APPENDIX A

Summary of Simulation Input

APPENDIX A1

September 2017 Simulation

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# Generated on 02:55:15, 14-12-2017
# Deltares, D-Flow FM Version 1.1.192.52184M, Aug 25 2017, 10:03:58

[model]
Program                           = D-Flow FM
Version                           = 1.1.192.52184M
MDUFormatVersion                  = 1.06                # File format version (do not edit this)
AutoStart                         = 2                   # Autostart simulation after loading MDU (0: no, 1: autostart, 2: autostartstop)

[geometry]
NetFile                           = penobscot_net.nc    # Unstructured grid file *_net.nc
BedlevelFile                      =                     # Bedlevels points file e.g. *.xyz, only needed for bedlevtype not equal 3
DryPointsFile                     =                     # Dry points file *.xyz (third column dummy z values), or dry areas polygon file *.pol (third column 1/-1:
                                                          inside/outside)
WaterLevIniFile                   =                     # Initial water levels sample file *.xyz
LandBoundaryFile                  =                     # Land boundaries file *.ldb, used for visualization
ThinDamFile                       =                     # Polyline file *_thd.pli, containing thin dams
FixedWeirFile                     =                     # Polyline file *_fxw.pliz, containing fixed weirs with rows x, y, crest level, left ground level, right ground
                                                          level
VertplizFile                      =                     # Vertical layering file *_vlay.pliz with rows x, y, Z, first Z, nr of layers, second Z, layer type
ProflocFile                       =                     # Channel profile location file *_proflocation.xyz with rows x, y, z, profile number ref
ProfdefFile                       =                     # Channel profile definition file *_profdefinition.def with definition for all profile numbers
ProfdefxyzFile                    =                     # Channel profile definition file _profdefinition.def with definition for all profile numbers
Uniformwidth1D                    = 2.                  # Uniform width for channel profiles not specified by profloc
StructureFile                     =                     # File *.ini containing list of structures (pumps, weirs, gates and general structures)
ManholeFile                       =                     # File *.ini containing manholes
ShipdefFile                       =                     # File *.shd containing ship definitions
WaterLevIni                       = 0.                  # Initial water level at missing s0 values
BedlevUni                         = -1.5                # Uniform bed level (default = -5 m)
Bedslope                          = 0.                  # Bed slope inclination if BedlevType > 2
BedlevType                        = 3                   # Bathymetry specification
                                                        # 1: at cell centers
                                                        # 2: at faces
                                                        # 3: at nodes, face levels mean of node values
                                                        # 4: at nodes, face levels min. of node values
                                                        # 5: at nodes, face levels max. of node values
                                                        # 6: at nodes, face levels max. of cell-center values
Blmeanbelow                       = -999.               # If not -999d0, below this level the cell center bed level is the mean of surrouding net nodes
Blminabove                        = -999.               # If not -999d0, above this level the cell center bed level is the min. of surrouding net nodes
PartitionFile                     =                     # Domain partition polygon file *_part.pol for parallel run
AngLat                            = 44.7                # Angle of latitude S-N (deg), 0: no Coriolis
AngLon                            = 0.                  # Angle of longitude E-W (deg), 0: Greenwich, used in solar heat flux computation.
Conveyance2D                      = -1                  # -1: R=HU,0: R=H, 1: R=A/P, 2: K=analytic-1D conv, 3: K=analytic-2D conv
Nonlin2D                          = 0                   # Non-linear 2D volumes, only used if ibedlevtype=3 and Conveyance2D>=1
Sillheightmin                     = 0.5                 # Weir treatment only if both sills larger than this value (m)
Makeorthocenters                  = 0                   # Switch from circumcentres to orthocentres in geominit (i>=1: number of iterations, 0: do not use)
Dcenterinside                     = 1.                  # Limit cell center (1.0: in cell, 0.0: on c/g)
Bamin                             = 1.d-6               # Minimum grid cell area, in combination with cut cells
OpenBoundaryTolerance             = 3.                  # Search tolerance factor between boundary polyline and grid cells, in cell size units
RenumberFlowNodes                 = 1                   # Renumber the flow nodes (1: yes, 0: no)
Kmx                               = 0                   # Maximum number of vertical layers
Layertype                         = 1                   # Vertical layer type (1: all sigma, 2: all z, 3: use VertplizFile)
Numtopsig                         = 0                   # Number of sigma layers in top of z-layer model
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SigmaGrowthFactor                  = 1.                 # Layer thickness growth factor from bed up
StretchType                        = 0                  # Type of layer stretching, 0 = uniform, 1 = user defined, 2 = fixed level double exponential

[numerics]
CFLMax                             = 0.7                # Maximum Courant number
Lincontin                          = 0                  # Default 0; Set to 1 for linearizing d(Hu)/dx; link to AdvecType
AdvecType                          = 33                 # Advection type (0: none, 1: Wenneker, 2: Wenneker q(uio-u), 3: Perot q(uio-u), 4: Perot q(ui-u), 5: Perot q(ui-u)
                                                          without itself)
TimeStepType                       = 2                  # Time step handling (0: only transport, 1: transport + velocity update, 2: full implicit step-reduce, 3: step-
                                                          Jacobi, 4: explicit)
Icoriolistype                      = 5
Limtyphu                           = 0                  # Limiter type for waterdepth in continuity eqn. (0: none, 1: minmod, 2: van Leer, 3: Kooren, 4: monotone central)
Limtypmom                          = 4                  # Limiter type for cell center advection velocity (0: none, 1: minmod, 2: van Leer, 3: Kooren, 4: monotone central)
Limtypsa                           = 4                  # Limiter type for salinity transport (0: none, 1: minmod, 2: van Leer, 3: Kooren, 4: monotone central)
TransportMethod                    = 1                  # Transport method (0: Herman's method, 1: transport module)
TransportTimestepping              = 0                  # Timestepping method in Transport module, 0 = global (default) , 1 = local
Vertadvtypsal                      = 5                  # Vertical advection type for salinity (0: none, 1: upwind explicit, 2: central explicit, 3: upwind implicit, 4:
                                                          central implicit, 5: central implicit but upwind for neg. stratif., 6: higher order explicit, no Forester)
Vertadvtyptem                      = 6                  # Vertical advection type for temperature (0: none, 1: upwind explicit, 2: central explicit, 3: upwind implicit, 4:
                                                          central implicit, 5: central implicit but upwind for neg. stratif., 6: higher order explicit, no Forester)
Cffacver                           = 0.                 # Factor for including (1-CFL) in HO term vertical   (0d0: no, 1d0: yes)
Jarhoxu                            = 0                  # Inlcude density gradient in advection term (0: no, 1: yes, 2: Also in barotrop and baroclin pressure term)
Horadvtypzlayer                    = 0                  # Horizontal advection treatment of z-layers (1: default, 2: sigma-like)
Zlayeratubybob                     = 0                  # Lowest connected cells governed by bob instead of by bL L/R
Icgsolver                          = 4                  # Solver type (1: sobekGS_OMP, 2: sobekGS_OMPthreadsafe, 3: sobekGS, 4: sobekGS + Saadilud, 5: parallel/global
                                                          Saad, 6: parallel/Petsc, 7: parallel/GS)
Maxdegree                          = 6                  # Maximum degree in Gauss elimination
FixedWeirScheme                    = 0                  # Fixed weir scheme (0: none, 1: compact stencil, 2: whole tile lifted, full subgrid weir + factor)
FixedWeirContraction               = 1.                 # Fixed weir flow width contraction factor
Fixedweirfrictscheme               = 1                  # Fixed weir friction scheme (0: friction based on hu, 1: friction based on subgrid weir friction scheme)
Fixedweirtopwidth                  = 1.                 # Uniform width of the groyne part of fixed weirs
Fixedweirtopfrictcoef              = -999.              # Uniform friction coefficient of the groyne part of fixed weirs
Fixedweirtalud                     = 0.25               # Uniform talud slope of fixed weirs
Izbndpos                           = 0                  # Position of z boundary (0: D3Dflow, 1: on net boundary, 2: on specifiend polyline)
Tlfsmo                             = 0.                 # Fourier smoothing time (s) on water level boundaries
Logprofatubndin                    = 1                  # ubnds inflow: 0=uniform U1, 1 = log U1, 2 = log U1 +(k-eps), 3=uniformk
Slopedrop2D                        = 0.                 # Apply drop losses only if local bed slope > Slopedrop2D, (<=0: no drop losses)
Drop3D                             = -999.              # Apply droplosses in 3D if z upwind below bob + 2/3 hu*drop3D
Chkadvd                            = 0.1                # Check advection terms if depth < chkadvd, => less setbacks
Trsh_u1Lb                          = 0.                 # 2D bedfriction in 3D below this threshold (m)
Zwsbtol                            = 0.                 # tolerance for zws(kb-1) at bed
Keepzlayeringatbed                 = 1                  #  bedlayerthickness = zlayerthickness at bed 0 or 1
Teta0                              = 0.55               # Theta of time integration (0.5 < theta < 1)
Qhrelax                            = 1.d-2              # Relaxation on Q-h open boundaries
Jbasqbnddownwindhs                 = 0                  # Water depth scheme at discharge boundaries (0: original hu, 1: downwind hs)
cstbnd                             = 0                  # Delft-3D type velocity treatment near boundaries for small coastal models (1: yes, 0: no)
Maxitverticalforestersal           = 100                # Forester iterations for salinity (0: no vertical filter for salinity, > 0: max nr of iterations)
Maxitverticalforestertem           = 0                  # Forester iterations for temperature (0: no vertical filter for temperature, > 0: max nr of iterations)
Jaorgsethu                         = 1                  # Velocity reconstruction scheme (0 : setumod, sethu, setau sequence, 1 : sethu, setau, setumod sequence
                                                          (standard))
Turbulencemodel                    = 3                  # Turbulence model (0: none, 1: constant, 2: algebraic, 3: k-epsilon, 4: k-tau)
Turbulenceadvection                = 0                  # Turbulence advection (0: none, 3: horizontally explicit and vertically implicit)
Eddyviscositybedfacmax             = 0.                 # Limit eddy viscosity at bed )
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AntiCreep                         = 0                     # Include anti-creep calculation (0: no, 1: yes)
Maxwaterleveldiff                 = 0.                    # upper bound (in m) on water level changes (<= 0: no bounds). Run will abort when violated.
Maxvelocitydiff                   = 0.                    # upper bound (in m/s) on velocity changes (<= 0: no bounds). Run will abort when violated.
MinTimestepBreak                  = 0.                    # smallest allowed timestep (in s), checked on a sliding average of several timesteps. Run will abort when
                                                            violated.
Epshu                             = 1.d-4                 # Threshold water depth for wet and dry cells
SobekDFM_umin                     = 0.                    # Minimal velocity treshold for weir losses in Sobek-DFM coupling.
SobekDFM_umin_method              = 0                     # Method for minimal velocity treshold for weir losses in Sobek-DFM coupling.
sobekDFM_relax                    = 0.1                   # Relaxation factor for SOBEK-DFM coupling algorithm.
Vertadvtypmom                     = 3                     # vertical advection for u1: 0: No, 3: Upwind implicit, 4: Central implicit, 5: QUICK implicit.
jaupwindsrc                       = 1                     # 1st-order upwind advection at sources/sinks (1) or higher-order (0)

[physics]
UnifFrictCoef                     = 2.3d-2                # Uniform friction coefficient (0: no friction)
UnifFrictType                     = 1                     # Uniform friction type (0: Chezy, 1: Manning, 2: White-Colebrook, 3: idem, WAQUA style)
UnifFrictCoef1D                   = 2.3d-2                # Uniform friction coefficient in 1D links (0: no friction)
UnifFrictCoefLin                  = 0.                    # Uniform linear friction coefficient for ocean models (m/s) (0: no friction)
Umodlin                           = 0.                    # Linear friction umod, for ifrctyp=4,5,6
Vicouv                            = 1.                    # Uniform horizontal eddy viscosity (m2/s)
Dicouv                            = 1.                    # Uniform horizontal eddy diffusivity (m2/s)
Vicoww                            = 5.d-5                 # Uniform vertical eddy viscosity  (m2/s)
Dicoww                            = 5.d-5                 # Uniform vertical eddy diffusivity  (m2/s)
Vicwminb                          = 0.                    # Minimum visc in prod and buoyancy term (m2/s)
Smagorinsky                       = 0.                    # Smagorinsky factor in horizontal turbulence
Elder                             = 0.                    # Elder factor in horizontal turbulence
irov                              = 0                     # 0=free slip, 1 = partial slip using wall_ks
wall_ks                           = 0.                    # Wall roughness type (0: free slip, 1: partial slip using wall_ks)
Rhomean                           = 1000.                 # Average water density (kg/m3)
Idensform                         = 1                     # Density calulation (0: uniform, 1: Eckard, 2: Unesco, 3: baroclinic case)
Ag                                = 9.81                  # Gravitational acceleration
TidalForcing                      = 0                     # Tidal forcing, if jsferic=1 (0: no, 1: yes)
SelfAttractionLoading             = 0                     # Self attraction and loading (0=no, 1=yes, 2=only self attraction)
Doodsonstart                      = 55.565                # TRIWAQ: 55.565, D3D: 57.555
Doodsonstop                       = 375.575               # TRIWAQ: 375.575, D3D: 275.555
Doodsoneps                        = 0.                    # TRIWAQ = 0.0  400 cmps , D3D = 0.03   60 cmps
Villemonte CD 1                   = 1.                    # Calibration coefficient for Villemonte. Default = 1.0.  NB. For Bloemberg data set 0.8 is recommended.
Villemonte CD 2                   = 10.                   # Calibration coefficient for Villemonte. Default = 10.0. NB. For Bloemberg data set 0.8 is recommended.
Salinity                          = 1                     # Include salinity, (0=no, 1=yes)
InitialSalinity                   = 0.                    # Uniform initial salinity concentration (ppt)
Sal0abovezlev                     = -999.                 # Vertical level (m) above which salinity is set 0
DeltaSalinity                     = -999.                 # for testcases
Backgroundsalinity                = 30.                   # Background salinity for eqn. of state (ppt)
Backgroundwatertemperature        = 6.                    # Background water temperature for eqn. of state (deg C)
Jadelvappos                       = 1                     # Only positive forced evaporation fluxes
Temperature                       = 1                     # Include temperature (0: no, 1: only transport, 3: excess model of D3D, 5: composite (ocean) model)
InitialTemperature                = 6.                    # Uniform initial water temperature (degC)
Secchidepth                       = 1.                    # Water clarity parameter (m)
Stanton                           = -1.                   # Coefficient for convective heat flux, if negative, Ccon = abs(Stanton)*Cdwind
Dalton                            = -1.                   # Coefficient for evaporative heat flux, if negative, Ceva = abs(Dalton)*Cdwind
Tempmax                           = -999.                 # Limit the temperature
Tempmin                           = 0.                    # Limit the temperature
SecondaryFlow                     = 0                     # Secondary flow (0: no, 1: yes)
BetaSpiral                        = 0.                    # Weight factor of the spiral flow intensity on flow dispersion stresses
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Equili                            = 0                   # Equilibrium spiral flow intensity (0: no, 1: yes)

[sediment]
Sedimentmodelnr                   = 0                   # Sediment model nr, (0=no, 1=Krone, 2=SvR2007, 3=E-H, 4=MorphologyModule)
Nr_of_sedfractions                = 0                   # Nr of sediment fractions, (specify the next parameters for each fraction)
MxgrKrone                         = 0                   # Highest fraction index treated by Krone

[bedform]
BedformFile                       =                     # Bedform characteristics file (*.bfm)

[grw]
Conductivity                      = 0.                  # non dimensionless K conductivity   saturated (m/s), Q = K*A*i (m3/s)
h_aquiferuni                      = 20.                 # uniform height of carrying layer (m)
h_unsatini                        = 0.200000002980232   # initial level groundwater is bedlevel - h_unsatini (m)

[veg]
Vegetationmodelnr                 = 0                   # Vegetation model nr, (0=no, 1=Baptist DFM)
Clveg                             = 0.8                 # Stem distance factor, default 0.8 ()
Cdveg                             = 0.7                 # Stem Cd coefficient , default 0.7 ()
Cbveg                             = 0.                  # Stem stiffness coefficient , default 0.7 ()
Rhoveg                            = 0.                  # Stem Rho, if > 0, -> bouyant stick procedure, default 0.0 ()
Stemheightstd                     = 0.                  # Stem height standard deviation fraction, e.g. 0.1  ()

[wind]
ICdtyp                            = 2                   # Wind drag coefficient type (1=Const; 2=Smith&Banke (2 pts); 3=S&B (3 pts); 4=Charnock 1955, 5=Whang 2005, 6=Wuest
                                                          2005)
Cdbreakpoints                     = 6.3d-4 7.23d-3      # Wind drag coefficient break points
Windspeedbreakpoints              = 0. 100.             # Wind speed break points (m/s)
Rhoair                            = 1.2                 # Air density (kg/m3)
PavBnd                            = 0.                  # Average air pressure on open boundaries (N/m2) (only applied if > 0)
Pavini                            = 0.                  # Average air pressure for initial water level correction (N/m2) (only applied if > 0)

[waves]
Wavemodelnr                       = 0                   # Wave model nr. (0: none, 1: fetch/depth limited hurdlestive, 2: Young-Verhagen, 3: SWAN, 4: wave group forcing,
                                                          5: uniform
Wavenikuradse                     = 1.d-2               # Wave friction Nikuradse ks coefficient (m), used in Krone-Swart
Rouwav                            = FR84                # Friction model for wave induced shear stress: FR84 (default) or: MS90, HT91, GM79, DS88, BK67, CJ85, OY88, VR04
Gammax                            = 1.                  # Maximum wave height/water depth ratio
uorbfac                           = 0                   # Orbital velocities: 0=D3D style; 1=Guza style
hminlw                            = 0.2                 # Cut-off depth for application of wave forces in momentum balance

[time]
RefDate                           = 20170901            # Reference date (yyyymmdd)
Tzone                             = 0.                  # Time zone assigned to input time series
DtUser                            = 300.                # Time interval (s) for external forcing update
DtNodal                           = 21600.              # Time interval (s) for updating nodal factors in astronomical boundary conditions
DtMax                             = 60.                 # Maximal computation timestep (s)
Dtfacmax                          = 1.1                 # Max timestep increase factor ( )
DtInit                            = 1.                  # Initial computation timestep (s)
Autotimestepdiff                  = 0                   # 0 = no, 1 = yes (Time limitation based on explicit diffusive term)
Tunit                             = S                   # Time unit for start/stop times (D, H, M or S)
TStart                            = 28800.              # Start time w.r.t. RefDate (in TUnit)
TStop                             = 1296000.            # Stop  time w.r.t. RefDate (in TUnit)
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[restart]
RestartFile                       =                     # Restart netcdf-file, either *_rst.nc or *_map.nc
RestartDateTime                   = yyyymmdd_HHMMSS     # Restart date and time (YYYYMMDDHHMMSS) when restarting from *_map.nc

[external forcing]
ExtForceFile                      = penobscot_032_2.ext # Old format for external forcings file *.ext, link with tim/cmp-format boundary conditions specification
ExtForceFileNew                   = penobscot_2017_bnd_reduced.ext# New format for external forcings file *.ext, link with bc-format boundary conditions specification
Rainfall                          = 0                   # Include rainfall, (0=no, 1=yes)

[trachytopes]
TrtRou                            = N                   # Include alluvial and vegetation roughness (trachytopes) (Y: yes, N: no)
TrtDef                            =                     # File (*.ttd) including trachytope definitions
TrtL                              =                     # File (*.arl) including distribution of trachytope definitions
DtTrt                             = 1200.               # Trachytope roughness update time interval (s)

[output]
OutputDir                         =                     # Output directory of map-, his-, rst-, dat- and timings-files, default: DFM_OUTPUT_<modelname>. Set to . for
                                                          current dir.
FlowGeomFile                      =                     # Flow geometry NetCDF *_flowgeom.nc
ObsFile                           = penobscot_obs.xyn   # Points file *.xyn with observation stations with rows x, y, station name
CrsFile                           = penobscot_crs.pli   # Polyline file *_crs.pli defining observation cross sections
FouFile                           =                     # Fourier analysis input file *.fou
HisFile                           =                     # HisFile name *_his.nc
MapFile                           =                     # MapFile name *_map.nc
HisInterval                       = 600. 28800. 1296000.# History output times, given as "interval" "start period" "end period" (s)
XLSInterval                       = 0.                  # Interval (s) between XLS history
MapInterval                       = 3600. 28800. 1296000.# Map file output, given as "interval" "start period" "end period" (s)
RstInterval                       = 86400. 28800. 1296000.# Restart file output times, given as "interval" "start period" "end period" (s)
S1incinterval                     = 0.                  # Interval (m) in incremental file for water levels S1
WaqInterval                       = 0. 28800. 1296000.  # DELWAQ output times, given as "interval" "start period" "end period" (s)
StatsInterval                     = -600.               # Interval (in s) between simulation statistics output.
WriteBalancefile                  = 0                   # Write balance file (1: yes, 0: no)
TimingsInterval                   = 0.                  # Timings statistics output interval
TimeSplitInterval                 = 0X                  # Time splitting interval, after which a new output file is started. value+unit, e.g. '1 M', valid units:
                                                          Y,M,D,h,m,s.
MapFormat                         = 1                   # Map file format, 1: netCDF, 2: Tecplot, 3: netCFD and Tecplot, 4: NetCDF-UGRID
Wrihis_balance                    = 0                   # Write mass balance totals to his file (1: yes, 0: no)
Wrihis_sourcesink                 = 1                   # Write sources-sinks statistics to his file (1=yes, 0=no)
Wrihis_structure_gen              = 1                   # Write general structure parameters to his file (1: yes, 0: no)
Wrihis_structure_dam              = 1                   # Write dam parameters to his file (1: yes, 0: no)
Wrihis_structure_pump             = 1                   # Write pump parameters to his file (1: yes, 0: no)
Wrihis_structure_gate             = 1                   # Write gate parameters to his file (1: yes, 0: no)
Wrihis_structure_weir             = 1                   # Write weir parameters to his file (1: yes, 0: no)
Wrihis_turbulence                 = 1                   # Write k, eps and vicww to his file (1: yes, 0: no)
Wrihis_wind                       = 1                   # Write wind velocities to his file (1: yes, 0: no)
Wrihis_temperature                = 1                   # Write temperature to his file (1: yes, 0: no)
Wrihis_heatflux                   = 0                   # Write heat flux to his file (1: yes, 0: no)
Wrihis_salinity                   = 1                   # Write salinity to his file (1: yes, 0: no)
Wrimap_waterlevel_s0              = 0                   # Write water levels for previous time step to map file (1: yes, 0: no)
Wrimap_waterlevel_s1              = 1                   # Write water levels to map file (1: yes, 0: no)
Wrimap_velocity_component_u0      = 0                   # Write velocity component for previous time step to map file (1: yes, 0: no)
Wrimap_velocity_component_u1      = 0                   # Write velocity component to map file (1: yes, 0: no)
```

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Wrimap_velocity_vector            = 1                   # Write cell-center velocity vectors to map file (1: yes, 0: no)
Wrimap_upward_velocity_component  = 0                   # Write upward velocity component on cell interfaces (1: yes, 0: no)
Wrimap_density_rho                = 0                   # Write flow density to map file (1: yes, 0: no)
Wrimap_horizontal_viscosity_viu   = 0                   # Write horizontal viscosity to map file (1: yes, 0: no)
Wrimap_horizontal_diffusivity_diu = 0                   # Write horizontal diffusivity to map file (1: yes, 0: no)
Wrimap_flow_flux_q1               = 0                   # Write flow flux to map file (1: yes, 0: no)
Wrimap_spiral_flow                = 0                   # Write spiral flow to map file (1: yes, 0: no)
Wrimap_numlimdt                   = 0                   # Write the number times a cell was Courant limiting to map file (1: yes, 0: no)
Wrimap_taucurrent                 = 1                   # Write the shear stress to map file (1: yes, 0: no)
Wrimap_chezy                      = 0                   # Write the chezy roughness to map file (1: yes, 0: no)
Wrimap_salinity                   = 1                   # Write salinity to map file (1: yes, 0: no)
Wrimap_temperature                = 1                   # Write temperature to map file (1: yes, 0: no)
Wrimap_turbulence                 = 0                   # Write vicww, k and eps to map file (1: yes, 0: no)
Wrimap_wind                       = 0                   # Write wind velocities to map file (1: yes, 0: no)
Richardsononoutput                = 1                   # Write Richardson numbers (1: yes, 0: no)
MapOutputTimeVector               =                     # File (*.mpt) containing fixed map output times (s) w.r.t. RefDate
FullGridOutput                    = 0                   # Full grid output mode (0: compact, 1: full time-varying grid data)
EulerVelocities                   = 0                   # Euler velocities output (0: GLM, 1: Euler velocities)
Wrirst_bnd                        = 1                   # Write waterlevel, bedlevel and coordinates of boundaries to restart files

[particles]
ParticlesFile                     =
AddTracer                         = 0                   # add tracer (1) or not (other)
StartTime                         = 0.                  # starttime (if >0)
TimeStep                          = 0.                  # time step (>0) or every computational time step
```

APPENDIX A2

Episodic Riverine Event: Penobscot River

```
# Generated on 05:40:07, 17-12-2017
# Deltares, D-Flow FM Version 1.1.192.52184M, Aug 25 2017, 10:03:58

[model]
Program                          = D-Flow FM
Version                          = 1.1.192.52184M
MDUFormatVersion                 = 1.06                 # File format version (do not edit this)
AutoStart                        = 2                    # Autostart simulation after loading MDU (0: no, 1: autostart, 2: autostartstop)

[geometry]
NetFile                          = penobscot_net.nc     # Unstructured grid file *_net.nc
BedlevelFile                     =                      # Bedlevels points file e.g. *.xyz, only needed for bedlevtype not equal 3
DryPointsFile                    =                      # Dry points file *.xyz (third column dummy z values), or dry areas polygon file *.pol (third column 1/-1:
                                                          inside/outside)
WaterLevIniFile                  =                      # Initial water levels sample file *.xyz
LandBoundaryFile                 =                      # Land boundaries file *.ldb, used for visualization
ThinDamFile                      =                      # Polyline file *_thd.pli, containing thin dams
FixedWeirFile                    =                      # Polyline file *_fxw.pliz, containing fixed weirs with rows x, y, crest level, left ground level, right ground
                                                          level
VertplizFile                     =                      # Vertical layering file *_vlay.pliz with rows x, y, Z, first Z, nr of layers, second Z, layer type
ProflocFile                      =                      # Channel profile location file *_proflocation.xyz with rows x, y, z, profile number ref
ProfdefFile                      =                      # Channel profile definition file *_profdefinition.def with definition for all profile numbers
ProfdefxyzFile                   =                      # Channel profile definition file _profdefinition.def with definition for all profile numbers
Uniformwidth1D                   = 2.                   # Uniform width for channel profiles not specified by profloc
StructureFile                    =                      # File *.ini containing list of structures (pumps, weirs, gates and general structures)
ManholeFile                      =                      # File *.ini containing manholes
ShipdefFile                      =                      # File *.shd containing ship definitions
WaterLevIni                      = 0.                   # Initial water level at missing s0 values
BedlevUni                        = -1.5                 # Uniform bed level (default = -5 m)
Bedslope                         = 0.                   # Bed slope inclination if BedlevType > 2
BedlevType                       = 3                    # Bathymetry specification
                                                        # 1: at cell centers
                                                        # 2: at faces
                                                        # 3: at nodes, face levels mean of node values
                                                        # 4: at nodes, face levels min. of node values
                                                        # 5: at nodes, face levels max. of node values
                                                        # 6: at nodes, face levels max. of cell-center values
Blmeanbelow                      = -999.                # If not -999d0, below this level the cell center bed level is the mean of surrouding net nodes
Blminabove                       = -999.                # If not -999d0, above this level the cell center bed level is the min. of surrouding net nodes
PartitionFile                    =                      # Domain partition polygon file *_part.pol for parallel run
AngLat                           = 44.7                 # Angle of latitude S-N (deg), 0: no Coriolis
AngLon                           = -68.8                # Angle of longitude E-W (deg), 0: Greenwich, used in solar heat flux computation.
Conveyance2D                     = -1                   # -1: R=HU,0: R=H, 1: R=A/P, 2: K=analytic-1D conv, 3: K=analytic-2D conv
Nonlin2D                         = 0                    # Non-linear 2D volumes, only used if ibedlevtype=3 and Conveyance2D>=1
Sillheightmin                    = 0.5                  # Weir treatment only if both sills larger than this value (m)
Makeorthocenters                 = 0                    # Switch from circumcentres to orthocentres in geominit (i>=1: number of iterations, 0: do not use)
Dcenterinside                    = 1.                   # Limit cell center (1.0: in cell, 0.0: on c/g)
Bamin                            = 1.d-6                # Minimum grid cell area, in combination with cut cells
OpenBoundaryTolerance            = 3.                   # Search tolerance factor between boundary polyline and grid cells, in cell size units
RenumberFlowNodes                = 1                    # Renumber the flow nodes (1: yes, 0: no)
Kmx                              = 0                    # Maximum number of vertical layers
Layertype                        = 1                    # Vertical layer type (1: all sigma, 2: all z, 3: use VertplizFile)
Numtopsig                        = 0                    # Number of sigma layers in top of z-layer model
```

```
SigmaGrowthFactor                  = 1.                    # Layer thickness growth factor from bed up
StretchType                        = 0                     # Type of layer stretching, 0 = uniform, 1 = user defined, 2 = fixed level double exponential

[numerics]
CFLMax                             = 0.7                   # Maximum Courant number
Lincontin                          = 0                     # Default 0; Set to 1 for linearizing d(Hu)/dx; link to AdvecType
AdvecType                          = 33                    # Advection type (0: none, 1: Wenneker, 2: Wenneker q(uio-u), 3: Perot q(uio-u), 4: Perot q(ui-u), 5: Perot q(ui-u)
                                                             without itself)
TimeStepType                       = 2                     # Time step handling (0: only transport, 1: transport + velocity update, 2: full implicit step-reduce, 3: step-
                                                             Jacobi, 4: explicit)
Icoriolistype                      = 5
Limtyphu                           = 0                     # Limiter type for waterdepth in continuity eqn. (0: none, 1: minmod, 2: van Leer, 3: Kooren, 4: monotone central)
Limtypmom                          = 4                     # Limiter type for cell center advection velocity (0: none, 1: minmod, 2: van Leer, 3: Kooren, 4: monotone central)
Limtypsa                           = 4                     # Limiter type for salinity transport (0: none, 1: minmod, 2: van Leer, 3: Kooren, 4: monotone central)
TransportMethod                    = 1                     # Transport method (0: Herman's method, 1: transport module)
TransportTimestepping              = 0                     # Timestepping method in Transport module, 0 = global (default) , 1 = local
Vertadvtypsal                      = 5                     # Vertical advection type for salinity (0: none, 1: upwind explicit, 2: central explicit, 3: upwind implicit, 4:
                                                             central implicit, 5: central implicit but upwind for neg. stratif., 6: higher order explicit, no Forester)
Vertadvtyptem                      = 6                     # Vertical advection type for temperature (0: none, 1: upwind explicit, 2: central explicit, 3: upwind implicit, 4:
                                                             central implicit, 5: central implicit but upwind for neg. stratif., 6: higher order explicit, no Forester)
Cffacver                           = 0.                    # Factor for including (1-CFL) in HO term vertical   (0d0: no, 1d0: yes)
Jarhoxu                            = 0                     # Inlcude density gradient in advection term (0: no, 1: yes, 2: Also in barotrop and baroclin pressure term)
Horadvtypzlayer                    = 0                     # Horizontal advection treatment of z-layers (1: default, 2: sigma-like)
Zlayeratubybob                     = 0                     # Lowest connected cells governed by bob instead of by bL L/R
Icgsolver                          = 4                     # Solver type (1: sobekGS_OMP, 2: sobekGS_OMPthreadsafe, 3: sobekGS, 4: sobekGS + Saadilud, 5: parallel/global
                                                             Saad, 6: parallel/Petsc, 7: parallel/GS)
Maxdegree                          = 6                     # Maximum degree in Gauss elimination
FixedWeirScheme                    = 0                     # Fixed weir scheme (0: none, 1: compact stencil, 2: whole tile lifted, full subgrid weir + factor)
FixedWeirContraction               = 1.                    # Fixed weir flow width contraction factor
Fixedweirfrictscheme               = 1                     # Fixed weir friction scheme (0: friction based on hu, 1: friction based on subgrid weir friction scheme)
Fixedweirtopwidth                  = 1.                    # Uniform width of the groyne part of fixed weirs
Fixedweirtopfrictcoef              = -999.                 # Uniform friction coefficient of the groyne part of fixed weirs
Fixedweirtalud                     = 0.25                  # Uniform talud slope of fixed weirs
Izbndpos                           = 0                     # Position of z boundary (0: D3Dflow, 1: on net boundary, 2: on specifiend polyline)
Tlfsmo                             = 0.                    # Fourier smoothing time (s) on water level boundaries
Logprofatubndin                    = 1                     # ubnds inflow: 0=uniform U1, 1 = log U1, 2 = log U1 +(k-eps), 3=uniformk
Slopedrop2D                        = 0.                    # Apply drop losses only if local bed slope > Slopedrop2D, (<=0: no drop losses)
Drop3D                             = -999.                 # Apply droplosses in 3D if z upwind below bob + 2/3 hu*drop3D
Chkadvd                            = 0.1                   # Check advection terms if depth < chkadvd, => less setbacks
Trsh_u1Lb                          = 0.                    # 2D bedfriction in 3D below this threshold (m)
Zwsbtol                            = 0.                    # tolerance for zws(kb-1) at bed
Keepzlayeringatbed                 = 1                     #  bedlayerthickness = zlayerthickness at bed 0 or 1
Teta0                              = 0.55                  # Theta of time integration (0.5 < theta < 1)
Qhrelax                            = 1.d-2                 # Relaxation on Q-h open boundaries
Jbasqbnddownwindhs                 = 0                     # Water depth scheme at discharge boundaries (0: original hu, 1: downwind hs)
cstbnd                             = 0                     # Delft-3D type velocity treatment near boundaries for small coastal models (1: yes, 0: no)
Maxitverticalforestersal           = 100                   # Forester iterations for salinity (0: no vertical filter for salinity, > 0: max nr of iterations)
Maxitverticalforestertem           = 0                     # Forester iterations for temperature (0: no vertical filter for temperature, > 0: max nr of iterations)
Jaorgsethu                         = 1                     # Velocity reconstruction scheme (0 : setumod, sethu, setau sequence, 1 : sethu, setau, setumod sequence
                                                             (standard))
Turbulencemodel                    = 3                     # Turbulence model (0: none, 1: constant, 2: algebraic, 3: k-epsilon, 4: k-tau)
Turbulenceadvection                = 0                     # Turbulence advection (0: none, 3: horizontally explicit and vertically implicit)
Eddyviscositybedfacmax             = 0.                    # Limit eddy viscosity at bed )
```

```
AntiCreep                         = 0                     # Include anti-creep calculation (0: no, 1: yes)
Maxwaterleveldiff                 = 0.                    # upper bound (in m) on water level changes (<= 0: no bounds). Run will abort when violated.
Maxvelocitydiff                   = 0.                    # upper bound (in m/s) on velocity changes (<= 0: no bounds). Run will abort when violated.
MinTimestepBreak                  = 0.                    # smallest allowed timestep (in s), checked on a sliding average of several timesteps. Run will abort when
                                                            violated.
Epshu                             = 1.d-4                 # Threshold water depth for wet and dry cells
SobekDFM_umin                     = 0.                    # Minimal velocity treshold for weir losses in Sobek-DFM coupling.
SobekDFM_umin_method              = 0                     # Method for minimal velocity treshold for weir losses in Sobek-DFM coupling.
sobekDFM_relax                    = 0.1                   # Relaxation factor for SOBEK-DFM coupling algorithm.
Vertadvtypmom                     = 3                     # vertical advection for u1: 0: No, 3: Upwind implicit, 4: Central implicit, 5: QUICK implicit.
jaupwindsrc                       = 1                     # 1st-order upwind advection at sources/sinks (1) or higher-order (0)

[physics]
UnifFrictCoef                     = 2.3d-2                # Uniform friction coefficient (0: no friction)
UnifFrictType                     = 1                     # Uniform friction type (0: Chezy, 1: Manning, 2: White-Colebrook, 3: idem, WAQUA style)
UnifFrictCoef1D                   = 2.3d-2                # Uniform friction coefficient in 1D links (0: no friction)
UnifFrictCoefLin                  = 0.                    # Uniform linear friction coefficient for ocean models (m/s) (0: no friction)
Umodlin                           = 0.                    # Linear friction umod, for ifrctyp=4,5,6
Vicouv                            = 1.                    # Uniform horizontal eddy viscosity (m2/s)
Dicouv                            = 1.                    # Uniform horizontal eddy diffusivity (m2/s)
Vicoww                            = 5.d-5                 # Uniform vertical eddy viscosity  (m2/s)
Dicoww                            = 5.d-5                 # Uniform vertical eddy diffusivity  (m2/s)
Vicwminb                          = 0.                    # Minimum visc in prod and buoyancy term (m2/s)
Smagorinsky                       = 0.                    # Smagorinsky factor in horizontal turbulence
Elder                             = 0.                    # Elder factor in horizontal turbulence
irov                              = 0                     # 0=free slip, 1 = partial slip using wall_ks
wall_ks                           = 0.                    # Wall roughness type (0: free slip, 1: partial slip using wall_ks)
Rhomean                           = 1000.                 # Average water density (kg/m3)
Idensform                         = 1                     # Density calulation (0: uniform, 1: Eckard, 2: Unesco, 3: baroclinic case)
Ag                                = 9.81                  # Gravitational acceleration
TidalForcing                      = 0                     # Tidal forcing, if jsferic=1 (0: no, 1: yes)
SelfAttractionLoading             = 0                     # Self attraction and loading (0=no, 1=yes, 2=only self attraction)
Doodsonstart                      = 55.565                # TRIWAQ: 55.565, D3D: 57.555
Doodsonstop                       = 375.575               # TRIWAQ: 375.575, D3D: 275.555
Doodsoneps                        = 0.                    # TRIWAQ = 0.0  400 cmps , D3D = 0.03   60 cmps
Villemonte CD 1                   = 1.                    # Calibration coefficient for Villemonte. Default = 1.0.  NB. For Bloemberg data set 0.8 is recommended.
Villemonte CD 2                   = 10.                   # Calibration coefficient for Villemonte. Default = 10.0. NB. For Bloemberg data set 0.8 is recommended.
Salinity                          = 1                     # Include salinity, (0=no, 1=yes)
InitialSalinity                   = 0.                    # Uniform initial salinity concentration (ppt)
Sal0abovezlev                     = -999.                 # Vertical level (m) above which salinity is set 0
DeltaSalinity                     = -999.                 # for testcases
Backgroundsalinity                = 30.                   # Background salinity for eqn. of state (ppt)
Backgroundwatertemperature        = 15.                   # Background water temperature for eqn. of state (deg C)
Jadelvappos                       = 1                     # Only positive forced evaporation fluxes
Temperature                       = 1                     # Include temperature (0: no, 1: only transport, 3: excess model of D3D, 5: composite (ocean) model)
InitialTemperature                = 15.                   # Uniform initial water temperature (degC)
Secchidepth                       = 1.                    # Water clarity parameter (m)
Stanton                           = -1.                   # Coefficient for convective heat flux, if negative, Ccon = abs(Stanton)*Cdwind
Dalton                            = -1.                   # Coefficient for evaporative heat flux, if negative, Ceva = abs(Dalton)*Cdwind
Tempmax                           = -999.                 # Limit the temperature
Tempmin                           = 0.                    # Limit the temperature
SecondaryFlow                     = 0                     # Secondary flow (0: no, 1: yes)
BetaSpiral                        = 0.                    # Weight factor of the spiral flow intensity on flow dispersion stresses
```

```
Equili                           = 0                  # Equilibrium spiral flow intensity (0: no, 1: yes)

[sediment]
Sedimentmodelnr                  = 0                  # Sediment model nr, (0=no, 1=Krone, 2=SvR2007, 3=E-H, 4=MorphologyModule)
Nr_of_sedfractions               = 0                  # Nr of sediment fractions, (specify the next parameters for each fraction)
MxgrKrone                        = 0                  # Highest fraction index treated by Krone

[bedform]
BedformFile                      =                    # Bedform characteristics file (*.bfm)

[grw]
Conductivity                     = 0.                 # non dimensionless K conductivity   saturated (m/s), Q = K*A*i (m3/s)
h_aquiferuni                     = 20.                # uniform height of carrying layer (m)
h_unsatini                       = 0.200000002980232  # initial level groundwater is bedlevel - h_unsatini (m)

[veg]
Vegetationmodelnr                = 0                  # Vegetation model nr, (0=no, 1=Baptist DFM)
Clveg                            = 0.8                # Stem distance factor, default 0.8 ()
Cdveg                            = 0.7                # Stem Cd coefficient , default 0.7 ()
Cbveg                            = 0.                 # Stem stiffness coefficient , default 0.7 ()
Rhoveg                           = 0.                 # Stem Rho, if > 0, -> bouyant stick procedure, default 0.0 ()
Stemheightstd                    = 0.                 # Stem height standard deviation fraction, e.g. 0.1  ()

[wind]
ICdtyp                           = 2                  # Wind drag coefficient type (1=Const; 2=Smith&Banke (2 pts); 3=S&B (3 pts); 4=Charnock 1955, 5=Whang 2005, 6=Wuest
                                                        2005)
Cdbreakpoints                    = 6.3d-4 7.23d-3     # Wind drag coefficient break points
Windspeedbreakpoints             = 0. 100.            # Wind speed break points (m/s)
Rhoair                           = 1.2                # Air density (kg/m3)
PavBnd                           = 0.                 # Average air pressure on open boundaries (N/m2) (only applied if > 0)
Pavini                           = 0.                 # Average air pressure for initial water level correction (N/m2) (only applied if > 0)

[waves]
Wavemodelnr                      = 0                  # Wave model nr. (0: none, 1: fetch/depth limited hurdlestive, 2: Young-Verhagen, 3: SWAN, 4: wave group forcing,
                                                        5: uniform
Wavenikuradse                    = 1.d-2              # Wave friction Nikuradse ks coefficient (m), used in Krone-Swart
Rouwav                           = FR84               # Friction model for wave induced shear stress: FR84 (default) or: MS90, HT91, GM79, DS88, BK67, CJ85, OY88, VR04
Gammax                           = 1.                 # Maximum wave height/water depth ratio
uorbfac                          = 0                  # Orbital velocities: 0=D3D style; 1=Guza style
hminlw                           = 0.2                # Cut-off depth for application of wave forces in momentum balance

[time]
RefDate                          = 20170901           # Reference date (yyyymmdd)
Tzone                            = 0.                 # Time zone assigned to input time series
DtUser                           = 300.               # Time interval (s) for external forcing update
DtNodal                          = 21600.             # Time interval (s) for updating nodal factors in astronomical boundary conditions
DtMax                            = 60.                # Maximal computation timestep (s)
Dtfacmax                         = 1.1                # Max timestep increase factor ( )
DtInit                           = 1.                 # Initial computation timestep (s)
Autotimestepdiff                 = 0                  # 0 = no, 1 = yes (Time limitation based on explicit diffusive term)
Tunit                            = S                  # Time unit for start/stop times (D, H, M or S)
TStart                           = 28800.             # Start time w.r.t. RefDate (in TUnit)
TStop                            = 357600.            # Stop  time w.r.t. RefDate (in TUnit)
```

```
[restart]
RestartFile                       =                       # Restart netcdf-file, either *_rst.nc or *_map.nc
RestartDateTime                   = yyyymmdd_HHMMSS       # Restart date and time (YYYYMMDDHHMMSS) when restarting from *_map.nc

[external forcing]
ExtForceFile                      = penobscot_2pct.ext   # Old format for external forcings file *.ext, link with tim/cmp-format boundary conditions specification
ExtForceFileNew                   = penobscot_river_2pct_bnd.ext# New format for external forcings file *.ext, link with bc-format boundary conditions specification
Rainfall                          = 0                     # Include rainfall, (0=no, 1=yes)

[trachytopes]
TrtRou                            = N                     # Include alluvial and vegetation roughness (trachytopes) (Y: yes, N: no)
TrtDef                            =                       # File (*.ttd) including trachytope definitions
TrtL                              =                       # File (*.arl) including distribution of trachytope definitions
DtTrt                             = 1200.                 # Trachytope roughness update time interval (s)

[output]
OutputDir                         =                       # Output directory of map-, his-, rst-, dat- and timings-files, default: DFM_OUTPUT_<modelname>. Set to . for
                                                            current dir.
FlowGeomFile                      =                       # Flow geometry NetCDF *_flowgeom.nc
ObsFile                           = penobscot_obs.xyn     # Points file *.xyn with observation stations with rows x, y, station name
CrsFile                           = penobscot_crs.pli     # Polyline file *_crs.pli defining observation cross sections
FouFile                           =                       # Fourier analysis input file *.fou
HisFile                           =                       # HisFile name *_his.nc
MapFile                           =                       # MapFile name *_map.nc
HisInterval                       = 600. 28800. 357600. # History output times, given as "interval" "start period" "end period" (s)
XLSInterval                       = 0.                    # Interval (s) between XLS history
MapInterval                       = 3600. 28800. 357600.# Map file output, given as "interval" "start period" "end period" (s)
RstInterval                       = 86400. 28800. 357600.# Restart file output times, given as "interval" "start period" "end period" (s)
S1incinterval                     = 0.                    # Interval (m) in incremental file for water levels S1
WaqInterval                       = 0. 28800. 357600.     # DELWAQ output times, given as "interval" "start period" "end period" (s)
StatsInterval                     = -600.                 # Interval (in s) between simulation statistics output.
WriteBalancefile                  = 0                     # Write balance file (1: yes, 0: no)
TimingsInterval                   = 0.                    # Timings statistics output interval
TimeSplitInterval                 = 0X                    # Time splitting interval, after which a new output file is started. value+unit, e.g. '1 M', valid units:
                                                            Y,M,D,h,m,s.
MapFormat                         = 1                     # Map file format, 1: netCDF, 2: Tecplot, 3: netCFD and Tecplot, 4: NetCDF-UGRID
Wrihis_balance                    = 0                     # Write mass balance totals to his file (1: yes, 0: no)
Wrihis_sourcesink                 = 1                     # Write sources-sinks statistics to his file (1=yes, 0=no)
Wrihis_structure_gen              = 1                     # Write general structure parameters to his file (1: yes, 0: no)
Wrihis_structure_dam              = 1                     # Write dam parameters to his file (1: yes, 0: no)
Wrihis_structure_pump             = 1                     # Write pump parameters to his file (1: yes, 0: no)
Wrihis_structure_gate             = 1                     # Write gate parameters to his file (1: yes, 0: no)
Wrihis_structure_weir             = 1                     # Write weir parameters to his file (1: yes, 0: no)
Wrihis_turbulence                 = 1                     # Write k, eps and vicww to his file (1: yes, 0: no)
Wrihis_wind                       = 1                     # Write wind velocities to his file (1: yes, 0: no)
Wrihis_temperature                = 1                     # Write temperature to his file (1: yes, 0: no)
Wrihis_heatflux                   = 0                     # Write heat flux to his file (1: yes, 0: no)
Wrihis_salinity                   = 1                     # Write salinity to his file (1: yes, 0: no)
Wrimap_waterlevel_s0              = 0                     # Write water levels for previous time step to map file (1: yes, 0: no)
Wrimap_waterlevel_s1              = 1                     # Write water levels to map file (1: yes, 0: no)
Wrimap_velocity_component_u0      = 0                     # Write velocity component for previous time step to map file (1: yes, 0: no)
Wrimap_velocity_component_u1      = 0                     # Write velocity component to map file (1: yes, 0: no)
```

```
Wrimap_velocity_vector            = 1                    # Write cell-center velocity vectors to map file (1: yes, 0: no)
Wrimap_upward_velocity_component  = 0                    # Write upward velocity component on cell interfaces (1: yes, 0: no)
Wrimap_density_rho                = 0                    # Write flow density to map file (1: yes, 0: no)
Wrimap_horizontal_viscosity_viu   = 0                    # Write horizontal viscosity to map file (1: yes, 0: no)
Wrimap_horizontal_diffusivity_diu = 0                    # Write horizontal diffusivity to map file (1: yes, 0: no)
Wrimap_flow_flux_q1               = 0                    # Write flow flux to map file (1: yes, 0: no)
Wrimap_spiral_flow                = 0                    # Write spiral flow to map file (1: yes, 0: no)
Wrimap_numlimdt                   = 0                    # Write the number times a cell was Courant limiting to map file (1: yes, 0: no)
Wrimap_taucurrent                 = 1                    # Write the shear stress to map file (1: yes, 0: no)
Wrimap_chezy                      = 0                    # Write the chezy roughness to map file (1: yes, 0: no)
Wrimap_salinity                   = 1                    # Write salinity to map file (1: yes, 0: no)
Wrimap_temperature                = 1                    # Write temperature to map file (1: yes, 0: no)
Wrimap_turbulence                 = 0                    # Write vicww, k and eps to map file (1: yes, 0: no)
Wrimap_wind                       = 0                    # Write wind velocities to map file (1: yes, 0: no)
Richardsononoutput                = 1                    # Write Richardson numbers (1: yes, 0: no)
MapOutputTimeVector               =                      # File (*.mpt) containing fixed map output times (s) w.r.t. RefDate
FullGridOutput                    = 0                    # Full grid output mode (0: compact, 1: full time-varying grid data)
EulerVelocities                   = 0                    # Euler velocities output (0: GLM, 1: Euler velocities)
Wrirst_bnd                        = 1                    # Write waterlevel, bedlevel and coordinates of boundaries to restart files

[particles]
ParticlesFile                     =
AddTracer                         = 0                    # add tracer (1) or not (other)
StartTime                         = 0.                   # starttime (if >0)
TimeStep                          = 0.                   # time step (>0) or every computational time step
```

APPENDIX A3

Episodic Riverine Event: Mendall Marsh

```
# Generated on 14:03:17, 17-12-2017
# Deltares, D-Flow FM Version 1.1.192.52184M, Aug 25 2017, 10:03:58

[model]
Program                           = D-Flow FM
Version                           = 1.1.192.52184M
MDUFormatVersion                  = 1.06                # File format version (do not edit this)
AutoStart                         = 2                   # Autostart simulation after loading MDU (0: no, 1: autostart, 2: autostartstop)

[geometry]
NetFile                           = penobscot_net.nc    # Unstructured grid file *_net.nc
BedlevelFile                      =                     # Bedlevels points file e.g. *.xyz, only needed for bedlevtype not equal 3
DryPointsFile                     =                     # Dry points file *.xyz (third column dummy z values), or dry areas polygon file *.pol (third column 1/-1:
                                                          inside/outside)
WaterLevIniFile                   =                     # Initial water levels sample file *.xyz
LandBoundaryFile                  =                     # Land boundaries file *.ldb, used for visualization
ThinDamFile                       =                     # Polyline file *_thd.pli, containing thin dams
FixedWeirFile                     =                     # Polyline file *_fxw.pliz, containing fixed weirs with rows x, y, crest level, left ground level, right ground
                                                          level
VertplizFile                      =                     # Vertical layering file *_vlay.pliz with rows x, y, Z, first Z, nr of layers, second Z, layer type
ProflocFile                       =                     # Channel profile location file *_proflocation.xyz with rows x, y, z, profile number ref
ProfdefFile                       =                     # Channel profile definition file *_profdefinition.def with definition for all profile numbers
ProfdefxyzFile                    =                     # Channel profile definition file _profdefinition.def with definition for all profile numbers
Uniformwidth1D                    = 2.                  # Uniform width for channel profiles not specified by profloc
StructureFile                     =                     # File *.ini containing list of structures (pumps, weirs, gates and general structures)
ManholeFile                       =                     # File *.ini containing manholes
ShipdefFile                       =                     # File *.shd containing ship definitions
WaterLevIni                       = 0.                  # Initial water level at missing s0 values
BedlevUni                         = -1.5                # Uniform bed level (default = -5 m)
Bedslope                          = 0.                  # Bed slope inclination if BedlevType > 2
BedlevType                        = 3                   # Bathymetry specification
                                                        # 1: at cell centers
                                                        # 2: at faces
                                                        # 3: at nodes, face levels mean of node values
                                                        # 4: at nodes, face levels min. of node values
                                                        # 5: at nodes, face levels max. of node values
                                                        # 6: at nodes, face levels max. of cell-center values
Blmeanbelow                       = -999.               # If not -999d0, below this level the cell center bed level is the mean of surrouding net nodes
Blminabove                        = -999.               # If not -999d0, above this level the cell center bed level is the min. of surrouding net nodes
PartitionFile                     =                     # Domain partition polygon file *_part.pol for parallel run
AngLat                            = 44.7                # Angle of latitude S-N (deg), 0: no Coriolis
AngLon                            = -68.8               # Angle of longitude E-W (deg), 0: Greenwich, used in solar heat flux computation.
Conveyance2D                      = -1                  # -1: R=HU,0: R=H, 1: R=A/P, 2: K=analytic-1D conv, 3: K=analytic-2D conv
Nonlin2D                          = 0                   # Non-linear 2D volumes, only used if ibedlevtype=3 and Conveyance2D>=1
Sillheightmin                     = 0.5                 # Weir treatment only if both sills larger than this value (m)
Makeorthocenters                  = 0                   # Switch from circumcentres to orthocentres in geominit (i>=1: number of iterations, 0: do not use)
Dcenterinside                     = 1.                  # Limit cell center (1.0: in cell, 0.0: on c/g)
Bamin                             = 1.d-6               # Minimum grid cell area, in combination with cut cells
OpenBoundaryTolerance             = 3.                  # Search tolerance factor between boundary polyline and grid cells, in cell size units
RenumberFlowNodes                 = 1                   # Renumber the flow nodes (1: yes, 0: no)
Kmx                               = 0                   # Maximum number of vertical layers
Layertype                         = 1                   # Vertical layer type (1: all sigma, 2: all z, 3: use VertplizFile)
Numtopsig                         = 0                   # Number of sigma layers in top of z-layer model
```

```
SigmaGrowthFactor                 = 1.                  # Layer thickness growth factor from bed up
StretchType                       = 0                   # Type of layer stretching, 0 = uniform, 1 = user defined, 2 = fixed level double exponential

[numerics]
CFLMax                            = 0.7                 # Maximum Courant number
Lincontin                         = 0                   # Default 0; Set to 1 for linearizing d(Hu)/dx; link to AdvecType
AdvecType                         = 33                  # Advection type (0: none, 1: Wenneker, 2: Wenneker q(uio-u), 3: Perot q(uio-u), 4: Perot q(ui-u), 5: Perot q(ui-u)
                                                          without itself)
TimeStepType                      = 2                   # Time step handling (0: only transport, 1: transport + velocity update, 2: full implicit step-reduce, 3: step-
                                                          Jacobi, 4: explicit)
Icoriolistype                     = 5
Limtyphu                          = 0                   # Limiter type for waterdepth in continuity eqn. (0: none, 1: minmod, 2: van Leer, 3: Kooren, 4: monotone central)
Limtypmom                         = 4                   # Limiter type for cell center advection velocity (0: none, 1: minmod, 2: van Leer, 3: Kooren, 4: monotone central)
Limtypsa                          = 4                   # Limiter type for salinity transport (0: none, 1: minmod, 2: van Leer, 3: Kooren, 4: monotone central)
TransportMethod                   = 1                   # Transport method (0: Herman's method, 1: transport module)
TransportTimestepping             = 0                   # Timestepping method in Transport module, 0 = global (default) , 1 = local
Vertadvtypsal                     = 5                   # Vertical advection type for salinity (0: none, 1: upwind explicit, 2: central explicit, 3: upwind implicit, 4:
                                                          central implicit, 5: central implicit but upwind for neg. stratif., 6: higher order explicit, no Forester)
Vertadvtyptem                     = 6                   # Vertical advection type for temperature (0: none, 1: upwind explicit, 2: central explicit, 3: upwind implicit, 4:
                                                          central implicit, 5: central implicit but upwind for neg. stratif., 6: higher order explicit, no Forester)
Cffacver                          = 0.                  # Factor for including (1-CFL) in HO term vertical   (0d0: no, 1d0: yes)
Jarhoxu                           = 0                   # Inlcude density gradient in advection term (0: no, 1: yes, 2: Also in barotrop and baroclin pressure term)
Horadvtypzlayer                   = 0                   # Horizontal advection treatment of z-layers (1: default, 2: sigma-like)
Zlayeratubybob                    = 0                   # Lowest connected cells governed by bob instead of by bL L/R
Icgsolver                         = 4                   # Solver type (1: sobekGS_OMP, 2: sobekGS_OMPthreadsafe, 3: sobekGS, 4: sobekGS + Saadilud, 5: parallel/global
                                                          Saad, 6: parallel/Petsc, 7: parallel/GS)
Maxdegree                         = 6                   # Maximum degree in Gauss elimination
FixedWeirScheme                   = 0                   # Fixed weir scheme (0: none, 1: compact stencil, 2: whole tile lifted, full subgrid weir + factor)
FixedWeirContraction              = 1.                  # Fixed weir flow width contraction factor
Fixedweirfrictscheme              = 1                   # Fixed weir friction scheme (0: friction based on hu, 1: friction based on subgrid weir friction scheme)
Fixedweirtopwidth                 = 1.                  # Uniform width of the groyne part of fixed weirs
Fixedweirtopfrictcoef             = -999.               # Uniform friction coefficient of the groyne part of fixed weirs
Fixedweirtalud                    = 0.25                # Uniform talud slope of fixed weirs
Izbndpos                          = 0                   # Position of z boundary (0: D3Dflow, 1: on net boundary, 2: on specifiend polyline)
Tlfsmo                            = 0.                  # Fourier smoothing time (s) on water level boundaries
Logprofatubndin                   = 1                   # ubnds inflow: 0=uniform U1, 1 = log U1, 2 = log U1 +(k-eps), 3=uniformk
Slopedrop2D                       = 0.                  # Apply drop losses only if local bed slope > Slopedrop2D, (<=0: no drop losses)
Drop3D                            = -999.               # Apply droplosses in 3D if z upwind below bob + 2/3 hu*drop3D
Chkadvd                           = 0.1                 # Check advection terms if depth < chkadvd, => less setbacks
Trsh_u1Lb                         = 0.                  # 2D bedfriction in 3D below this threshold (m)
Zwsbtol                           = 0.                  # tolerance for zws(kb-1) at bed
Keepzlayeringatbed                = 1                   #  bedlayerthickness = zlayerthickness at bed 0 or 1
Teta0                             = 0.55                # Theta of time integration (0.5 < theta < 1)
Qhrelax                           = 1.d-2               # Relaxation on Q-h open boundaries
Jbasqbnddownwindhs                = 0                   # Water depth scheme at discharge boundaries (0: original hu, 1: downwind hs)
cstbnd                            = 0                   # Delft-3D type velocity treatment near boundaries for small coastal models (1: yes, 0: no)
Maxitverticalforestersal          = 100                 # Forester iterations for salinity (0: no vertical filter for salinity, > 0: max nr of iterations)
Maxitverticalforestertem          = 0                   # Forester iterations for temperature (0: no vertical filter for temperature, > 0: max nr of iterations)
Jaorgsethu                        = 1                   # Velocity reconstruction scheme (0 : setumod, sethu, setau sequence, 1 : sethu, setau, setumod sequence
                                                          (standard))
Turbulencemodel                   = 3                   # Turbulence model (0: none, 1: constant, 2: algebraic, 3: k-epsilon, 4: k-tau)
Turbulenceadvection               = 0                   # Turbulence advection (0: none, 3: horizontally explicit and vertically implicit)
Eddyviscositybedfacmax            = 0.                  # Limit eddy viscosity at bed )
```

```
AntiCreep                          = 0                      # Include anti-creep calculation (0: no, 1: yes)
Maxwaterleveldiff                  = 0.                     # upper bound (in m) on water level changes (<= 0: no bounds). Run will abort when violated.
Maxvelocitydiff                    = 0.                     # upper bound (in m/s) on velocity changes (<= 0: no bounds). Run will abort when violated.
MinTimestepBreak                   = 0.                     # smallest allowed timestep (in s), checked on a sliding average of several timesteps. Run will abort when
                                                             violated.
Epshu                              = 1.d-4                  # Threshold water depth for wet and dry cells
SobekDFM_umin                      = 0.                     # Minimal velocity treshold for weir losses in Sobek-DFM coupling.
SobekDFM_umin_method               = 0                      # Method for minimal velocity treshold for weir losses in Sobek-DFM coupling.
sobekDFM_relax                     = 0.1                    # Relaxation factor for SOBEK-DFM coupling algorithm.
Vertadvtypmom                      = 3                      # vertical advection for u1: 0: No, 3: Upwind implicit, 4: Central implicit, 5: QUICK implicit.
jaupwindsrc                        = 1                      # 1st-order upwind advection at sources/sinks (1) or higher-order (0)

[physics]
UnifFrictCoef                      = 2.3d-2                 # Uniform friction coefficient (0: no friction)
UnifFrictType                      = 1                      # Uniform friction type (0: Chezy, 1: Manning, 2: White-Colebrook, 3: idem, WAQUA style)
UnifFrictCoef1D                    = 2.3d-2                 # Uniform friction coefficient in 1D links (0: no friction)
UnifFrictCoefLin                   = 0.                     # Uniform linear friction coefficient for ocean models (m/s) (0: no friction)
Umodlin                            = 0.                     # Linear friction umod, for ifrctyp=4,5,6
Vicouv                             = 1.                     # Uniform horizontal eddy viscosity (m2/s)
Dicouv                             = 1.                     # Uniform horizontal eddy diffusivity (m2/s)
Vicoww                             = 5.d-5                  # Uniform vertical eddy viscosity  (m2/s)
Dicoww                             = 5.d-5                  # Uniform vertical eddy diffusivity  (m2/s)
Vicwminb                           = 0.                     # Minimum visc in prod and buoyancy term (m2/s)
Smagorinsky                        = 0.                     # Smagorinsky factor in horizontal turbulence
Elder                              = 0.                     # Elder factor in horizontal turbulence
irov                               = 0                      # 0=free slip, 1 = partial slip using wall_ks
wall_ks                            = 0.                     # Wall roughness type (0: free slip, 1: partial slip using wall_ks)
Rhomean                            = 1000.                  # Average water density (kg/m3)
Idensform                          = 1                      # Density calulation (0: uniform, 1: Eckard, 2: Unesco, 3: baroclinic case)
Ag                                 = 9.81                   # Gravitational acceleration
TidalForcing                       = 0                      # Tidal forcing, if jsferic=1 (0: no, 1: yes)
SelfAttractionLoading              = 0                      # Self attraction and loading (0=no, 1=yes, 2=only self attraction)
Doodsonstart                       = 55.565                 # TRIWAQ: 55.565, D3D: 57.555
Doodsonstop                        = 375.575                # TRIWAQ: 375.575, D3D: 275.555
Doodsoneps                         = 0.                     # TRIWAQ = 0.0  400 cmps , D3D = 0.03   60 cmps
Villemonte CD 1                    = 1.                     # Calibration coefficient for Villemonte. Default = 1.0.  NB. For Bloemberg data set 0.8 is recommended.
Villemonte CD 2                    = 10.                    # Calibration coefficient for Villemonte. Default = 10.0. NB. For Bloemberg data set 0.8 is recommended.
Salinity                           = 1                      # Include salinity, (0=no, 1=yes)
InitialSalinity                    = 0.                     # Uniform initial salinity concentration (ppt)
Sal0abovezlev                      = -999.                  # Vertical level (m) above which salinity is set 0
DeltaSalinity                      = -999.                  # for testcases
Backgroundsalinity                 = 30.                    # Background salinity for eqn. of state (ppt)
Backgroundwatertemperature         = 15.                    # Background water temperature for eqn. of state (deg C)
Jadelvappos                        = 1                      # Only positive forced evaporation fluxes
Temperature                        = 1                      # Include temperature (0: no, 1: only transport, 3: excess model of D3D, 5: composite (ocean) model)
InitialTemperature                 = 15.                    # Uniform initial water temperature (degC)
Secchidepth                        = 1.                     # Water clarity parameter (m)
Stanton                            = -1.                    # Coefficient for convective heat flux, if negative, Ccon = abs(Stanton)*Cdwind
Dalton                             = -1.                    # Coefficient for evaporative heat flux, if negative, Ceva = abs(Dalton)*Cdwind
Tempmax                            = -999.                  # Limit the temperature
Tempmin                            = 0.                     # Limit the temperature
SecondaryFlow                      = 0                      # Secondary flow (0: no, 1: yes)
BetaSpiral                         = 0.                     # Weight factor of the spiral flow intensity on flow dispersion stresses
```

```
Equili                            = 0                  # Equilibrium spiral flow intensity (0: no, 1: yes)

[sediment]
Sedimentmodelnr                   = 0                  # Sediment model nr, (0=no, 1=Krone, 2=SvR2007, 3=E-H, 4=MorphologyModule)
Nr_of_sedfractions                = 0                  # Nr of sediment fractions, (specify the next parameters for each fraction)
MxgrKrone                         = 0                  # Highest fraction index treated by Krone

[bedform]
BedformFile                       =                    # Bedform characteristics file (*.bfm)

[grw]
Conductivity                      = 0.                 # non dimensionless K conductivity   saturated (m/s), Q = K*A*i (m3/s)
h_aquiferuni                      = 20.                # uniform height of carrying layer (m)
h_unsatini                        = 0.200000002980232  # initial level groundwater is bedlevel - h_unsatini (m)

[veg]
Vegetationmodelnr                 = 0                  # Vegetation model nr, (0=no, 1=Baptist DFM)
Clveg                             = 0.8                # Stem distance factor, default 0.8 ()
Cdveg                             = 0.7                # Stem Cd coefficient , default 0.7 ()
Cbveg                             = 0.                 # Stem stiffness coefficient , default 0.7 ()
Rhoveg                            = 0.                 # Stem Rho, if > 0, -> bouyant stick procedure, default 0.0 ()
Stemheightstd                     = 0.                 # Stem height standard deviation fraction, e.g. 0.1  ()

[wind]
ICdtyp                            = 2                  # Wind drag coefficient type (1=Const; 2=Smith&Banke (2 pts); 3=S&B (3 pts); 4=Charnock 1955, 5=Whang 2005, 6=Wuest
                                                         2005)
Cdbreakpoints                     = 6.3d-4 7.23d-3     # Wind drag coefficient break points
Windspeedbreakpoints              = 0. 100.            # Wind speed break points (m/s)
Rhoair                            = 1.2                # Air density (kg/m3)
PavBnd                            = 0.                 # Average air pressure on open boundaries (N/m2) (only applied if > 0)
Pavini                            = 0.                 # Average air pressure for initial water level correction (N/m2) (only applied if > 0)

[waves]
Wavemodelnr                       = 0                  # Wave model nr. (0: none, 1: fetch/depth limited hurdlestive, 2: Young-Verhagen, 3: SWAN, 4: wave group forcing,
                                                         5: uniform
Wavenikuradse                     = 1.d-2              # Wave friction Nikuradse ks coefficient (m), used in Krone-Swart
Rouwav                            = FR84               # Friction model for wave induced shear stress: FR84 (default) or: MS90, HT91, GM79, DS88, BK67, CJ85, OY88, VR04
Gammax                            = 1.                 # Maximum wave height/water depth ratio
uorbfac                           = 0                  # Orbital velocities: 0=D3D style; 1=Guza style
hminlw                            = 0.2                # Cut-off depth for application of wave forces in momentum balance

[time]
RefDate                           = 20170901           # Reference date (yyyymmdd)
Tzone                             = 0.                 # Time zone assigned to input time series
DtUser                            = 300.               # Time interval (s) for external forcing update
DtNodal                           = 21600.             # Time interval (s) for updating nodal factors in astronomical boundary conditions
DtMax                             = 60.                # Maximal computation timestep (s)
Dtfacmax                          = 1.1                # Max timestep increase factor ( )
DtInit                            = 1.                 # Initial computation timestep (s)
Autotimestepdiff                  = 0                  # 0 = no, 1 = yes (Time limitation based on explicit diffusive term)
Tunit                             = S                  # Time unit for start/stop times (D, H, M or S)
TStart                            = 28800.             # Start time w.r.t. RefDate (in TUnit)
TStop                             = 357600.            # Stop  time w.r.t. RefDate (in TUnit)
```

```
[restart]
RestartFile                       =                     # Restart netcdf-file, either *_rst.nc or *_map.nc
RestartDateTime                   = yyyymmdd_HHMMSS     # Restart date and time (YYYYMMDDHHMMSS) when restarting from *_map.nc

[external forcing]
ExtForceFile                      = penobscot_2pct.ext  # Old format for external forcings file *.ext, link with tim/cmp-format boundary conditions specification
ExtForceFileNew                   = penobscot_mendall_2pct_bnd.ext# New format for external forcings file *.ext, link with bc-format boundary conditions specification
Rainfall                          = 0                   # Include rainfall, (0=no, 1=yes)

[trachytopes]
TrtRou                            = N                   # Include alluvial and vegetation roughness (trachytopes) (Y: yes, N: no)
TrtDef                            =                     # File (*.ttd) including trachytope definitions
TrtL                              =                     # File (*.arl) including distribution of trachytope definitions
DtTrt                             = 1200.               # Trachytope roughness update time interval (s)

[output]
OutputDir                         =                     # Output directory of map-, his-, rst-, dat- and timings-files, default: DFM_OUTPUT_<modelname>. Set to . for
                                                          current dir.
FlowGeomFile                      =                     # Flow geometry NetCDF *_flowgeom.nc
ObsFile                           = penobscot_obs.xyn   # Points file *.xyn with observation stations with rows x, y, station name
CrsFile                           = penobscot_crs.pli   # Polyline file *_crs.pli defining observation cross sections
FouFile                           =                     # Fourier analysis input file *.fou
HisFile                           =                     # HisFile name *_his.nc
MapFile                           =                     # MapFile name *_map.nc
HisInterval                       = 600. 28800. 357600. # History output times, given as "interval" "start period" "end period" (s)
XLSInterval                       = 0.                  # Interval (s) between XLS history
MapInterval                       = 3600. 28800. 357600.# Map file output, given as "interval" "start period" "end period" (s)
RstInterval                       = 86400. 28800. 357600.# Restart file output times, given as "interval" "start period" "end period" (s)
S1incinterval                     = 0.                  # Interval (m) in incremental file for water levels S1
WaqInterval                       = 0. 28800. 357600.   # DELWAQ output times, given as "interval" "start period" "end period" (s)
StatsInterval                     = -600.               # Interval (in s) between simulation statistics output.
WriteBalancefile                  = 0                   # Write balance file (1: yes, 0: no)
TimingsInterval                   = 0.                  # Timings statistics output interval
TimeSplitInterval                 = 0X                  # Time splitting interval, after which a new output file is started. value+unit, e.g. '1 M', valid units:
                                                          Y,M,D,h,m,s.
MapFormat                         = 1                   # Map file format, 1: netCDF, 2: Tecplot, 3: netCFD and Tecplot, 4: NetCDF-UGRID
Wrihis_balance                    = 0                   # Write mass balance totals to his file (1: yes, 0: no)
Wrihis_sourcesink                 = 1                   # Write sources-sinks statistics to his file (1=yes, 0=no)
Wrihis_structure_gen              = 1                   # Write general structure parameters to his file (1: yes, 0: no)
Wrihis_structure_dam              = 1                   # Write dam parameters to his file (1: yes, 0: no)
Wrihis_structure_pump             = 1                   # Write pump parameters to his file (1: yes, 0: no)
Wrihis_structure_gate             = 1                   # Write gate parameters to his file (1: yes, 0: no)
Wrihis_structure_weir             = 1                   # Write weir parameters to his file (1: yes, 0: no)
Wrihis_turbulence                 = 1                   # Write k, eps and vicww to his file (1: yes, 0: no)
Wrihis_wind                       = 1                   # Write wind velocities to his file (1: yes, 0: no)
Wrihis_temperature                = 1                   # Write temperature to his file (1: yes, 0: no)
Wrihis_heatflux                   = 0                   # Write heat flux to his file (1: yes, 0: no)
Wrihis_salinity                   = 1                   # Write salinity to his file (1: yes, 0: no)
Wrimap_waterlevel_s0              = 0                   # Write water levels for previous time step to map file (1: yes, 0: no)
Wrimap_waterlevel_s1              = 1                   # Write water levels to map file (1: yes, 0: no)
Wrimap_velocity_component_u0      = 0                   # Write velocity component for previous time step to map file (1: yes, 0: no)
Wrimap_velocity_component_u1      = 0                   # Write velocity component to map file (1: yes, 0: no)
```

```
Wrimap_velocity_vector            = 1                  # Write cell-center velocity vectors to map file (1: yes, 0: no)
Wrimap_upward_velocity_component  = 0                  # Write upward velocity component on cell interfaces (1: yes, 0: no)
Wrimap_density_rho                = 0                  # Write flow density to map file (1: yes, 0: no)
Wrimap_horizontal_viscosity_viu   = 0                  # Write horizontal viscosity to map file (1: yes, 0: no)
Wrimap_horizontal_diffusivity_diu = 0                  # Write horizontal diffusivity to map file (1: yes, 0: no)
Wrimap_flow_flux_q1               = 0                  # Write flow flux to map file (1: yes, 0: no)
Wrimap_spiral_flow                = 0                  # Write spiral flow to map file (1: yes, 0: no)
Wrimap_numlimdt                   = 0                  # Write the number times a cell was Courant limiting to map file (1: yes, 0: no)
Wrimap_taucurrent                 = 1                  # Write the shear stress to map file (1: yes, 0: no)
Wrimap_chezy                      = 0                  # Write the chezy roughness to map file (1: yes, 0: no)
Wrimap_salinity                   = 1                  # Write salinity to map file (1: yes, 0: no)
Wrimap_temperature                = 1                  # Write temperature to map file (1: yes, 0: no)
Wrimap_turbulence                 = 0                  # Write vicww, k and eps to map file (1: yes, 0: no)
Wrimap_wind                       = 0                  # Write wind velocities to map file (1: yes, 0: no)
Richardsononoutput                = 1                  # Write Richardson numbers (1: yes, 0: no)
MapOutputTimeVector               =                    # File (*.mpt) containing fixed map output times (s) w.r.t. RefDate
FullGridOutput                    = 0                  # Full grid output mode (0: compact, 1: full time-varying grid data)
EulerVelocities                   = 0                  # Euler velocities output (0: GLM, 1: Euler velocities)
Wrirst_bnd                        = 1                  # Write waterlevel, bedlevel and coordinates of boundaries to restart files

[particles]
ParticlesFile                     =
AddTracer                         = 0                  # add tracer (1) or not (other)
StartTime                         = 0.                 # starttime (if >0)
TimeStep                          = 0.                 # time step (>0) or every computational time step
```

APPENDIX A4

Episodic Riverine Event: Orland River

```
# Generated on 15:22:26, 15-12-2017
# Deltares, D-Flow FM Version 1.1.192.52184M, Aug 25 2017, 10:03:58

[model]
Program                           = D-Flow FM
Version                           = 1.1.192.52184M
MDUFormatVersion                  = 1.06                # File format version (do not edit this)
AutoStart                         = 2                   # Autostart simulation after loading MDU (0: no, 1: autostart, 2: autostartstop)

[geometry]
NetFile                           = penobscot_net.nc    # Unstructured grid file *_net.nc
BedlevelFile                      =                     # Bedlevels points file e.g. *.xyz, only needed for bedlevtype not equal 3
DryPointsFile                     =                     # Dry points file *.xyz (third column dummy z values), or dry areas polygon file *.pol (third column 1/-1:
                                                          inside/outside)
WaterLevIniFile                   =                     # Initial water levels sample file *.xyz
LandBoundaryFile                  =                     # Land boundaries file *.ldb, used for visualization
ThinDamFile                       =                     # Polyline file *_thd.pli, containing thin dams
FixedWeirFile                     =                     # Polyline file *_fxw.pliz, containing fixed weirs with rows x, y, crest level, left ground level, right ground
                                                          level
VertplizFile                      =                     # Vertical layering file *_vlay.pliz with rows x, y, Z, first Z, nr of layers, second Z, layer type
ProflocFile                       =                     # Channel profile location file *_proflocation.xyz with rows x, y, z, profile number ref
ProfdefFile                       =                     # Channel profile definition file *_profdefinition.def with definition for all profile numbers
ProfdefxyzFile                    =                     # Channel profile definition file _profdefinition.def with definition for all profile numbers
Uniformwidth1D                    = 2.                  # Uniform width for channel profiles not specified by profloc
StructureFile                     =                     # File *.ini containing list of structures (pumps, weirs, gates and general structures)
ManholeFile                       =                     # File *.ini containing manholes
ShipdefFile                       =                     # File *.shd containing ship definitions
WaterLevIni                       = 0.                  # Initial water level at missing s0 values
BedlevUni                         = -1.5                # Uniform bed level (default = -5 m)
Bedslope                          = 0.                  # Bed slope inclination if BedlevType > 2
BedlevType                        = 3                   # Bathymetry specification
                                                        # 1: at cell centers
                                                        # 2: at faces
                                                        # 3: at nodes, face levels mean of node values
                                                        # 4: at nodes, face levels min. of node values
                                                        # 5: at nodes, face levels max. of node values
                                                        # 6: at nodes, face levels max. of cell-center values
Blmeanbelow                       = -999.               # If not -999d0, below this level the cell center bed level is the mean of surrouding net nodes
Blminabove                        = -999.               # If not -999d0, above this level the cell center bed level is the min. of surrouding net nodes
PartitionFile                     =                     # Domain partition polygon file *_part.pol for parallel run
AngLat                            = 44.7                # Angle of latitude S-N (deg), 0: no Coriolis
AngLon                            = -68.8               # Angle of longitude E-W (deg), 0: Greenwich, used in solar heat flux computation.
Conveyance2D                      = -1                  # -1: R=HU,0: R=H, 1: R=A/P, 2: K=analytic-1D conv, 3: K=analytic-2D conv
Nonlin2D                          = 0                   # Non-linear 2D volumes, only used if ibedlevtype=3 and Conveyance2D>=1
Sillheightmin                     = 0.5                 # Weir treatment only if both sills larger than this value (m)
Makeorthocenters                  = 0                   # Switch from circumcentres to orthocentres in geominit (i>=1: number of iterations, 0: do not use)
Dcenterinside                     = 1.                  # Limit cell center (1.0: in cell, 0.0: on c/g)
Bamin                             = 1.d-6               # Minimum grid cell area, in combination with cut cells
OpenBoundaryTolerance             = 3.                  # Search tolerance factor between boundary polyline and grid cells, in cell size units
RenumberFlowNodes                 = 1                   # Renumber the flow nodes (1: yes, 0: no)
Kmx                               = 0                   # Maximum number of vertical layers
Layertype                         = 1                   # Vertical layer type (1: all sigma, 2: all z, 3: use VertplizFile)
Numtopsig                         = 0                   # Number of sigma layers in top of z-layer model
```

```
SigmaGrowthFactor                = 1.                    # Layer thickness growth factor from bed up
StretchType                      = 0                     # Type of layer stretching, 0 = uniform, 1 = user defined, 2 = fixed level double exponential

[numerics]
CFLMax                           = 0.7                   # Maximum Courant number
Lincontin                        = 0                     # Default 0; Set to 1 for linearizing d(Hu)/dx; link to AdvecType
AdvecType                        = 33                    # Advection type (0: none, 1: Wenneker, 2: Wenneker q(uio-u), 3: Perot q(uio-u), 4: Perot q(ui-u), 5: Perot q(ui-u)
                                                           without itself)
TimeStepType                     = 2                     # Time step handling (0: only transport, 1: transport + velocity update, 2: full implicit step-reduce, 3: step-
                                                           Jacobi, 4: explicit)
Icoriolistype                    = 5
Limtyphu                         = 0                     # Limiter type for waterdepth in continuity eqn. (0: none, 1: minmod, 2: van Leer, 3: Kooren, 4: monotone central)
Limtypmom                        = 4                     # Limiter type for cell center advection velocity (0: none, 1: minmod, 2: van Leer, 3: Kooren, 4: monotone central)
Limtypsa                         = 4                     # Limiter type for salinity transport (0: none, 1: minmod, 2: van Leer, 3: Kooren, 4: monotone central)
TransportMethod                  = 1                     # Transport method (0: Herman's method, 1: transport module)
TransportTimestepping            = 0                     # Timestepping method in Transport module, 0 = global (default) , 1 = local
Vertadvtypsal                    = 5                     # Vertical advection type for salinity (0: none, 1: upwind explicit, 2: central explicit, 3: upwind implicit, 4:
                                                           central implicit, 5: central implicit but upwind for neg. stratif., 6: higher order explicit, no Forester)
Vertadvtyptem                    = 6                     # Vertical advection type for temperature (0: none, 1: upwind explicit, 2: central explicit, 3: upwind implicit, 4:
                                                           central implicit, 5: central implicit but upwind for neg. stratif., 6: higher order explicit, no Forester)
Cffacver                         = 0.                    # Factor for including (1-CFL) in HO term vertical   (0d0: no, 1d0: yes)
Jarhoxu                          = 0                     # Inlcude density gradient in advection term (0: no, 1: yes, 2: Also in barotrop and baroclin pressure term)
Horadvtypzlayer                  = 0                     # Horizontal advection treatment of z-layers (1: default, 2: sigma-like)
Zlayeratubybob                   = 0                     # Lowest connected cells governed by bob instead of by bL L/R
Icgsolver                        = 4                     # Solver type (1: sobekGS_OMP, 2: sobekGS_OMPthreadsafe, 3: sobekGS, 4: sobekGS + Saadilud, 5: parallel/global
                                                           Saad, 6: parallel/Petsc, 7: parallel/GS)
Maxdegree                        = 6                     # Maximum degree in Gauss elimination
FixedWeirScheme                  = 0                     # Fixed weir scheme (0: none, 1: compact stencil, 2: whole tile lifted, full subgrid weir + factor)
FixedWeirContraction             = 1.                    # Fixed weir flow width contraction factor
Fixedweirfrictscheme             = 1                     # Fixed weir friction scheme (0: friction based on hu, 1: friction based on subgrid weir friction scheme)
Fixedweirtopwidth                = 1.                    # Uniform width of the groyne part of fixed weirs
Fixedweirtopfrictcoef            = -999.                 # Uniform friction coefficient of the groyne part of fixed weirs
Fixedweirtalud                   = 0.25                  # Uniform talud slope of fixed weirs
Izbndpos                         = 0                     # Position of z boundary (0: D3Dflow, 1: on net boundary, 2: on specifiend polyline)
Tlfsmo                           = 0.                    # Fourier smoothing time (s) on water level boundaries
Logprofatubndin                  = 1                     # ubnds inflow: 0=uniform U1, 1 = log U1, 2 = log U1 +(k-eps), 3=uniformk
Slopedrop2D                      = 0.                    # Apply drop losses only if local bed slope > Slopedrop2D, (<=0: no drop losses)
Drop3D                           = -999.                 # Apply droplosses in 3D if z upwind below bob + 2/3 hu*drop3D
Chkadvd                          = 0.1                   # Check advection terms if depth < chkadvd, => less setbacks
Trsh_u1Lb                        = 0.                    # 2D bedfriction in 3D below this threshold (m)
Zwsbtol                          = 0.                    # tolerance for zws(kb-1) at bed
Keepzlayeringatbed               = 1                     #  bedlayerthickness = zlayerthickness at bed 0 or 1
Teta0                            = 0.55                  # Theta of time integration (0.5 < theta < 1)
Qhrelax                          = 1.d-2                 # Relaxation on Q-h open boundaries
Jbasqbnddownwindhs               = 0                     # Water depth scheme at discharge boundaries (0: original hu, 1: downwind hs)
cstbnd                           = 0                     # Delft-3D type velocity treatment near boundaries for small coastal models (1: yes, 0: no)
Maxitverticalforestersal         = 100                   # Forester iterations for salinity (0: no vertical filter for salinity, > 0: max nr of iterations)
Maxitverticalforestertem         = 0                     # Forester iterations for temperature (0: no vertical filter for temperature, > 0: max nr of iterations)
Jaorgsethu                       = 1                     # Velocity reconstruction scheme (0 : setumod, sethu, setau sequence, 1 : sethu, setau, setumod sequence
                                                           (standard))
Turbulencemodel                  = 3                     # Turbulence model (0: none, 1: constant, 2: algebraic, 3: k-epsilon, 4: k-tau)
Turbulenceadvection              = 0                     # Turbulence advection (0: none, 3: horizontally explicit and vertically implicit)
Eddyviscositybedfacmax           = 0.                    # Limit eddy viscosity at bed )
```

```
AntiCreep                         = 0                      # Include anti-creep calculation (0: no, 1: yes)
Maxwaterleveldiff                 = 0.                     # upper bound (in m) on water level changes (<= 0: no bounds). Run will abort when violated.
Maxvelocitydiff                   = 0.                     # upper bound (in m/s) on velocity changes (<= 0: no bounds). Run will abort when violated.
MinTimestepBreak                  = 0.                     # smallest allowed timestep (in s), checked on a sliding average of several timesteps. Run will abort when
                                                             violated.
Epshu                             = 1.d-4                  # Threshold water depth for wet and dry cells
SobekDFM_umin                     = 0.                     # Minimal velocity treshold for weir losses in Sobek-DFM coupling.
SobekDFM_umin_method              = 0                      # Method for minimal velocity treshold for weir losses in Sobek-DFM coupling.
sobekDFM_relax                    = 0.1                    # Relaxation factor for SOBEK-DFM coupling algorithm.
Vertadvtypmom                     = 3                      # vertical advection for u1: 0: No, 3: Upwind implicit, 4: Central implicit, 5: QUICK implicit.
jaupwindsrc                       = 1                      # 1st-order upwind advection at sources/sinks (1) or higher-order (0)

[physics]
UnifFrictCoef                     = 2.3d-2                 # Uniform friction coefficient (0: no friction)
UnifFrictType                     = 1                      # Uniform friction type (0: Chezy, 1: Manning, 2: White-Colebrook, 3: idem, WAQUA style)
UnifFrictCoef1D                   = 2.3d-2                 # Uniform friction coefficient in 1D links (0: no friction)
UnifFrictCoefLin                  = 0.                     # Uniform linear friction coefficient for ocean models (m/s) (0: no friction)
Umodlin                           = 0.                     # Linear friction umod, for ifrctyp=4,5,6
Vicouv                            = 1.                     # Uniform horizontal eddy viscosity (m2/s)
Dicouv                            = 1.                     # Uniform horizontal eddy diffusivity (m2/s)
Vicoww                            = 5.d-5                  # Uniform vertical eddy viscosity  (m2/s)
Dicoww                            = 5.d-5                  # Uniform vertical eddy diffusivity  (m2/s)
Vicwminb                          = 0.                     # Minimum visc in prod and buoyancy term (m2/s)
Smagorinsky                       = 0.                     # Smagorinsky factor in horizontal turbulence
Elder                             = 0.                     # Elder factor in horizontal turbulence
irov                              = 0                      # 0=free slip, 1 = partial slip using wall_ks
wall_ks                           = 0.                     # Wall roughness type (0: free slip, 1: partial slip using wall_ks)
Rhomean                           = 1000.                  # Average water density (kg/m3)
Idensform                         = 1                      # Density calulation (0: uniform, 1: Eckard, 2: Unesco, 3: baroclinic case)
Ag                                = 9.81                   # Gravitational acceleration
TidalForcing                      = 0                      # Tidal forcing, if jsferic=1 (0: no, 1: yes)
SelfAttractionLoading             = 0                      # Self attraction and loading (0=no, 1=yes, 2=only self attraction)
Doodsonstart                      = 55.565                 # TRIWAQ: 55.565, D3D: 57.555
Doodsonstop                       = 375.575                # TRIWAQ: 375.575, D3D: 275.555
Doodsoneps                        = 0.                     # TRIWAQ = 0.0  400 cmps , D3D = 0.03   60 cmps
Villemonte CD 1                   = 1.                     # Calibration coefficient for Villemonte. Default = 1.0.  NB. For Bloemberg data set 0.8 is recommended.
Villemonte CD 2                   = 10.                    # Calibration coefficient for Villemonte. Default = 10.0. NB. For Bloemberg data set 0.8 is recommended.
Salinity                          = 1                      # Include salinity, (0=no, 1=yes)
InitialSalinity                   = 0.                     # Uniform initial salinity concentration (ppt)
Sal0abovezlev                     = -999.                  # Vertical level (m) above which salinity is set 0
DeltaSalinity                     = -999.                  # for testcases
Backgroundsalinity                = 30.                    # Background salinity for eqn. of state (ppt)
Backgroundwatertemperature        = 15.                    # Background water temperature for eqn. of state (deg C)
Jadelvappos                       = 1                      # Only positive forced evaporation fluxes
Temperature                       = 1                      # Include temperature (0: no, 1: only transport, 3: excess model of D3D, 5: composite (ocean) model)
InitialTemperature                = 15.                    # Uniform initial water temperature (degC)
Secchidepth                       = 1.                     # Water clarity parameter (m)
Stanton                           = -1.                    # Coefficient for convective heat flux, if negative, Ccon = abs(Stanton)*Cdwind
Dalton                            = -1.                    # Coefficient for evaporative heat flux, if negative, Ceva = abs(Dalton)*Cdwind
Tempmax                           = -999.                  # Limit the temperature
Tempmin                           = 0.                     # Limit the temperature
SecondaryFlow                     = 0                      # Secondary flow (0: no, 1: yes)
BetaSpiral                        = 0.                     # Weight factor of the spiral flow intensity on flow dispersion stresses
```

```
Equili                            = 0                   # Equilibrium spiral flow intensity (0: no, 1: yes)

[sediment]
Sedimentmodelnr                   = 0                   # Sediment model nr, (0=no, 1=Krone, 2=SvR2007, 3=E-H, 4=MorphologyModule)
Nr_of_sedfractions                = 0                   # Nr of sediment fractions, (specify the next parameters for each fraction)
MxgrKrone                         = 0                   # Highest fraction index treated by Krone

[bedform]
BedformFile                       =                     # Bedform characteristics file (*.bfm)

[grw]
Conductivity                      = 0.                  # non dimensionless K conductivity   saturated (m/s), Q = K*A*i (m3/s)
h_aquiferuni                      = 20.                 # uniform height of carrying layer (m)
h_unsatini                        = 0.200000002980232   # initial level groundwater is bedlevel - h_unsatini (m)

[veg]
Vegetationmodelnr                 = 0                   # Vegetation model nr, (0=no, 1=Baptist DFM)
Clveg                             = 0.8                 # Stem distance factor, default 0.8 ()
Cdveg                             = 0.7                 # Stem Cd coefficient , default 0.7 ()
Cbveg                             = 0.                  # Stem stiffness coefficient , default 0.7 ()
Rhoveg                            = 0.                  # Stem Rho, if > 0, -> bouyant stick procedure, default 0.0 ()
Stemheightstd                     = 0.                  # Stem height standard deviation fraction, e.g. 0.1  ()

[wind]
ICdtyp                            = 2                   # Wind drag coefficient type (1=Const; 2=Smith&Banke (2 pts); 3=S&B (3 pts); 4=Charnock 1955, 5=Whang 2005, 6=Wuest
                                                          2005)
Cdbreakpoints                     = 6.3d-4 7.23d-3      # Wind drag coefficient break points
Windspeedbreakpoints              = 0. 100.             # Wind speed break points (m/s)
Rhoair                            = 1.2                 # Air density (kg/m3)
PavBnd                            = 0.                  # Average air pressure on open boundaries (N/m2) (only applied if > 0)
Pavini                            = 0.                  # Average air pressure for initial water level correction (N/m2) (only applied if > 0)

[waves]
Wavemodelnr                       = 0                   # Wave model nr. (0: none, 1: fetch/depth limited hurdlestive, 2: Young-Verhagen, 3: SWAN, 4: wave group forcing,
                                                          5: uniform
Wavenikuradse                     = 1.d-2               # Wave friction Nikuradse ks coefficient (m), used in Krone-Swart
Rouwav                            = FR84                # Friction model for wave induced shear stress: FR84 (default) or: MS90, HT91, GM79, DS88, BK67, CJ85, OY88, VR04
Gammax                            = 1.                  # Maximum wave height/water depth ratio
uorbfac                           = 0                   # Orbital velocities: 0=D3D style; 1=Guza style
hminlw                            = 0.2                 # Cut-off depth for application of wave forces in momentum balance

[time]
RefDate                           = 20170901            # Reference date (yyyymmdd)
Tzone                             = 0.                  # Time zone assigned to input time series
DtUser                            = 300.                # Time interval (s) for external forcing update
DtNodal                           = 21600.              # Time interval (s) for updating nodal factors in astronomical boundary conditions
DtMax                             = 60.                 # Maximal computation timestep (s)
Dtfacmax                          = 1.1                 # Max timestep increase factor ( )
DtInit                            = 1.                  # Initial computation timestep (s)
Autotimestepdiff                  = 0                   # 0 = no, 1 = yes (Time limitation based on explicit diffusive term)
Tunit                             = S                   # Time unit for start/stop times (D, H, M or S)
TStart                            = 28800.              # Start time w.r.t. RefDate (in TUnit)
TStop                             = 357600.             # Stop  time w.r.t. RefDate (in TUnit)
```

```
[restart]
RestartFile                       =                      # Restart netcdf-file, either *_rst.nc or *_map.nc
RestartDateTime                   = yyyymmdd_HHMMSS      # Restart date and time (YYYYMMDDHHMMSS) when restarting from *_map.nc

[external forcing]
ExtForceFile                      = penobscot_2pct.ext  # Old format for external forcings file *.ext, link with tim/cmp-format boundary conditions specification
ExtForceFileNew                   = penobscot_orland_2pct_bnd.ext# New format for external forcings file *.ext, link with bc-format boundary conditions specification
Rainfall                          = 0                    # Include rainfall, (0=no, 1=yes)

[trachytopes]
TrtRou                            = N                    # Include alluvial and vegetation roughness (trachytopes) (Y: yes, N: no)
TrtDef                            =                      # File (*.ttd) including trachytope definitions
TrtL                              =                      # File (*.arl) including distribution of trachytope definitions
DtTrt                             = 1200.                # Trachytope roughness update time interval (s)

[output]
OutputDir                         =                      # Output directory of map-, his-, rst-, dat- and timings-files, default: DFM_OUTPUT_<modelname>. Set to . for
                                                           current dir.
FlowGeomFile                      =                      # Flow geometry NetCDF *_flowgeom.nc
ObsFile                           = penobscot_obs.xyn    # Points file *.xyn with observation stations with rows x, y, station name
CrsFile                           = penobscot_crs.pli    # Polyline file *_crs.pli defining observation cross sections
FouFile                           =                      # Fourier analysis input file *.fou
HisFile                           =                      # HisFile name *_his.nc
MapFile                           =                      # MapFile name *_map.nc
HisInterval                       = 600. 28800. 357600. # History output times, given as "interval" "start period" "end period" (s)
XLSInterval                       = 0.                   # Interval (s) between XLS history
MapInterval                       = 3600. 28800. 357600.# Map file output, given as "interval" "start period" "end period" (s)
RstInterval                       = 86400. 28800. 357600.# Restart file output times, given as "interval" "start period" "end period" (s)
S1incinterval                     = 0.                   # Interval (m) in incremental file for water levels S1
WaqInterval                       = 0. 28800. 357600.    # DELWAQ output times, given as "interval" "start period" "end period" (s)
StatsInterval                     = -600.                # Interval (in s) between simulation statistics output.
WriteBalancefile                  = 0                    # Write balance file (1: yes, 0: no)
TimingsInterval                   = 0.                   # Timings statistics output interval
TimeSplitInterval                 = 0X                   # Time splitting interval, after which a new output file is started. value+unit, e.g. '1 M', valid units:
                                                           Y,M,D,h,m,s.
MapFormat                         = 1                    # Map file format, 1: netCDF, 2: Tecplot, 3: netCFD and Tecplot, 4: NetCDF-UGRID
Wrihis_balance                    = 0                    # Write mass balance totals to his file (1: yes, 0: no)
Wrihis_sourcesink                 = 1                    # Write sources-sinks statistics to his file (1=yes, 0=no)
Wrihis_structure_gen              = 1                    # Write general structure parameters to his file (1: yes, 0: no)
Wrihis_structure_dam              = 1                    # Write dam parameters to his file (1: yes, 0: no)
Wrihis_structure_pump             = 1                    # Write pump parameters to his file (1: yes, 0: no)
Wrihis_structure_gate             = 1                    # Write gate parameters to his file (1: yes, 0: no)
Wrihis_structure_weir             = 1                    # Write weir parameters to his file (1: yes, 0: no)
Wrihis_turbulence                 = 1                    # Write k, eps and vicww to his file (1: yes, 0: no)
Wrihis_wind                       = 1                    # Write wind velocities to his file (1: yes, 0: no)
Wrihis_temperature                = 1                    # Write temperature to his file (1: yes, 0: no)
Wrihis_heatflux                   = 0                    # Write heat flux to his file (1: yes, 0: no)
Wrihis_salinity                   = 1                    # Write salinity to his file (1: yes, 0: no)
Wrimap_waterlevel_s0              = 0                    # Write water levels for previous time step to map file (1: yes, 0: no)
Wrimap_waterlevel_s1              = 1                    # Write water levels to map file (1: yes, 0: no)
Wrimap_velocity_component_u0      = 0                    # Write velocity component for previous time step to map file (1: yes, 0: no)
Wrimap_velocity_component_u1      = 0                    # Write velocity component to map file (1: yes, 0: no)
```

```
Wrimap_velocity_vector            = 1                    # Write cell-center velocity vectors to map file (1: yes, 0: no)
Wrimap_upward_velocity_component  = 0                    # Write upward velocity component on cell interfaces (1: yes, 0: no)
Wrimap_density_rho                = 0                    # Write flow density to map file (1: yes, 0: no)
Wrimap_horizontal_viscosity_viu   = 0                    # Write horizontal viscosity to map file (1: yes, 0: no)
Wrimap_horizontal_diffusivity_diu = 0                    # Write horizontal diffusivity to map file (1: yes, 0: no)
Wrimap_flow_flux_q1               = 0                    # Write flow flux to map file (1: yes, 0: no)
Wrimap_spiral_flow                = 0                    # Write spiral flow to map file (1: yes, 0: no)
Wrimap_numlimdt                   = 0                    # Write the number times a cell was Courant limiting to map file (1: yes, 0: no)
Wrimap_taucurrent                 = 1                    # Write the shear stress to map file (1: yes, 0: no)
Wrimap_chezy                      = 0                    # Write the chezy roughness to map file (1: yes, 0: no)
Wrimap_salinity                   = 1                    # Write salinity to map file (1: yes, 0: no)
Wrimap_temperature                = 1                    # Write temperature to map file (1: yes, 0: no)
Wrimap_turbulence                 = 0                    # Write vicww, k and eps to map file (1: yes, 0: no)
Wrimap_wind                       = 0                    # Write wind velocities to map file (1: yes, 0: no)
Richardsononoutput                = 1                    # Write Richardson numbers (1: yes, 0: no)
MapOutputTimeVector               =                      # File (*.mpt) containing fixed map output times (s) w.r.t. RefDate
FullGridOutput                    = 0                    # Full grid output mode (0: compact, 1: full time-varying grid data)
EulerVelocities                   = 0                    # Euler velocities output (0: GLM, 1: Euler velocities)
Wrirst_bnd                        = 1                    # Write waterlevel, bedlevel and coordinates of boundaries to restart files

[particles]
ParticlesFile                     =
AddTracer                         = 0                    # add tracer (1) or not (other)
StartTime                         = 0.                   # starttime (if >0)
TimeStep                          = 0.                   # time step (>0) or every computational time step
```

APPENDIX A5

Episodic Coastal Event: Atlantic Ocean

```
# Generated on 19:35:17, 18-12-2017
# Deltares, D-Flow FM Version 1.1.192.52184M, Aug 25 2017, 10:03:58

[model]
Program                            = D-Flow FM
Version                            = 1.1.192.52184M
MDUFormatVersion                   = 1.06                 # File format version (do not edit this)
AutoStart                          = 2                    # Autostart simulation after loading MDU (0: no, 1: autostart, 2: autostartstop)

[geometry]
NetFile                            = penobscot_net.nc     # Unstructured grid file *_net.nc
BedlevelFile                       =                      # Bedlevels points file e.g. *.xyz, only needed for bedlevtype not equal 3
DryPointsFile                      =                      # Dry points file *.xyz (third column dummy z values), or dry areas polygon file *.pol (third column 1/-1:
                                                            inside/outside)
WaterLevIniFile                    =                      # Initial water levels sample file *.xyz
LandBoundaryFile                   =                      # Land boundaries file *.ldb, used for visualization
ThinDamFile                        =                      # Polyline file *_thd.pli, containing thin dams
FixedWeirFile                      =                      # Polyline file *_fxw.pliz, containing fixed weirs with rows x, y, crest level, left ground level, right ground
                                                            level
VertplizFile                       =                      # Vertical layering file *_vlay.pliz with rows x, y, Z, first Z, nr of layers, second Z, layer type
ProflocFile                        =                      # Channel profile location file *_proflocation.xyz with rows x, y, z, profile number ref
ProfdefFile                        =                      # Channel profile definition file *_profdefinition.def with definition for all profile numbers
ProfdefxyzFile                     =                      # Channel profile definition file _profdefinition.def with definition for all profile numbers
Uniformwidth1D                     = 2.                   # Uniform width for channel profiles not specified by profloc
StructureFile                      =                      # File *.ini containing list of structures (pumps, weirs, gates and general structures)
ManholeFile                        =                      # File *.ini containing manholes
ShipdefFile                        =                      # File *.shd containing ship definitions
WaterLevIni                        = 0.                   # Initial water level at missing s0 values
BedlevUni                          = -1.5                 # Uniform bed level (default = -5 m)
Bedslope                           = 0.                   # Bed slope inclination if BedlevType > 2
BedlevType                         = 3                    # Bathymetry specification
                                                          # 1: at cell centers
                                                          # 2: at faces
                                                          # 3: at nodes, face levels mean of node values
                                                          # 4: at nodes, face levels min. of node values
                                                          # 5: at nodes, face levels max. of node values
                                                          # 6: at nodes, face levels max. of cell-center values
Blmeanbelow                        = -999.                # If not -999d0, below this level the cell center bed level is the mean of surrouding net nodes
Blminabove                         = -999.                # If not -999d0, above this level the cell center bed level is the min. of surrouding net nodes
PartitionFile                      =                      # Domain partition polygon file *_part.pol for parallel run
AngLat                             = 44.7                 # Angle of latitude S-N (deg), 0: no Coriolis
AngLon                             = -68.8                # Angle of longitude E-W (deg), 0: Greenwich, used in solar heat flux computation.
Conveyance2D                       = -1                   # -1: R=HU,0: R=H, 1: R=A/P, 2: K=analytic-1D conv, 3: K=analytic-2D conv
Nonlin2D                           = 0                    # Non-linear 2D volumes, only used if ibedlevtype=3 and Conveyance2D>=1
Sillheightmin                      = 0.5                  # Weir treatment only if both sills larger than this value (m)
Makeorthocenters                   = 0                    # Switch from circumcentres to orthocentres in geominit (i>=1: number of iterations, 0: do not use)
Dcenterinside                      = 1.                   # Limit cell center (1.0: in cell, 0.0: on c/g)
Bamin                              = 1.d-6                # Minimum grid cell area, in combination with cut cells
OpenBoundaryTolerance              = 3.                   # Search tolerance factor between boundary polyline and grid cells, in cell size units
RenumberFlowNodes                  = 1                    # Renumber the flow nodes (1: yes, 0: no)
Kmx                                = 0                    # Maximum number of vertical layers
Layertype                          = 1                    # Vertical layer type (1: all sigma, 2: all z, 3: use VertplizFile)
Numtopsig                          = 0                    # Number of sigma layers in top of z-layer model
```

```
SigmaGrowthFactor                 = 1.                    # Layer thickness growth factor from bed up
StretchType                       = 0                     # Type of layer stretching, 0 = uniform, 1 = user defined, 2 = fixed level double exponential

[numerics]
CFLMax                            = 0.7                   # Maximum Courant number
Lincontin                         = 0                     # Default 0; Set to 1 for linearizing d(Hu)/dx; link to AdvecType
AdvecType                         = 33                    # Advection type (0: none, 1: Wenneker, 2: Wenneker q(uio-u), 3: Perot q(uio-u), 4: Perot q(ui-u), 5: Perot q(ui-u)
                                                            without itself)
TimeStepType                      = 2                     # Time step handling (0: only transport, 1: transport + velocity update, 2: full implicit step-reduce, 3: step-
                                                            Jacobi, 4: explicit)
Icoriolistype                     = 5
Limtyphu                          = 0                     # Limiter type for waterdepth in continuity eqn. (0: none, 1: minmod, 2: van Leer, 3: Kooren, 4: monotone central)
Limtypmom                         = 4                     # Limiter type for cell center advection velocity (0: none, 1: minmod, 2: van Leer, 3: Kooren, 4: monotone central)
Limtypsa                          = 4                     # Limiter type for salinity transport (0: none, 1: minmod, 2: van Leer, 3: Kooren, 4: monotone central)
TransportMethod                   = 1                     # Transport method (0: Herman's method, 1: transport module)
TransportTimestepping             = 0                     # Timestepping method in Transport module, 0 = global (default) , 1 = local
Vertadvtypsal                     = 5                     # Vertical advection type for salinity (0: none, 1: upwind explicit, 2: central explicit, 3: upwind implicit, 4:
                                                            central implicit, 5: central implicit but upwind for neg. stratif., 6: higher order explicit, no Forester)
Vertadvtyptem                     = 6                     # Vertical advection type for temperature (0: none, 1: upwind explicit, 2: central explicit, 3: upwind implicit, 4:
                                                            central implicit, 5: central implicit but upwind for neg. stratif., 6: higher order explicit, no Forester)
Cffacver                          = 0.                    # Factor for including (1-CFL) in HO term vertical   (0d0: no, 1d0: yes)
Jarhoxu                           = 0                     # Inlcude density gradient in advection term (0: no, 1: yes, 2: Also in barotrop and baroclin pressure term)
Horadvtypzlayer                   = 0                     # Horizontal advection treatment of z-layers (1: default, 2: sigma-like)
Zlayeratubybob                    = 0                     # Lowest connected cells governed by bob instead of by bL L/R
Icgsolver                         = 4                     # Solver type (1: sobekGS_OMP, 2: sobekGS_OMPthreadsafe, 3: sobekGS, 4: sobekGS + Saadilud, 5: parallel/global
                                                            Saad, 6: parallel/Petsc, 7: parallel/GS)
Maxdegree                         = 6                     # Maximum degree in Gauss elimination
FixedWeirScheme                   = 0                     # Fixed weir scheme (0: none, 1: compact stencil, 2: whole tile lifted, full subgrid weir + factor)
FixedWeirContraction              = 1.                    # Fixed weir flow width contraction factor
Fixedweirfrictscheme              = 1                     # Fixed weir friction scheme (0: friction based on hu, 1: friction based on subgrid weir friction scheme)
Fixedweirtopwidth                 = 1.                    # Uniform width of the groyne part of fixed weirs
Fixedweirtopfrictcoef             = -999.                 # Uniform friction coefficient of the groyne part of fixed weirs
Fixedweirtalud                    = 0.25                  # Uniform talud slope of fixed weirs
Izbndpos                          = 0                     # Position of z boundary (0: D3Dflow, 1: on net boundary, 2: on specifiend polyline)
Tlfsmo                            = 0.                    # Fourier smoothing time (s) on water level boundaries
Logprofatubndin                   = 1                     # ubnds inflow: 0=uniform U1, 1 = log U1, 2 = log U1 +(k-eps), 3=uniformk
Slopedrop2D                       = 0.                    # Apply drop losses only if local bed slope > Slopedrop2D, (<=0: no drop losses)
Drop3D                            = -999.                 # Apply droplosses in 3D if z upwind below bob + 2/3 hu*drop3D
Chkadvd                           = 0.1                   # Check advection terms if depth < chkadvd, => less setbacks
Trsh_u1Lb                         = 0.                    # 2D bedfriction in 3D below this threshold (m)
Zwsbtol                           = 0.                    # tolerance for zws(kb-1) at bed
Keepzlayeringatbed                = 1                     #  bedlayerthickness = zlayerthickness at bed 0 or 1
Teta0                             = 0.55                  # Theta of time integration (0.5 < theta < 1)
Qhrelax                           = 1.d-2                 # Relaxation on Q-h open boundaries
Jbasqbnddownwindhs                = 0                     # Water depth scheme at discharge boundaries (0: original hu, 1: downwind hs)
cstbnd                            = 0                     # Delft-3D type velocity treatment near boundaries for small coastal models (1: yes, 0: no)
Maxitverticalforestersal          = 100                   # Forester iterations for salinity (0: no vertical filter for salinity, > 0: max nr of iterations)
Maxitverticalforestertem          = 0                     # Forester iterations for temperature (0: no vertical filter for temperature, > 0: max nr of iterations)
Jaorgsethu                        = 1                     # Velocity reconstruction scheme (0 : setumod, sethu, setau sequence, 1 : sethu, setau, setumod sequence
                                                            (standard))
Turbulencemodel                   = 3                     # Turbulence model (0: none, 1: constant, 2: algebraic, 3: k-epsilon, 4: k-tau)
Turbulenceadvection               = 0                     # Turbulence advection (0: none, 3: horizontally explicit and vertically implicit)
Eddyviscositybedfacmax            = 0.                    # Limit eddy viscosity at bed )
```

```
AntiCreep                         = 0                    # Include anti-creep calculation (0: no, 1: yes)
Maxwaterleveldiff                 = 0.                   # upper bound (in m) on water level changes (<= 0: no bounds). Run will abort when violated.
Maxvelocitydiff                   = 0.                   # upper bound (in m/s) on velocity changes (<= 0: no bounds). Run will abort when violated.
MinTimestepBreak                  = 0.                   # smallest allowed timestep (in s), checked on a sliding average of several timesteps. Run will abort when
                                                          violated.
Epshu                             = 1.d-4                # Threshold water depth for wet and dry cells
SobekDFM_umin                     = 0.                   # Minimal velocity treshold for weir losses in Sobek-DFM coupling.
SobekDFM_umin_method              = 0                    # Method for minimal velocity treshold for weir losses in Sobek-DFM coupling.
sobekDFM_relax                    = 0.1                  # Relaxation factor for SOBEK-DFM coupling algorithm.
Vertadvtypmom                     = 3                    # vertical advection for u1: 0: No, 3: Upwind implicit, 4: Central implicit, 5: QUICK implicit.
jaupwindsrc                       = 1                    # 1st-order upwind advection at sources/sinks (1) or higher-order (0)

[physics]
UnifFrictCoef                     = 2.3d-2               # Uniform friction coefficient (0: no friction)
UnifFrictType                     = 1                    # Uniform friction type (0: Chezy, 1: Manning, 2: White-Colebrook, 3: idem, WAQUA style)
UnifFrictCoef1D                   = 2.3d-2               # Uniform friction coefficient in 1D links (0: no friction)
UnifFrictCoefLin                  = 0.                   # Uniform linear friction coefficient for ocean models (m/s) (0: no friction)
Umodlin                           = 0.                   # Linear friction umod, for ifrctyp=4,5,6
Vicouv                            = 1.                   # Uniform horizontal eddy viscosity (m2/s)
Dicouv                            = 1.                   # Uniform horizontal eddy diffusivity (m2/s)
Vicoww                            = 5.d-5                # Uniform vertical eddy viscosity  (m2/s)
Dicoww                            = 5.d-5                # Uniform vertical eddy diffusivity  (m2/s)
Vicwminb                          = 0.                   # Minimum visc in prod and buoyancy term (m2/s)
Smagorinsky                       = 0.                   # Smagorinsky factor in horizontal turbulence
Elder                             = 0.                   # Elder factor in horizontal turbulence
irov                              = 0                    # 0=free slip, 1 = partial slip using wall_ks
wall_ks                           = 0.                   # Wall roughness type (0: free slip, 1: partial slip using wall_ks)
Rhomean                           = 1000.                # Average water density (kg/m3)
Idensform                         = 1                    # Density calulation (0: uniform, 1: Eckard, 2: Unesco, 3: baroclinic case)
Ag                                = 9.81                 # Gravitational acceleration
TidalForcing                      = 0                    # Tidal forcing, if jsferic=1 (0: no, 1: yes)
SelfAttractionLoading             = 0                    # Self attraction and loading (0=no, 1=yes, 2=only self attraction)
Doodsonstart                      = 55.565               # TRIWAQ: 55.565, D3D: 57.555
Doodsonstop                       = 375.575              # TRIWAQ: 375.575, D3D: 275.555
Doodsoneps                        = 0.                   # TRIWAQ = 0.0  400 cmps , D3D = 0.03   60 cmps
Villemonte CD 1                   = 1.                   # Calibration coefficient for Villemonte. Default = 1.0.  NB. For Bloemberg data set 0.8 is recommended.
Villemonte CD 2                   = 10.                  # Calibration coefficient for Villemonte. Default = 10.0. NB. For Bloemberg data set 0.8 is recommended.
Salinity                          = 1                    # Include salinity, (0=no, 1=yes)
InitialSalinity                   = 0.                   # Uniform initial salinity concentration (ppt)
Sal0abovezlev                     = -999.                # Vertical level (m) above which salinity is set 0
DeltaSalinity                     = -999.                # for testcases
Backgroundsalinity                = 30.                  # Background salinity for eqn. of state (ppt)
Backgroundwatertemperature        = 15.                  # Background water temperature for eqn. of state (deg C)
Jadelvappos                       = 1                    # Only positive forced evaporation fluxes
Temperature                       = 1                    # Include temperature (0: no, 1: only transport, 3: excess model of D3D, 5: composite (ocean) model)
InitialTemperature                = 15.                  # Uniform initial water temperature (degC)
Secchidepth                       = 1.                   # Water clarity parameter (m)
Stanton                           = -1.                  # Coefficient for convective heat flux, if negative, Ccon = abs(Stanton)*Cdwind
Dalton                            = -1.                  # Coefficient for evaporative heat flux, if negative, Ceva = abs(Dalton)*Cdwind
Tempmax                           = -999.                # Limit the temperature
Tempmin                           = 0.                   # Limit the temperature
SecondaryFlow                     = 0                    # Secondary flow (0: no, 1: yes)
BetaSpiral                        = 0.                   # Weight factor of the spiral flow intensity on flow dispersion stresses
```

```
Equili                          = 0                   # Equilibrium spiral flow intensity (0: no, 1: yes)

[sediment]
Sedimentmodelnr                 = 0                   # Sediment model nr, (0=no, 1=Krone, 2=SvR2007, 3=E-H, 4=MorphologyModule)
Nr_of_sedfractions              = 0                   # Nr of sediment fractions, (specify the next parameters for each fraction)
MxgrKrone                       = 0                   # Highest fraction index treated by Krone

[bedform]
BedformFile                     =                     # Bedform characteristics file (*.bfm)

[grw]
Conductivity                    = 0.                  # non dimensionless K conductivity   saturated (m/s), Q = K*A*i (m3/s)
h_aquiferuni                    = 20.                 # uniform height of carrying layer (m)
h_unsatini                      = 0.200000002980232   # initial level groundwater is bedlevel - h_unsatini (m)

[veg]
Vegetationmodelnr               = 0                   # Vegetation model nr, (0=no, 1=Baptist DFM)
Clveg                           = 0.8                 # Stem distance factor, default 0.8 ()
Cdveg                           = 0.7                 # Stem Cd coefficient , default 0.7 ()
Cbveg                           = 0.                  # Stem stiffness coefficient , default 0.7 ()
Rhoveg                          = 0.                  # Stem Rho, if > 0, -> bouyant stick procedure, default 0.0 ()
Stemheightstd                   = 0.                  # Stem height standard deviation fraction, e.g. 0.1  ()

[wind]
ICdtyp                          = 2                   # Wind drag coefficient type (1=Const; 2=Smith&Banke (2 pts); 3=S&B (3 pts); 4=Charnock 1955, 5=Whang 2005, 6=Wuest
                                                        2005)
Cdbreakpoints                   = 6.3d-4 7.23d-3      # Wind drag coefficient break points
Windspeedbreakpoints            = 0. 100.             # Wind speed break points (m/s)
Rhoair                          = 1.2                 # Air density (kg/m3)
PavBnd                          = 0.                  # Average air pressure on open boundaries (N/m2) (only applied if > 0)
Pavini                          = 0.                  # Average air pressure for initial water level correction (N/m2) (only applied if > 0)

[waves]
Wavemodelnr                     = 0                   # Wave model nr. (0: none, 1: fetch/depth limited hurdlestive, 2: Young-Verhagen, 3: SWAN, 4: wave group forcing,
                                                        5: uniform
Wavenikuradse                   = 1.d-2               # Wave friction Nikuradse ks coefficient (m), used in Krone-Swart
Rouwav                          = FR84                # Friction model for wave induced shear stress: FR84 (default) or: MS90, HT91, GM79, DS88, BK67, CJ85, OY88, VR04
Gammax                          = 1.                  # Maximum wave height/water depth ratio
uorbfac                         = 0                   # Orbital velocities: 0=D3D style; 1=Guza style
hminlw                          = 0.2                 # Cut-off depth for application of wave forces in momentum balance

[time]
RefDate                         = 20170901            # Reference date (yyyymmdd)
Tzone                           = 0.                  # Time zone assigned to input time series
DtUser                          = 300.                # Time interval (s) for external forcing update
DtNodal                         = 21600.              # Time interval (s) for updating nodal factors in astronomical boundary conditions
DtMax                           = 60.                 # Maximal computation timestep (s)
Dtfacmax                        = 1.1                 # Max timestep increase factor ( )
DtInit                          = 1.                  # Initial computation timestep (s)
Autotimestepdiff                = 0                   # 0 = no, 1 = yes (Time limitation based on explicit diffusive term)
Tunit                           = S                   # Time unit for start/stop times (D, H, M or S)
TStart                          = 28800.              # Start time w.r.t. RefDate (in TUnit)
TStop                           = 715200.             # Stop  time w.r.t. RefDate (in TUnit)
```

```
[restart]
RestartFile                       =                      # Restart netcdf-file, either *_rst.nc or *_map.nc
RestartDateTime                   = yyyymmdd_HHMMSS      # Restart date and time (YYYYMMDDHHMMSS) when restarting from *_map.nc

[external forcing]
ExtForceFile                      = penobscot_atlantic.ext# Old format for external forcings file *.ext, link with tim/cmp-format boundary conditions specification
ExtForceFileNew                   = penobscot_atlantic_bnd.ext# New format for external forcings file *.ext, link with bc-format boundary conditions specification
Rainfall                          = 0                    # Include rainfall, (0=no, 1=yes)

[trachytopes]
TrtRou                            = N                    # Include alluvial and vegetation roughness (trachytopes) (Y: yes, N: no)
TrtDef                            =                      # File (*.ttd) including trachytope definitions
TrtL                              =                      # File (*.arl) including distribution of trachytope definitions
DtTrt                             = 1200.                # Trachytope roughness update time interval (s)

[output]
OutputDir                         =                      # Output directory of map-, his-, rst-, dat- and timings-files, default: DFM_OUTPUT_<modelname>. Set to . for
                                                           current dir.
FlowGeomFile                      =                      # Flow geometry NetCDF *_flowgeom.nc
ObsFile                           = penobscot_obs.xyn    # Points file *.xyn with observation stations with rows x, y, station name
CrsFile                           = penobscot_crs.pli    # Polyline file *_crs.pli defining observation cross sections
FouFile                           =                      # Fourier analysis input file *.fou
HisFile                           =                      # HisFile name *_his.nc
MapFile                           =                      # MapFile name *_map.nc
HisInterval                       = 600. 28800. 715200. # History output times, given as "interval" "start period" "end period" (s)
XLSInterval                       = 0.                   # Interval (s) between XLS history
MapInterval                       = 3600. 28800. 715200.# Map file output, given as "interval" "start period" "end period" (s)
RstInterval                       = 86400. 28800. 715200.# Restart file output times, given as "interval" "start period" "end period" (s)
S1incinterval                     = 0.                   # Interval (m) in incremental file for water levels S1
WaqInterval                       = 0. 28800. 715200.    # DELWAQ output times, given as "interval" "start period" "end period" (s)
StatsInterval                     = -600.                # Interval (in s) between simulation statistics output.
WriteBalancefile                  = 0                    # Write balance file (1: yes, 0: no)
TimingsInterval                   = 0.                   # Timings statistics output interval
TimeSplitInterval                 = 0X                   # Time splitting interval, after which a new output file is started. value+unit, e.g. '1 M', valid units:
                                                           Y,M,D,h,m,s.
MapFormat                         = 1                    # Map file format, 1: netCDF, 2: Tecplot, 3: netCFD and Tecplot, 4: NetCDF-UGRID
Wrihis_balance                    = 0                    # Write mass balance totals to his file (1: yes, 0: no)
Wrihis_sourcesink                 = 1                    # Write sources-sinks statistics to his file (1=yes, 0=no)
Wrihis_structure_gen              = 1                    # Write general structure parameters to his file (1: yes, 0: no)
Wrihis_structure_dam              = 1                    # Write dam parameters to his file (1: yes, 0: no)
Wrihis_structure_pump             = 1                    # Write pump parameters to his file (1: yes, 0: no)
Wrihis_structure_gate             = 1                    # Write gate parameters to his file (1: yes, 0: no)
Wrihis_structure_weir             = 1                    # Write weir parameters to his file (1: yes, 0: no)
Wrihis_turbulence                 = 1                    # Write k, eps and vicww to his file (1: yes, 0: no)
Wrihis_wind                       = 1                    # Write wind velocities to his file (1: yes, 0: no)
Wrihis_temperature                = 1                    # Write temperature to his file (1: yes, 0: no)
Wrihis_heatflux                   = 0                    # Write heat flux to his file (1: yes, 0: no)
Wrihis_salinity                   = 1                    # Write salinity to his file (1: yes, 0: no)
Wrimap_waterlevel_s0              = 0                    # Write water levels for previous time step to map file (1: yes, 0: no)
Wrimap_waterlevel_s1              = 1                    # Write water levels to map file (1: yes, 0: no)
Wrimap_velocity_component_u0      = 0                    # Write velocity component for previous time step to map file (1: yes, 0: no)
Wrimap_velocity_component_u1      = 0                    # Write velocity component to map file (1: yes, 0: no)
```

```
Wrimap_velocity_vector            = 1                    # Write cell-center velocity vectors to map file (1: yes, 0: no)
Wrimap_upward_velocity_component  = 0                    # Write upward velocity component on cell interfaces (1: yes, 0: no)
Wrimap_density_rho                = 0                    # Write flow density to map file (1: yes, 0: no)
Wrimap_horizontal_viscosity_viu   = 0                    # Write horizontal viscosity to map file (1: yes, 0: no)
Wrimap_horizontal_diffusivity_diu = 0                    # Write horizontal diffusivity to map file (1: yes, 0: no)
Wrimap_flow_flux_q1               = 0                    # Write flow flux to map file (1: yes, 0: no)
Wrimap_spiral_flow                = 0                    # Write spiral flow to map file (1: yes, 0: no)
Wrimap_numlimdt                   = 0                    # Write the number times a cell was Courant limiting to map file (1: yes, 0: no)
Wrimap_taucurrent                 = 1                    # Write the shear stress to map file (1: yes, 0: no)
Wrimap_chezy                      = 0                    # Write the chezy roughness to map file (1: yes, 0: no)
Wrimap_salinity                   = 1                    # Write salinity to map file (1: yes, 0: no)
Wrimap_temperature                = 1                    # Write temperature to map file (1: yes, 0: no)
Wrimap_turbulence                 = 0                    # Write vicww, k and eps to map file (1: yes, 0: no)
Wrimap_wind                       = 0                    # Write wind velocities to map file (1: yes, 0: no)
Richardsononoutput                = 1                    # Write Richardson numbers (1: yes, 0: no)
MapOutputTimeVector               =                      # File (*.mpt) containing fixed map output times (s) w.r.t. RefDate
FullGridOutput                    = 0                    # Full grid output mode (0: compact, 1: full time-varying grid data)
EulerVelocities                   = 0                    # Euler velocities output (0: GLM, 1: Euler velocities)
Wrirst_bnd                        = 1                    # Write waterlevel, bedlevel and coordinates of boundaries to restart files

[particles]
ParticlesFile                     =
AddTracer                         = 0                    # add tracer (1) or not (other)
StartTime                         = 0.                   # starttime (if >0)
TimeStep                          = 0.                   # time step (>0) or every computational time step
```

APPENDIX B

Simulation Output

APPENDIX B1

September 2017 Simulation

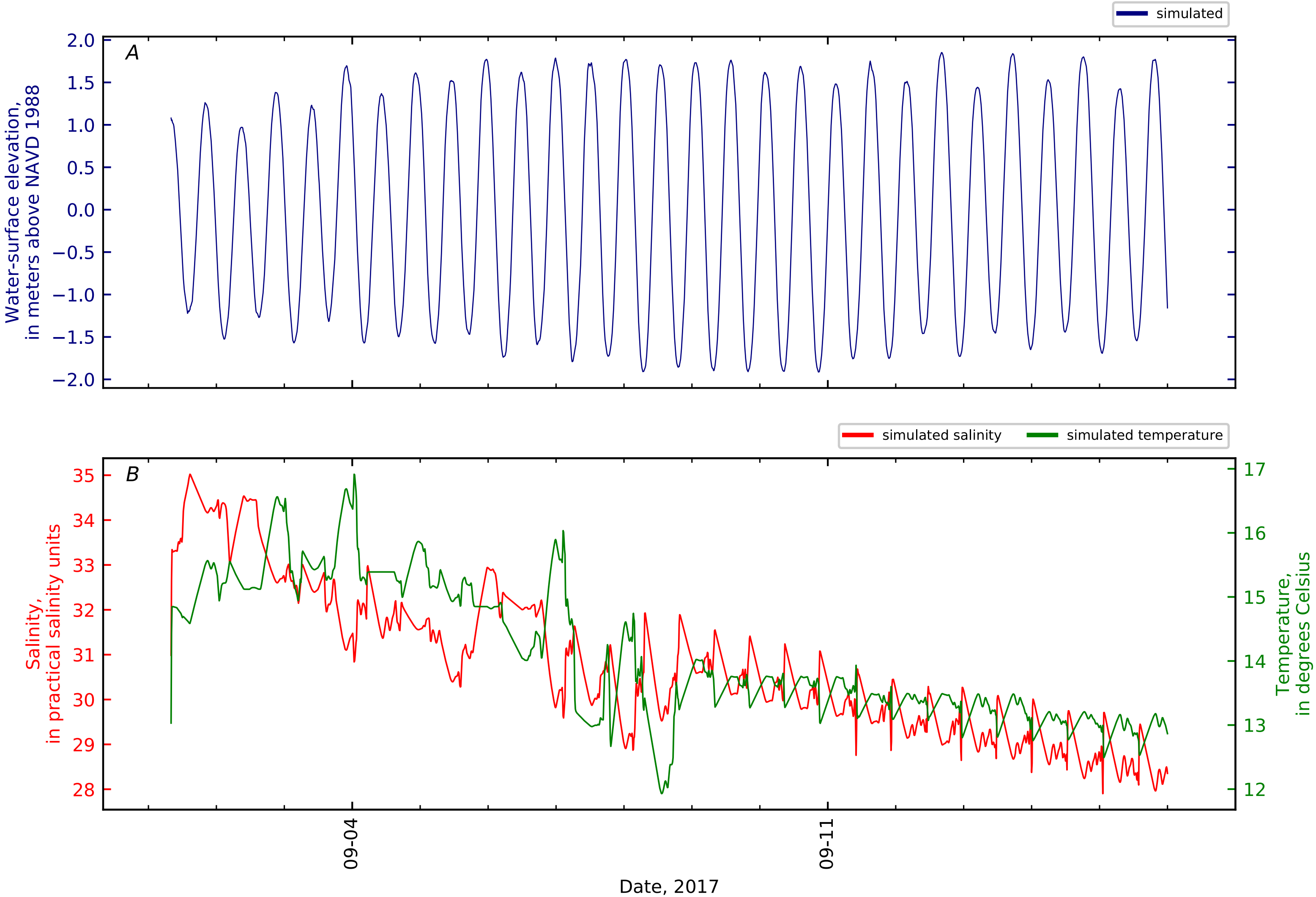

Figure B1-1. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 0, Penob Riv -KM5 nr Cape Jellison boundary.

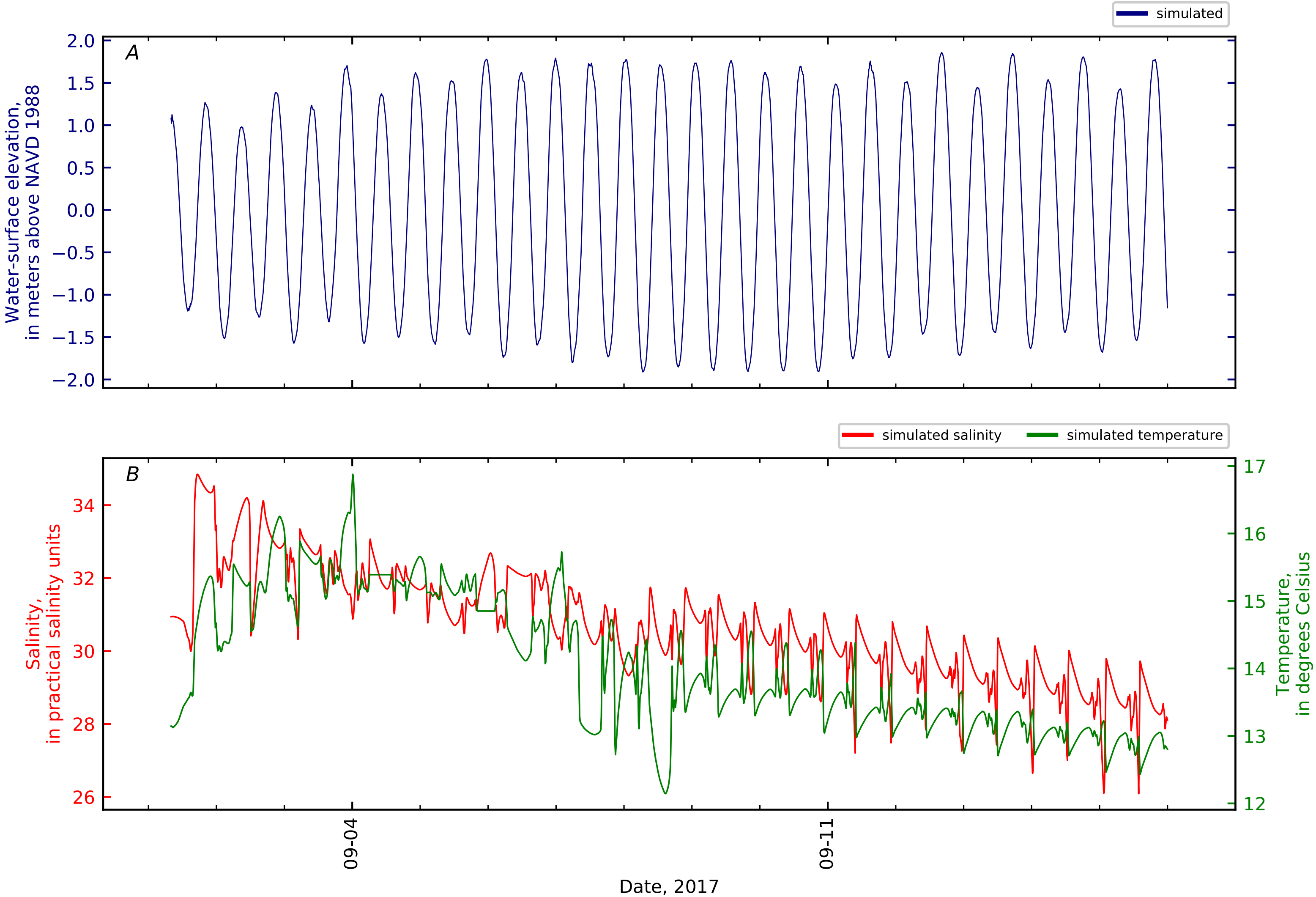

Figure B1-2. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 1, Penob Riv -KM4 nr Cape Jellison XS.

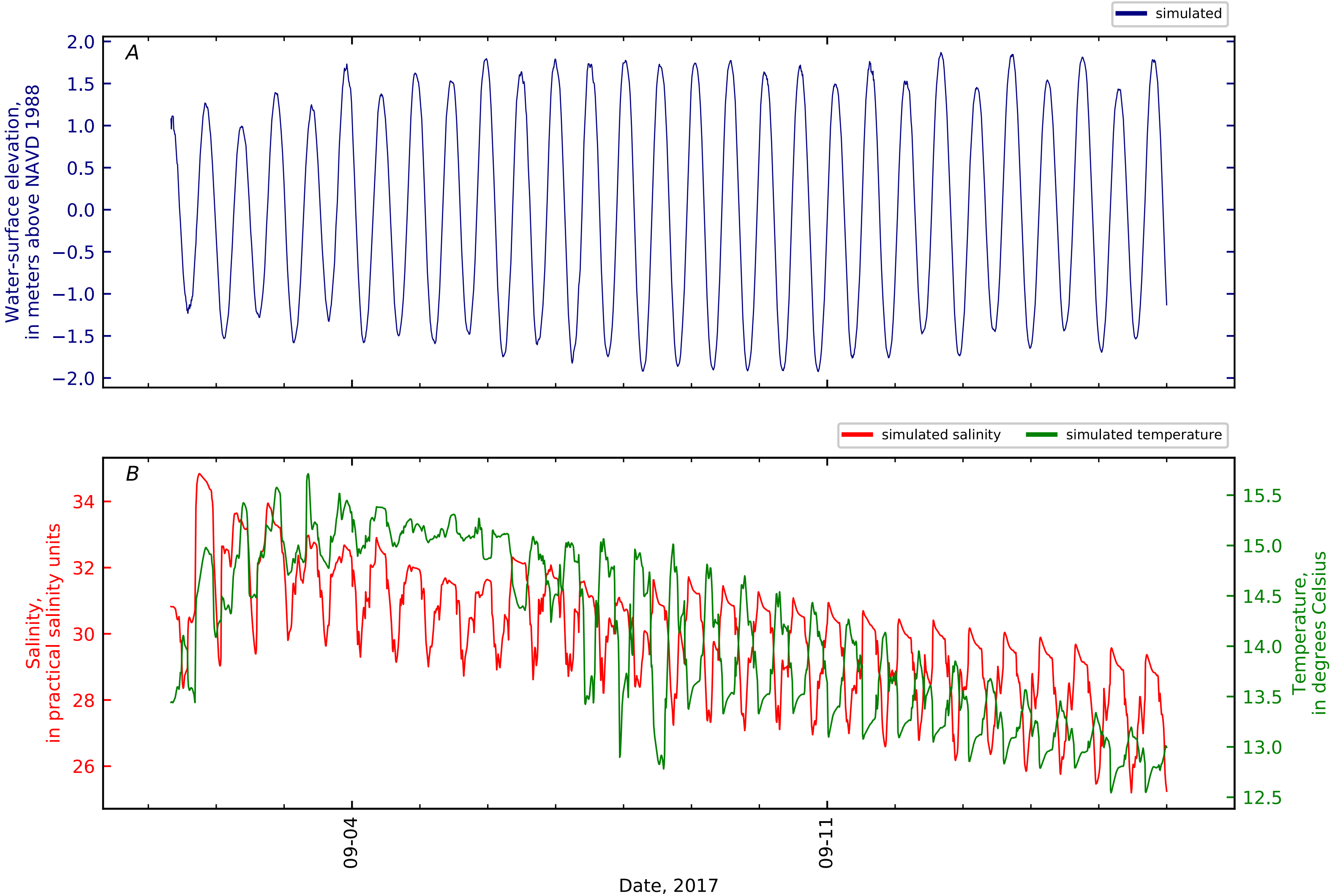

Figure B1-3. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 2, Penob Riv -KM1.5 d/s Ft Point.

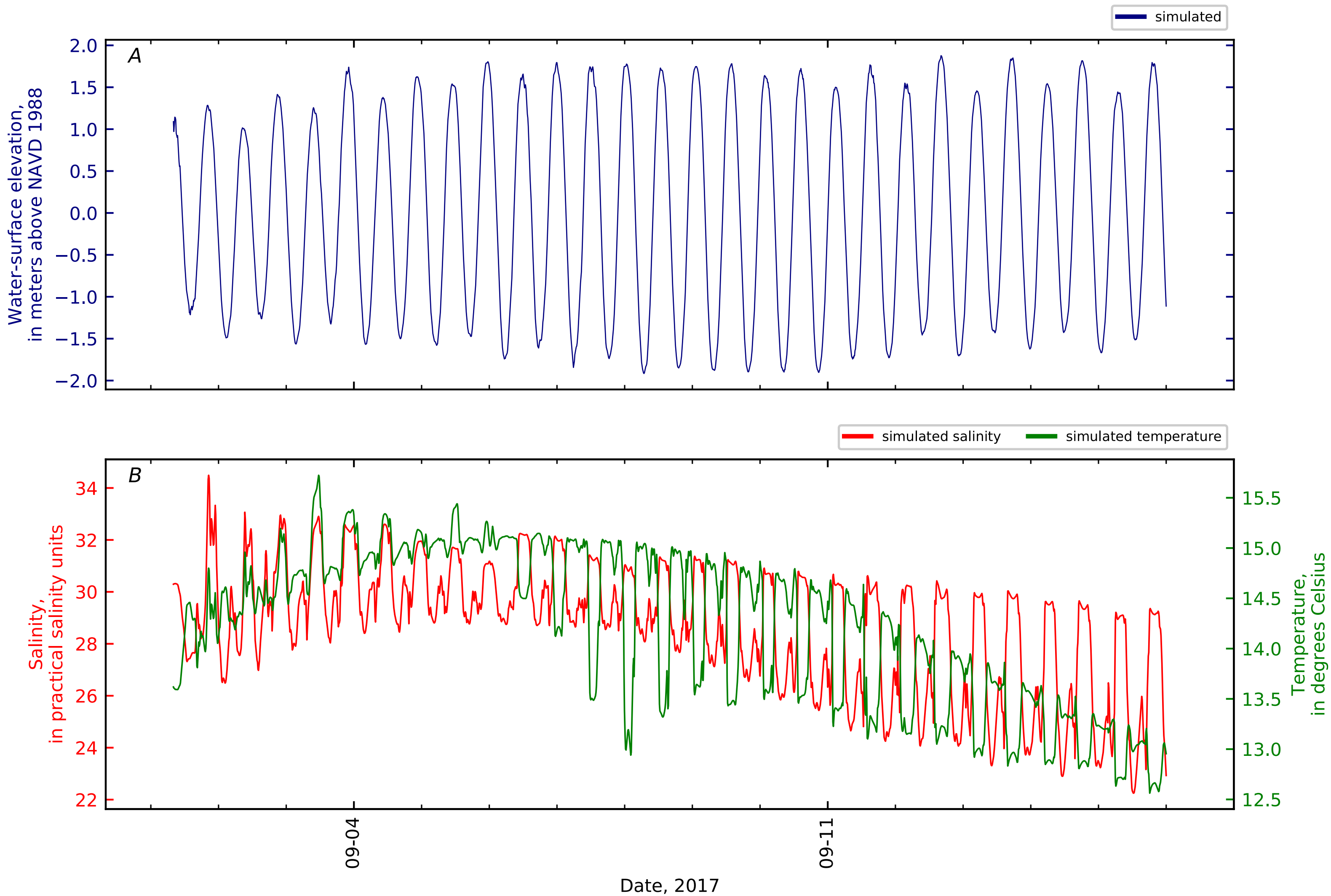

Figure B1-4. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 3, Penob Riv KM0 Ft Point.

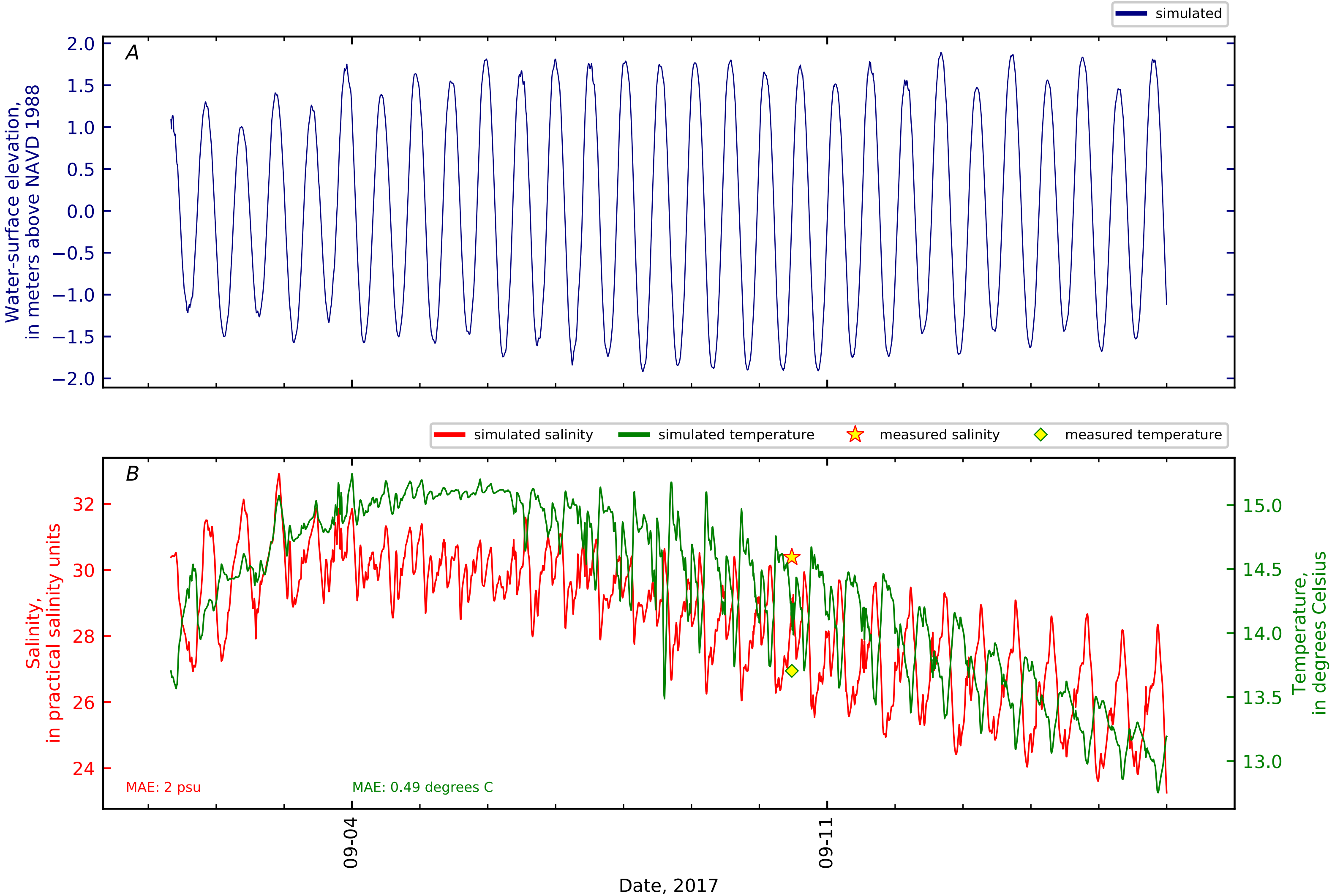

Figure B1-5. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 4, Penob Riv KM0 GS CTD5-01.

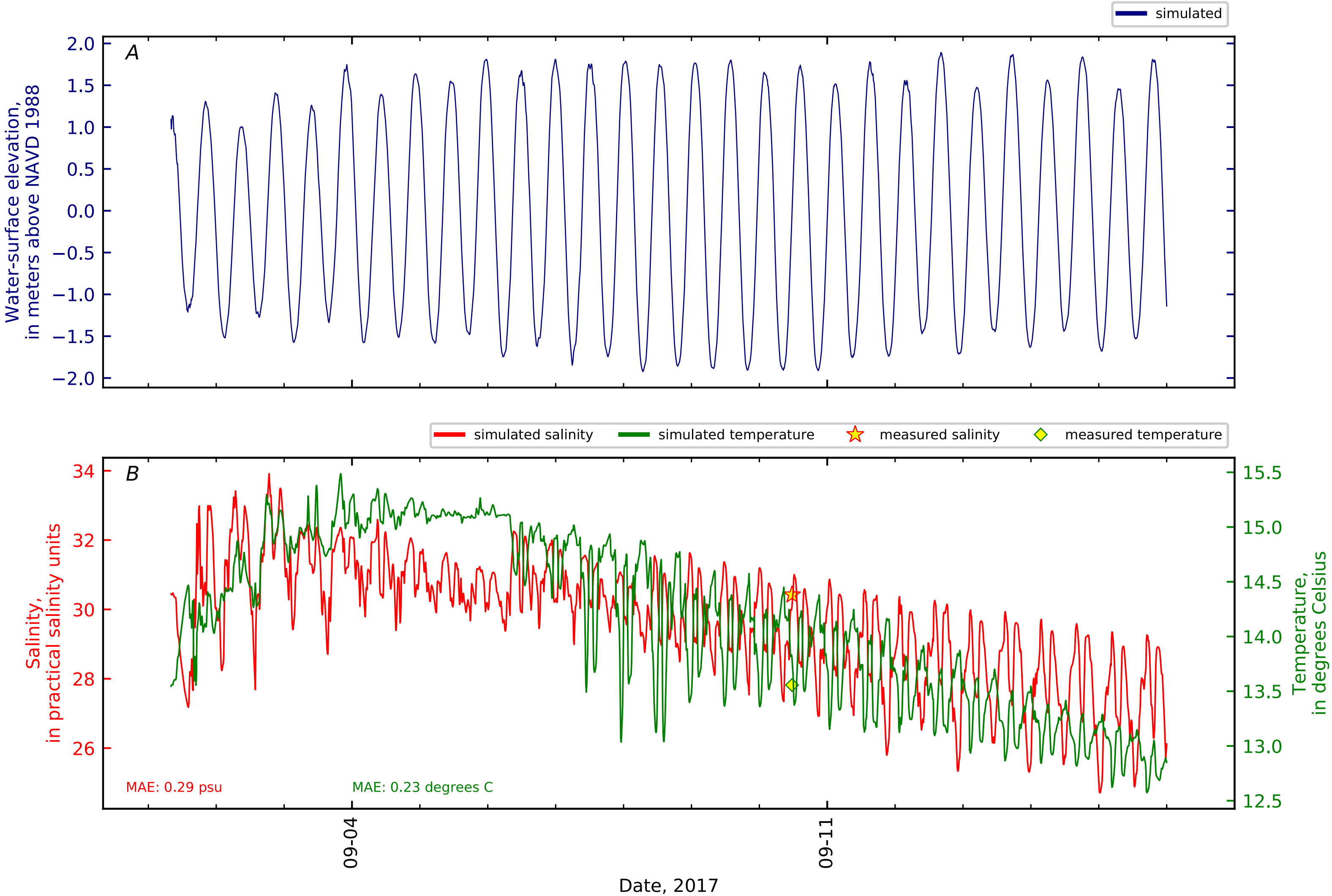

Figure B1-6. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 5, Penob Riv KM0 GS CTD5-02.

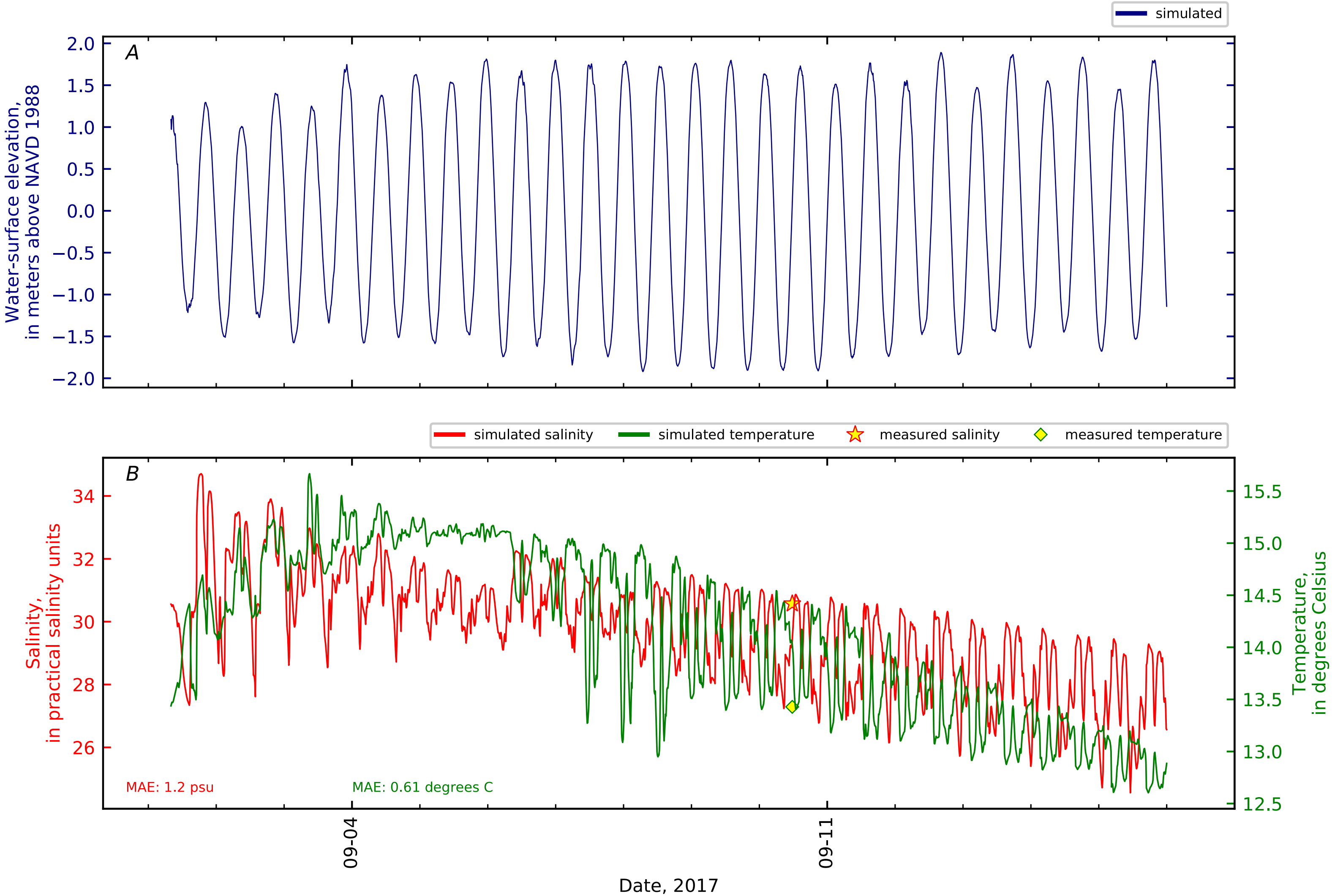

Figure B1-7. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 6, Penob Riv KM0 GS CTD5-03.

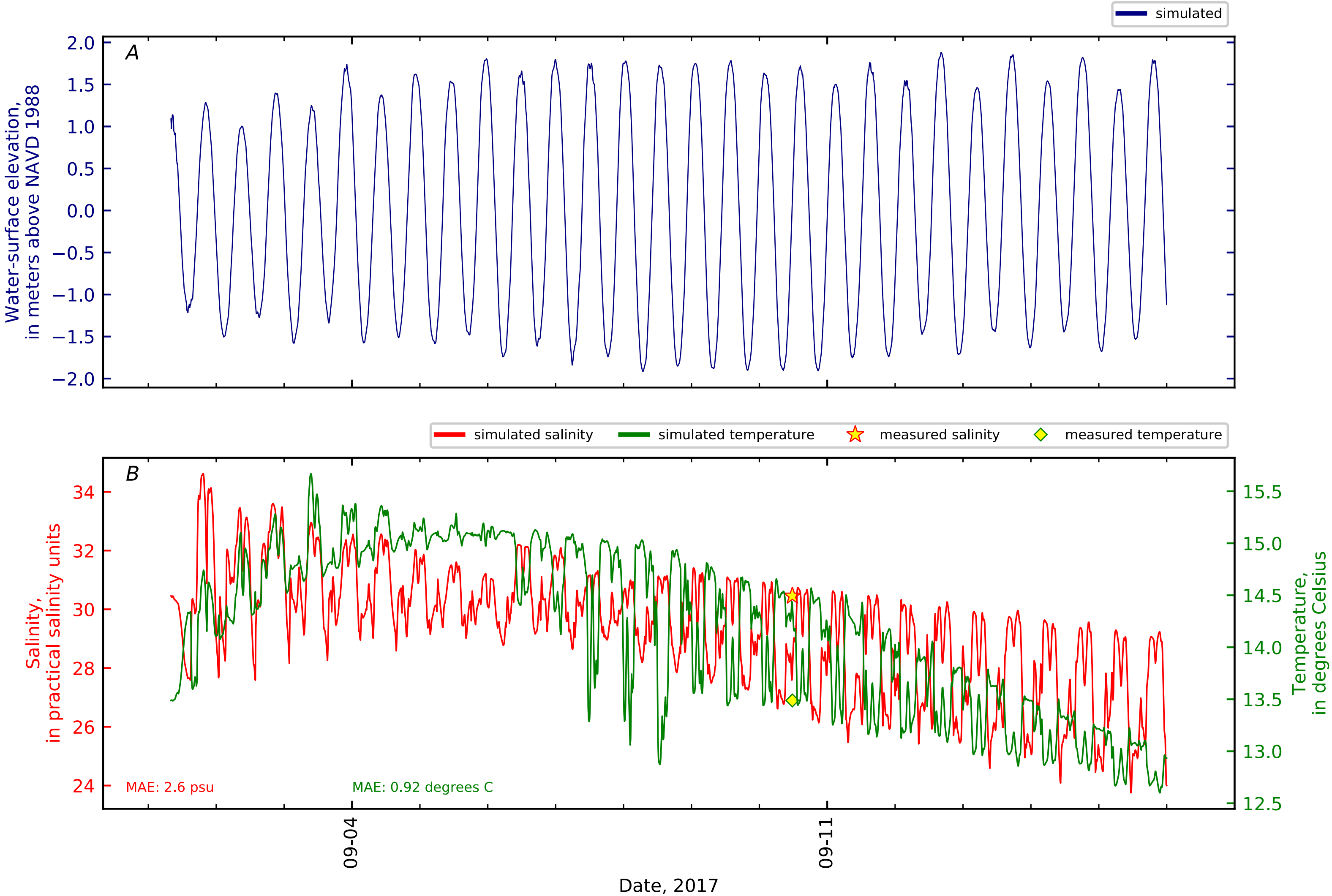

Figure B1-8. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 7, Penob Riv KM0 GS CTD5-04.

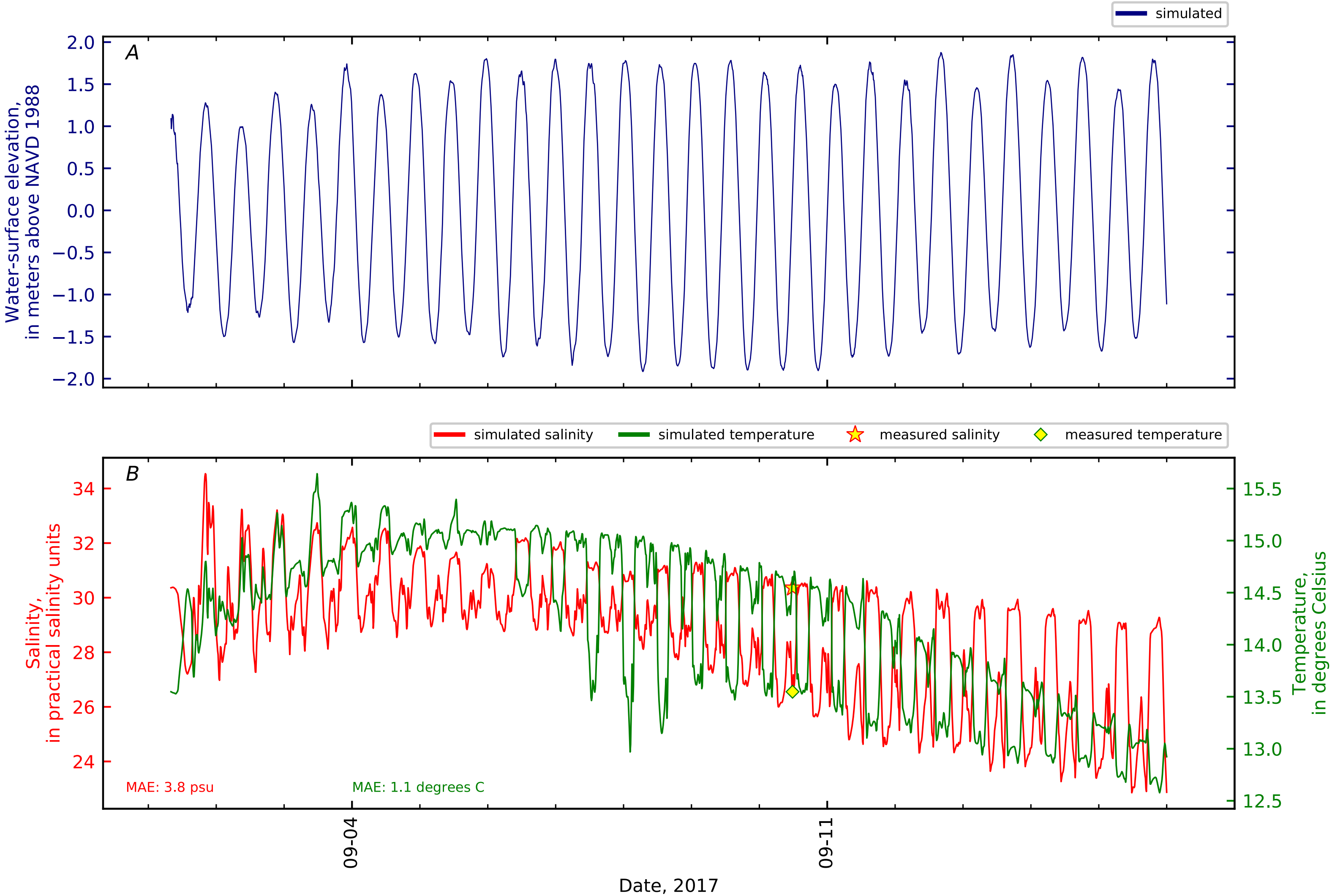

Figure B1-9. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 8, Penob Riv KM0 GS CTD5-05.

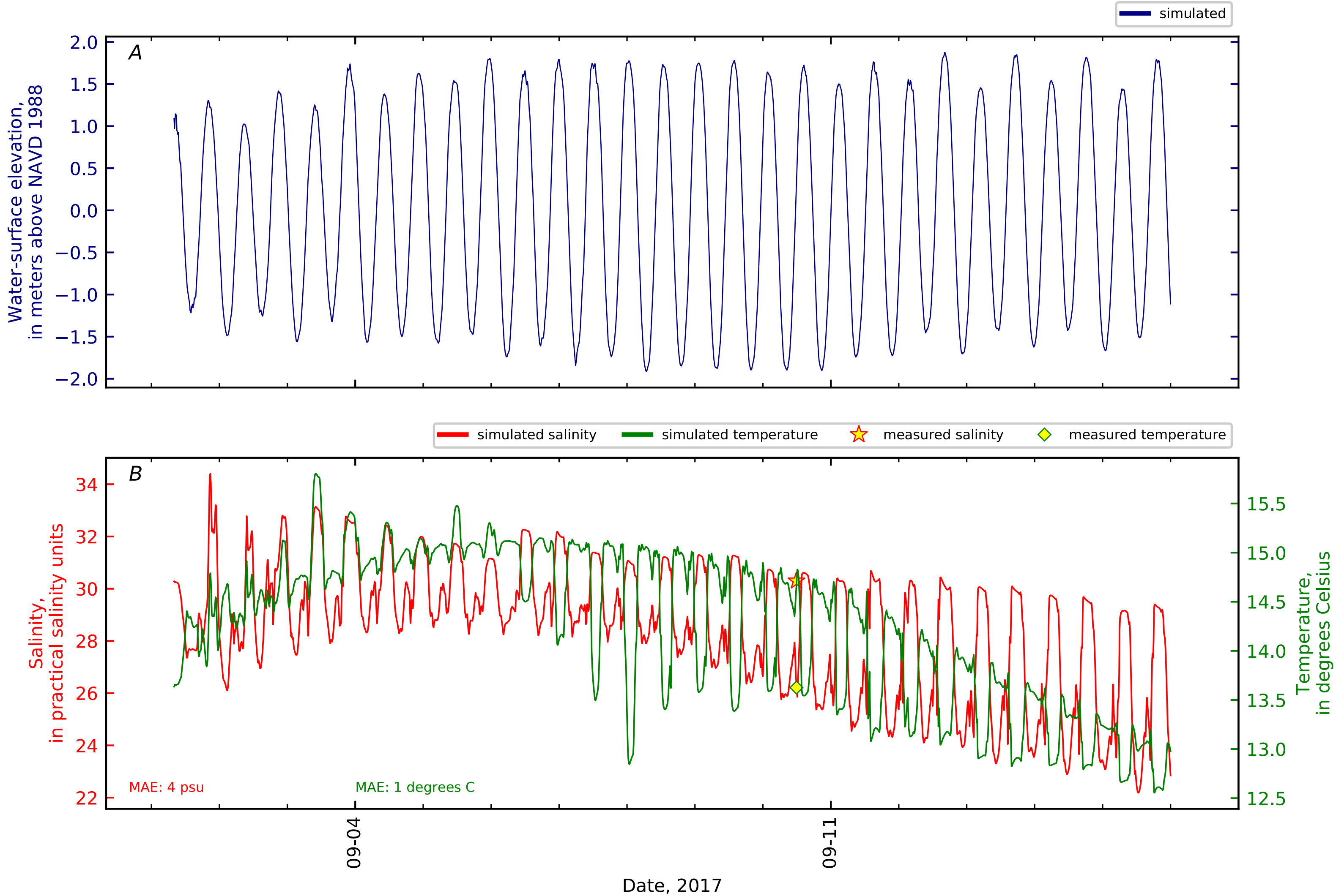

Figure B1-10. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 9, Penob Riv KM0 GS CTD5-06.

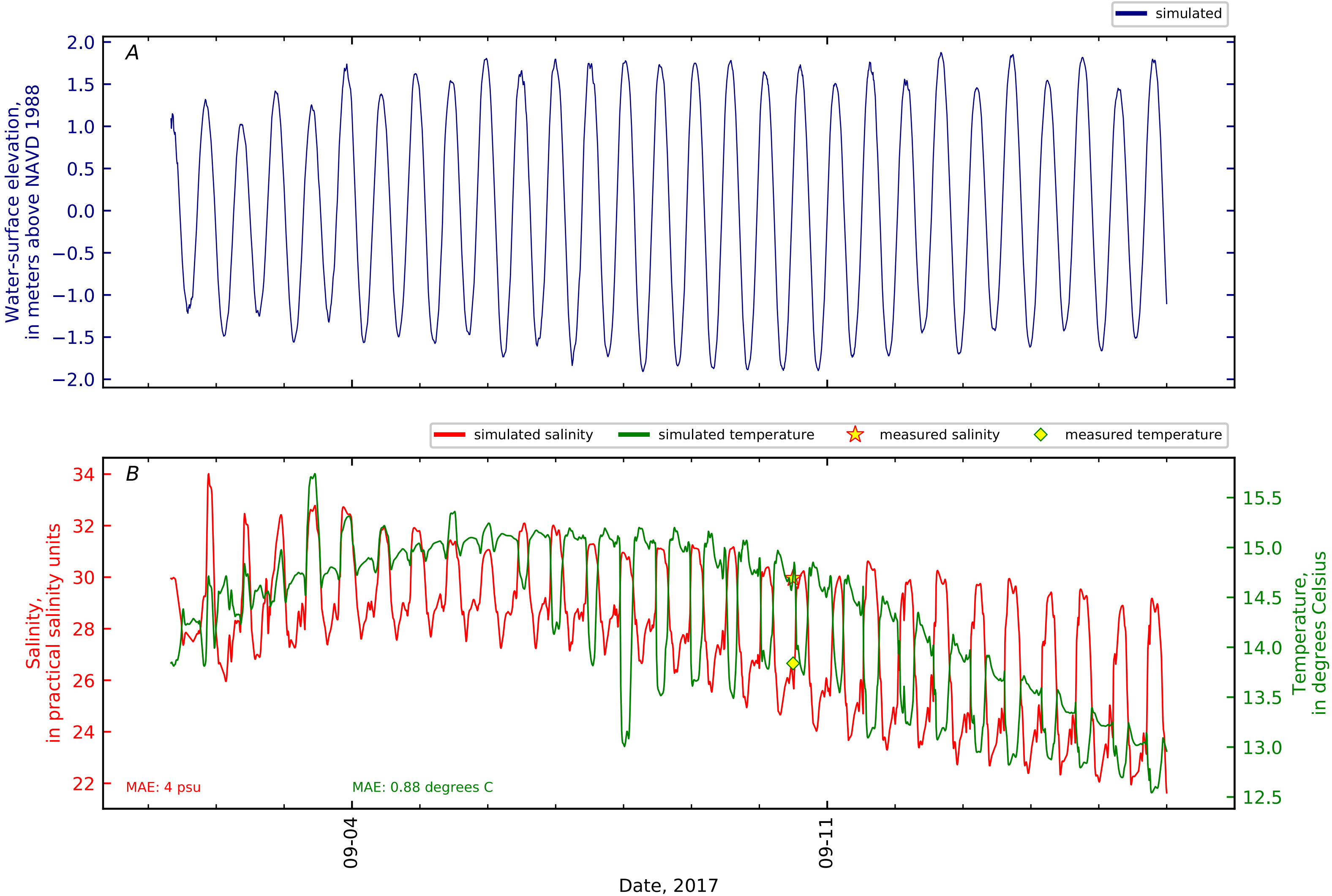

Figure B1-11. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 10, Penob Riv KM0 GS CTD5-07.

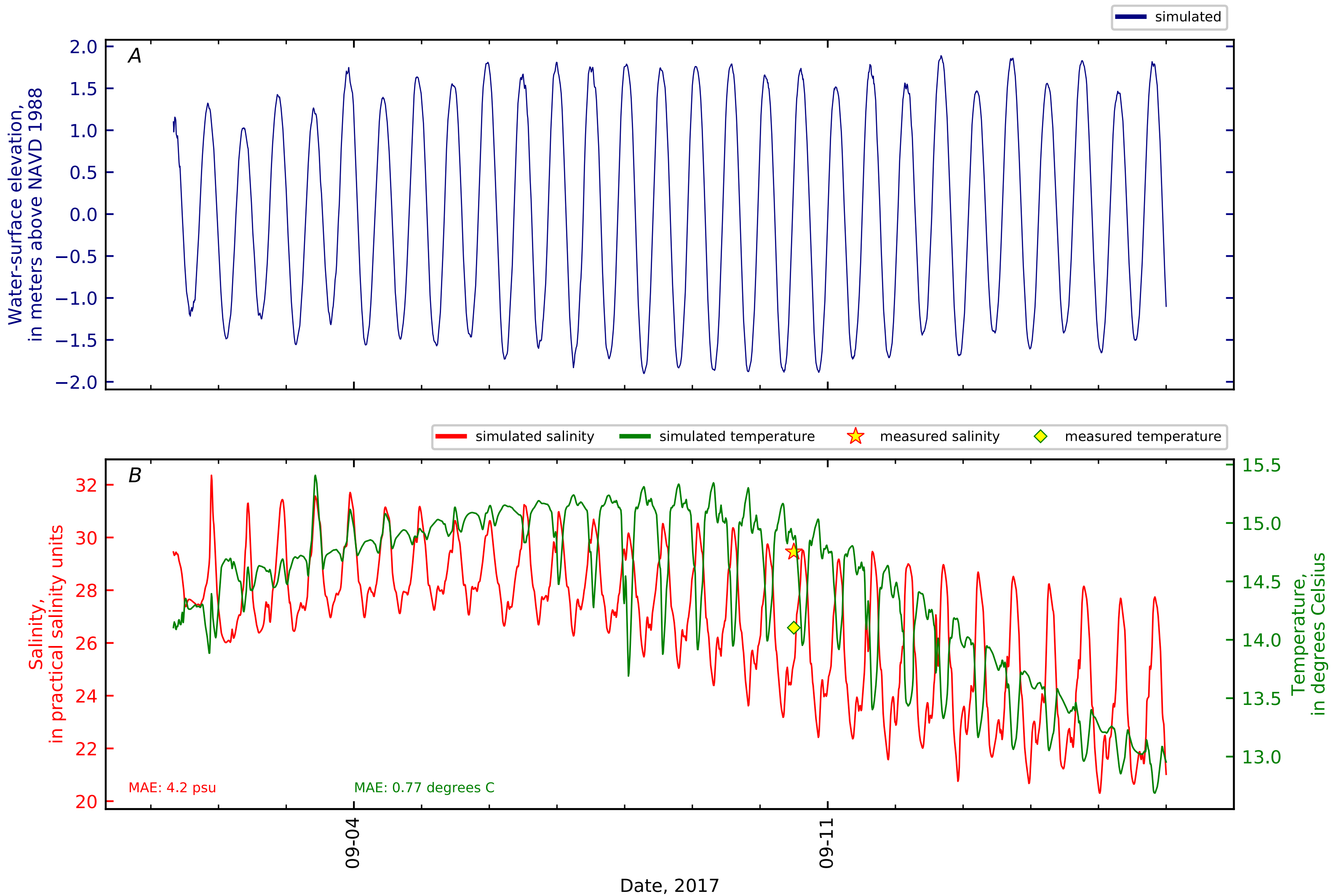

Figure B1-12. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 11, Penob Riv KM0 GS CTD5-08.

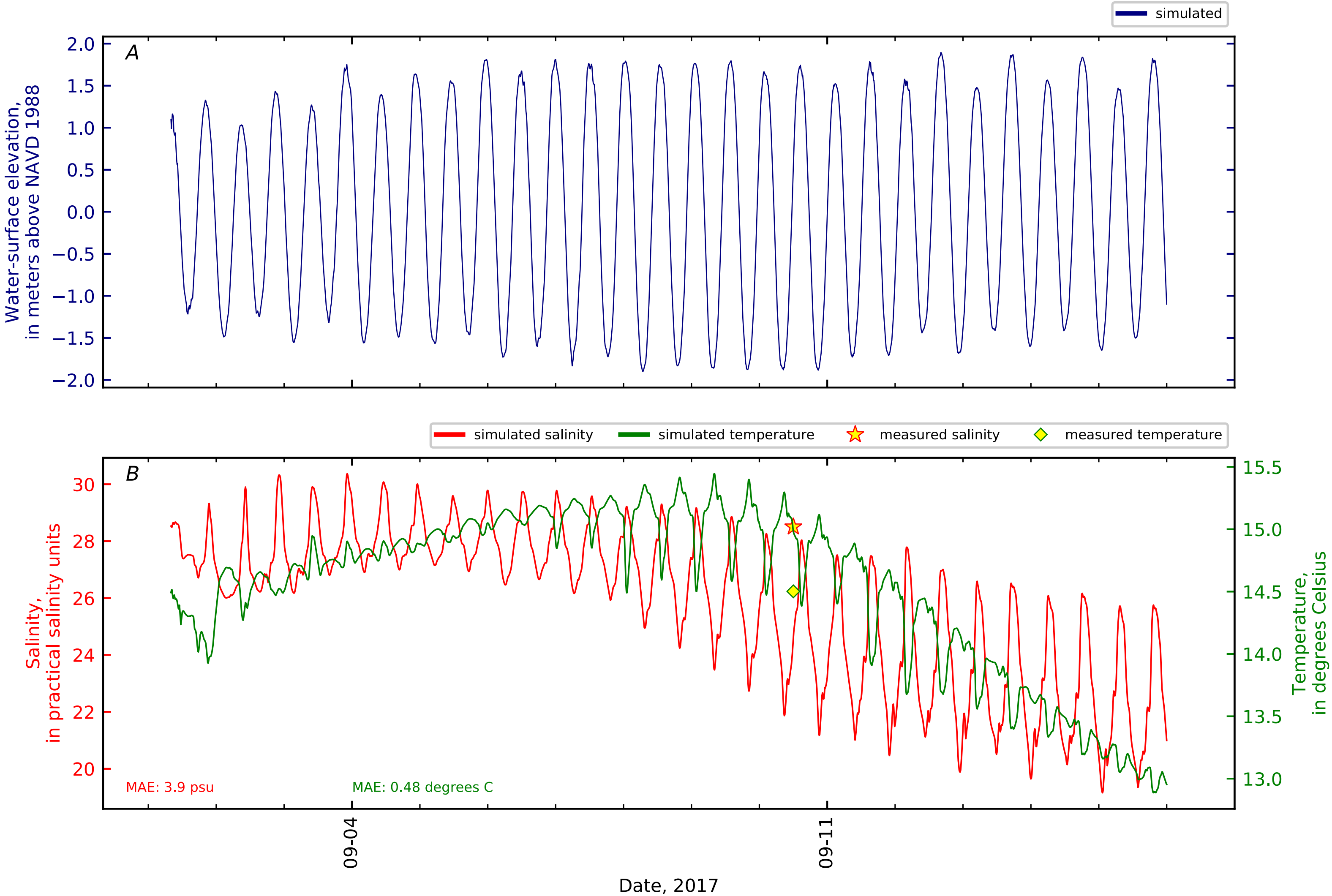

Figure B1-13. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 12, Penob Riv KM0 GS CTD5-09.

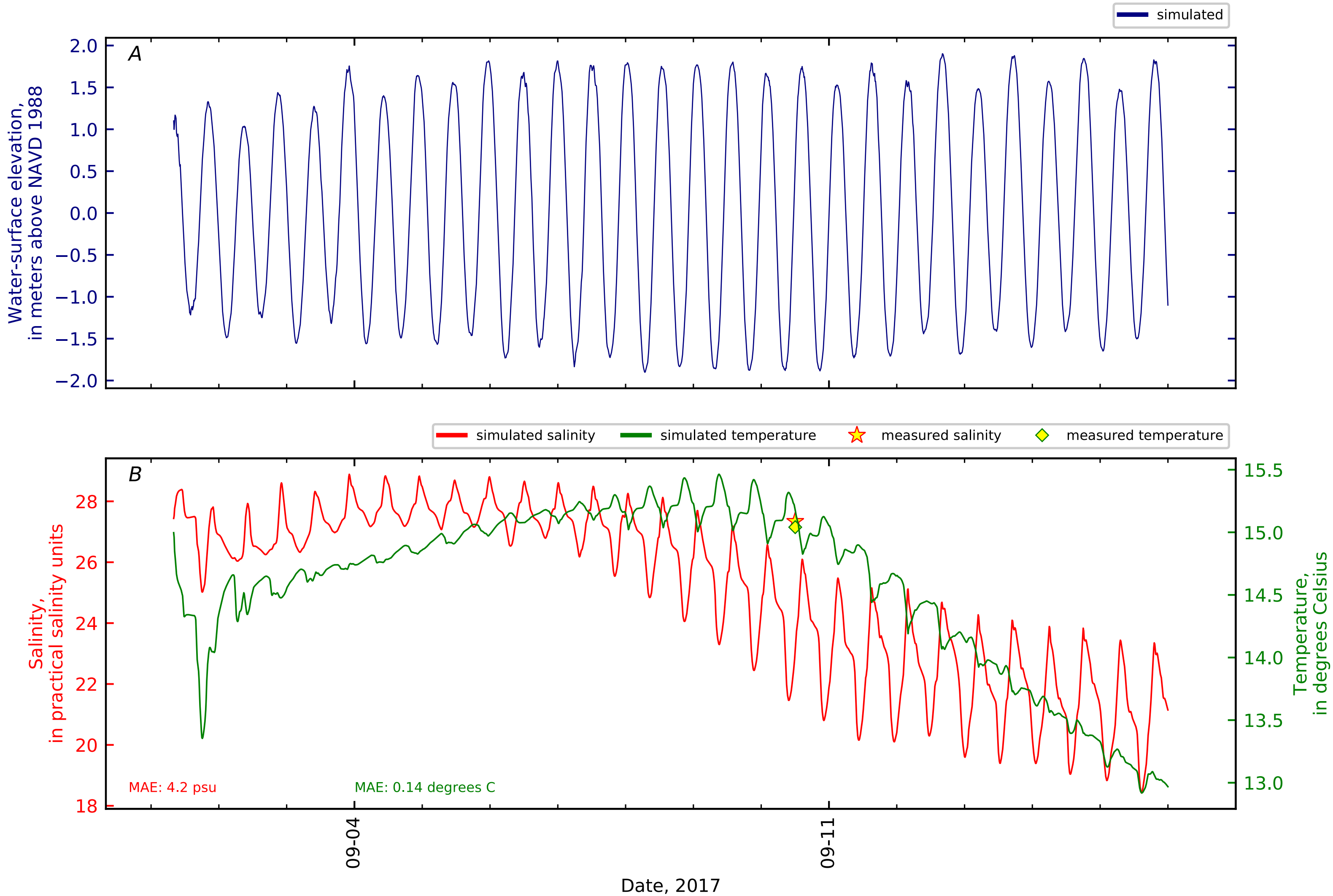

Figure B1-14. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 13, Penob Riv KM0 GS CTD5-10.

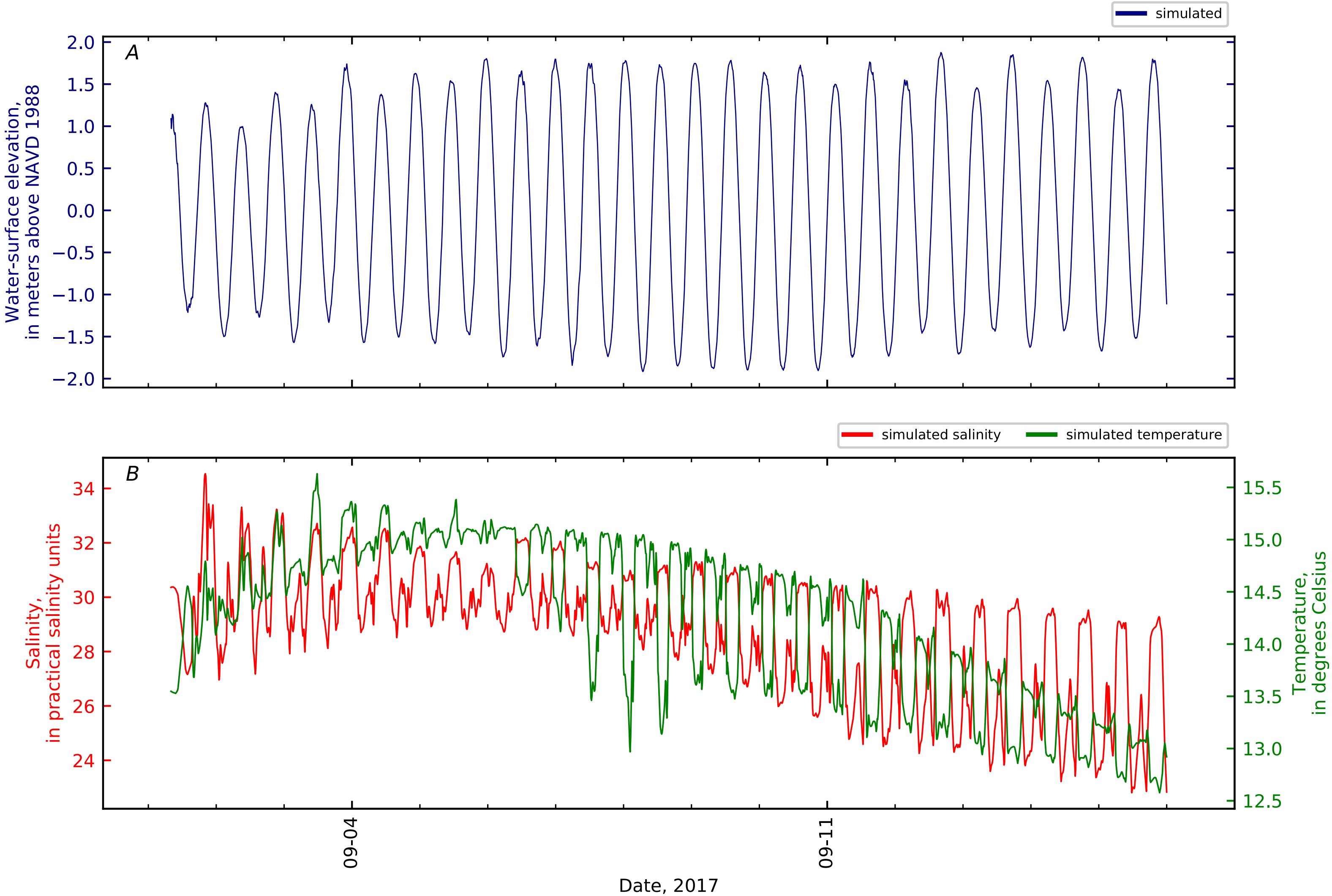

Figure B1-15. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 14, Penob Riv KM0.04 WHOI1 Ft Point 2010.

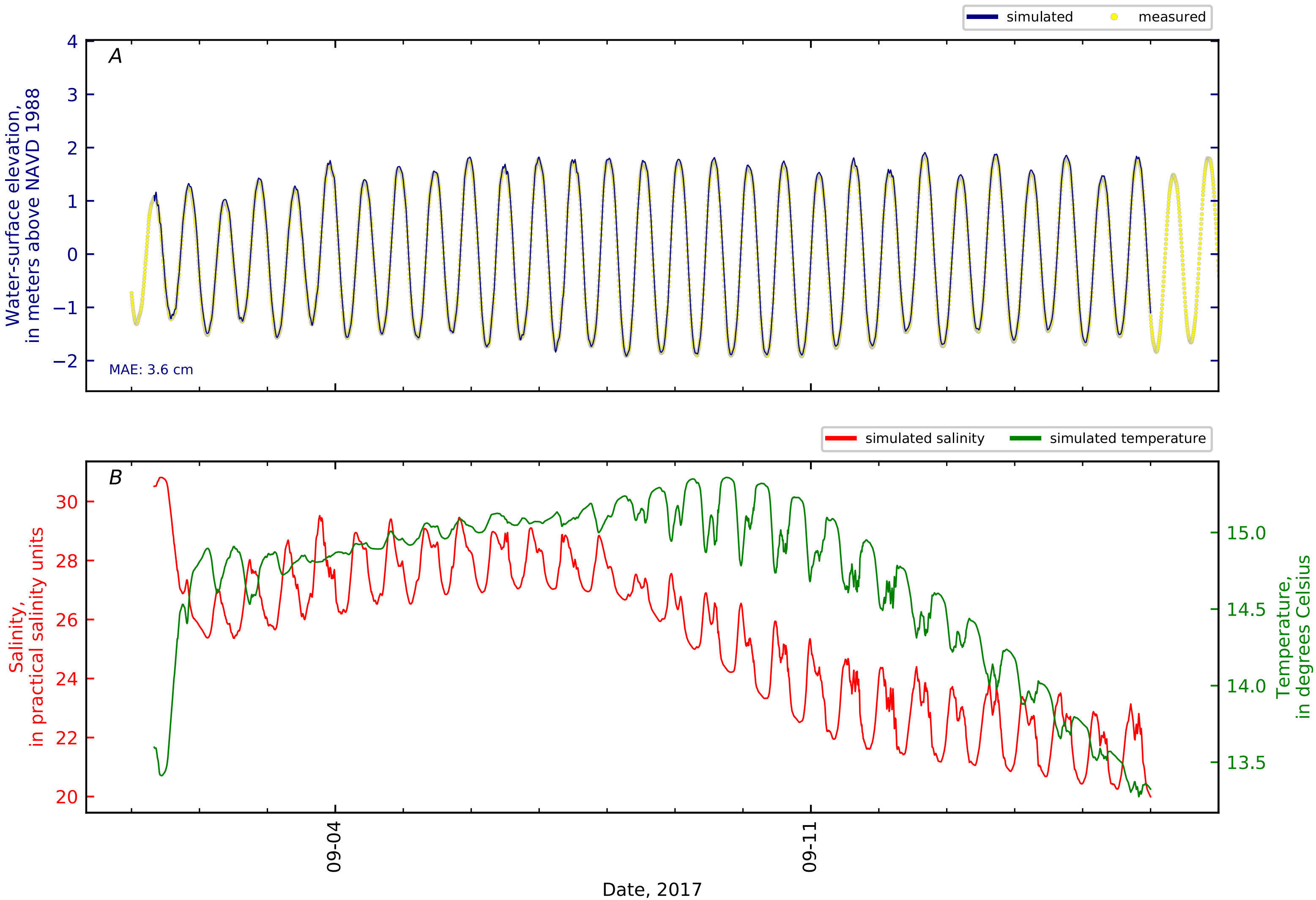

Figure B1-16. Time series for *A*, simulated and measured water-surface elevation; and *B*, simulated salinity and temperature at station 15, Penob Riv KM0.1 GS 442810068480101 at Ft.

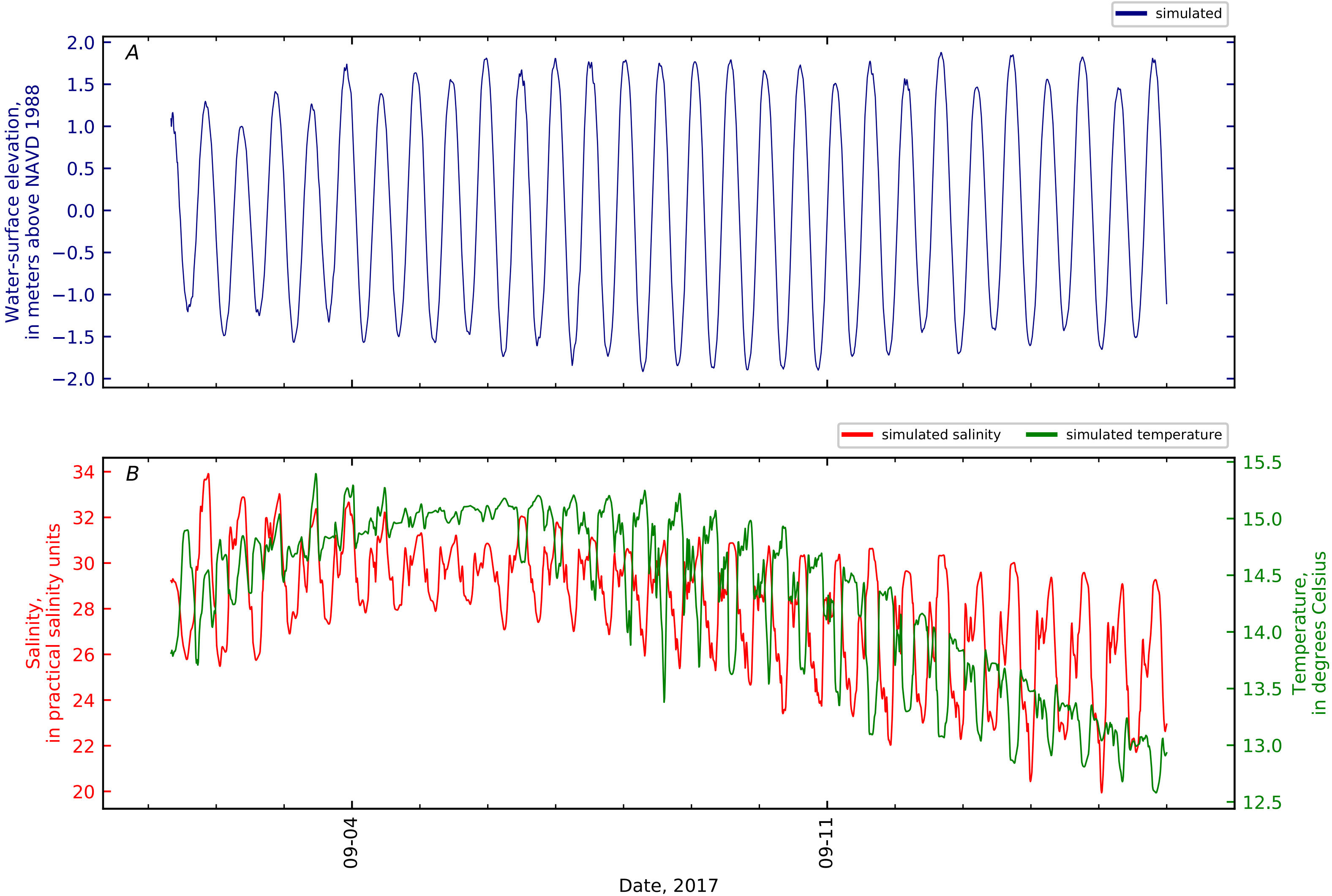

Figure B1-17. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 16, Penob Riv KM1.

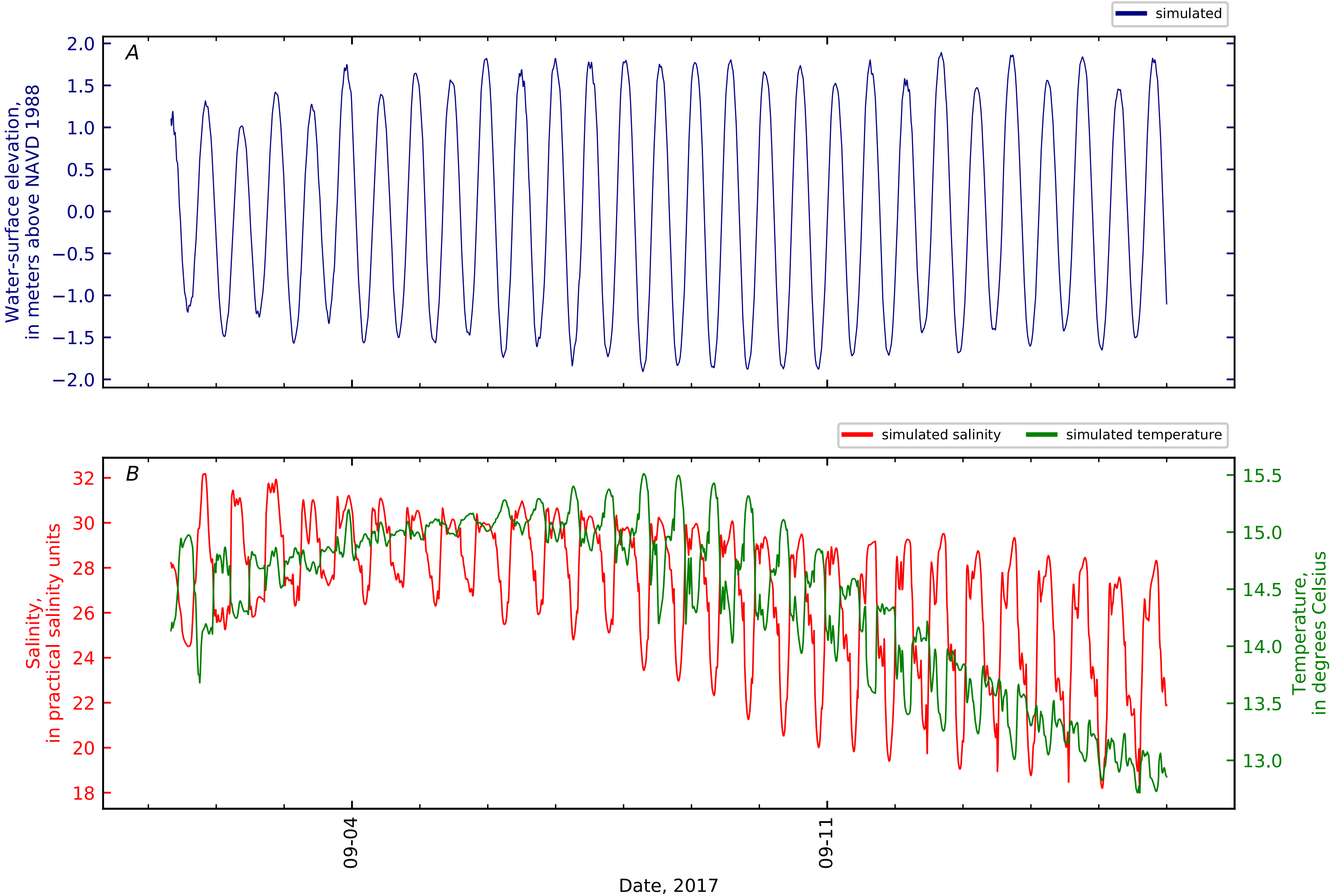

Figure B1-18. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 17, Penob Riv KM2.

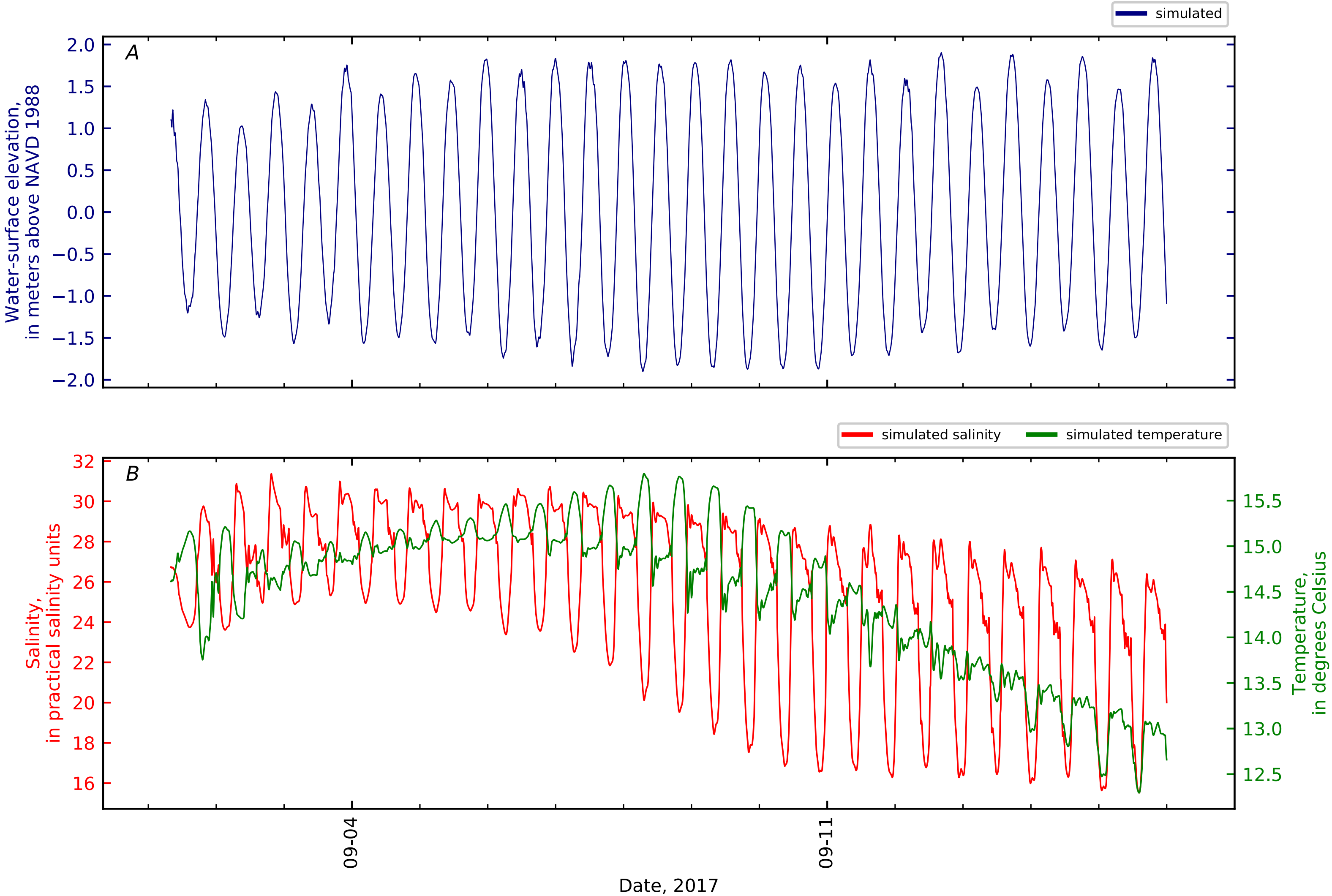

Figure B1-19. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 18, Penob Riv KM3.

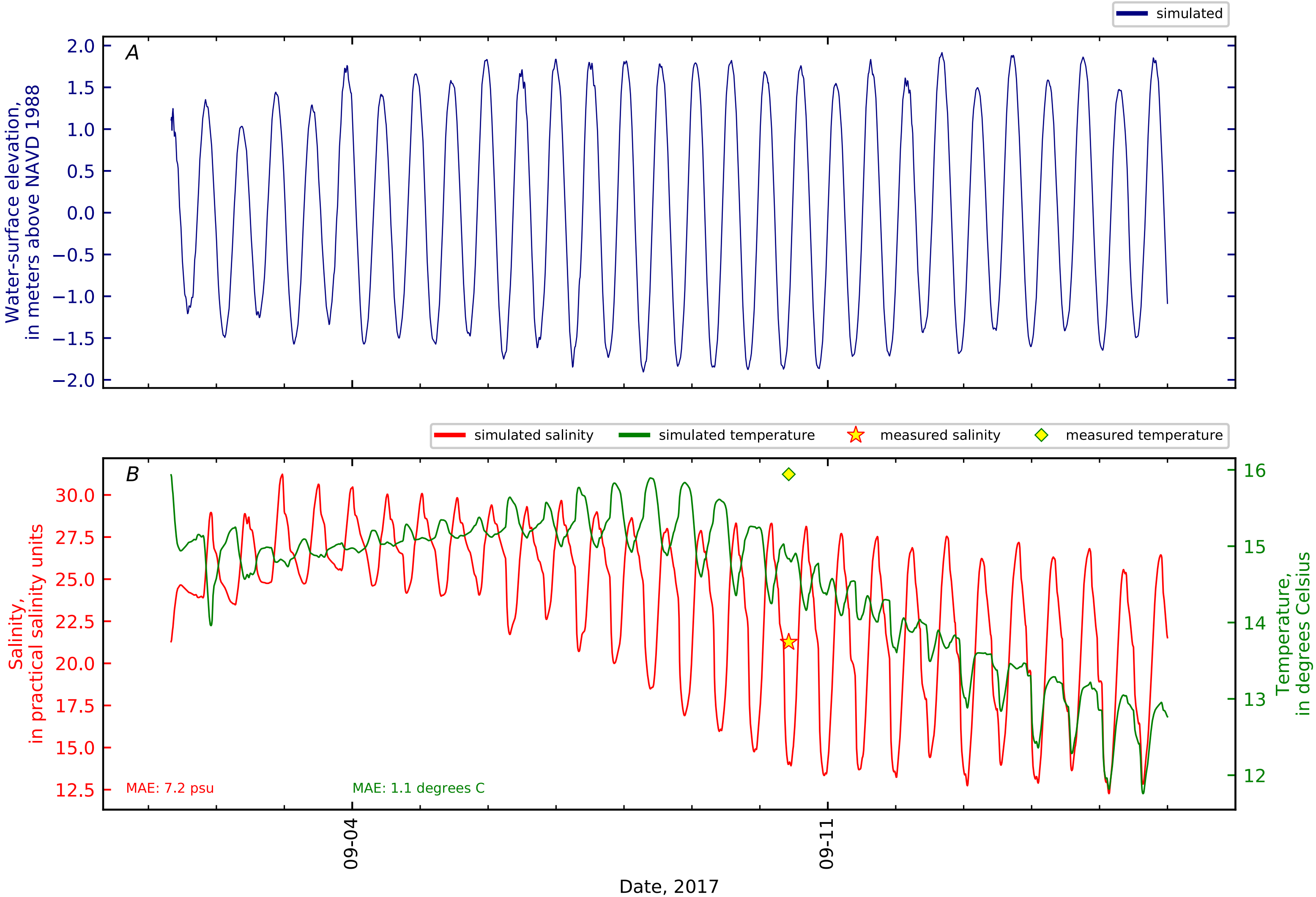

Figure B1-20. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 19, Penob Riv KM3.8 GS CTD3-01.

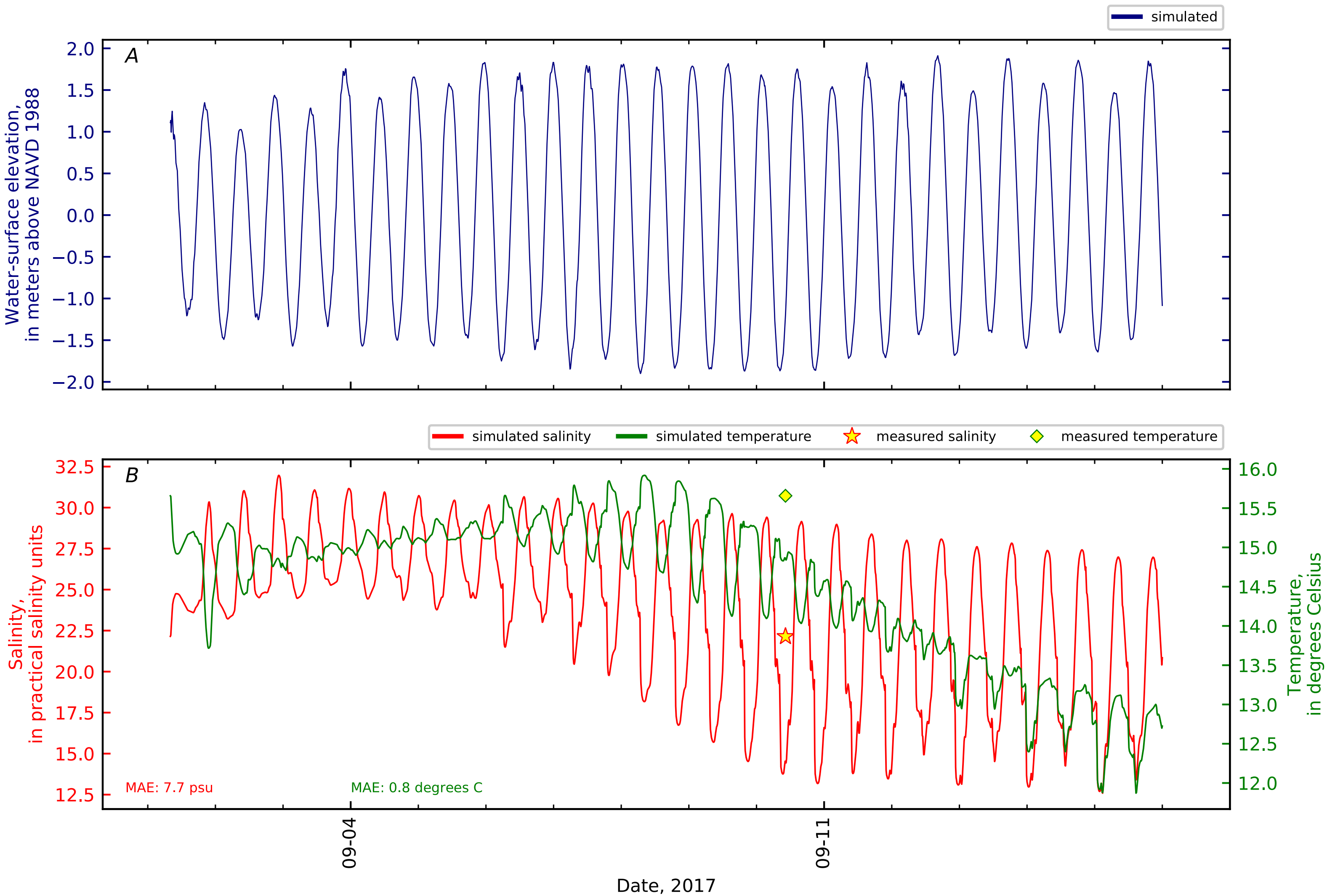

Figure B1-21. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 20, Penob Riv KM3.8 GS CTD3-02.

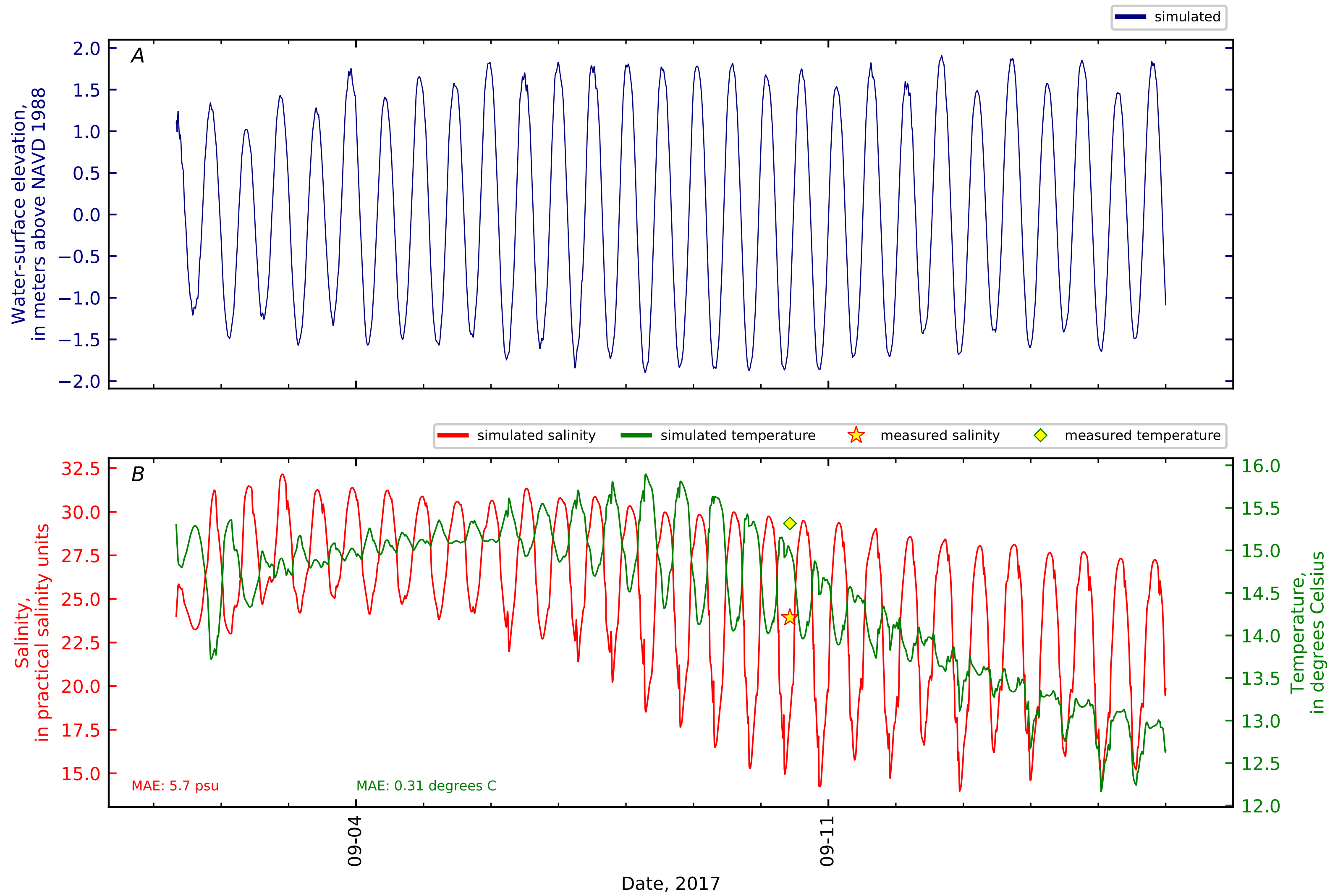

Figure B1-22. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 21, Penob Riv KM3.8 GS CTD3-03.

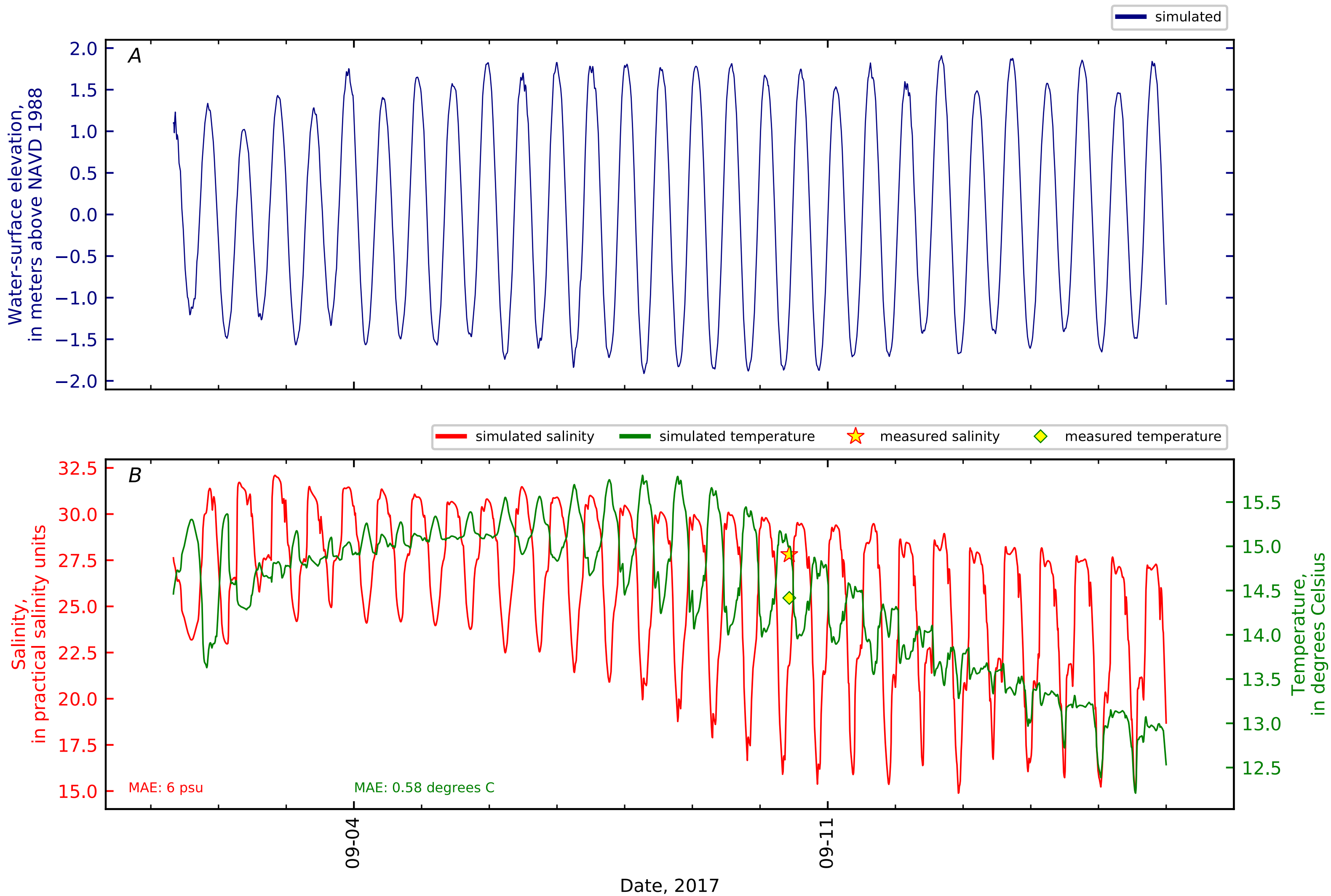

Figure B1-23. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 22, Penob Riv KM3.8 GS CTD3-04.

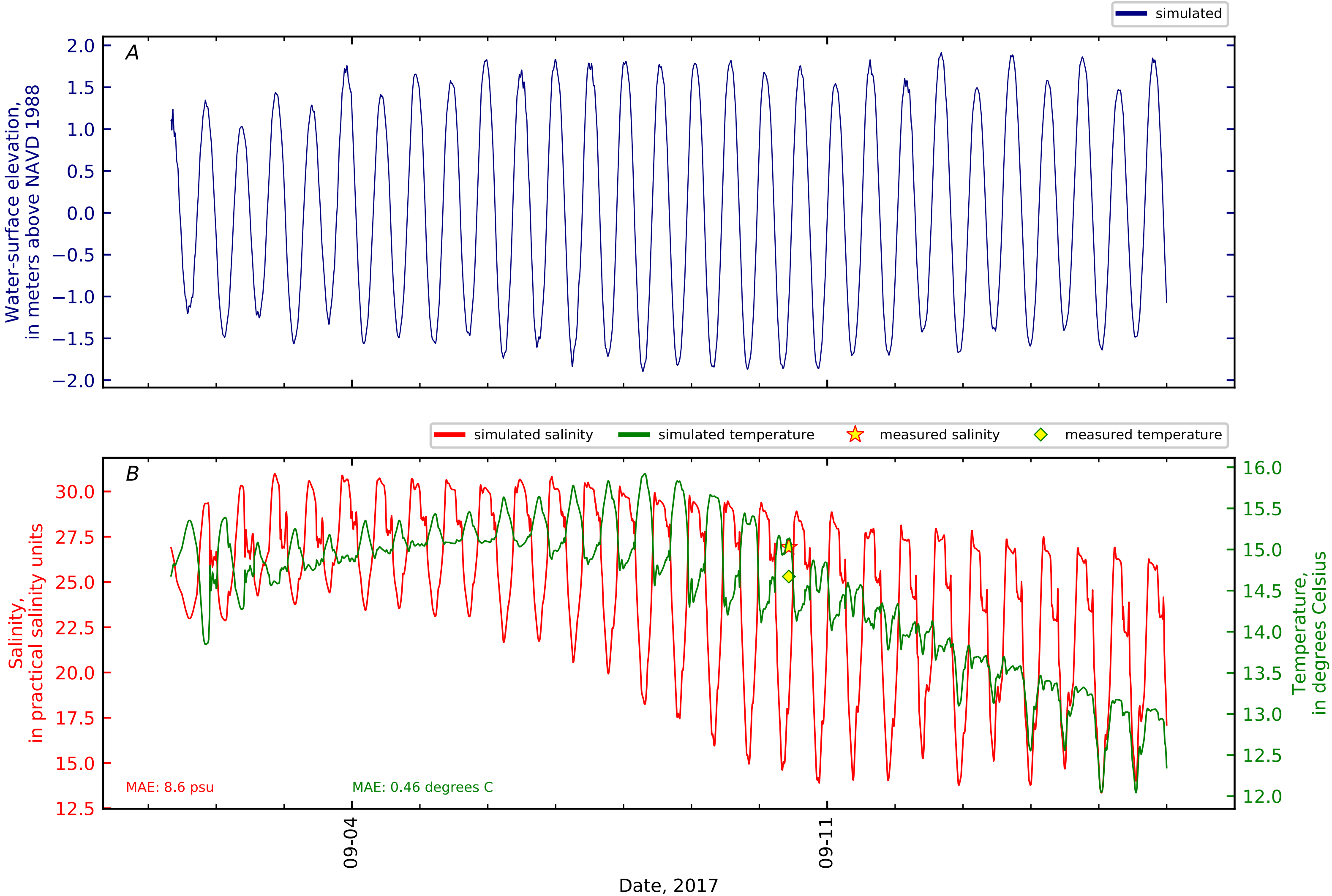

Figure B1-24. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 23, Penob Riv KM3.8 GS CTD3-05.

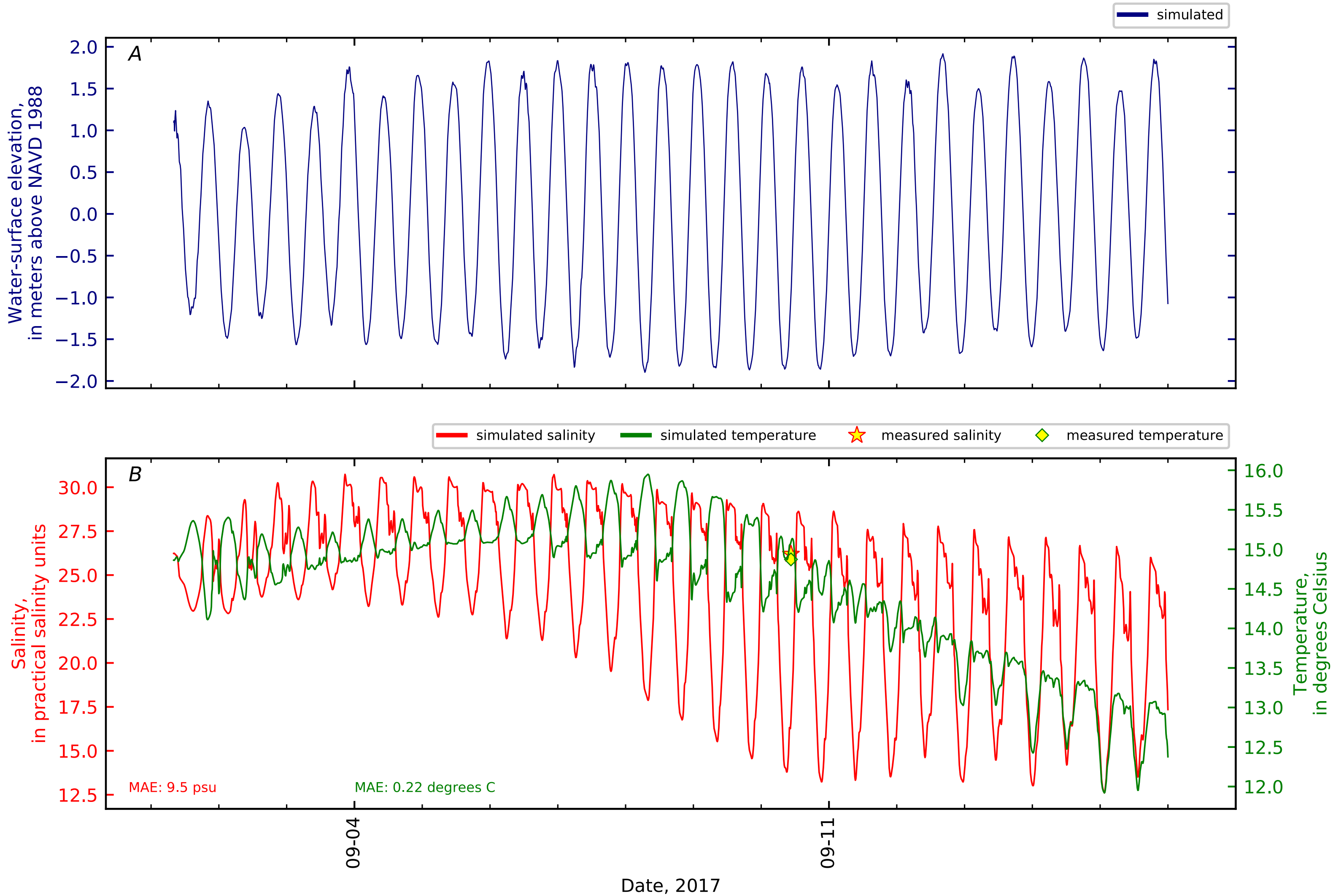

Figure B1-25. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 24, Penob Riv KM3.8 GS CTD3-06.

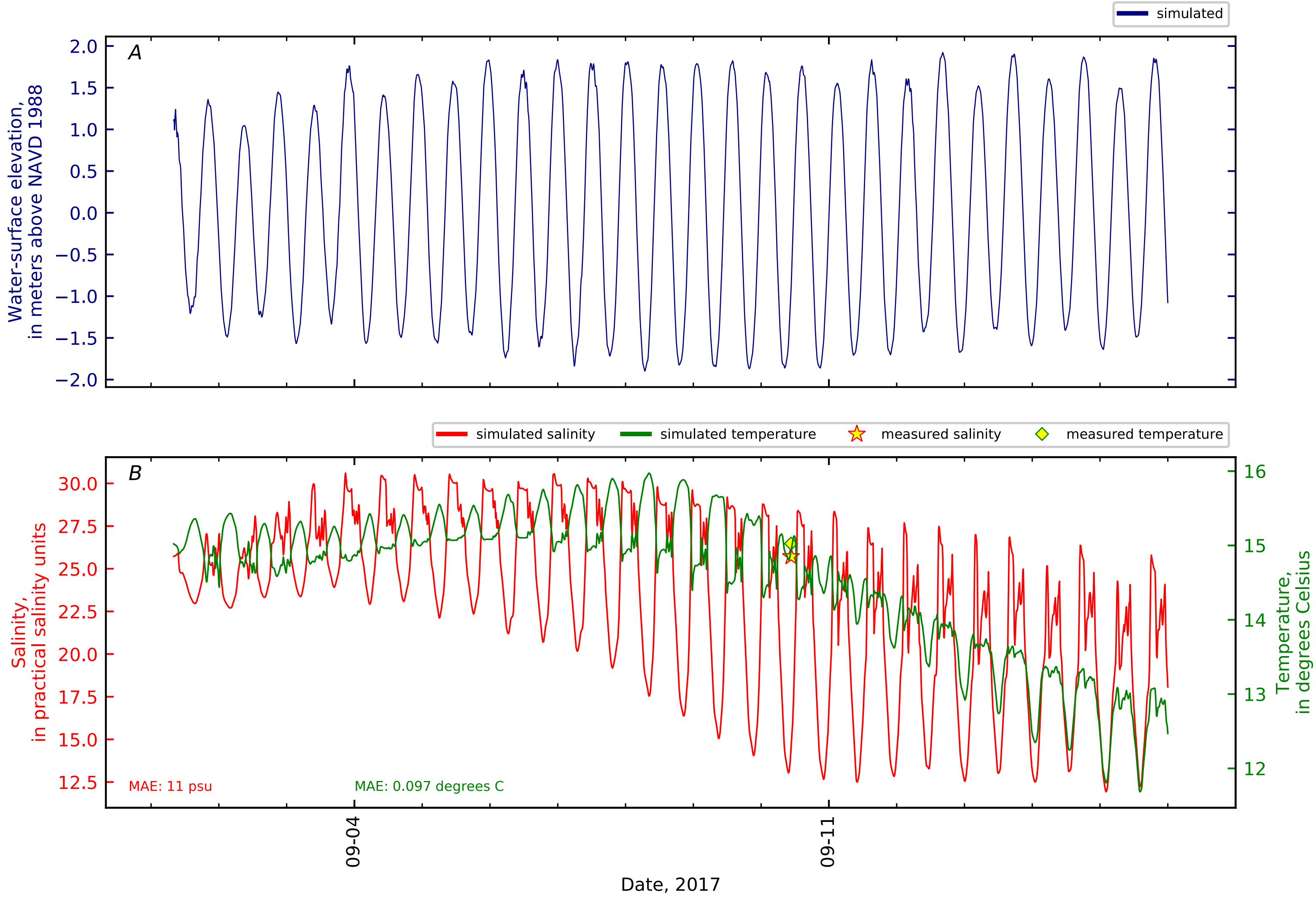

Figure B1-26. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 25, Penob Riv KM3.8 GS CTD3-07.

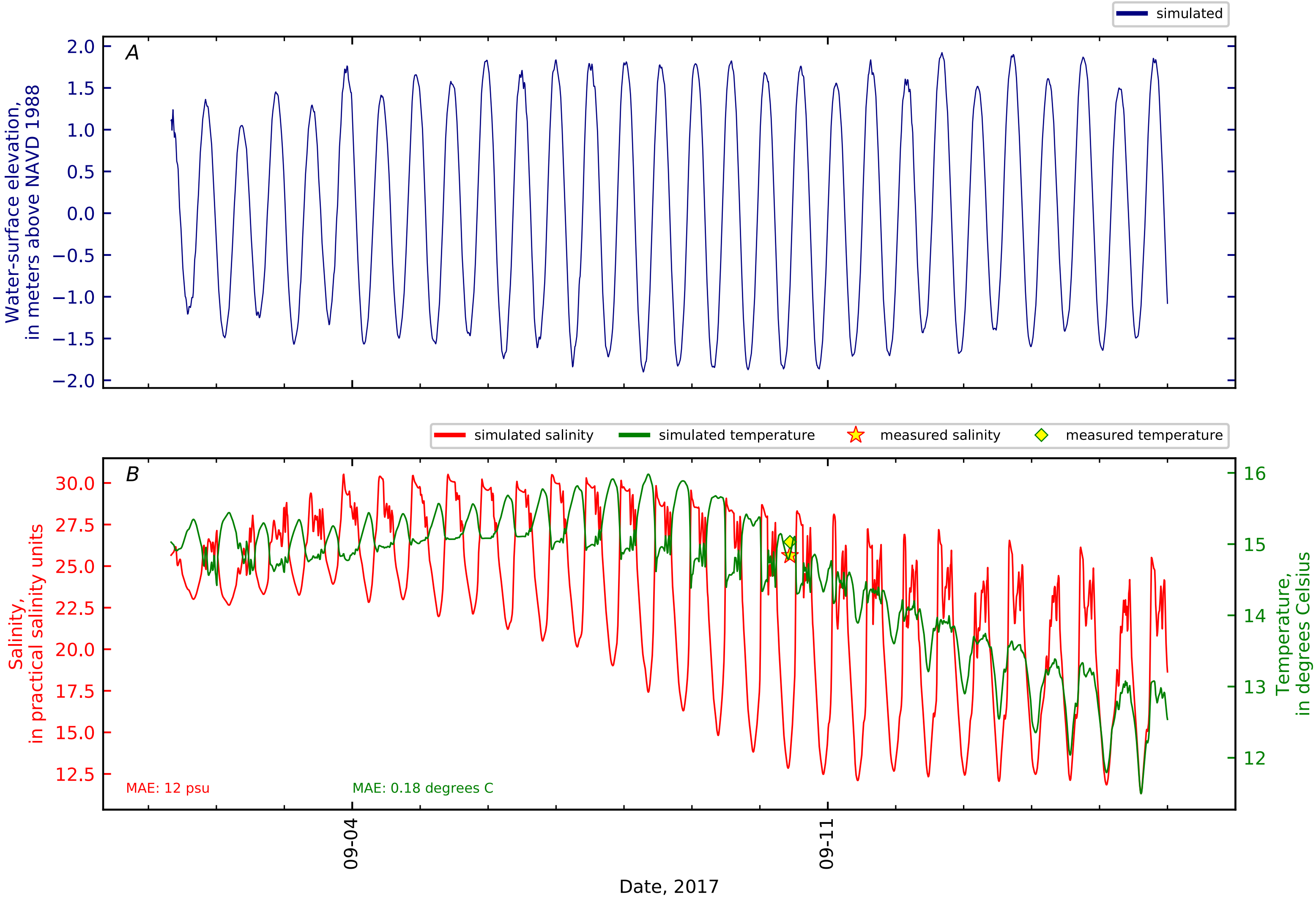

Figure B1-27. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 26, Penob Riv KM3.8 GS CTD3-08.

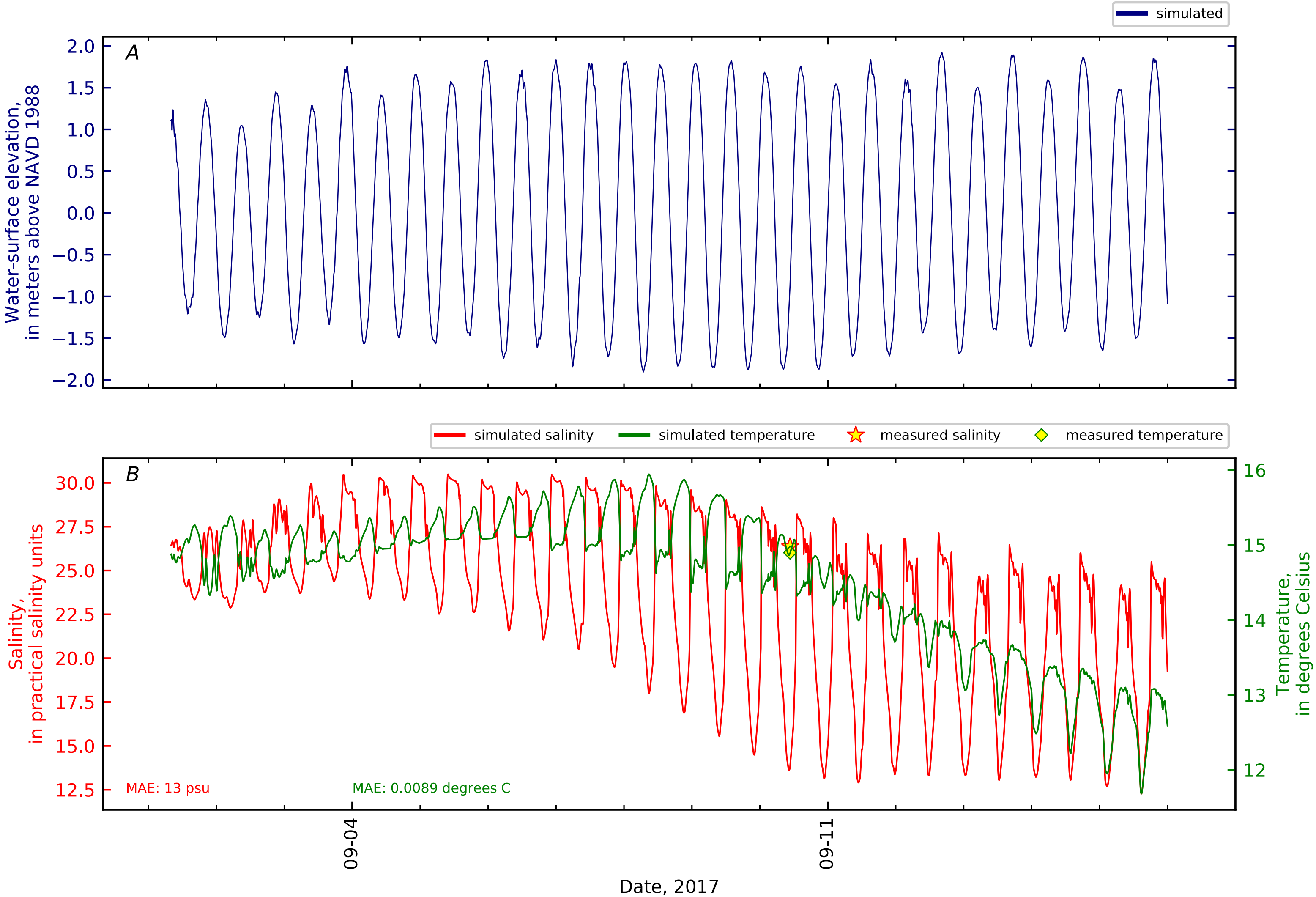

Figure B1-28. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 27, Penob Riv KM3.8 GS CTD3-09.

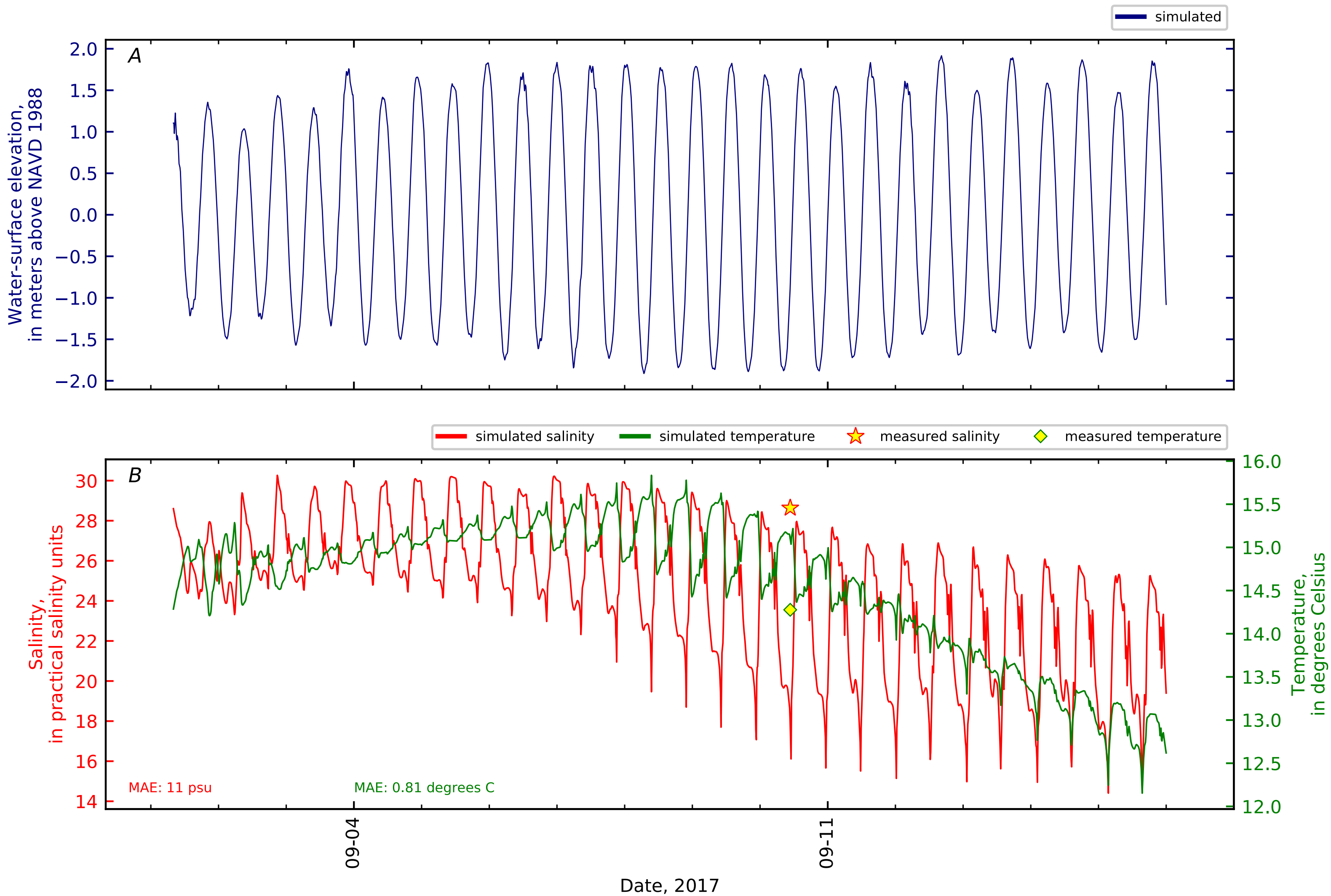

Figure B1-29. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 28, Penob Riv KM3.8 GS CTD3-10.

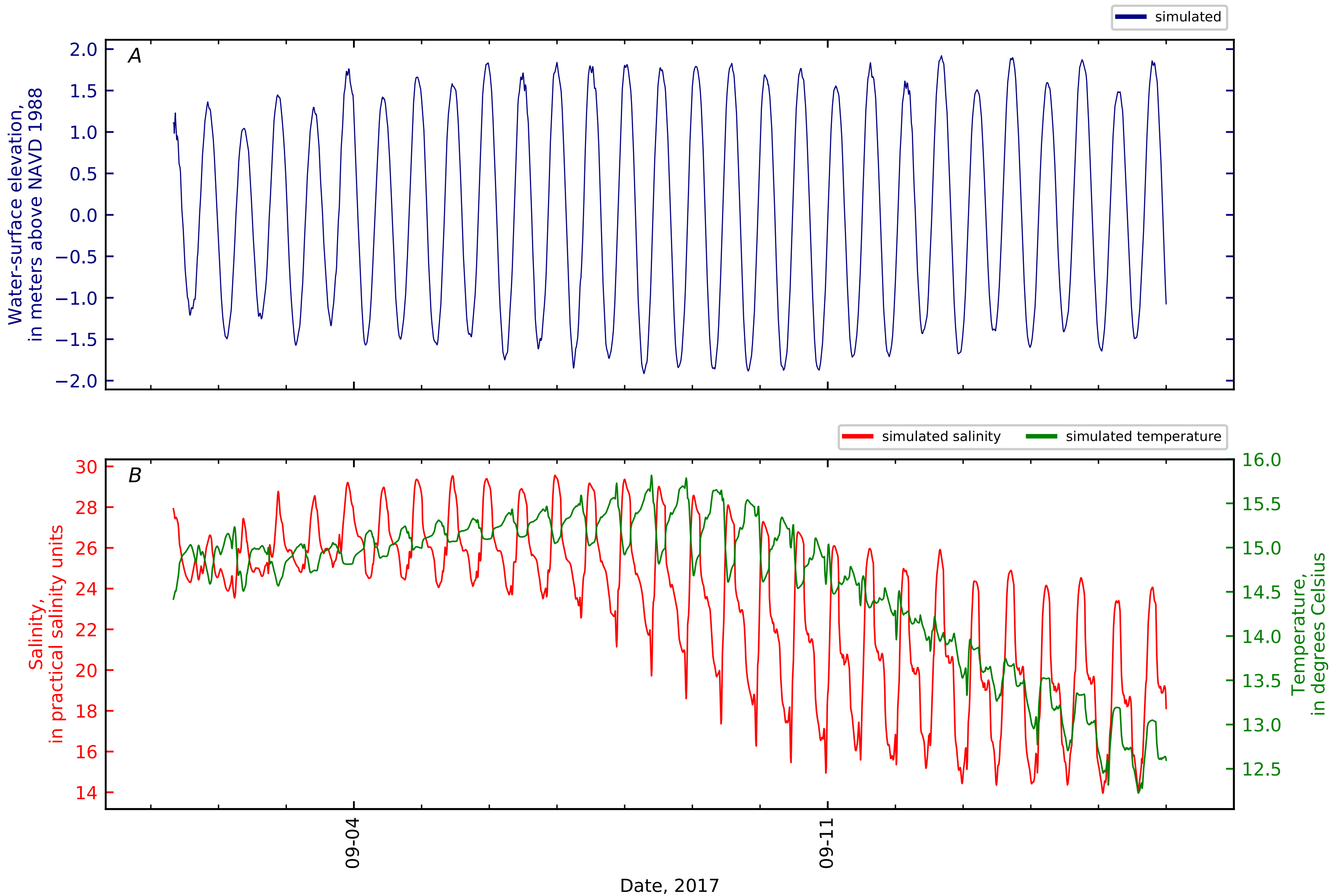

Figure B1-30. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 29, Penob Riv KM3.85 fmr NOAA gage Gross Poi.

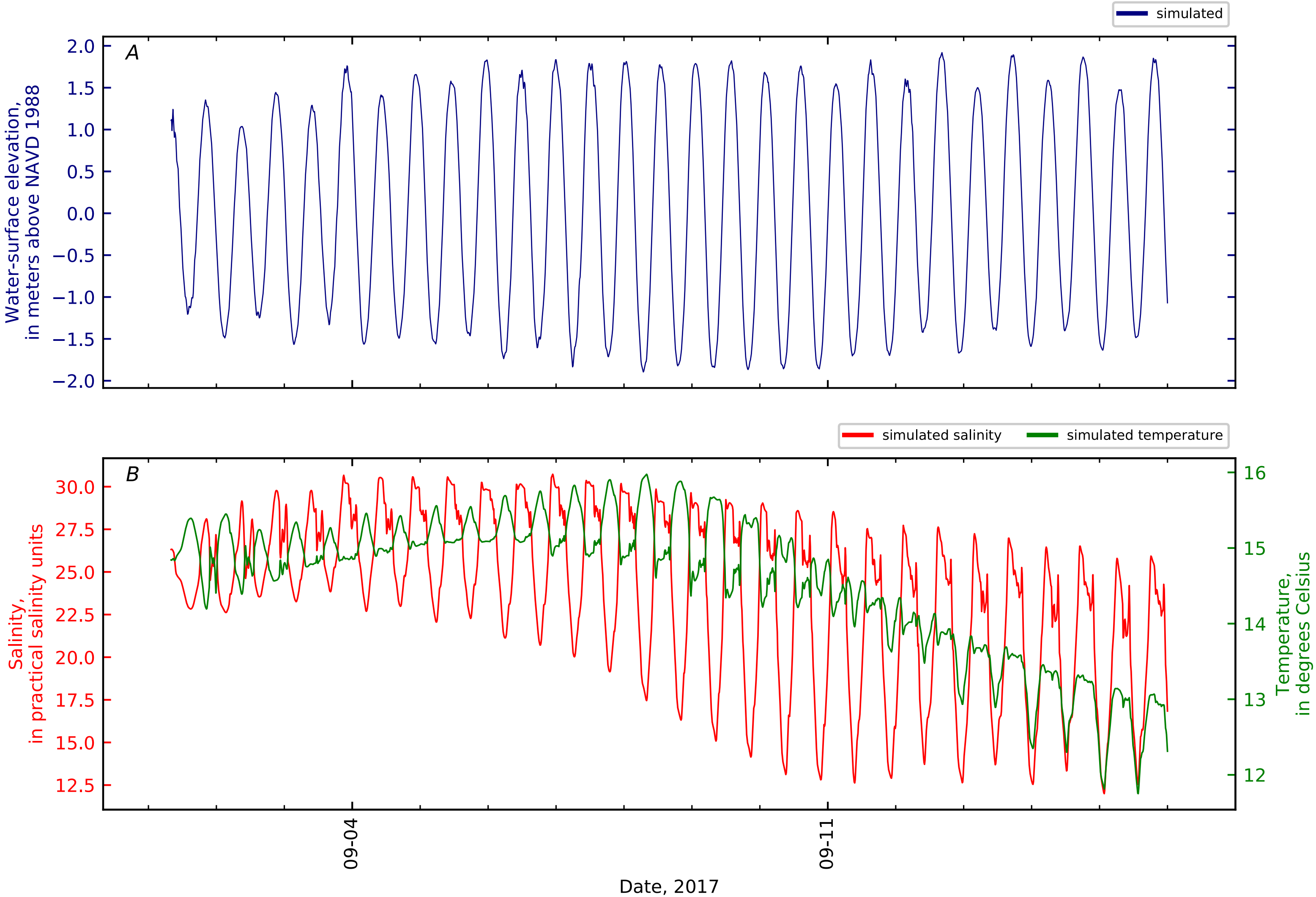

Figure B1-31. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 30, Penob Riv KM4.

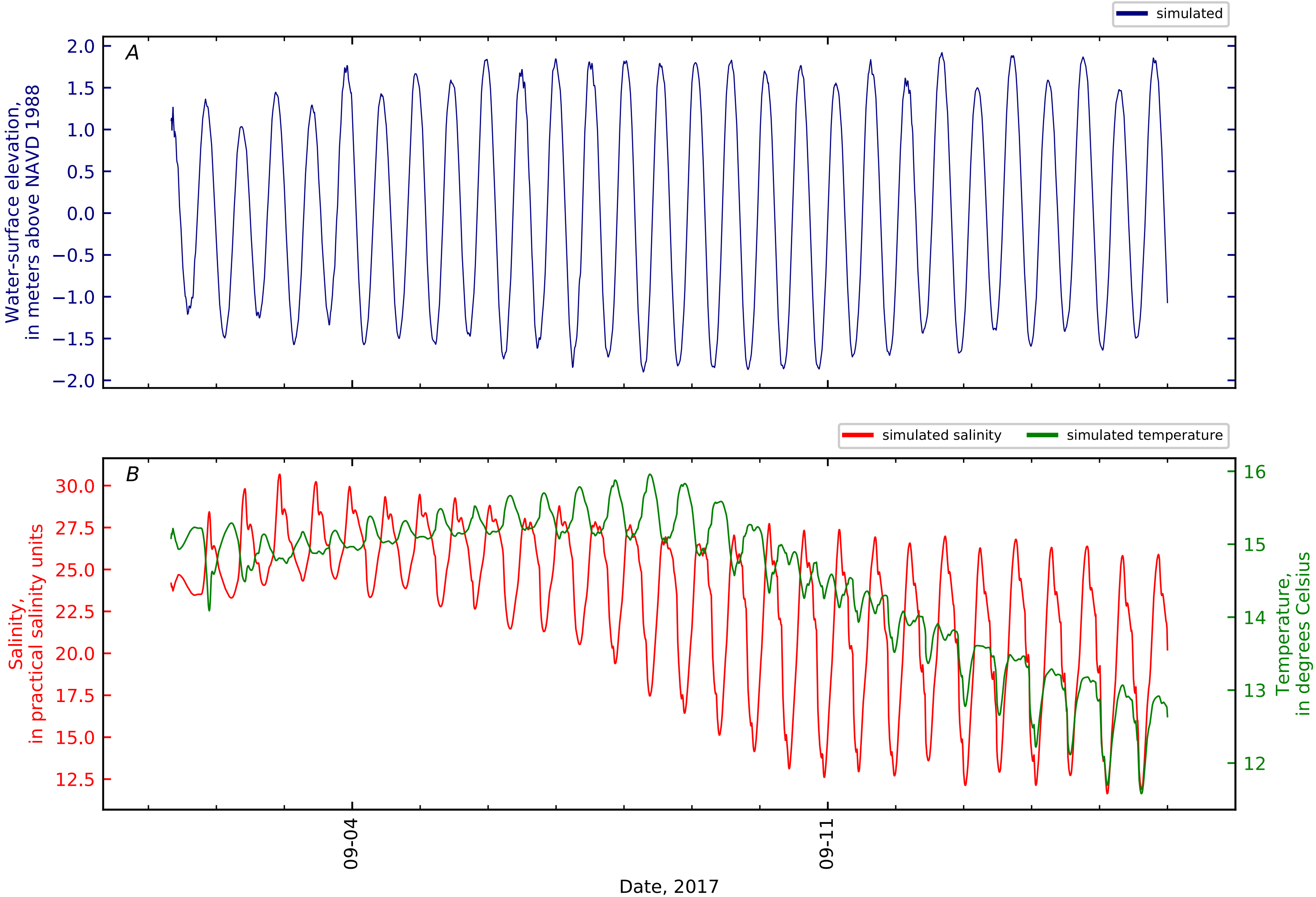

Figure B1-32. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 31, Penob Riv KM4.3 fmr NOAA gage Sandy Beac.

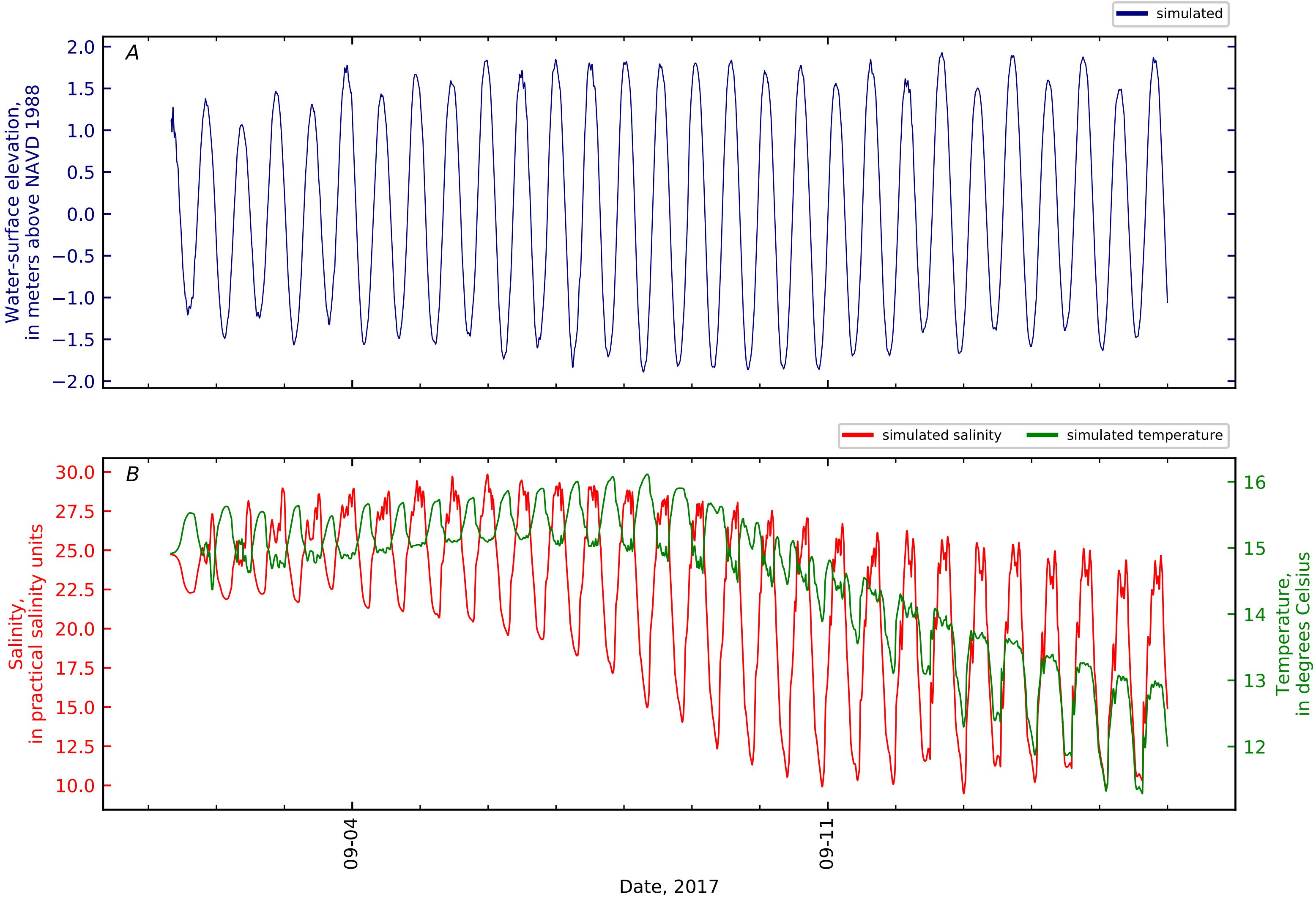

Figure B1-33. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 32, Penob Riv KM5.

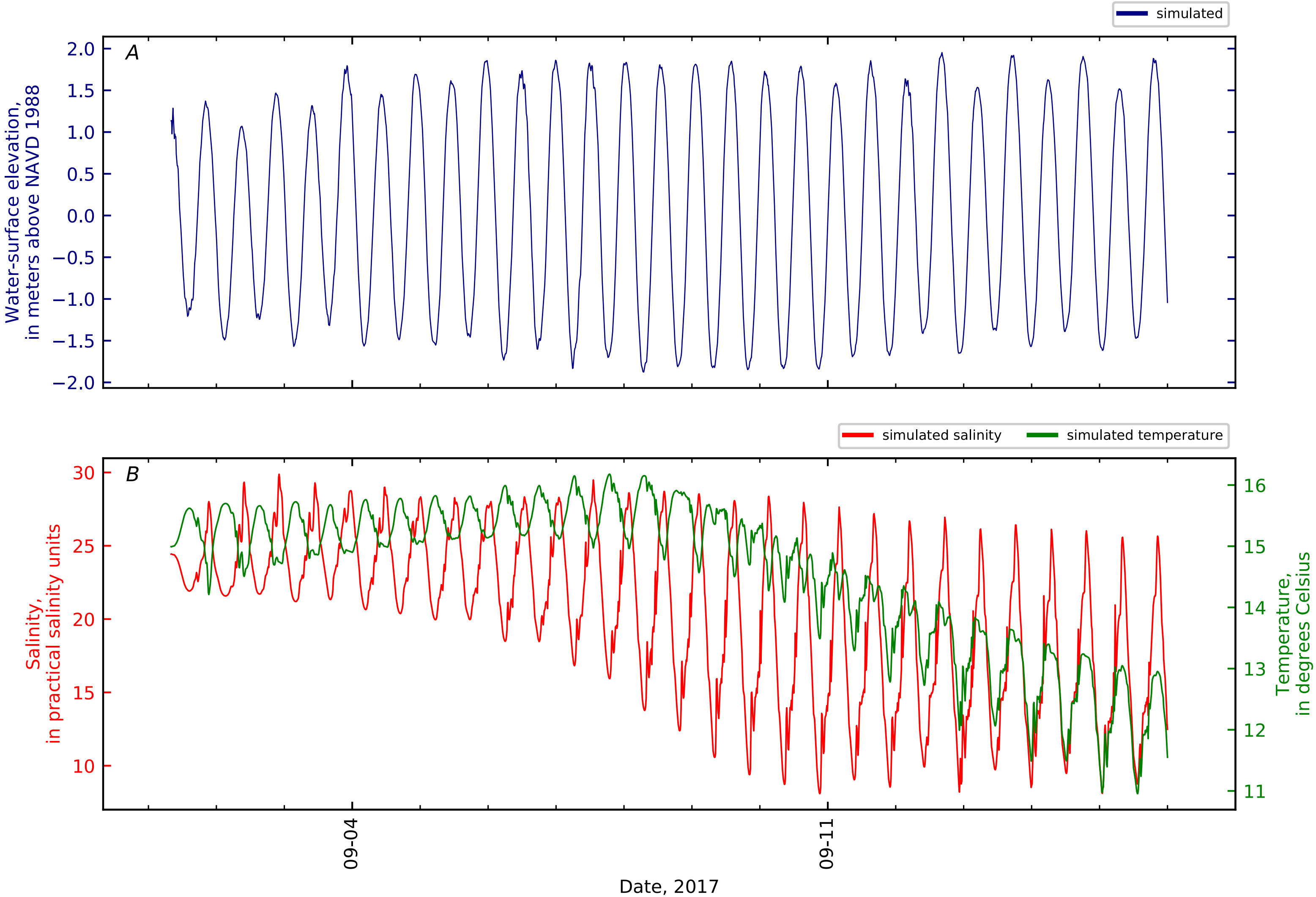

Figure B1-34. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 33, Penob Riv KM6.

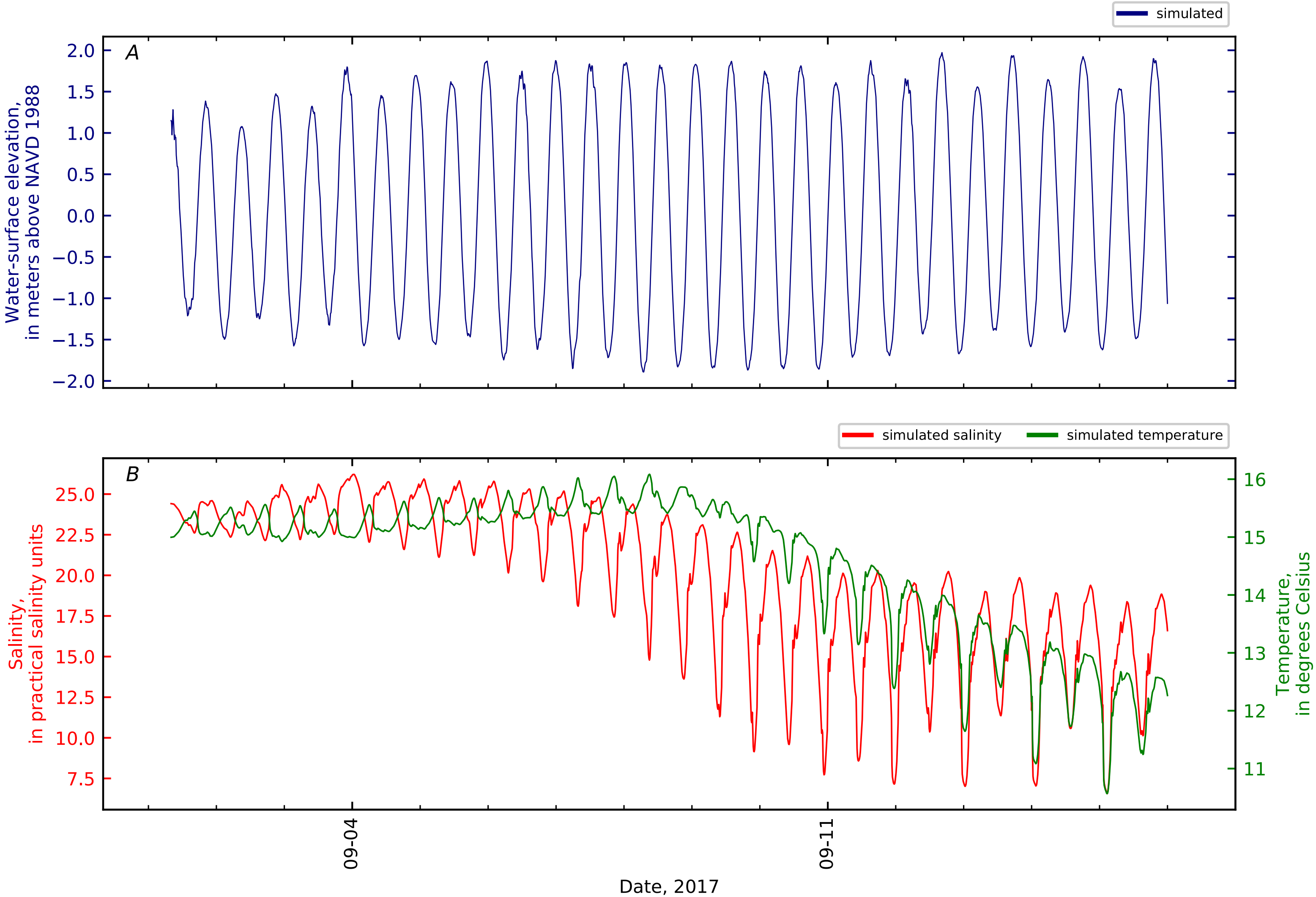

Figure B1-35. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 34, Penob Riv KM6 ERDC11 VW-MU14-SF-1.

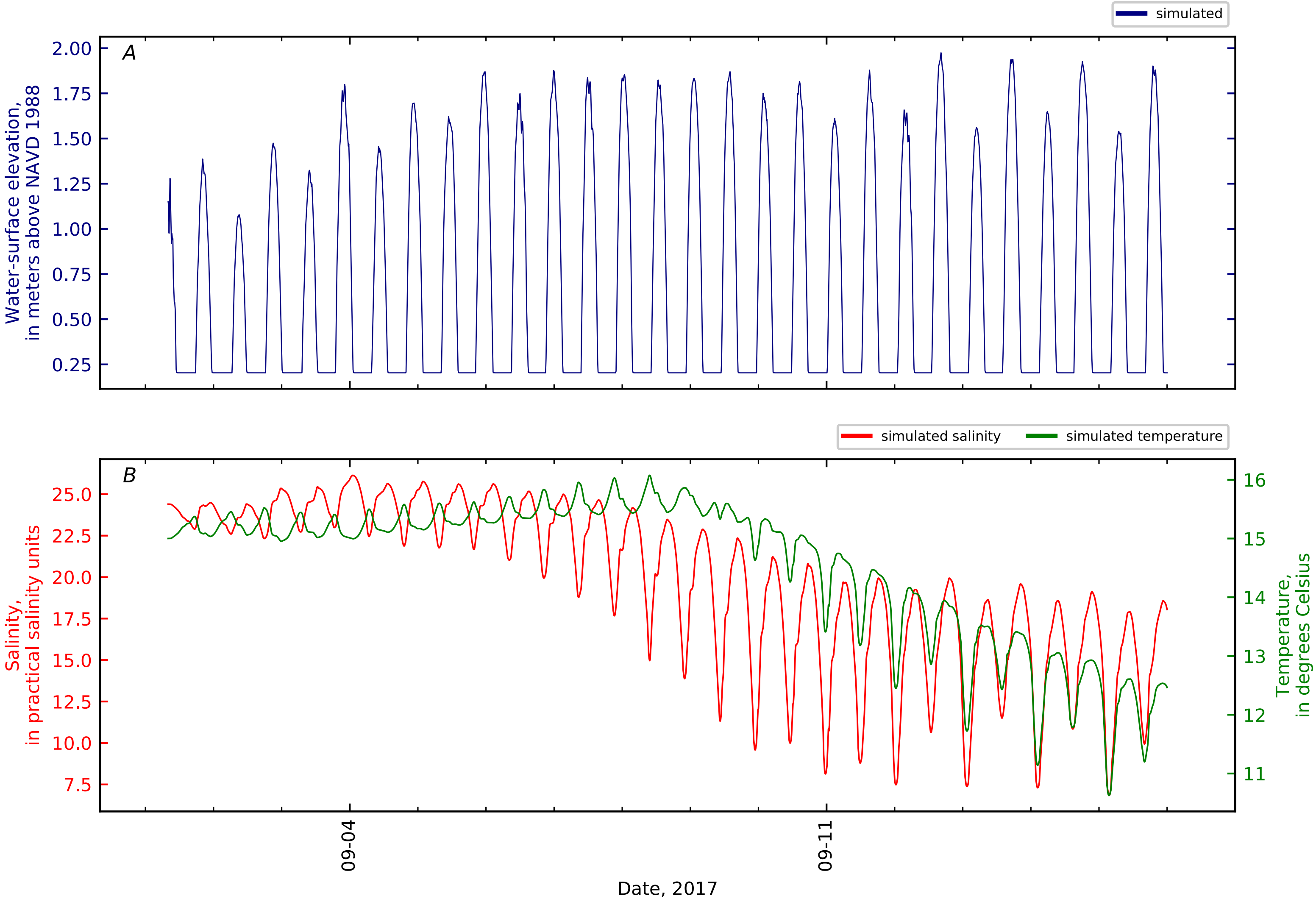

Figure B1-36. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 35, Penob Riv KM6.05 ERDC10 VW-MU7-SF1.

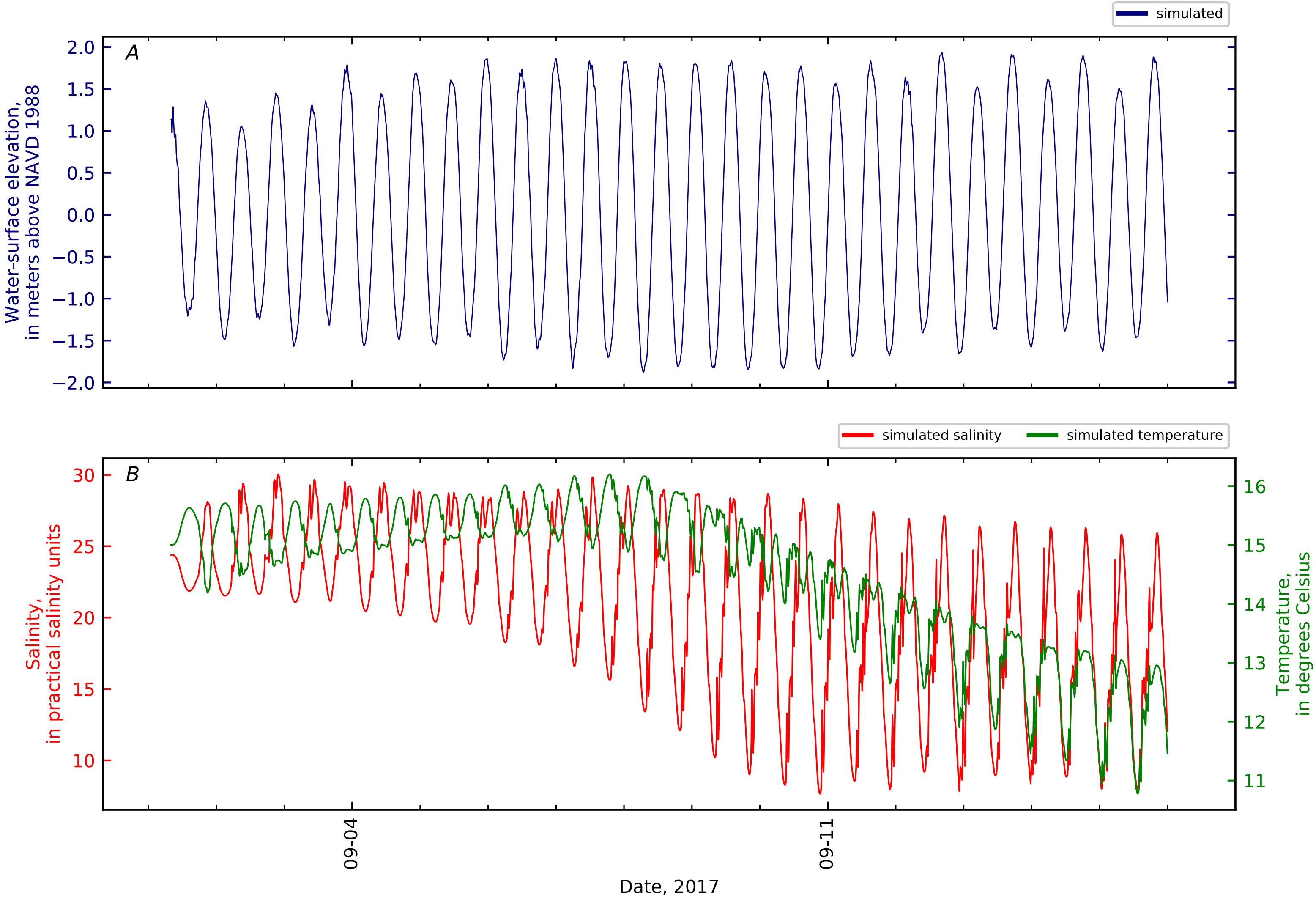

Figure B1-37. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 36, Penob Riv KM6.1 WHOI5 Verona Island 2010.

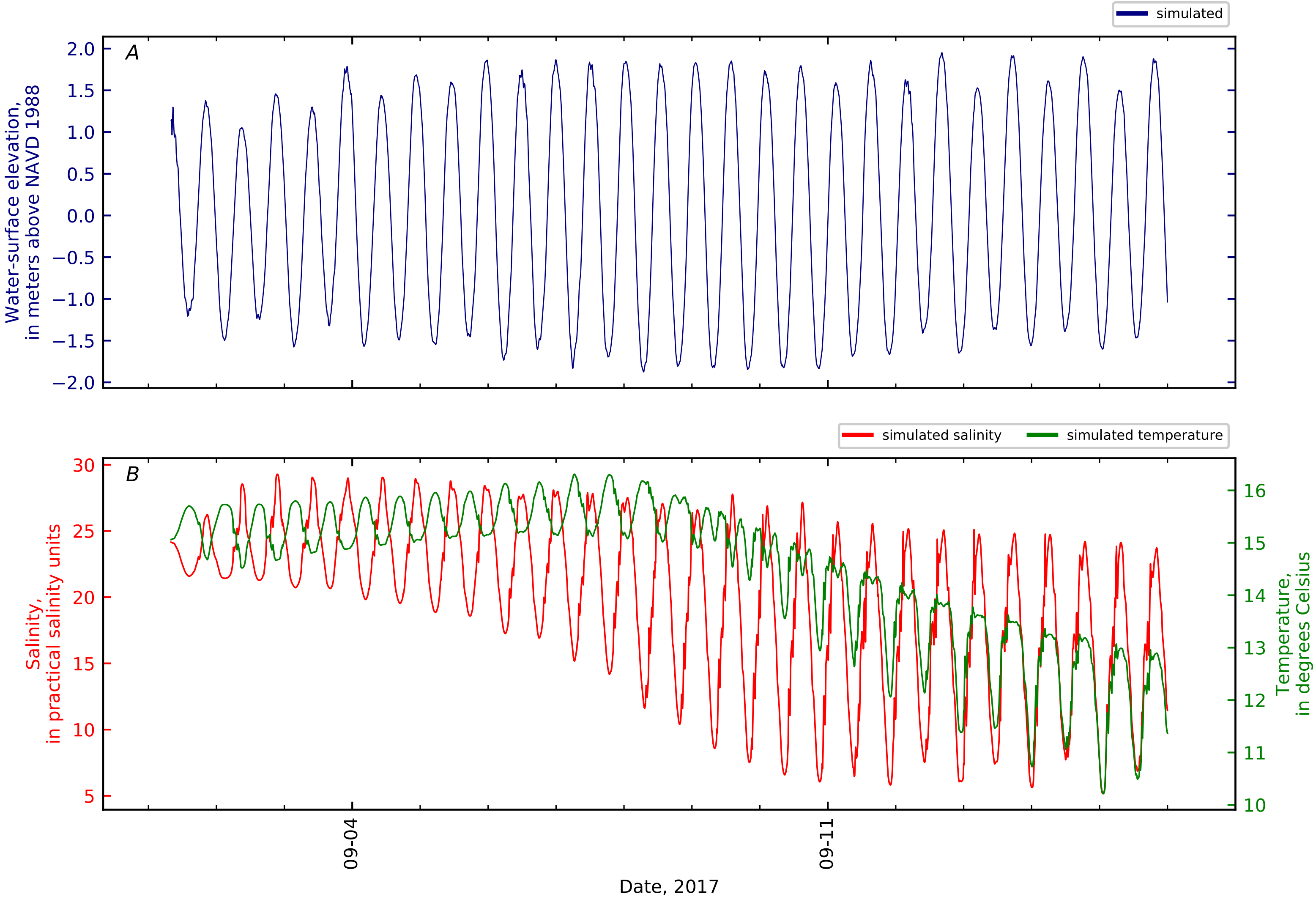

Figure B1-38. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 37, Penob Riv KM7.

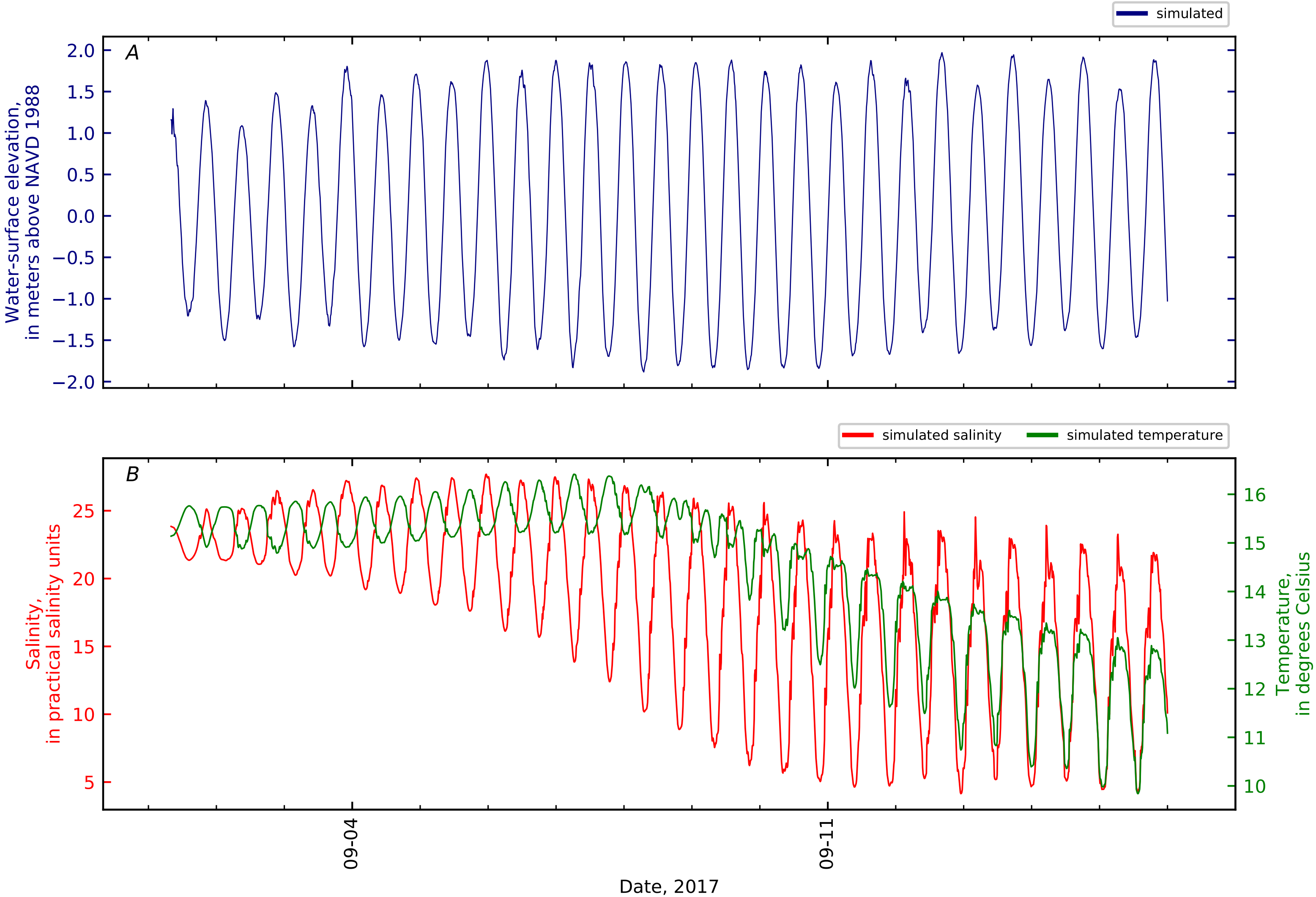

Figure B1-39. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 38, Penob Riv KM8.

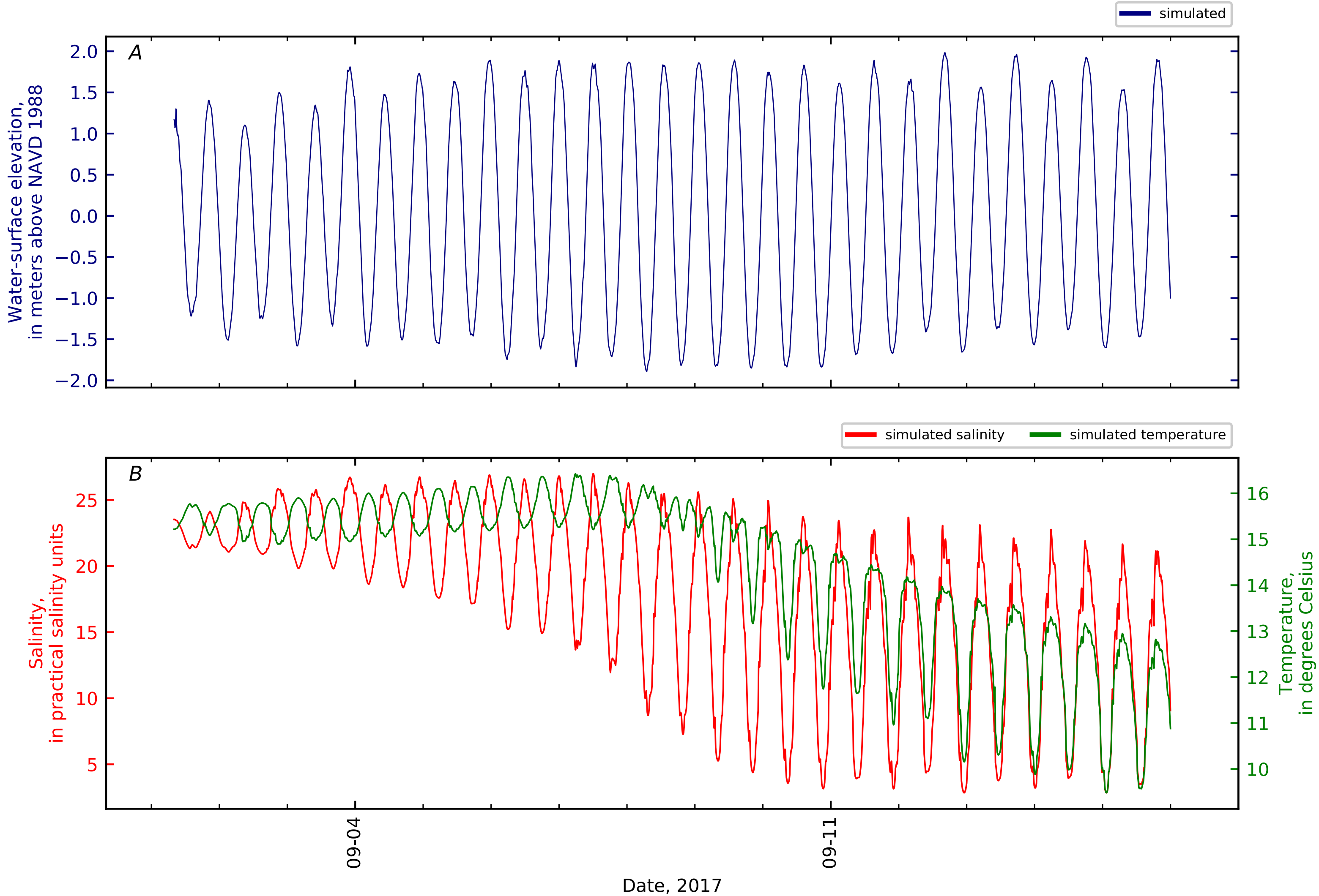

Figure B1-40. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 39, Penob Riv KM9.

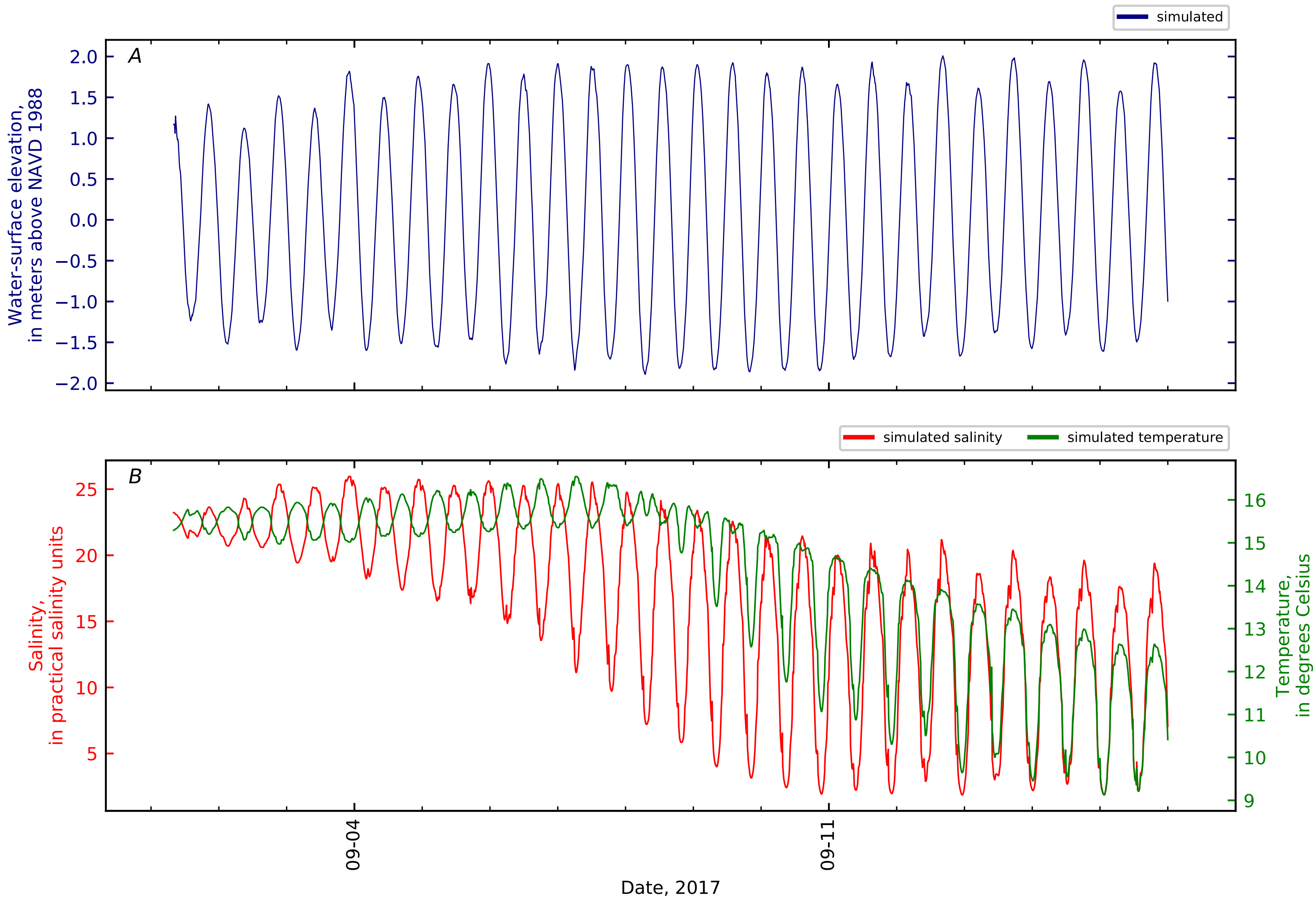

Figure B1-41. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 40, Penob Riv KM10.

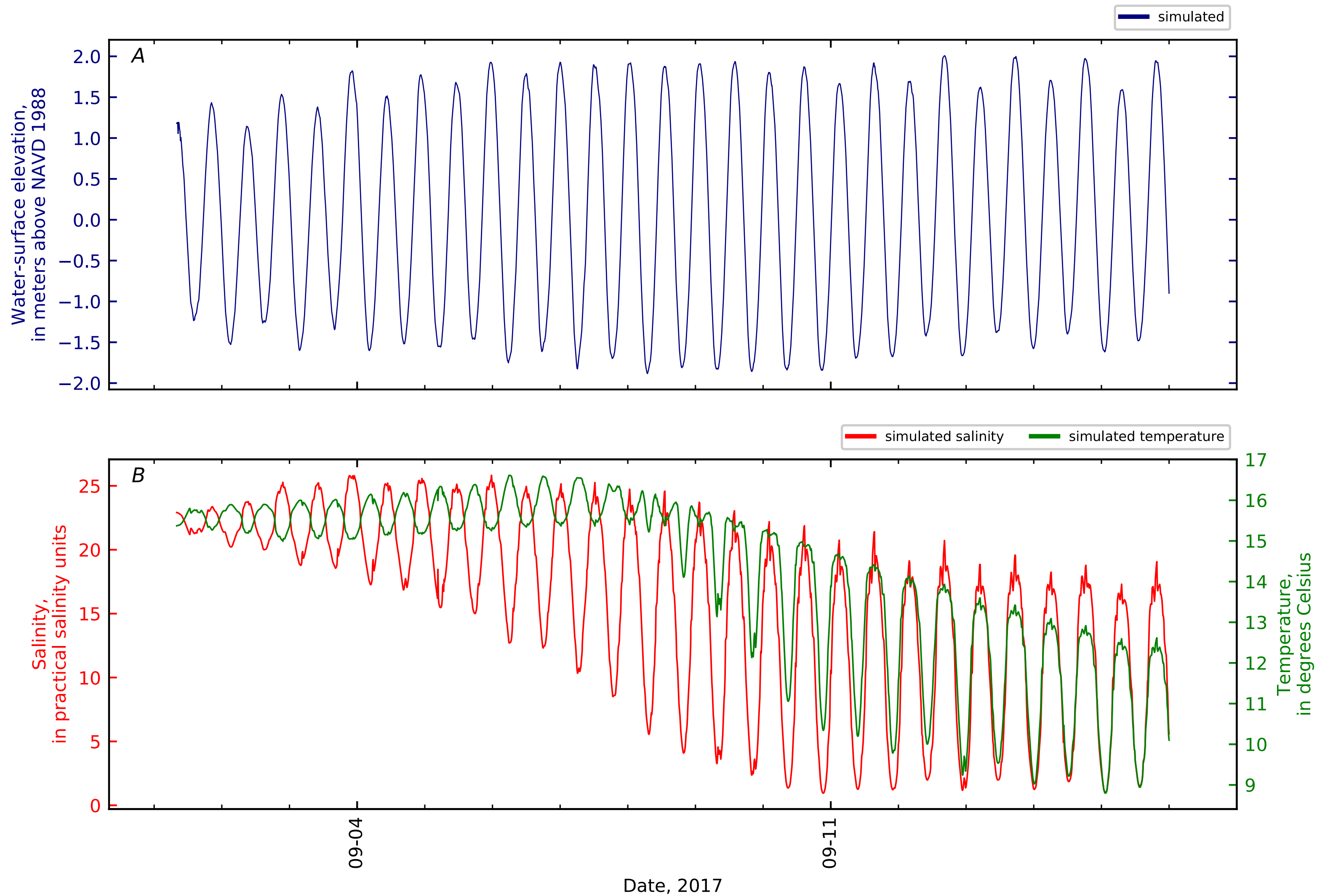

Figure B1-42. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 41, Penob Riv KM11.

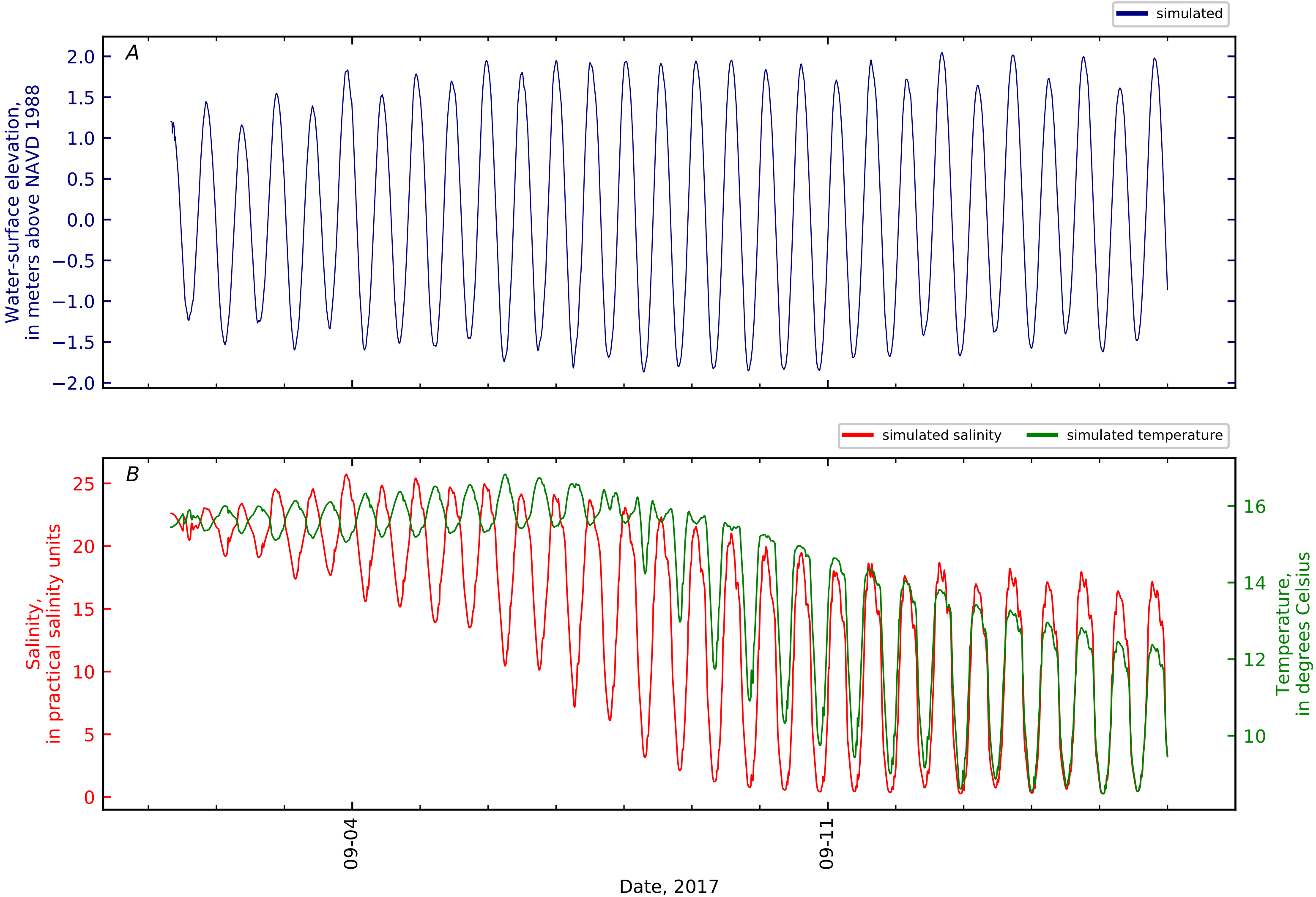

Figure B1-43. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 42, Penob Riv KM12.

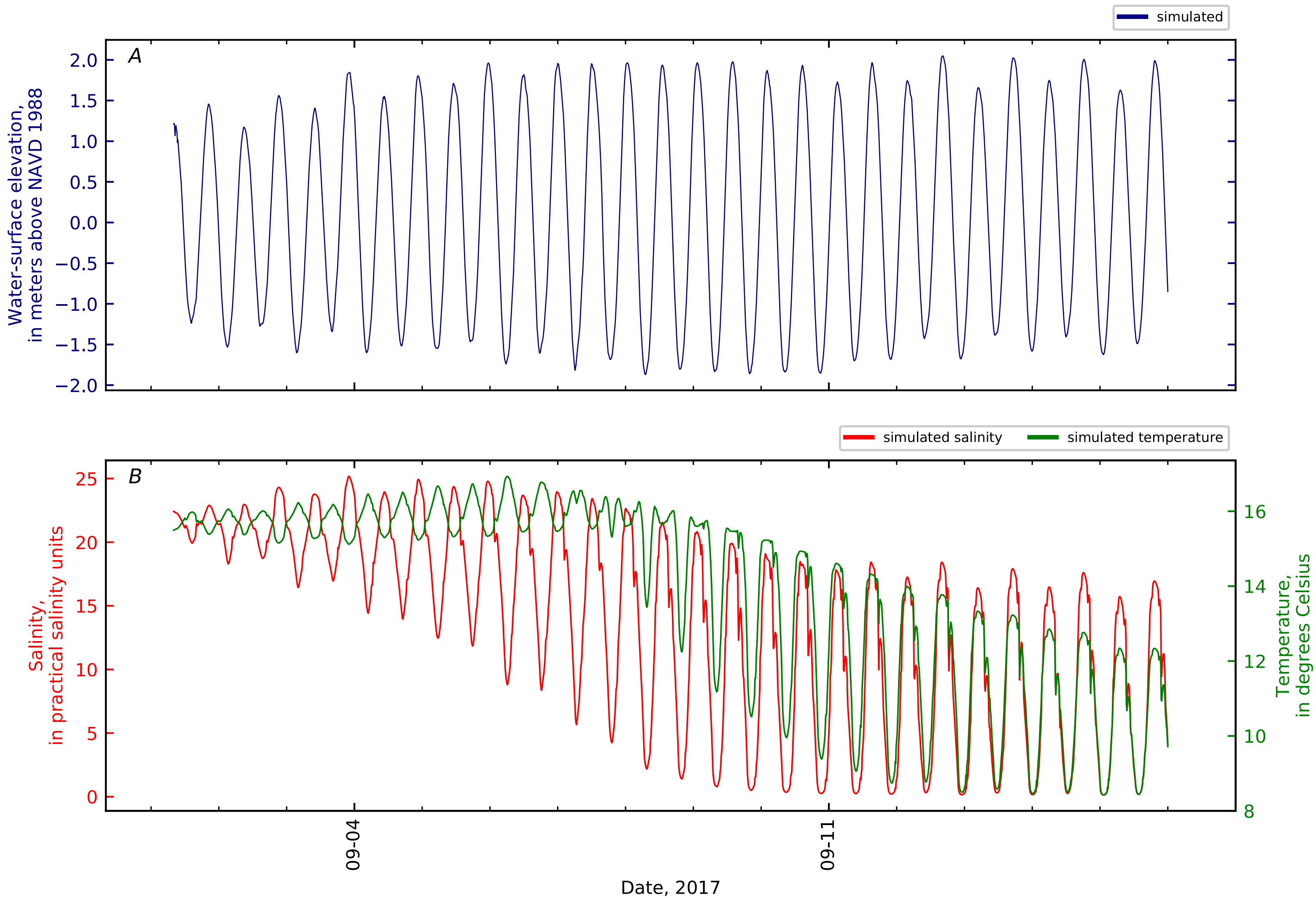

Figure B1-44. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 43, Penob Riv KM12.9 WHOI7 Bucksport 2011.

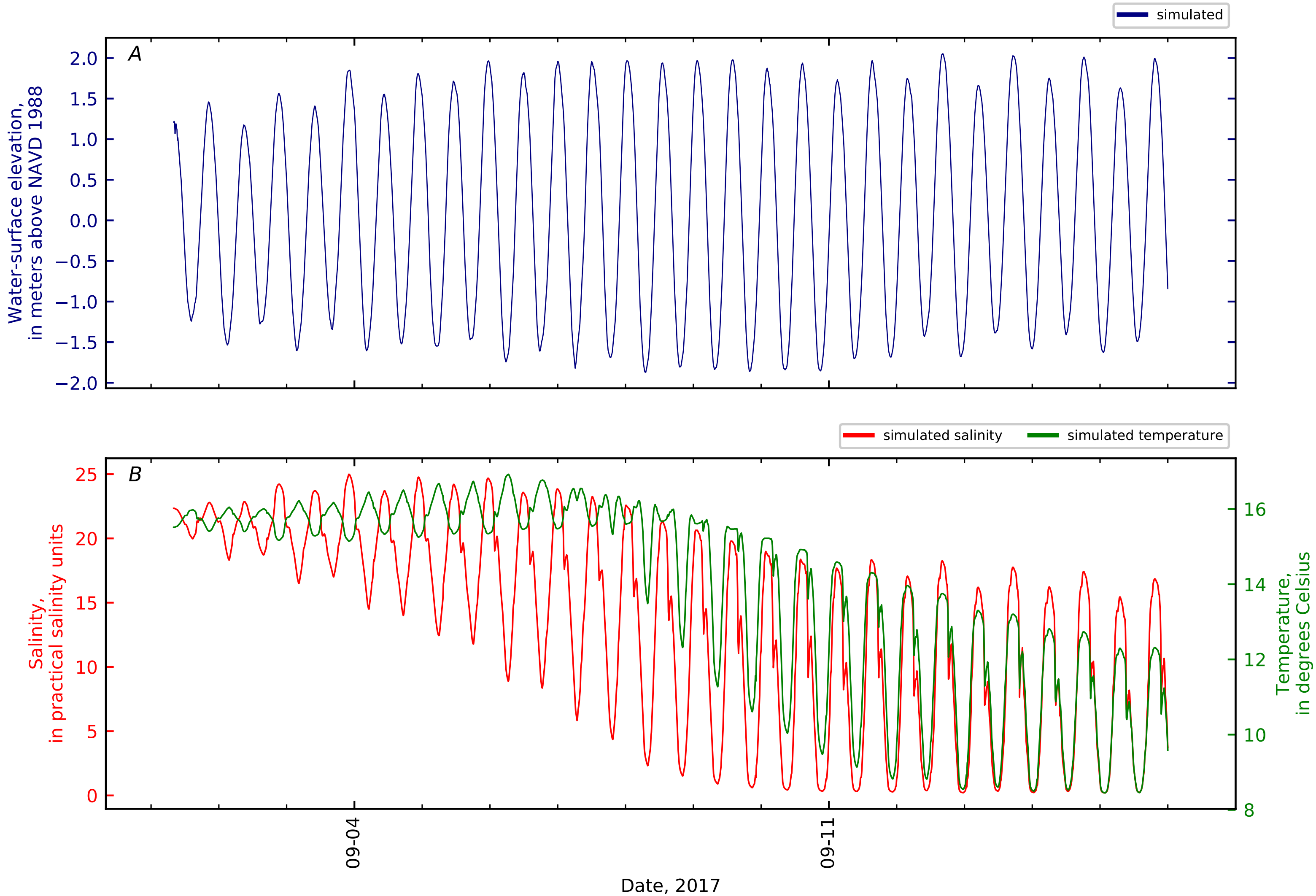

Figure B1-45. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 44, Penob Riv KM13.

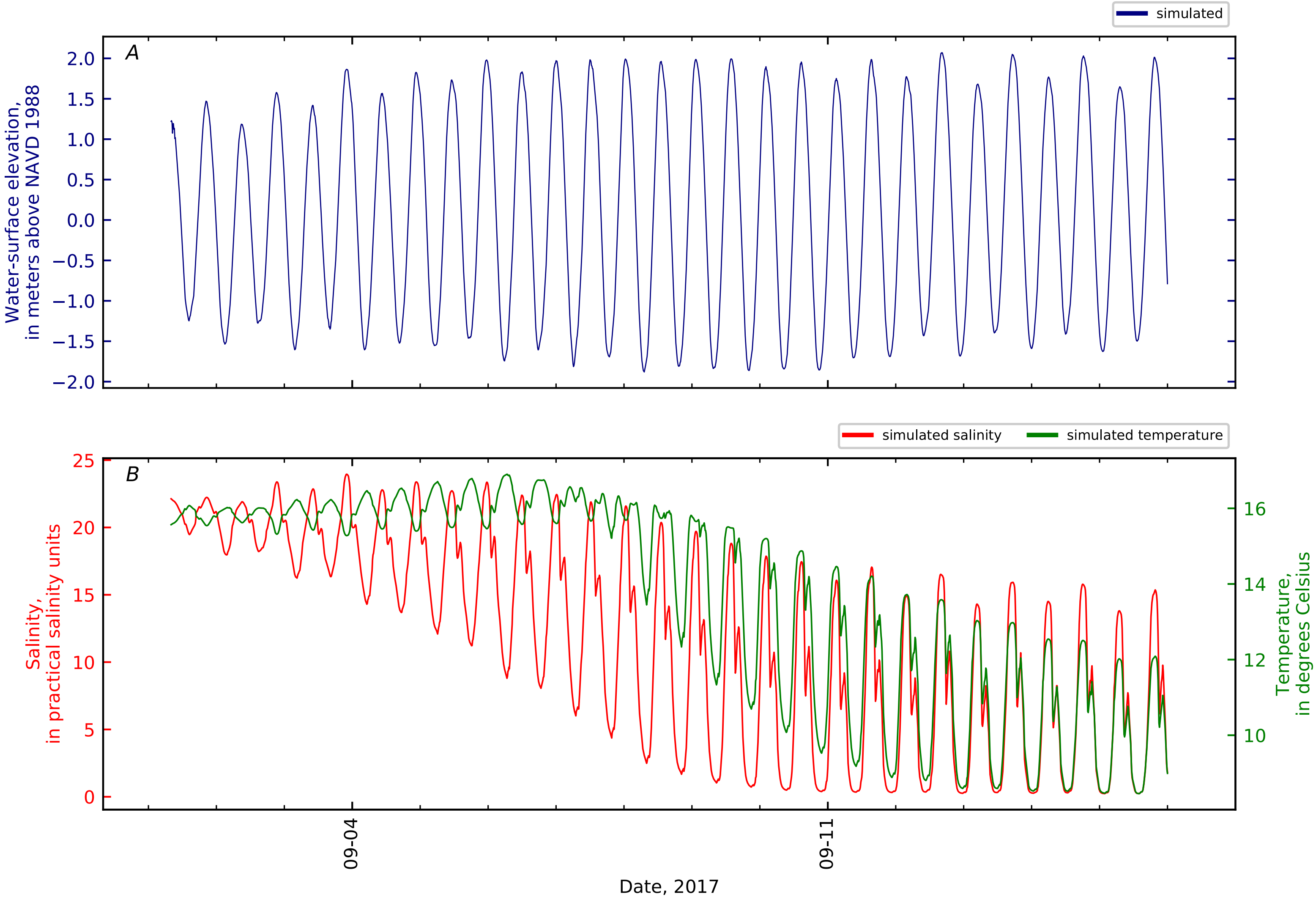

Figure B1-46. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 45, Penob Riv KM14.

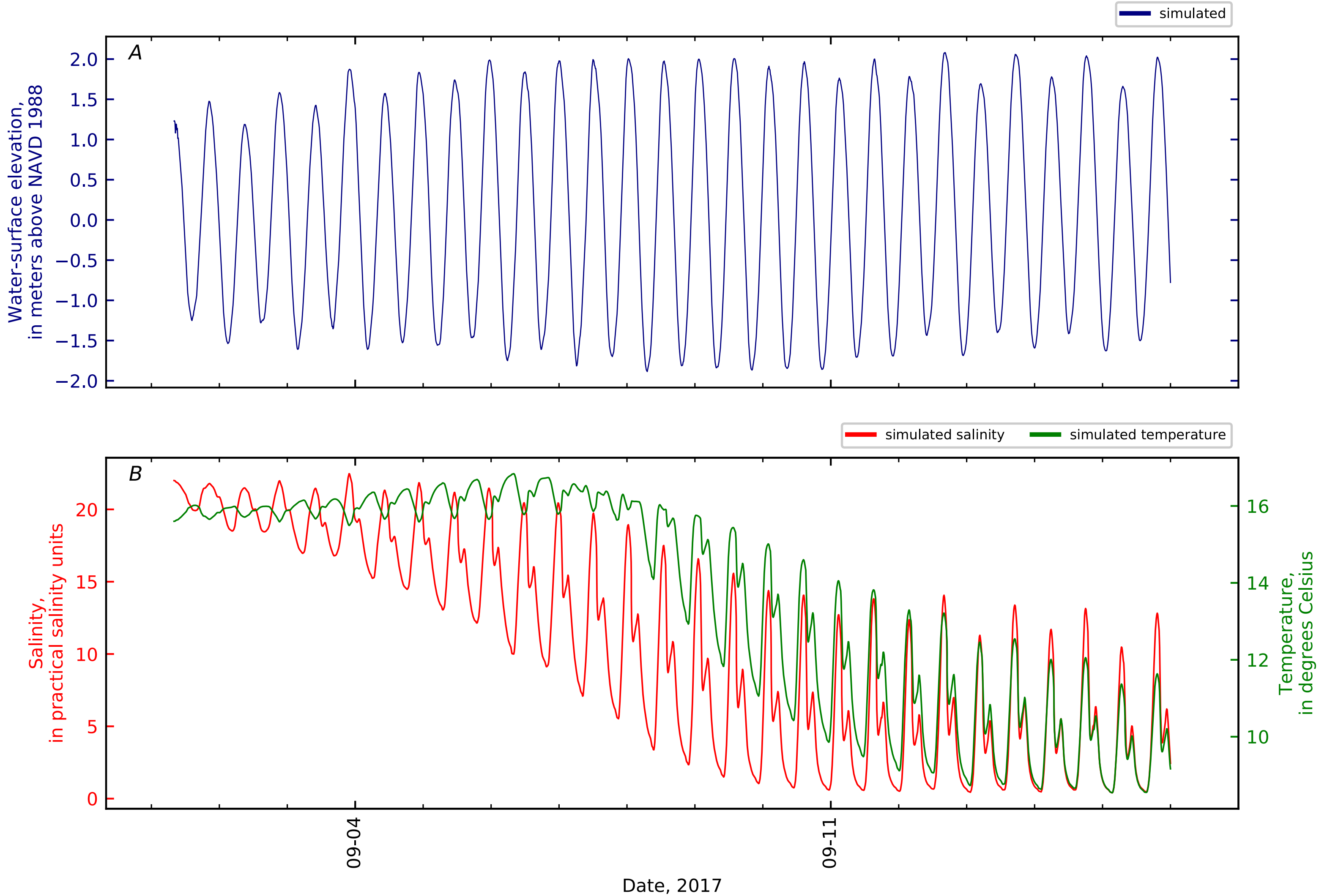

Figure B1-47. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 46, Penob Riv KM14.27 ERDC15 BU-MU1-SF-1.

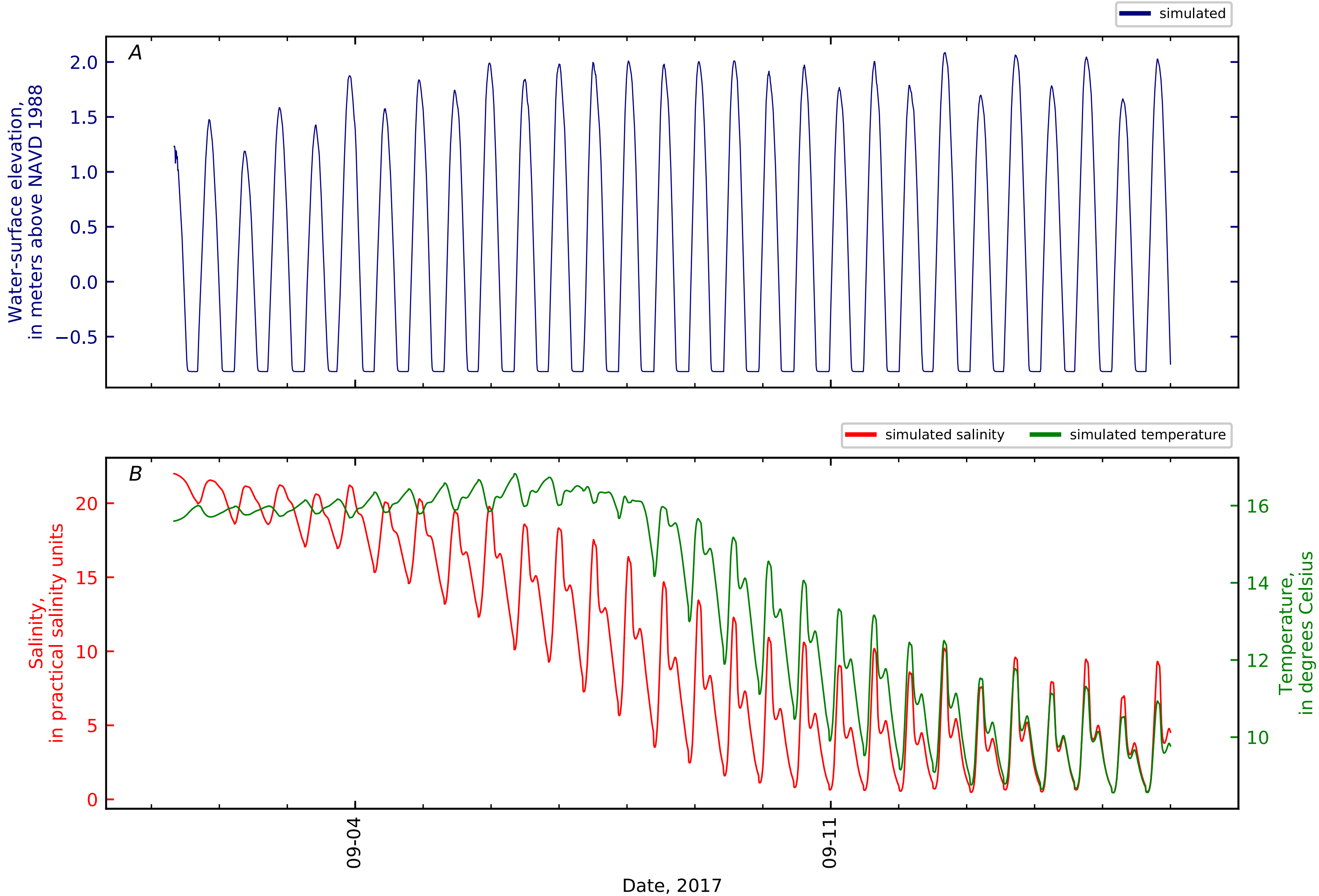

Figure B1-48. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 47, Penob Riv KM14.29 ERDC16B BU-MU1-SF-1.

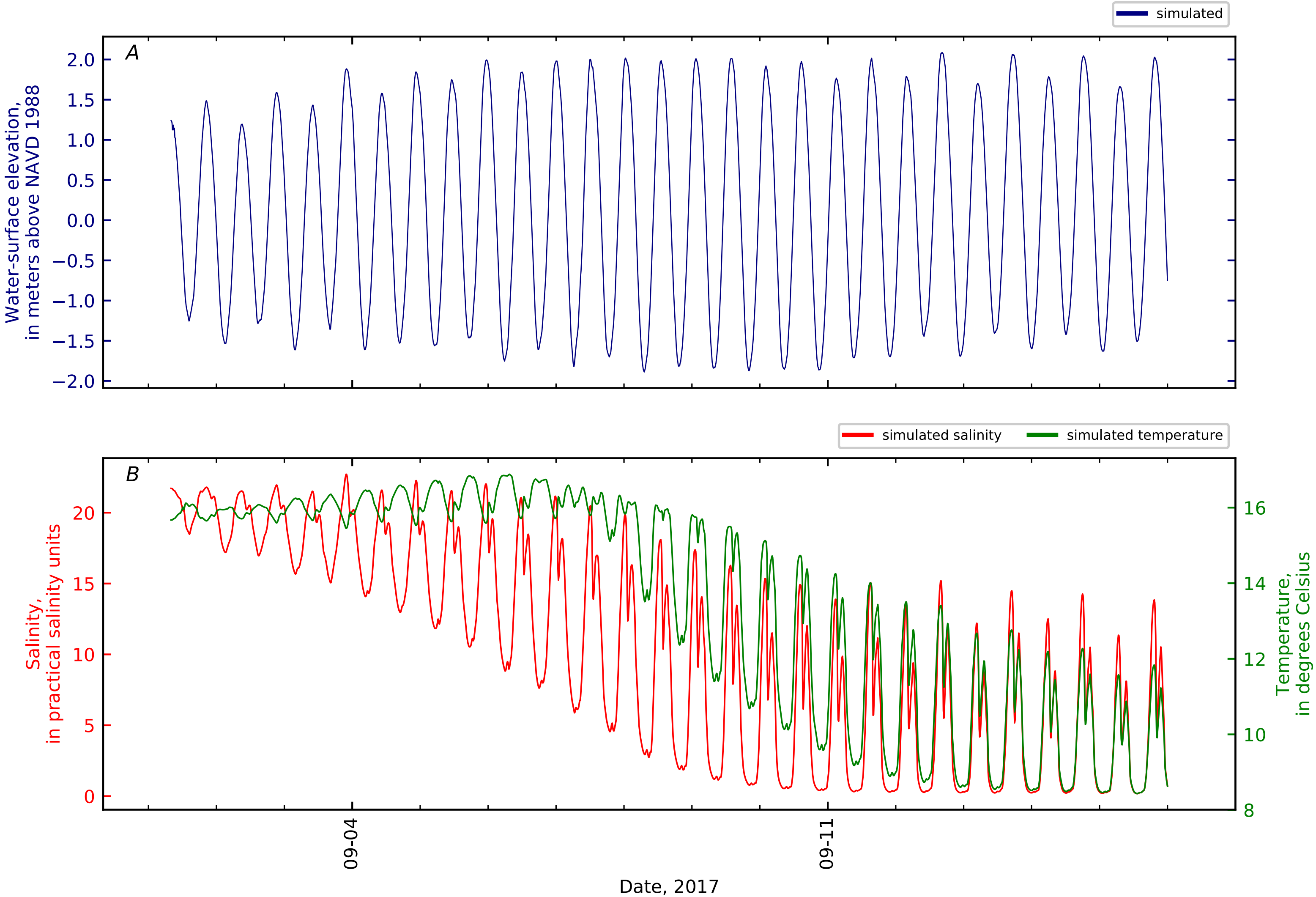

Figure B1-49. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 48, Penob Riv KM15.

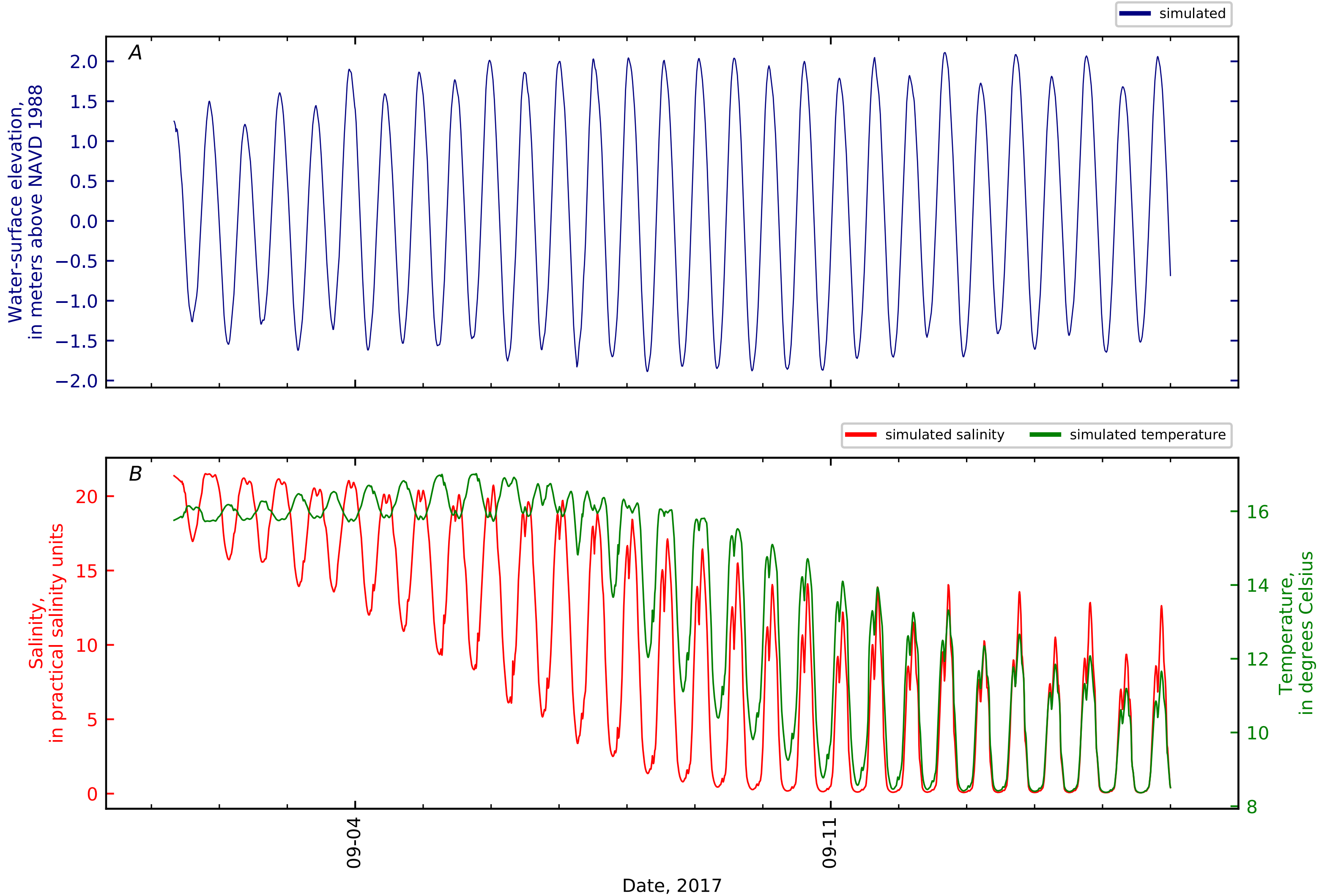

Figure B1-50. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 49, Penob Riv KM16.

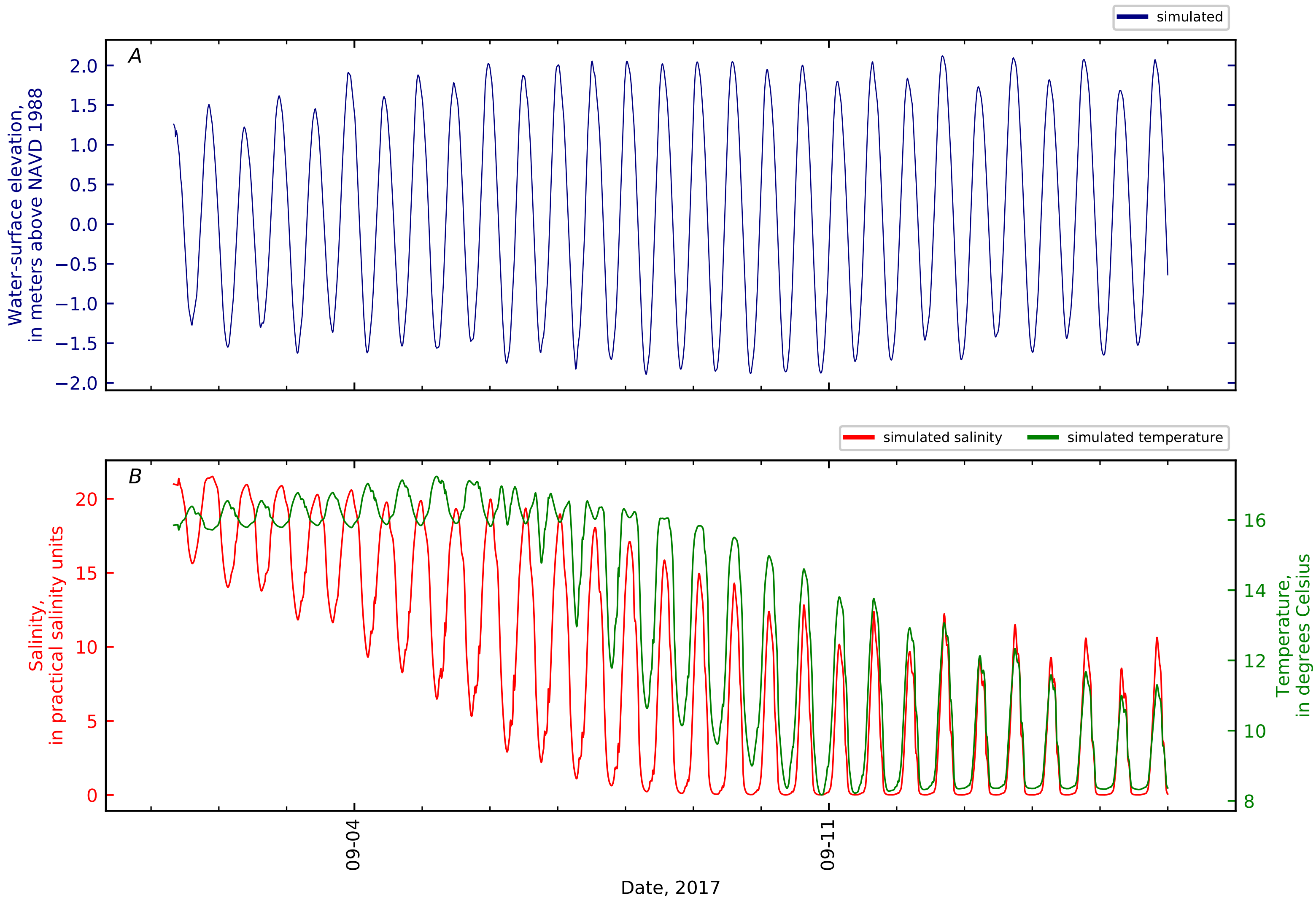

Figure B1-51. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 50, Penob Riv KM17.

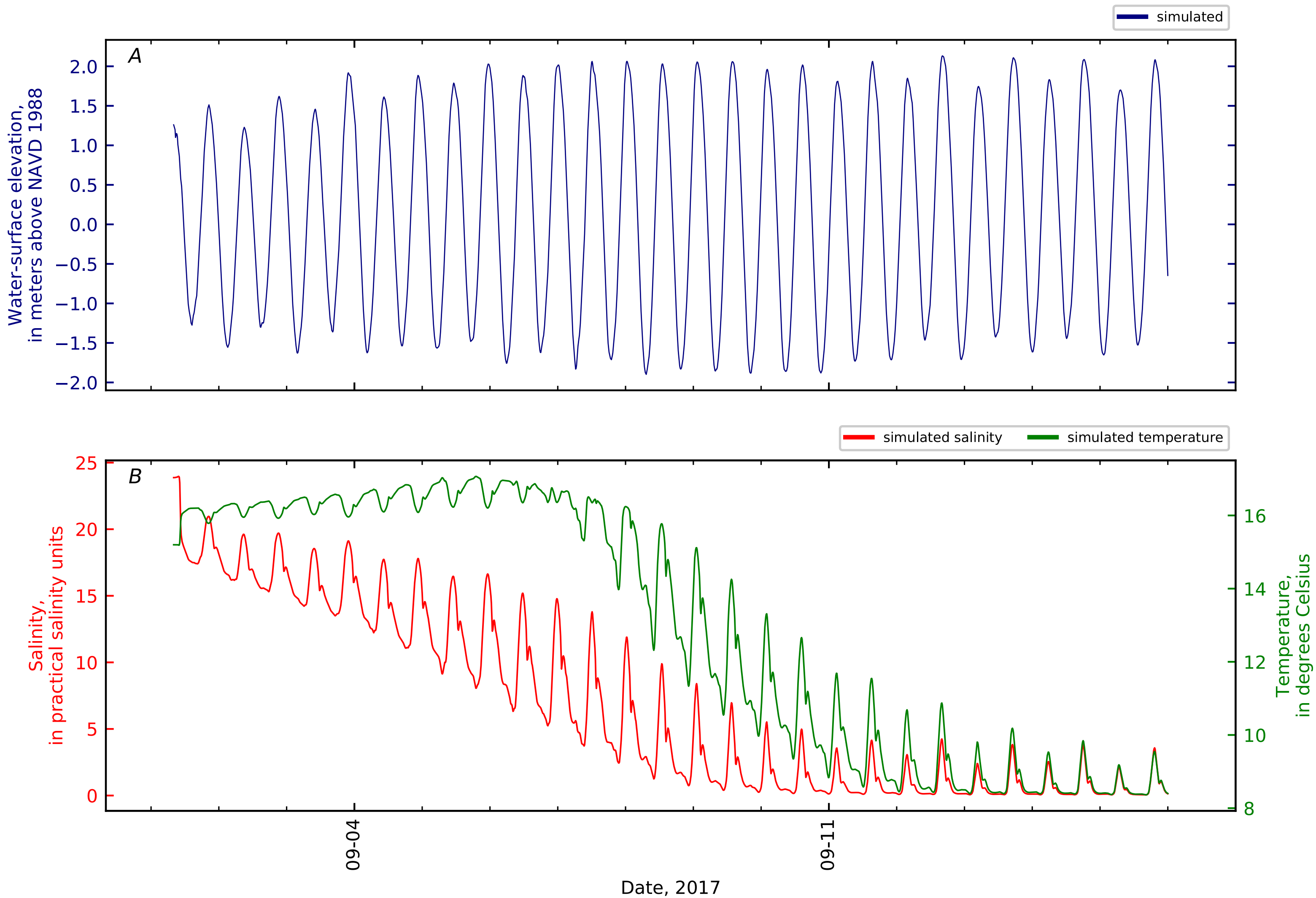

Figure B1-52. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 51, Penob Riv KM17.2 ERDC17B FF-MU7-SF-1.

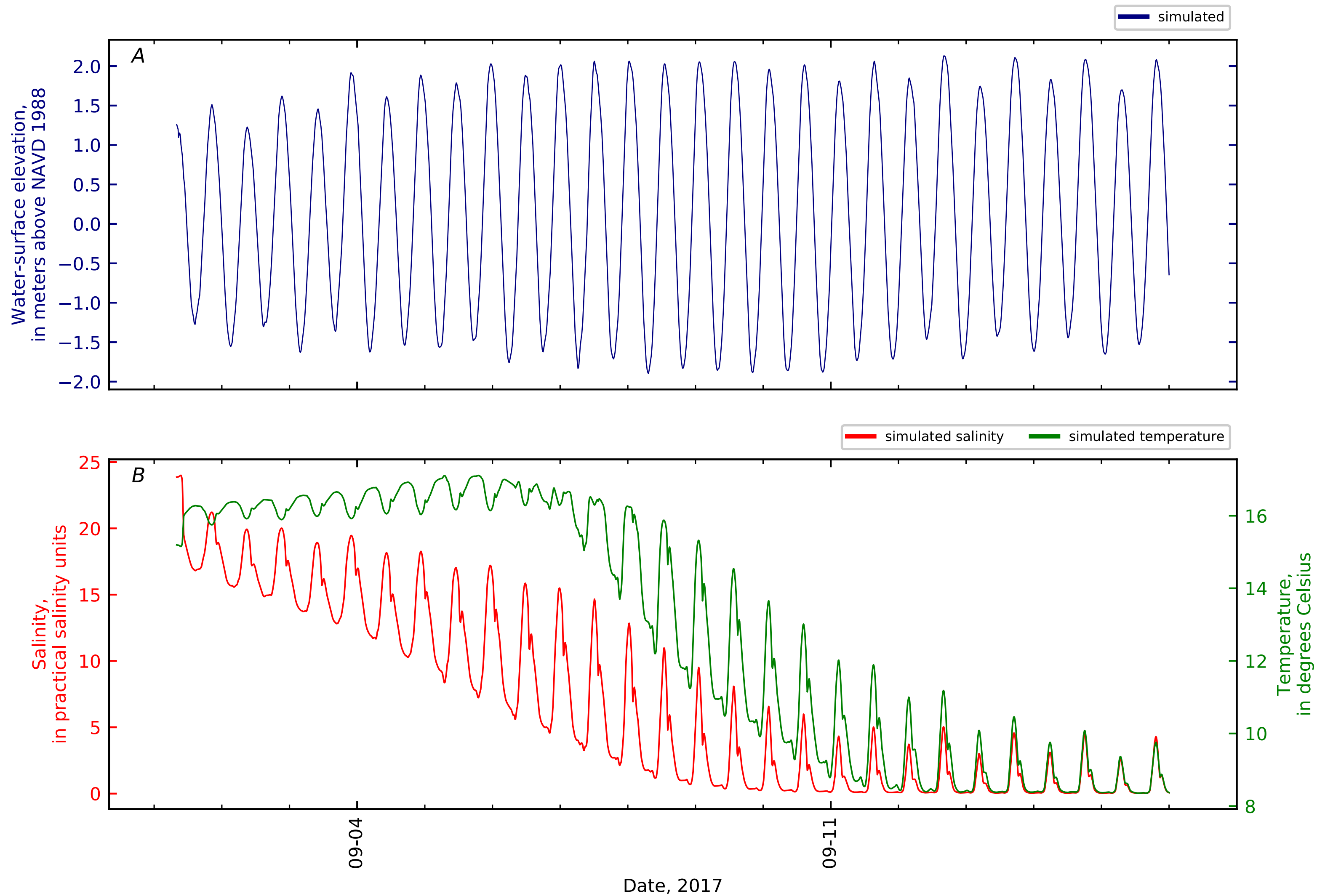

Figure B1-53. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 52, Penob Riv KM17.21 ERDC13 FF-MU7-SF-1.

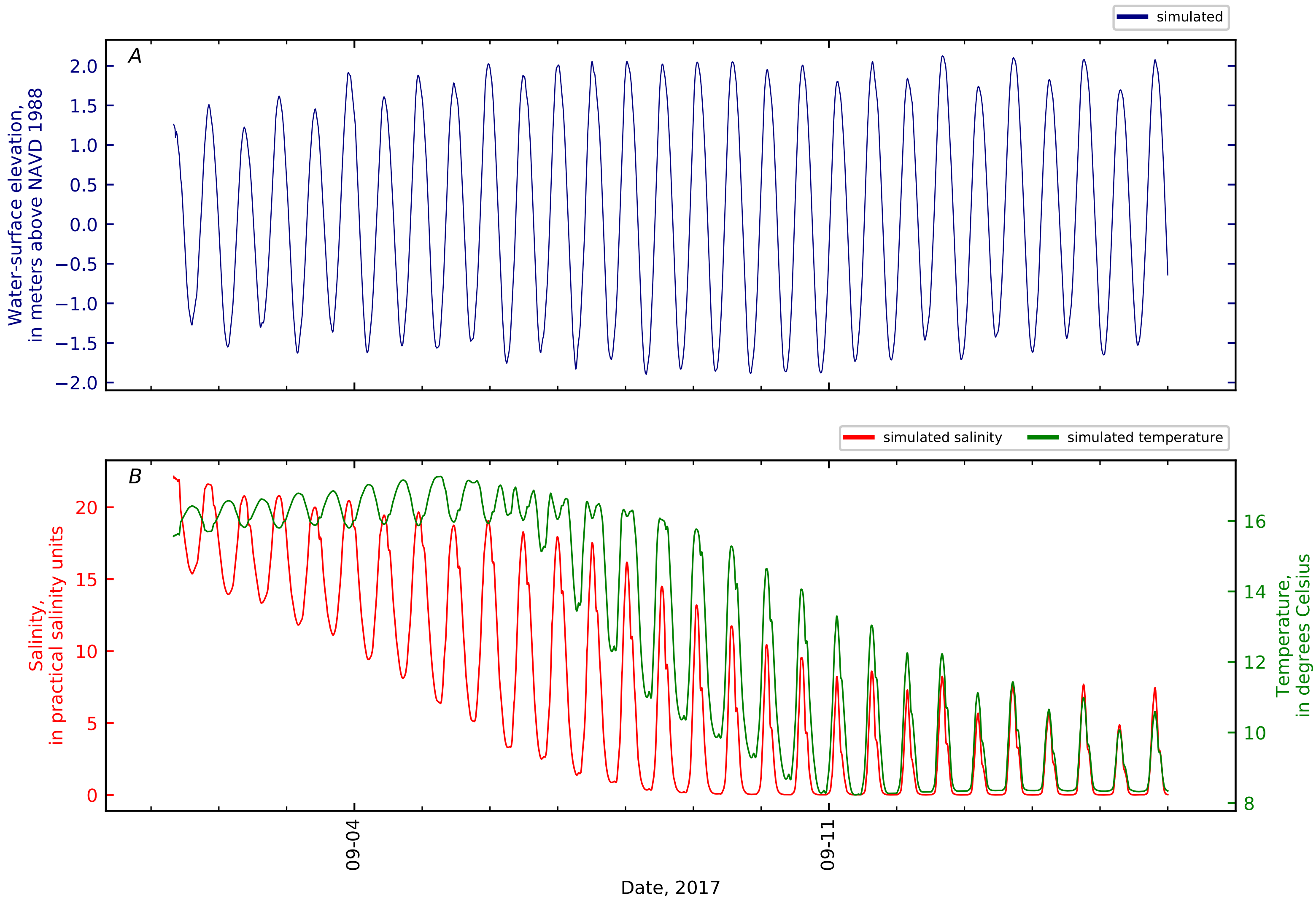

Figure B1-54. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 53, Penob Riv KM17.2 WHOI2 Frankfort Flats 2.

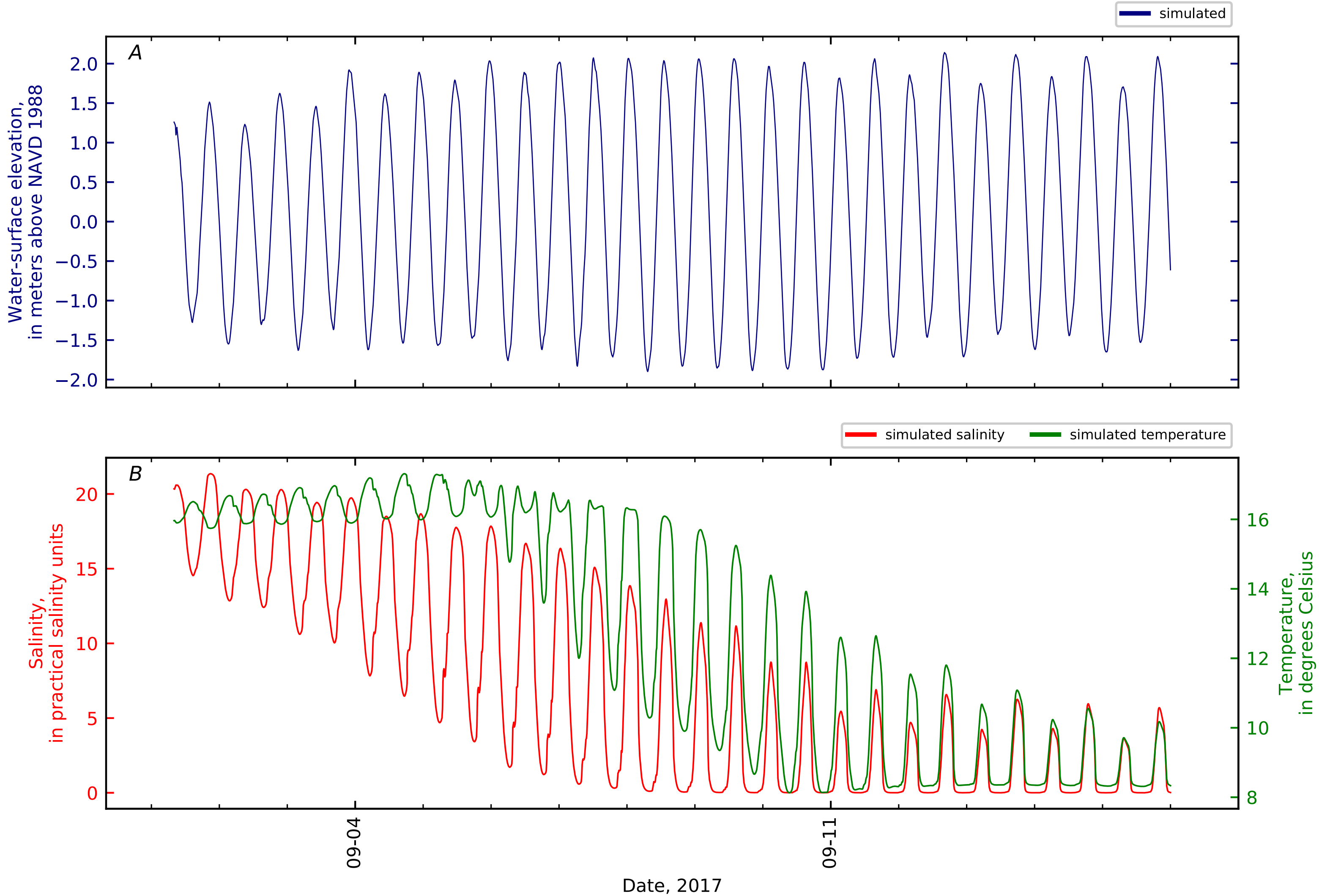

Figure B1-55. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 54, Penob Riv KM18.

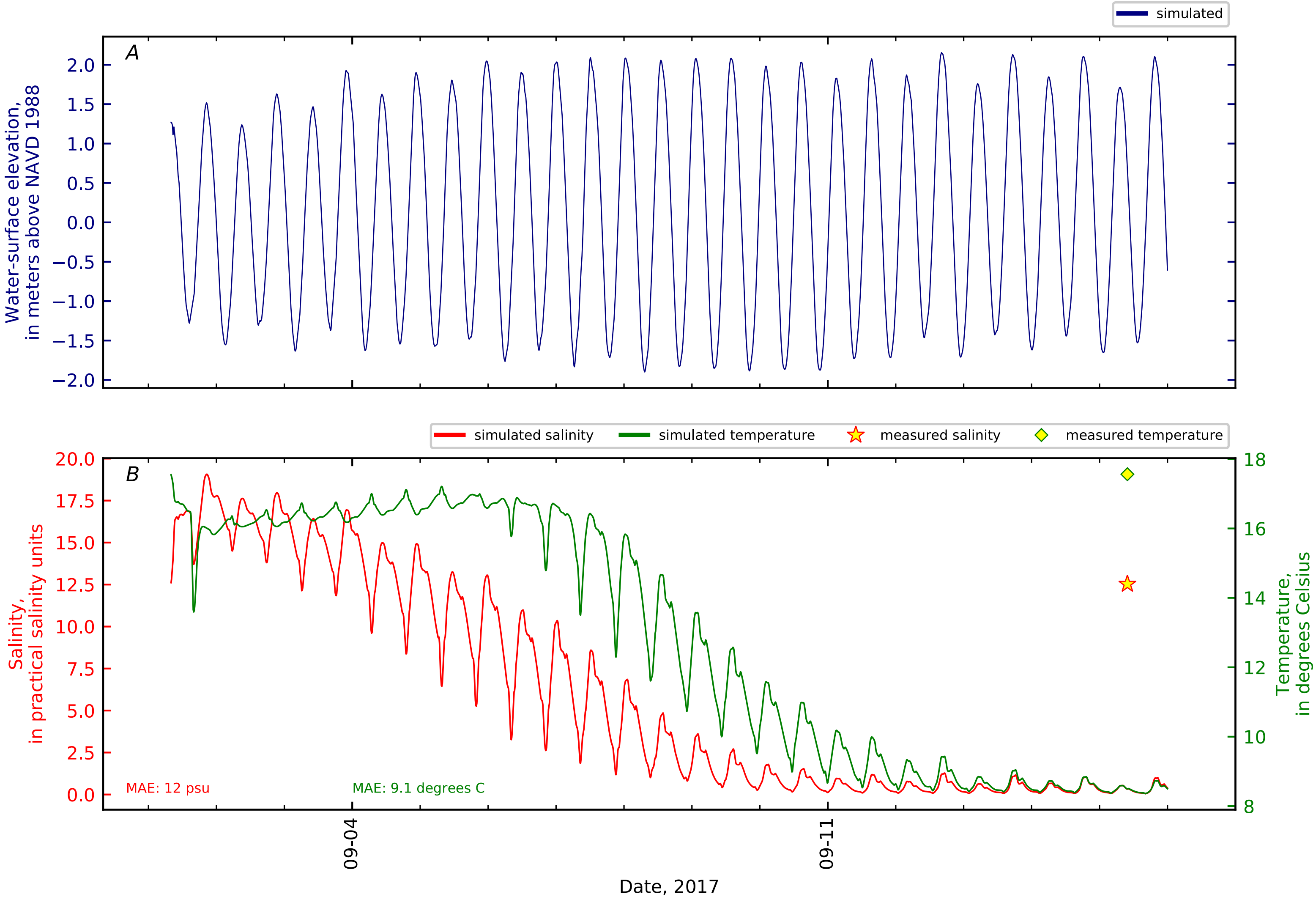

Figure B1-56. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 55, Penob Riv KM18.01 GS CTD1-01.

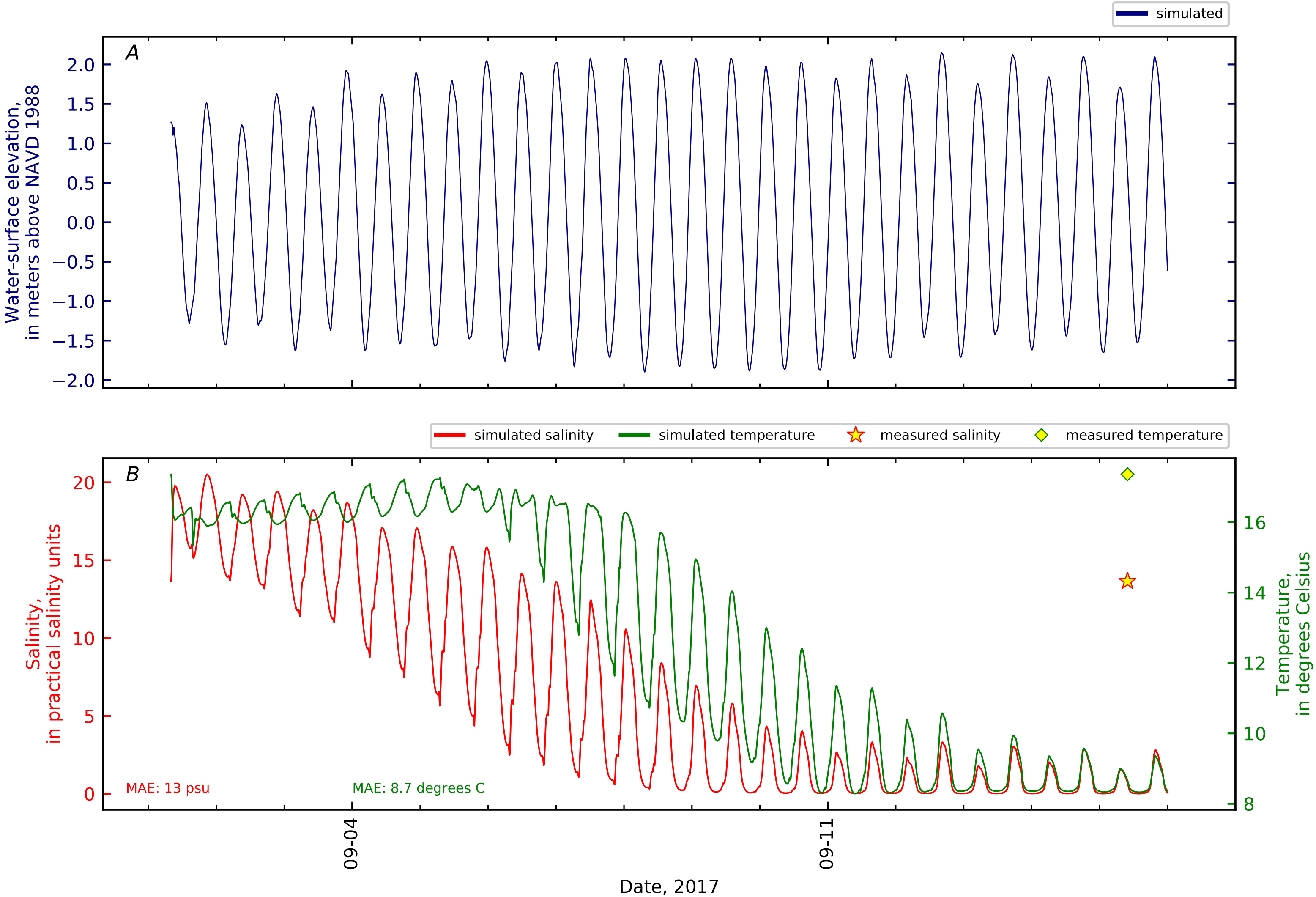

Figure B1-57. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 56, Penob Riv KM18.01 GS CTD1-02.

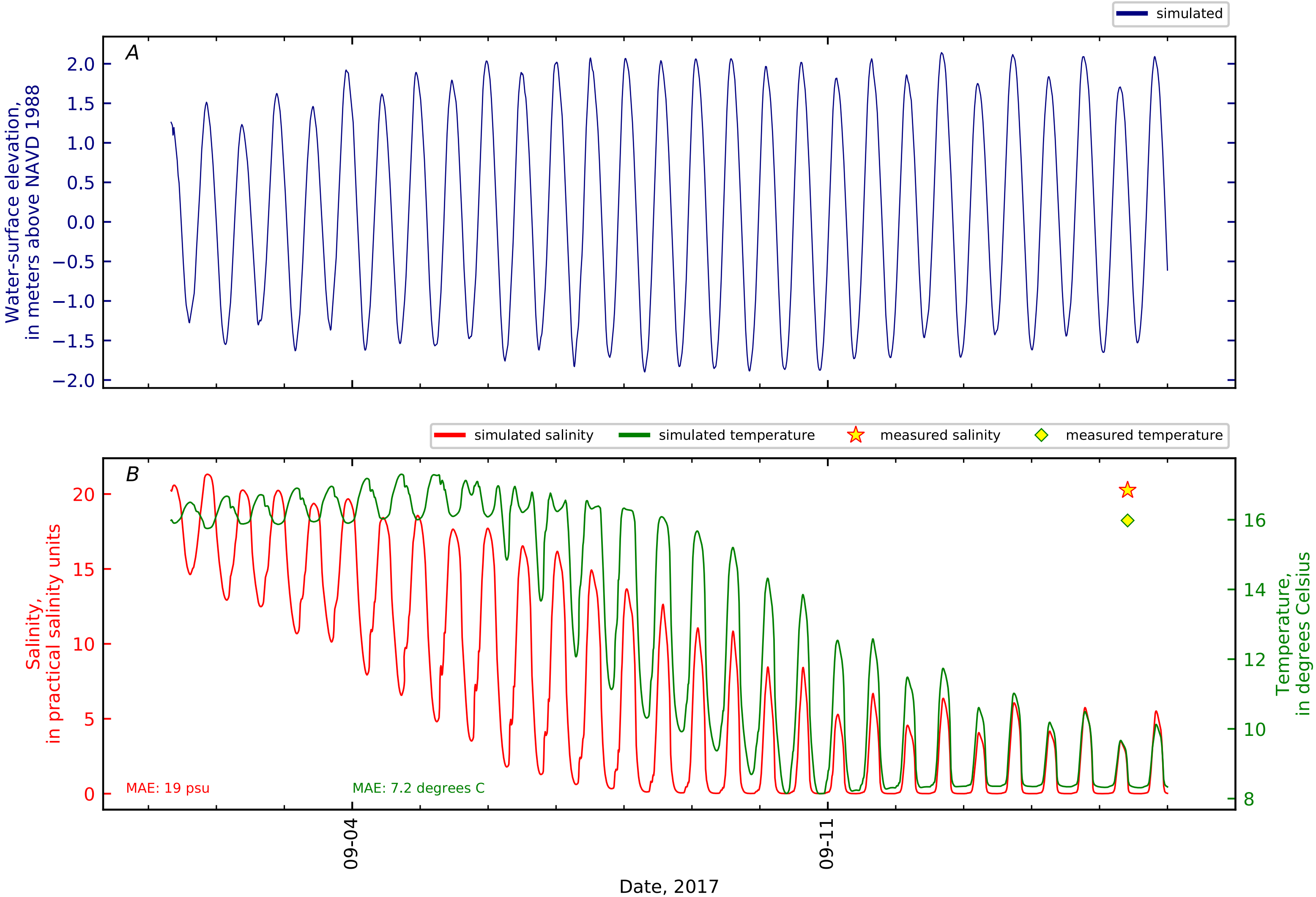

Figure B1-58. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 57, Penob Riv KM18.01 GS CTD1-03.

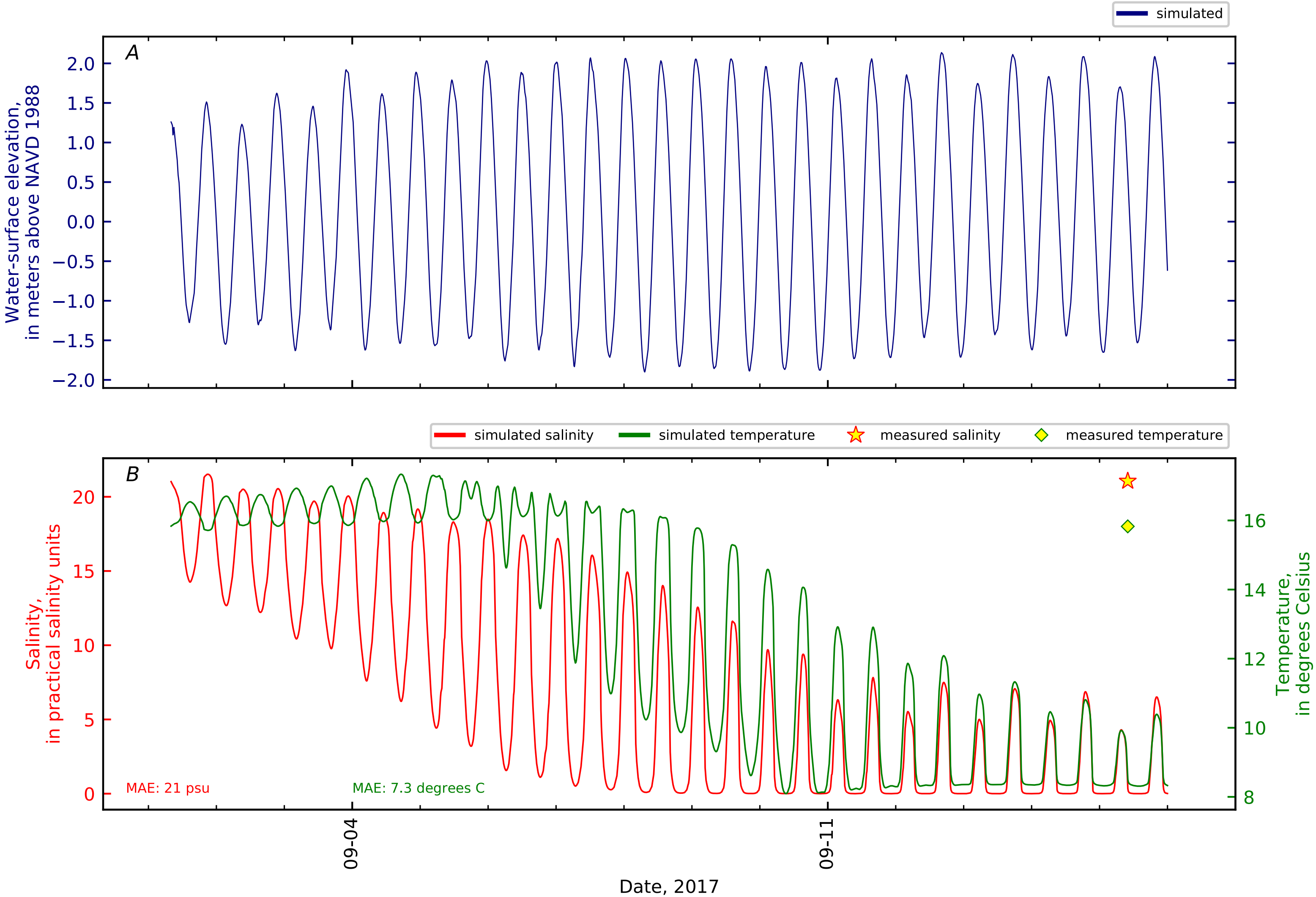

Figure B1-59. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 58, Penob Riv KM18.01 GS CTD1-04.

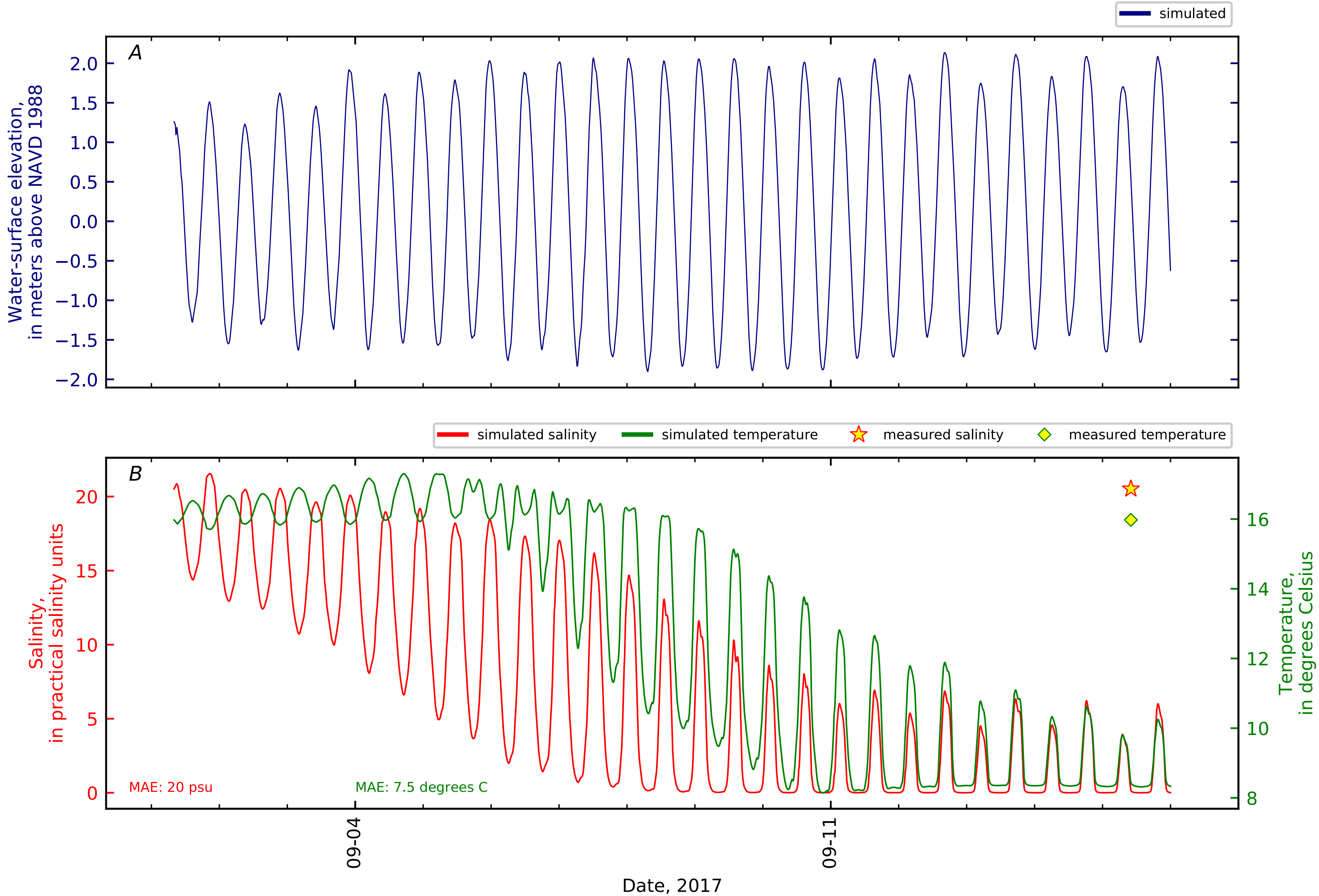

Figure B1-60. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 59, Penob Riv KM18.01 GS CTD1-05.

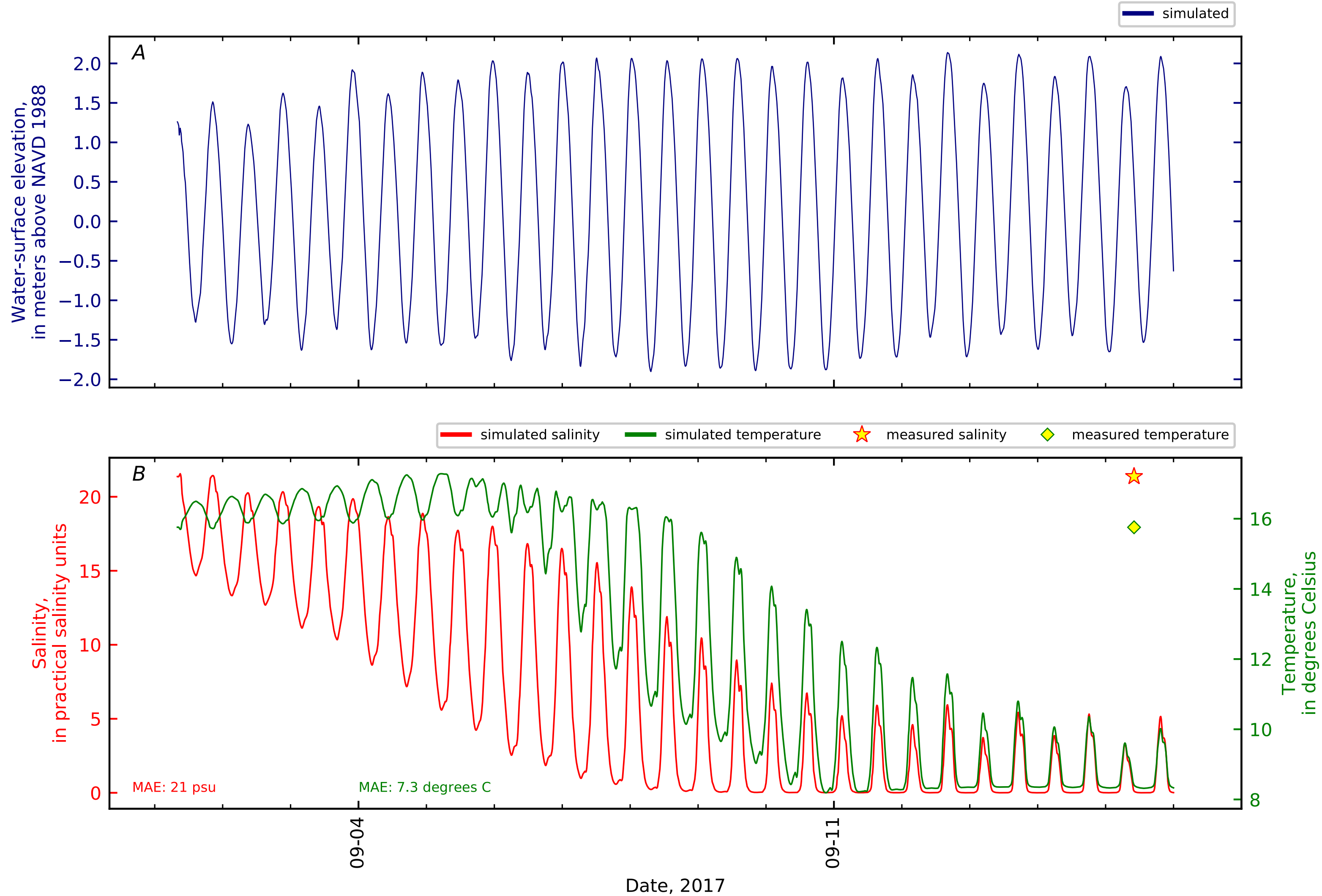

Figure B1-61. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 60, Penob Riv KM18.01 GS CTD1-06.

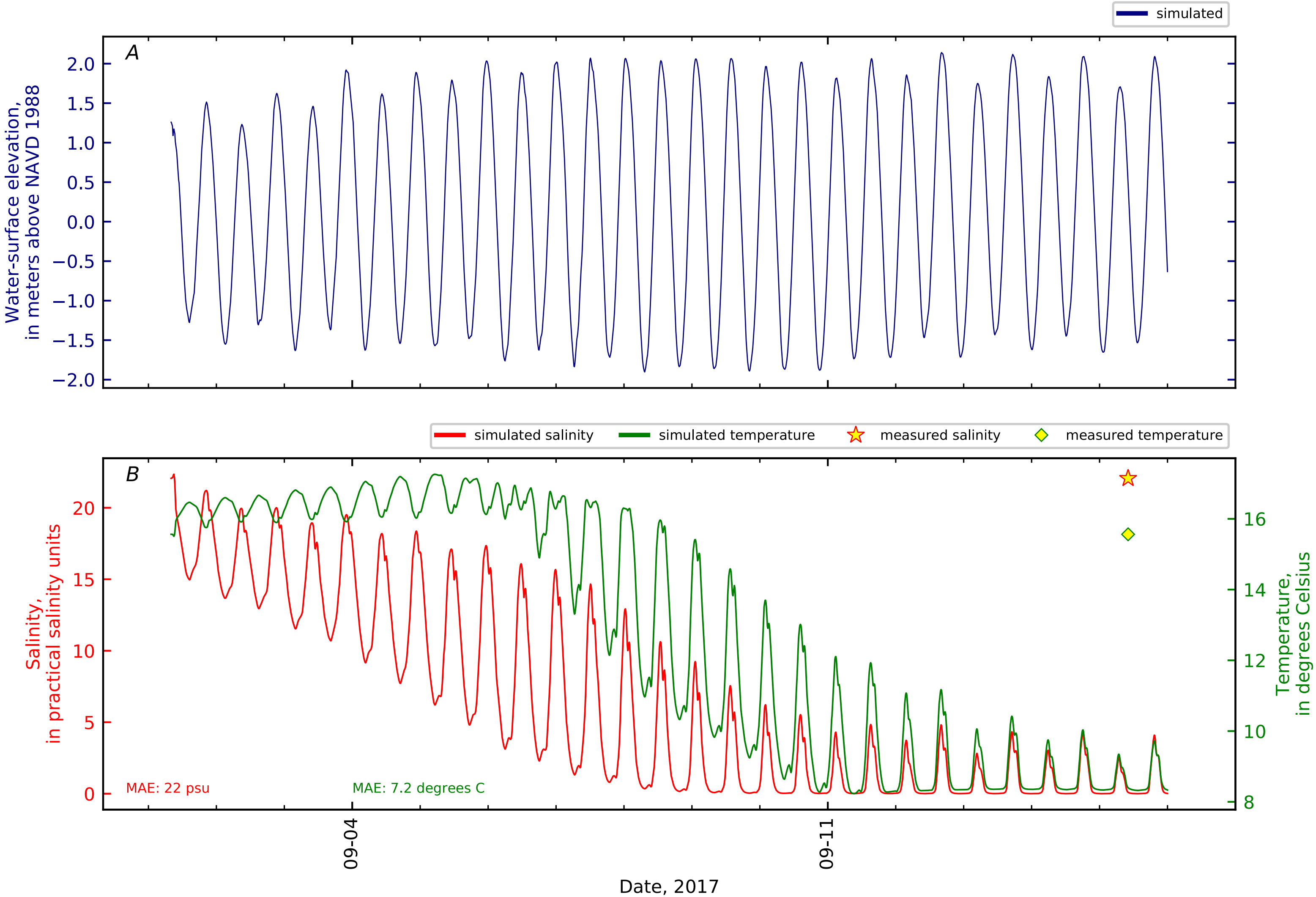

Figure B1-62. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 61, Penob Riv KM18.01 GS CTD1-07.

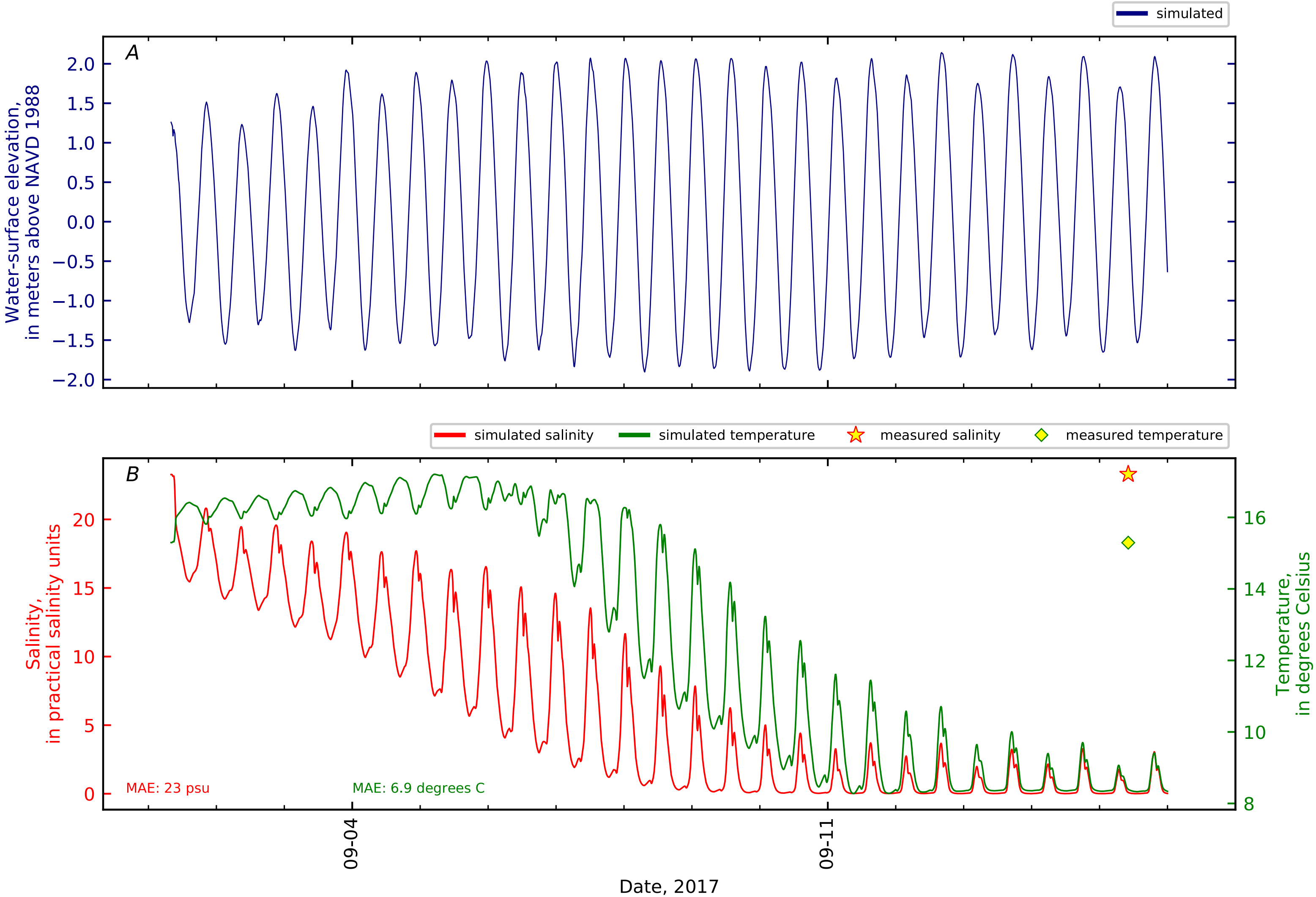

Figure B1-63. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 62, Penob Riv KM18.01 GS CTD1-08.

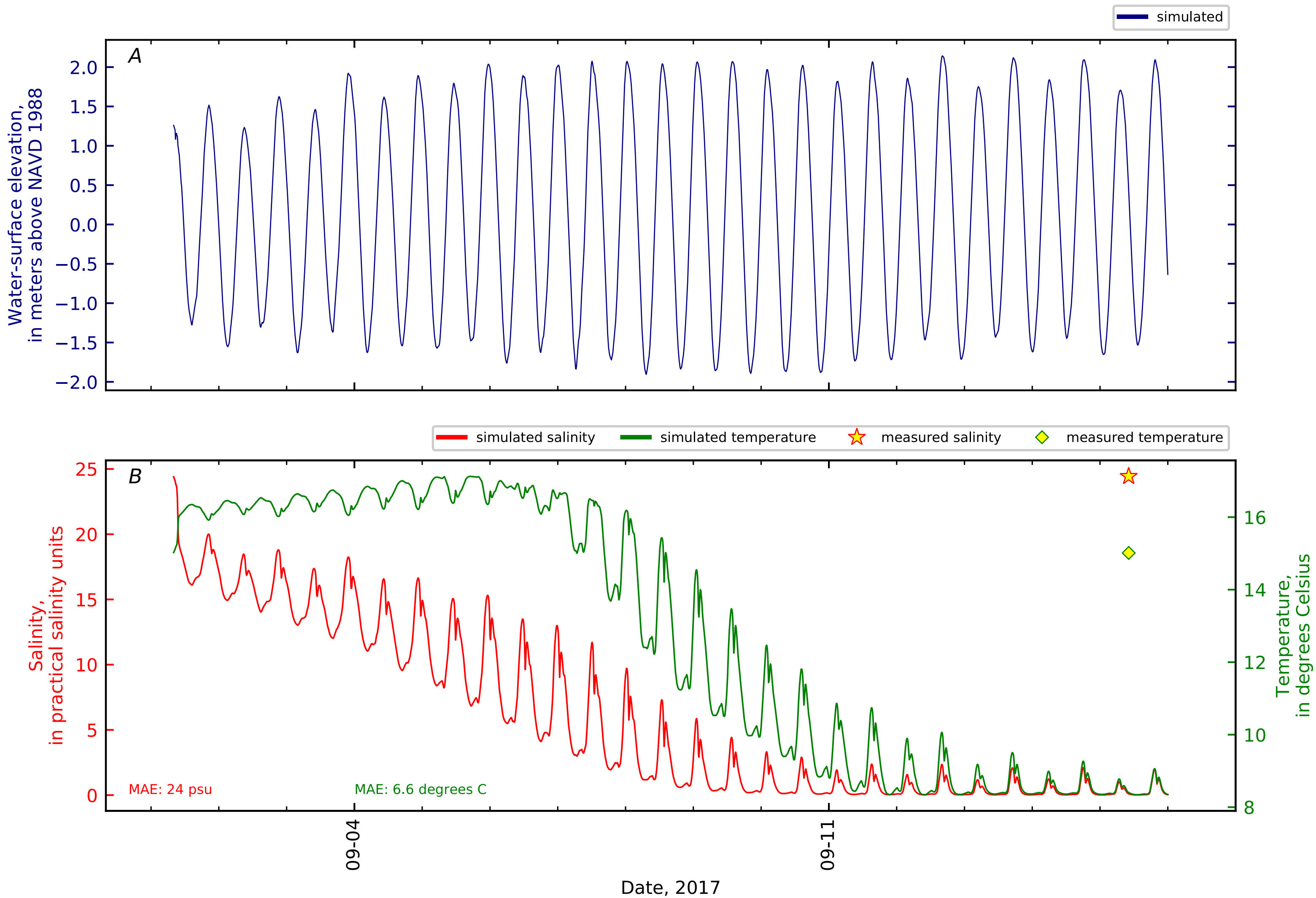

Figure B1-64. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 63, Penob Riv KM18.01 GS CTD1-09.

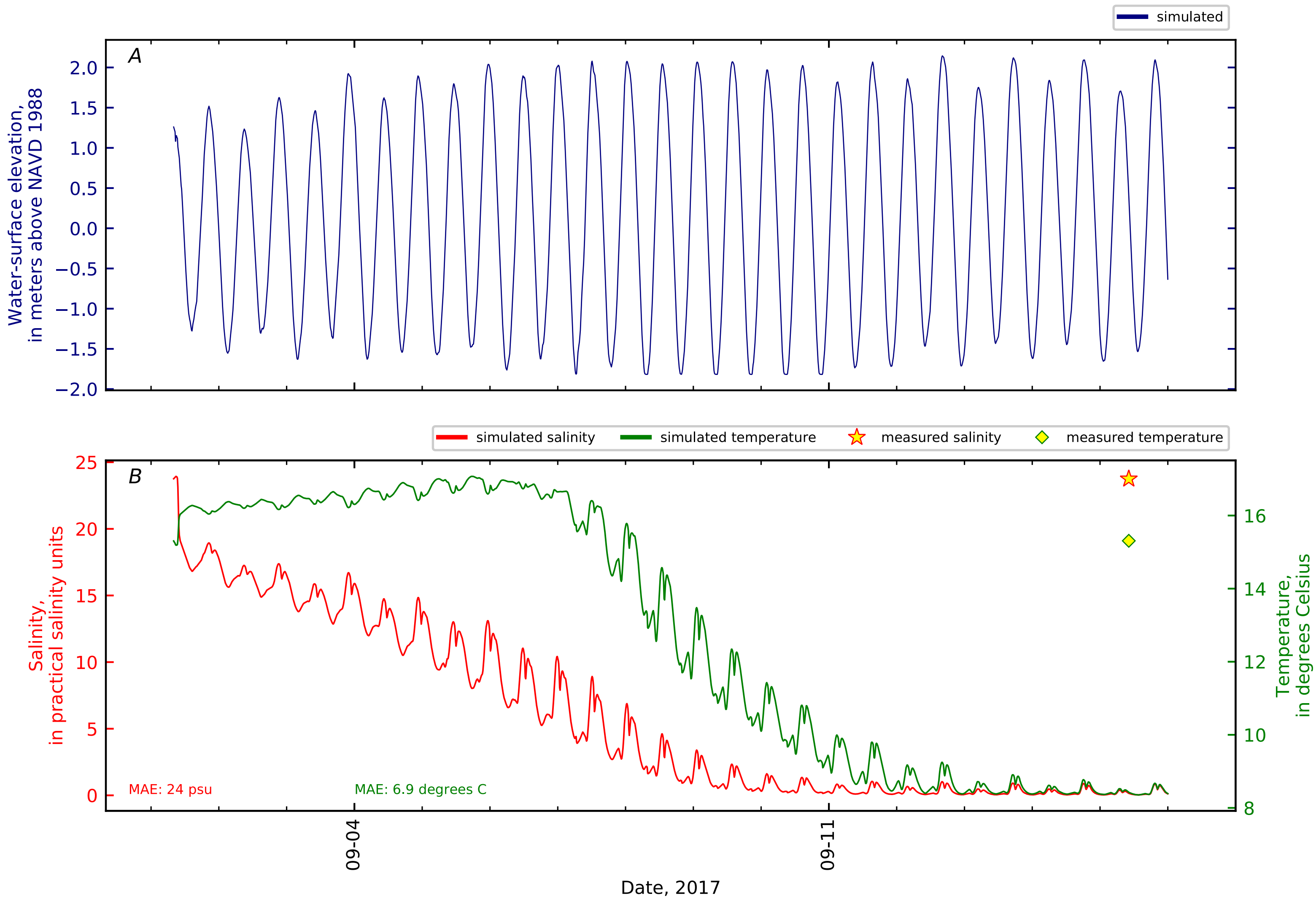

Figure B1-65. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 64, Penob Riv KM18.01 GS CTD1-10.

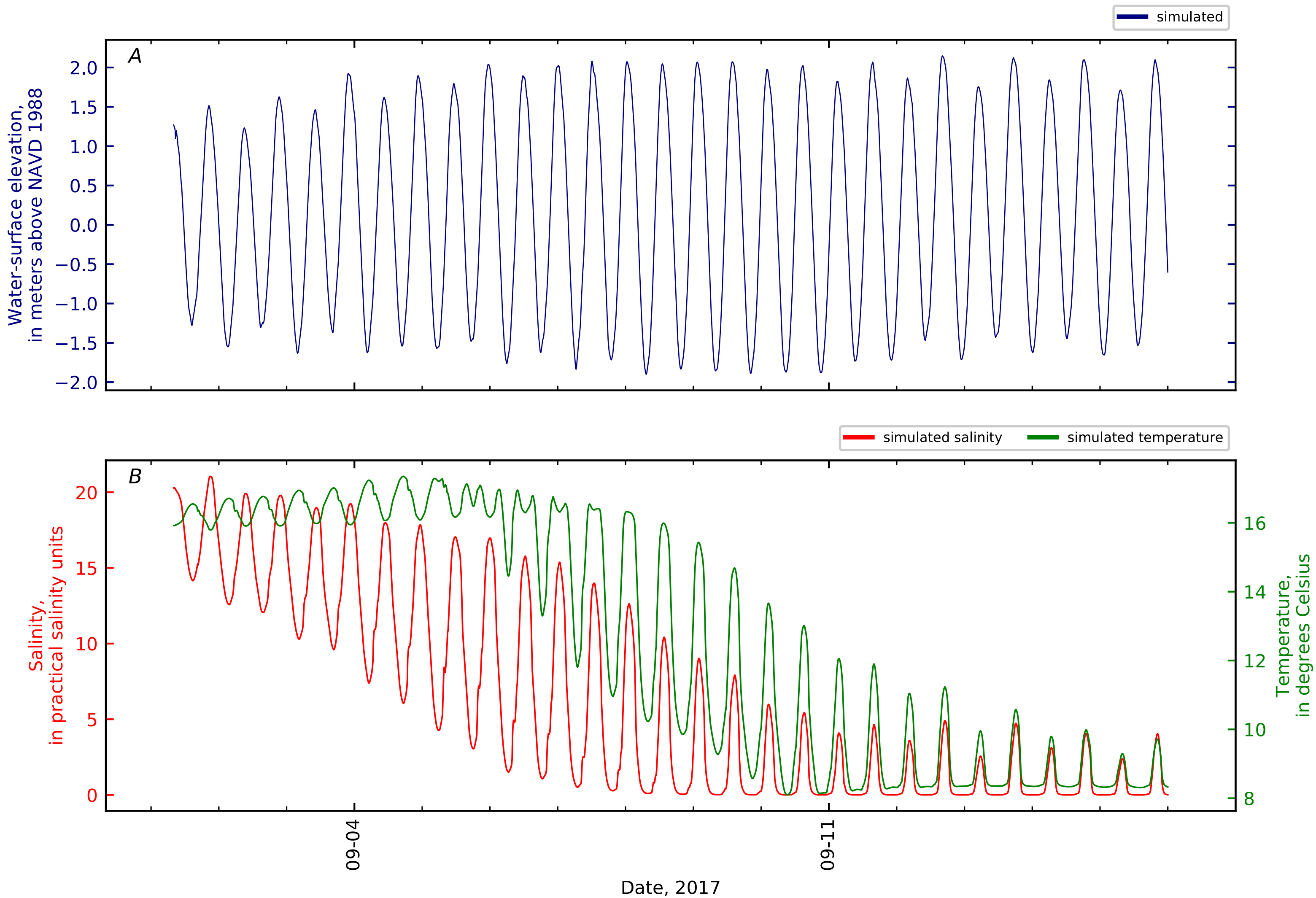

Figure B1-66. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 65, Penob Riv KM18.5 WHOI8 Frankfort Channel.

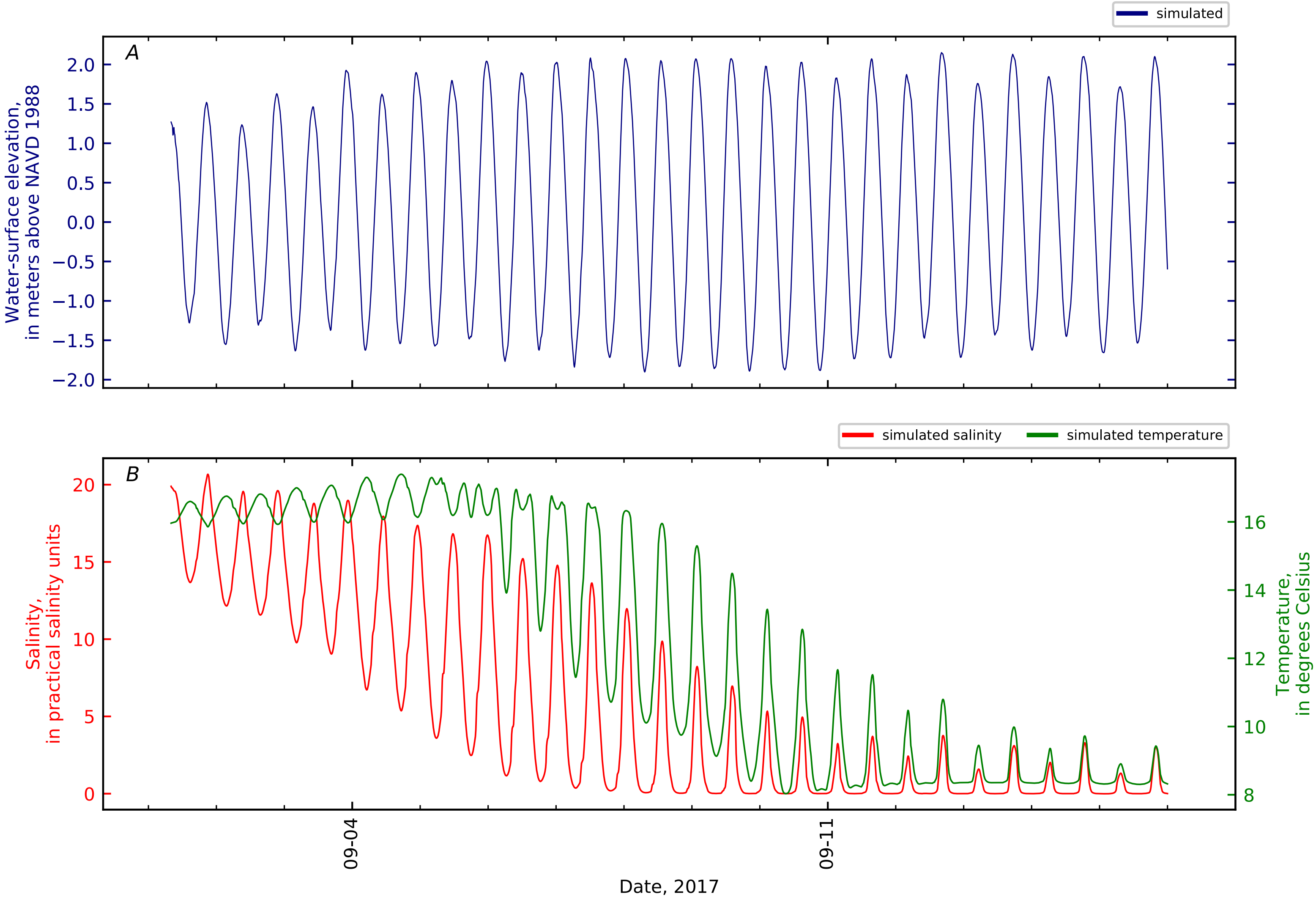

Figure B1-67. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 66, Penob Riv KM19.

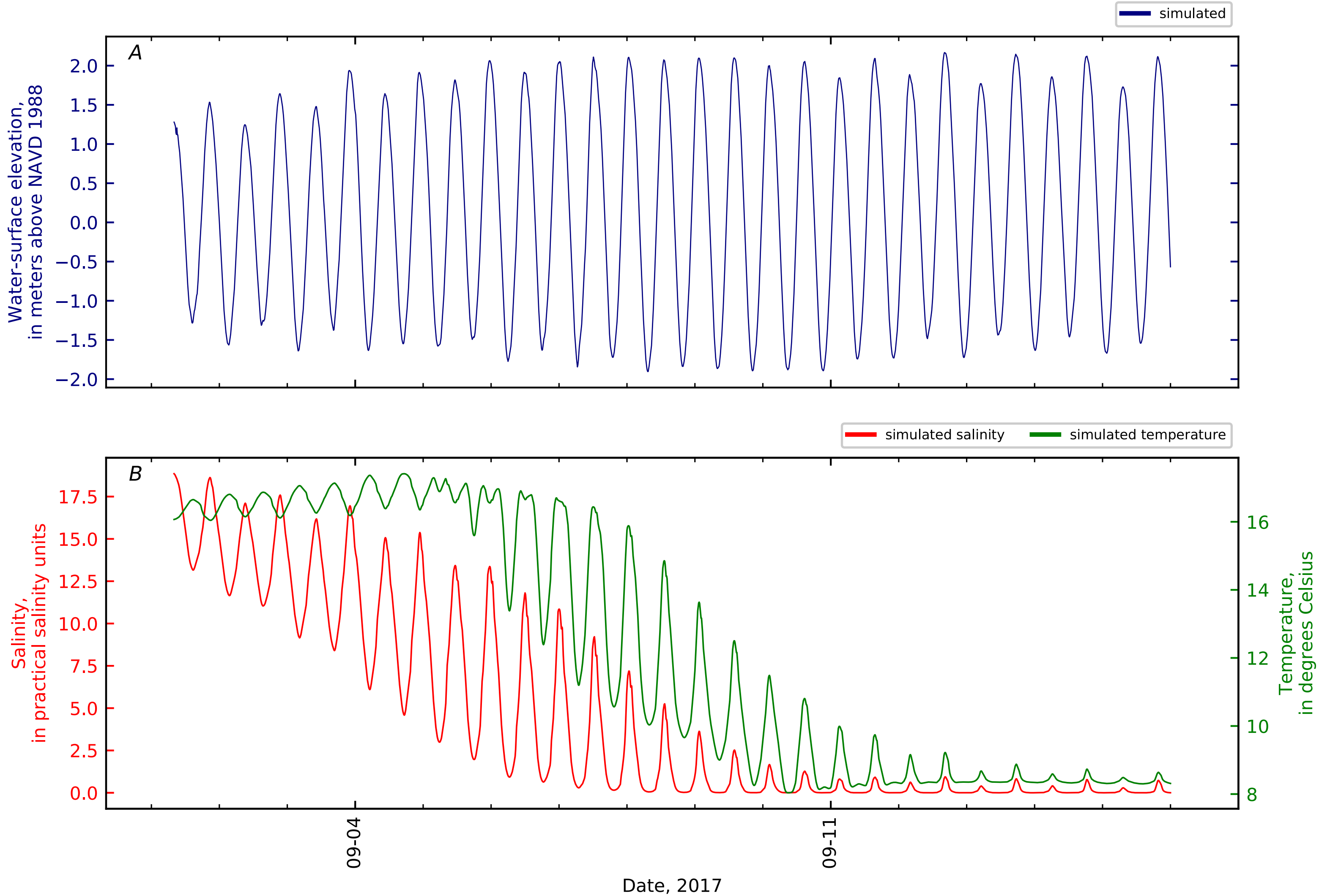

Figure B1-68. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 67, Penob Riv KM20.

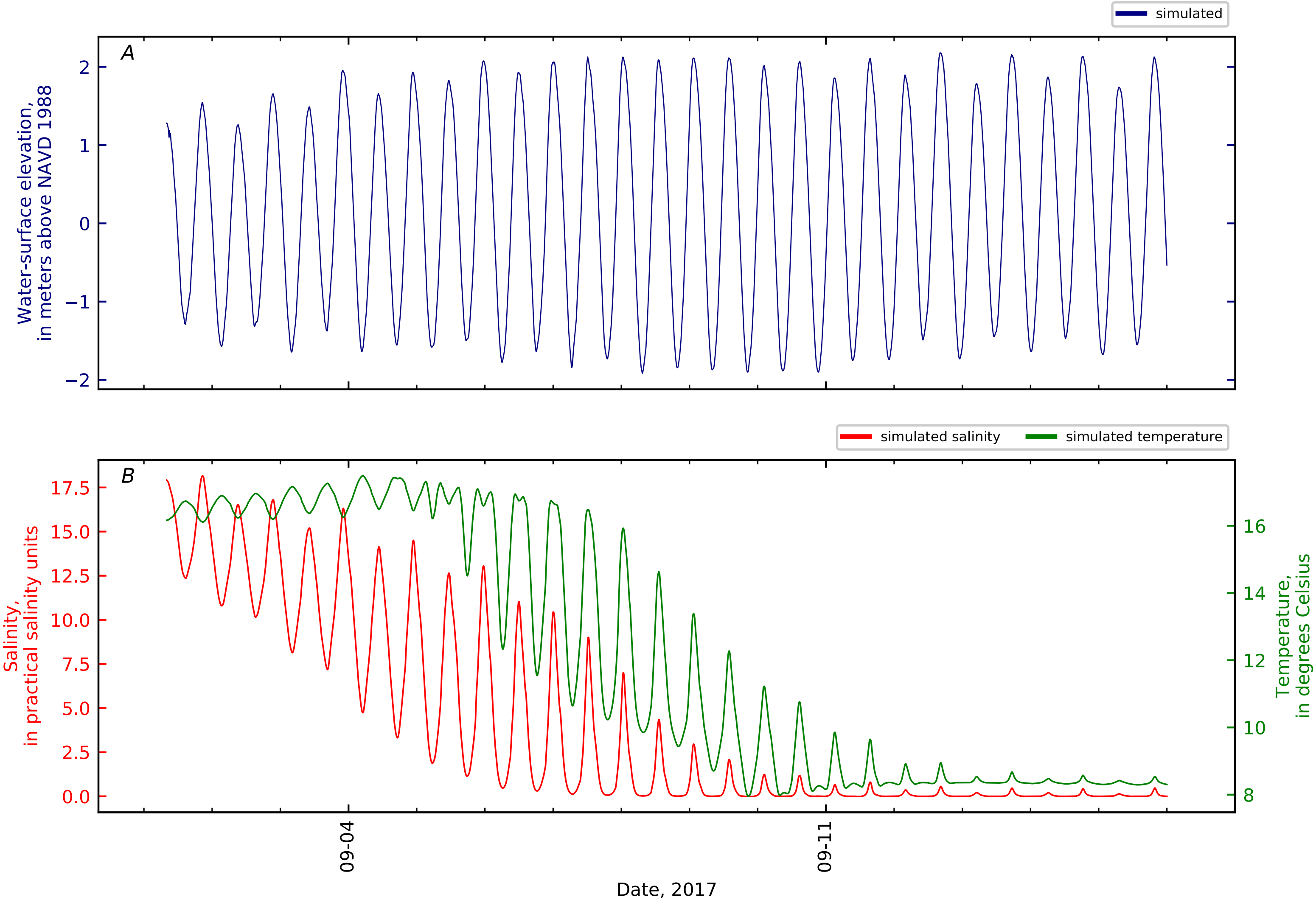

Figure B1-69. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 68, Penob Riv KM21.

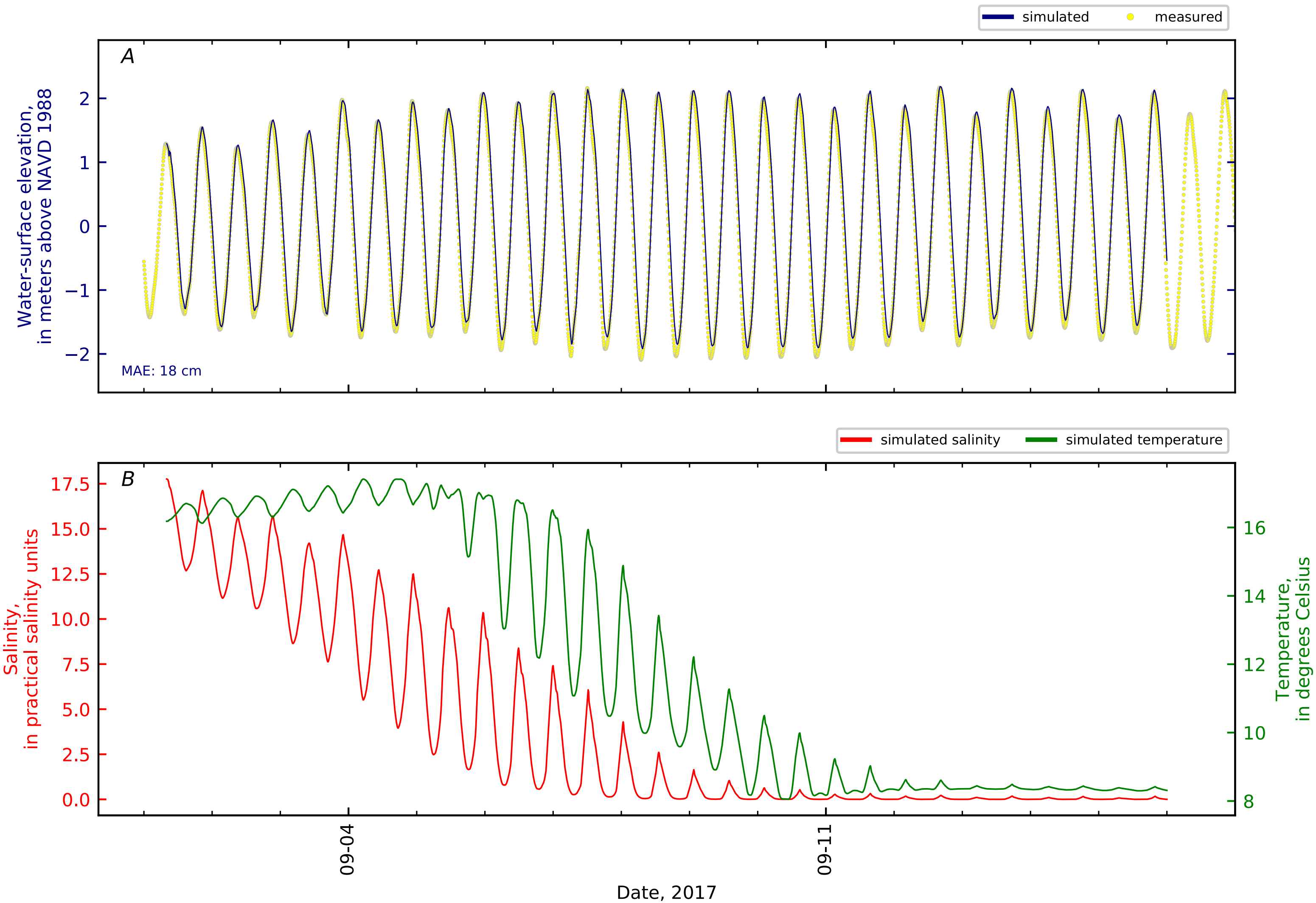

Figure B1-70. Time series for *A*, simulated and measured water-surface elevation; and *B*, simulated salinity and temperature at station 69, Penob Riv KM21.2 GS 443810068502201 Wint.

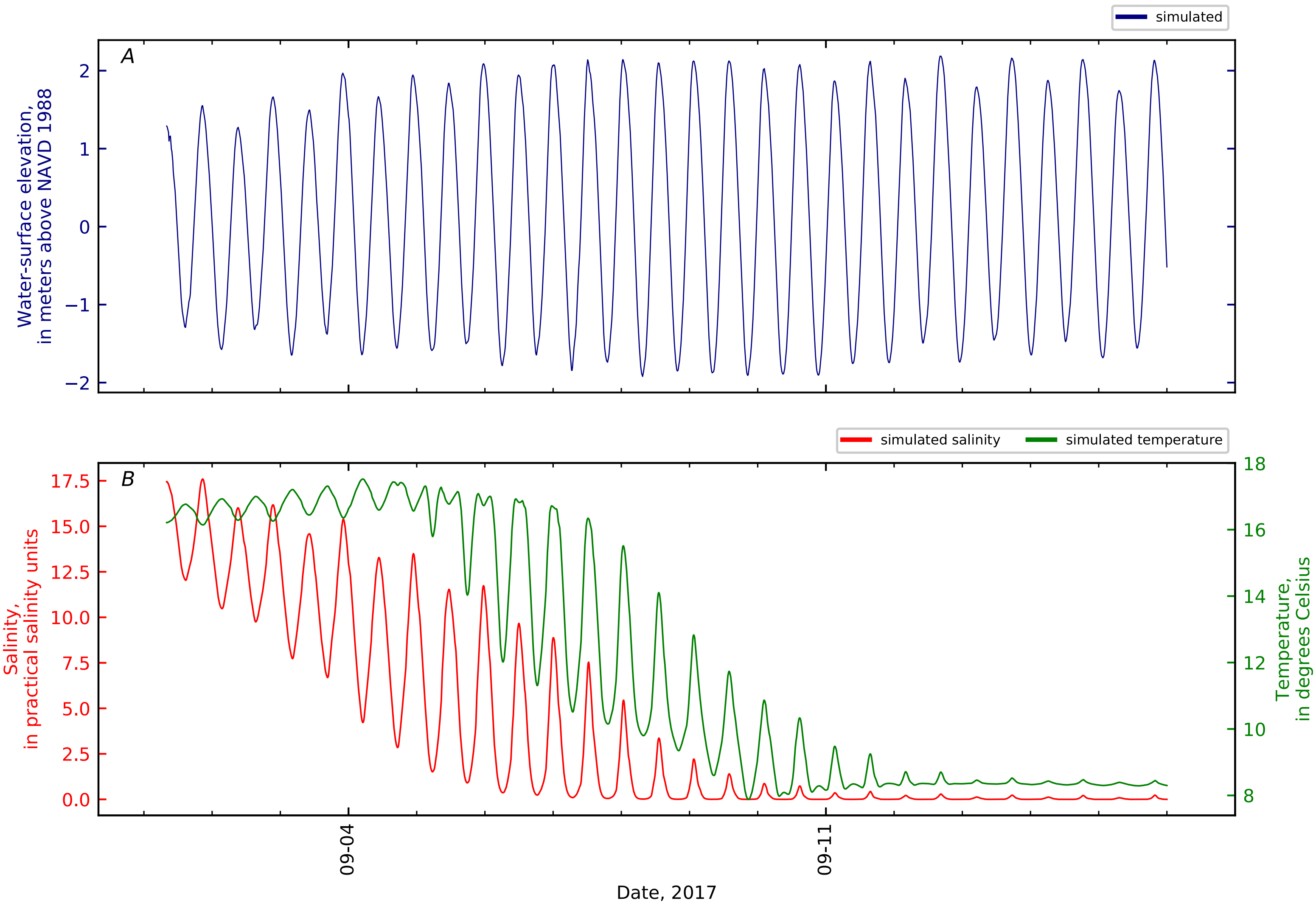

Figure B1-71. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 70, Penob Riv KM21.5 WHOI6 Winterport 2010.

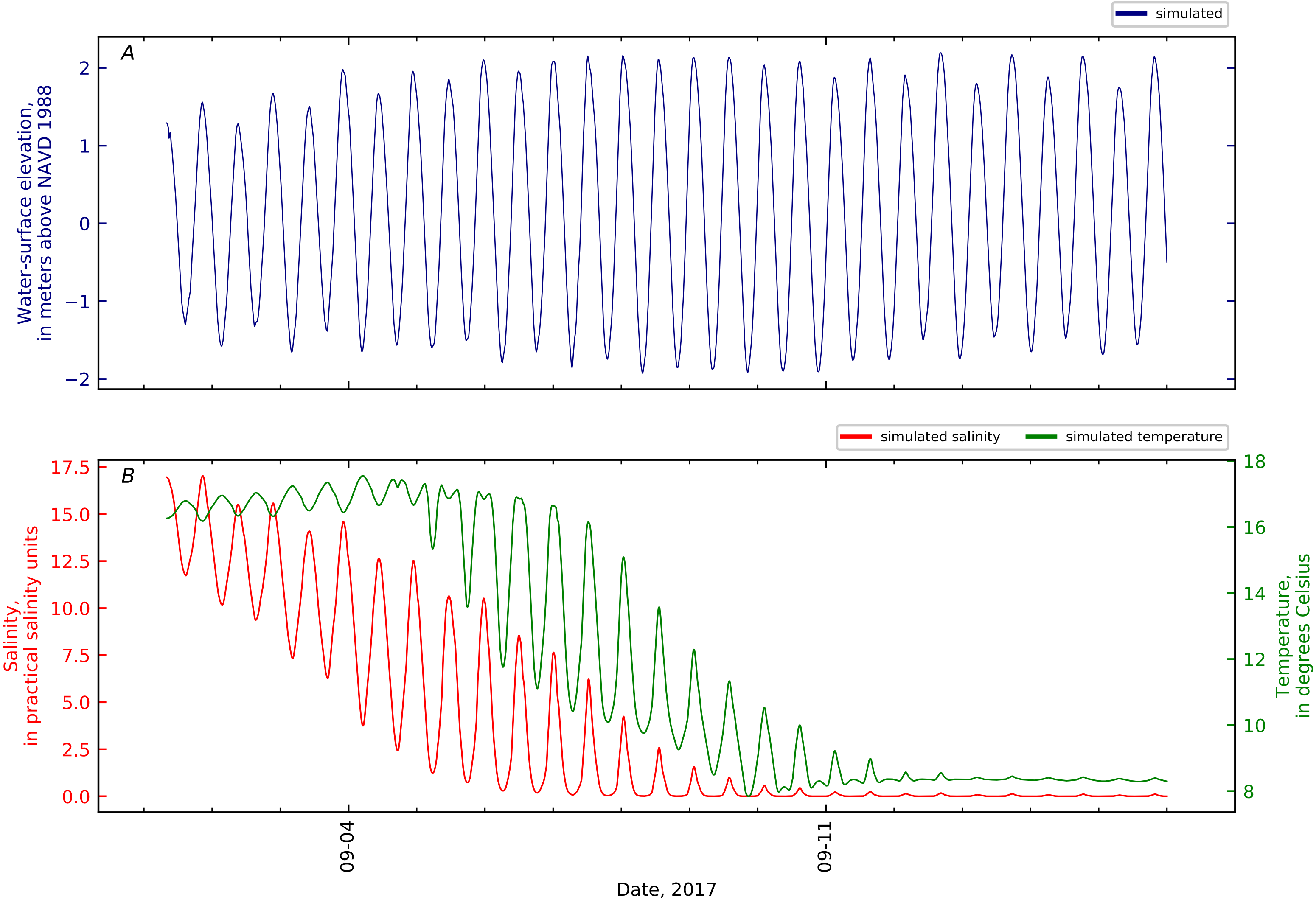

Figure B1-72. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 71, Penob Riv KM22.

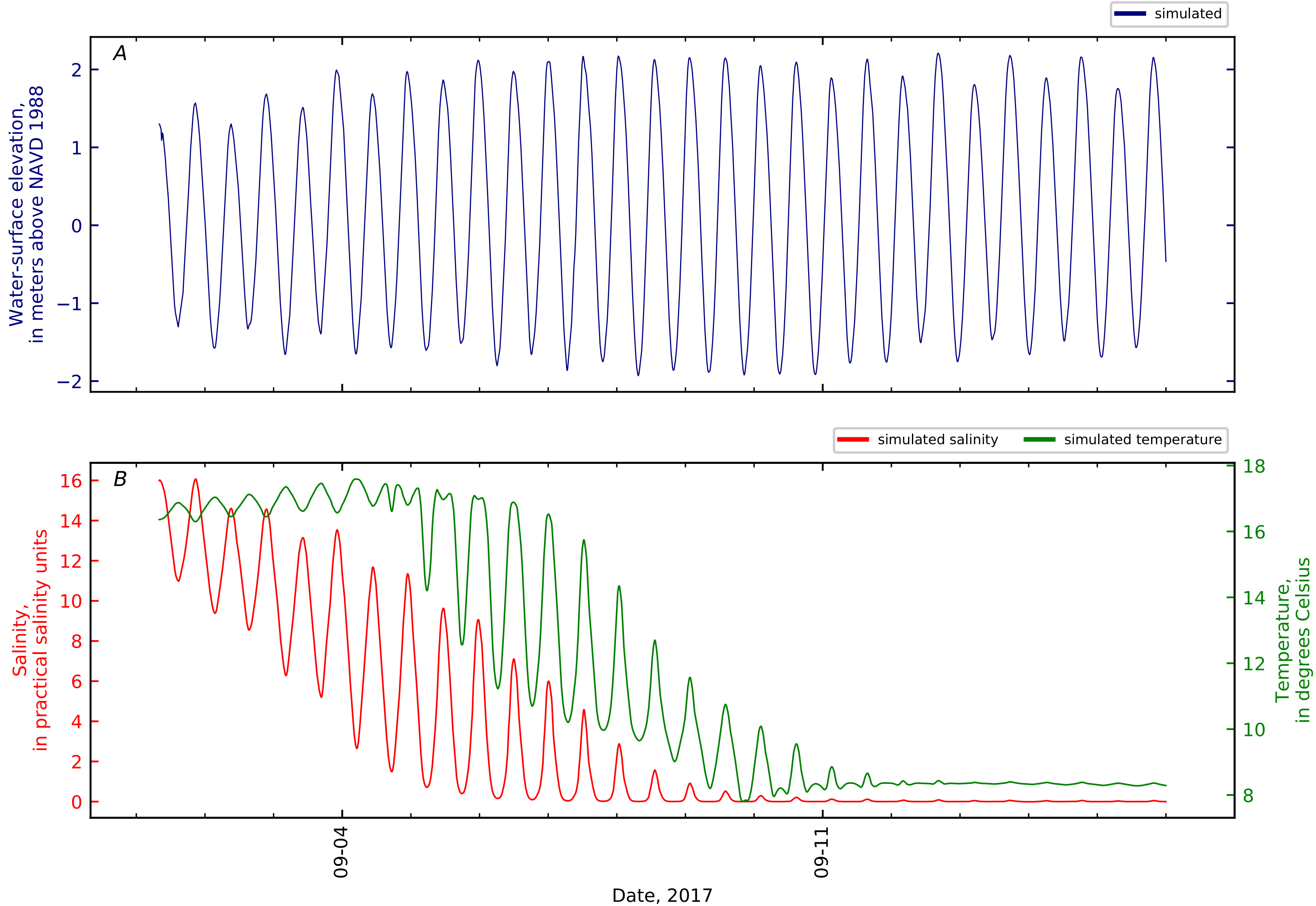

Figure B1-73. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 72, Penob Riv KM23.

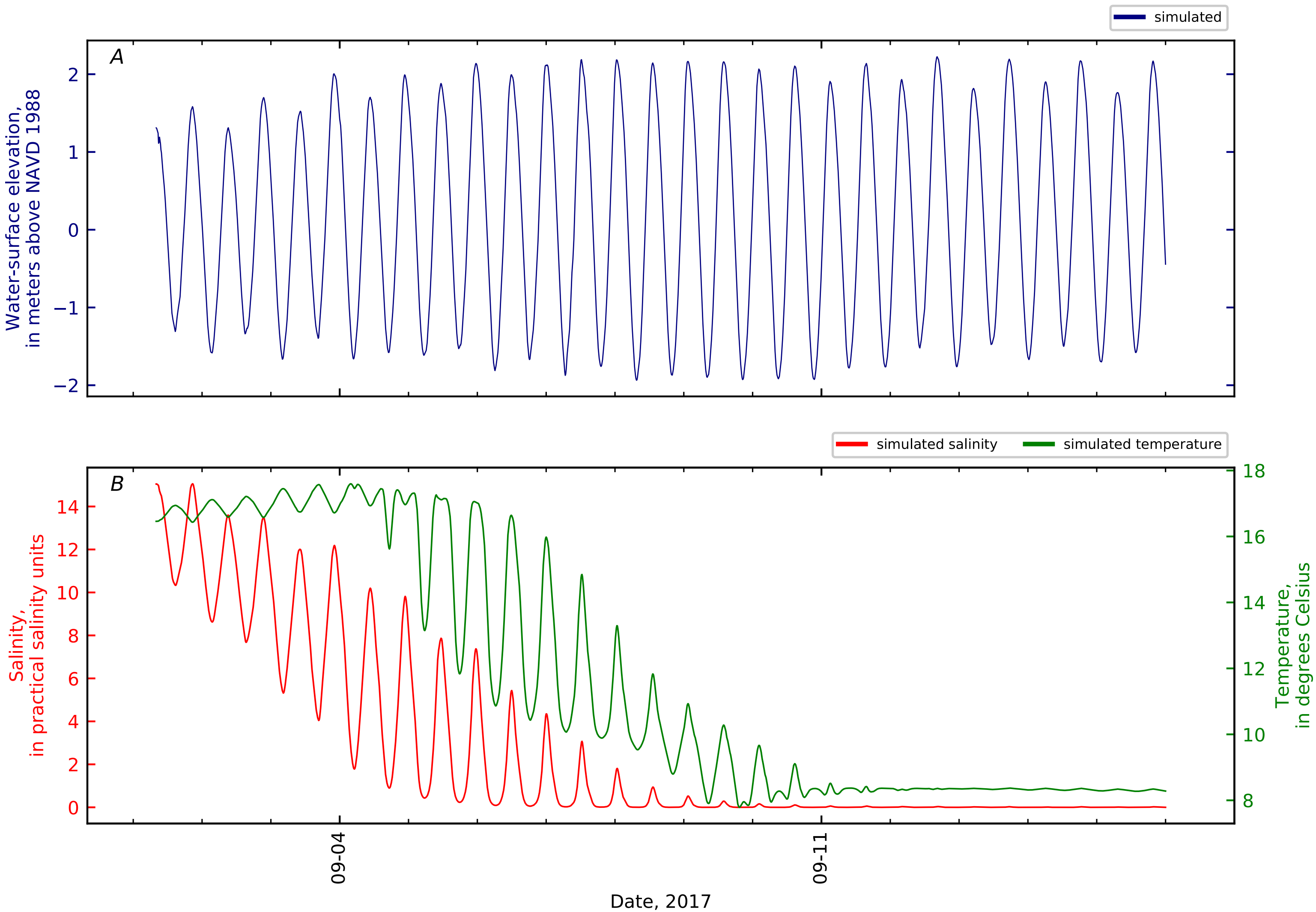

Figure B1-74. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 73, Penob Riv KM24.

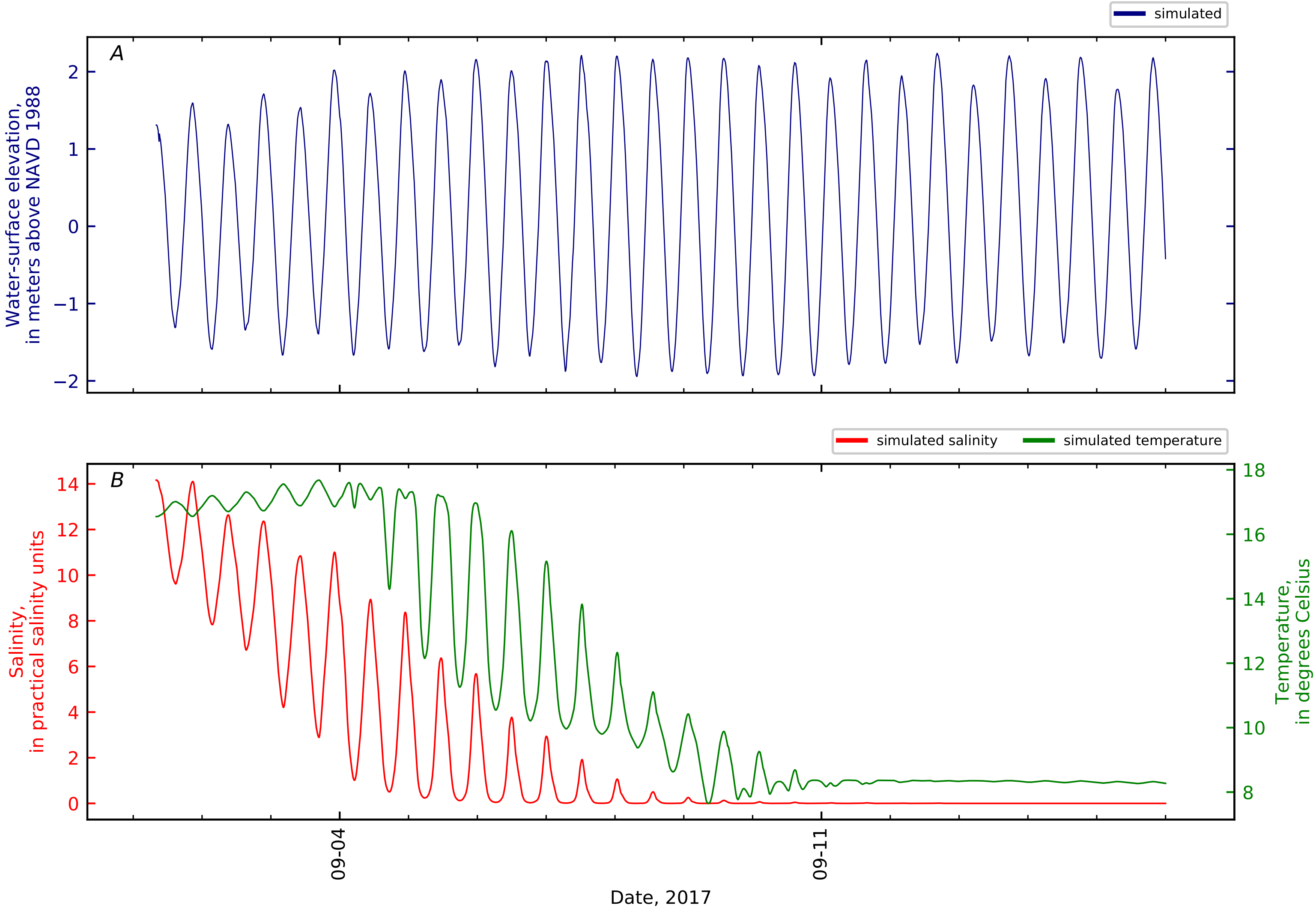

Figure B1-75. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 74, Penob Riv KM25.

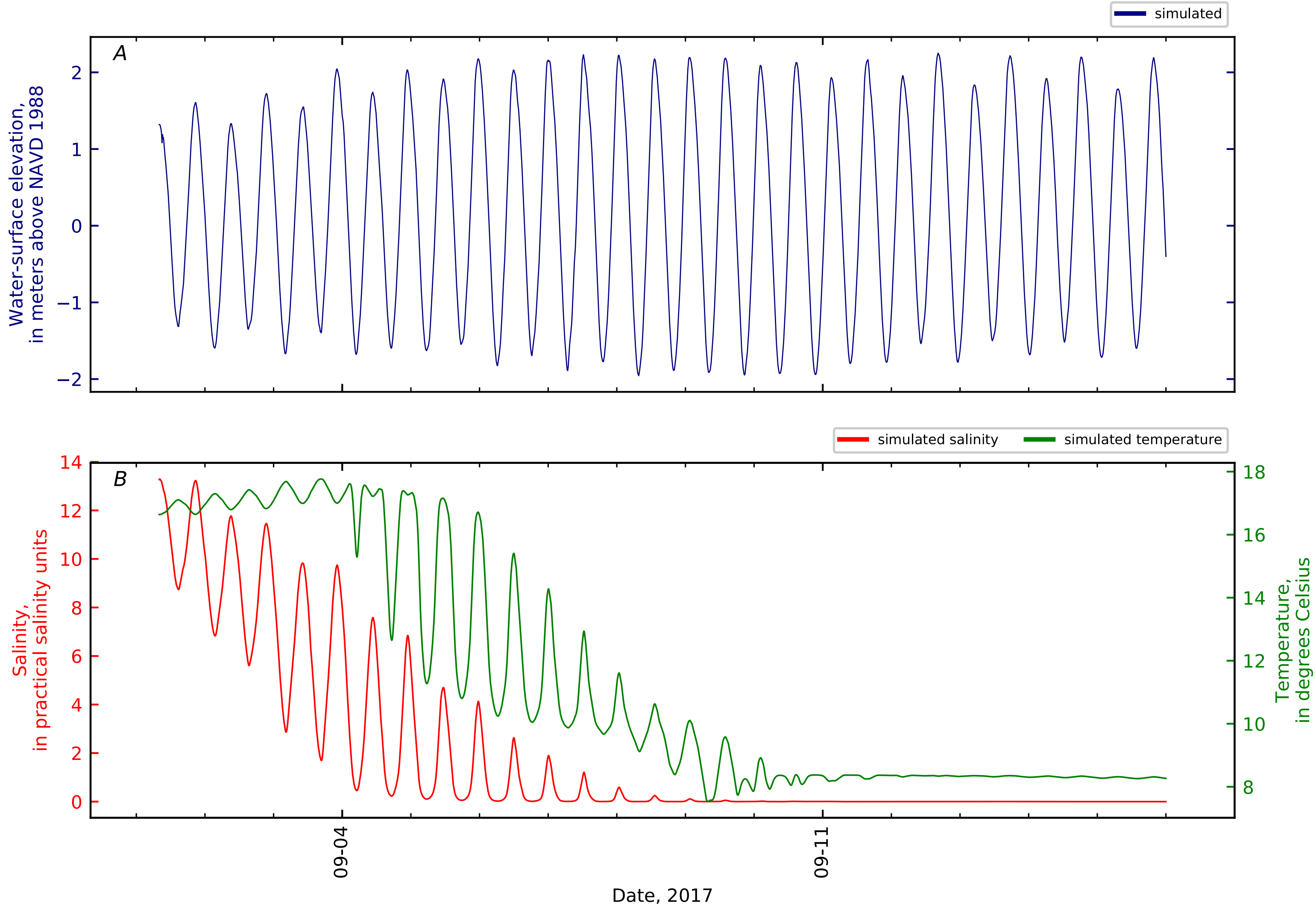

Figure B1-76. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 75, Penob Riv KM26.

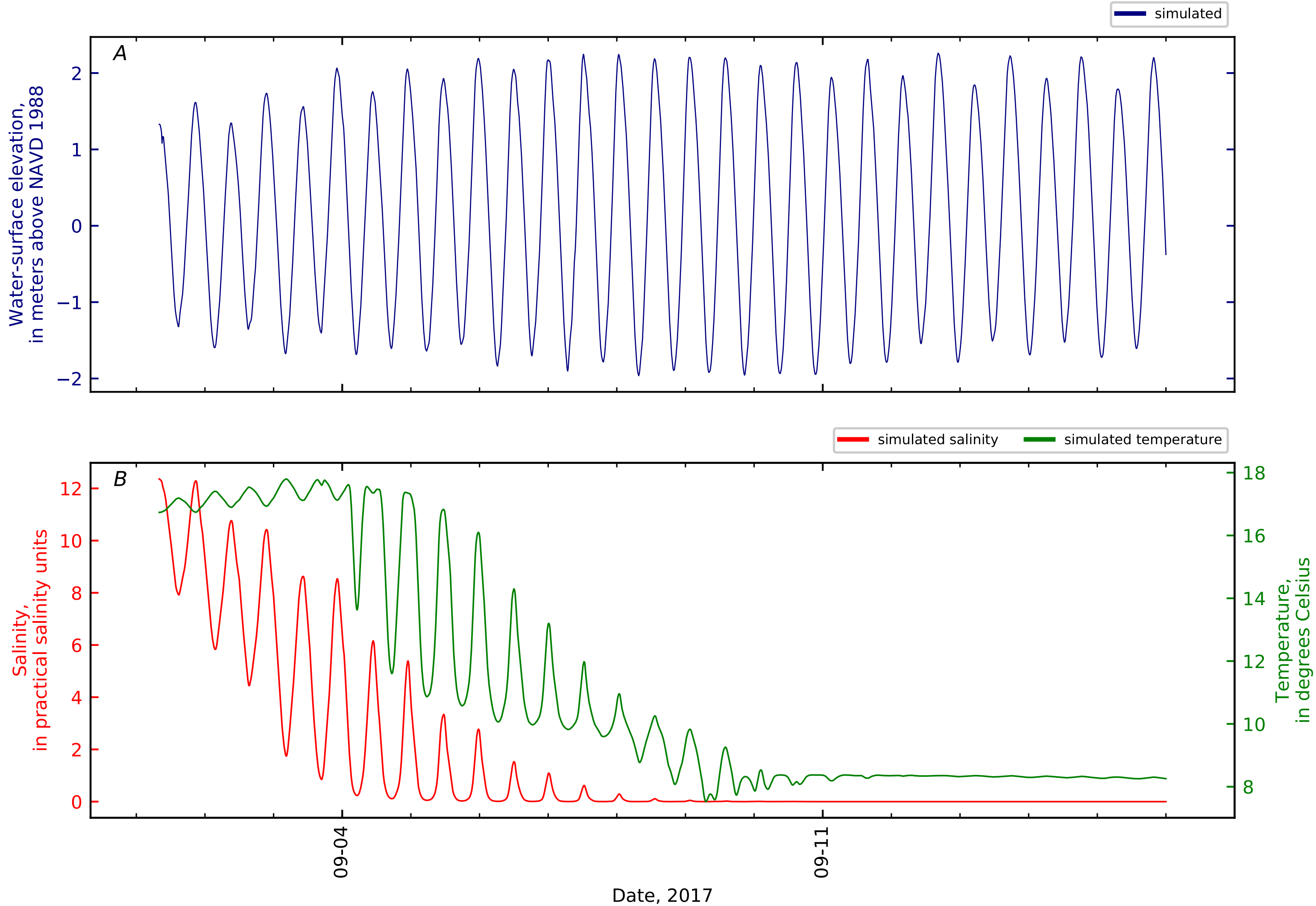

Figure B1-77. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 76, Penob Riv KM27.

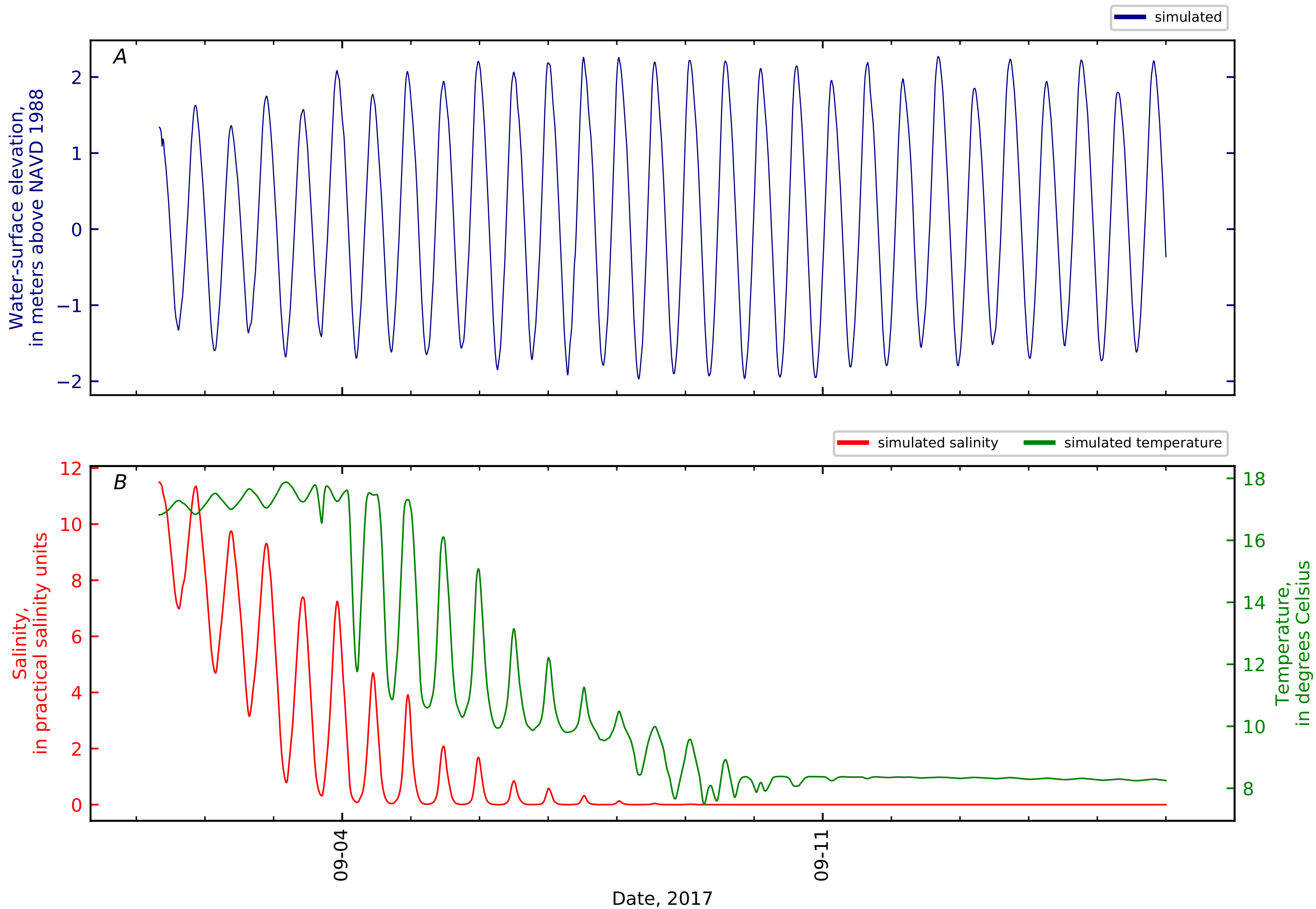

Figure B1-78. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 77, Penob Riv KM28.

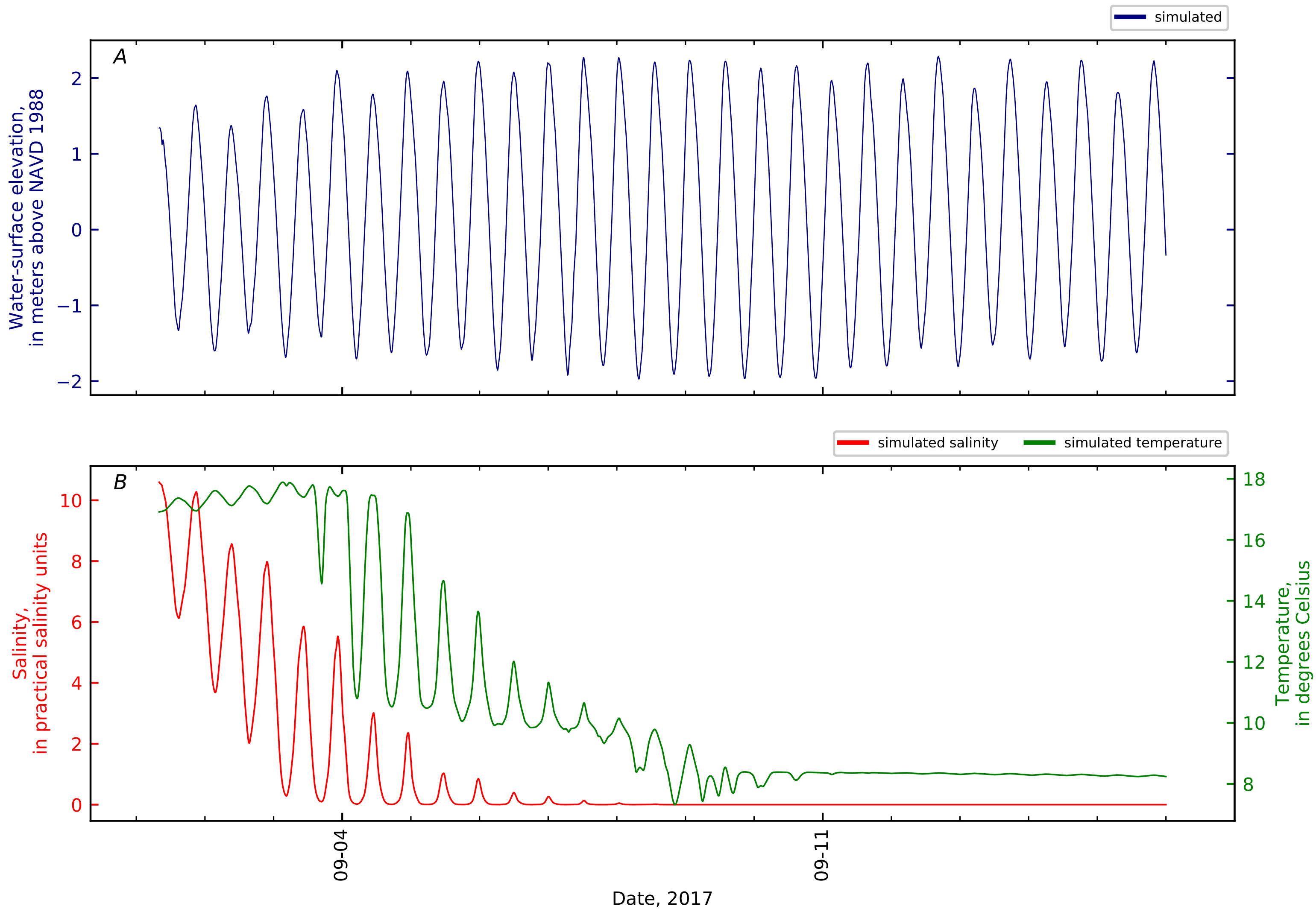

Figure B1-79. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 78, Penob Riv KM29.

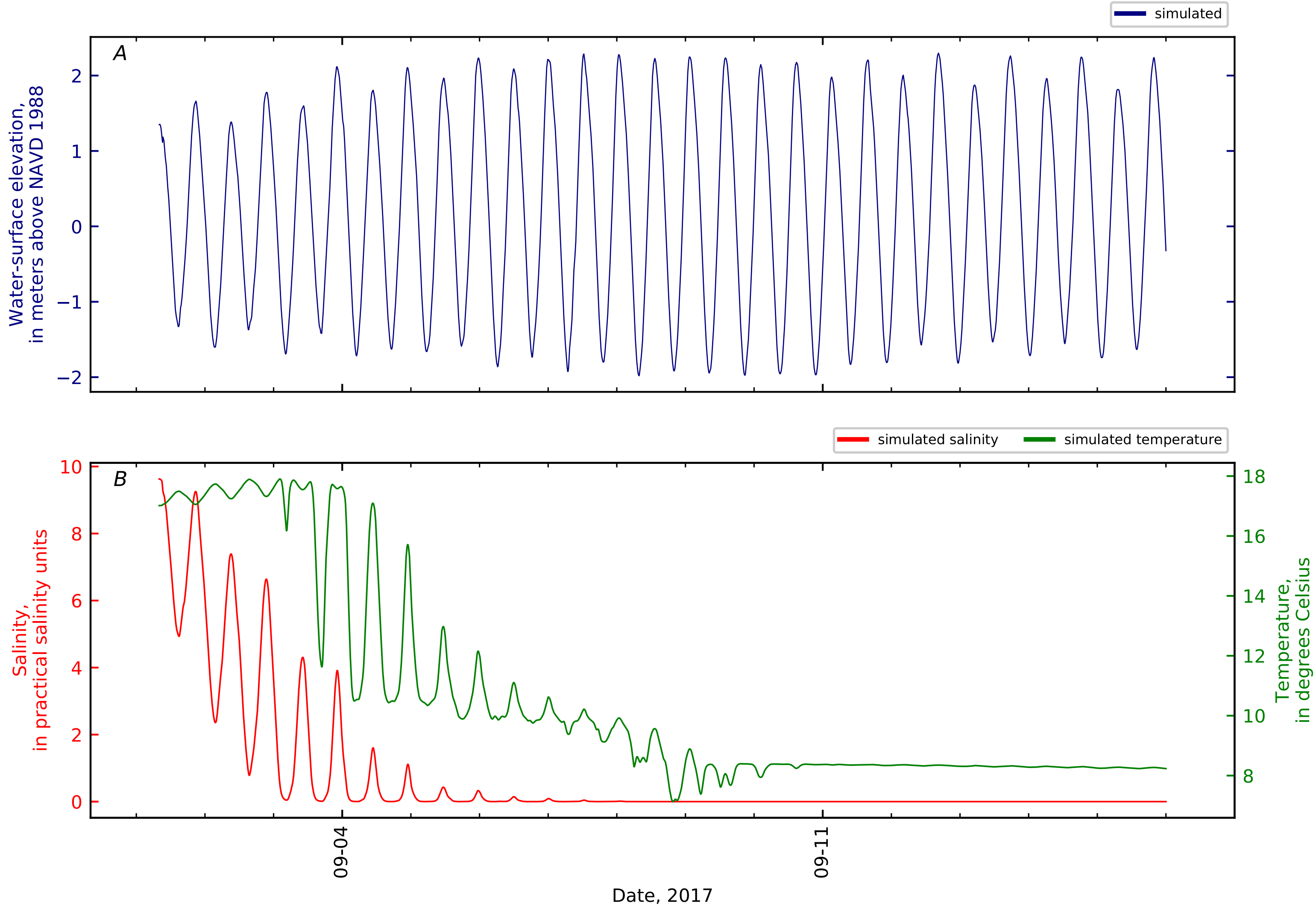

Figure B1-80. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 79, Penob Riv KM30.

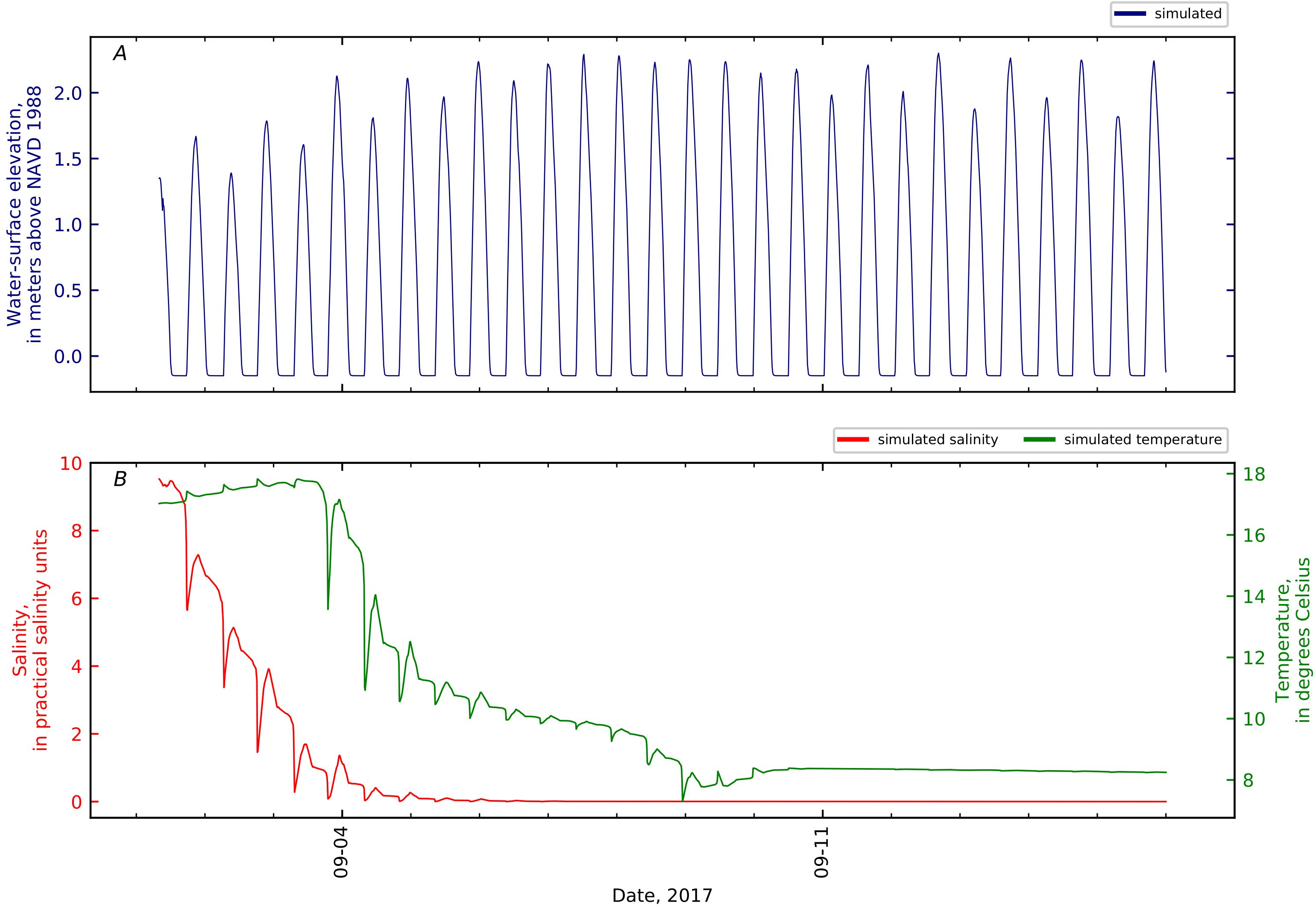

Figure B1-81. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 80, Penob Riv KM30.3 ERDC3 ON-MU2-SF-2 Bartl.

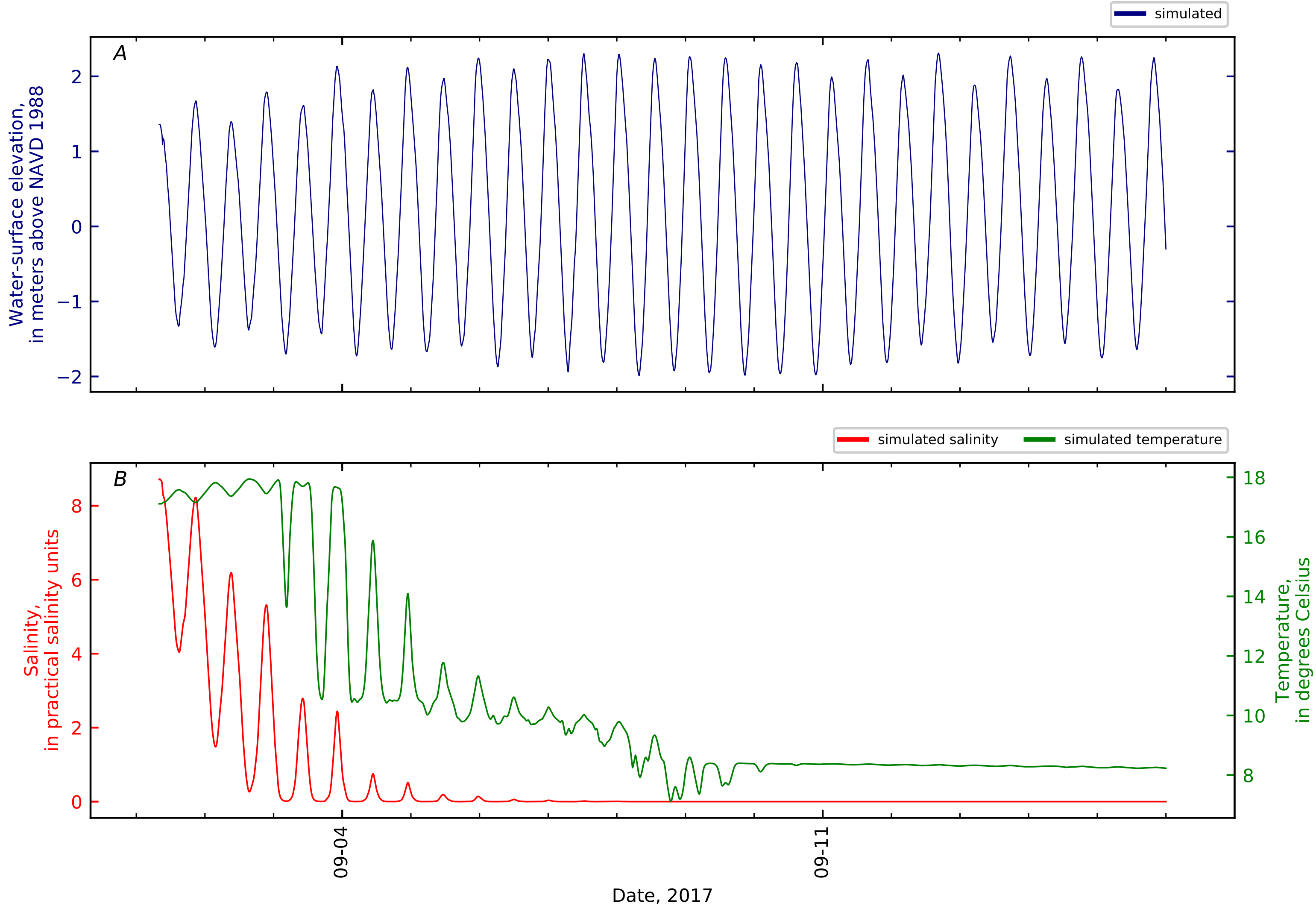

Figure B1-82. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 81, Penob Riv KM31.

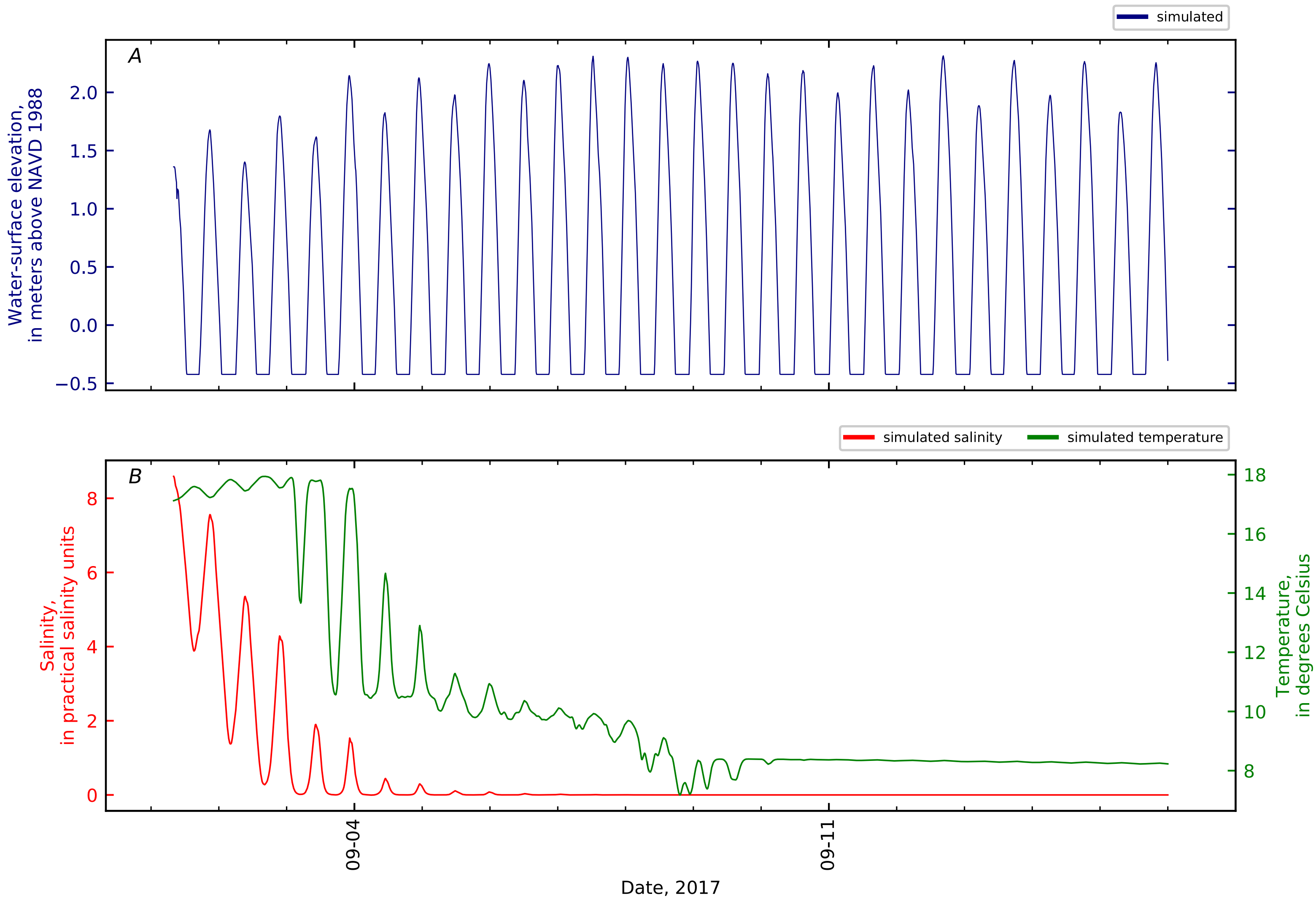

Figure B1-83. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 82, Penob Riv KM31.3 ERDC1 ON-MU2-SF-1.

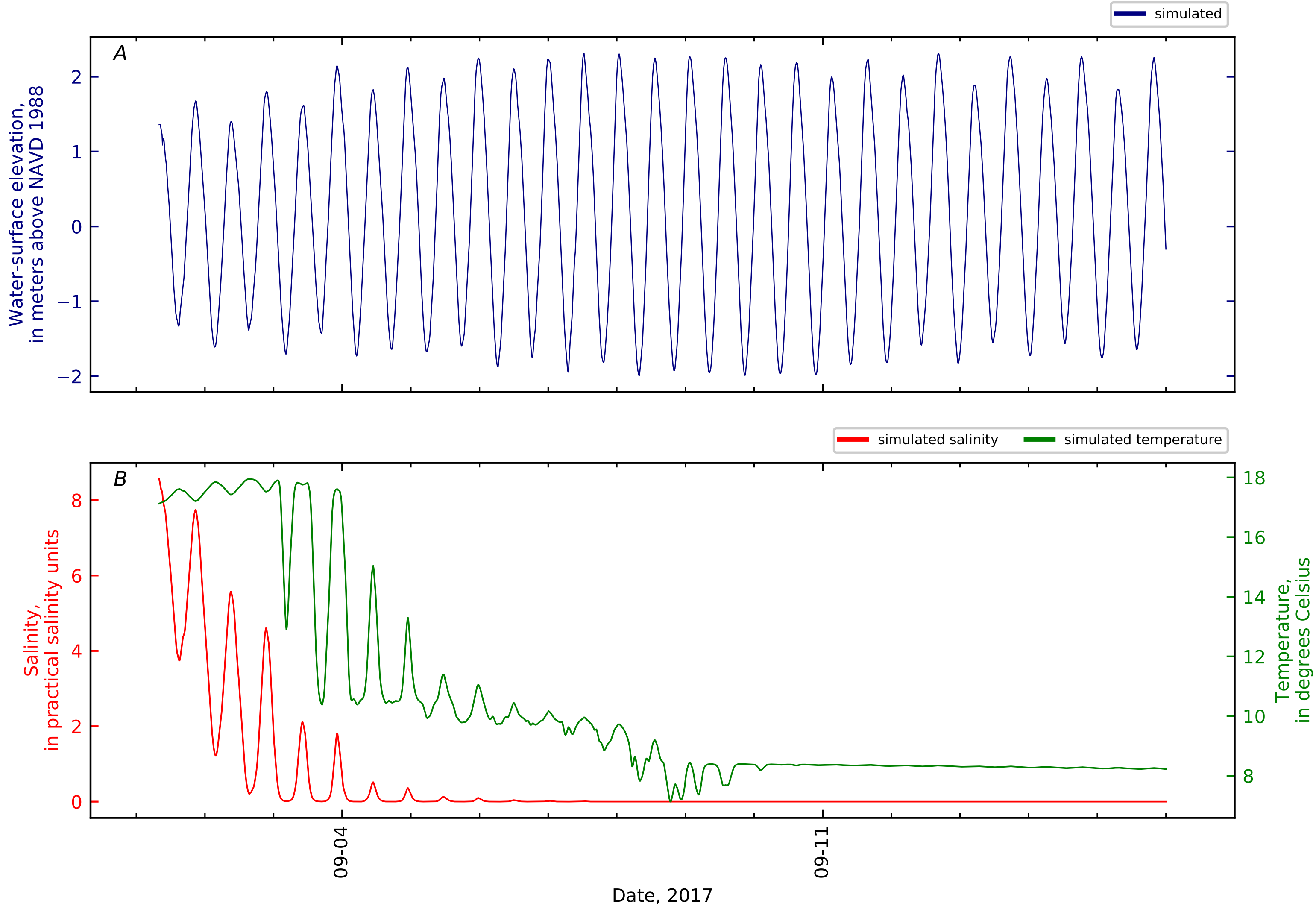

Figure B1-84. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 83, Penob Riv KM31.4 ERDC2 ON-MU13-SF-1.

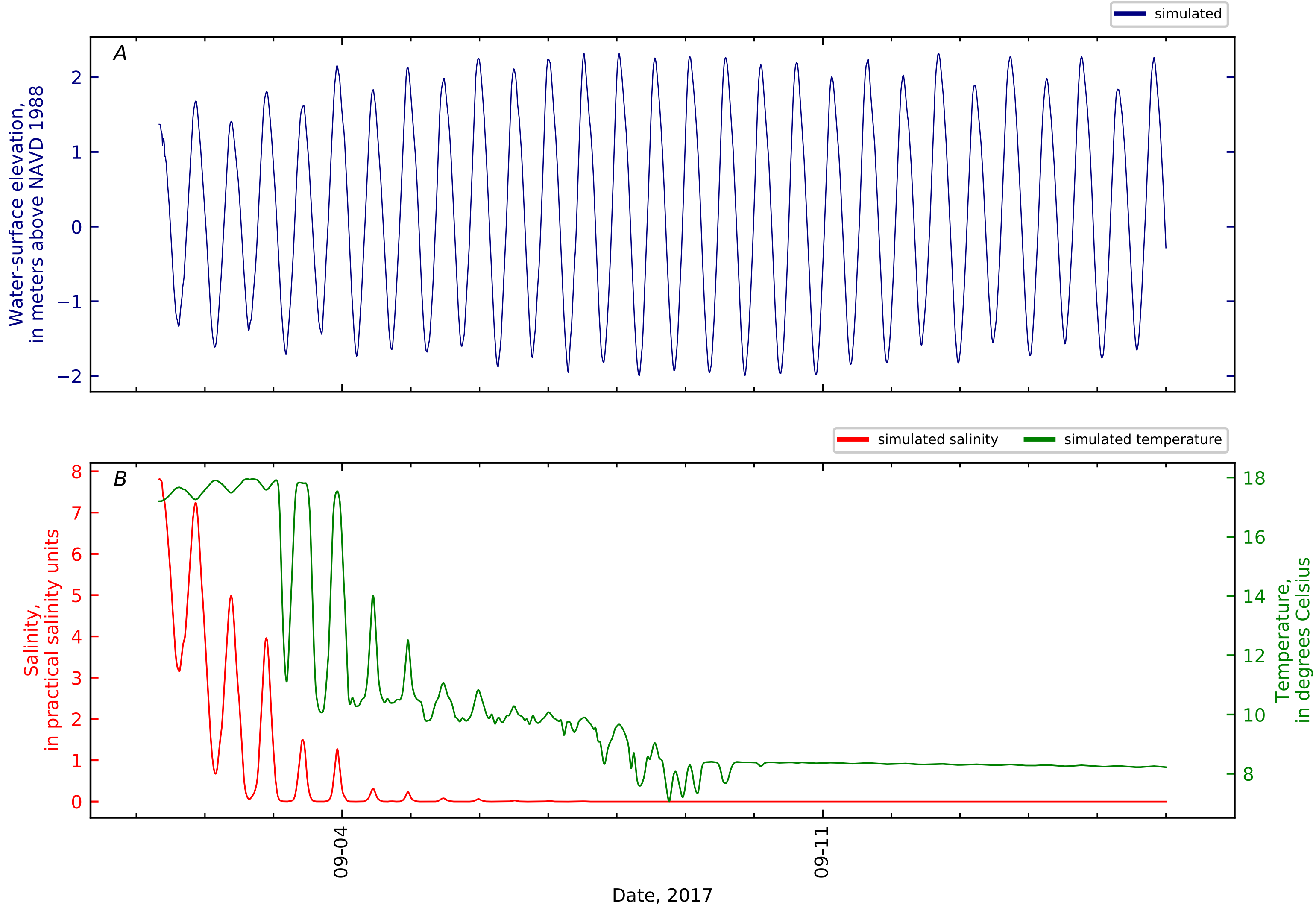

Figure B1-85. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 84, Penob Riv KM32.

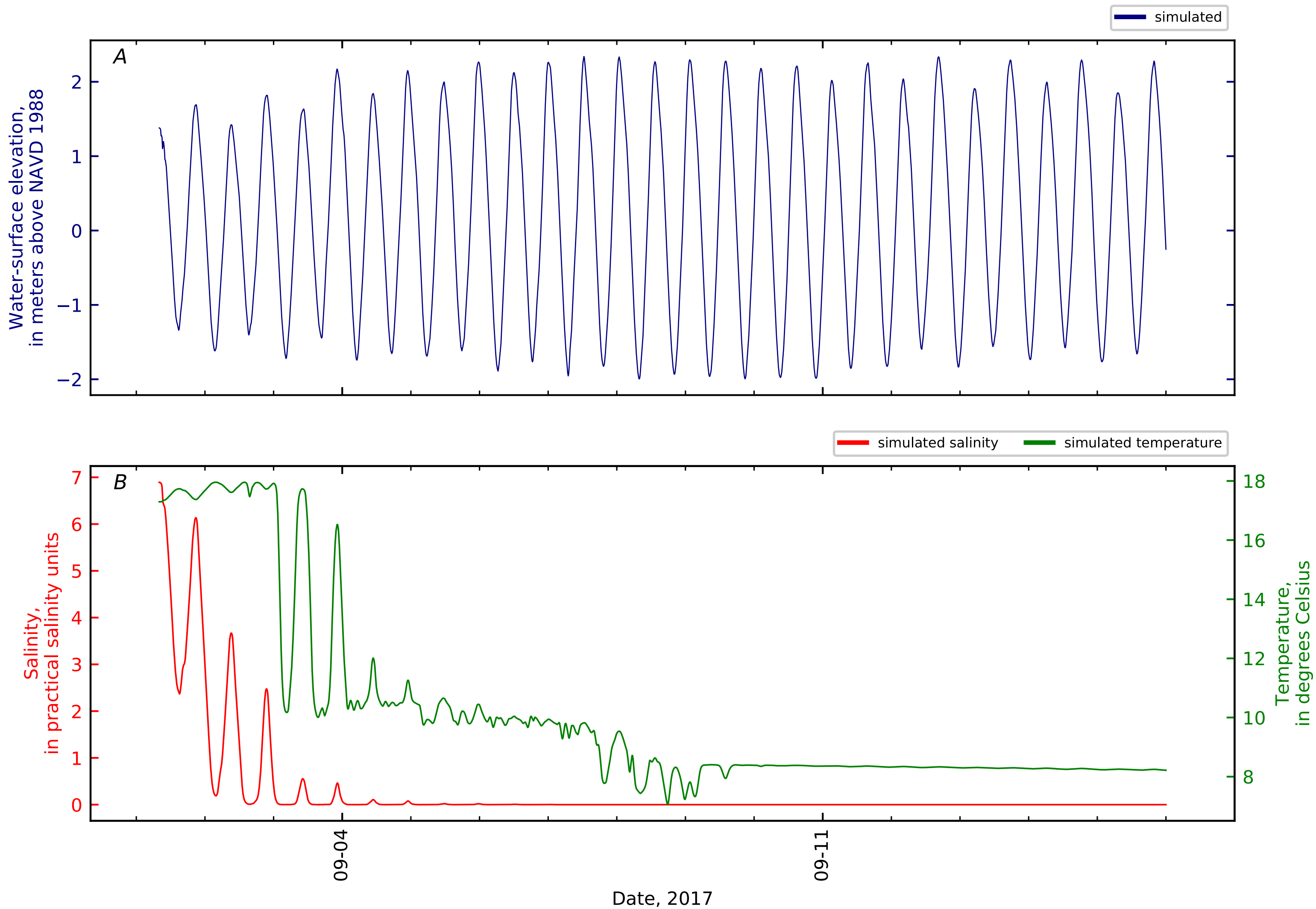

Figure B1-86. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 85, Penob Riv KM33.

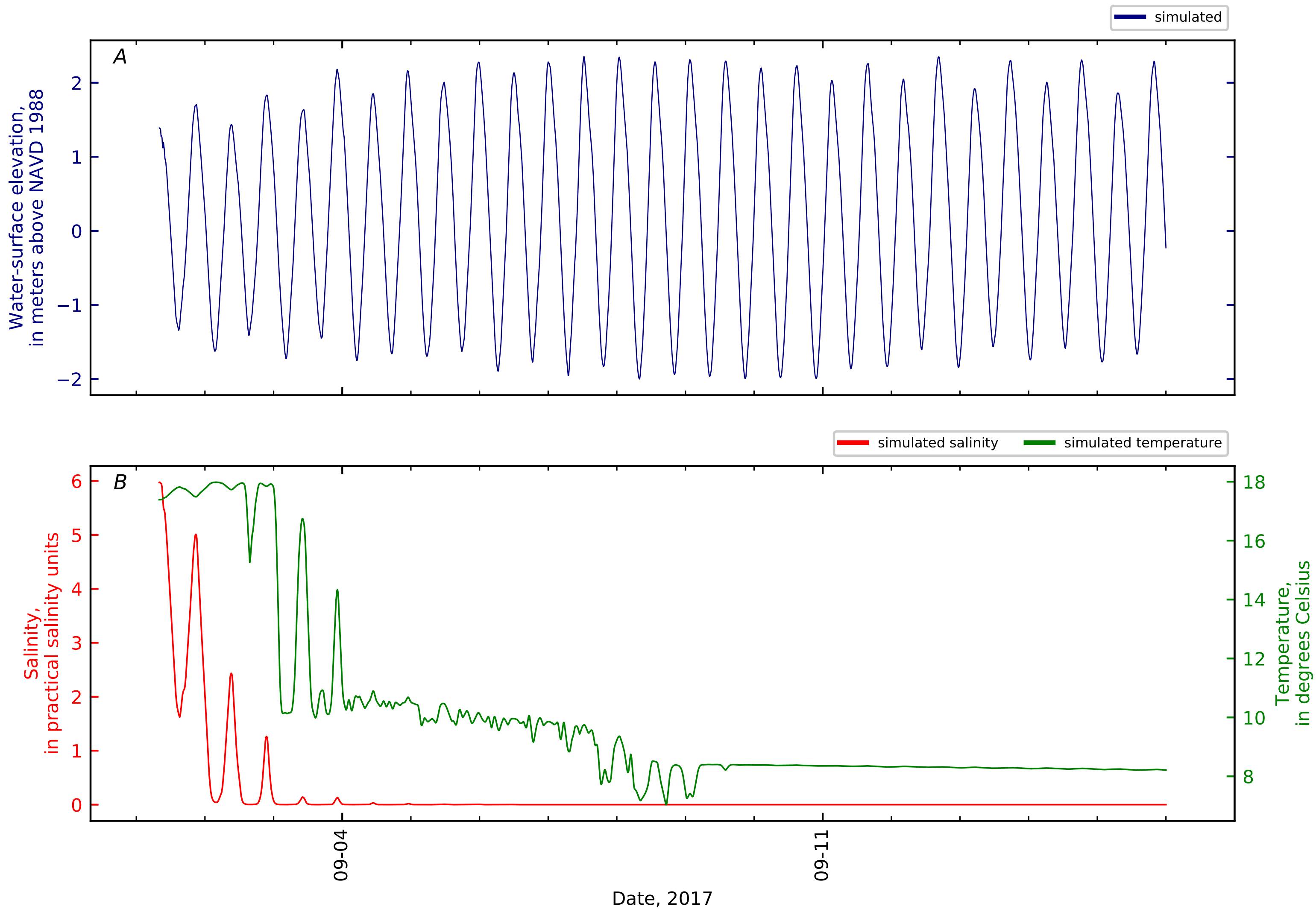

Figure B1-87. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 86, Penob Riv KM34.

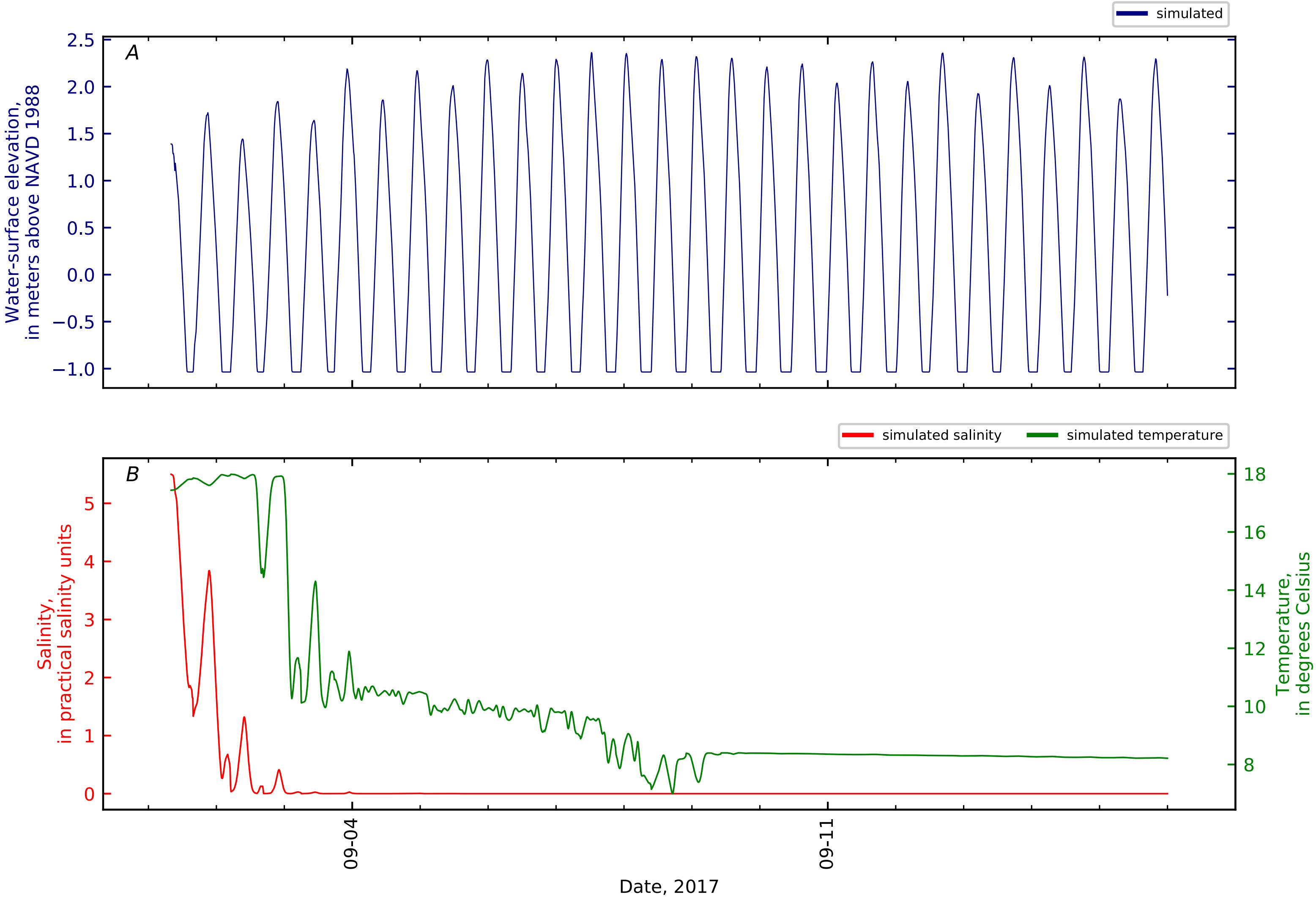

Figure B1-88. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 87, Penob Riv KM34.6 Southern Cove Orrington.

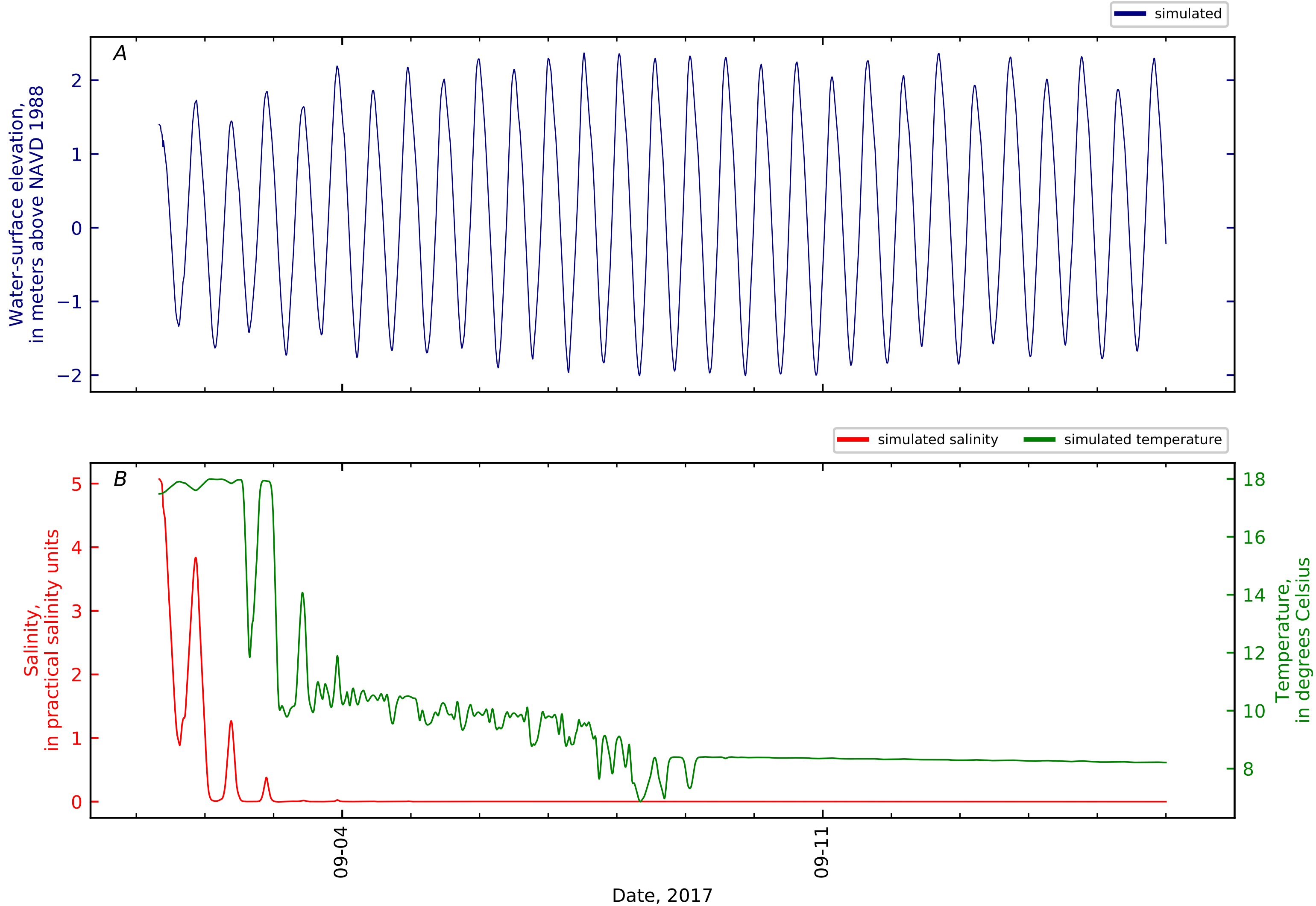

Figure B1-89. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 88, Penob Riv KM35.

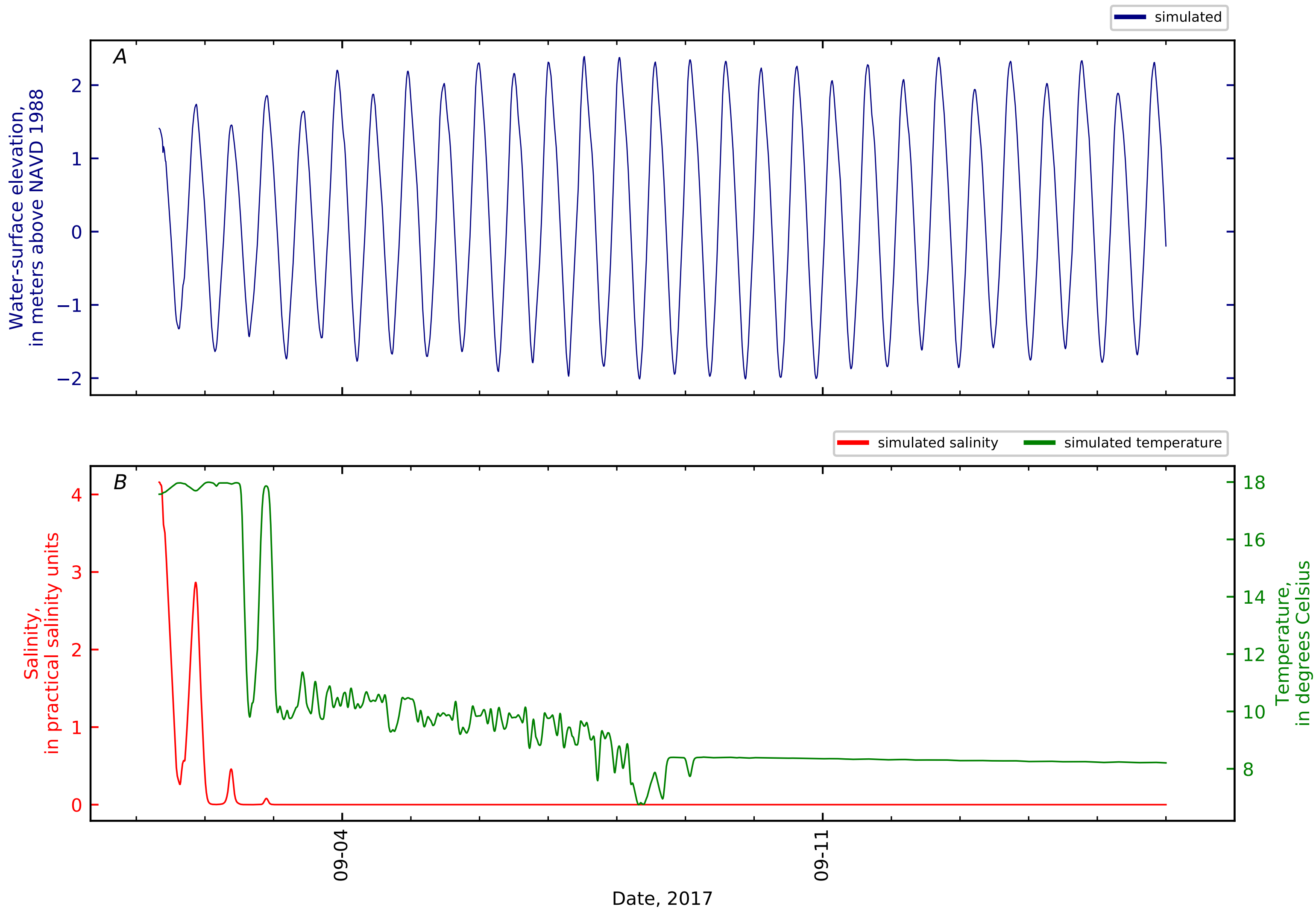

Figure B1-90. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 89, Penob Riv KM36.

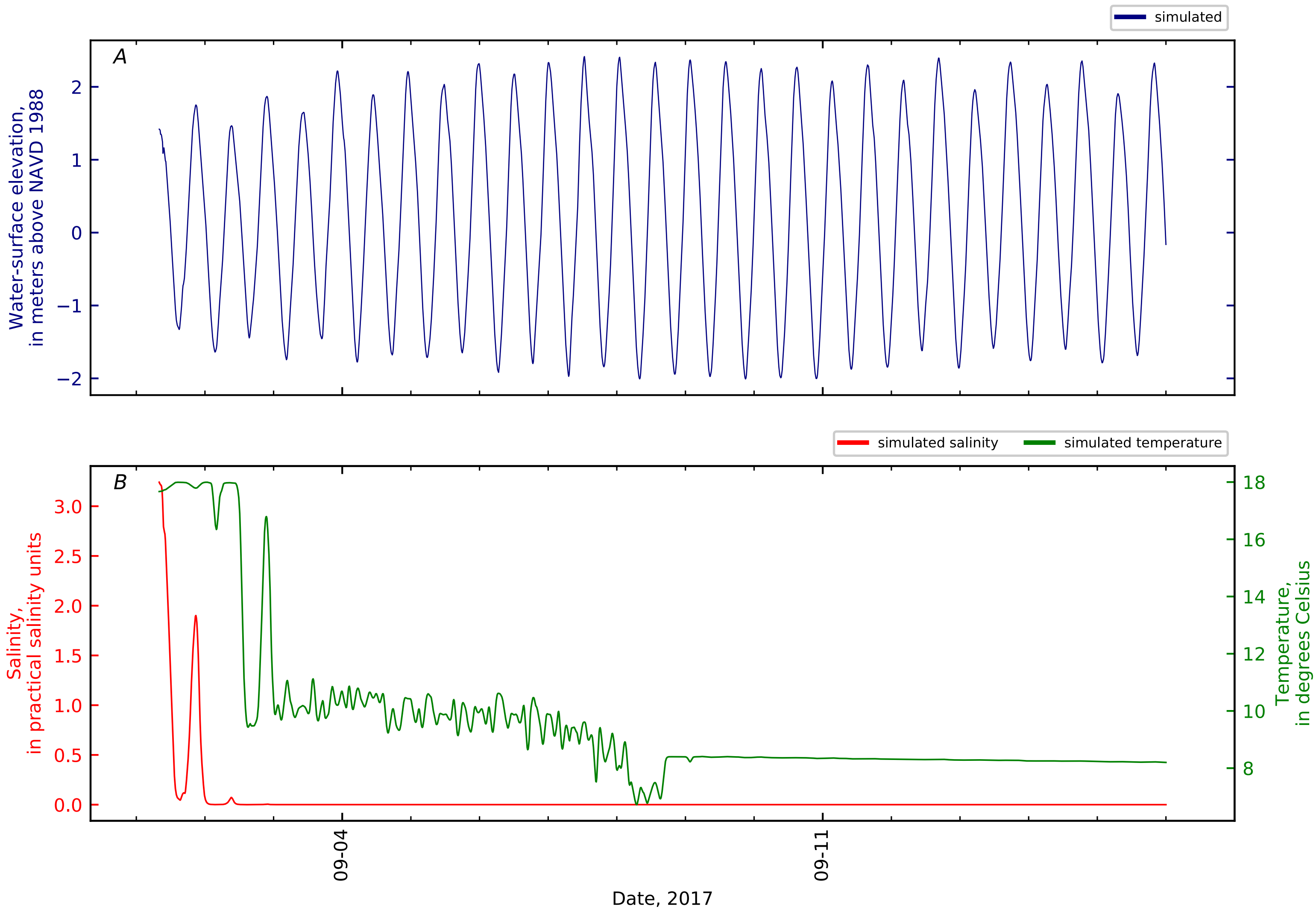

Figure B1-91. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 90, Penob Riv KM37.

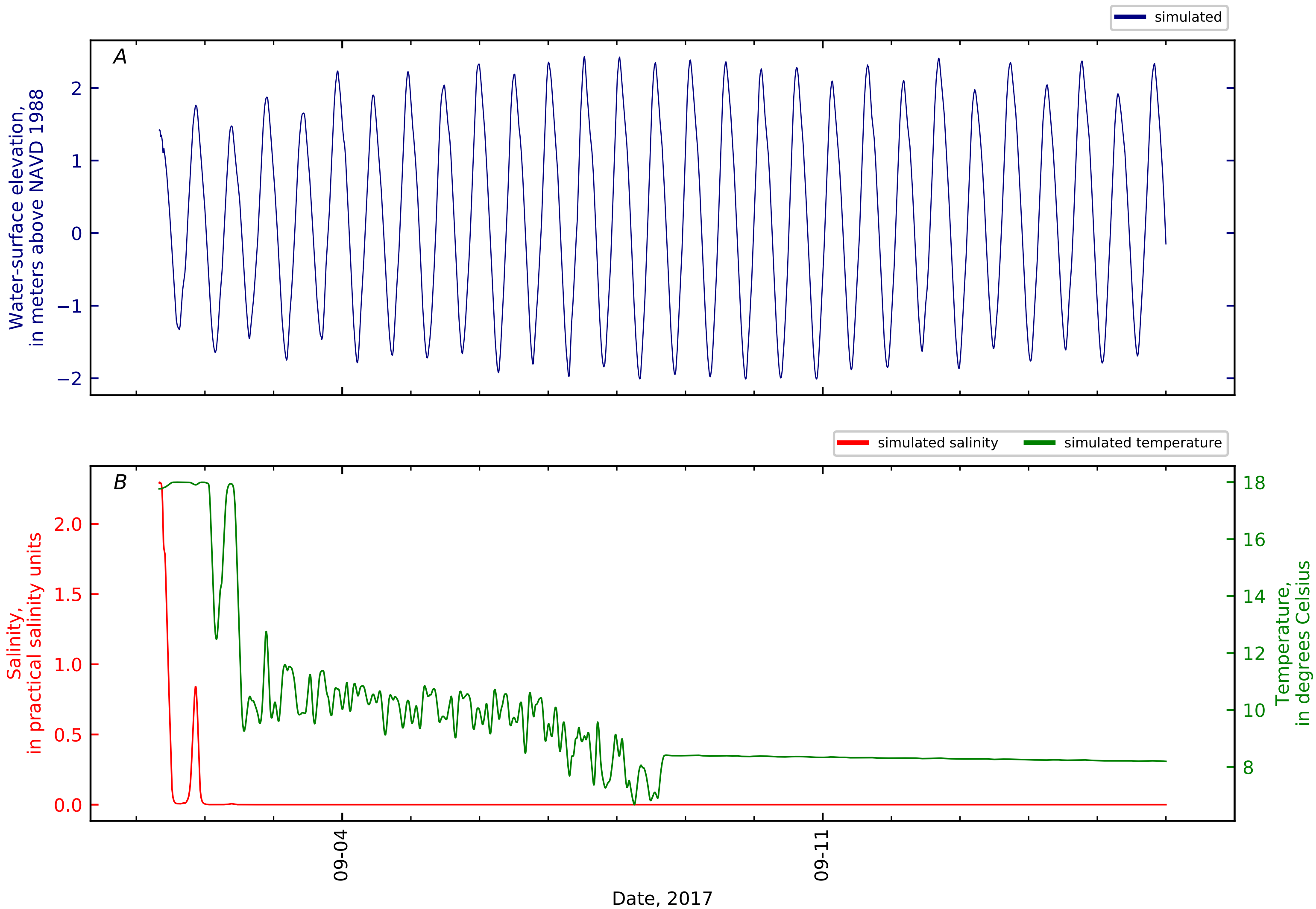

Figure B1-92. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 91, Penob Riv KM38.

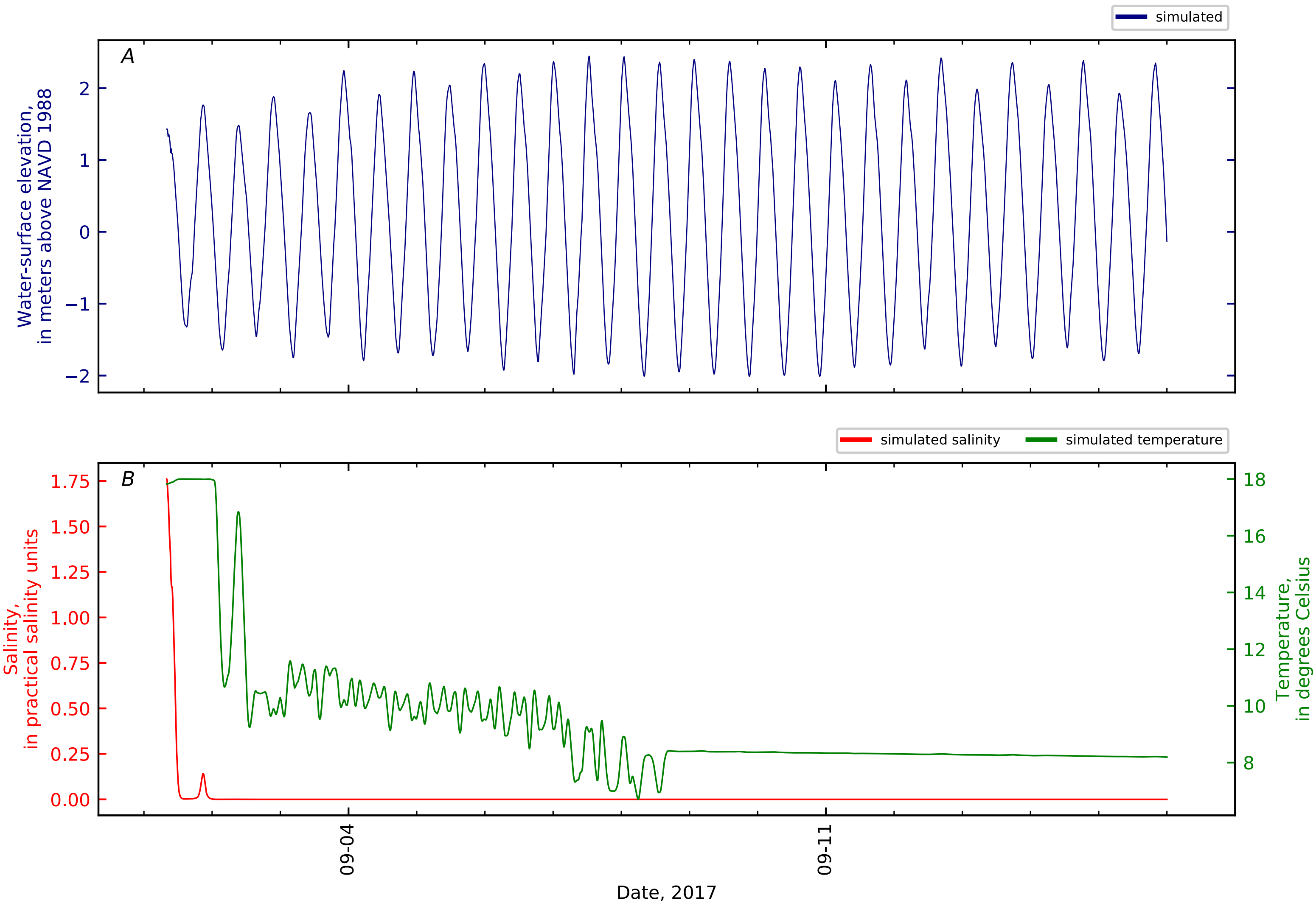

Figure B1-93. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 92, Penob Riv KM38.7 Boat ramp d/s Bangor.

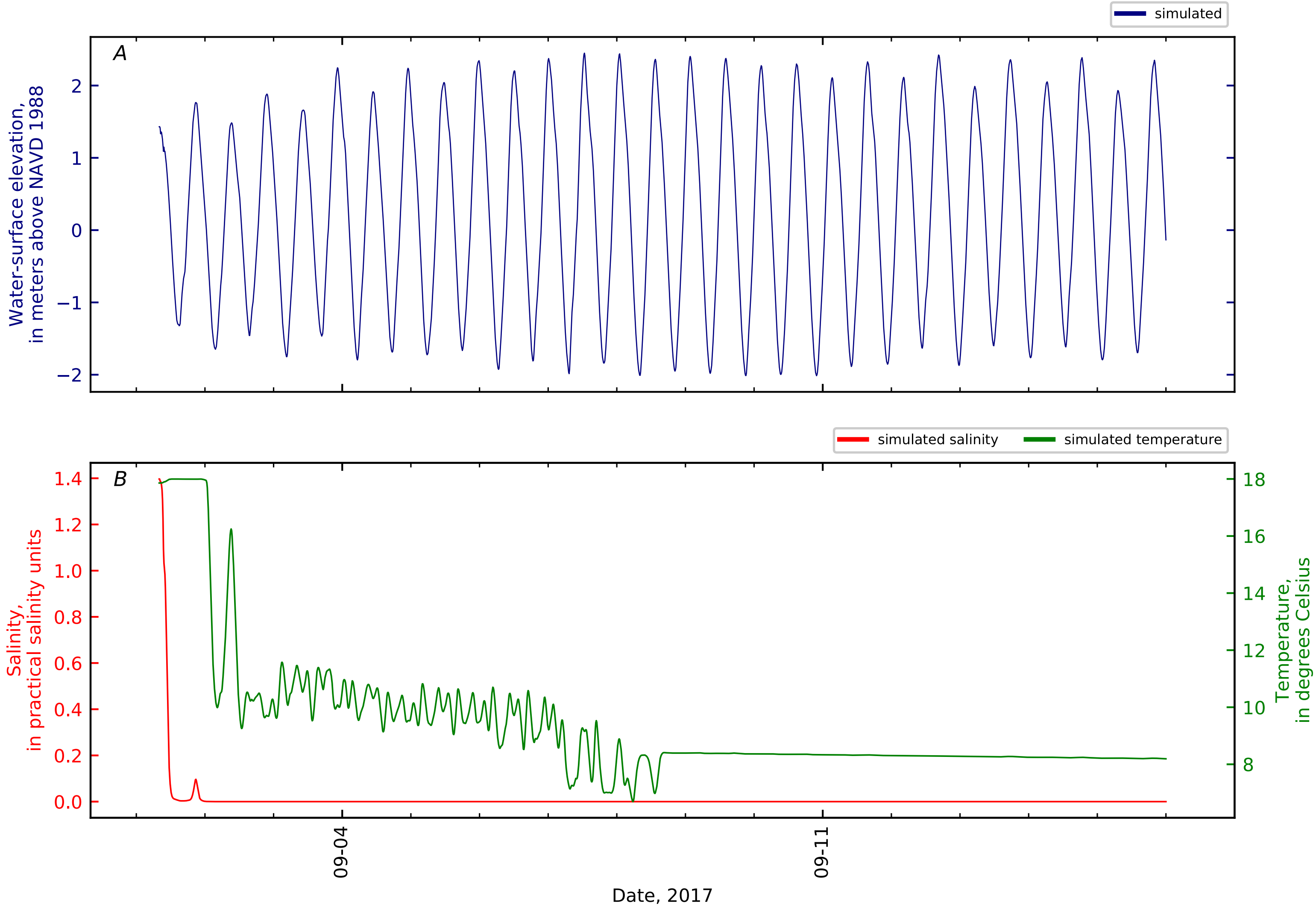

Figure B1-94. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 93, Penob Riv KM39.

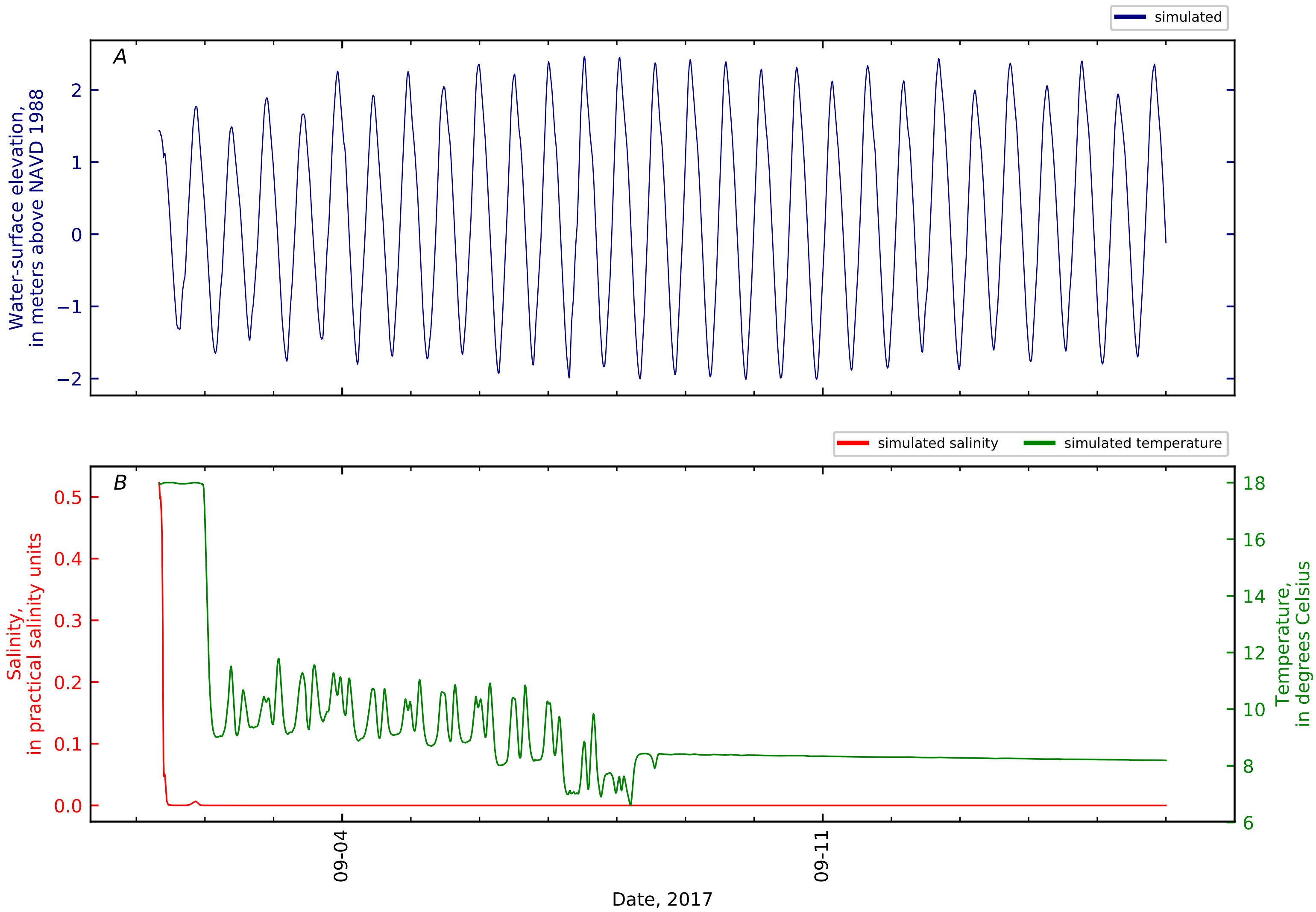

Figure B1-95. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 94, Penob Riv KM40.

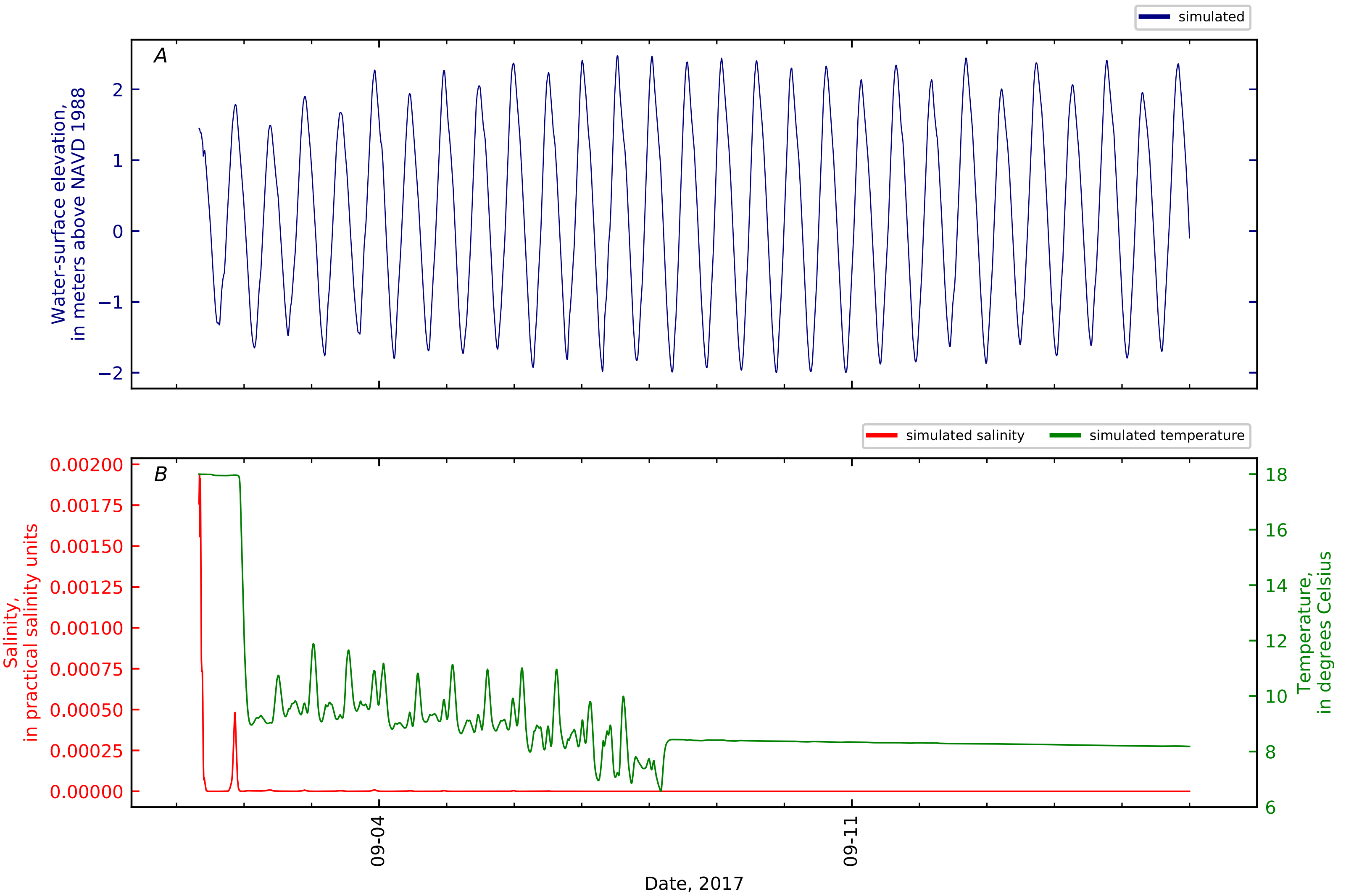

Figure B1-96. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 95, Penob Riv KM41.

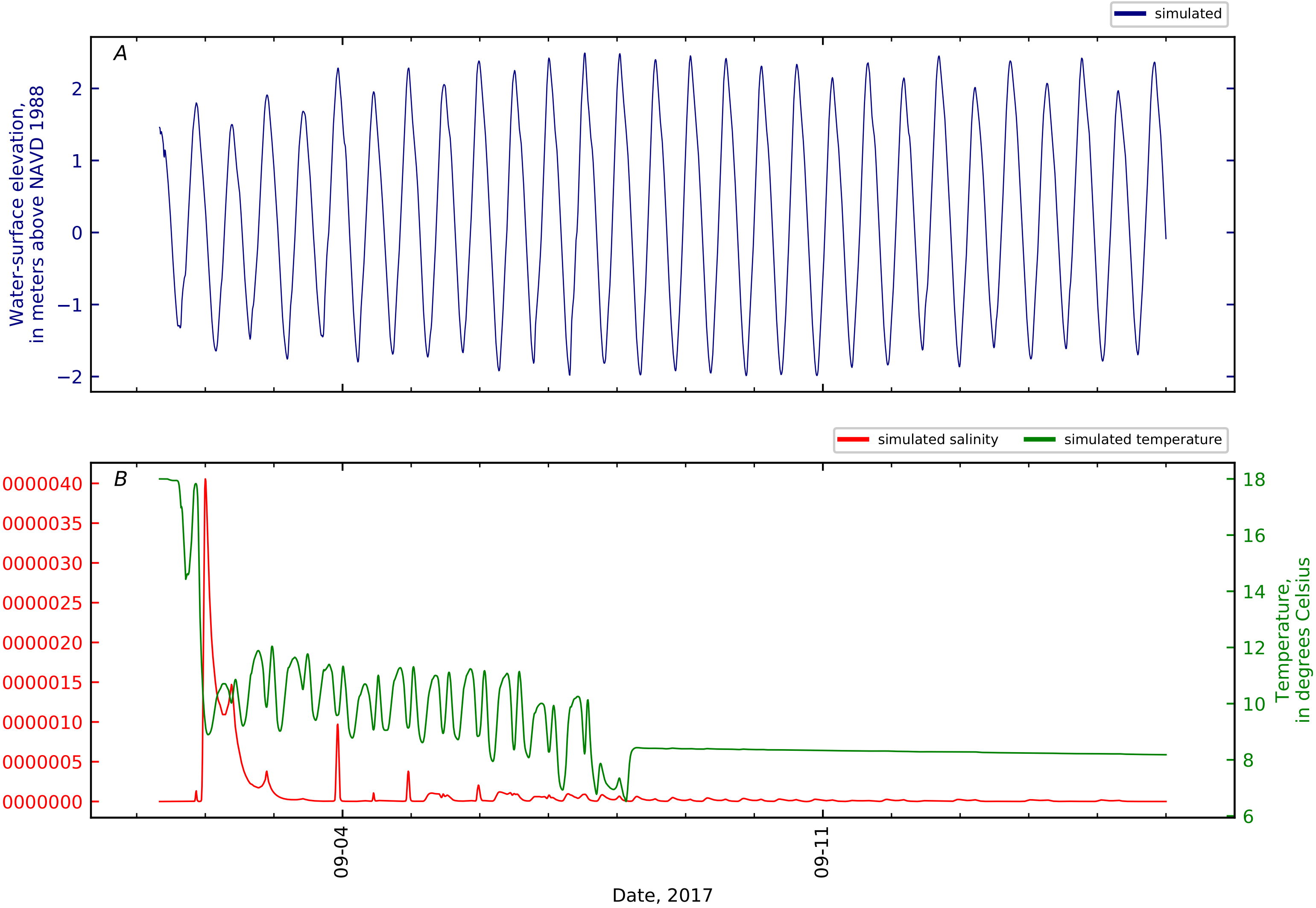

Figure B1-97. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 96, Penob Riv KM42.

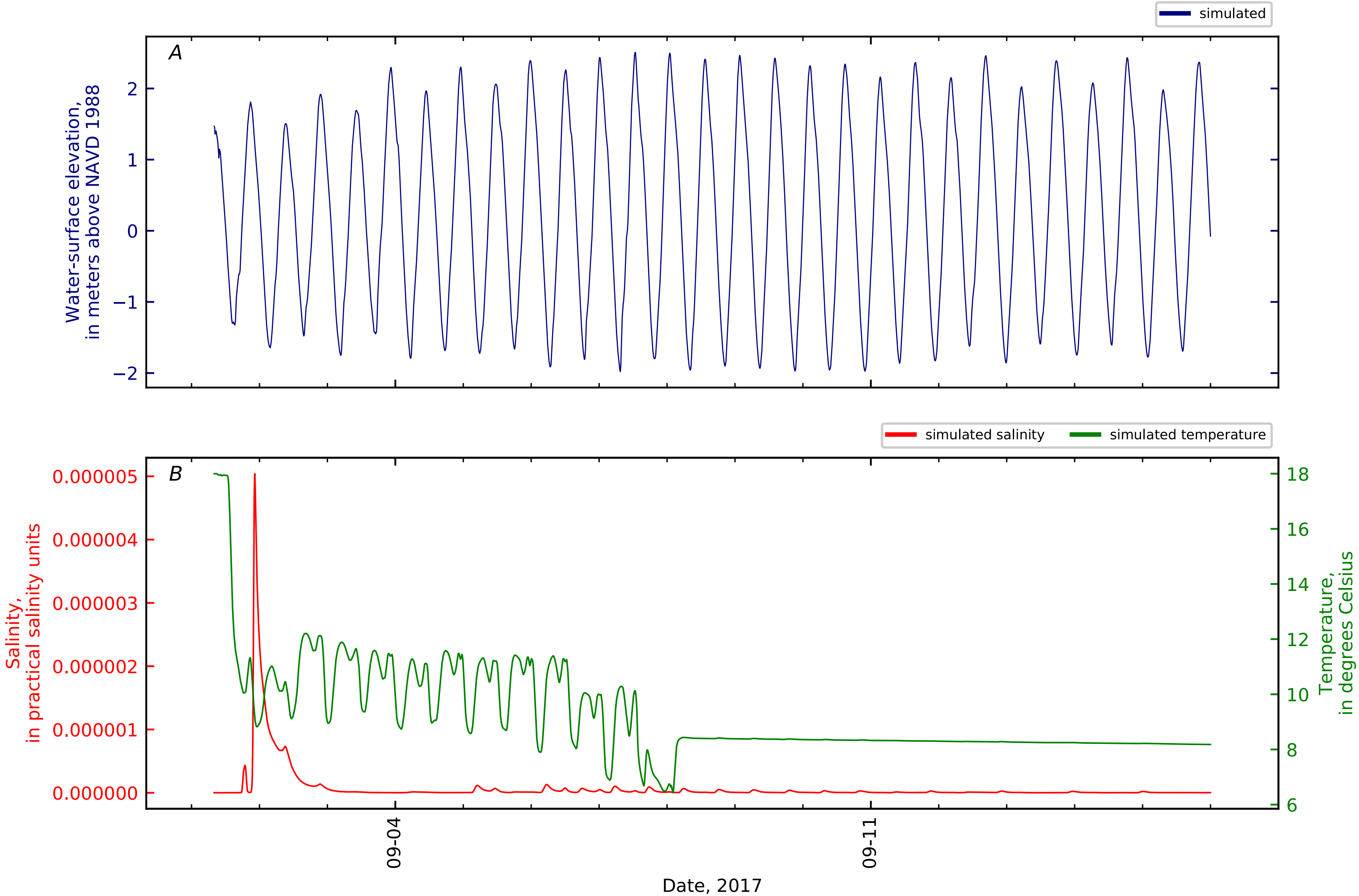

Figure B1-98. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 97, Penob Riv KM43.

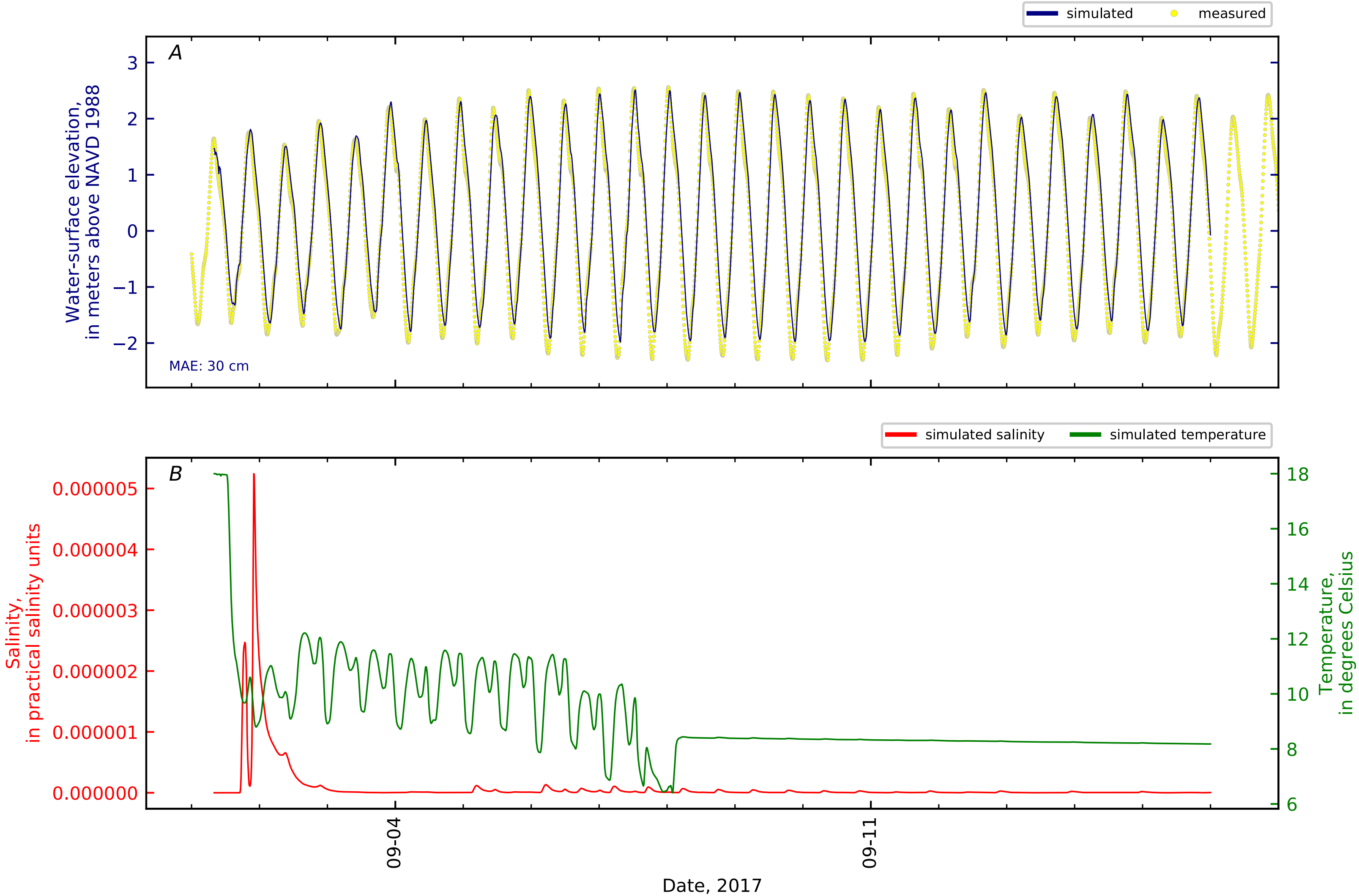

Figure B1-99. Time series for *A*, simulated and measured water-surface elevation; and *B*, simulated salinity and temperature at station 98, Penob Riv KM43.2 GS 01037050 at Bangor.

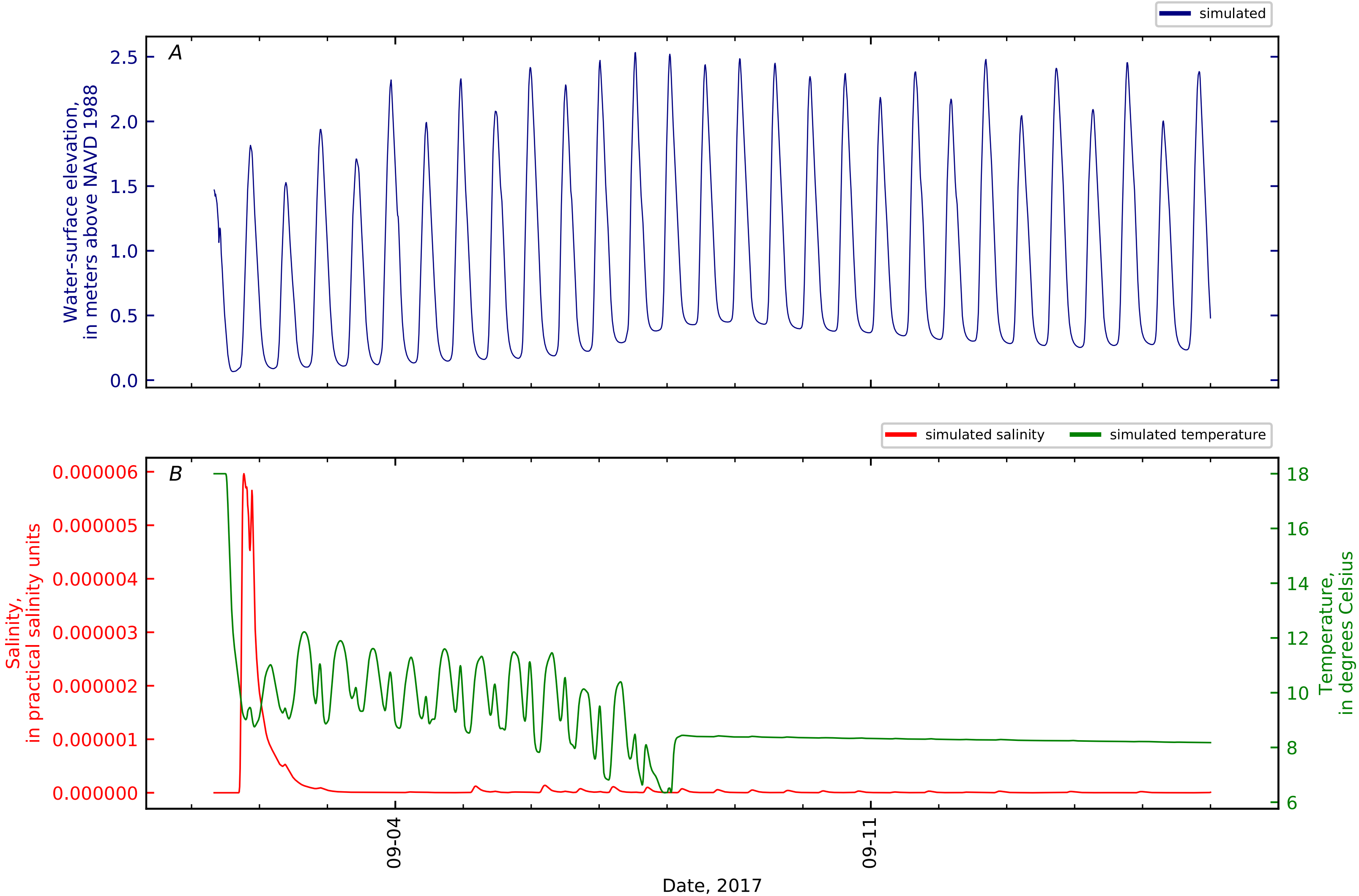

Figure B1-100. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 99, Penob Riv KM44.

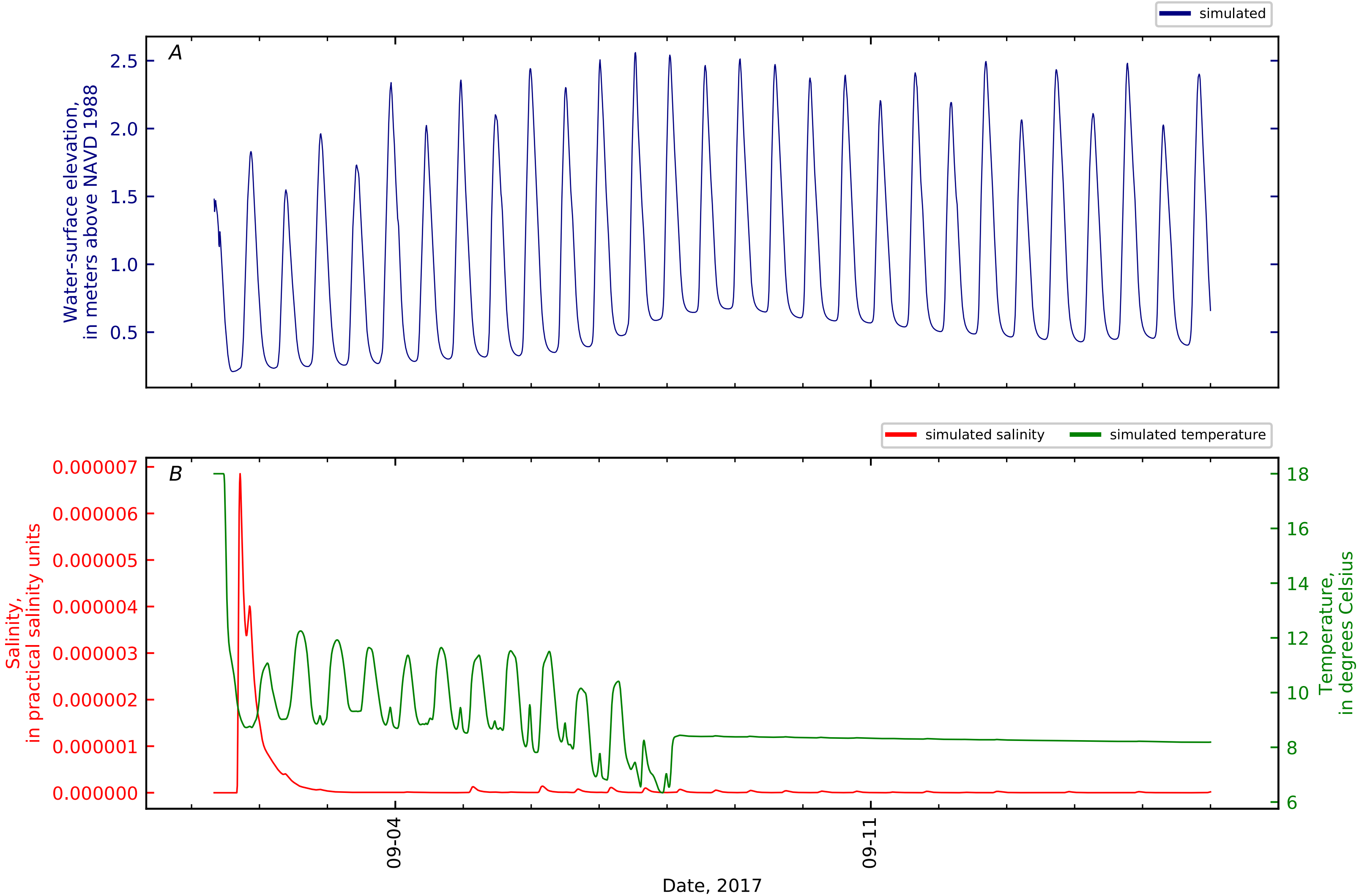

Figure B1-101. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 100, Penob Riv KM45.

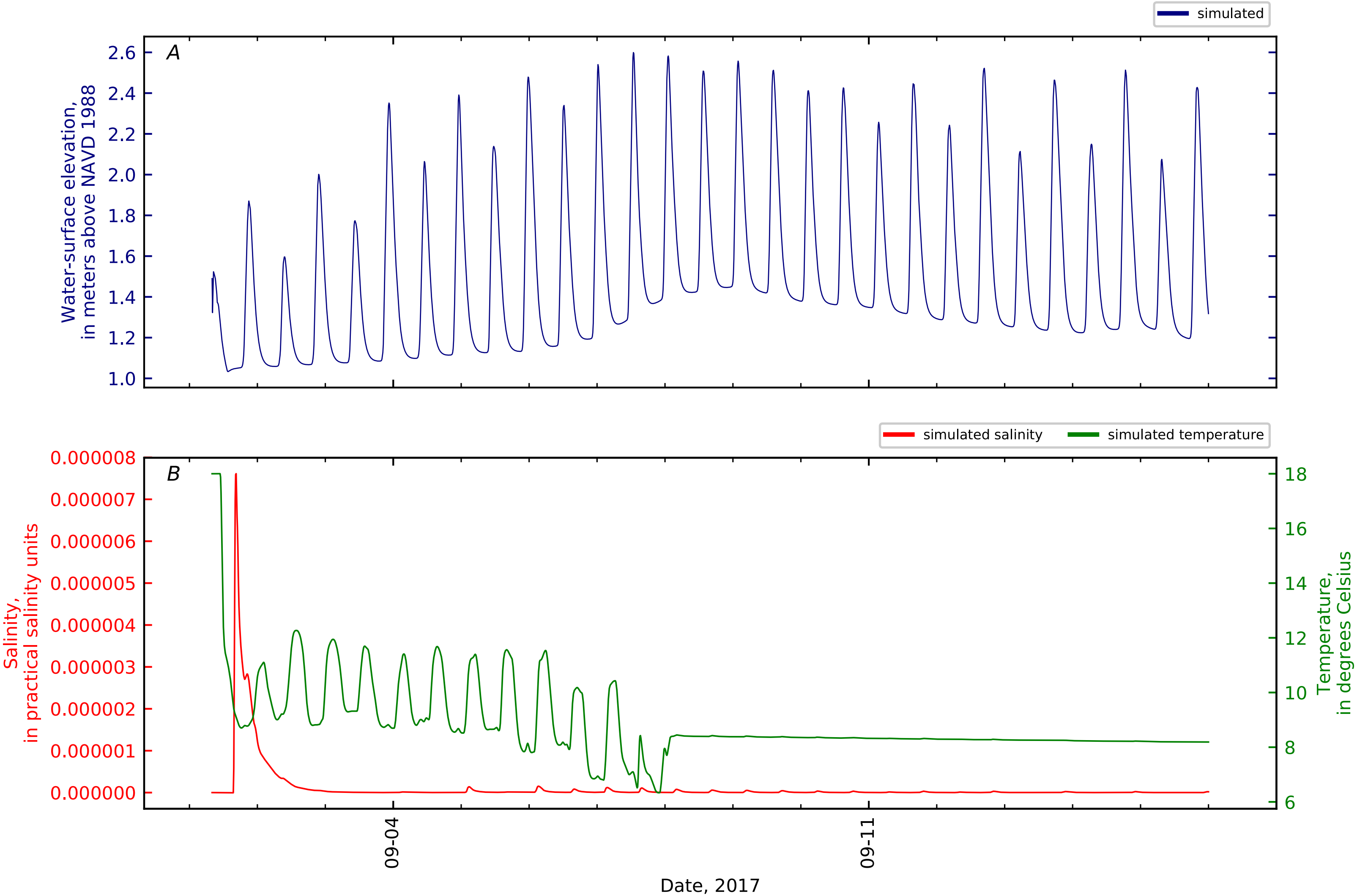

Figure B1-102. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 101, Penob Riv KM46.

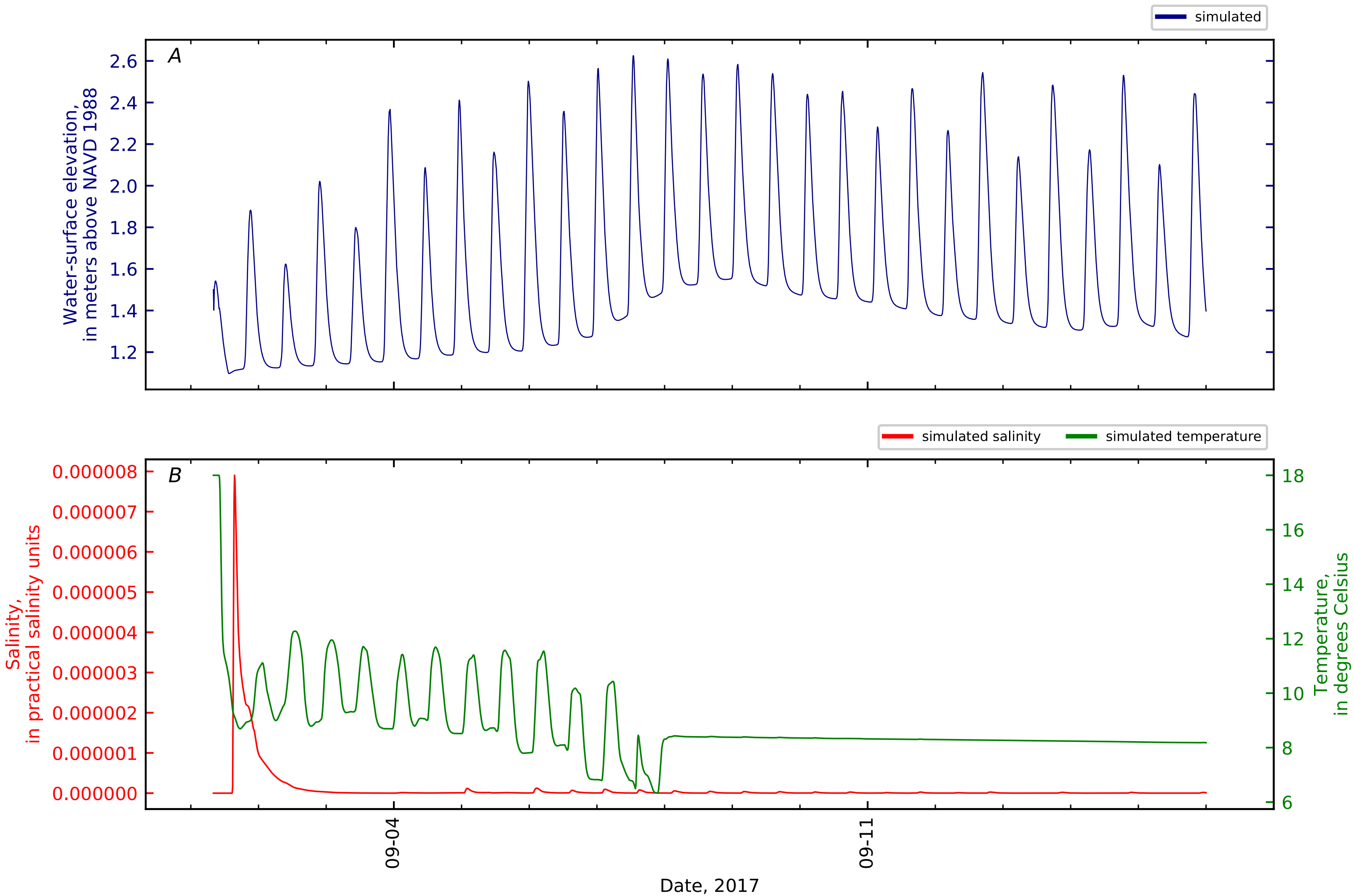

Figure B1-103. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 102, Penob Riv KM47.

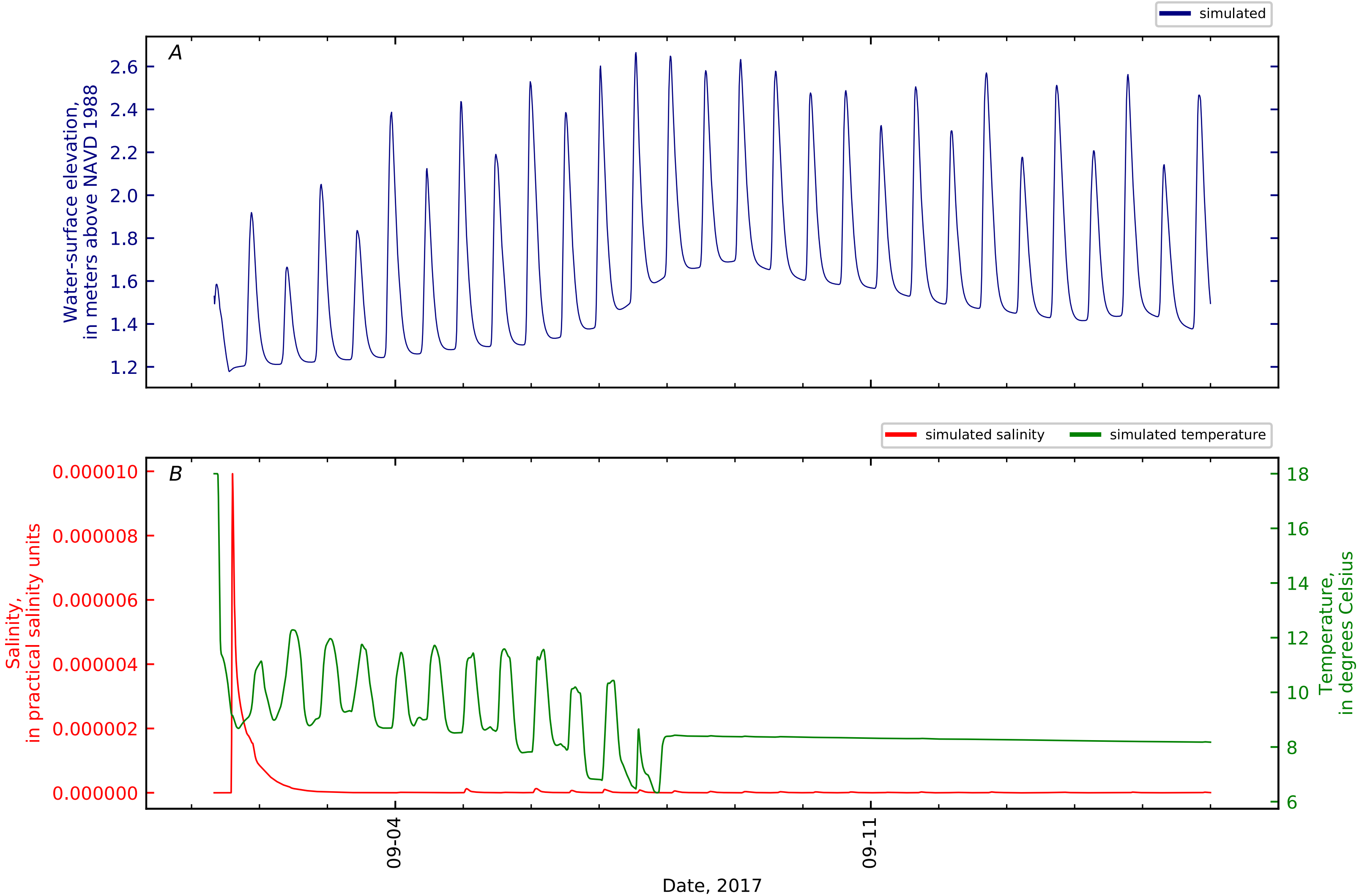

Figure B1-104. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 103, Penob Riv KM48.

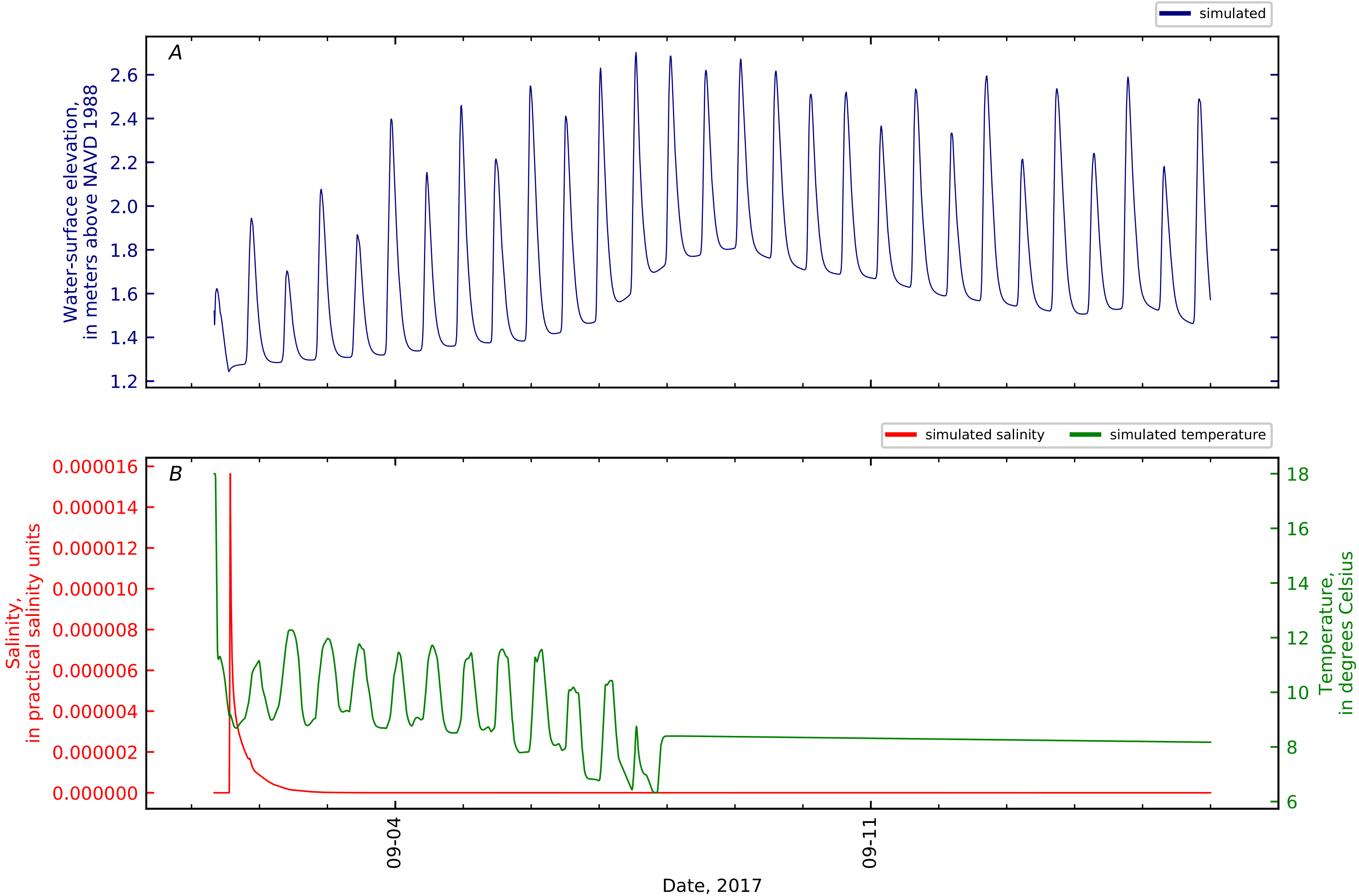

Figure B1-105. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 104, Penob Riv KM49.

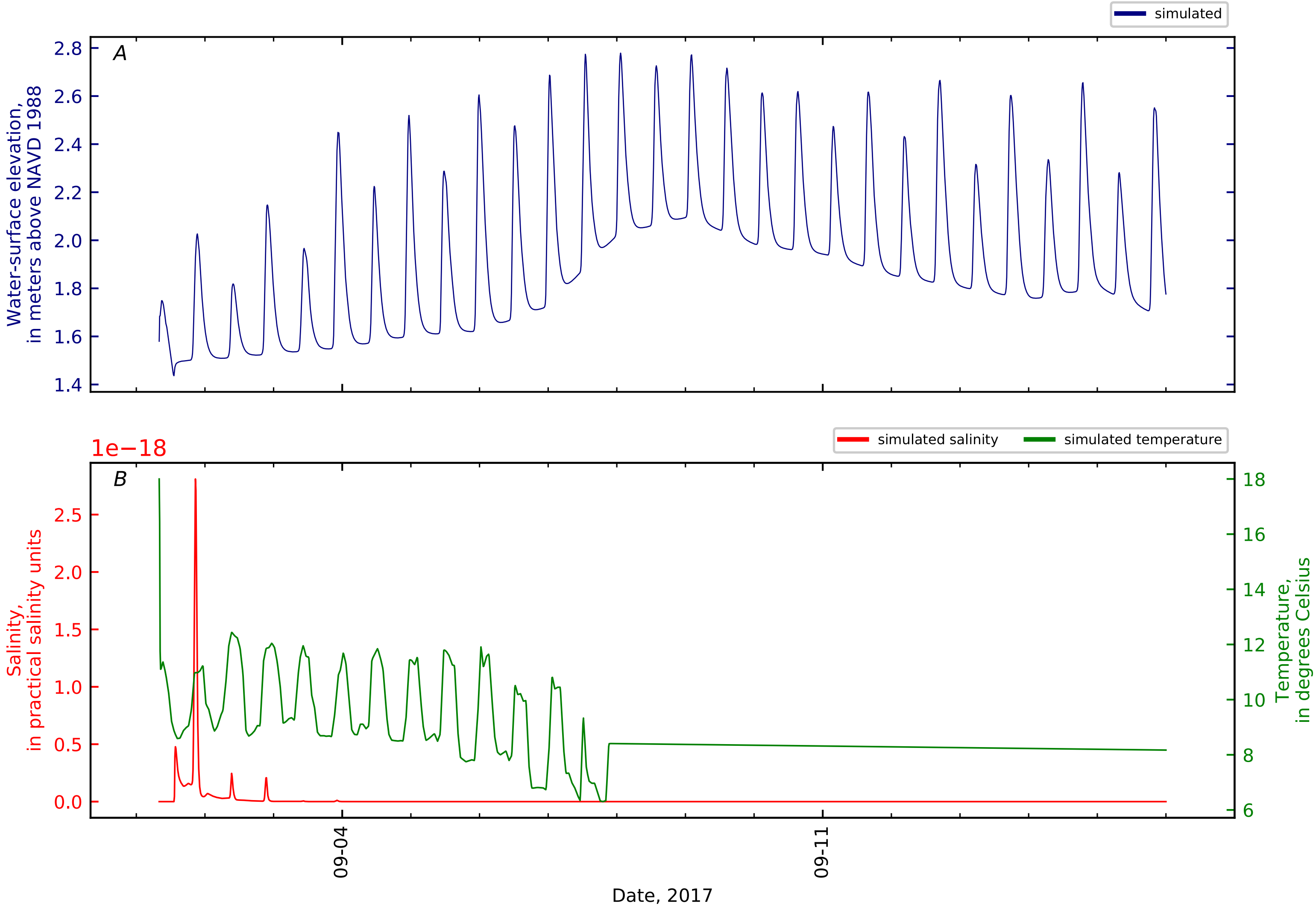

Figure B1-106. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 105, Penob Riv KM50 nr GS gage Eddington.

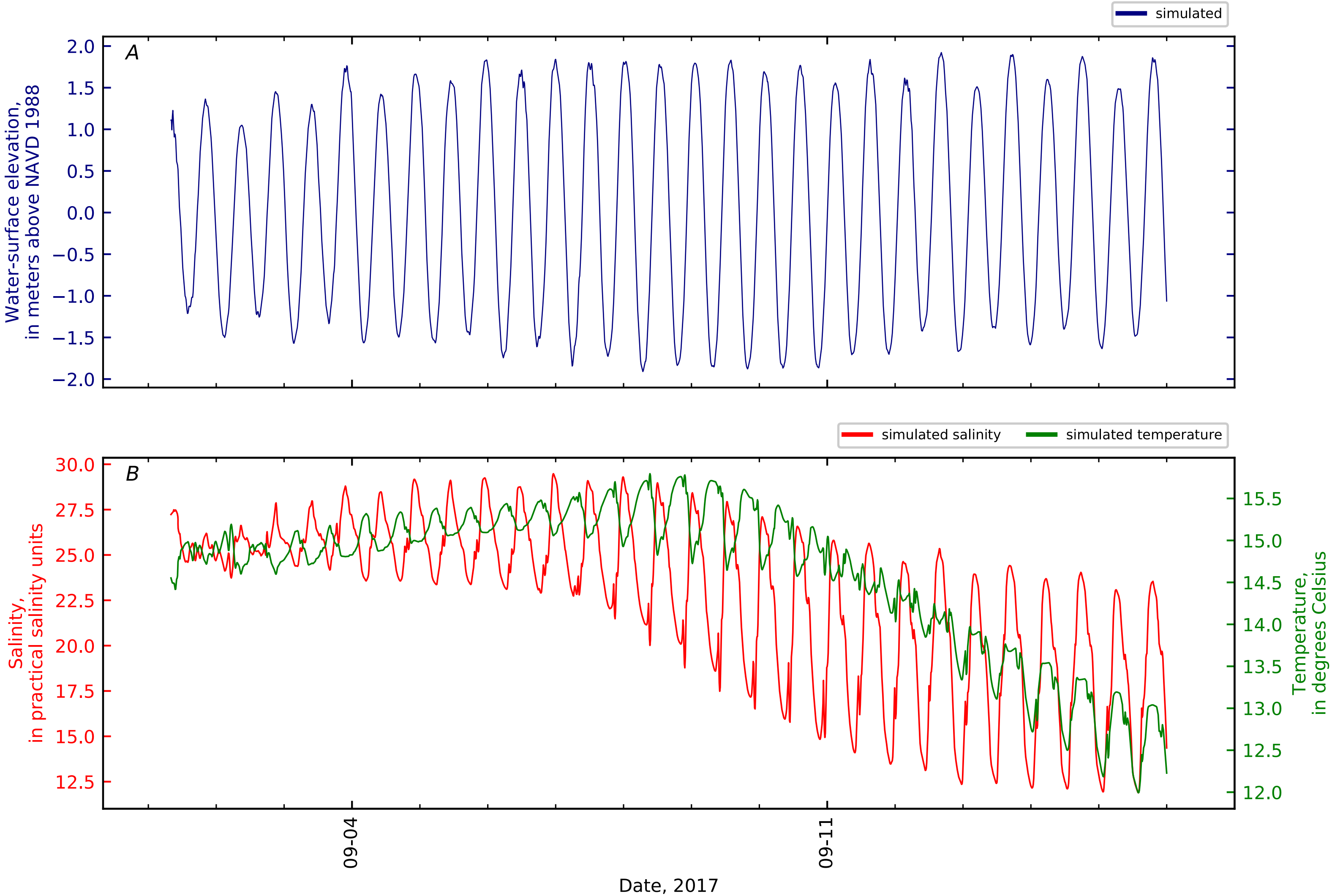

Figure B1-107. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 106, East Channel -KM0.1 ERDC9 VE-MU4-SF-2.

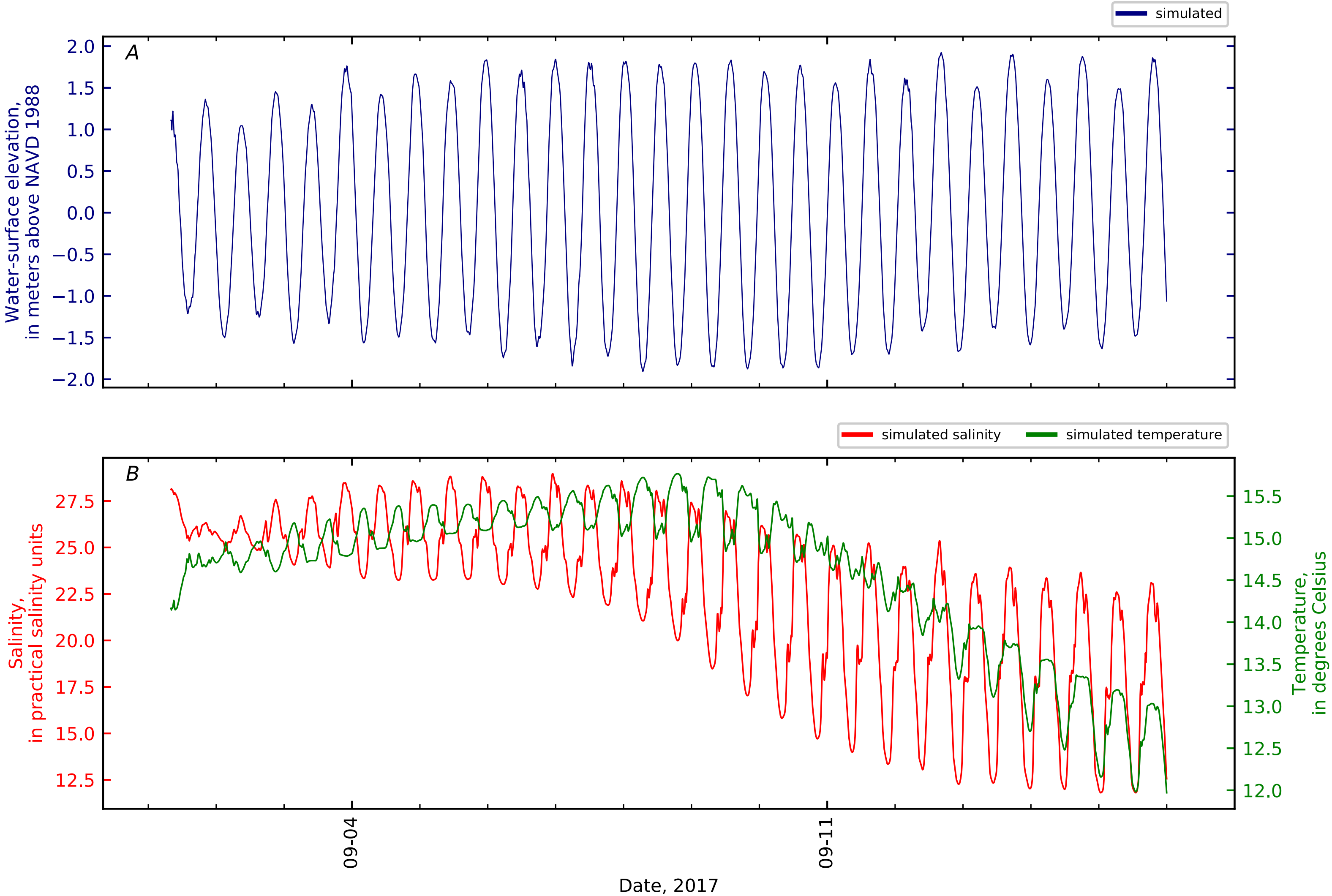

Figure B1-108. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 107, East Channel KM0.

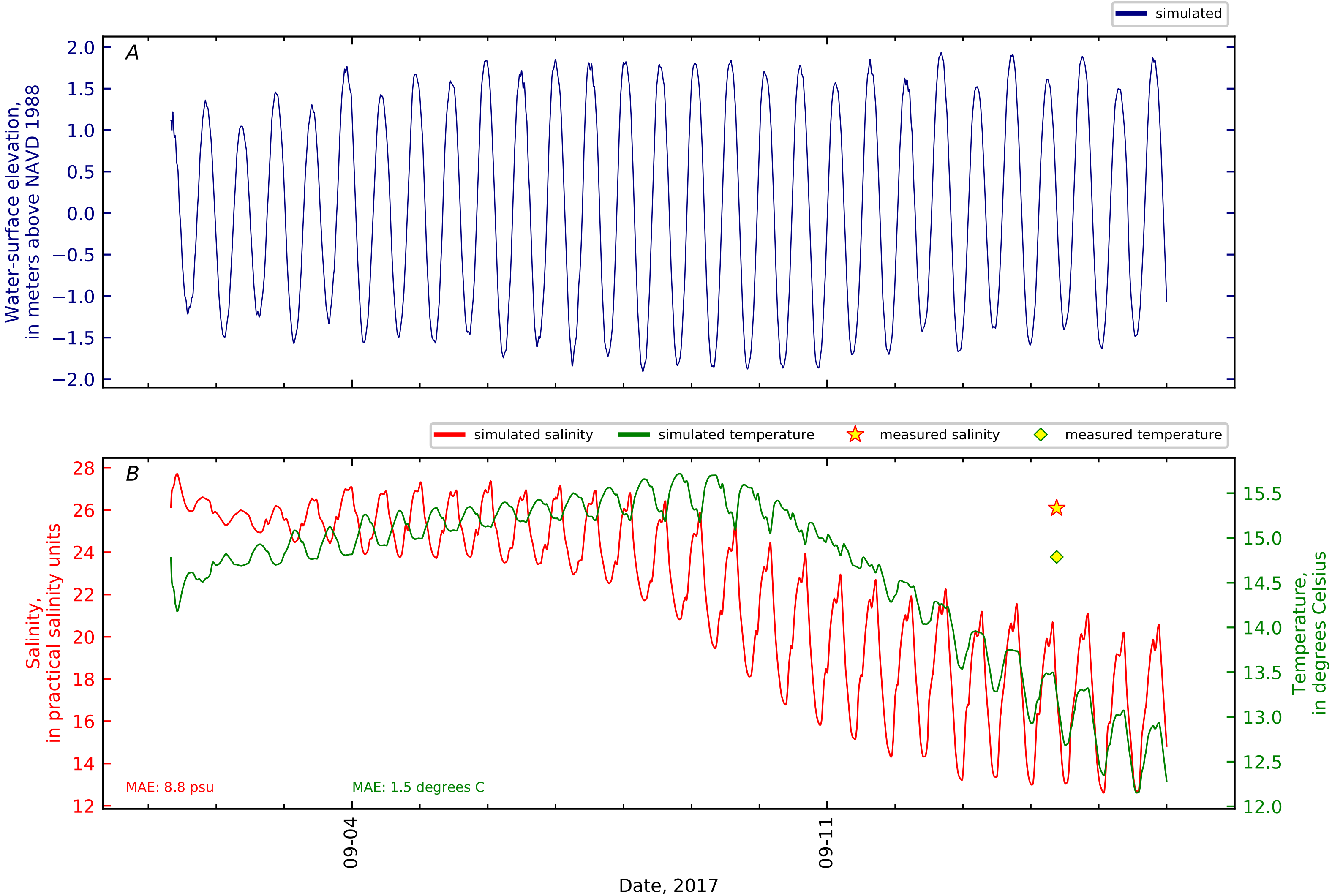

Figure B1-109. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 108, East Channel KM0.1 GS CTD4-01.

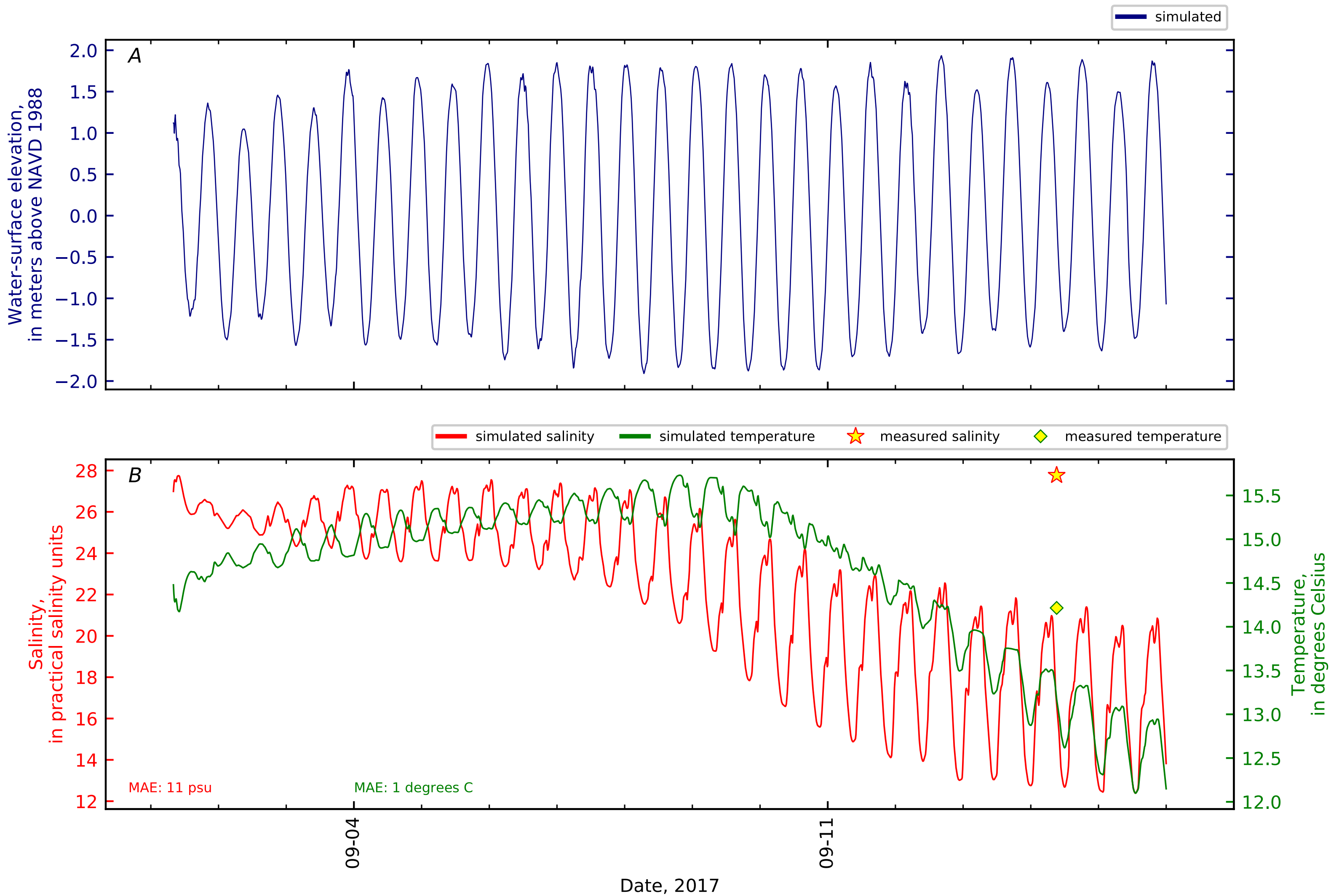

Figure B1-110. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 109, East Channel KM0.1 GS CTD4-02.

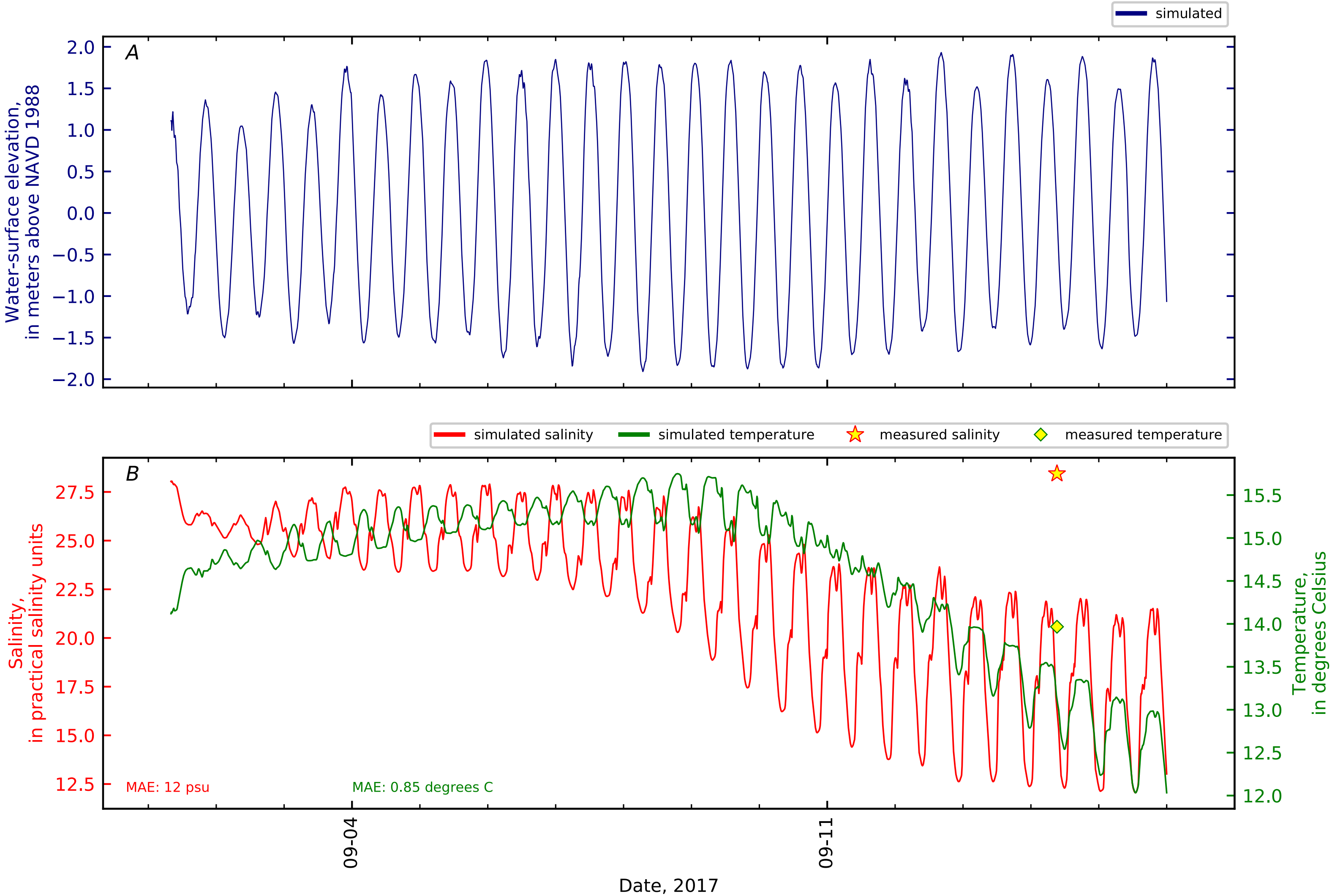

Figure B1-111. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 110, East Channel KM0.1 GS CTD4-03.

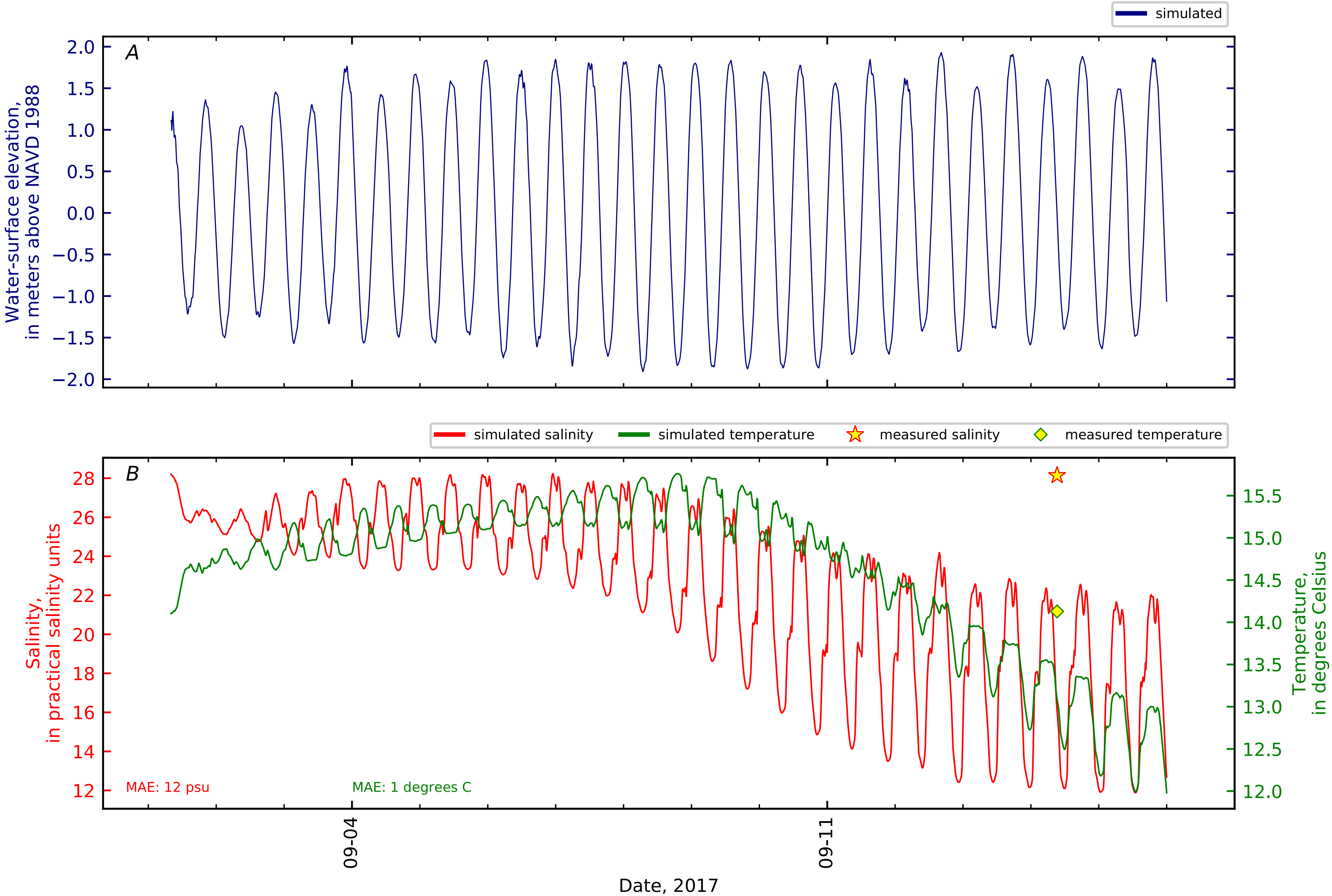

Figure B1-112. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 111, East Channel KM0.1 GS CTD4-04.

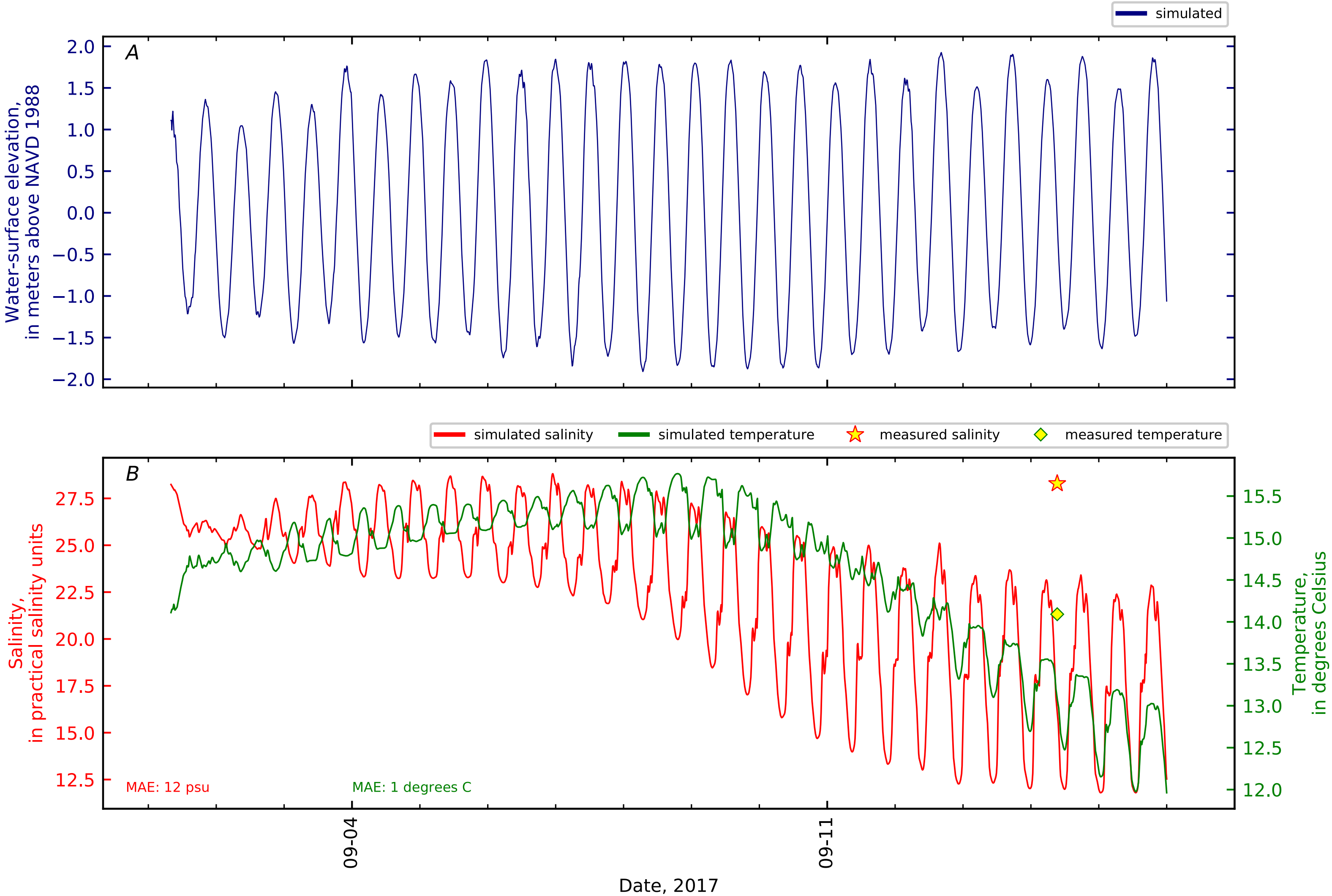

Figure B1-113. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 112, East Channel KM0.1 GS CTD4-05.

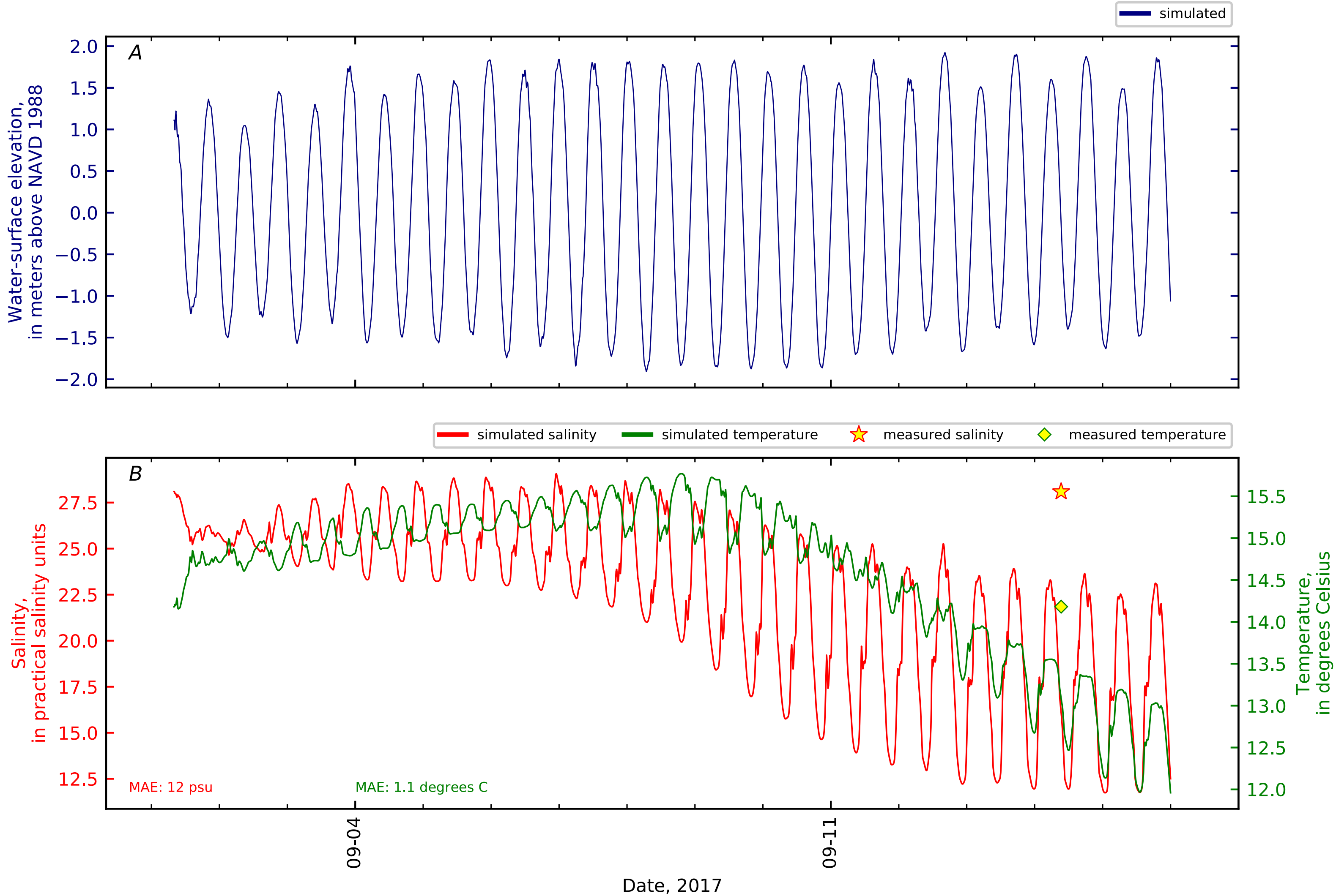

Figure B1-114. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 113, East Channel KM0.1 GS CTD4-06.

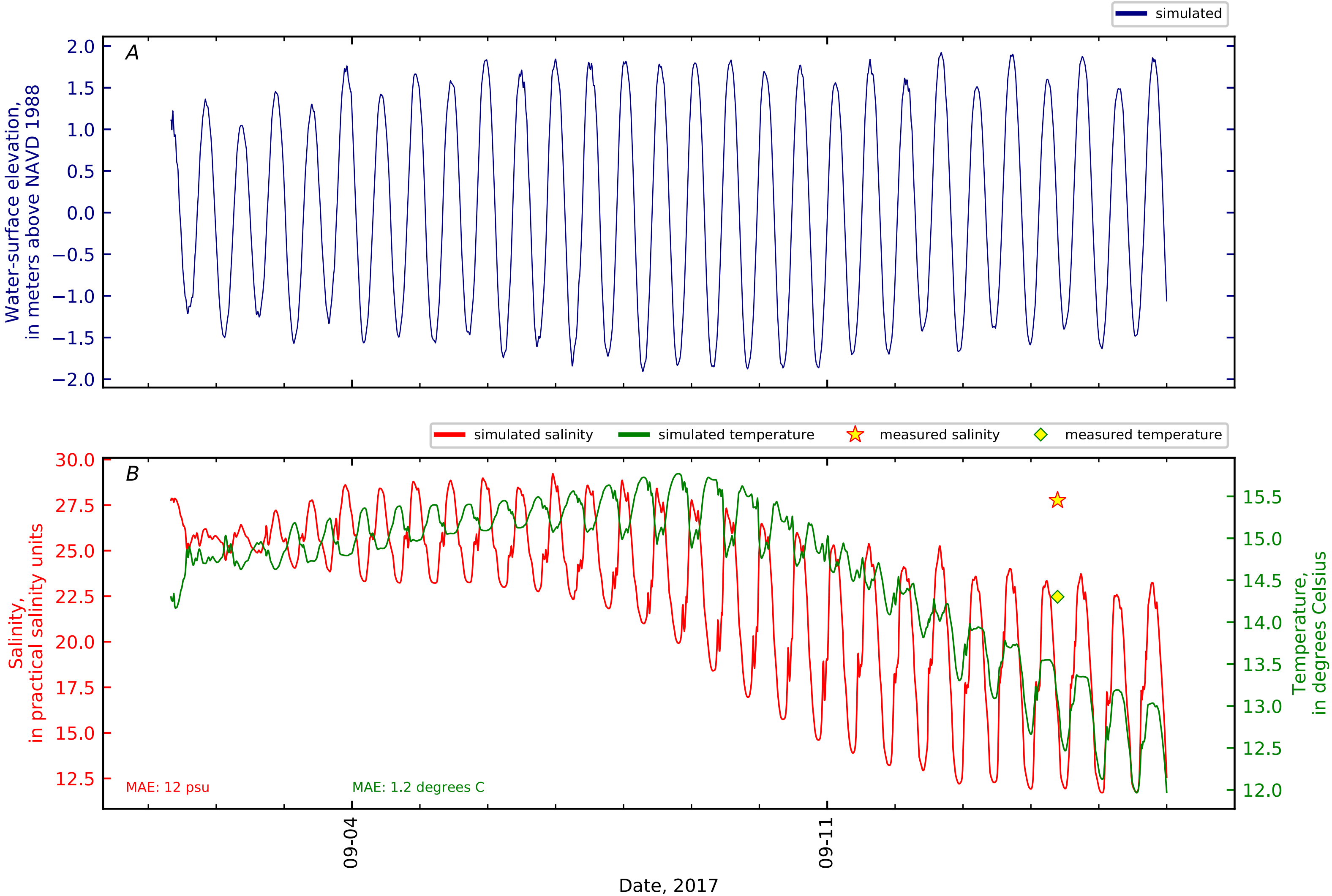

Figure B1-115. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 114, East Channel KM0.1 GS CTD4-07.

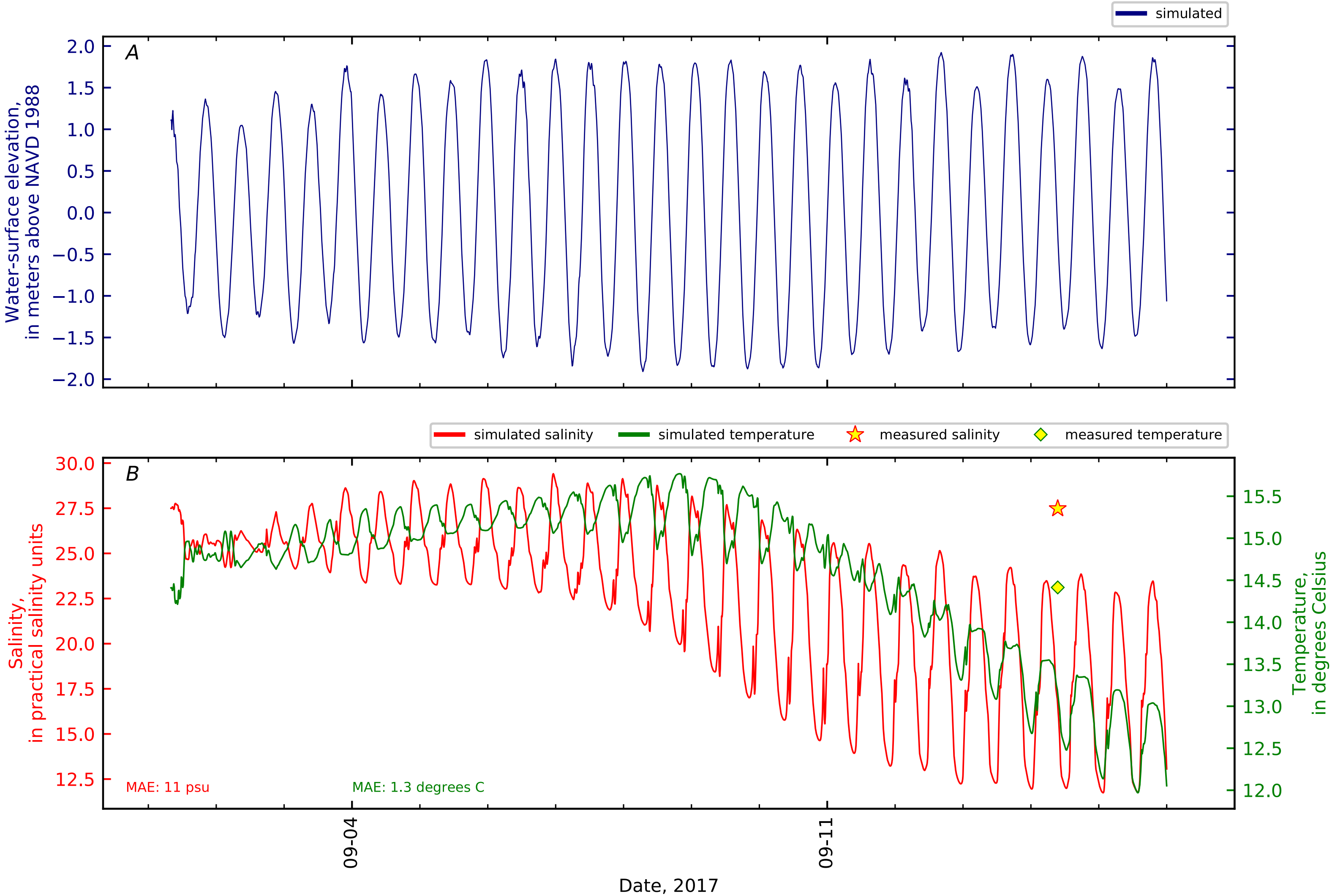

Figure B1-116. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 115, East Channel KM0.1 GS CTD4-08.

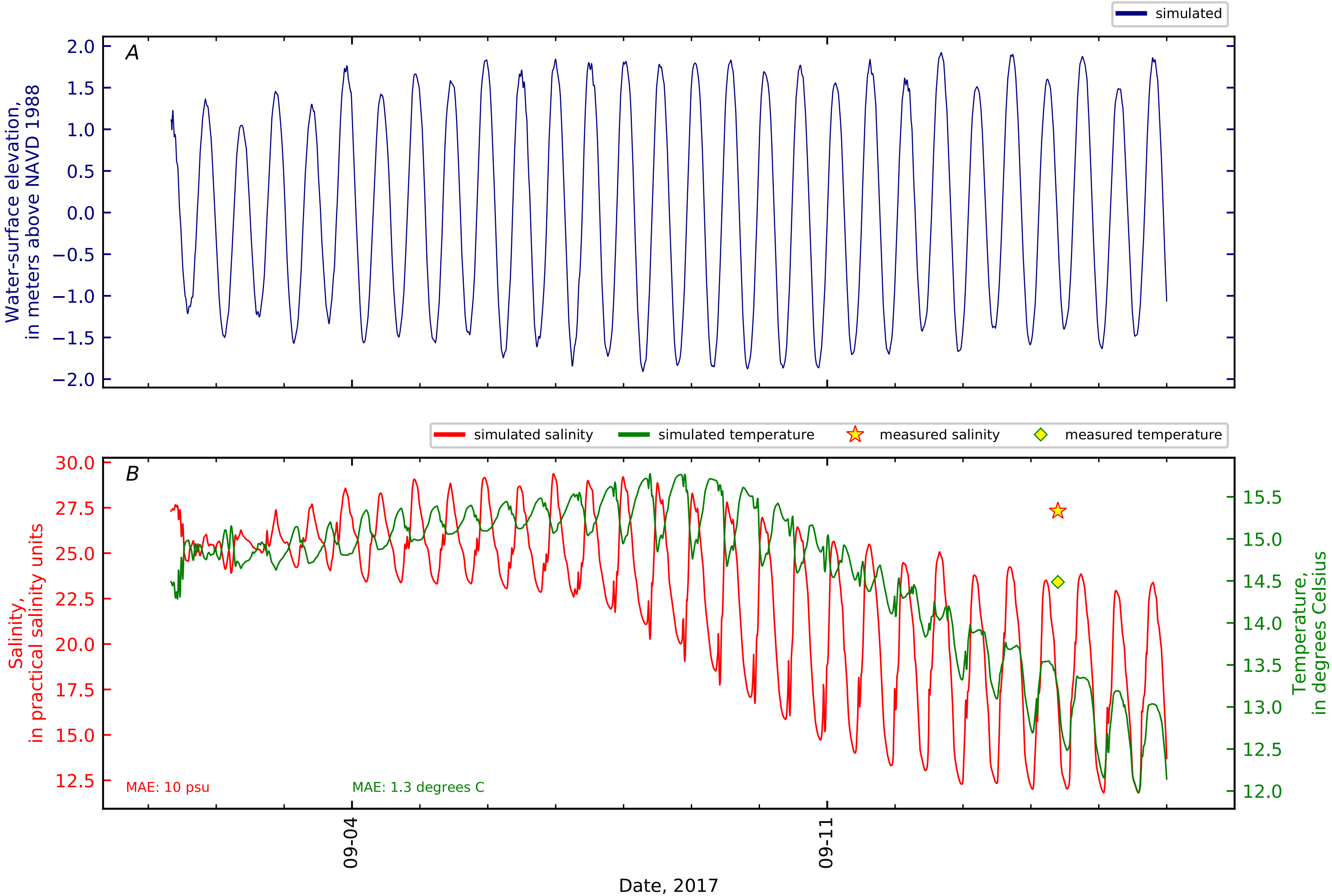

Figure B1-117. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 116, East Channel KM0.1 GS CTD4-09.

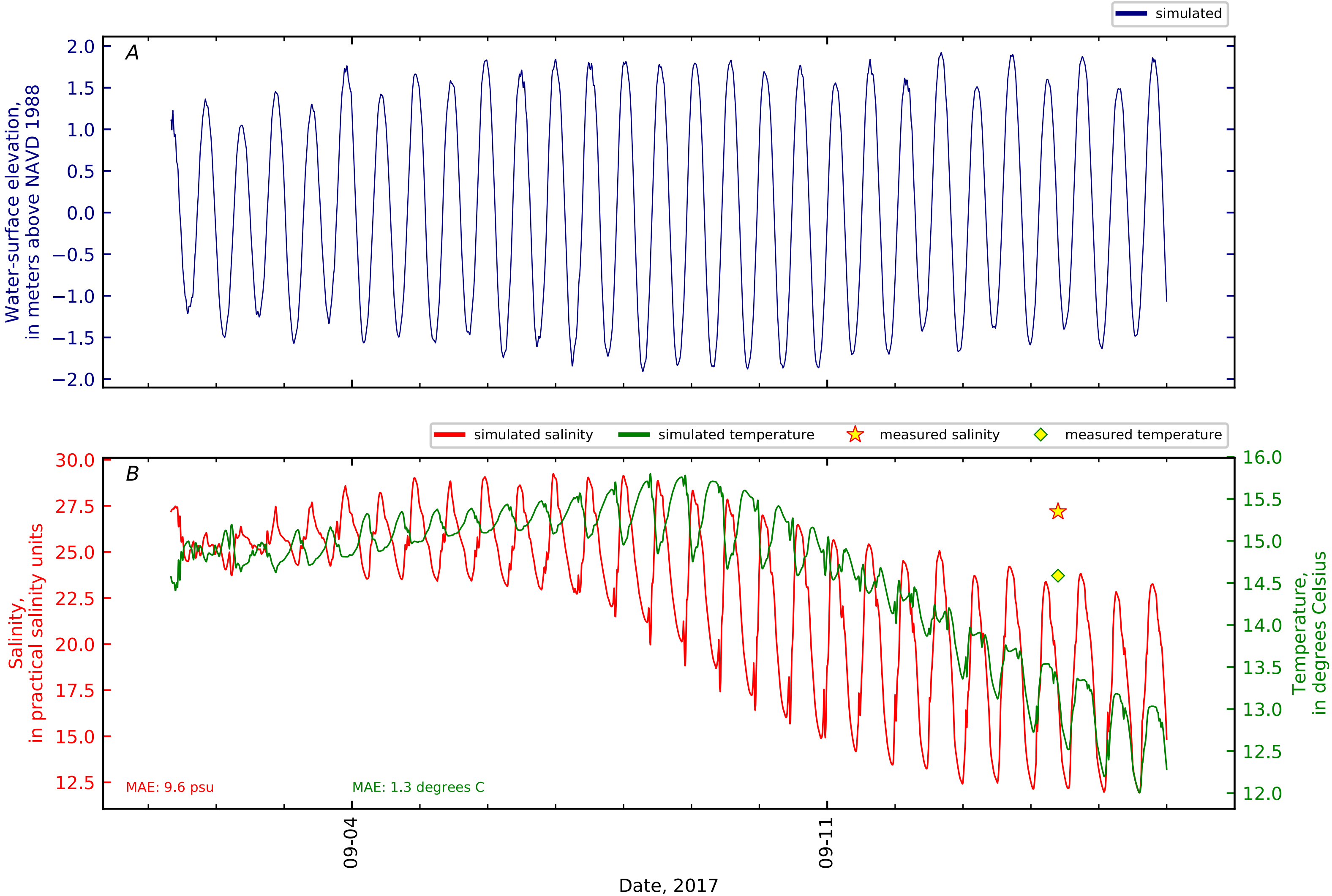

Figure B1-118. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 117, East Channel KM0.1 GS CTD4-10.

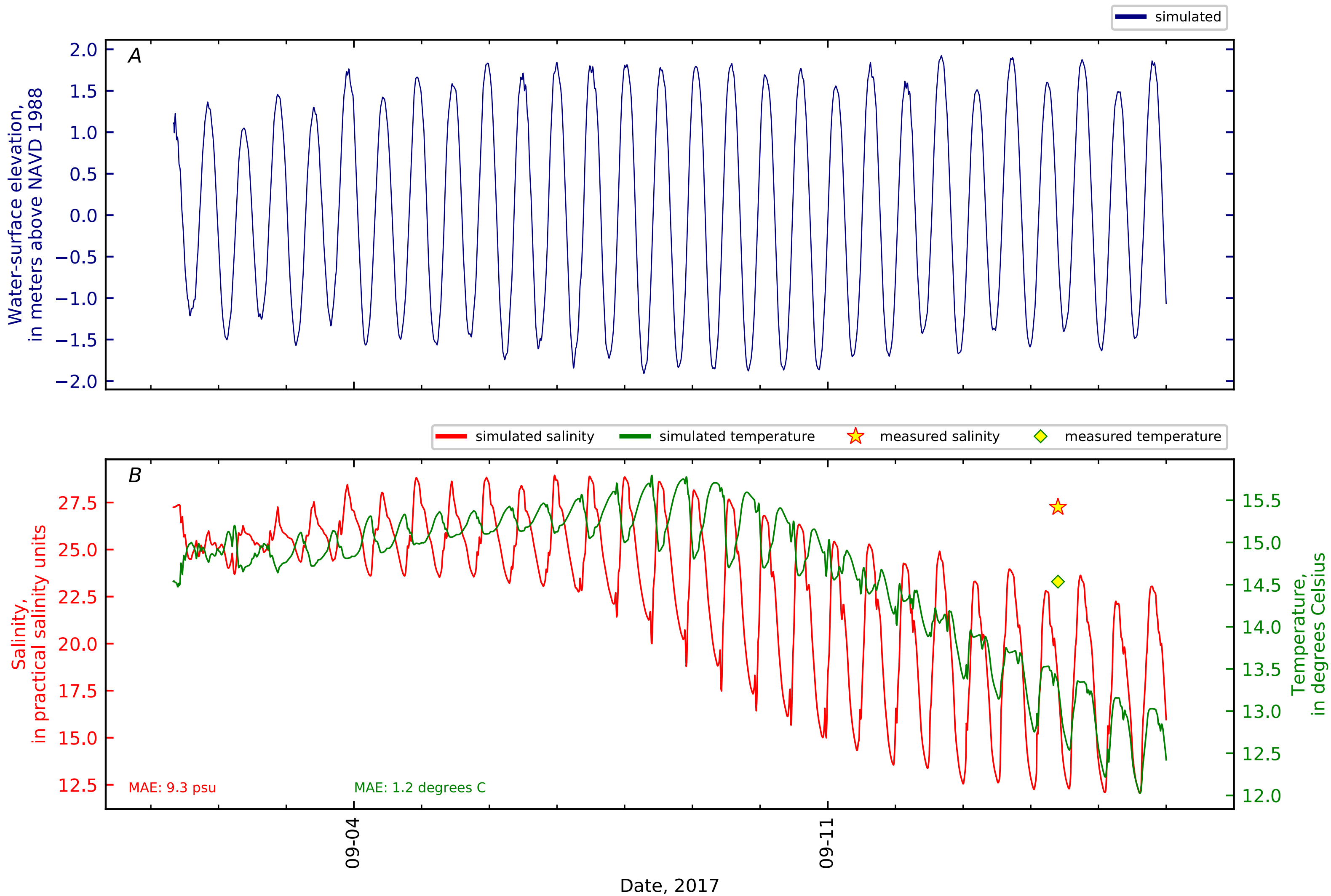

Figure B1-119. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 118, East Channel KM0.1 GS CTD4-11.

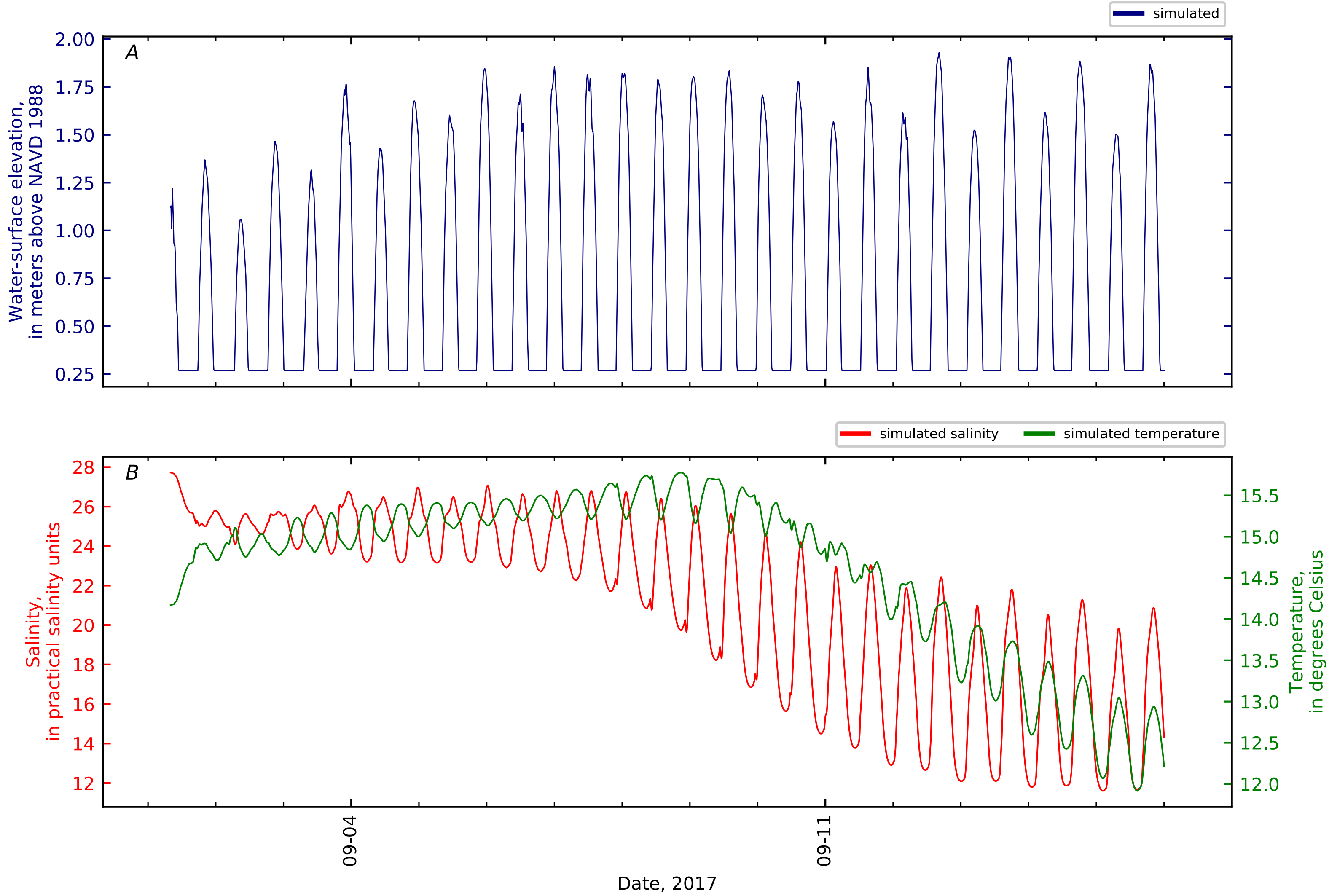

Figure B1-120. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 119, East Channel KM0.78 ERDC7 VE-MU3-SF-1.

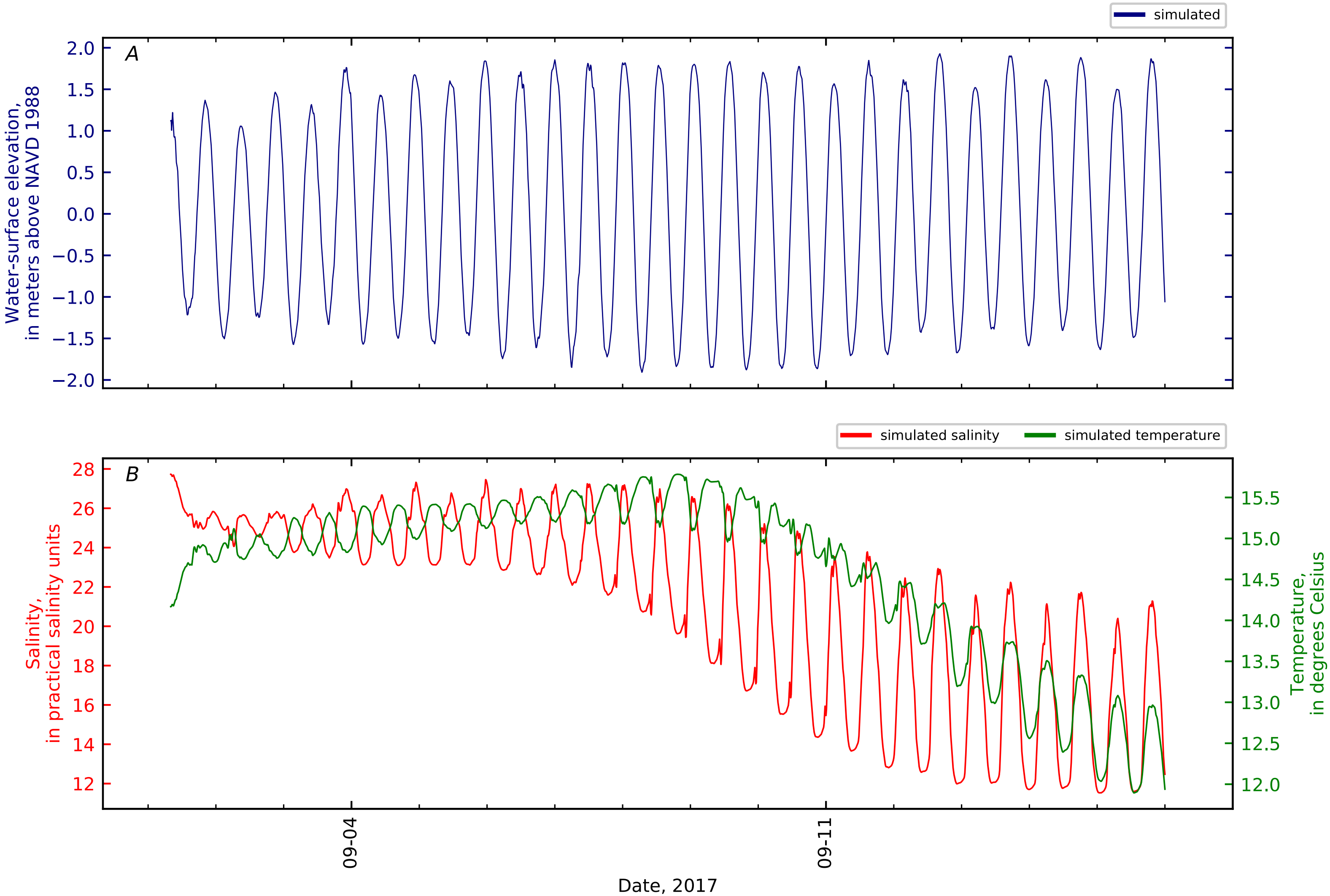

Figure B1-121. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 120, East Channel KM0.8 ERDC8 VE-MU4-SF-1.

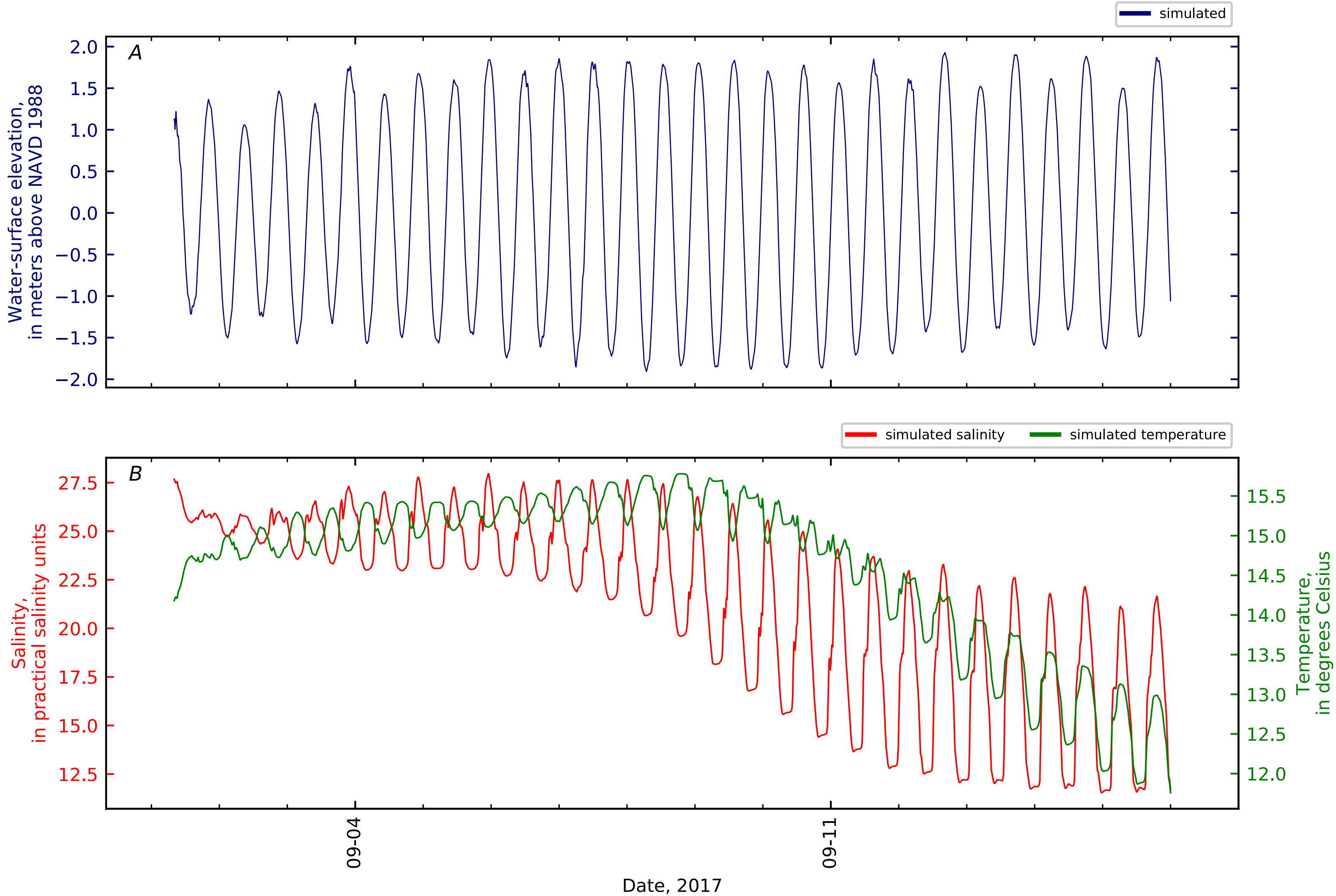

Figure B1-122. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 121, East Channel KM1.

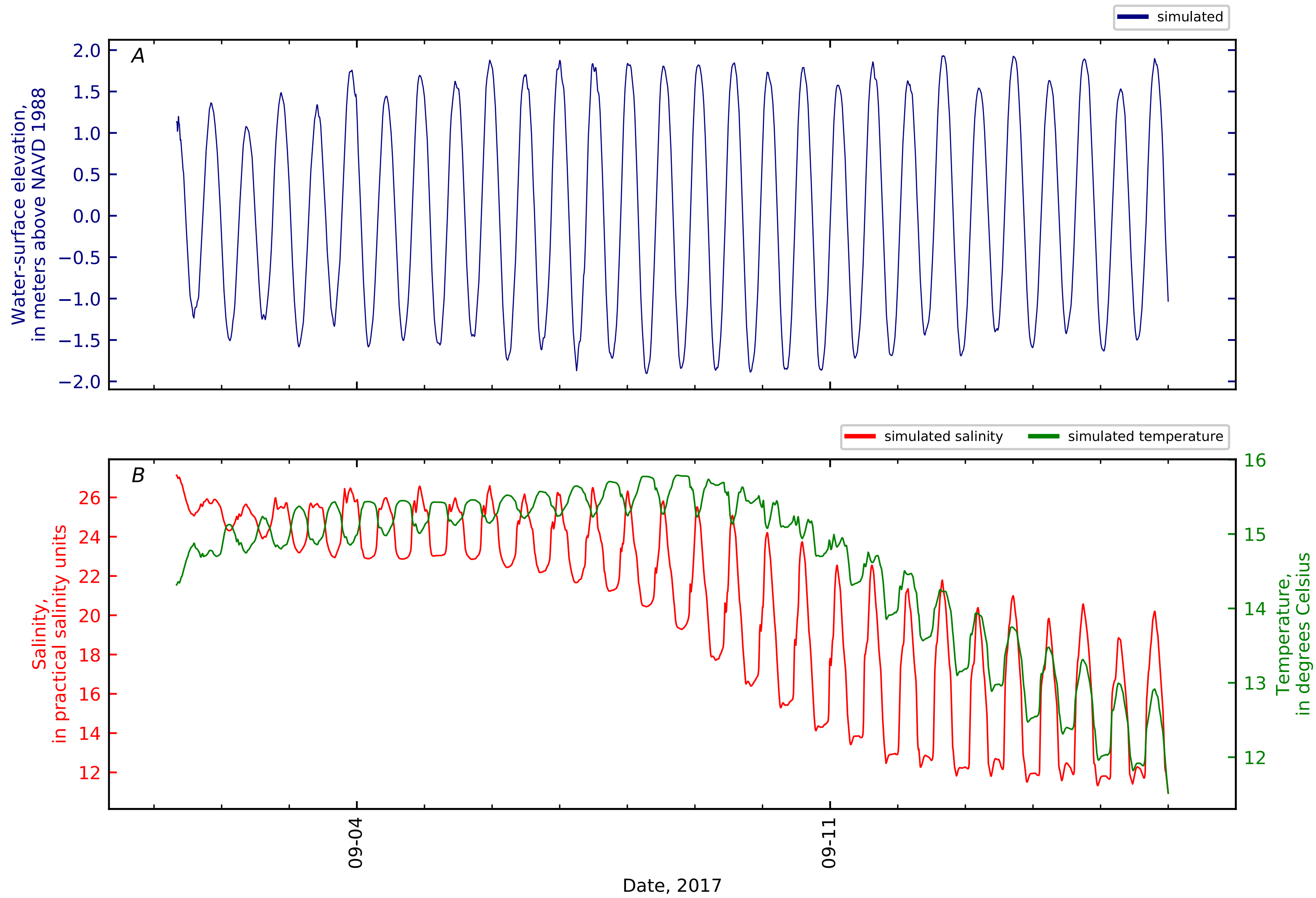

Figure B1-123. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 122, East Channel KM2.

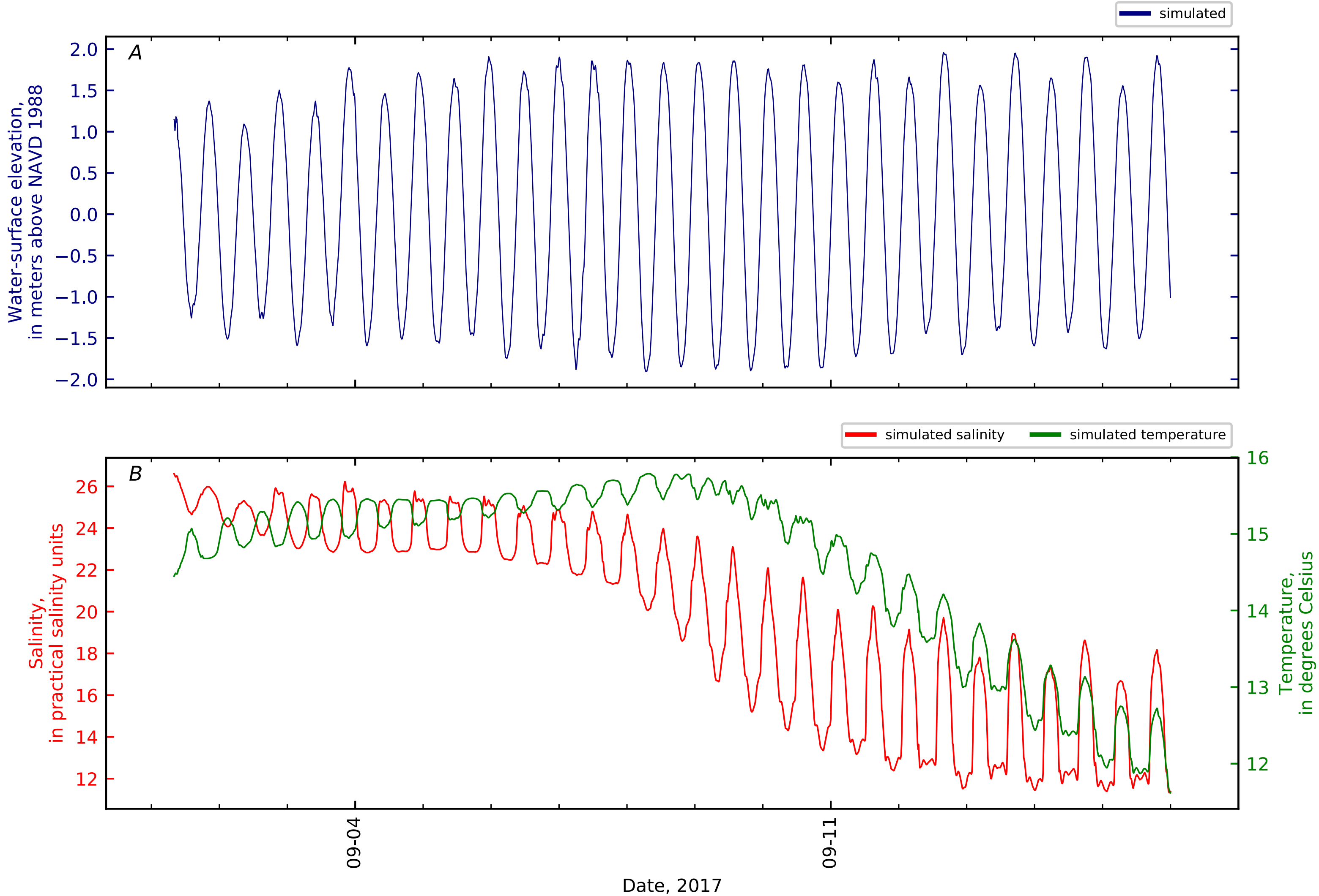

Figure B1-124. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 123, East Channel KM3.

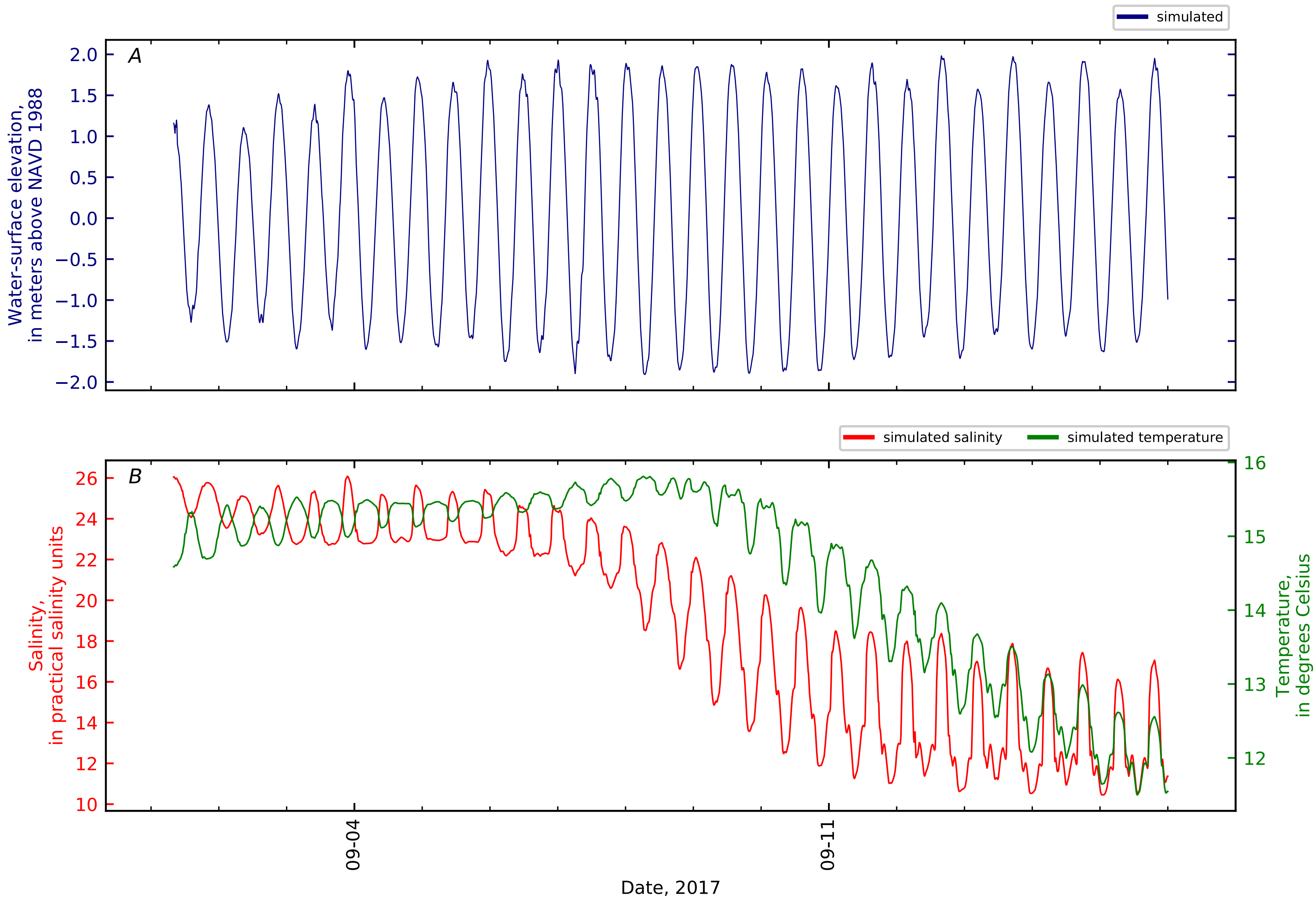

Figure B1-125. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 124, East Channel KM4.

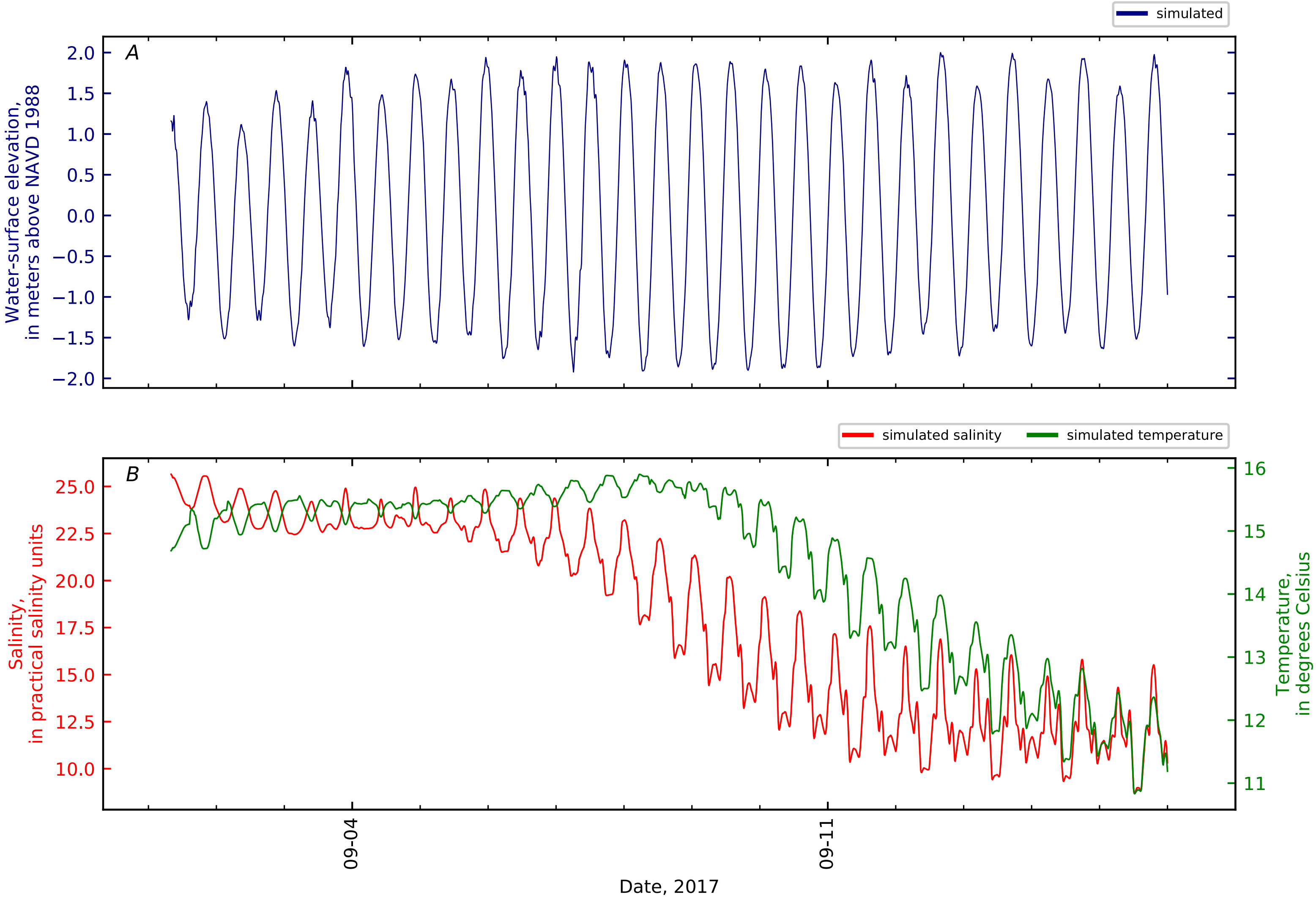

Figure B1-126. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 125, East Channel KM5.

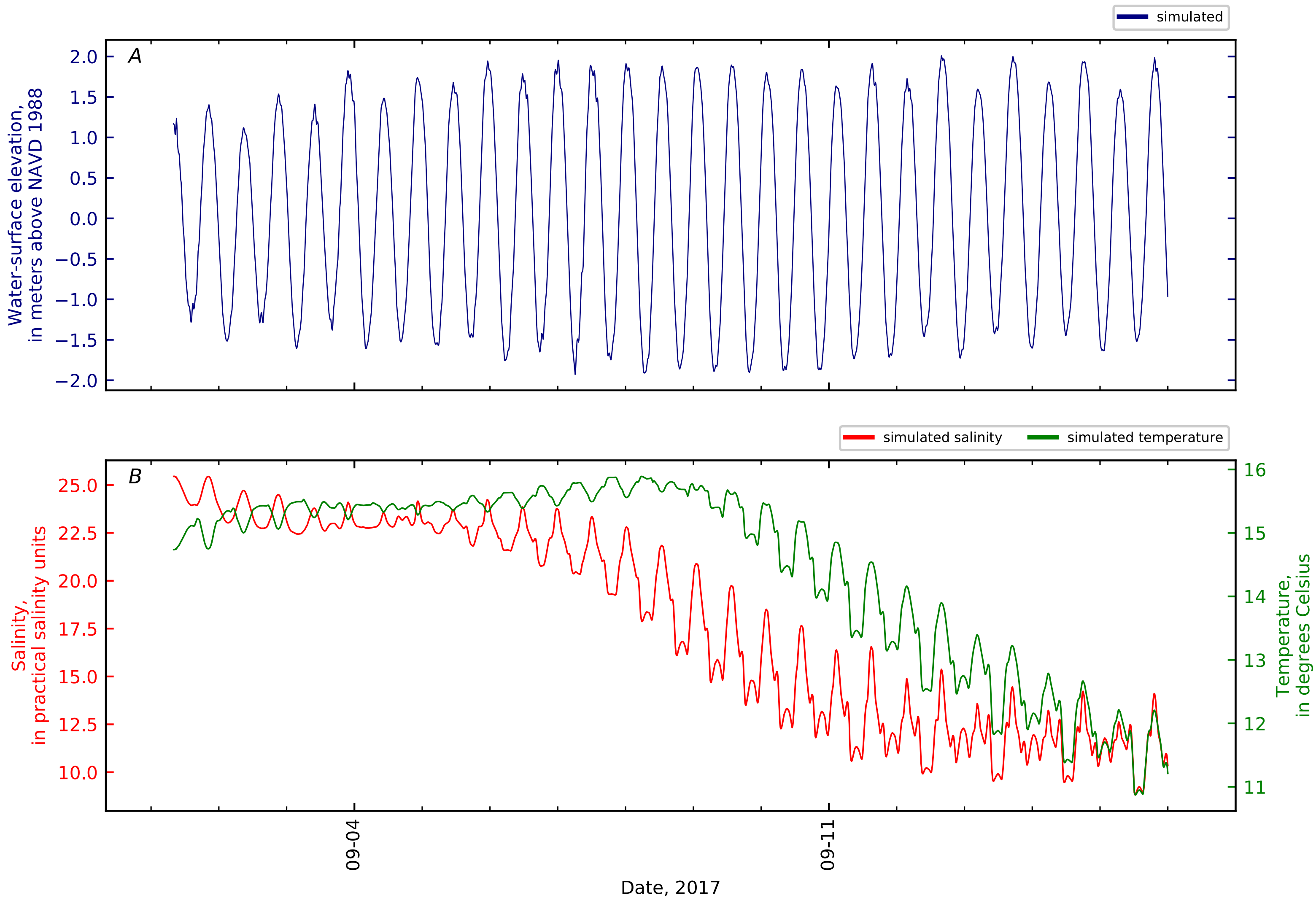

Figure B1-127. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 126, East Channel KM5.3 ERDC4 VN-MU3-SF-1.

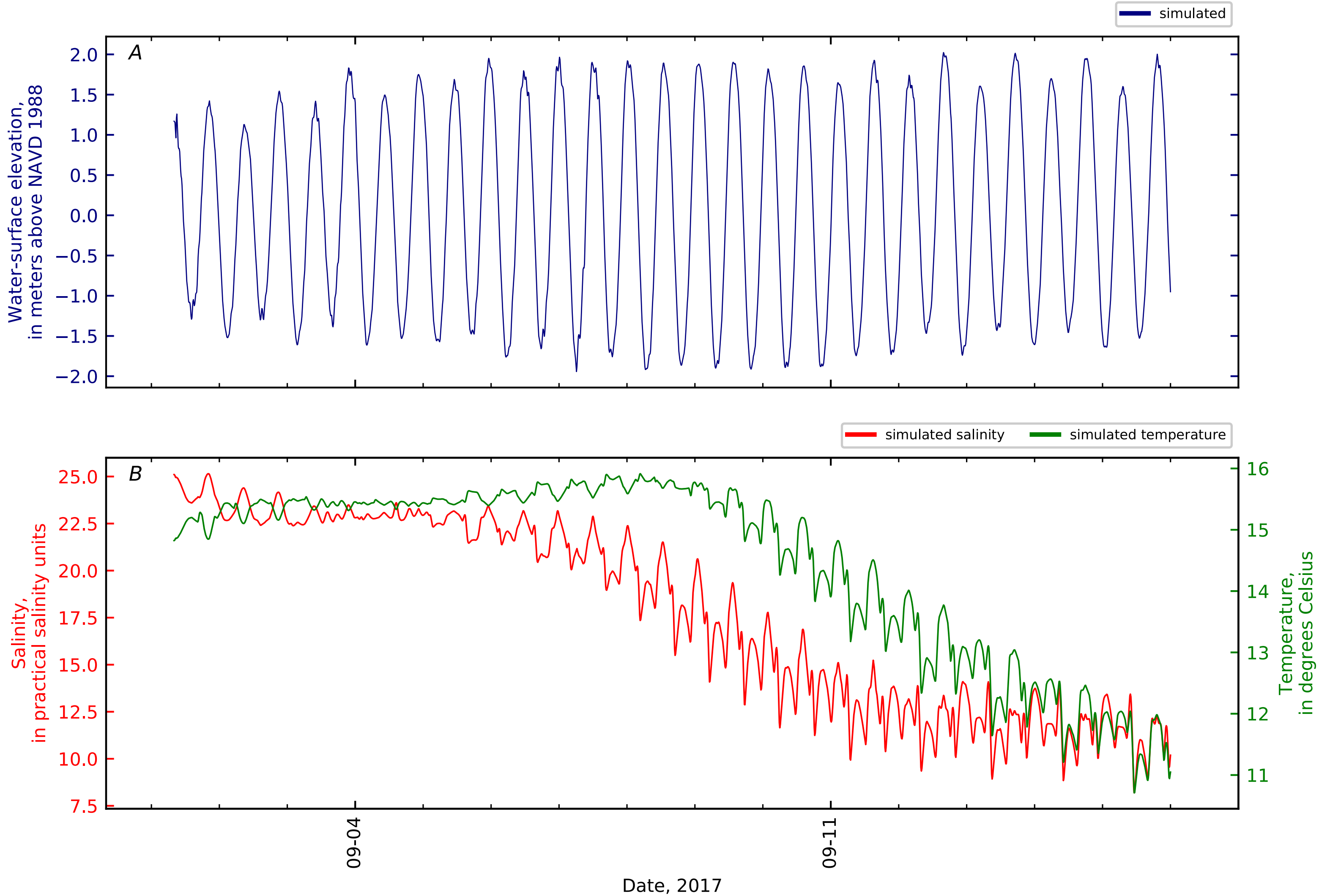

Figure B1-128. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 127, East Channel KM6.

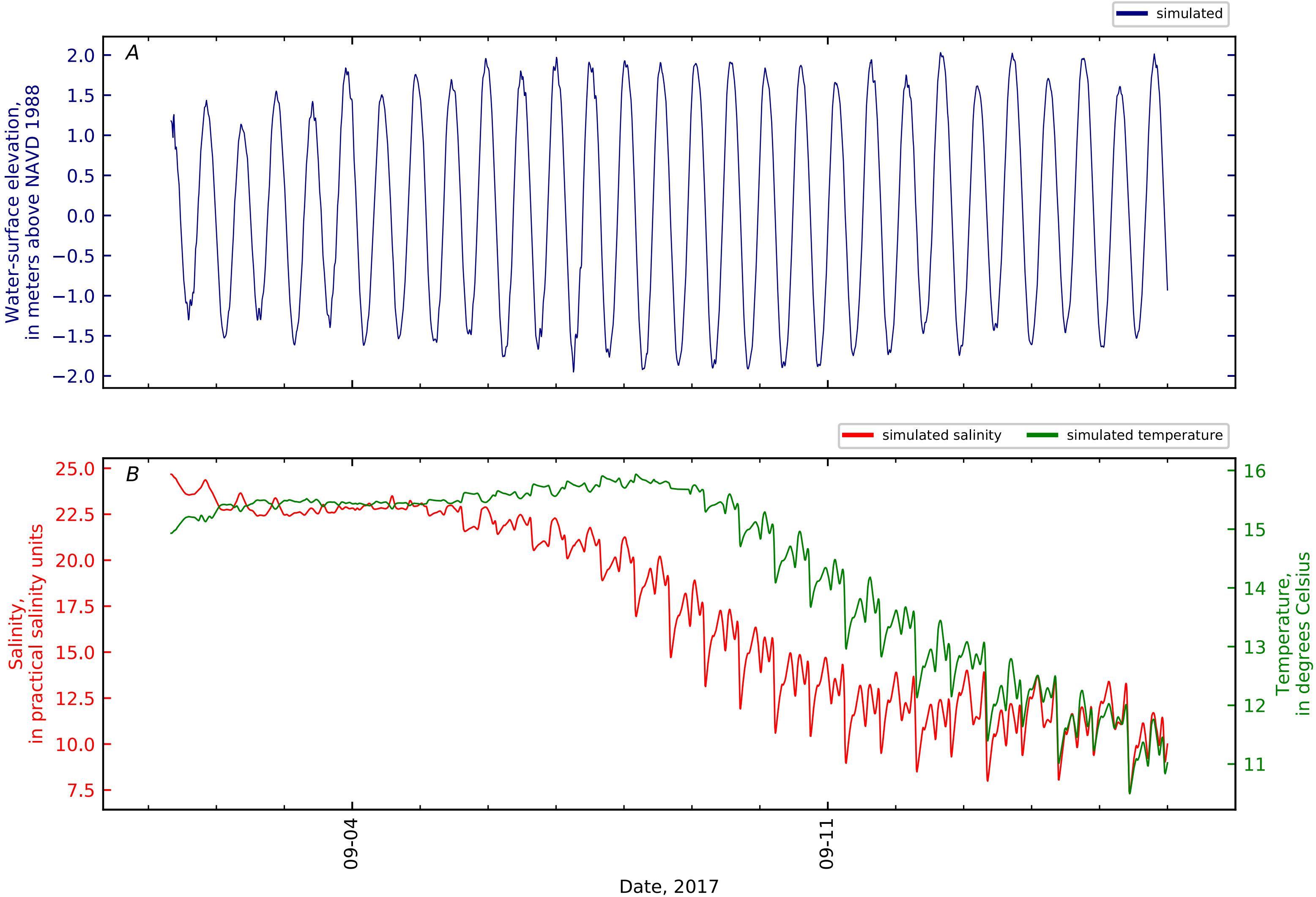

Figure B1-129. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 128, East Channel KM6.8 ERDC12 VN-MU4-SF-1.

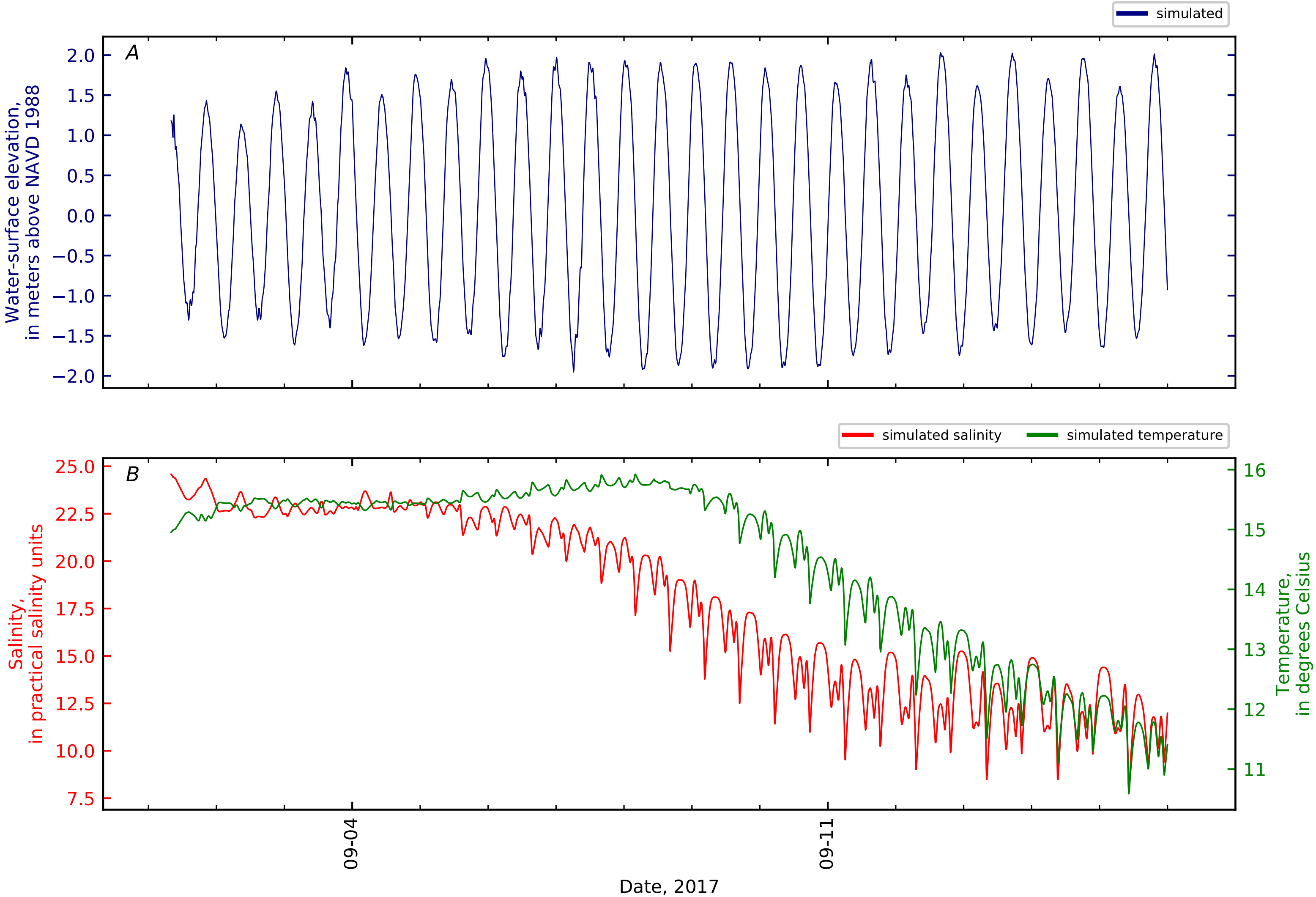

Figure B1-130. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 129, East Channel KM7.

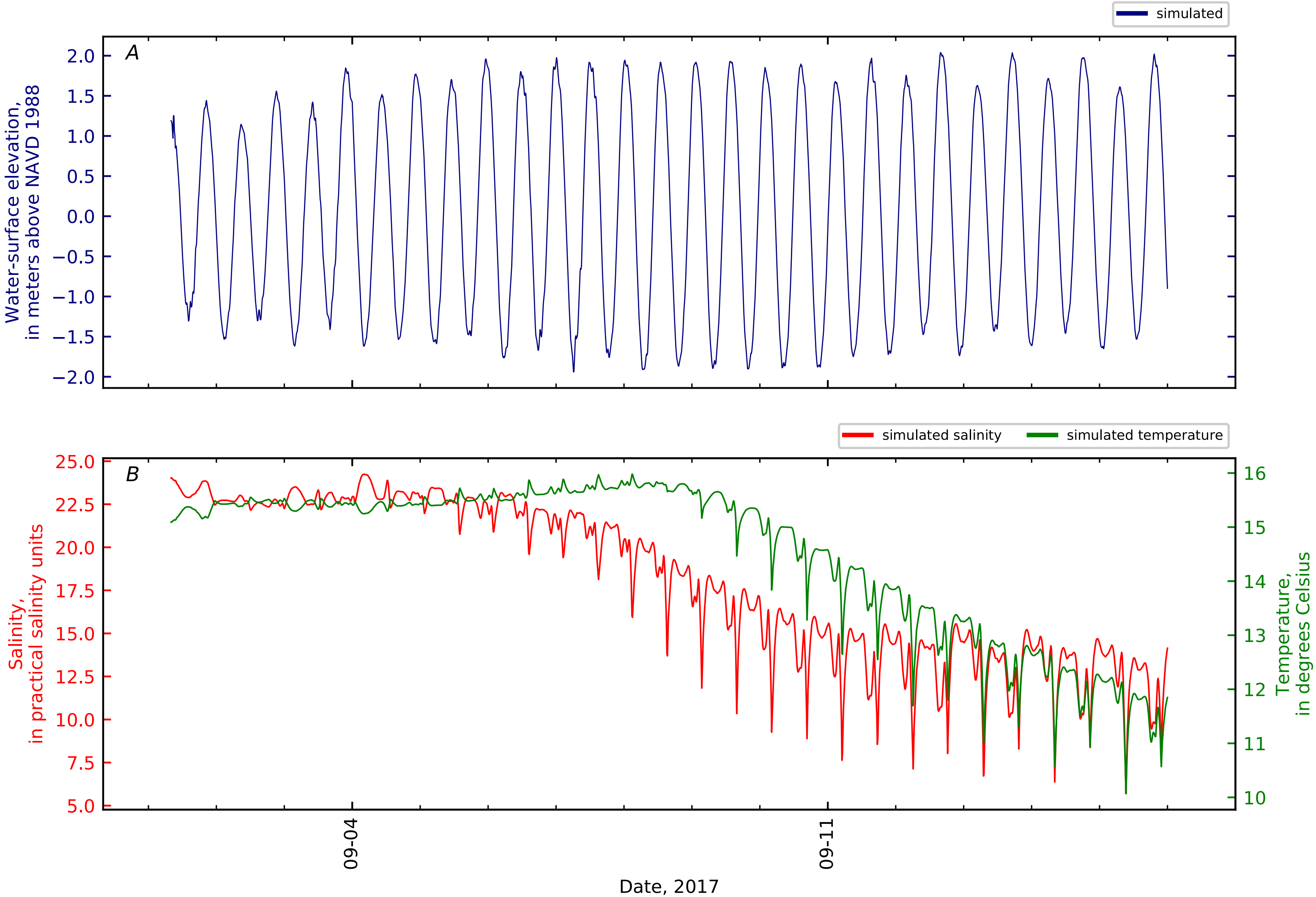

Figure B1-131. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 130, East Channel KM8.

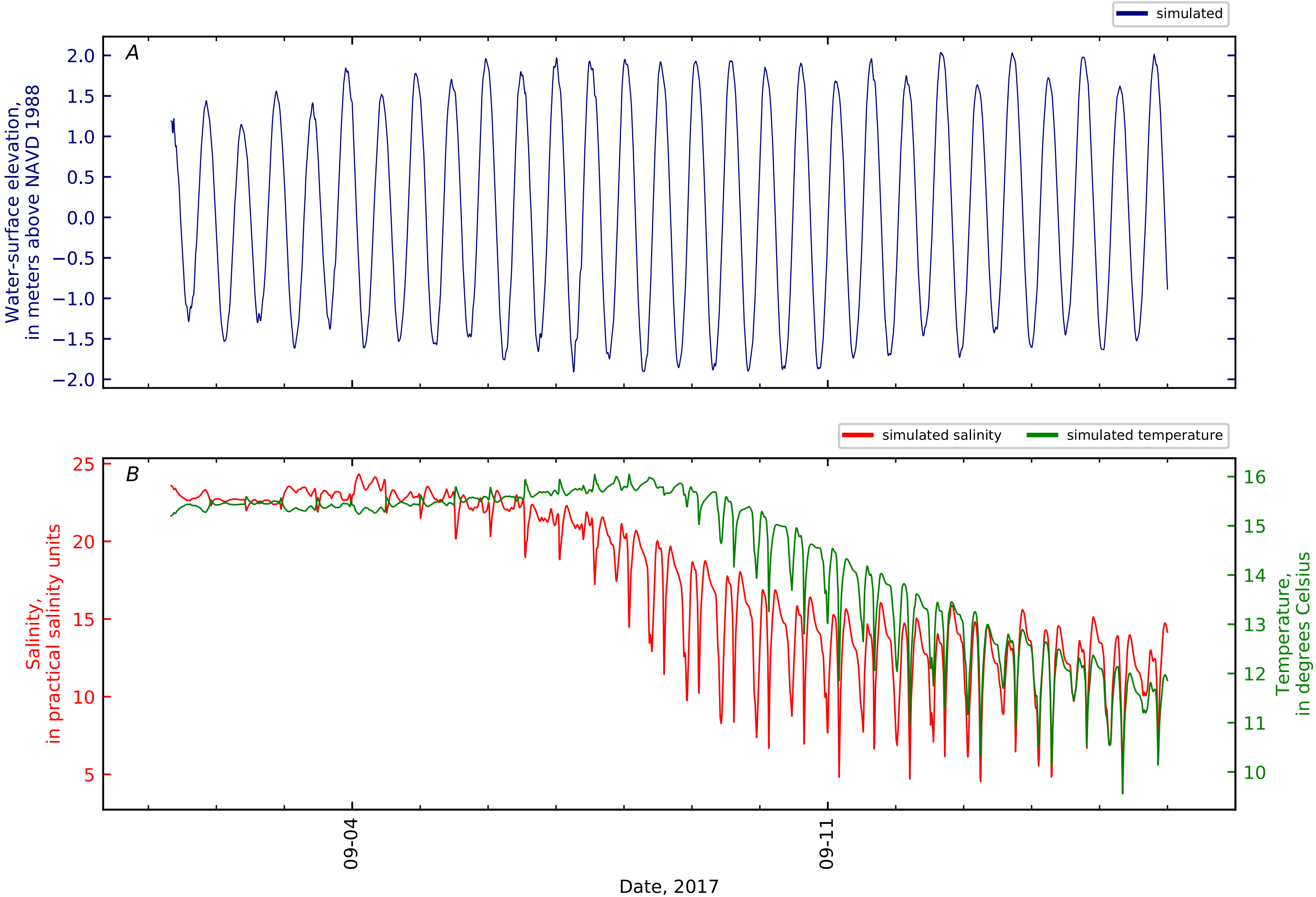

Figure B1-132. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 131, East Channel KM9.

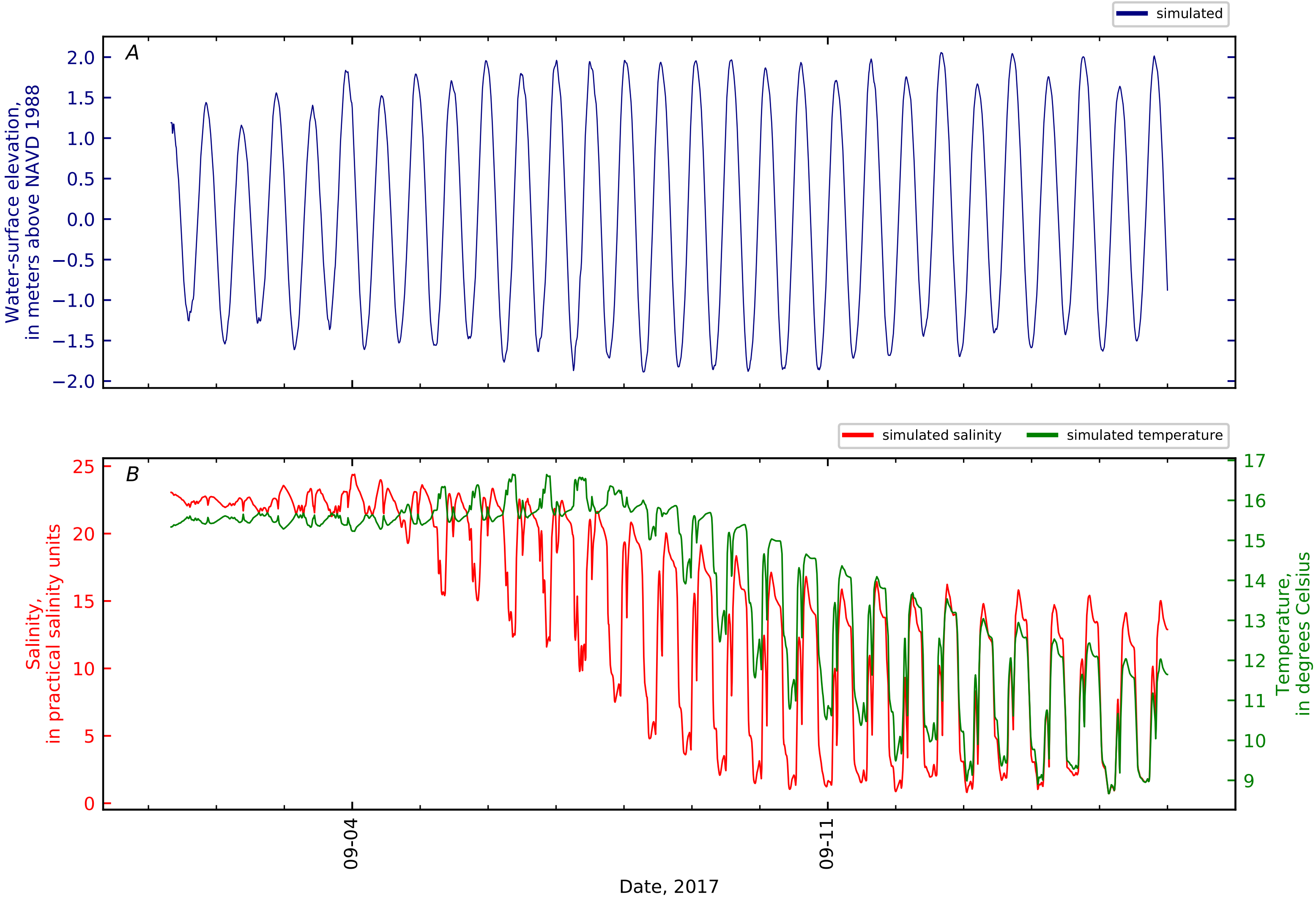

Figure B1-133. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 132, East Channel KM10.

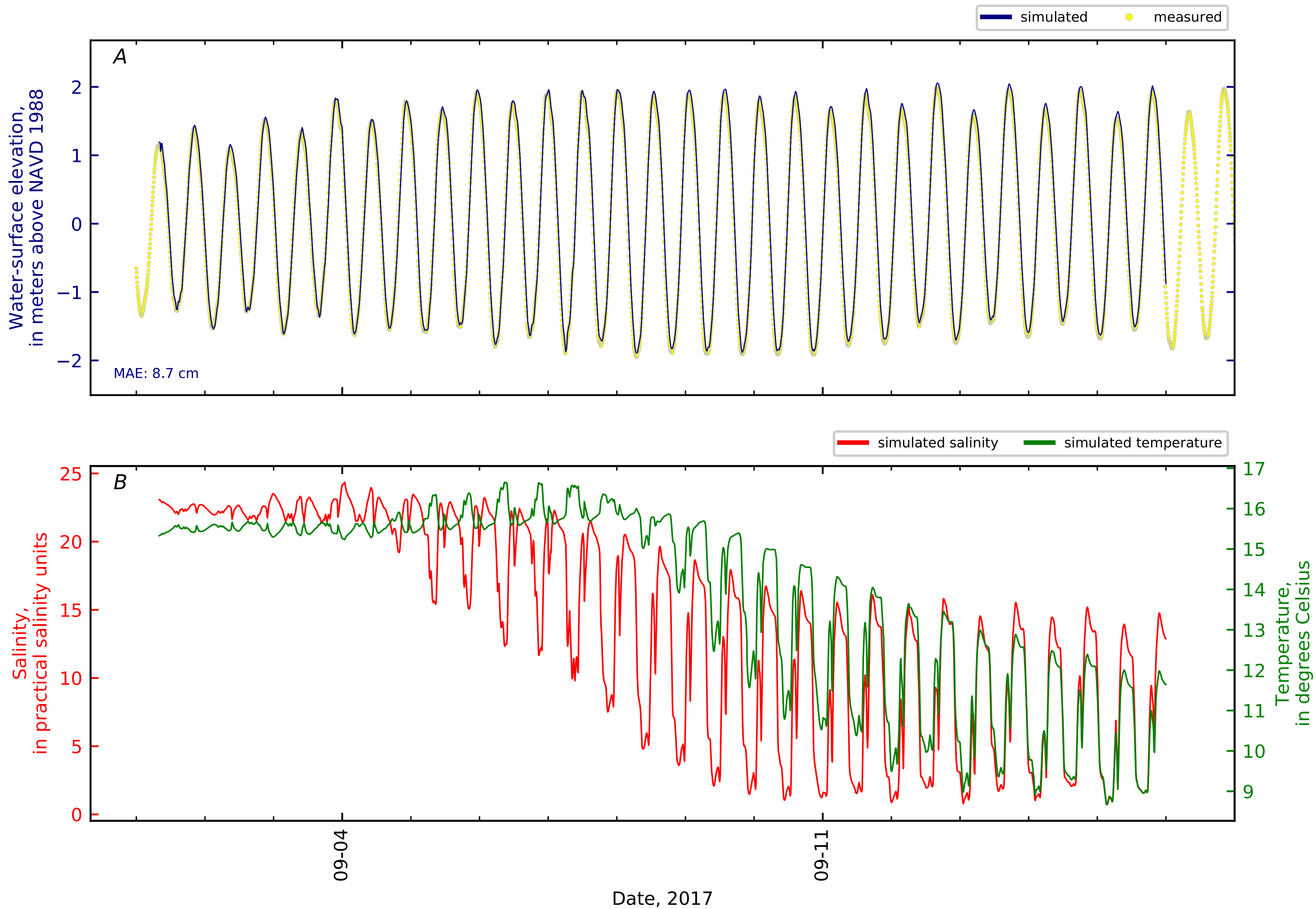

Figure B1-134. Time series for *A*, simulated and measured water-surface elevation; and *B*, simulated salinity and temperature at station 133, East Channel KM10 GS 443409068471801 at.

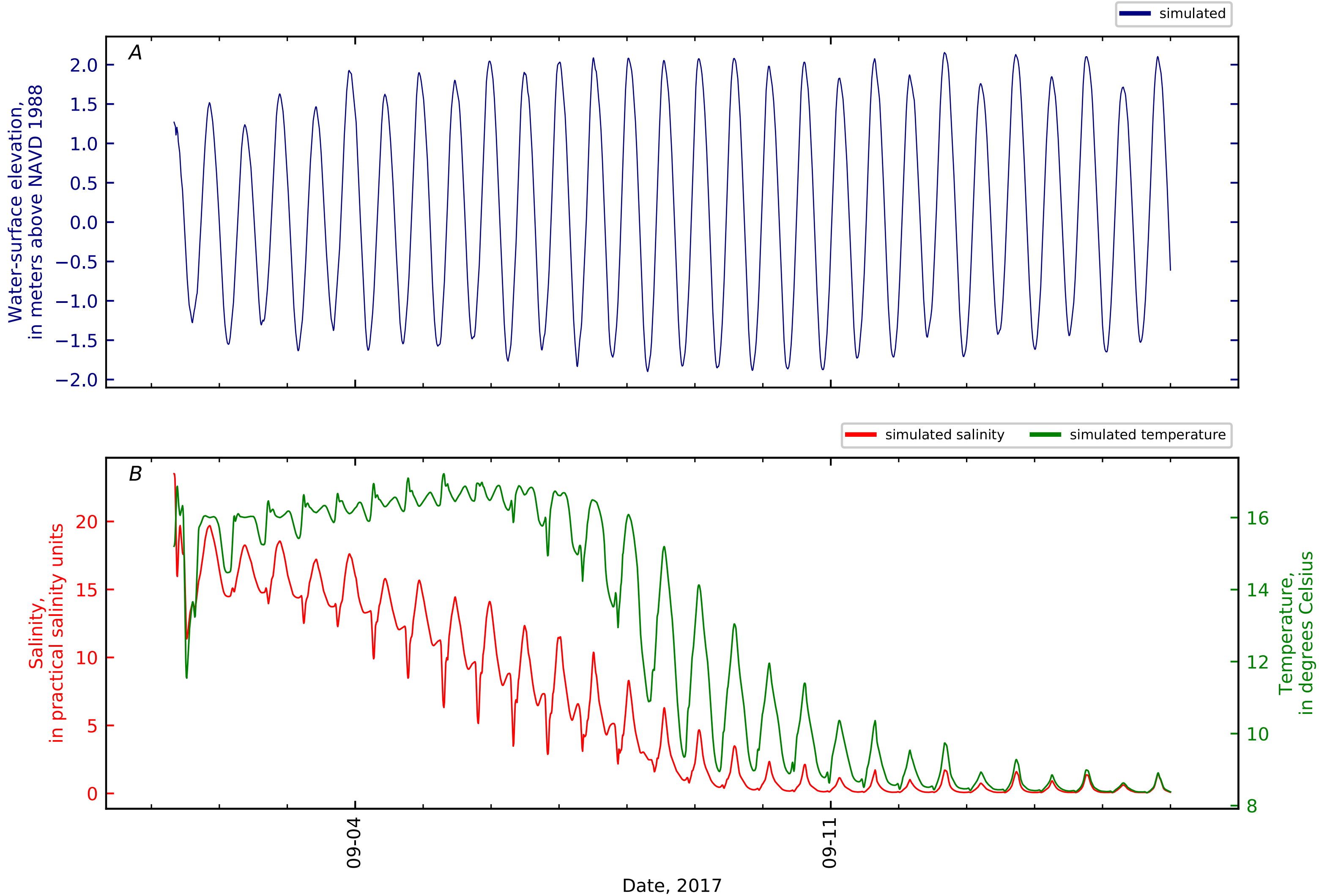

Figure B1-135. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 134, Mendall Marsh KM0.

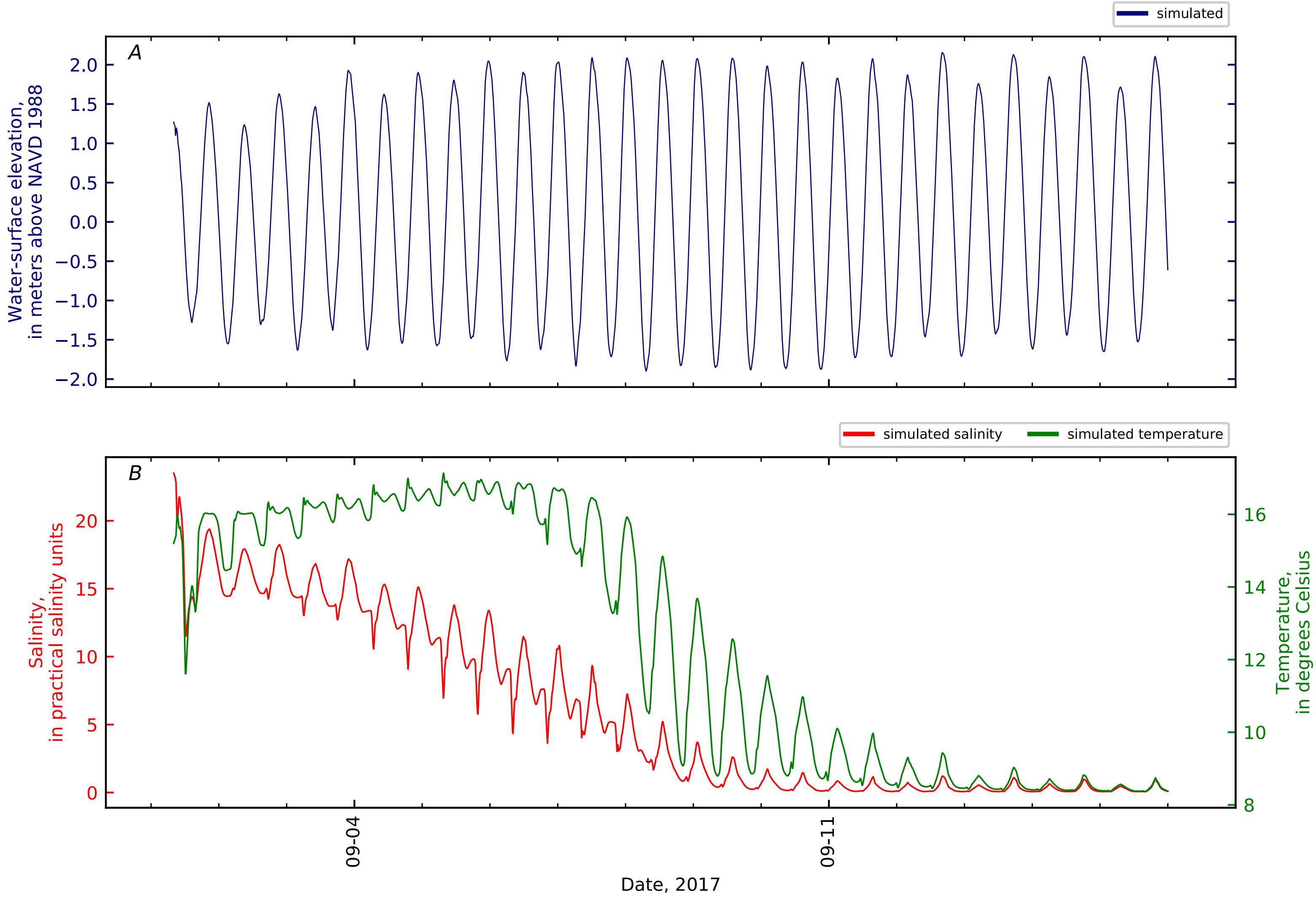

Figure B1-136. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 135, Mendall Marsh KM0.1 ERDC14 MM-MU6-SF-1.

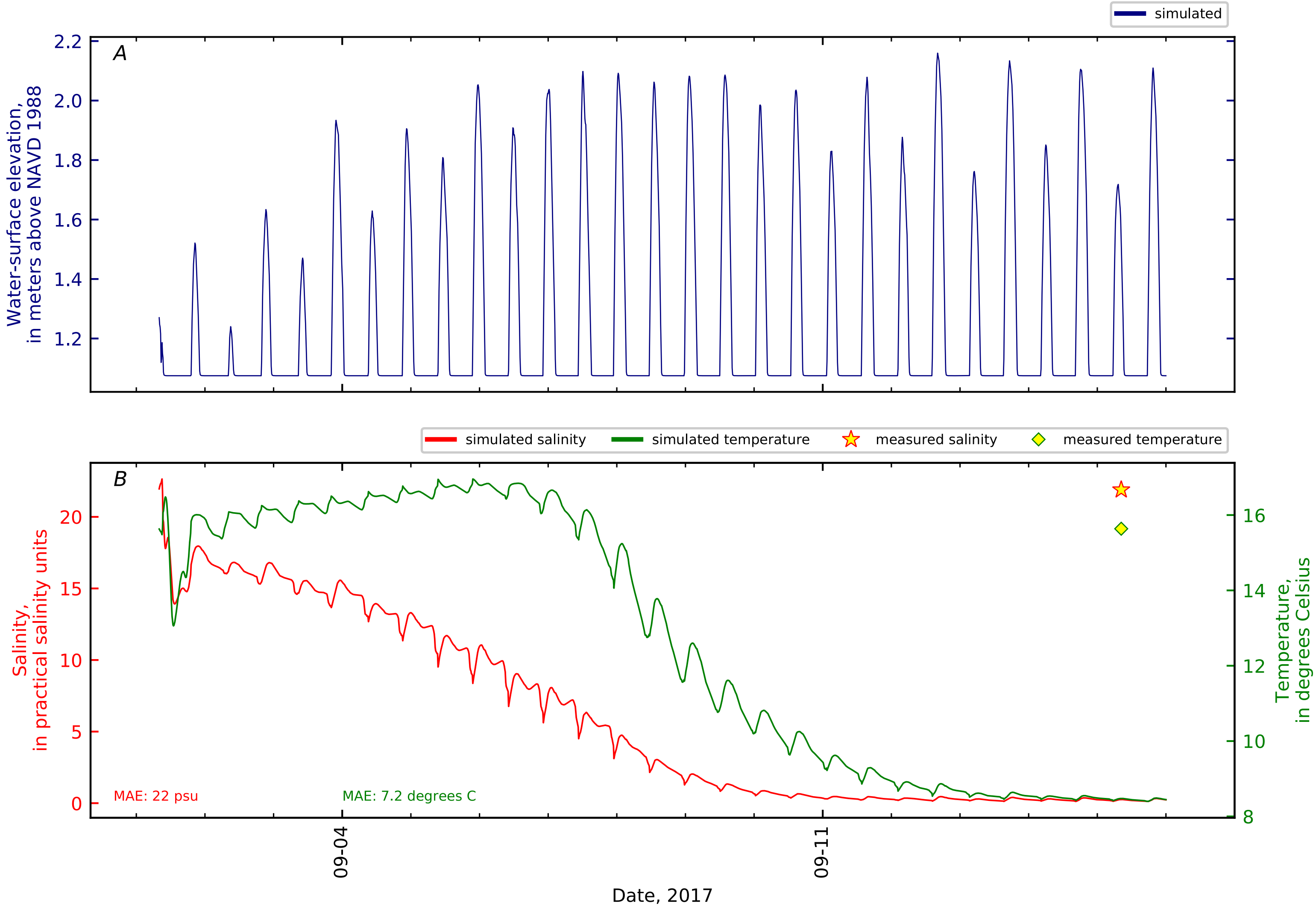

Figure B1-137. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 136, Mendall Marsh KM0.4 GS CTD2-01.

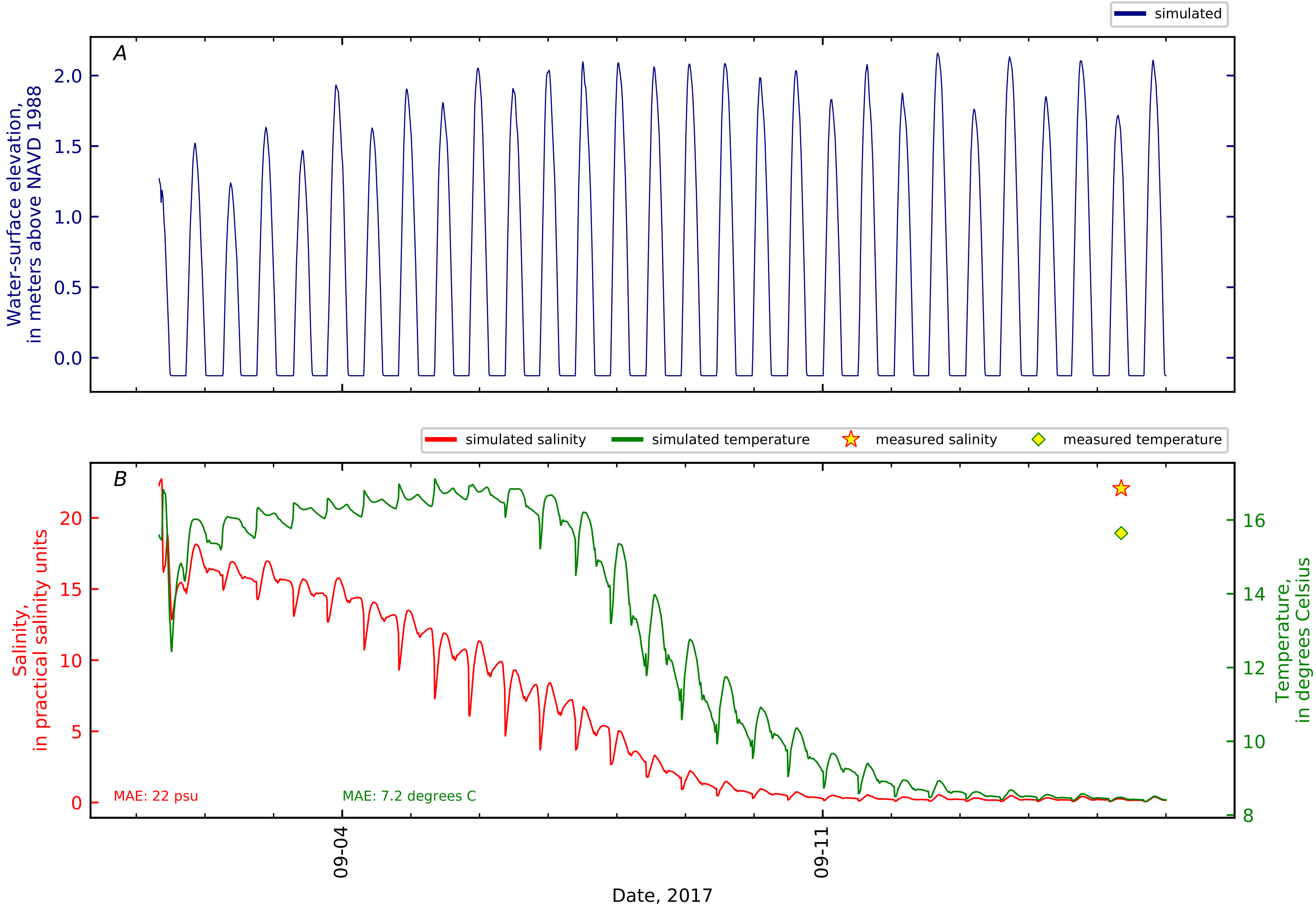

Figure B1-138. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 137, Mendall Marsh KM0.4 GS CTD2-02.

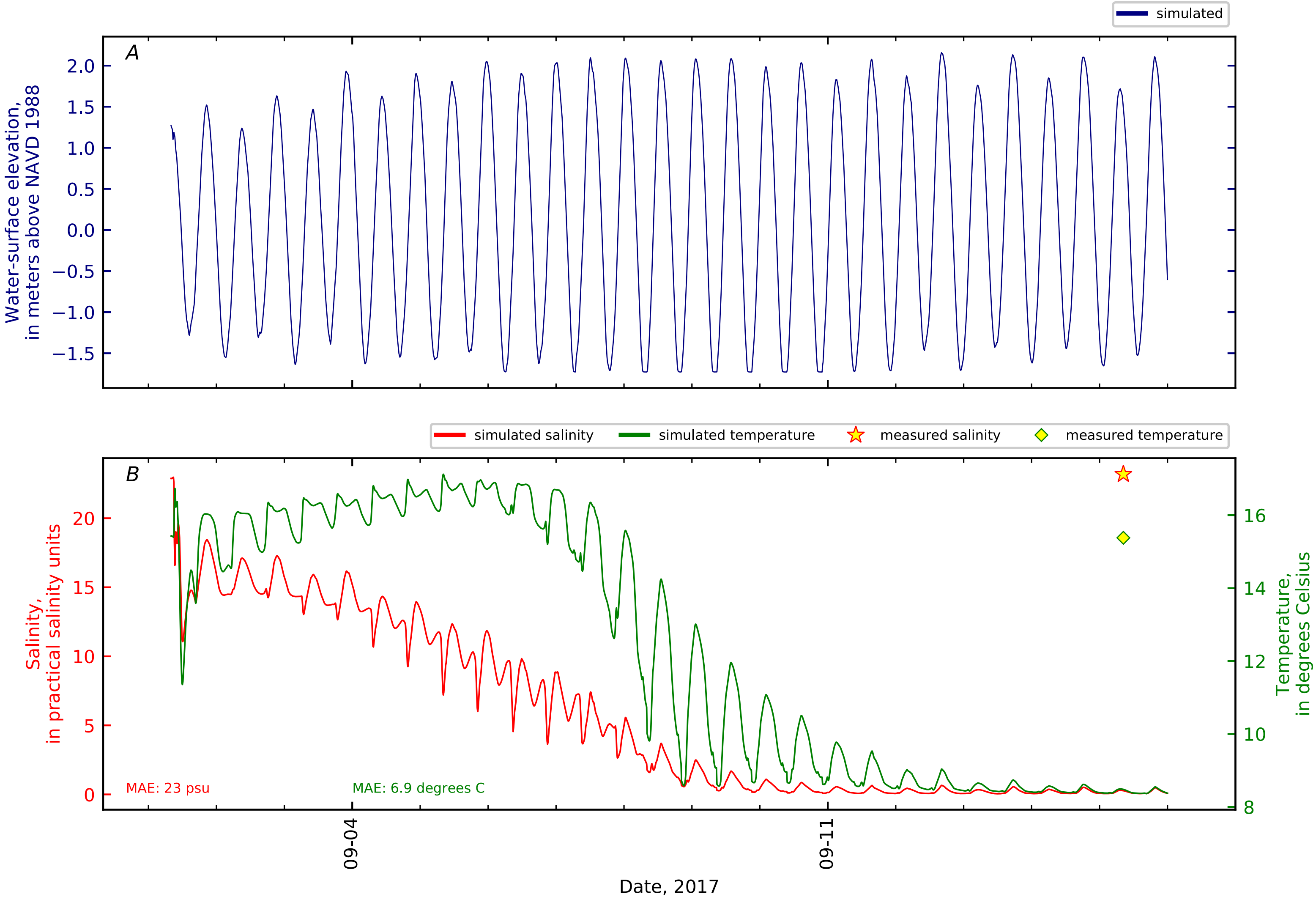

Figure B1-139. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 138, Mendall Marsh KM0.4 GS CTD2-03.

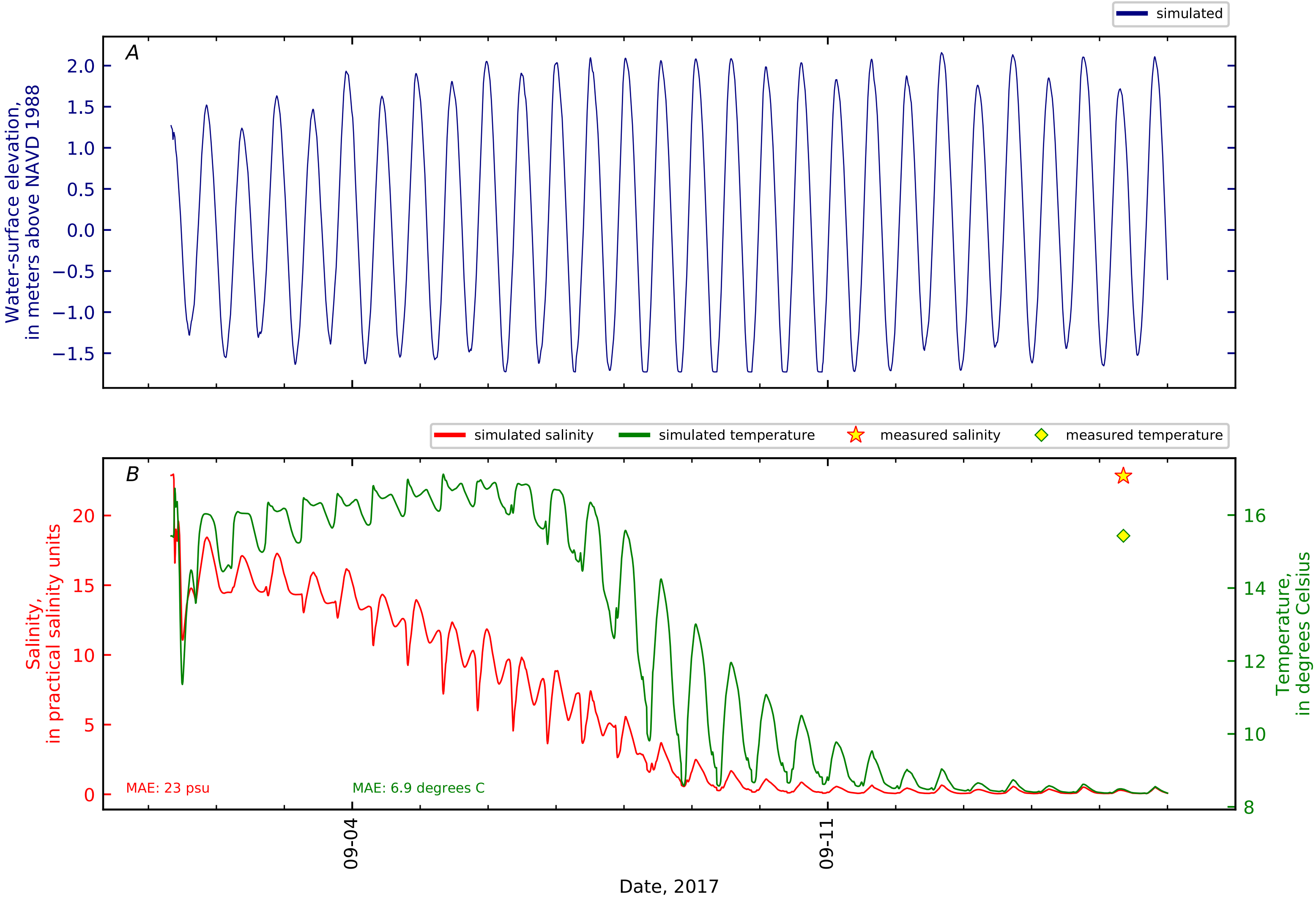

Figure B1-140. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 139, Mendall Marsh KM0.4 GS CTD2-04.

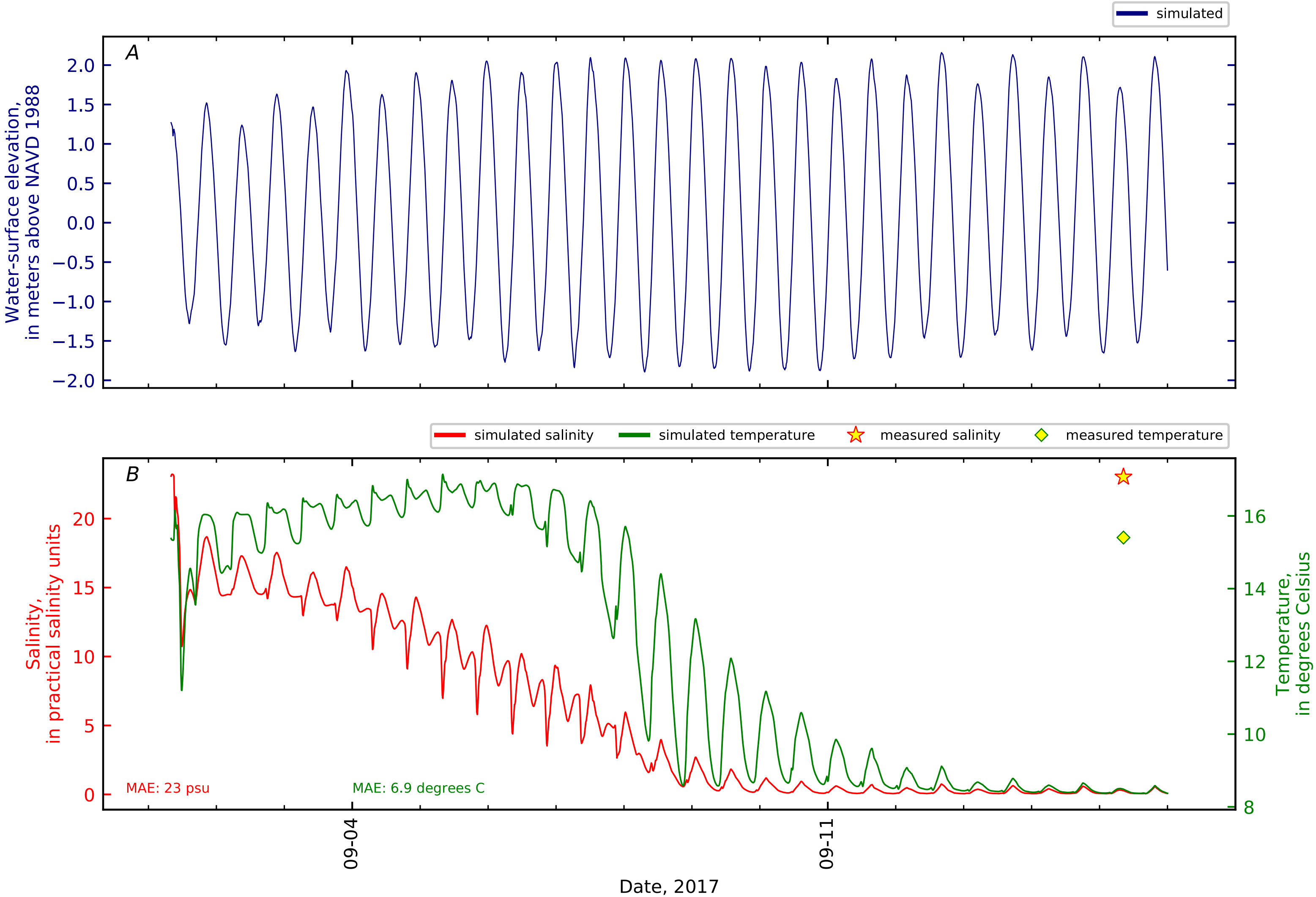

Figure B1-141. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 140, Mendall Marsh KM0.4 GS CTD2-05.

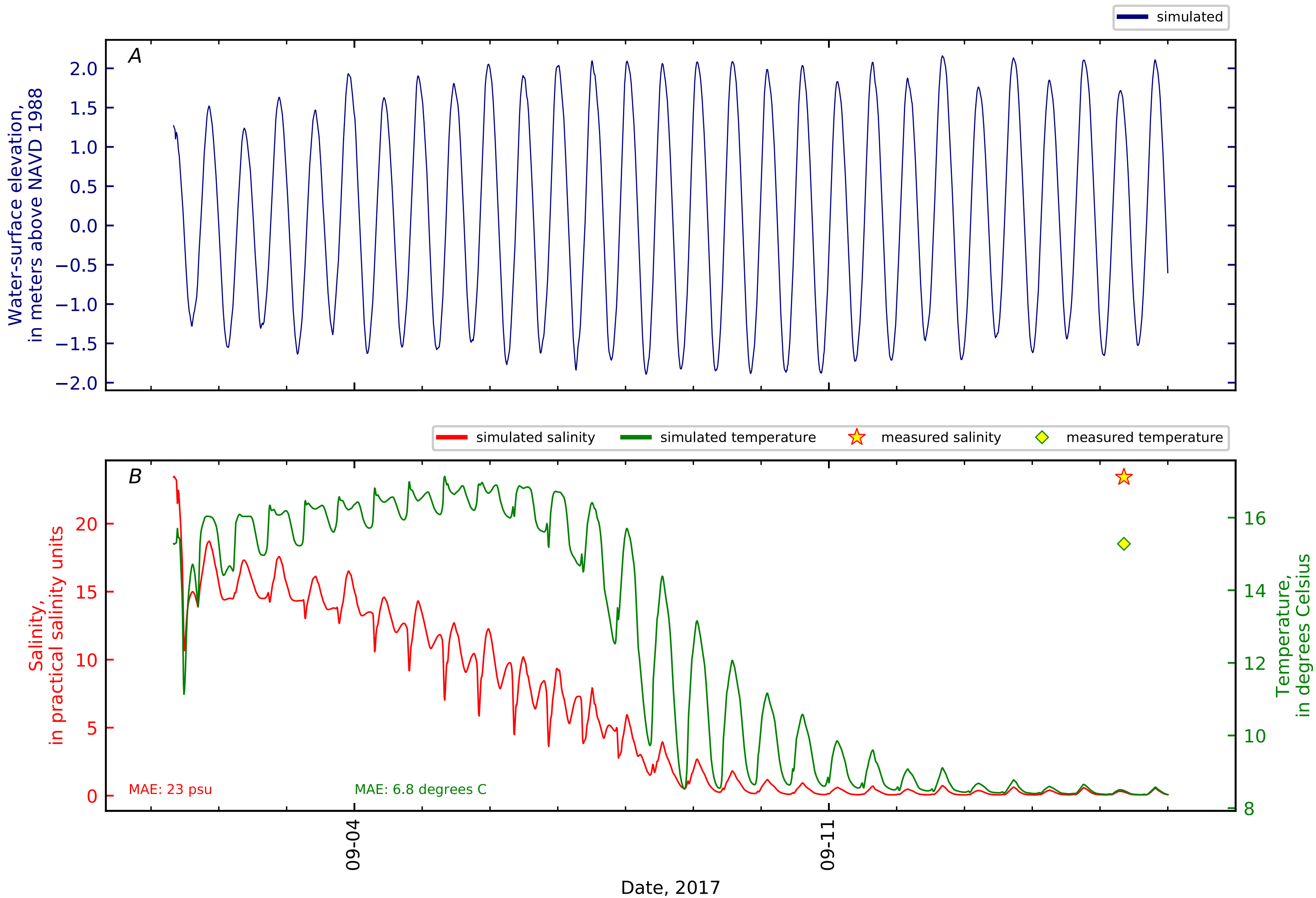

Figure B1-142. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 141, Mendall Marsh KM0.4 GS CTD2-06.

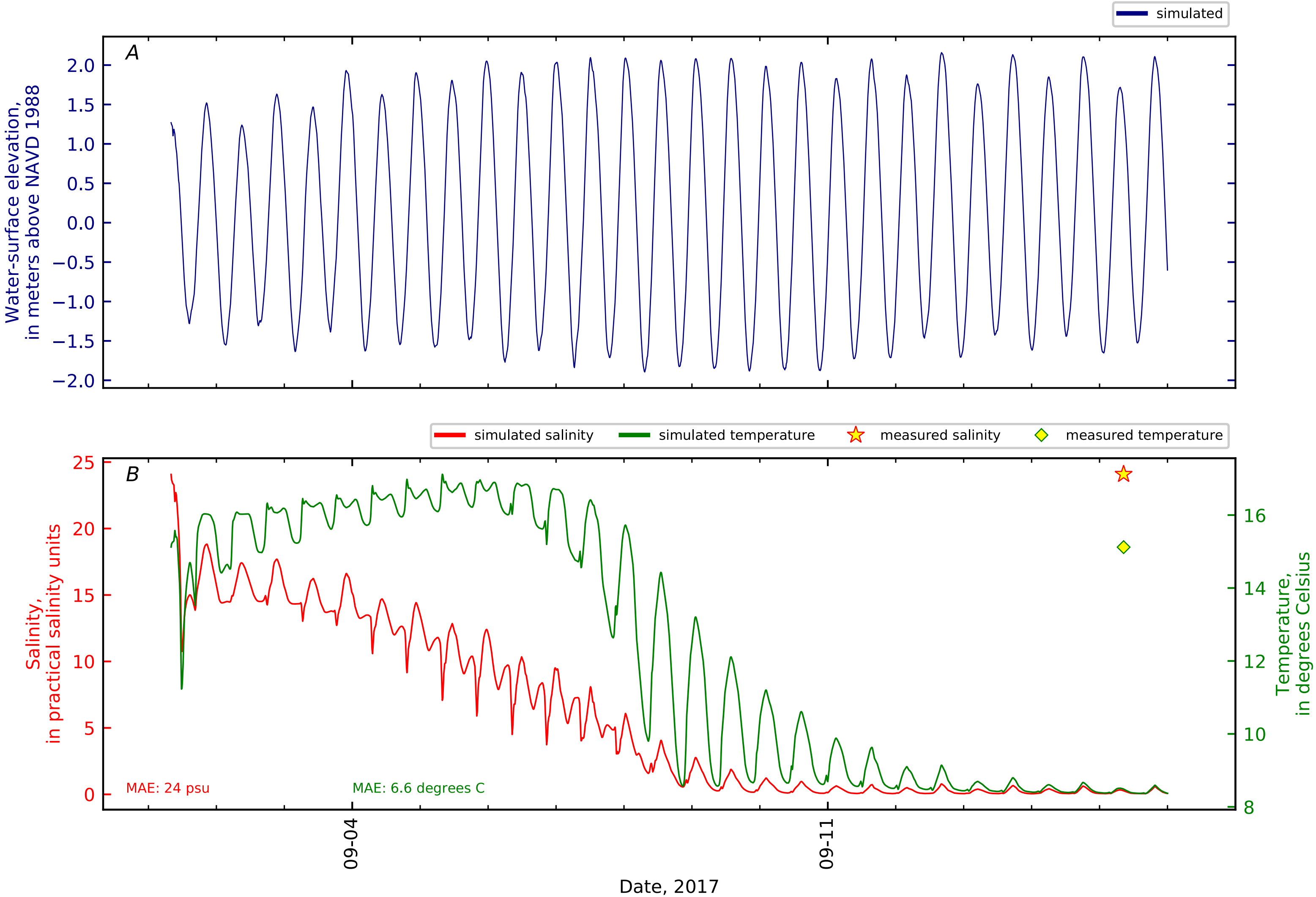

Figure B1-143. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 142, Mendall Marsh KM0.4 GS CTD2-07.

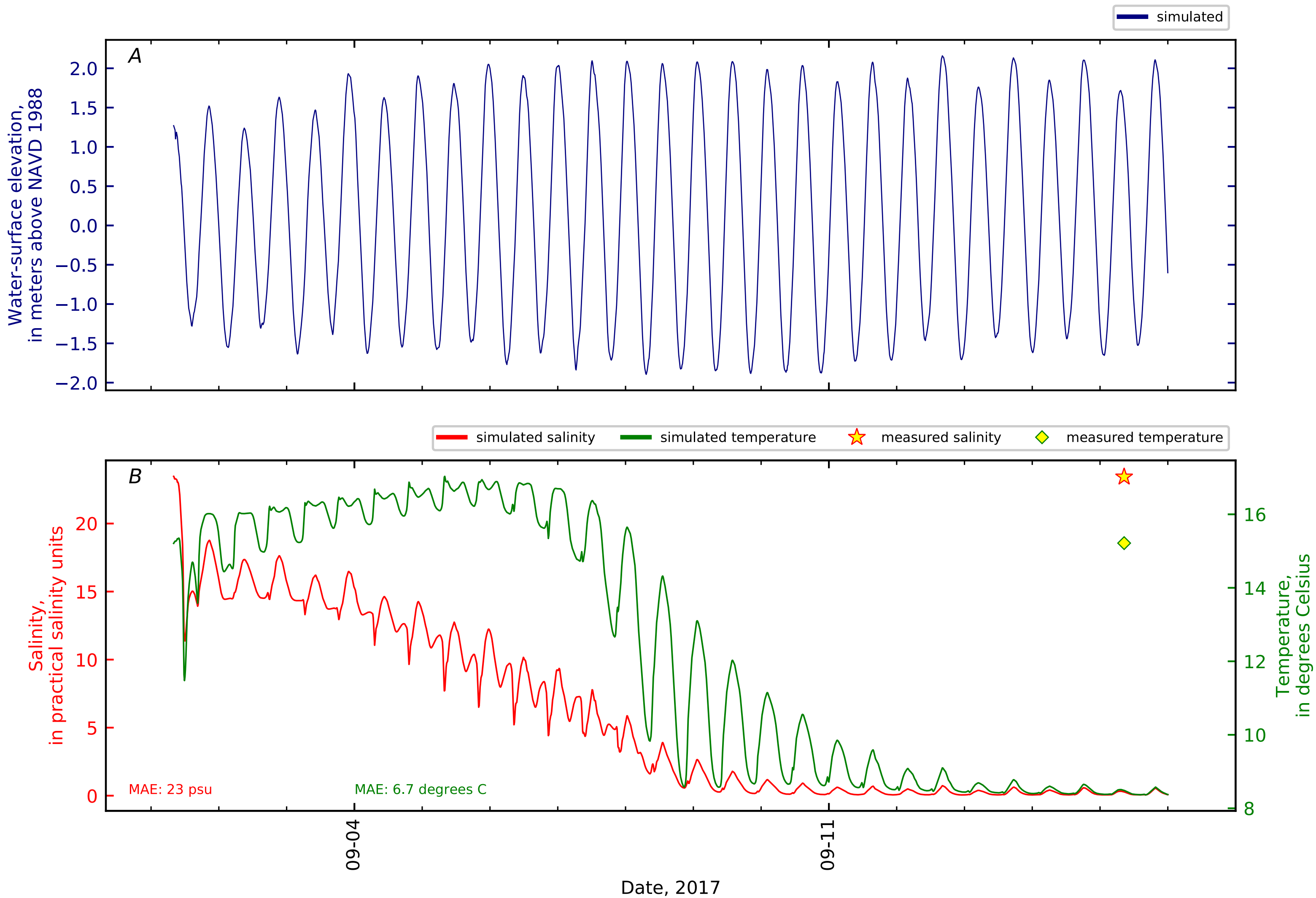

Figure B1-144. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 143, Mendall Marsh KM0.4 GS CTD2-08.

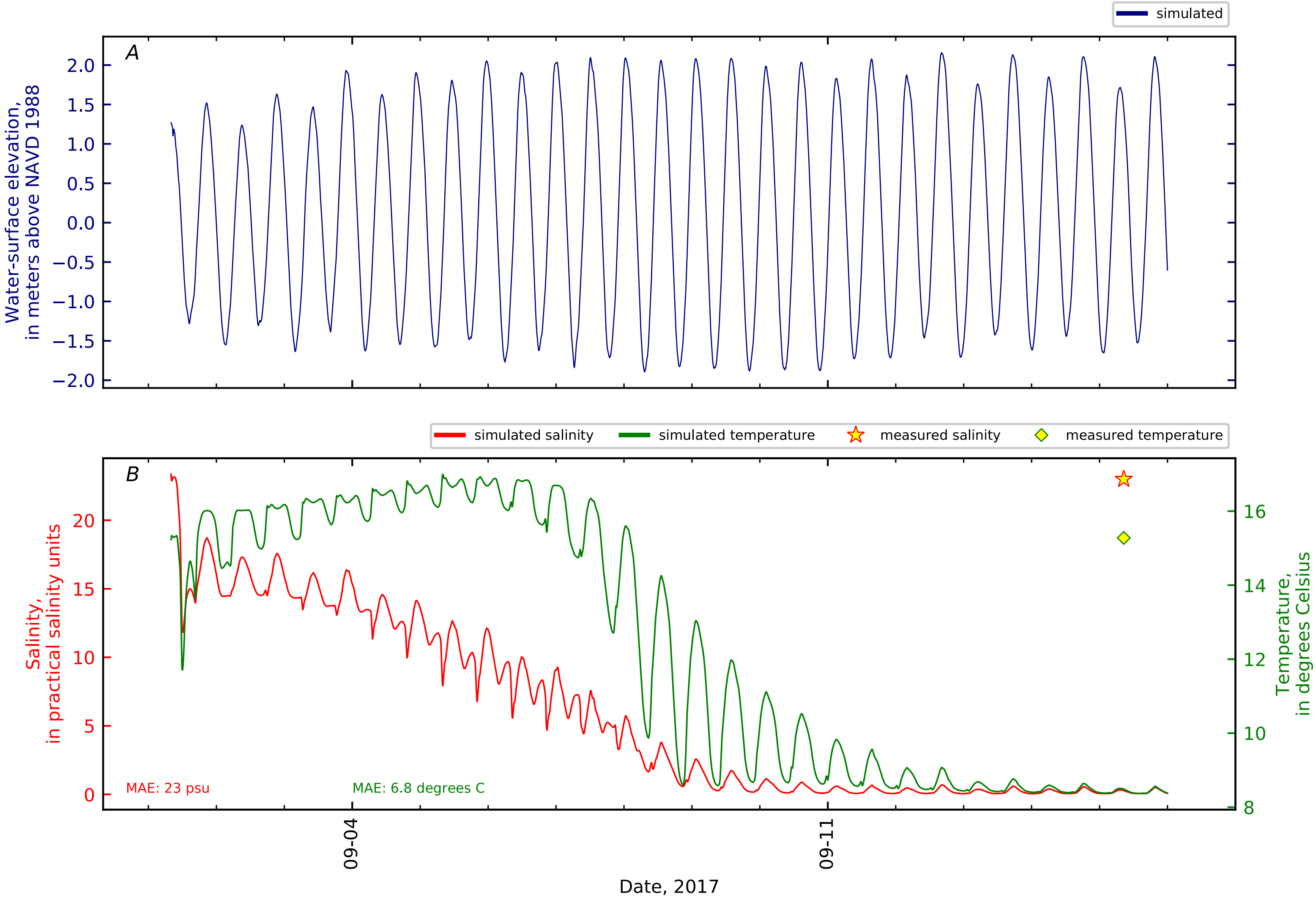

Figure B1-145. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 144, Mendall Marsh KM0.4 GS CTD2-09.

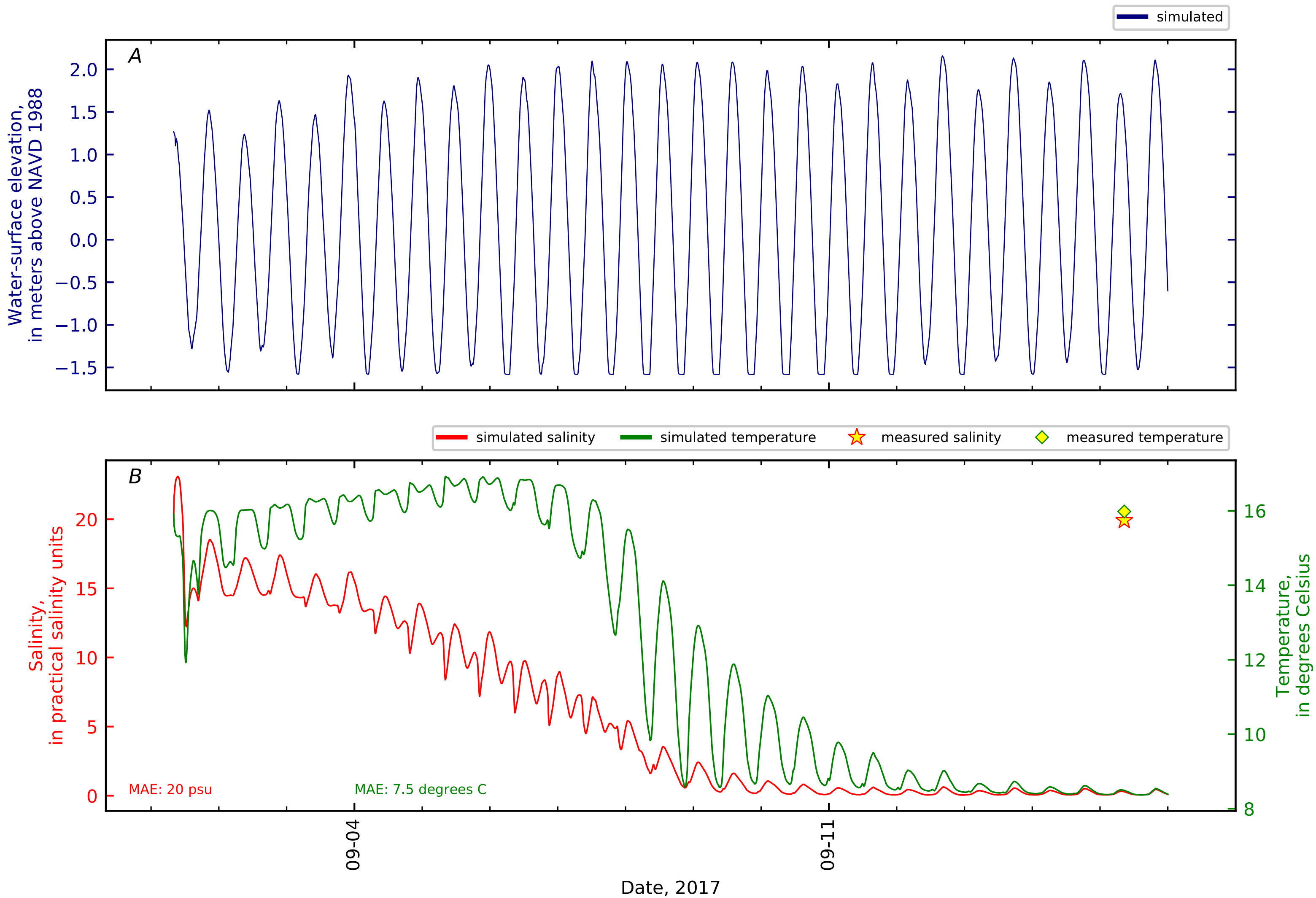

Figure B1-146. *A*, Time series for simulated water-surface elevation; and *B*, time series for simulated salinity and temperature, and depth-average salinity and temperature measured with casts of a conductivity-temperature-depth instrument at station 145, Mendall Marsh KM0.4 GS CTD2-10.

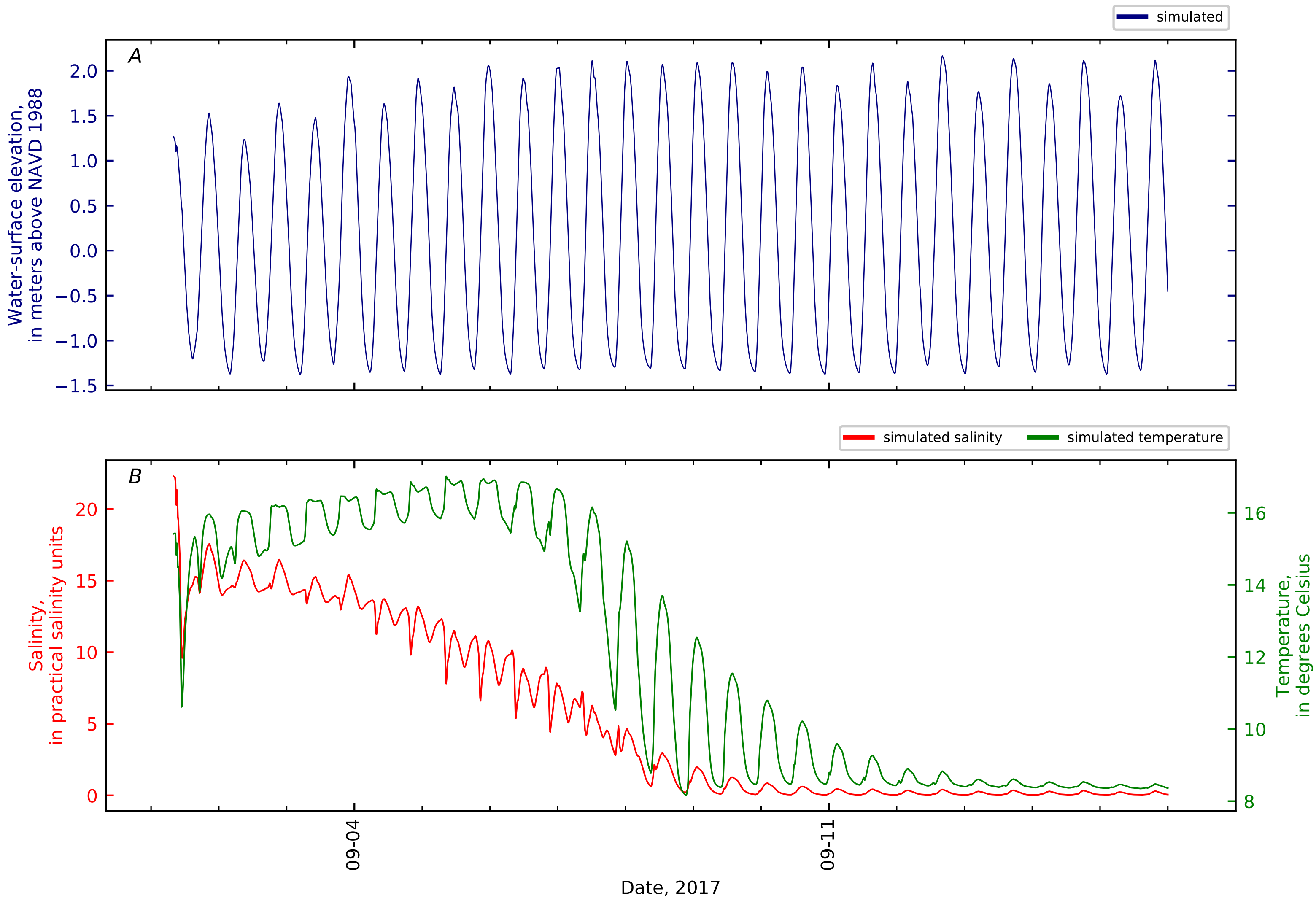

Figure B1-147. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 146, Mendall Marsh KM1.

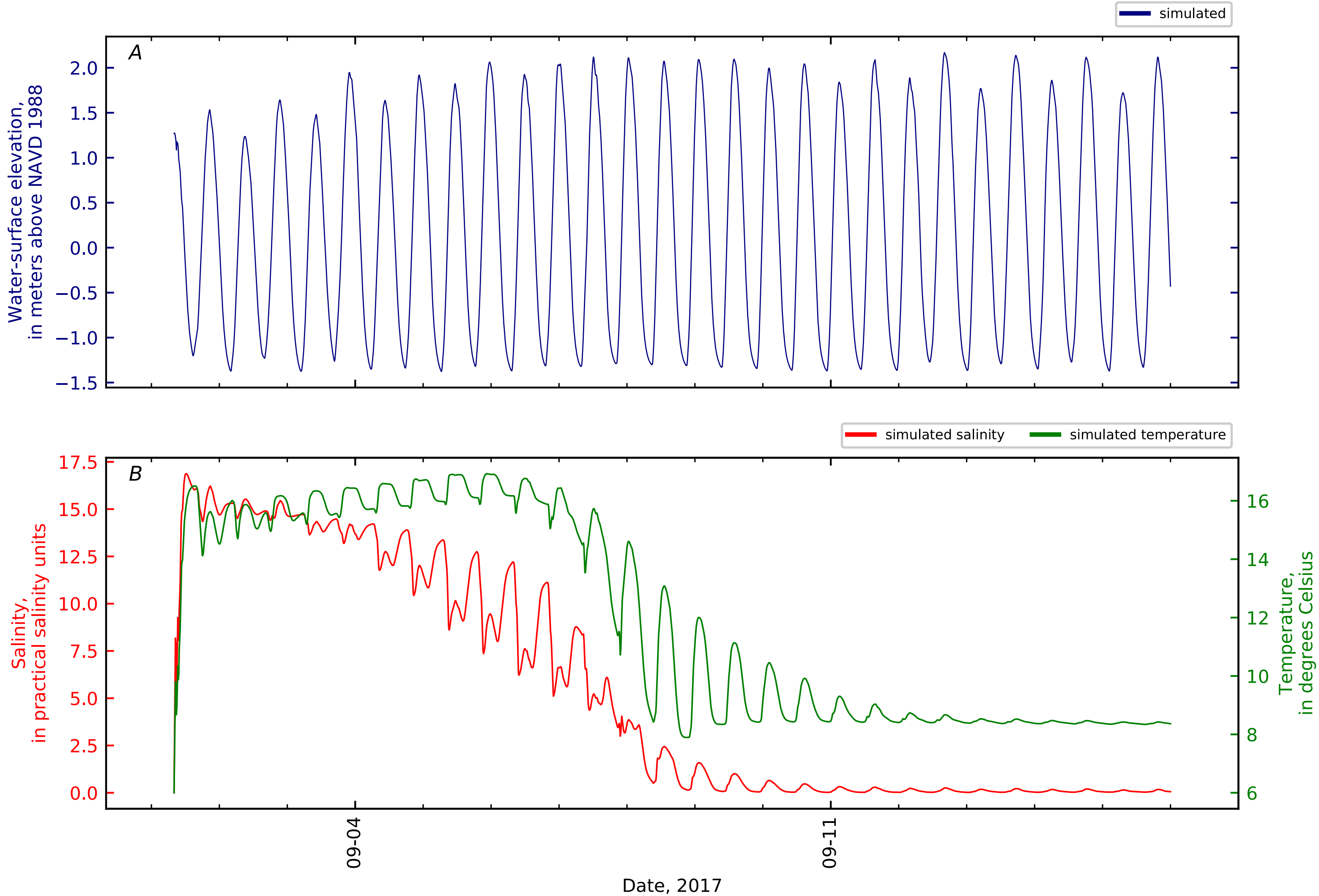

Figure B1-148. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 147, Mendall Marsh KM1.5 WHOI3 2010.

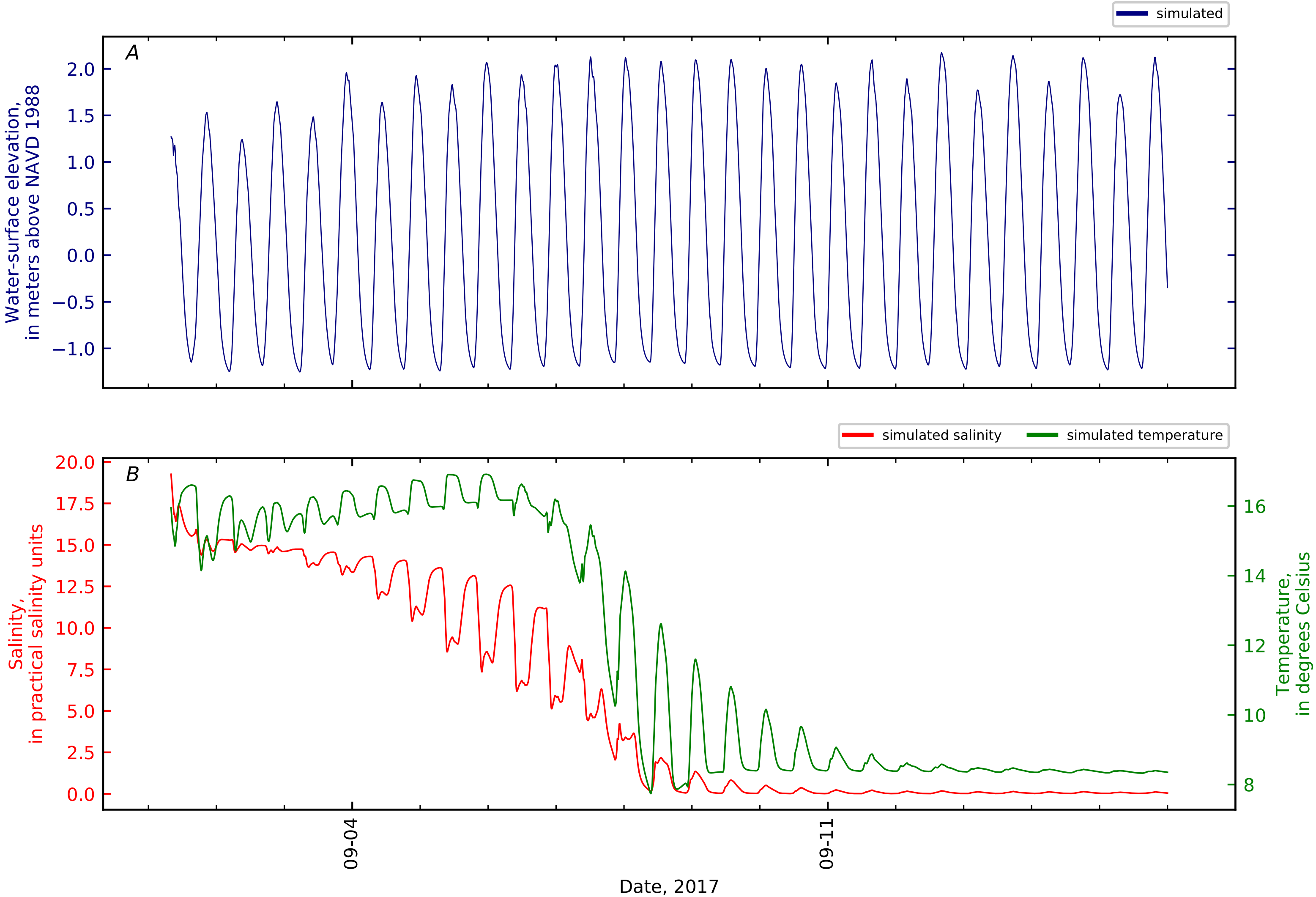

Figure B1-149. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 148, Mendall Marsh KM2.

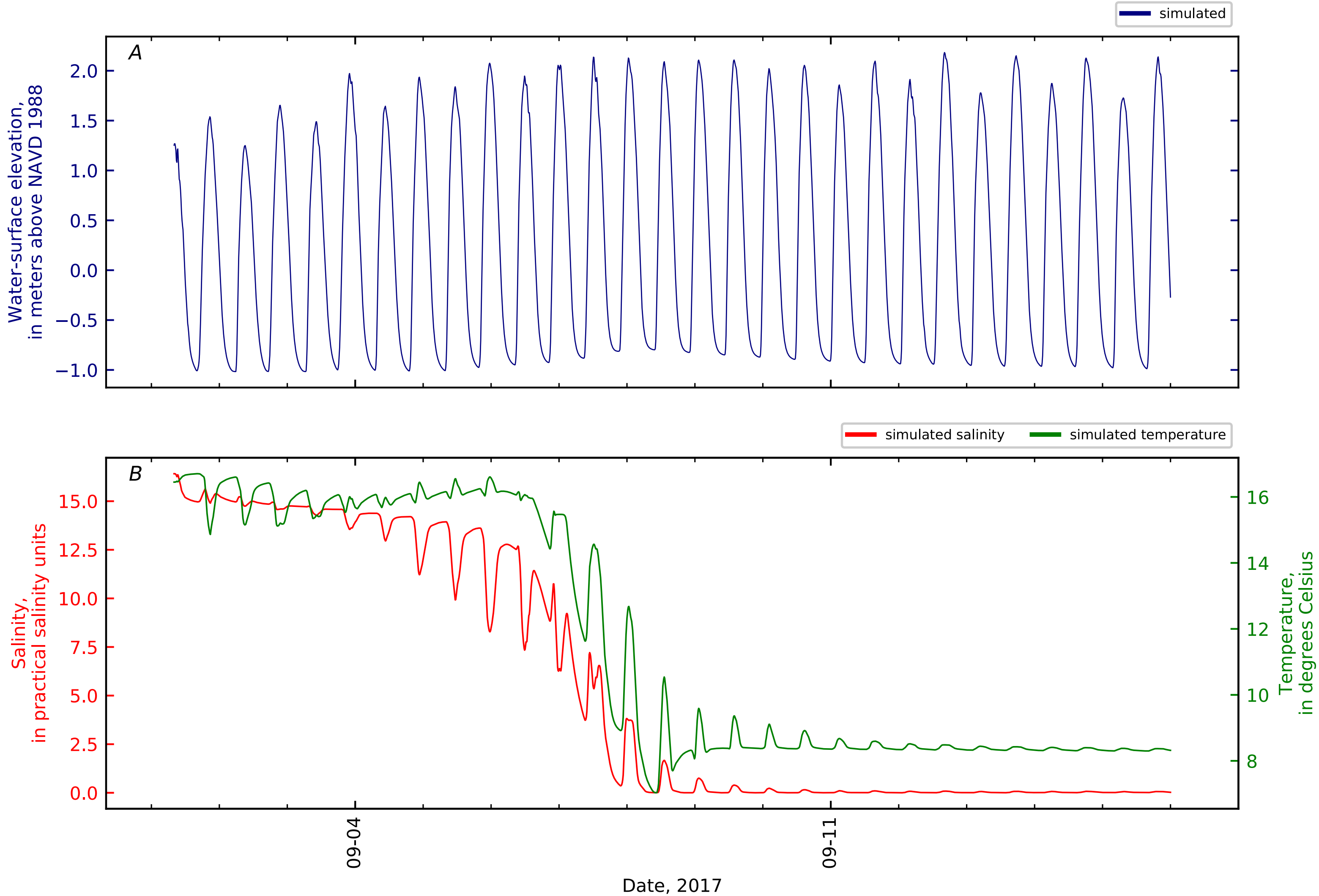

Figure B1-150. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 149, Mendall Marsh KM3.

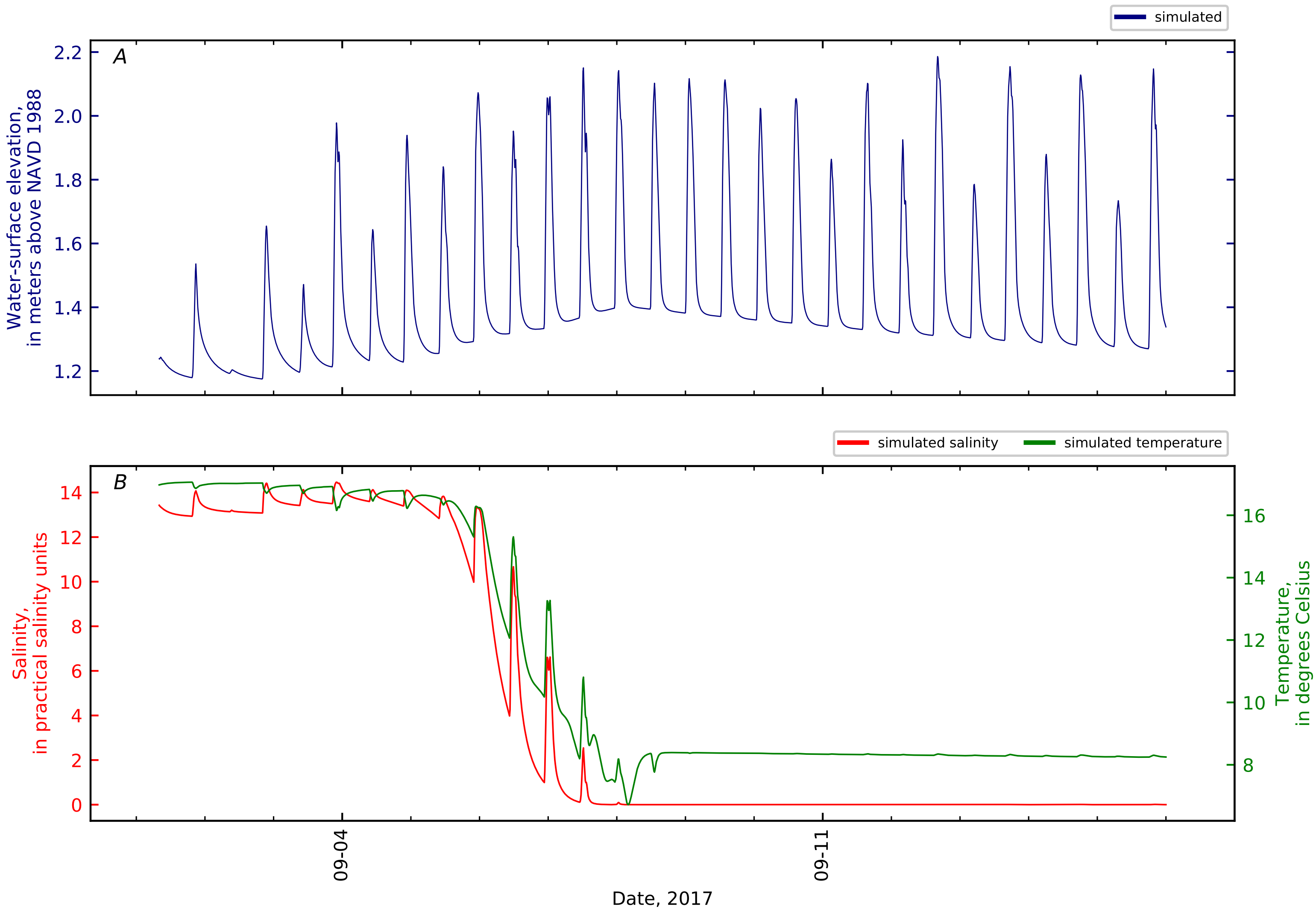

Figure B1-151. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 150, Mendall Marsh KM4.

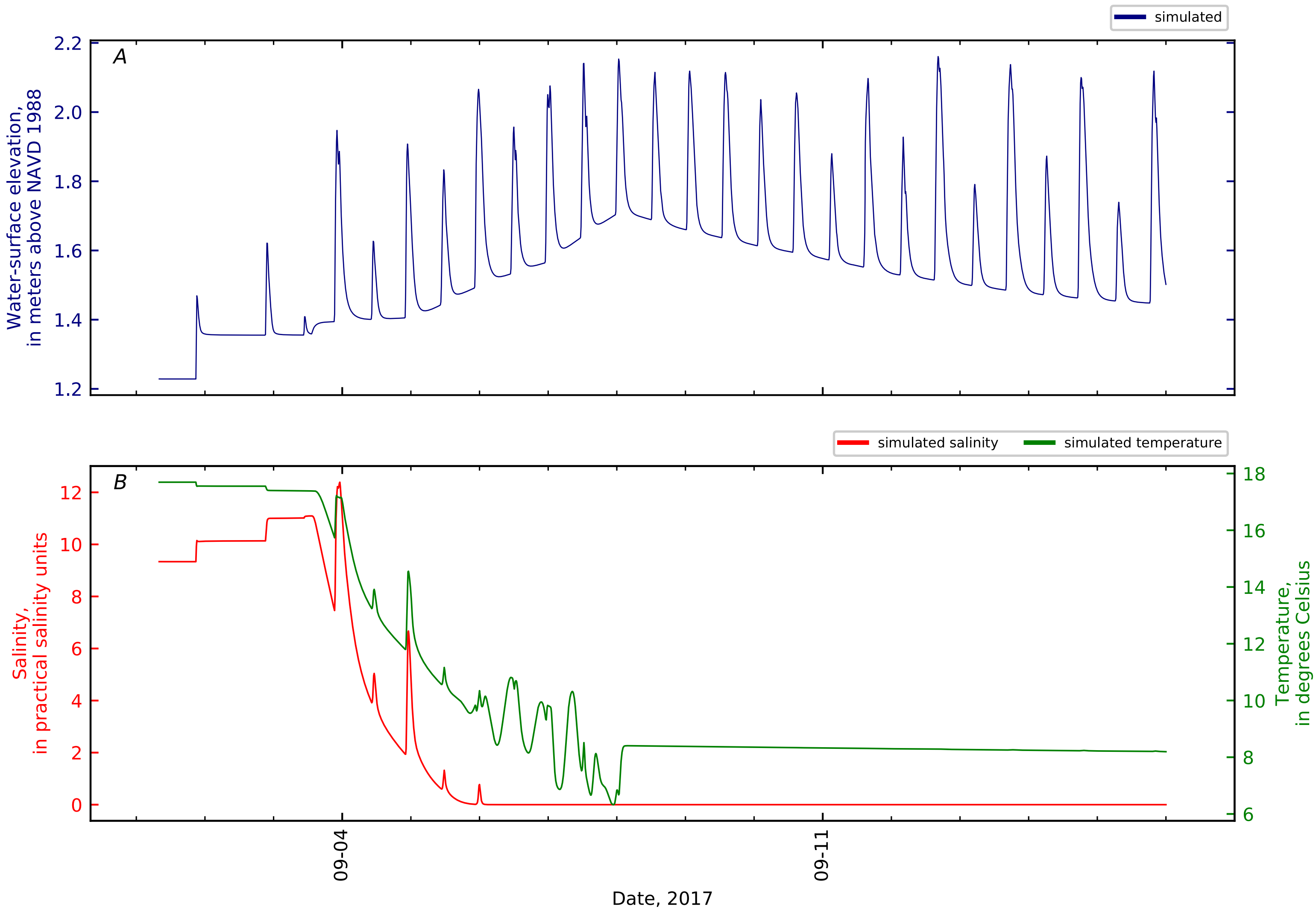

Figure B1-152. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 151, Mendall Marsh KM5.

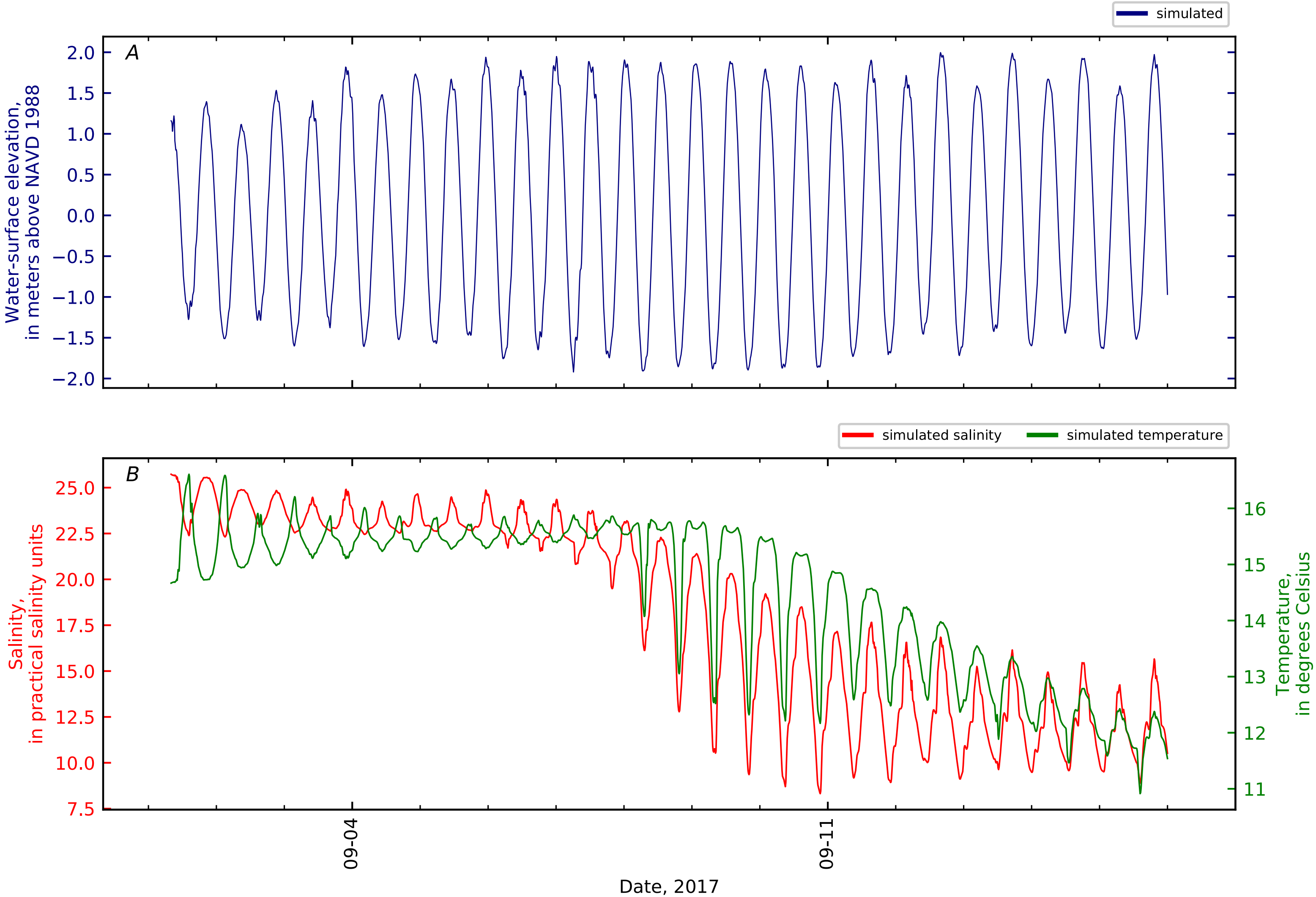

Figure B1-153. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 152, Orland Riv KM0.

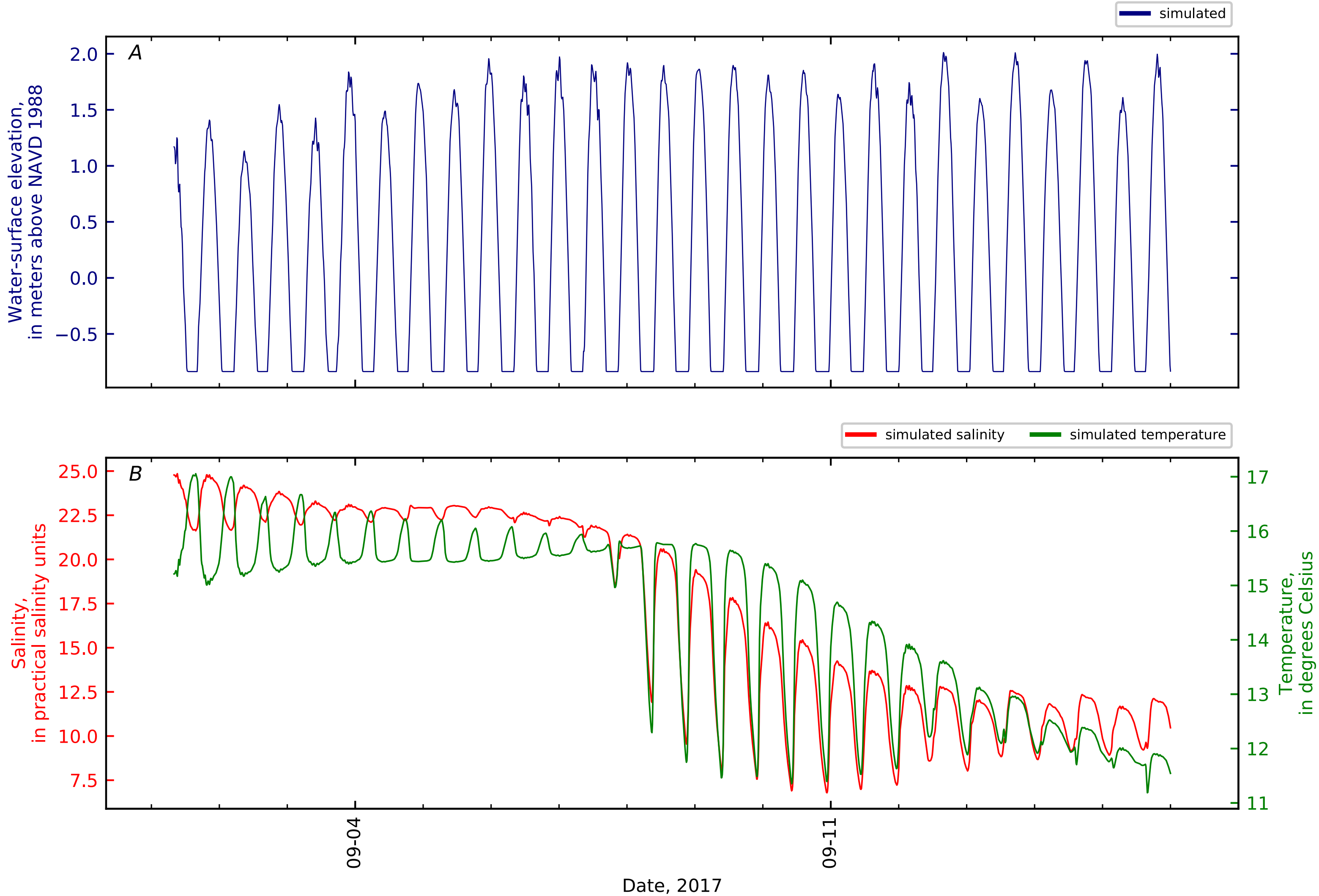

Figure B1-154. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 153, Orland Riv KM0.9 ERDC5 OR-MU1-SF-1.

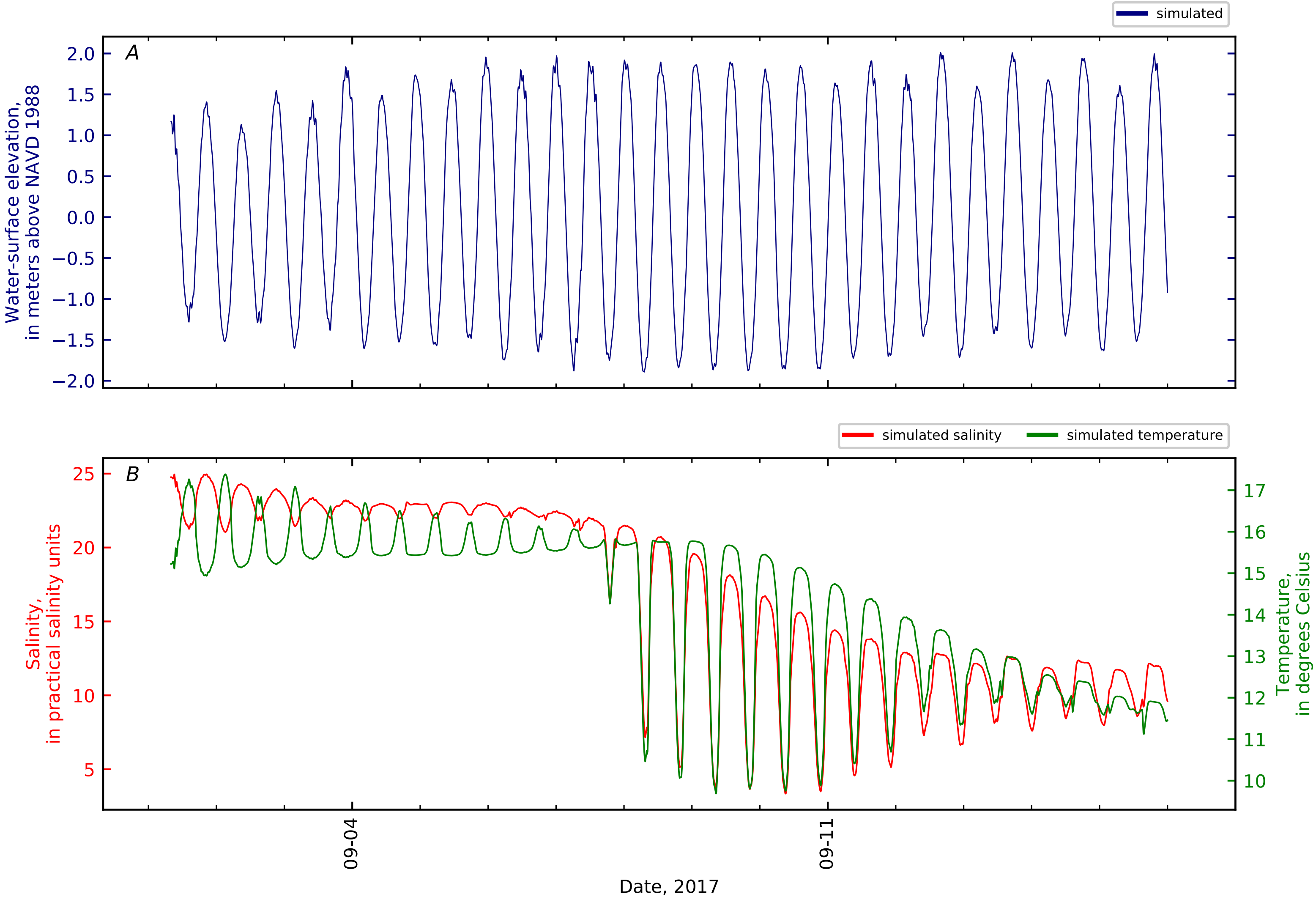

Figure B1-155. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 154, Orland Riv KM0.9 ERDC6 OR-MU3-SF-1.

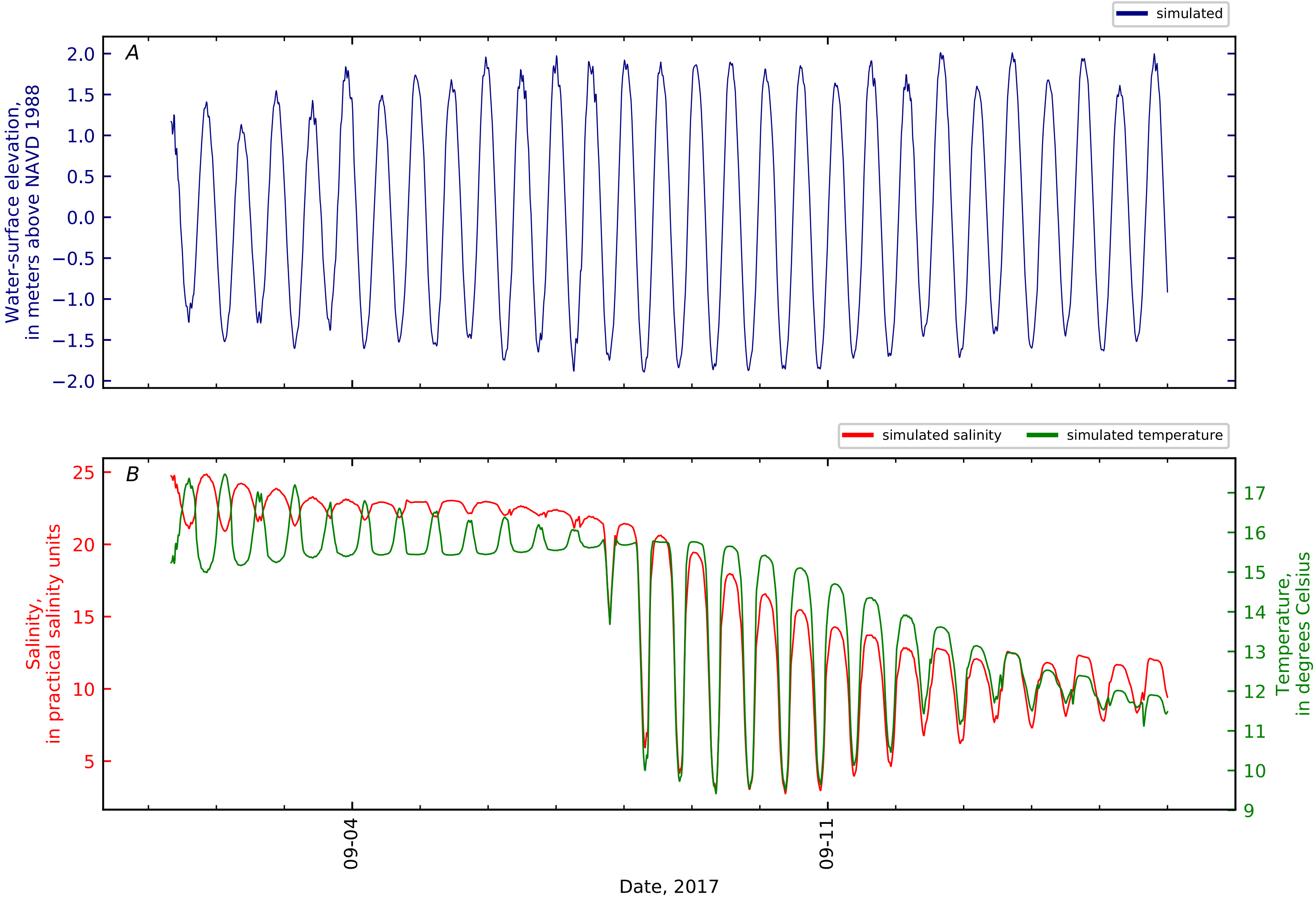

Figure B1-156. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 155, Orland Riv KM1.

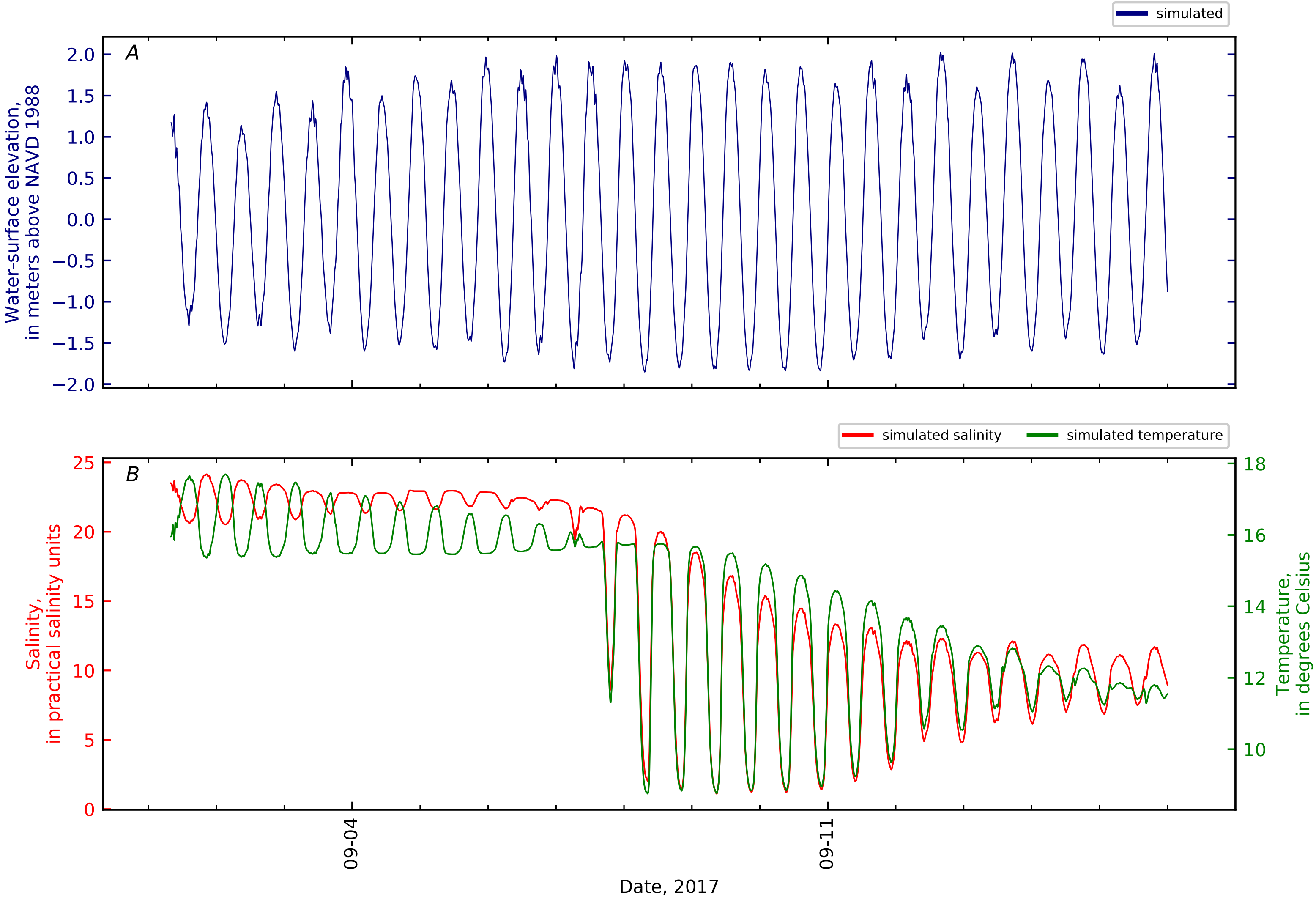

Figure B1-157. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 156, Orland Riv KM1.6 WHOI4 2010.

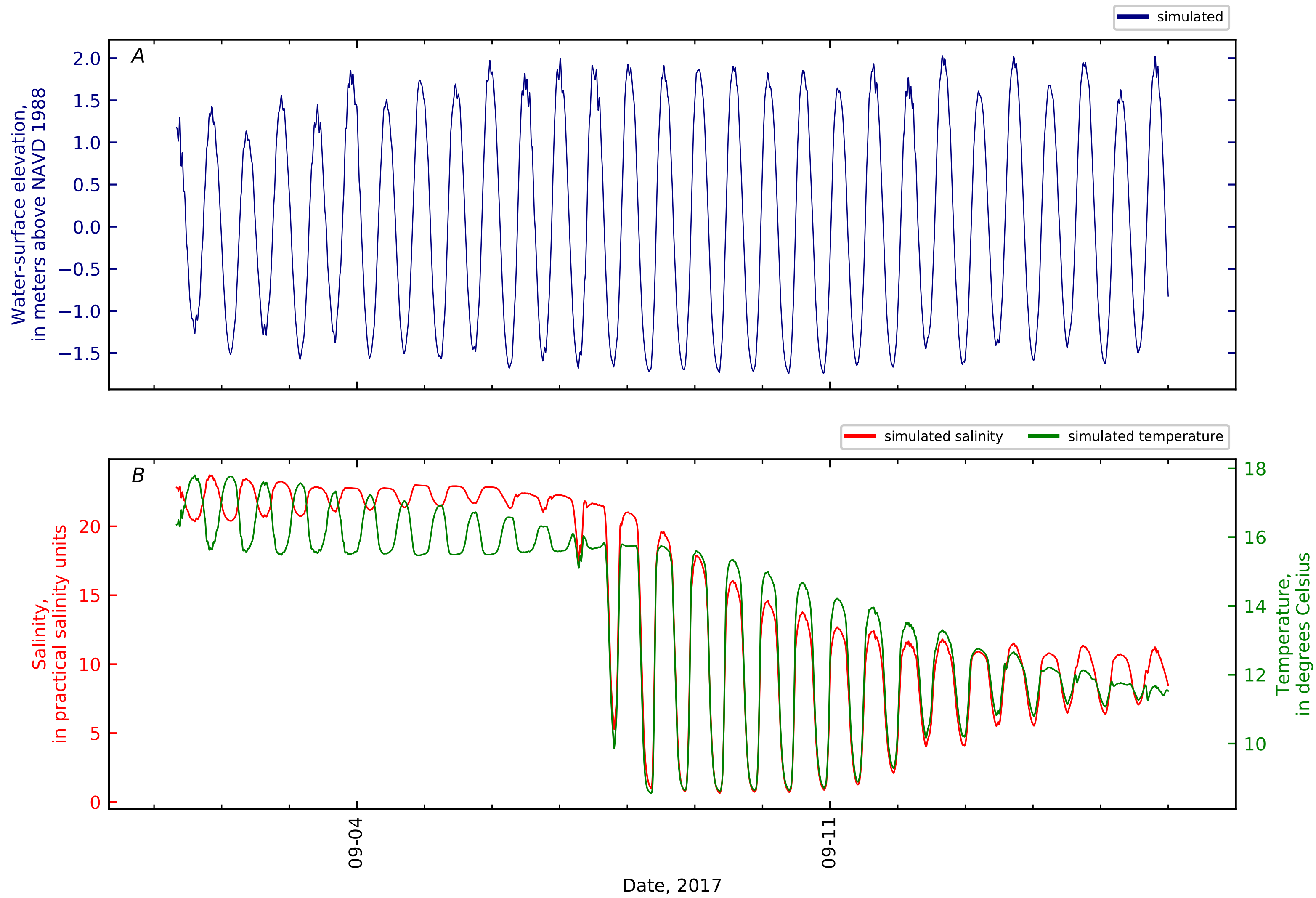

Figure B1-158. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 157, Orland Riv KM2.

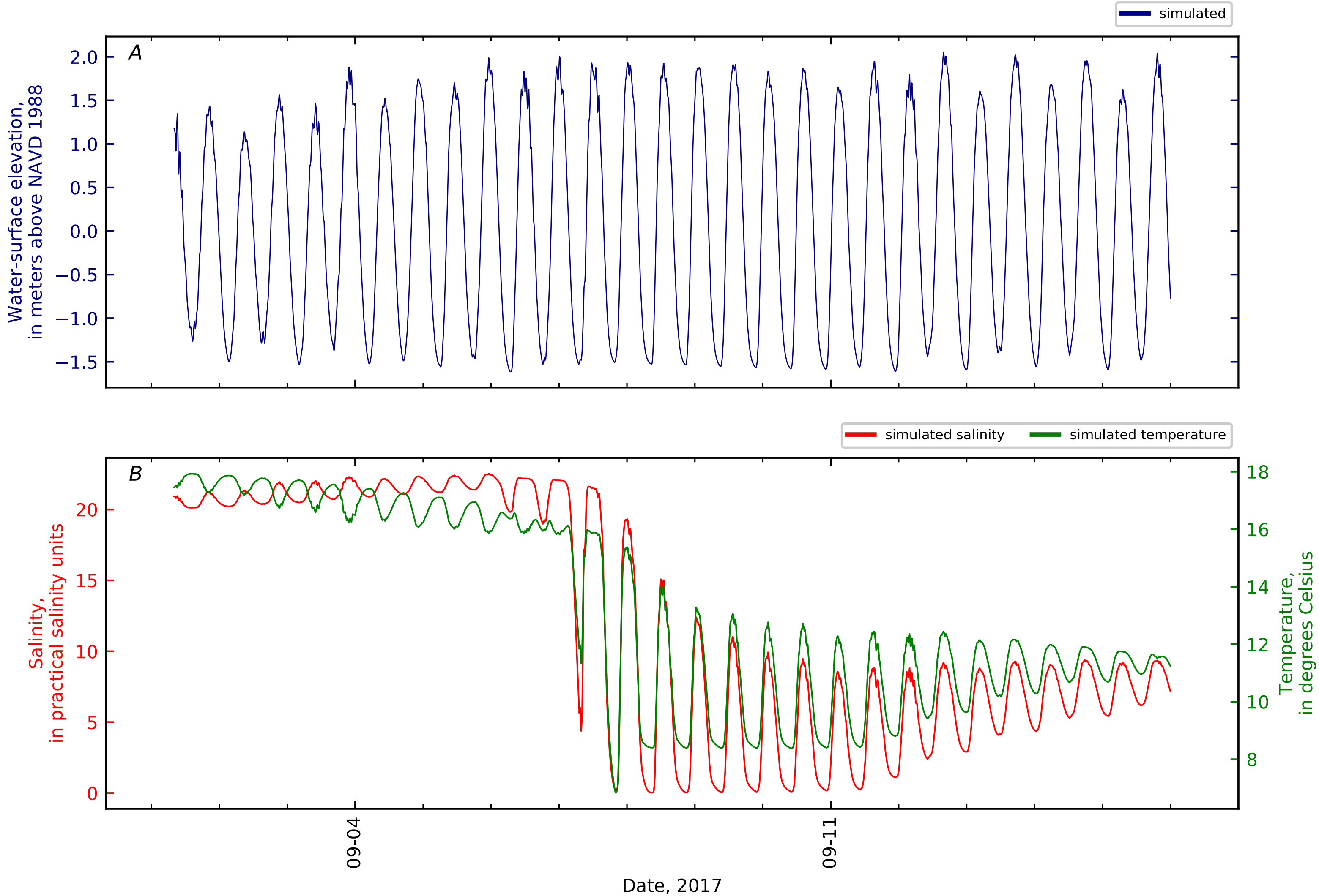

Figure B1-159. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 158, Orland Riv KM3.

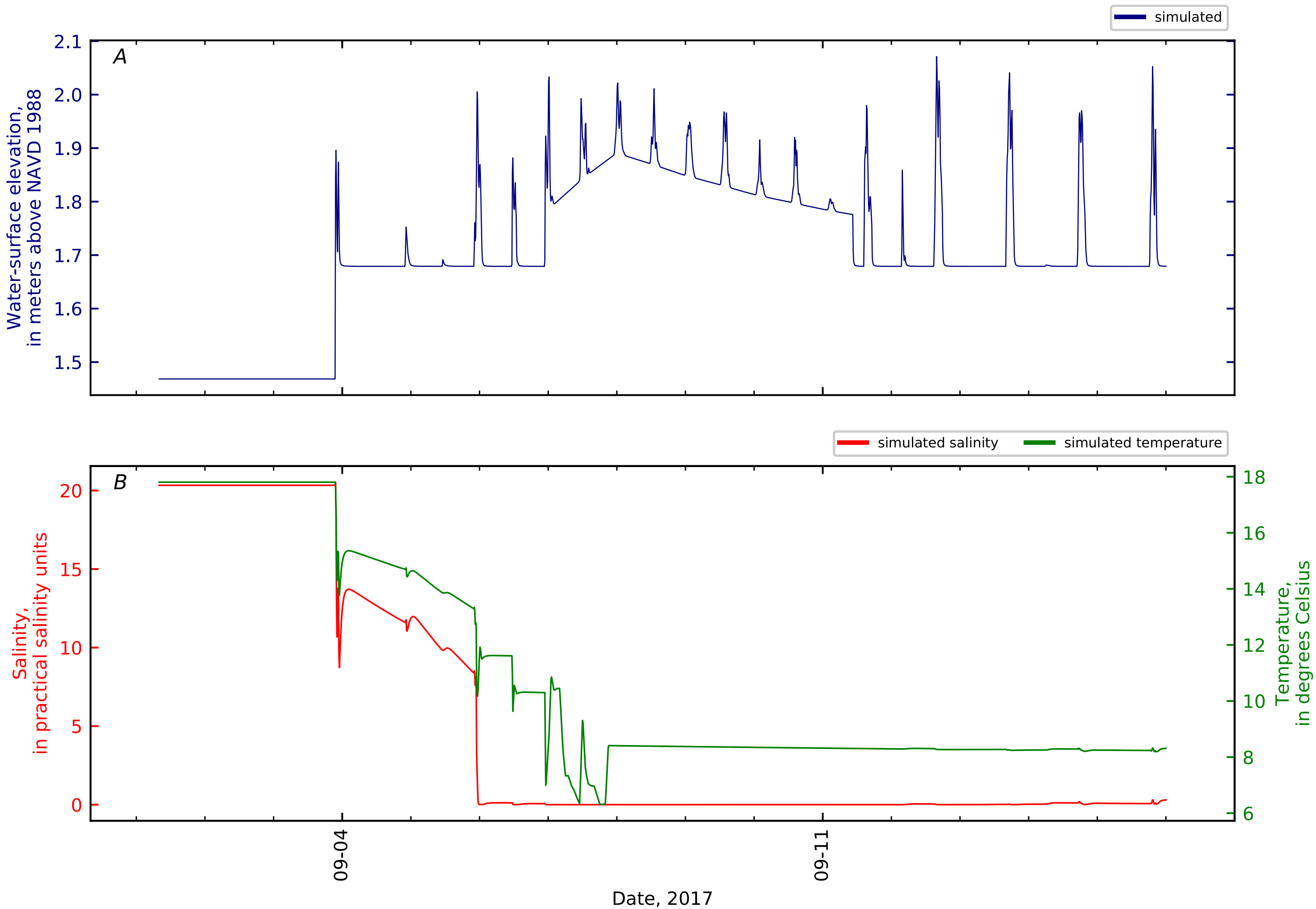

Figure B1-160. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 159, Orland Riv KM4.

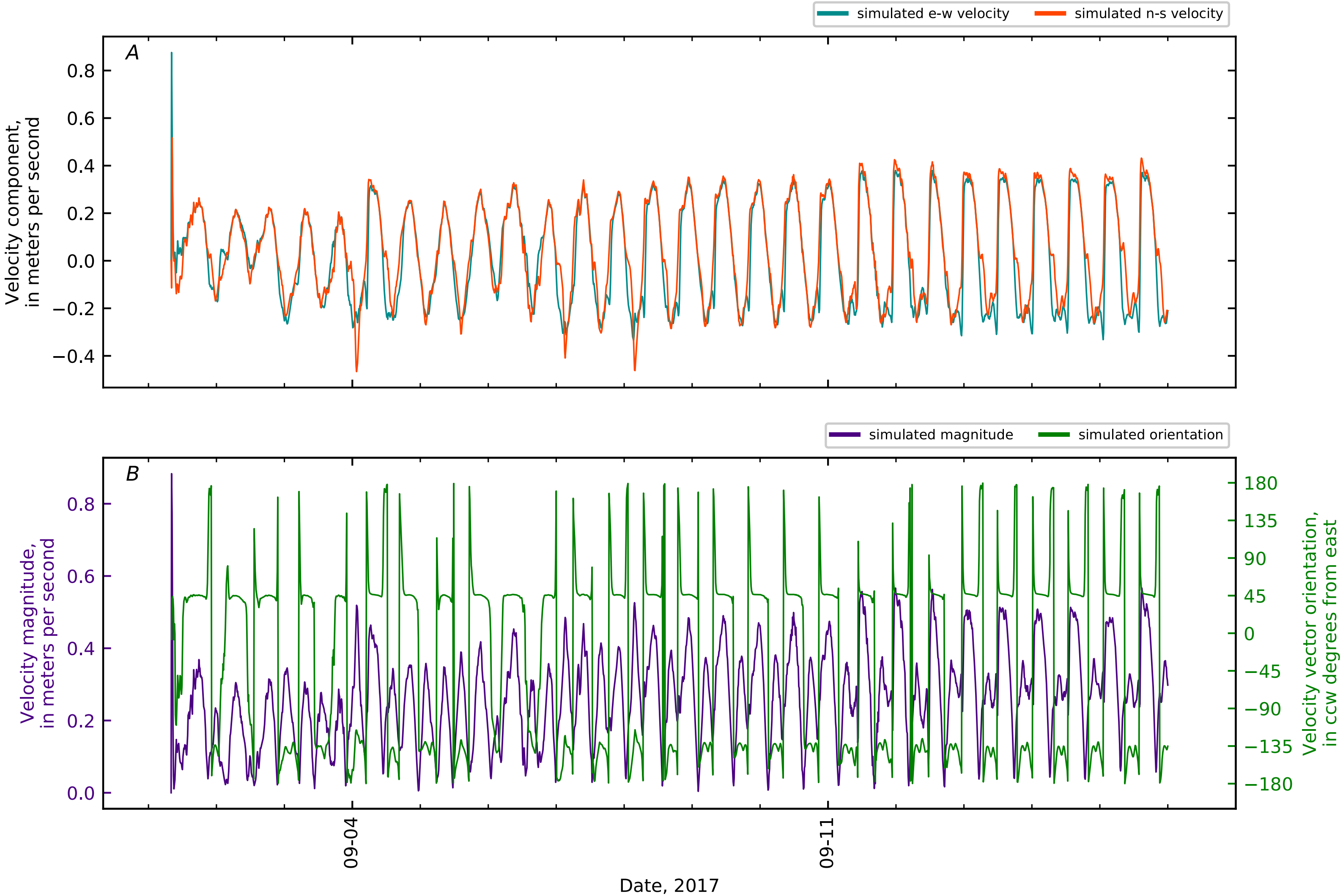

Figure B1-161. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 0, Penob Riv -KM5 nr Cape Jellison boundary.

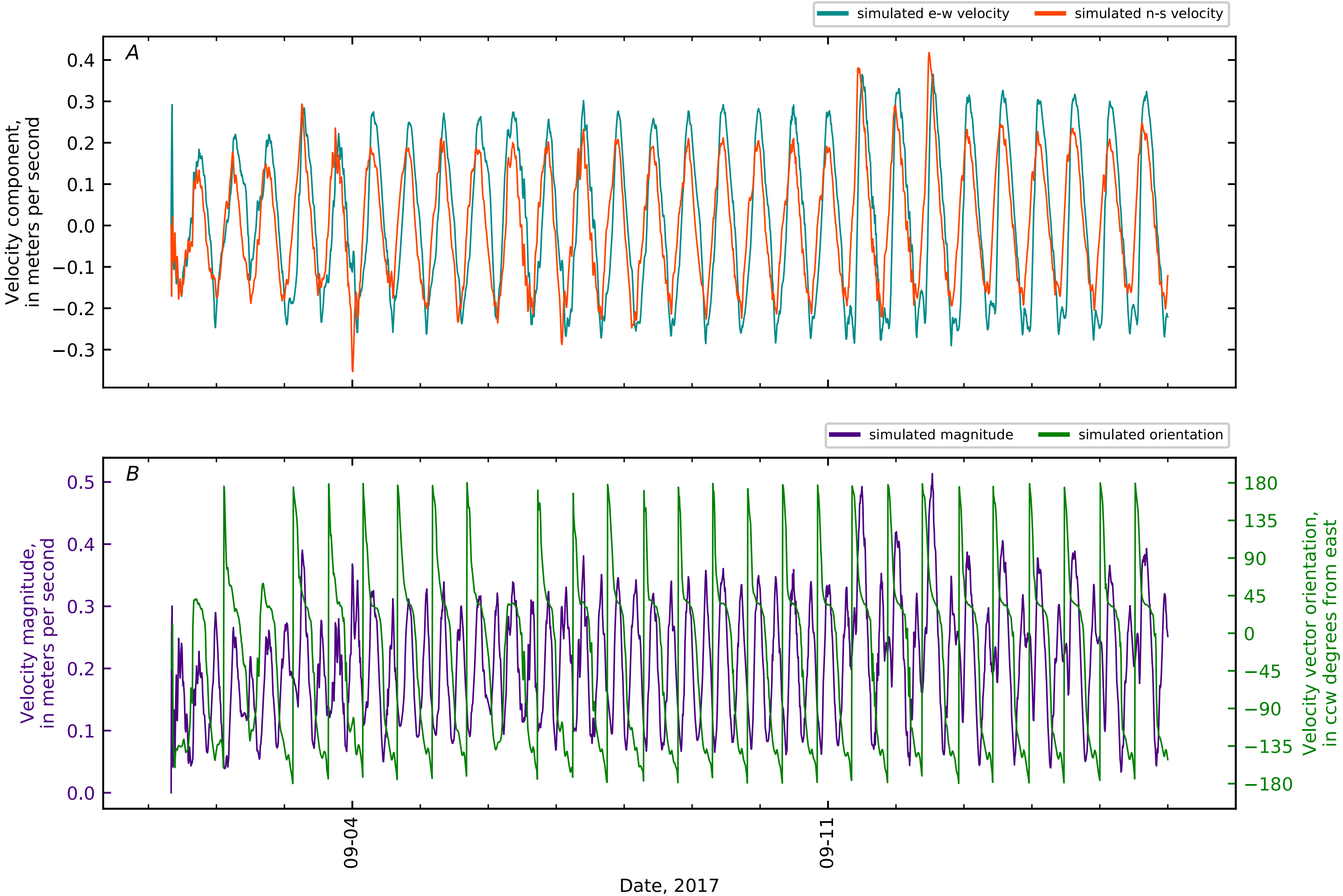

Figure B1-162. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 1, Penob Riv -KM4 nr Cape Jellison XS.

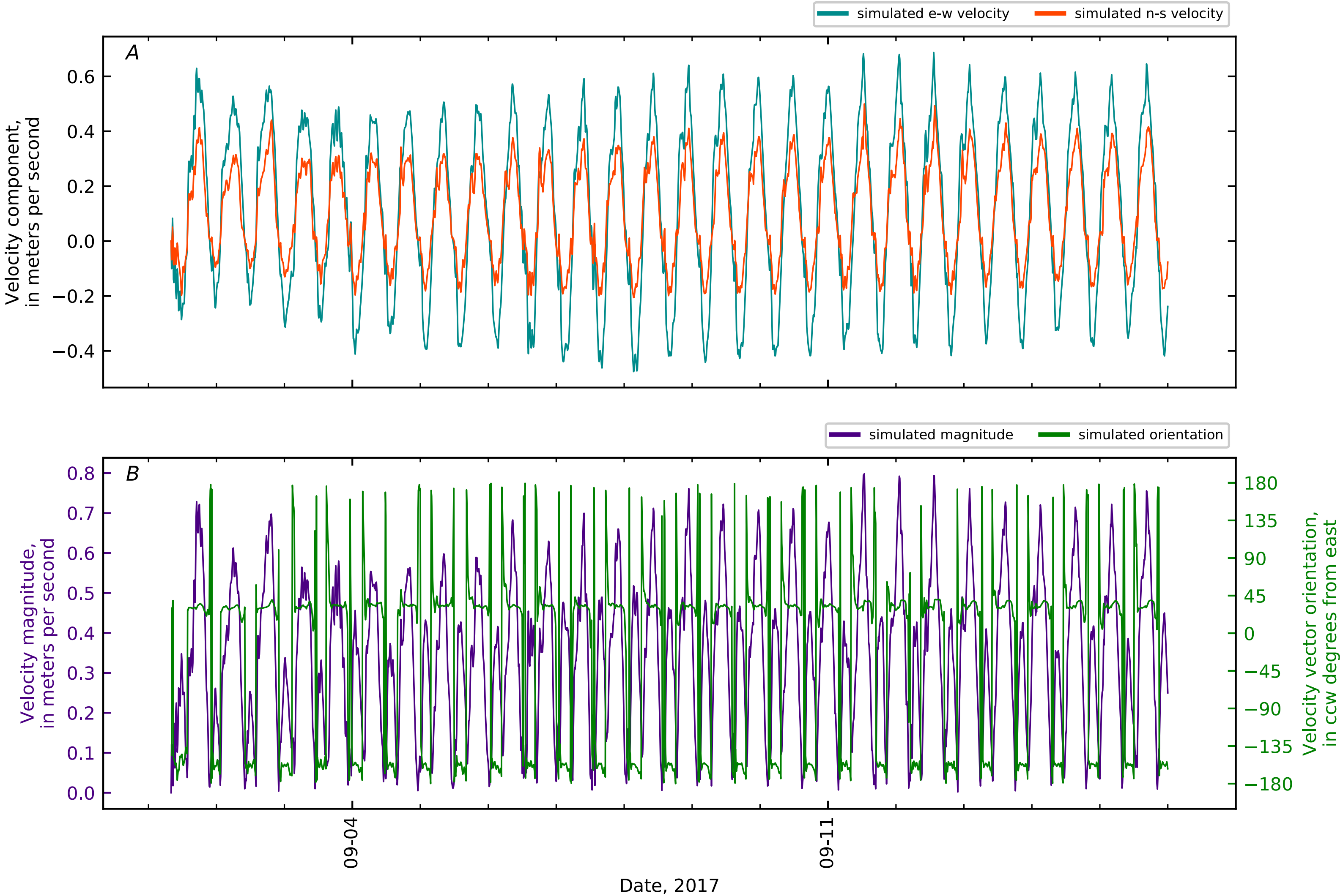

Figure B1-163. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 2, Penob Riv -KM1.5 d/s Ft Point.

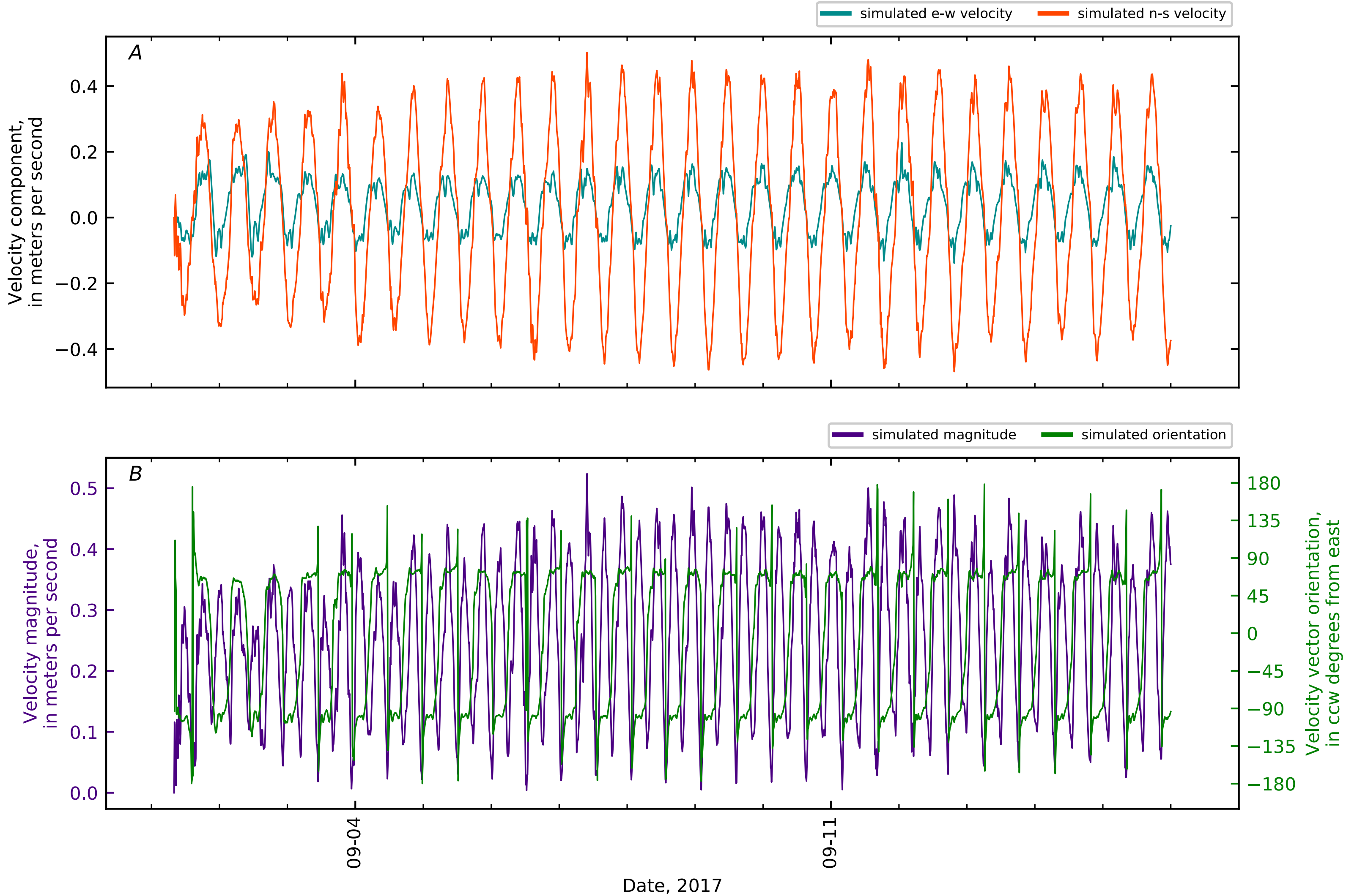

Figure B1-164. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 3, Penob Riv KM0 Ft Point.

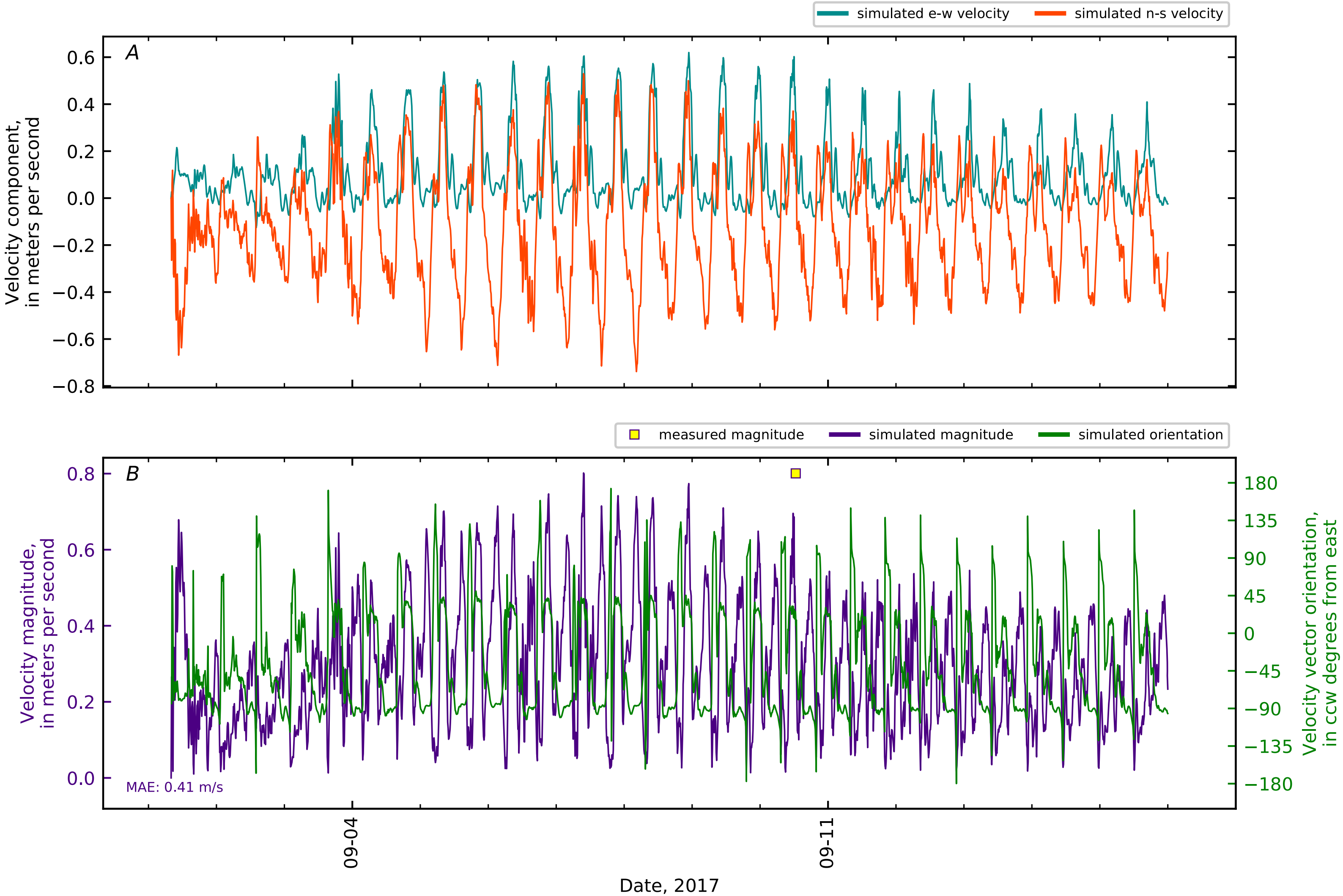

Figure B1-165. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 4, Penob Riv KM0 GS CTD5-01.

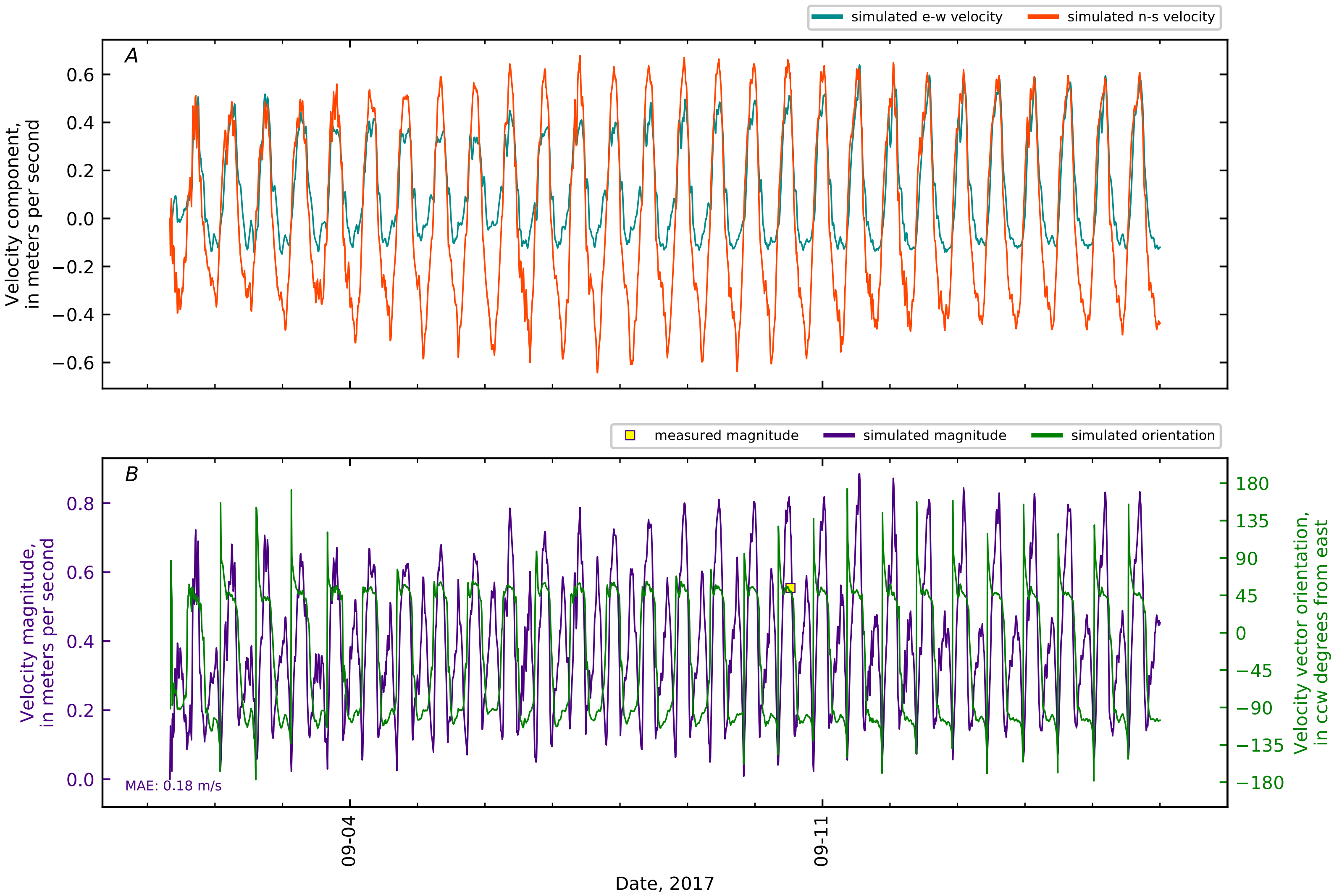

Figure B1-166. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 5, Penob Riv KM0 GS CTD5-02.

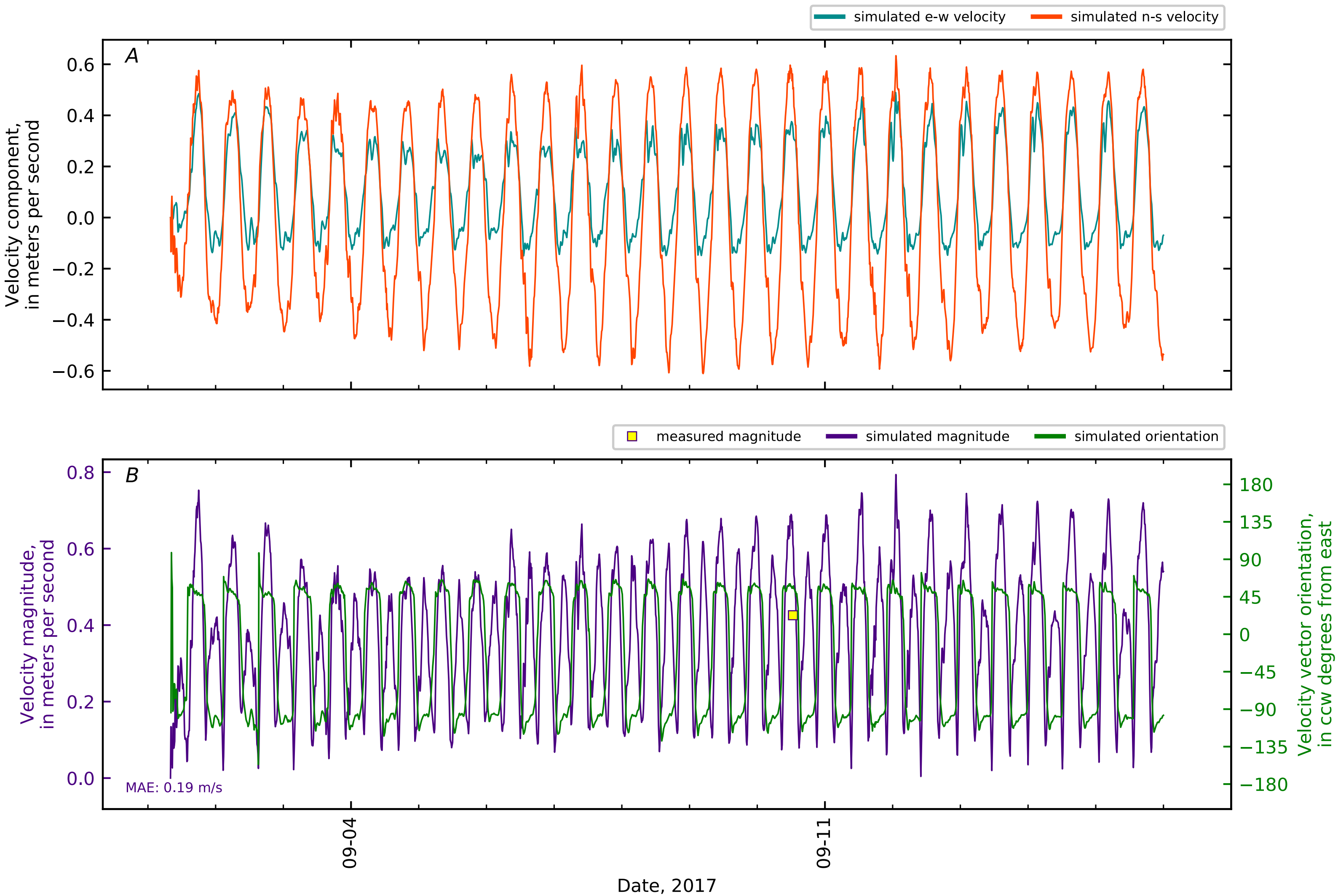

Figure B1-167. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 6, Penob Riv KM0 GS CTD5-03.

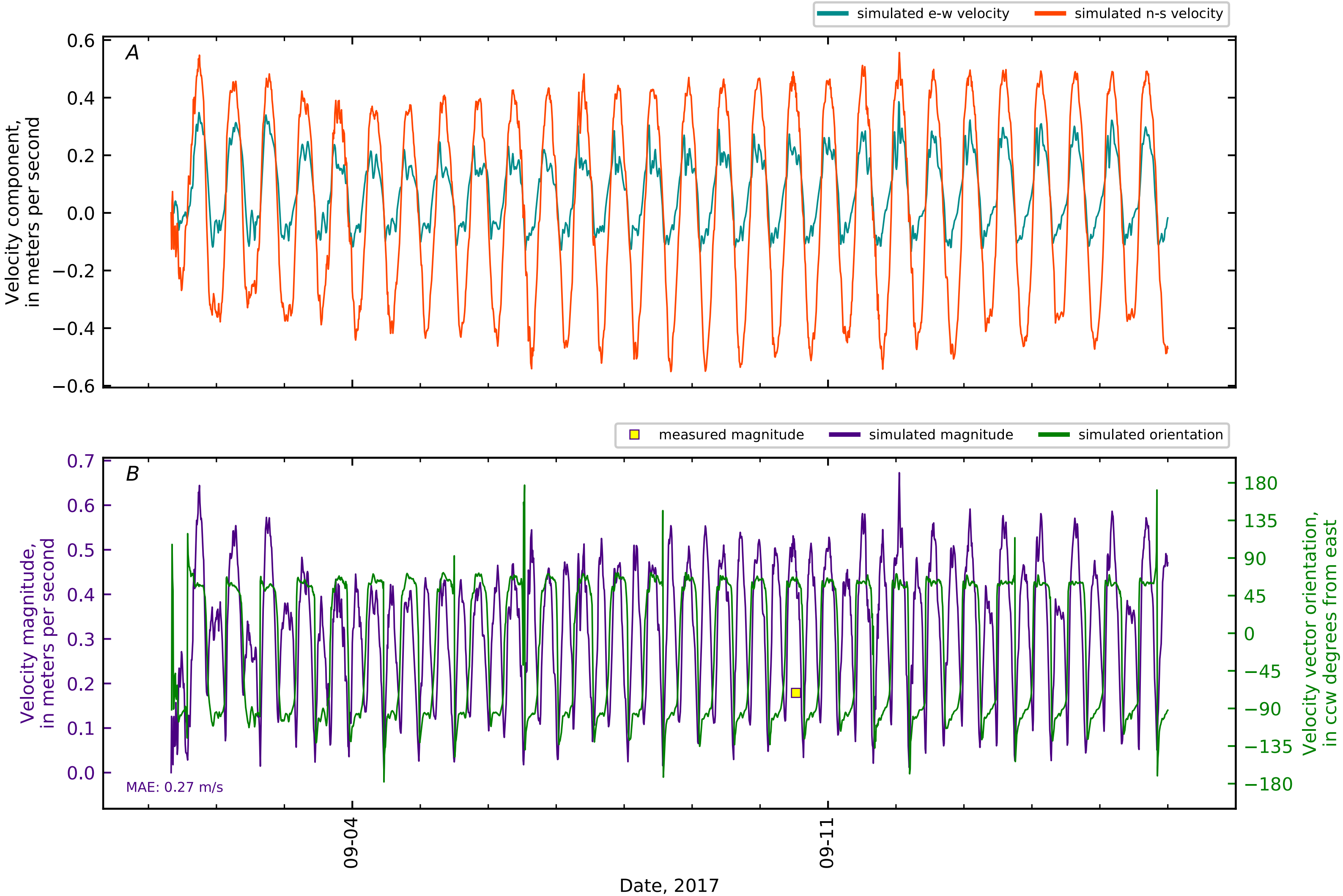

Figure B1-168. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 7, Penob Riv KM0 GS CTD5-04.

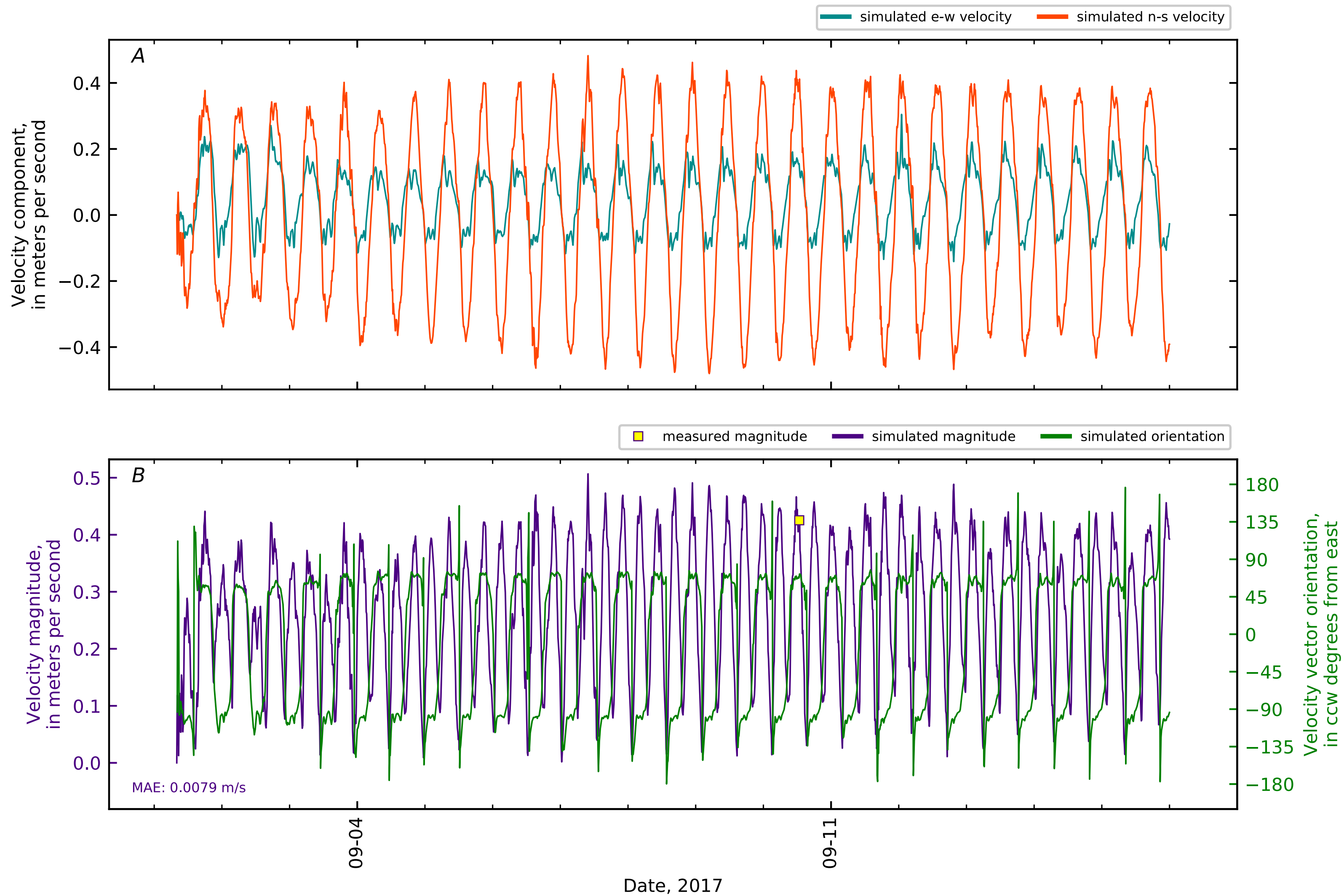

Figure B1-169. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 8, Penob Riv KM0 GS CTD5-05.

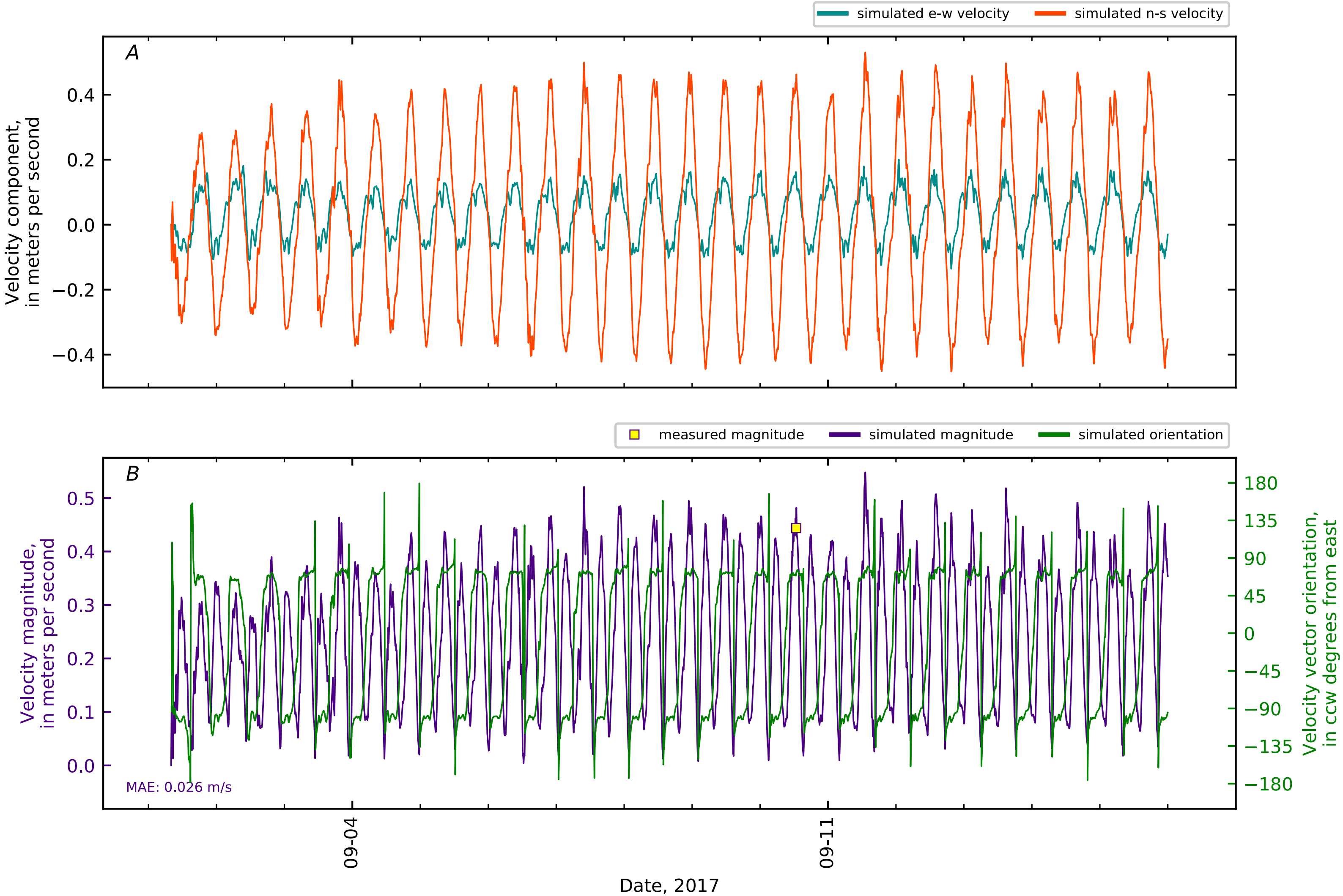

Figure B1-170. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 9, Penob Riv KM0 GS CTD5-06.

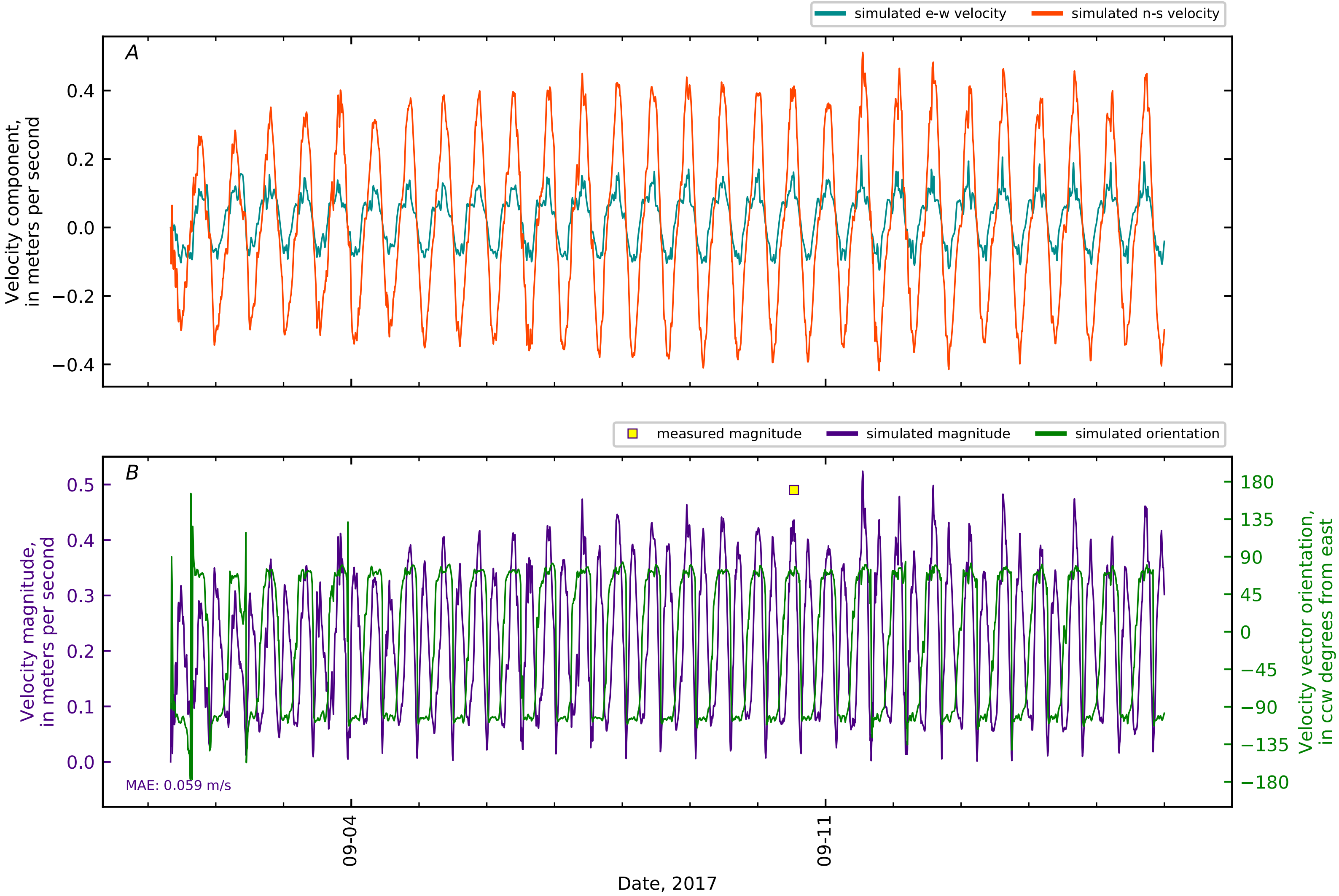

Figure B1-171. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 10, Penob Riv KM0 GS CTD5-07.

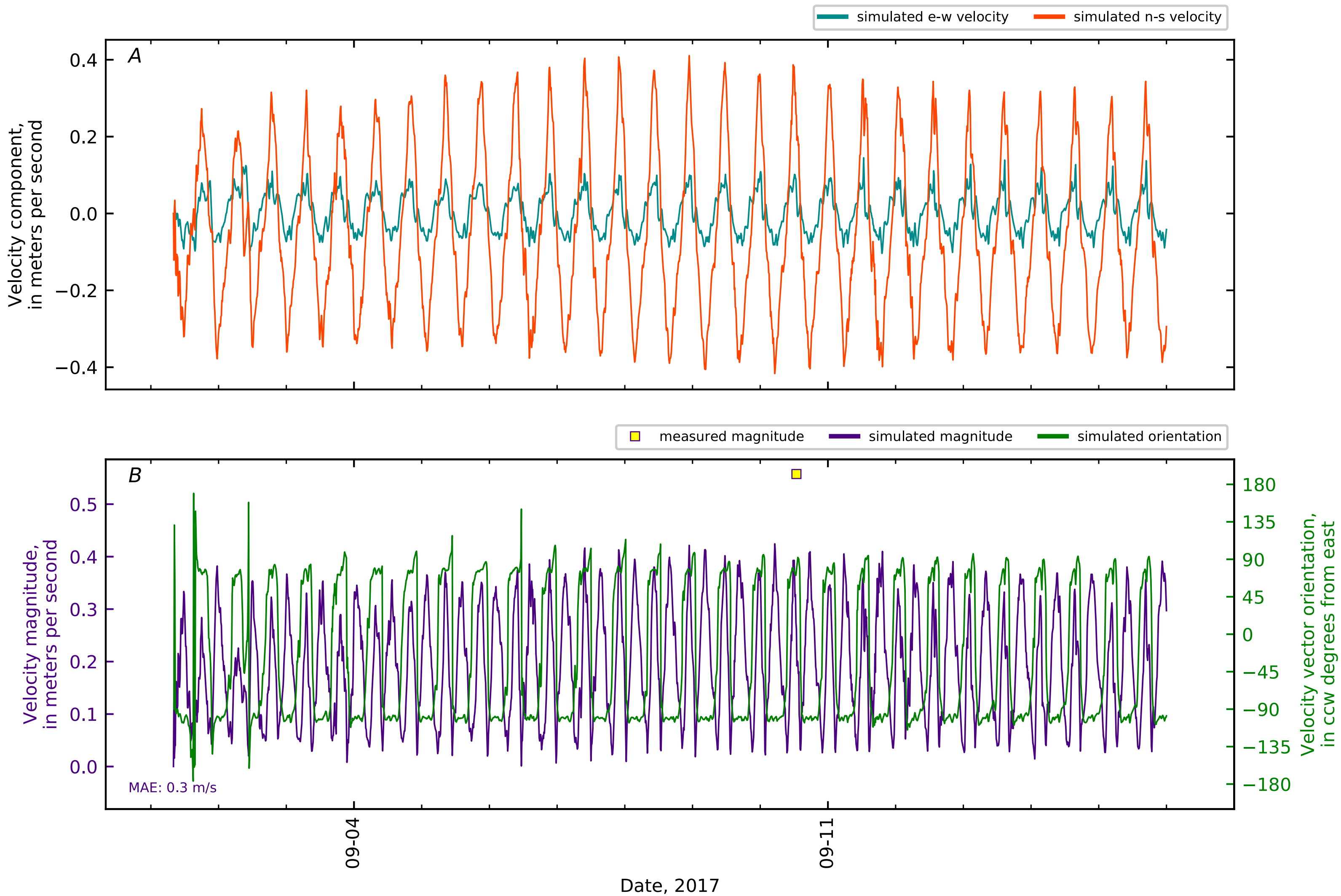

Figure B1-172. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 11, Penob Riv KM0 GS CTD5-08.

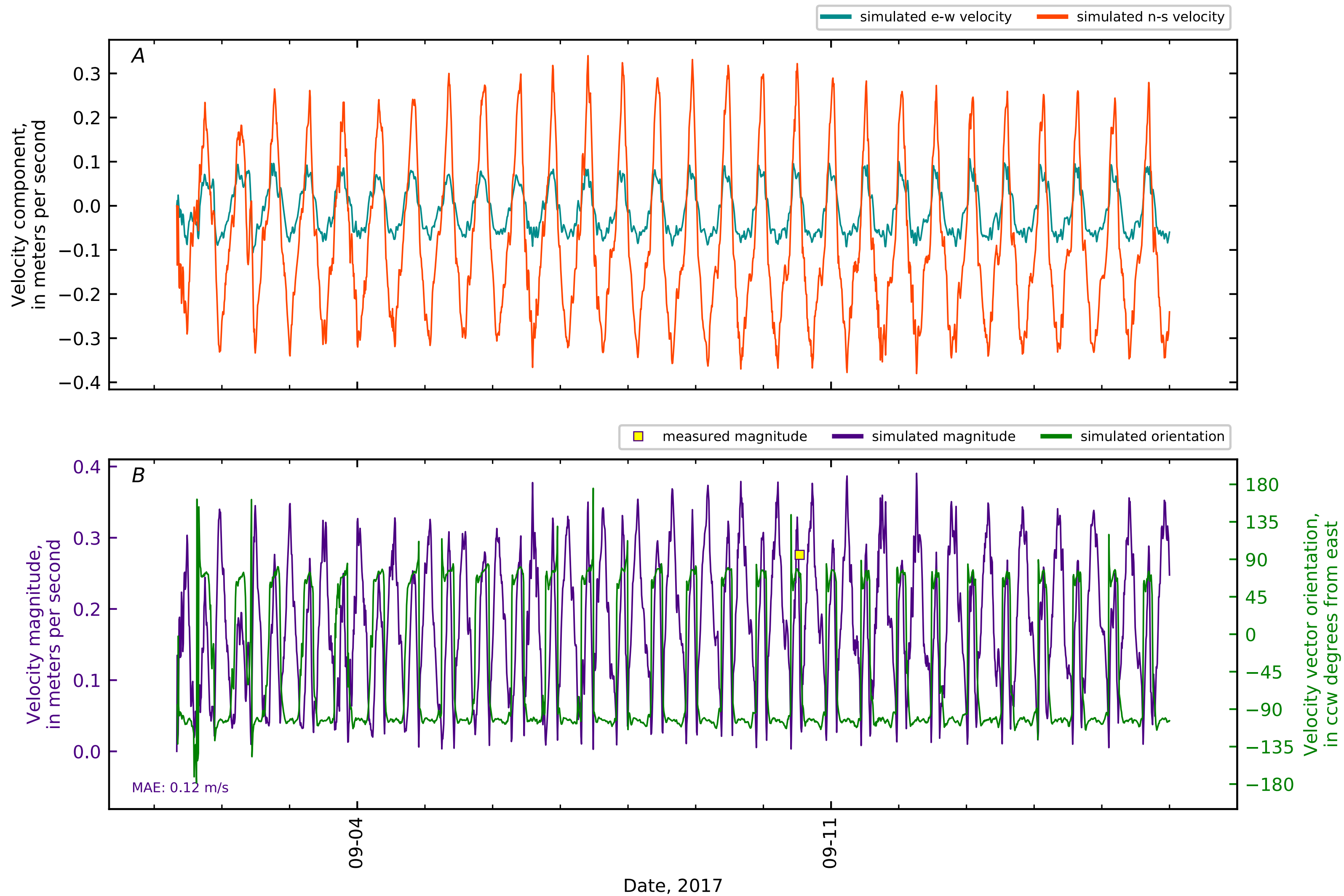

Figure B1-173. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 12, Penob Riv KM0 GS CTD5-09.

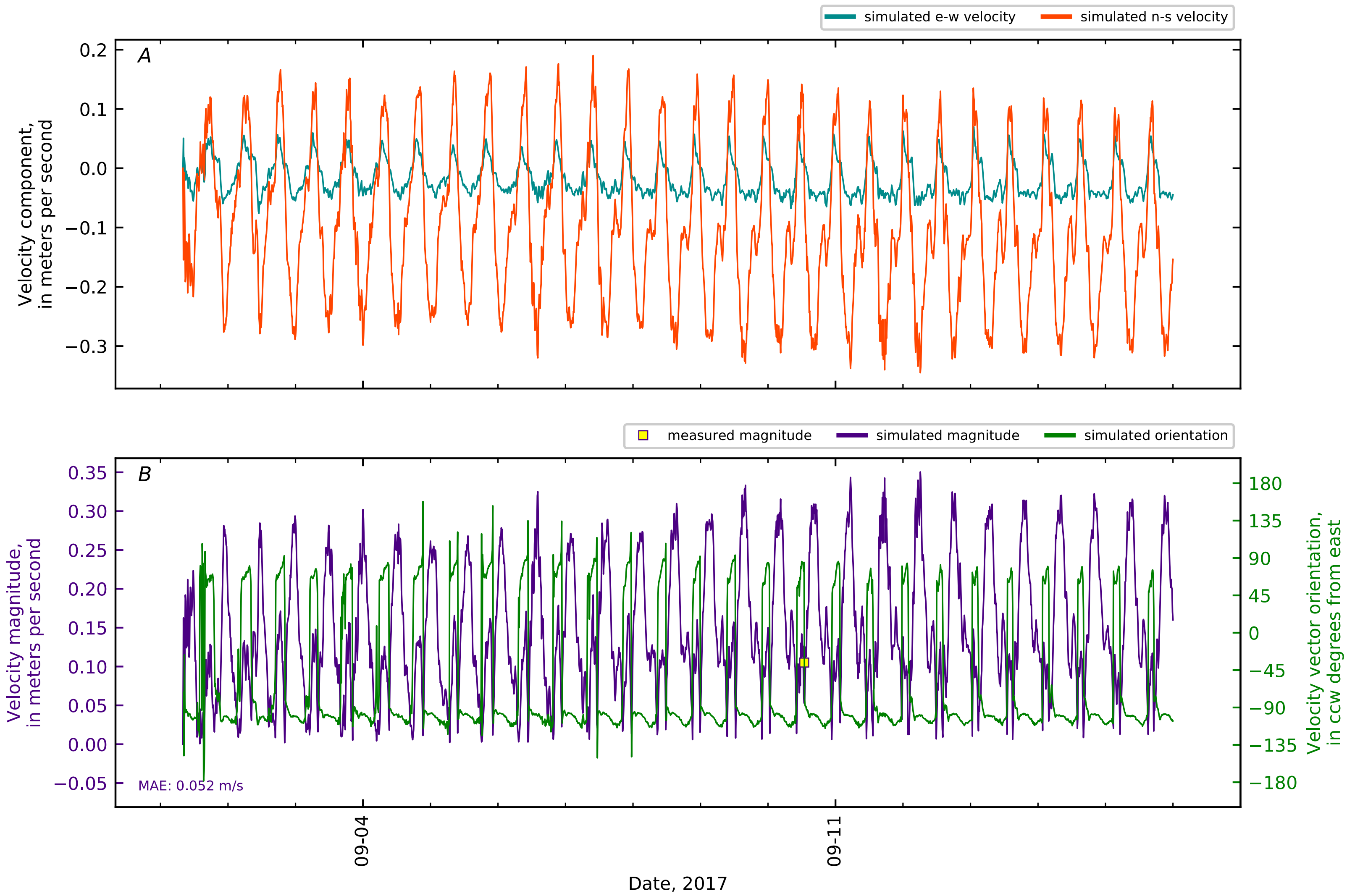

Figure B1-174. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 13, Penob Riv KM0 GS CTD5-10.

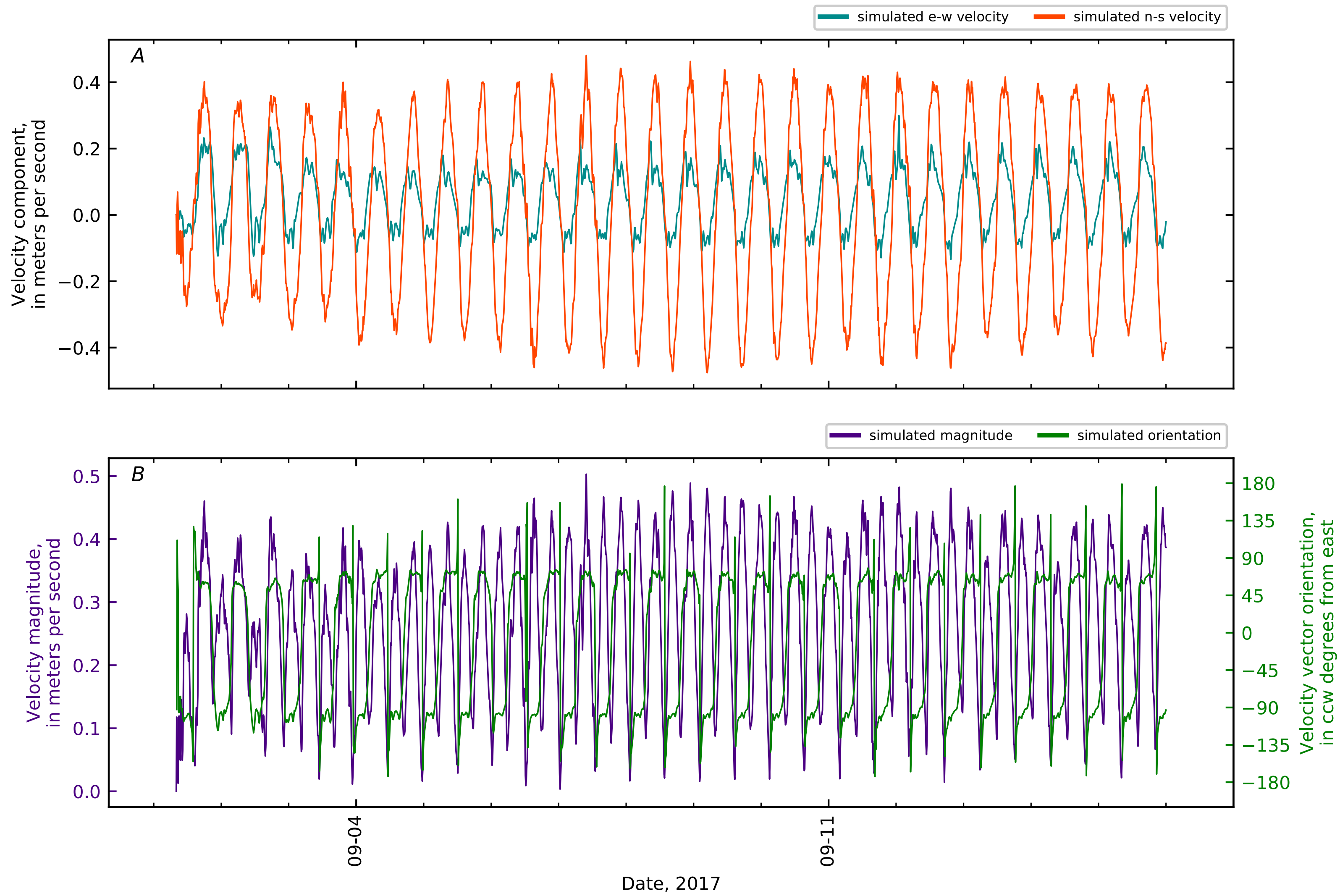

Figure B1-175. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 14, Penob Riv KM0.04 WHOI1 Ft Point 2010.

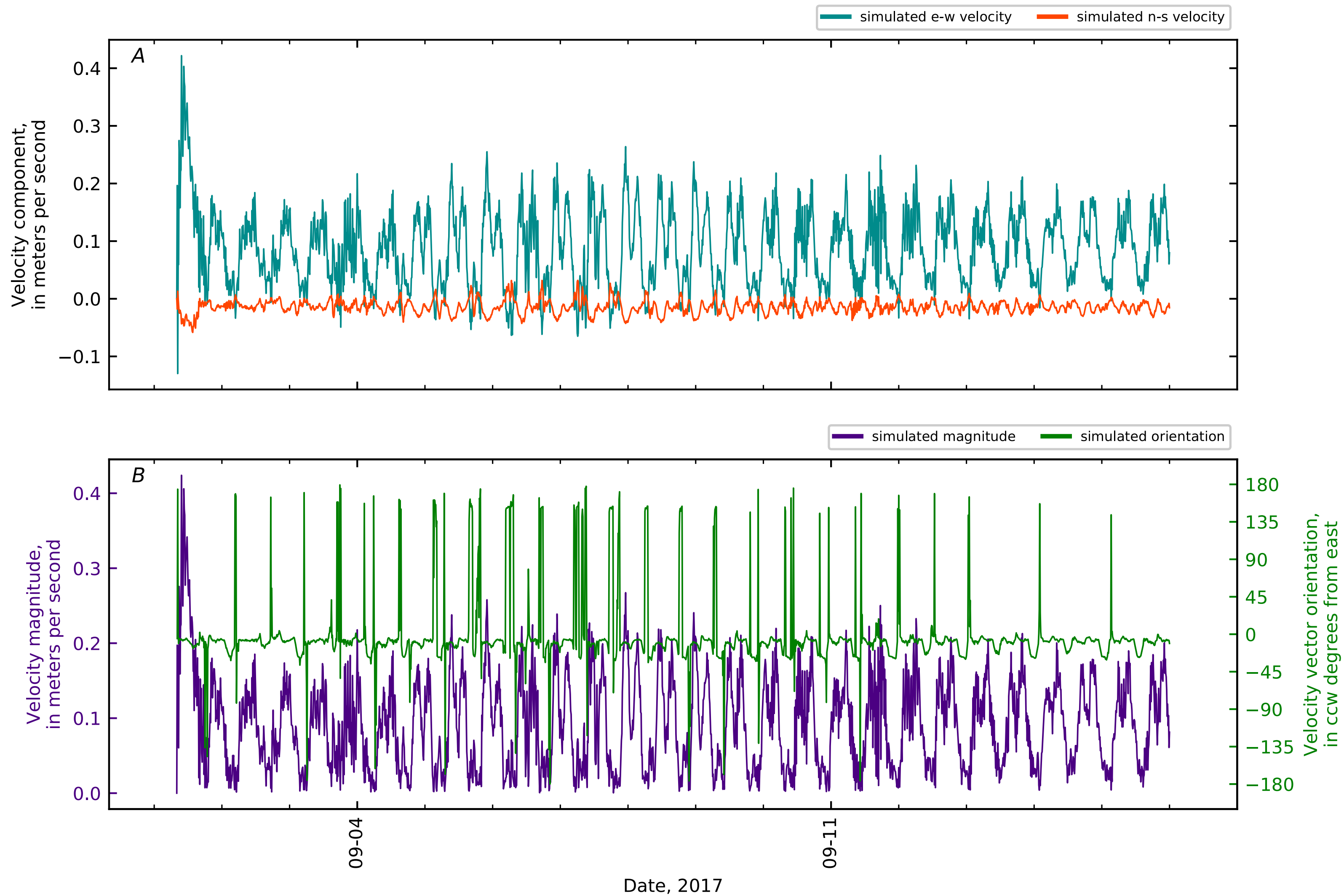

Figure B1-176. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 15, Penob Riv KM0.1 GS 442810068480101 at Ft.

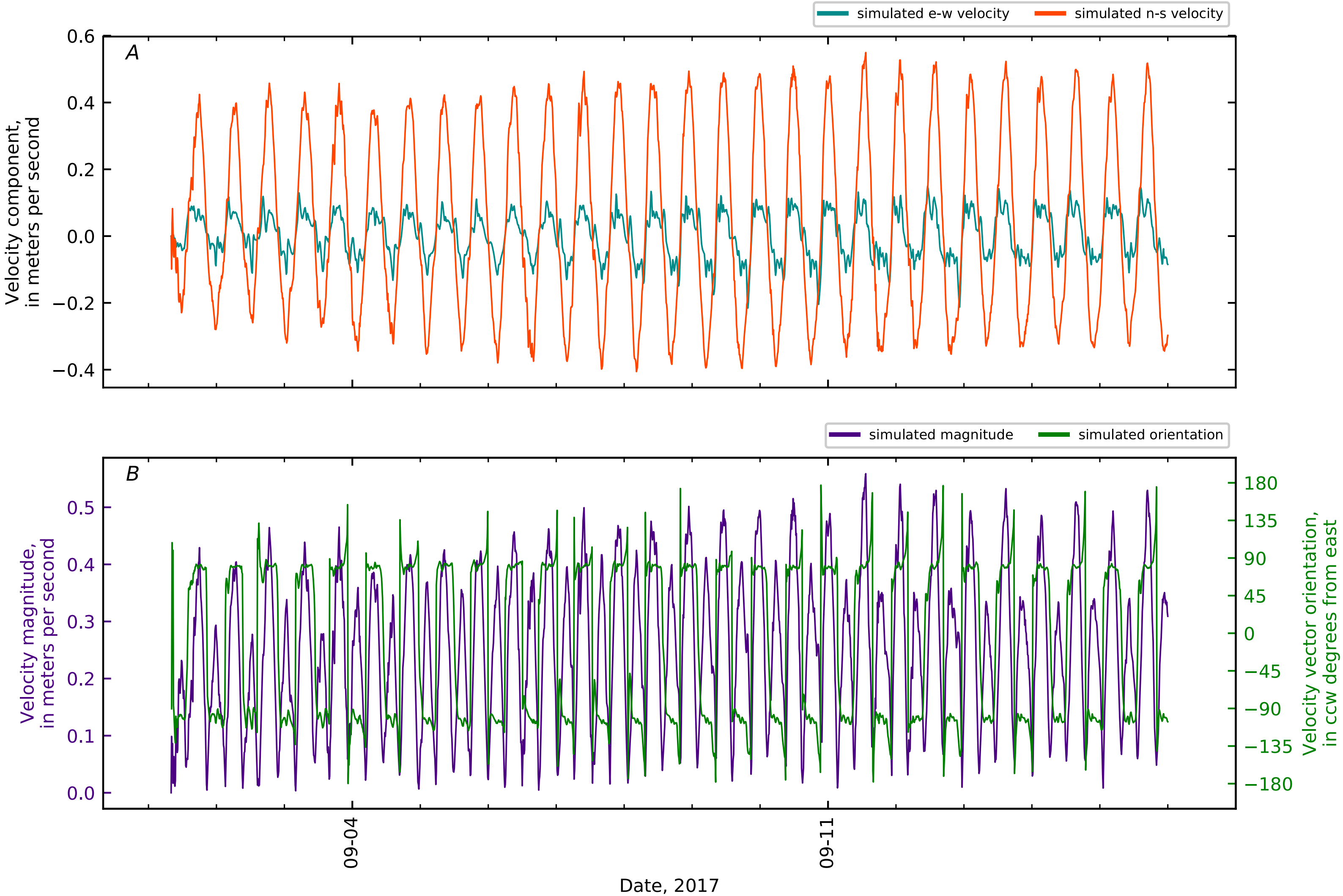

Figure B1-177. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 16, Penob Riv KM1.

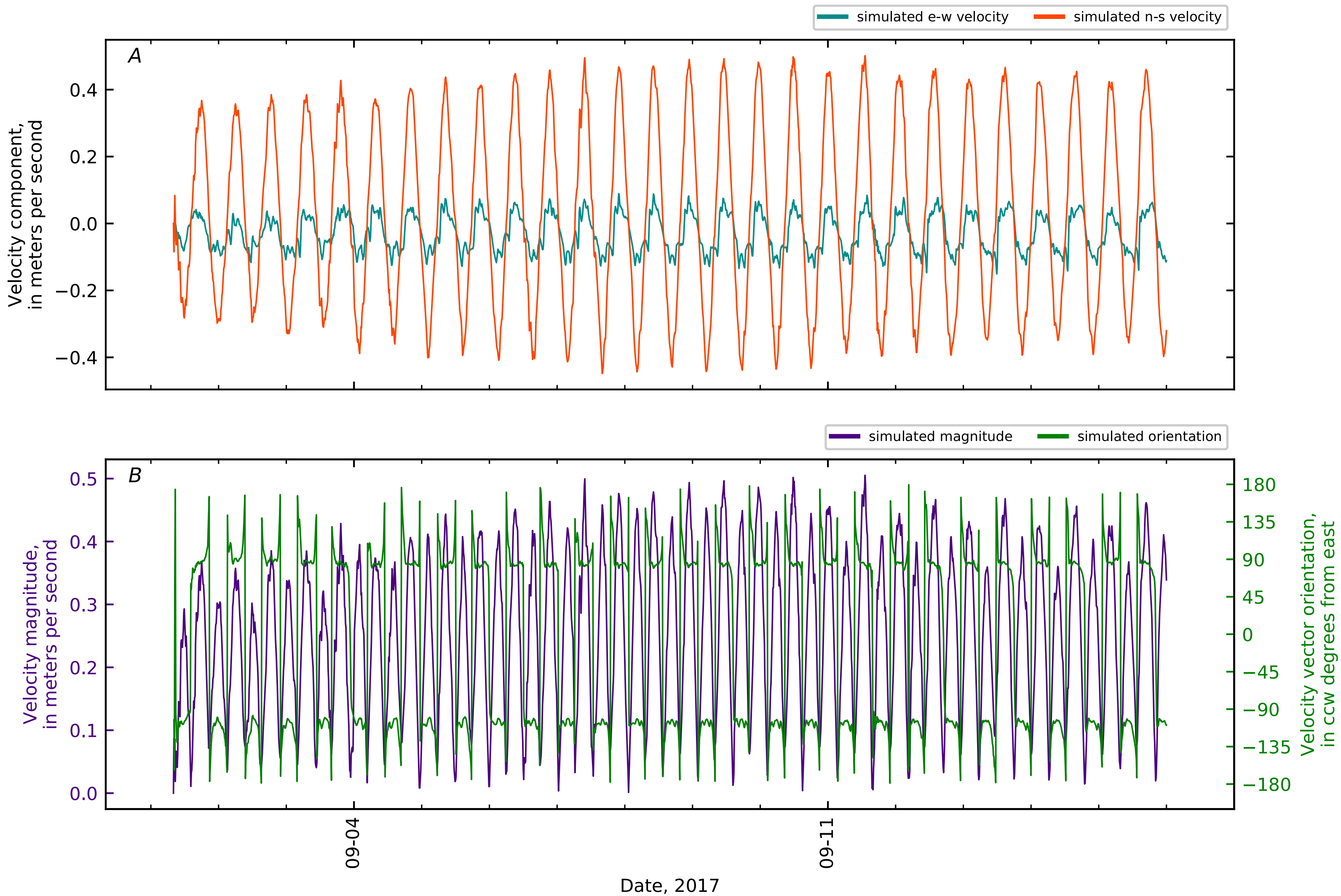

Figure B1-178. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 17, Penob Riv KM2.

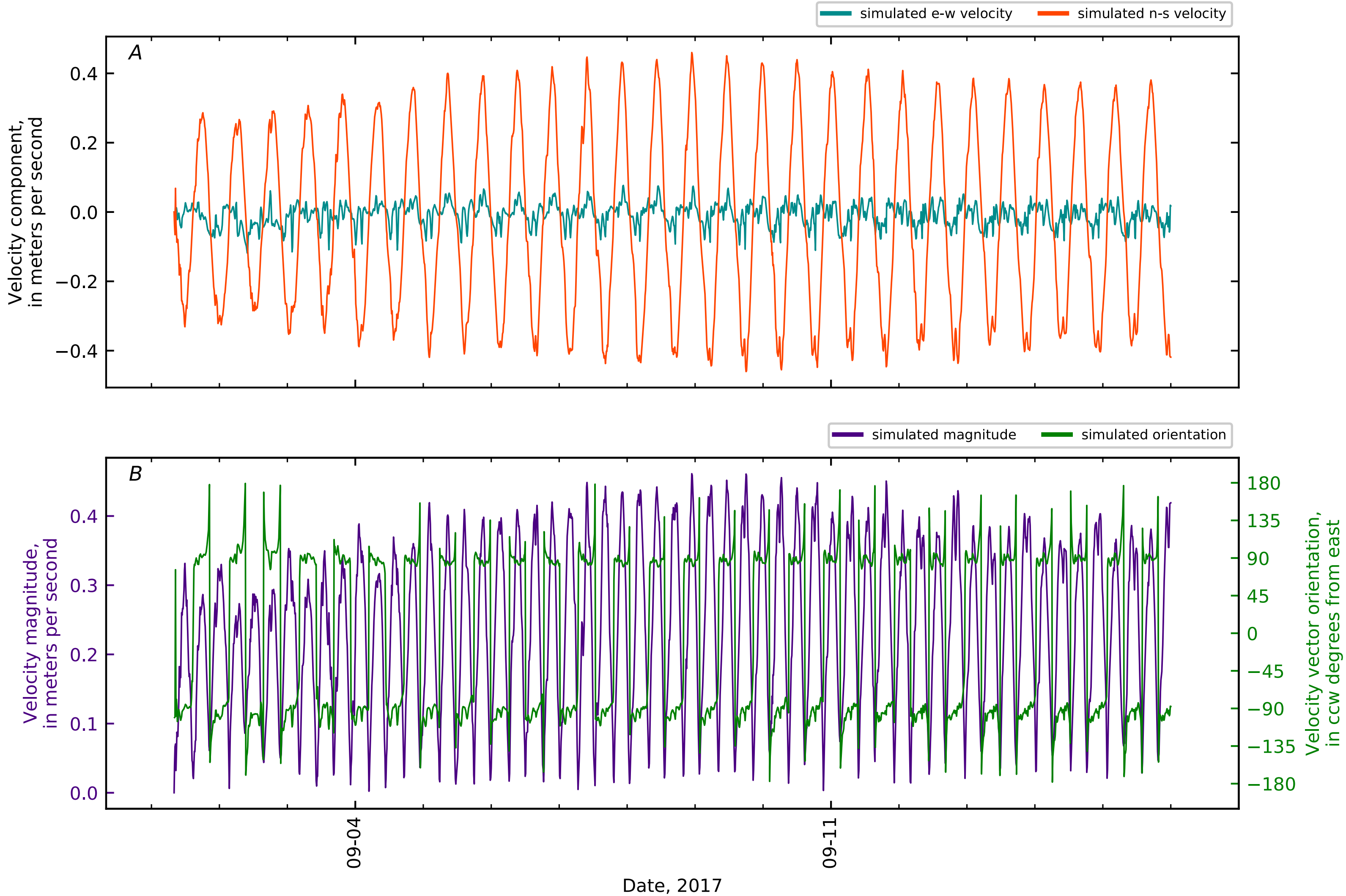

Figure B1-179. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 18, Penob Riv KM3.

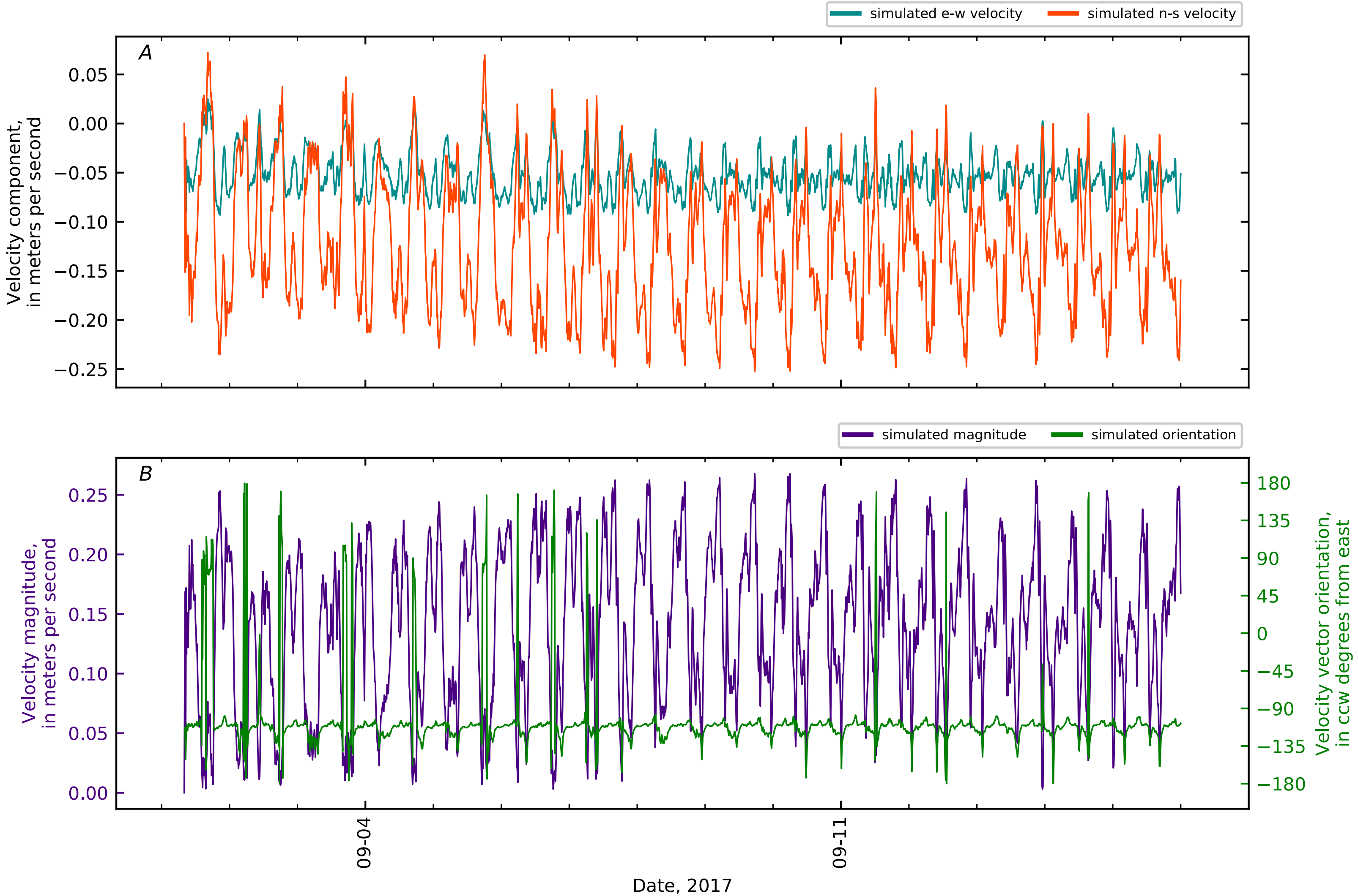

Figure B1-180. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 19, Penob Riv KM3.8 GS CTD3-01.

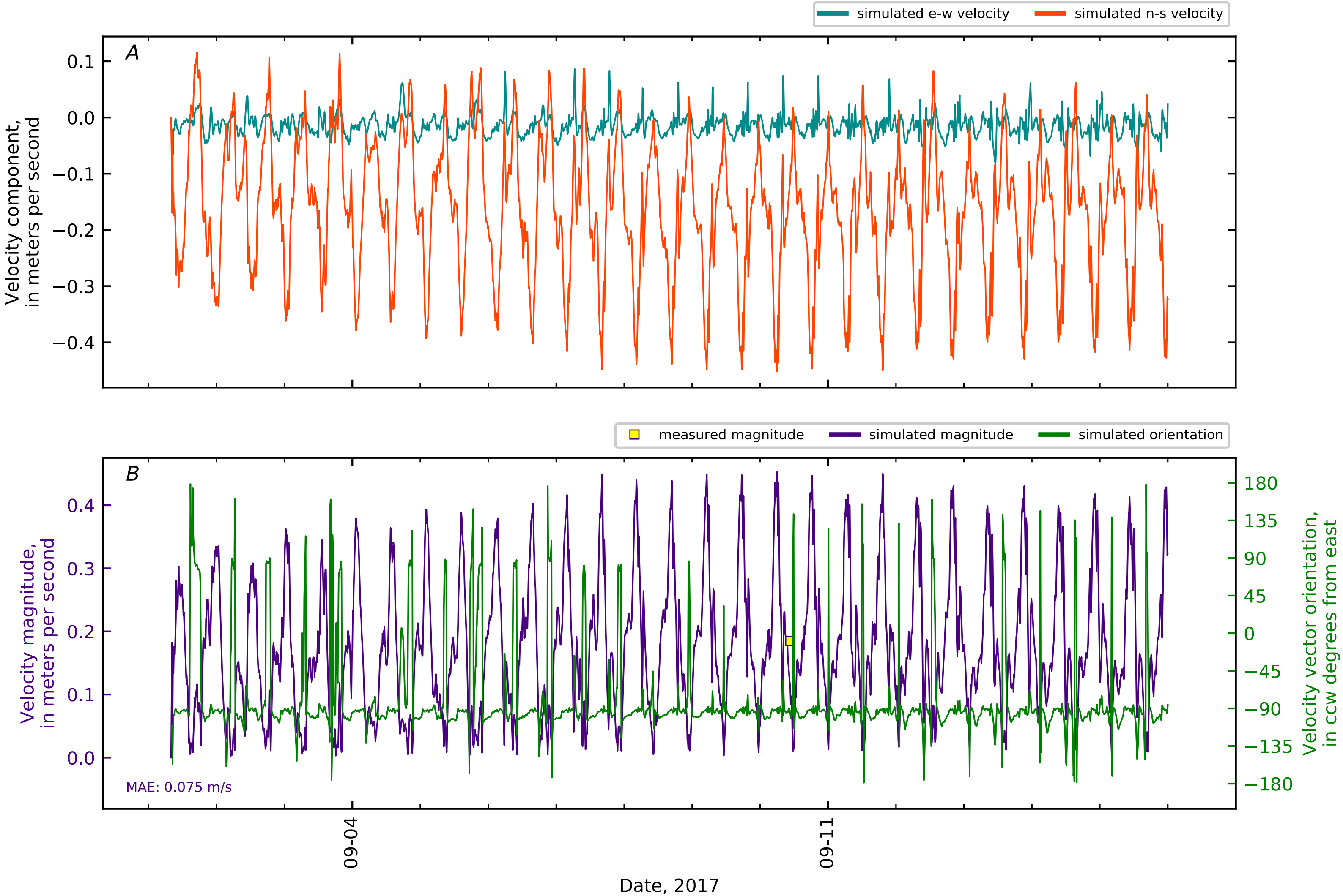

Figure B1-181. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 20, Penob Riv KM3.8 GS CTD3-02.

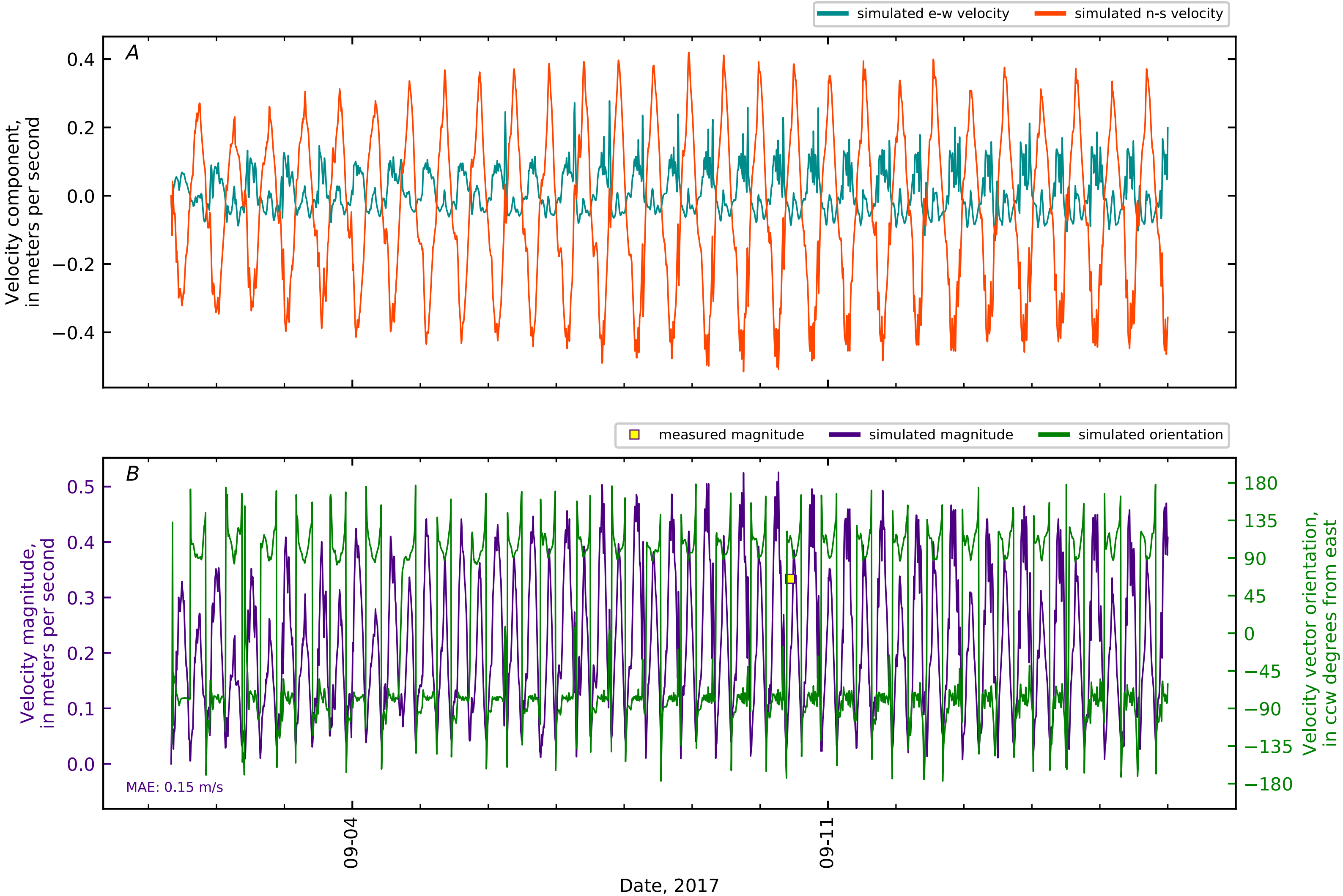

Figure B1-182. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 21, Penob Riv KM3.8 GS CTD3-03.

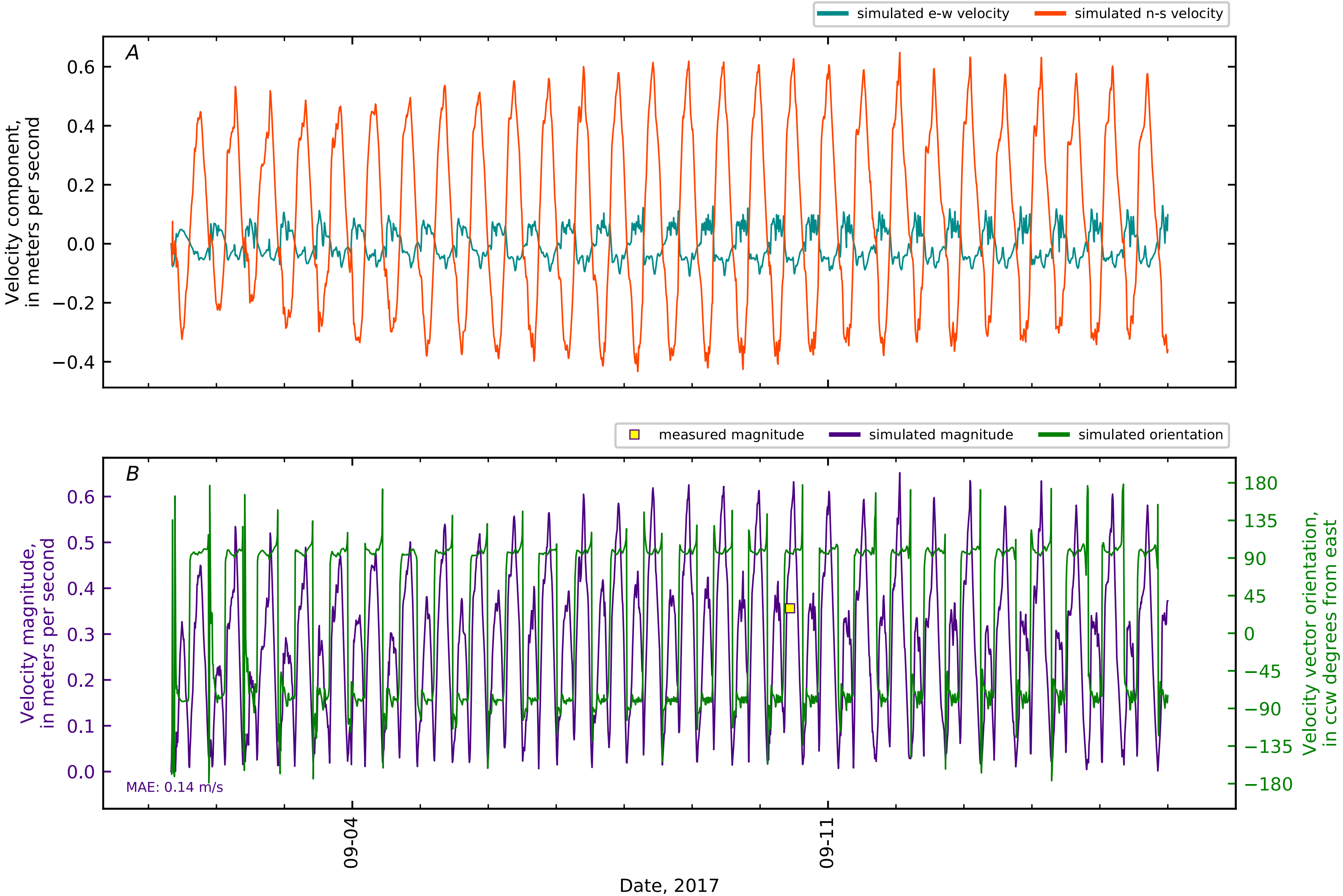

Figure B1-183. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 22, Penob Riv KM3.8 GS CTD3-04.

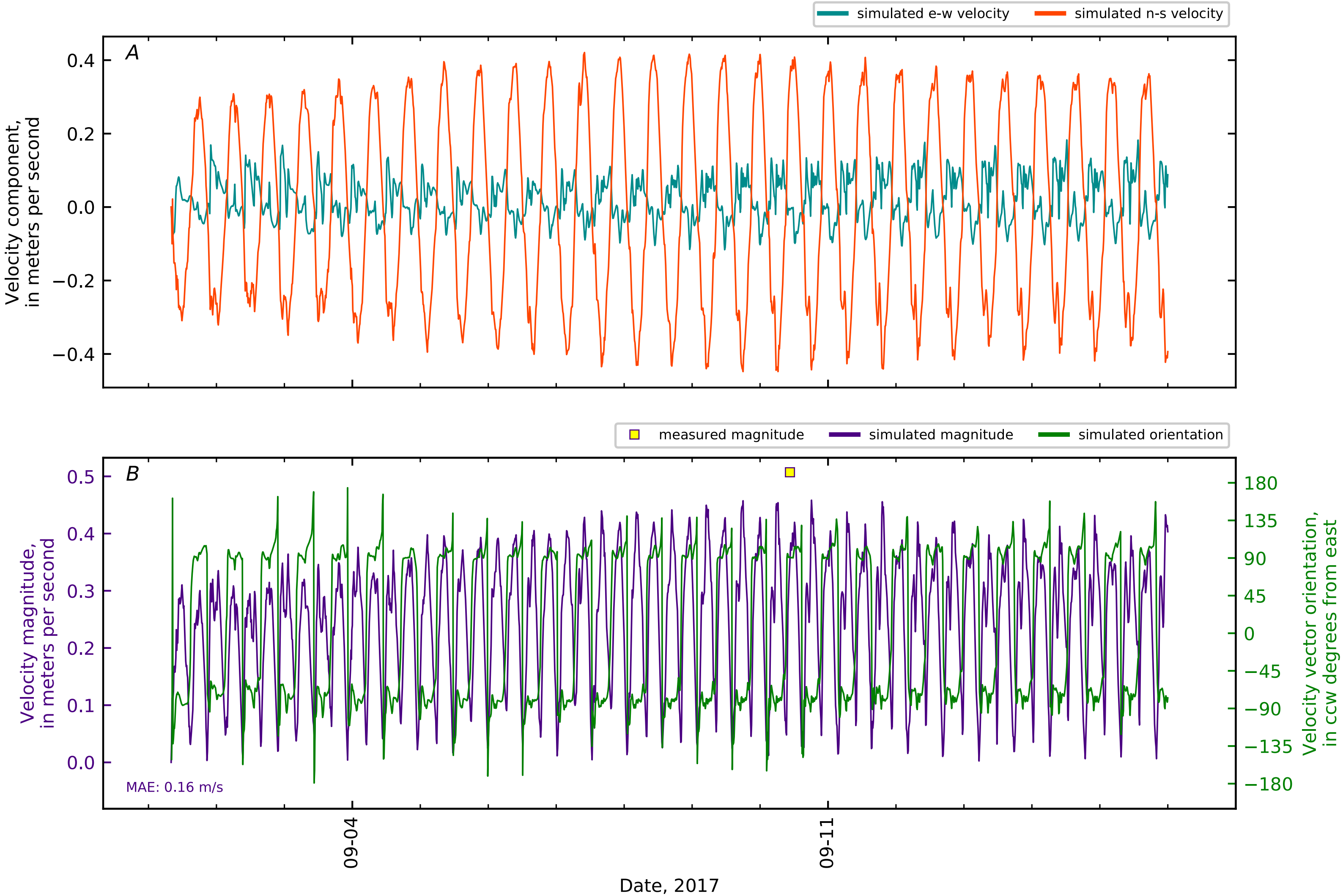

Figure B1-184. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 23, Penob Riv KM3.8 GS CTD3-05.

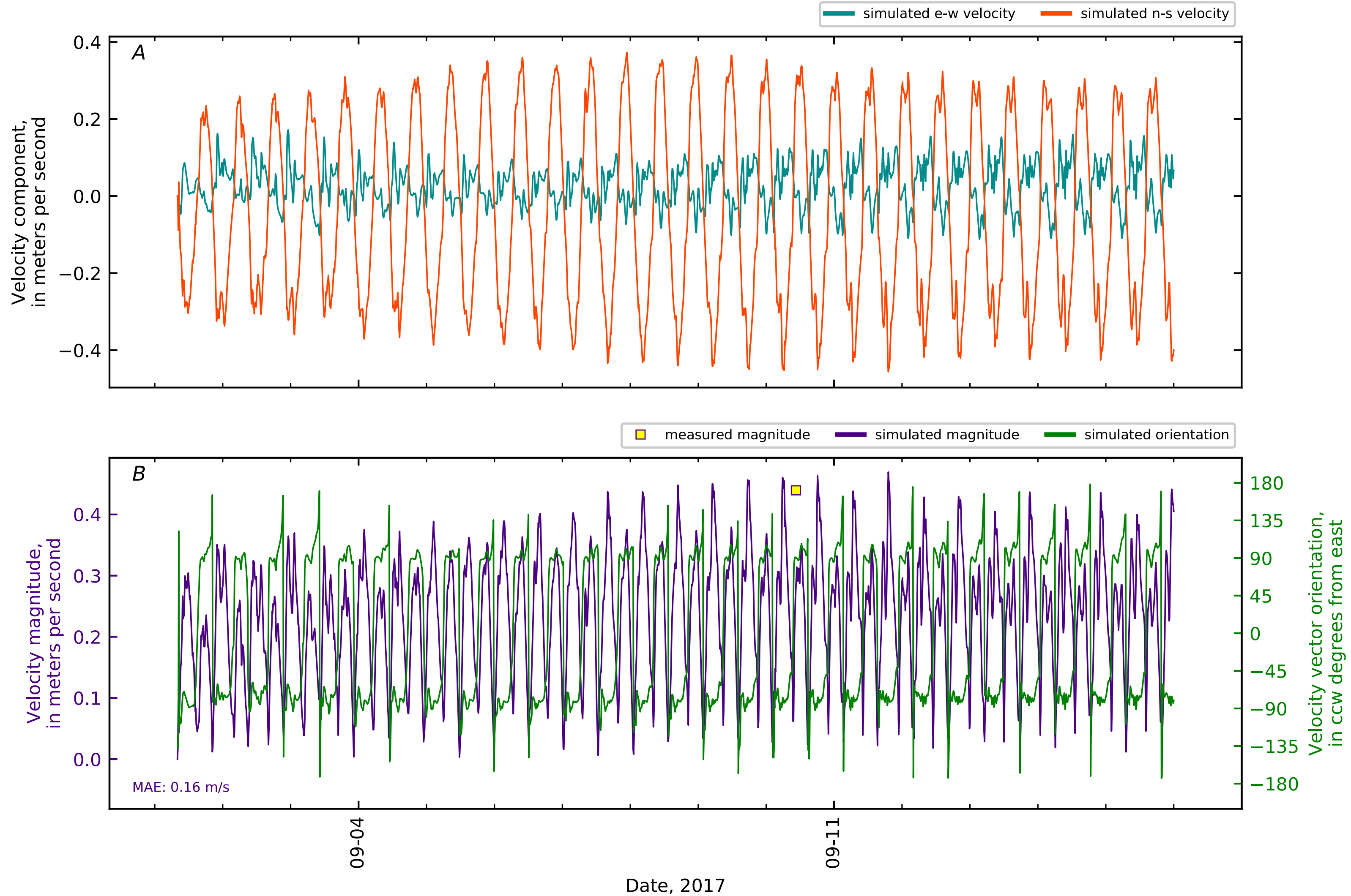

Figure B1-185. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 24, Penob Riv KM3.8 GS CTD3-06.

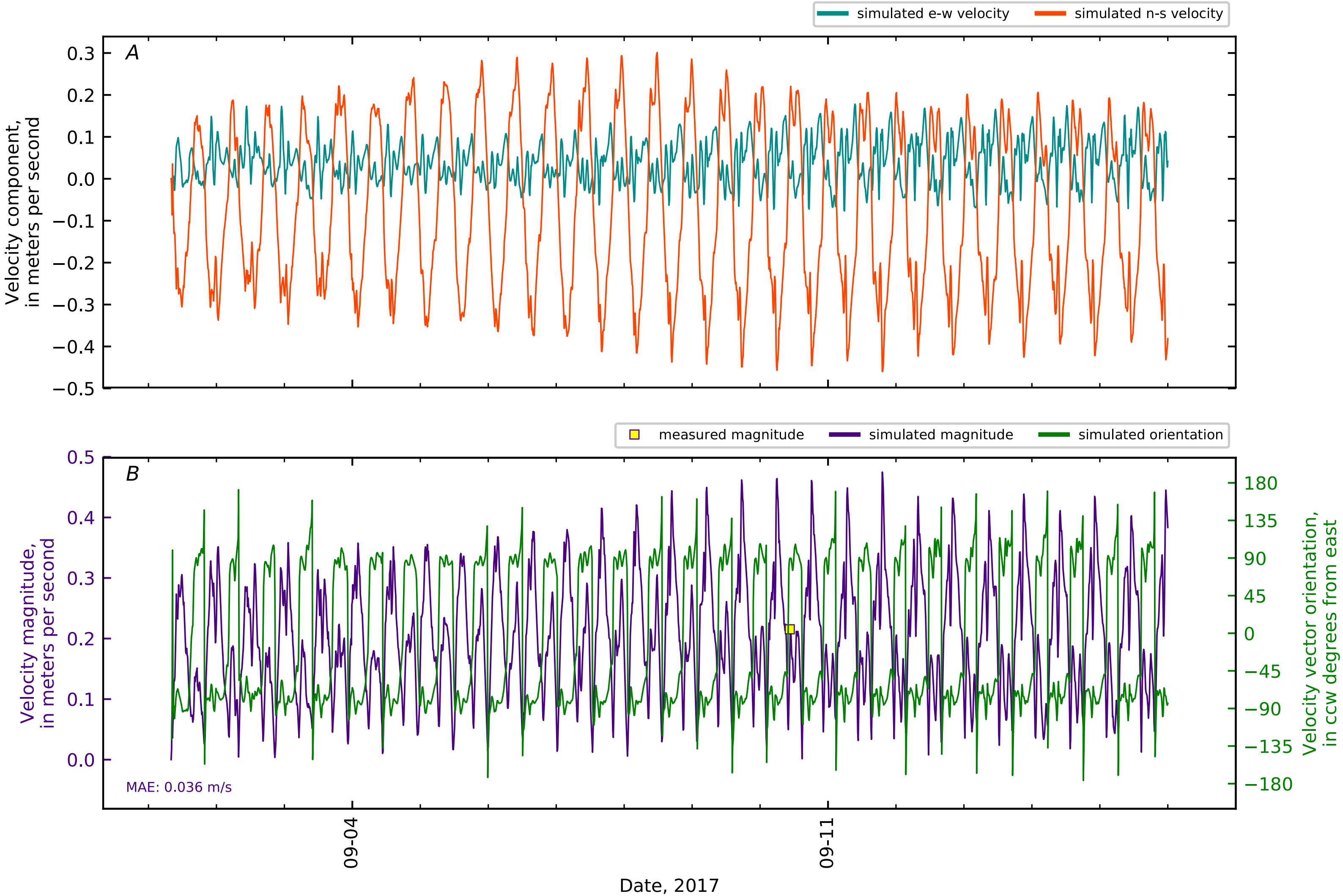

Figure B1-186. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 25, Penob Riv KM3.8 GS CTD3-07.

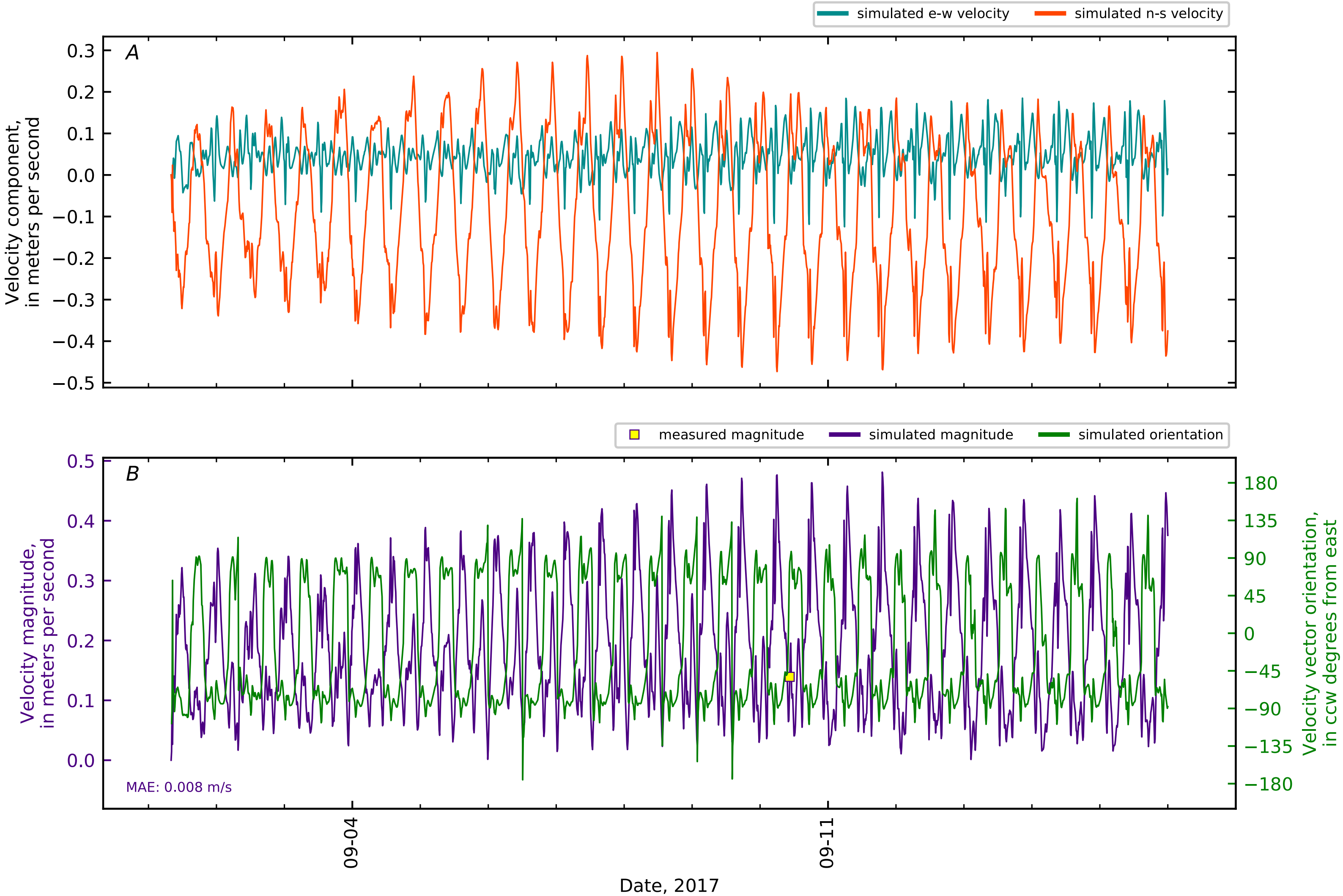

Figure B1-187. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 26, Penob Riv KM3.8 GS CTD3-08.

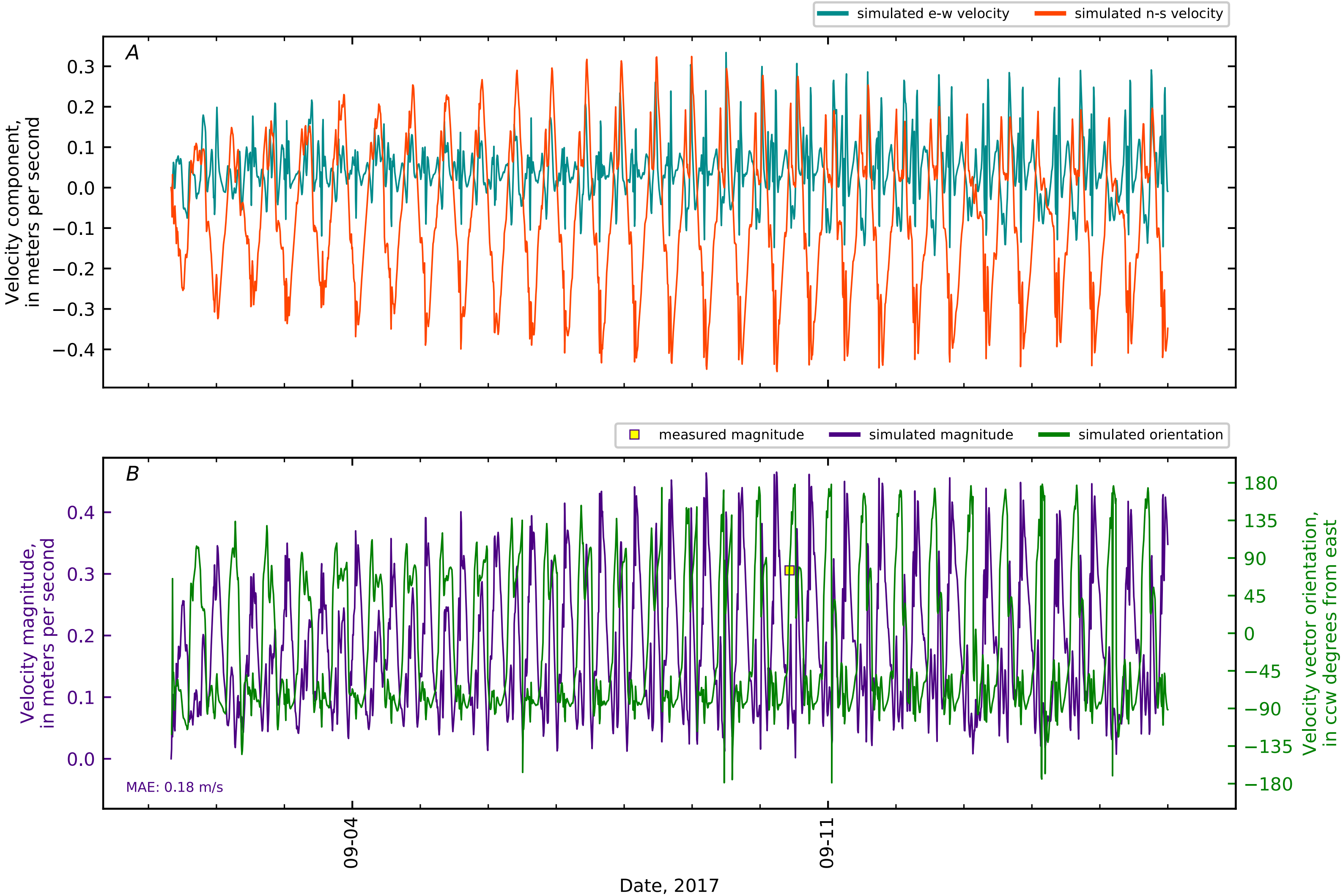

Figure B1-188. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 27, Penob Riv KM3.8 GS CTD3-09.

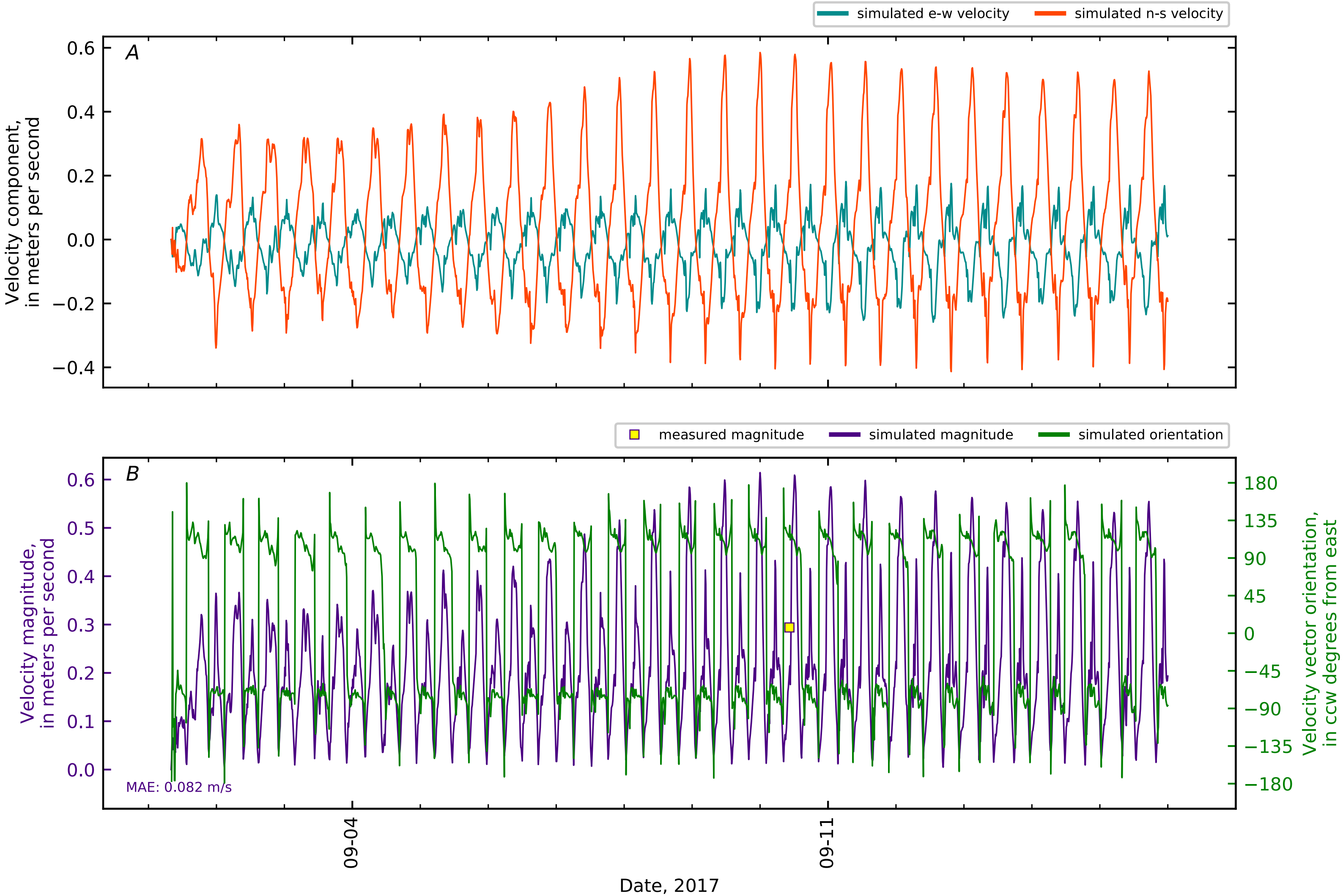

Figure B1-189. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 28, Penob Riv KM3.8 GS CTD3-10.

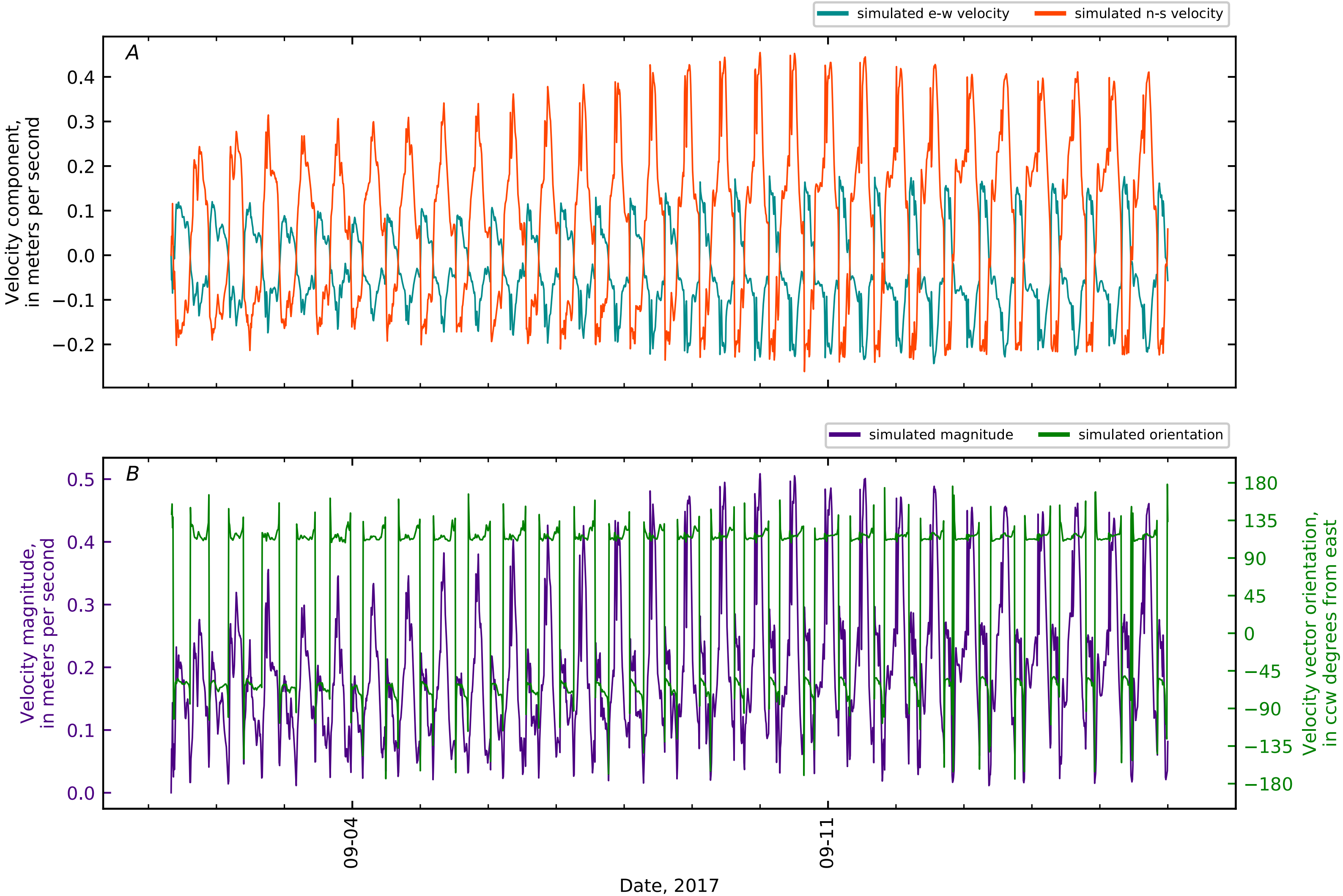

Figure B1-190. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 29, Penob Riv KM3.85 fmr NOAA gage Gross Poi.

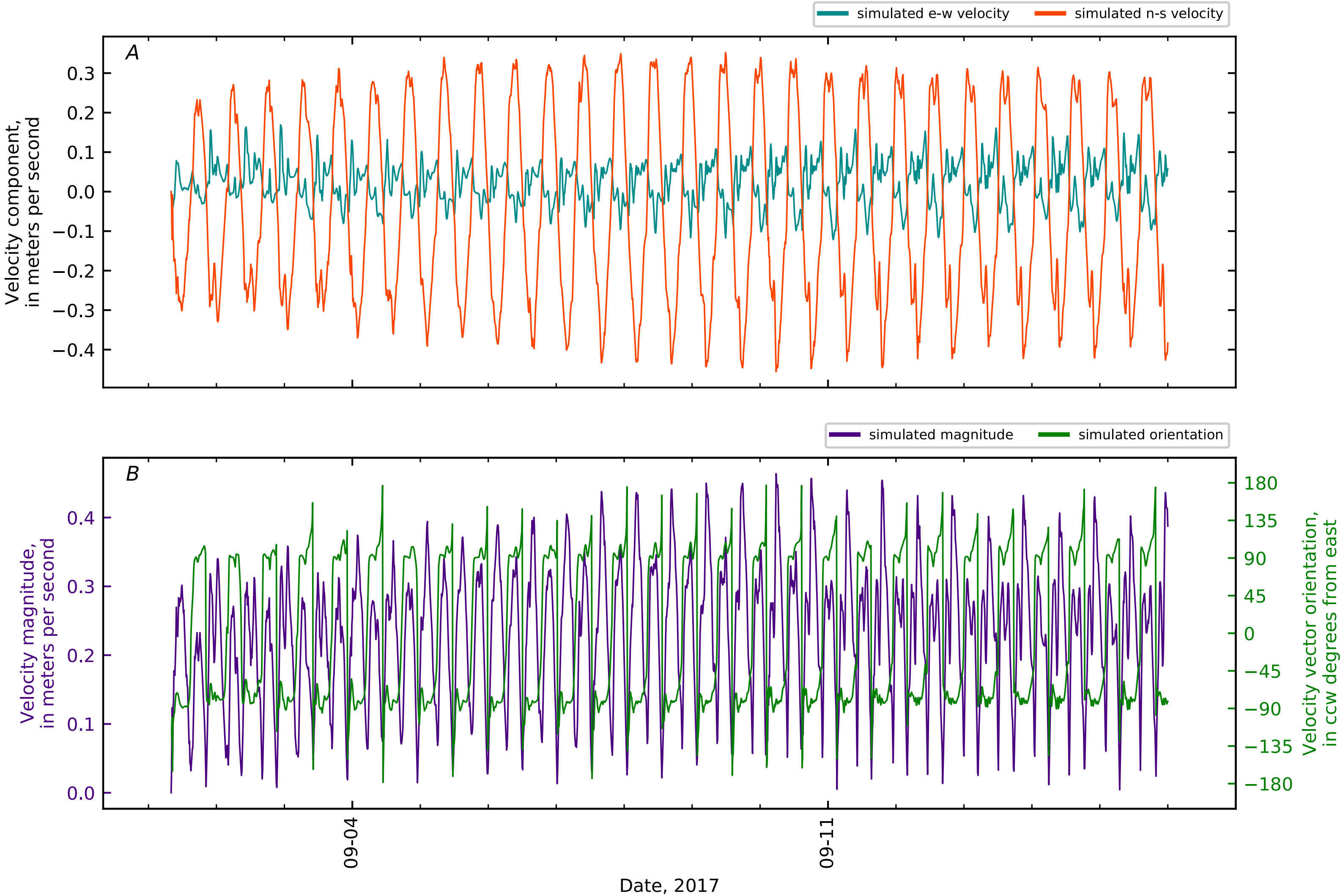

Figure B1-191. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 30, Penob Riv KM4.

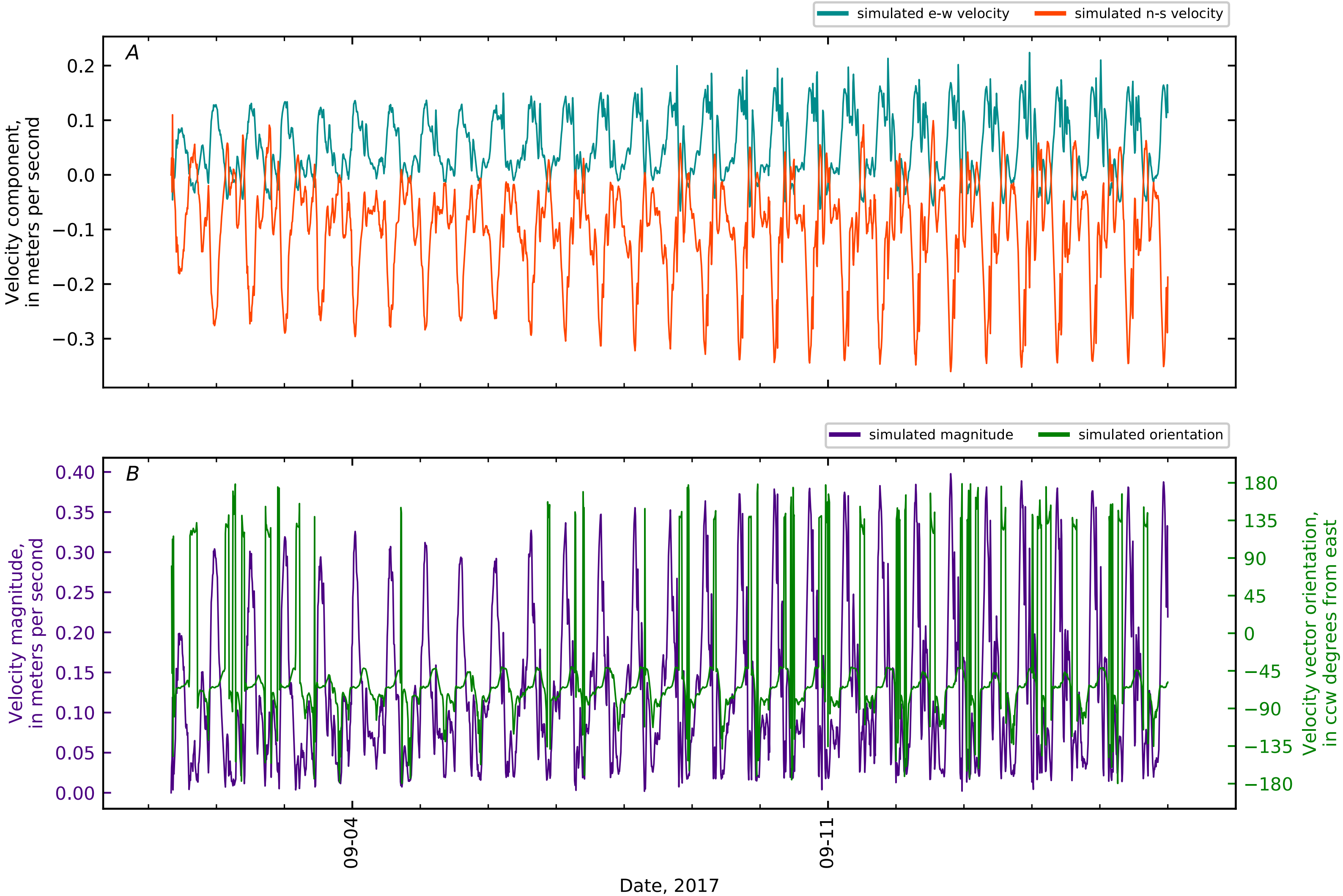

Figure B1-192. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 31, Penob Riv KM4.3 fmr NOAA gage Sandy Beac.

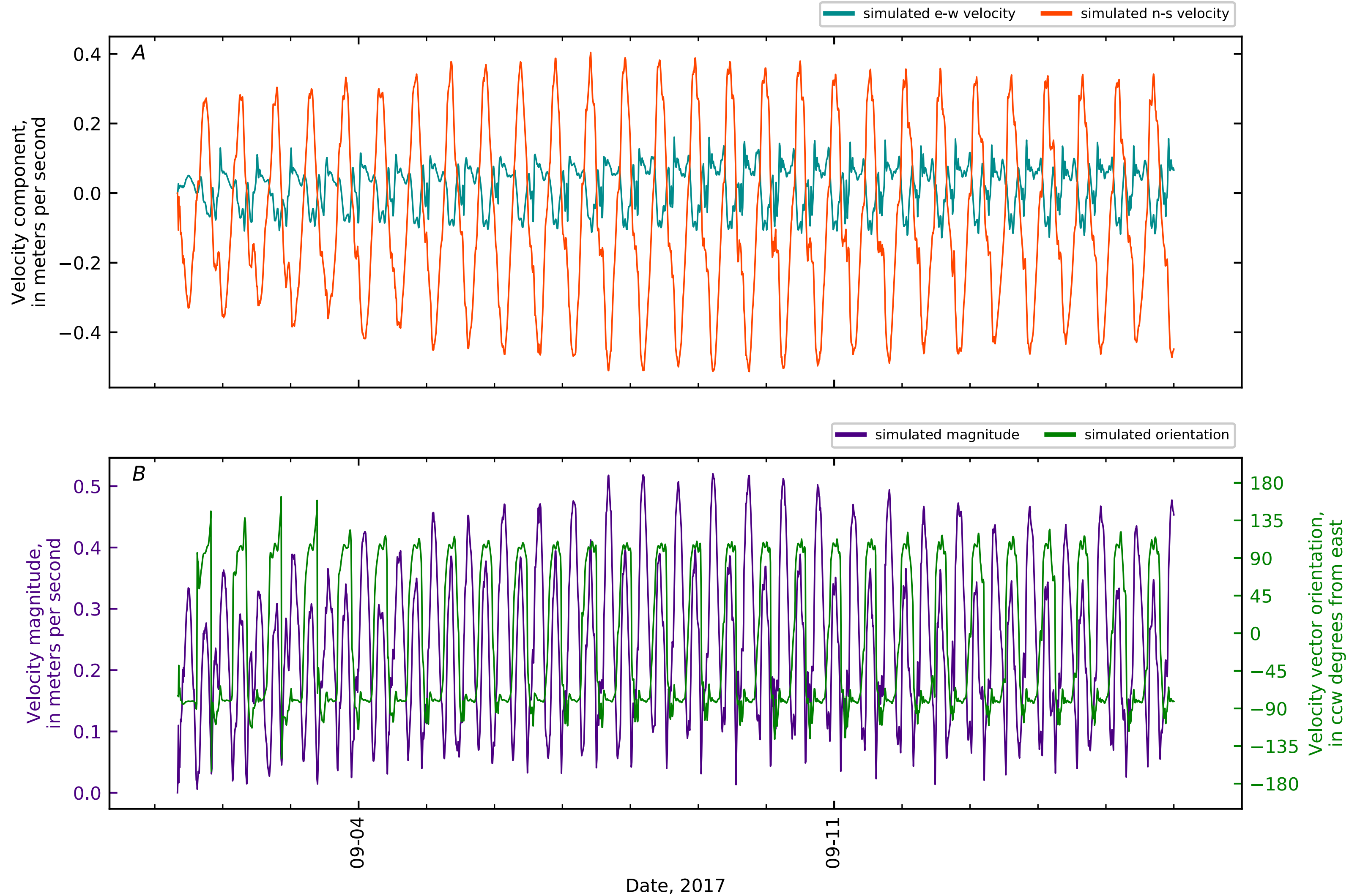

Figure B1-193. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 32, Penob Riv KM5.

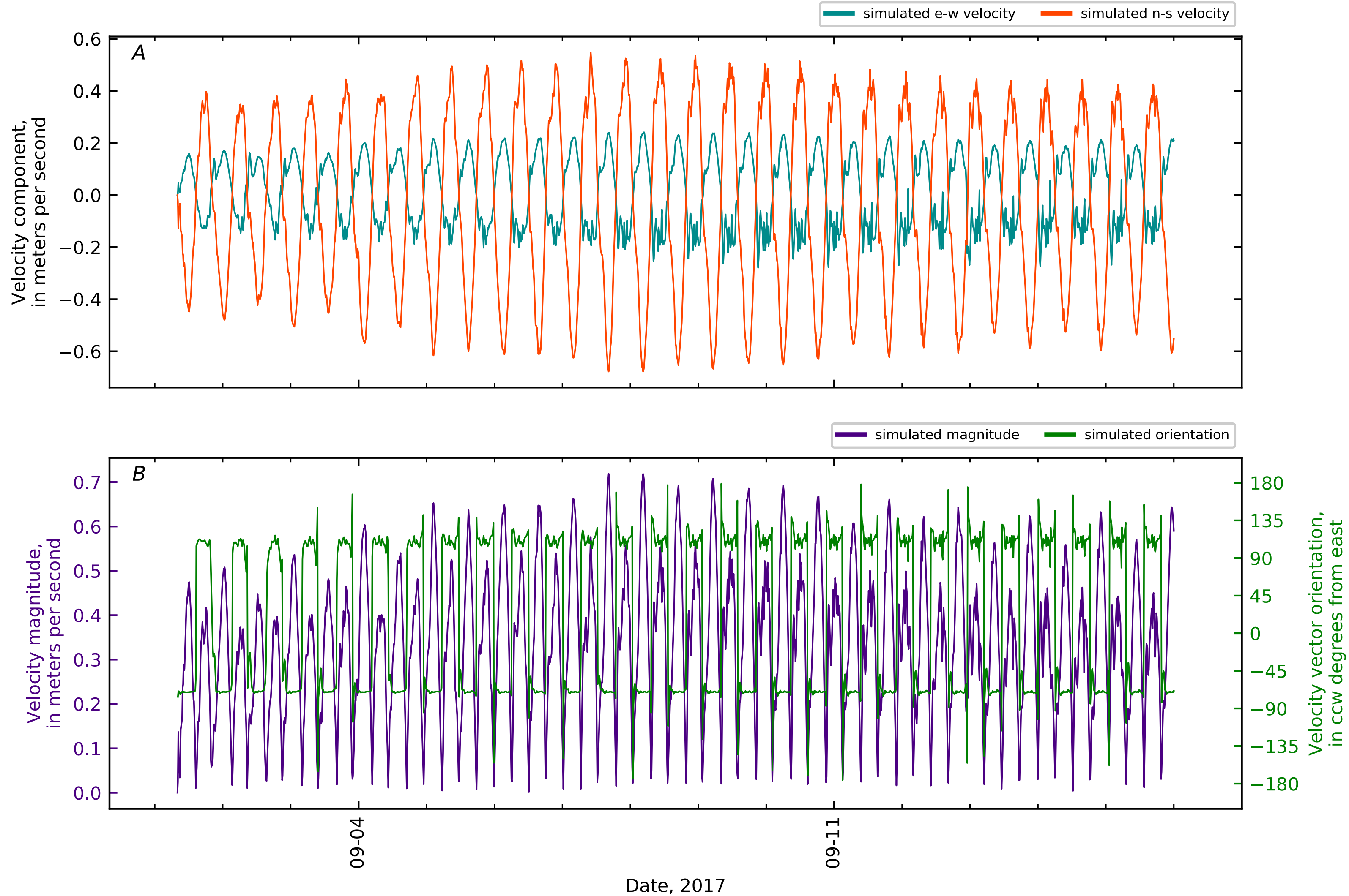

Figure B1-194. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 33, Penob Riv KM6.

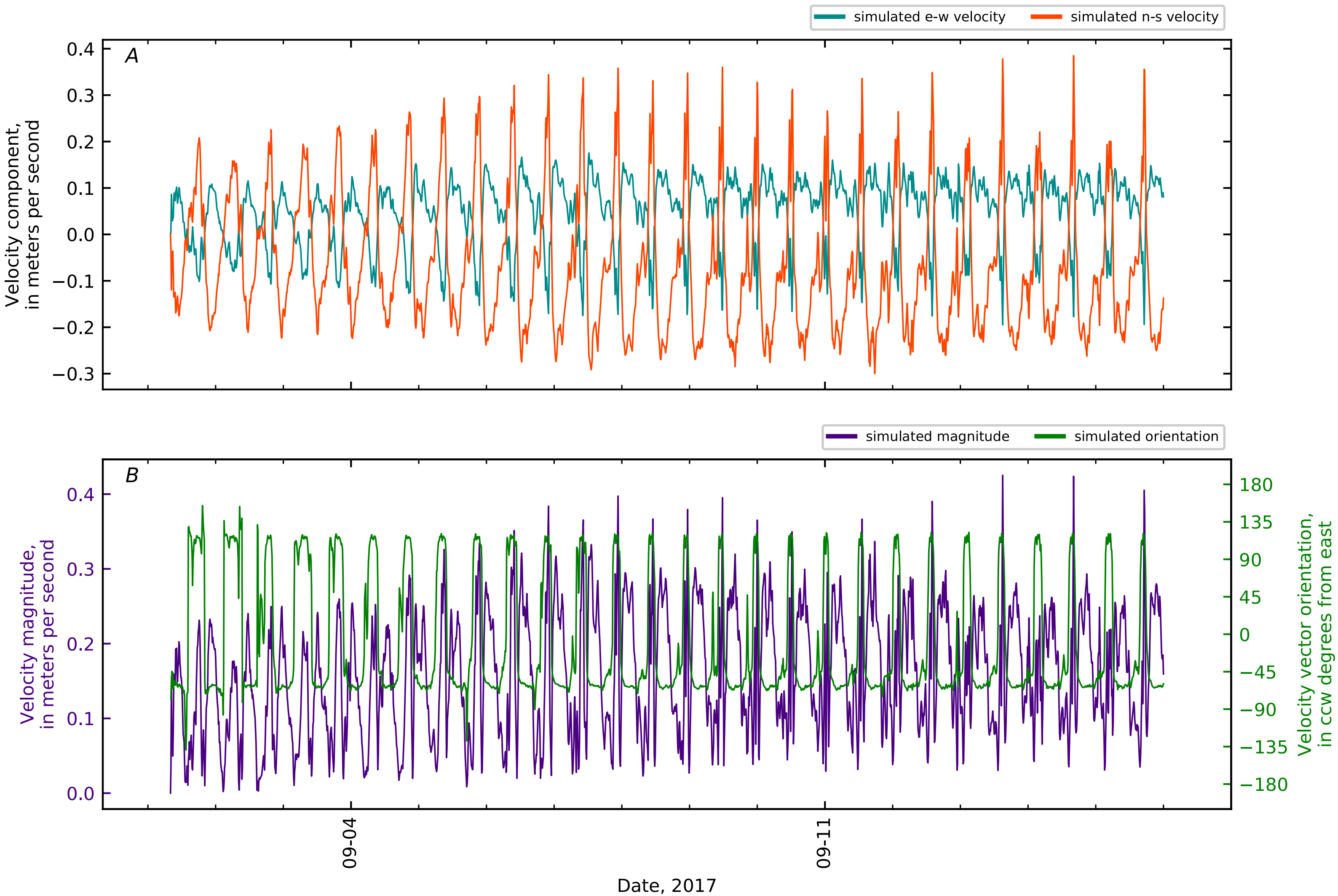

Figure B1-195. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 34, Penob Riv KM6 ERDC11 VW-MU14-SF-1.

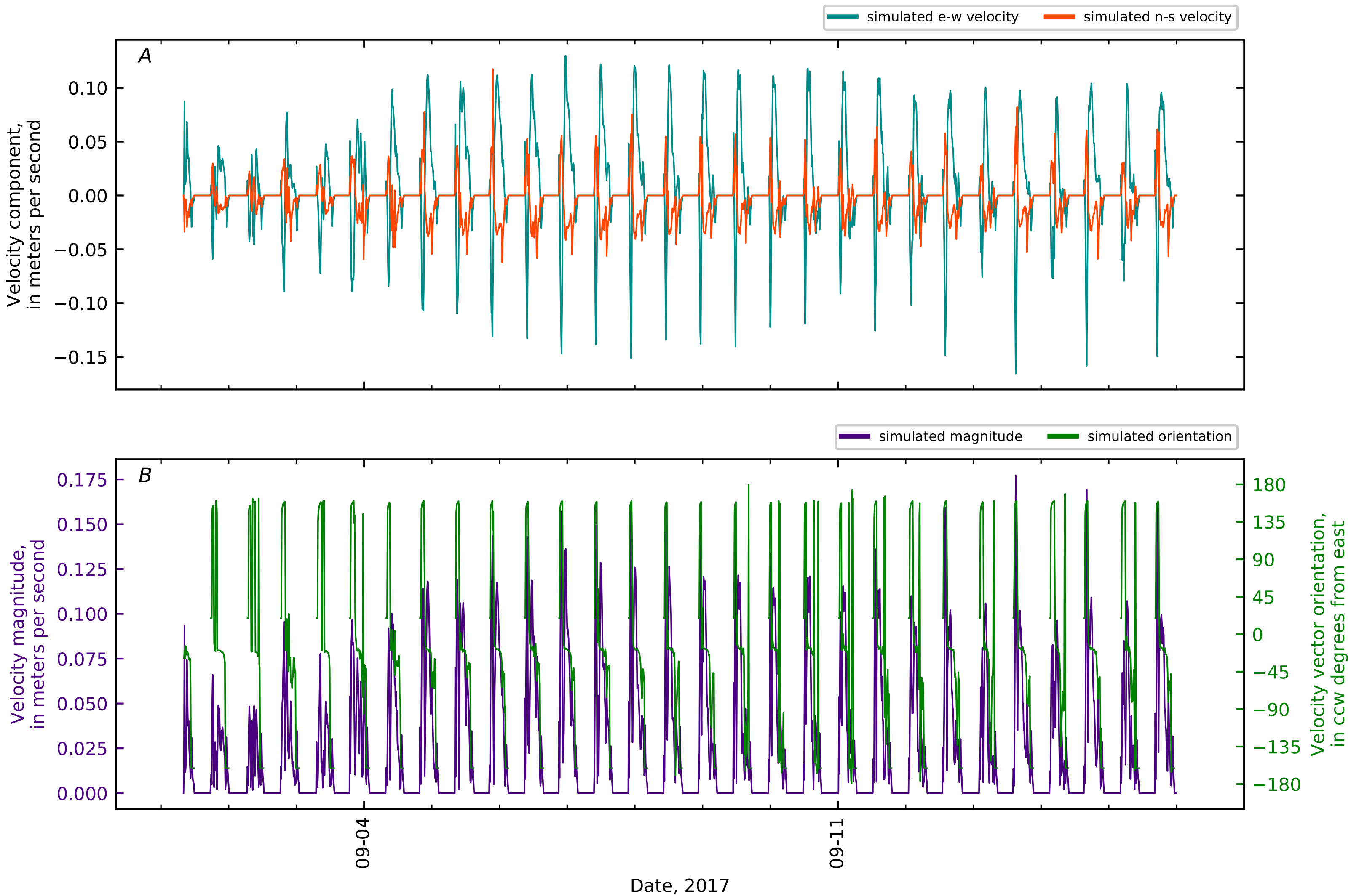

Figure B1-196. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 35, Penob Riv KM6.05 ERDC10 VW-MU7-SF1.

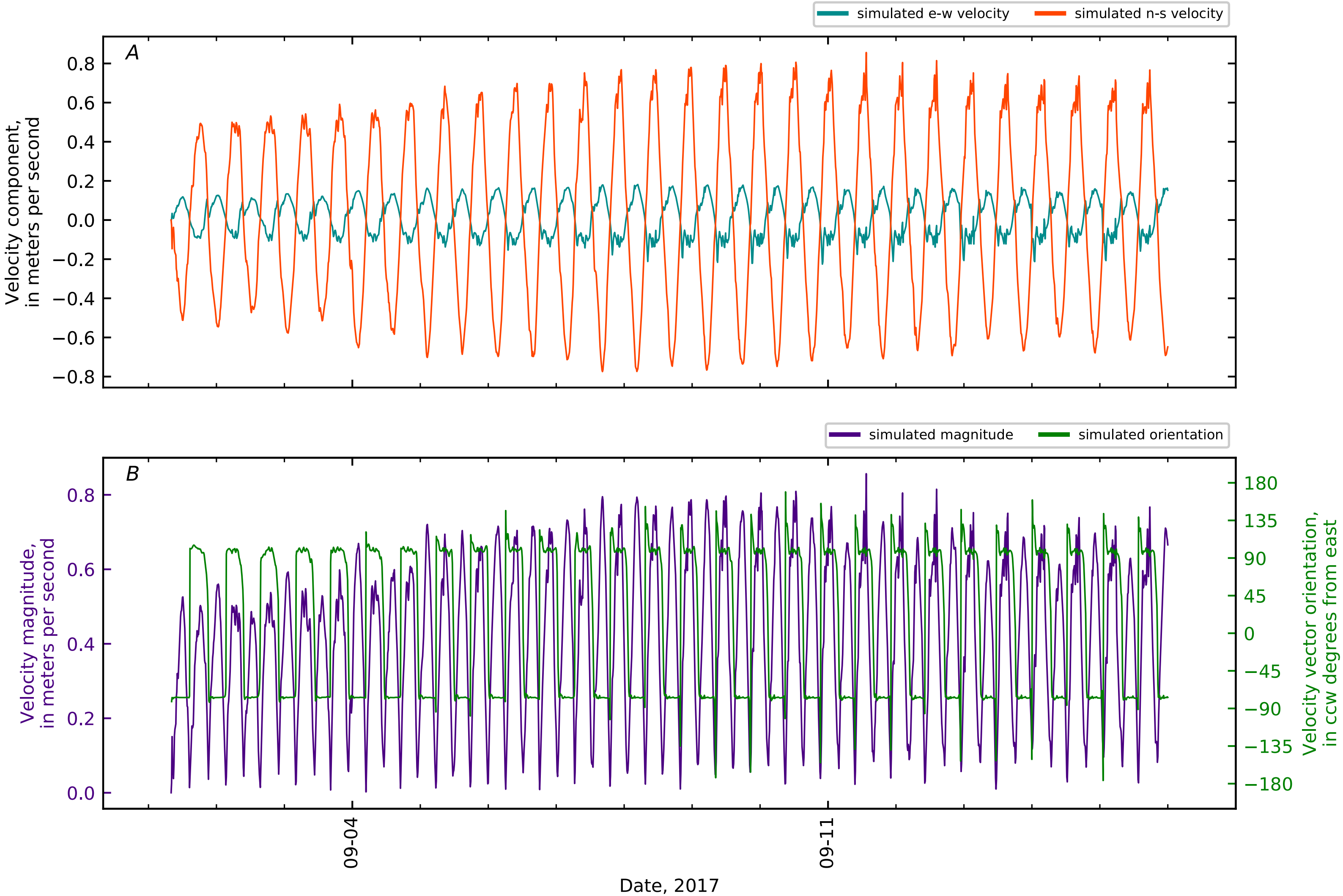

Figure B1-197. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 36, Penob Riv KM6.1 WHOI5 Verona Island 2010.

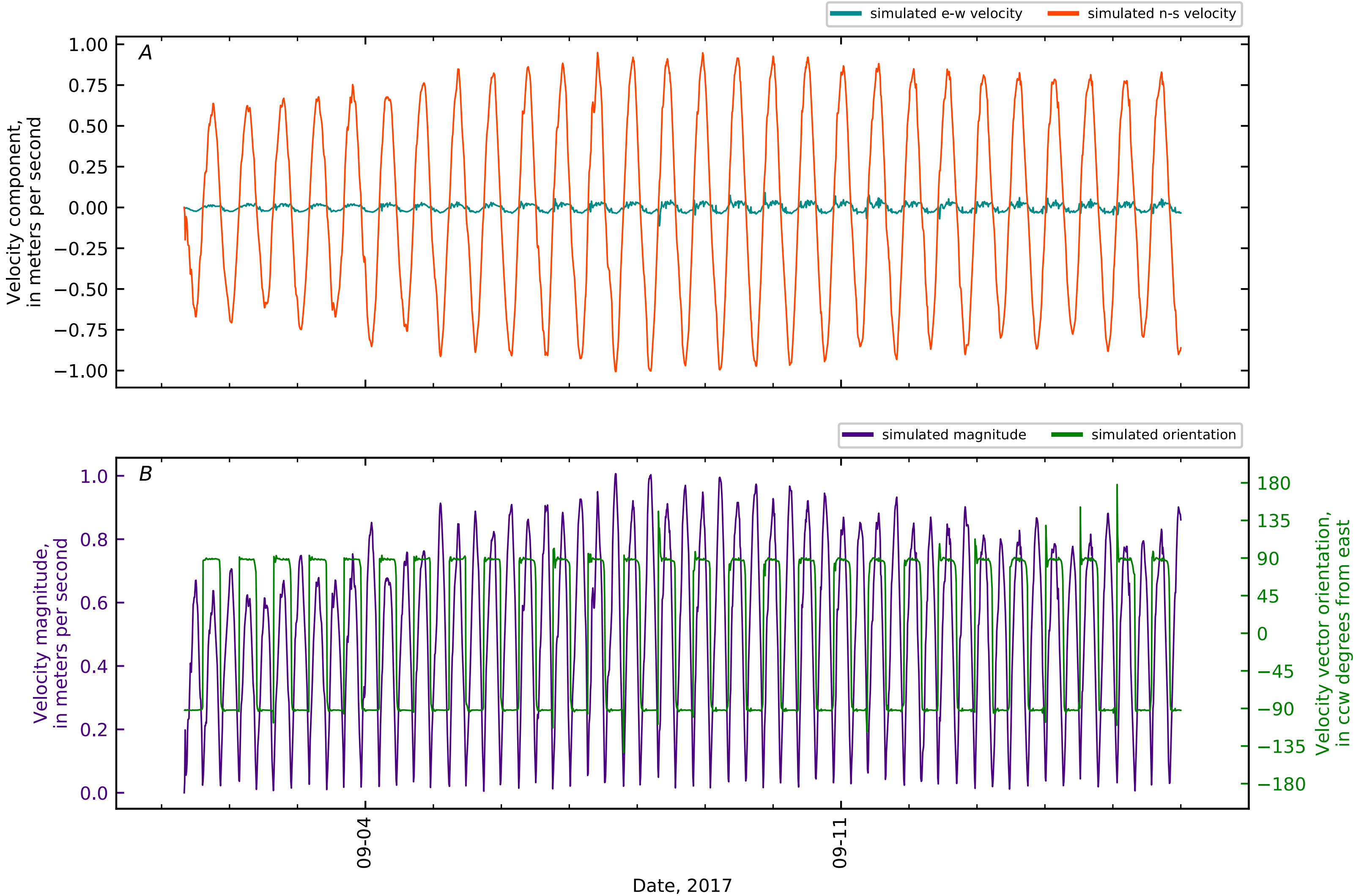

Figure B1-198. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 37, Penob Riv KM7.

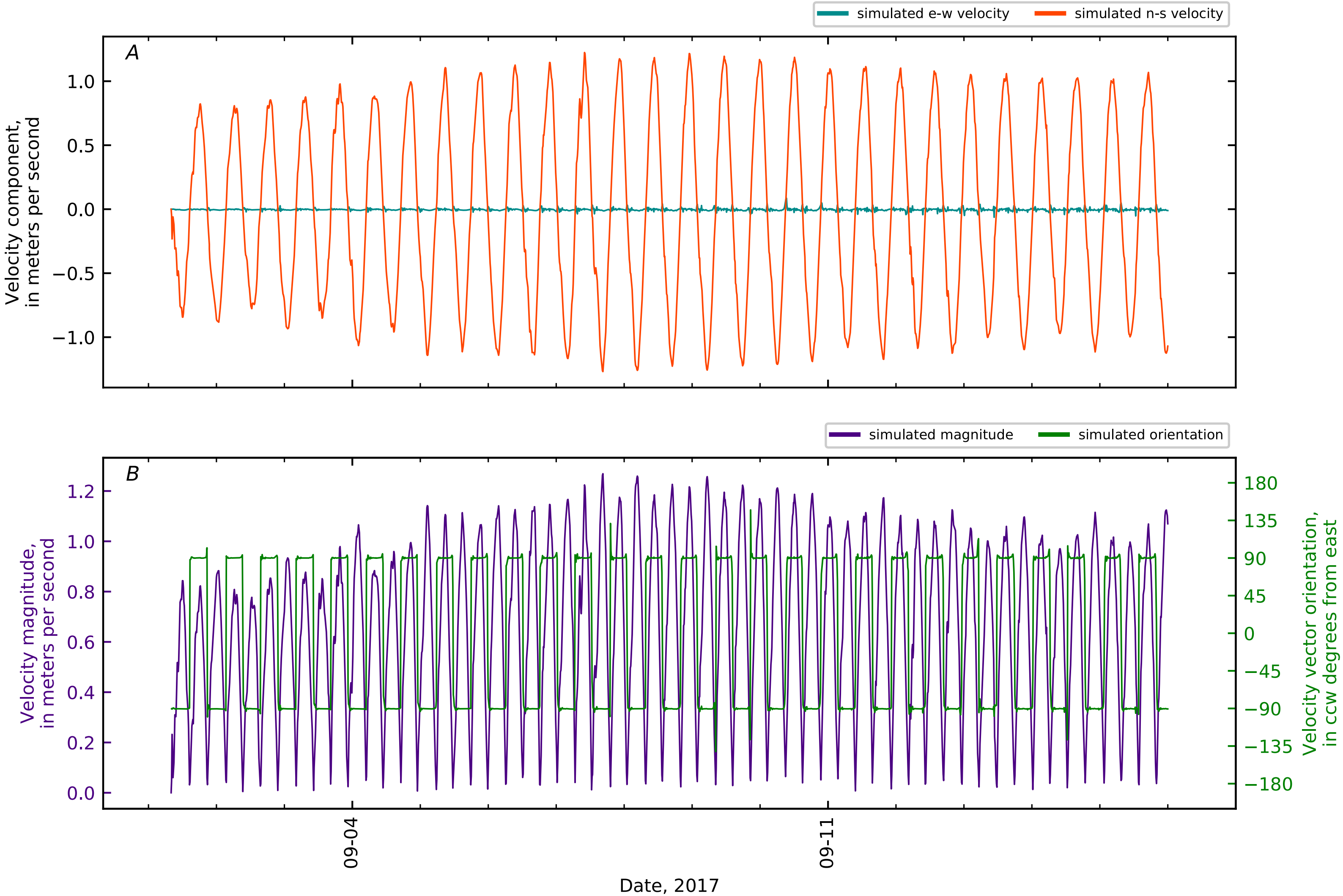

Figure B1-199. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 38, Penob Riv KM8.

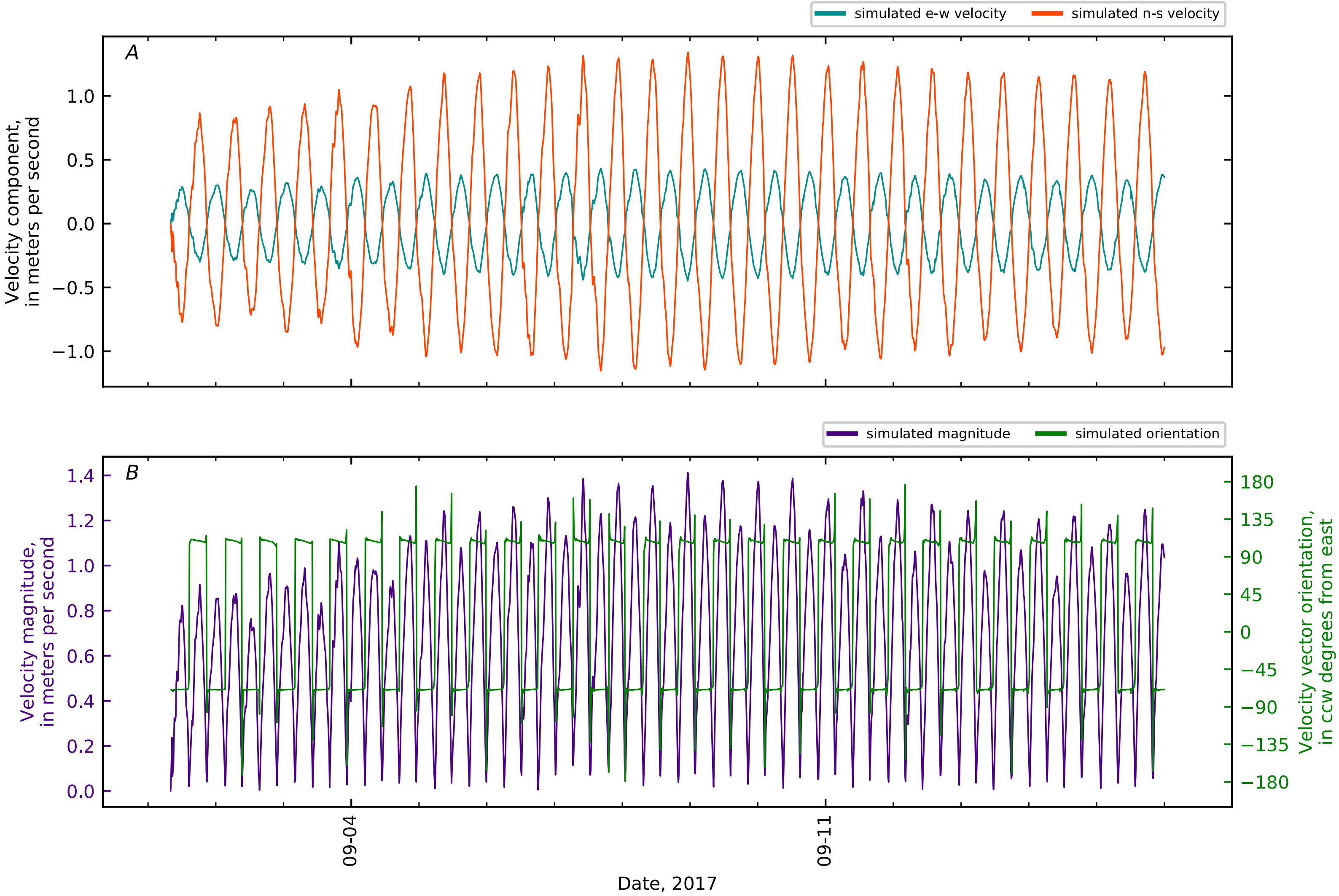

Figure B1-200. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 39, Penob Riv KM9.

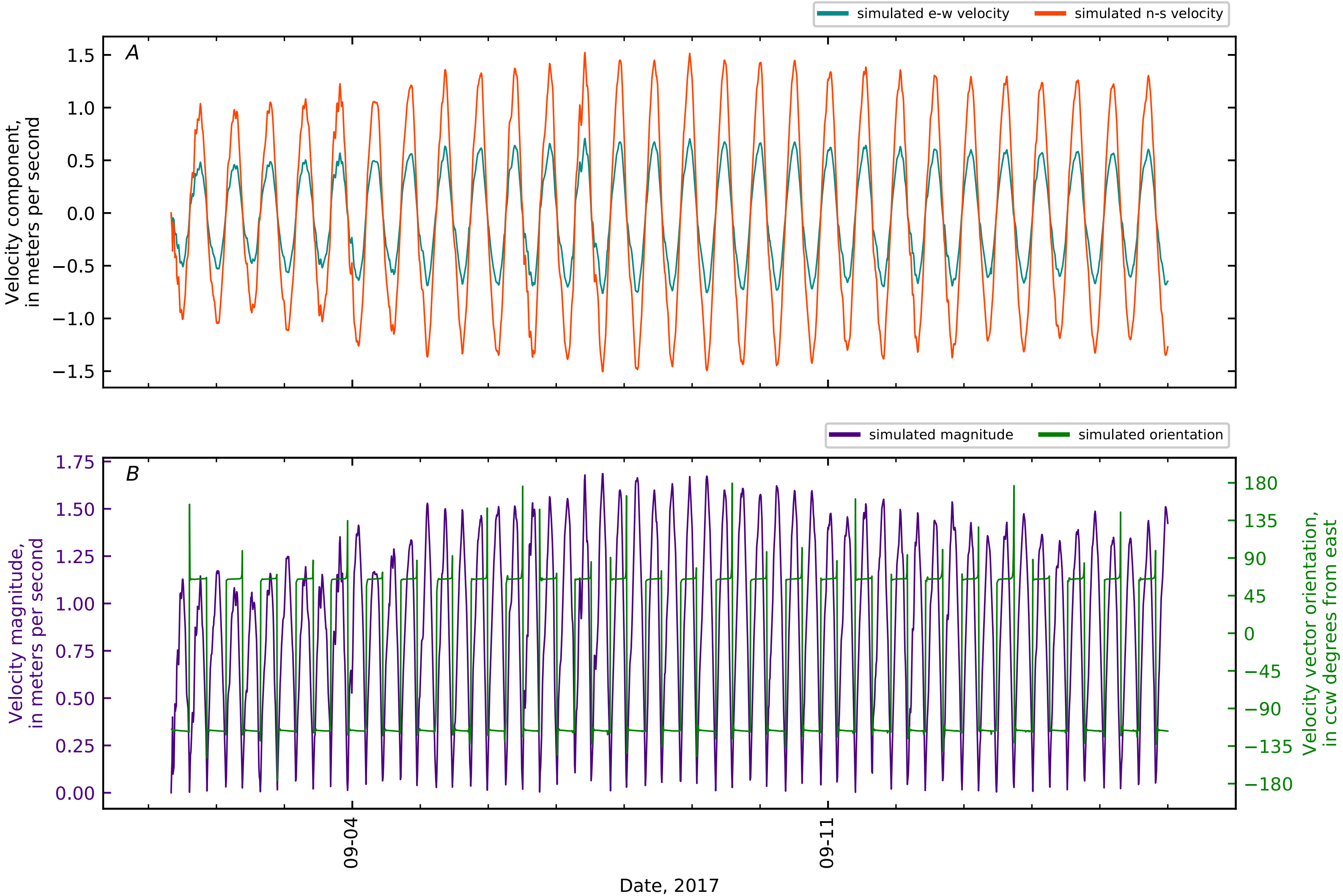

Figure B1-201. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 40, Penob Riv KM10.

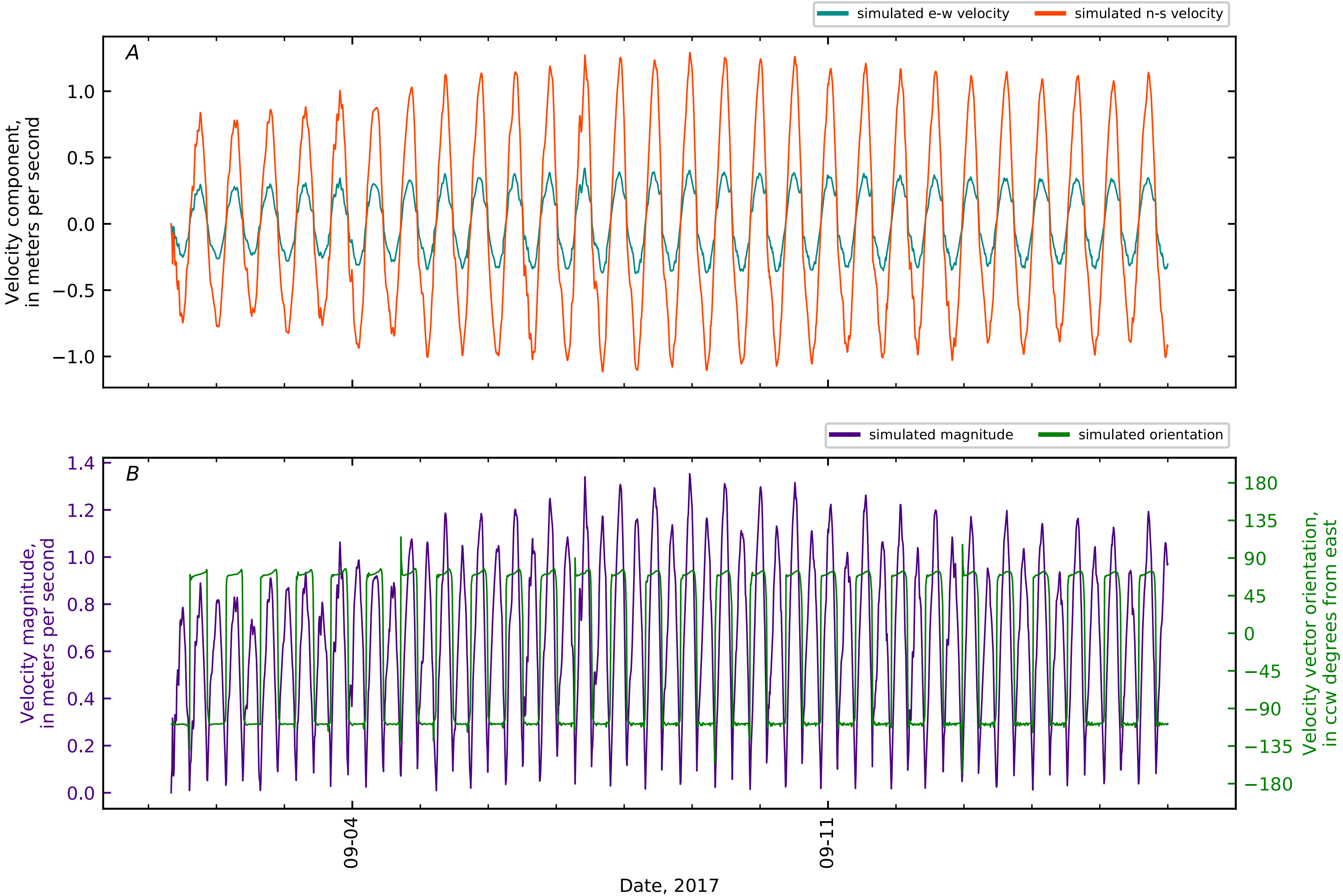

Figure B1-202. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 41, Penob Riv KM11.

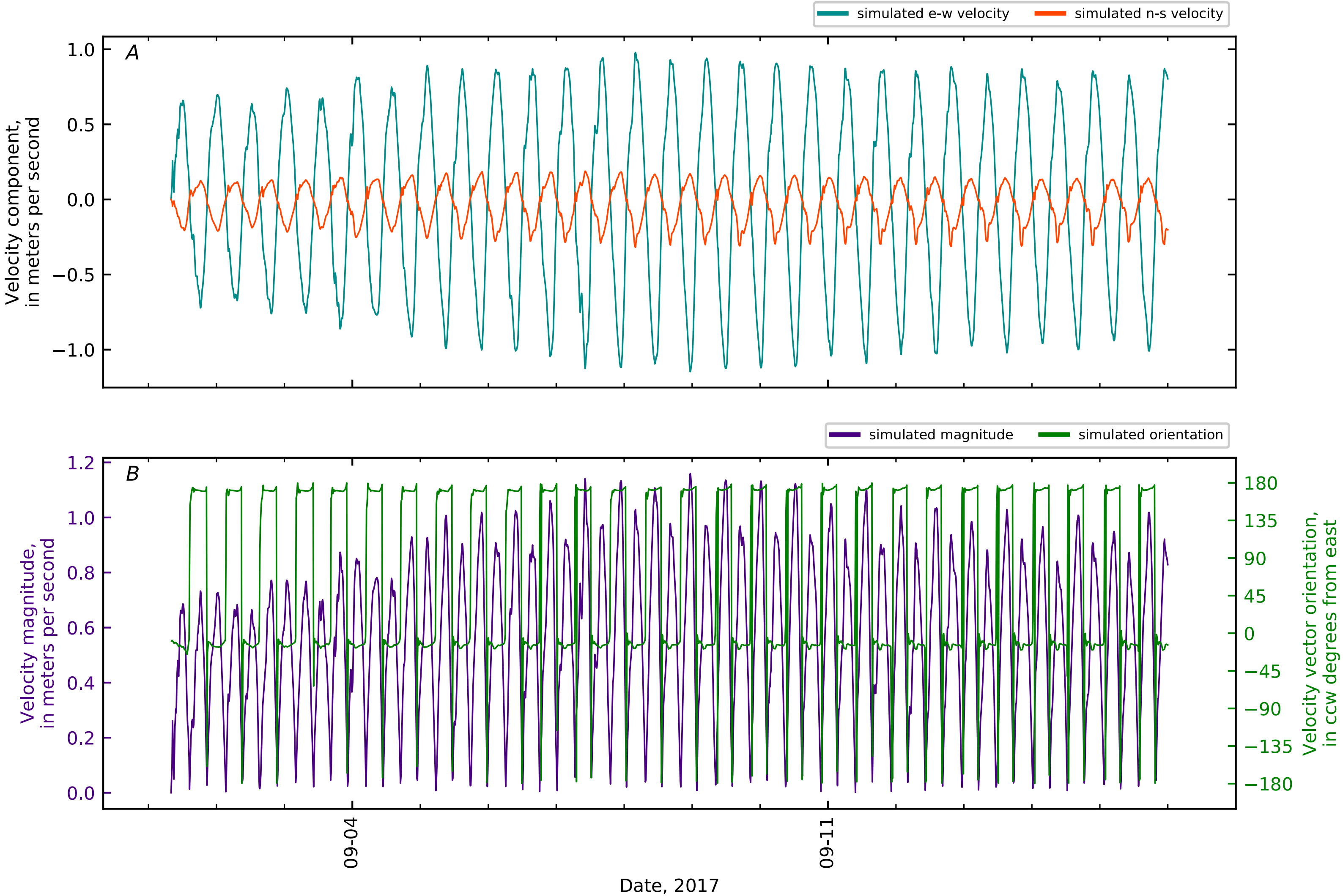

Figure B1-203. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 42, Penob Riv KM12.

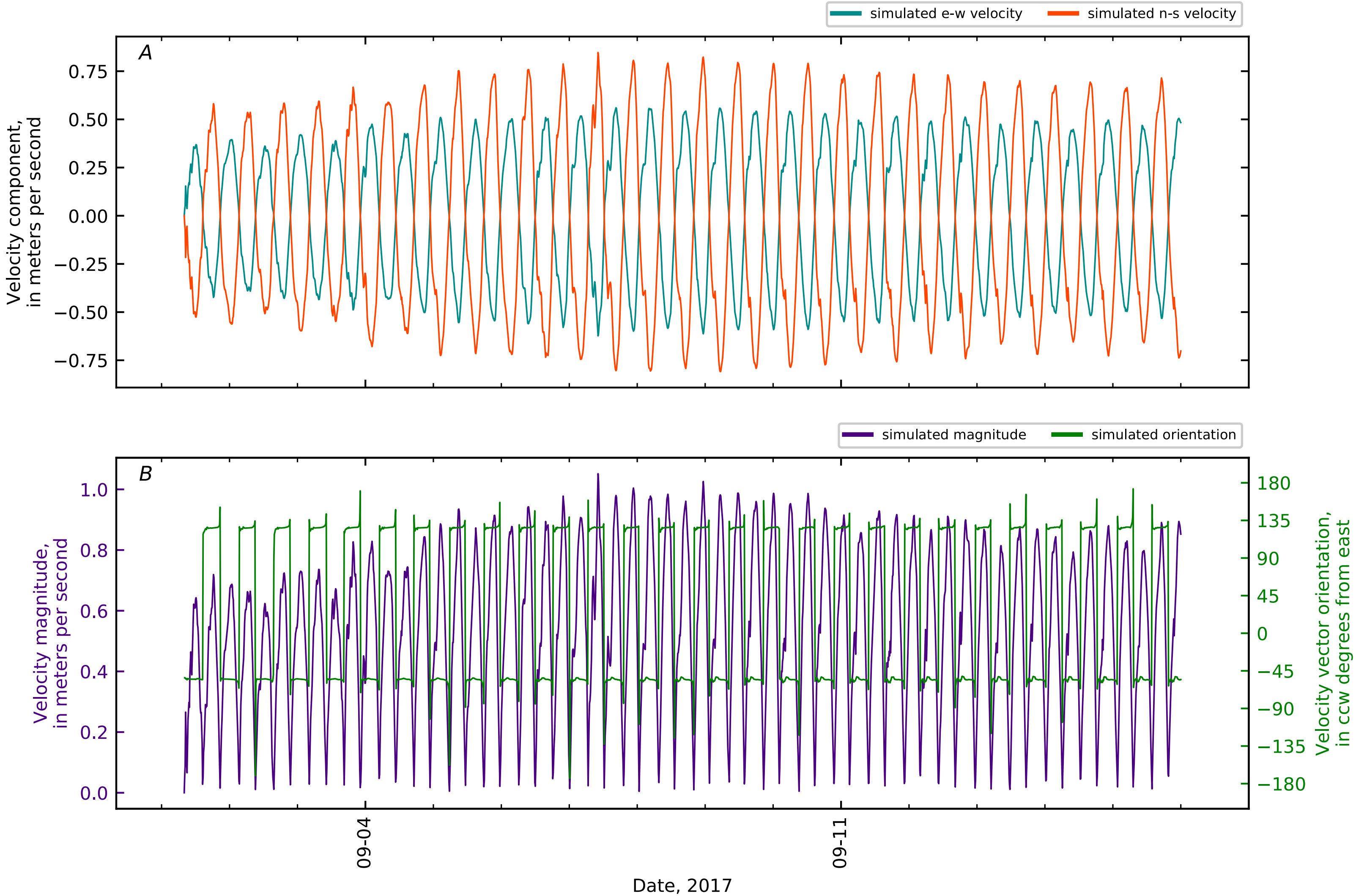

Figure B1-204. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 43, Penob Riv KM12.9 WHOI7 Bucksport 2011.

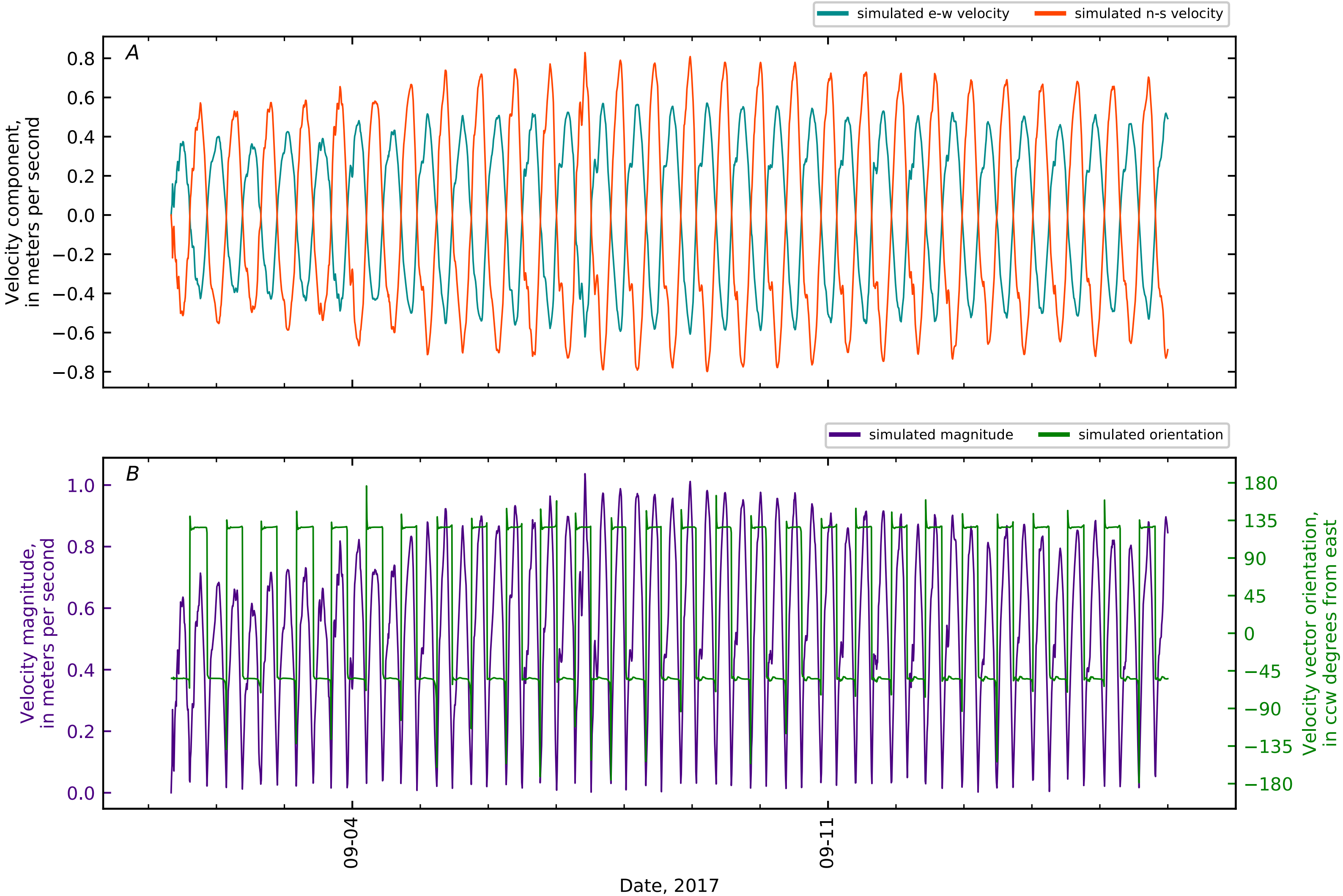

Figure B1-205. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 44, Penob Riv KM13.

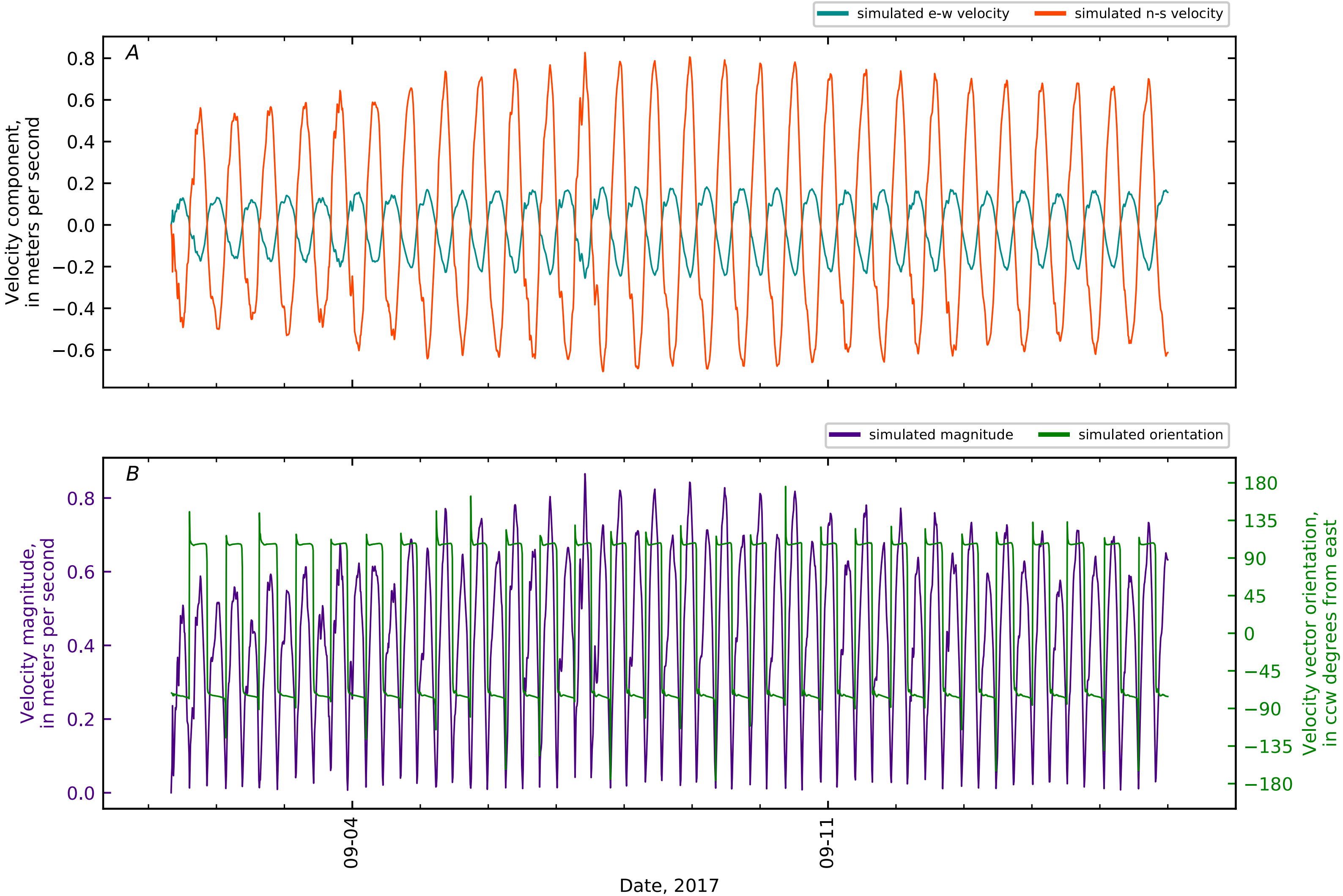

Figure B1-206. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 45, Penob Riv KM14.

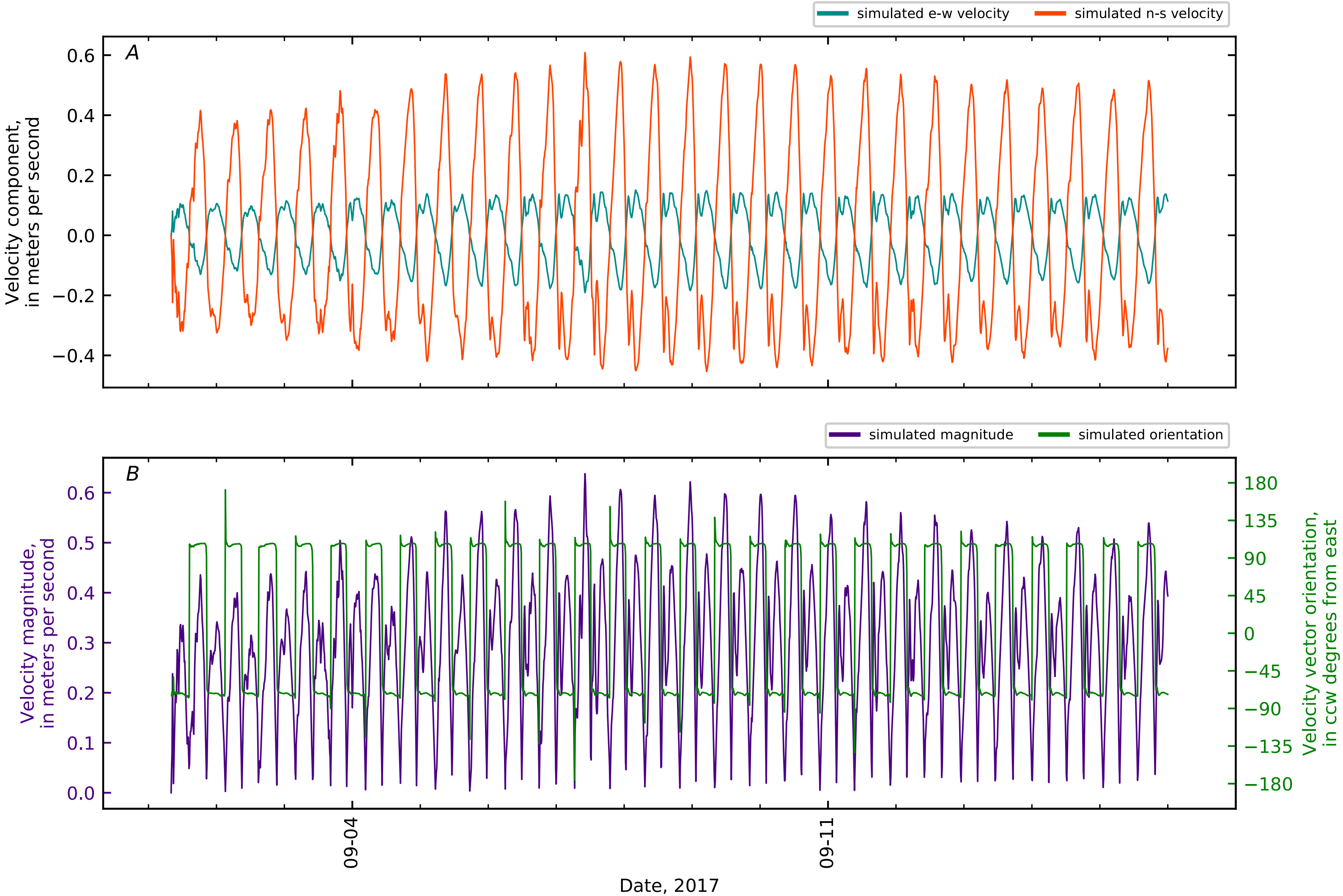

Figure B1-207. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 46, Penob Riv KM14.27 ERDC15 BU-MU1-SF-1.

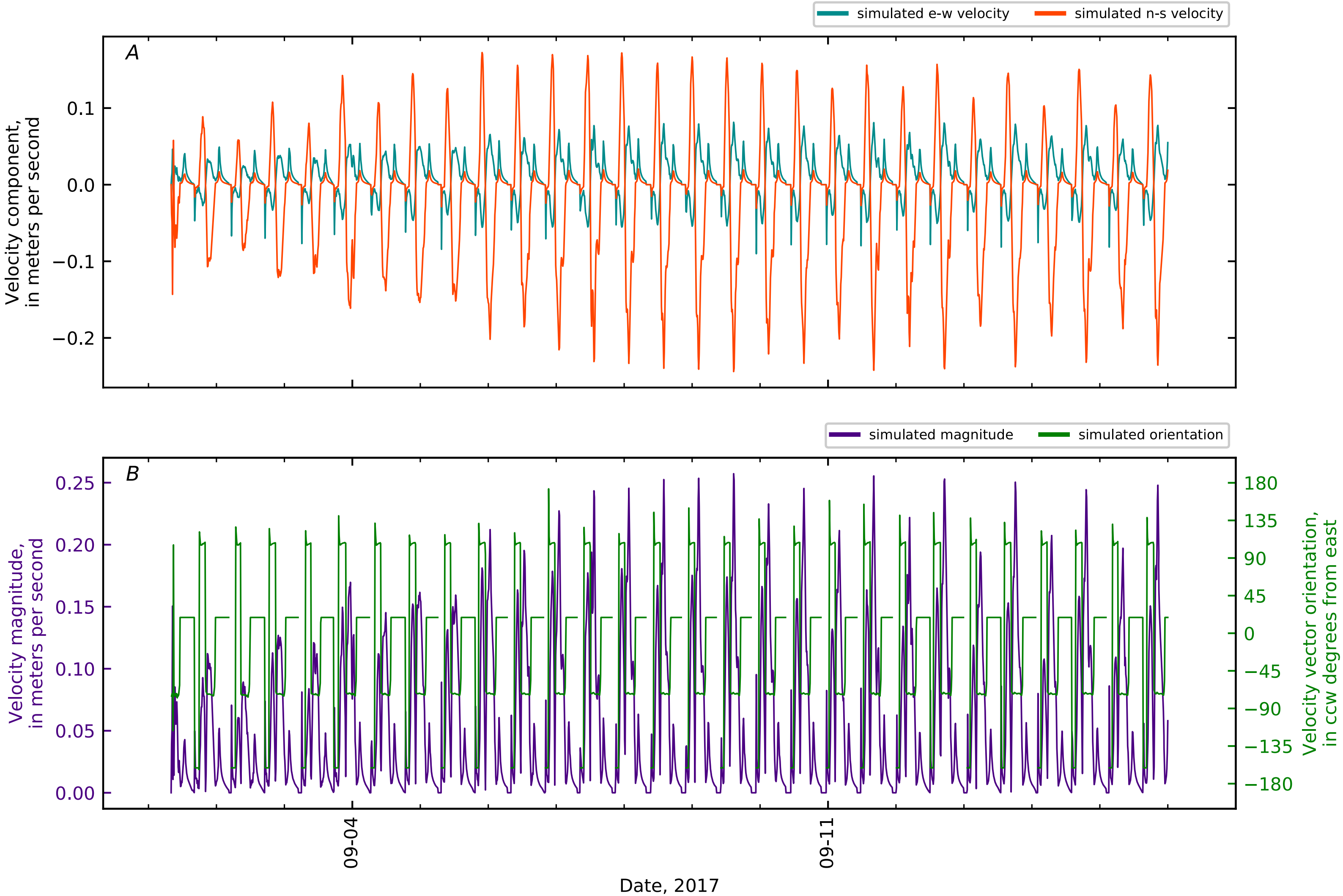

Figure B1-208. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 47, Penob Riv KM14.29 ERDC16B BU-MU1-SF-1.

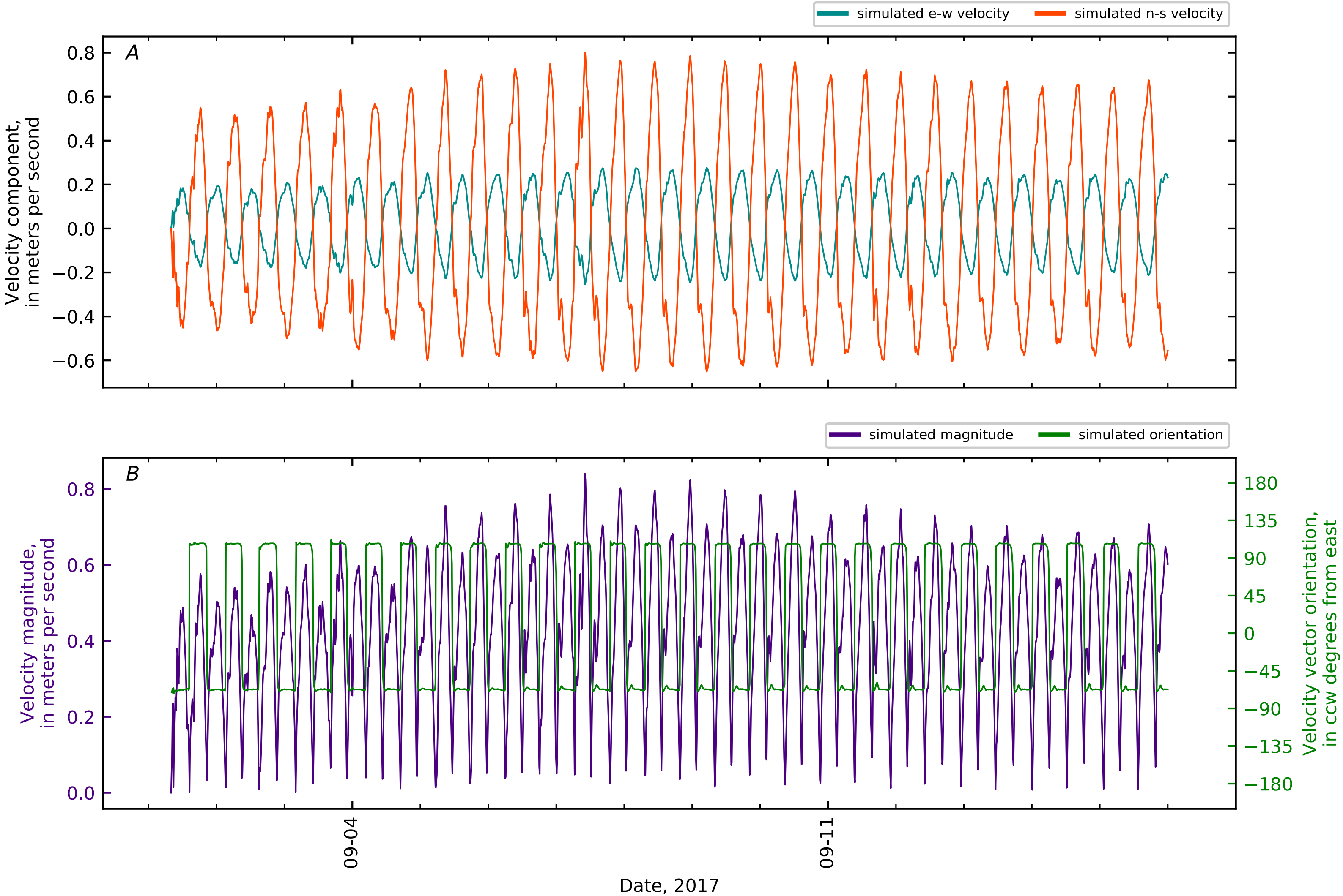

Figure B1-209. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 48, Penob Riv KM15.

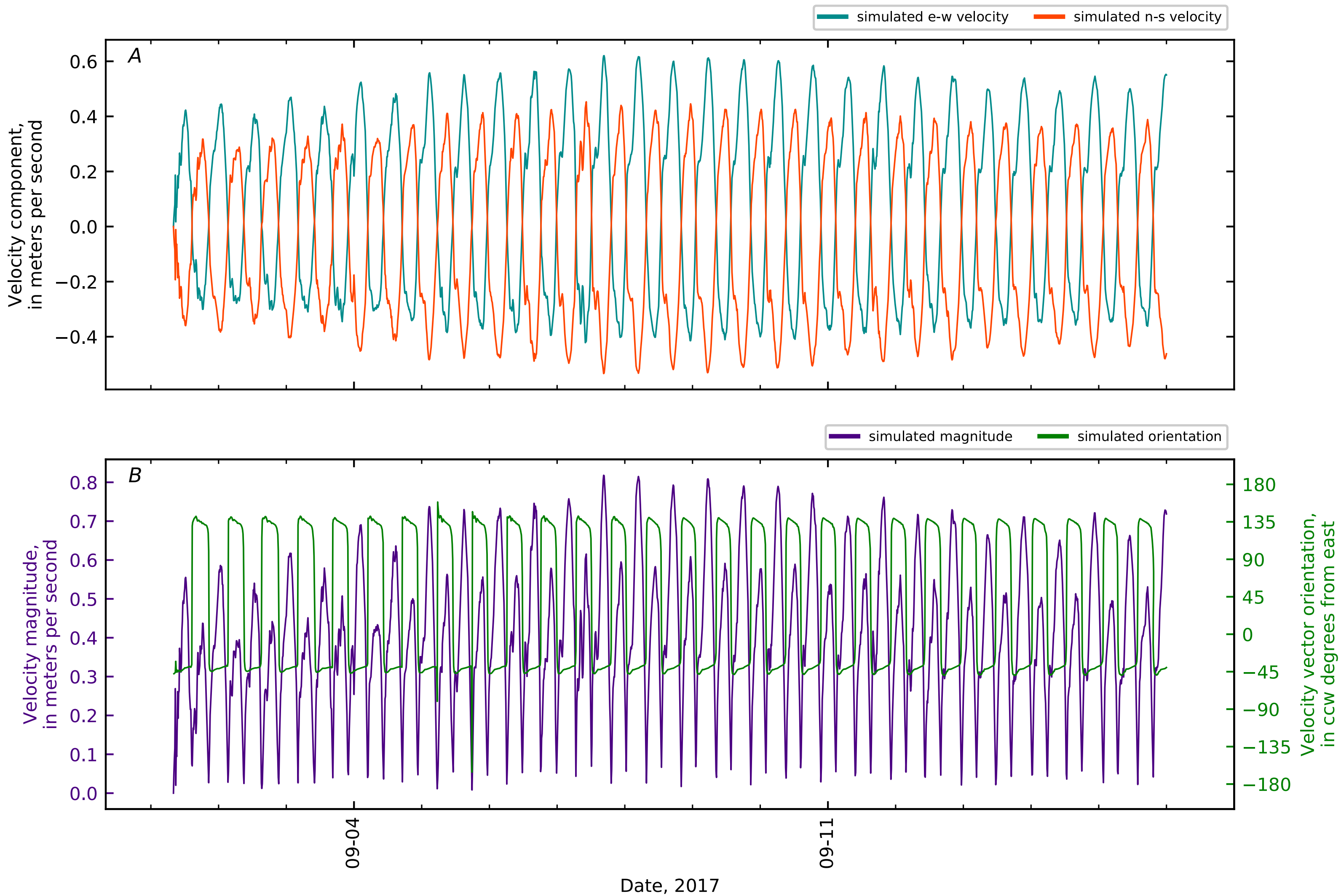

Figure B1-210. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 49, Penob Riv KM16.

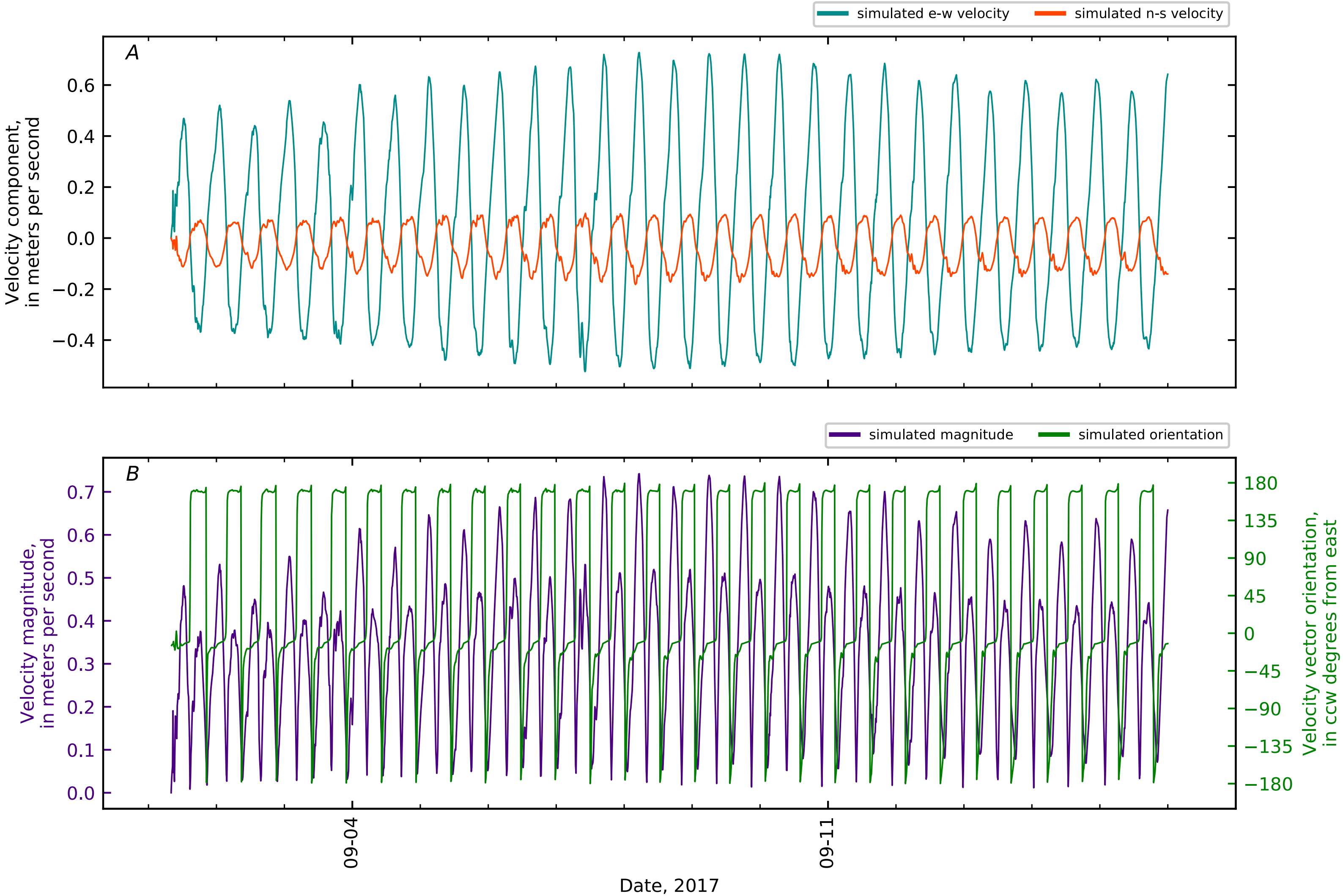

Figure B1-211. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 50, Penob Riv KM17.

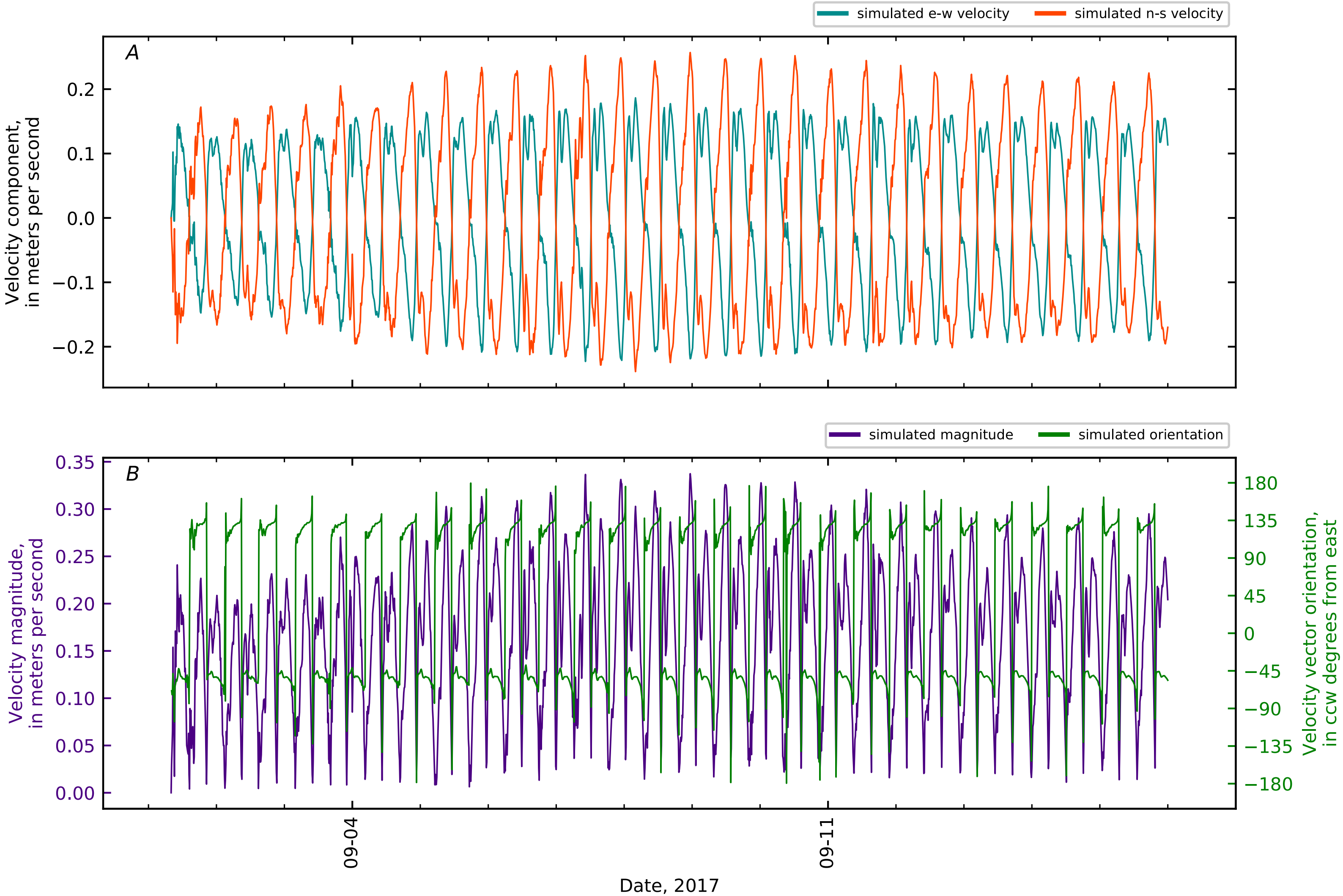

Figure B1-212. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 51, Penob Riv KM17.2 ERDC17B FF-MU7-SF-1.

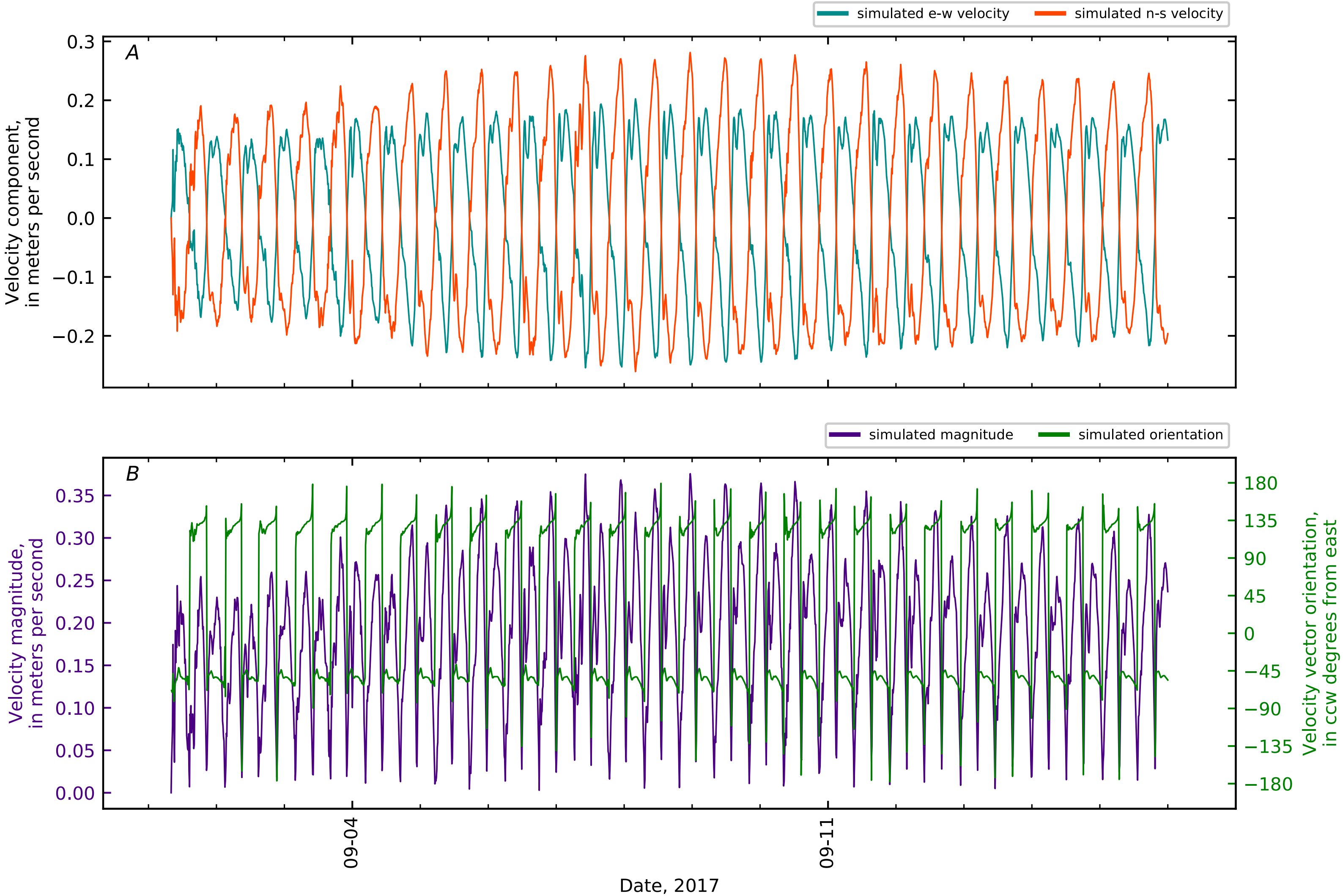

Figure B1-213. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 52, Penob Riv KM17.21 ERDC13 FF-MU7-SF-1.

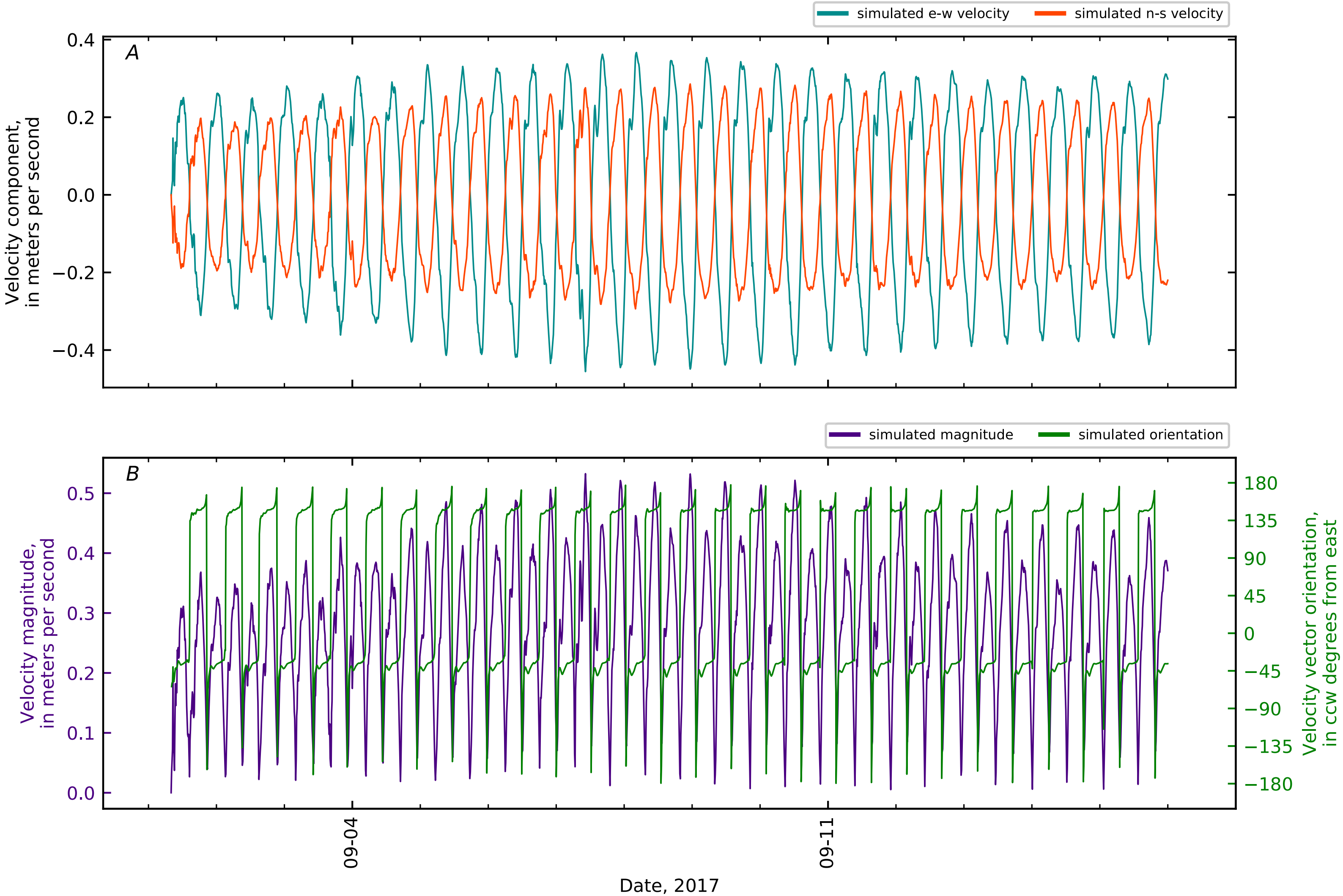

Figure B1-214. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 53, Penob Riv KM17.2 WHOI2 Frankfort Flats 2.

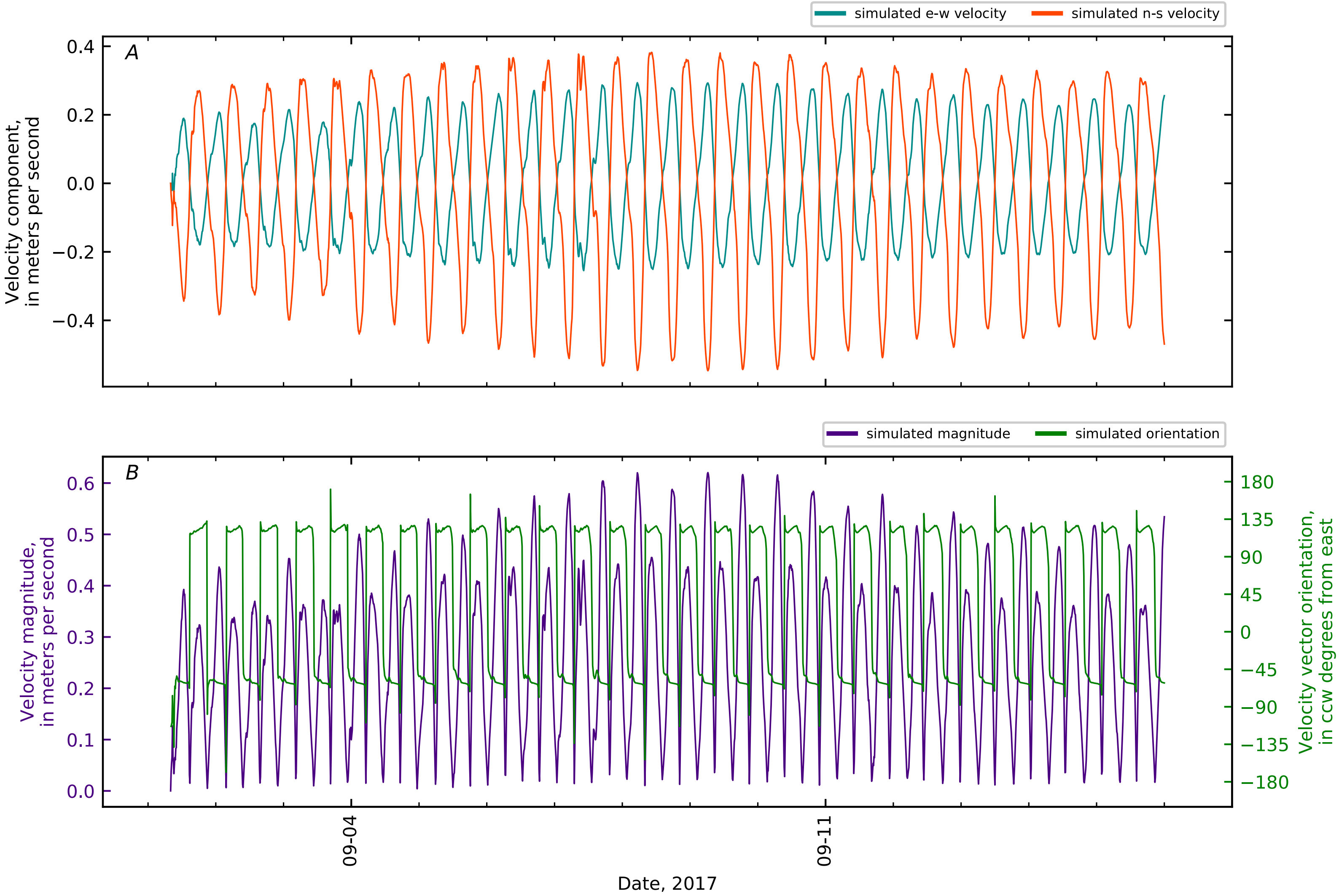

Figure B1-215. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 54, Penob Riv KM18.

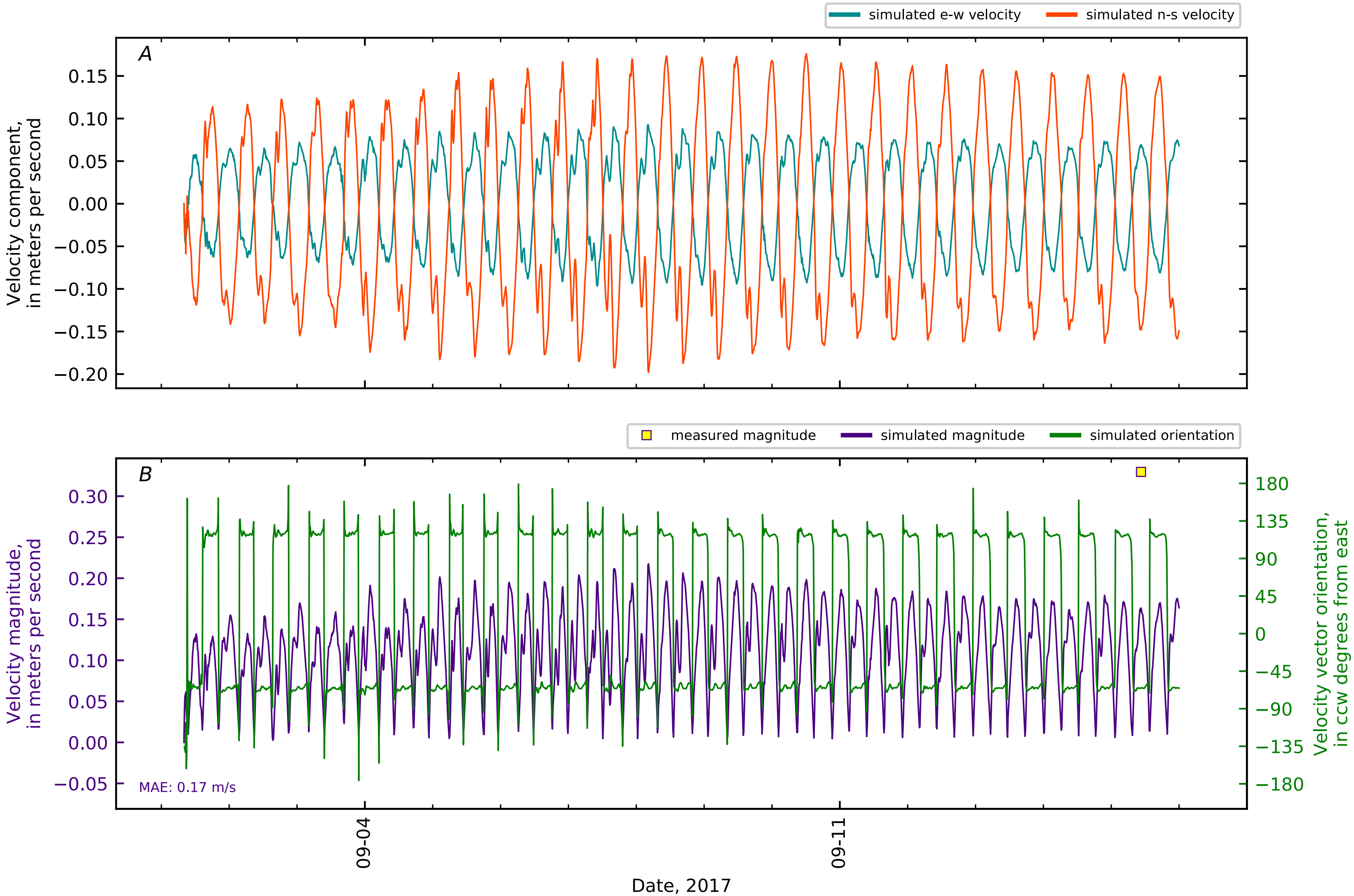

Figure B1-216. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 55, Penob Riv KM18.01 GS CTD1-01.

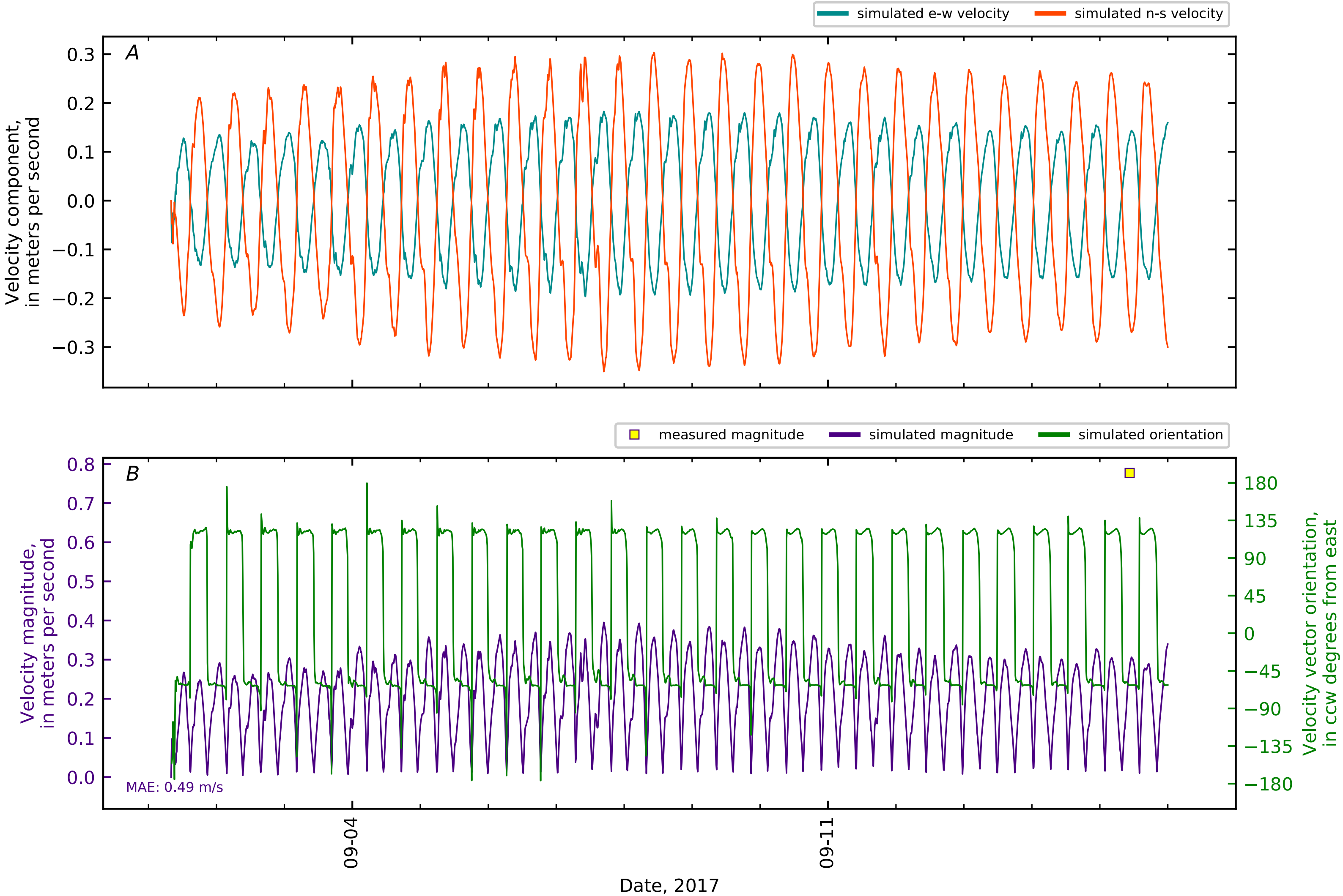

Figure B1-217. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 56, Penob Riv KM18.01 GS CTD1-02.

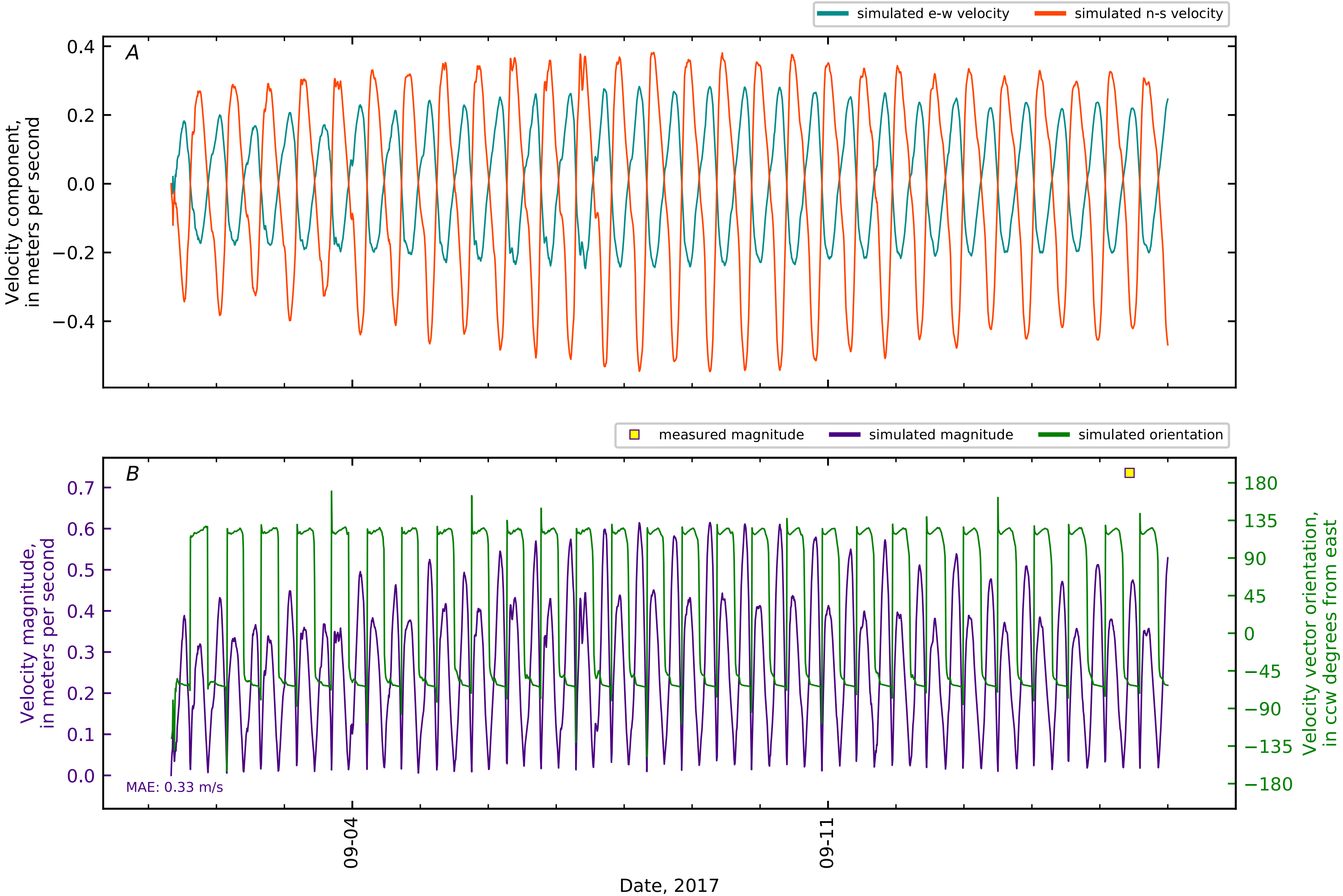

Figure B1-218. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 57, Penob Riv KM18.01 GS CTD1-03.

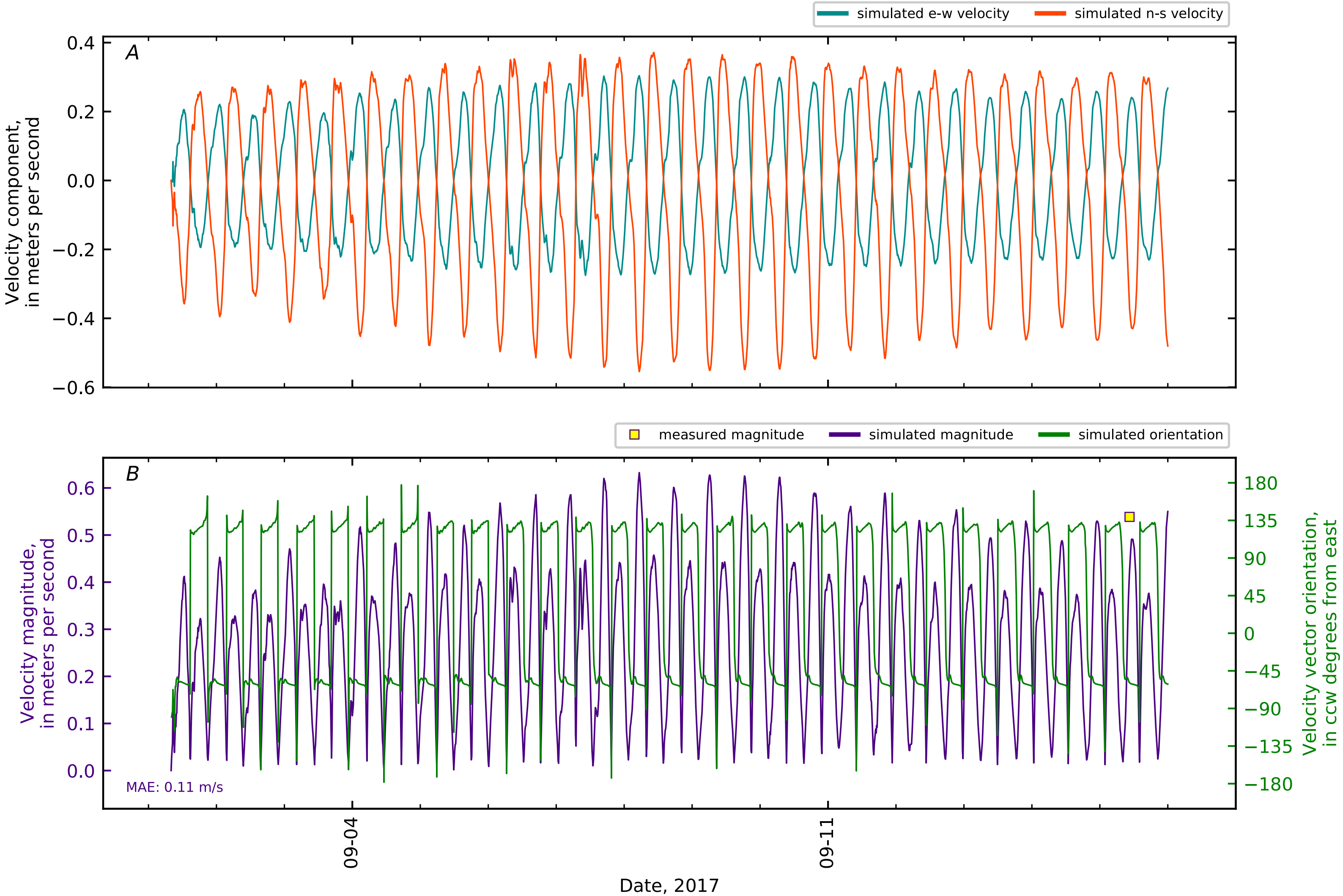

Figure B1-219. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 58, Penob Riv KM18.01 GS CTD1-04.

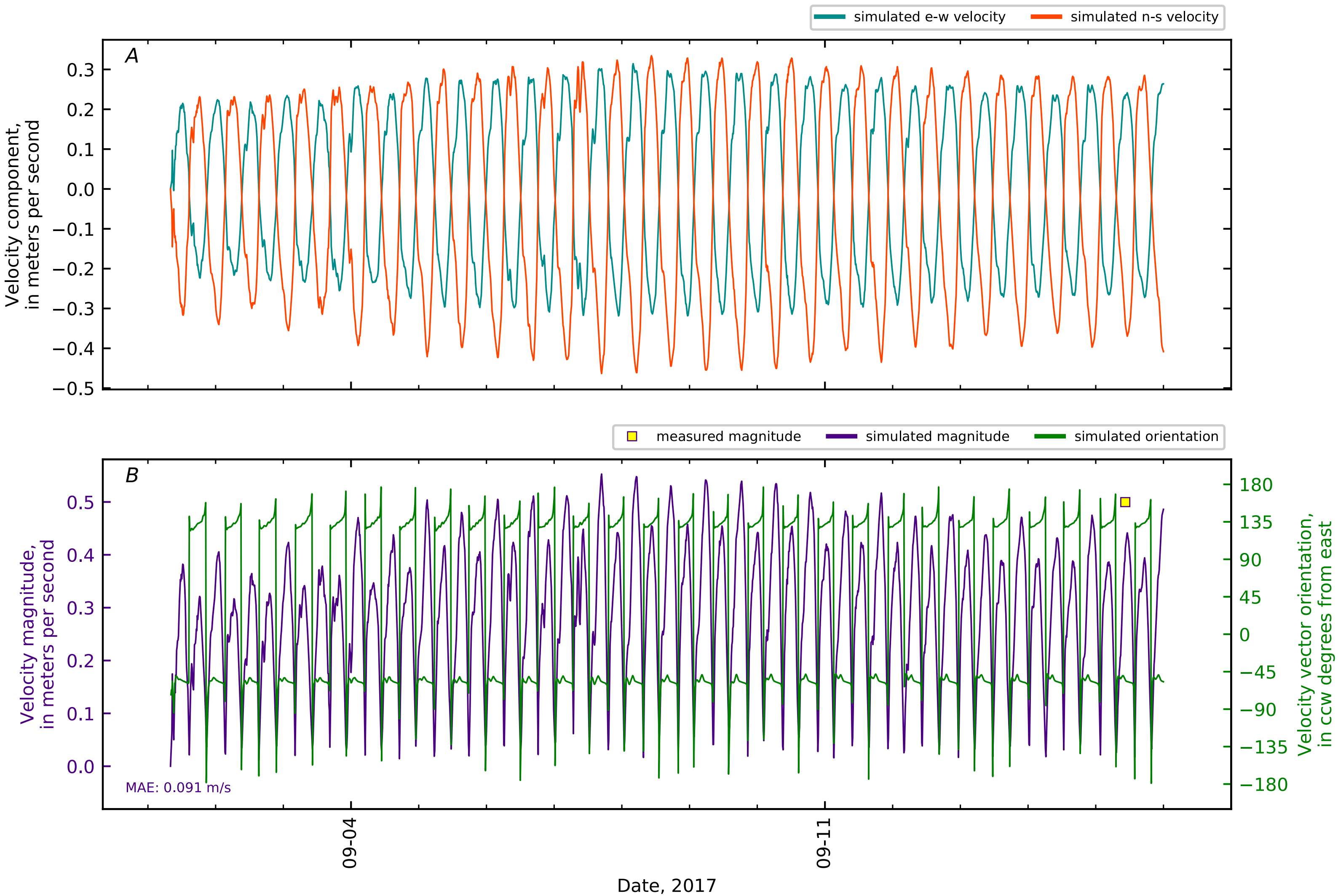

Figure B1-220. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 59, Penob Riv KM18.01 GS CTD1-05.

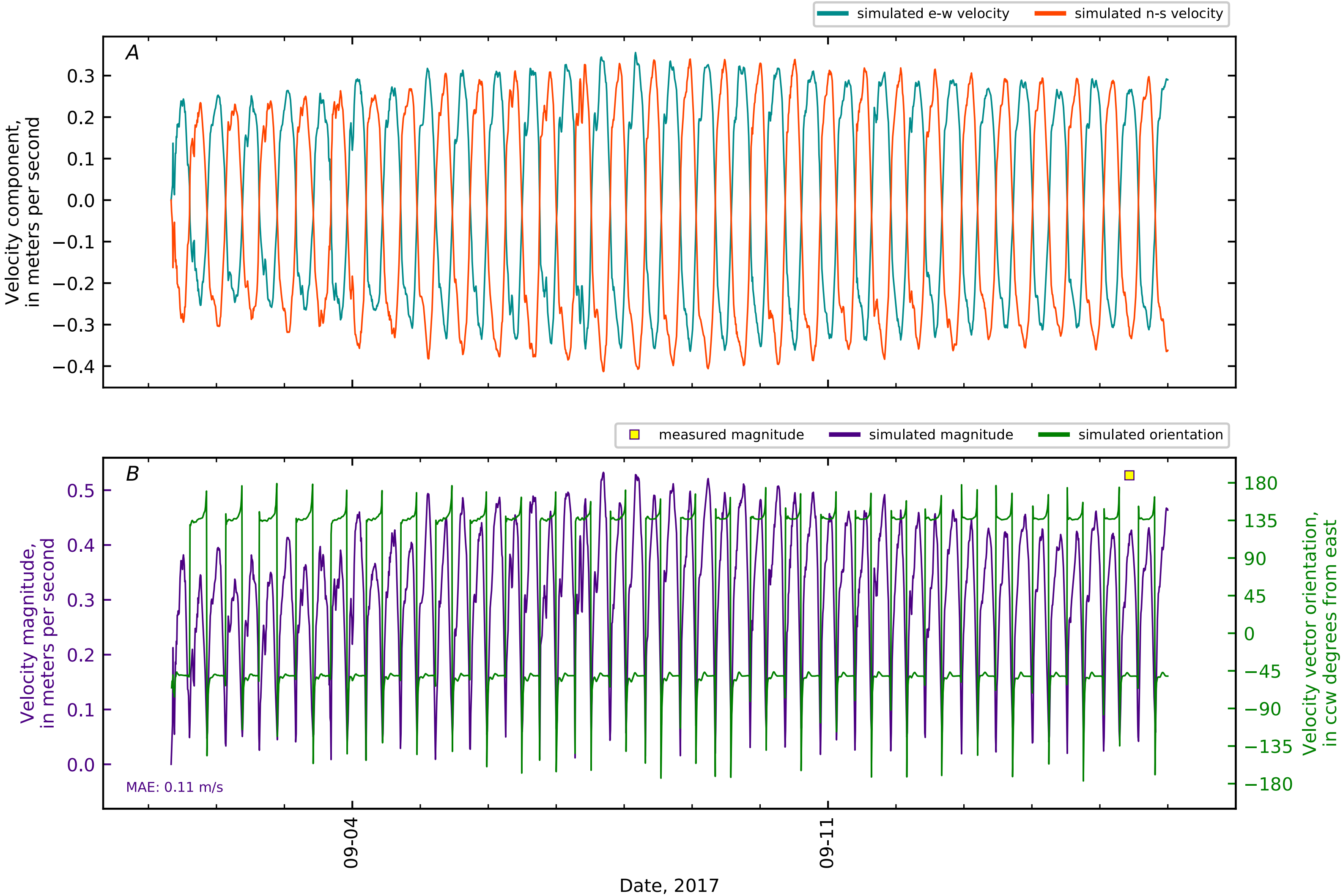

Figure B1-221. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 60, Penob Riv KM18.01 GS CTD1-06.

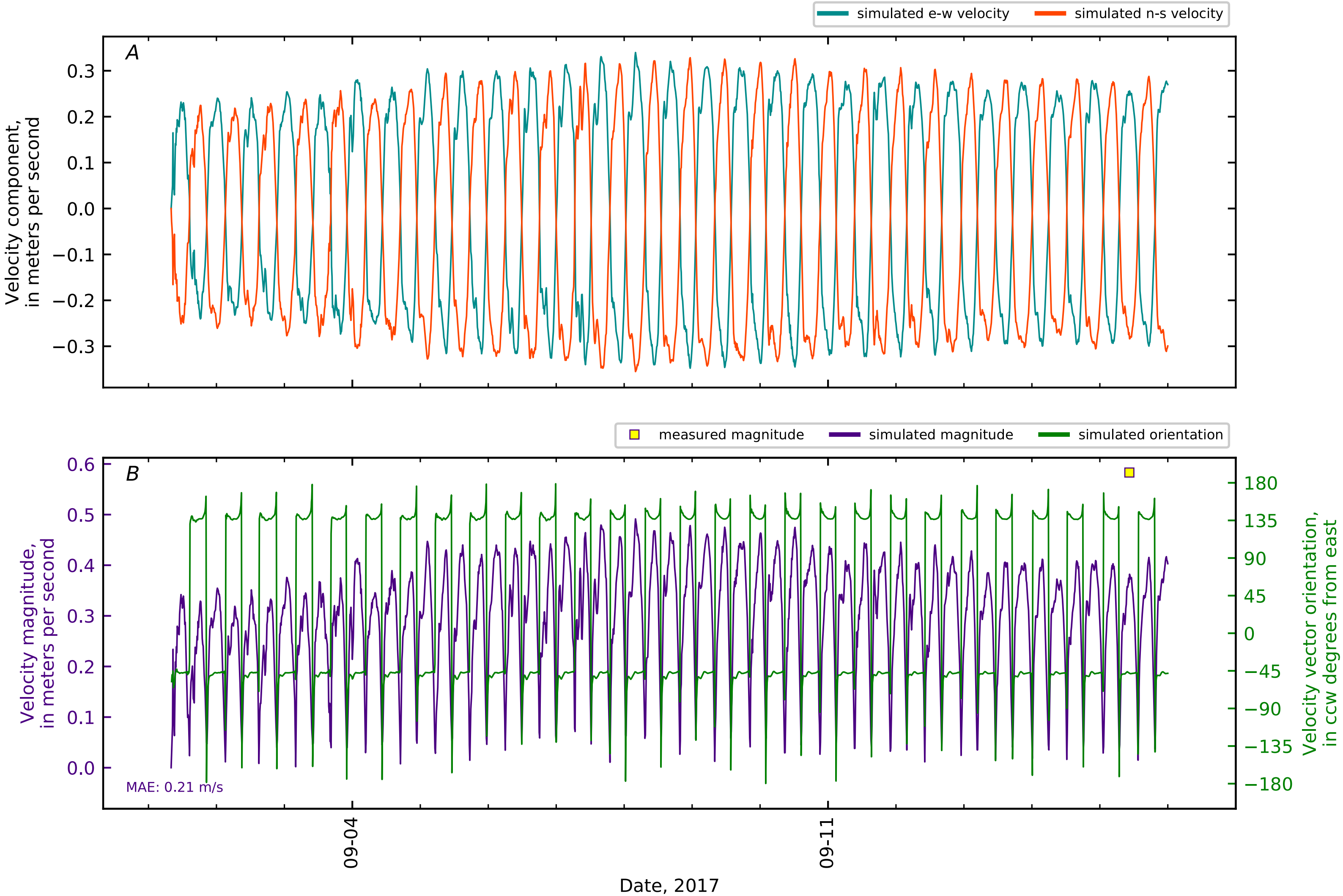

Figure B1-222. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 61, Penob Riv KM18.01 GS CTD1-07.

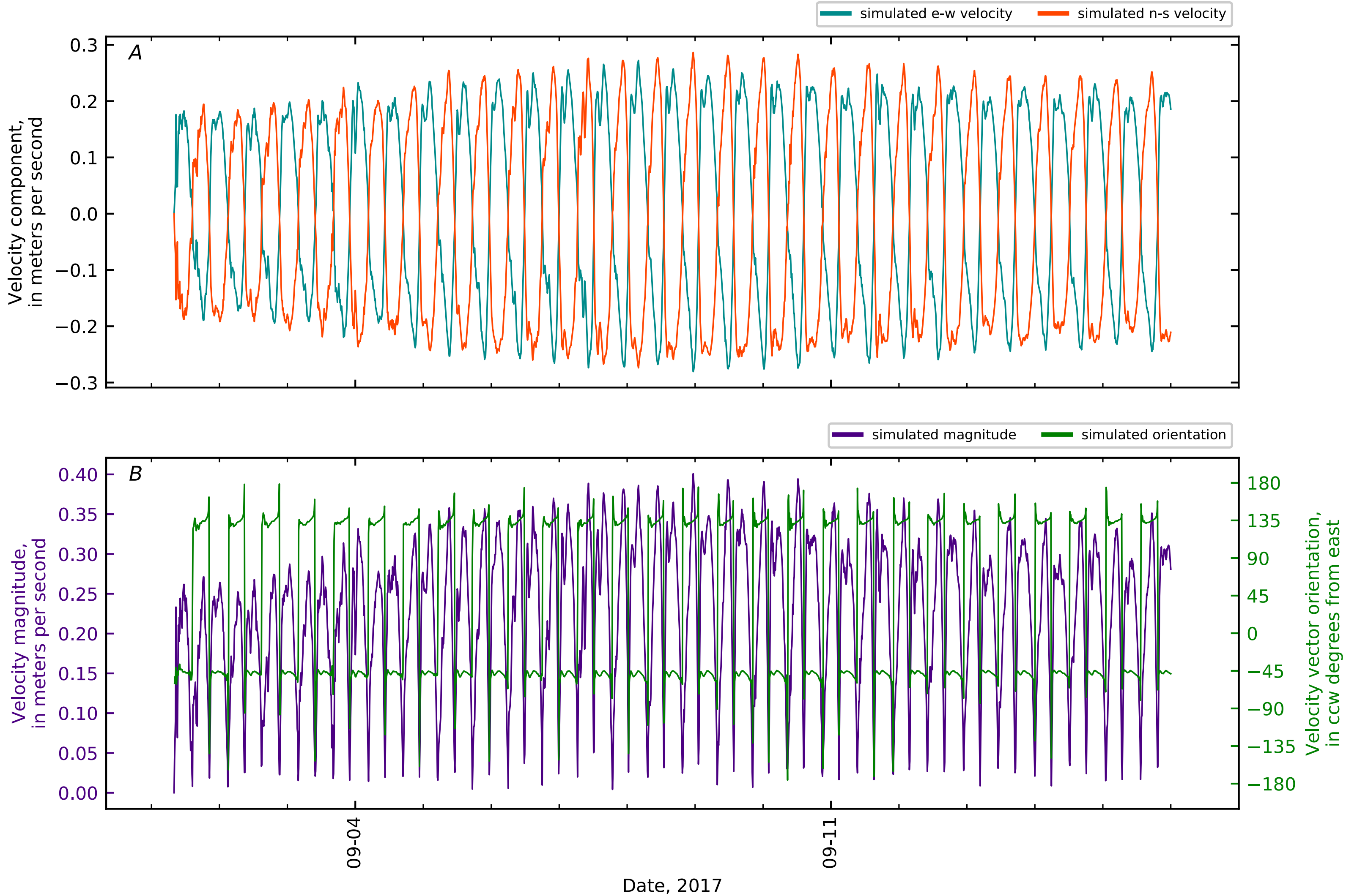

Figure B1-223. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 62, Penob Riv KM18.01 GS CTD1-08.

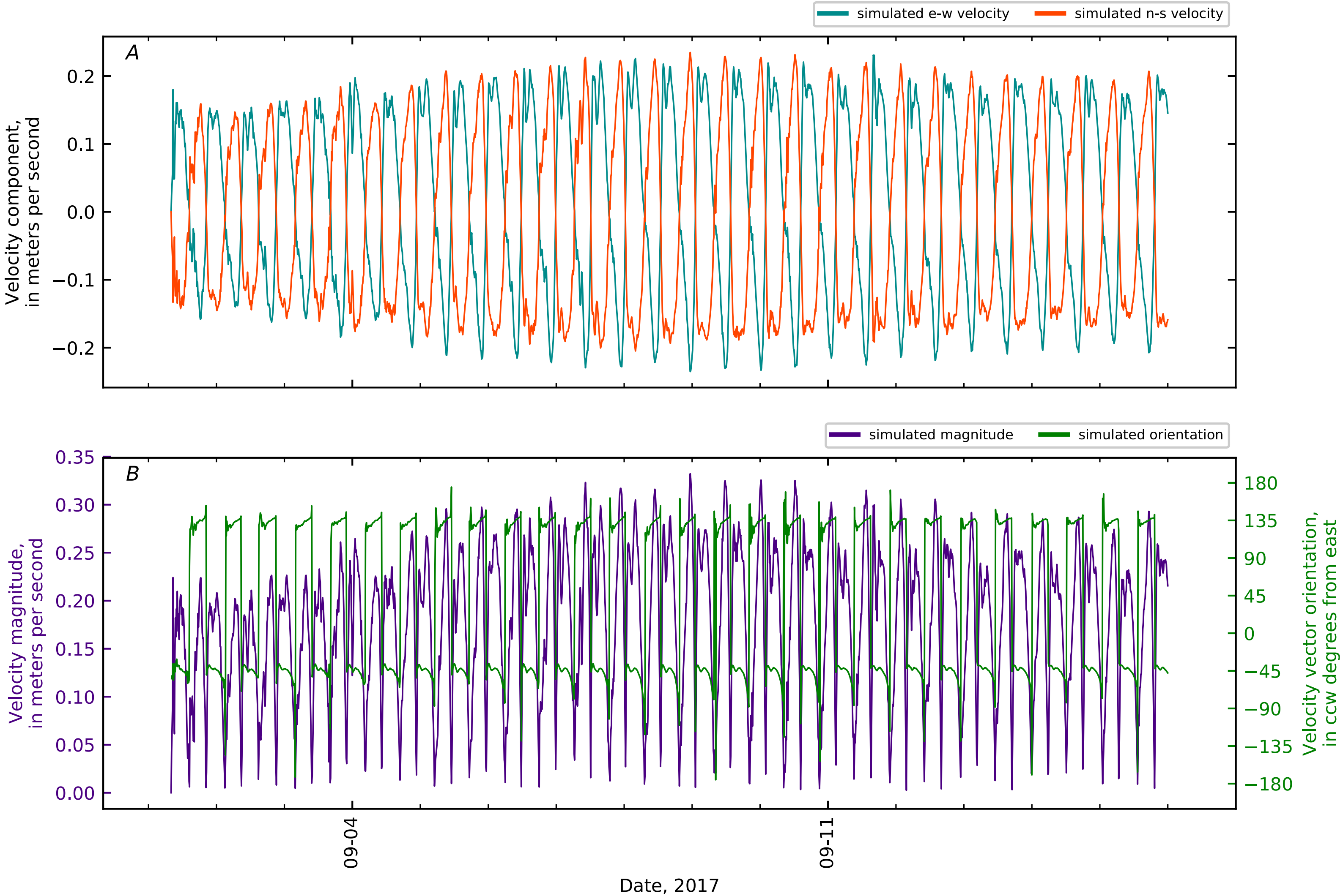

Figure B1-224. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 63, Penob Riv KM18.01 GS CTD1-09.

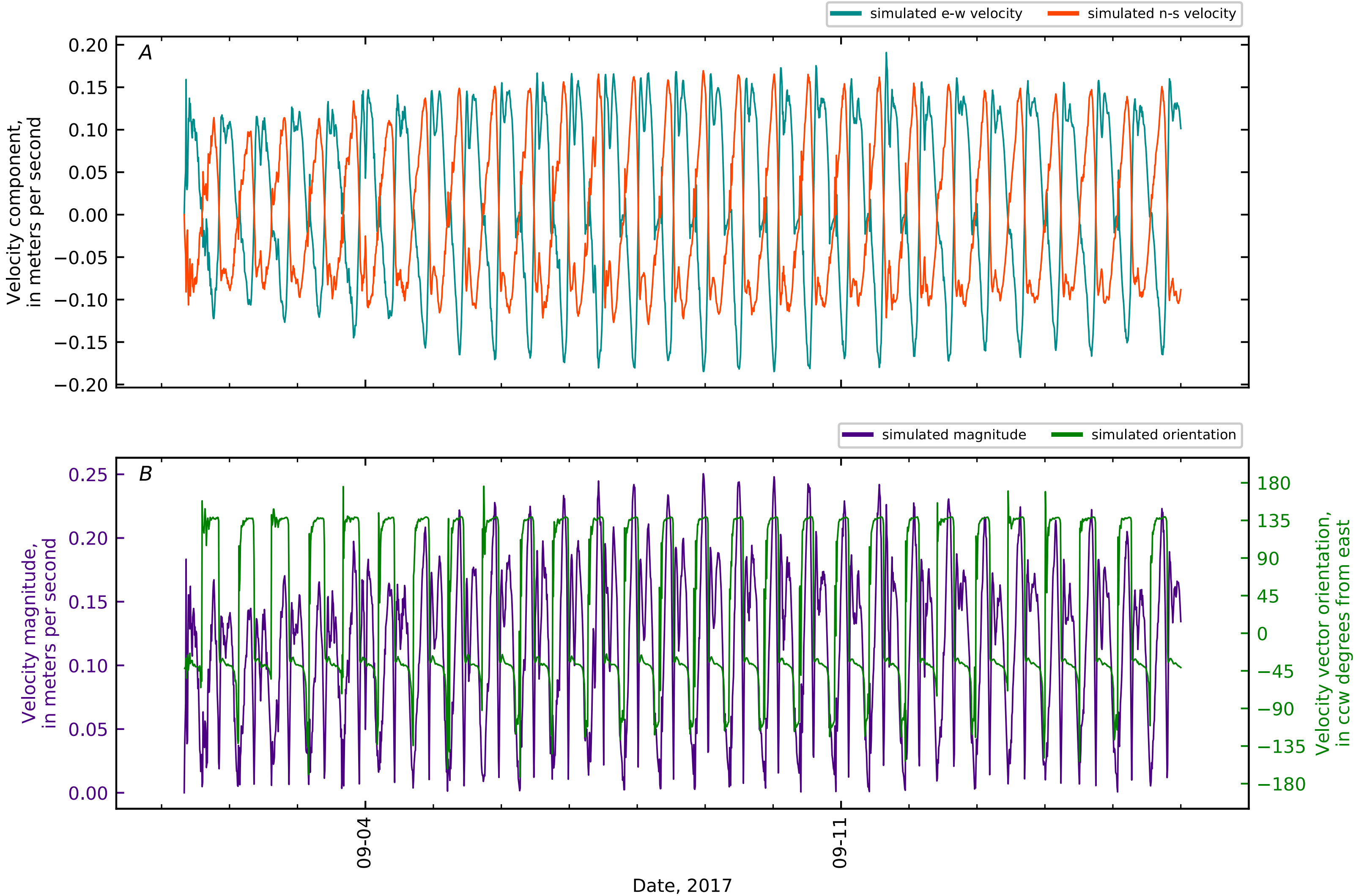

Figure B1-225. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 64, Penob Riv KM18.01 GS CTD1-10.

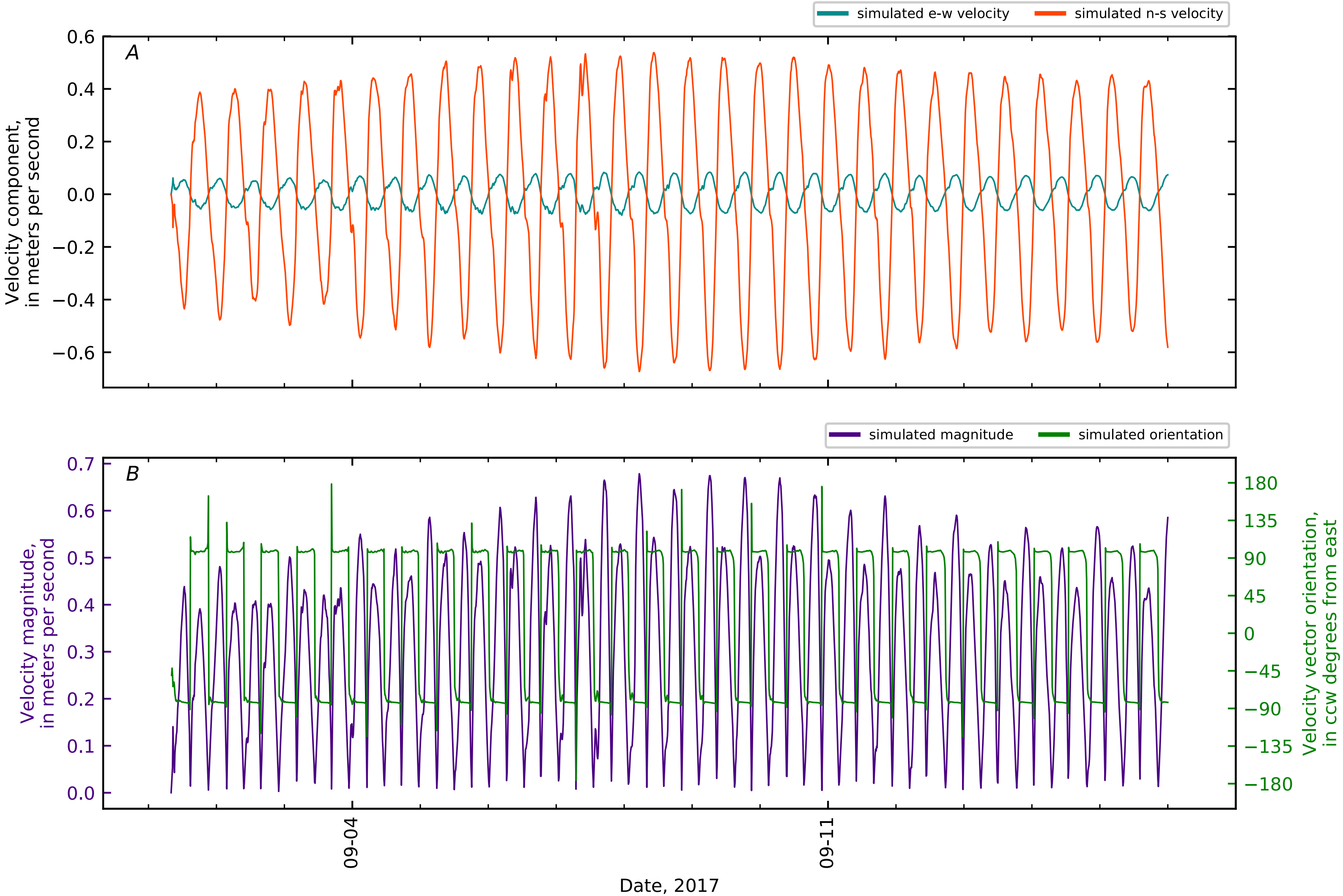

Figure B1-226. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 65, Penob Riv KM18.5 WHOI8 Frankfort Channel.

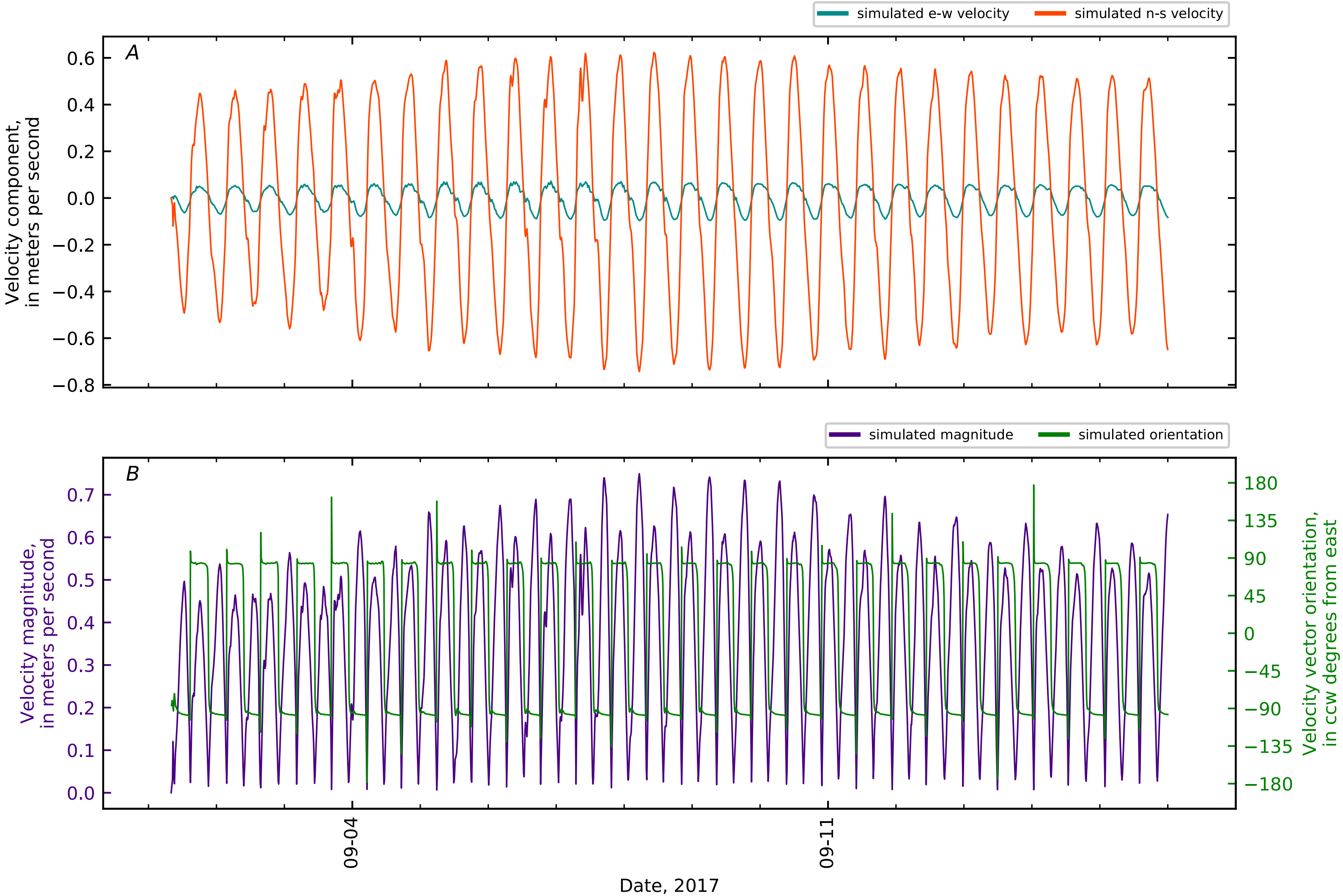

Figure B1-227. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 66, Penob Riv KM19.

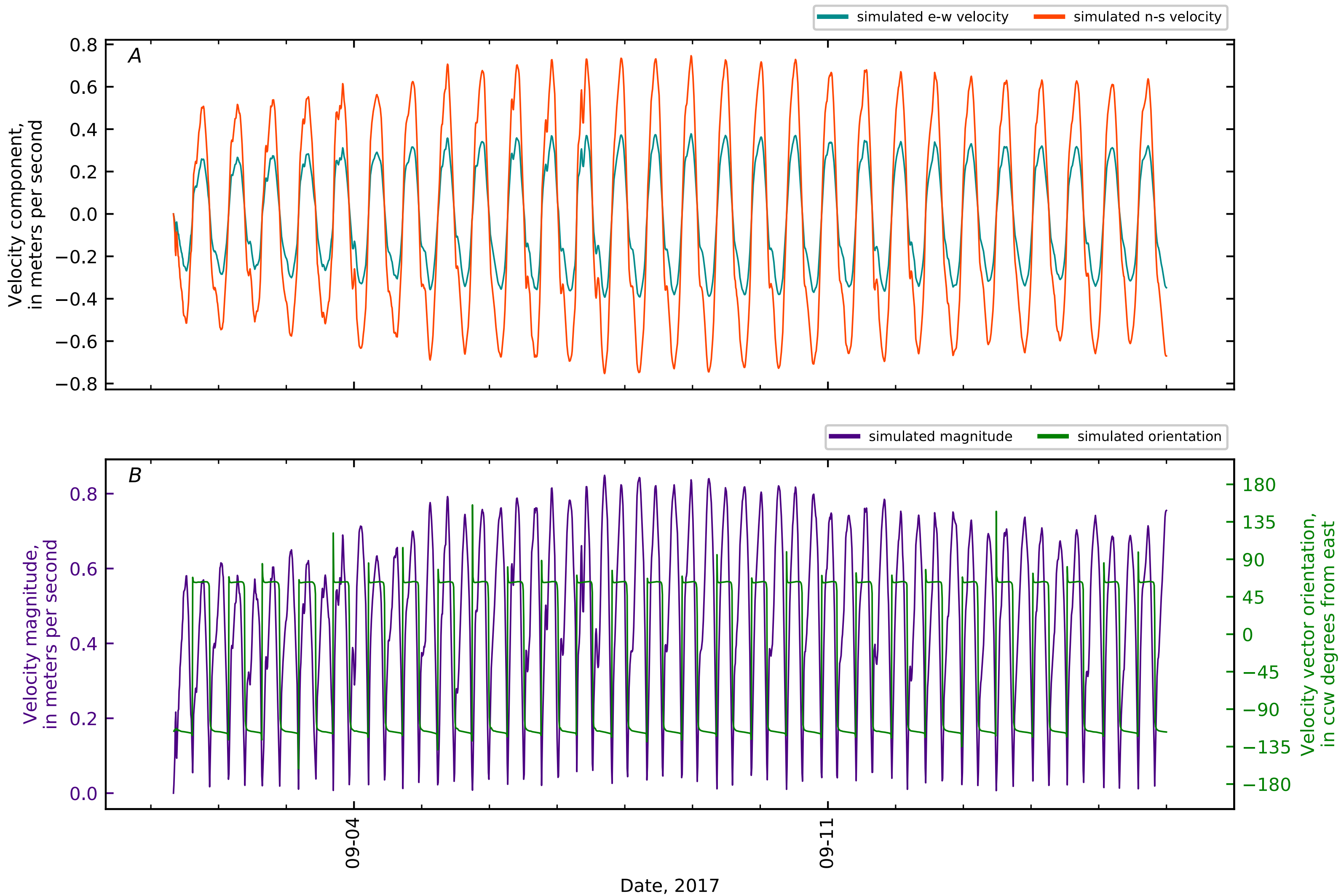

Figure B1-228. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 67, Penob Riv KM20.

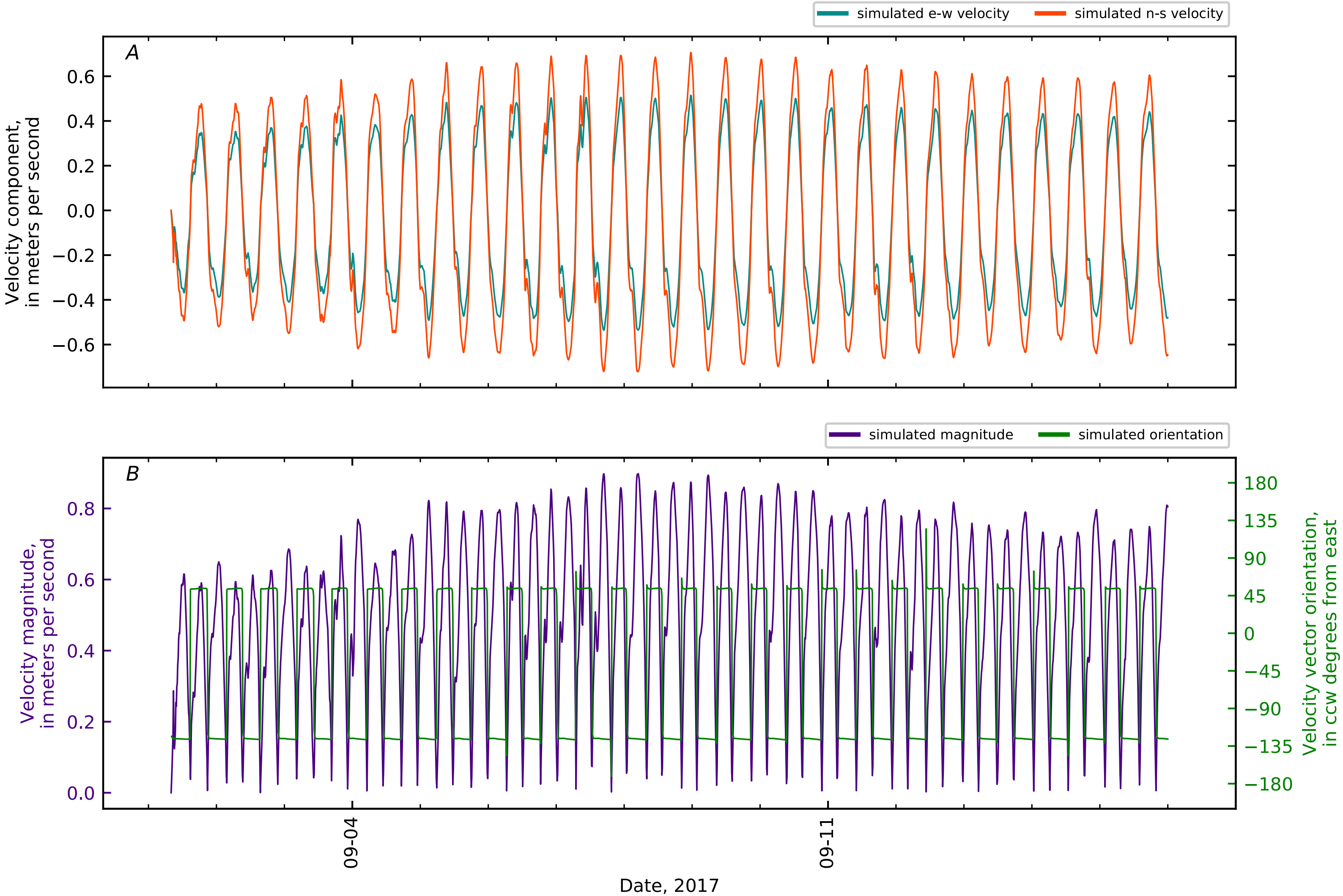

Figure B1-229. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 68, Penob Riv KM21.

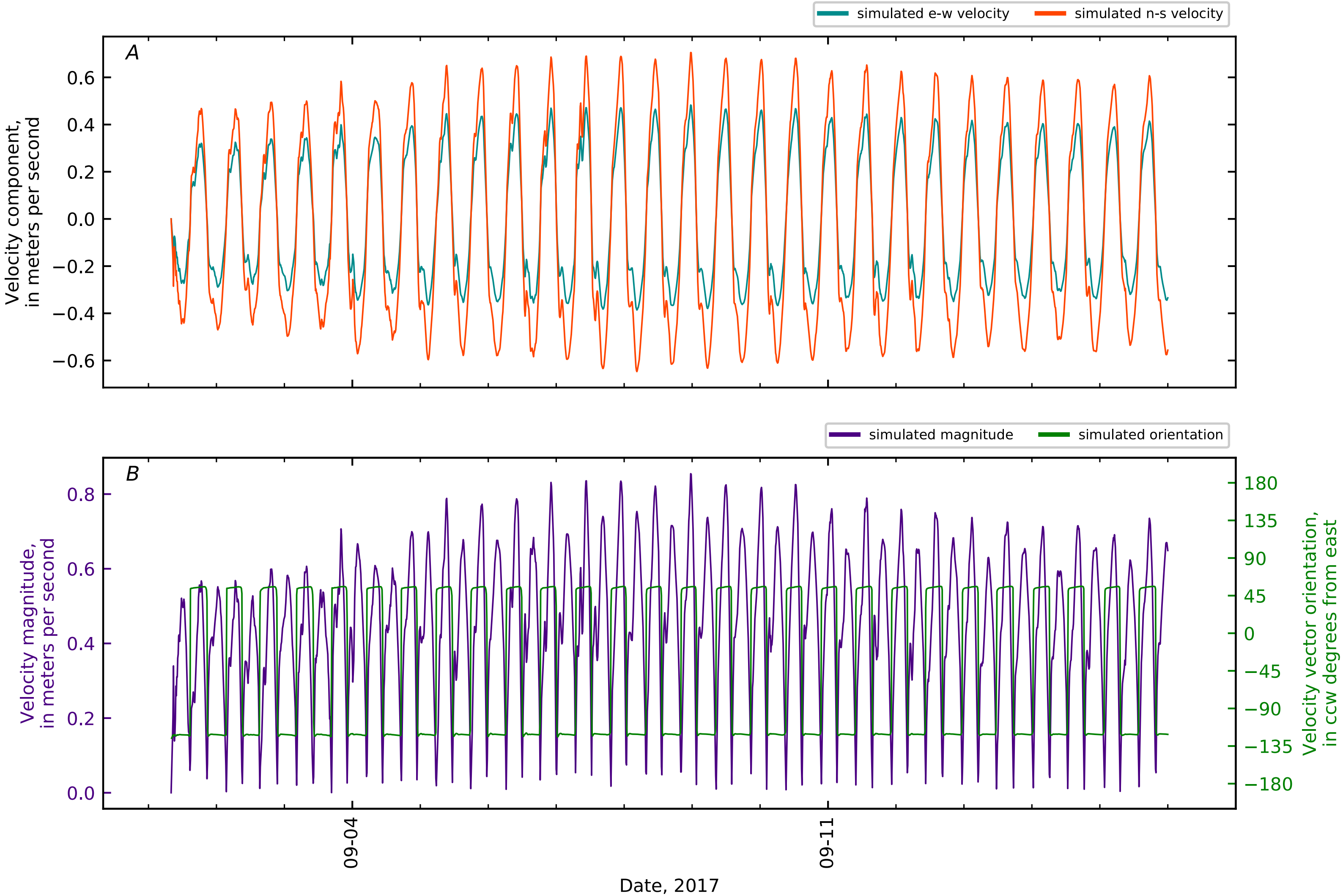

Figure B1-230. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 69, Penob Riv KM21.2 GS 443810068502201 Wint.

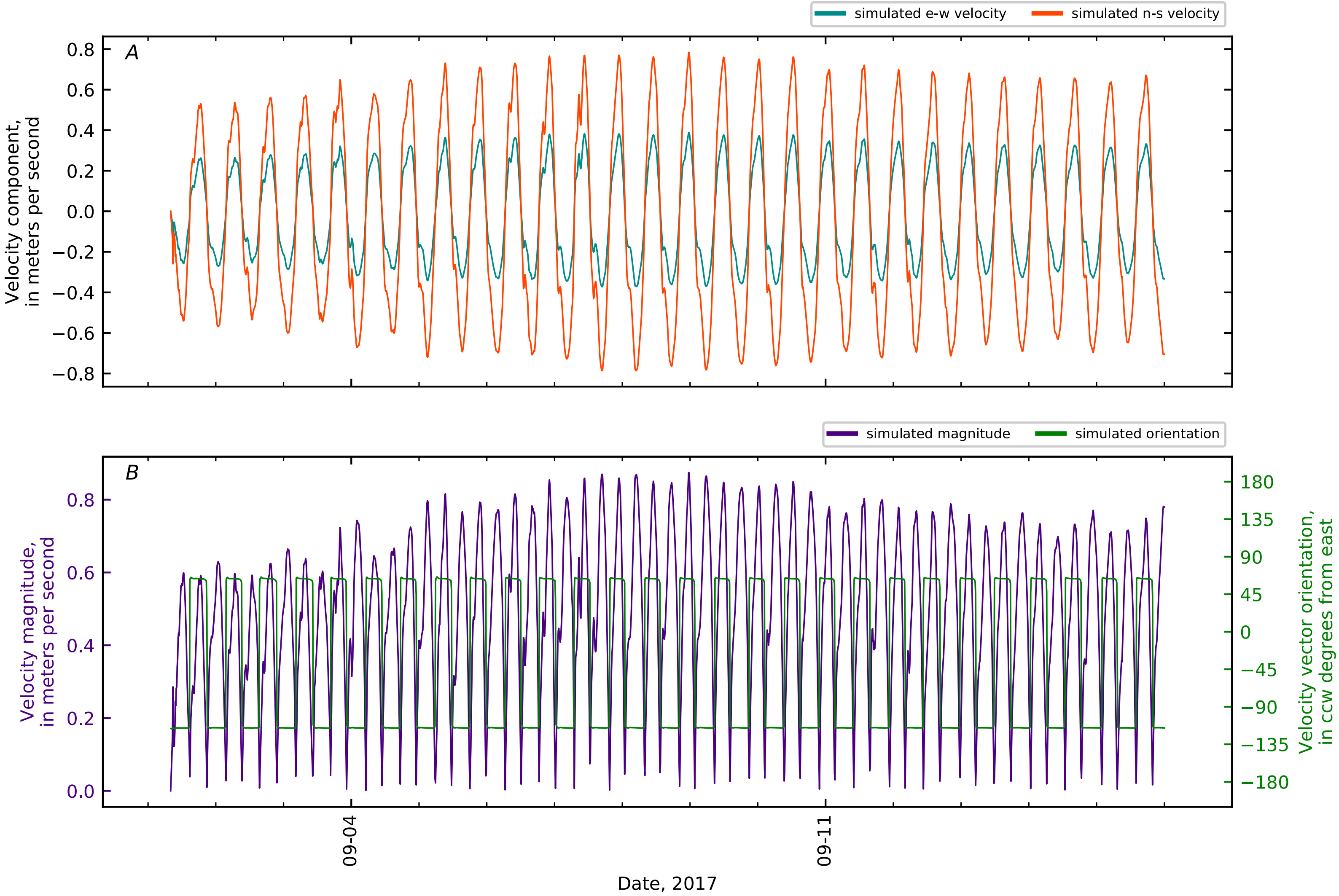

Figure B1-231. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 70, Penob Riv KM21.5 WHOI6 Winterport 2010.

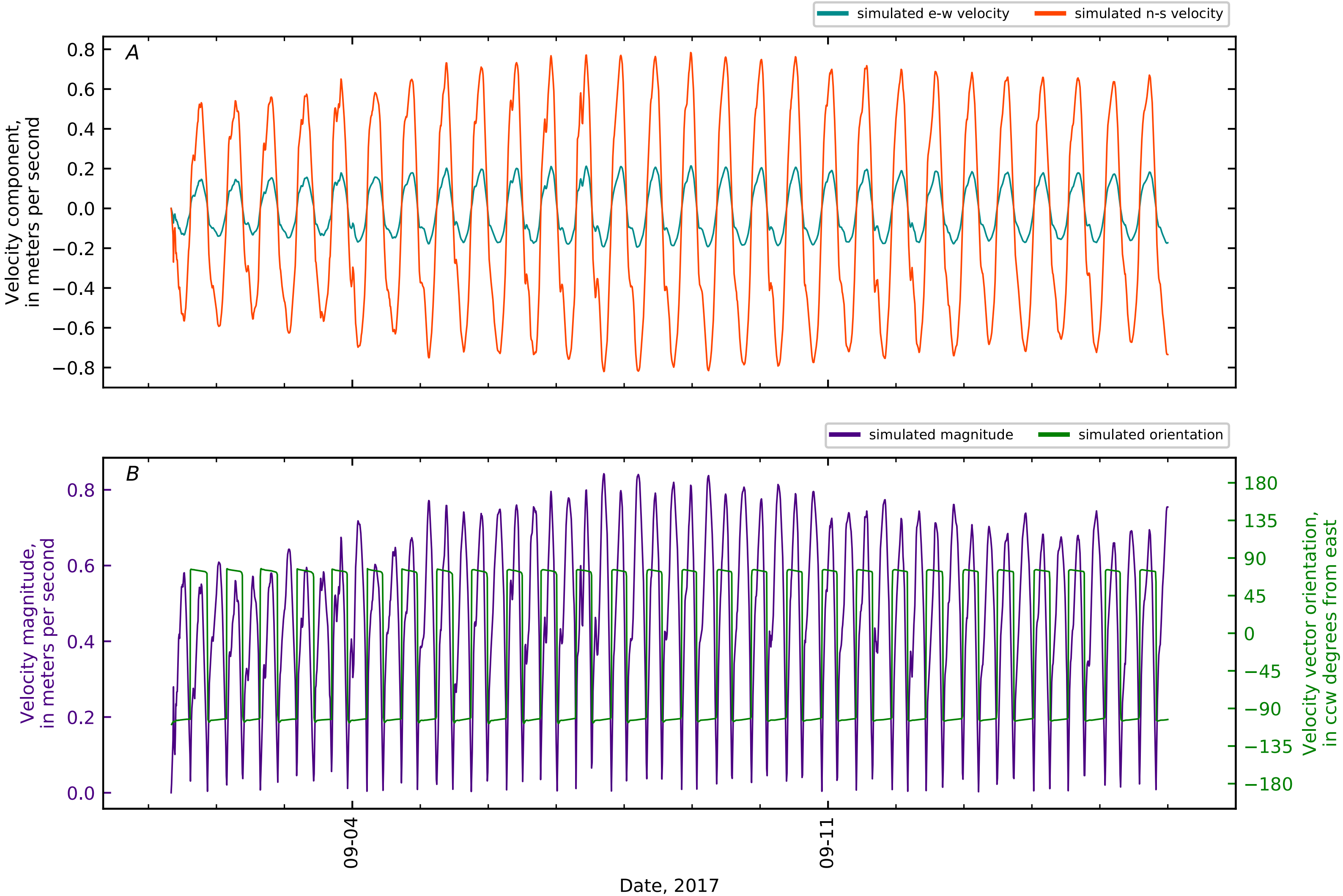

Figure B1-232. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 71, Penob Riv KM22.

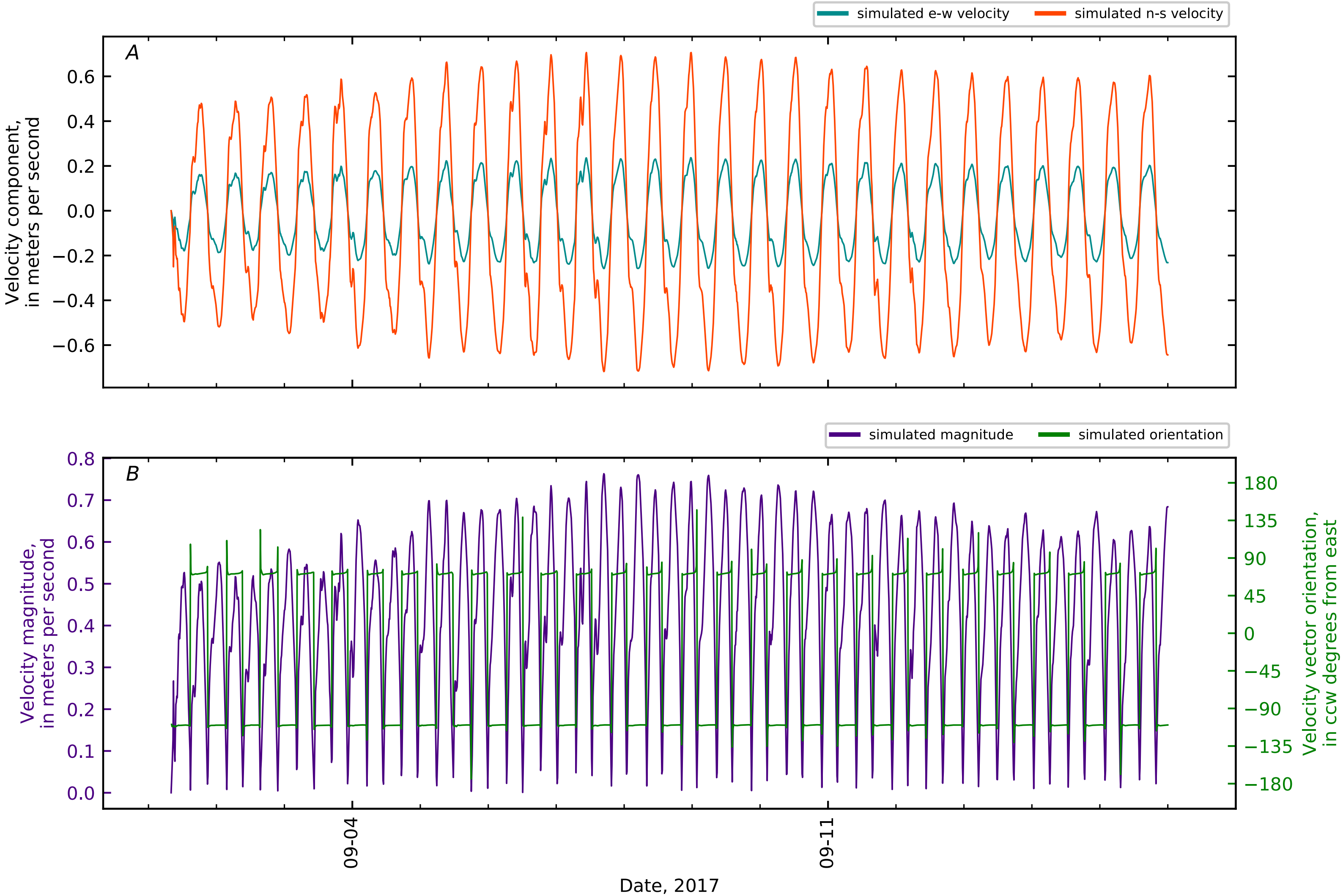

Figure B1-233. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 72, Penob Riv KM23.

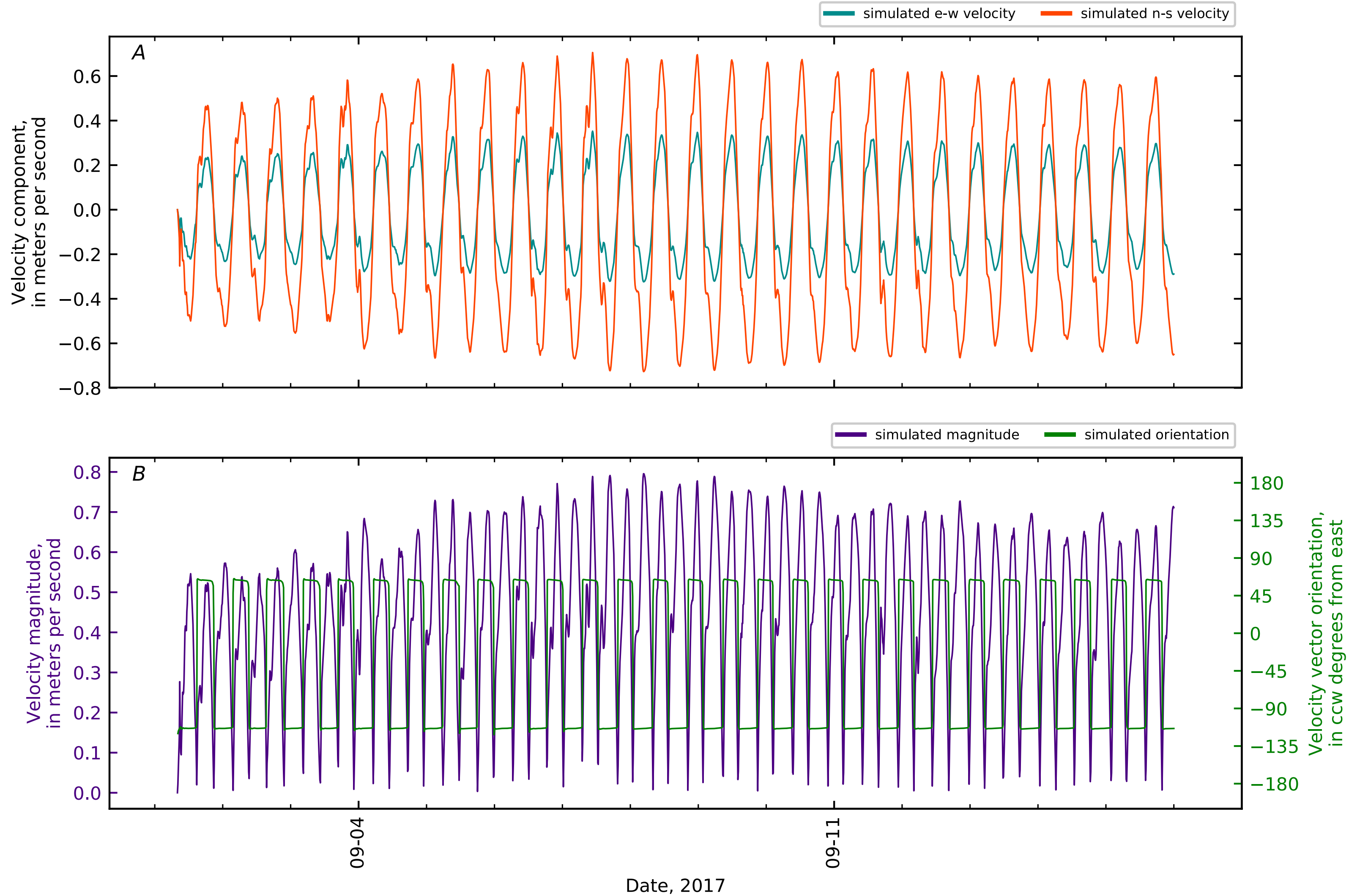

Figure B1-234. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 73, Penob Riv KM24.

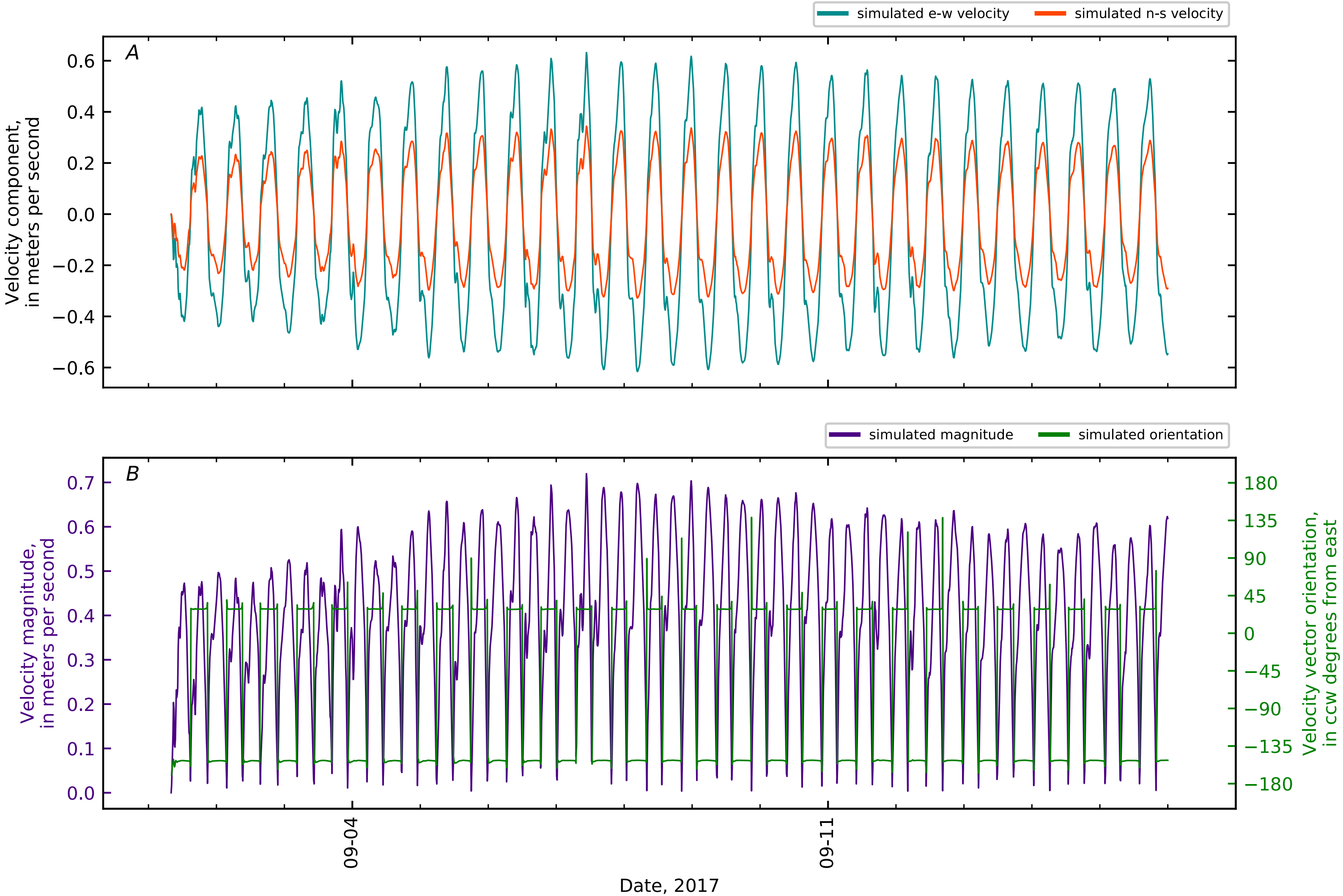

Figure B1-235. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 74, Penob Riv KM25.

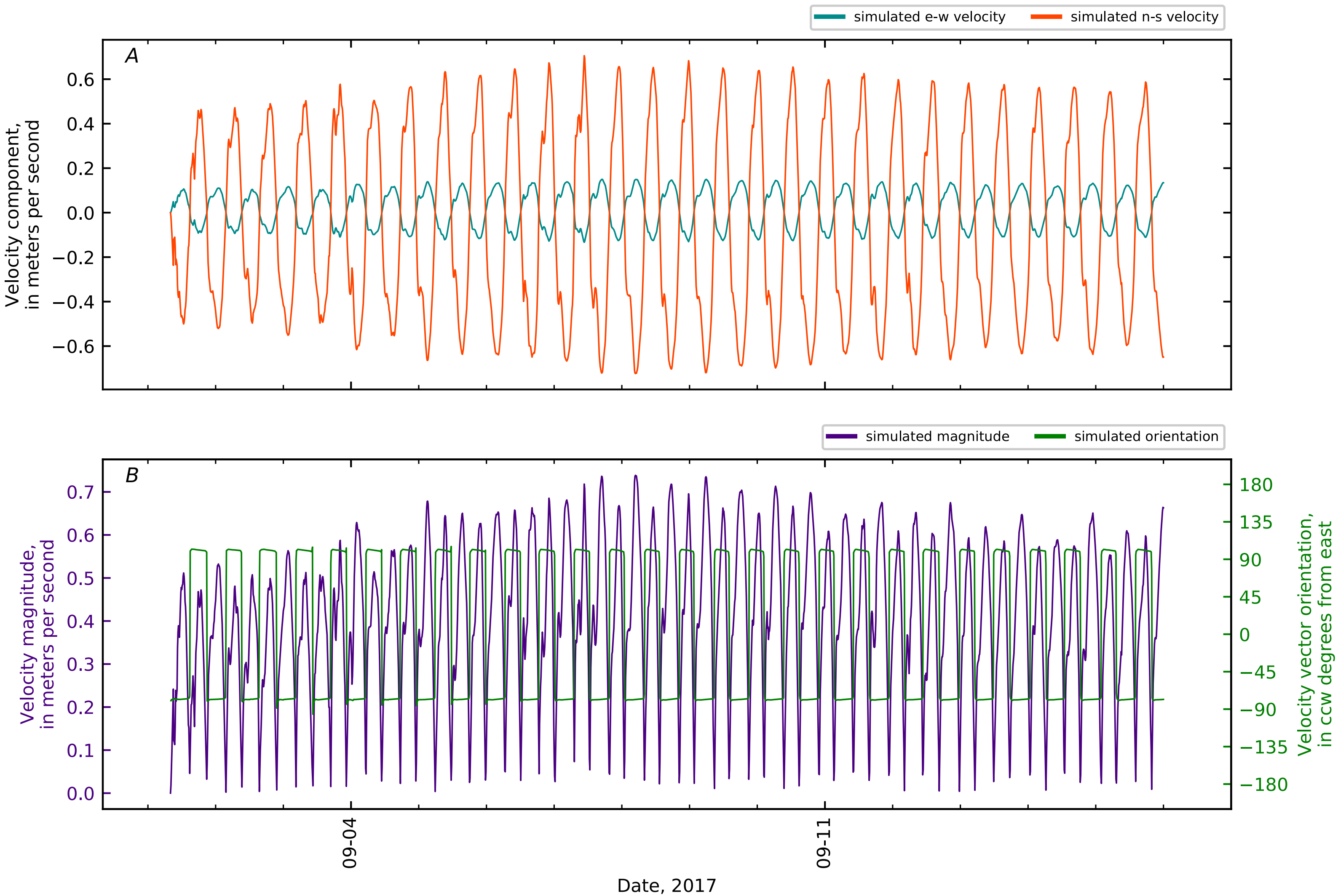

Figure B1-236. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 75, Penob Riv KM26.

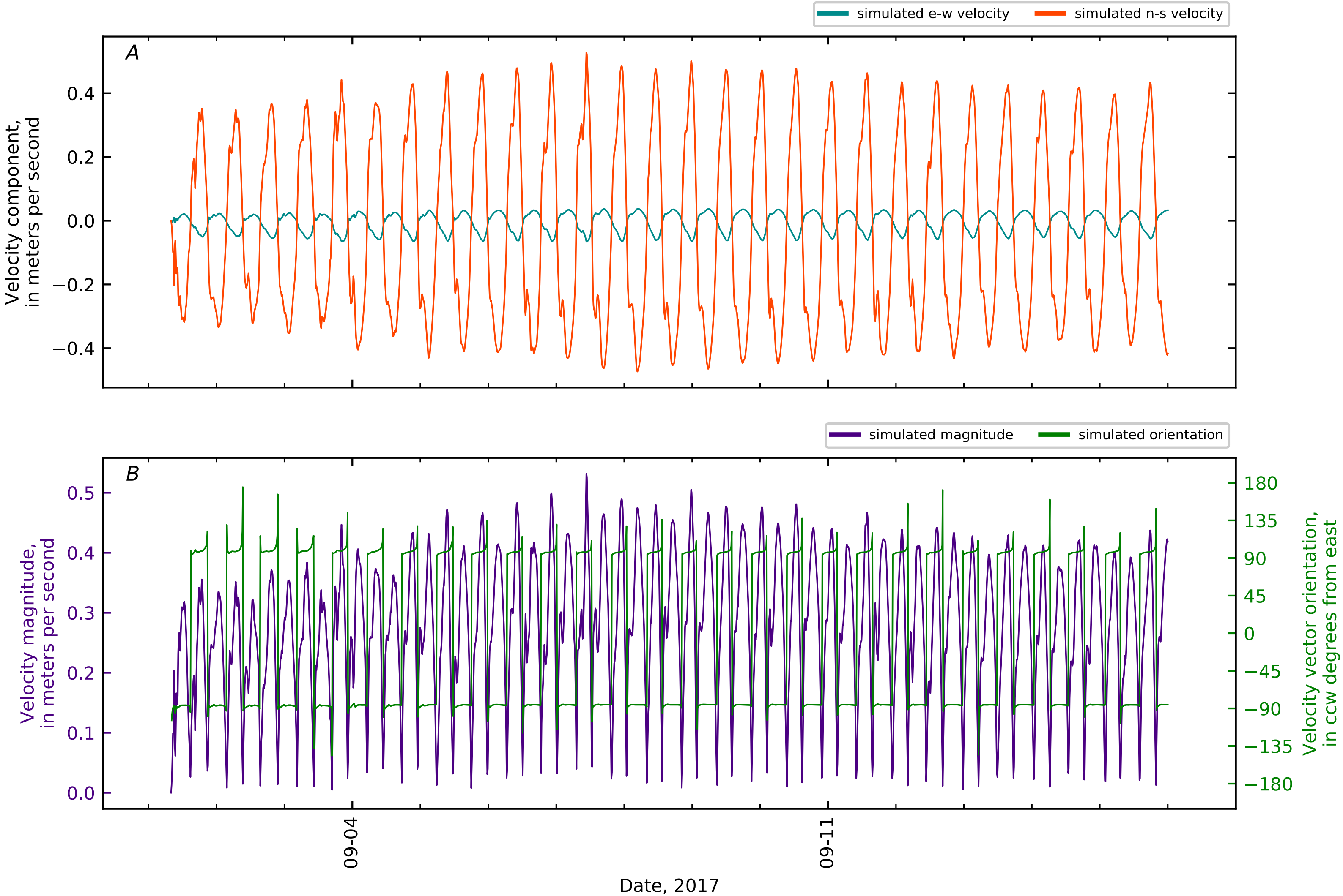

Figure B1-237. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 76, Penob Riv KM27.

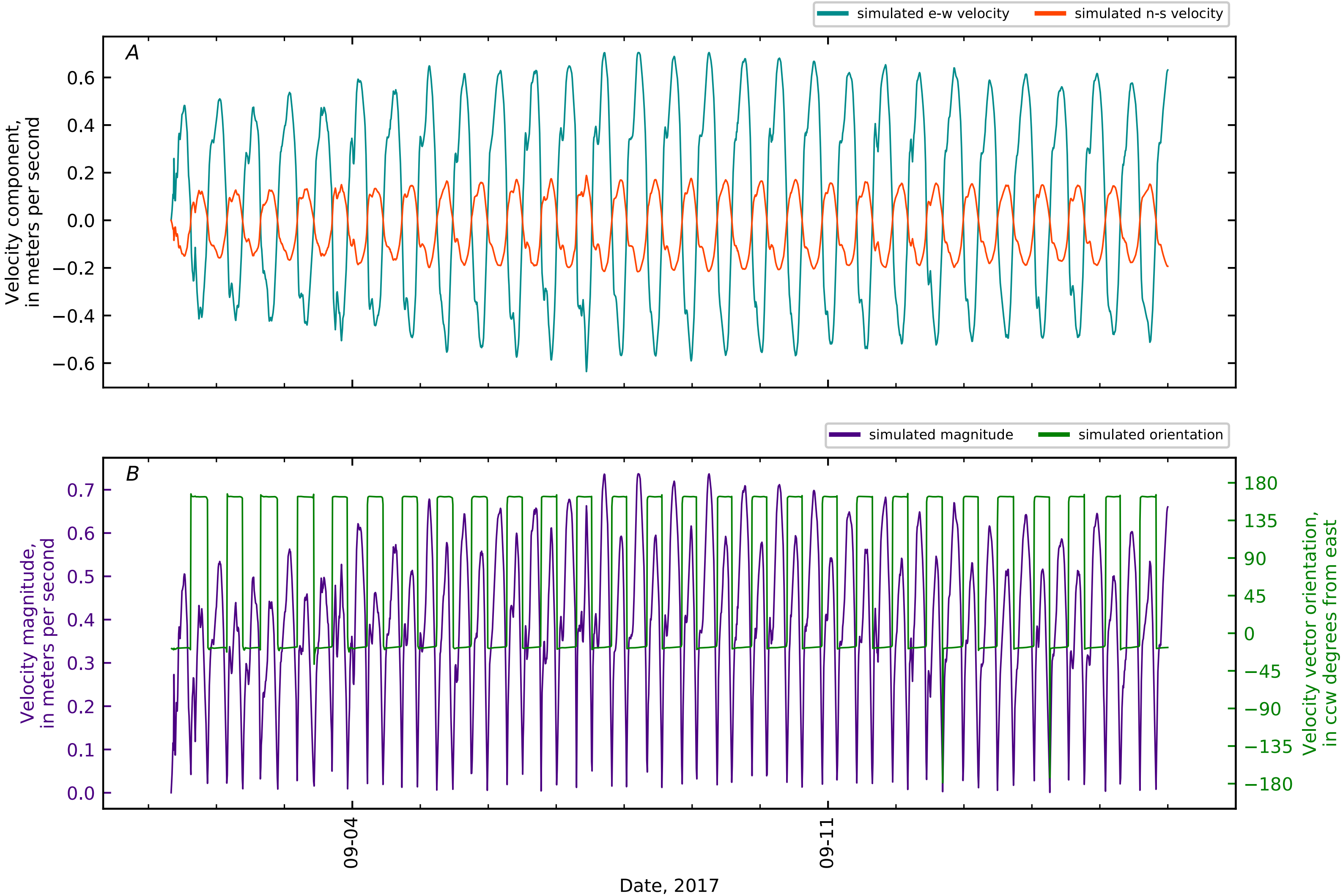

Figure B1-238. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 77, Penob Riv KM28.

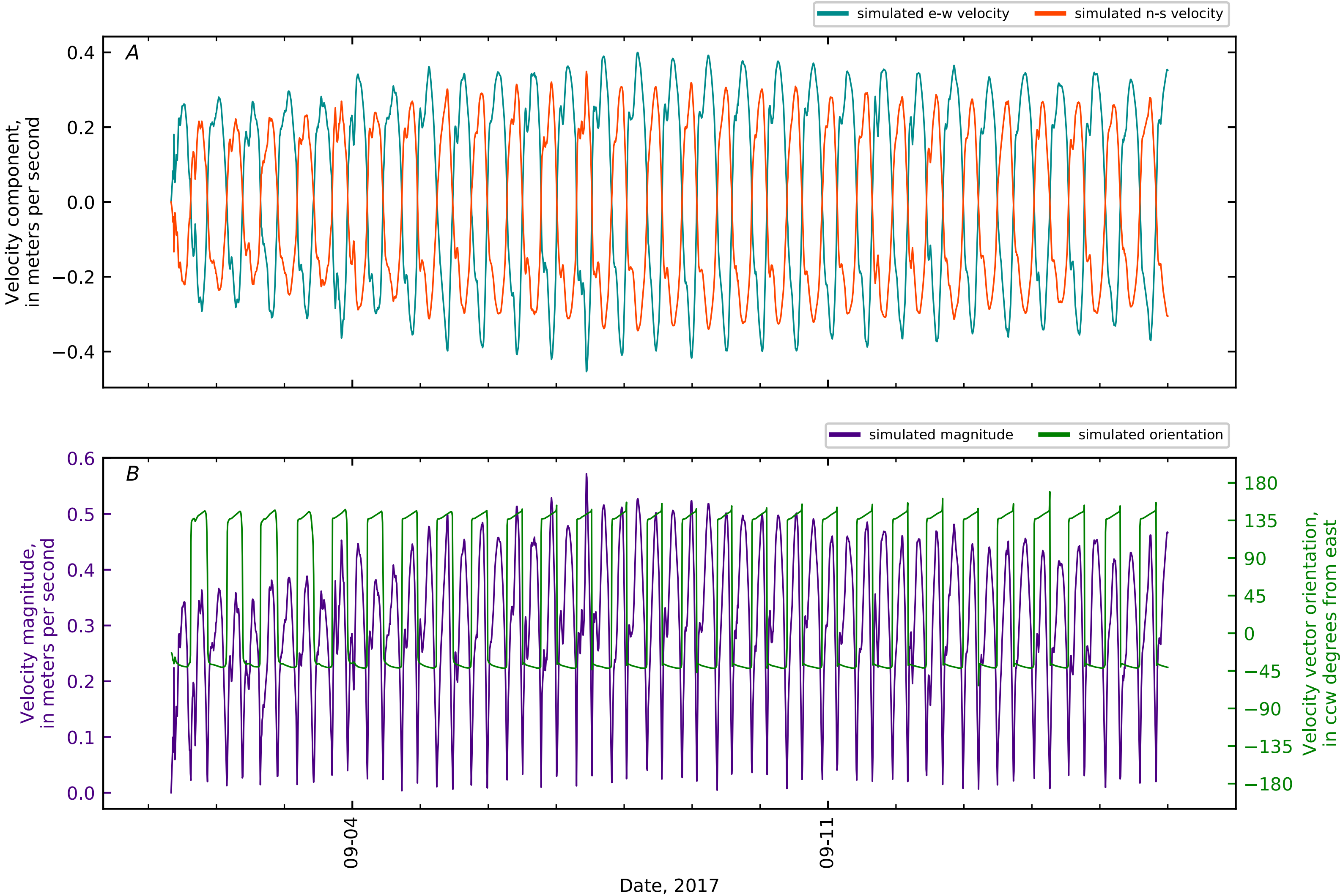

Figure B1-239. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 78, Penob Riv KM29.

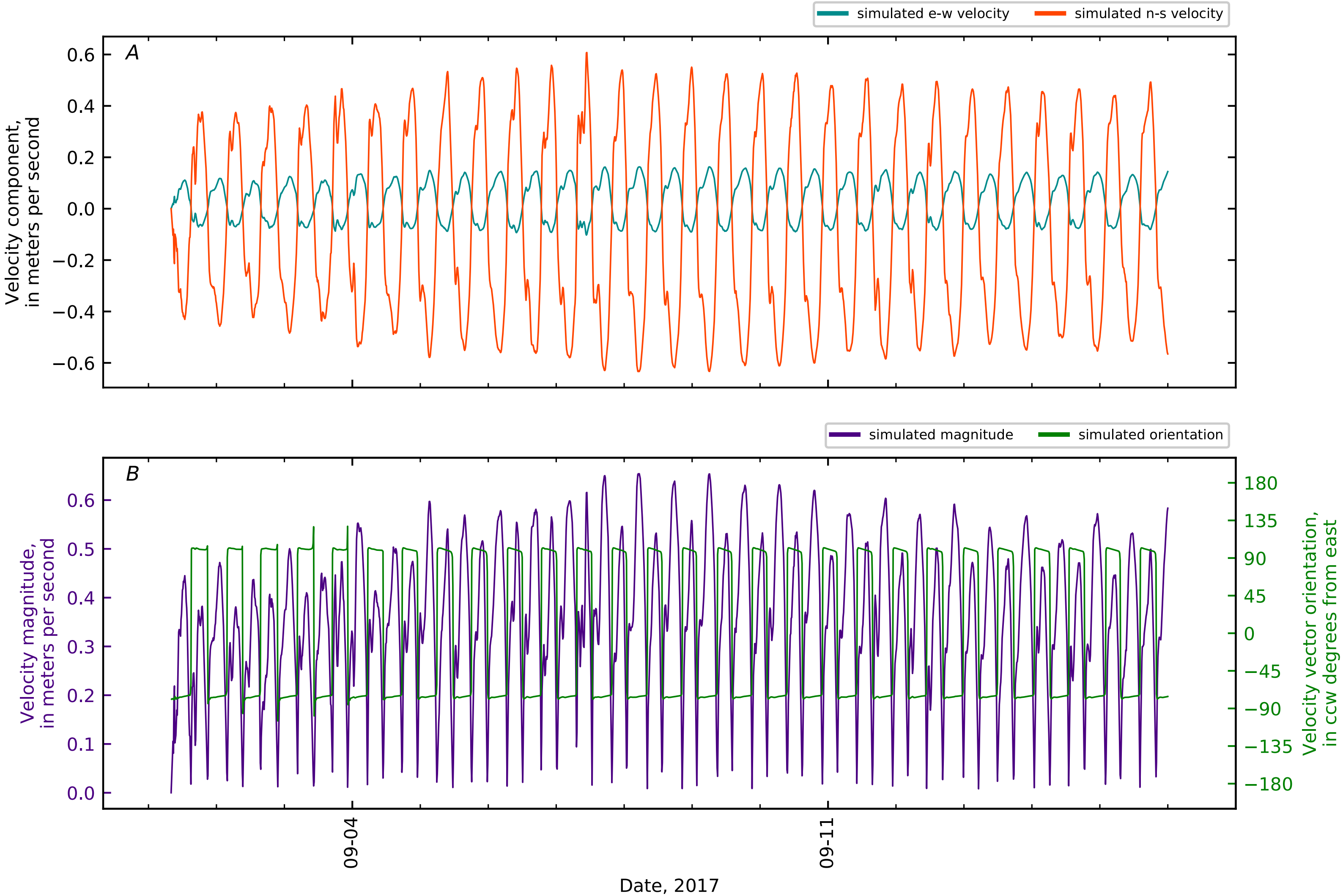

Figure B1-240. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 79, Penob Riv KM30.

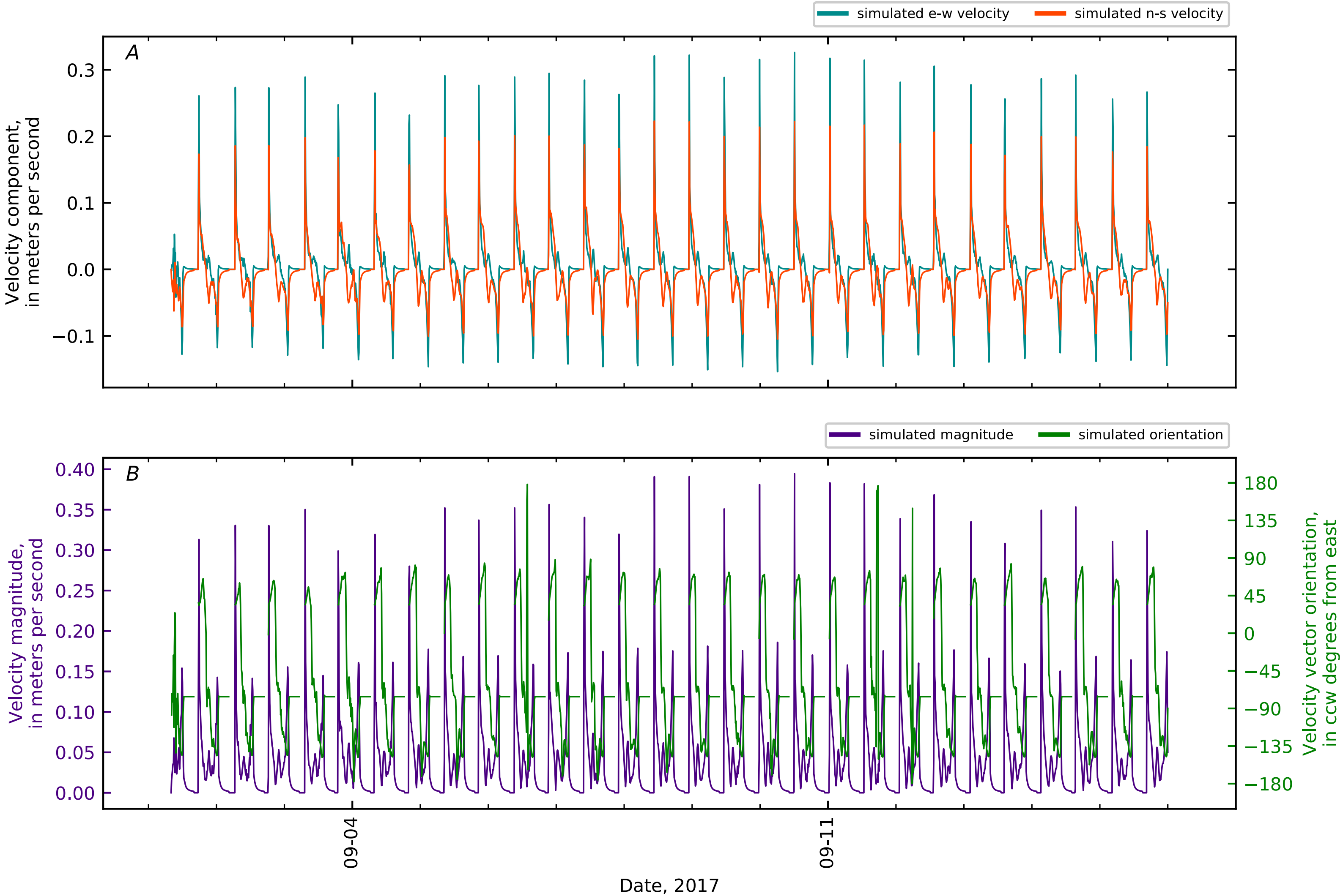

Figure B1-241. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 80, Penob Riv KM30.3 ERDC3 ON-MU2-SF-2 Bartl.

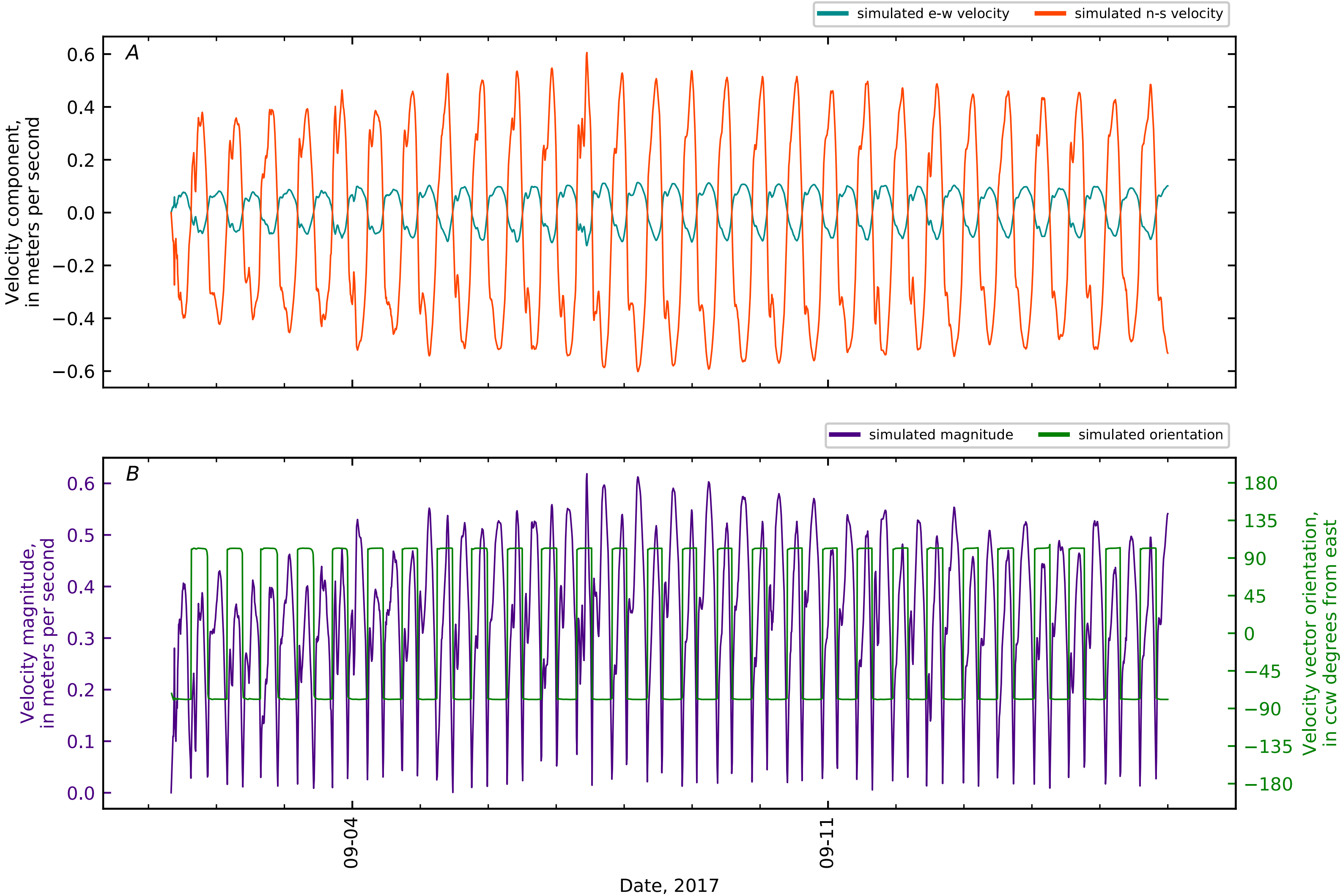

Figure B1-242. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 81, Penob Riv KM31.

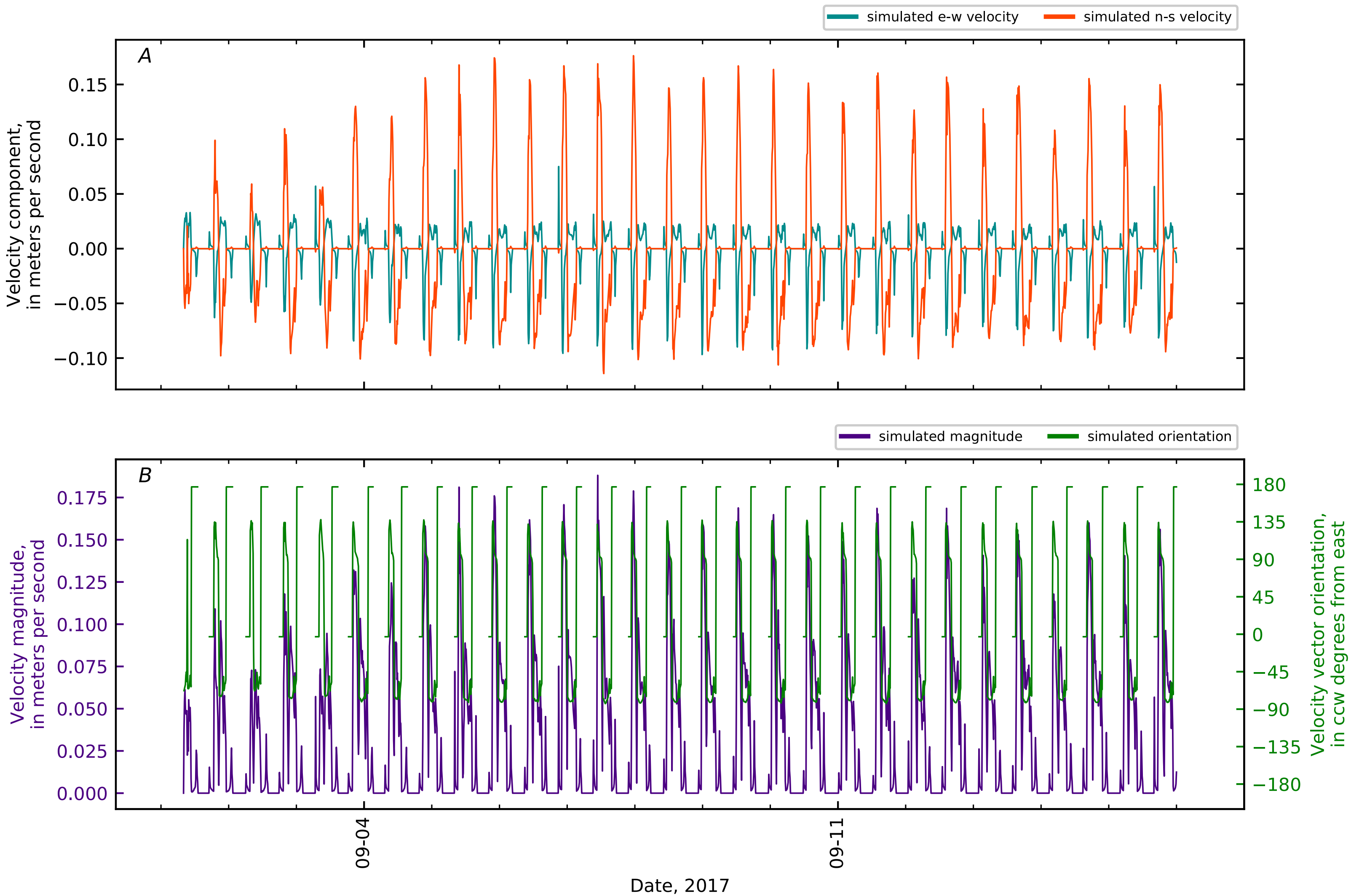

Figure B1-243. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 82, Penob Riv KM31.3 ERDC1 ON-MU2-SF-1.

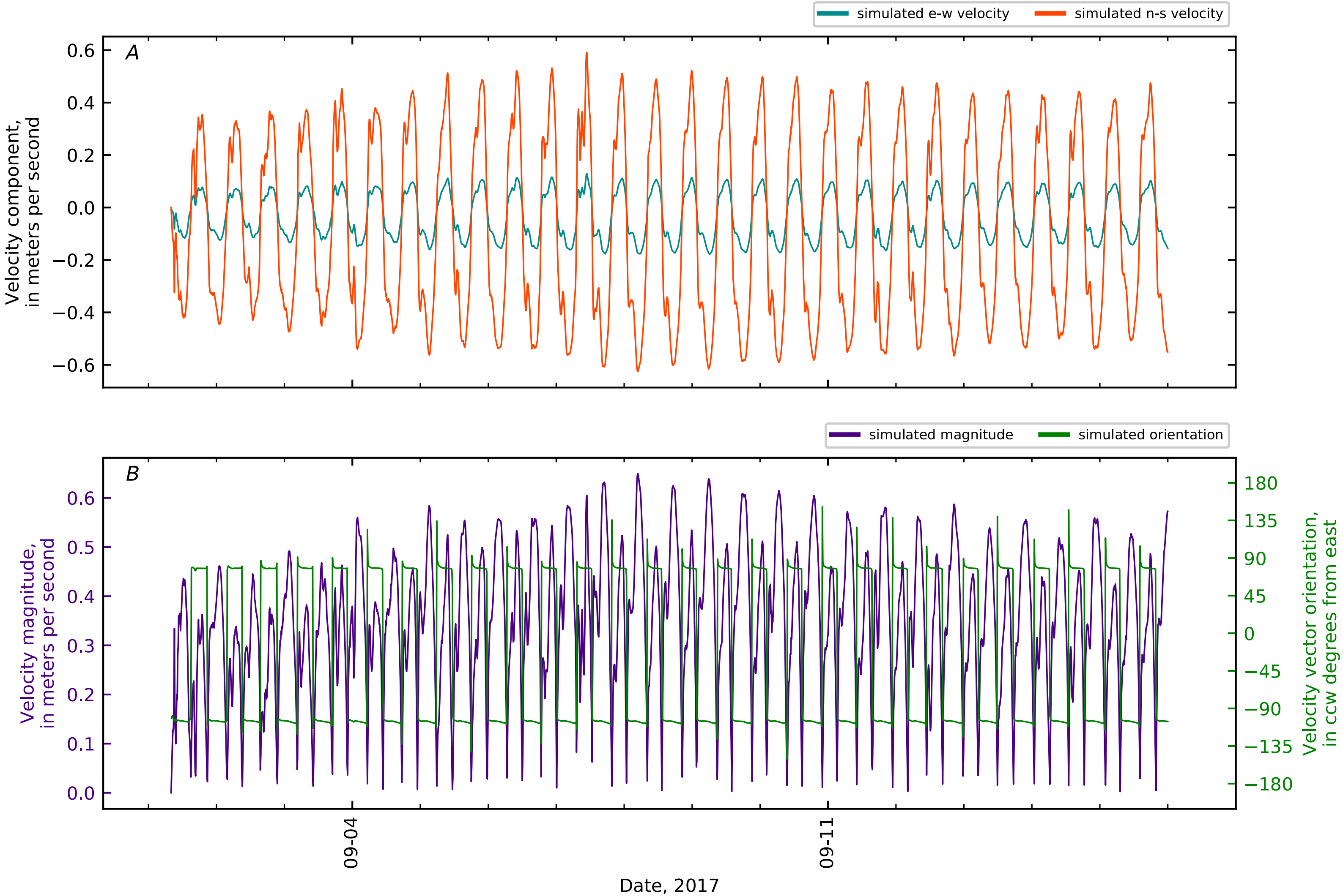

Figure B1-244. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 83, Penob Riv KM31.4 ERDC2 ON-MU13-SF-1.

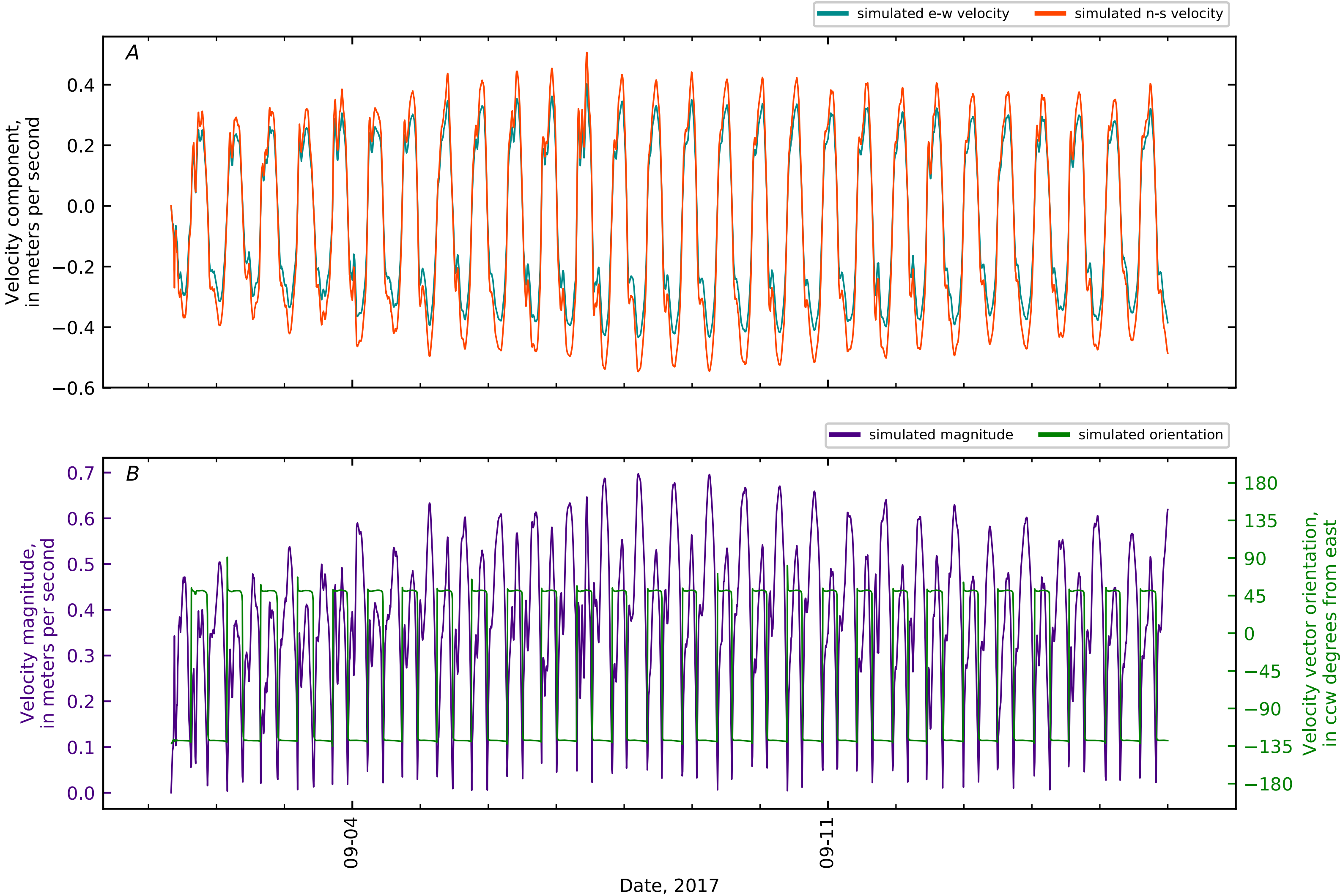

Figure B1-245. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 84, Penob Riv KM32.

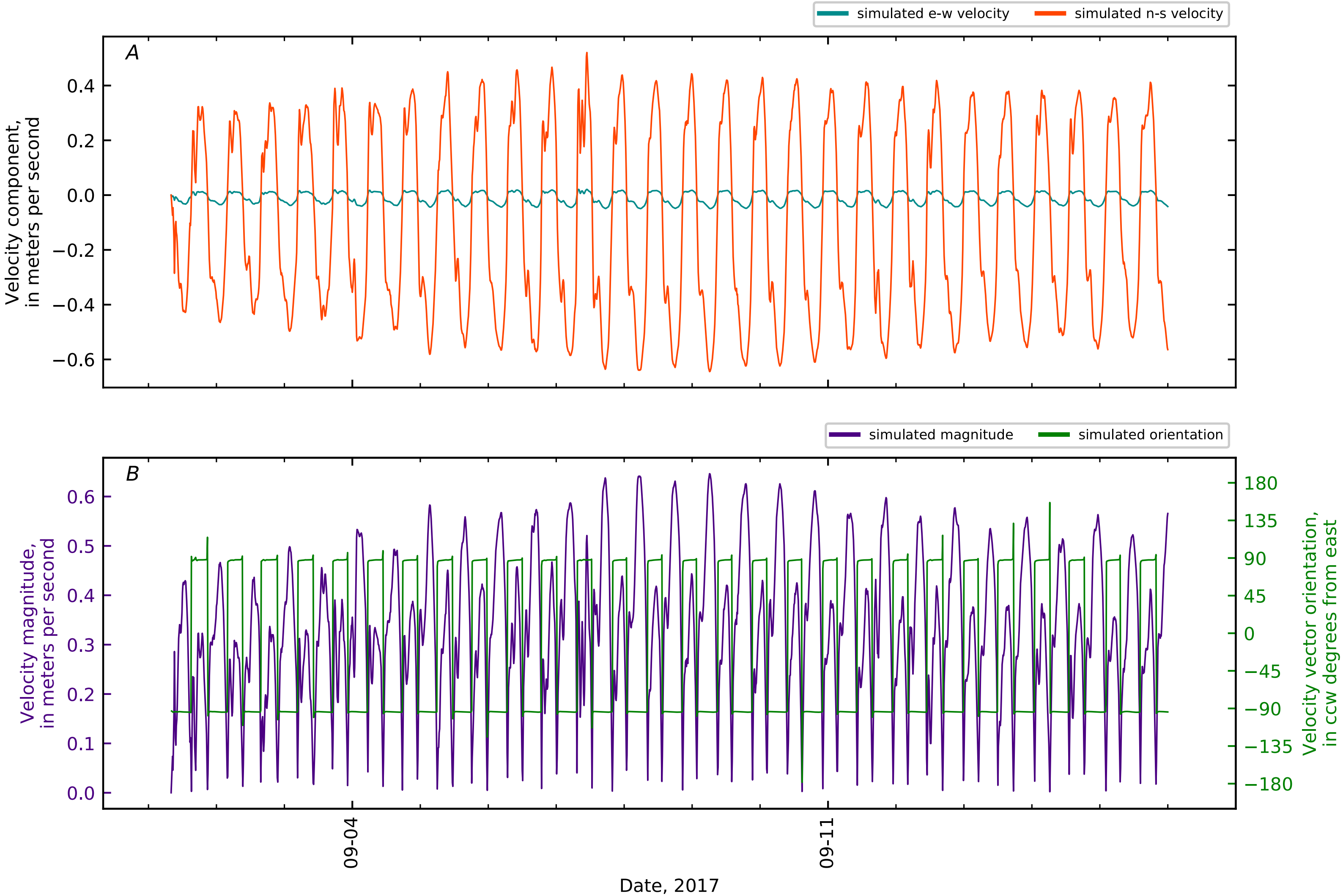

Figure B1-246. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 85, Penob Riv KM33.

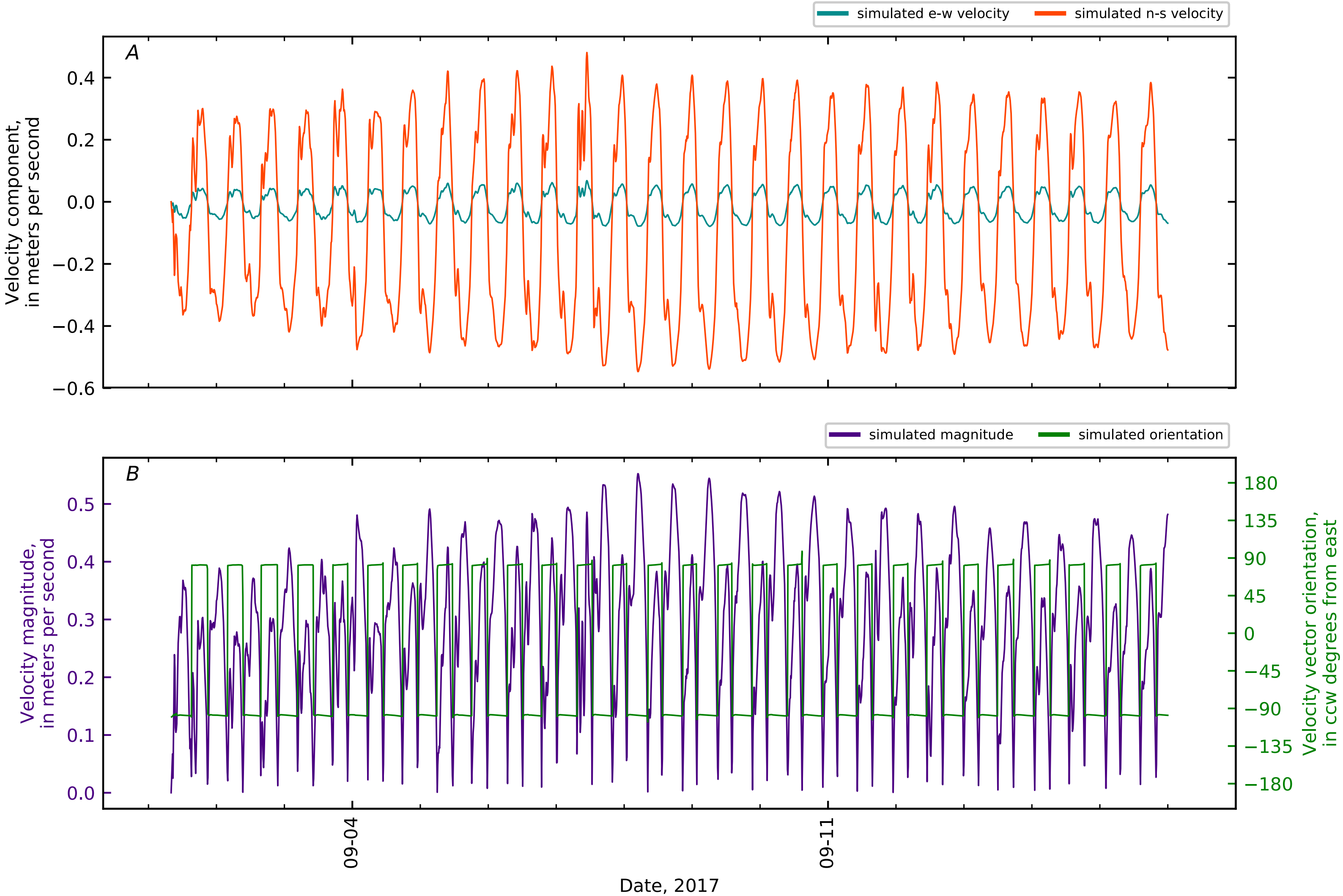

Figure B1-247. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 86, Penob Riv KM34.

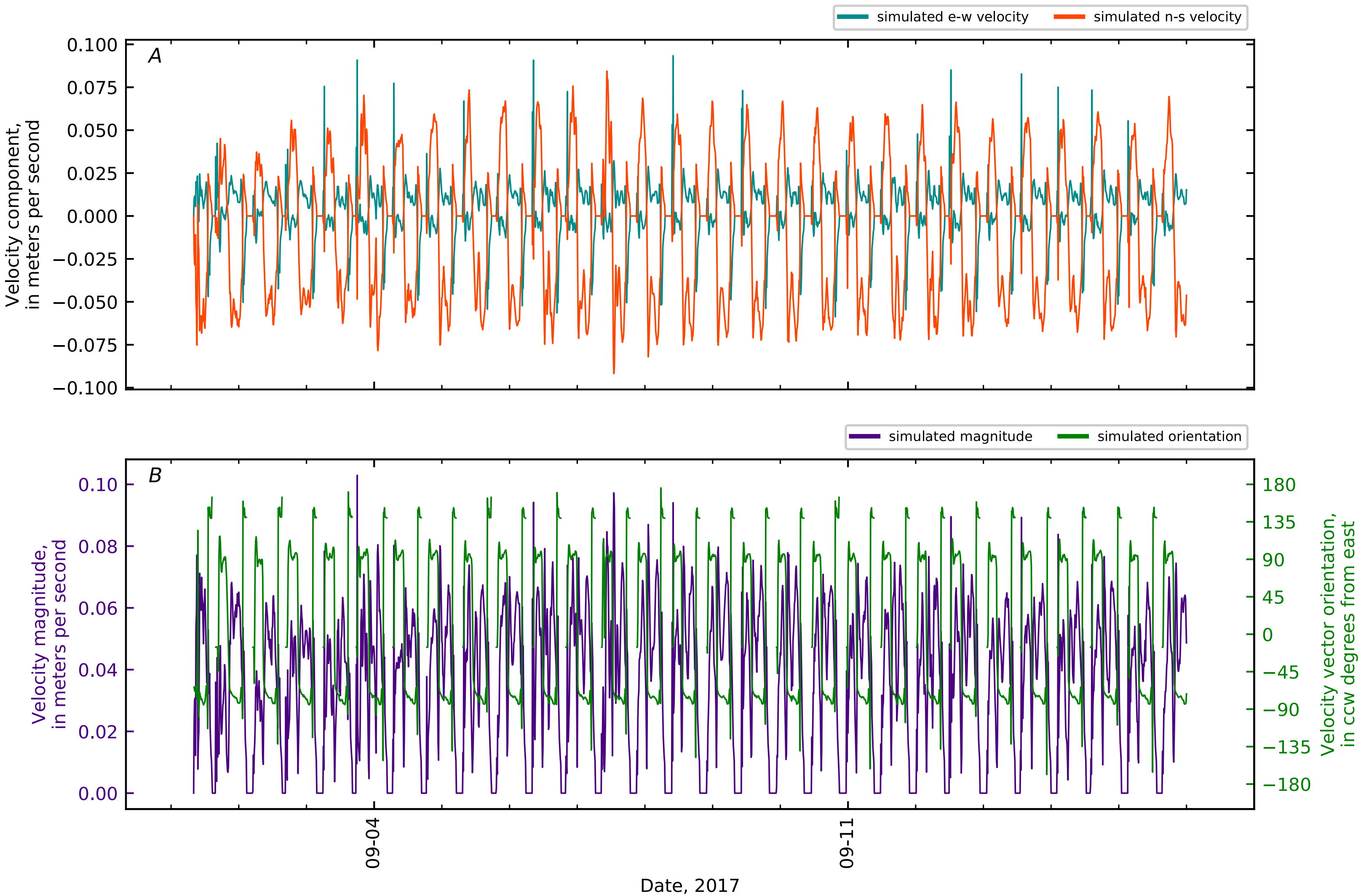

Figure B1-248. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 87, Penob Riv KM34.6 Southern Cove Orrington.

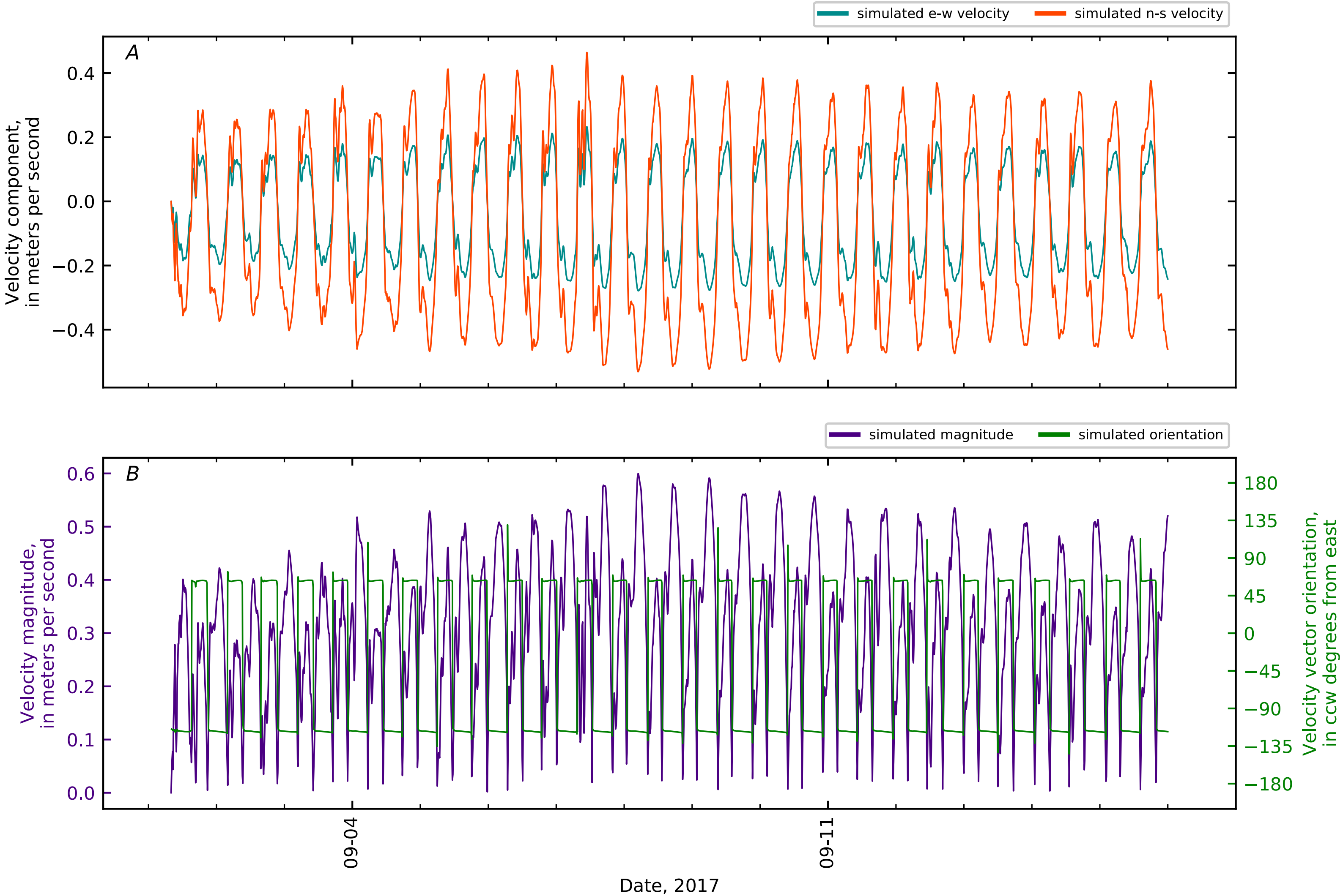

Figure B1-249. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 88, Penob Riv KM35.

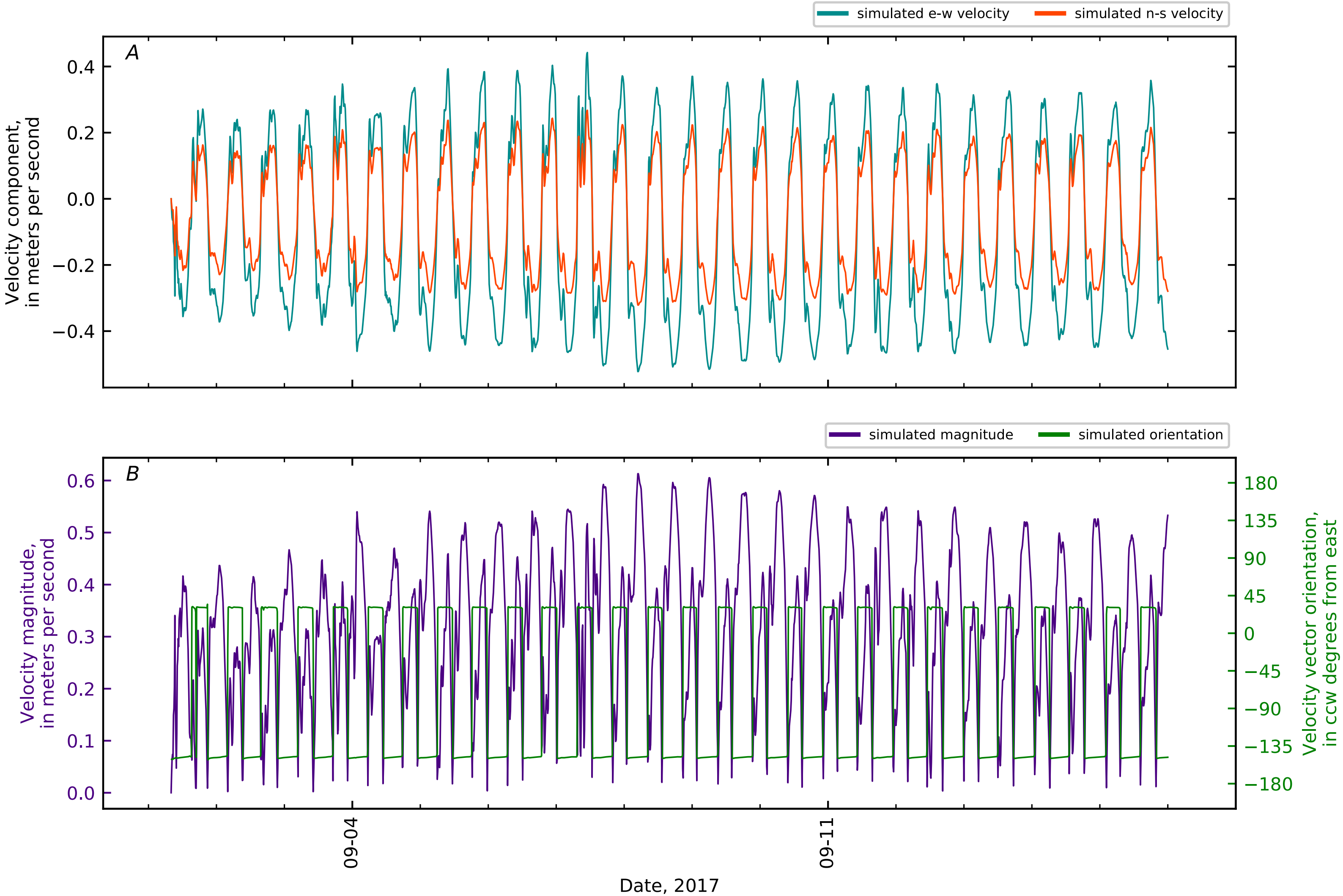

Figure B1-250. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 89, Penob Riv KM36.

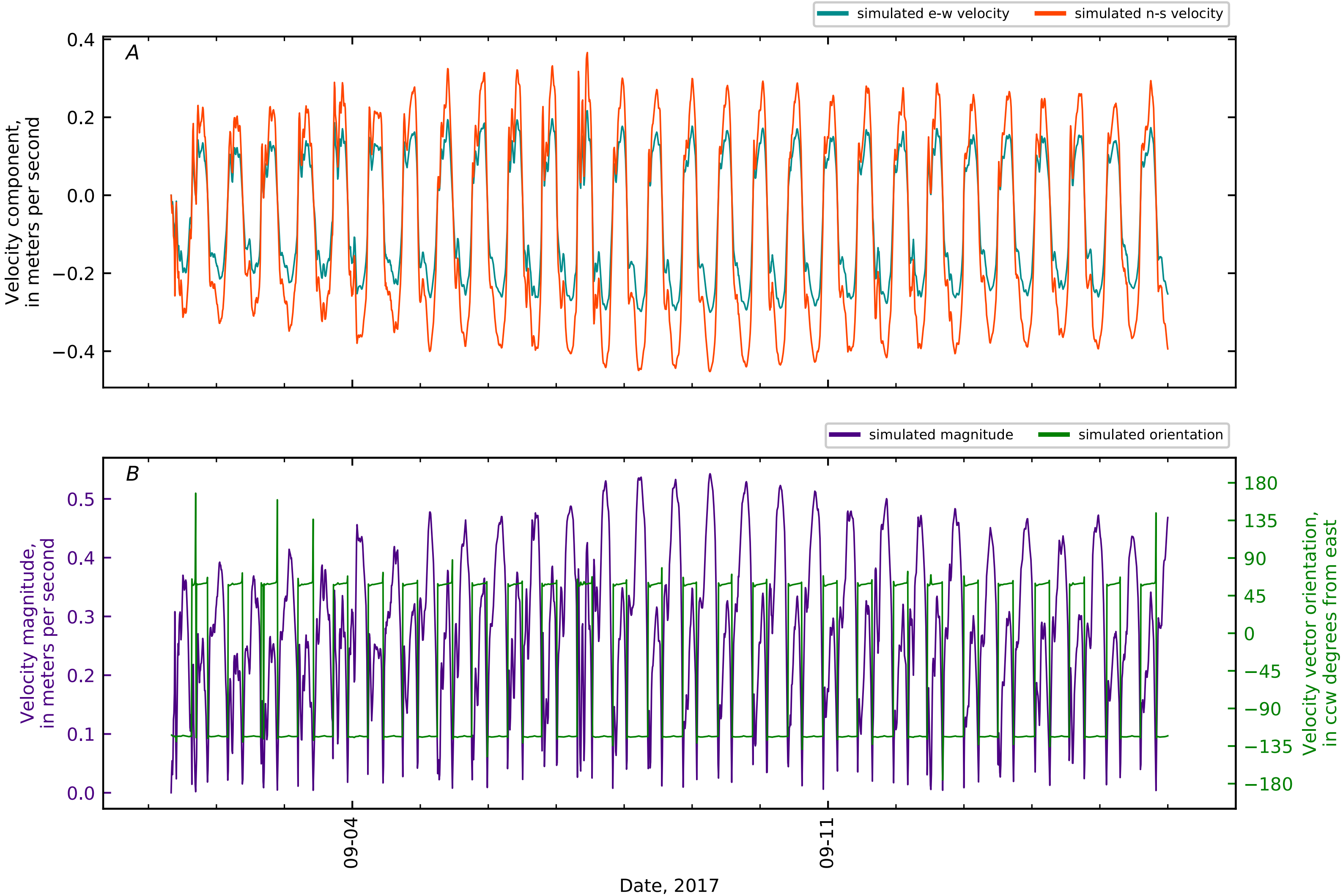

Figure B1-251. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 90, Penob Riv KM37.

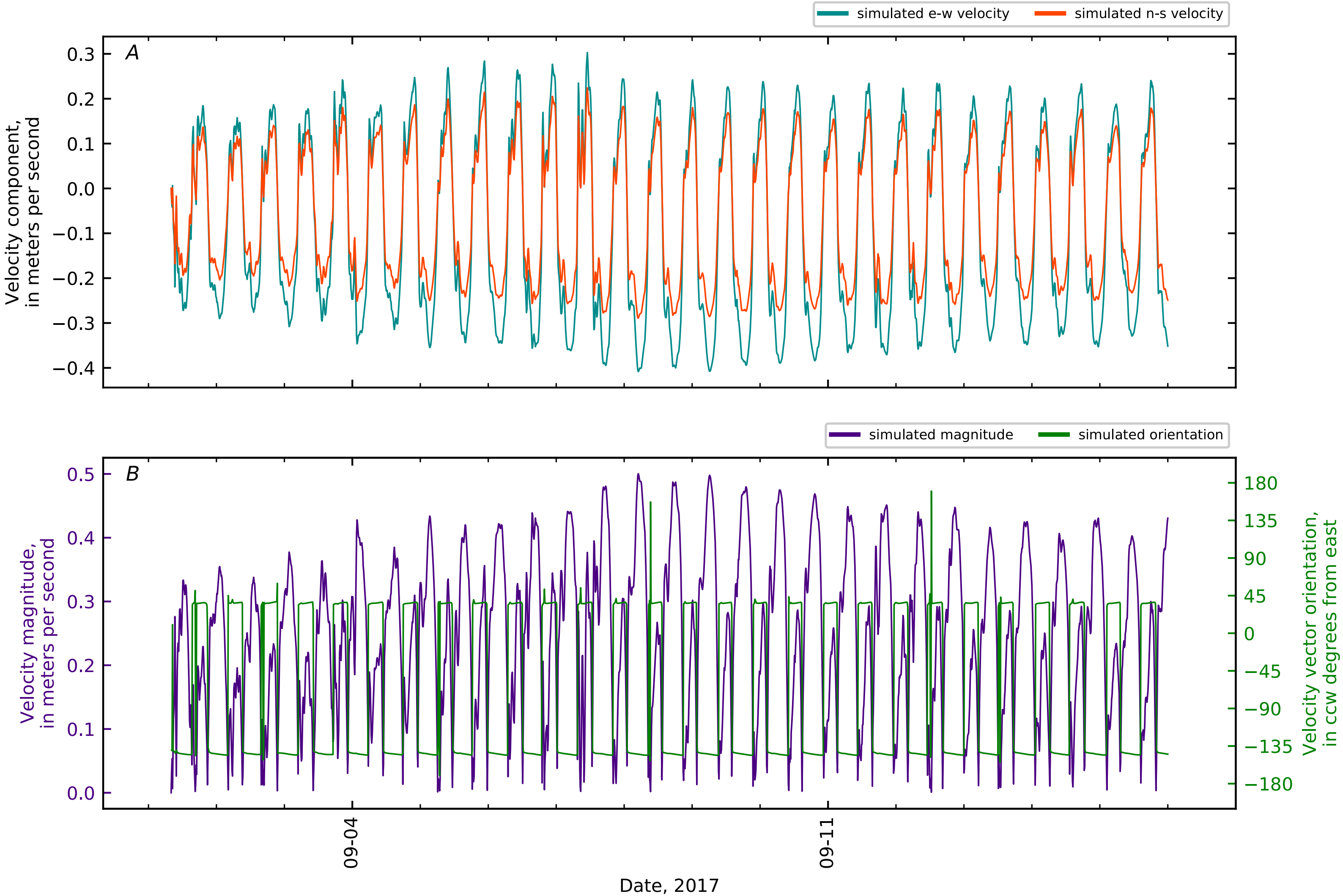

Figure B1-252. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 91, Penob Riv KM38.

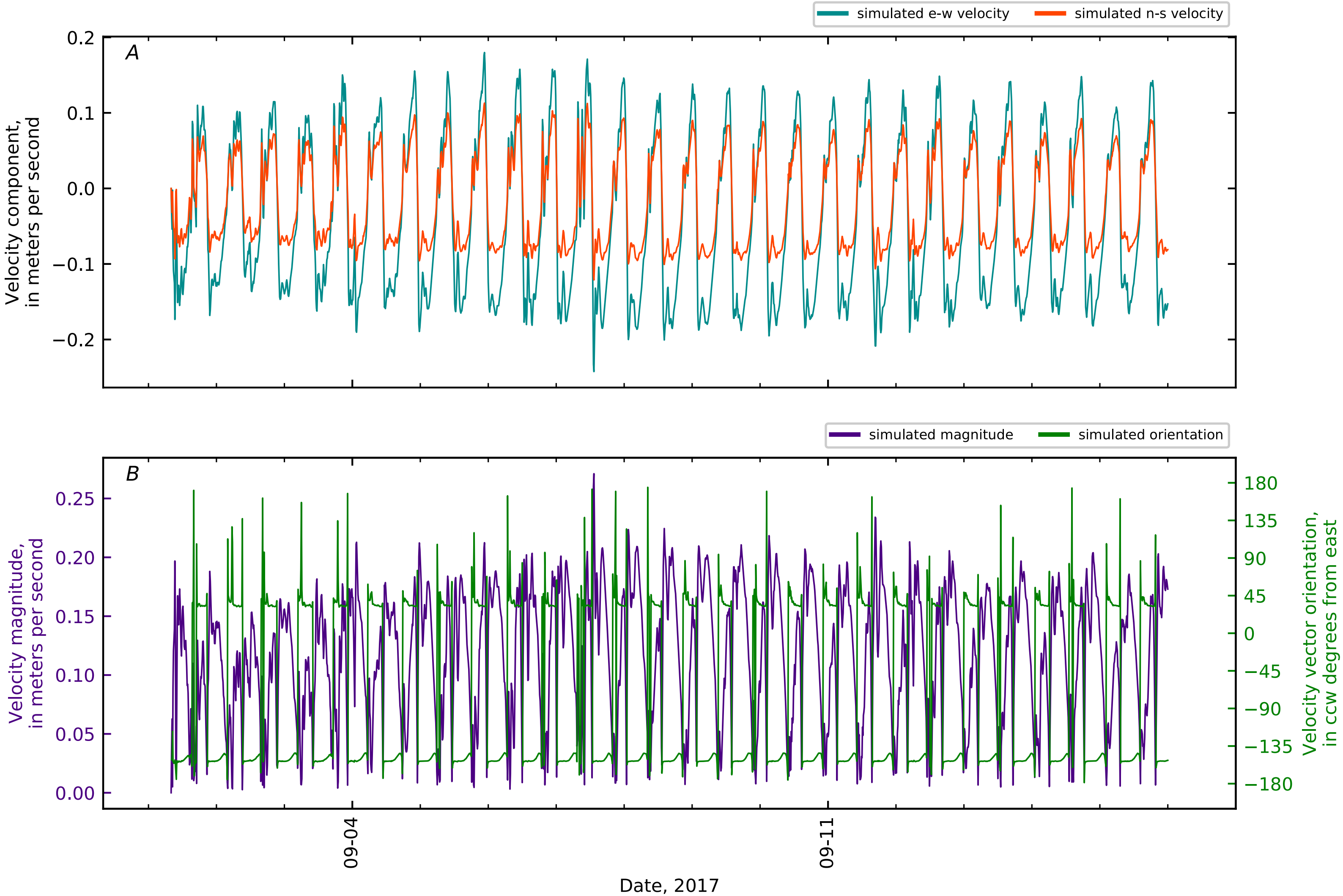

Figure B1-253. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 92, Penob Riv KM38.7 Boat ramp d/s Bangor.

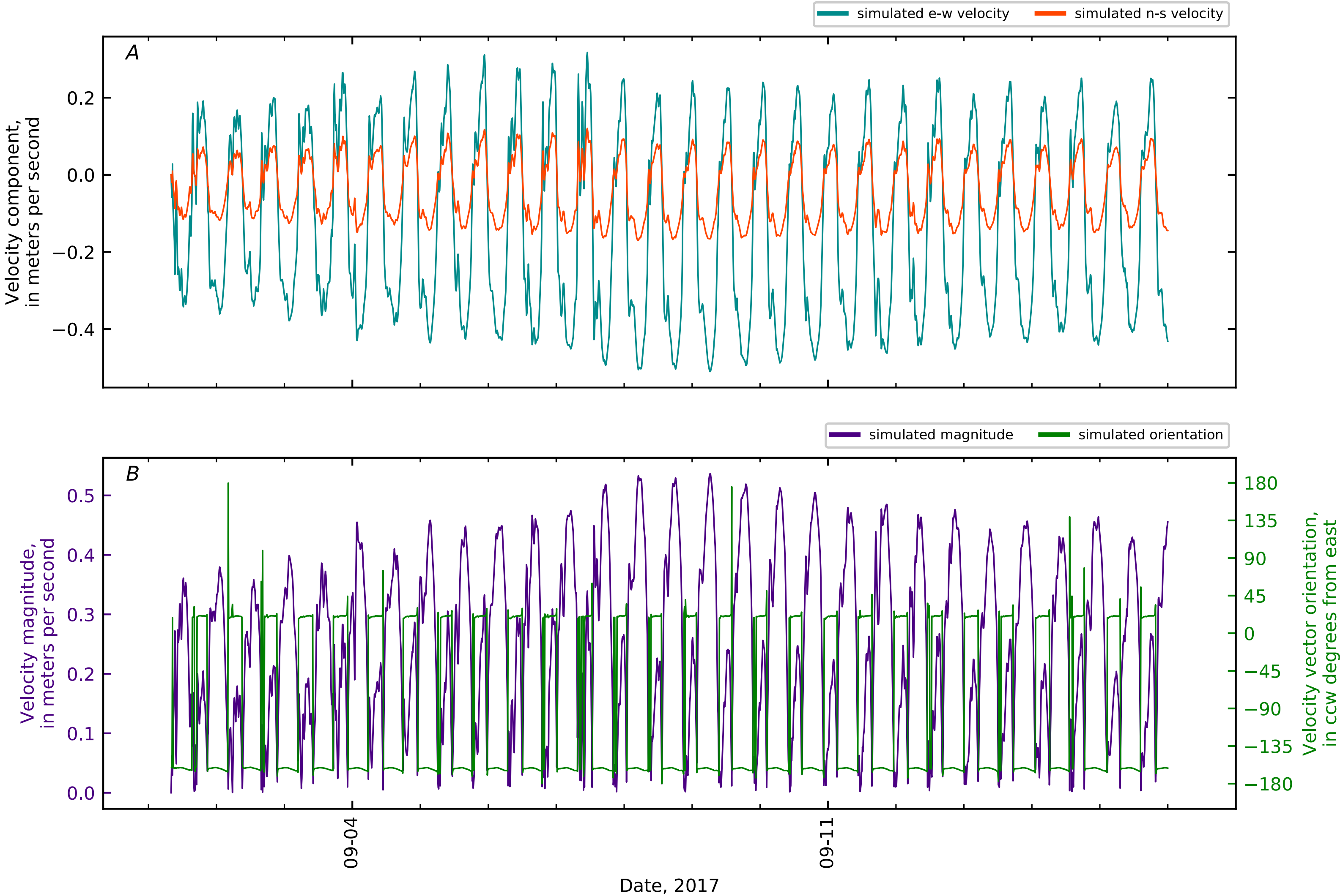

Figure B1-254. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 93, Penob Riv KM39.

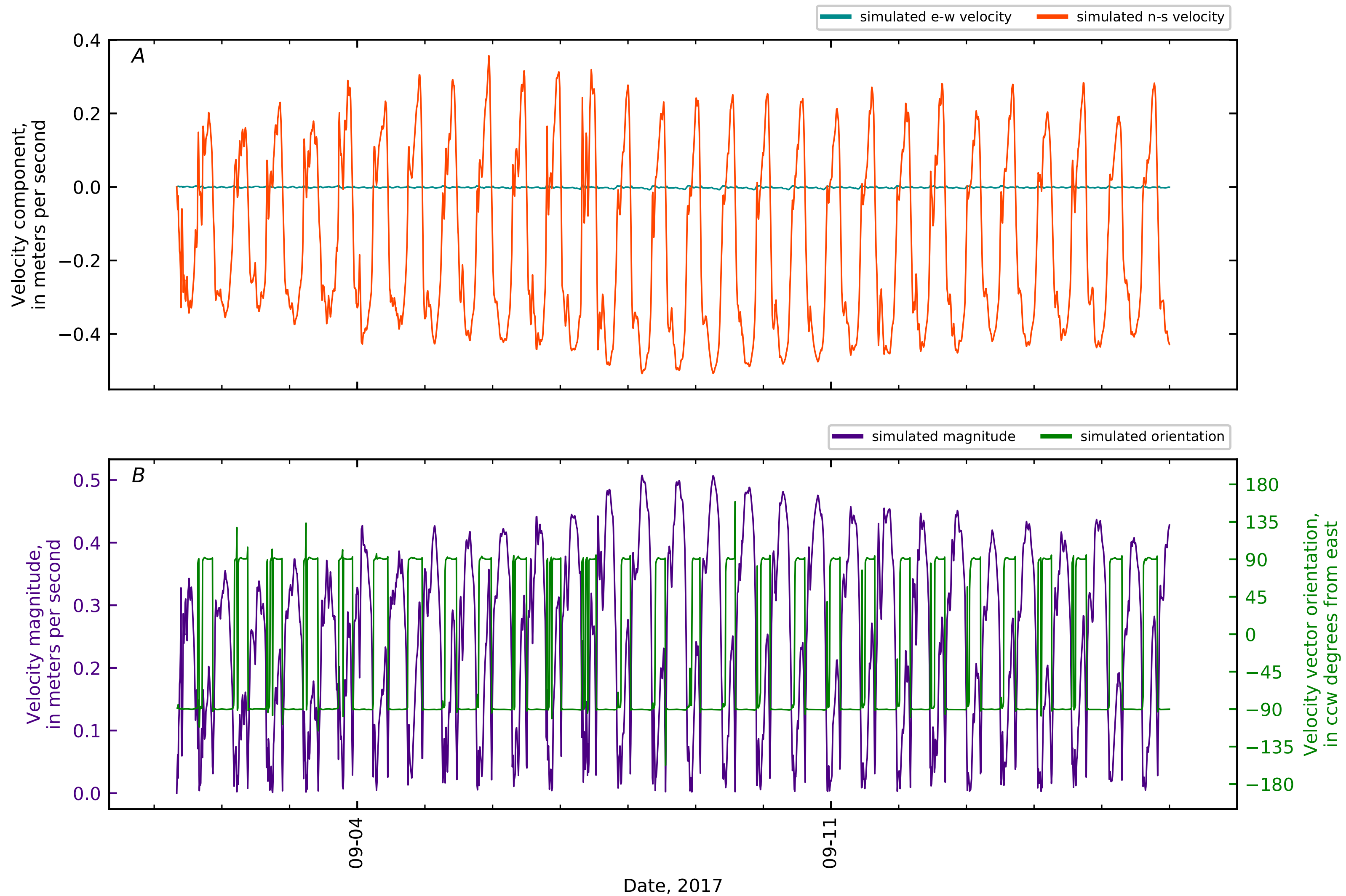

Figure B1-255. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 94, Penob Riv KM40.

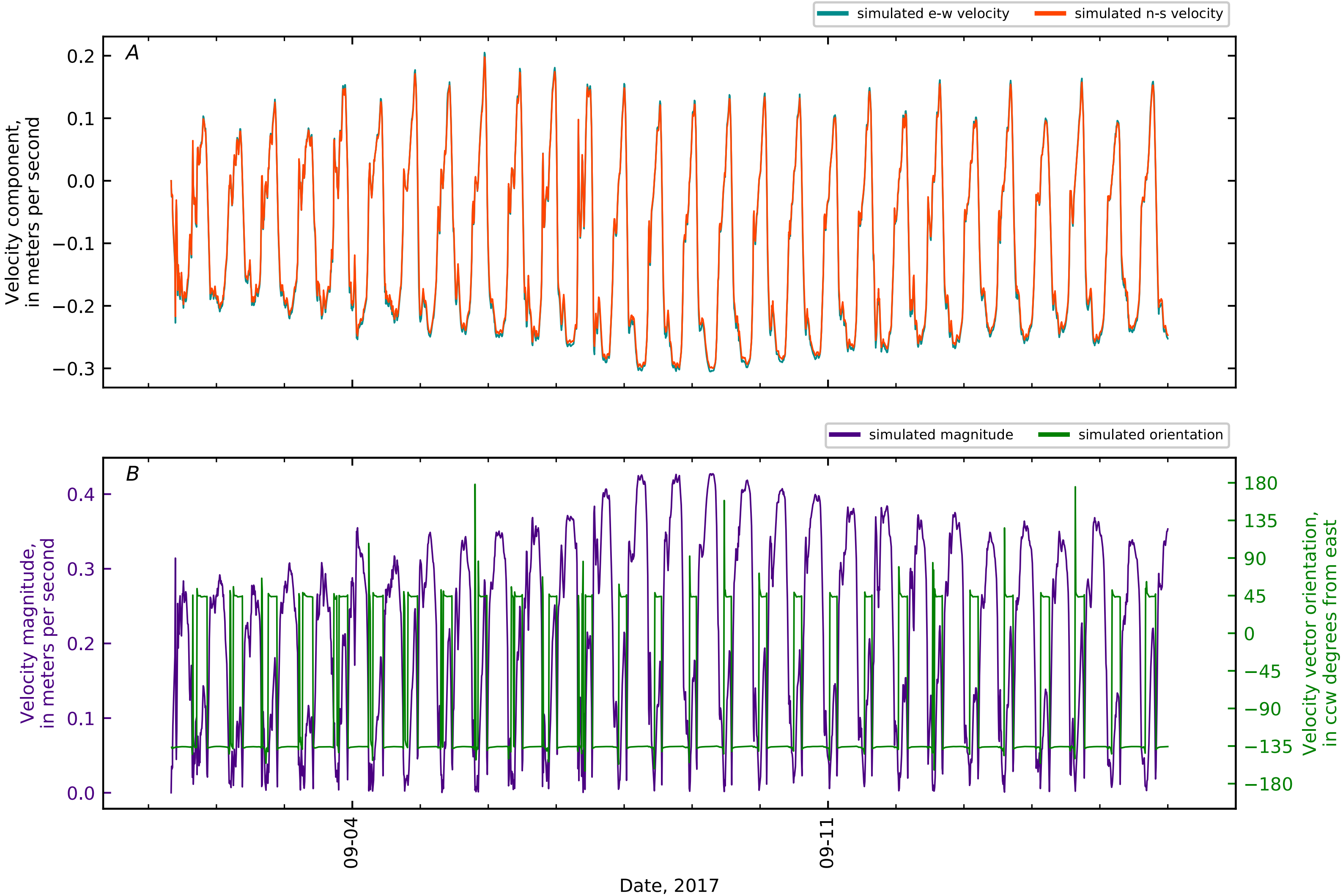

Figure B1-256. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 95, Penob Riv KM41.

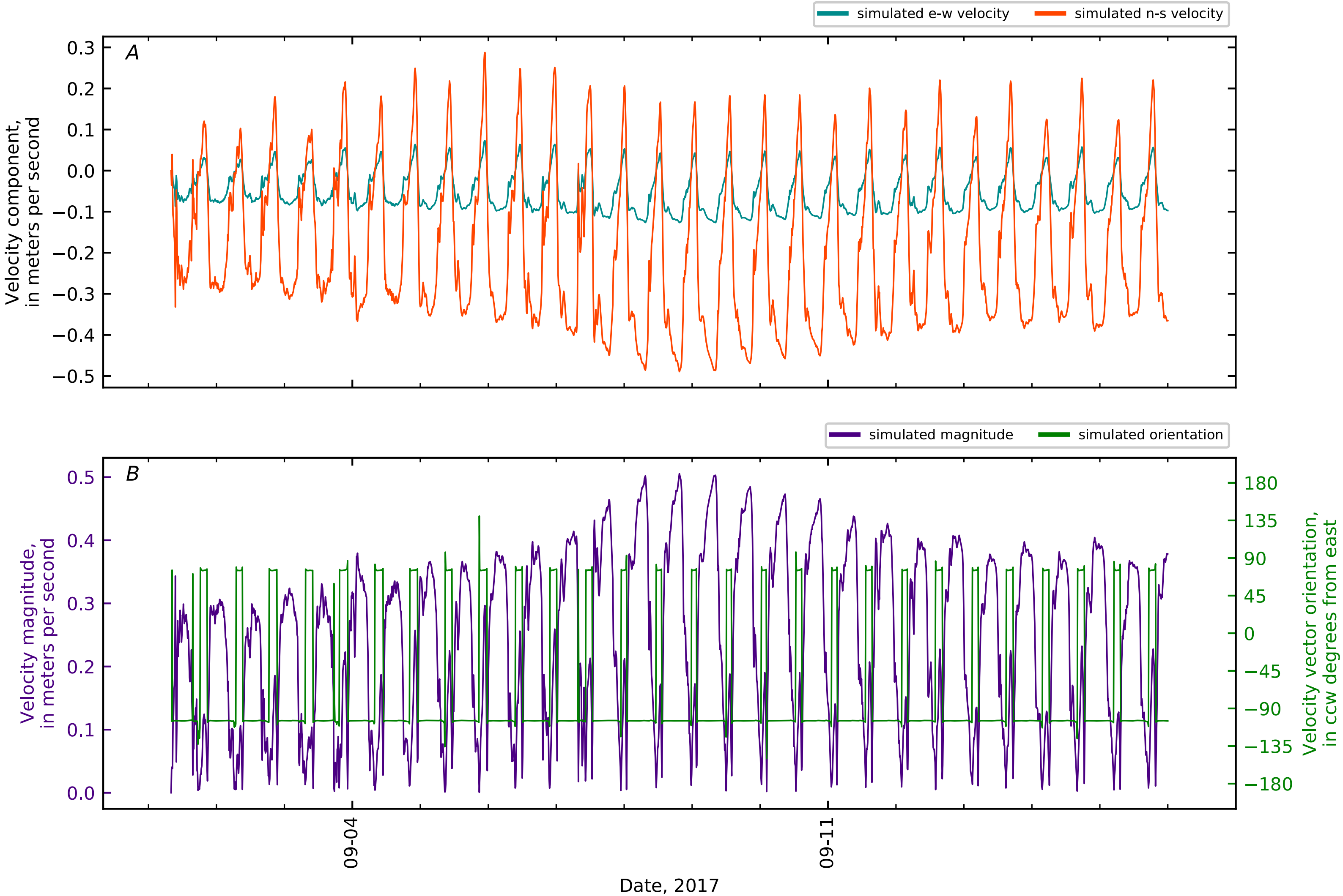

Figure B1-257. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 96, Penob Riv KM42.

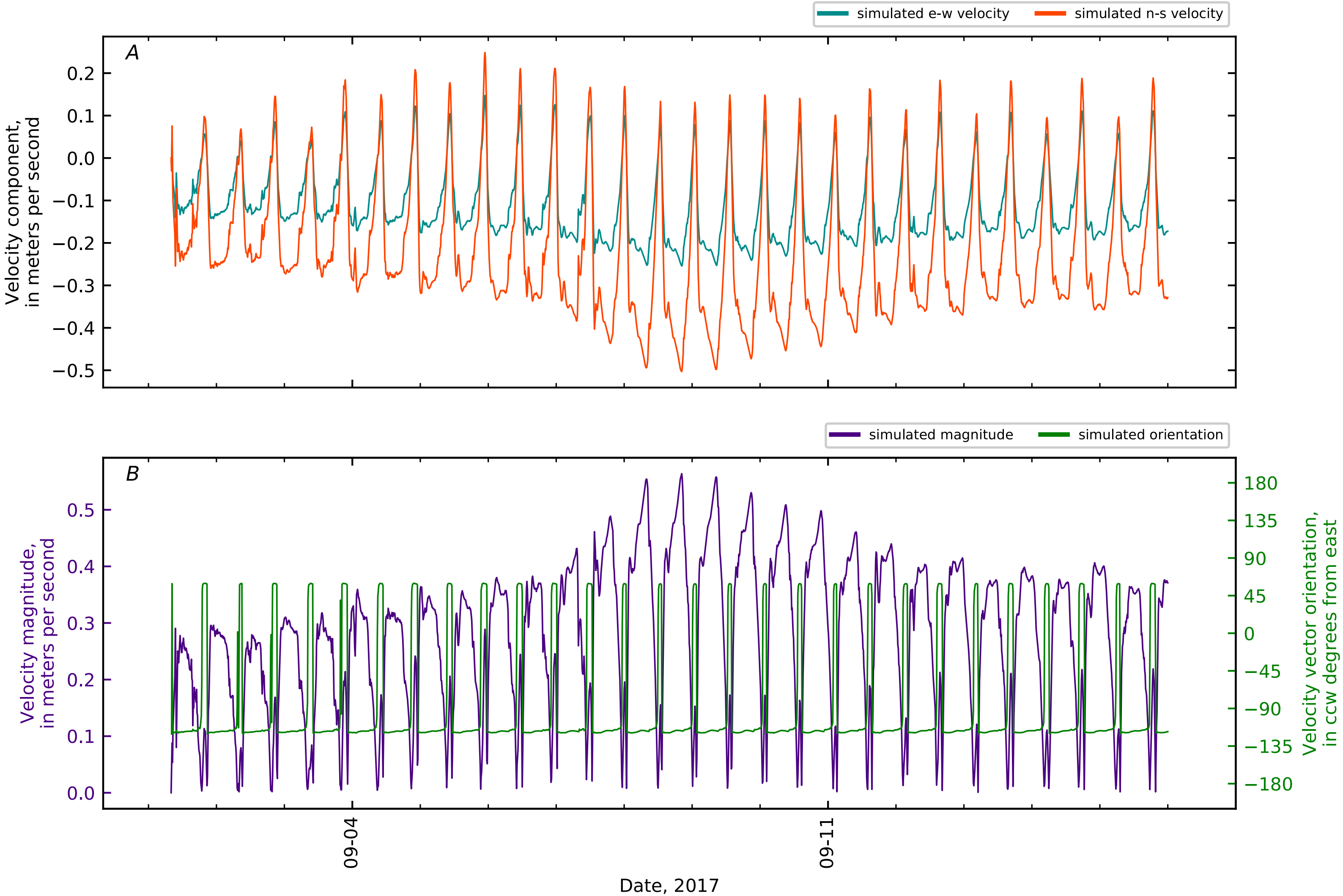

Figure B1-258. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 97, Penob Riv KM43.

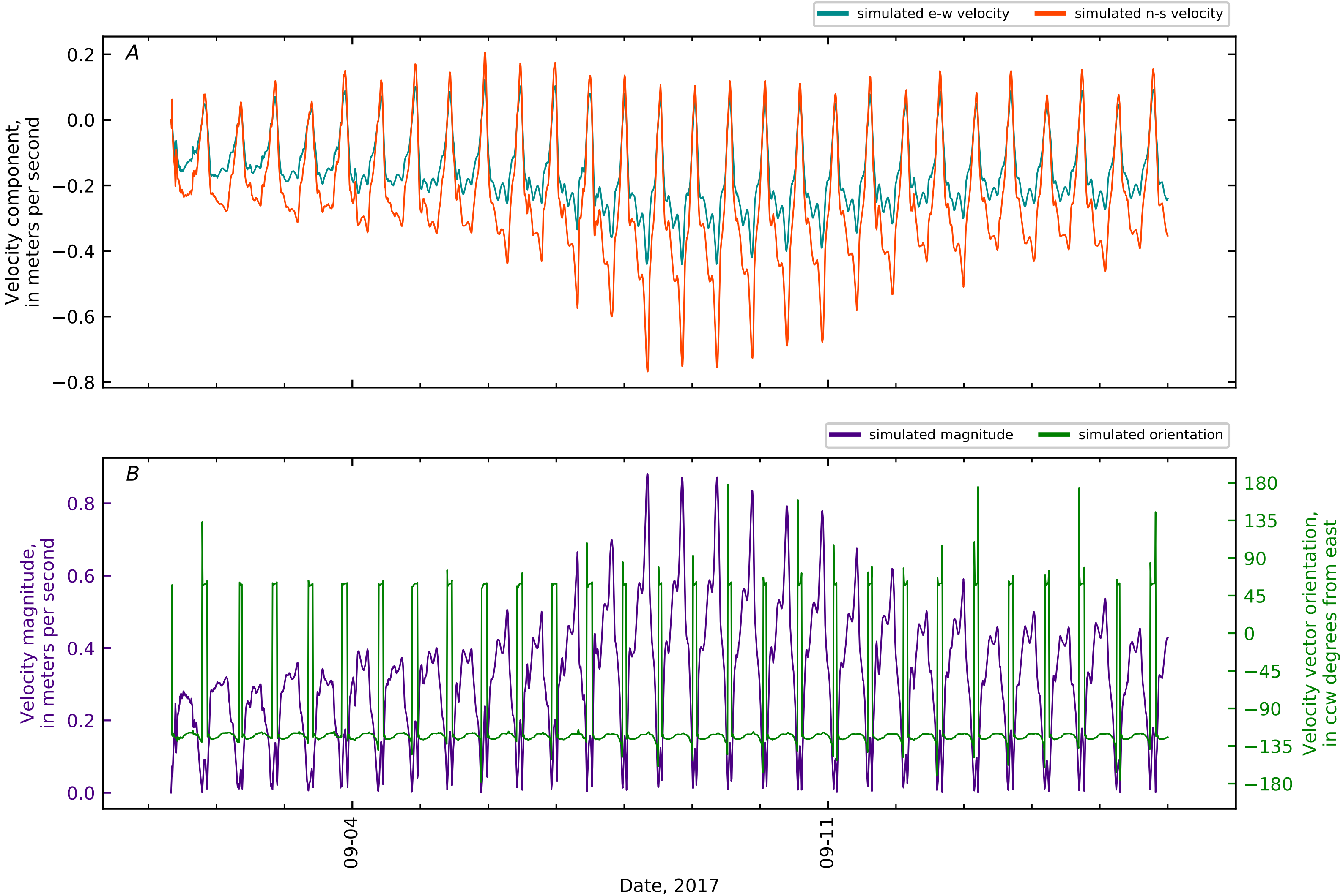

Figure B1-259. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 98, Penob Riv KM43.2 GS 01037050 at Bangor.

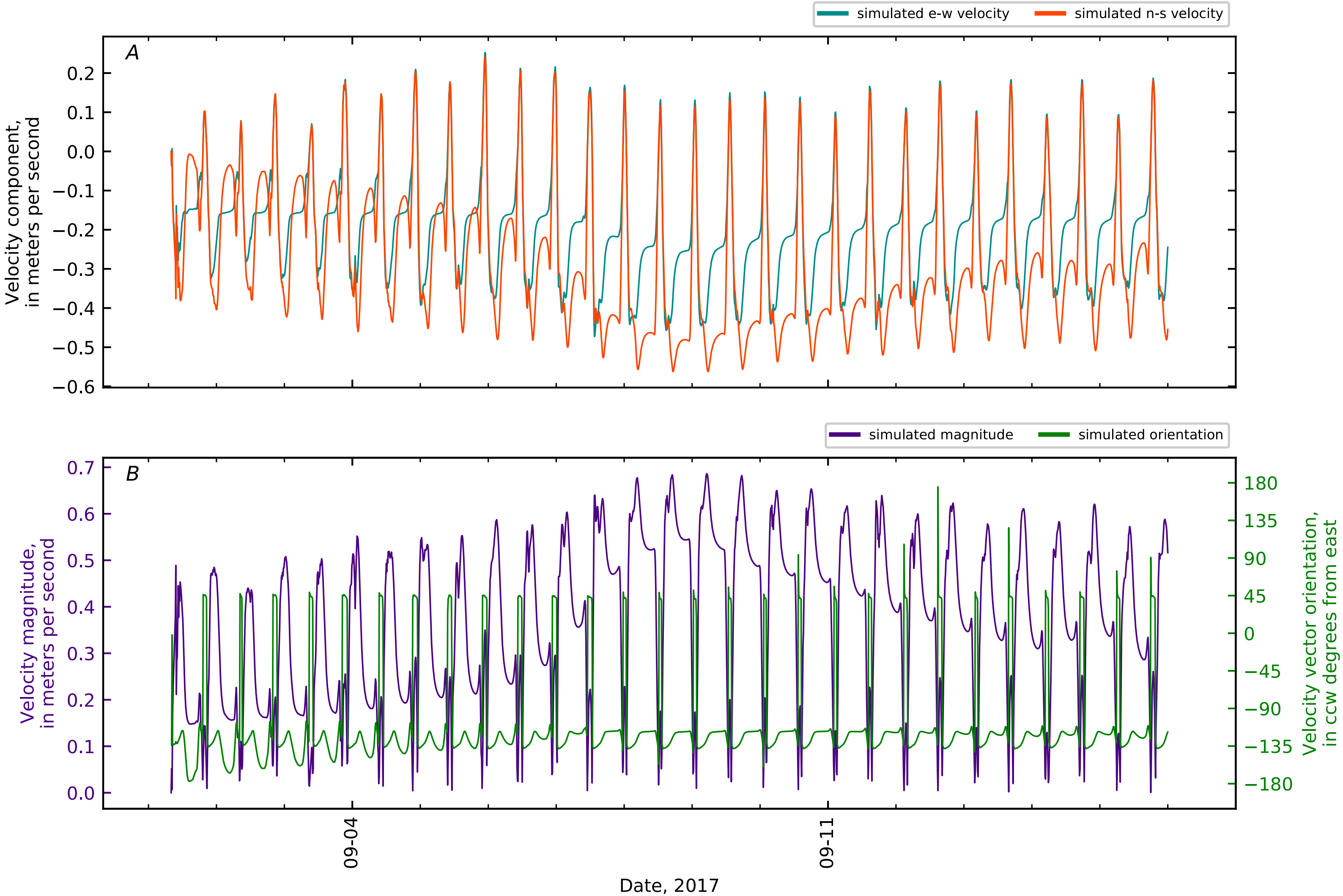

Figure B1-260. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 99, Penob Riv KM44.

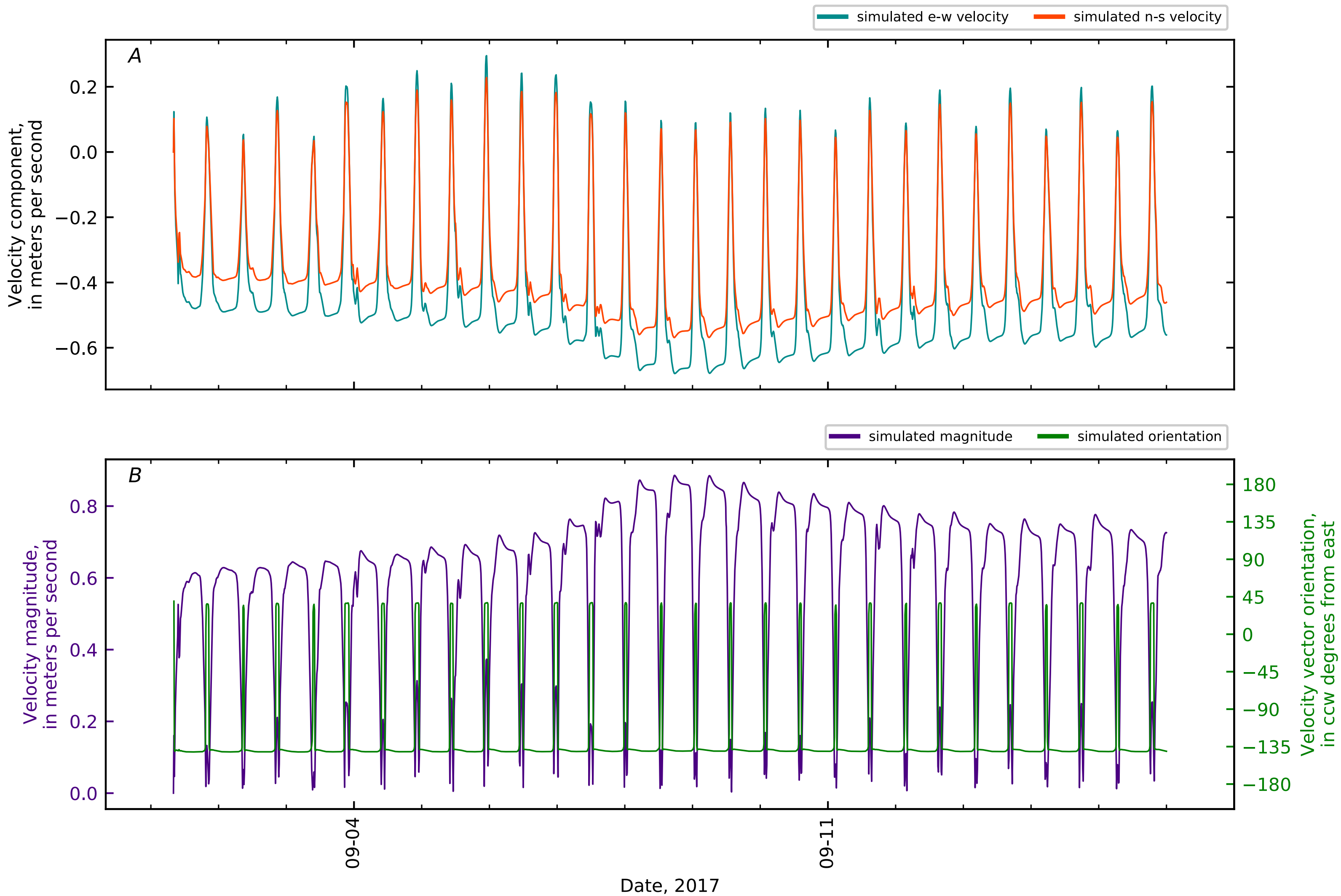

Figure B1-261. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 100, Penob Riv KM45.

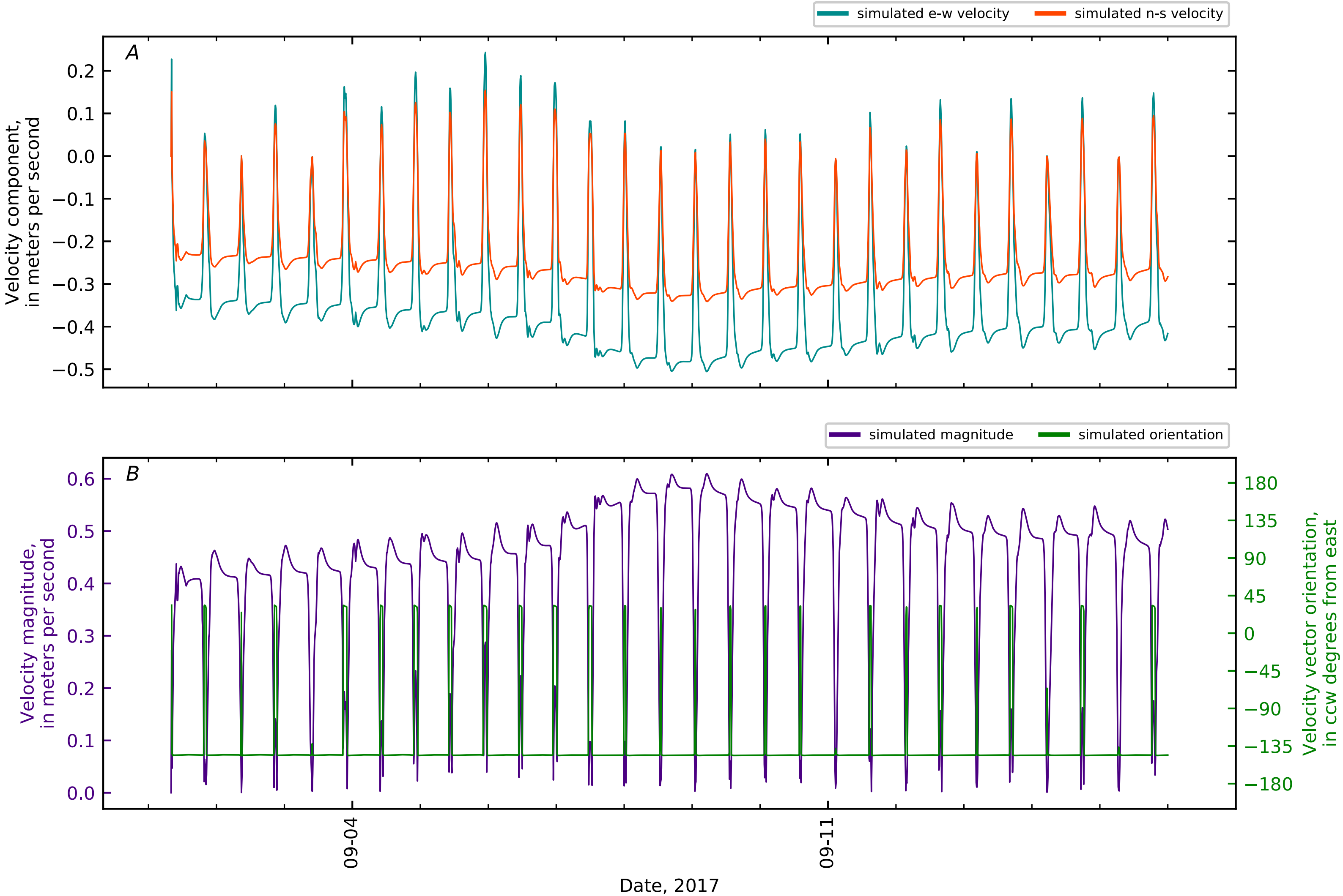

Figure B1-262. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 101, Penob Riv KM46.

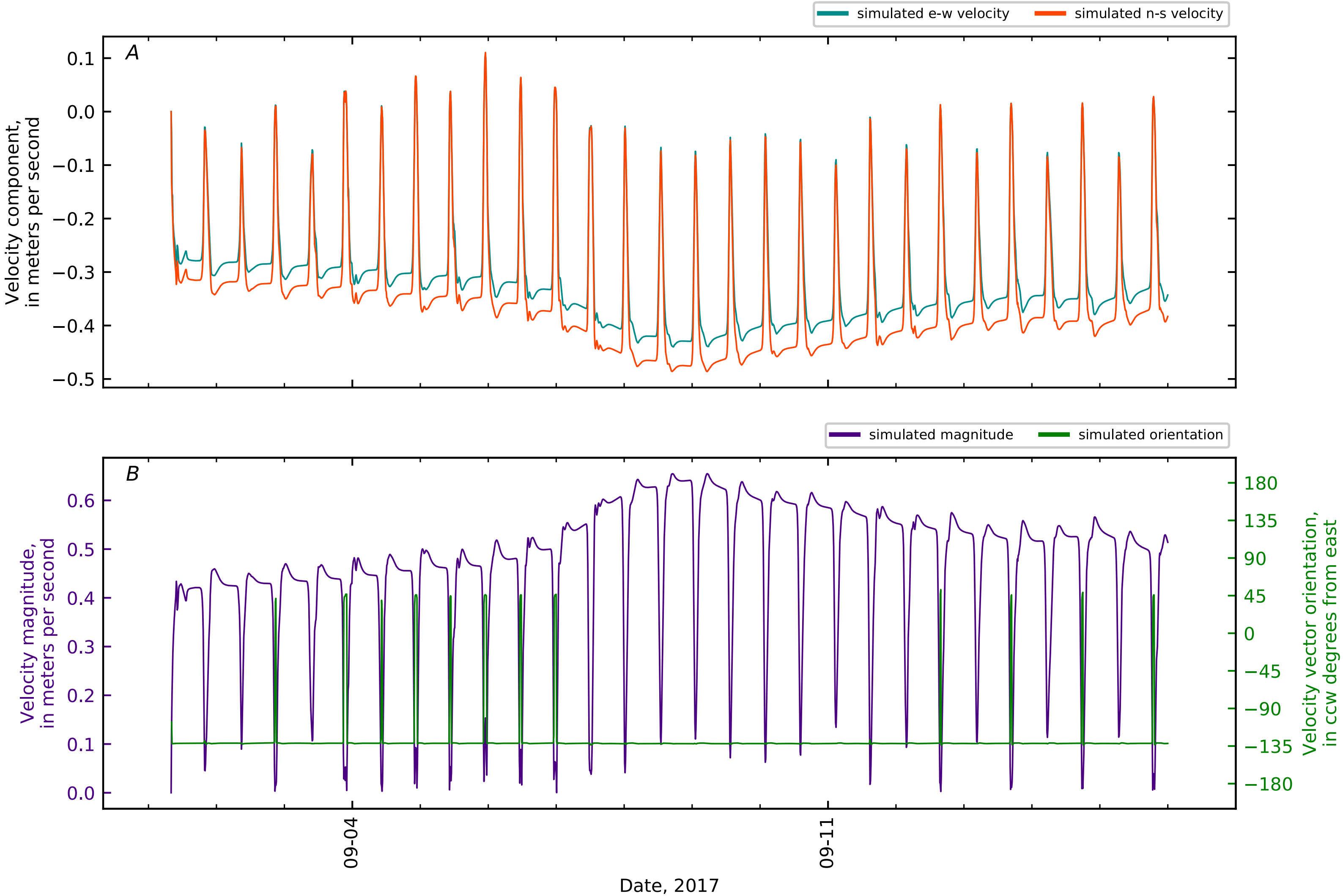

Figure B1-263. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 102, Penob Riv KM47.

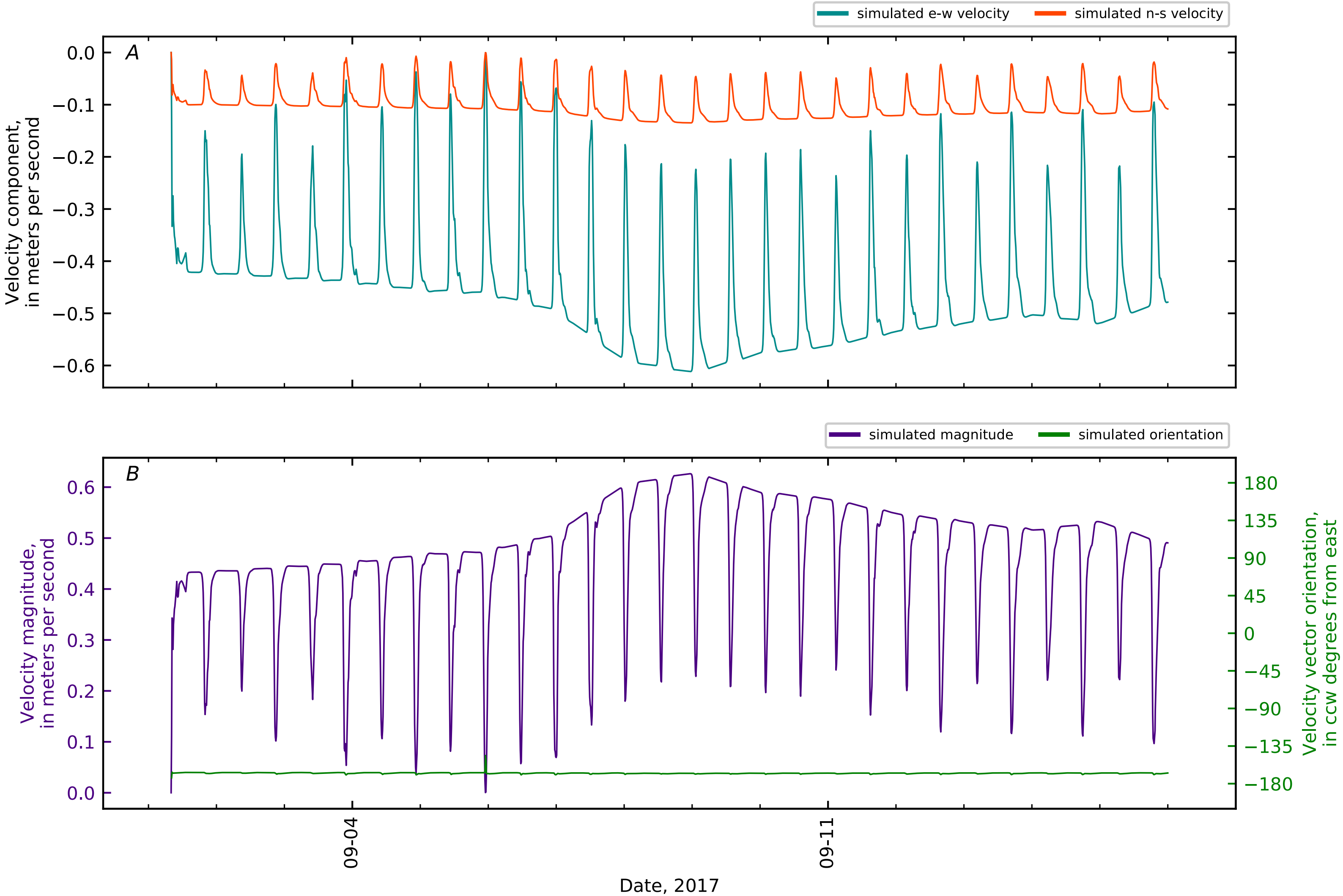

Figure B1-264. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 103, Penob Riv KM48.

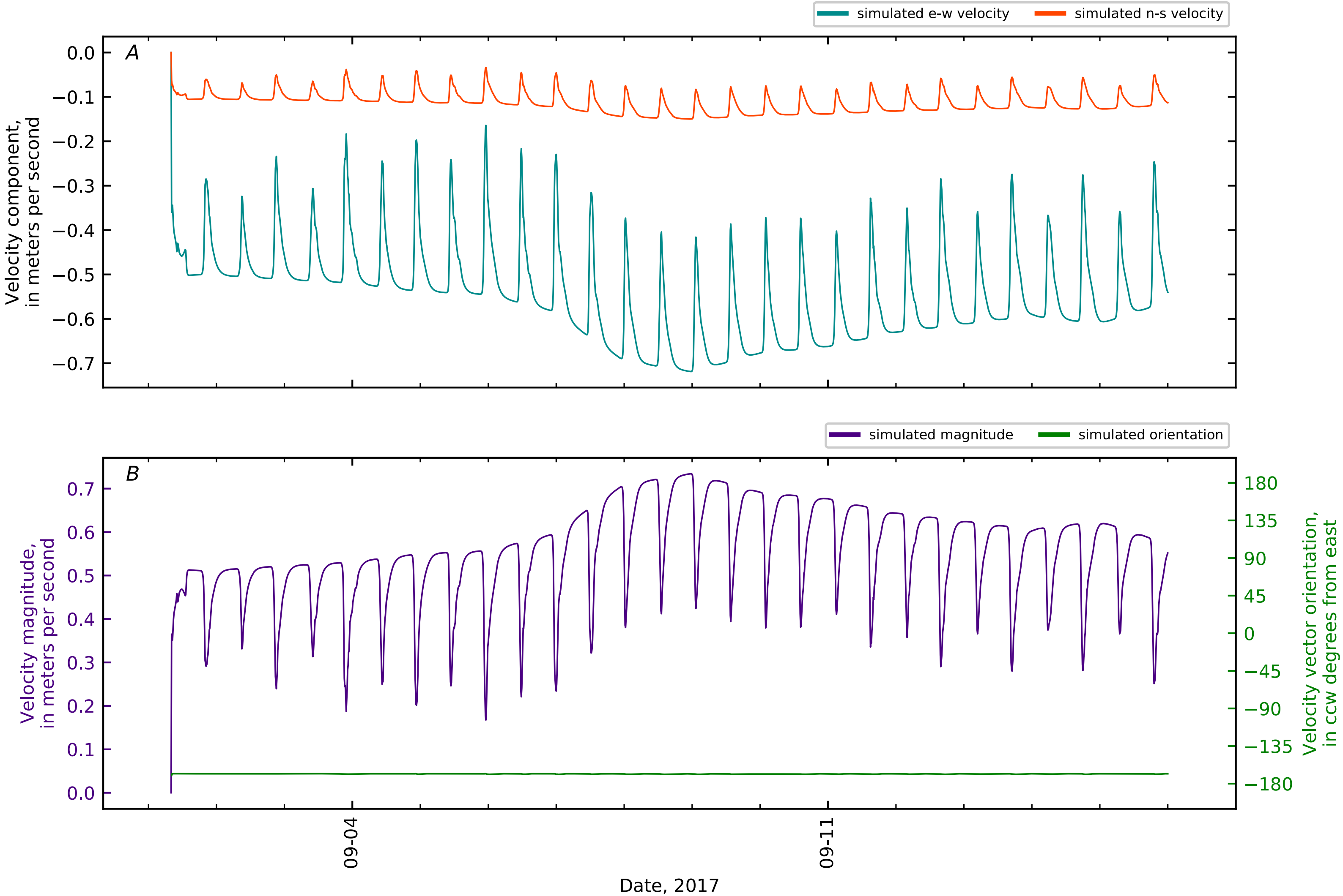

Figure B1-265. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 104, Penob Riv KM49.

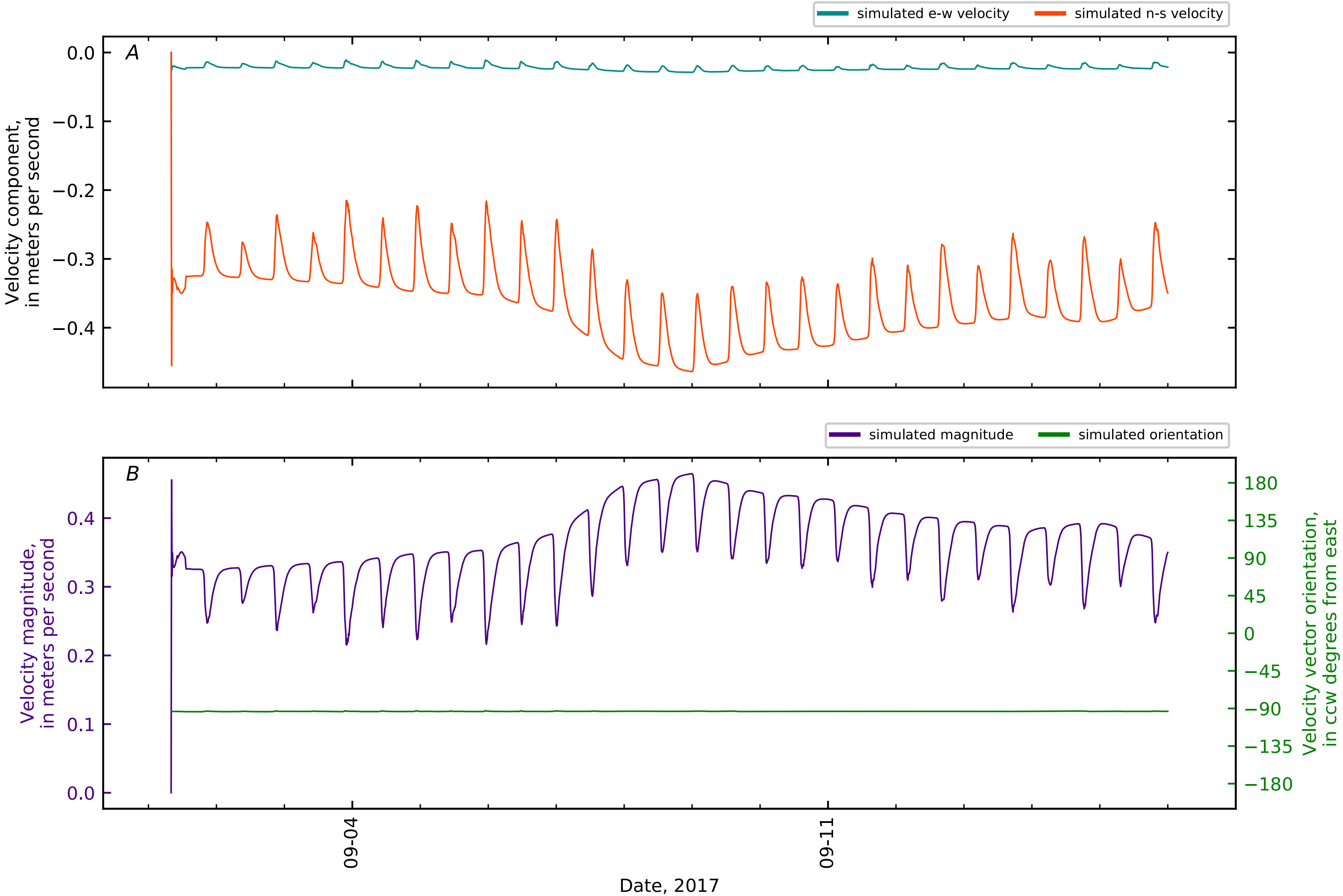

Figure B1-266. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 105, Penob Riv KM50 nr GS gage Eddington.

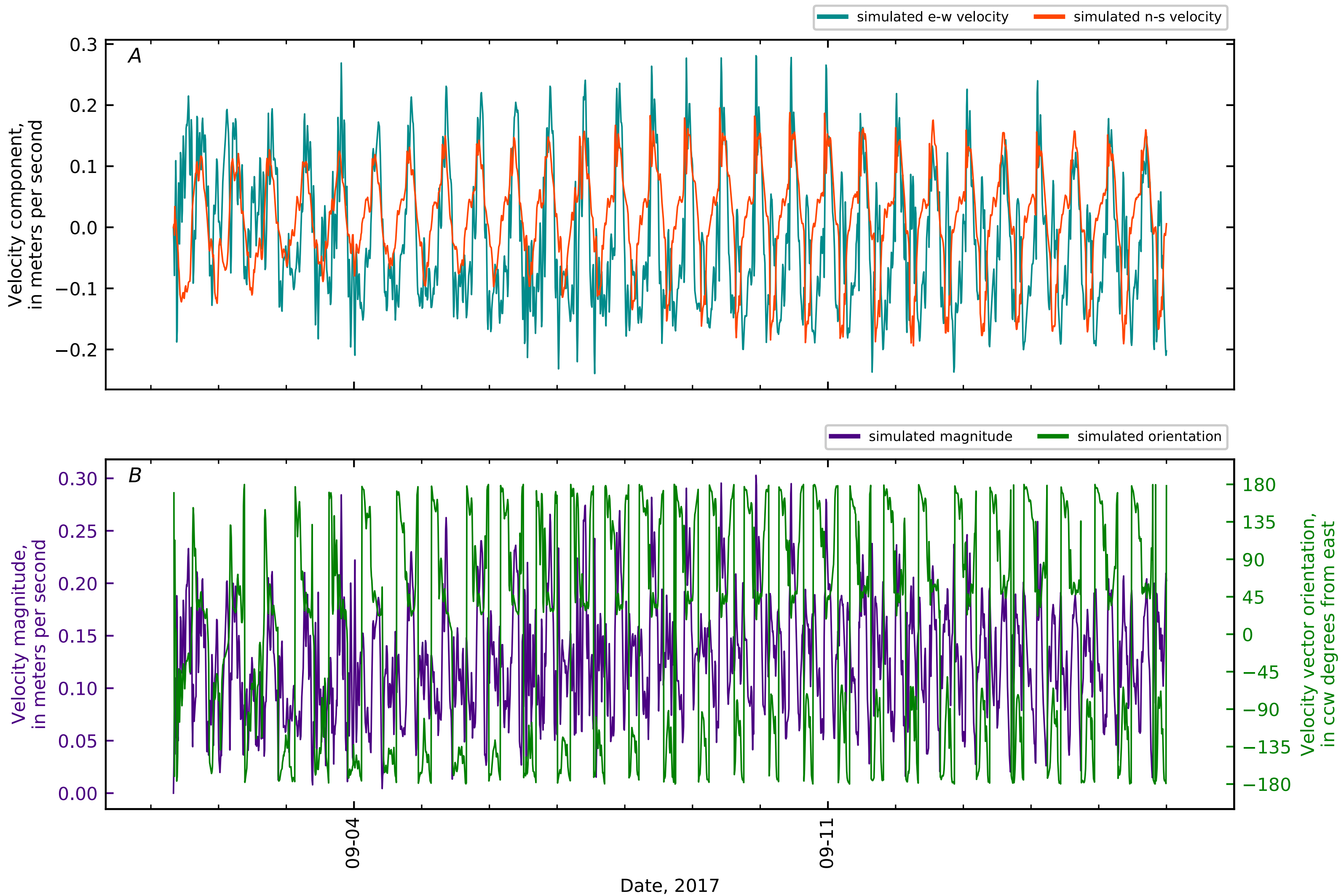

Figure B1-267. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 106, East Channel -KM0.1 ERDC9 VE-MU4-SF-2.

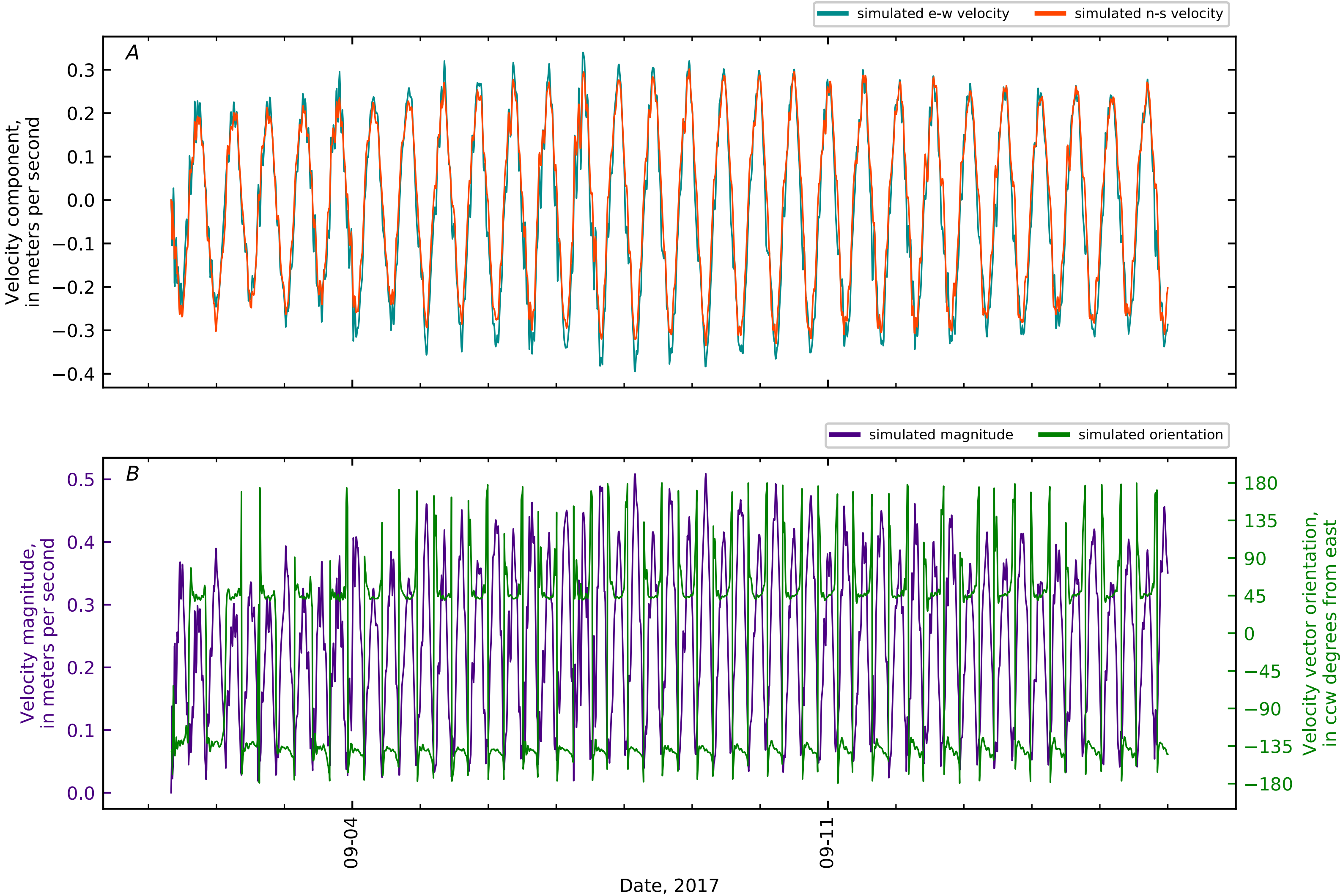

Figure B1-268. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 107, East Channel KM0.

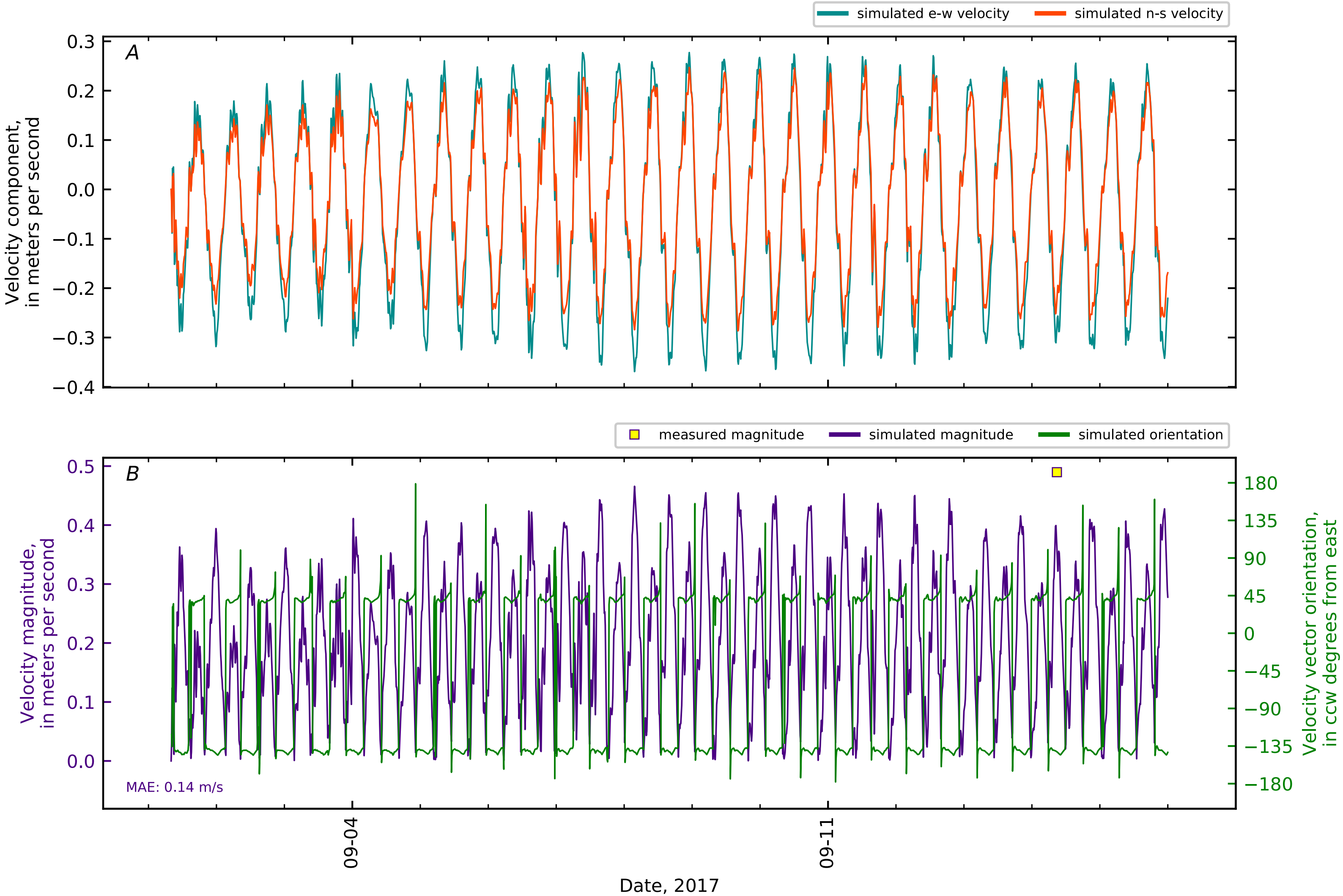

Figure B1-269. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 108, East Channel KM0.1 GS CTD4-01.

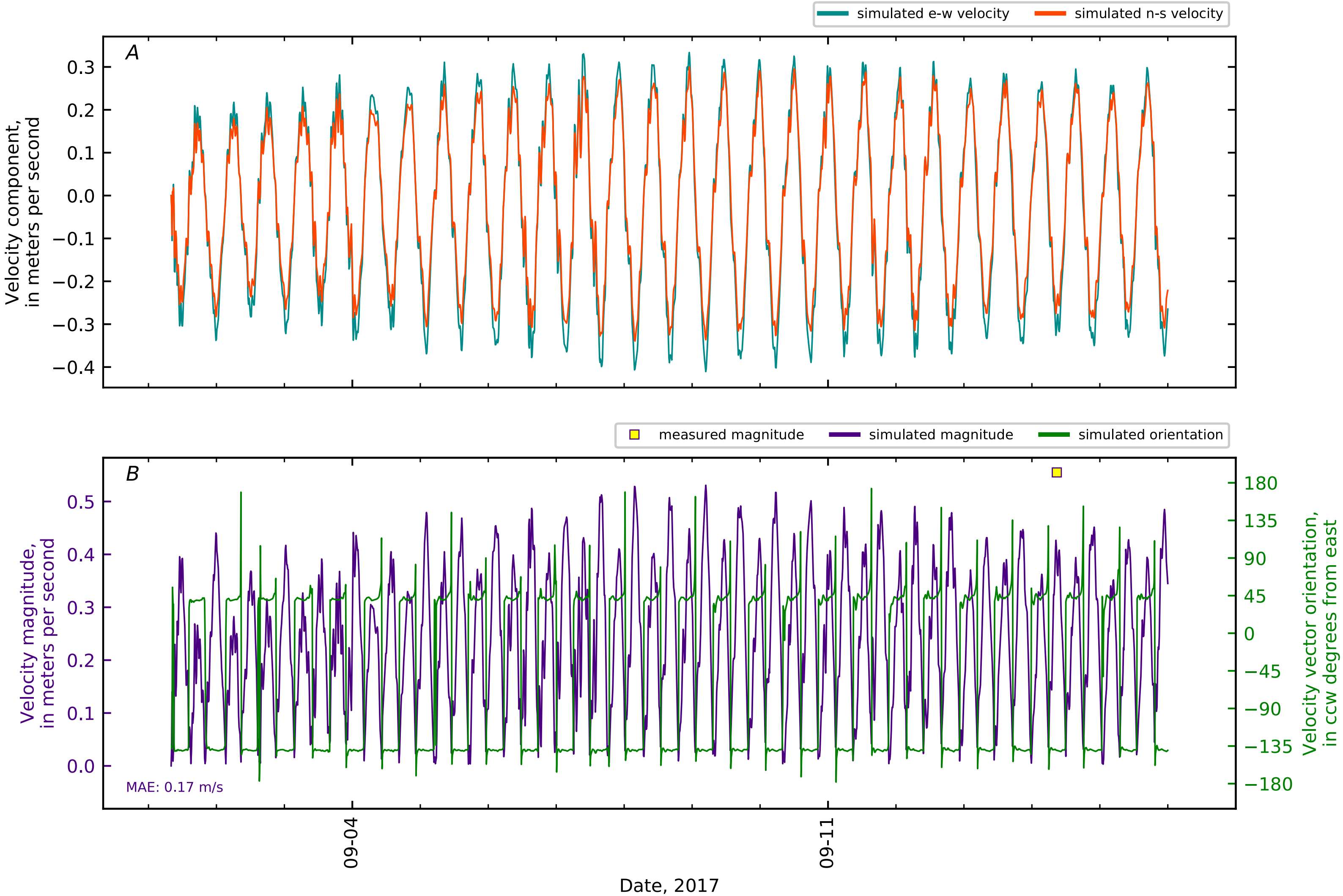

Figure B1-270. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 109, East Channel KM0.1 GS CTD4-02.

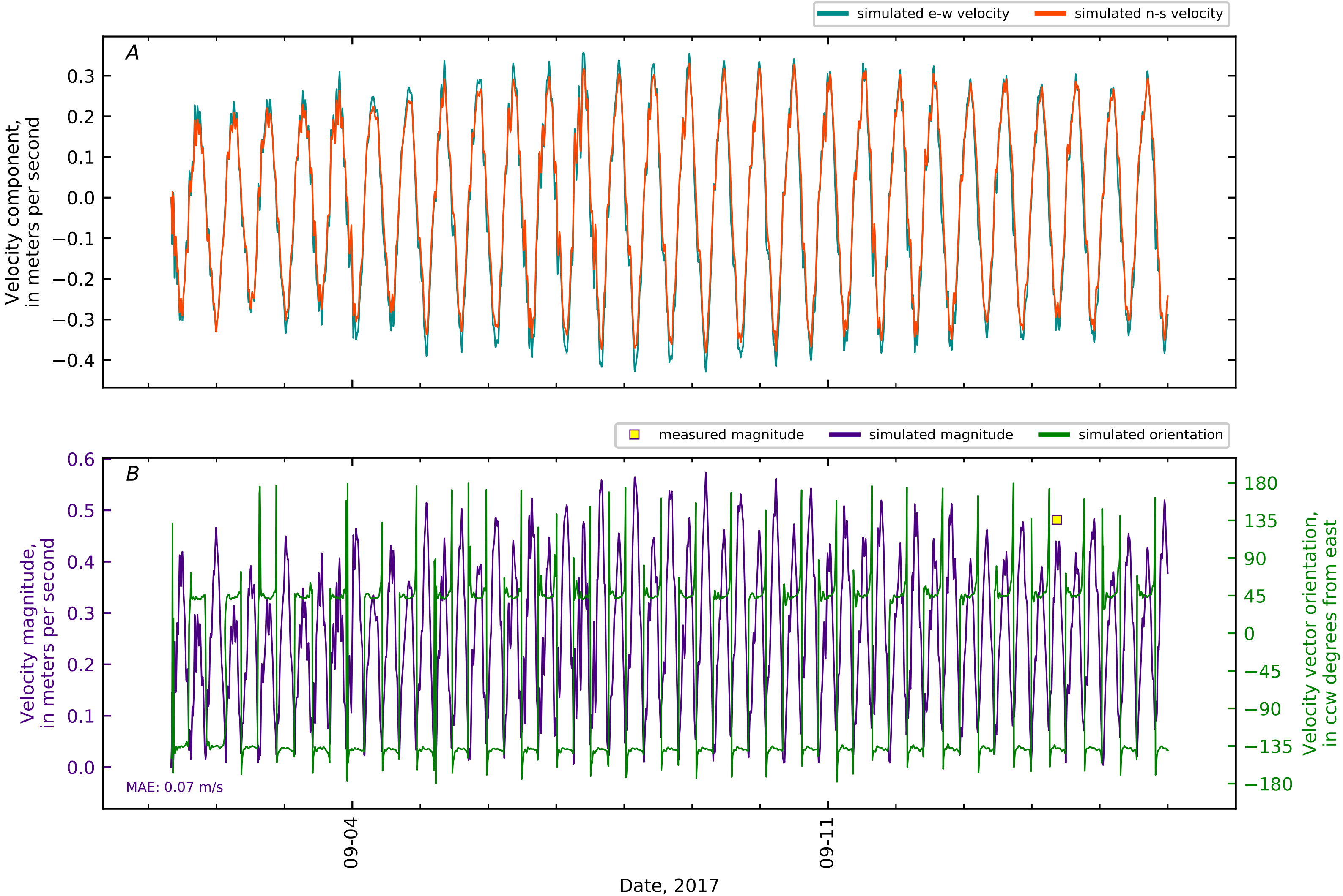

Figure B1-271. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 110, East Channel KM0.1 GS CTD4-03.

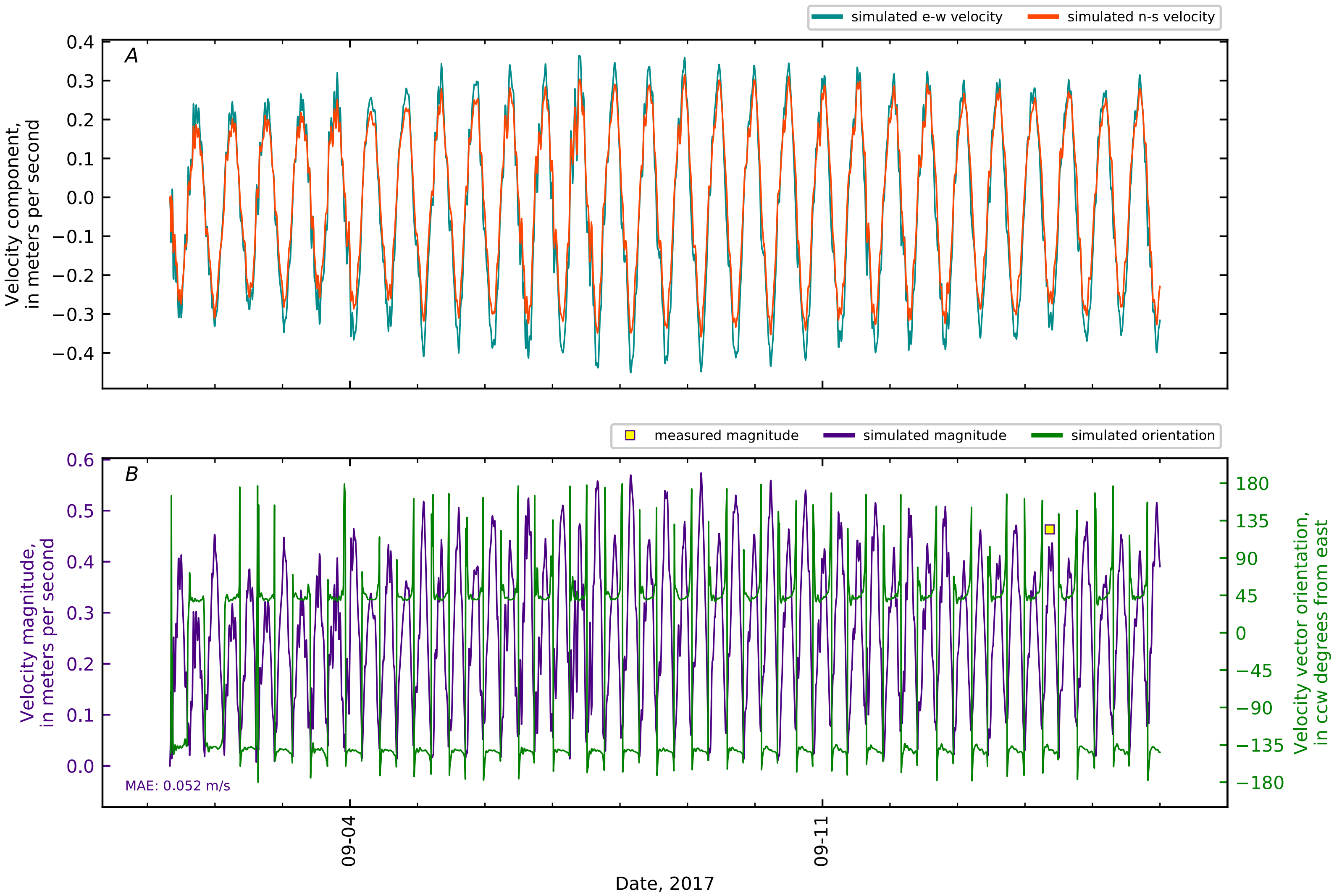

Figure B1-272. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 111, East Channel KM0.1 GS CTD4-04.

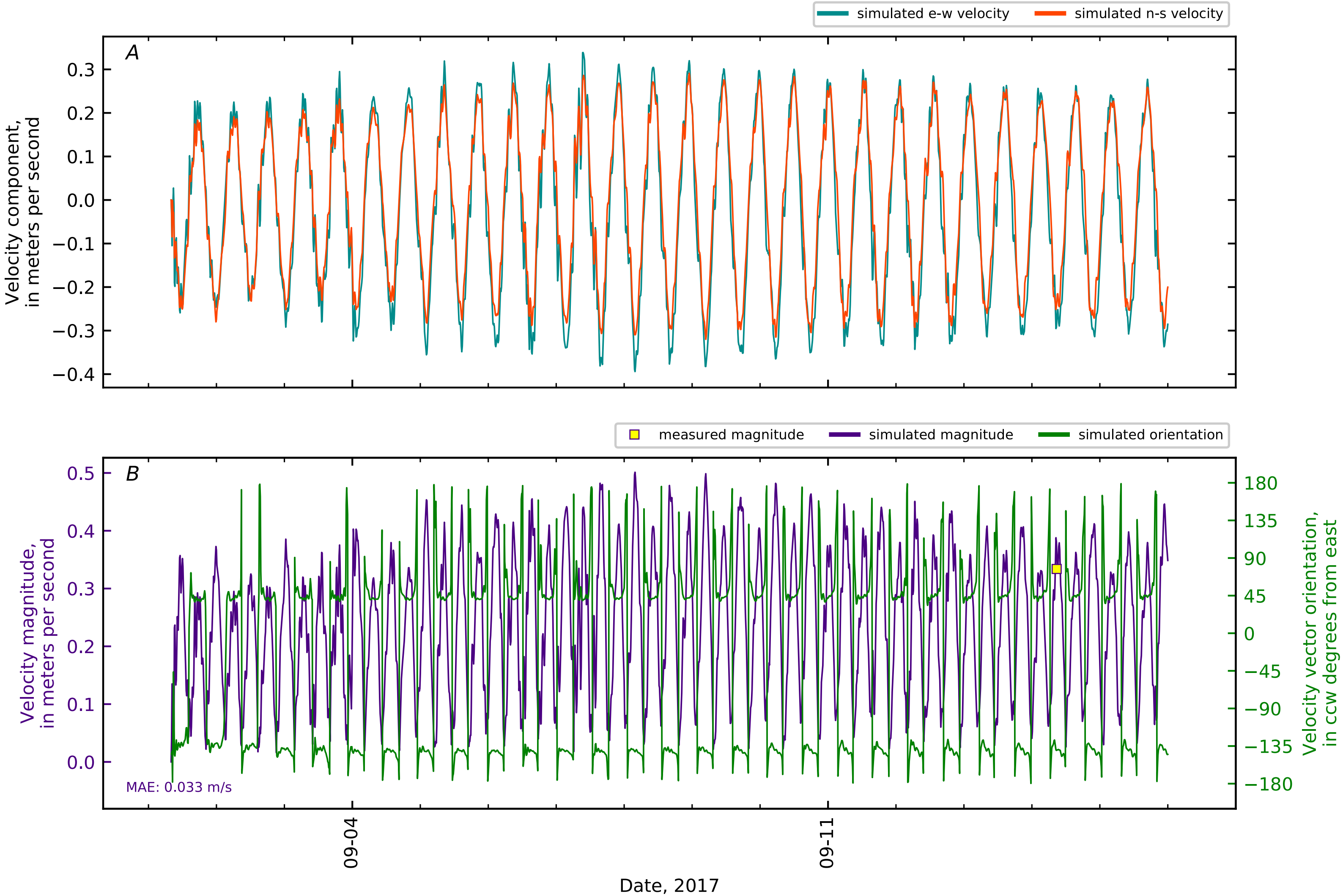

Figure B1-273. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 112, East Channel KM0.1 GS CTD4-05.

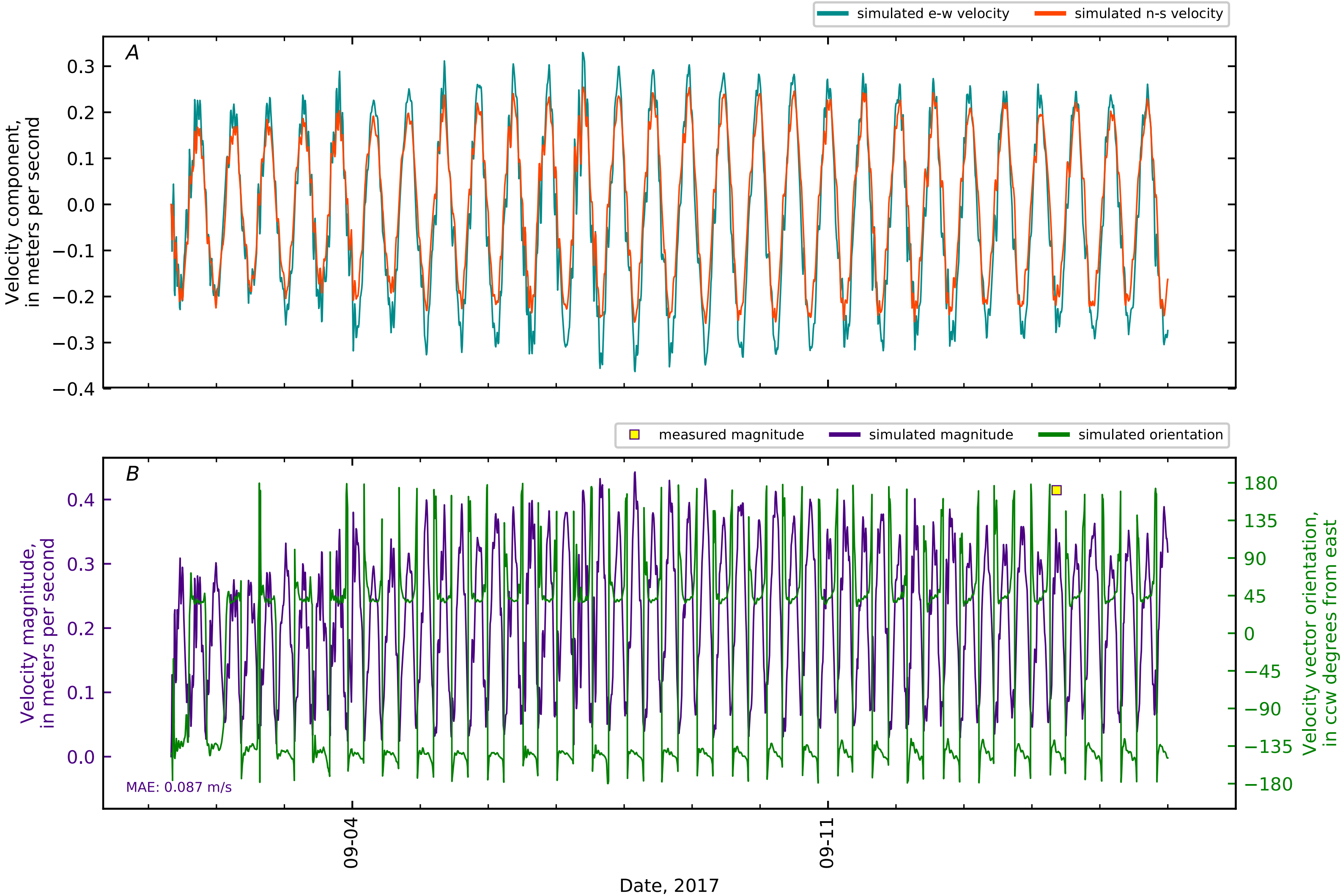

Figure B1-274. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 113, East Channel KM0.1 GS CTD4-06.

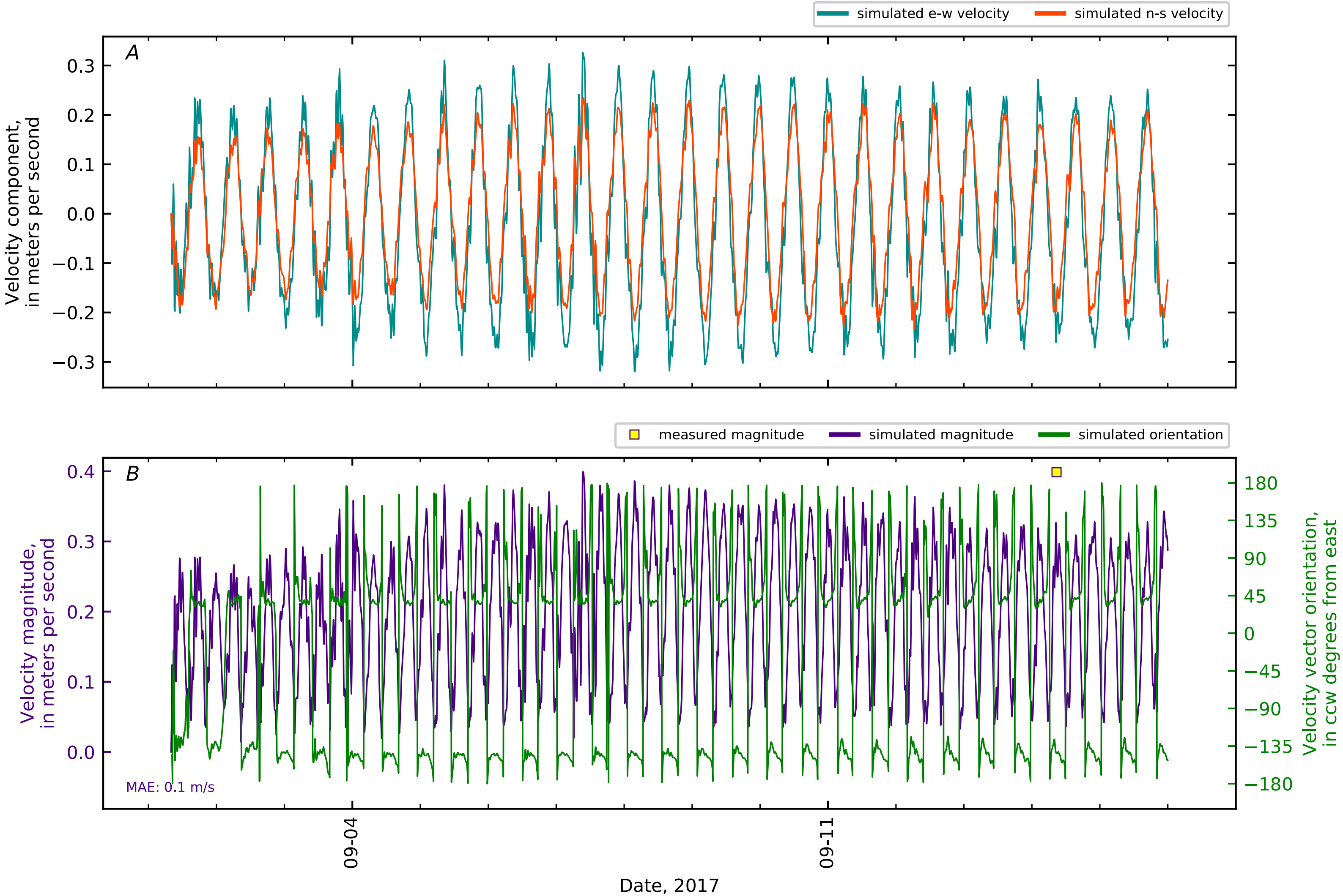

Figure B1-275. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 114, East Channel KM0.1 GS CTD4-07.

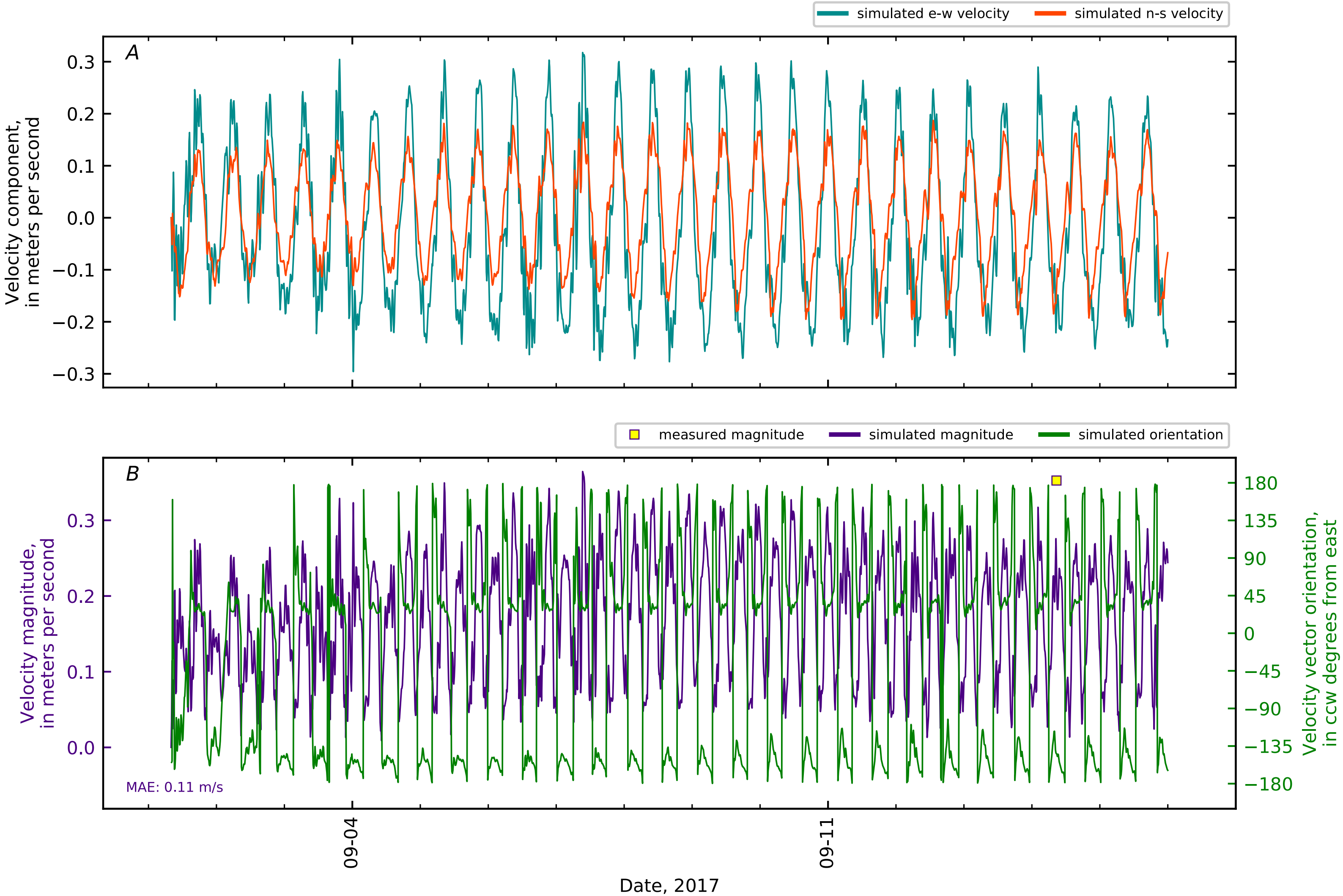

Figure B1-276. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 115, East Channel KM0.1 GS CTD4-08.

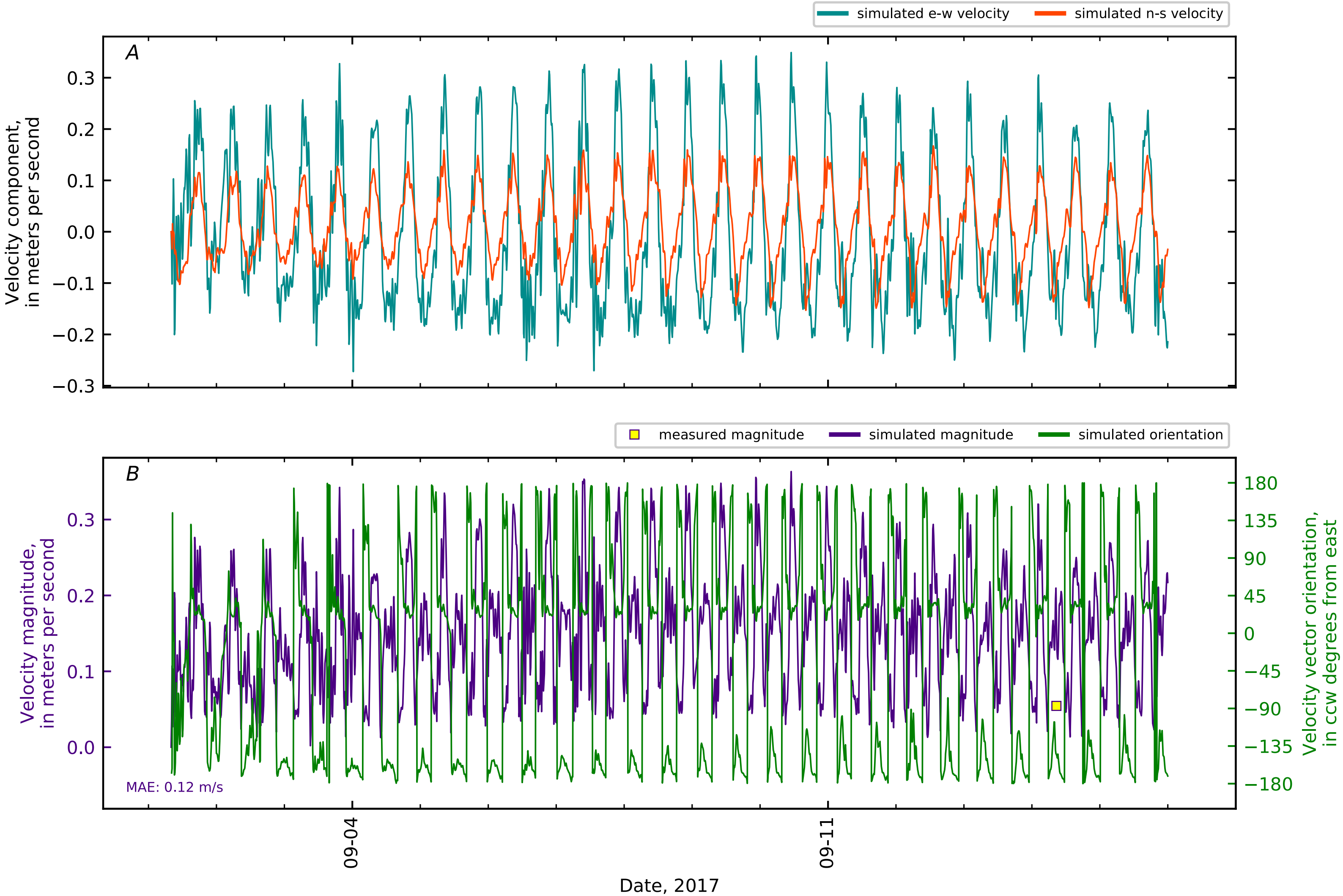

Figure B1-277. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 116, East Channel KM0.1 GS CTD4-09.

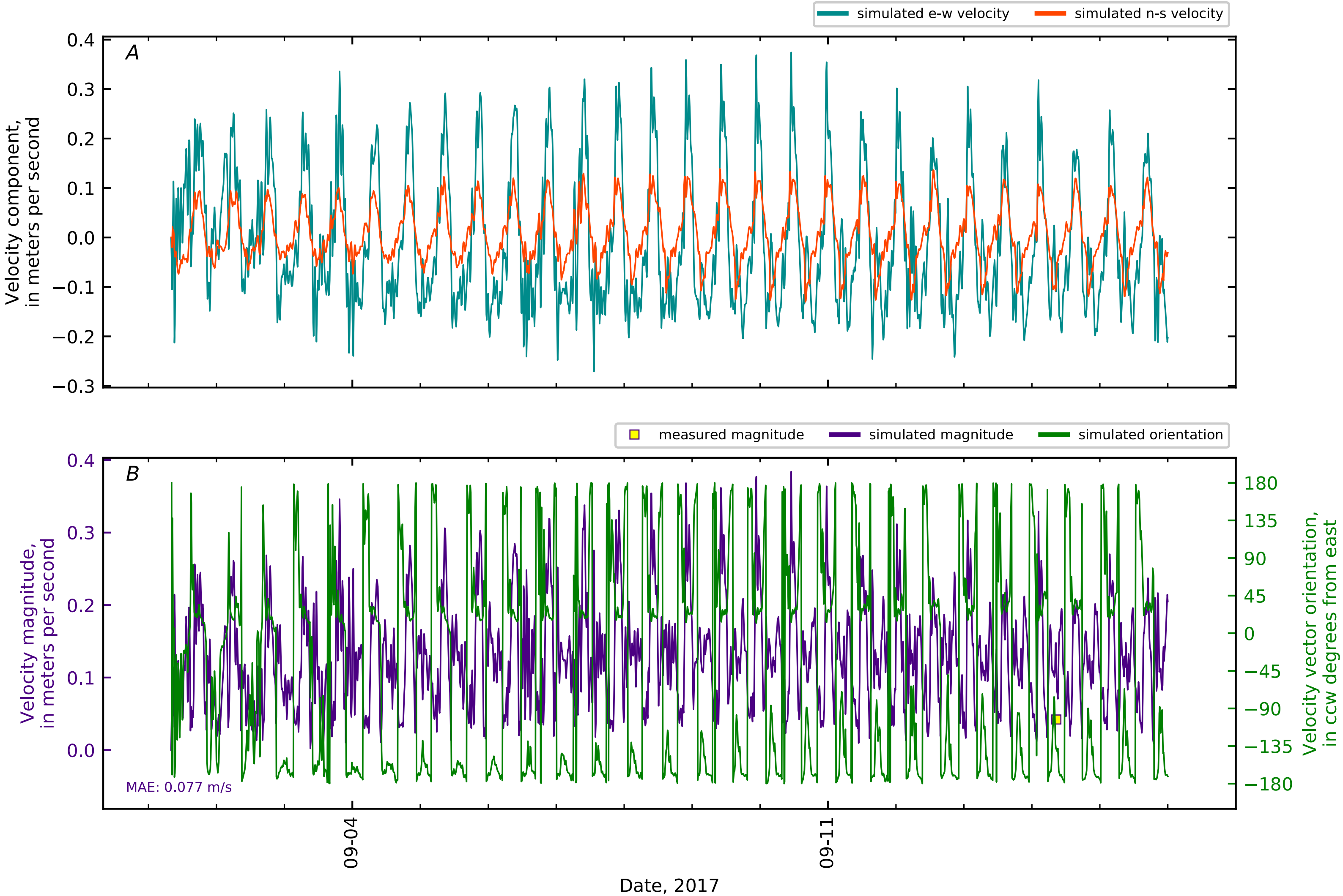

Figure B1-278. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 117, East Channel KM0.1 GS CTD4-10.

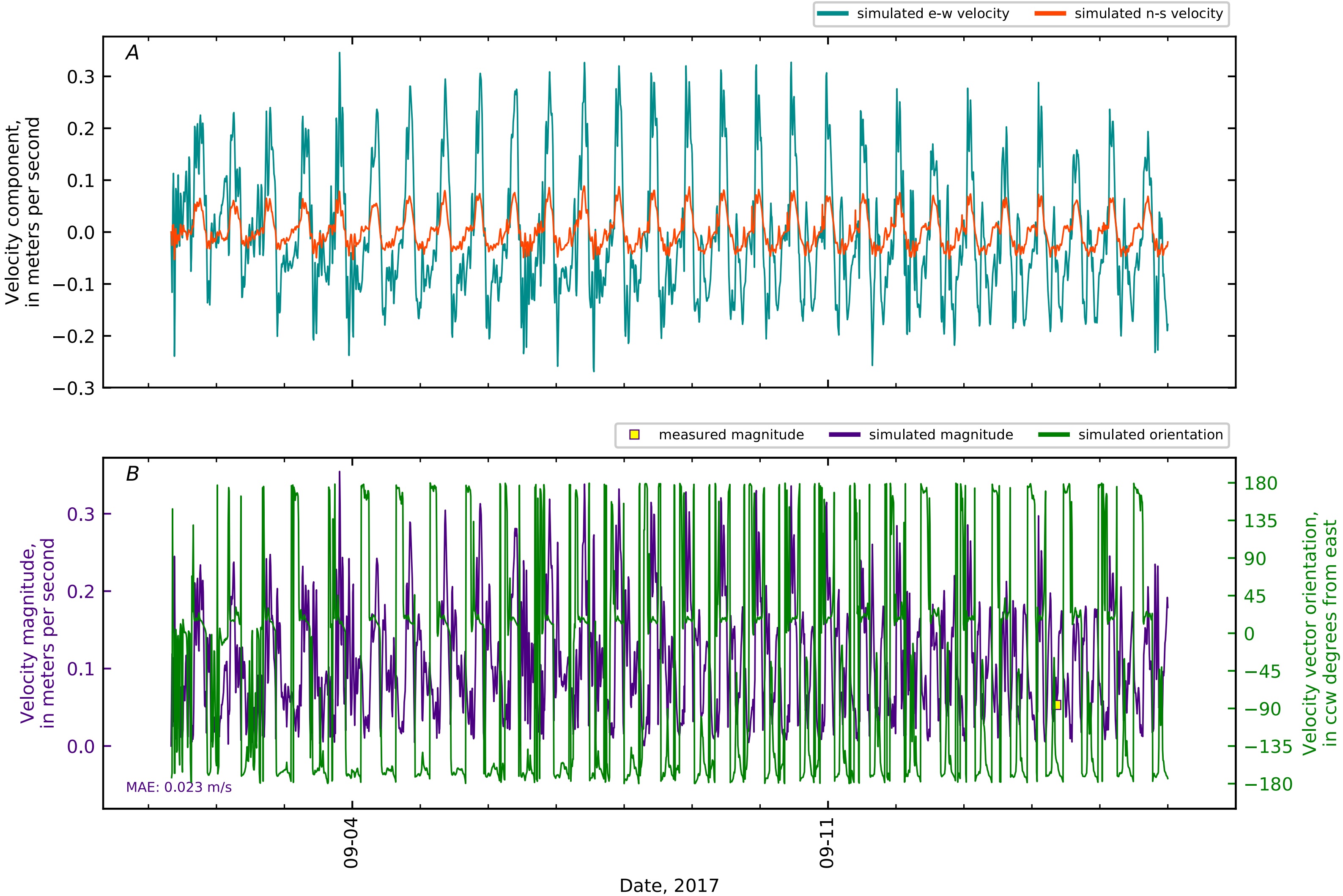

Figure B1-279. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 118, East Channel KM0.1 GS CTD4-11.

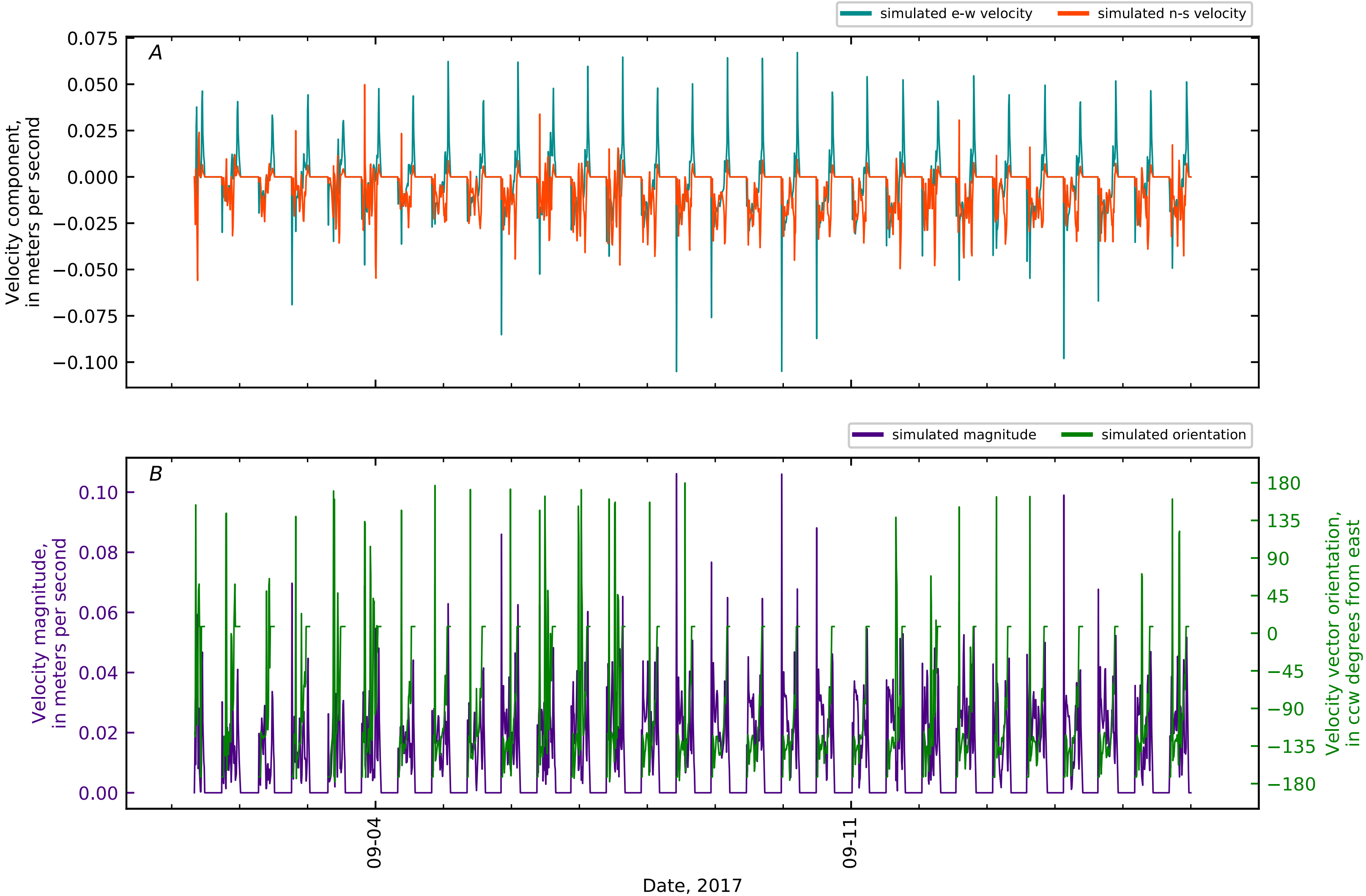

Figure B1-280. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 119, East Channel KM0.78 ERDC7 VE-MU3-SF-1.

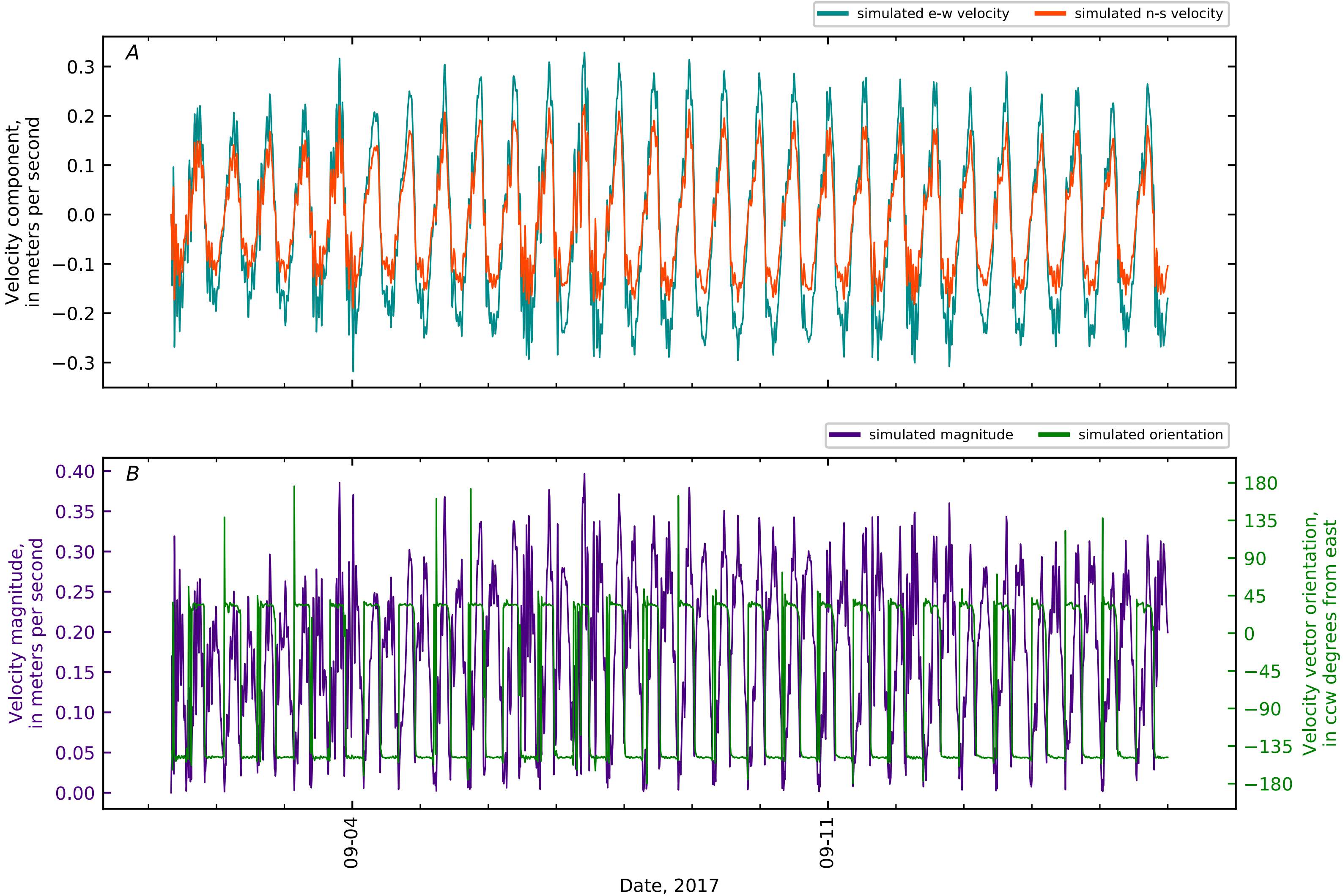

Figure B1-281. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 120, East Channel KM0.8 ERDC8 VE-MU4-SF-1.

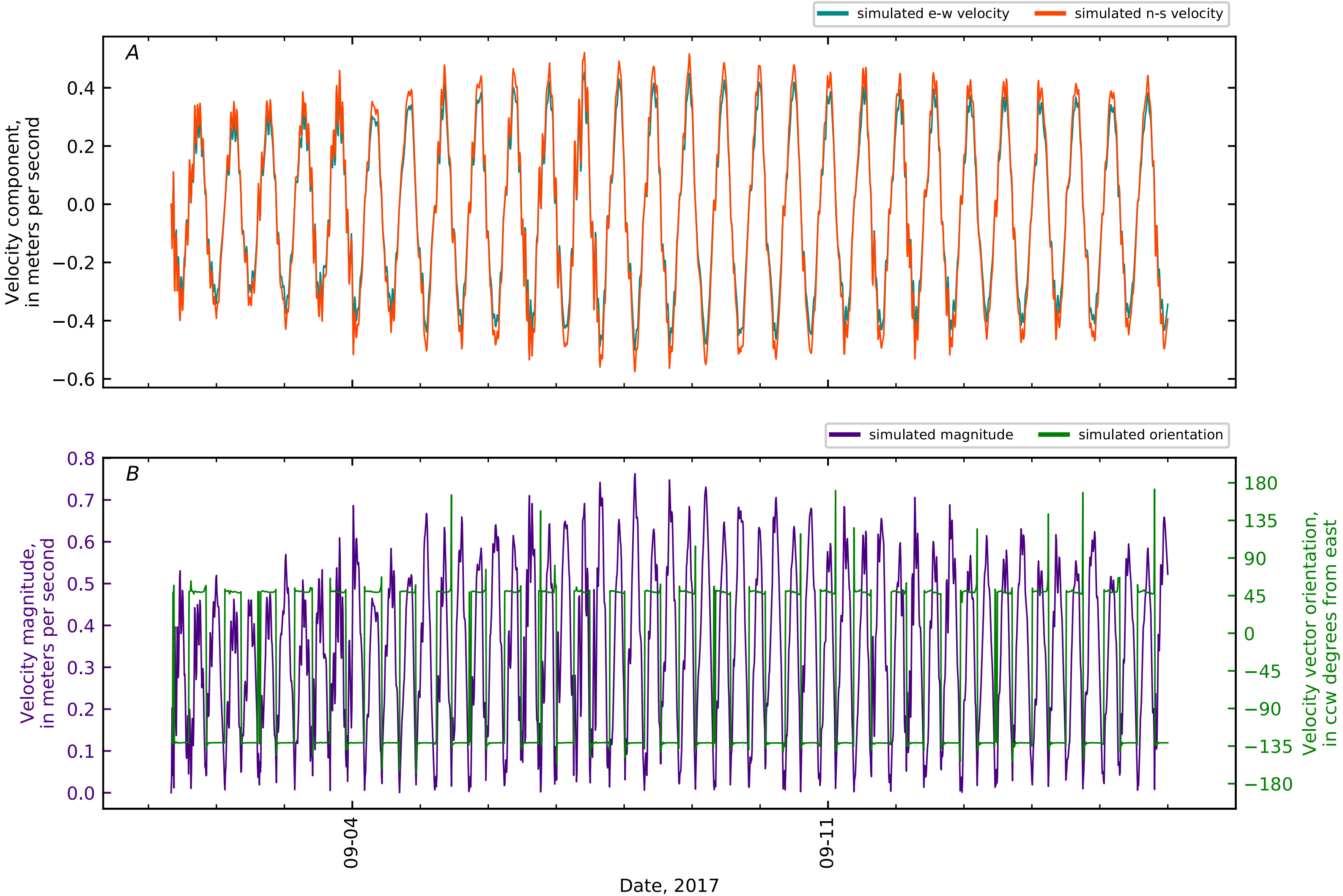

Figure B1-282. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 121, East Channel KM1.

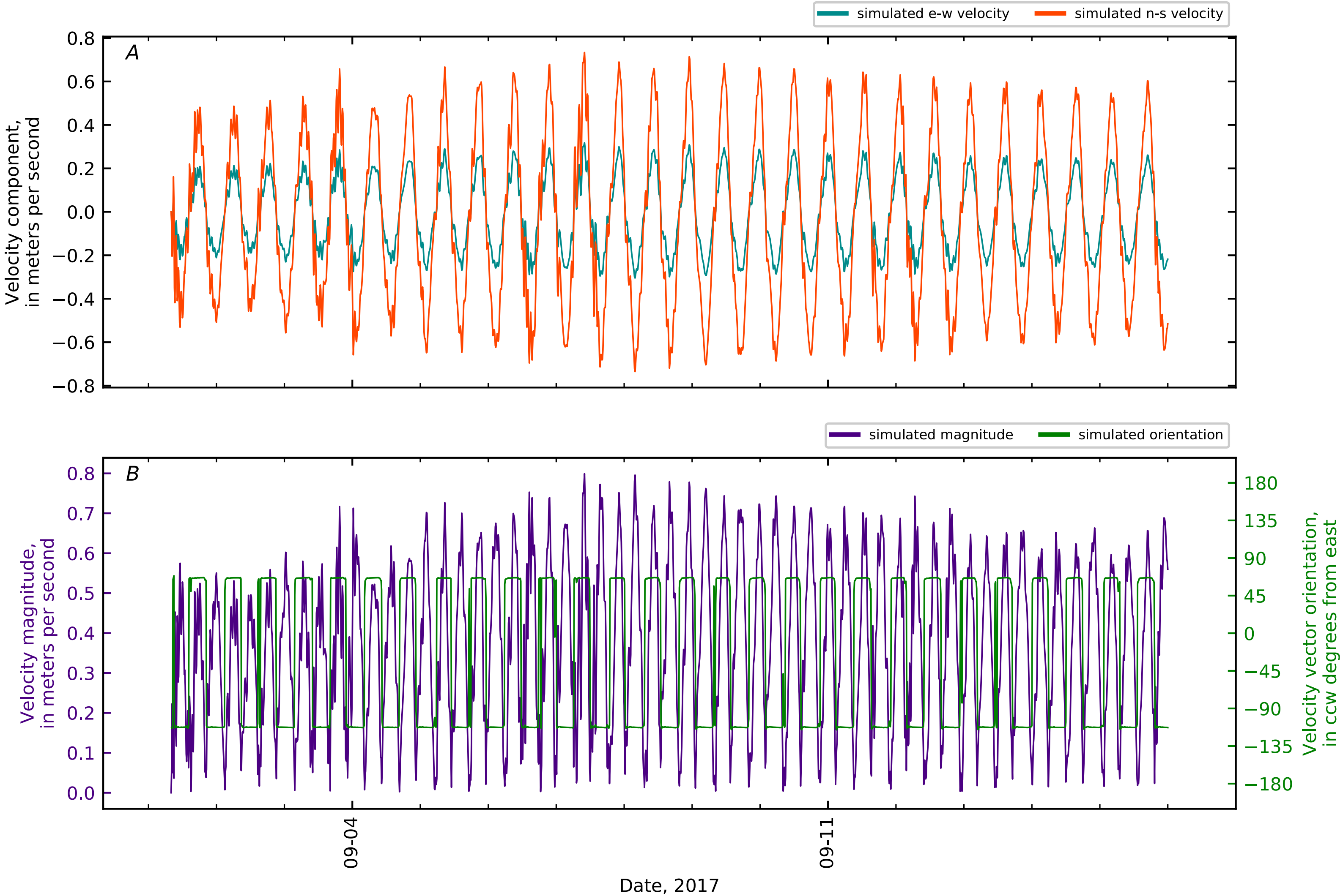

Figure B1-283. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 122, East Channel KM2.

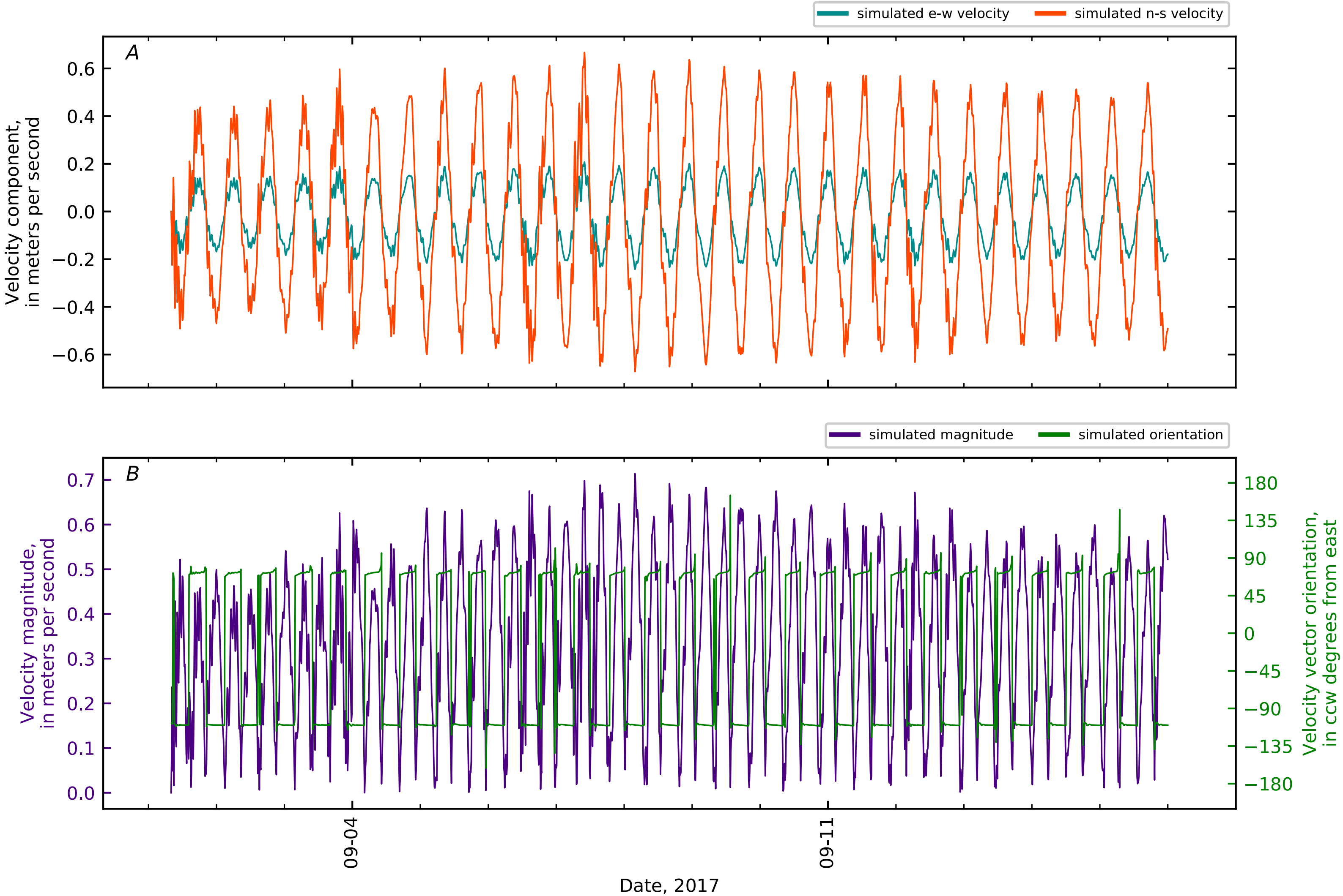

Figure B1-284. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 123, East Channel KM3.

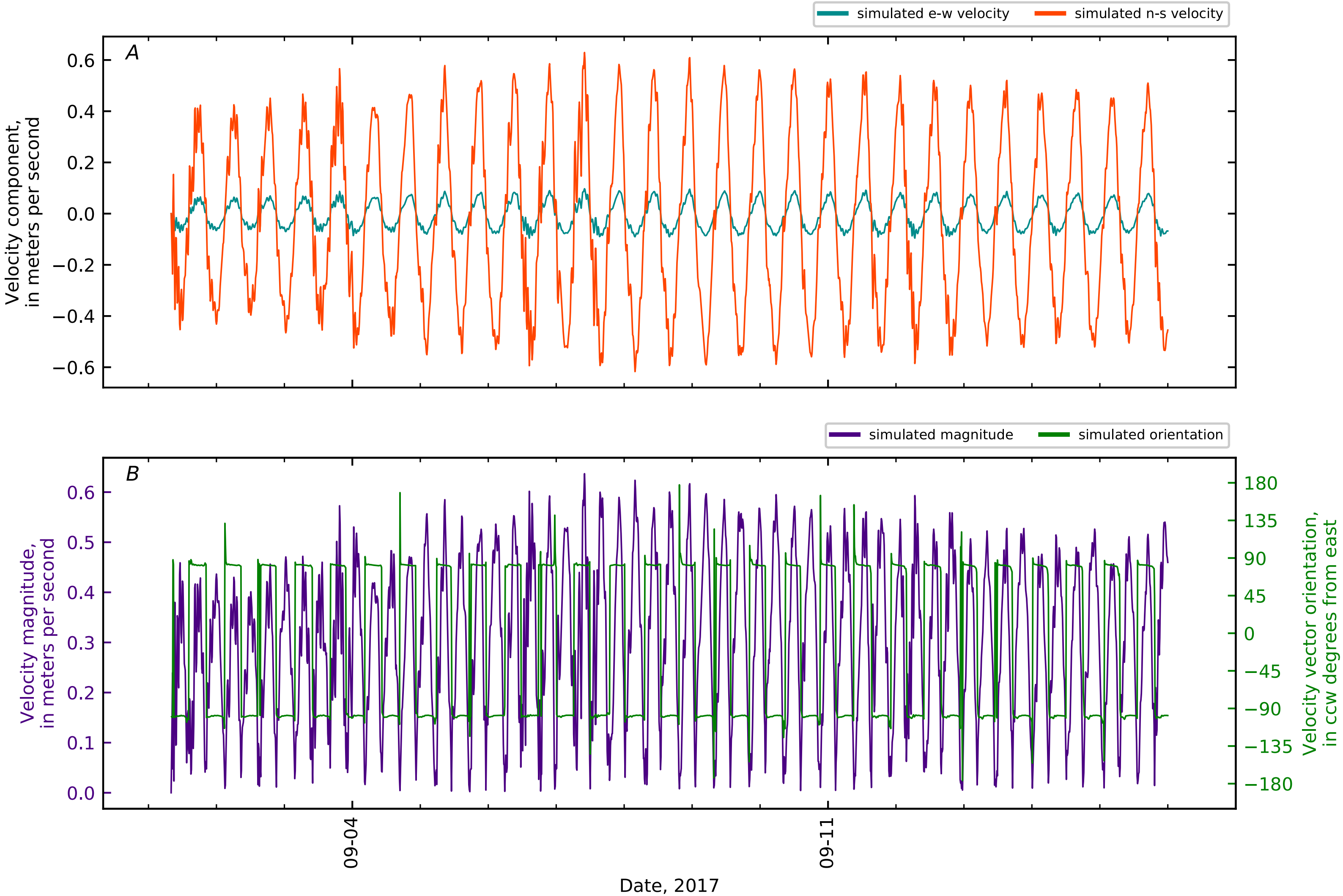

Figure B1-285. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 124, East Channel KM4.

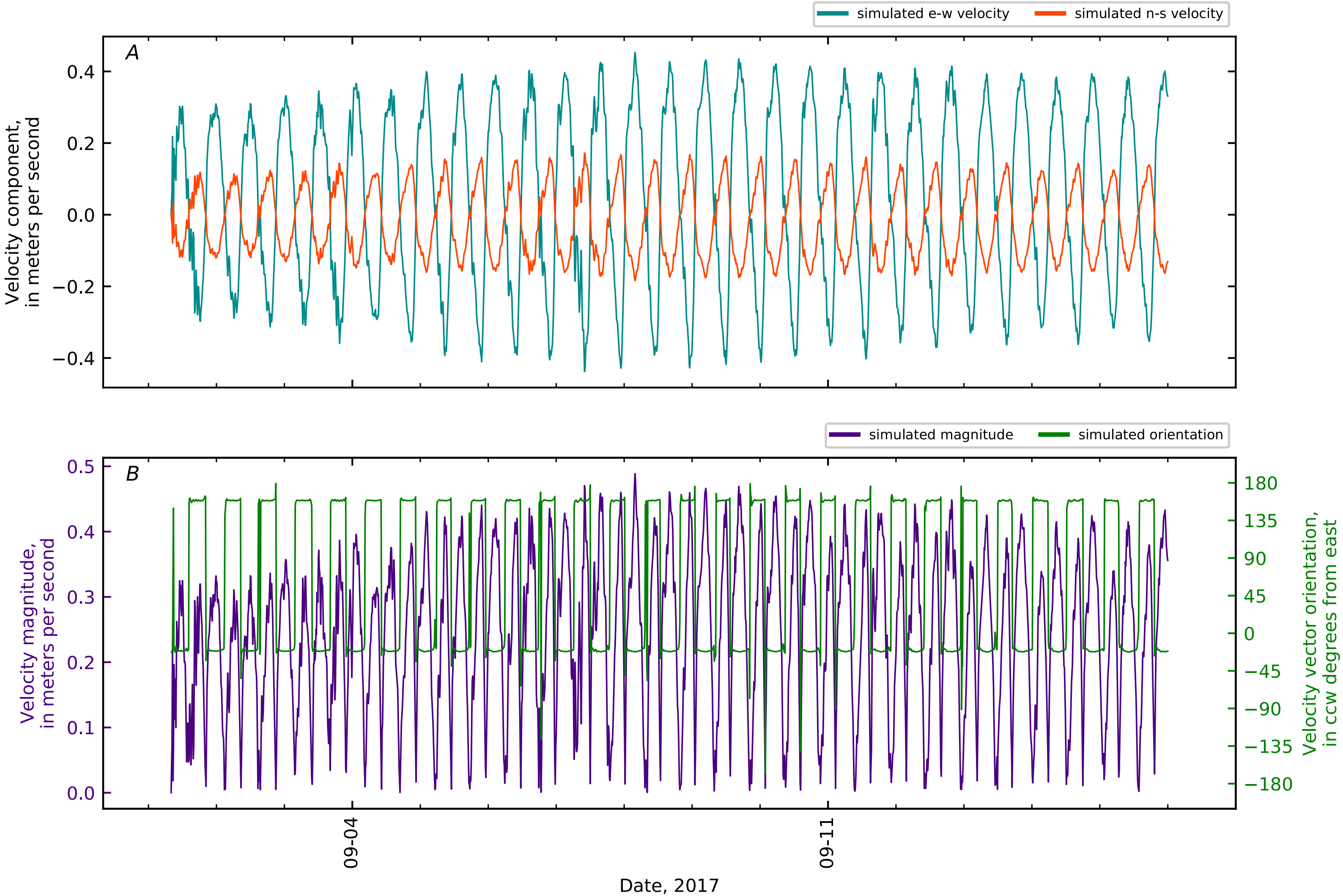

Figure B1-286. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 125, East Channel KM5.

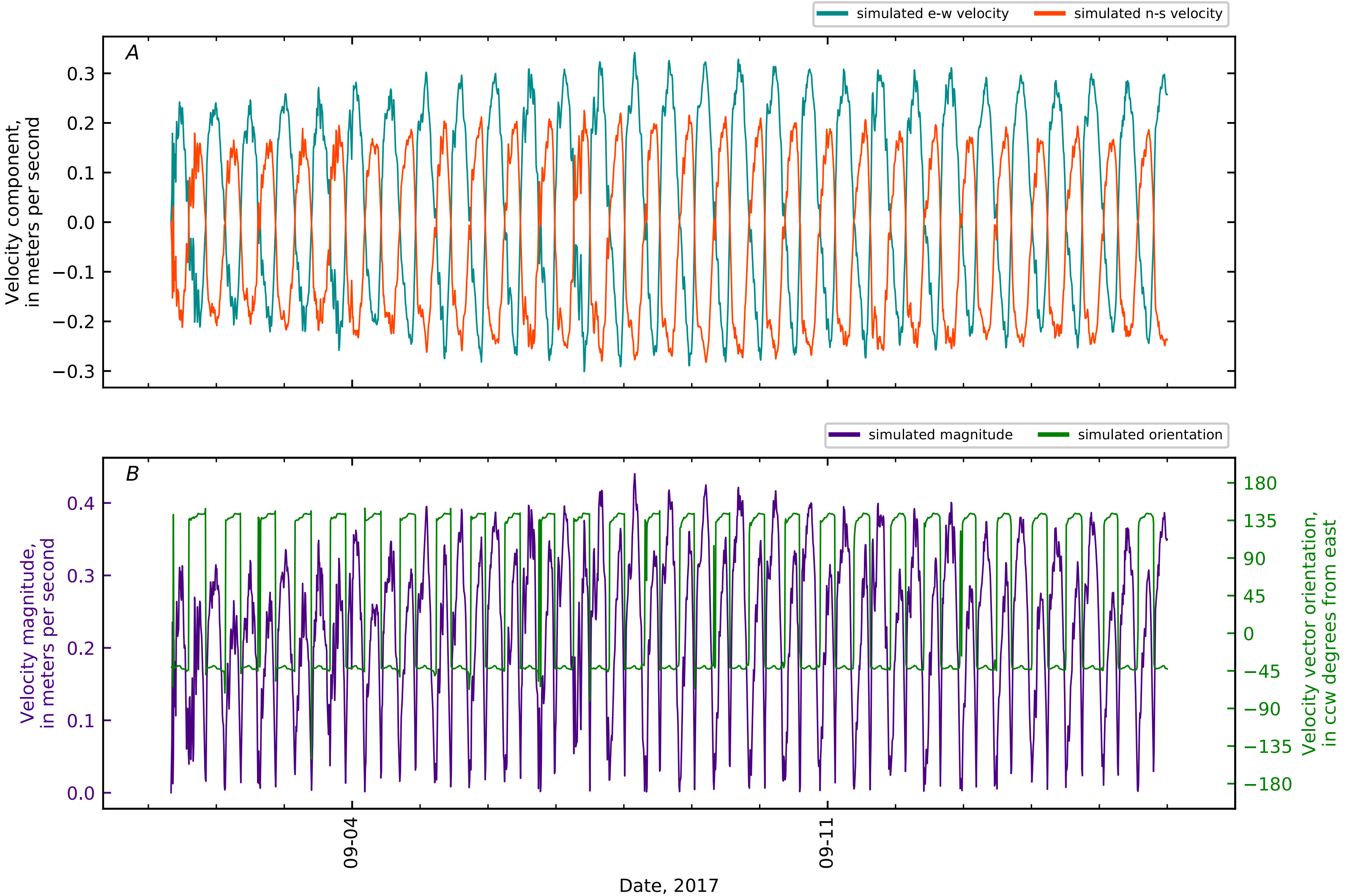

Figure B1-287. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 126, East Channel KM5.3 ERDC4 VN-MU3-SF-1.

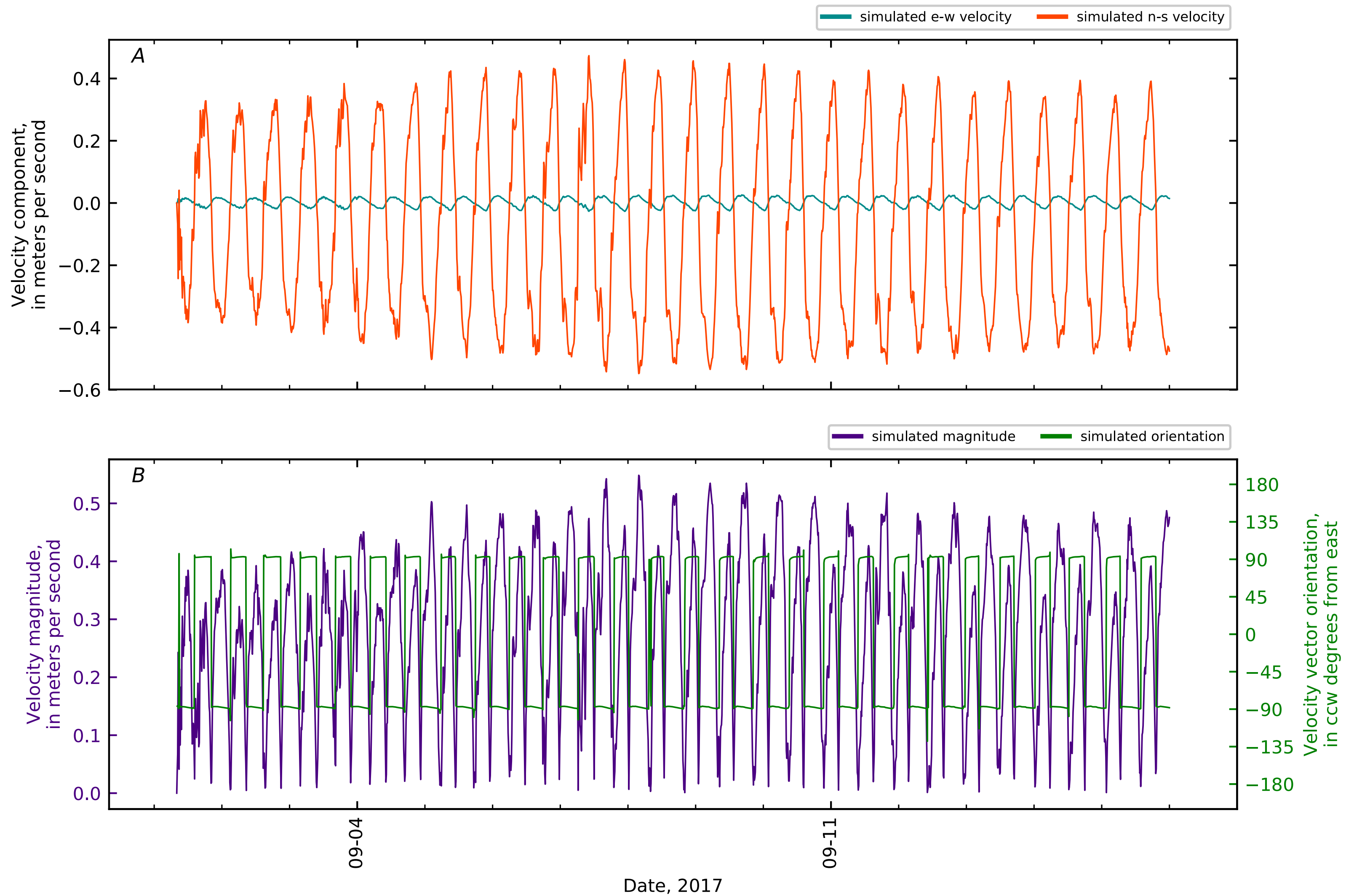

Figure B1-288. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 127, East Channel KM6.

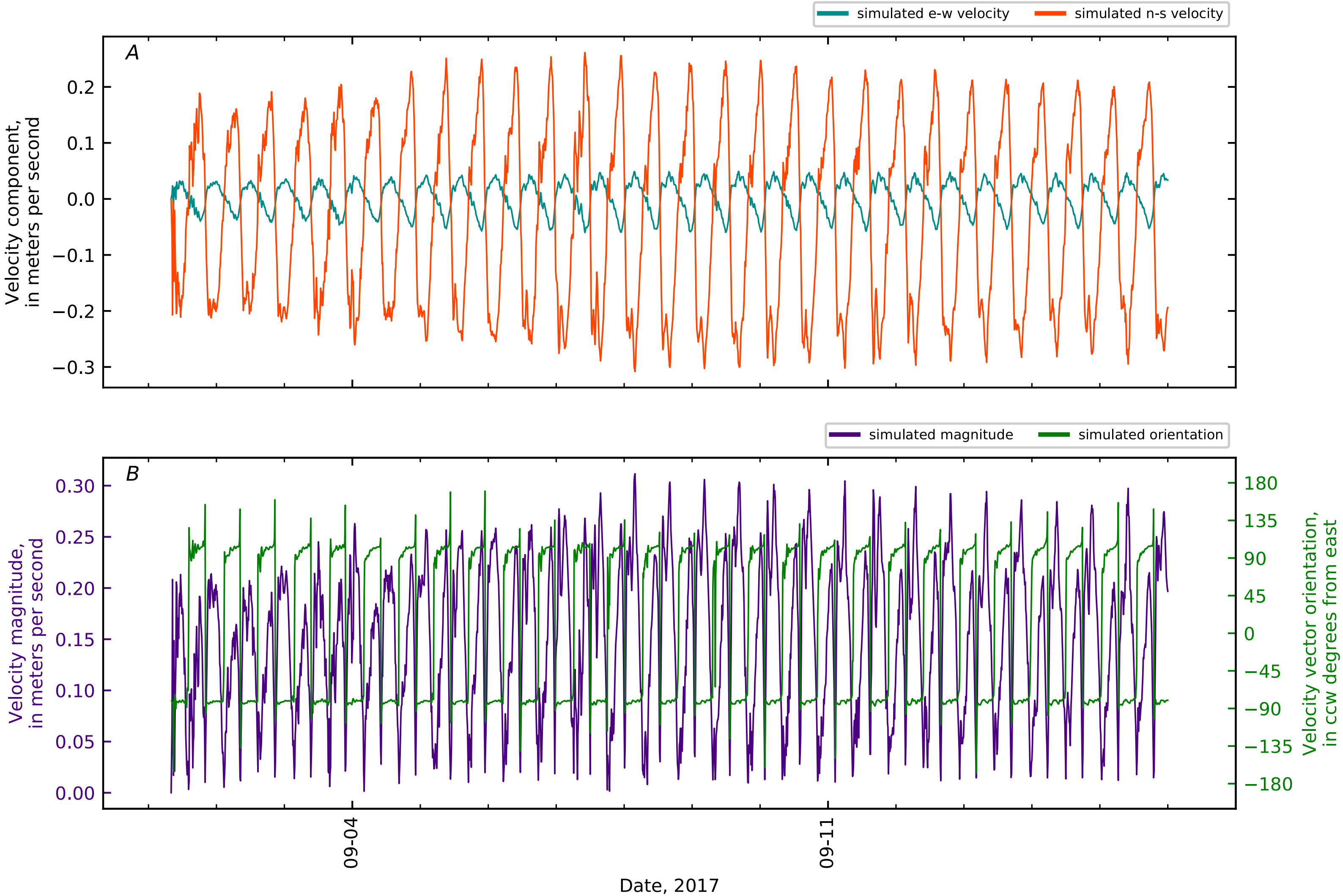

Figure B1-289. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 128, East Channel KM6.8 ERDC12 VN-MU4-SF-1.

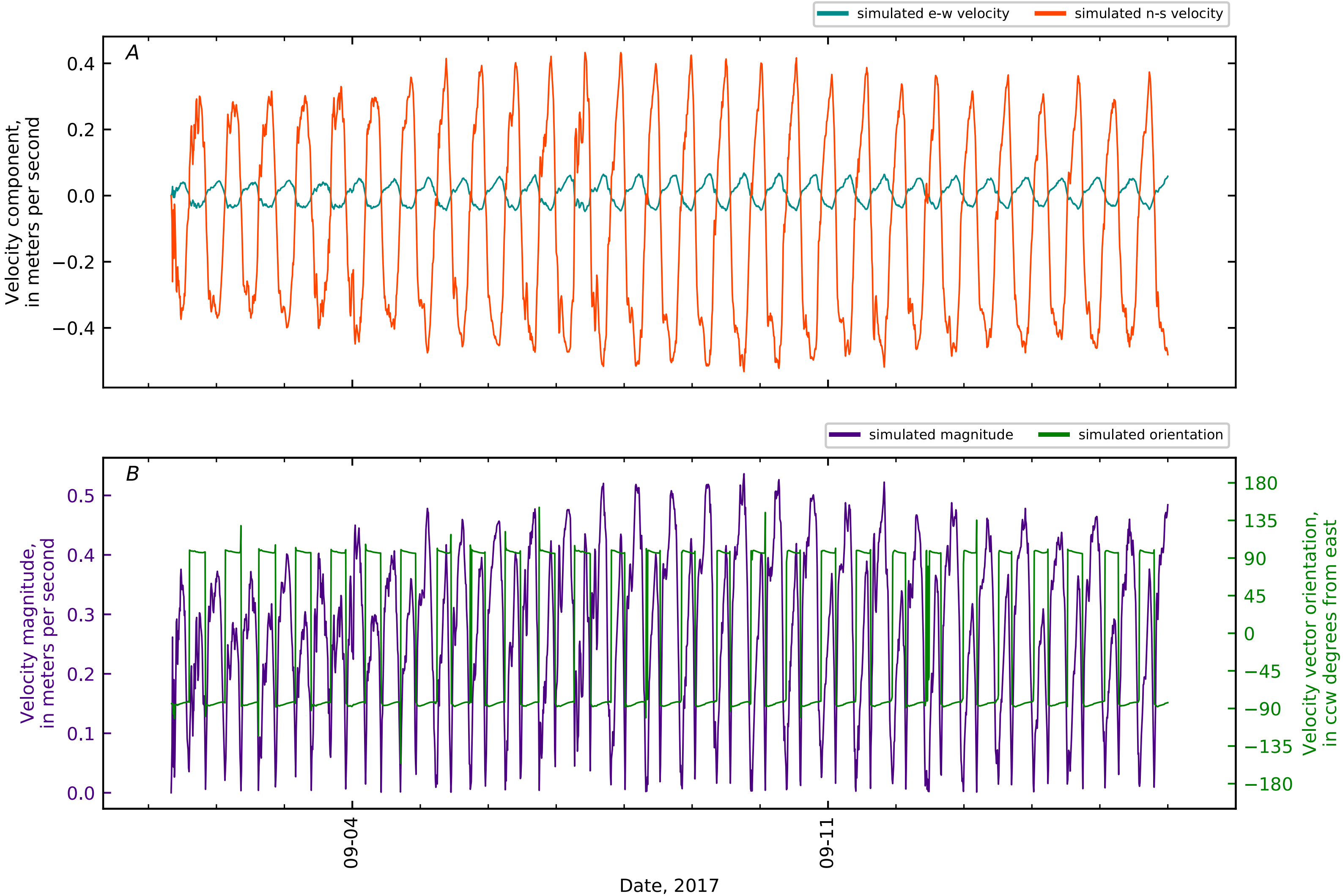

Figure B1-290. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 129, East Channel KM7.

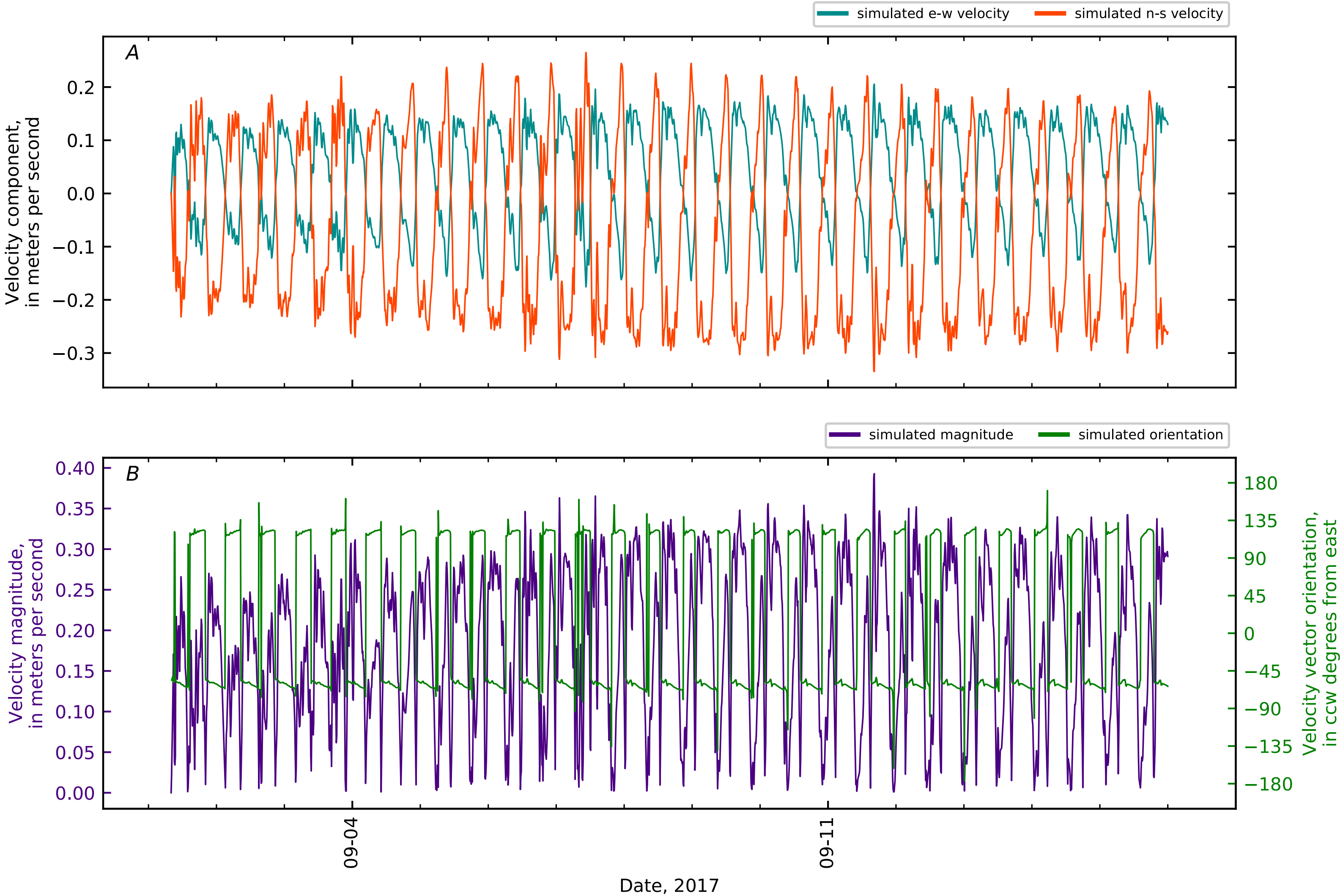

Figure B1-291. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 130, East Channel KM8.

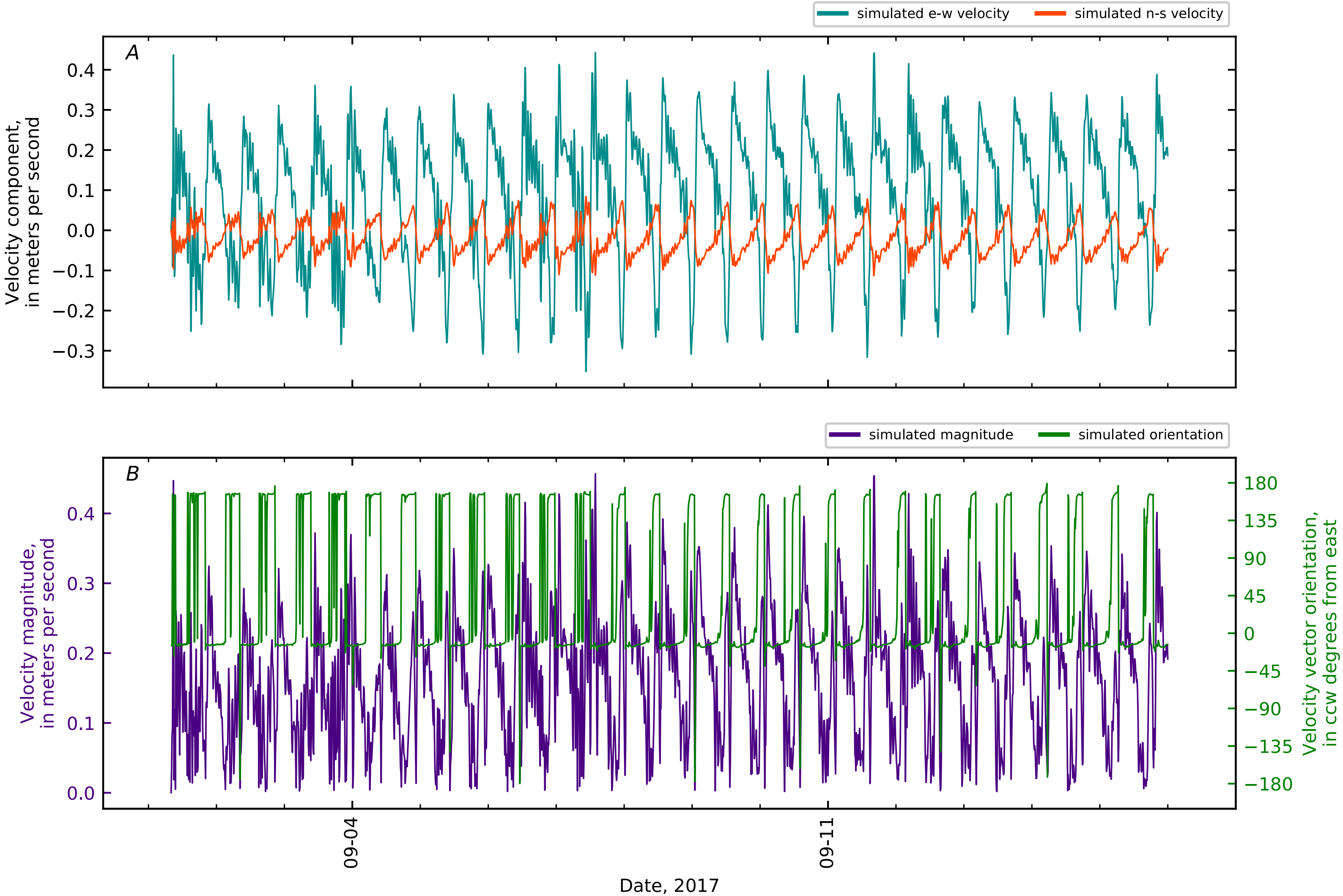

Figure B1-292. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 131, East Channel KM9.

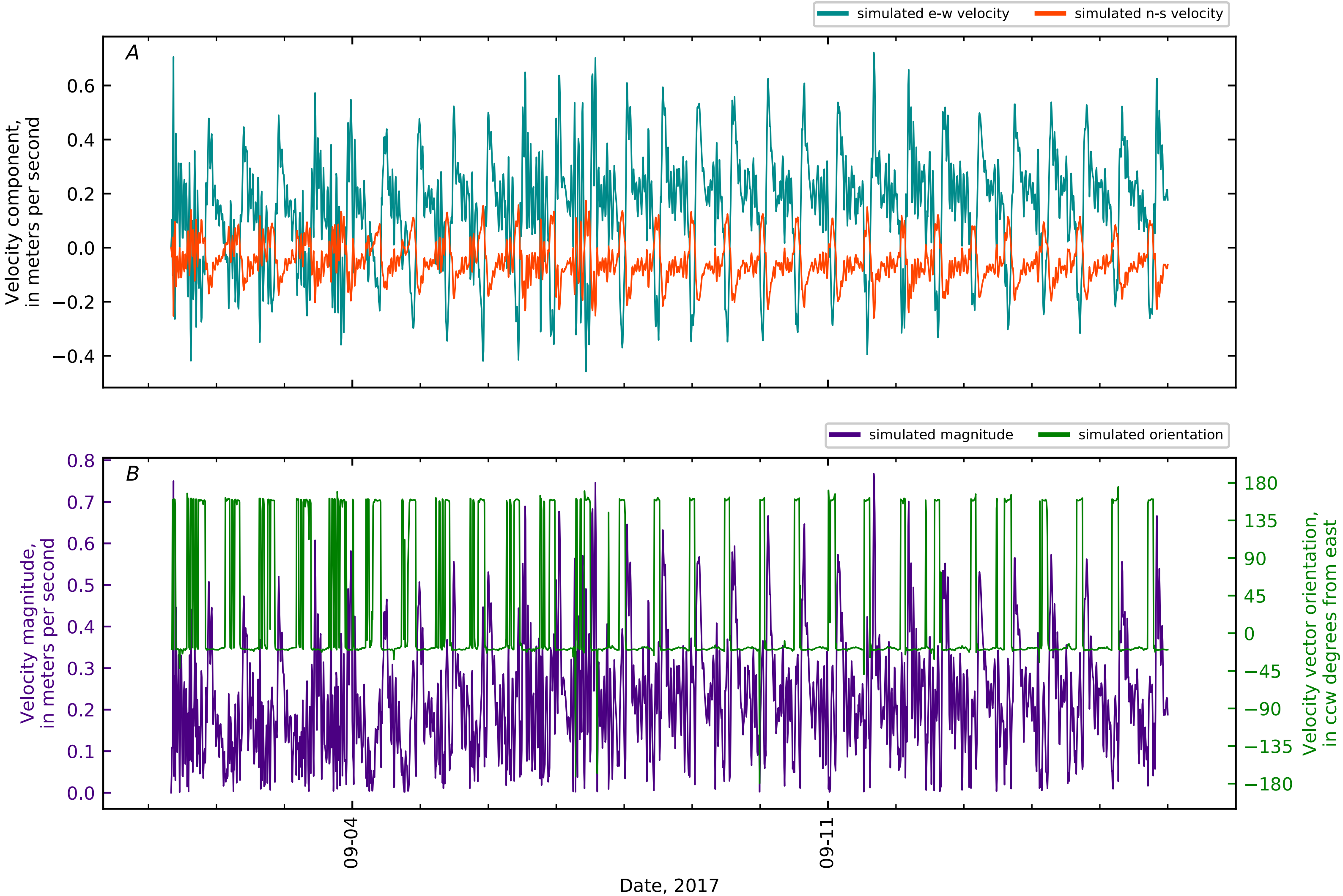

Figure B1-293. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 132, East Channel KM10.

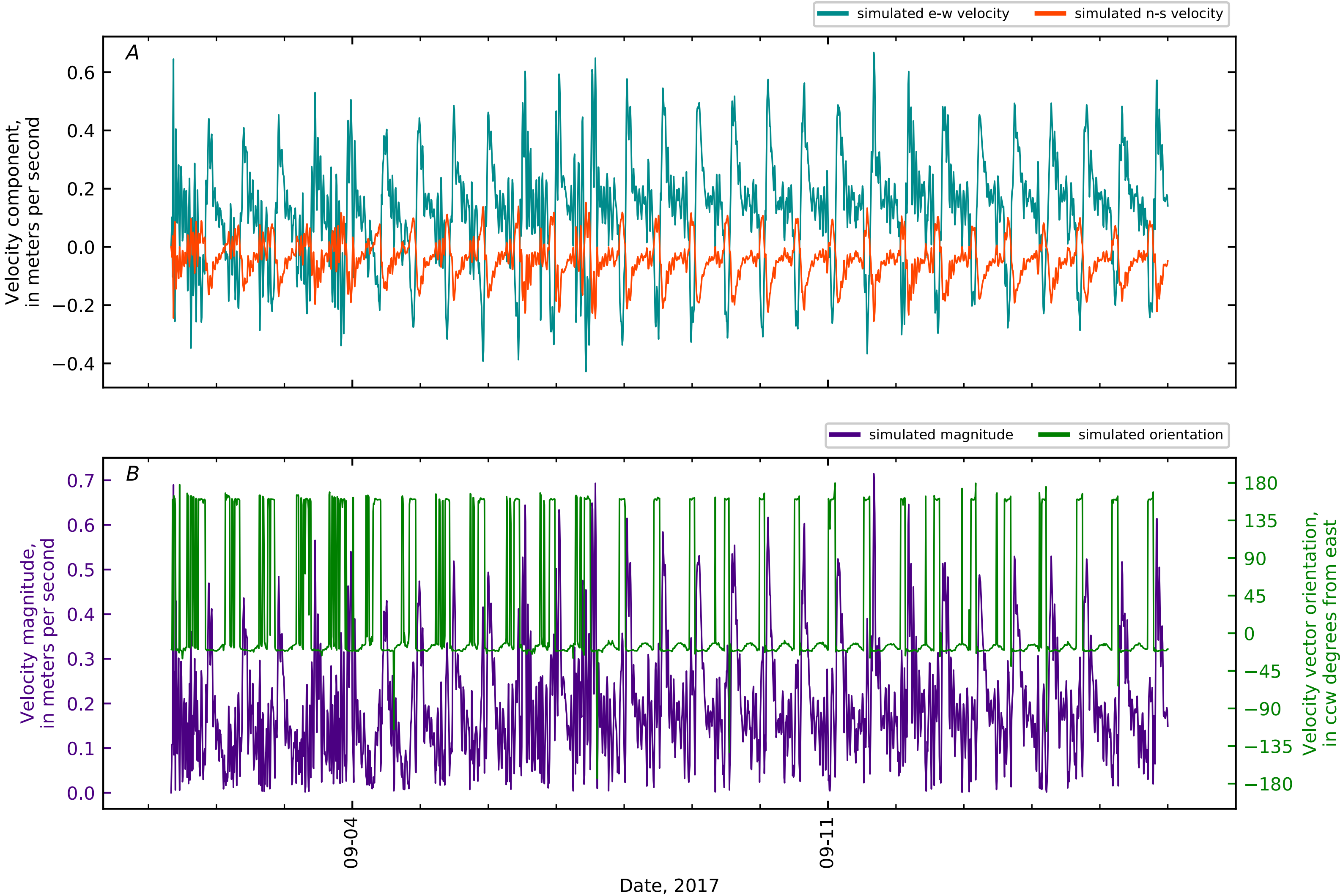

Figure B1-294. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 133, East Channel KM10 GS 443409068471801 at.

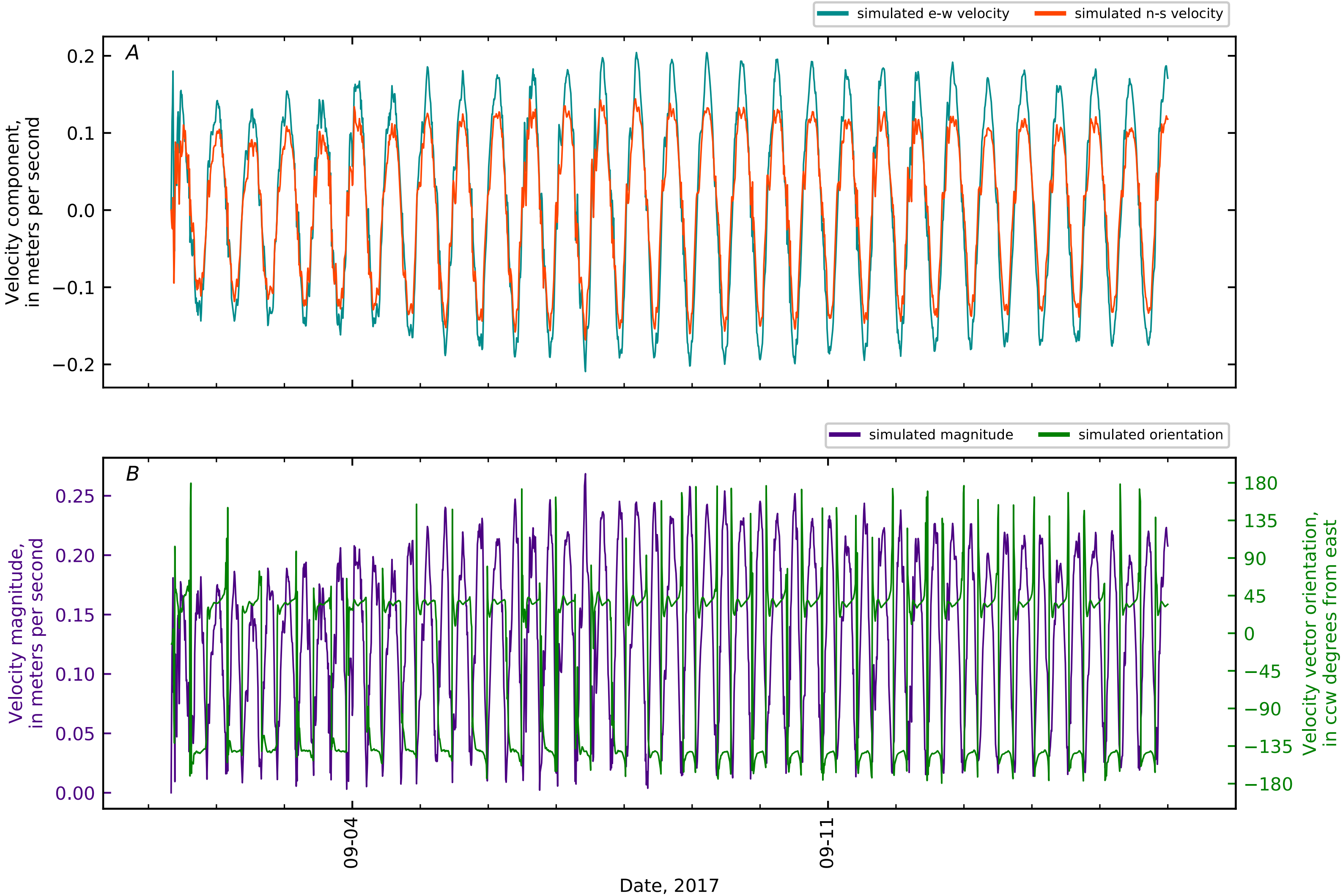

Figure B1-295. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 134, Mendall Marsh KM0.

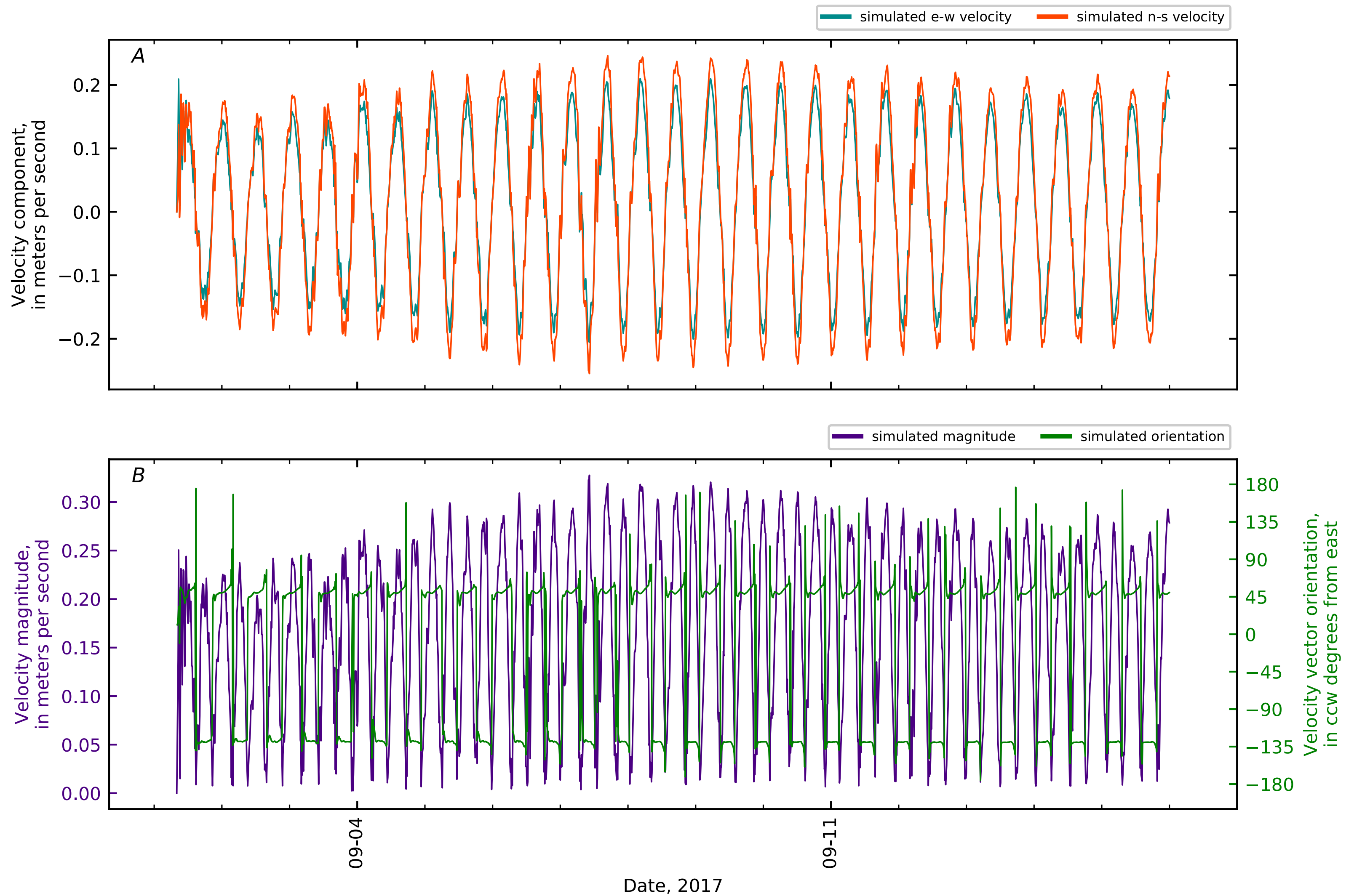

Figure B1-296. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 135, Mendall Marsh KM0.1 ERDC14 MM-MU6-SF-1.

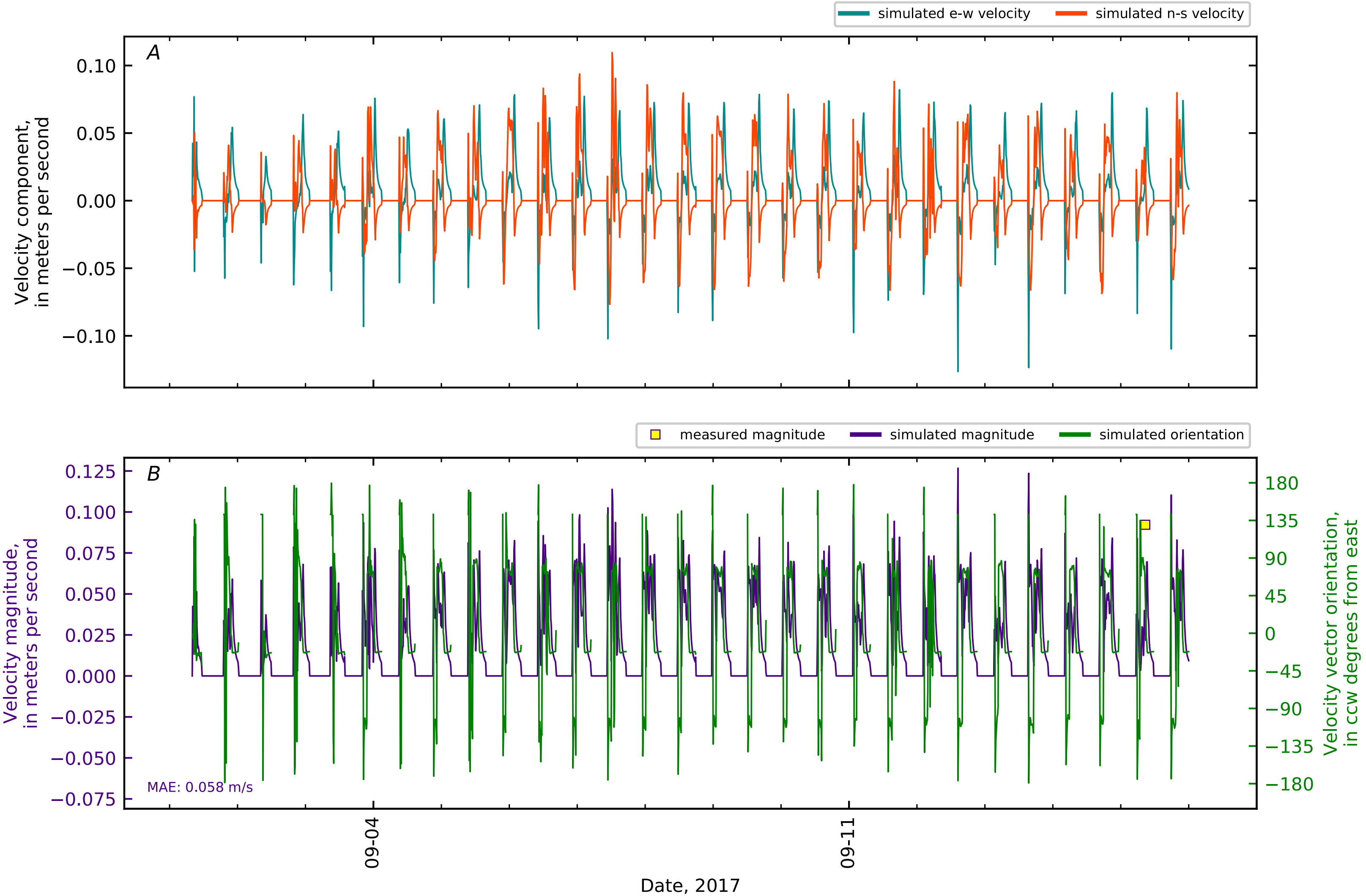

Figure B1-297. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 136, Mendall Marsh KM0.4 GS CTD2-01.

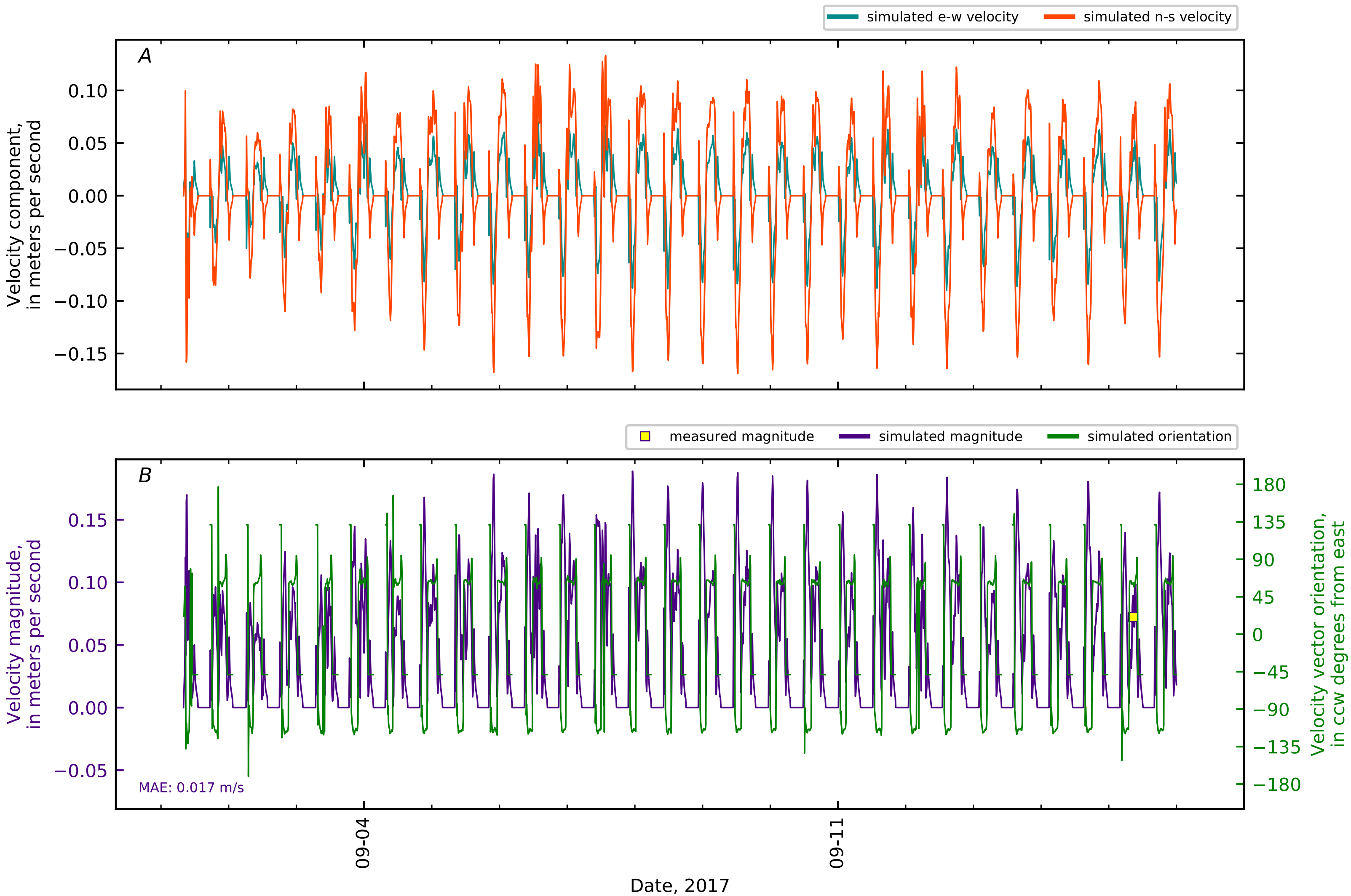

Figure B1-298. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 137, Mendall Marsh KM0.4 GS CTD2-02.

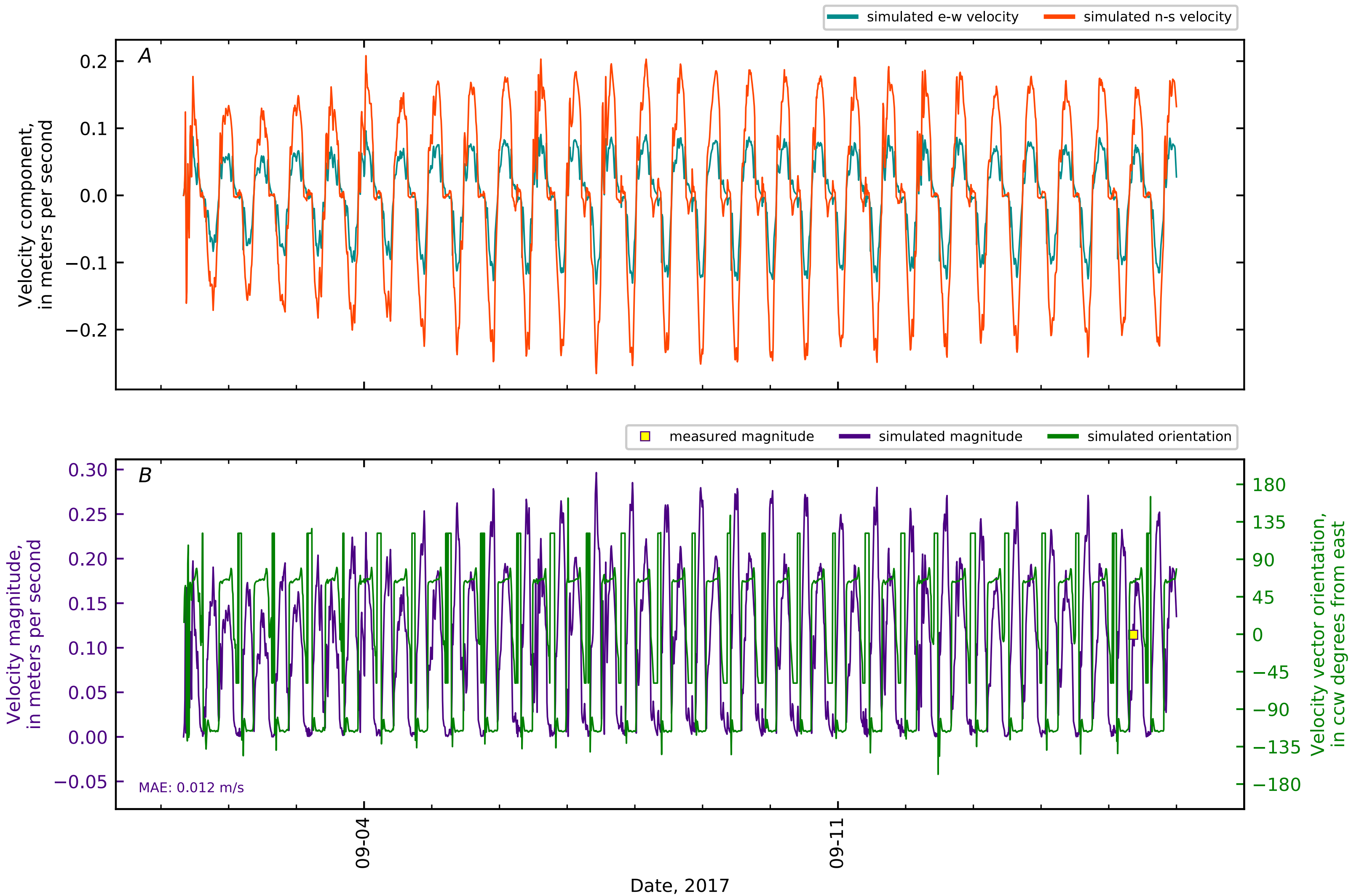

Figure B1-299. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 138, Mendall Marsh KM0.4 GS CTD2-03.

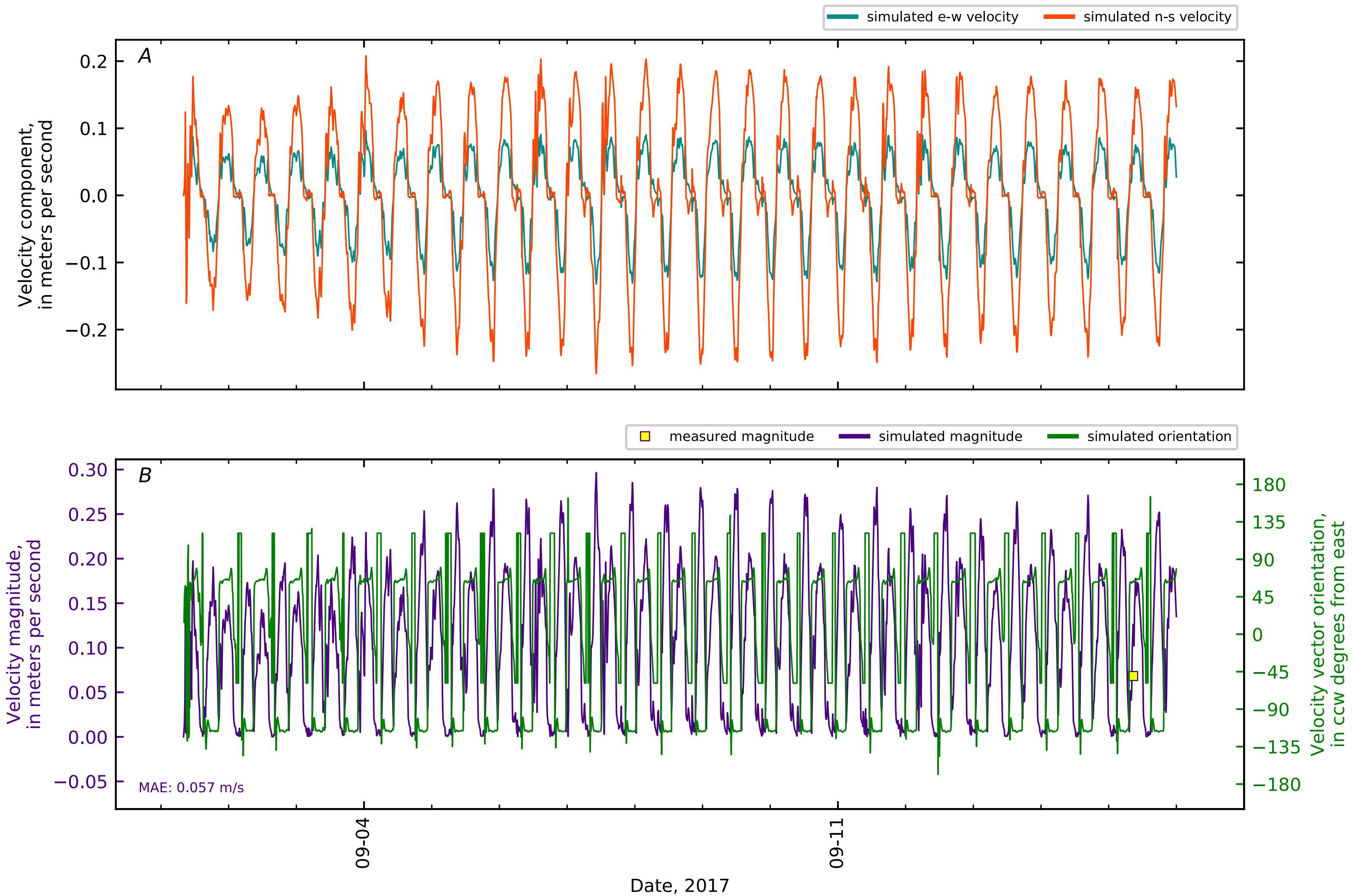

Figure B1-300. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 139, Mendall Marsh KM0.4 GS CTD2-04.

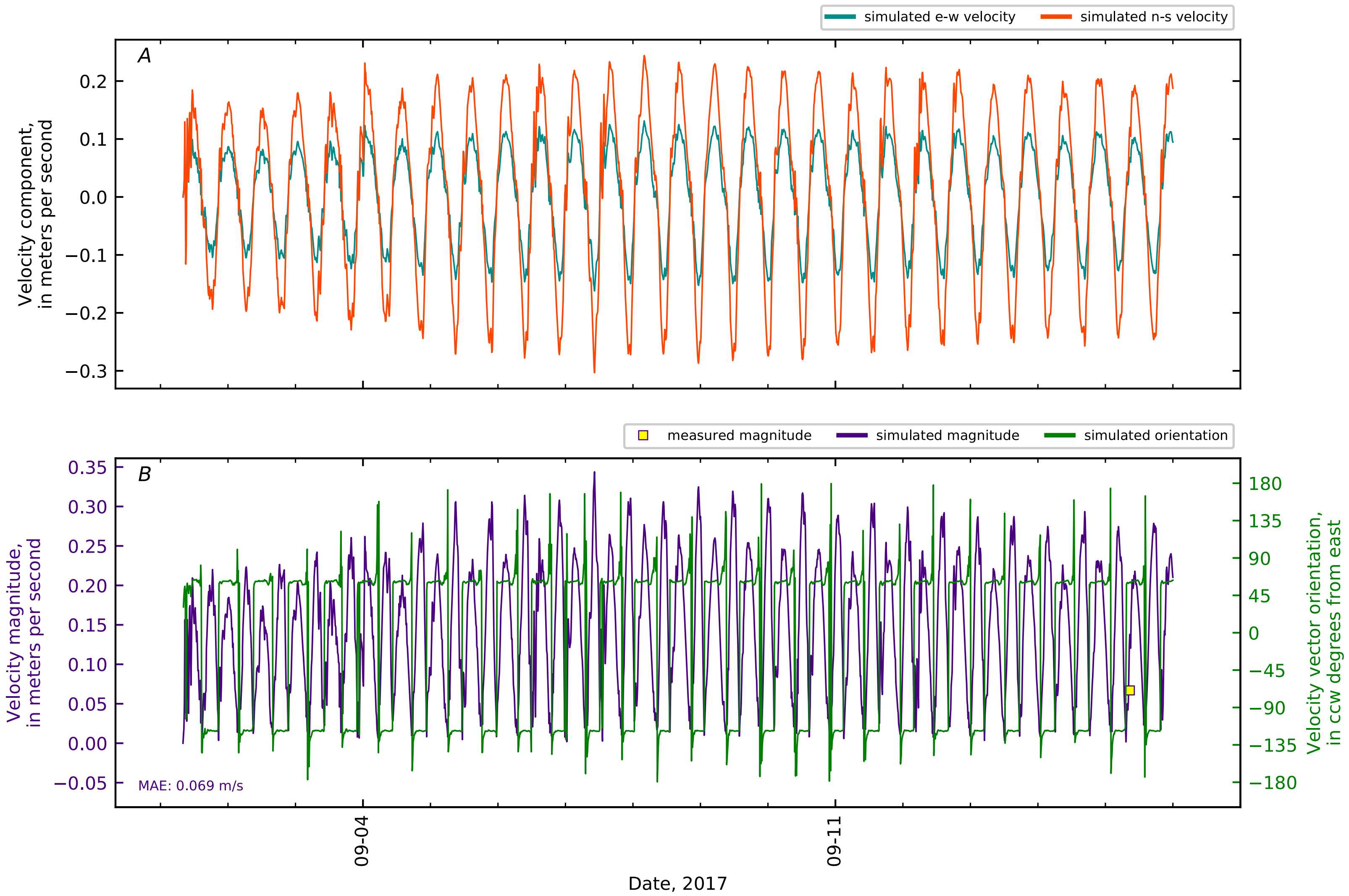

Figure B1-301. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 140, Mendall Marsh KM0.4 GS CTD2-05.

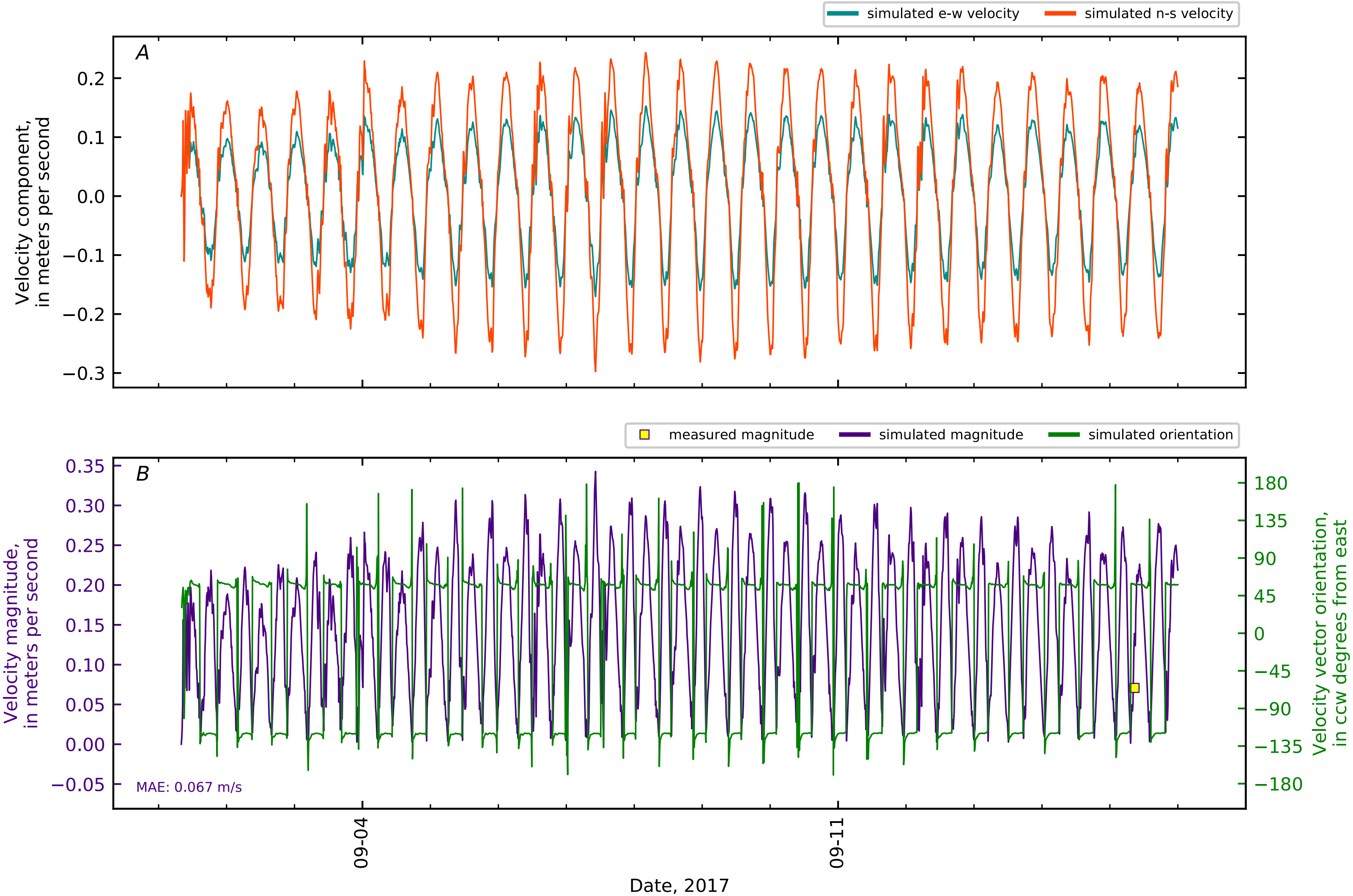

Figure B1-302. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 141, Mendall Marsh KM0.4 GS CTD2-06.

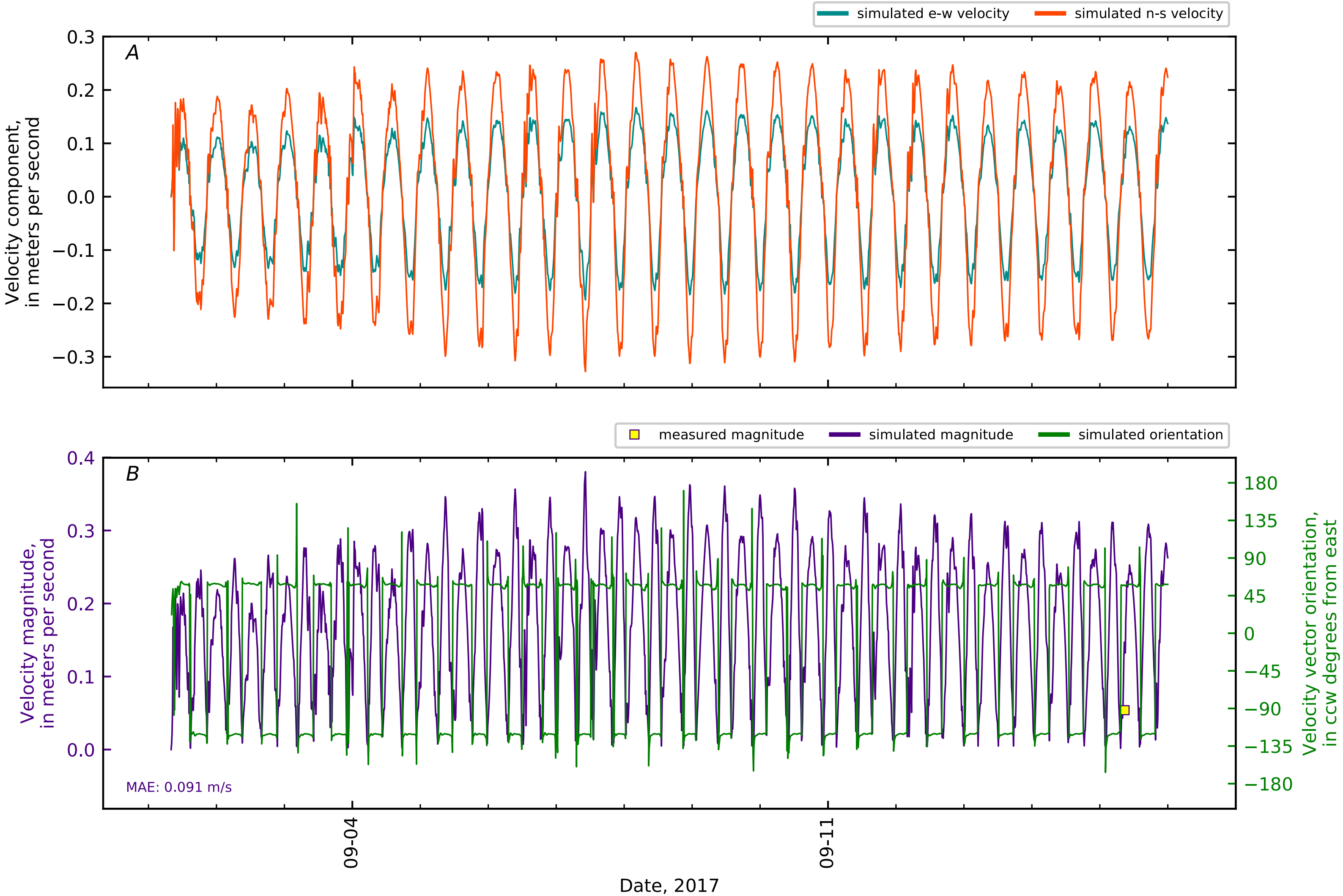

Figure B1-303. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 142, Mendall Marsh KM0.4 GS CTD2-07.

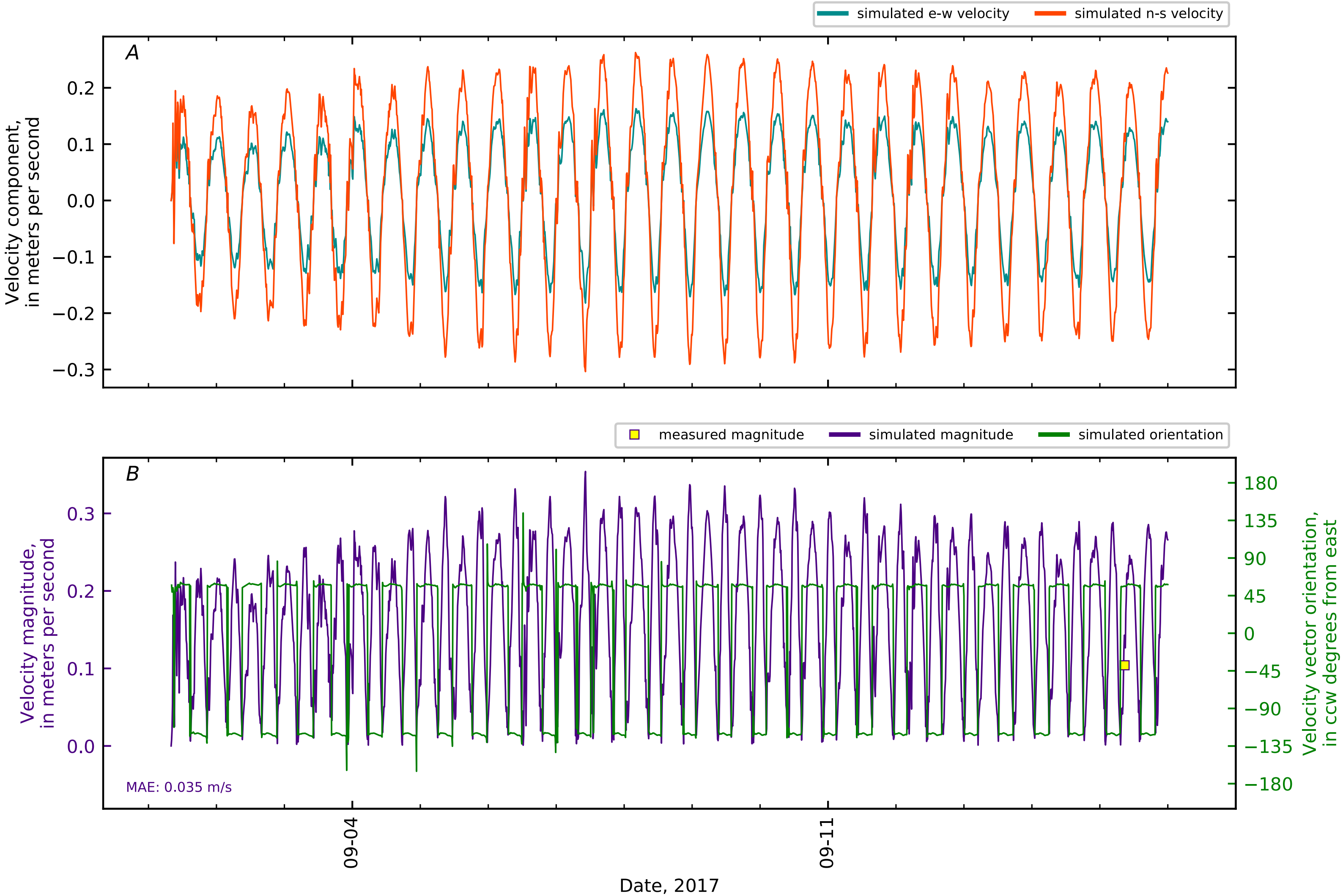

Figure B1-304. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 143, Mendall Marsh KM0.4 GS CTD2-08.

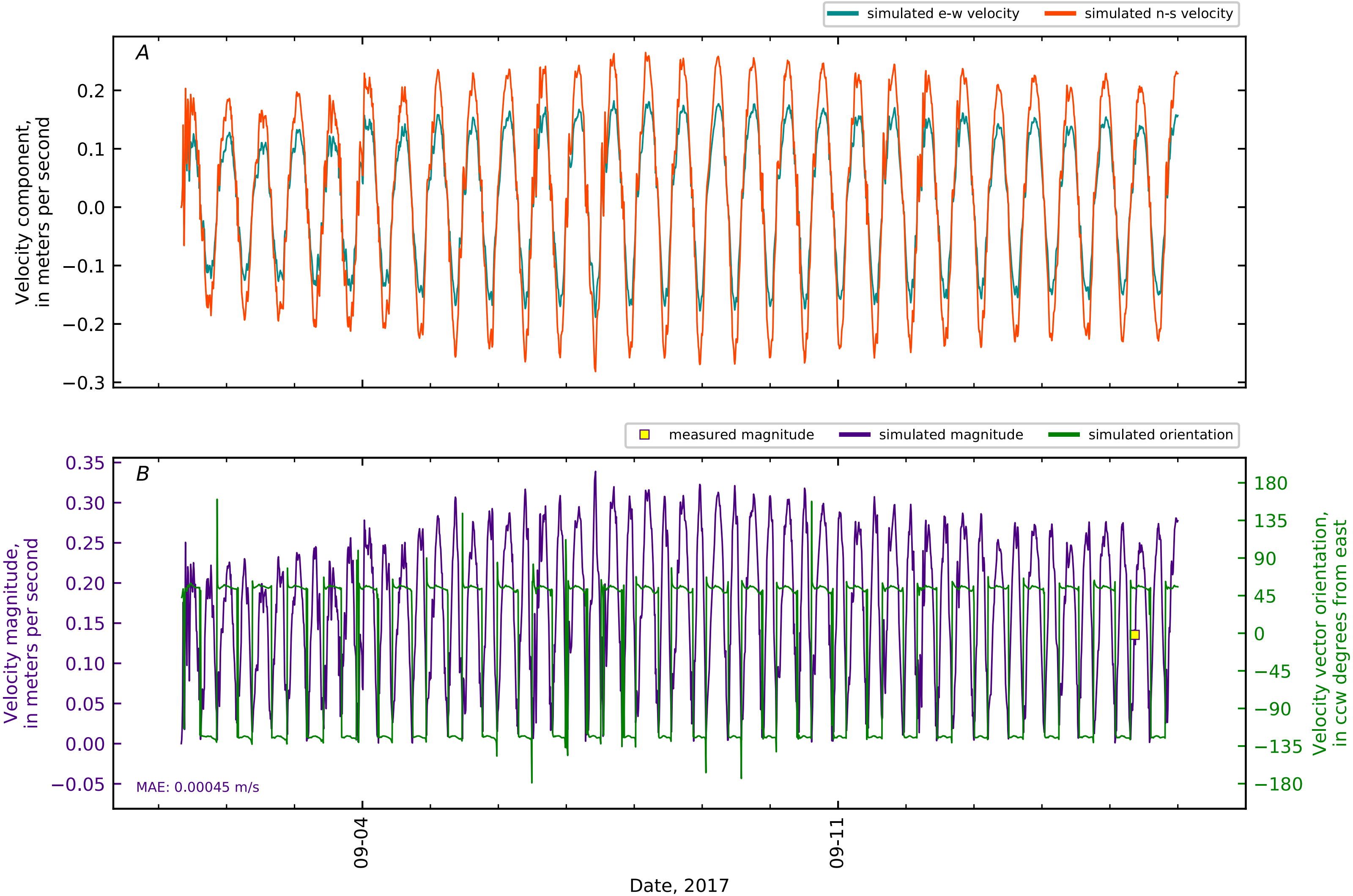

Figure B1-305. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 144, Mendall Marsh KM0.4 GS CTD2-09.

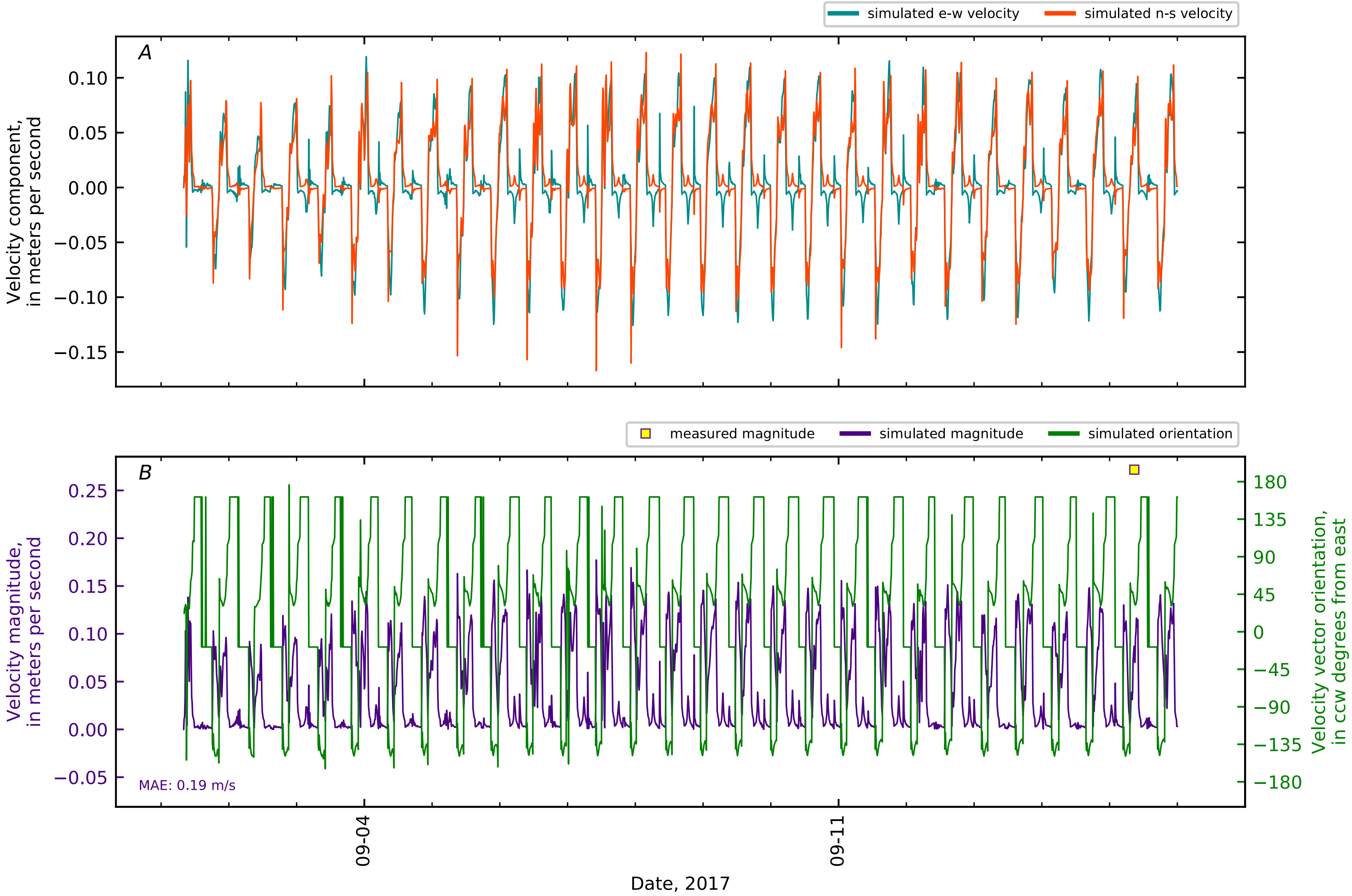

Figure B1-306. *A*, Time series for simulated flow velocity components; and *B*, time series for simulated velocity magnitude and velocity vector orientation, and depth-average velocity magnitude measured with an acoustic Doppler current profiler at station 145, Mendall Marsh KM0.4 GS CTD2-10.

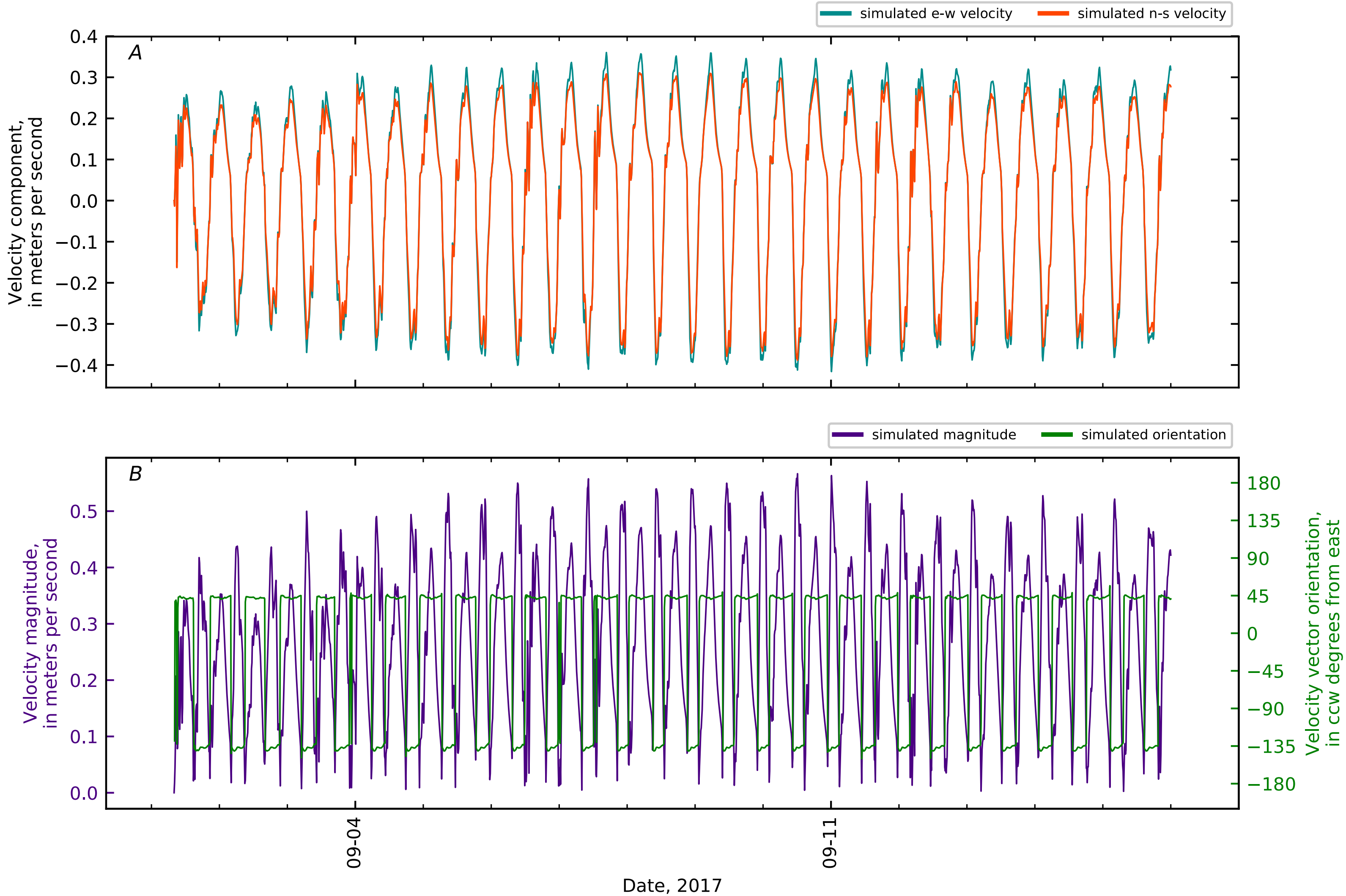

Figure B1-307. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 146, Mendall Marsh KM1.

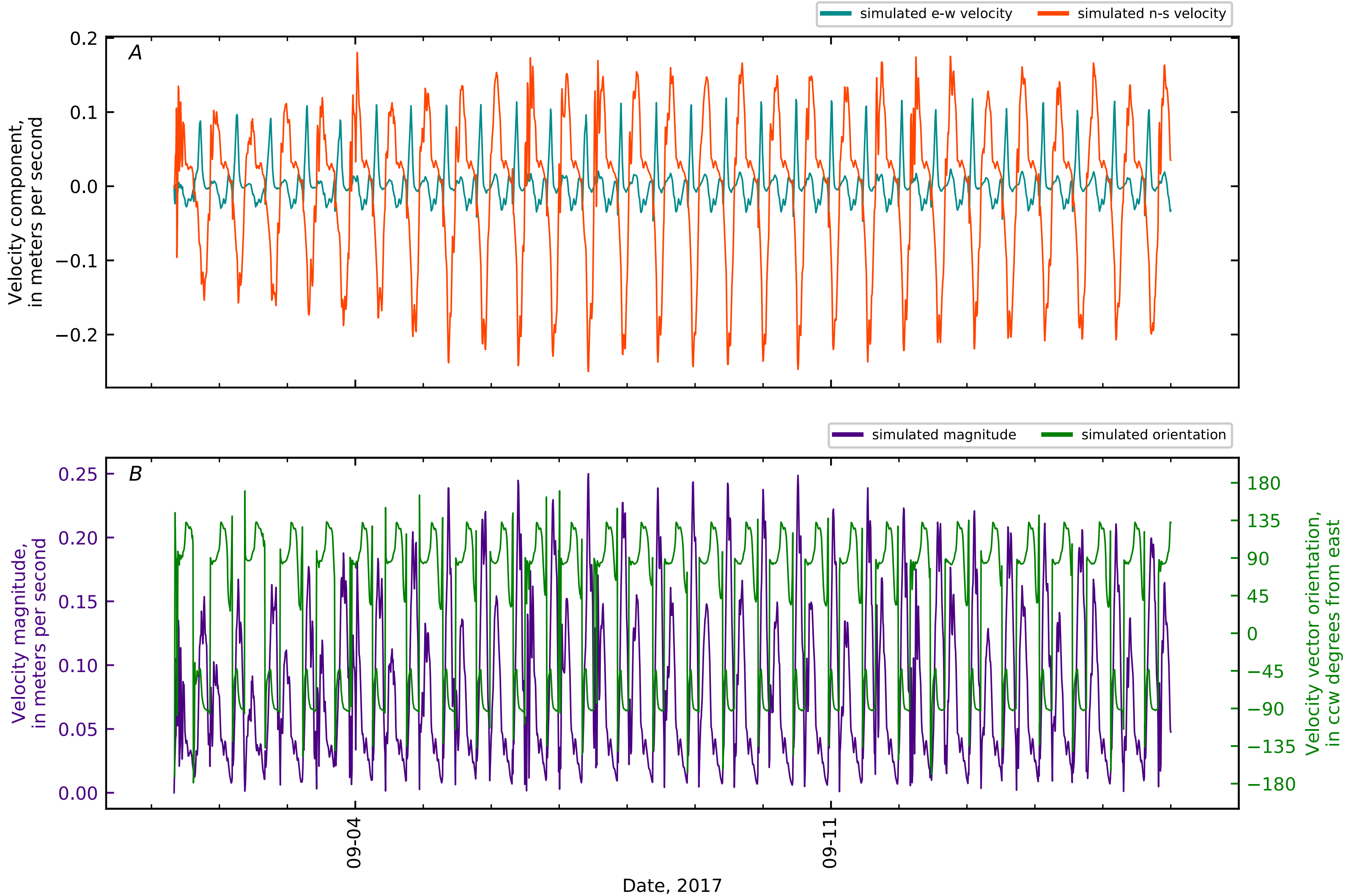

Figure B1-308. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 147, Mendall Marsh KM1.5 WHOI3 2010.

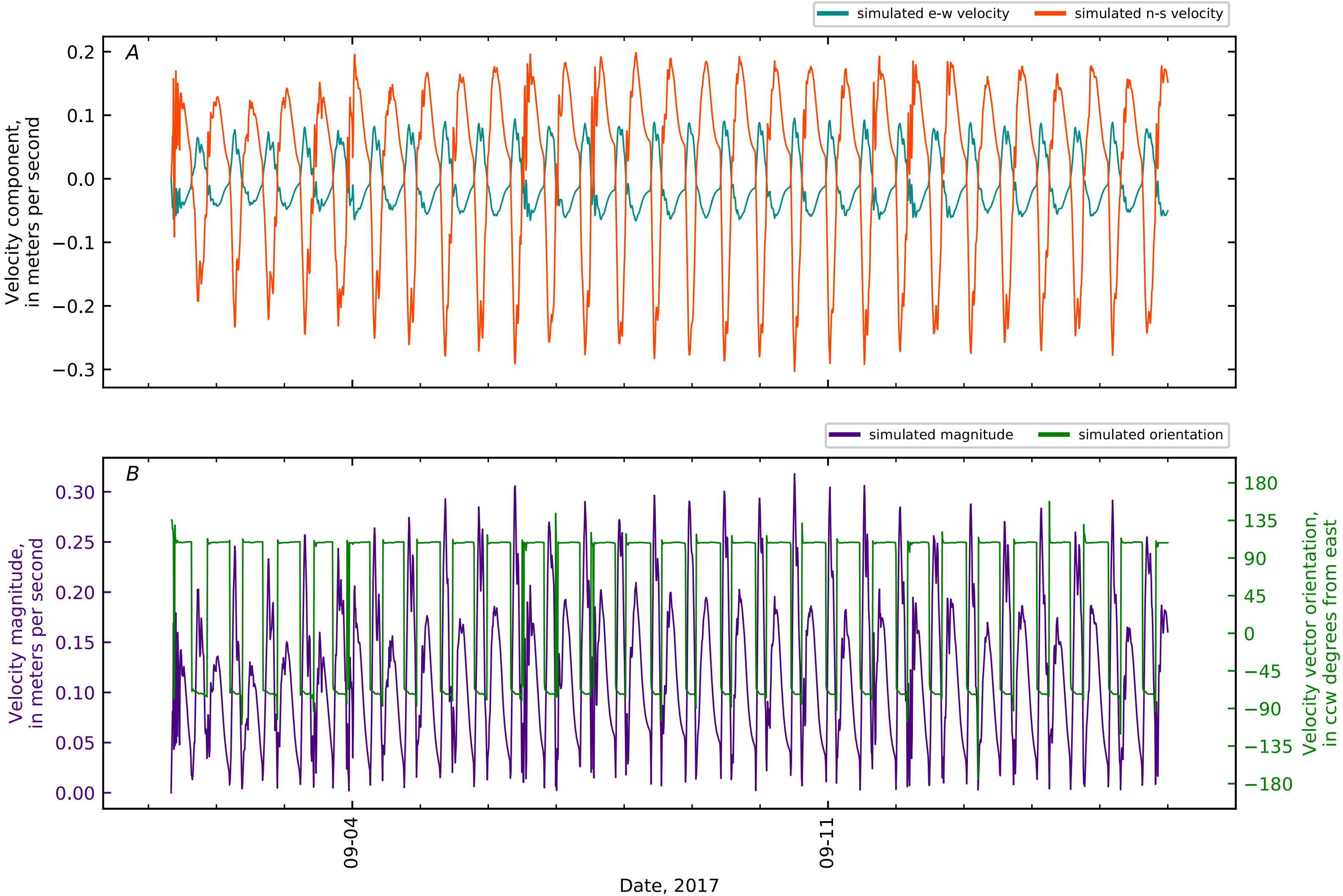

Figure B1-309. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 148, Mendall Marsh KM2.

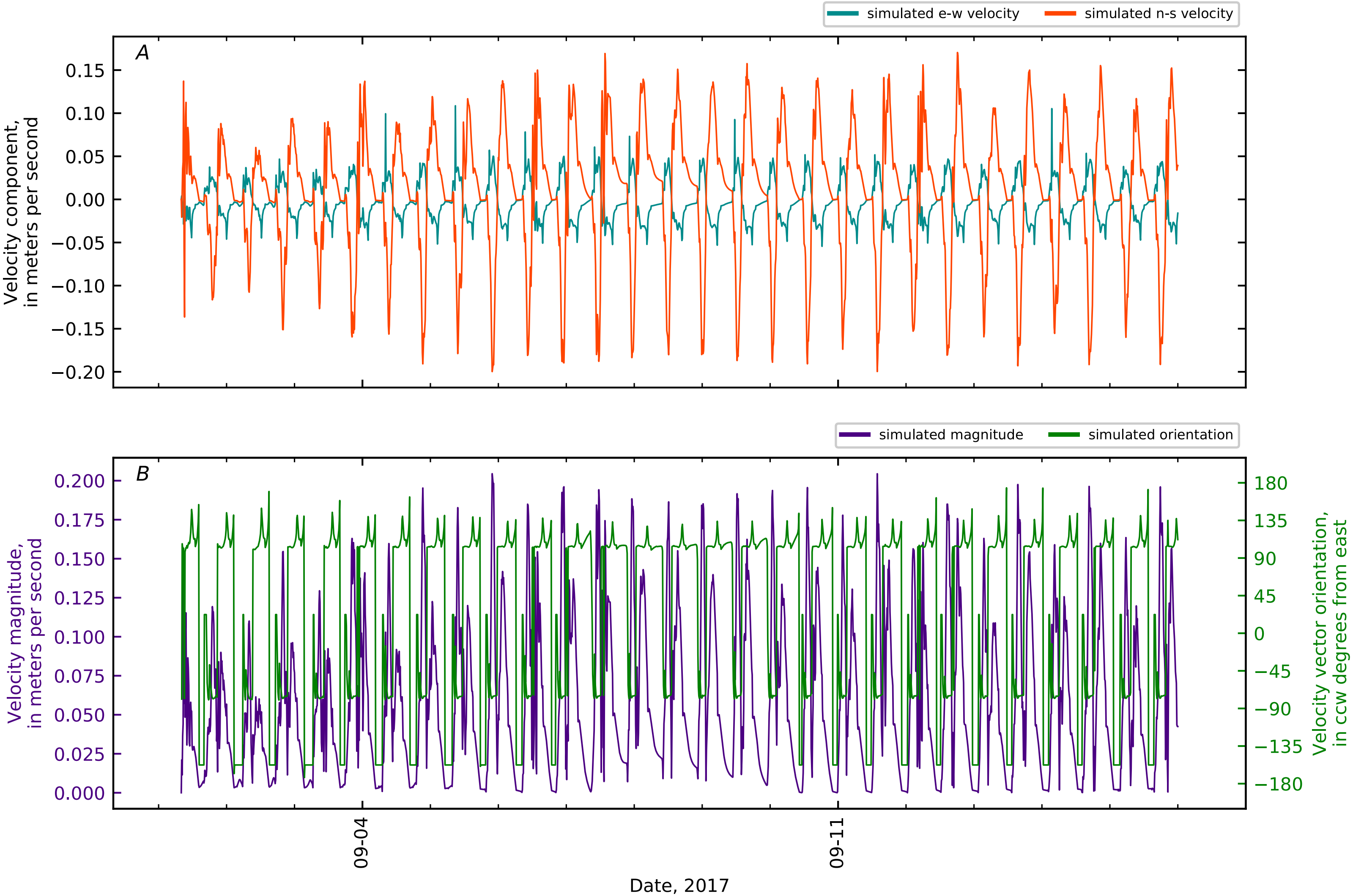

Figure B1-310. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 149, Mendall Marsh KM3.

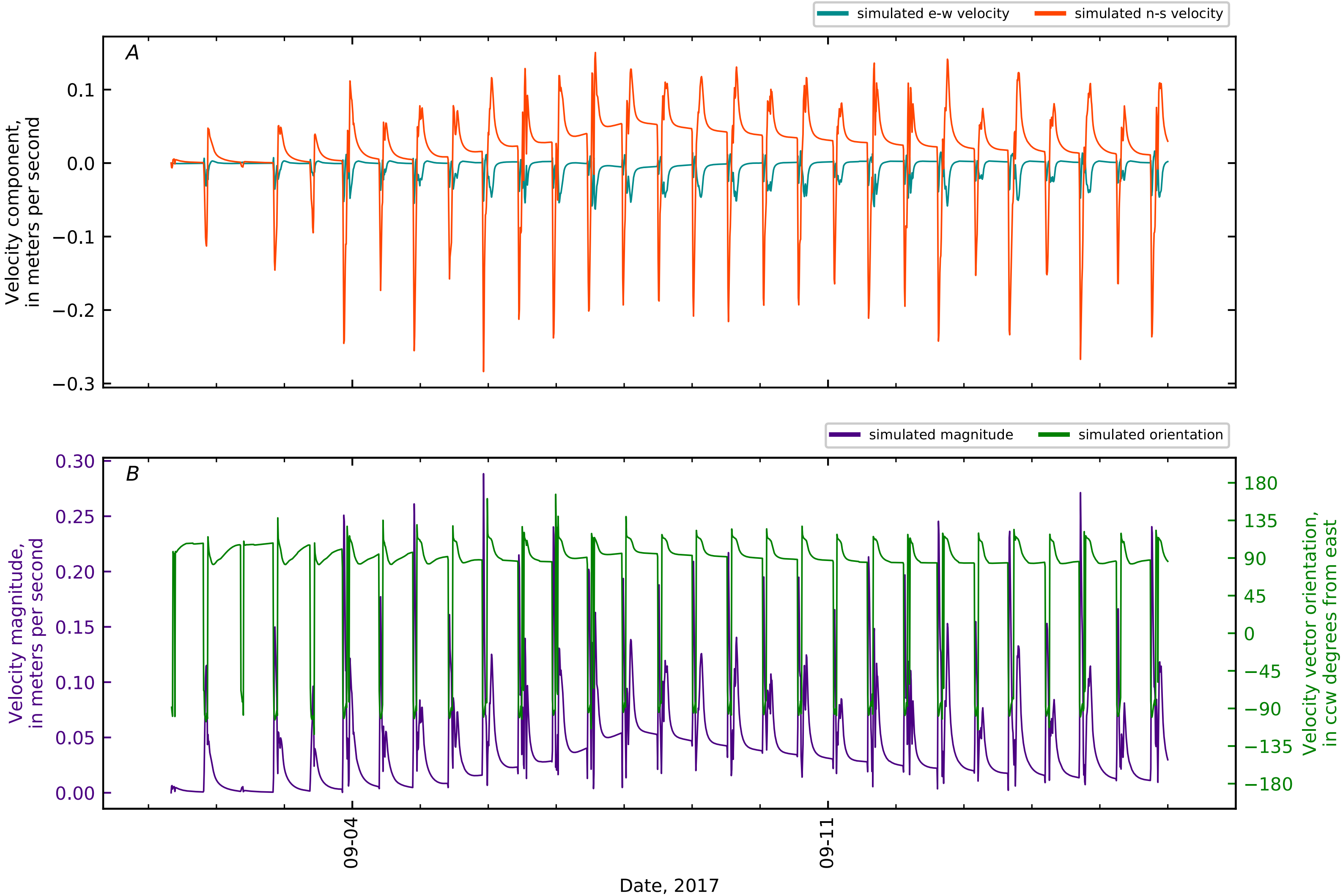

Figure B1-311. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 150, Mendall Marsh KM4.

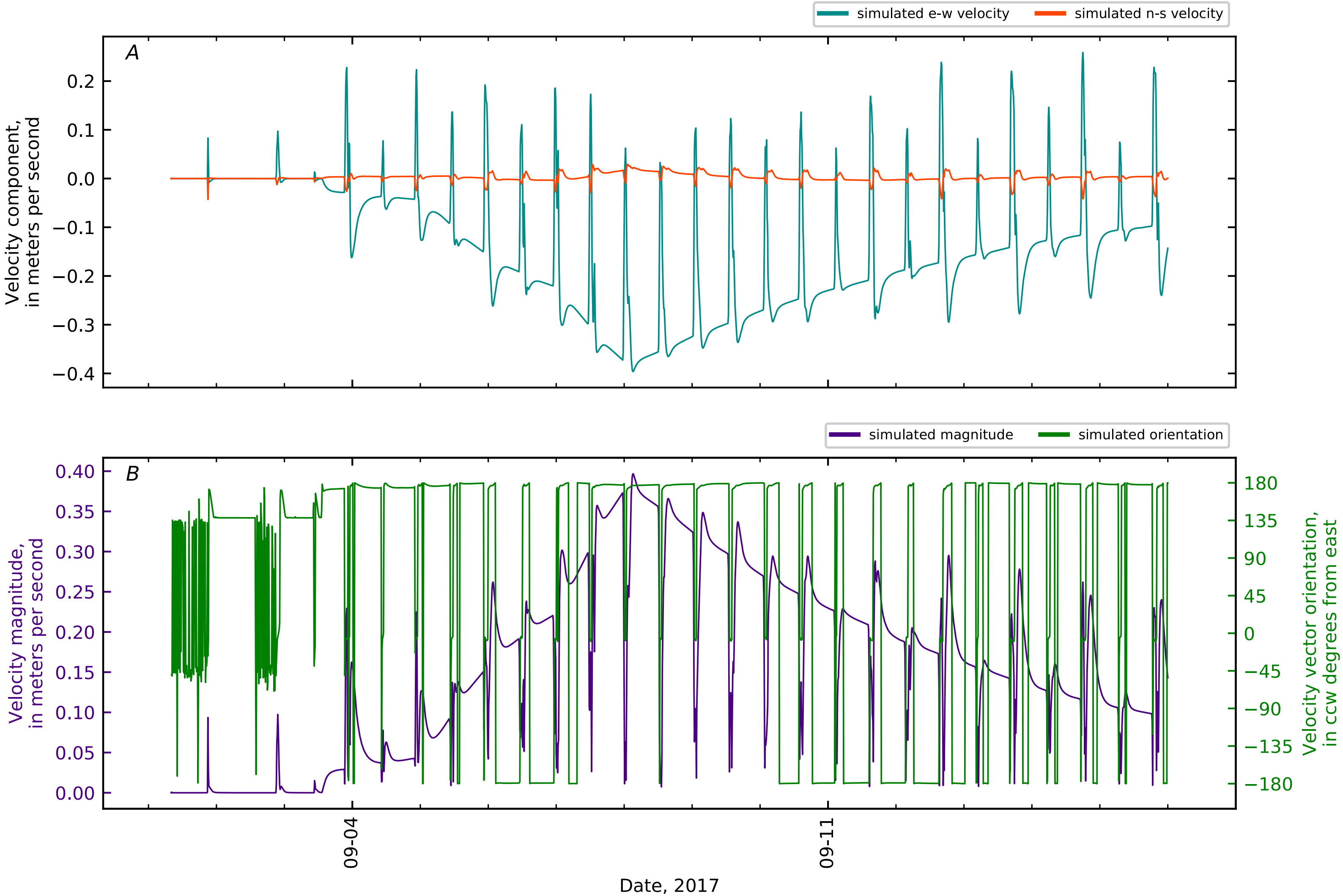

Figure B1-312. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 151, Mendall Marsh KM5.

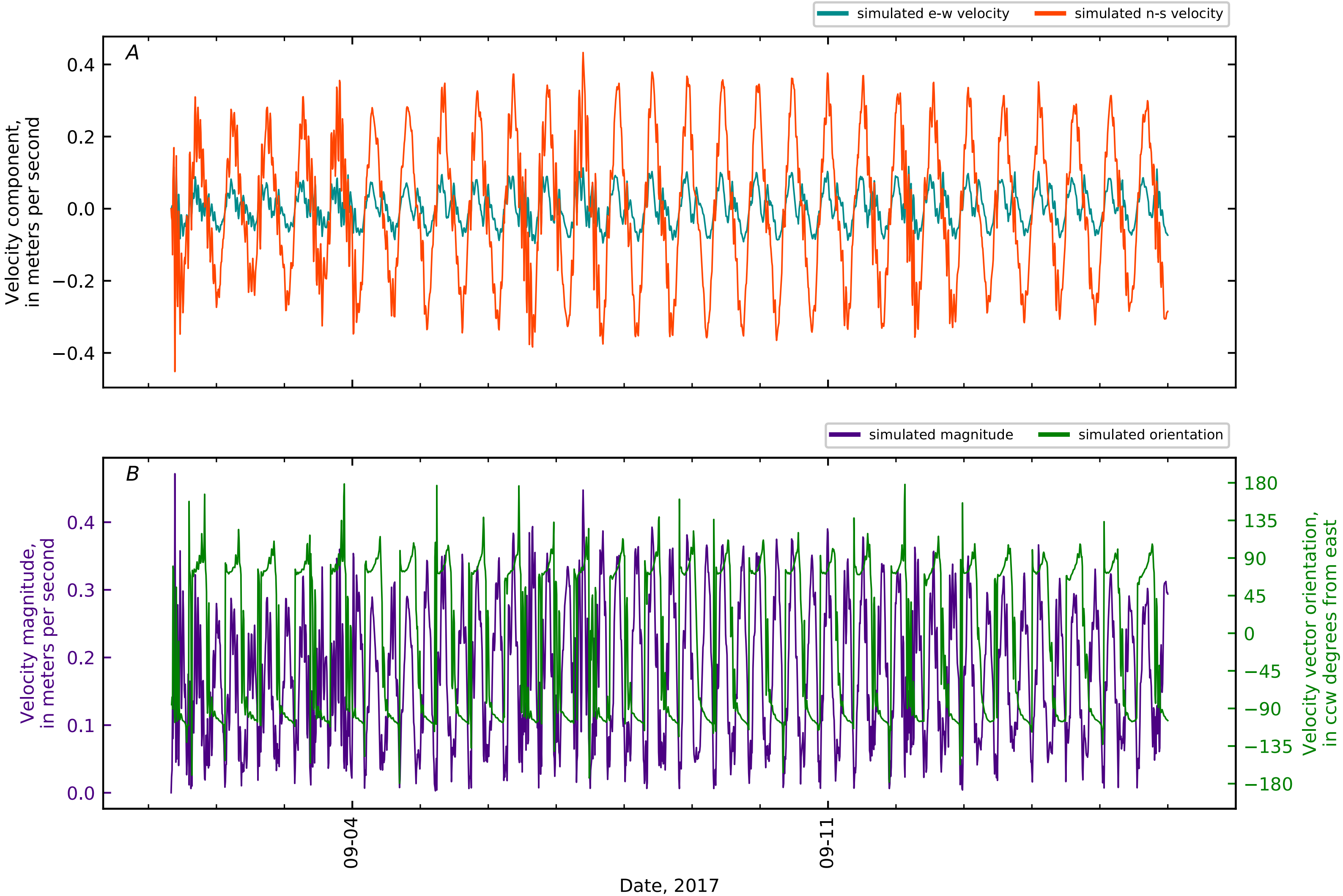

Figure B1-313. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 152, Orland Riv KM0.

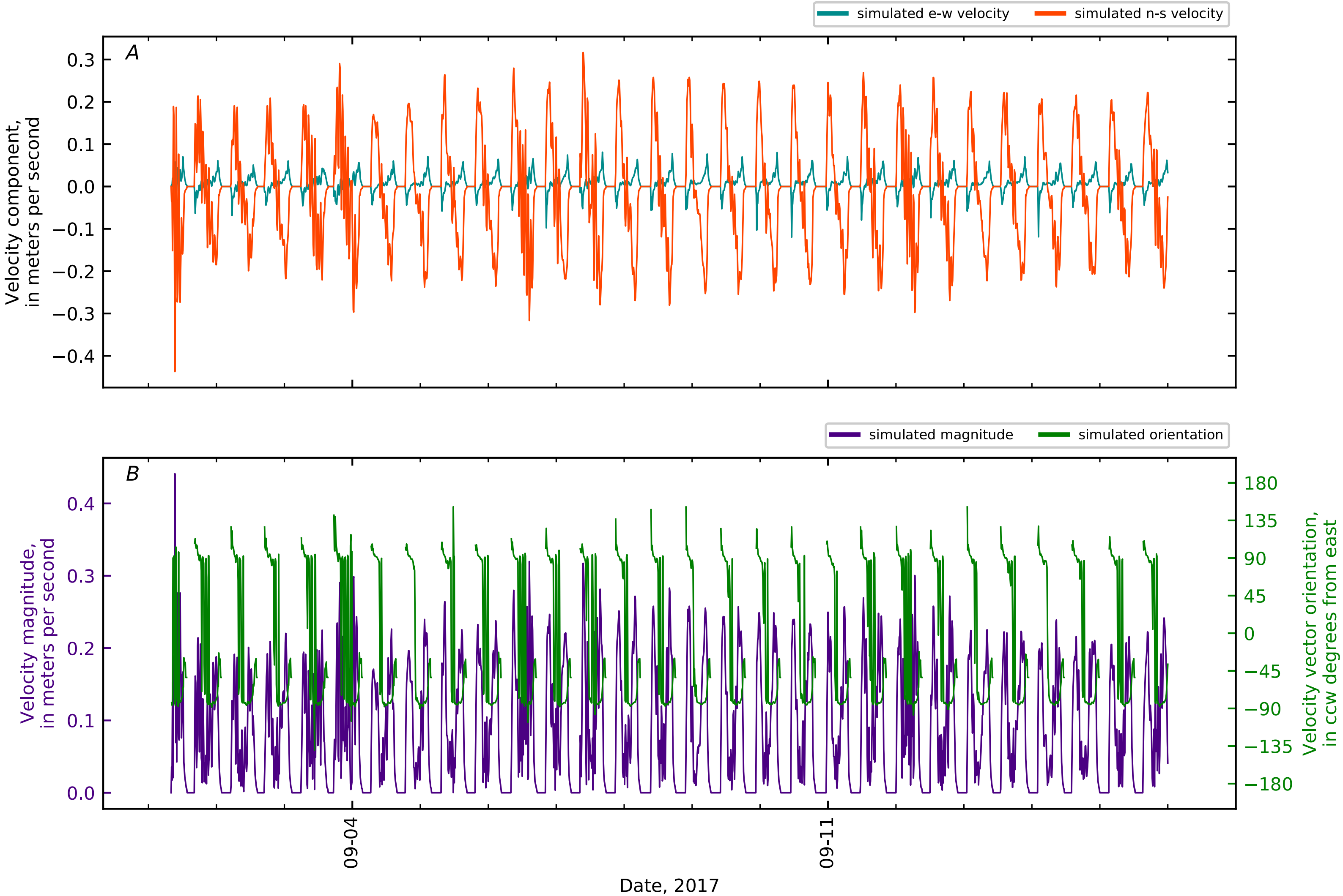

Figure B1-314. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 153, Orland Riv KM0.9 ERDC5 OR-MU1-SF-1.

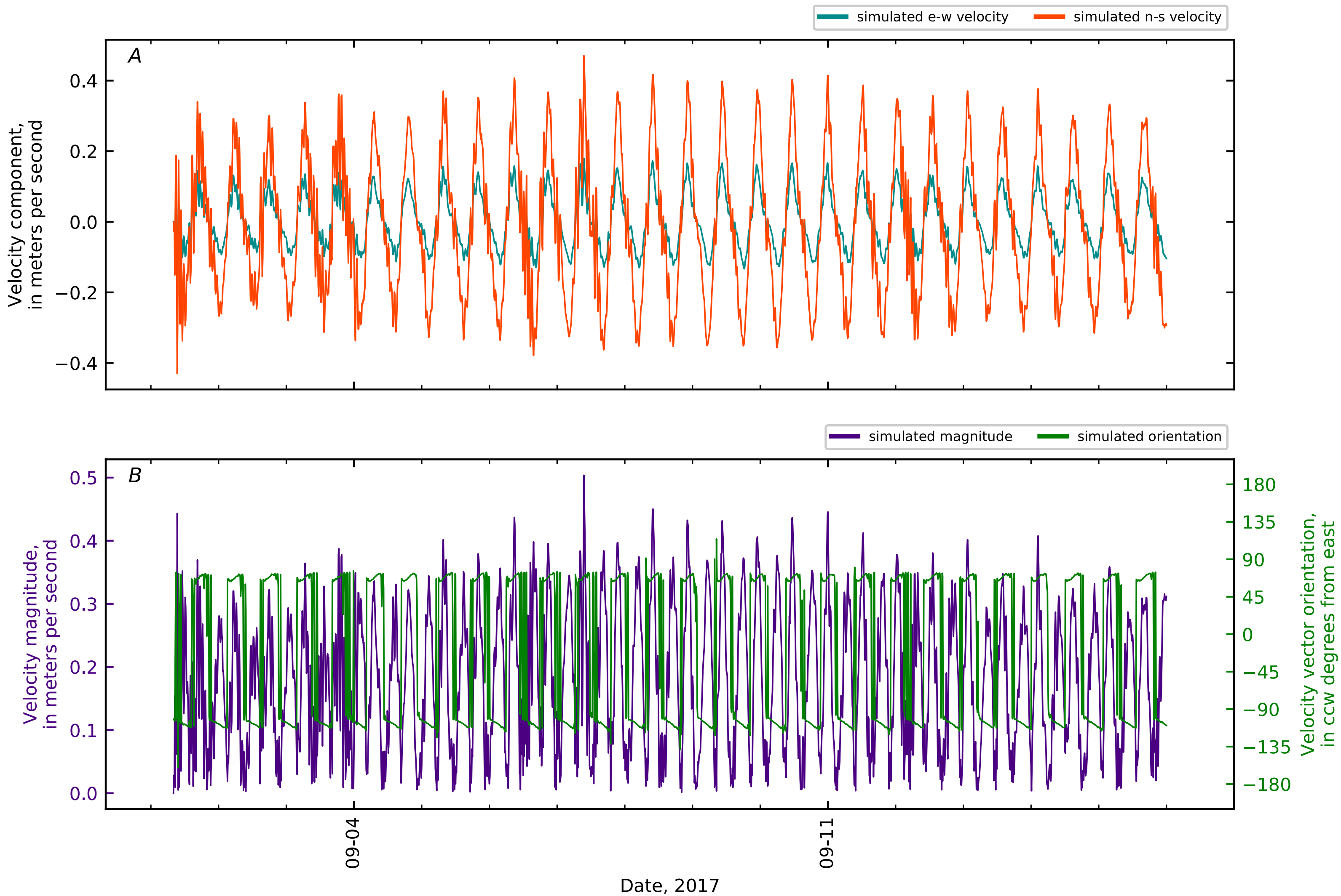

Figure B1-315. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 154, Orland Riv KM0.9 ERDC6 OR-MU3-SF-1.

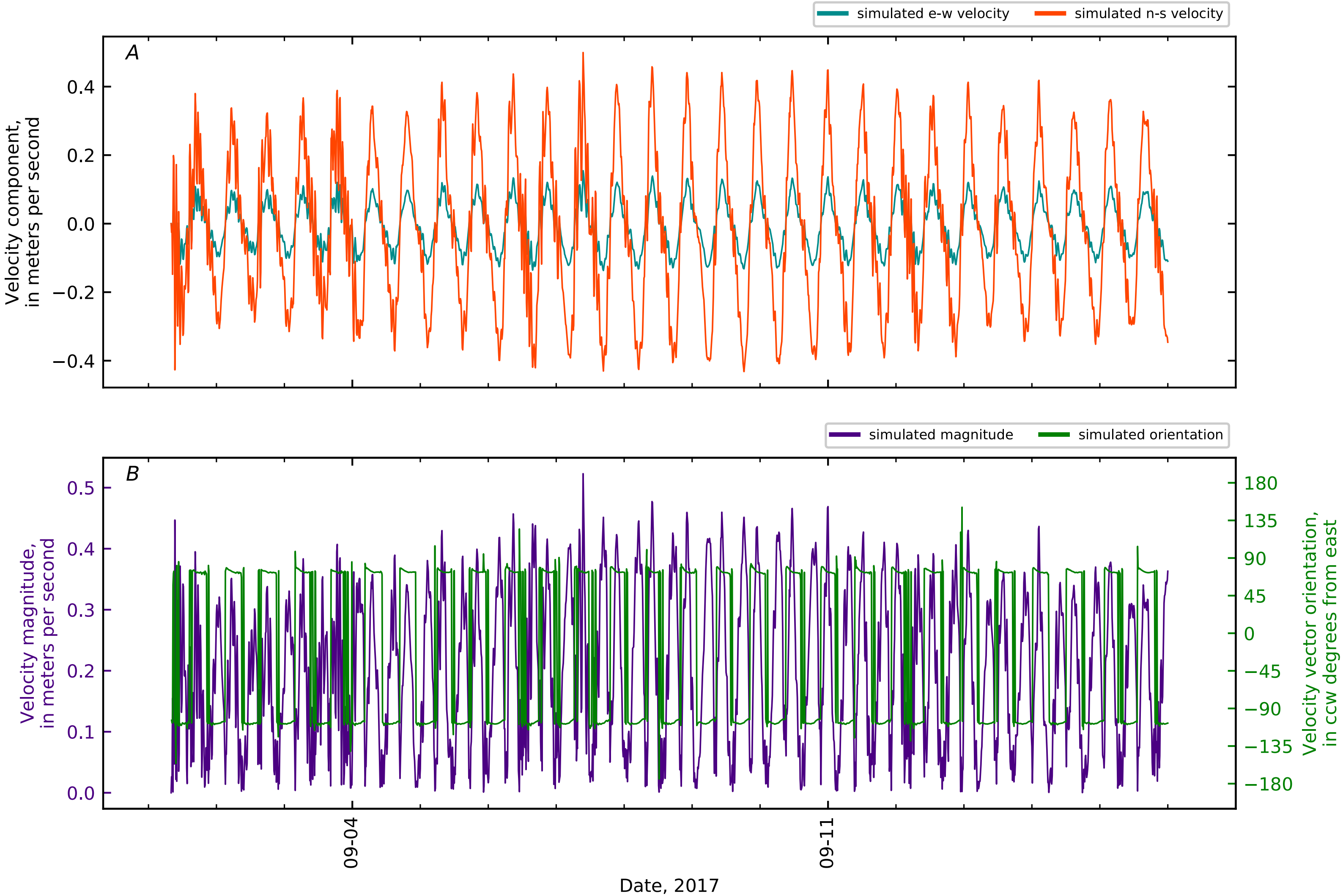

Figure B1-316. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 155, Orland Riv KM1.

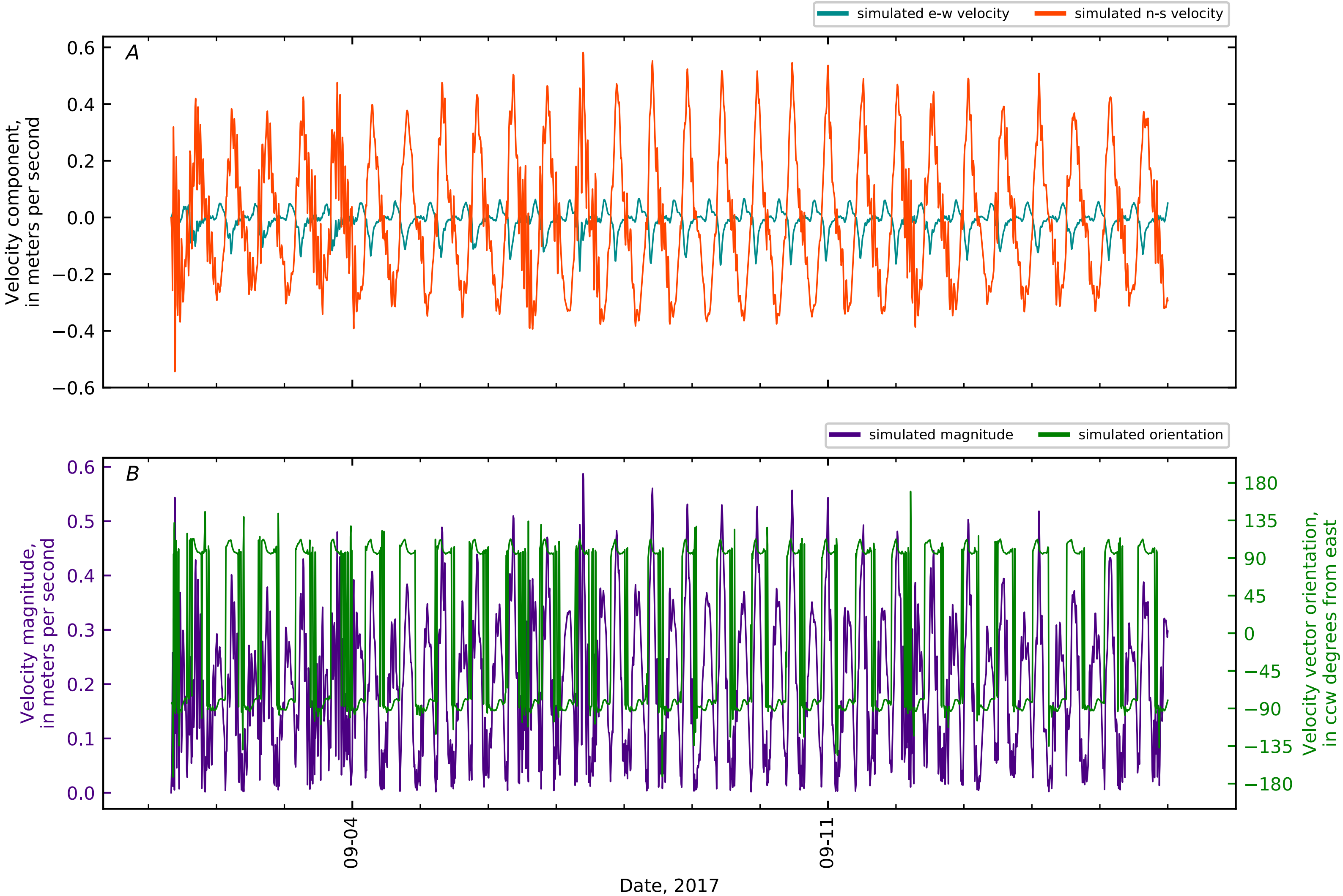

Figure B1-317. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 156, Orland Riv KM1.6 WHOI4 2010.

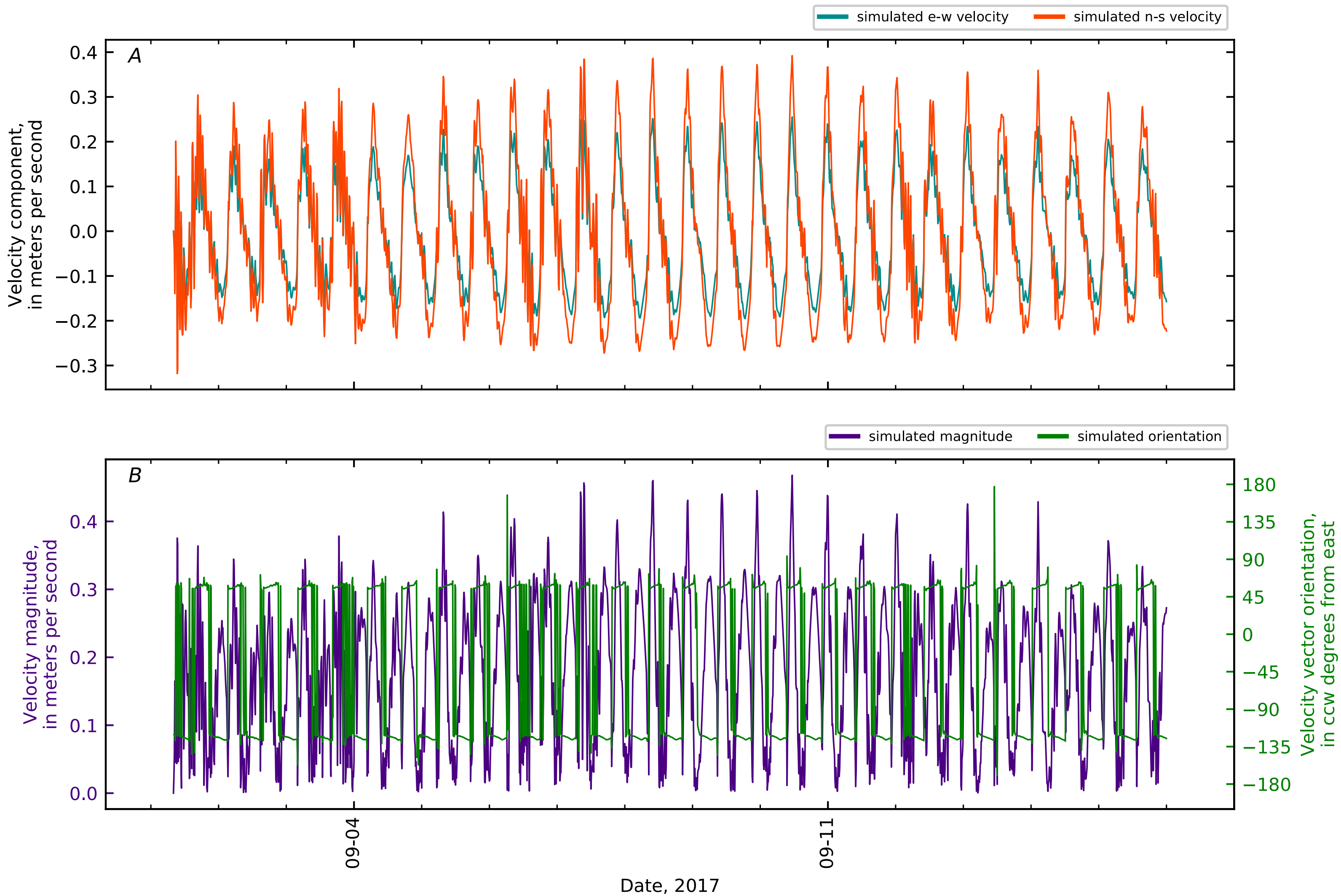

Figure B1-318. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 157, Orland Riv KM2.

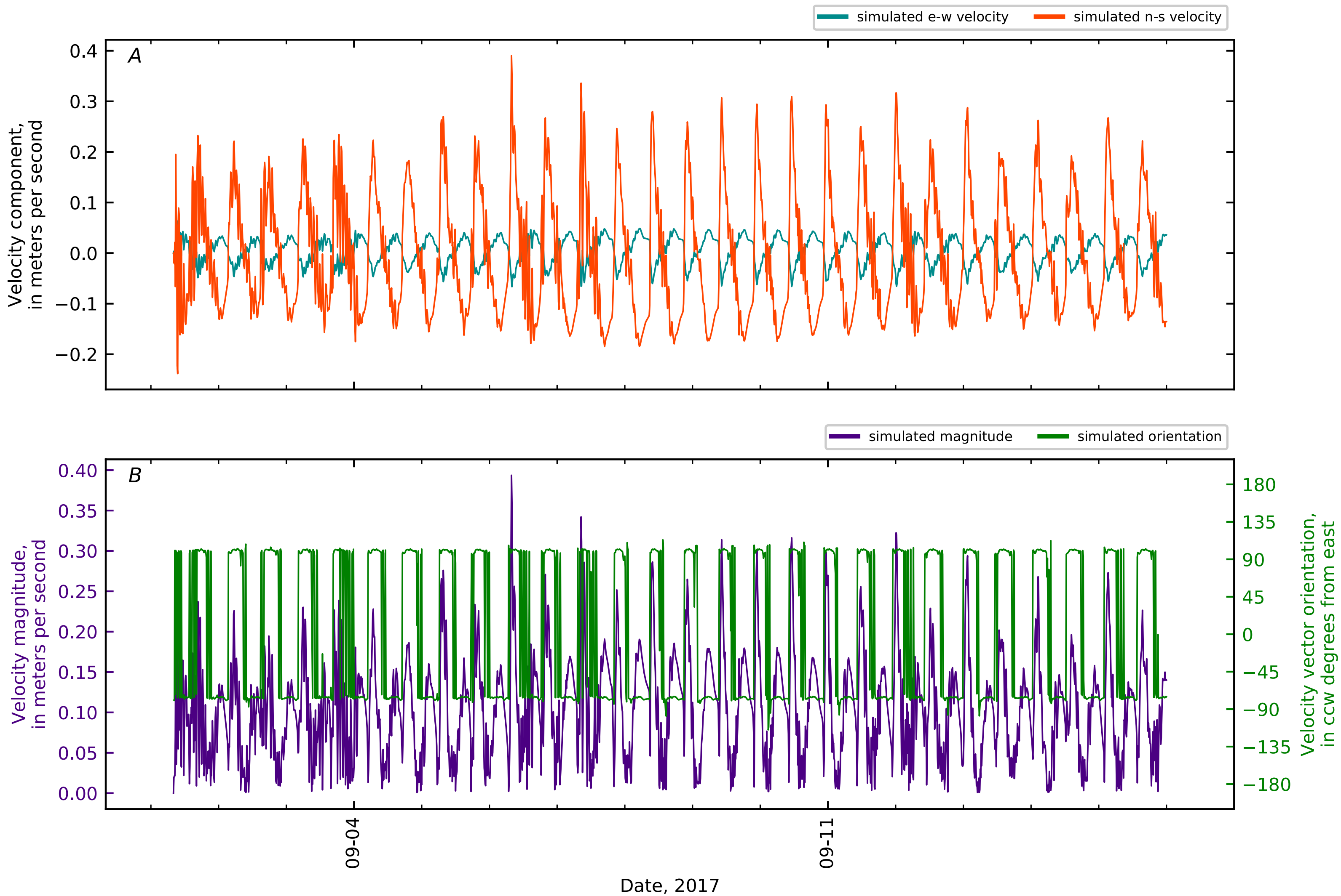

Figure B1-319. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 158, Orland Riv KM3.

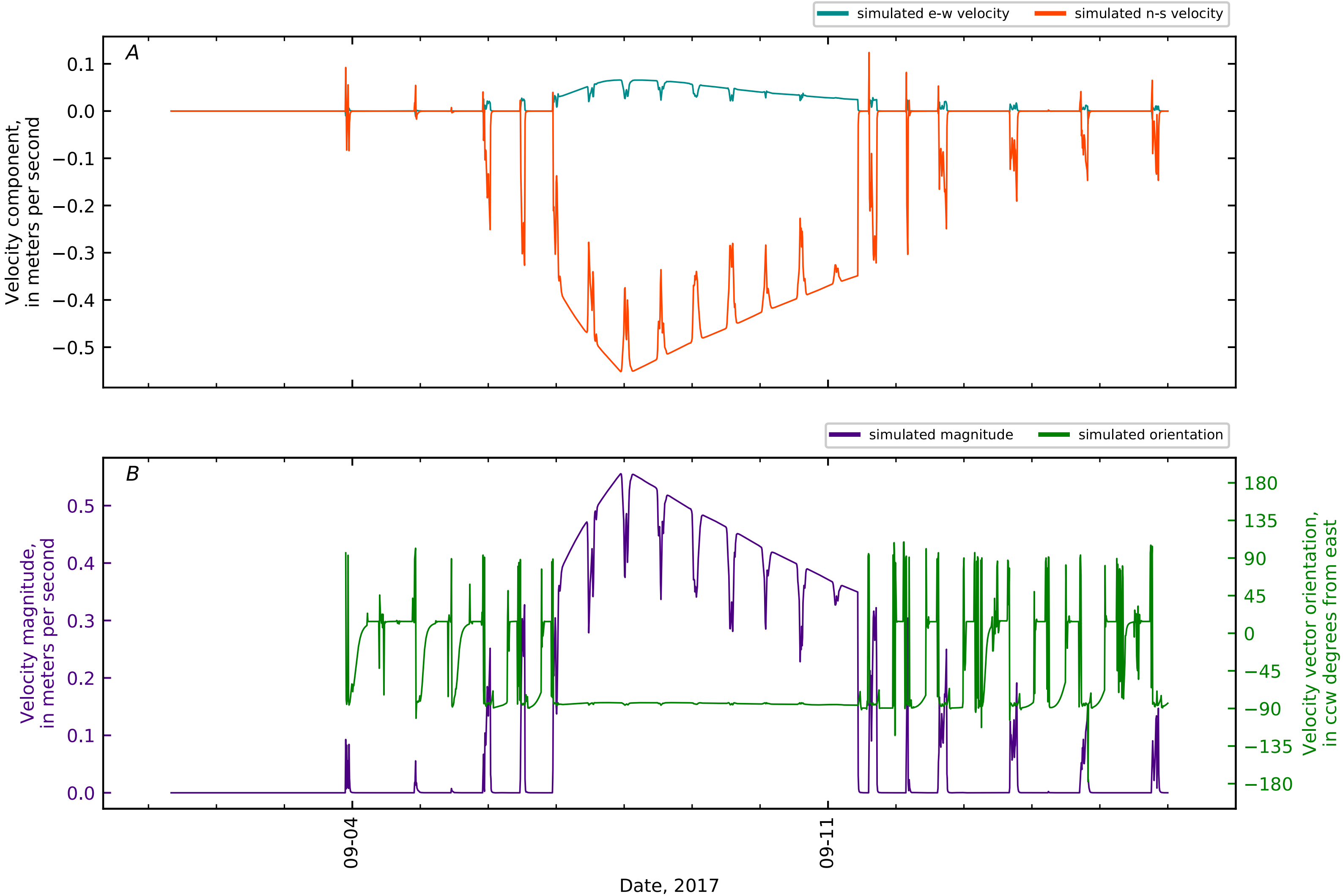

Figure B1-320. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 159, Orland Riv KM4.

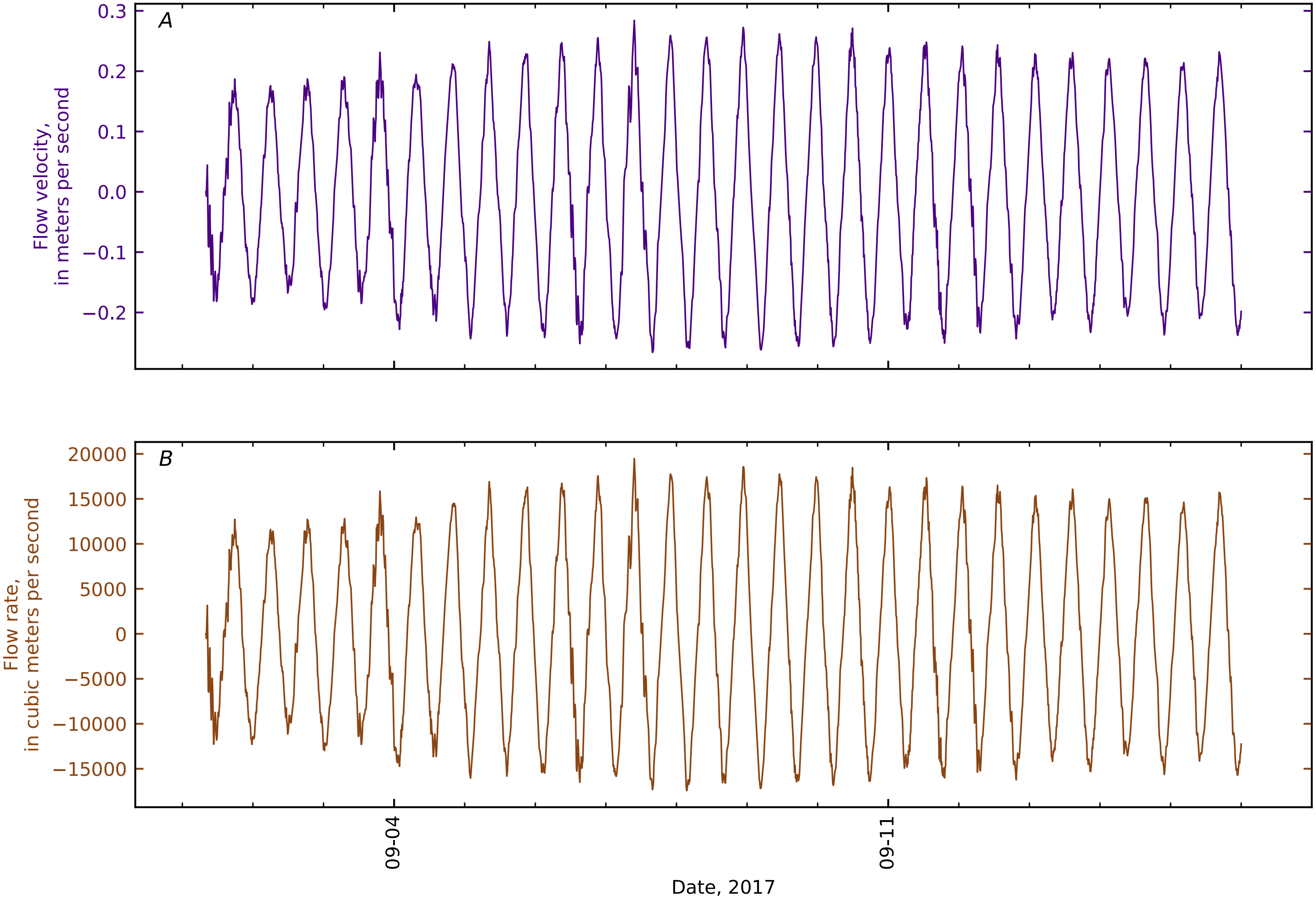

Figure B1-321. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 0, Penob Riv -KM4 Cape Jellison.

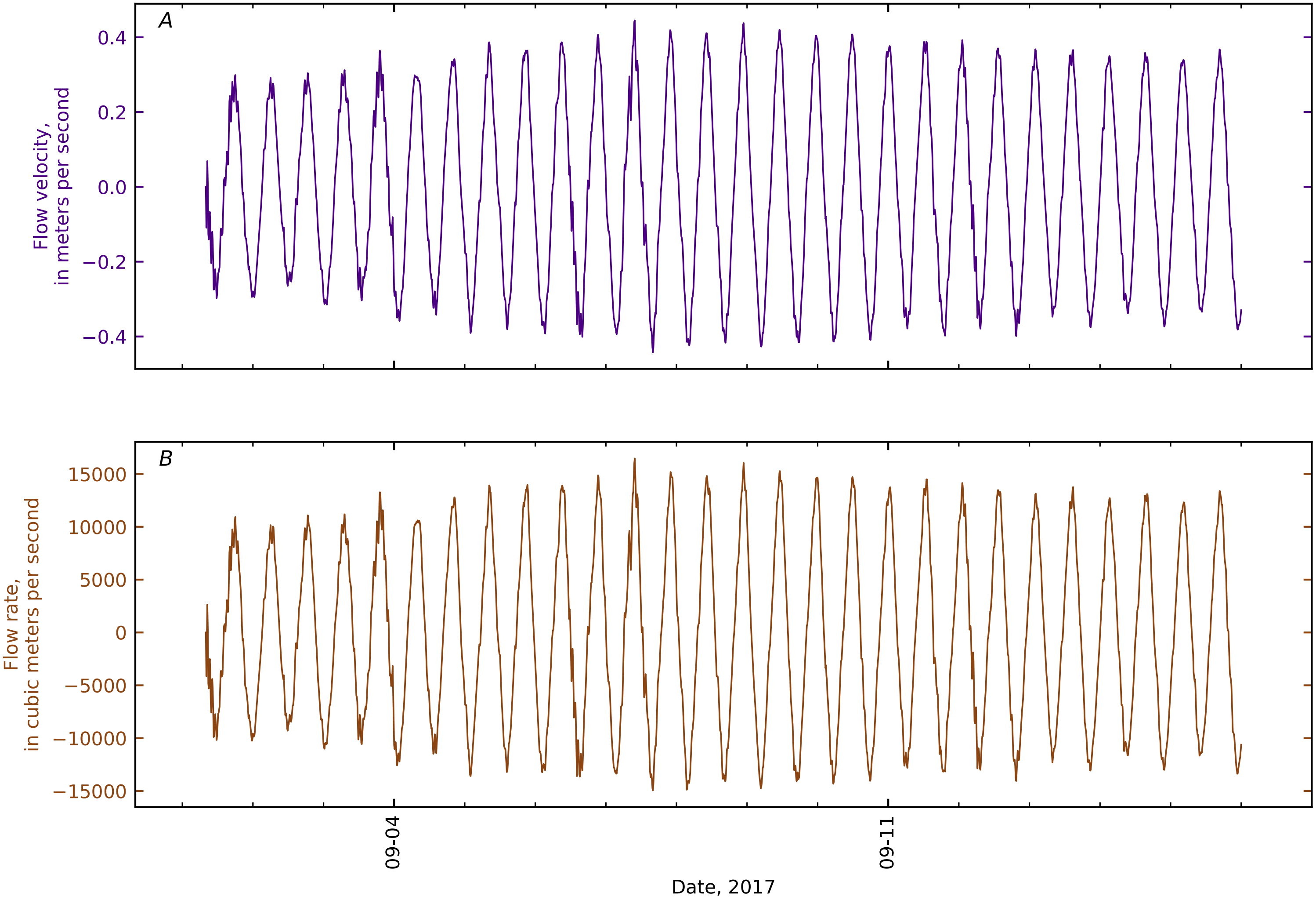

Figure B1-322. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 1, Penob Riv -KM1.5 d/s Ft Point.

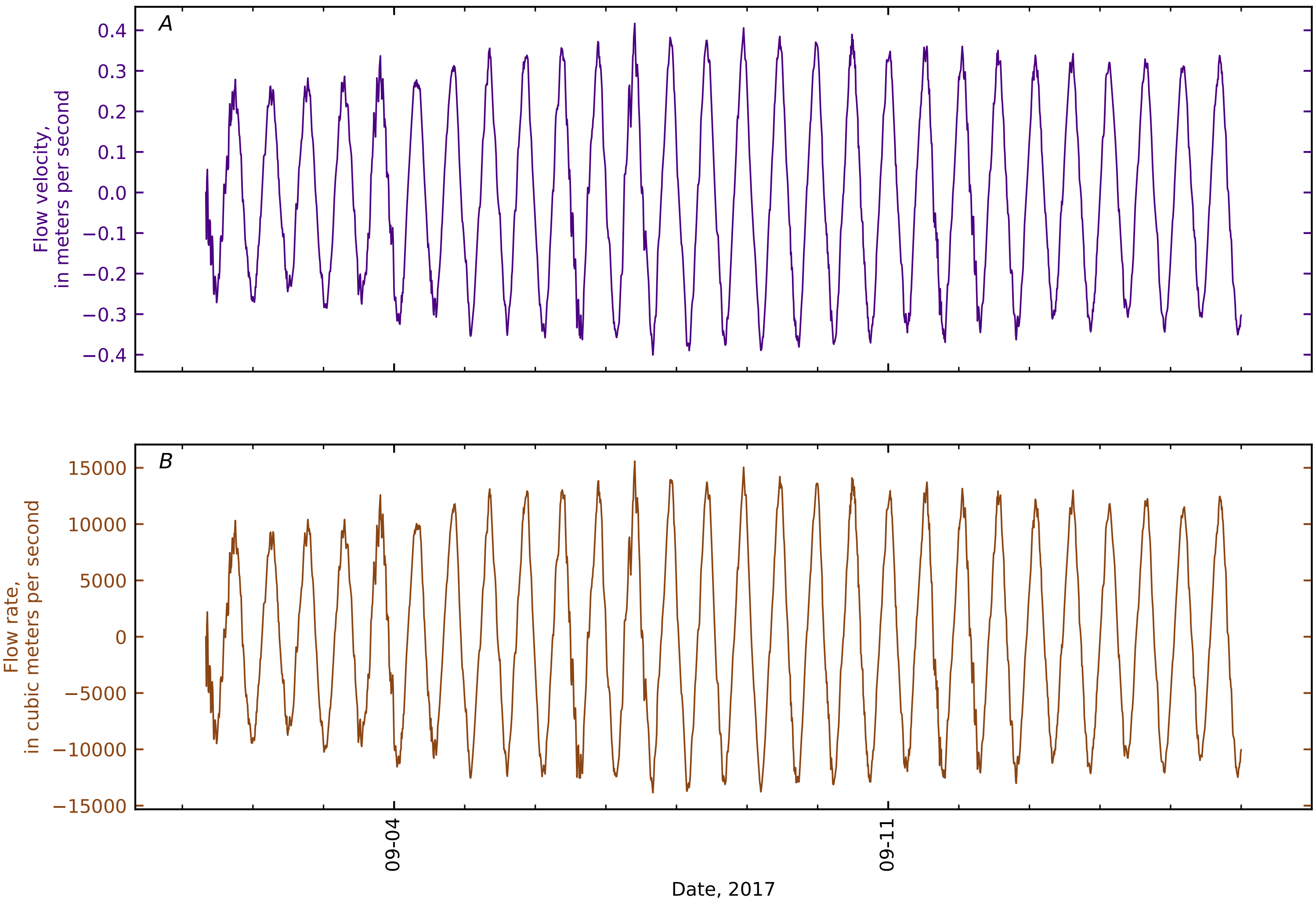

Figure B1-323. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 2, Penob Riv KM0 GS Trnsct5 Ft Point.

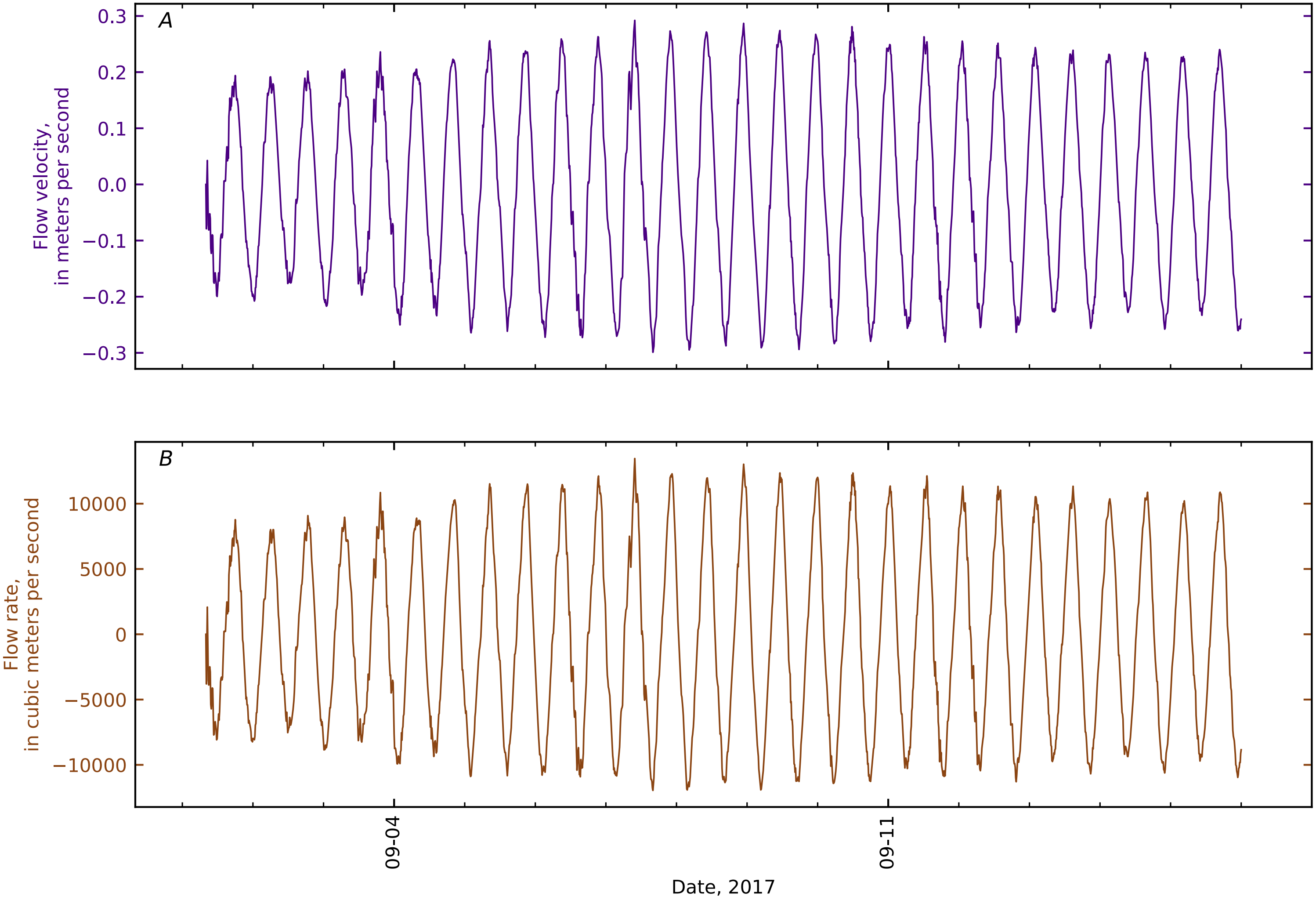

Figure B1-324. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 3, Penob Riv KM1.5 Ft Point Cove.

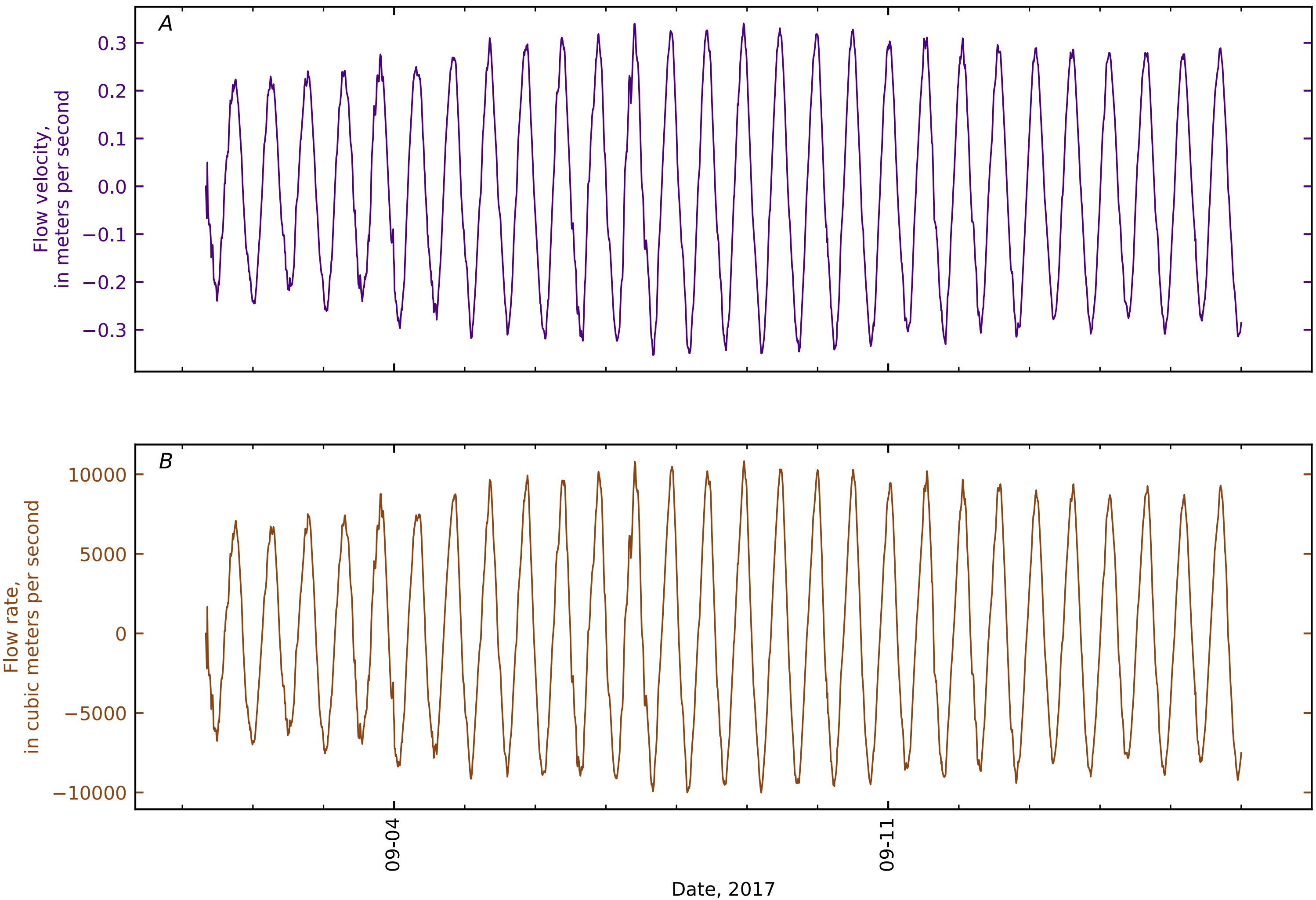

Figure B1-325. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 4, Penob Riv KM3 d/s conf East Ch.

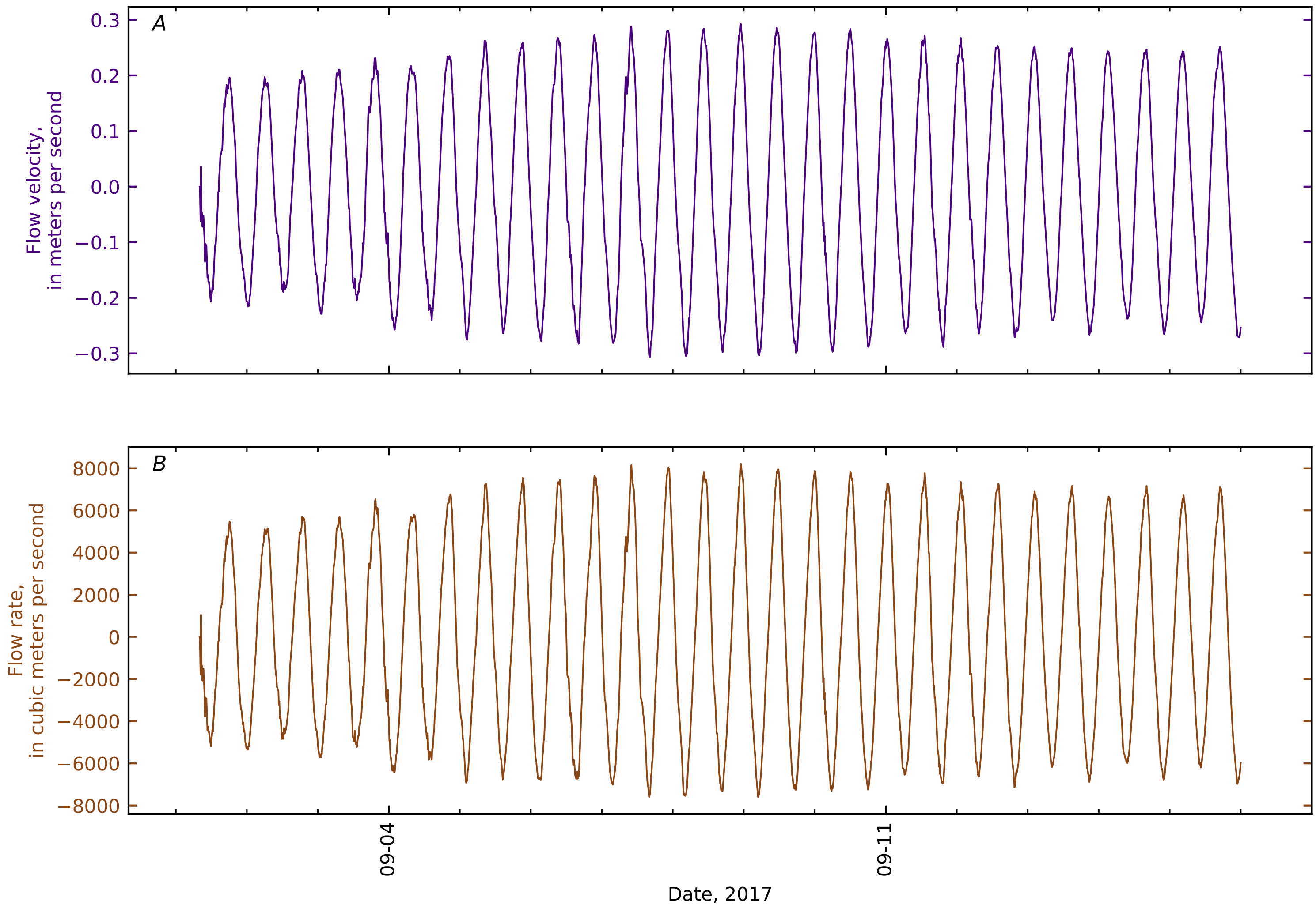

Figure B1-326. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 5, Penob Riv KM3.8 conf East Ch GS Trsct3 Gross Point.

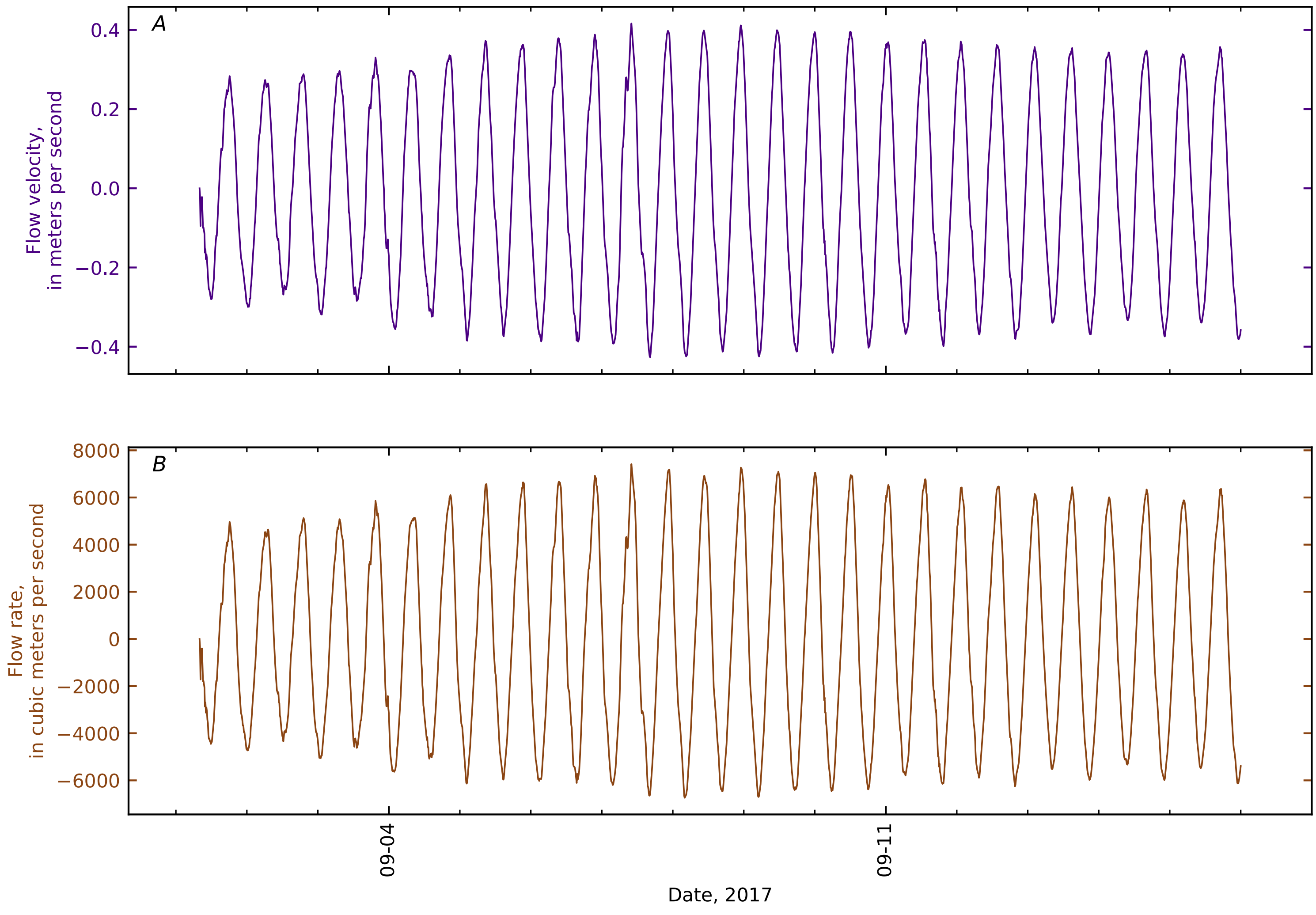

Figure B1-327. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 6, Penob Riv KM5.3 Sandy Point Odom Ledge.

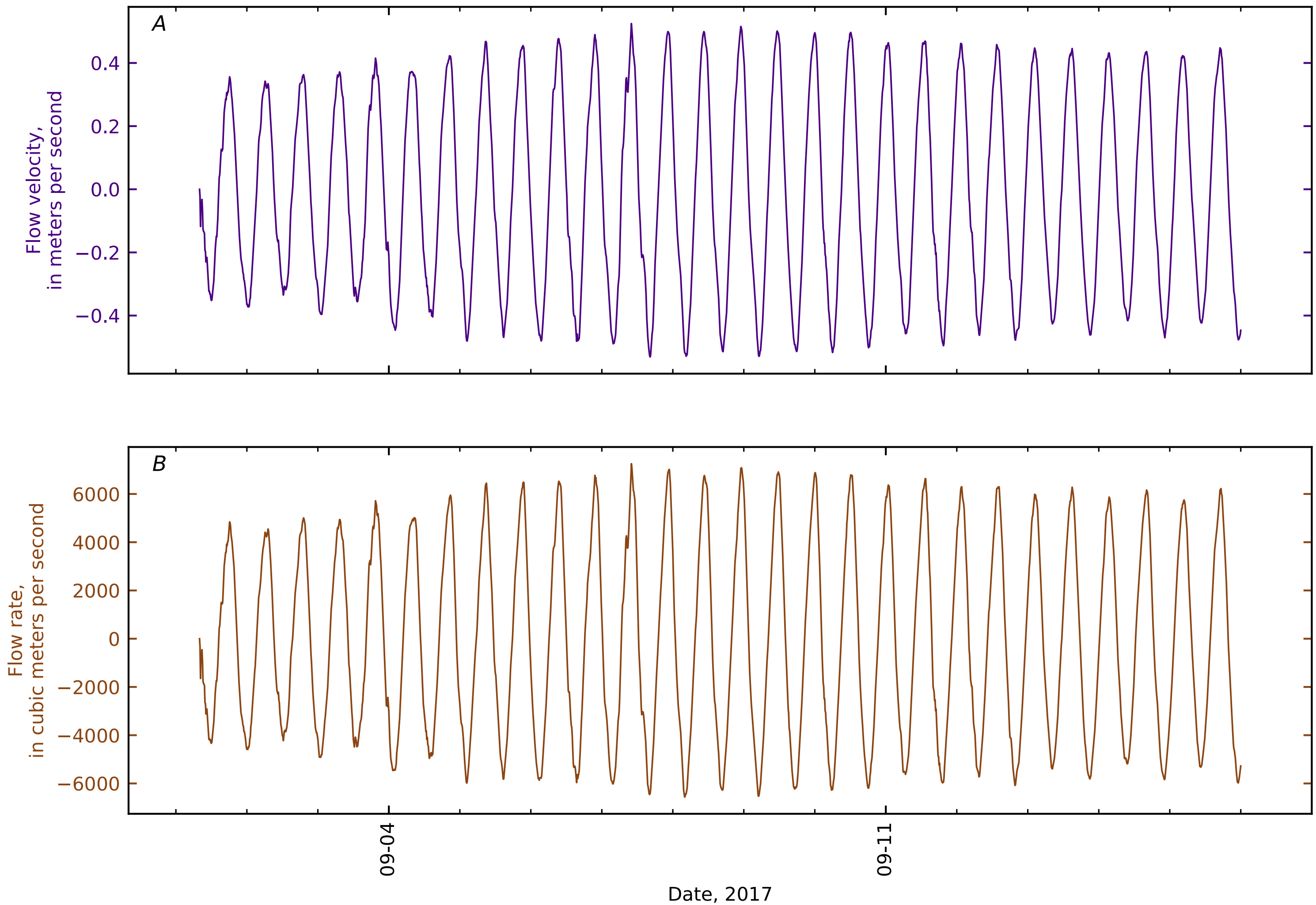

Figure B1-328. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 7, Penob Riv KM6 d/s narrows.

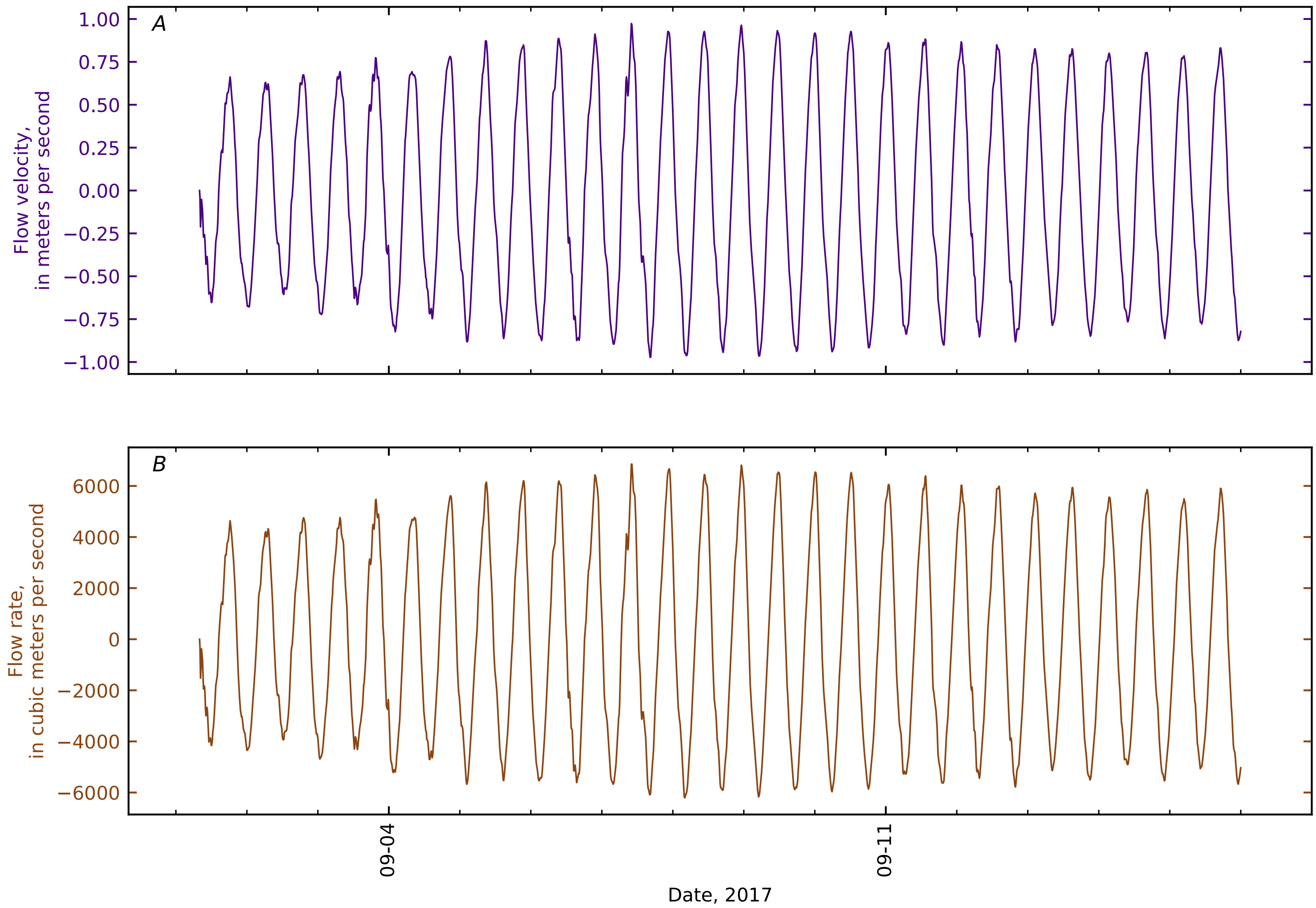

Figure B1-329. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 8, Penob Riv KM8 narrows.

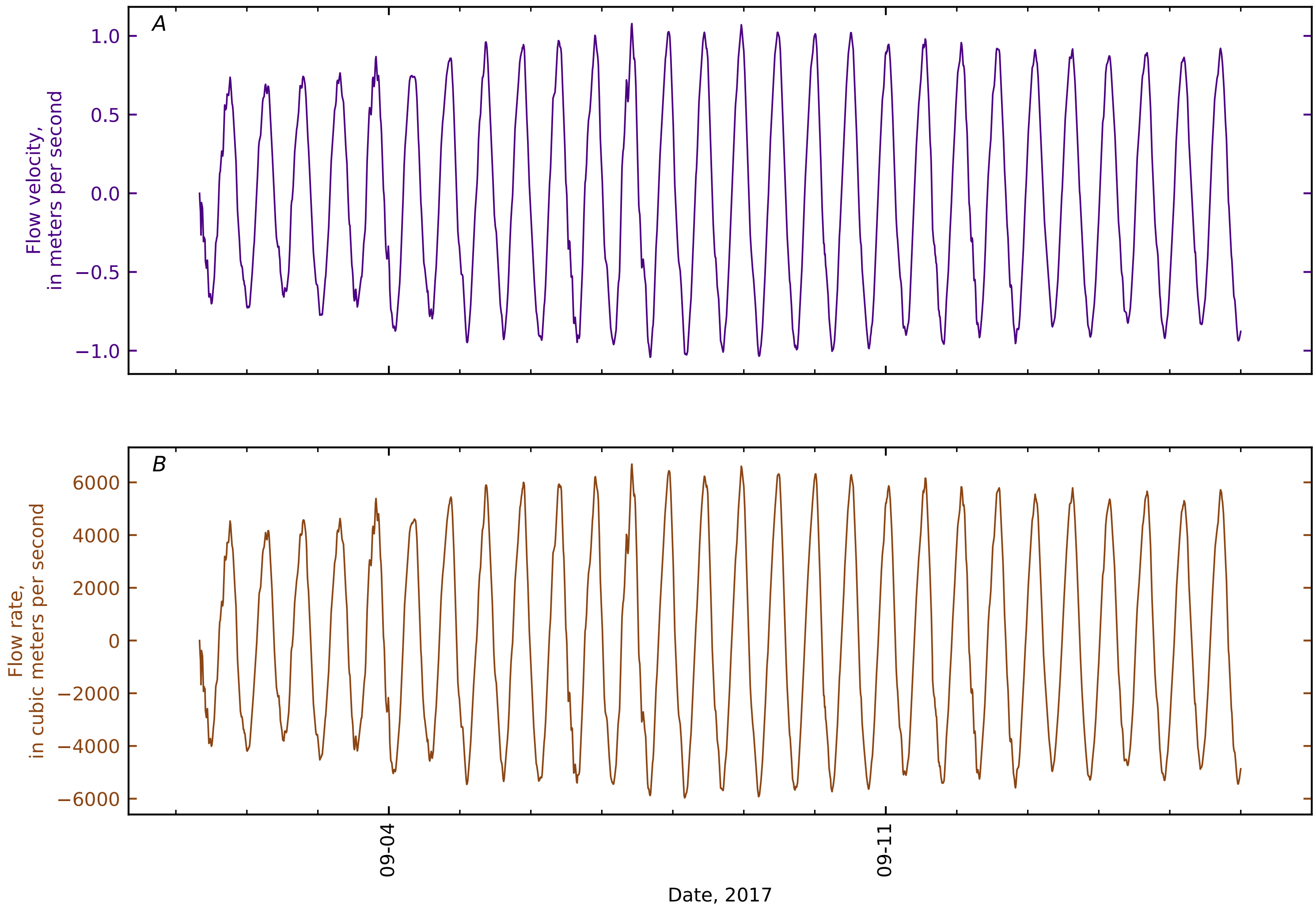

Figure B1-330. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 9, Penob Riv KM10 narrows d/s bridge.

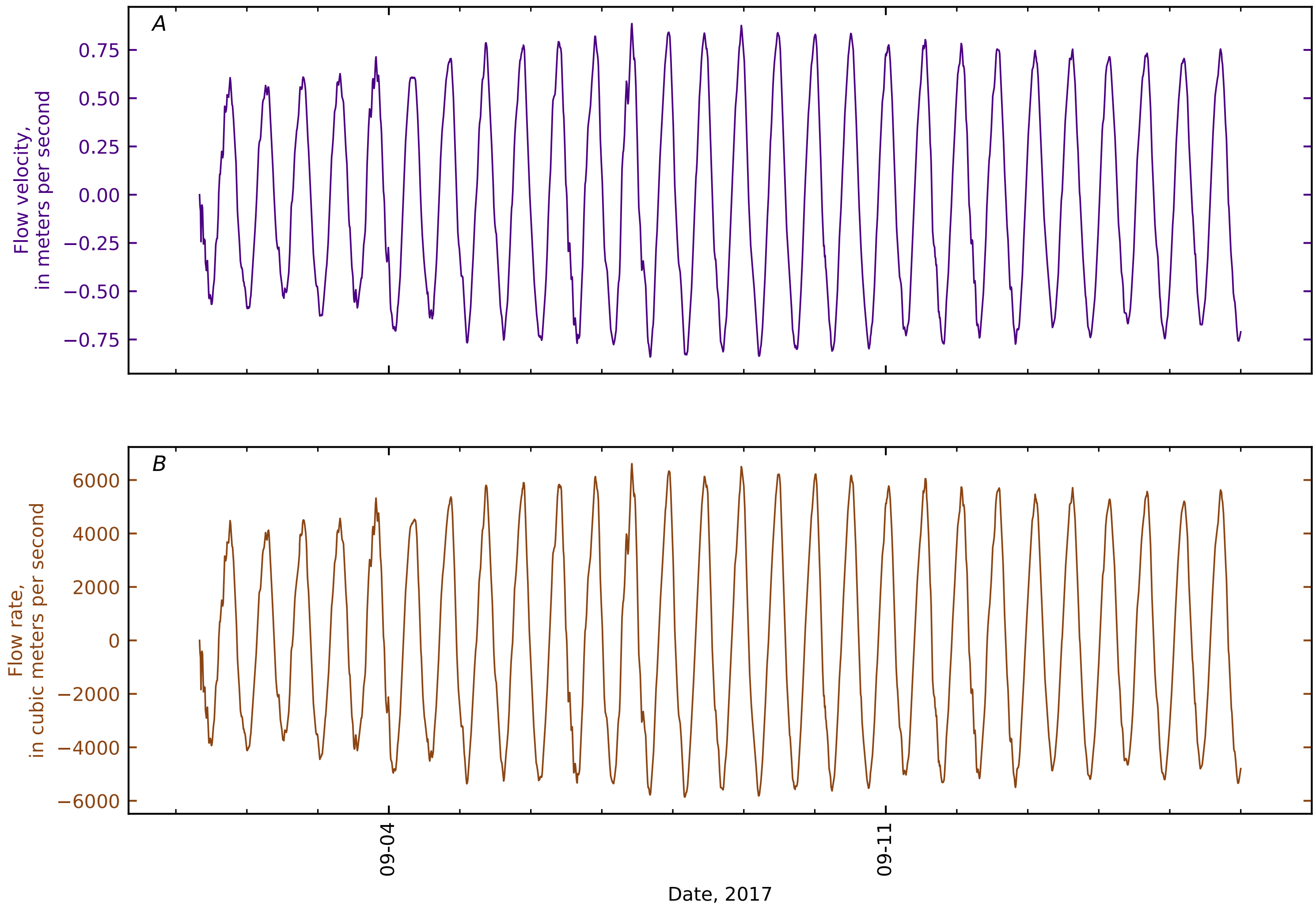

Figure B1-331. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 10, Penob Riv KM11 d/s East Ch split nr Bucksport.

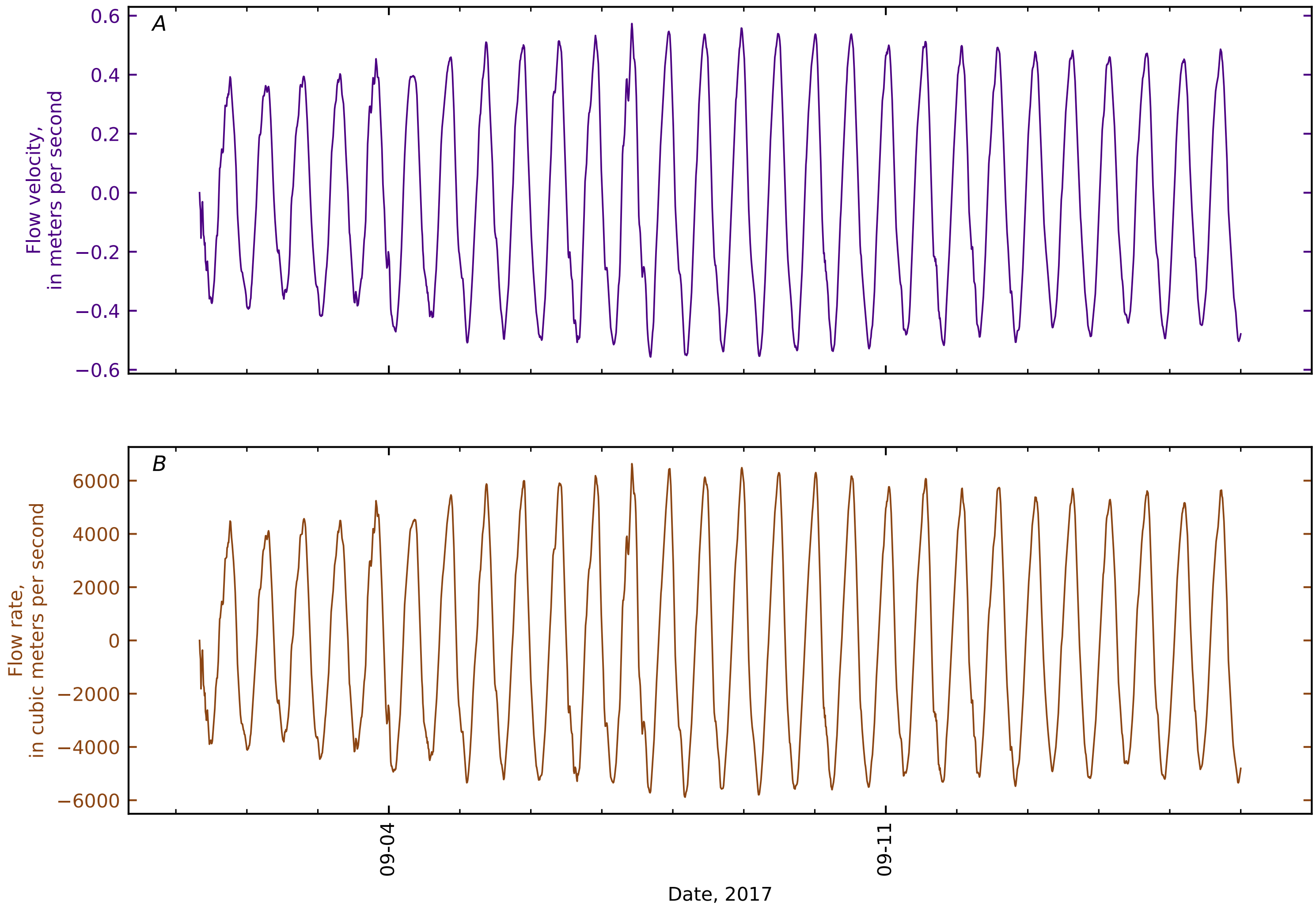

Figure B1-332. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 11, Penob Riv KM11.4 East Ch split nr Bucksport.

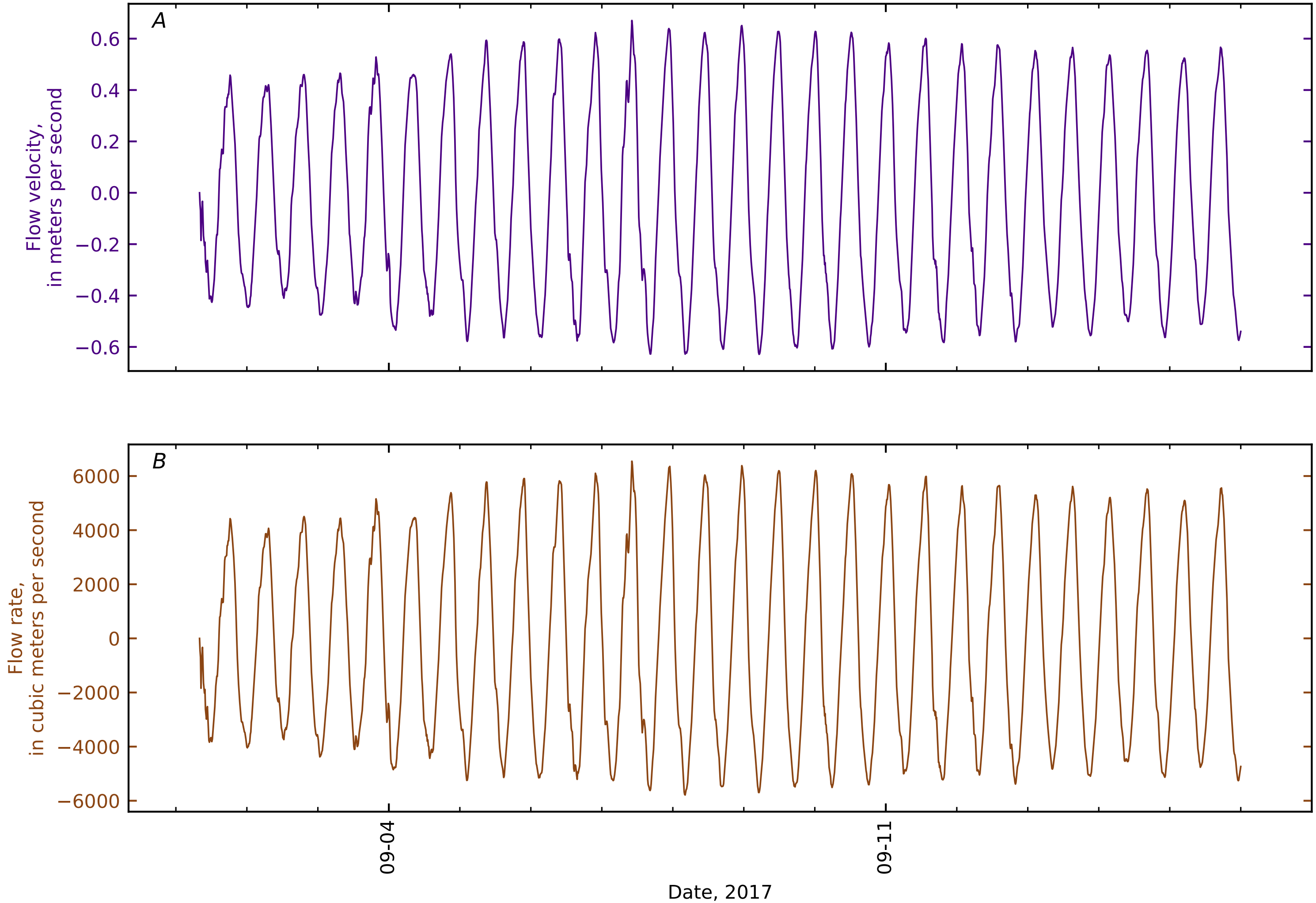

Figure B1-333. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 12, Penob Riv KM12 Bucksport.

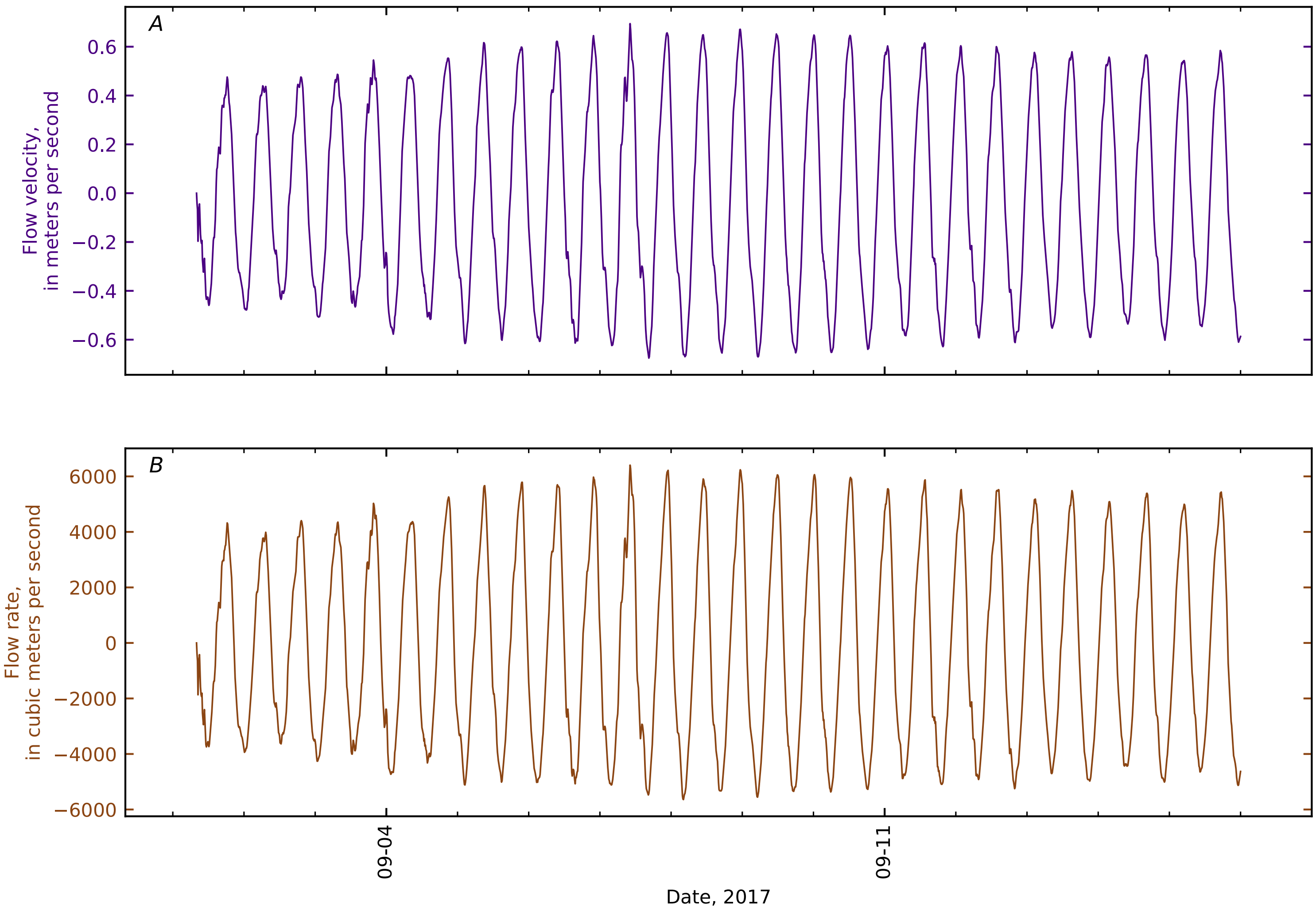

Figure B1-334. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 13,
Penob Riv KM13 dropoff u/s Bucksport.

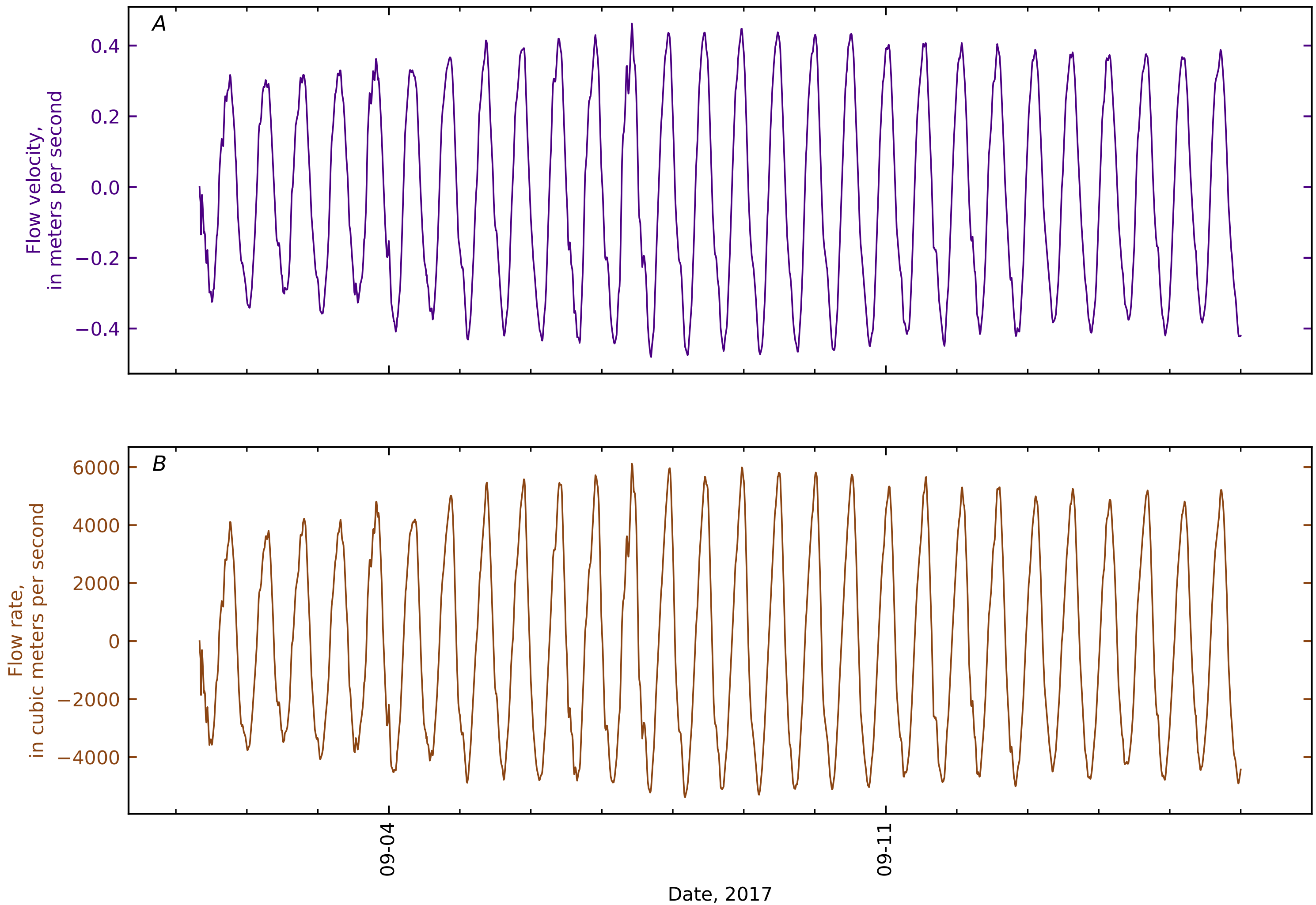

Figure B1-335. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 14, Penob Riv KM14 u/s dropoff.

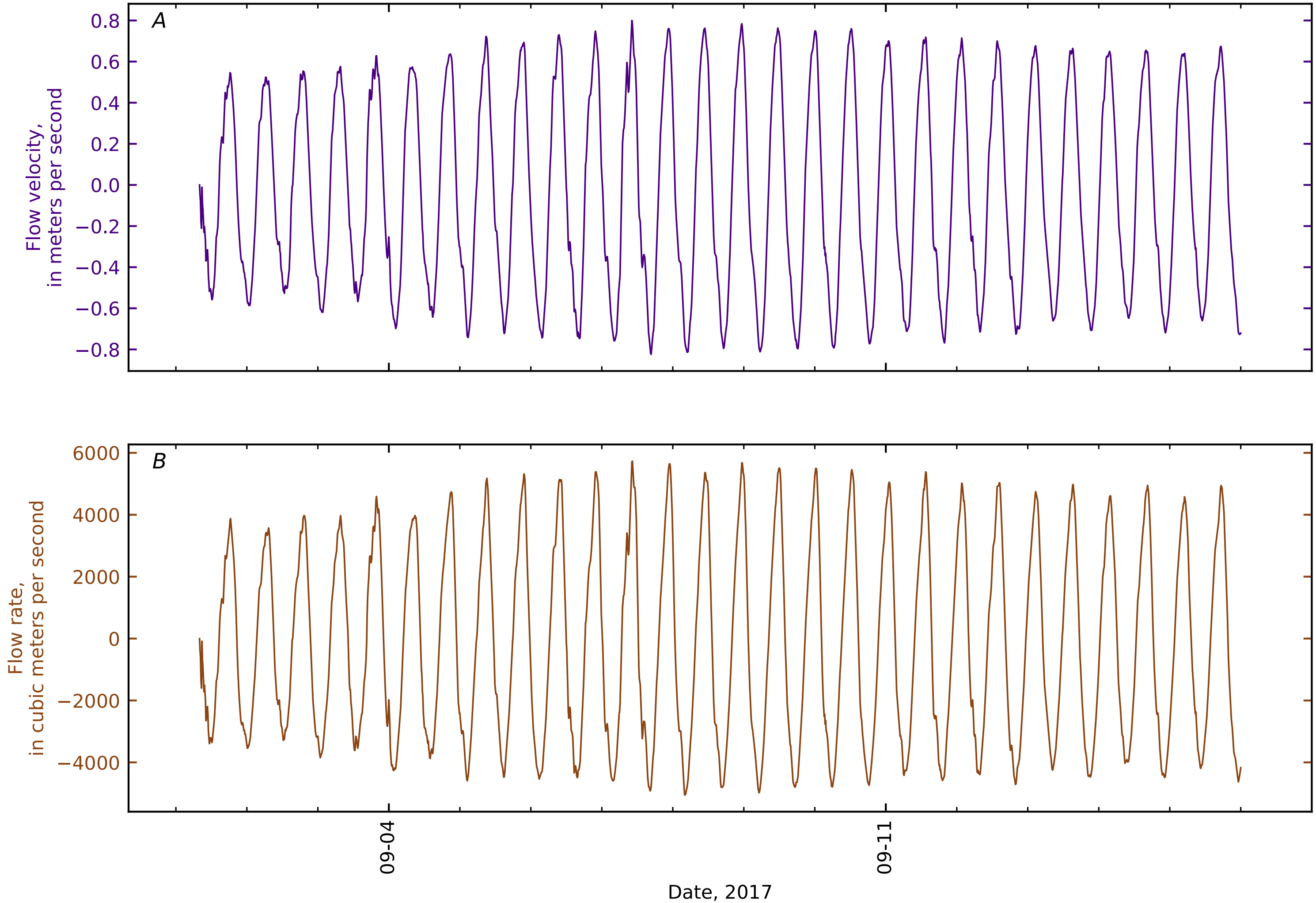

Figure B1-336. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 15, Penob Riv KM15 d/s conf Mendall Marsh.

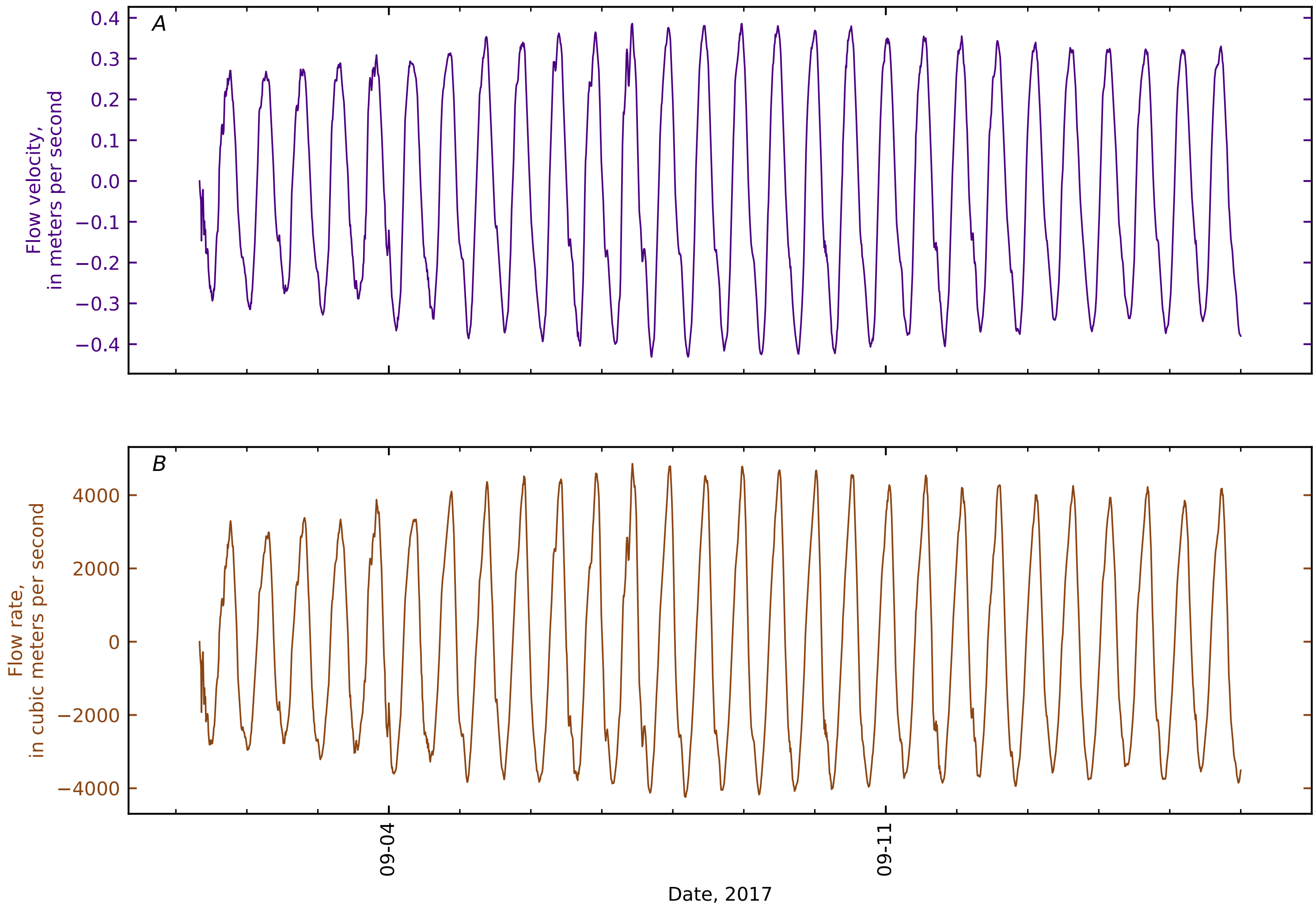

Figure B1-337. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 16, Penob Riv KM17 Frankfort Flats d/s Mendall Marsh.

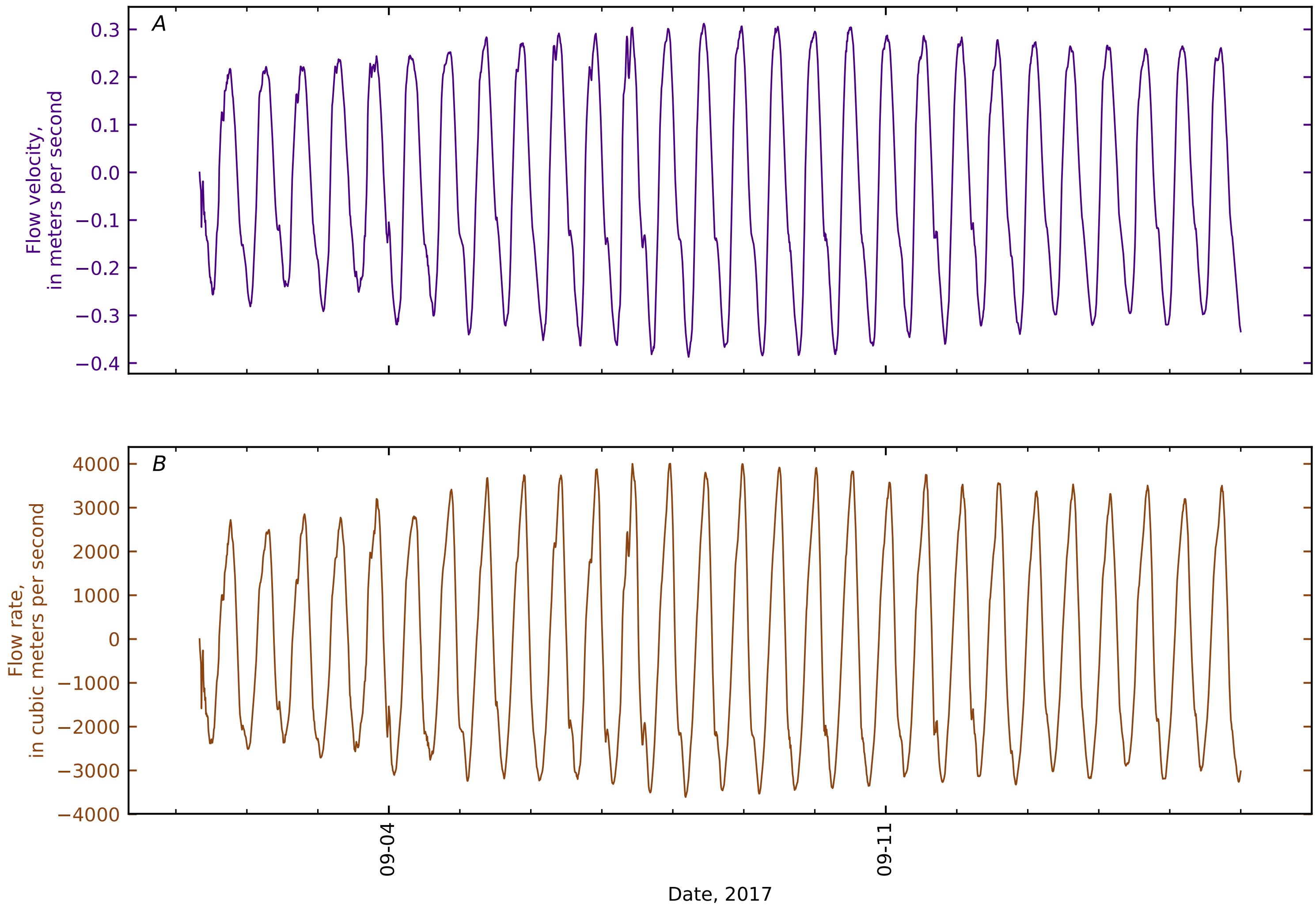

Figure B1-338. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 17, Penob Riv KM18 Frankfort Flats u/s Mendall Marsh GS Trnsct1.

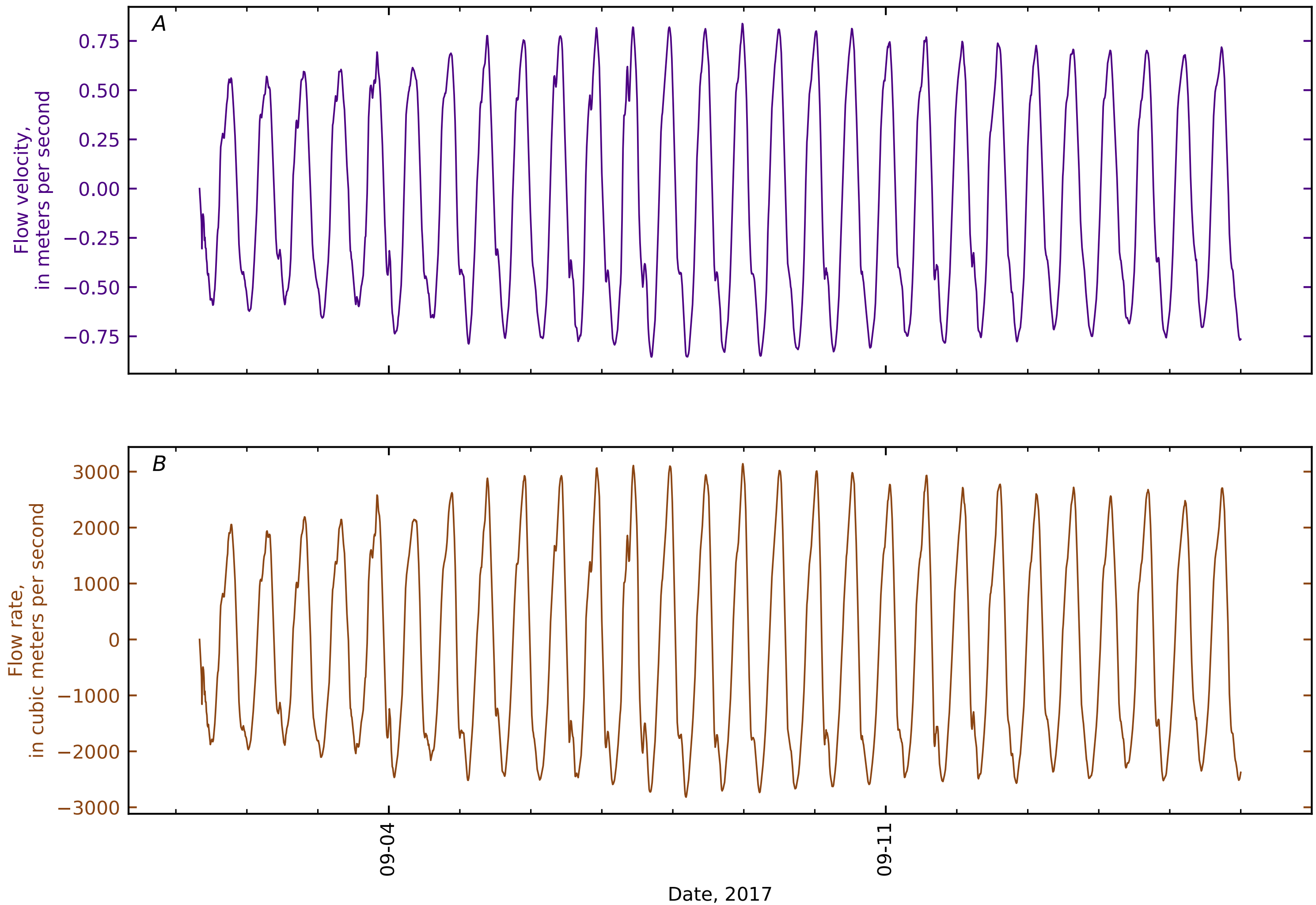

Figure B1-339. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 18, Penob Riv KM21.2 GS 443810068502201 Winterport.

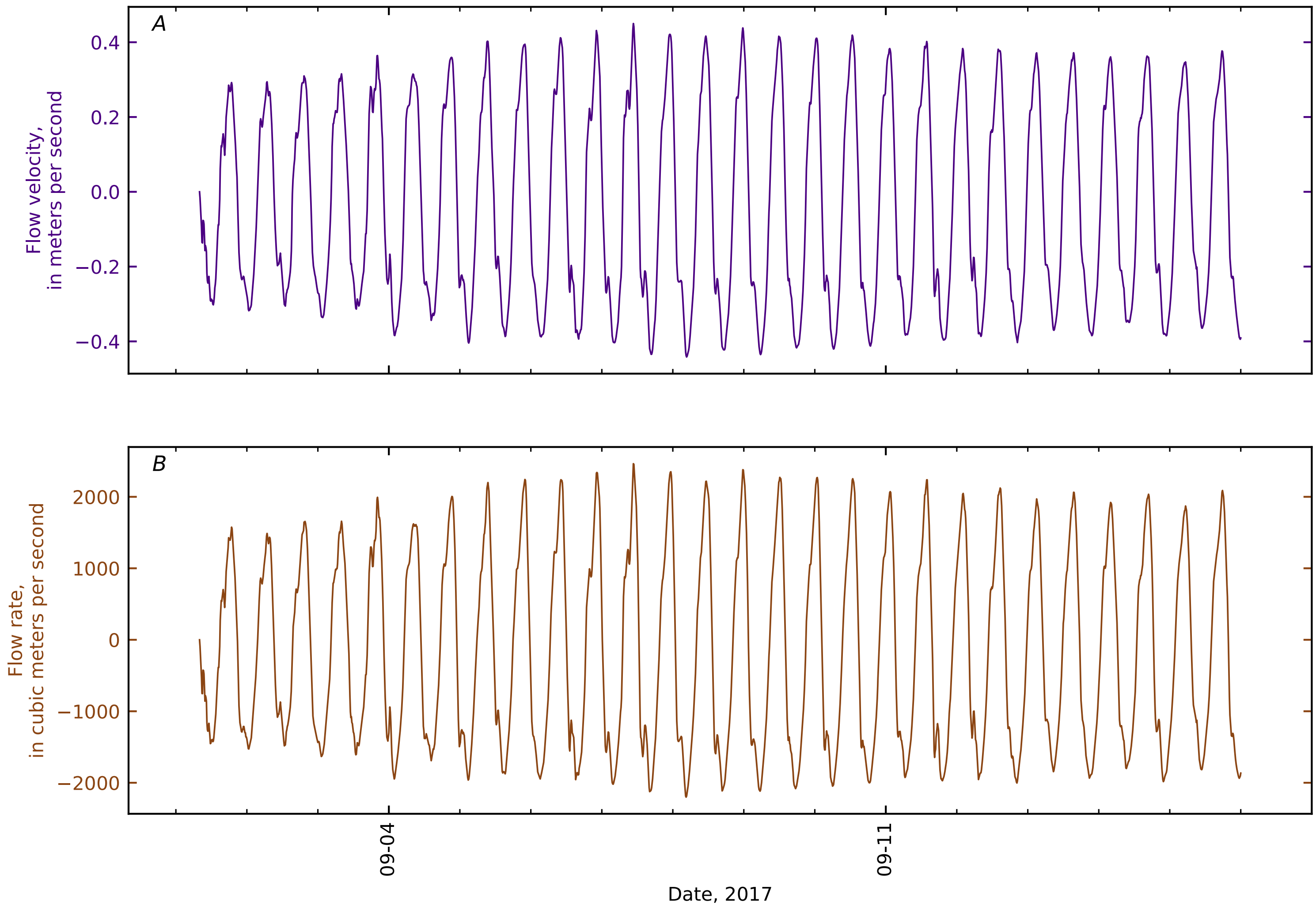

Figure B1-340. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 19, Penob Riv KM25.2 Oak Pt narrows d/s bend.

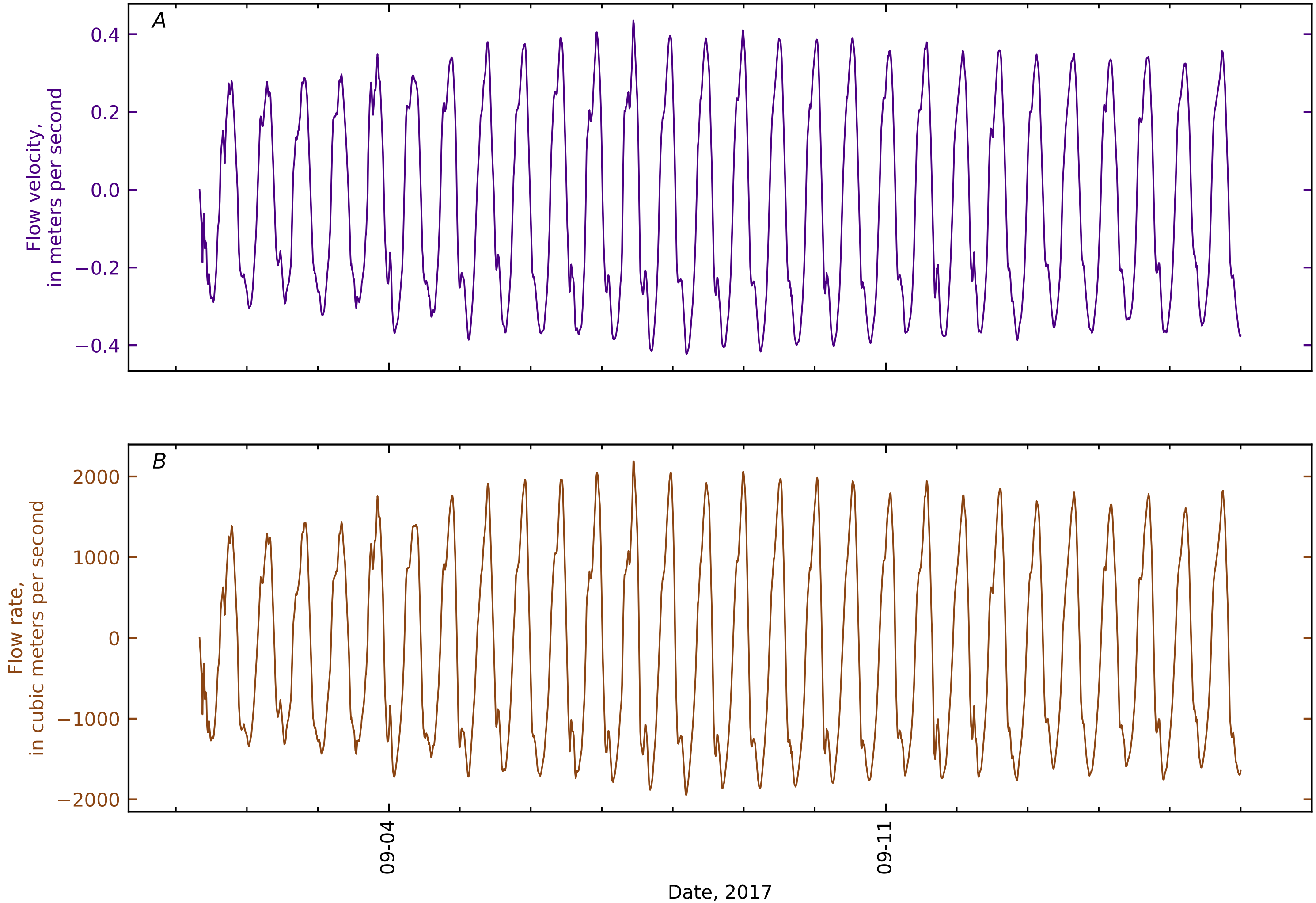

Figure B1-341. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 20, Penob Riv KM27.2 South Orrington.

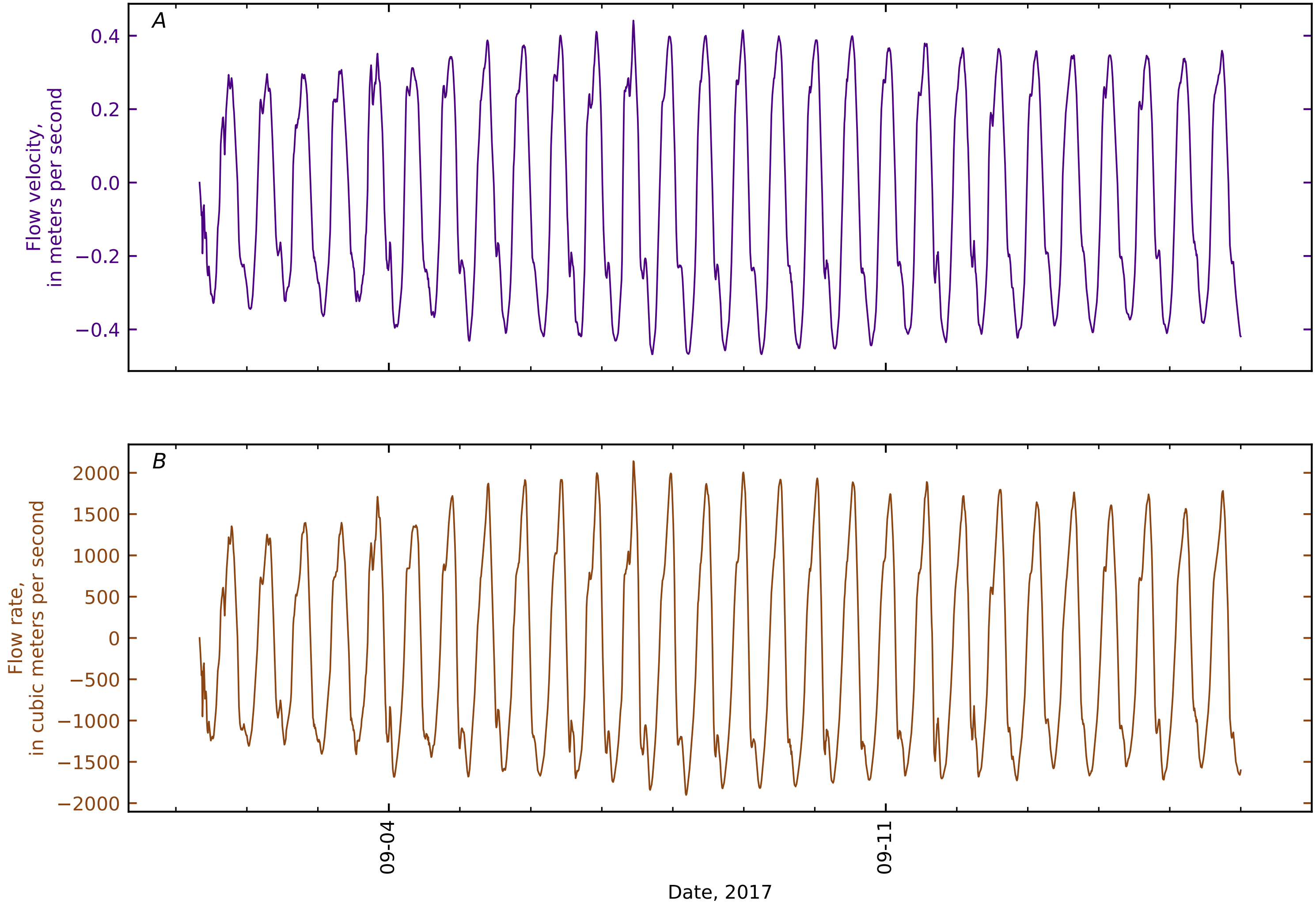

Figure B1-342. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 21, Penob Riv KM27.6 South Orrington u/s bend.

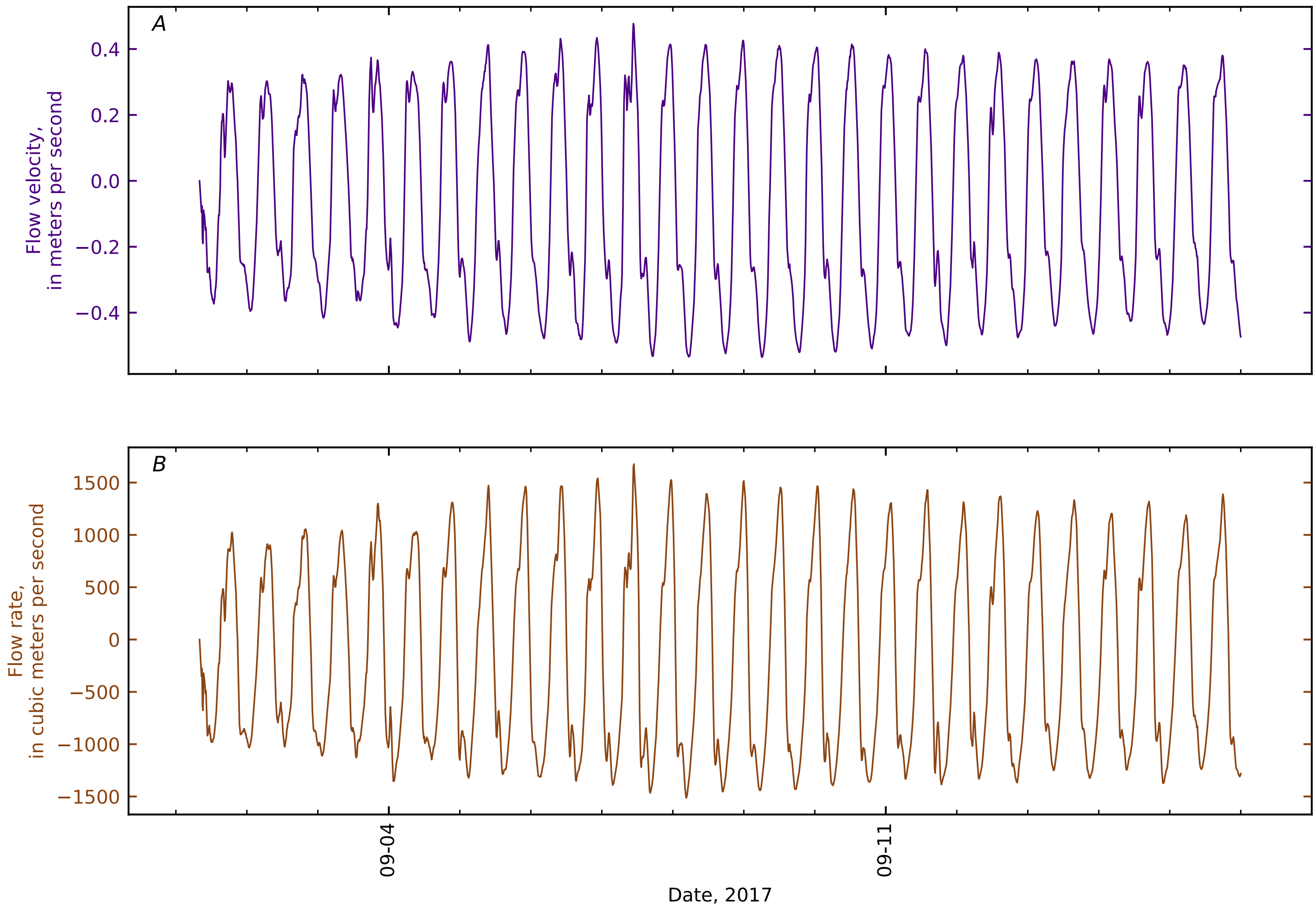

Figure B1-343. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 22, Penob Riv KM30 nr Bald Hill d/s bend.

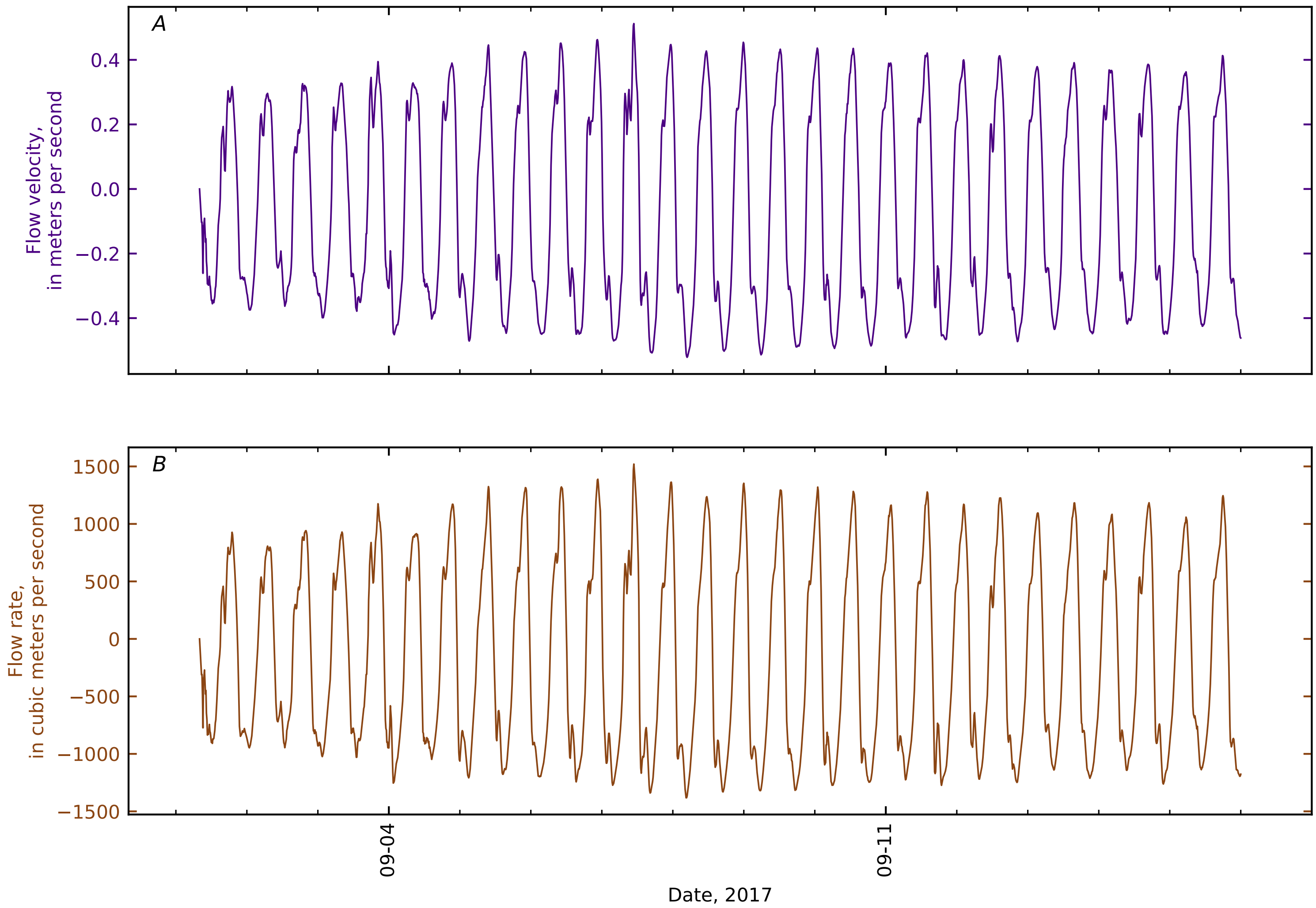

Figure B1-344. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 23, Penob Riv KM31 narrows.

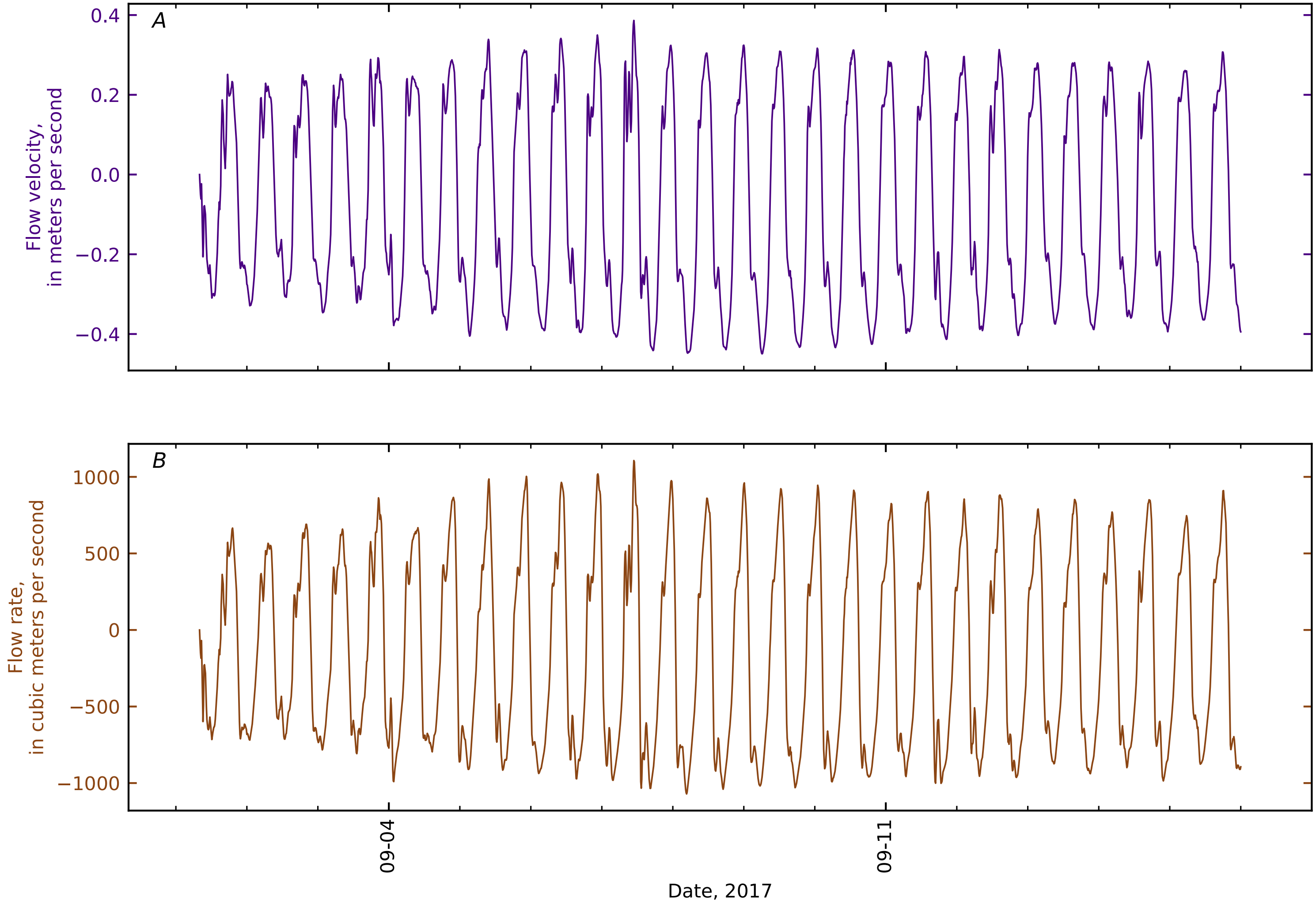

Figure B1-345. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 24, Penob Riv KM34 d/s Orrington.

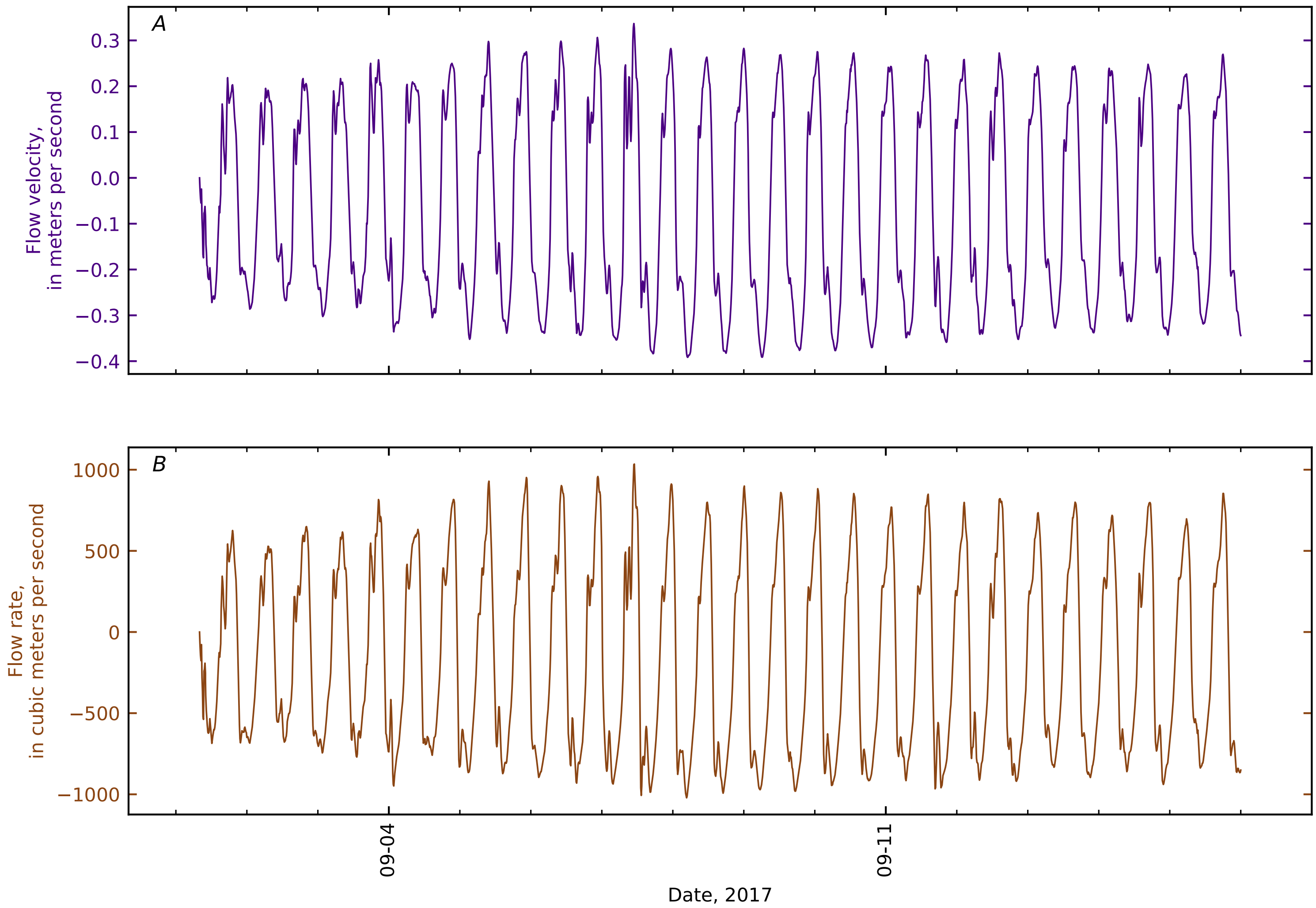

Figure B1-346. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 25, Penob Riv KM34.6 Southern Cove Orrington.

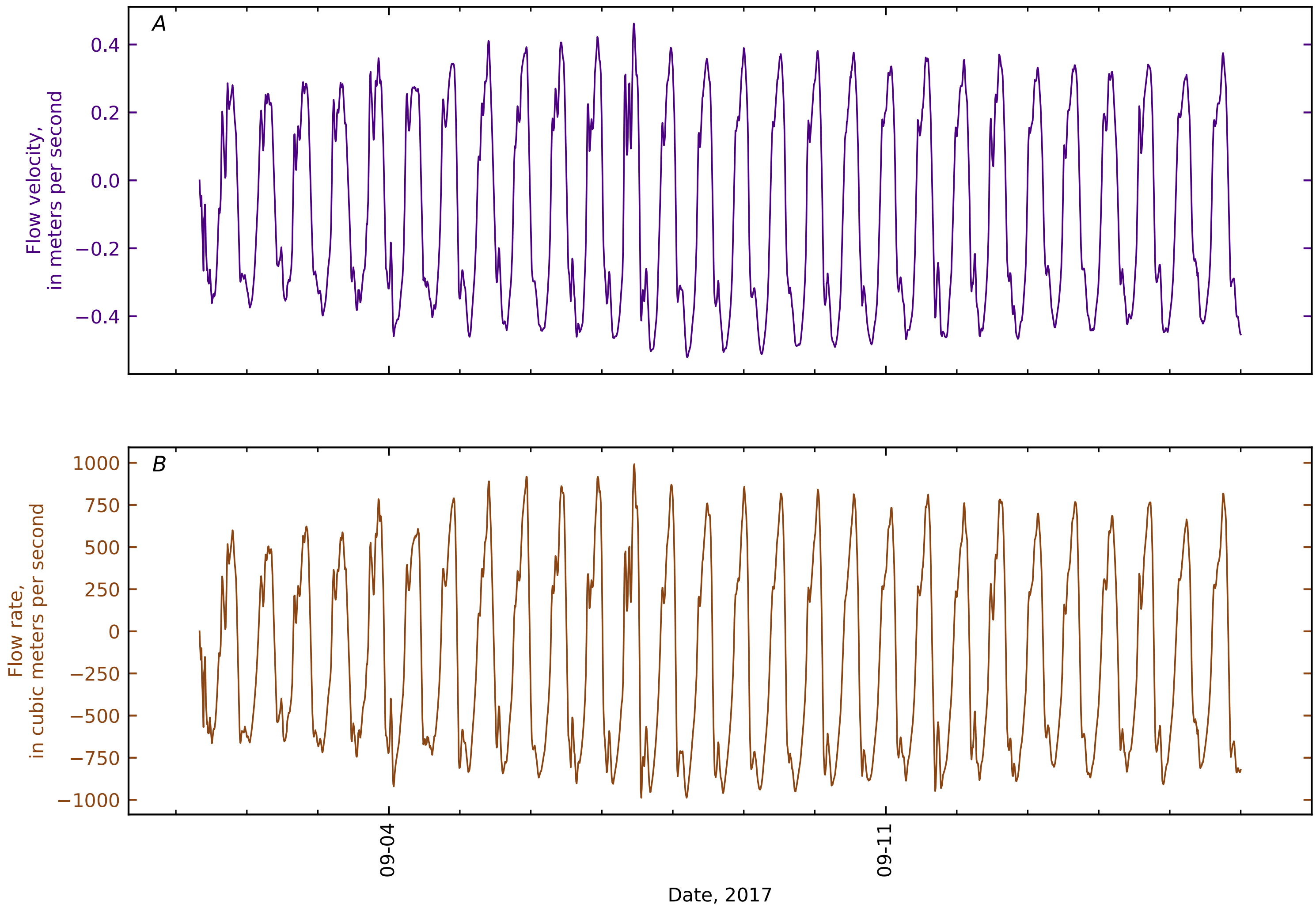

Figure B1-347. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 26, Penob Riv KM35 Orrington d/s Souadabscook Str Hampden.

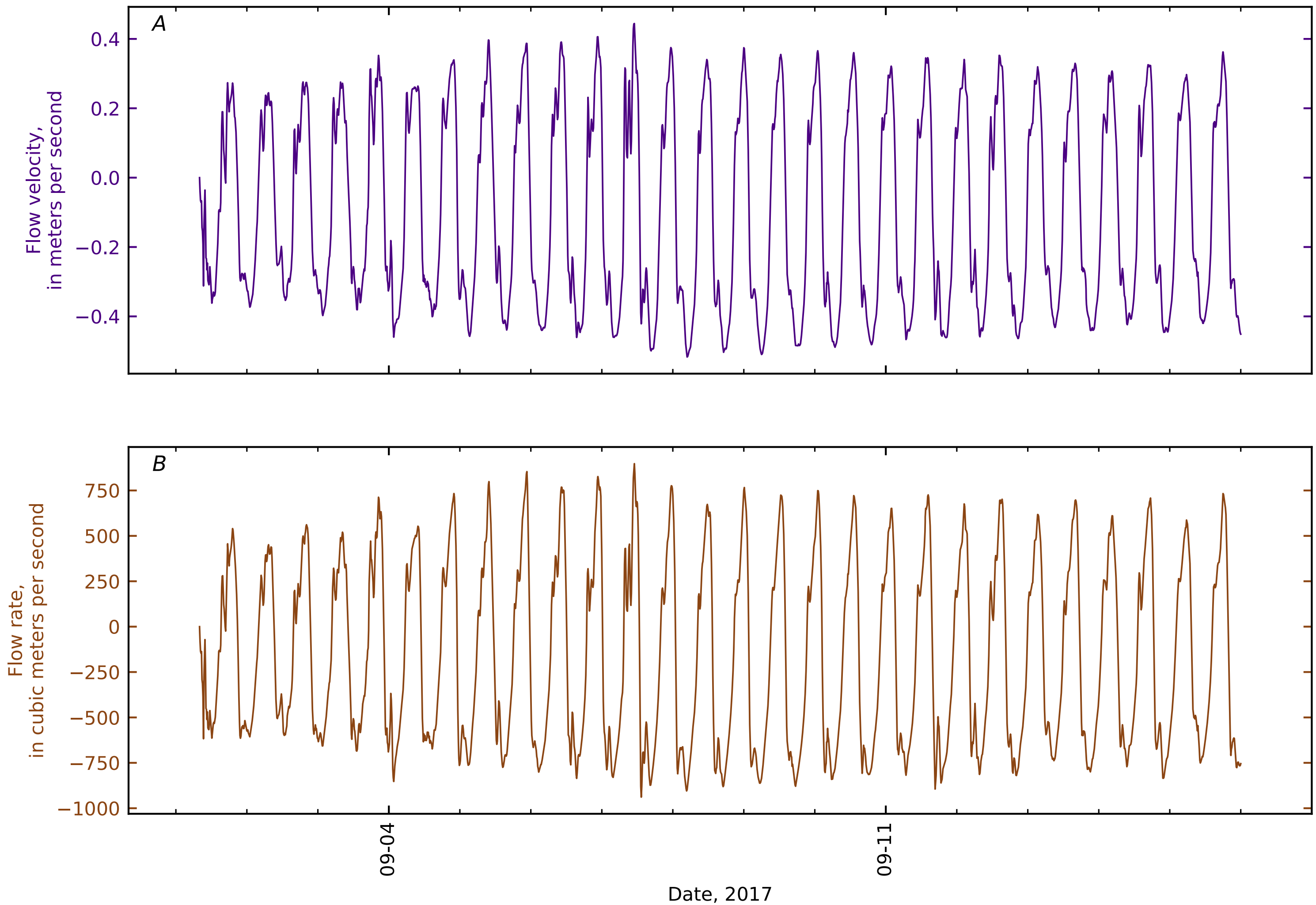

Figure B1-348. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 27, Penob Riv KM36 u/s Souadabscook Str Hampden.

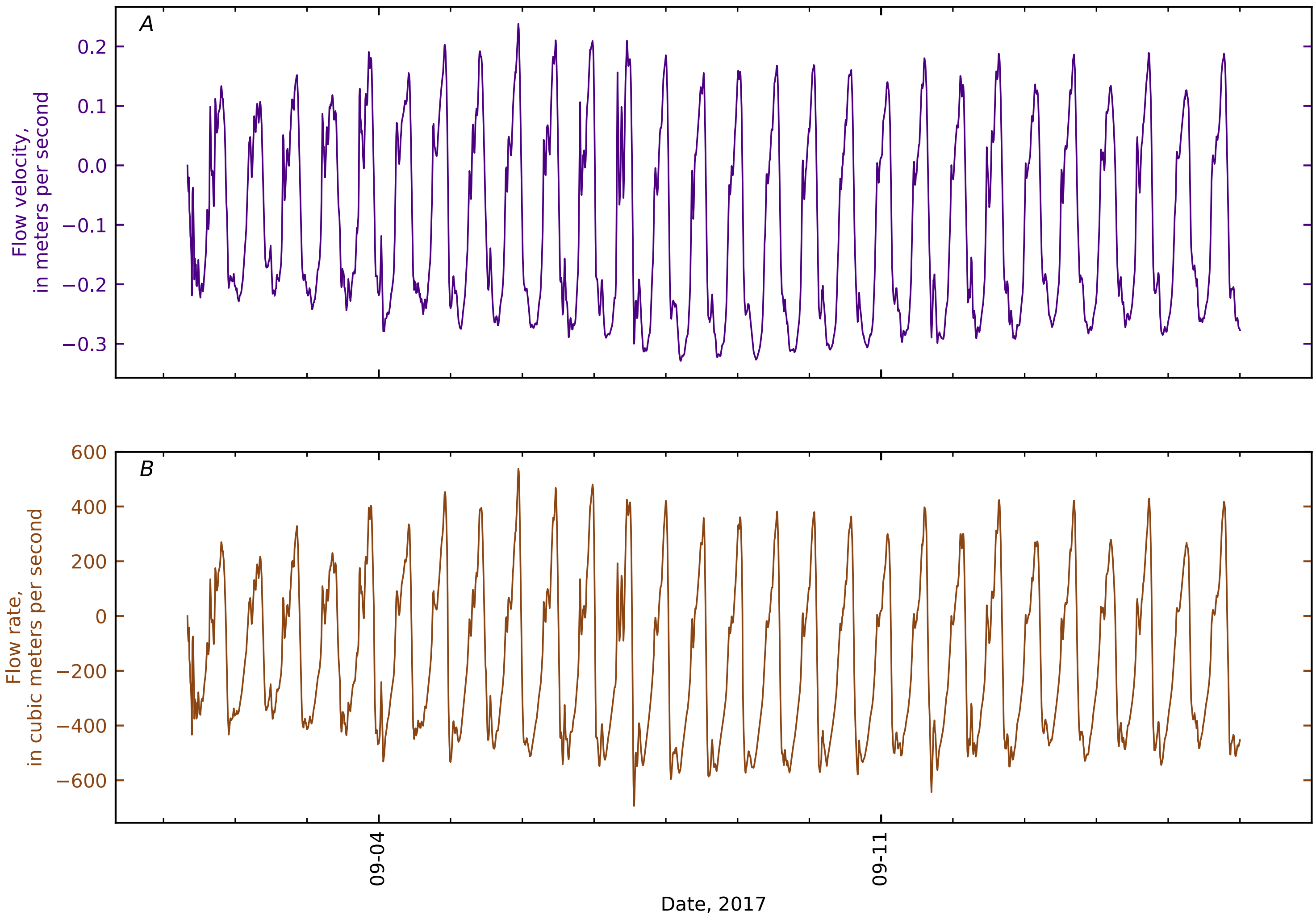

Figure B1-349. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 28, Penob Riv KM40 South Brewer.

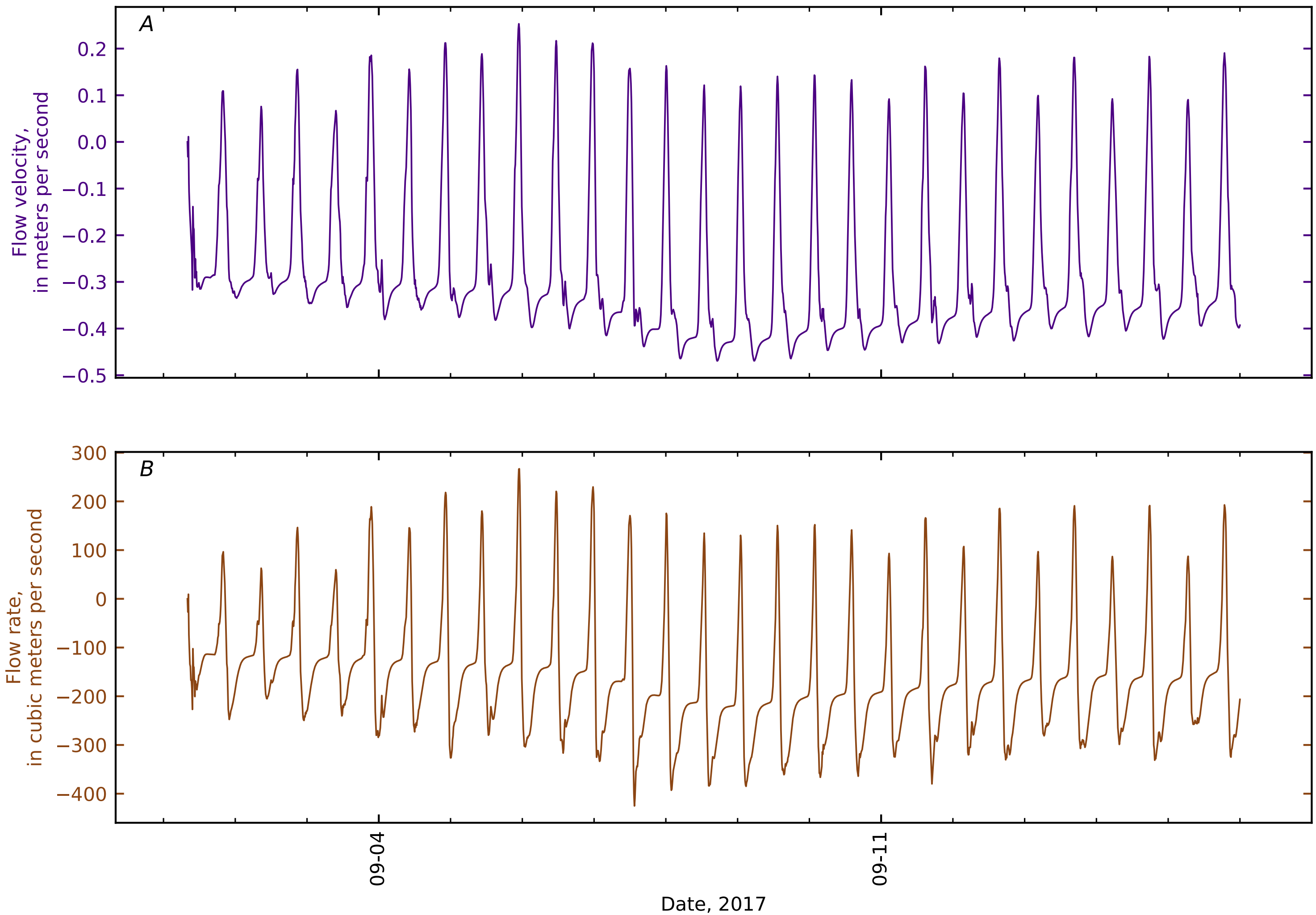

Figure B1-350. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 29, Penob Riv KM43 u/s Kenduskeag Str Bangor.

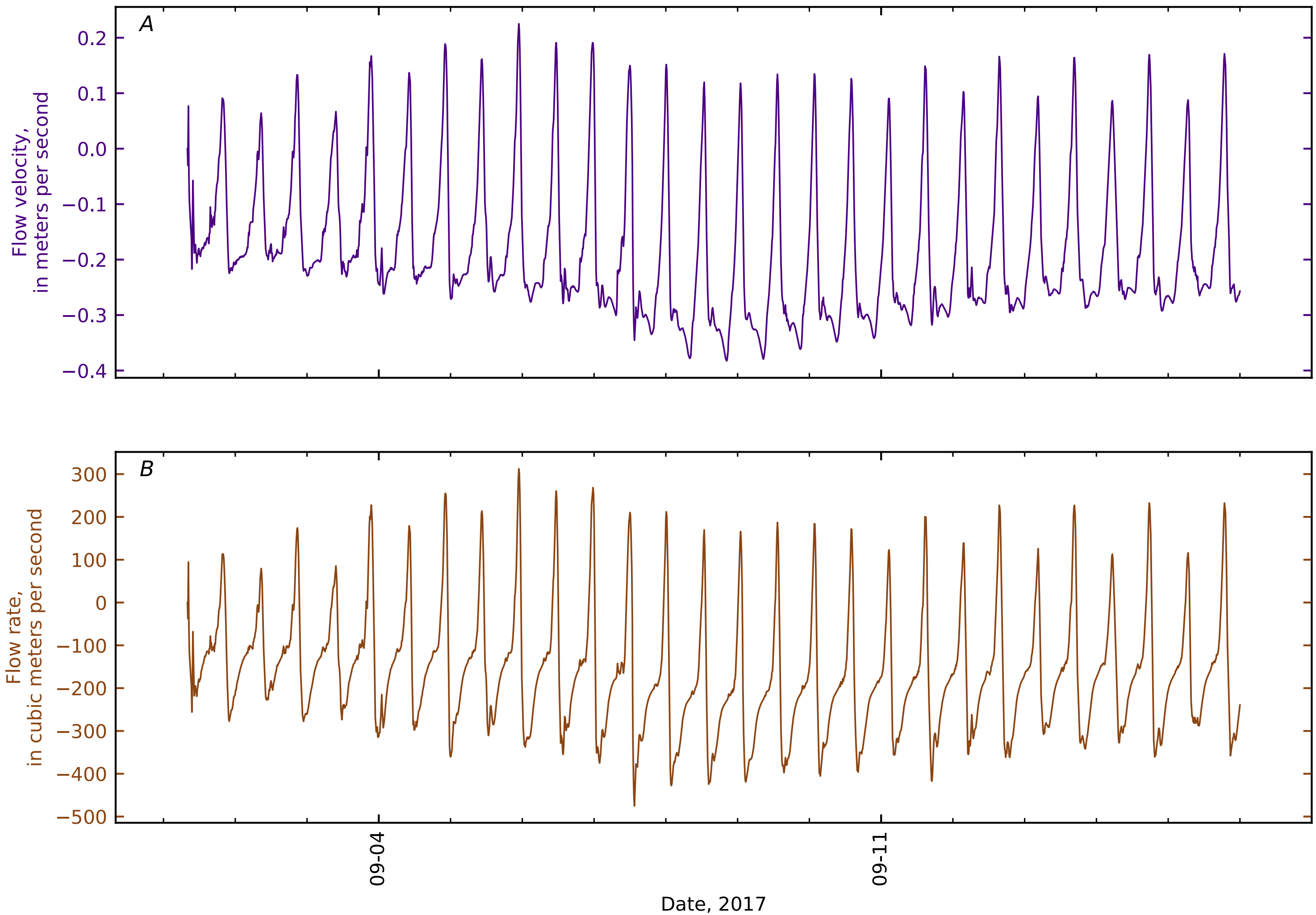

Figure B1-351. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 30, Penob Riv KM43.2 GS 01037050 at Bangor d/s Kenduskeag Str.

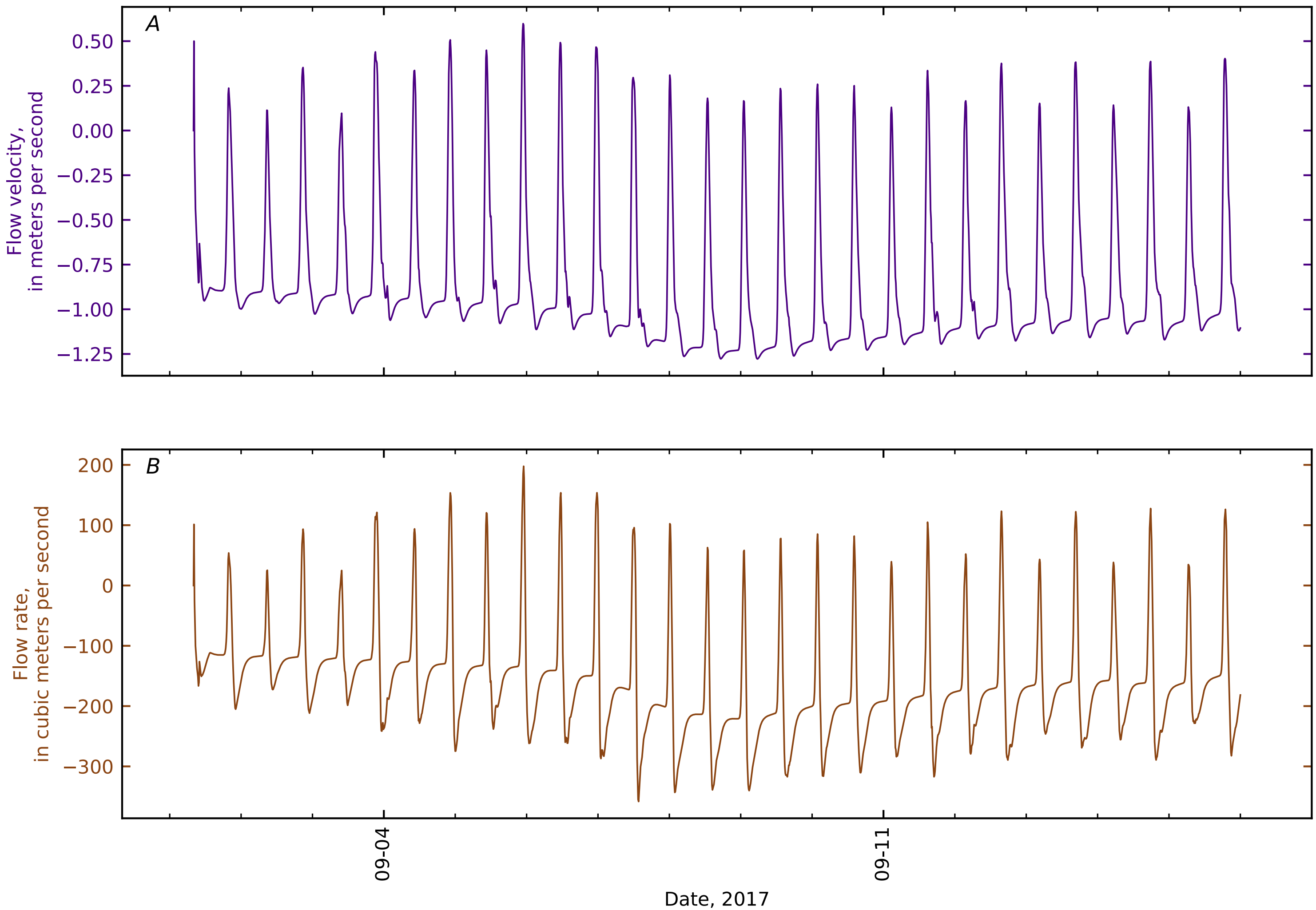

Figure B1-352. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 31, Penob Riv KM45.3 Bangor.

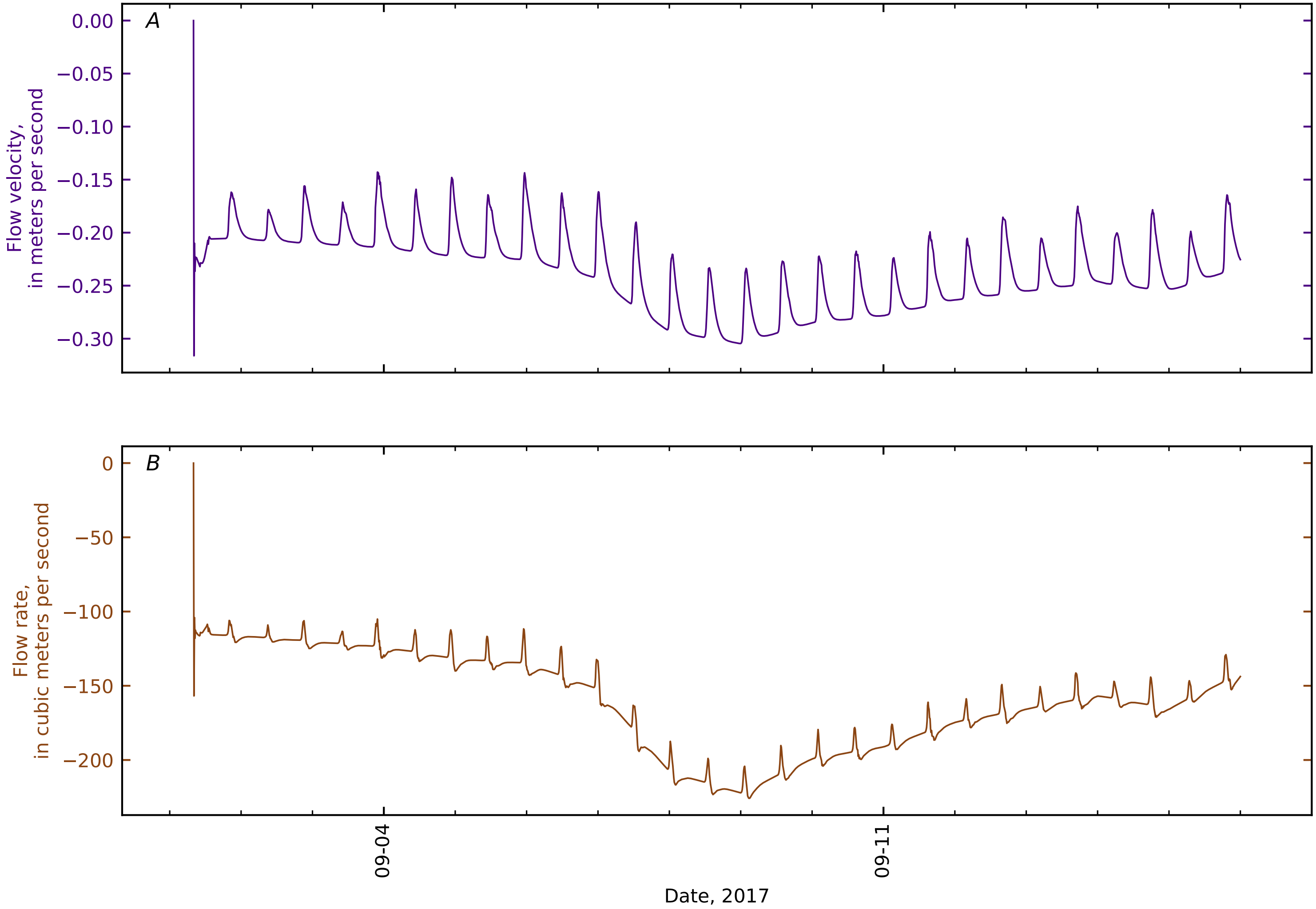

Figure B1-353. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 32, Penob Riv KM50 Eddington.

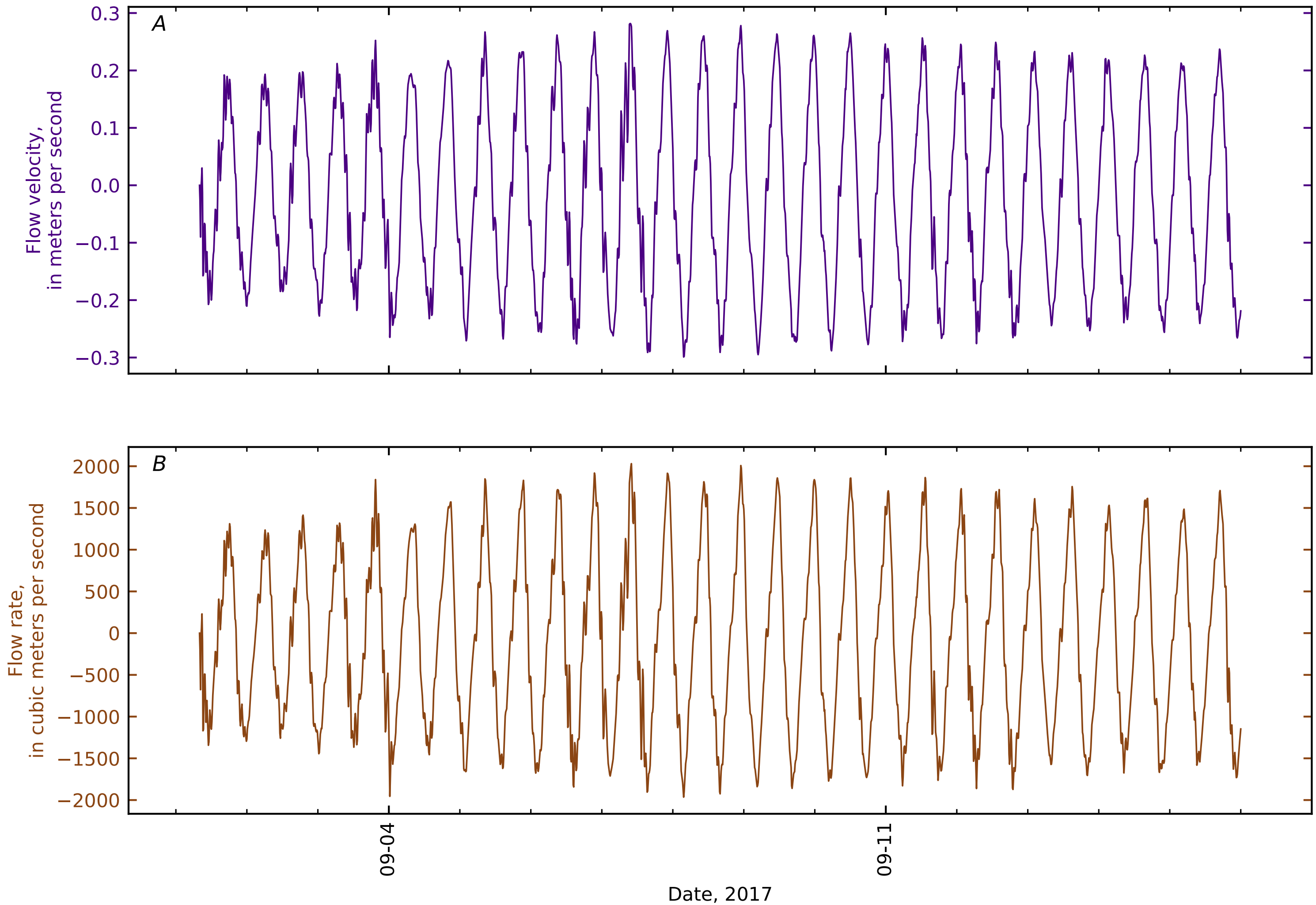

Figure B1-354. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 33, East Ch KM0 at Verona jct at GS Trnsct4.

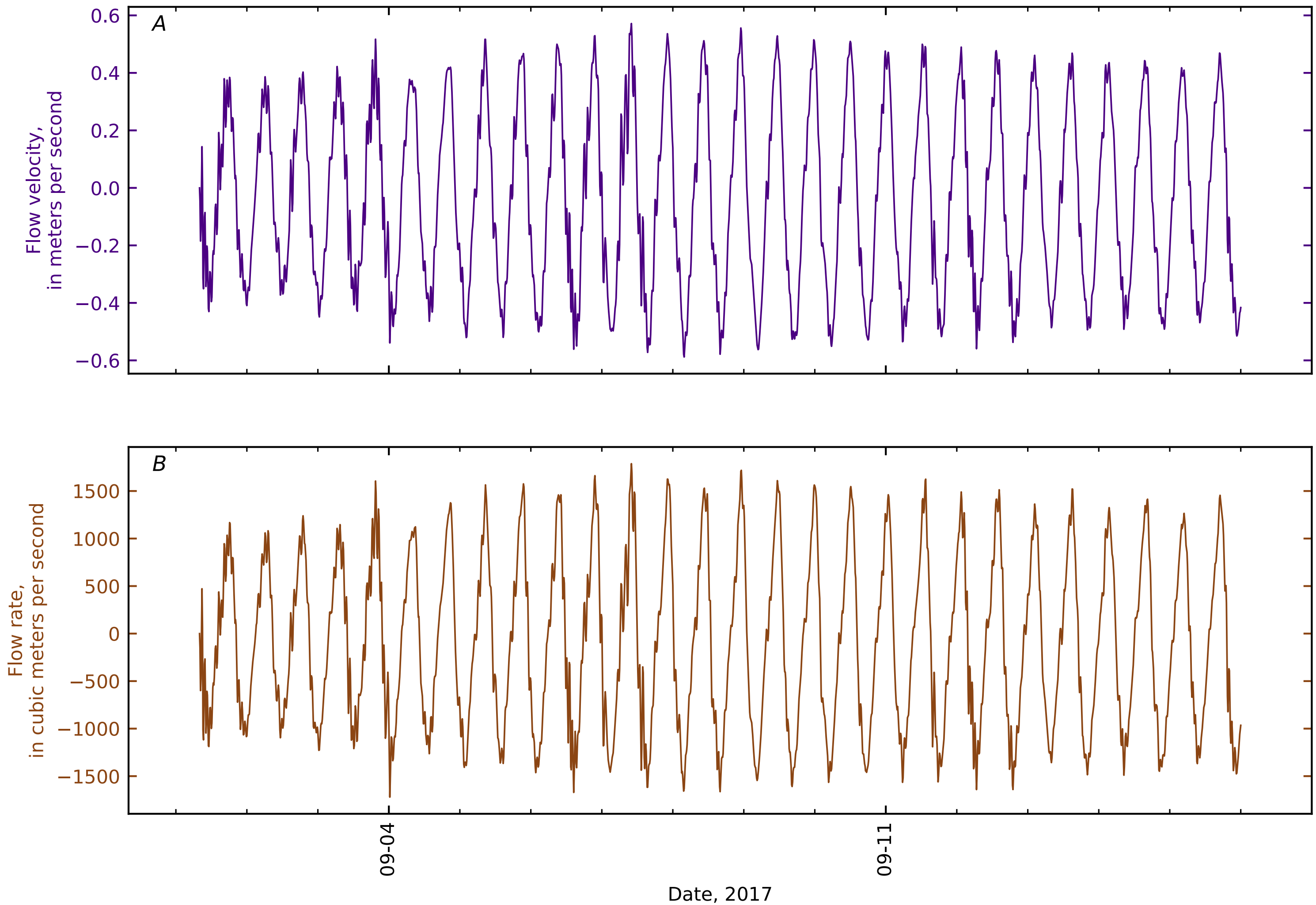

Figure B1-355. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 34, East Ch KM2 d/s Orland Riv.

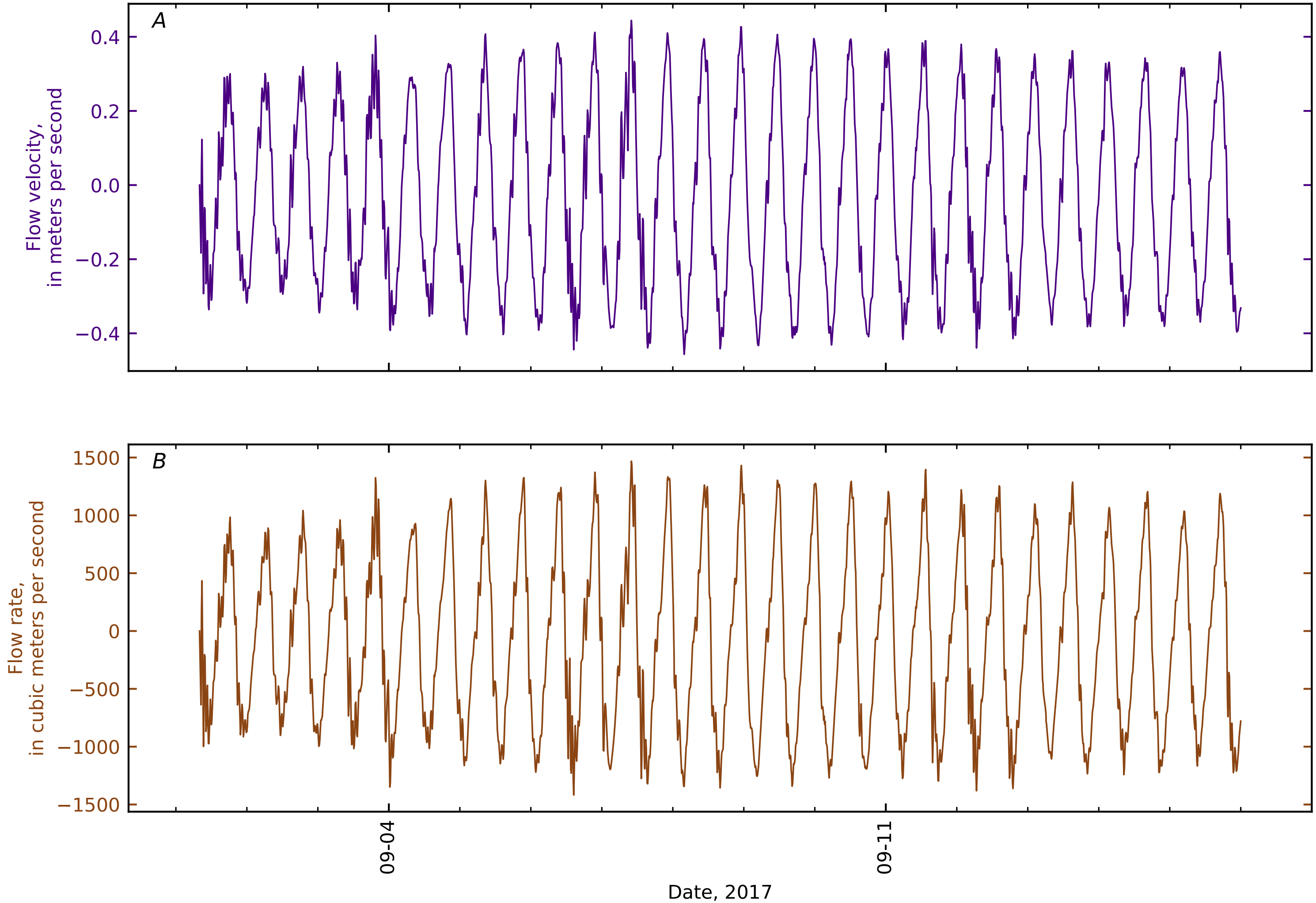

Figure B1-356. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 35, East Ch KM4 d/s Orland Riv.

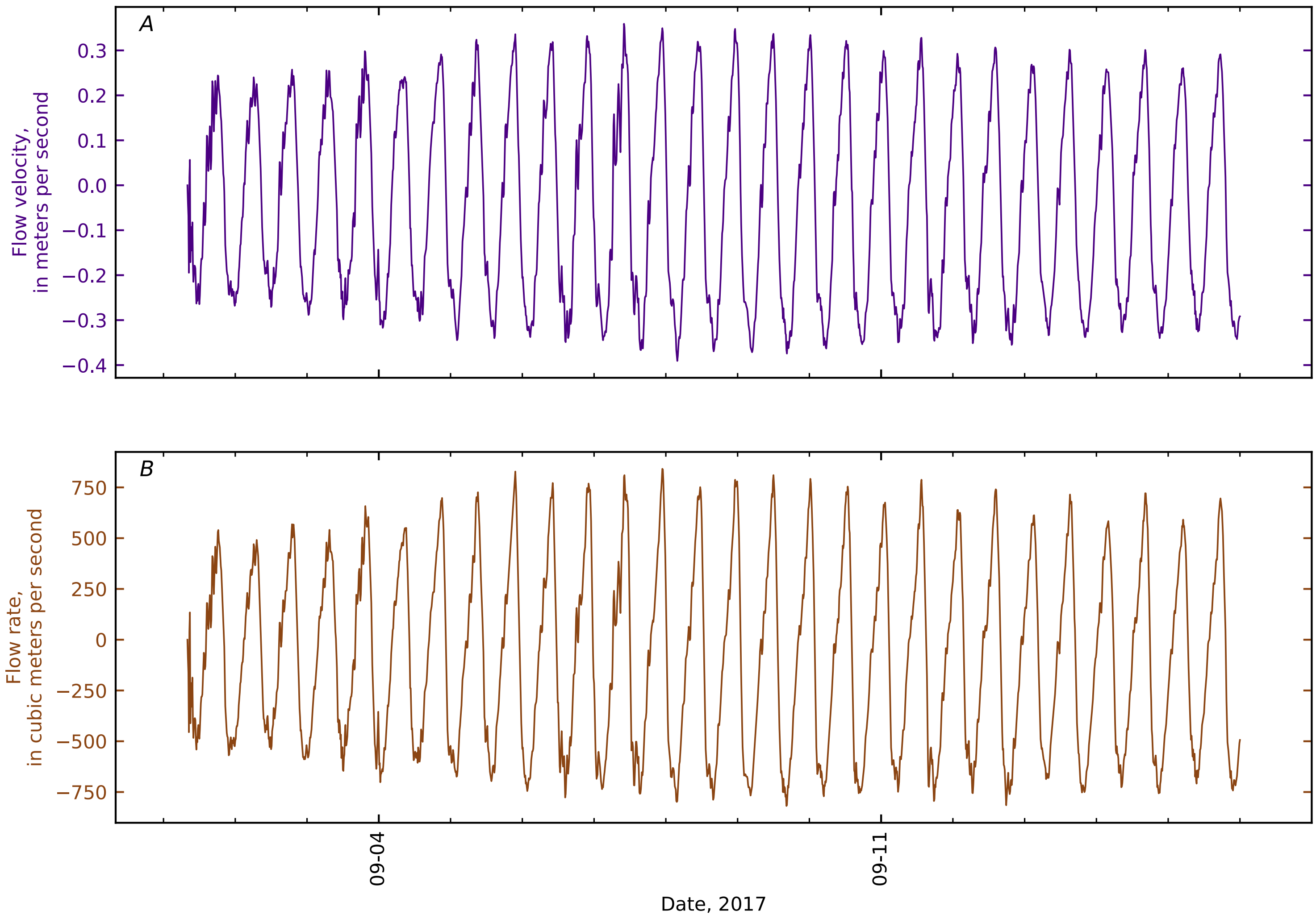

Figure B1-357. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 36, East Ch KM5 u/s Orland Riv.

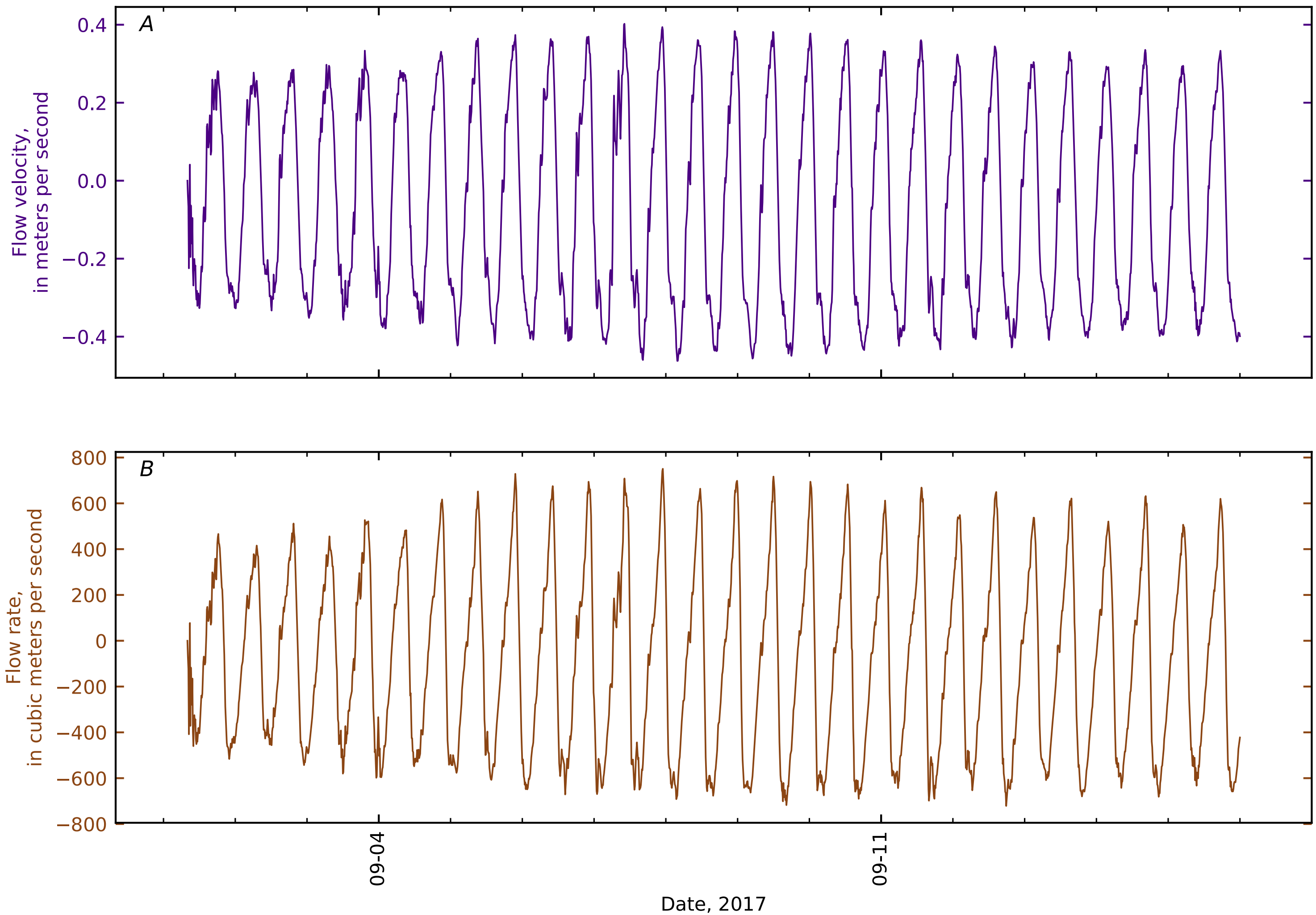

Figure B1-358. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 37, East Ch KM6 u/s Orland Riv d/s flats.

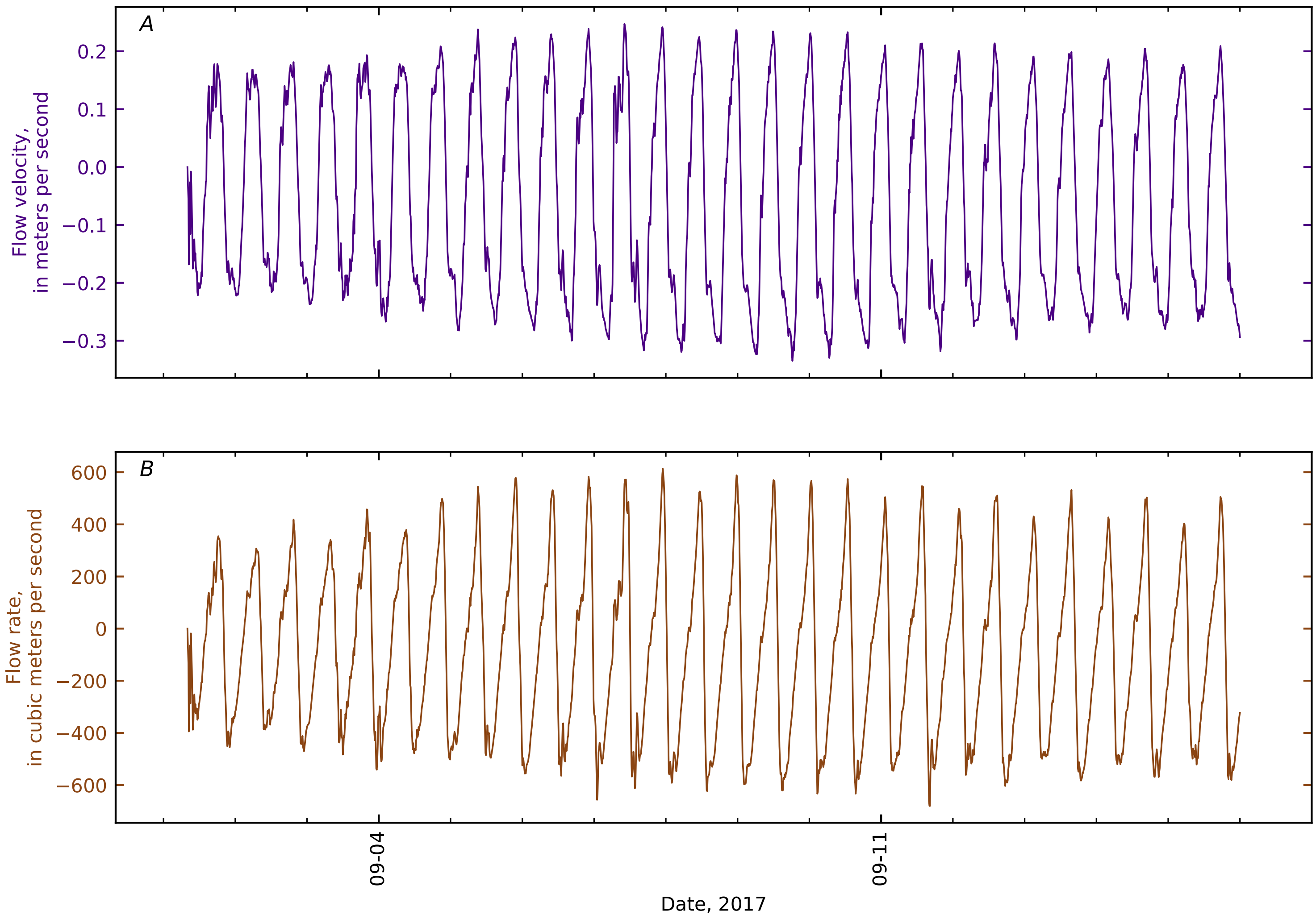

Figure B1-359. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 38, East Ch KM7 d/s Porcupine Is at flats.

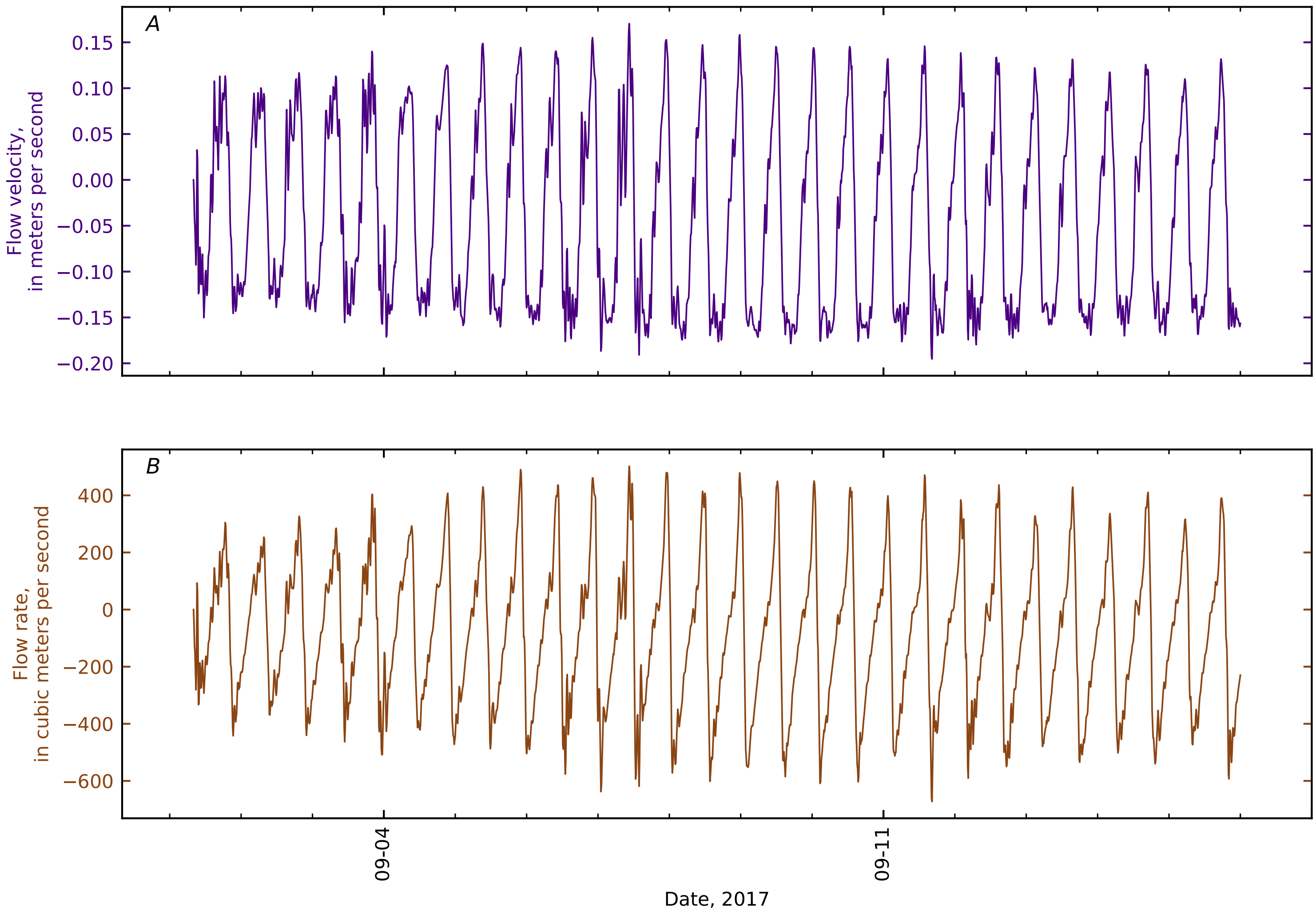

Figure B1-360. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 39, East Ch KM8 u/s flats.

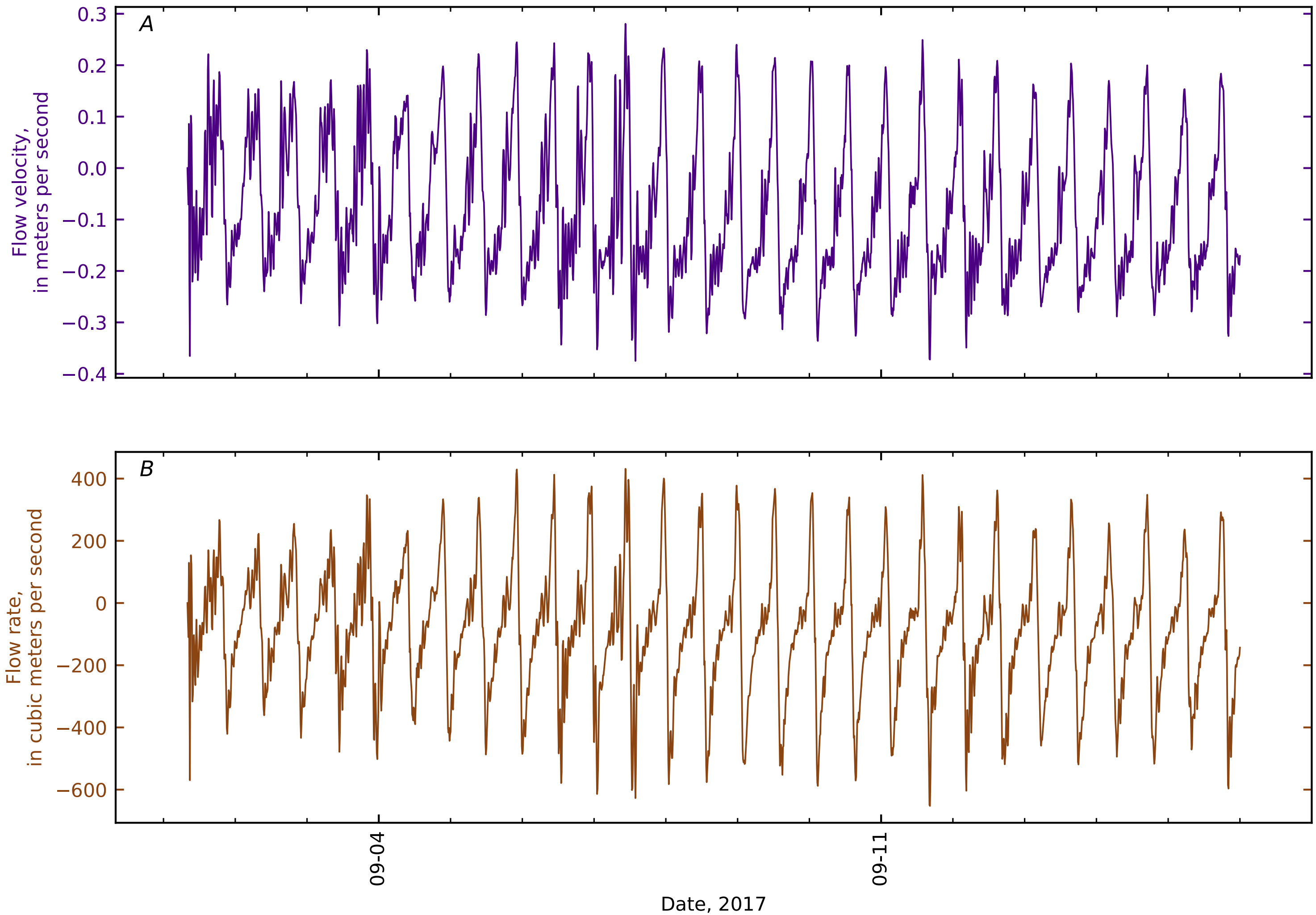

Figure B1-361. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 40, East Ch KM9 north part.

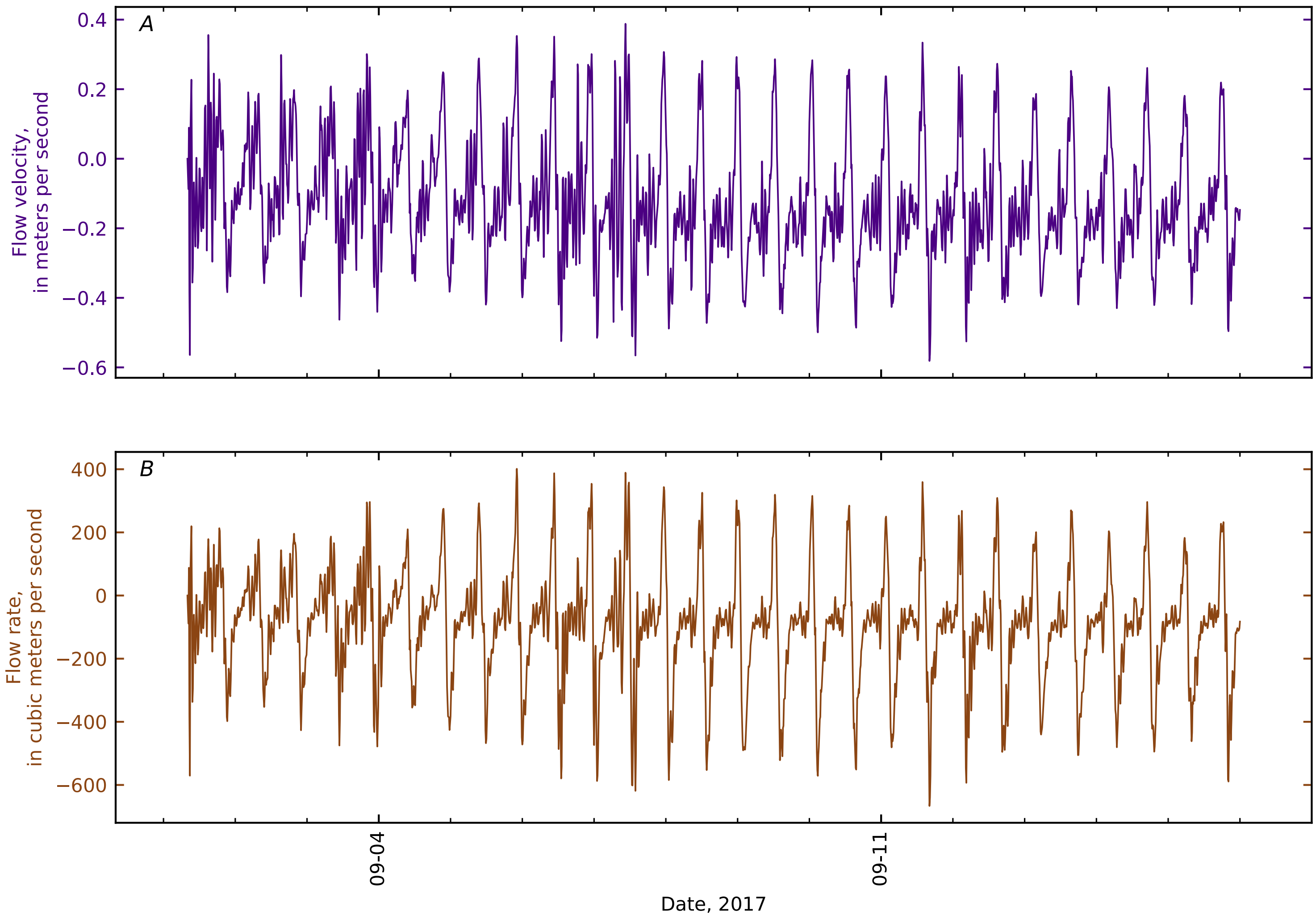

Figure B1-362. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 41, East Channel KM10 GS 443409068471801 at Bucksport d/s conf Silv.

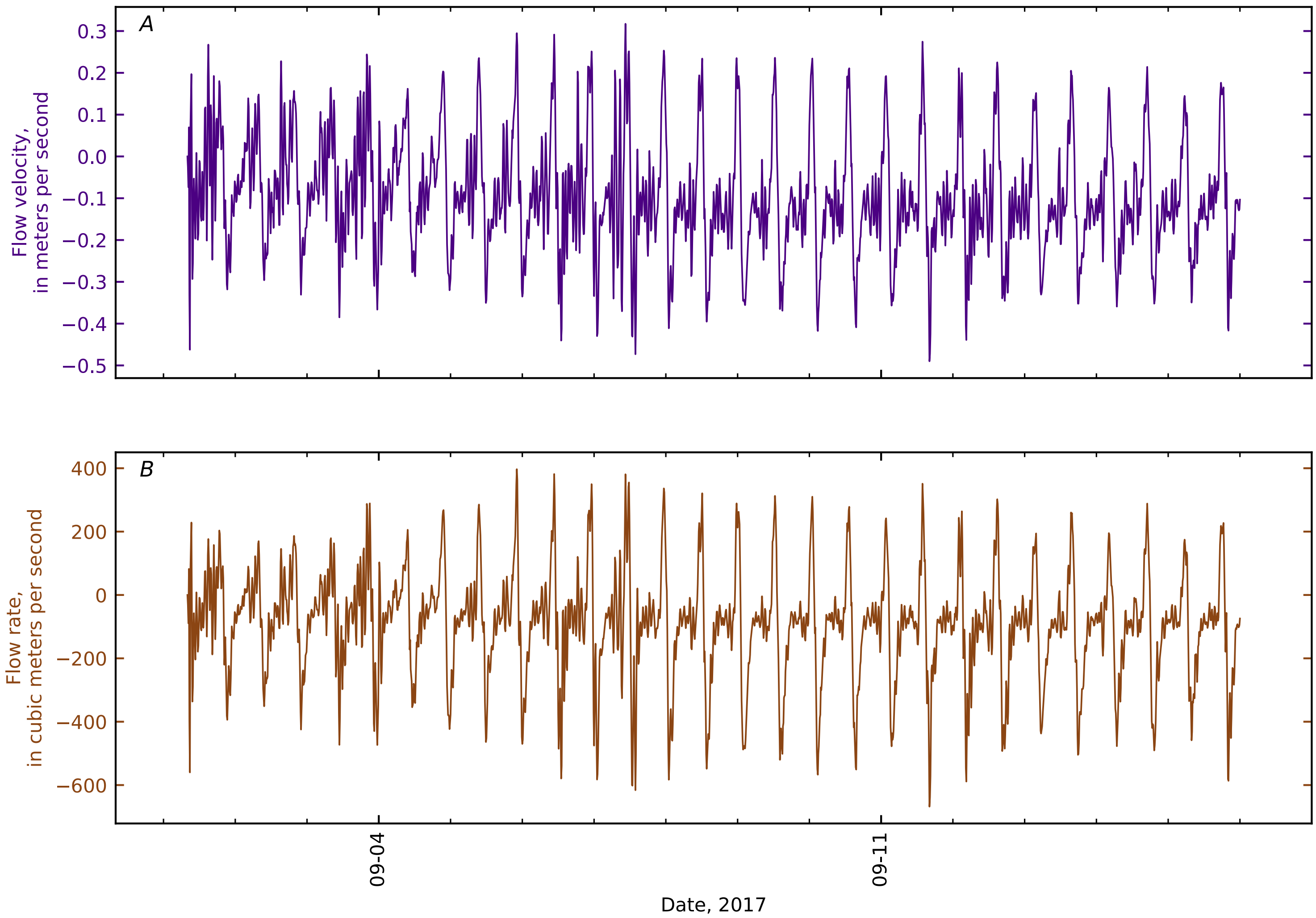

Figure B1-363. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 42, East Ch KM10.2 Bucksport u/s conf Silver Lake discharge.

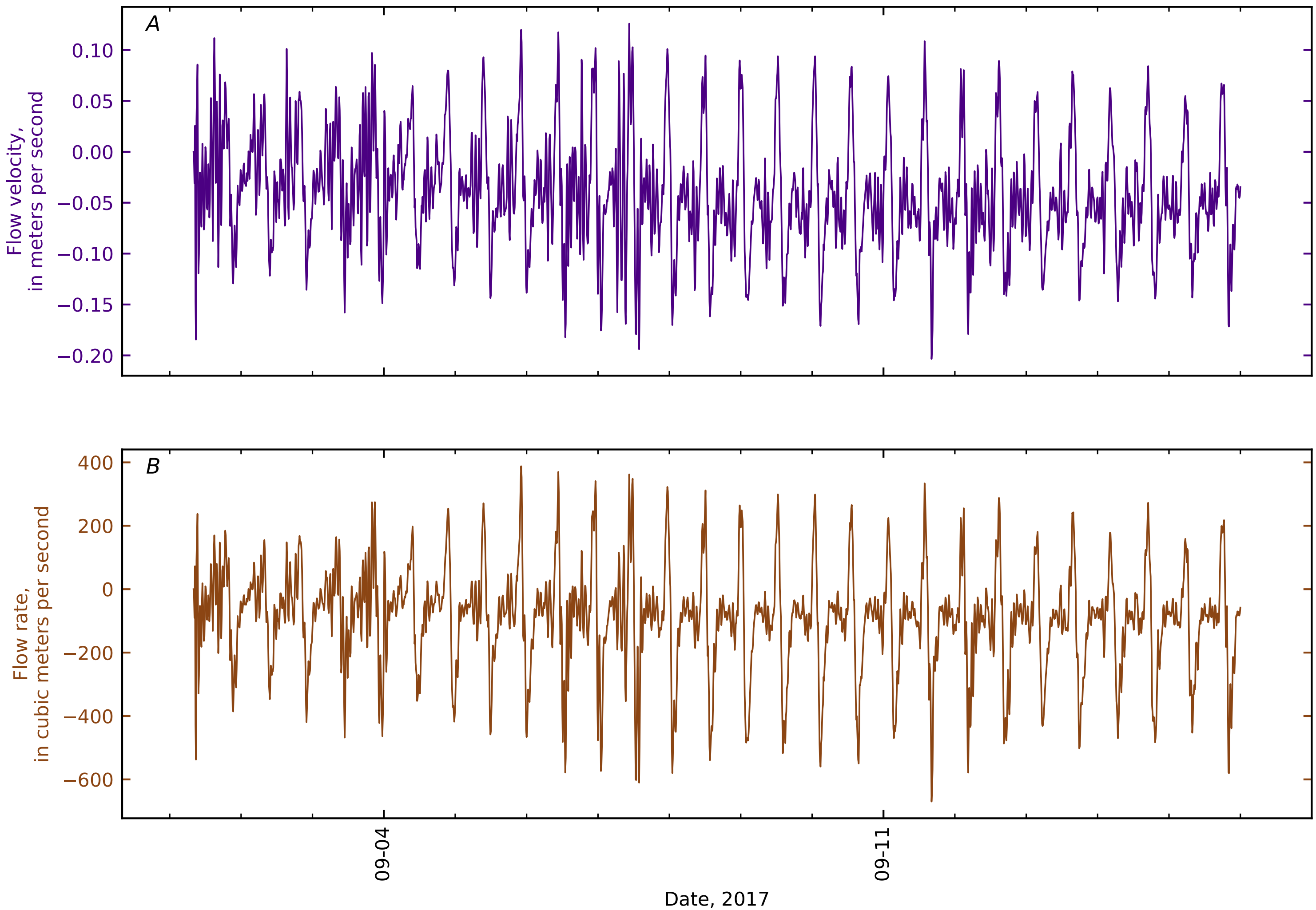

Figure B1-364. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 43, East Ch KM10.5 at Penob River split.

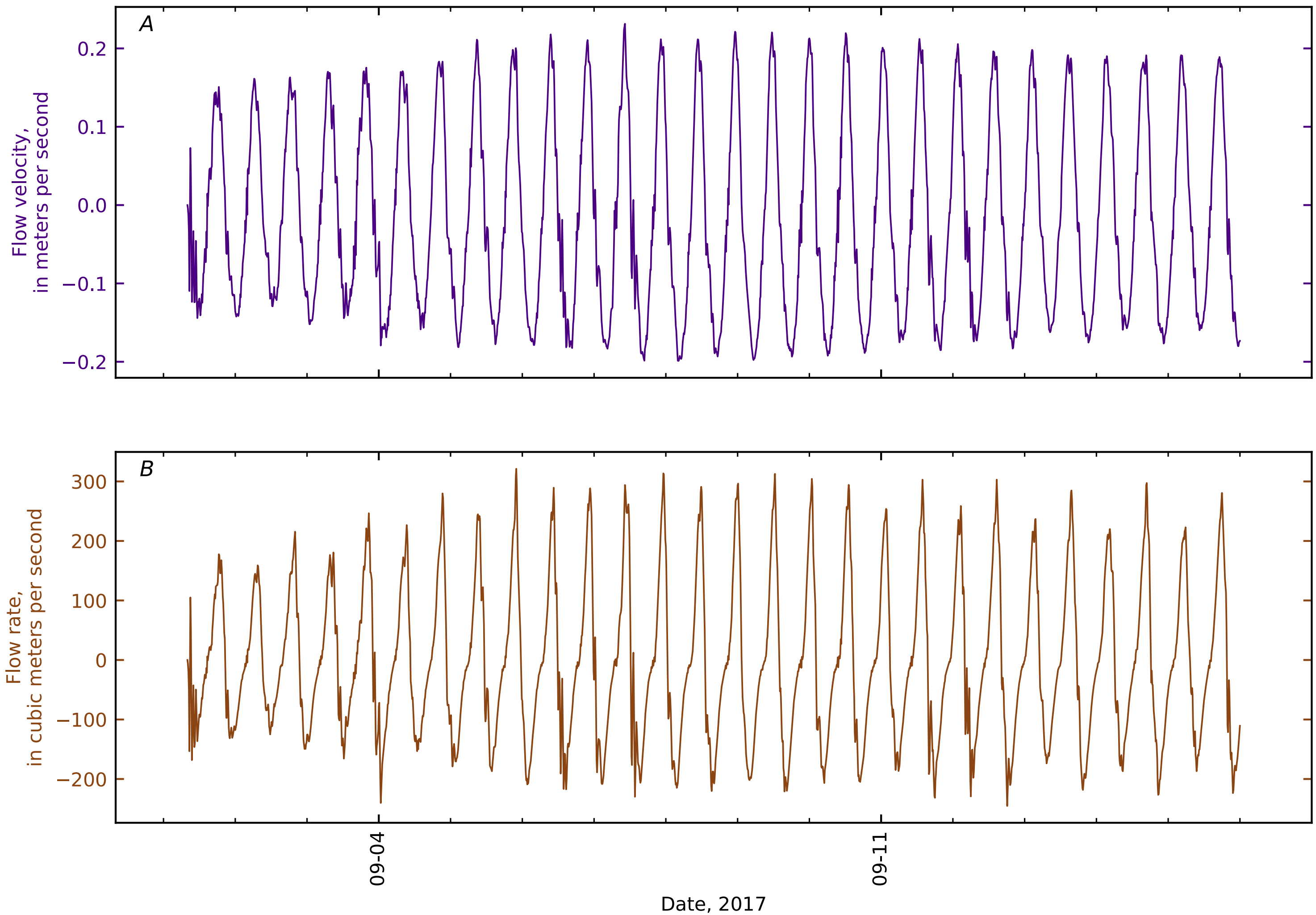

Figure B1-365. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 44, Mendall Marsh KM0.4 at Penob Riv KM17.3 GS Trnsct2.

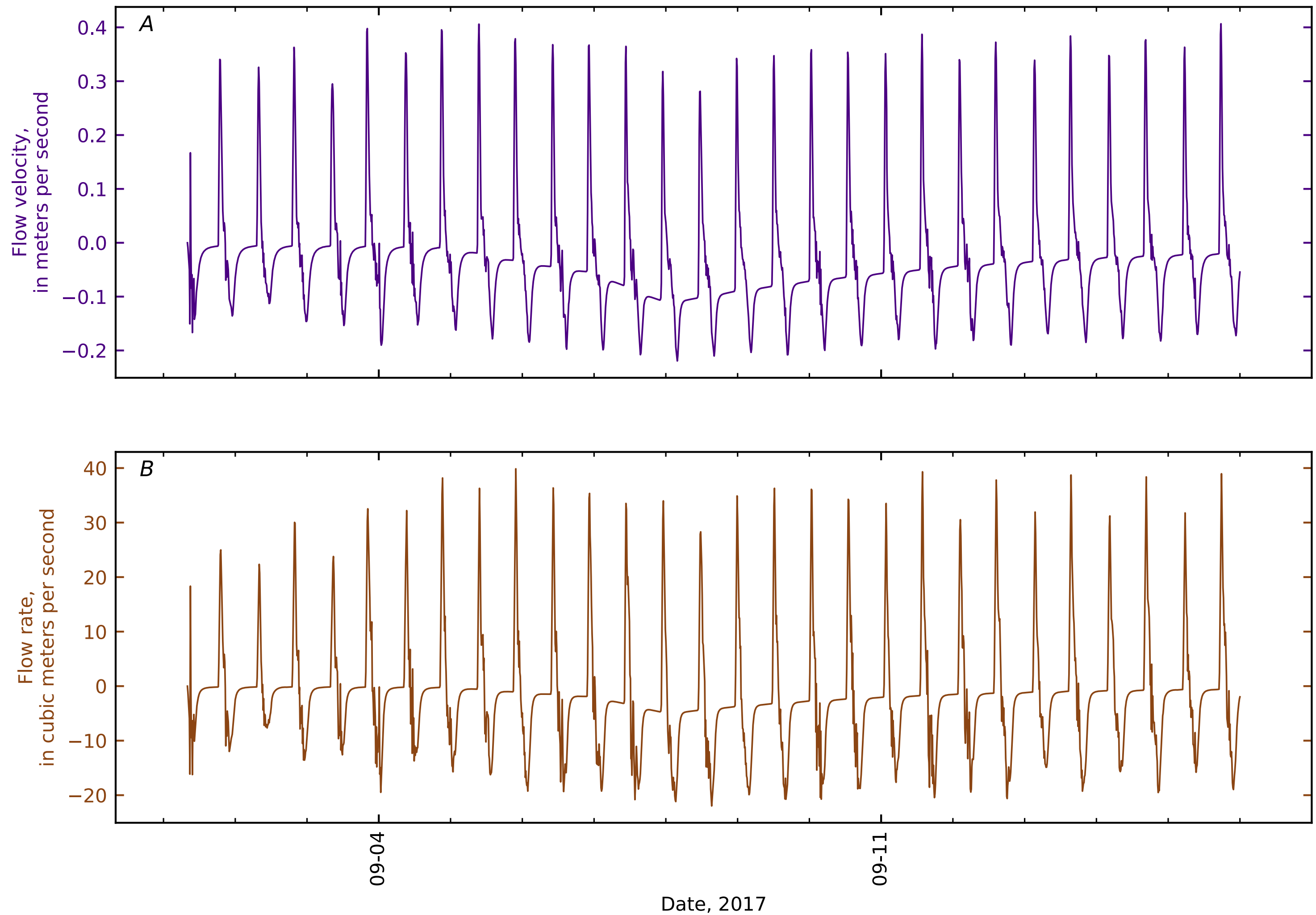

Figure B1-366. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 45, Mendall Marsh KM1 conf North Branch Marsh Riv.

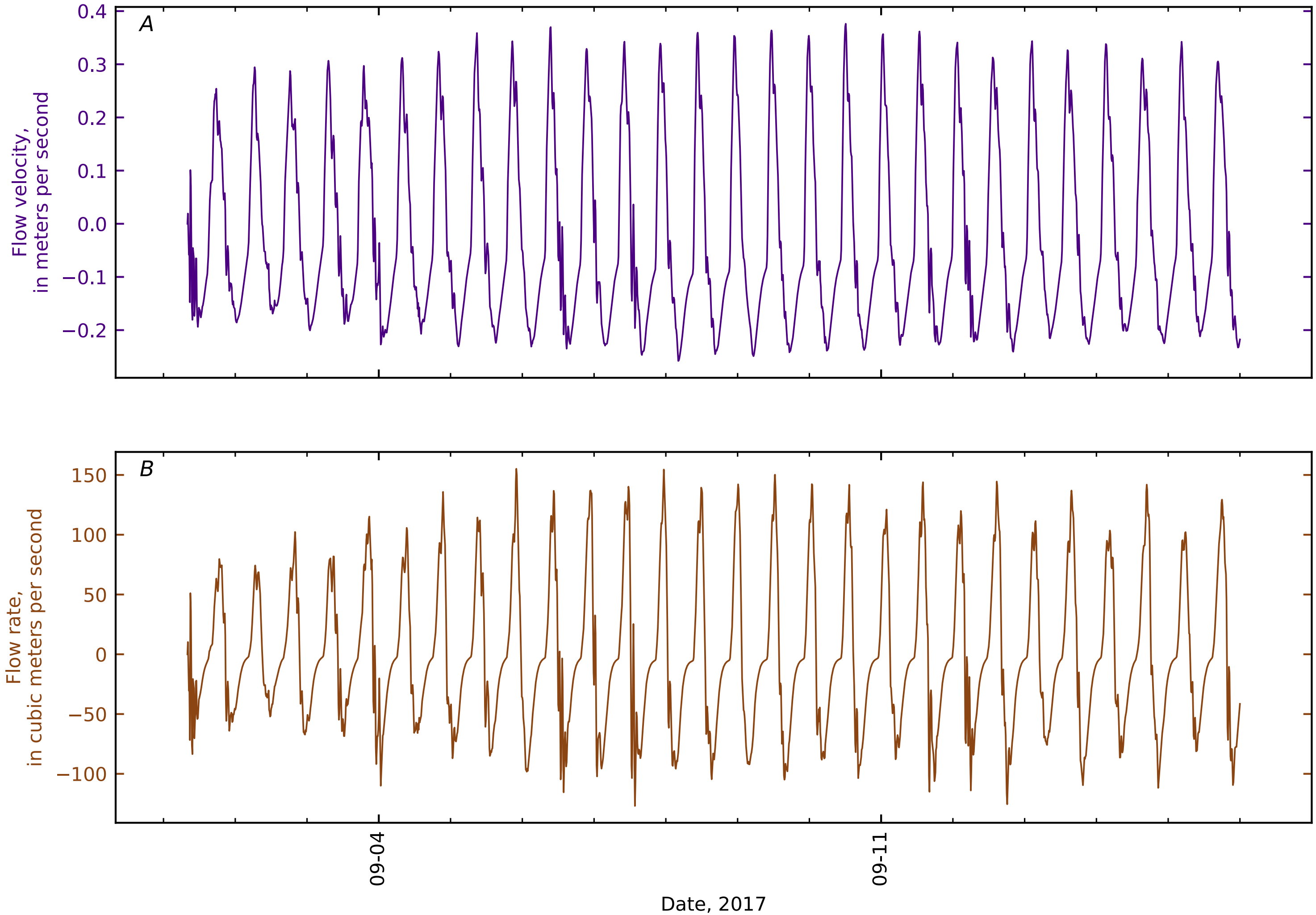

Figure B1-367. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 46, Mendall Marsh KM1.7 at boat launch.

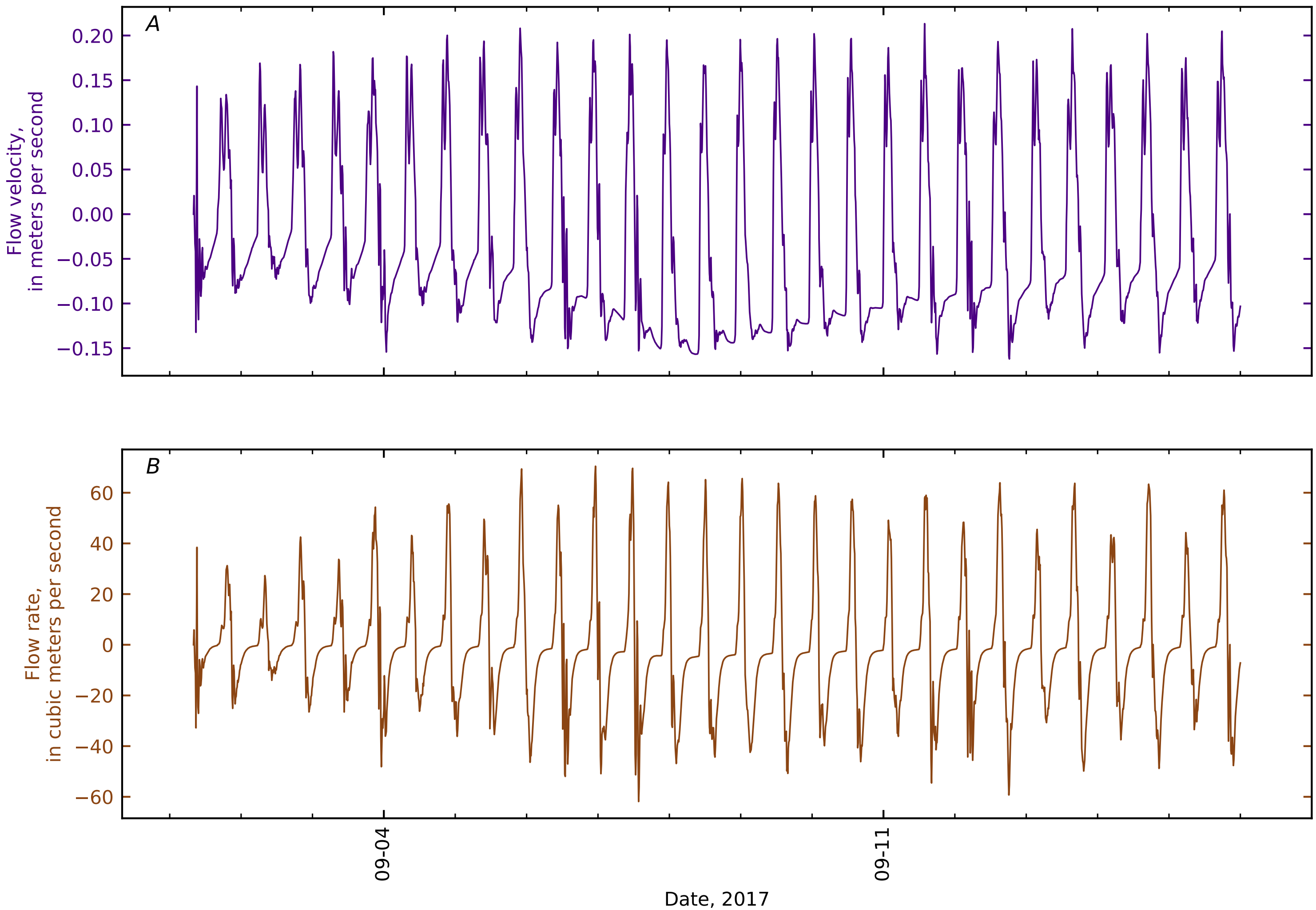

Figure B1-368. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 47, Mendall Marsh KM3 nr Misquito Mtn.

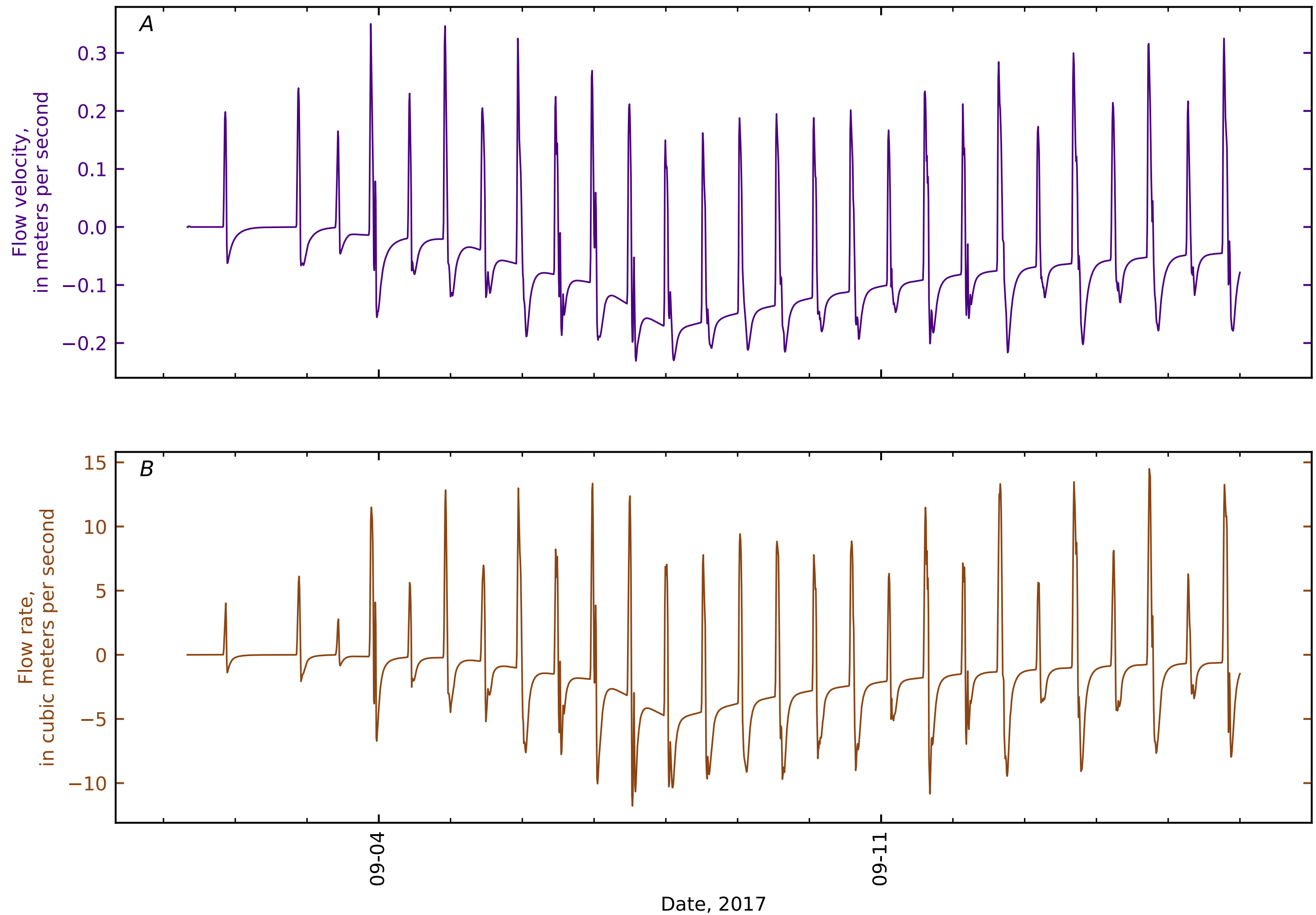

Figure B1-369. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 48, Mendall Marsh KM4.6.

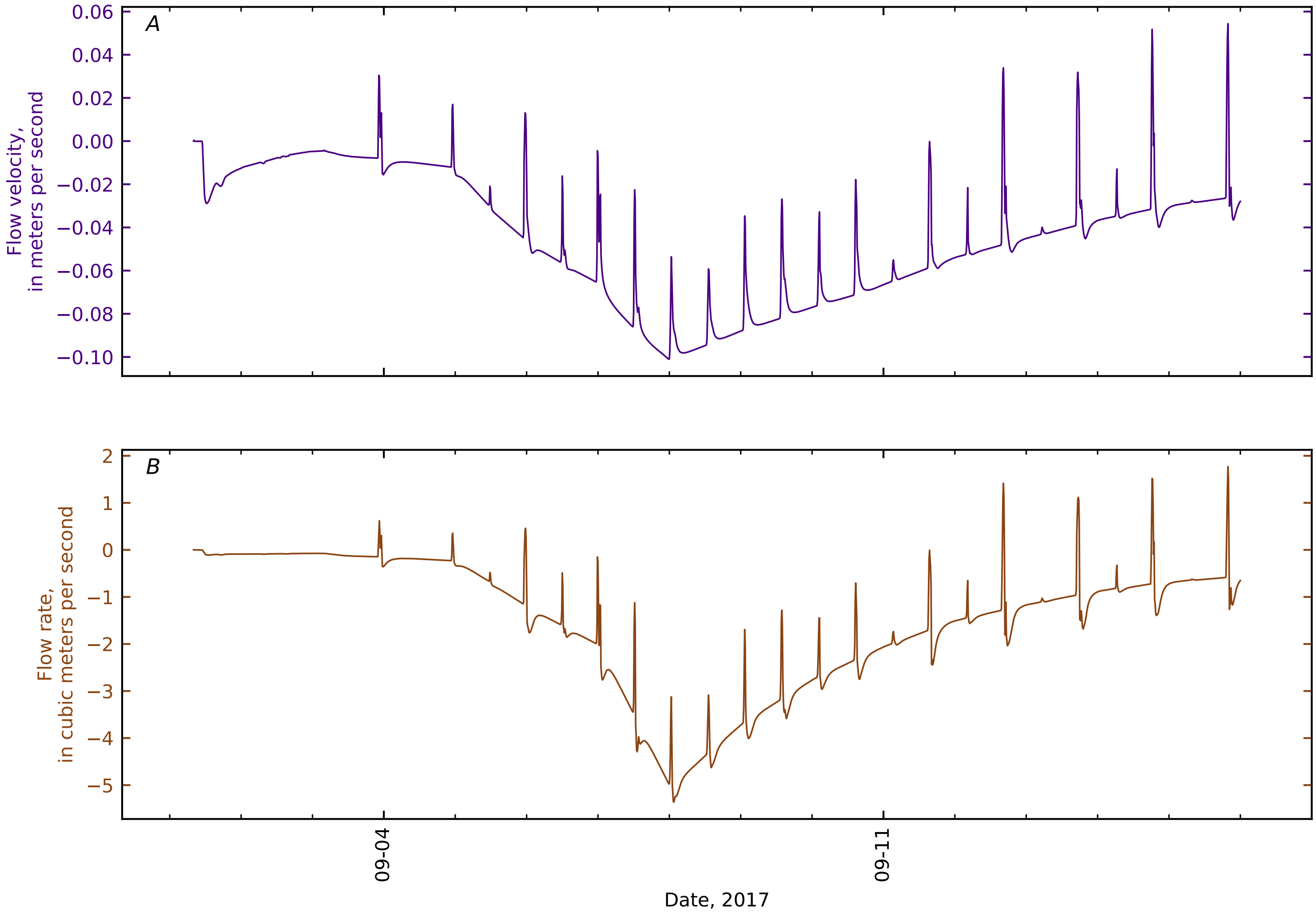

Figure B1-370. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 49, Mendall Marsh KM5.7 nr conf Colson Str.

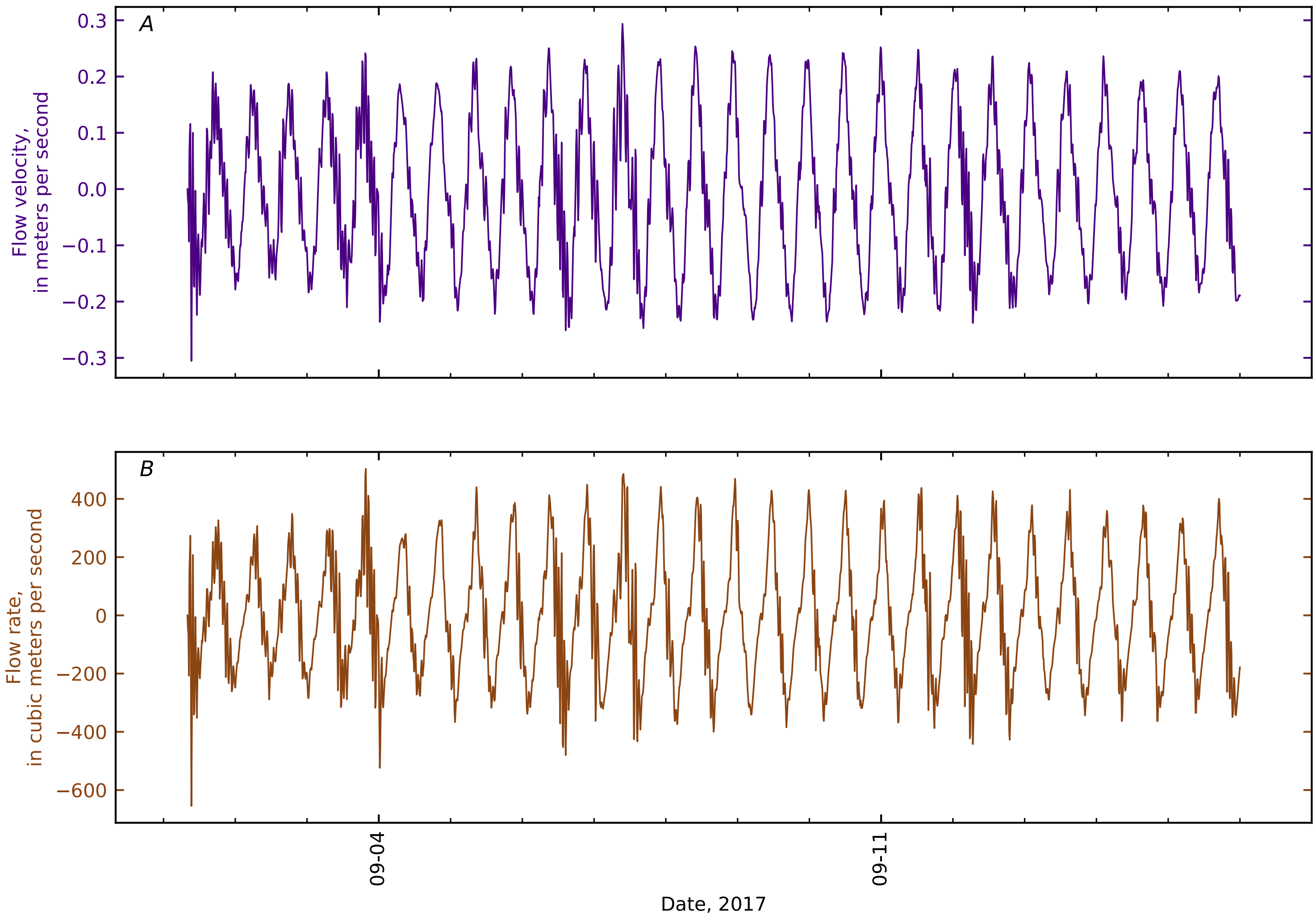

Figure B1-371. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 50, Orland Riv KM0 conf East Ch.

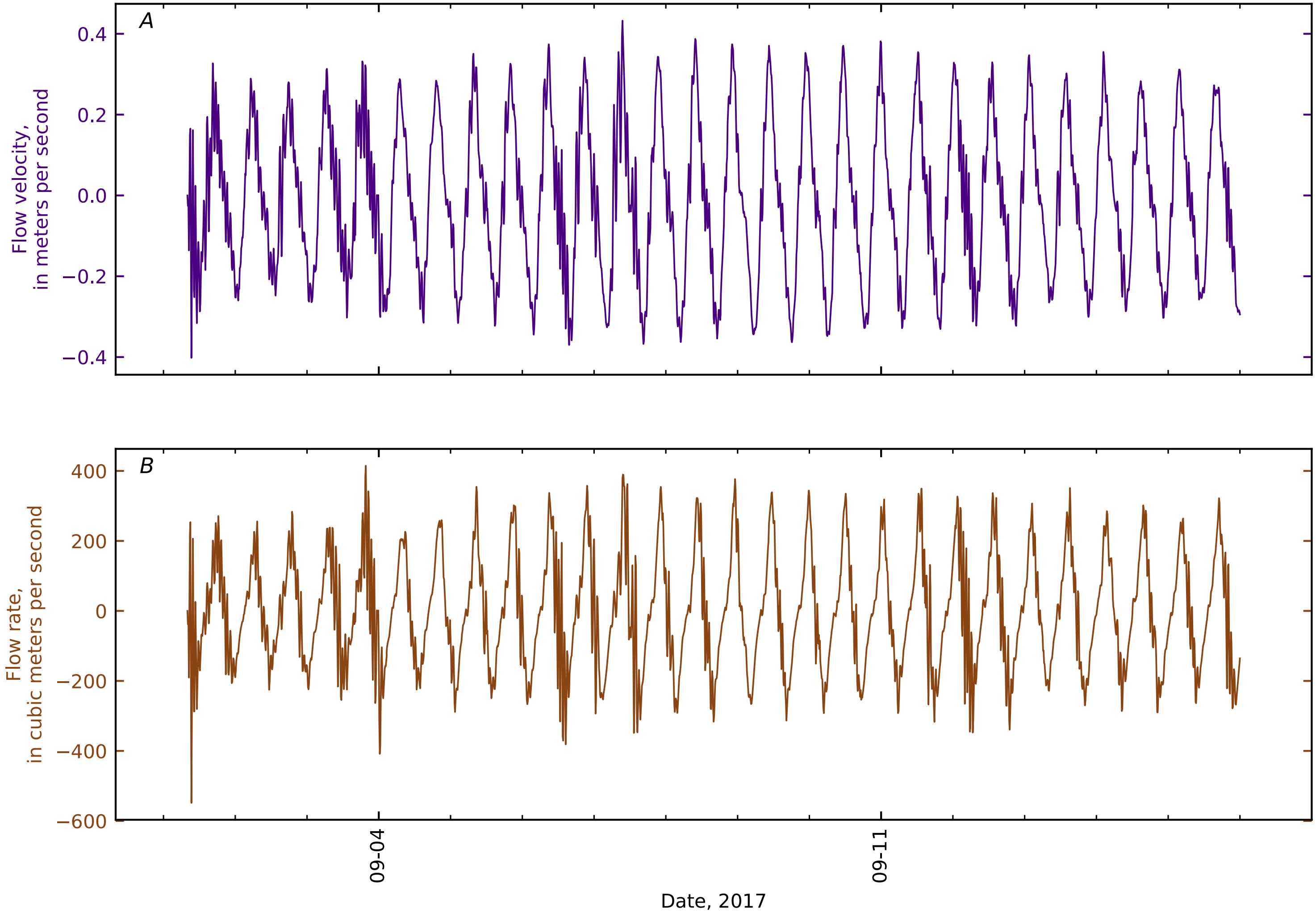

Figure B1-372. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 51, Orland Riv KM0.5.

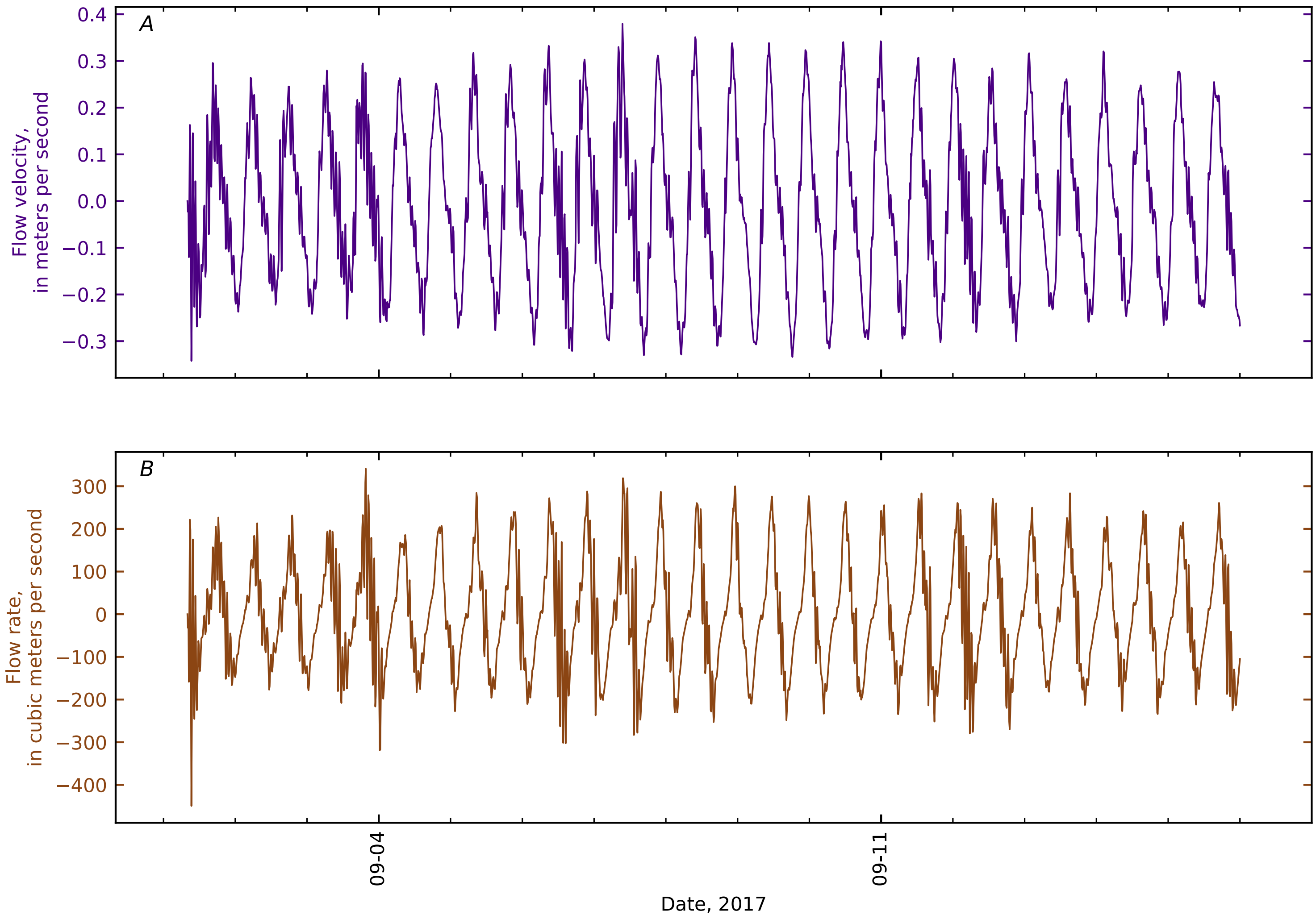

Figure B1-373. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 52, Orland Riv KM1.

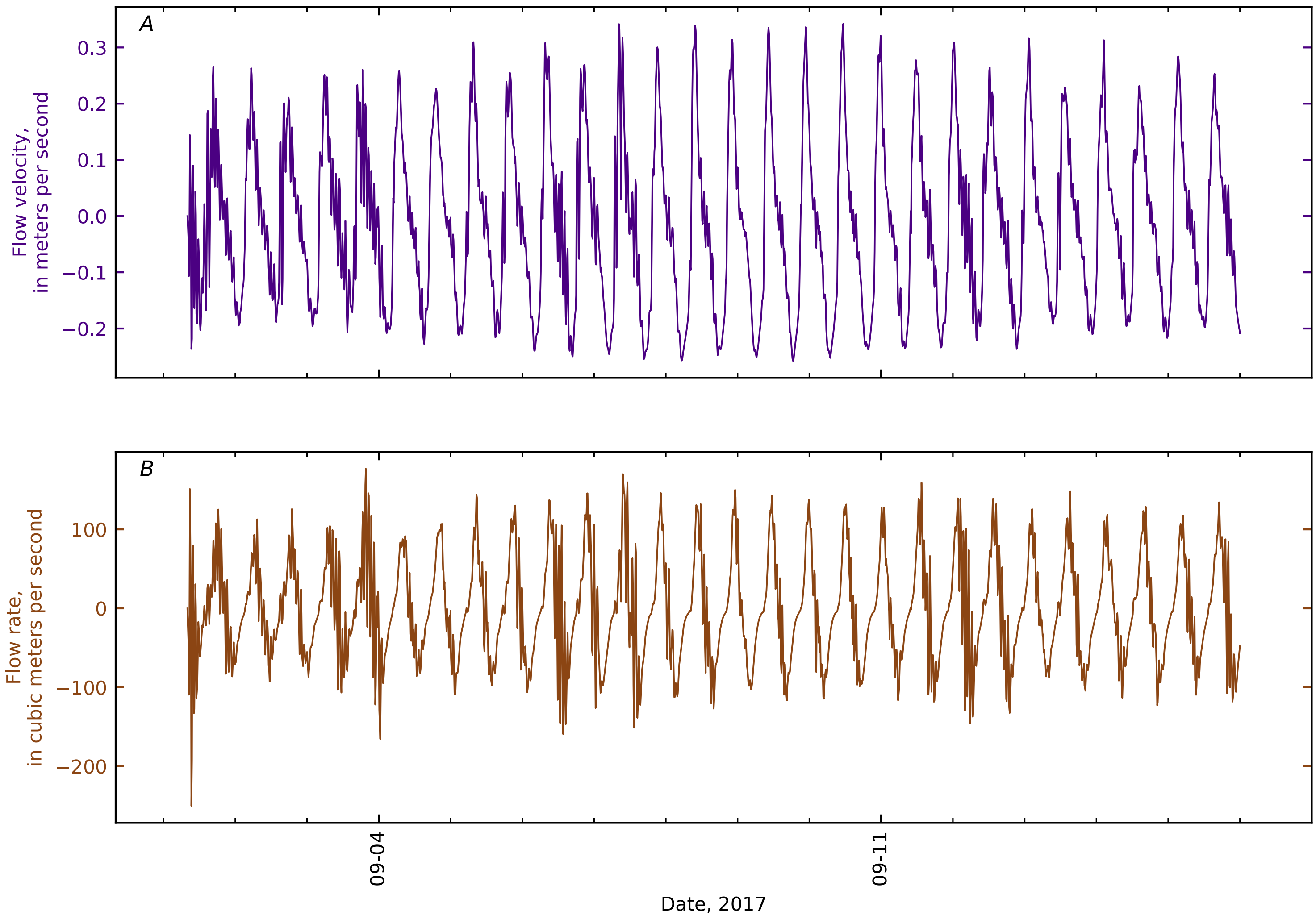

Figure B1-374. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 53, Orland Riv KM2.

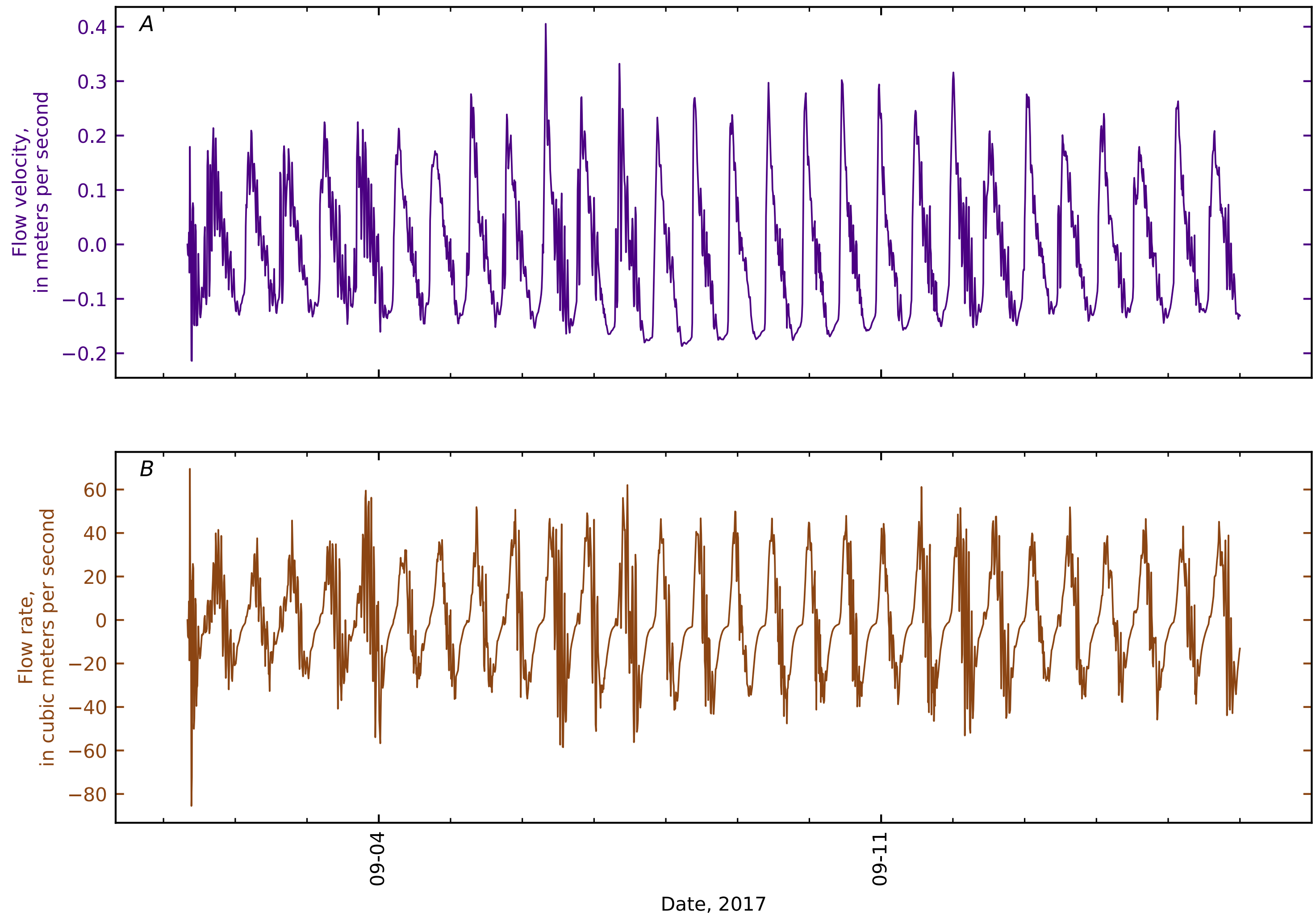

Figure B1-375. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 54, Orland Riv KM3.

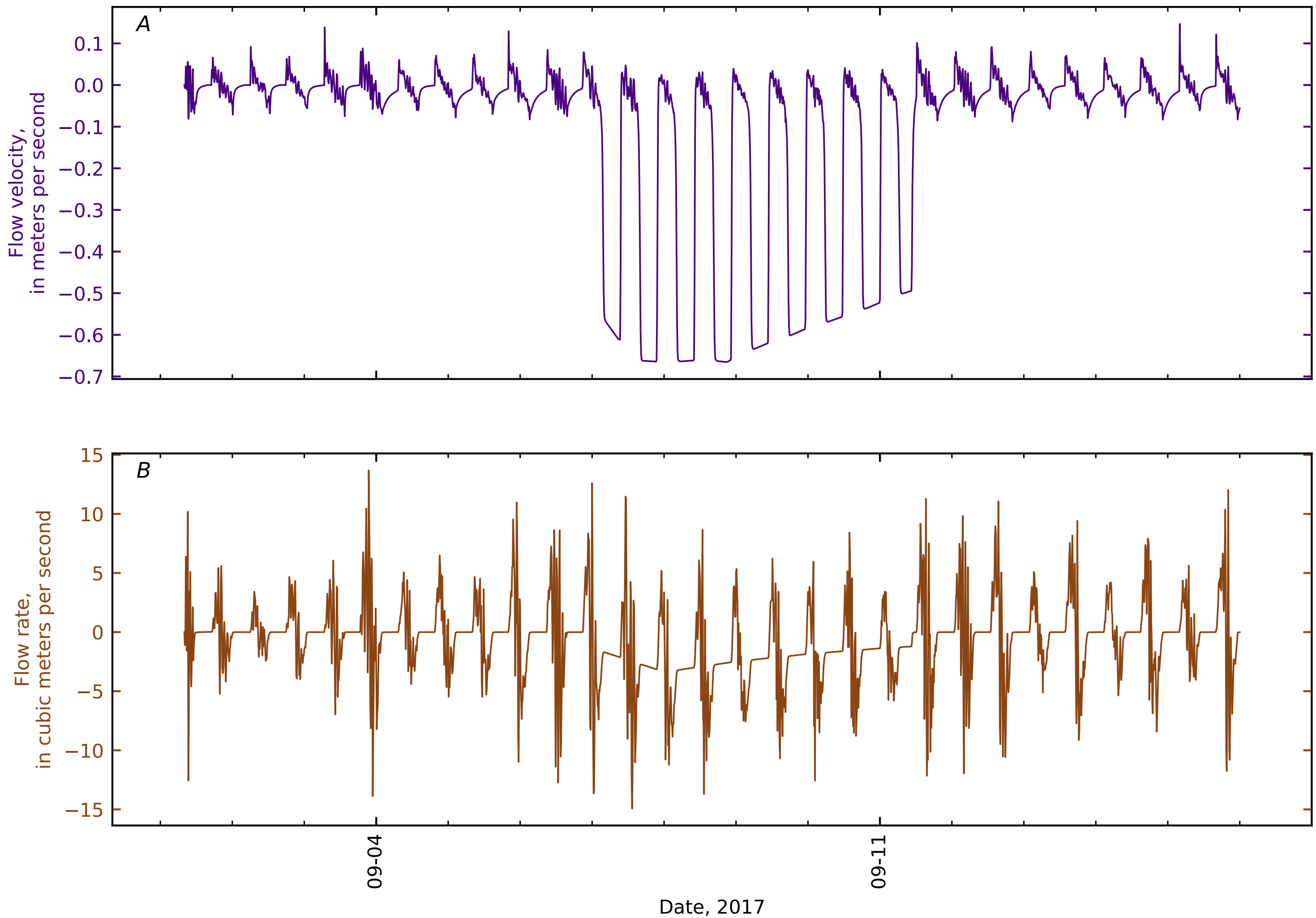

Figure B1-376. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 55, Orland Riv KM3.7 d/s Orland Dam.

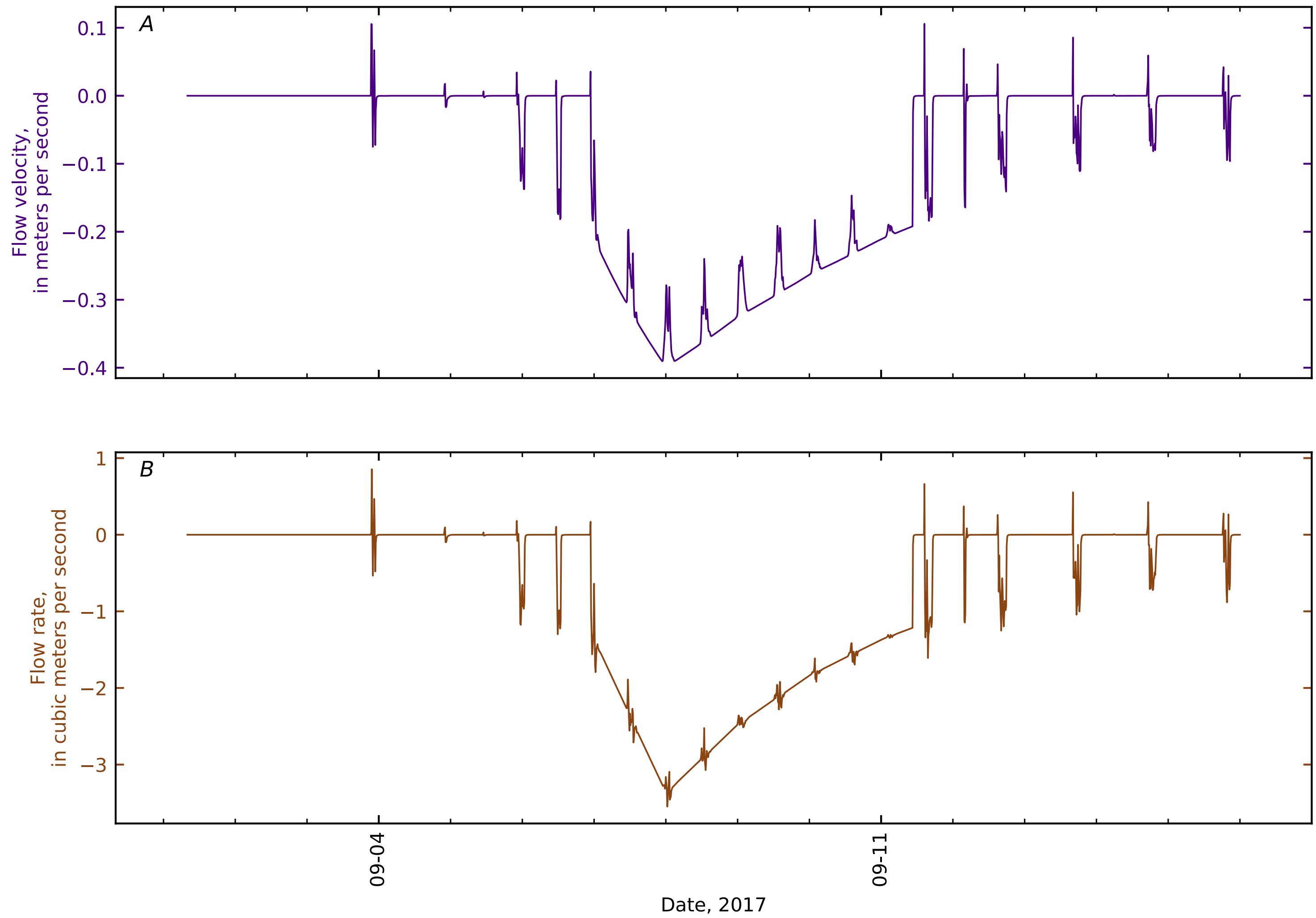

Figure B1-377. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 56, Orland Riv KM3.9 at Orland Dam.

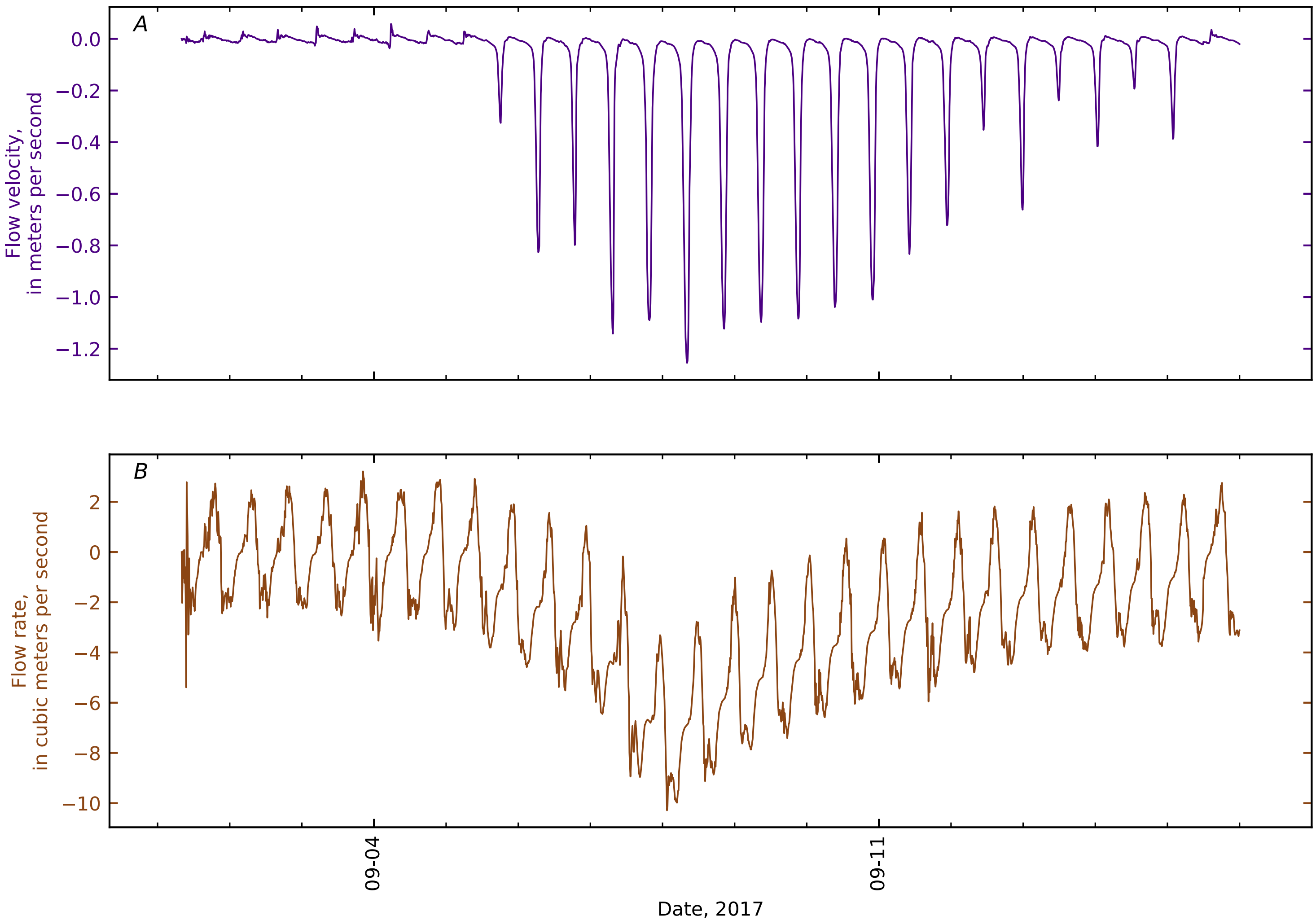

Figure B1-378. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 57, Kenduskeag Str conf Penob Riv KM43.3 Bangor.

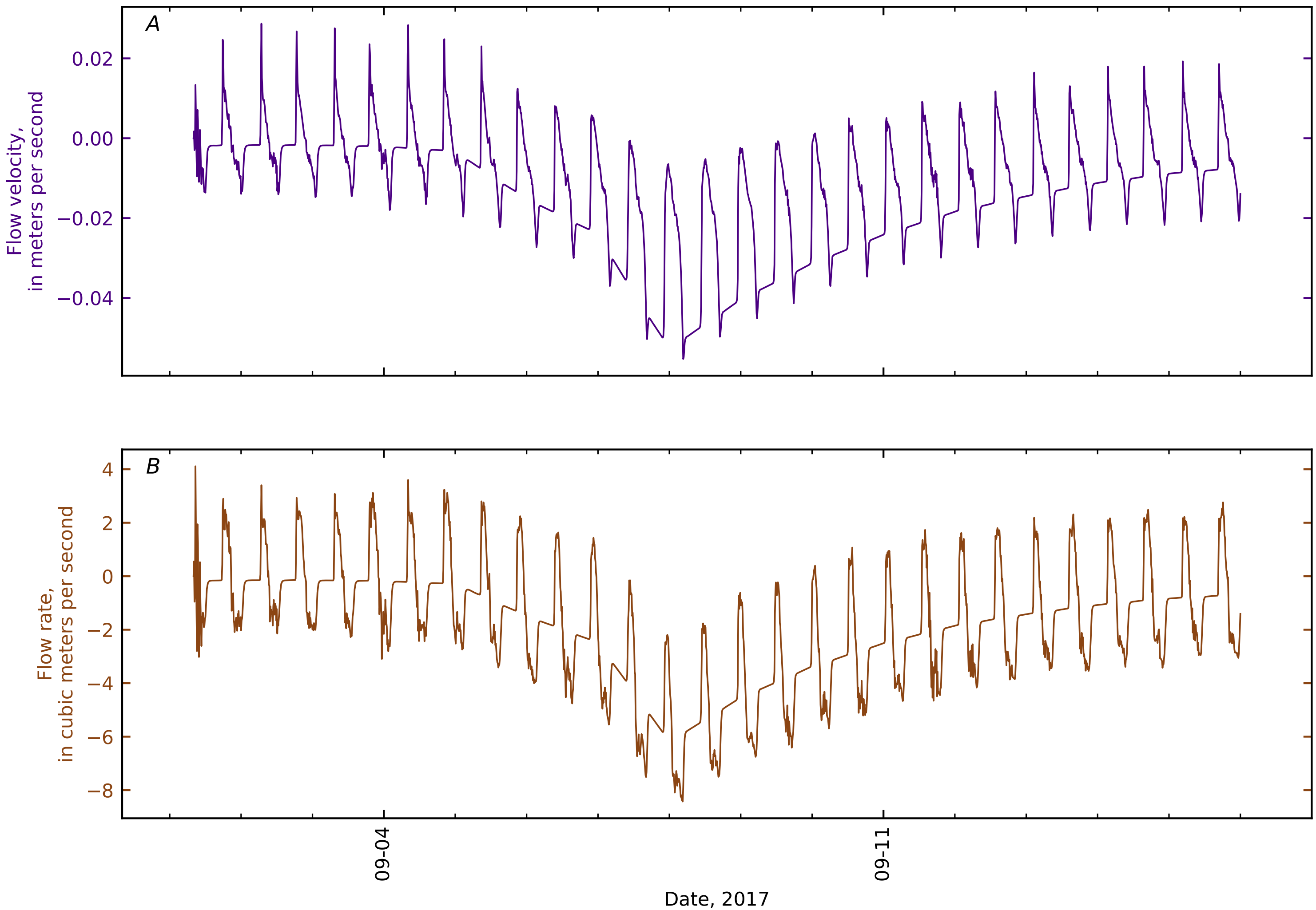

Figure B1-379. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 58, Souadabscook Str conf Penob Riv KM35.3 Hampden.

APPENDIX B2

Episodic Riverine Event: Penobscot River

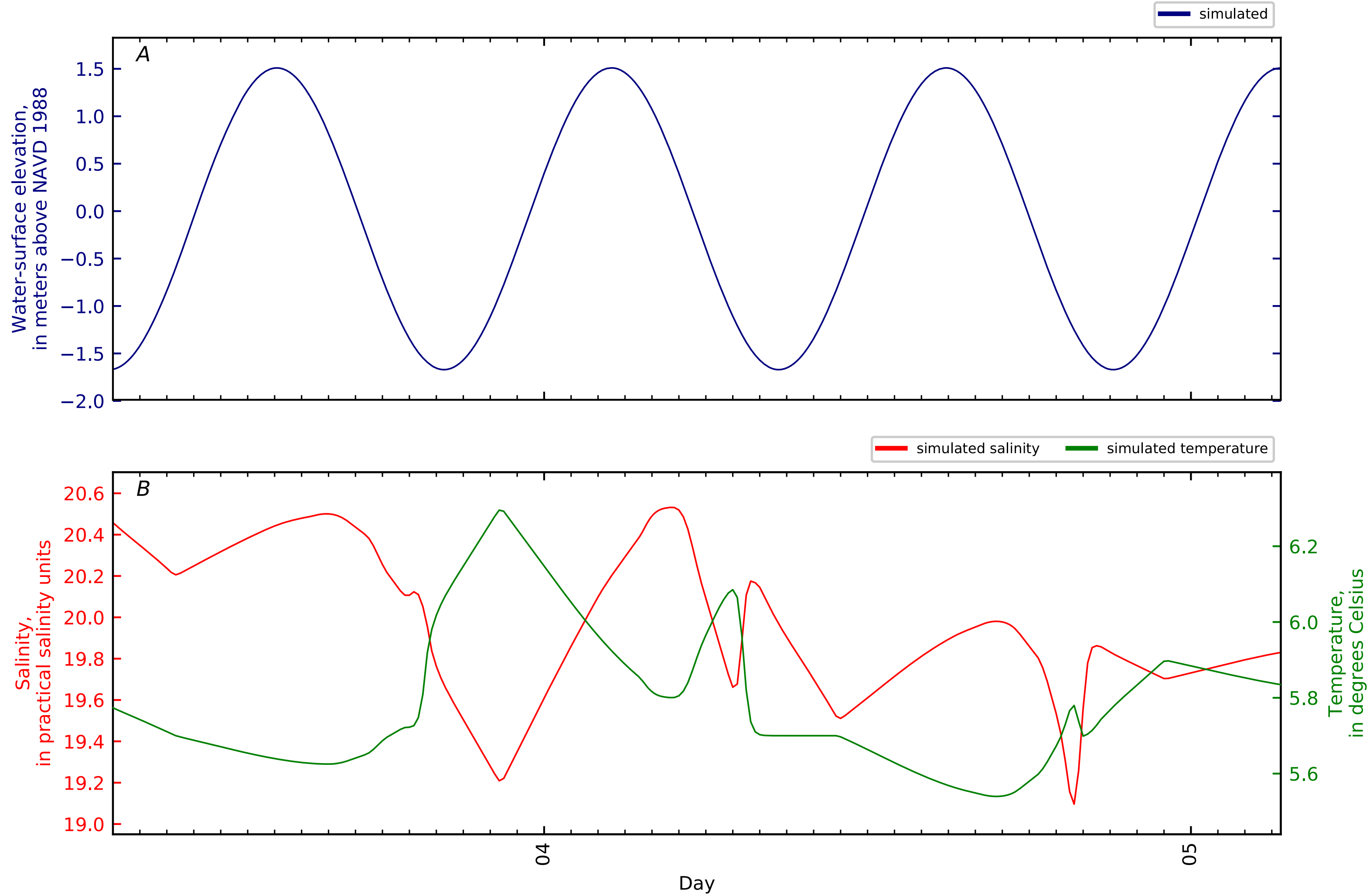

Figure B2-1. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 0, Penob Riv -KM5 nr Cape Jellison boundary. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

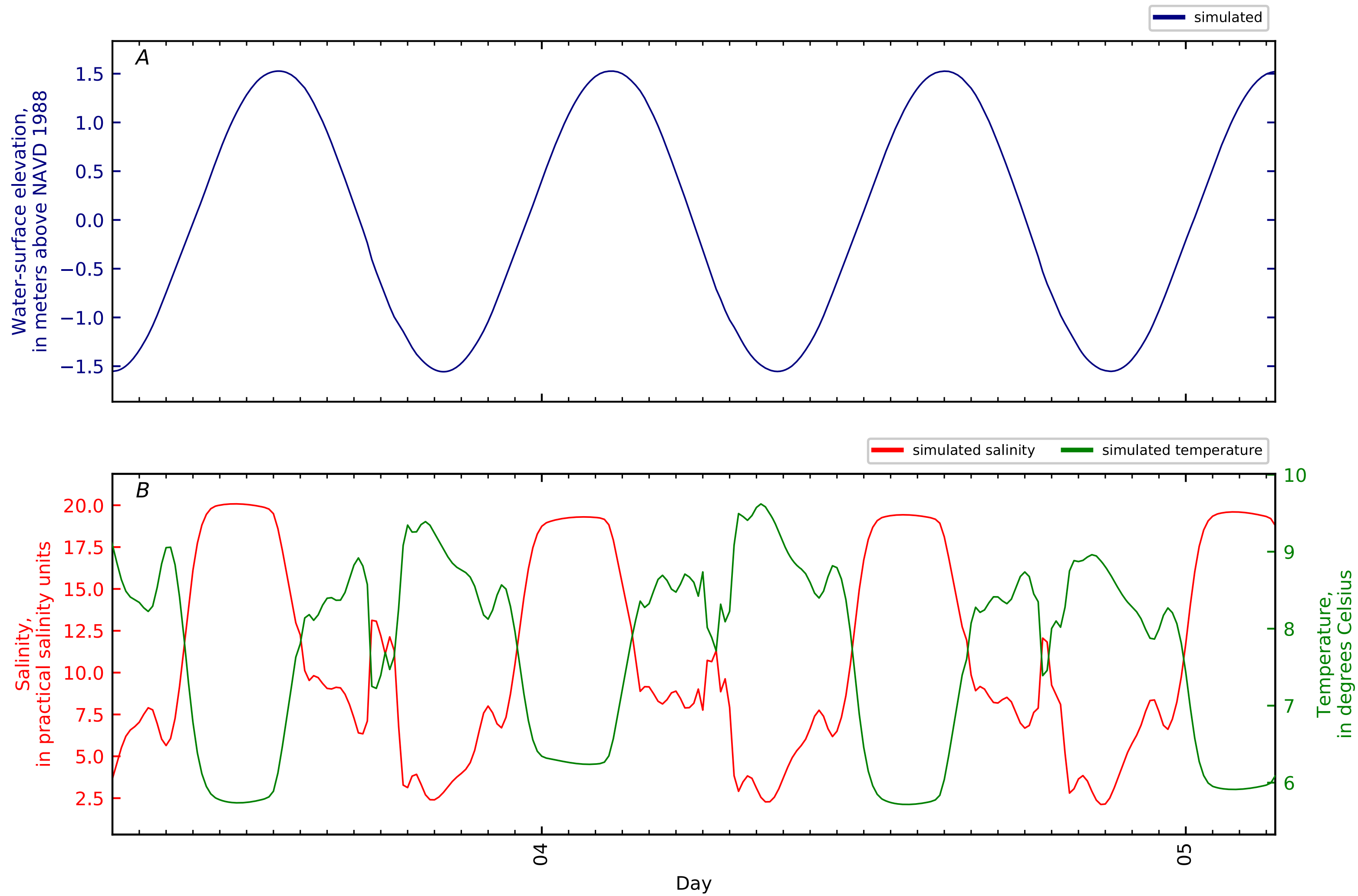

Figure B2-2. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 1, Penob Riv -KM4 nr Cape Jellison XS. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

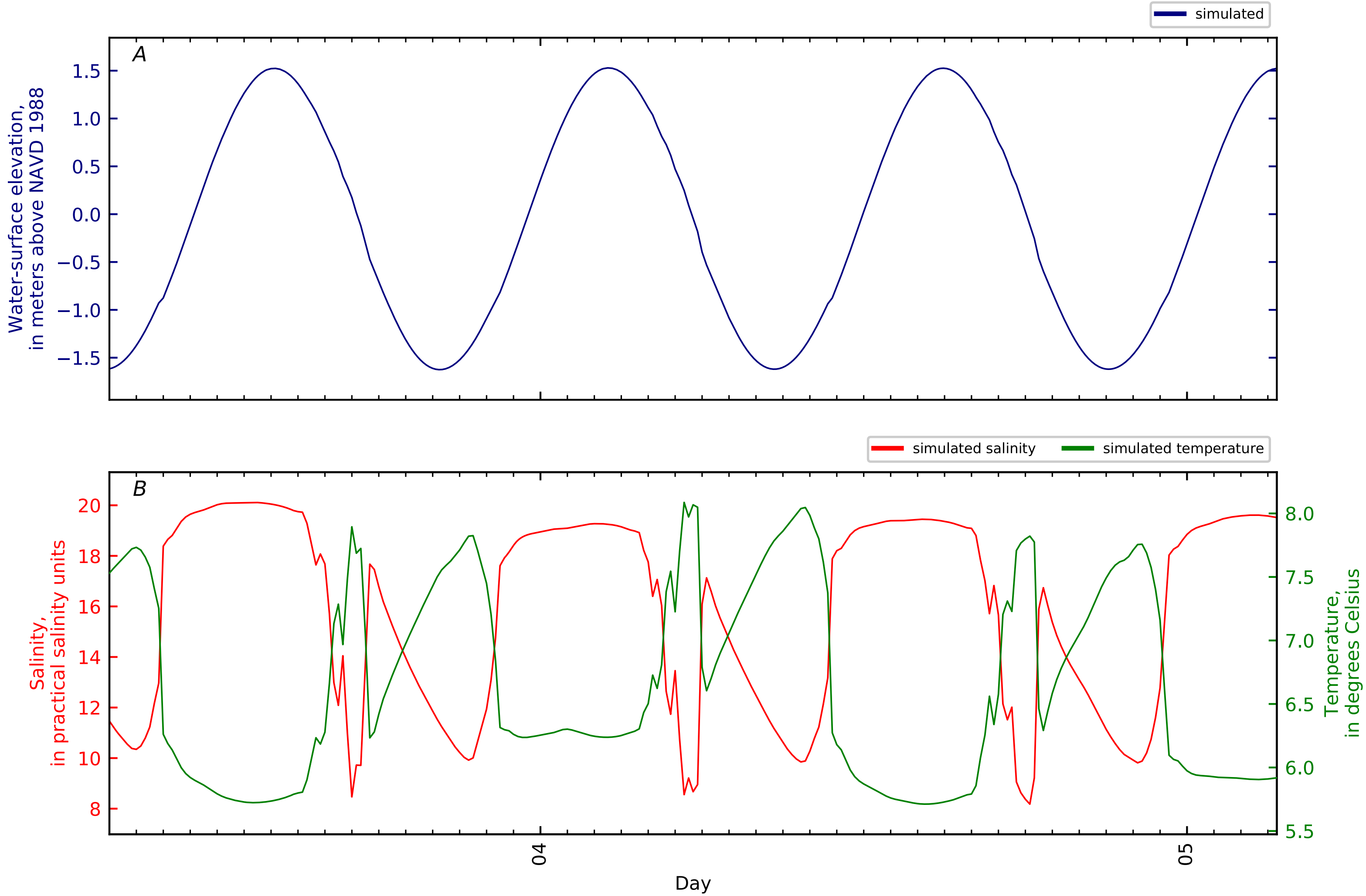

Figure B2-3. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 2, Penob Riv -KM1.5 d/s Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

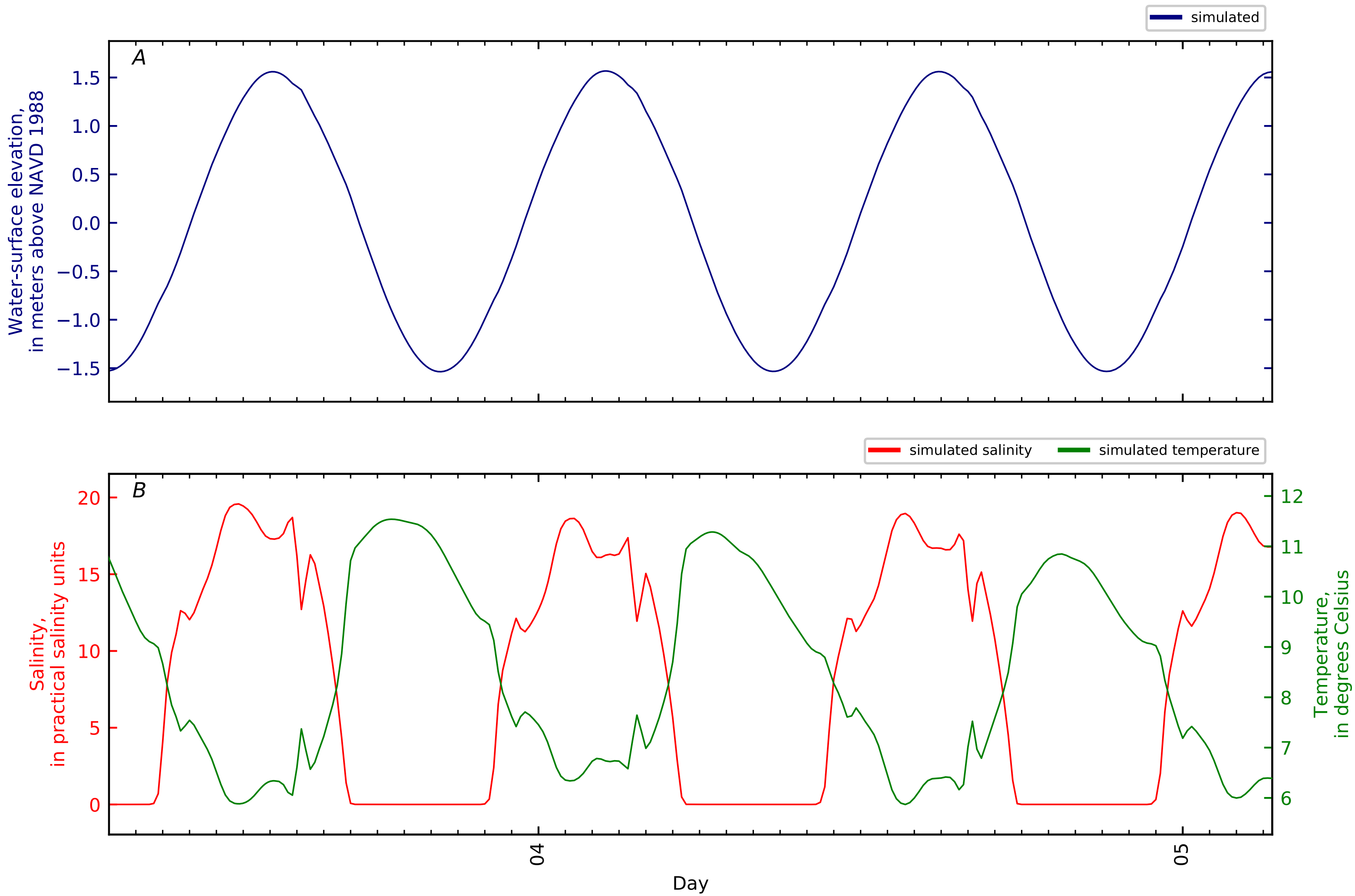

Figure B2-4. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 3, Penob Riv KM0 Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

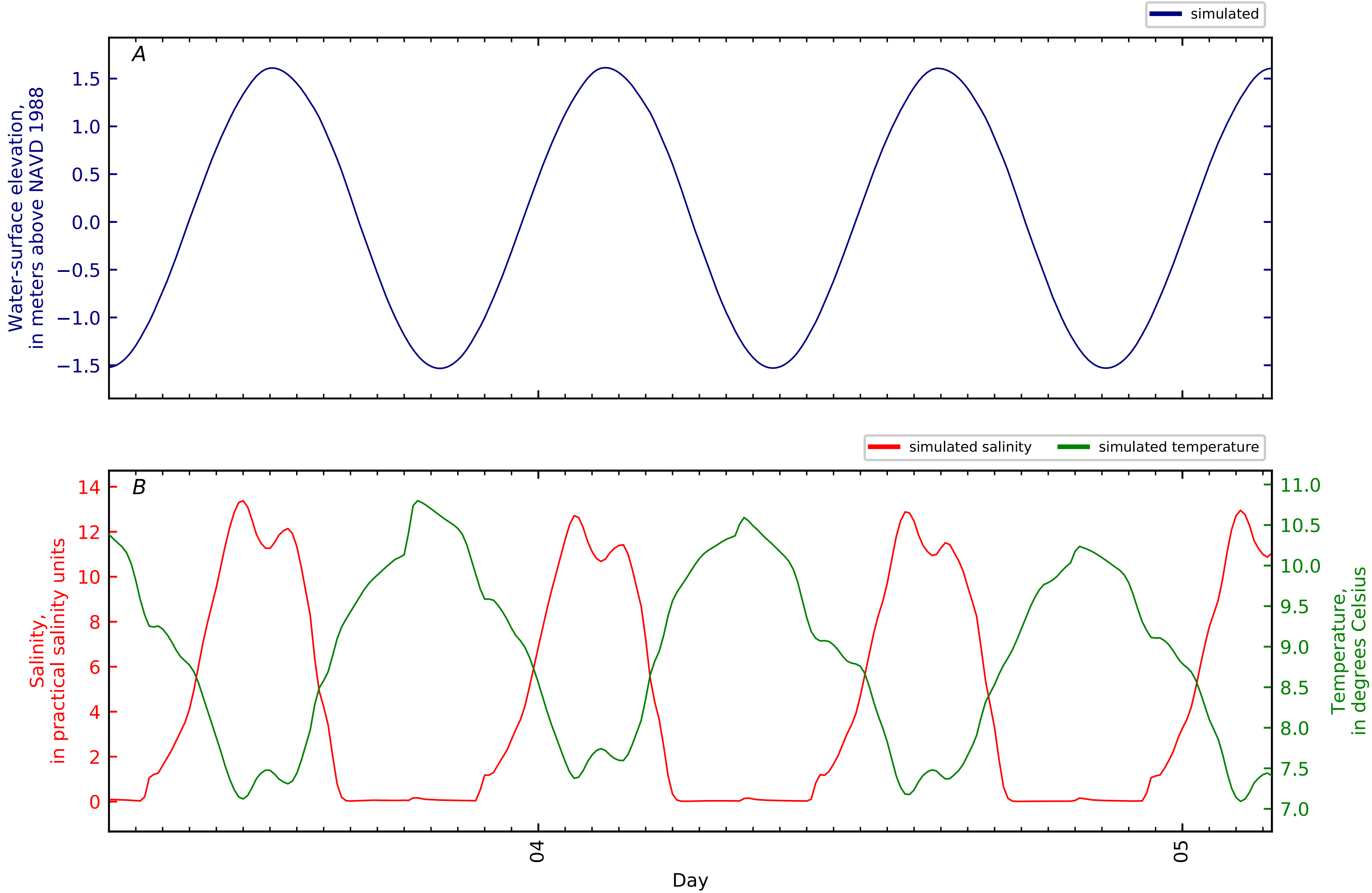

Figure B2-5. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 4, Penob Riv KM0 GS CTD5-01. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

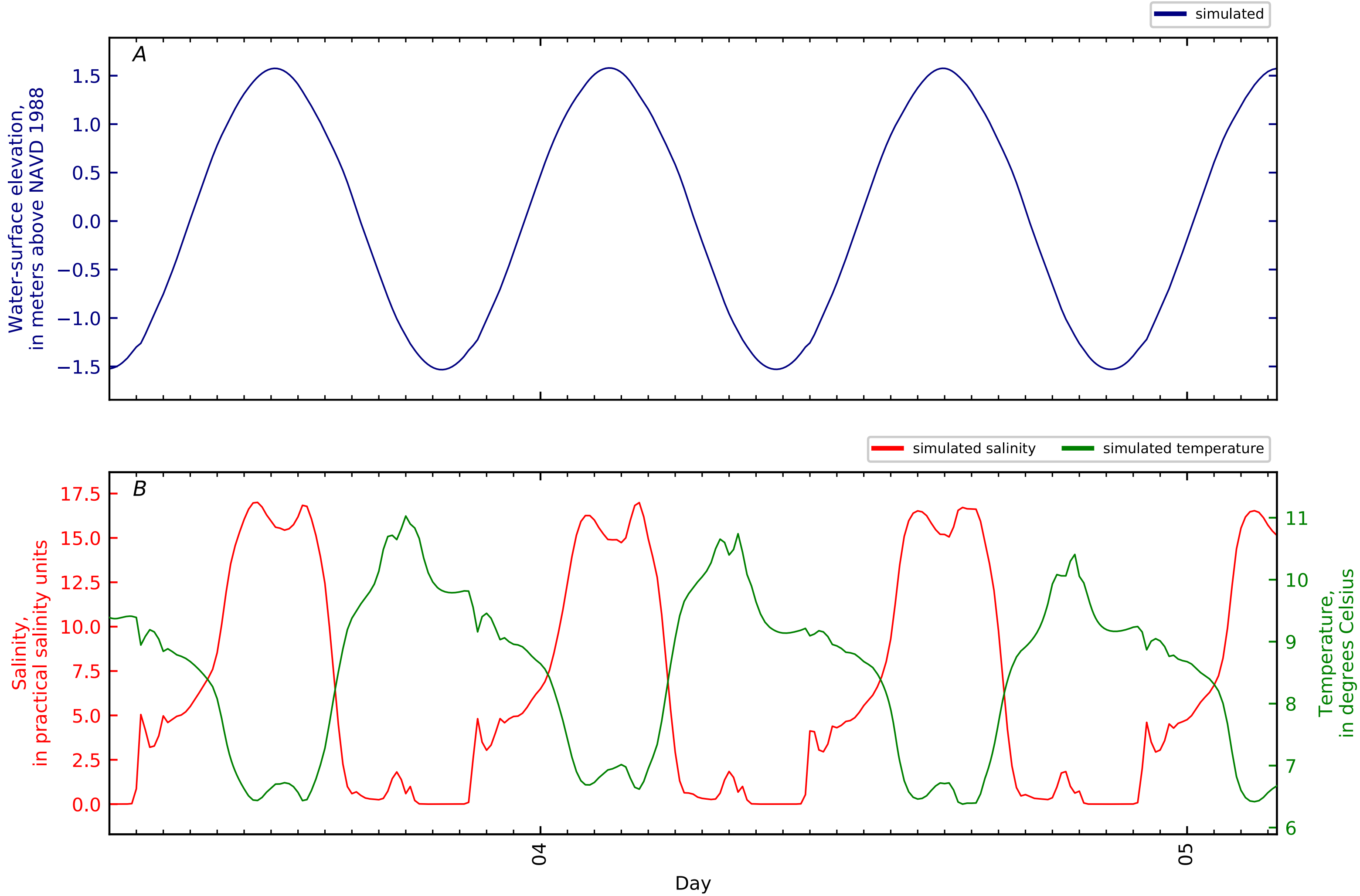

Figure B2-6. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 5, Penob Riv KM0 GS CTD5-02. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

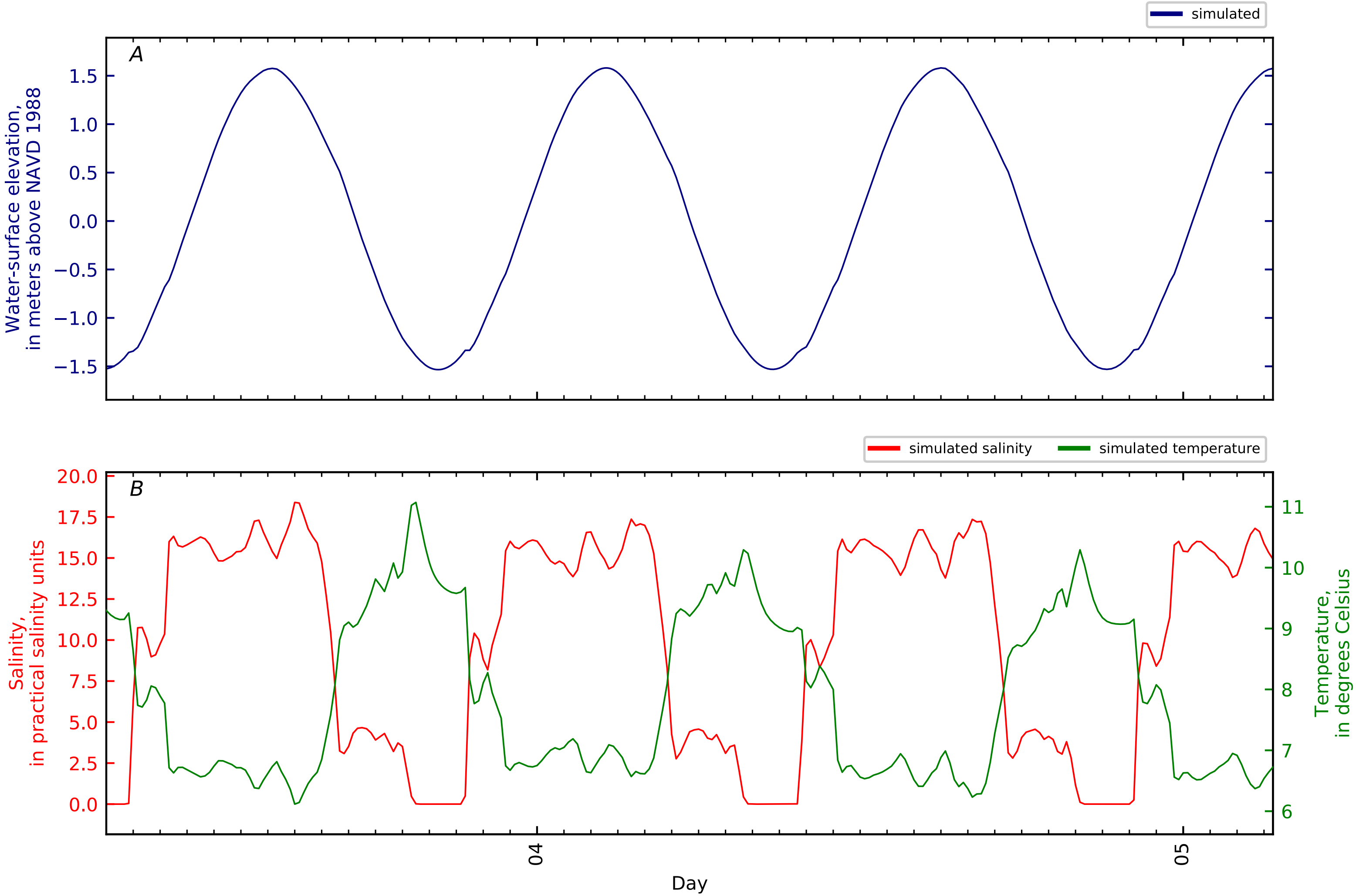

Figure B2-7. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 6, Penob Riv KM0 GS CTD5-03. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

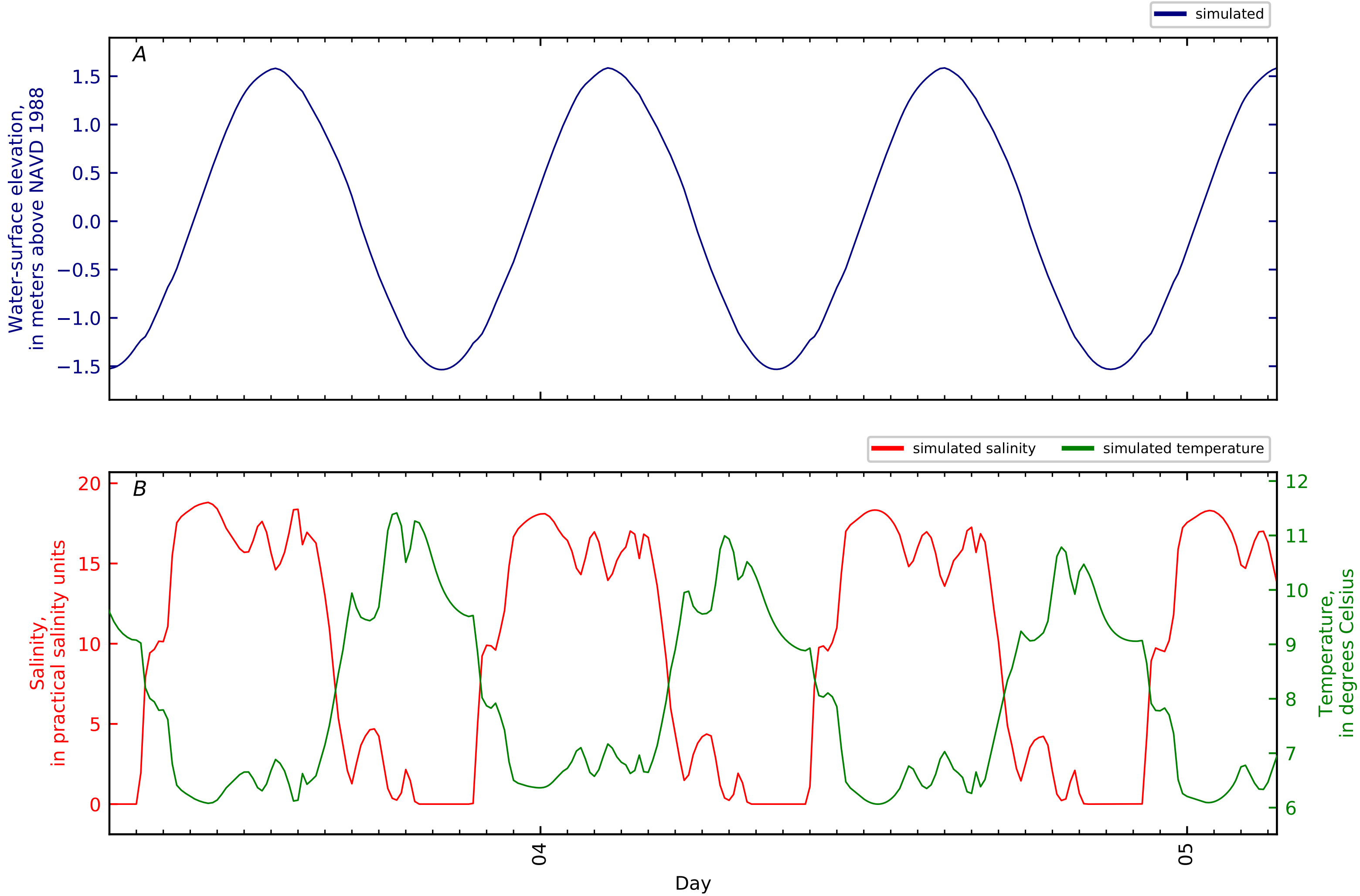

Figure B2-8. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 7, Penob Riv KM0 GS CTD5-04. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

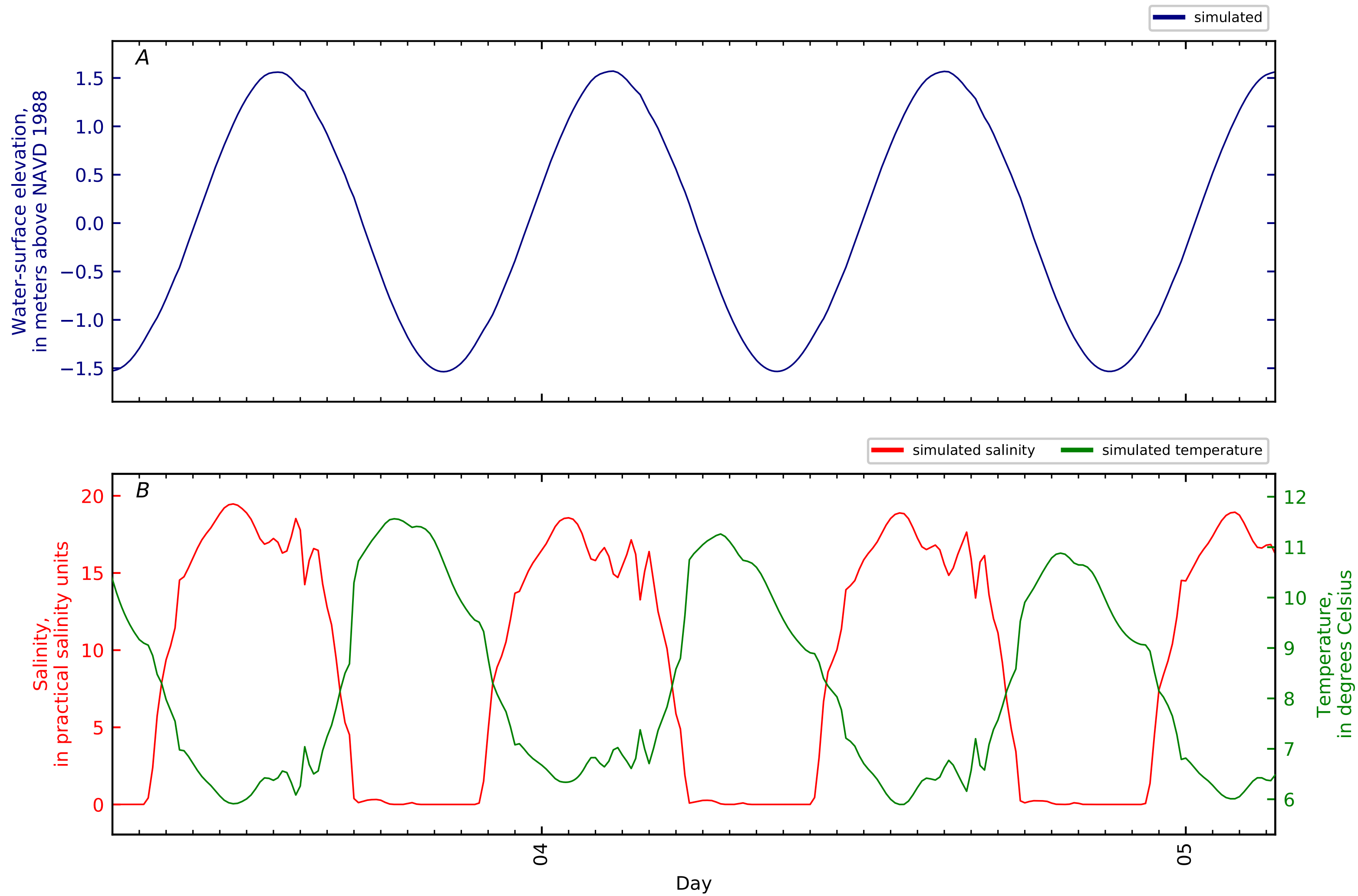

Figure B2-9. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 8, Penob Riv KM0 GS CTD5-05. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

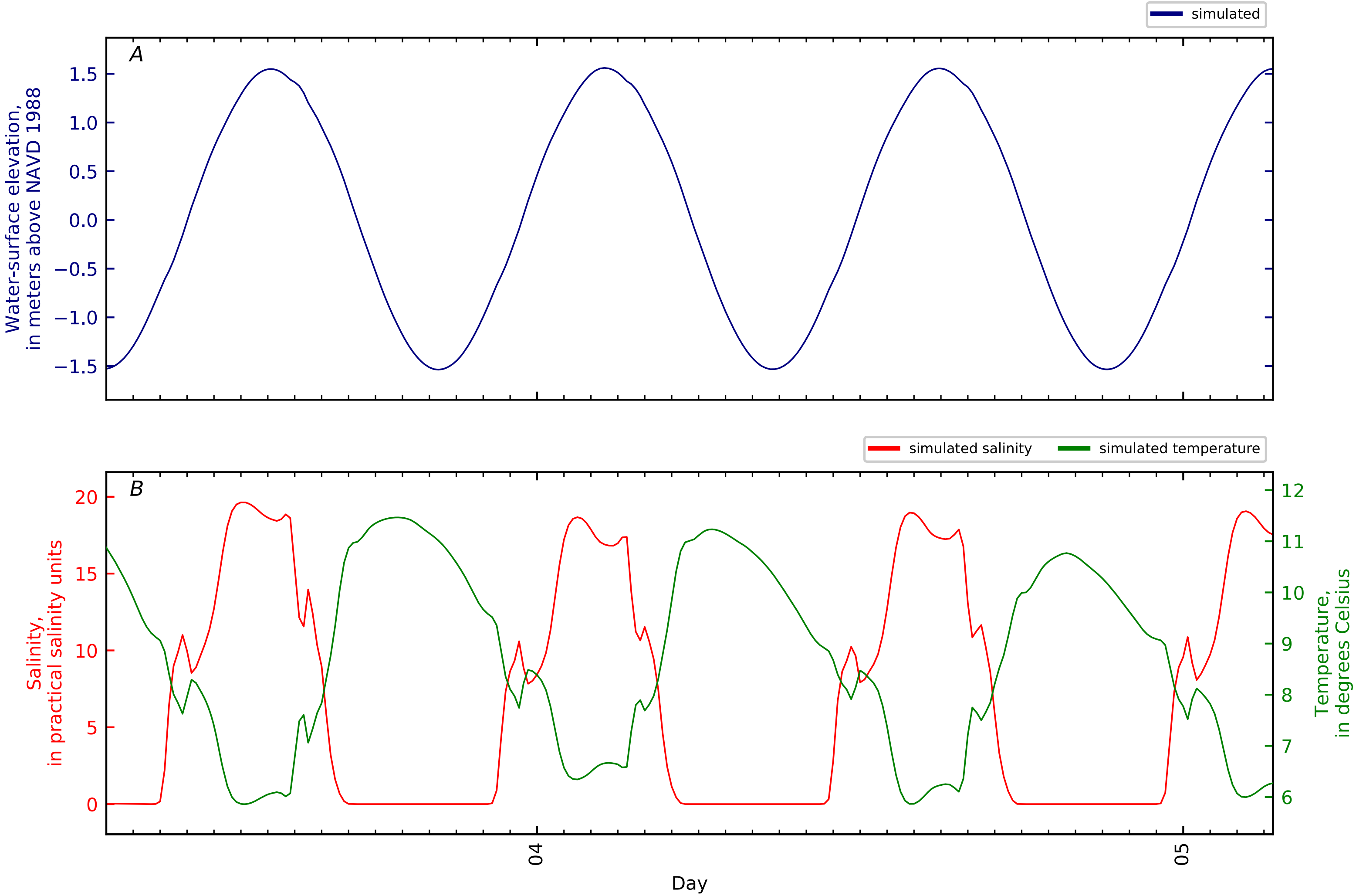

Figure B2-10. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 9, Penob Riv KM0 GS CTD5-06. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

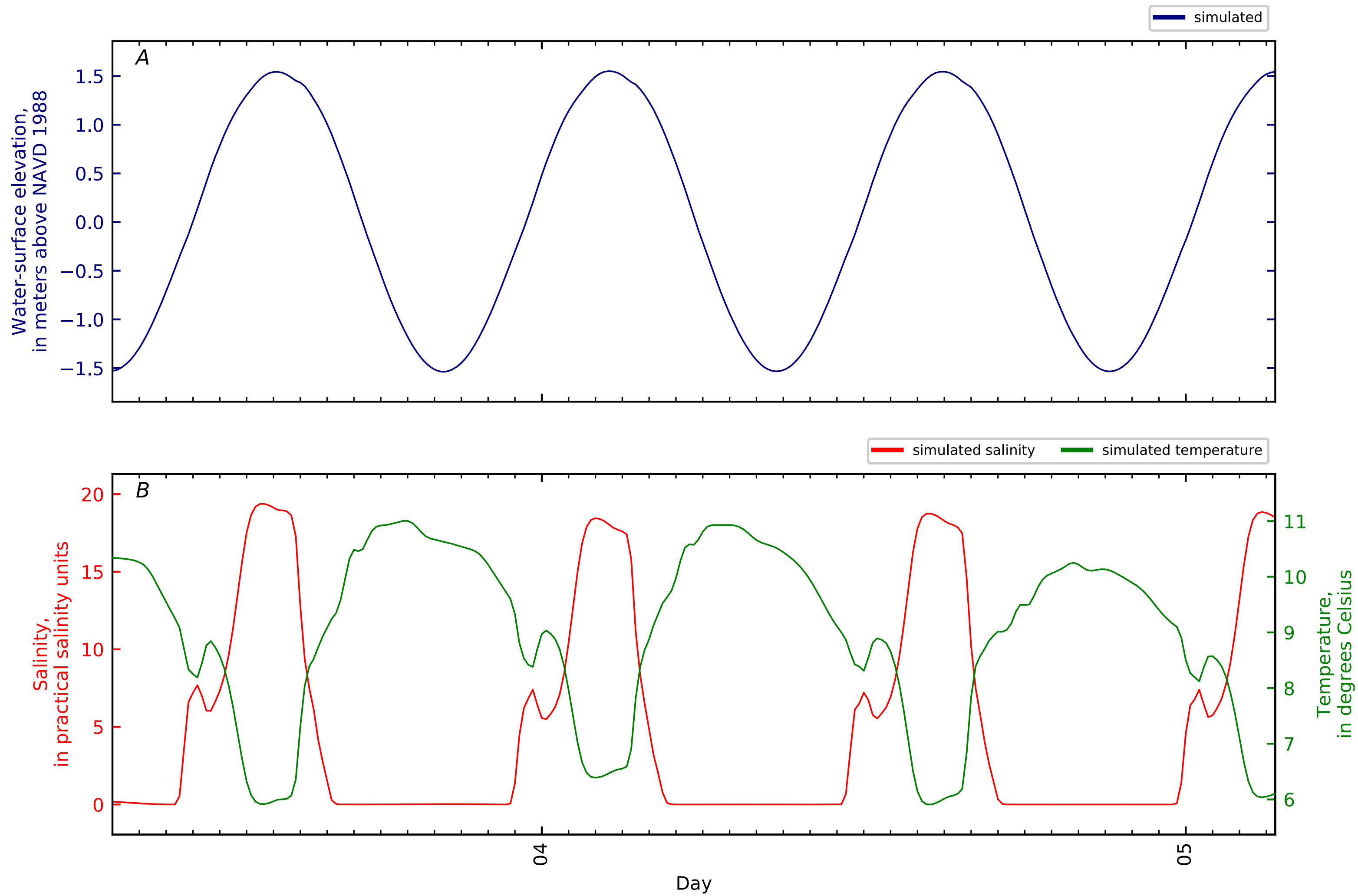

Figure B2-11. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 10, Penob Riv KM0 GS CTD5-07. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

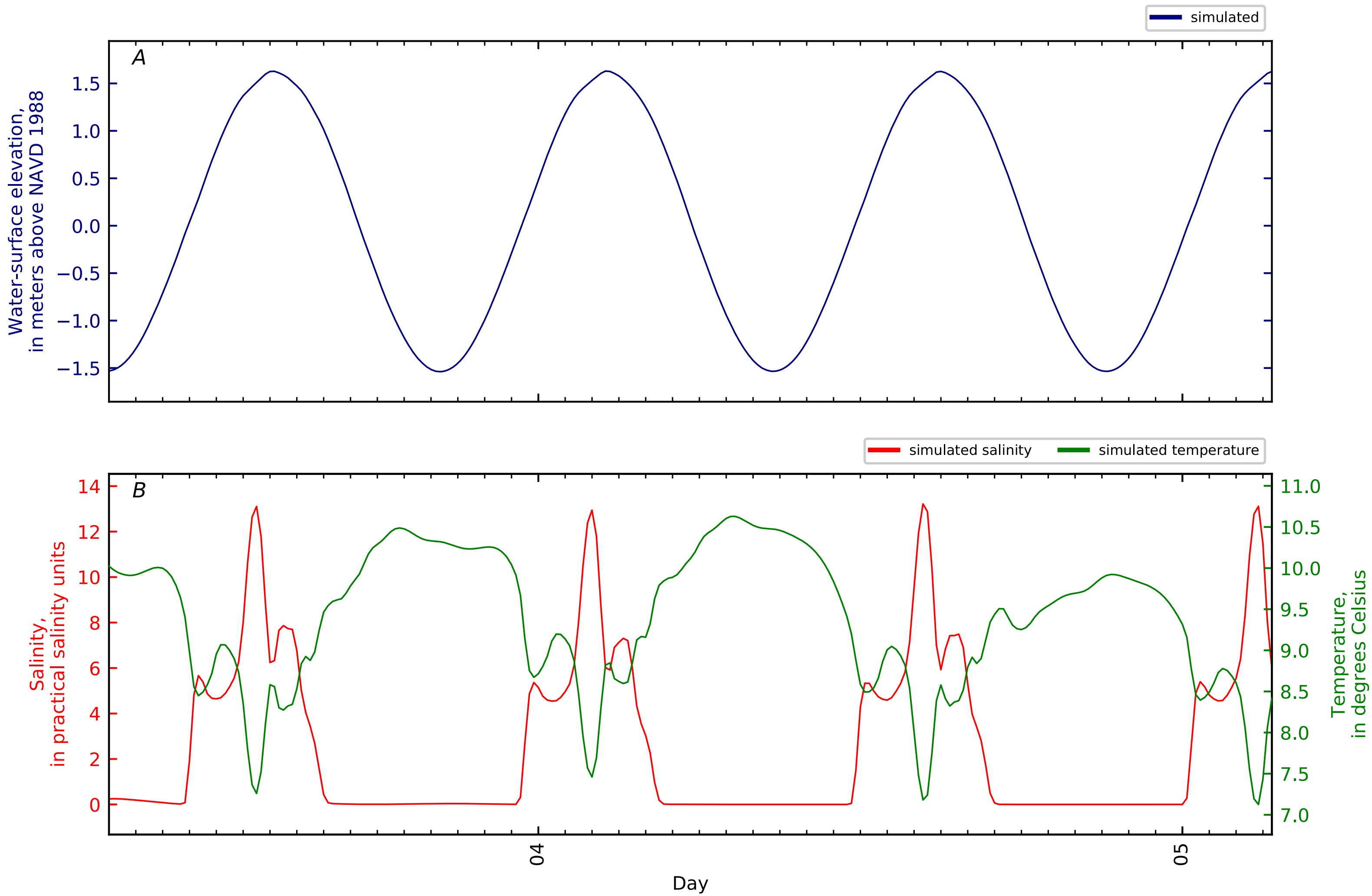

Figure B2-12. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 11, Penob Riv KM0 GS CTD5-08. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

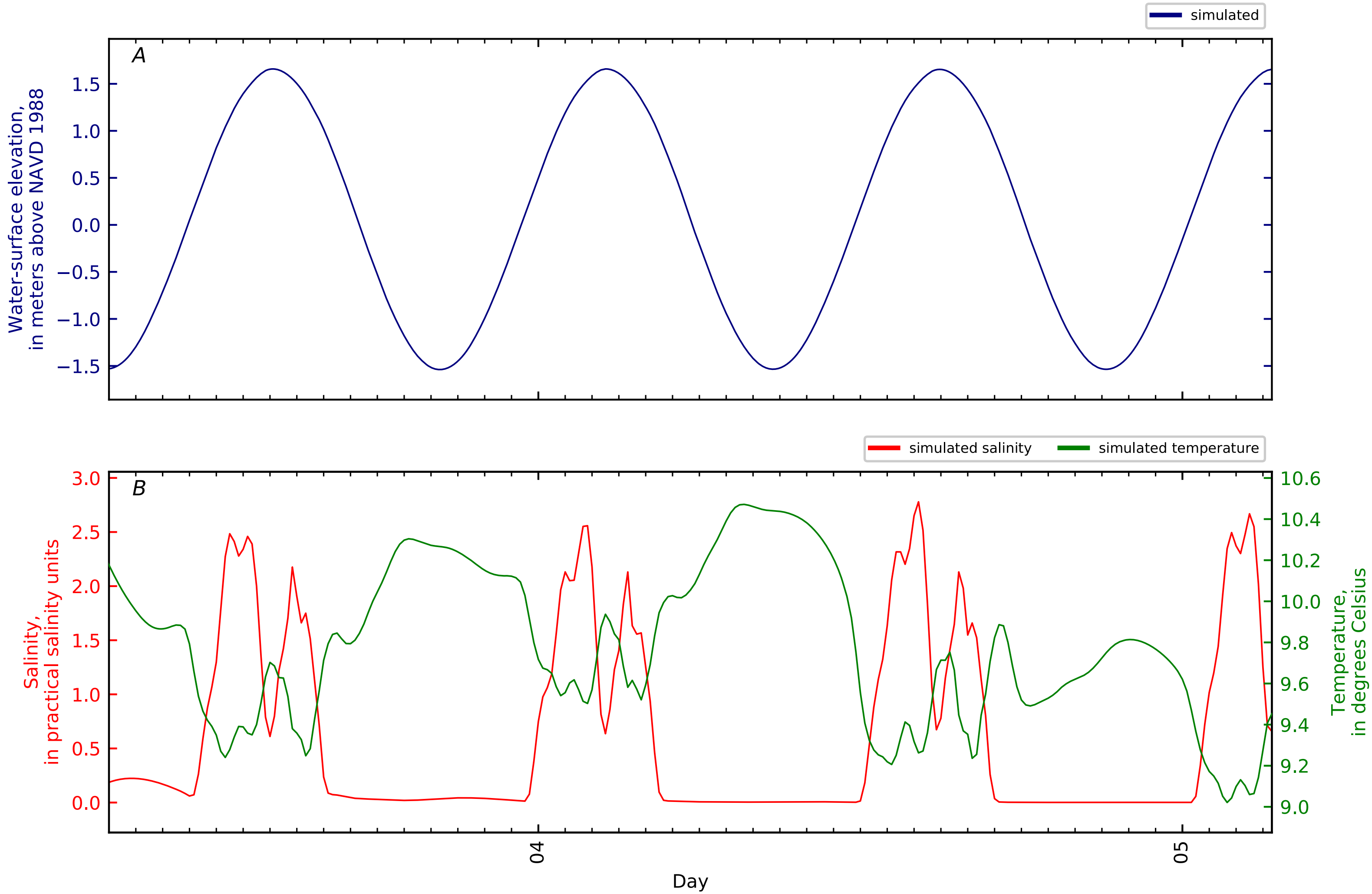

Figure B2-13. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 12, Penob Riv KM0 GS CTD5-09. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

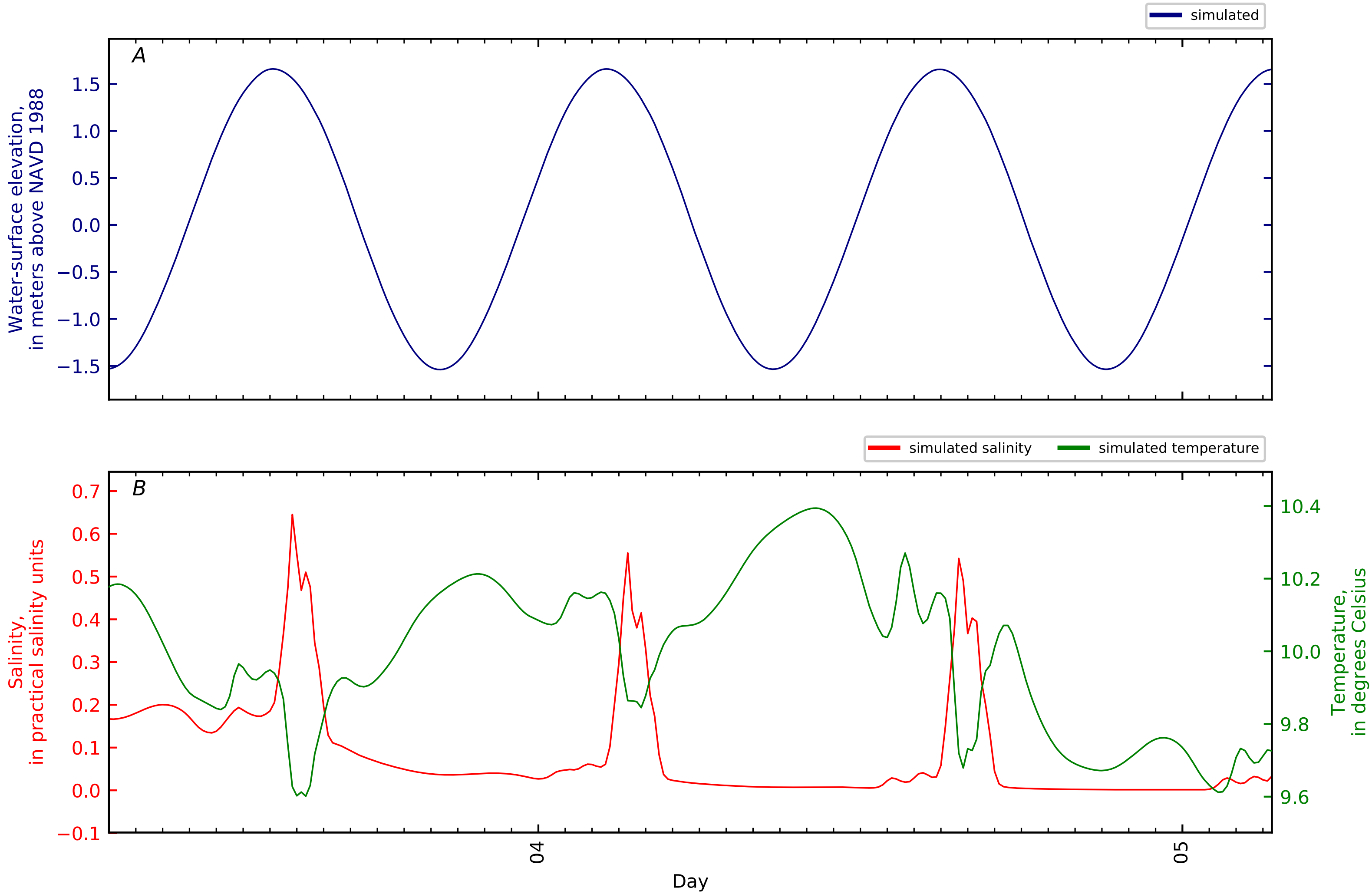

Figure B2-14. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 13, Penob Riv KM0 GS CTD5-10. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

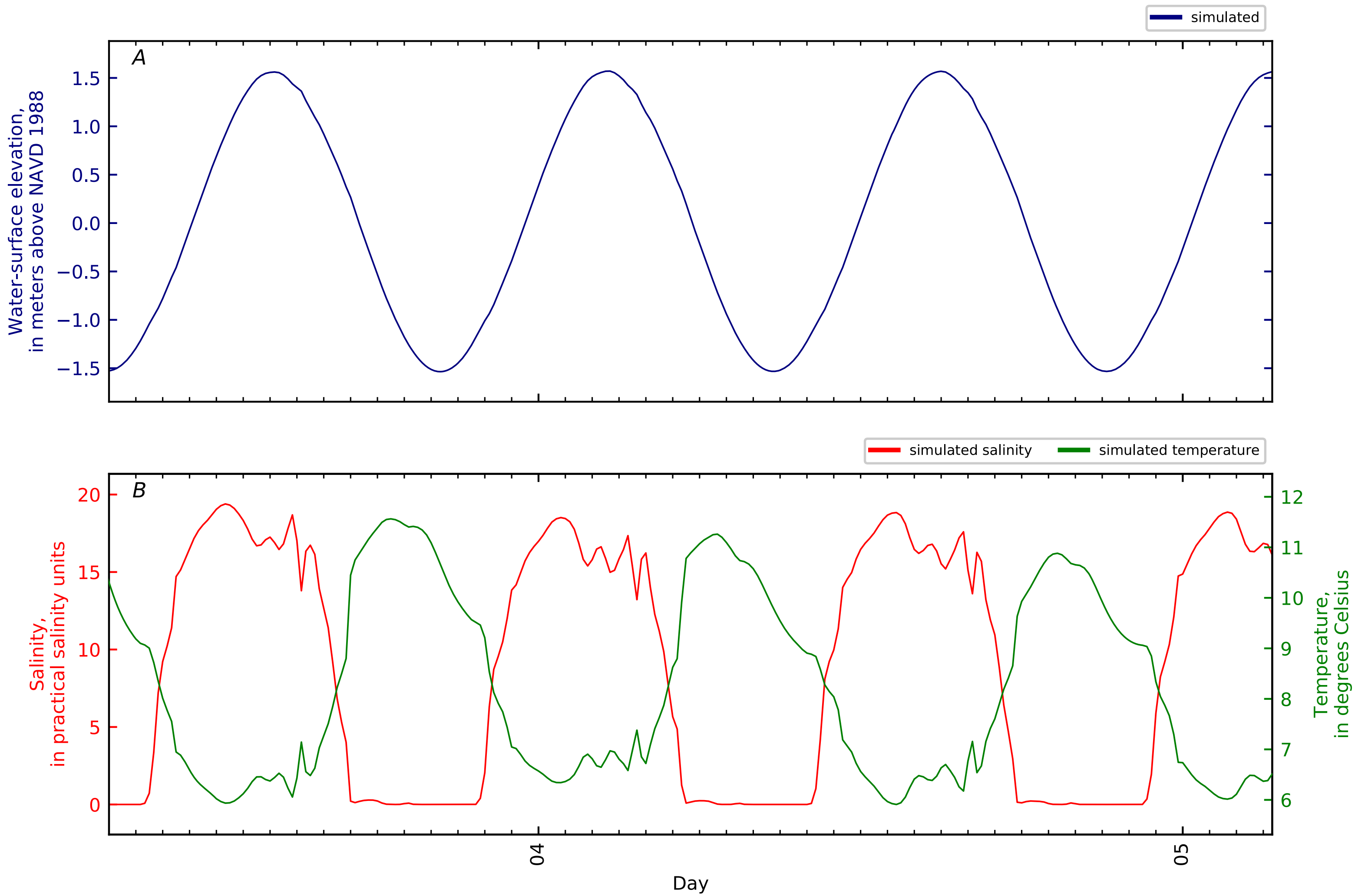

Figure B2-15. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 14, Penob Riv KM0.04 WHOI1 Ft Point 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

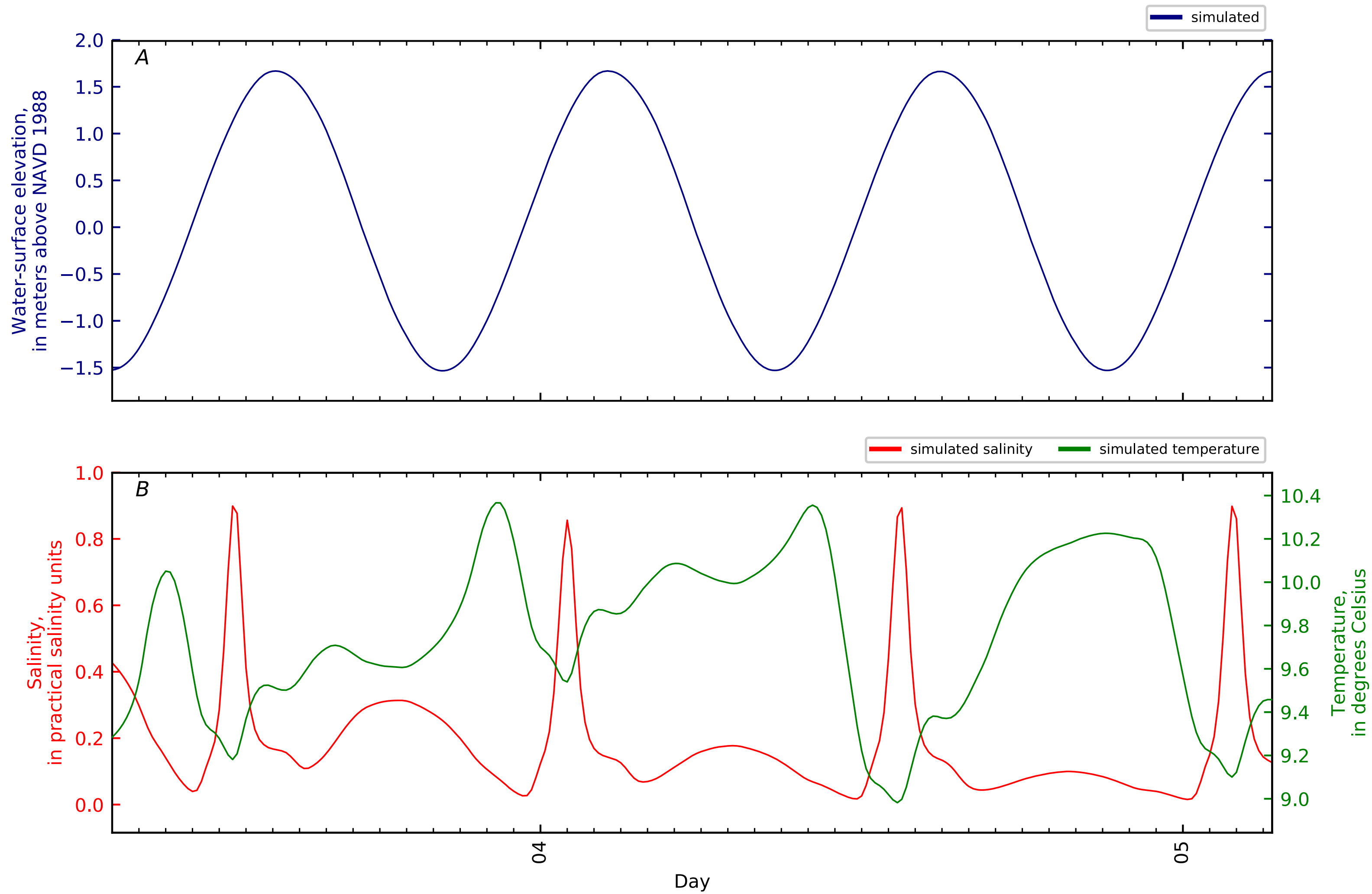

Figure B2-16. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 15, Penob Riv KM0.1 GS 442810068480101 at Ft. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

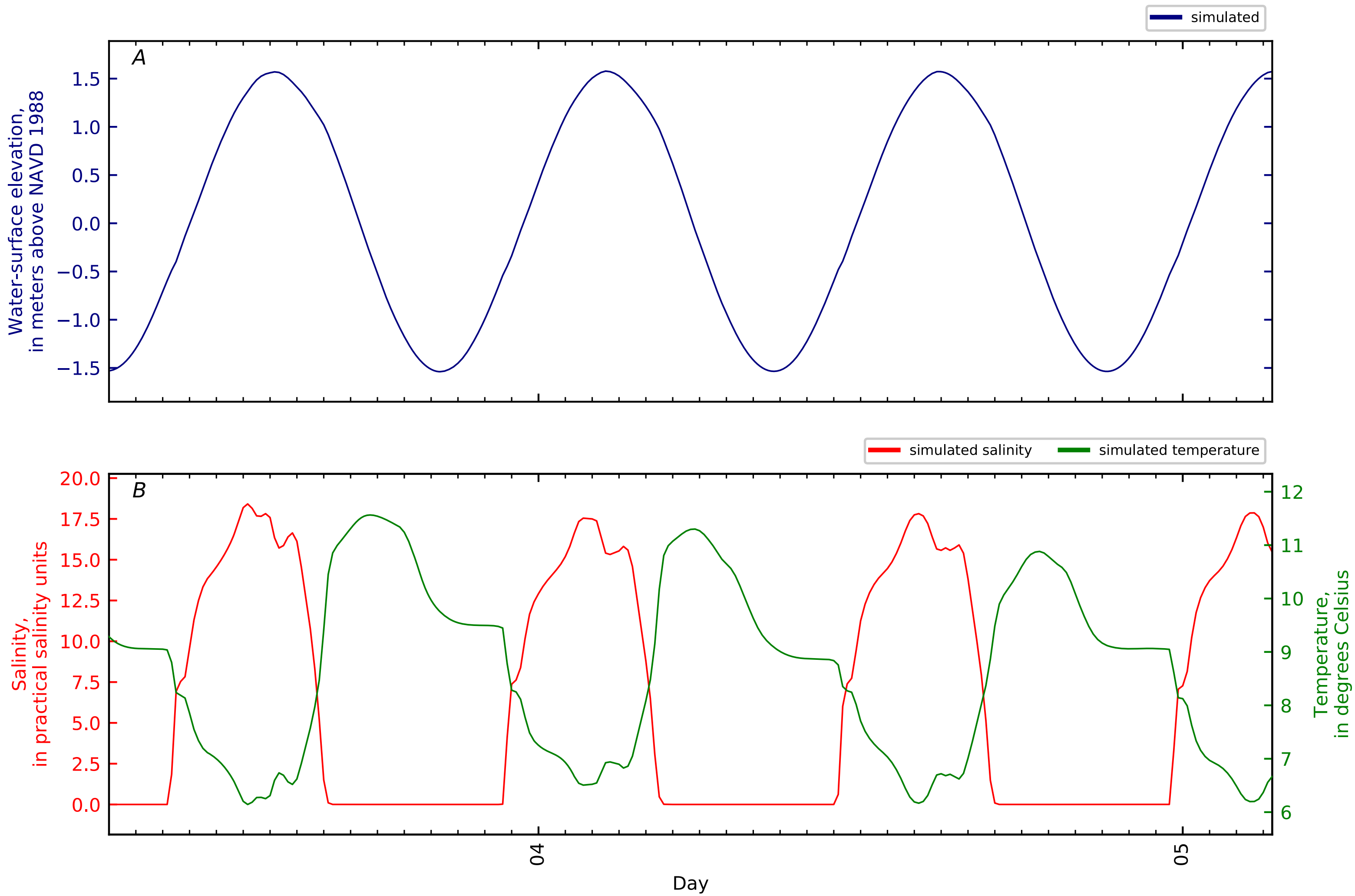

Figure B2-17. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 16, Penob Riv KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

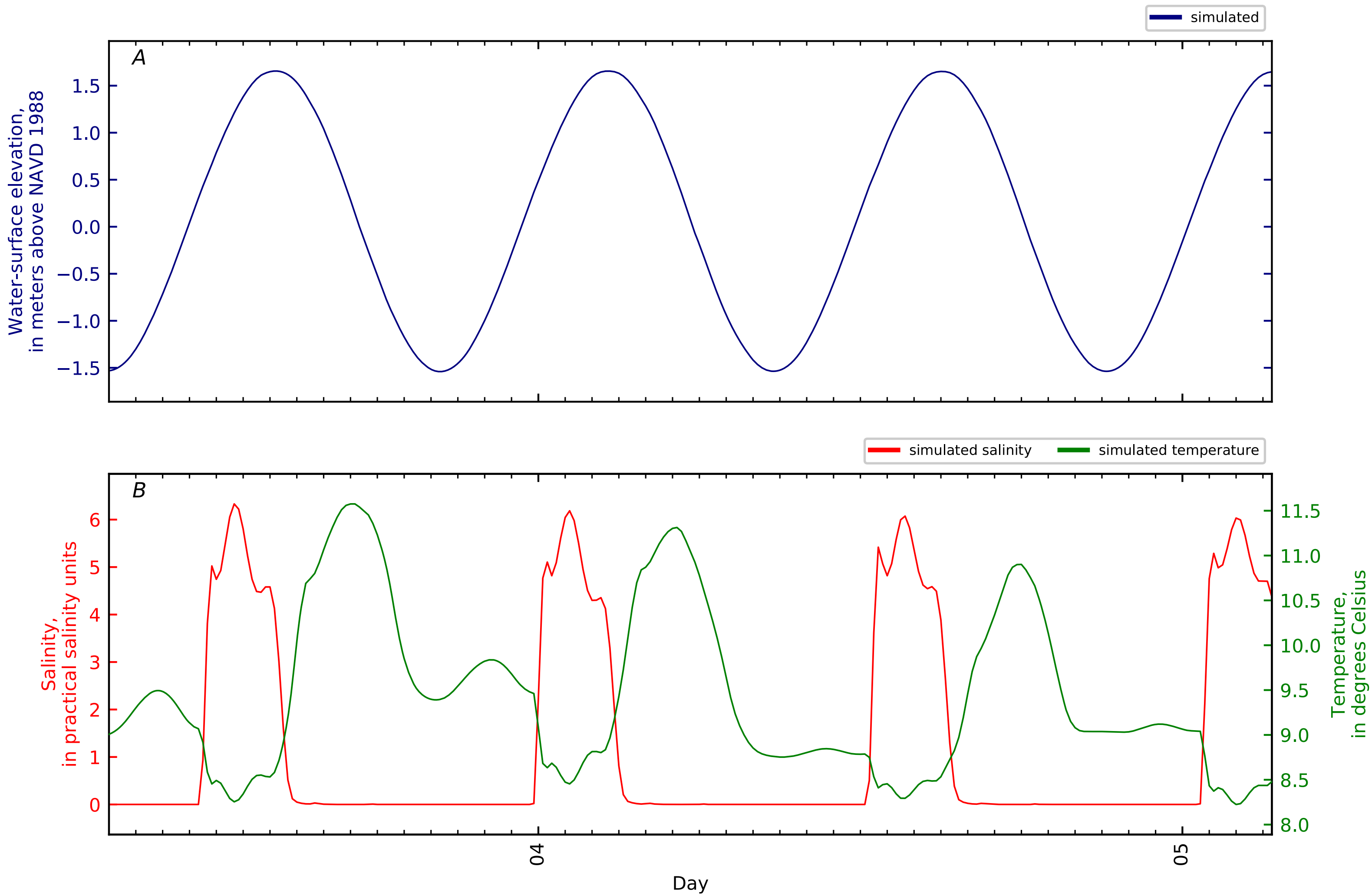

Figure B2-18. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 17, Penob Riv KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

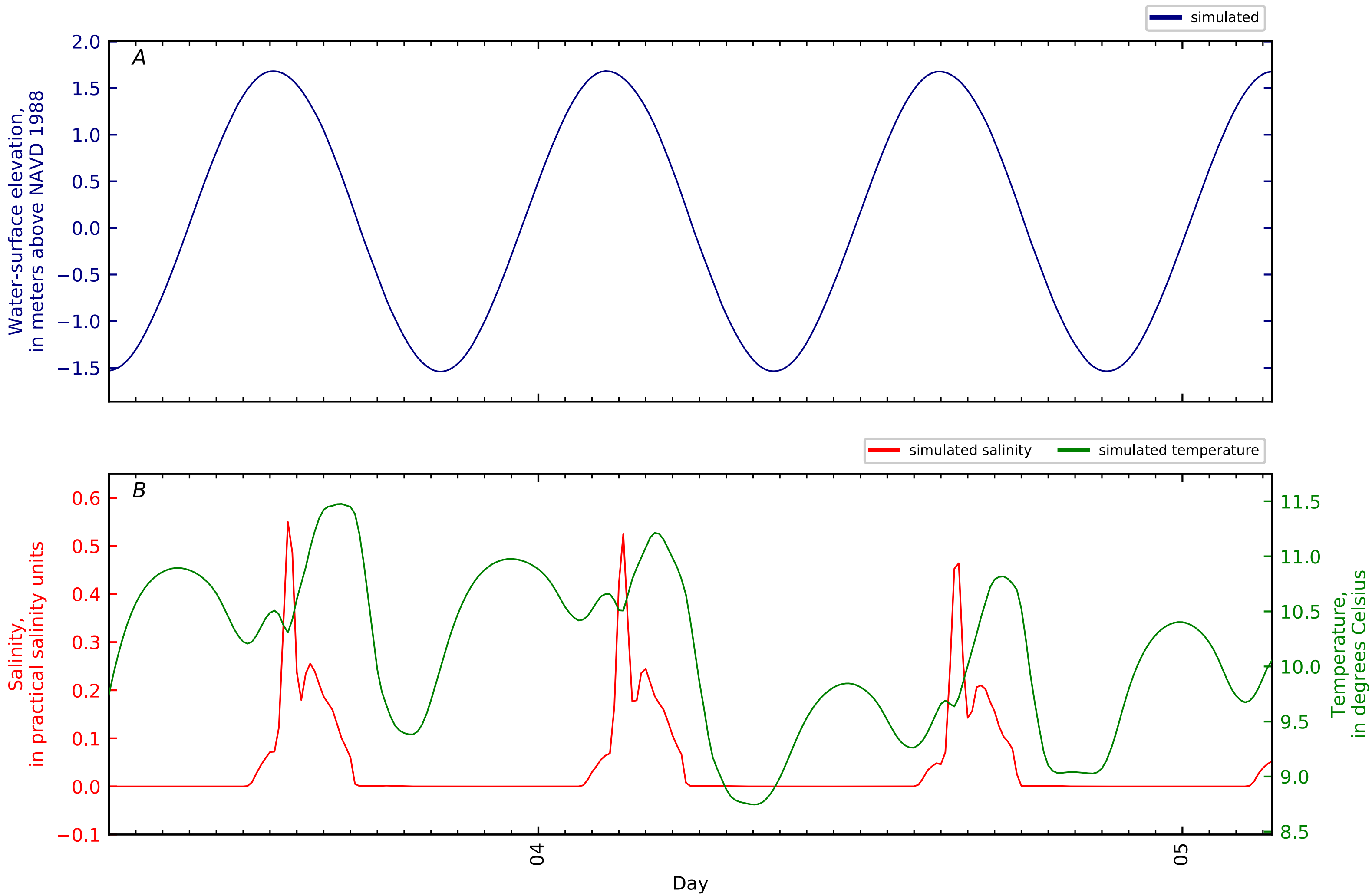

Figure B2-19. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 18, Penob Riv KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

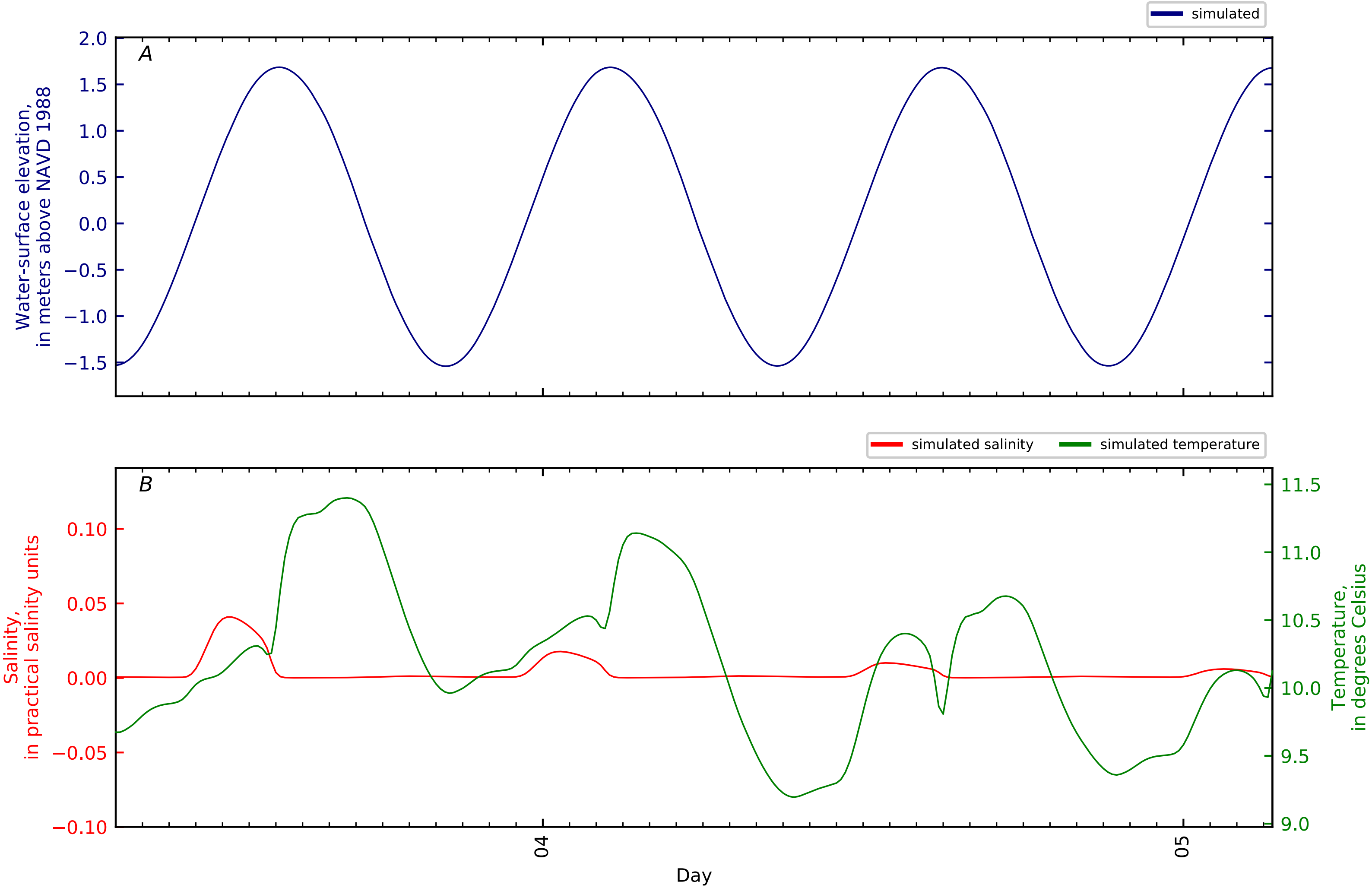

Figure B2-20. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 19, Penob Riv KM3.8 GS CTD3-01. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

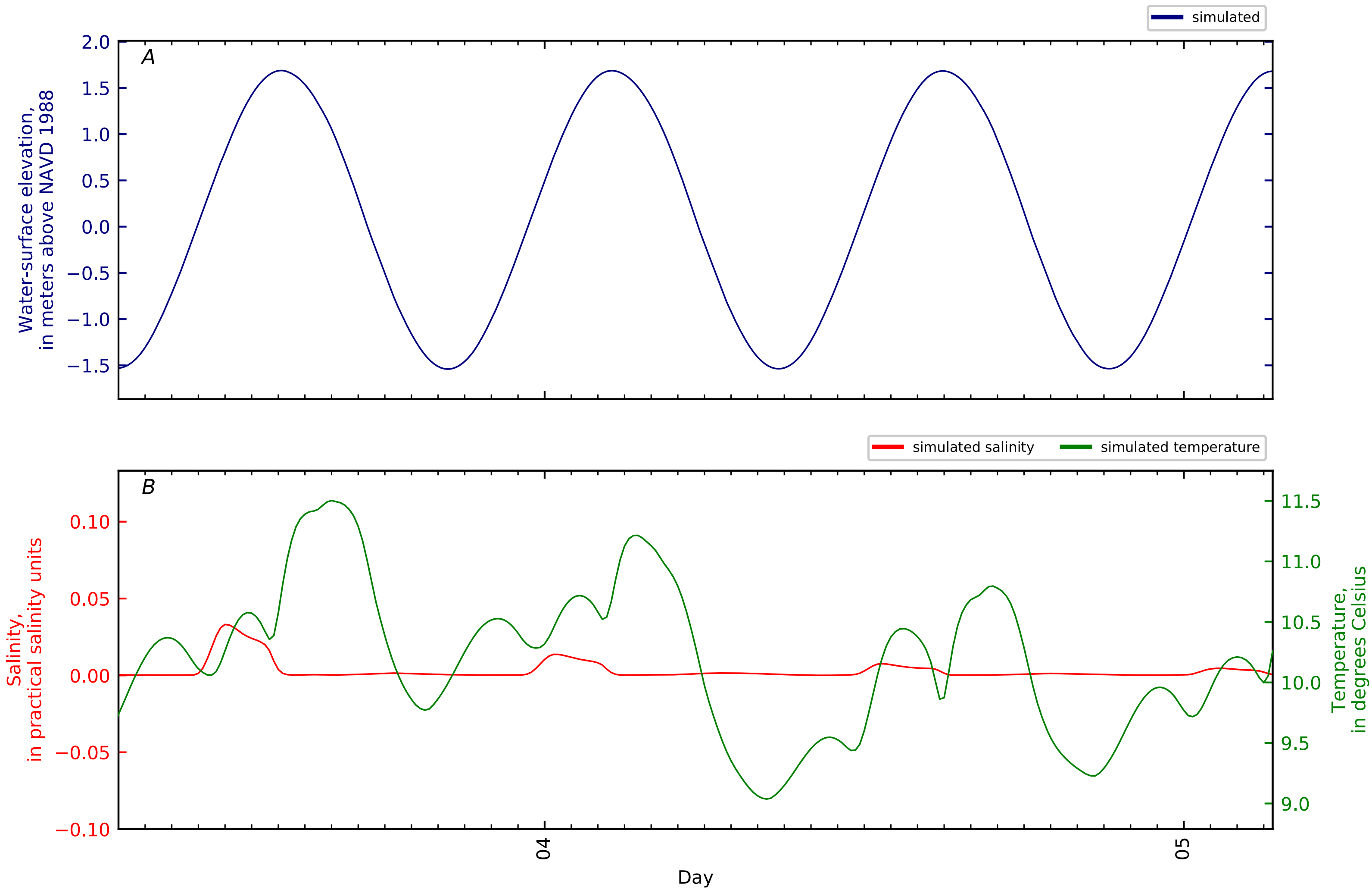

Figure B2-21. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 20, Penob Riv KM3.8 GS CTD3-02. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

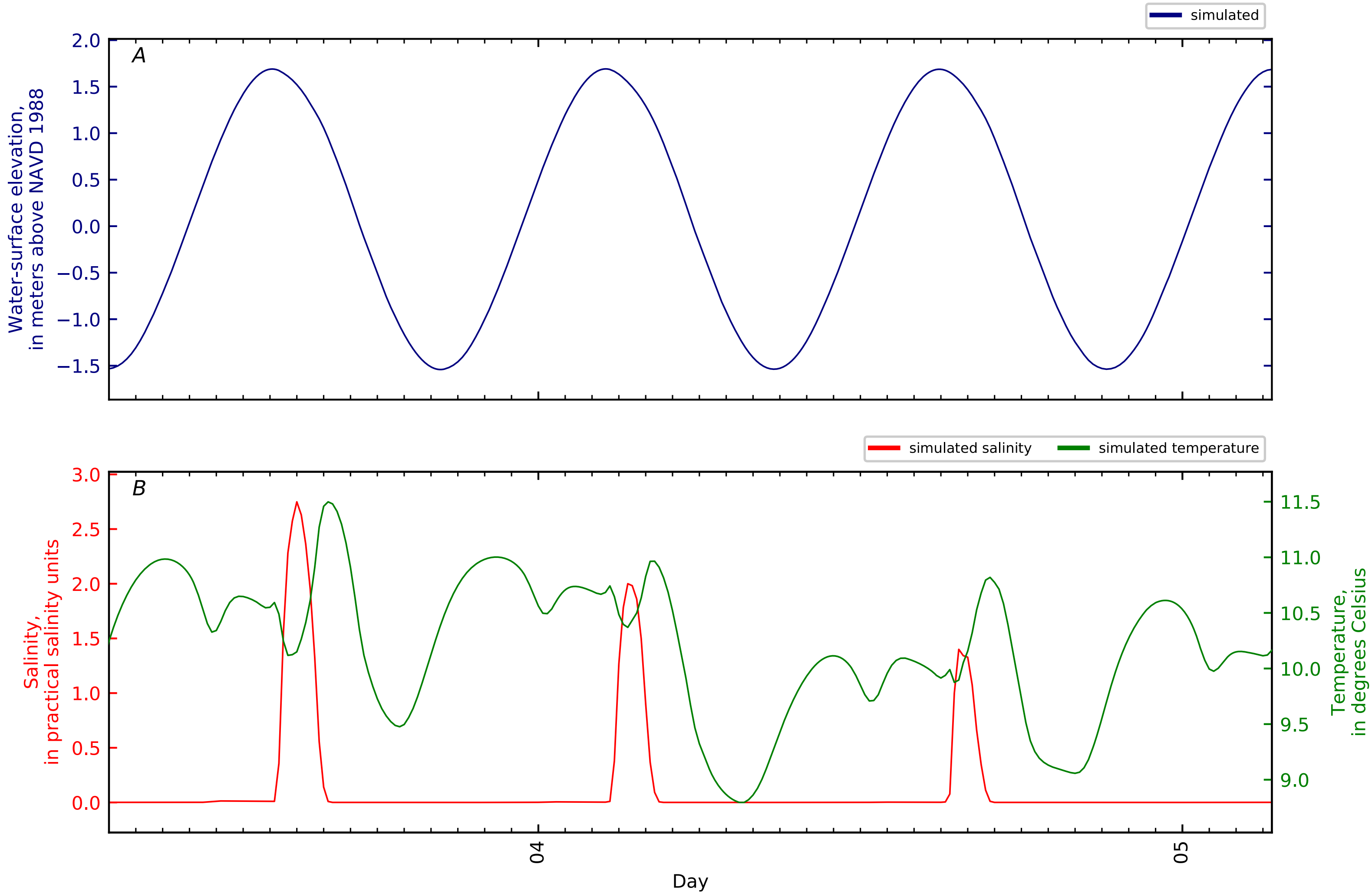

Figure B2-22. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 21, Penob Riv KM3.8 GS CTD3-03. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

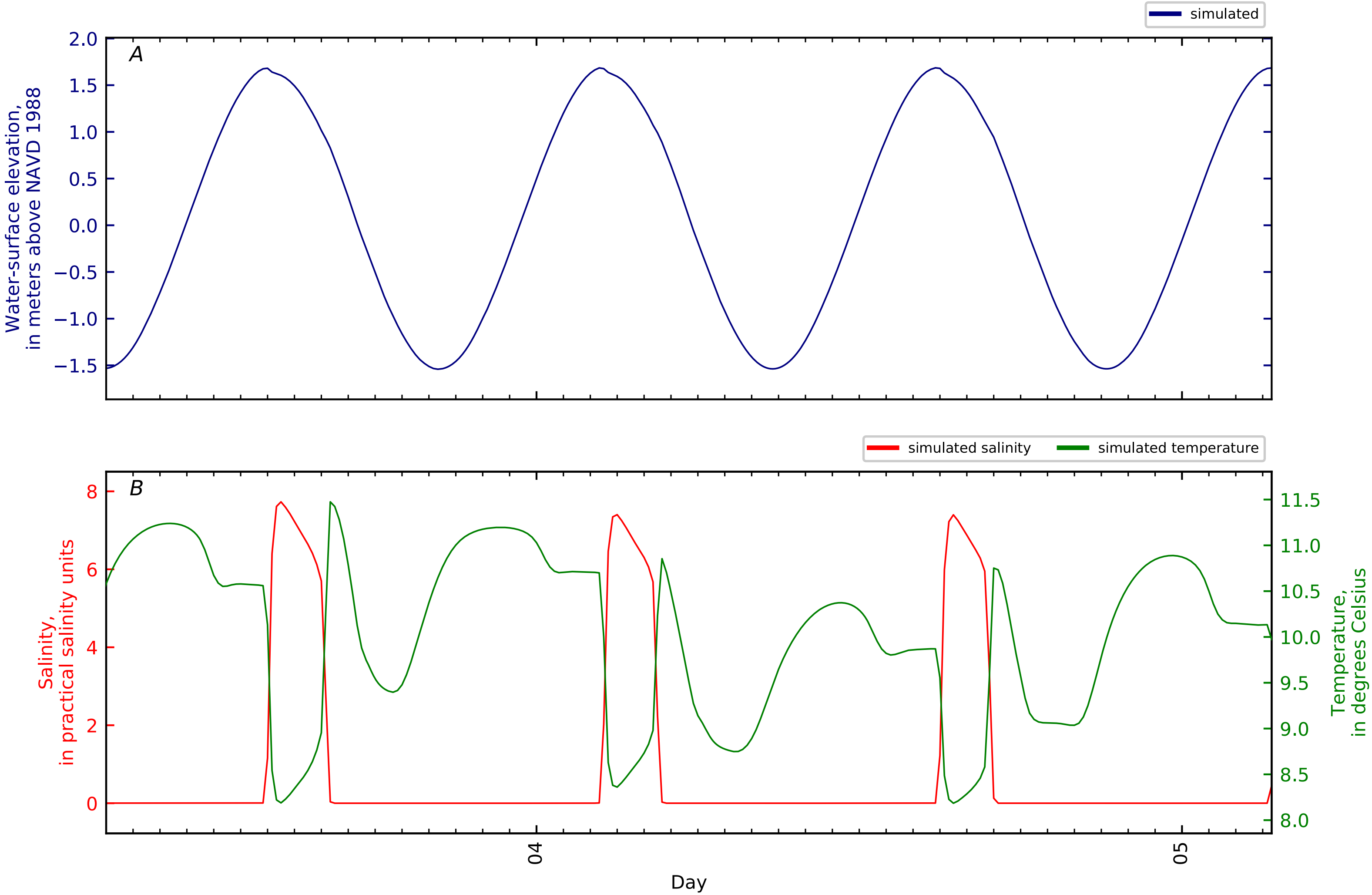

Figure B2-23. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 22, Penob Riv KM3.8 GS CTD3-04. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

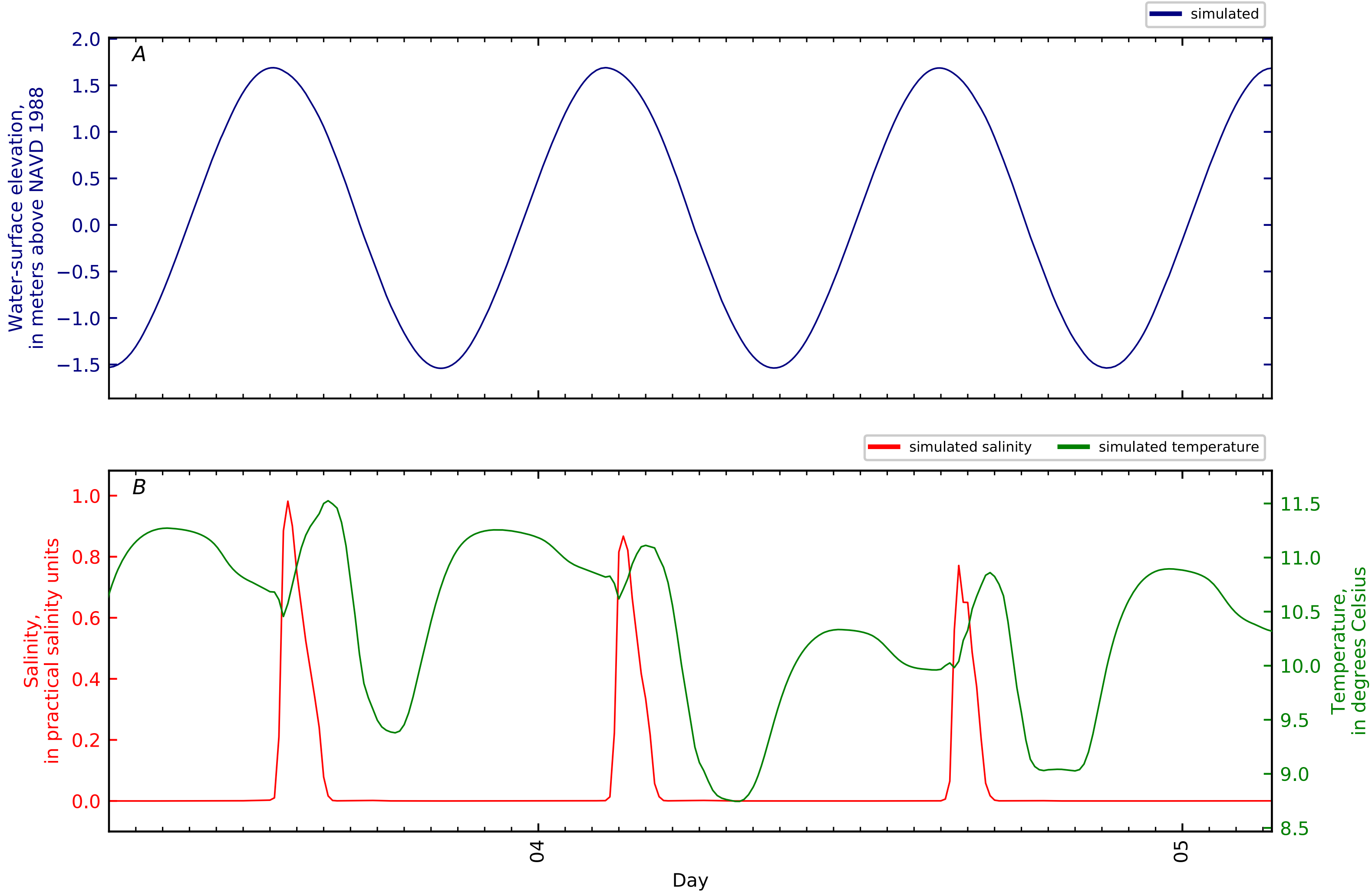

Figure B2-24. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 23, Penob Riv KM3.8 GS CTD3-05. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

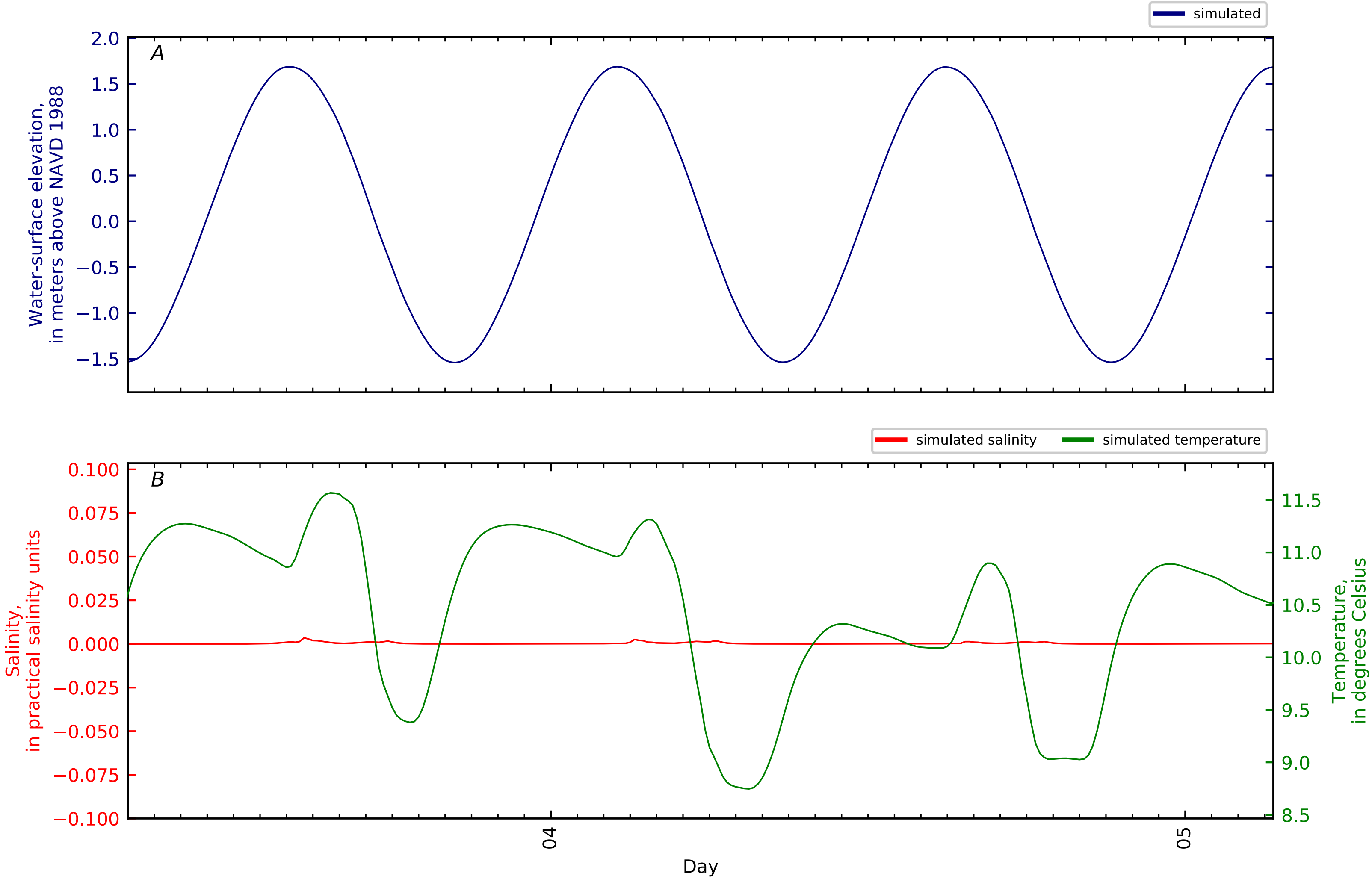

Figure B2-25. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 24, Penob Riv KM3.8 GS CTD3-06. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

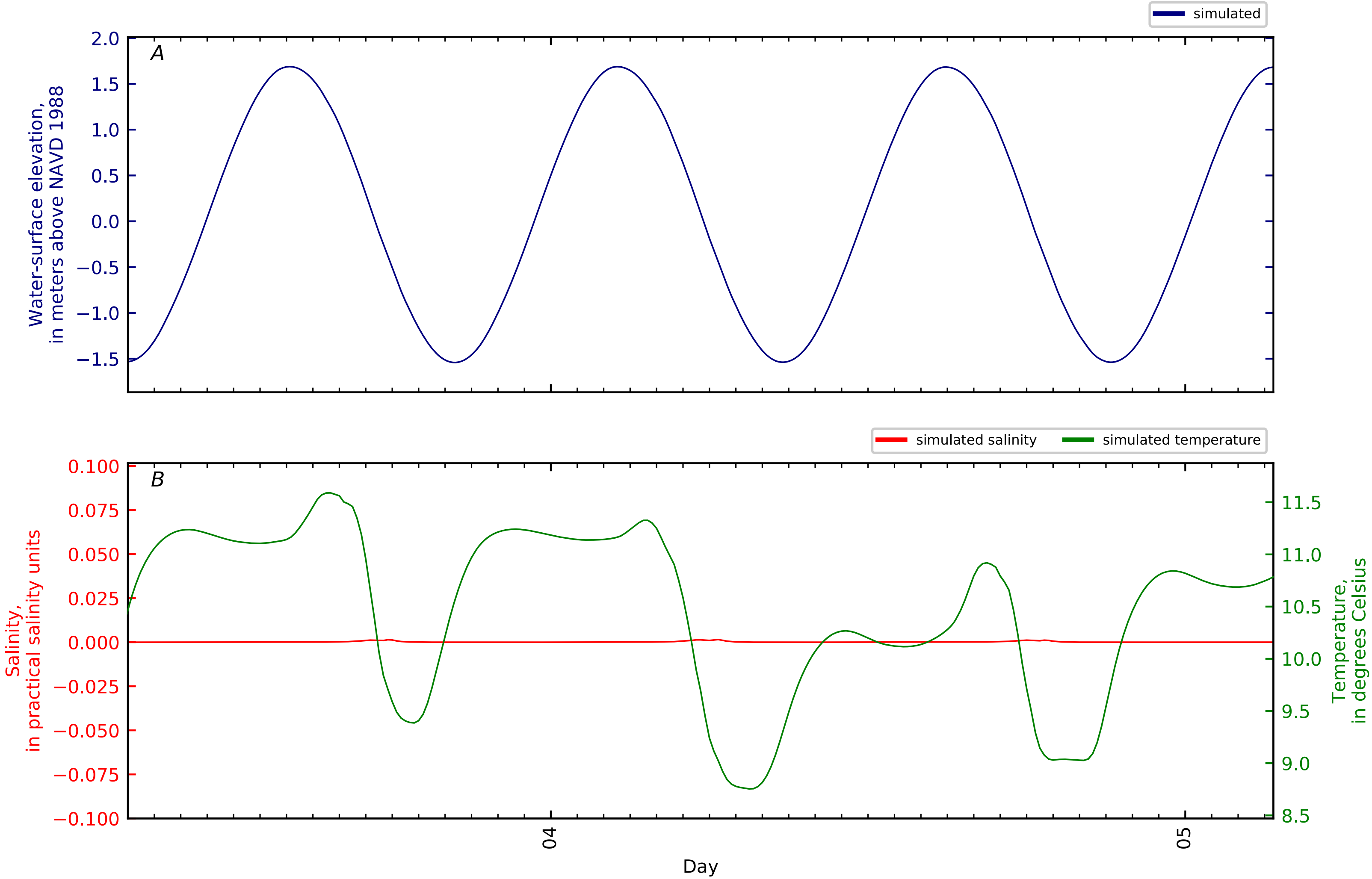

Figure B2-26. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 25, Penob Riv KM3.8 GS CTD3-07. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

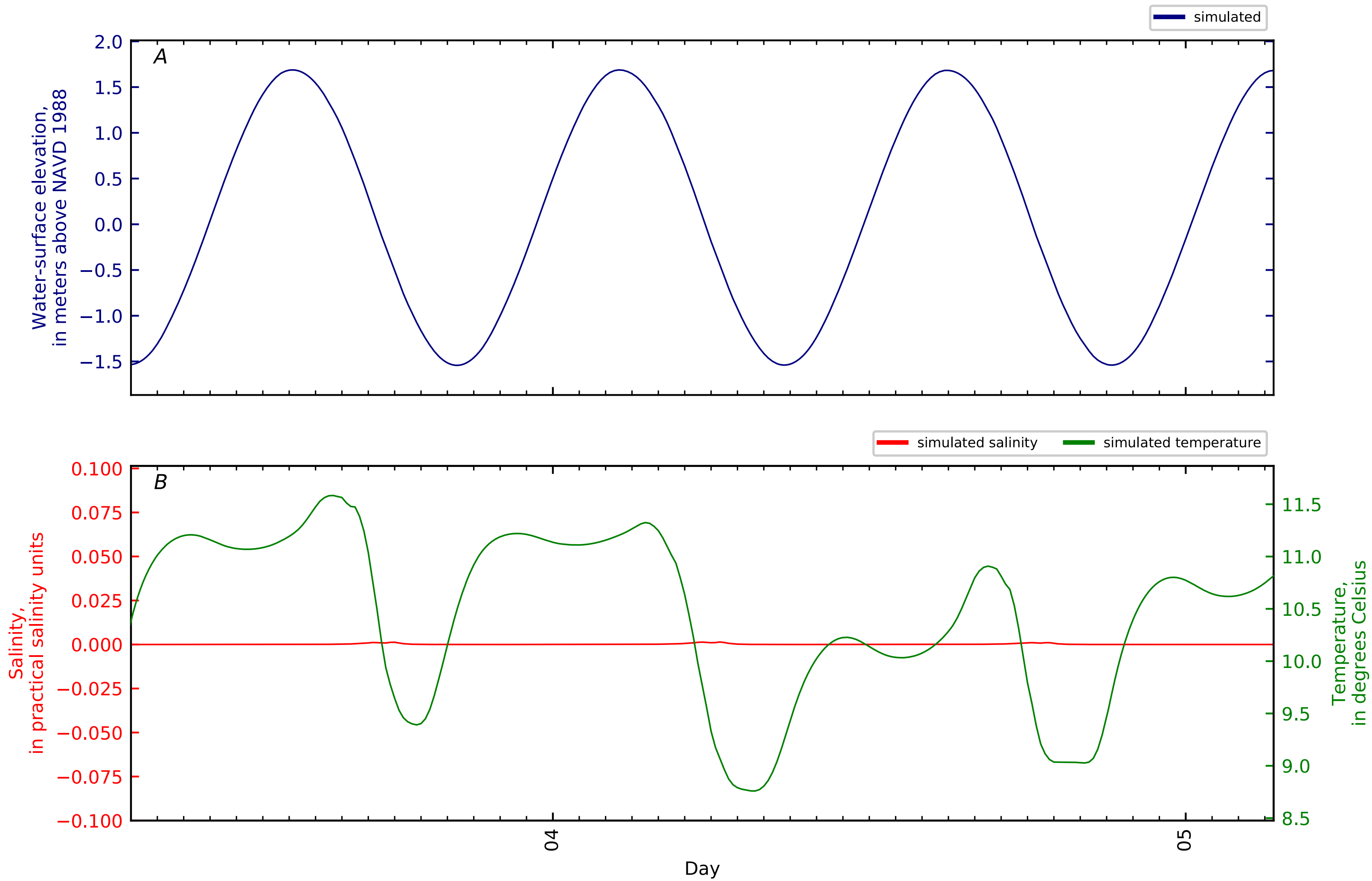

Figure B2-27. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 26, Penob Riv KM3.8 GS CTD3-08. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

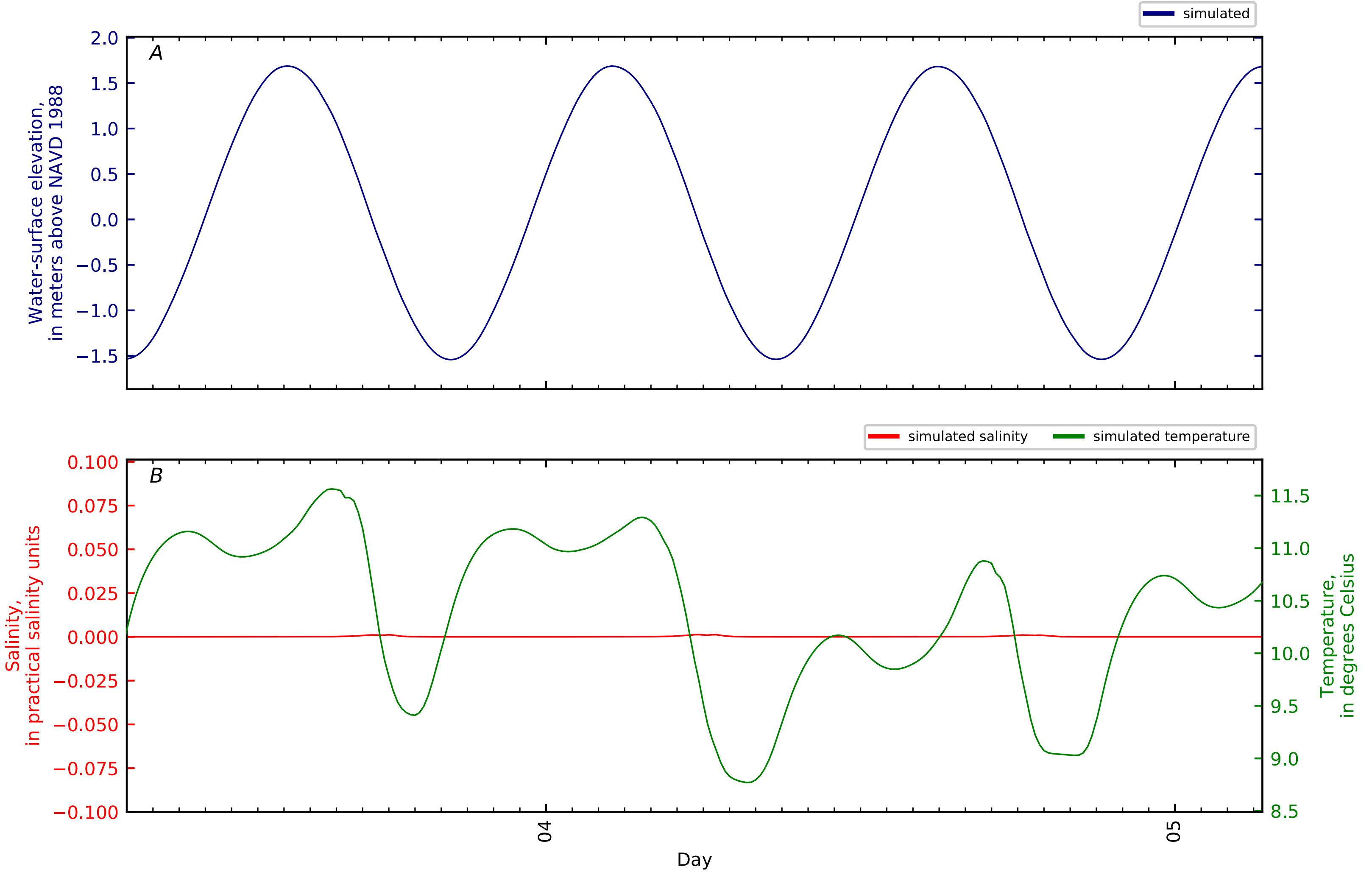

Figure B2-28. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 27, Penob Riv KM3.8 GS CTD3-09. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

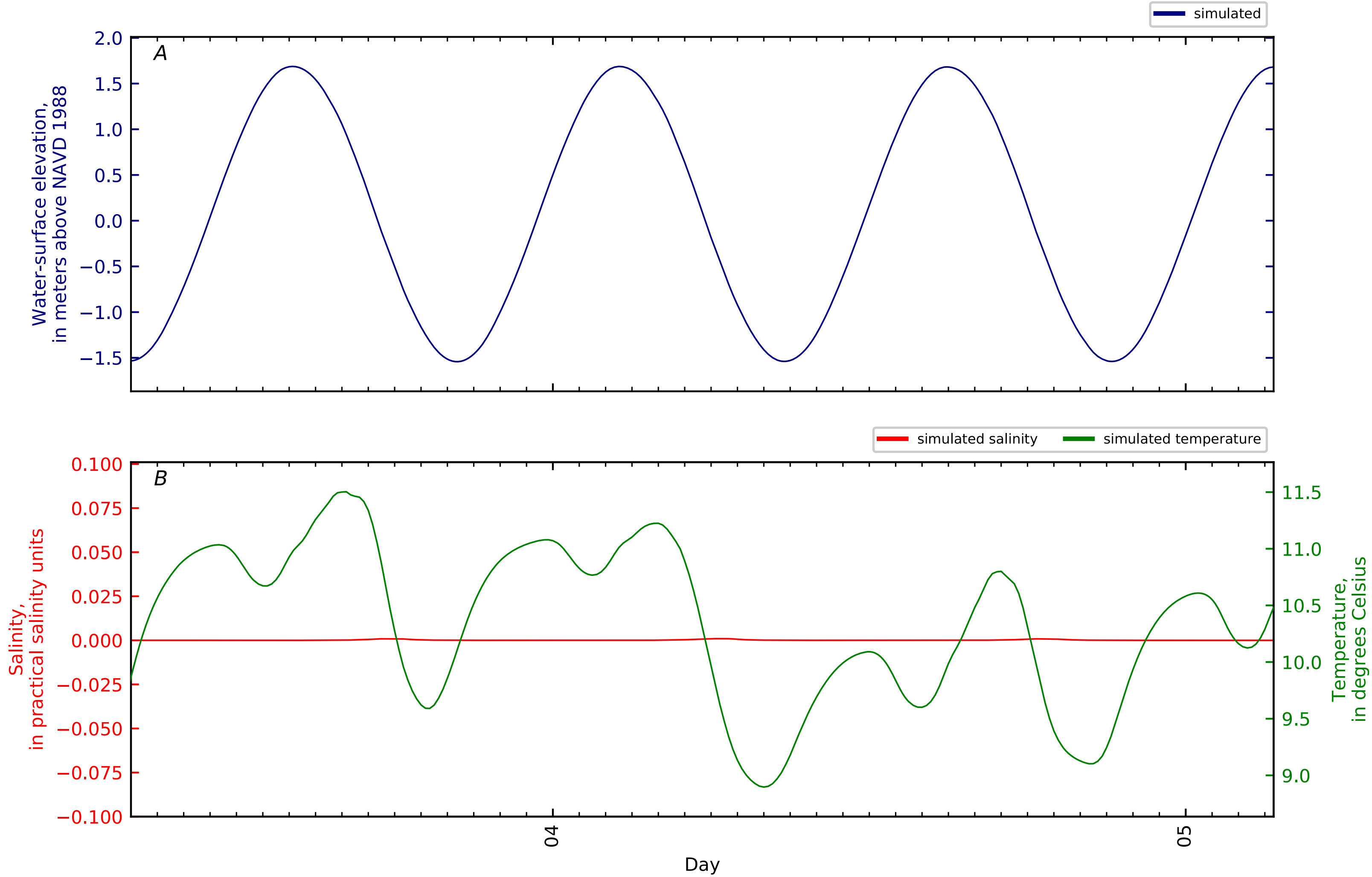

Figure B2-29. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 28, Penob Riv KM3.8 GS CTD3-10. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

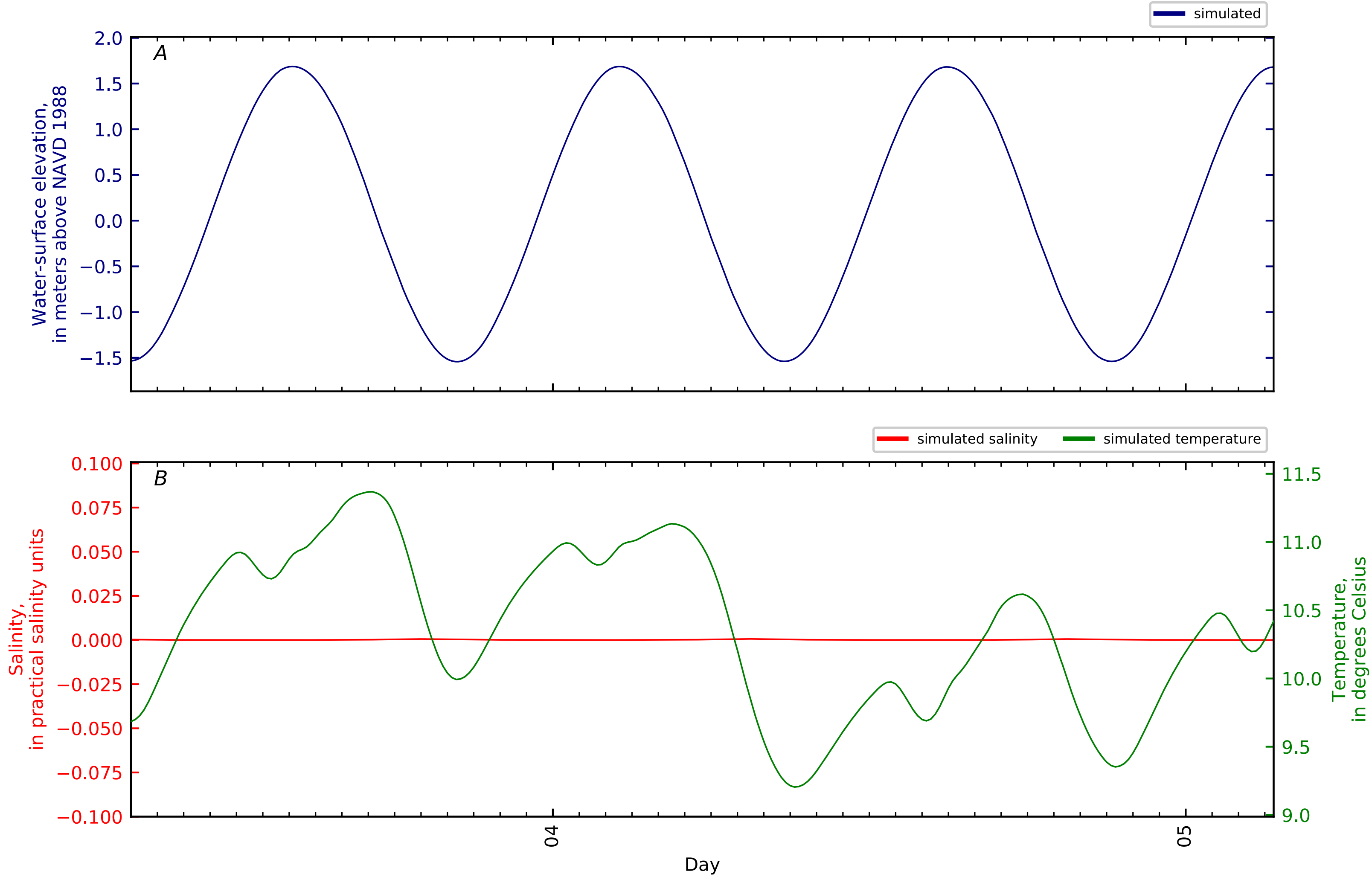

Figure B2-30. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 29, Penob Riv KM3.85 fmr NOAA gage Gross Poi. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

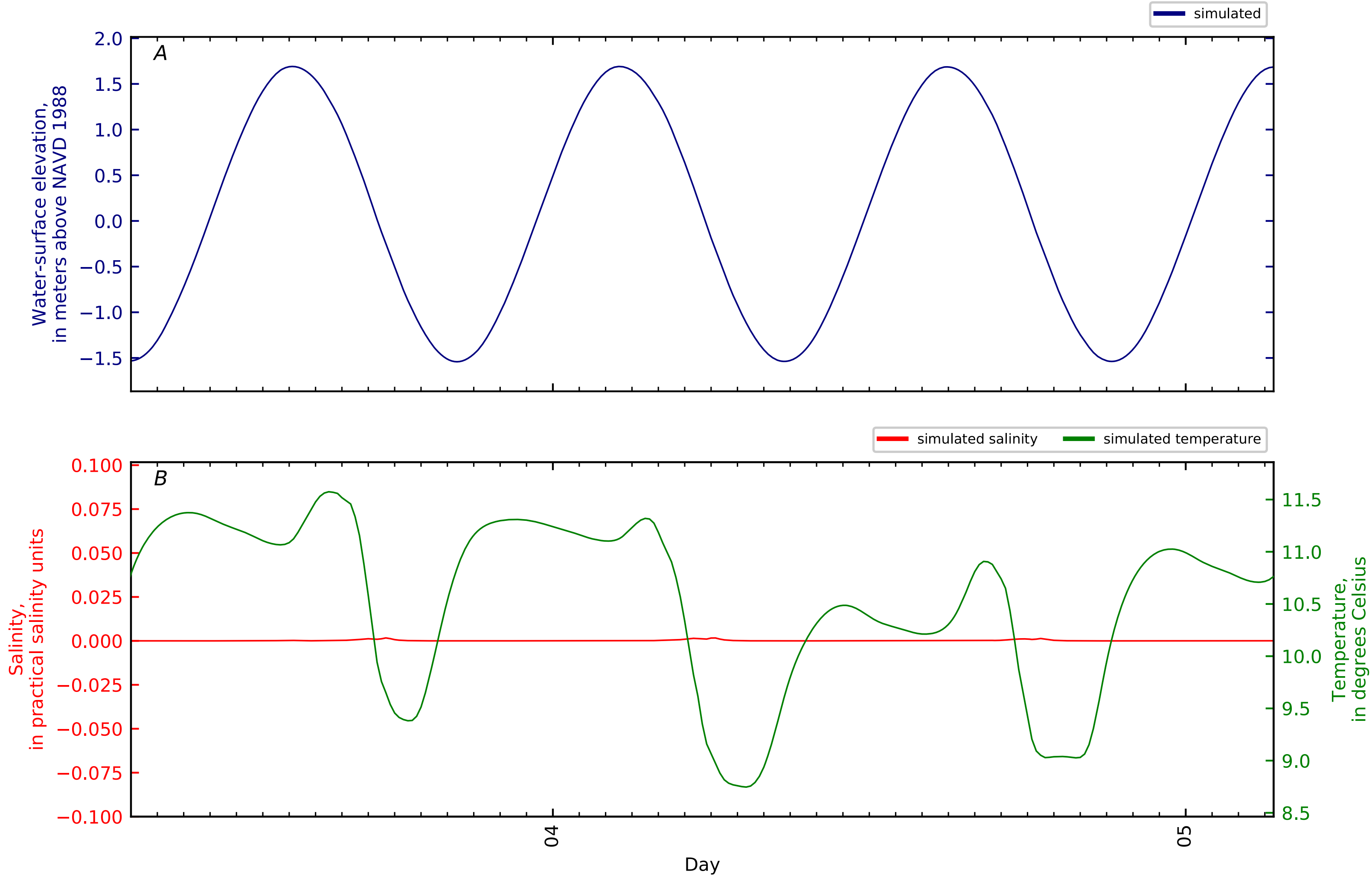

Figure B2-31. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 30, Penob Riv KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

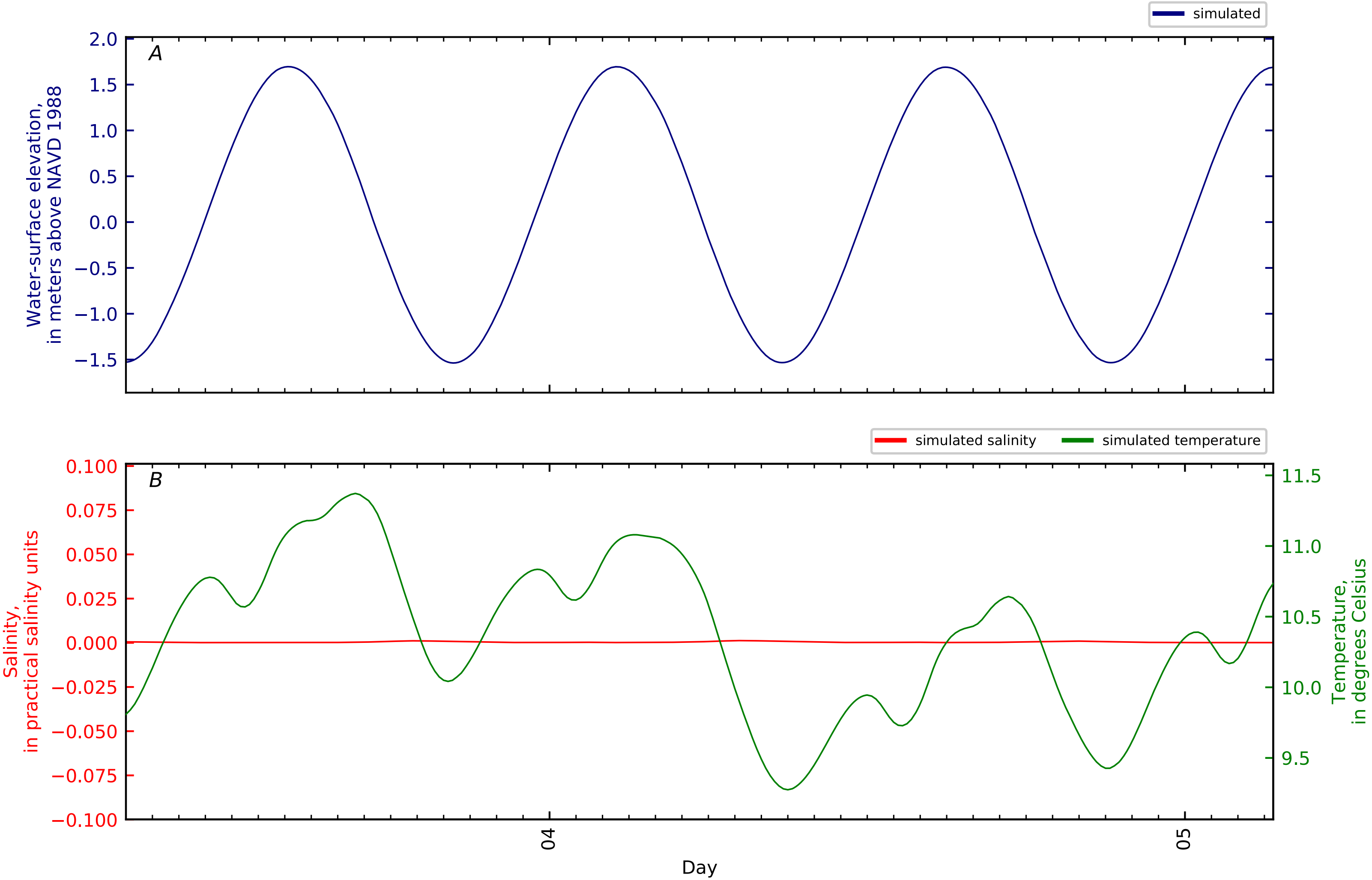

Figure B2-32. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 31, Penob Riv KM4.3 fmr NOAA gage Sandy Beac. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

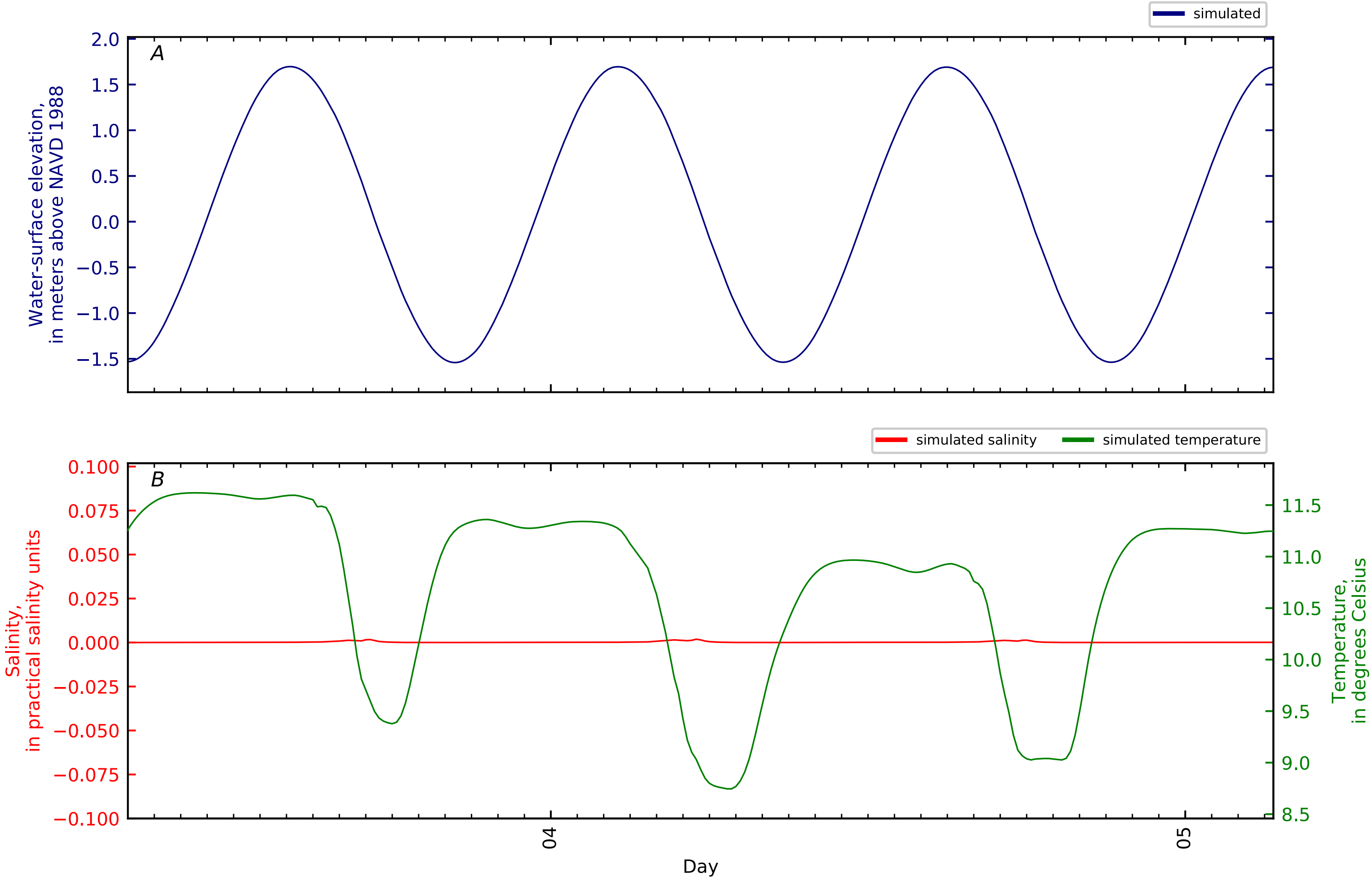

Figure B2-33. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 32, Penob Riv KM5. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

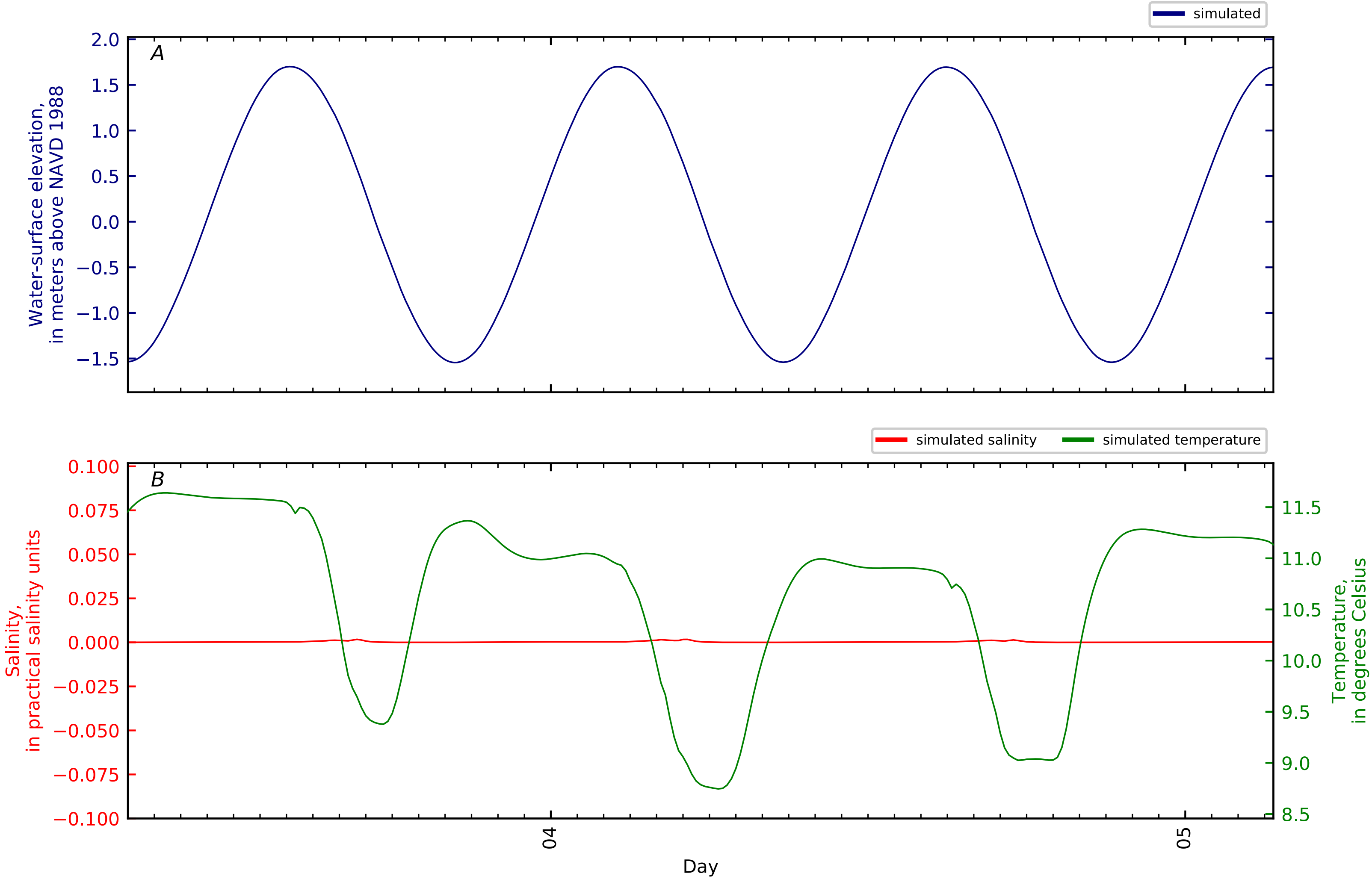

Figure B2-34. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 33, Penob Riv KM6. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

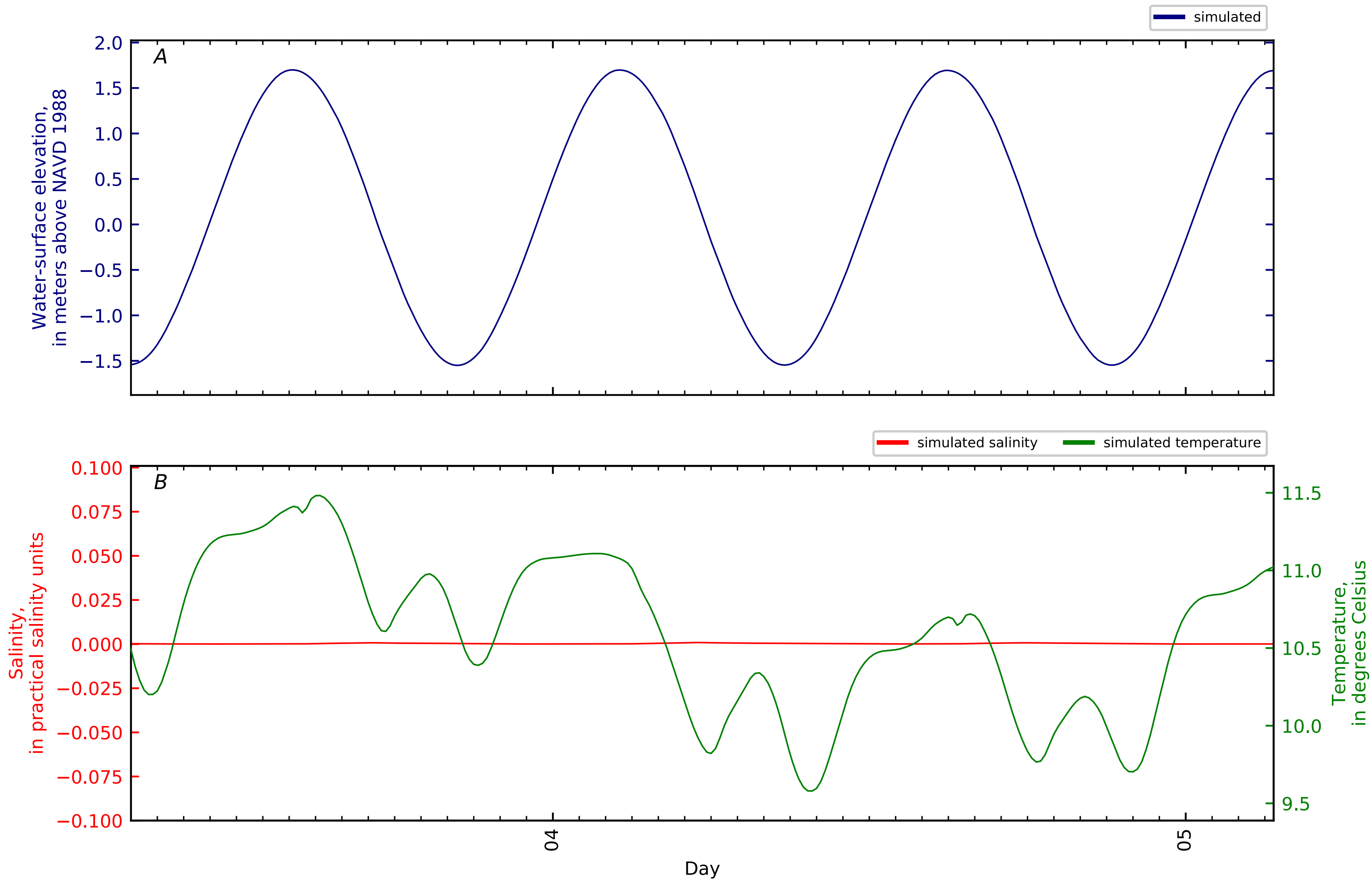

Figure B2-35. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 34, Penob Riv KM6 ERDC11 VW-MU14-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

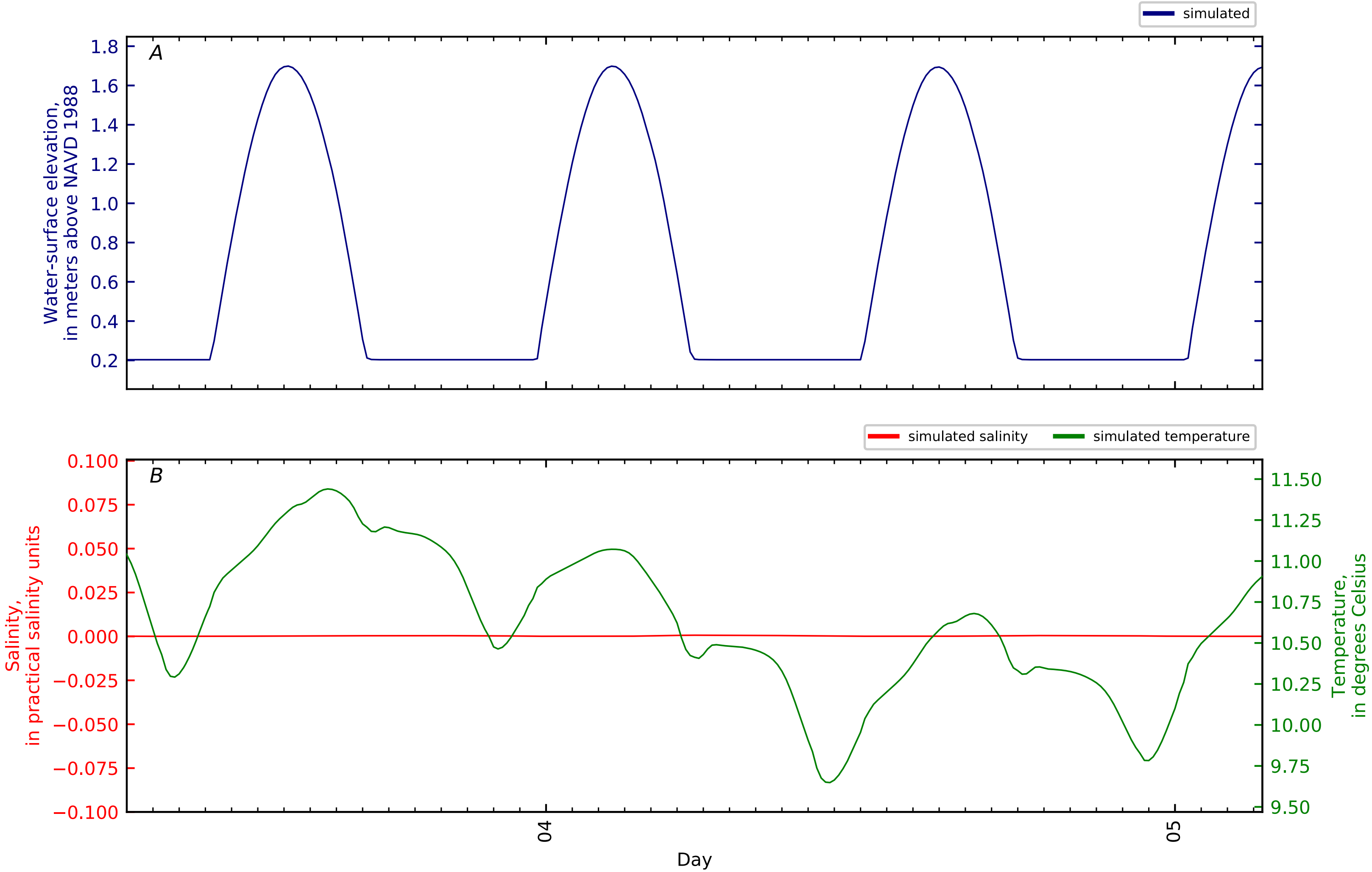

Figure B2-36. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 35, Penob Riv KM6.05 ERDC10 VW-MU7-SF1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

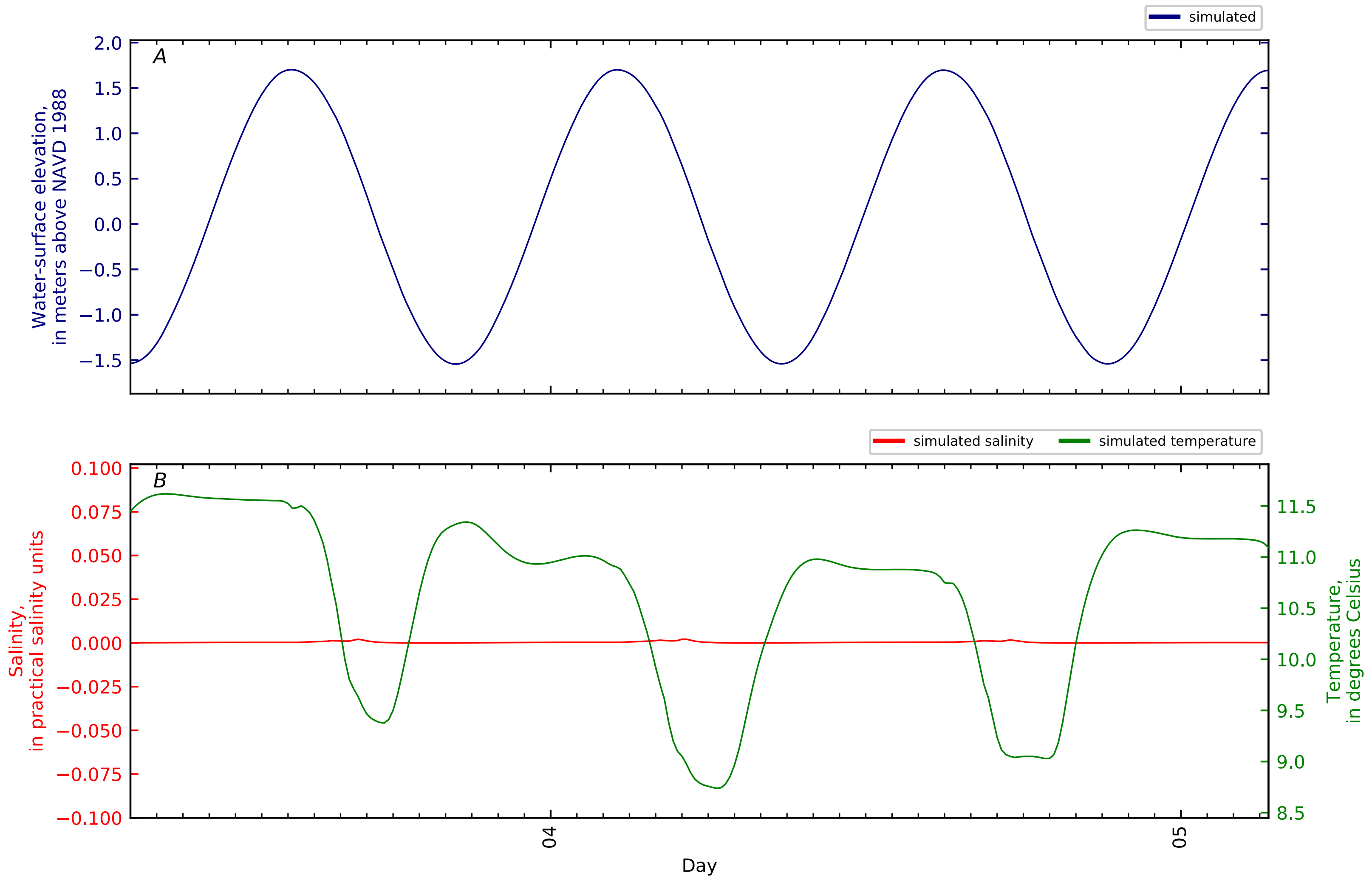

Figure B2-37. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 36, Penob Riv KM6.1 WHOI5 Verona Island 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

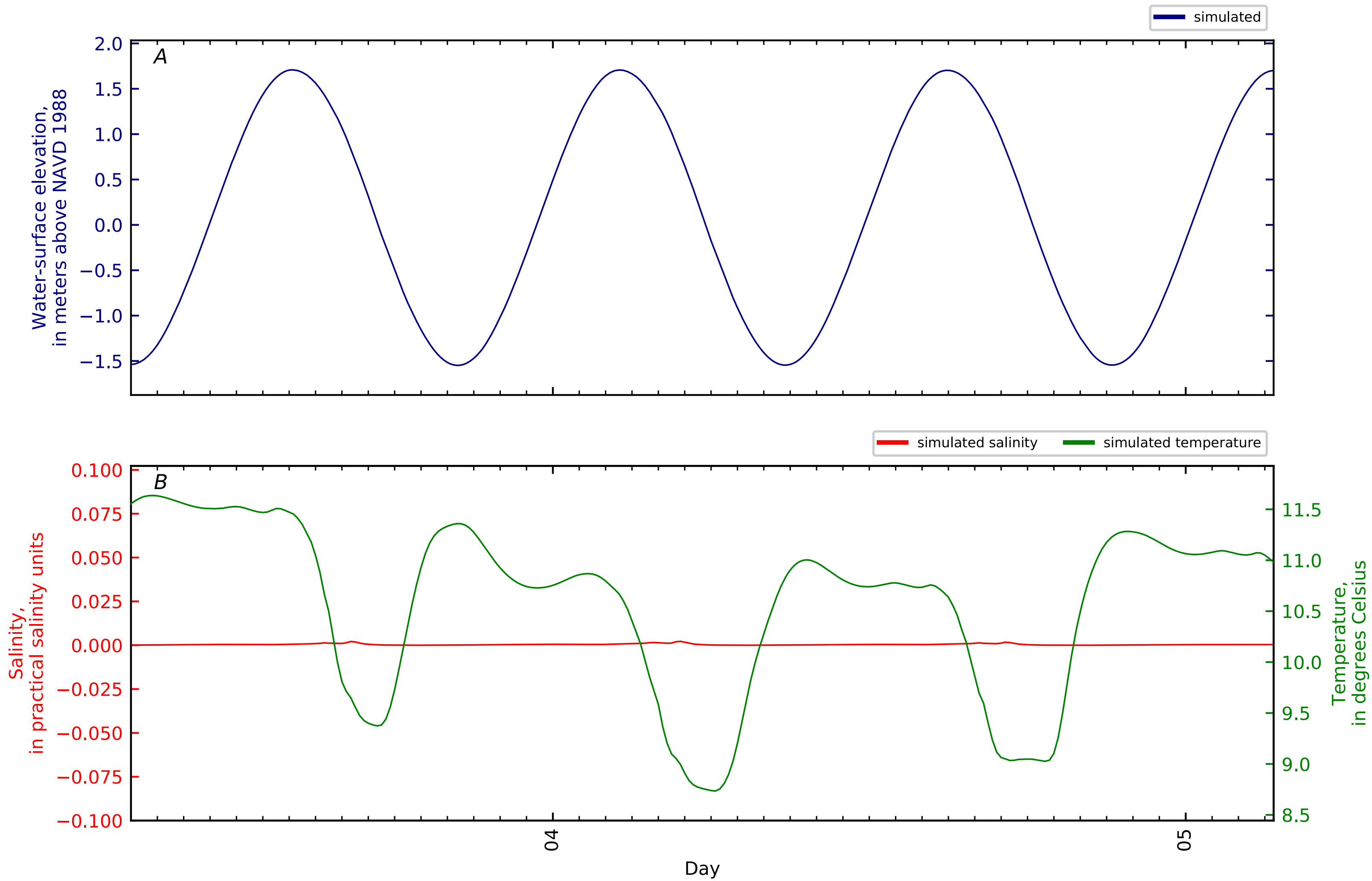

Figure B2-38. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 37, Penob Riv KM7. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

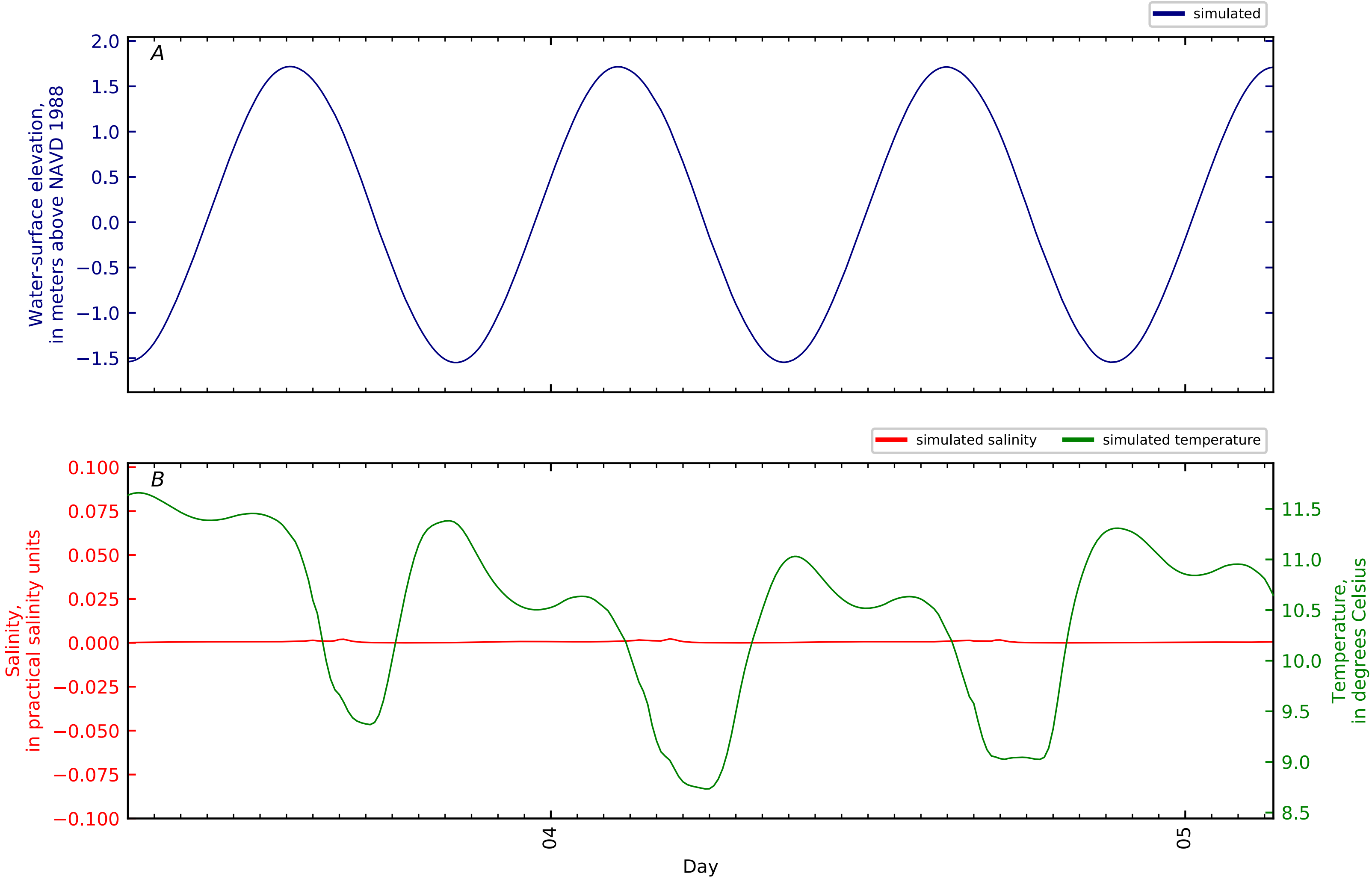

Figure B2-39. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 38, Penob Riv KM8. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

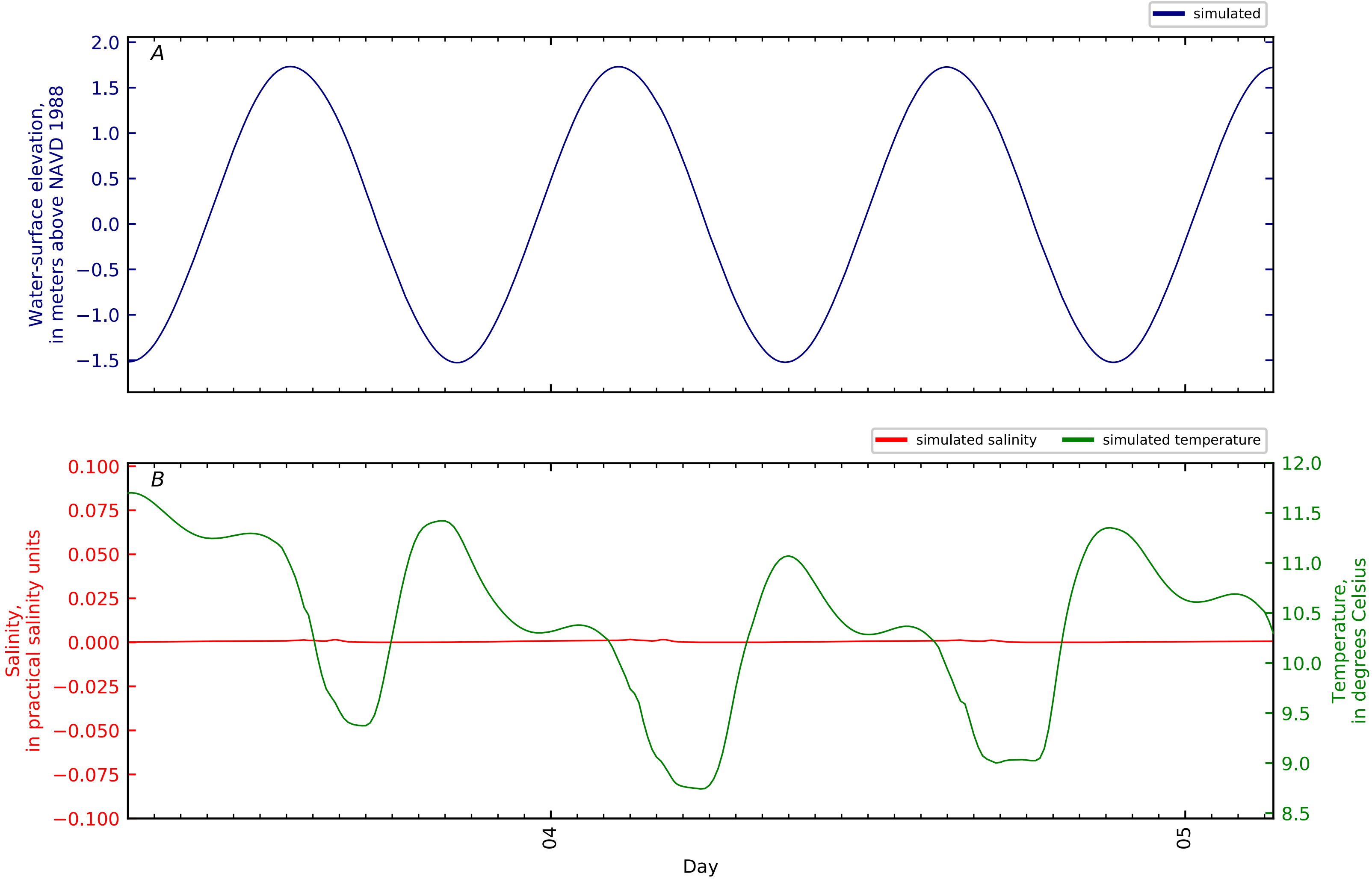

Figure B2-40. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 39, Penob Riv KM9. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

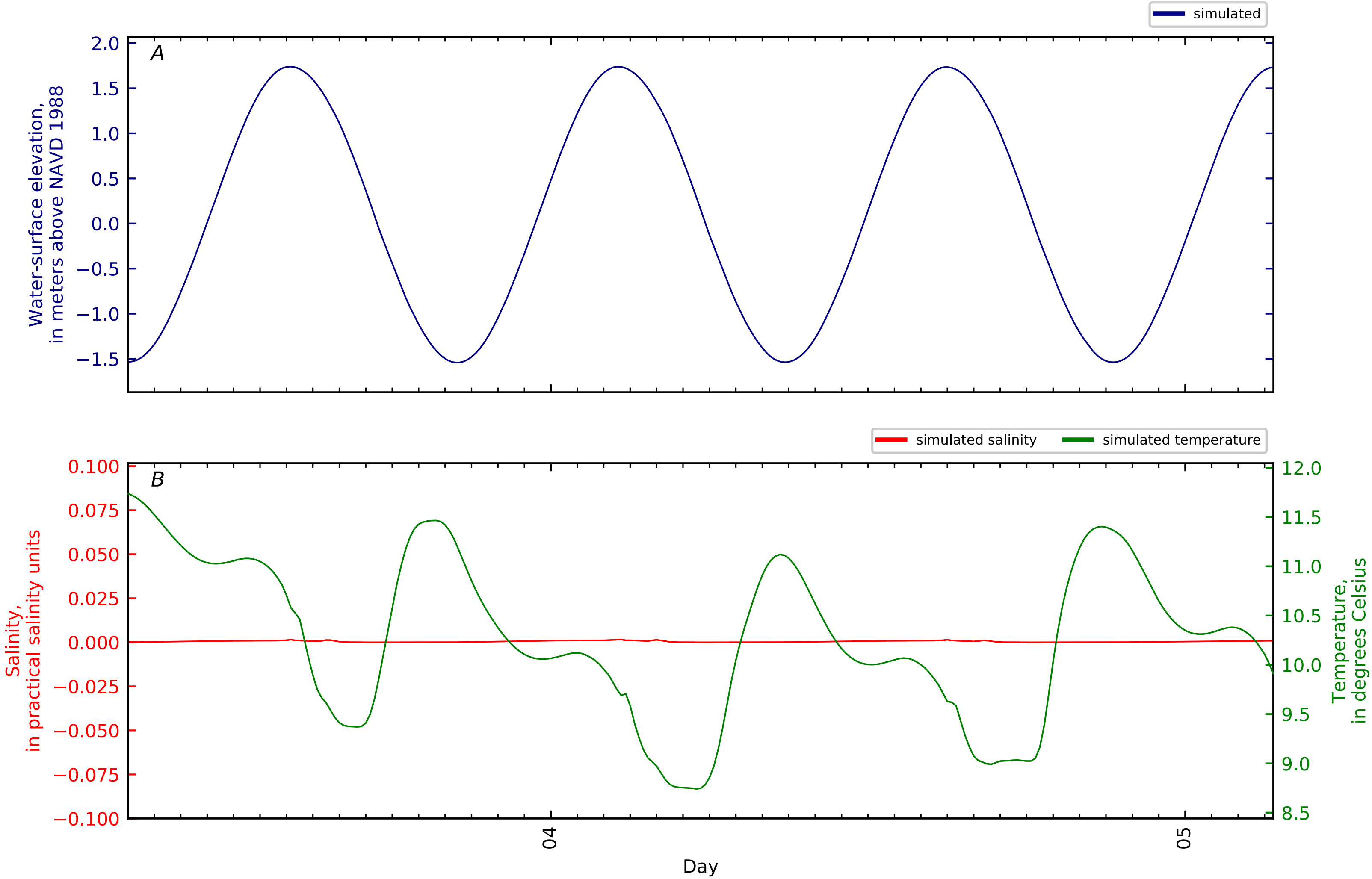

Figure B2-41. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 40, Penob Riv KM10. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

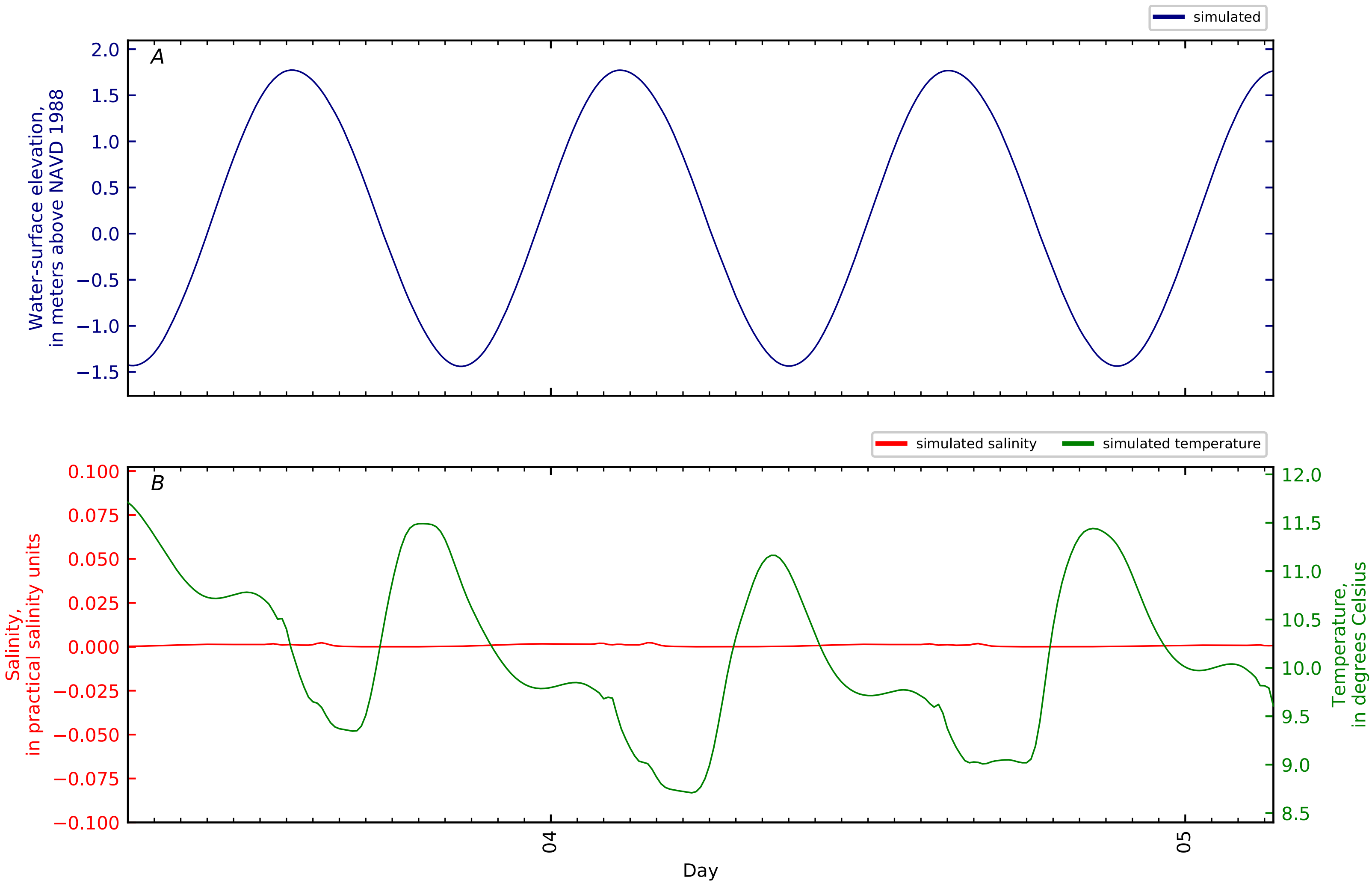

Figure B2-42. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 41, Penob Riv KM11. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

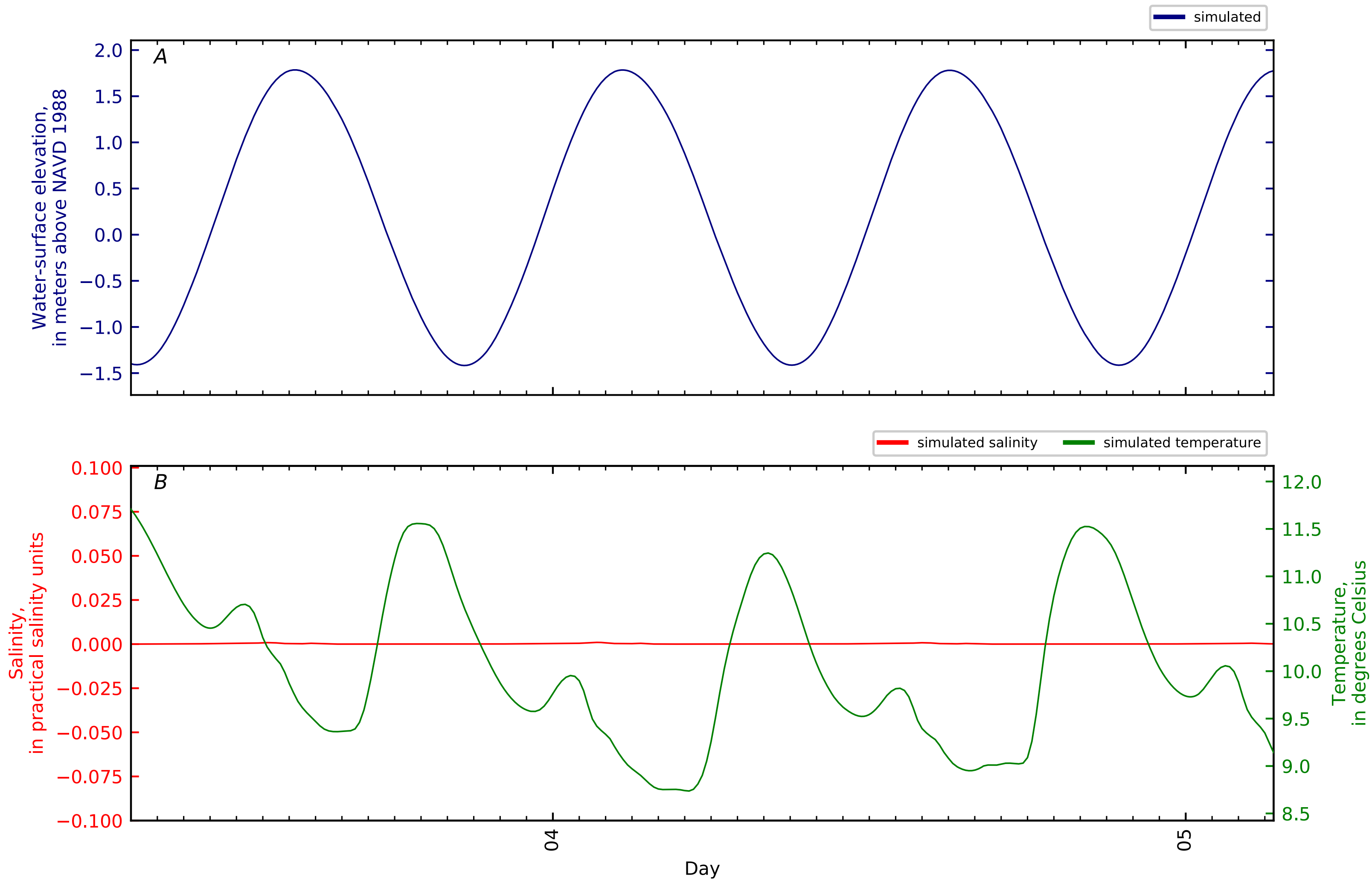

Figure B2-43. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 42, Penob Riv KM12. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

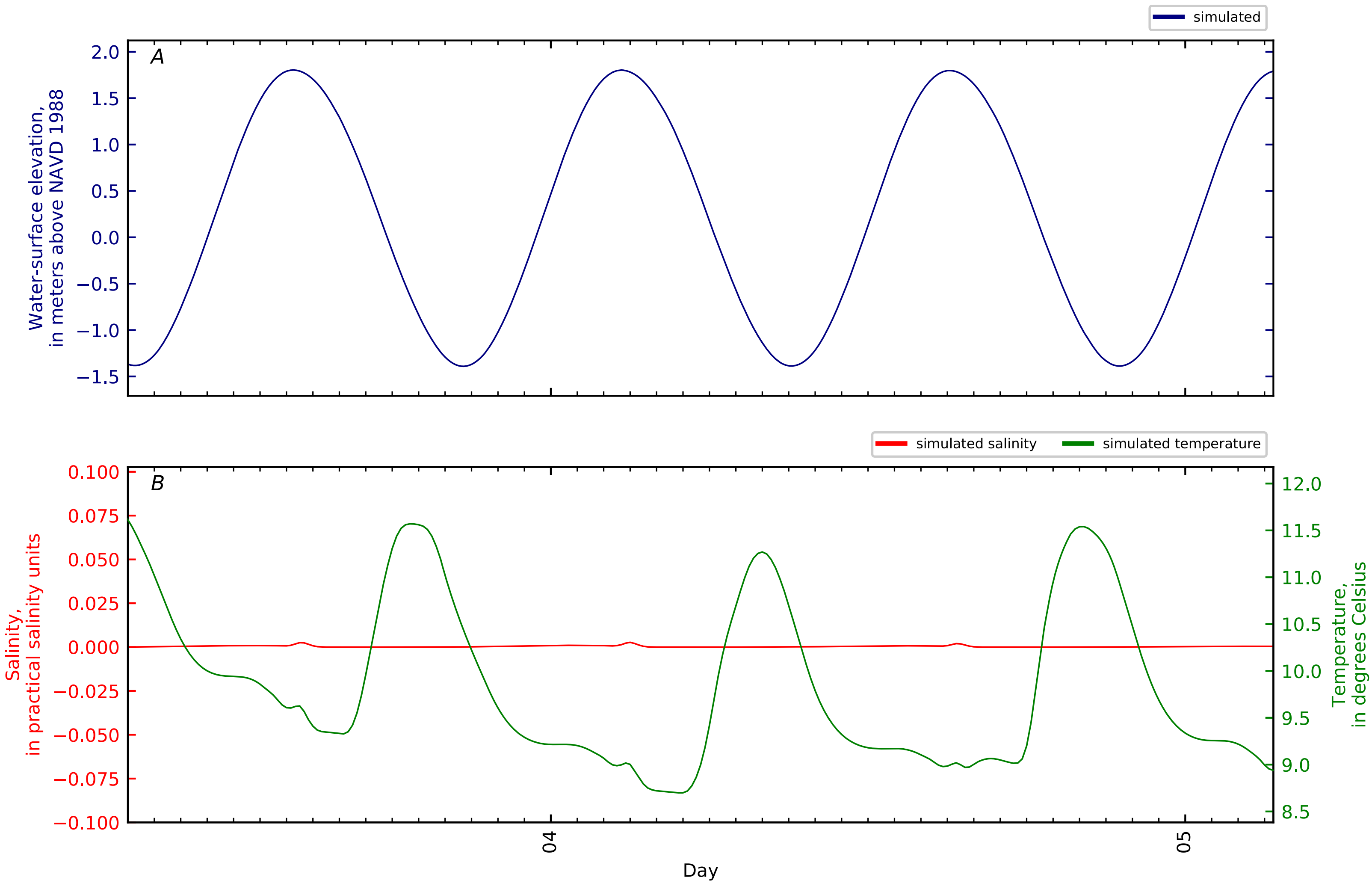

Figure B2-44. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 43, Penob Riv KM12.9 WHOI7 Bucksport 2011. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

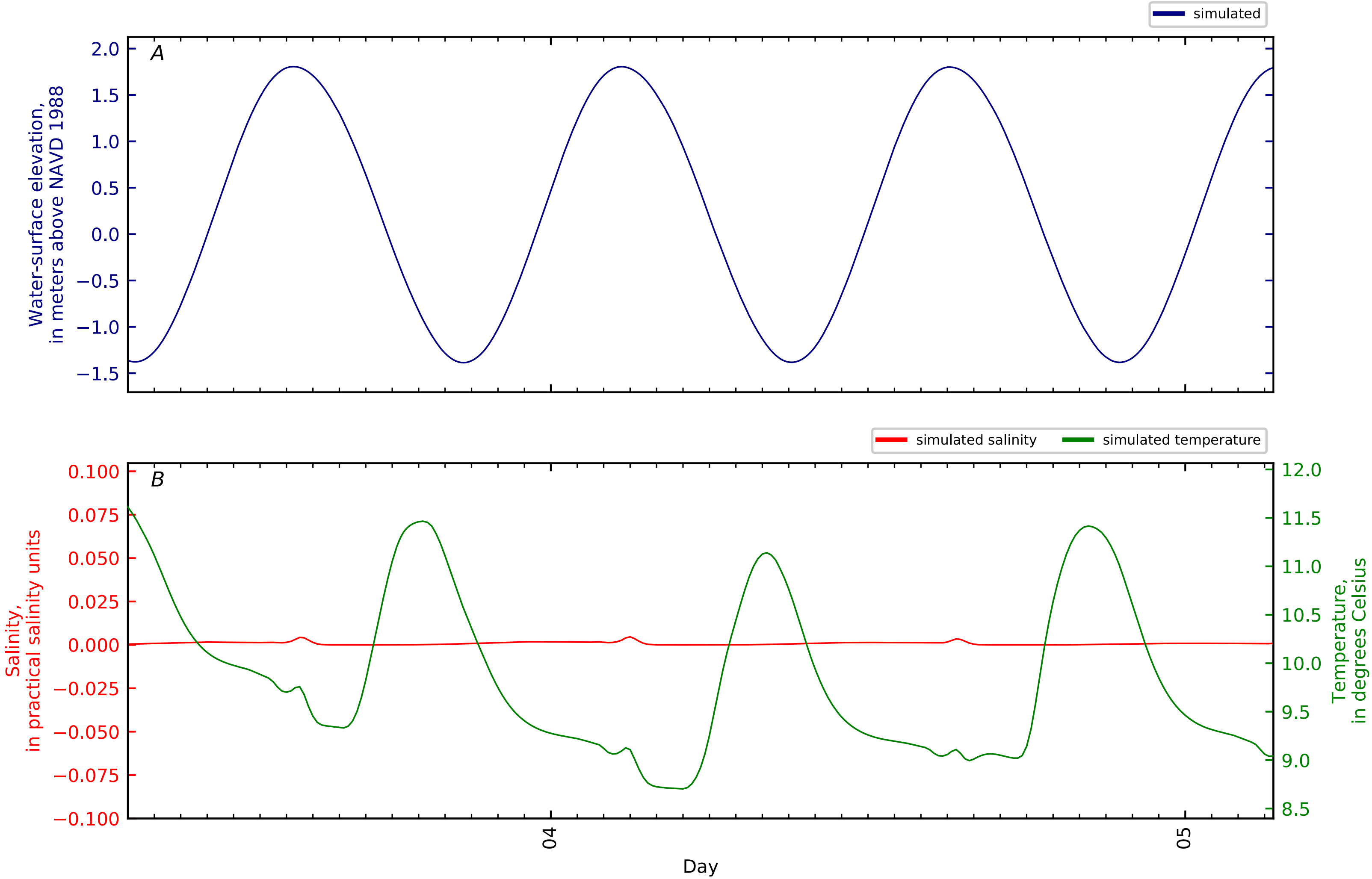

Figure B2-45. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 44, Penob Riv KM13. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

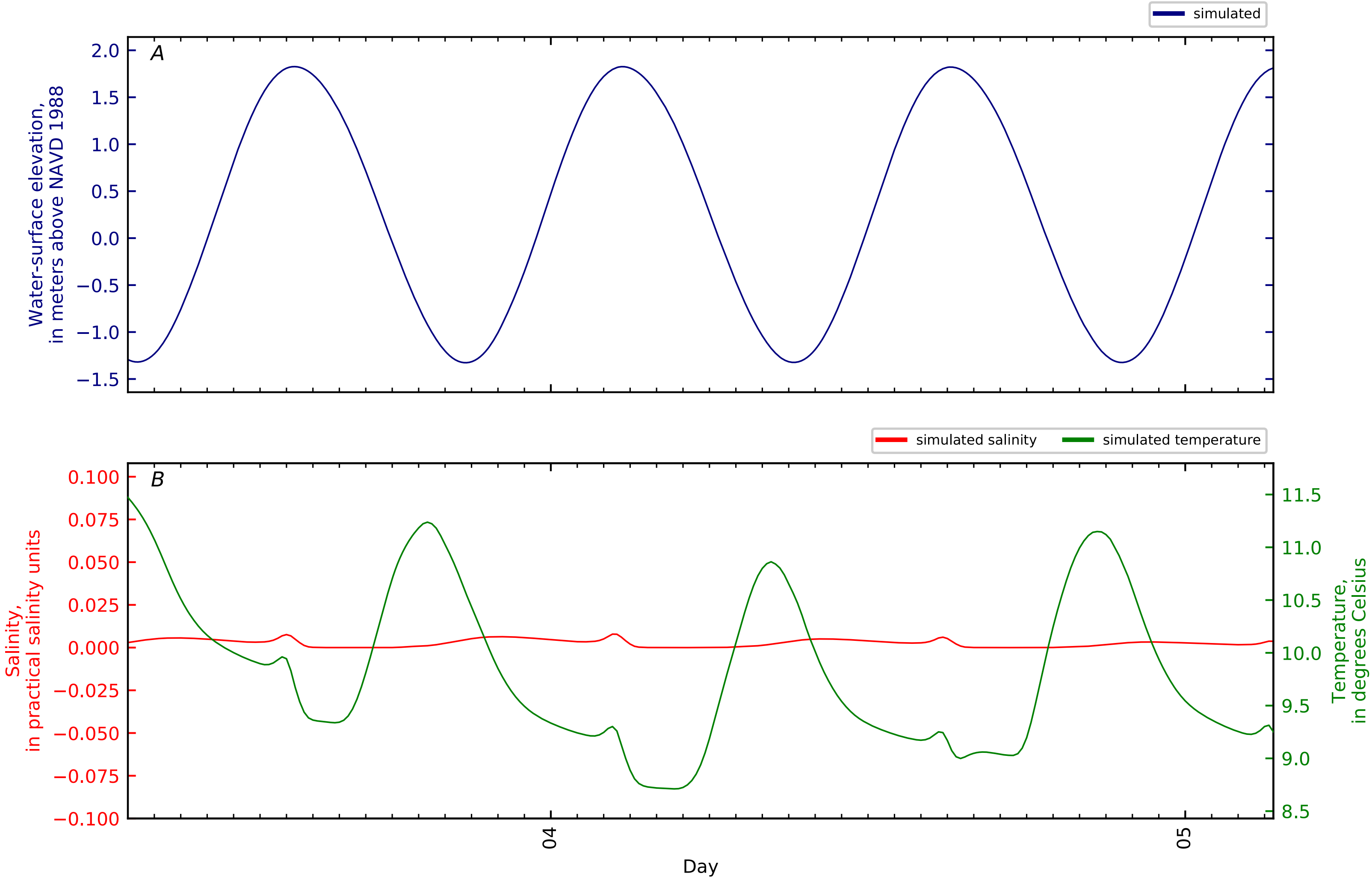

Figure B2-46. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 45, Penob Riv KM14. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

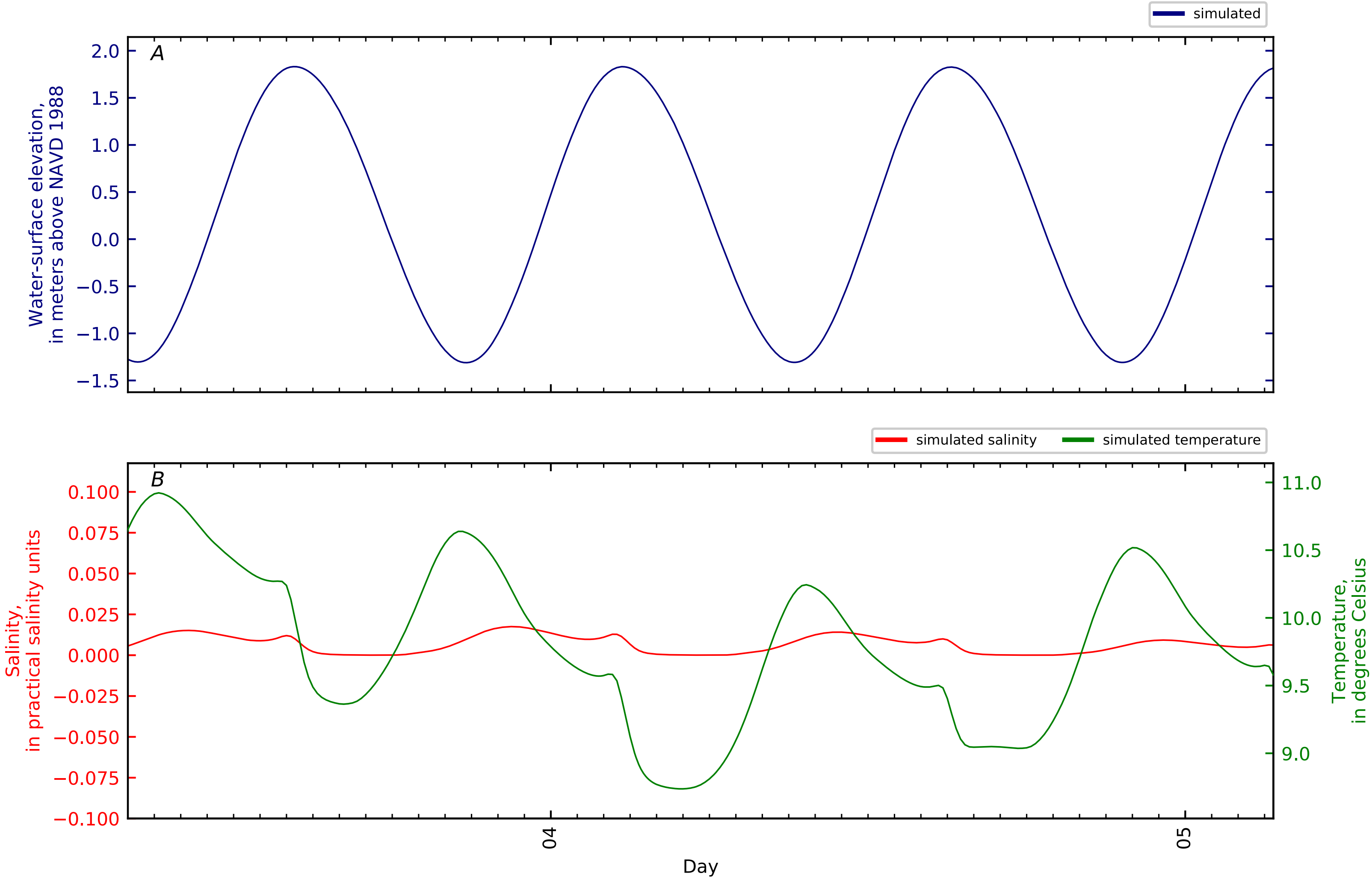

Figure B2-47. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 46, Penob Riv KM14.27 ERDC15 BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

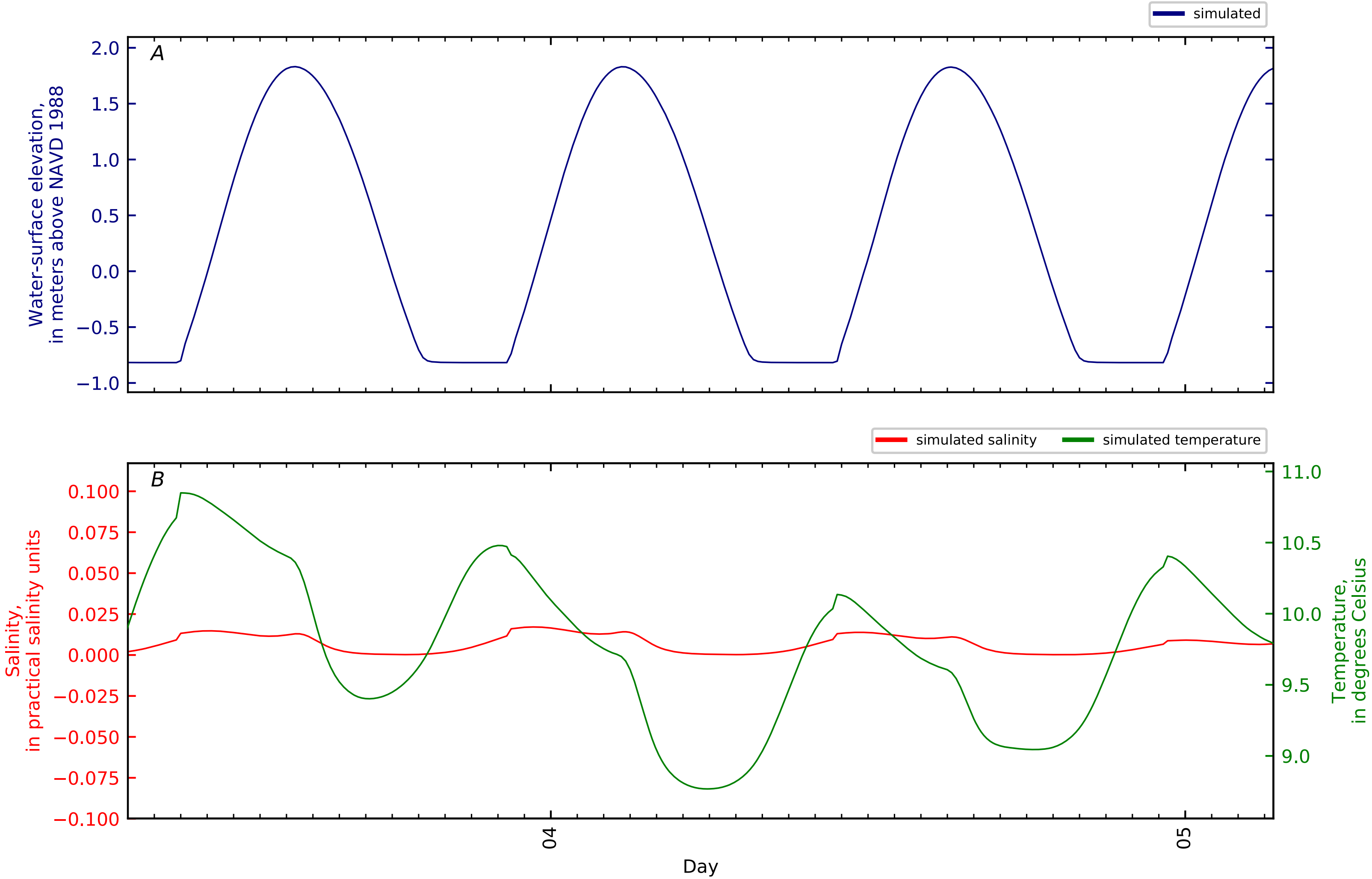

Figure B2-48. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 47, Penob Riv KM14.29 ERDC16B BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

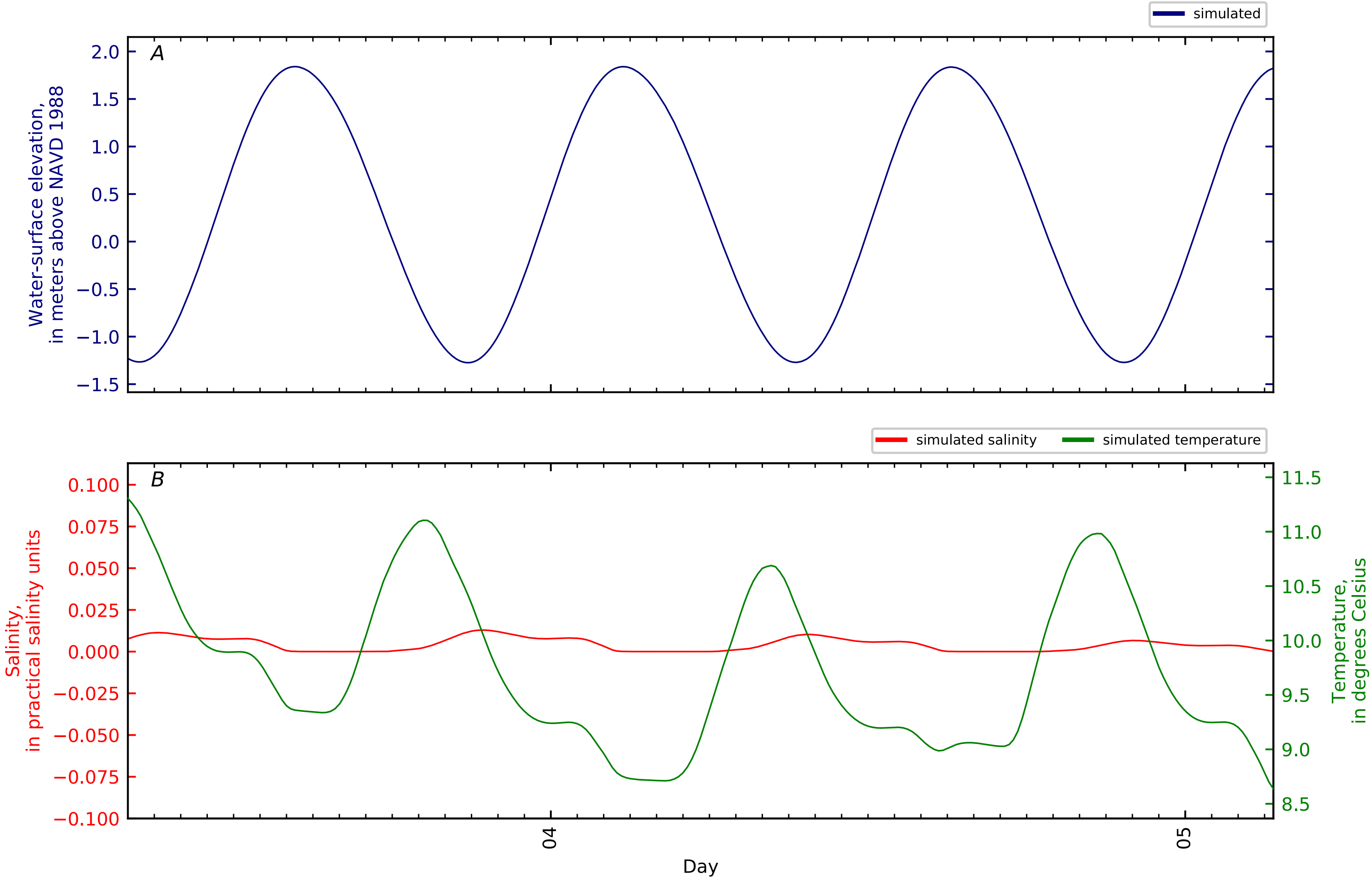

Figure B2-49. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 48, Penob Riv KM15. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

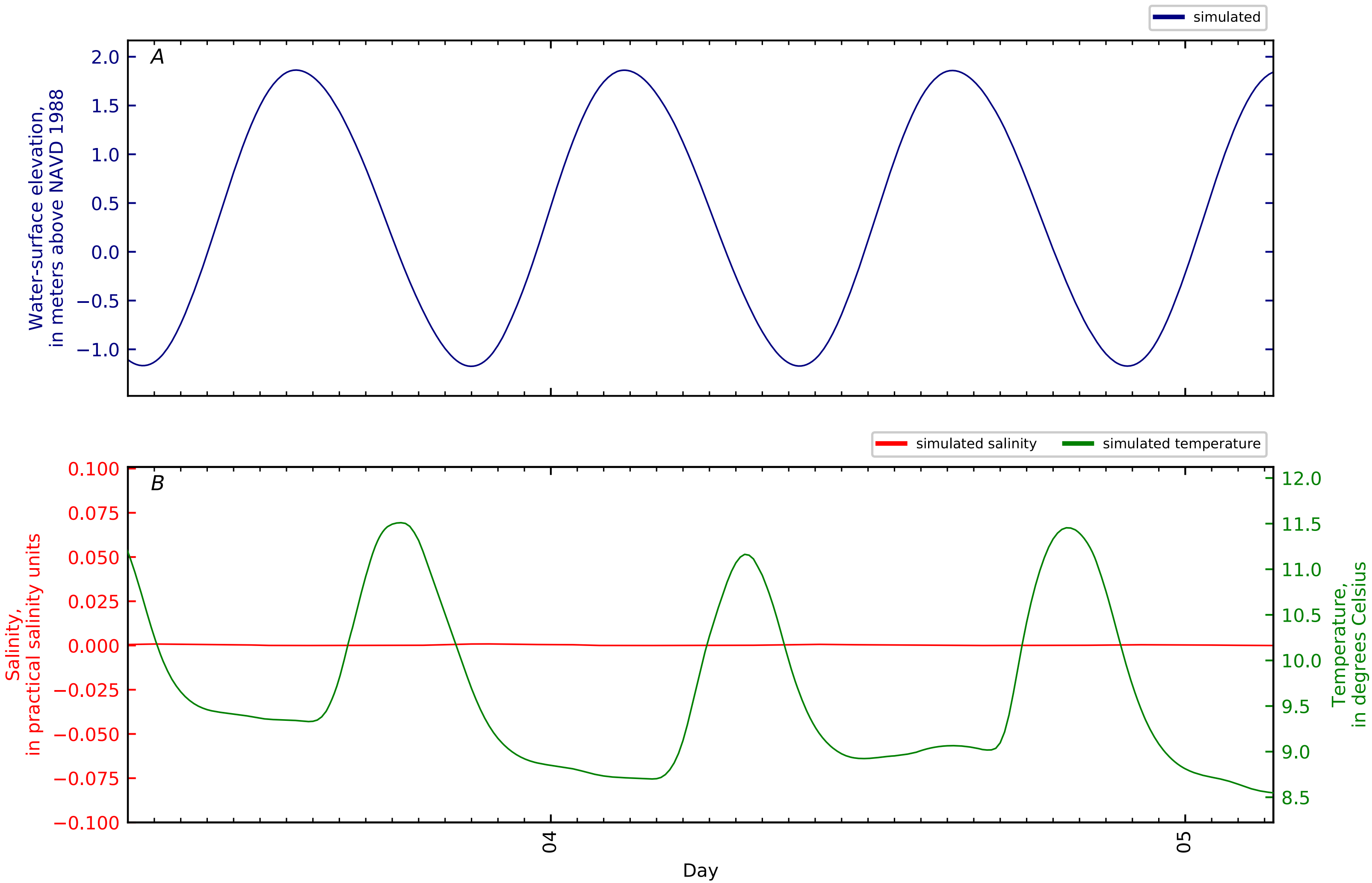

Figure B2-50. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 49, Penob Riv KM16. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

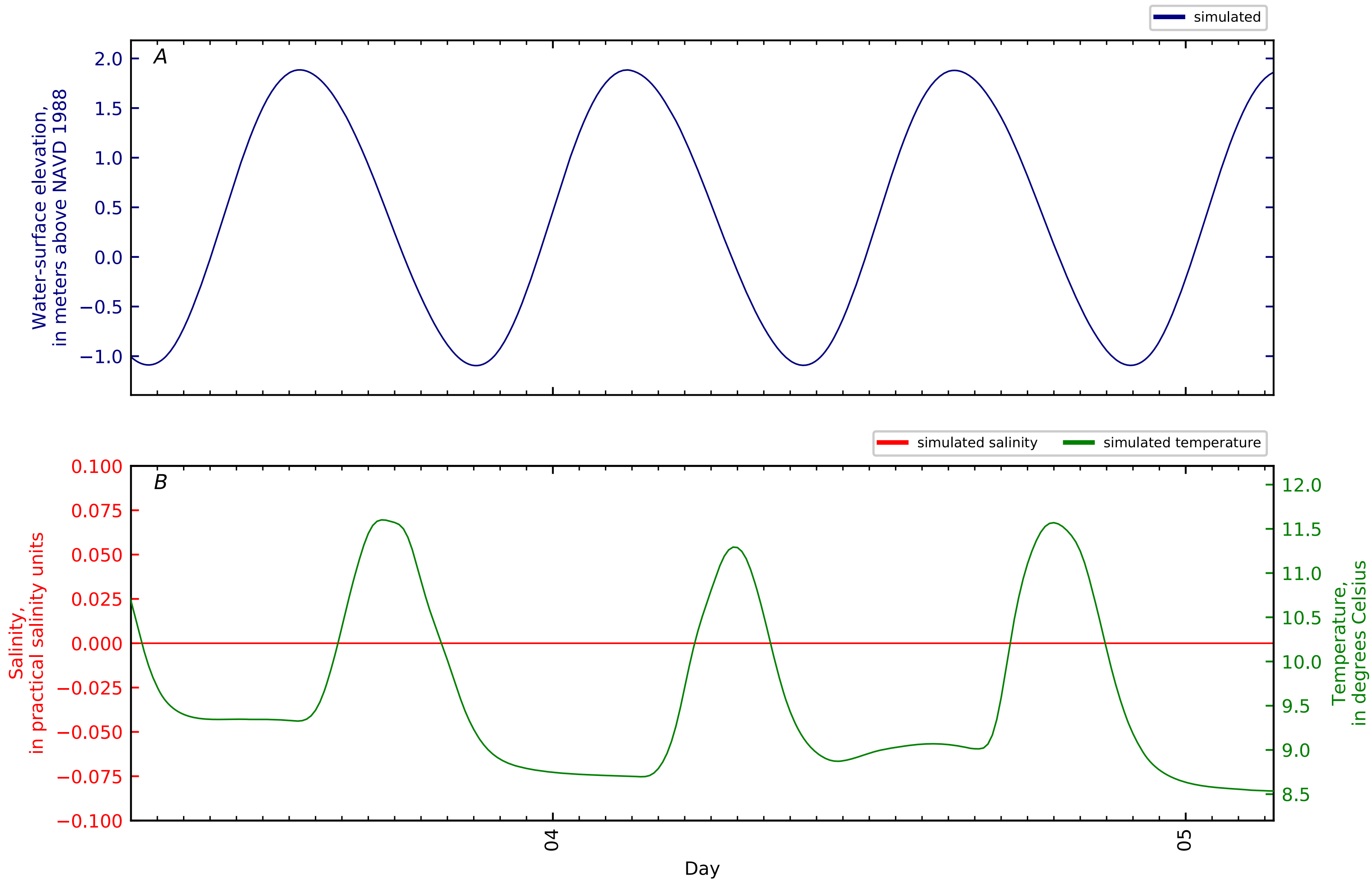

Figure B2-51. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 50, Penob Riv KM17. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

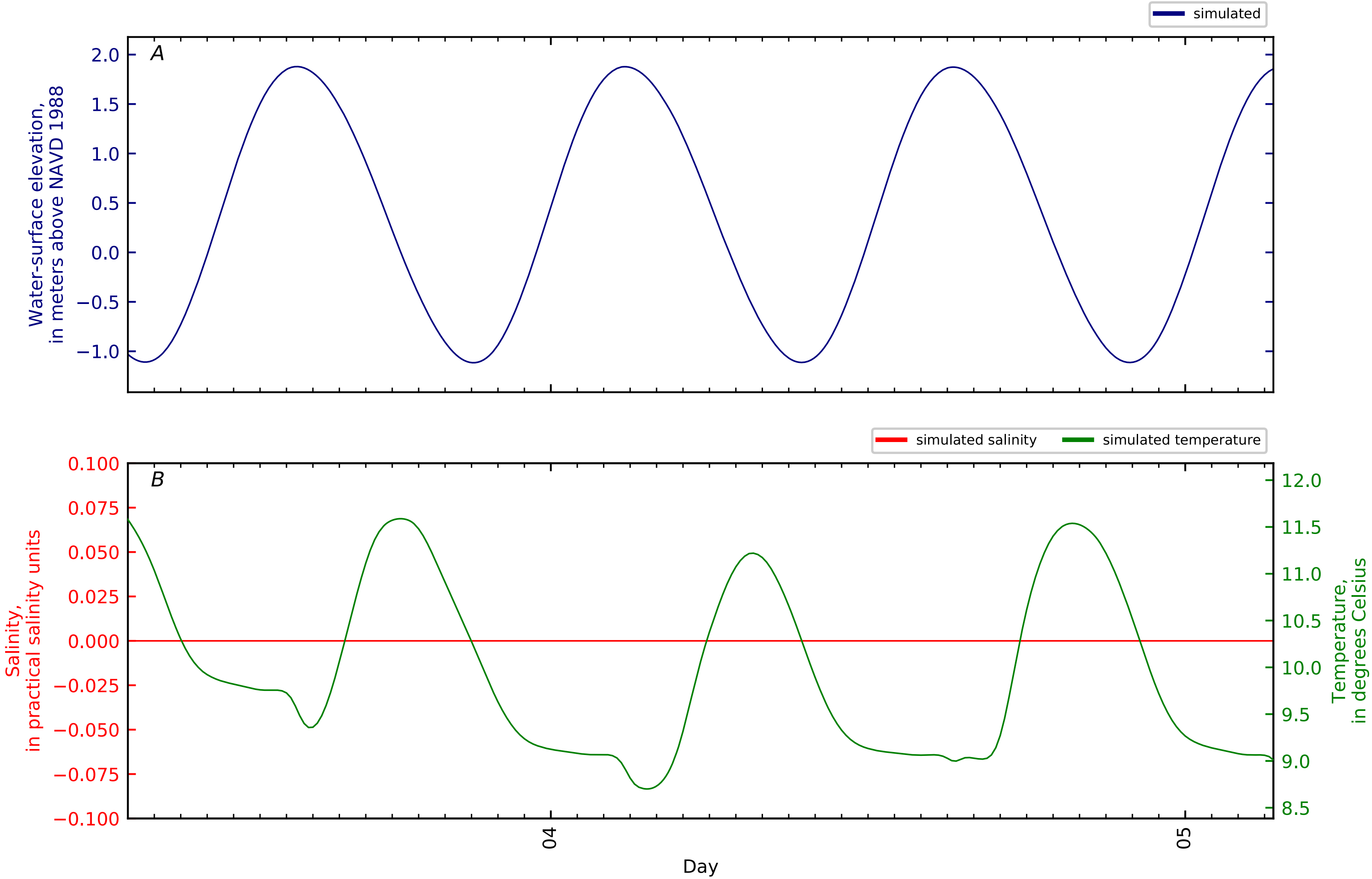

Figure B2-52. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 51, Penob Riv KM17.2 ERDC17B FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

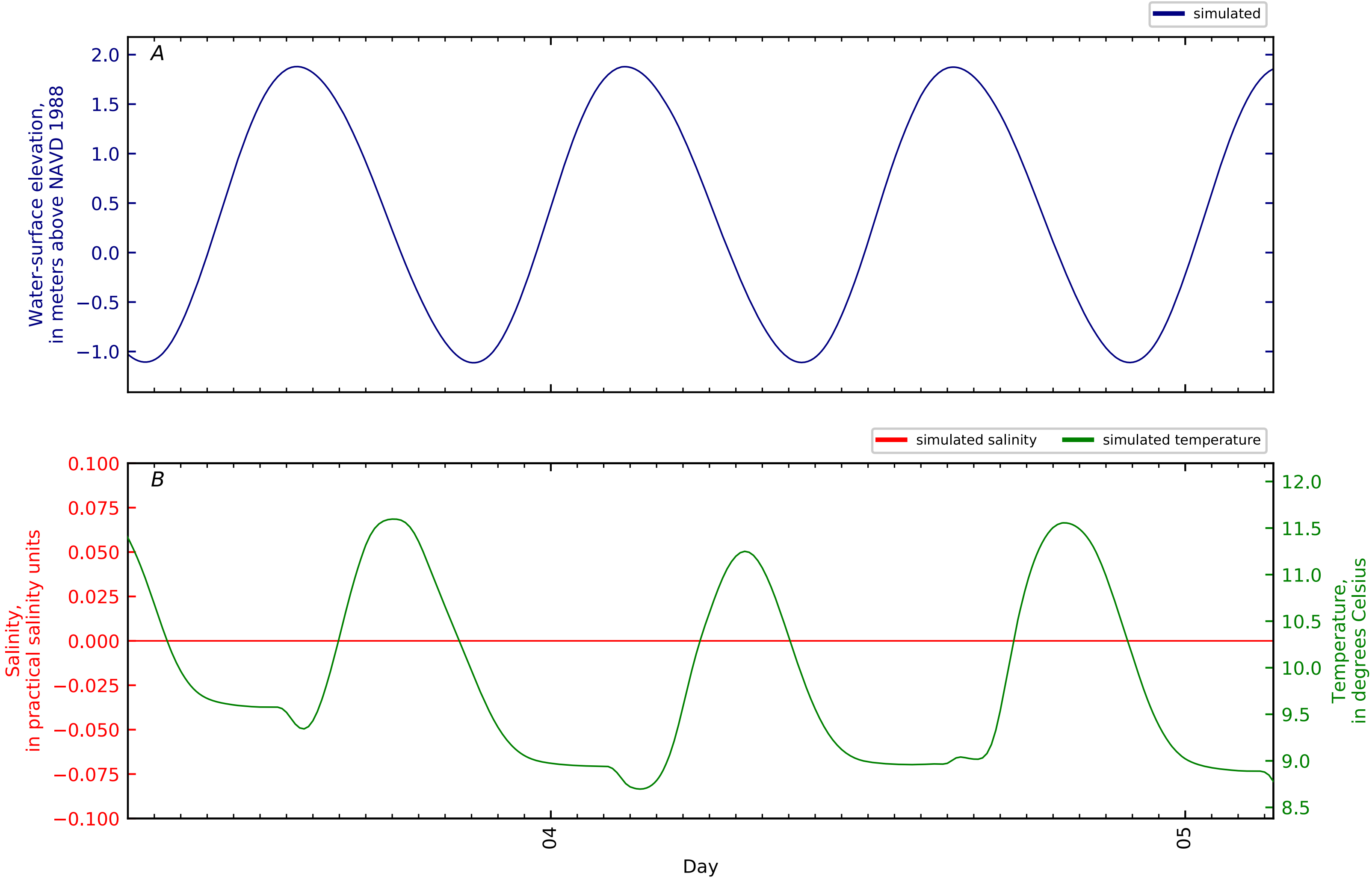

Figure B2-53. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 52, Penob Riv KM17.21 ERDC13 FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

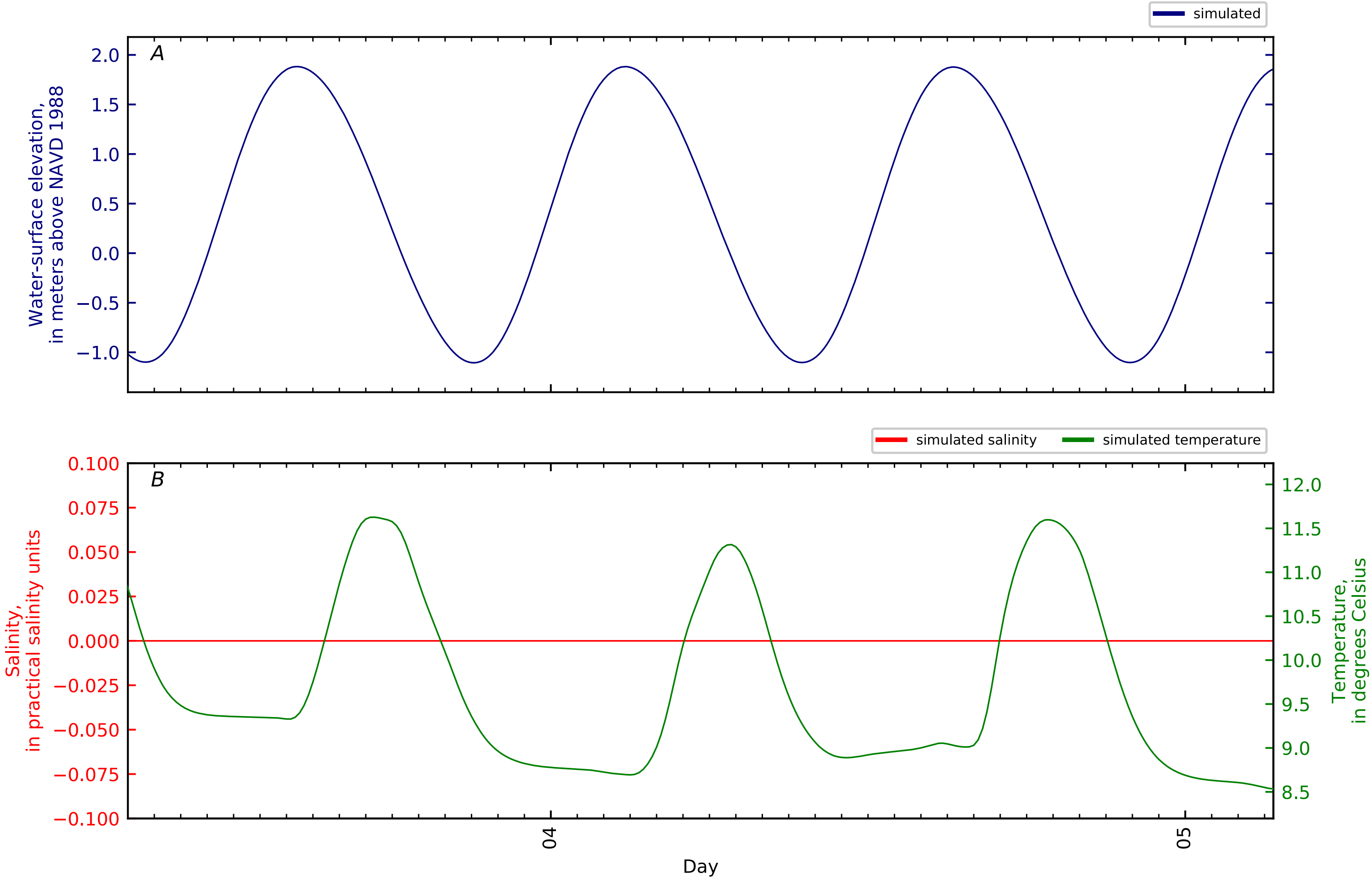

Figure B2-54. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 53, Penob Riv KM17.2 WHOI2 Frankfort Flats 2. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

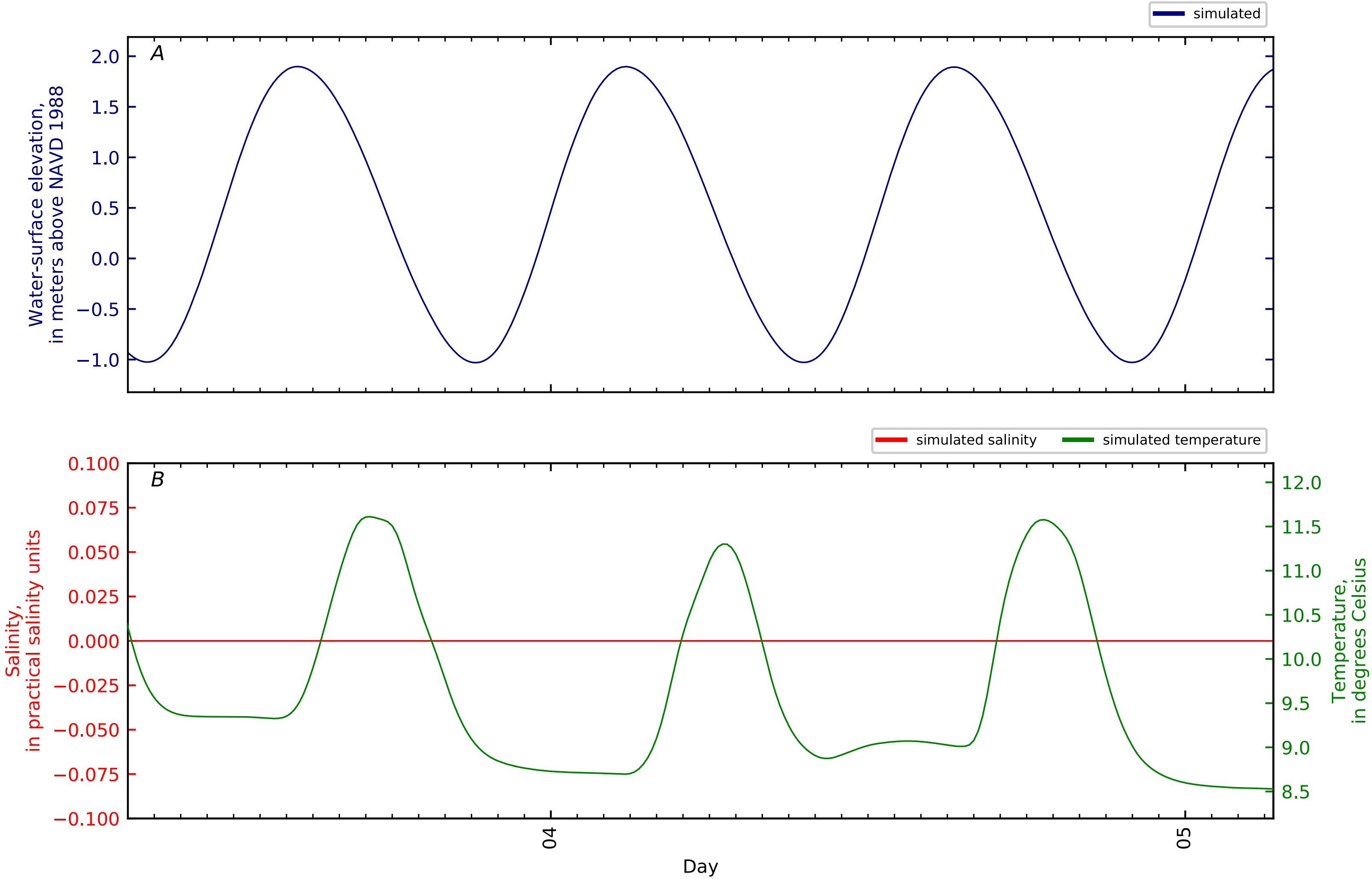

Figure B2-55. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 54, Penob Riv KM18. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

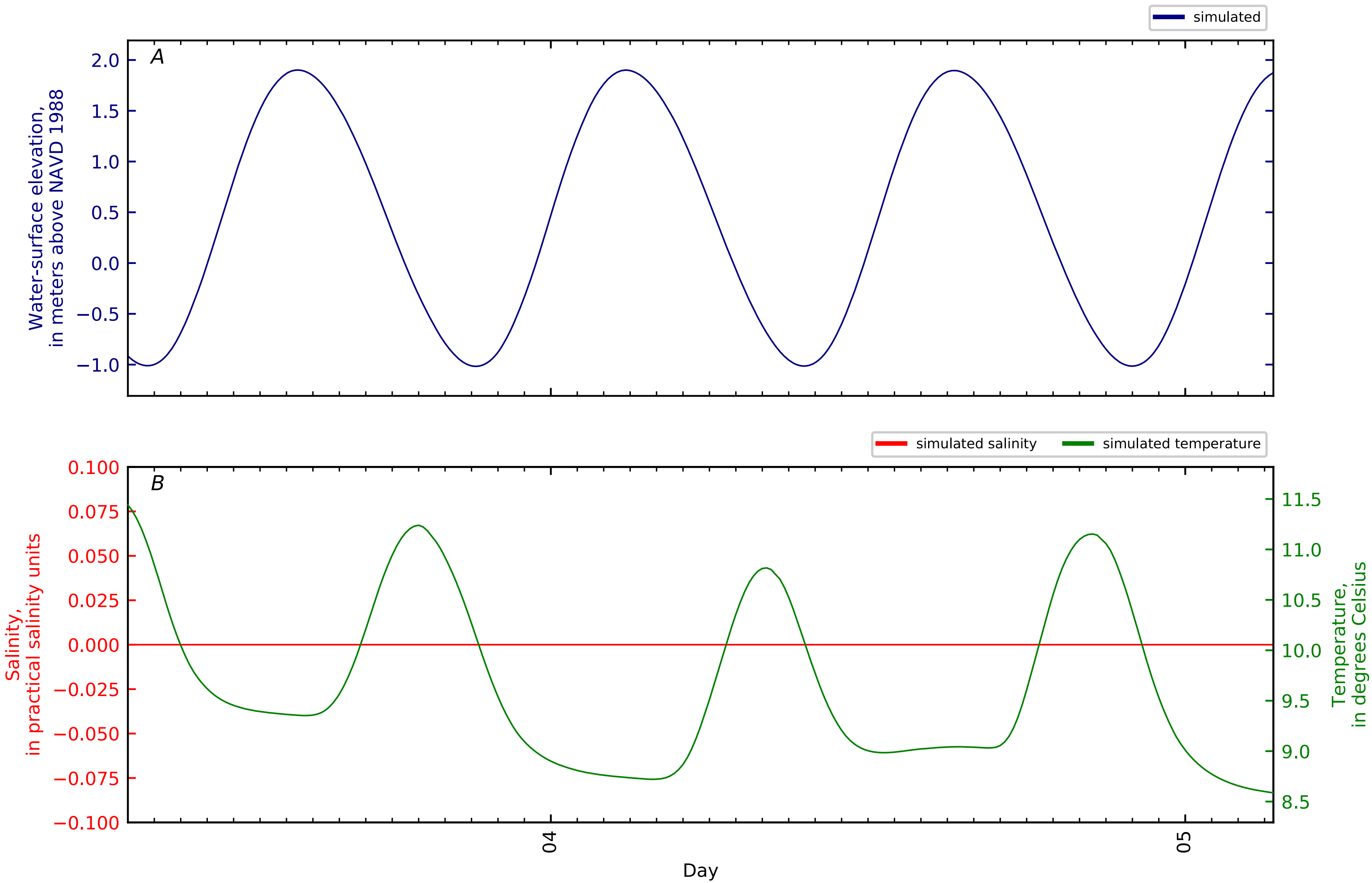

Figure B2-56. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 55, Penob Riv KM18.01 GS CTD1-01. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

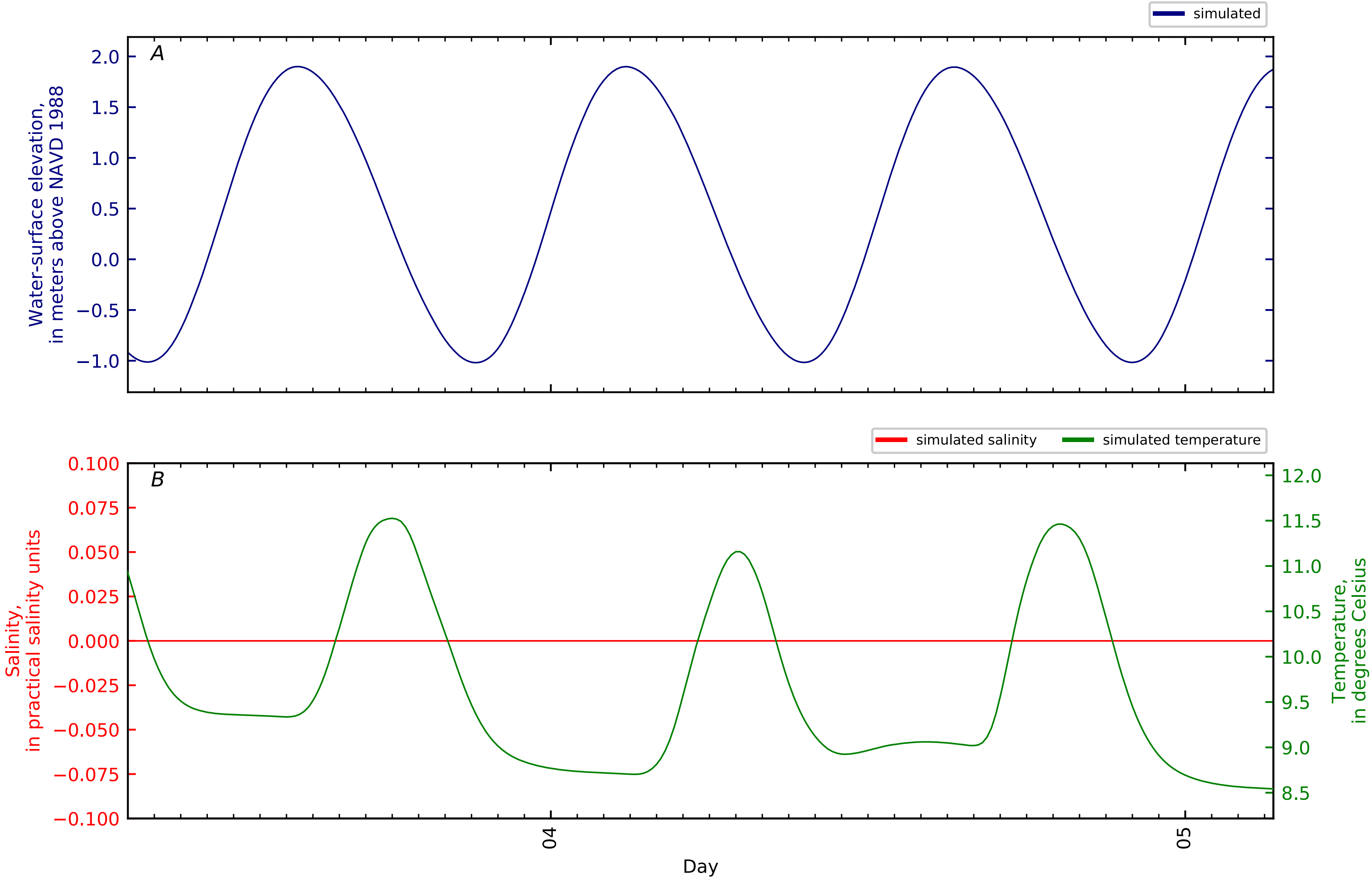

Figure B2-57. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 56, Penob Riv KM18.01 GS CTD1-02. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

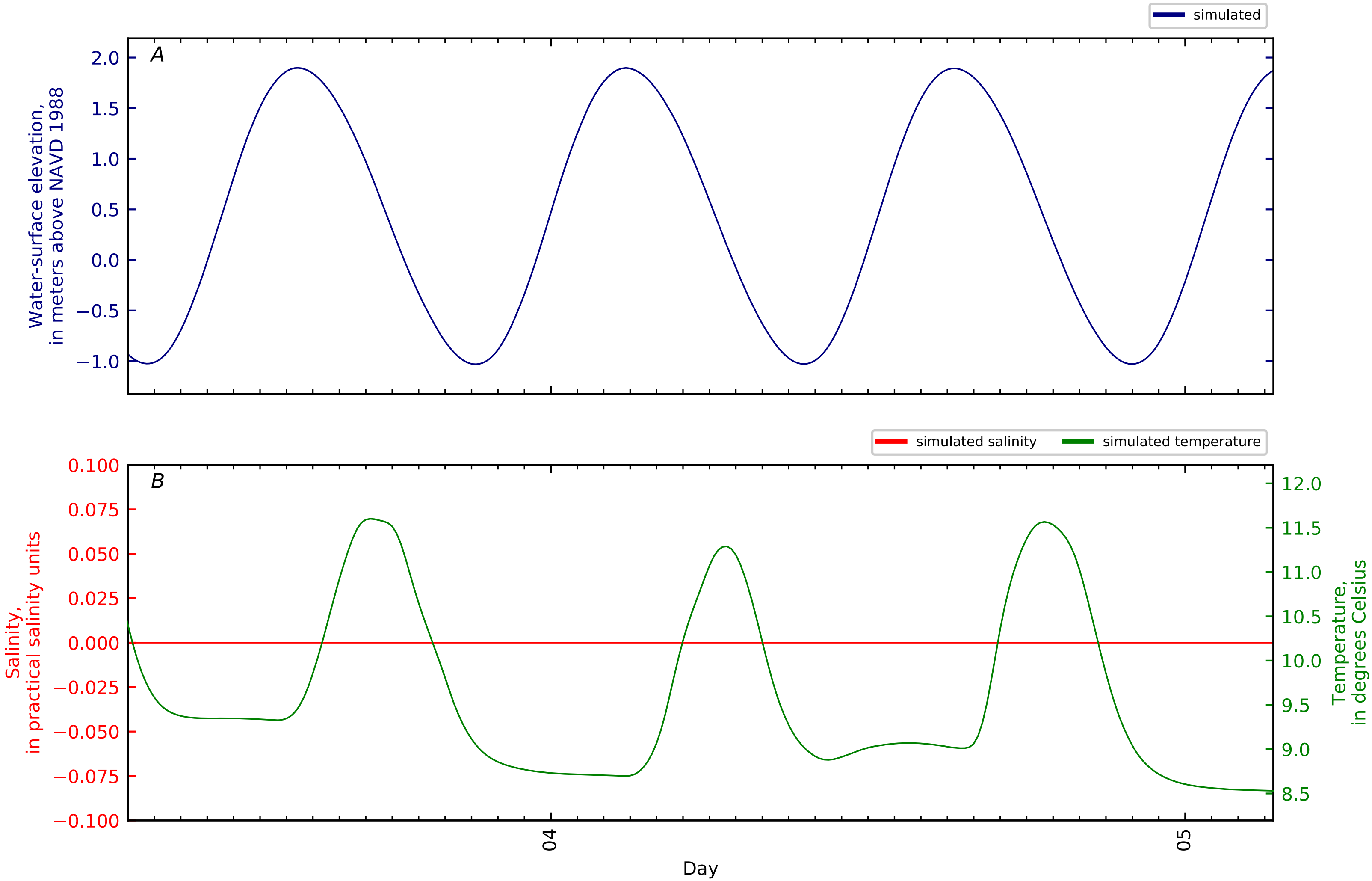

Figure B2-58. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 57, Penob Riv KM18.01 GS CTD1-03. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

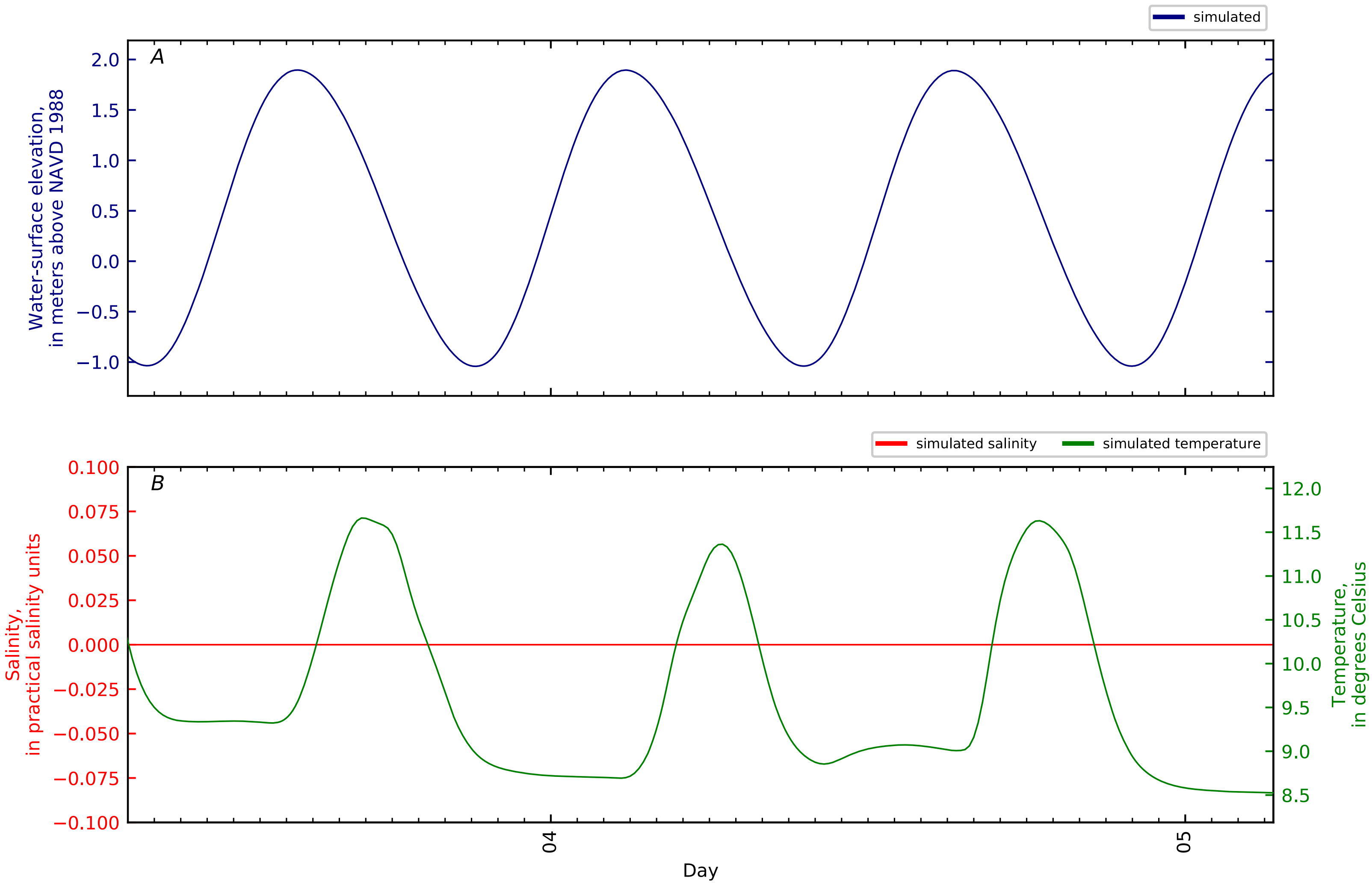

Figure B2-59. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 58, Penob Riv KM18.01 GS CTD1-04. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

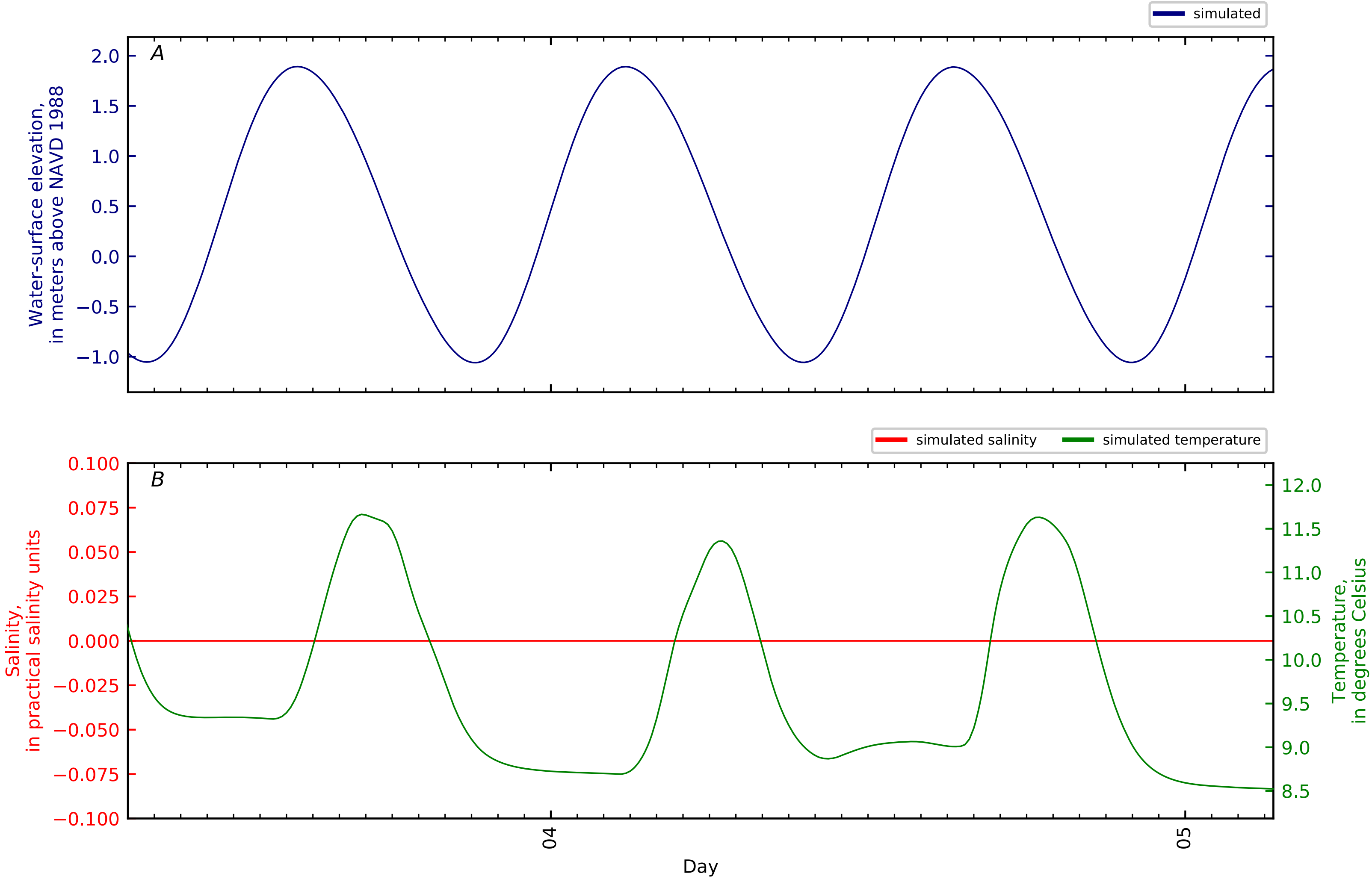

Figure B2-60. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 59, Penob Riv KM18.01 GS CTD1-05. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

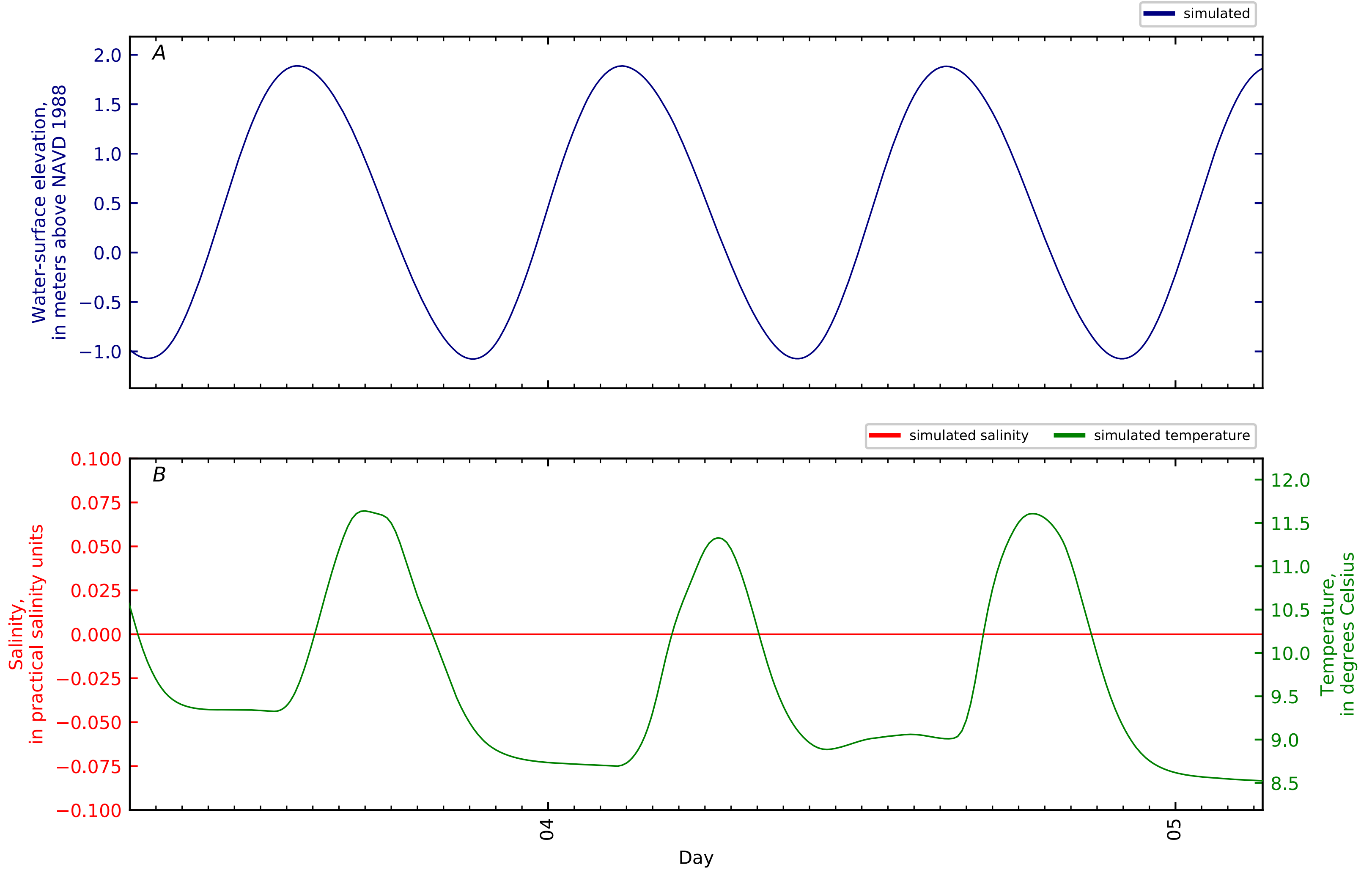

Figure B2-61. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 60, Penob Riv KM18.01 GS CTD1-06. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

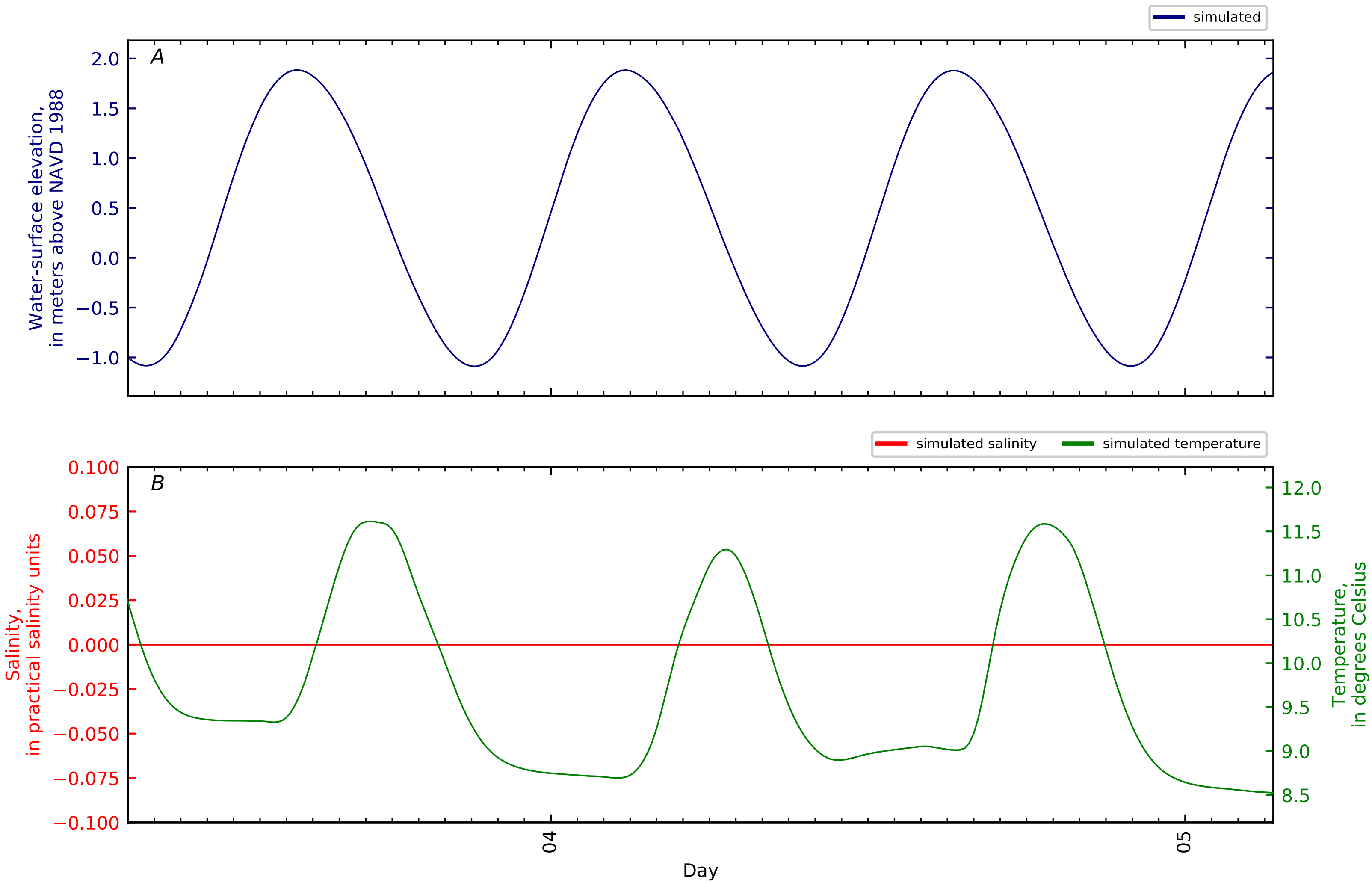

Figure B2-62. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 61, Penob Riv KM18.01 GS CTD1-07. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

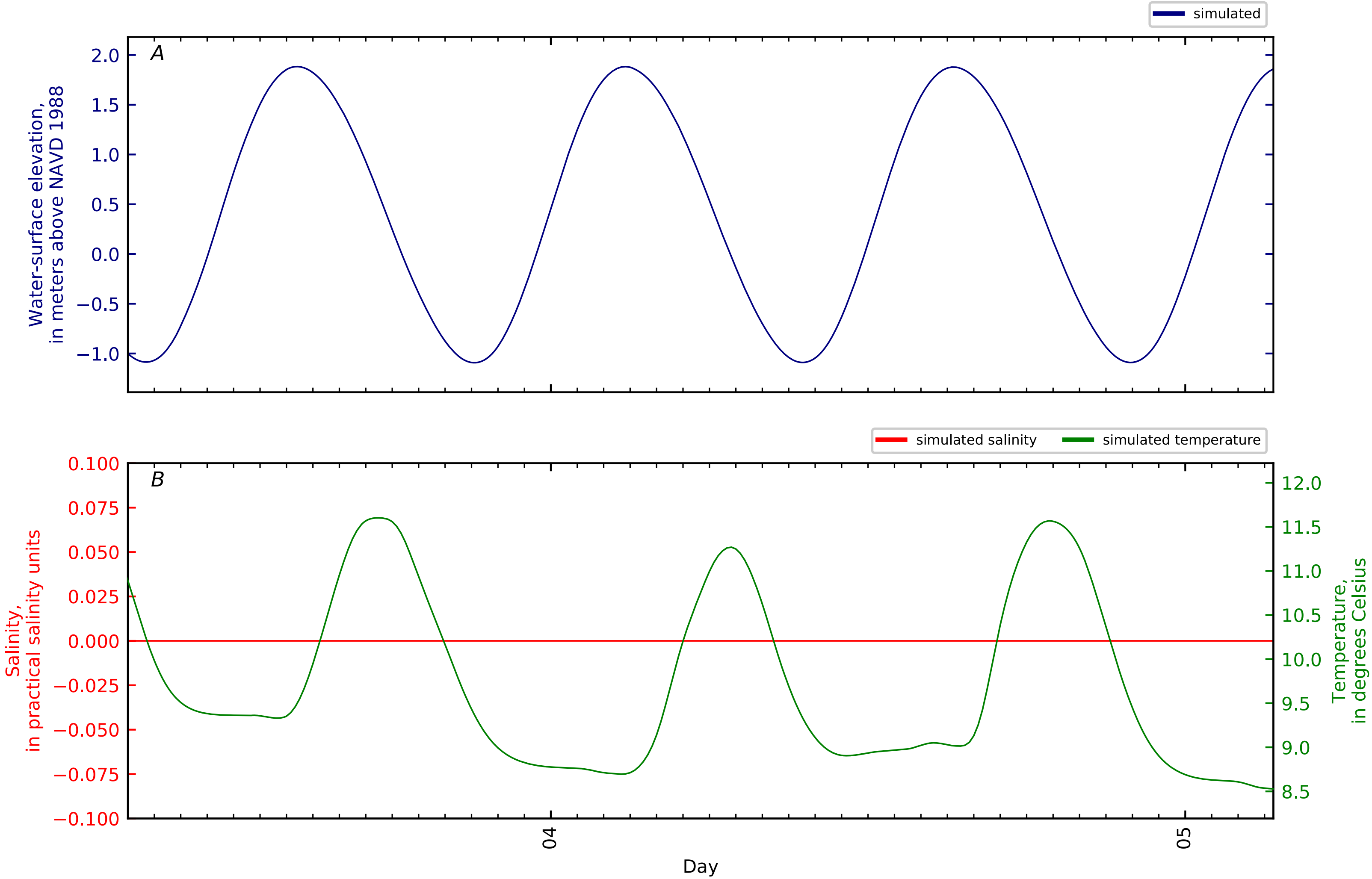

Figure B2-63. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 62, Penob Riv KM18.01 GS CTD1-08. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

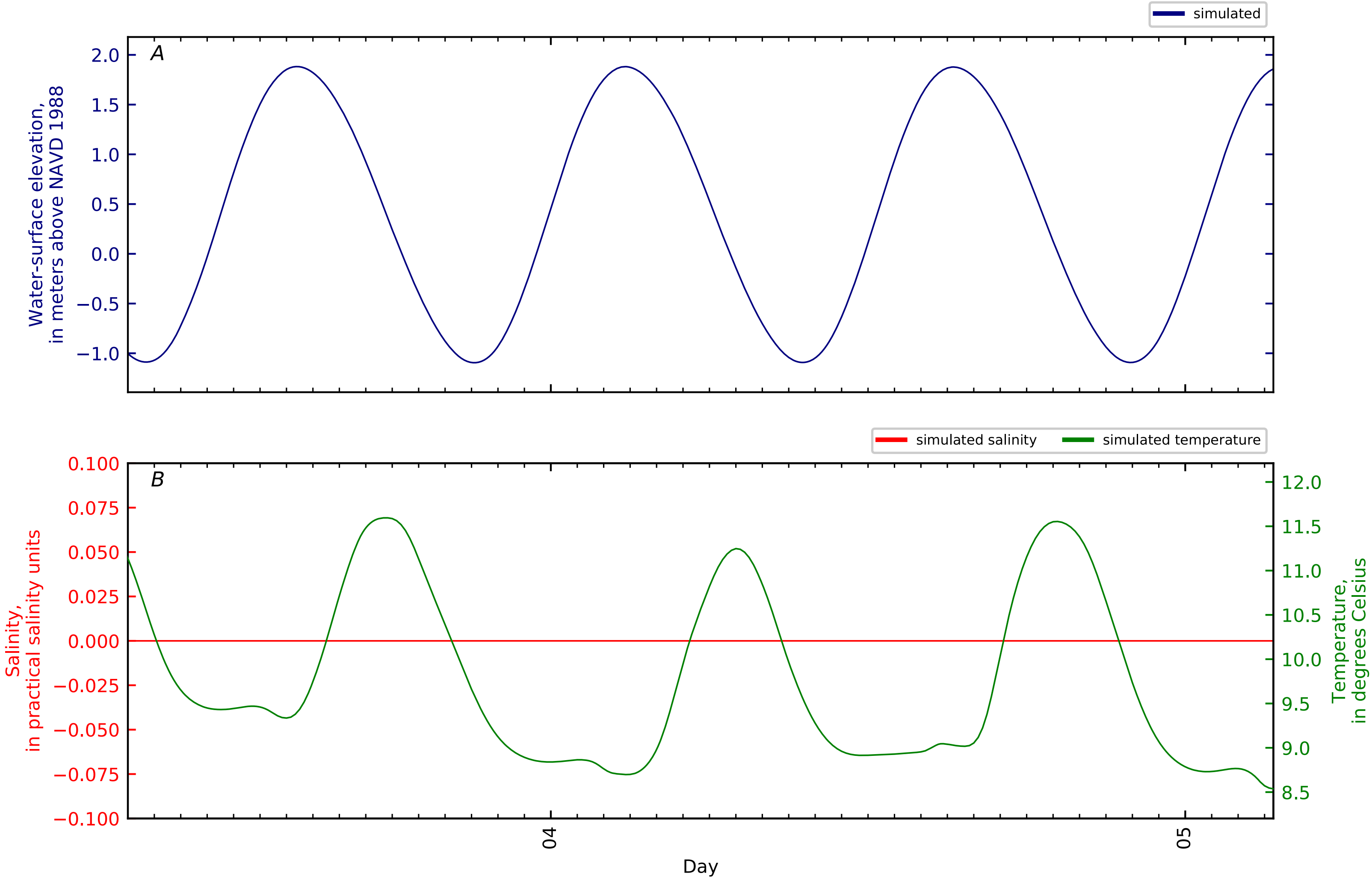

Figure B2-64. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 63, Penob Riv KM18.01 GS CTD1-09. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

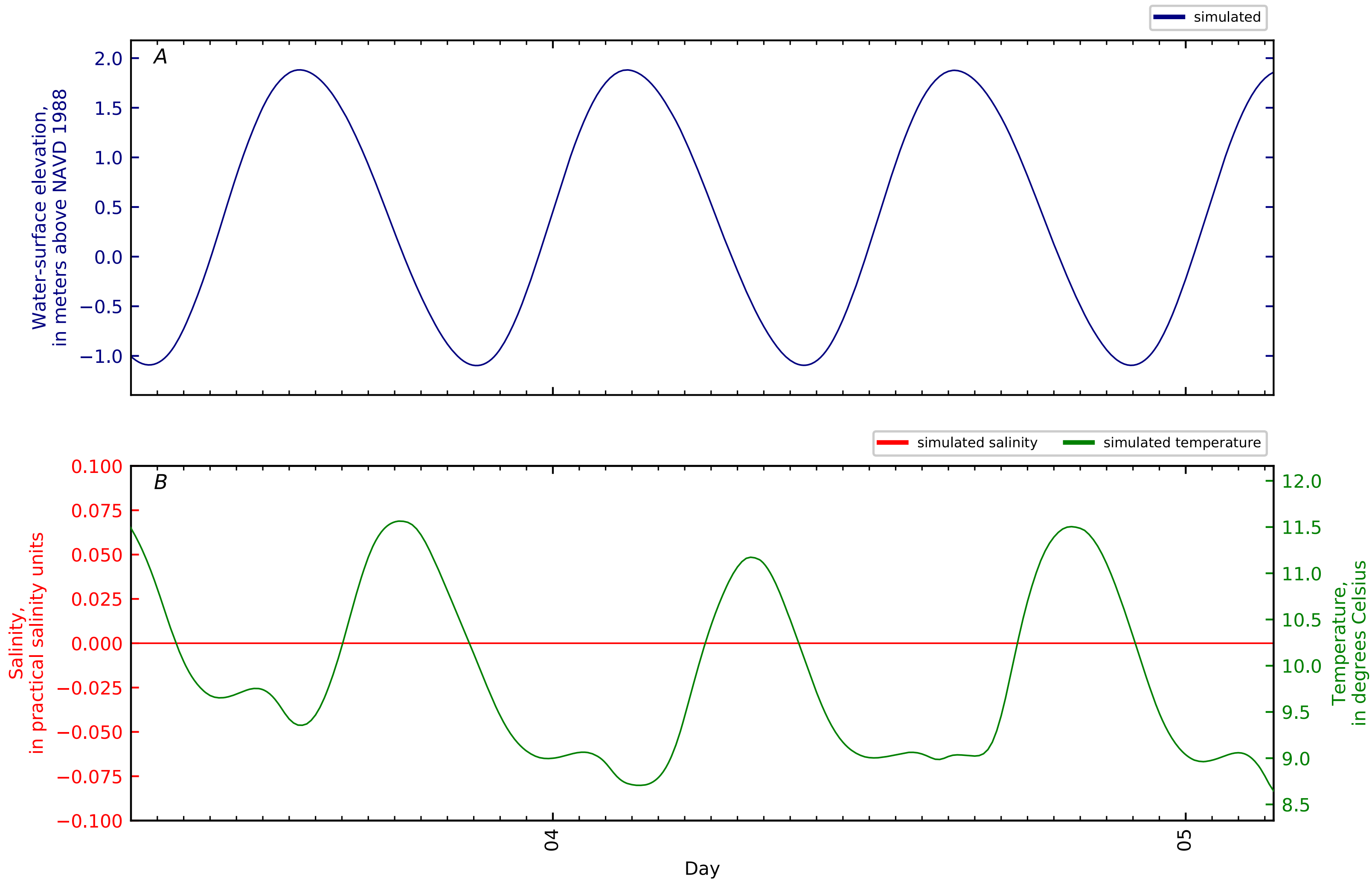

Figure B2-65. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 64, Penob Riv KM18.01 GS CTD1-10. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

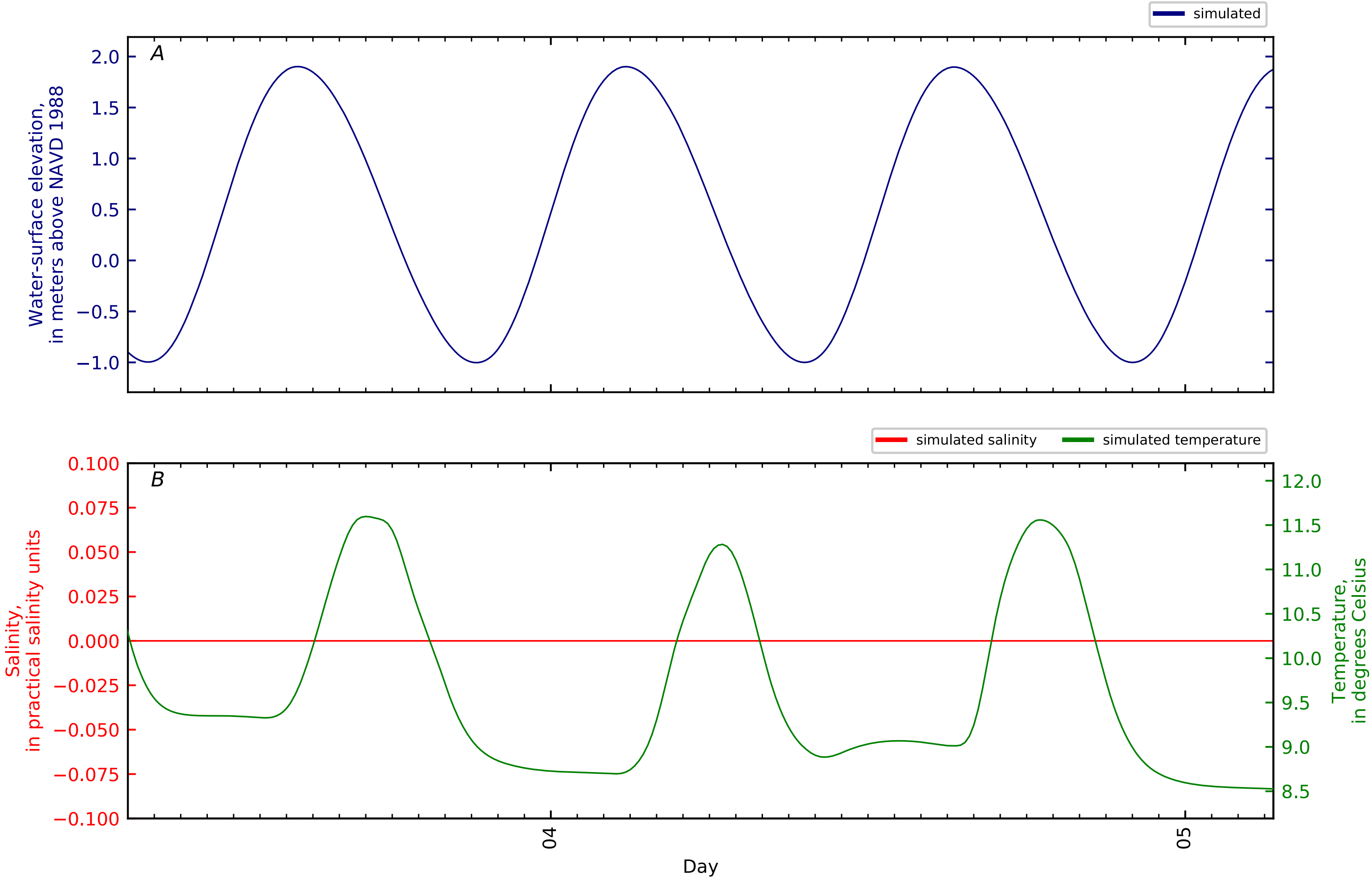

Figure B2-66. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 65, Penob Riv KM18.5 WHOI8 Frankfort Channel. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

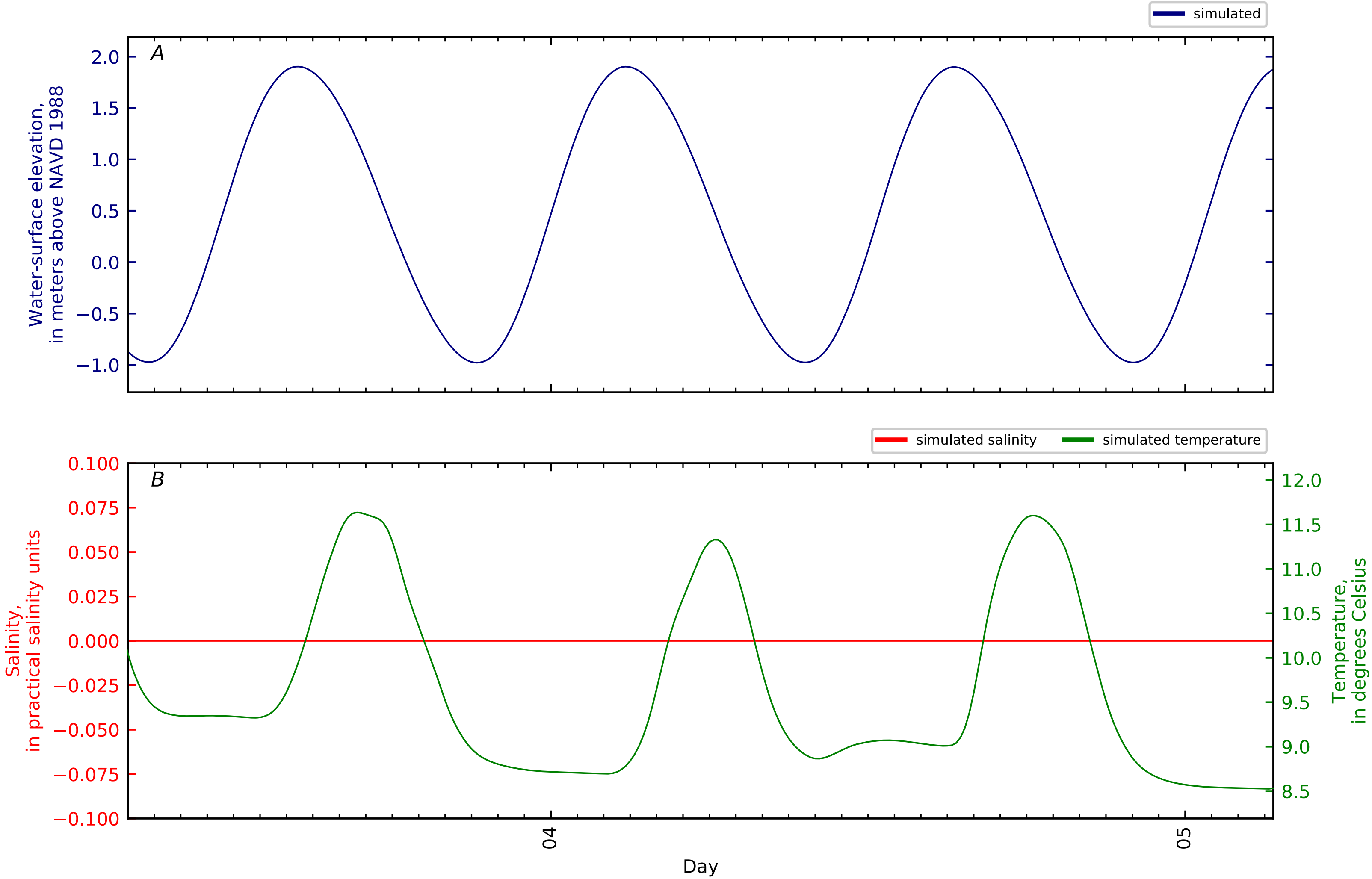

Figure B2-67. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 66, Penob Riv KM19. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

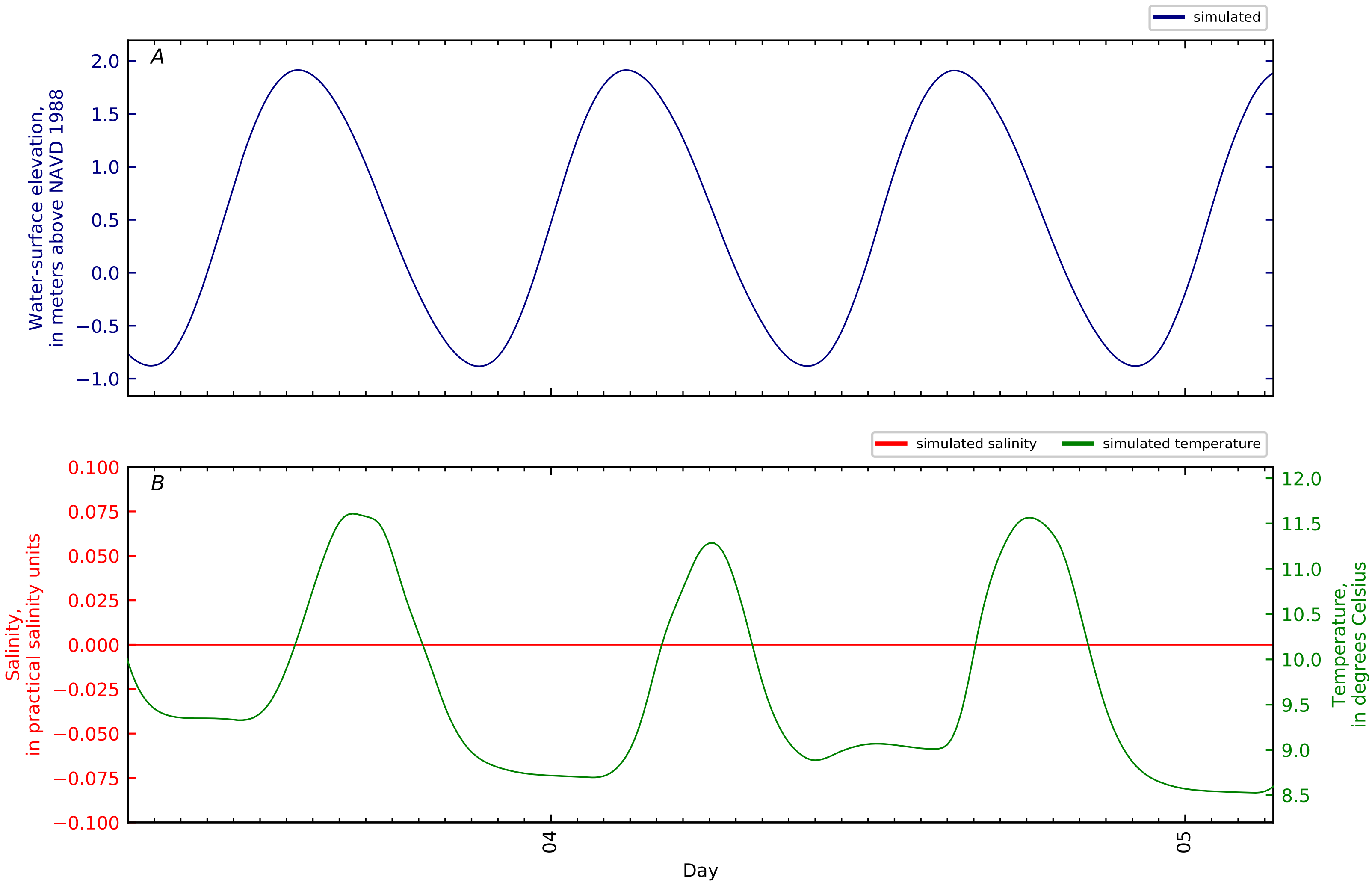

Figure B2-68. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 67, Penob Riv KM20. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

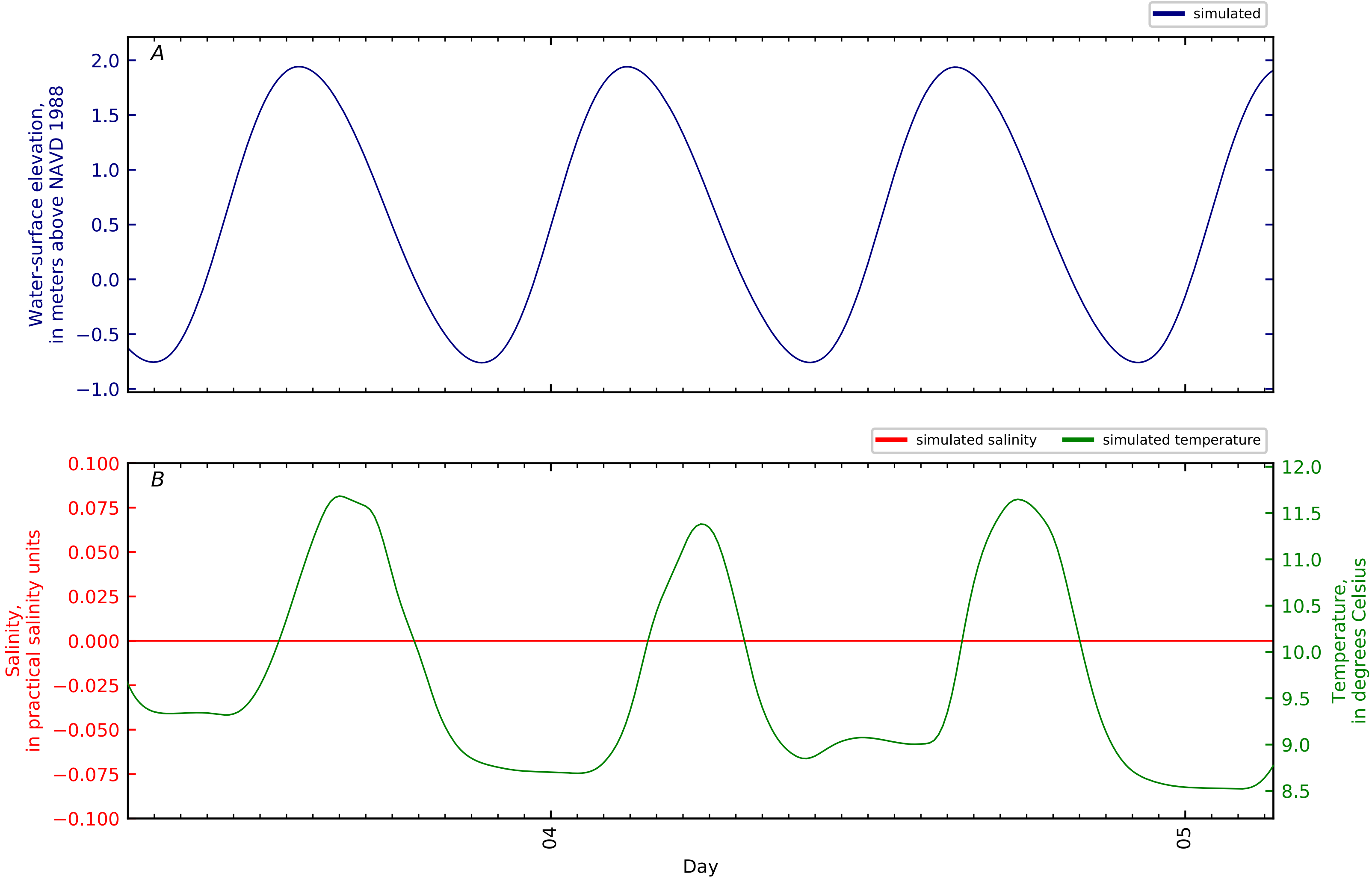

Figure B2-69. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 68, Penob Riv KM21. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

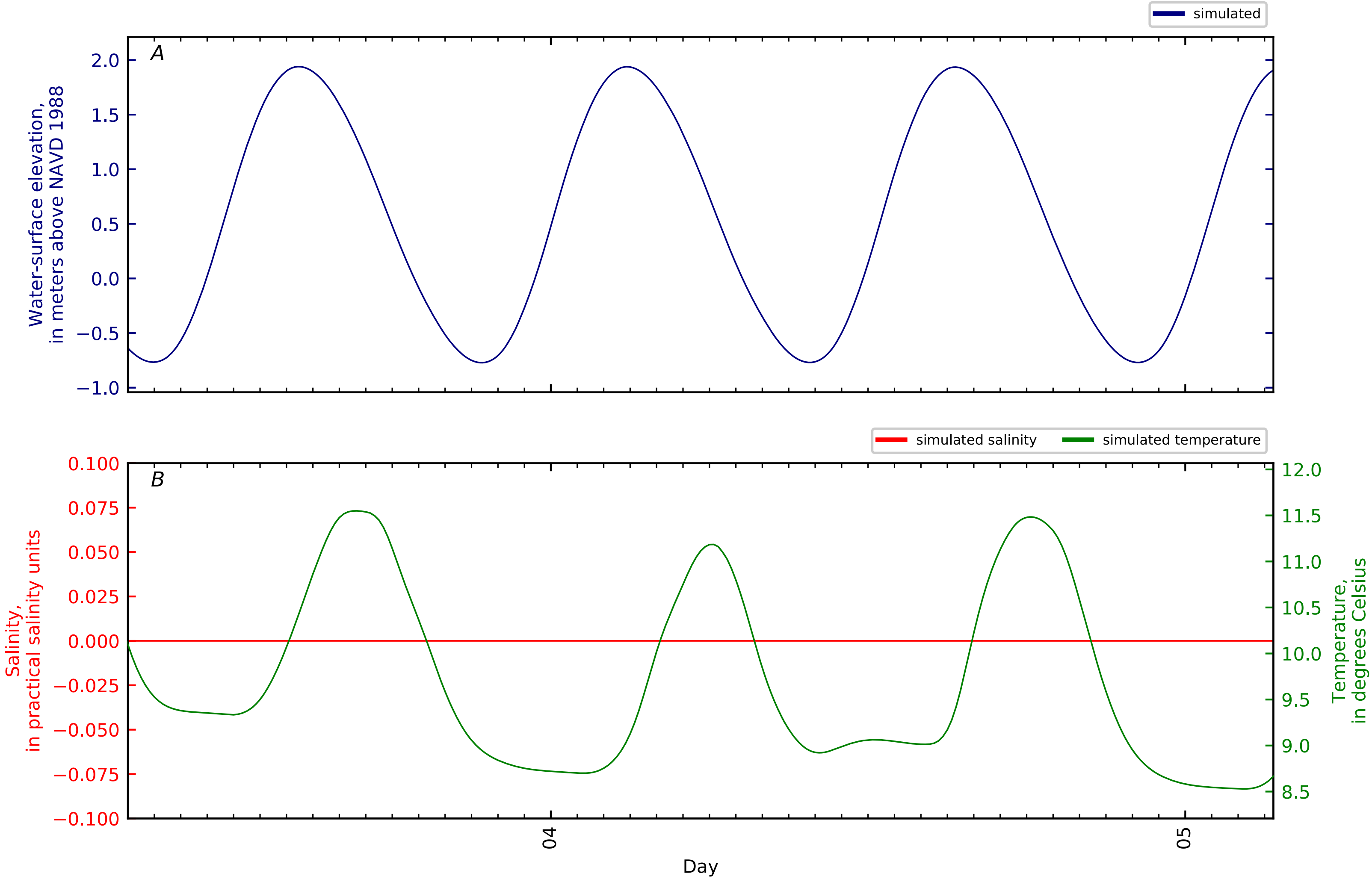

Figure B2-70. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 69, Penob Riv KM21.2 GS 443810068502201 Wint. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

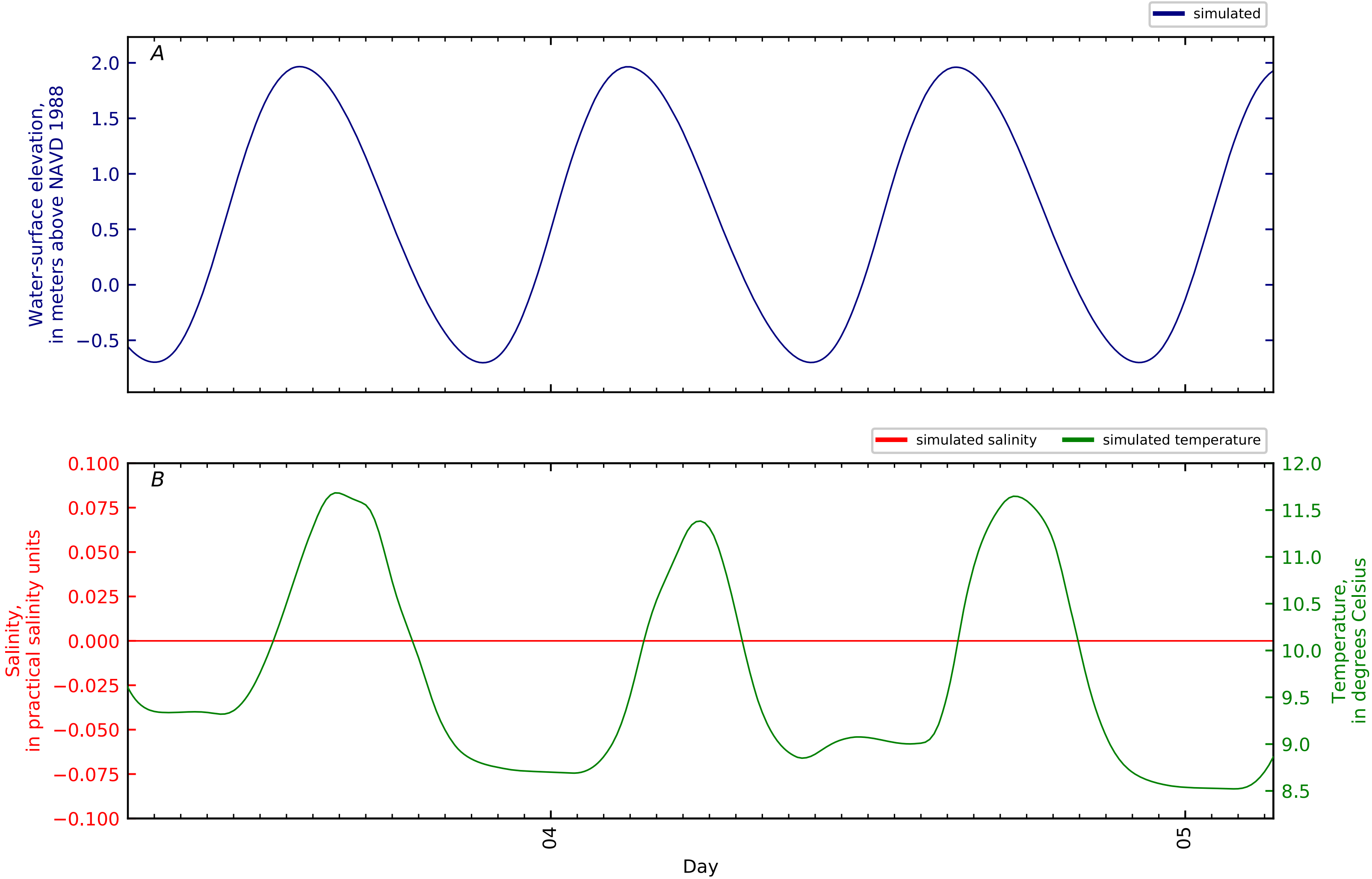

Figure B2-71. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 70, Penob Riv KM21.5 WHOI6 Winterport 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

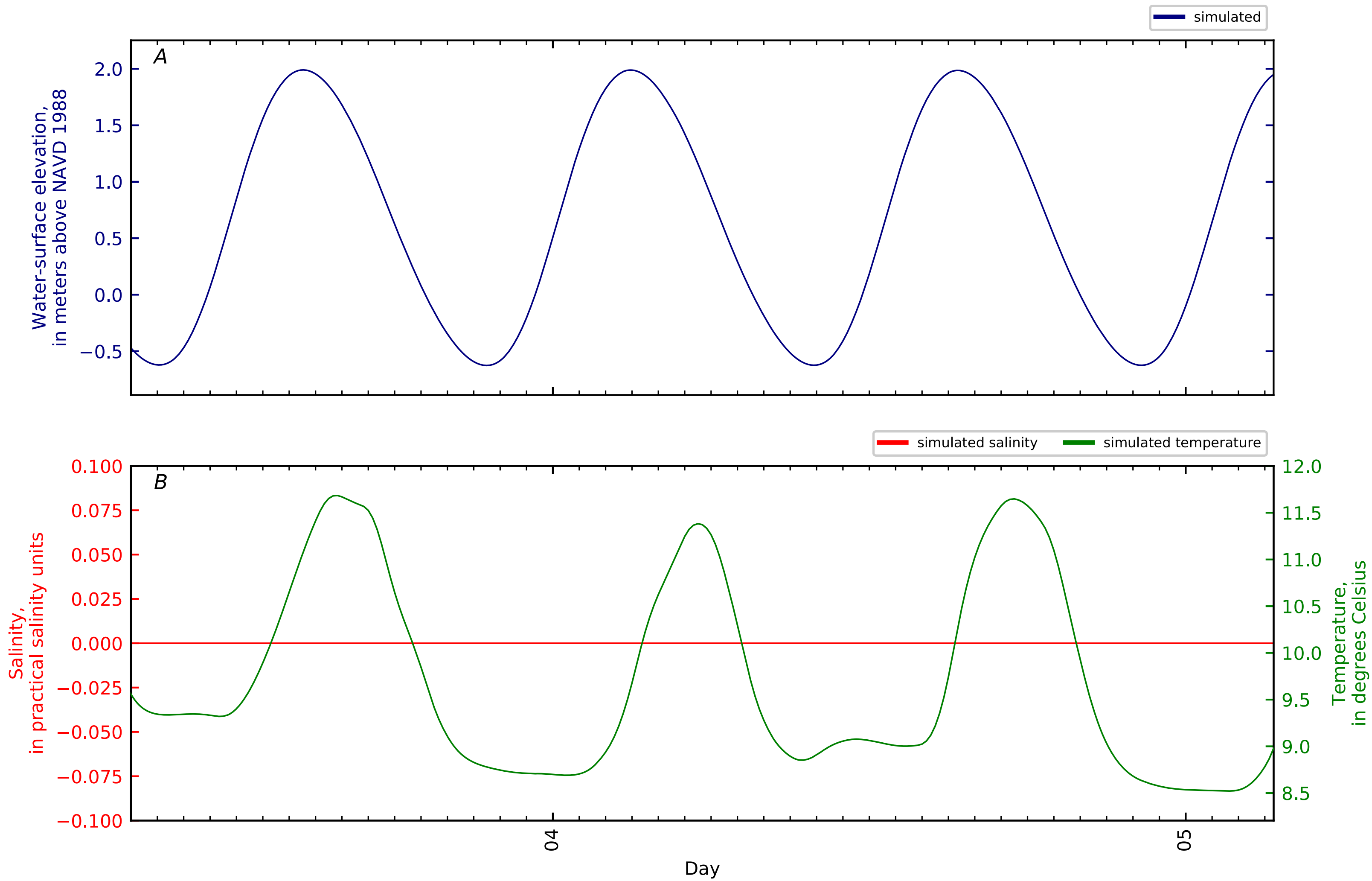

Figure B2-72. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 71, Penob Riv KM22. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

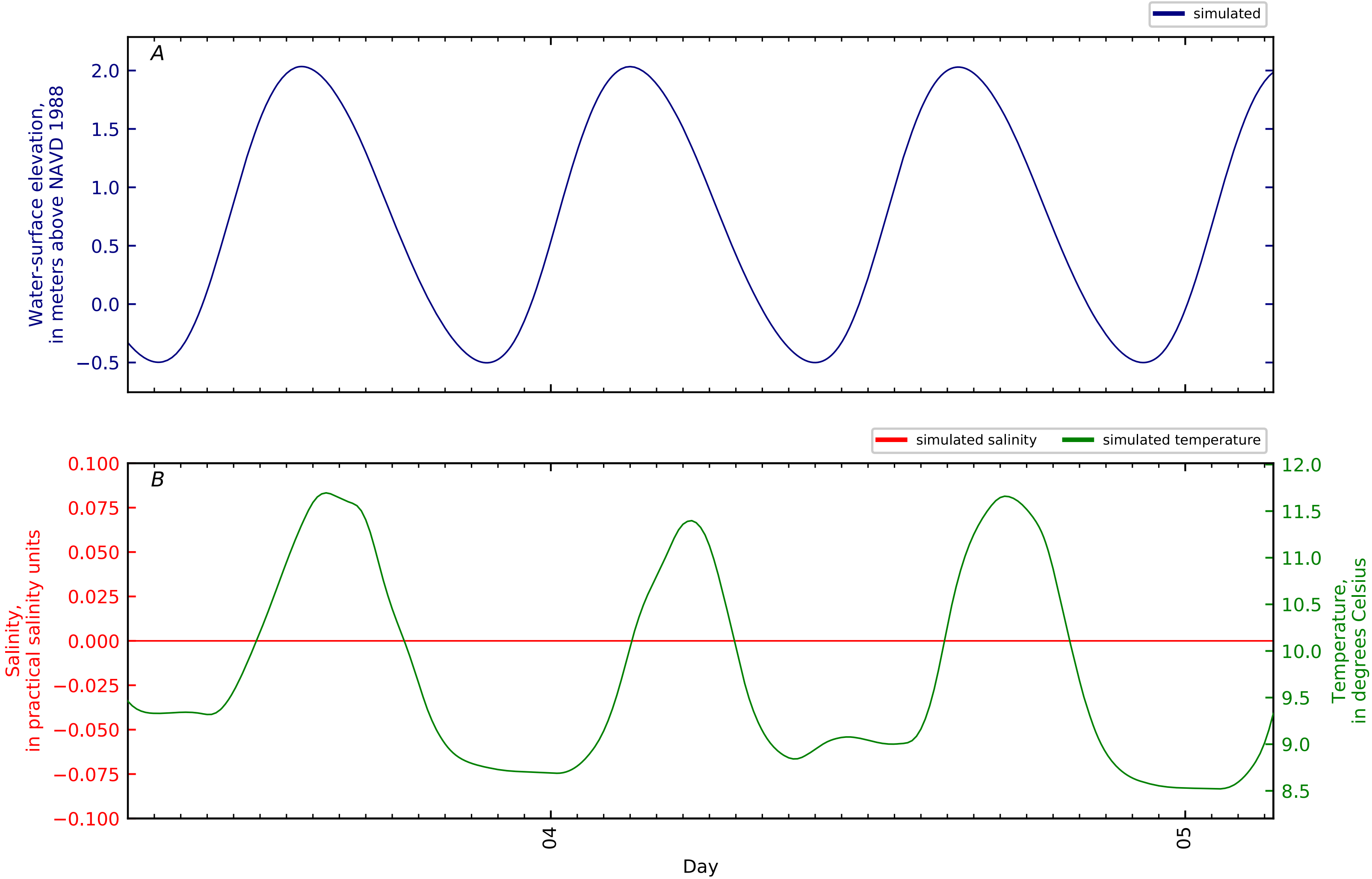

Figure B2-73. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 72, Penob Riv KM23. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

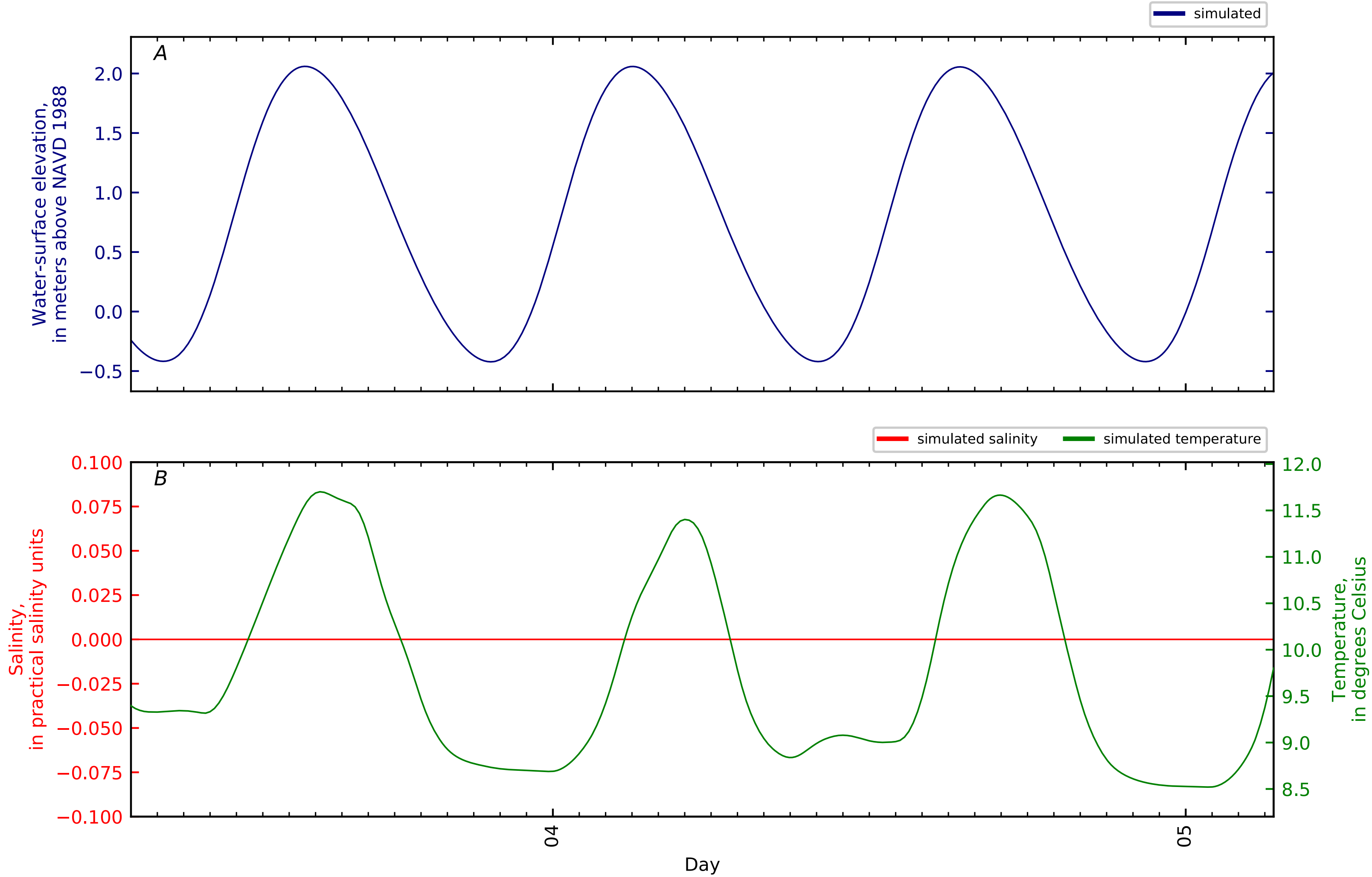

Figure B2-74. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 73, Penob Riv KM24. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

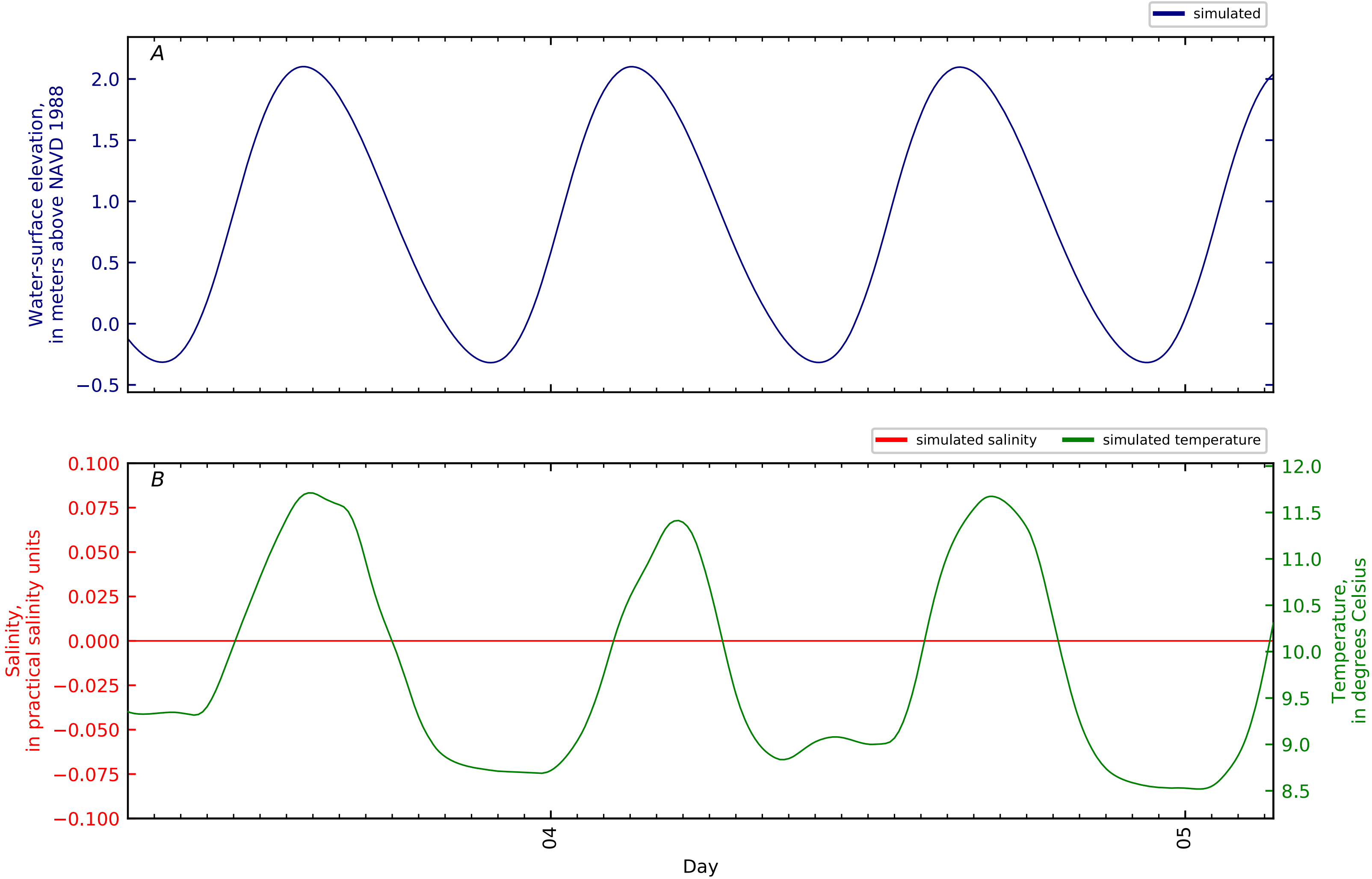

Figure B2-75. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 74, Penob Riv KM25. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

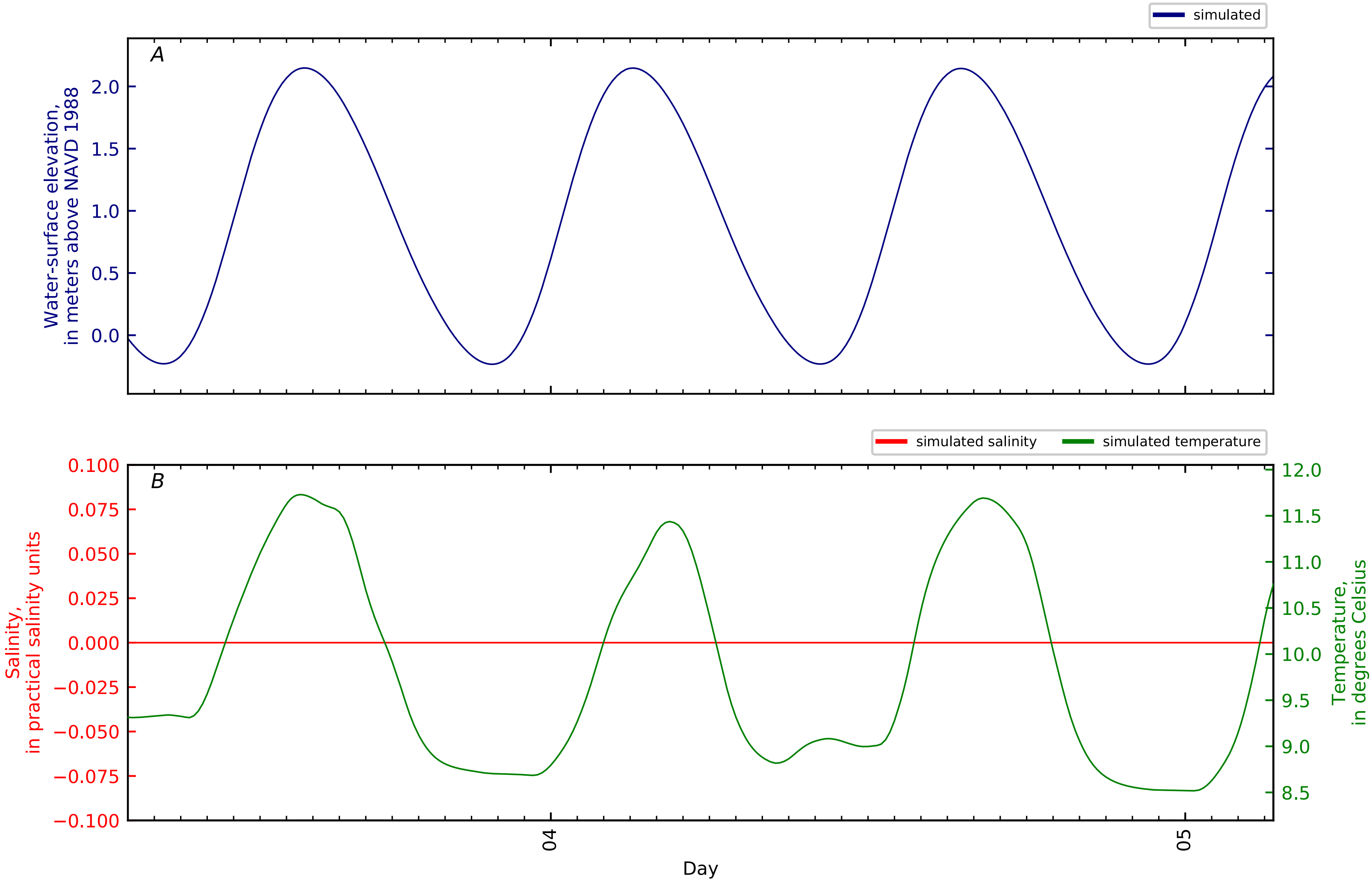

Figure B2-76. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 75, Penob Riv KM26. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

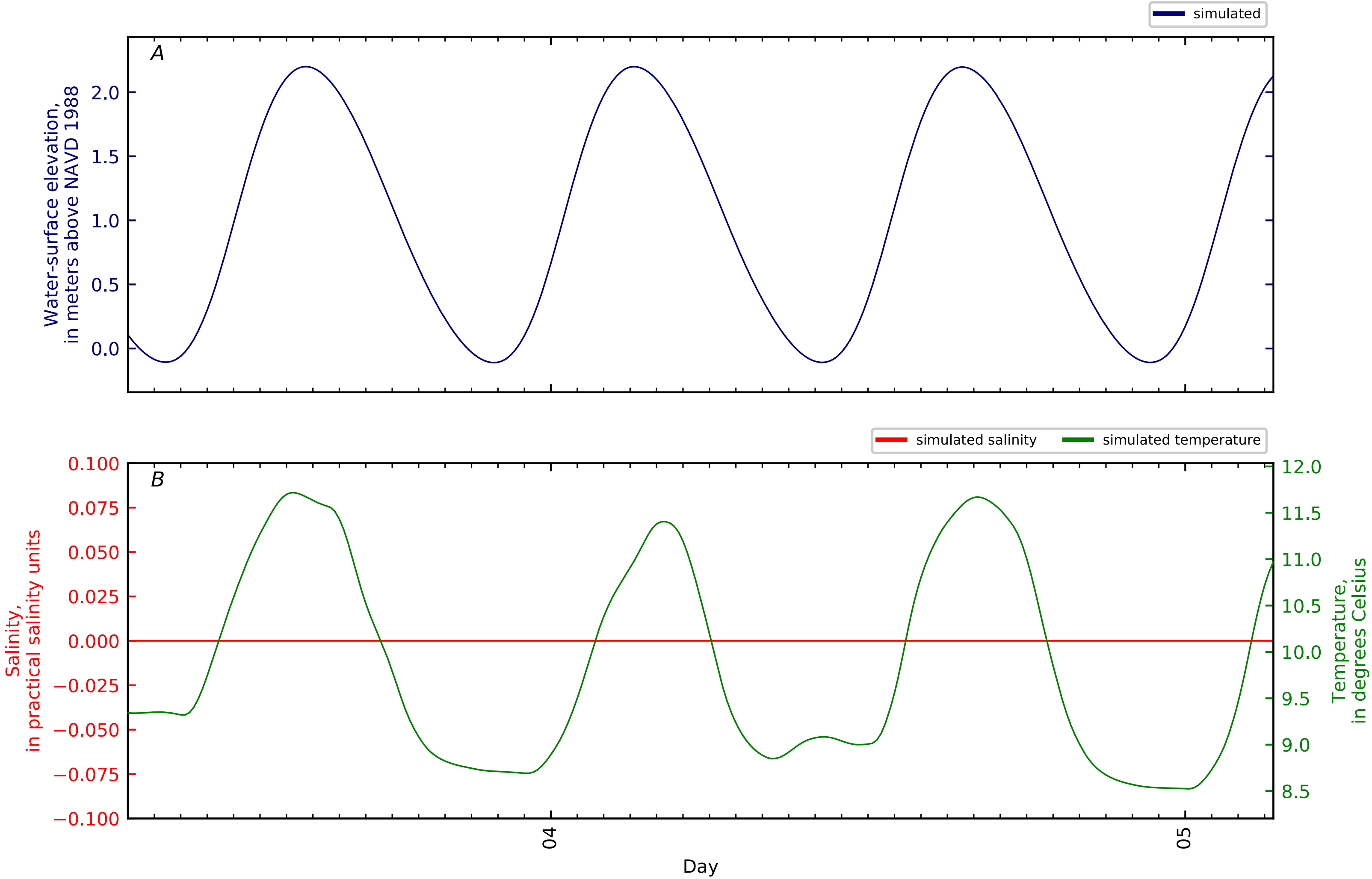

Figure B2-77. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 76, Penob Riv KM27. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

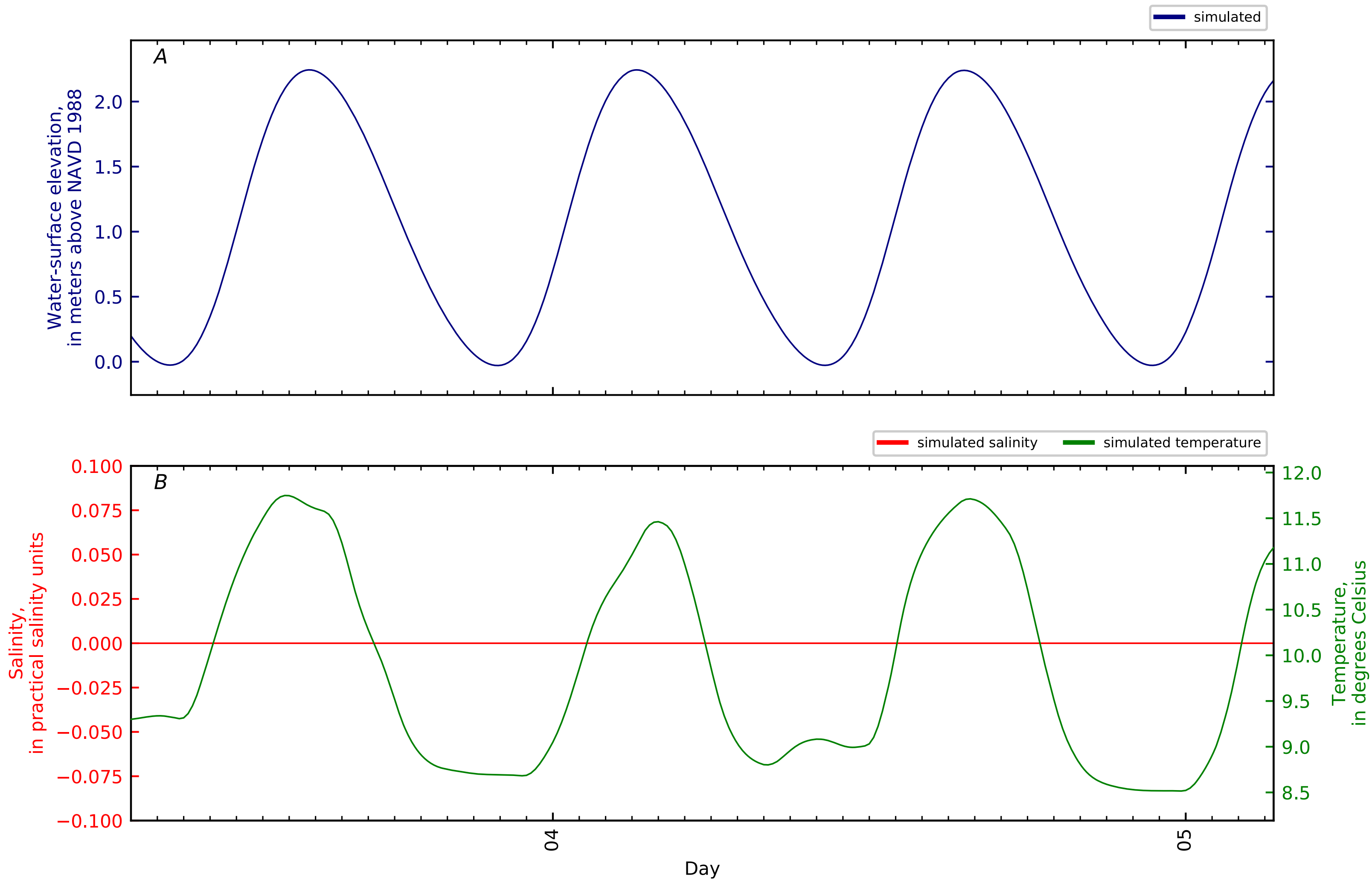

Figure B2-78. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 77, Penob Riv KM28. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

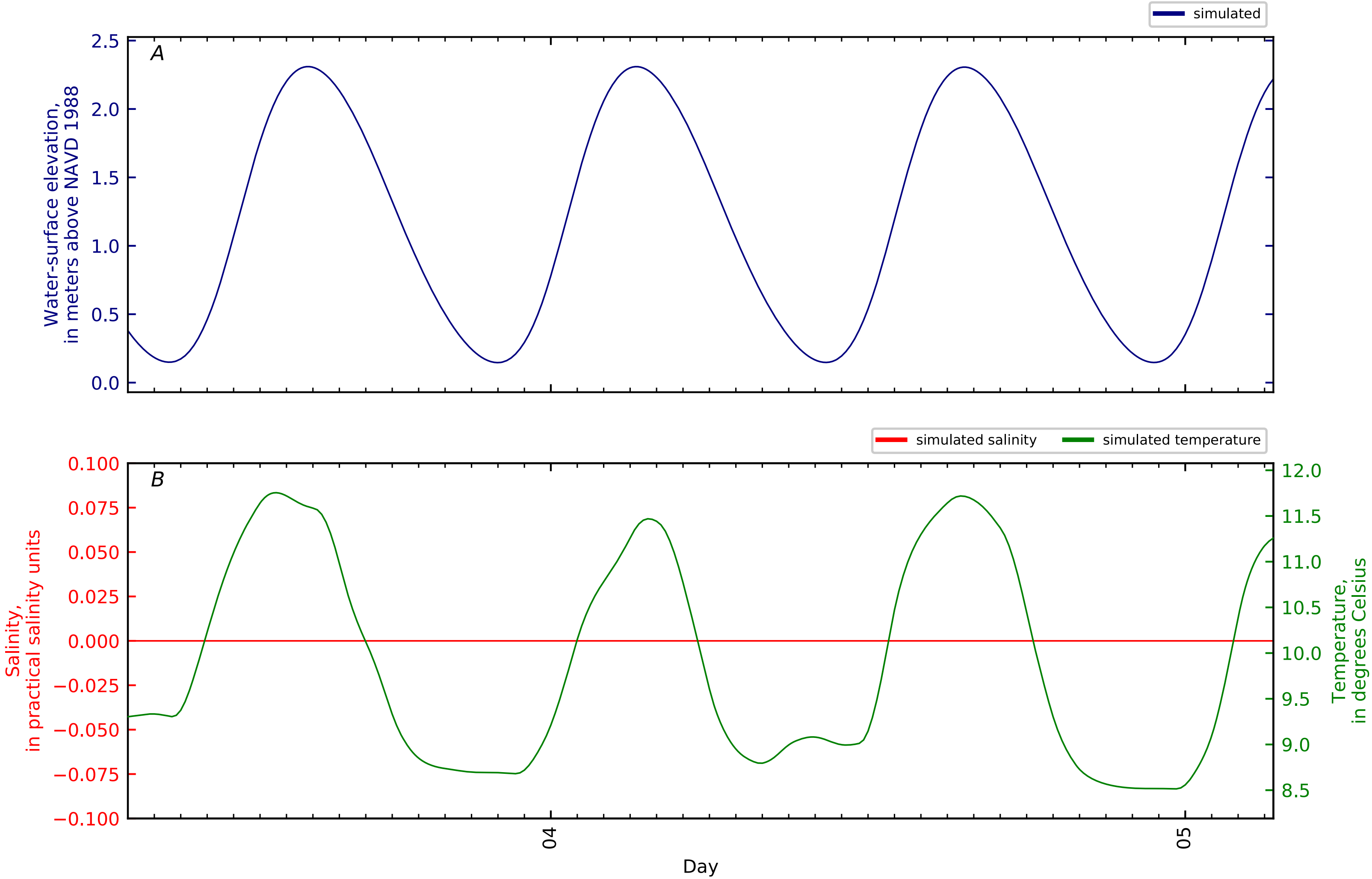

Figure B2-79. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 78, Penob Riv KM29. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

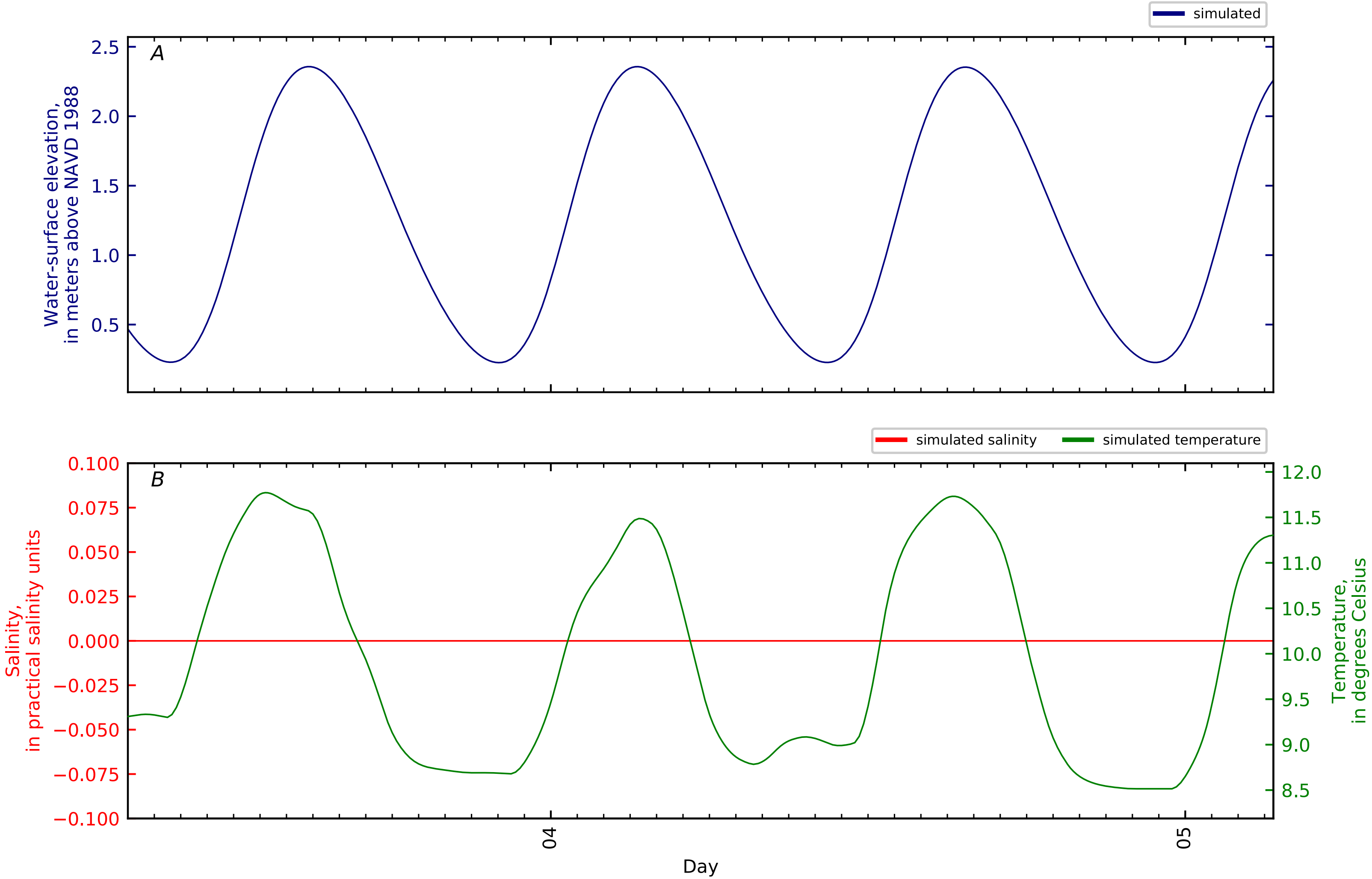

Figure B2-80. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 79, Penob Riv KM30. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

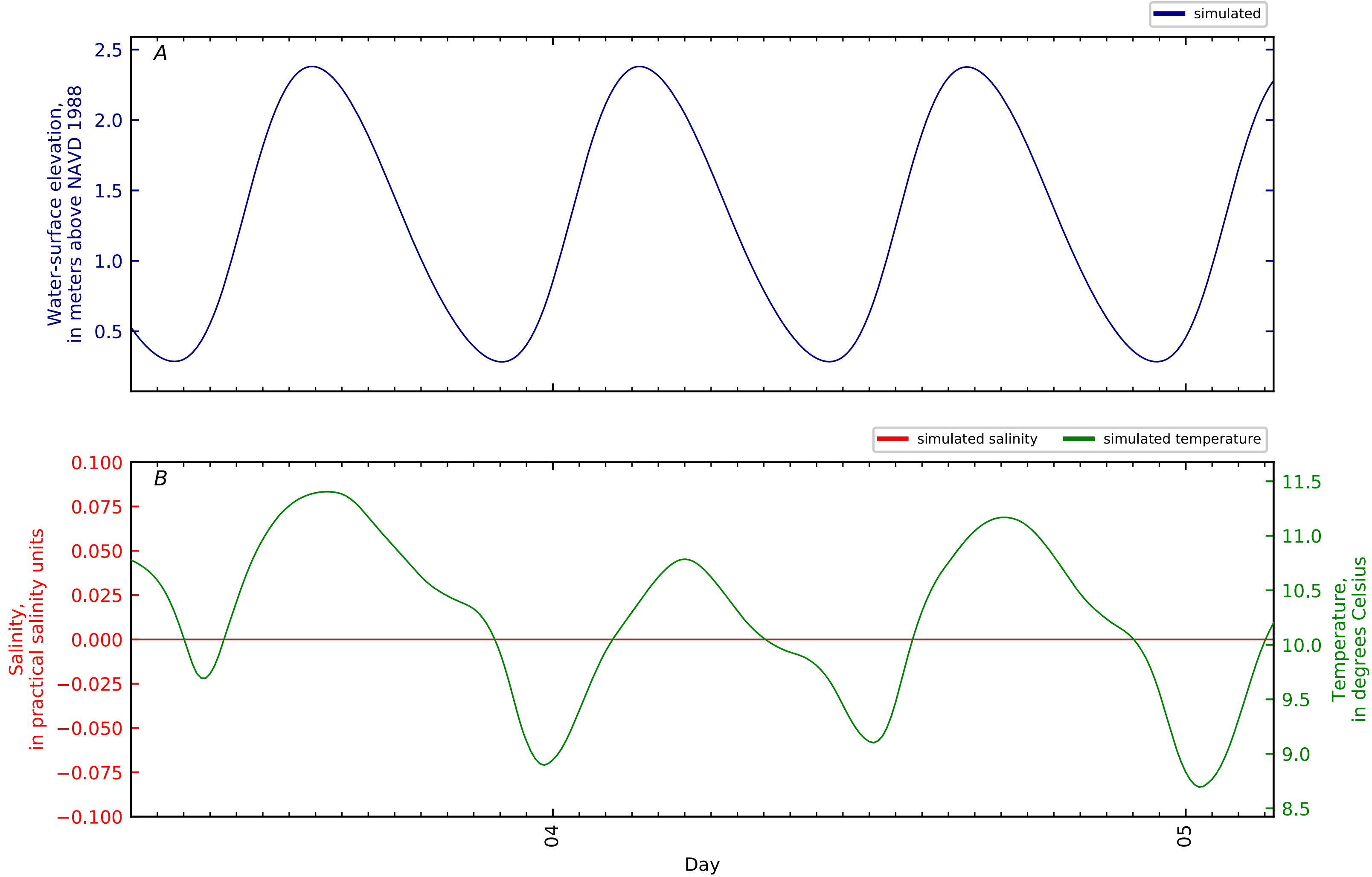

Figure B2-81. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 80, Penob Riv KM30.3 ERDC3 ON-MU2-SF-2 Bartl. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

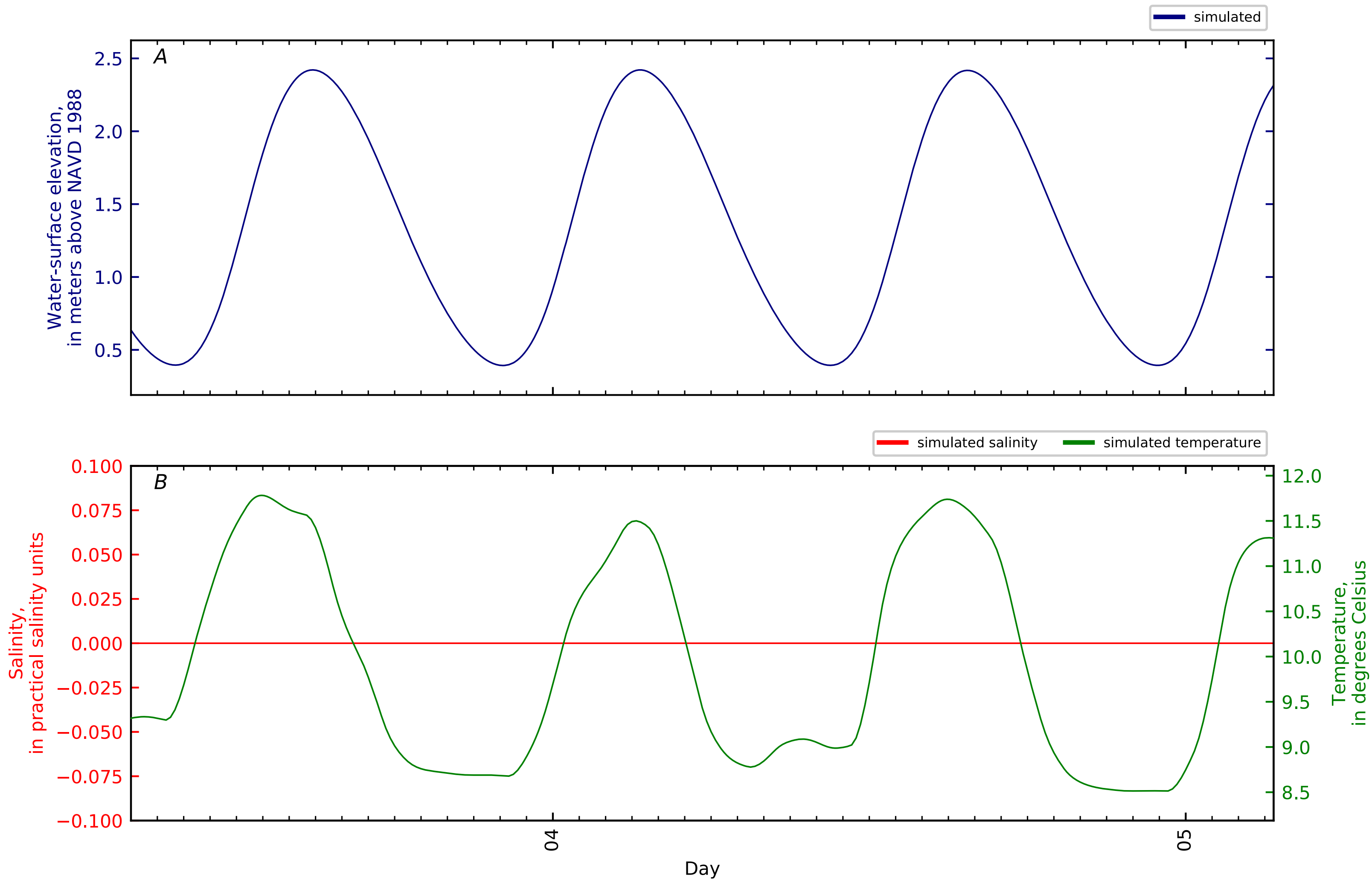

Figure B2-82. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 81, Penob Riv KM31. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

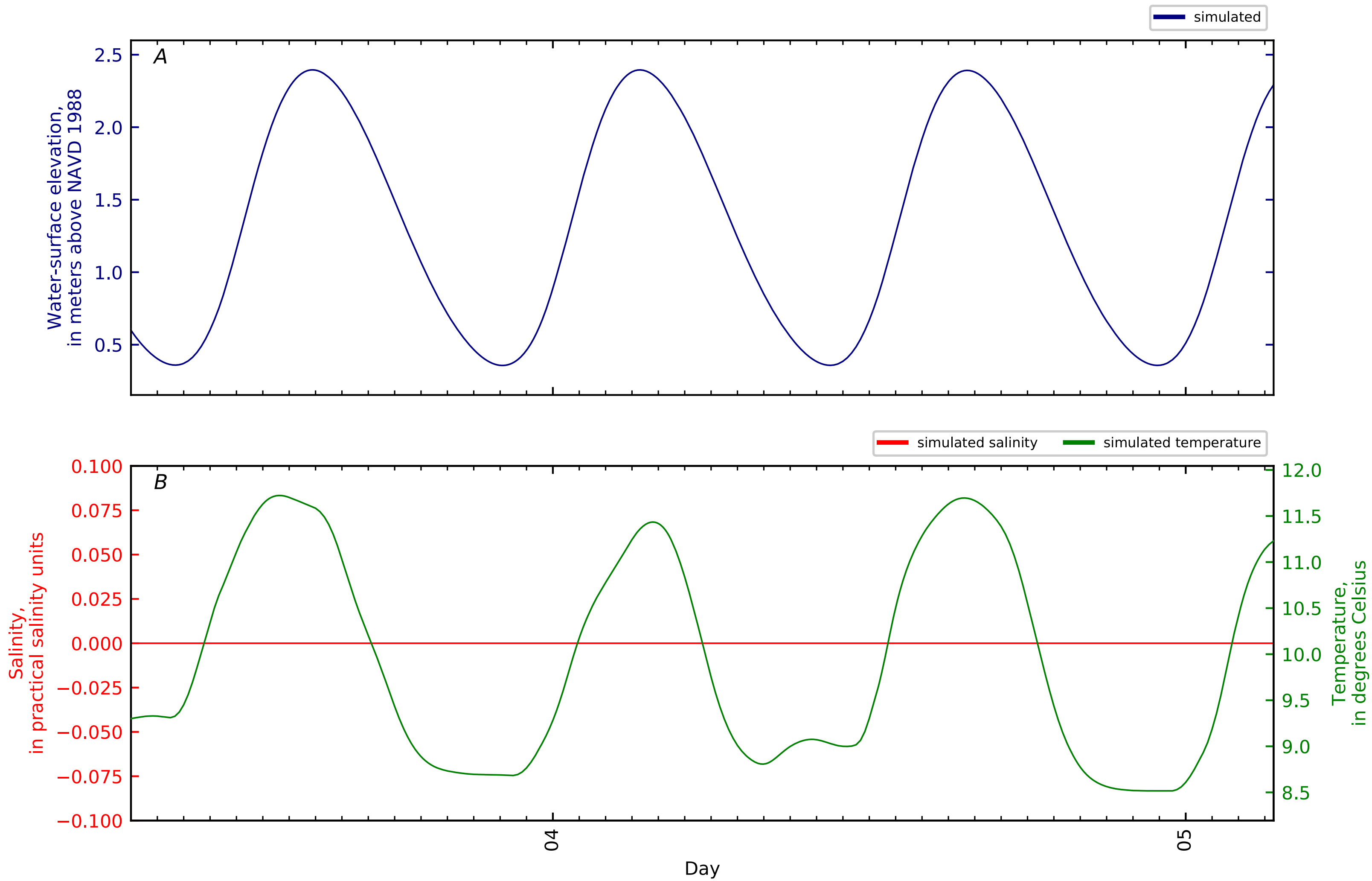

Figure B2-83. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 82, Penob Riv KM31.3 ERDC1 ON-MU2-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

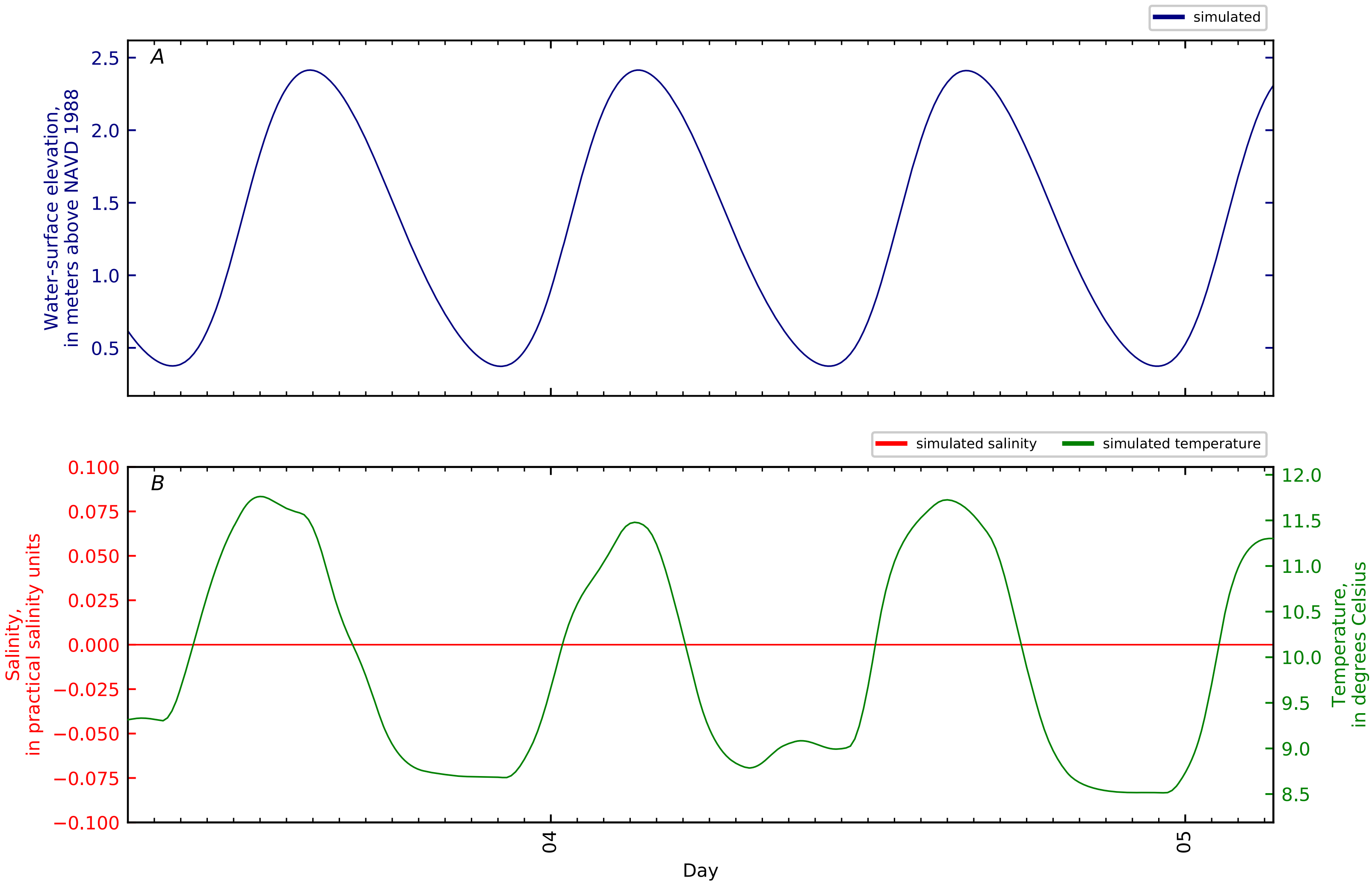

Figure B2-84. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 83, Penob Riv KM31.4 ERDC2 ON-MU13-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

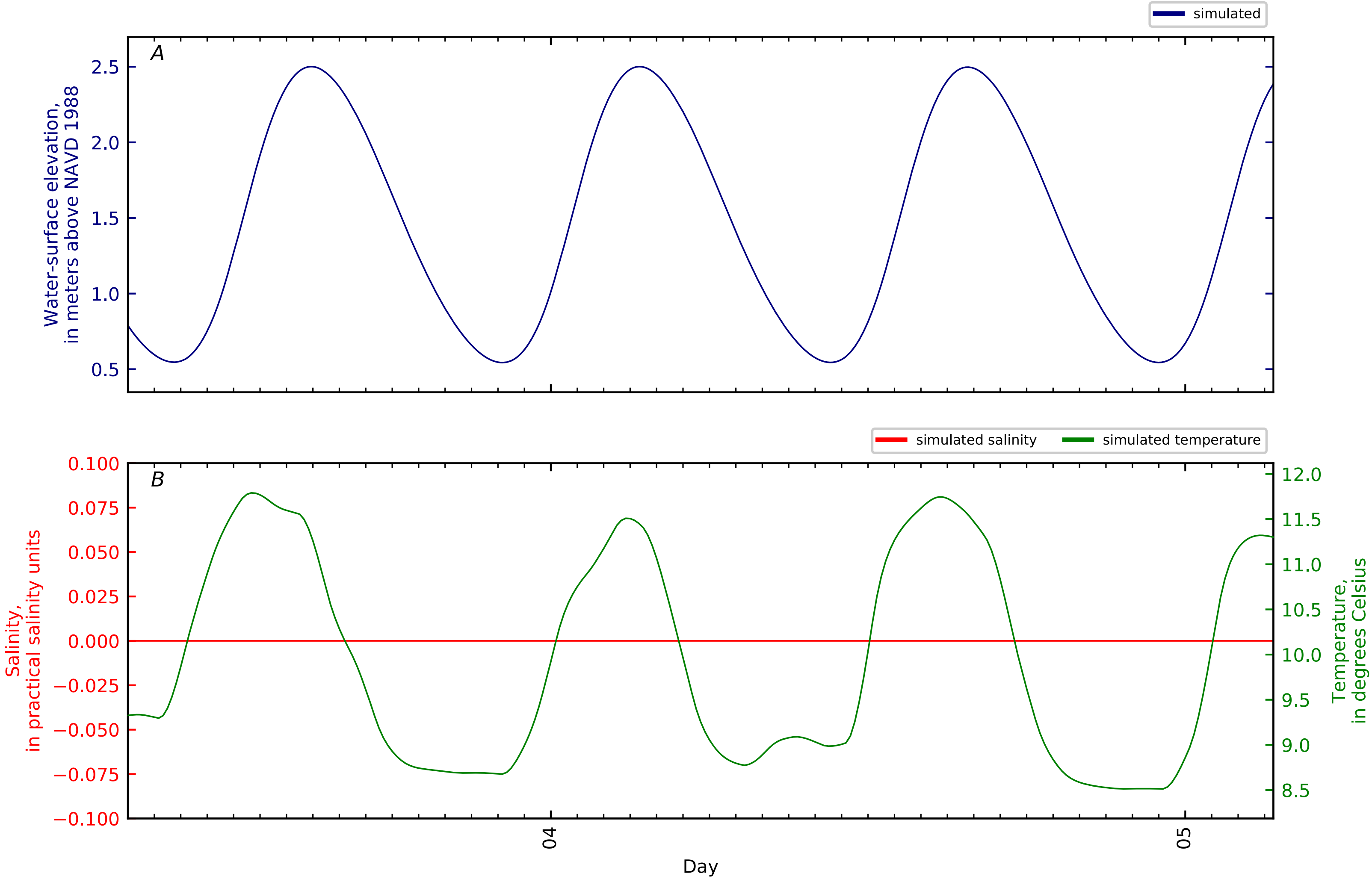

Figure B2-85. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 84, Penob Riv KM32. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

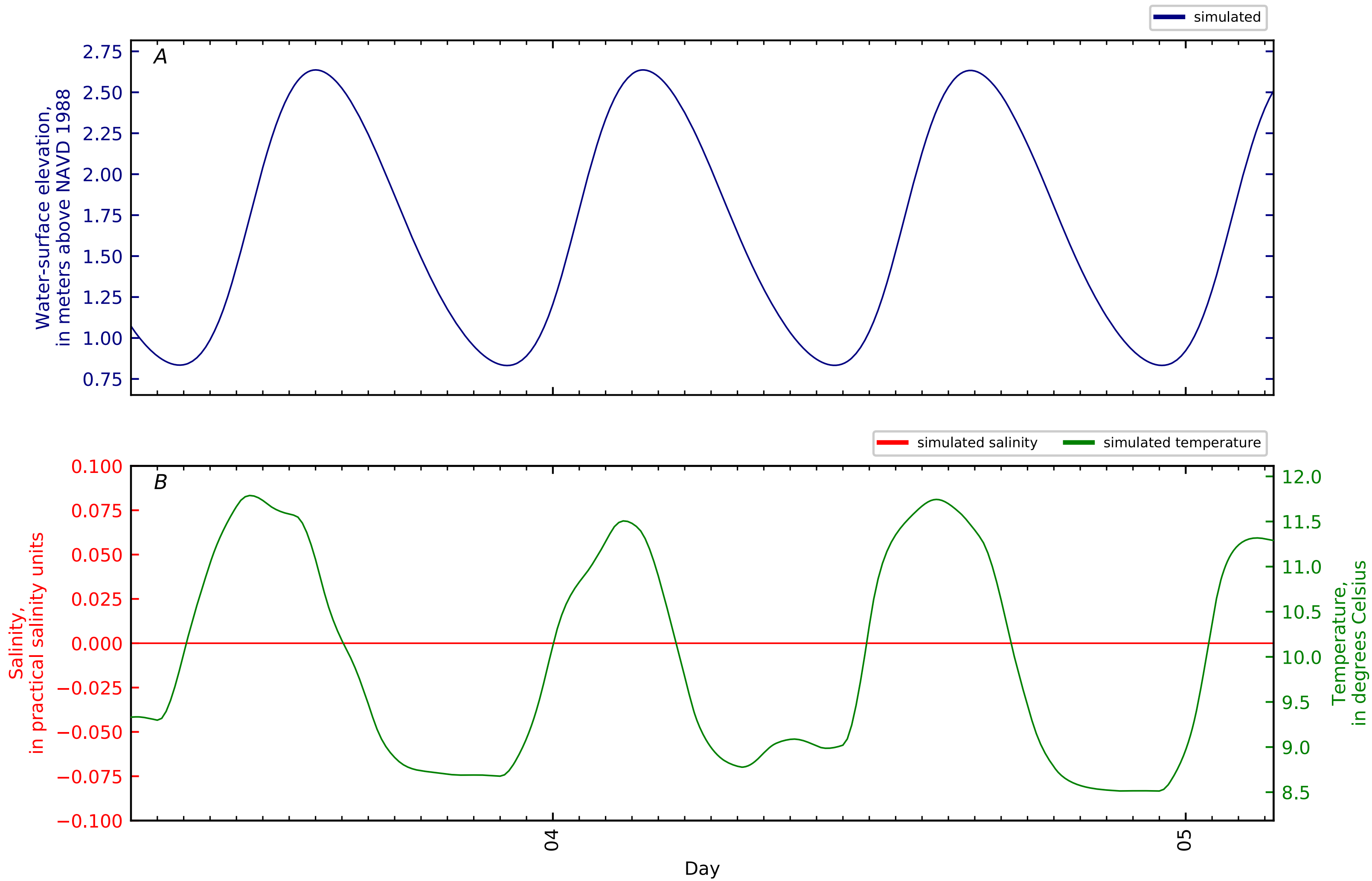

Figure B2-86. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 85, Penob Riv KM33. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

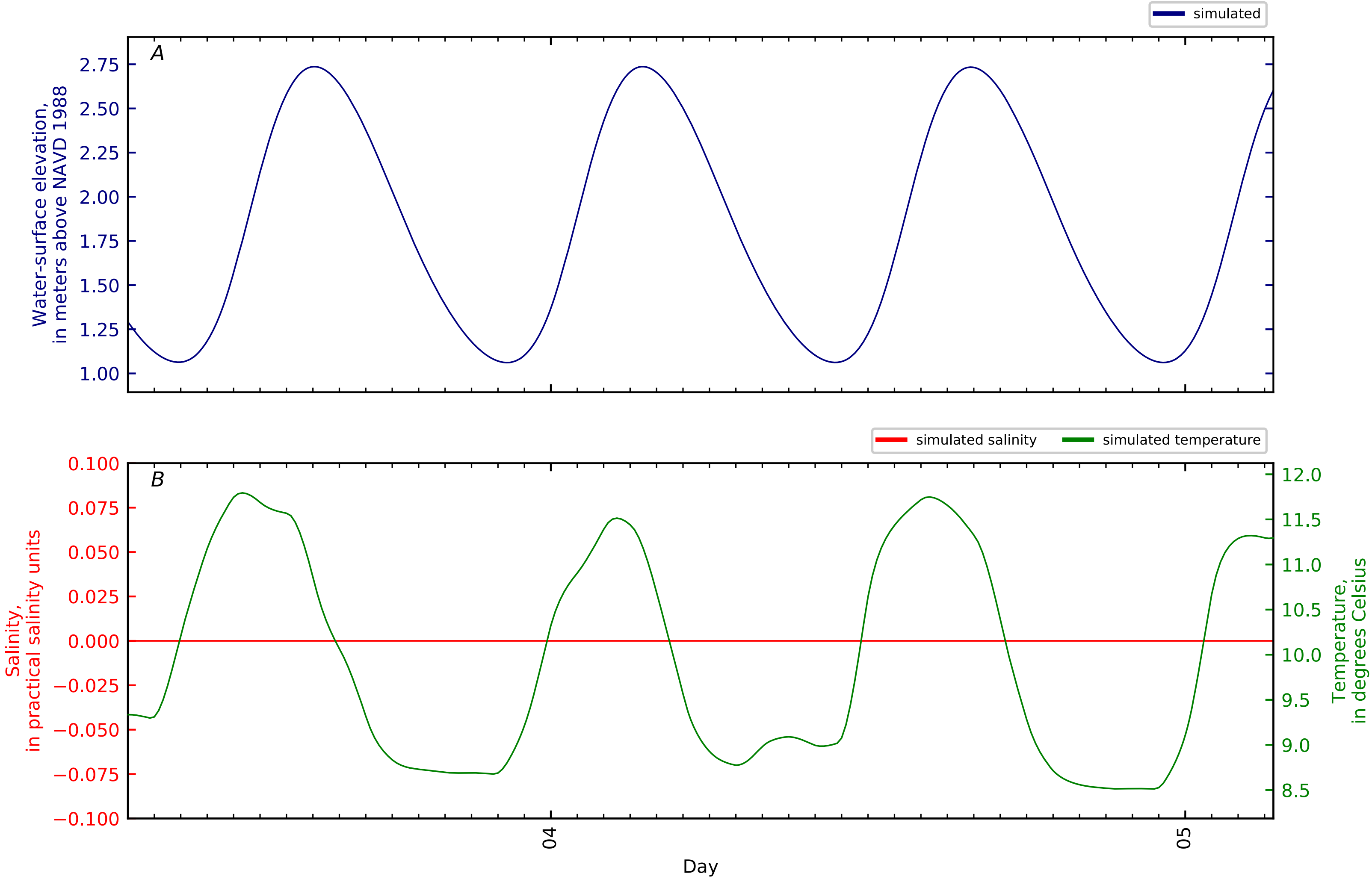

Figure B2-87. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 86, Penob Riv KM34. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

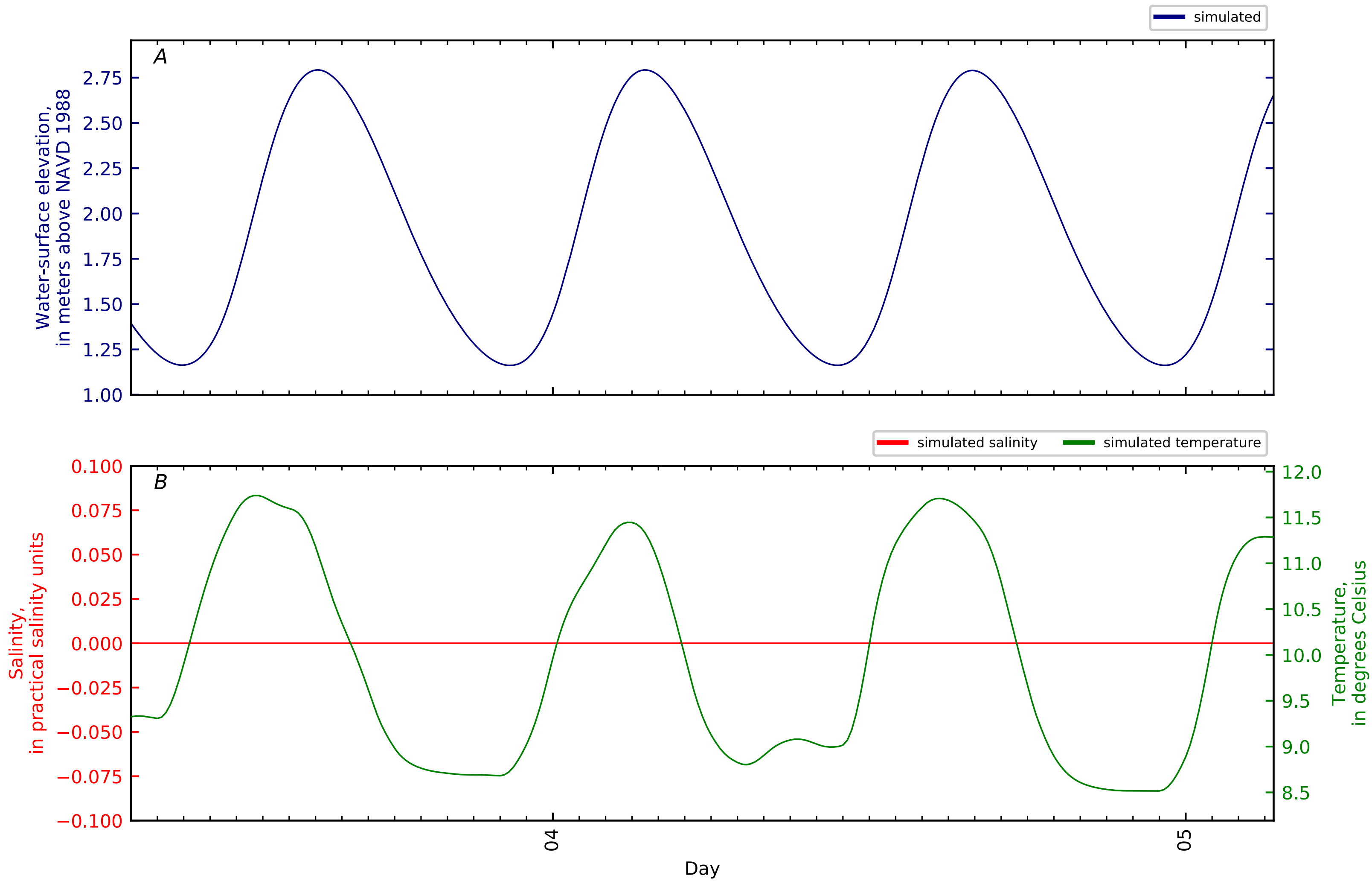

Figure B2-88. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 87, Penob Riv KM34.6 Southern Cove Orrington. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

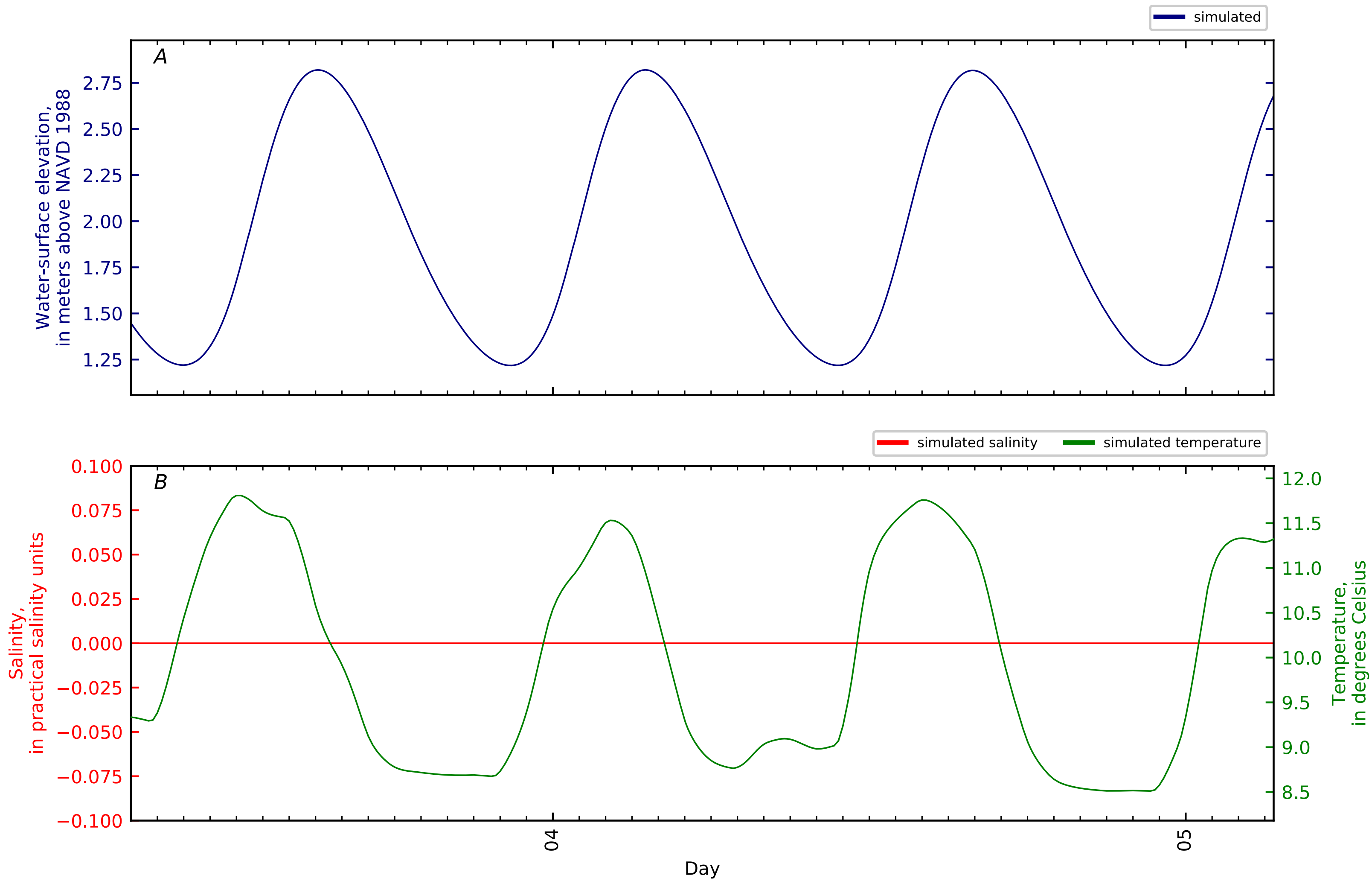

Figure B2-89. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 88, Penob Riv KM35. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

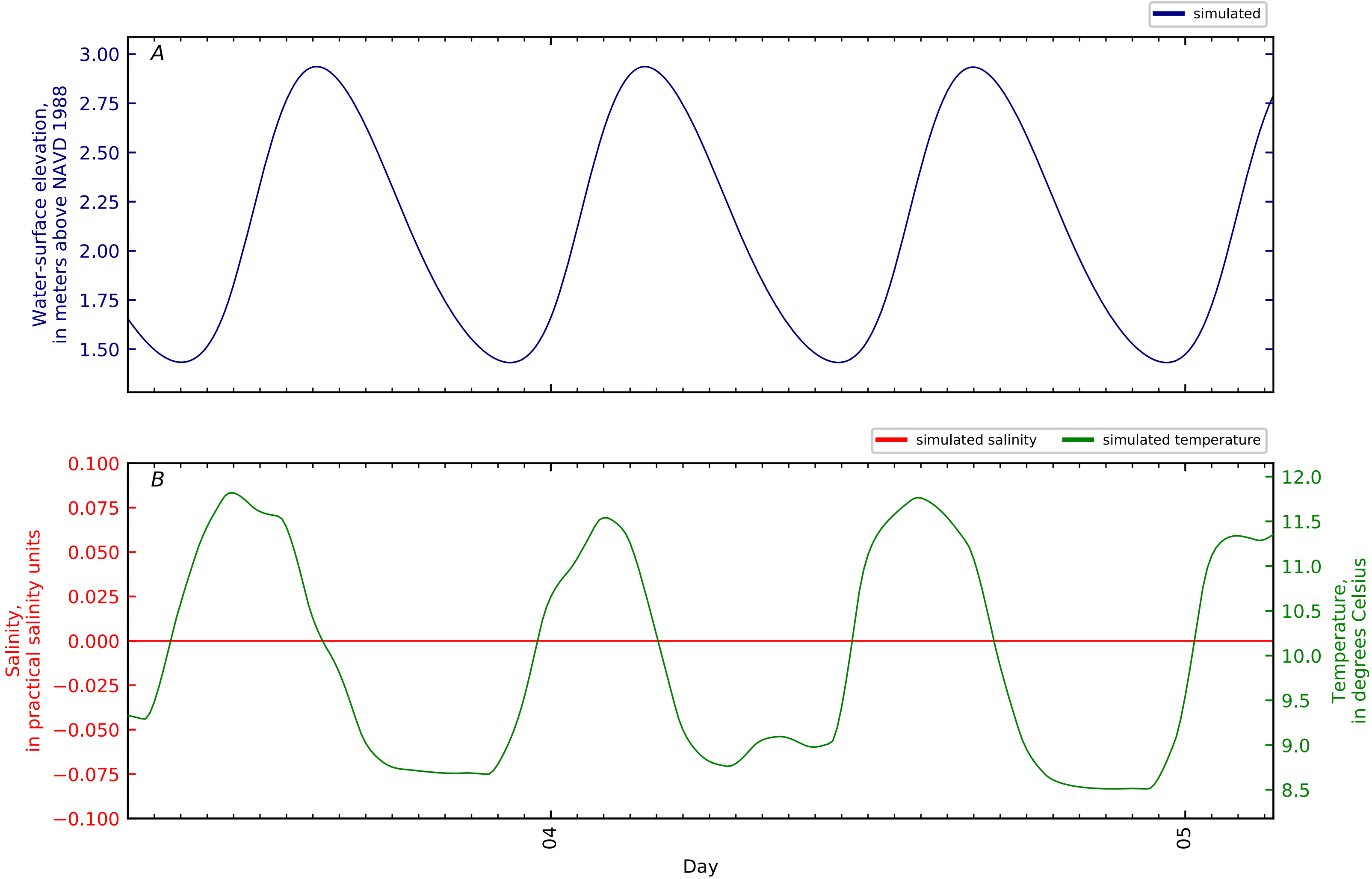

Figure B2-90. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 89, Penob Riv KM36. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

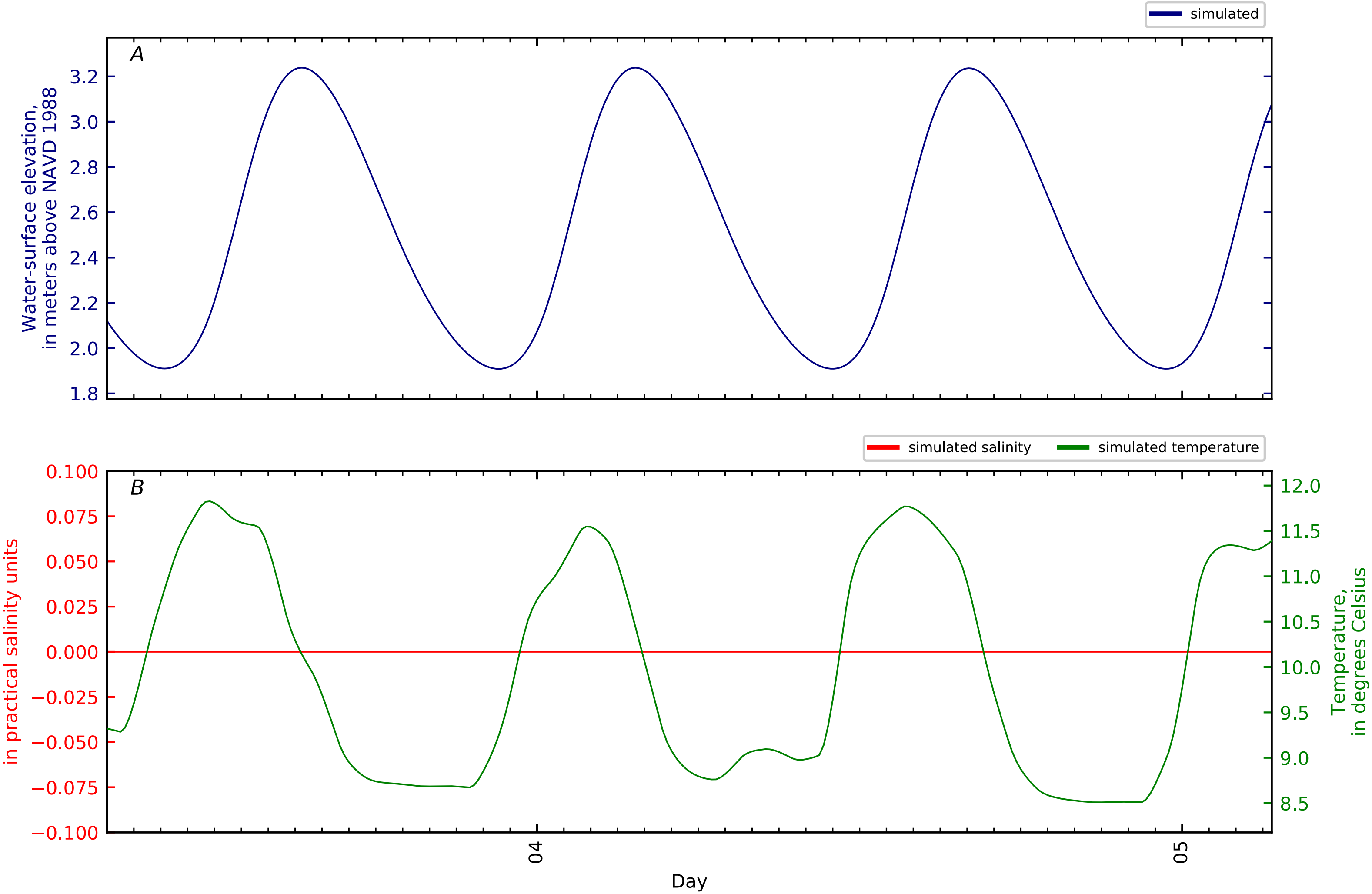

Figure B2-91. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 90, Penob Riv KM37. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

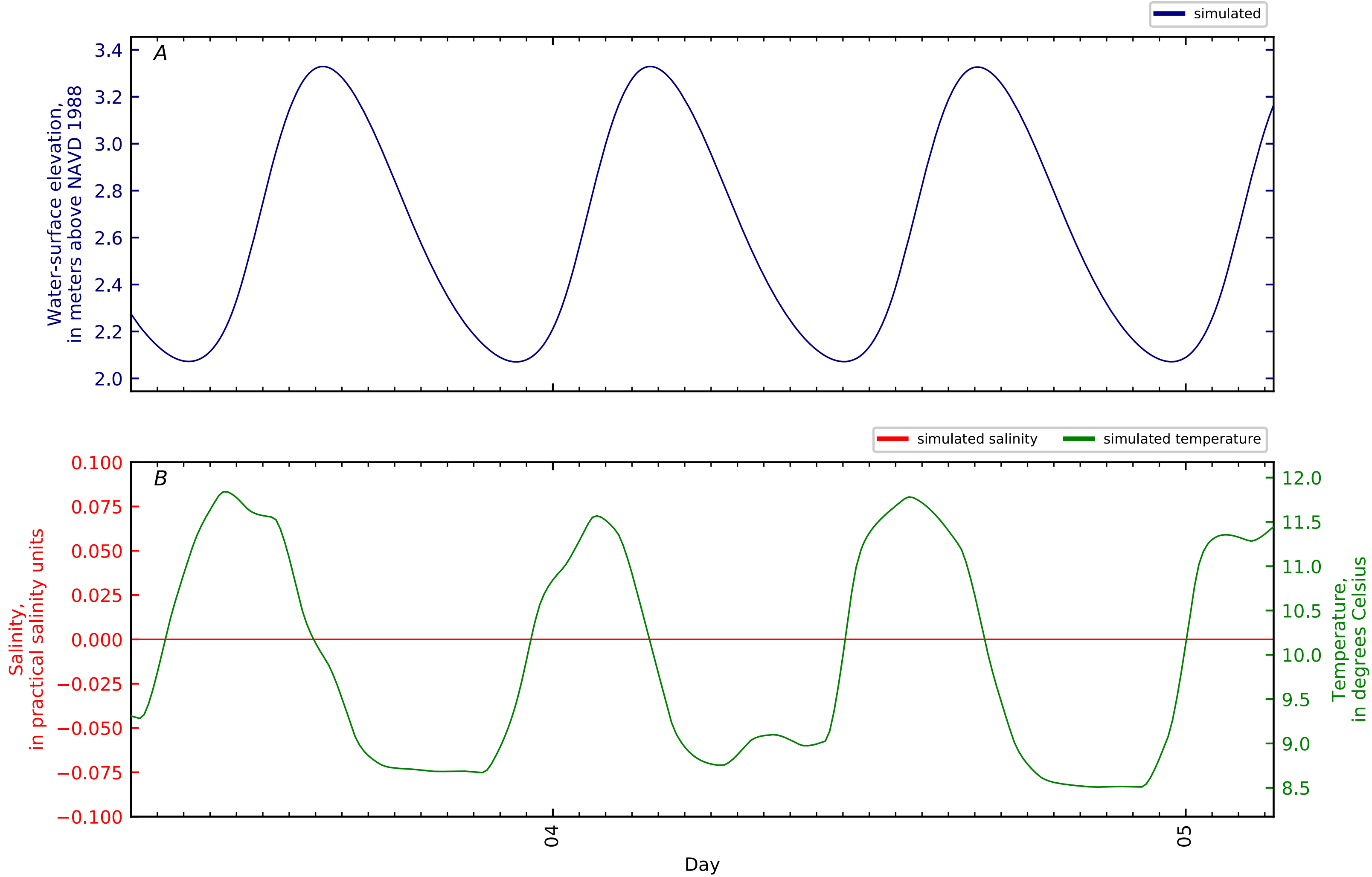

Figure B2-92. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 91, Penob Riv KM38. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

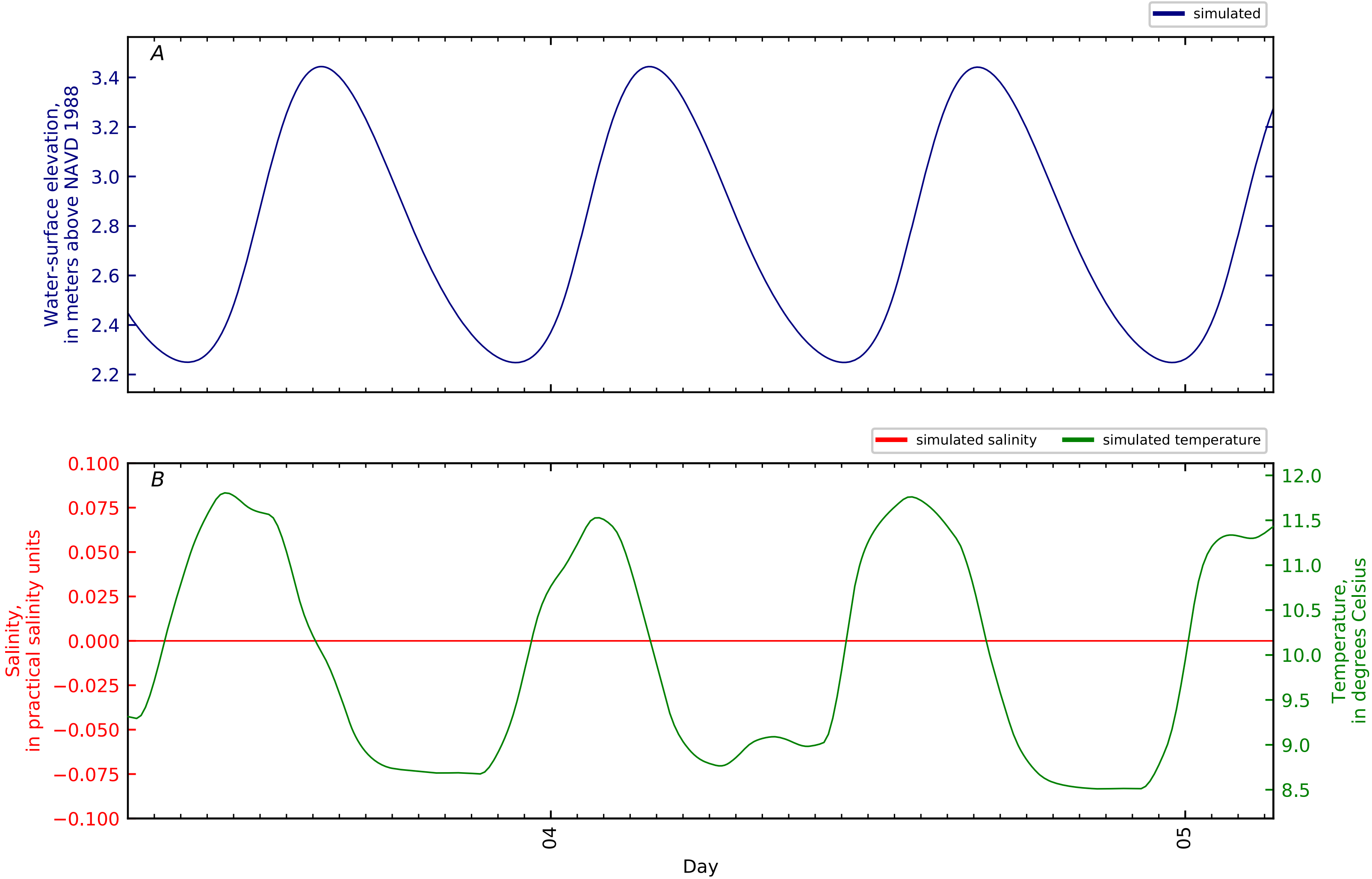

Figure B2-93. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 92, Penob Riv KM38.7 Boat ramp d/s Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

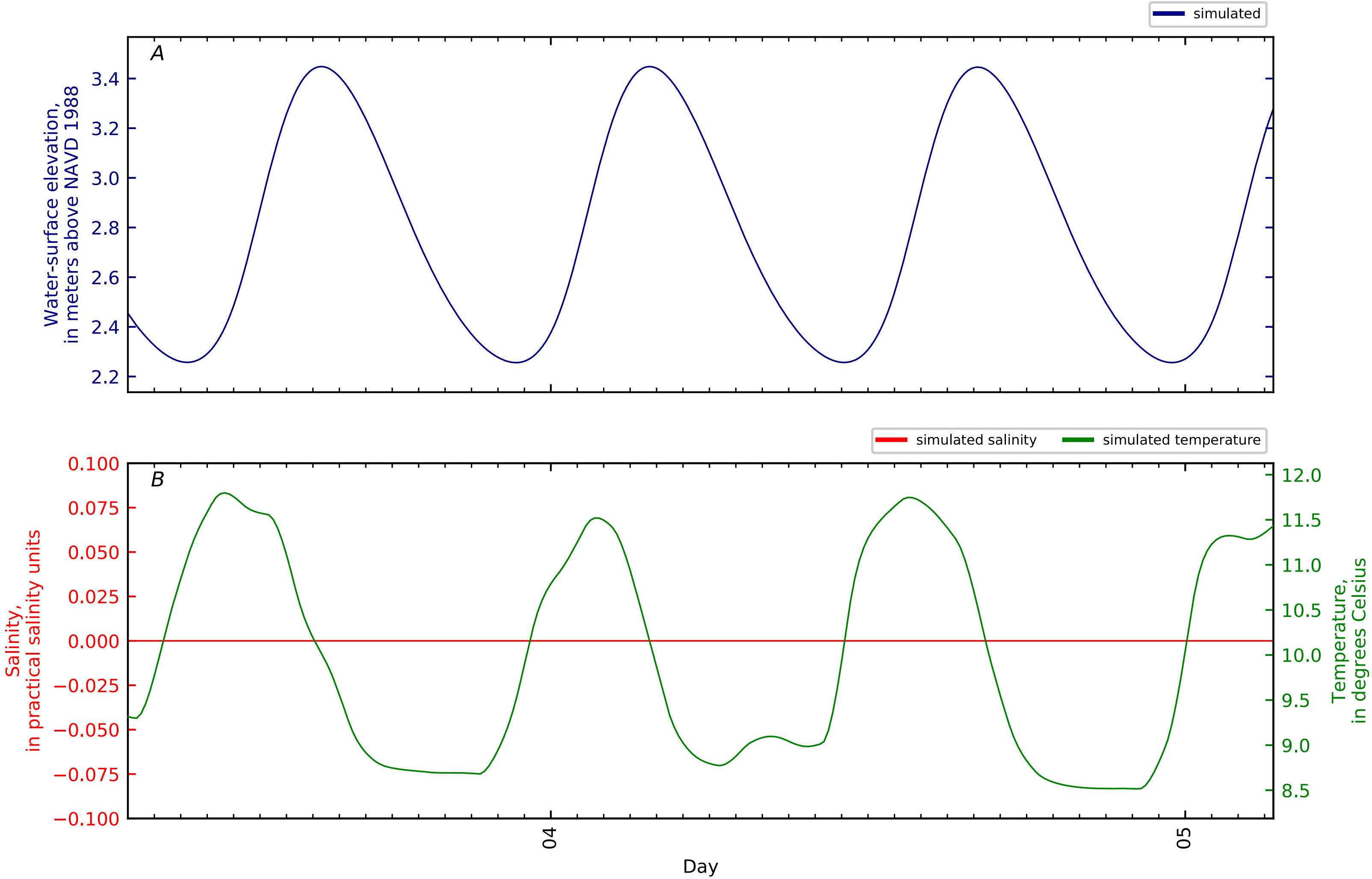

Figure B2-94. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 93, Penob Riv KM39. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

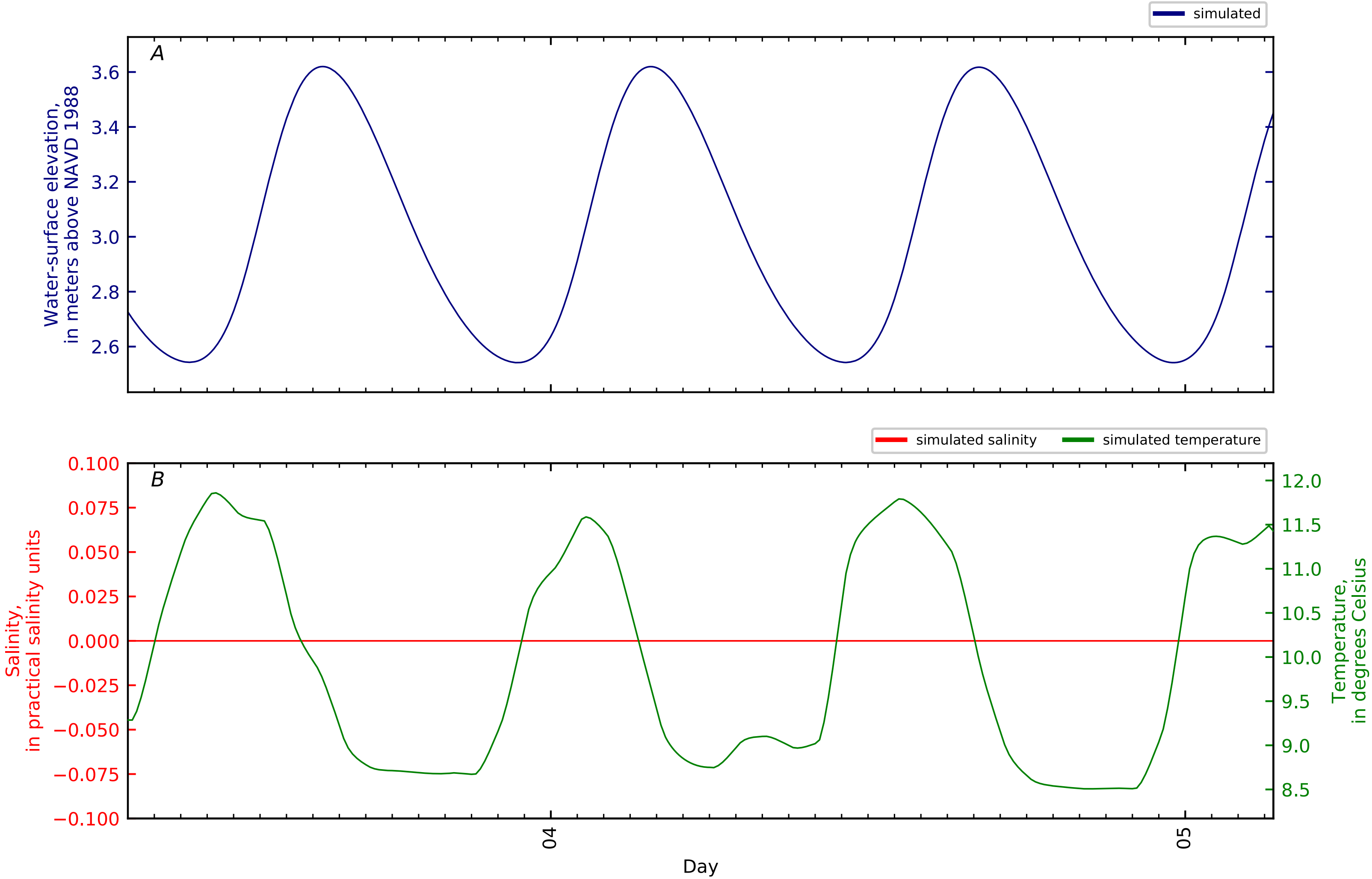

Figure B2-95. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 94, Penob Riv KM40. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

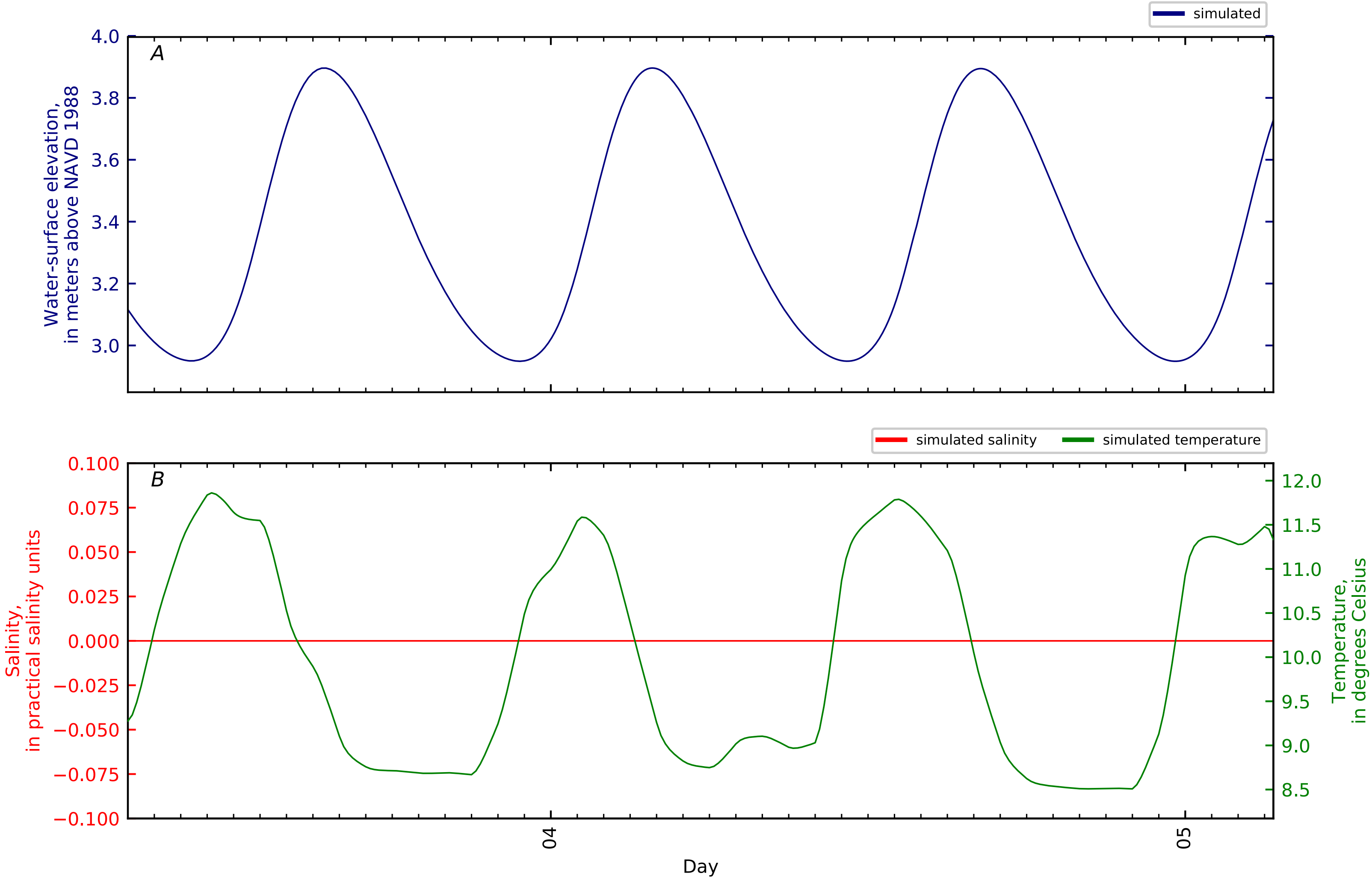

Figure B2-96. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 95, Penob Riv KM41. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

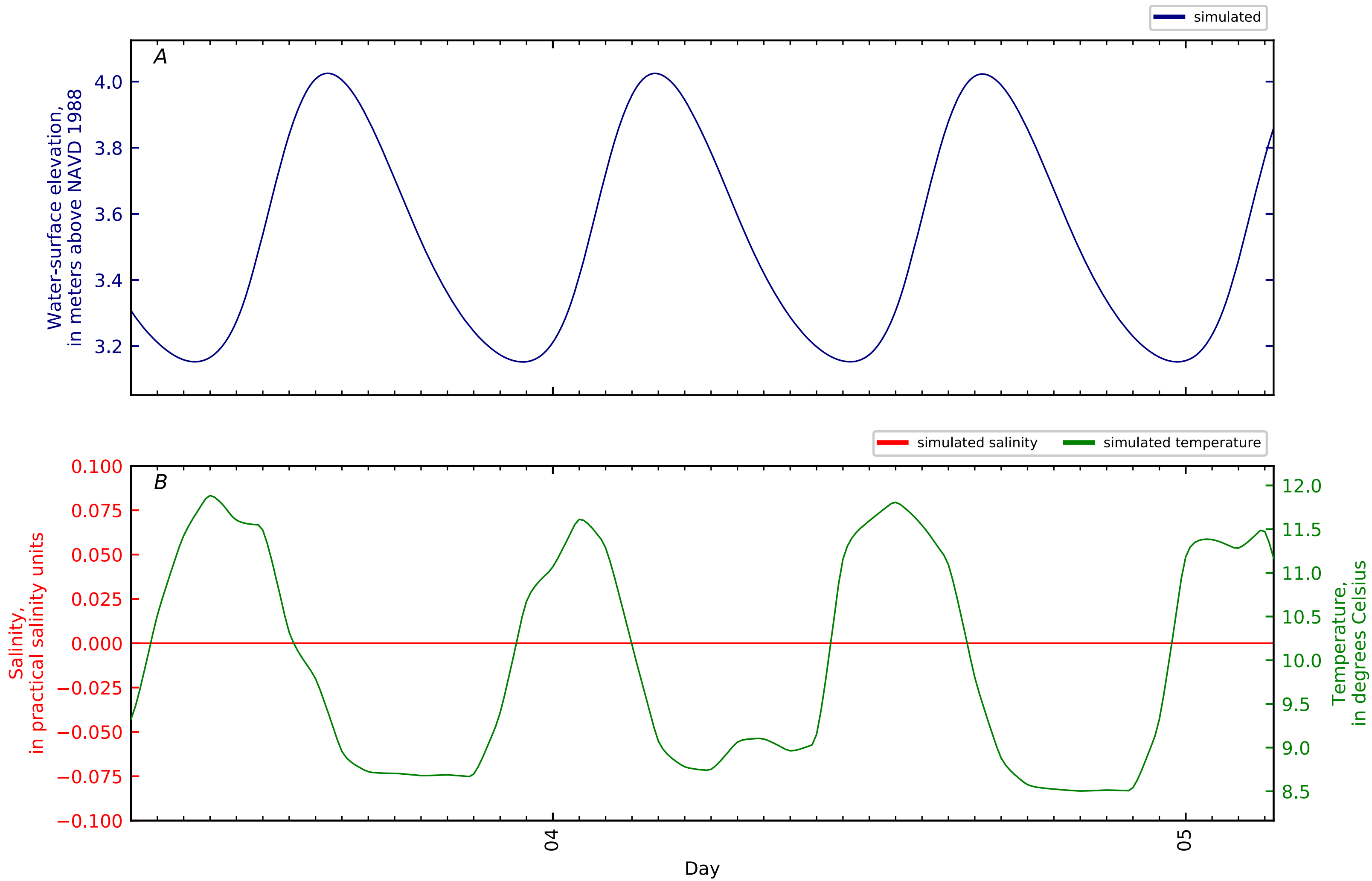

Figure B2-97. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 96, Penob Riv KM42. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

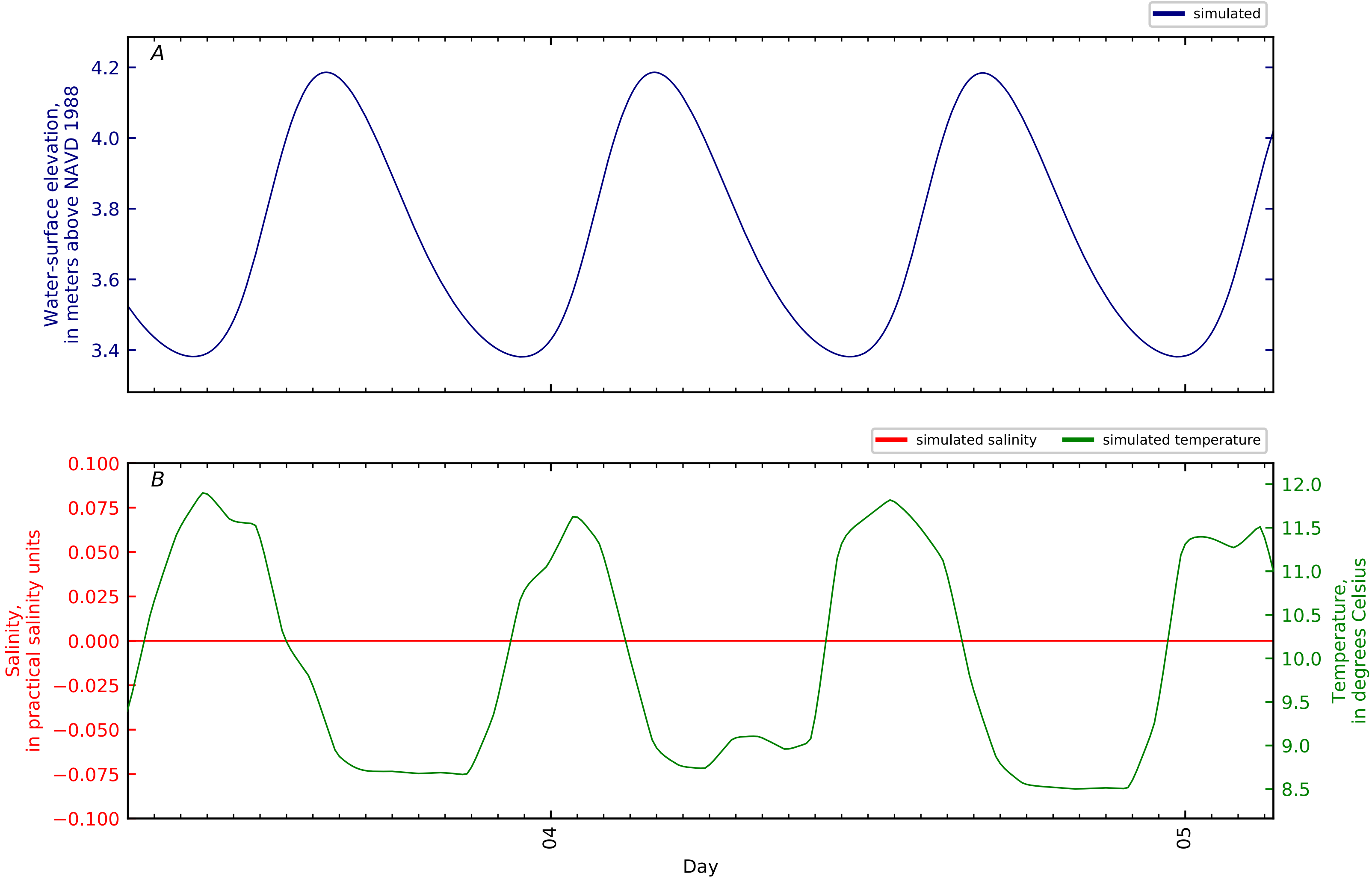

Figure B2-98. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 97, Penob Riv KM43. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

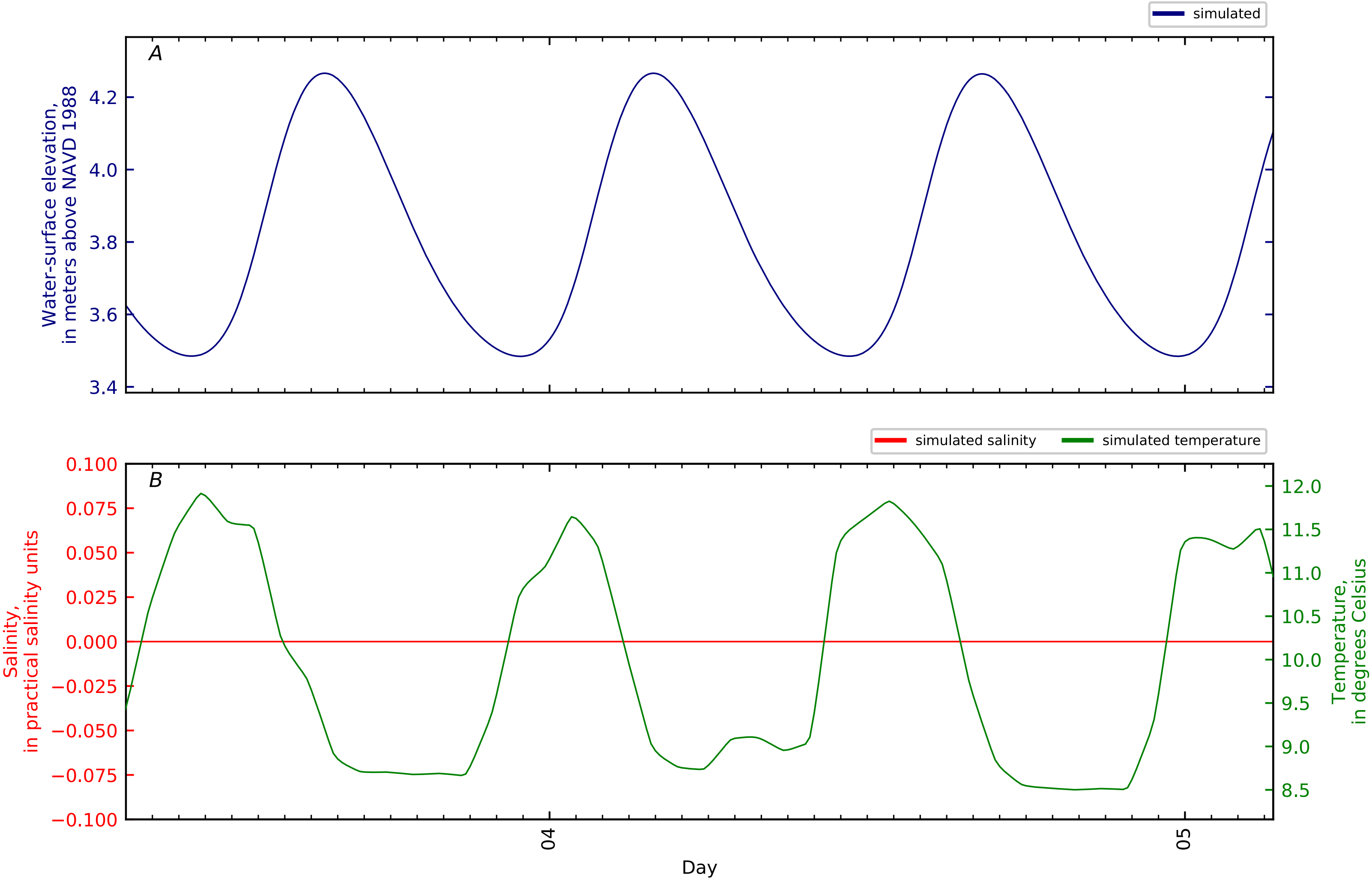

Figure B2-99. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 98, Penob Riv KM43.2 GS 01037050 at Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

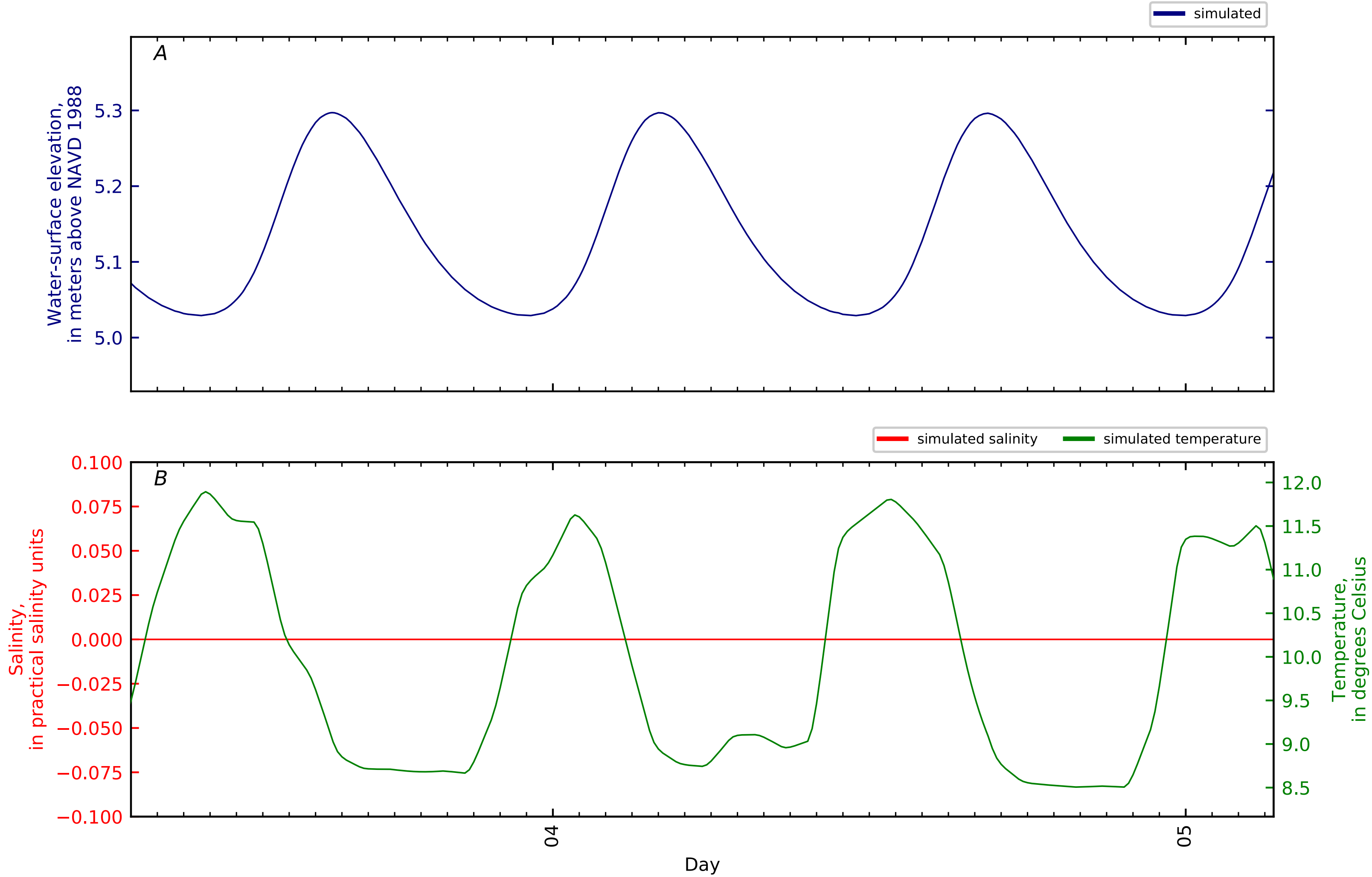

Figure B2-100. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 99, Penob Riv KM44. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

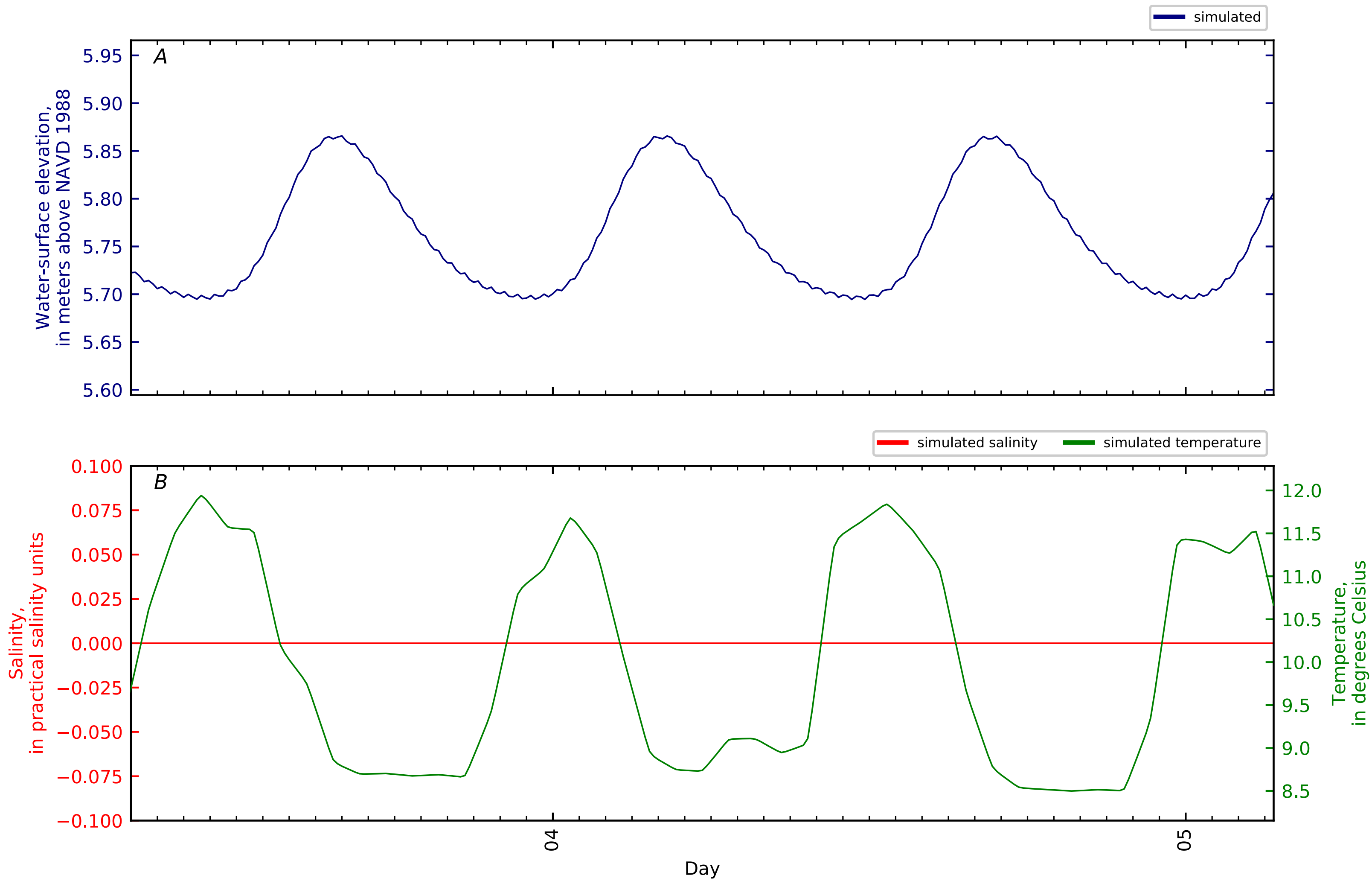

Figure B2-101. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 100, Penob Riv KM45. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

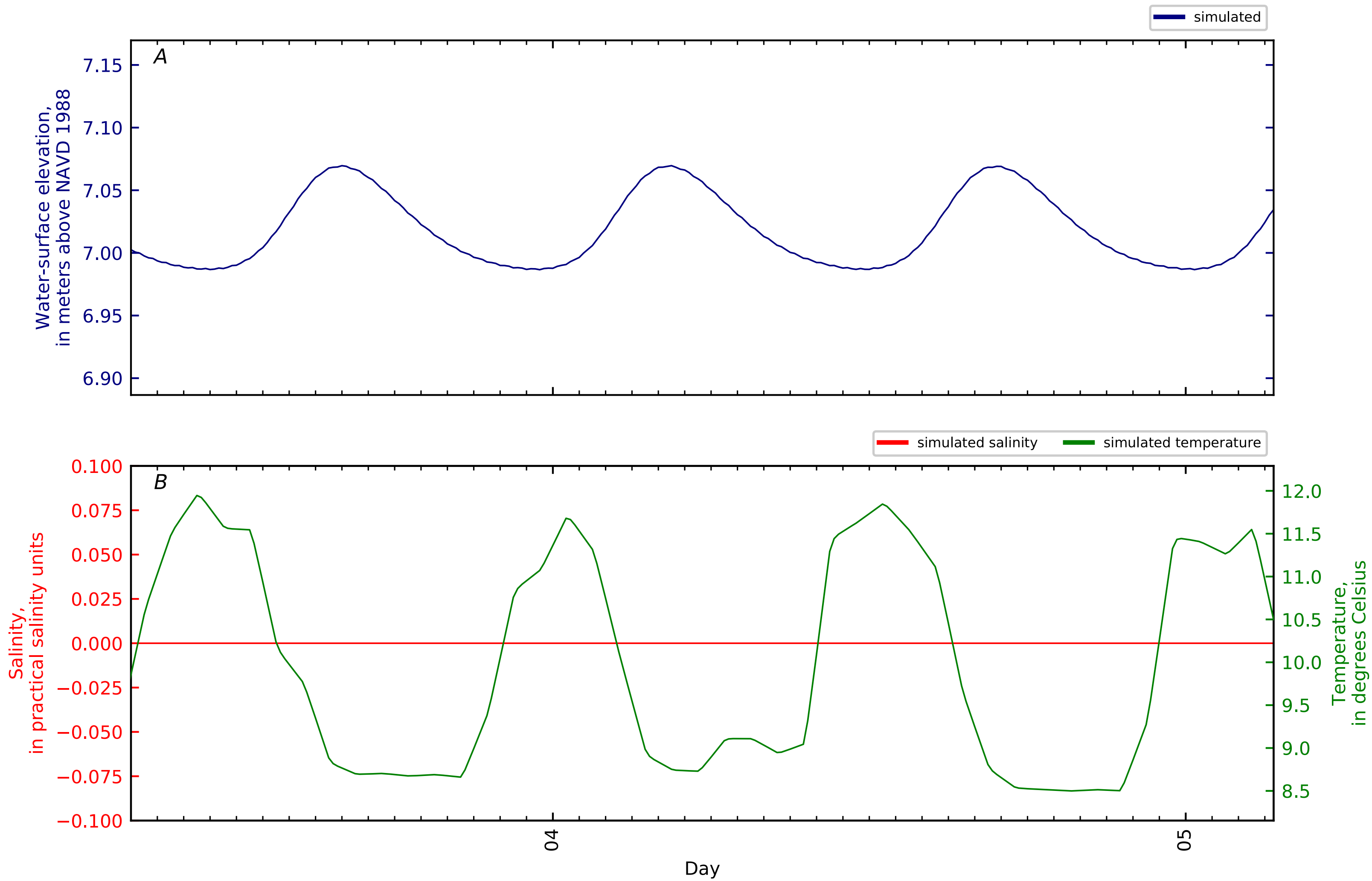

Figure B2-102. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 101, Penob Riv KM46. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

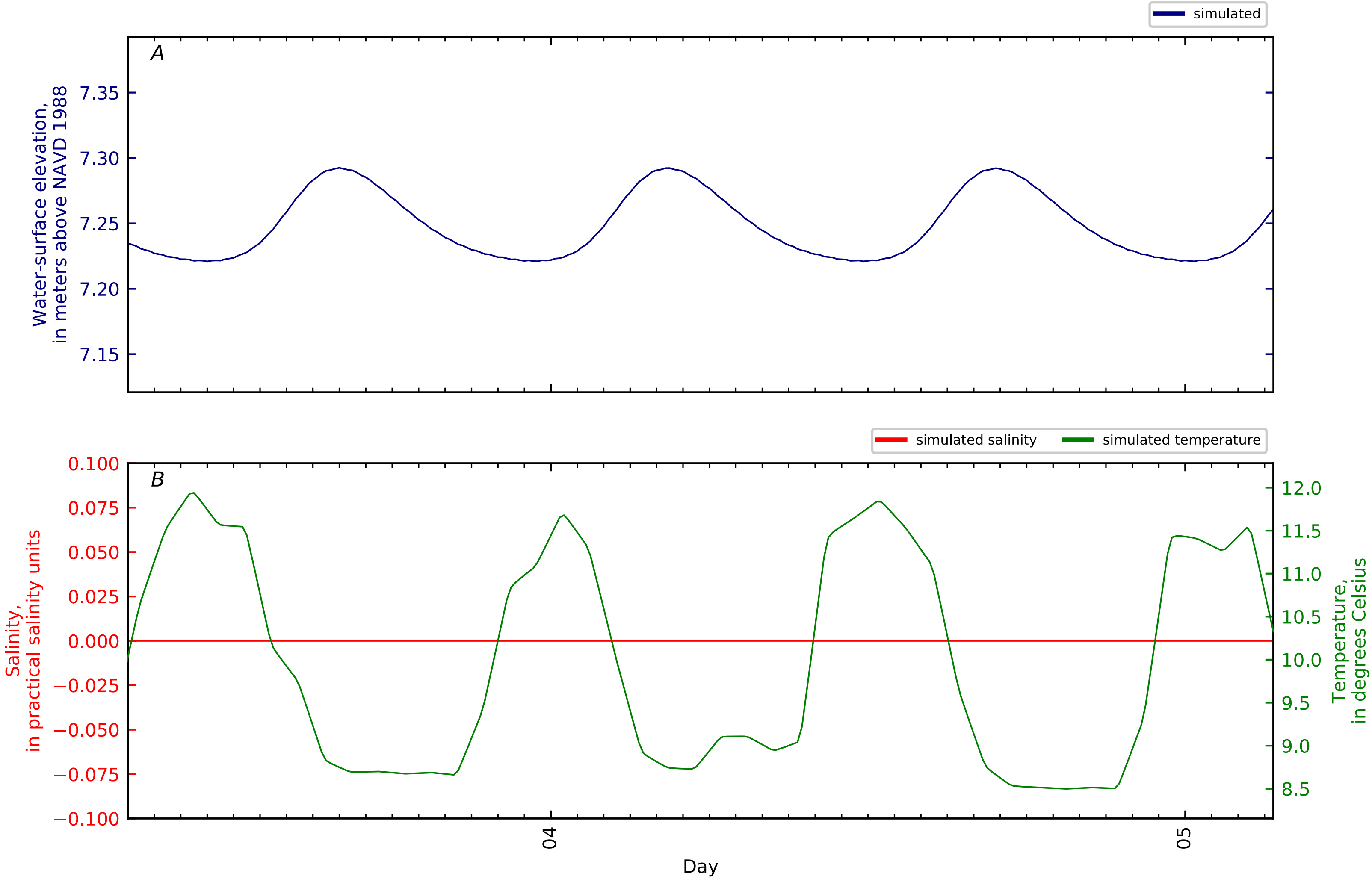

Figure B2-103. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 102, Penob Riv KM47. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

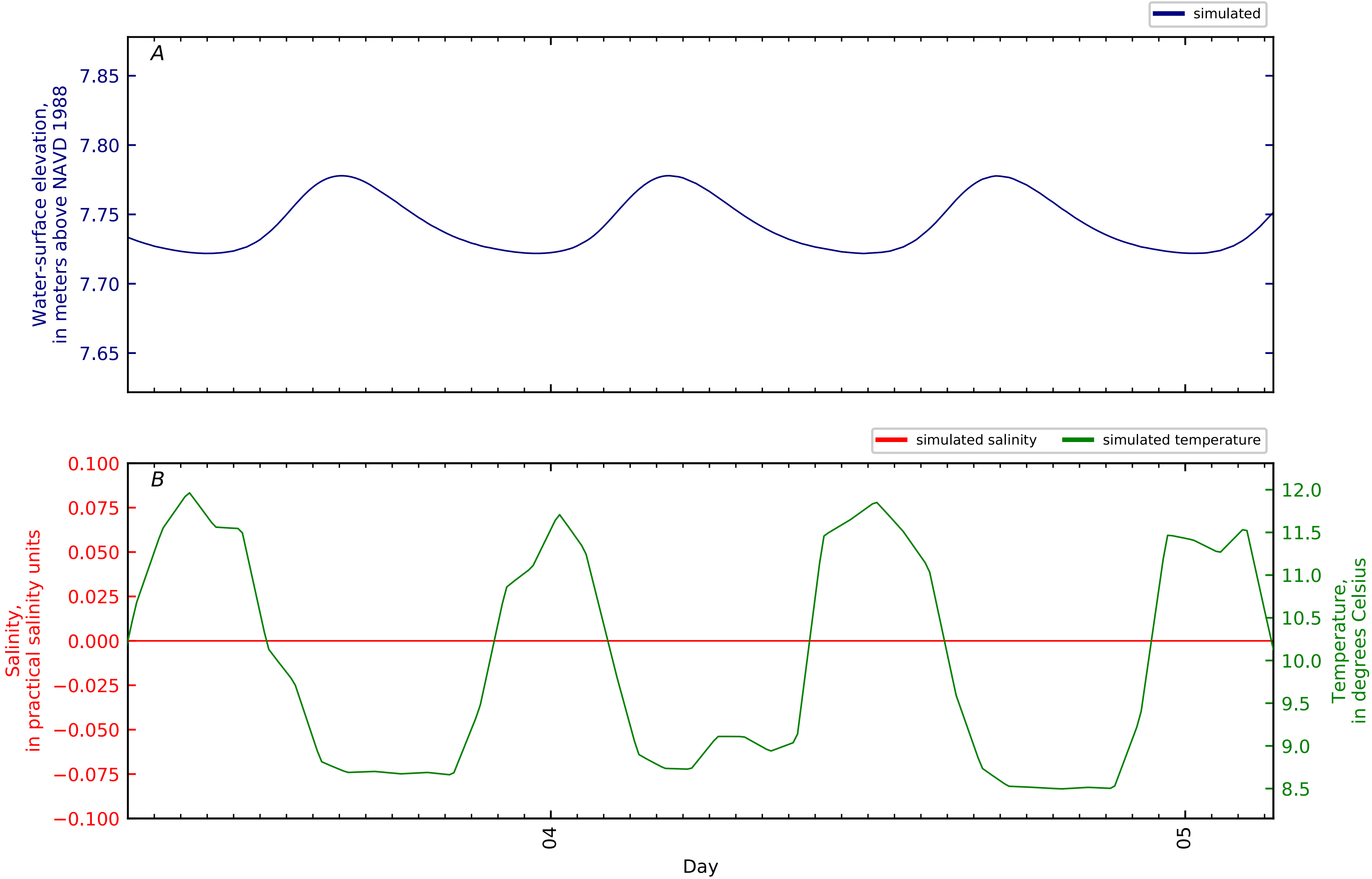

Figure B2-104. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 103, Penob Riv KM48. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

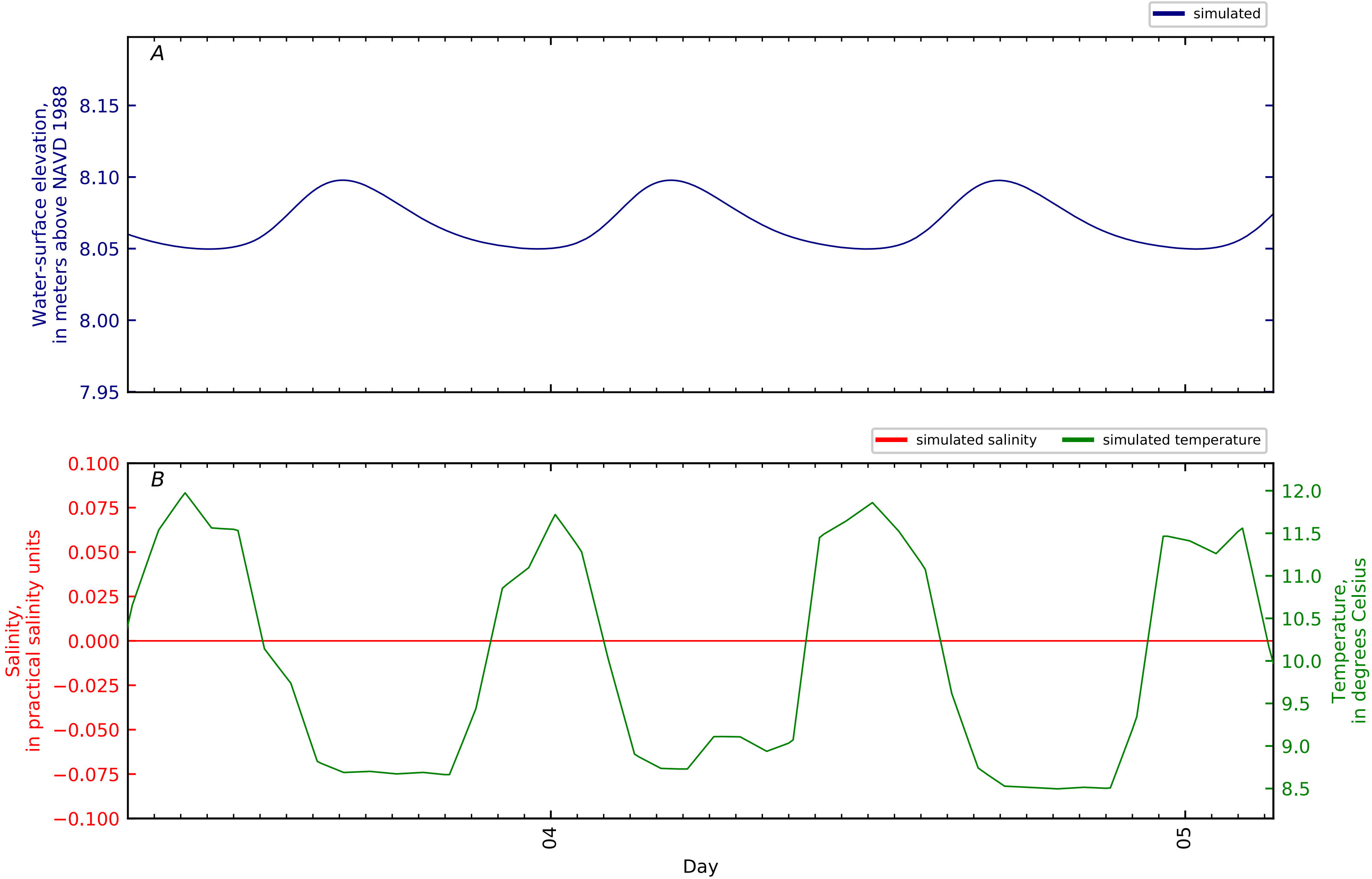

Figure B2-105. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 104, Penob Riv KM49. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

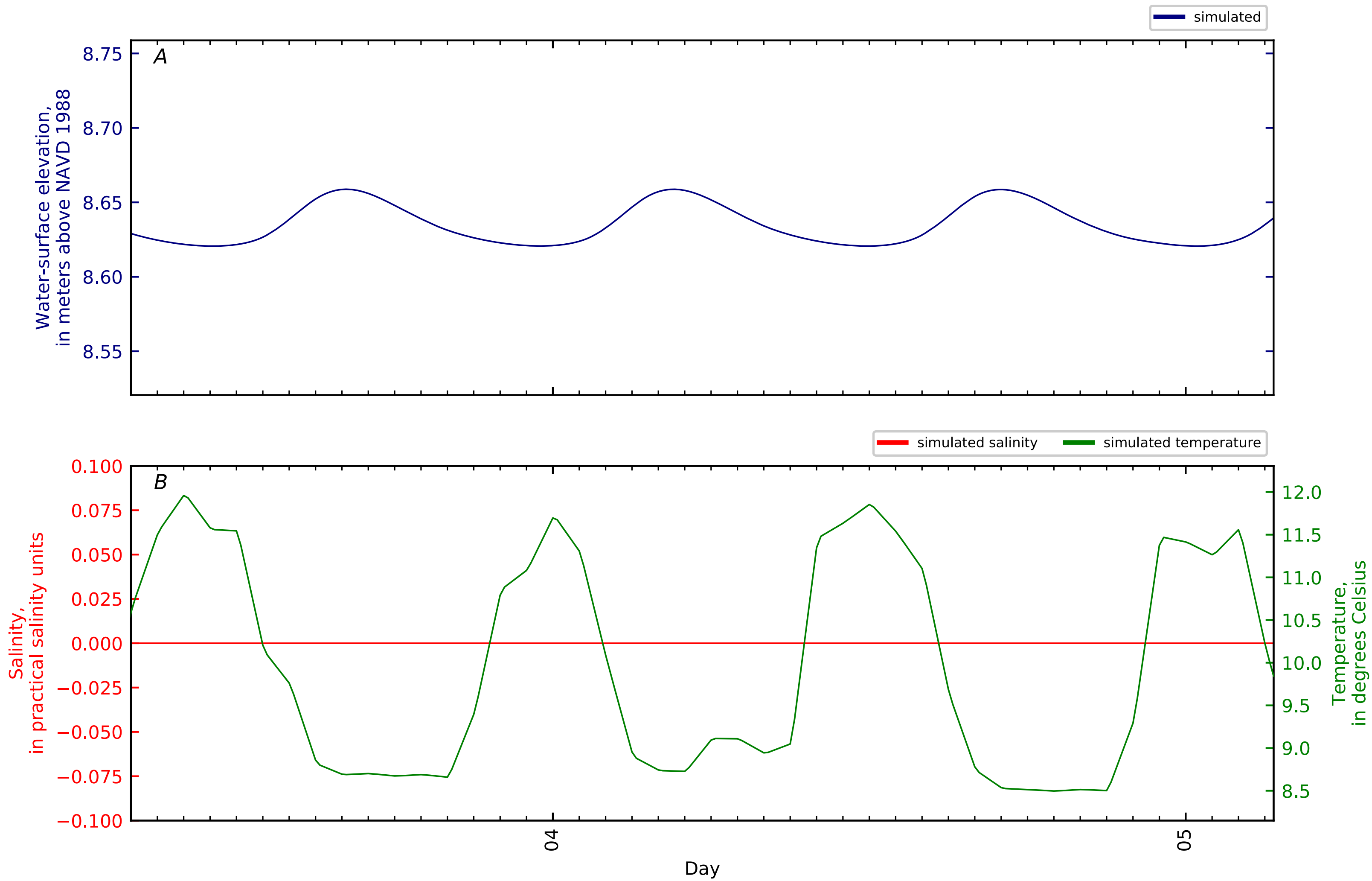

Figure B2-106. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 105, Penob Riv KM50 nr GS gage Eddington. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

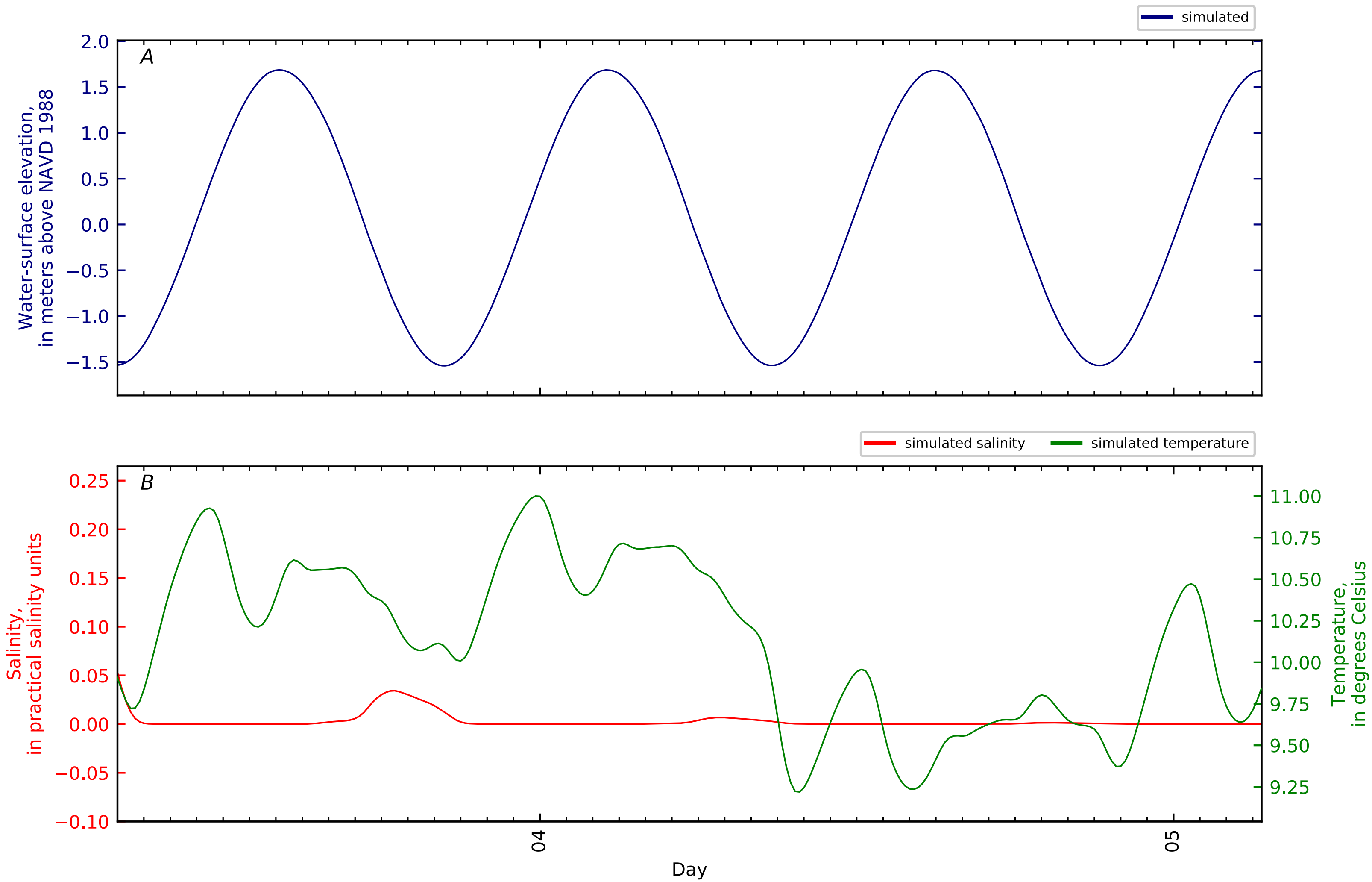

Figure B2-107. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 106, East Channel -KM0.1 ERDC9 VE-MU4-SF-2. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

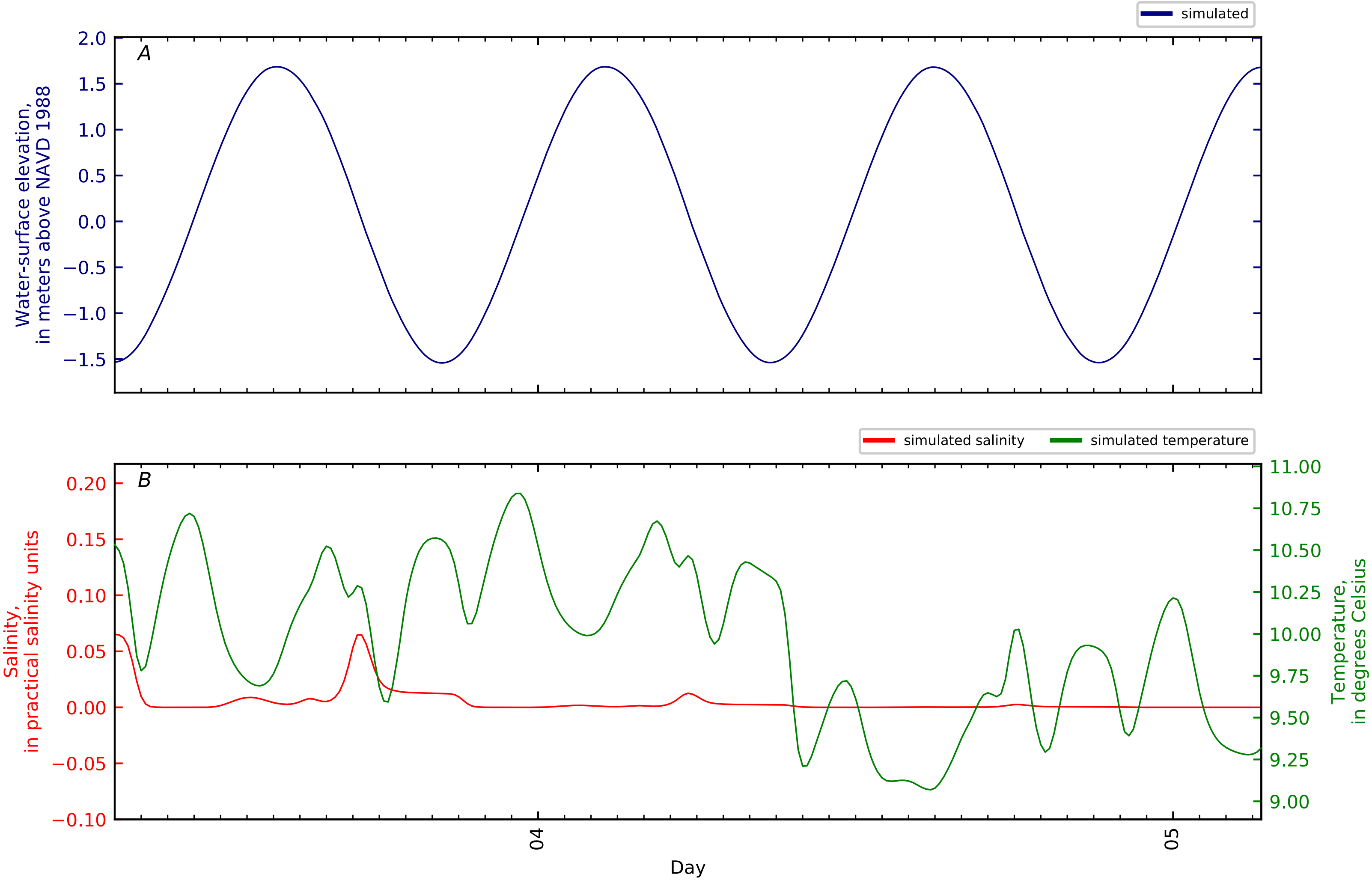

Figure B2-108. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 107, East Channel KM0. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

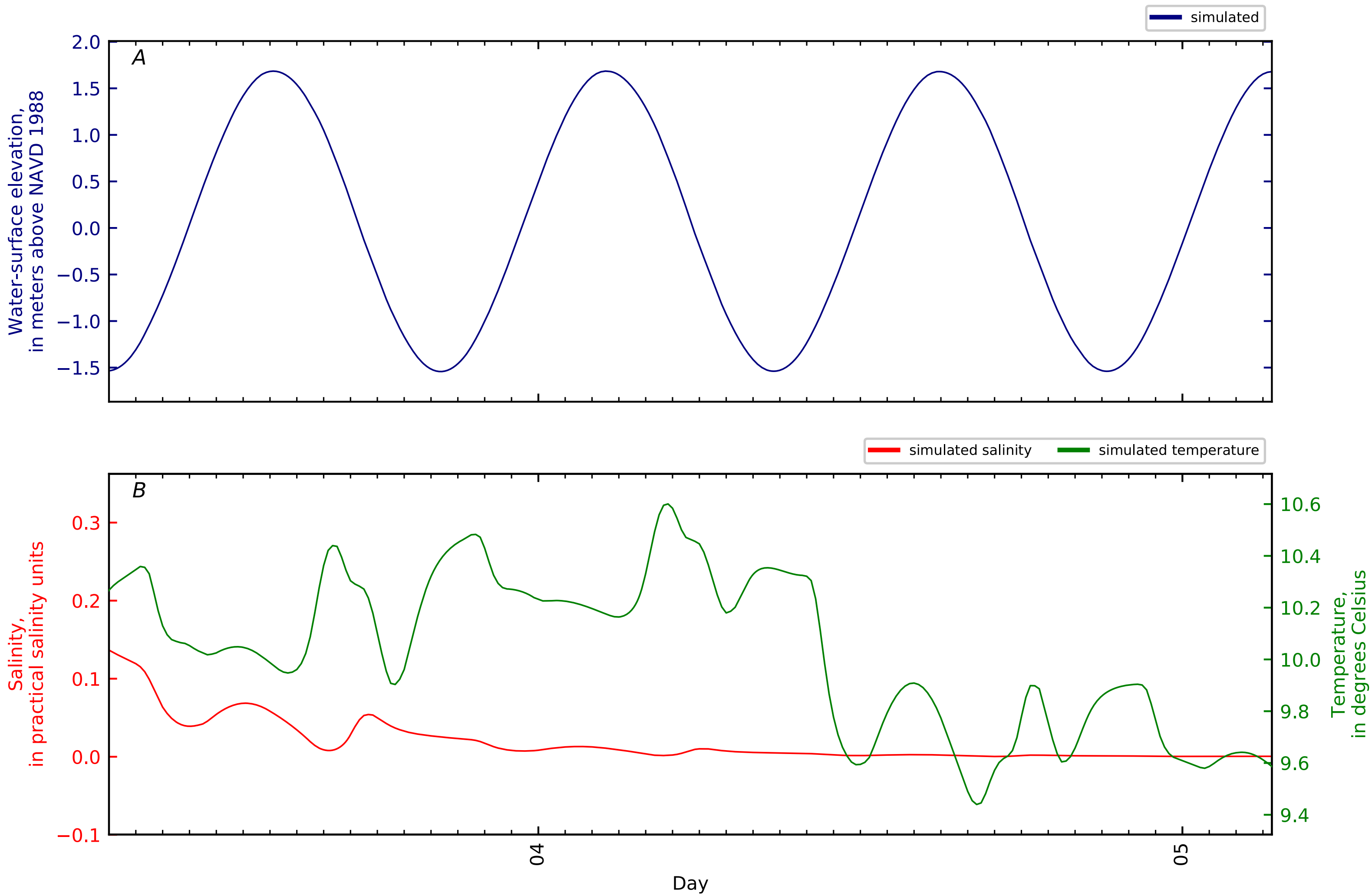

Figure B2-109. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 108, East Channel KM0.1 GS CTD4-01. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

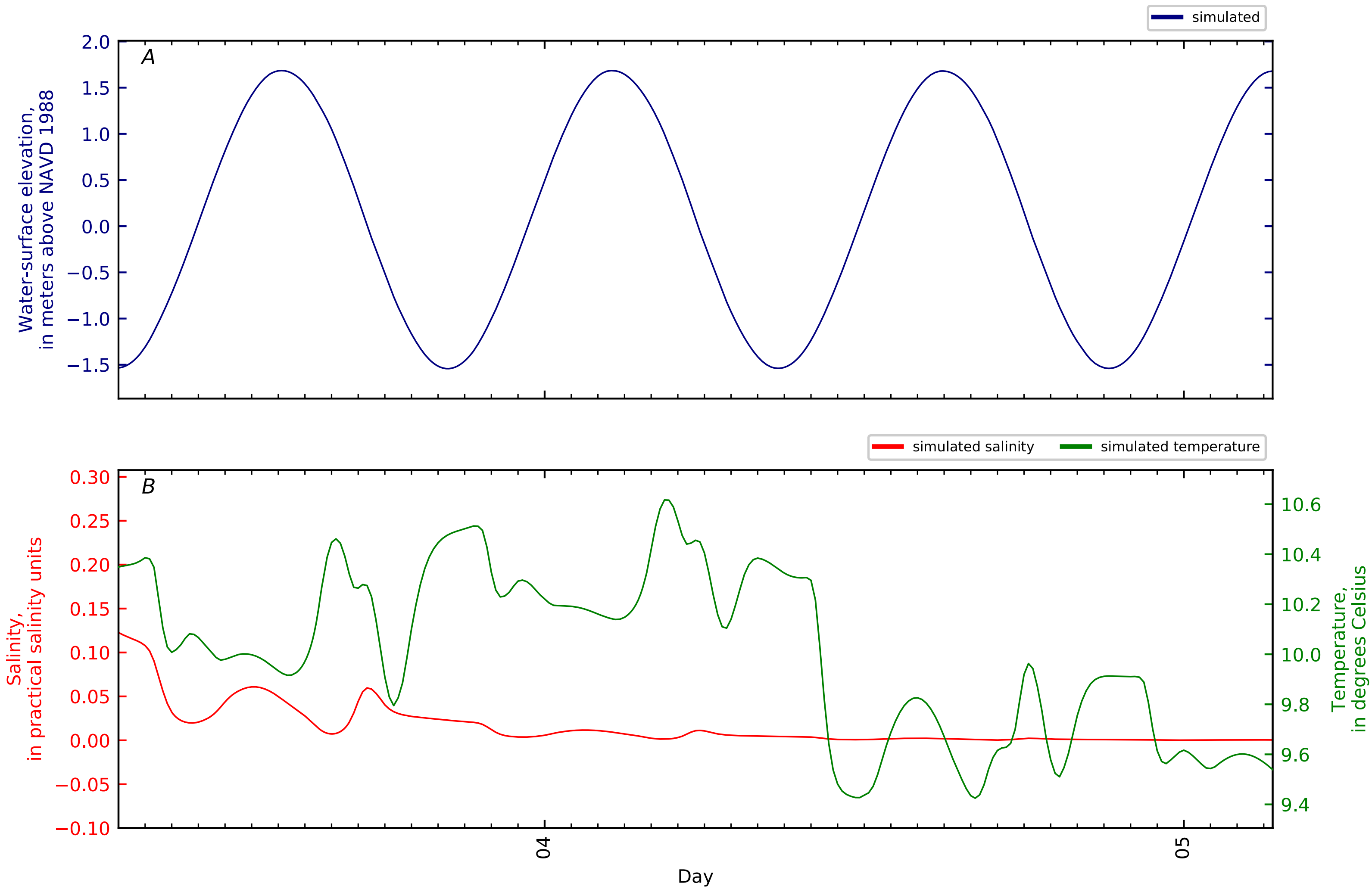

Figure B2-110. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 109, East Channel KM0.1 GS CTD4-02. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

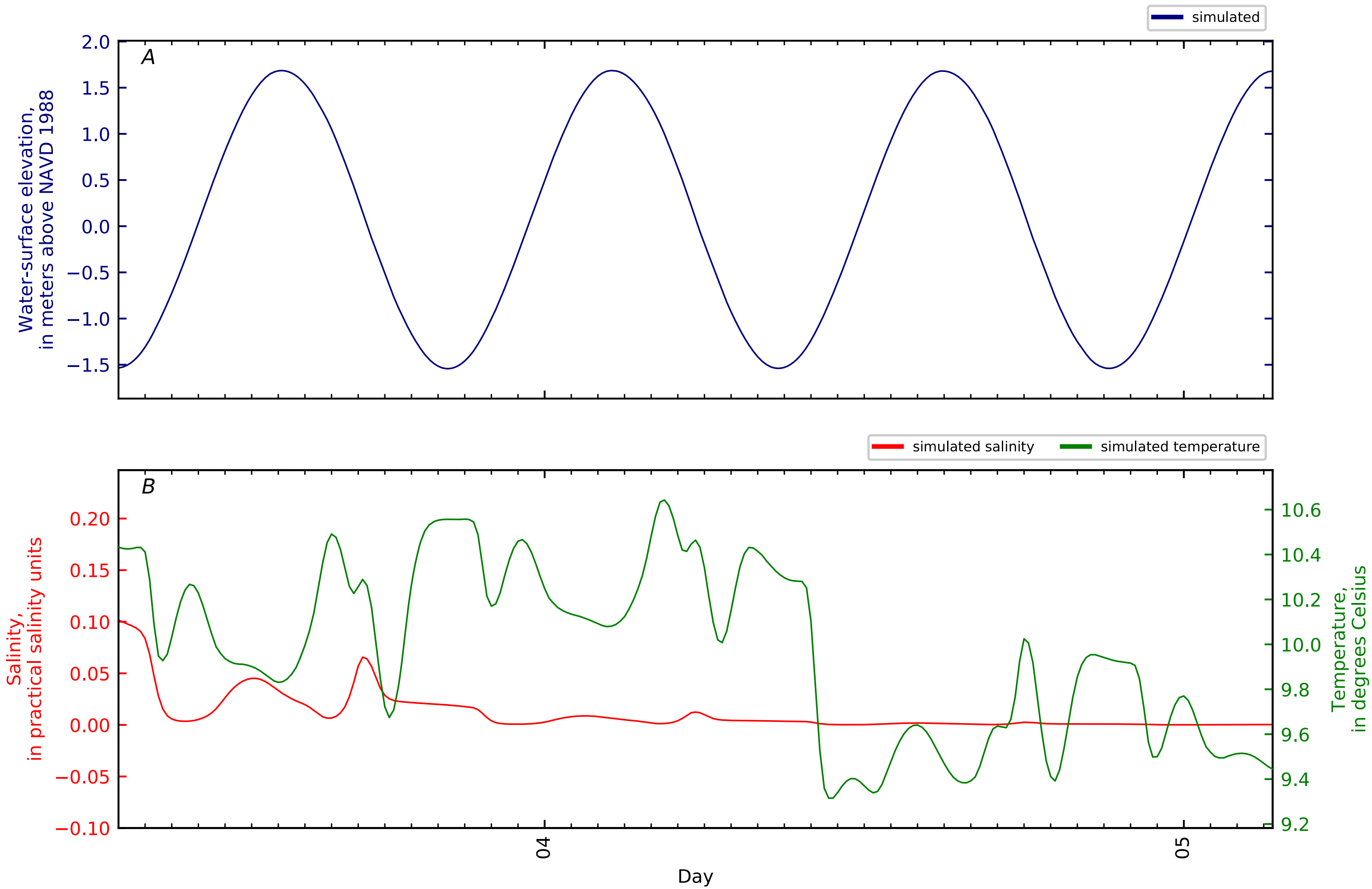

Figure B2-111. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 110, East Channel KM0.1 GS CTD4-03. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

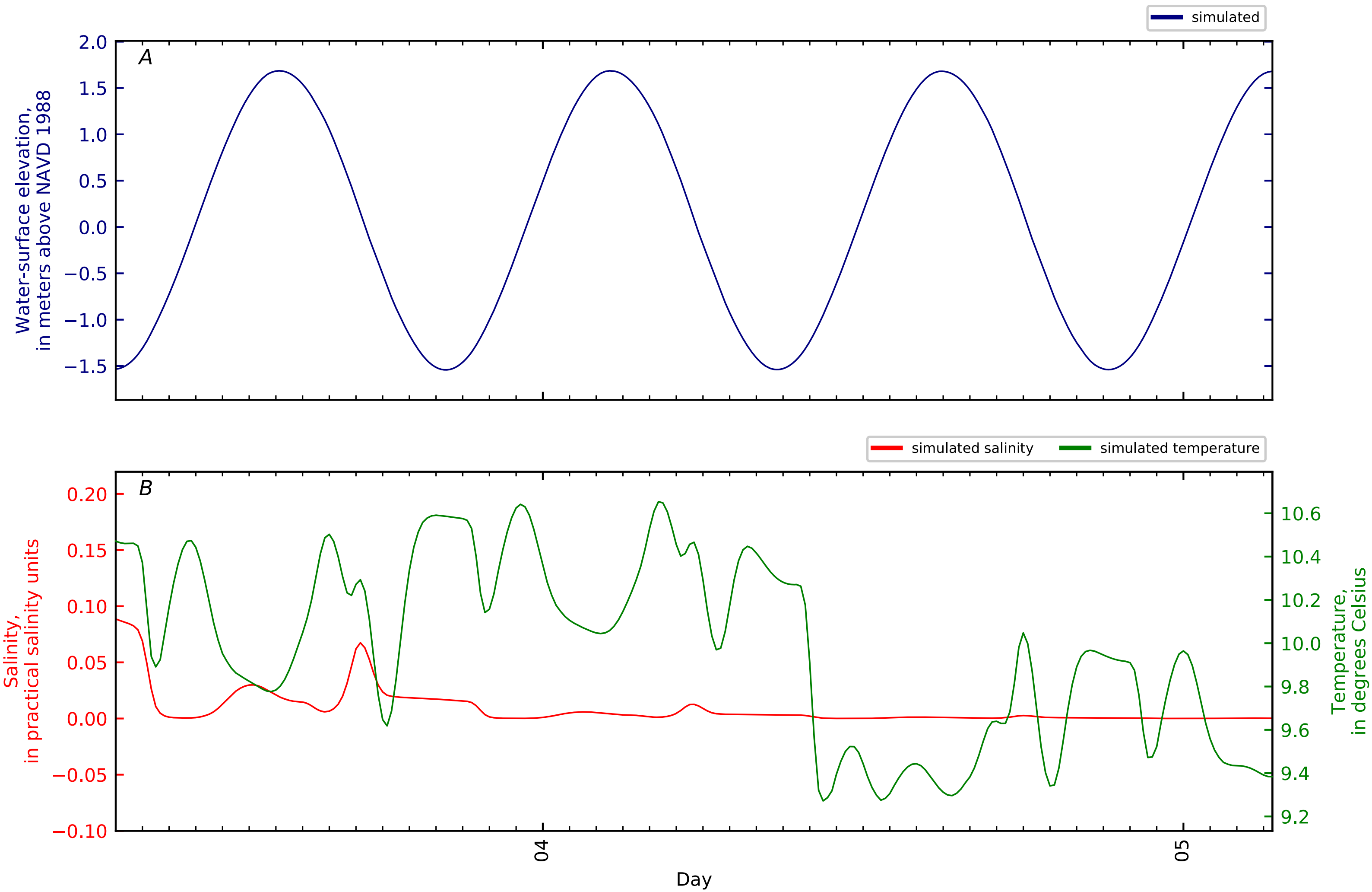

Figure B2-112. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 111, East Channel KM0.1 GS CTD4-04. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

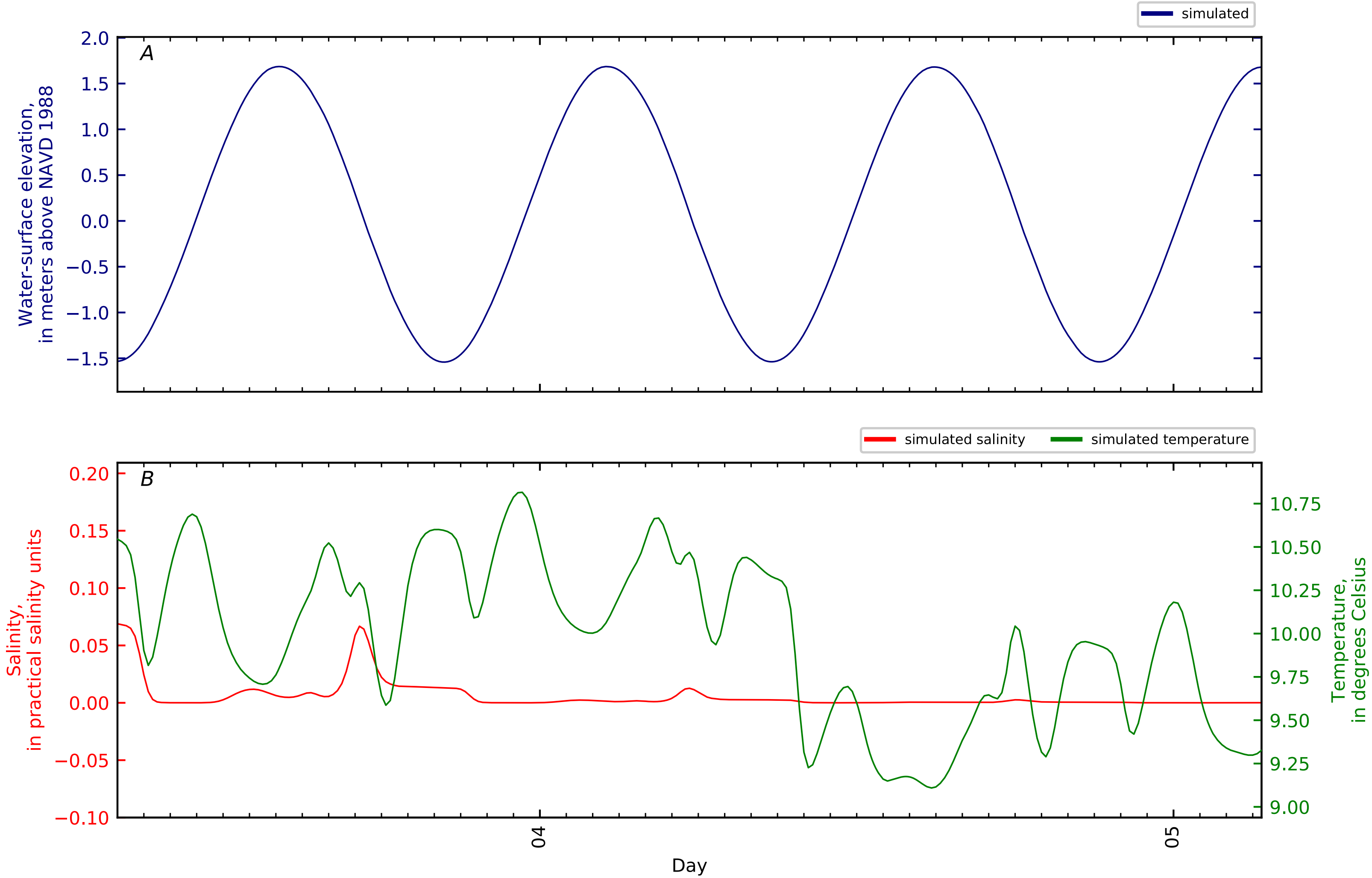

Figure B2-113. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 112, East Channel KM0.1 GS CTD4-05. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

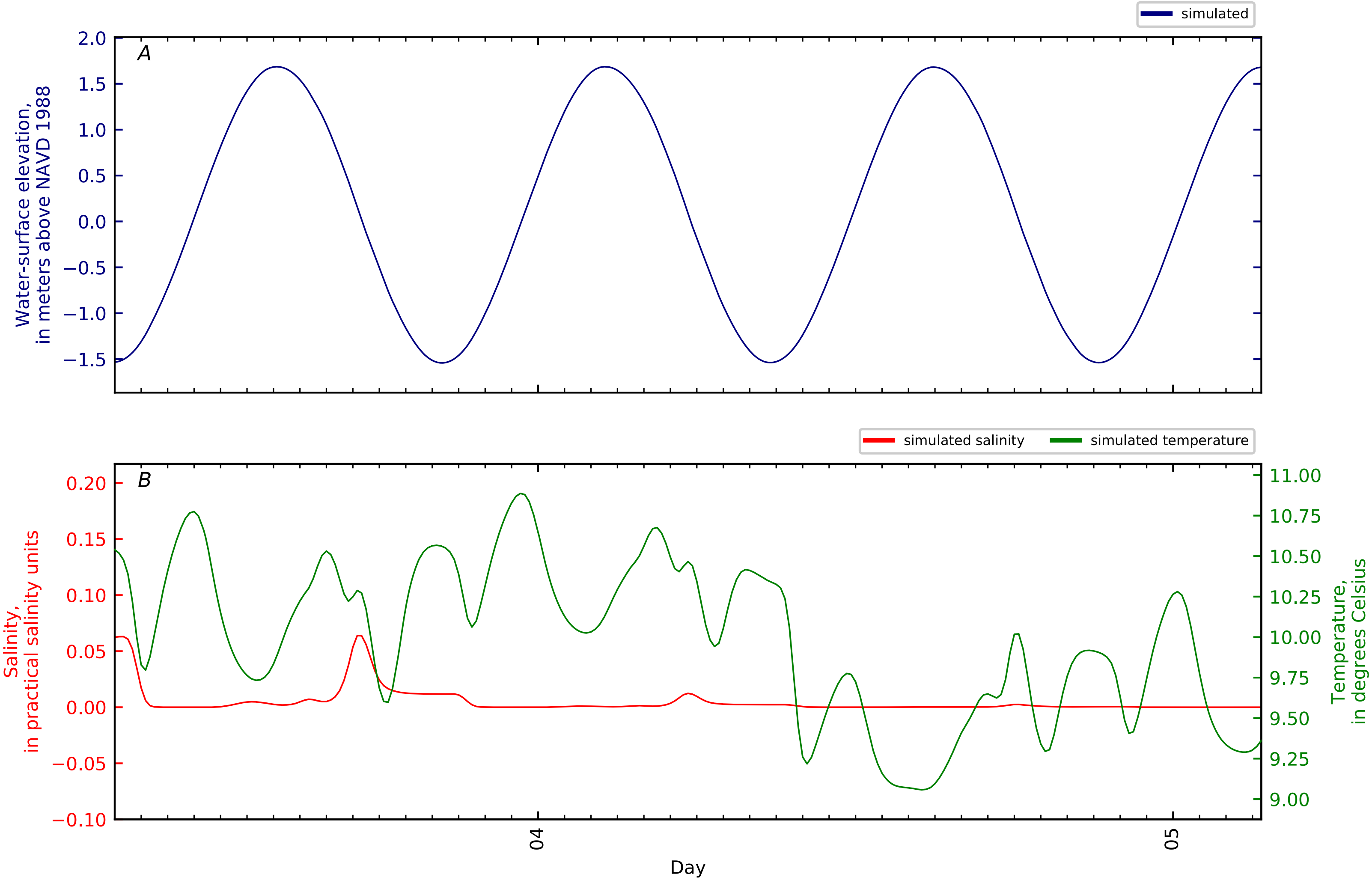

Figure B2-114. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 113, East Channel KM0.1 GS CTD4-06. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

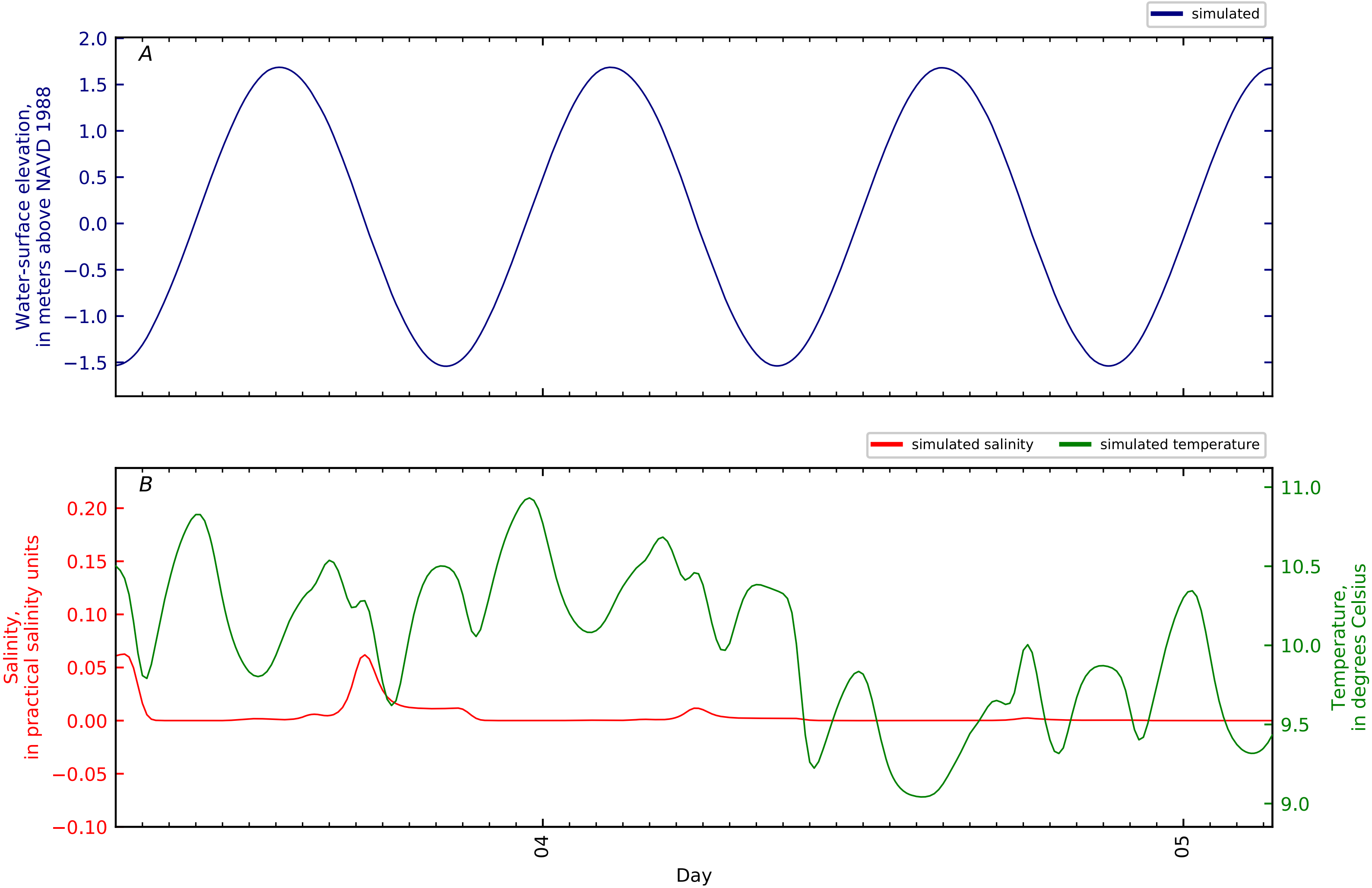

Figure B2-115. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 114, East Channel KM0.1 GS CTD4-07. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

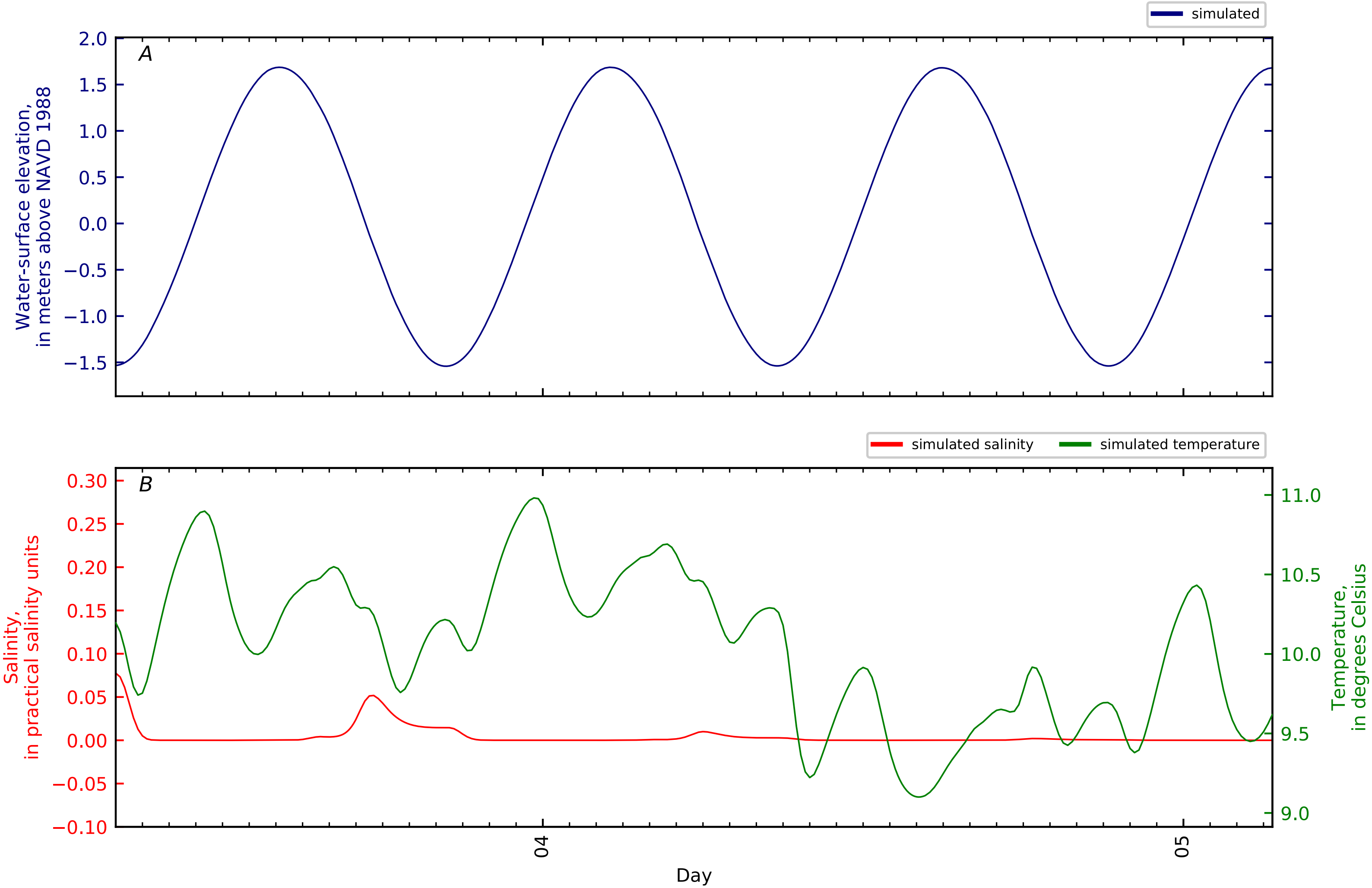

Figure B2-116. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 115, East Channel KM0.1 GS CTD4-08. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

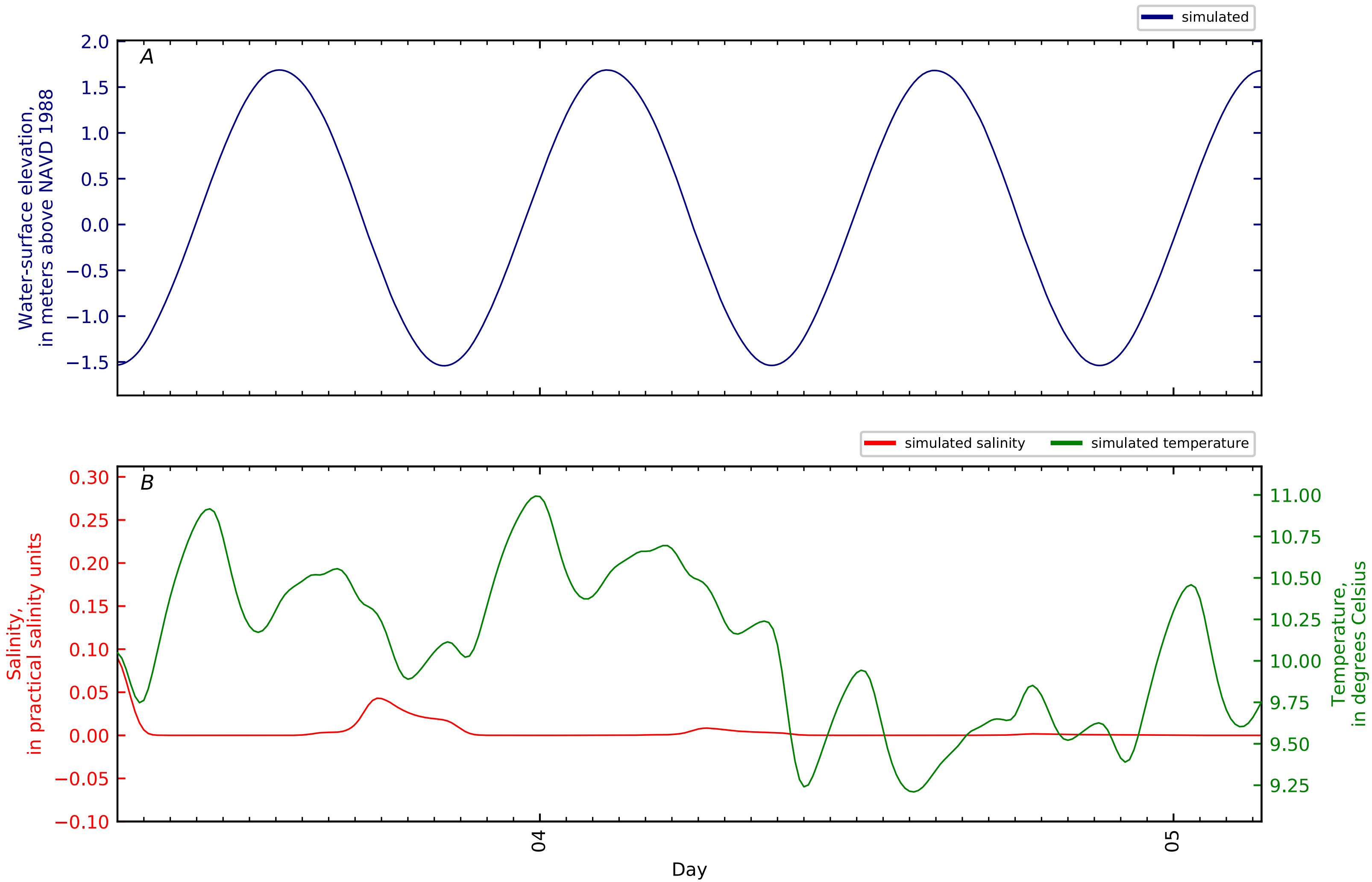

Figure B2-117. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 116, East Channel KM0.1 GS CTD4-09. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

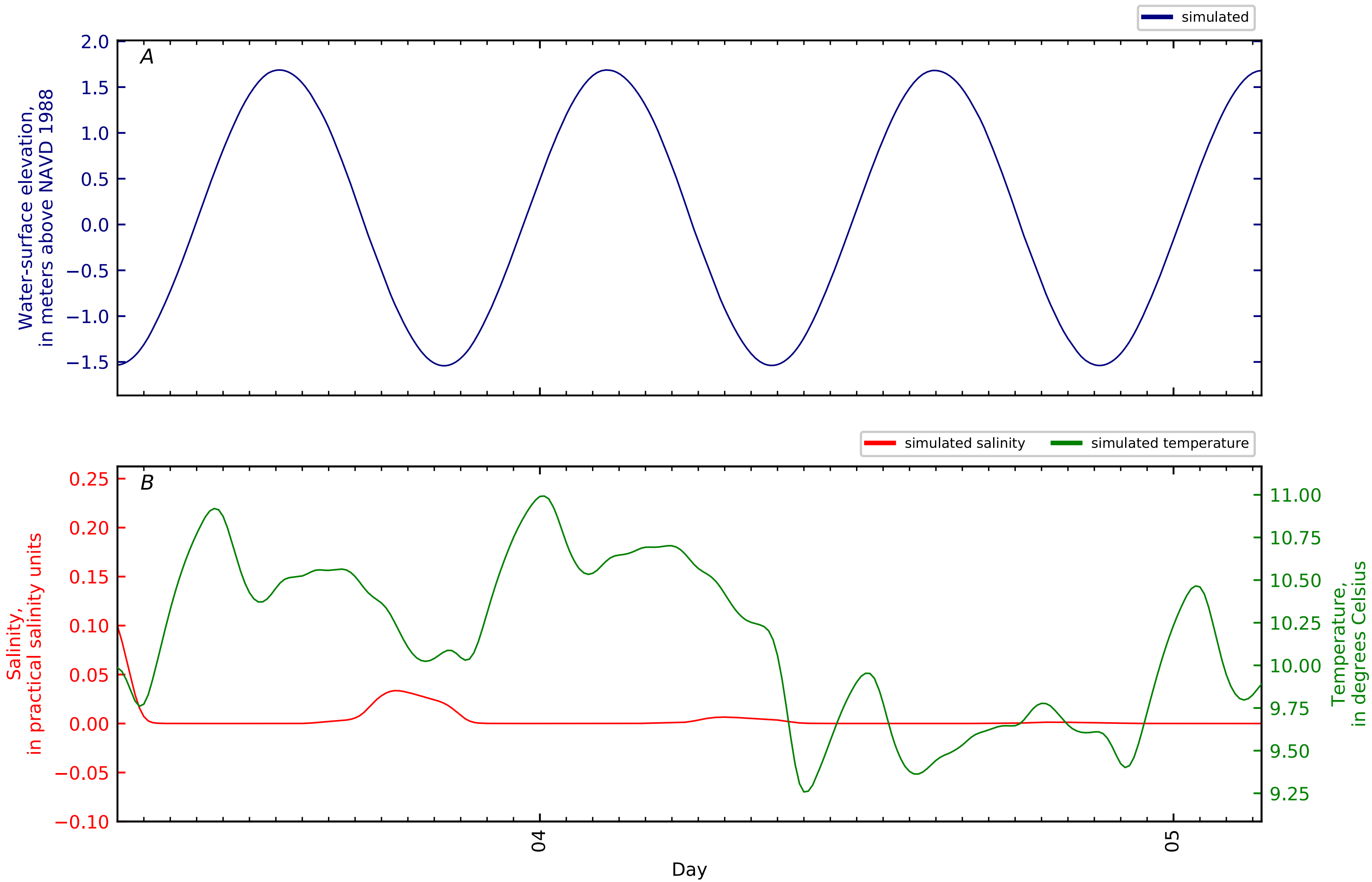

Figure B2-118. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 117, East Channel KM0.1 GS CTD4-10. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

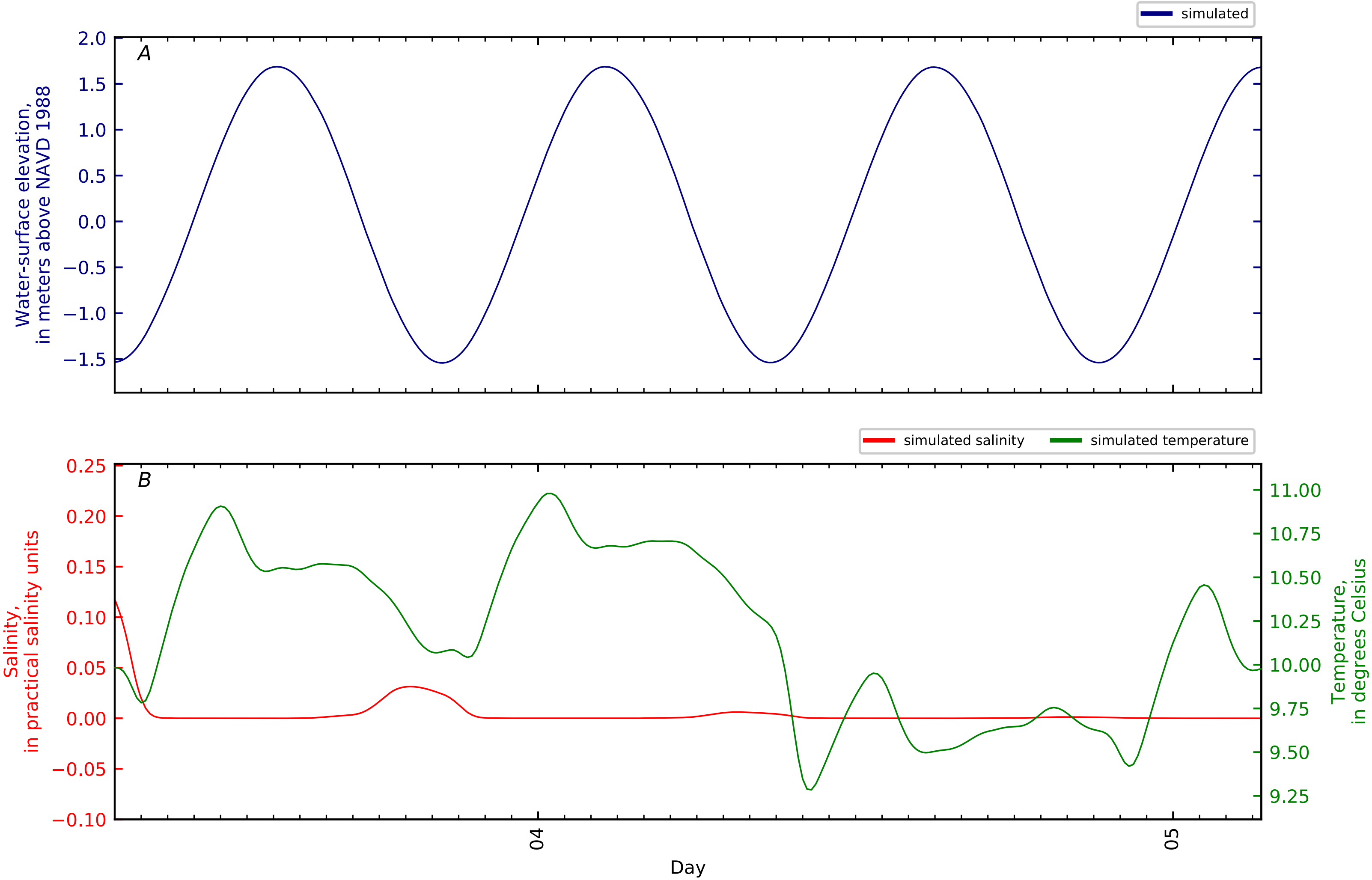

Figure B2-119. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 118, East Channel KM0.1 GS CTD4-11. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

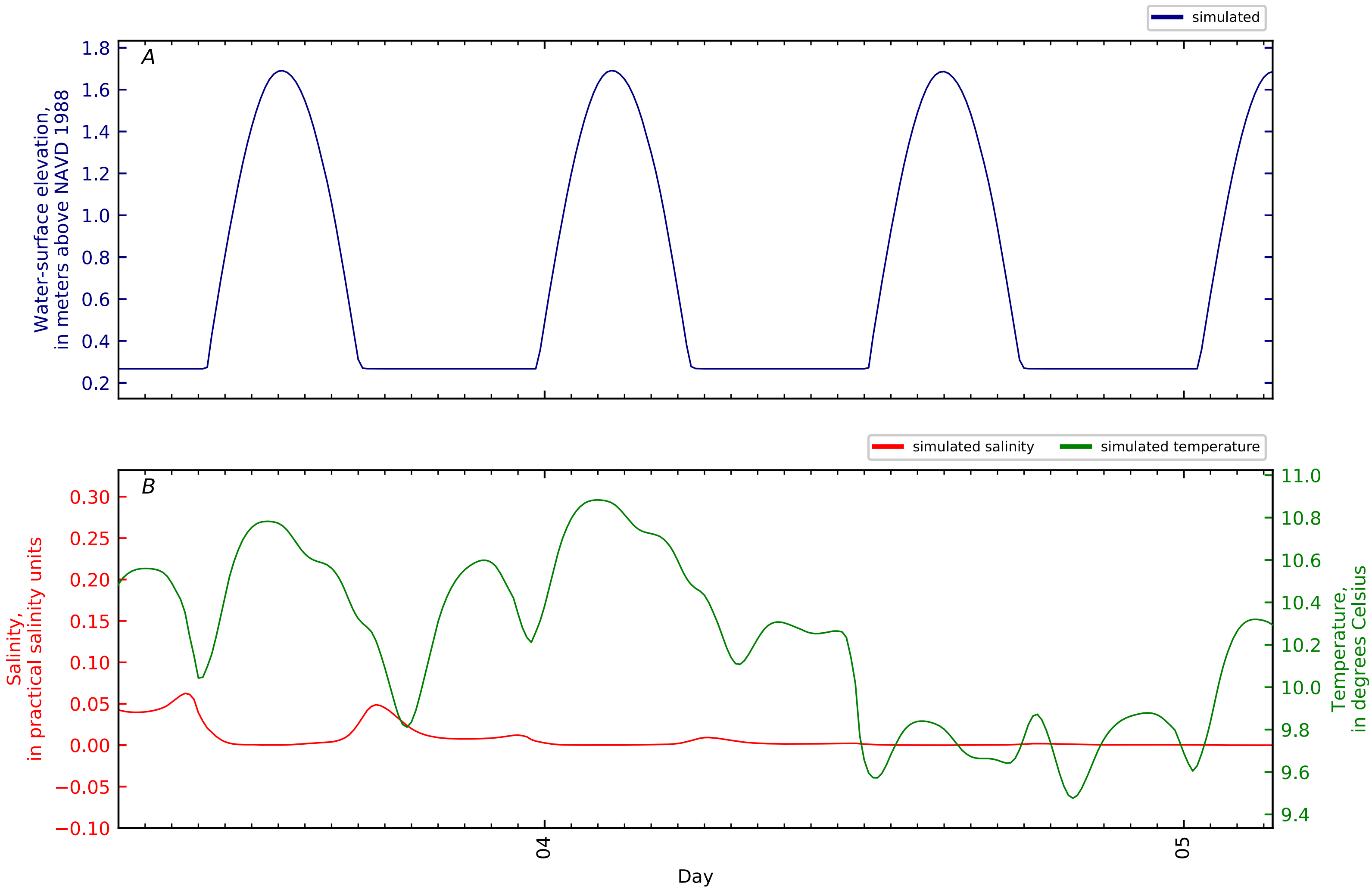

Figure B2-120. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 119, East Channel KM0.78 ERDC7 VE-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

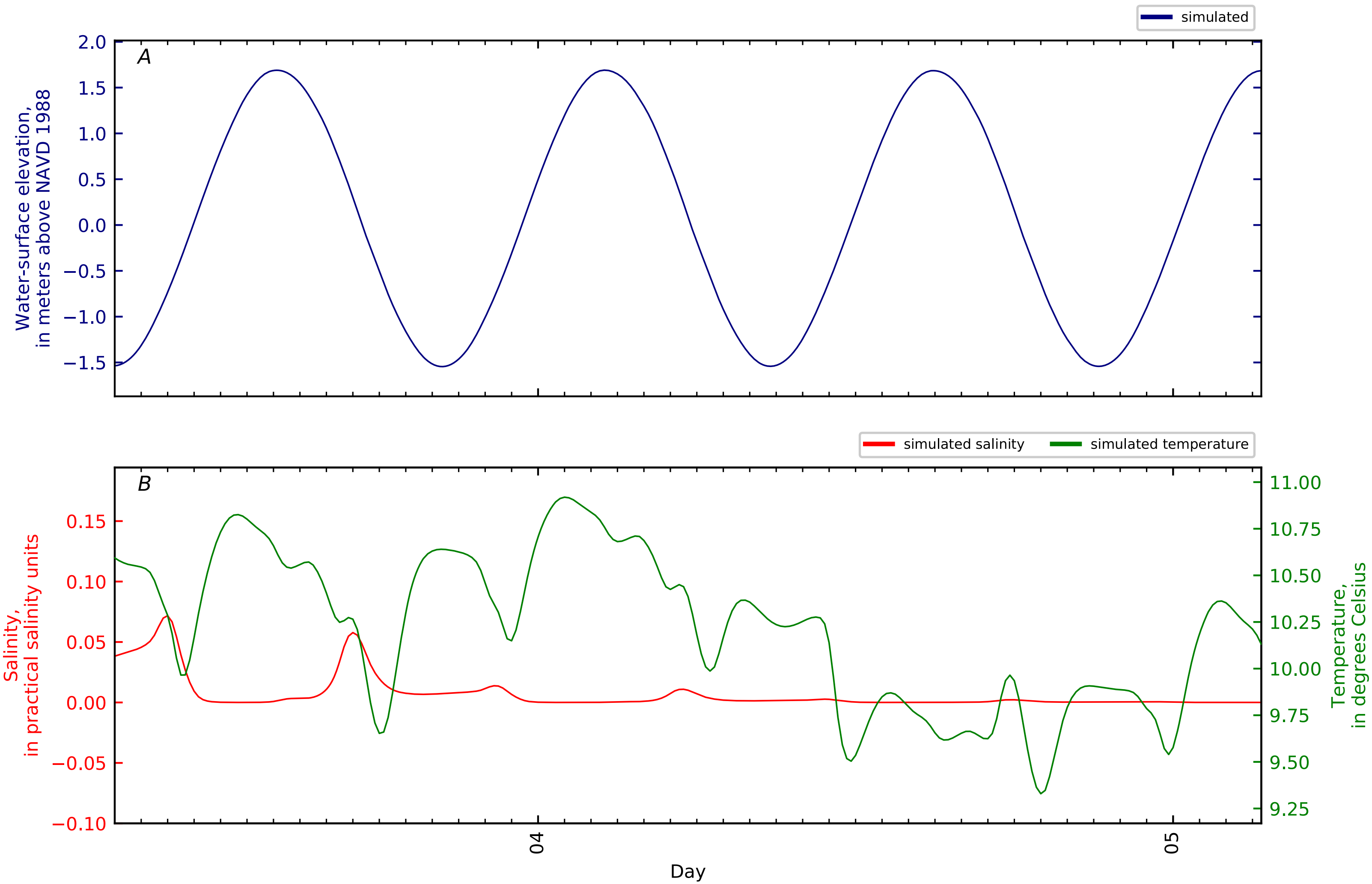

Figure B2-121. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 120, East Channel KM0.8 ERDC8 VE-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

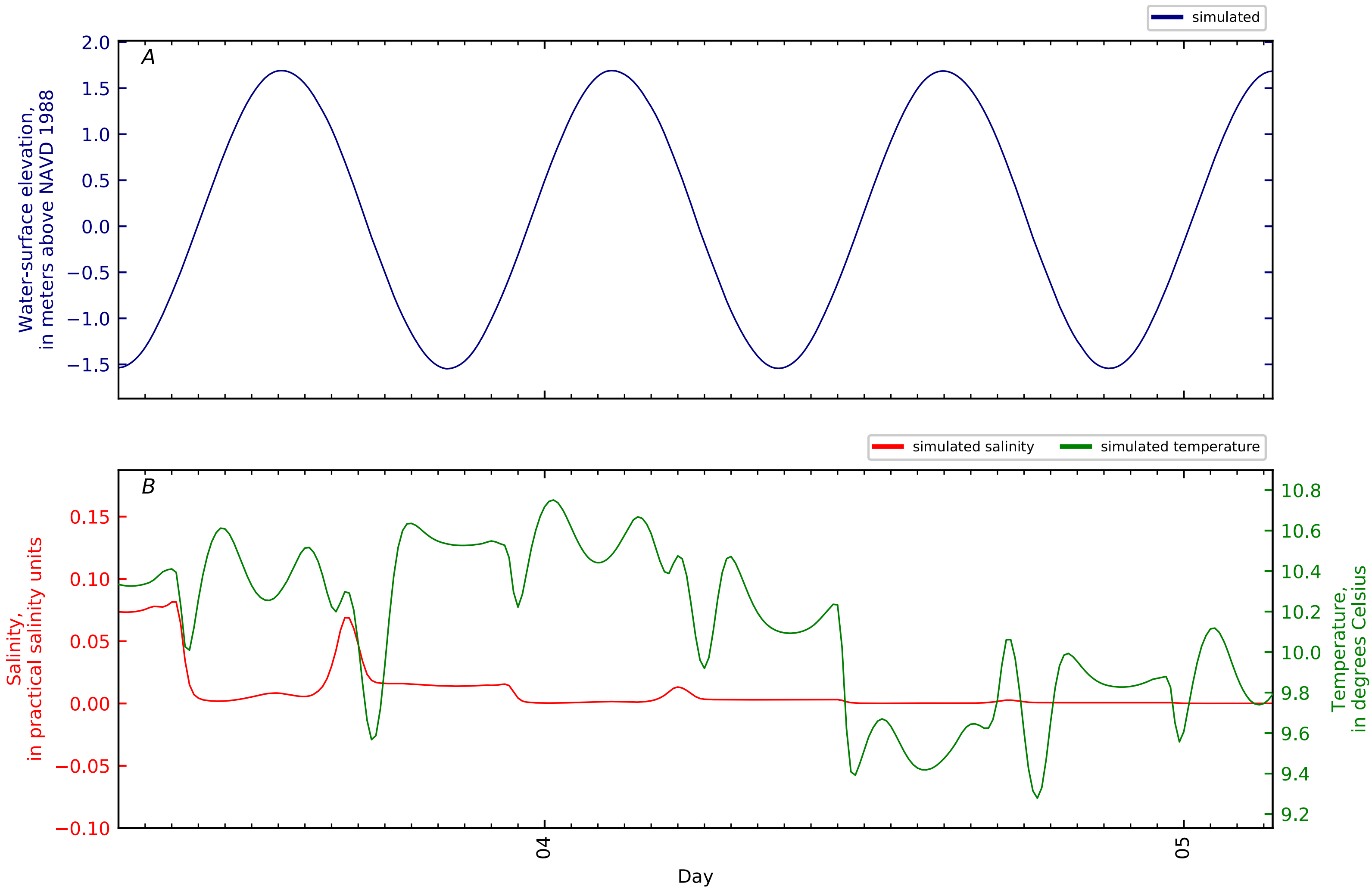

Figure B2-122. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 121, East Channel KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

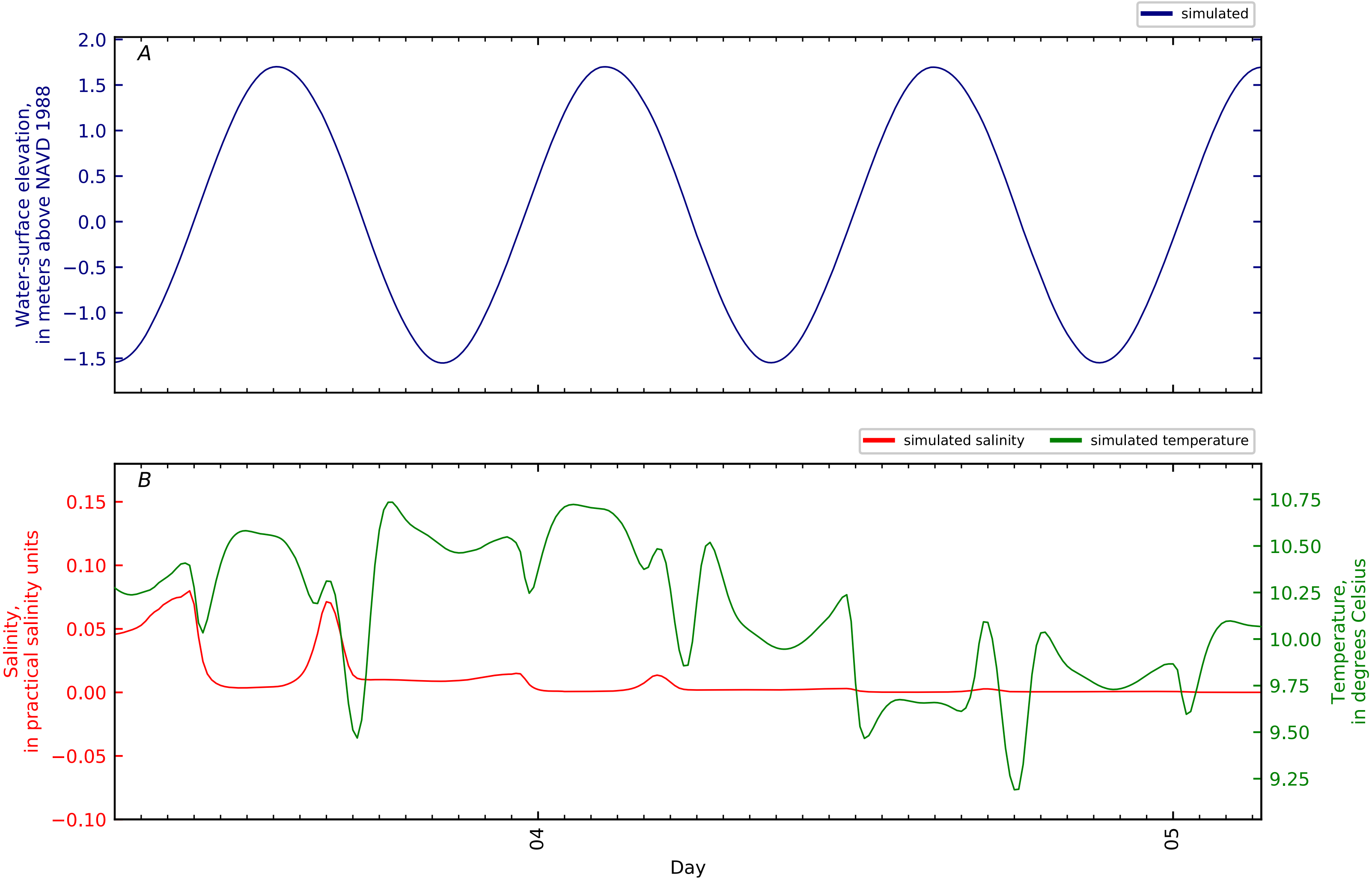

Figure B2-123. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 122, East Channel KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

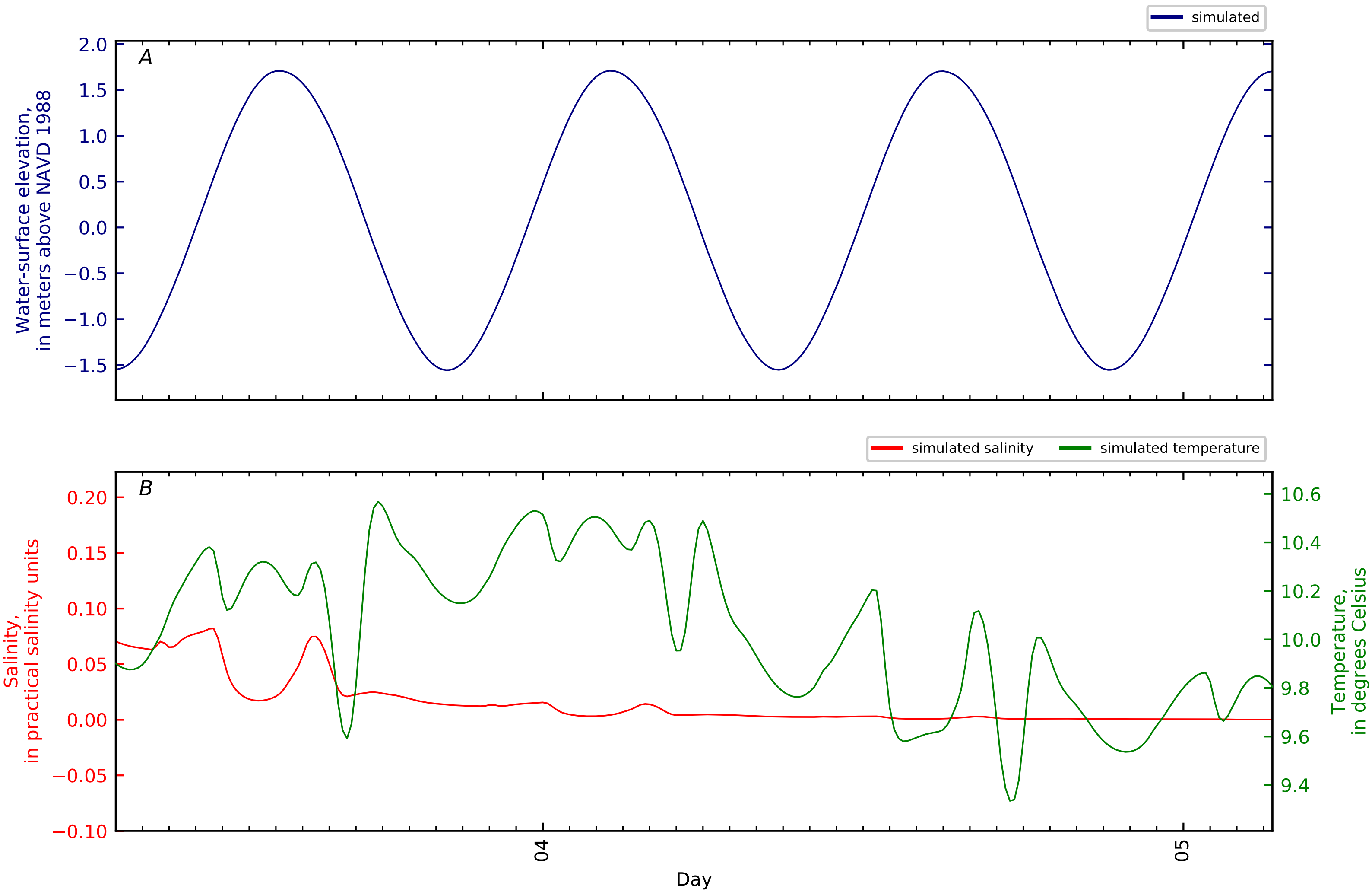

Figure B2-124. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 123, East Channel KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

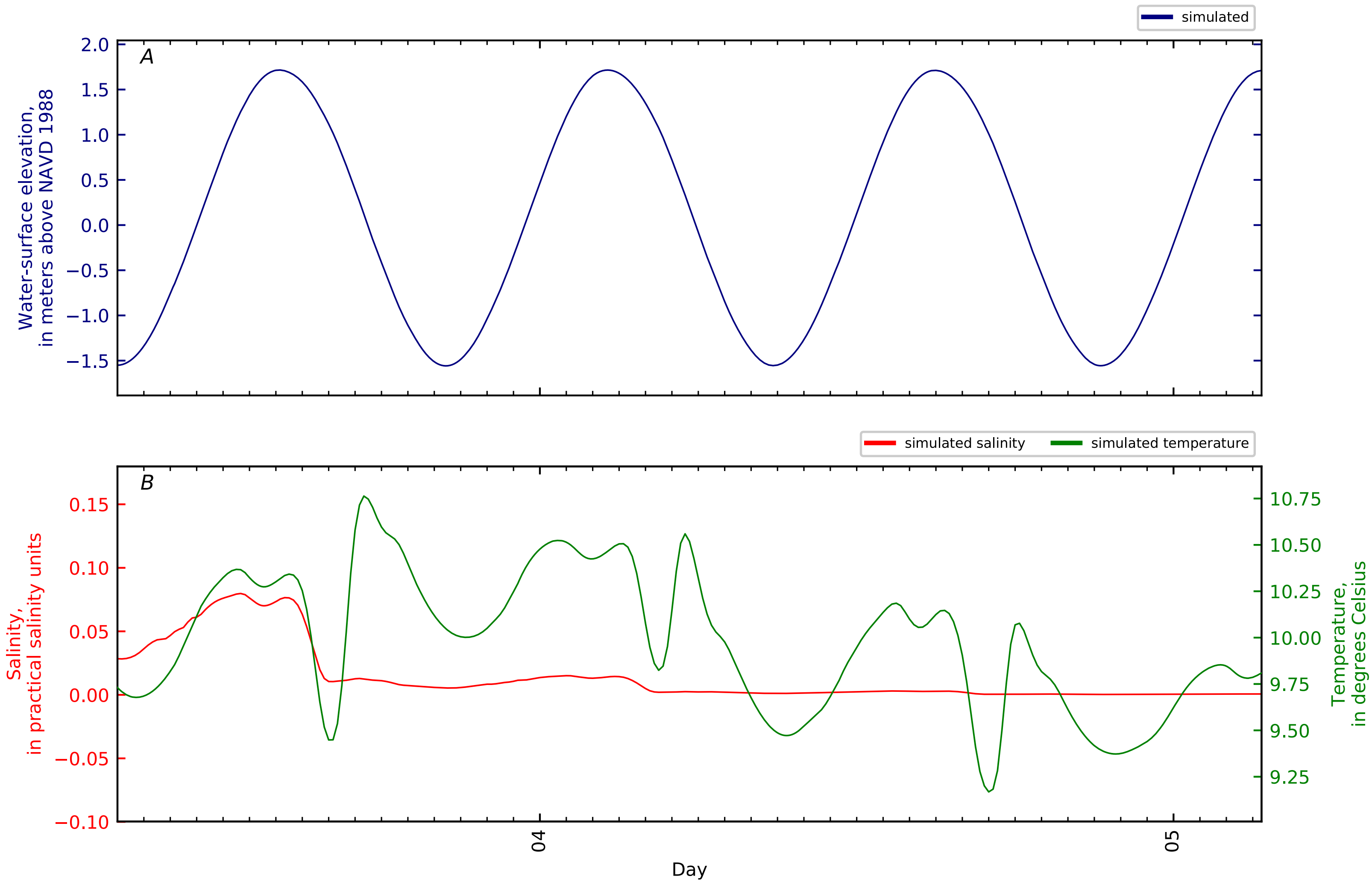

Figure B2-125. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 124, East Channel KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

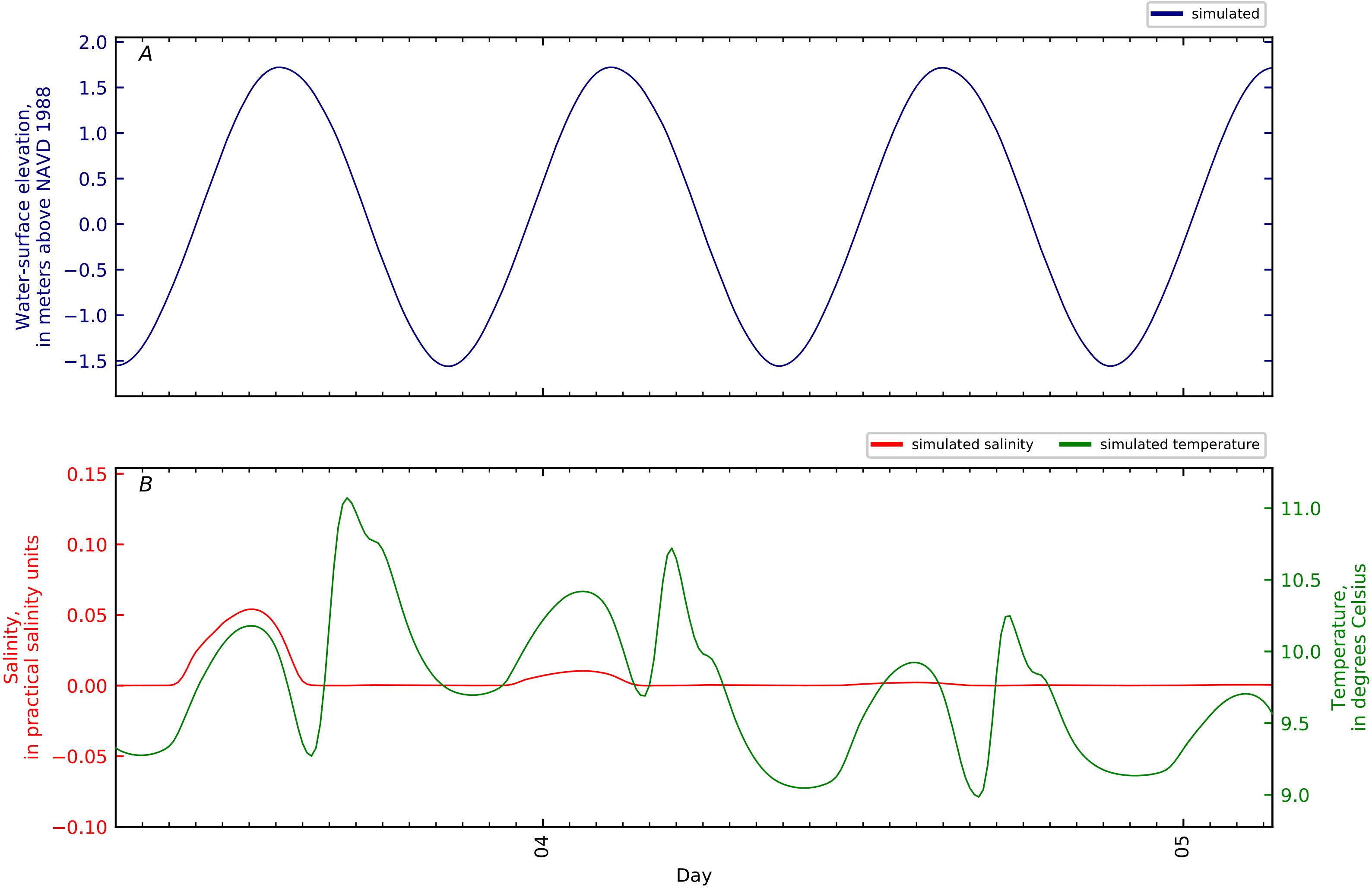

Figure B2-126. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 125, East Channel KM5. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

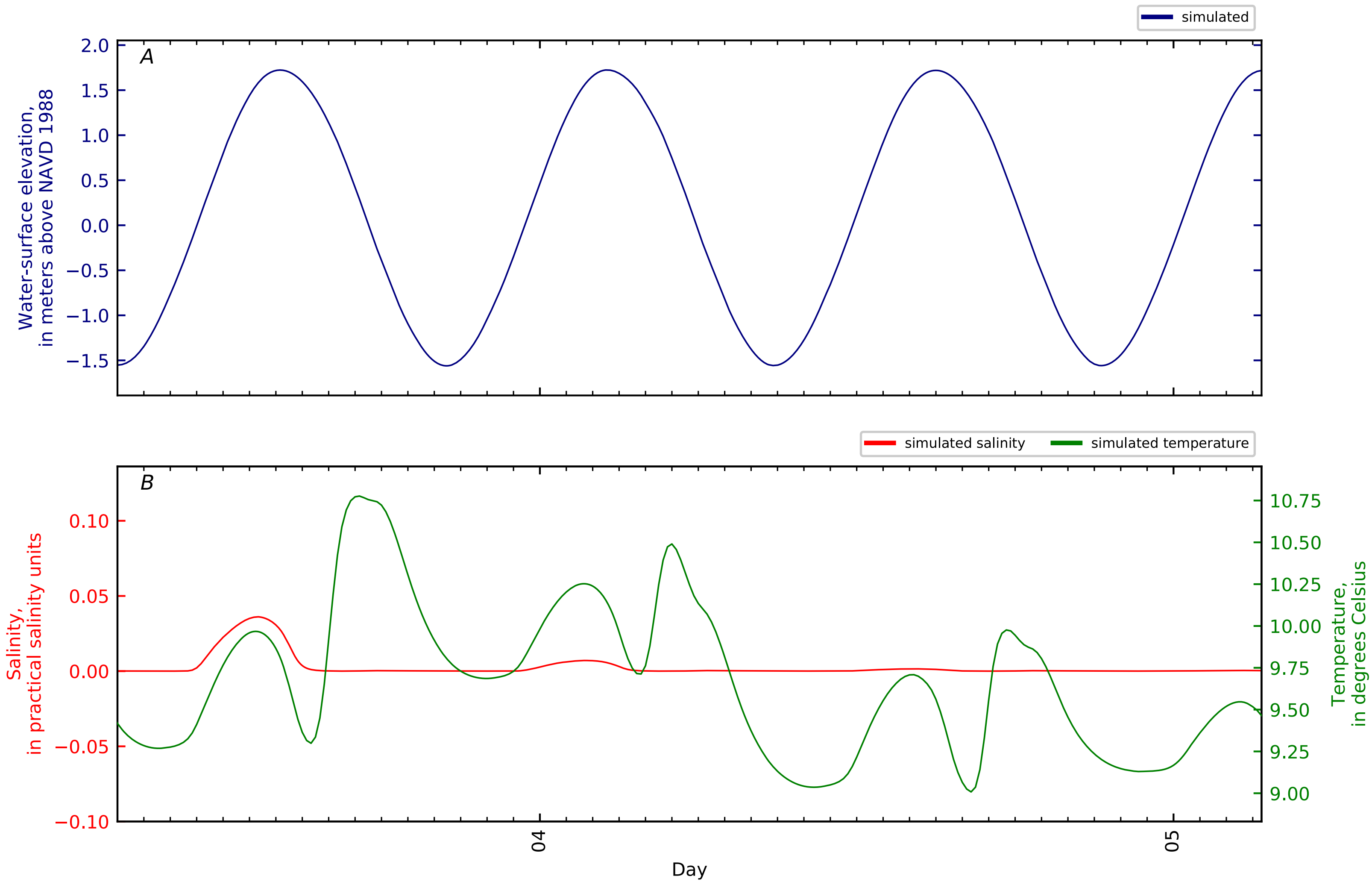

Figure B2-127. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 126, East Channel KM5.3 ERDC4 VN-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

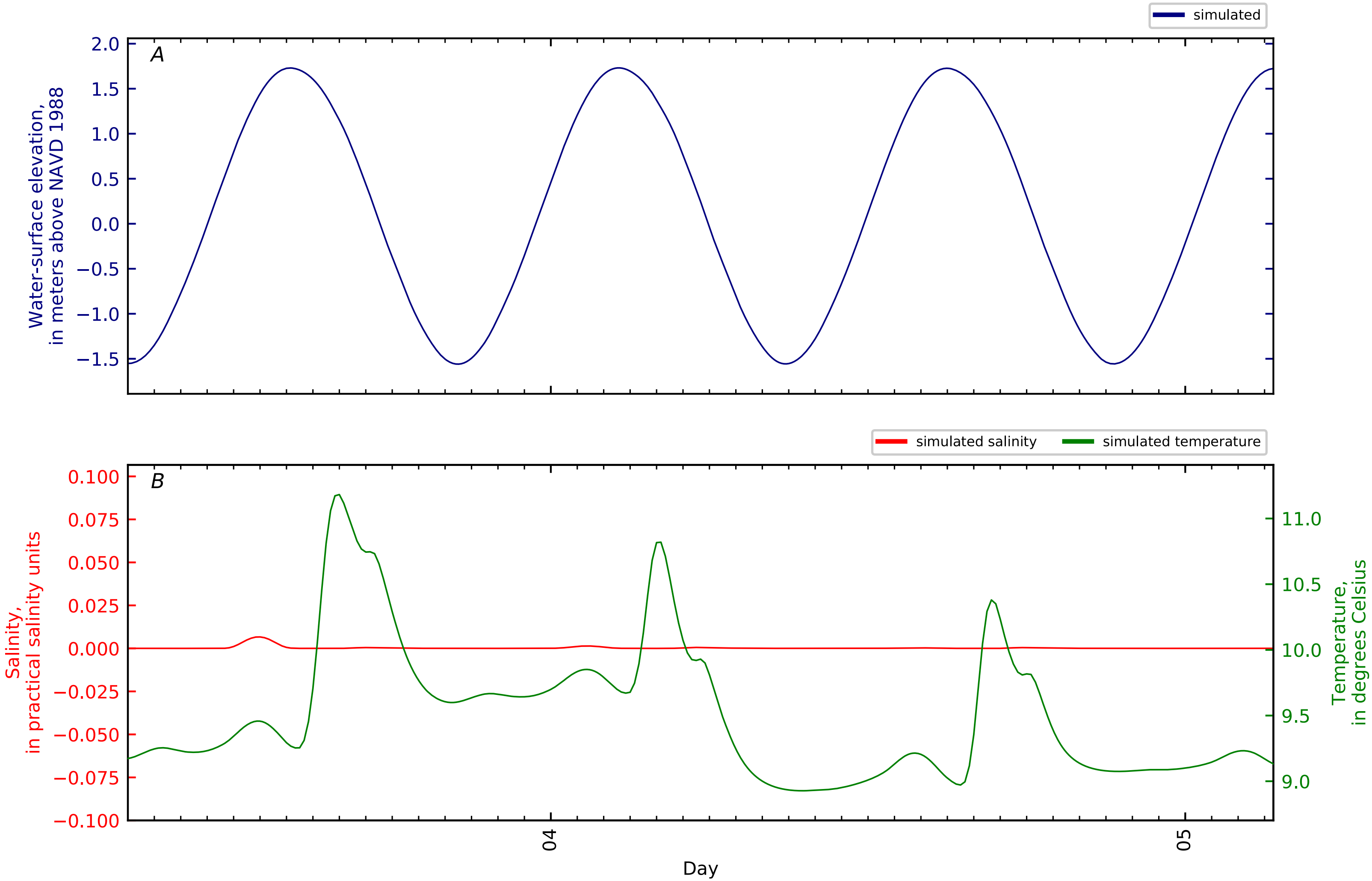

Figure B2-128. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 127, East Channel KM6. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

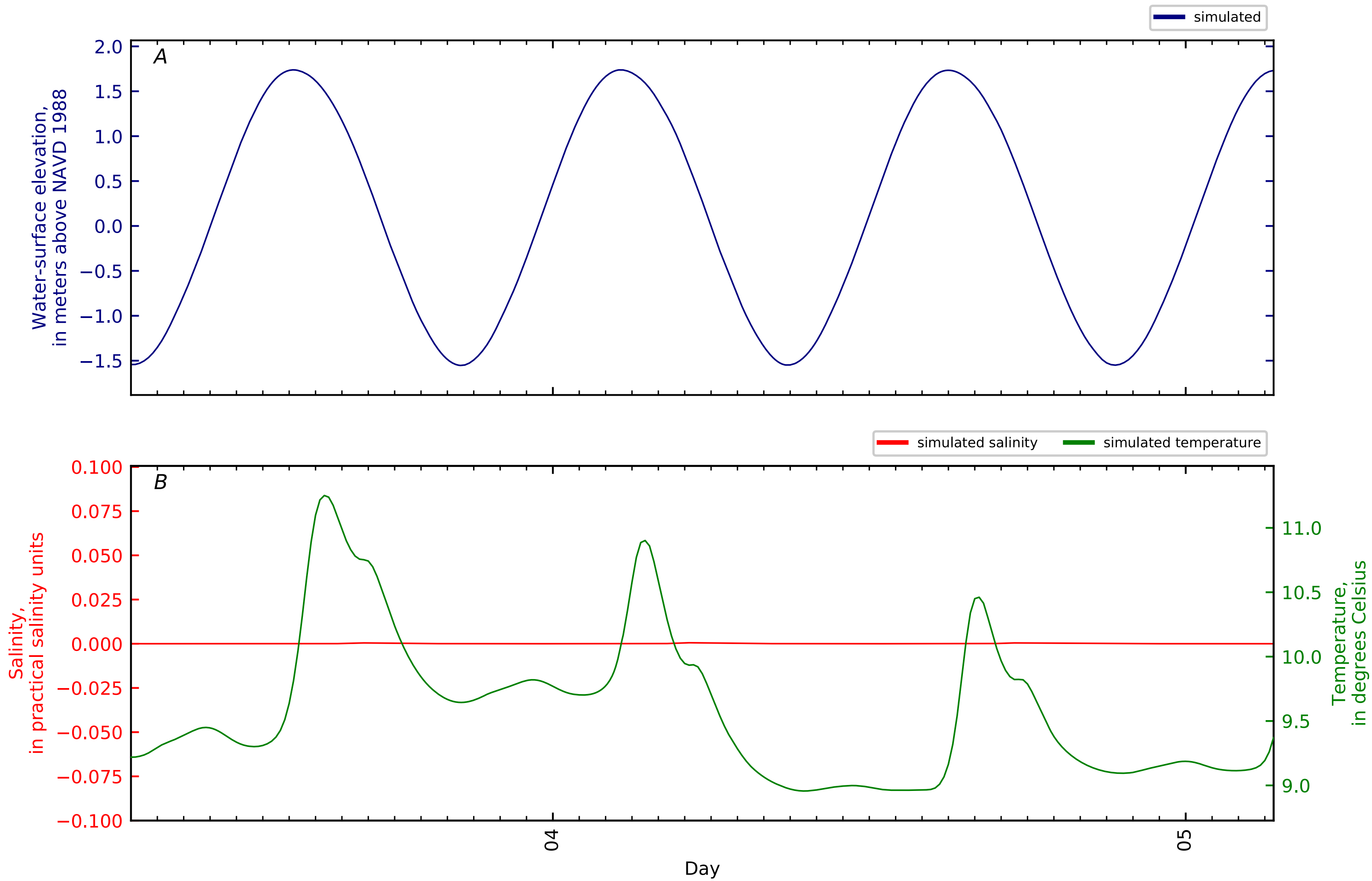

Figure B2-129. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 128, East Channel KM6.8 ERDC12 VN-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

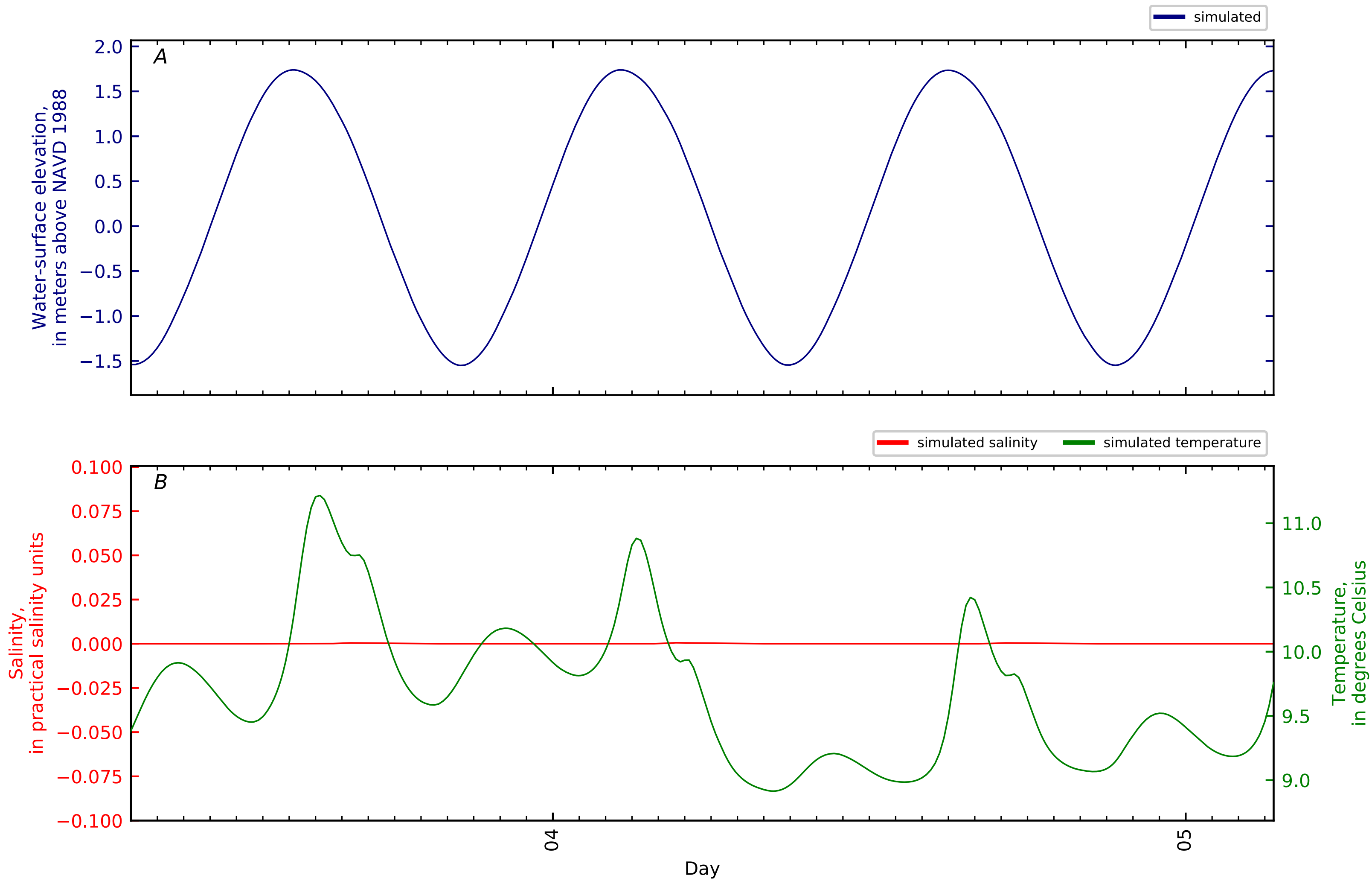

Figure B2-130. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 129, East Channel KM7. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

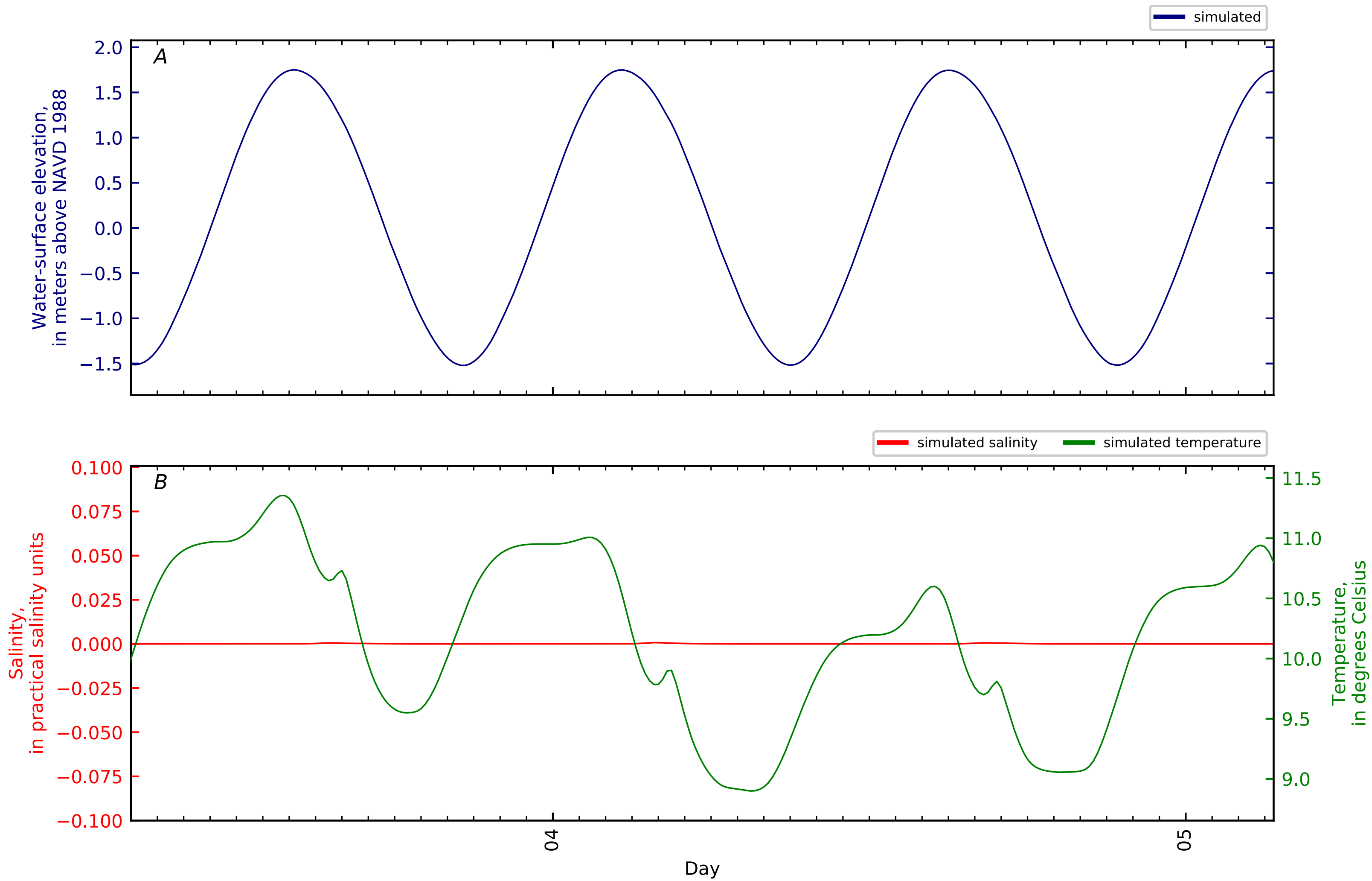

Figure B2-131. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 130, East Channel KM8. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

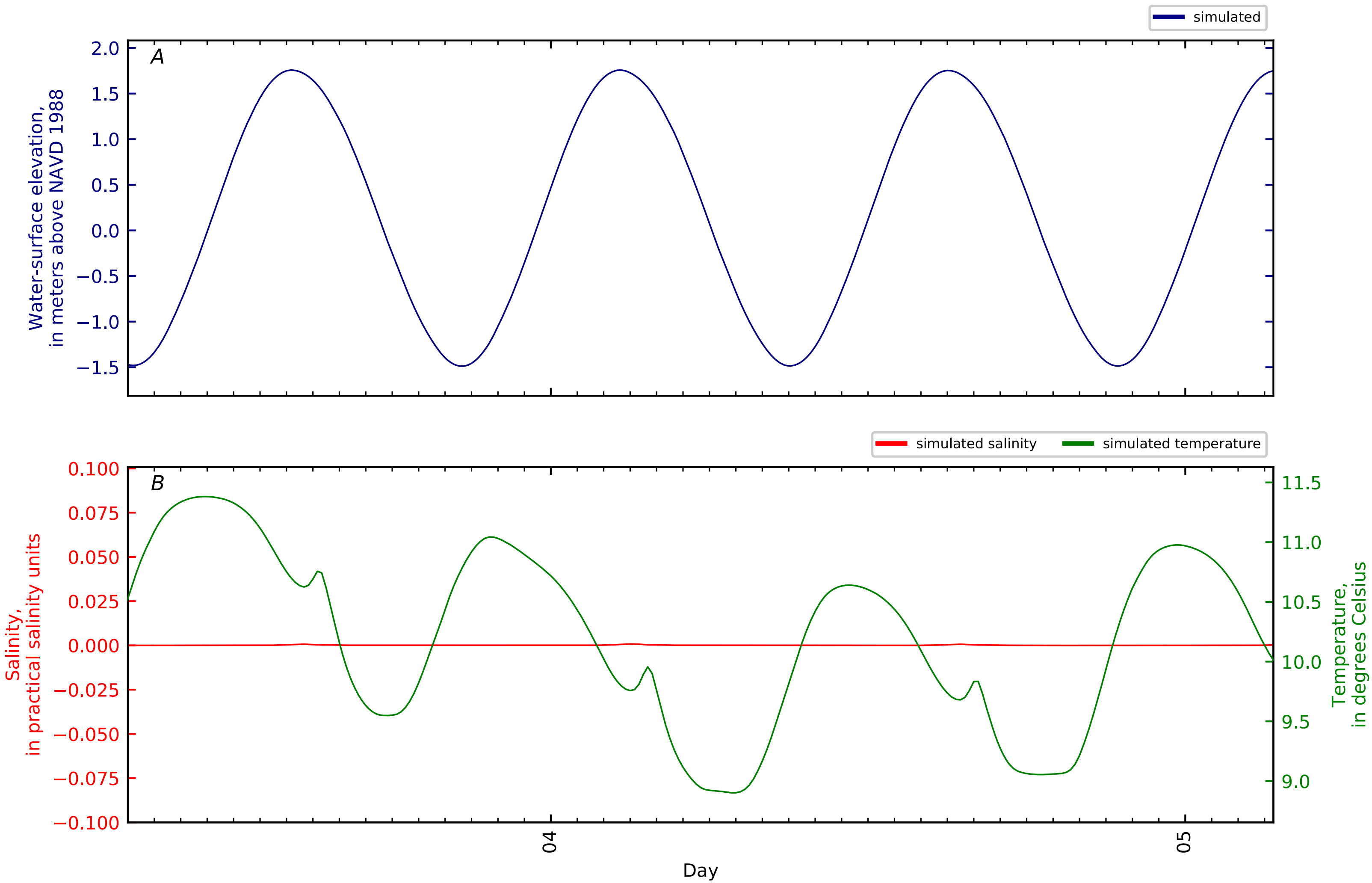

Figure B2-132. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 131, East Channel KM9. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

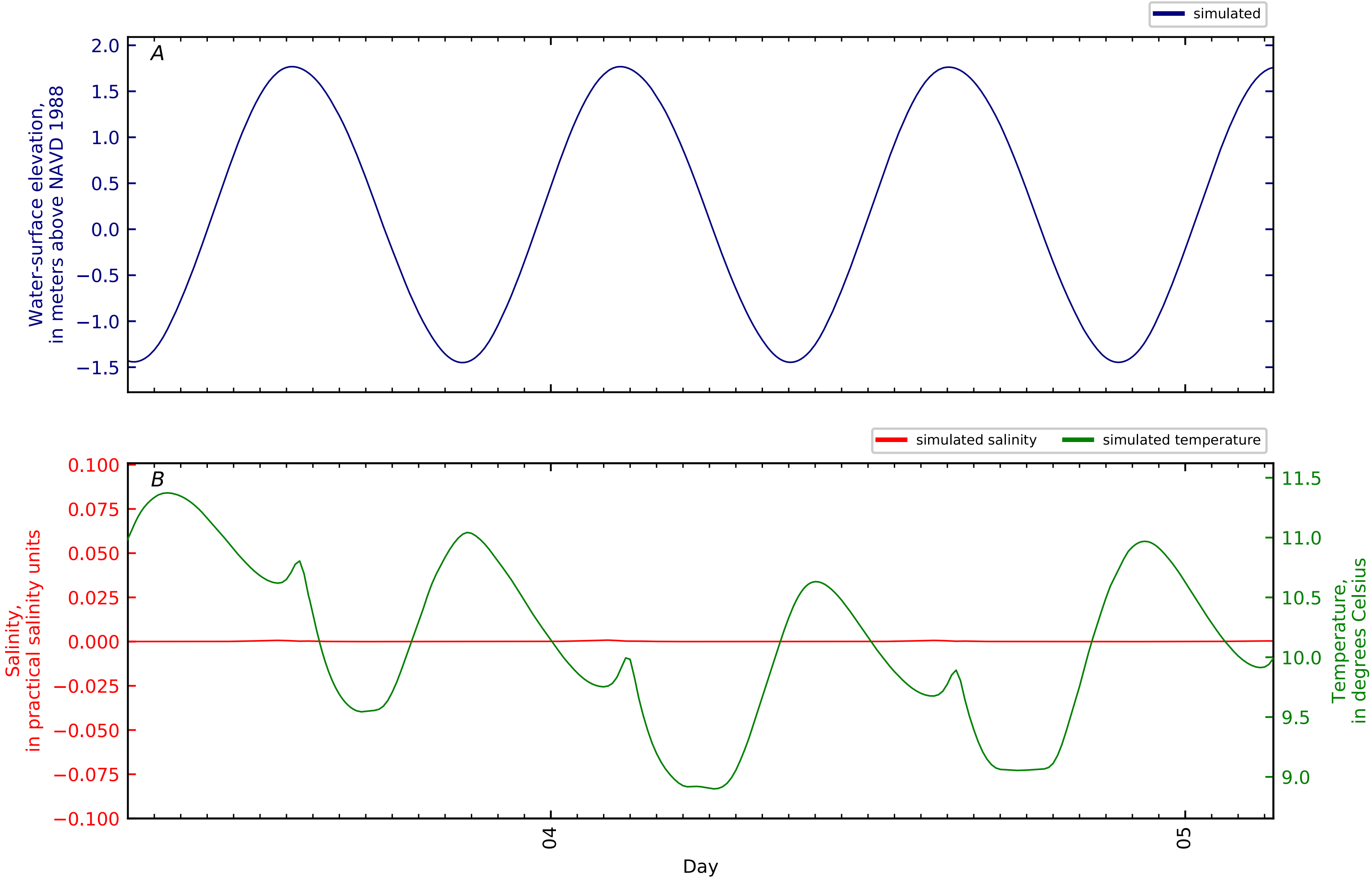

Figure B2-133. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 132, East Channel KM10. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

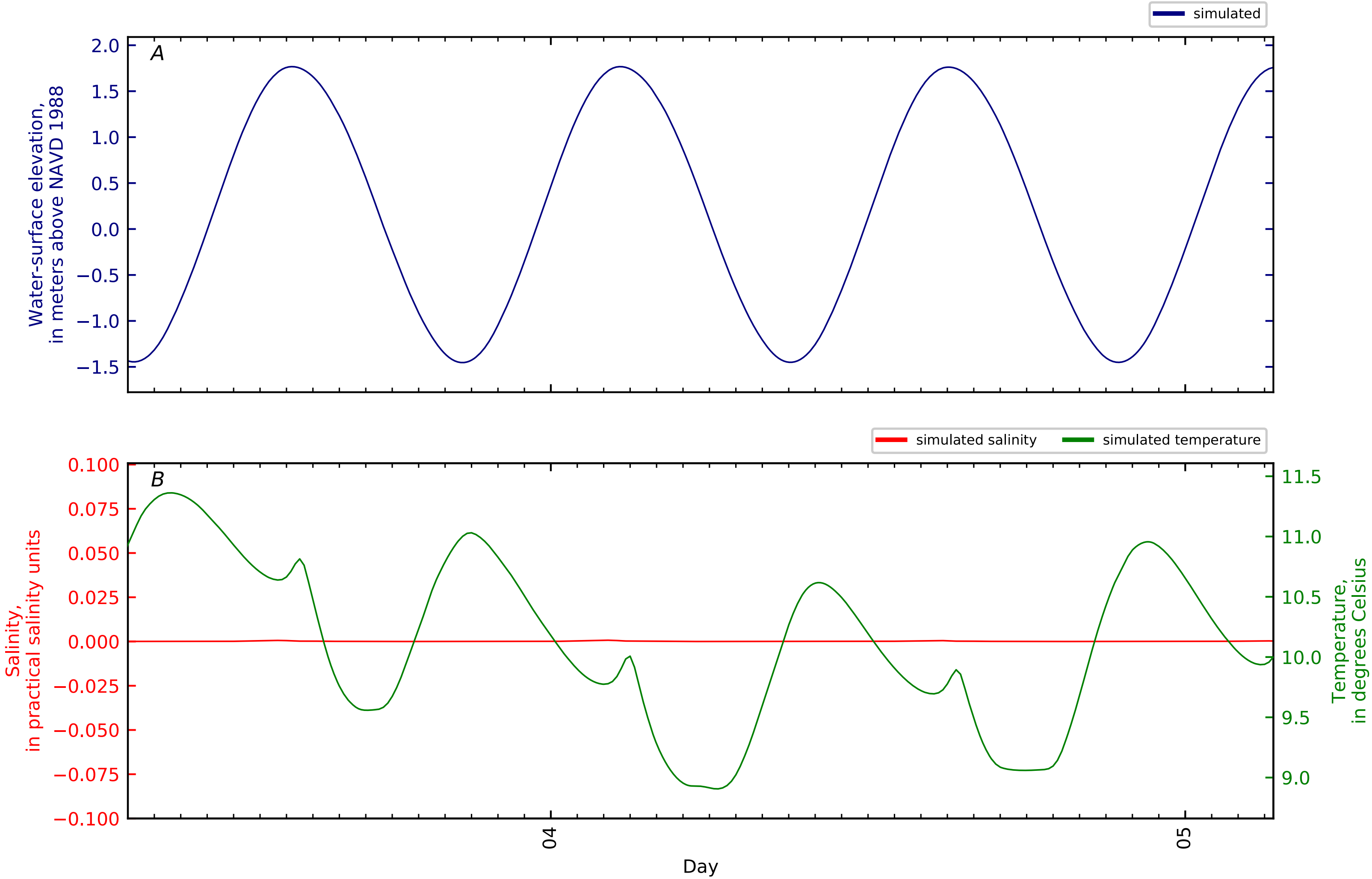

Figure B2-134. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 133, East Channel KM10 GS 443409068471801 at. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

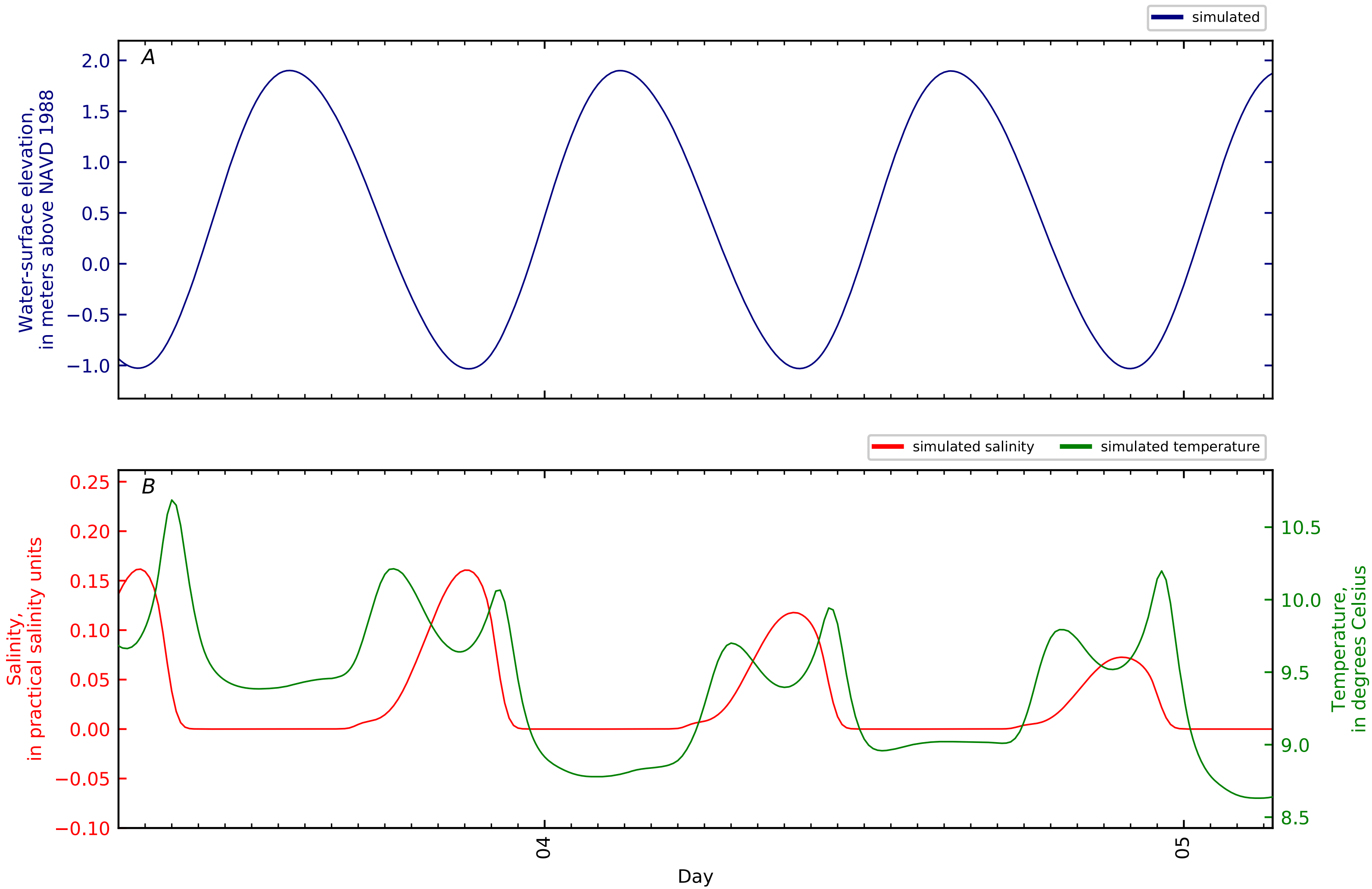

Figure B2-135. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 134, Mendall Marsh KM0. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

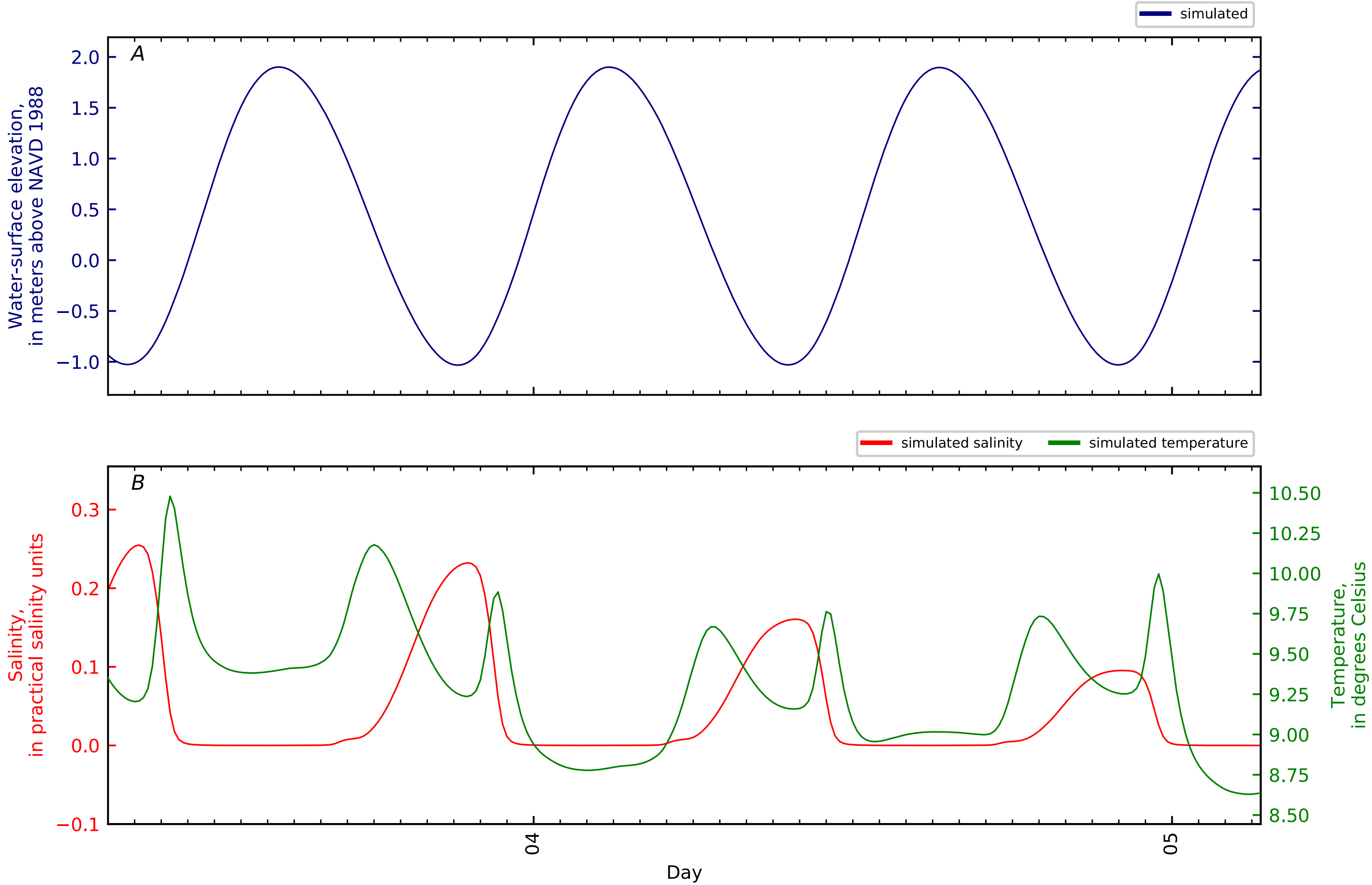

Figure B2-136. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 135, Mendall Marsh KM0.1 ERDC14 MM-MU6-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

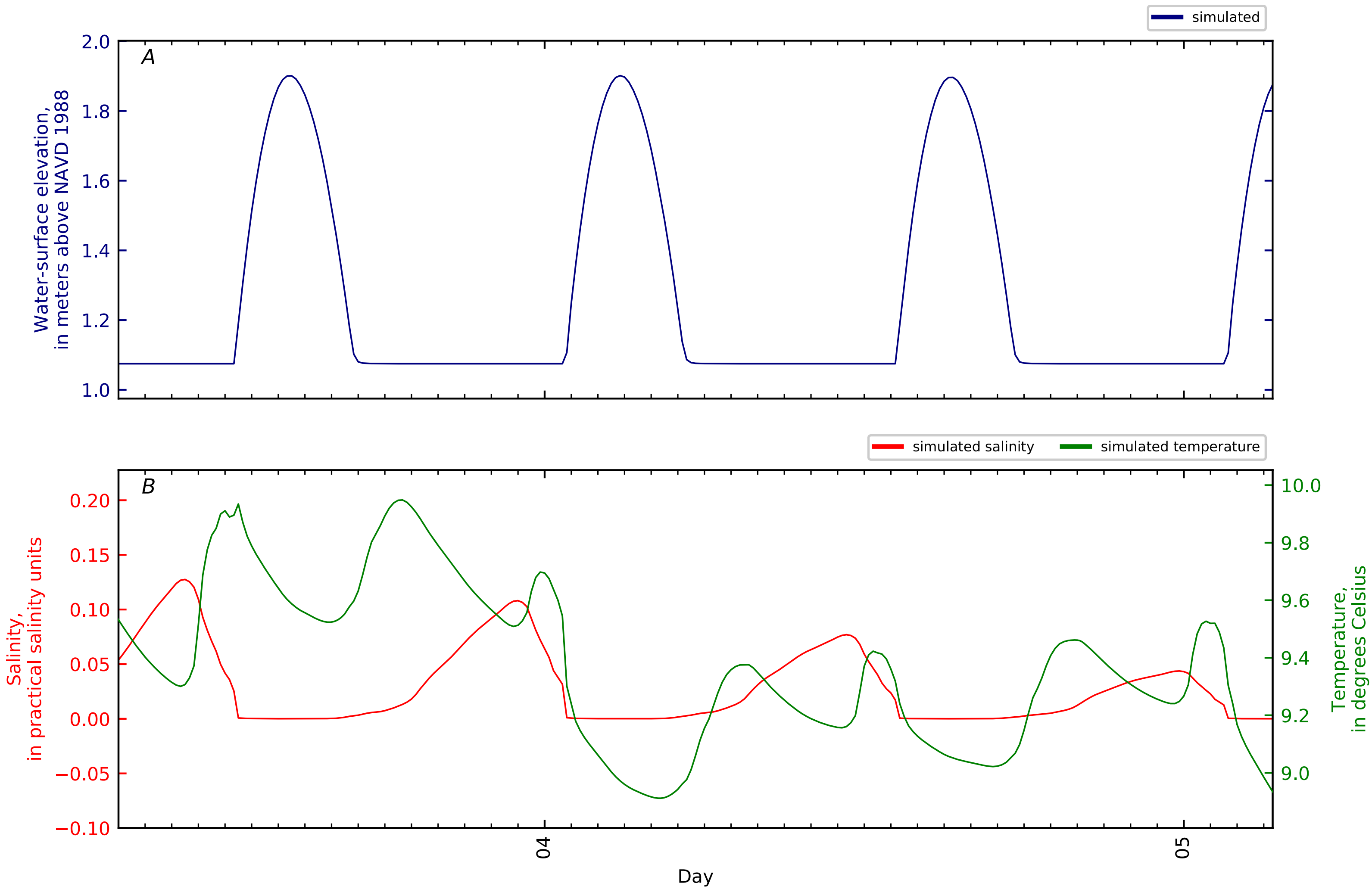

Figure B2-137. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 136, Mendall Marsh KM0.4 GS CTD2-01. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

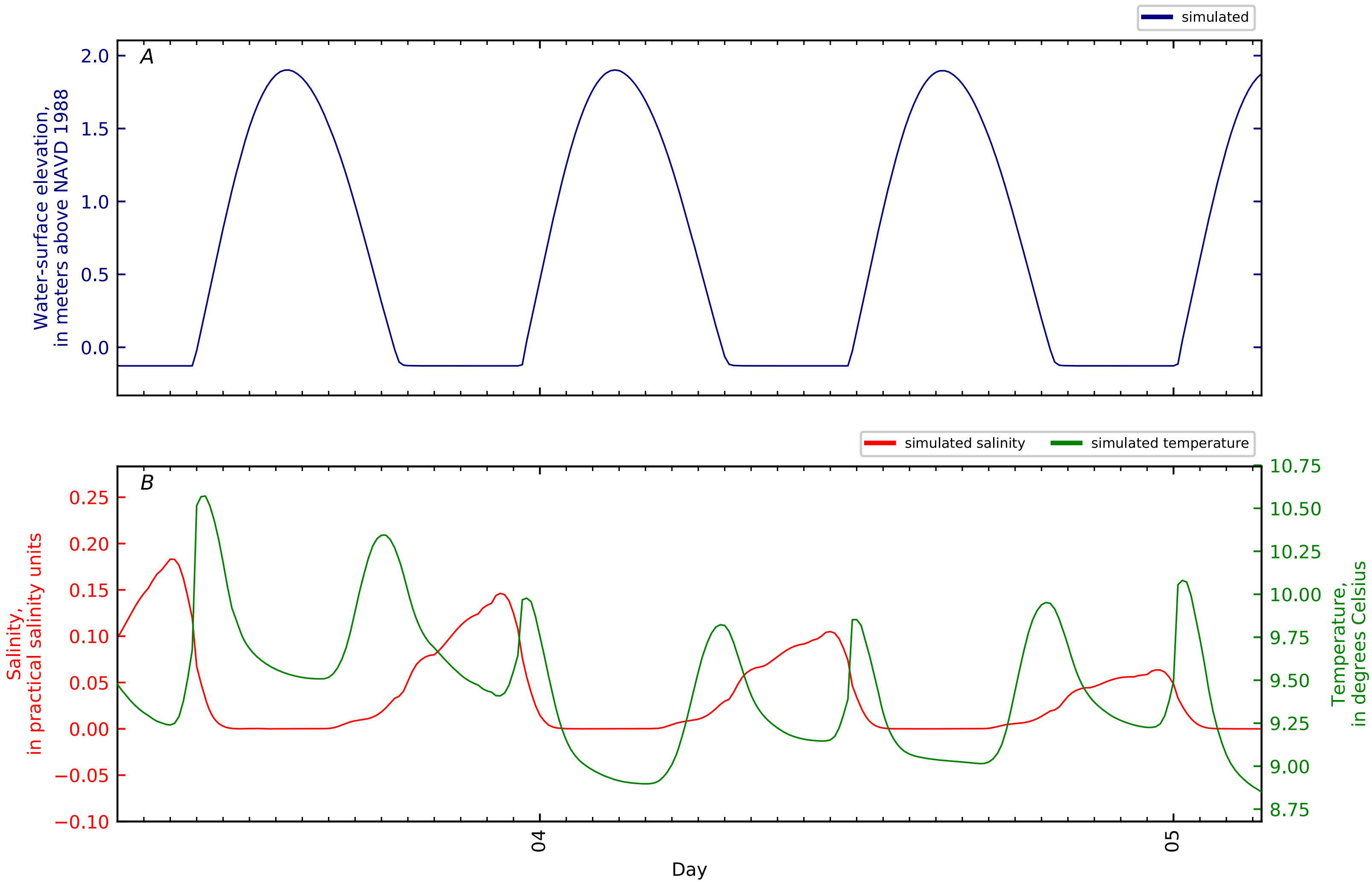

Figure B2-138. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 137, Mendall Marsh KM0.4 GS CTD2-02. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

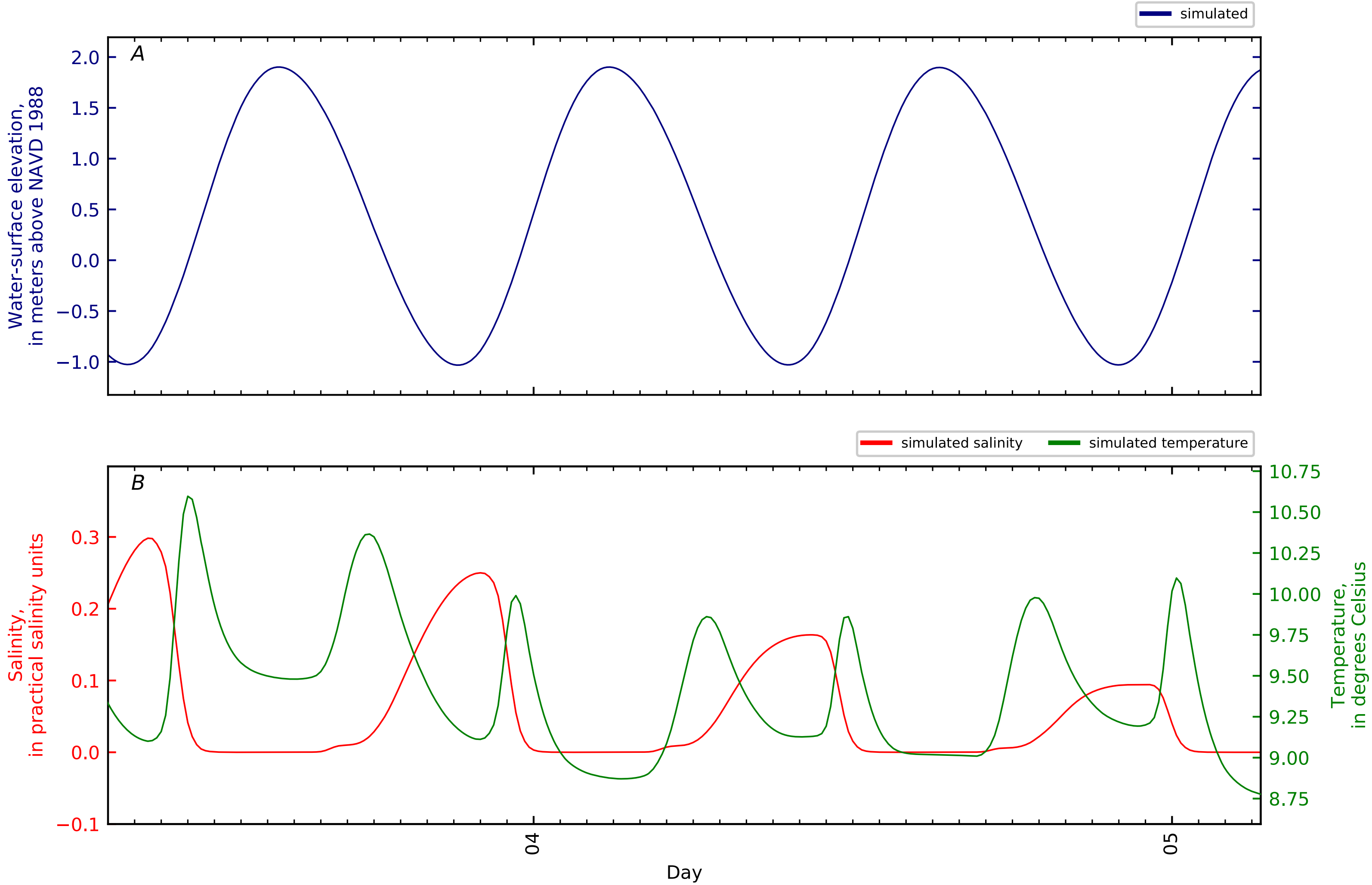

Figure B2-139. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 138, Mendall Marsh KM0.4 GS CTD2-03. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

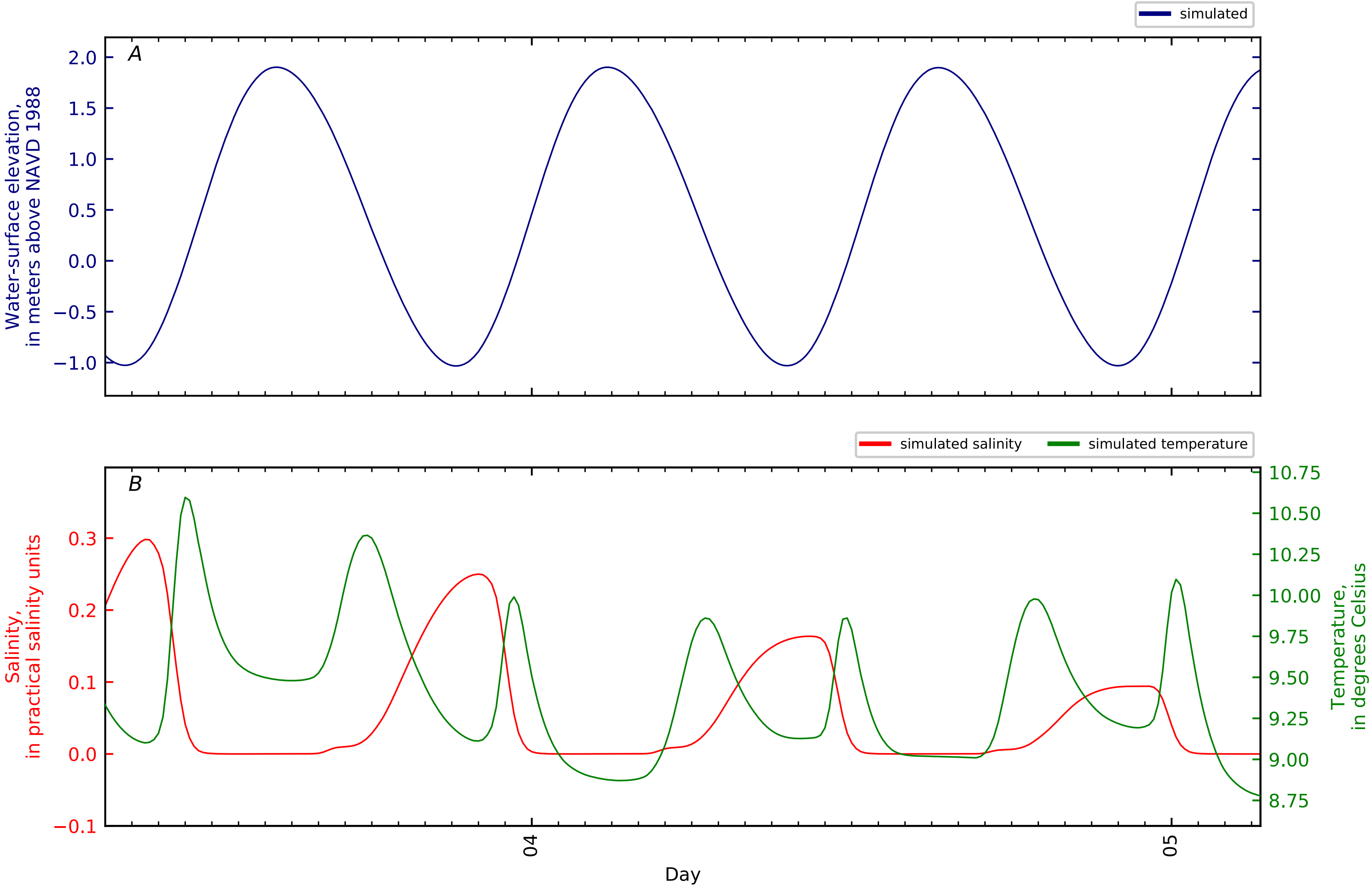

Figure B2-140. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 139, Mendall Marsh KM0.4 GS CTD2-04. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

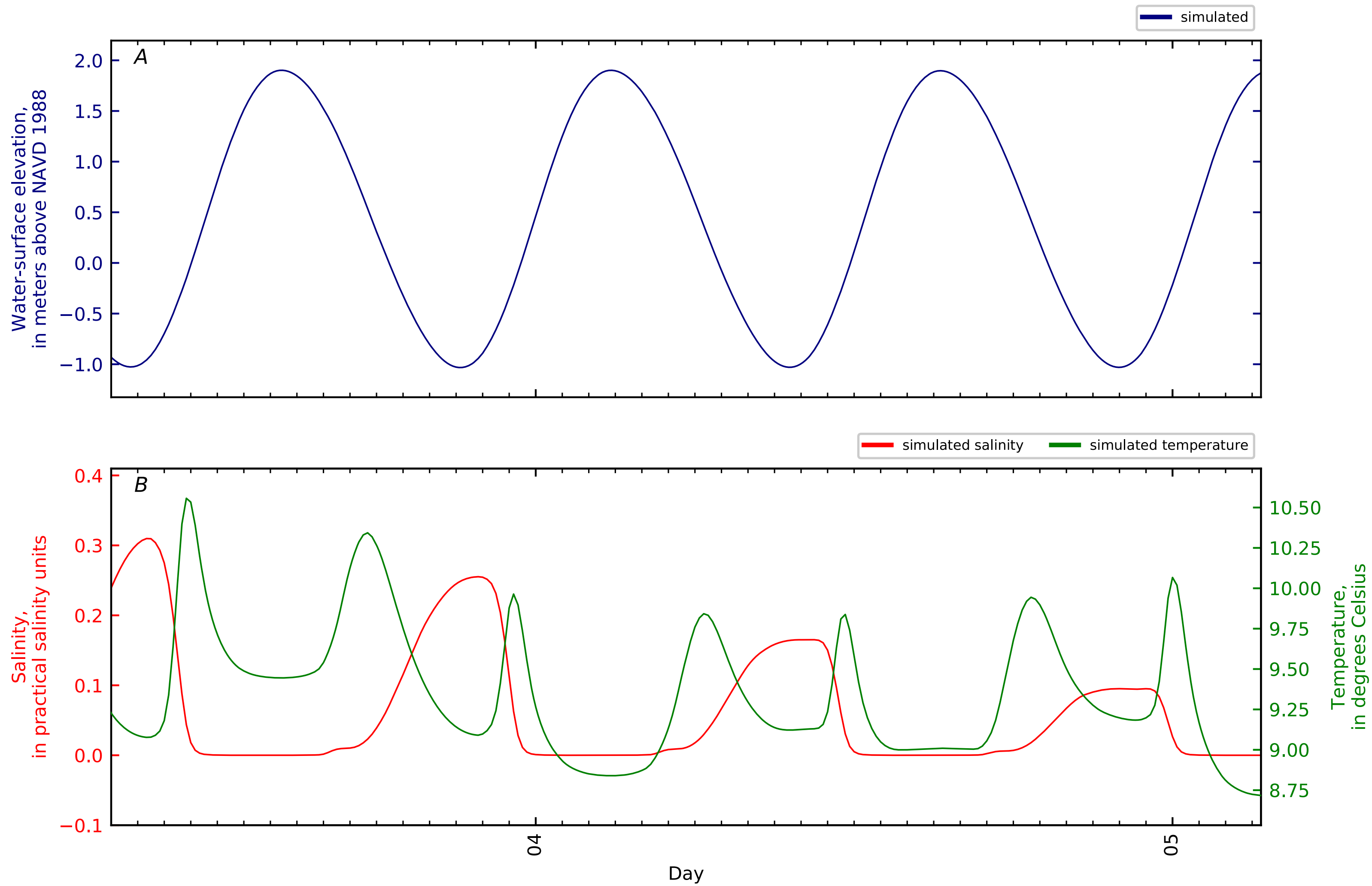

Figure B2-141. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 140, Mendall Marsh KM0.4 GS CTD2-05. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

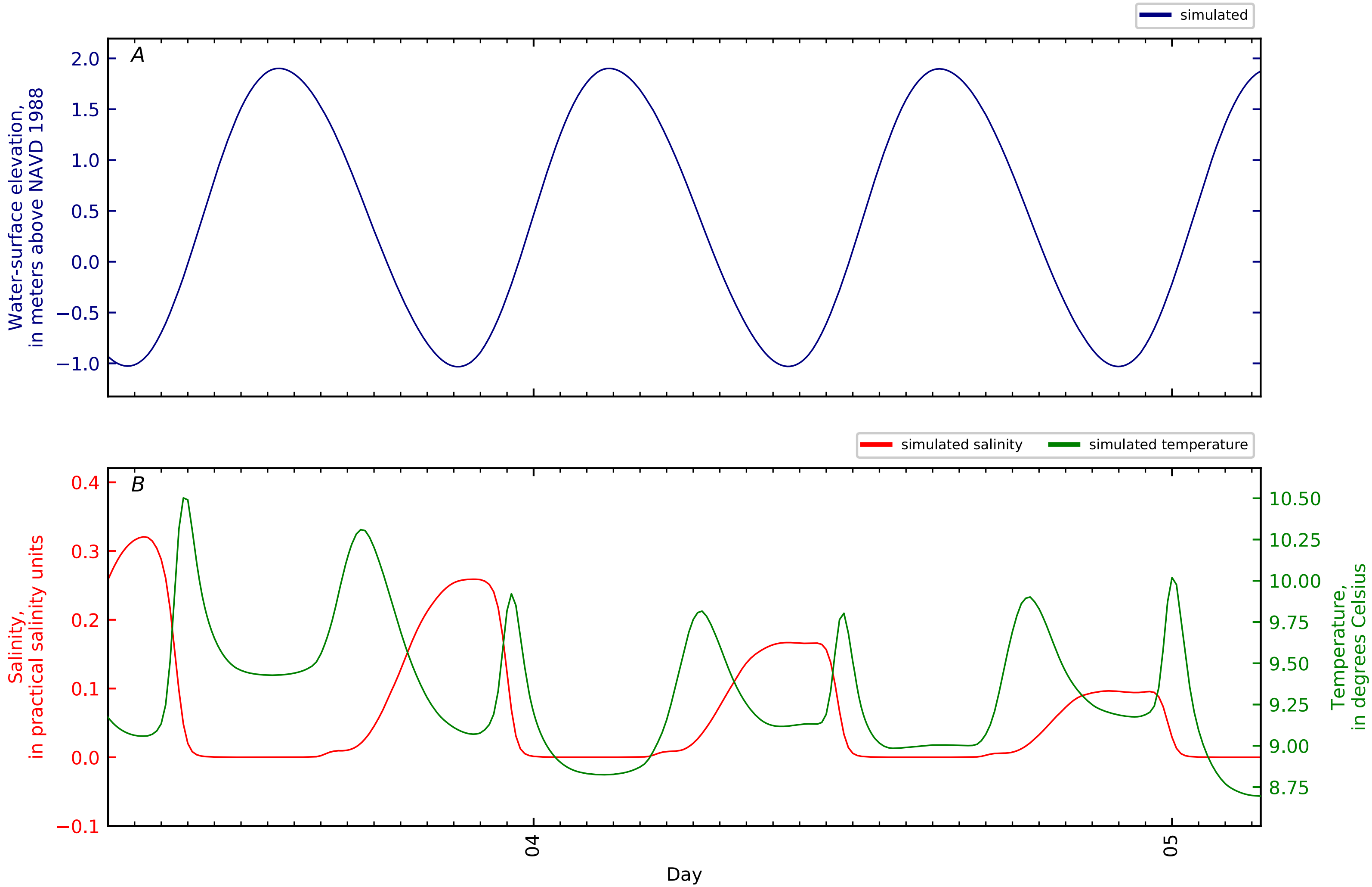

Figure B2-142. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 141, Mendall Marsh KM0.4 GS CTD2-06. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

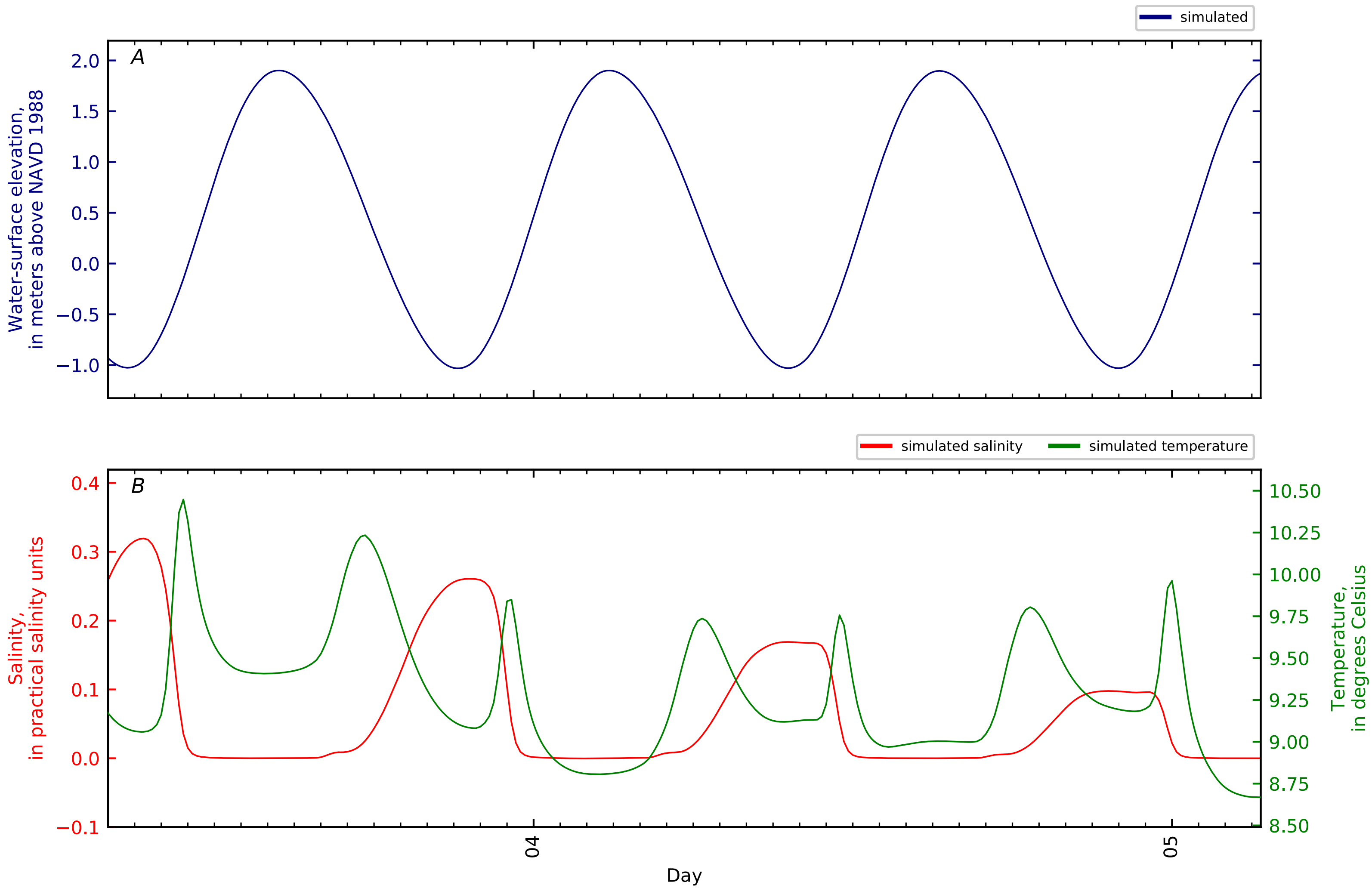

Figure B2-143. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 142, Mendall Marsh KM0.4 GS CTD2-07. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

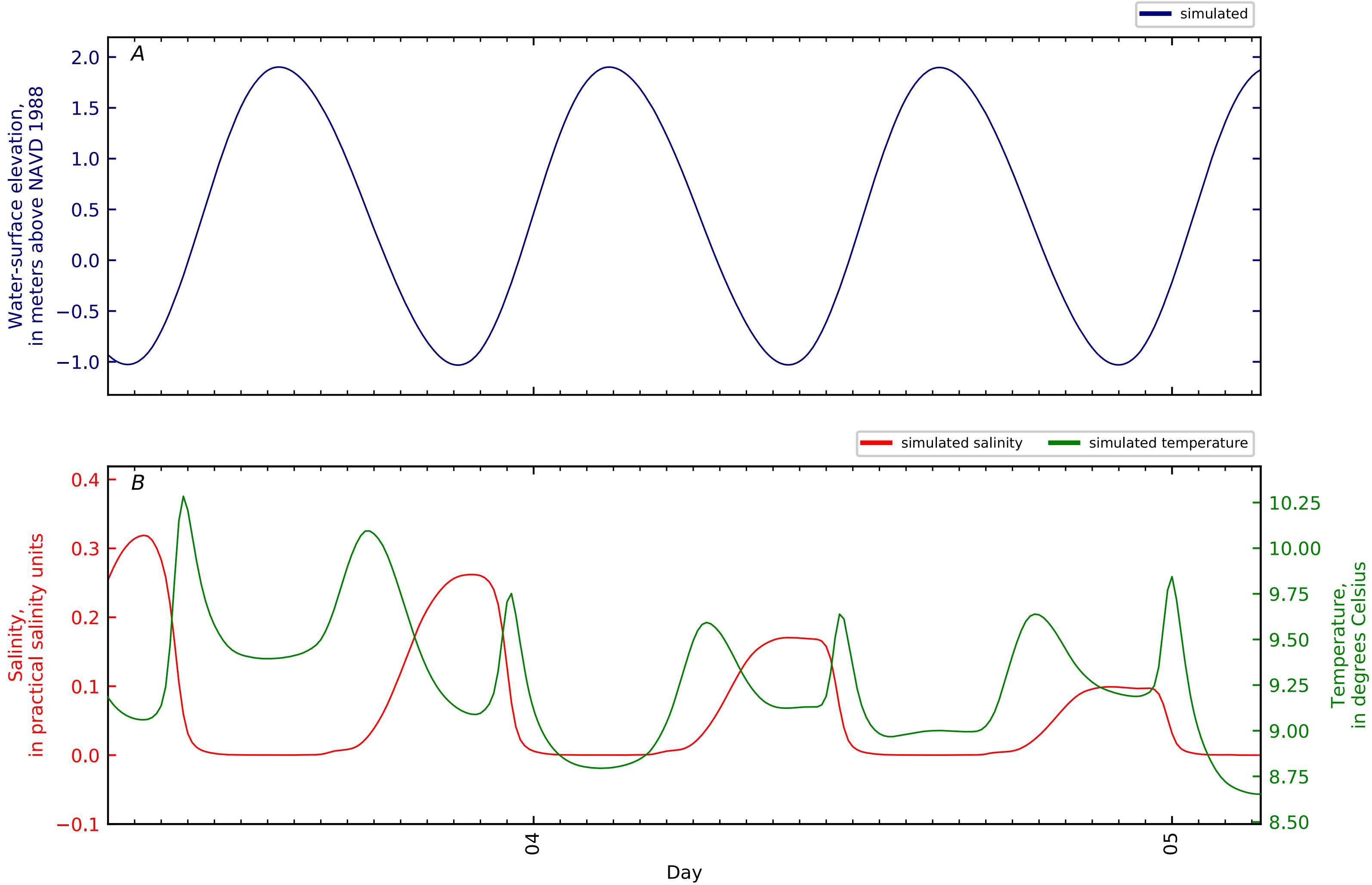

Figure B2-144. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 143, Mendall Marsh KM0.4 GS CTD2-08. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

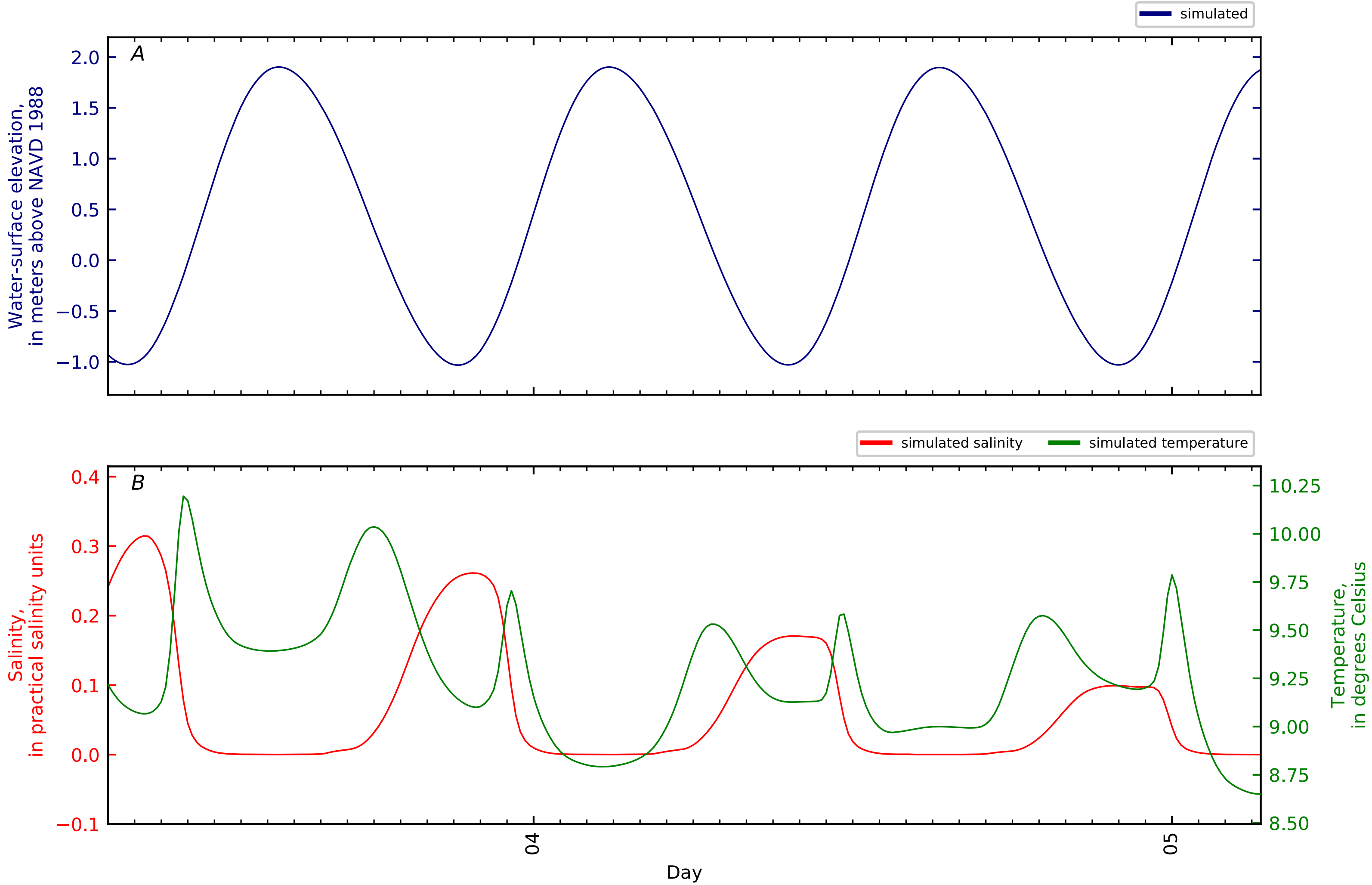

Figure B2-145. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 144, Mendall Marsh KM0.4 GS CTD2-09. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

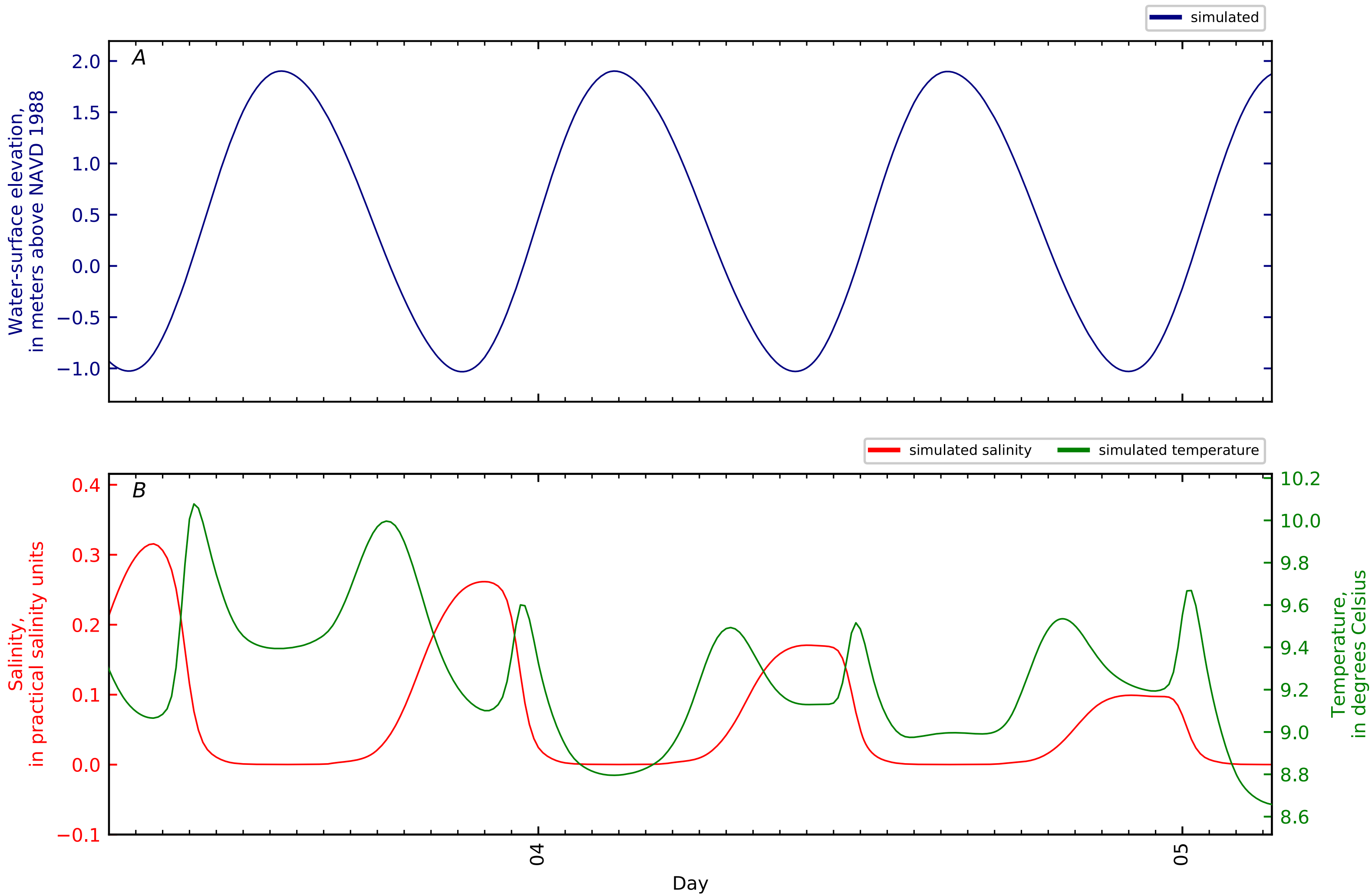

Figure B2-146. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 145, Mendall Marsh KM0.4 GS CTD2-10. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

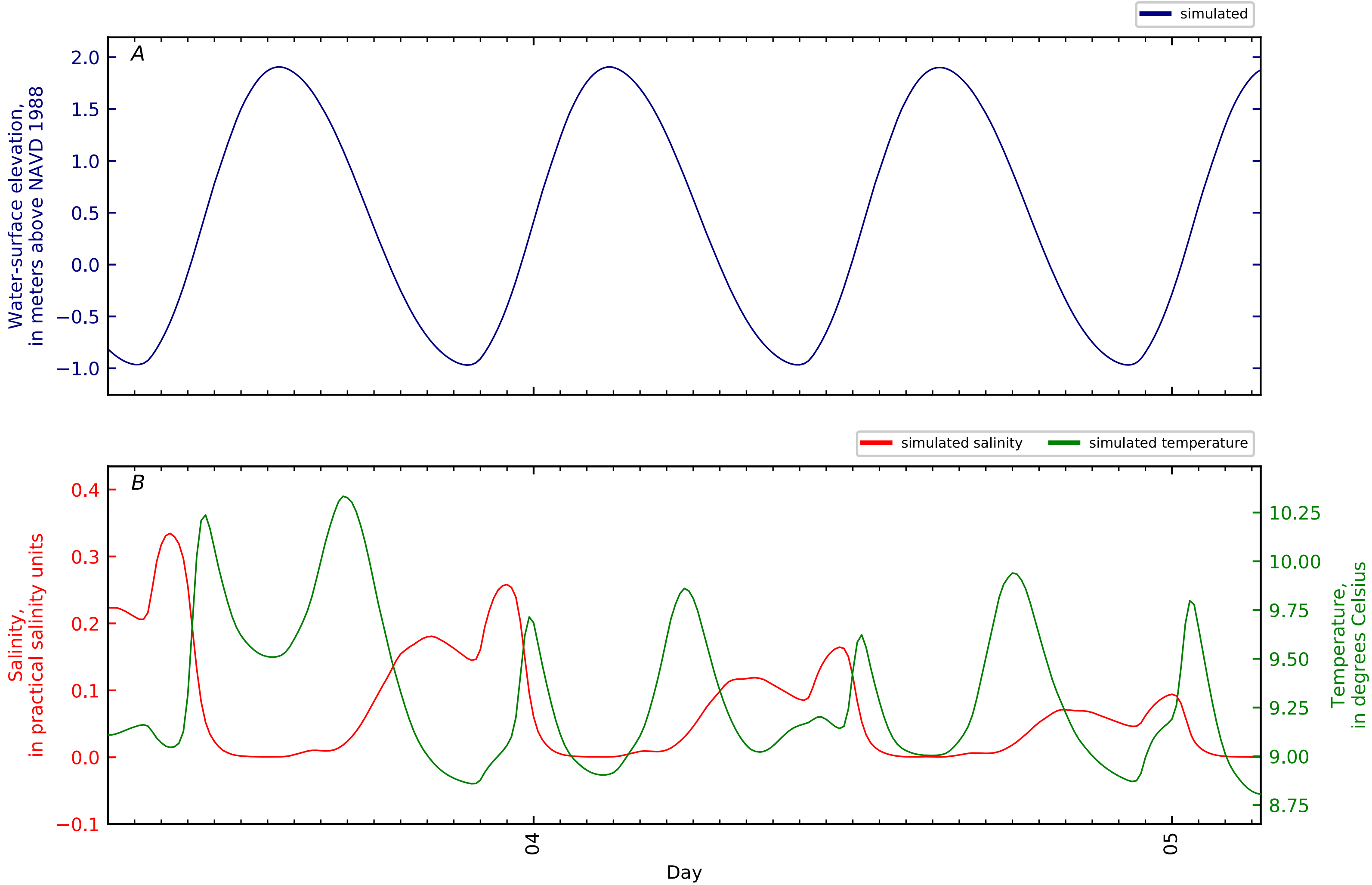

Figure B2-147. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 146, Mendall Marsh KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

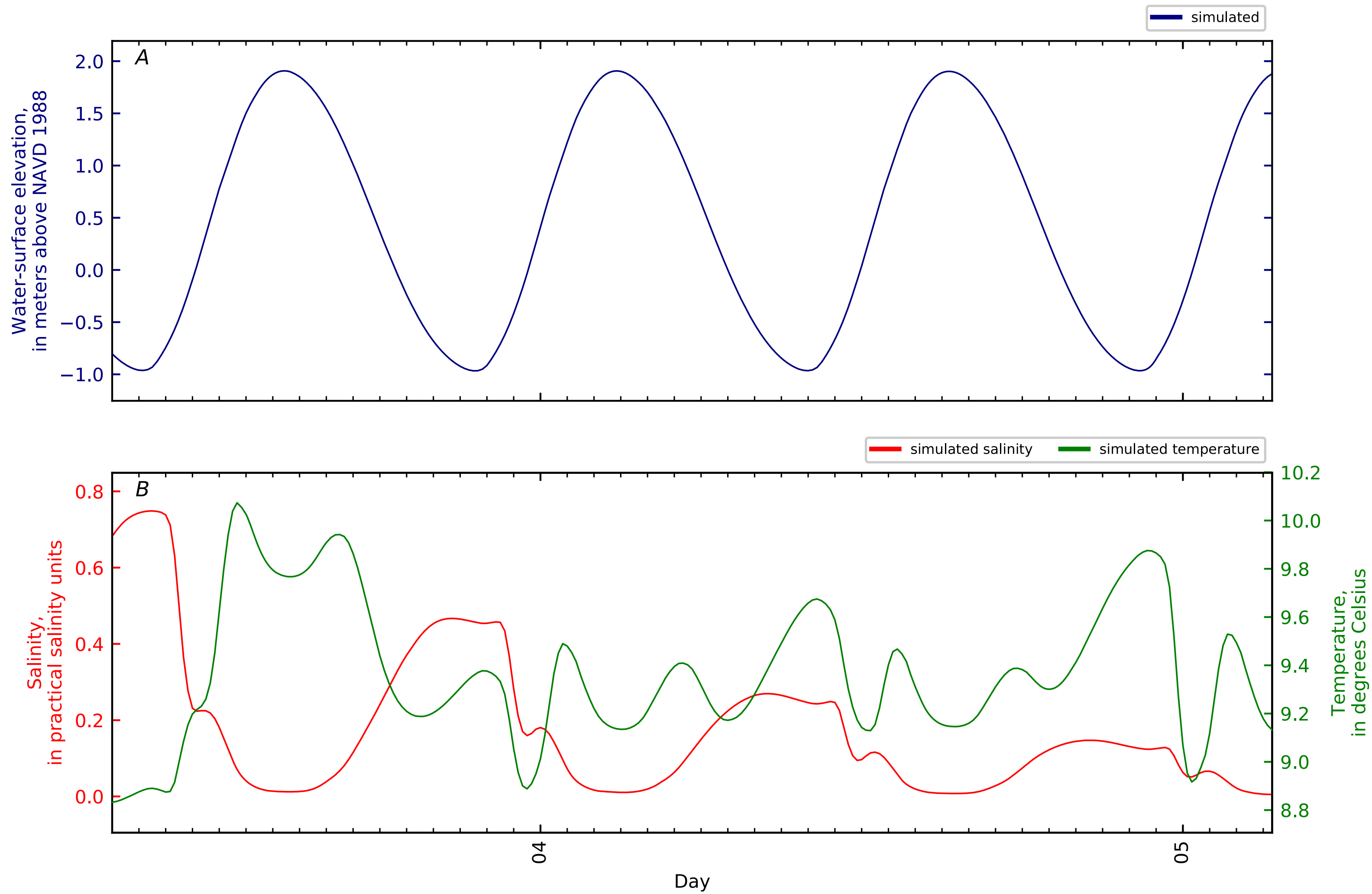

Figure B2-148. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 147, Mendall Marsh KM1.5 WHOI3 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

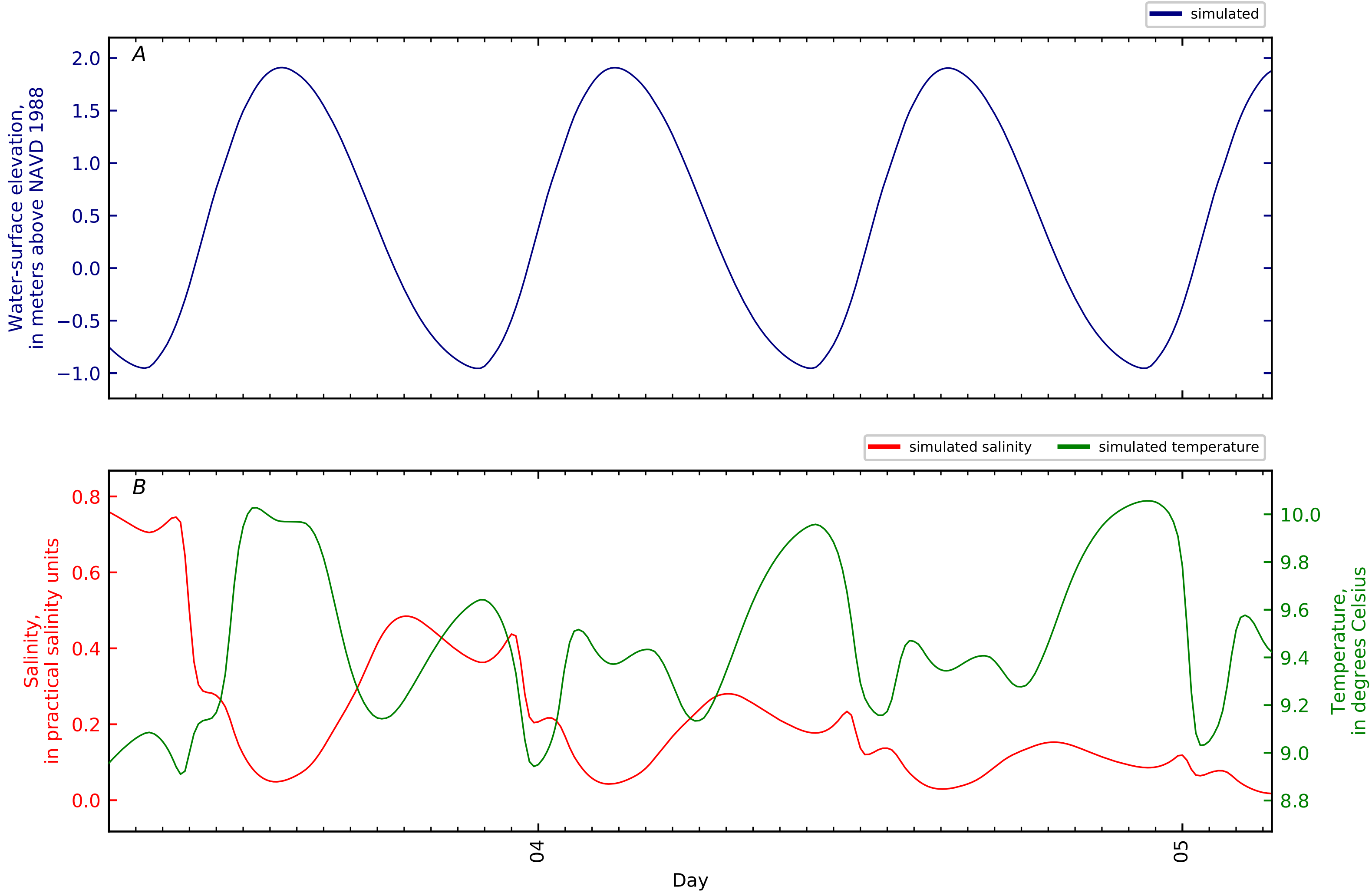

Figure B2-149. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 148, Mendall Marsh KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

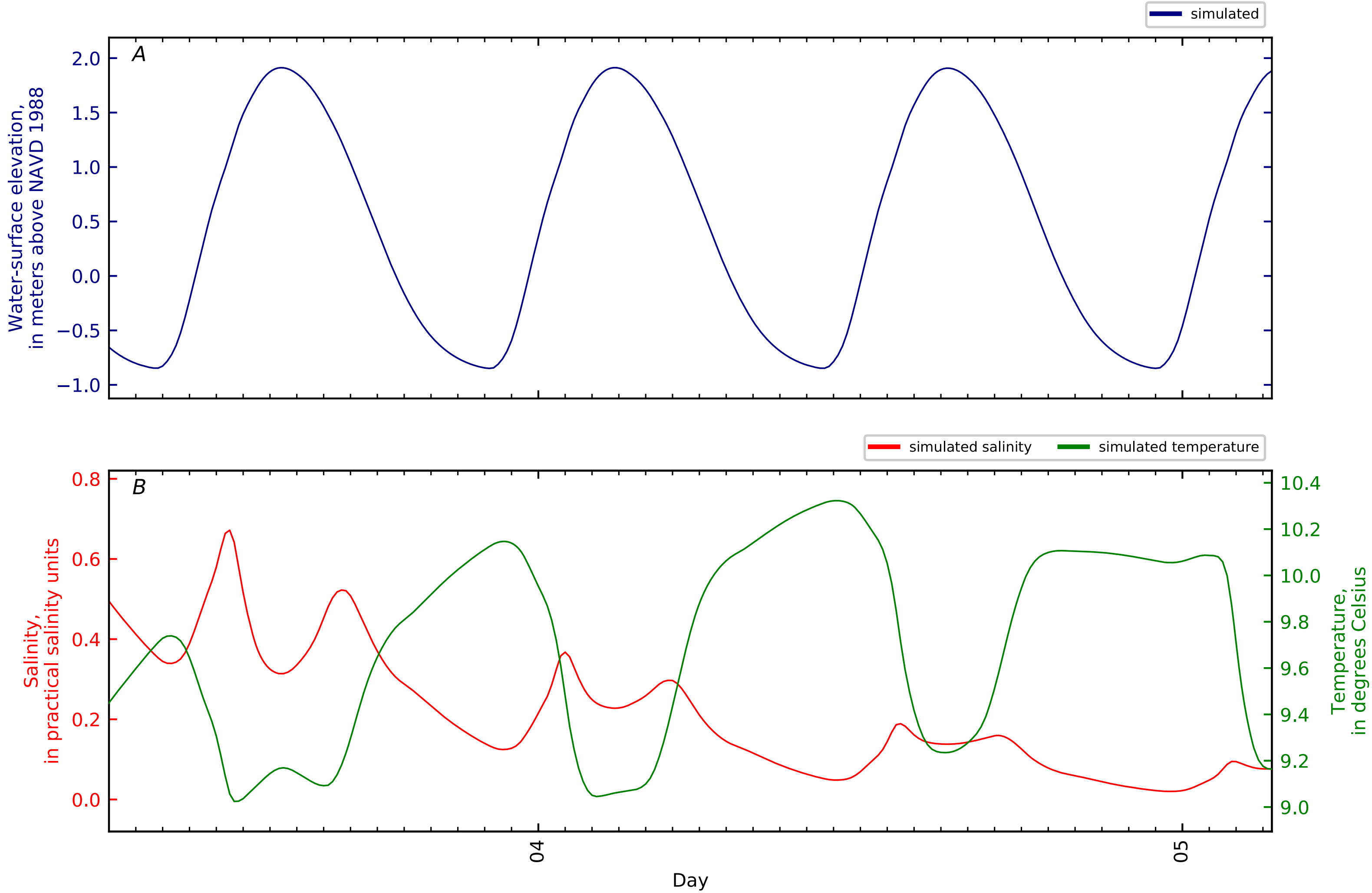

Figure B2-150. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 149, Mendall Marsh KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

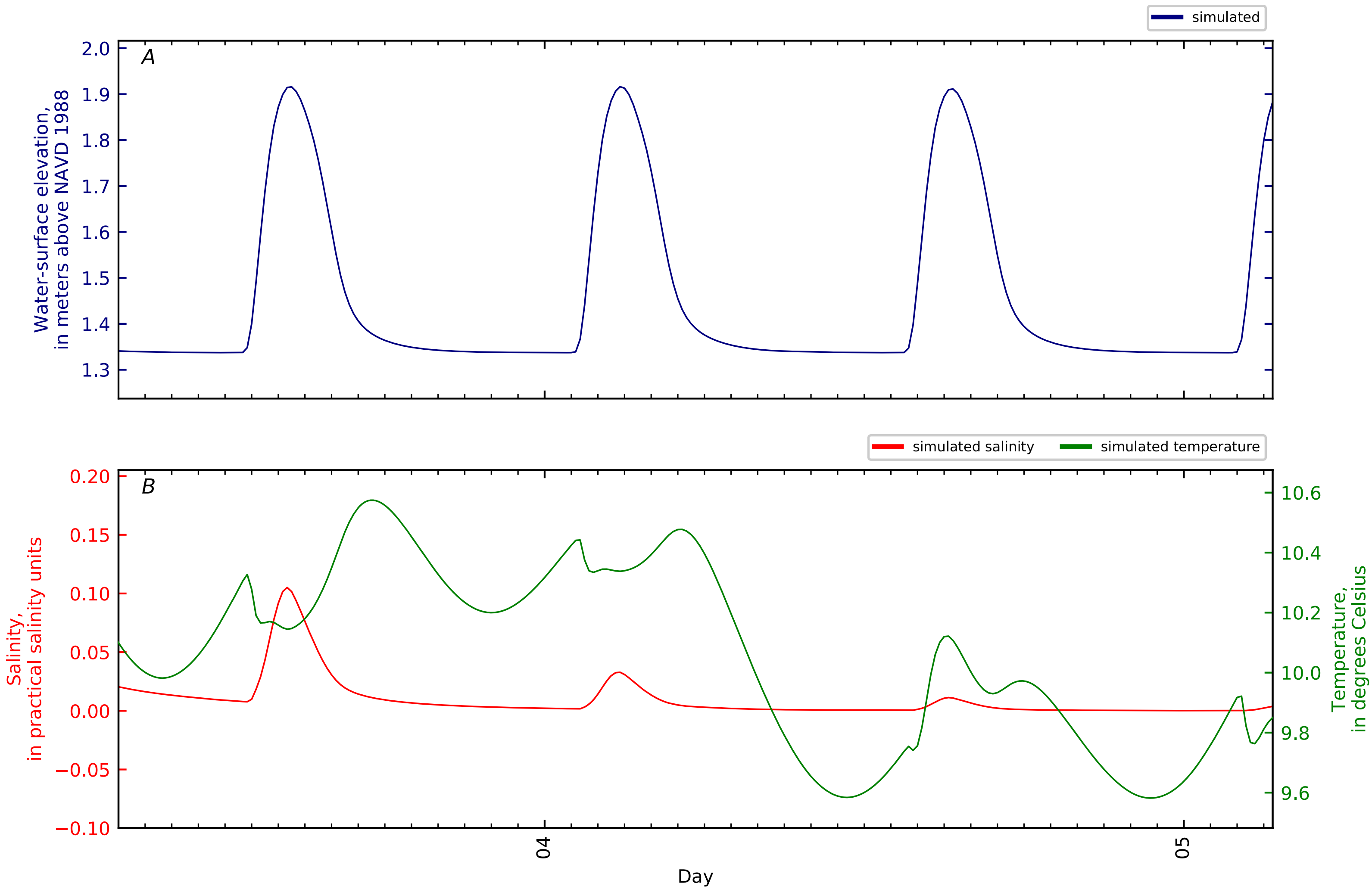

Figure B2-151. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 150, Mendall Marsh KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

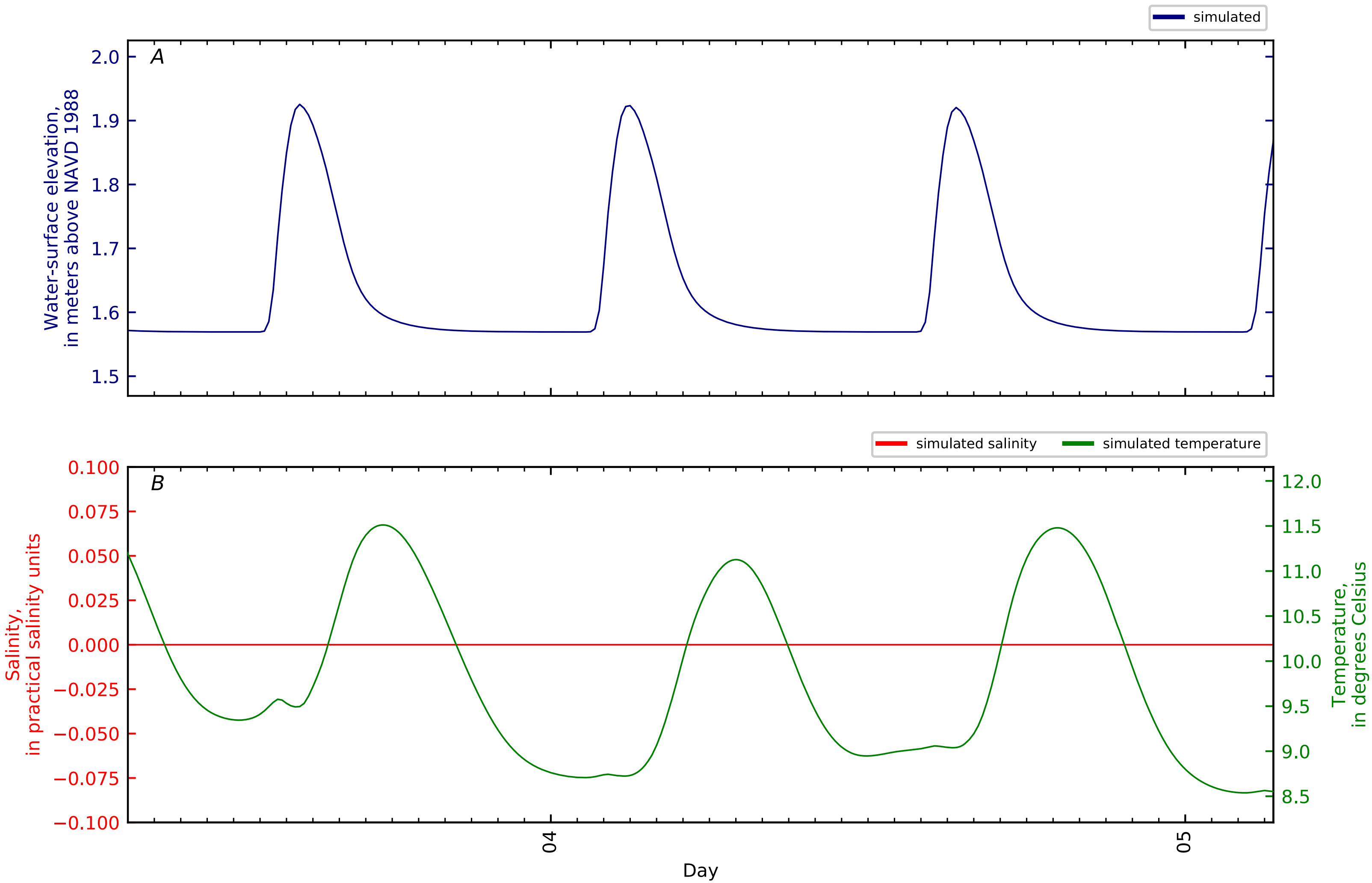

Figure B2-152. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 151, Mendall Marsh KM5. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

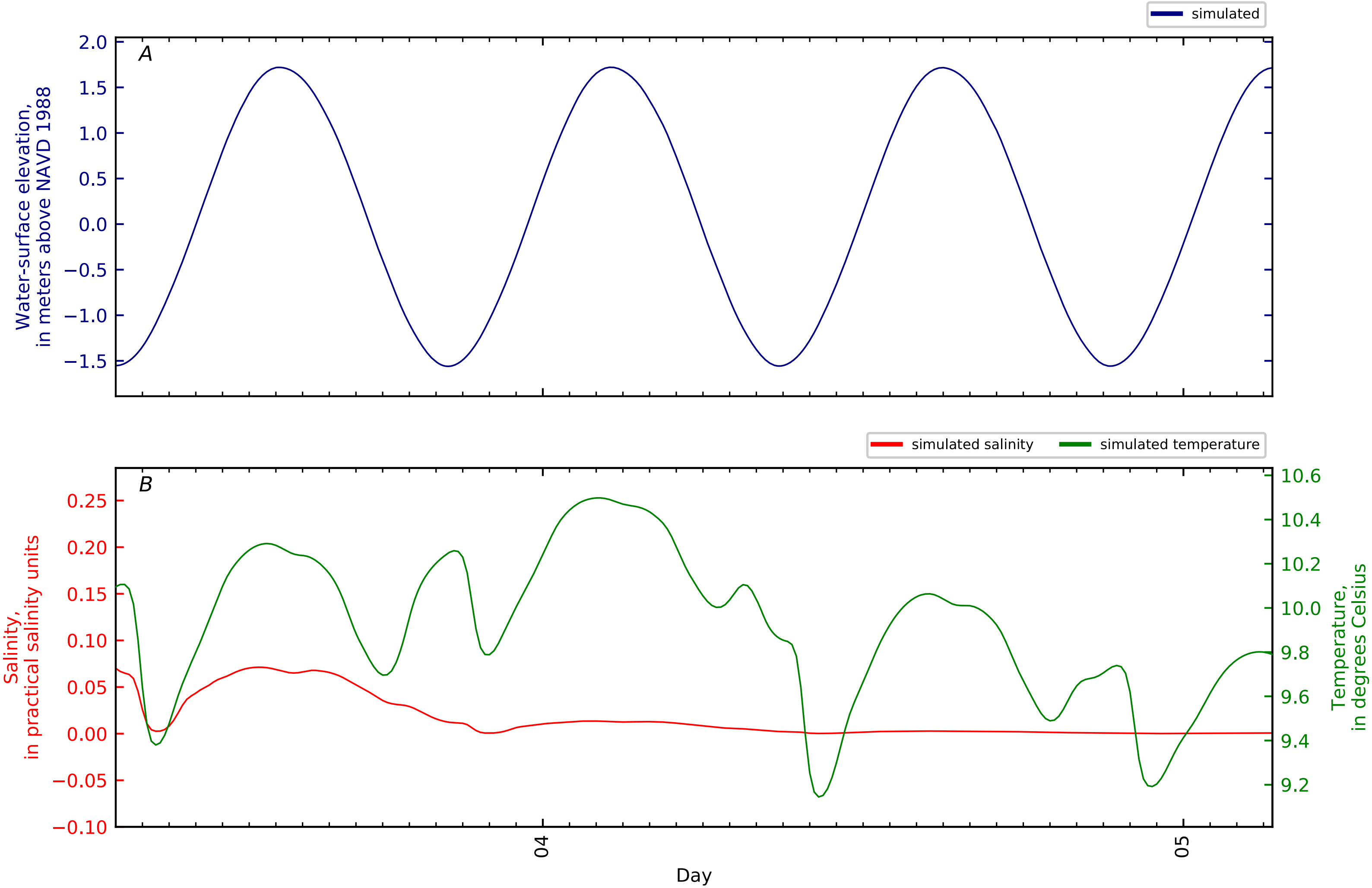

Figure B2-153. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 152, Orland Riv KM0. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

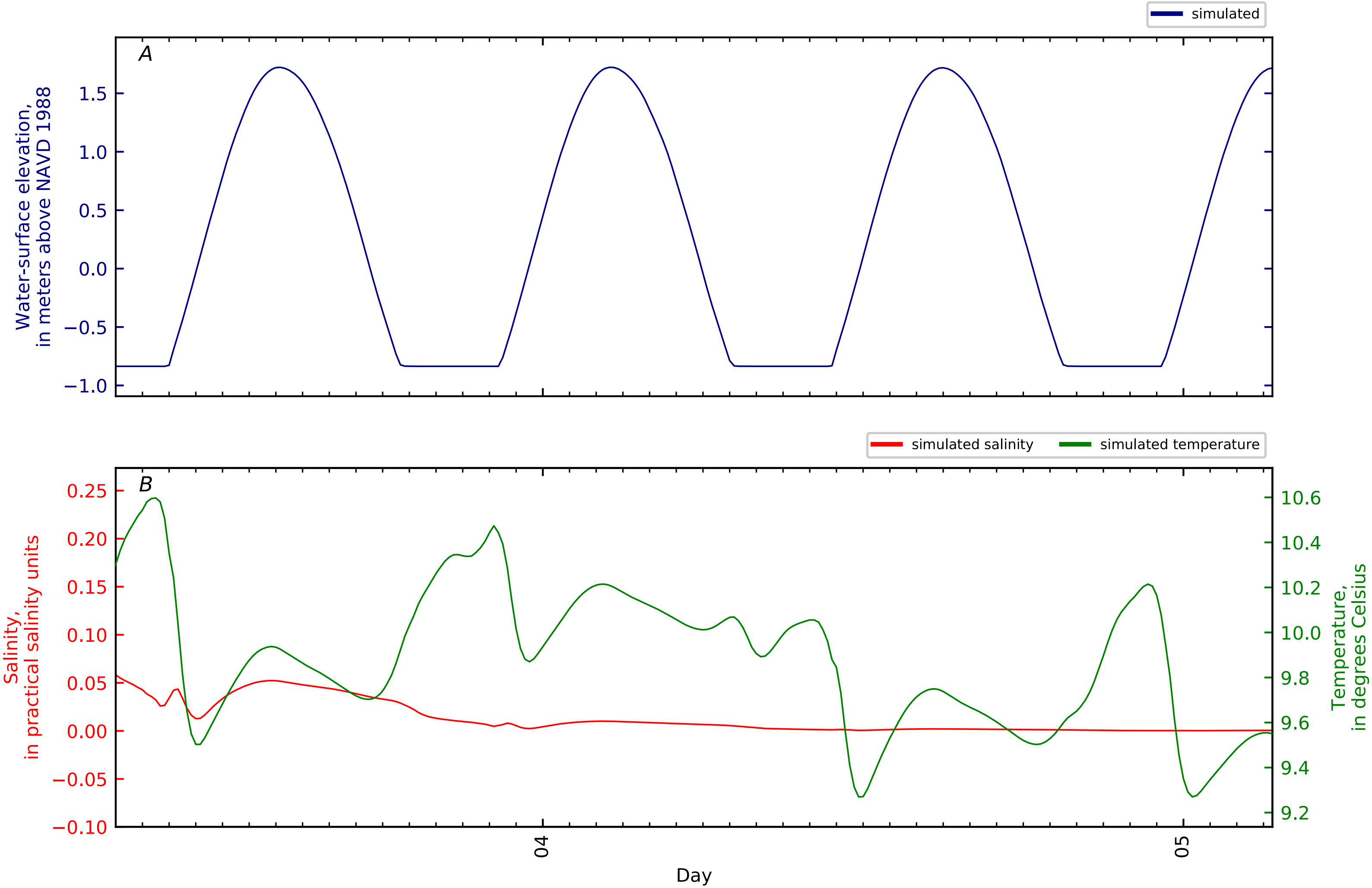

Figure B2-154. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 153, Orland Riv KM0.9 ERDC5 OR-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

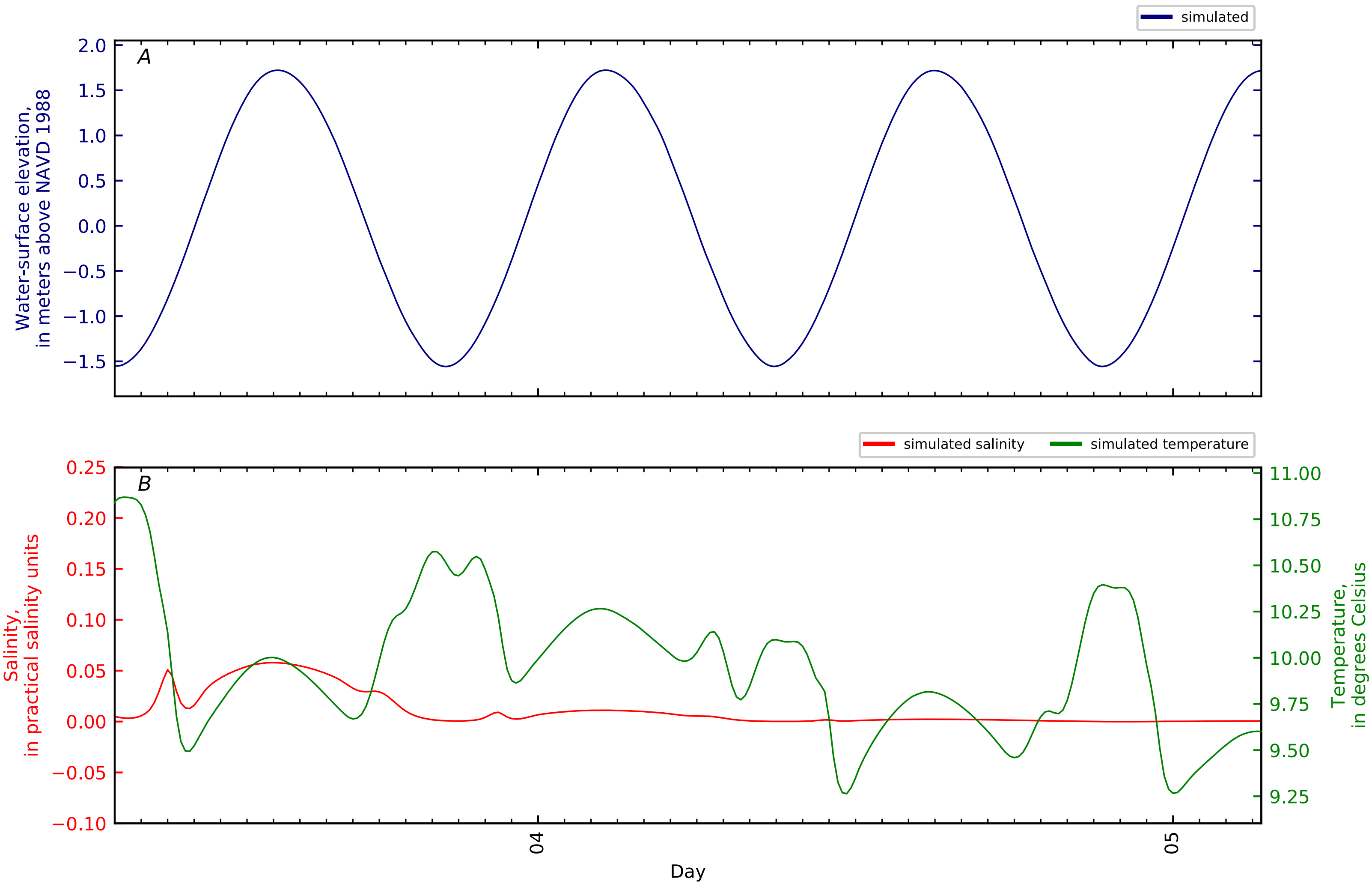

Figure B2-155. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 154, Orland Riv KM0.9 ERDC6 OR-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

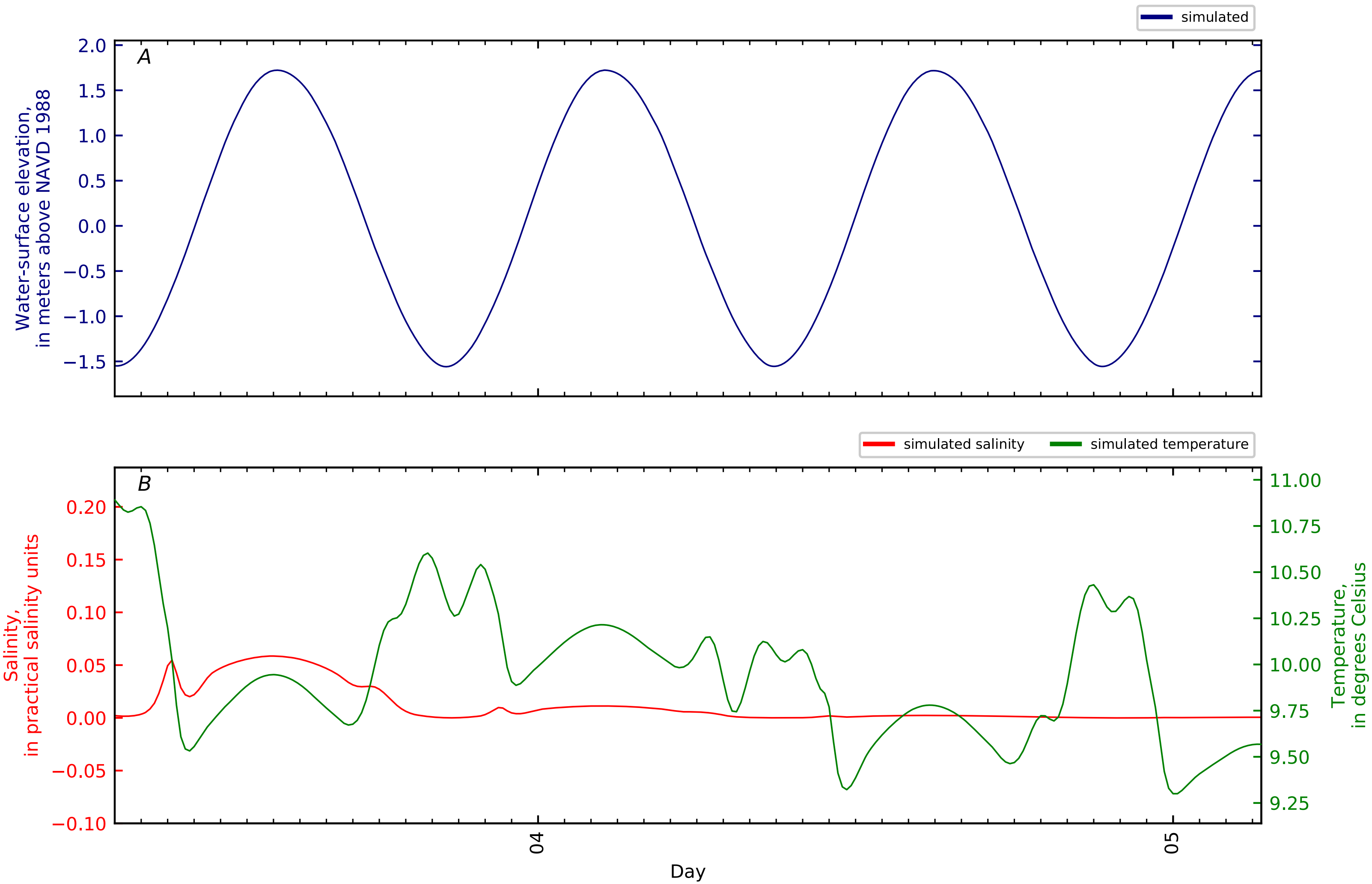

Figure B2-156. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 155, Orland Riv KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

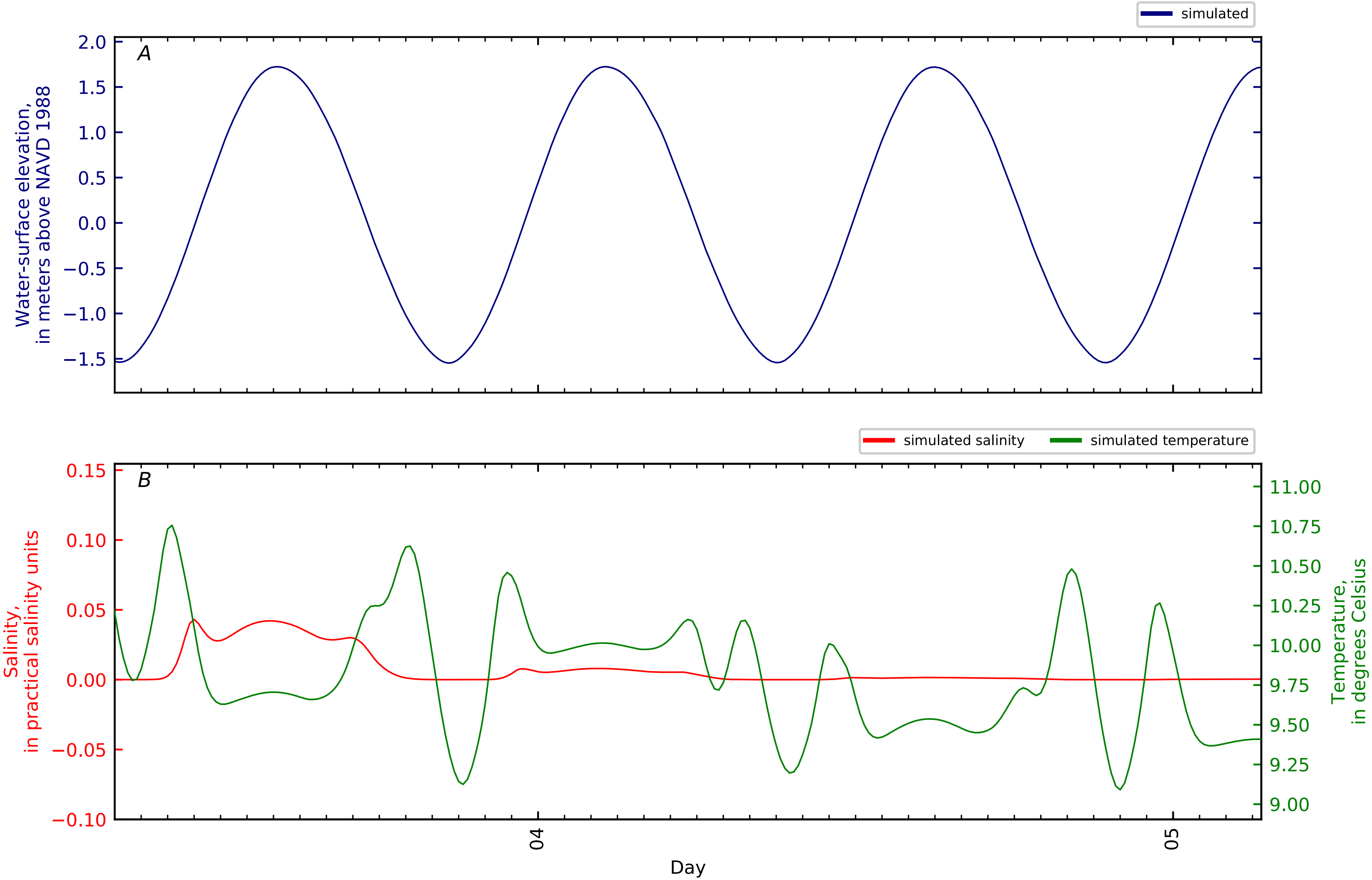

Figure B2-157. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 156, Orland Riv KM1.6 WHOI4 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

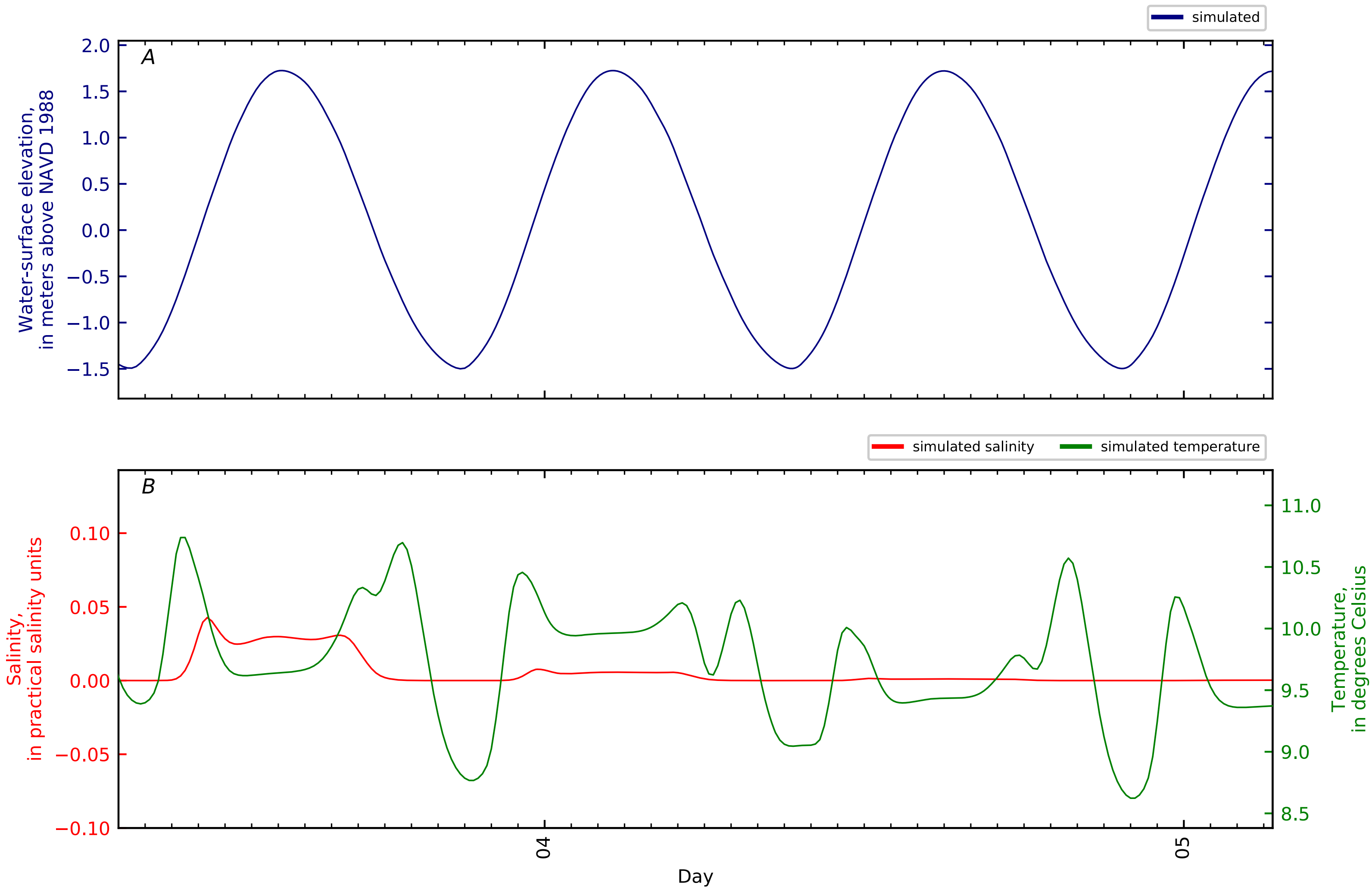

Figure B2-158. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 157, Orland Riv KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

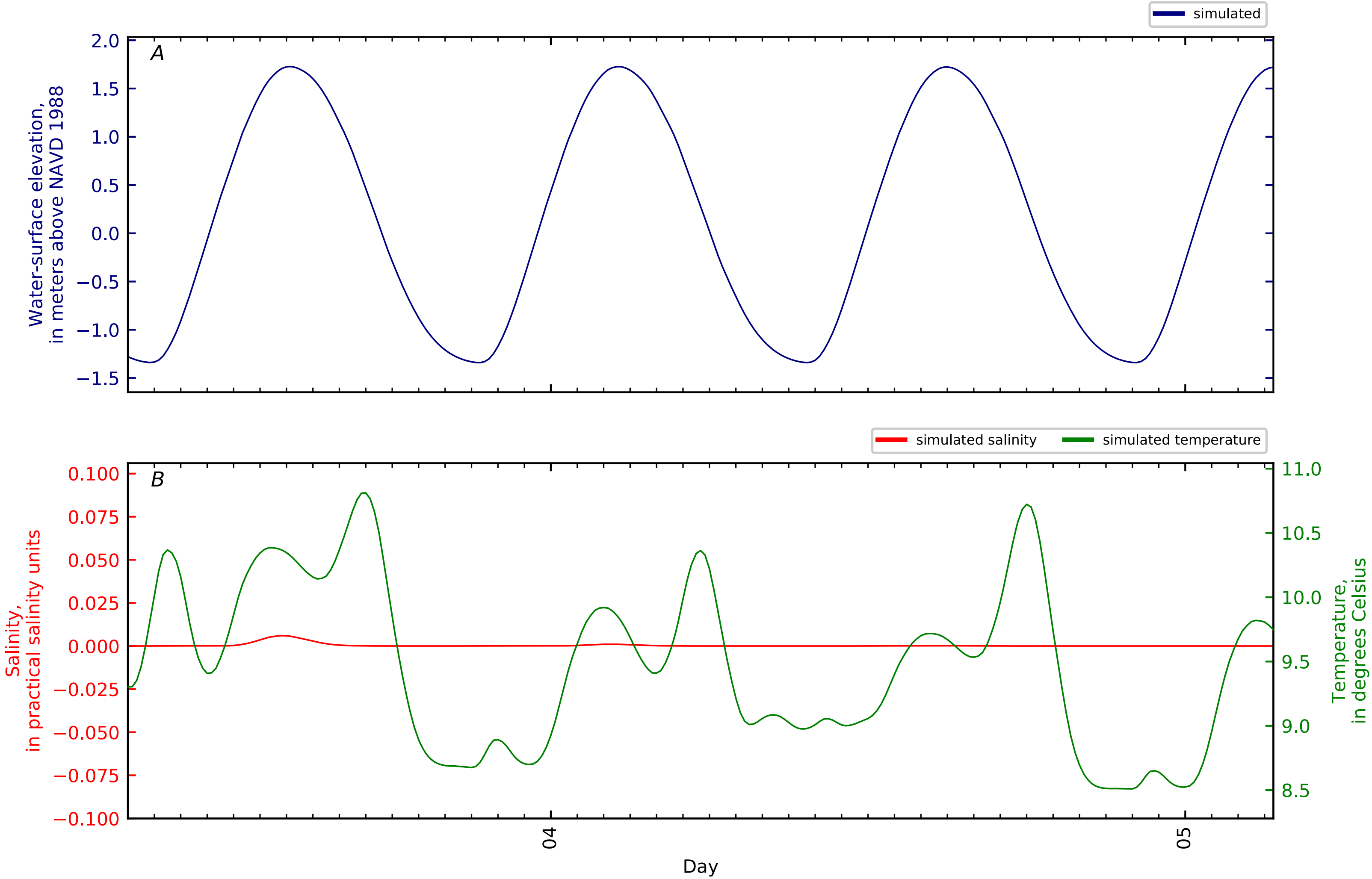

Figure B2-159. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 158, Orland Riv KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

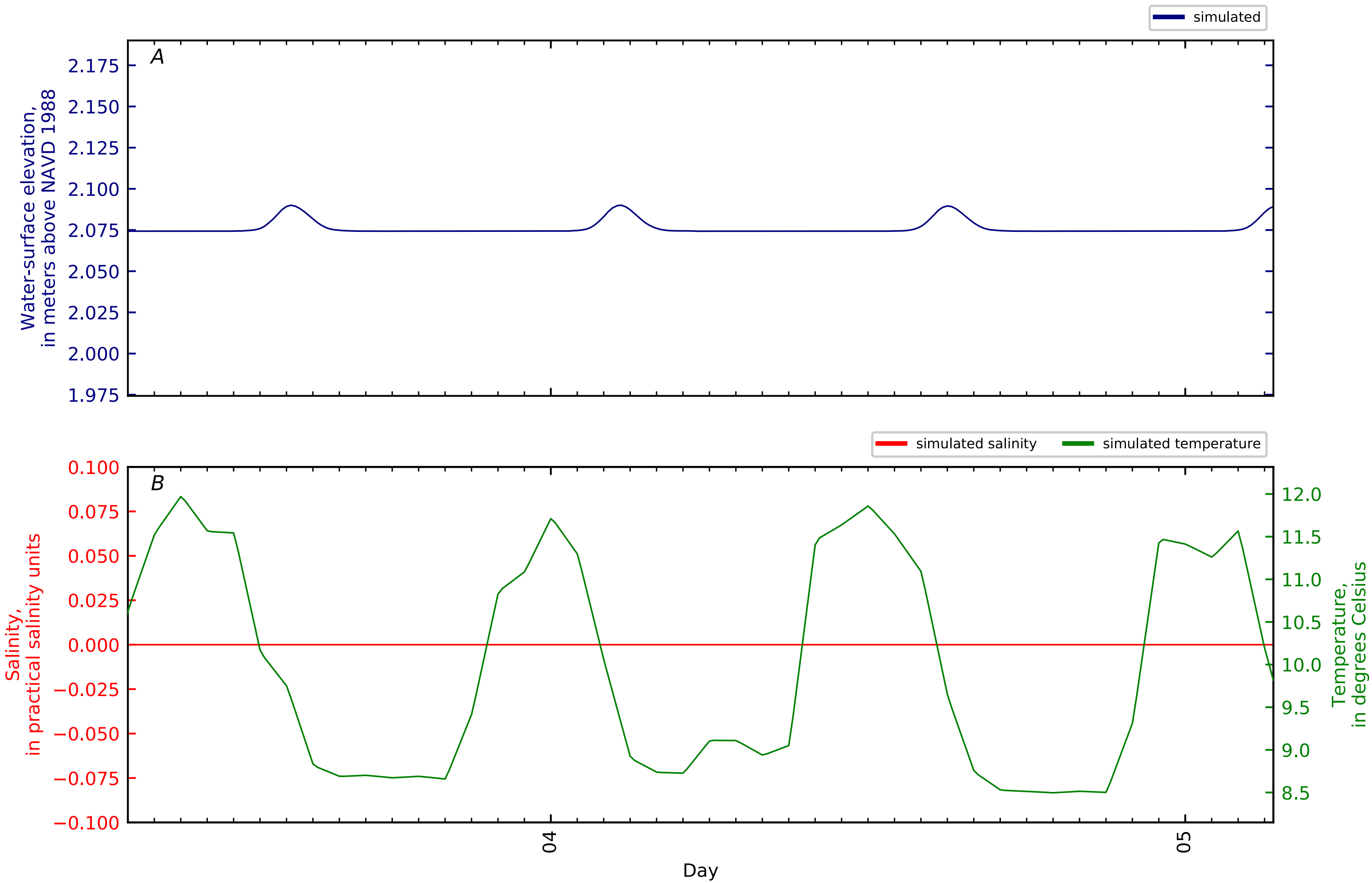

Figure B2-160. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 159, Orland Riv KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

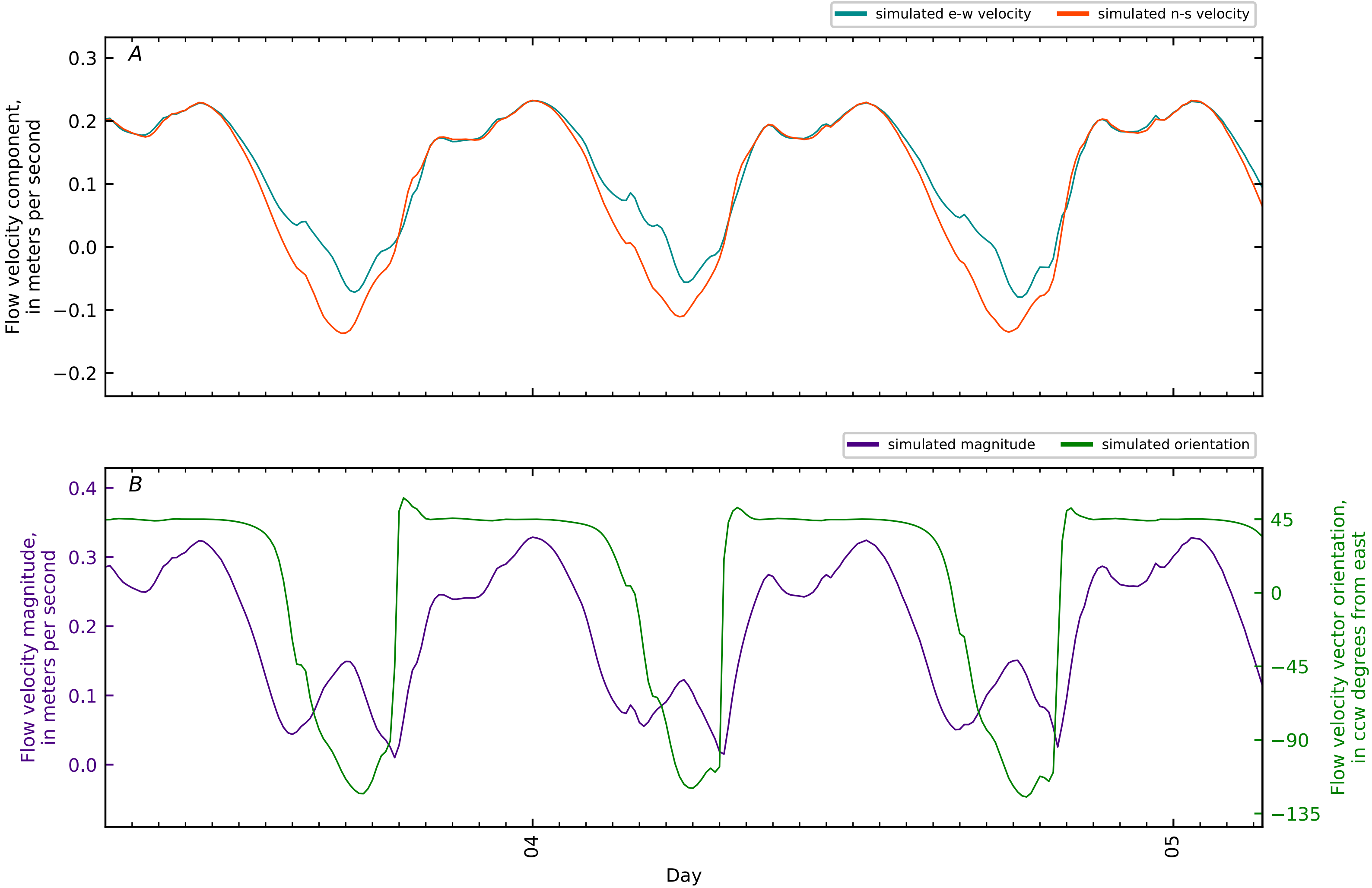

Figure B2-161. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 0, Penob Riv -KM5 nr Cape Jellison boundary. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

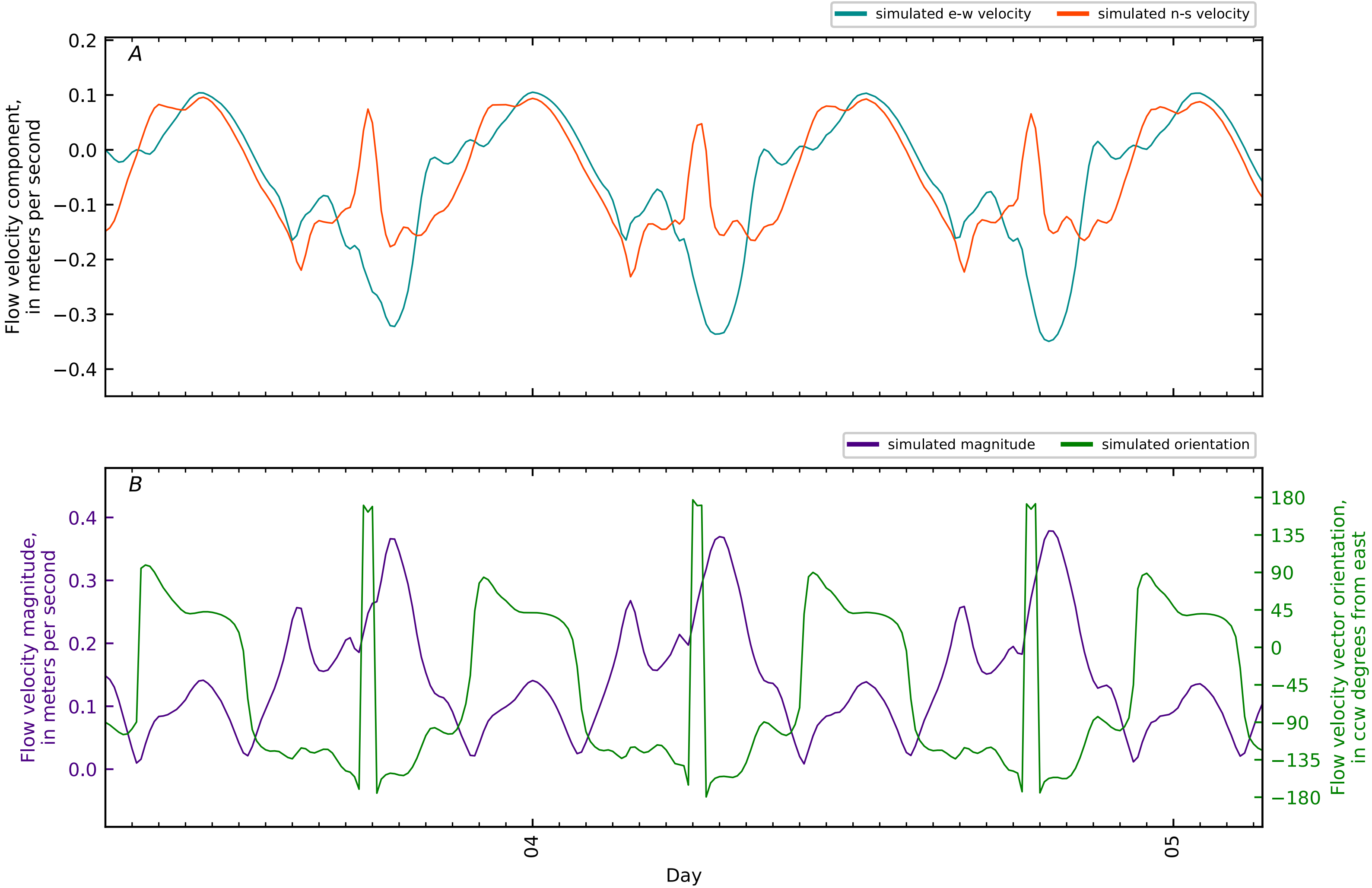

Figure B2-162. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 1, Penob Riv -KM4 nr Cape Jellison XS. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

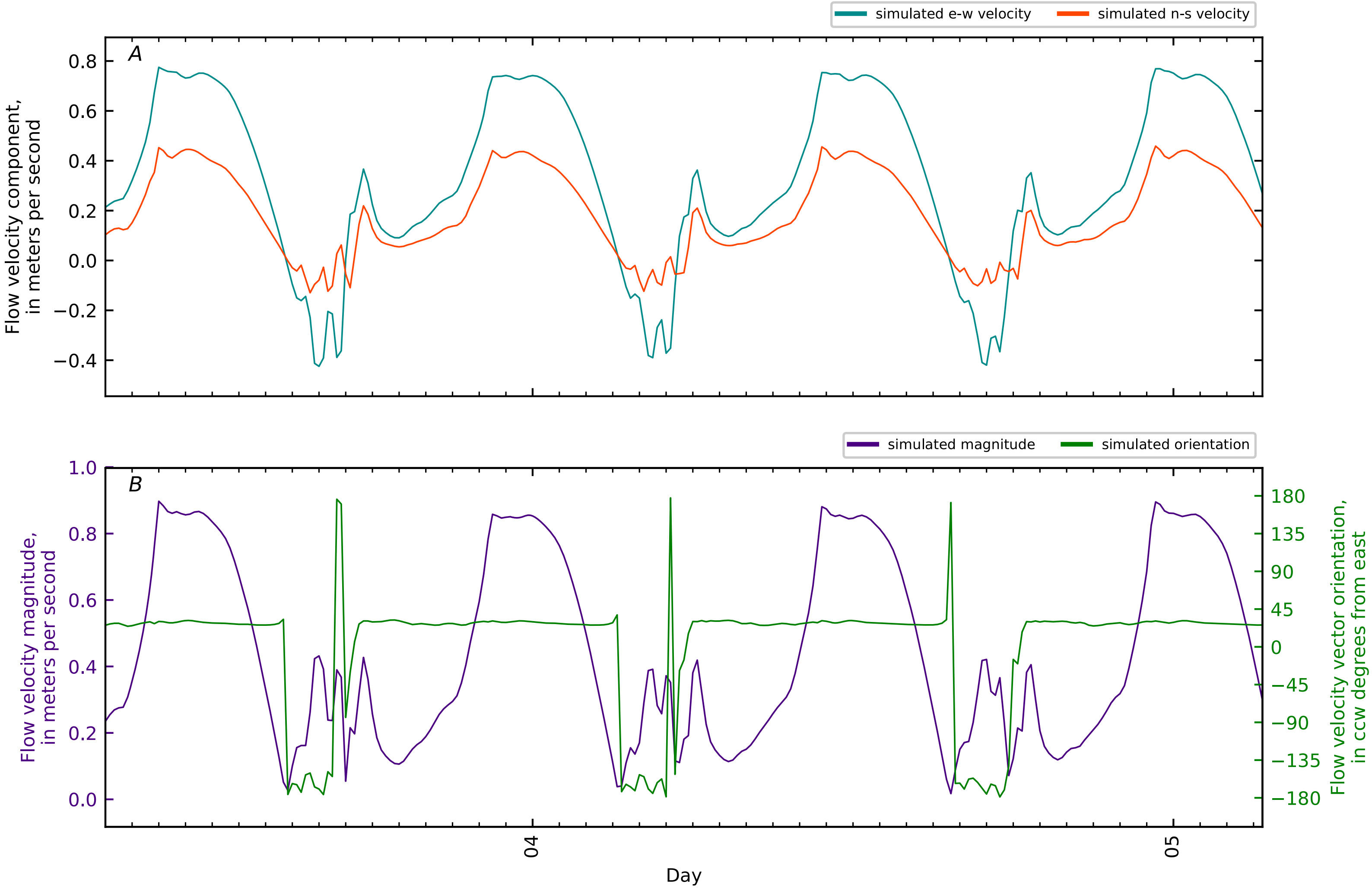

Figure B2-163. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 2, Penob Riv -KM1.5 d/s Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

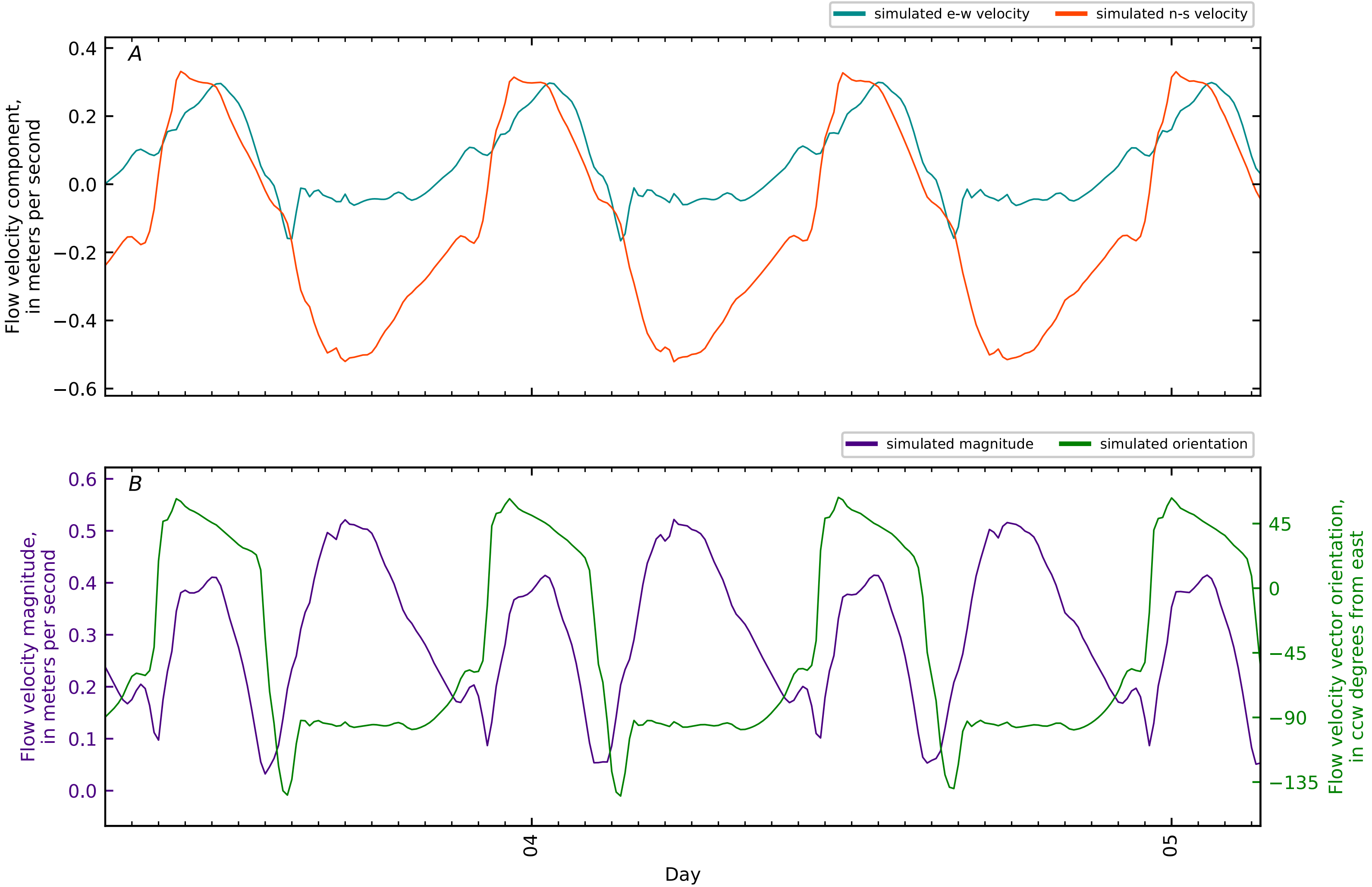

Figure B2-164. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 3, Penob Riv KM0 Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

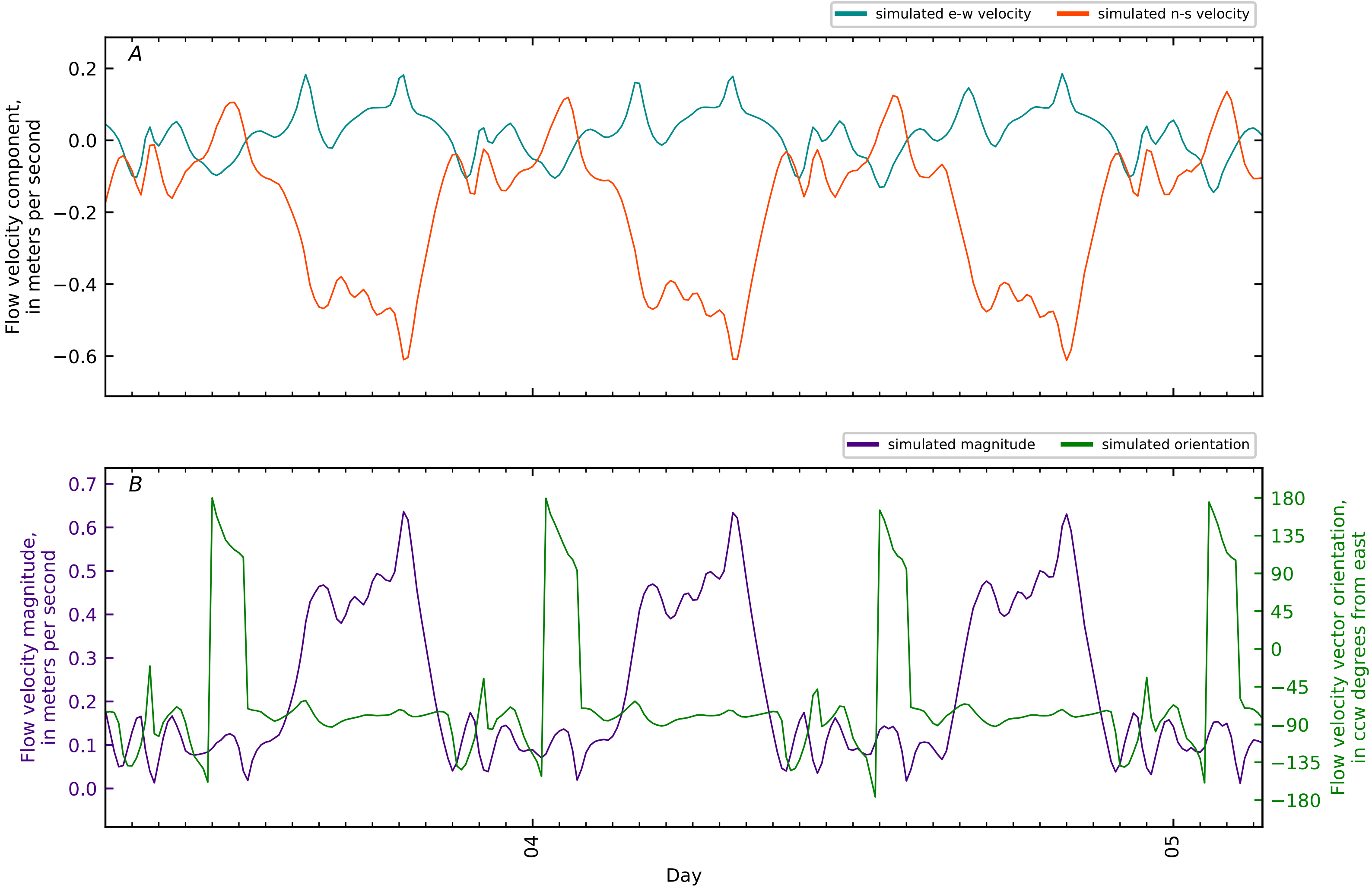

Figure B2-165. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 4, Penob Riv KM0 GS CTD5-01. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

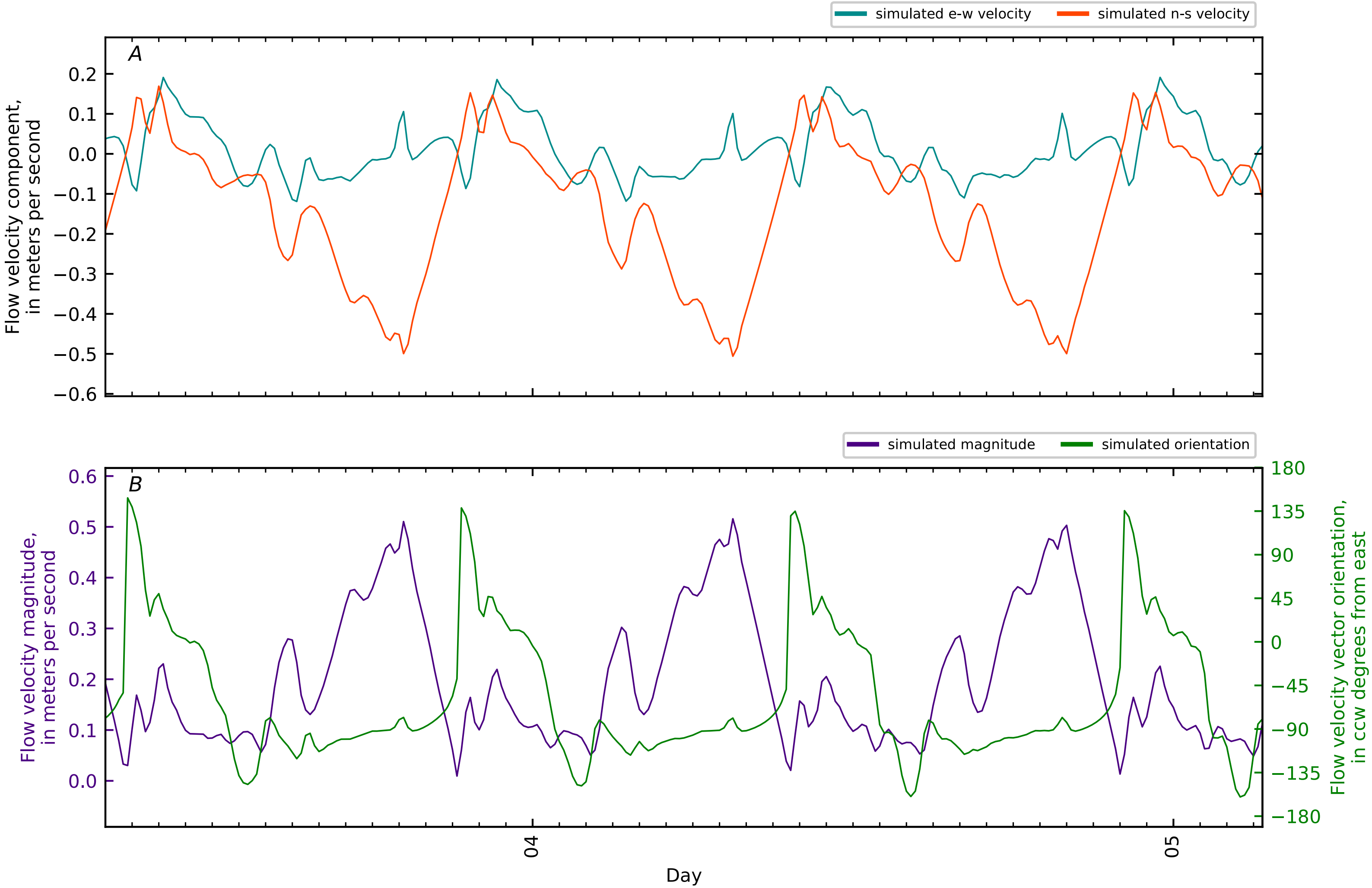

Figure B2-166. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 5, Penob Riv KM0 GS CTD5-02. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

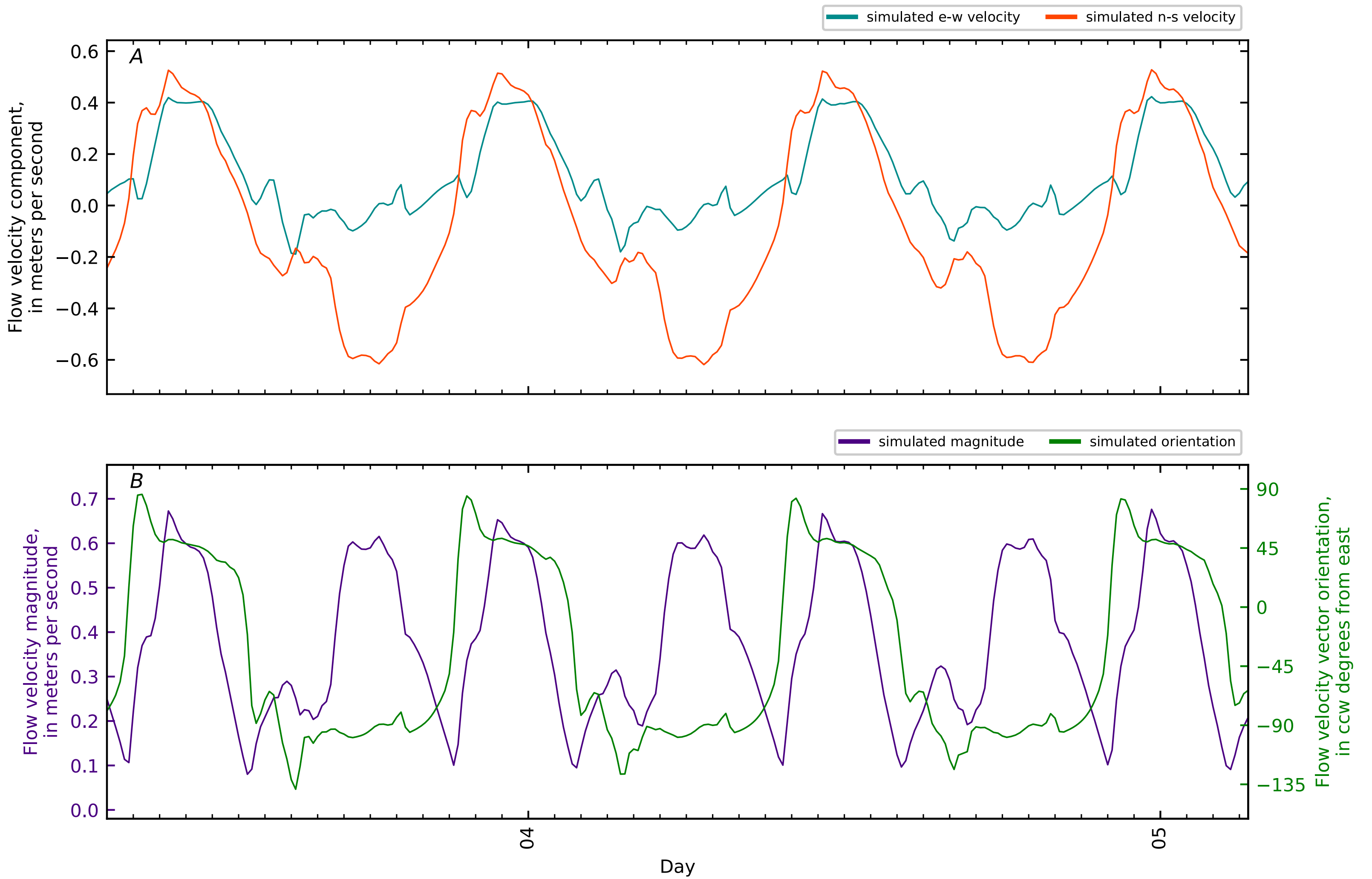

Figure B2-167. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 6, Penob Riv KM0 GS CTD5-03. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

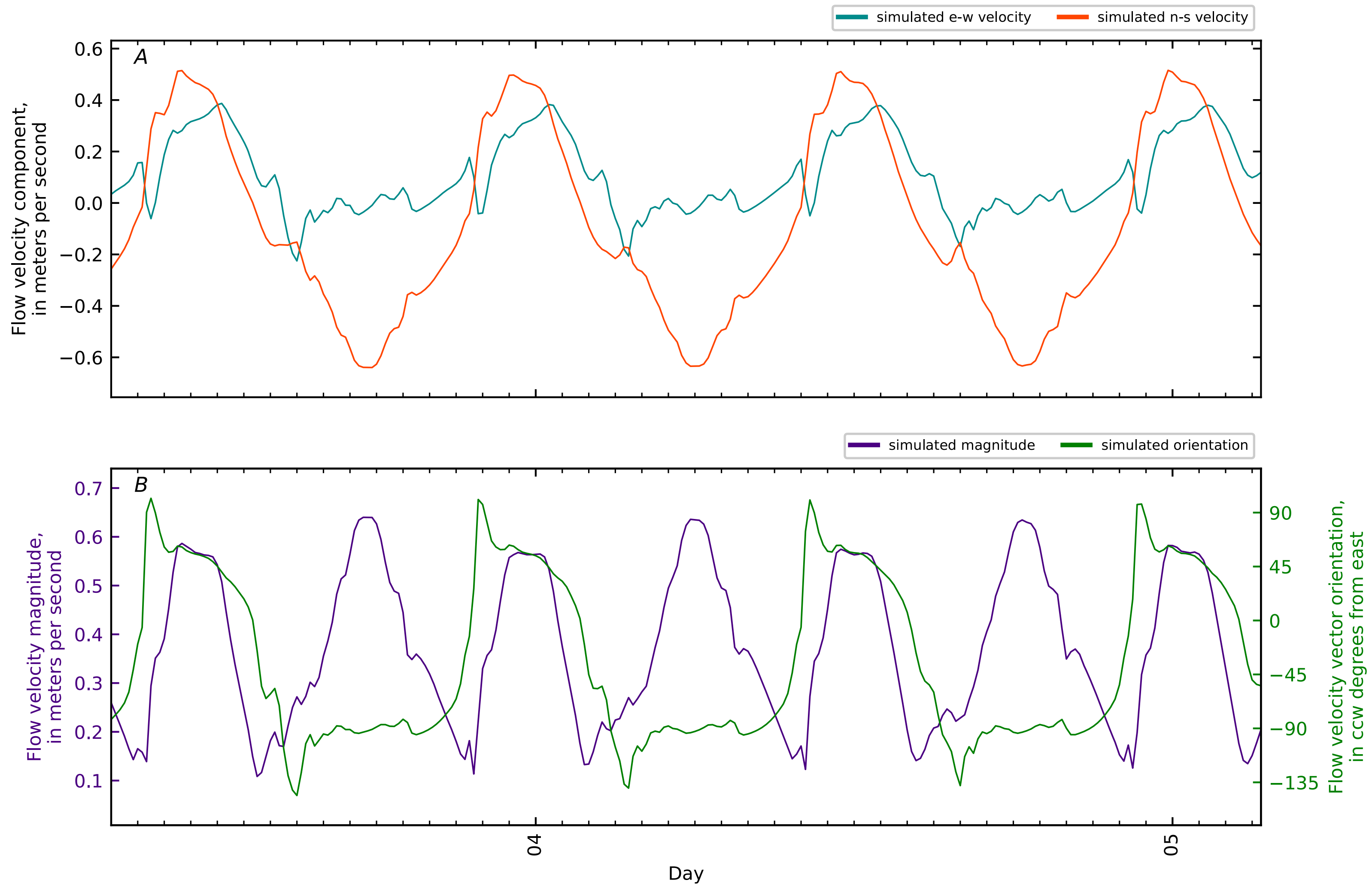

Figure B2-168. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 7, Penob Riv KM0 GS CTD5-04. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

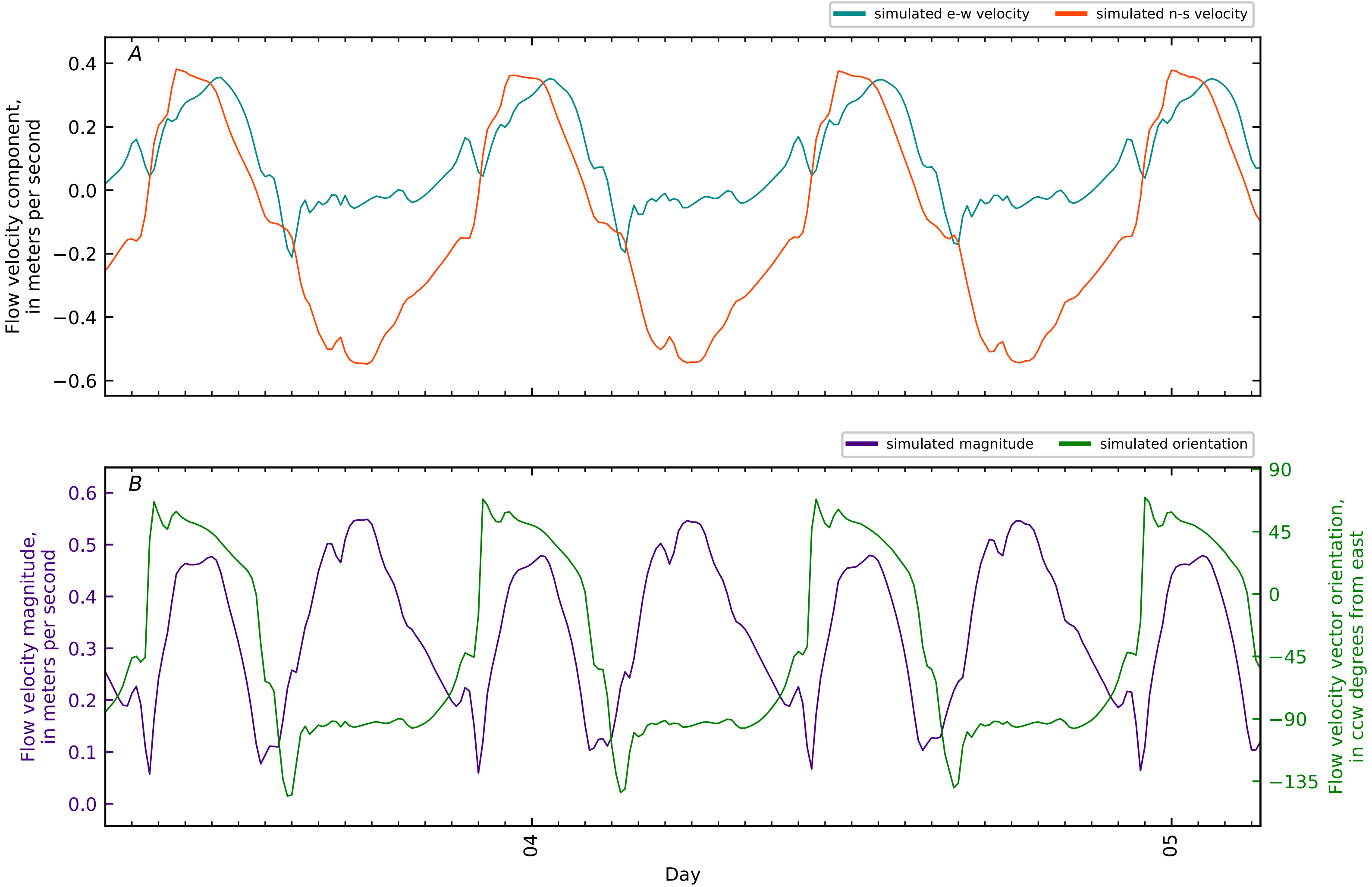

Figure B2-169. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 8, Penob Riv KM0 GS CTD5-05. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

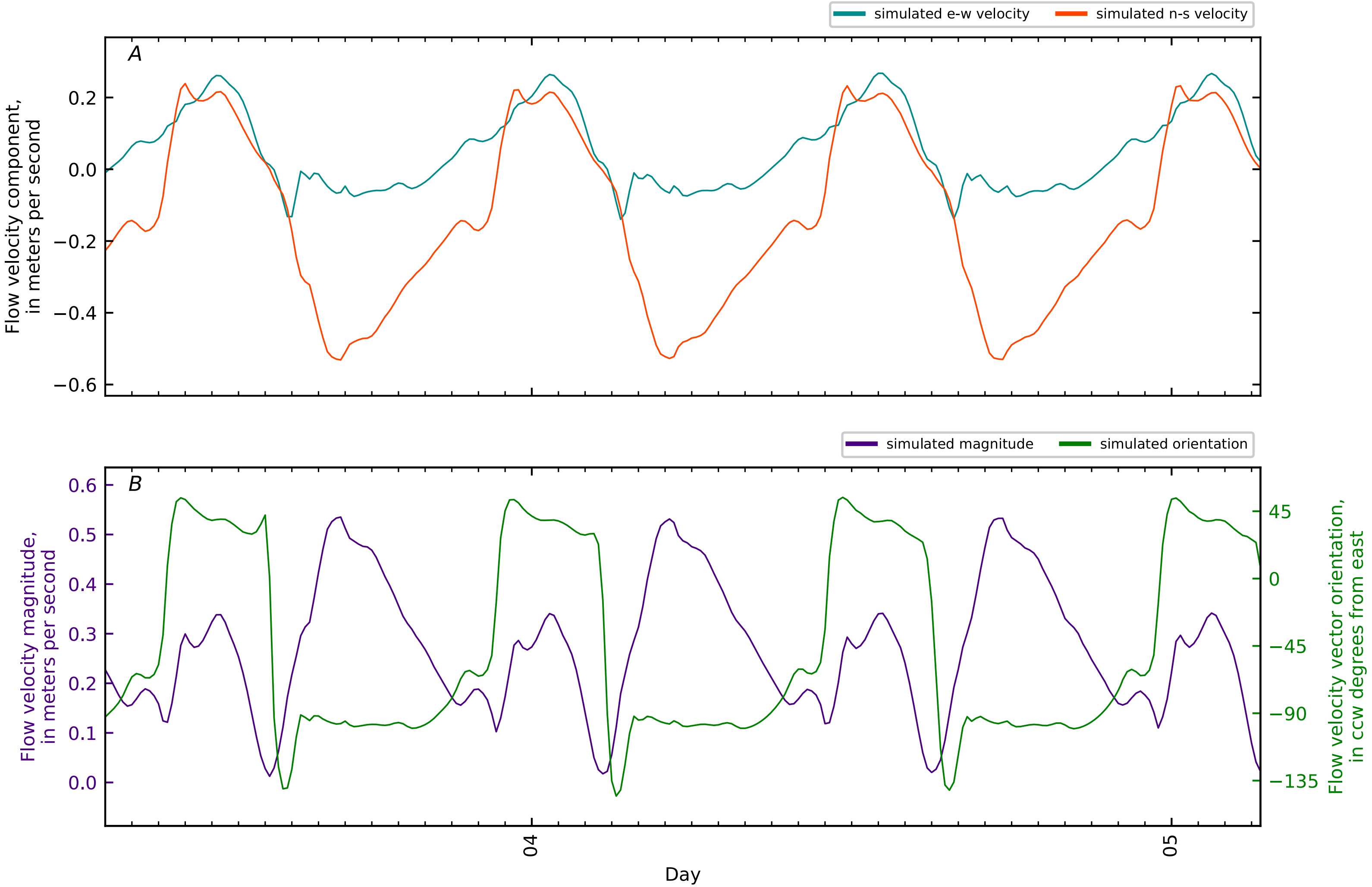

Figure B2-170. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 9, Penob Riv KM0 GS CTD5-06. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

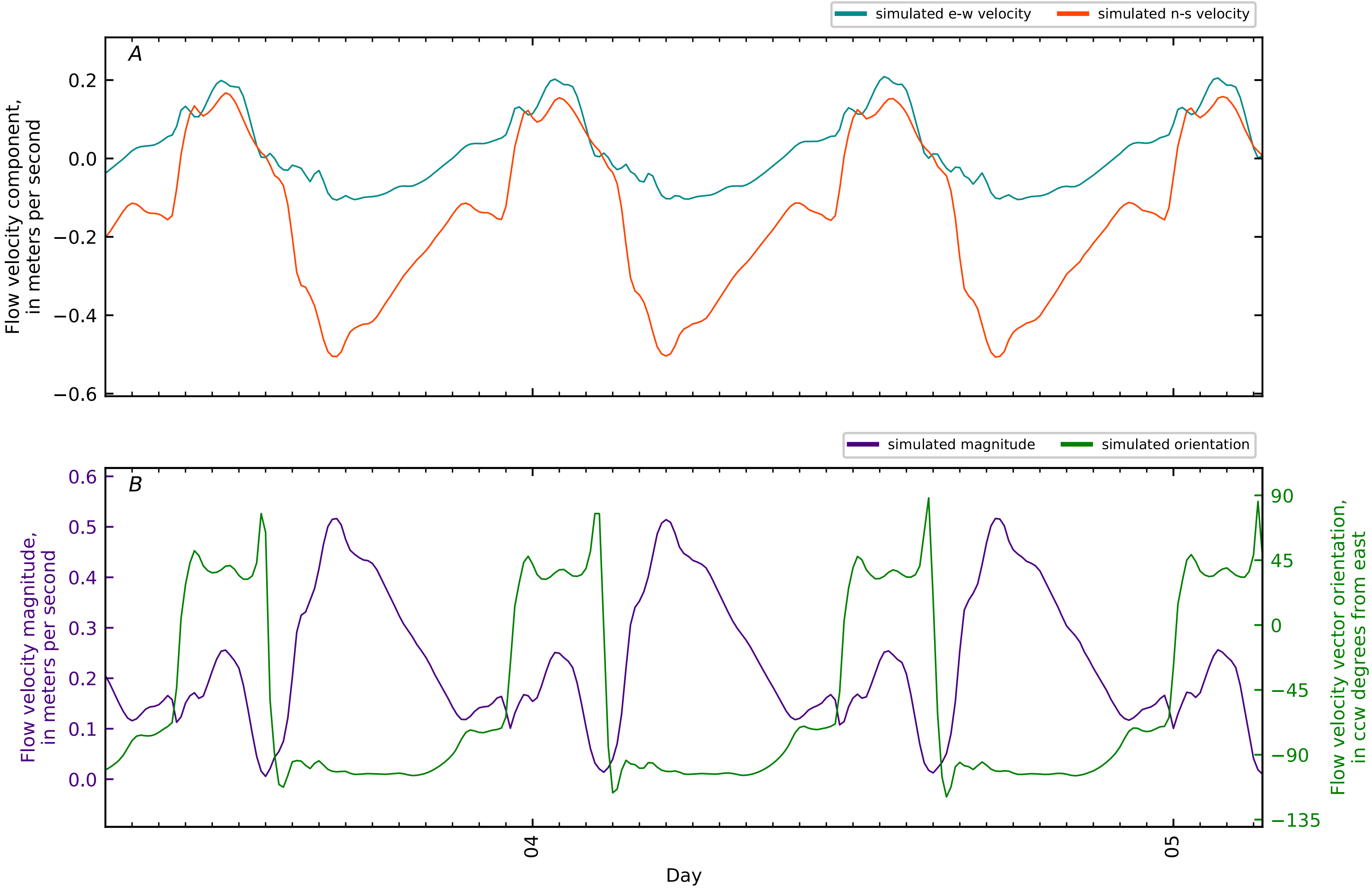

Figure B2-171. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 10, Penob Riv KM0 GS CTD5-07. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

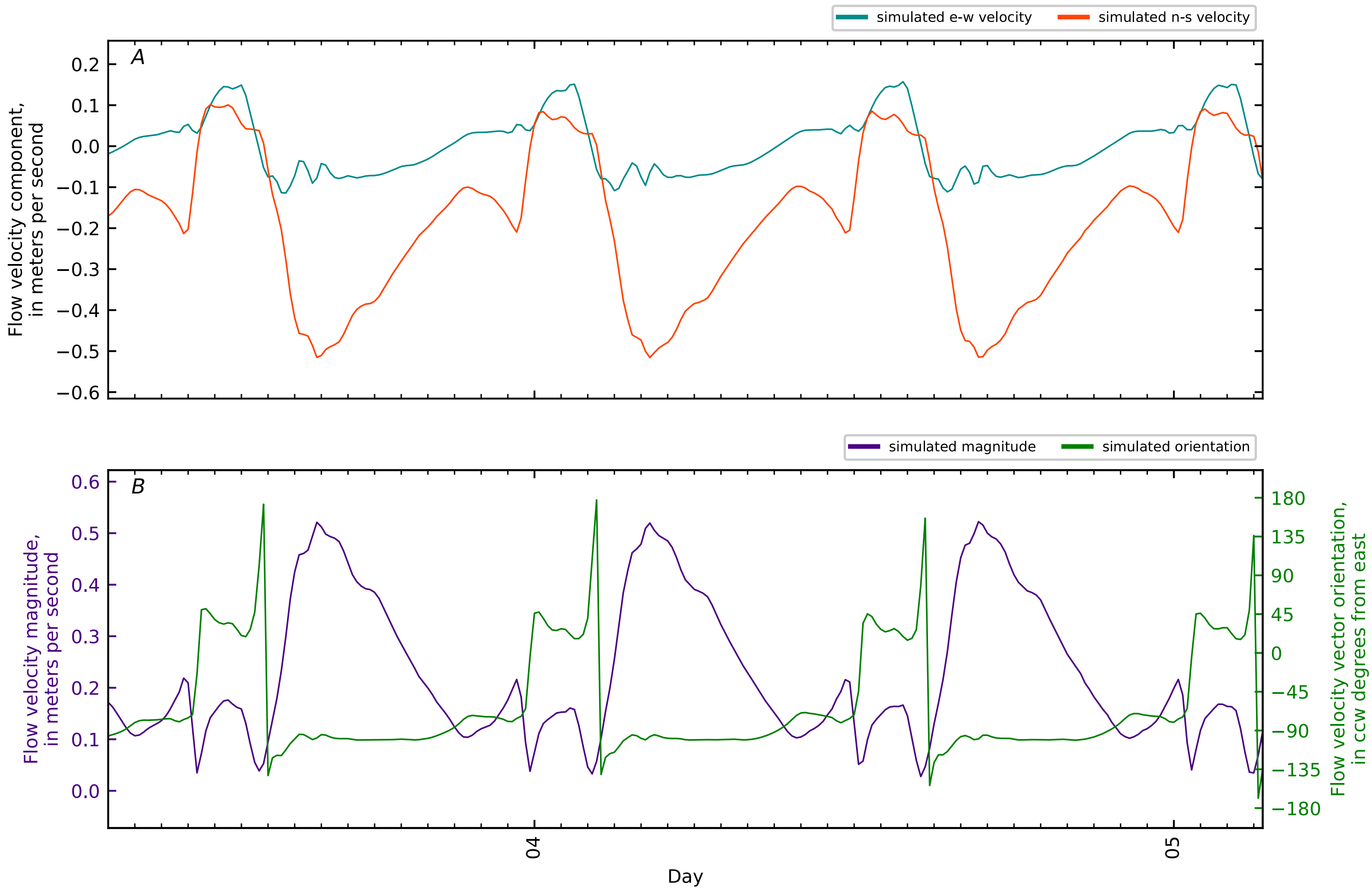

Figure B2-172. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 11, Penob Riv KM0 GS CTD5-08. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

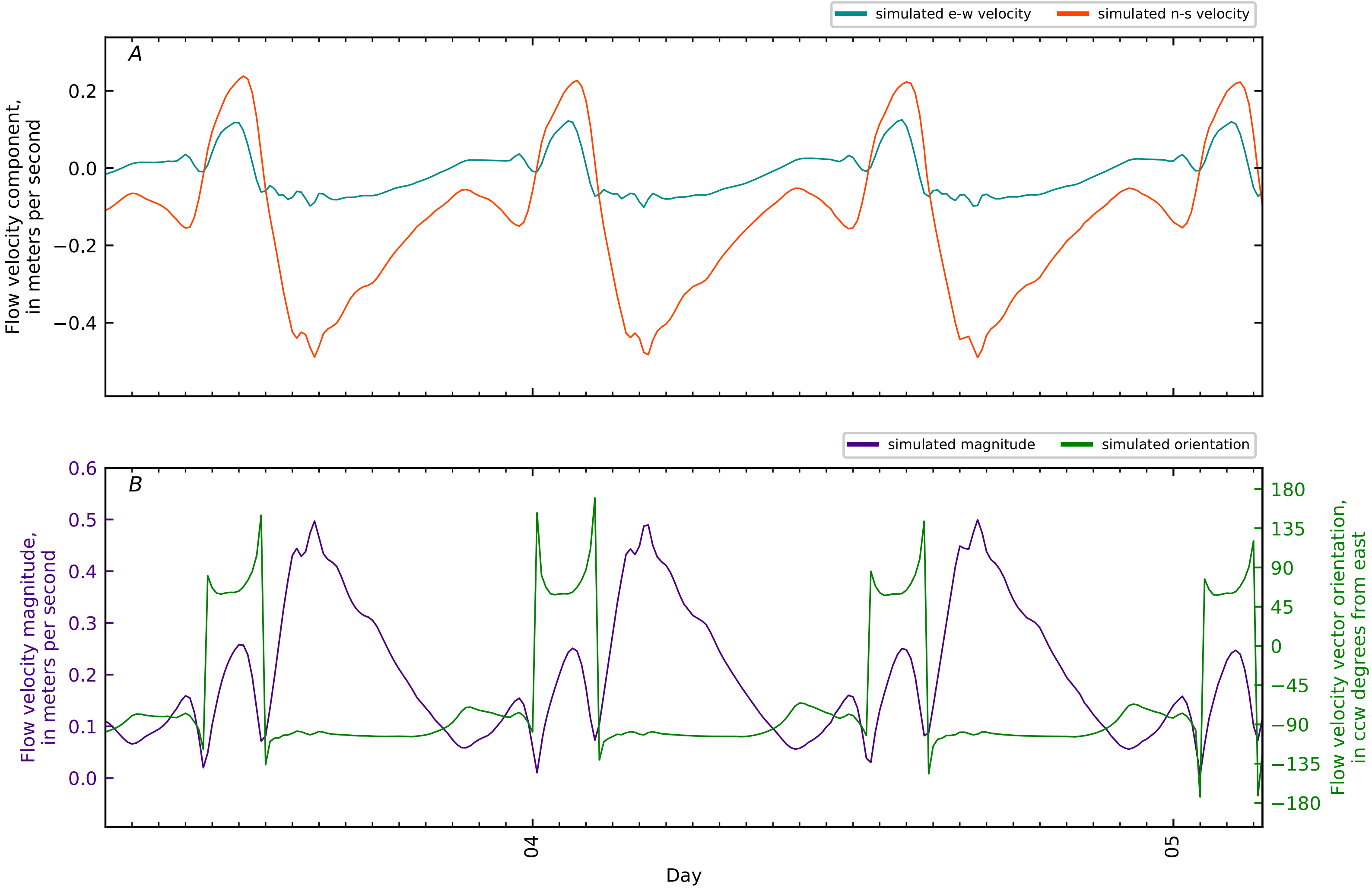

Figure B2-173. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 12, Penob Riv KM0 GS CTD5-09. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

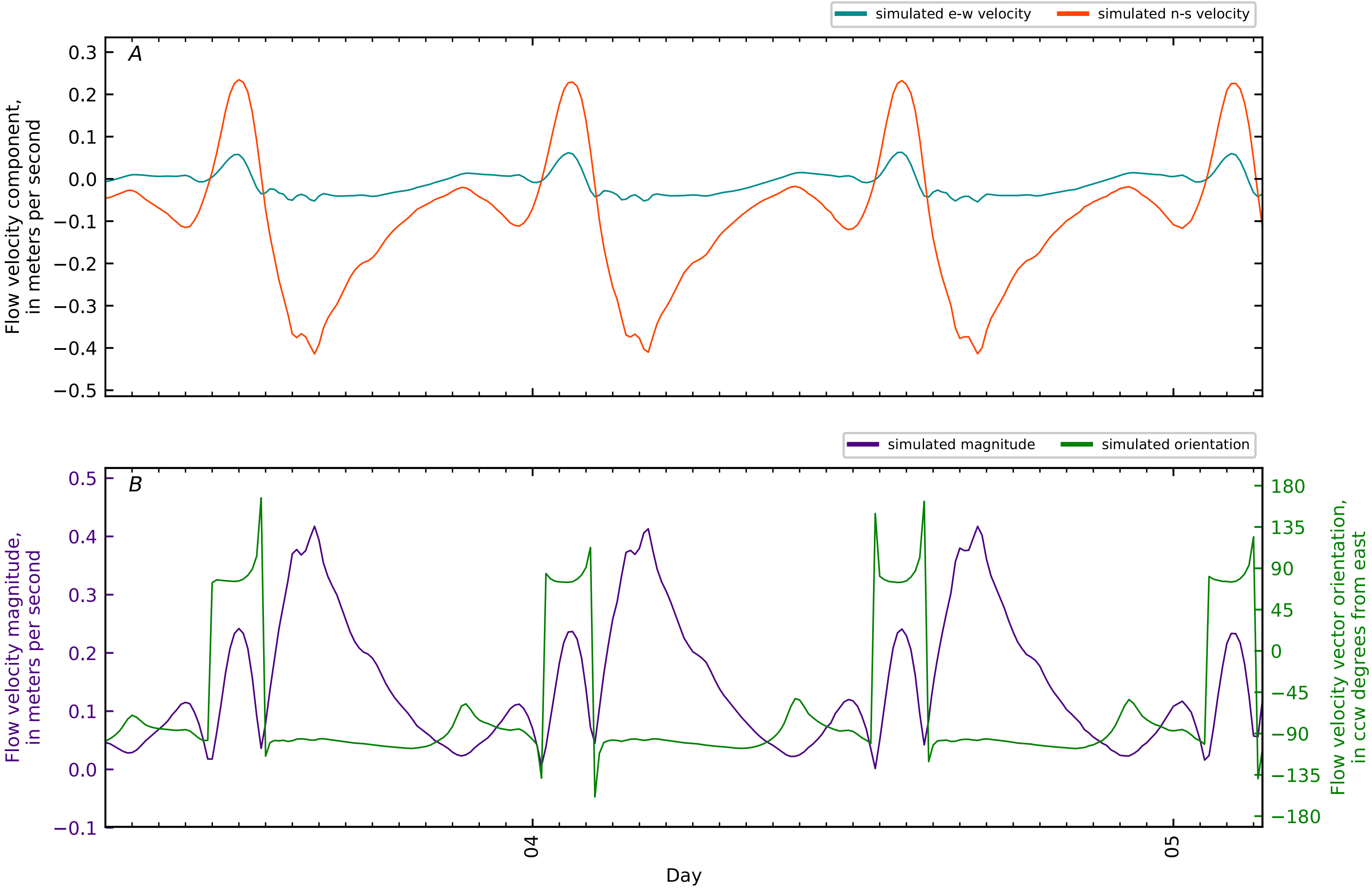

Figure B2-174. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 13, Penob Riv KM0 GS CTD5-10. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

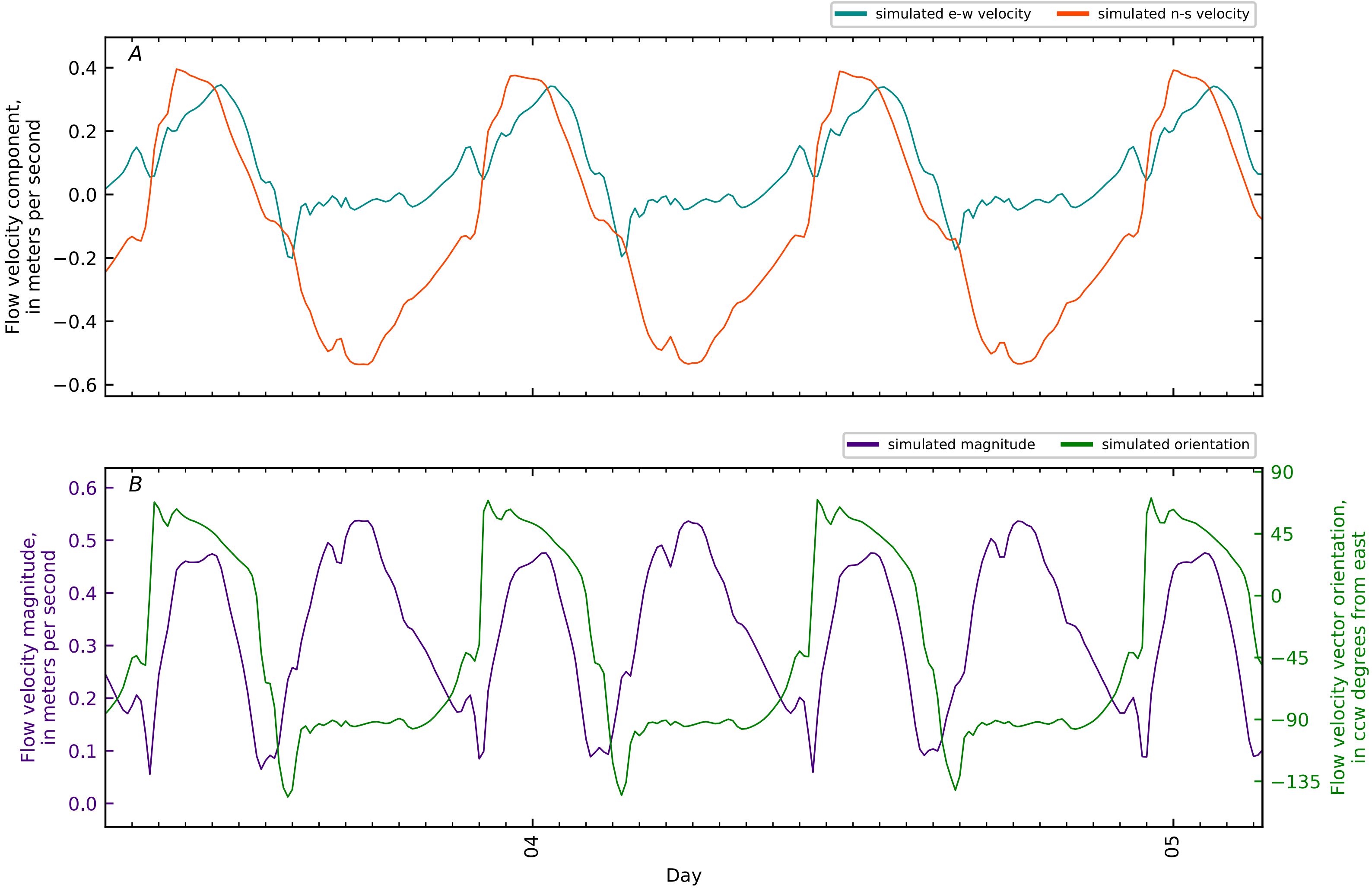

Figure B2-175. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 14, Penob Riv KM0.04 WHOI1 Ft Point 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

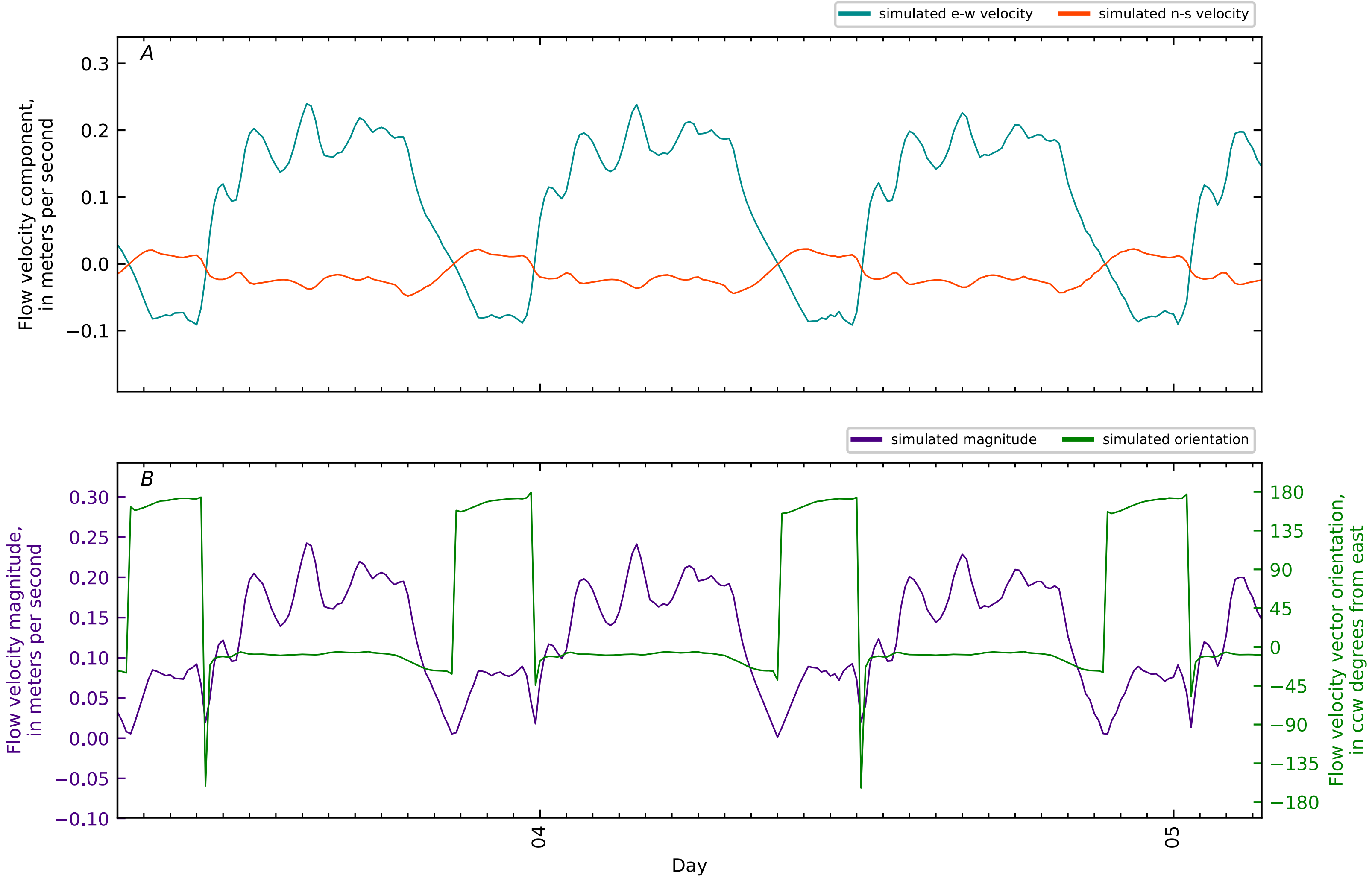

Figure B2-176. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 15, Penob Riv KM0.1 GS 442810068480101 at Ft. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

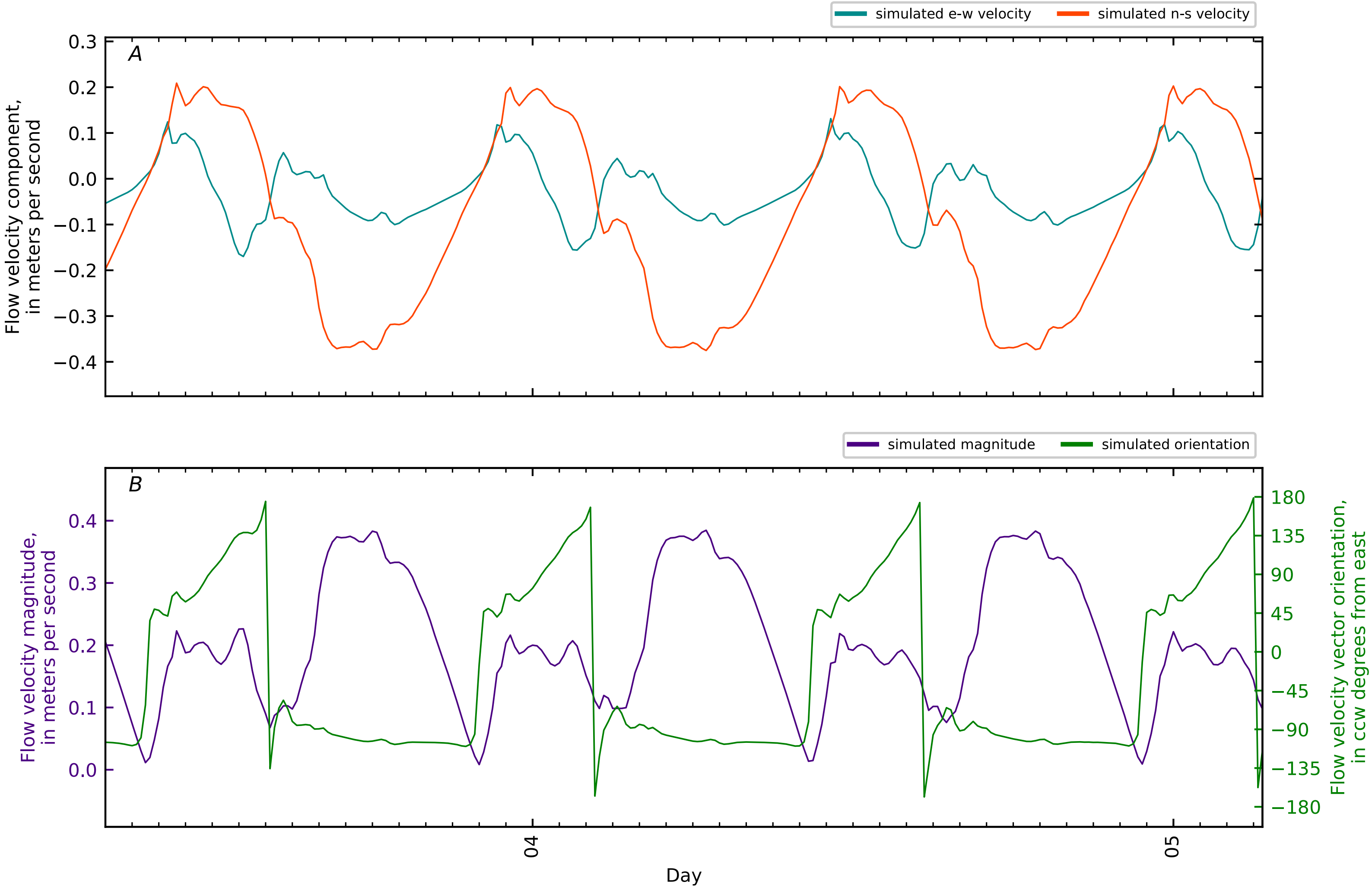

Figure B2-177. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 16, Penob Riv KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

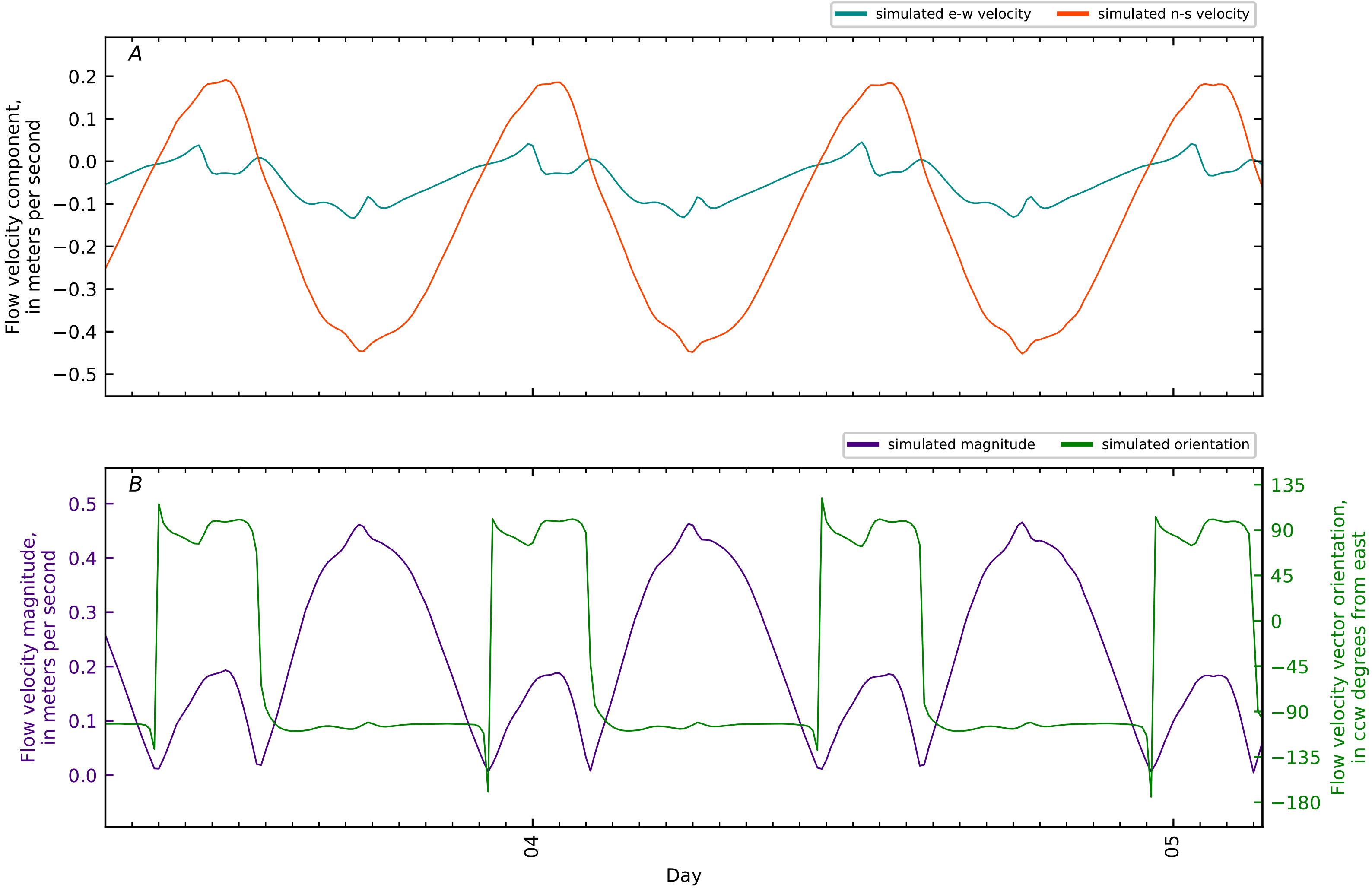

Figure B2-178. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 17, Penob Riv KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

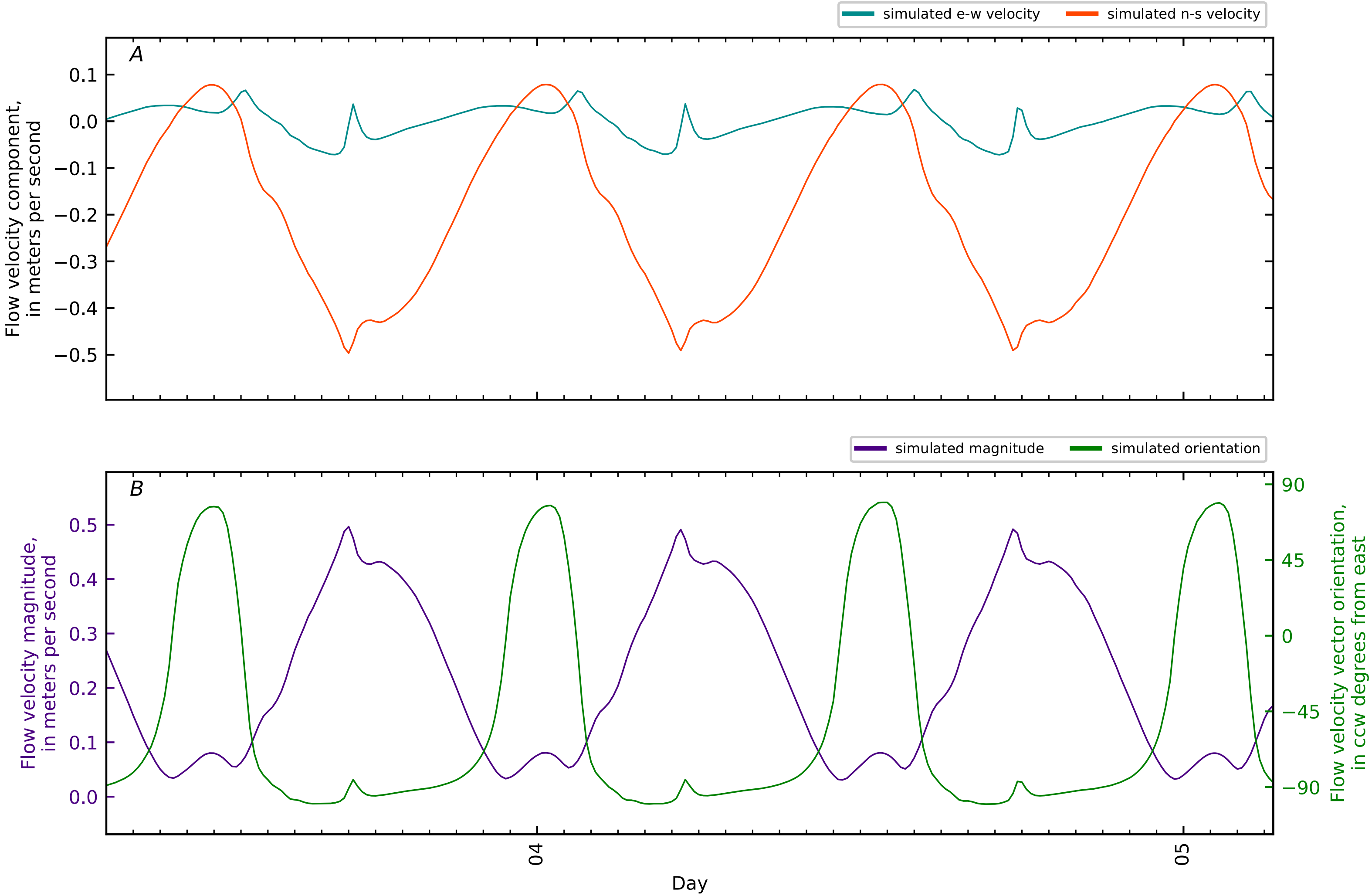

Figure B2-179. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 18, Penob Riv KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

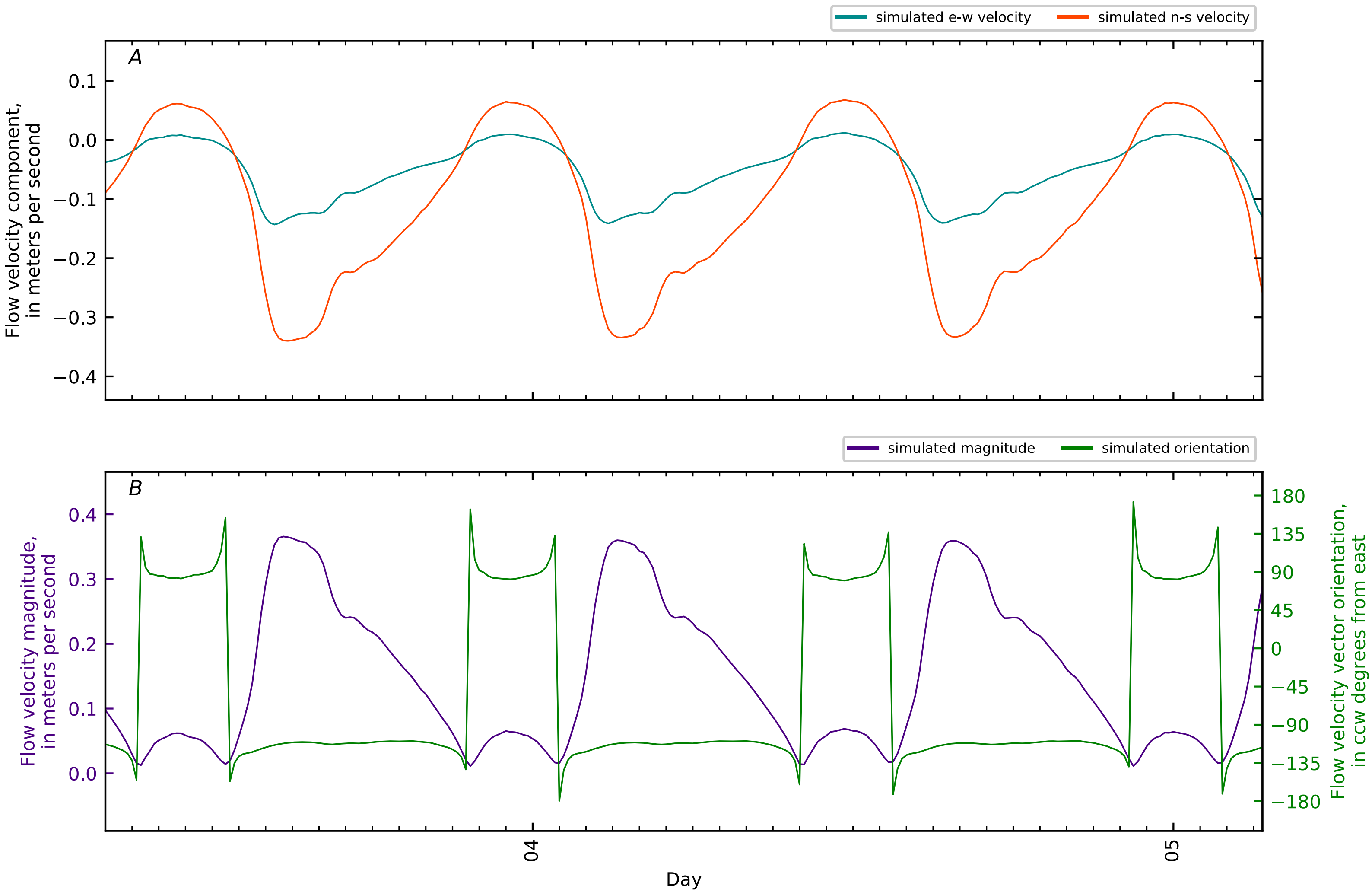

Figure B2-180. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 19, Penob Riv KM3.8 GS CTD3-01. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

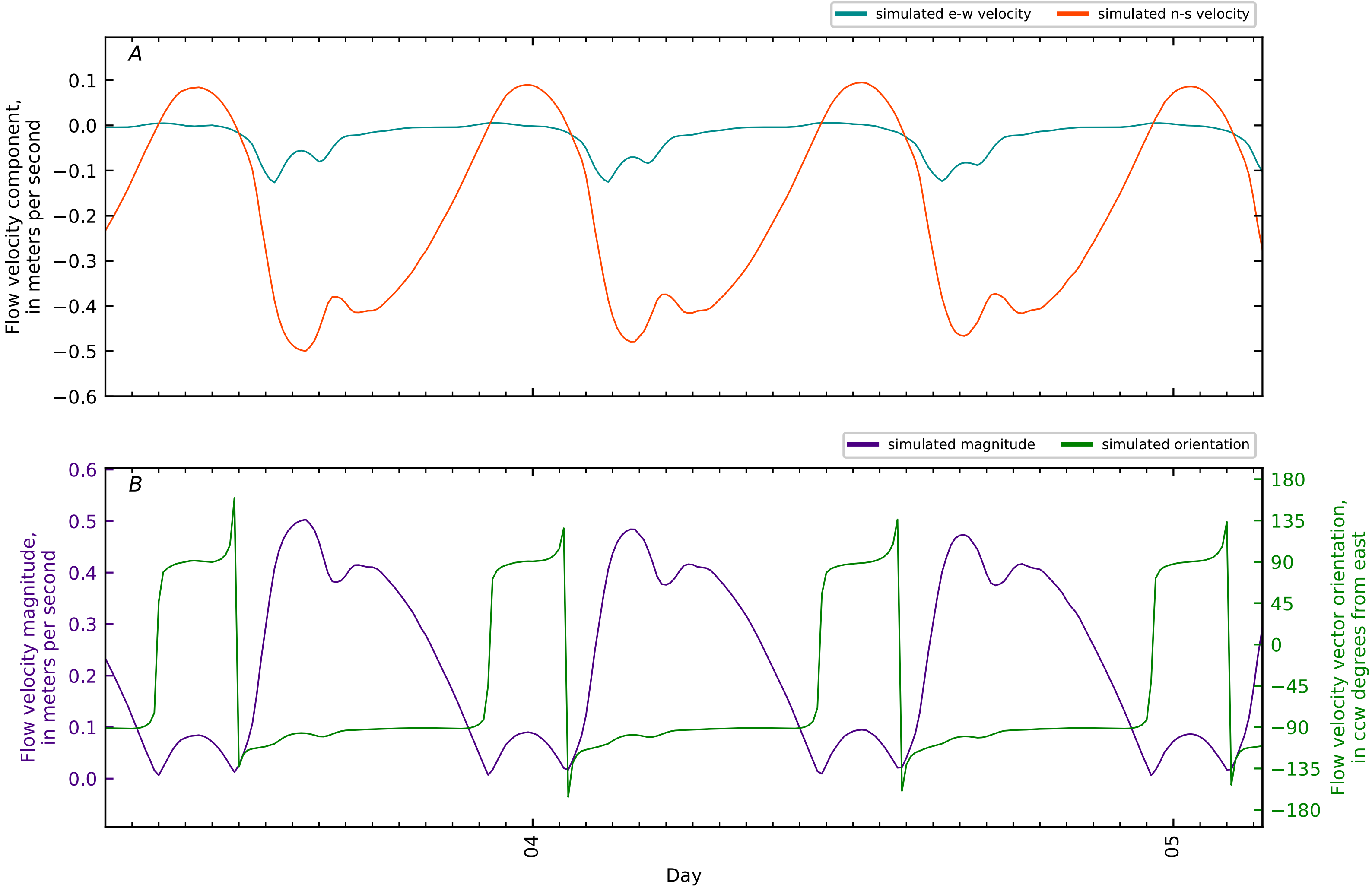

Figure B2-181. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 20, Penob Riv KM3.8 GS CTD3-02. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

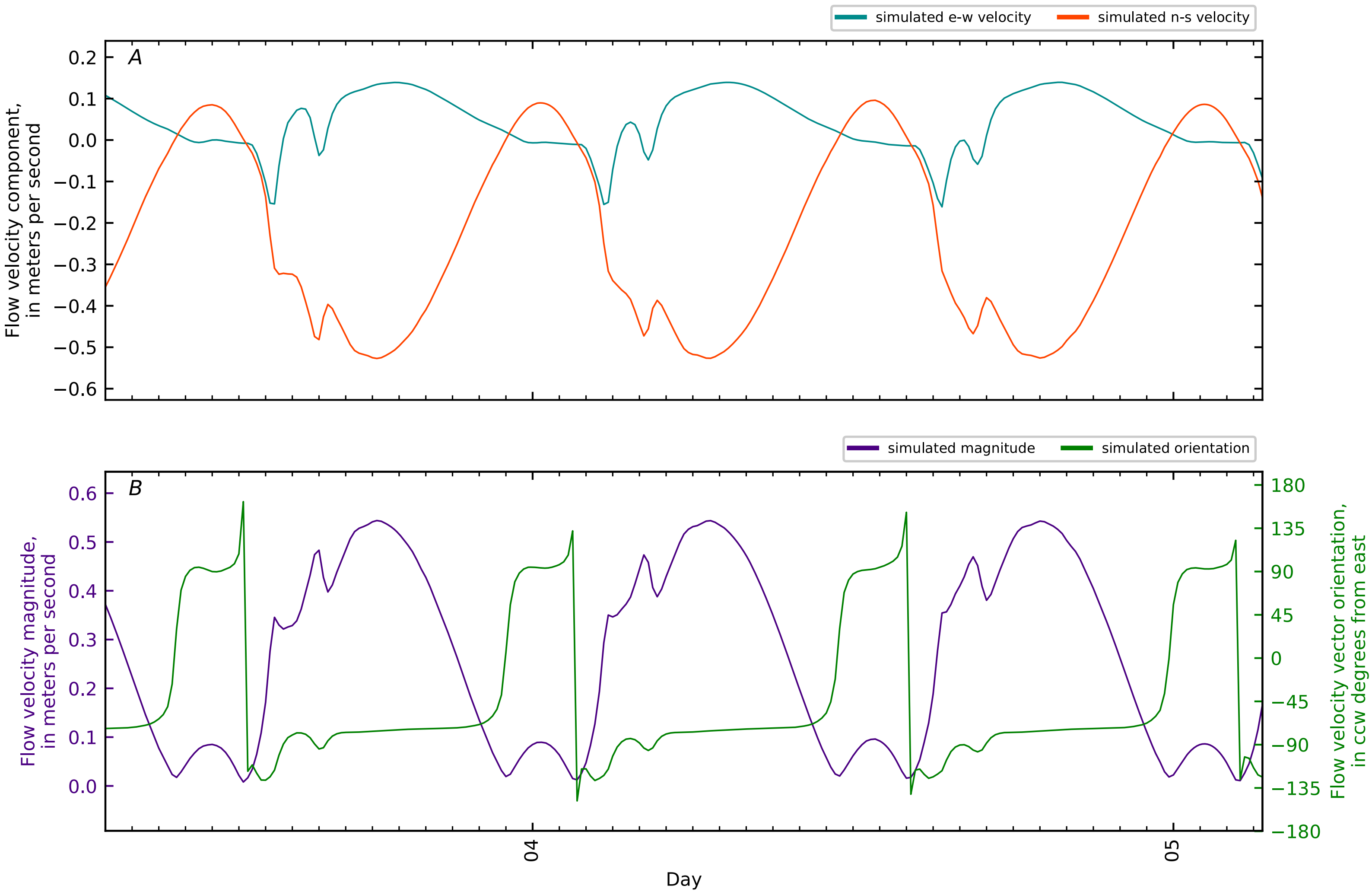

Figure B2-182. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 21, Penob Riv KM3.8 GS CTD3-03. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

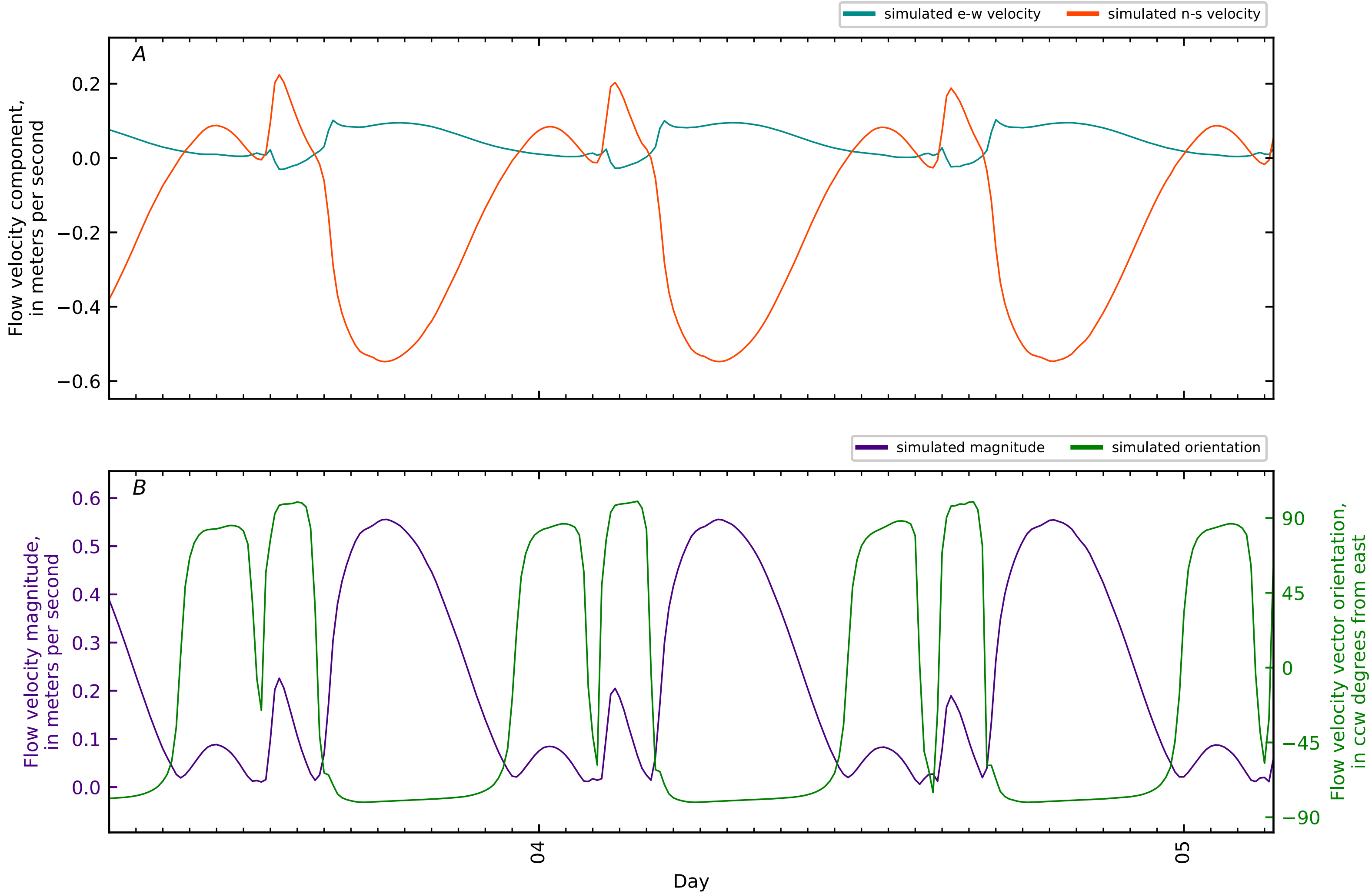

Figure B2-183. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 22, Penob Riv KM3.8 GS CTD3-04. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

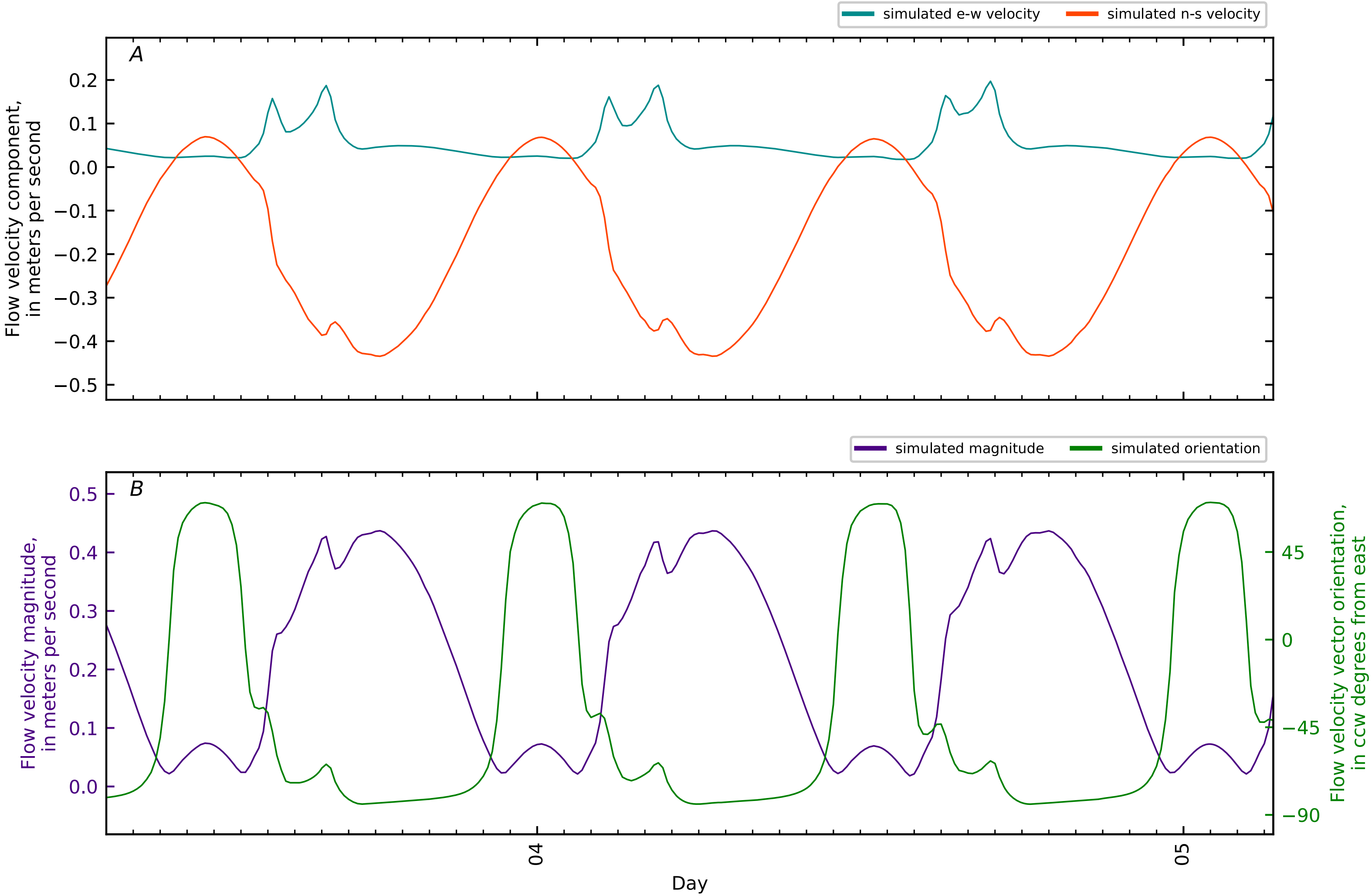

Figure B2-184. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 23, Penob Riv KM3.8 GS CTD3-05. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

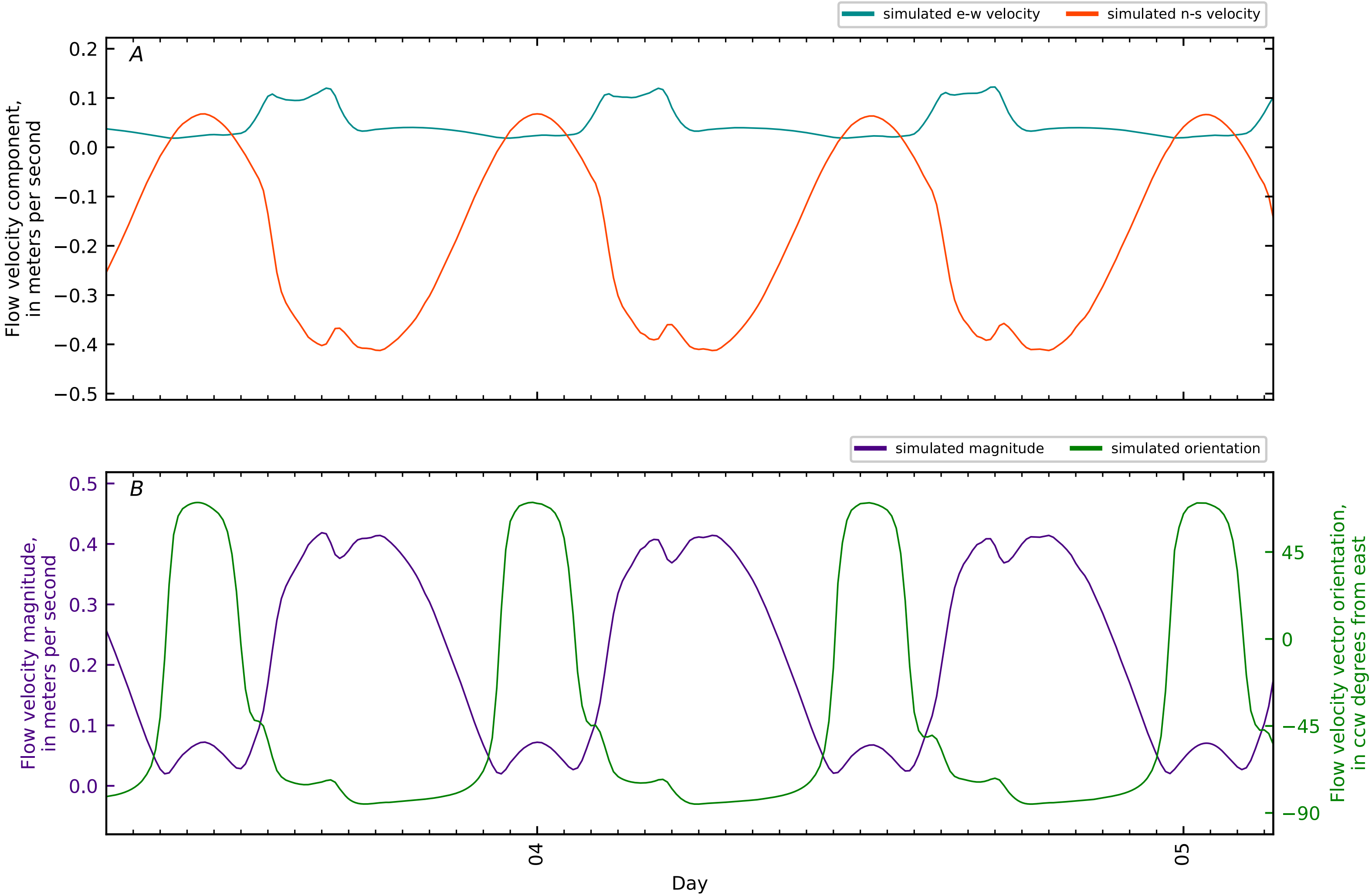

Figure B2-185. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 24, Penob Riv KM3.8 GS CTD3-06. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

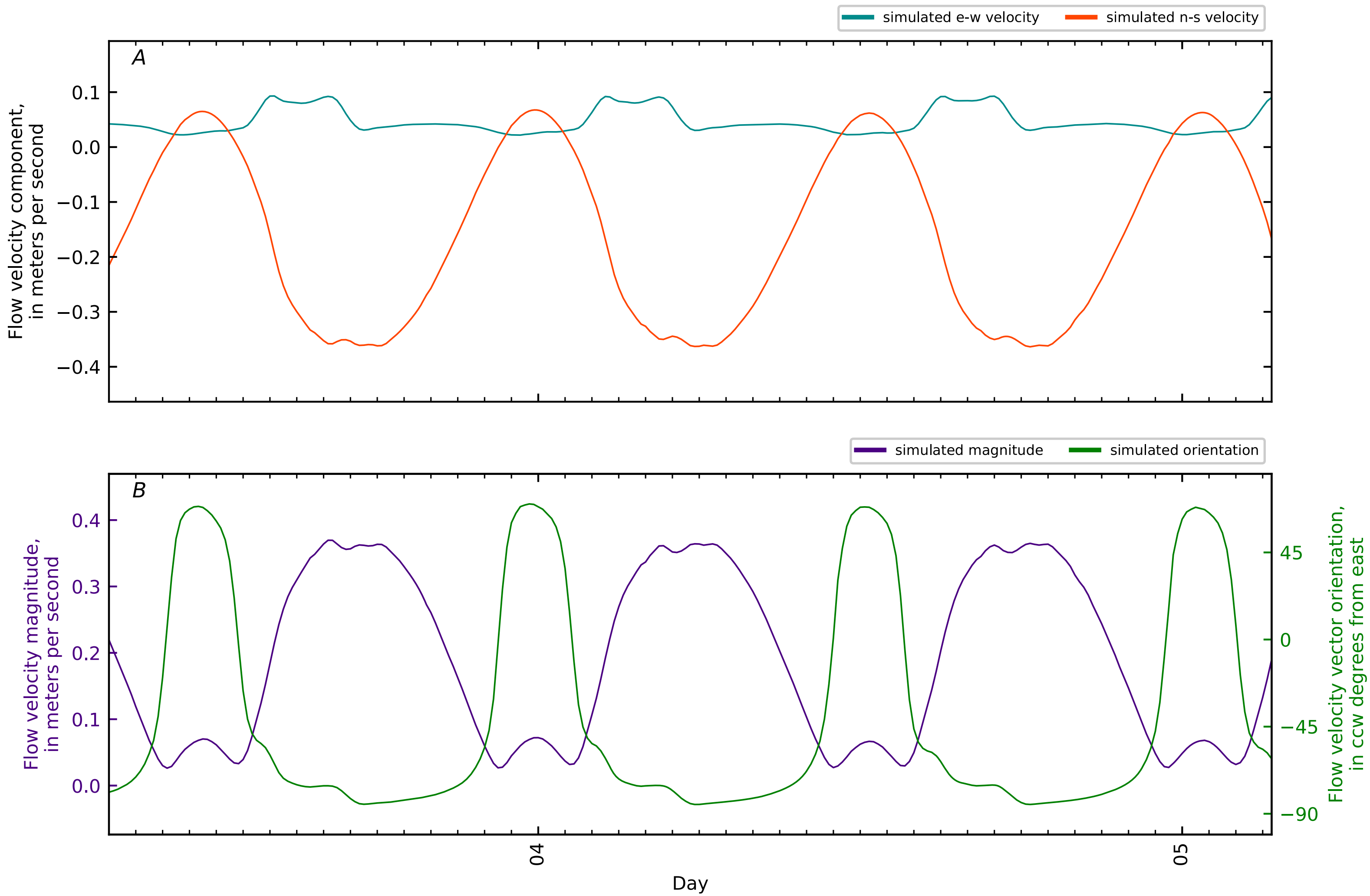

Figure B2-186. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 25, Penob Riv KM3.8 GS CTD3-07. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

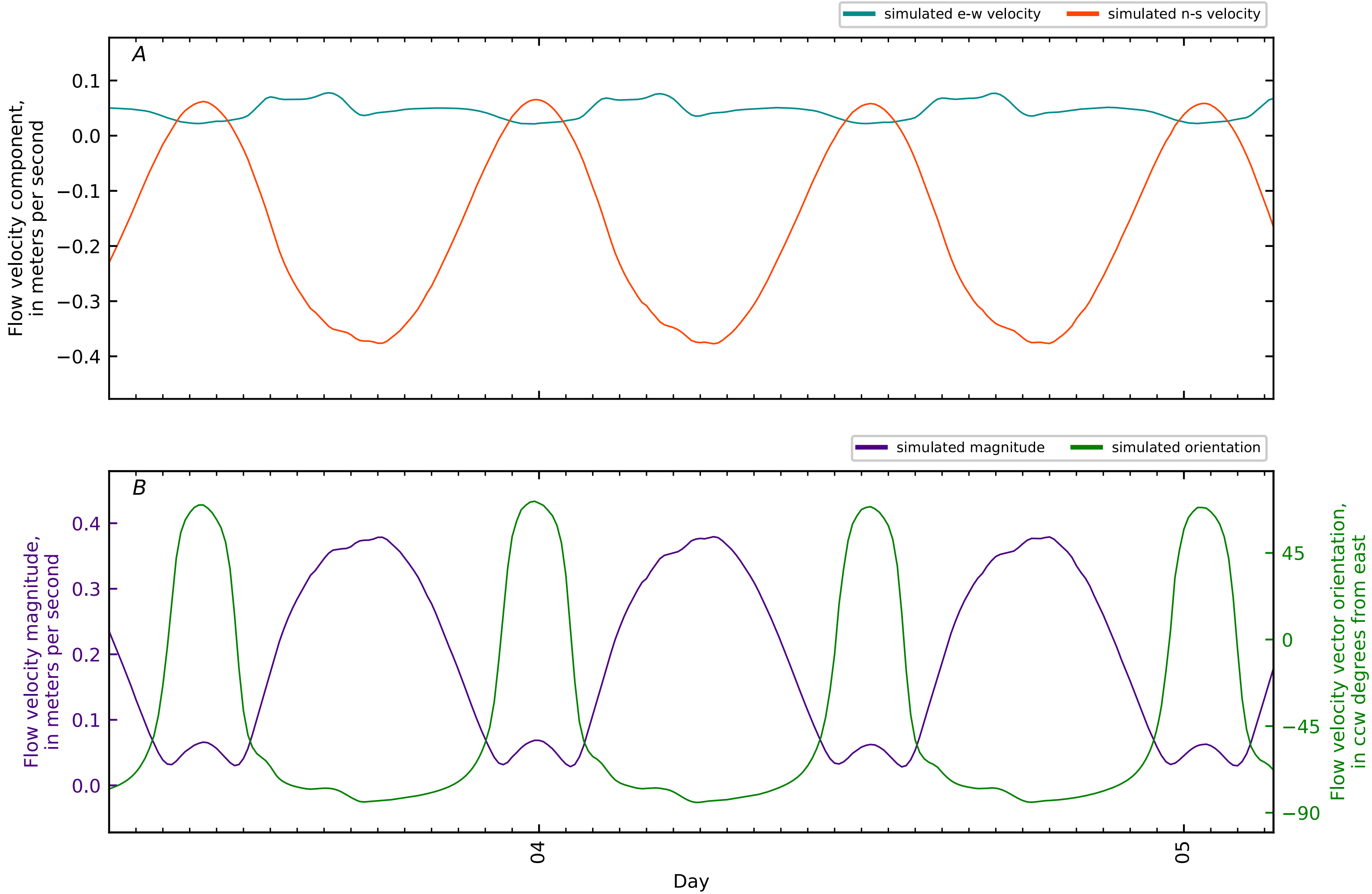

Figure B2-187. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 26, Penob Riv KM3.8 GS CTD3-08. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

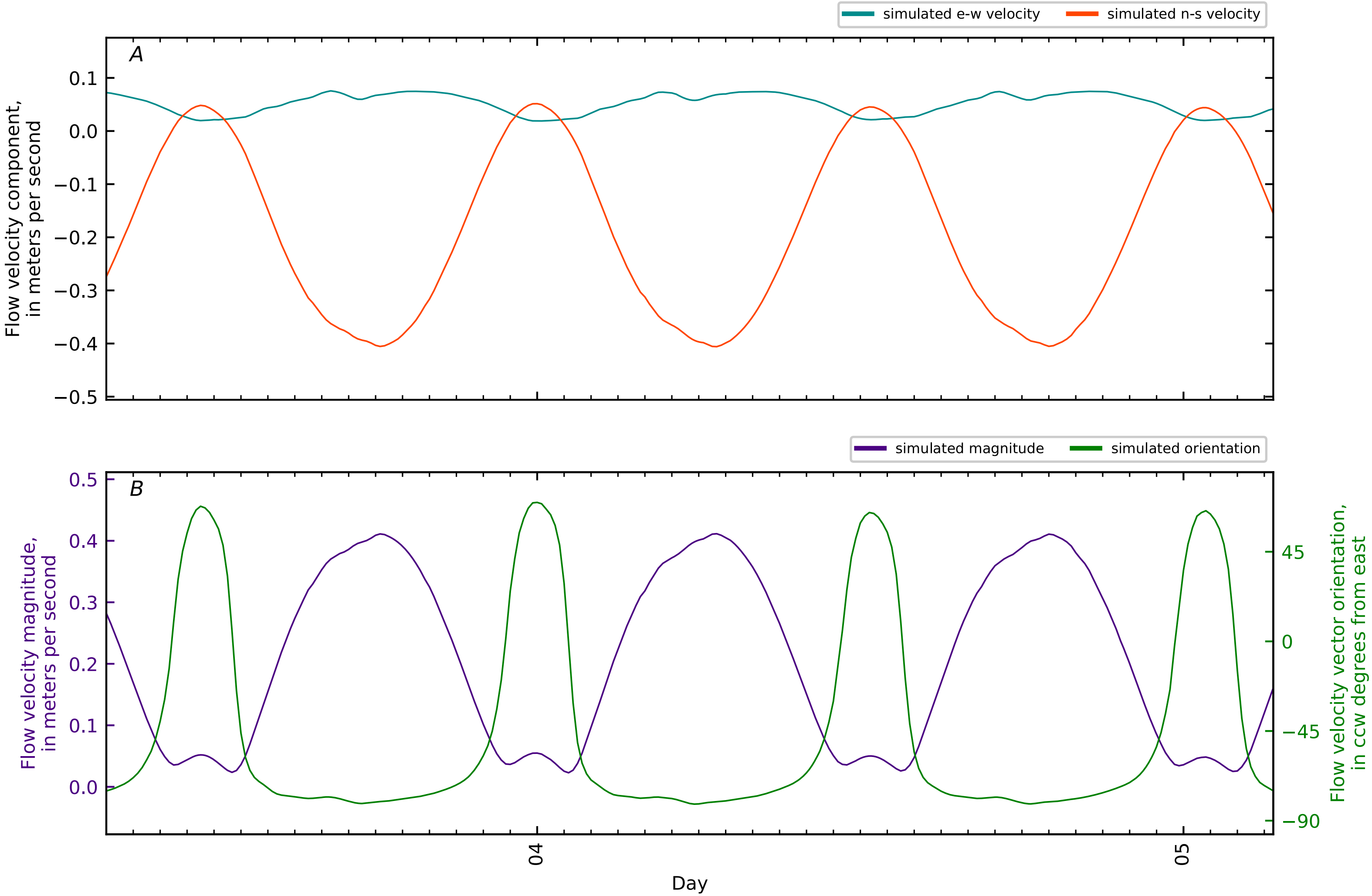

Figure B2-188. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 27, Penob Riv KM3.8 GS CTD3-09. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

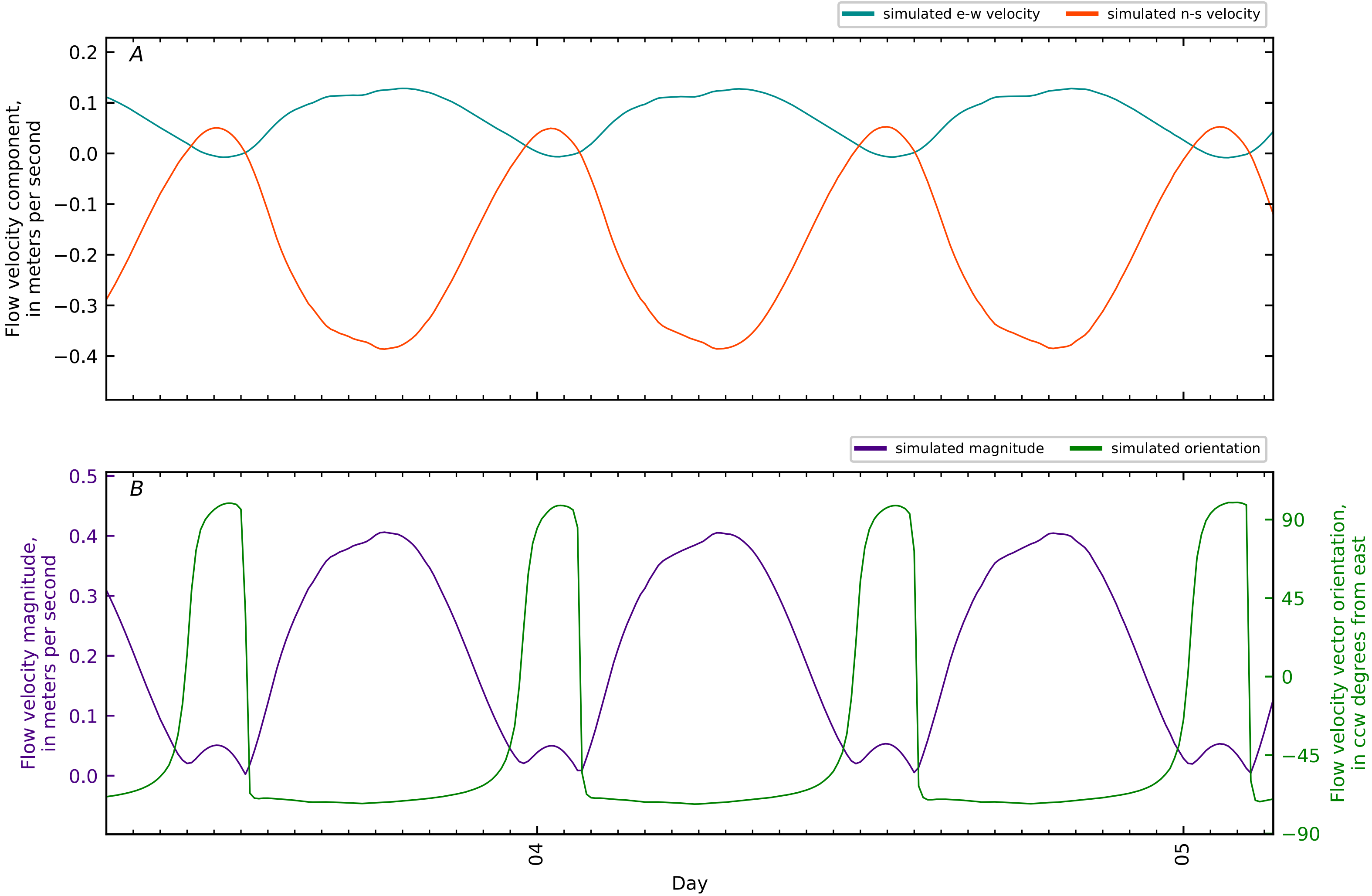

Figure B2-189. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 28, Penob Riv KM3.8 GS CTD3-10. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

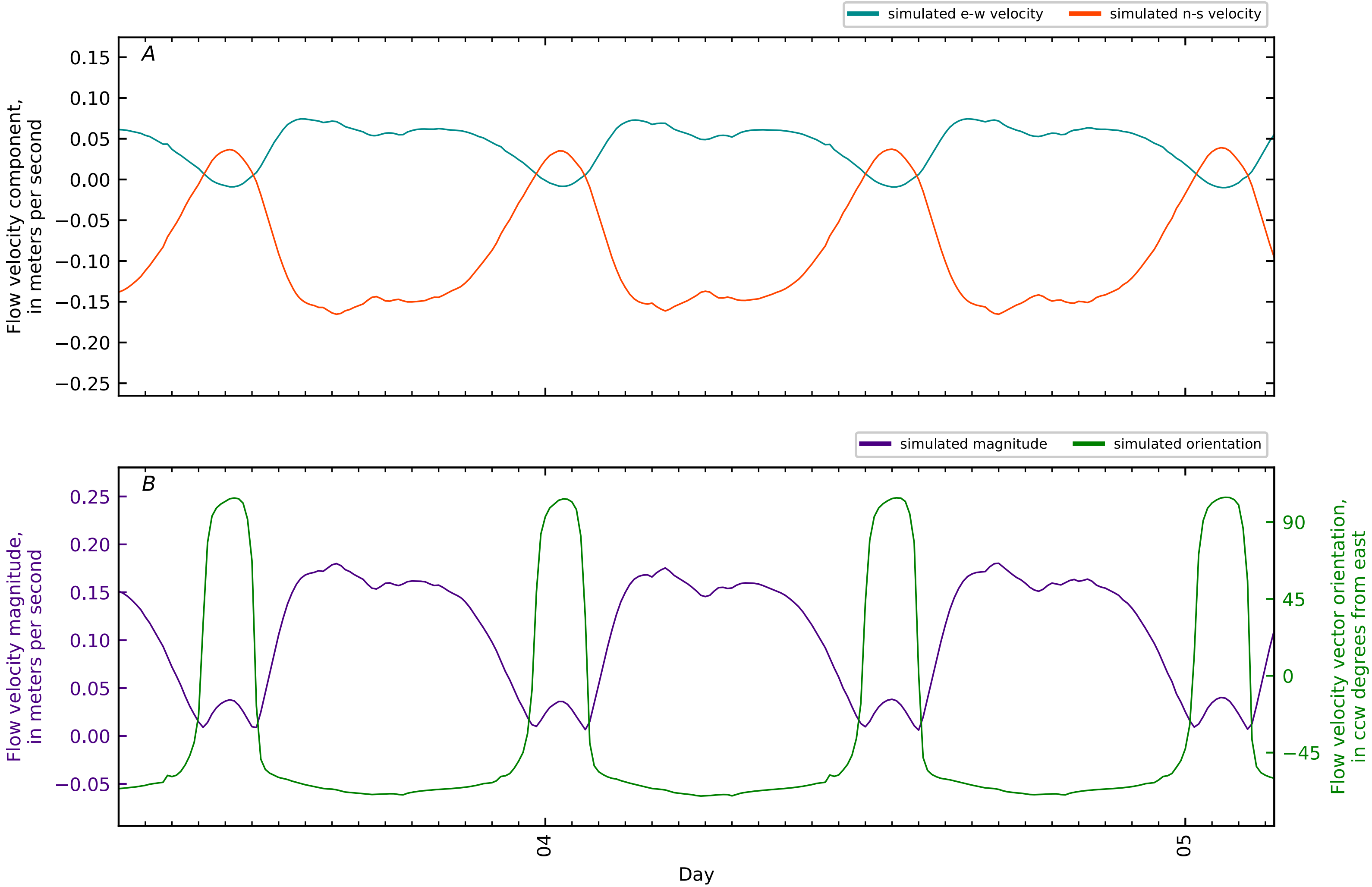

Figure B2-190. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 29, Penob Riv KM3.85 fmr NOAA gage Gross Poi. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

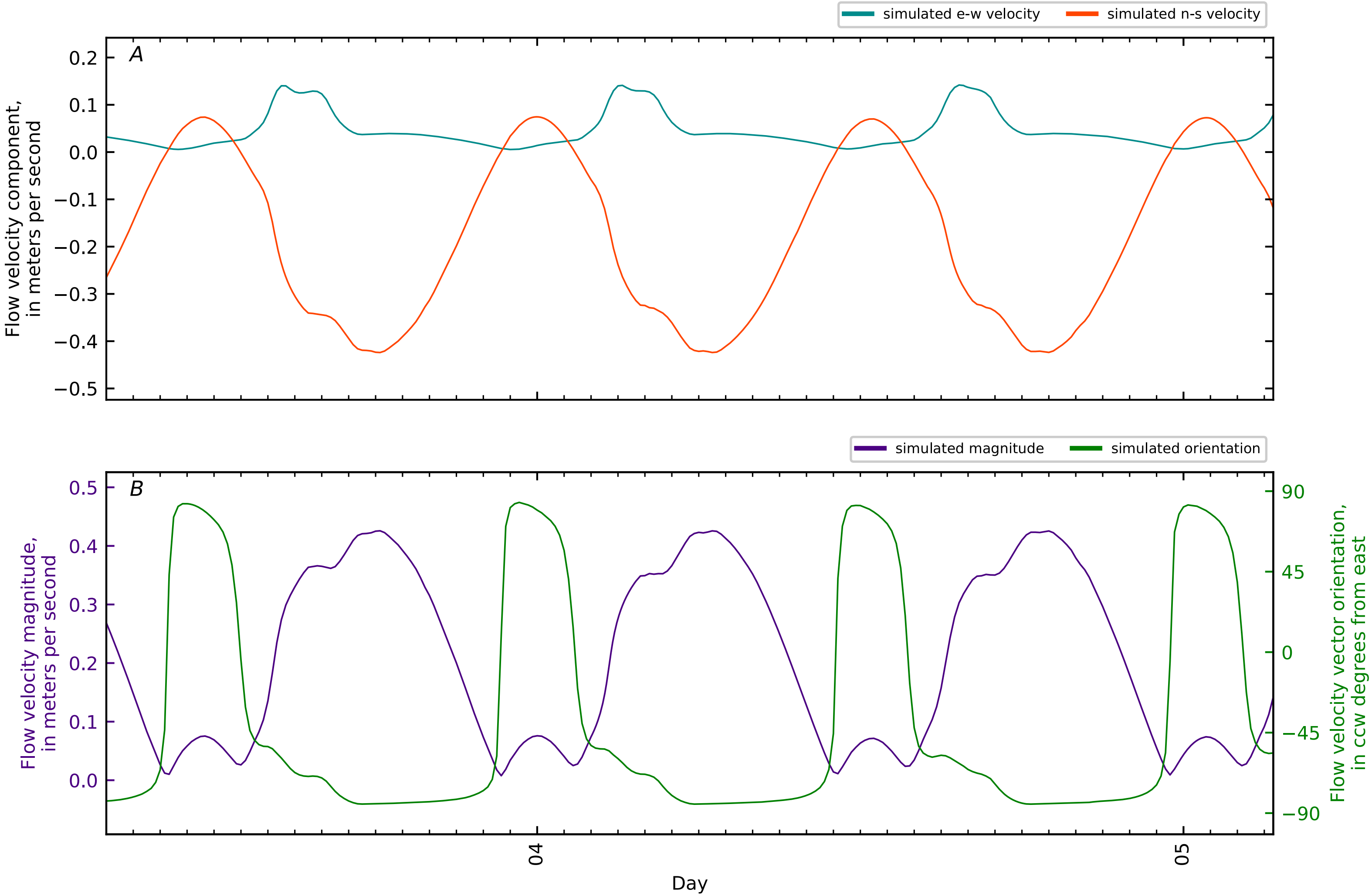

Figure B2-191. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 30, Penob Riv KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

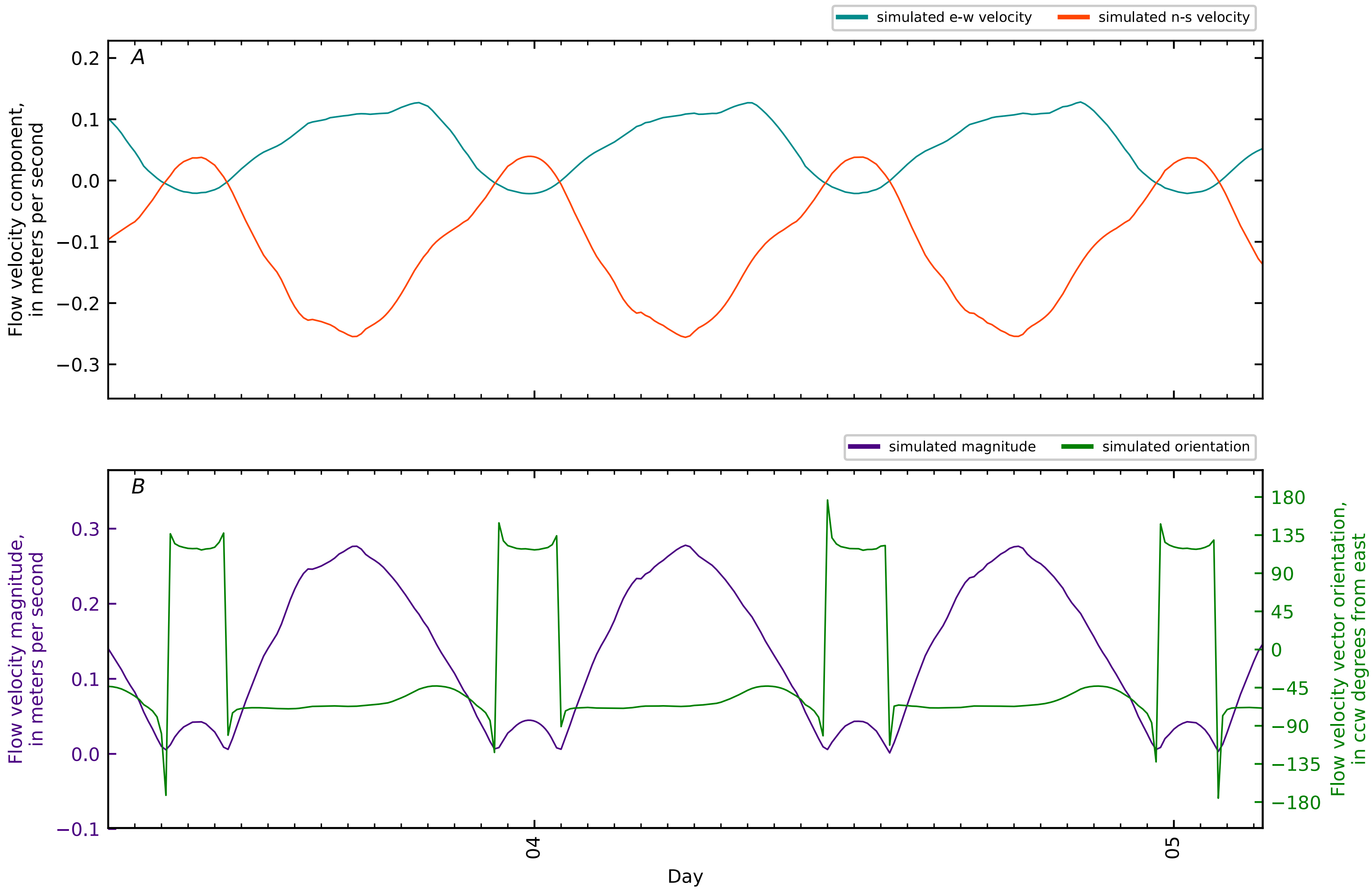

Figure B2-192. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 31, Penob Riv KM4.3 fmr NOAA gage Sandy Beac. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

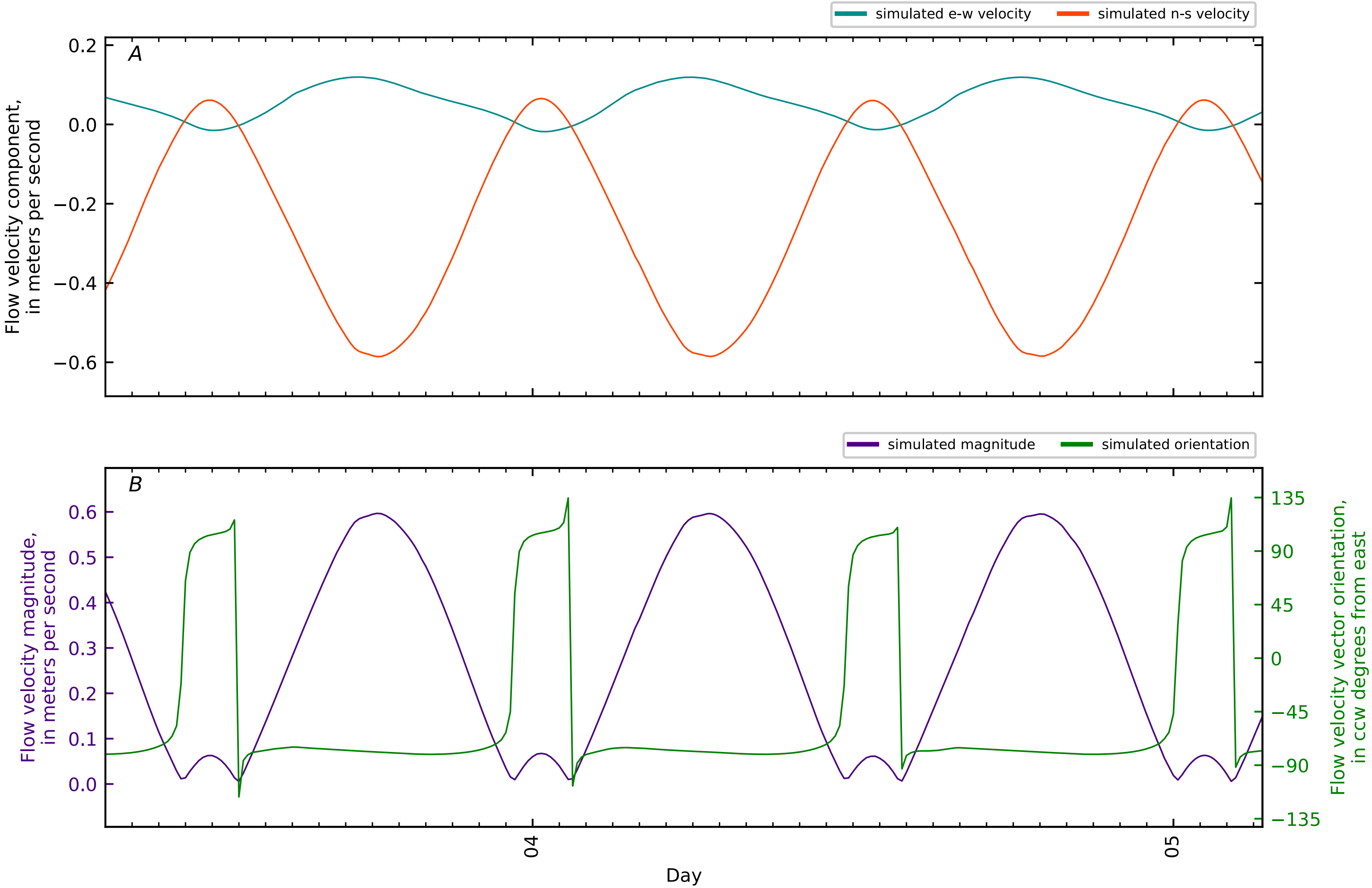

Figure B2-193. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 32, Penob Riv KM5. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

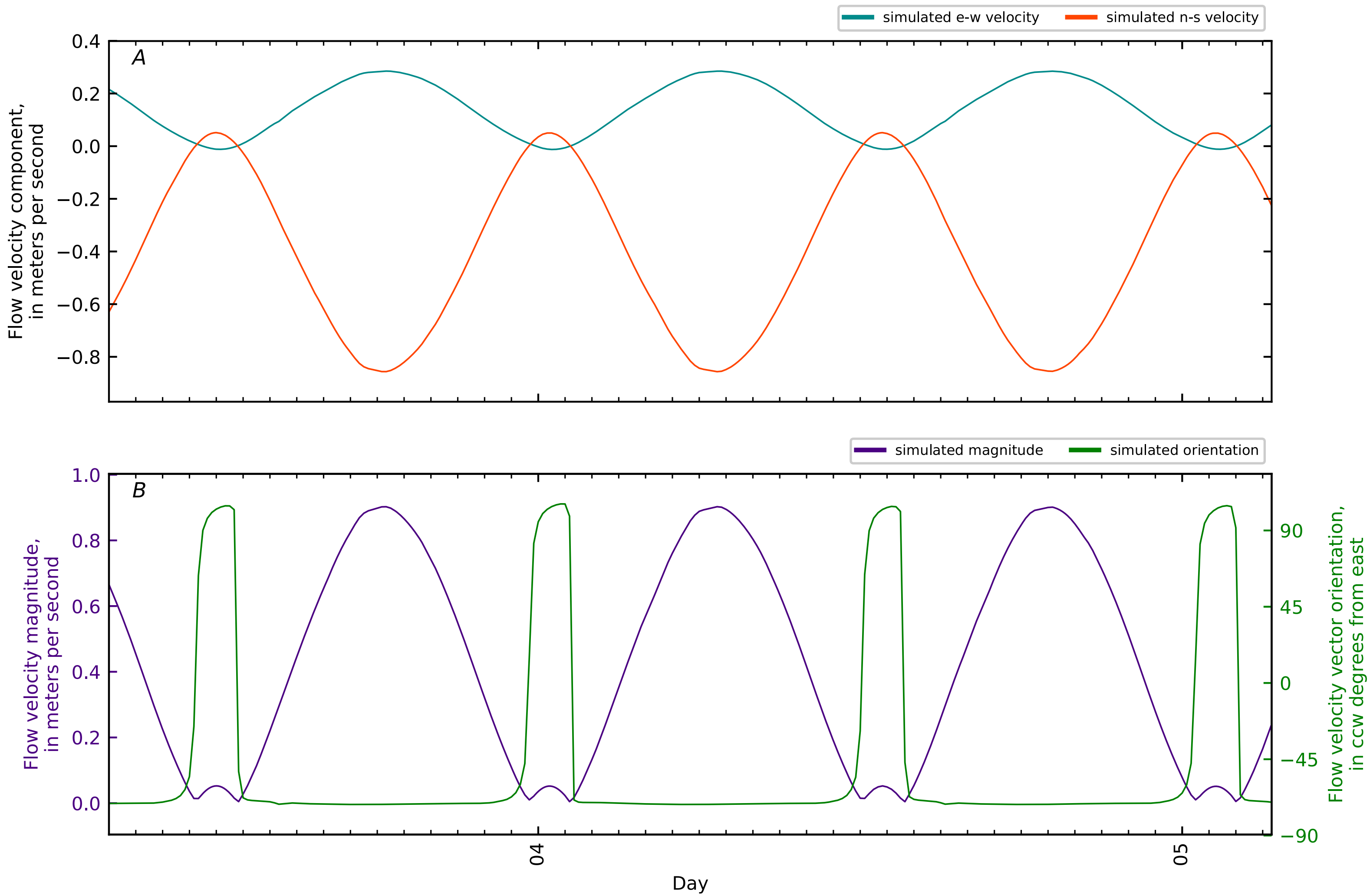

Figure B2-194. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 33, Penob Riv KM6. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

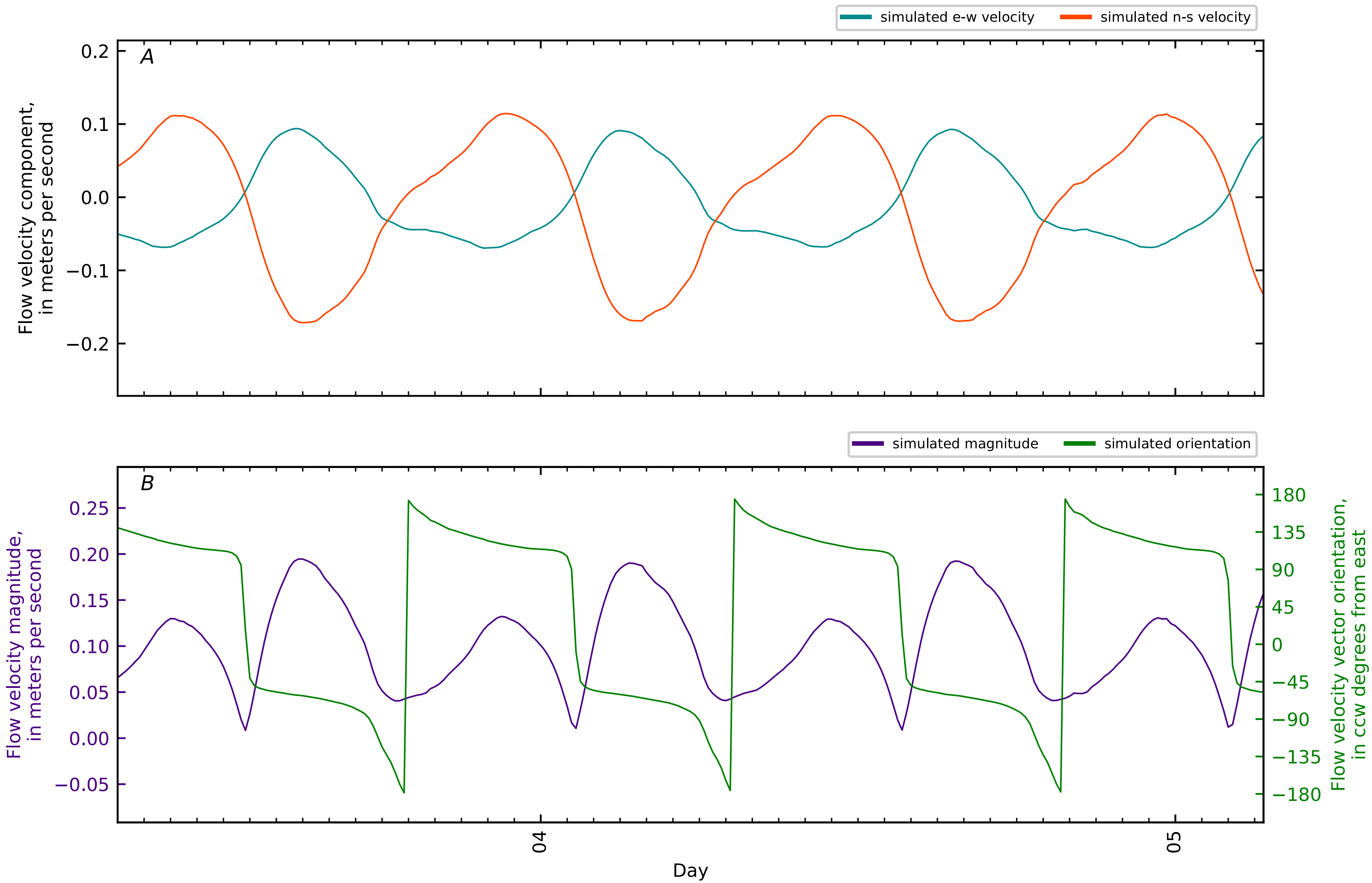

Figure B2-195. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 34, Penob Riv KM6 ERDC11 VW-MU14-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

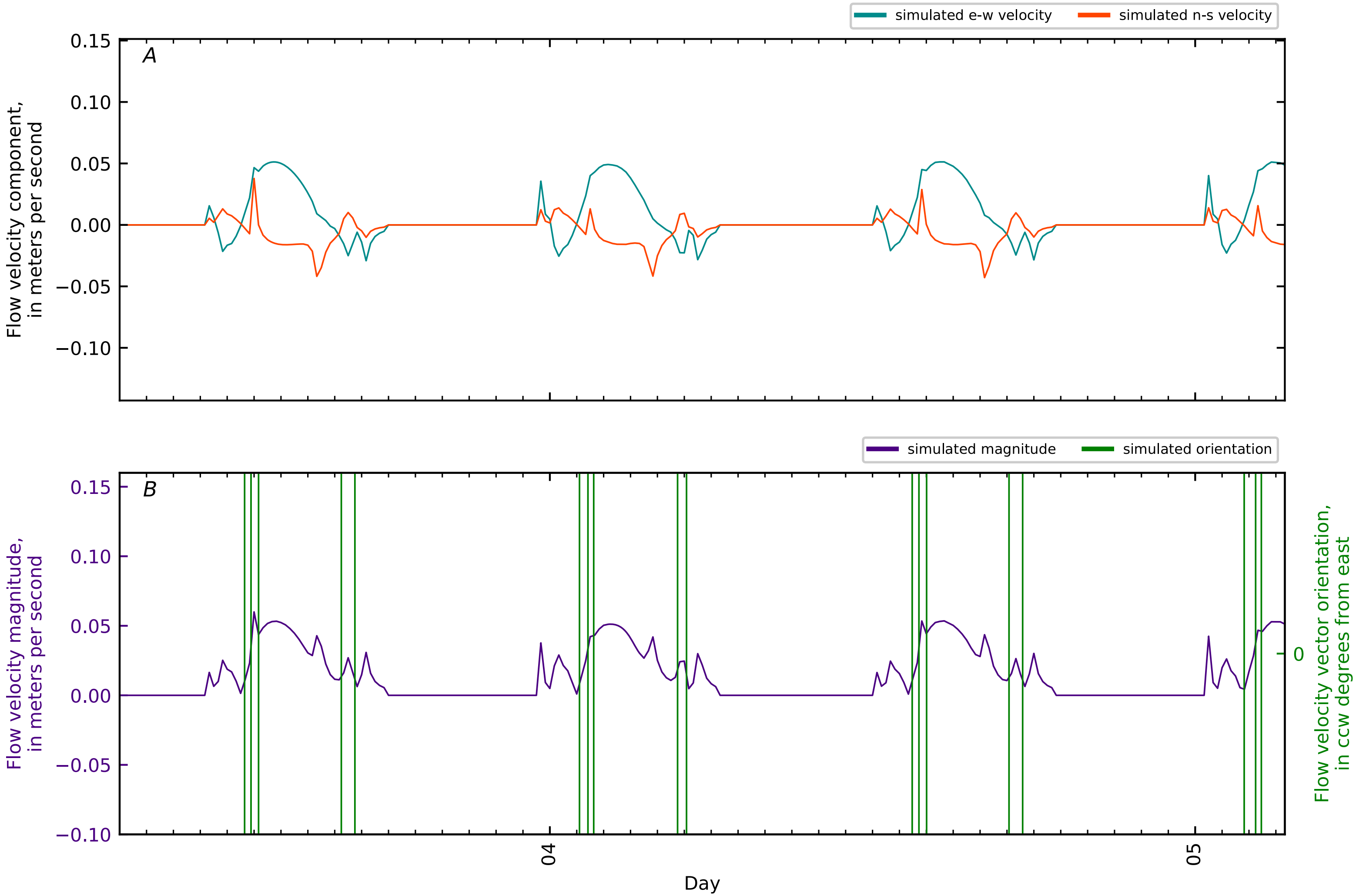

Figure B2-196. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 35, Penob Riv KM6.05 ERDC10 VW-MU7-SF1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

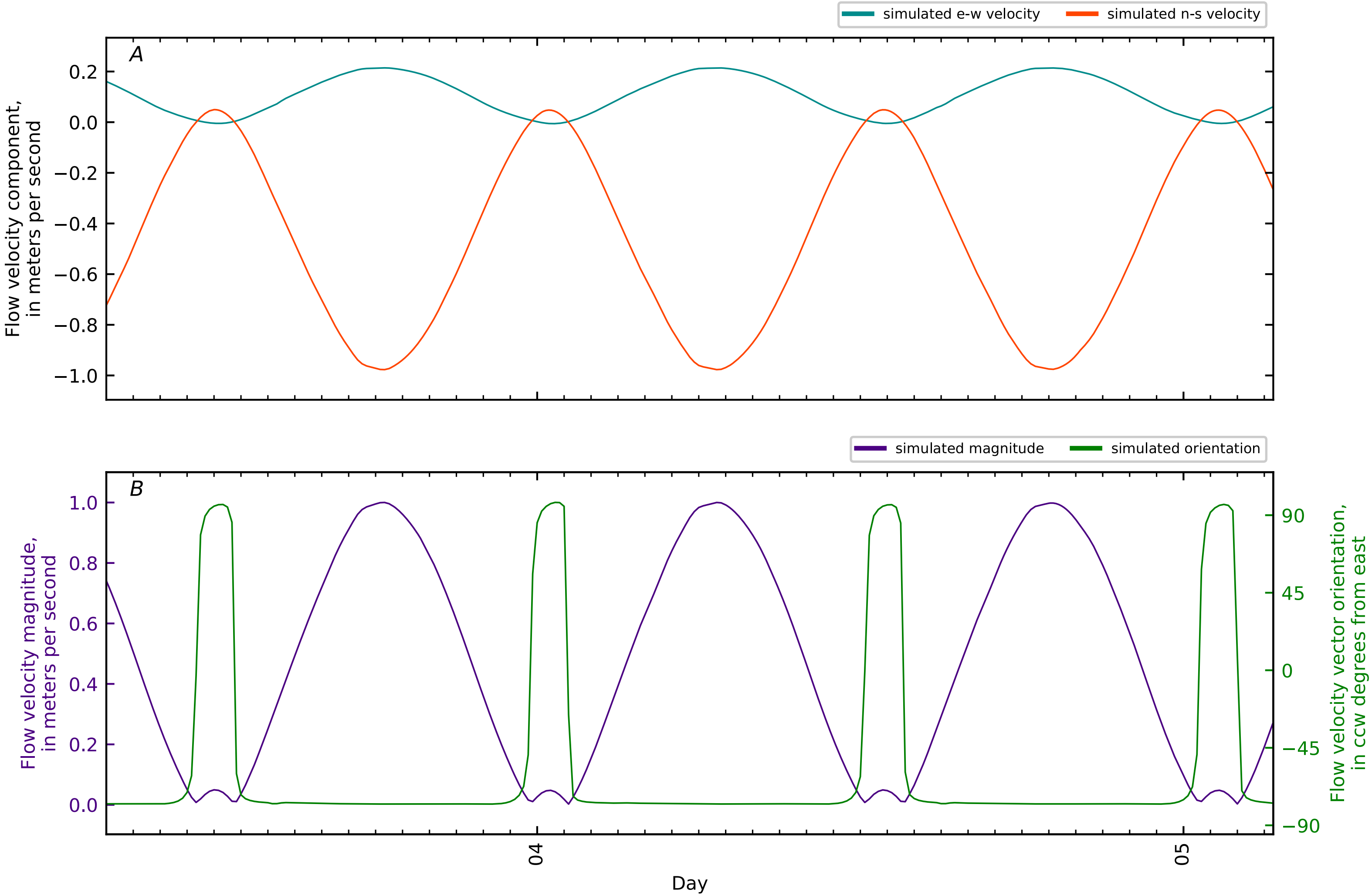

Figure B2-197. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 36, Penob Riv KM6.1 WHOI5 Verona Island 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

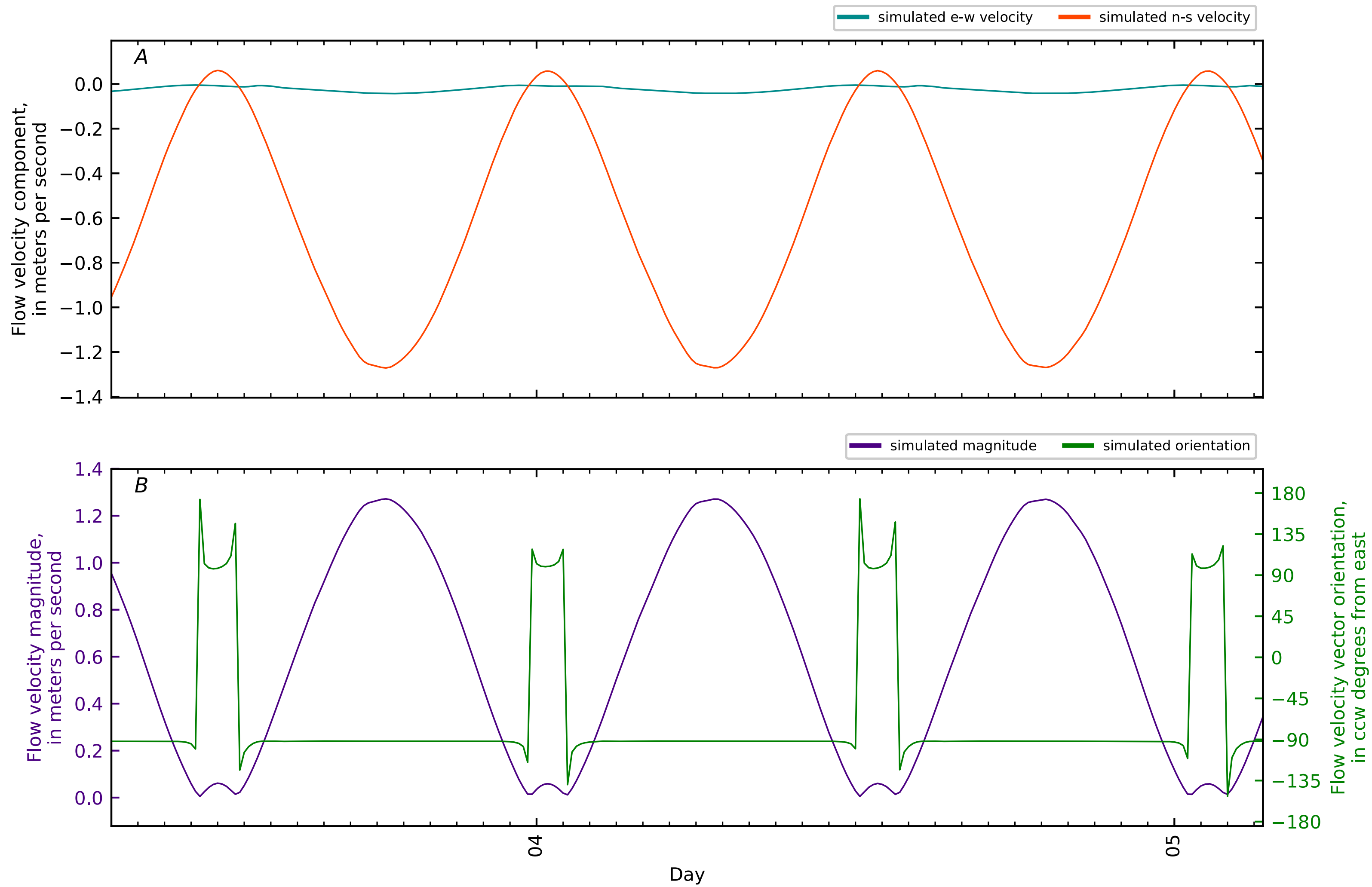

Figure B2-198. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 37, Penob Riv KM7. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

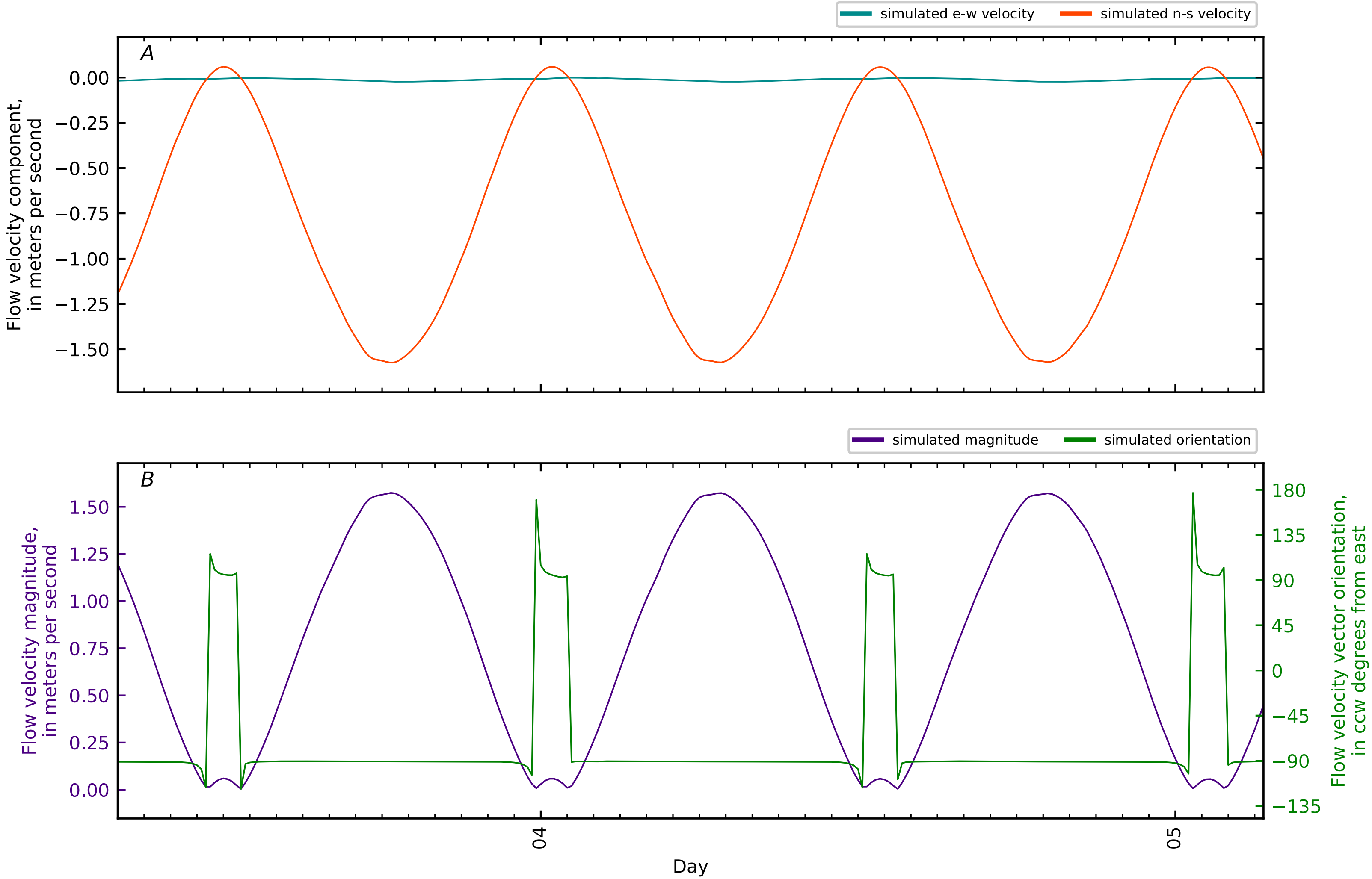

Figure B2-199. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 38, Penob Riv KM8. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

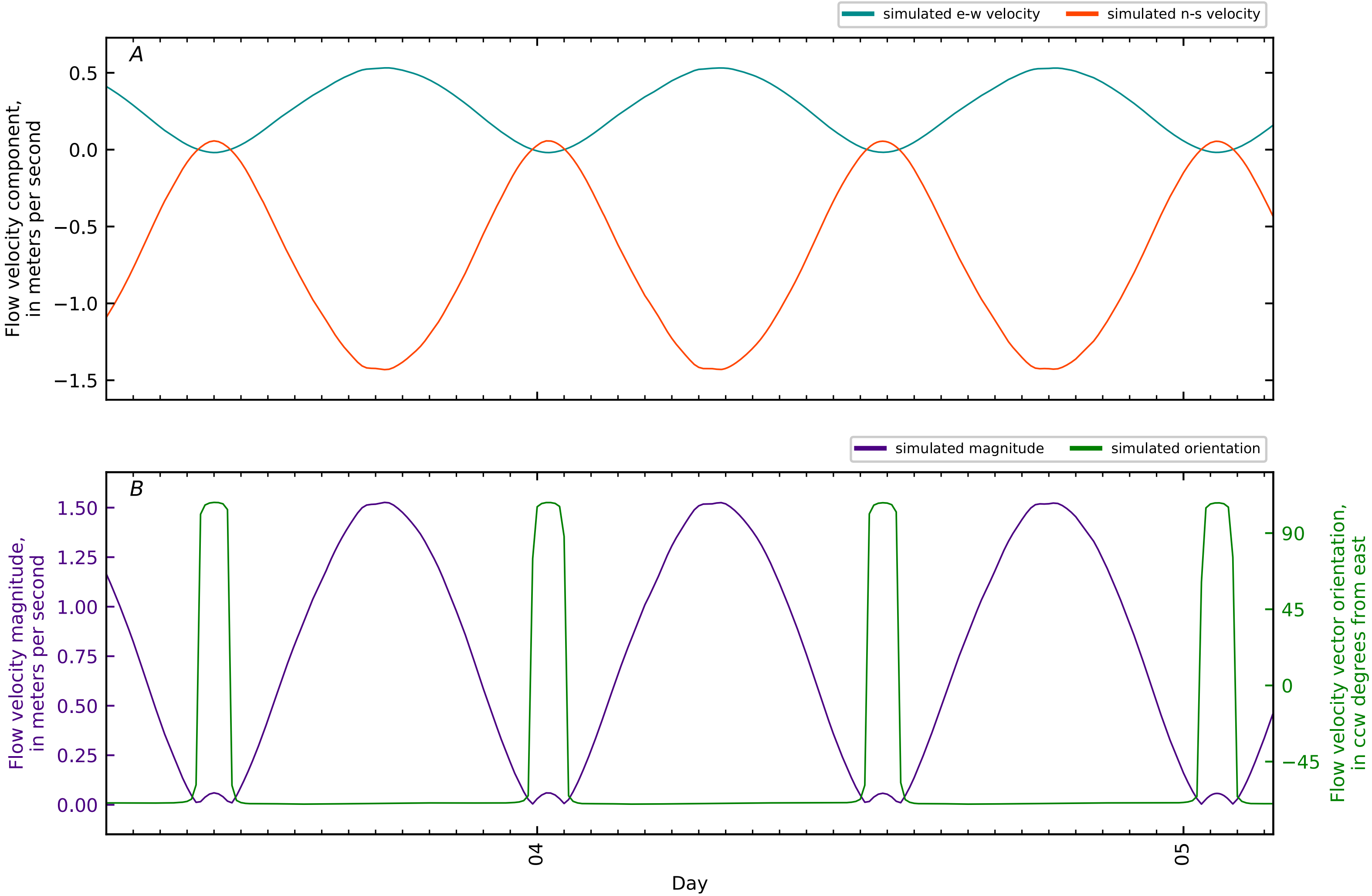

Figure B2-200. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 39, Penob Riv KM9. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

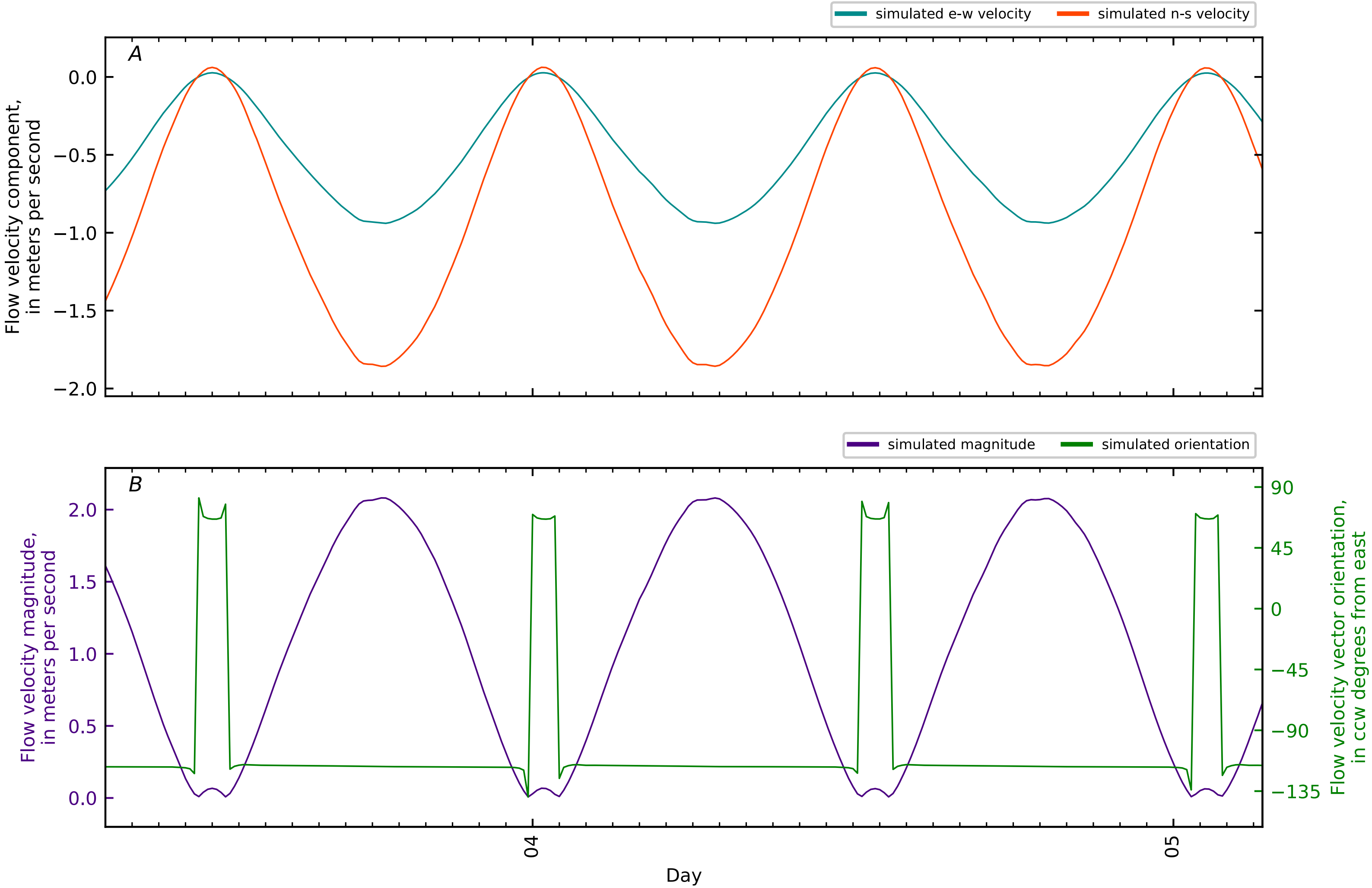

Figure B2-201. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 40, Penob Riv KM10. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

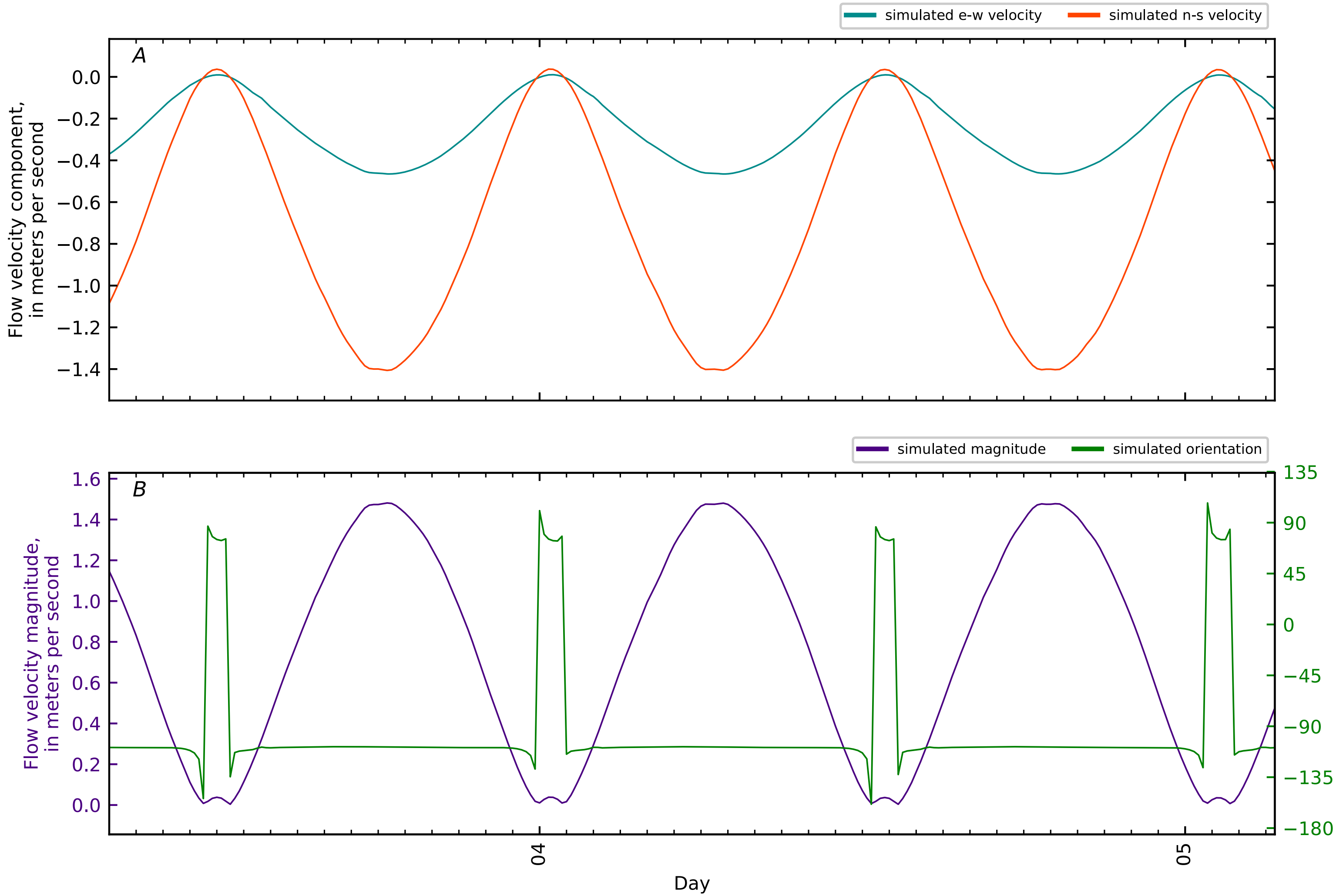

Figure B2-202. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 41, Penob Riv KM11. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

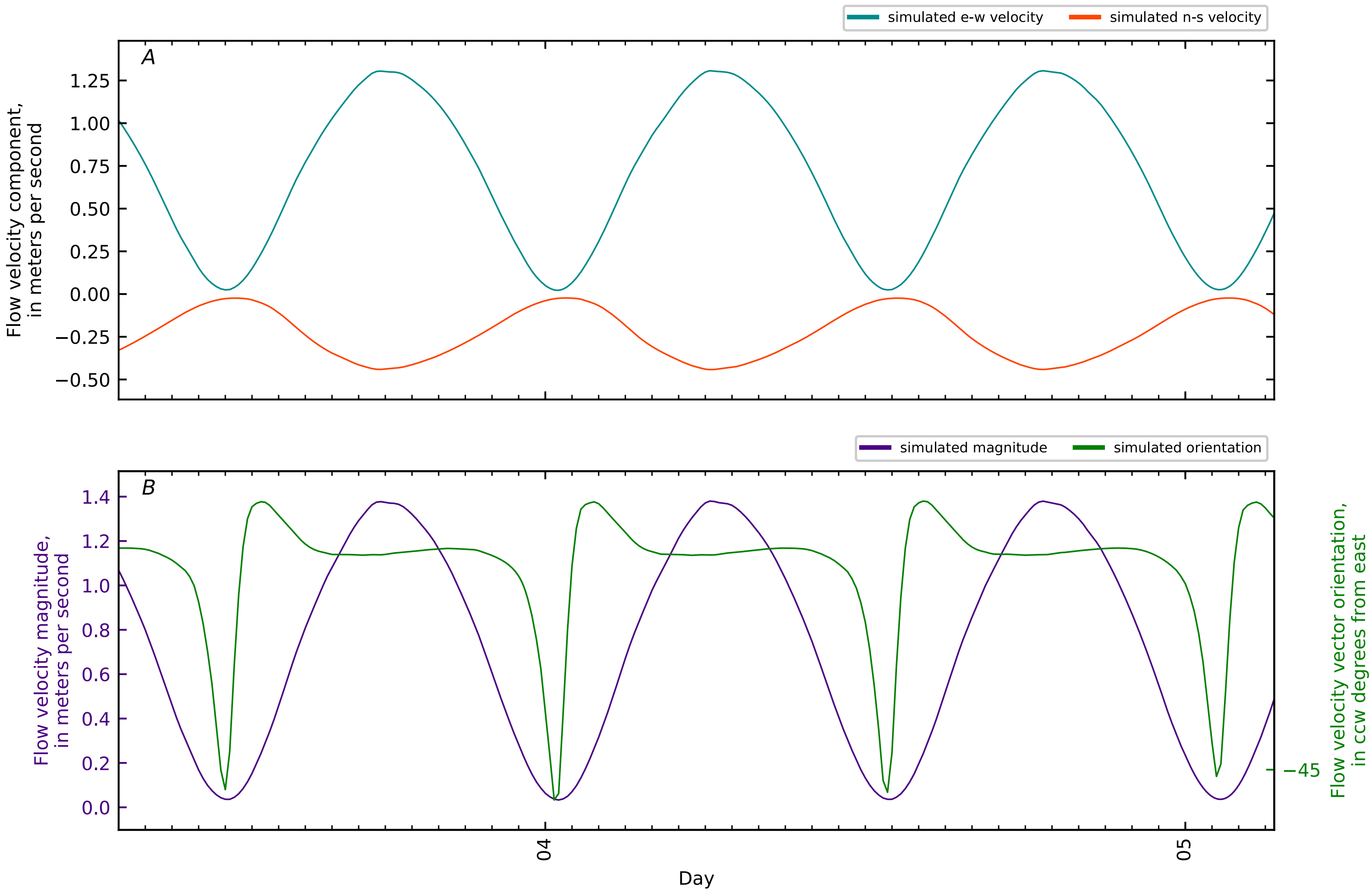

Figure B2-203. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 42, Penob Riv KM12. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

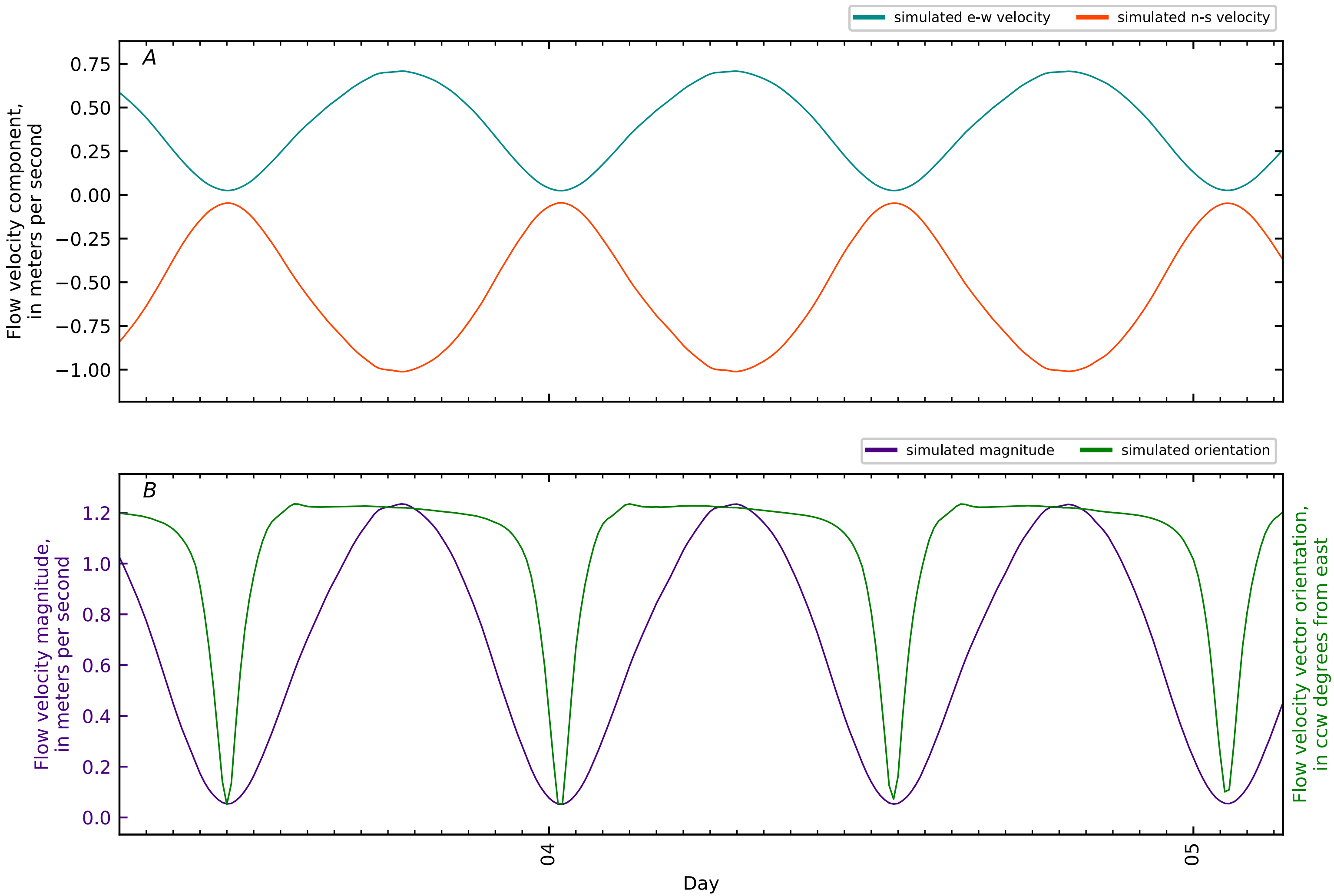

Figure B2-204. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 43, Penob Riv KM12.9 WHOI7 Bucksport 2011. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

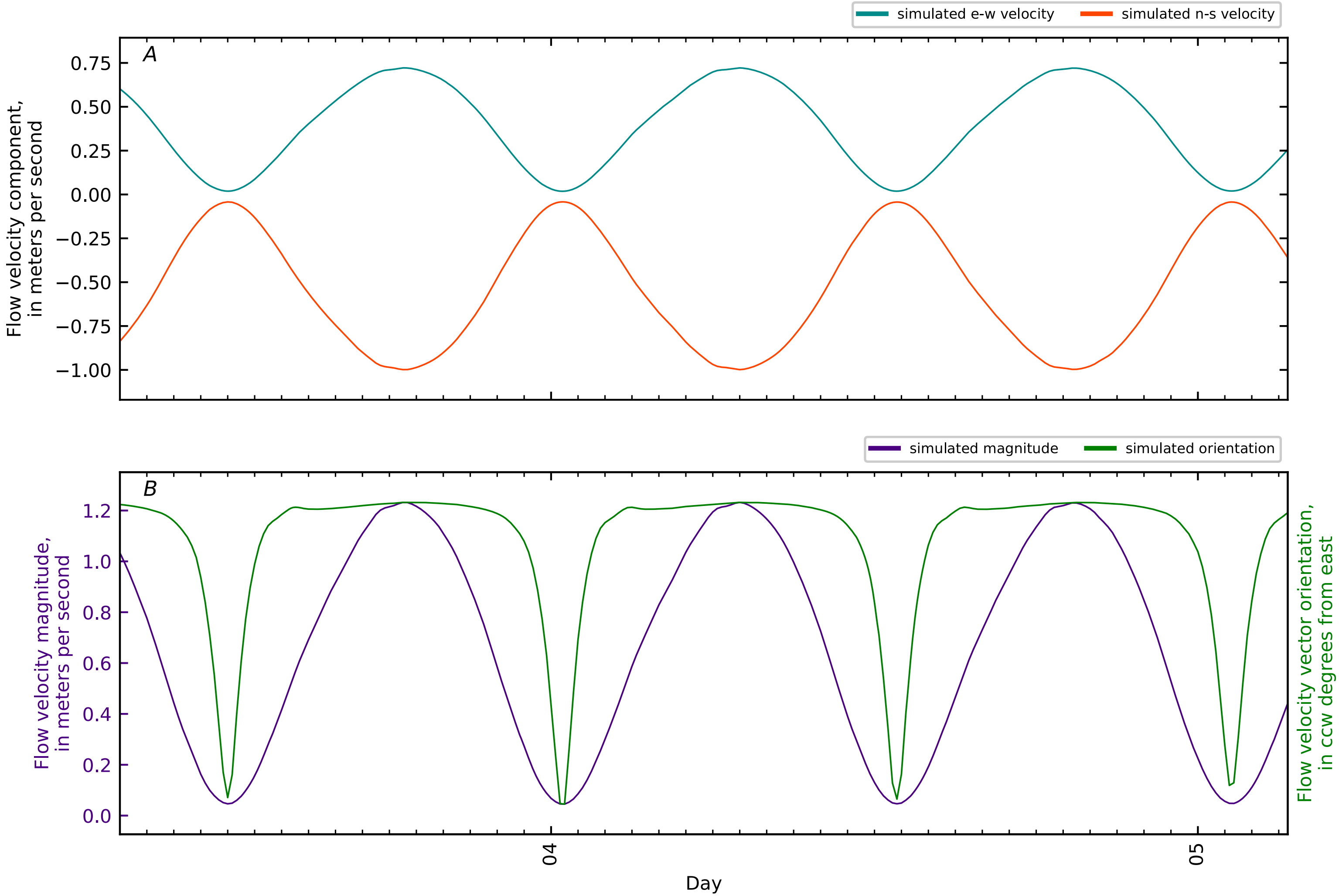

Figure B2-205. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 44, Penob Riv KM13. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

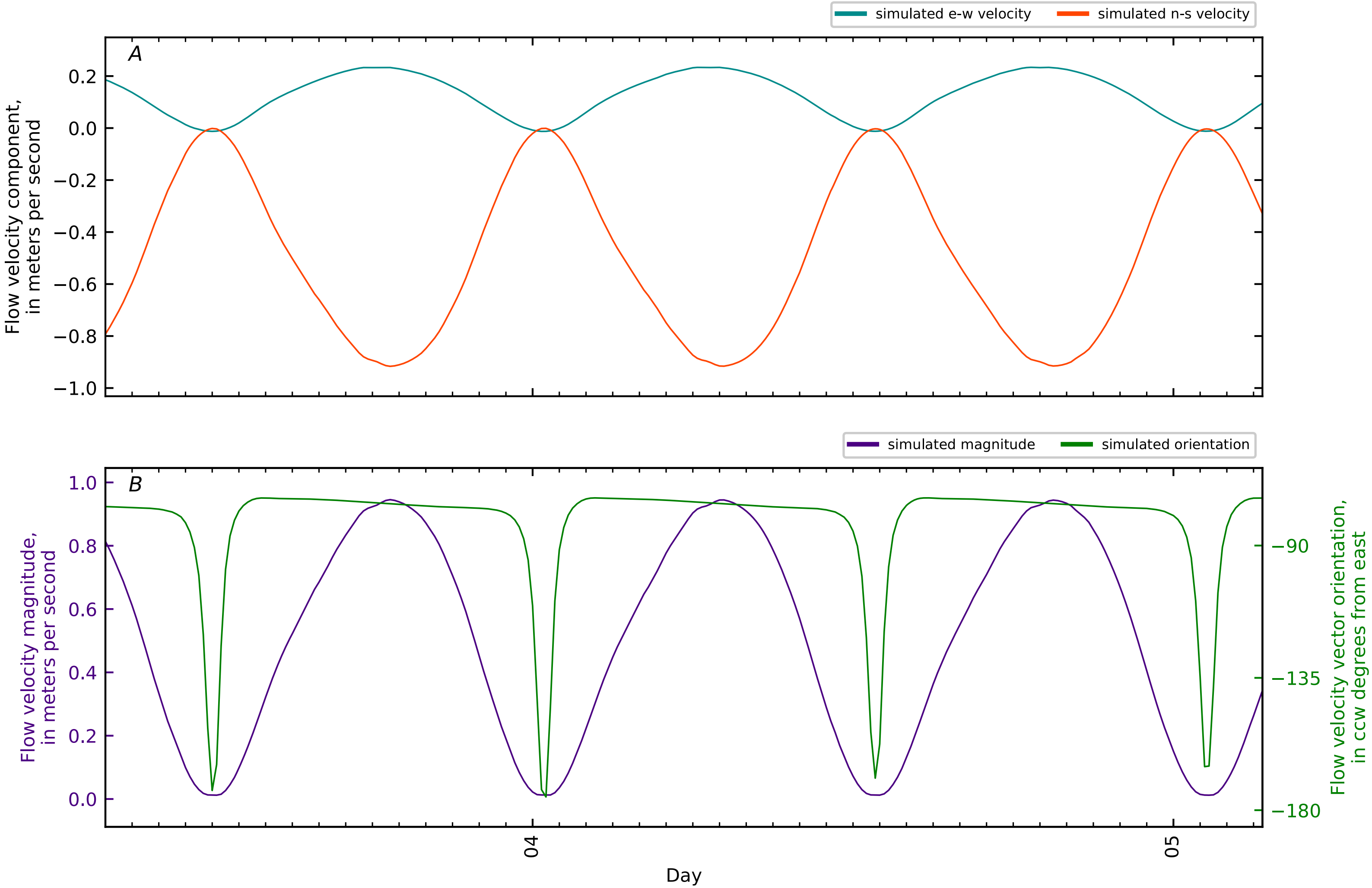

Figure B2-206. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 45, Penob Riv KM14. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

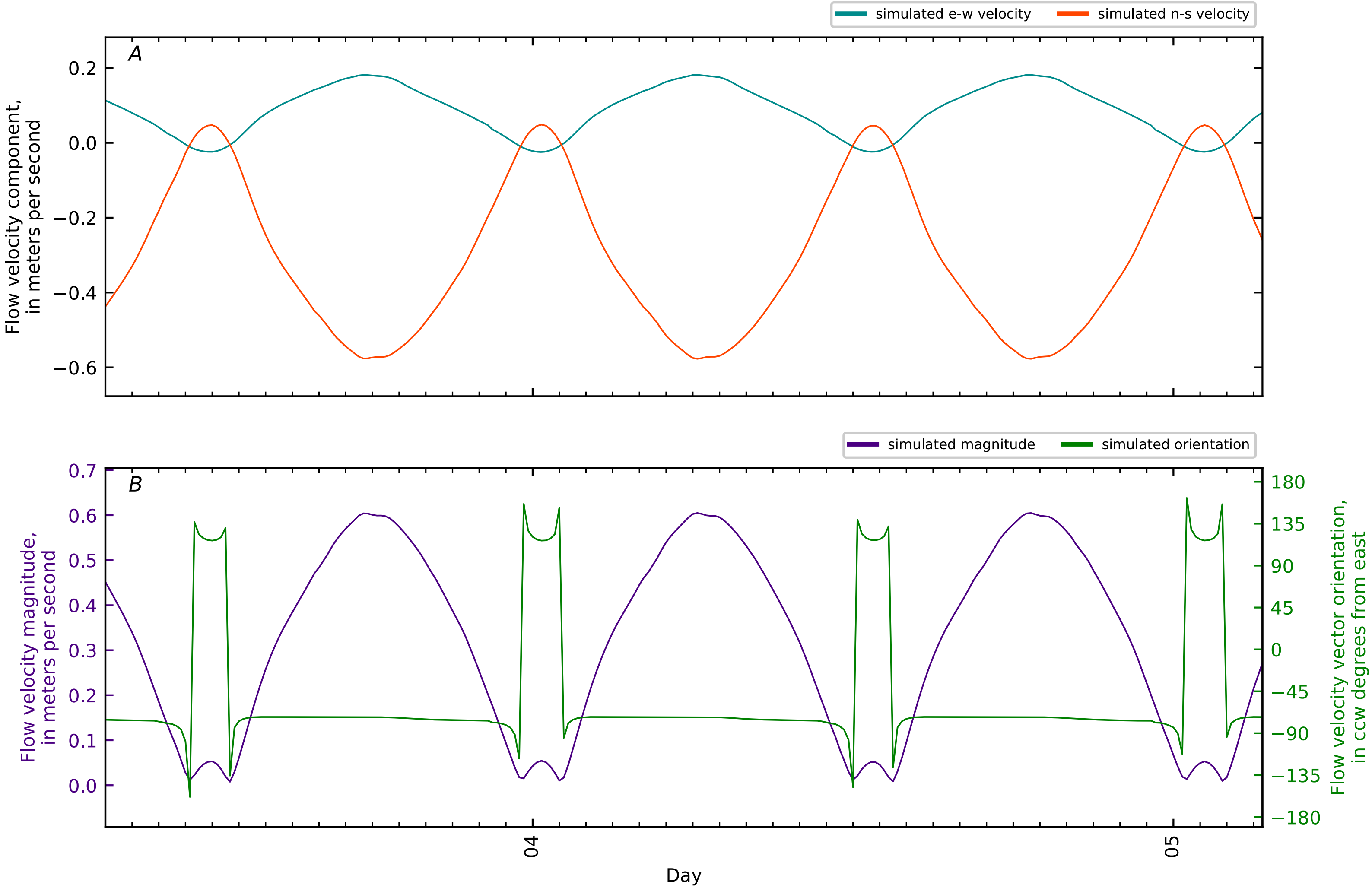

Figure B2-207. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 46, Penob Riv KM14.27 ERDC15 BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

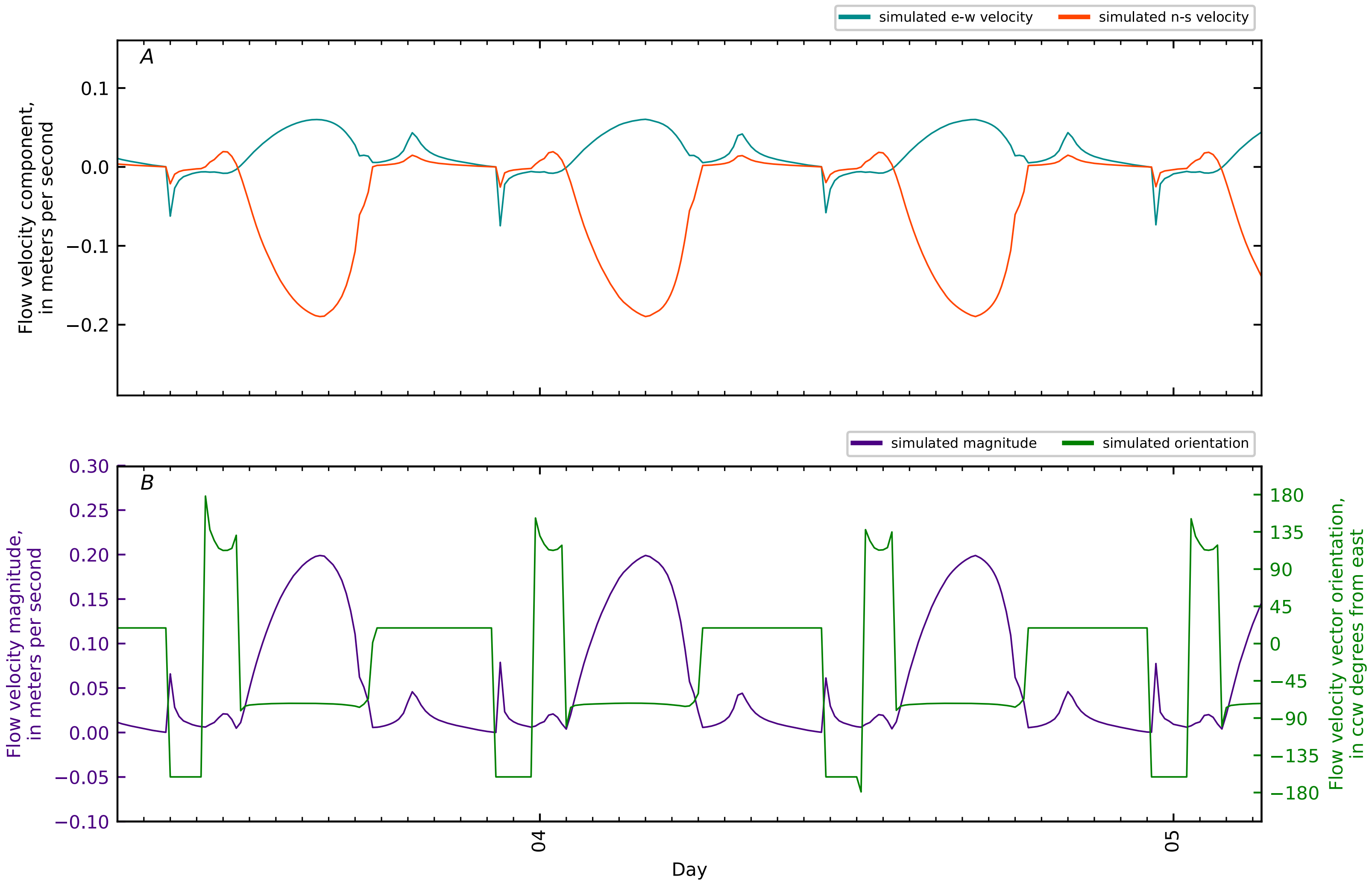

Figure B2-208. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 47, Penob Riv KM14.29 ERDC16B BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

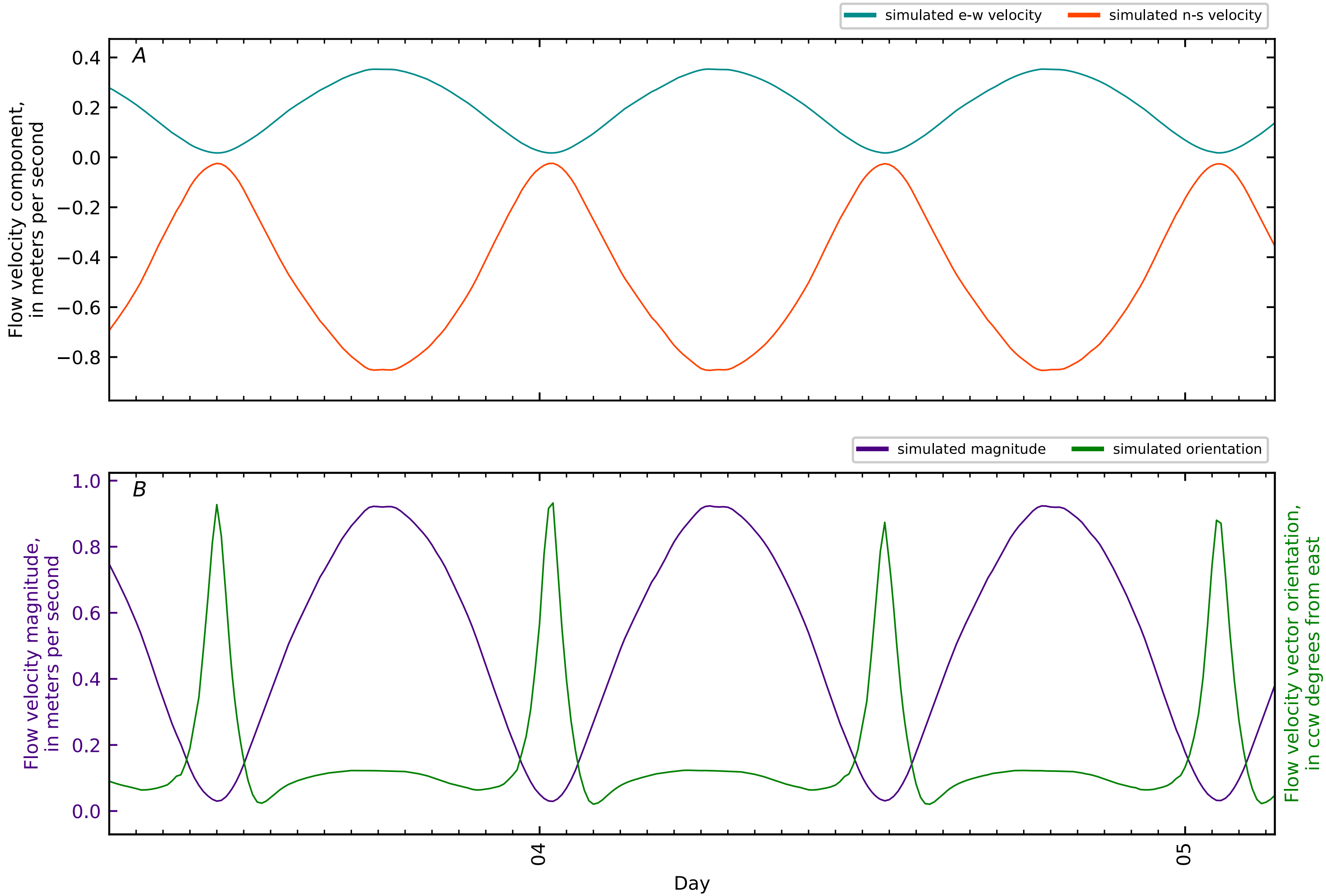

Figure B2-209. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 48, Penob Riv KM15. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

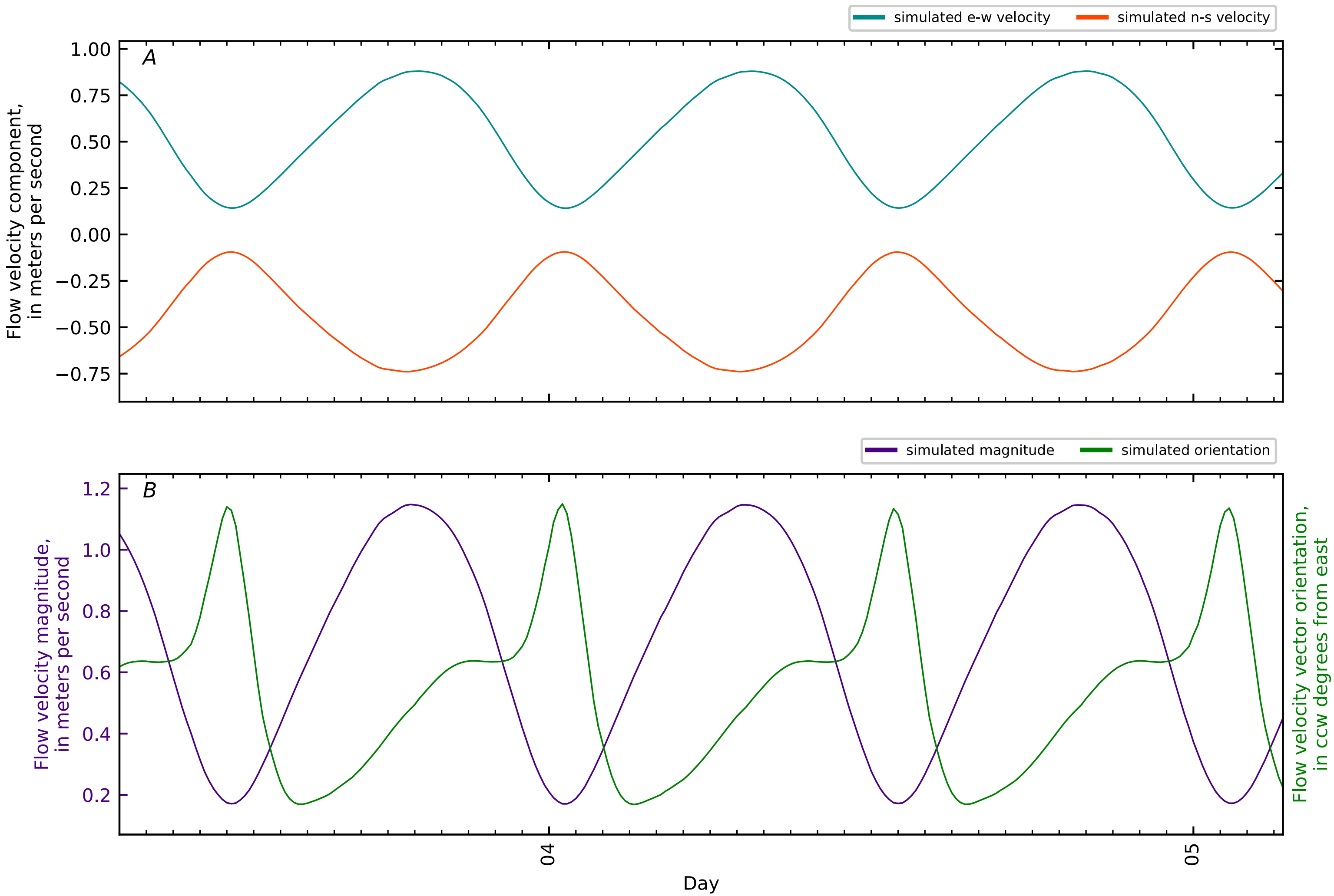

Figure B2-210. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 49, Penob Riv KM16. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

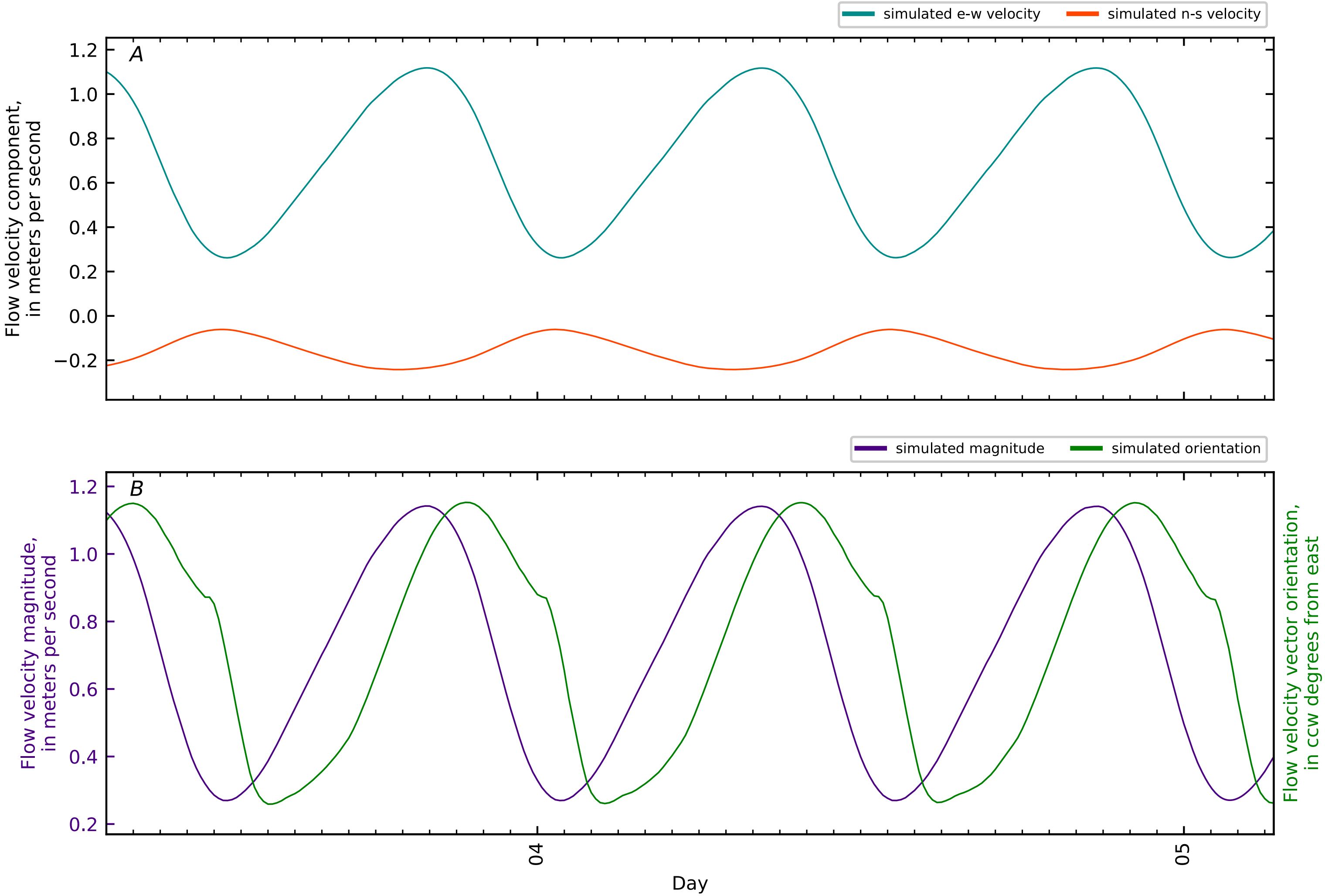

Figure B2-211. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 50, Penob Riv KM17. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

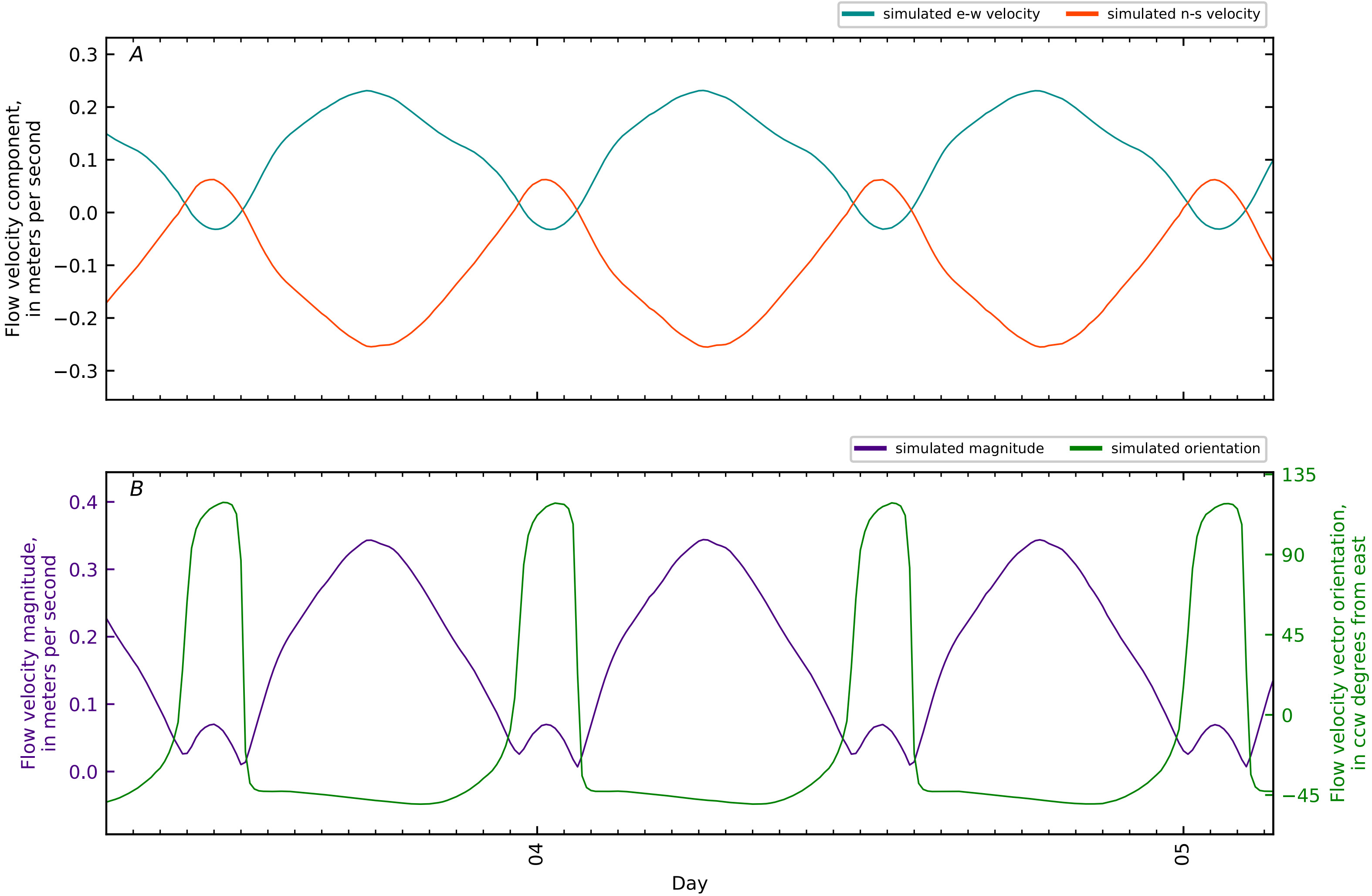

Figure B2-212. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 51, Penob Riv KM17.2 ERDC17B FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

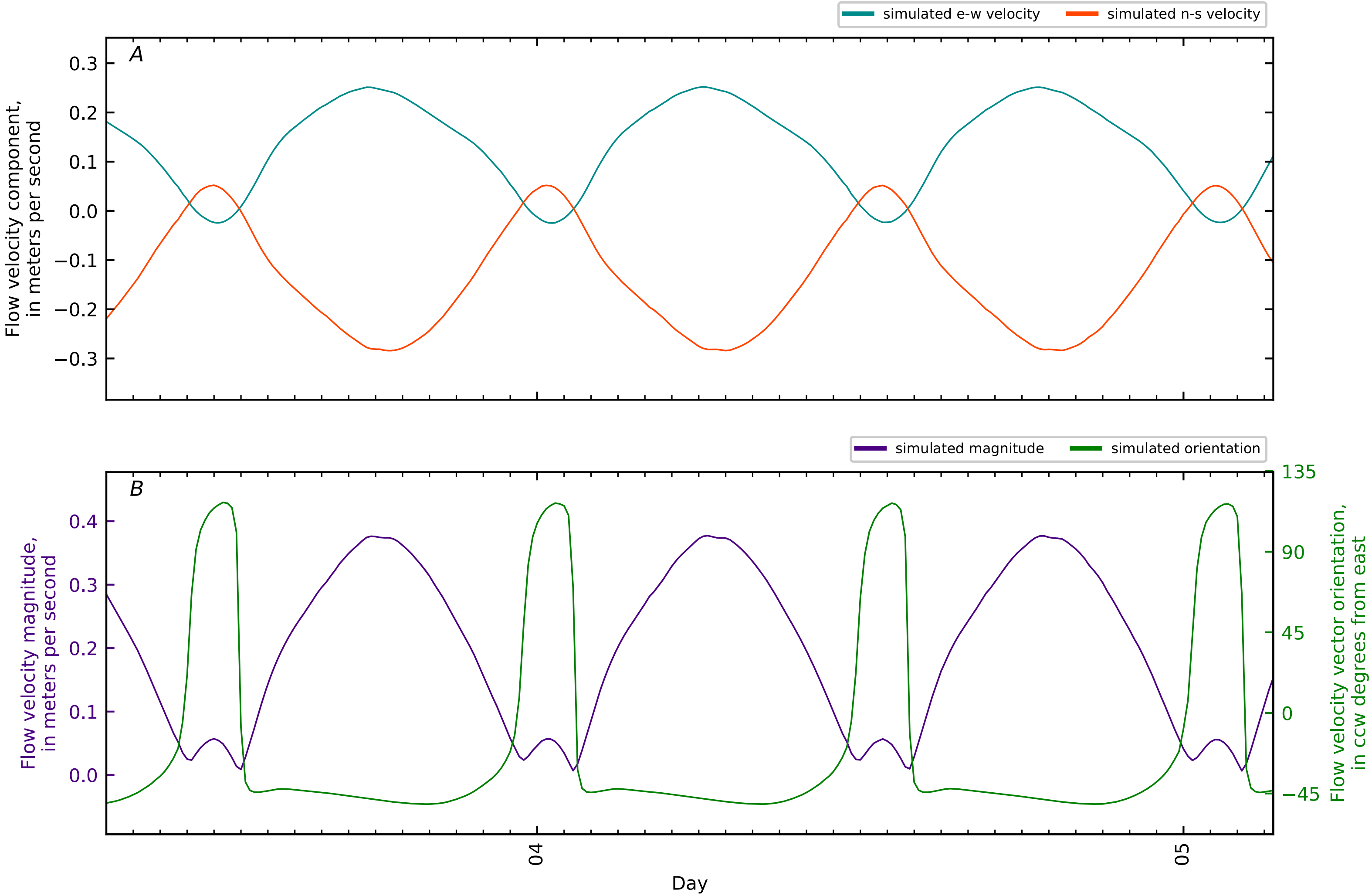

Figure B2-213. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 52, Penob Riv KM17.21 ERDC13 FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

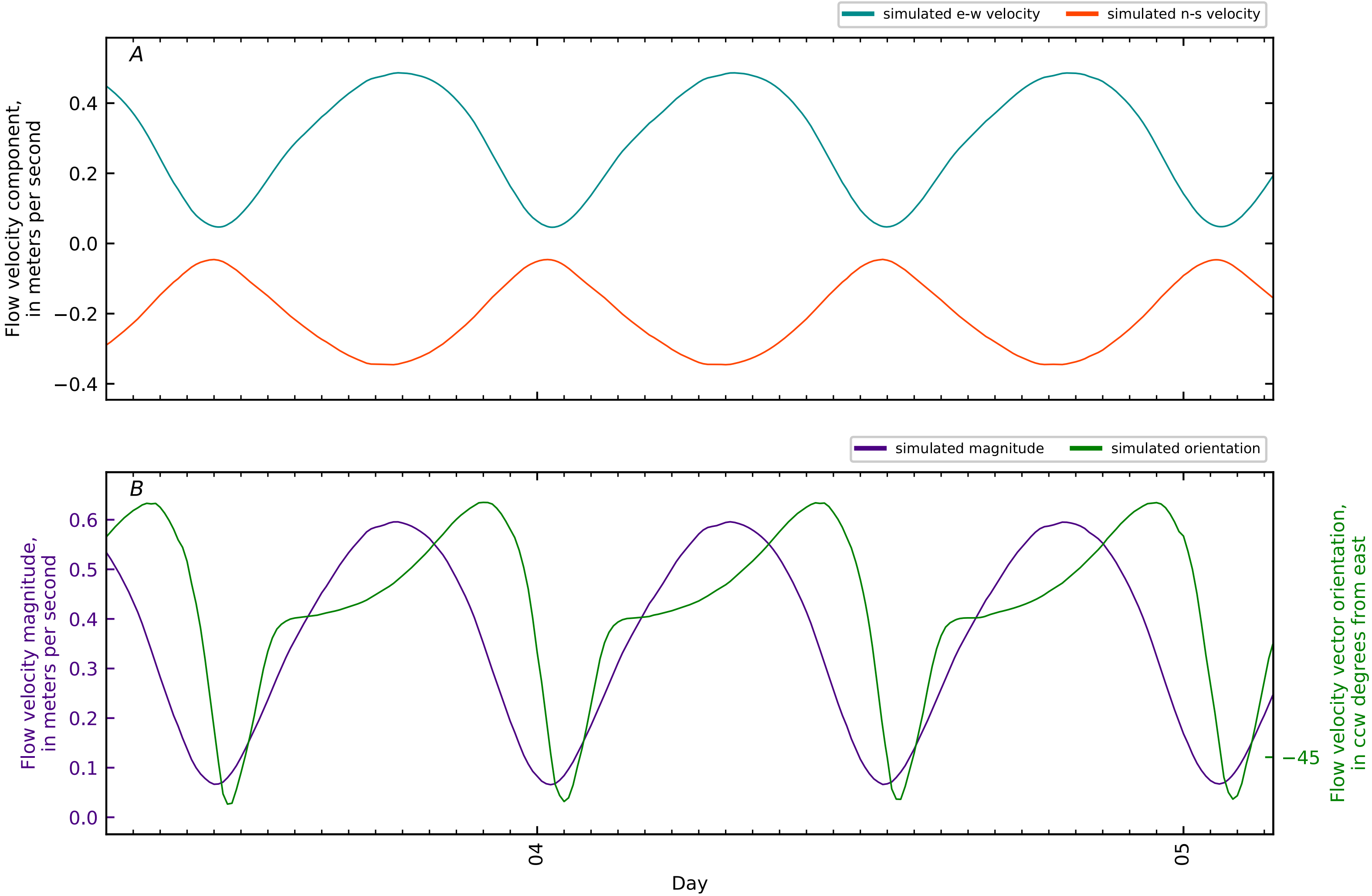

Figure B2-214. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 53, Penob Riv KM17.2 WHOI2 Frankfort Flats 2. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

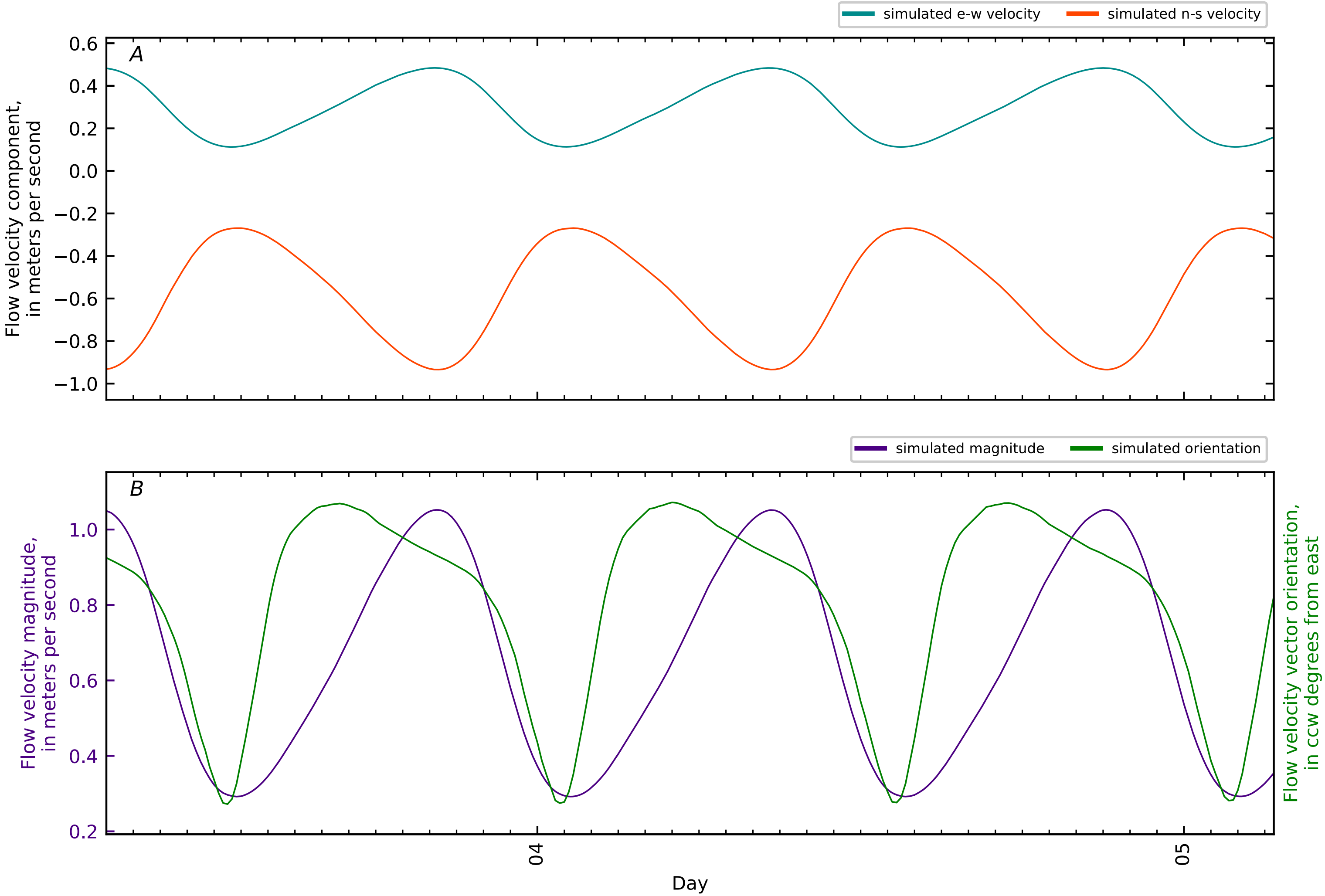

Figure B2-215. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 54, Penob Riv KM18. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

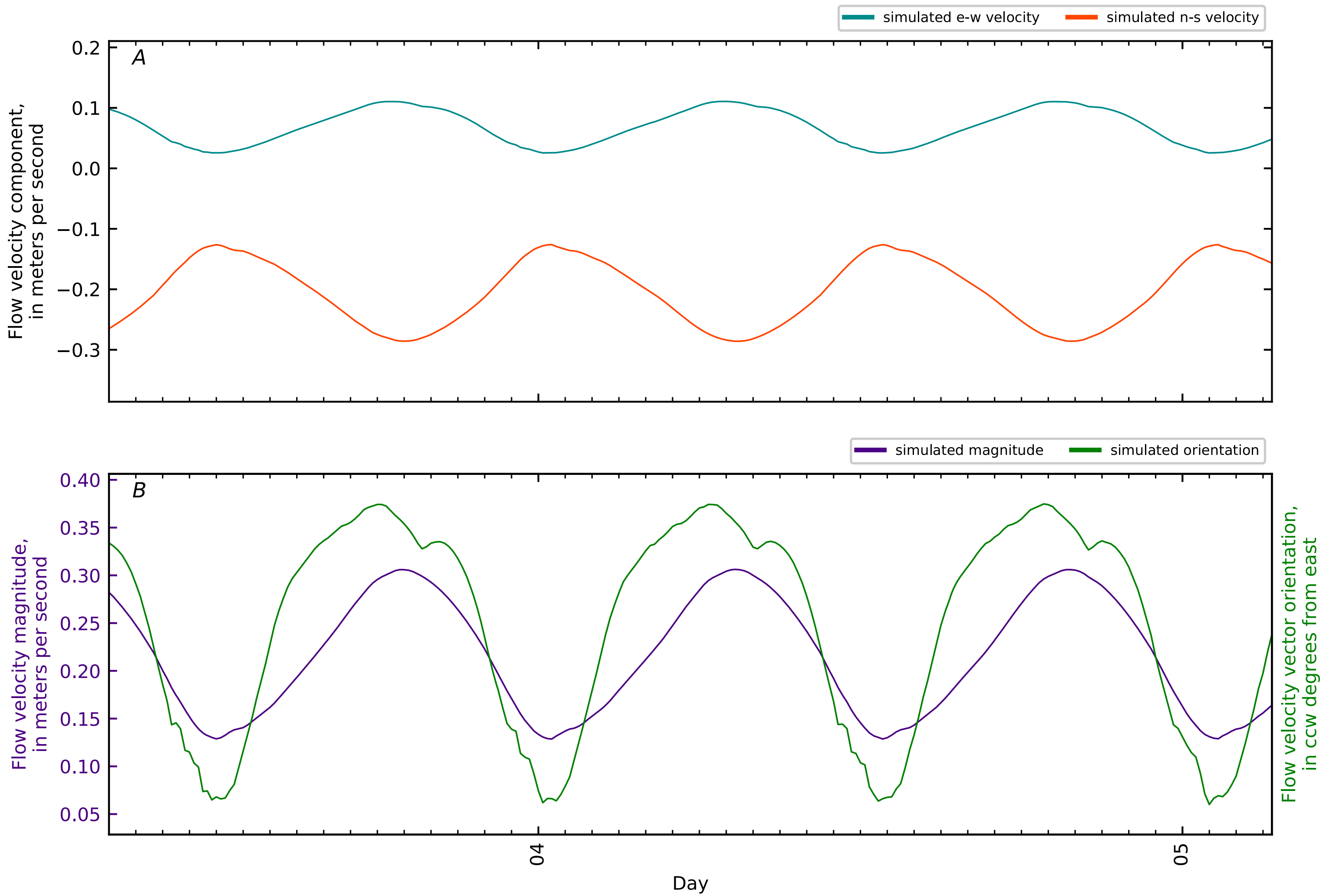

Figure B2-216. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 55, Penob Riv KM18.01 GS CTD1-01. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

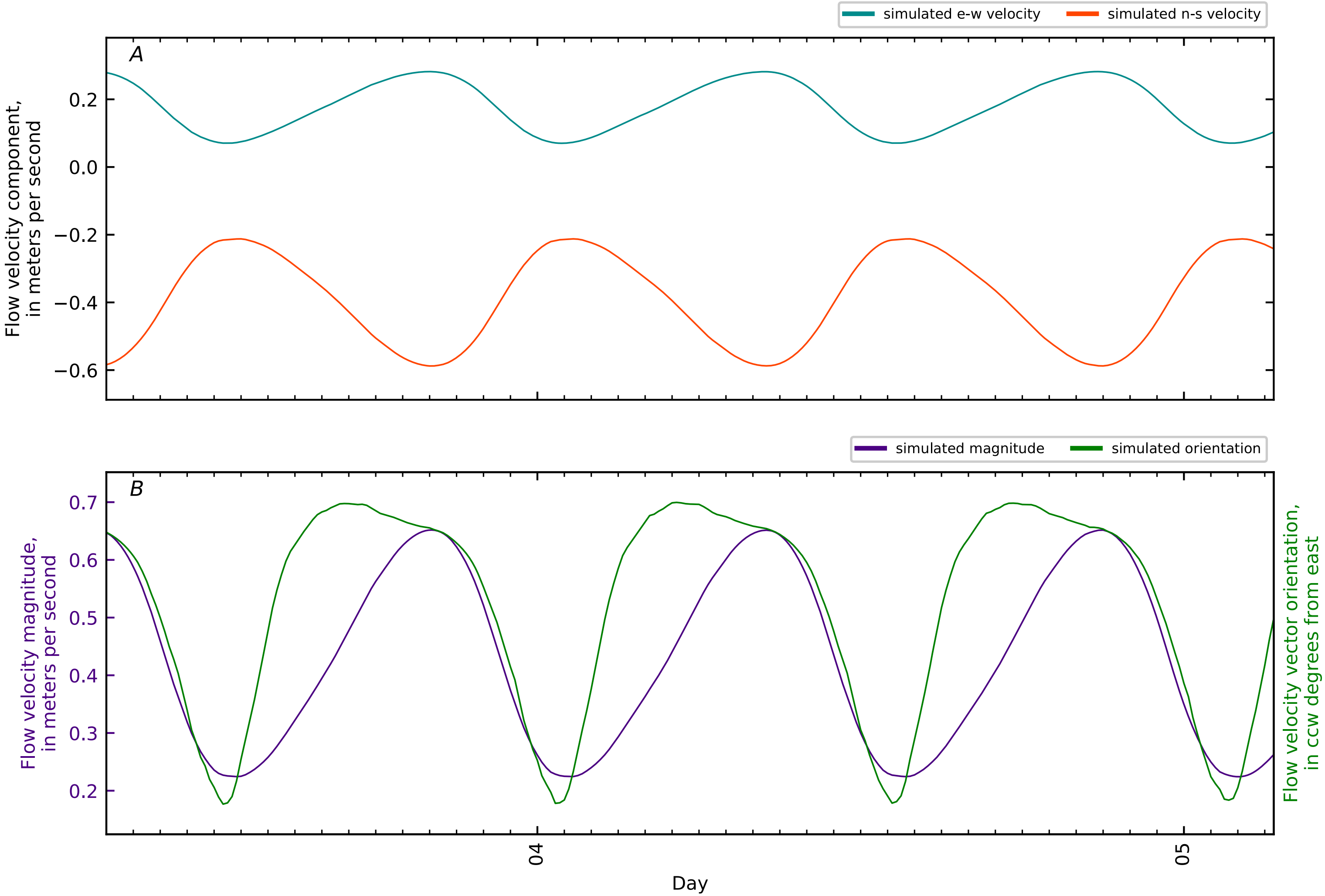

Figure B2-217. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 56, Penob Riv KM18.01 GS CTD1-02. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

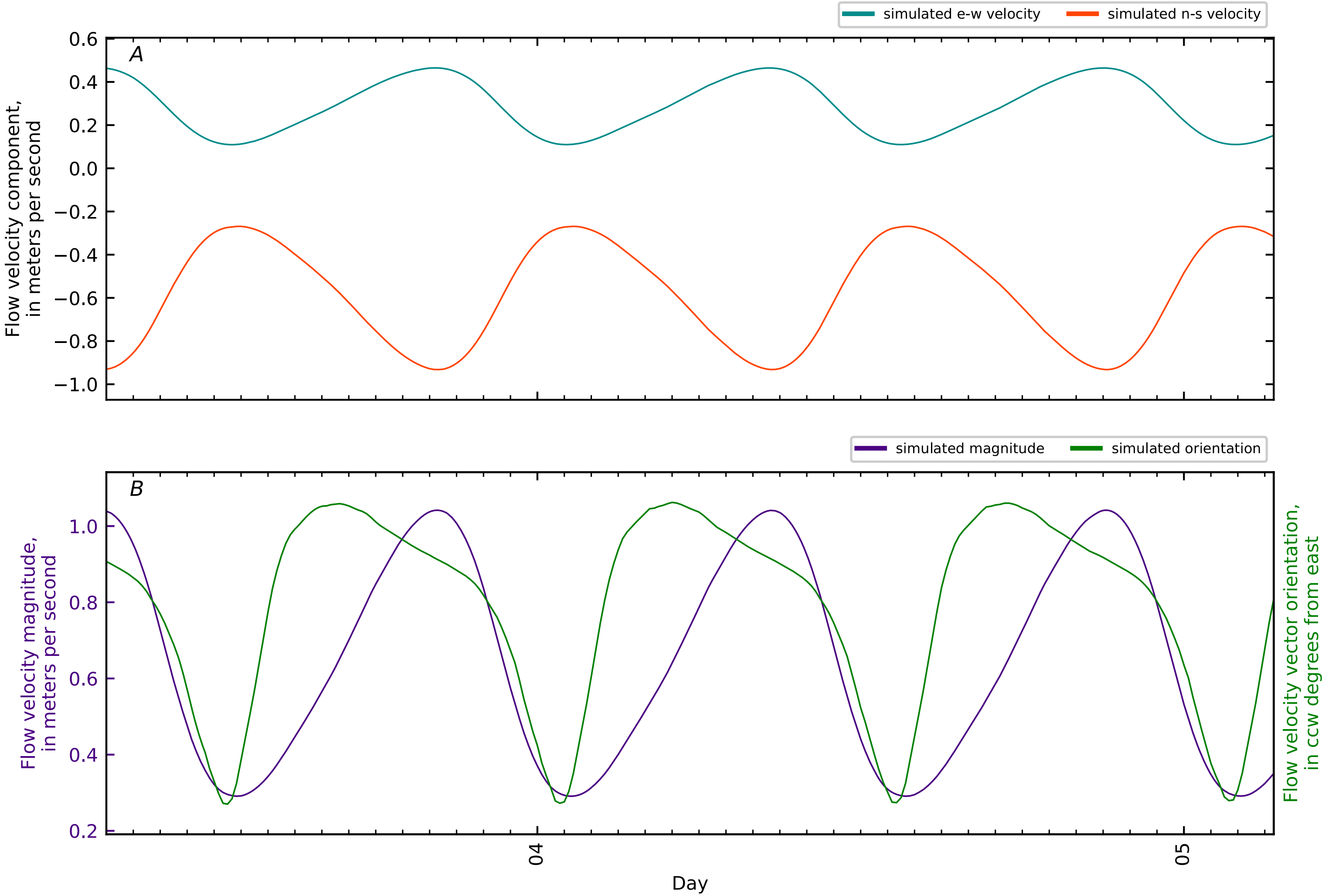

Figure B2-218. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 57, Penob Riv KM18.01 GS CTD1-03. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

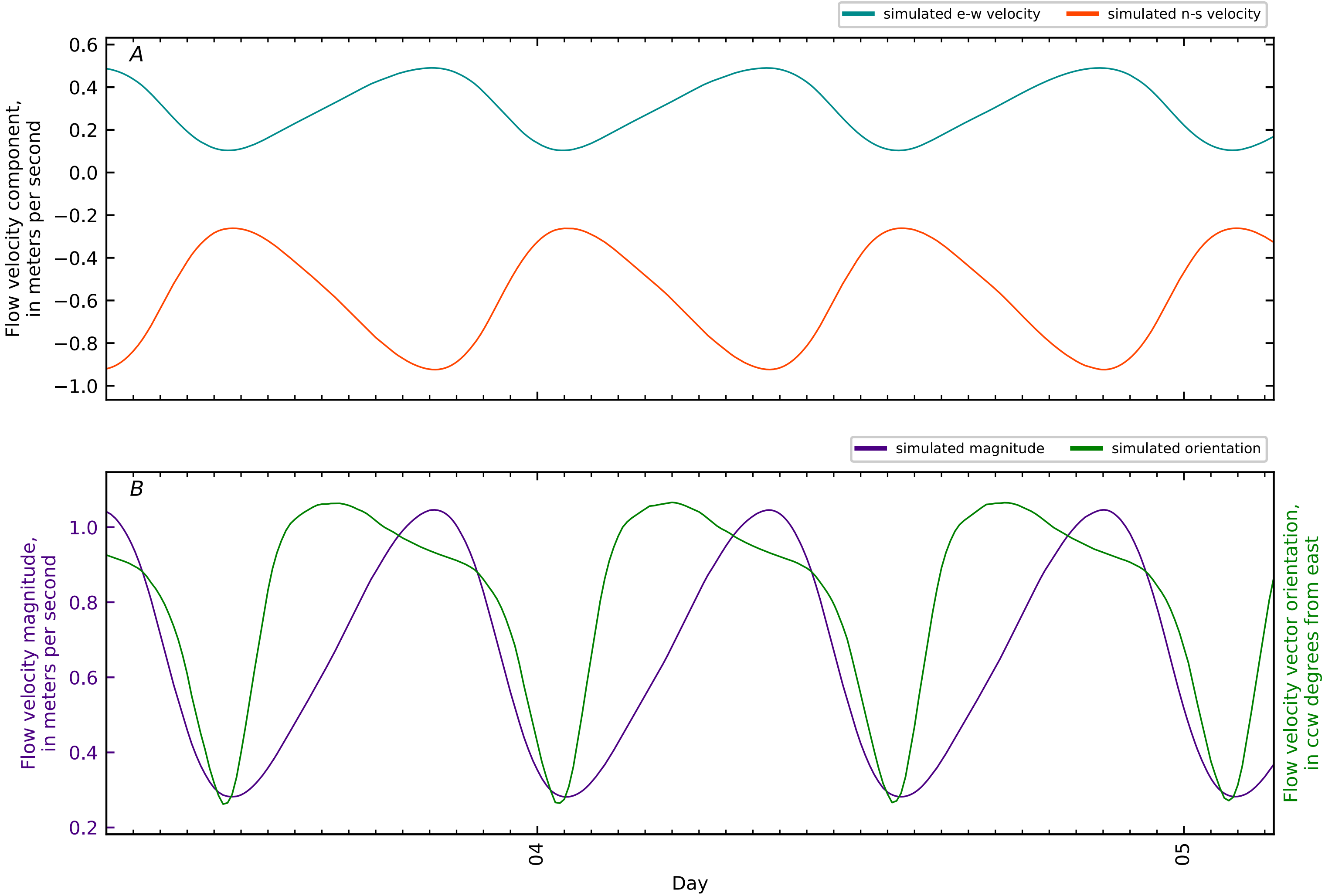

Figure B2-219. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 58, Penob Riv KM18.01 GS CTD1-04. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

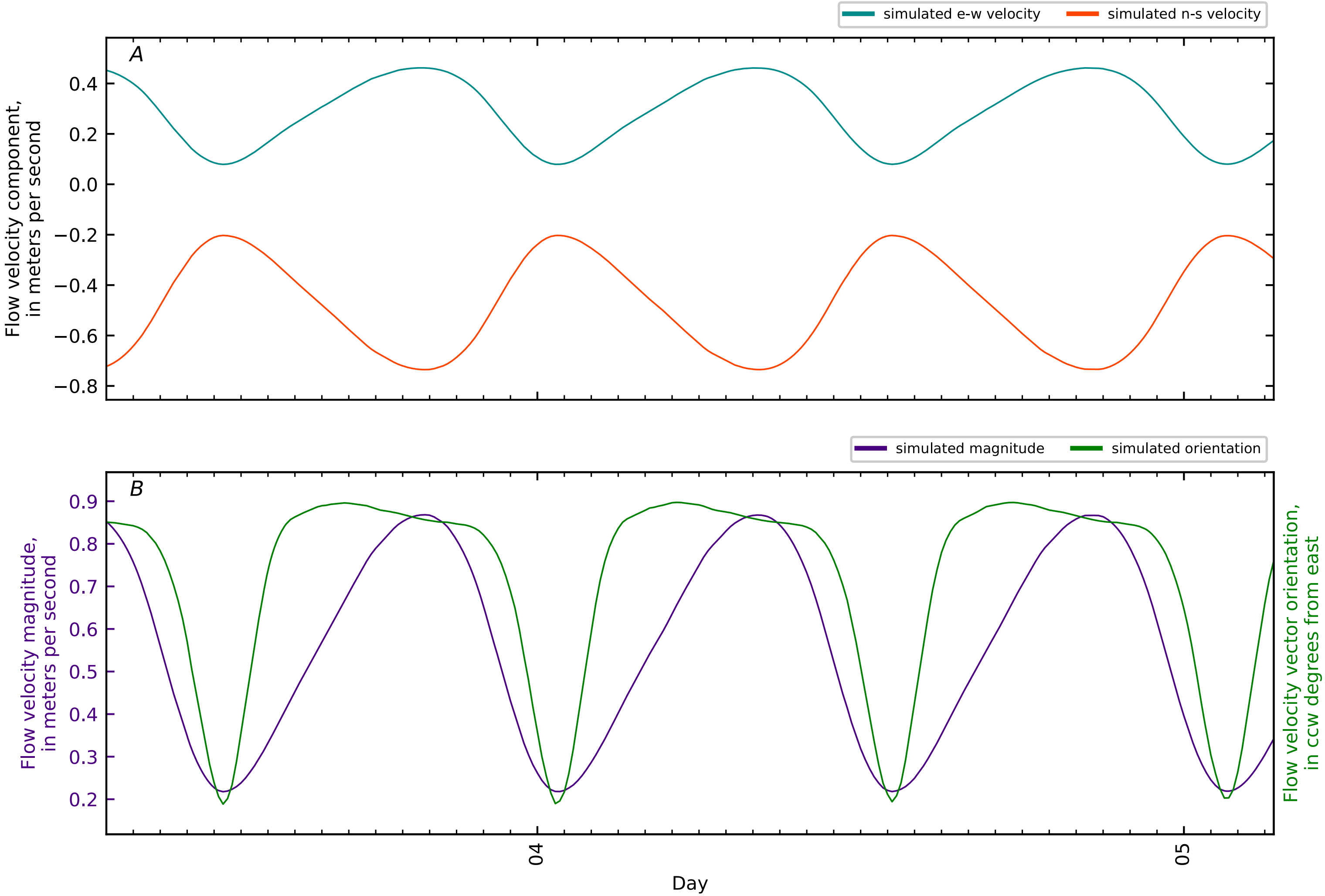

Figure B2-220. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 59, Penob Riv KM18.01 GS CTD1-05. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

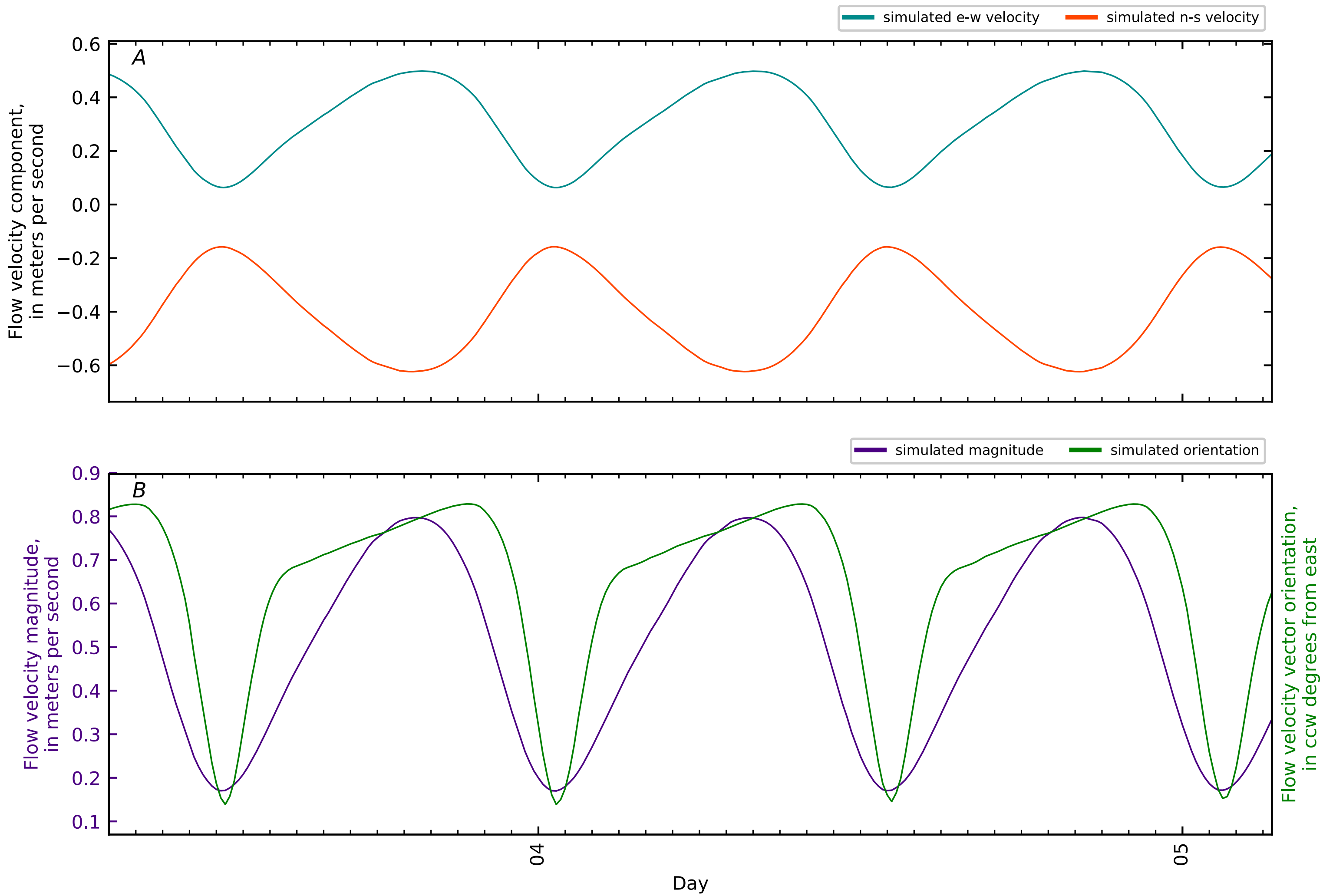

Figure B2-221. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 60, Penob Riv KM18.01 GS CTD1-06. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

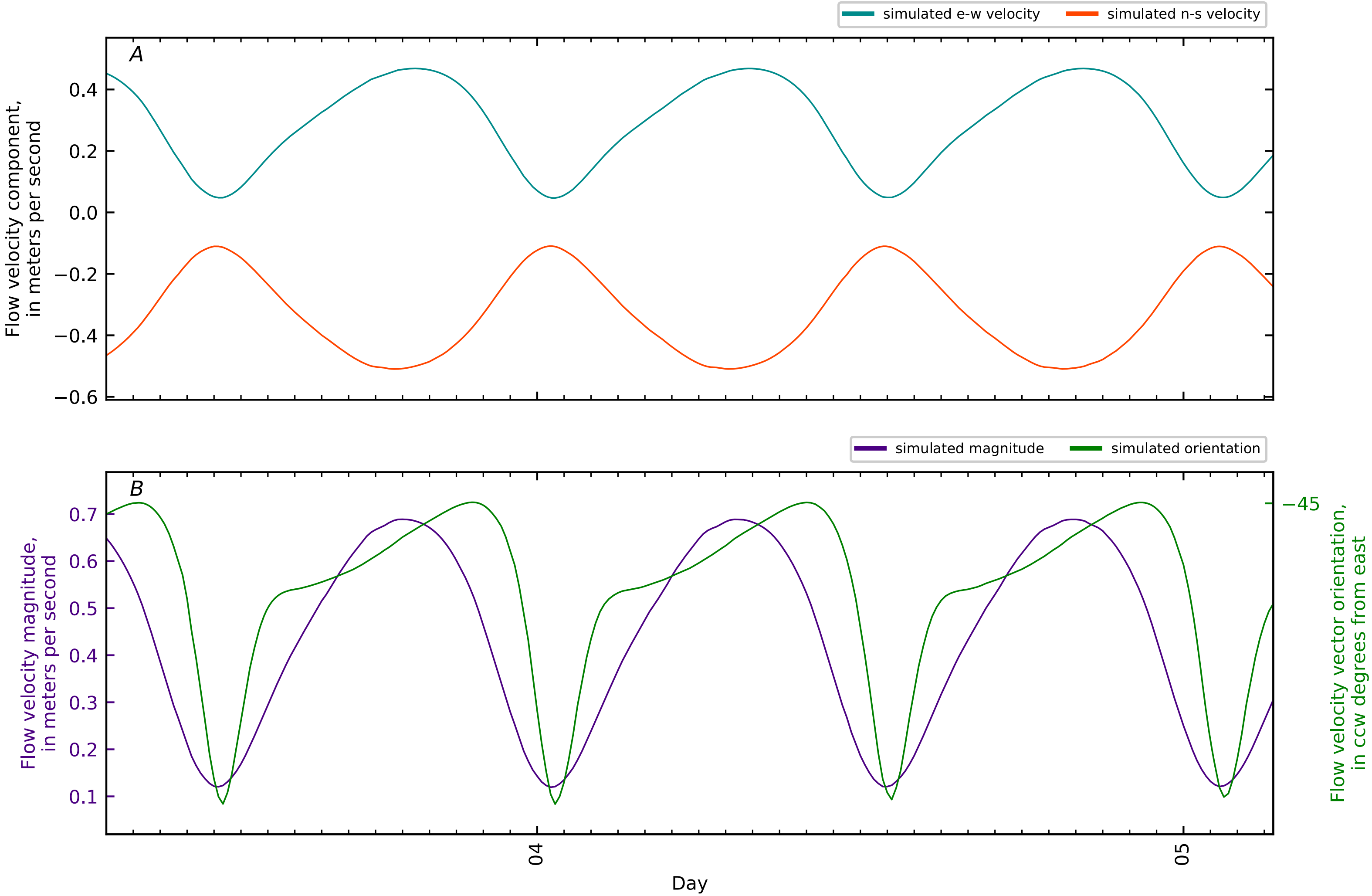

Figure B2-222. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 61, Penob Riv KM18.01 GS CTD1-07. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

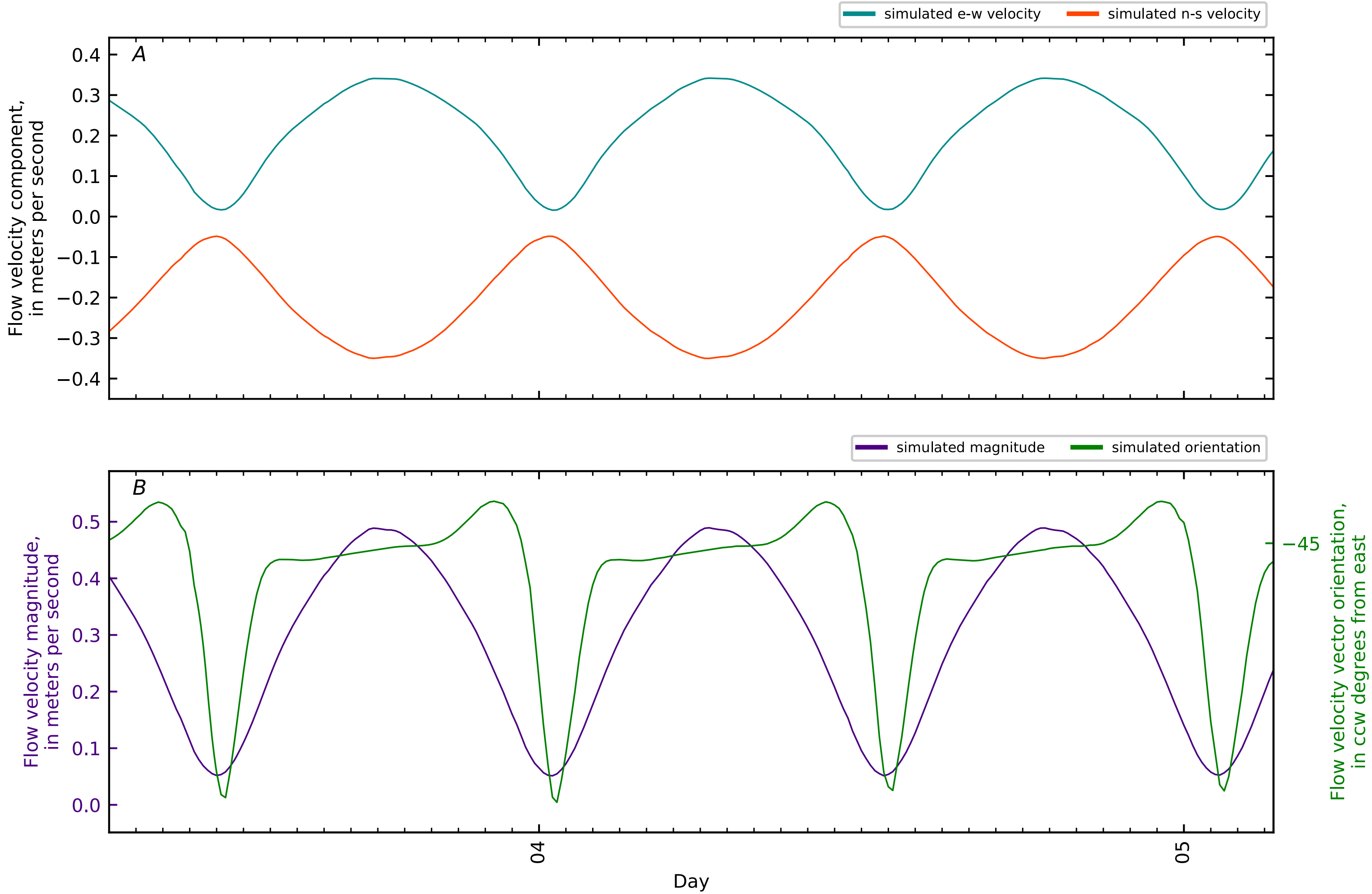

Figure B2-223. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 62, Penob Riv KM18.01 GS CTD1-08. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

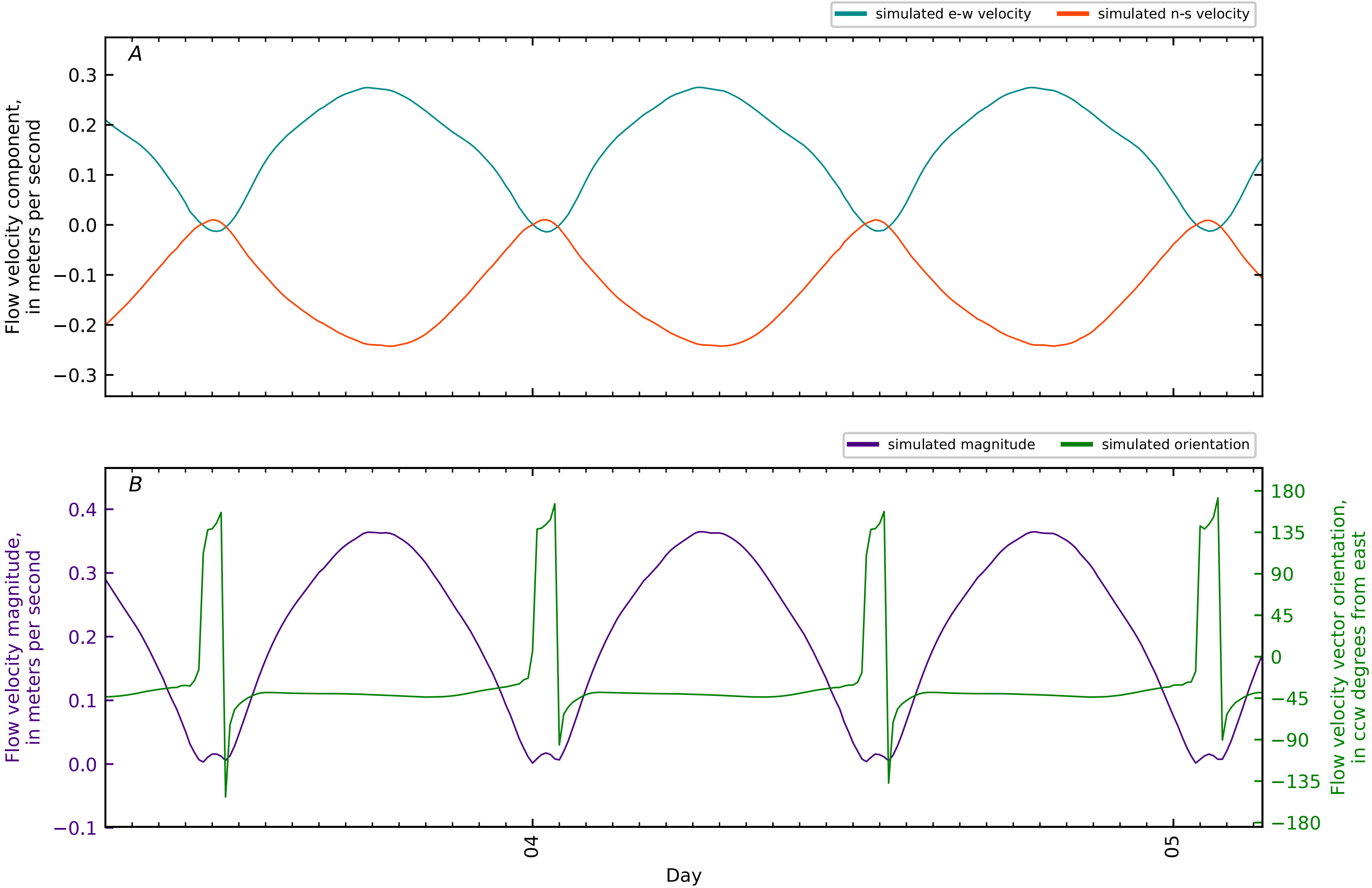

Figure B2-224. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 63, Penob Riv KM18.01 GS CTD1-09. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

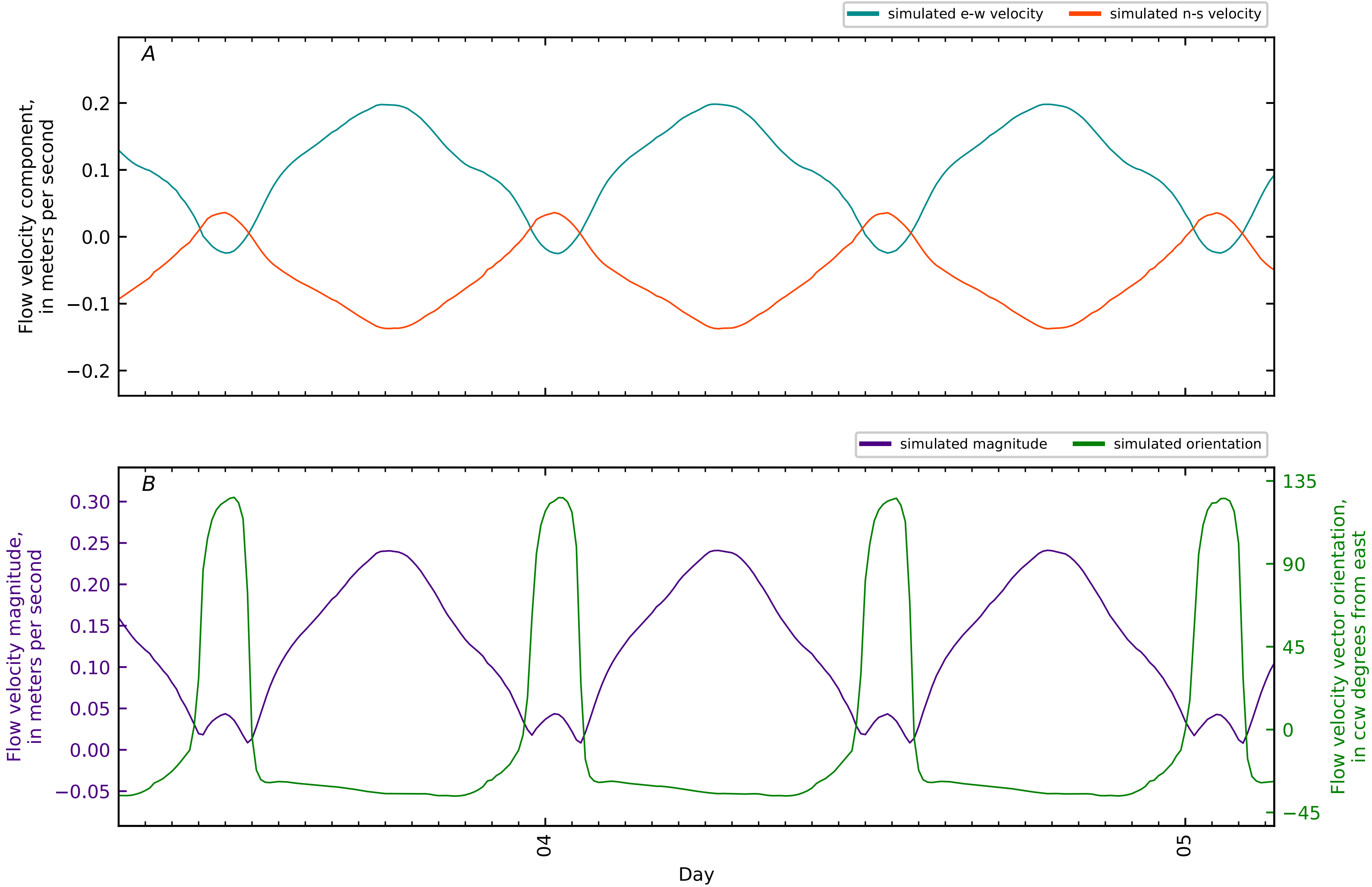

Figure B2-225. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 64, Penob Riv KM18.01 GS CTD1-10. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

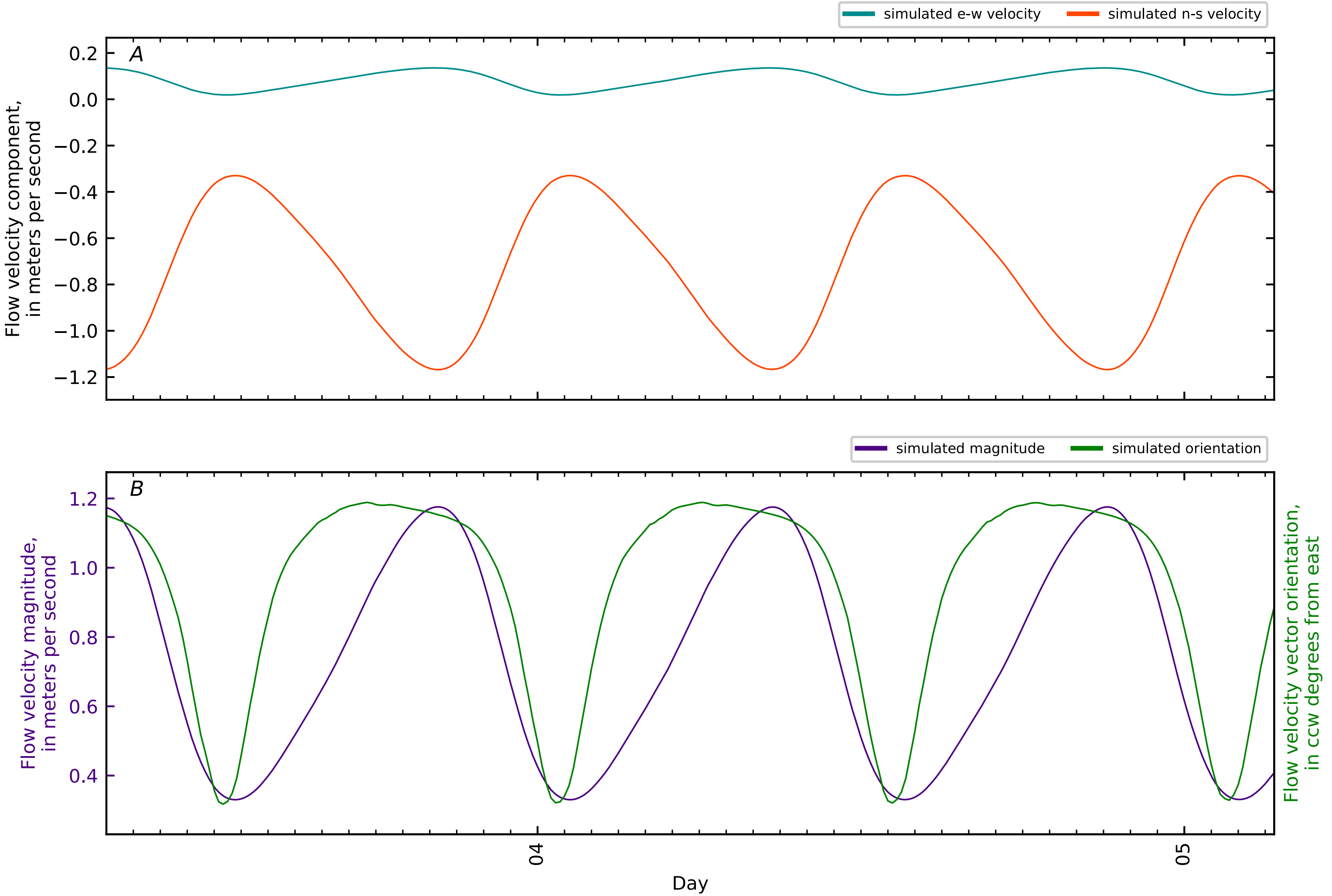

Figure B2-226. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 65, Penob Riv KM18.5 WHOI8 Frankfort Channel. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

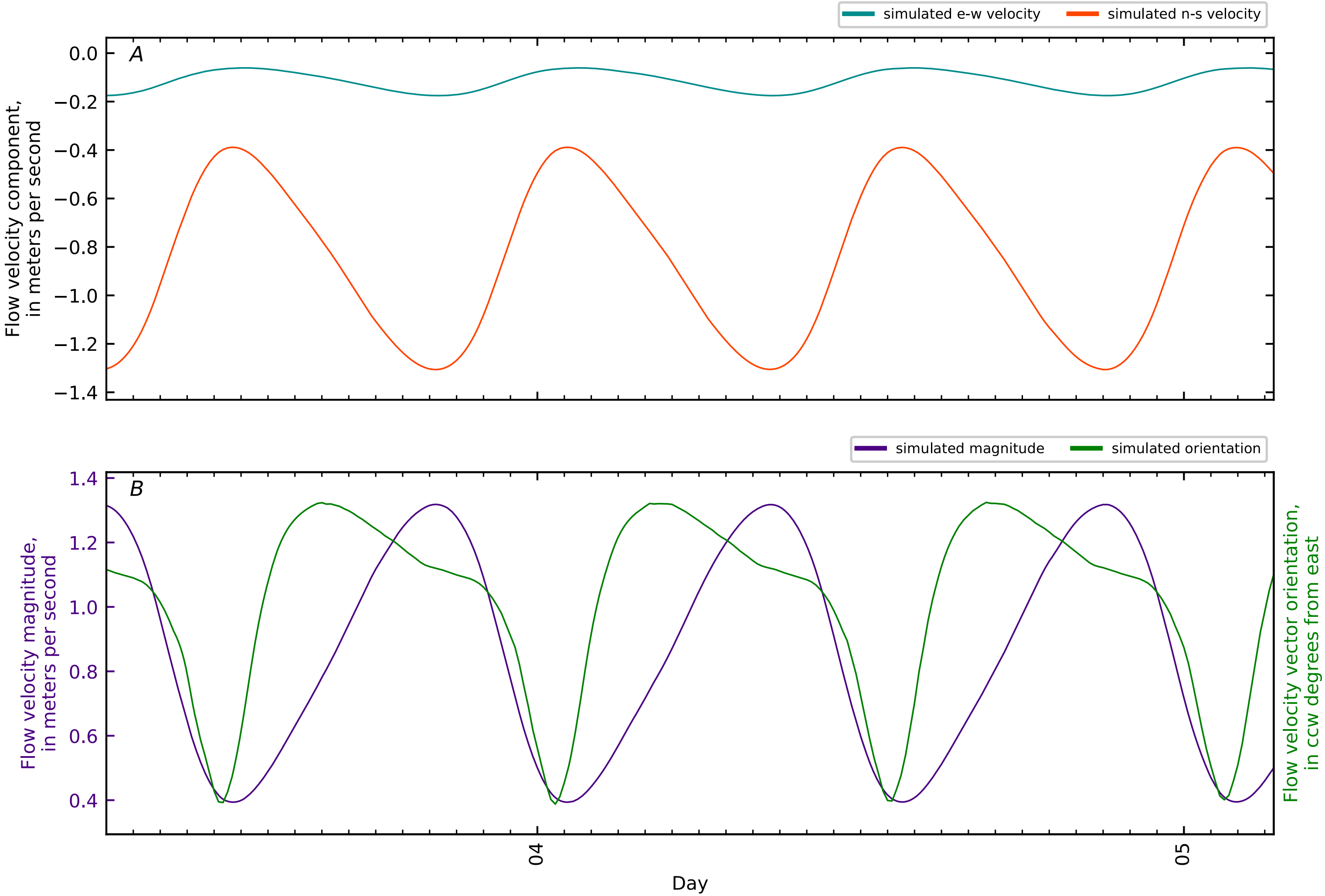

Figure B2-227. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 66, Penob Riv KM19. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

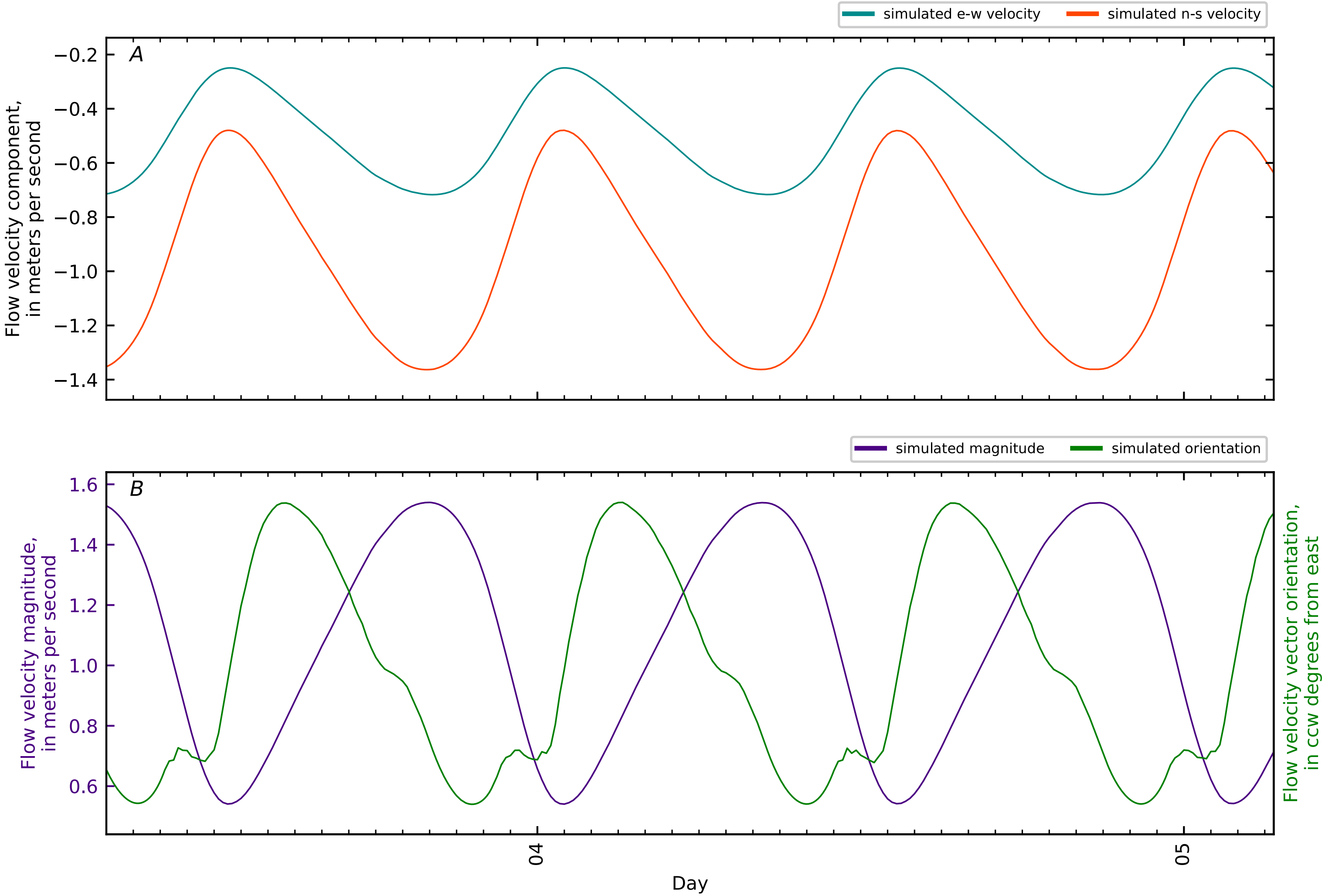

Figure B2-228. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 67, Penob Riv KM20. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

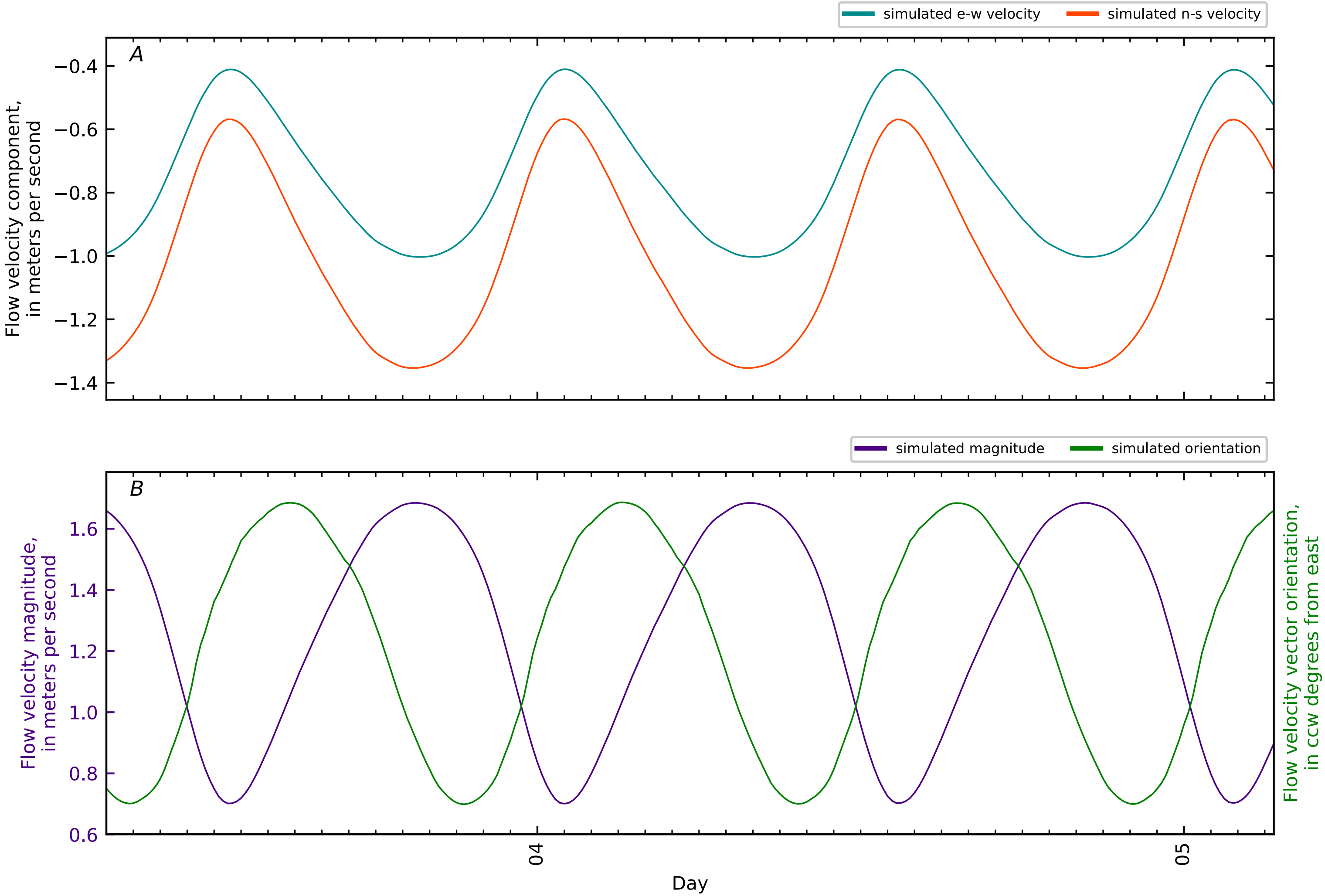

Figure B2-229. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 68, Penob Riv KM21. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

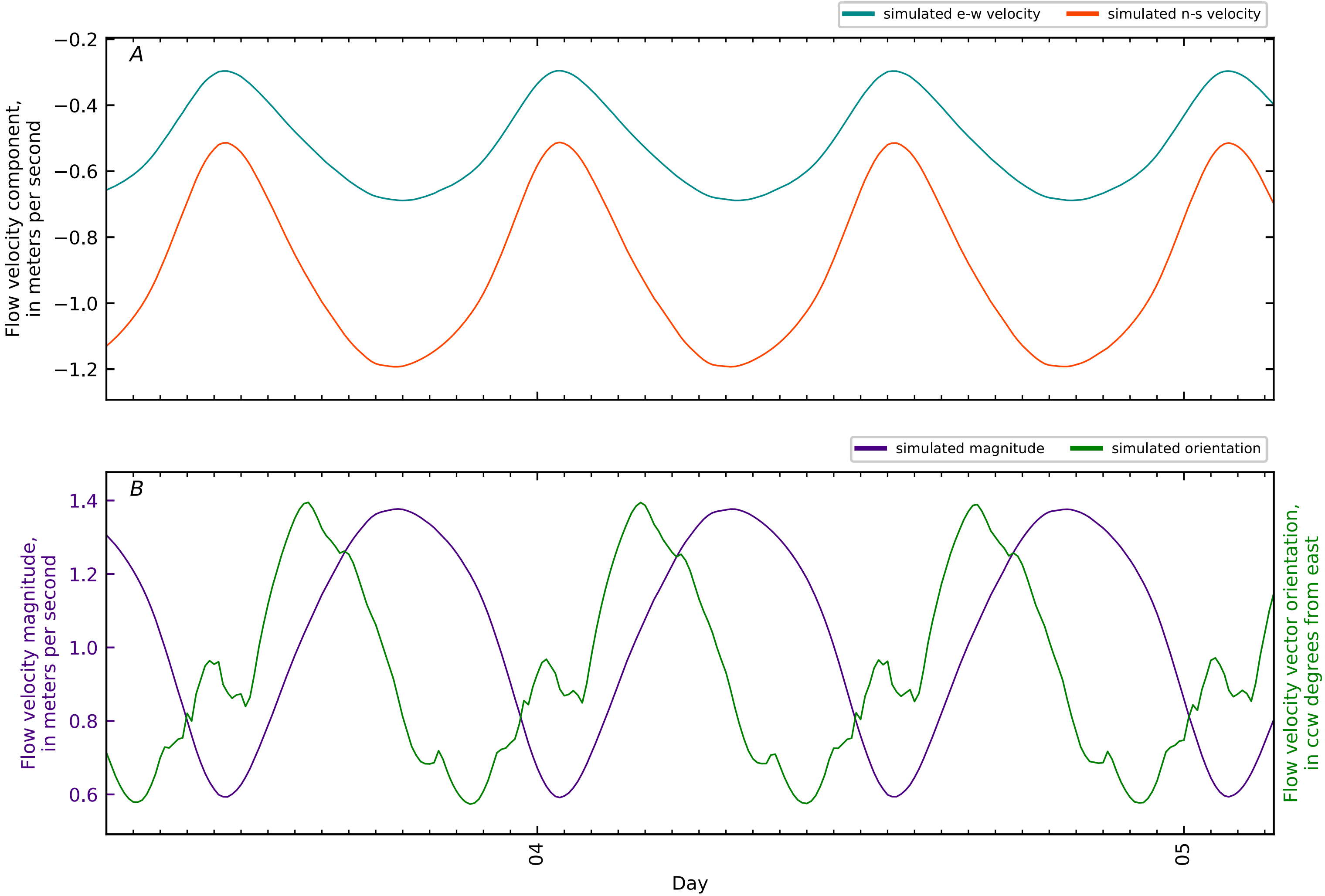

Figure B2-230. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 69, Penob Riv KM21.2 GS 443810068502201 Wint. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

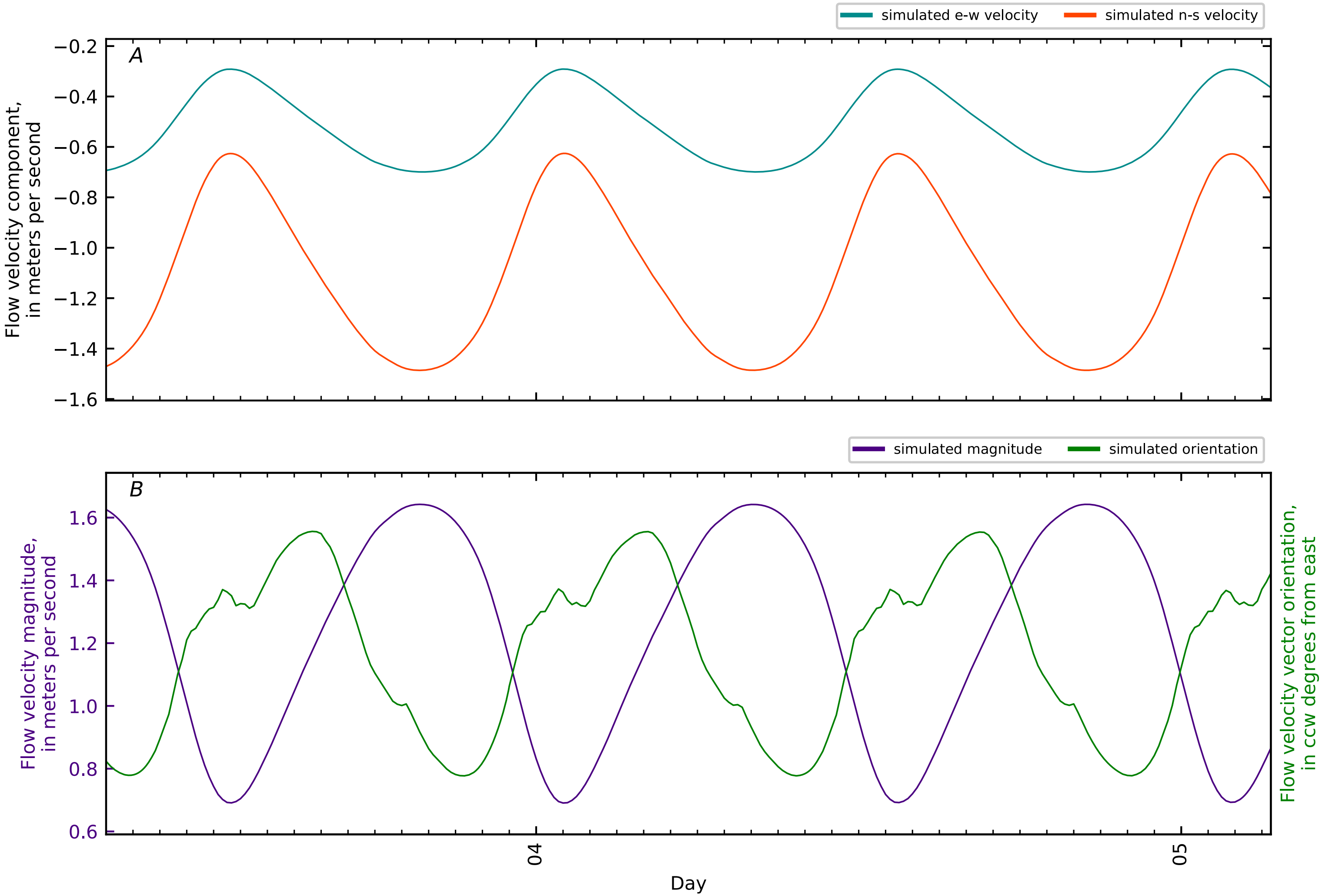

Figure B2-231. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 70, Penob Riv KM21.5 WHOI6 Winterport 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

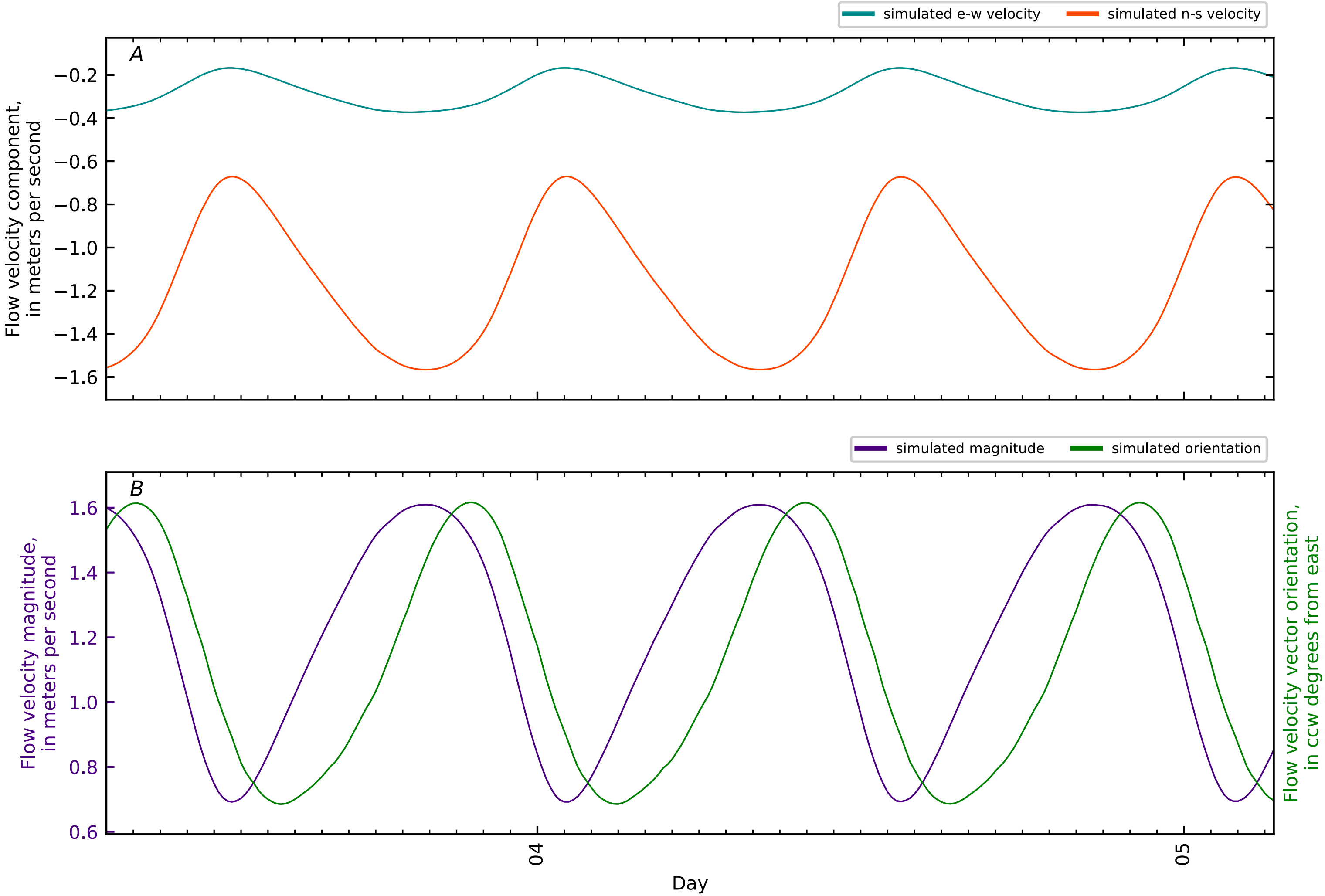

Figure B2-232. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 71, Penob Riv KM22. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

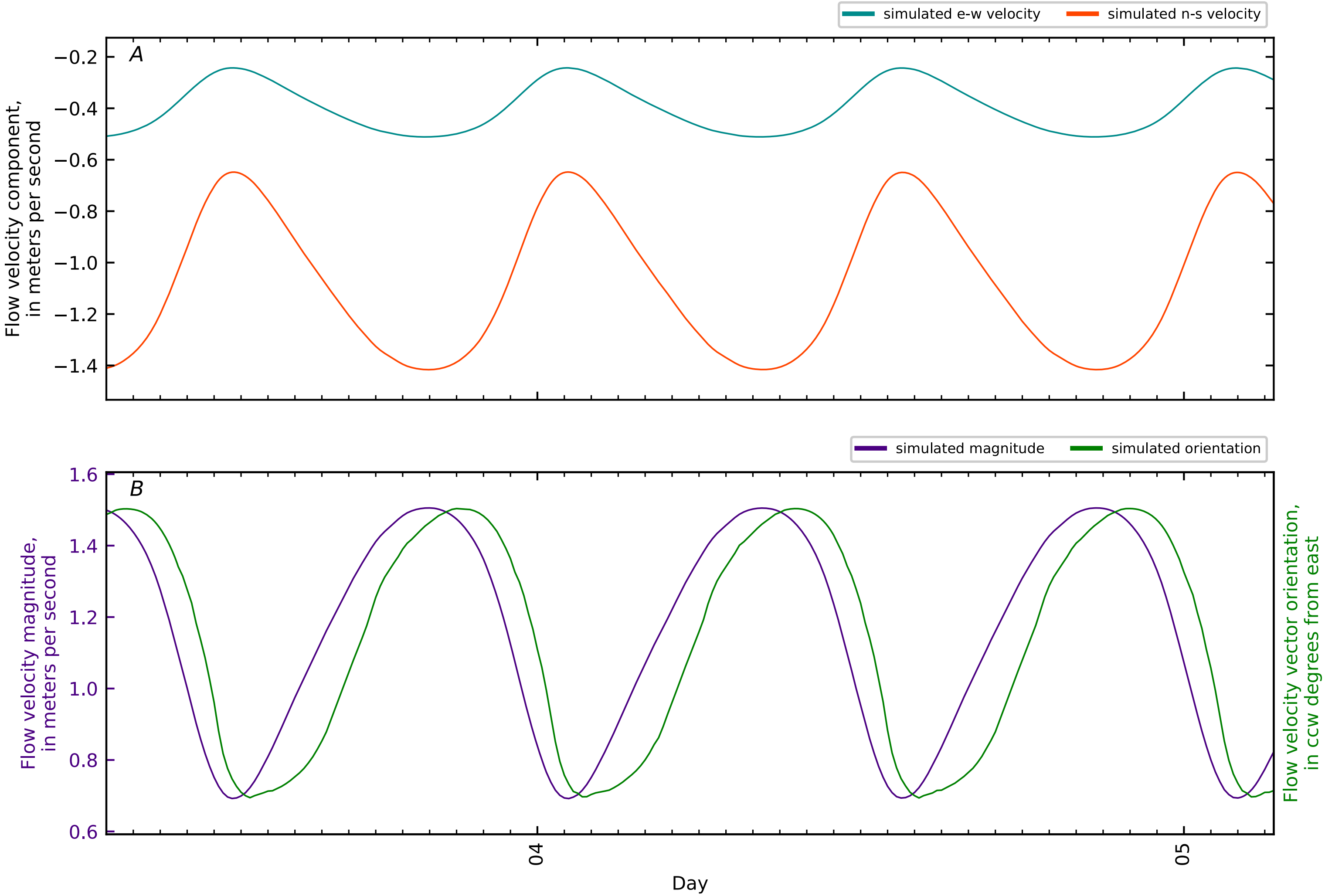

Figure B2-233. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 72, Penob Riv KM23. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

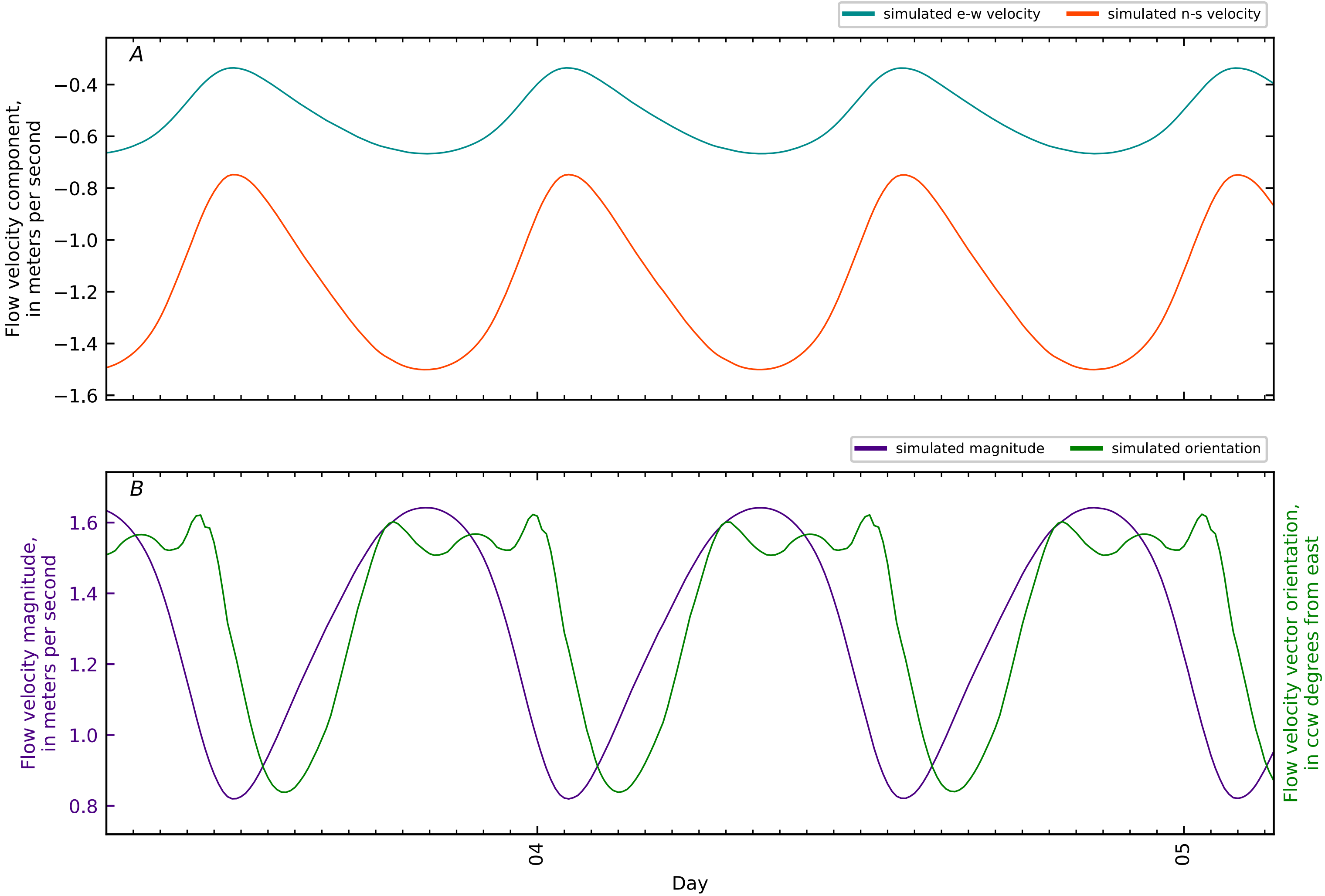

Figure B2-234. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 73, Penob Riv KM24. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

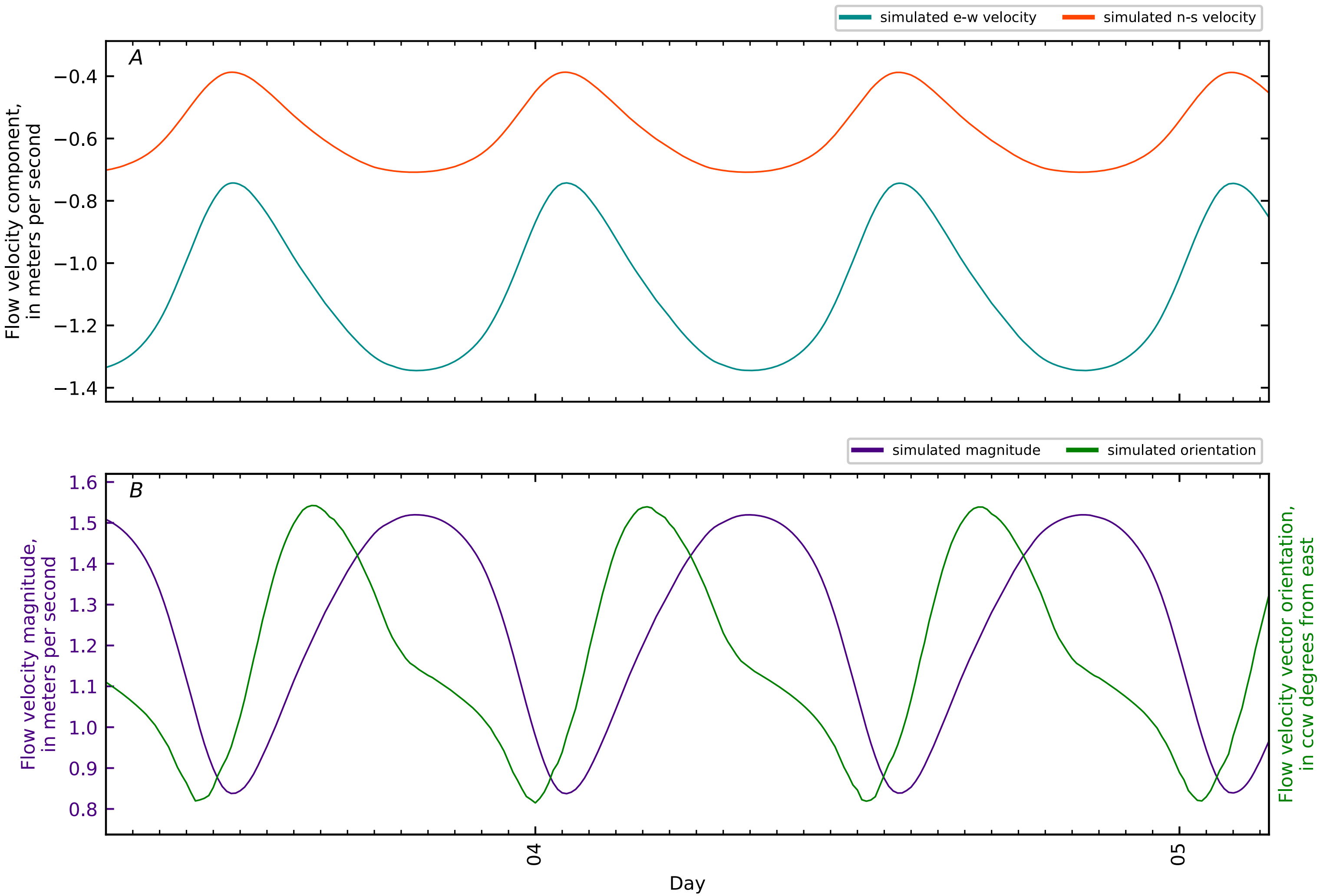

Figure B2-235. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 74, Penob Riv KM25. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

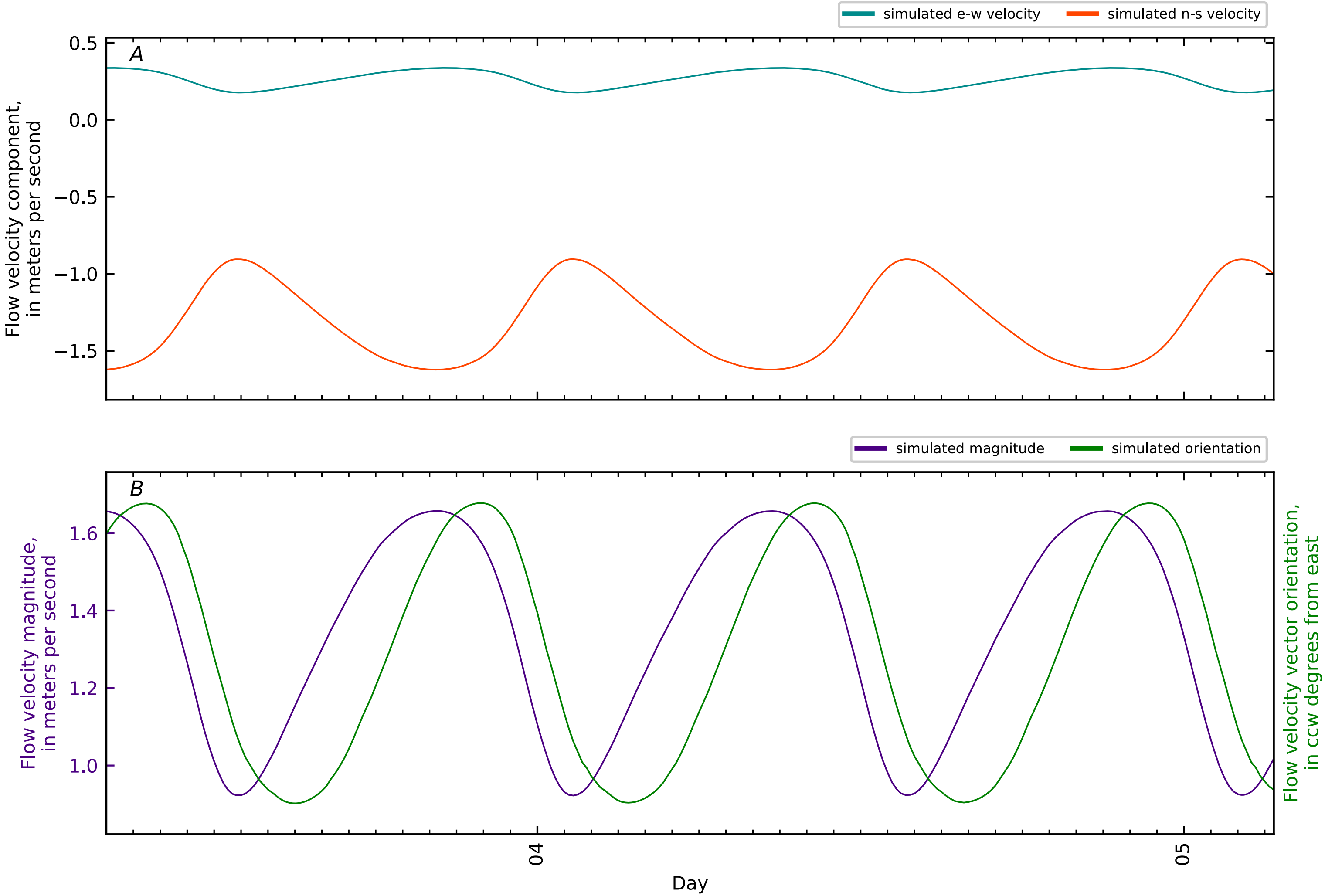

Figure B2-236. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 75, Penob Riv KM26. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

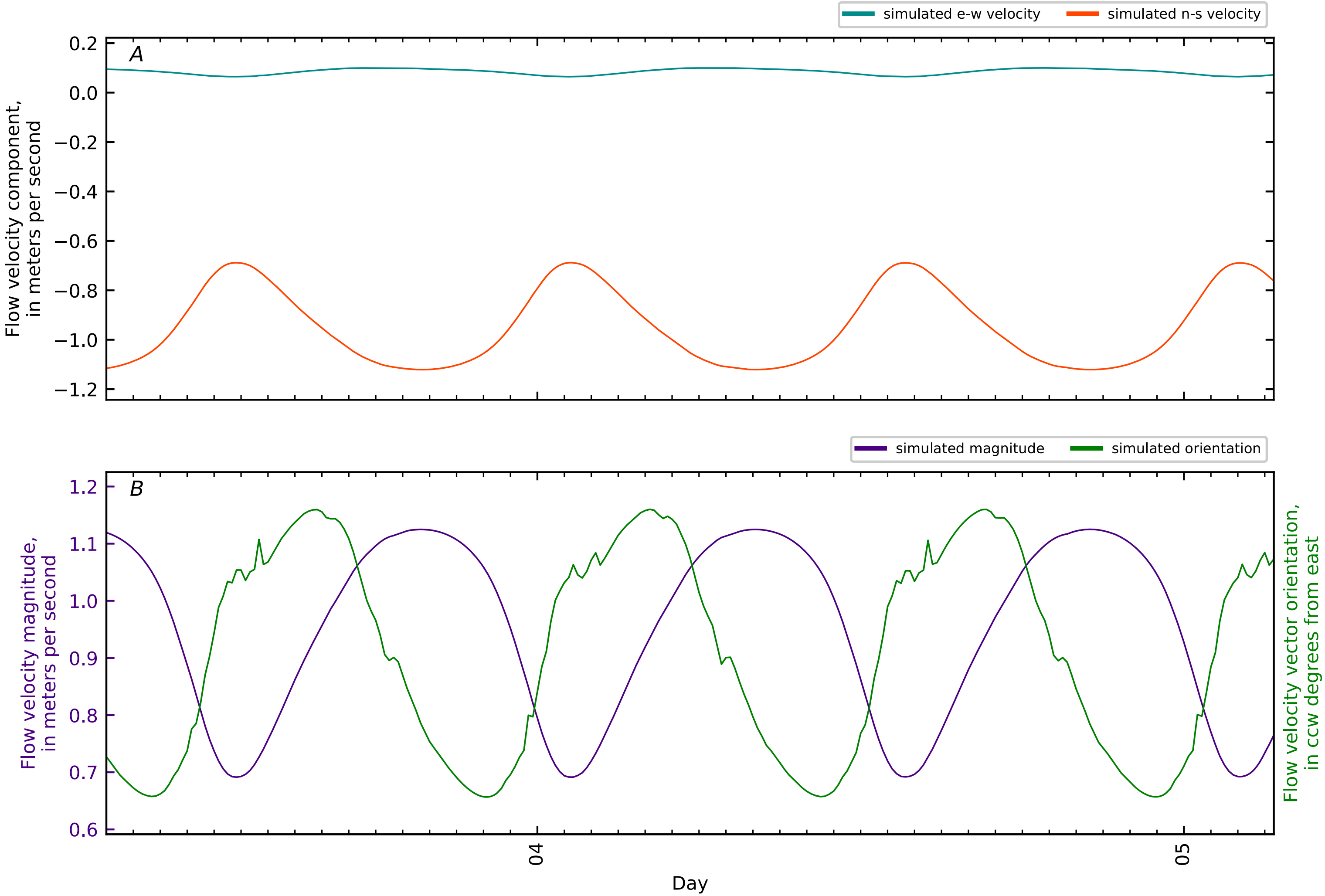

Figure B2-237. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 76, Penob Riv KM27. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

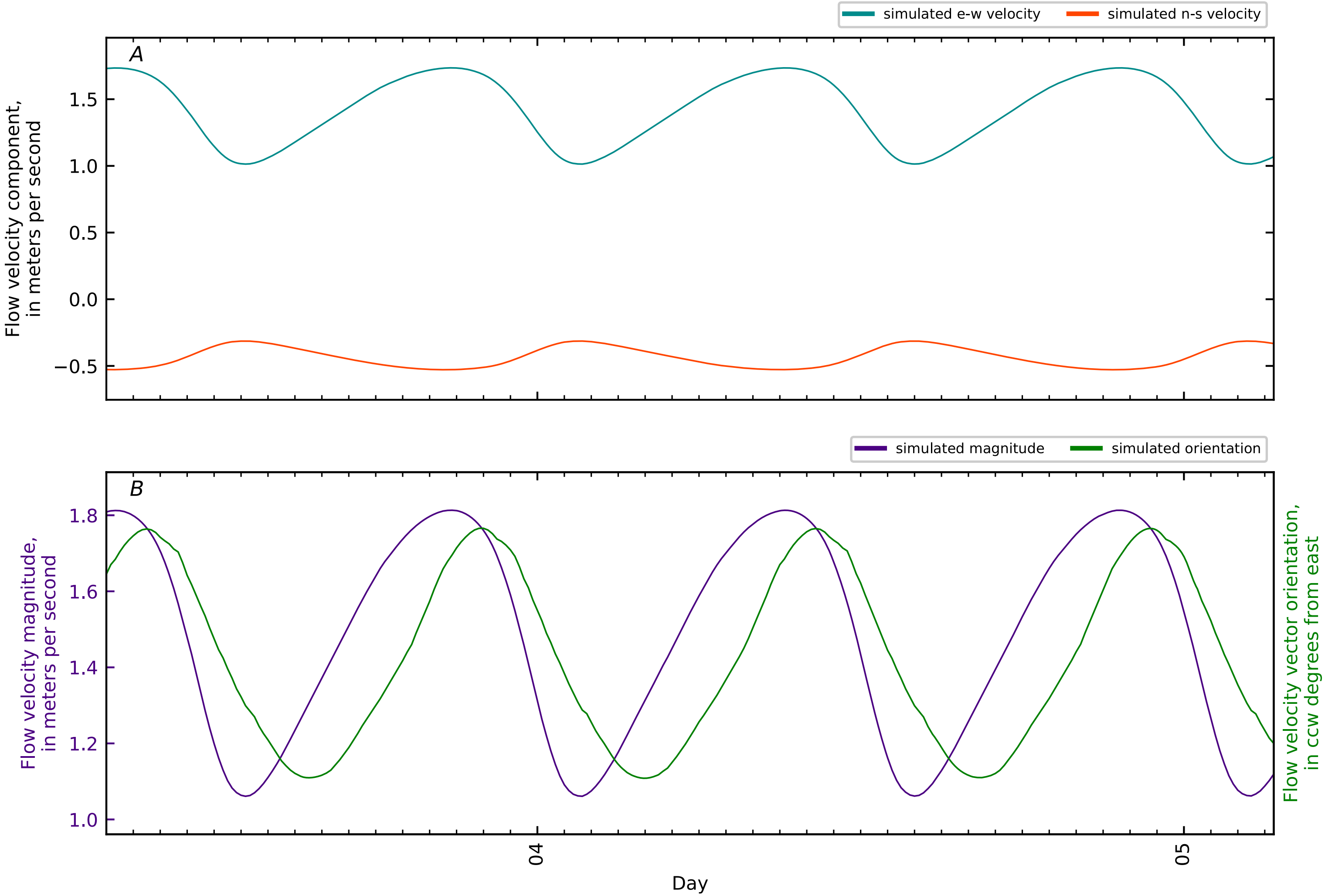

Figure B2-238. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 77, Penob Riv KM28. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

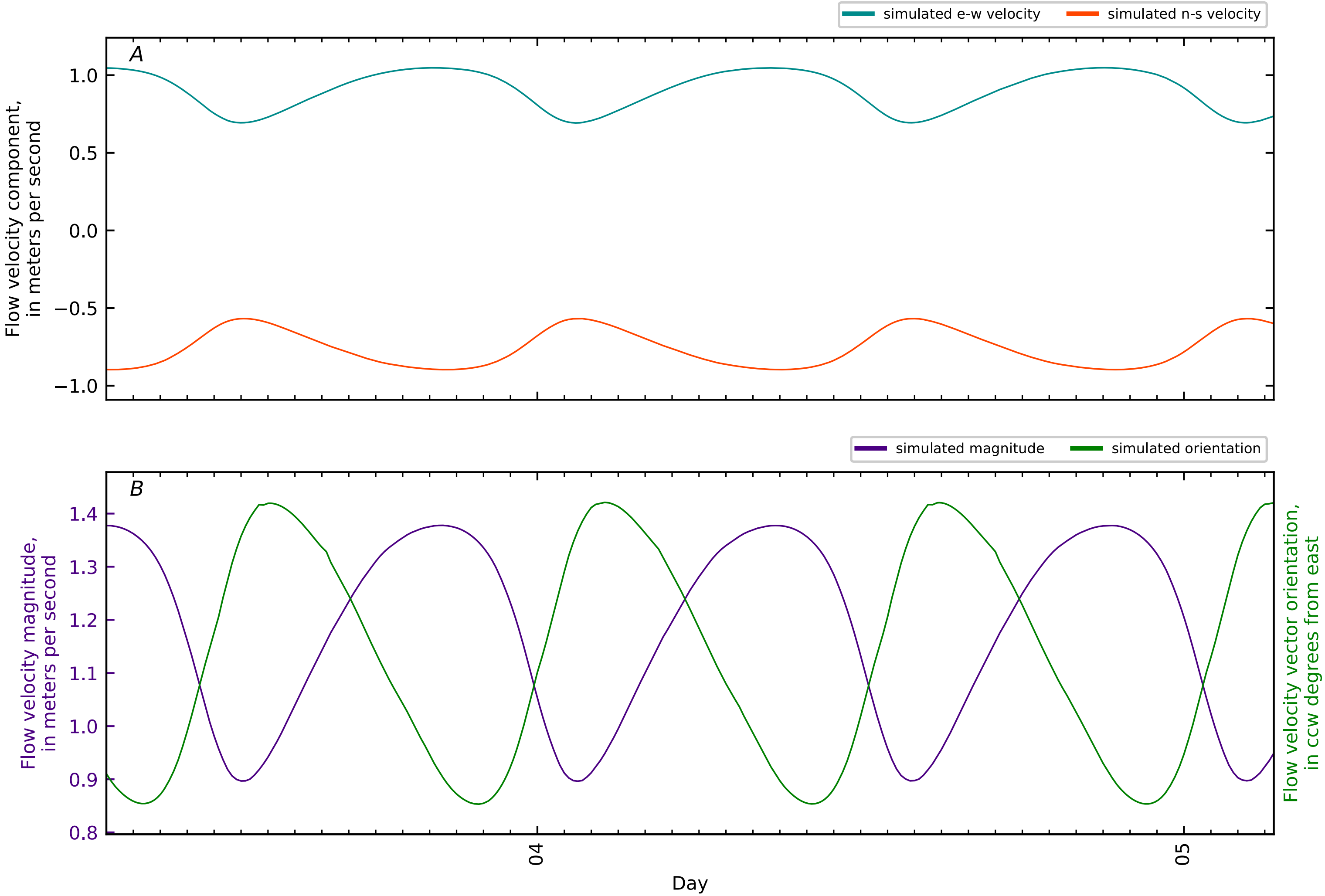

Figure B2-239. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 78, Penob Riv KM29. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

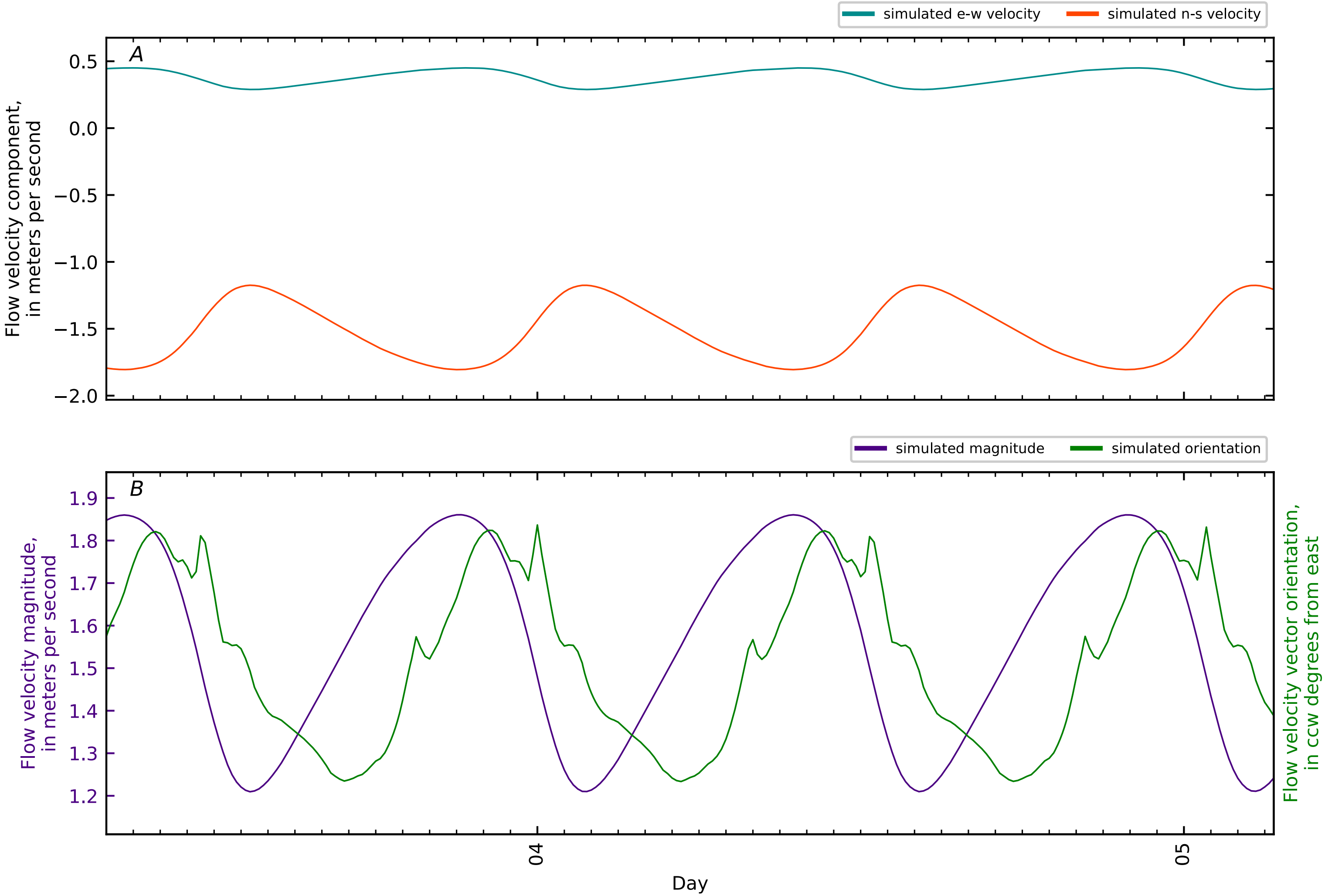

Figure B2-240. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 79, Penob Riv KM30. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

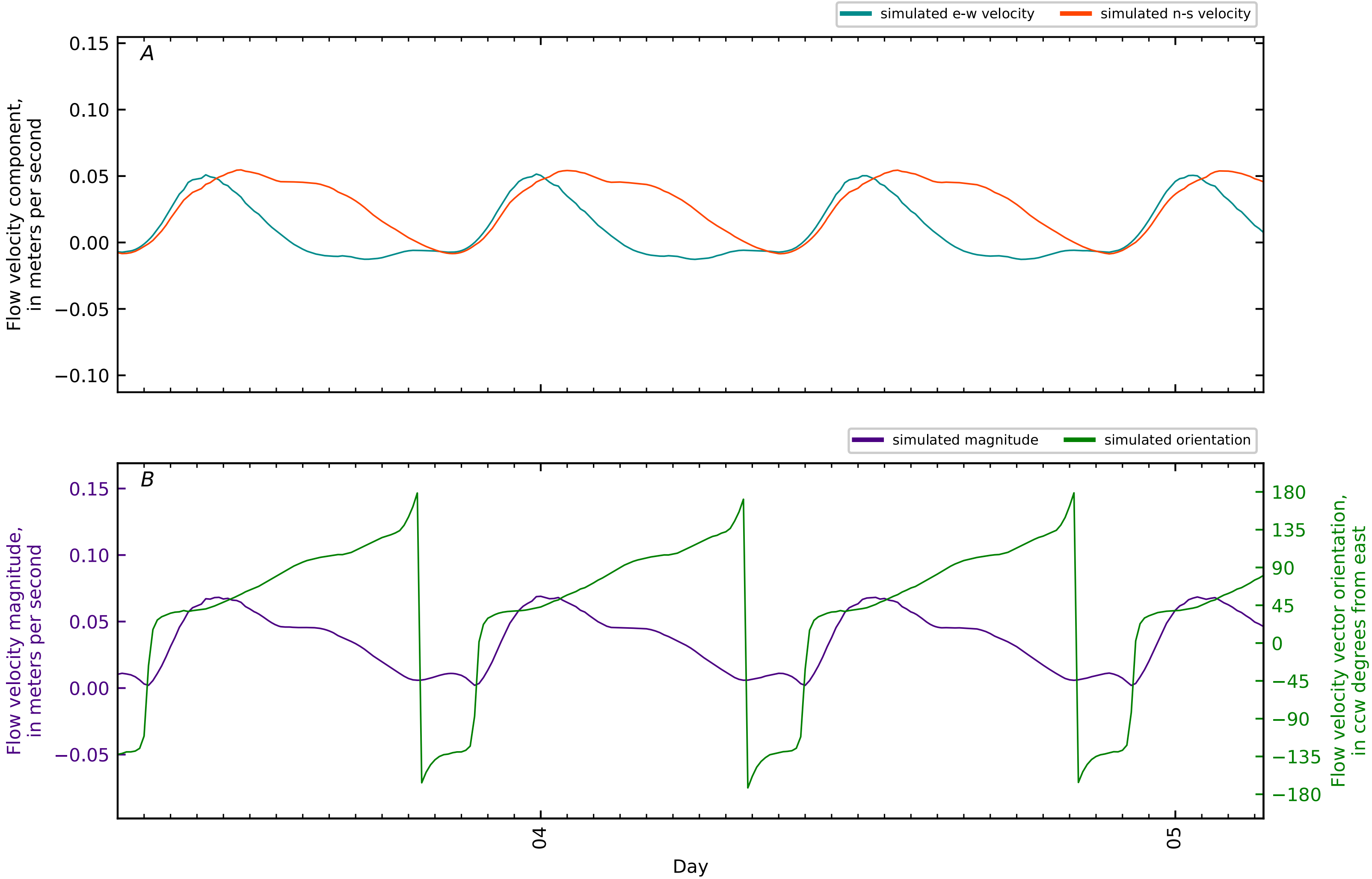

Figure B2-241. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 80, Penob Riv KM30.3 ERDC3 ON-MU2-SF-2 Bartl. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

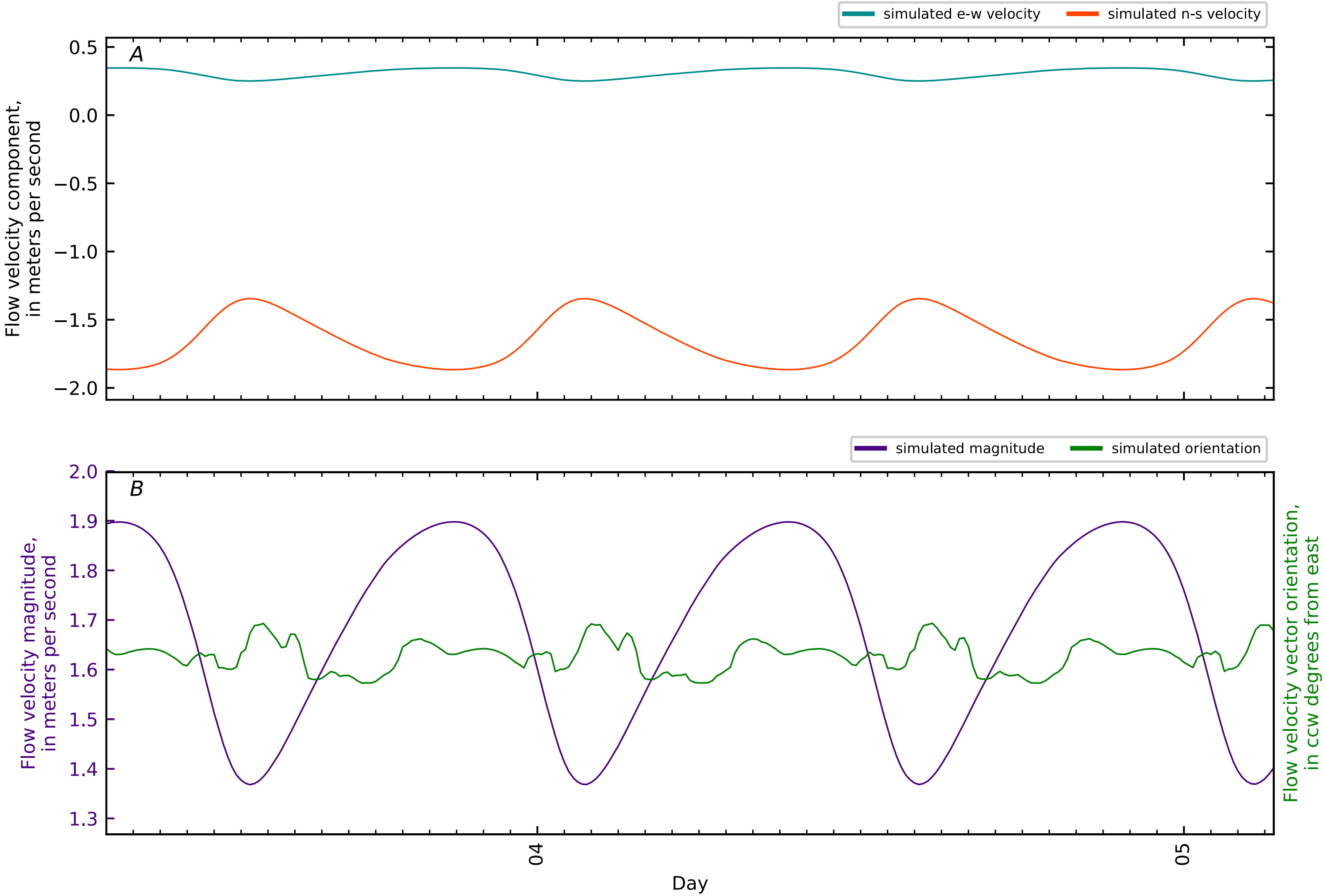

Figure B2-242. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 81, Penob Riv KM31. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

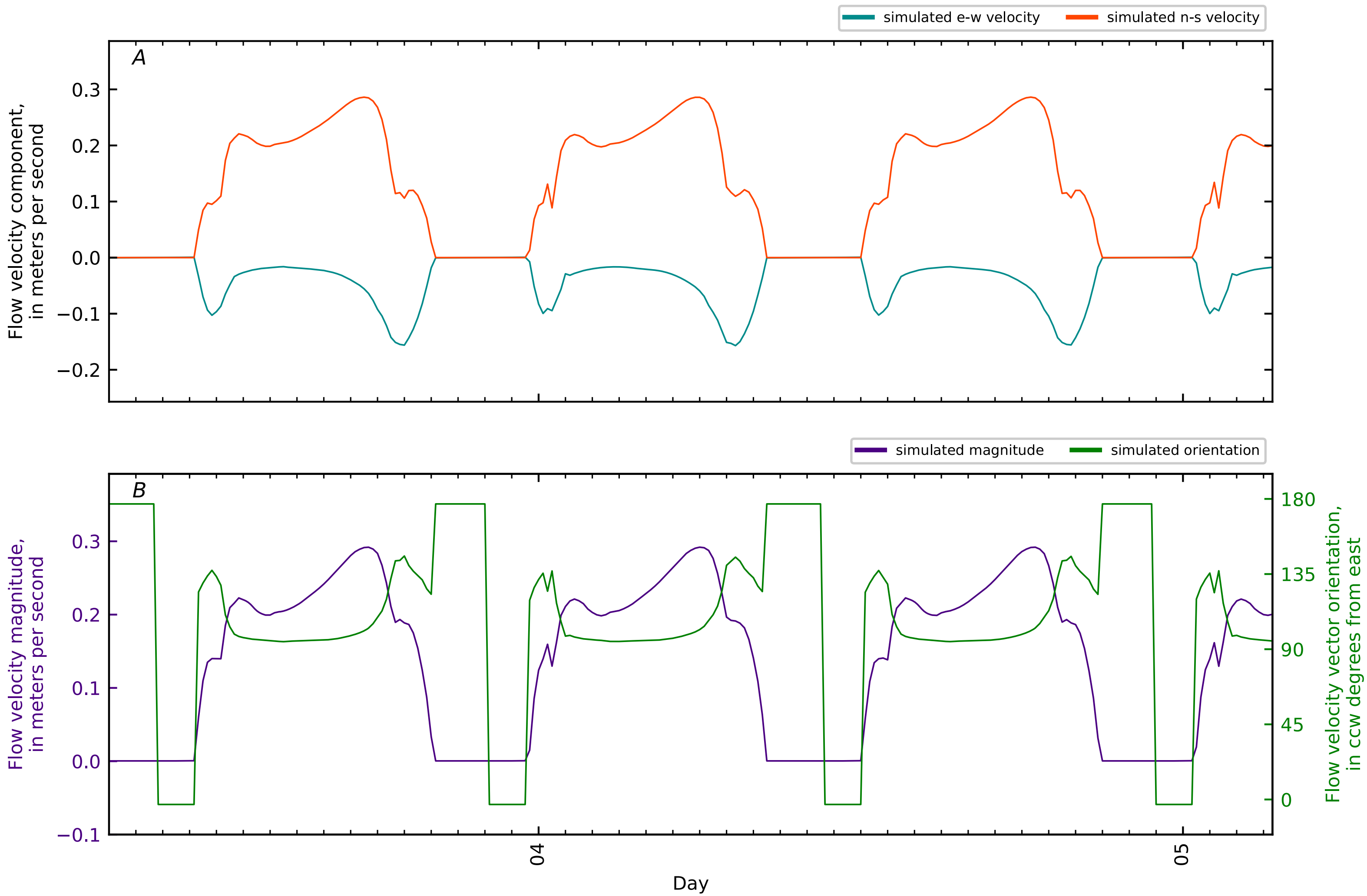

Figure B2-243. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 82, Penob Riv KM31.3 ERDC1 ON-MU2-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

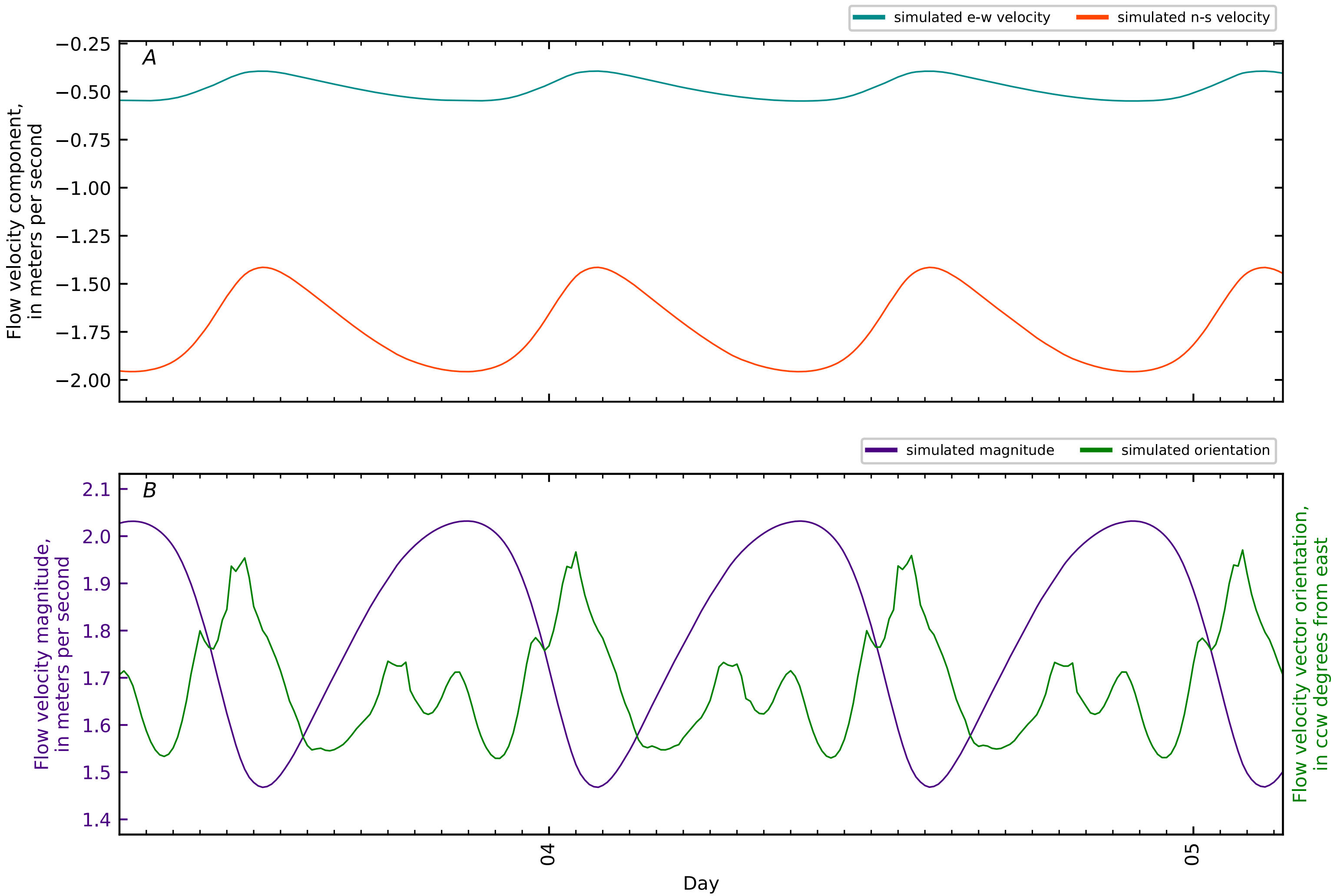

Figure B2-244. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 83, Penob Riv KM31.4 ERDC2 ON-MU13-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

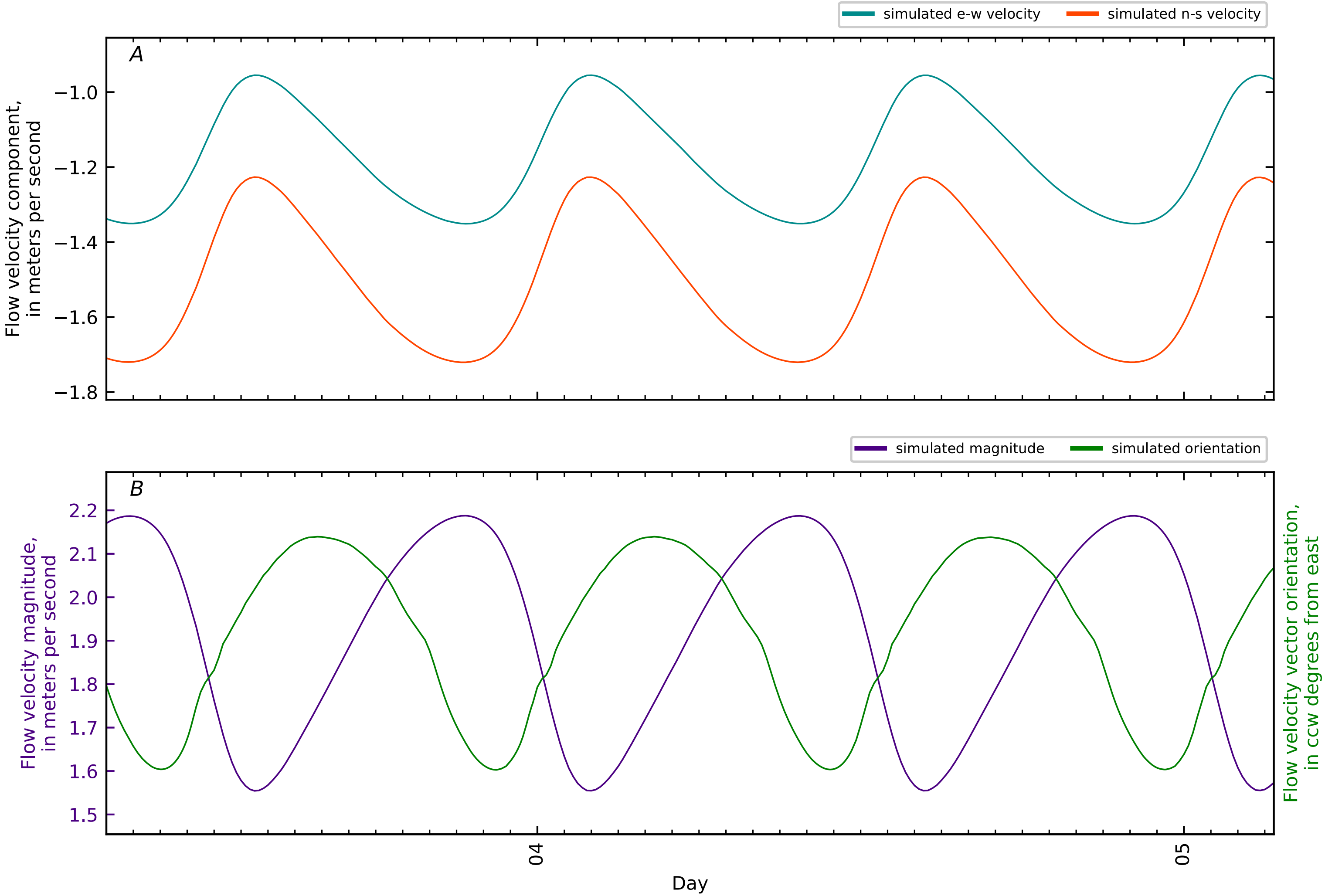

Figure B2-245. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 84, Penob Riv KM32. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

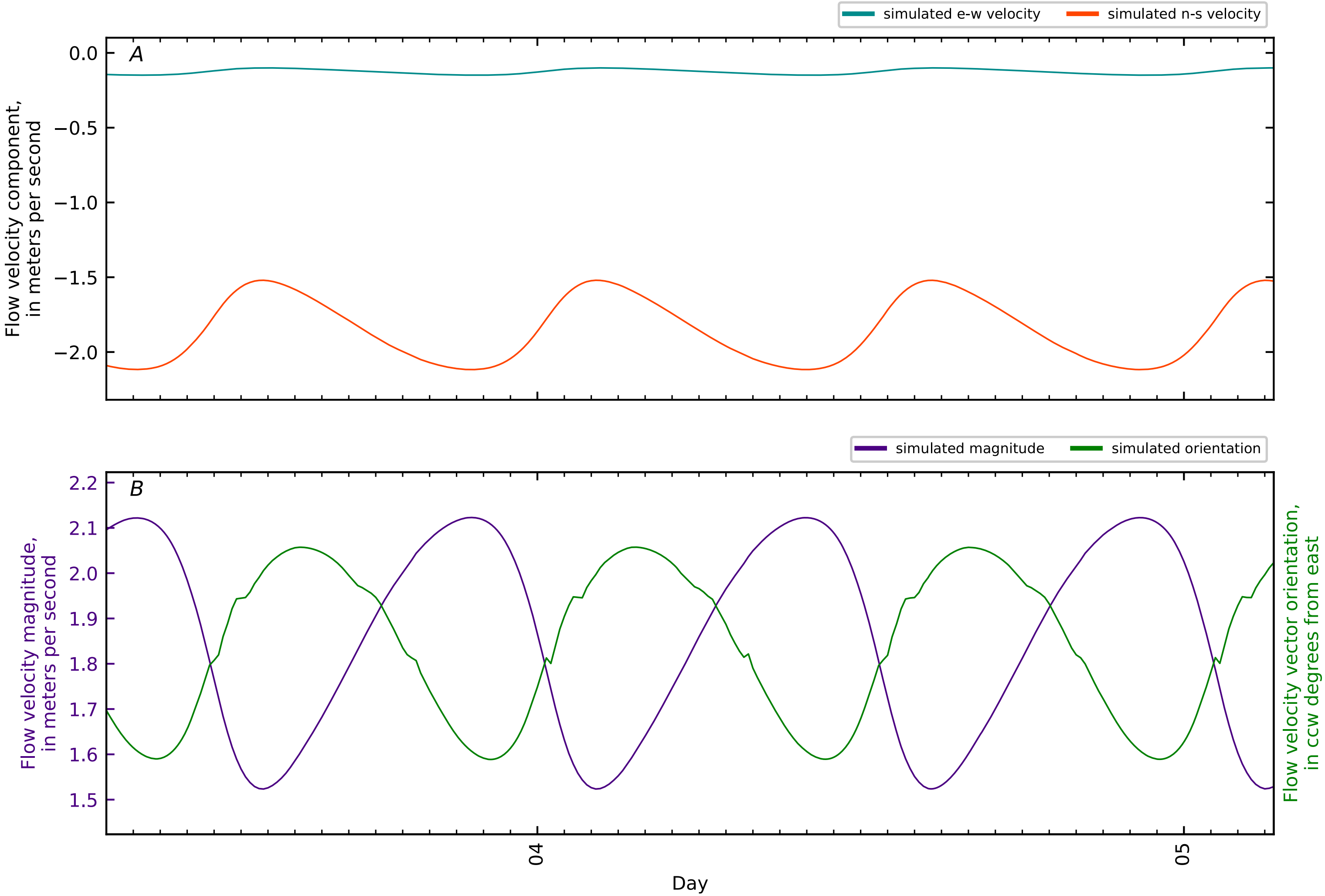

Figure B2-246. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 85, Penob Riv KM33. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

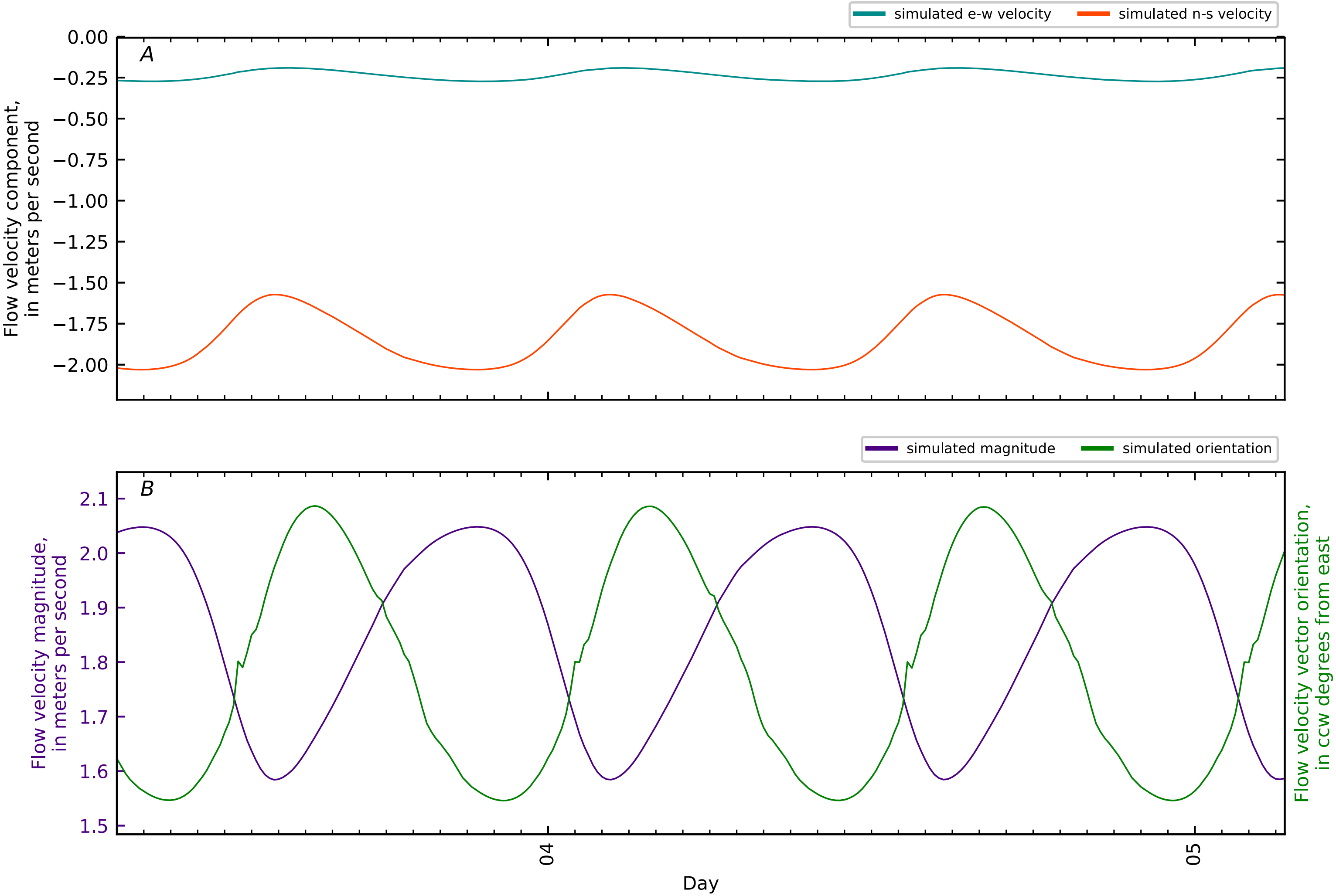

Figure B2-247. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 86, Penob Riv KM34. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

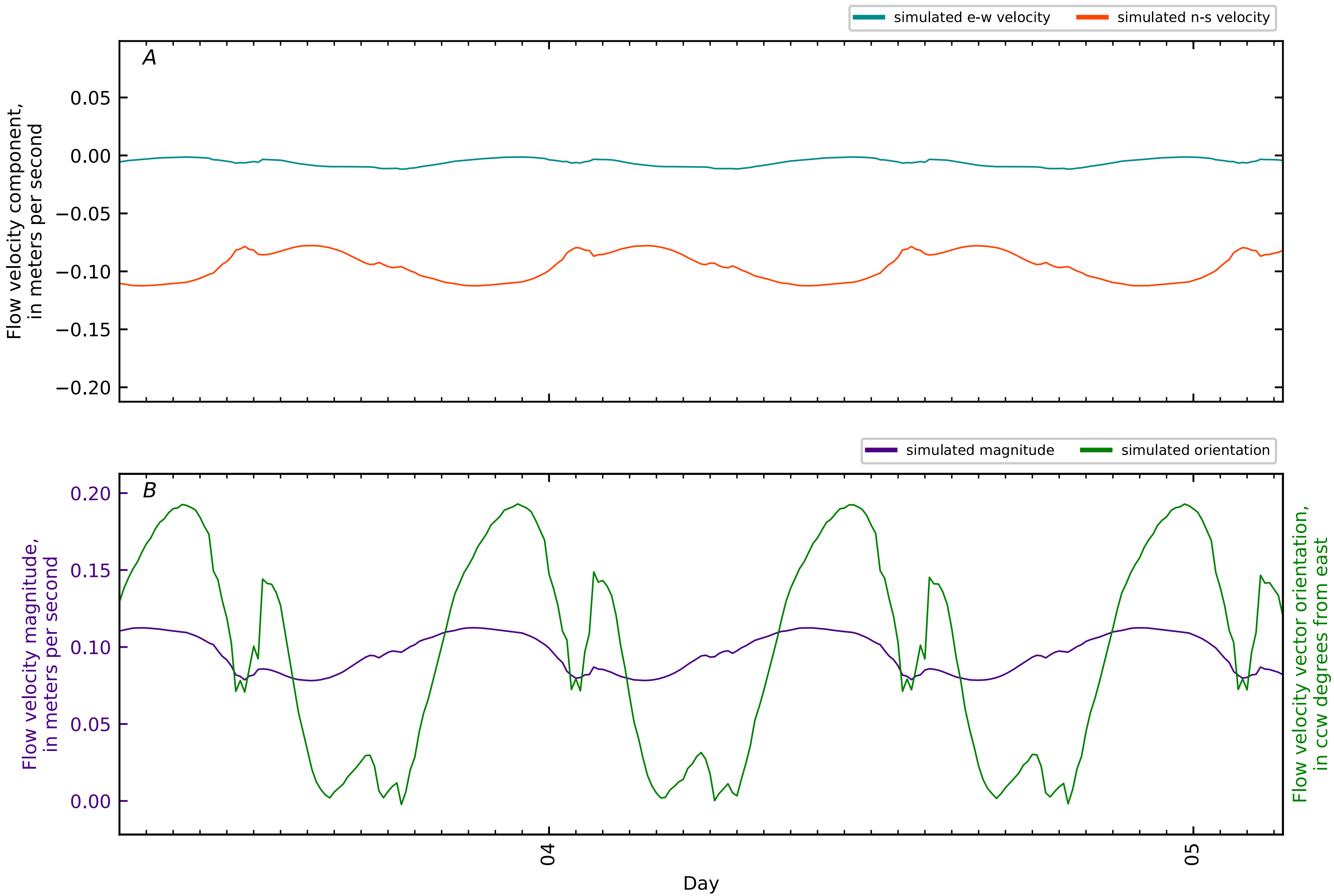

Figure B2-248. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 87, Penob Riv KM34.6 Southern Cove Orrington. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

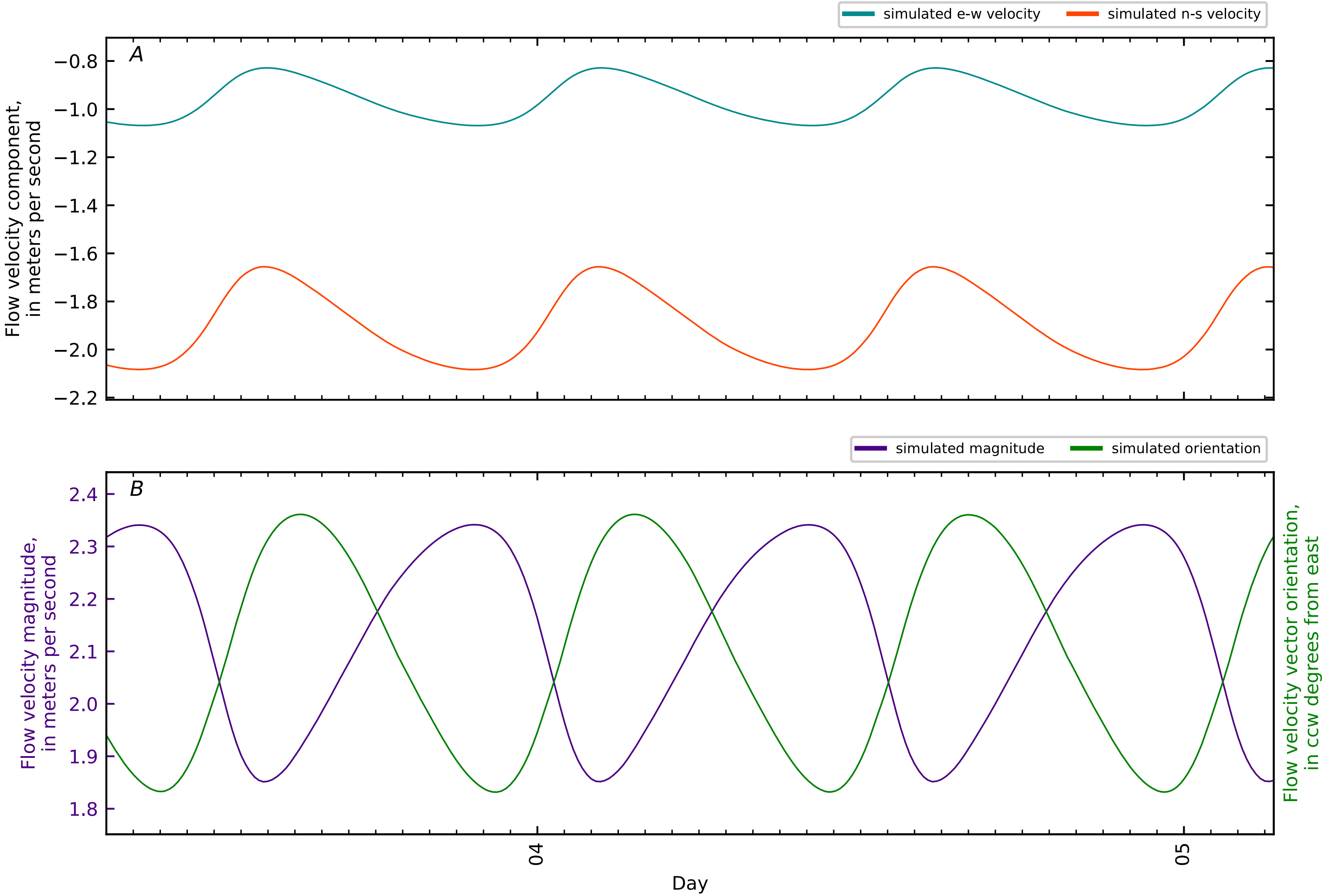

Figure B2-249. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 88, Penob Riv KM35. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

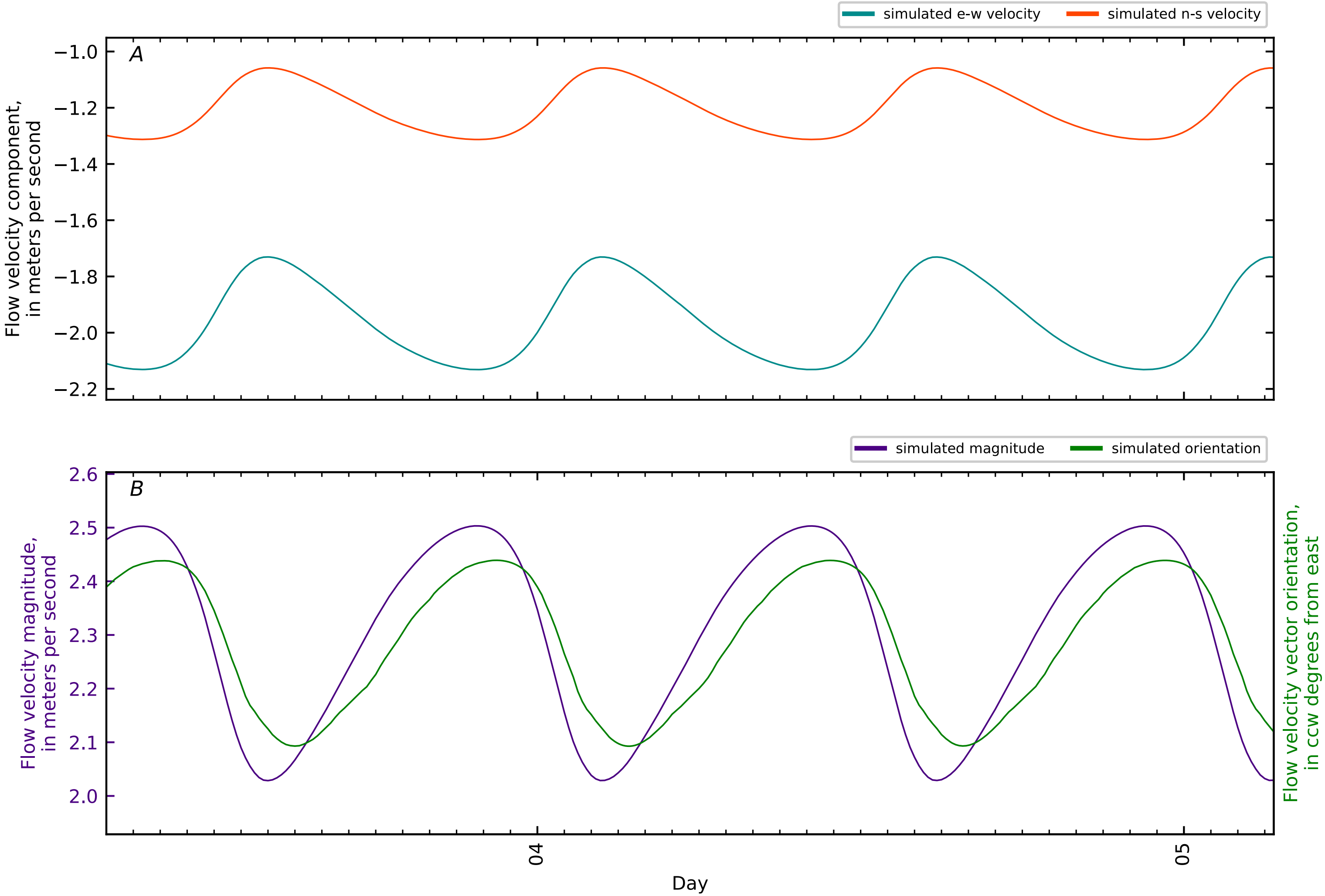

Figure B2-250. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 89, Penob Riv KM36. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

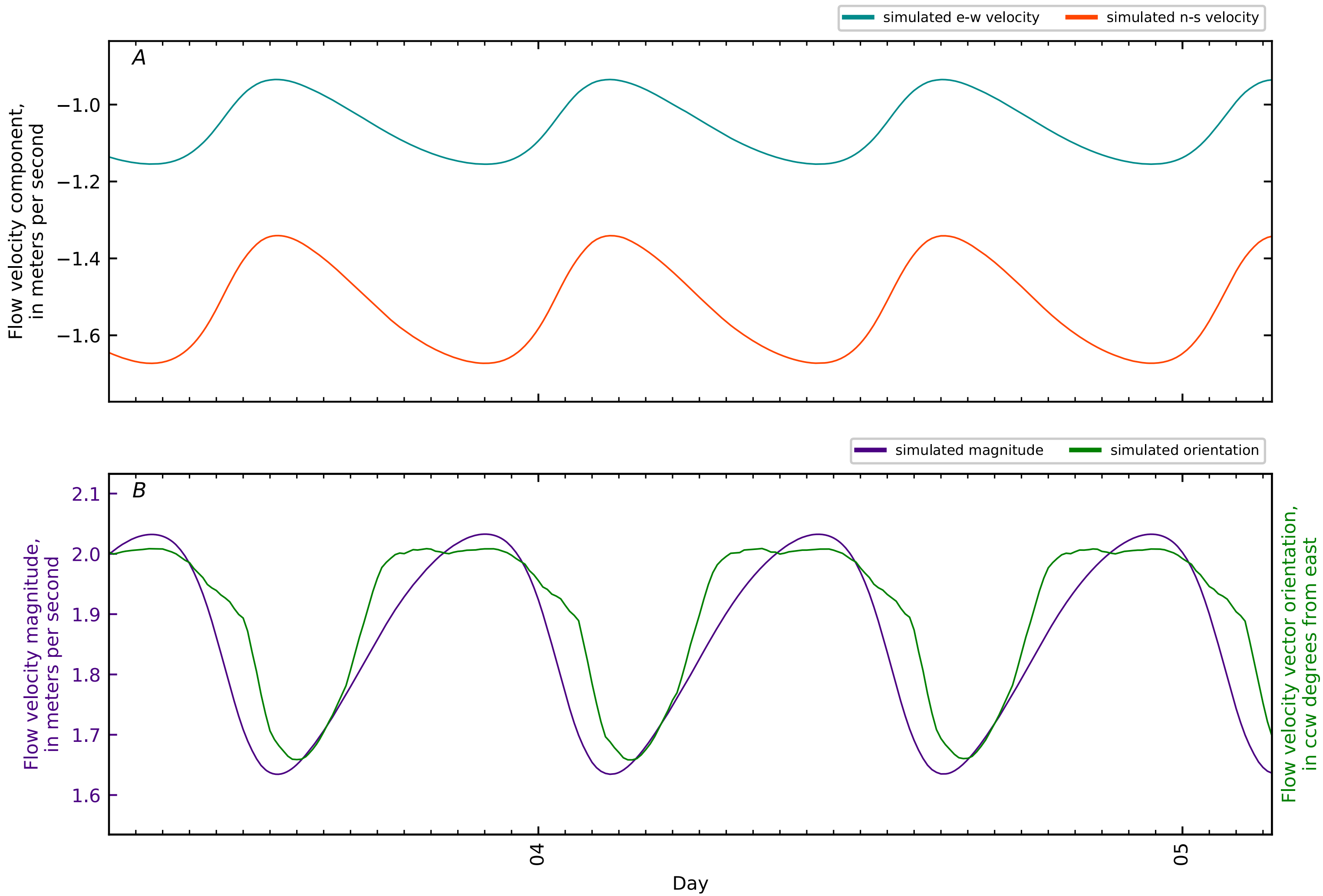

Figure B2-251. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 90, Penob Riv KM37. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

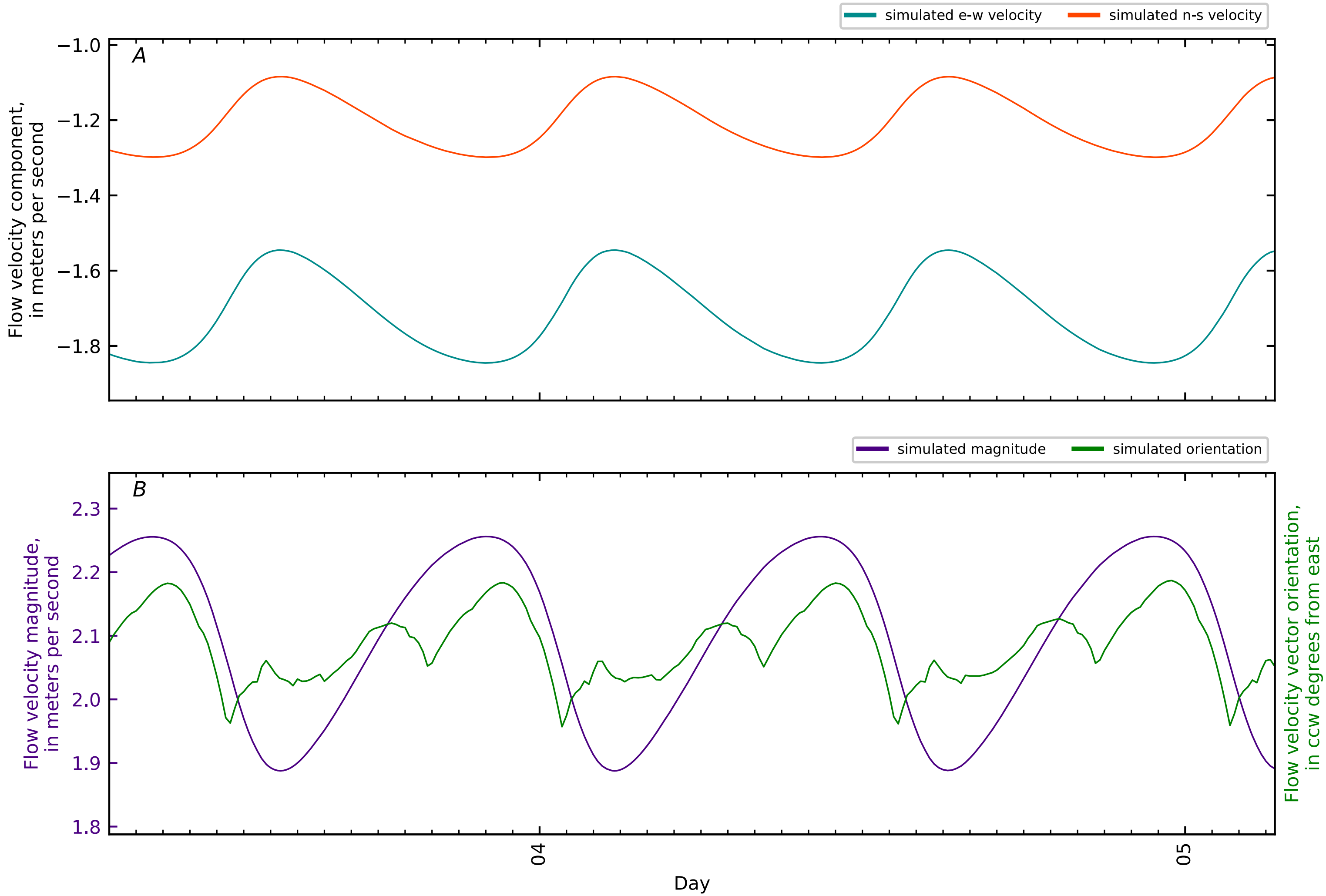

Figure B2-252. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 91, Penob Riv KM38. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

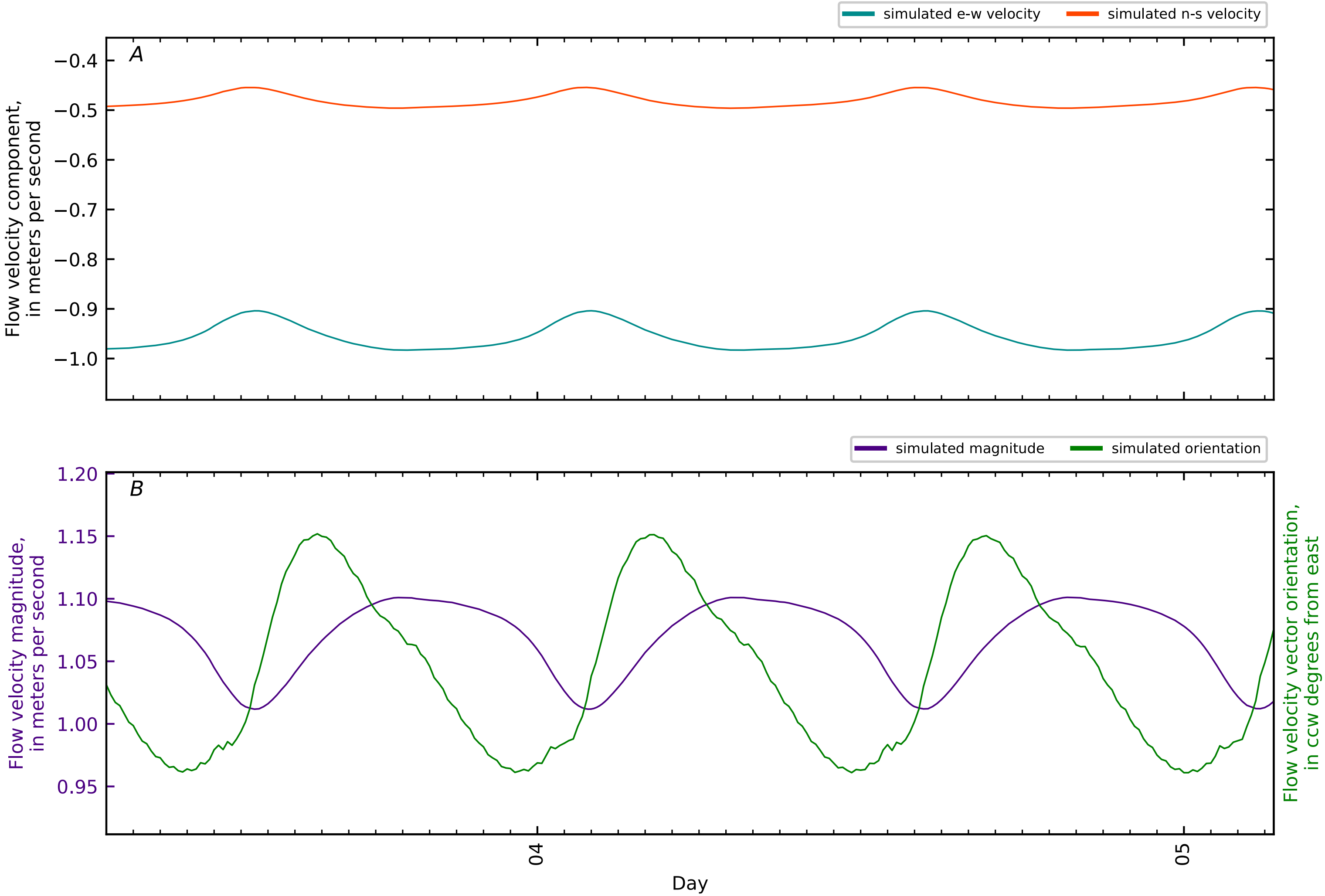

Figure B2-253. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 92, Penob Riv KM38.7 Boat ramp d/s Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

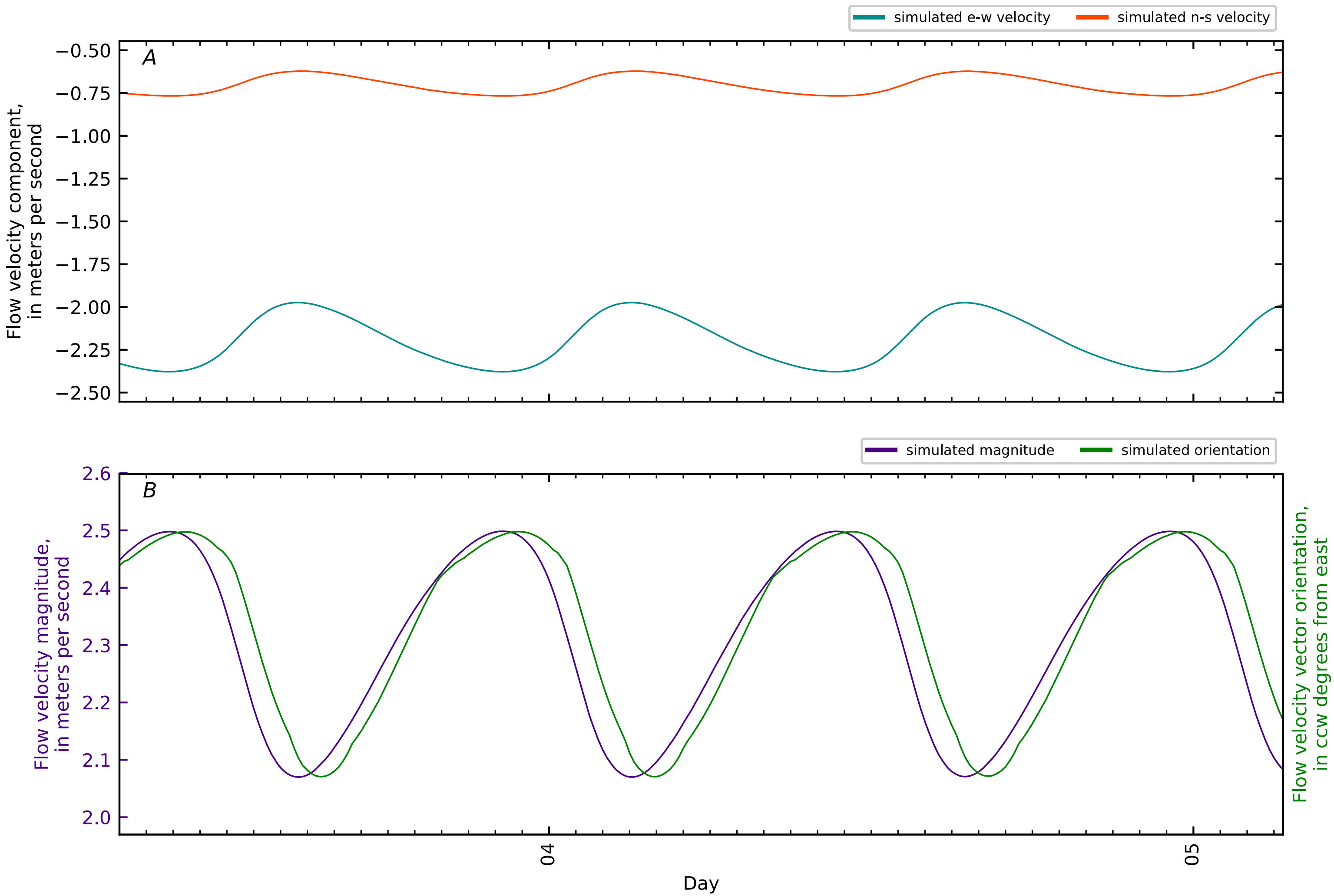

Figure B2-254. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 93, Penob Riv KM39. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

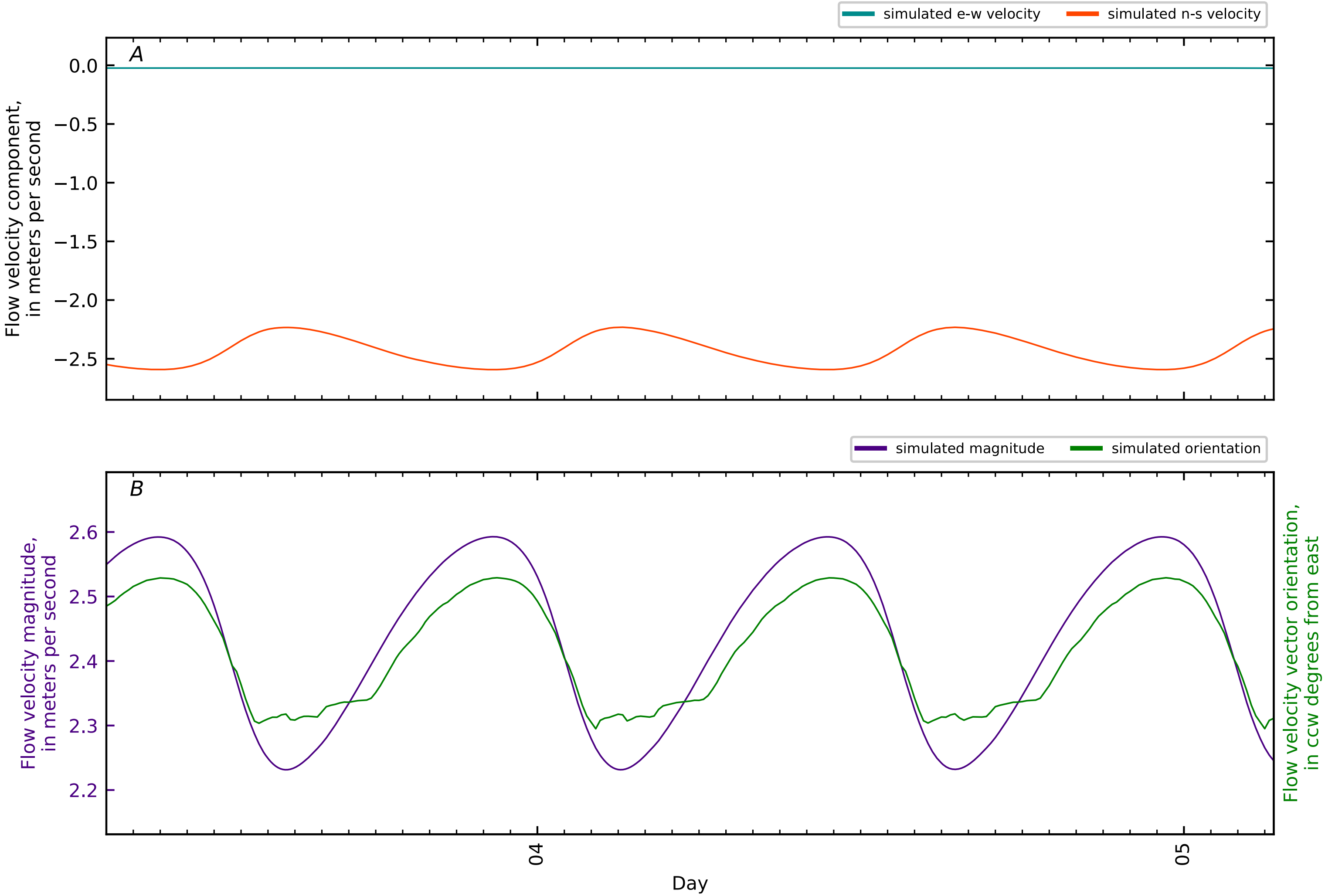

Figure B2-255. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 94, Penob Riv KM40. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

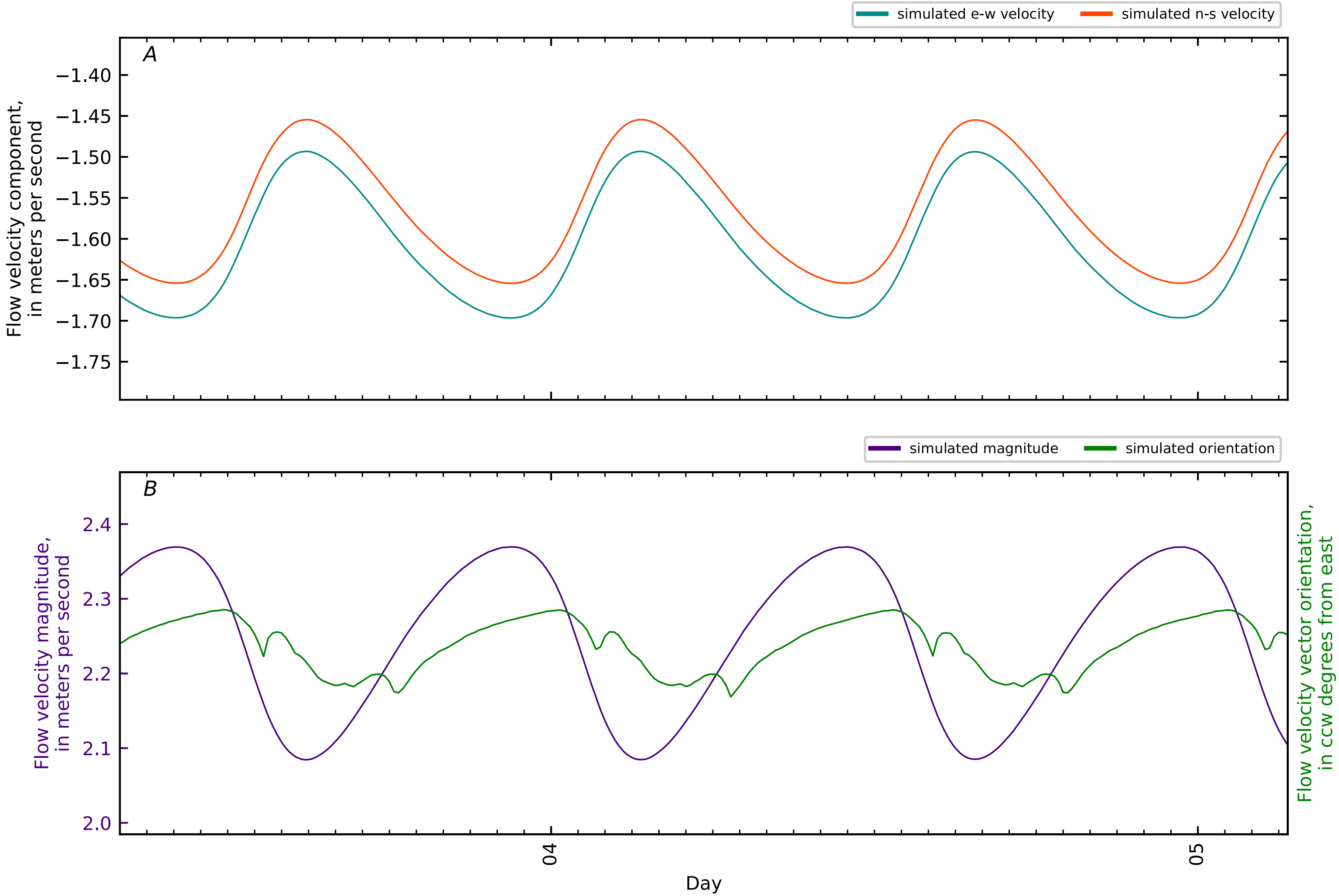

Figure B2-256. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 95, Penob Riv KM41. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

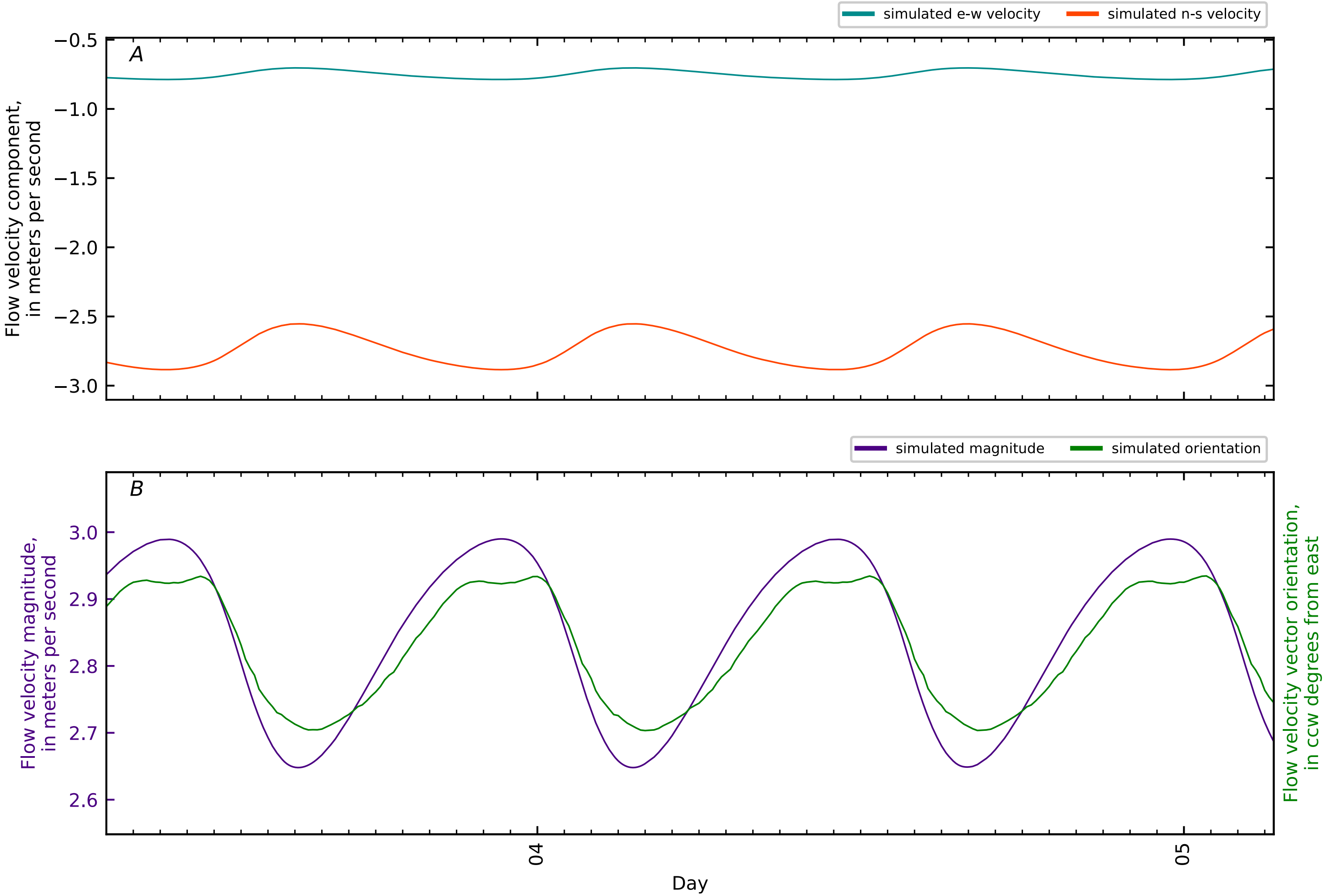

Figure B2-257. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 96, Penob Riv KM42. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

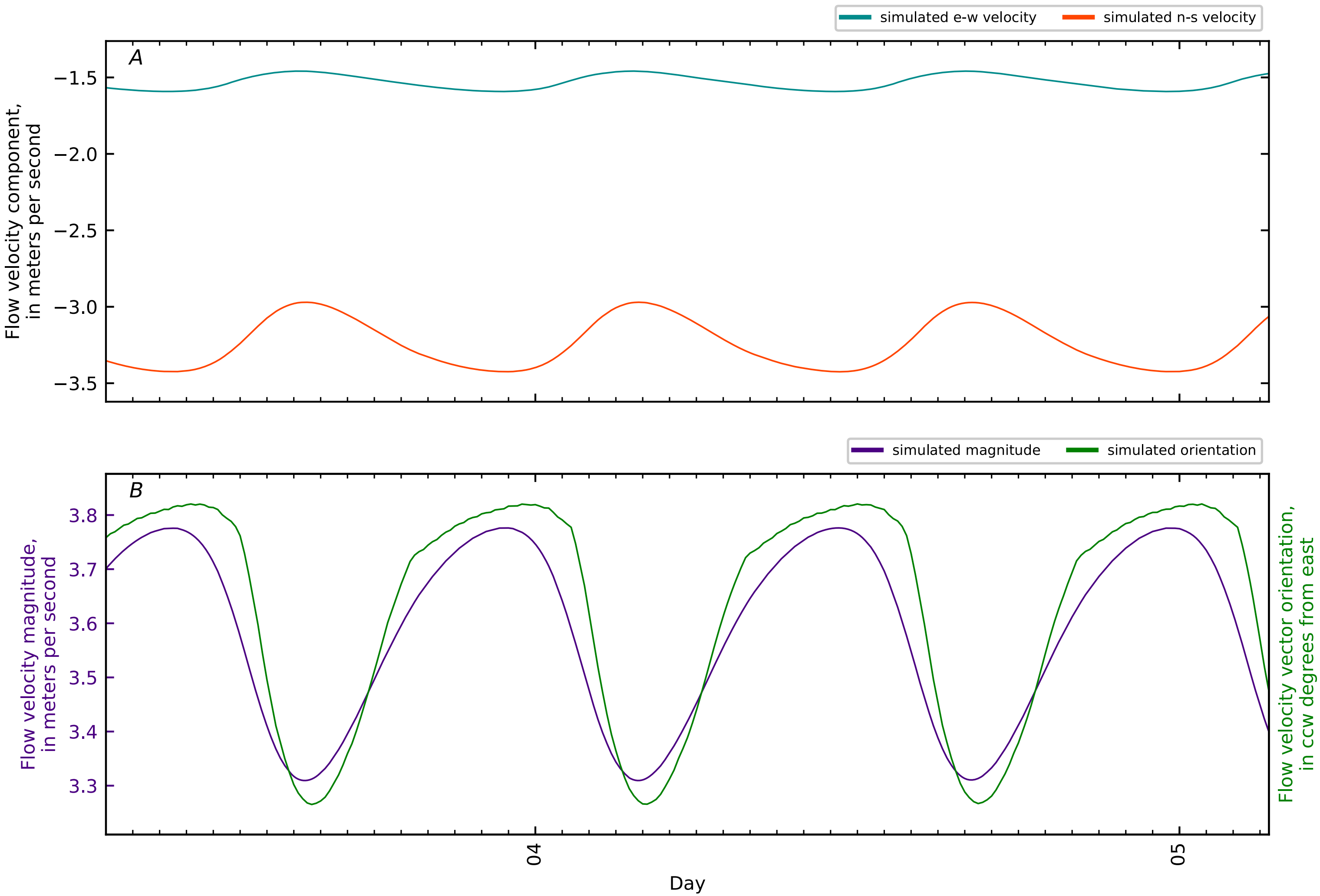

Figure B2-258. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 97, Penob Riv KM43. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

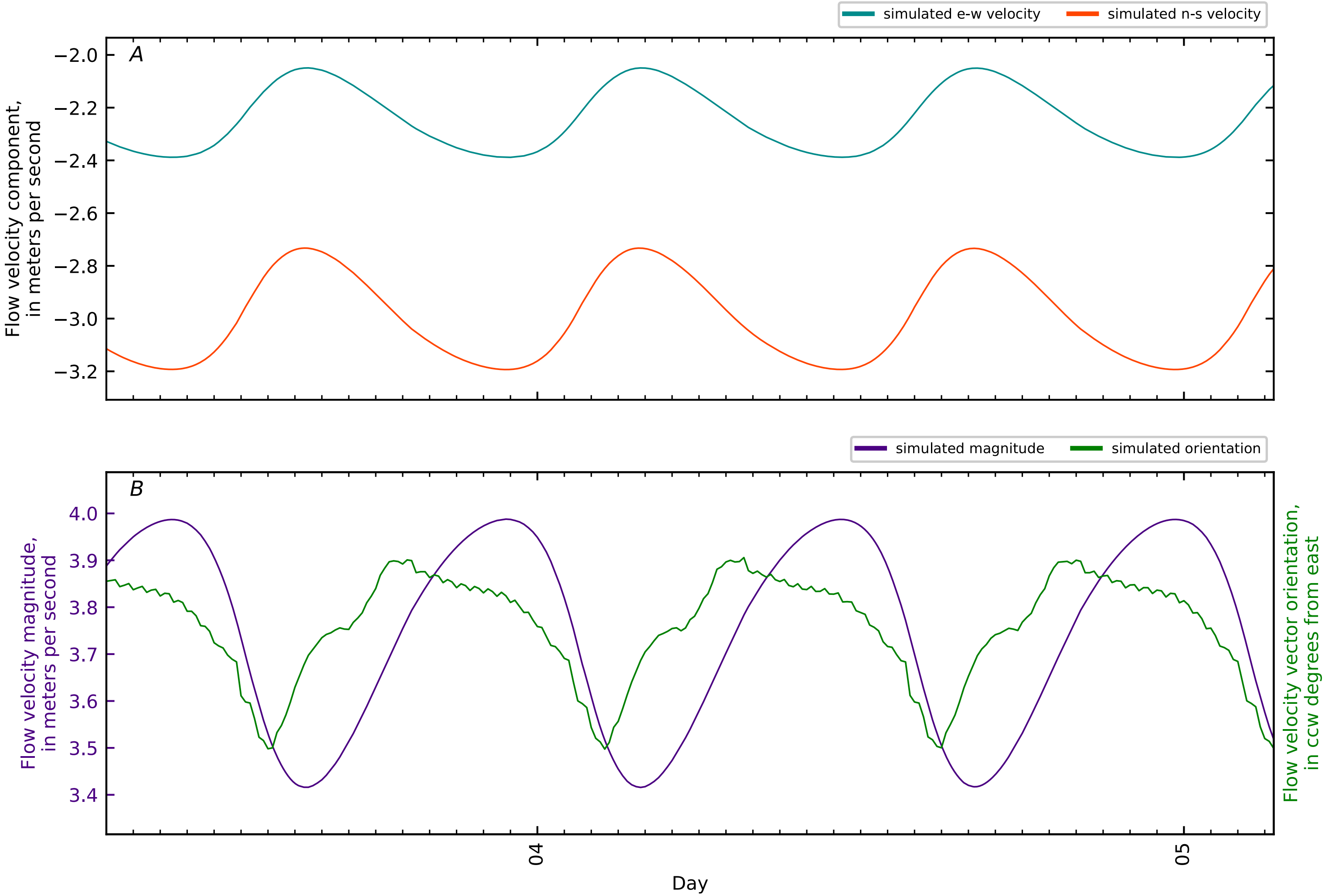

Figure B2-259. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 98, Penob Riv KM43.2 GS 01037050 at Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

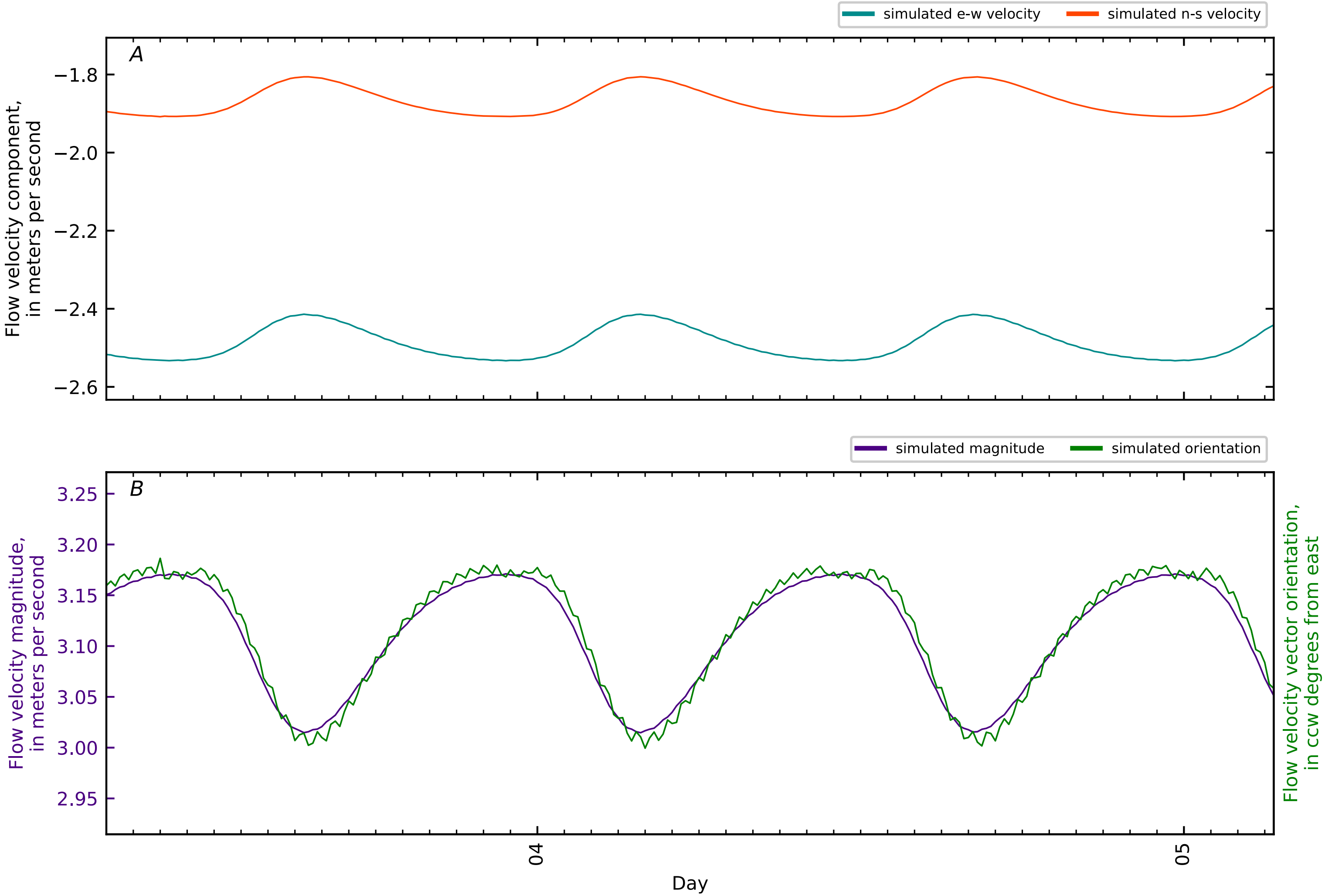

Figure B2-260. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 99, Penob Riv KM44. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

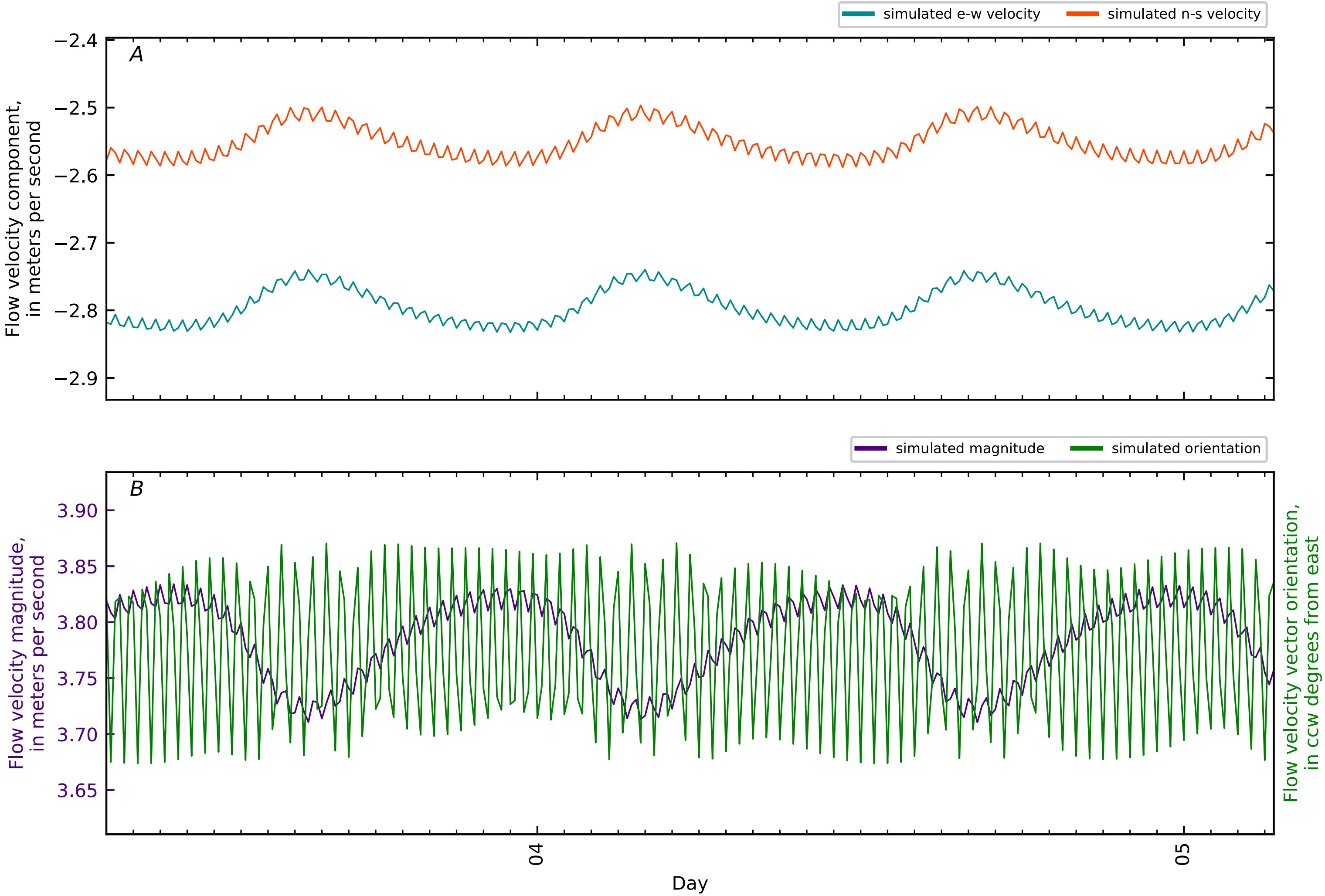

Figure B2-261. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 100, Penob Riv KM45. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

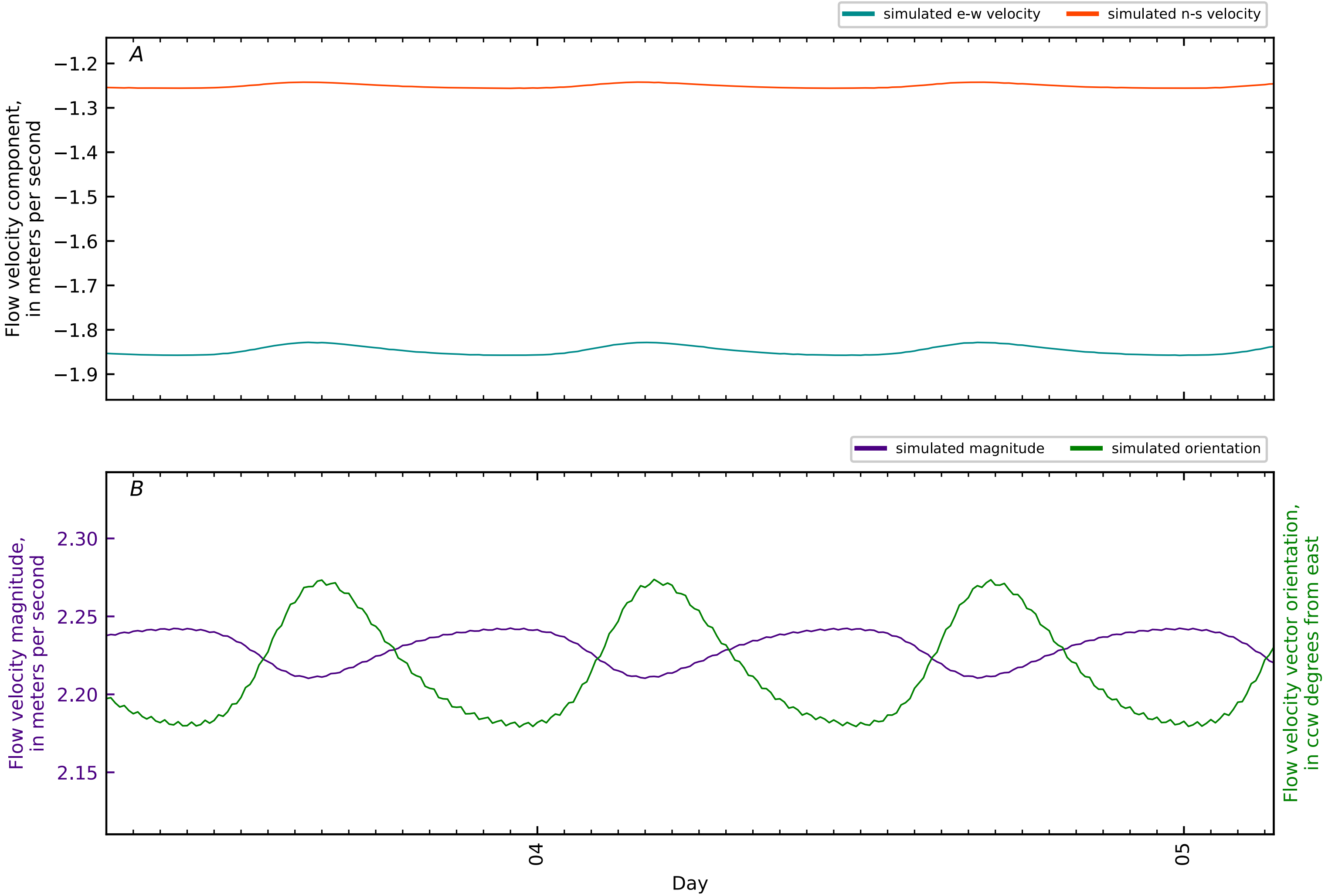

Figure B2-262. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 101, Penob Riv KM46. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

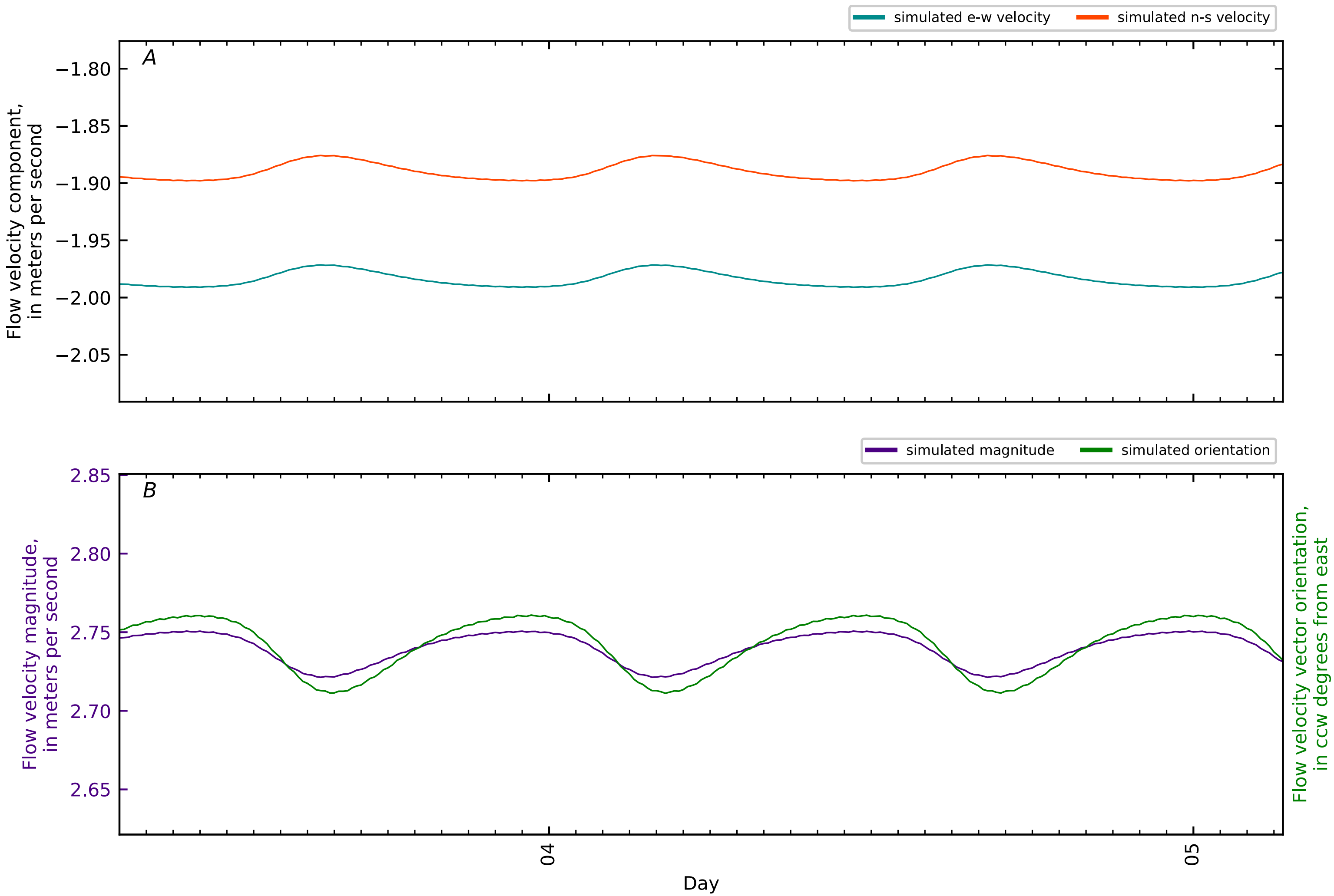

Figure B2-263. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 102, Penob Riv KM47. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

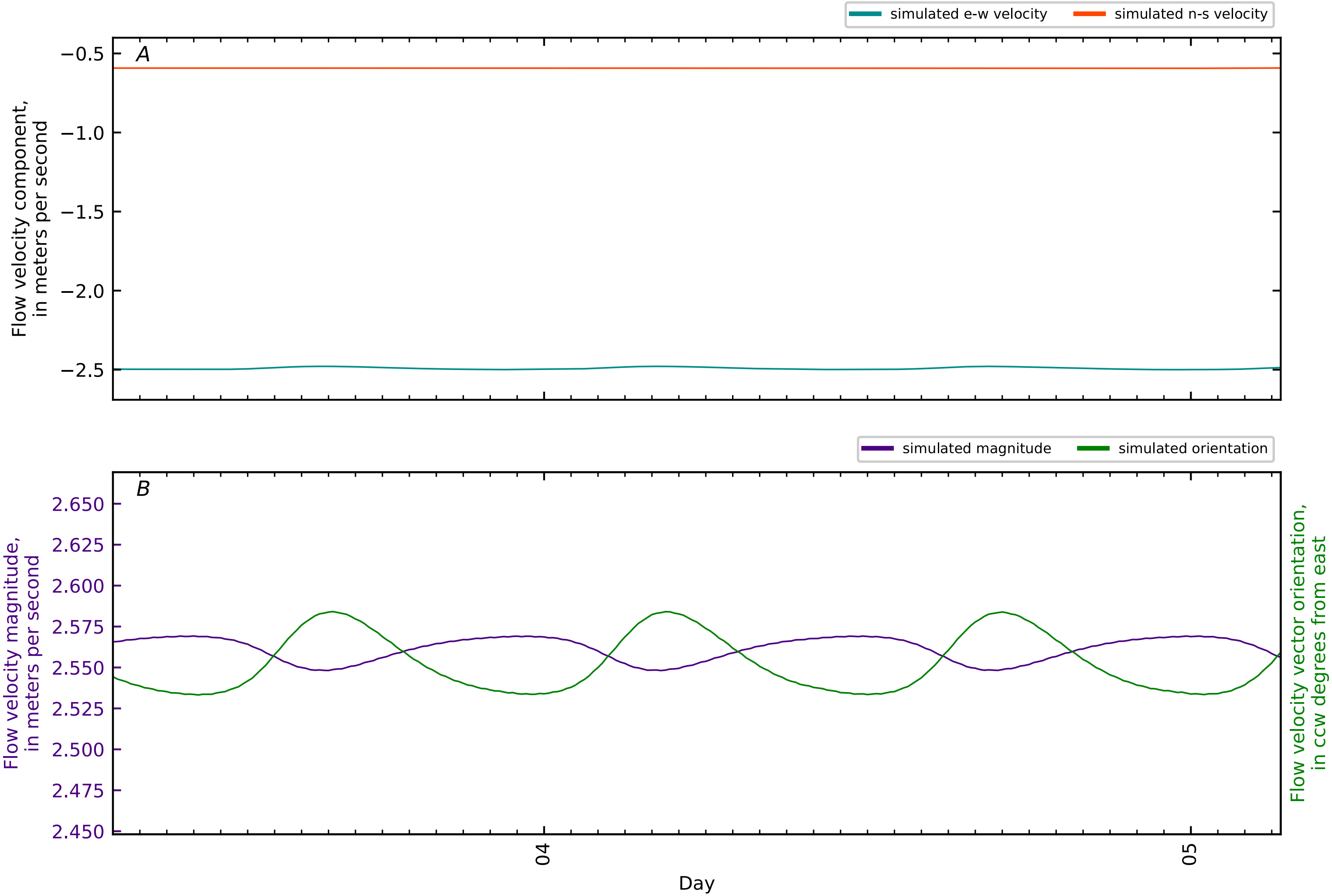

Figure B2-264. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 103, Penob Riv KM48. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

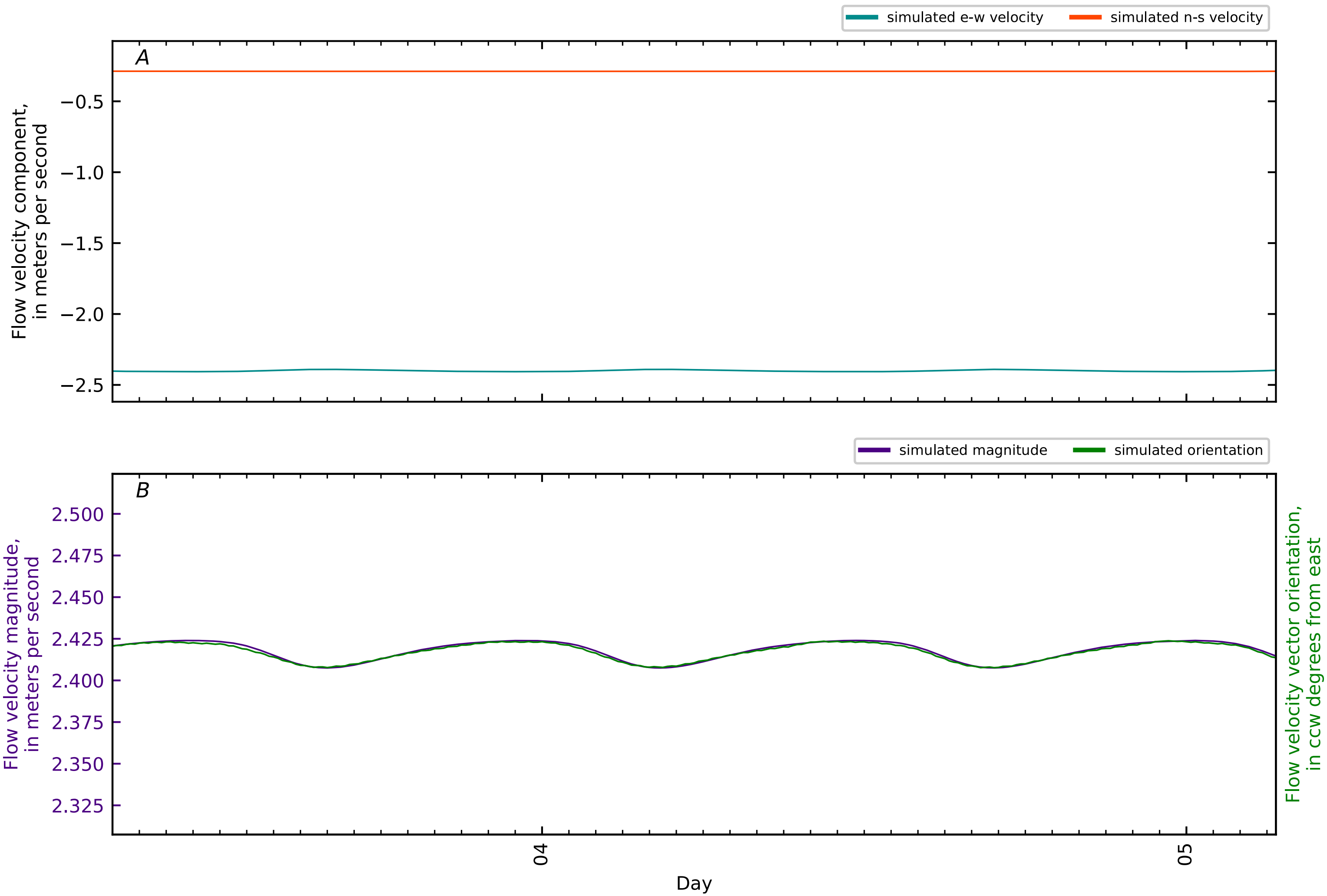

Figure B2-265. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 104, Penob Riv KM49. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

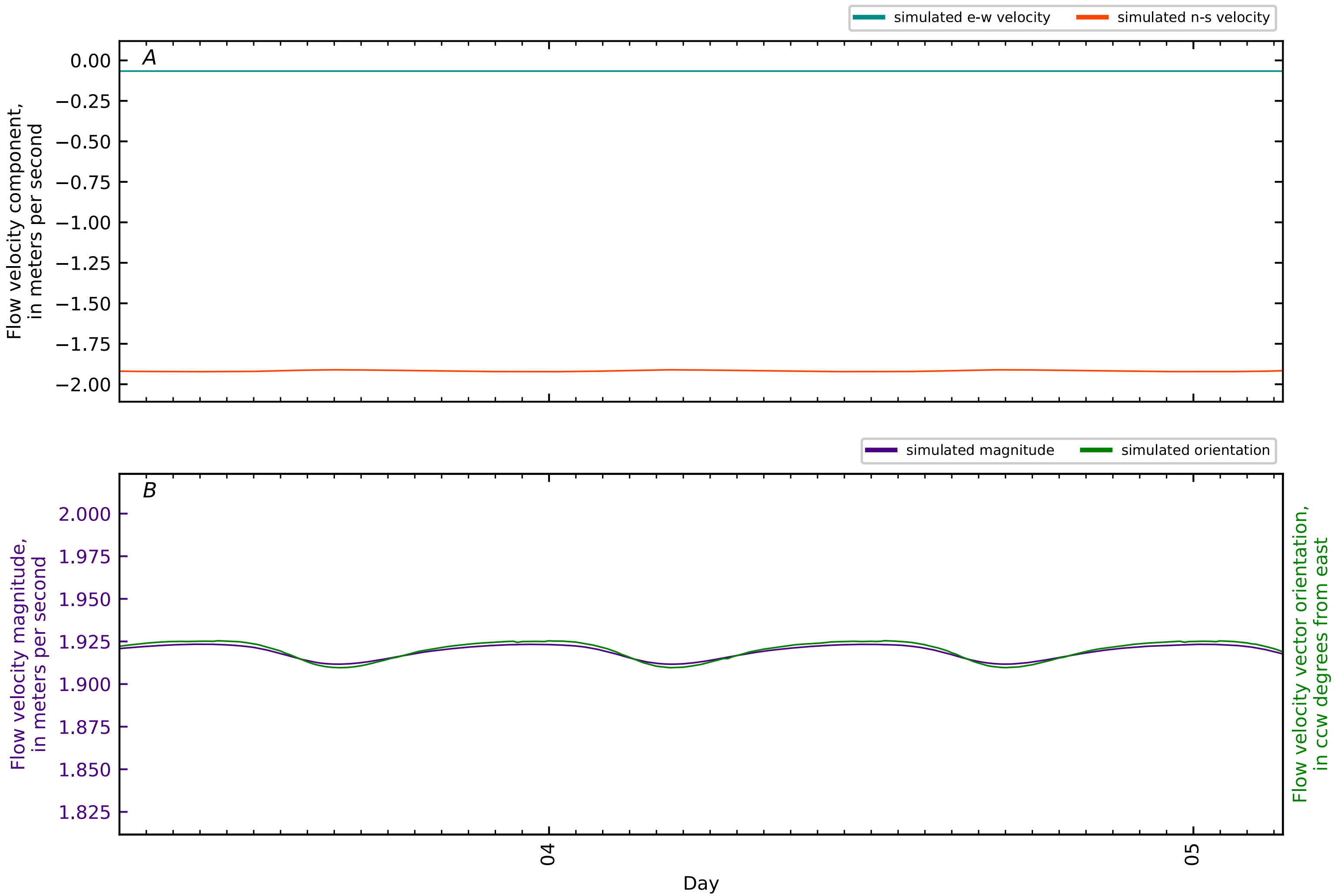

Figure B2-266. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 105, Penob Riv KM50 nr GS gage Eddington. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

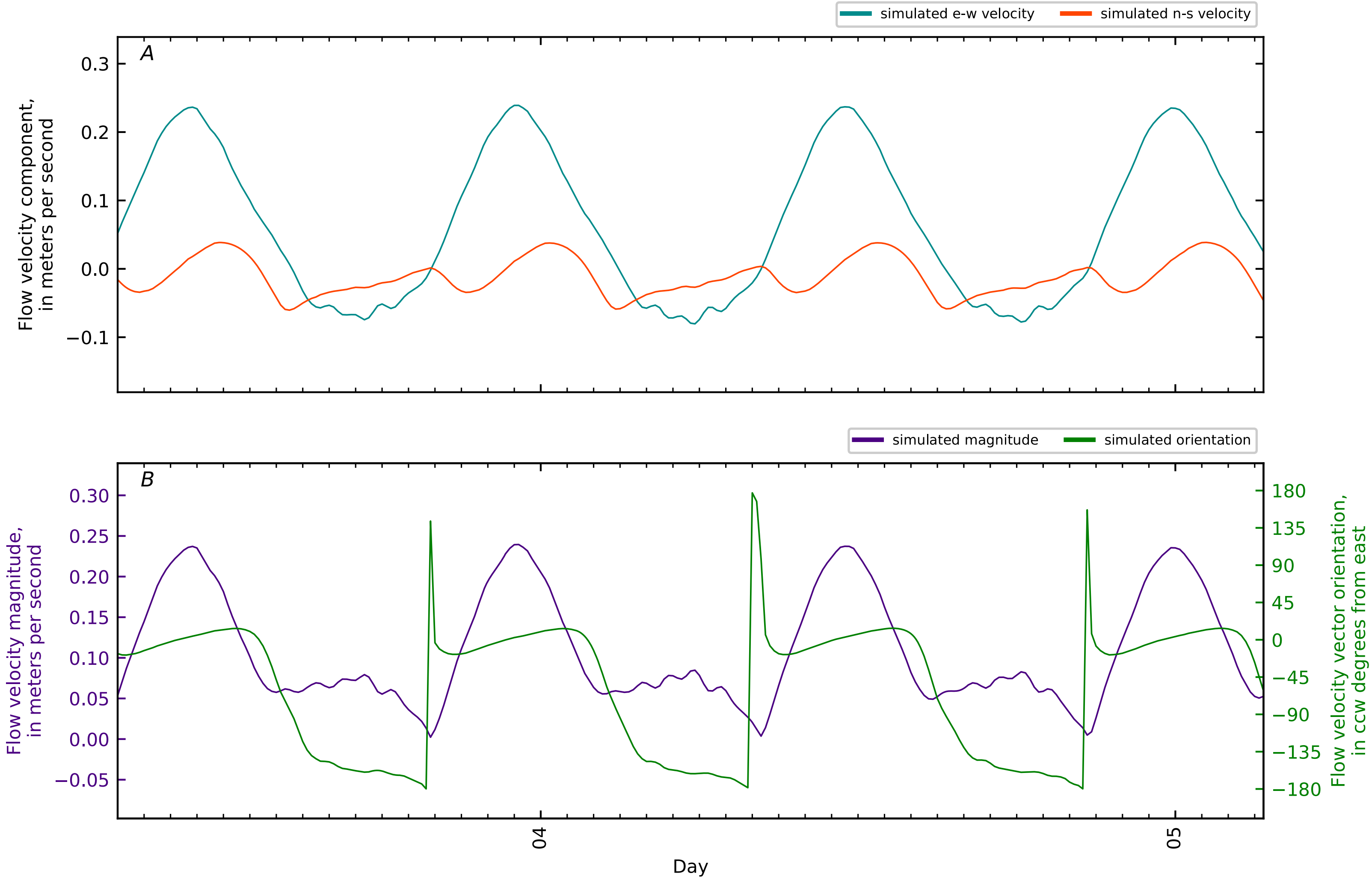

Figure B2-267. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 106, East Channel -KM0.1 ERDC9 VE-MU4-SF-2. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

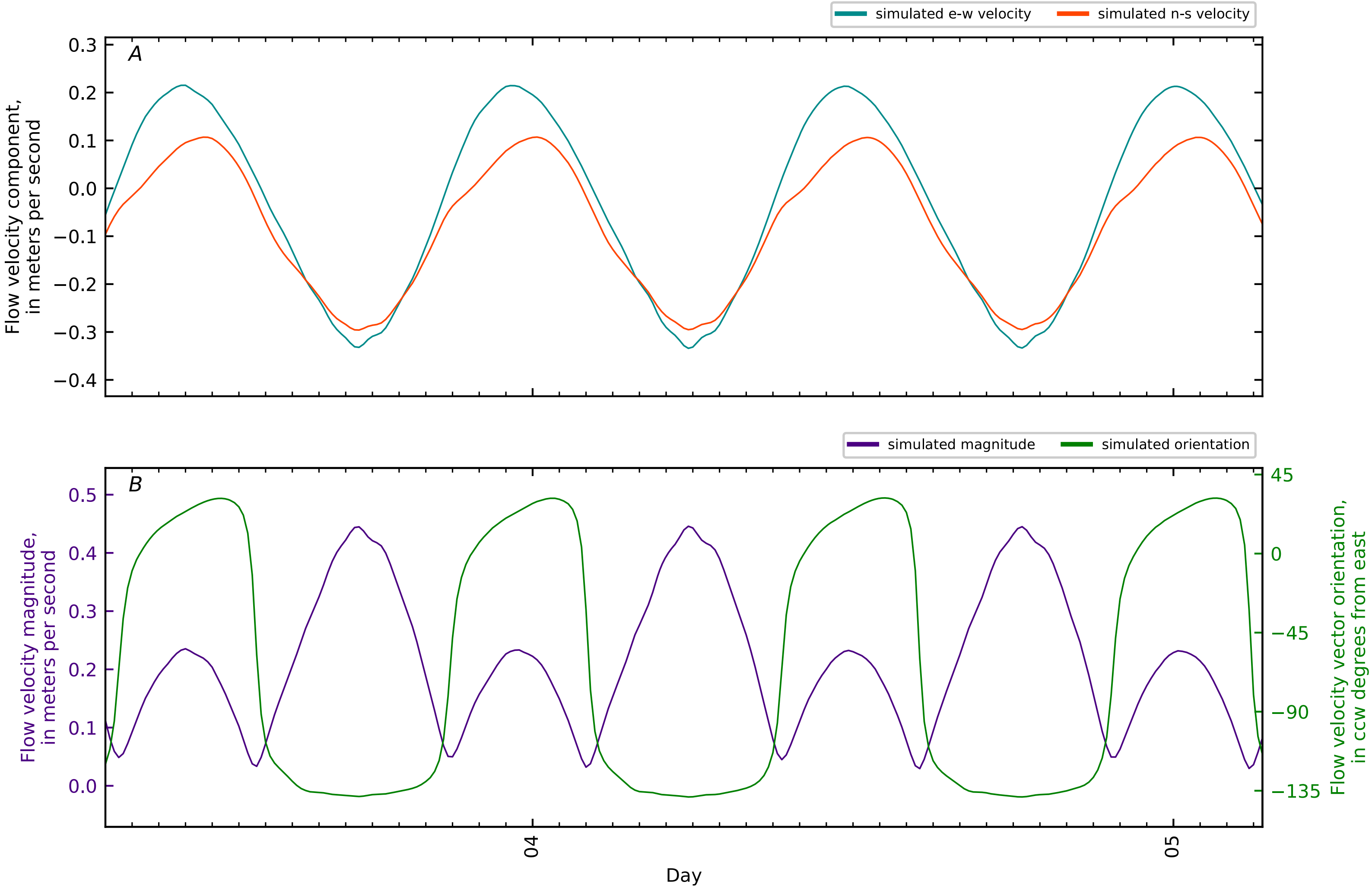

Figure B2-268. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 107, East Channel KM0. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

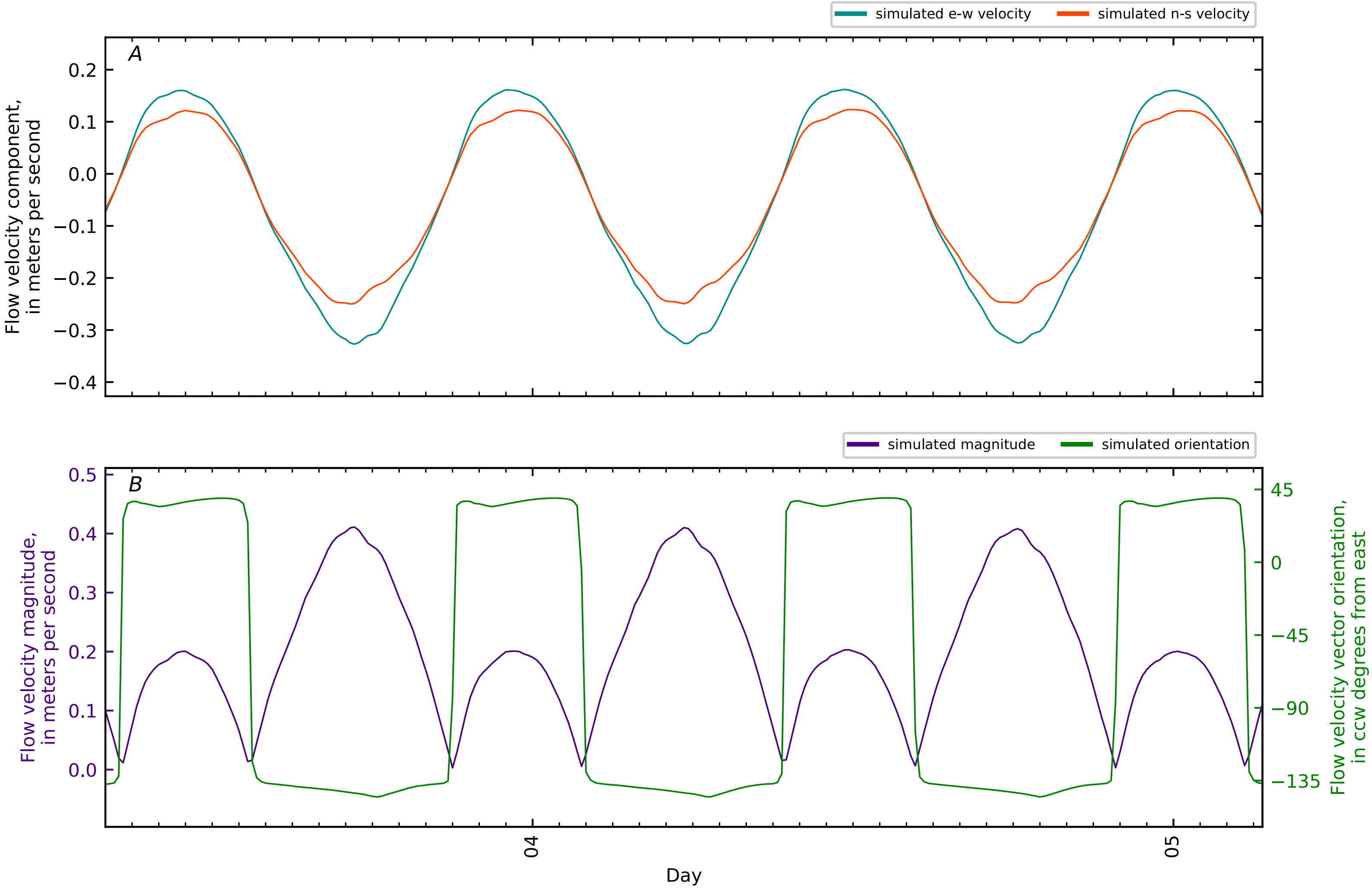

Figure B2-269. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 108, East Channel KM0.1 GS CTD4-01. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

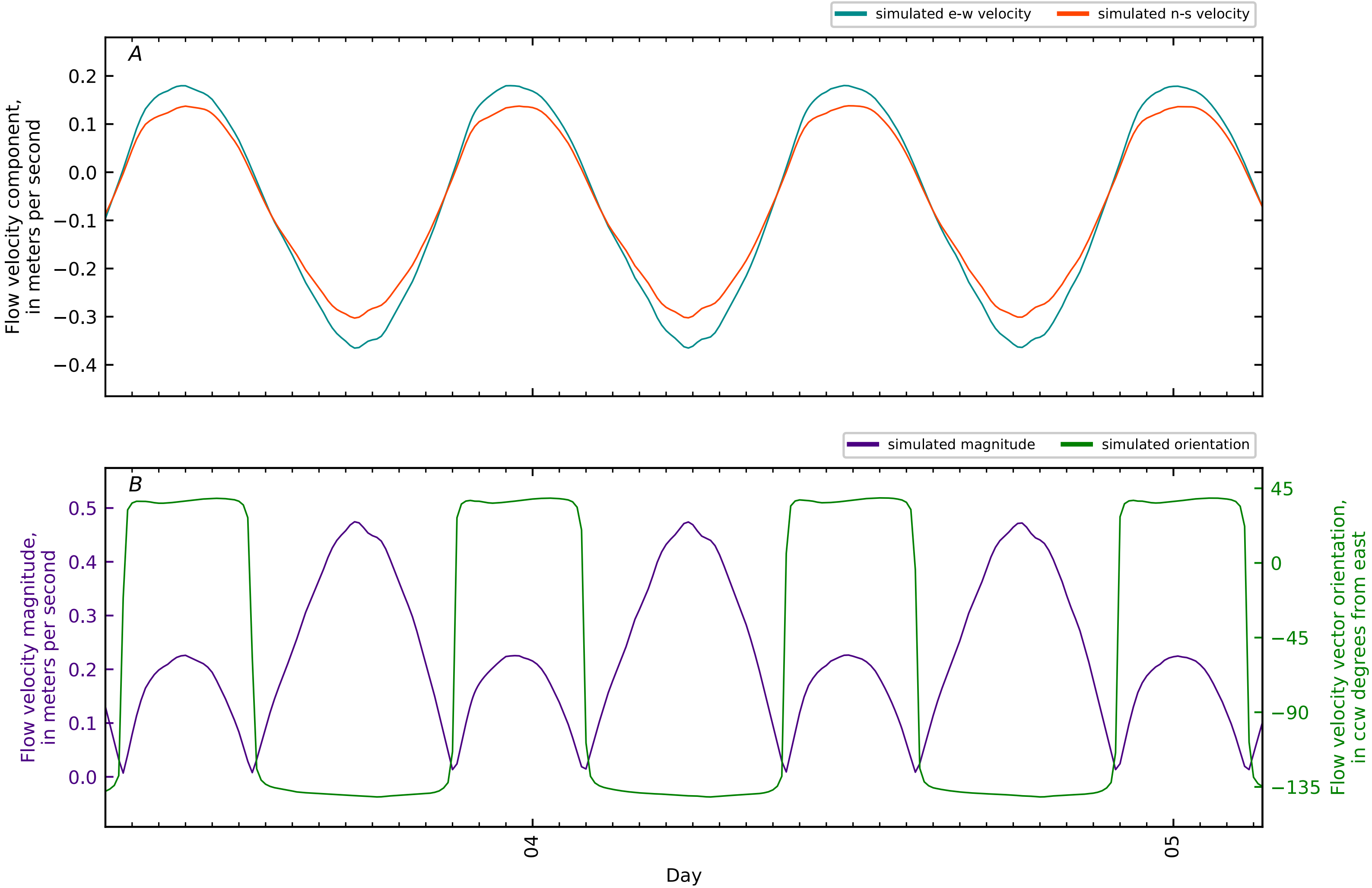

Figure B2-270. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 109, East Channel KM0.1 GS CTD4-02. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

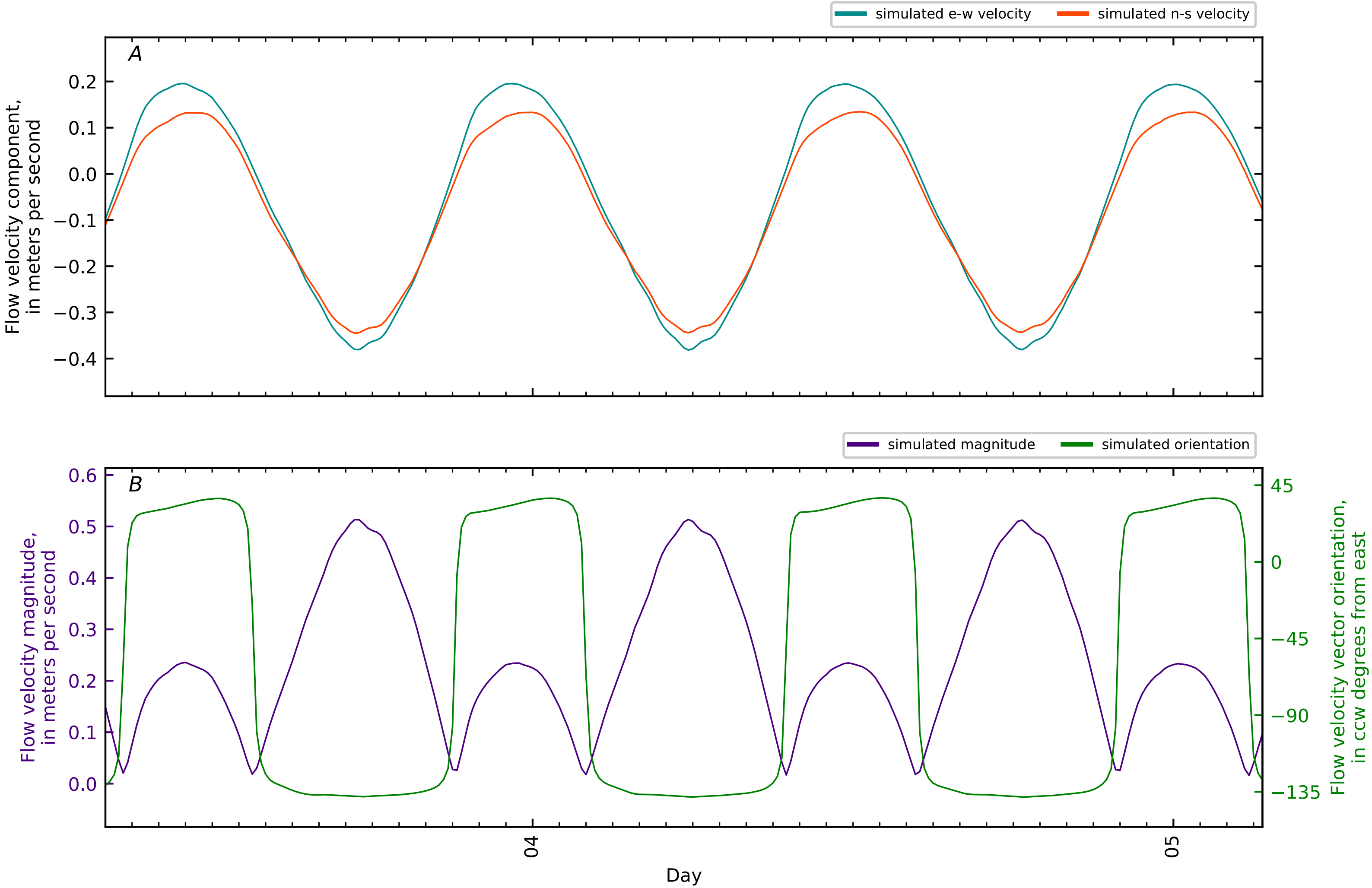

Figure B2-271. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 110, East Channel KM0.1 GS CTD4-03. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

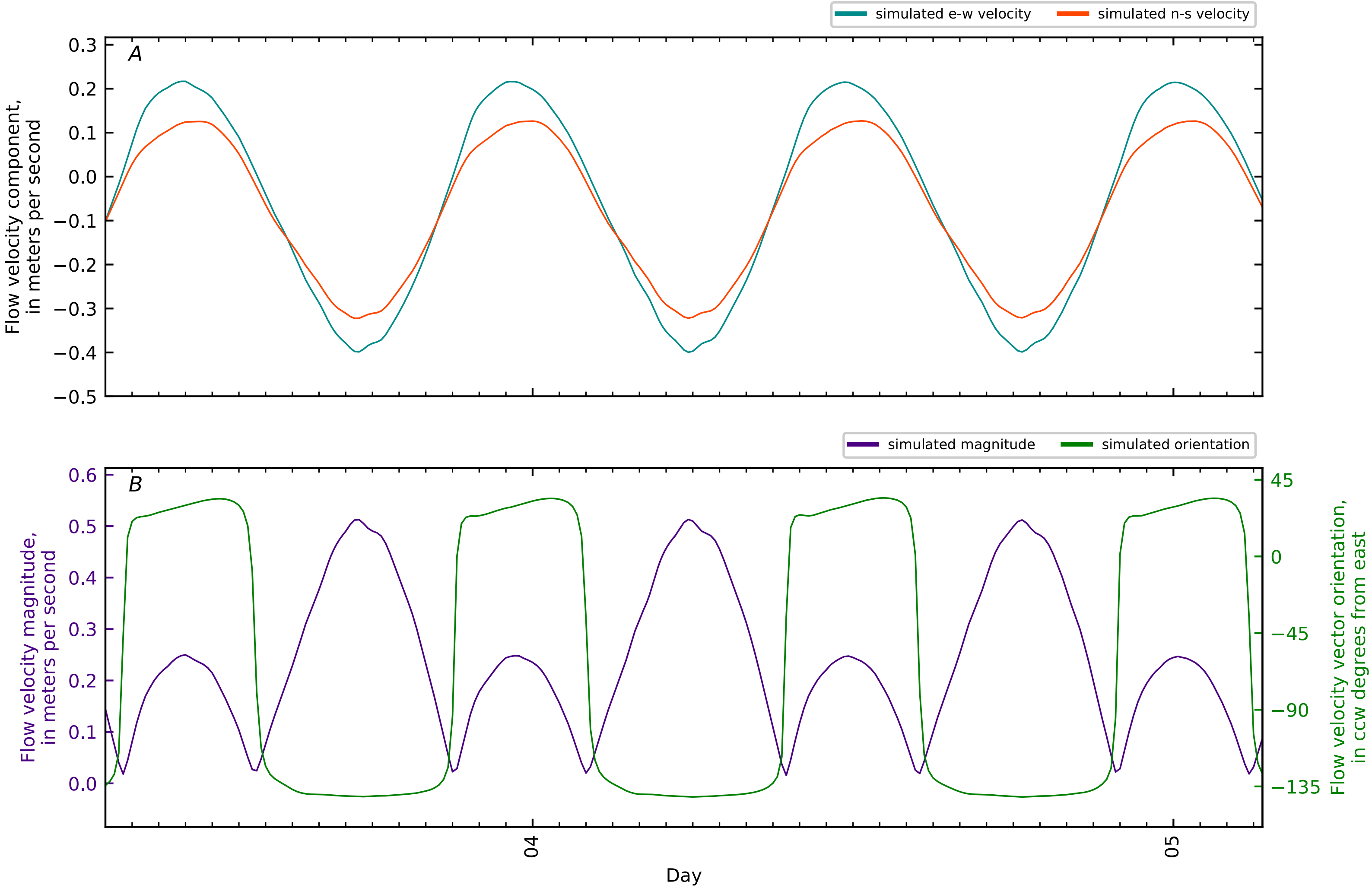

Figure B2-272. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 111, East Channel KM0.1 GS CTD4-04. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

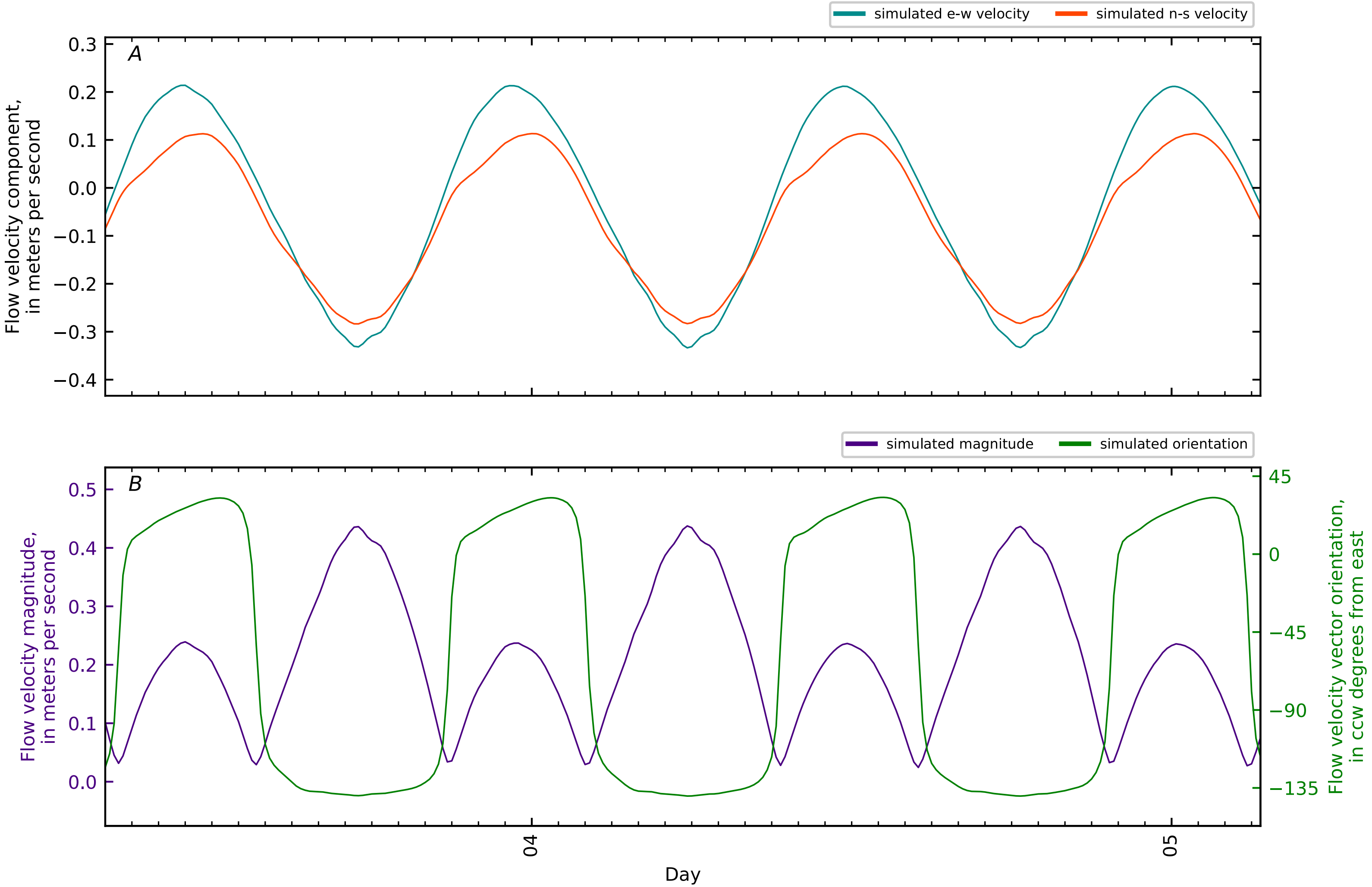

Figure B2-273. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 112, East Channel KM0.1 GS CTD4-05. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

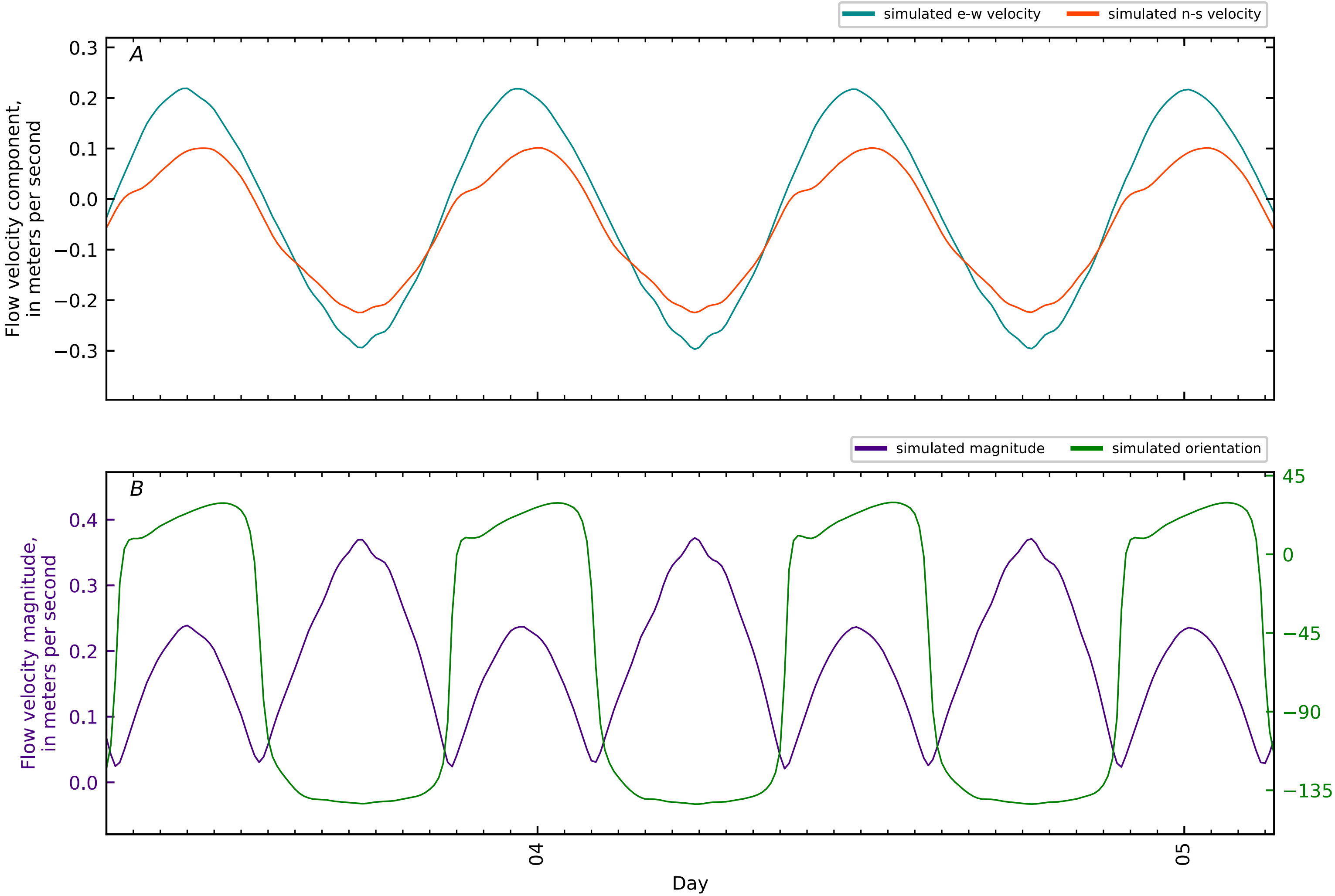

Figure B2-274. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 113, East Channel KM0.1 GS CTD4-06. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

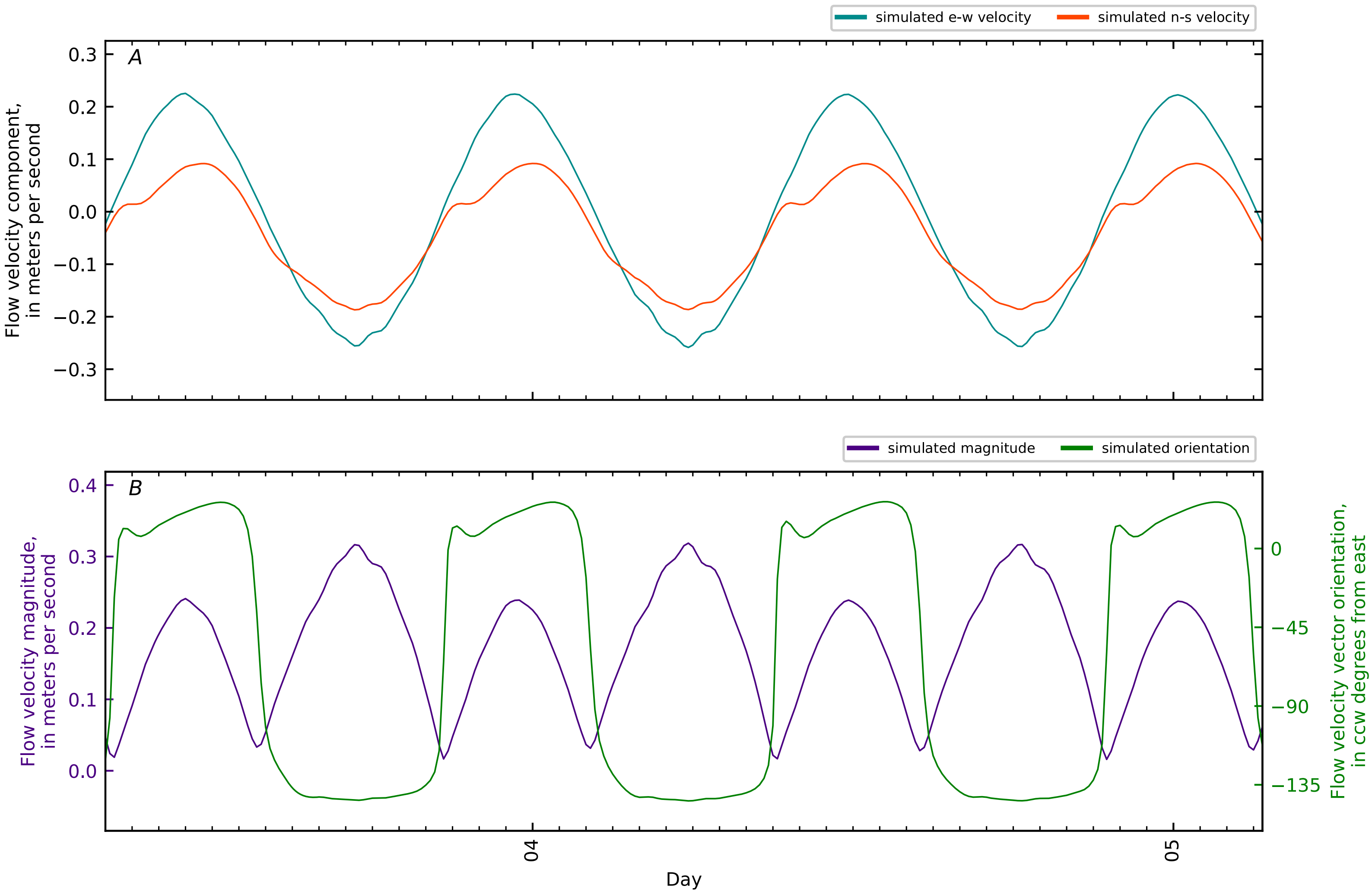

Figure B2-275. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 114, East Channel KM0.1 GS CTD4-07. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

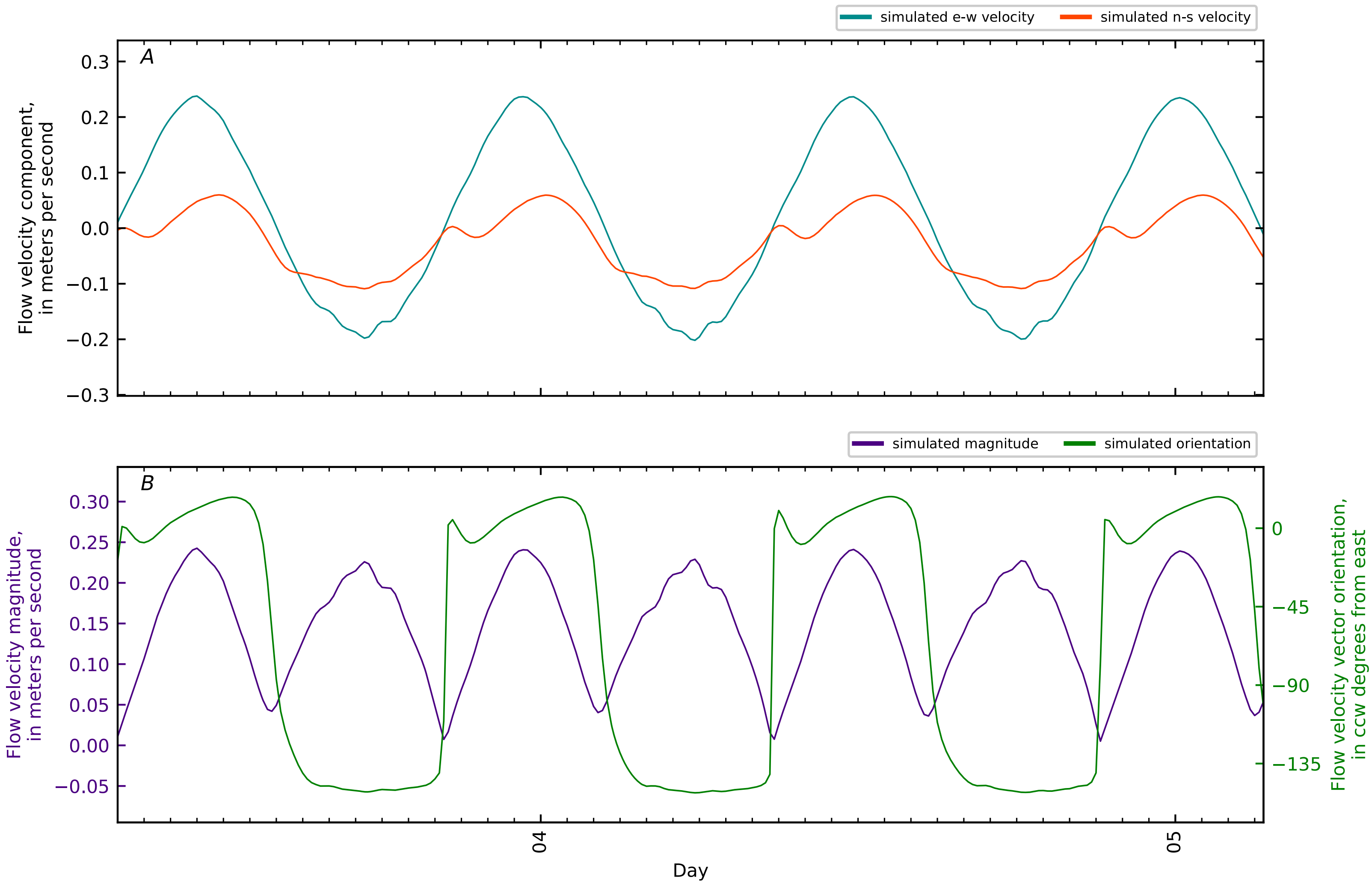

Figure B2-276. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 115, East Channel KM0.1 GS CTD4-08. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

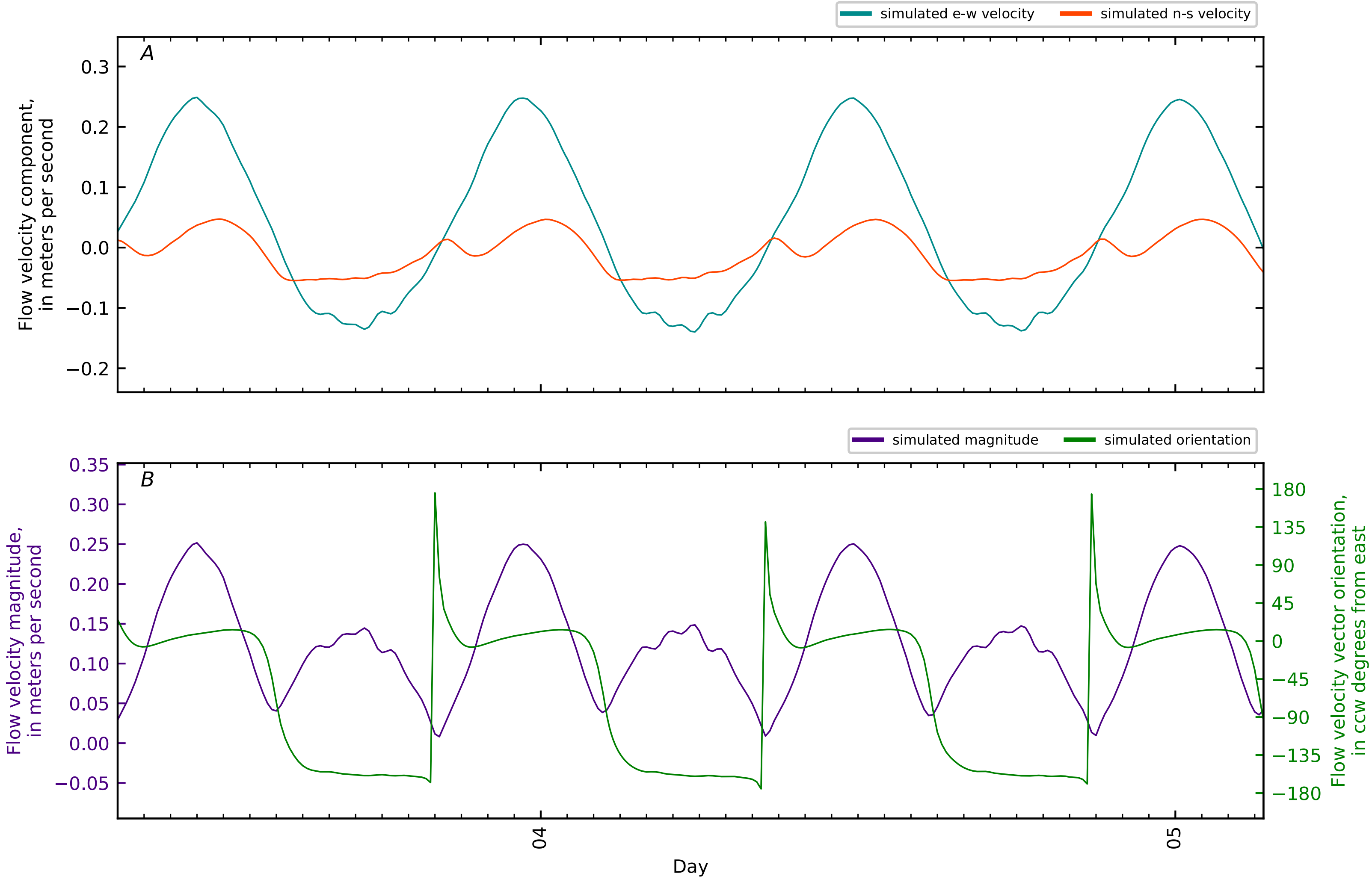

Figure B2-277. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 116, East Channel KM0.1 GS CTD4-09. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

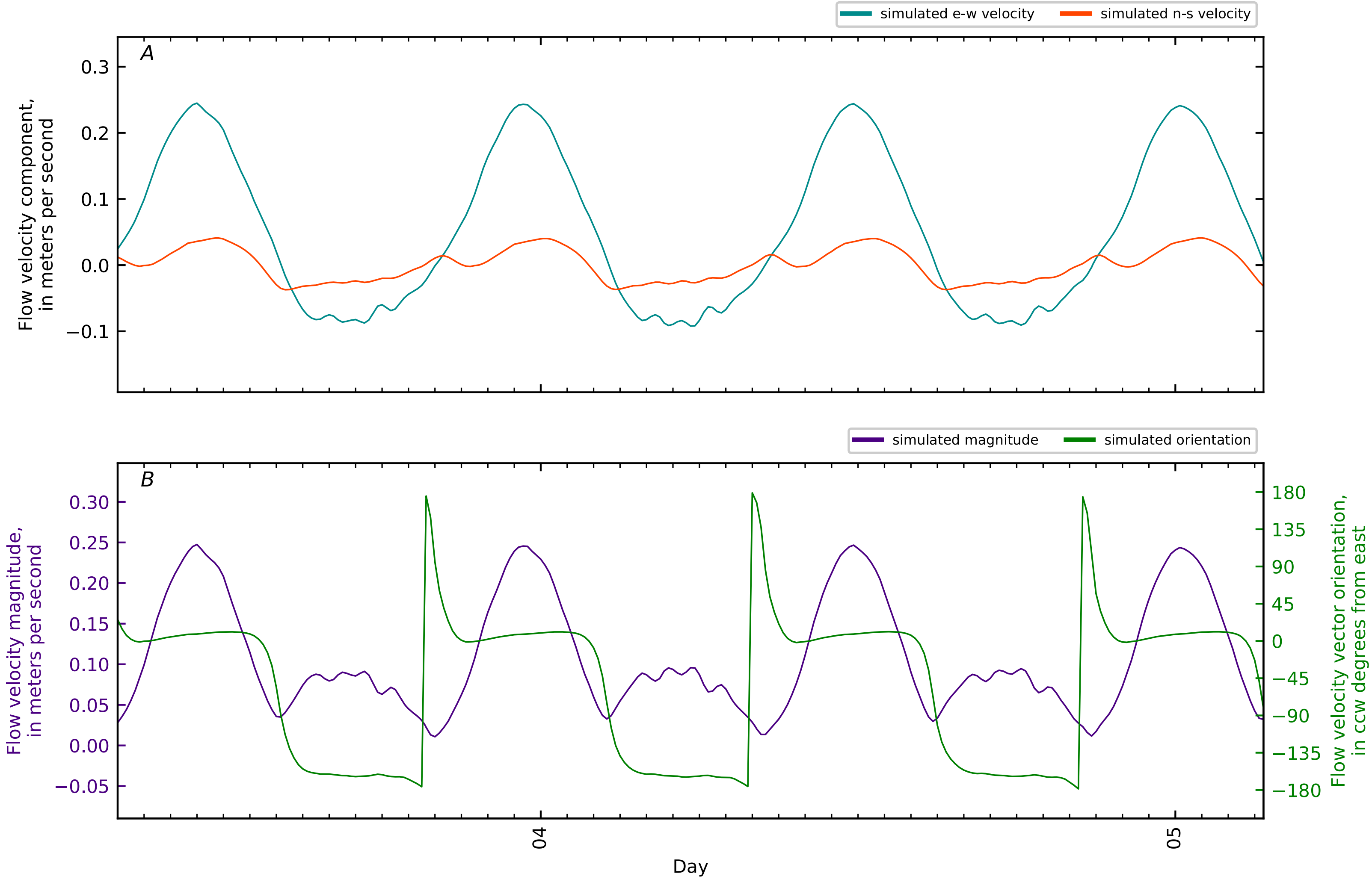

Figure B2-278. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 117, East Channel KM0.1 GS CTD4-10. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

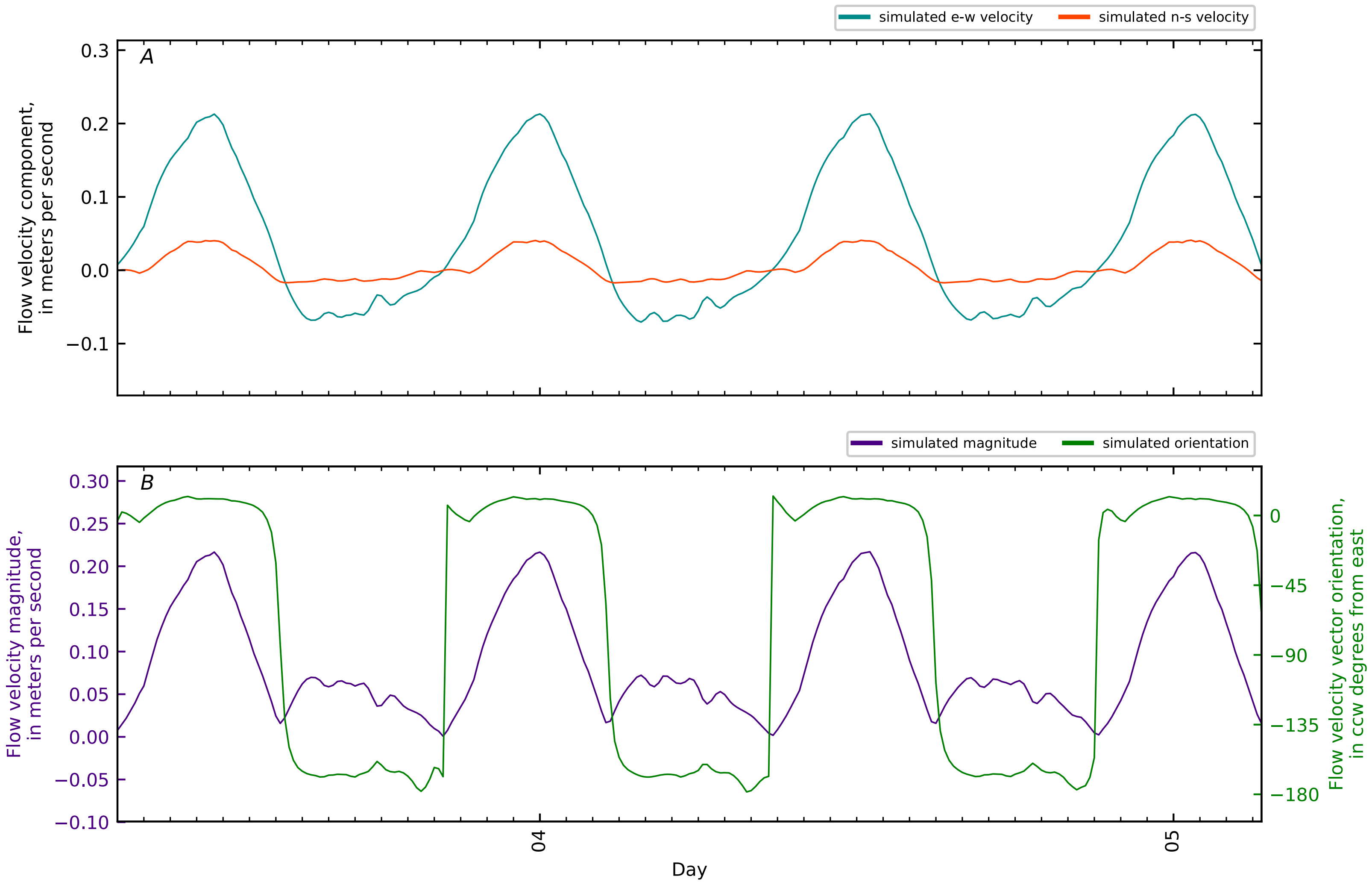

Figure B2-279. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 118, East Channel KM0.1 GS CTD4-11. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

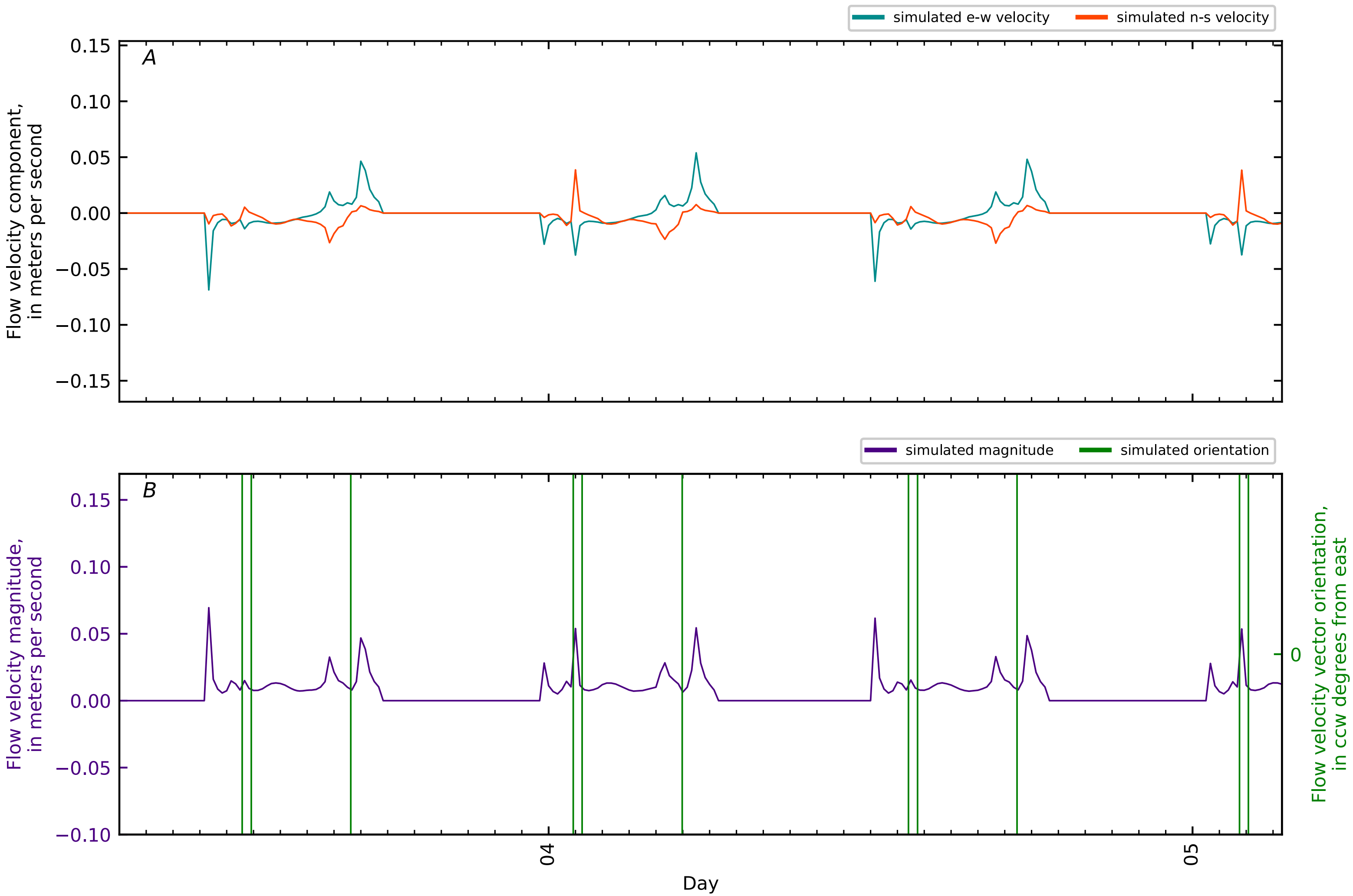

Figure B2-280. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 119, East Channel KM0.78 ERDC7 VE-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

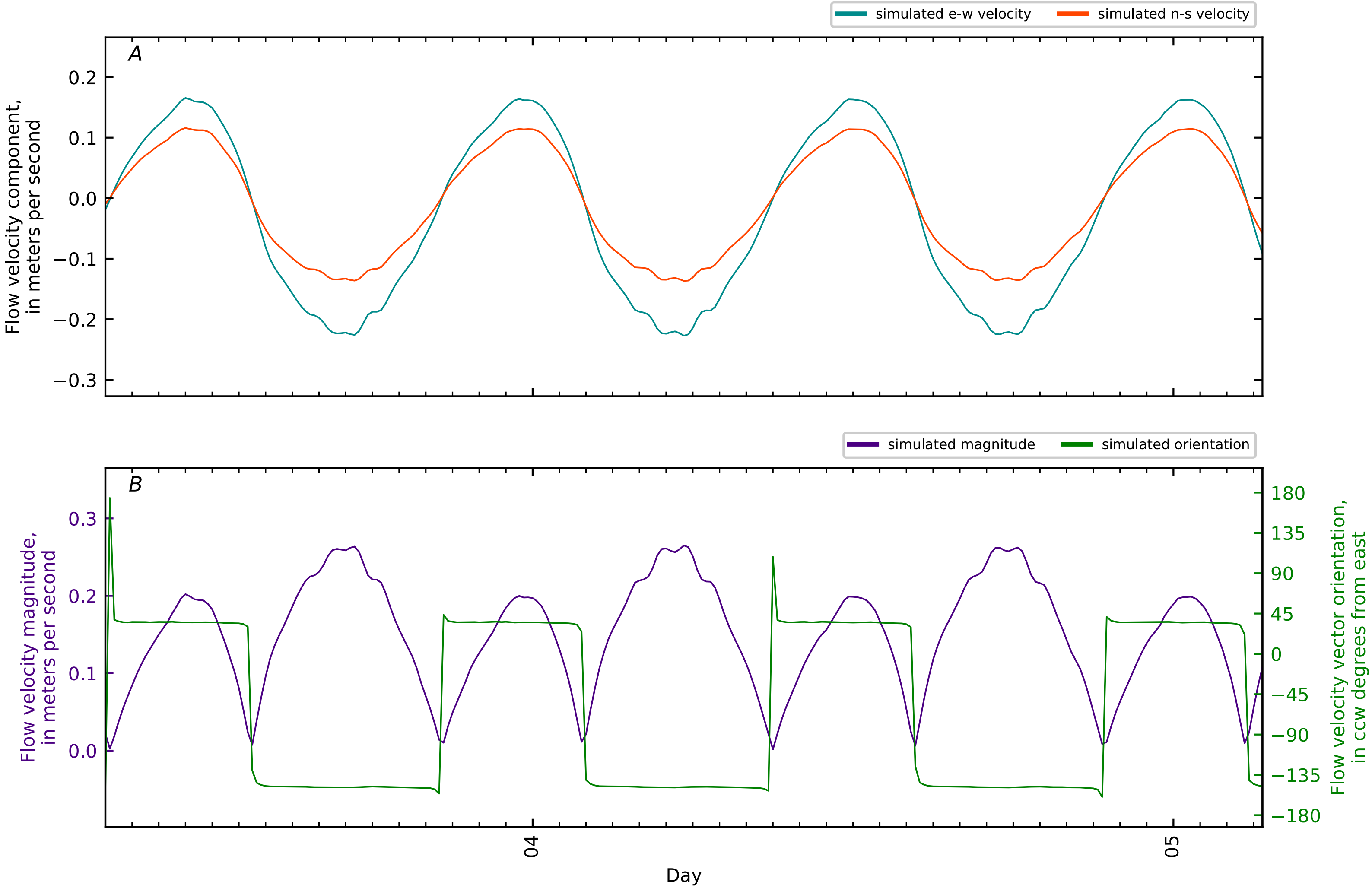

Figure B2-281. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 120, East Channel KM0.8 ERDC8 VE-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

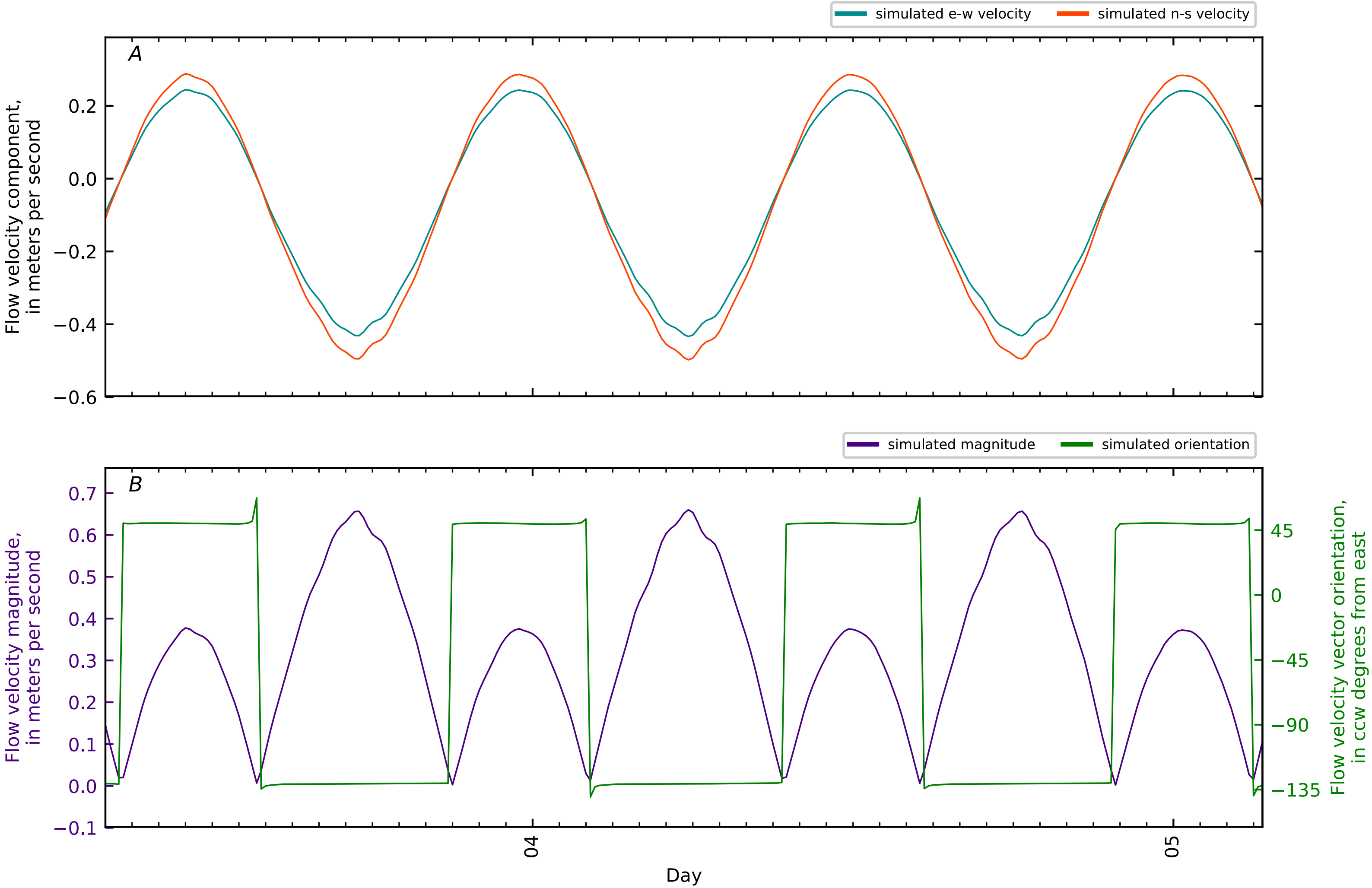

Figure B2-282. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 121, East Channel KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

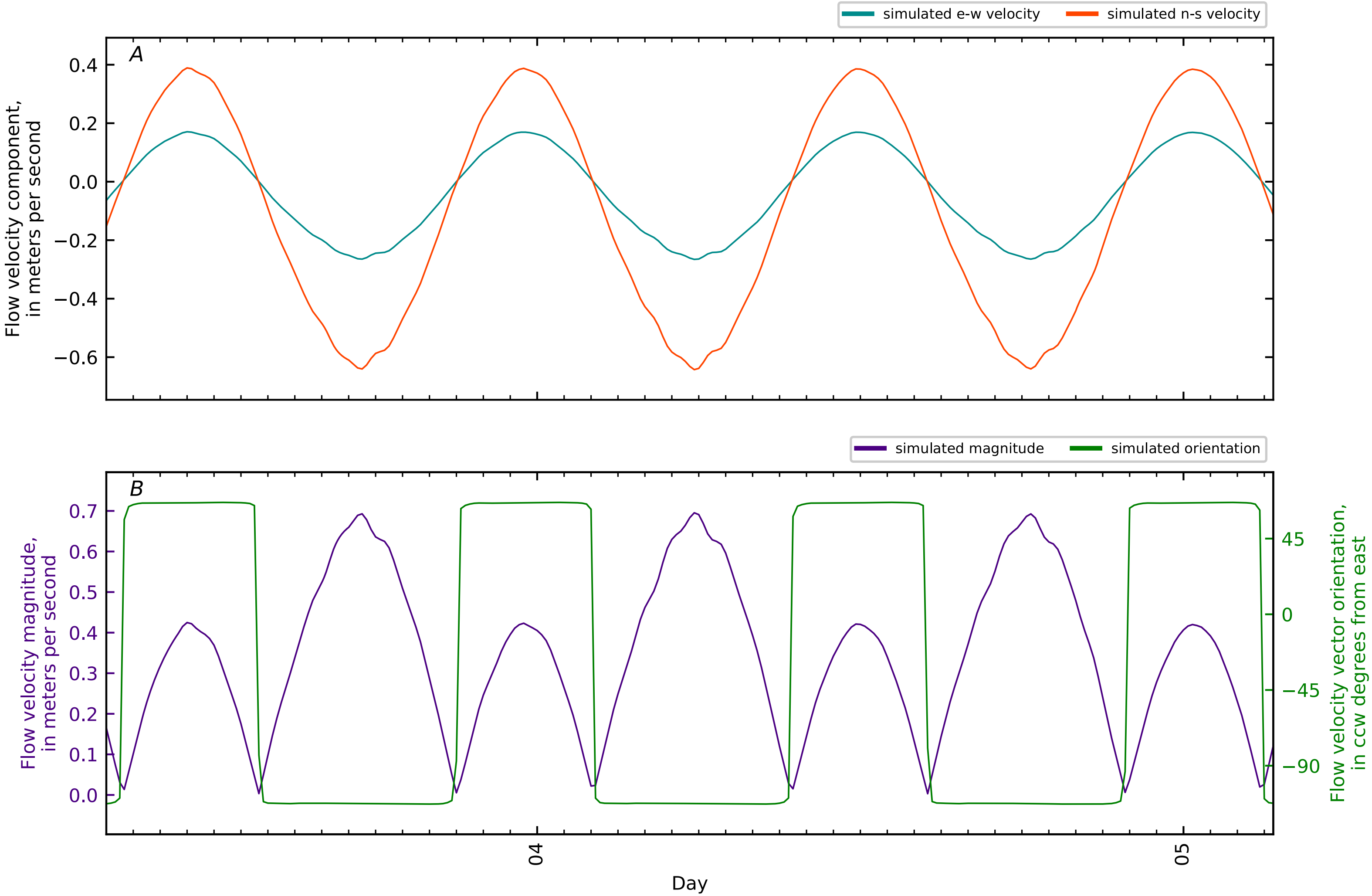

Figure B2-283. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 122, East Channel KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

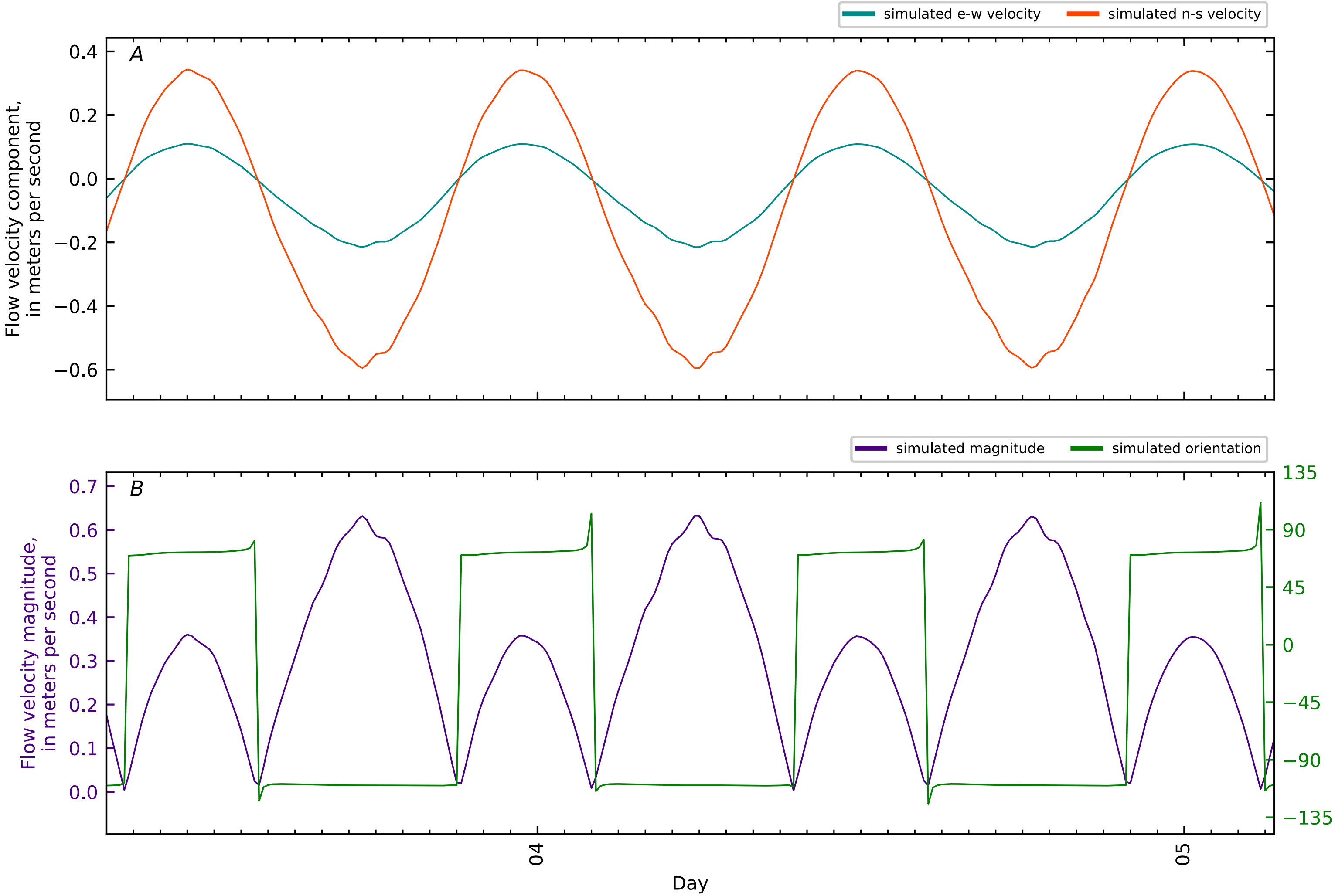

Figure B2-284. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 123, East Channel KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

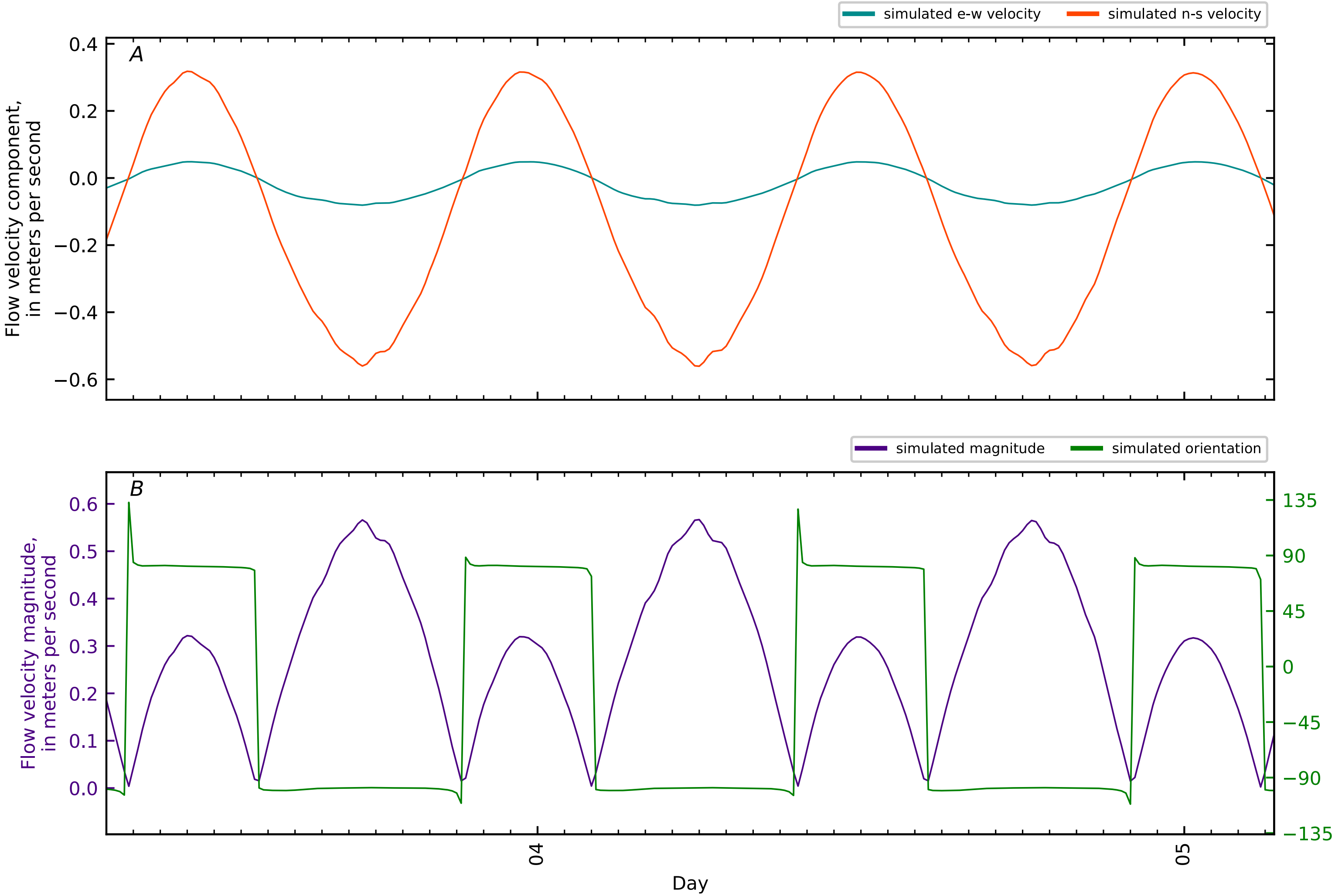

Figure B2-285. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 124, East Channel KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

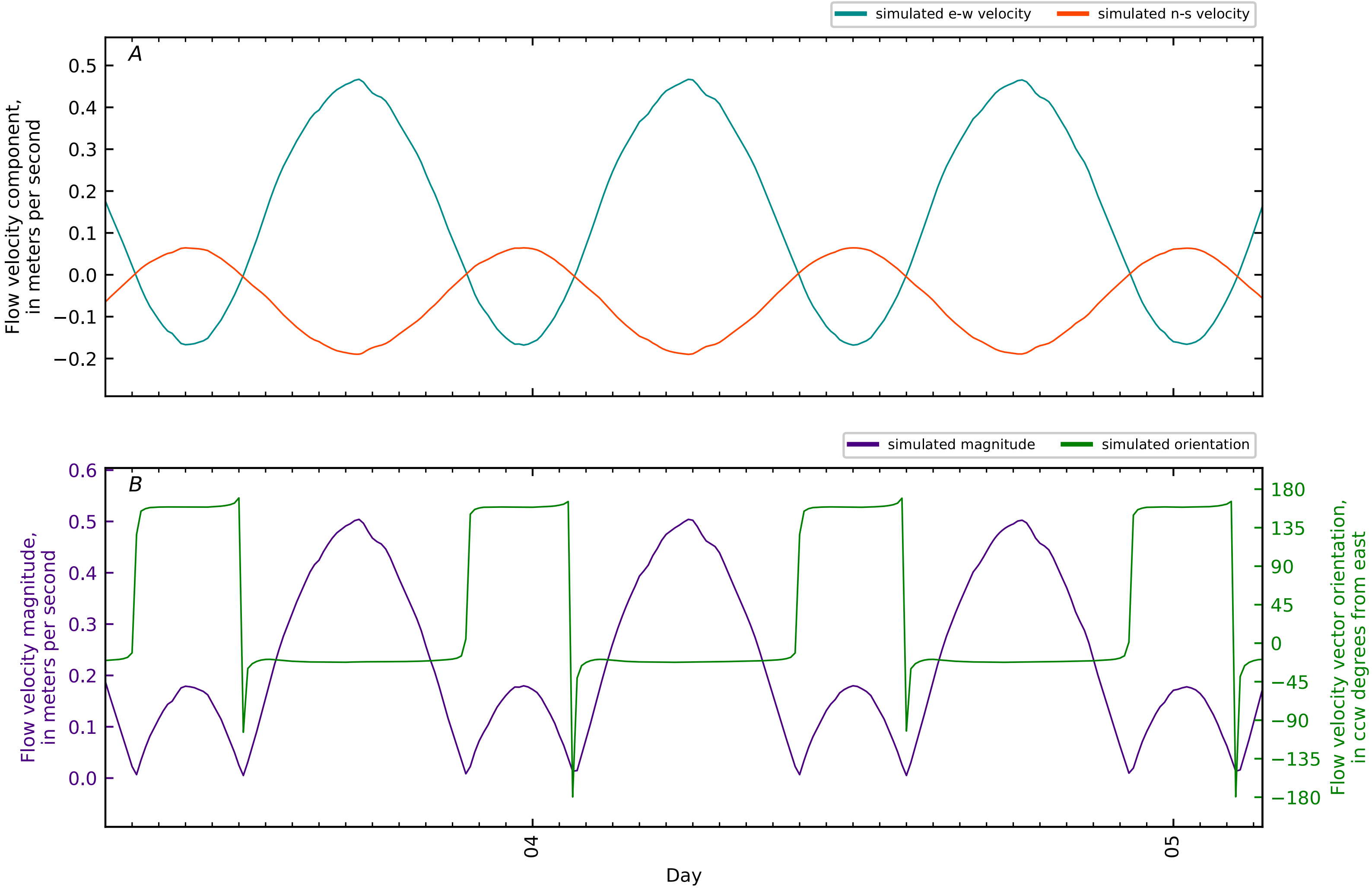

Figure B2-286. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 125, East Channel KM5. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

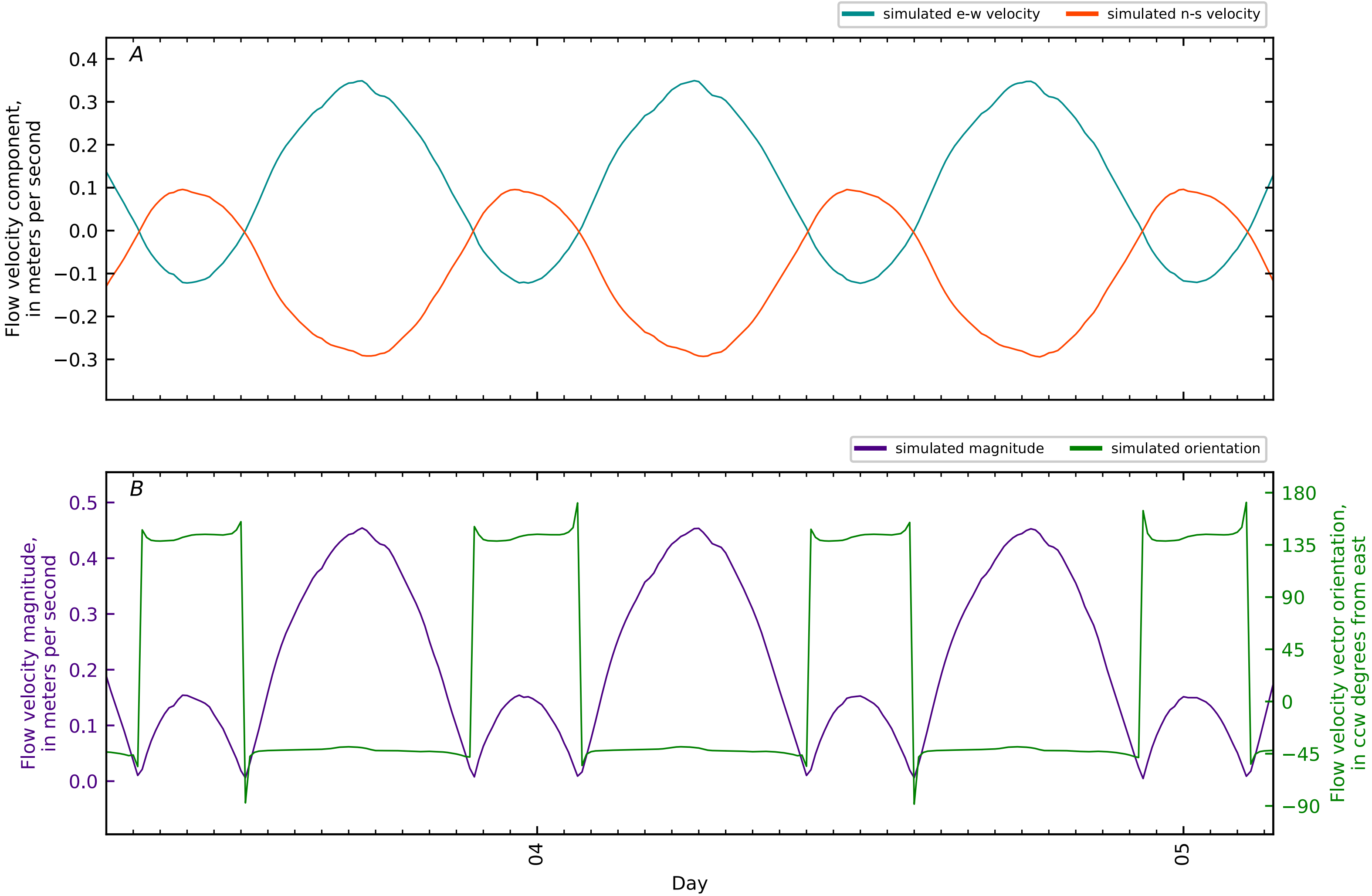

Figure B2-287. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 126, East Channel KM5.3 ERDC4 VN-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

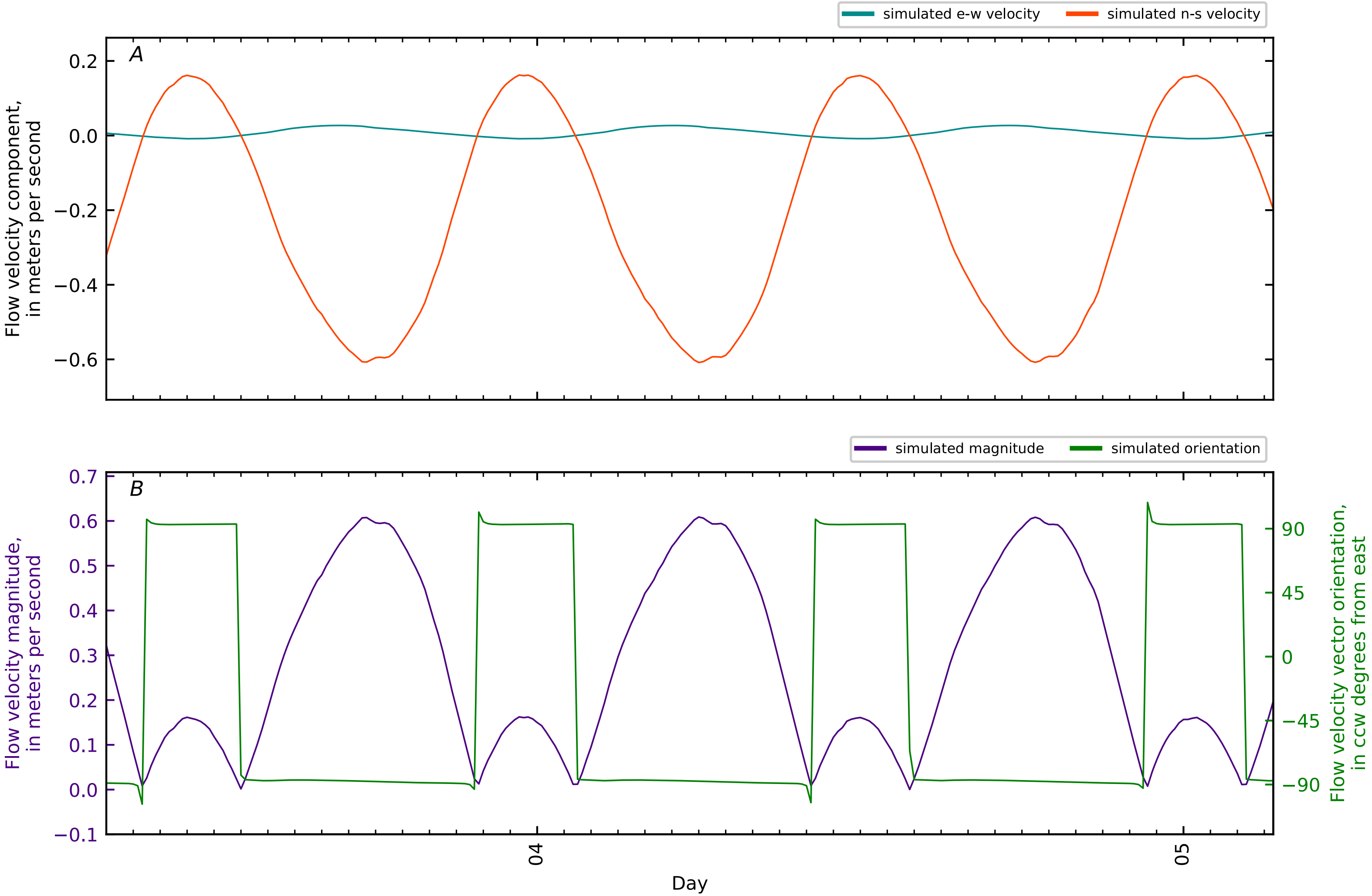

Figure B2-288. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 127, East Channel KM6. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

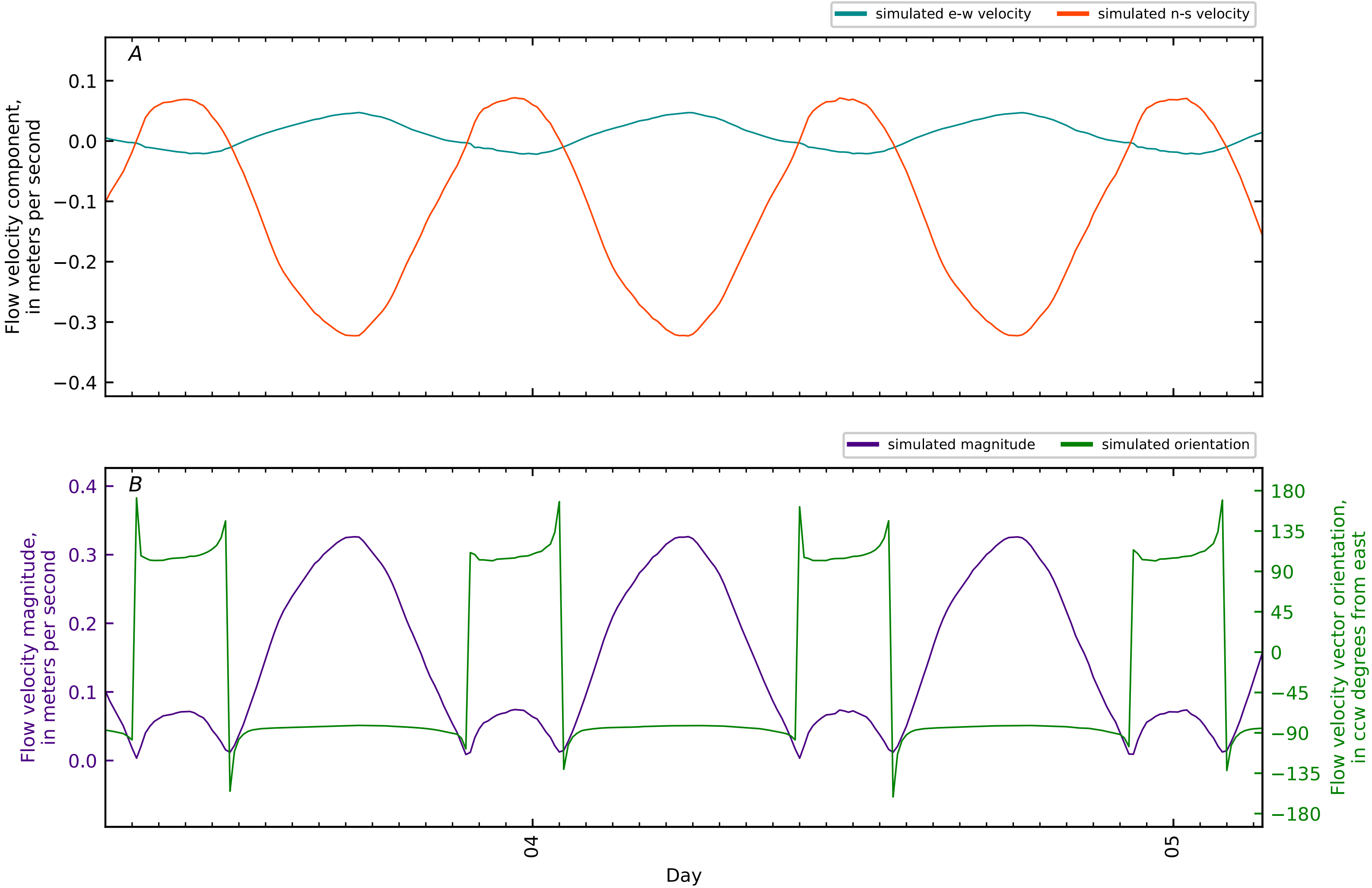

Figure B2-289. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 128, East Channel KM6.8 ERDC12 VN-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

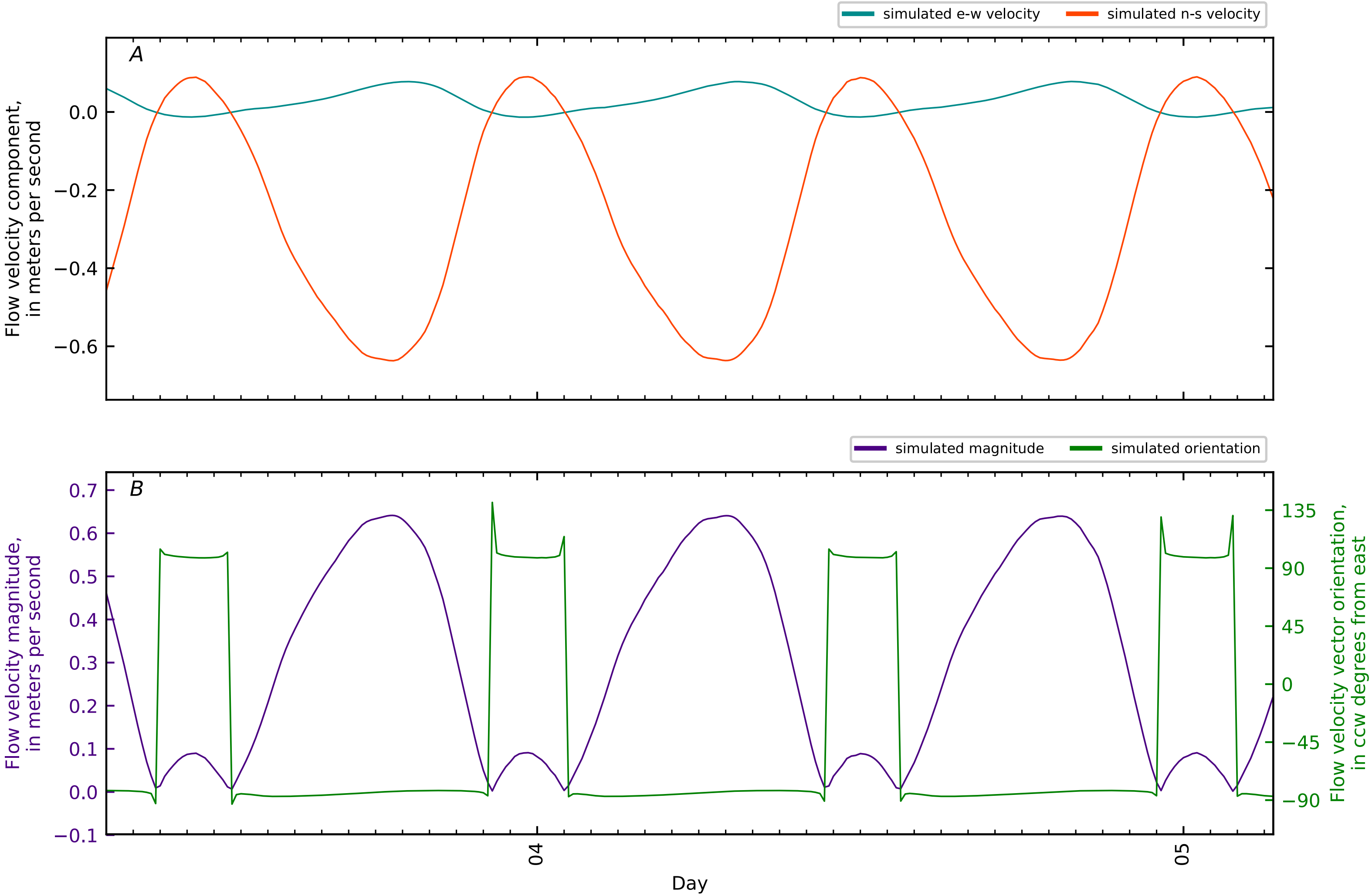

Figure B2-290. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 129, East Channel KM7. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

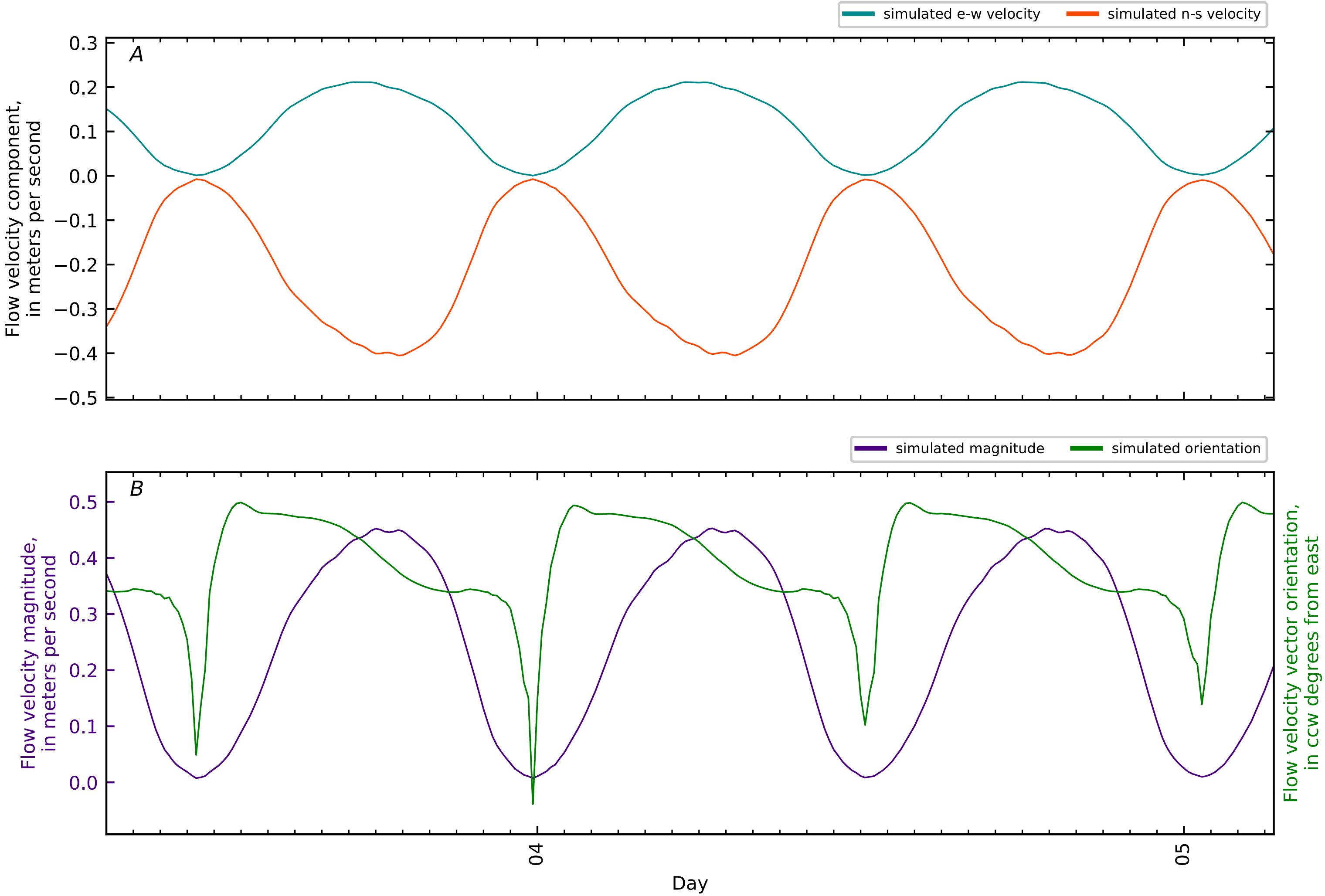

Figure B2-291. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 130, East Channel KM8. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

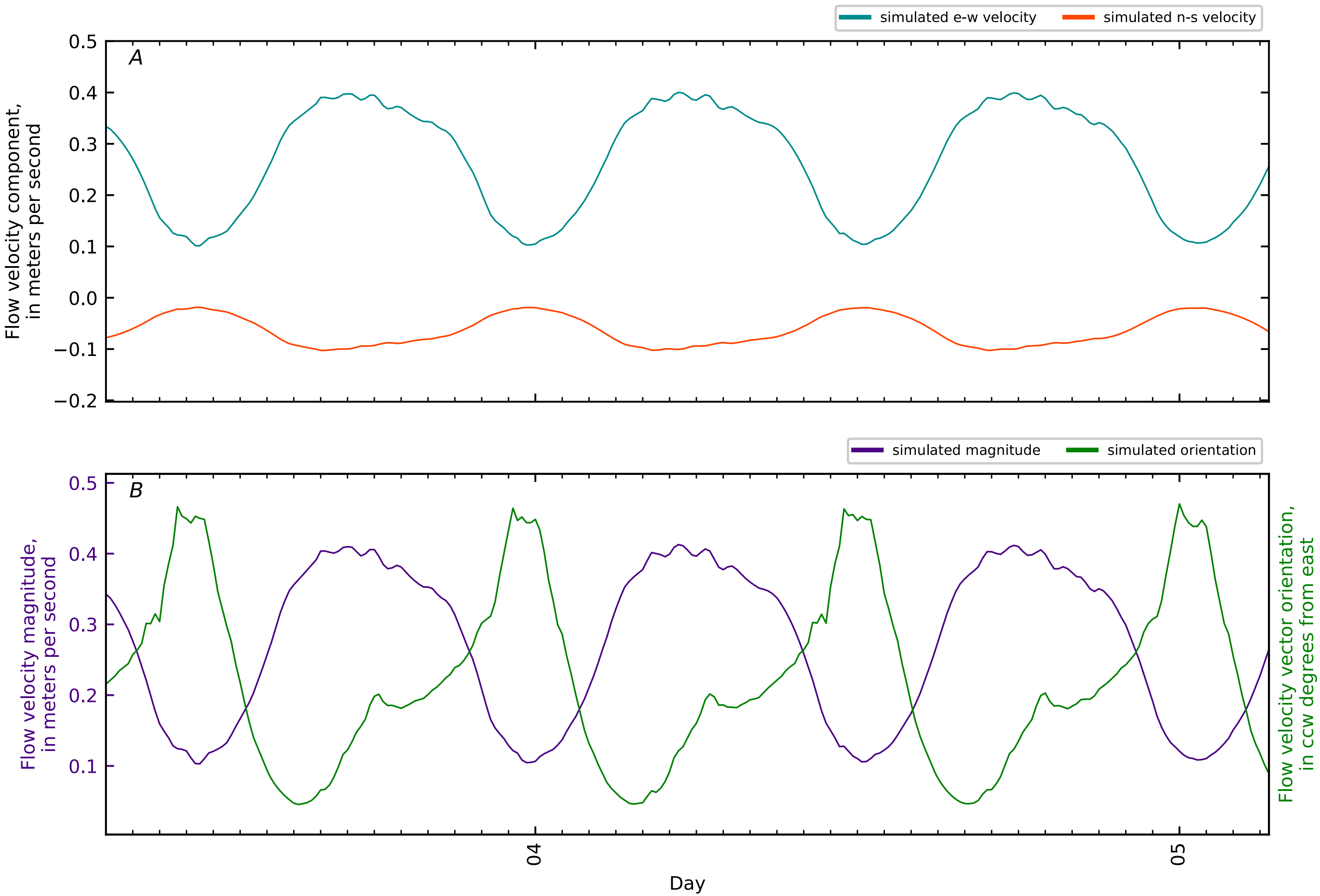

Figure B2-292. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 131, East Channel KM9. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

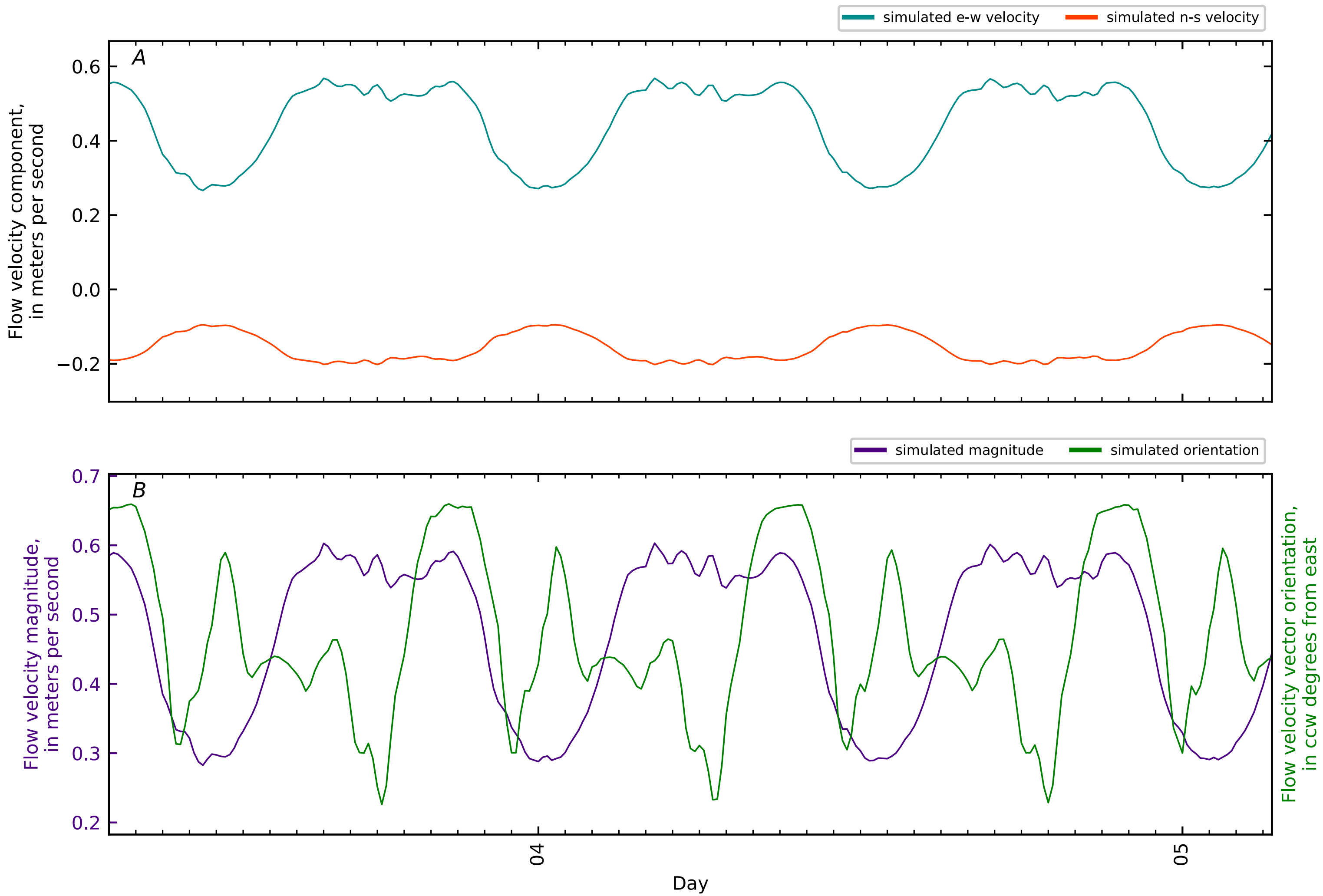

Figure B2-293. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 132, East Channel KM10. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

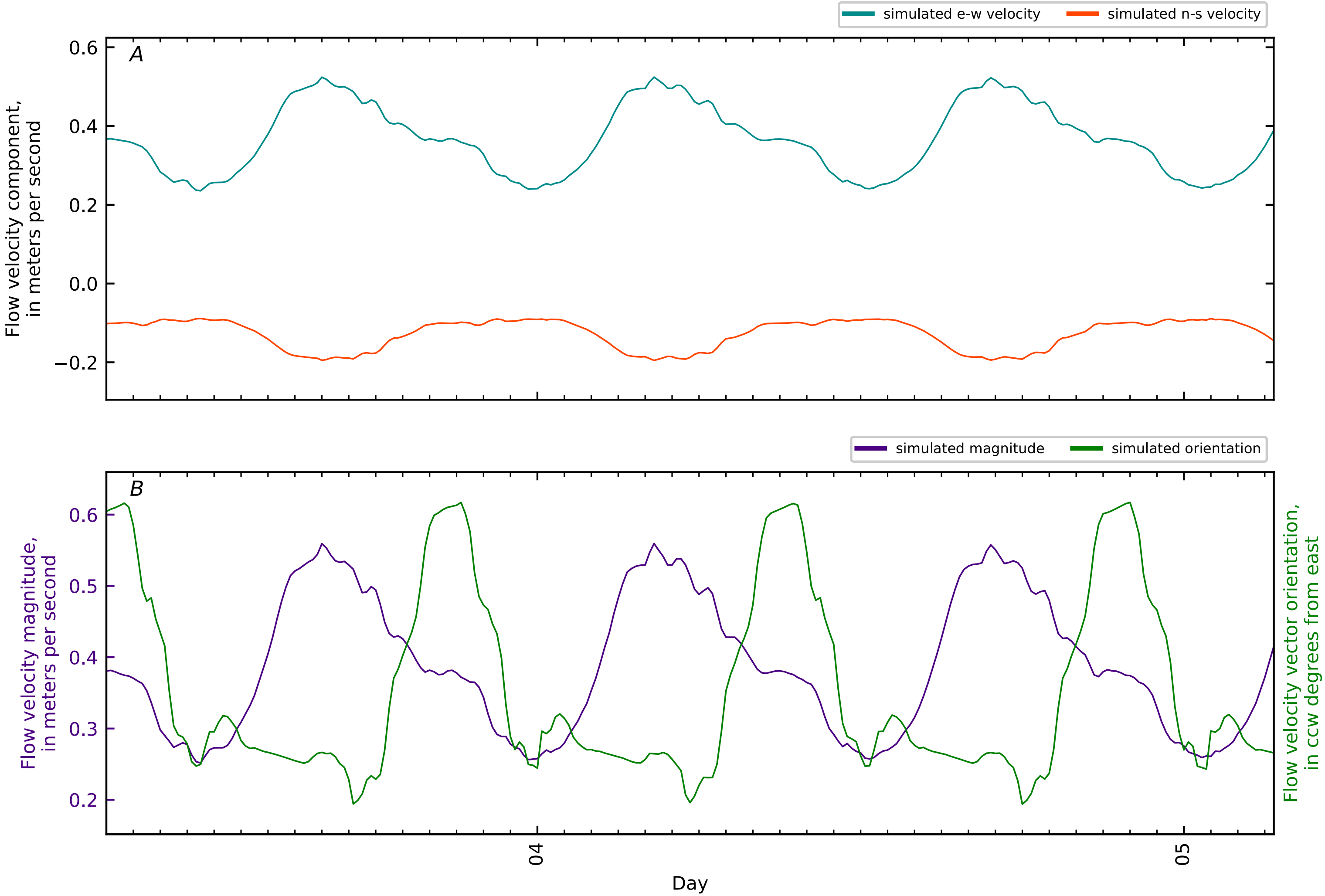

Figure B2-294. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 133, East Channel KM10 GS 443409068471801 at. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

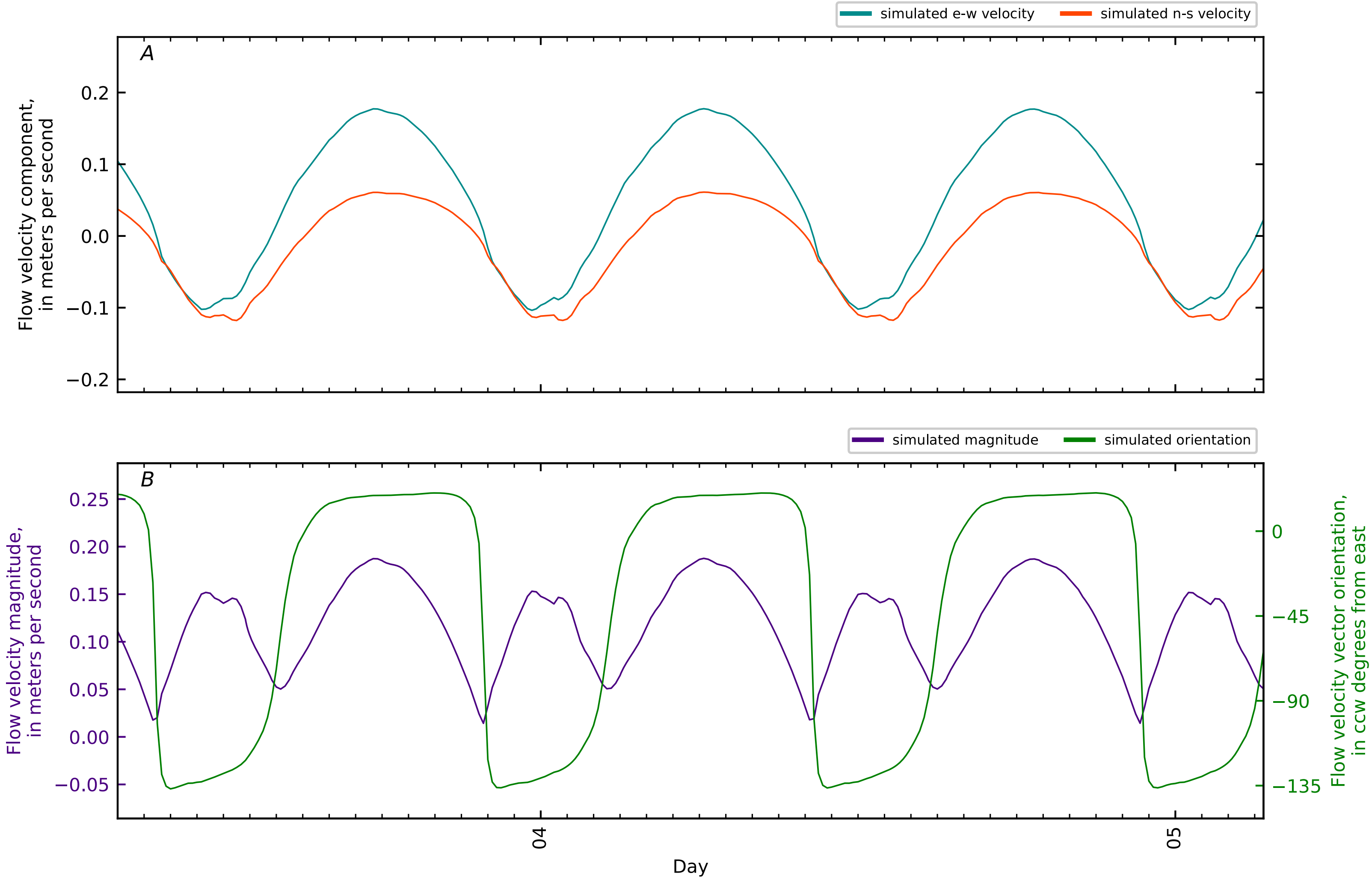

Figure B2-295. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 134, Mendall Marsh KM0. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

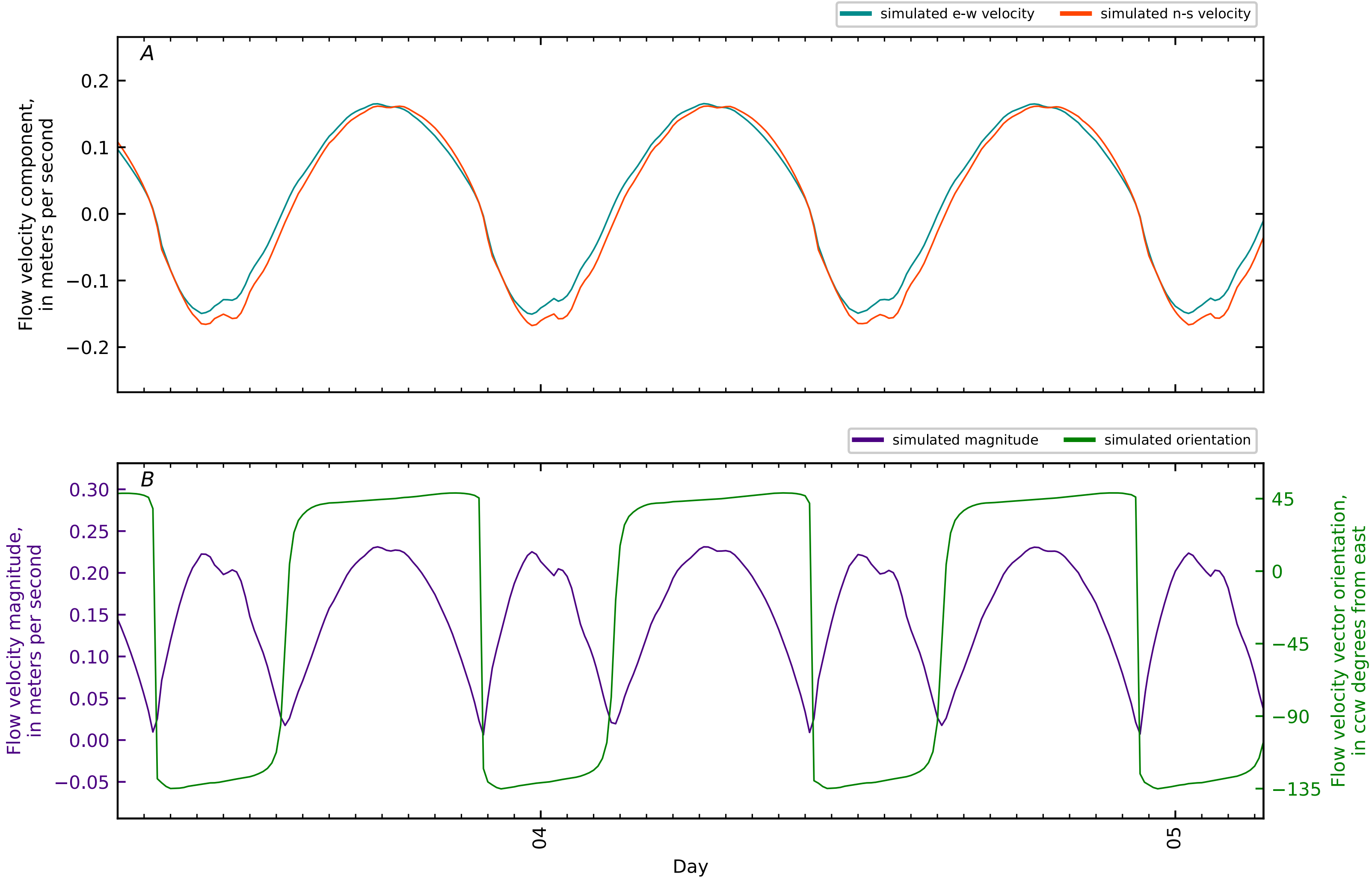

Figure B2-296. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 135, Mendall Marsh KM0.1 ERDC14 MM-MU6-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

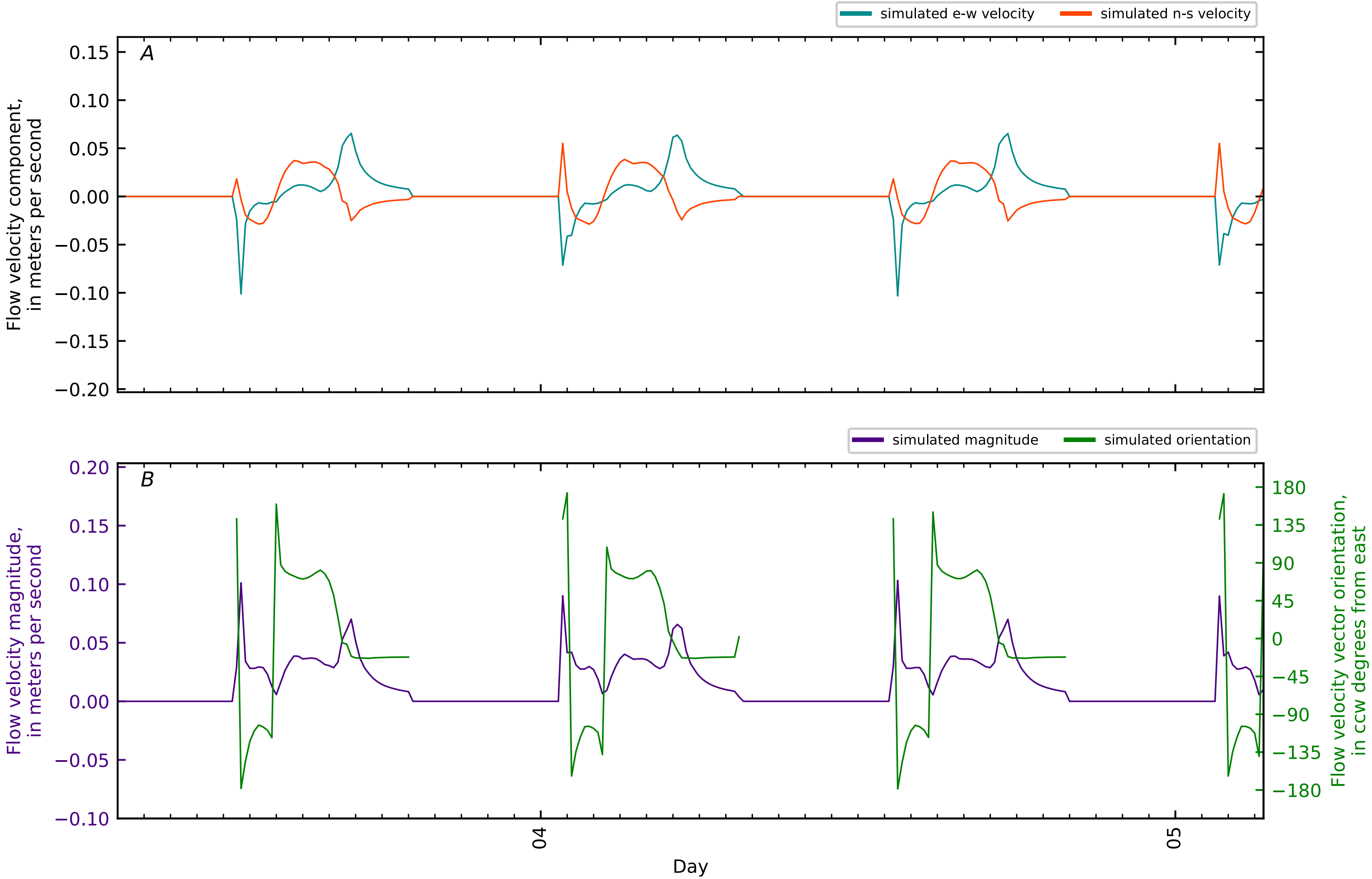

Figure B2-297. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 136, Mendall Marsh KM0.4 GS CTD2-01. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

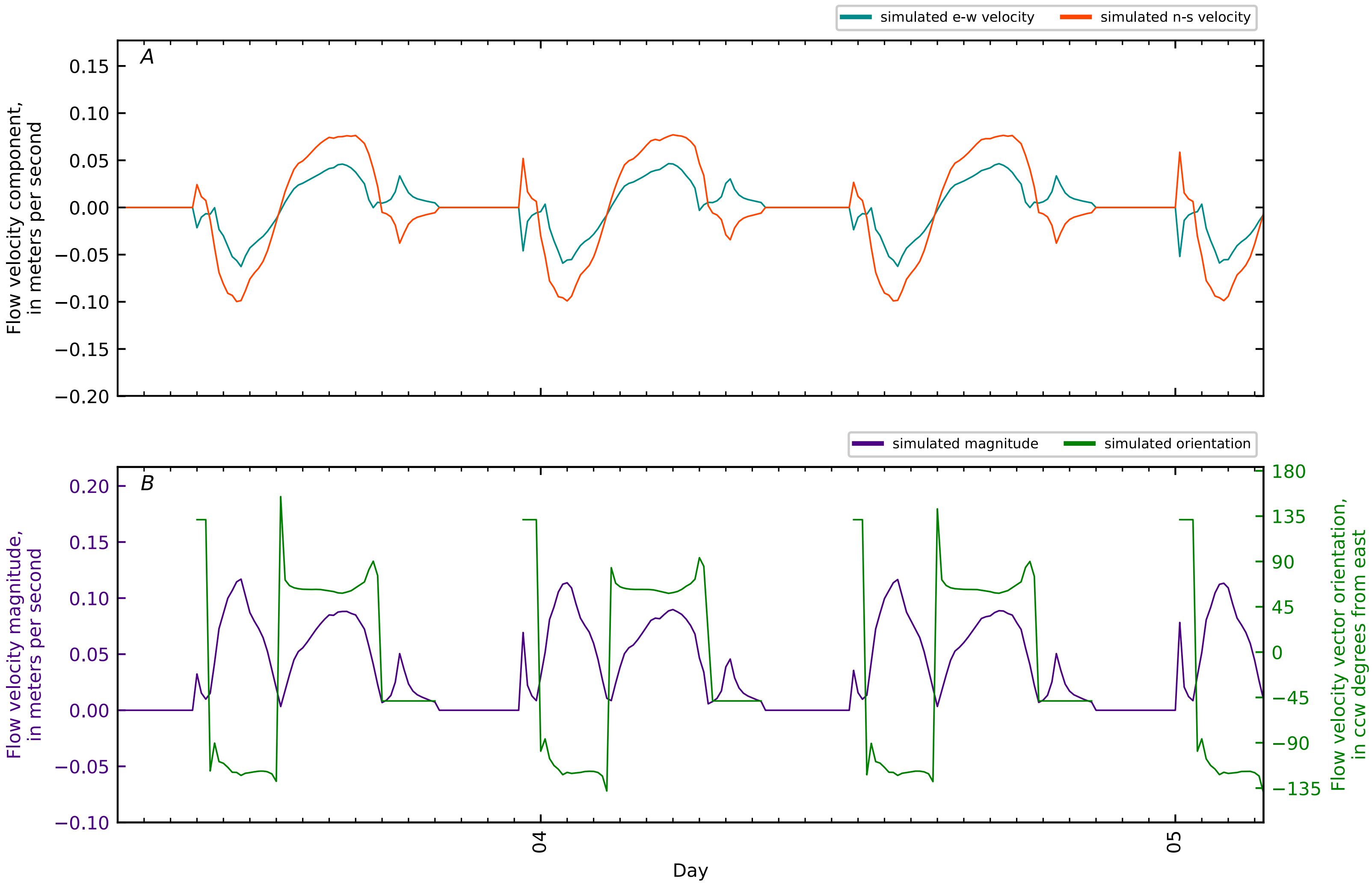

Figure B2-298. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 137, Mendall Marsh KM0.4 GS CTD2-02. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

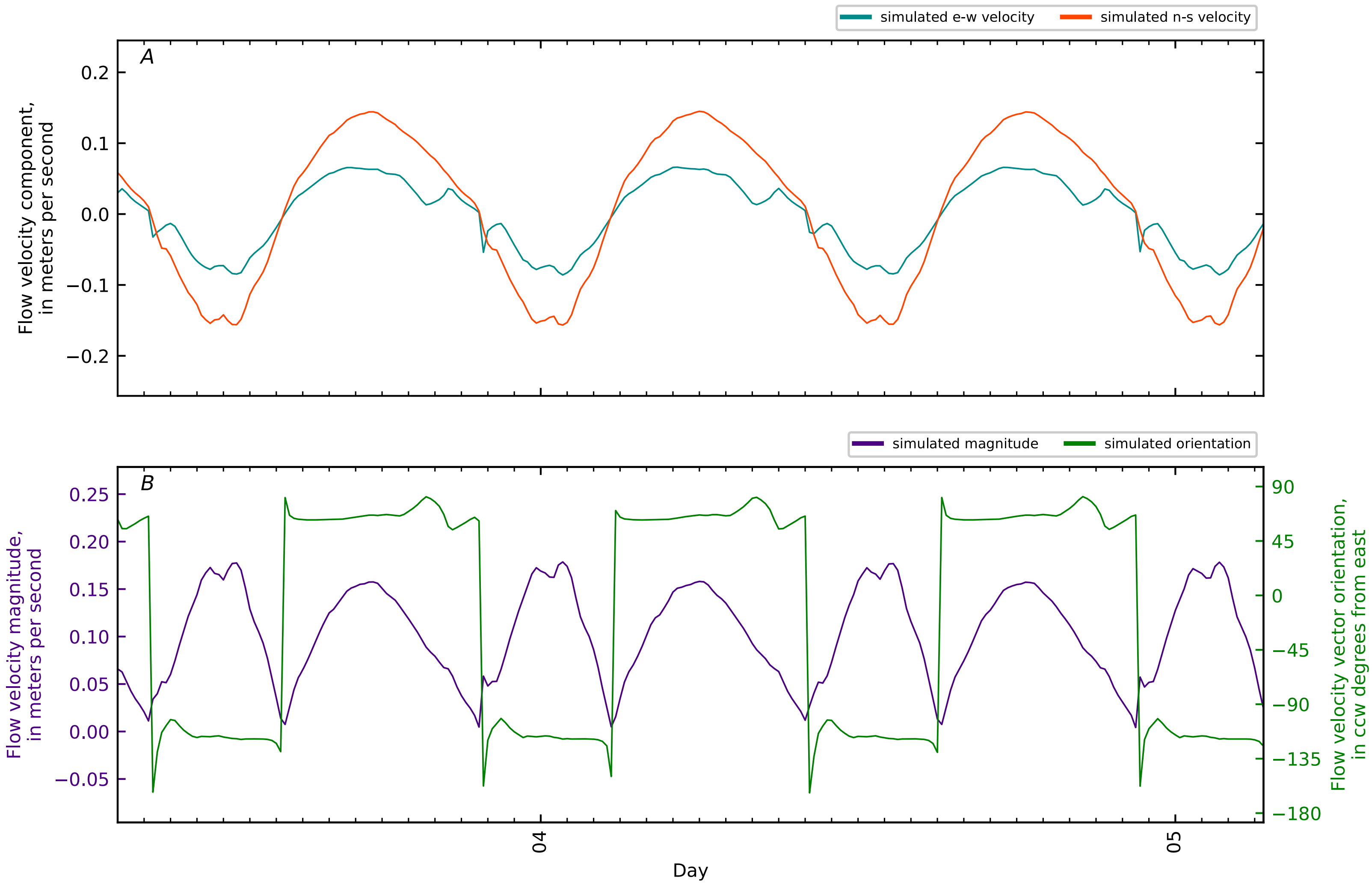

Figure B2-299. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 138, Mendall Marsh KM0.4 GS CTD2-03. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

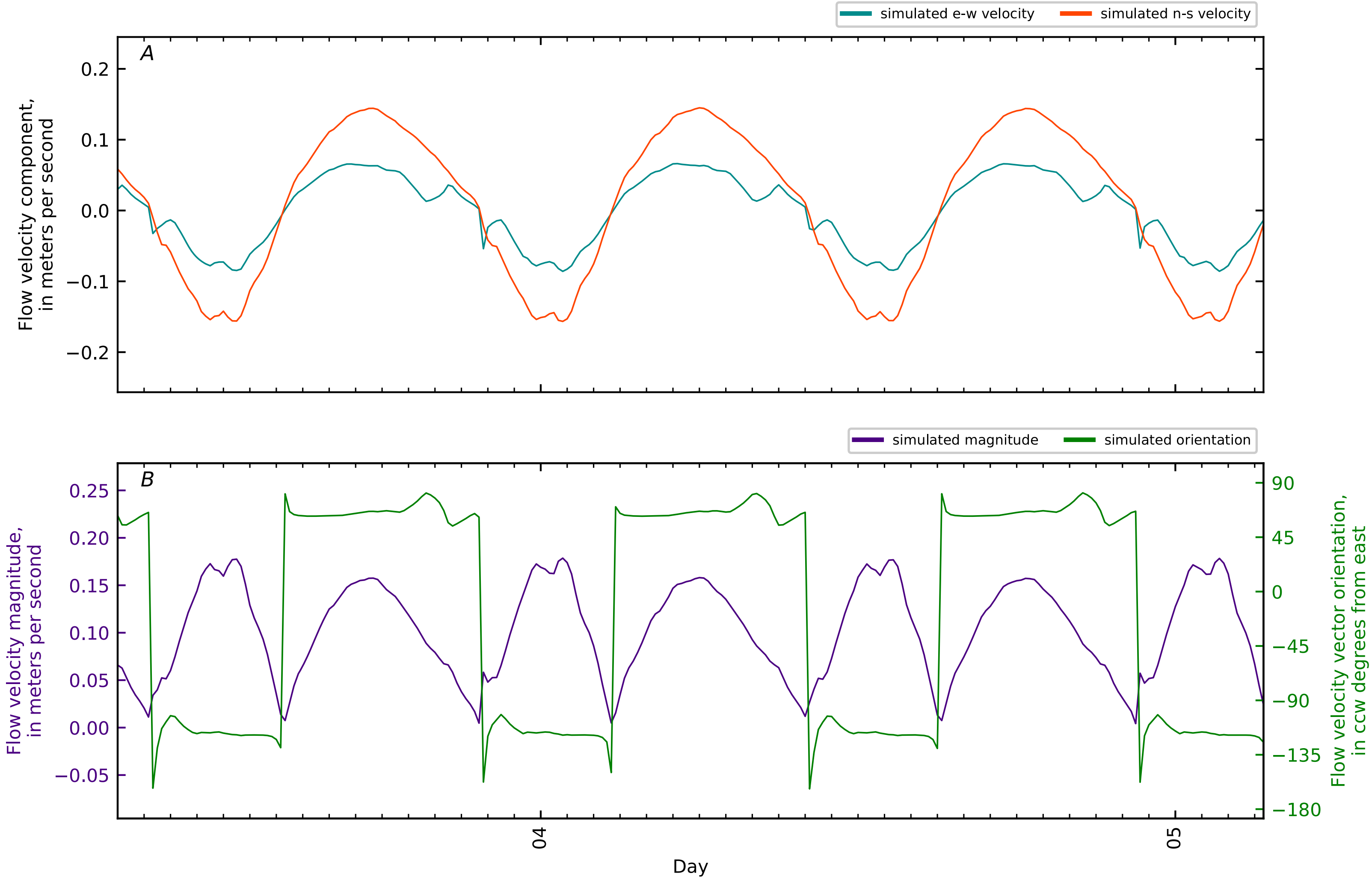

Figure B2-300. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 139, Mendall Marsh KM0.4 GS CTD2-04. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

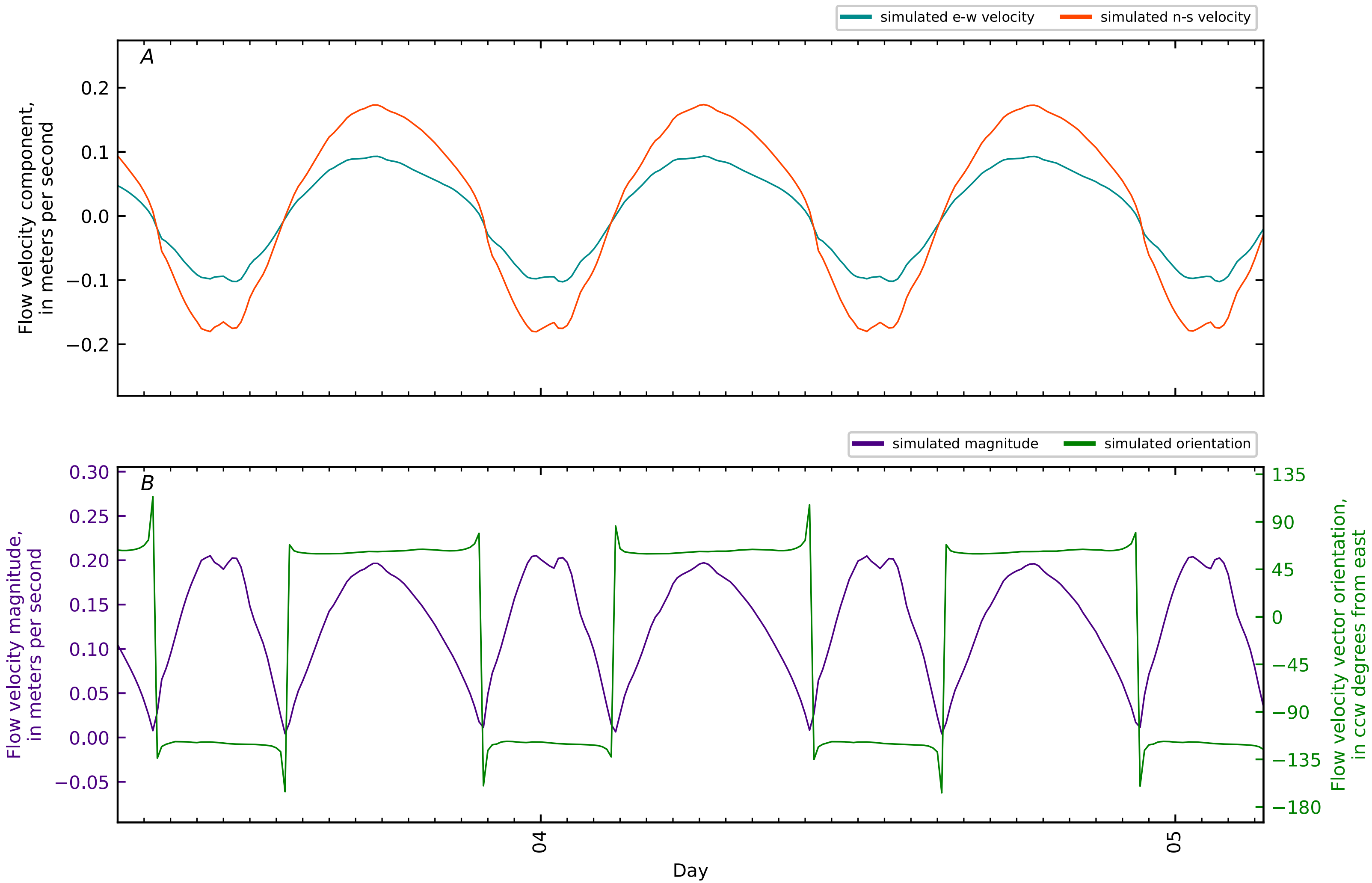

Figure B2-301. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 140, Mendall Marsh KM0.4 GS CTD2-05. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

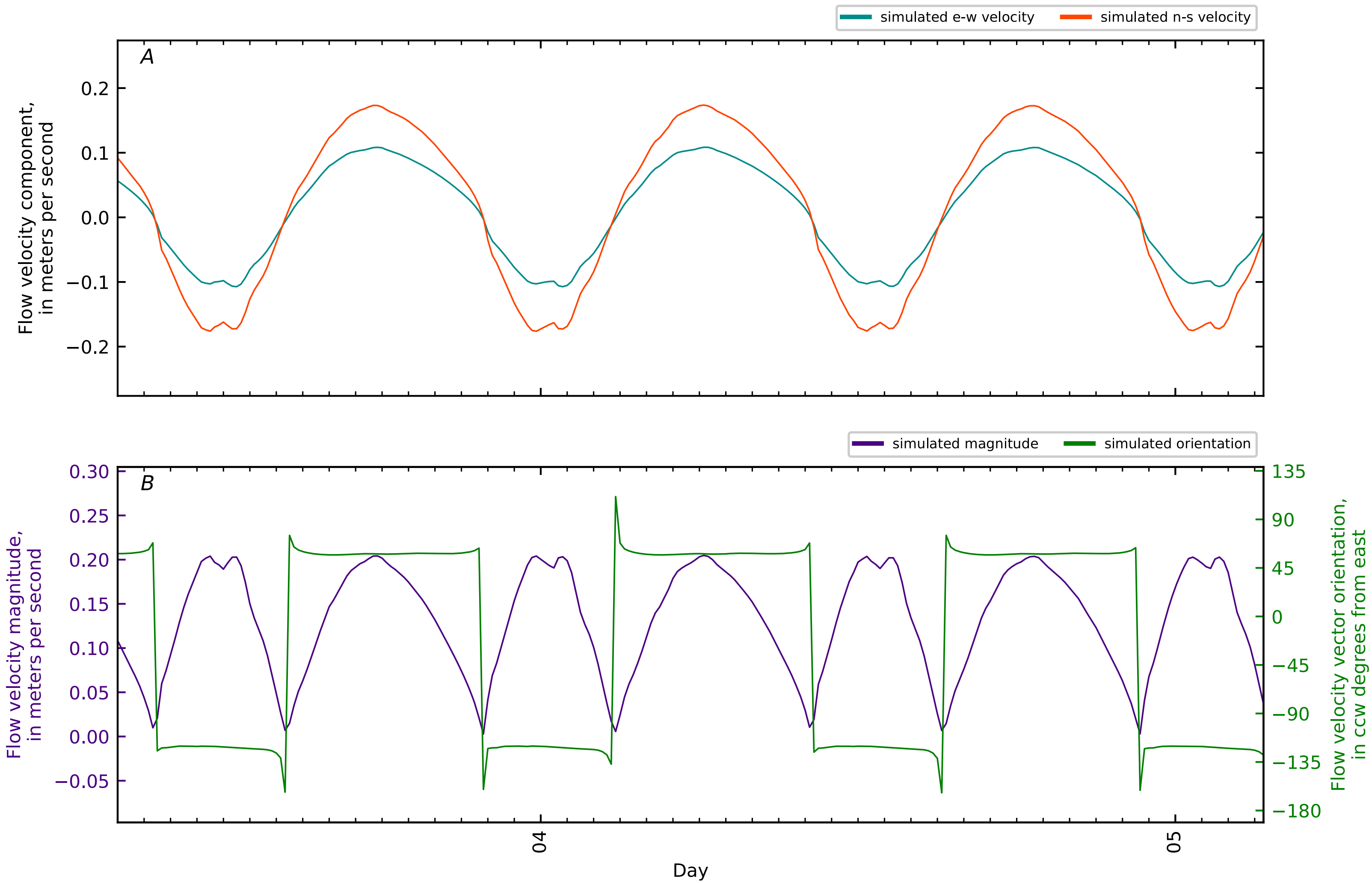

Figure B2-302. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 141, Mendall Marsh KM0.4 GS CTD2-06. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

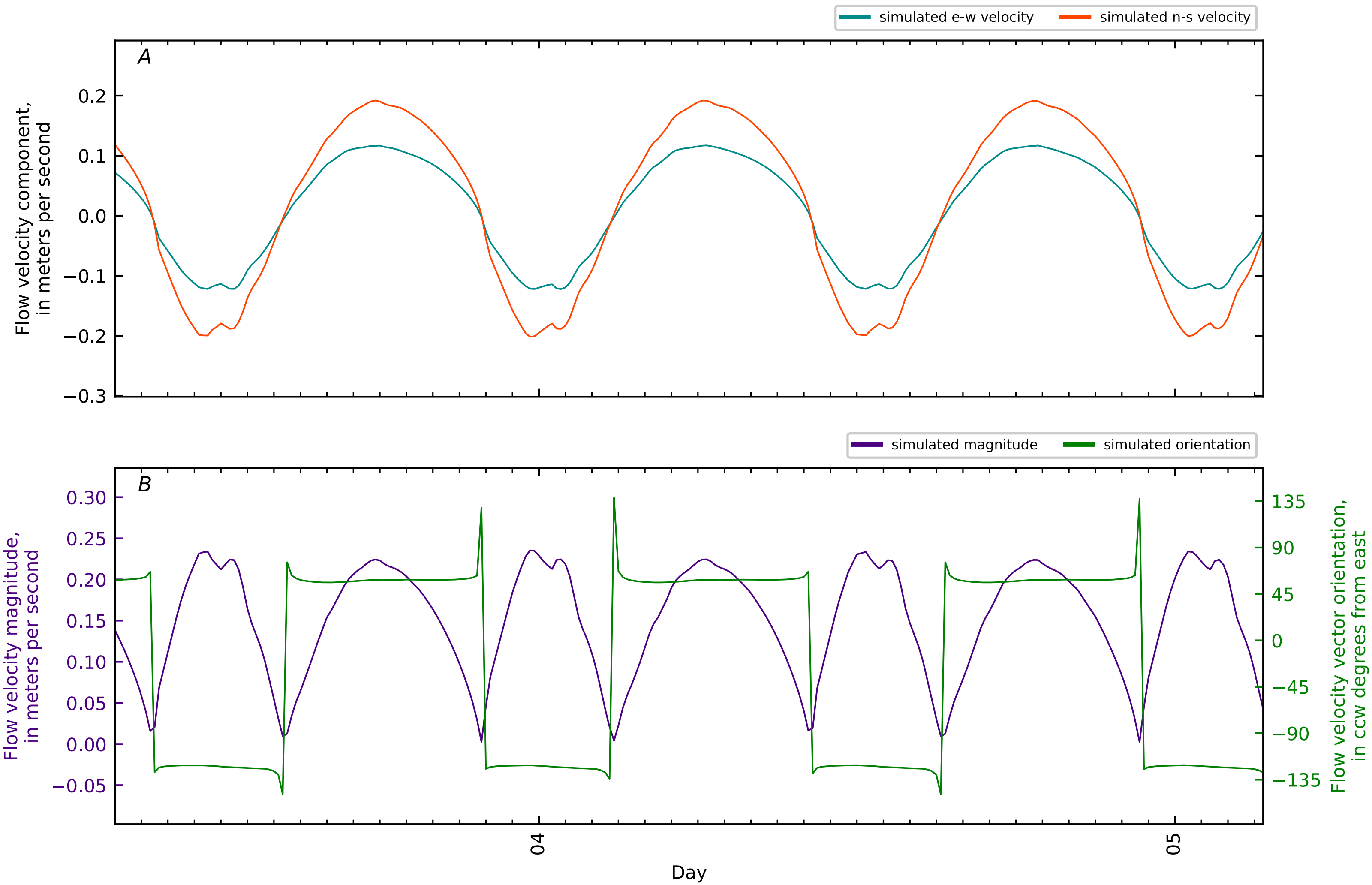

Figure B2-303. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 142, Mendall Marsh KM0.4 GS CTD2-07. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

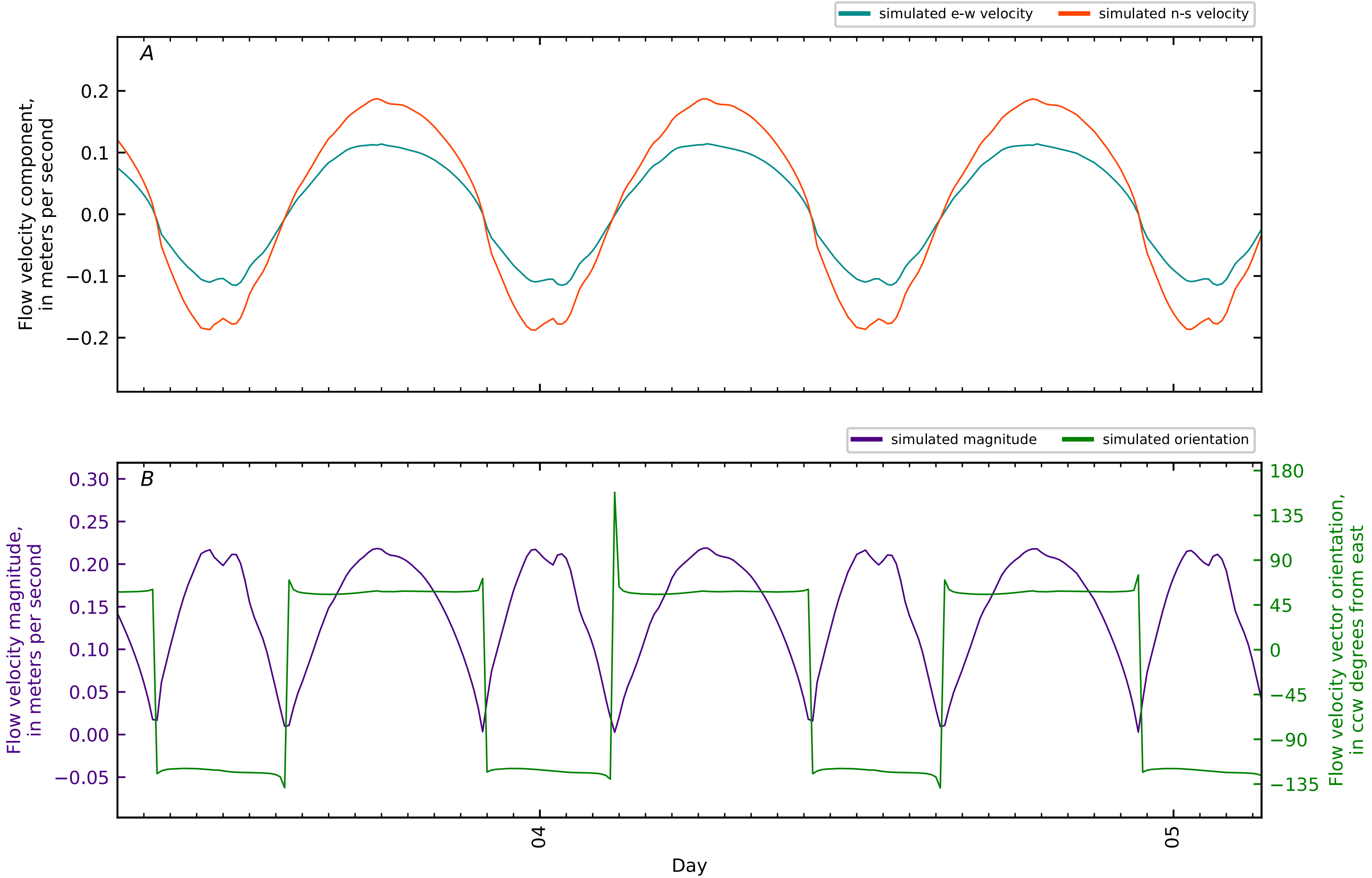

Figure B2-304. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 143, Mendall Marsh KM0.4 GS CTD2-08. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

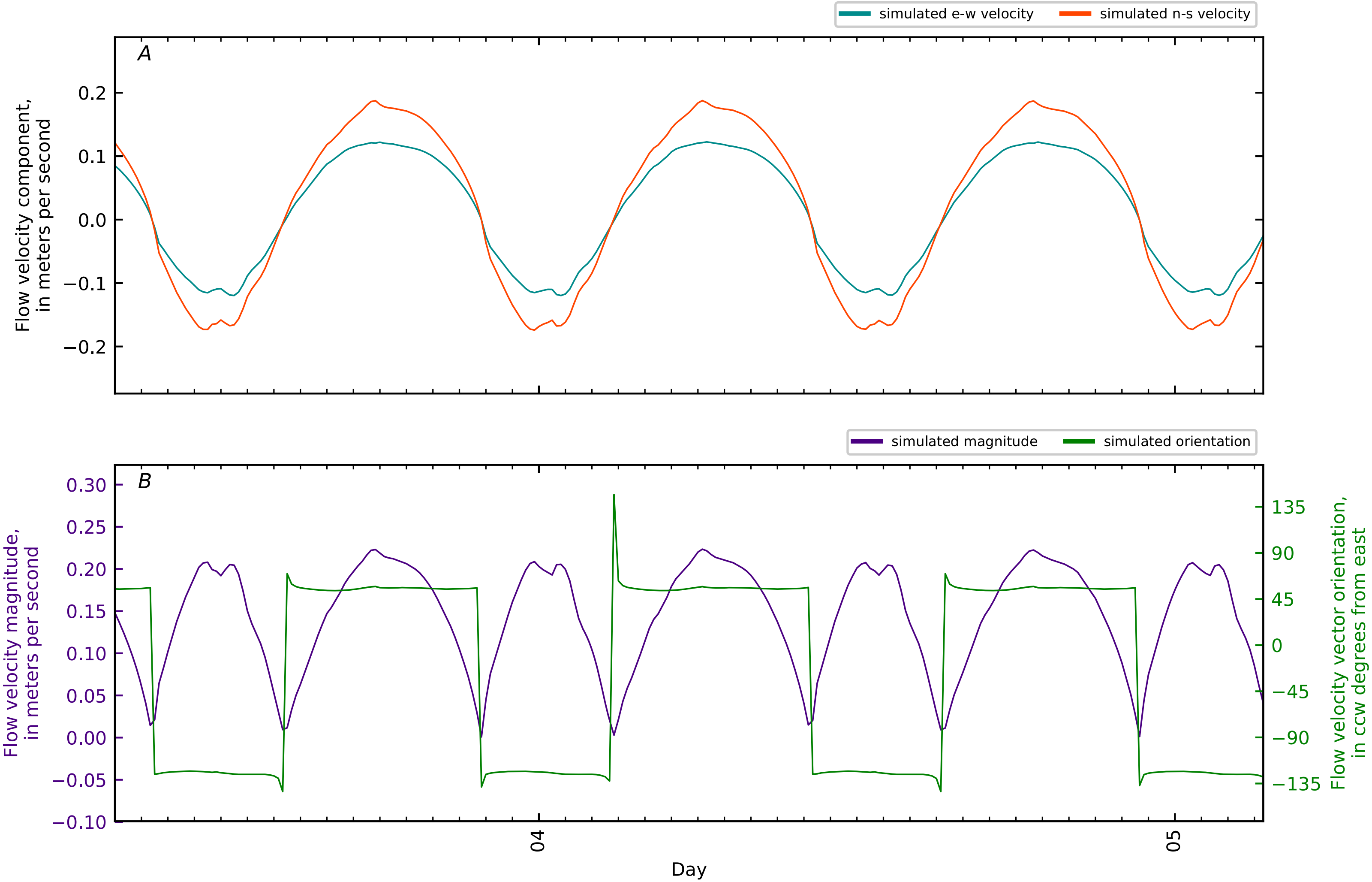

Figure B2-305. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 144, Mendall Marsh KM0.4 GS CTD2-09. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

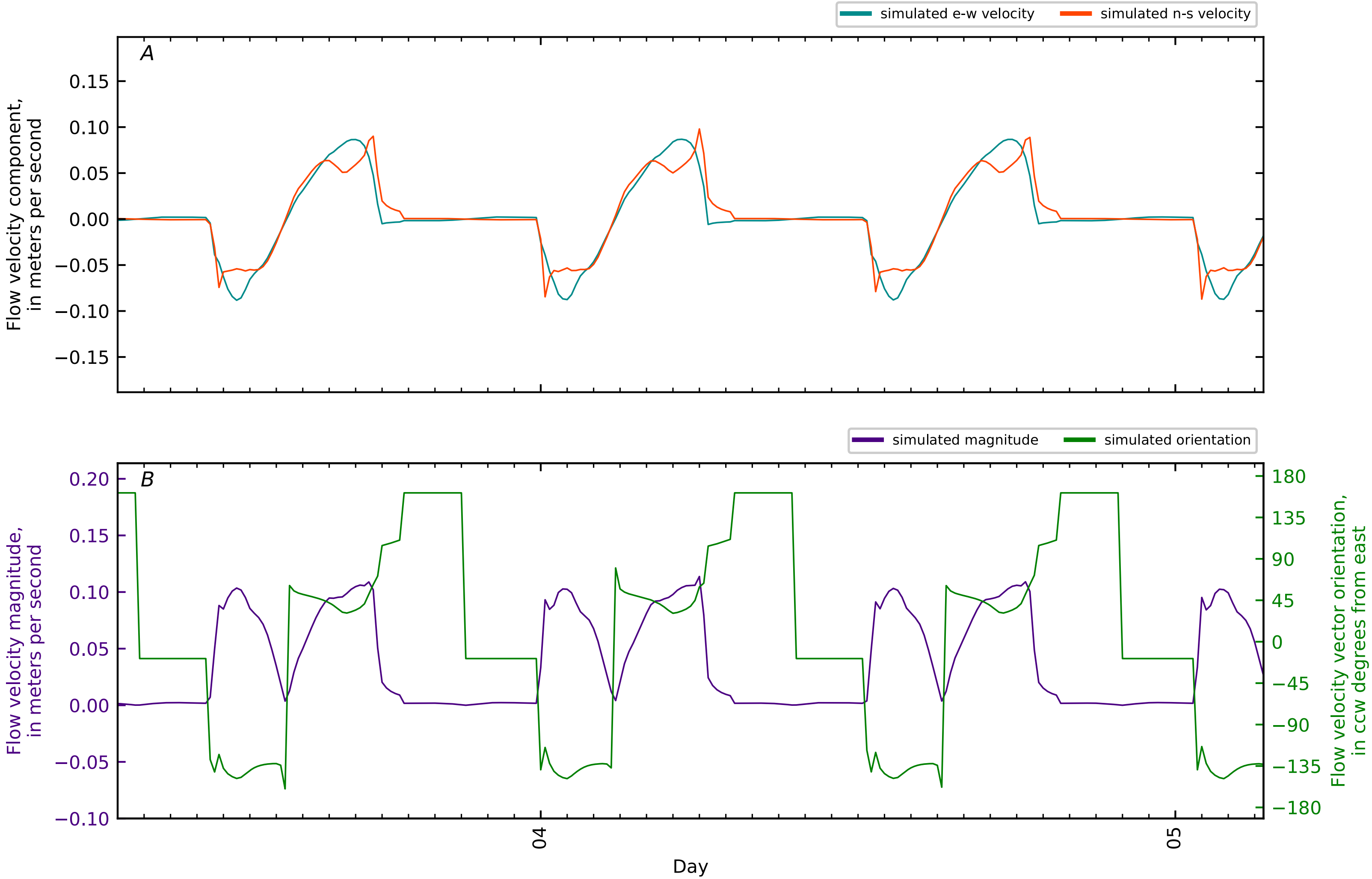

Figure B2-306. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 145, Mendall Marsh KM0.4 GS CTD2-10. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

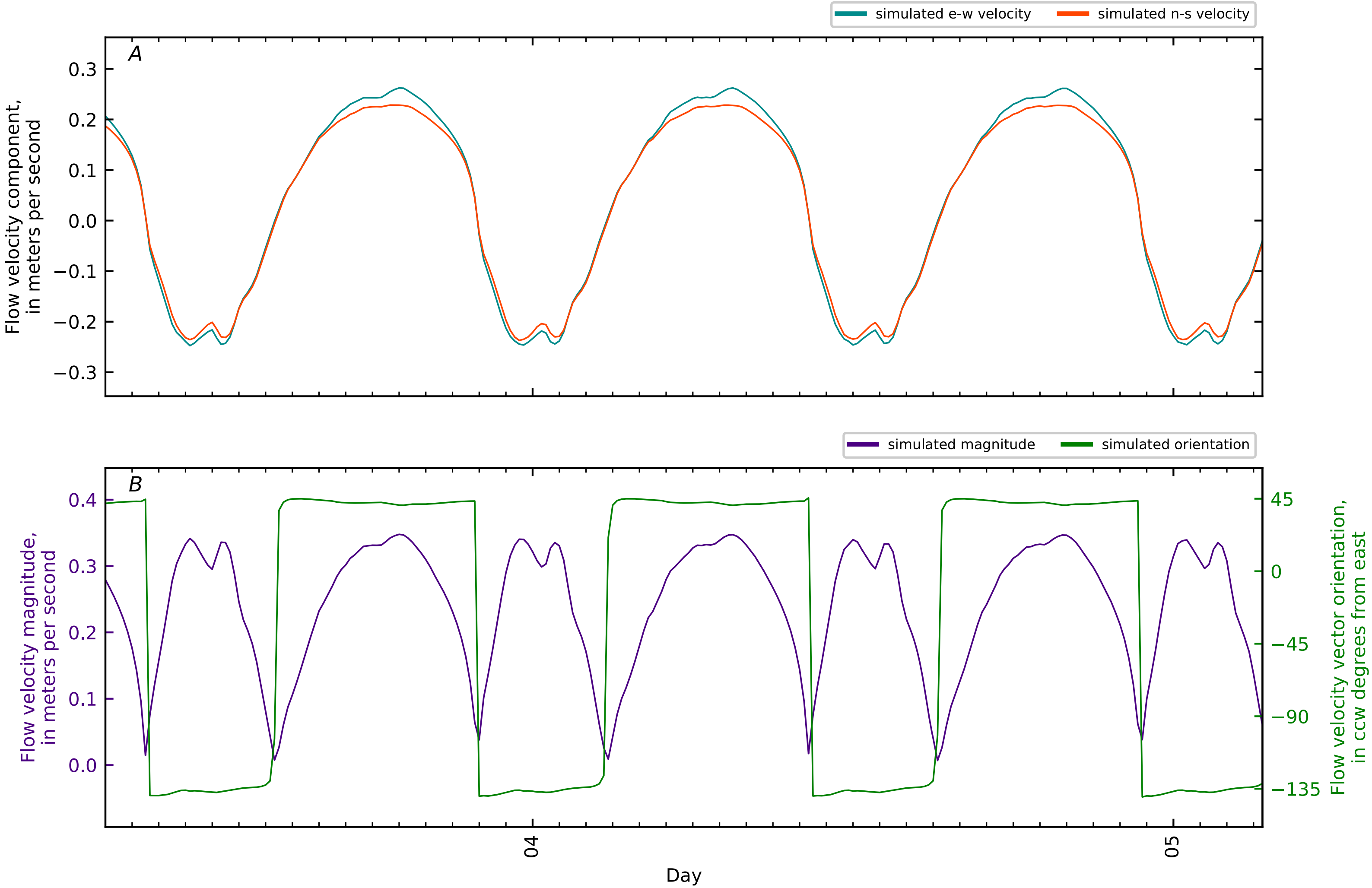

Figure B2-307. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 146, Mendall Marsh KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

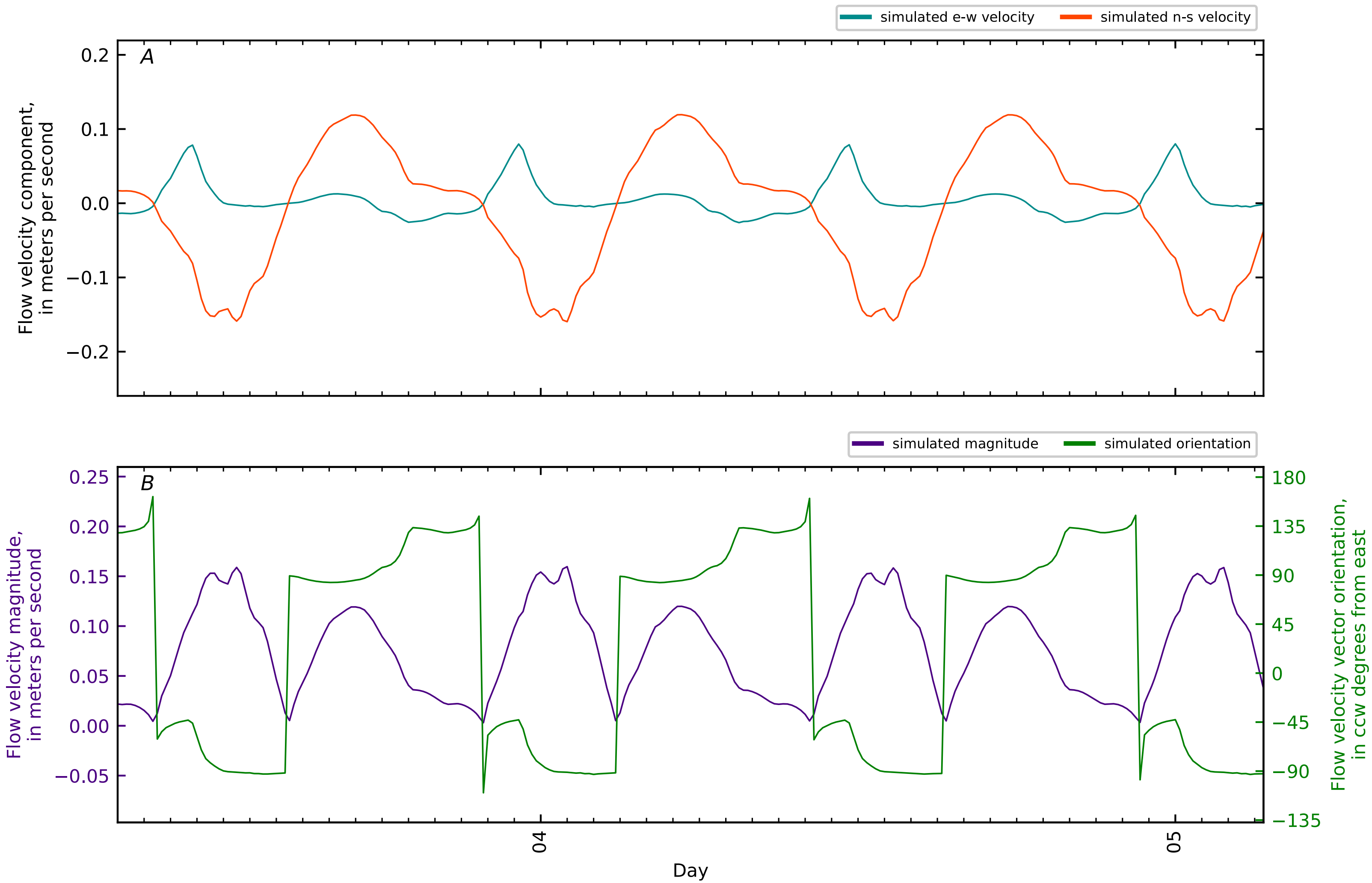

Figure B2-308. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 147, Mendall Marsh KM1.5 WHOI3 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

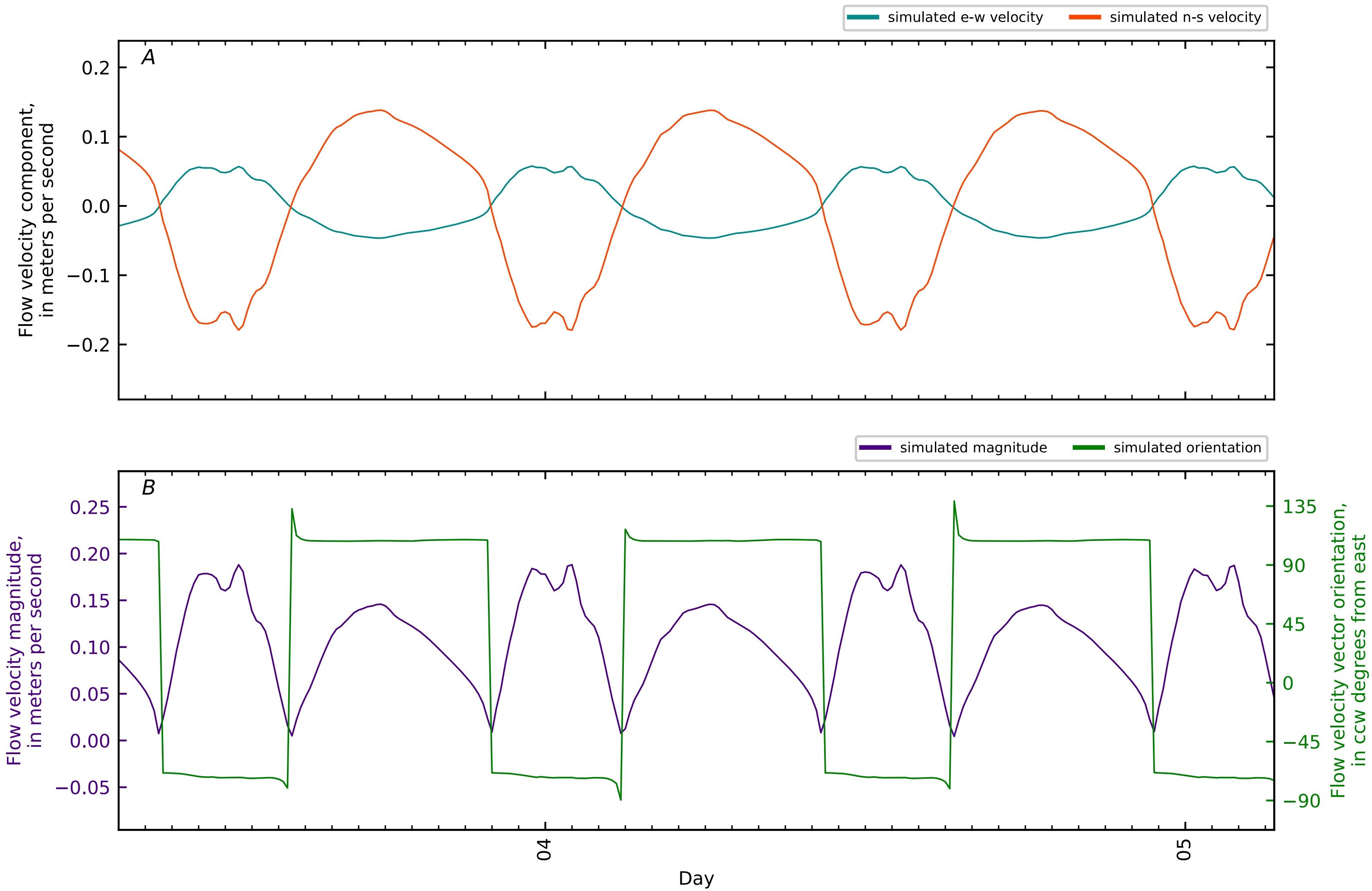

Figure B2-309. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 148, Mendall Marsh KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

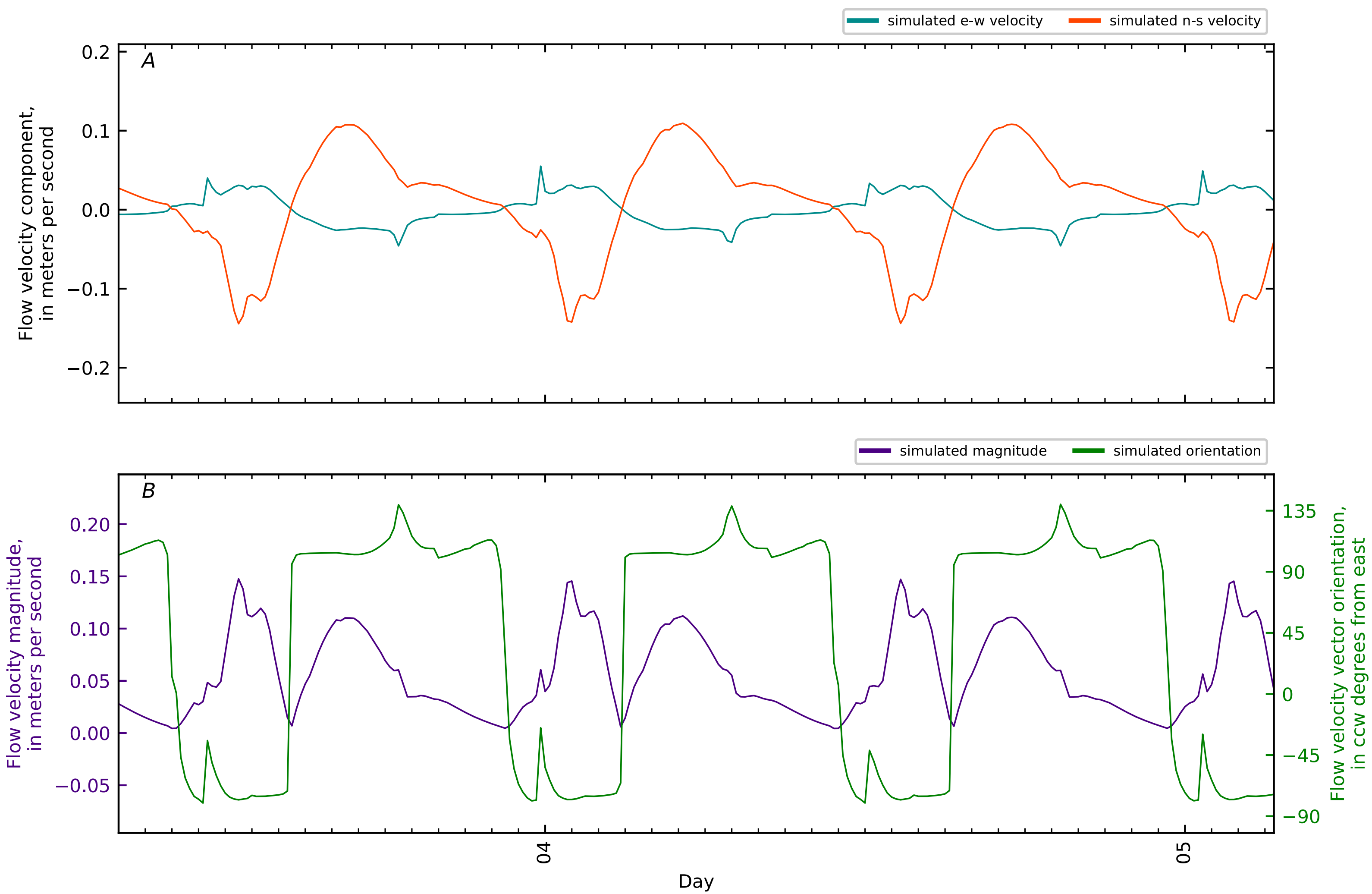

Figure B2-310. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 149, Mendall Marsh KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

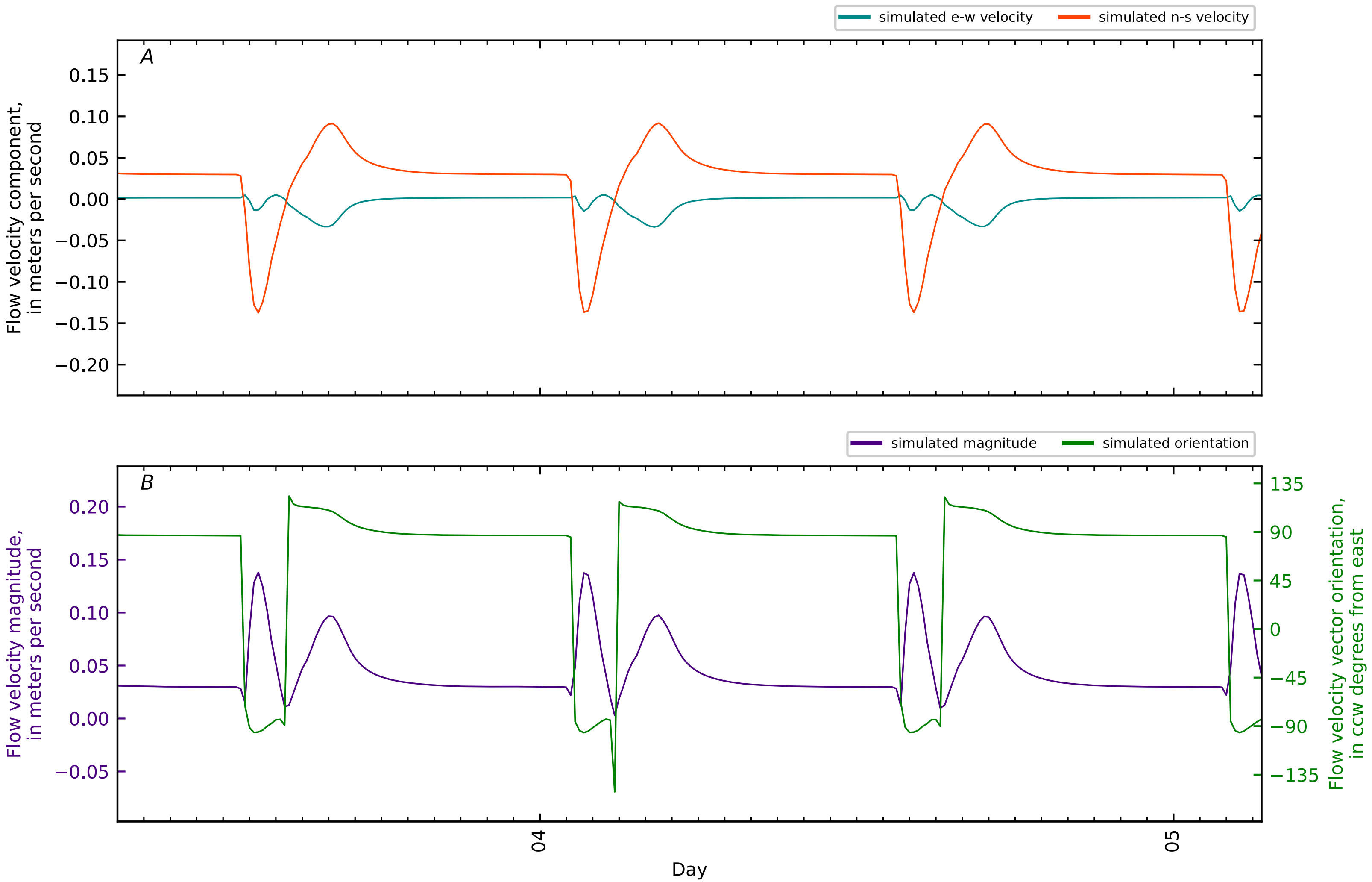

Figure B2-311. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 150, Mendall Marsh KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

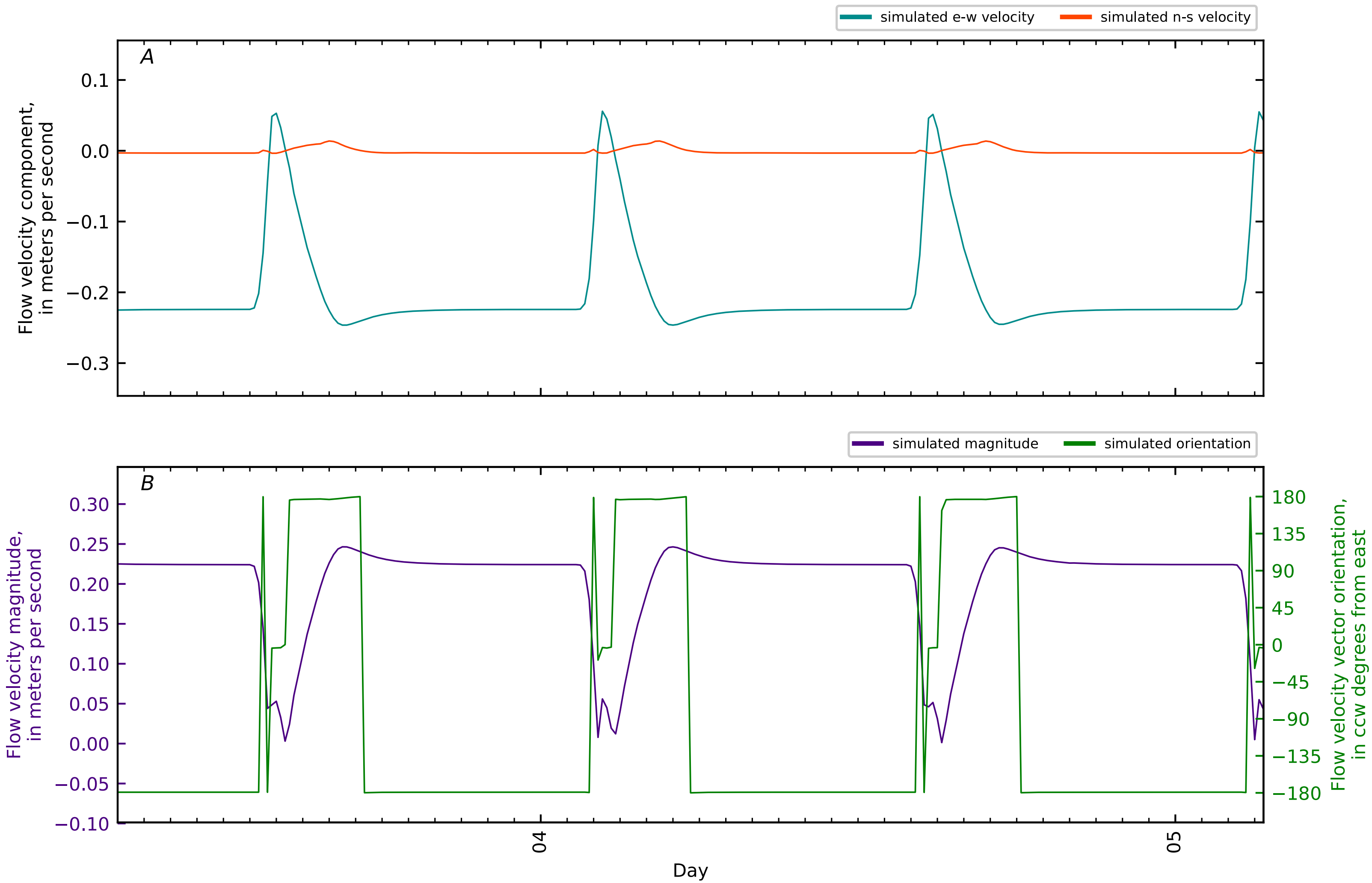

Figure B2-312. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 151, Mendall Marsh KM5. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

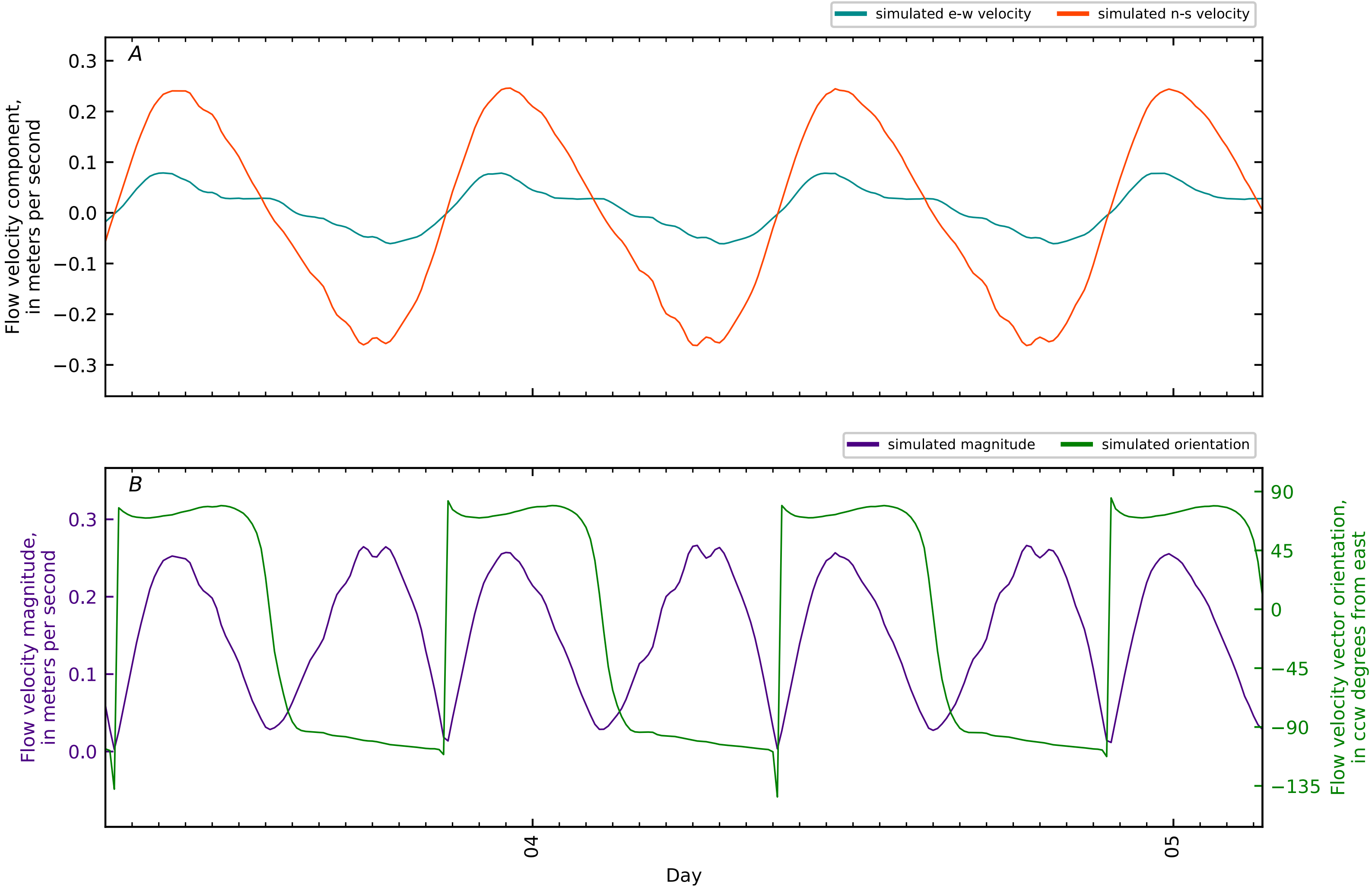

Figure B2-313. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 152, Orland Riv KM0. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

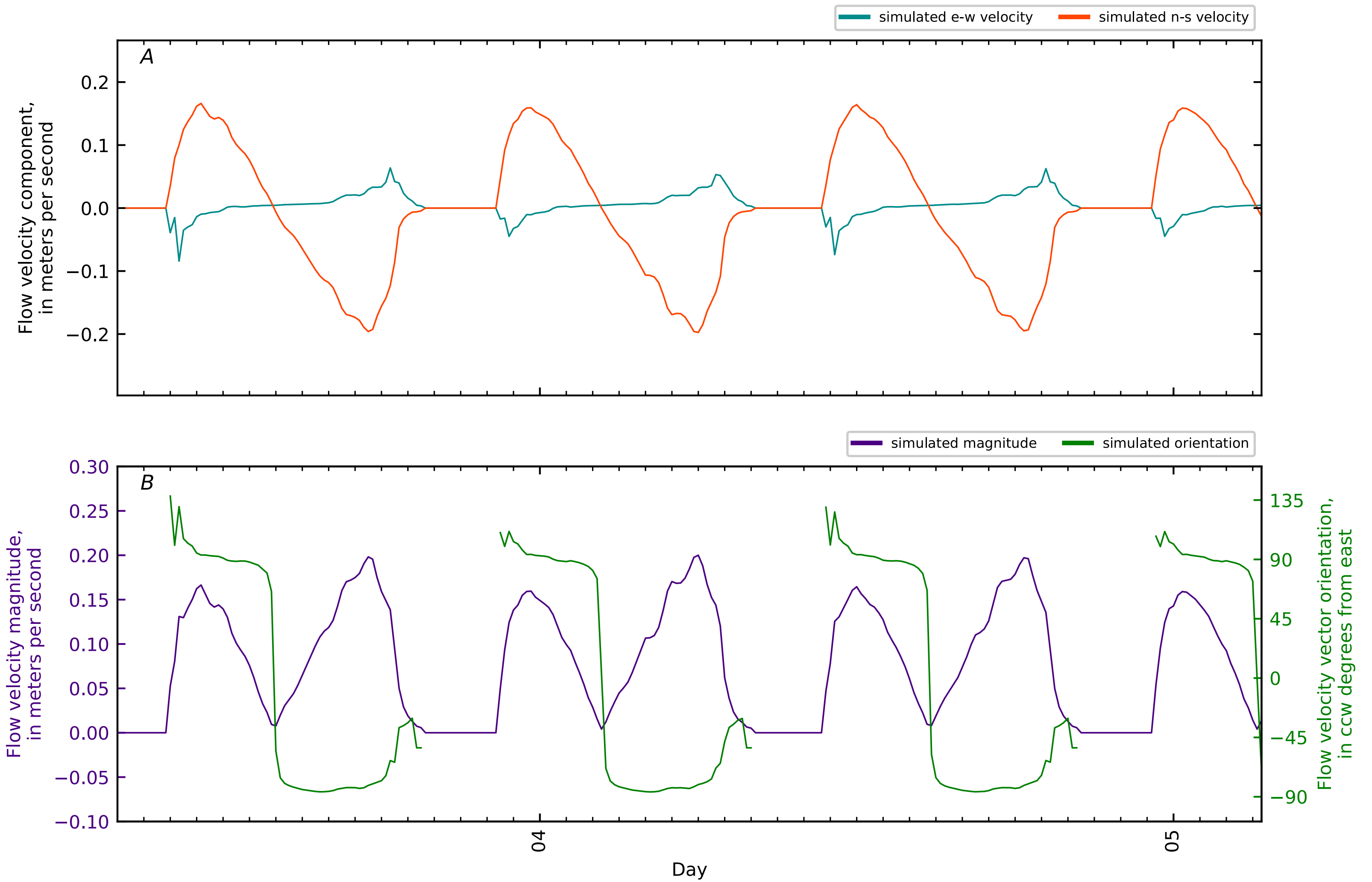

Figure B2-314. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 153, Orland Riv KM0.9 ERDC5 OR-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

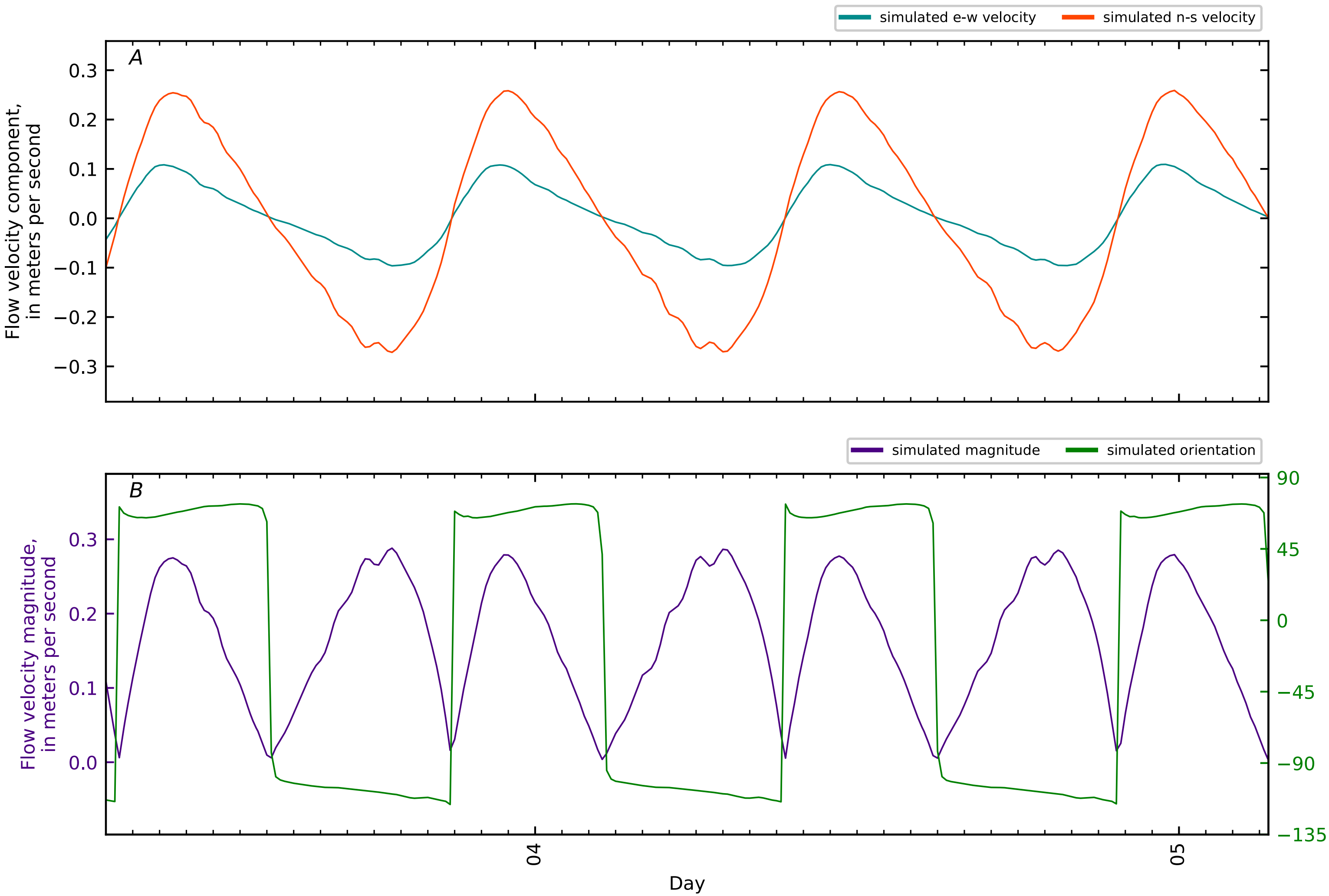

Figure B2-315. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 154, Orland Riv KM0.9 ERDC6 OR-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

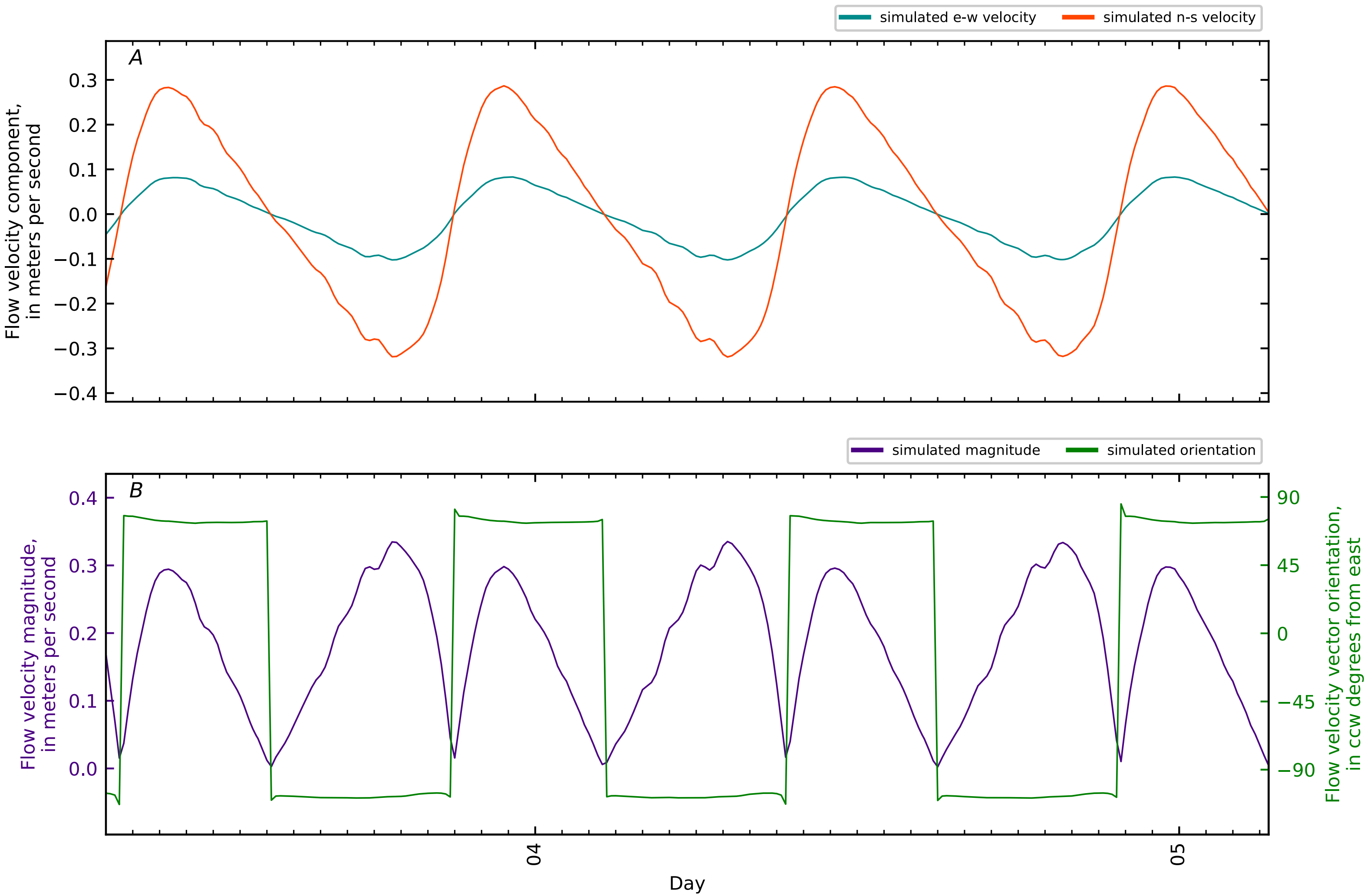

Figure B2-316. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 155, Orland Riv KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

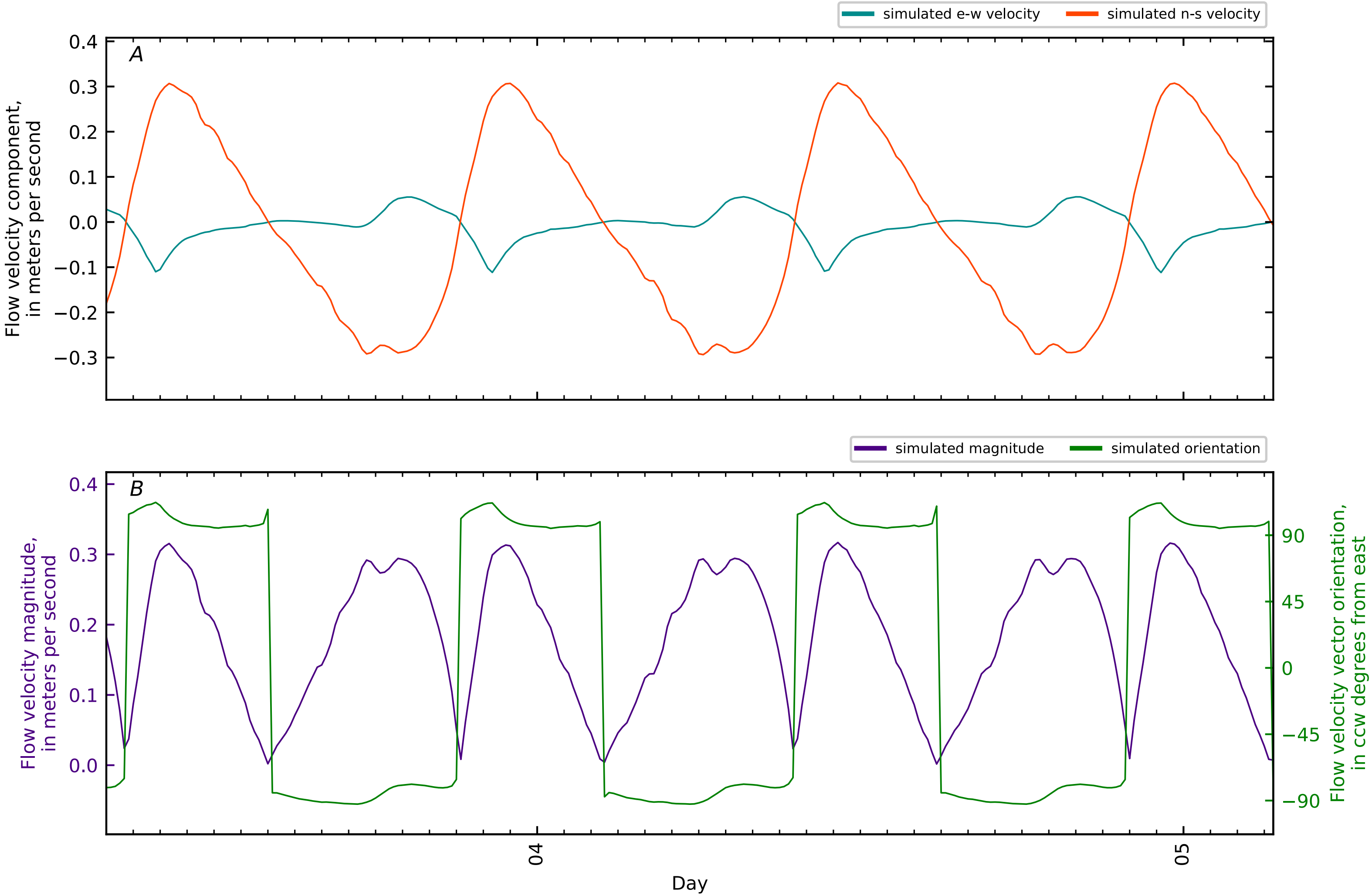

Figure B2-317. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 156, Orland Riv KM1.6 WHOI4 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

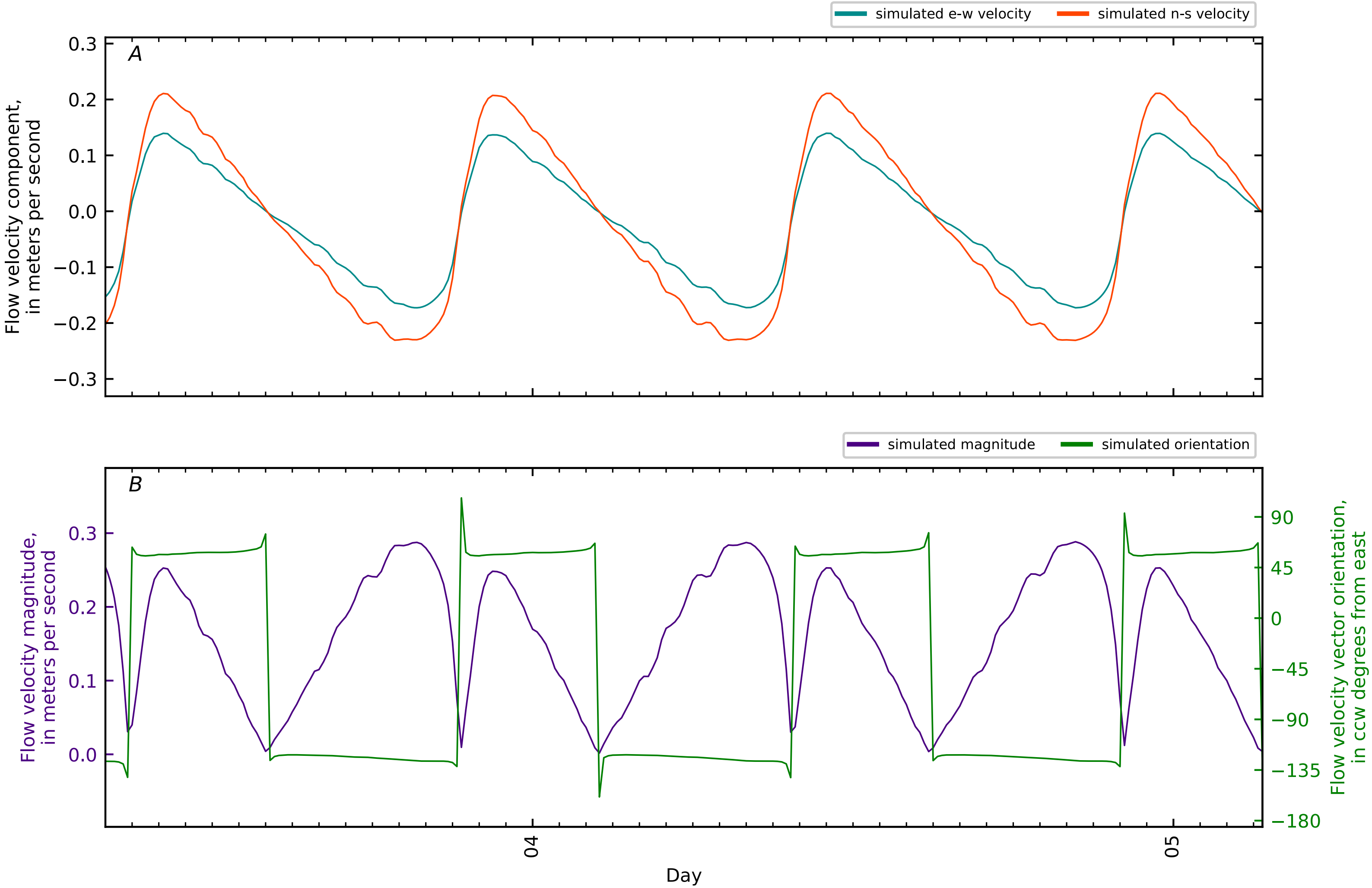

Figure B2-318. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 157, Orland Riv KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

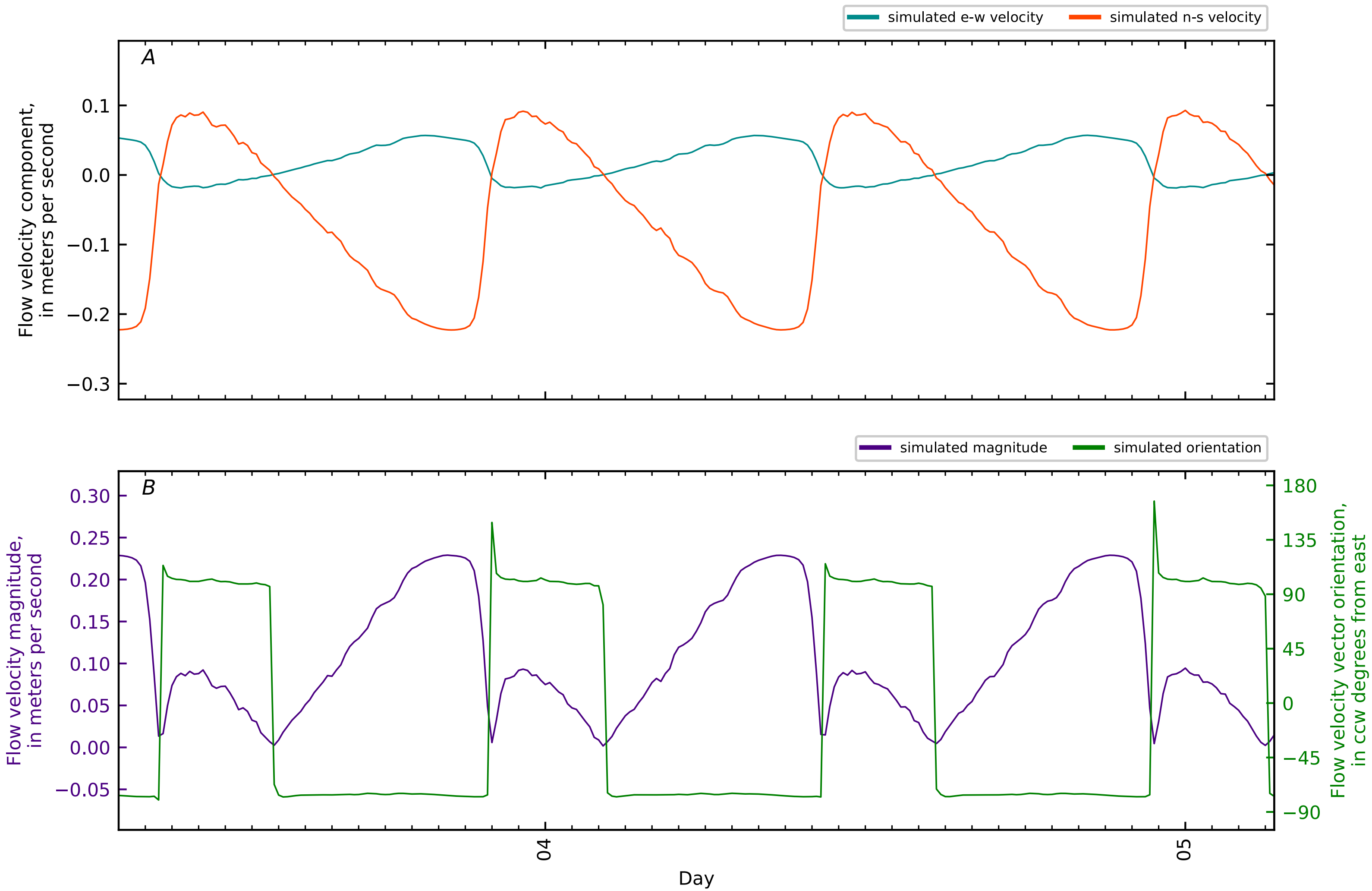

Figure B2-319. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 158, Orland Riv KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

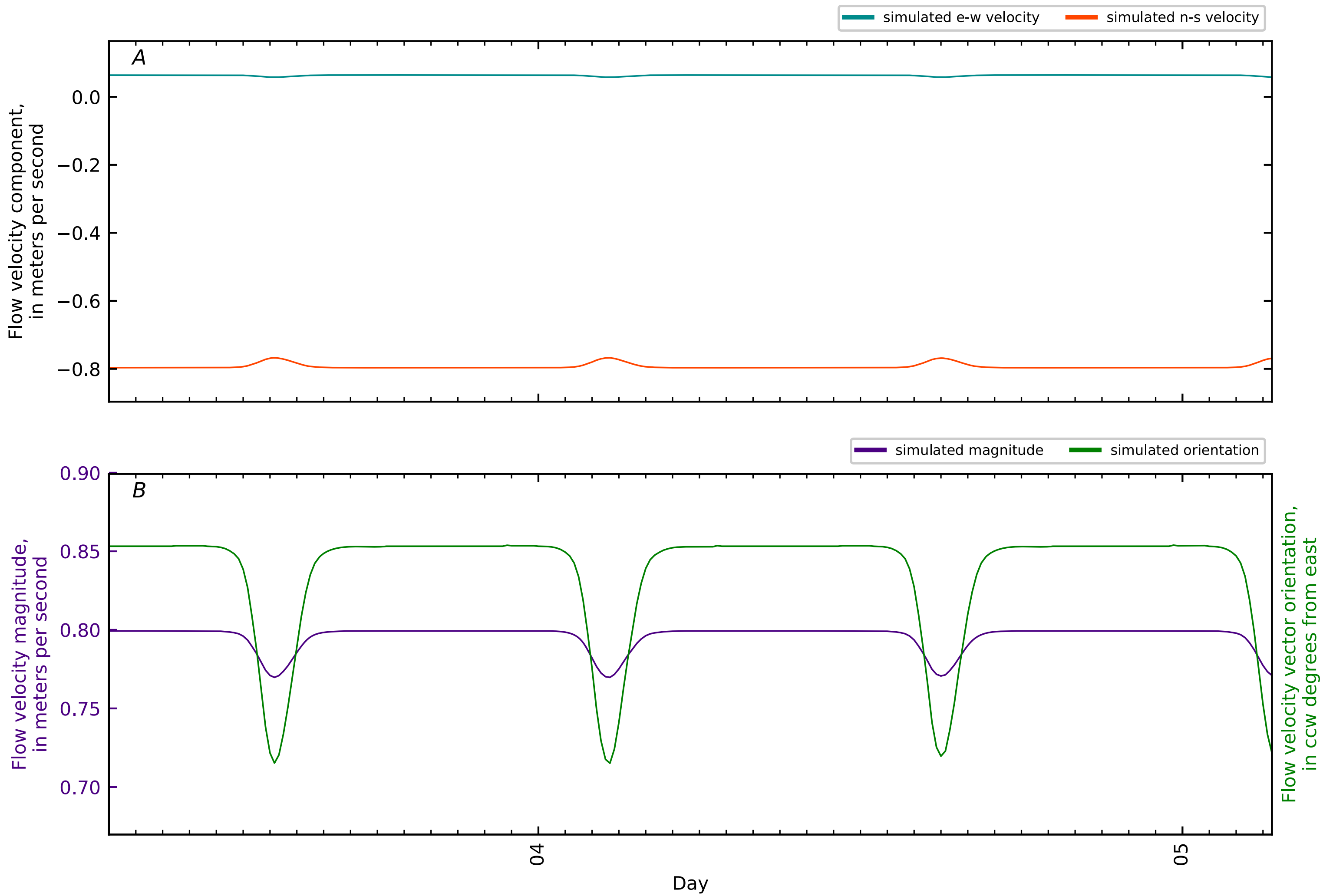

Figure B2-320. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 159, Orland Riv KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

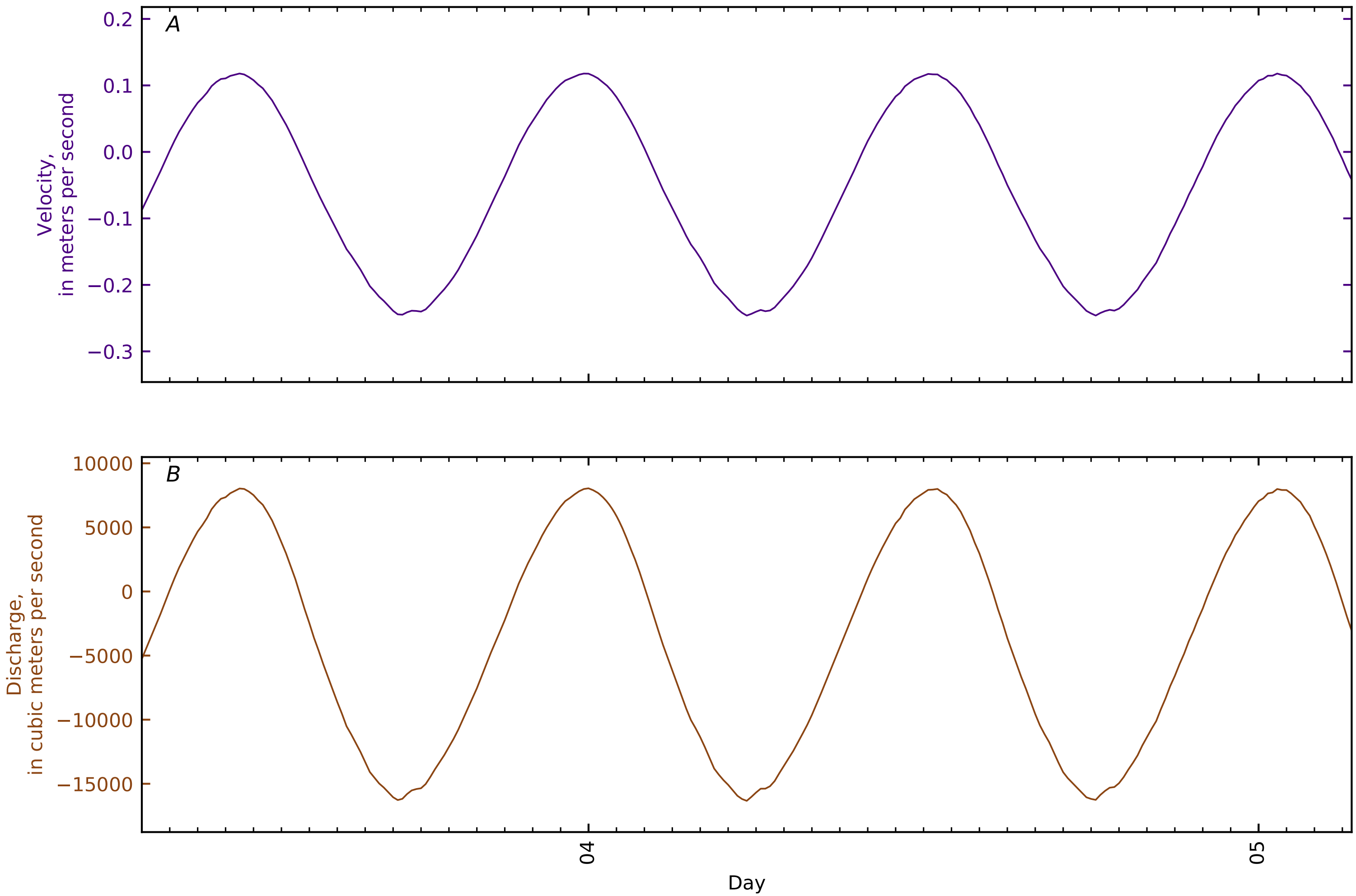

Figure B2-321. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 0, Penob Riv -KM4 Cape Jellison. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

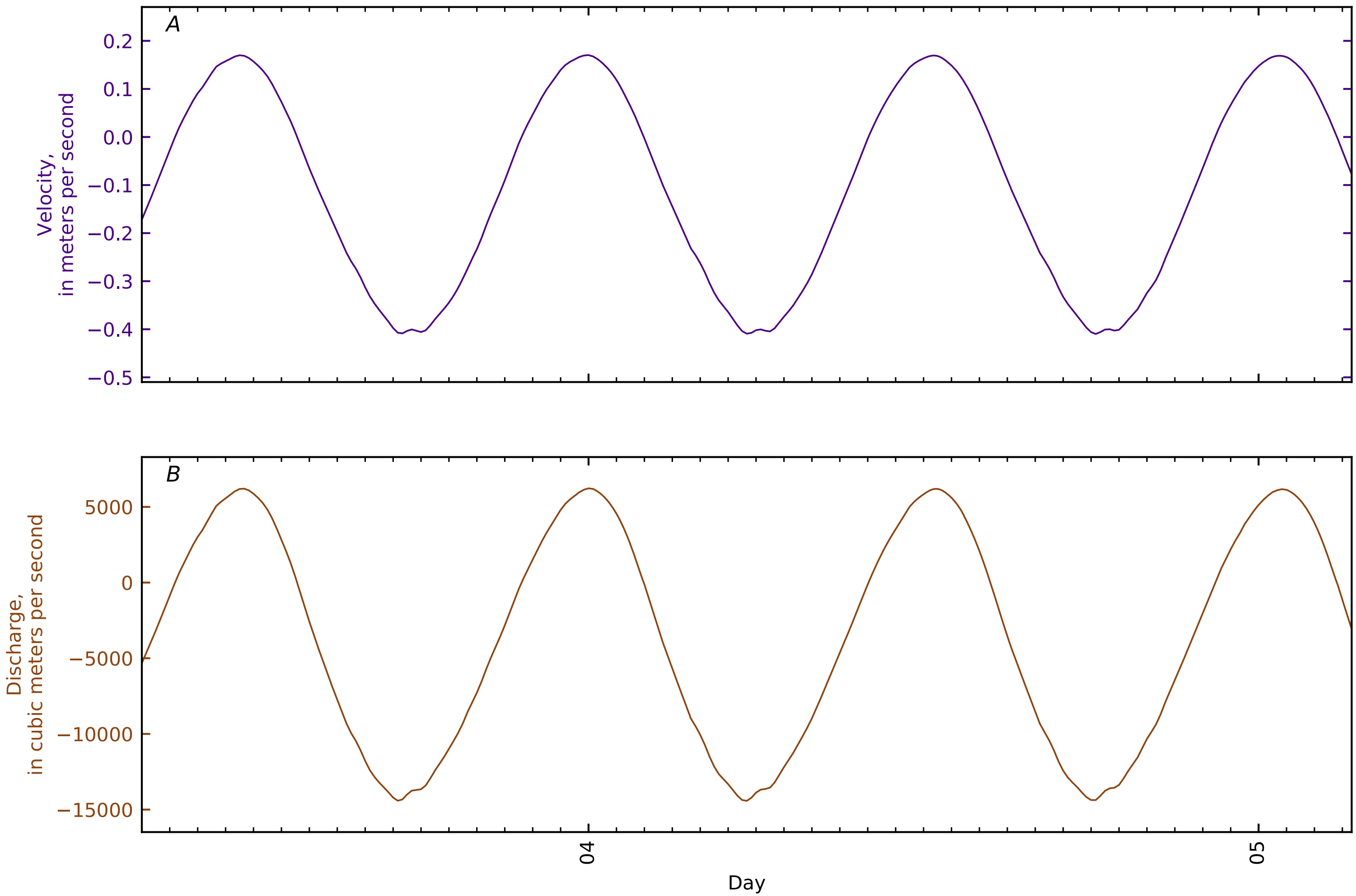

Figure B2-322. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 1, Penob Riv -KM1.5 d/s Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

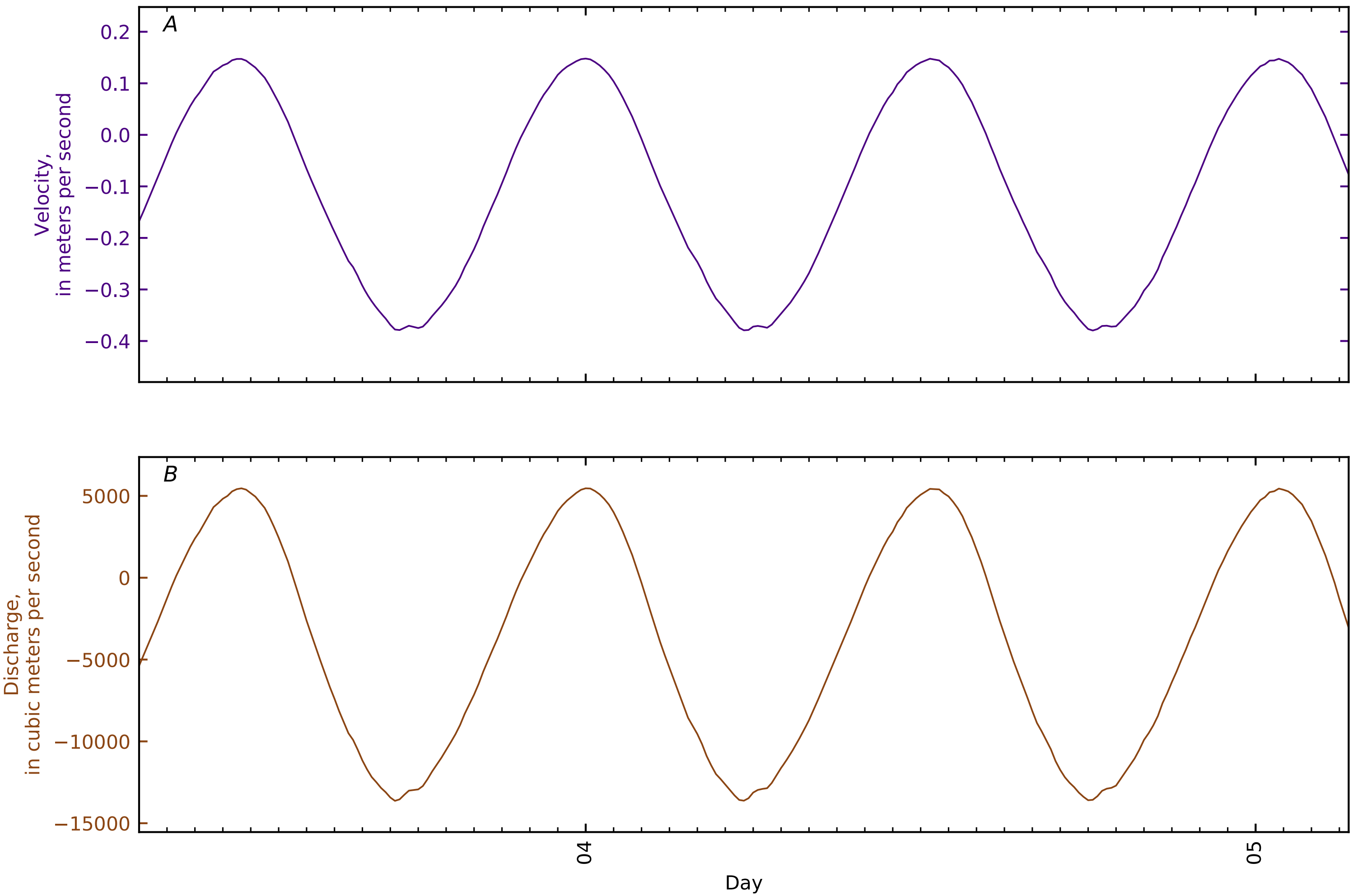

Figure B2-323. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 2, Penob Riv KM0 GS Trnsct5 Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

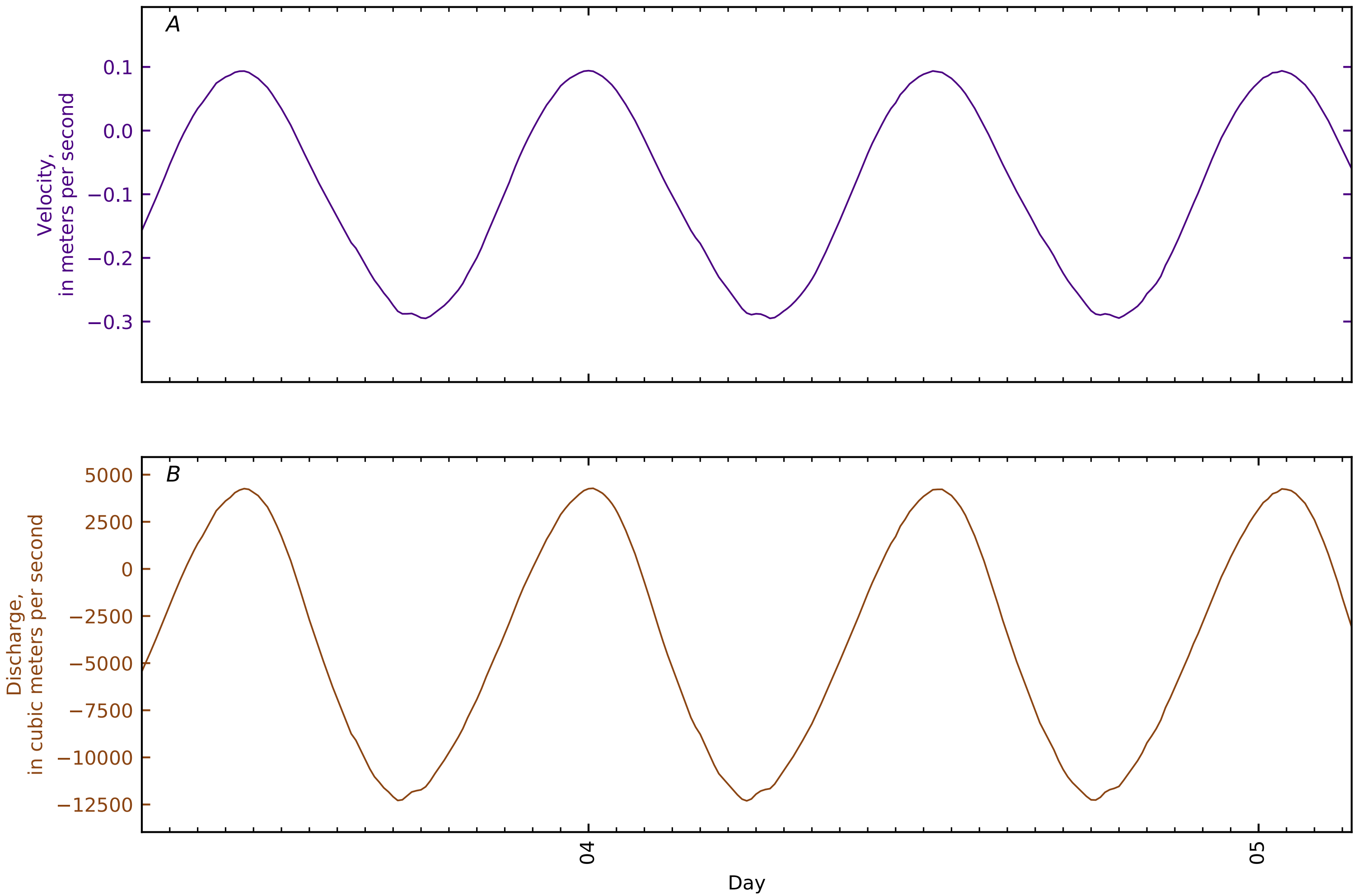

Figure B2-324. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 3, Penob Riv KM1.5 Ft Point Cove. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

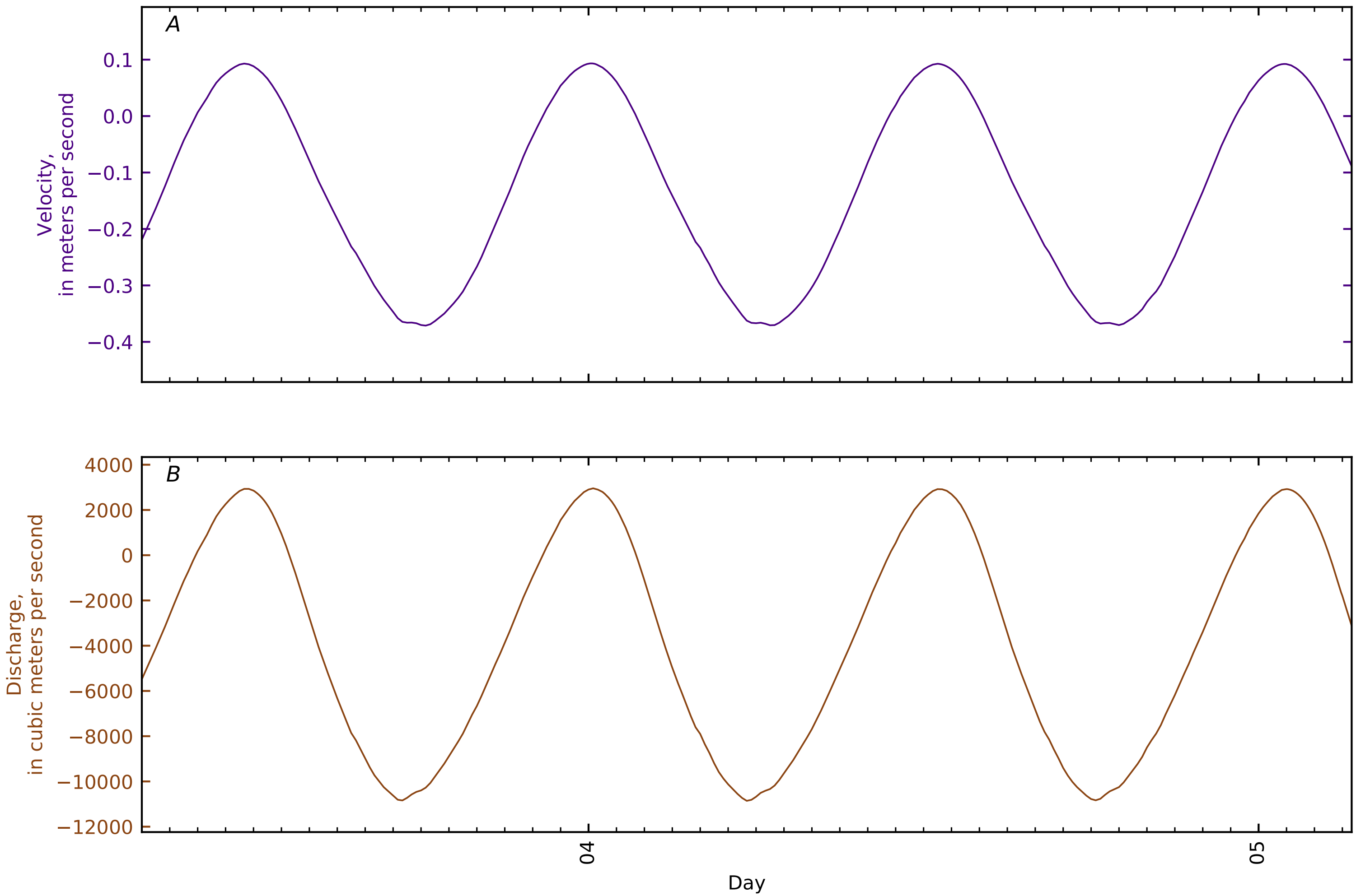

Figure B2-325. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 4, Penob Riv KM3 d/s conf East Ch. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

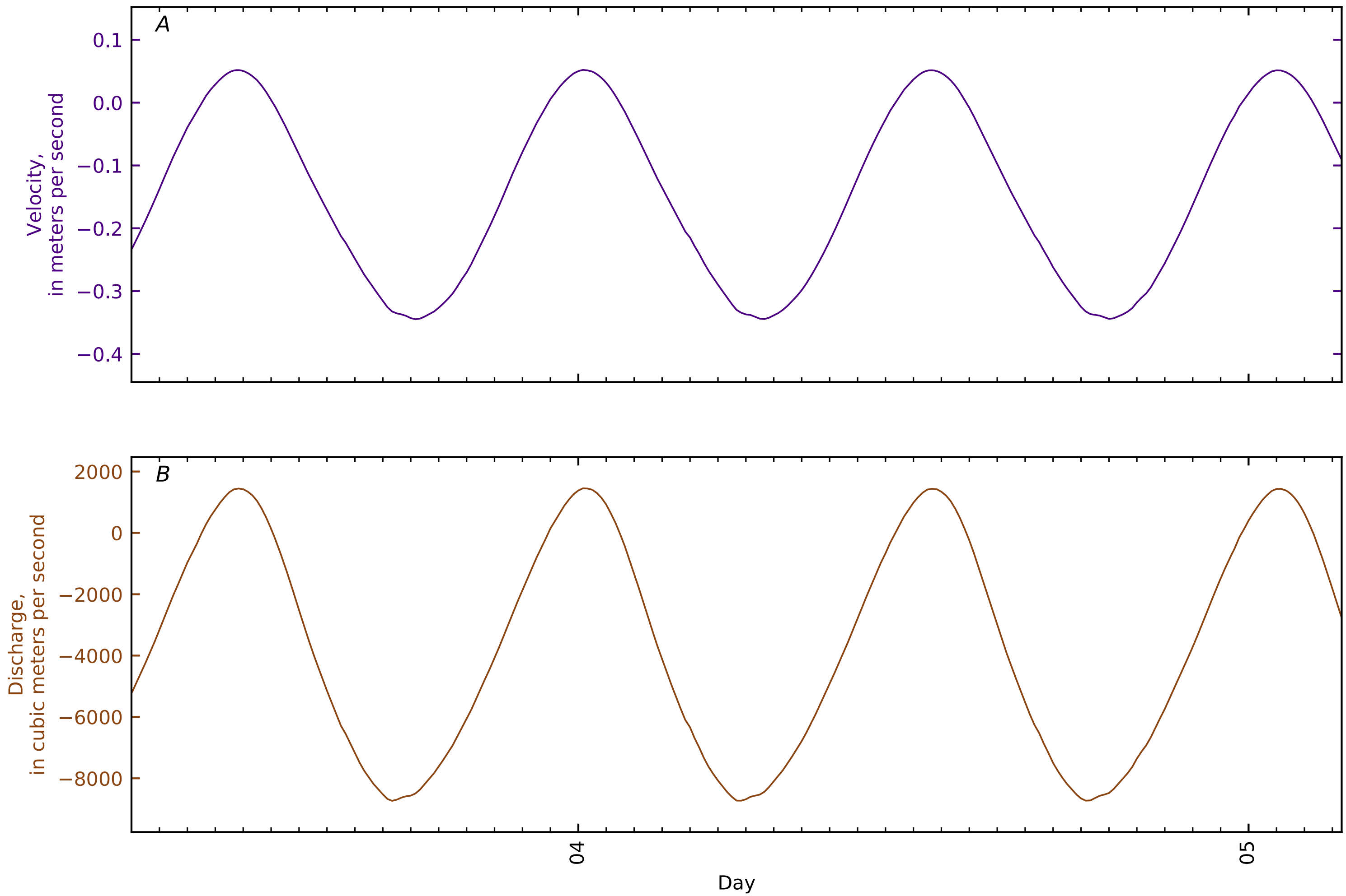

Figure B2-326. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 5, Penob Riv KM3.8 conf East Ch GS Trsct3 Gross Point. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

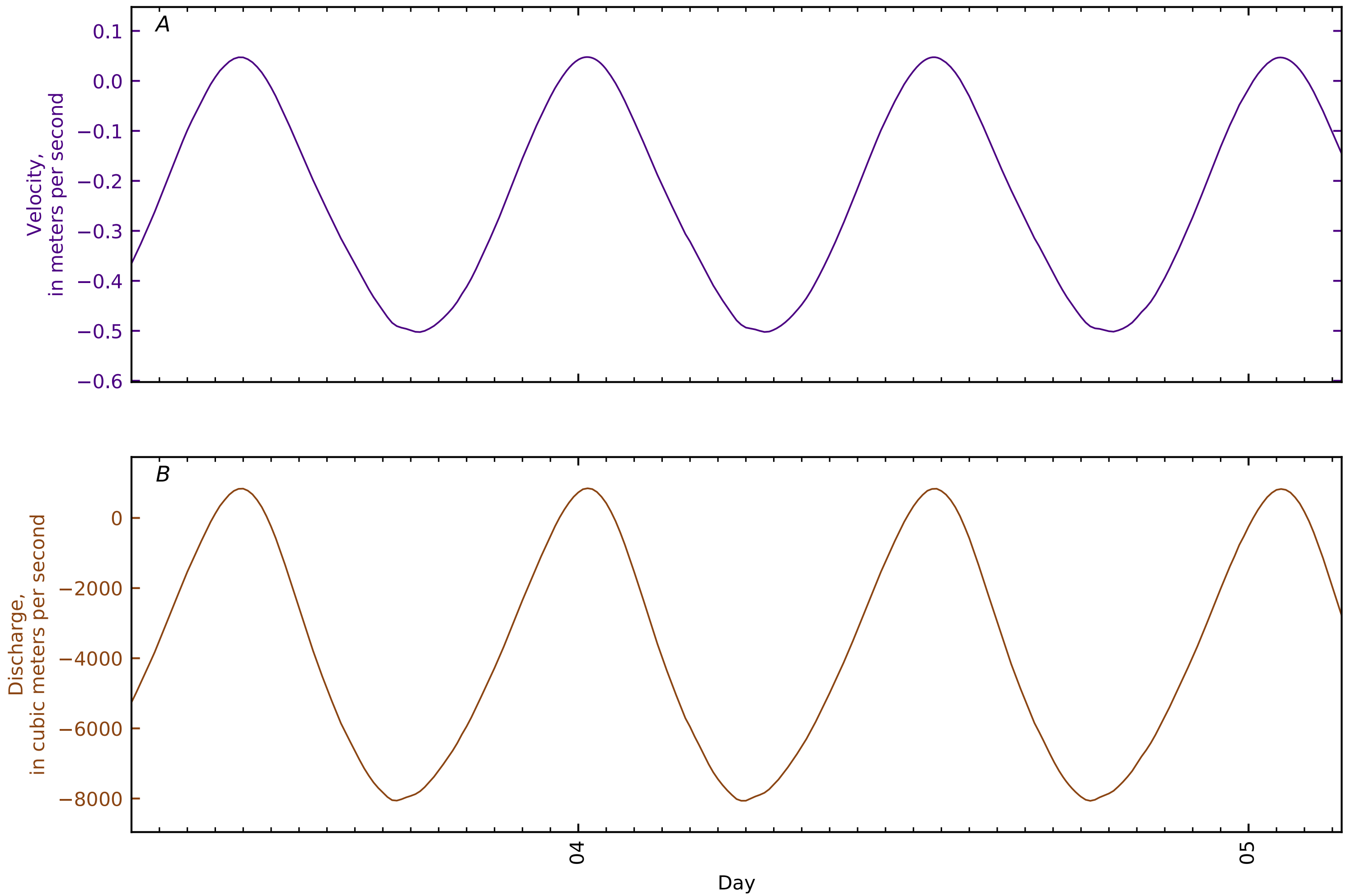

Figure B2-327. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 6, Penob Riv KM5.3 Sandy Point Odom Ledge. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

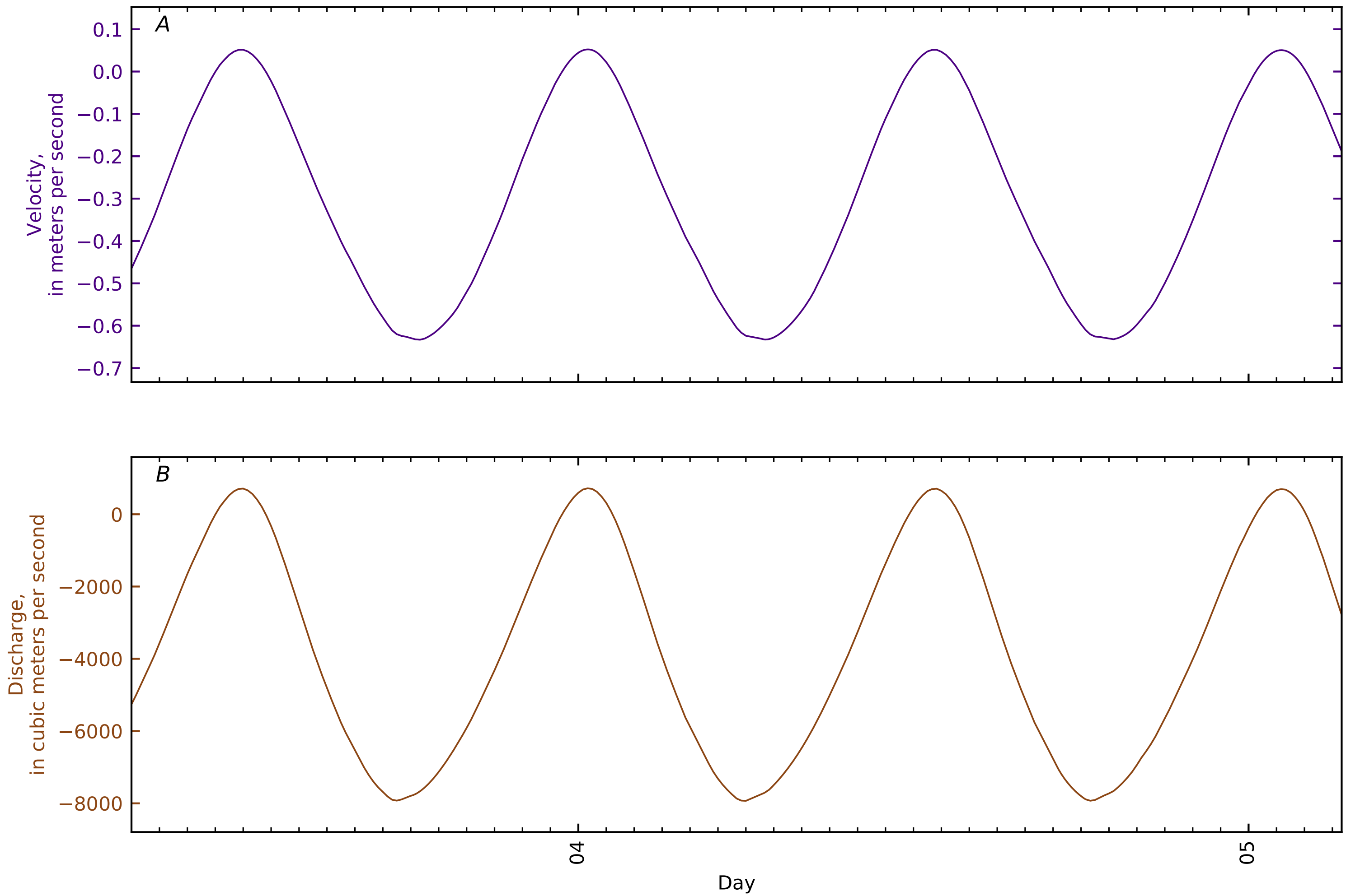

Figure B2-328. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 7, Penob Riv KM6 d/s narrows. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

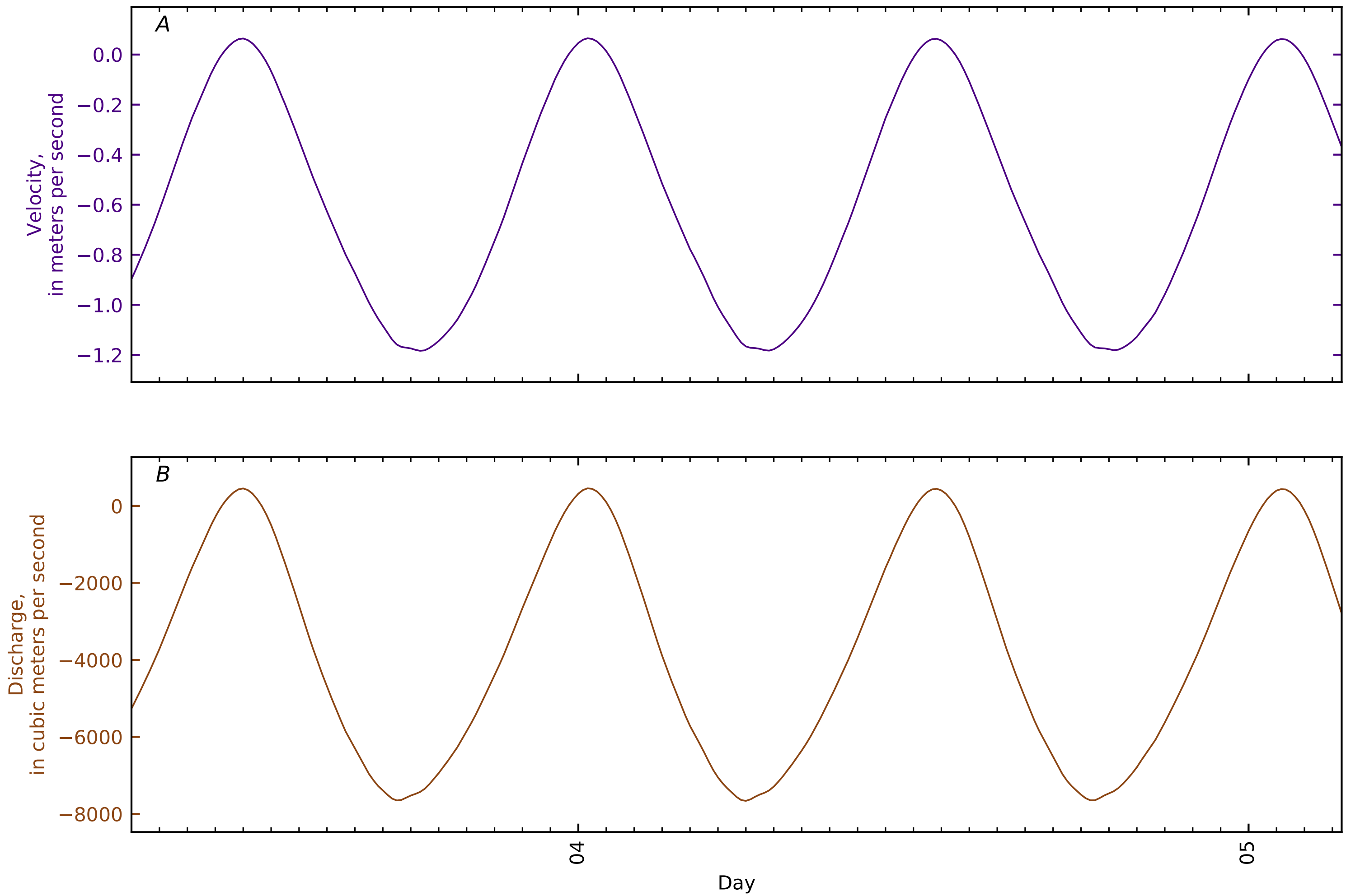

Figure B2-329. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 8, Penob Riv KM8 narrows. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

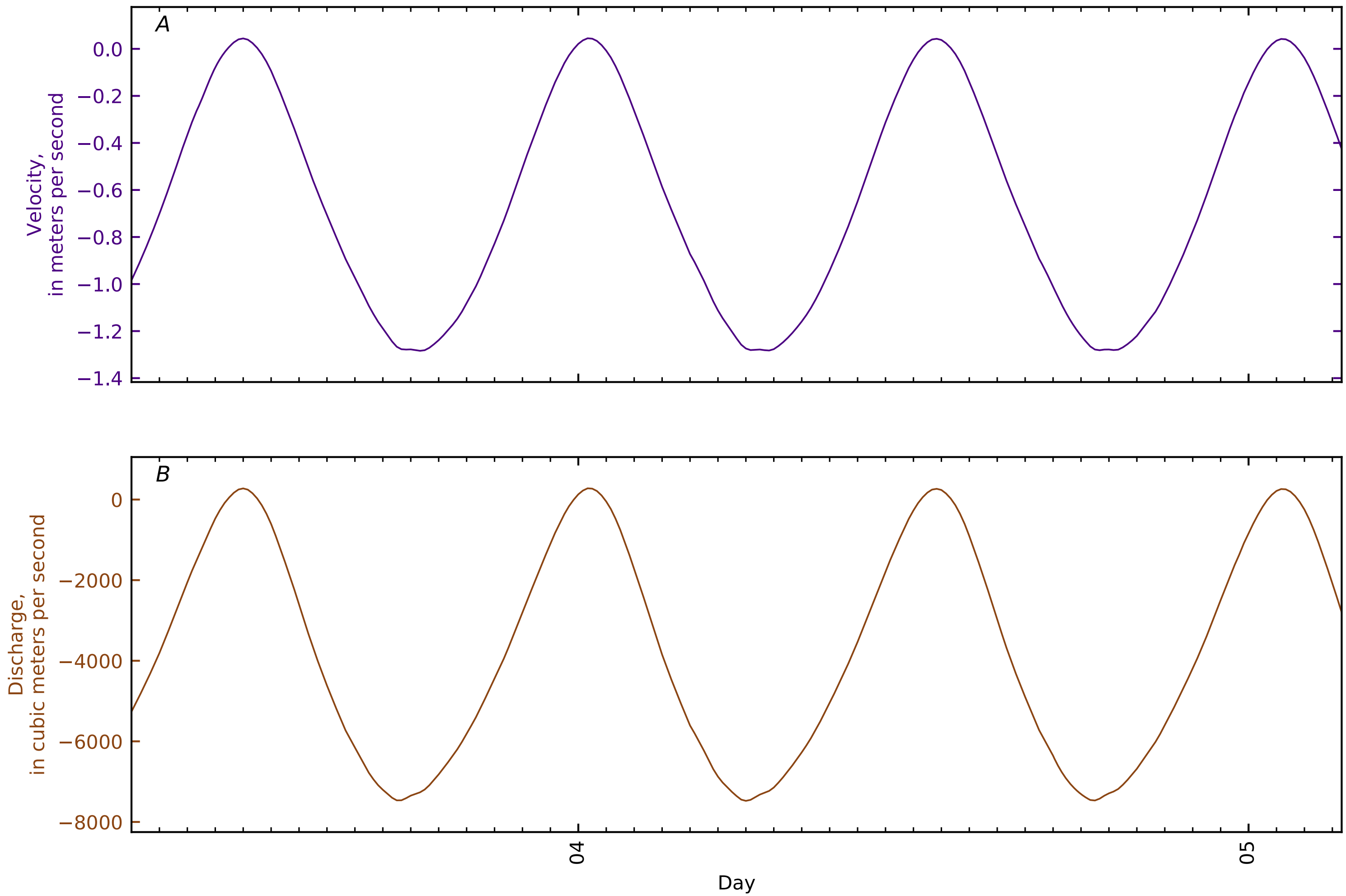

Figure B2-330. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 9, Penob Riv KM10 narrows d/s bridge. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

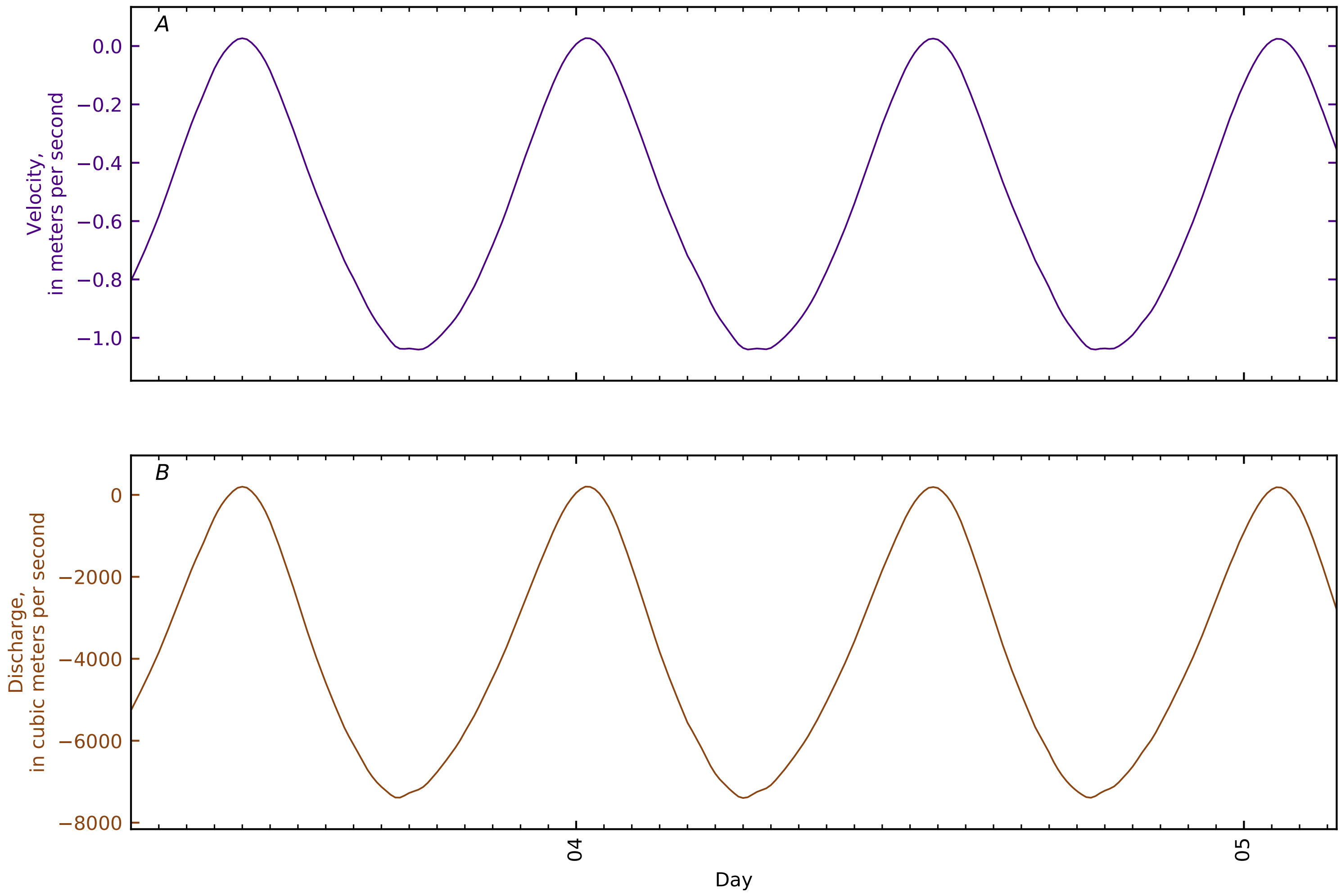

Figure B2-331. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 10, Penob Riv KM11 d/s East Ch split nr Bucksport. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

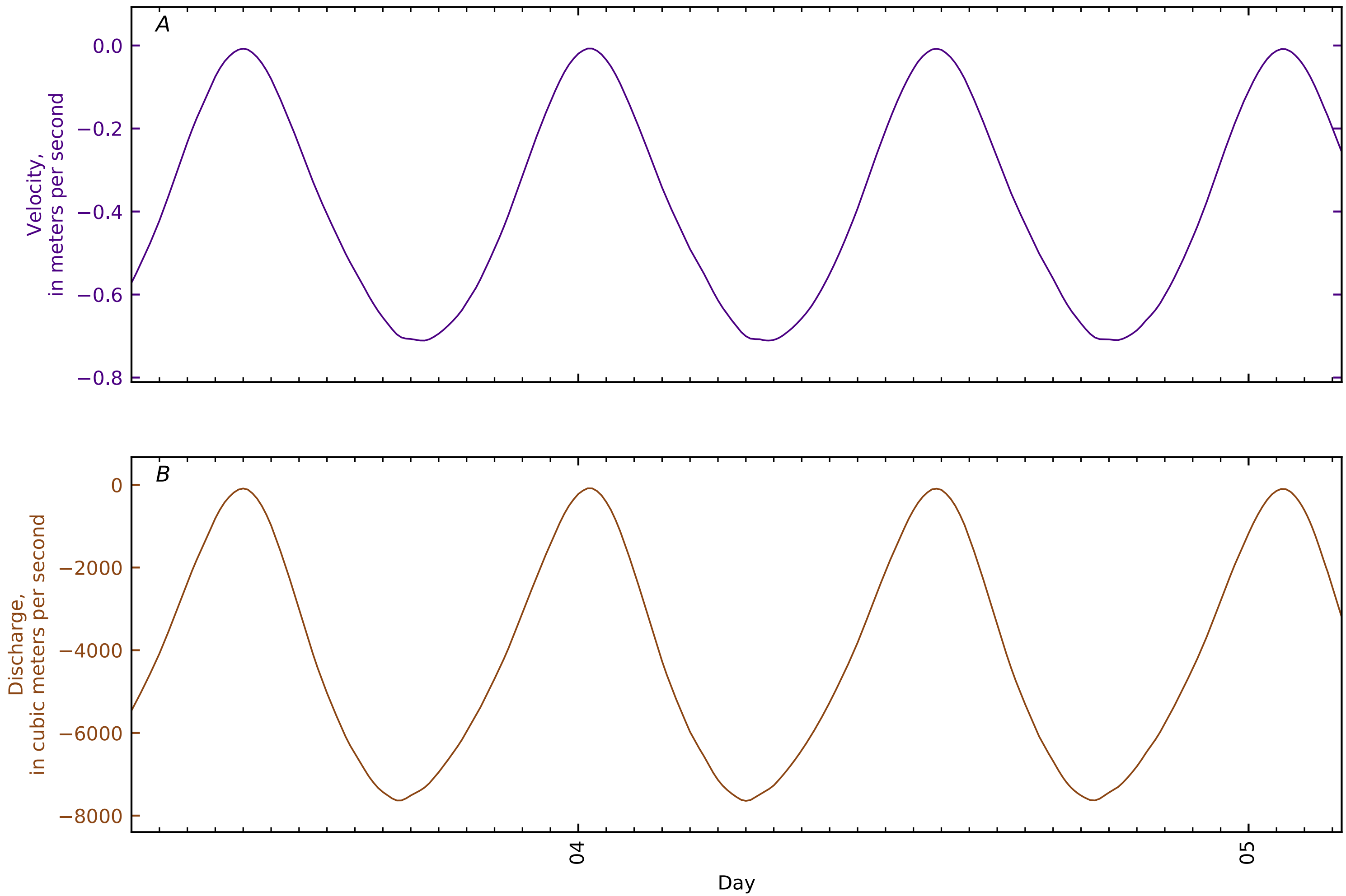

Figure B2-332. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 11, Penob Riv KM11.4 East Ch split nr Bucksport. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

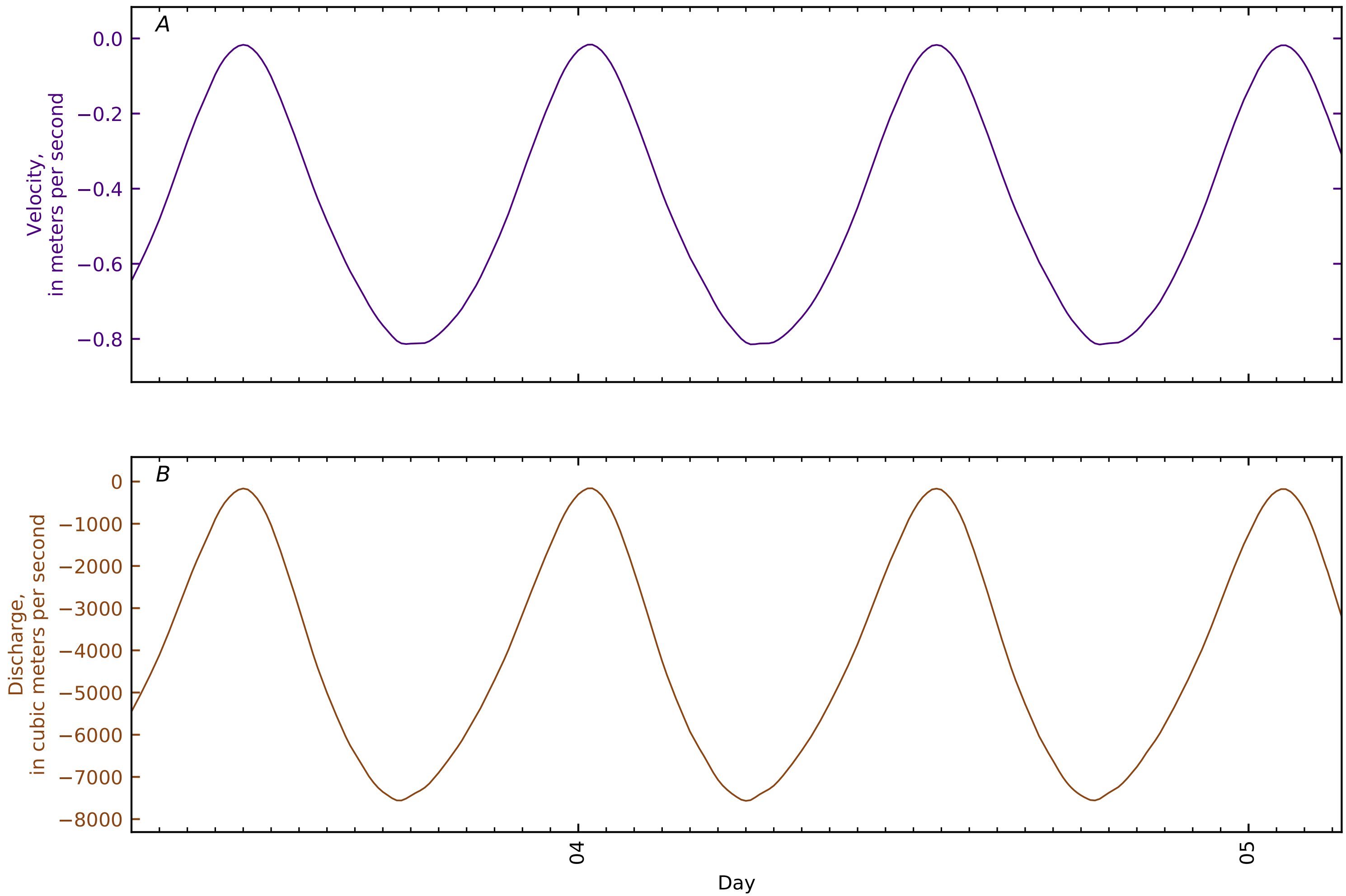

Figure B2-333. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 12, Penob Riv KM12 Bucksport. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

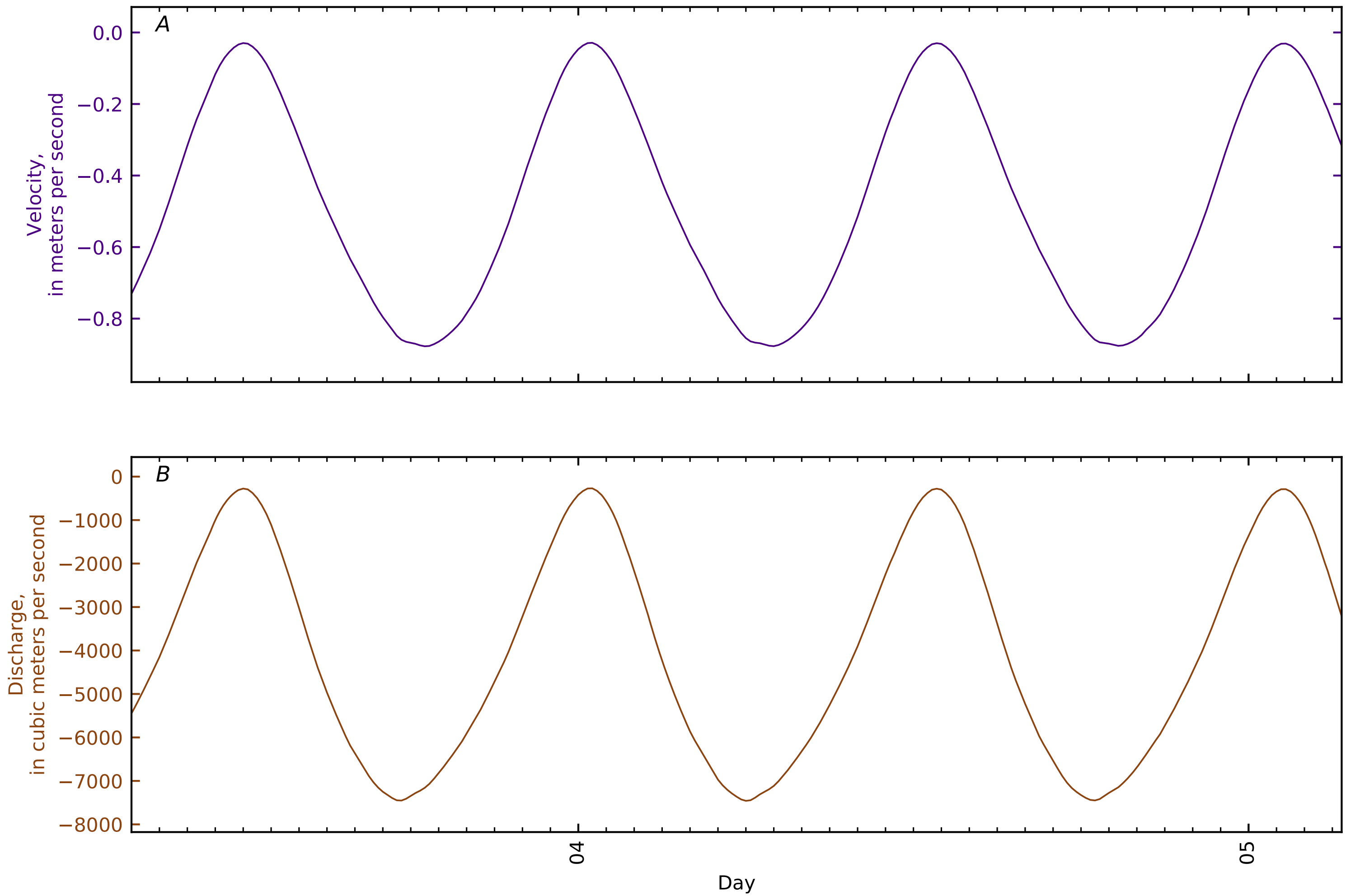

Figure B2-334. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 13, Penob Riv KM13 dropoff u/s Bucksport. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

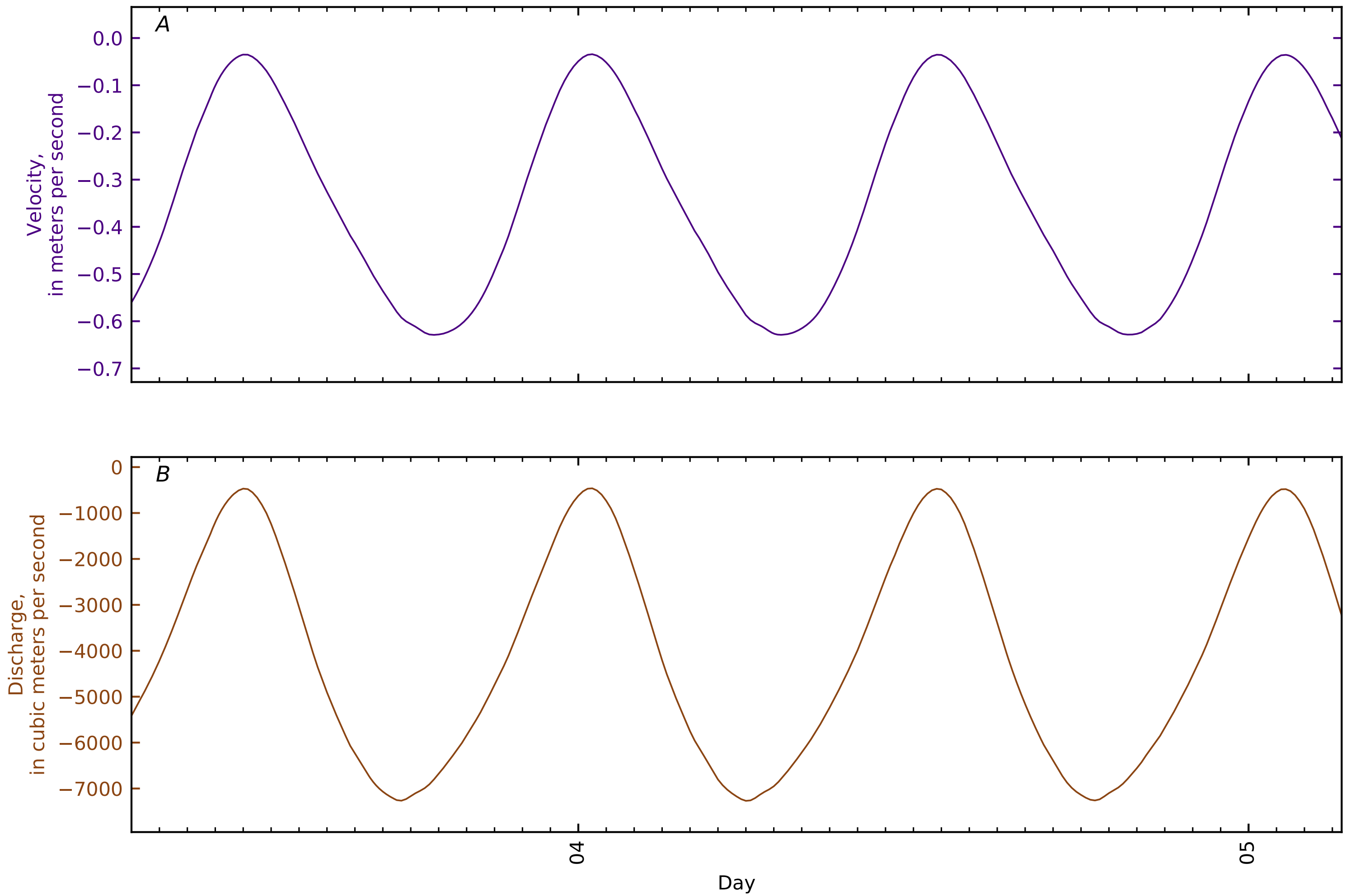

Figure B2-335. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 14, Penob Riv KM14 u/s dropoff. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

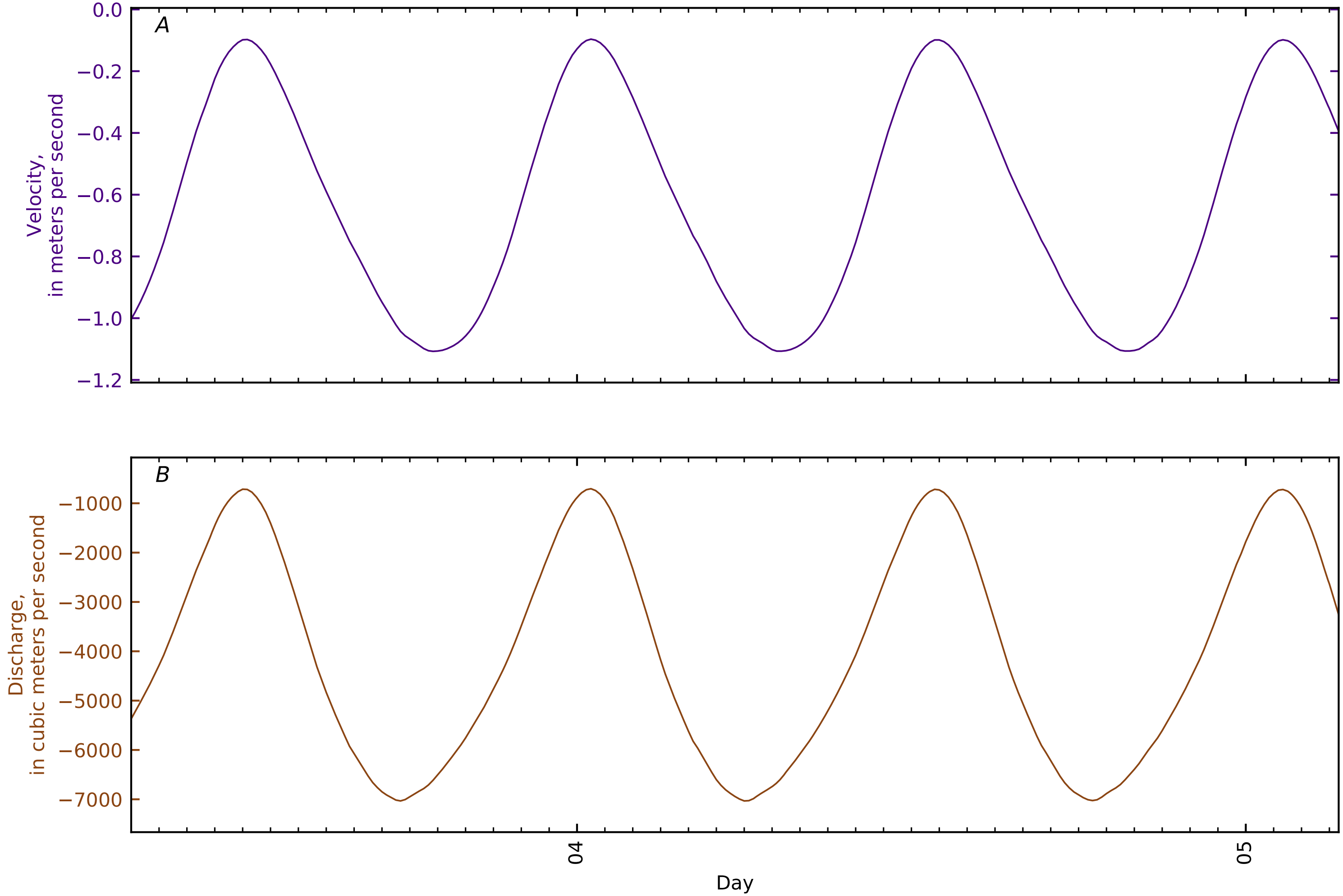

Figure B2-336. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 15, Penob Riv KM15 d/s conf Mendall Marsh. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

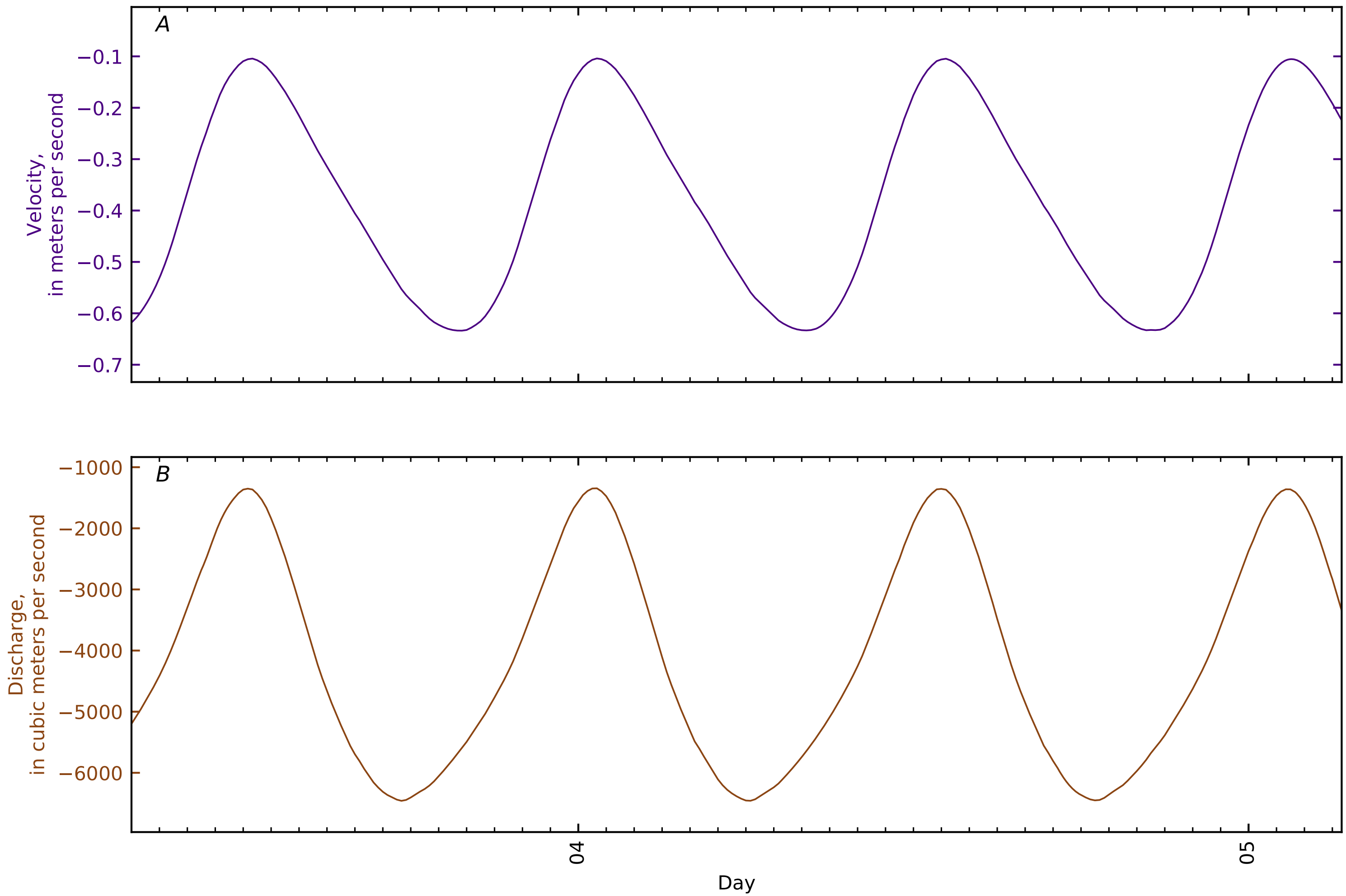

Figure B2-337. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 16, Penob Riv KM17 Frankfort Flats d/s Mendall Marsh. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

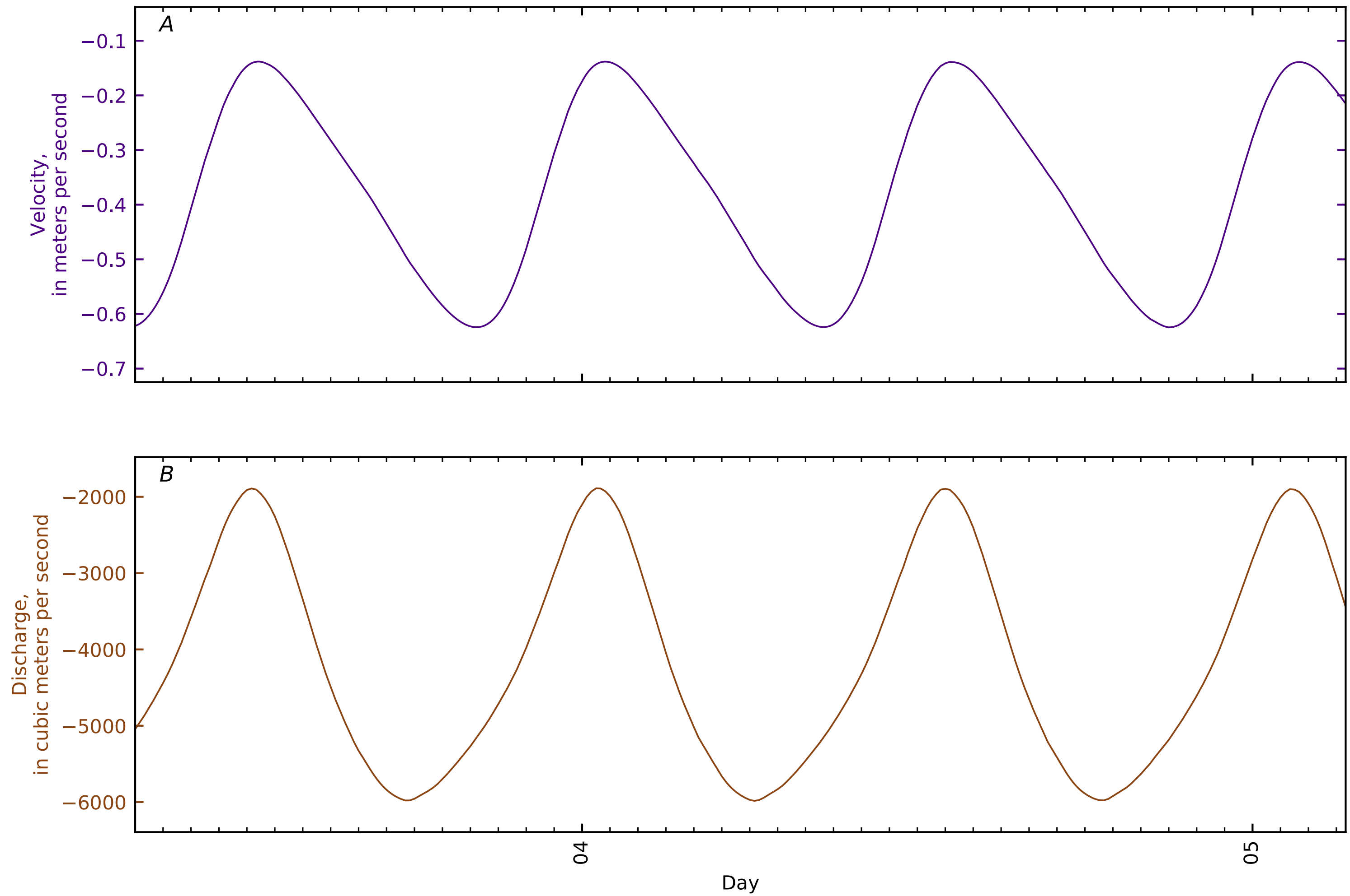

Figure B2-338. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 17, Penob Riv KM18 Frankfort Flats u/s Mendall Marsh GS Trnsct1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

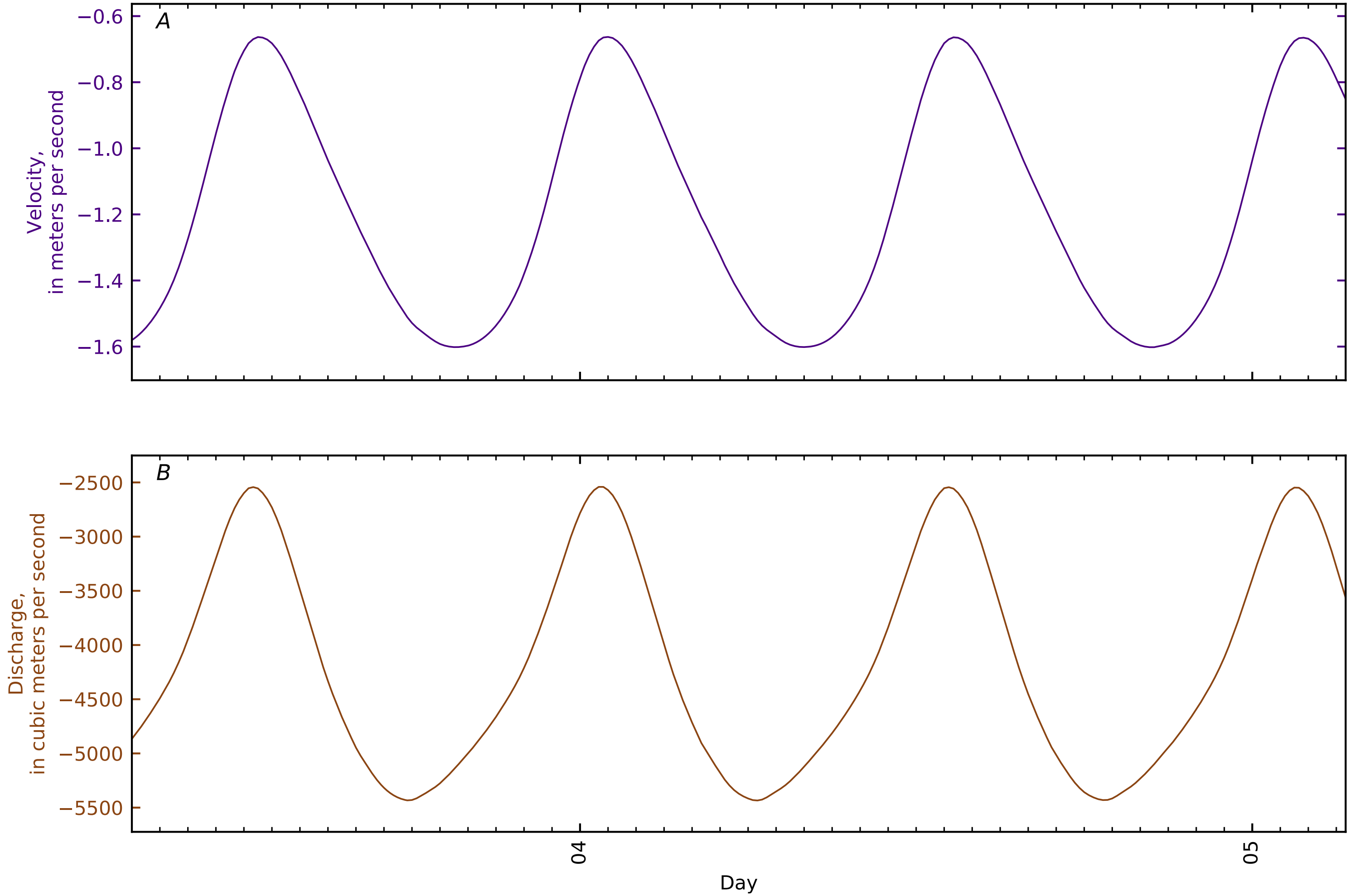

Figure B2-339. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 18, Penob Riv KM21.2 GS 443810068502201 Winterport. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

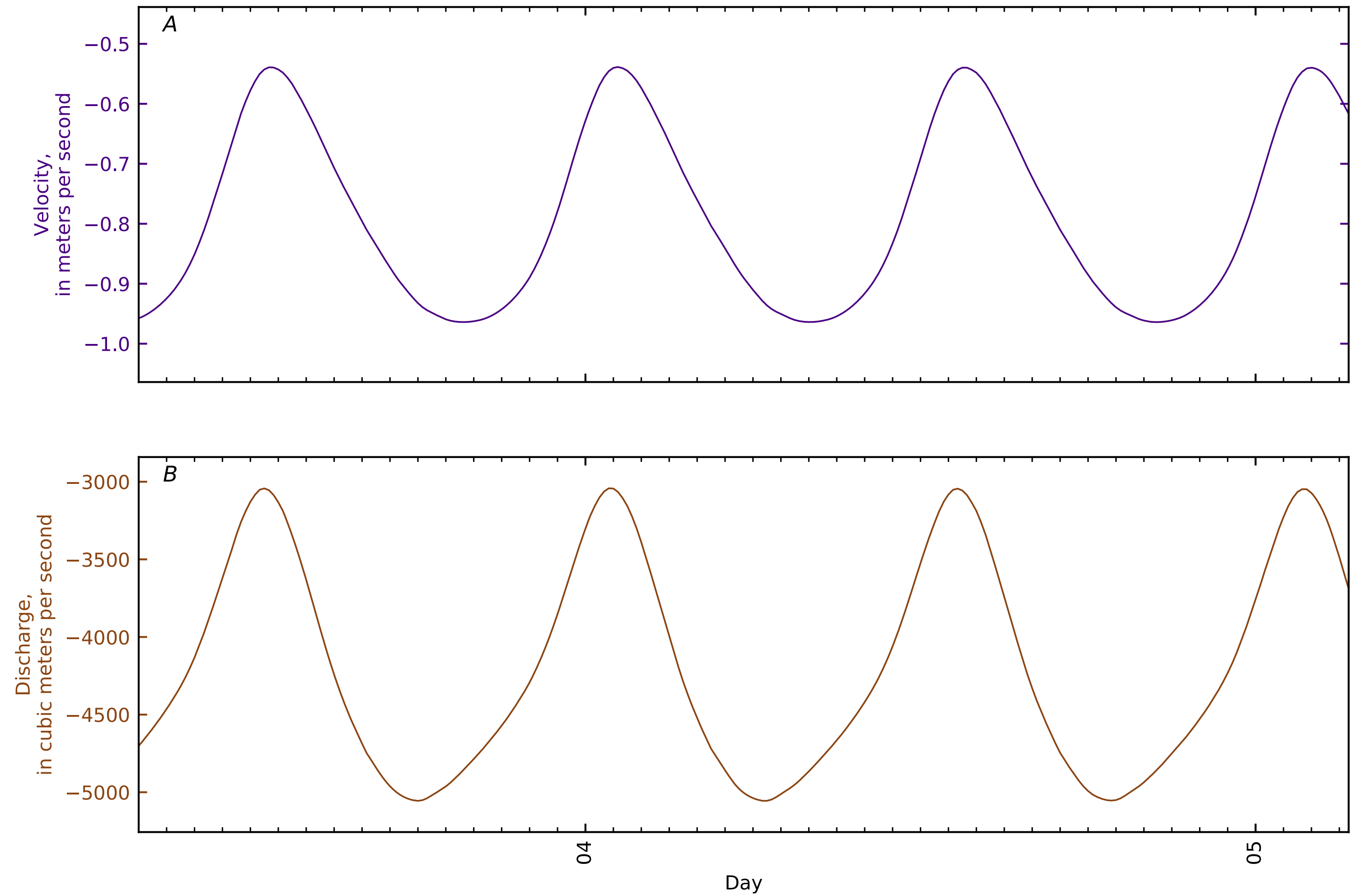

Figure B2-340. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 19, Penob Riv KM25.2 Oak Pt narrows d/s bend. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

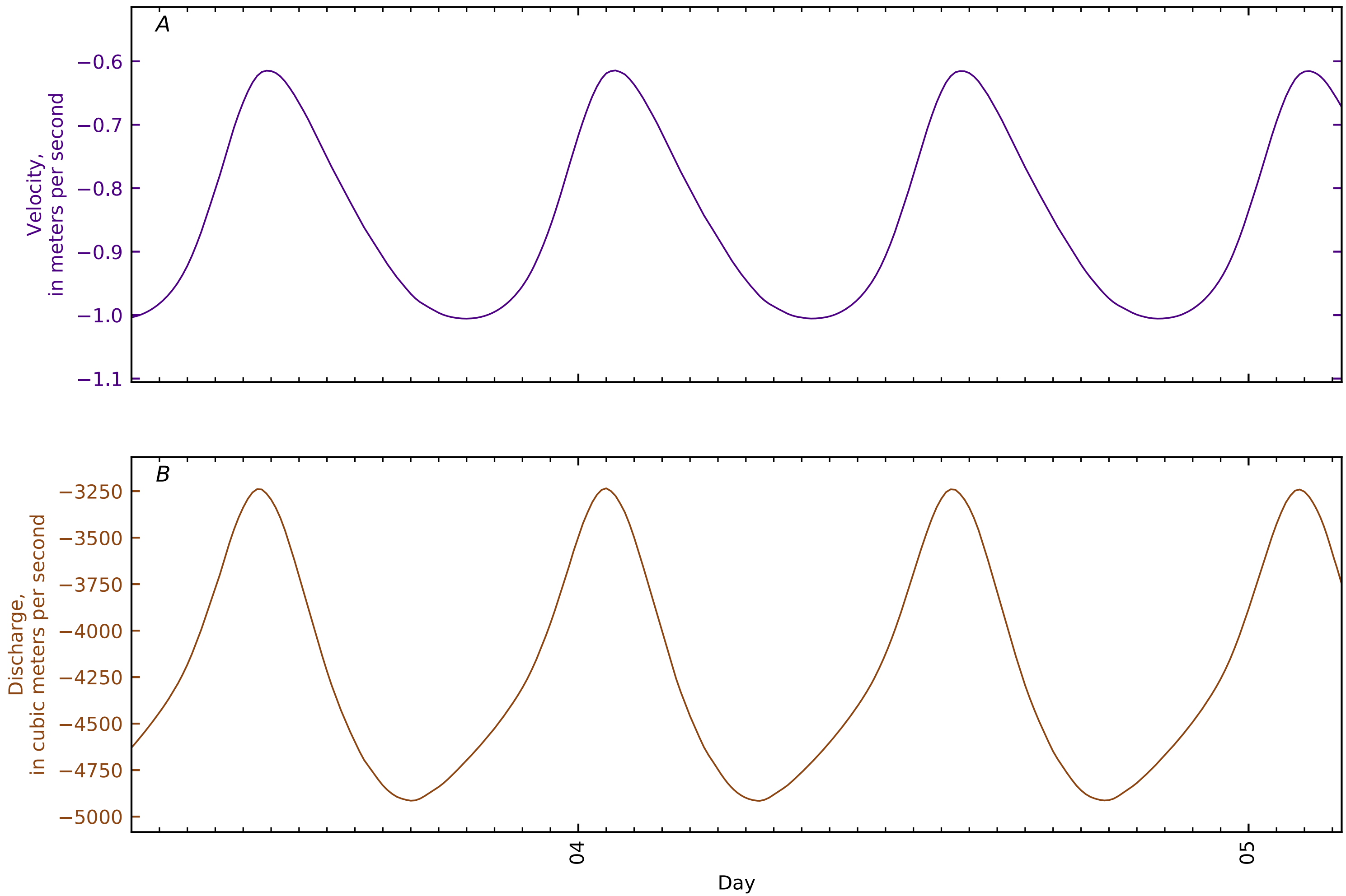

Figure B2-341. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 20, Penob Riv KM27.2 South Orrington. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

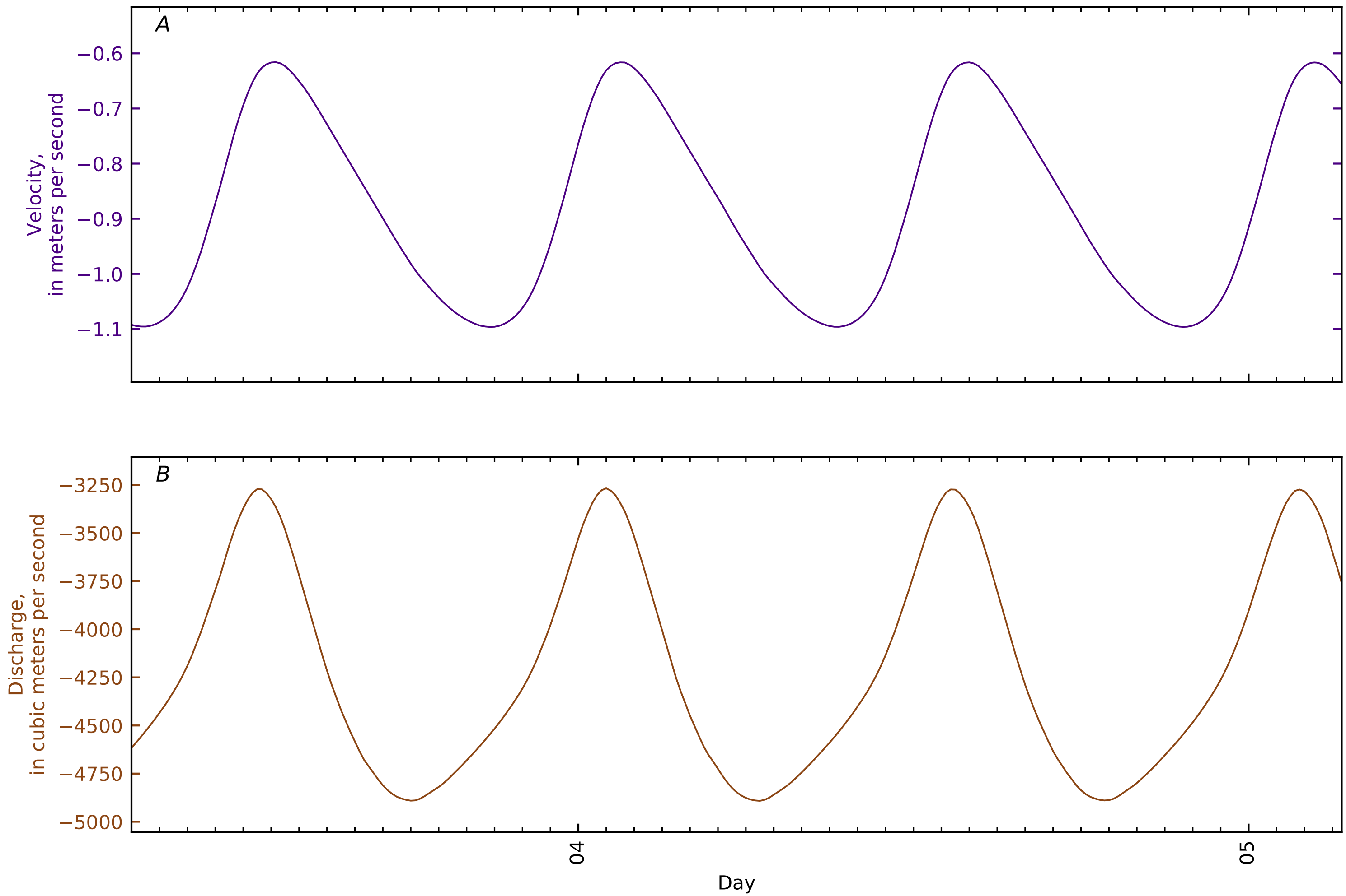

Figure B2-342. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 21, Penob Riv KM27.6 South Orrington u/s bend. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

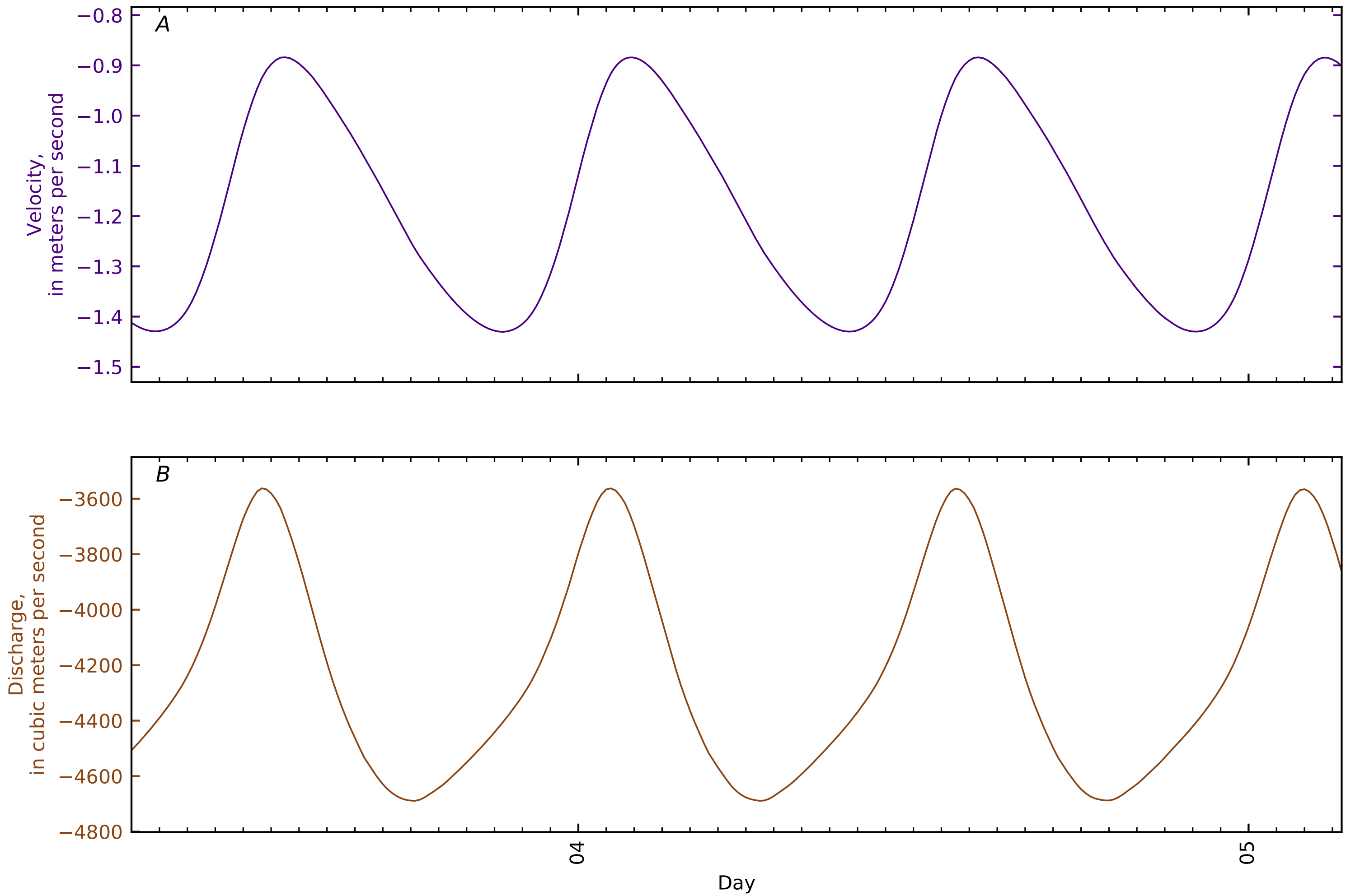

Figure B2-343. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 22, Penob Riv KM30 nr Bald Hill d/s bend. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

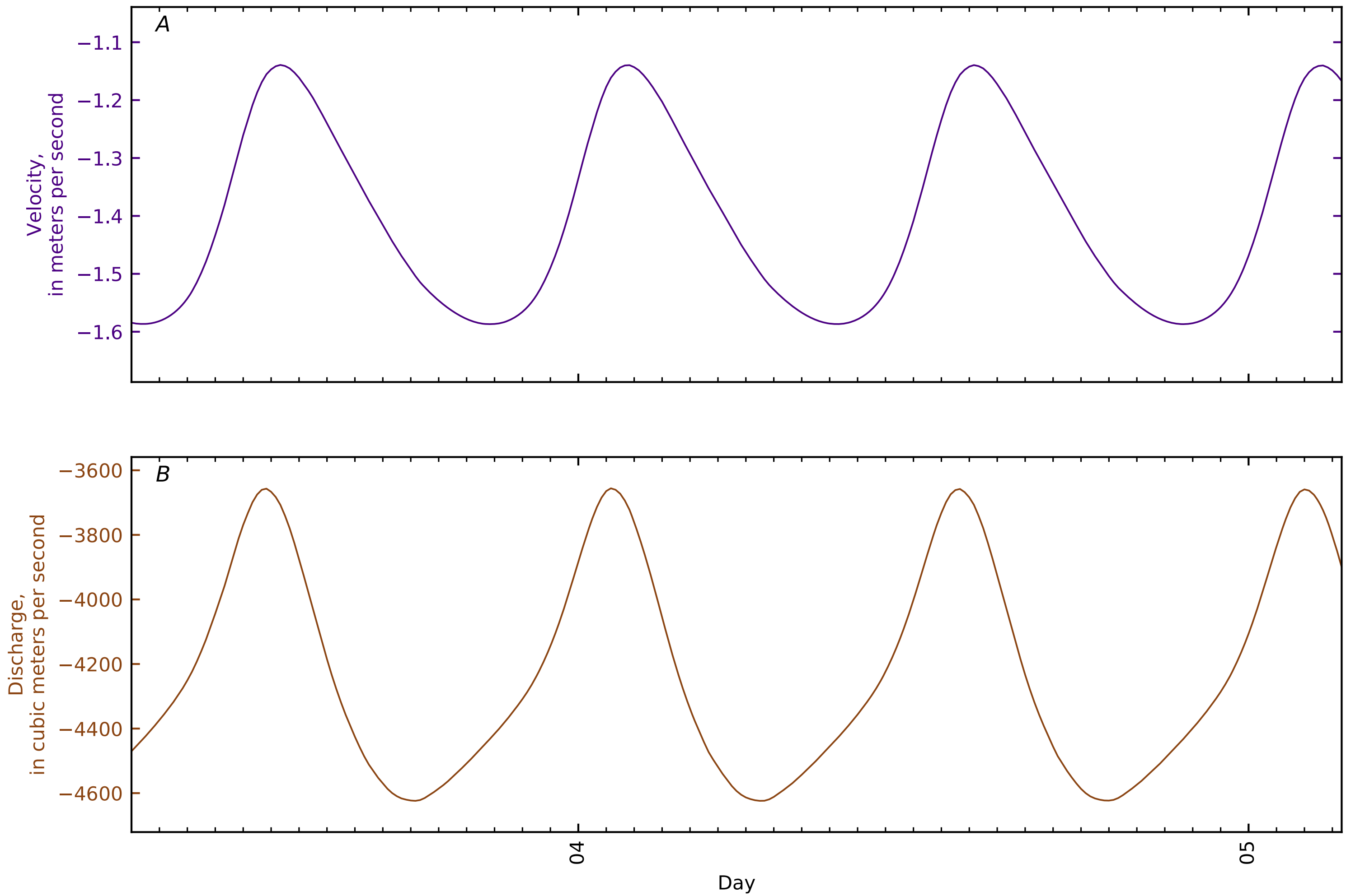

Figure B2-344. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 23, Penob Riv KM31 narrows. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

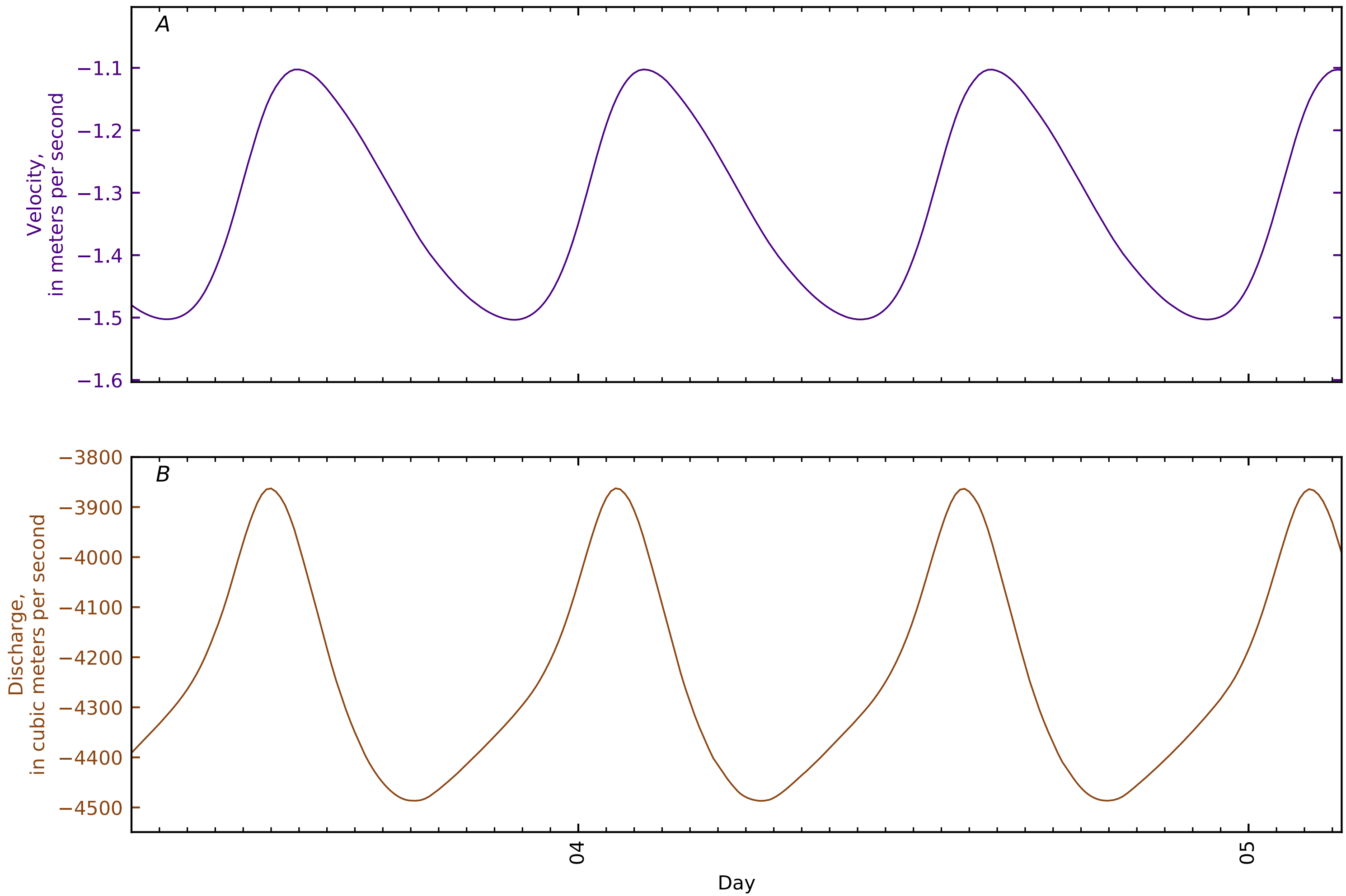

Figure B2-345. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 24, Penob Riv KM34 d/s Orrington. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

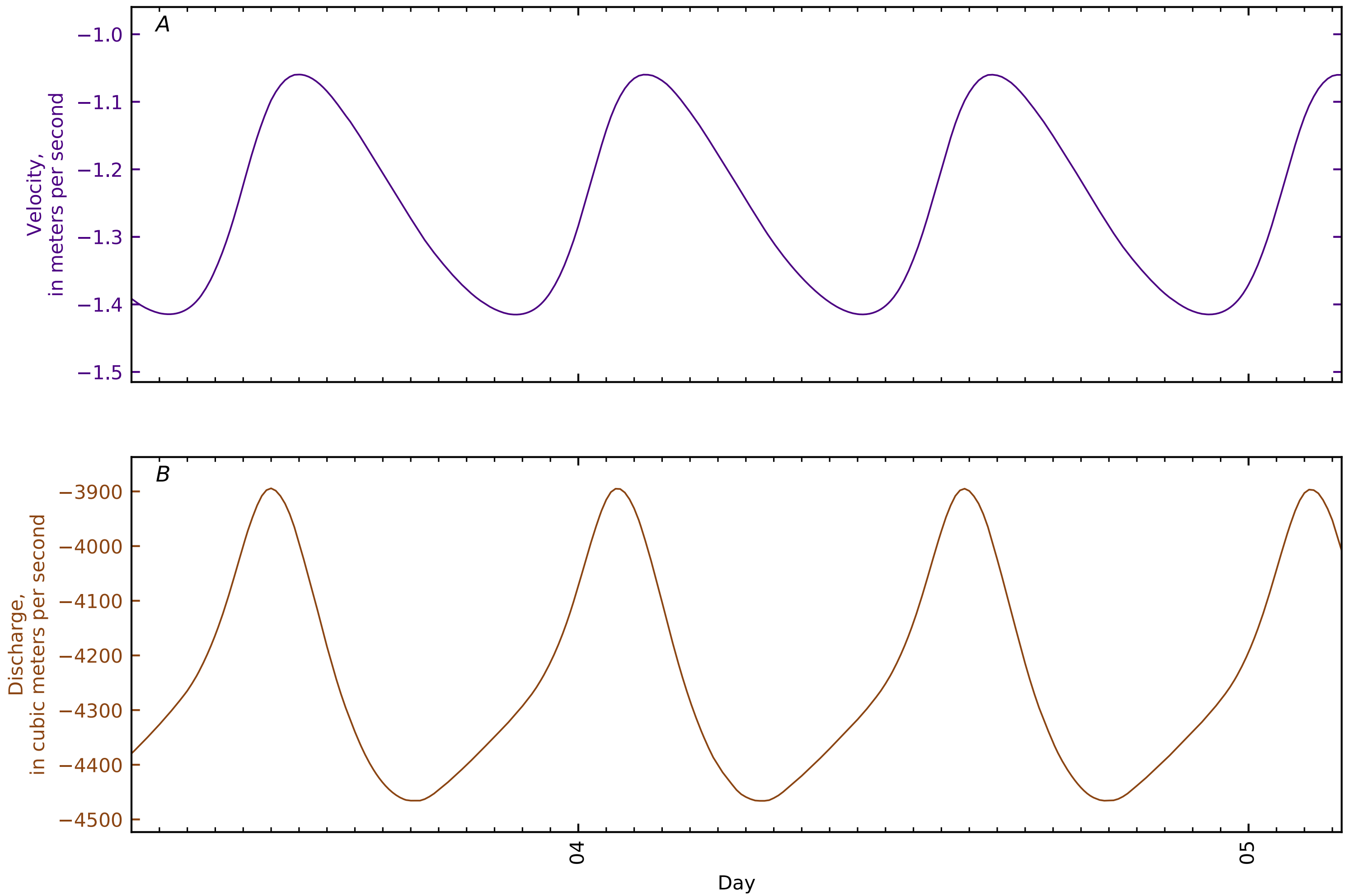

Figure B2-346. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 25, Penob Riv KM34.6 Southern Cove Orrington. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

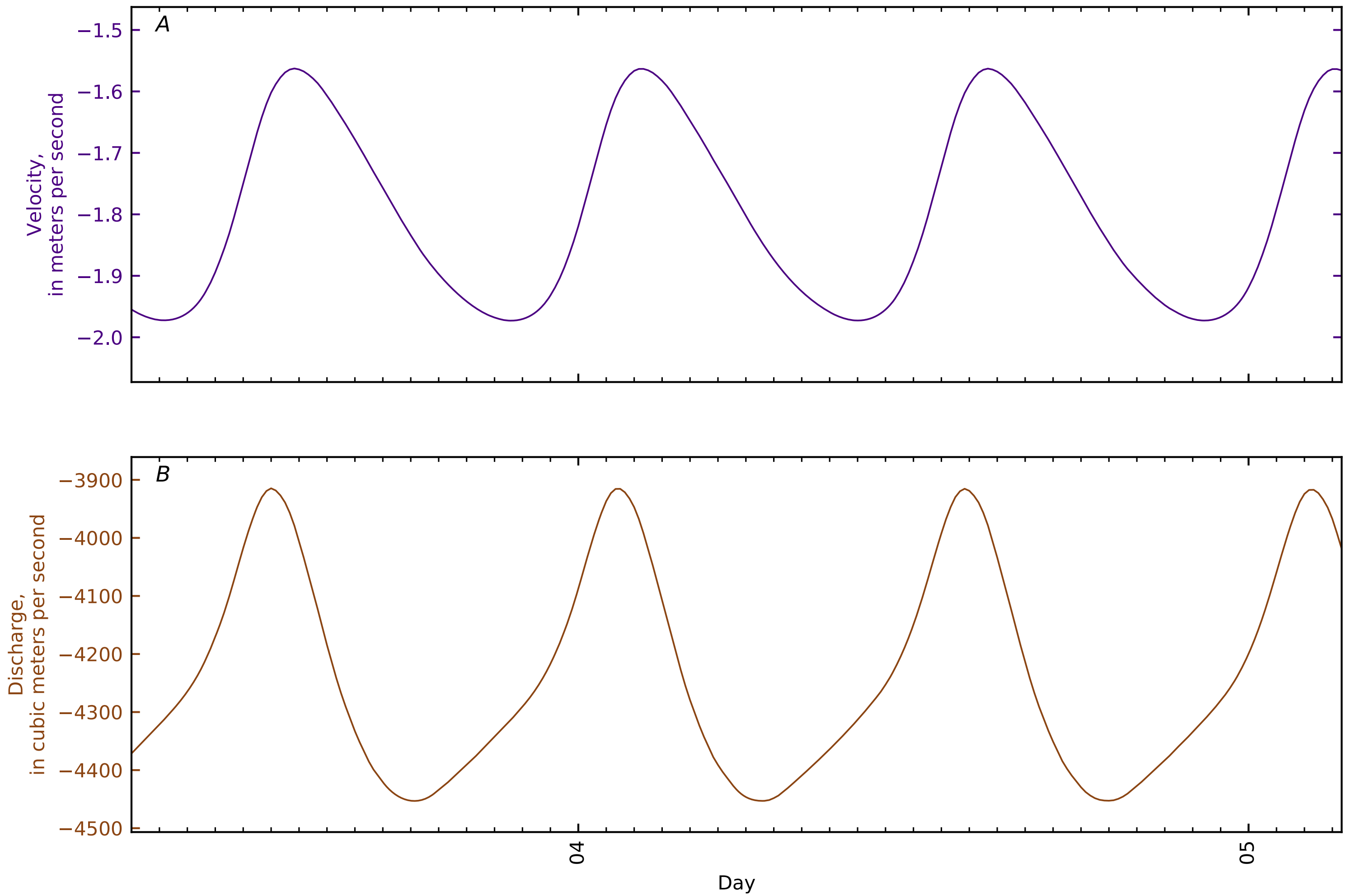

Figure B2-347. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 26, Penob Riv KM35 Orrington d/s Souadabscook Str Hampden. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

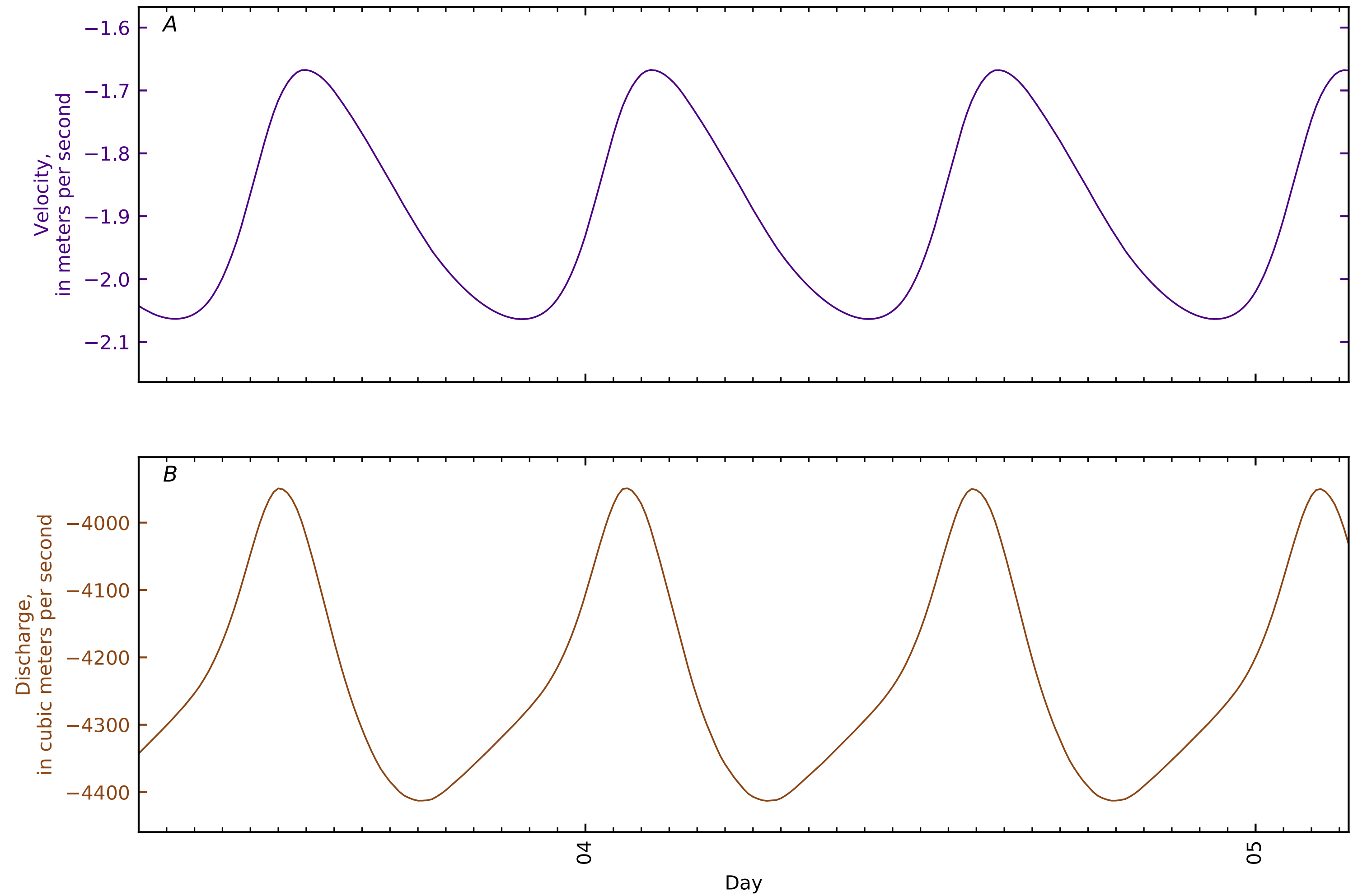

Figure B2-348. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 27, Penob Riv KM36 u/s Souadabscook Str Hampden. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

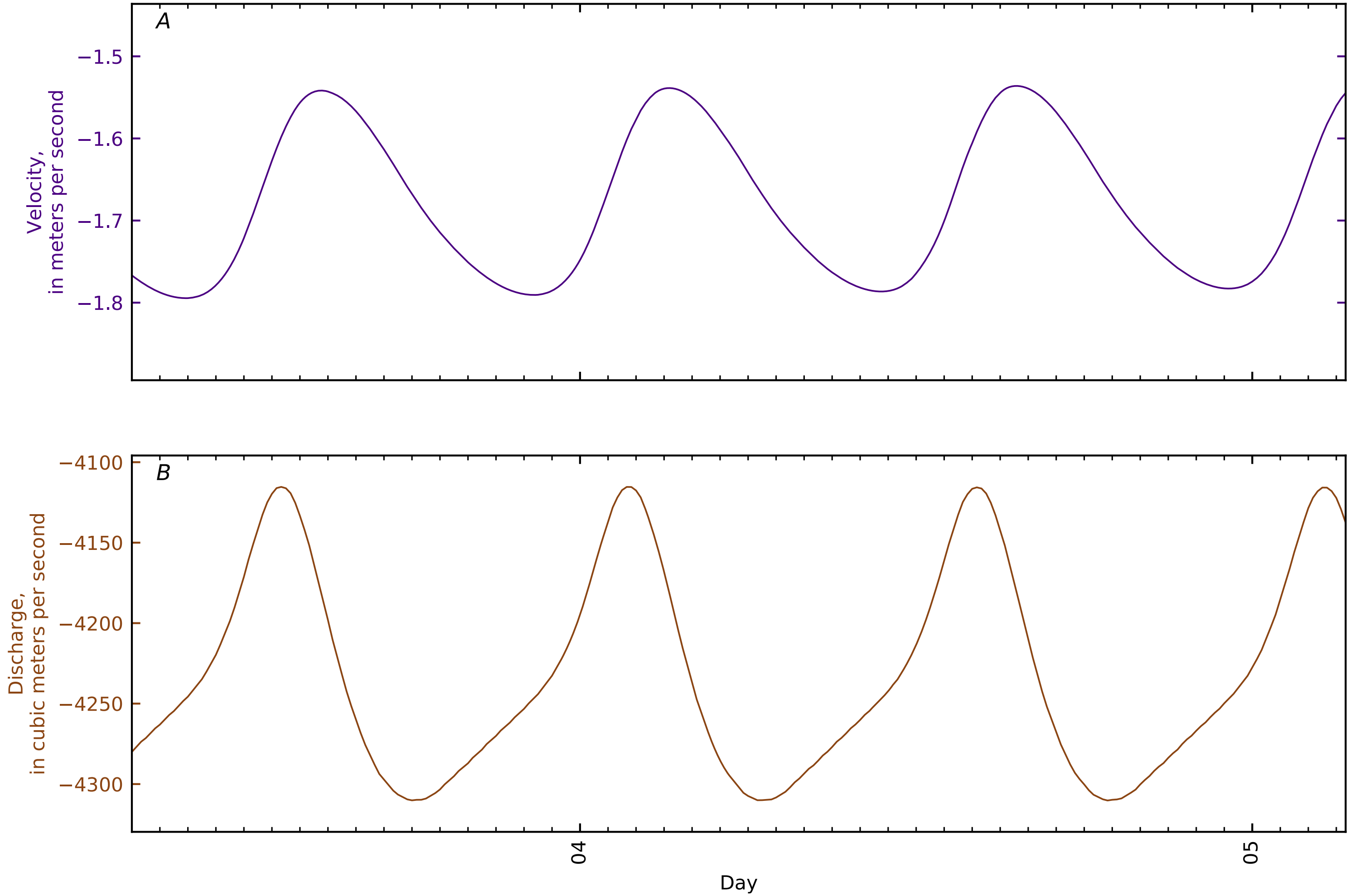

Figure B2-349. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 28, Penob Riv KM40 South Brewer. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

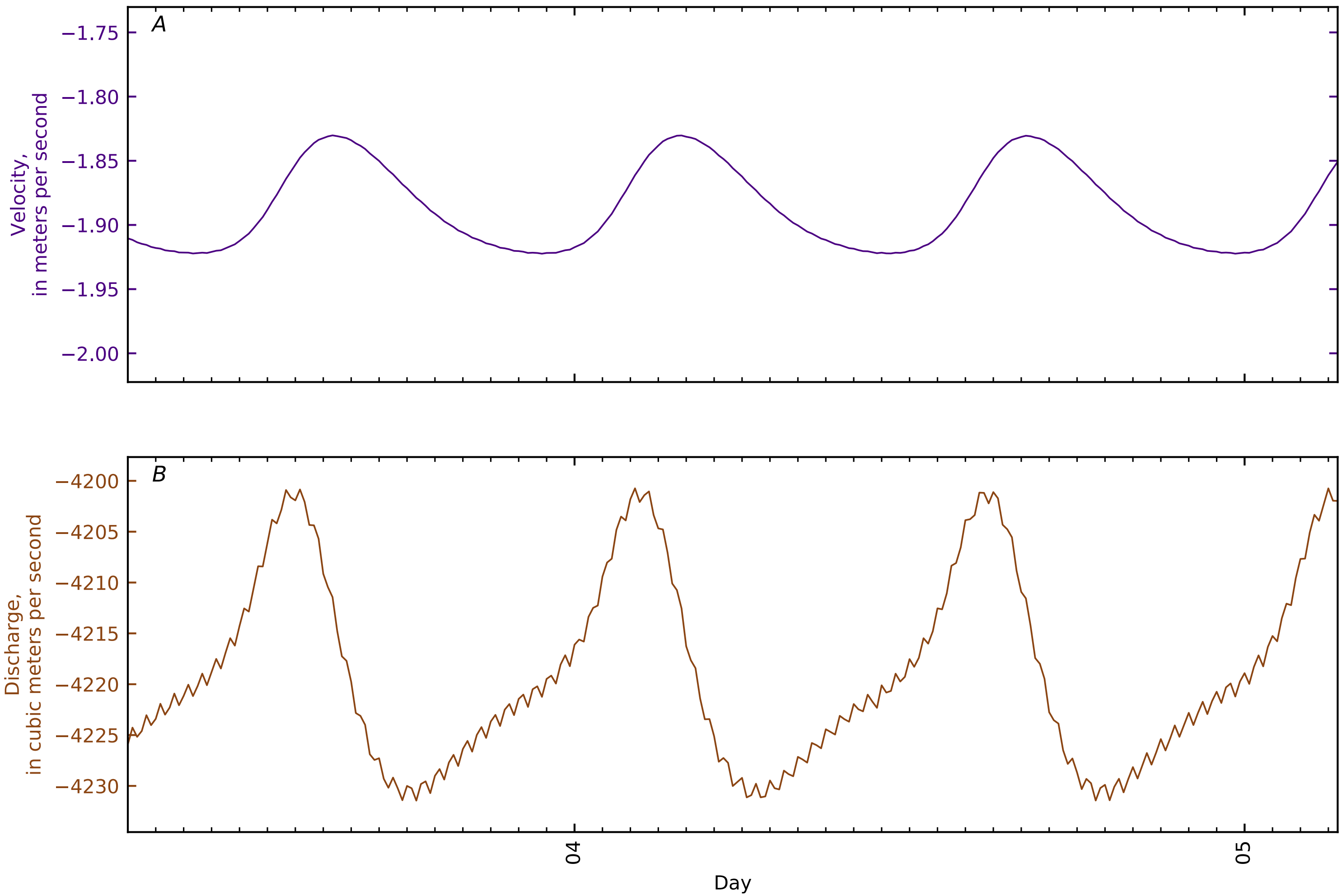

Figure B2-350. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 29, Penob Riv KM43 u/s Kenduskeag Str Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

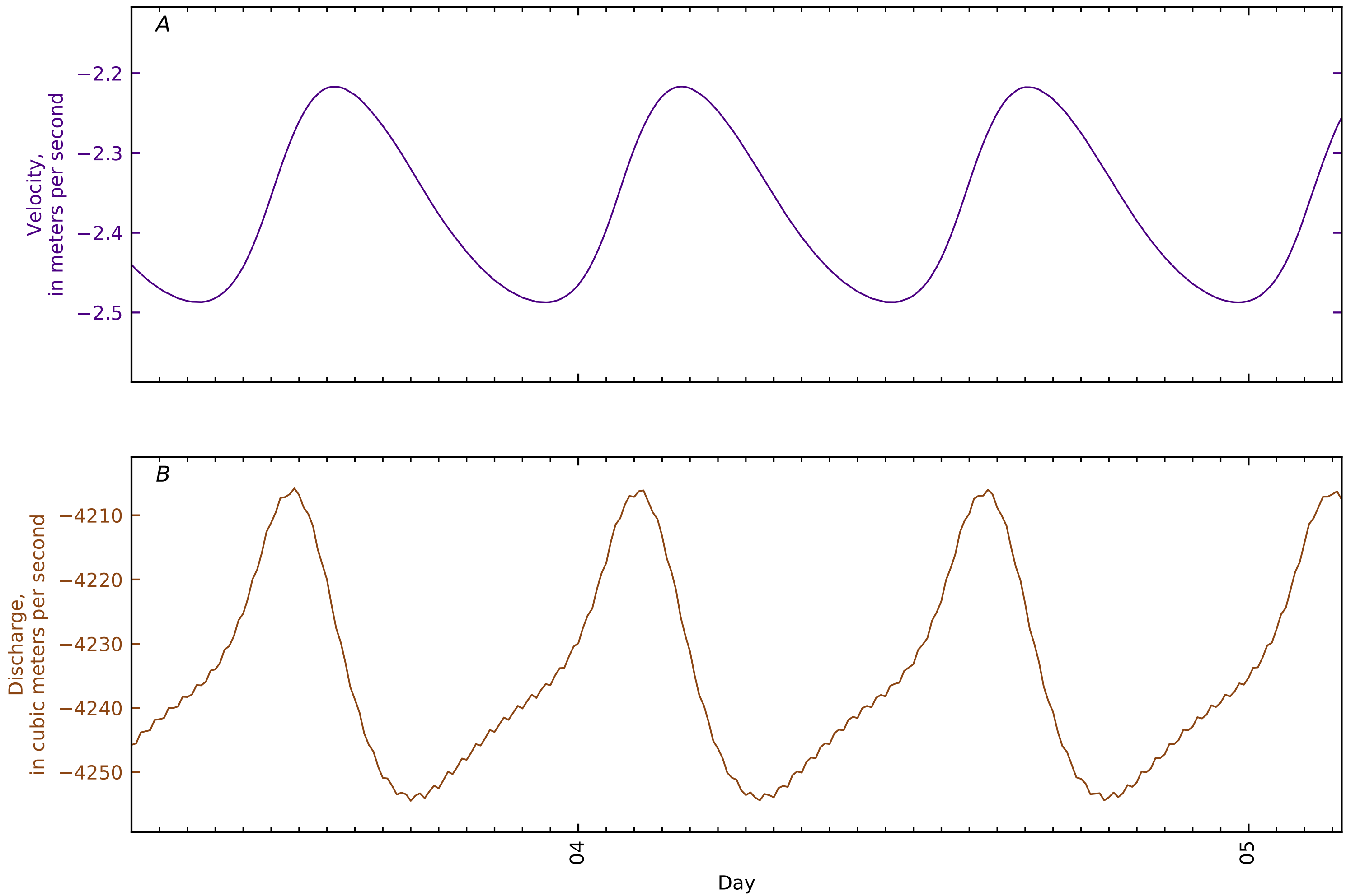

Figure B2-351. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 30, Penob Riv KM43.2 GS 01037050 at Bangor d/s Kenduskeag Str. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

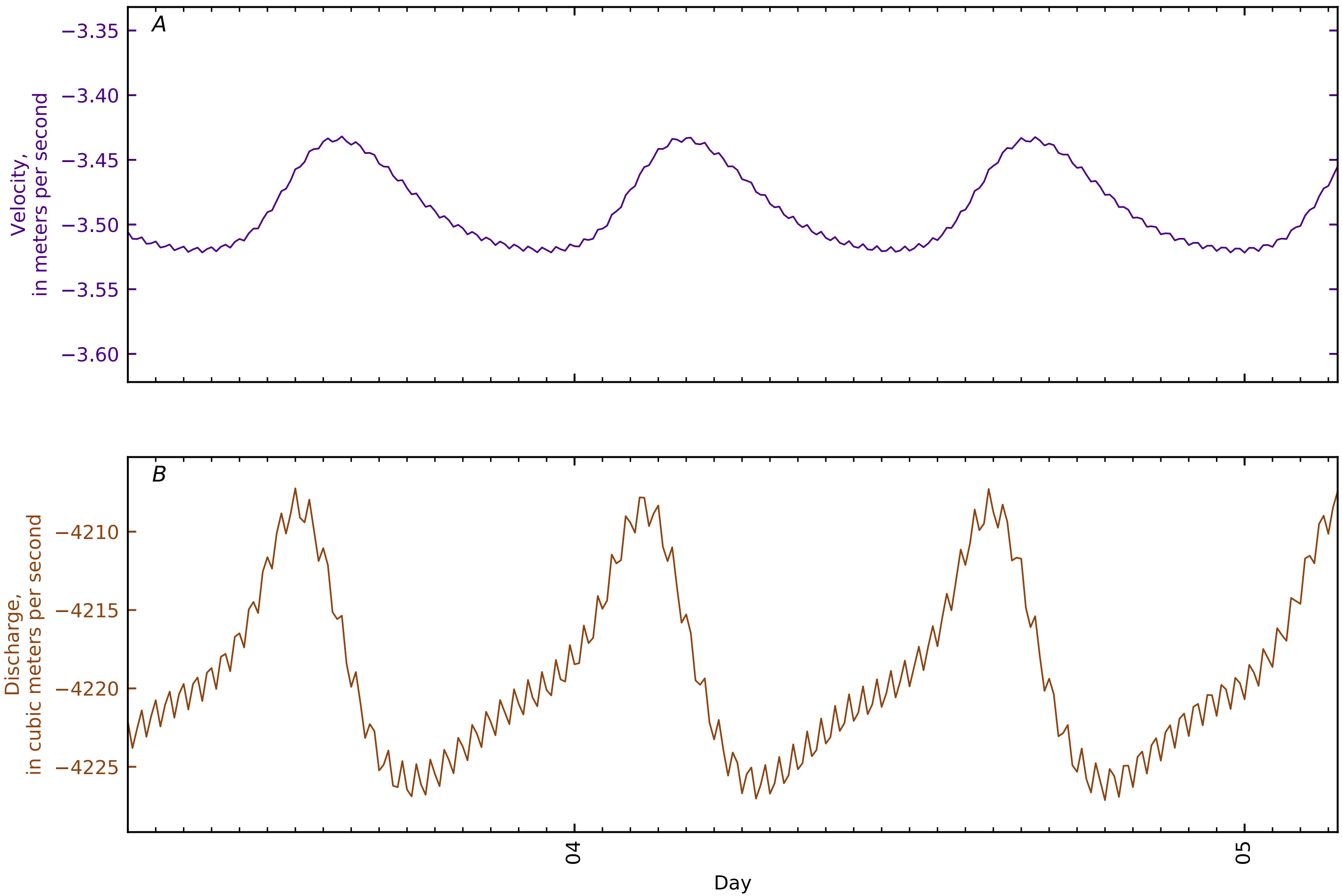

Figure B2-352. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 31, Penob Riv KM45.3 Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

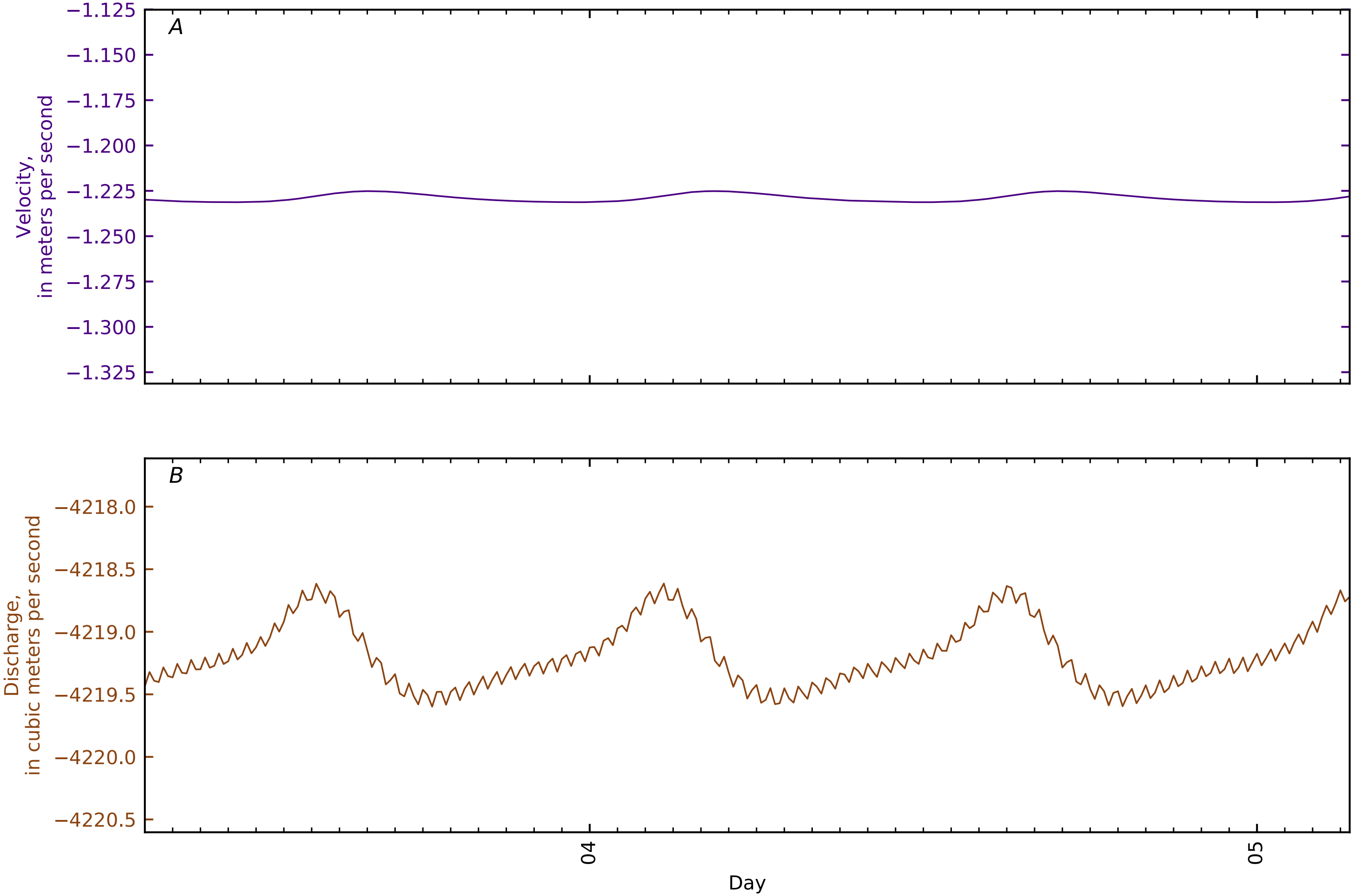

Figure B2-353. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 32, Penob Riv KM50 Eddington. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

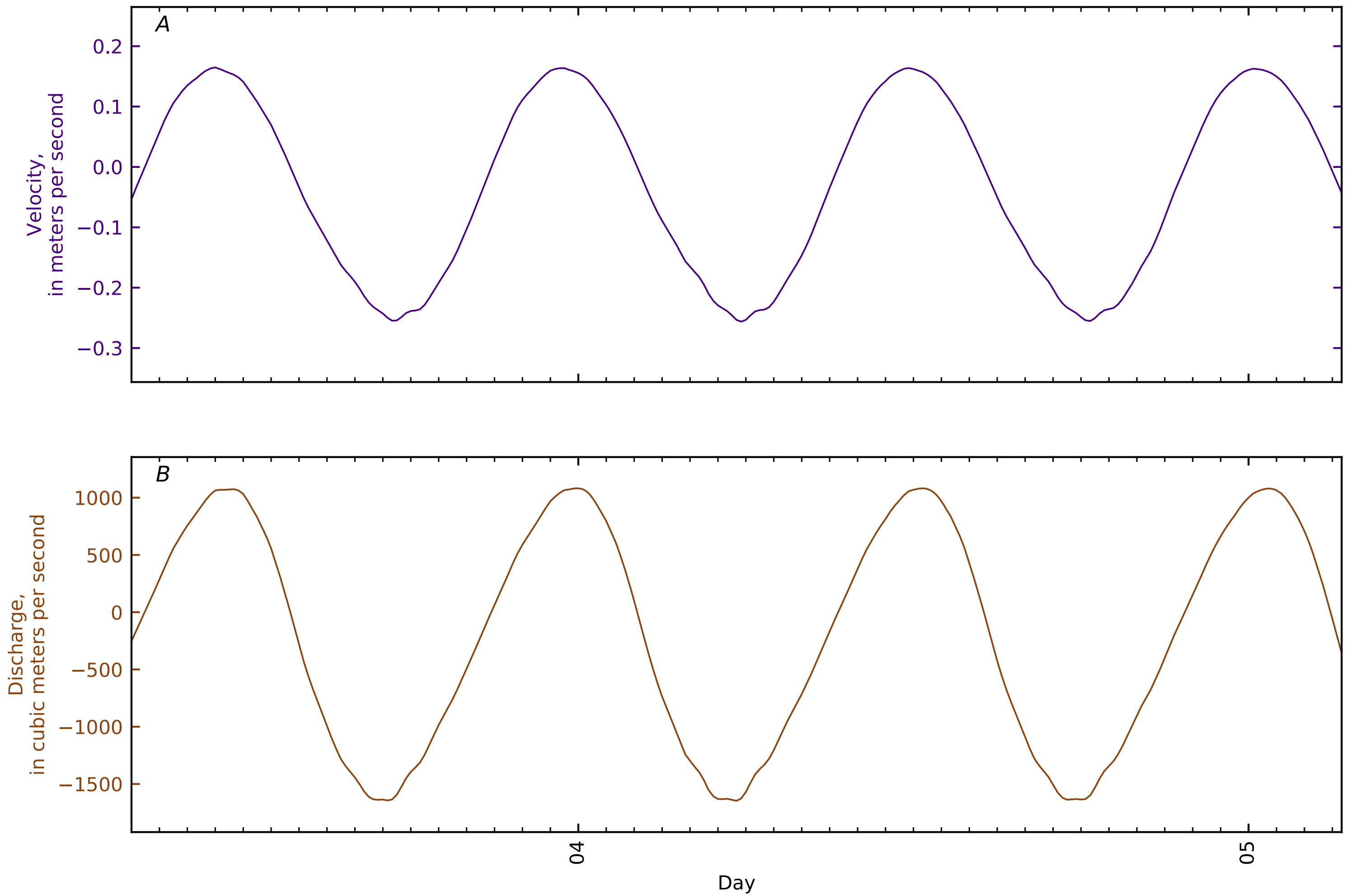

Figure B2-354. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 33, East Ch KM0 at Verona jct at GS Trnsct4. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

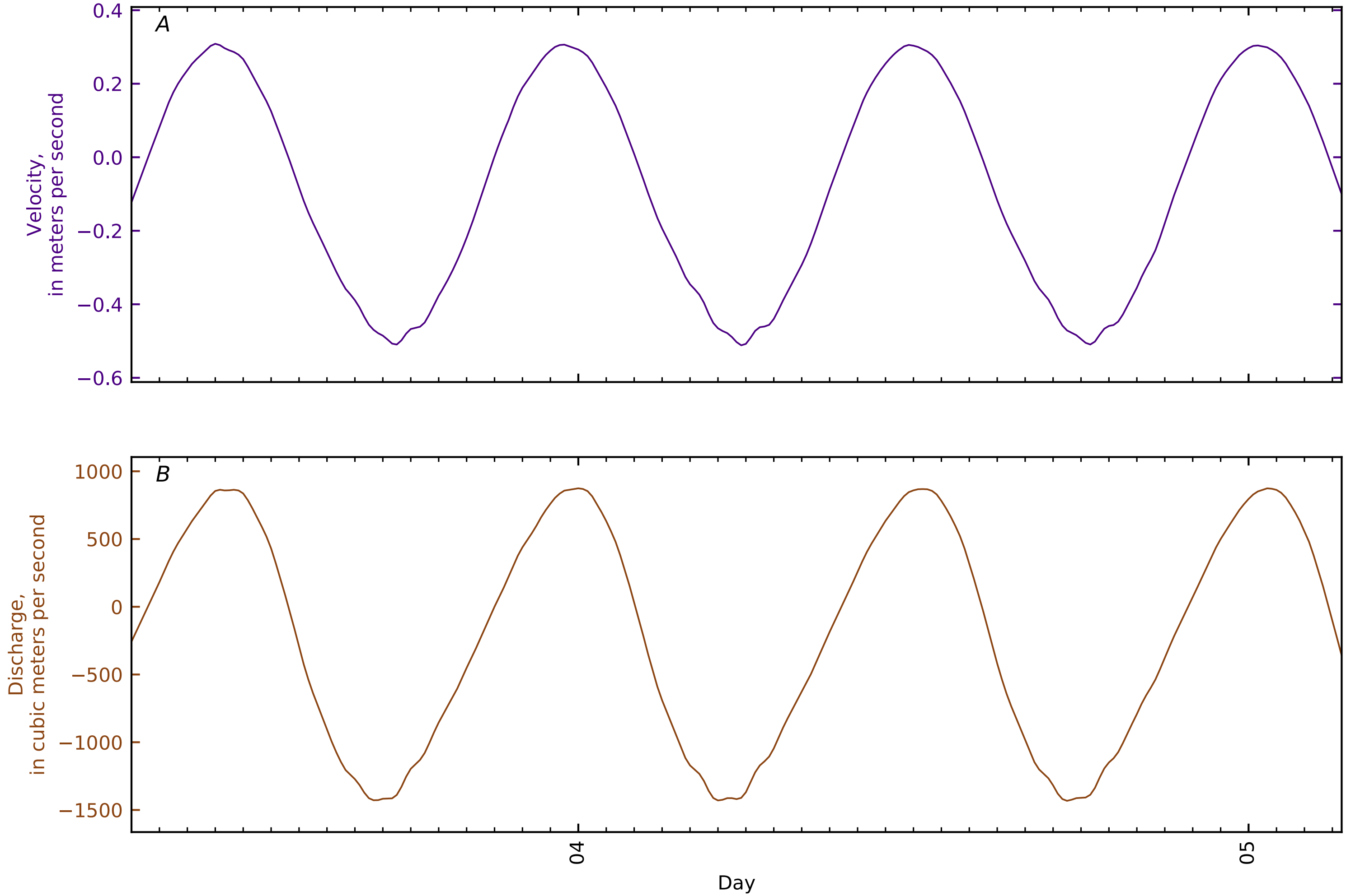

Figure B2-355. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 34, East Ch KM2 d/s Orland Riv. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

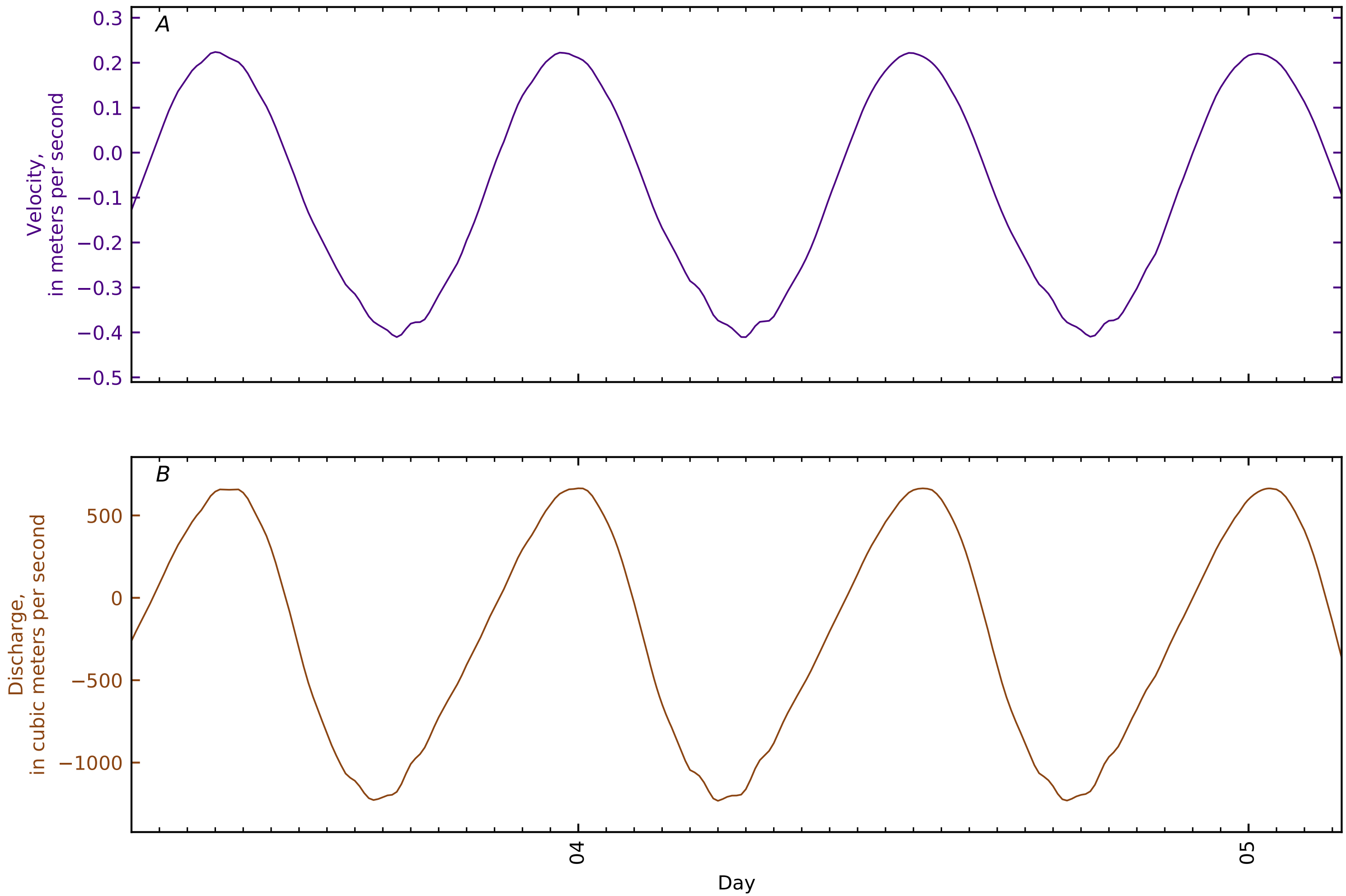

Figure B2-356. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 35, East Ch KM4 d/s Orland Riv. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

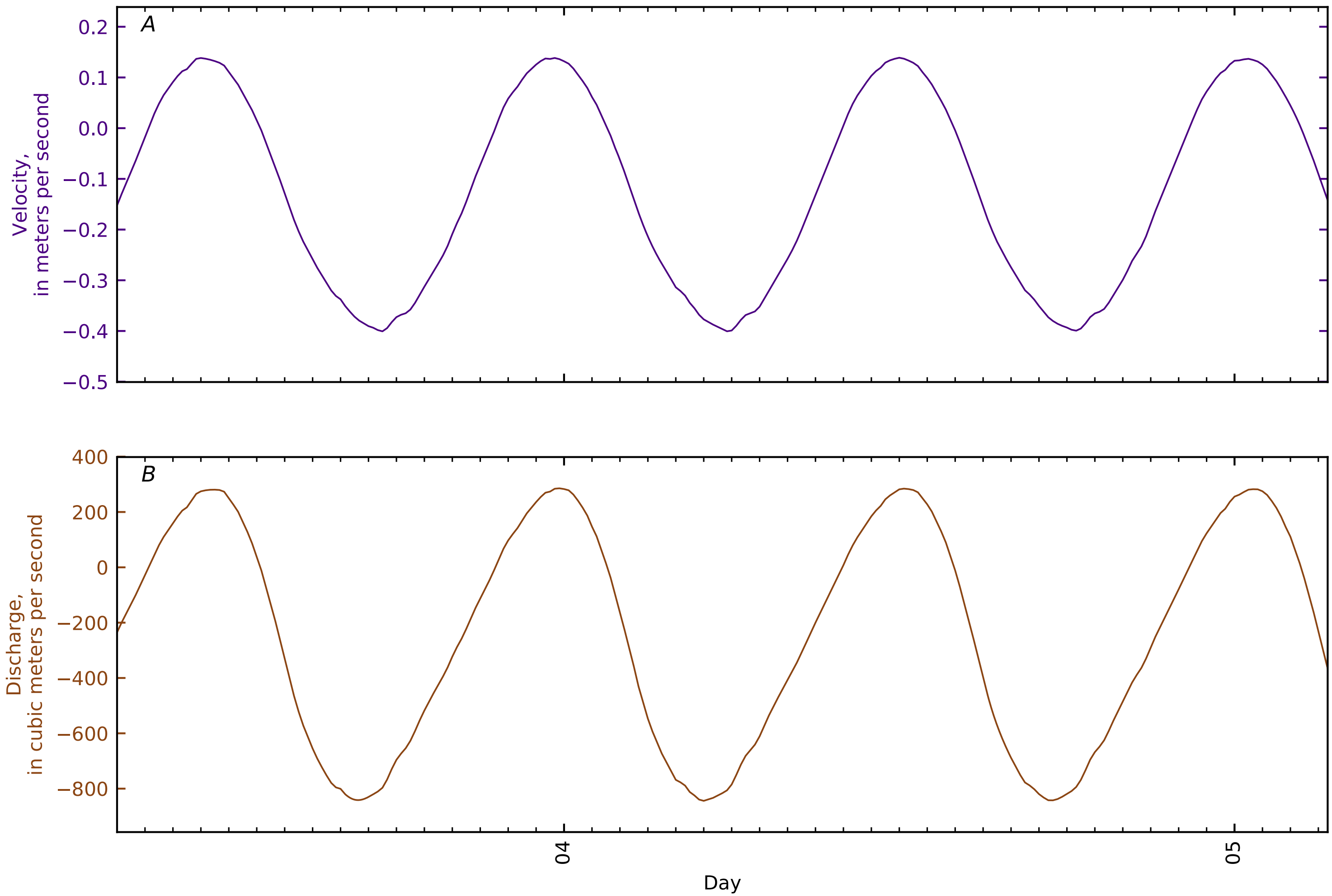

Figure B2-357. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 36, East Ch KM5 u/s Orland Riv. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

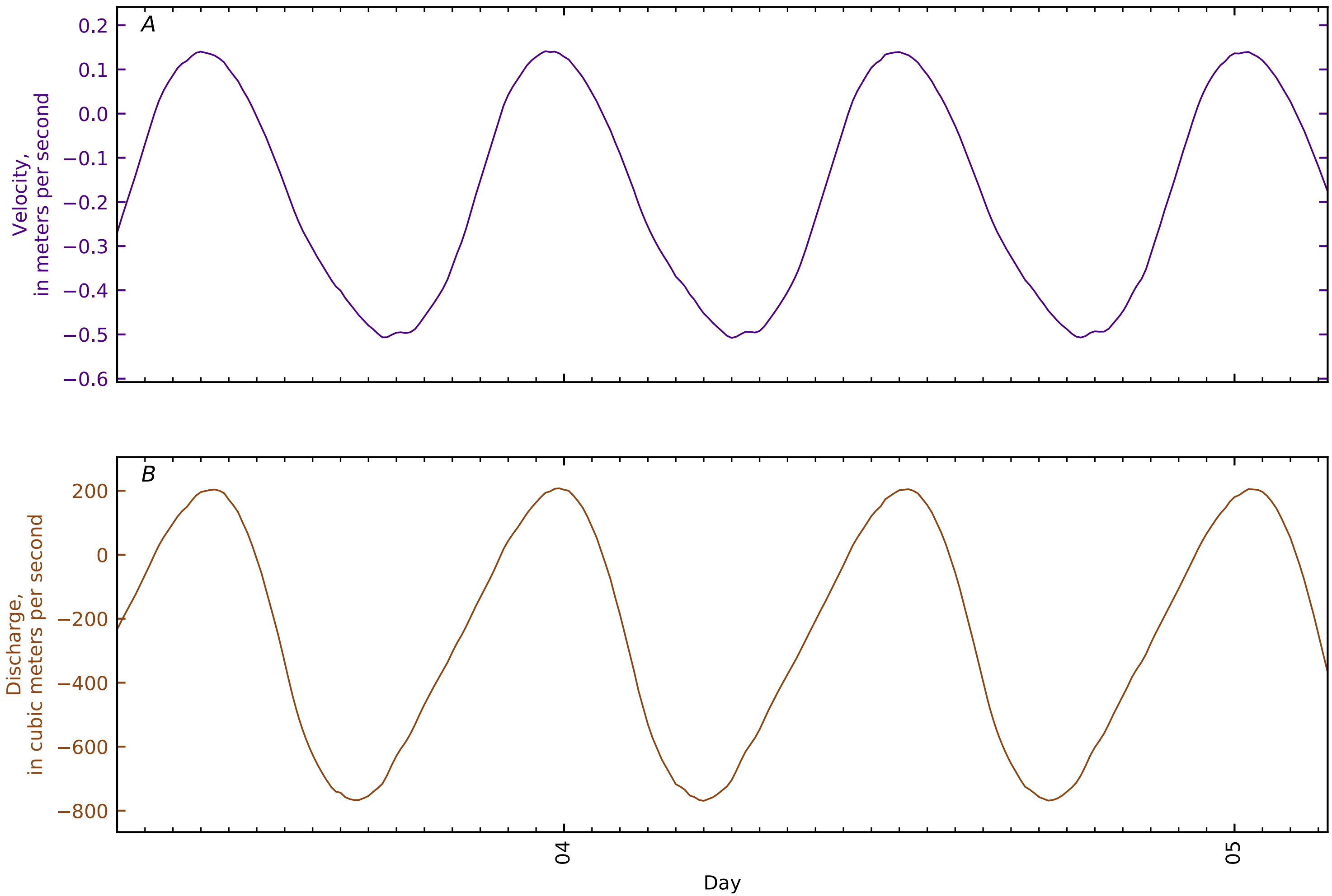

Figure B2-358. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 37, East Ch KM6 u/s Orland Riv d/s flats. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

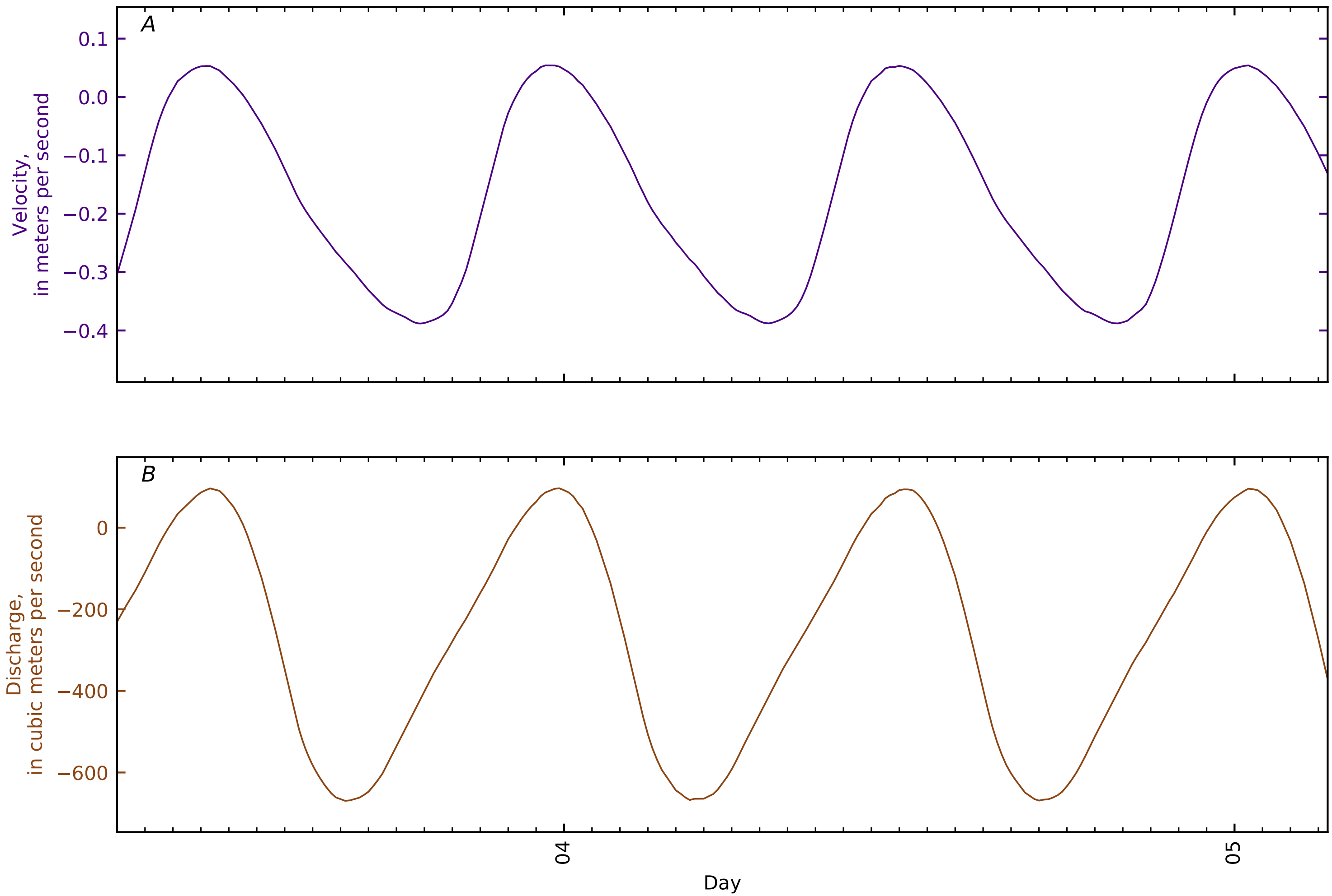

Figure B2-359. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 38, East Ch KM7 d/s Porcupine Is at flats. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

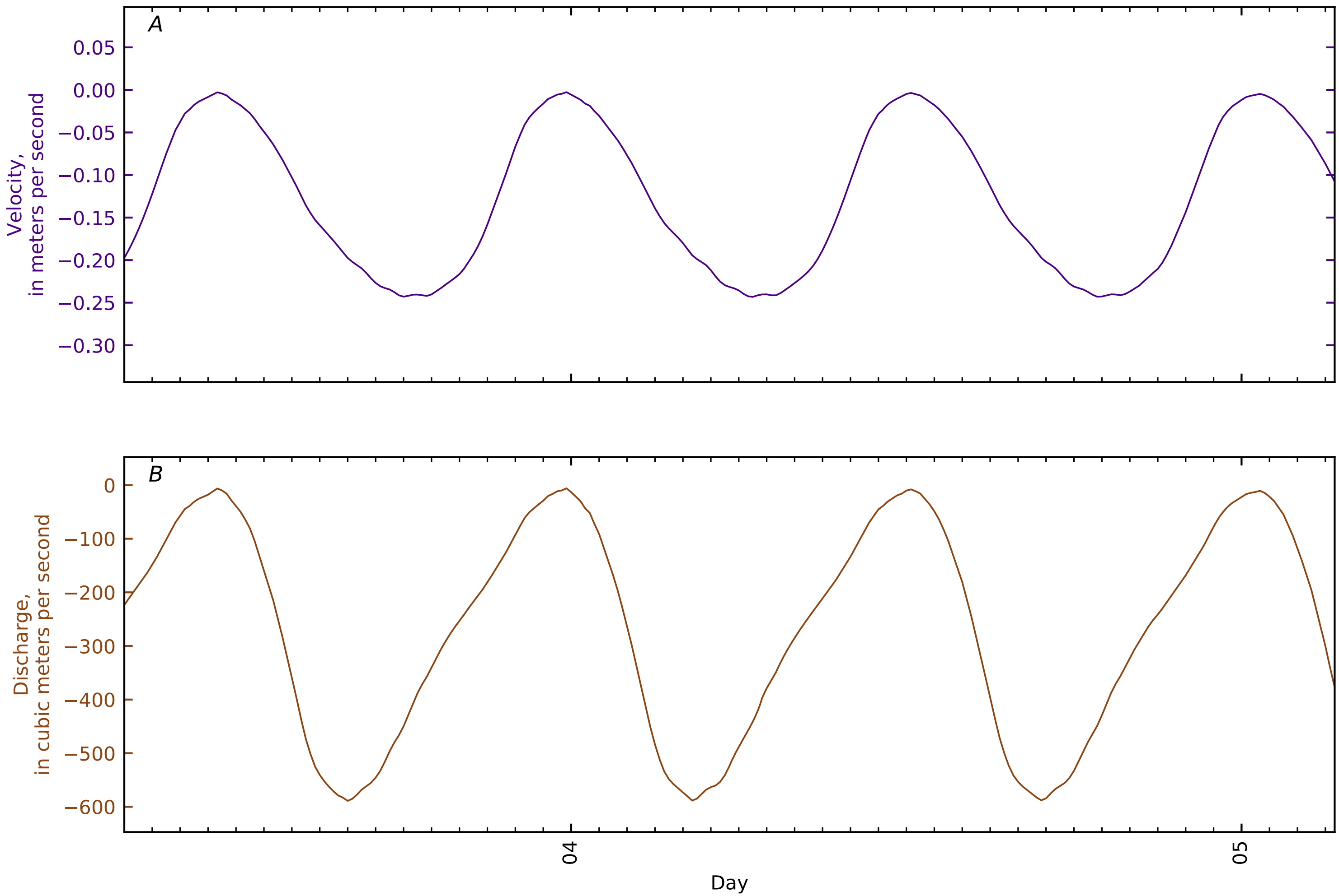

Figure B2-360. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 39, East Ch KM8 u/s flats. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

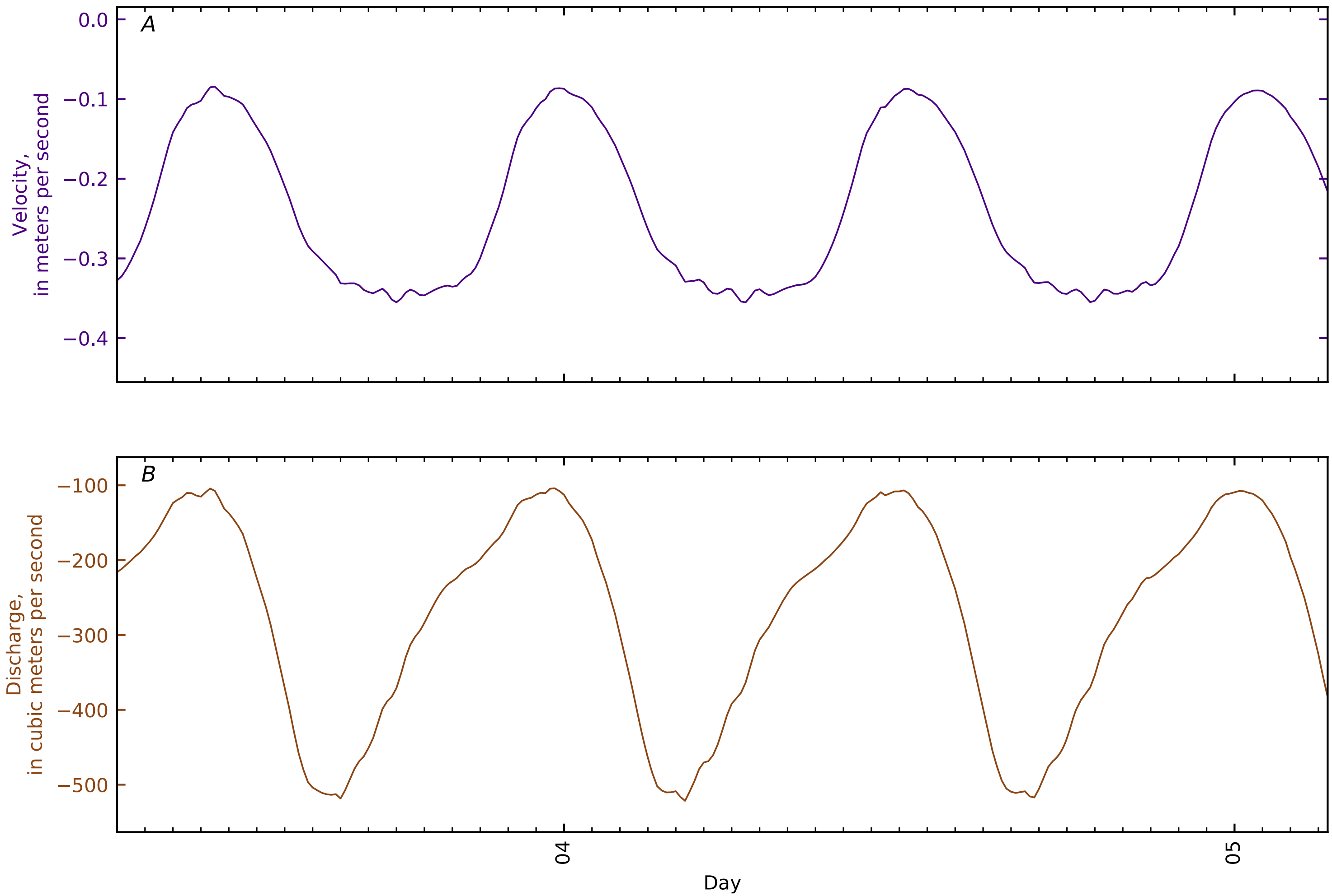

Figure B2-361. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 40, East Ch KM9 north part. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

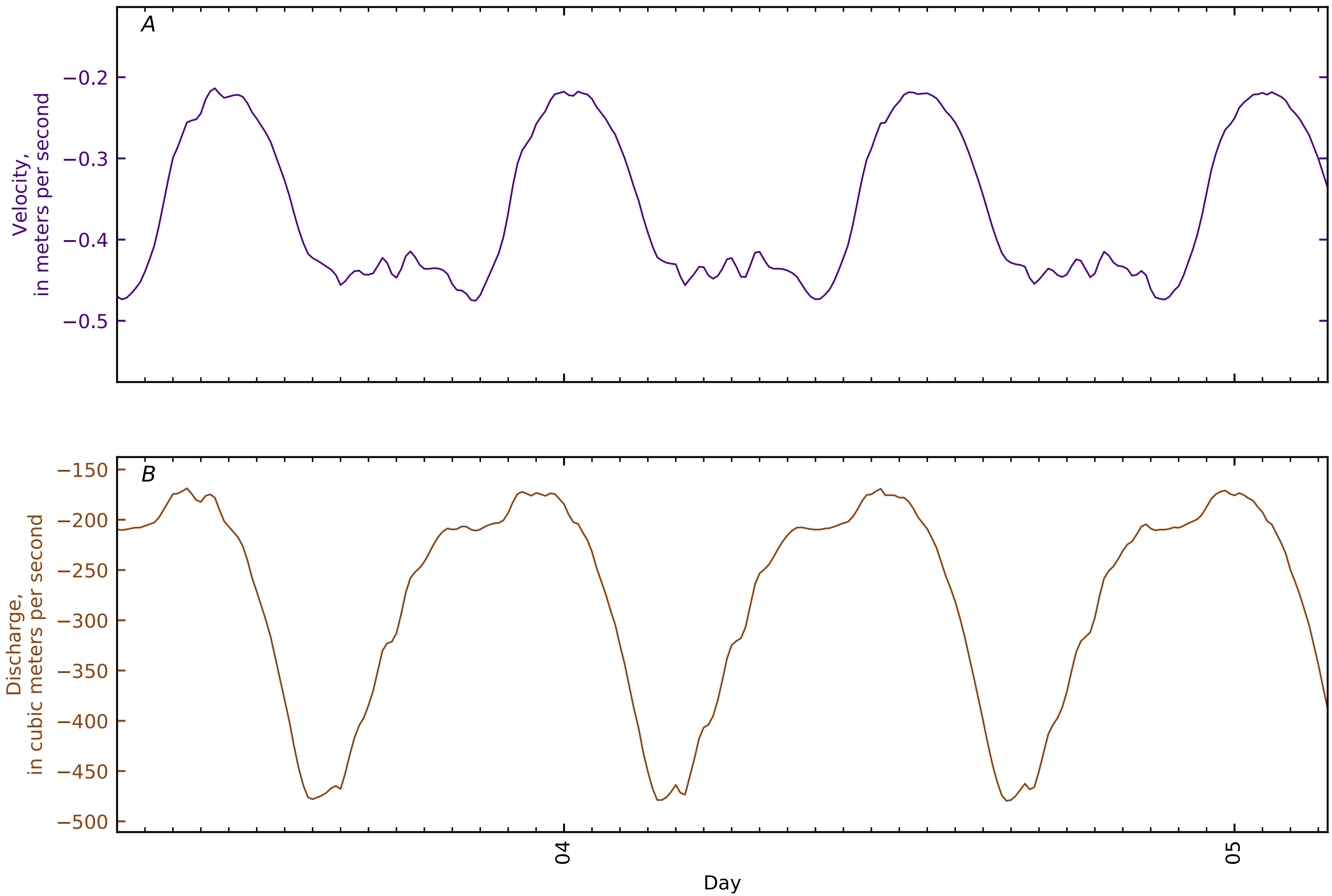

Figure B2-362. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 41, East Channel KM10 GS 443409068471801 at Bucksport d/s conf Silv. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

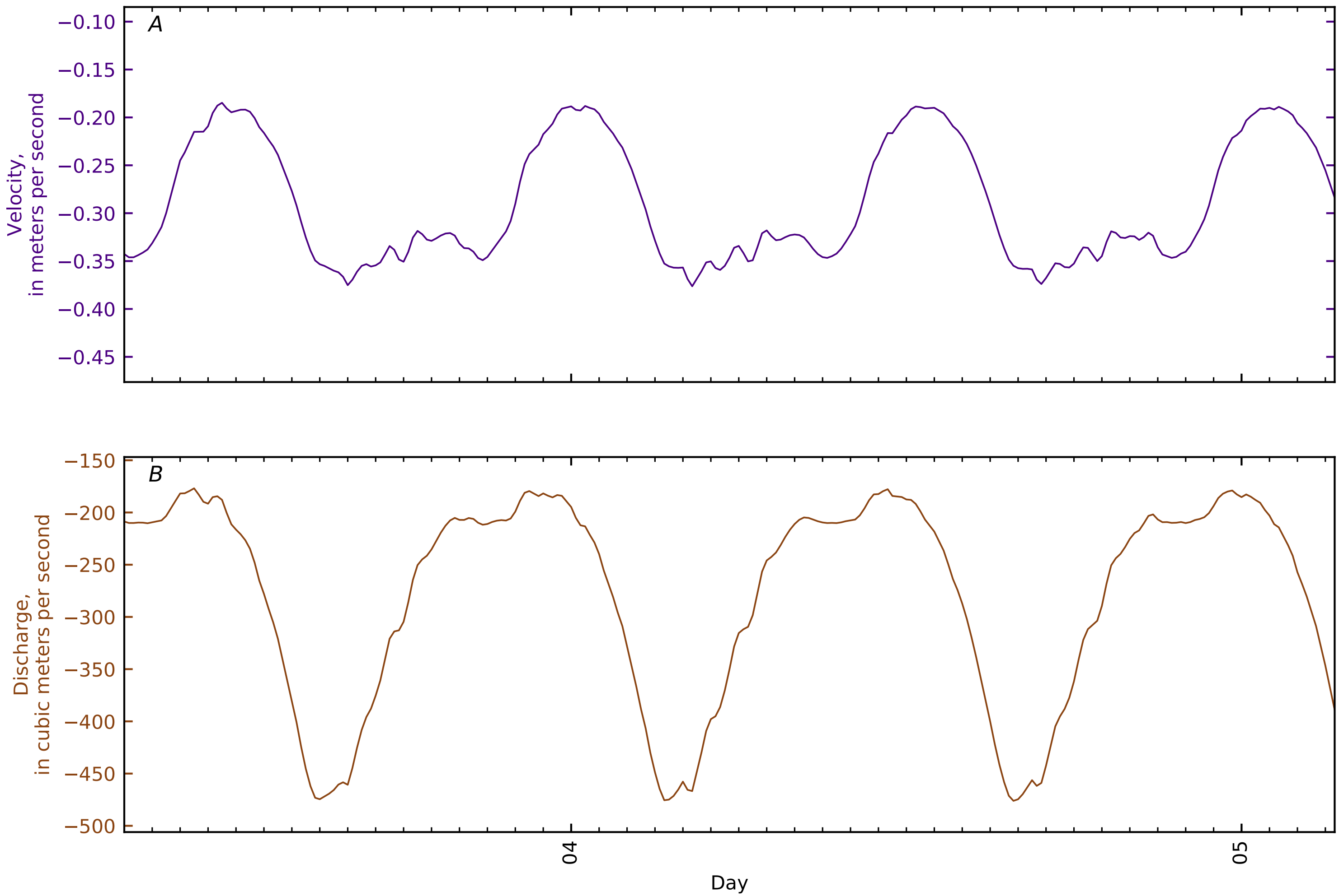

Figure B2-363. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 42, East Ch KM10.2 Bucksport u/s conf Silver Lake discharge. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

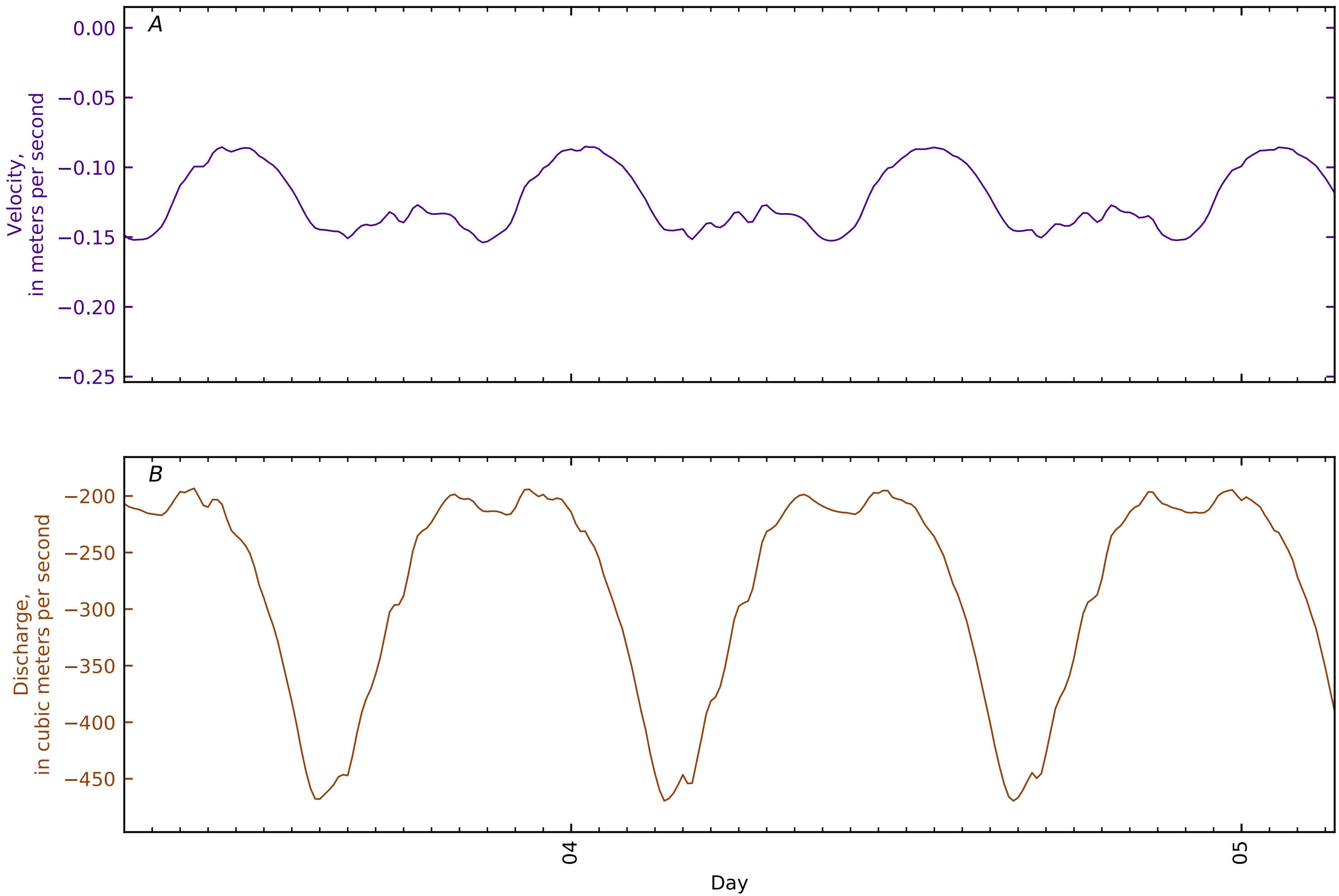

Figure B2-364. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 43, East Ch KM10.5 at Penob River split. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

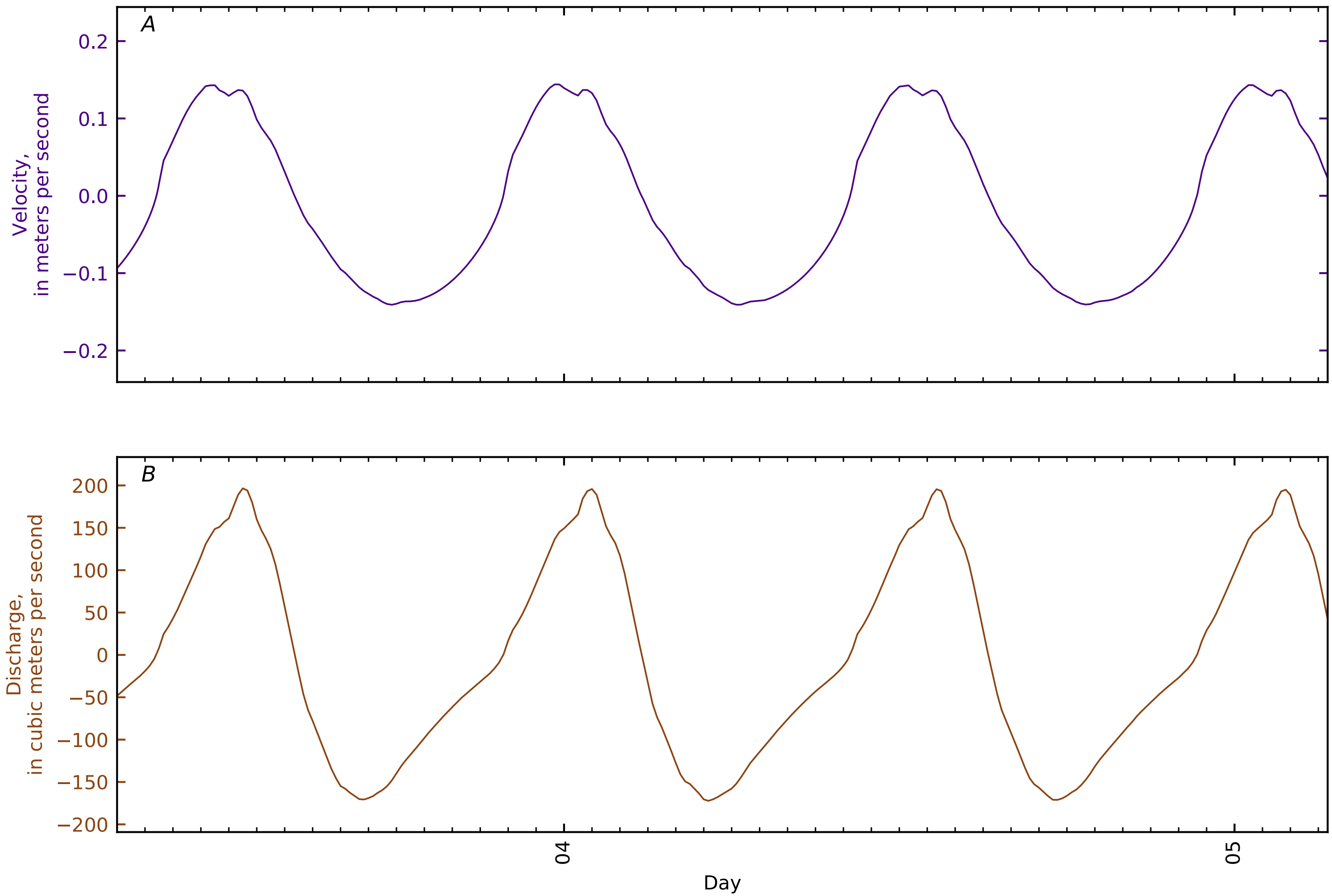

Figure B2-365. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 44, Mendall Marsh KM0.4 at Penob Riv KM17.3 GS Trnsct2. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

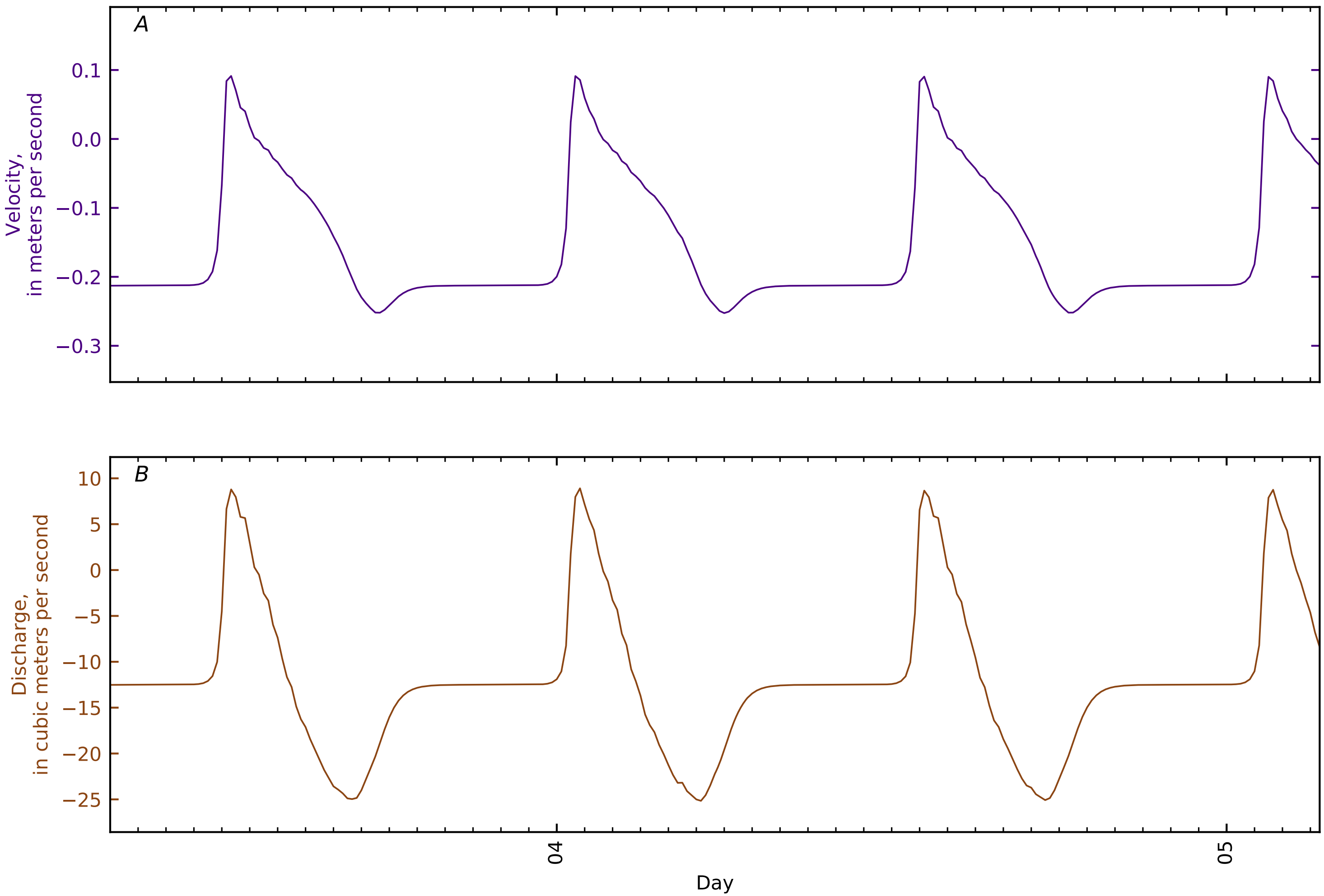

Figure B2-366. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 45, Mendall Marsh KM1 conf North Branch Marsh Riv. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

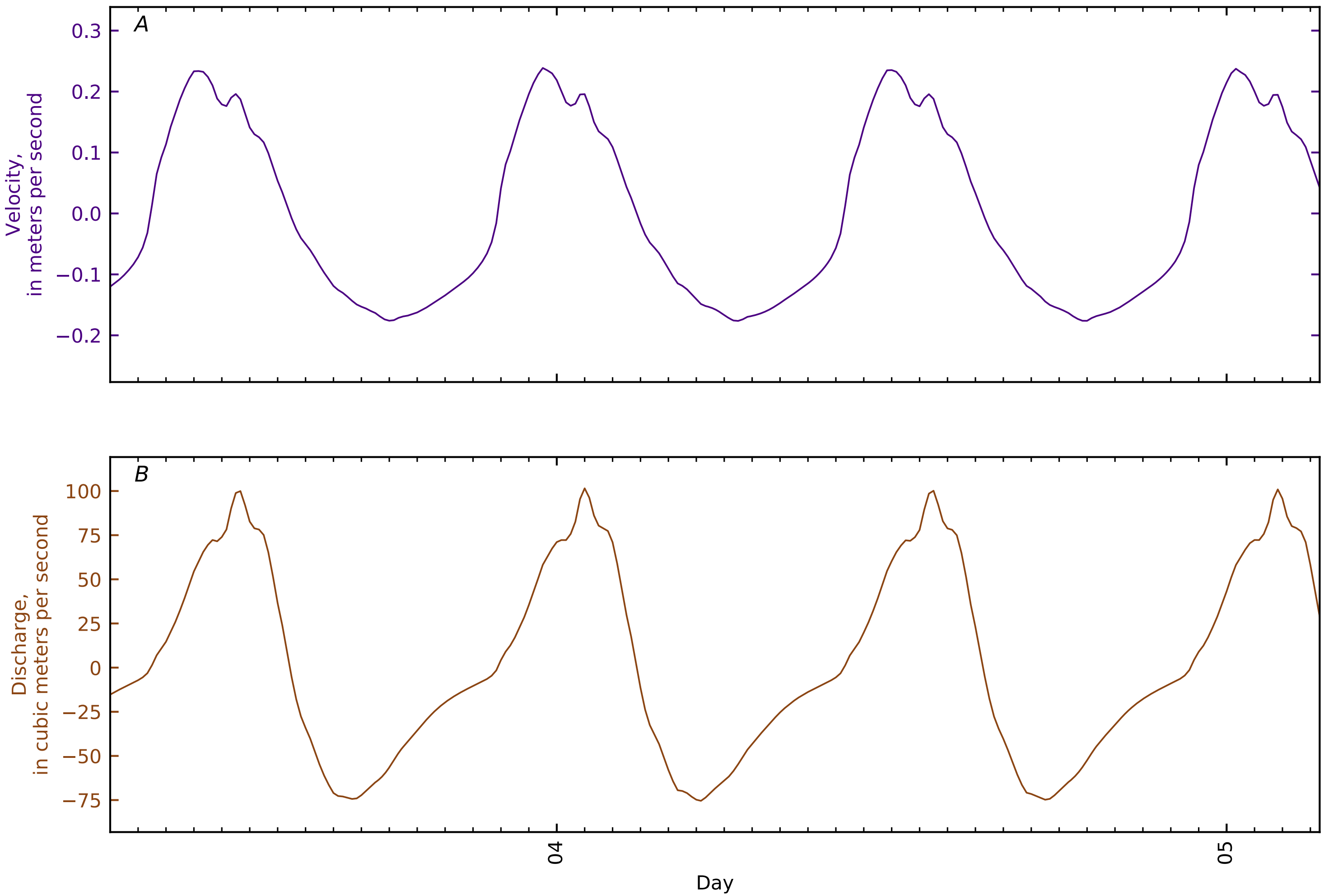

Figure B2-367. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 46, Mendall Marsh KM1.7 at boat launch. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

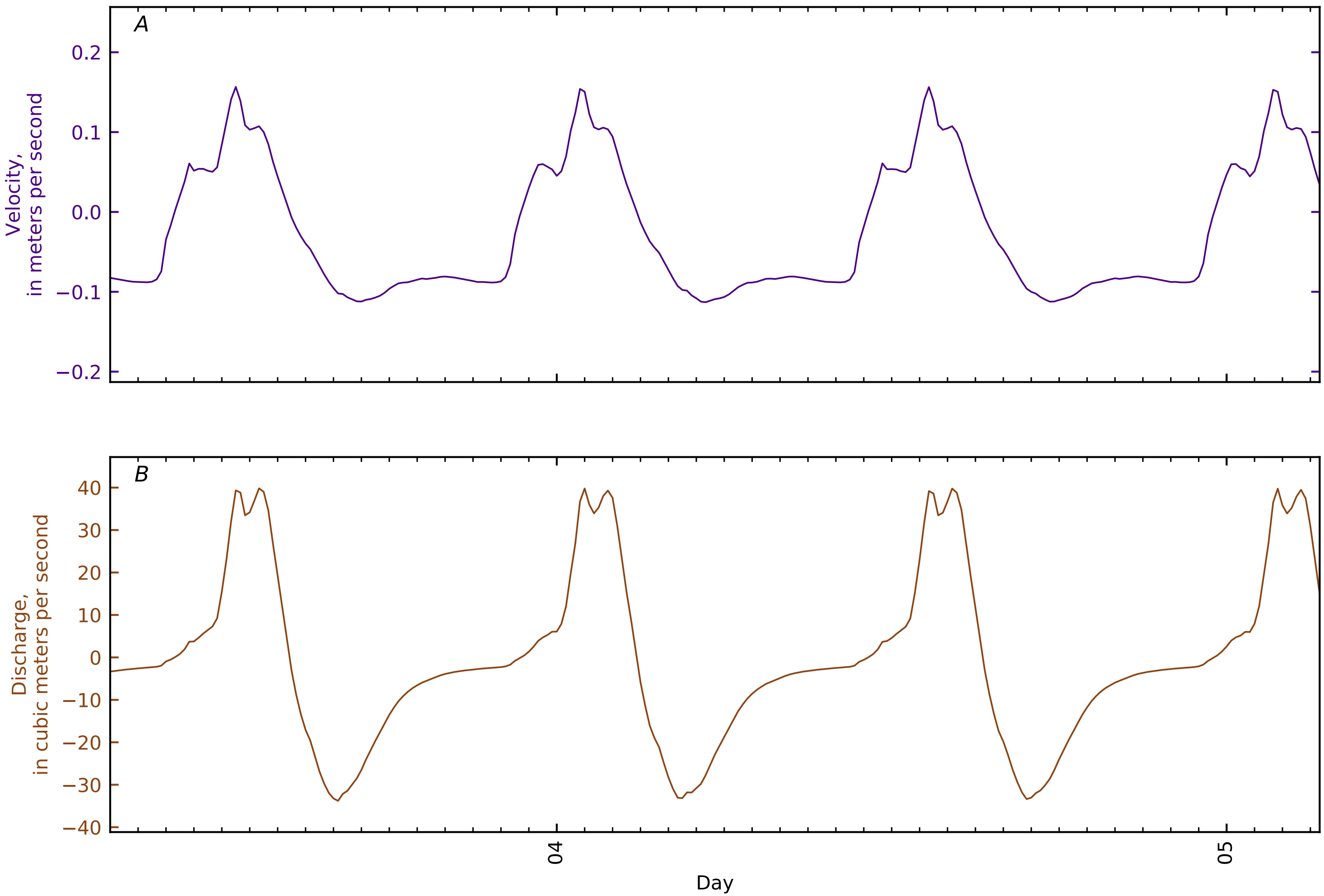

Figure B2-368. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 47, Mendall Marsh KM3 nr Misquito Mtn. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

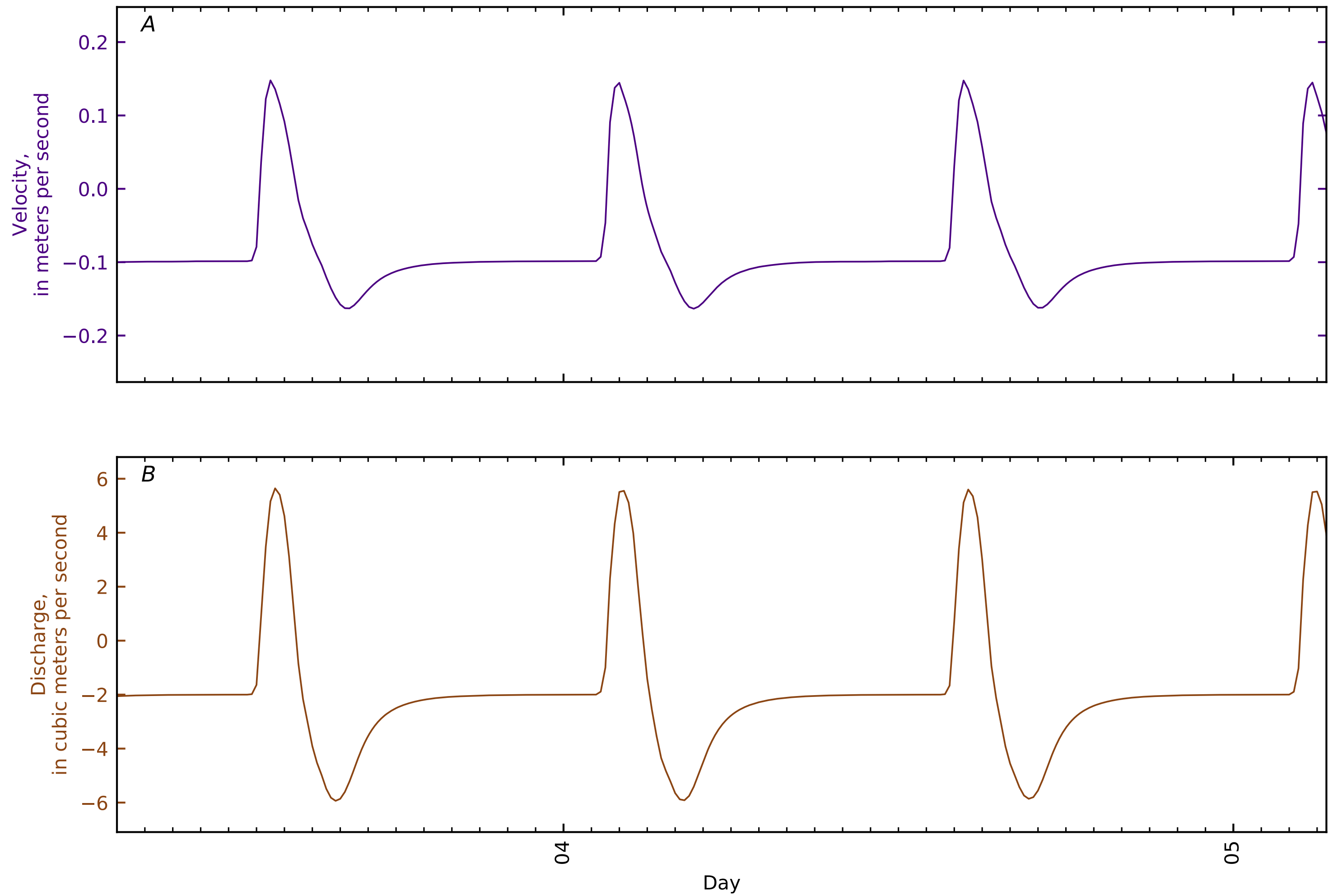

Figure B2-369. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 48, Mendall Marsh KM4.6. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

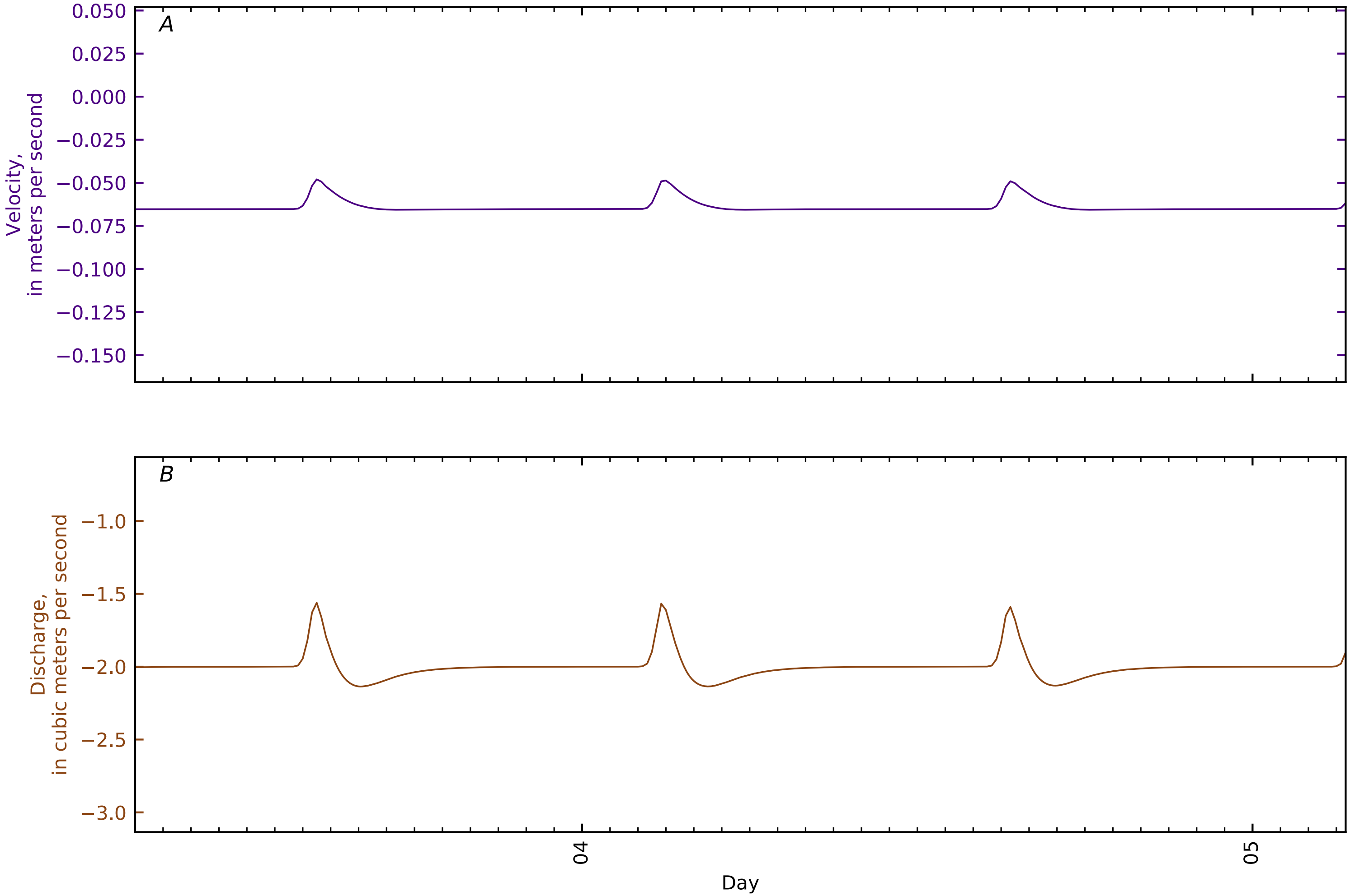

Figure B2-370. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 49, Mendall Marsh KM5.7 nr conf Colson Str. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

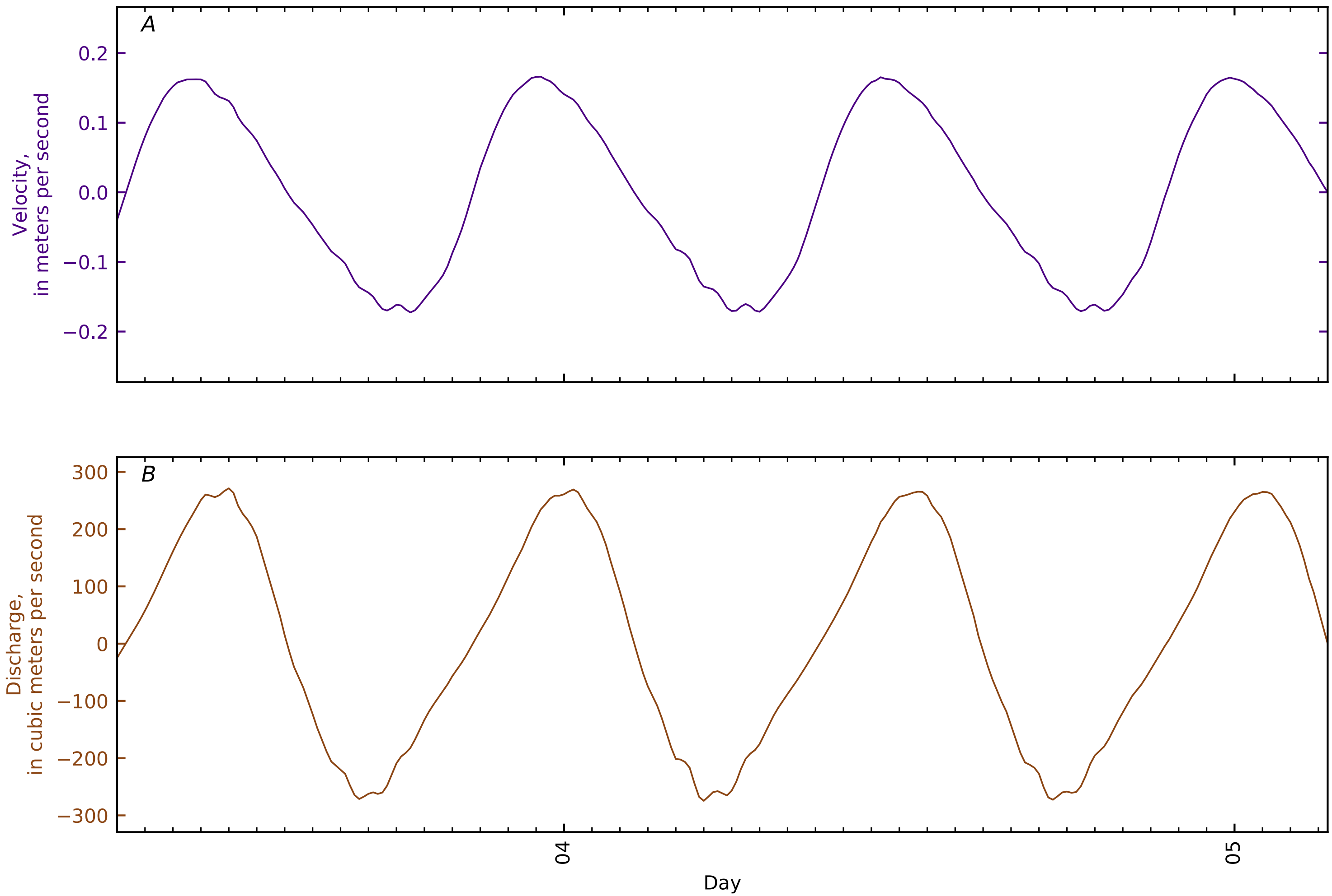

Figure B2-371. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 50, Orland Riv KM0 conf East Ch. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

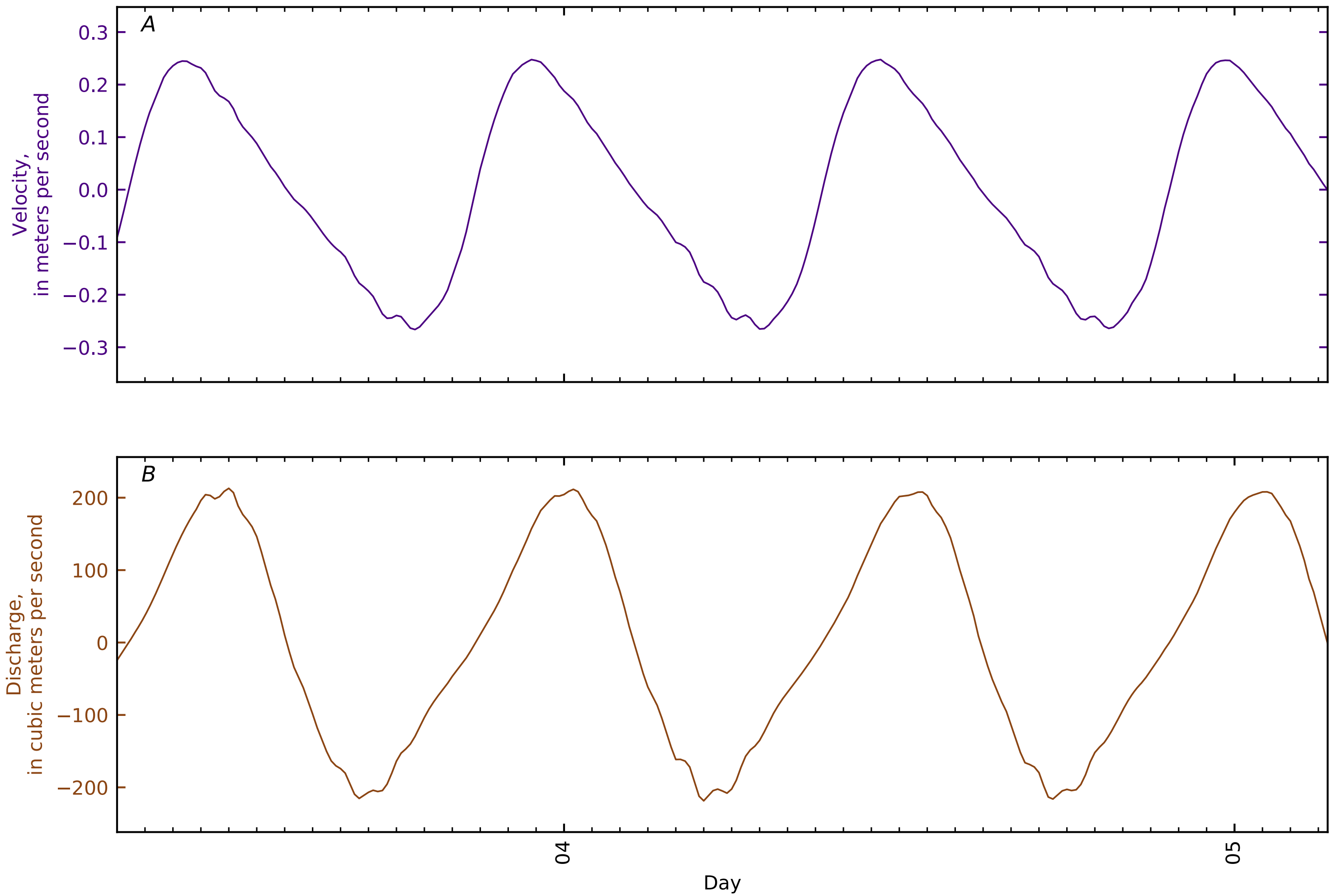

Figure B2-372. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 51, Orland Riv KM0.5. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

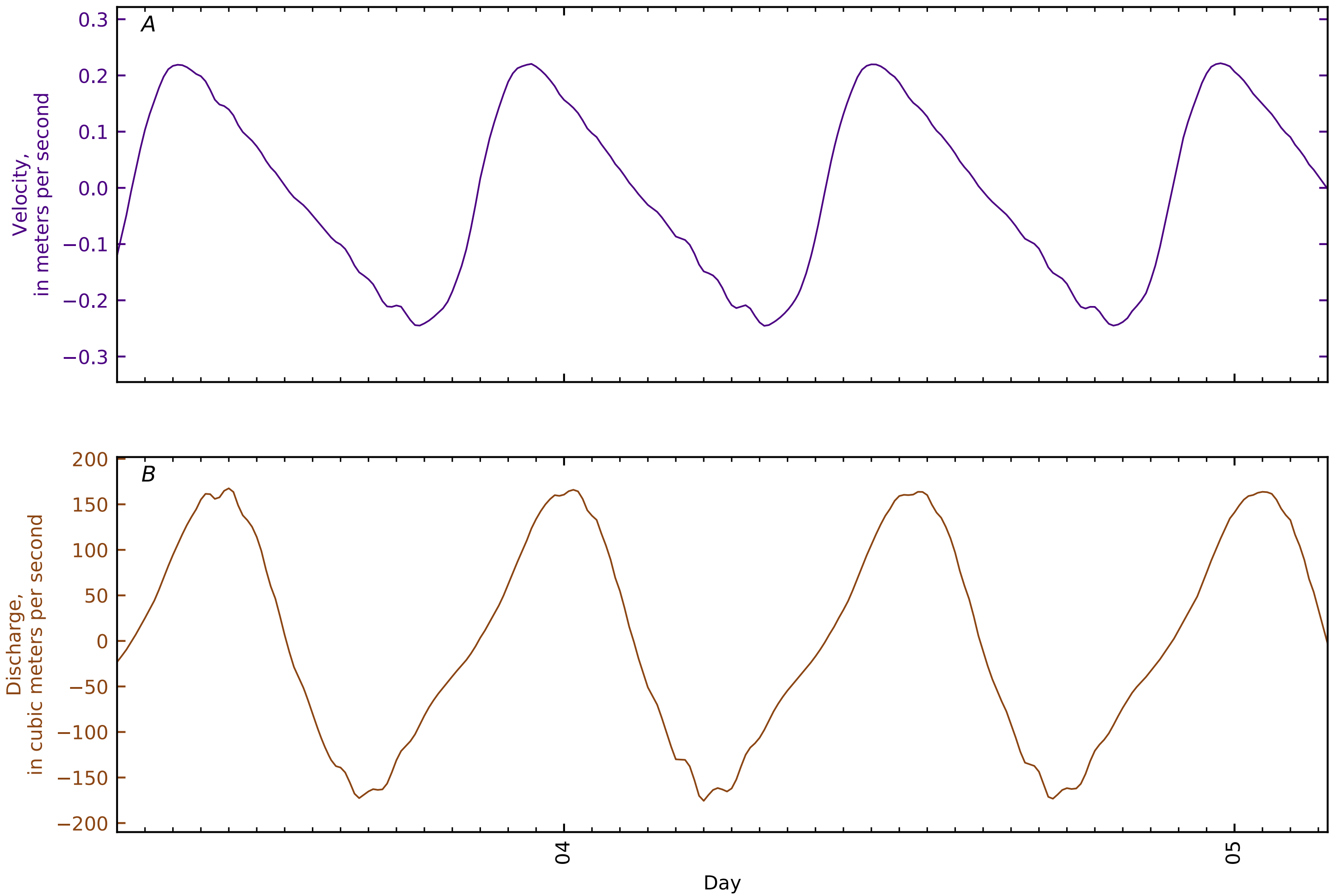

Figure B2-373. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 52, Orland Riv KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

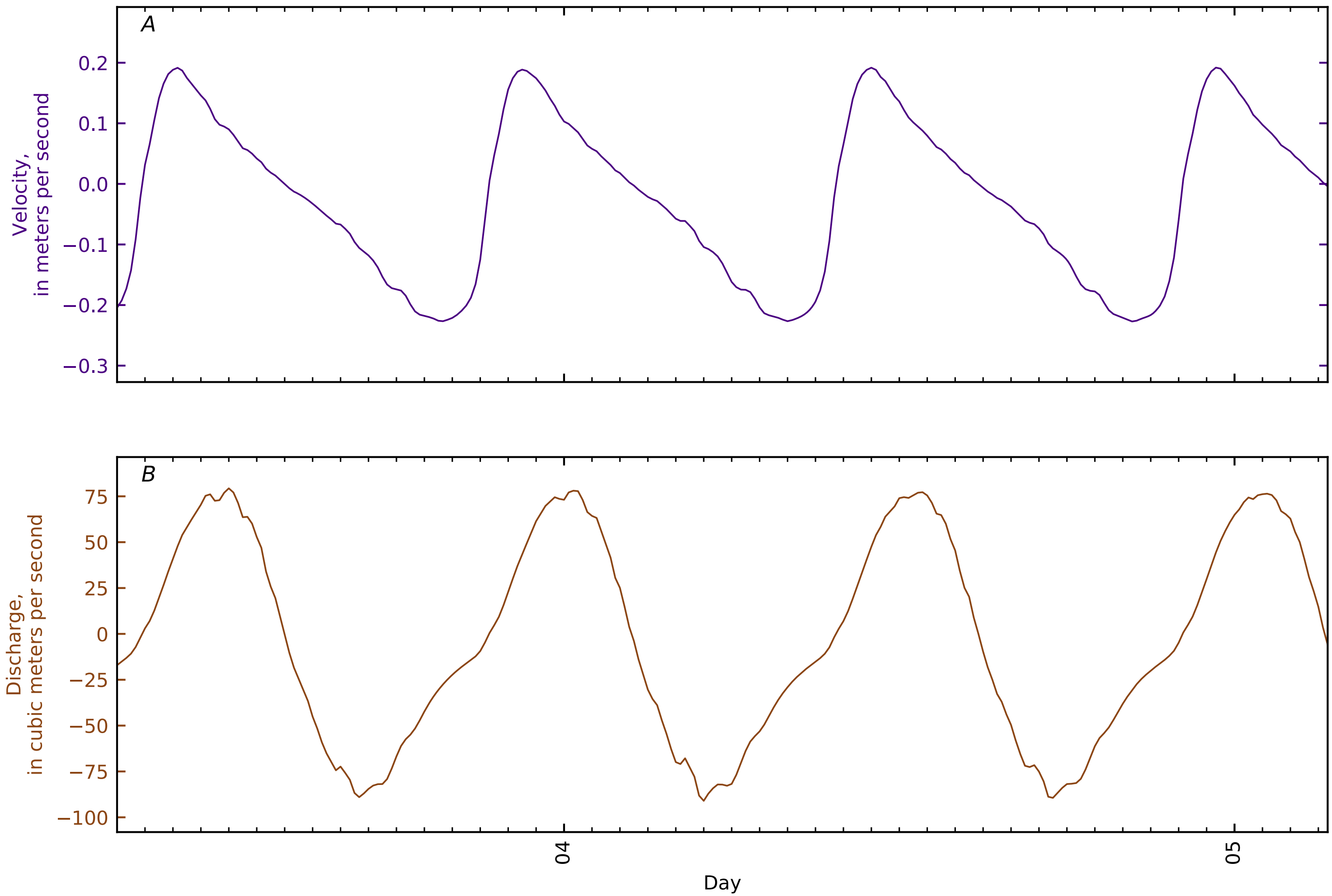

Figure B2-374. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 53, Orland Riv KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

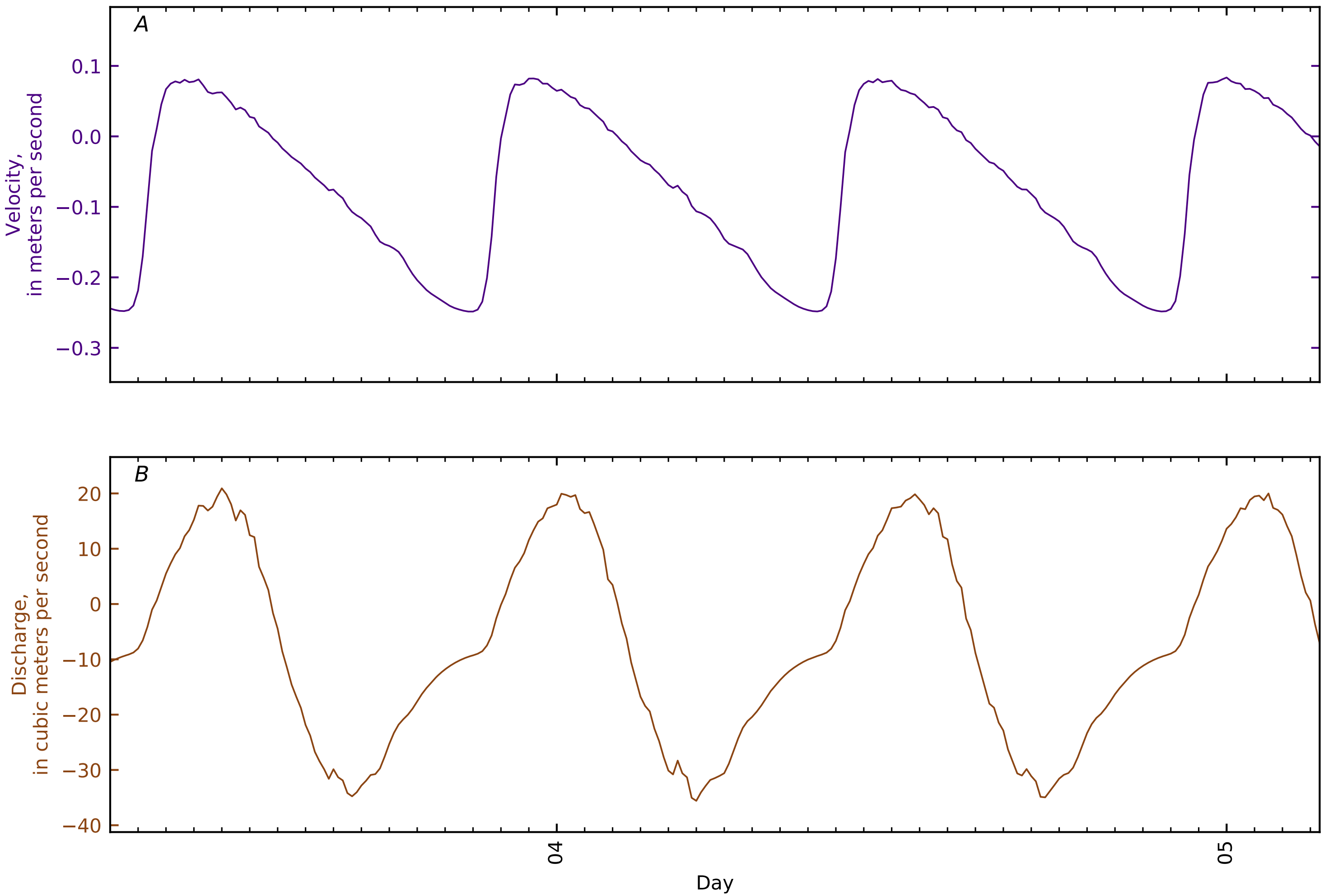

Figure B2-375. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 54, Orland Riv KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

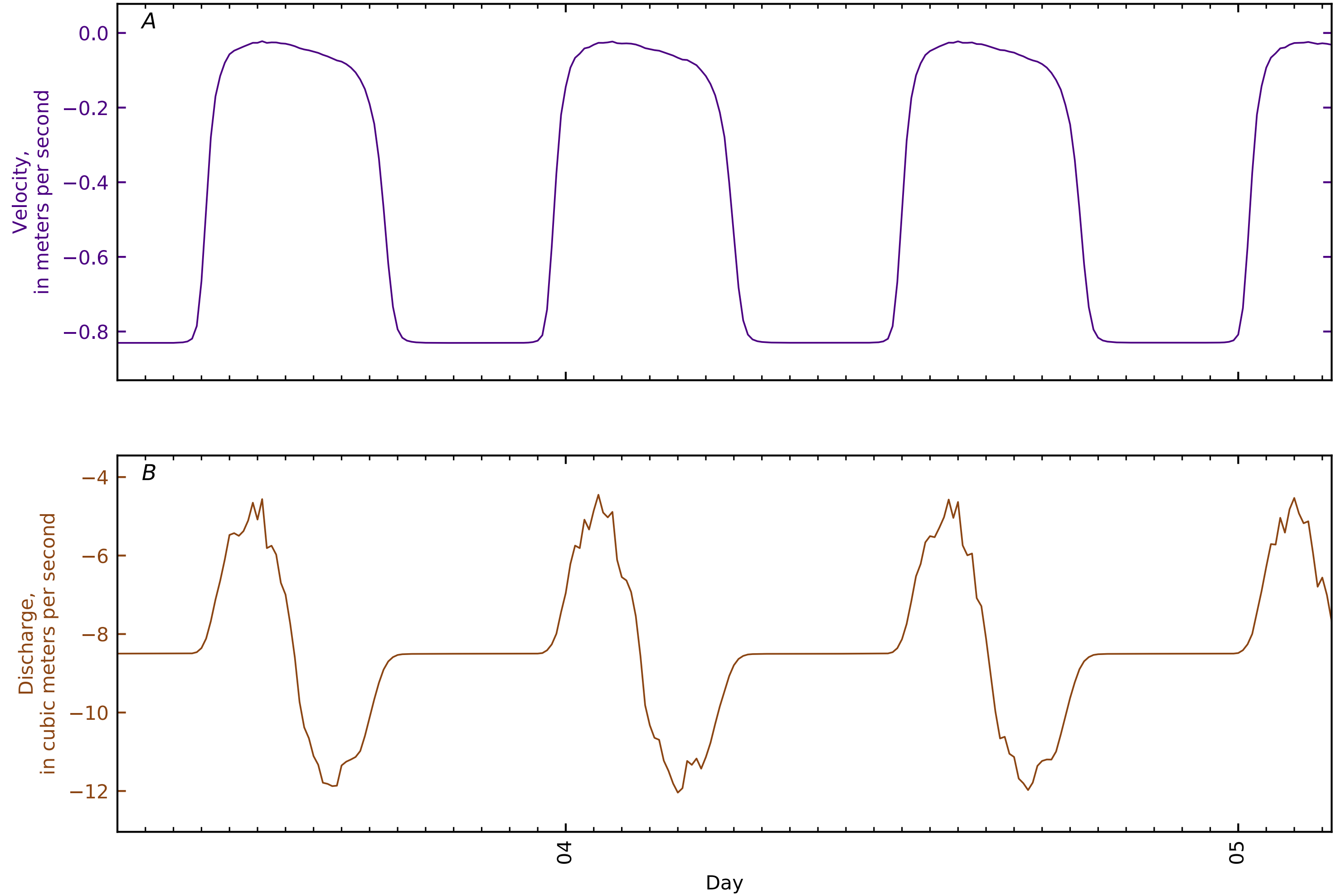

Figure B2-376. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 55, Orland Riv KM3.7 d/s Orland Dam. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

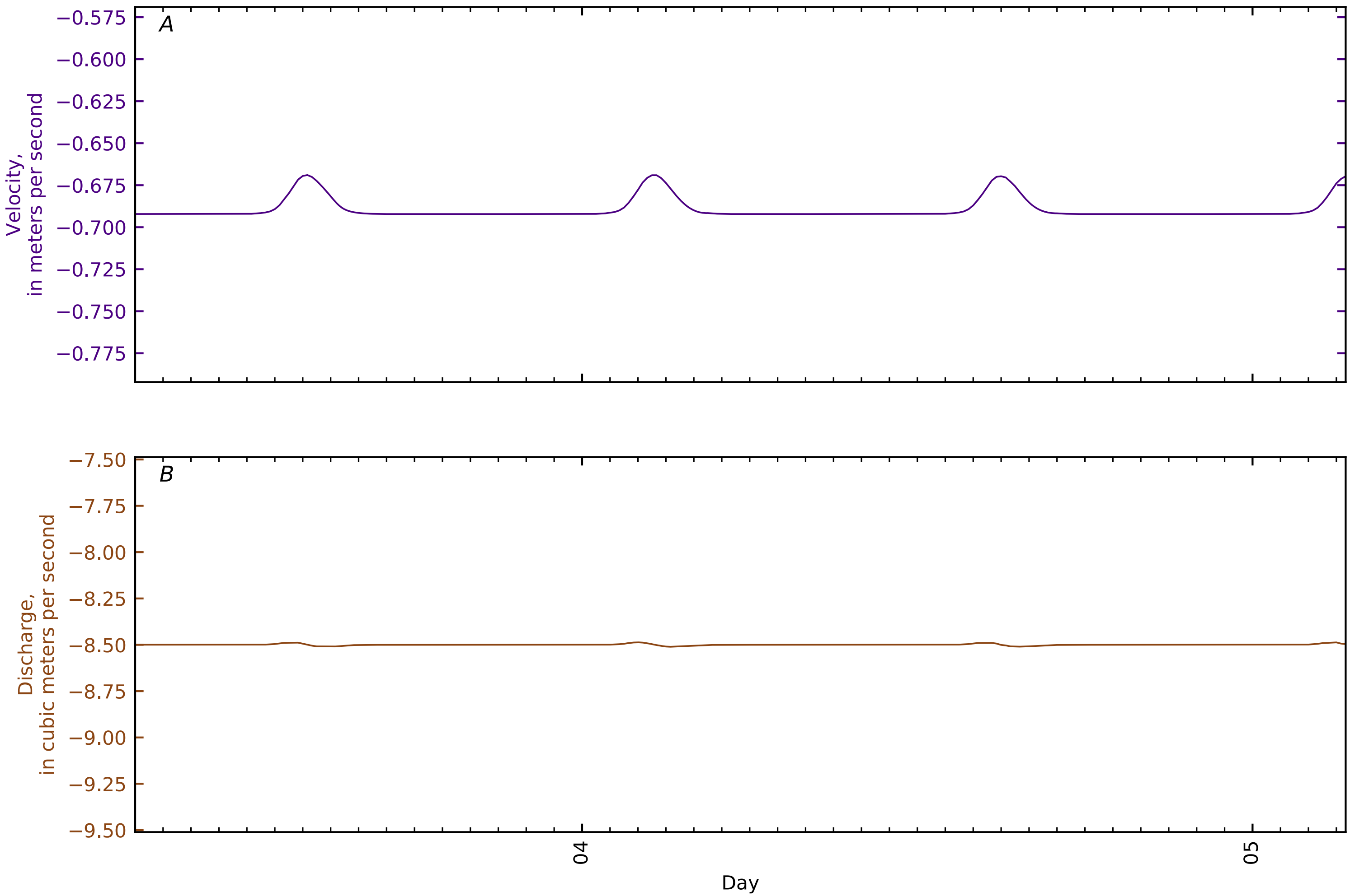

Figure B2-377. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 56, Orland Riv KM3.9 at Orland Dam. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

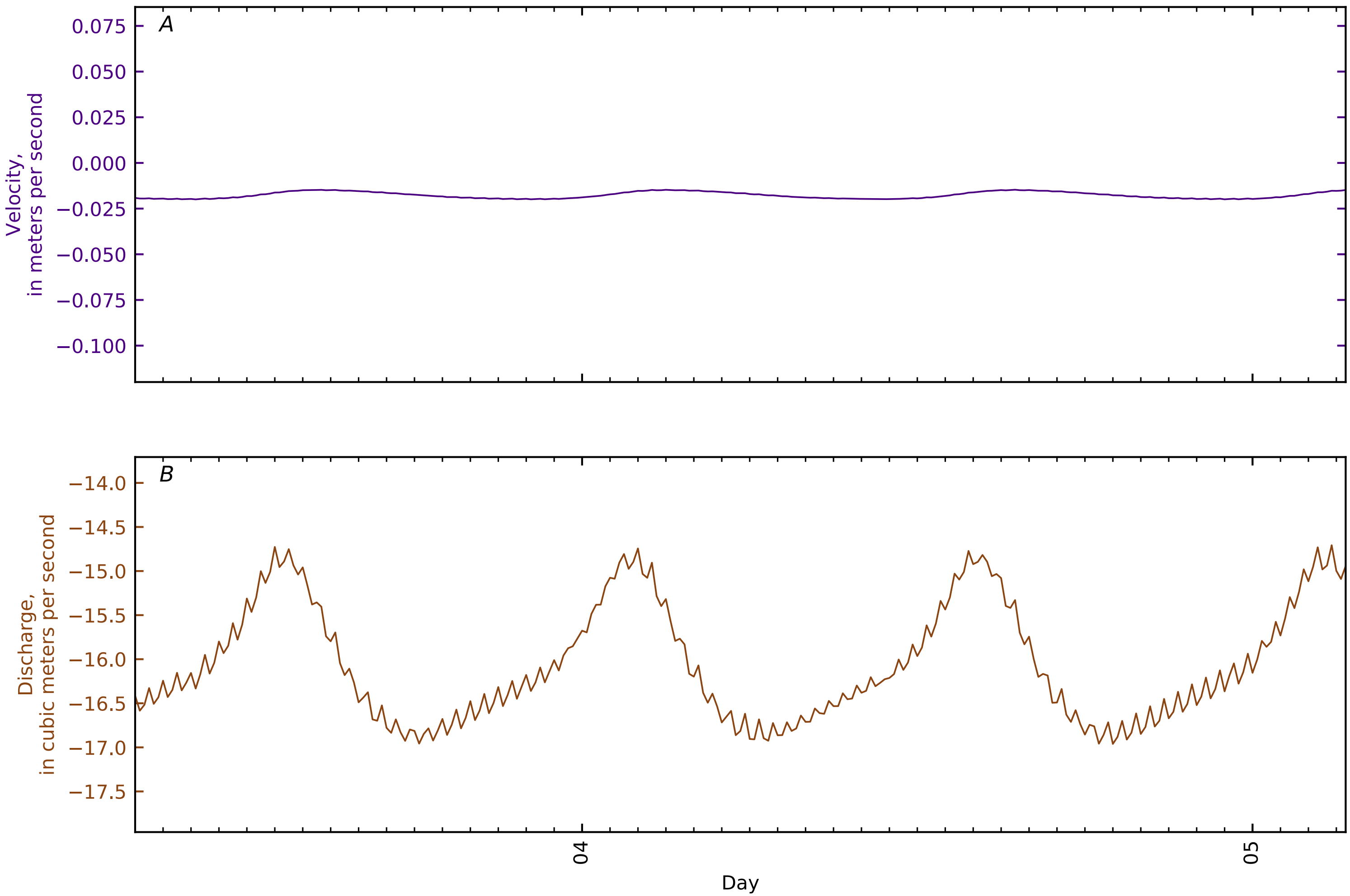

Figure B2-378. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 57, Kenduskeag Str conf Penob Riv KM43.3 Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

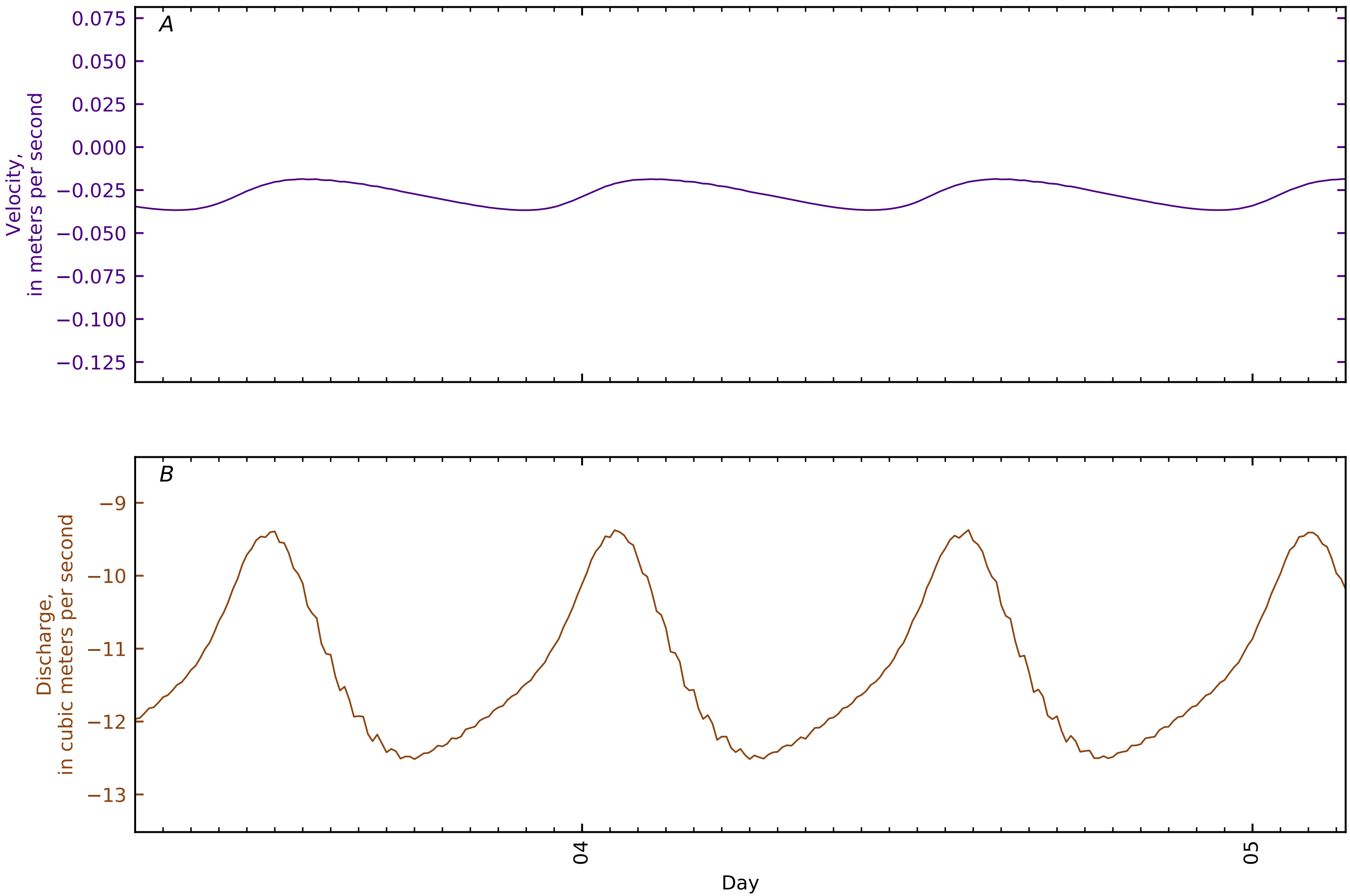

Figure B2-379. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 58, Souadabscook Str conf Penob Riv KM35.3 Hampden. Flow forced by a two-percent annual-exceedance-probability flood in the Penobscot River at Eddington.

APPENDIX B3

Episodic Riverine Event: Mendall Marsh

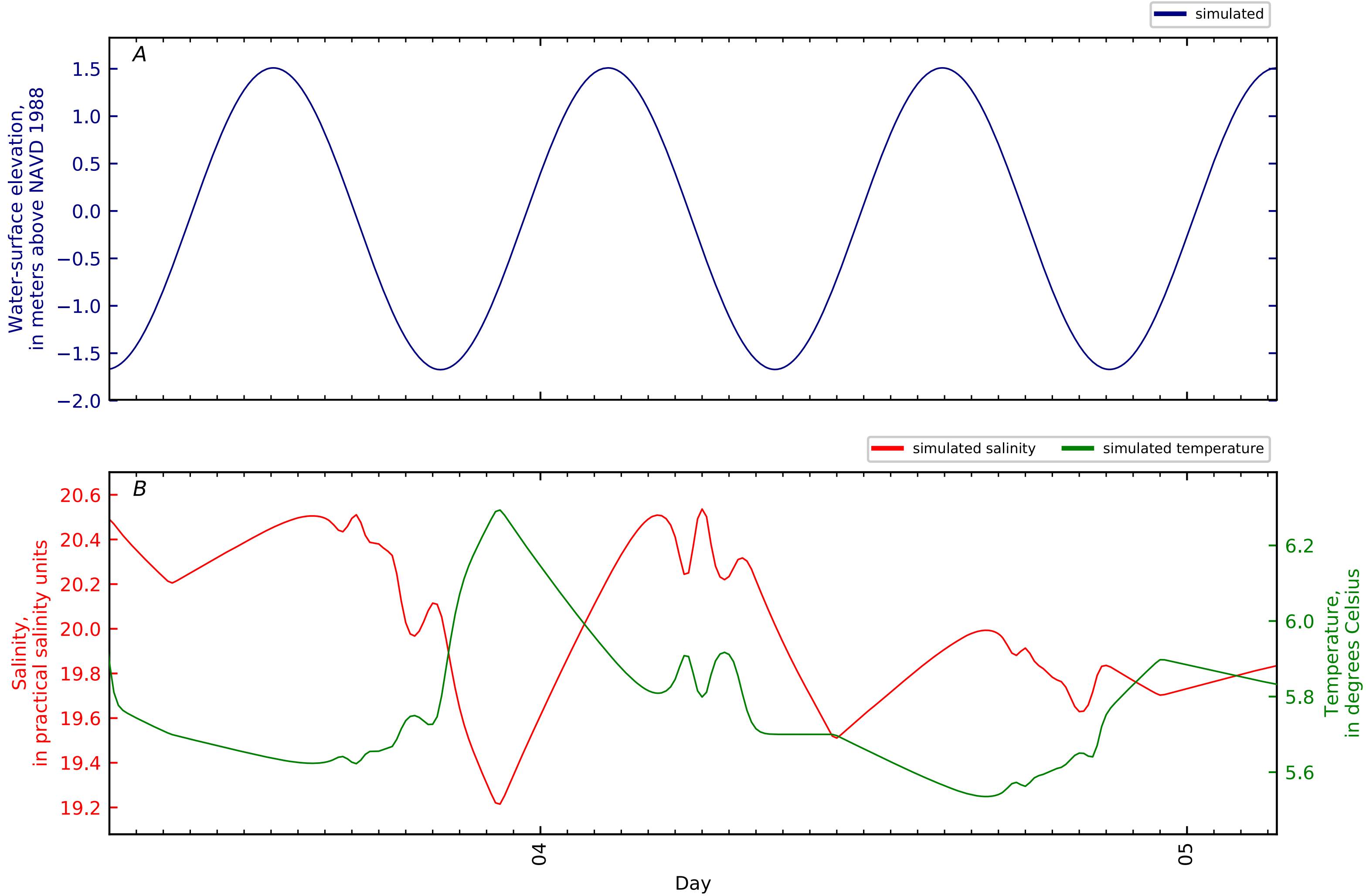

Figure B3-1. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 0, Penob Riv -KM5 nr Cape Jellison boundary. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

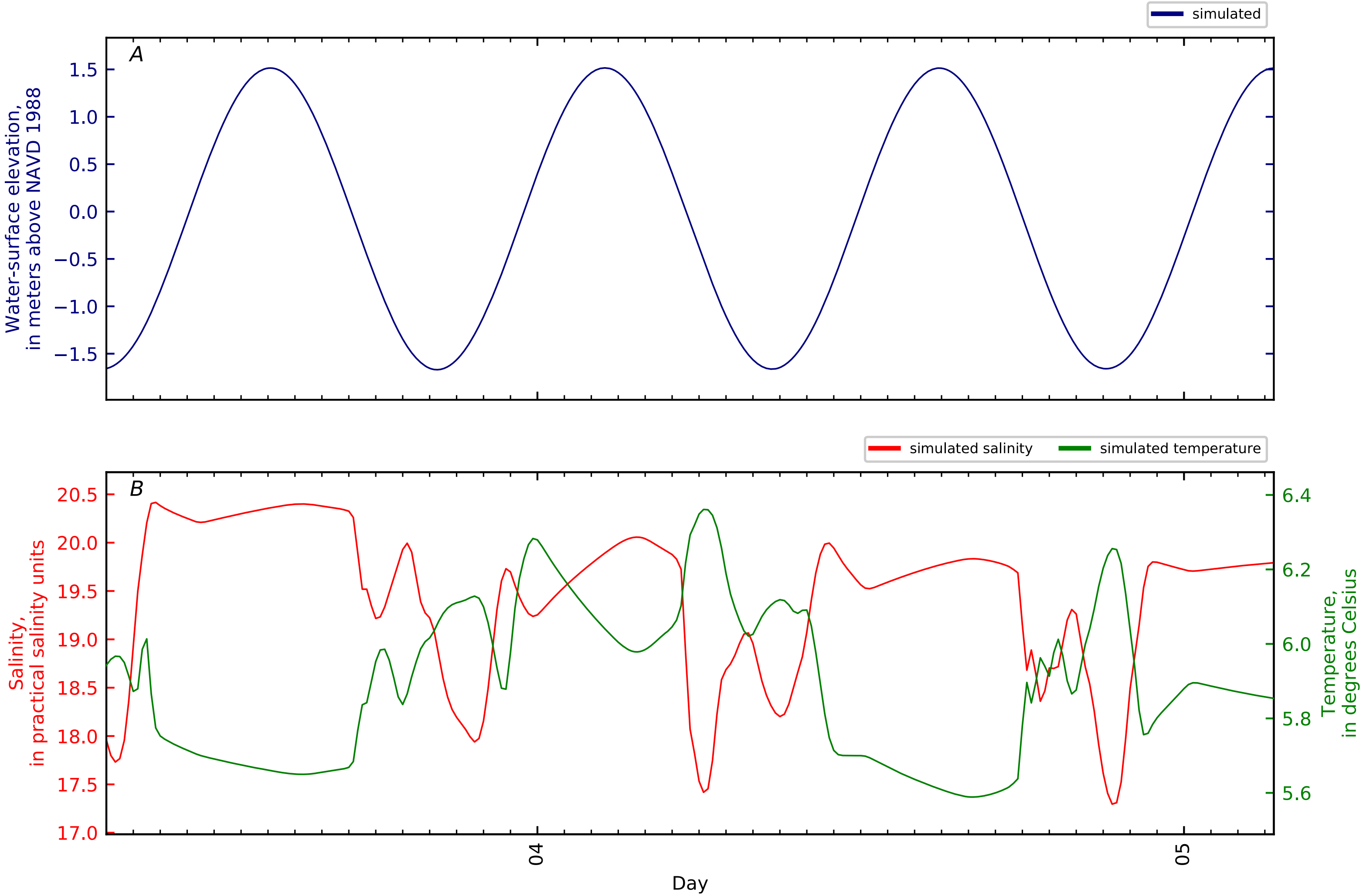

Figure B3-2. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 1, Penob Riv -KM4 nr Cape Jellison XS. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

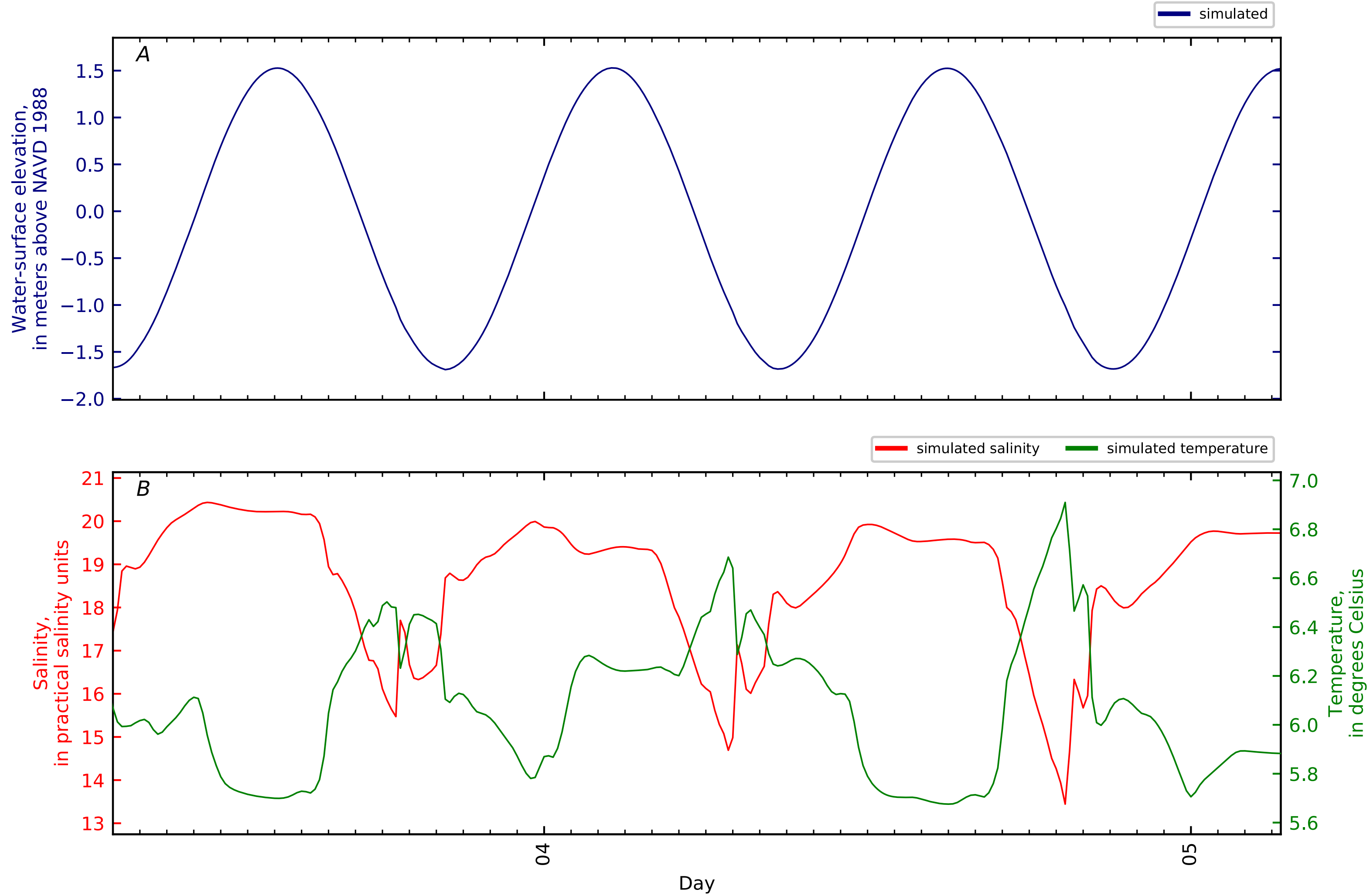

Figure B3-3. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 2, Penob Riv -KM1.5 d/s Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

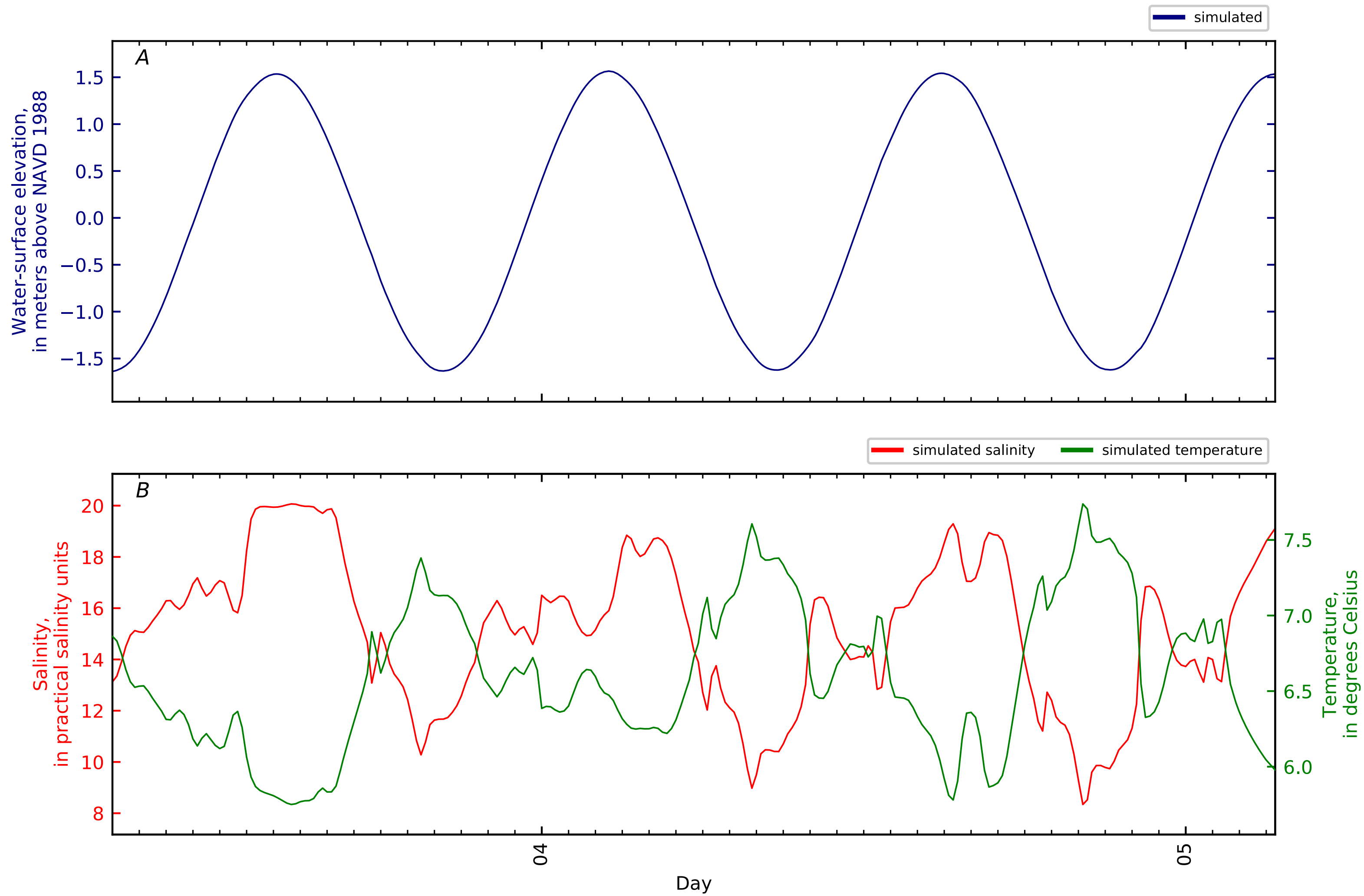

Figure B3-4. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 3, Penob Riv KM0 Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

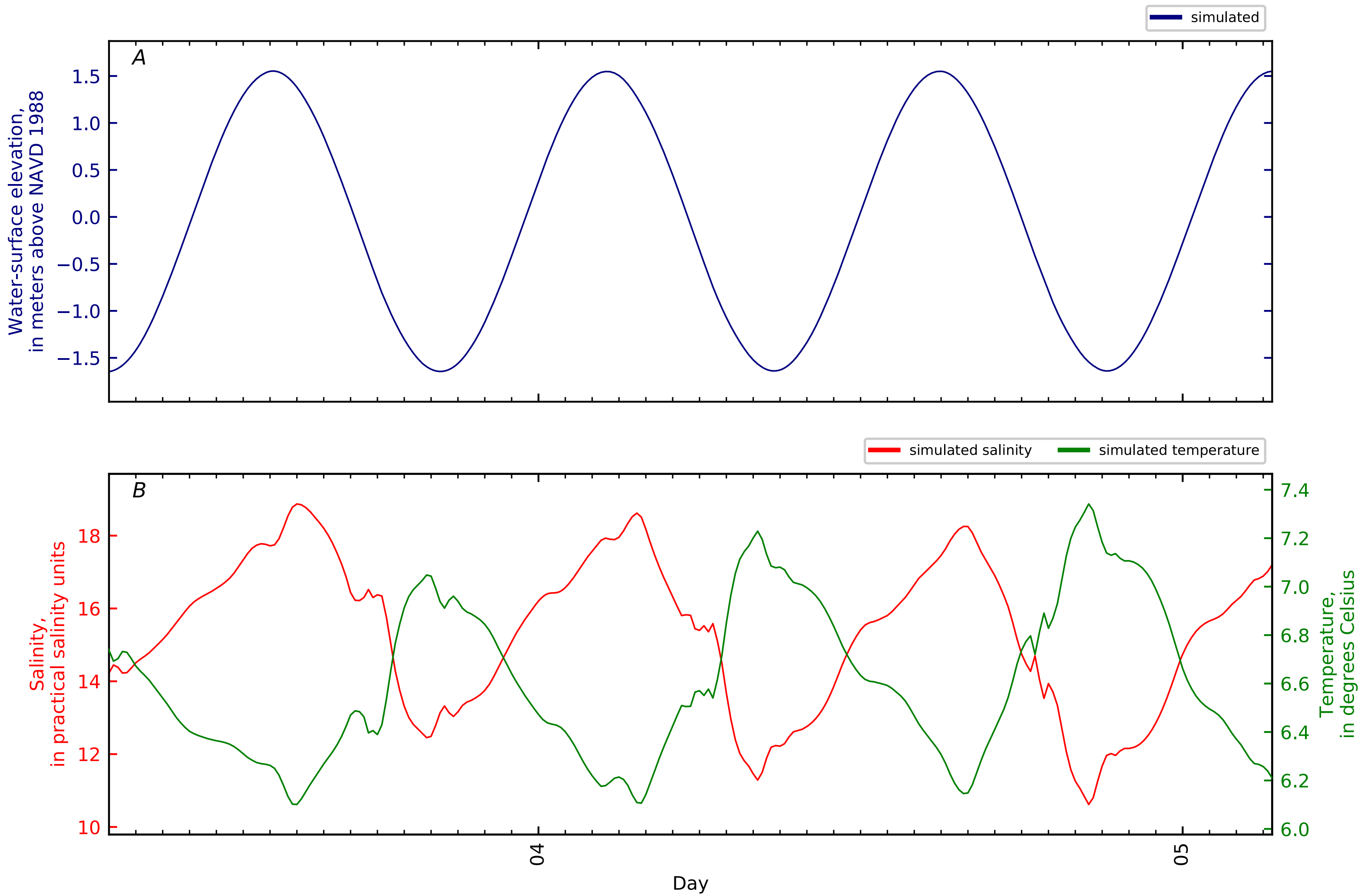

Figure B3-5. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 4, Penob Riv KM0 GS CTD5-01. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

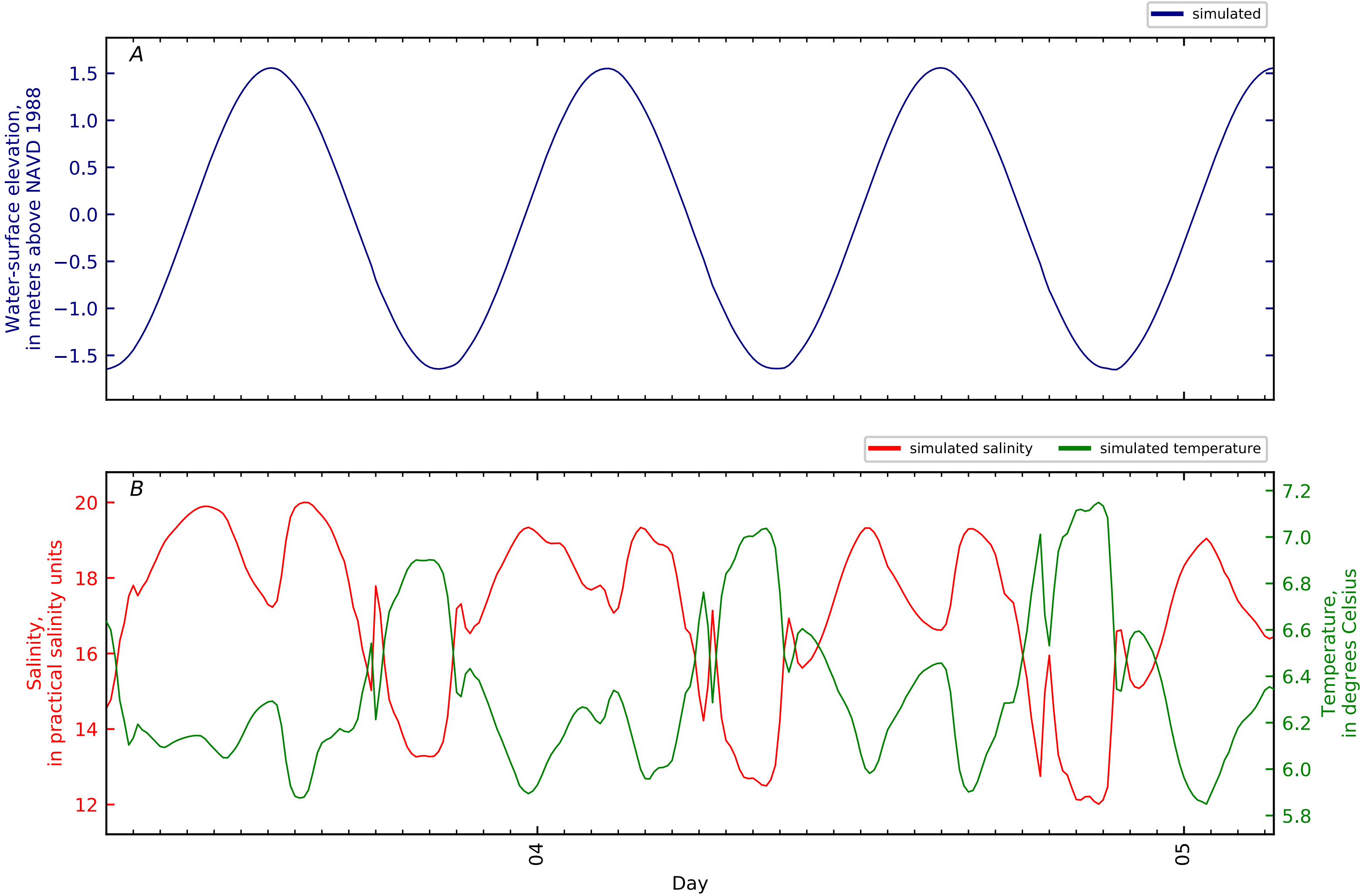

Figure B3-6. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 5, Penob Riv KM0 GS CTD5-02. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

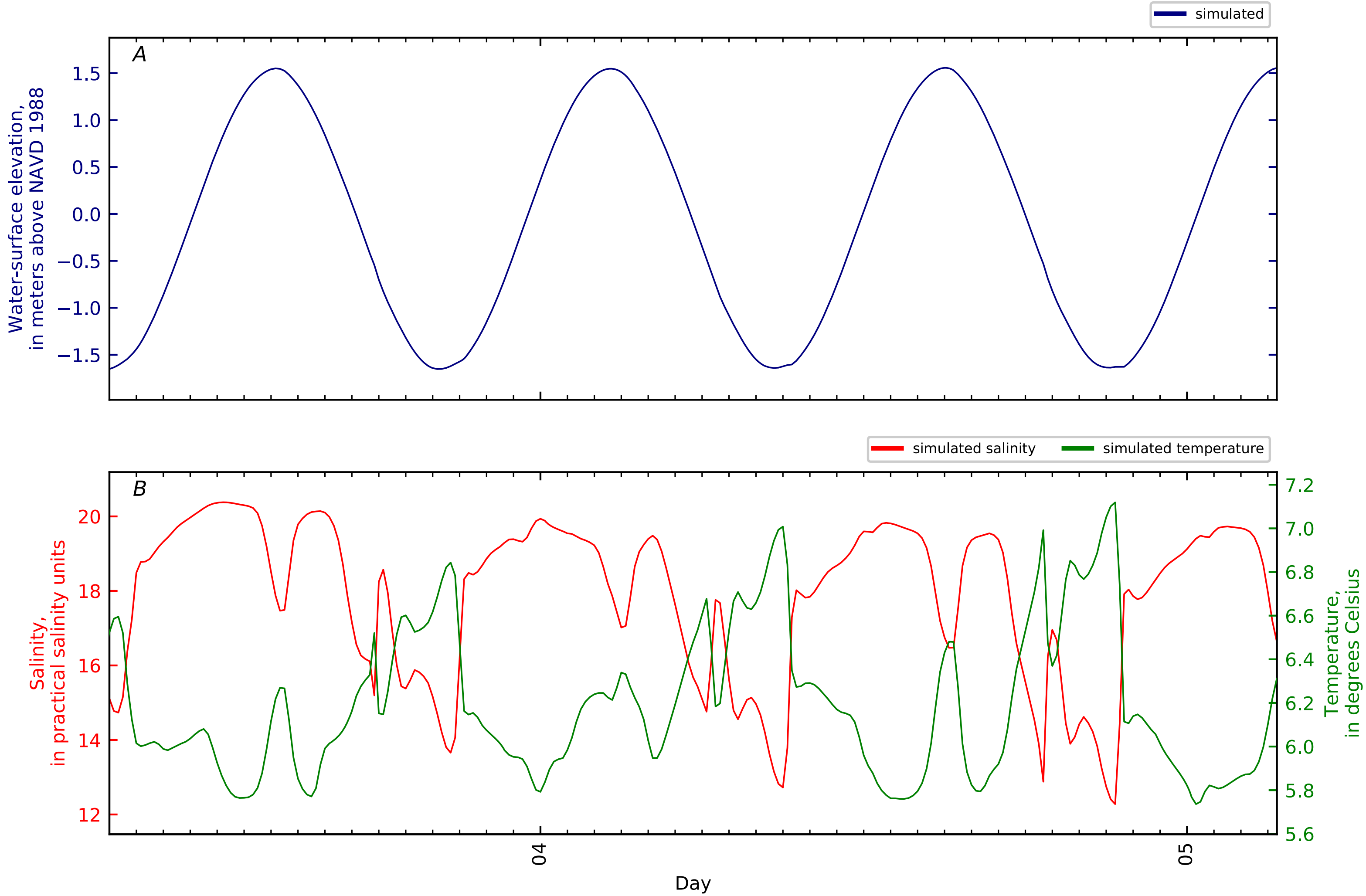

Figure B3-7. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 6, Penob Riv KM0 GS CTD5-03. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

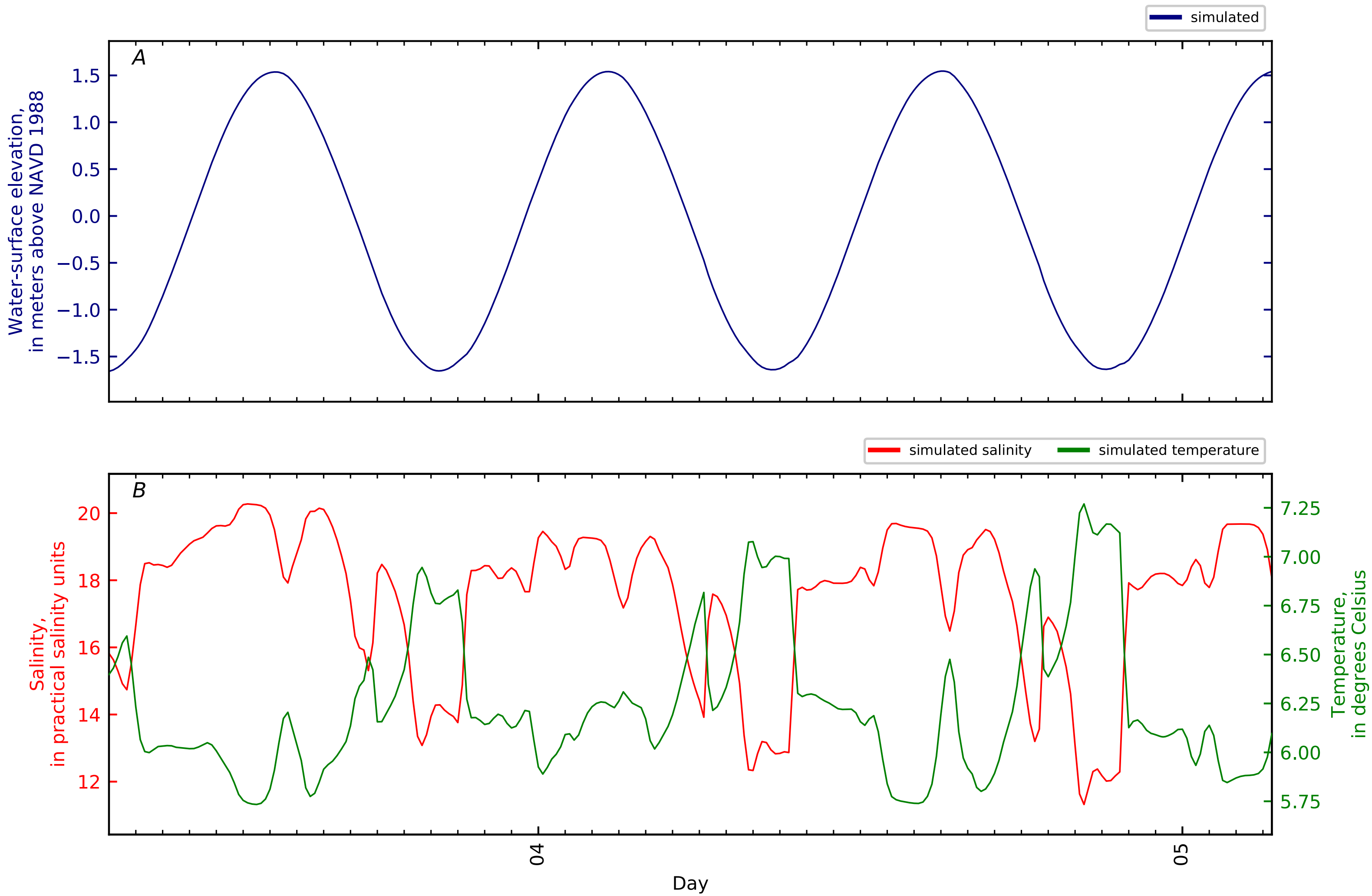

Figure B3-8. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 7, Penob Riv KM0 GS CTD5-04. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

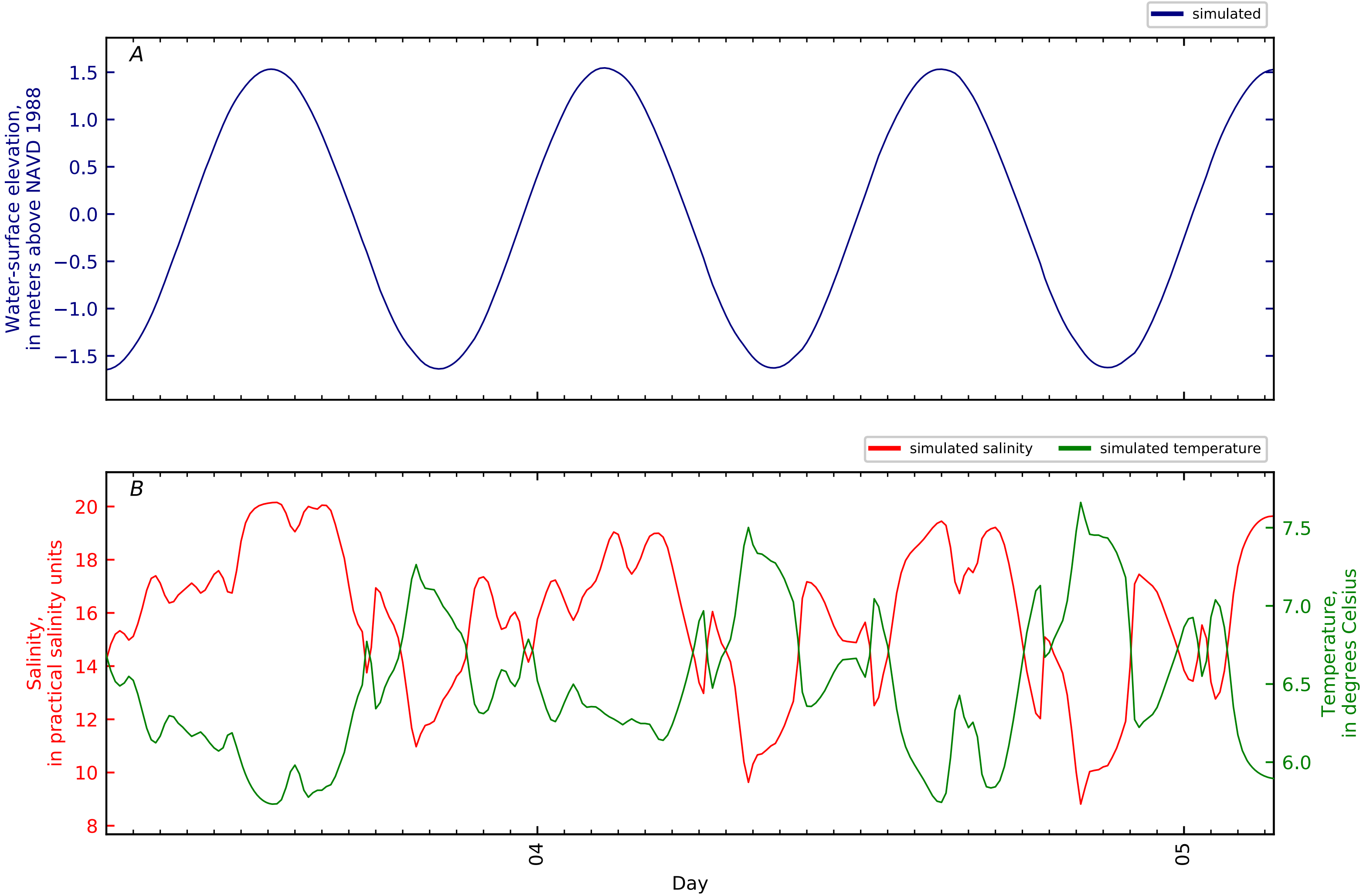

Figure B3-9. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 8, Penob Riv KM0 GS CTD5-05. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

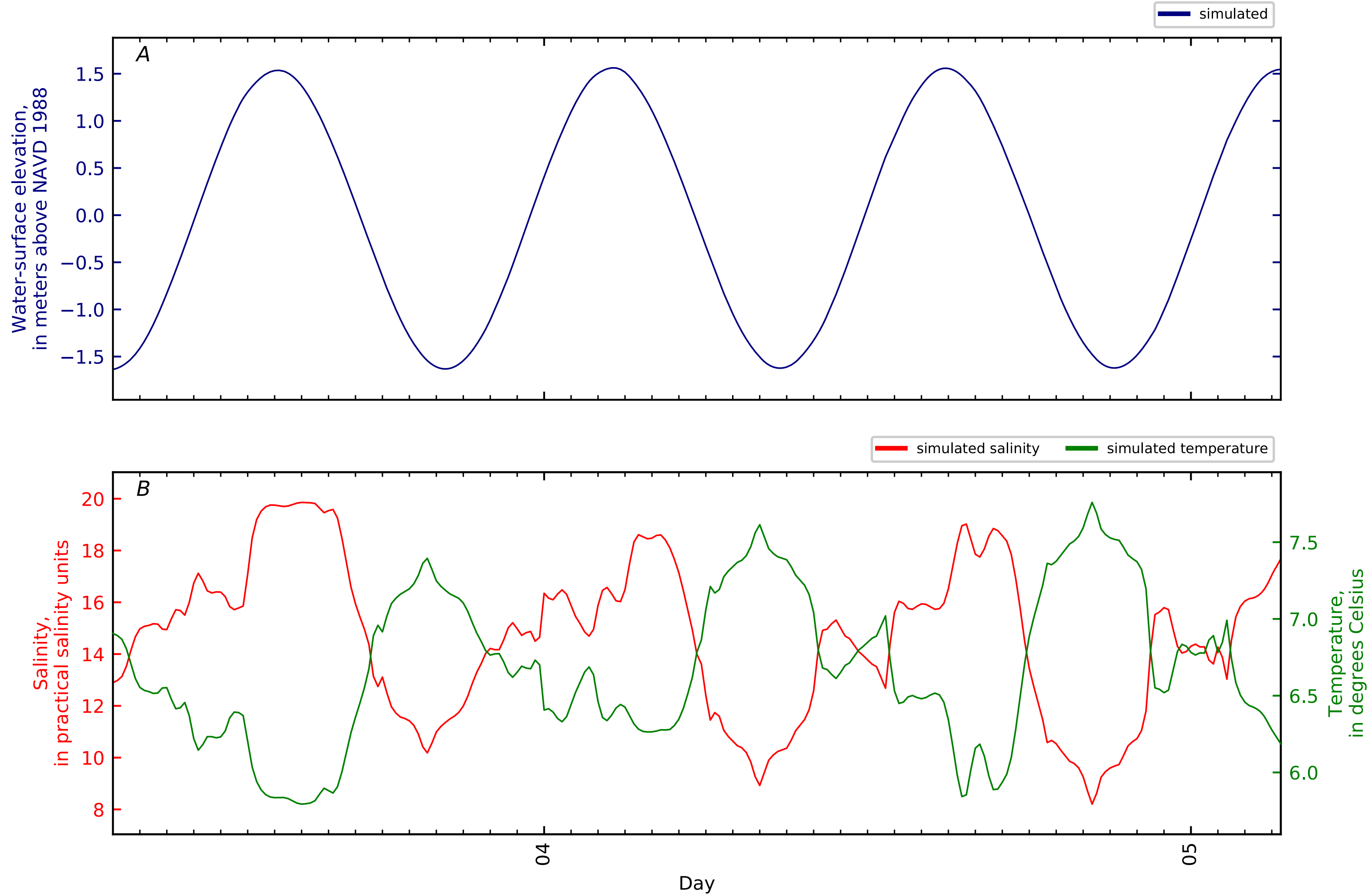

Figure B3-10. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 9, Penob Riv KM0 GS CTD5-06. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

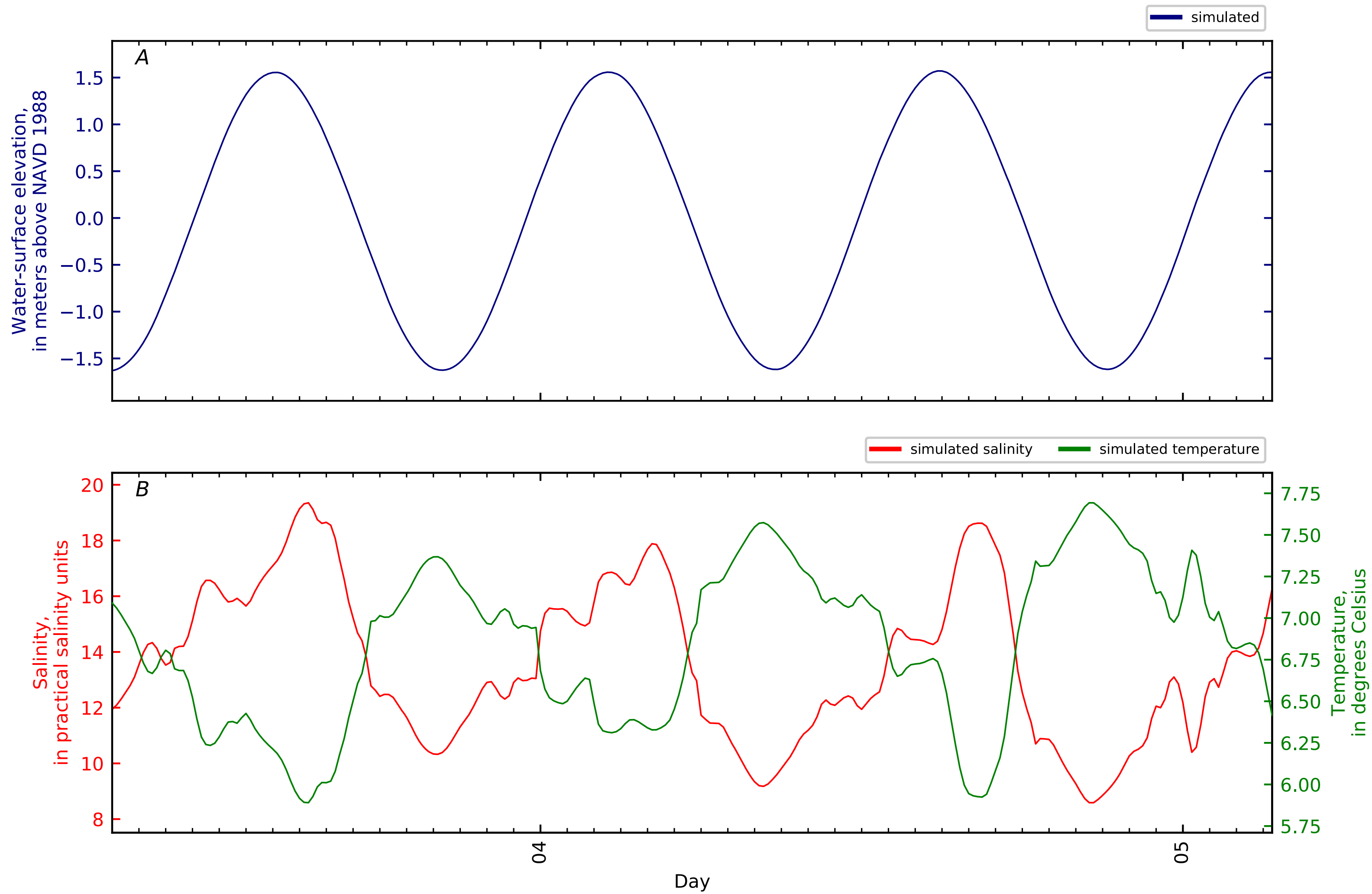

Figure B3-11. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 10, Penob Riv KM0 GS CTD5-07. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

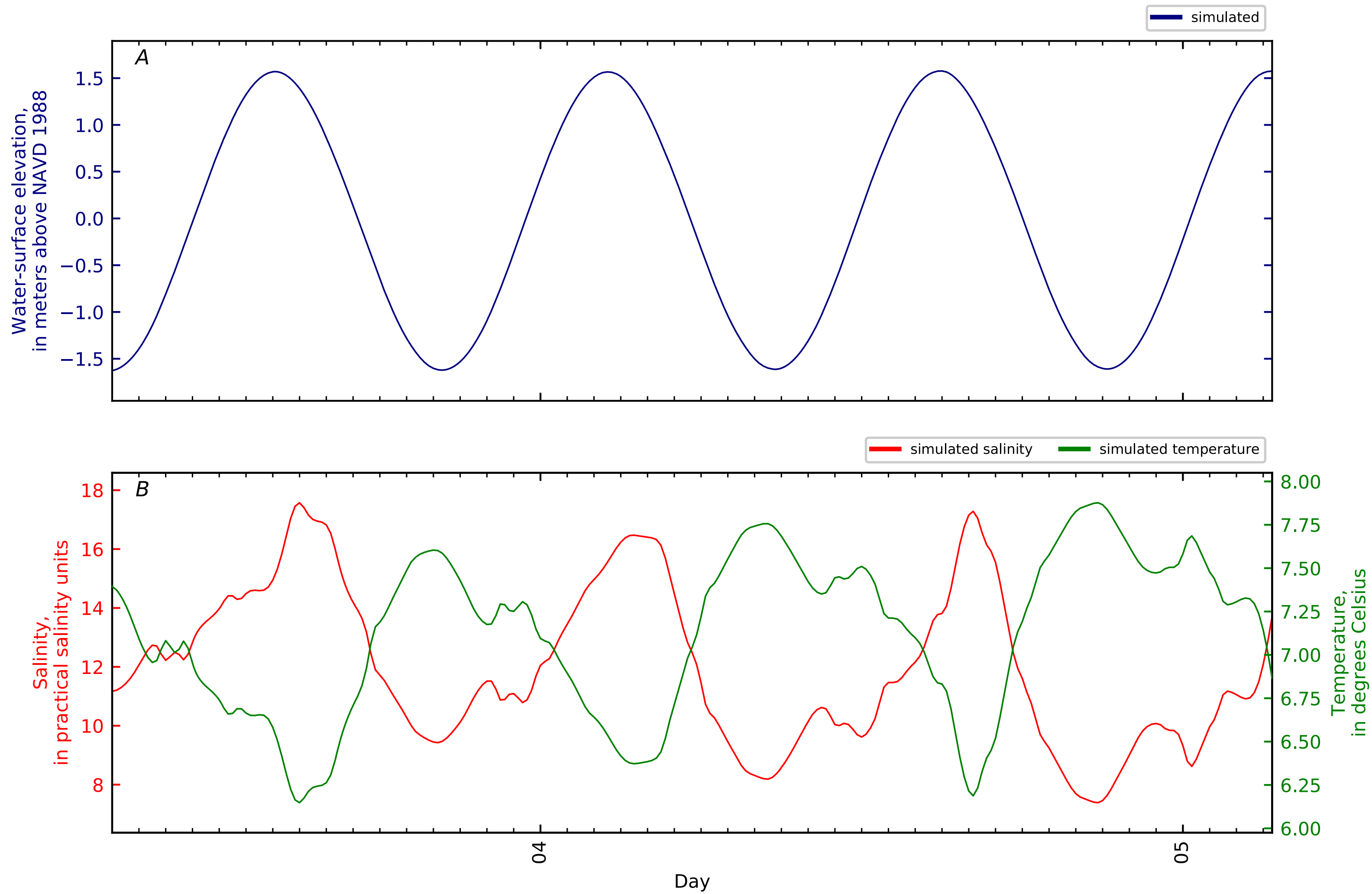

Figure B3-12. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 11, Penob Riv KM0 GS CTD5-08. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

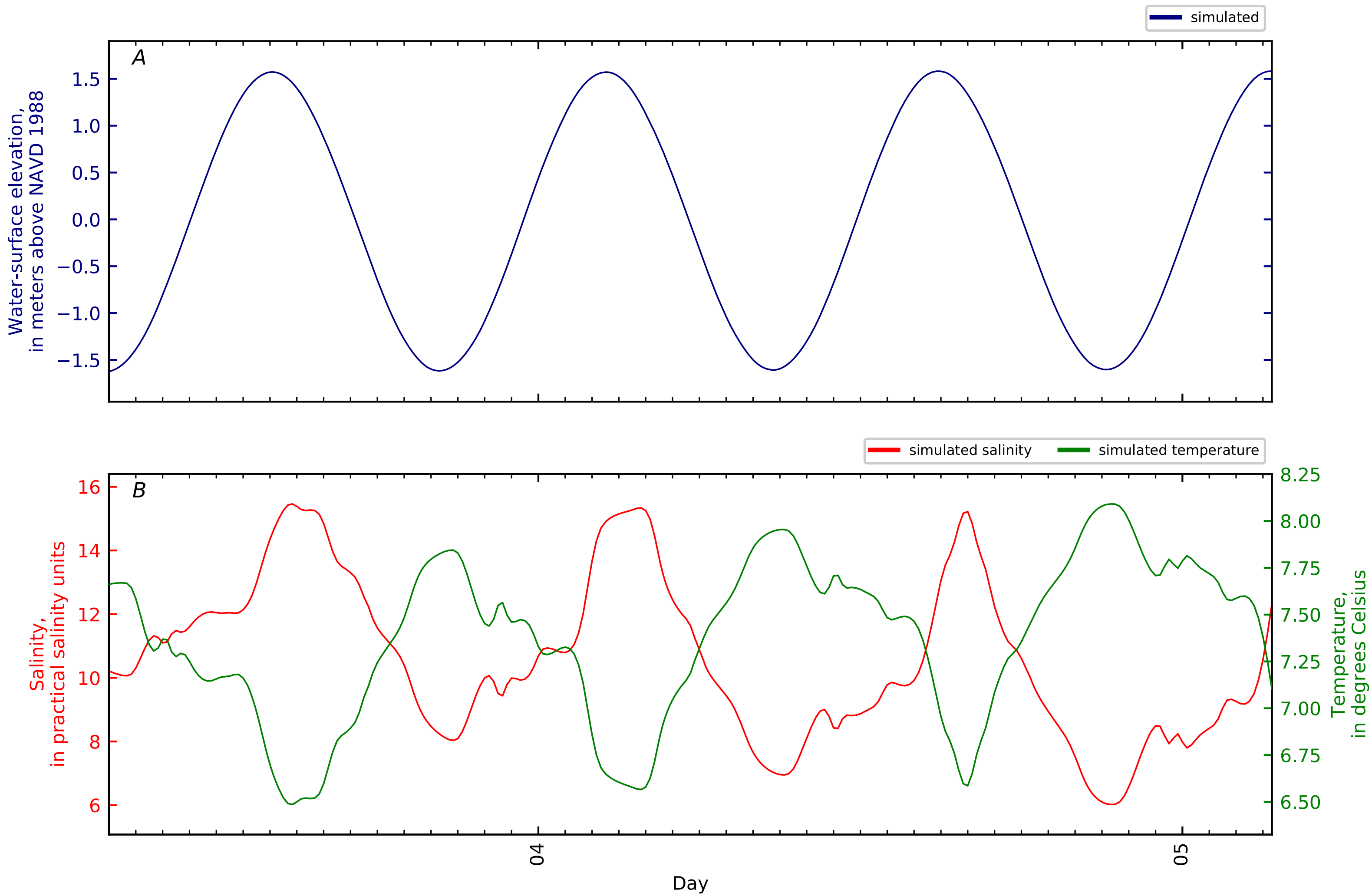

Figure B3-13. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 12, Penob Riv KM0 GS CTD5-09. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

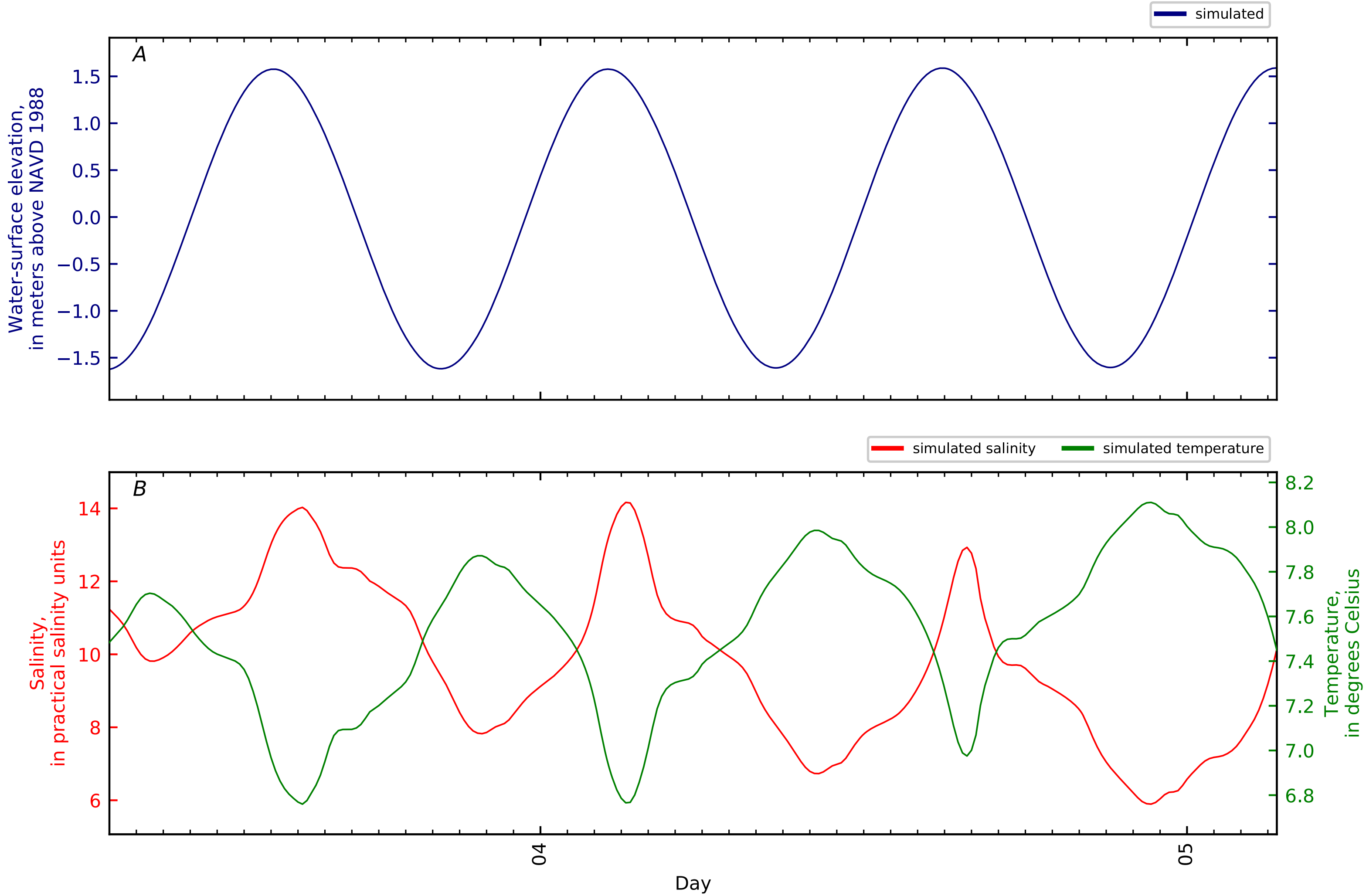

Figure B3-14. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 13, Penob Riv KM0 GS CTD5-10. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

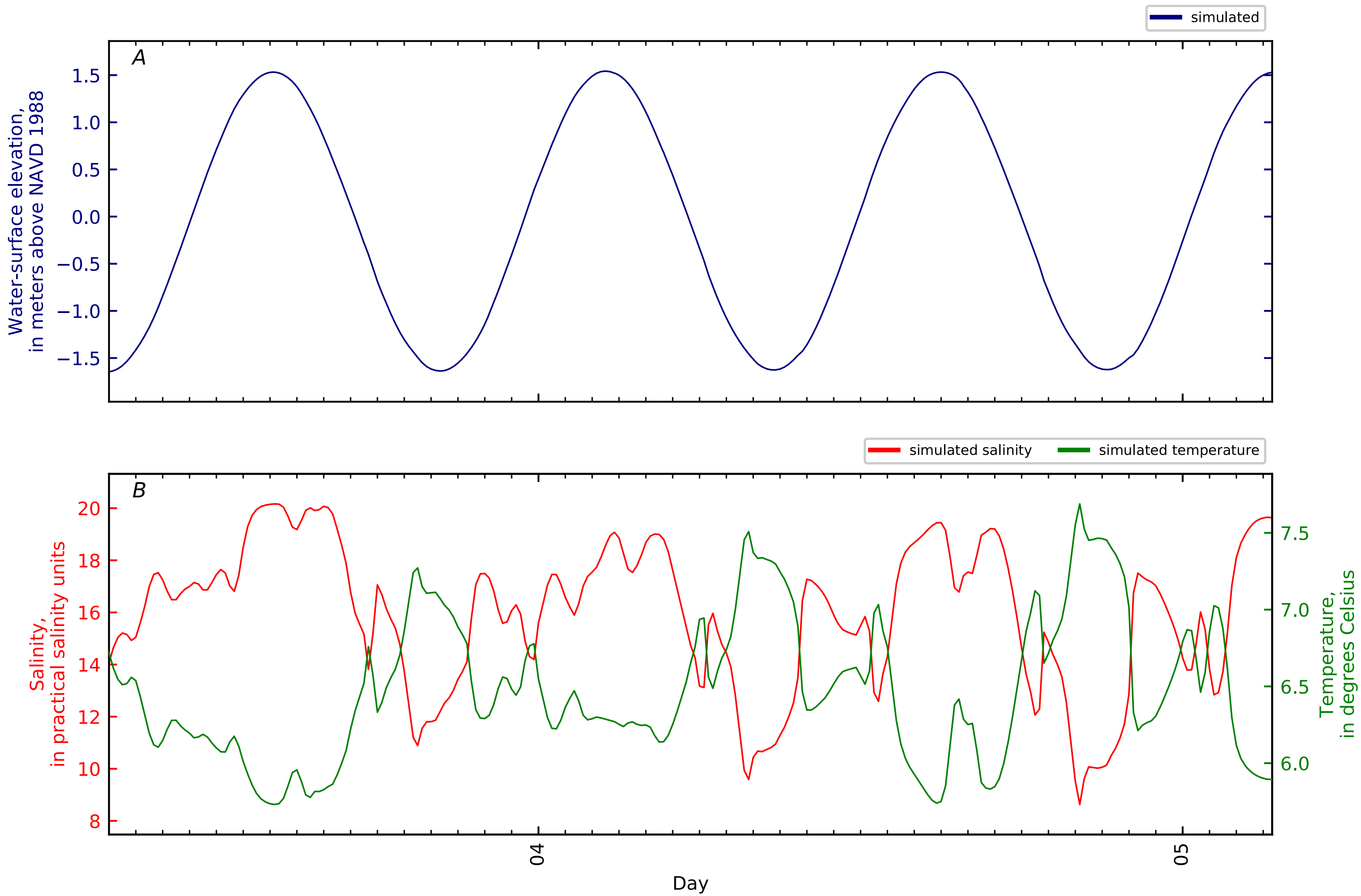

Figure B3-15. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 14, Penob Riv KM0.04 WHOI1 Ft Point 2010. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

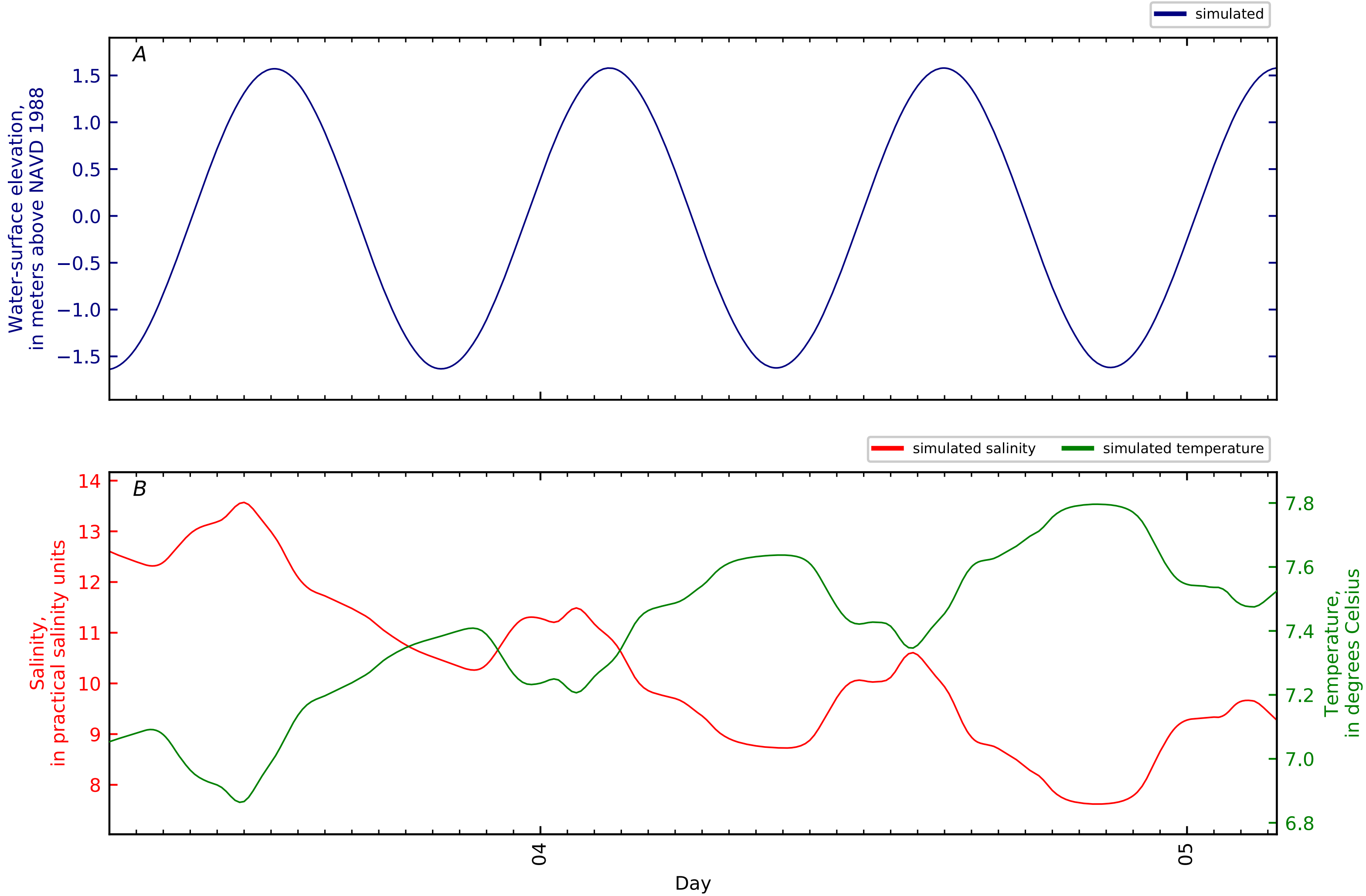

Figure B3-16. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 15, Penob Riv KM0.1 GS 442810068480101 at Ft. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

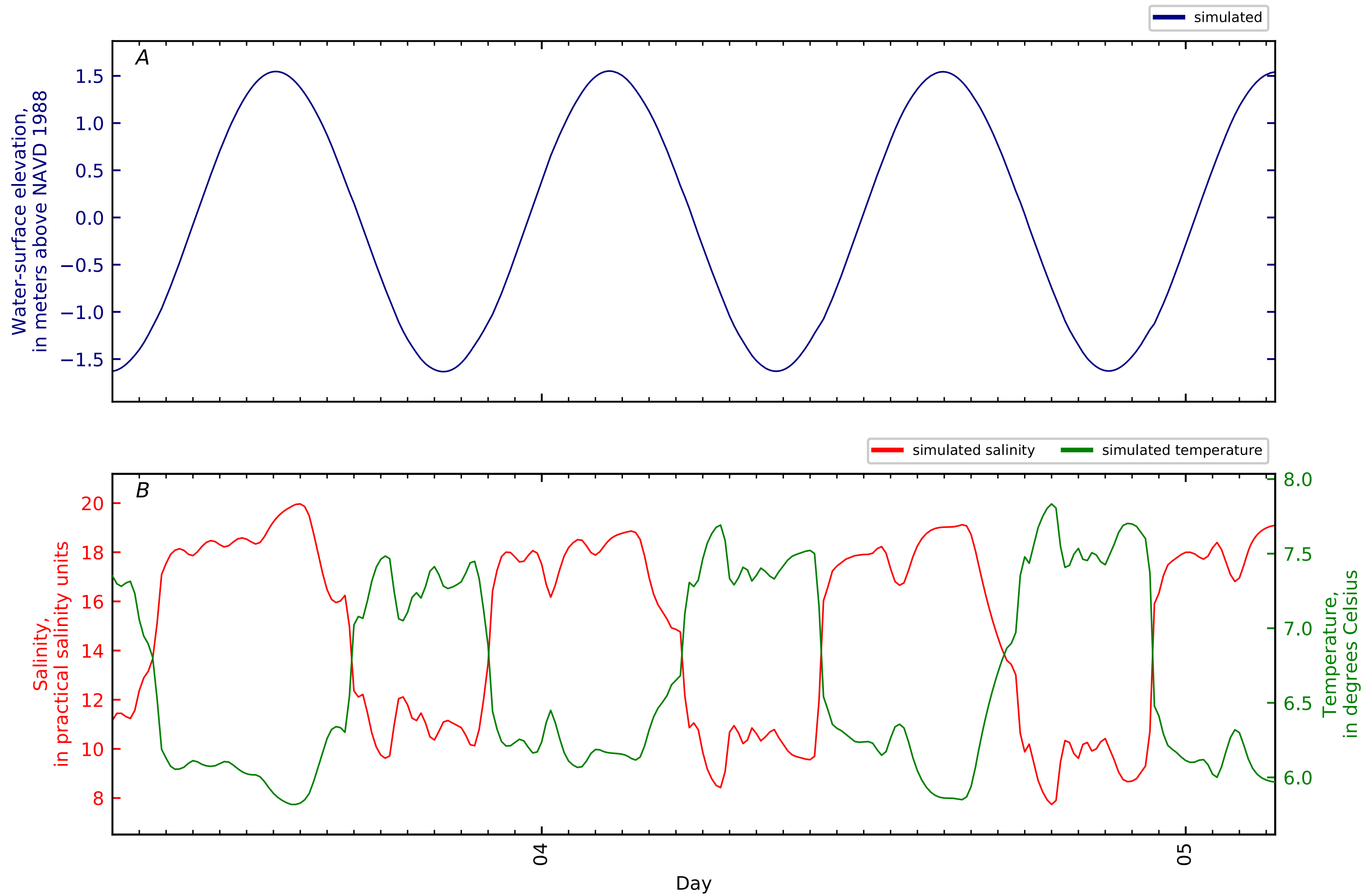

Figure B3-17. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 16, Penob Riv KM1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

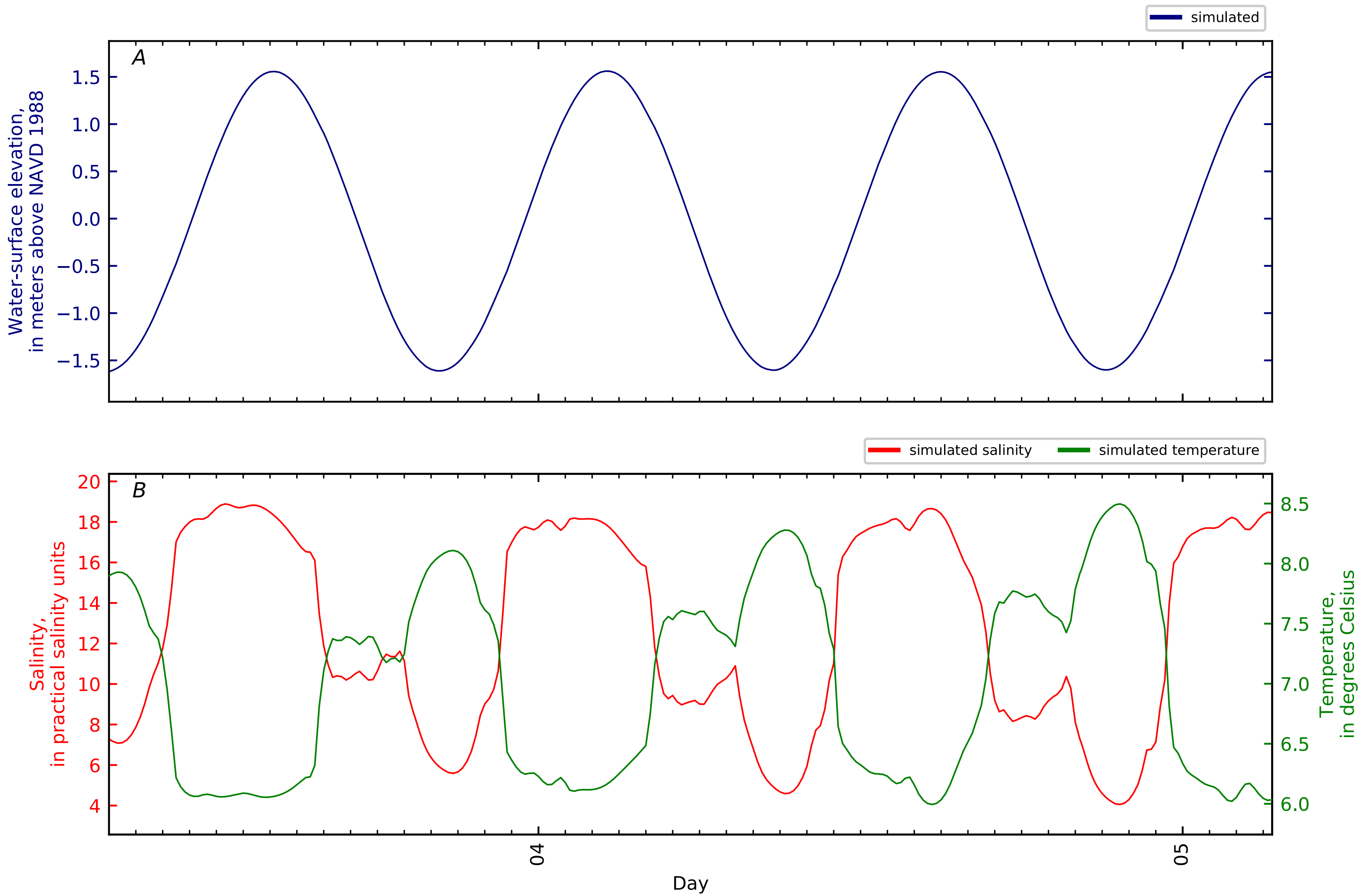

Figure B3-18. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 17, Penob Riv KM2. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

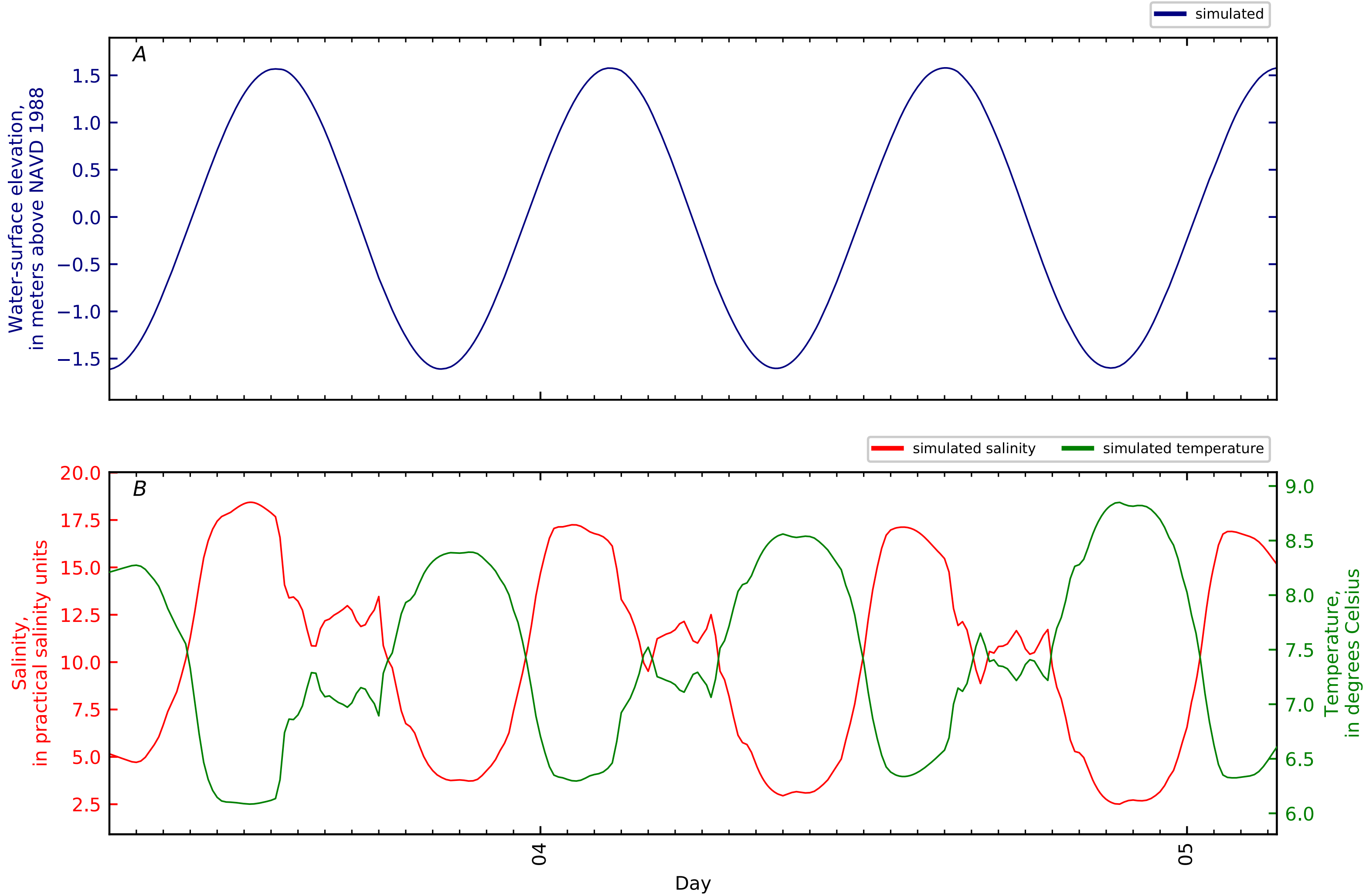

Figure B3-19. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 18, Penob Riv KM3. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

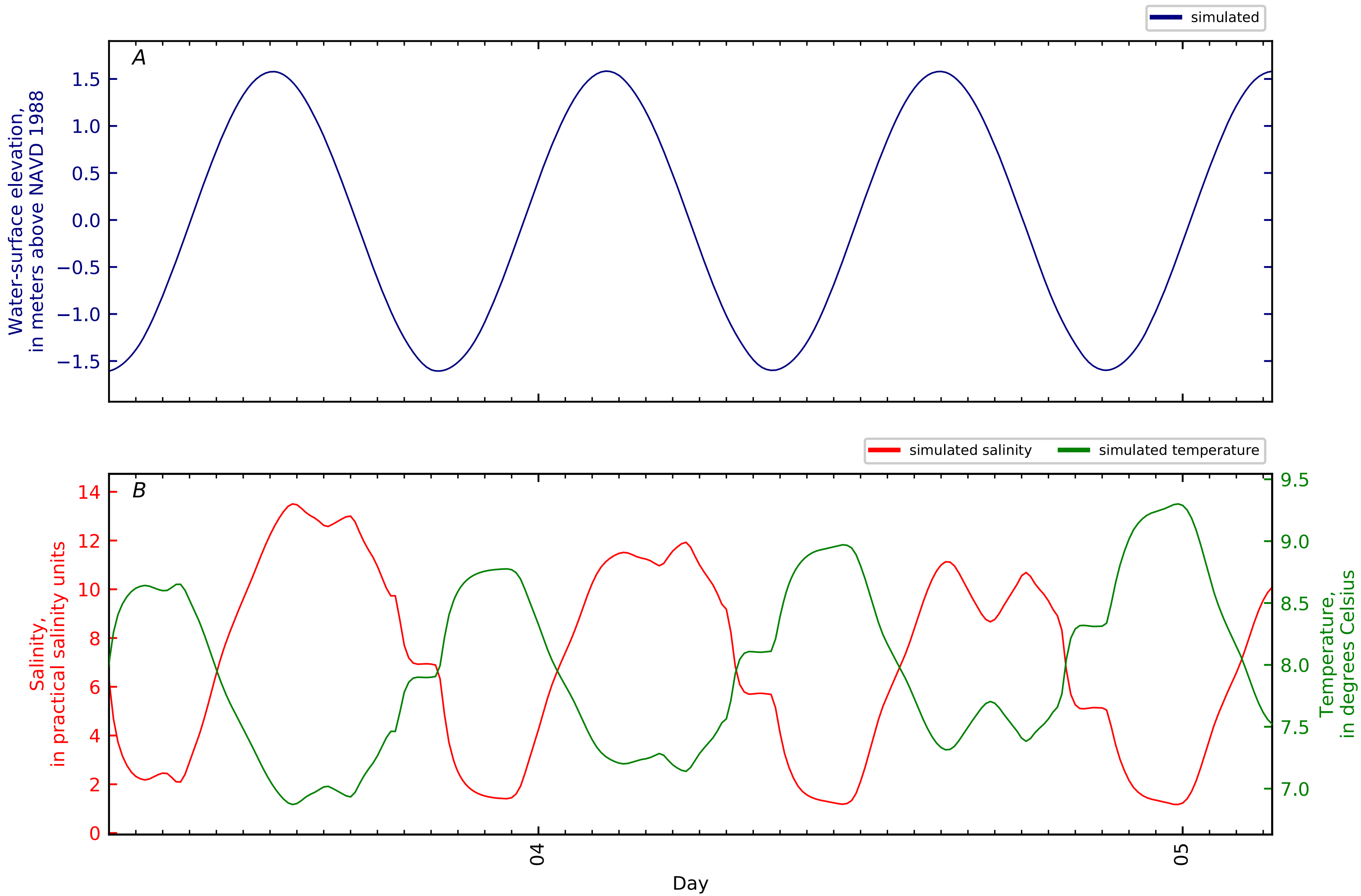

Figure B3-20. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 19, Penob Riv KM3.8 GS CTD3-01. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

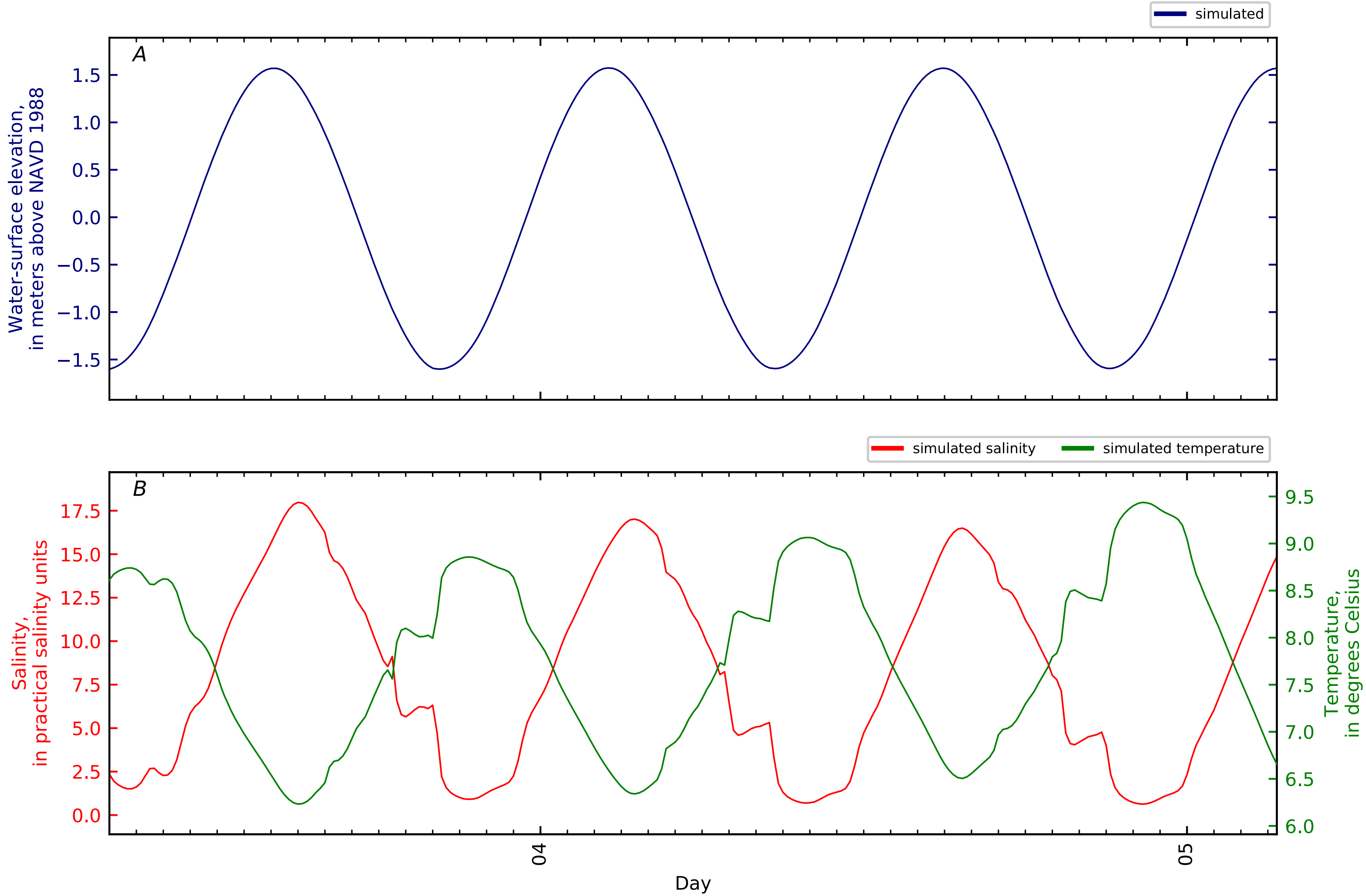

Figure B3-21. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 20, Penob Riv KM3.8 GS CTD3-02. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

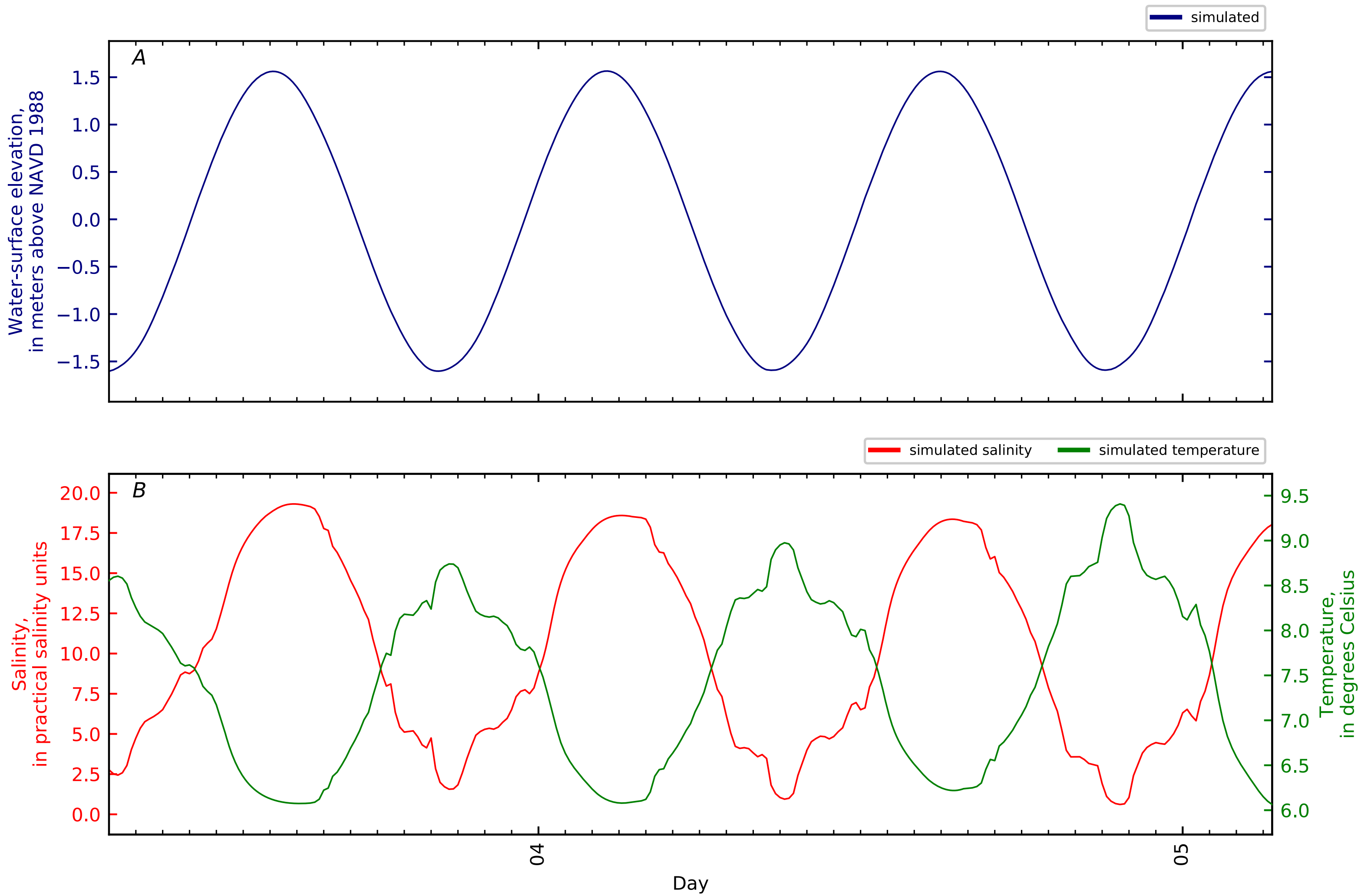

Figure B3-22. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 21, Penob Riv KM3.8 GS CTD3-03. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

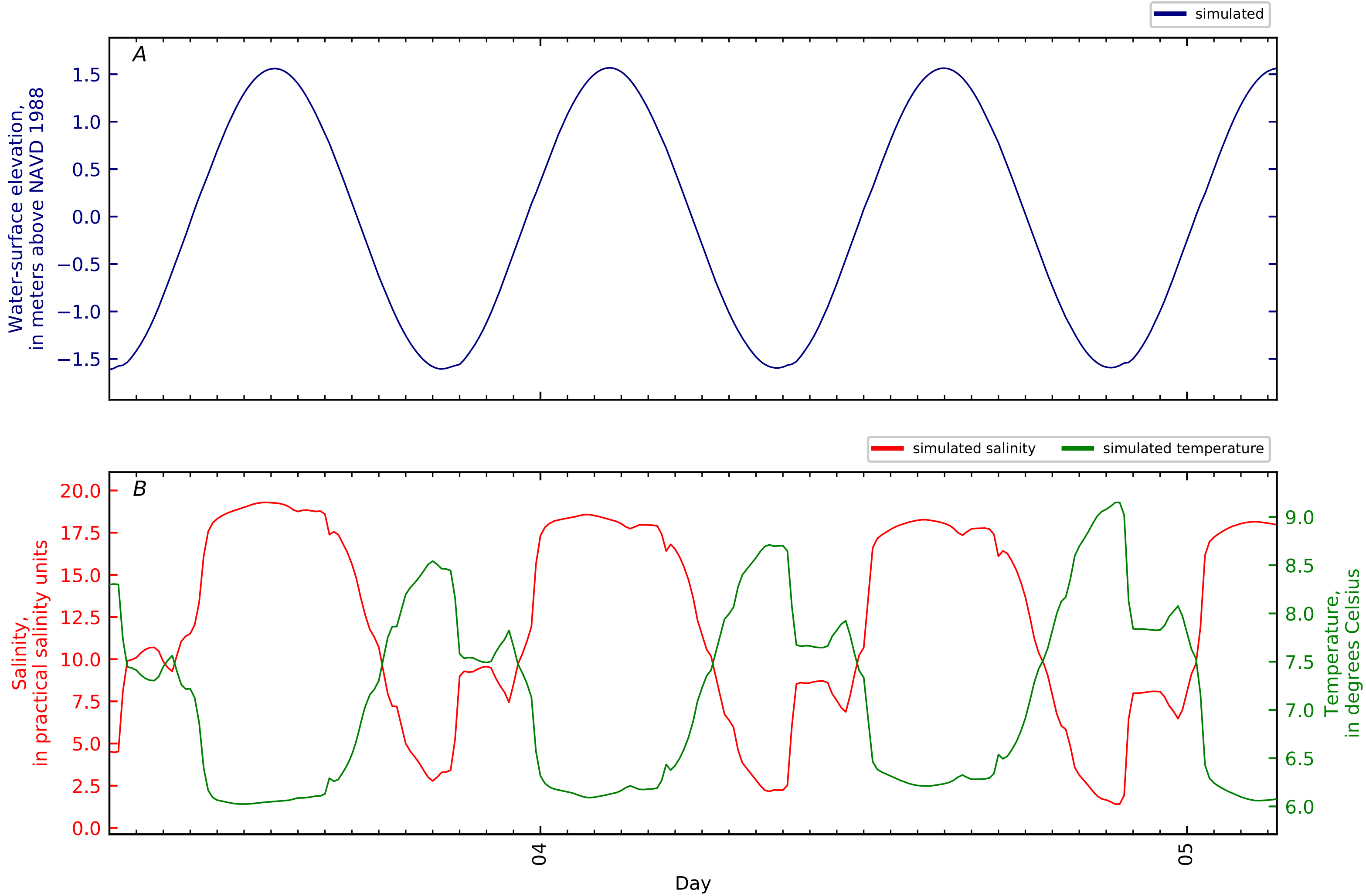

Figure B3-23. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 22, Penob Riv KM3.8 GS CTD3-04. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

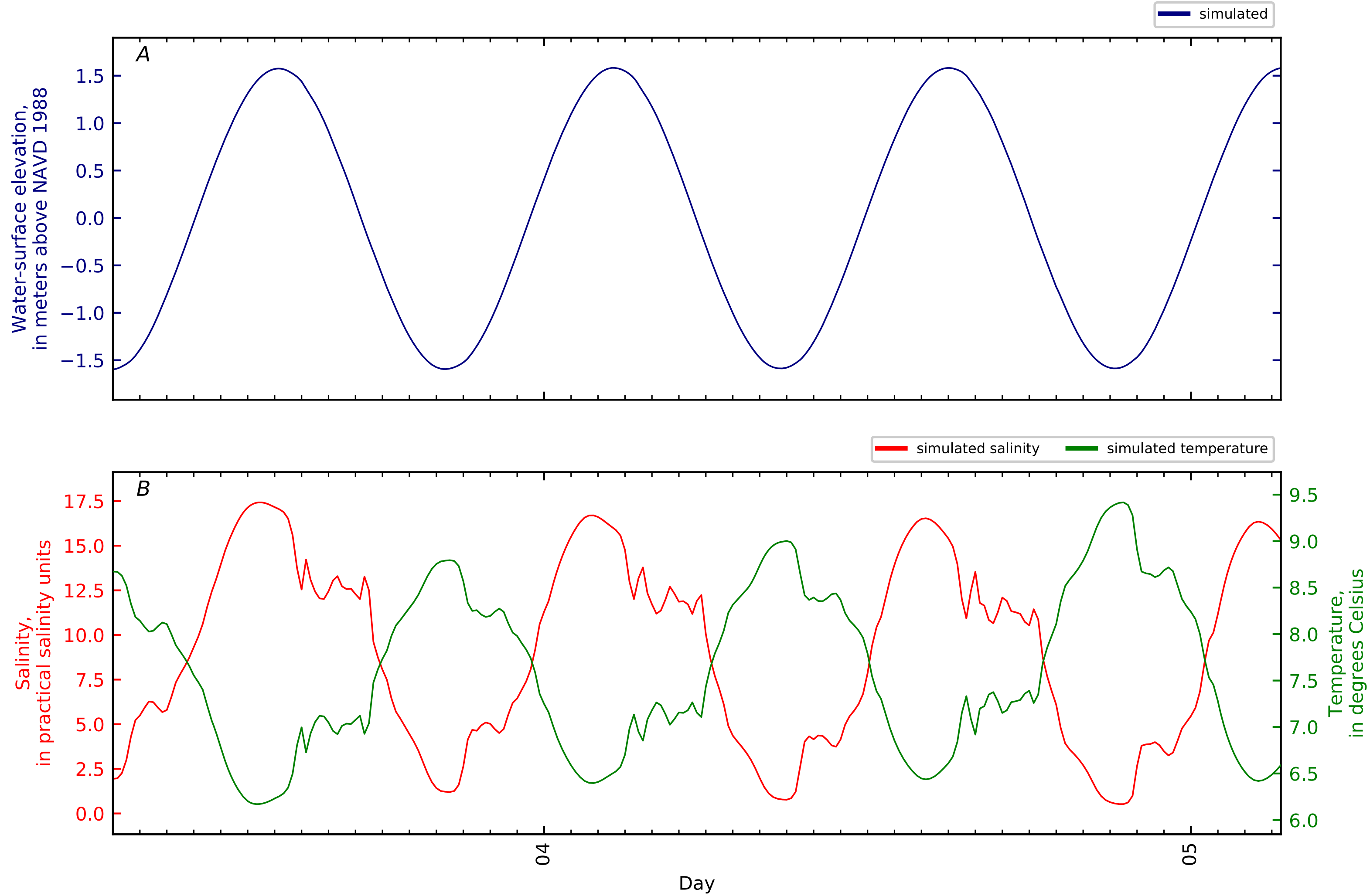

Figure B3-24. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 23, Penob Riv KM3.8 GS CTD3-05. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

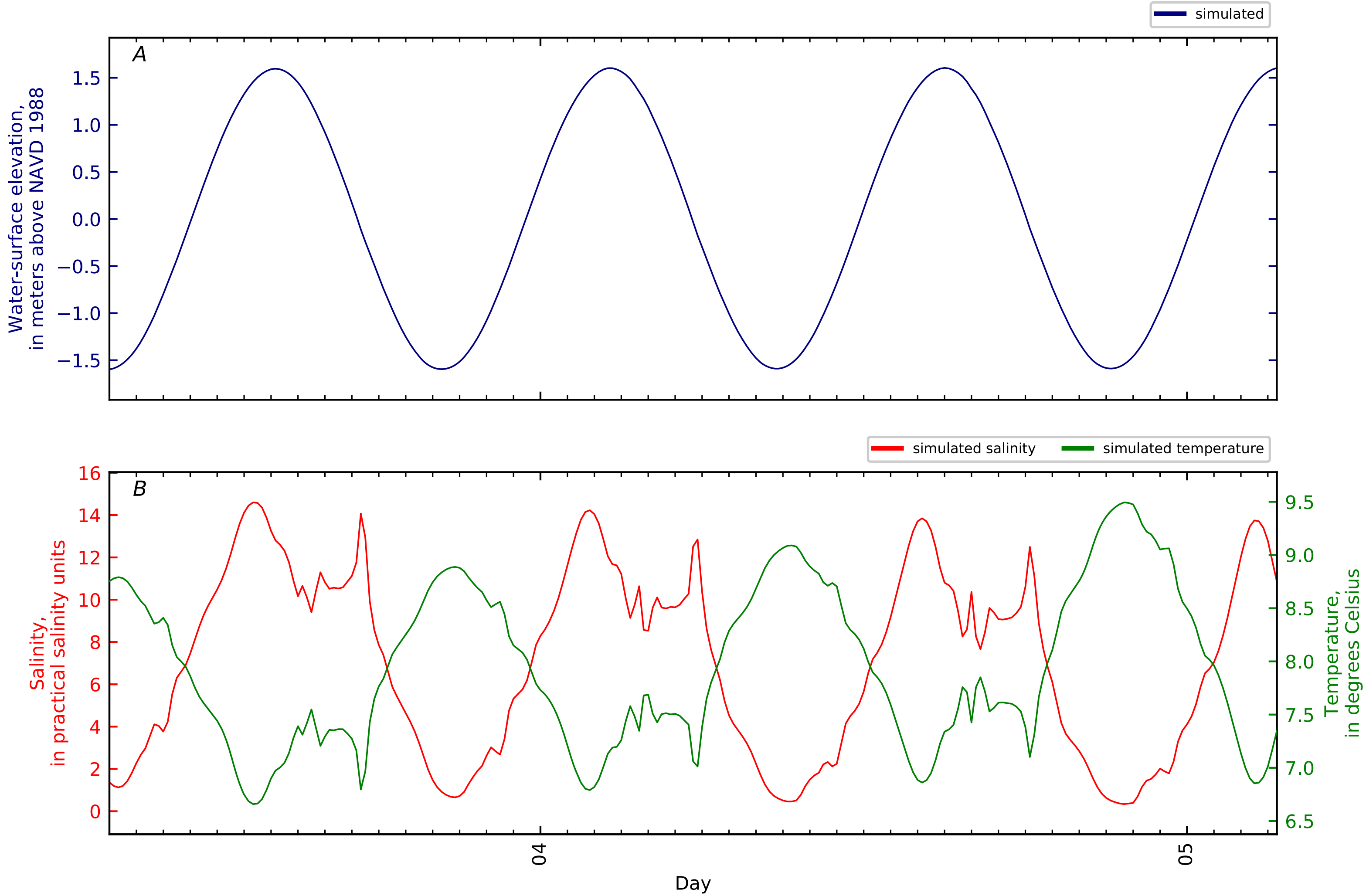

Figure B3-25. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 24, Penob Riv KM3.8 GS CTD3-06. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

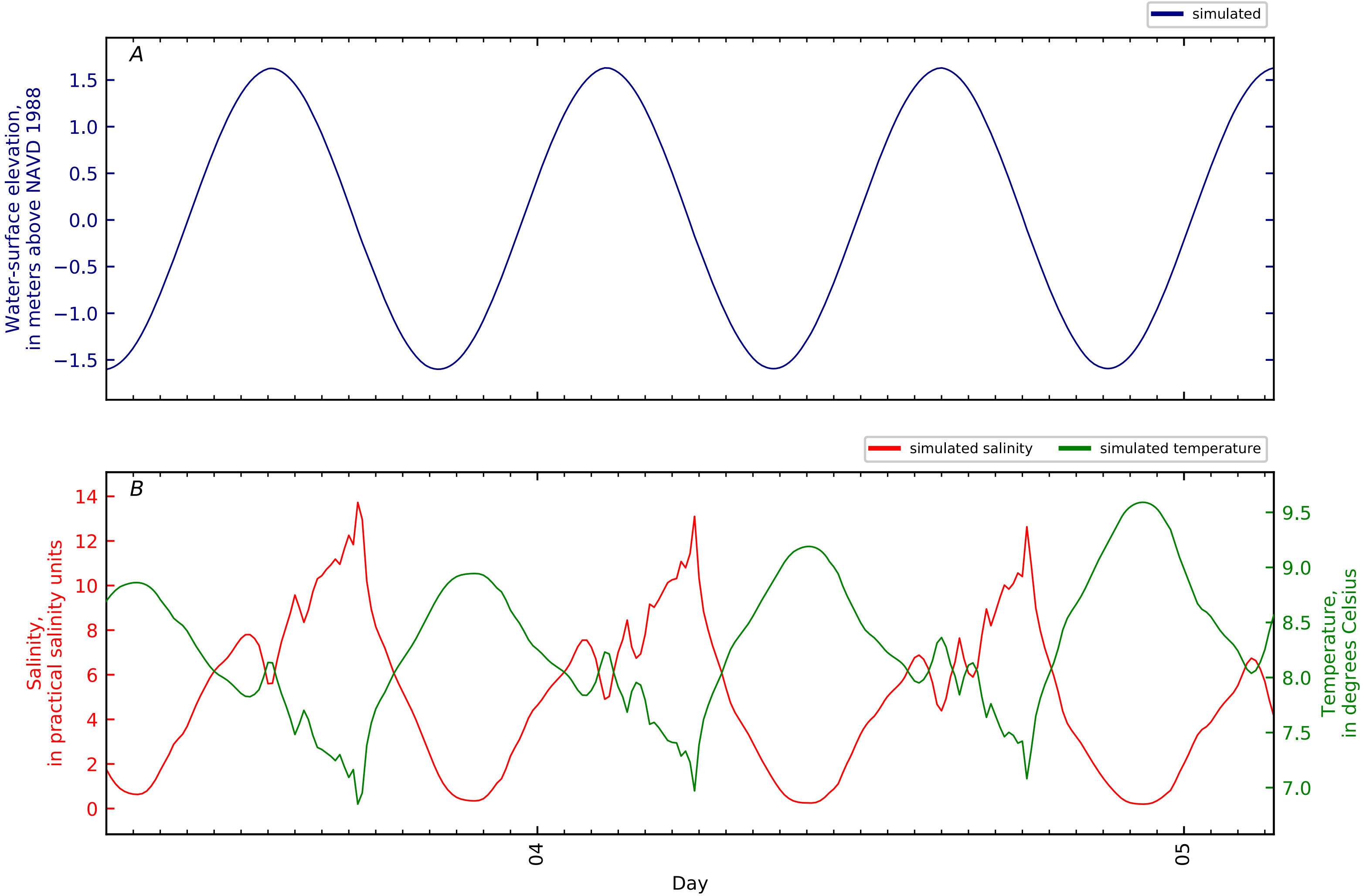

Figure B3-26. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 25, Penob Riv KM3.8 GS CTD3-07. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

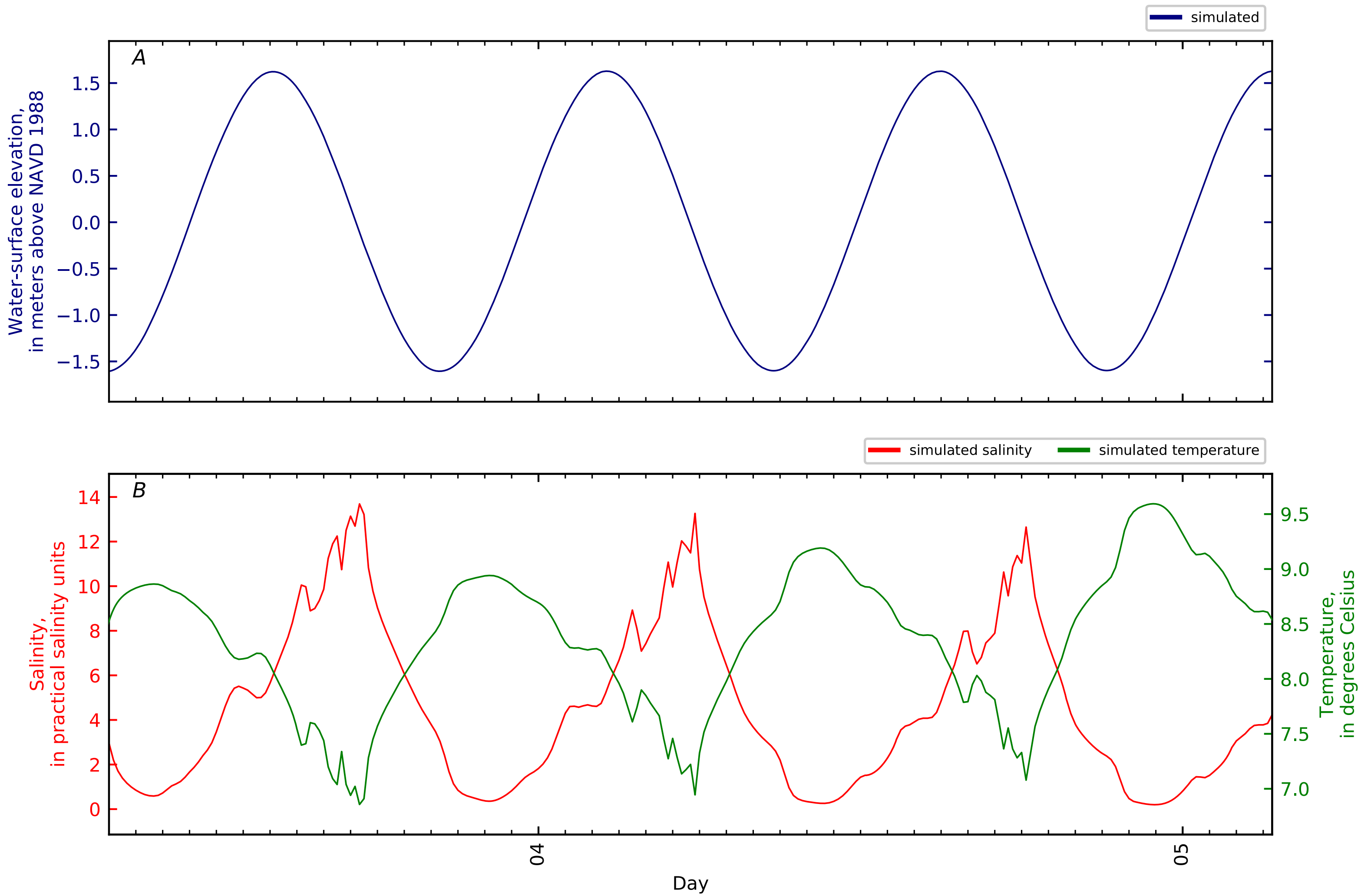

Figure B3-27. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 26, Penob Riv KM3.8 GS CTD3-08. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

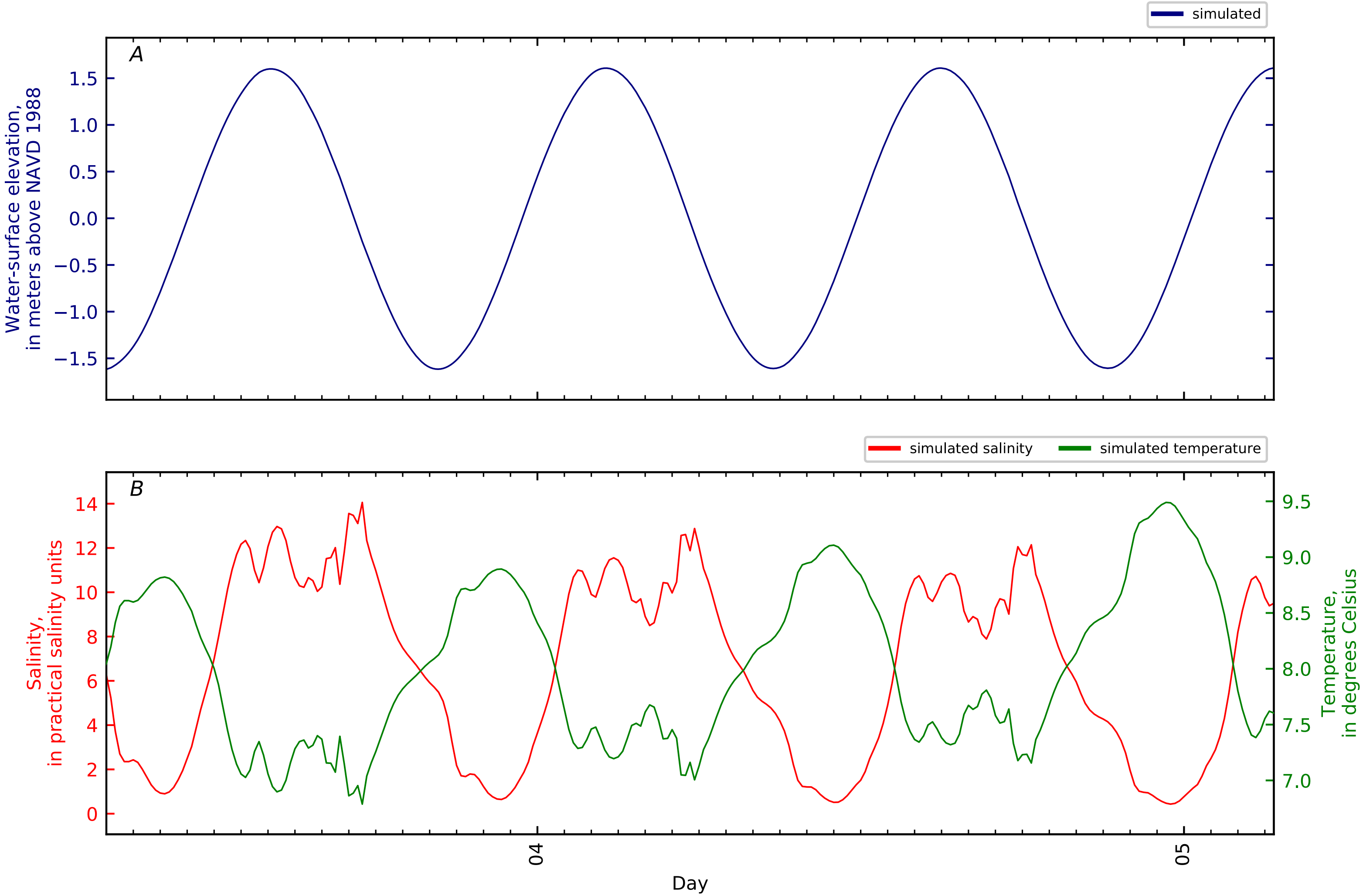

Figure B3-28. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 27, Penob Riv KM3.8 GS CTD3-09. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

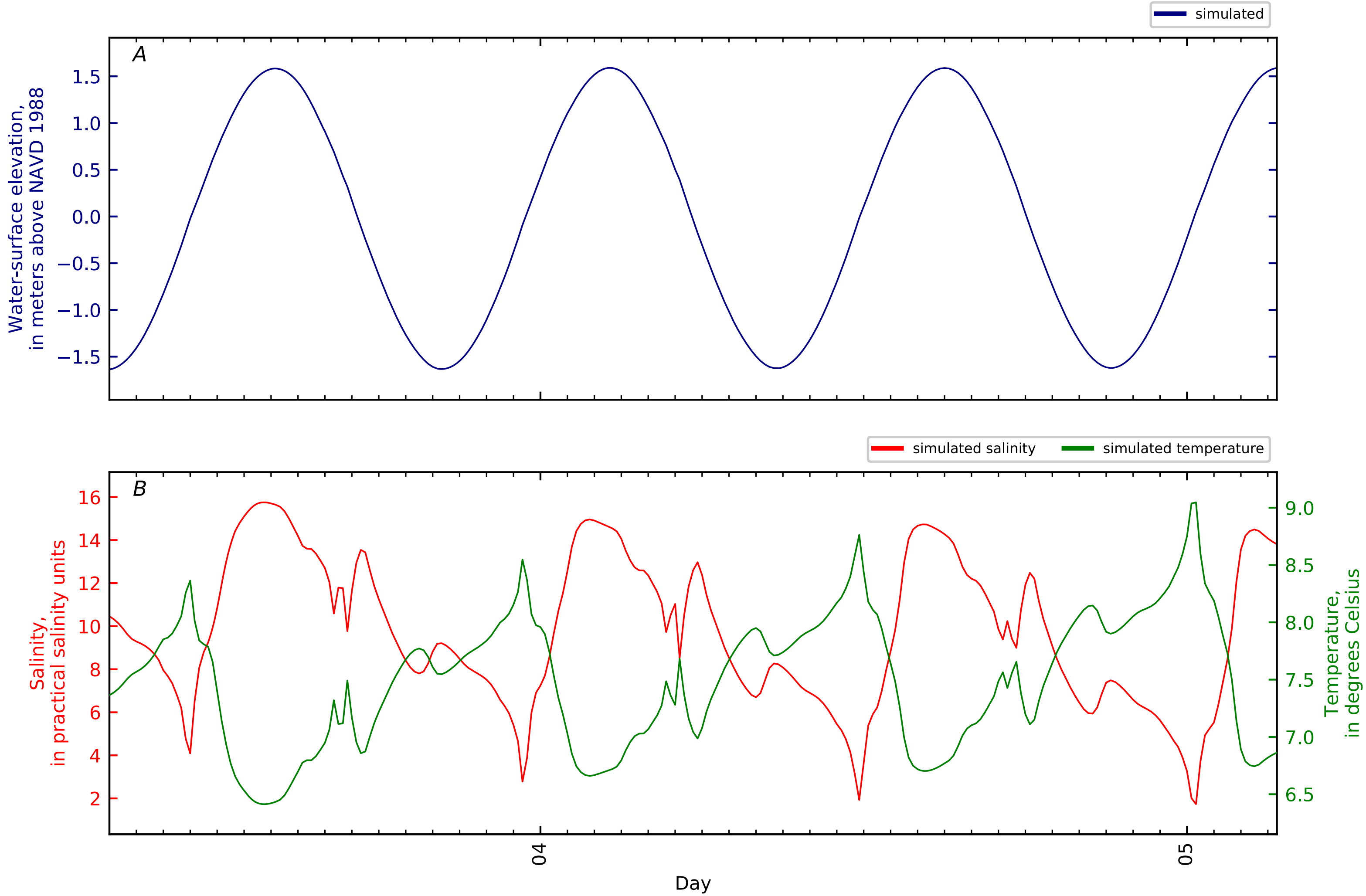

Figure B3-29. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 28, Penob Riv KM3.8 GS CTD3-10. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

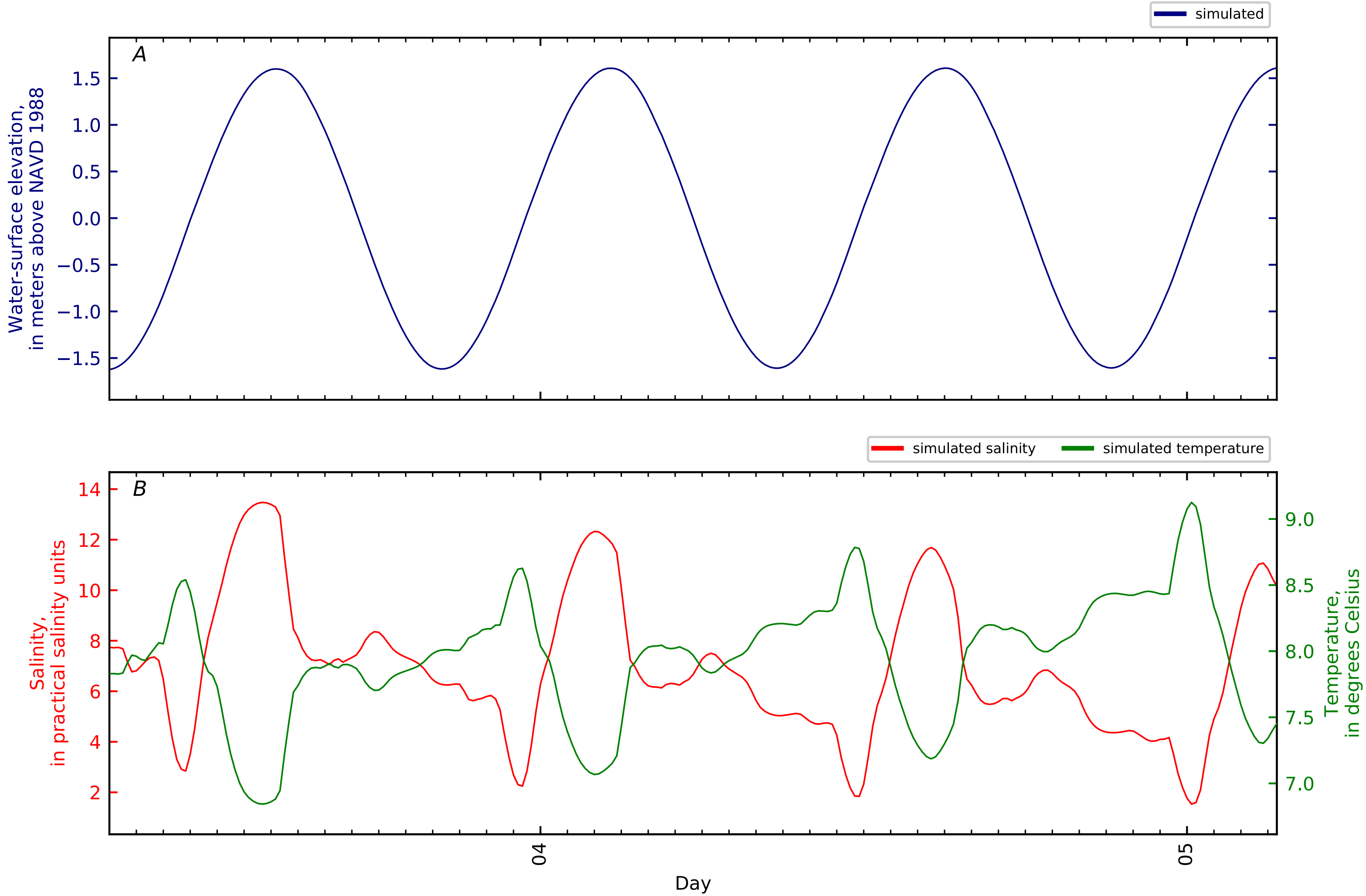

Figure B3-30. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 29, Penob Riv KM3.85 fmr NOAA gage Gross Poi. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

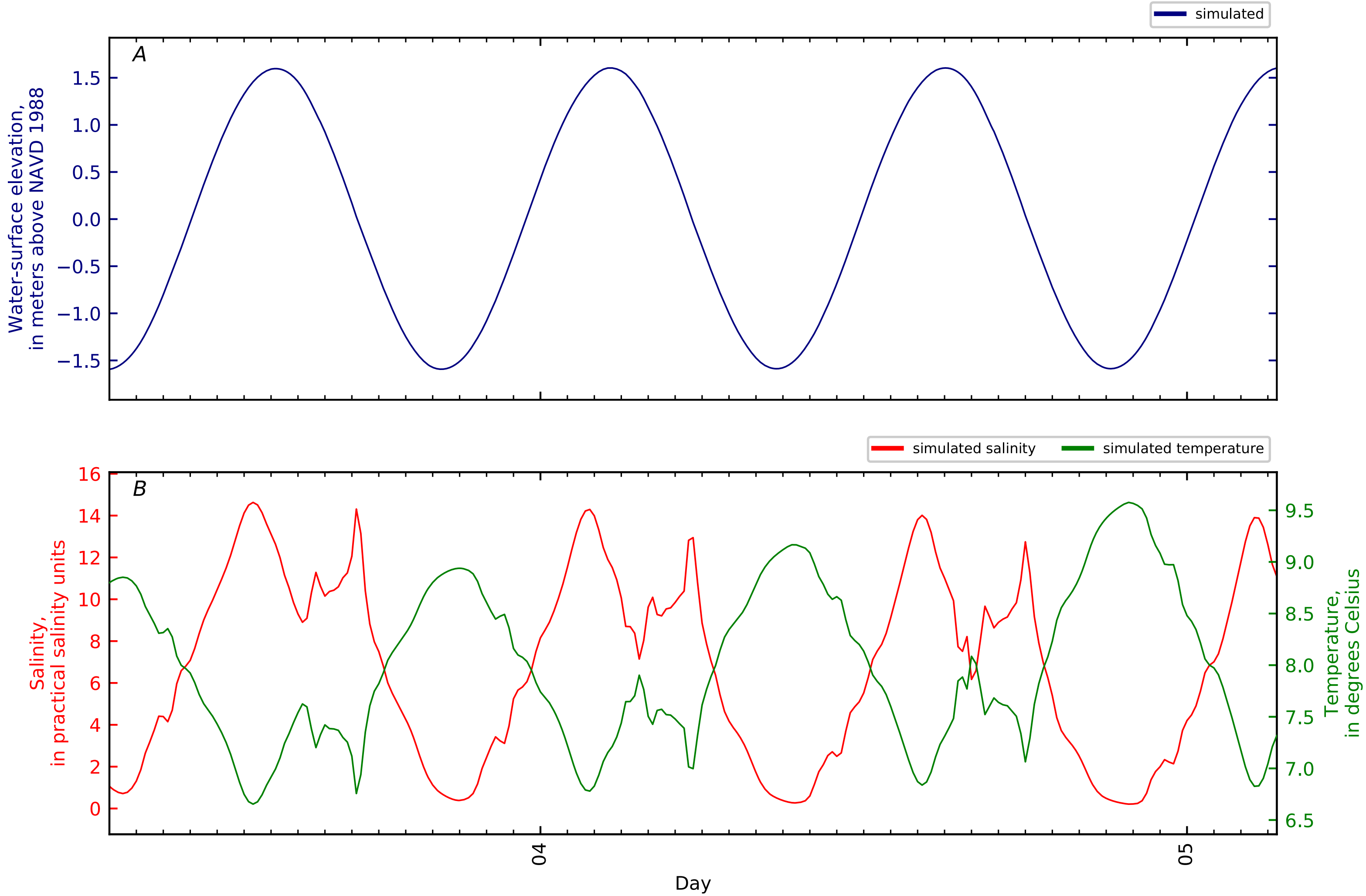

Figure B3-31. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 30, Penob Riv KM4. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

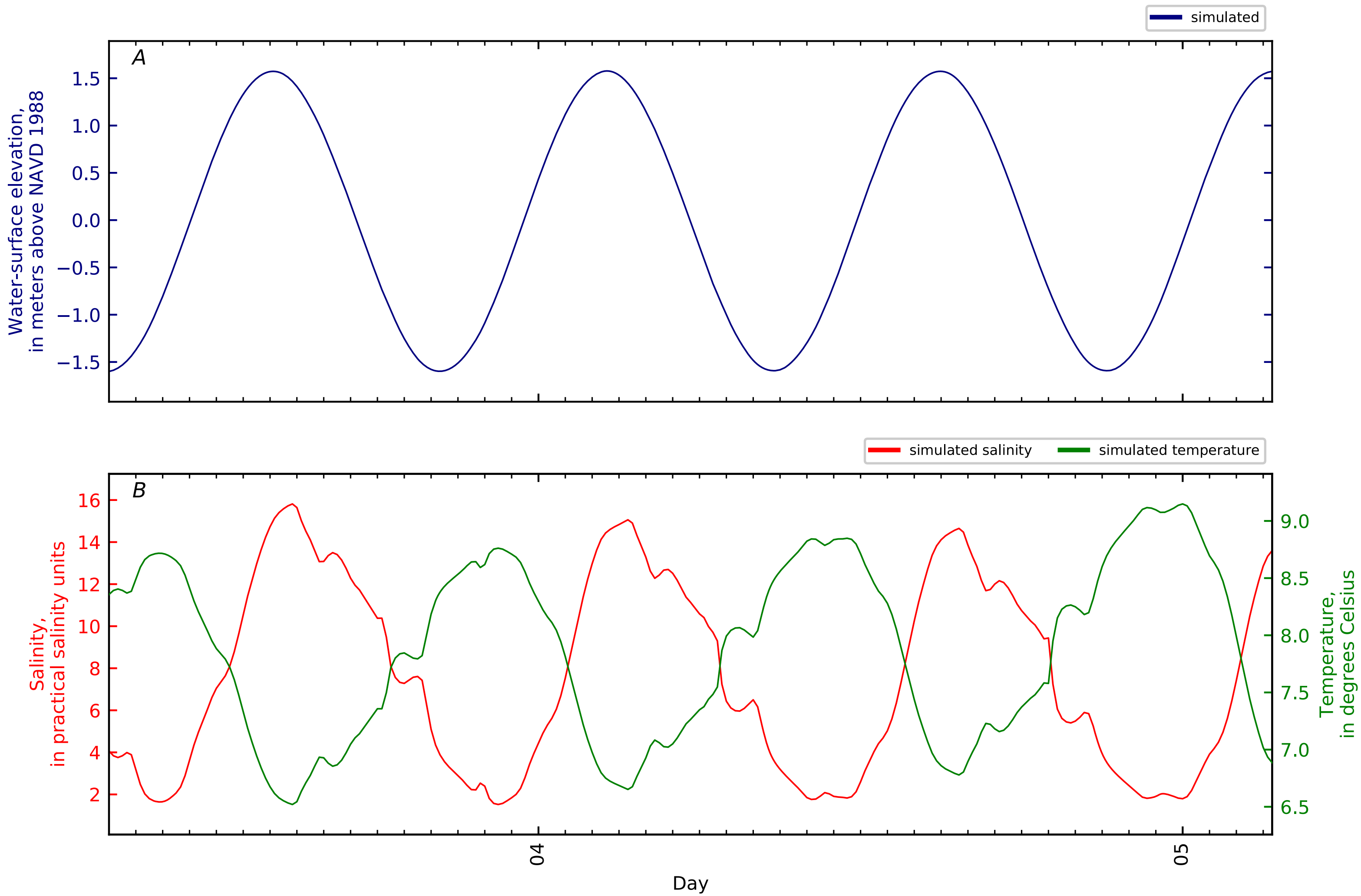

Figure B3-32. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 31, Penob Riv KM4.3 fmr NOAA gage Sandy Beac. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

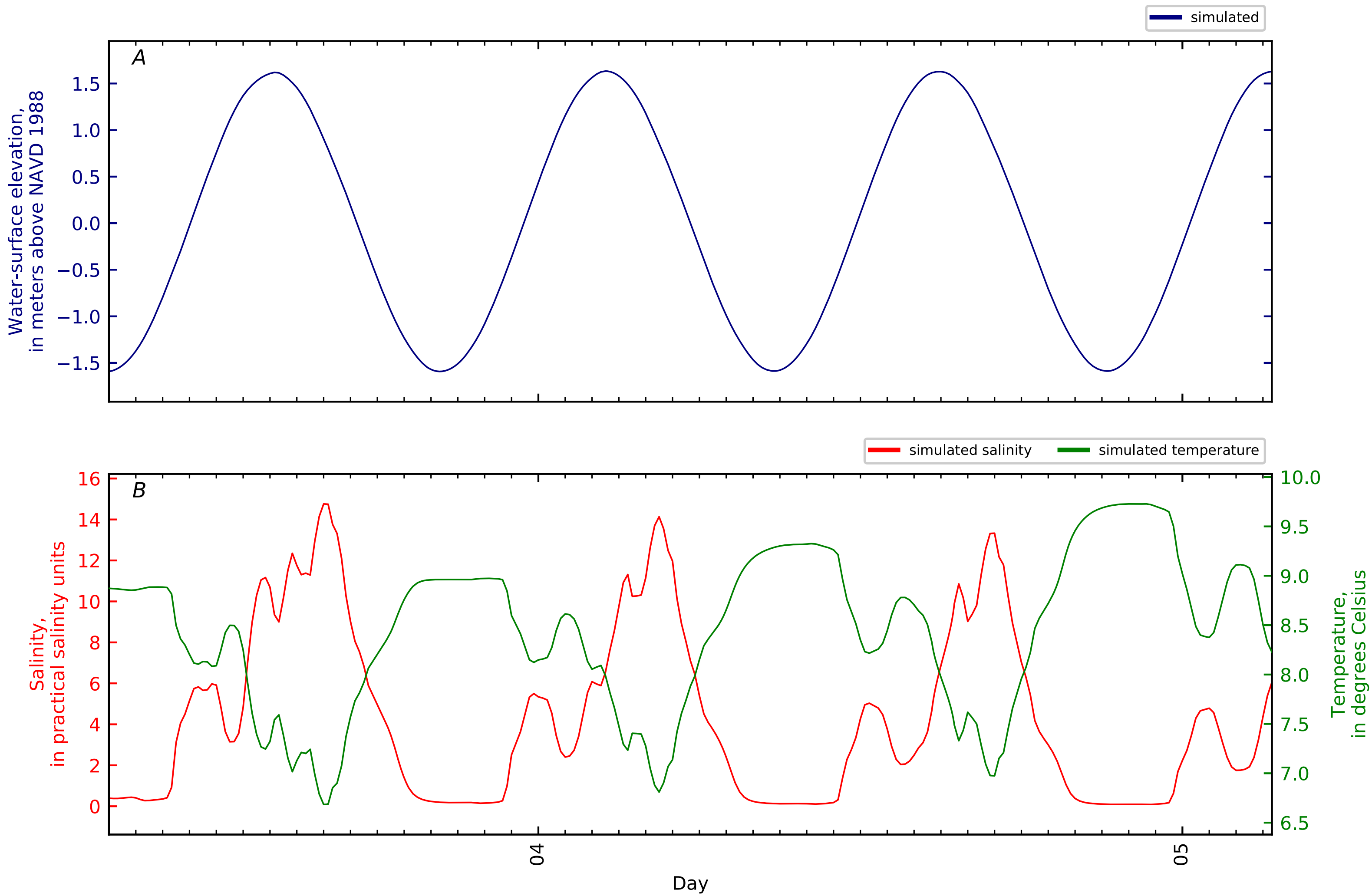

Figure B3-33. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 32, Penob Riv KM5. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

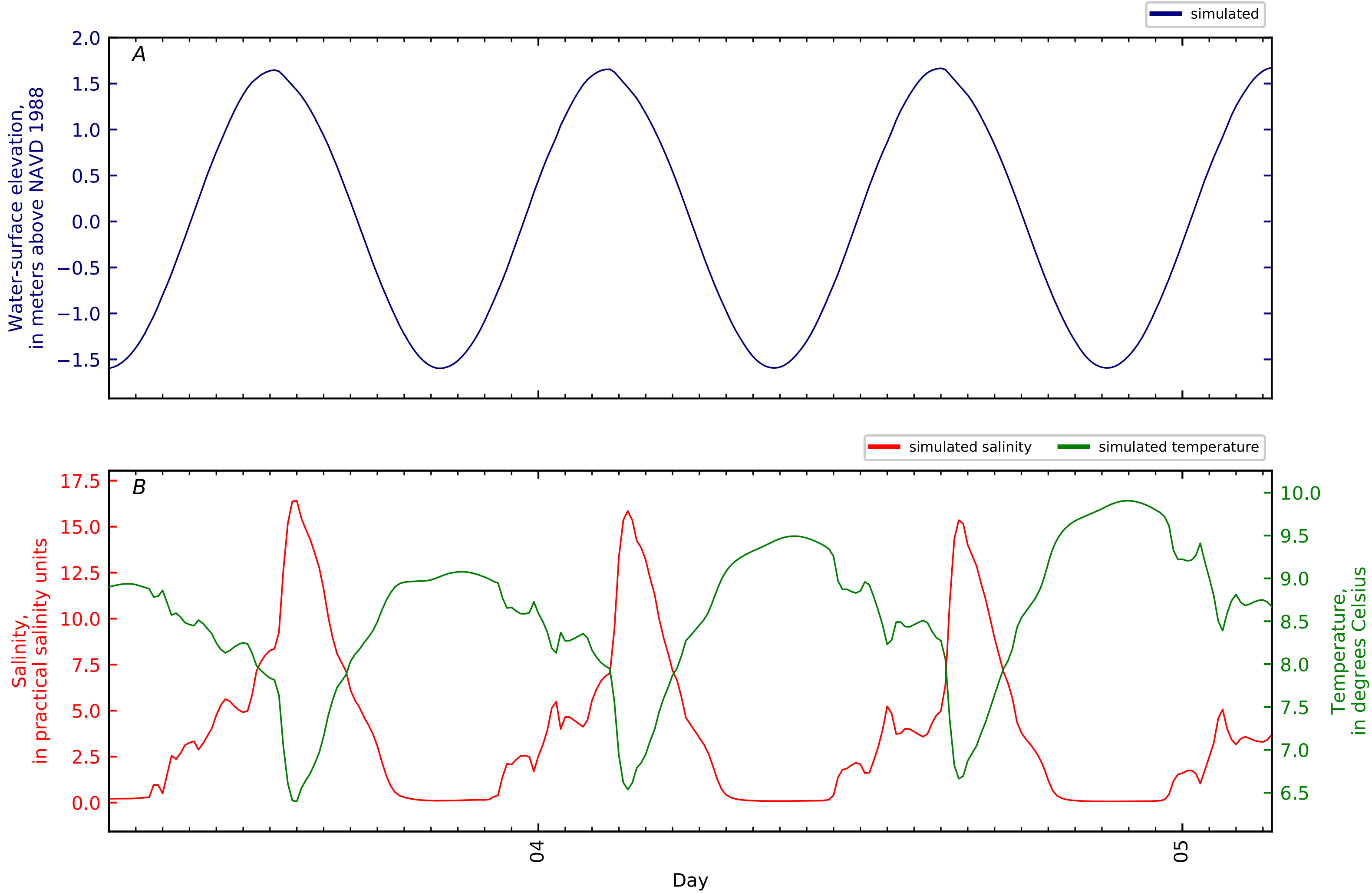

Figure B3-34. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 33, Penob Riv KM6. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

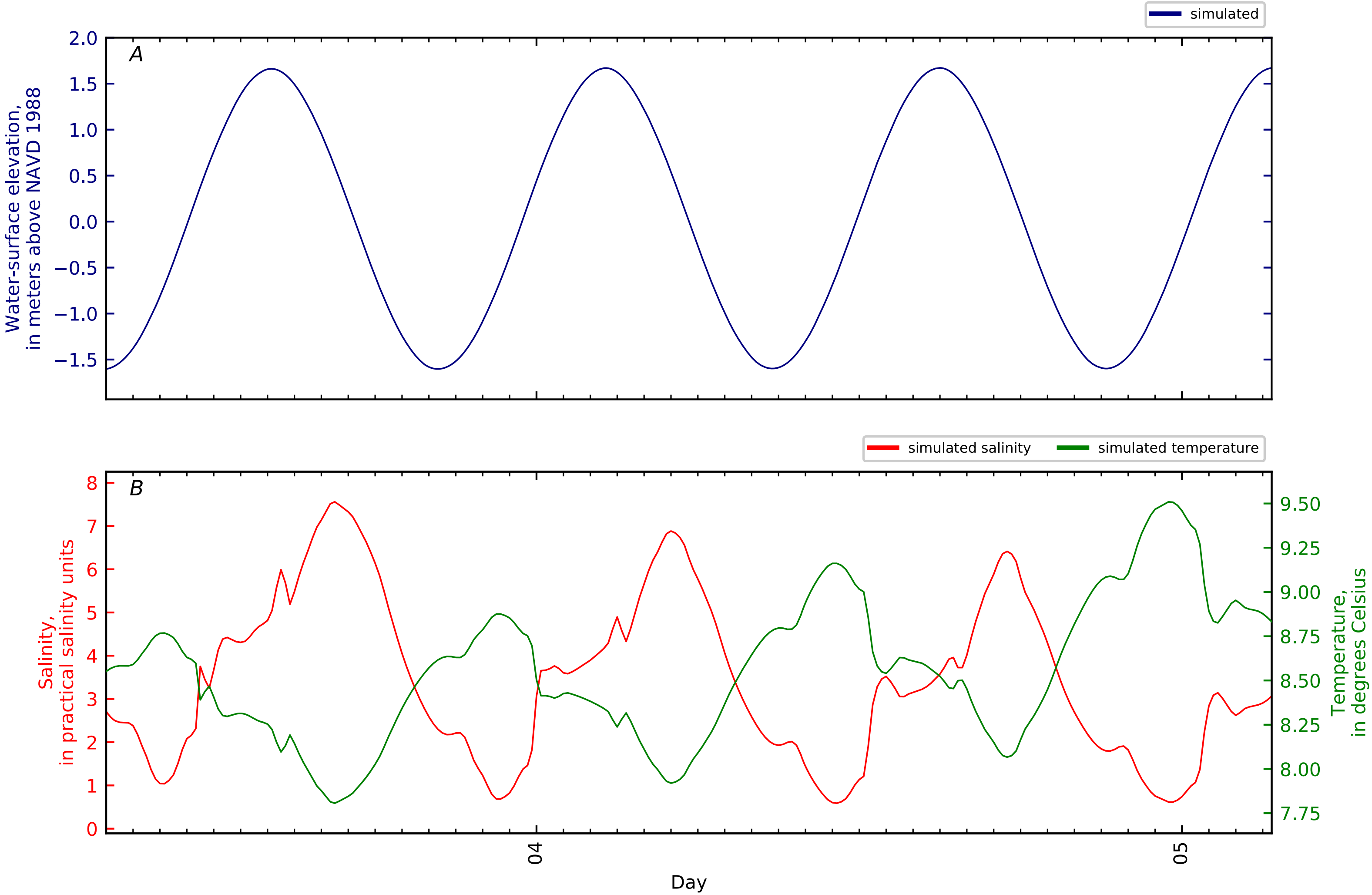

Figure B3-35. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 34, Penob Riv KM6 ERDC11 VW-MU14-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

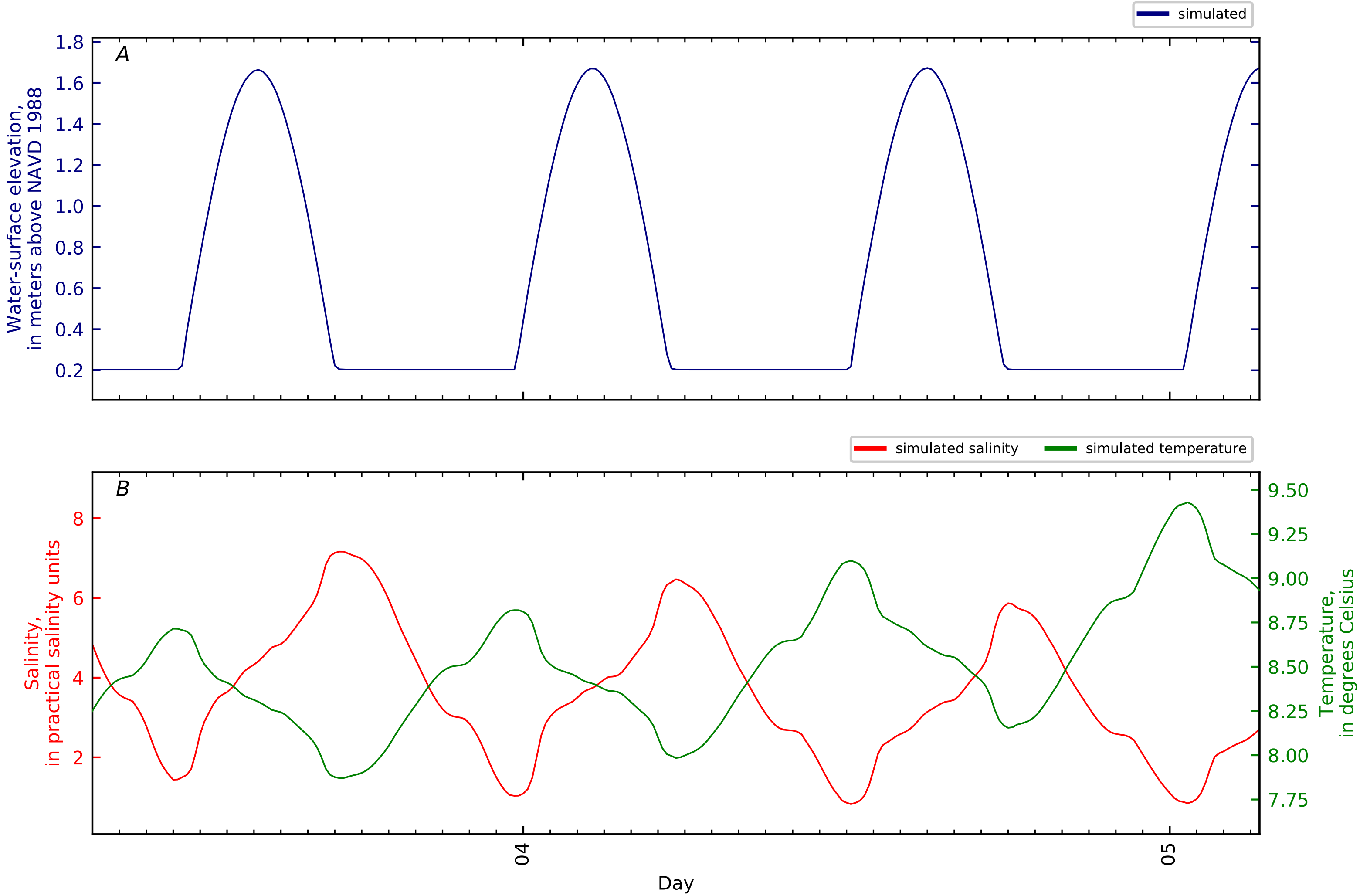

Figure B3-36. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 35, Penob Riv KM6.05 ERDC10 VW-MU7-SF1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

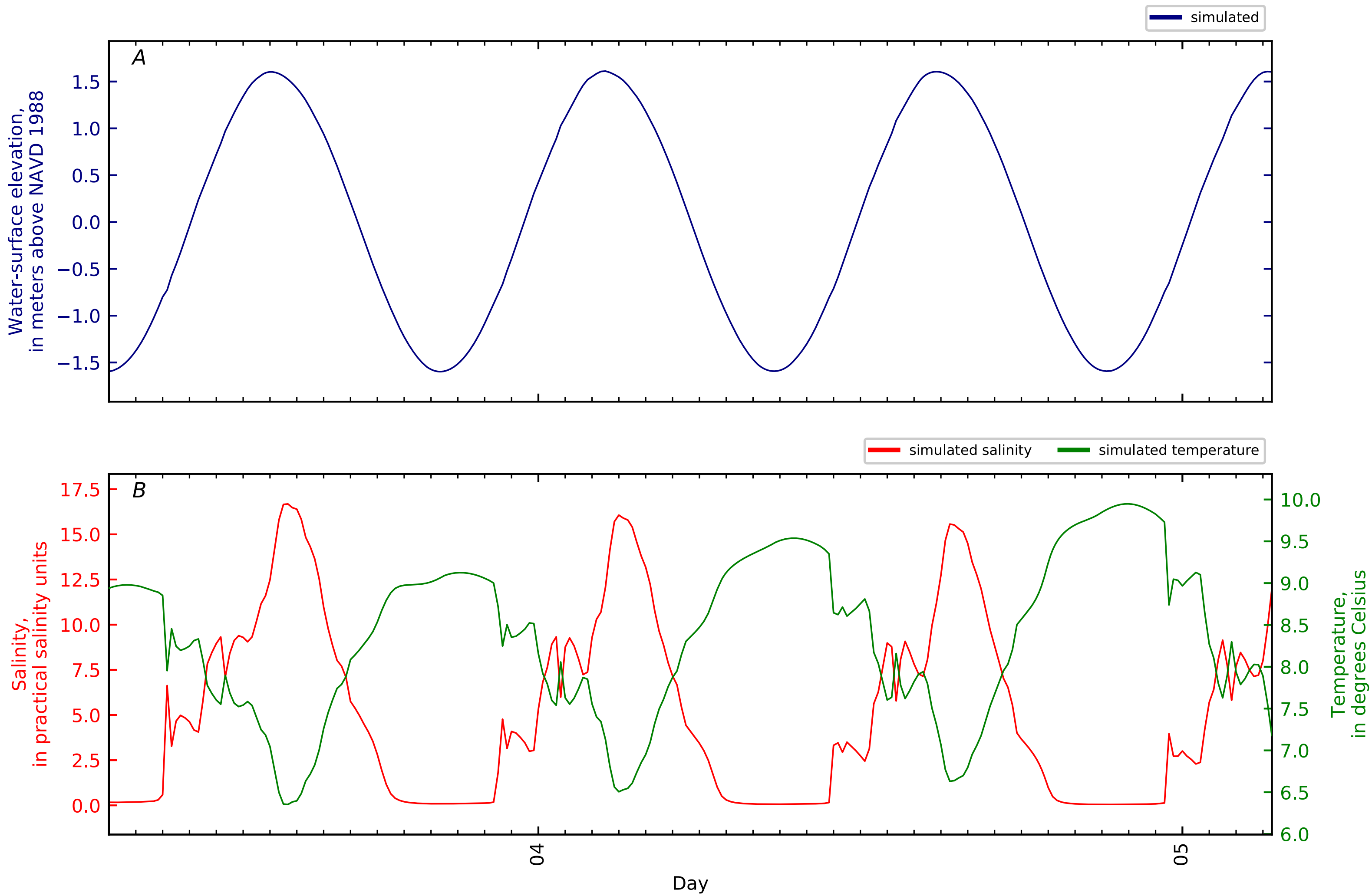

Figure B3-37. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 36, Penob Riv KM6.1 WHOI5 Verona Island 2010. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

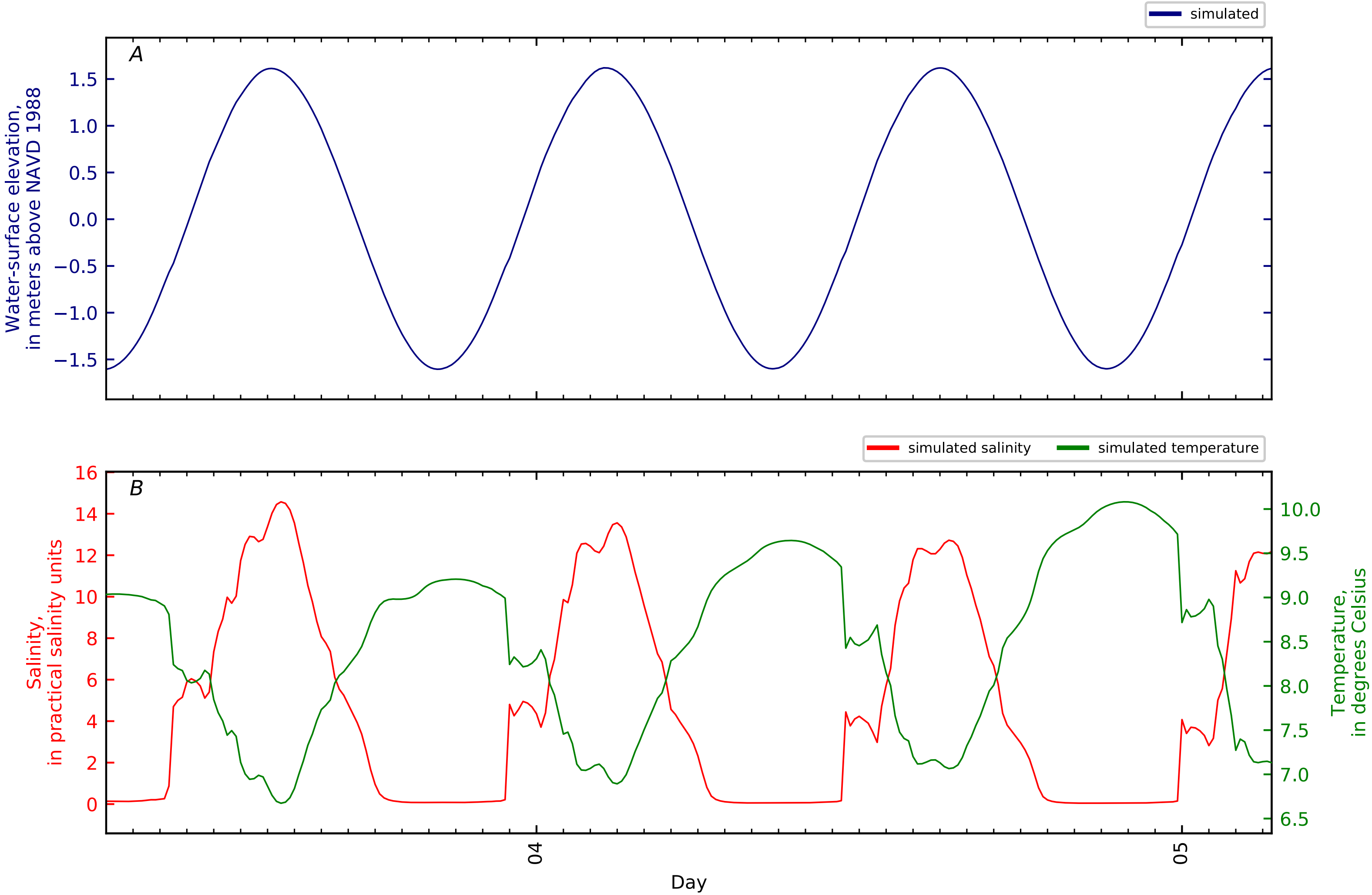

Figure B3-38. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 37, Penob Riv KM7. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

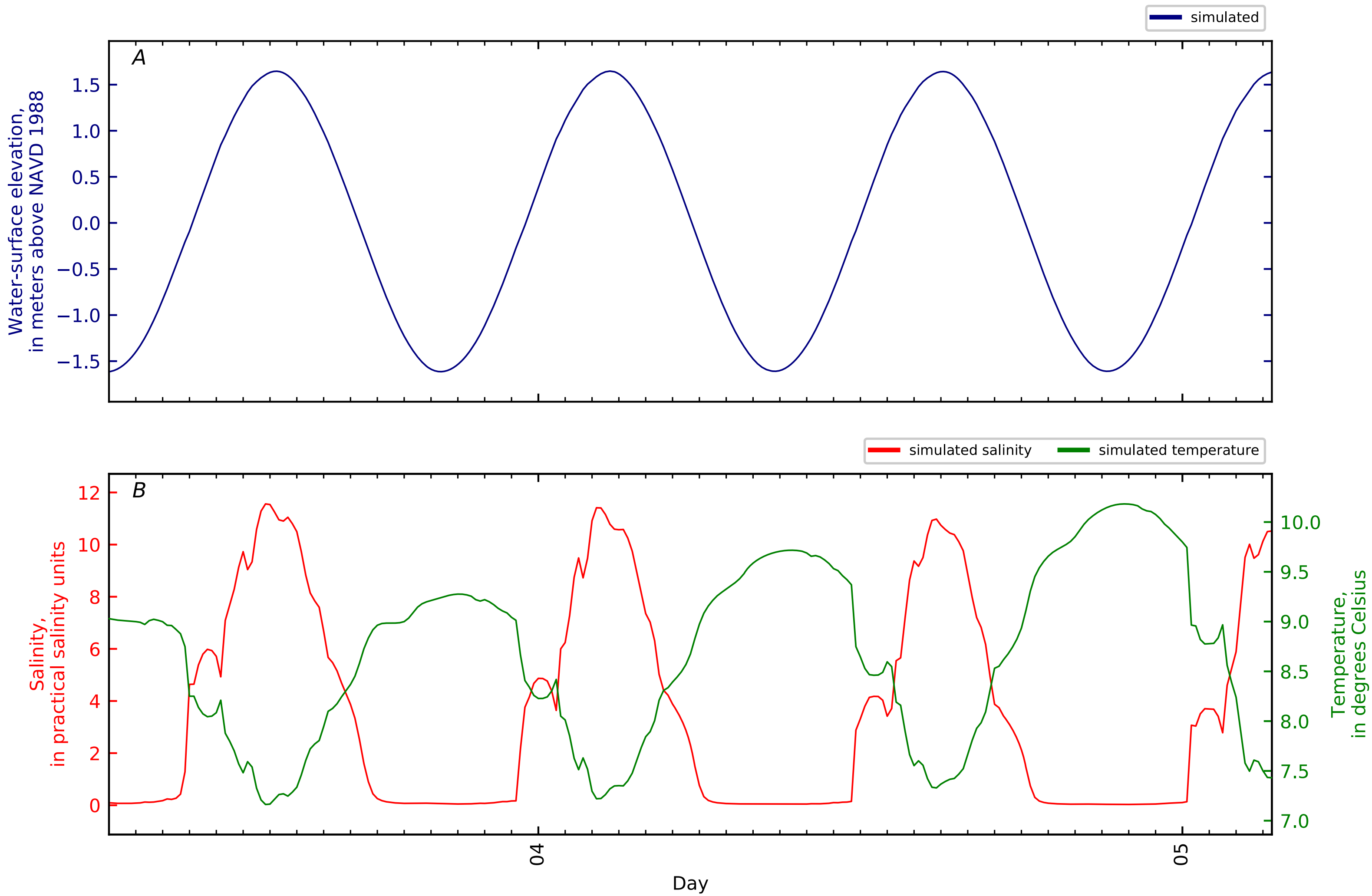

Figure B3-39. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 38, Penob Riv KM8. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

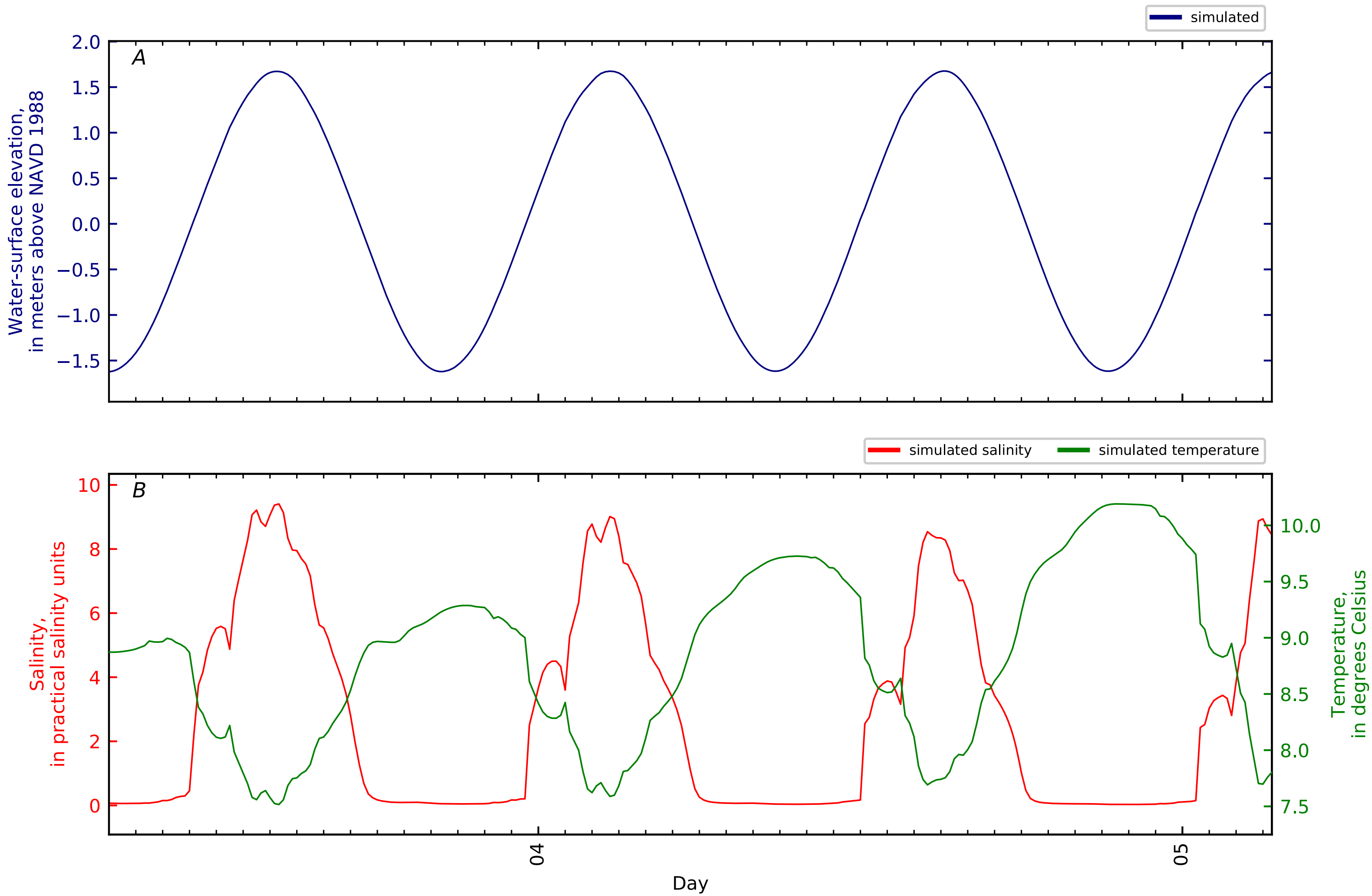

Figure B3-40. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 39, Penob Riv KM9. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

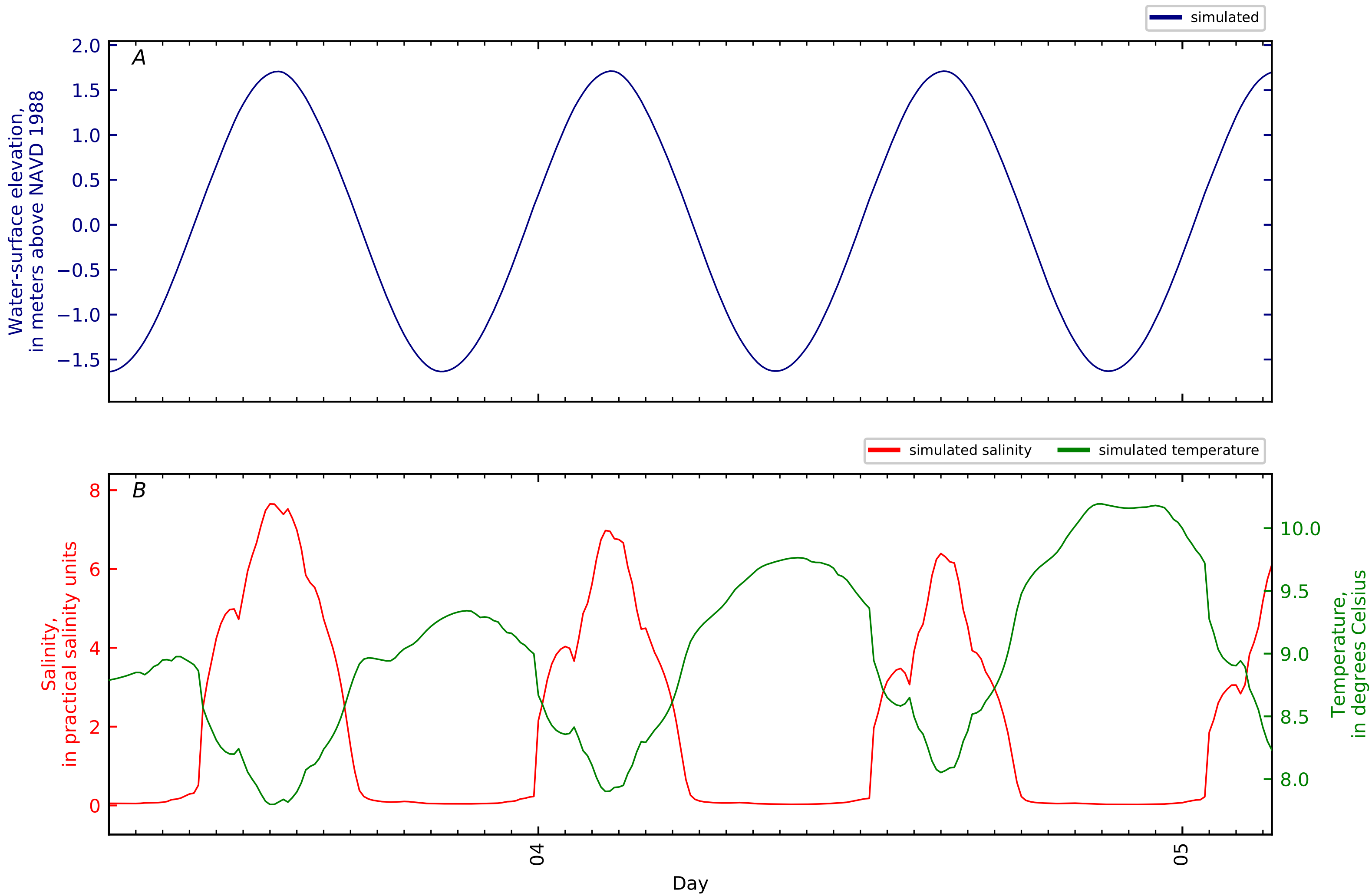

Figure B3-41. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 40, Penob Riv KM10. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

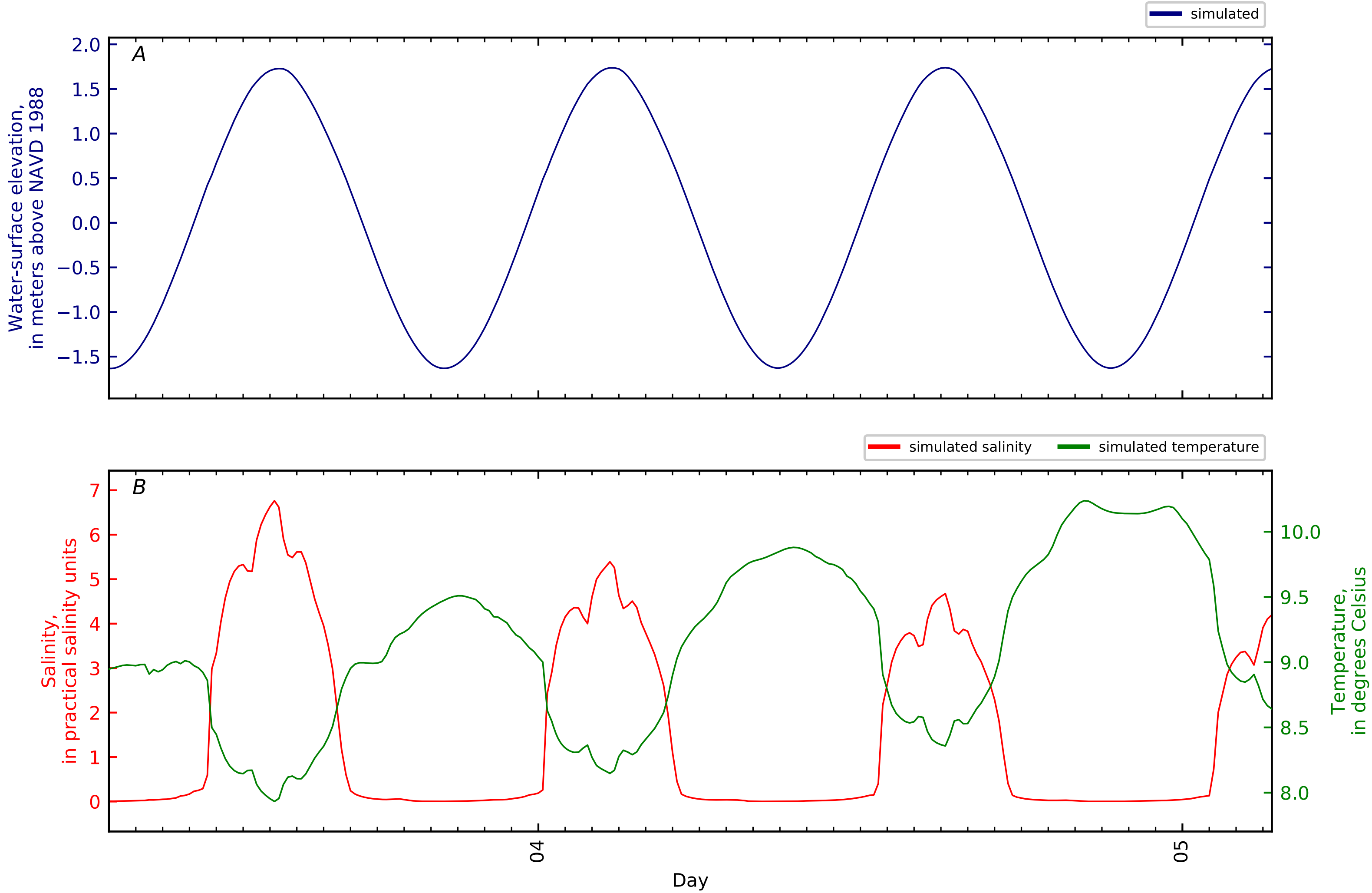

Figure B3-42. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 41, Penob Riv KM11. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

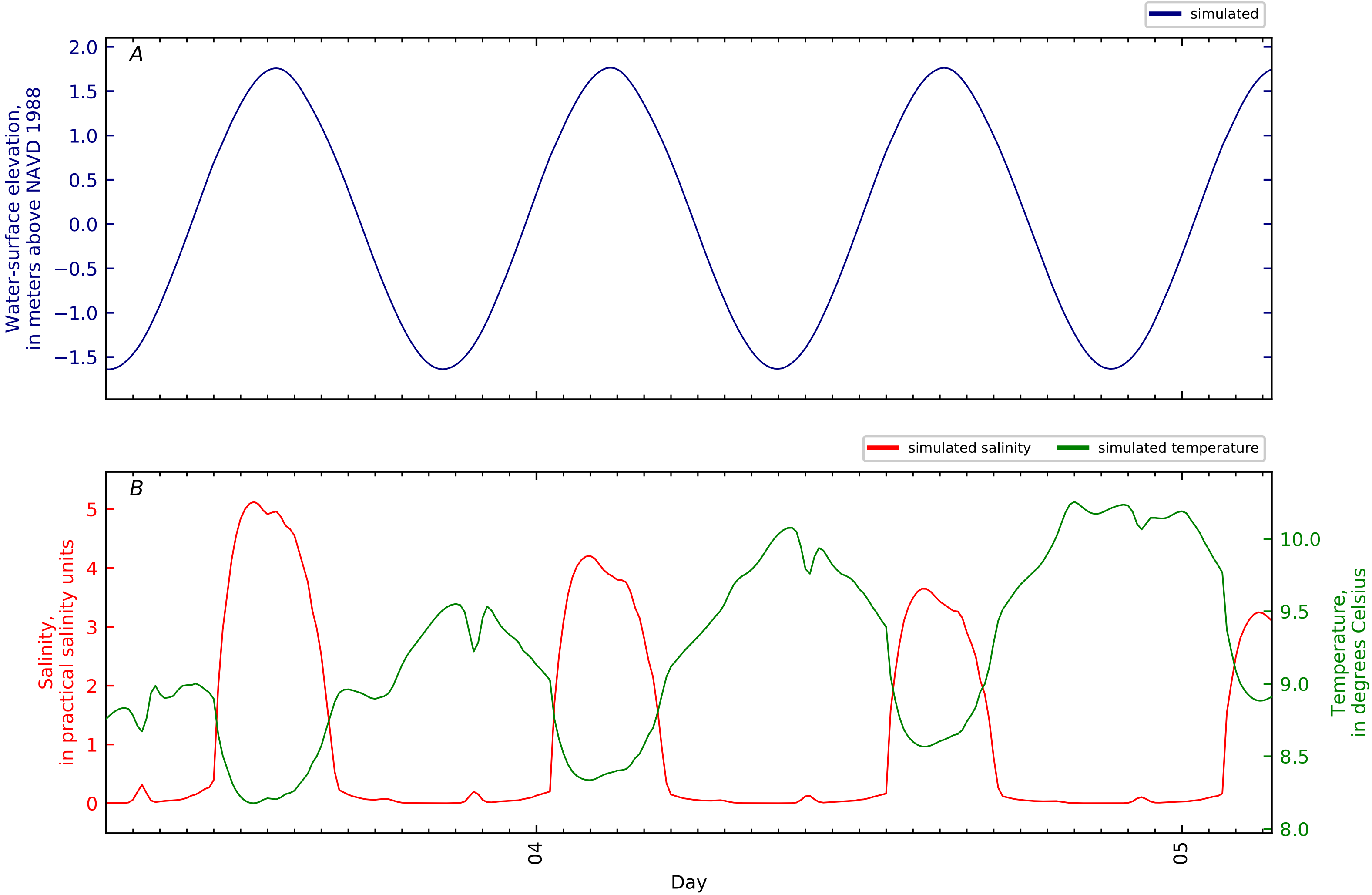

Figure B3-43. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 42, Penob Riv KM12. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

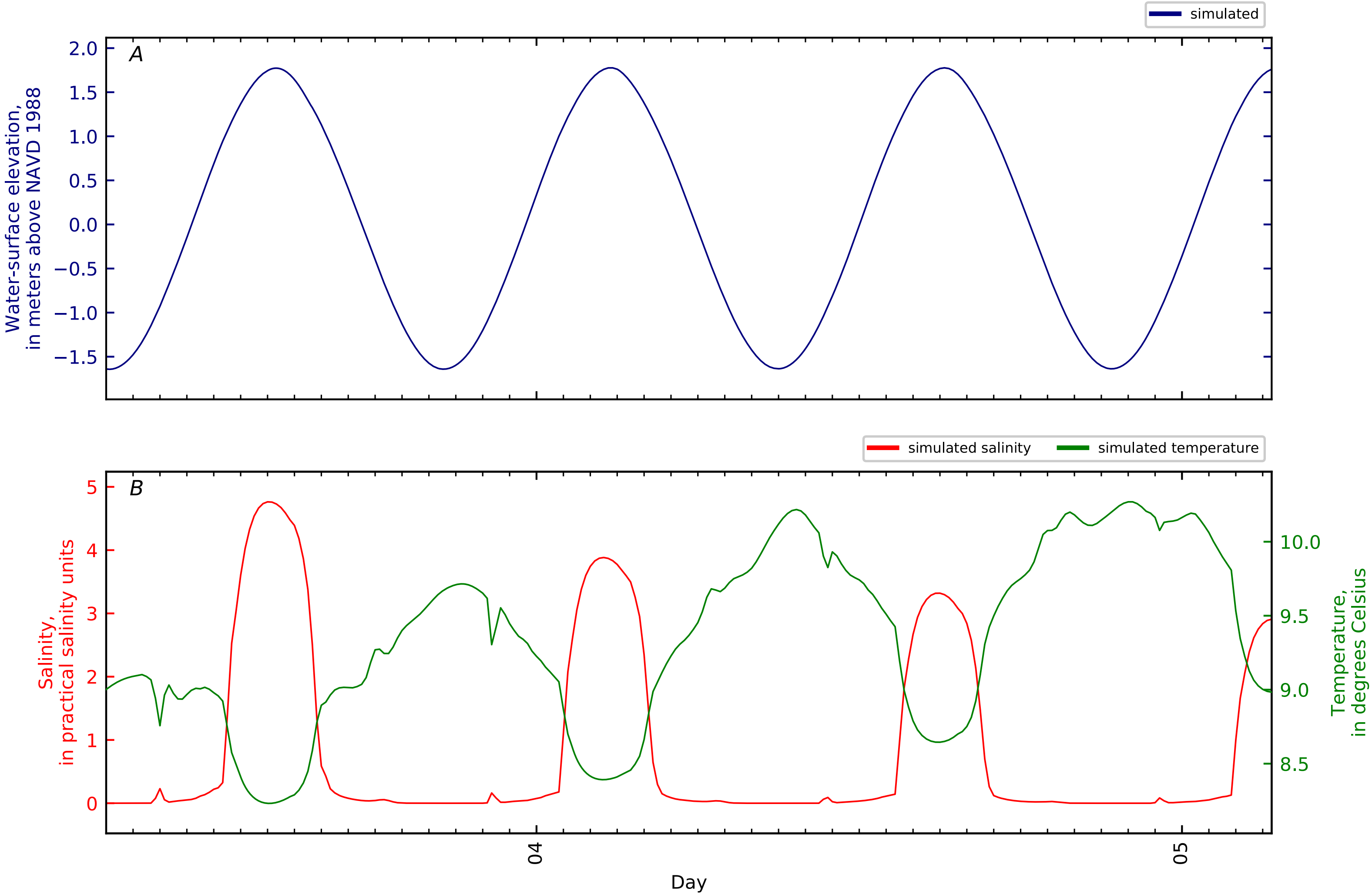

Figure B3-44. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 43, Penob Riv KM12.9 WHOI7 Bucksport 2011. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

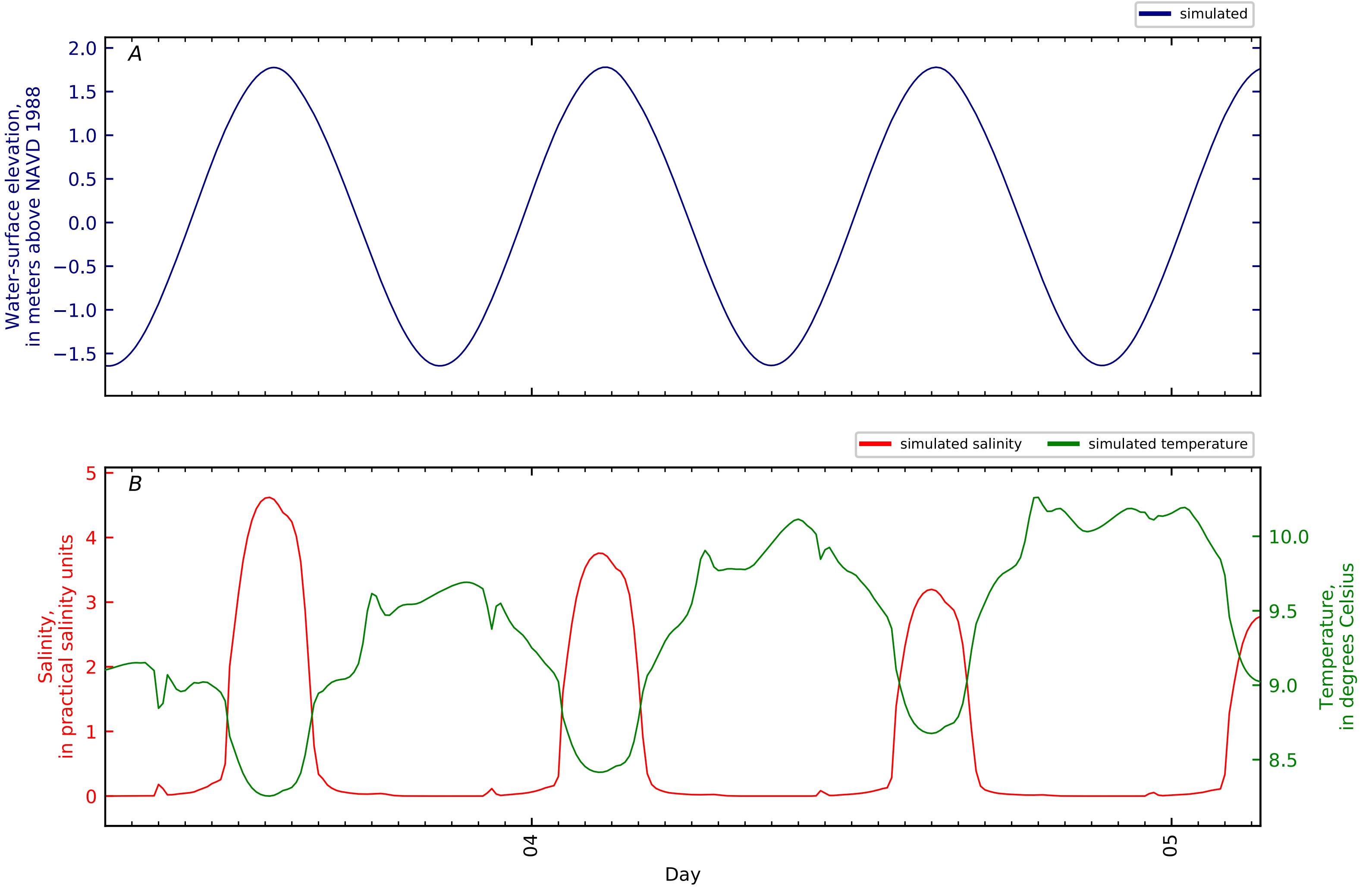

Figure B3-45. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 44, Penob Riv KM13. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

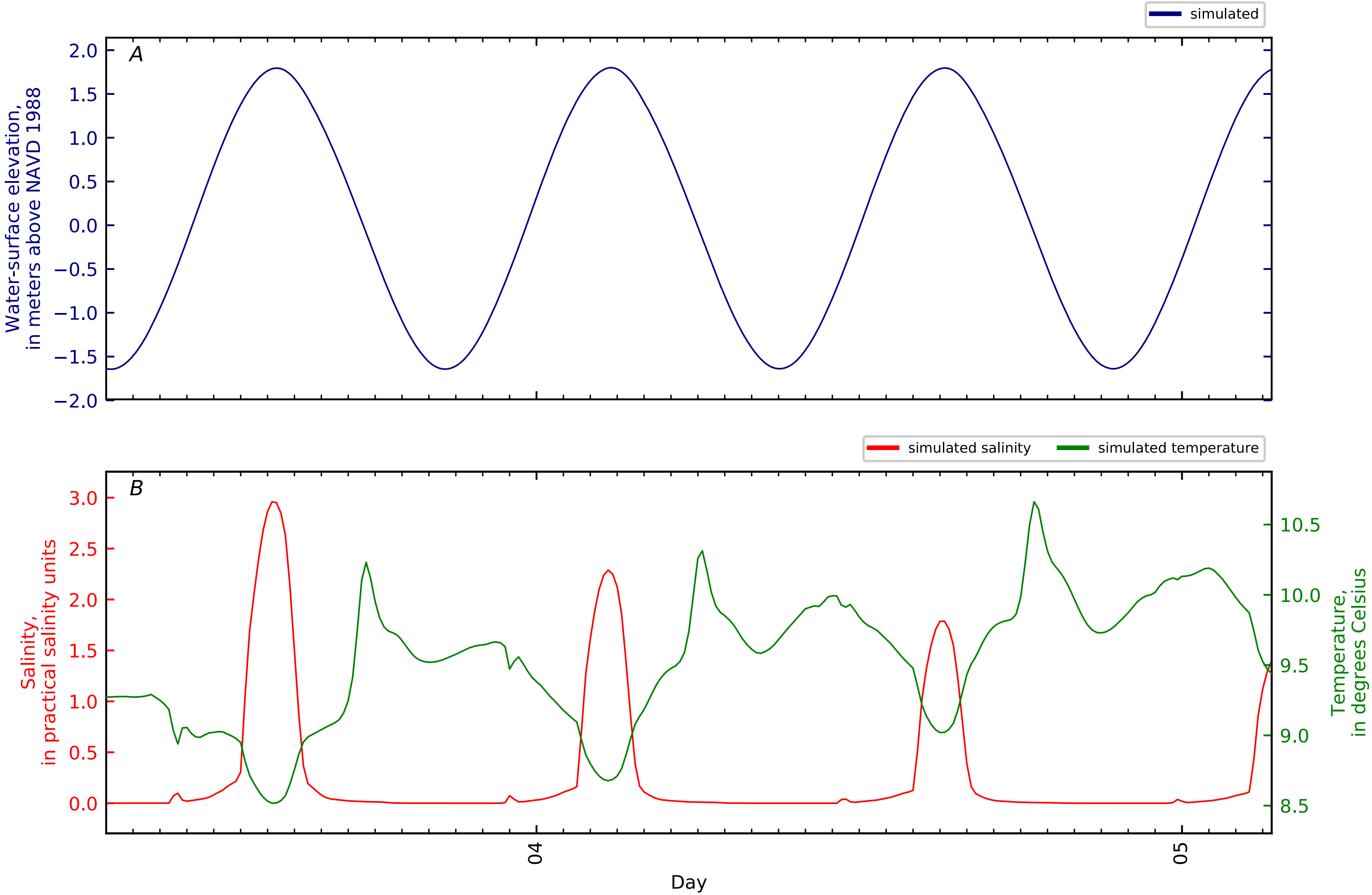

Figure B3-46. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 45, Penob Riv KM14. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

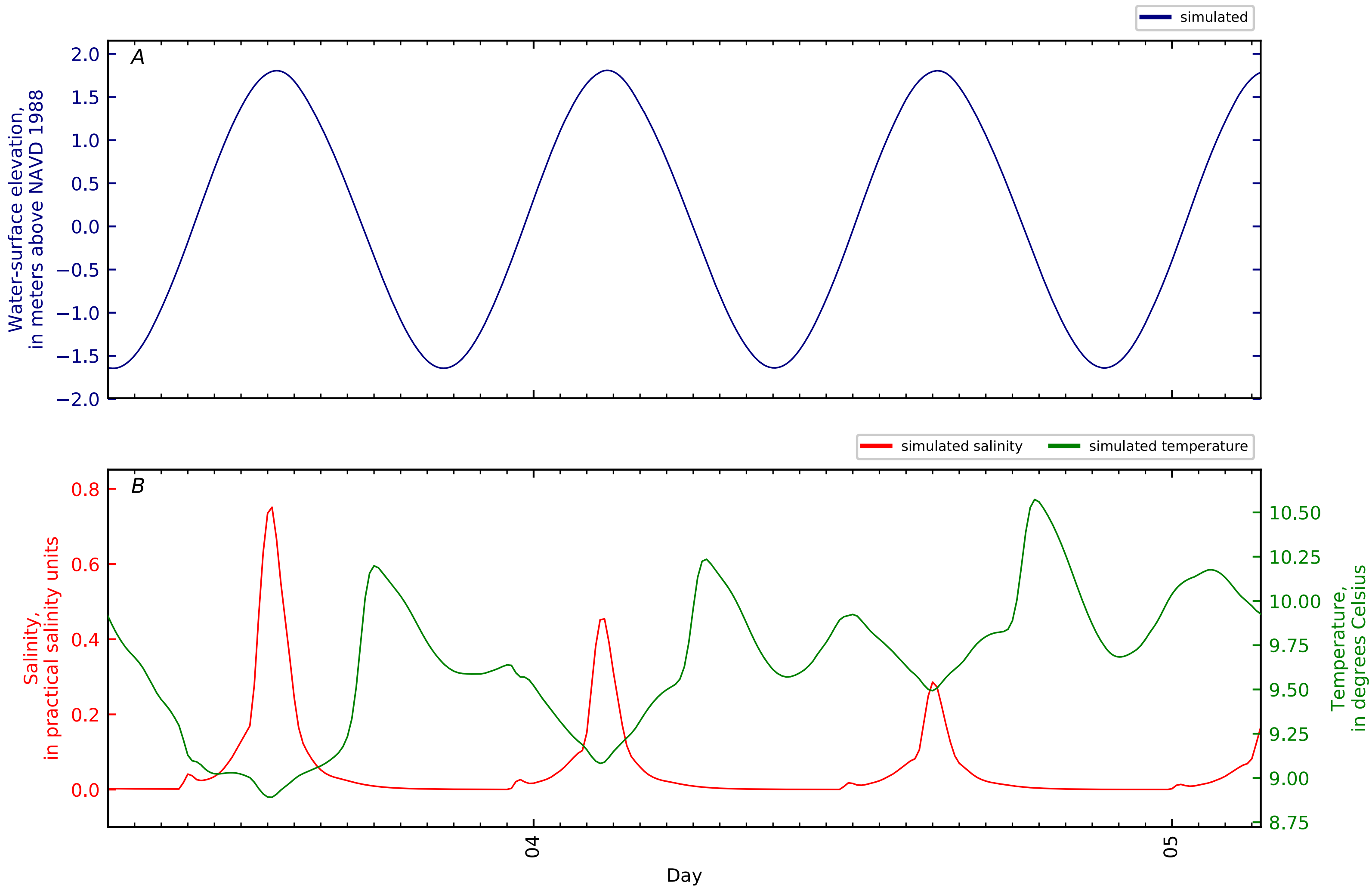

Figure B3-47. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 46, Penob Riv KM14.27 ERDC15 BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

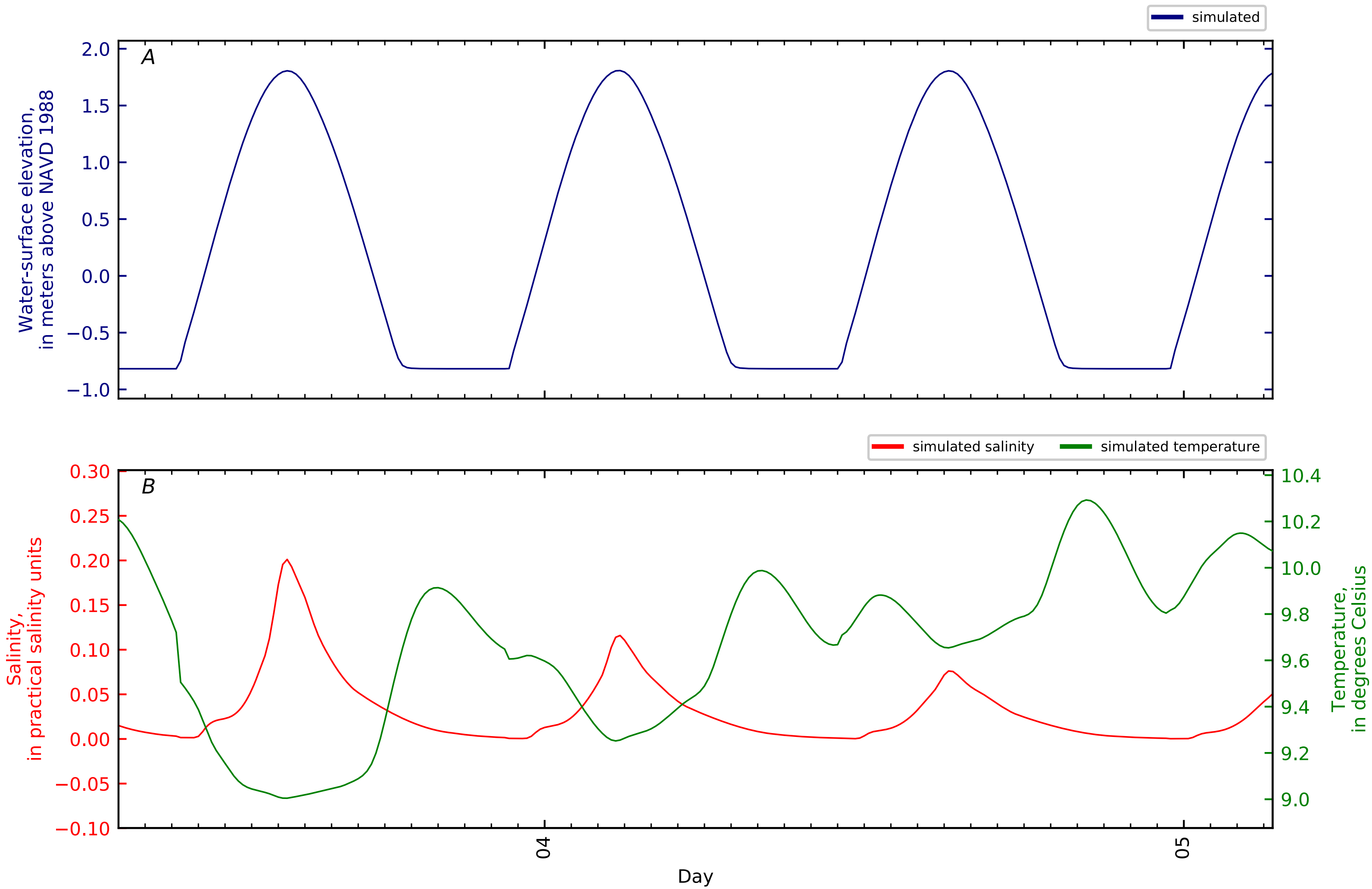

Figure B3-48. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 47, Penob Riv KM14.29 ERDC16B BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

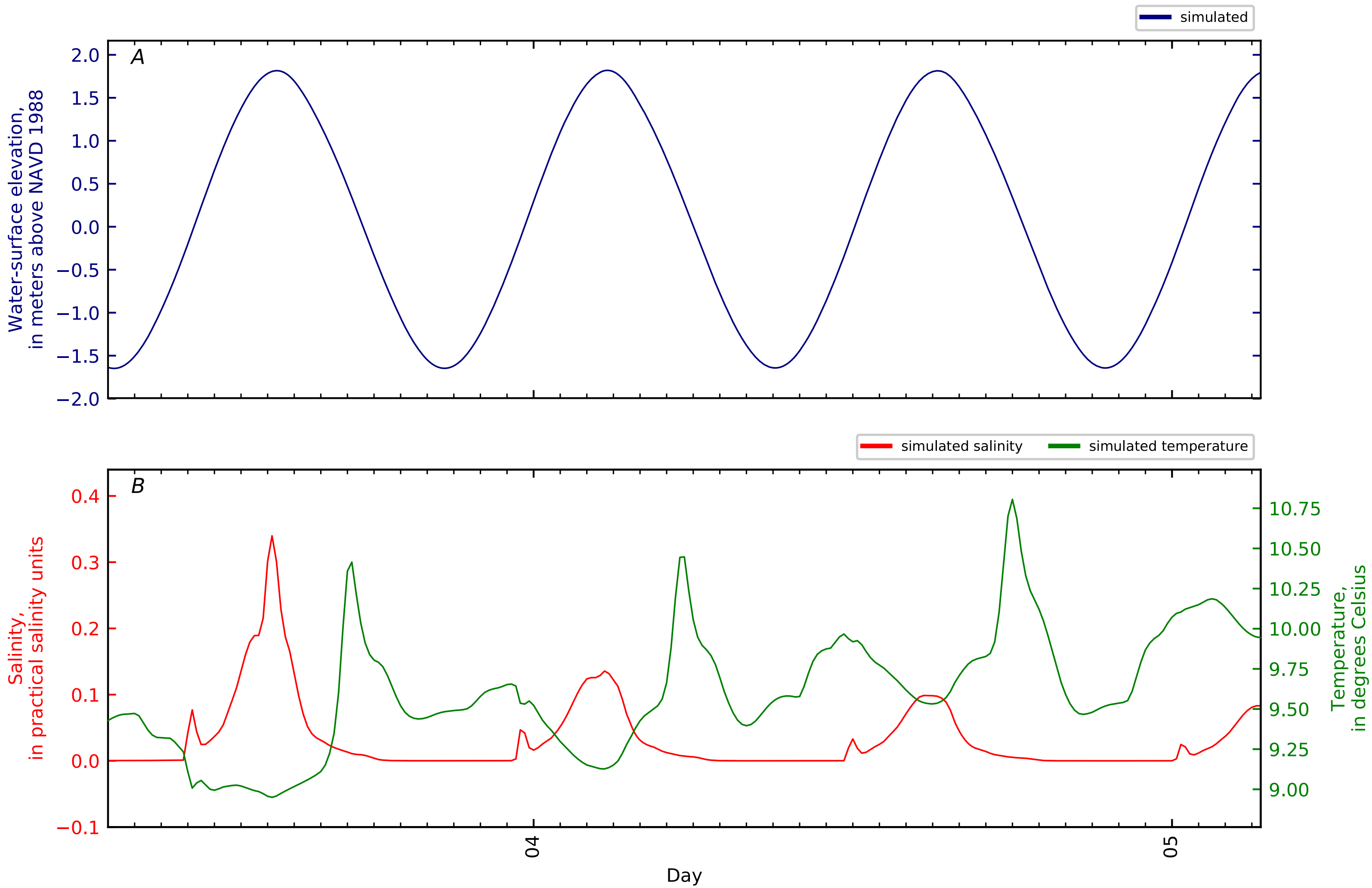

Figure B3-49. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 48, Penob Riv KM15. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

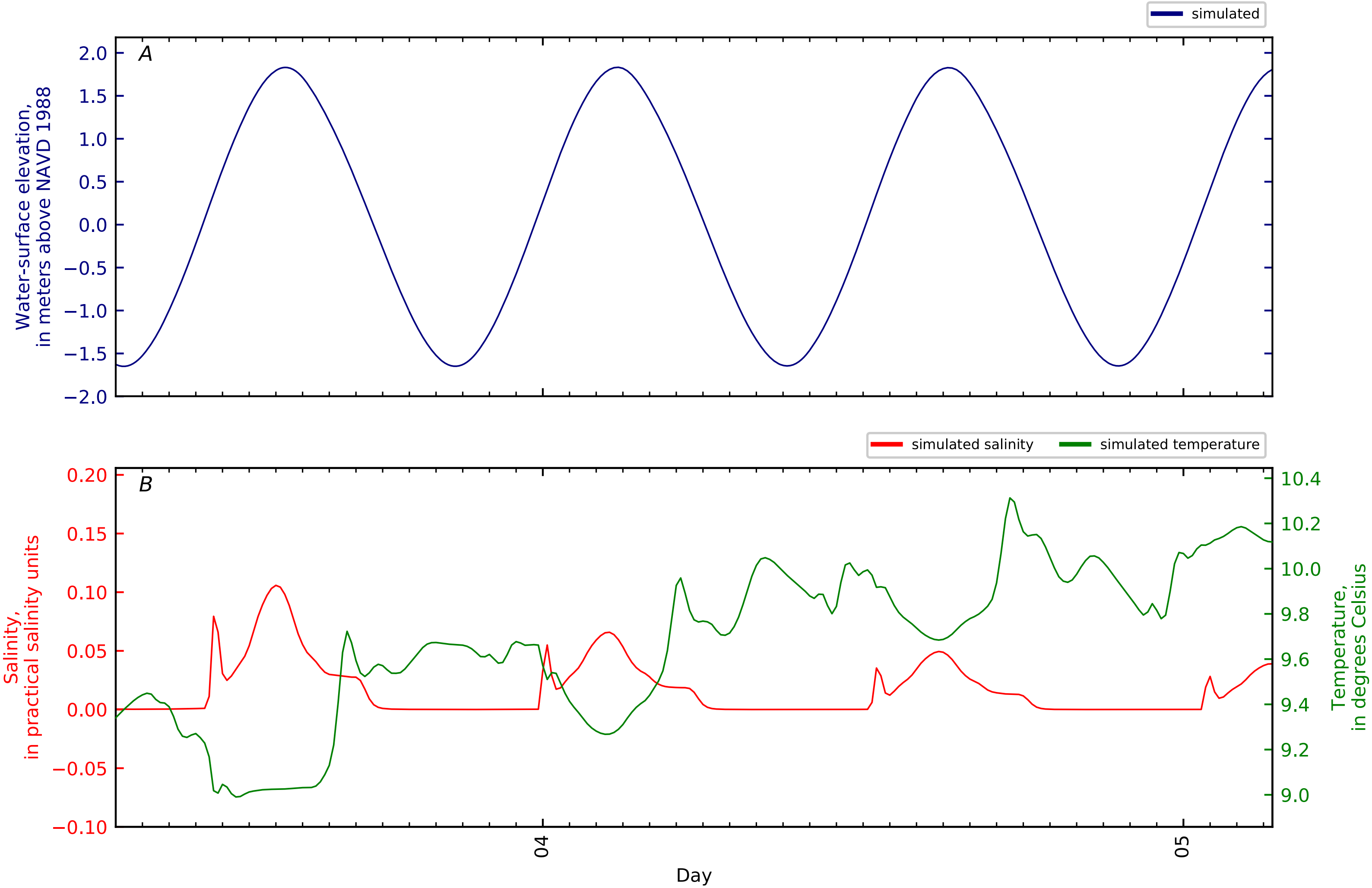

Figure B3-50. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 49, Penob Riv KM16. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

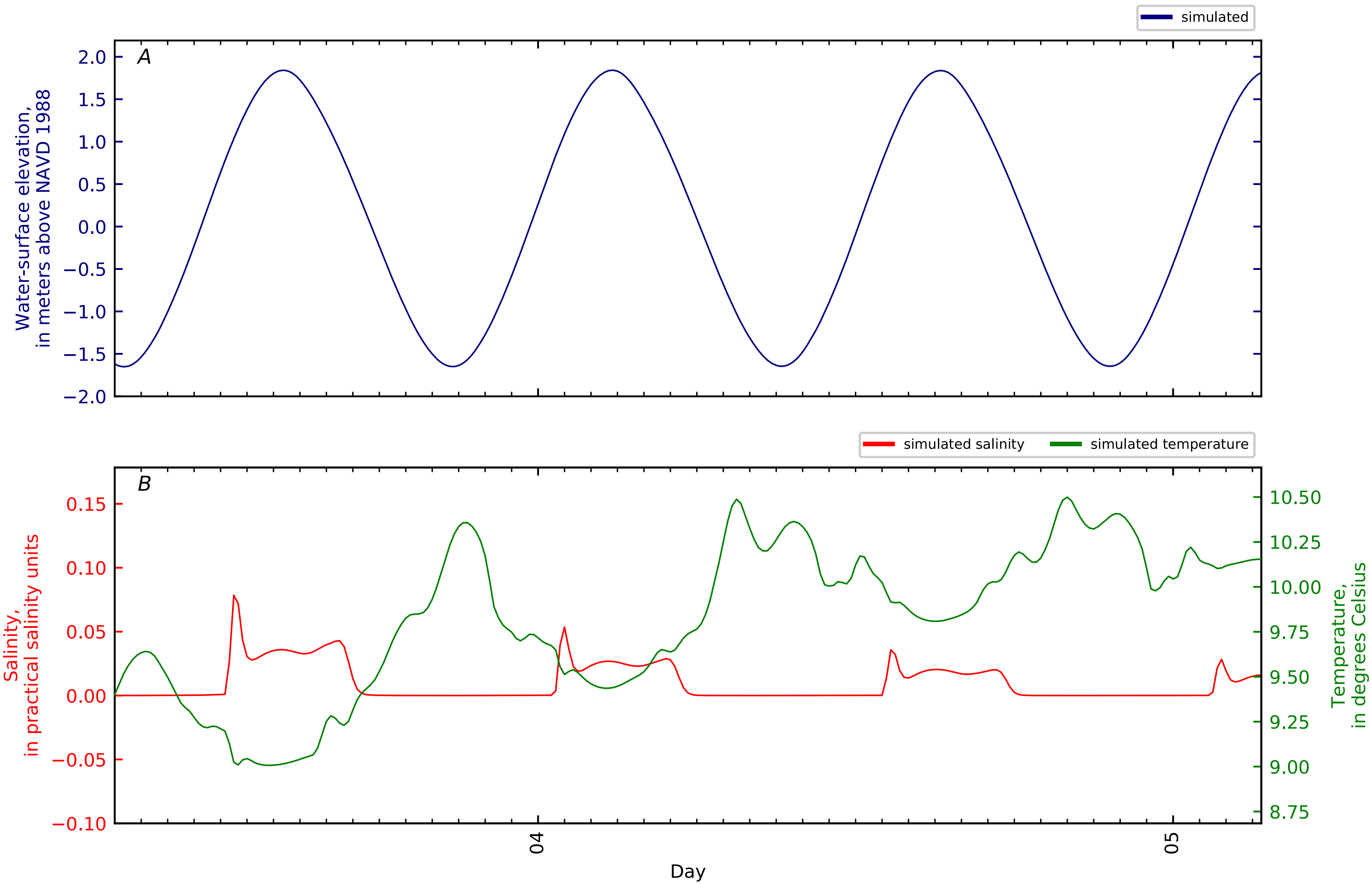

Figure B3-51. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 50, Penob Riv KM17. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

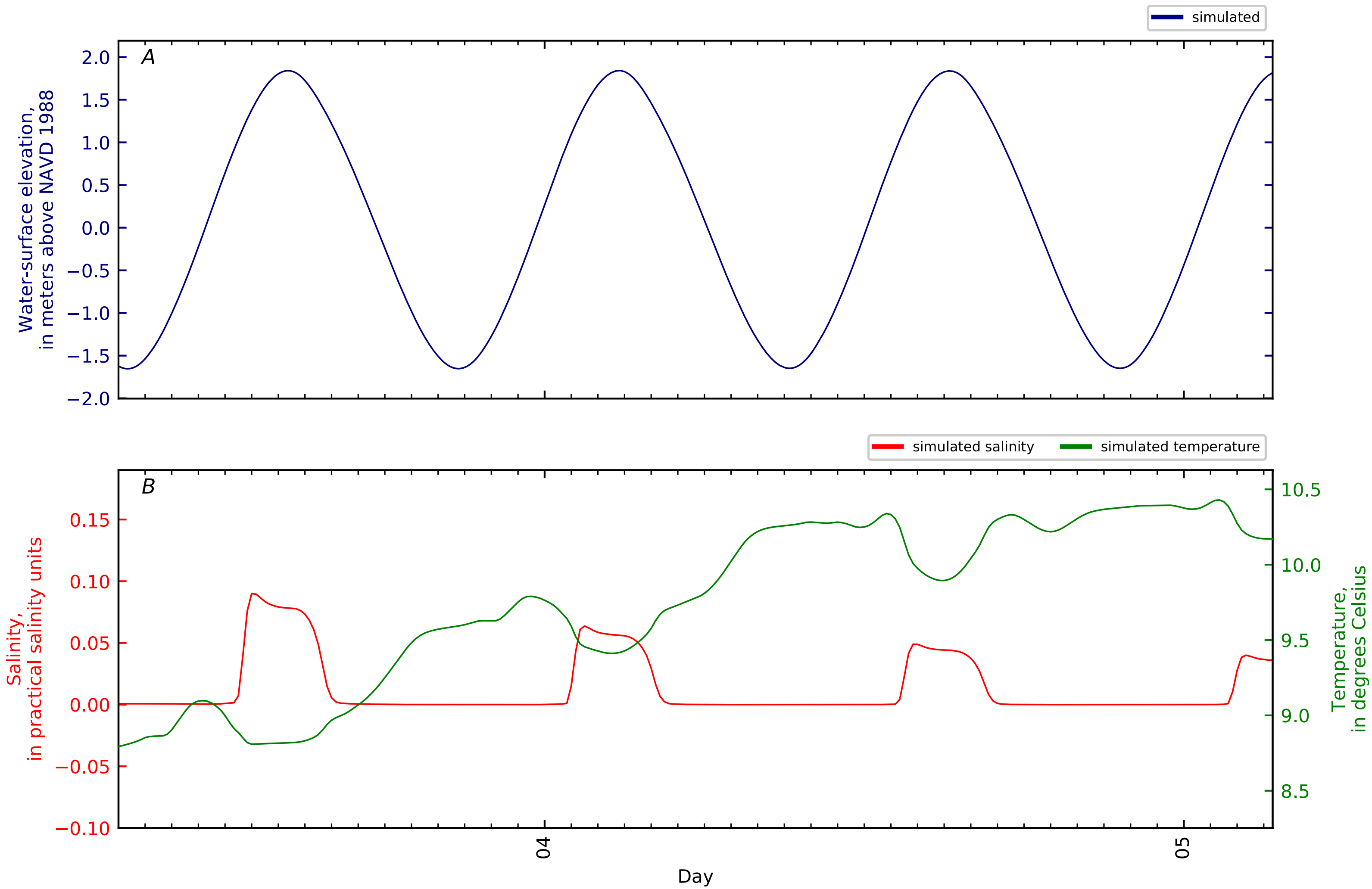

Figure B3-52. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 51, Penob Riv KM17.2 ERDC17B FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

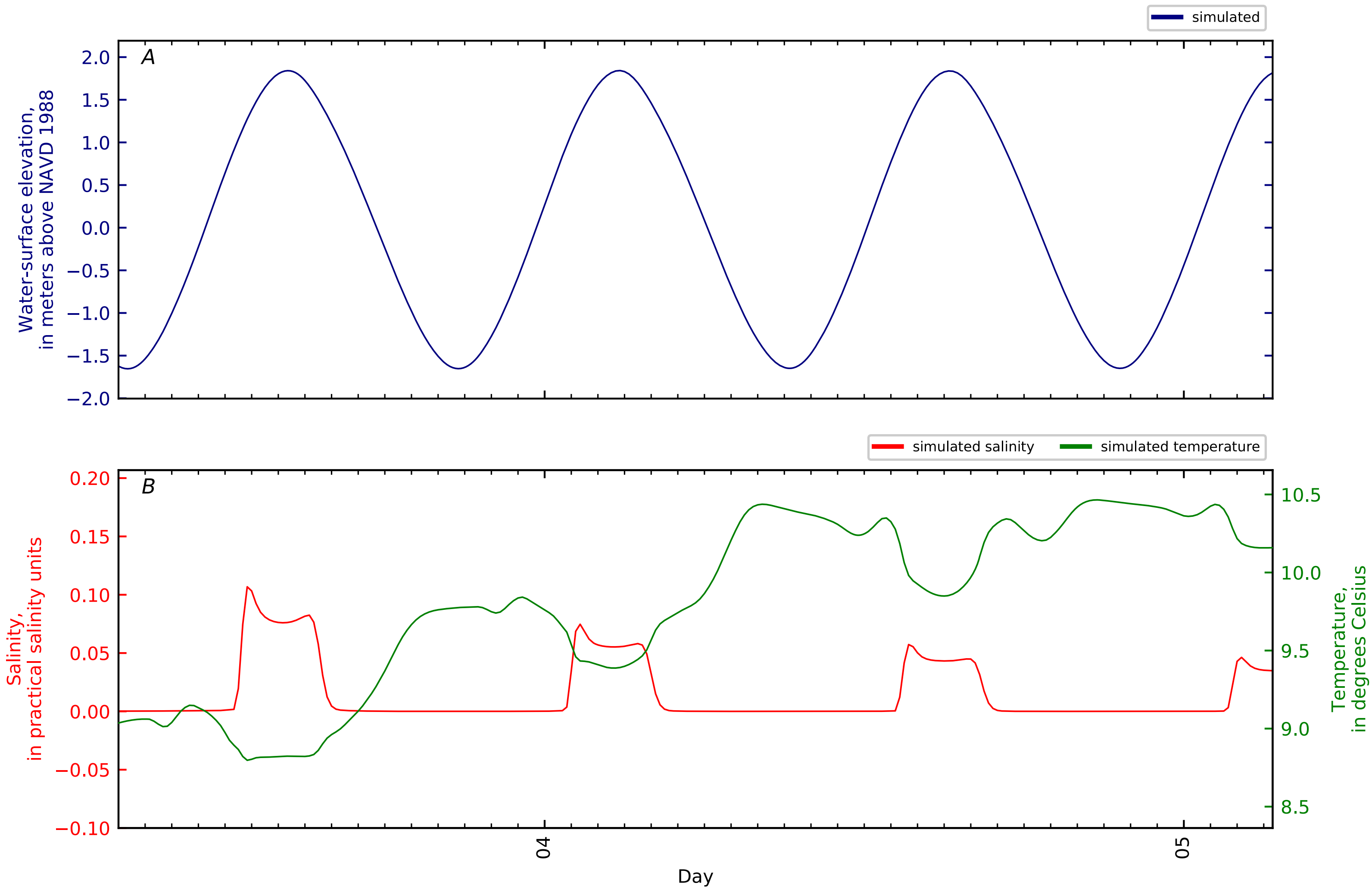

Figure B3-53. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 52, Penob Riv KM17.21 ERDC13 FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

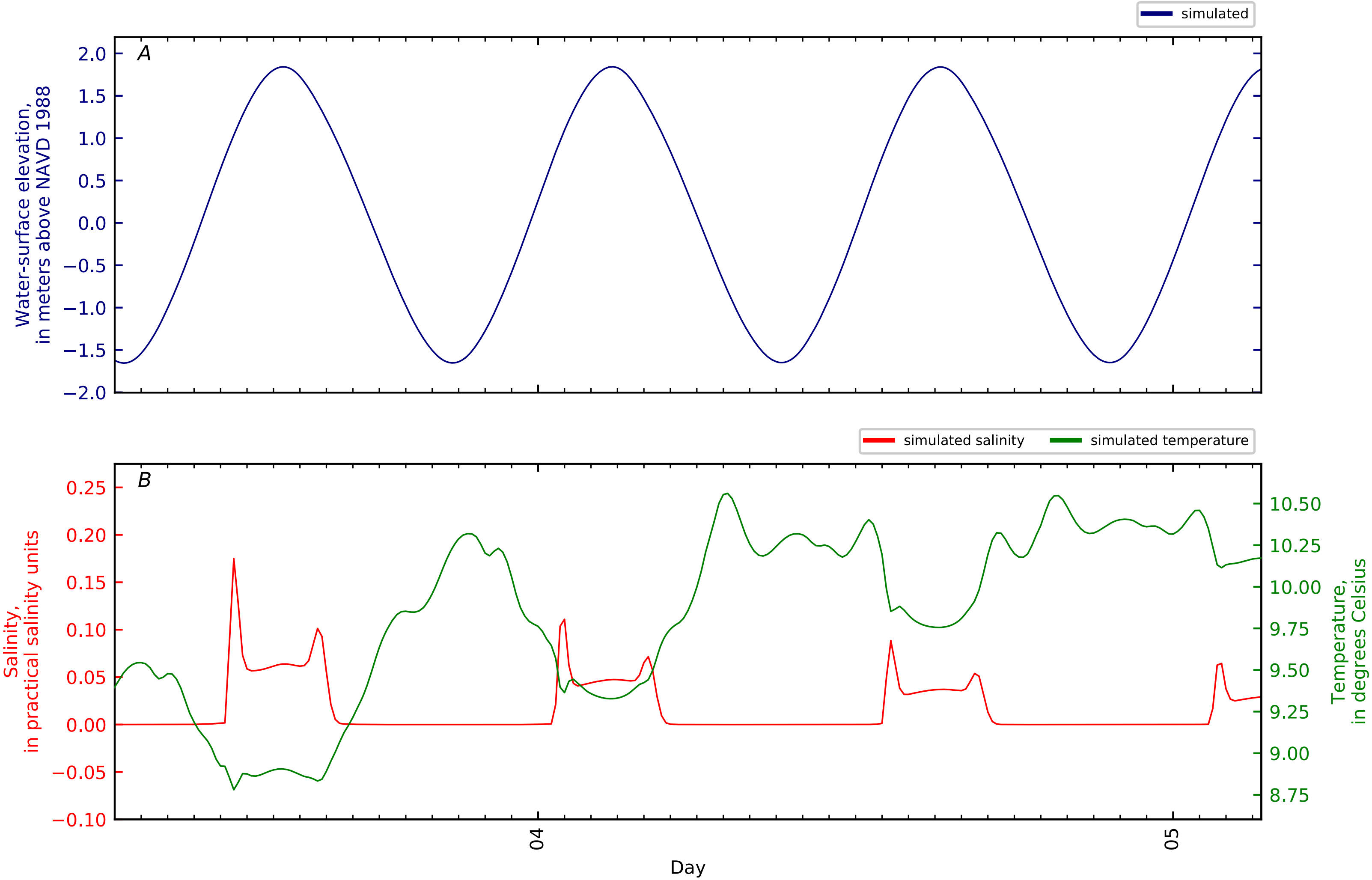

Figure B3-54. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 53, Penob Riv KM17.2 WHOI2 Frankfort Flats 2. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

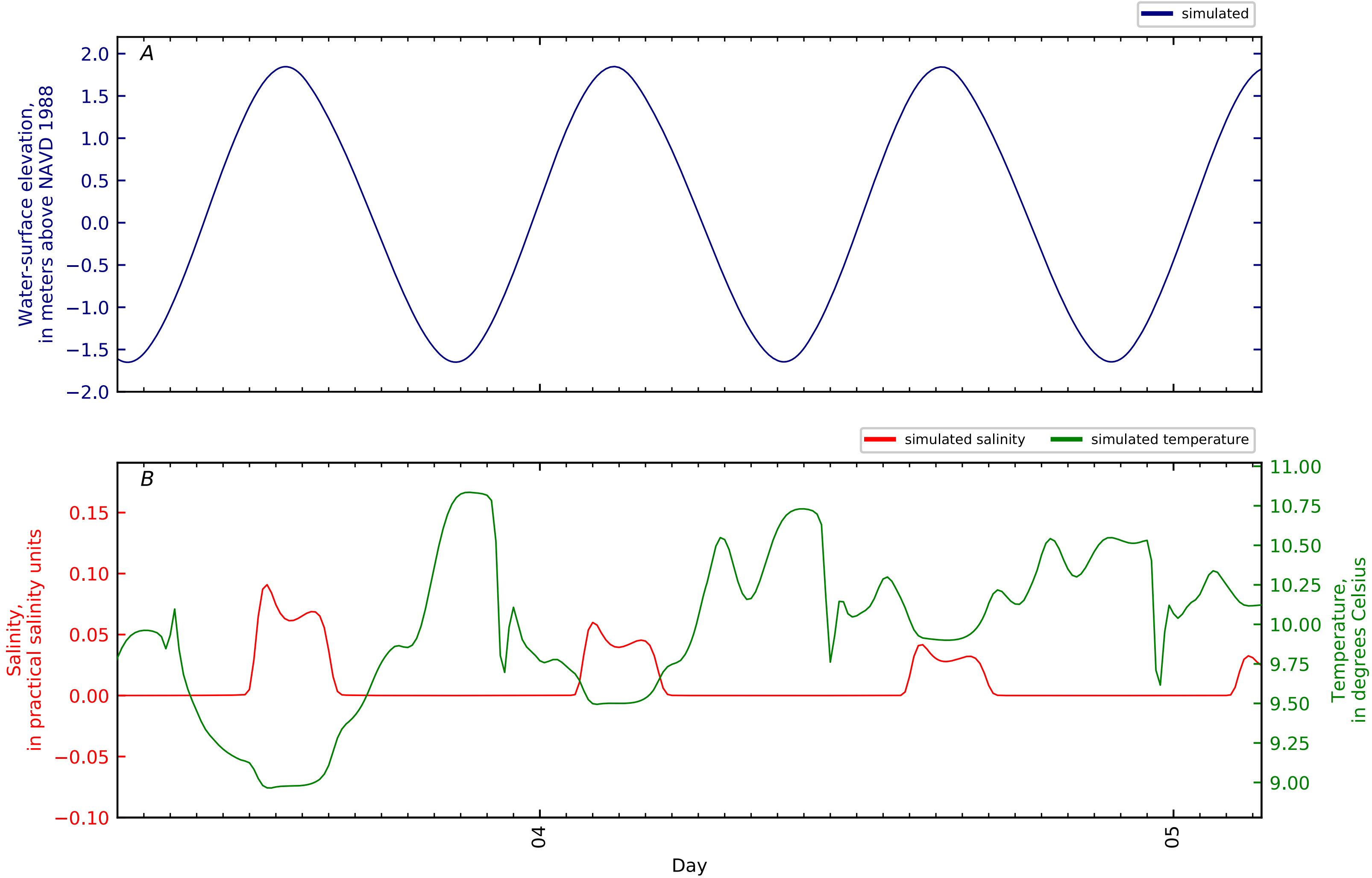

Figure B3-55. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 54, Penob Riv KM18. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

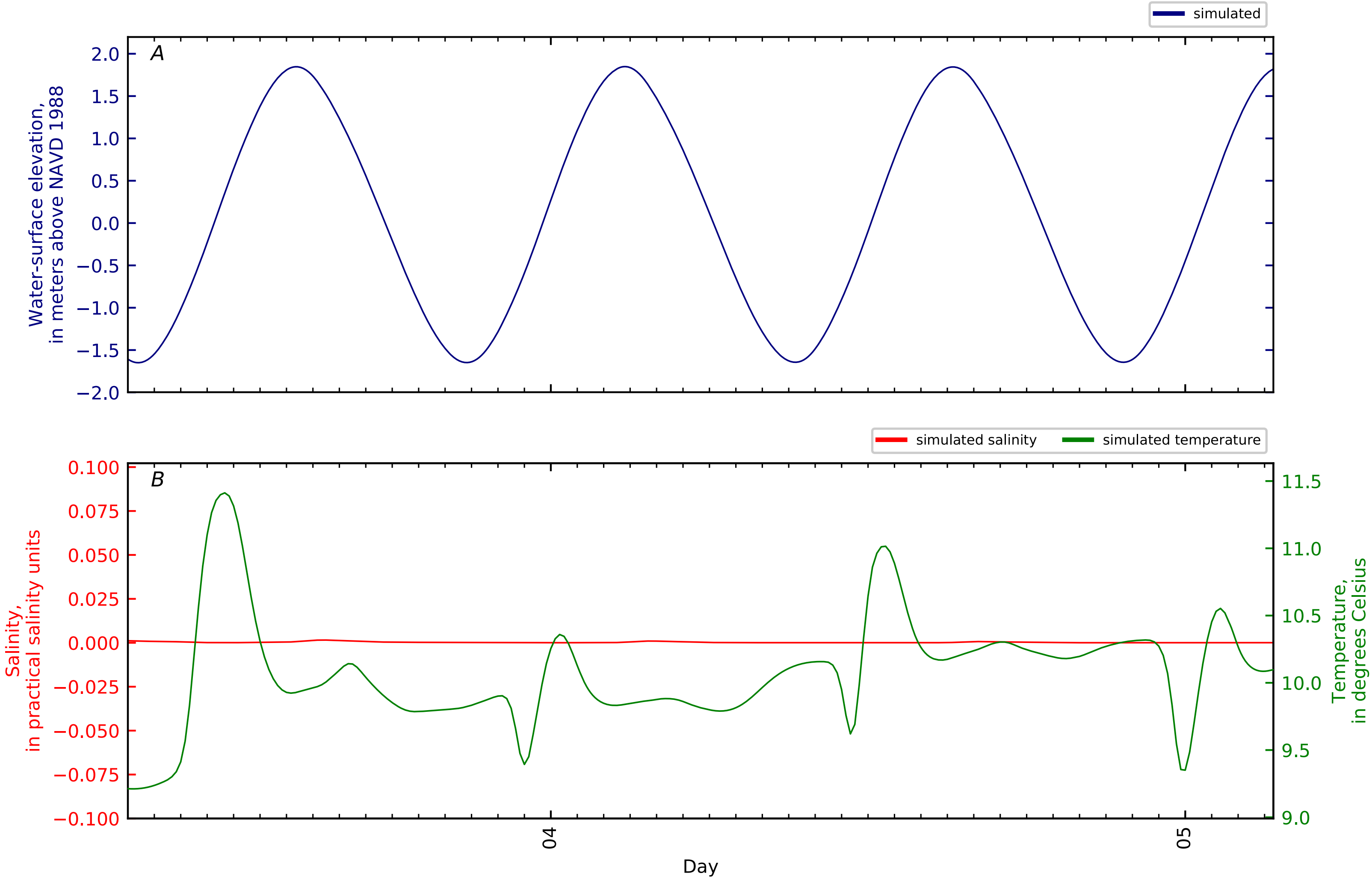

Figure B3-56. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 55, Penob Riv KM18.01 GS CTD1-01. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

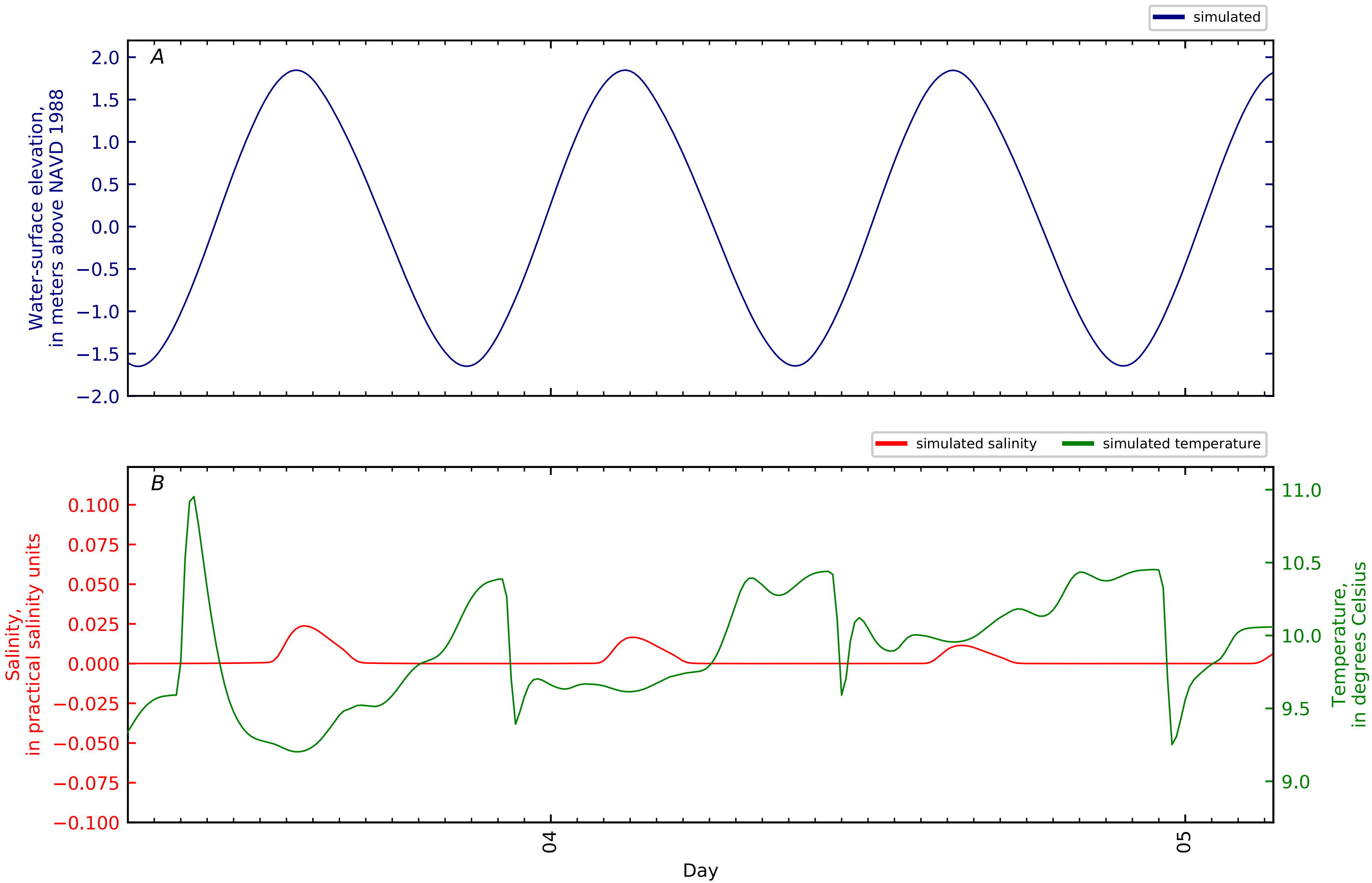

Figure B3-57. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 56, Penob Riv KM18.01 GS CTD1-02. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

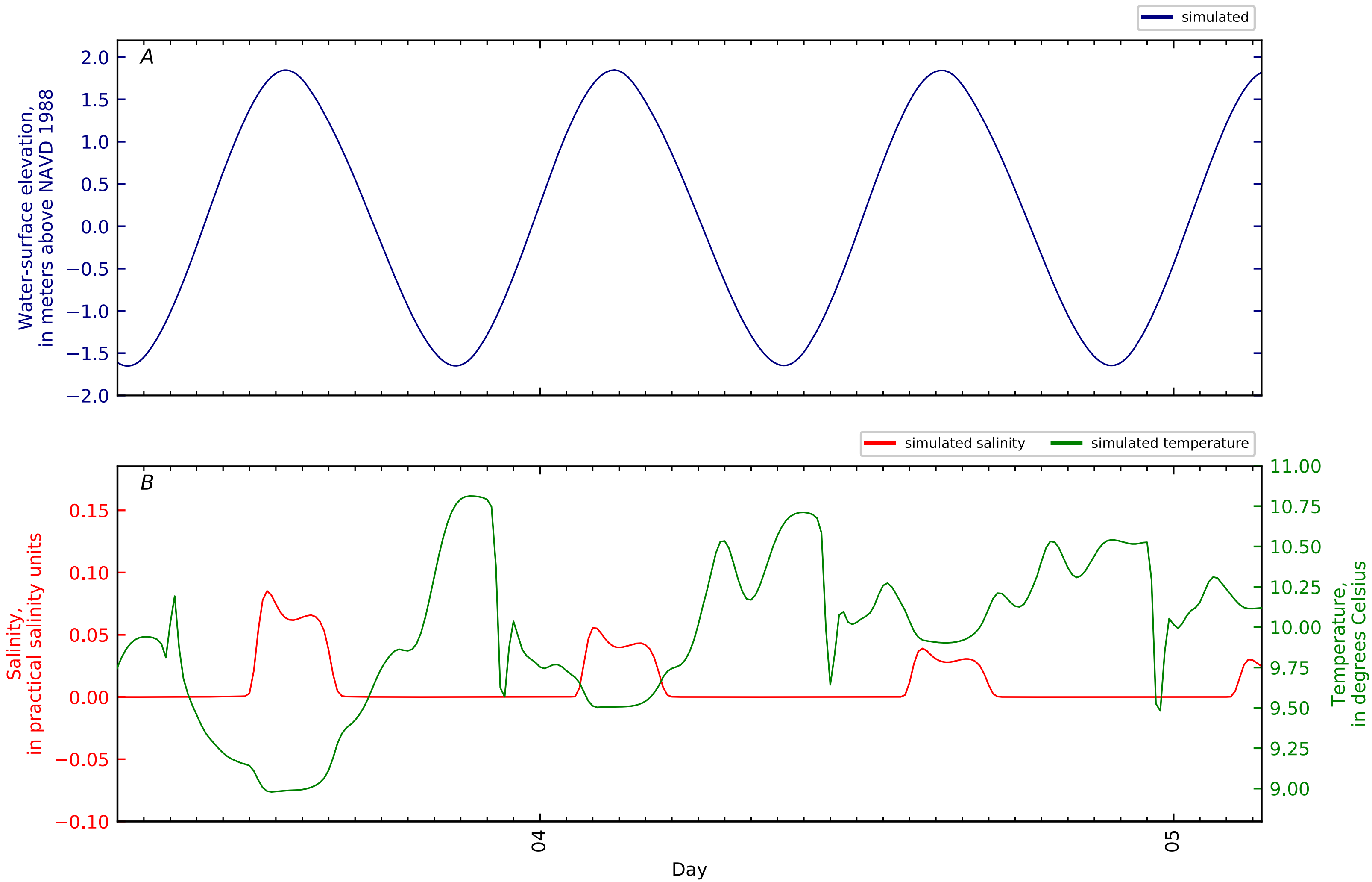

Figure B3-58. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 57, Penob Riv KM18.01 GS CTD1-03. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

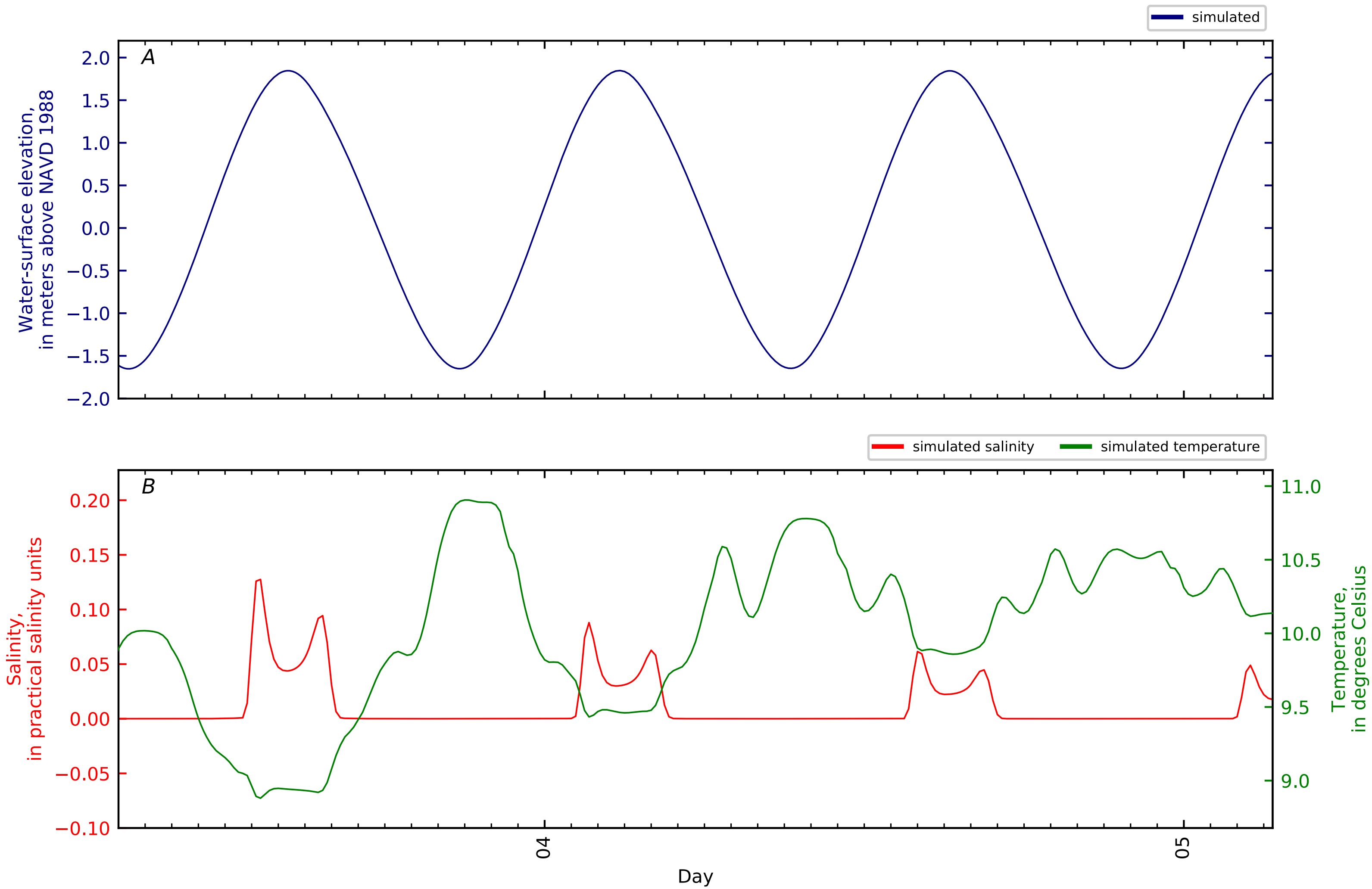

Figure B3-59. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 58, Penob Riv KM18.01 GS CTD1-04. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

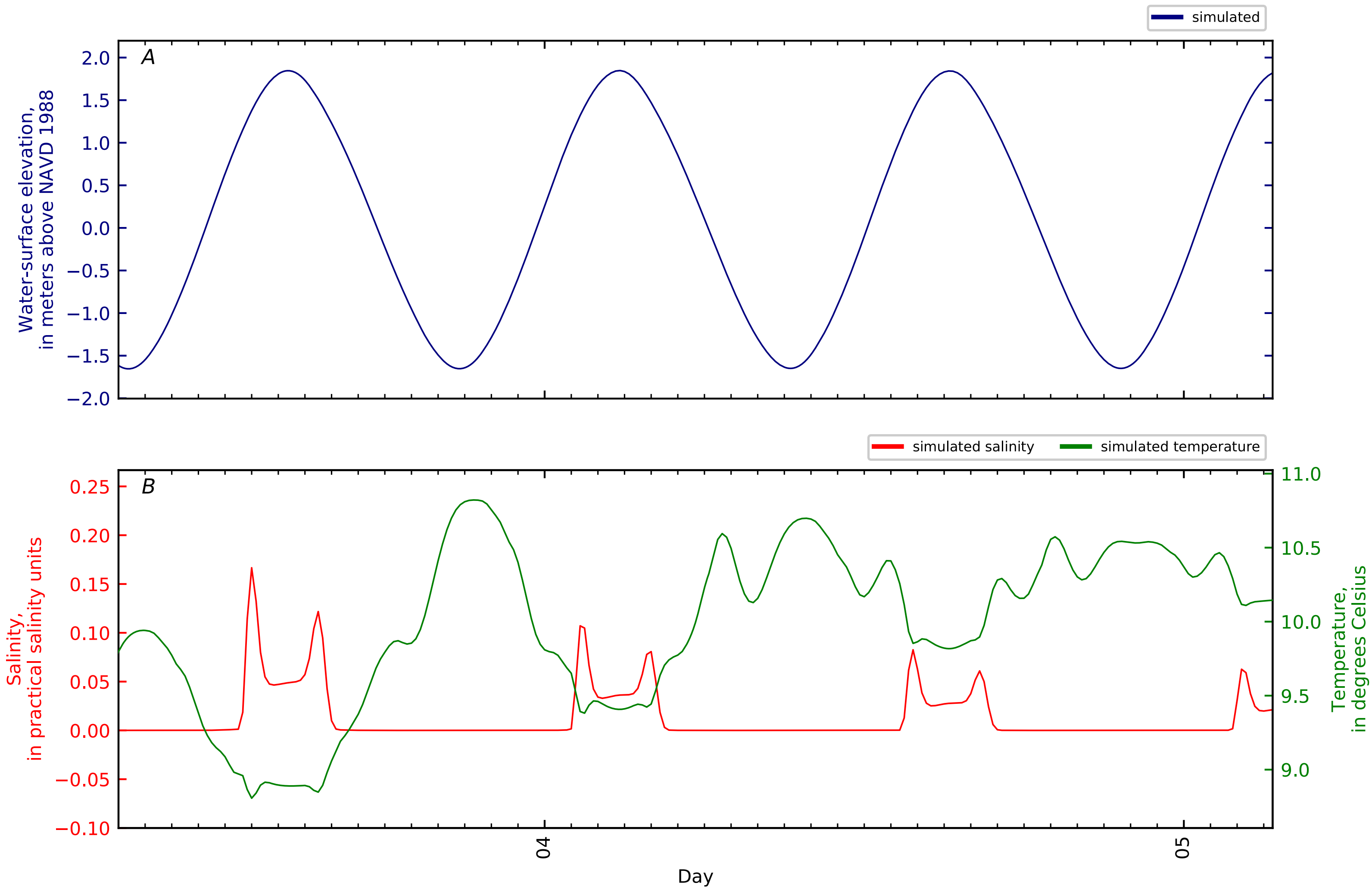

Figure B3-60. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 59, Penob Riv KM18.01 GS CTD1-05. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

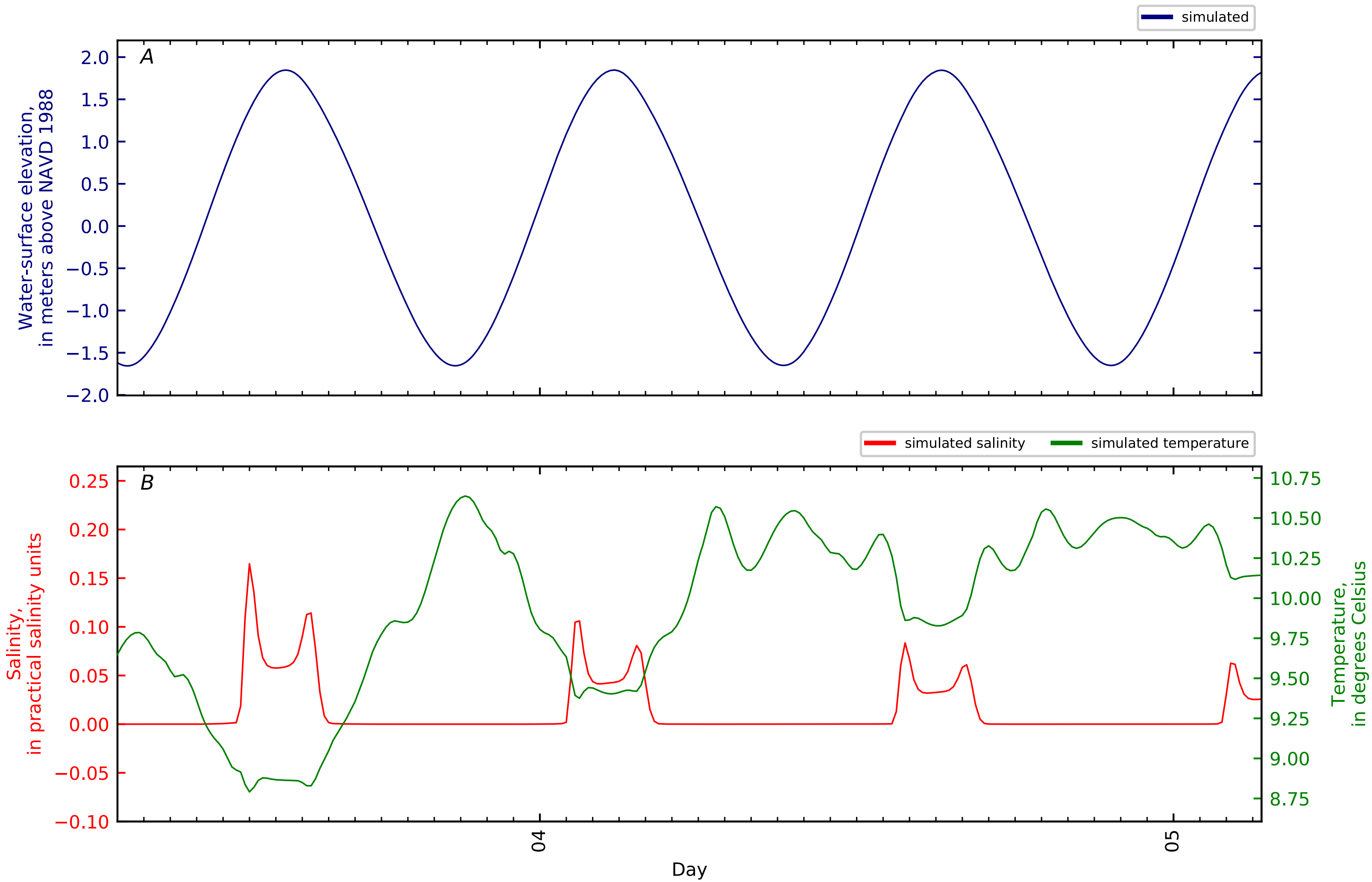

Figure B3-61. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 60, Penob Riv KM18.01 GS CTD1-06. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

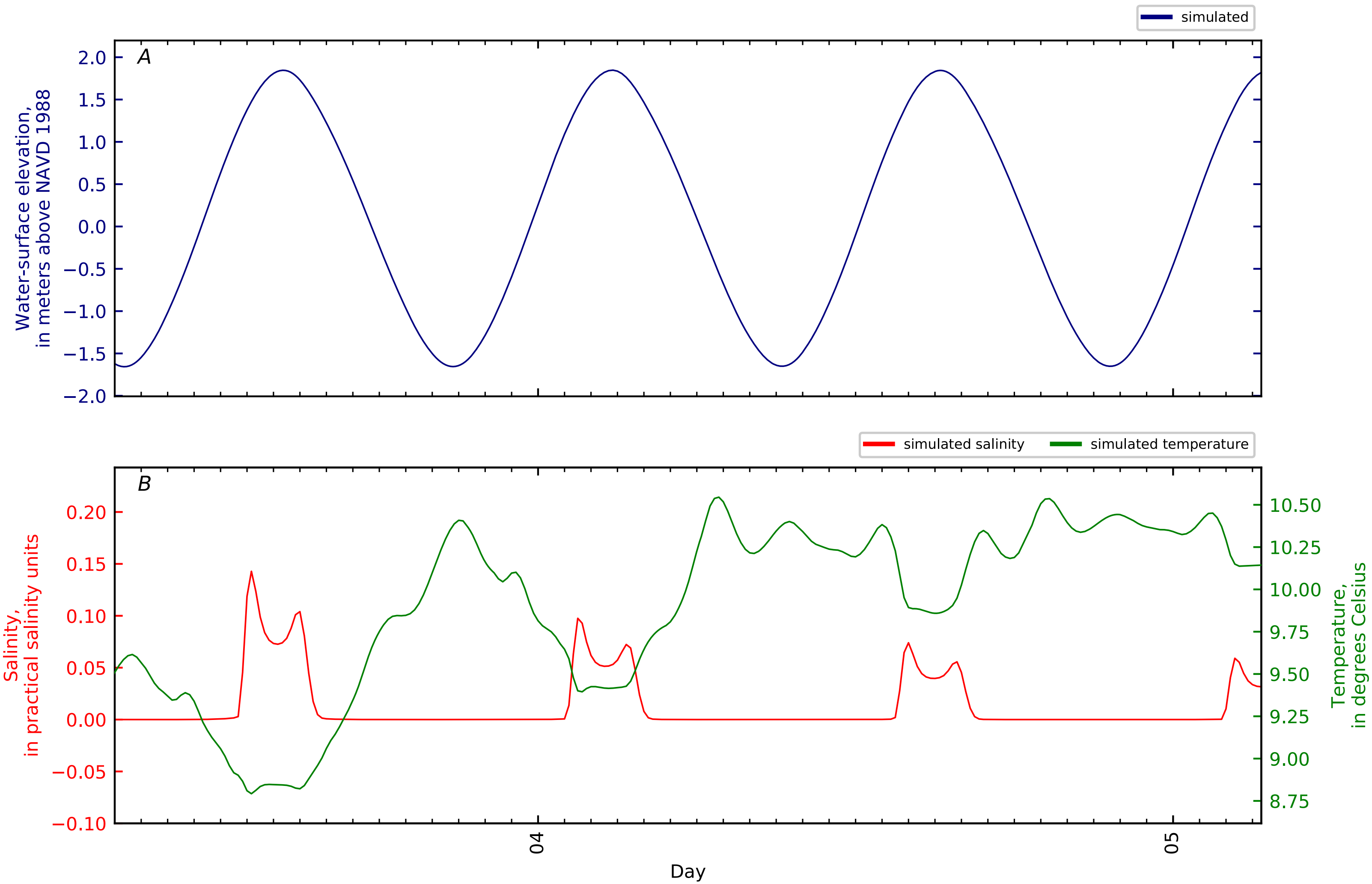

Figure B3-62. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 61, Penob Riv KM18.01 GS CTD1-07. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

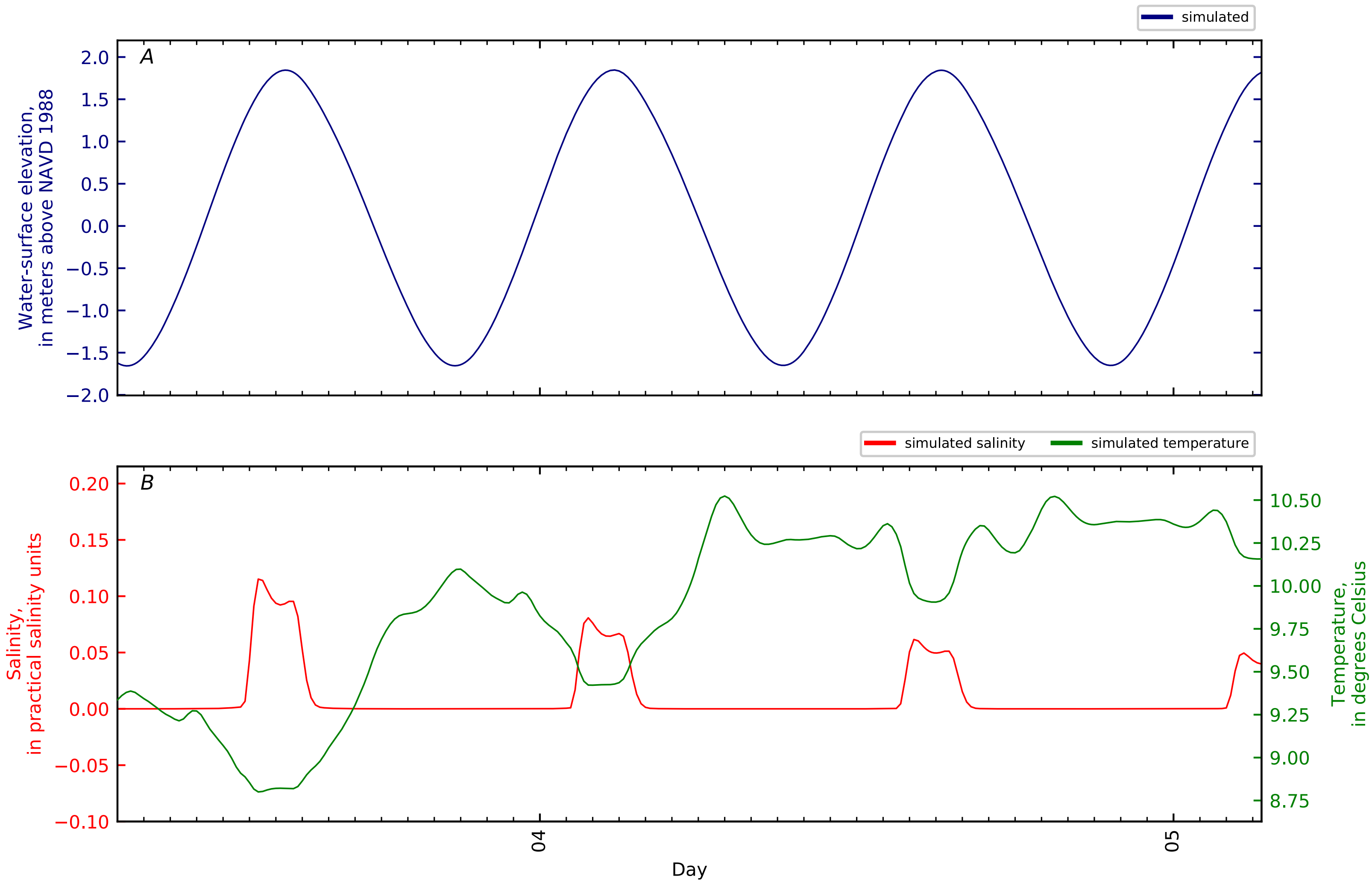

Figure B3-63. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 62, Penob Riv KM18.01 GS CTD1-08. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

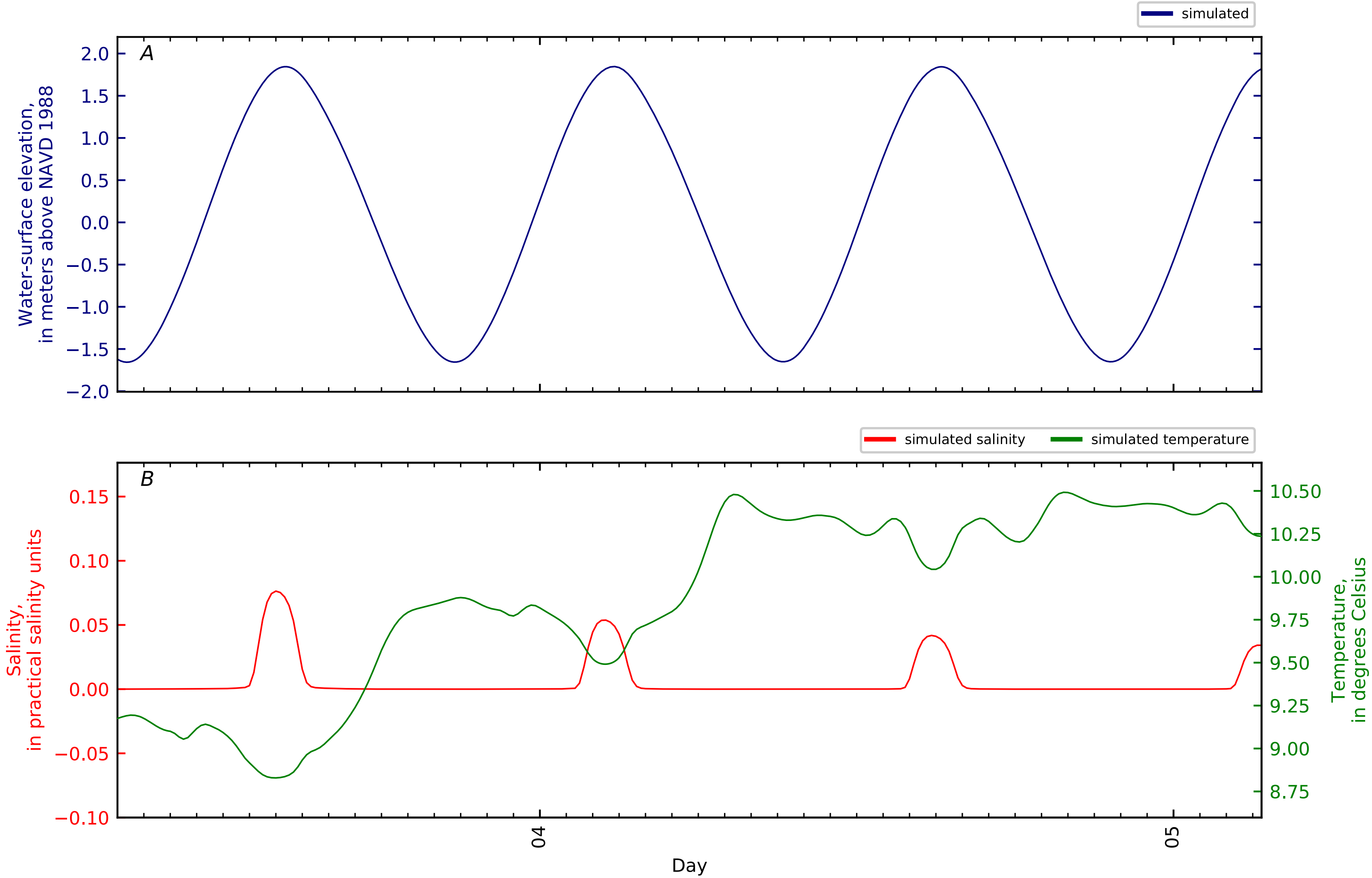

Figure B3-64. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 63, Penob Riv KM18.01 GS CTD1-09. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

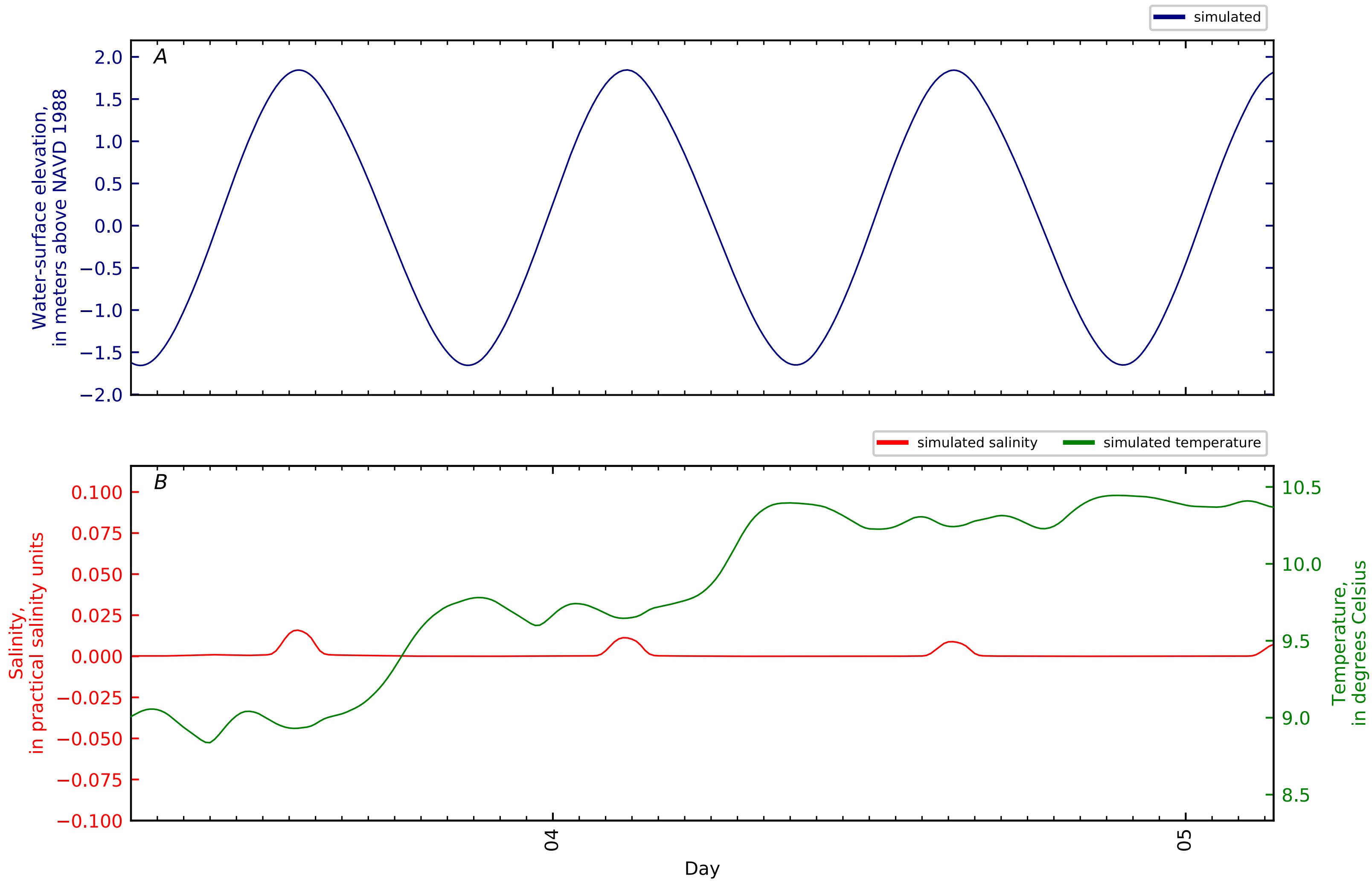

Figure B3-65. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 64, Penob Riv KM18.01 GS CTD1-10. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

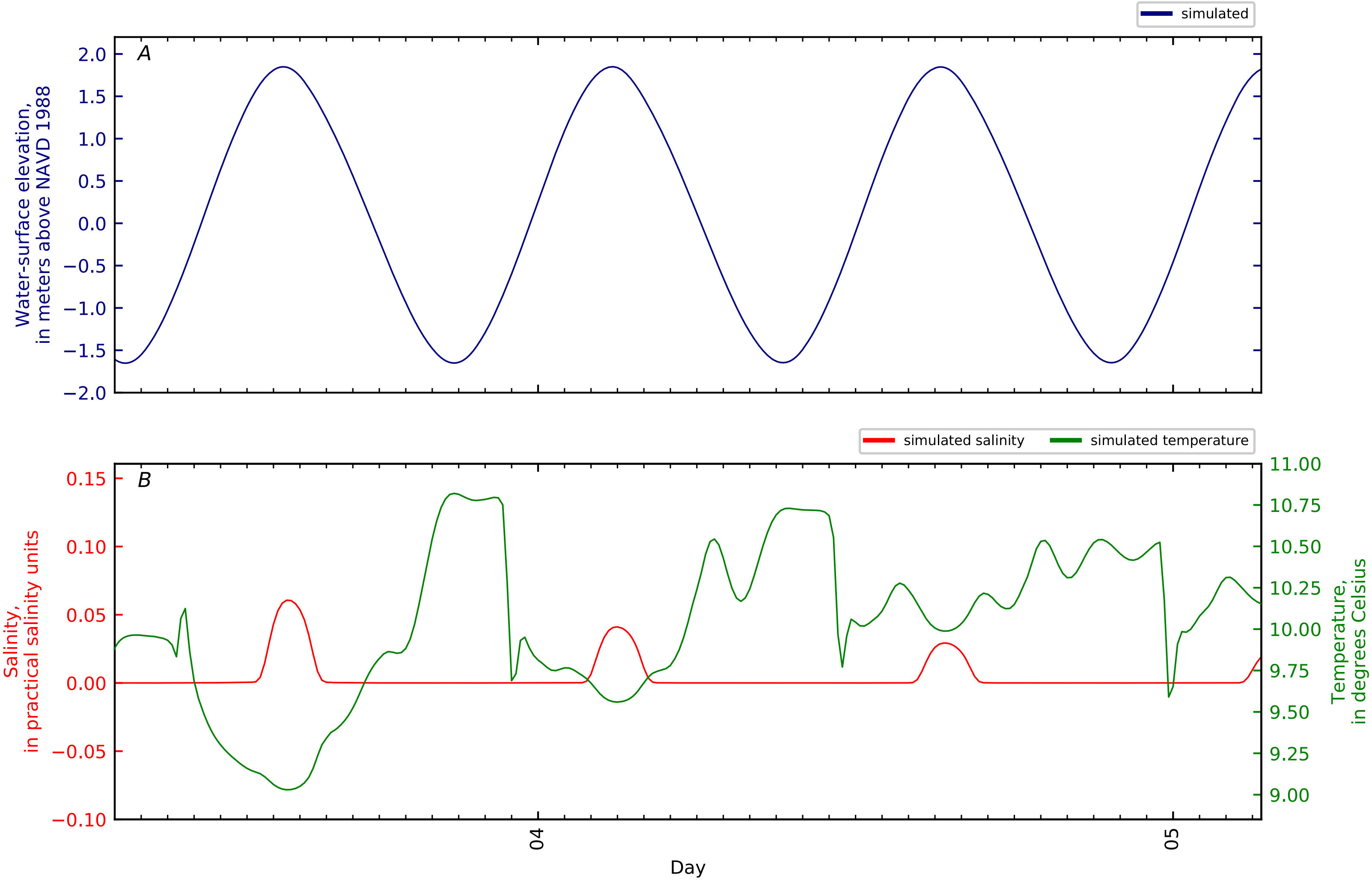

Figure B3-66. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 65, Penob Riv KM18.5 WHOI8 Frankfort Channel. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

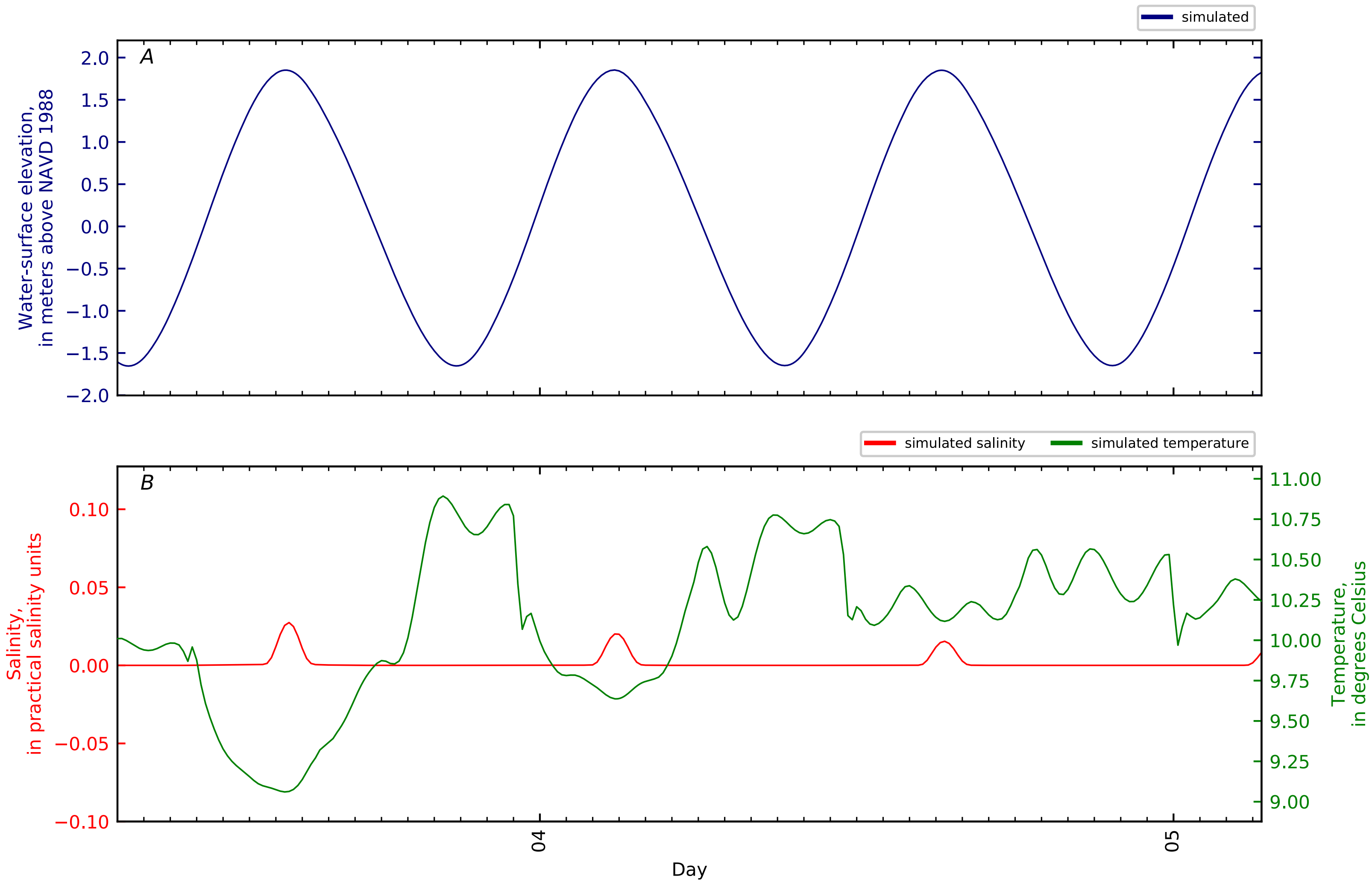

Figure B3-67. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 66, Penob Riv KM19. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

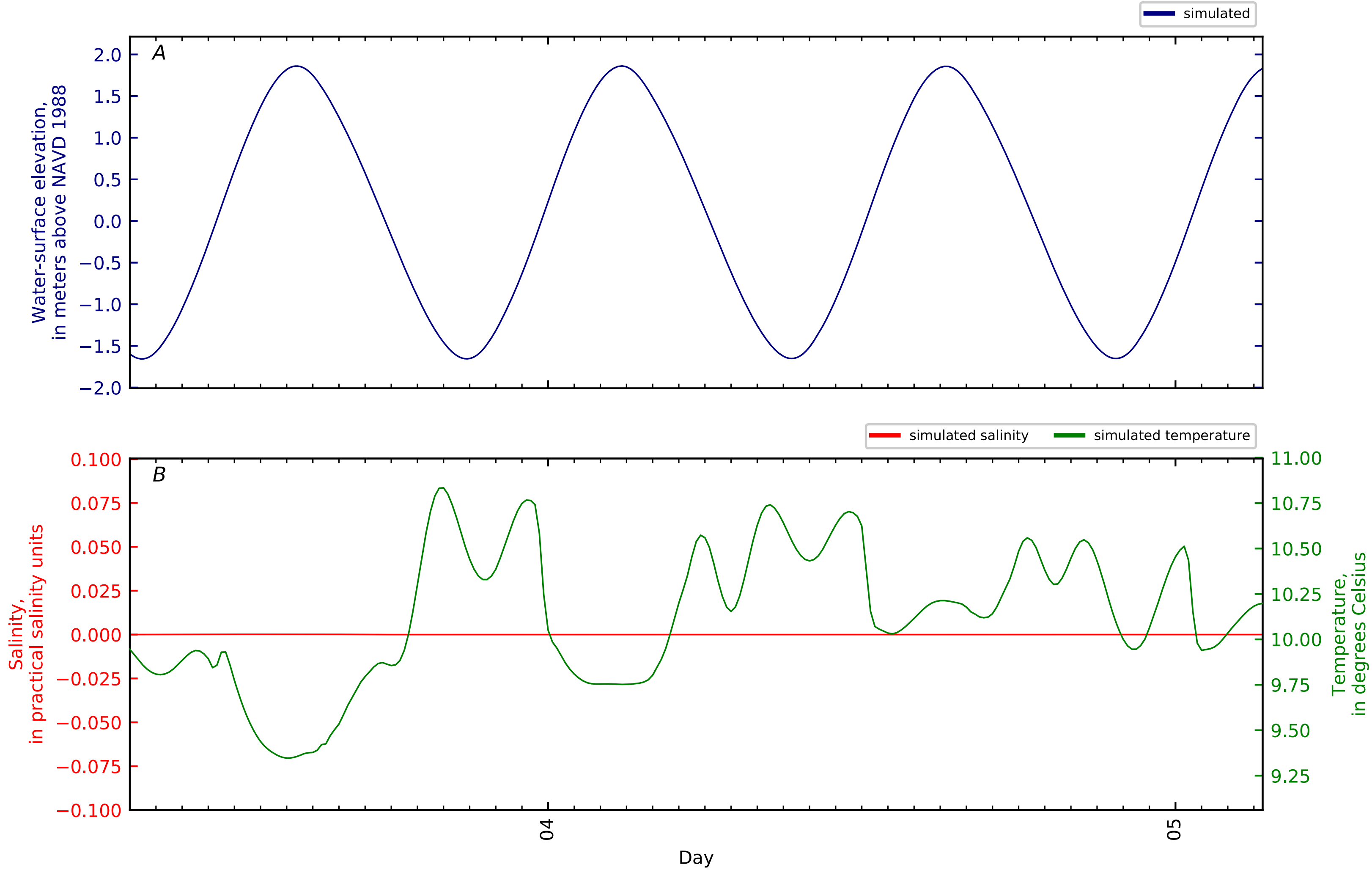

Figure B3-68. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 67, Penob Riv KM20. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

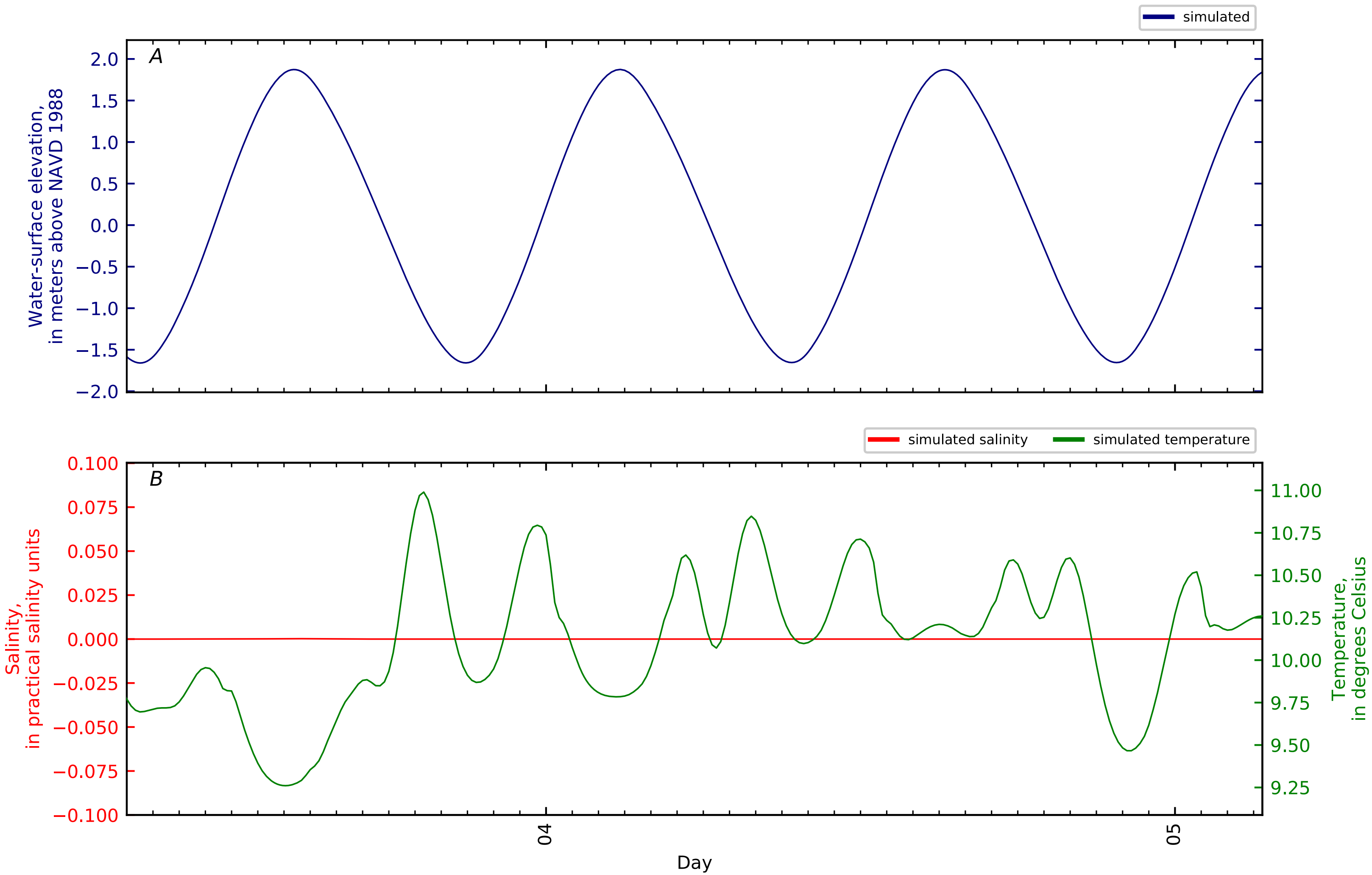

Figure B3-69. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 68, Penob Riv KM21. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

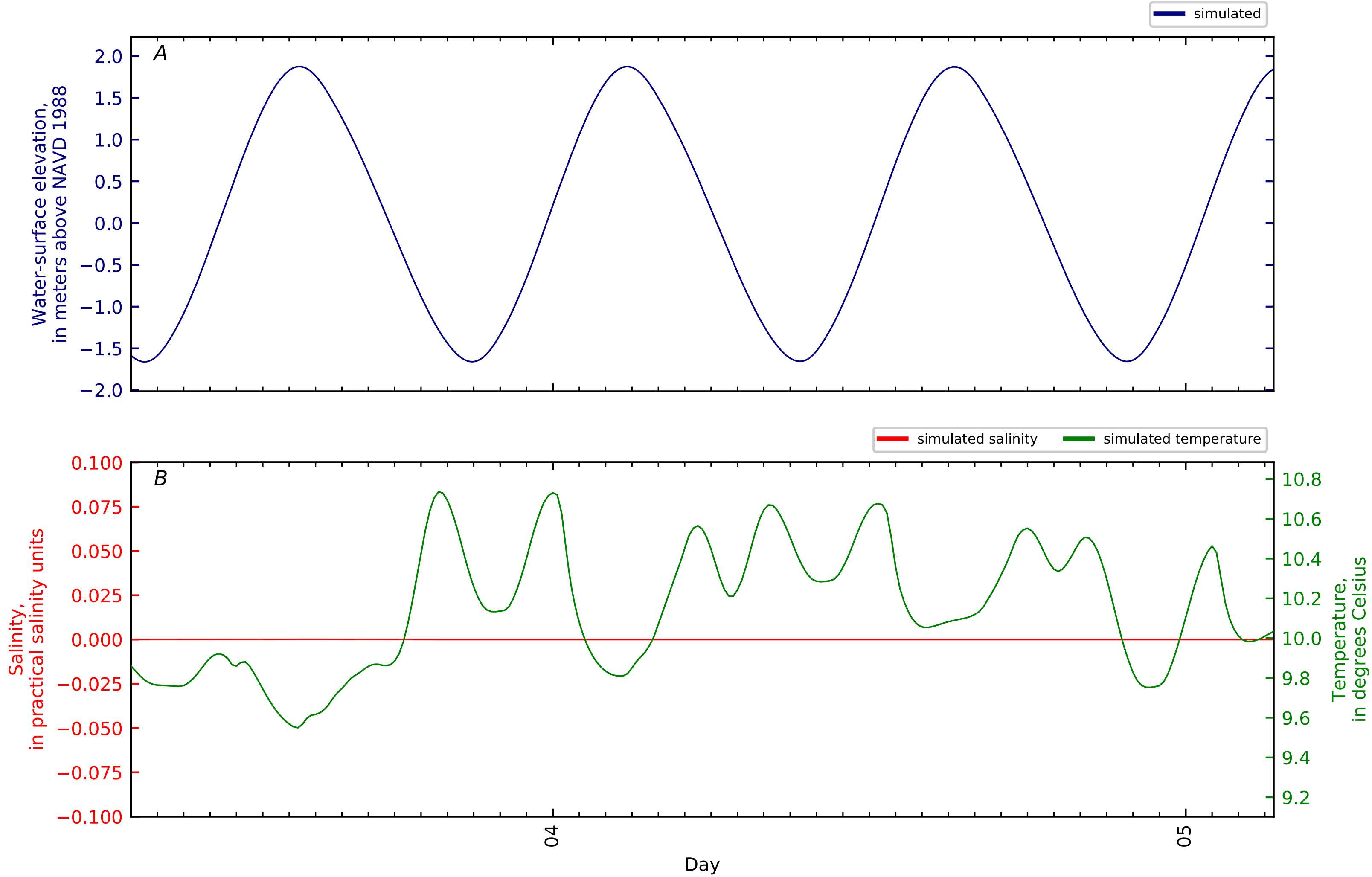

Figure B3-70. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 69, Penob Riv KM21.2 GS 443810068502201 Wint. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

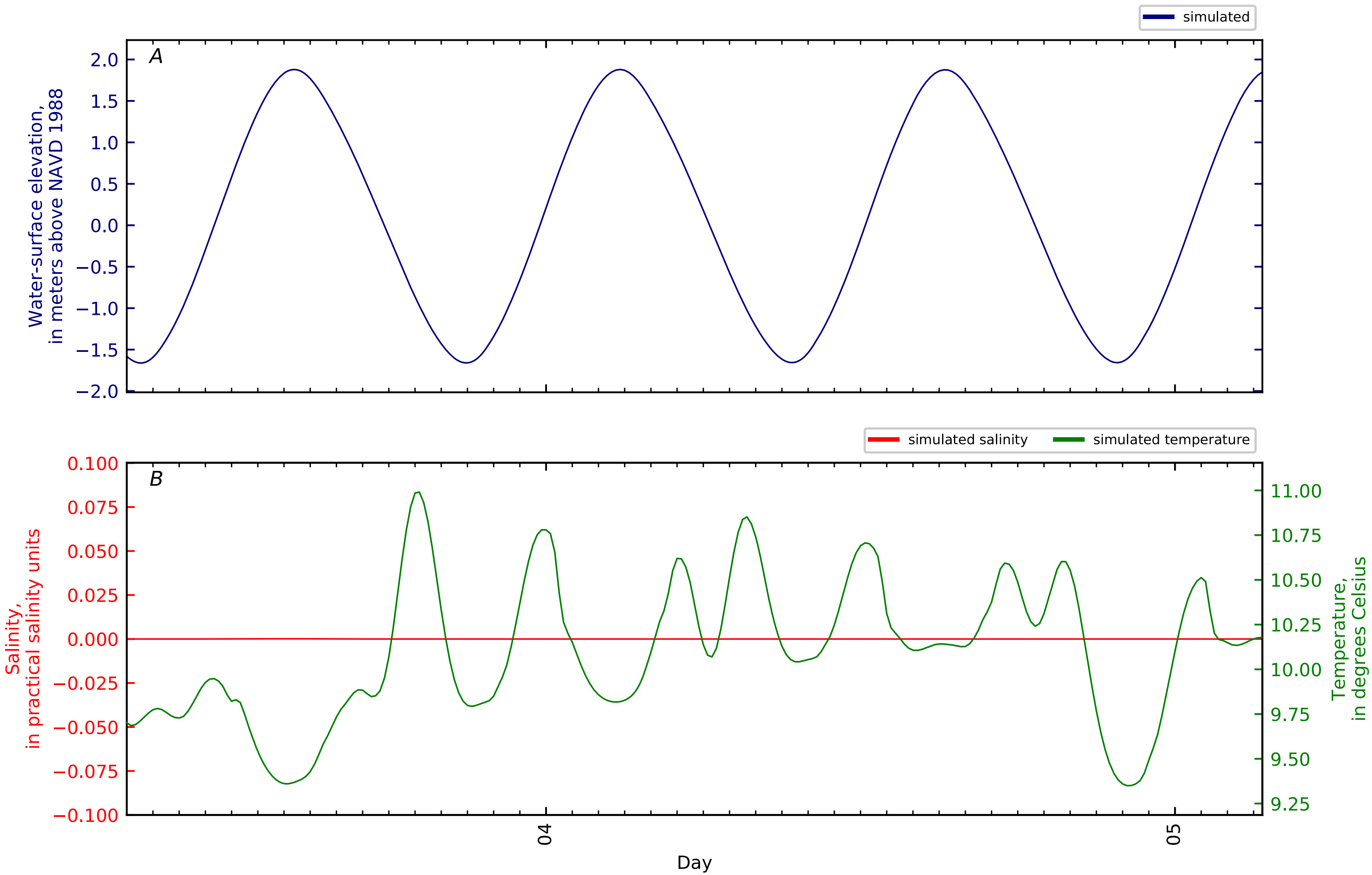

Figure B3-71. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 70, Penob Riv KM21.5 WHOI6 Winterport 2010. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

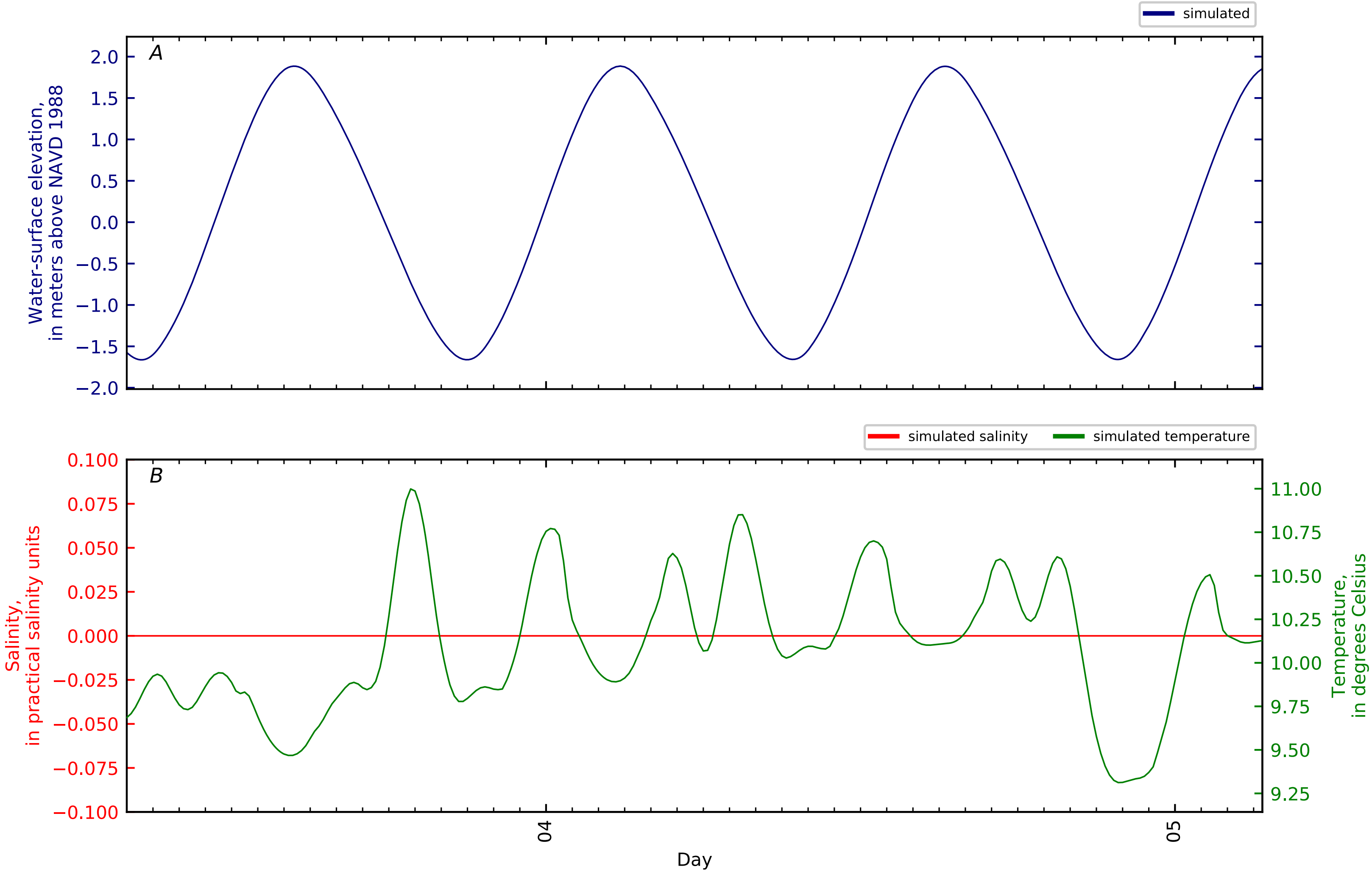

Figure B3-72. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 71, Penob Riv KM22. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

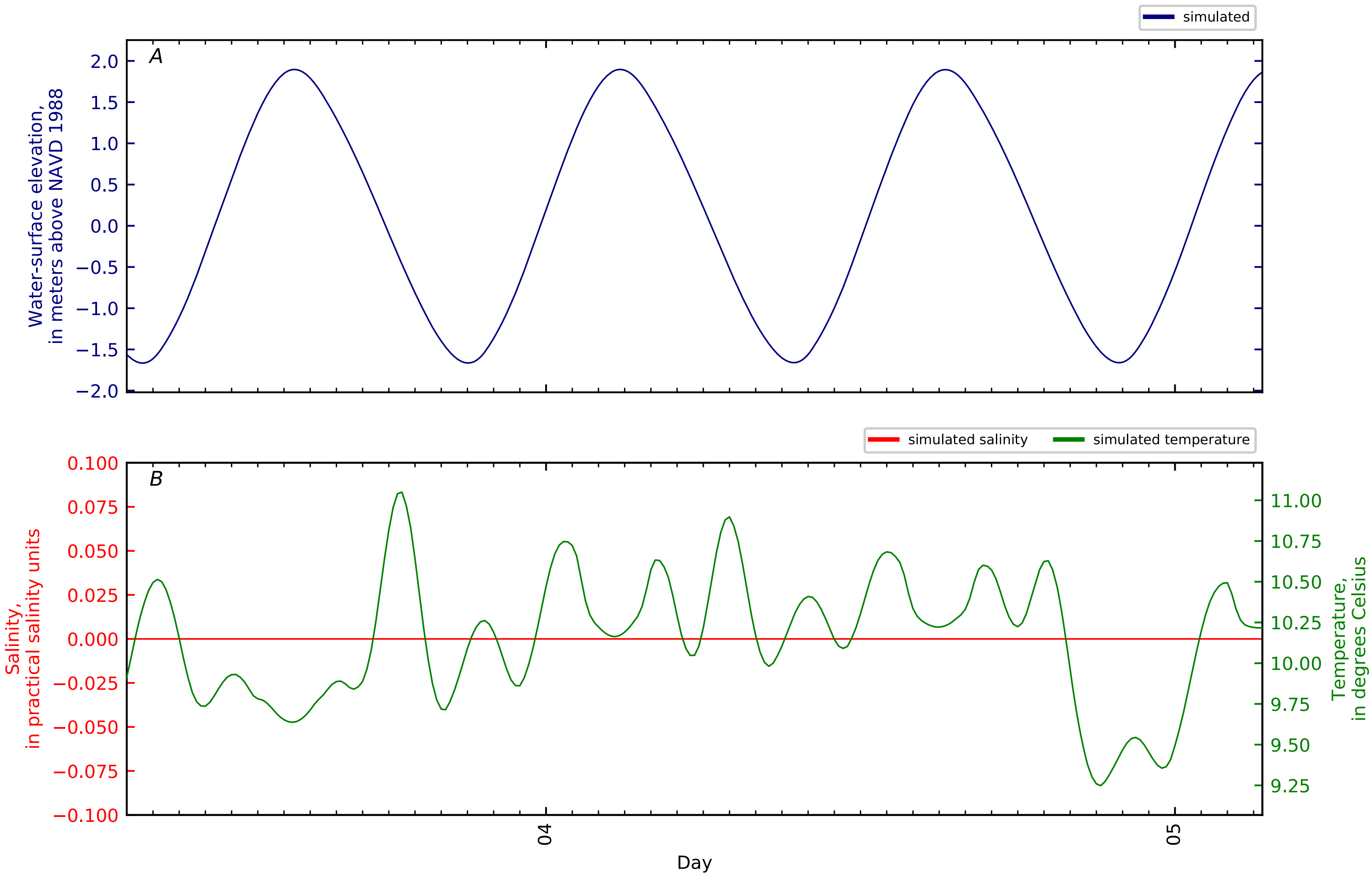

Figure B3-73. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 72, Penob Riv KM23. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

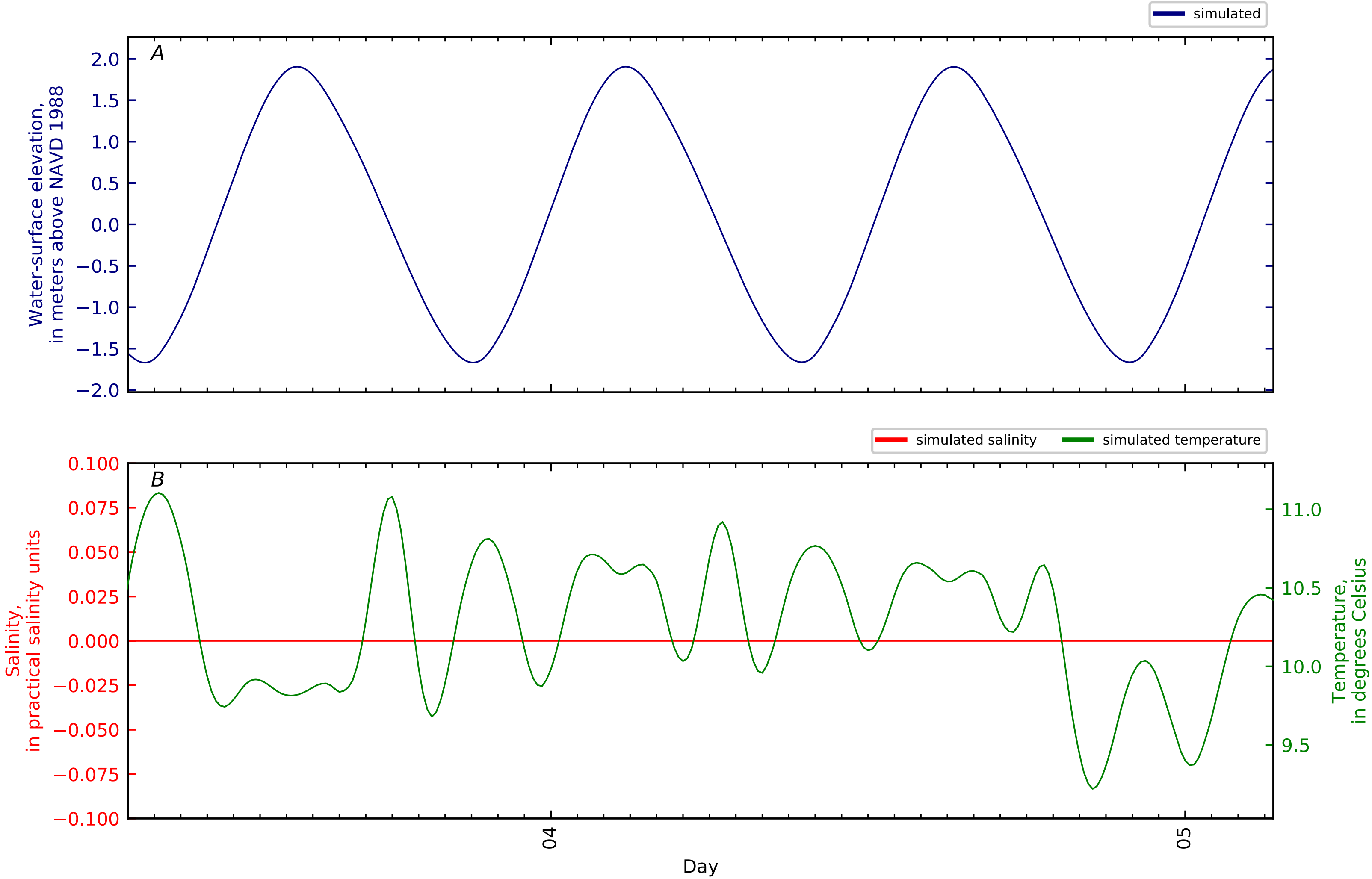

Figure B3-74. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 73, Penob Riv KM24. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

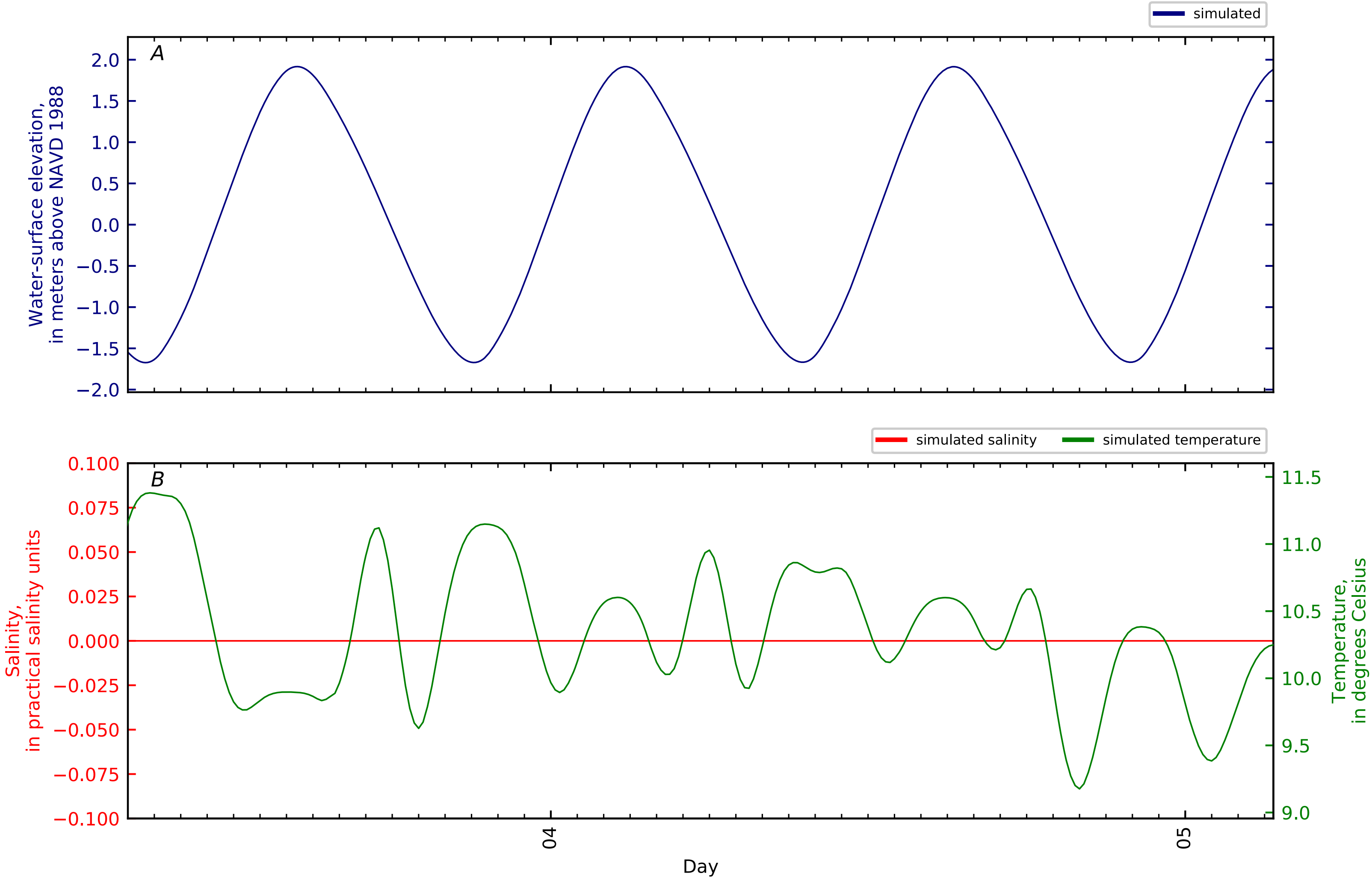

Figure B3-75. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 74, Penob Riv KM25. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

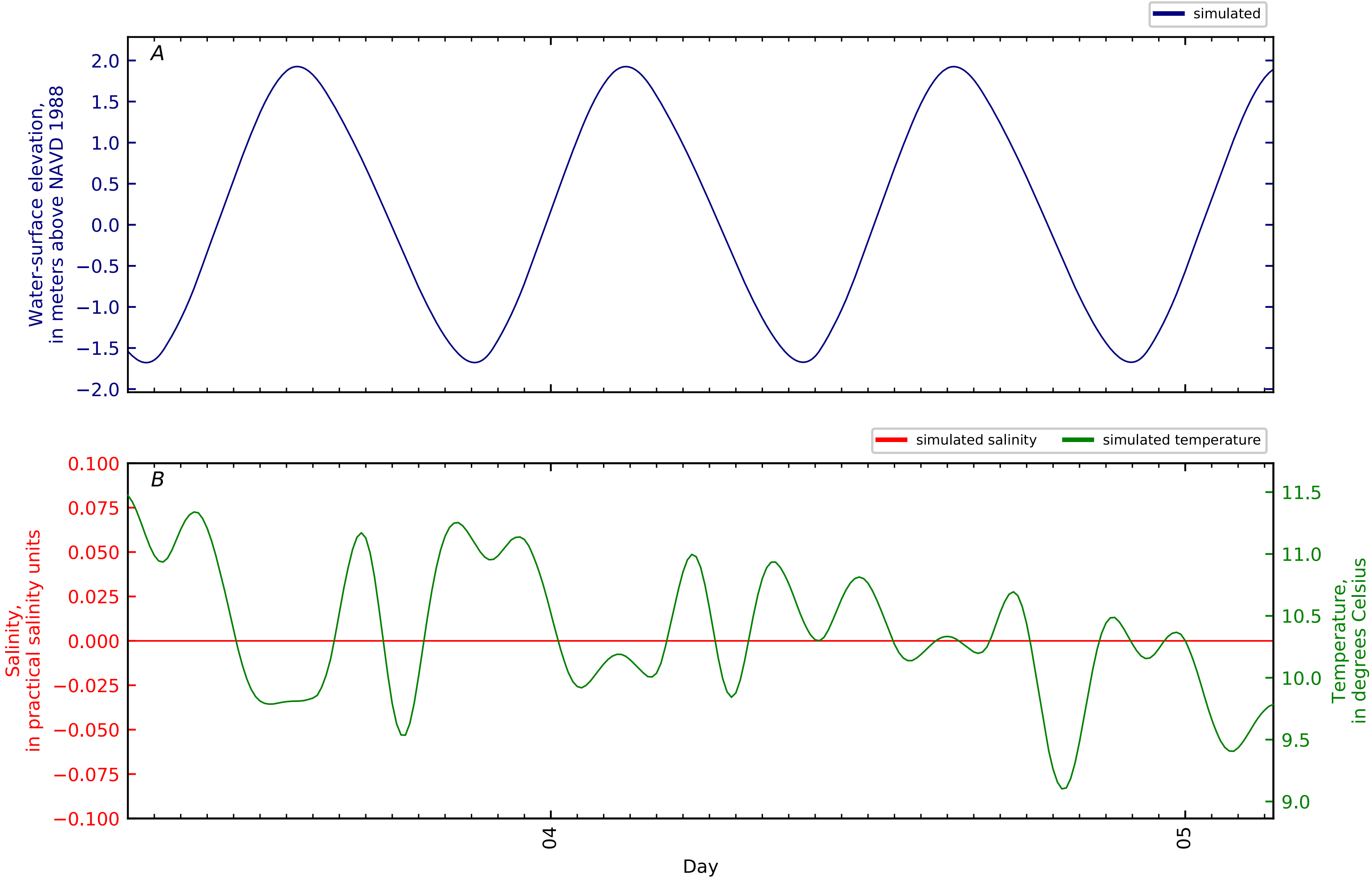

Figure B3-76. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 75, Penob Riv KM26. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

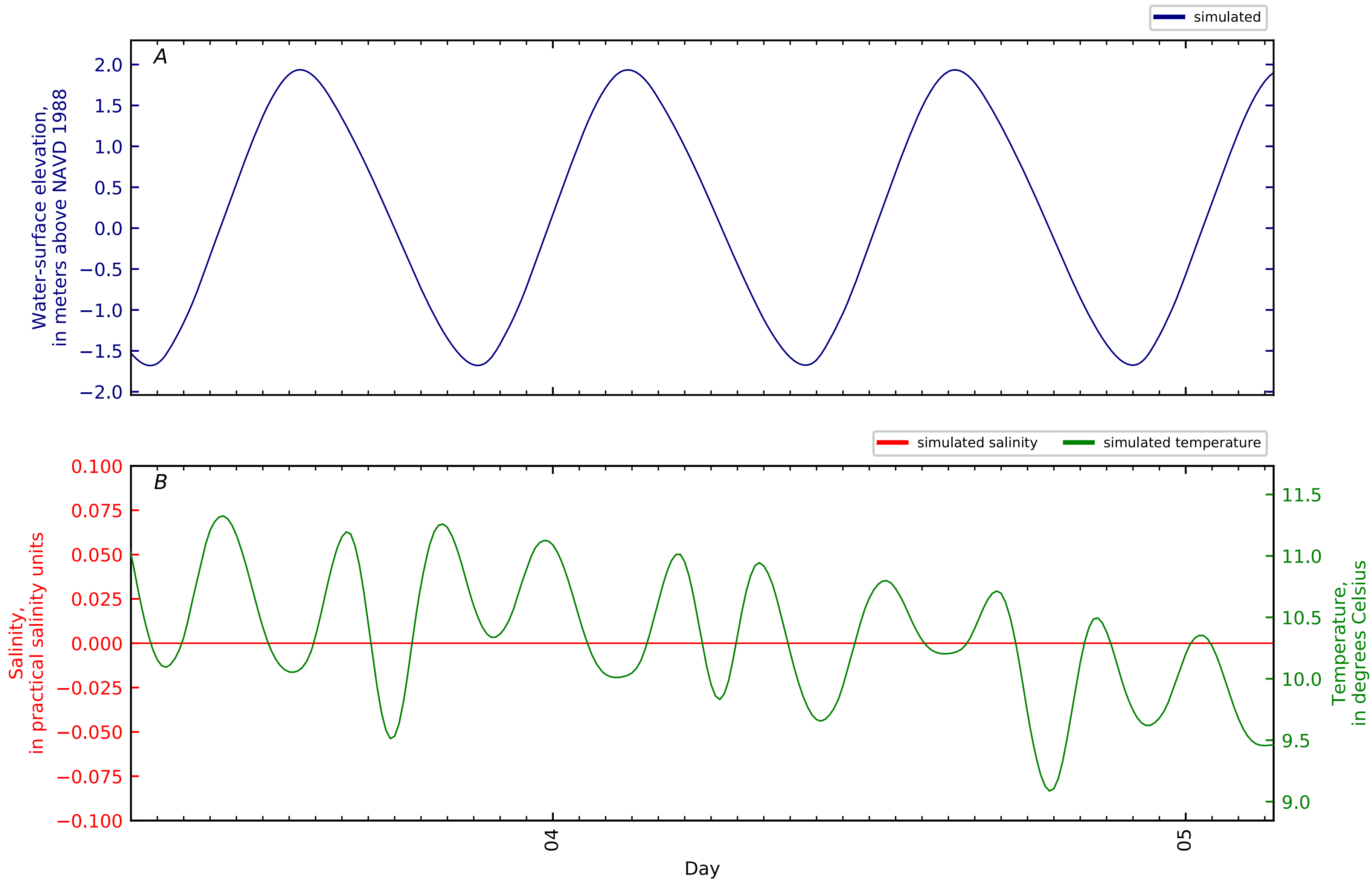

Figure B3-77. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 76, Penob Riv KM27. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

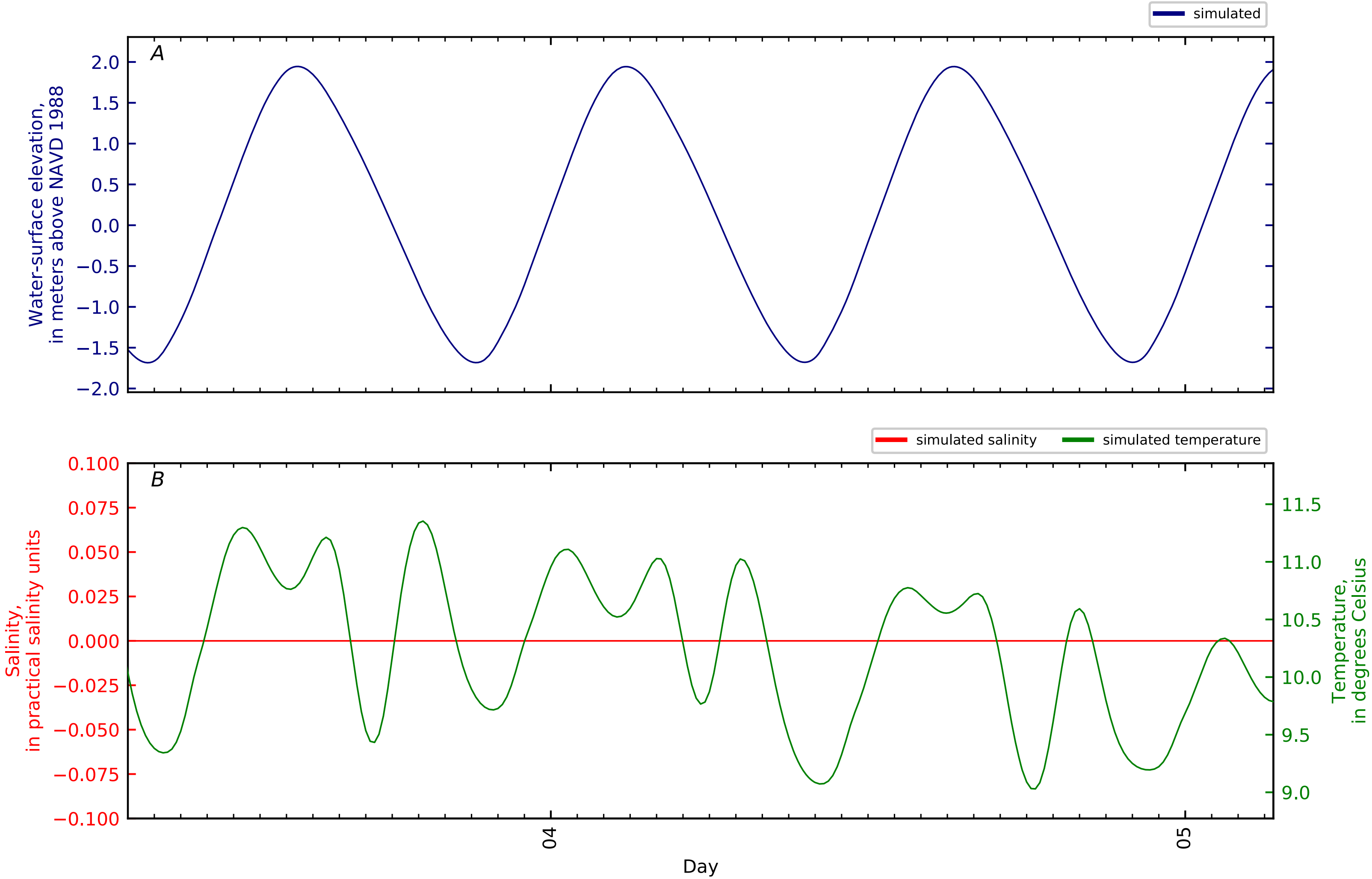

Figure B3-78. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 77, Penob Riv KM28. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

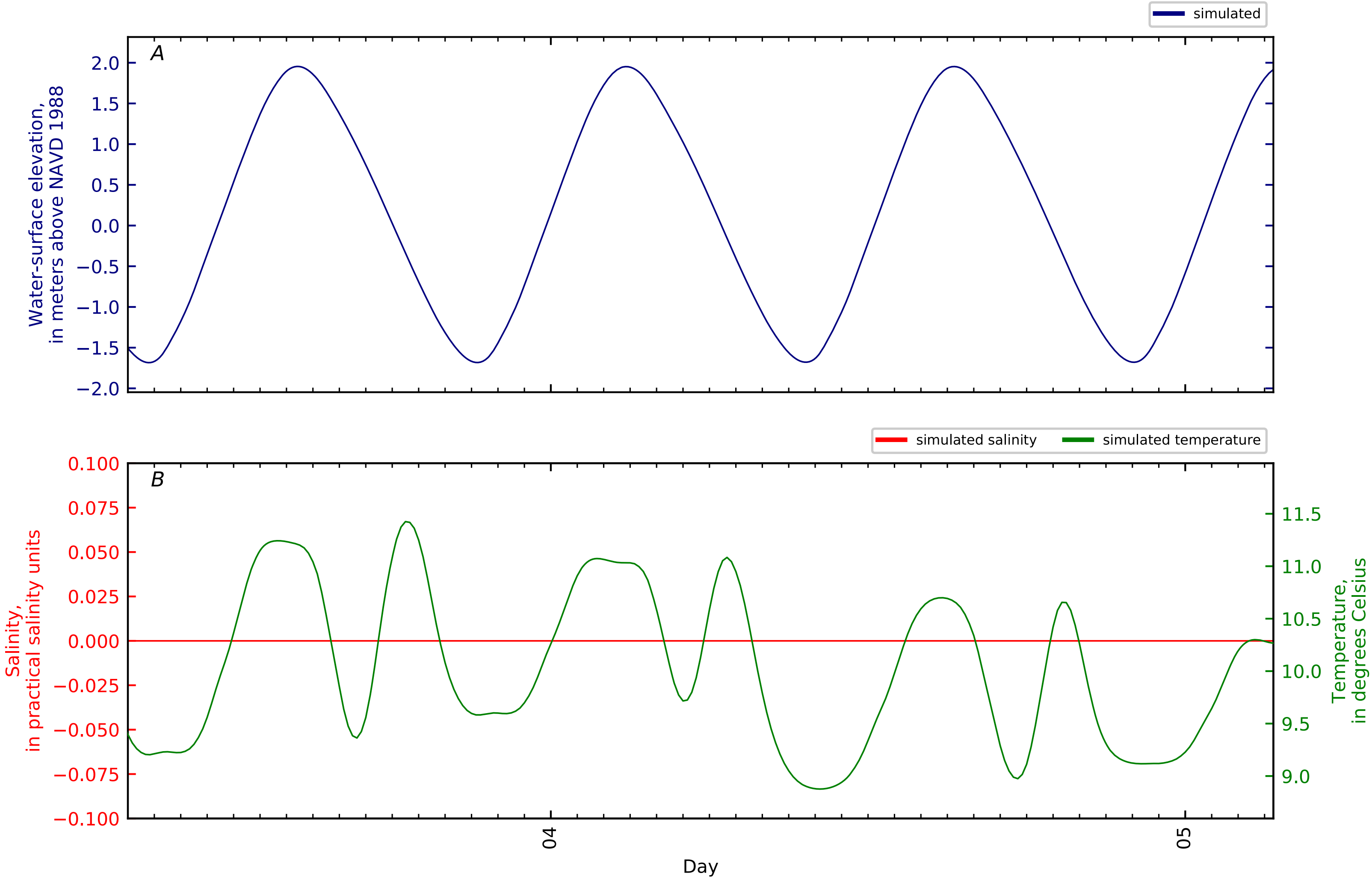

Figure B3-79. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 78, Penob Riv KM29. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

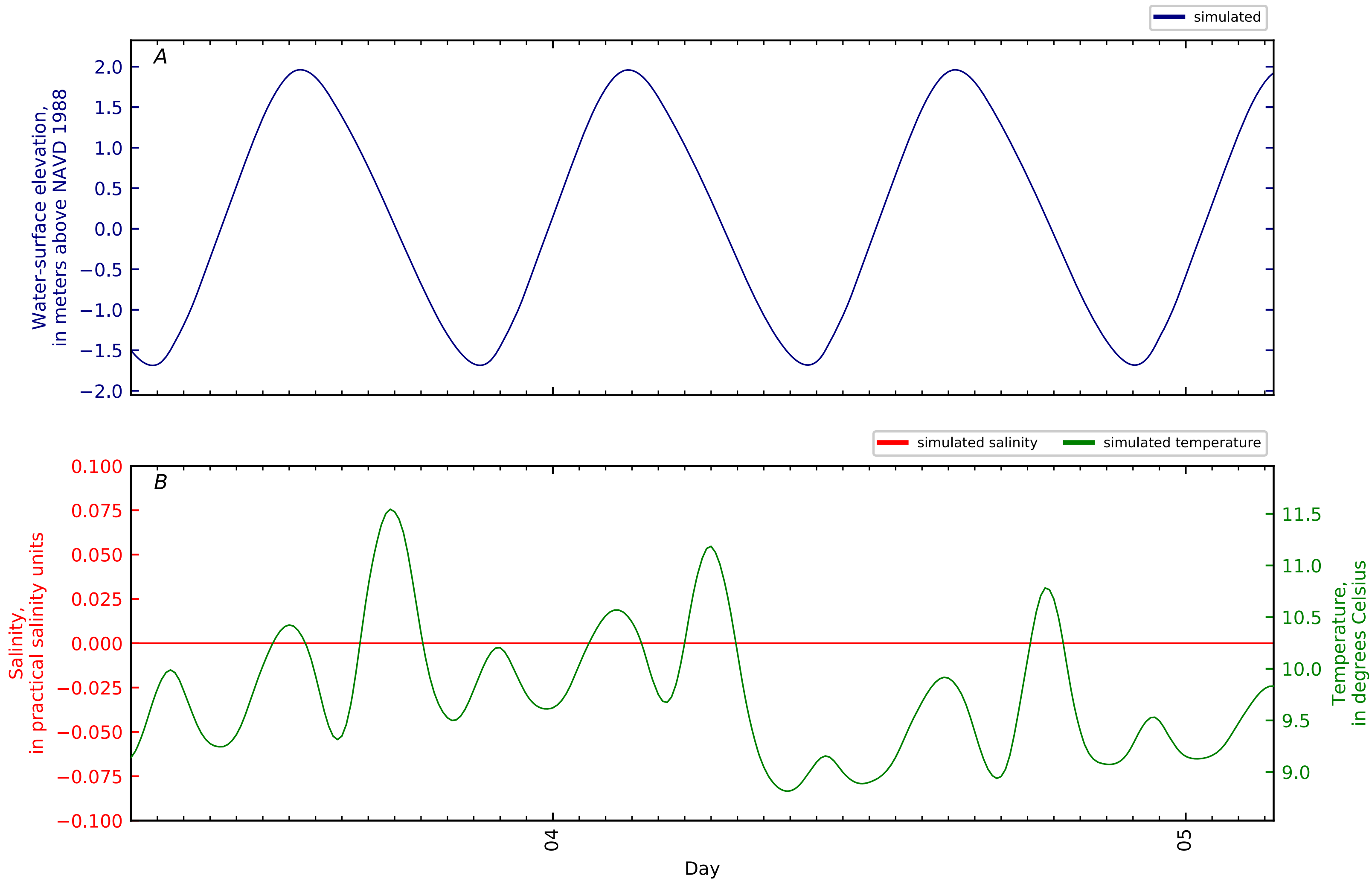

Figure B3-80. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 79, Penob Riv KM30. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

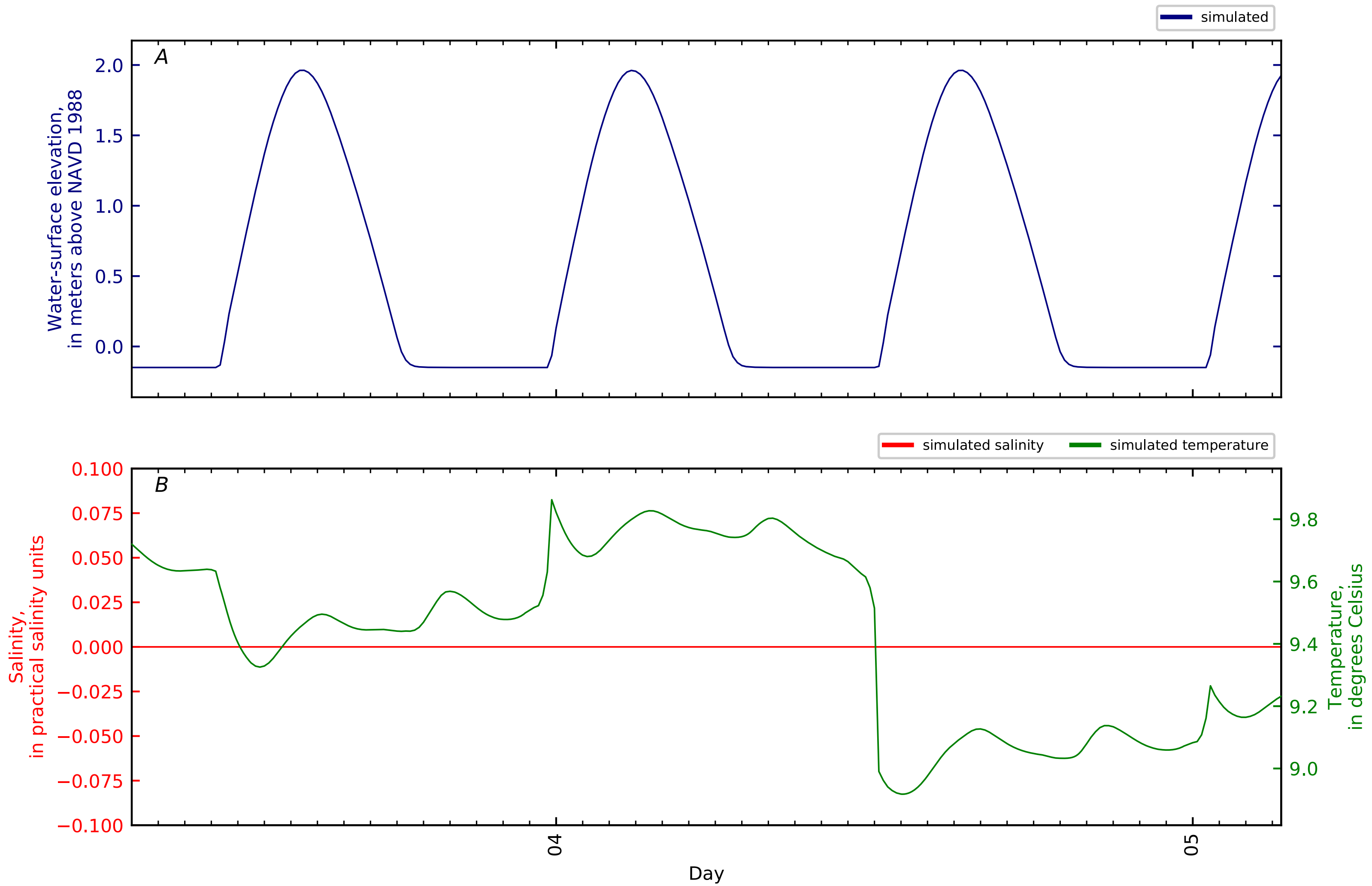

Figure B3-81. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 80, Penob Riv KM30.3 ERDC3 ON-MU2-SF-2 Bartl. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

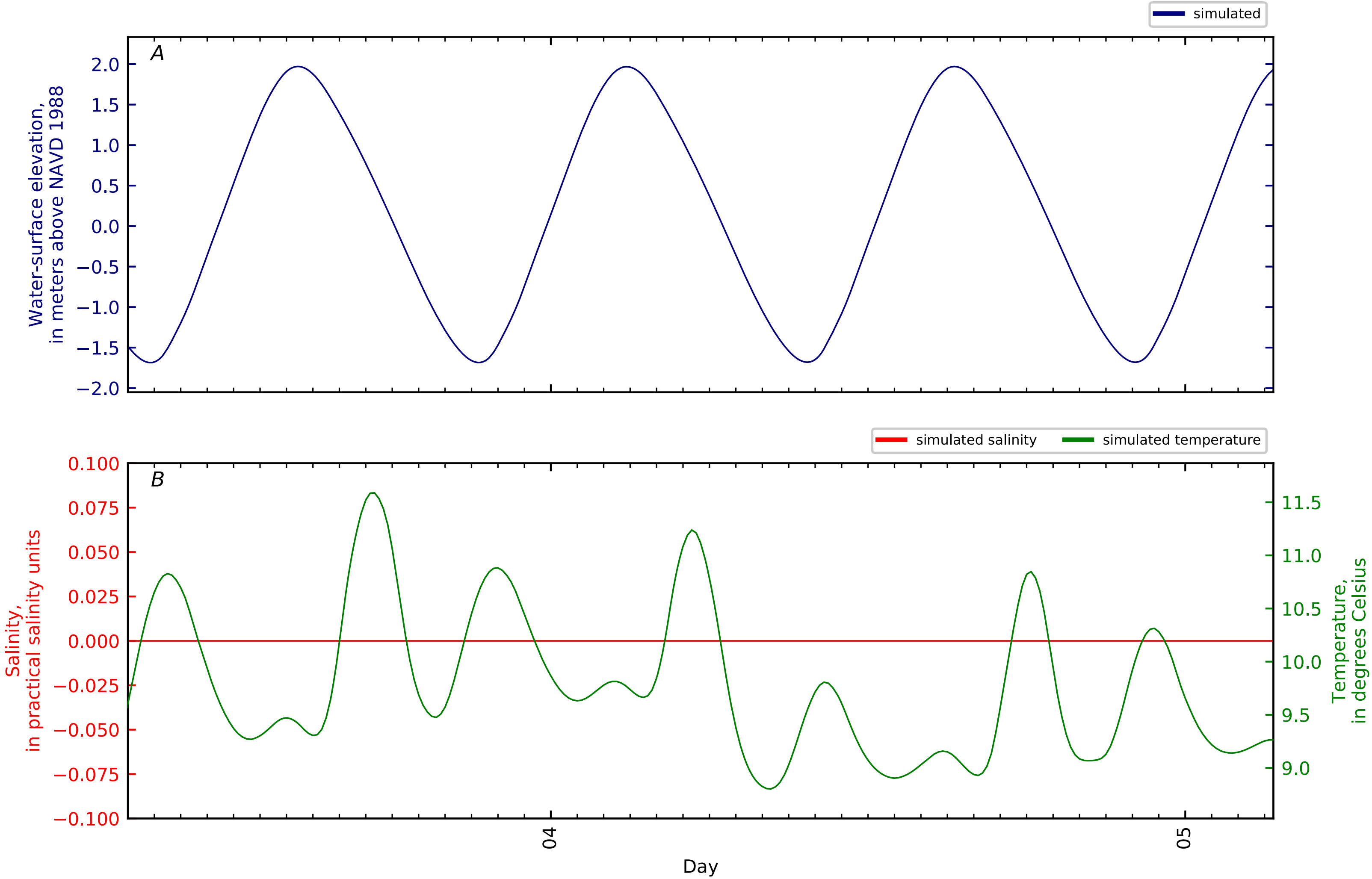

Figure B3-82. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 81, Penob Riv KM31. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

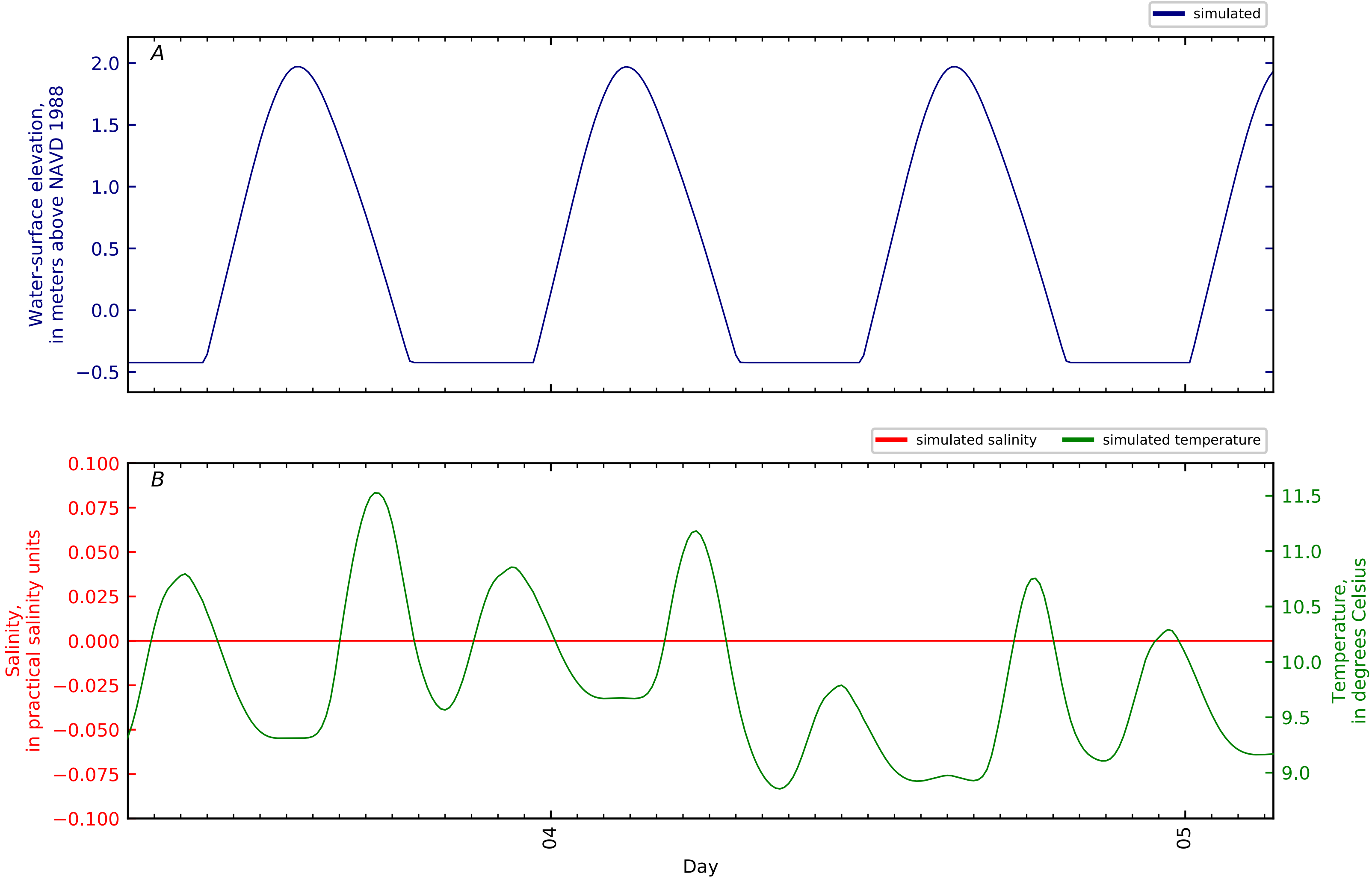

Figure B3-83. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 82, Penob Riv KM31.3 ERDC1 ON-MU2-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

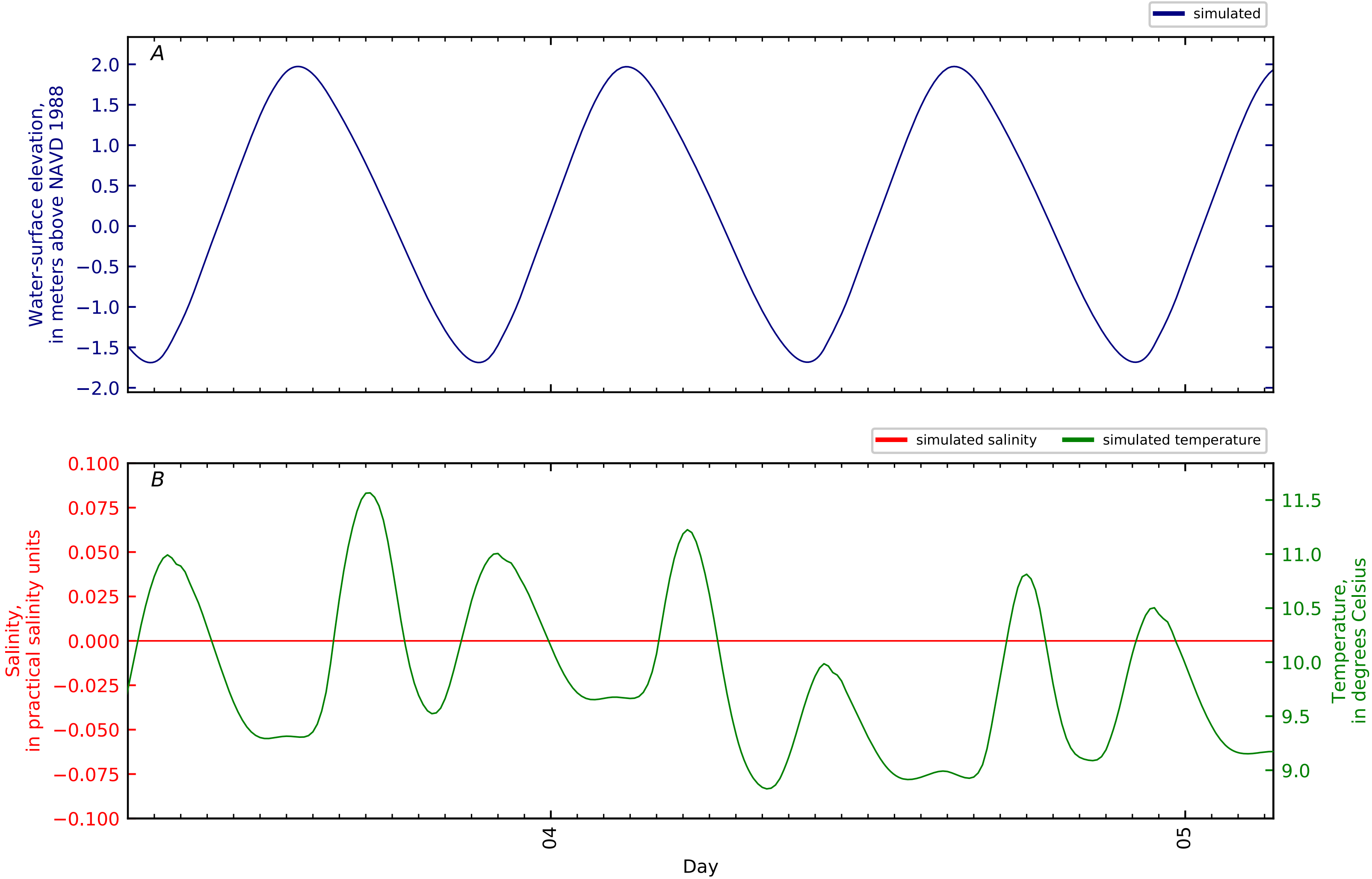

Figure B3-84. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 83, Penob Riv KM31.4 ERDC2 ON-MU13-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

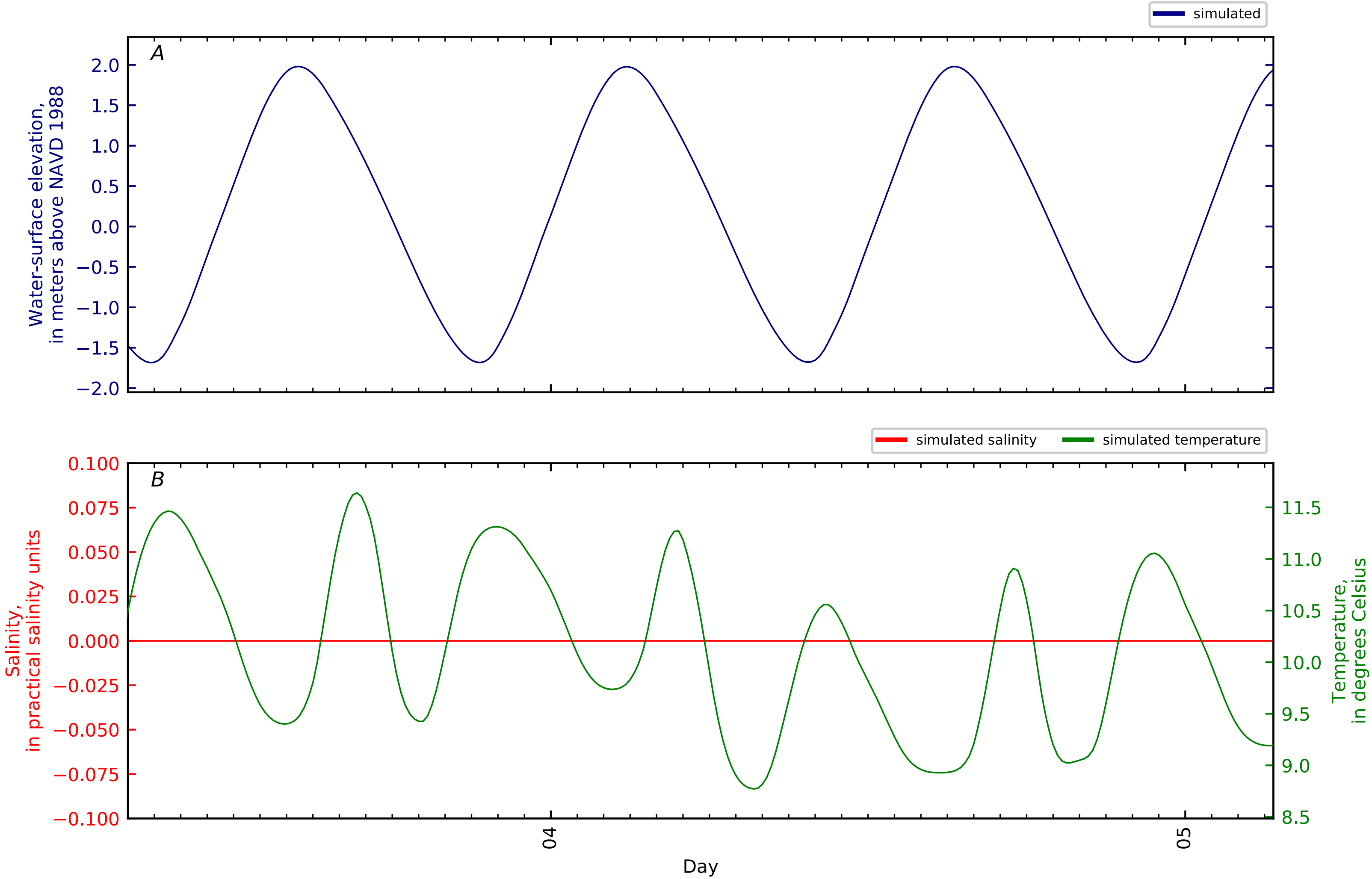

Figure B3-85. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 84, Penob Riv KM32. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

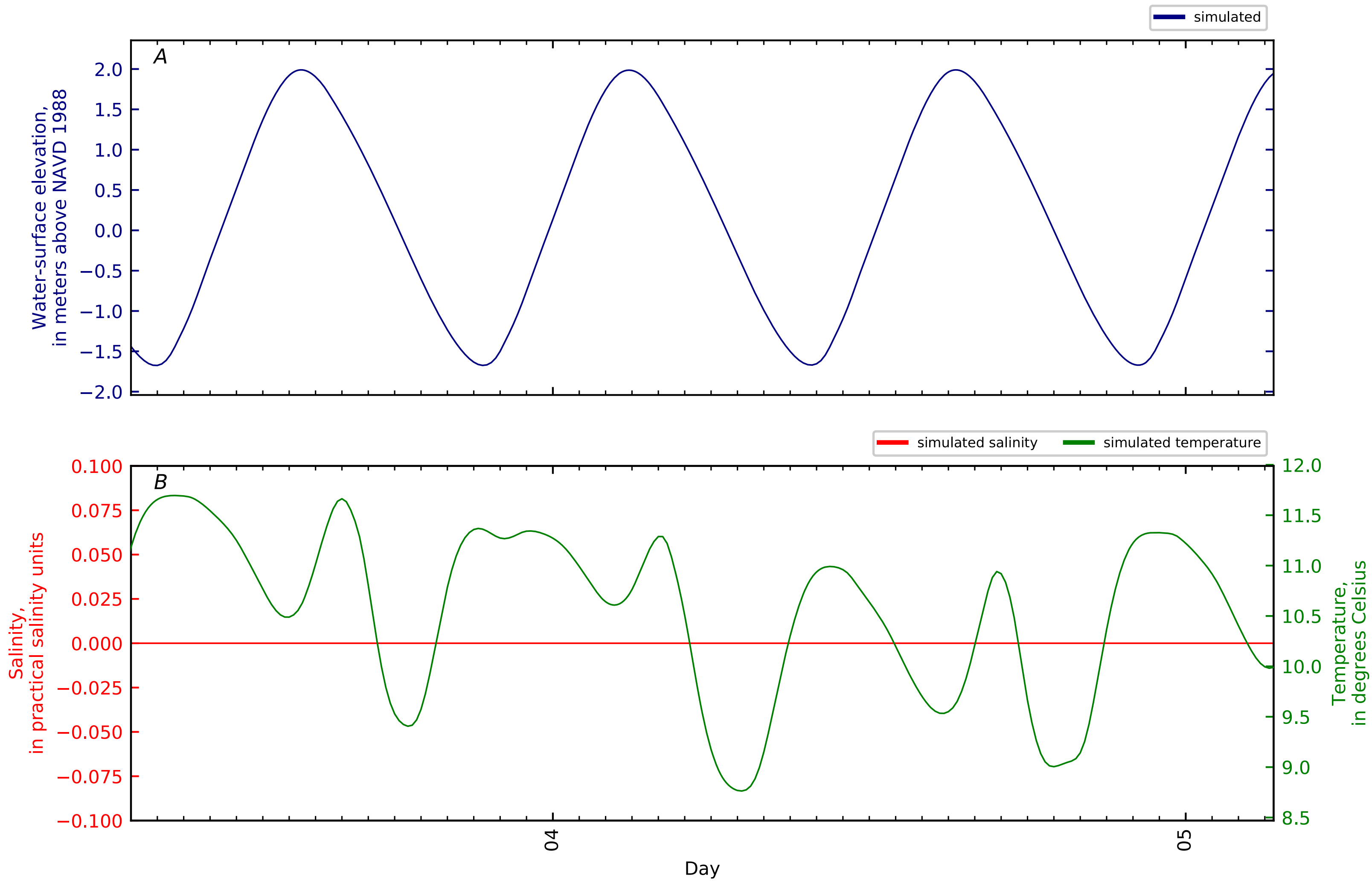

Figure B3-86. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 85, Penob Riv KM33. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

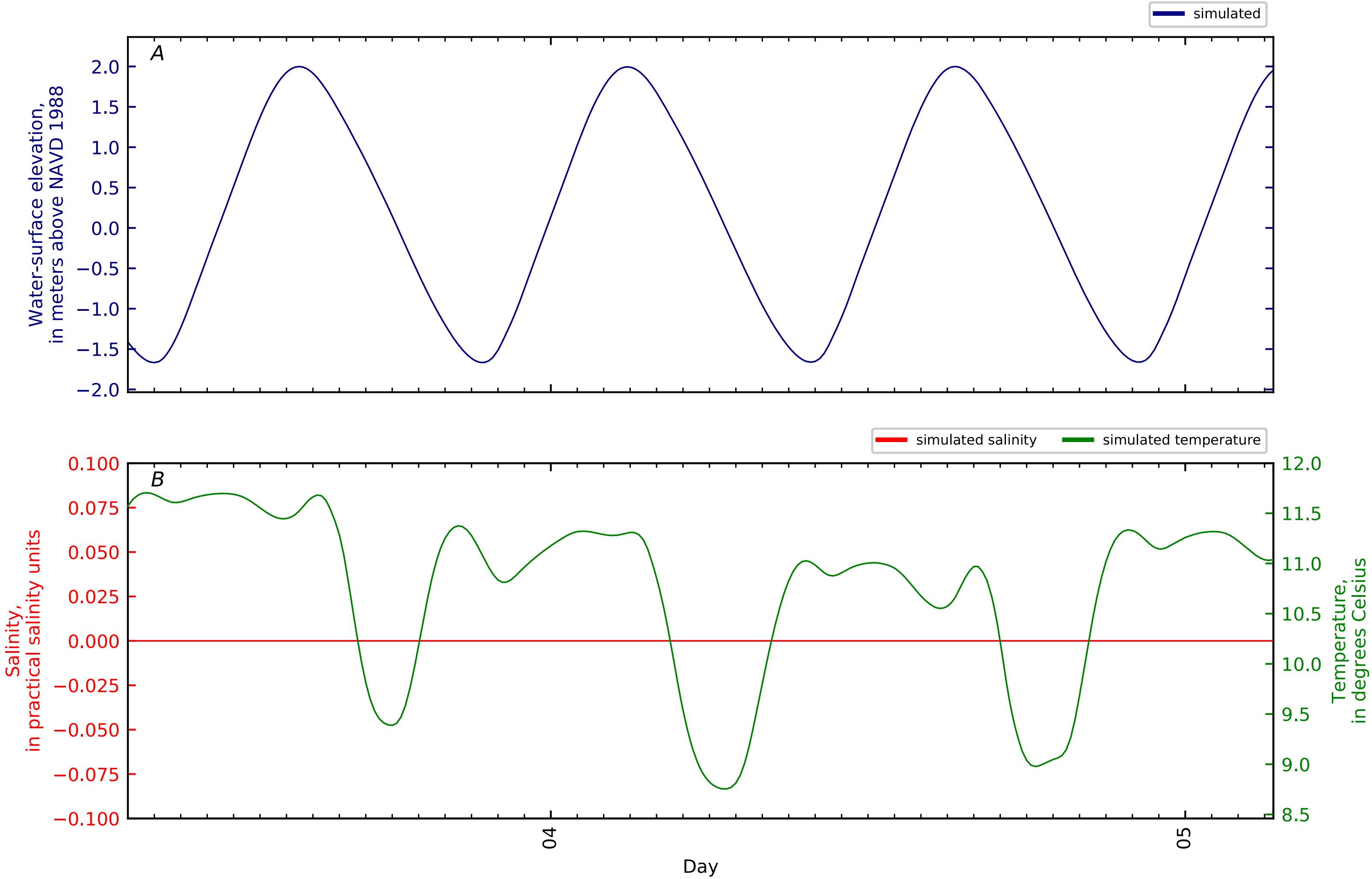

Figure B3-87. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 86, Penob Riv KM34. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

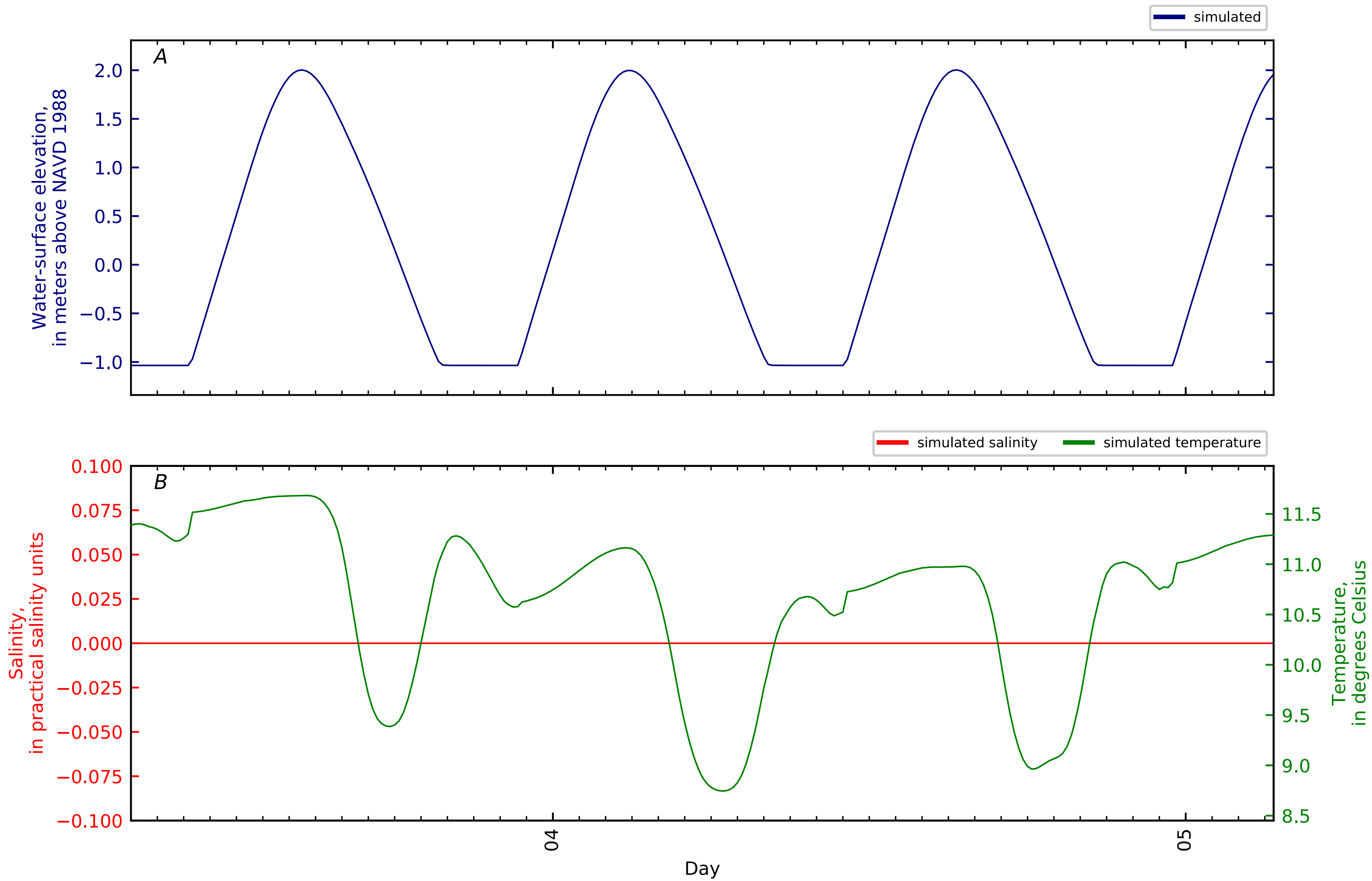

Figure B3-88. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 87, Penob Riv KM34.6 Southern Cove Orrington. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

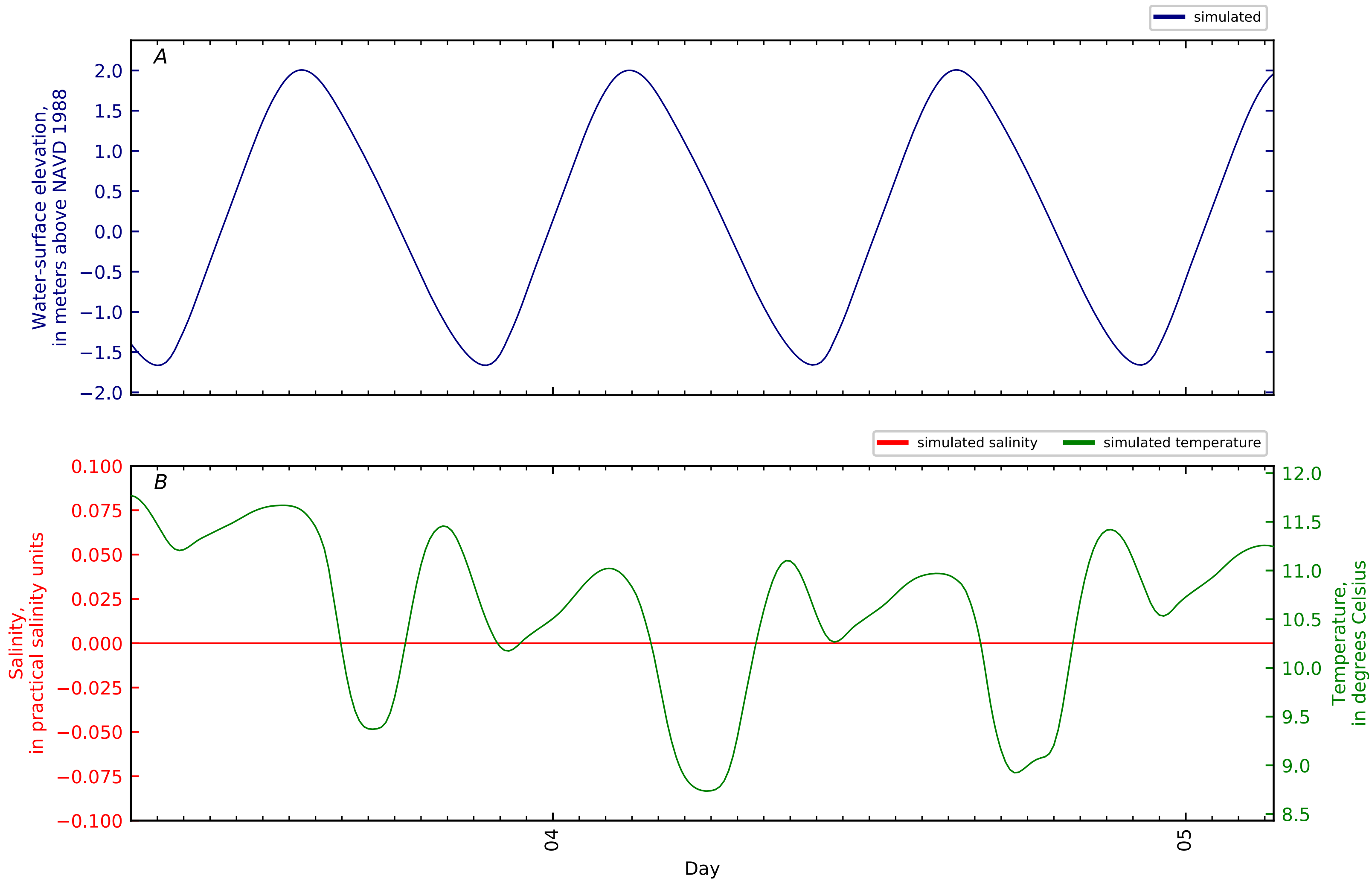

Figure B3-89. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 88, Penob Riv KM35. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

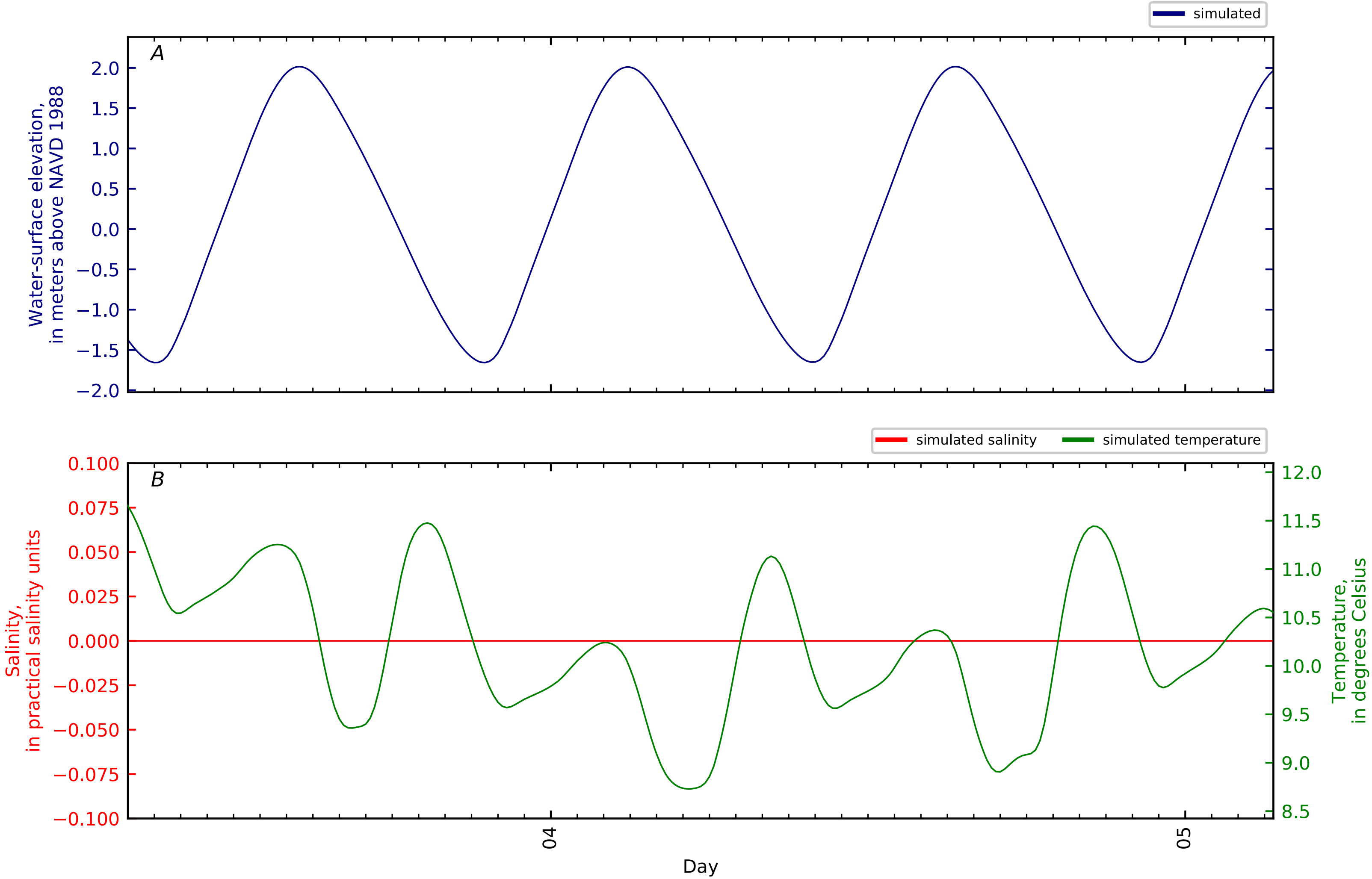

Figure B3-90. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 89, Penob Riv KM36. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

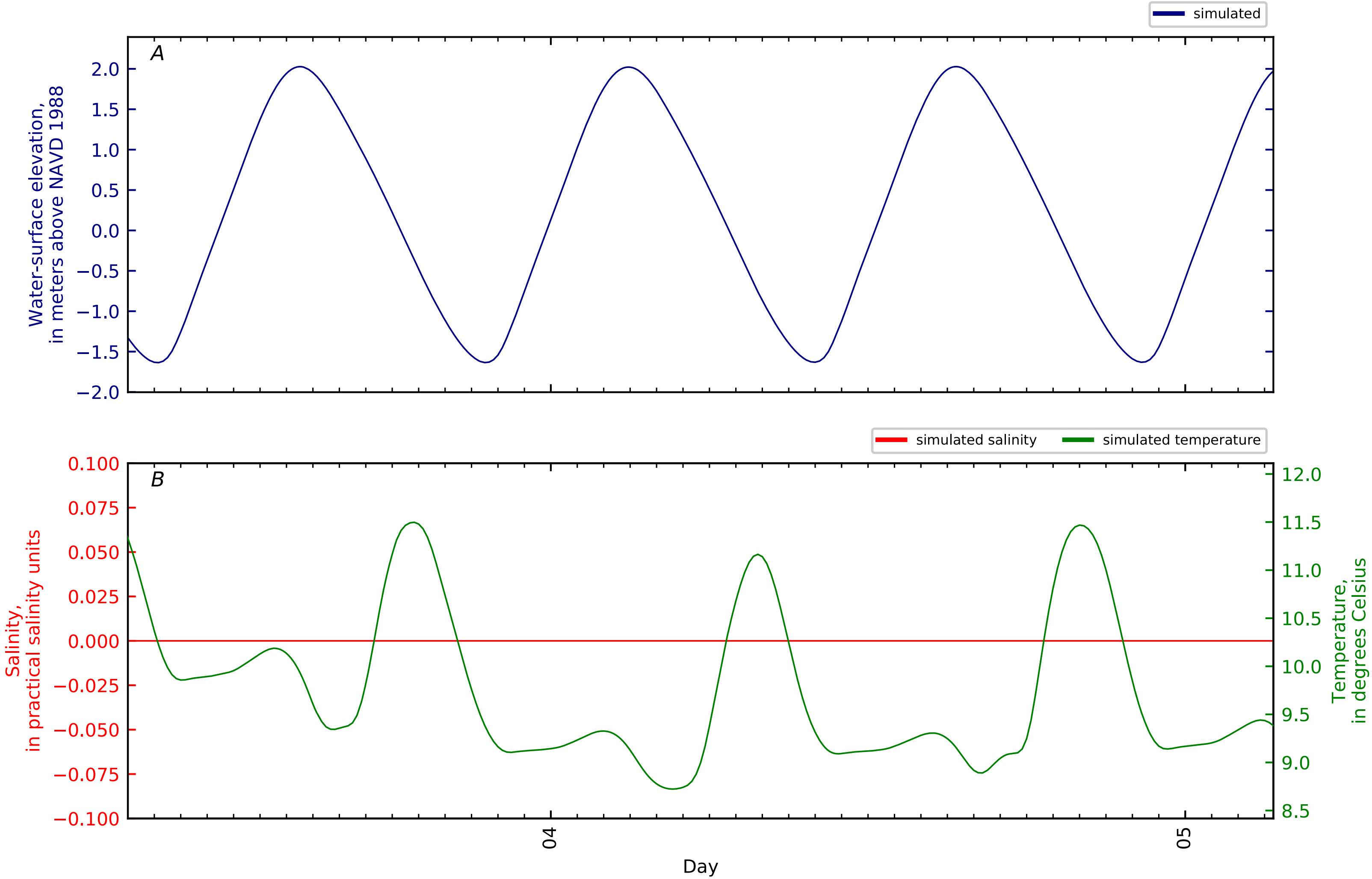

Figure B3-91. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 90, Penob Riv KM37. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

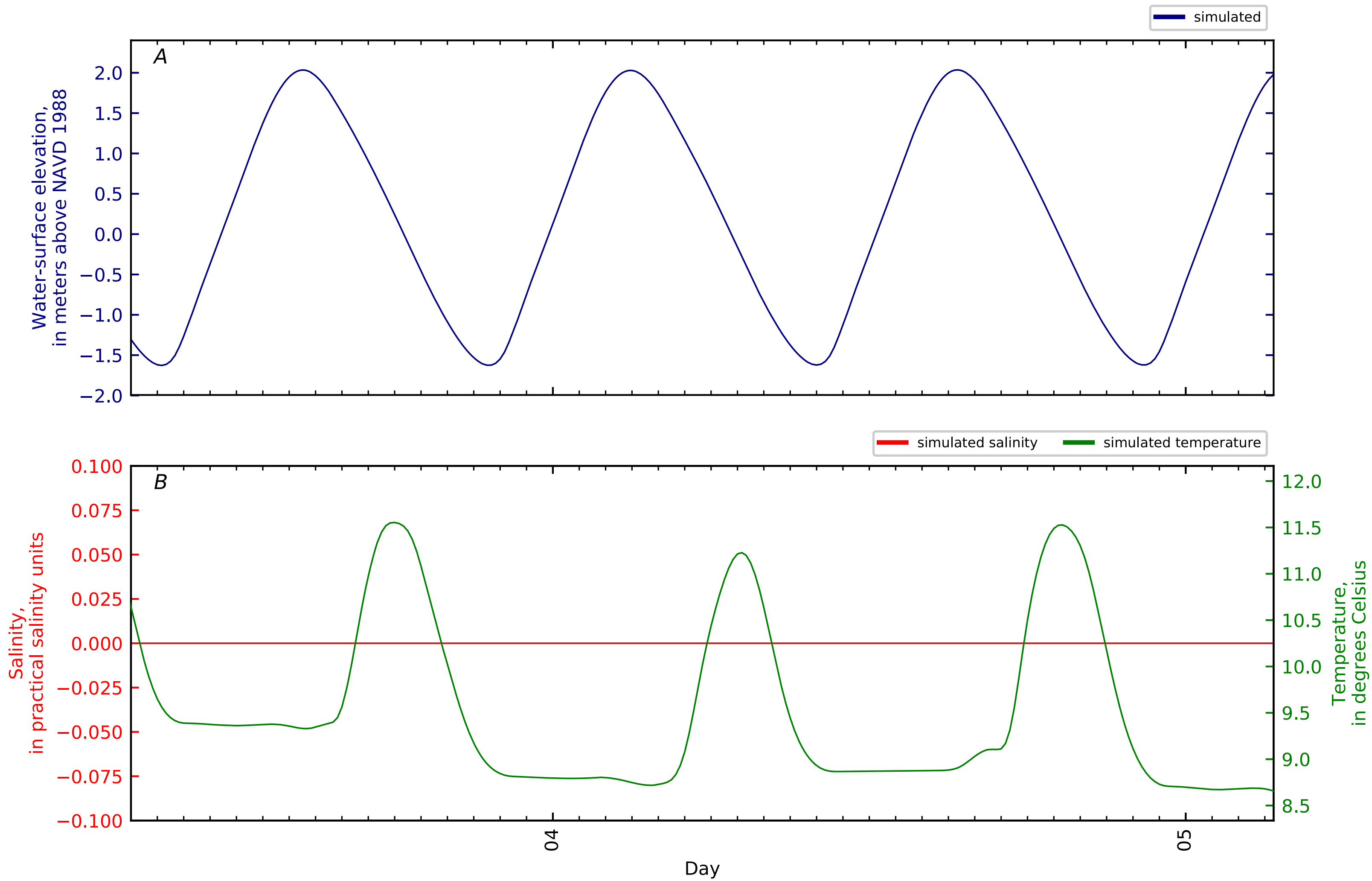

Figure B3-92. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 91, Penob Riv KM38. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

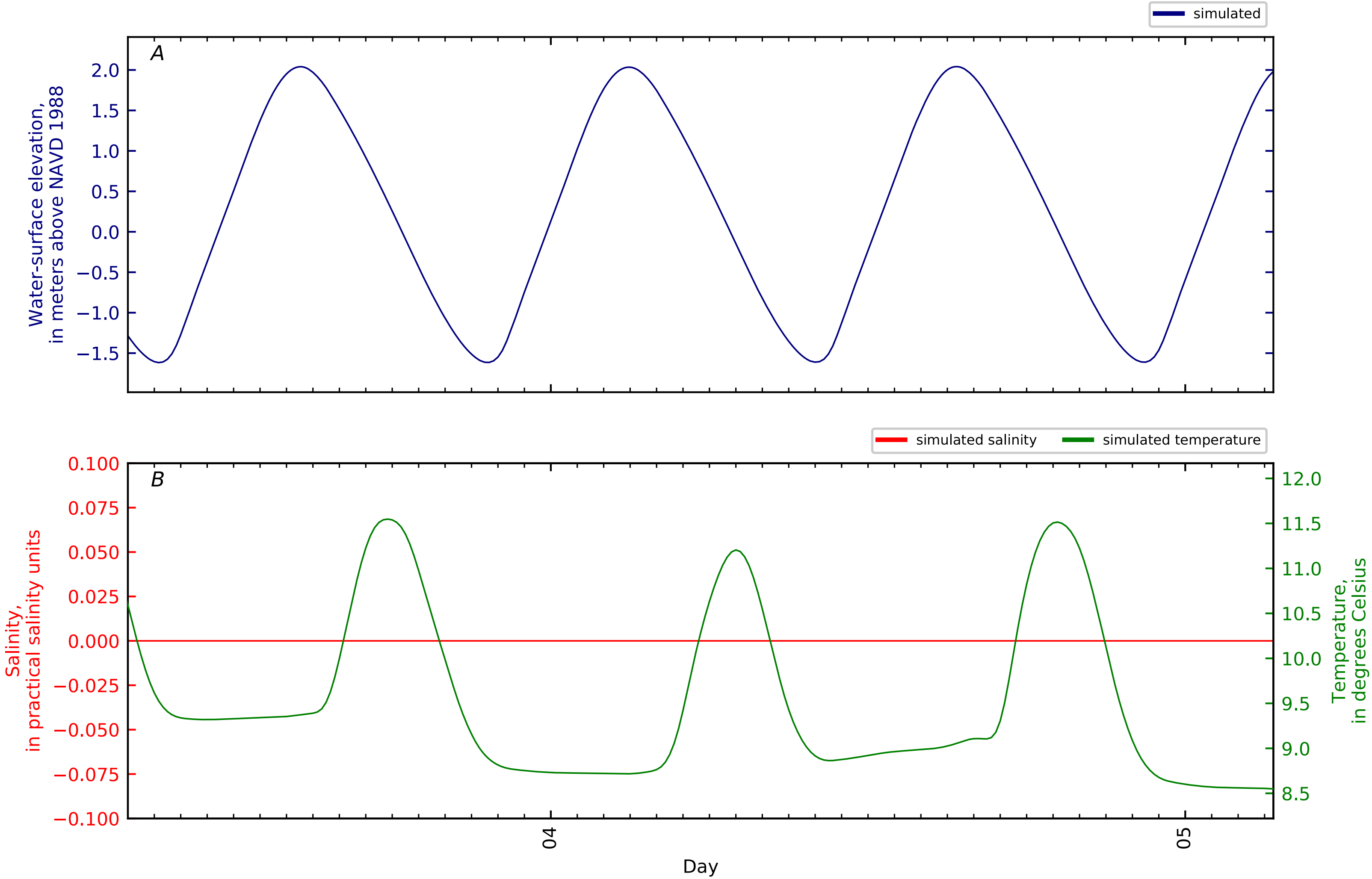

Figure B3-93. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 92, Penob Riv KM38.7 Boat ramp d/s Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

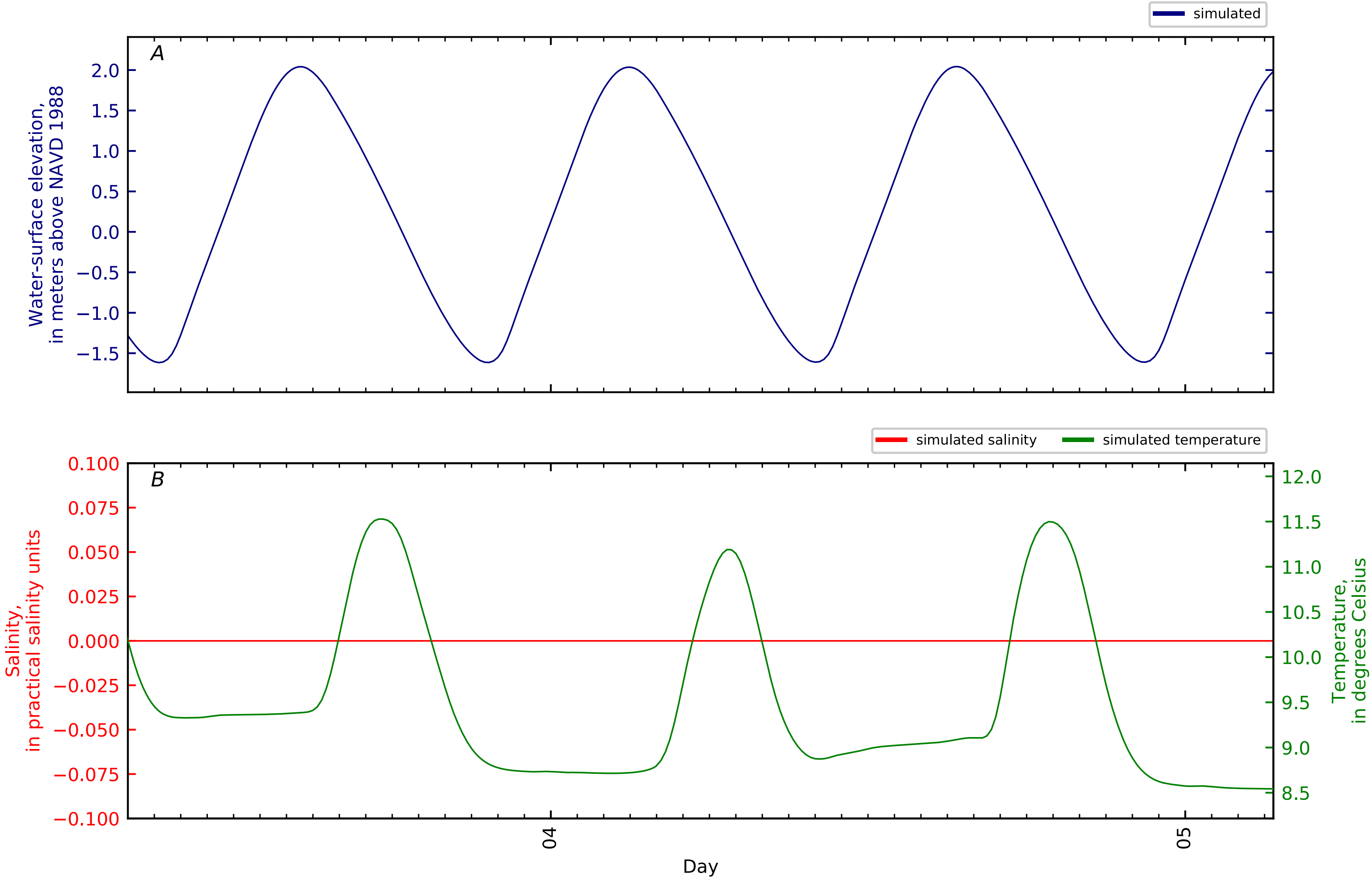

Figure B3-94. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 93, Penob Riv KM39. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

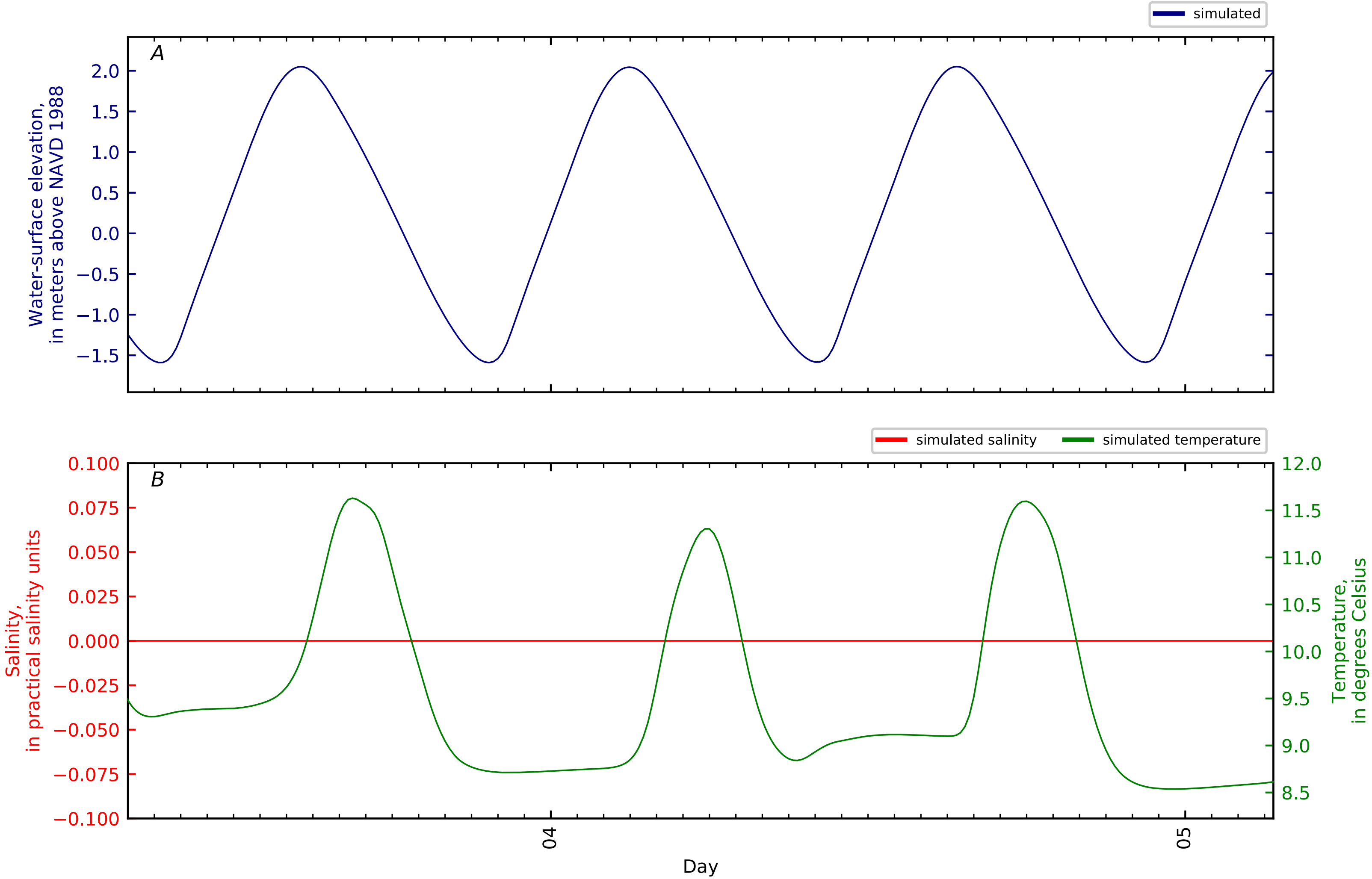

Figure B3-95. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 94, Penob Riv KM40. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

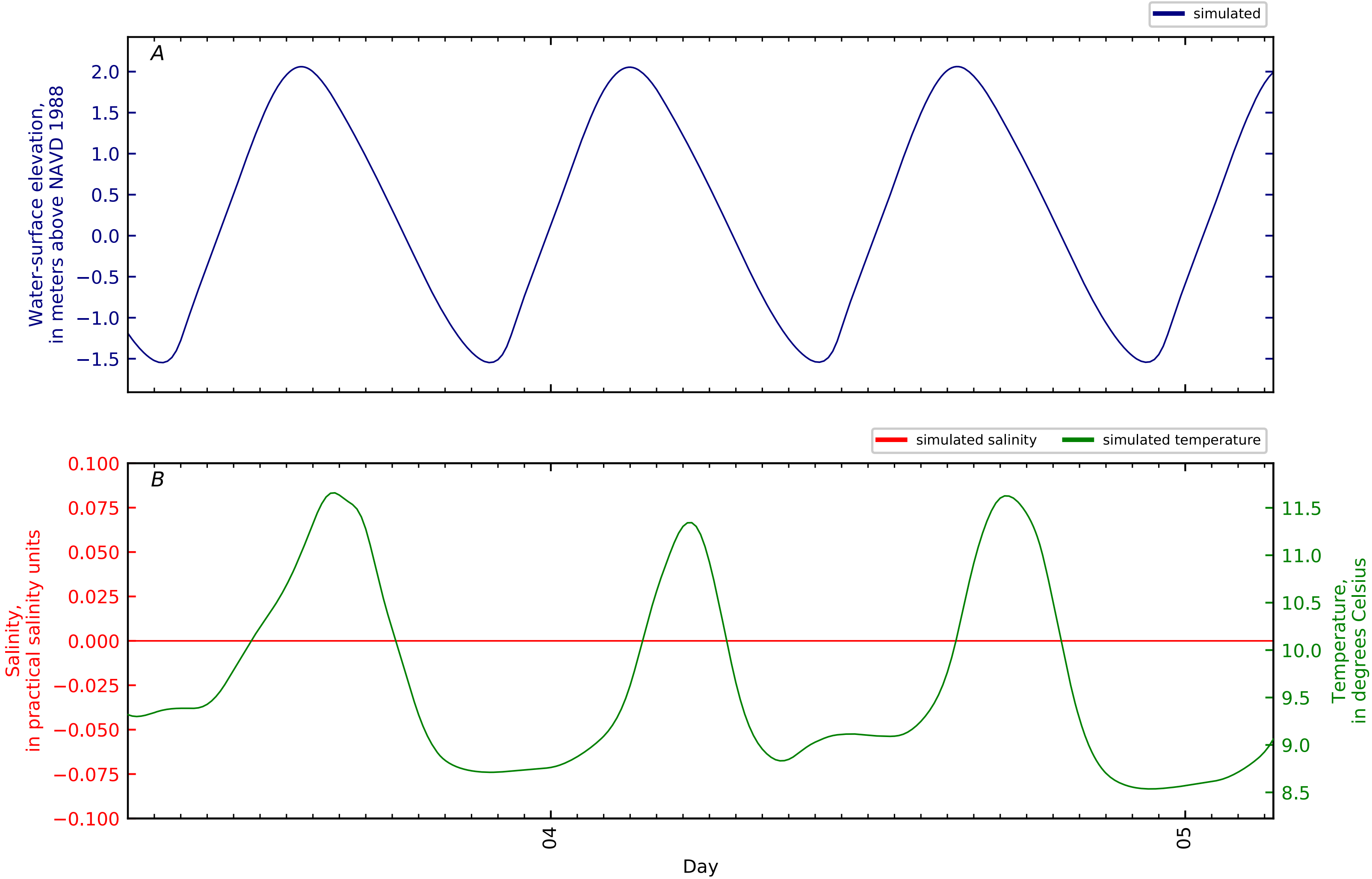

Figure B3-96. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 95, Penob Riv KM41. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

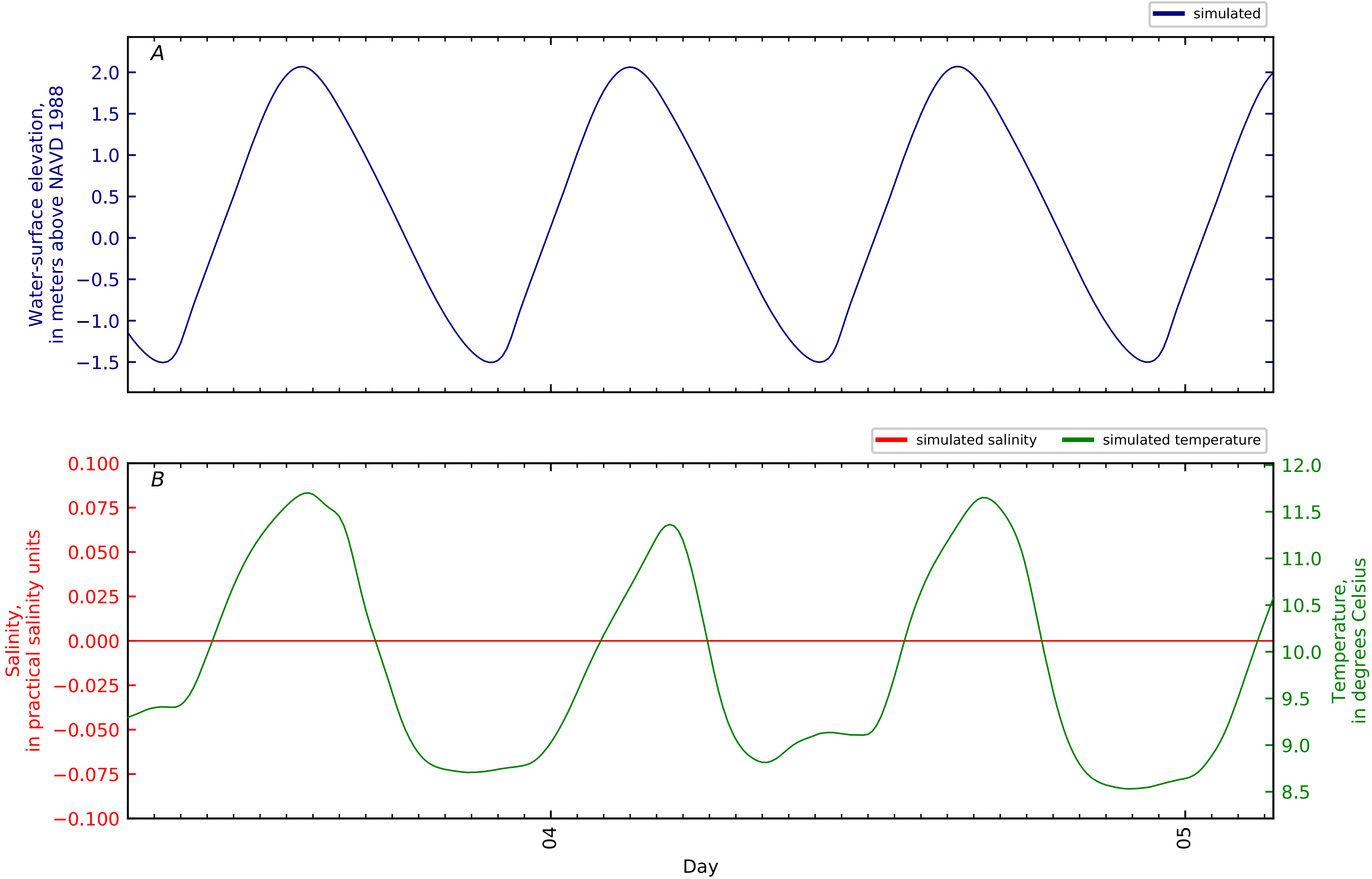

Figure B3-97. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 96, Penob Riv KM42. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

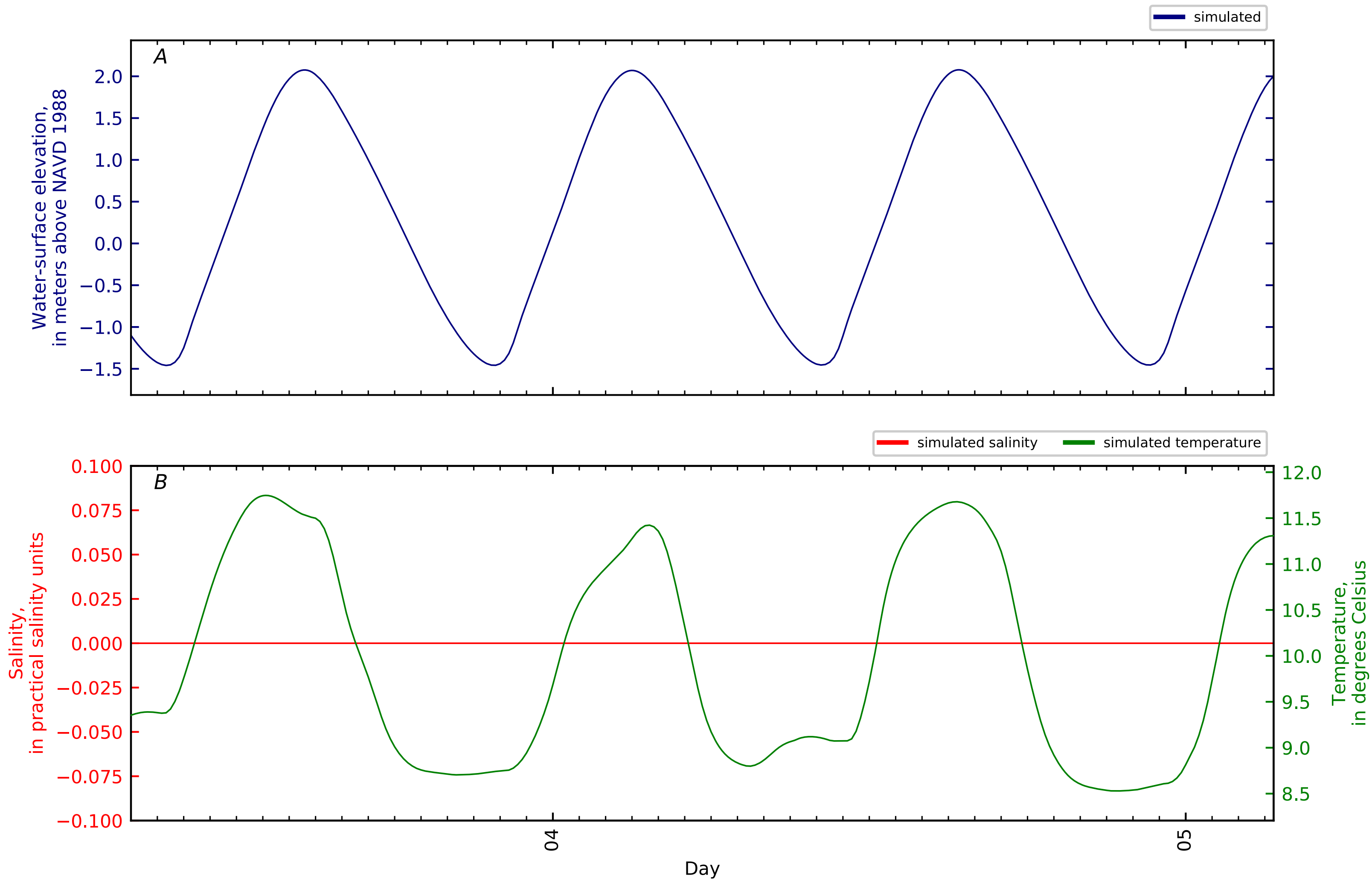

Figure B3-98. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 97, Penob Riv KM43. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

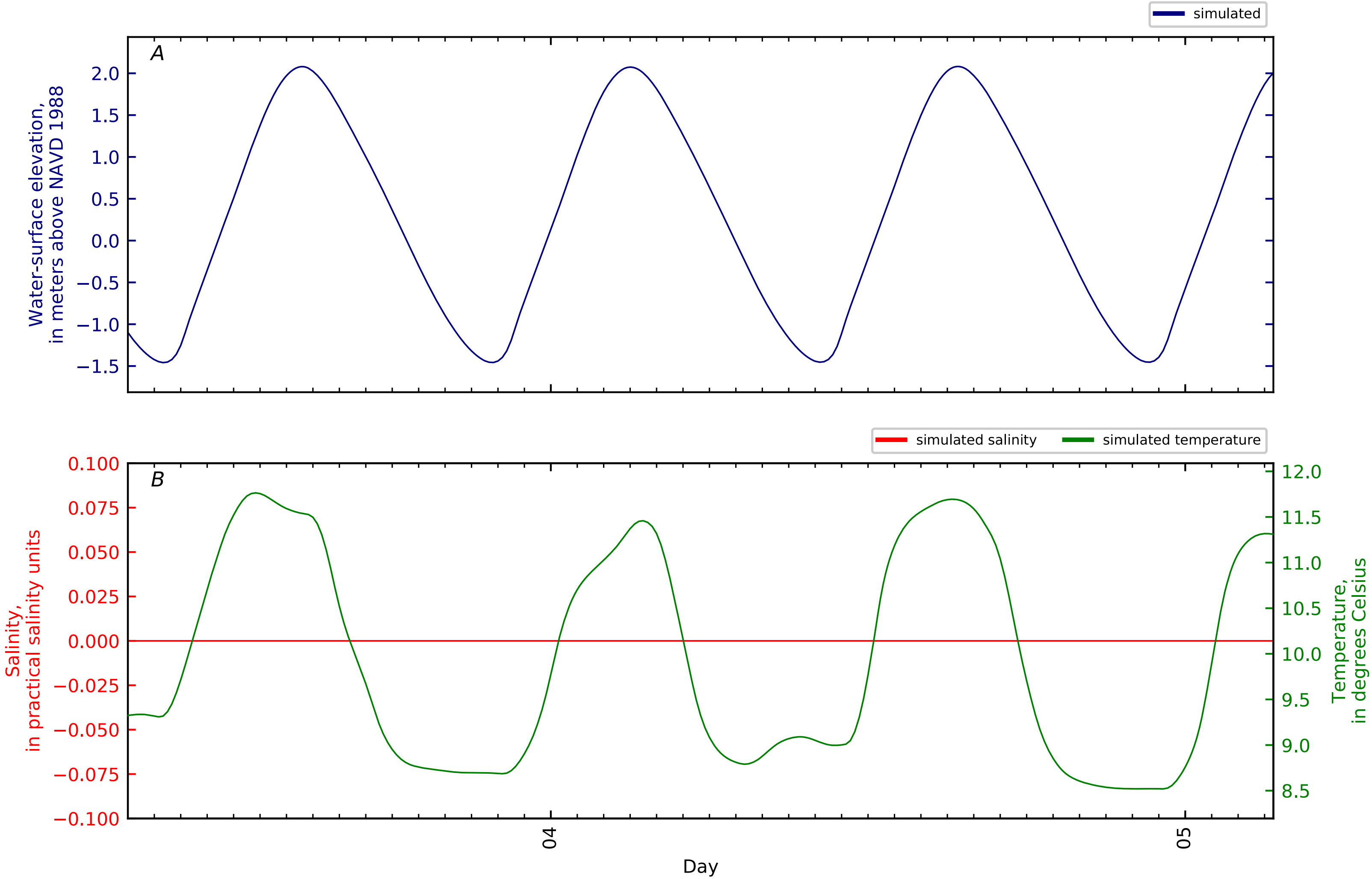

Figure B3-99. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 98, Penob Riv KM43.2 GS 01037050 at Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

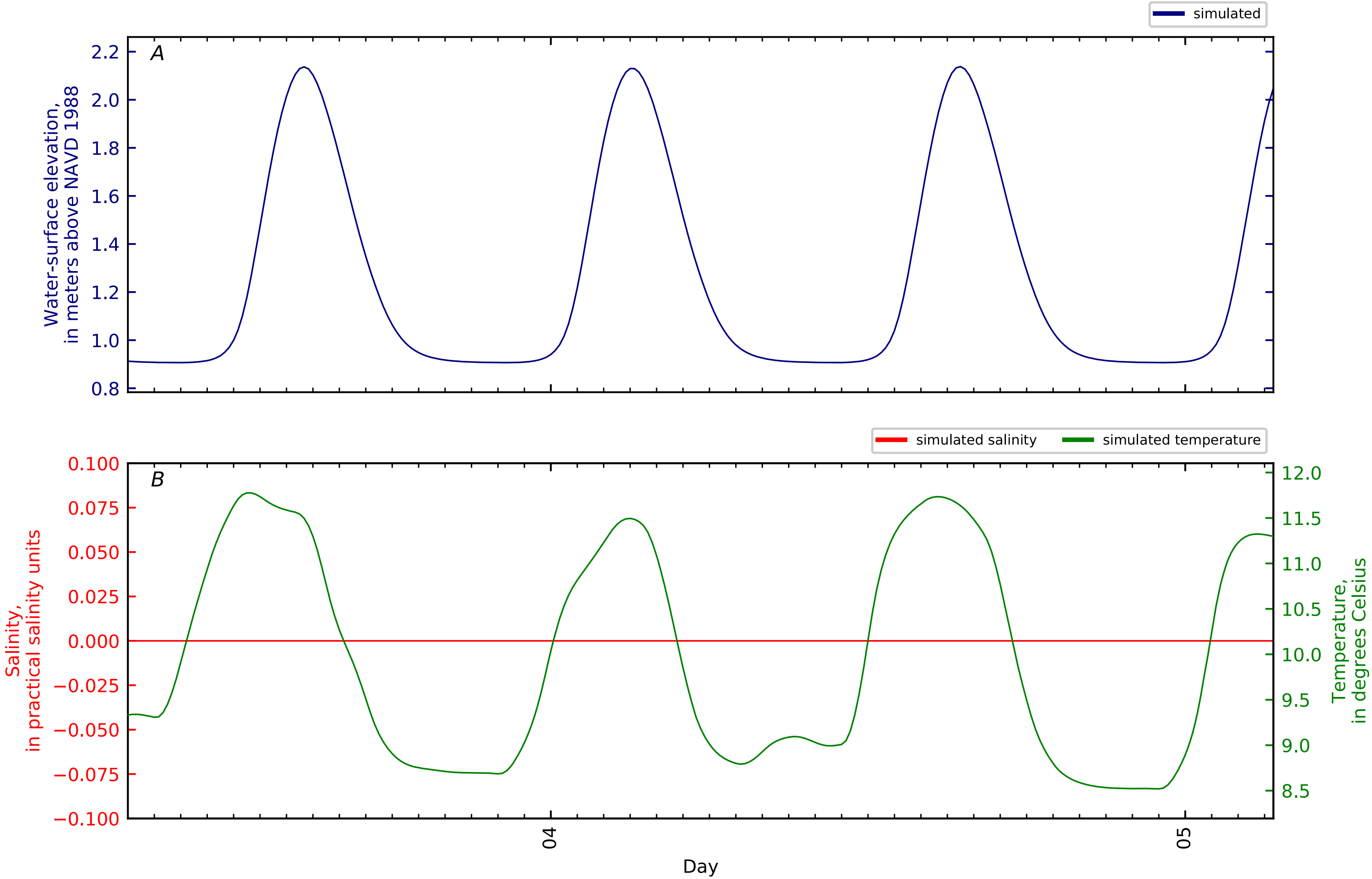

Figure B3-100. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 99, Penob Riv KM44. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

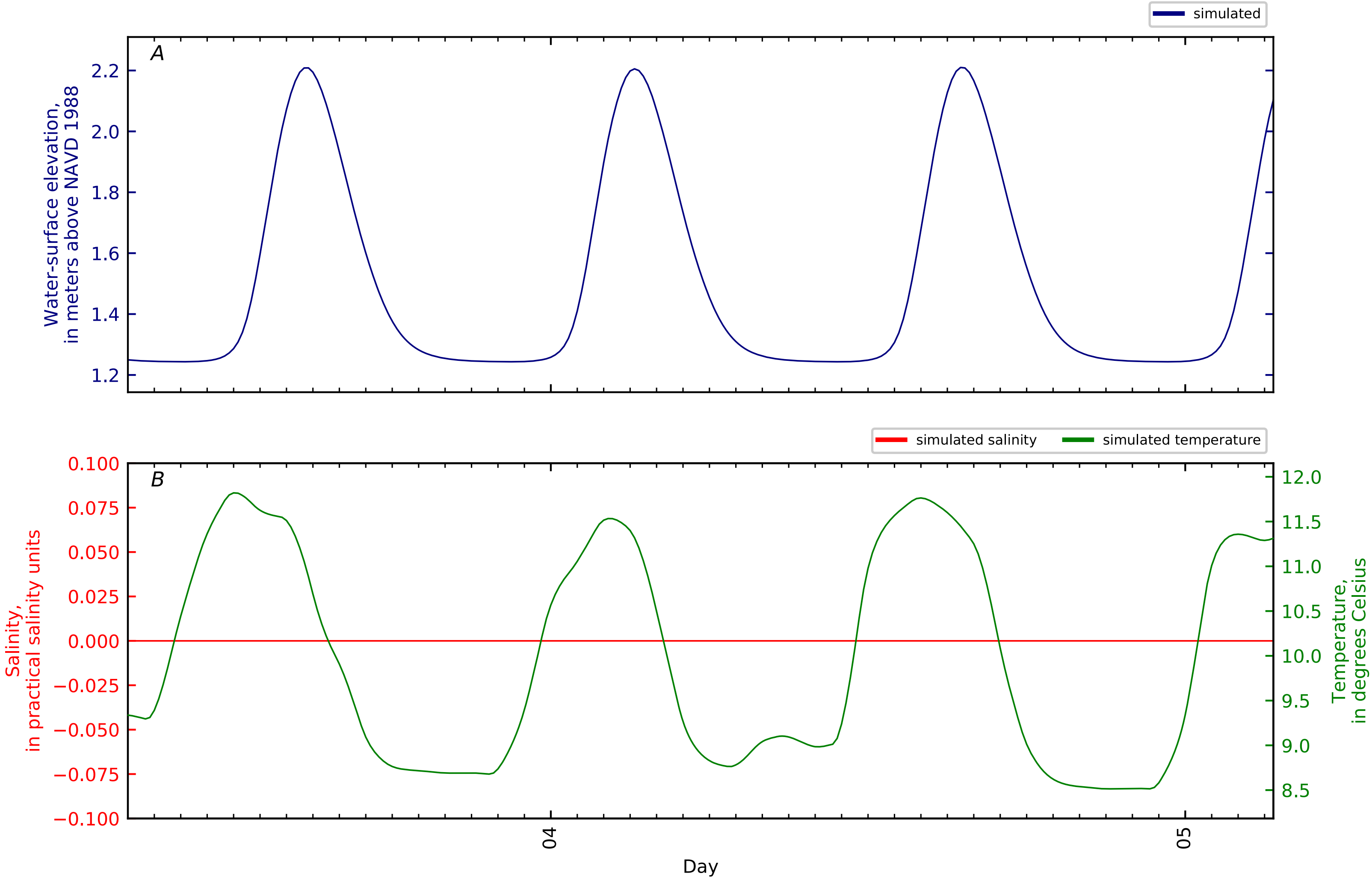

Figure B3-101. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 100, Penob Riv KM45. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

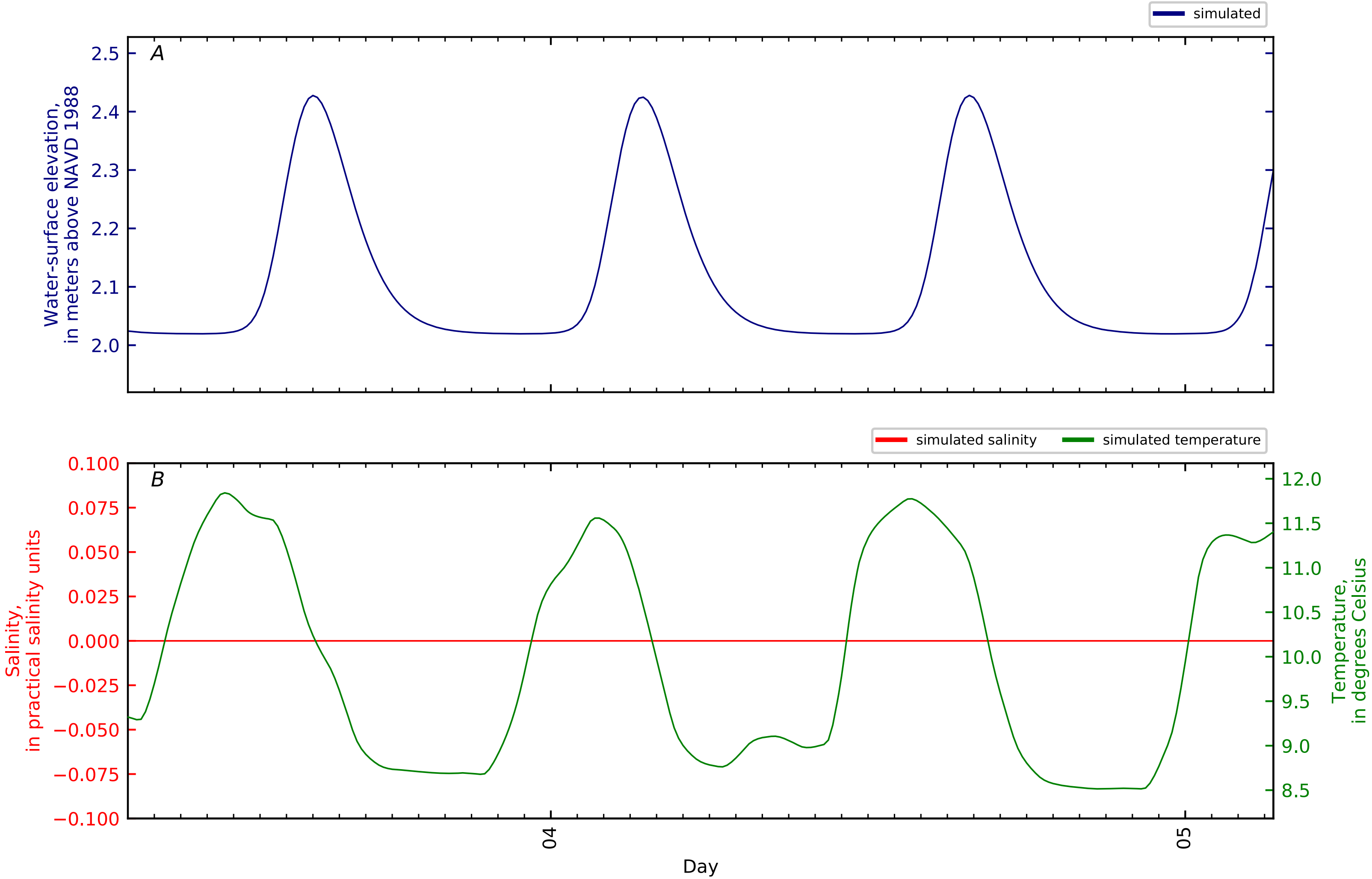

Figure B3-102. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 101, Penob Riv KM46. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

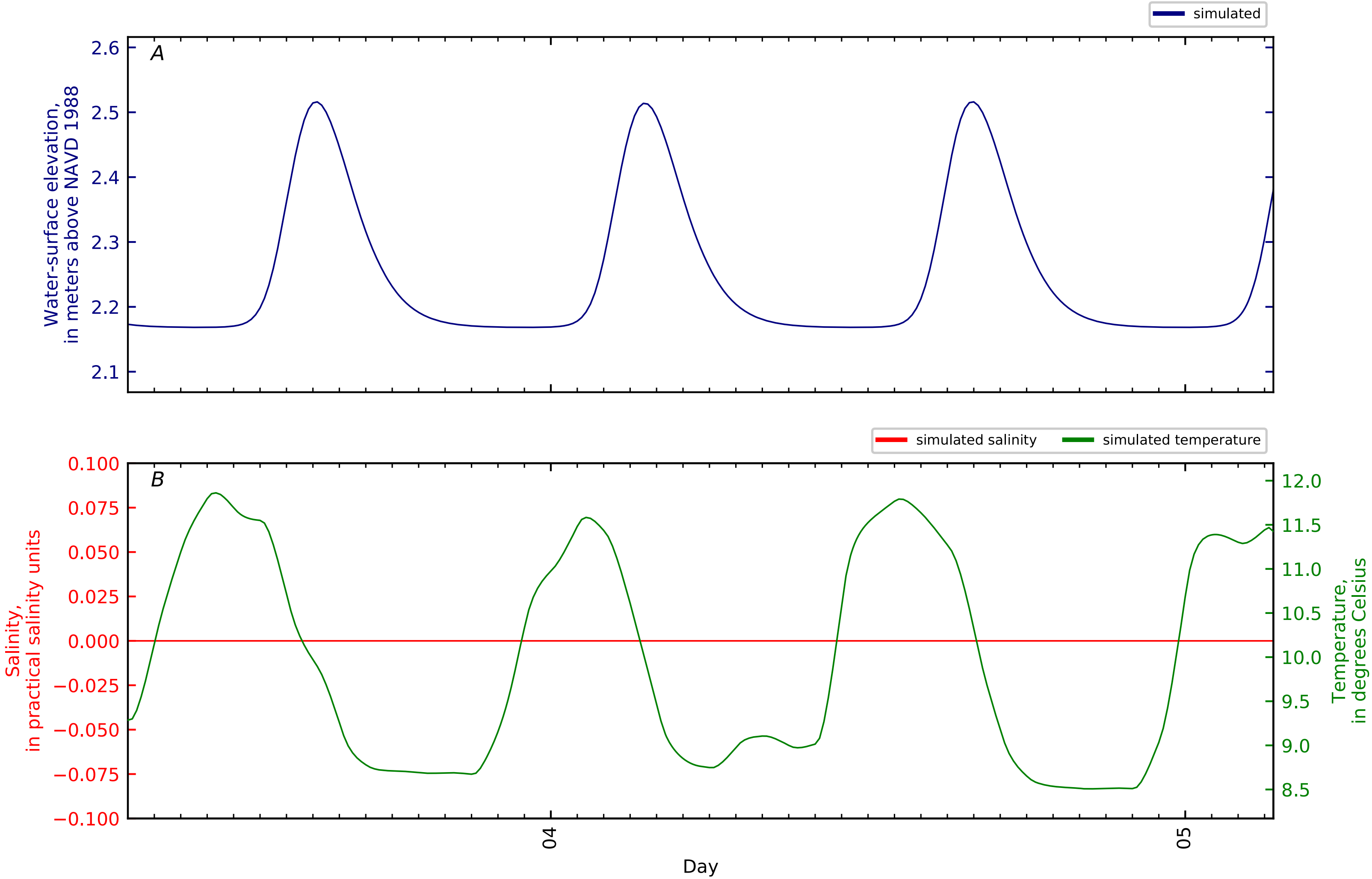

Figure B3-103. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 102, Penob Riv KM47. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

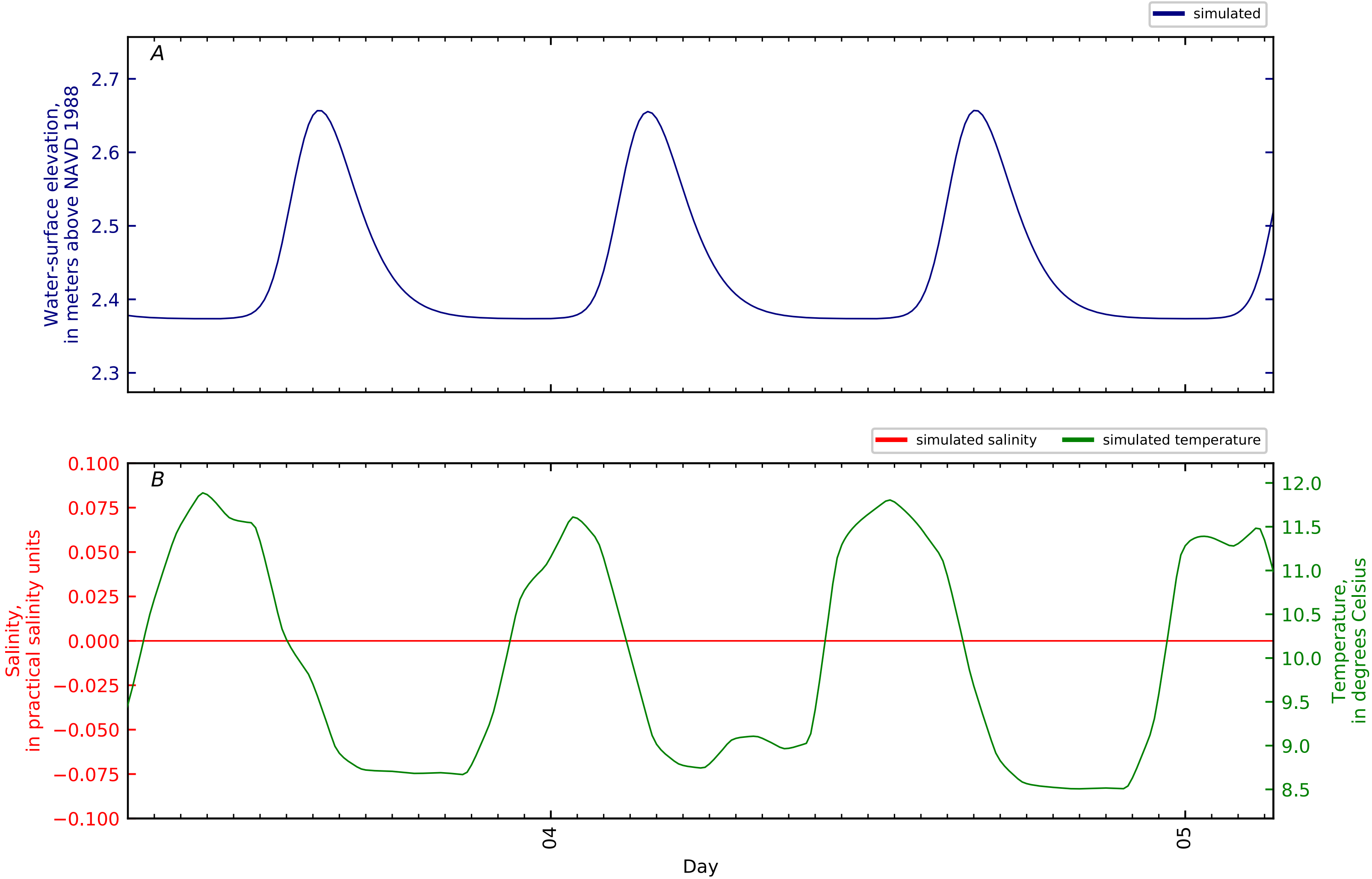

Figure B3-104. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 103, Penob Riv KM48. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

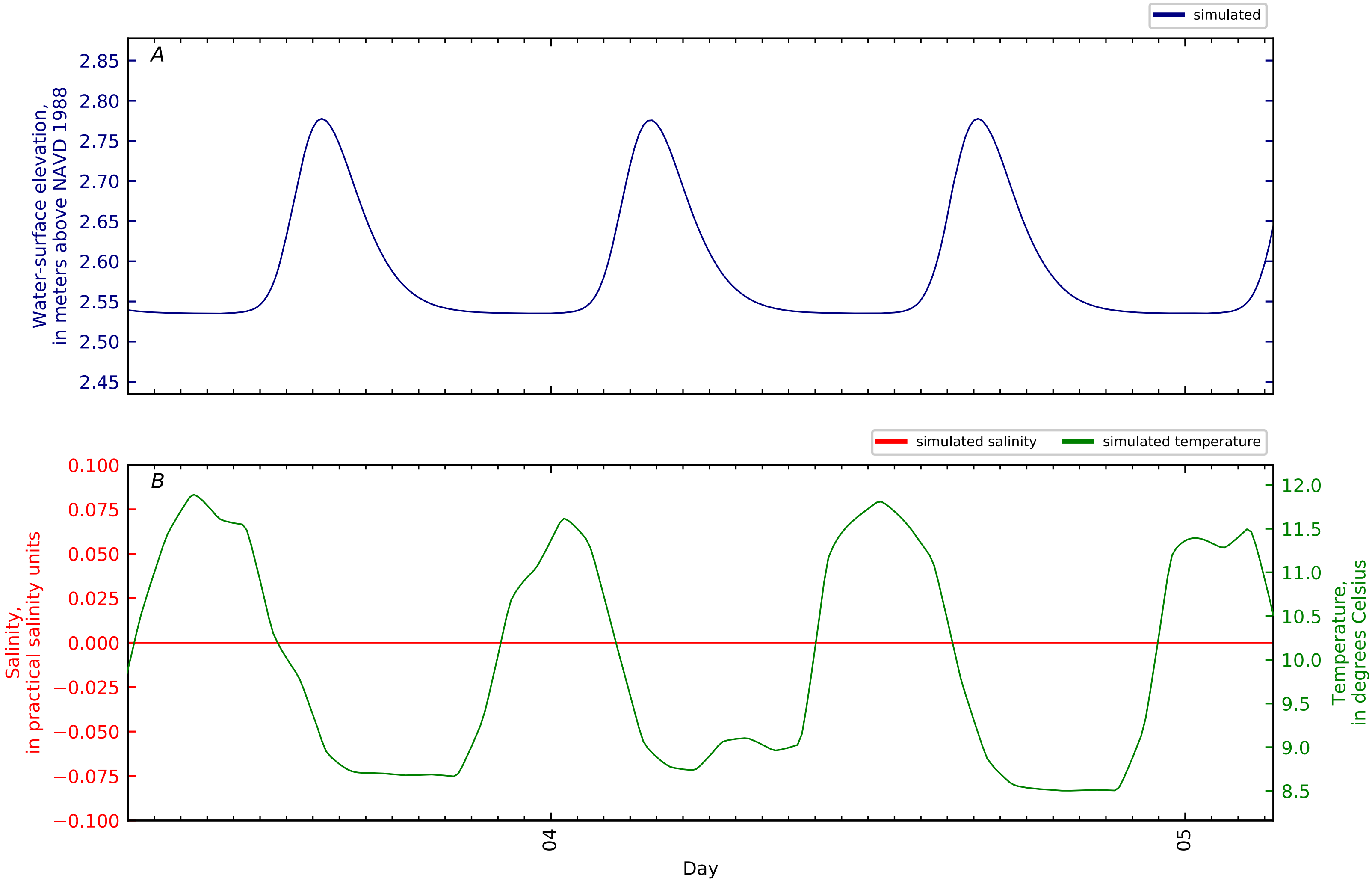

Figure B3-105. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 104, Penob Riv KM49. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

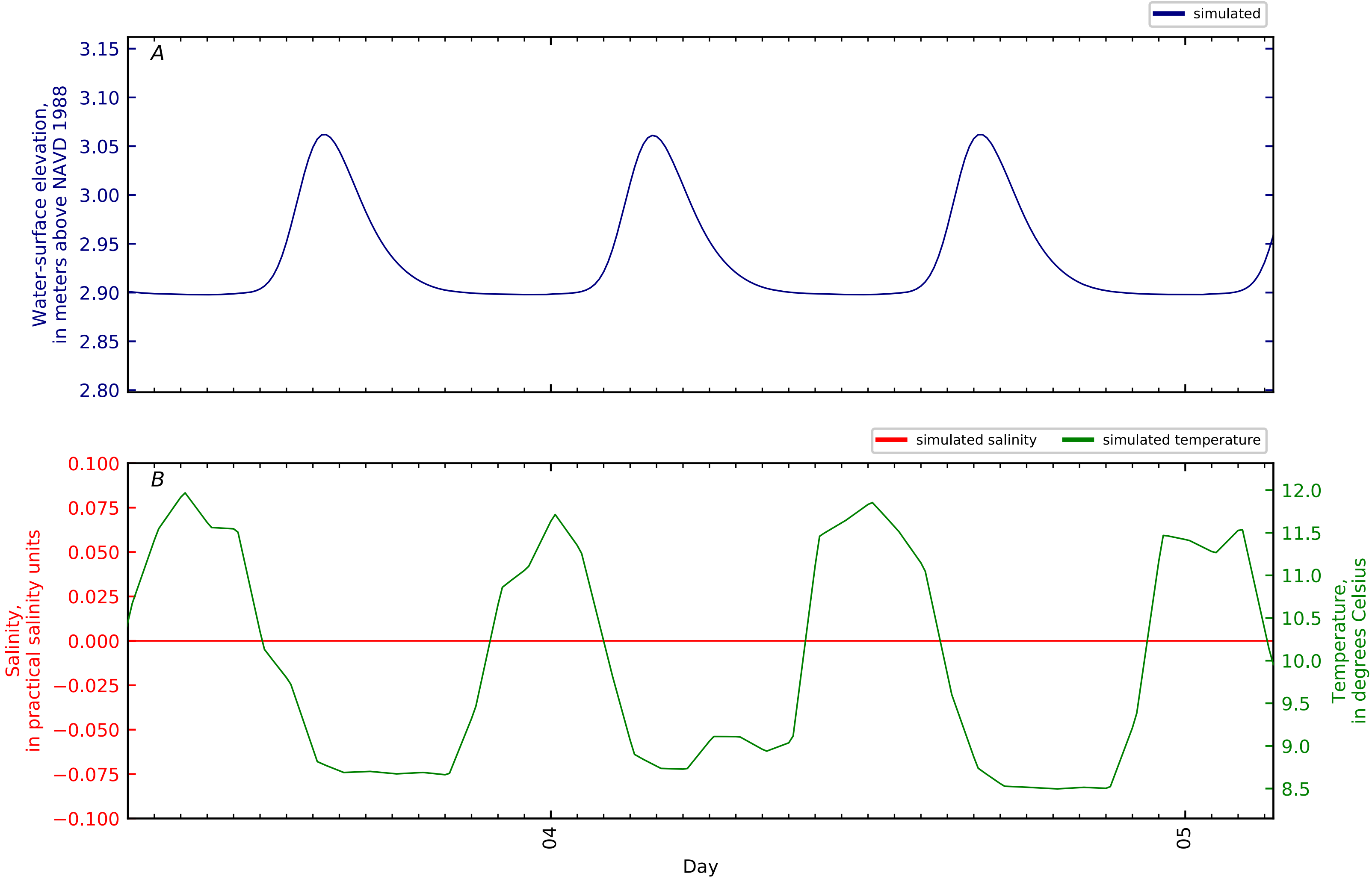

Figure B3-106. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 105, Penob Riv KM50 nr GS gage Eddington. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

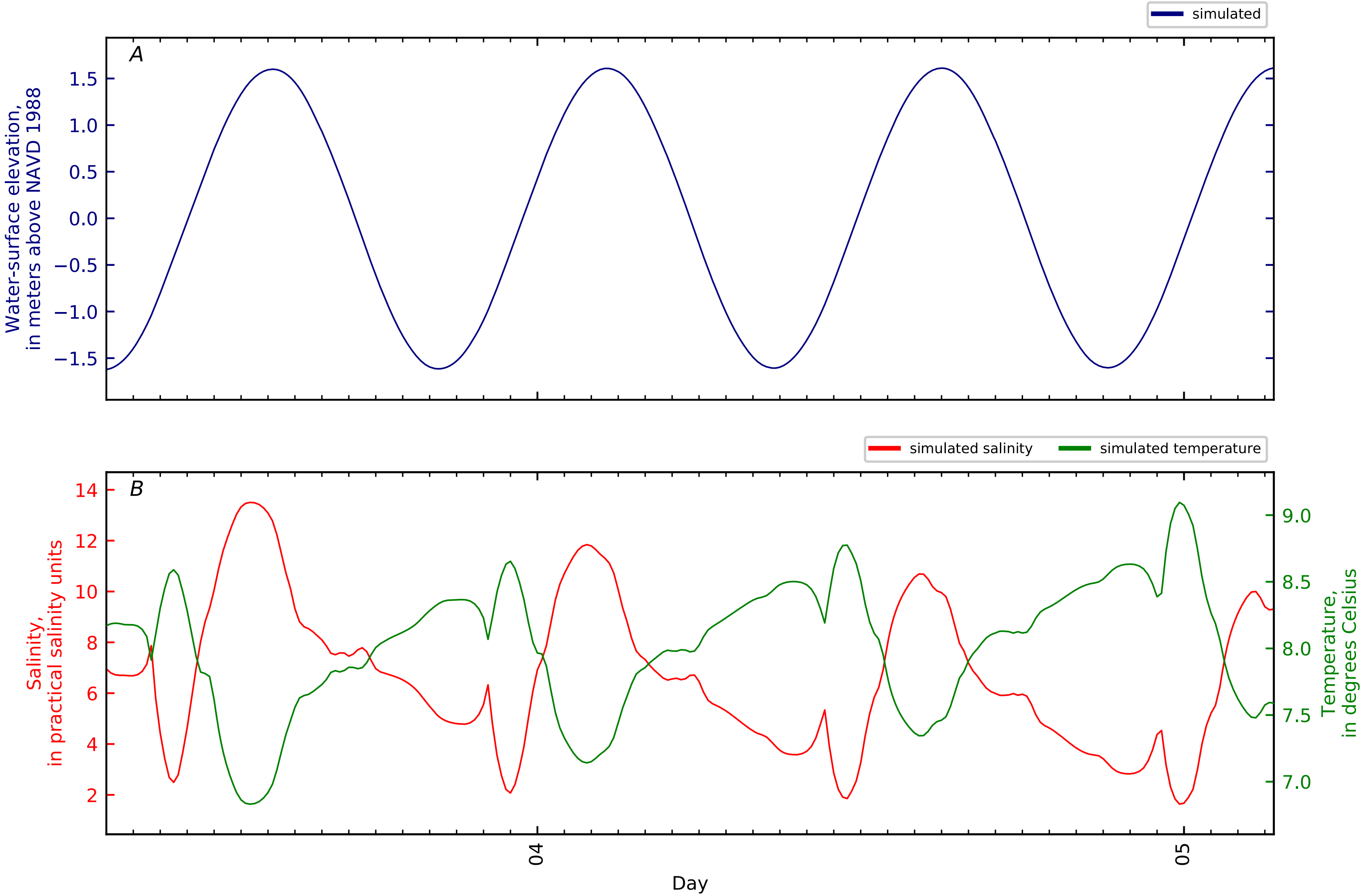

Figure B3-107. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 106, East Channel -KM0.1 ERDC9 VE-MU4-SF-2. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

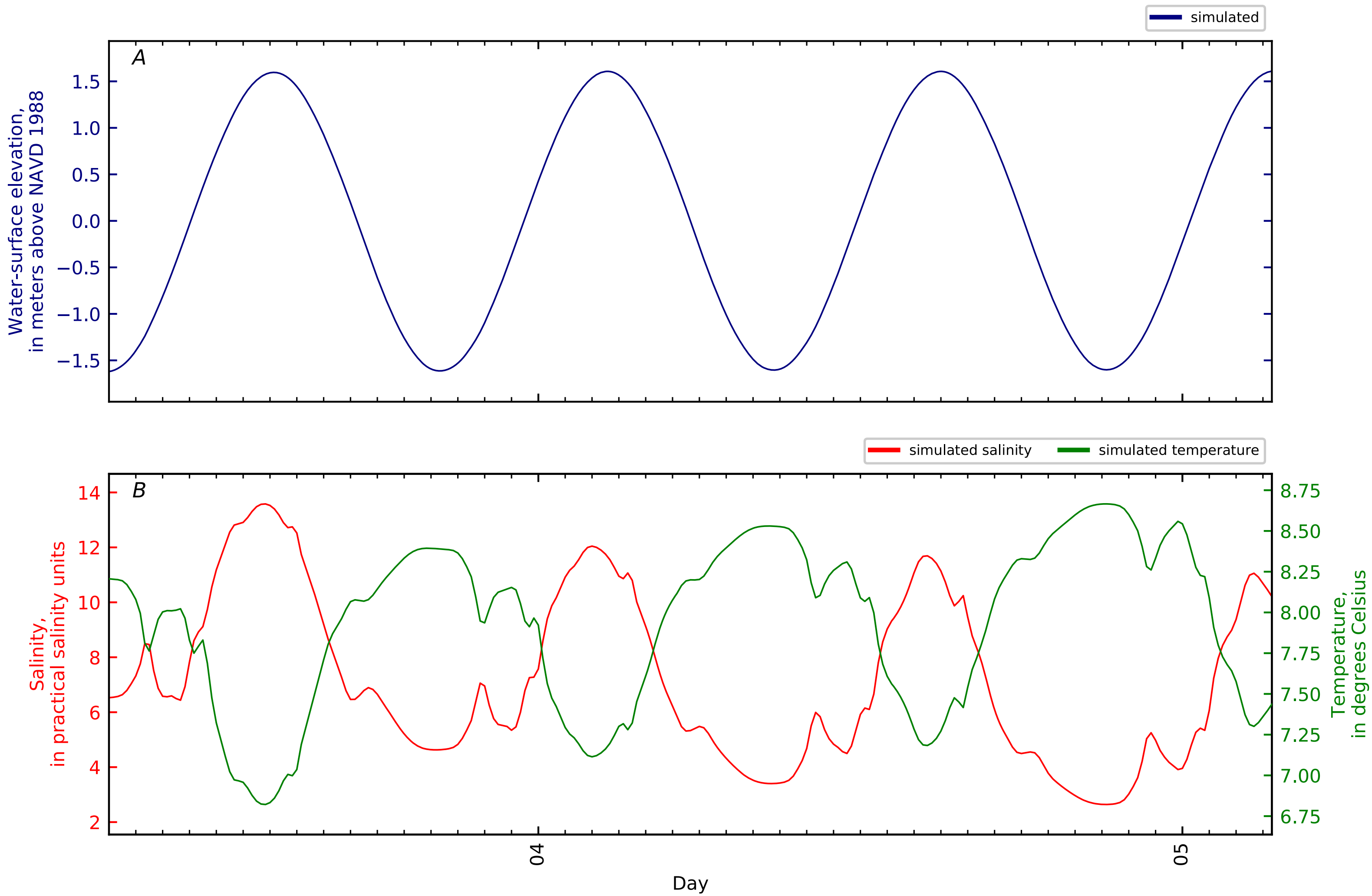

Figure B3-108. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 107, East Channel KM0. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

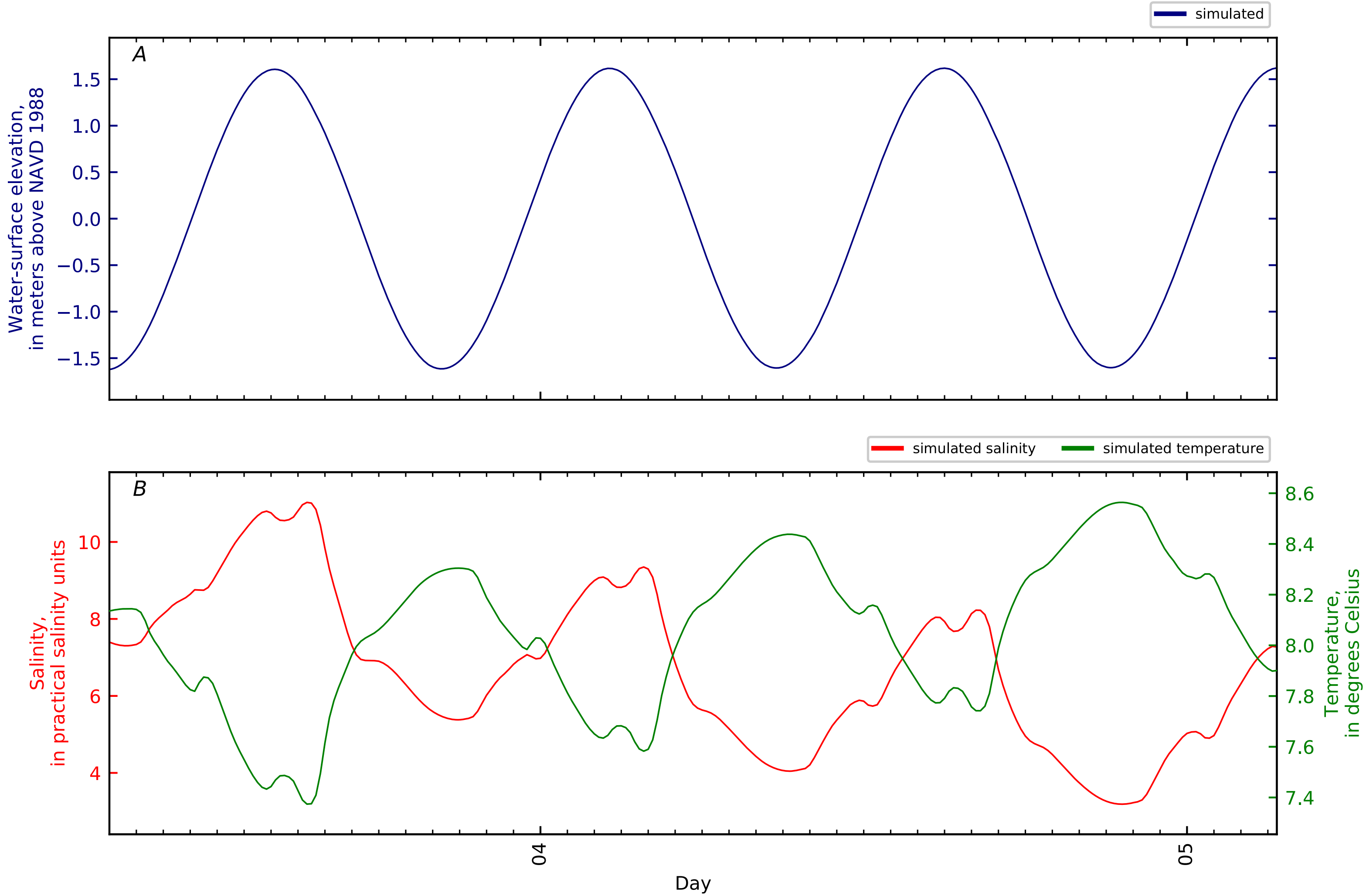

Figure B3-109. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 108, East Channel KM0.1 GS CTD4-01. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

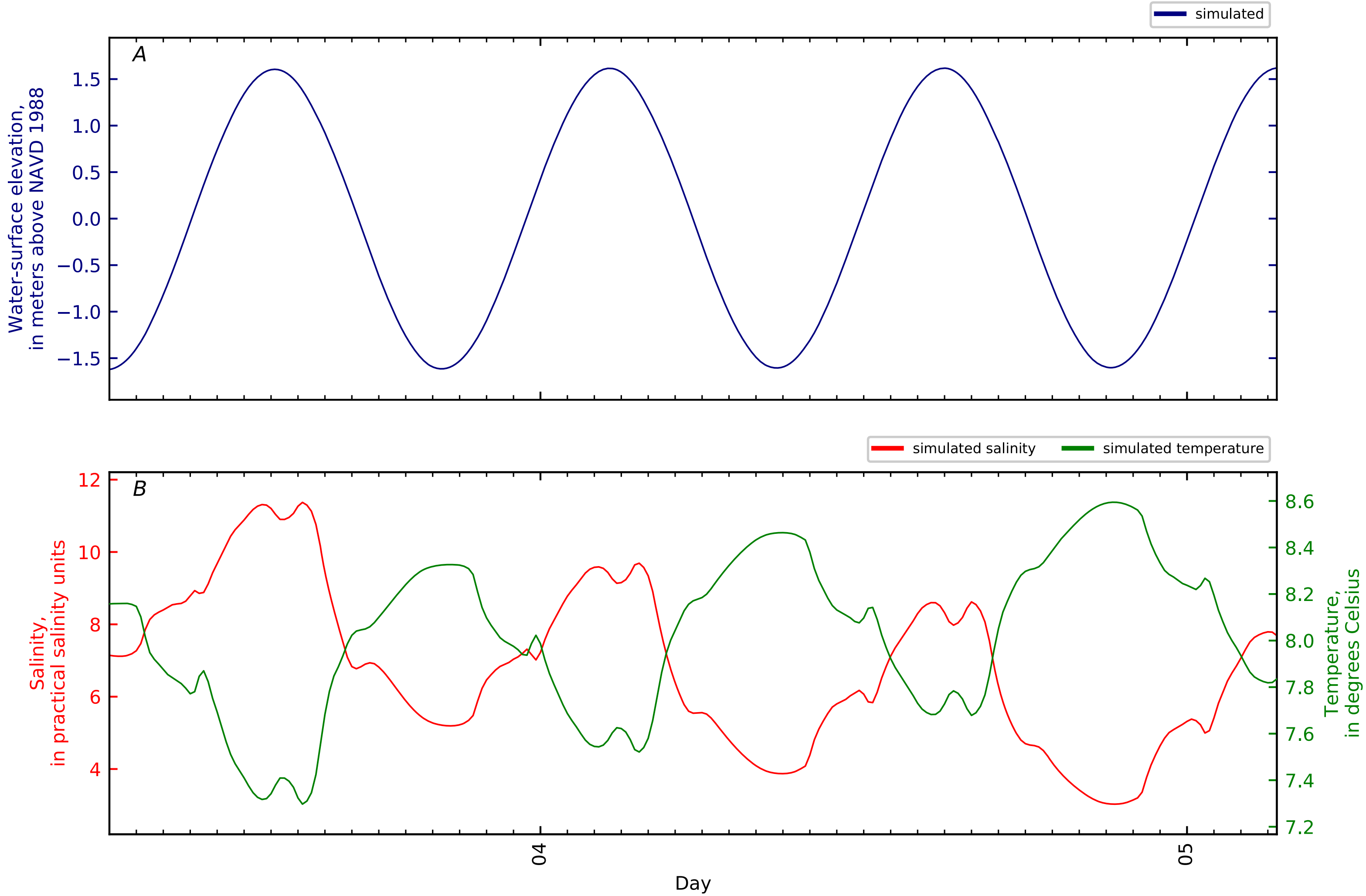

Figure B3-110. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 109, East Channel KM0.1 GS CTD4-02. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

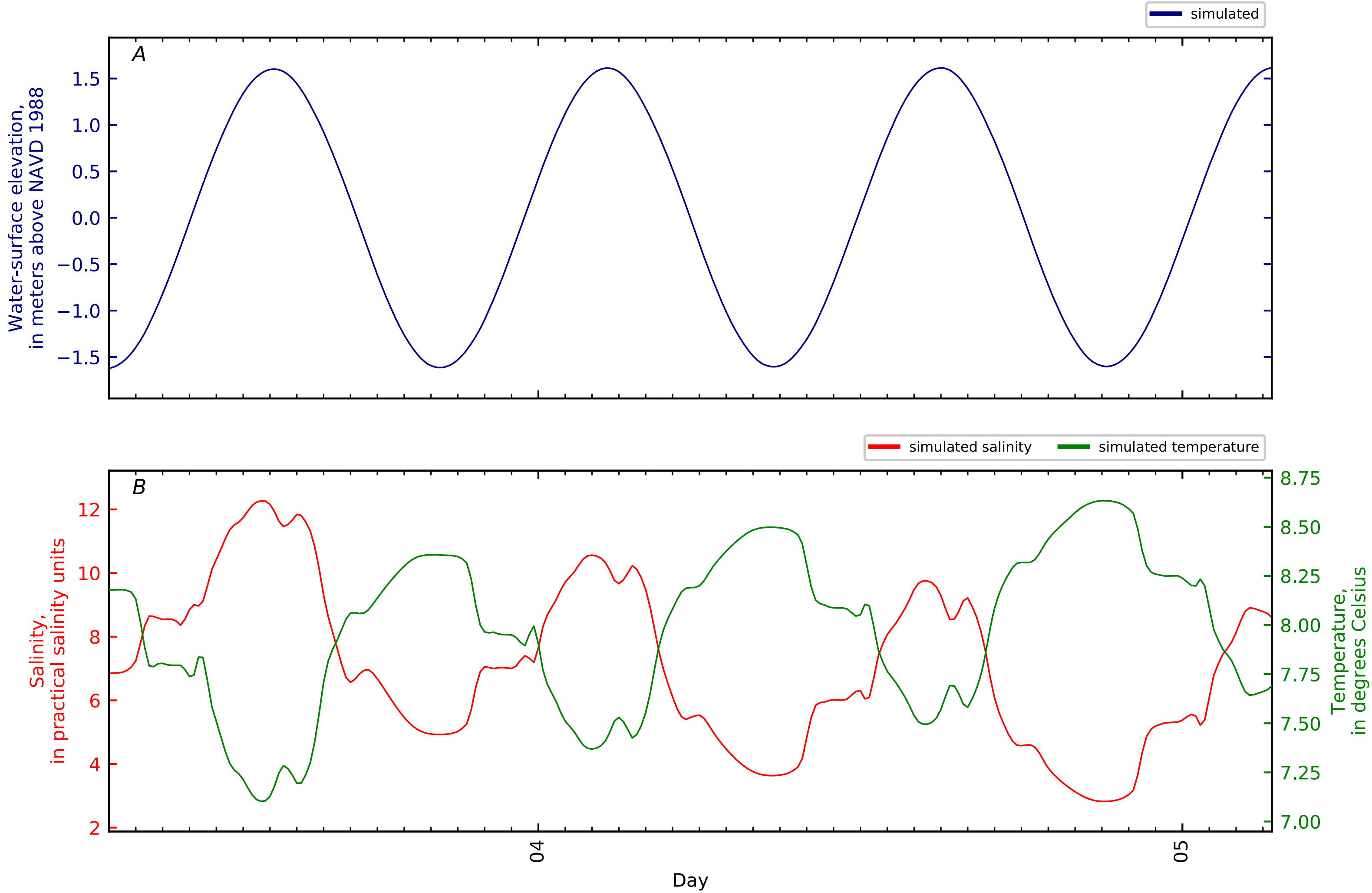

Figure B3-111. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 110, East Channel KM0.1 GS CTD4-03. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

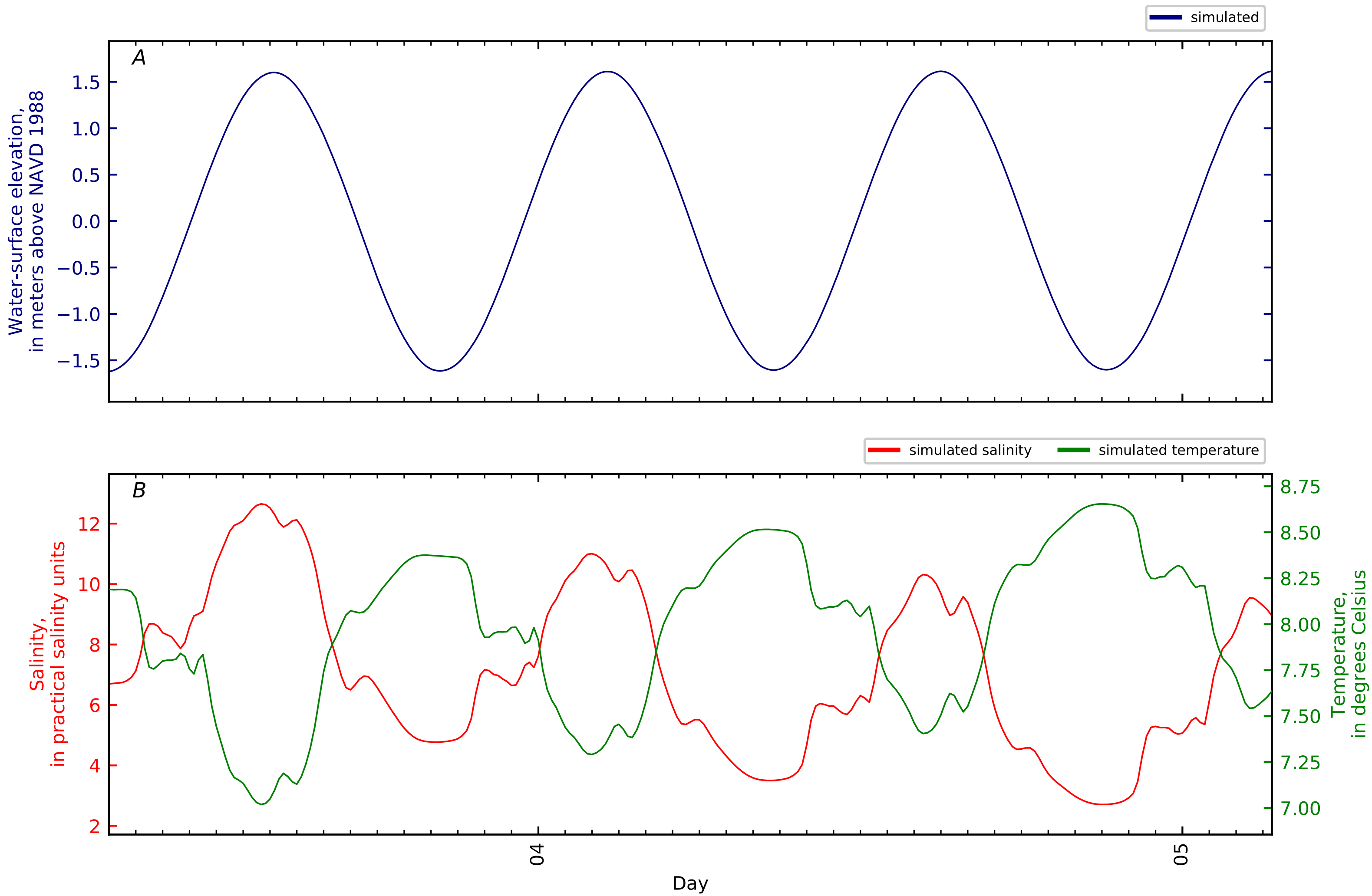

Figure B3-112. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 111, East Channel KM0.1 GS CTD4-04. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

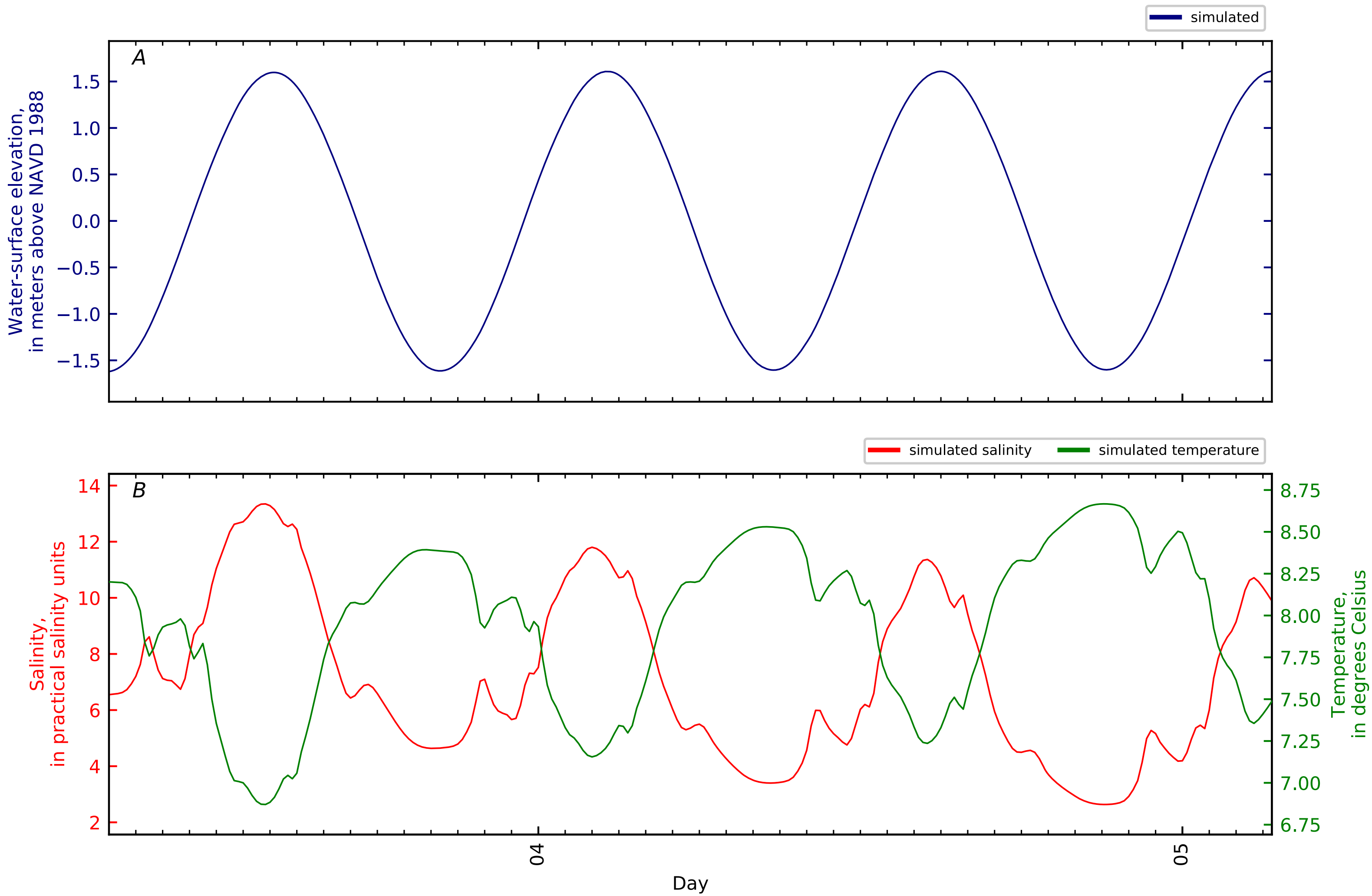

Figure B3-113. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 112, East Channel KM0.1 GS CTD4-05. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

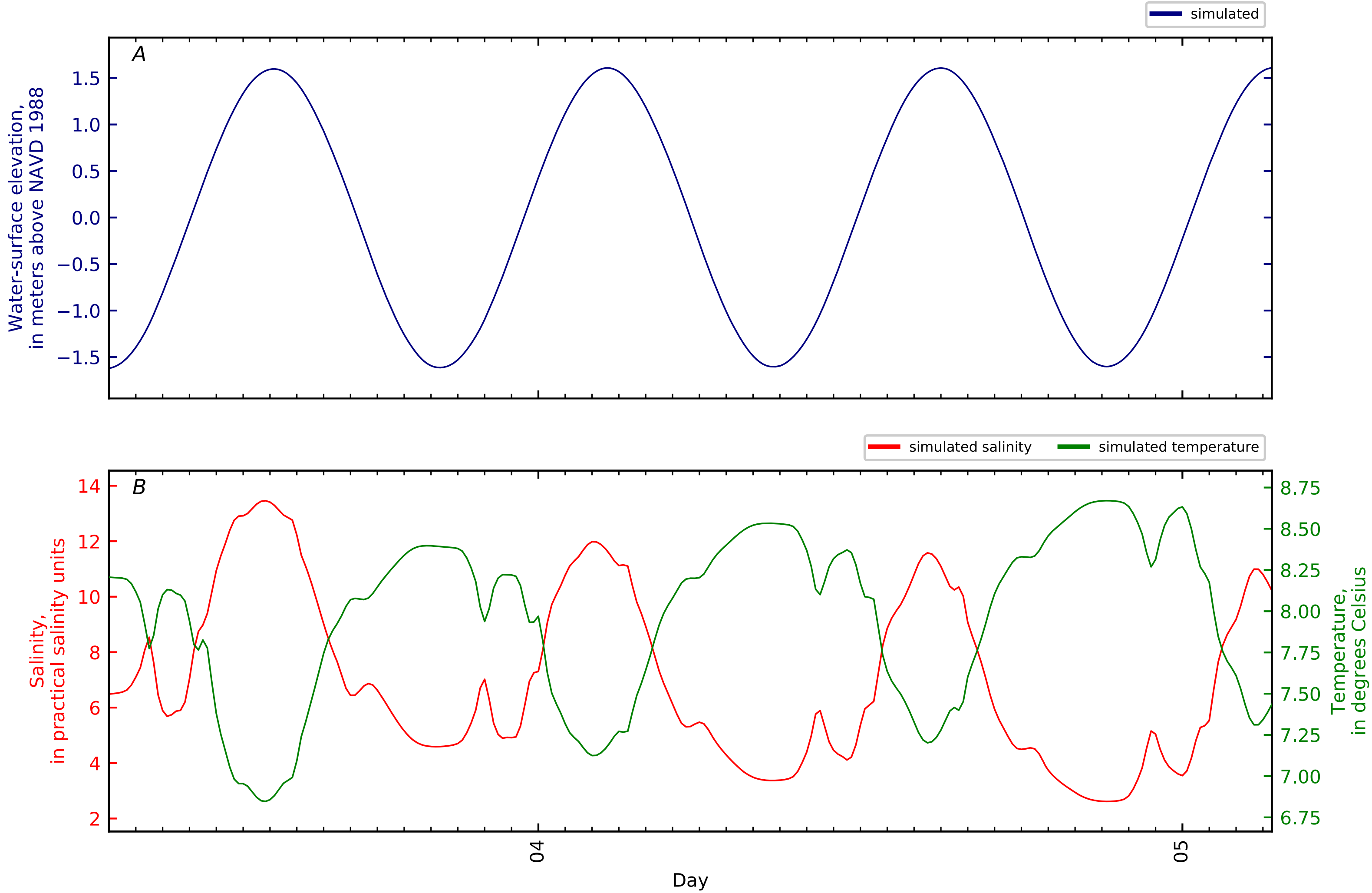

Figure B3-114. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 113, East Channel KM0.1 GS CTD4-06. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

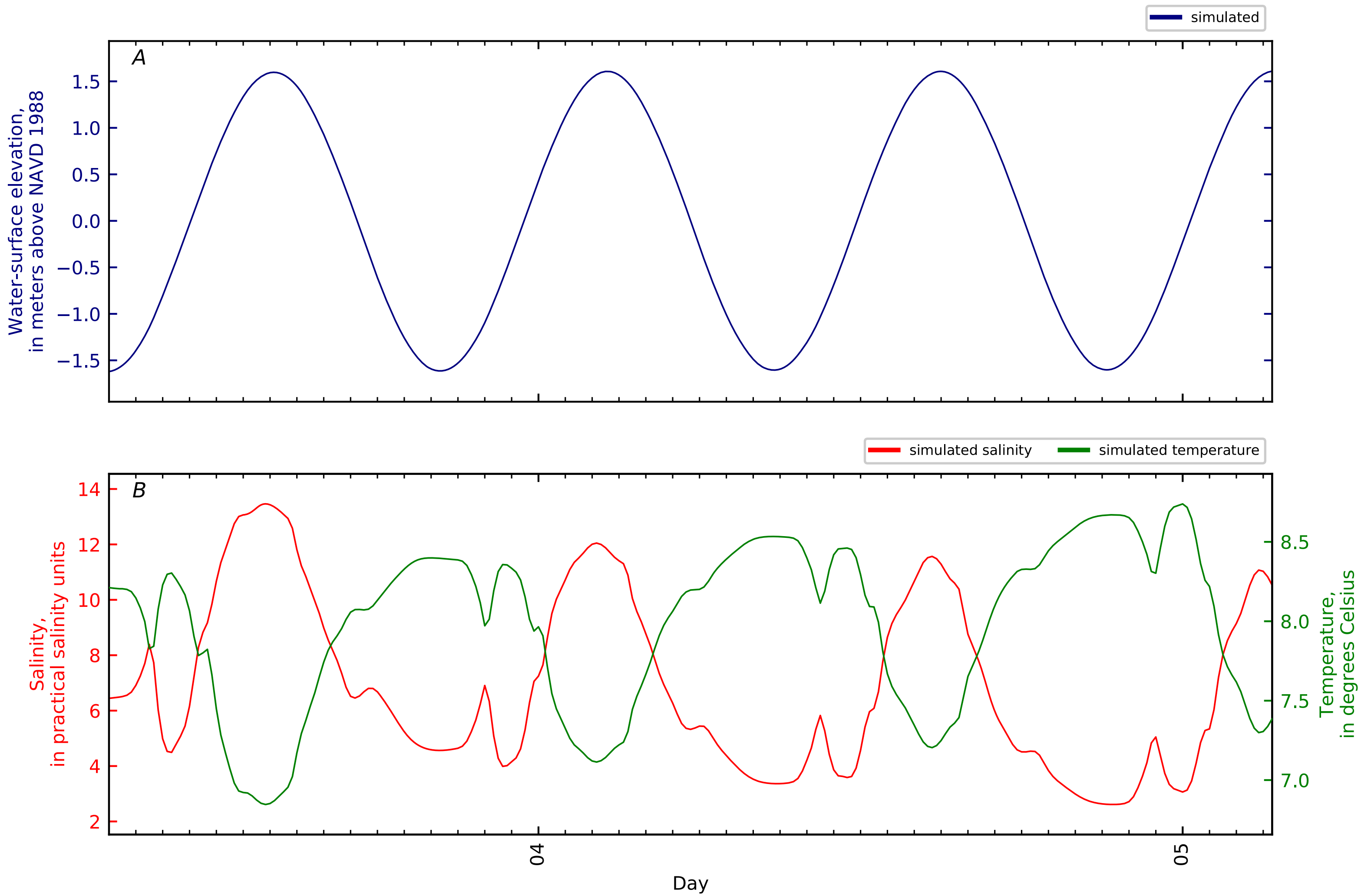

Figure B3-115. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 114, East Channel KM0.1 GS CTD4-07. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

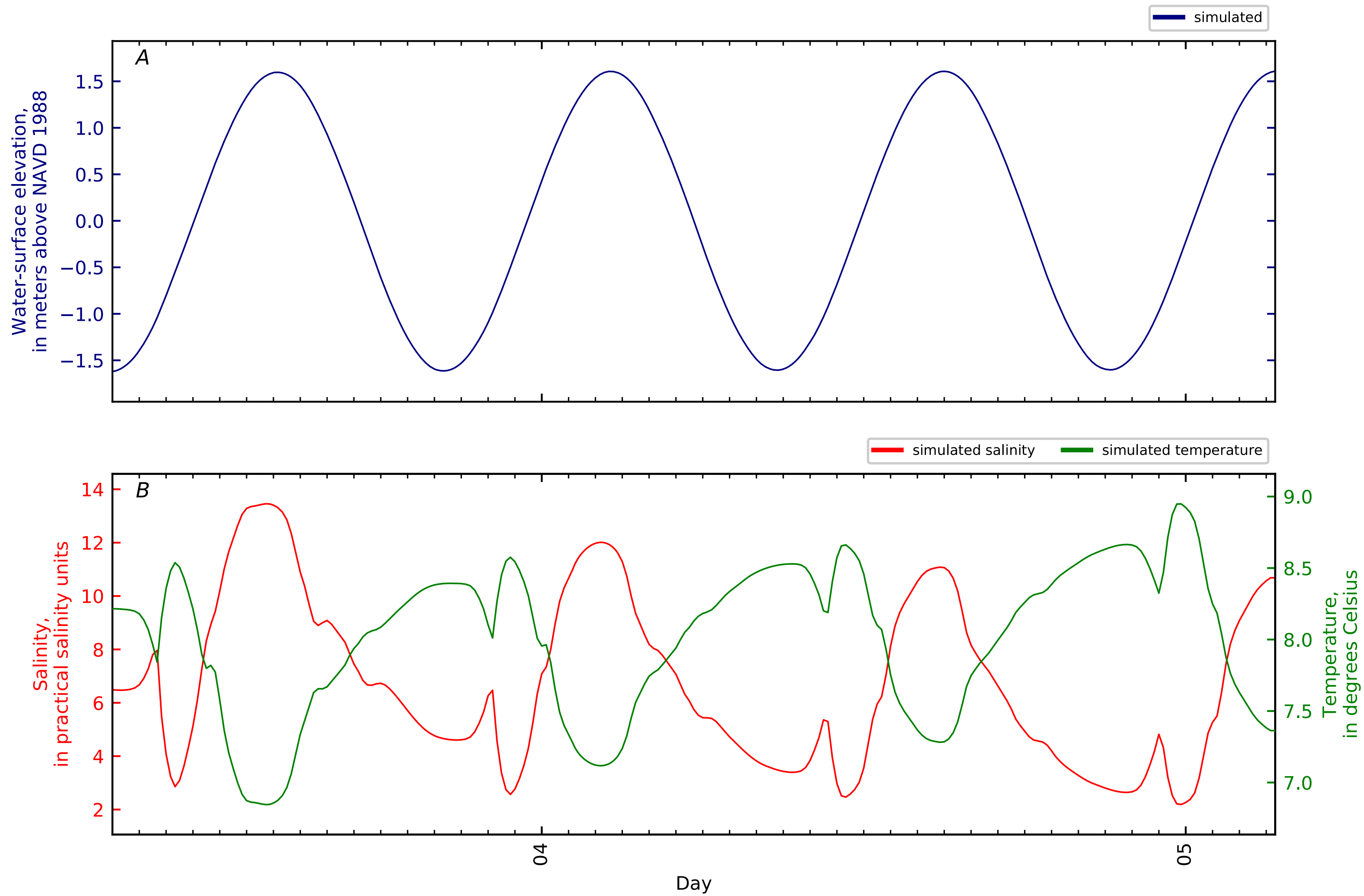

Figure B3-116. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 115, East Channel KM0.1 GS CTD4-08. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

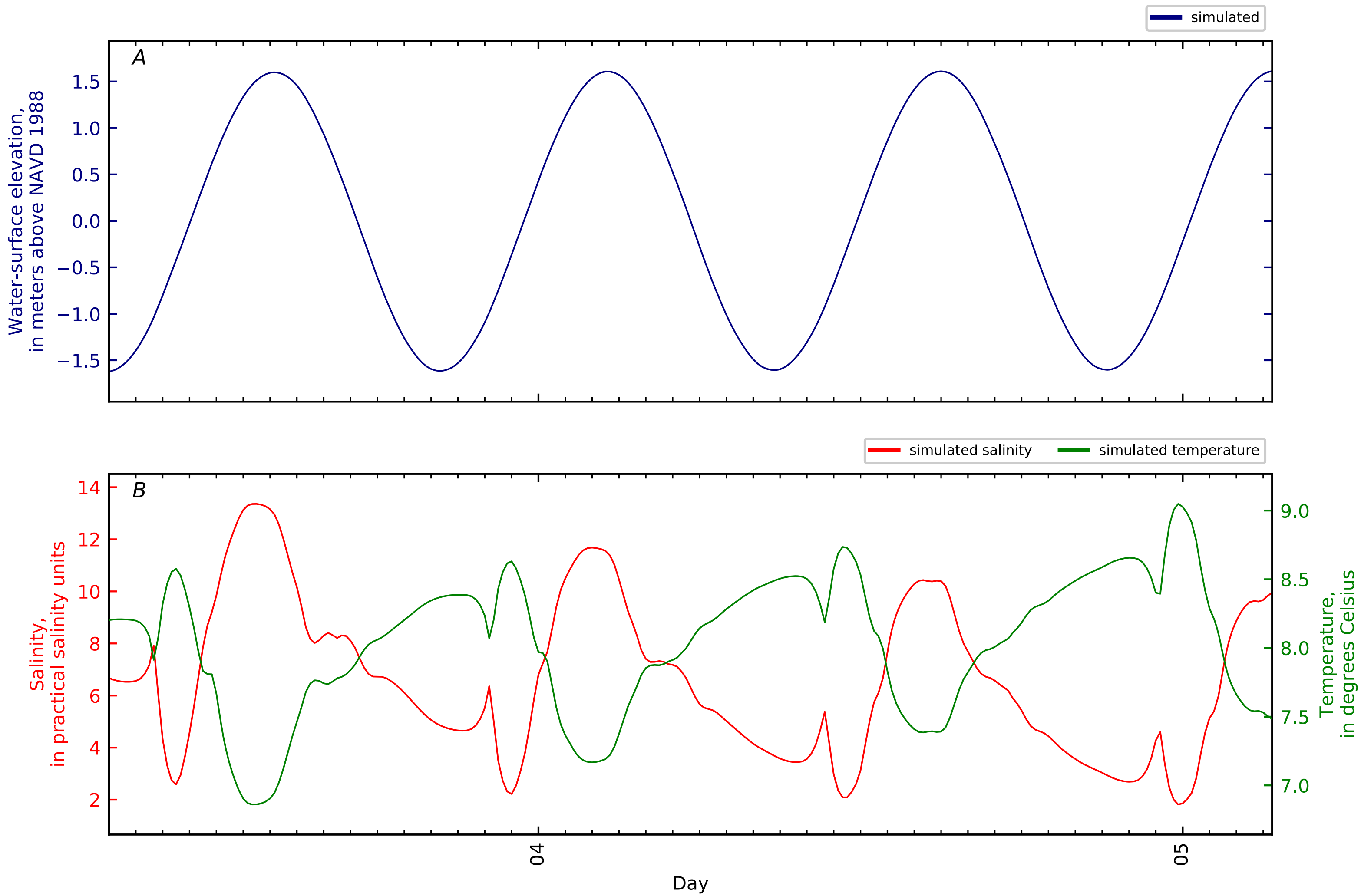

Figure B3-117. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 116, East Channel KM0.1 GS CTD4-09. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

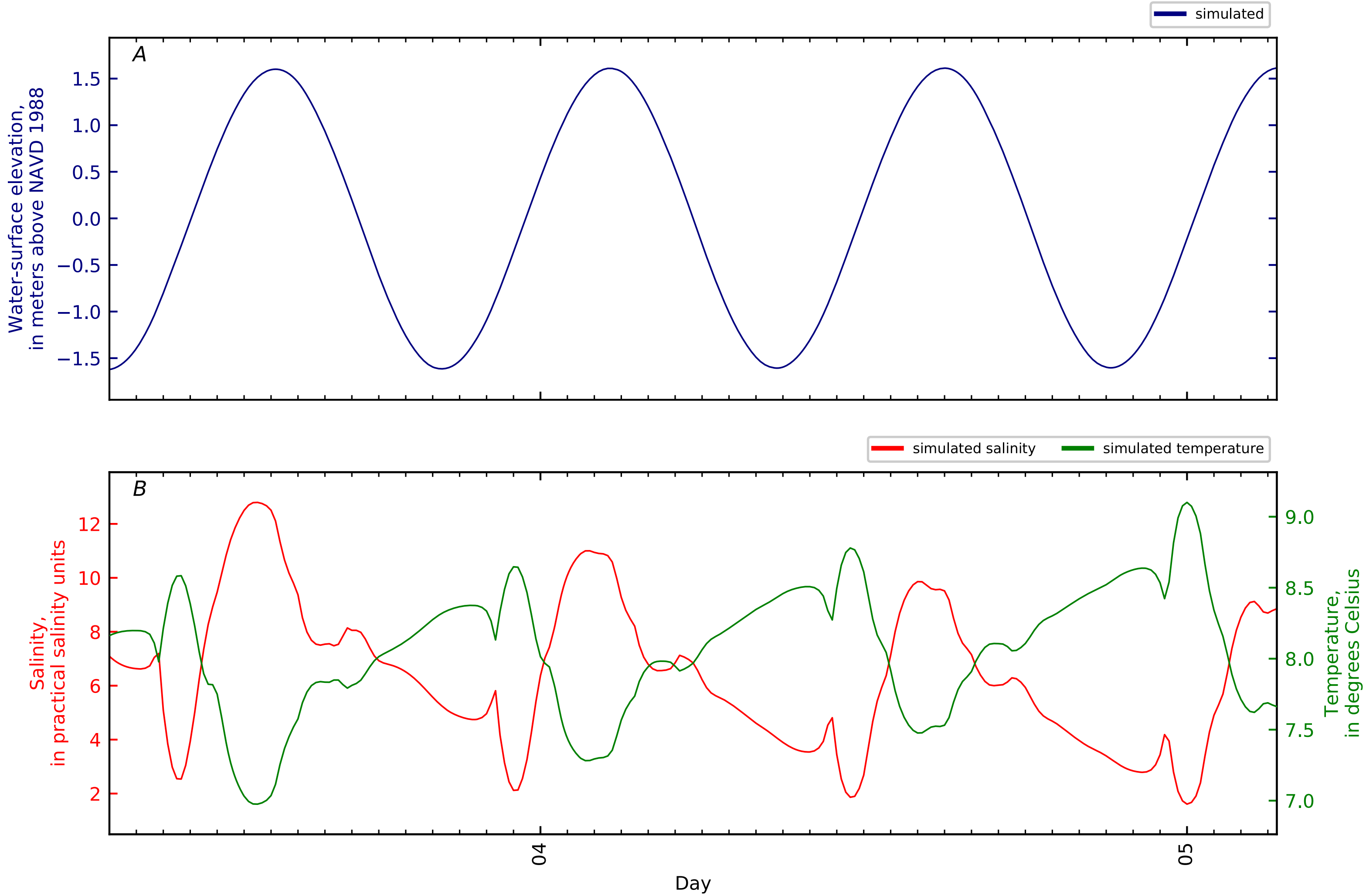

Figure B3-118. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 117, East Channel KM0.1 GS CTD4-10. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

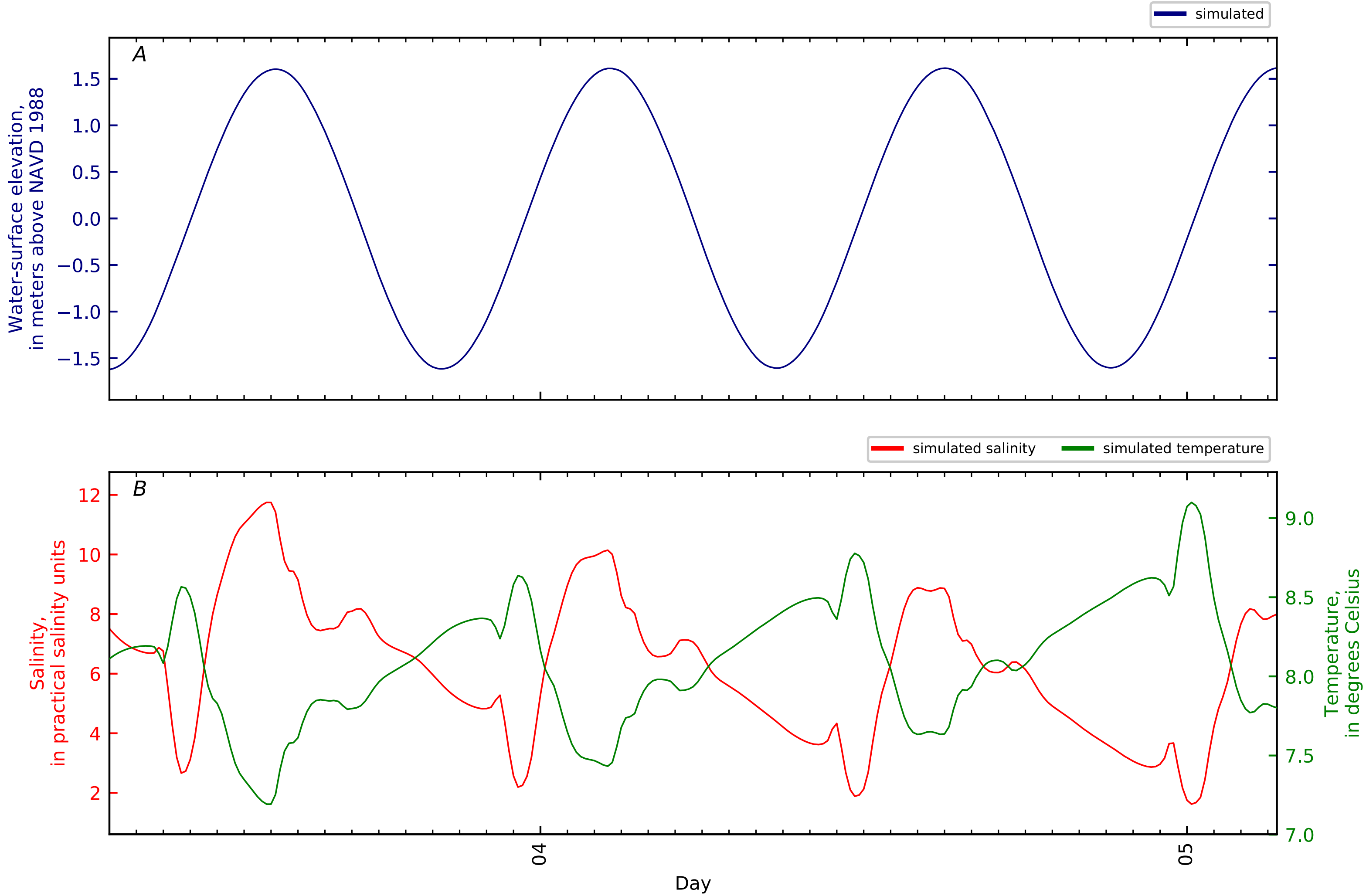

Figure B3-119. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 118, East Channel KM0.1 GS CTD4-11. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

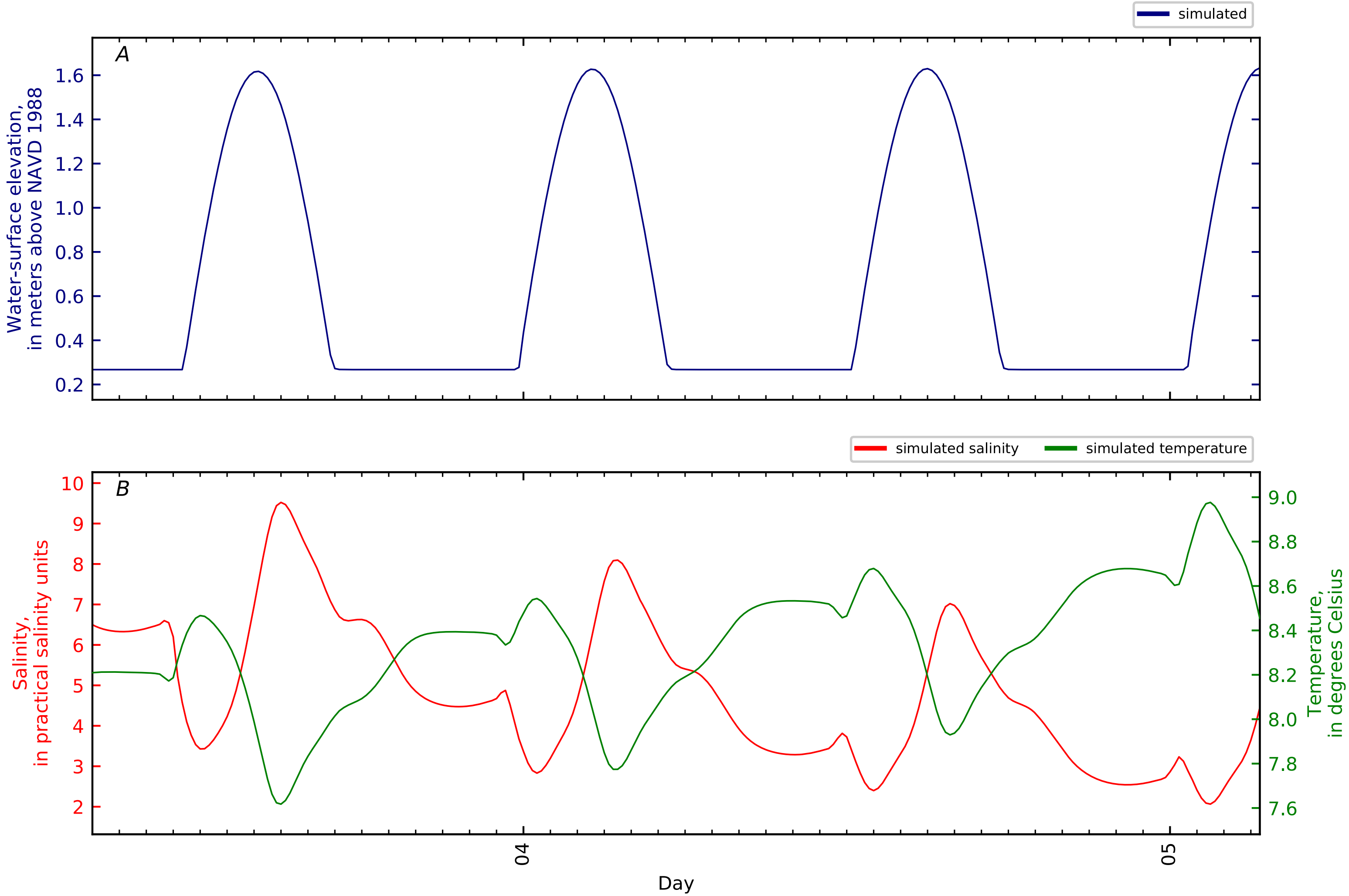

Figure B3-120. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 119, East Channel KM0.78 ERDC7 VE-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

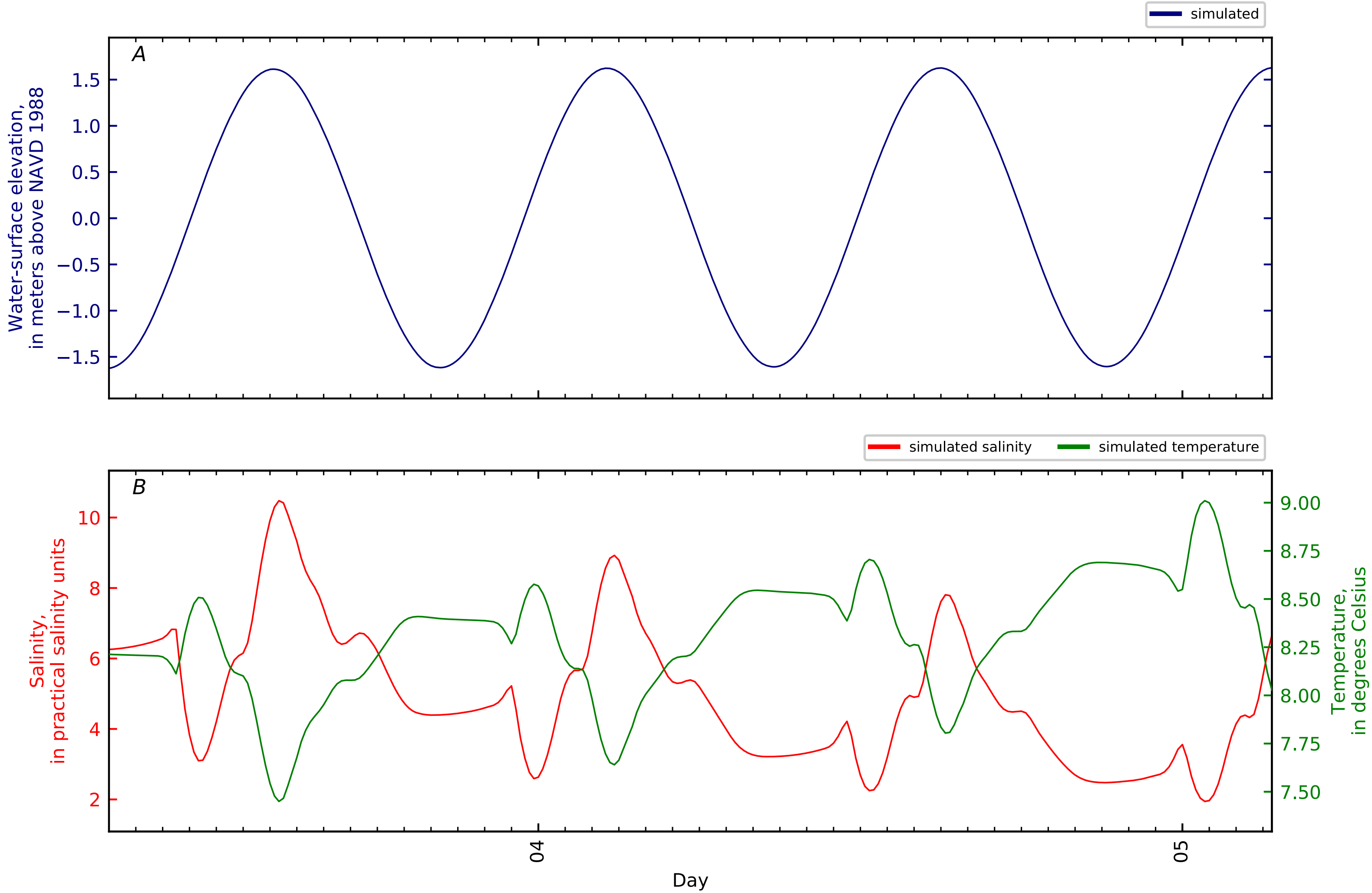

Figure B3-121. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 120, East Channel KM0.8 ERDC8 VE-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

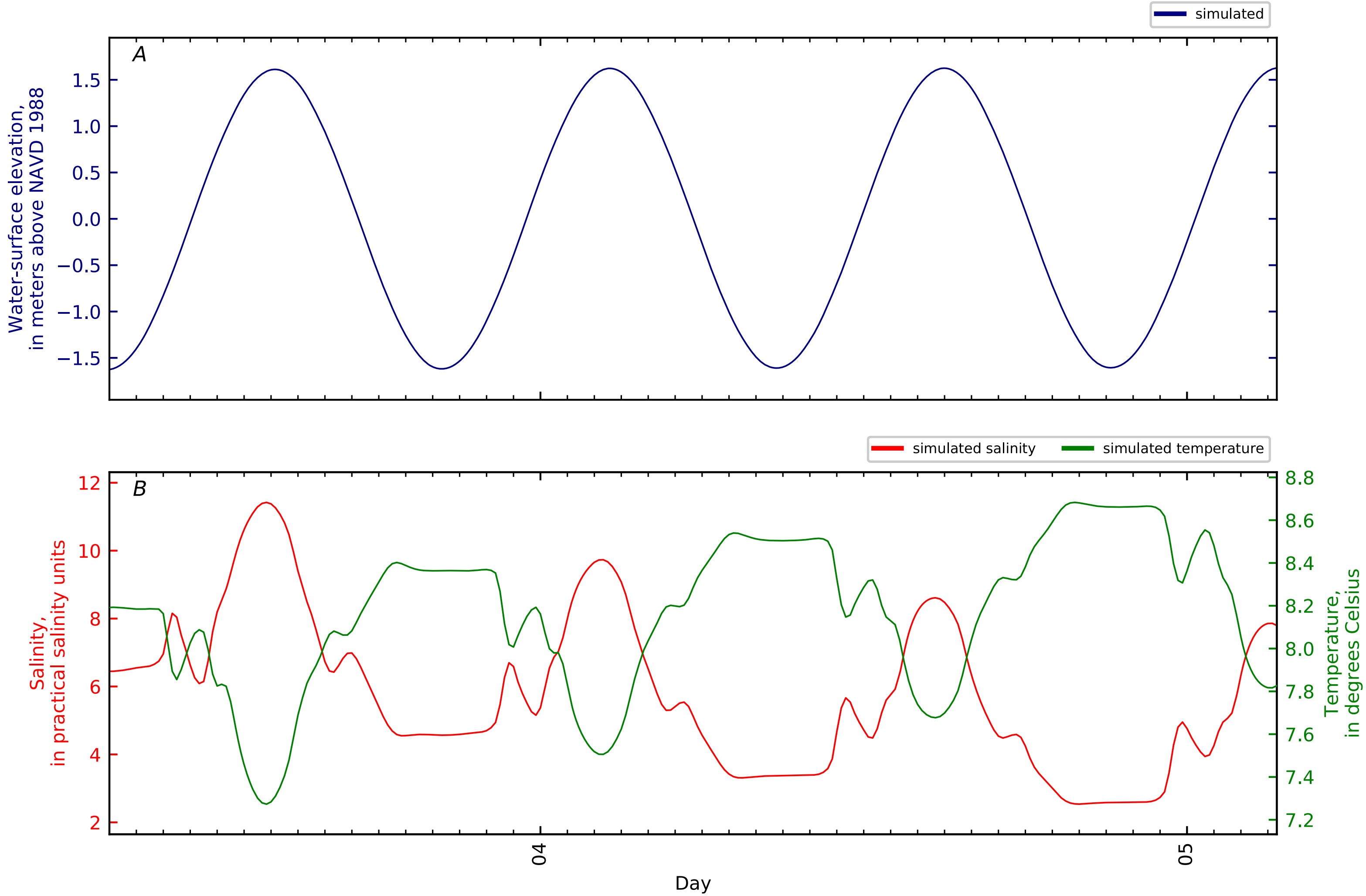

Figure B3-122. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 121, East Channel KM1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

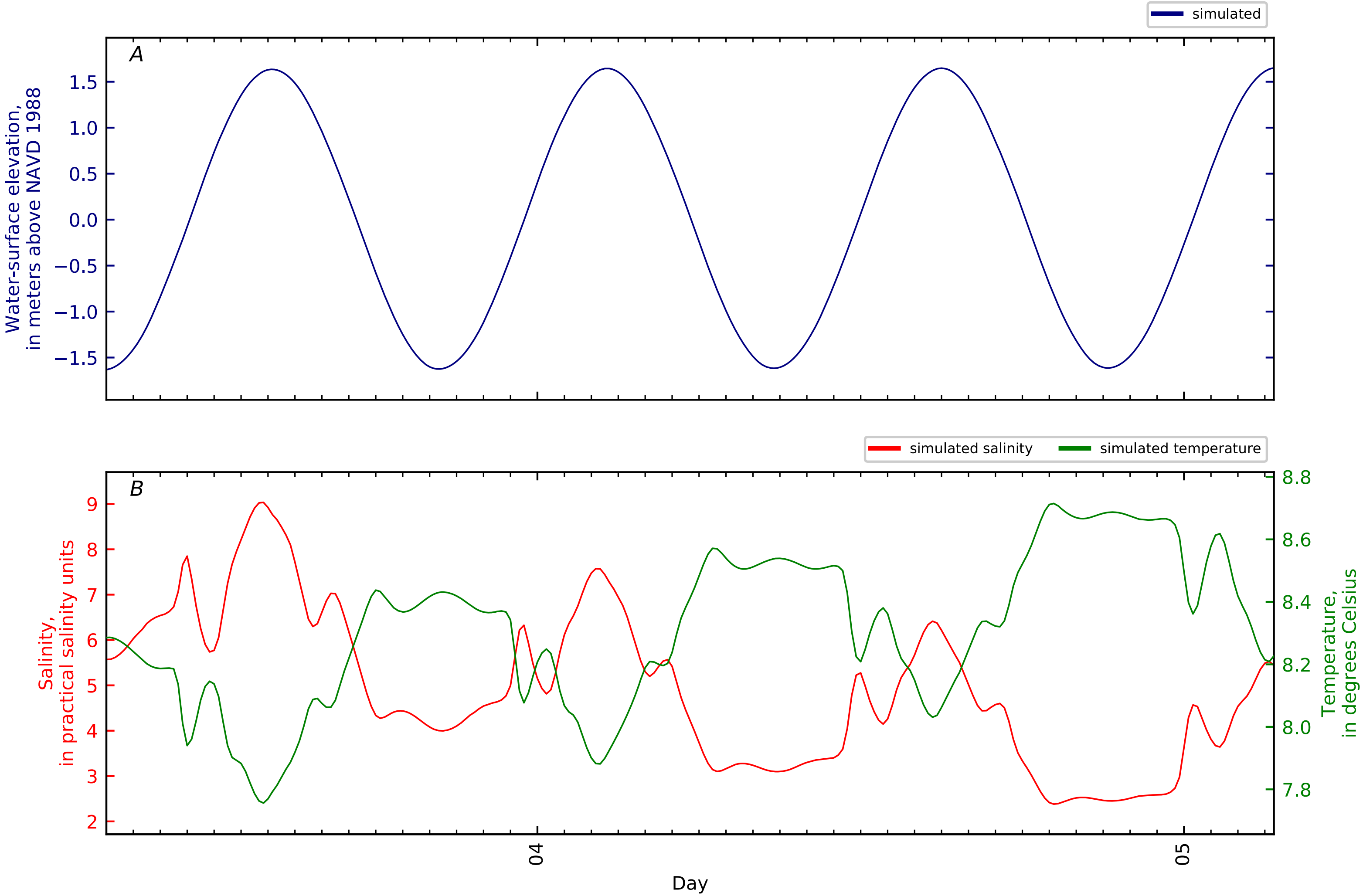

Figure B3-123. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 122, East Channel KM2. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

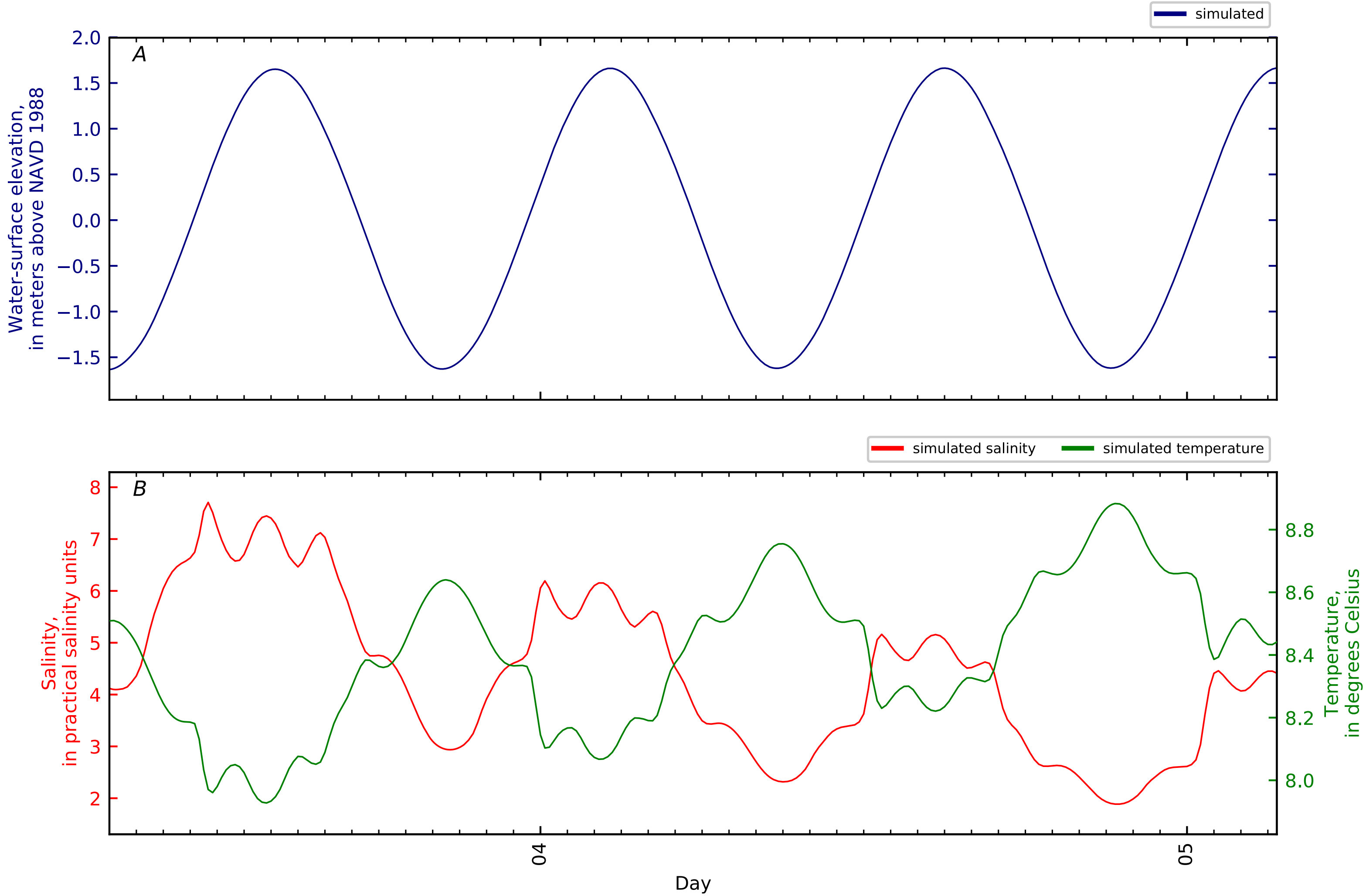

Figure B3-124. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 123, East Channel KM3. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

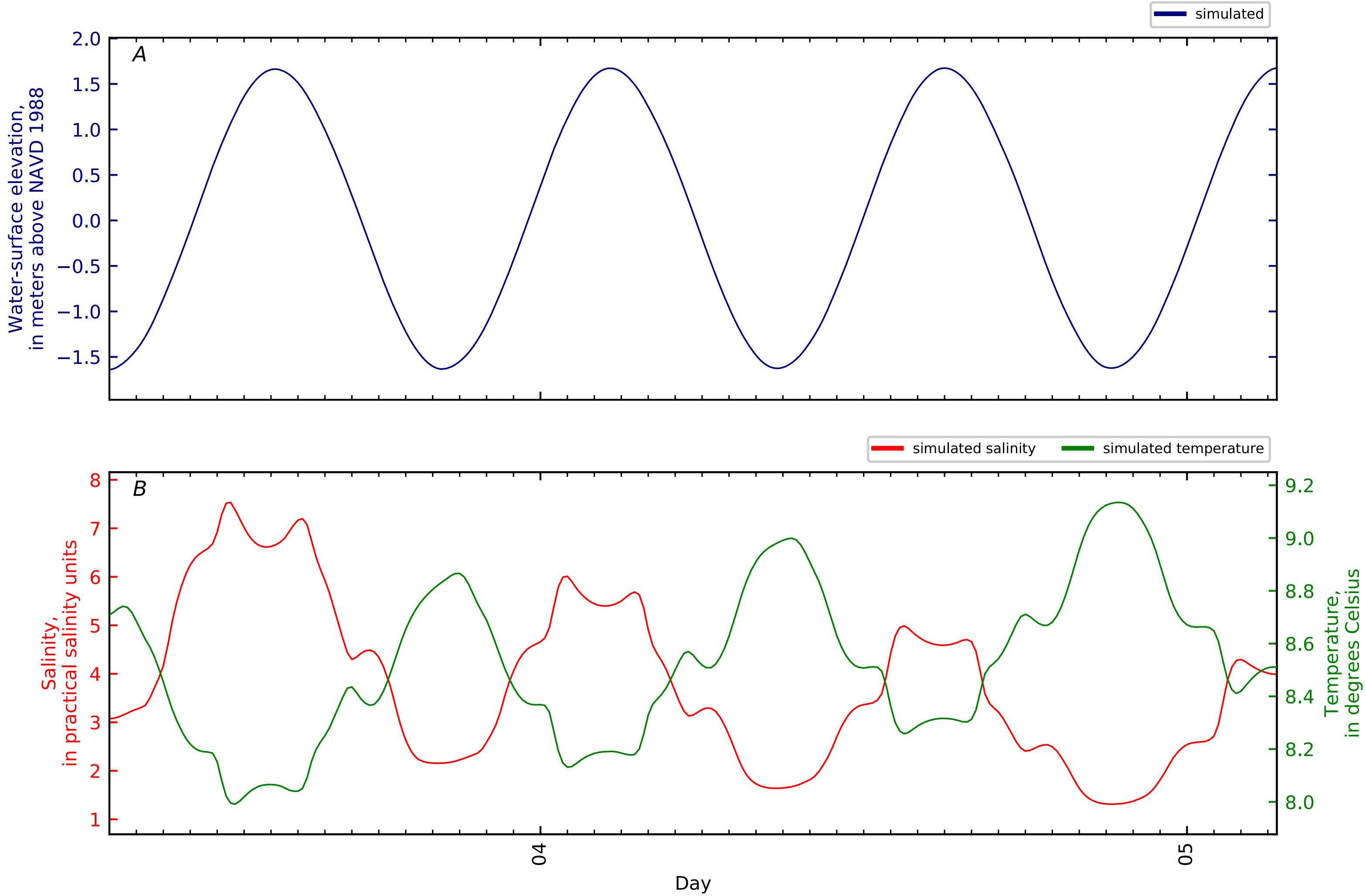

Figure B3-125. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 124, East Channel KM4. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

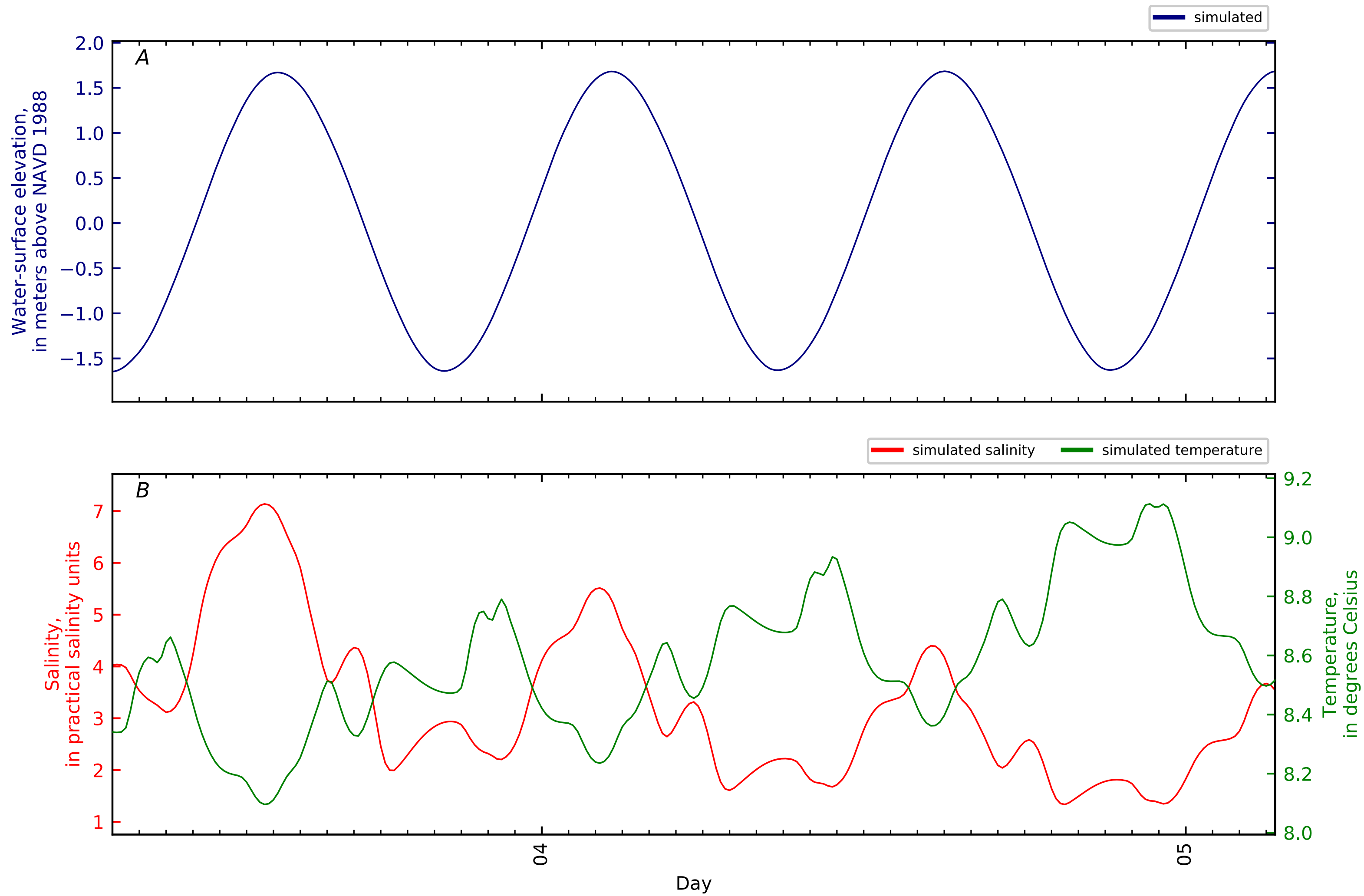

Figure B3-126. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 125, East Channel KM5. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

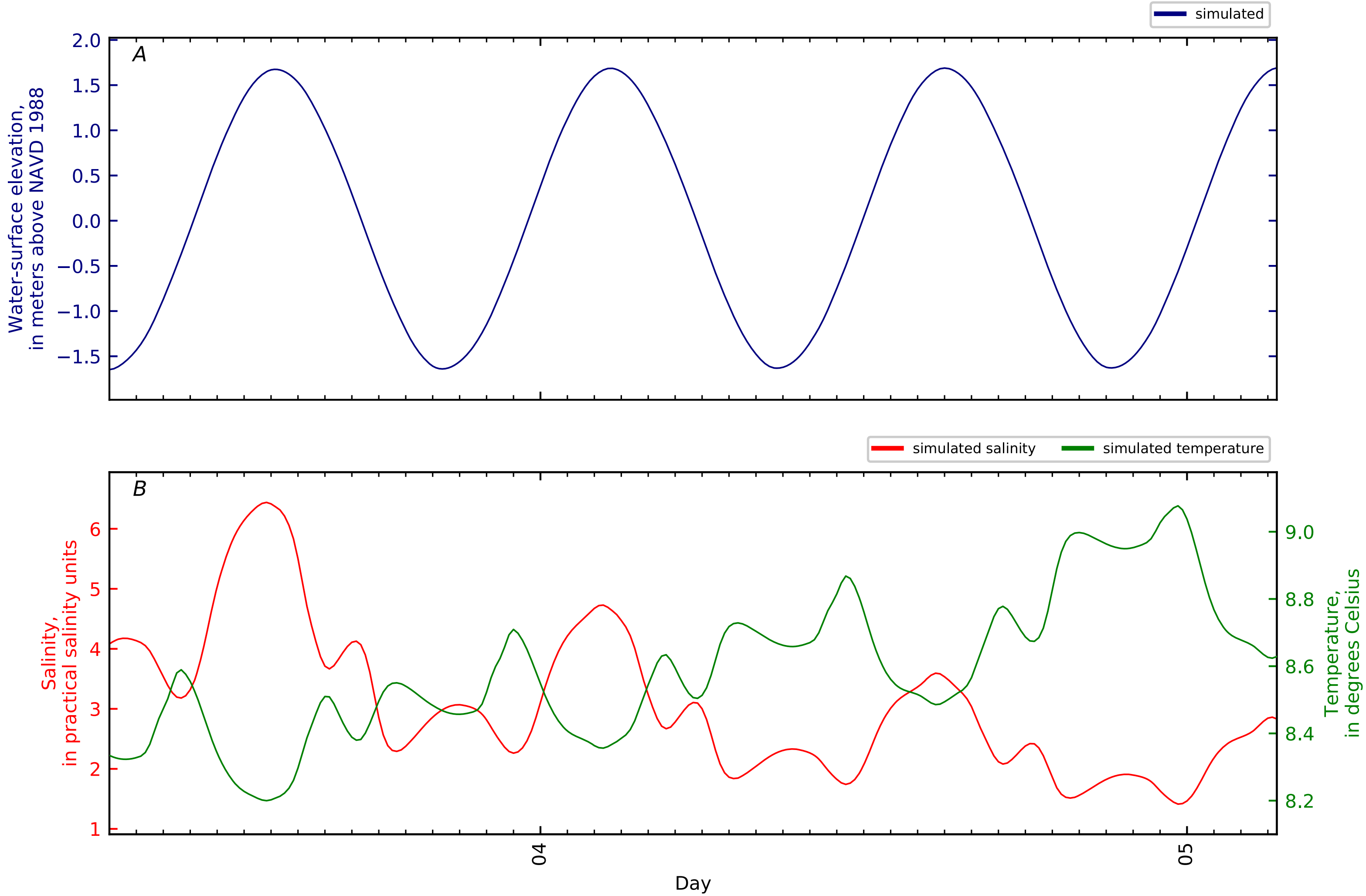

Figure B3-127. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 126, East Channel KM5.3 ERDC4 VN-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

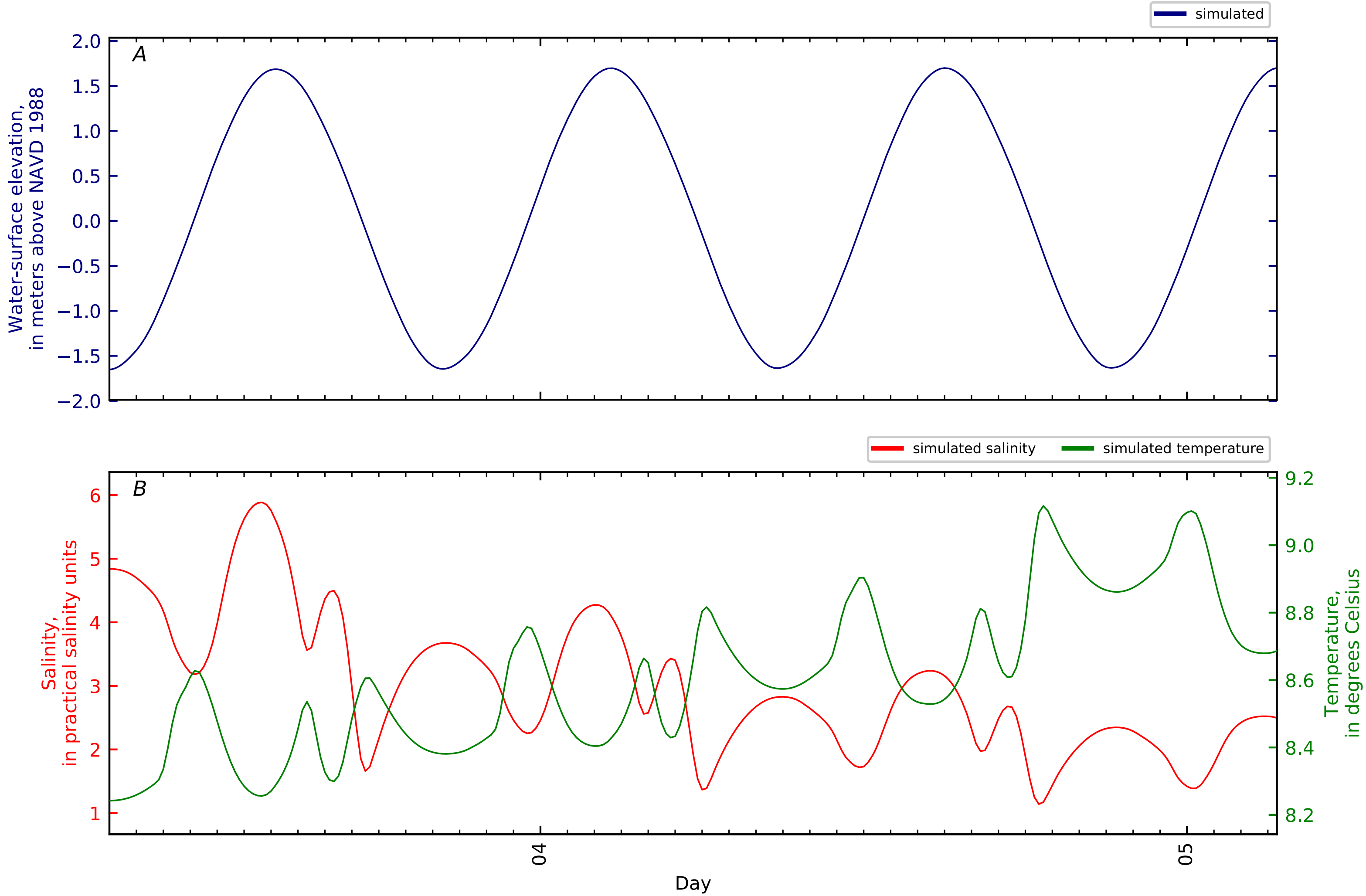

Figure B3-128. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 127, East Channel KM6. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

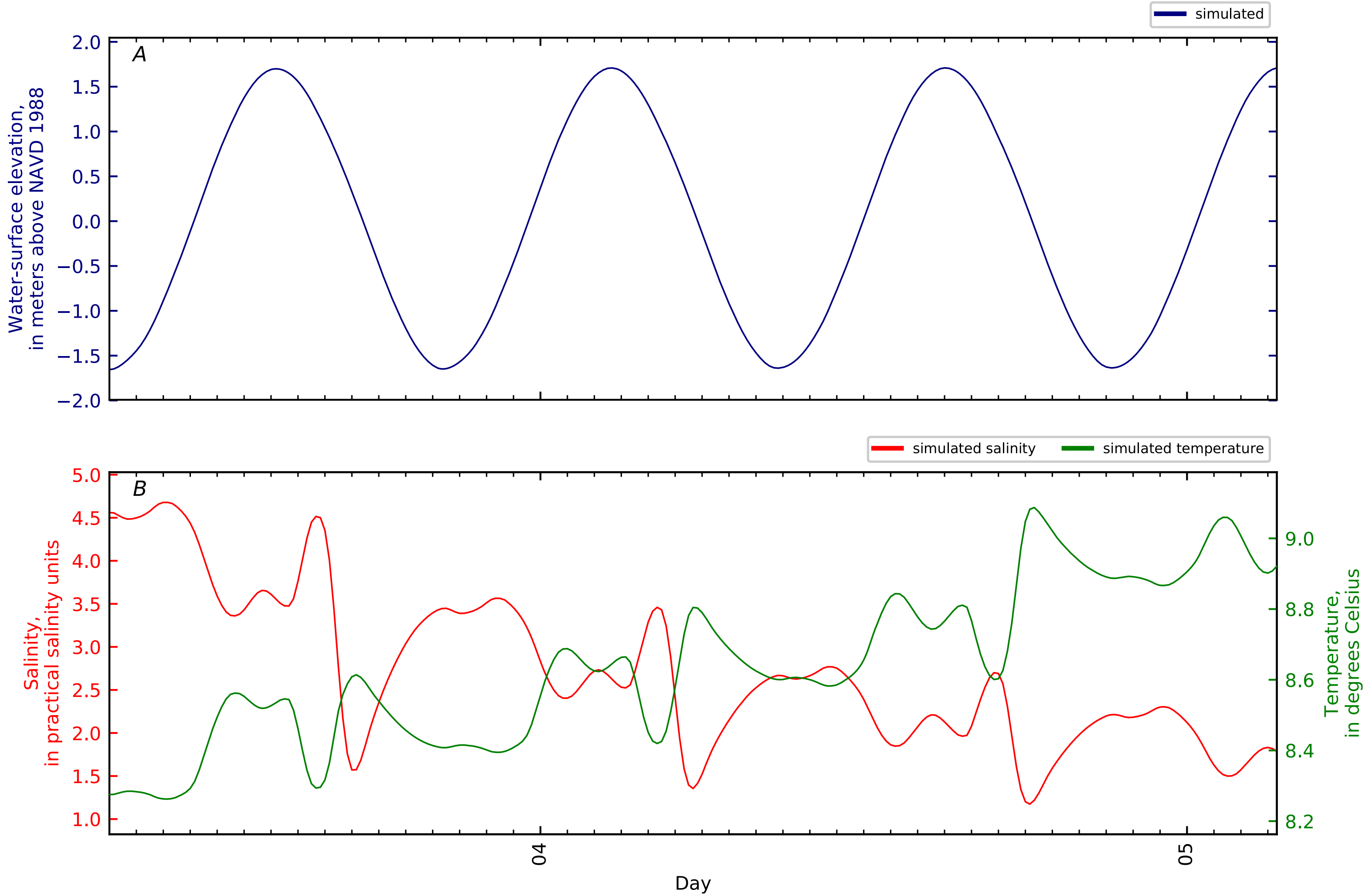

Figure B3-129. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 128, East Channel KM6.8 ERDC12 VN-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

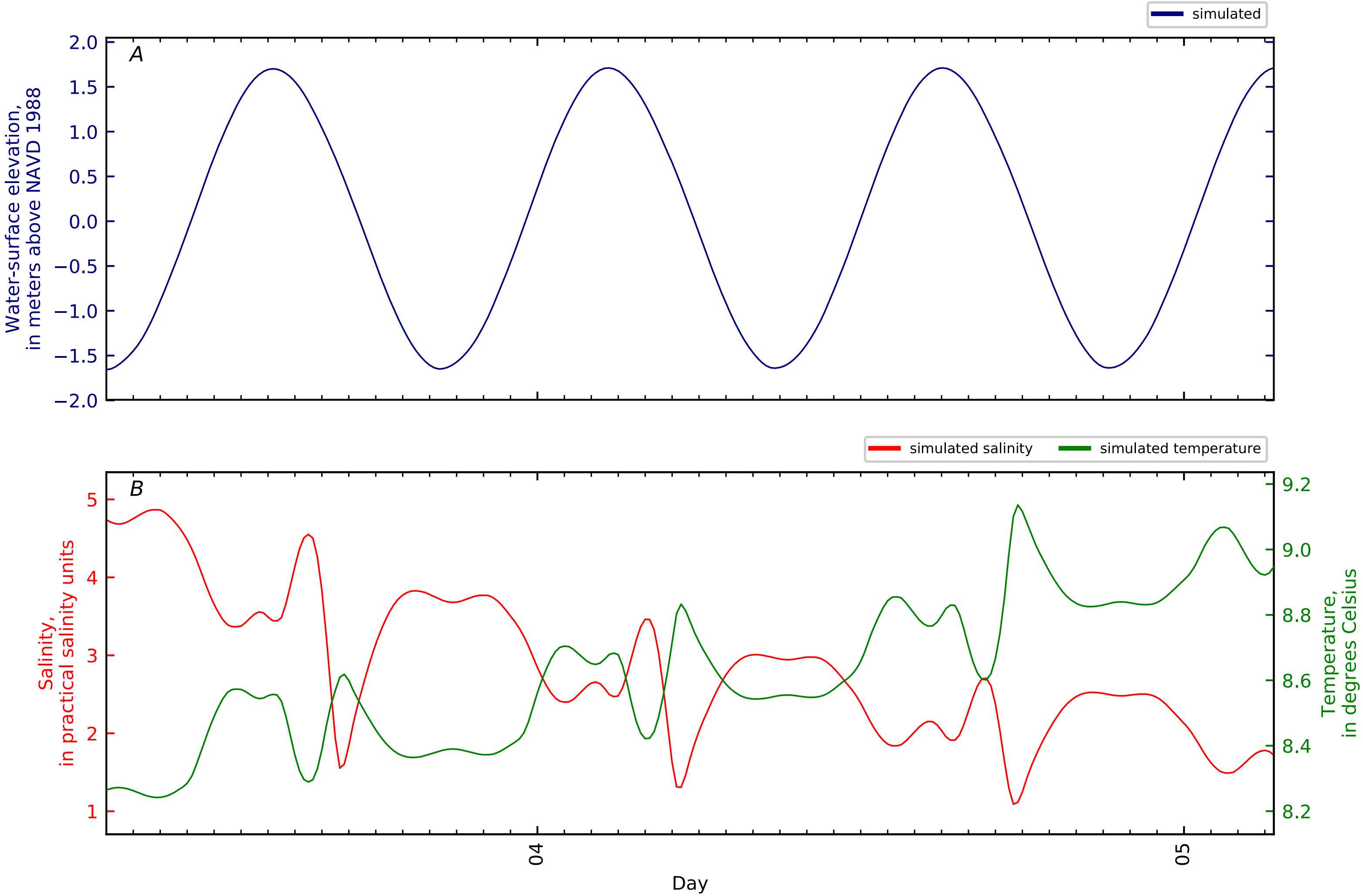

Figure B3-130. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 129, East Channel KM7. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

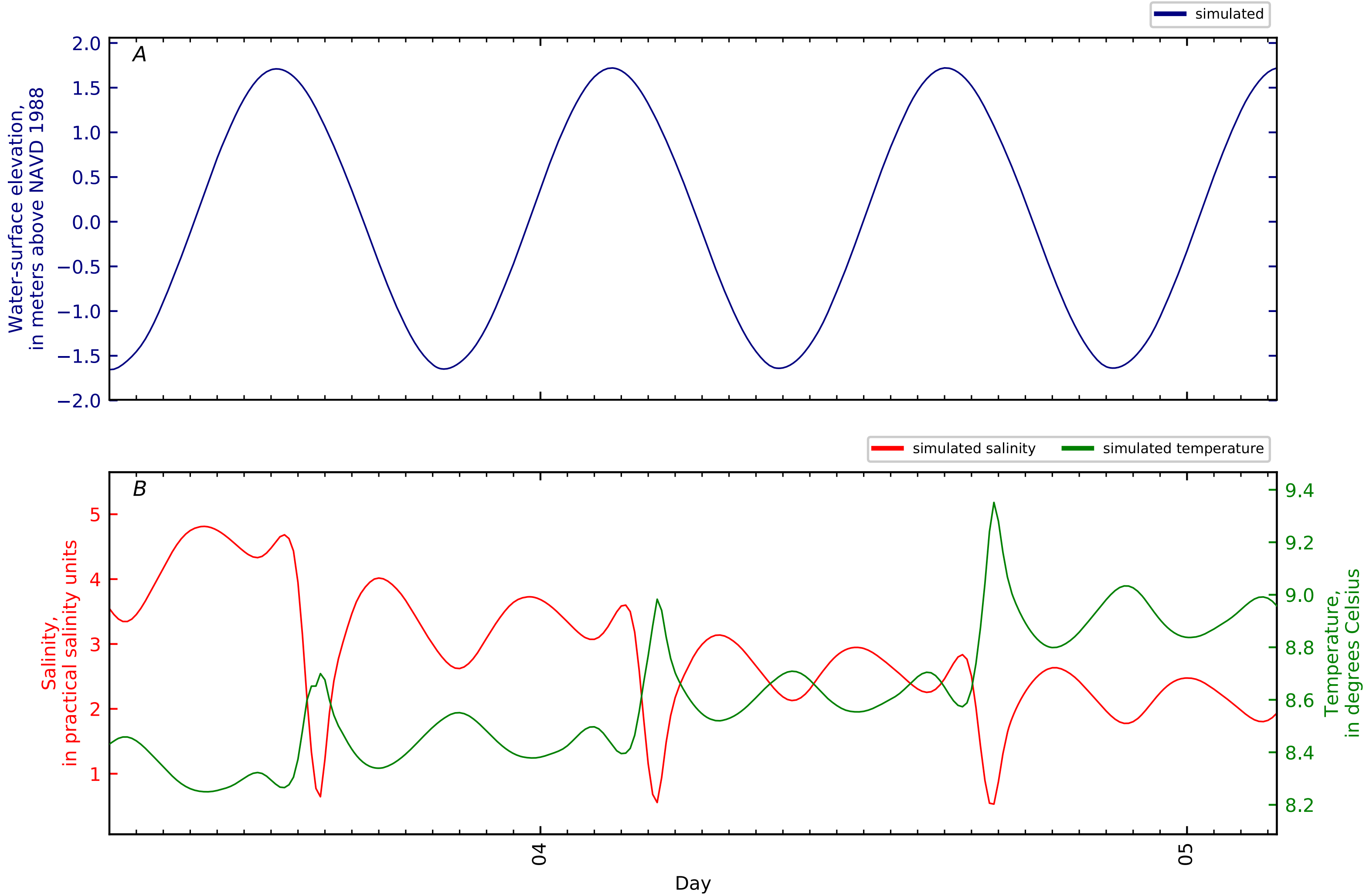

Figure B3-131. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 130, East Channel KM8. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

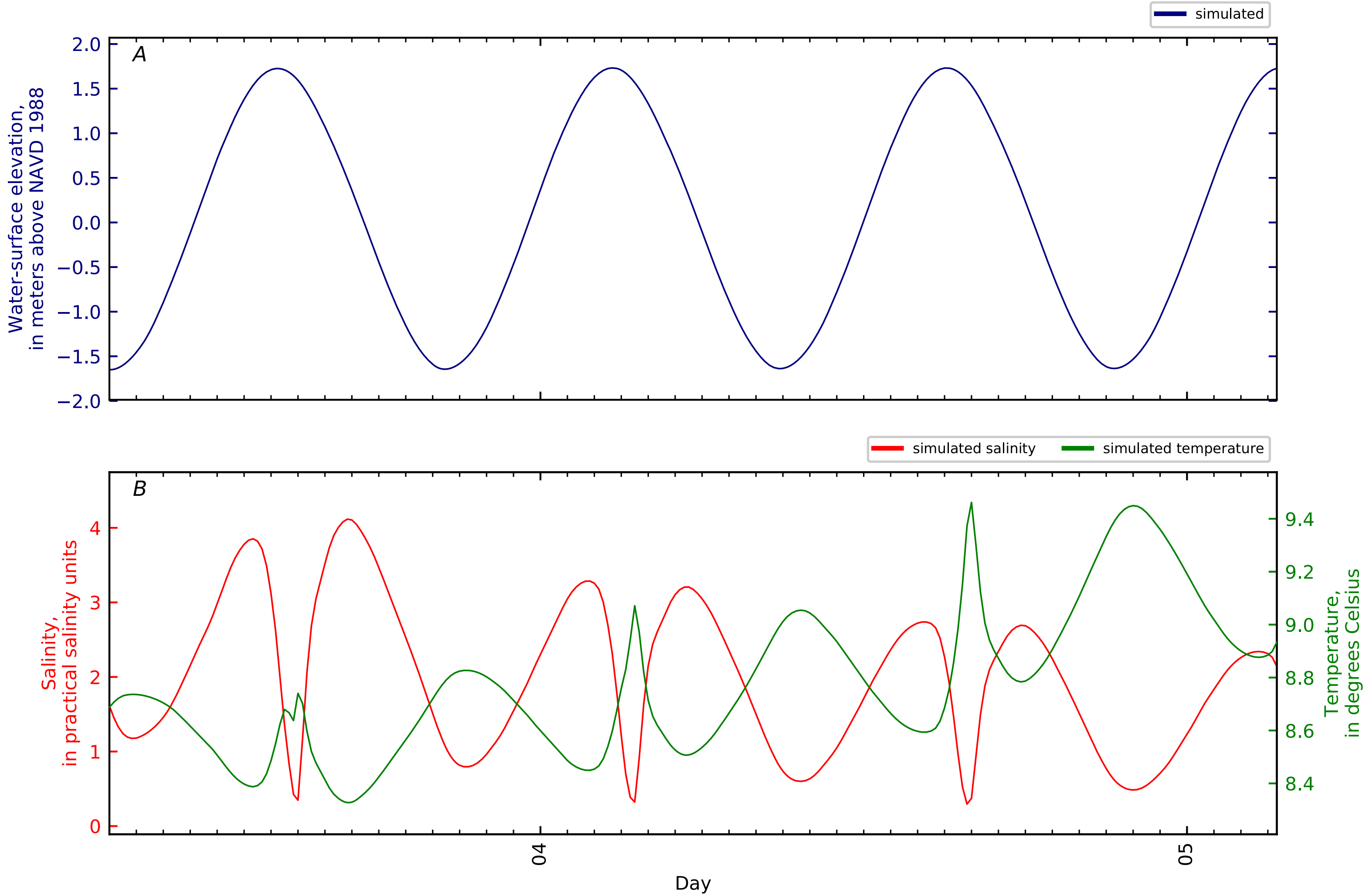

Figure B3-132. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 131, East Channel KM9. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

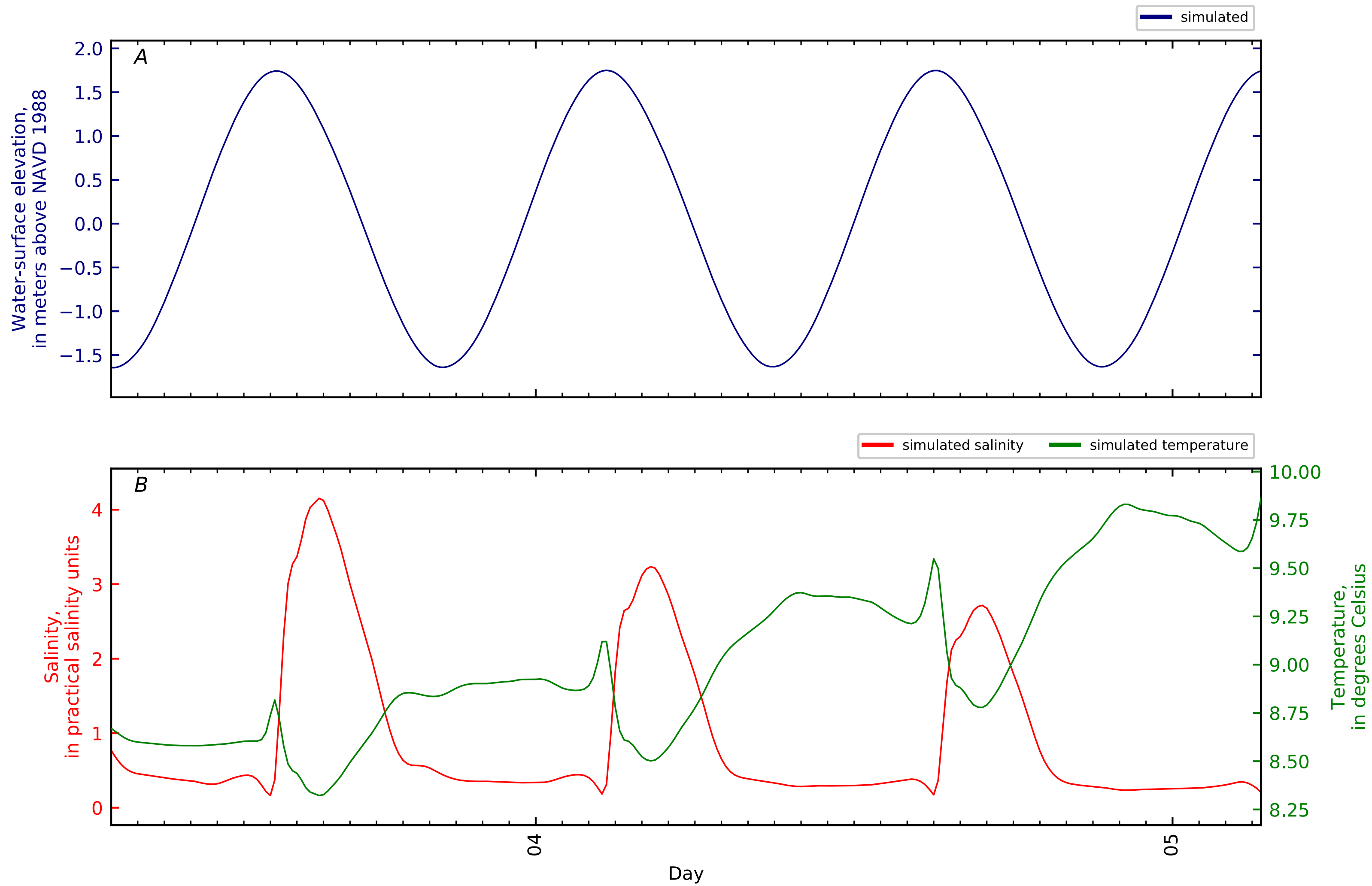

Figure B3-133. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 132, East Channel KM10. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

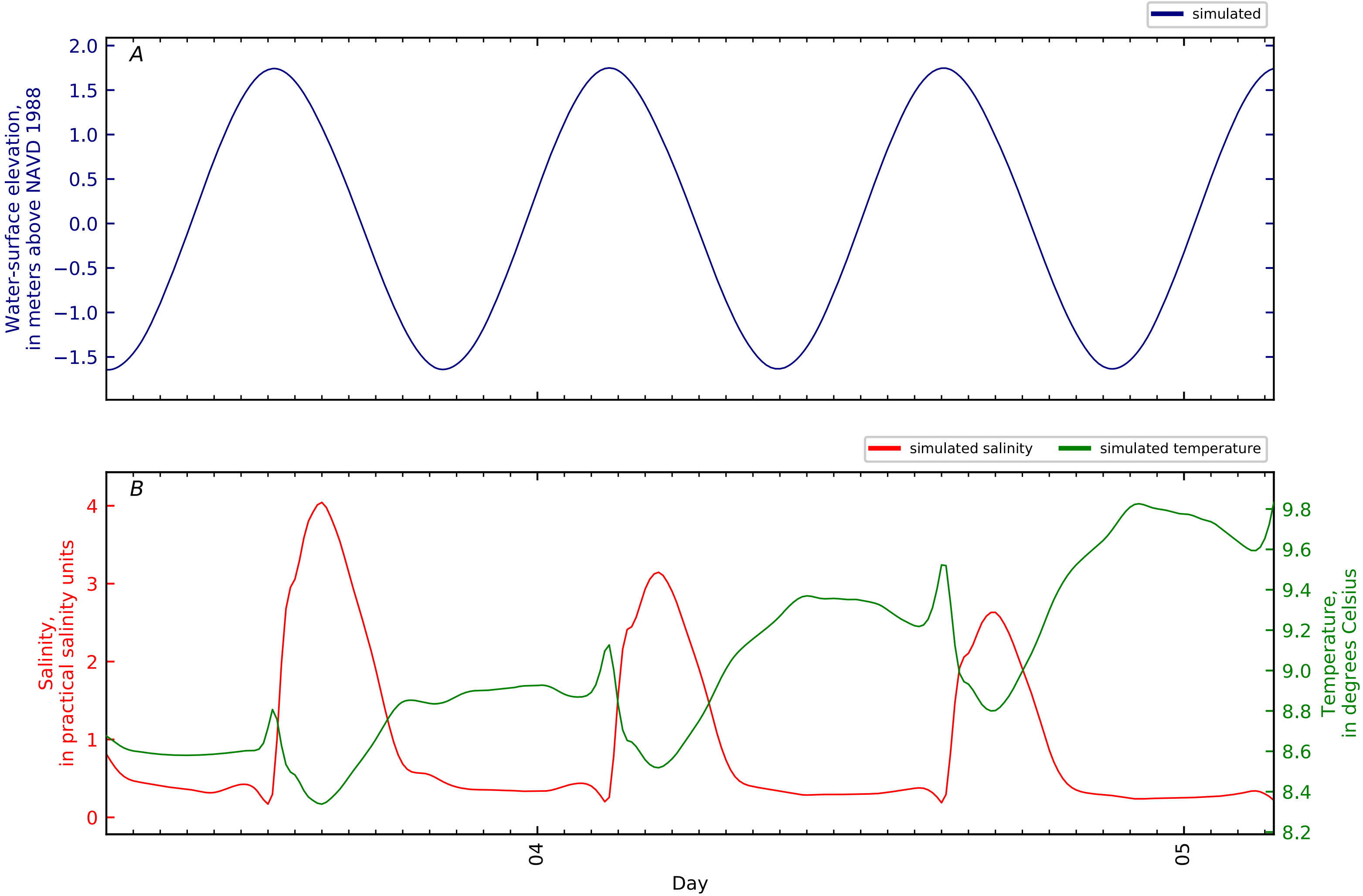

Figure B3-134. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 133, East Channel KM10 GS 443409068471801 at. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

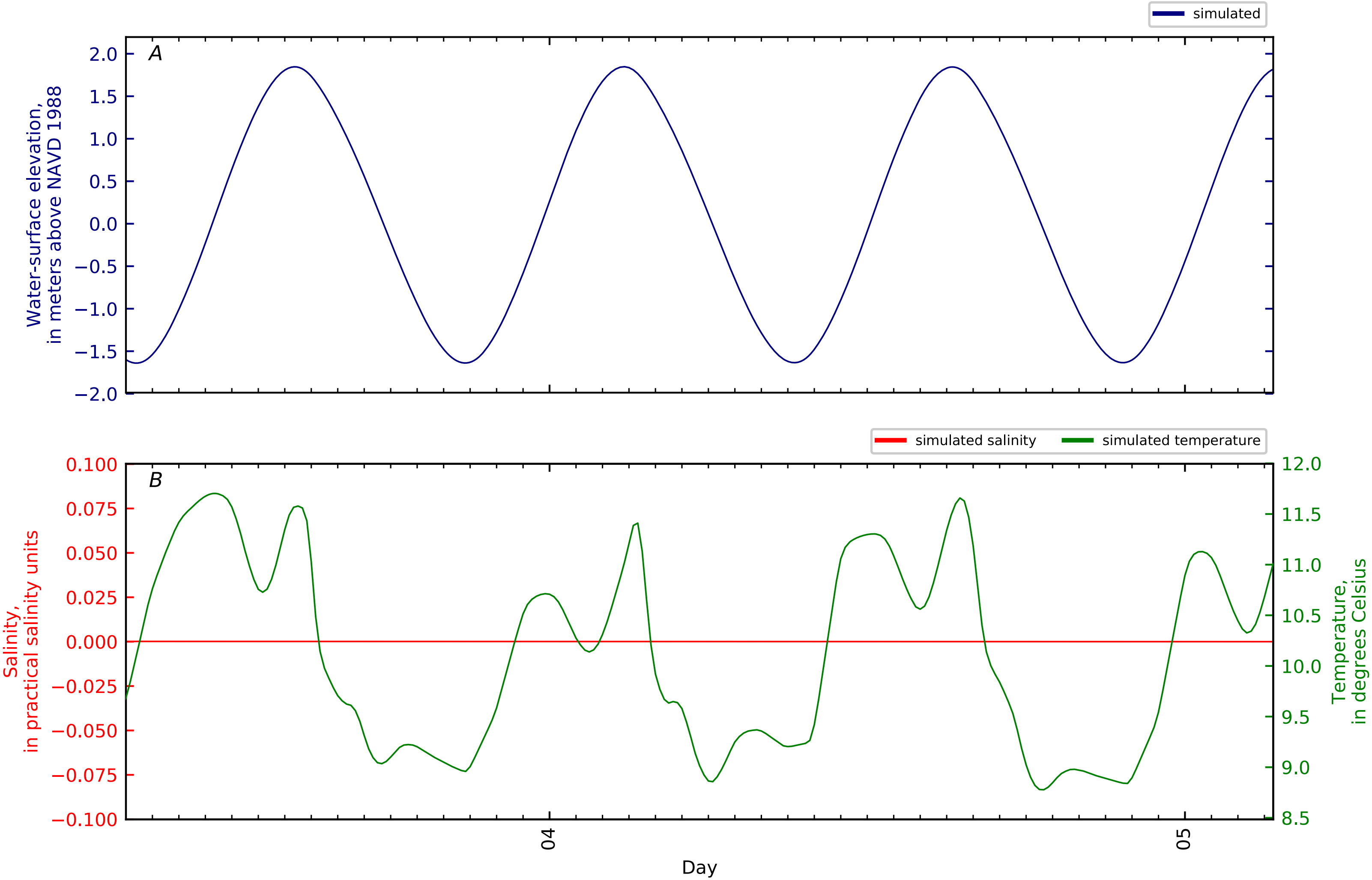

Figure B3-135. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 134, Mendall Marsh KM0. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

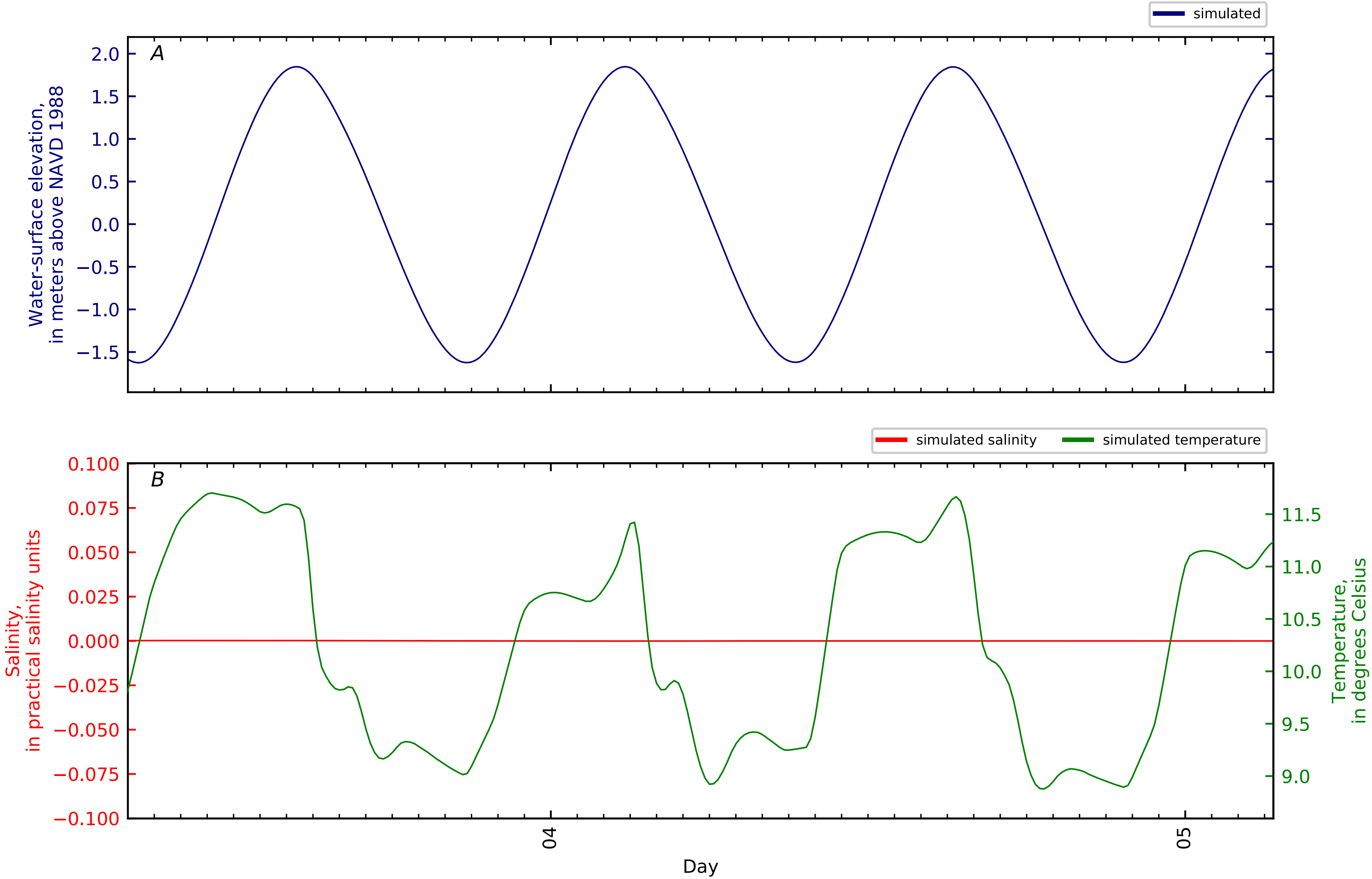

Figure B3-136. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 135, Mendall Marsh KM0.1 ERDC14 MM-MU6-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

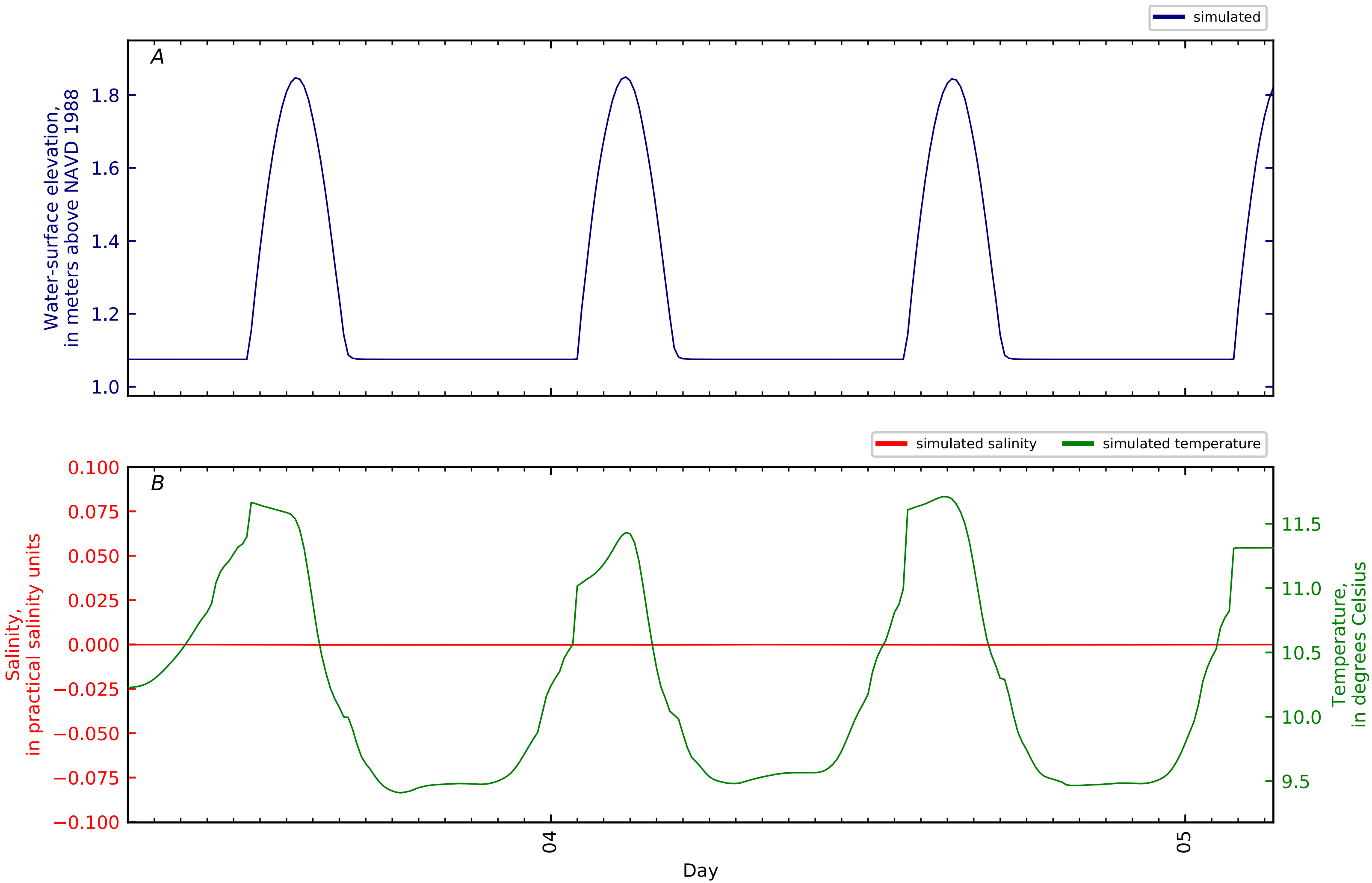

Figure B3-137. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 136, Mendall Marsh KM0.4 GS CTD2-01. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

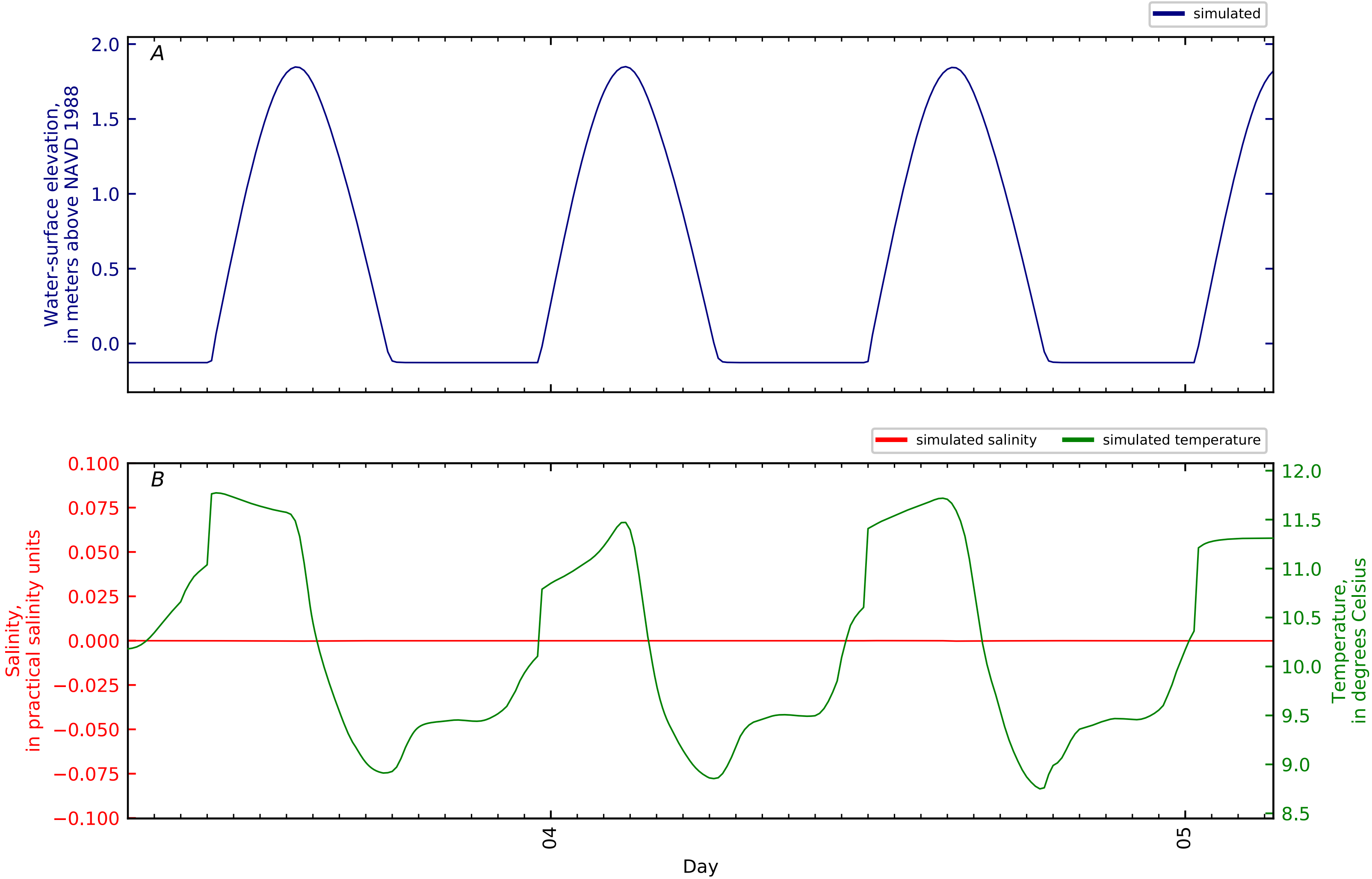

Figure B3-138. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 137, Mendall Marsh KM0.4 GS CTD2-02. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

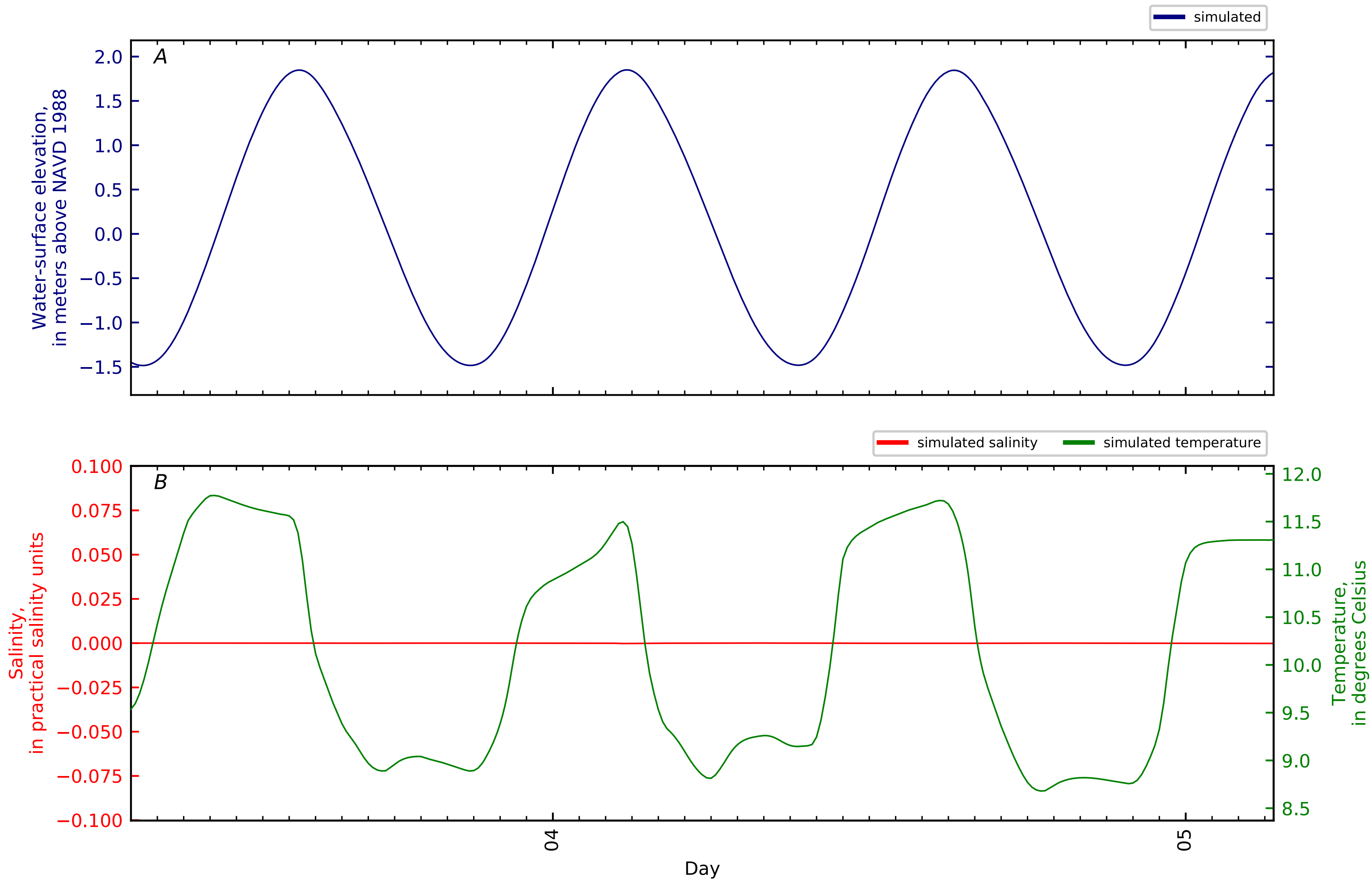

Figure B3-139. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 138, Mendall Marsh KM0.4 GS CTD2-03. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

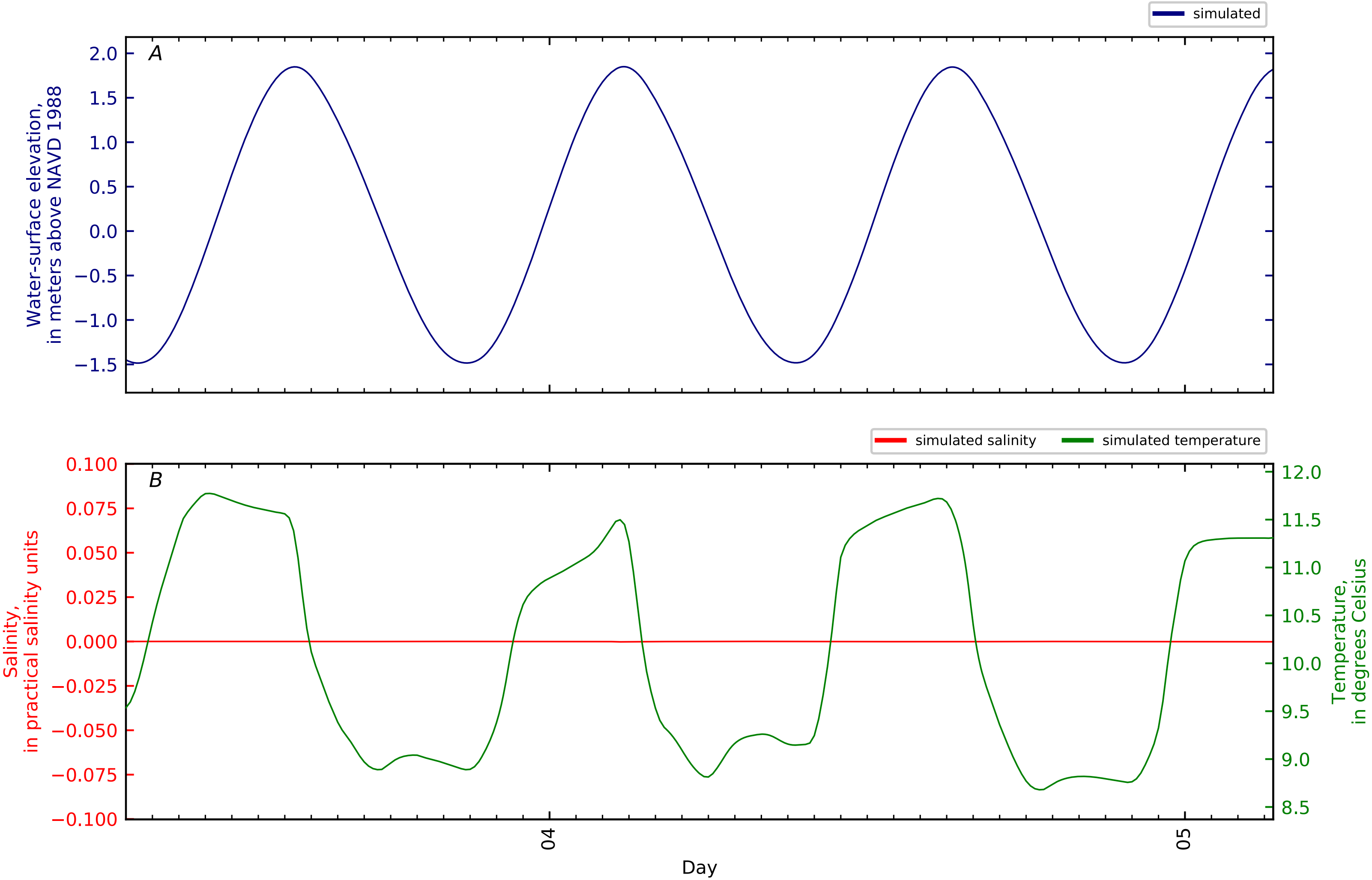

Figure B3-140. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 139, Mendall Marsh KM0.4 GS CTD2-04. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

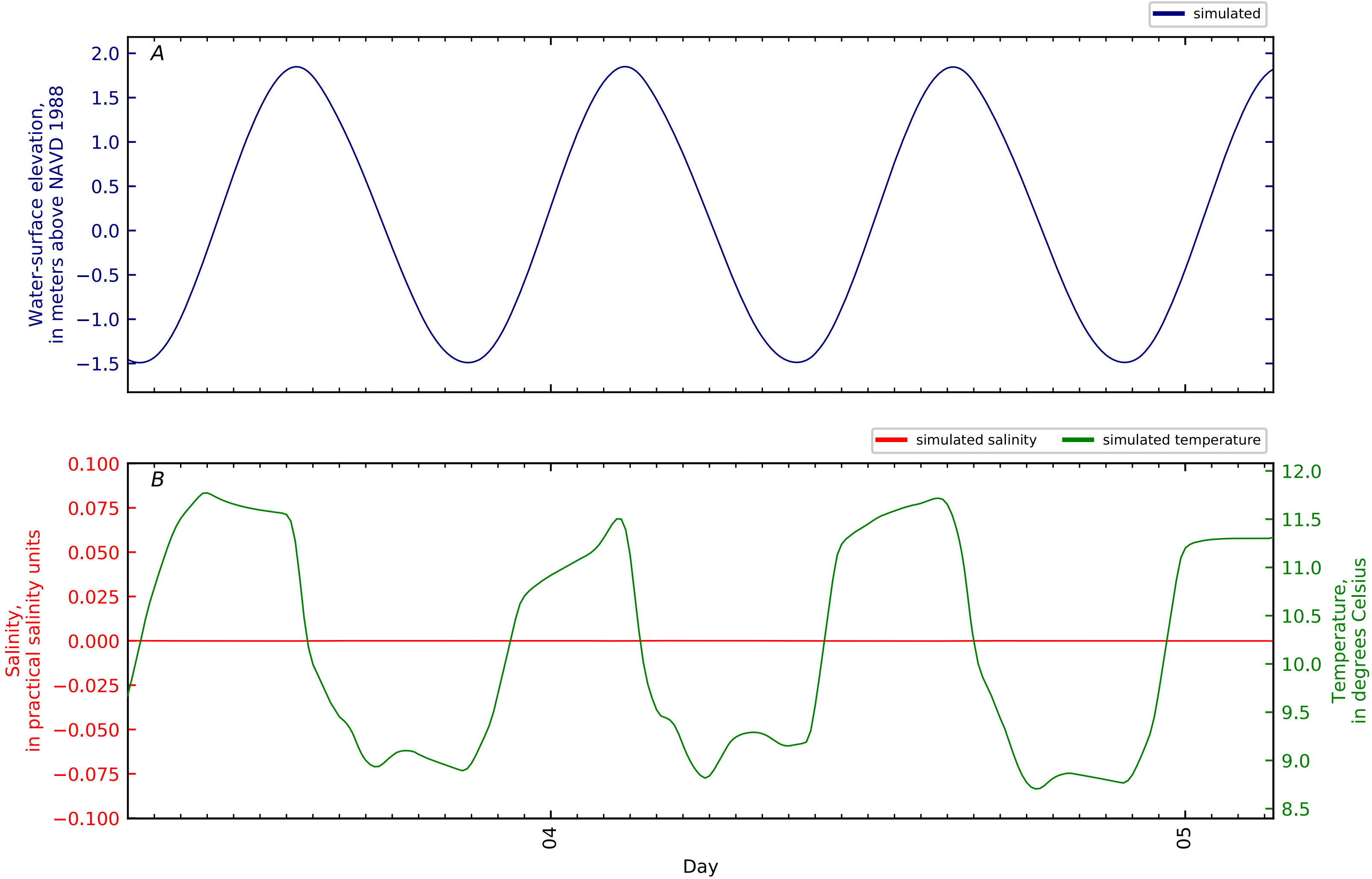

Figure B3-141. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 140, Mendall Marsh KM0.4 GS CTD2-05. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

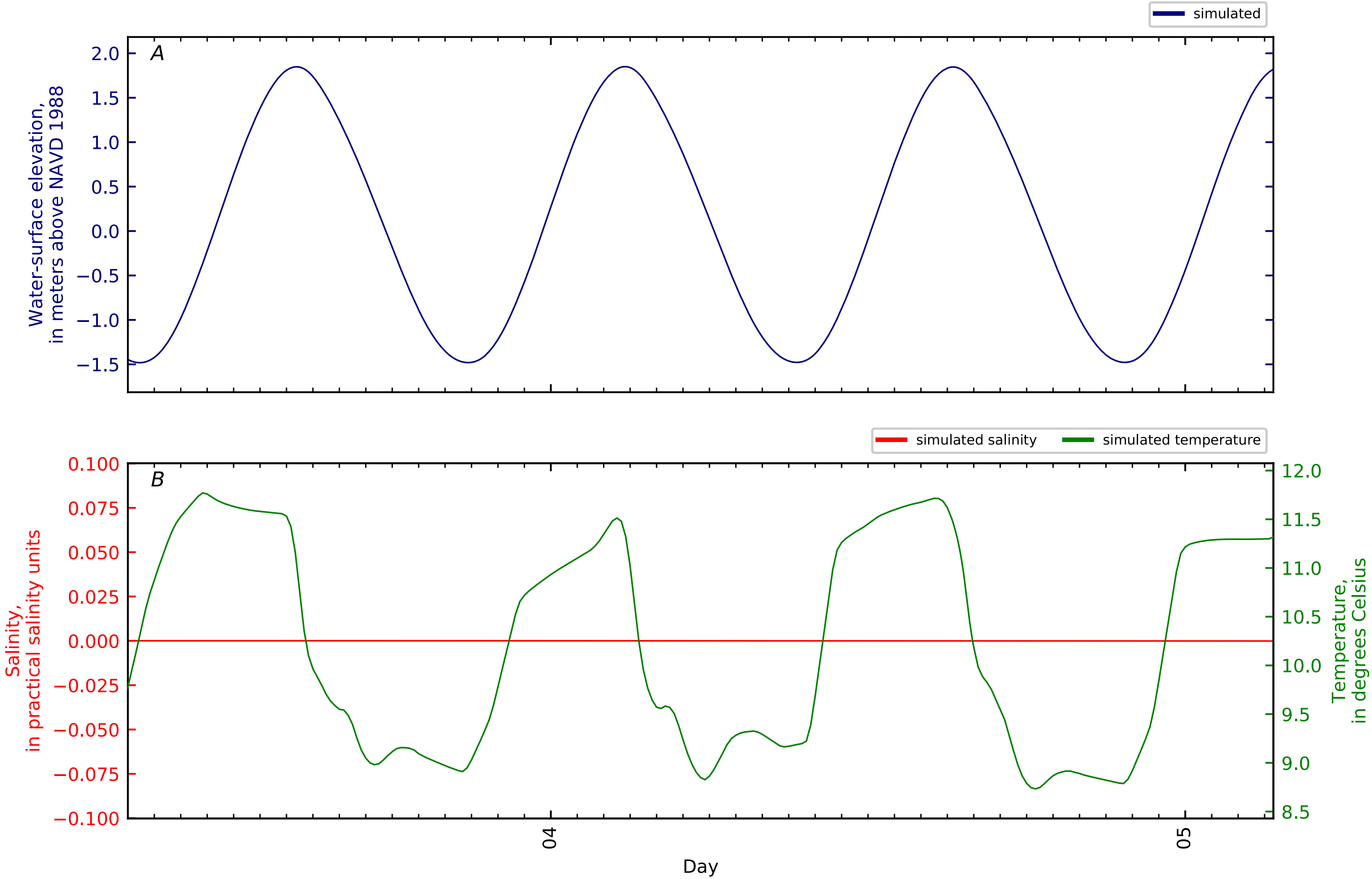

Figure B3-142. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 141, Mendall Marsh KM0.4 GS CTD2-06. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

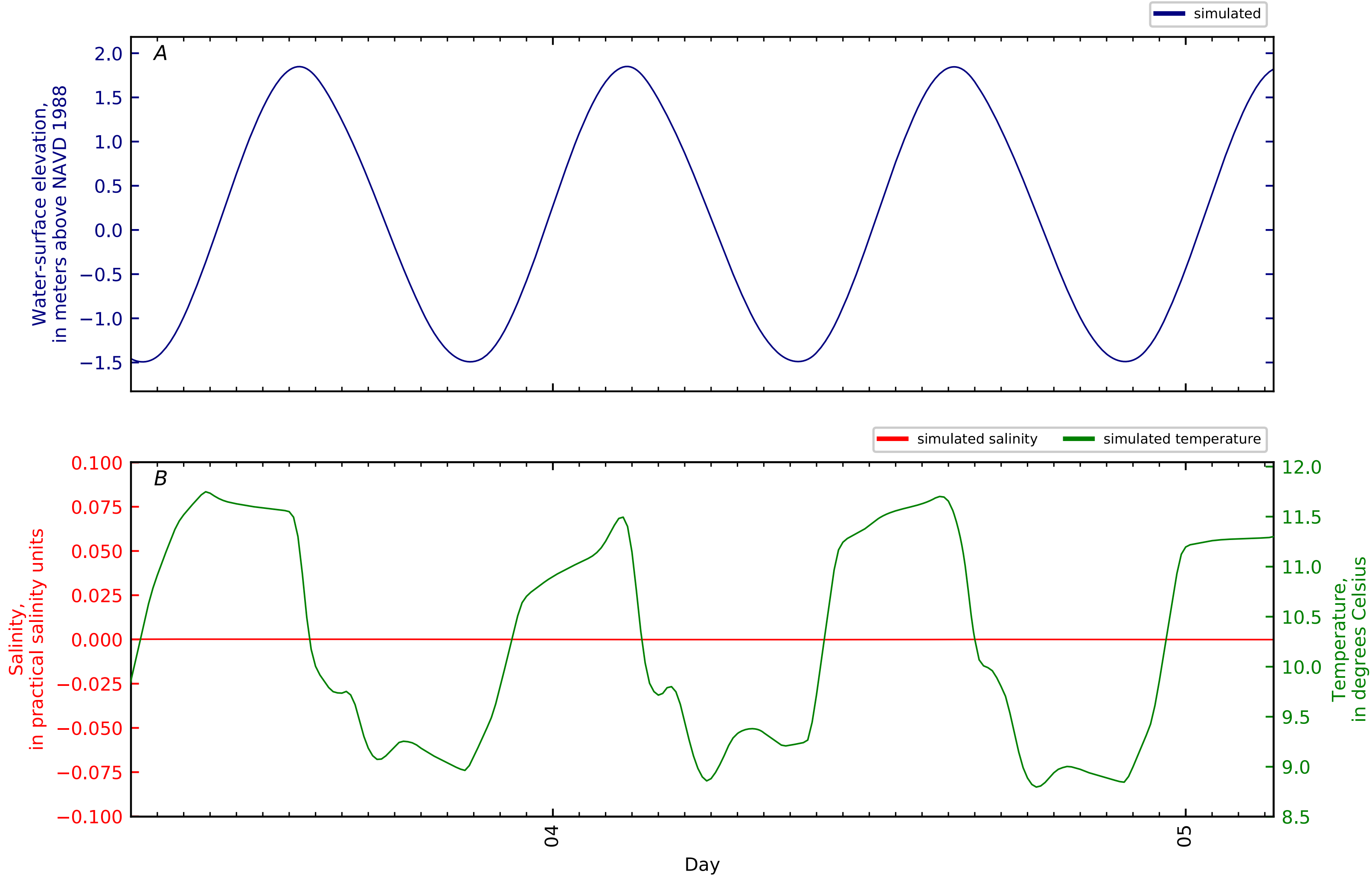

Figure B3-143. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 142, Mendall Marsh KM0.4 GS CTD2-07. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

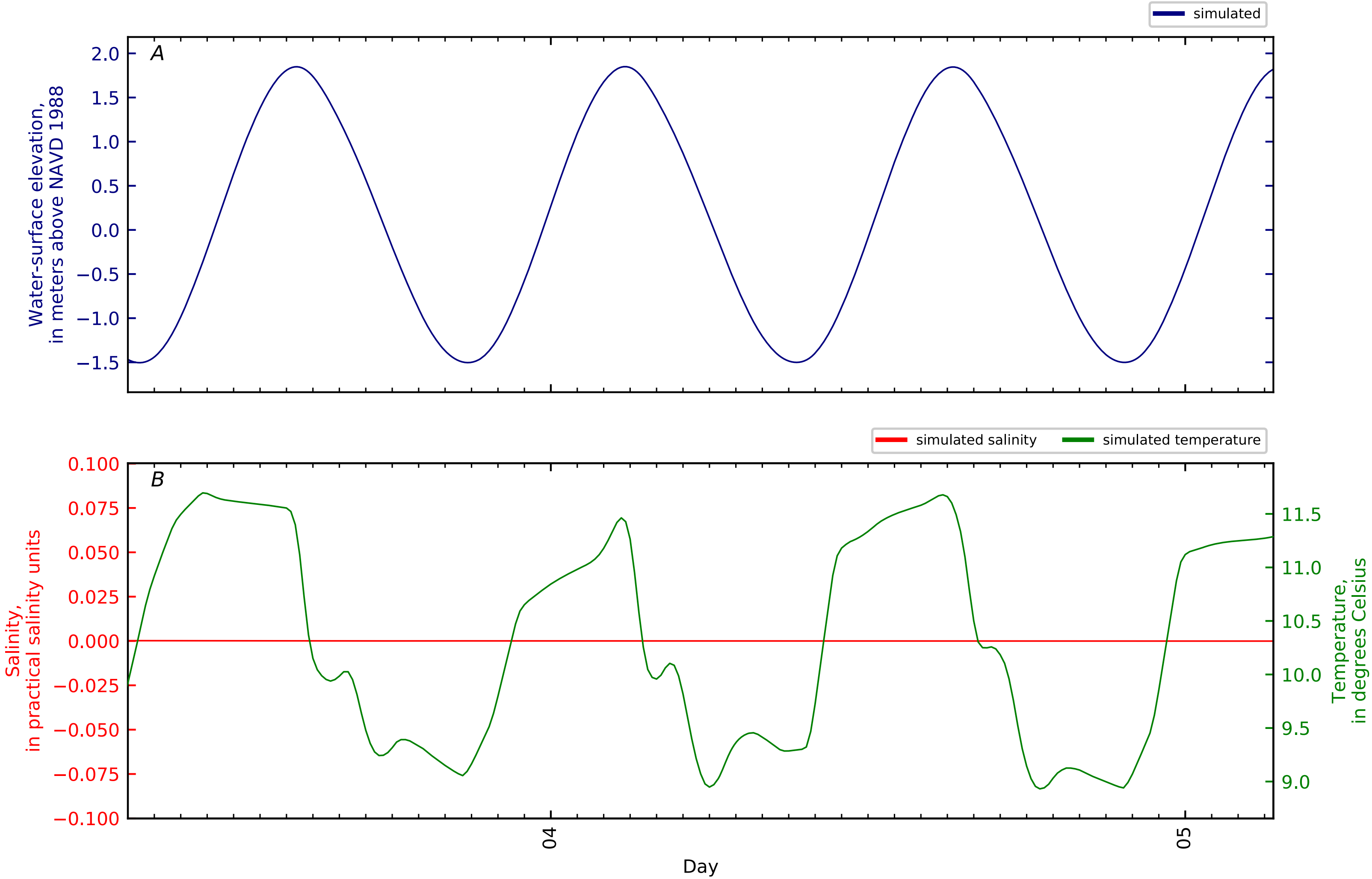

Figure B3-144. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 143, Mendall Marsh KM0.4 GS CTD2-08. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

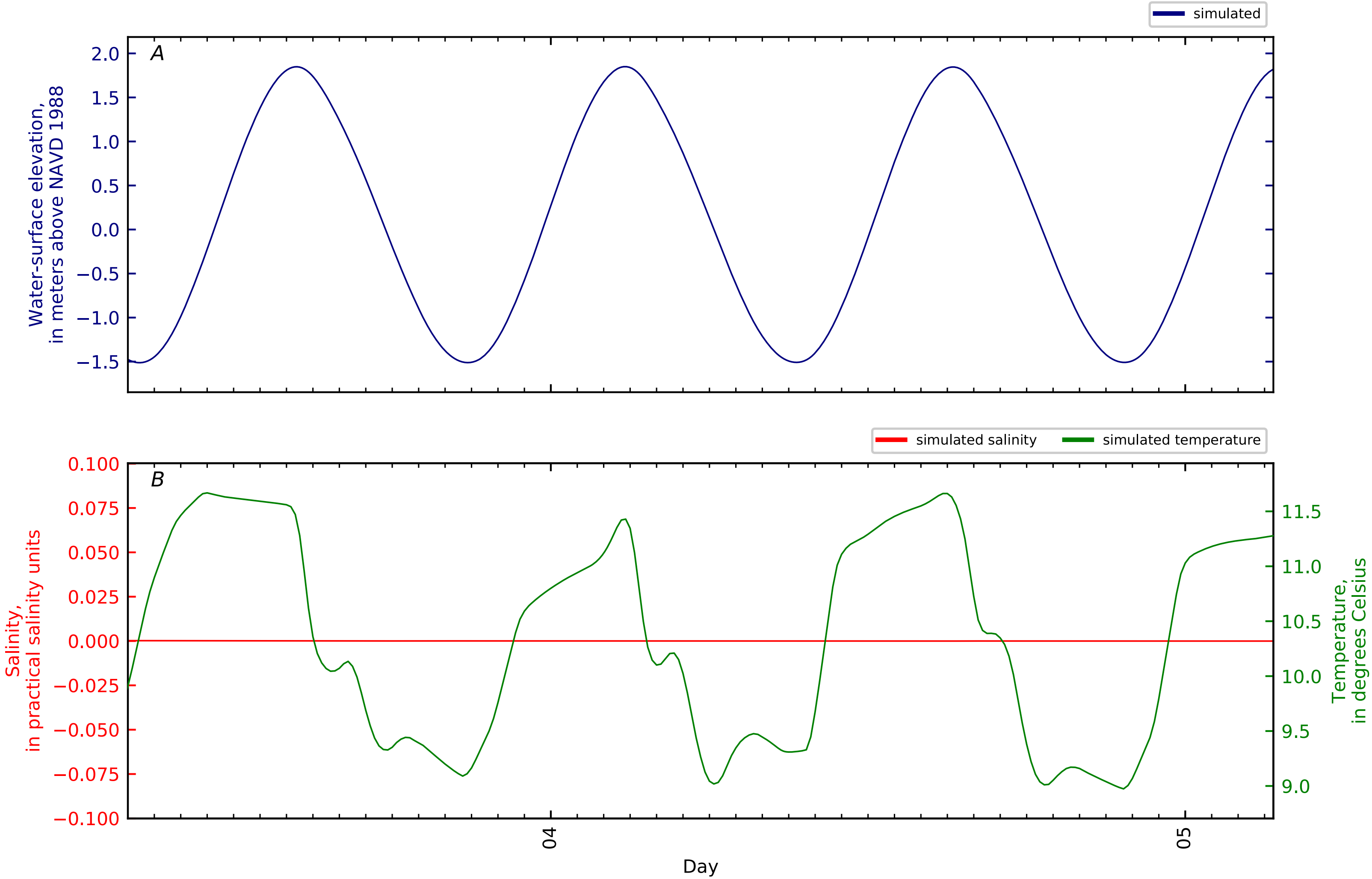

Figure B3-145. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 144, Mendall Marsh KM0.4 GS CTD2-09. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

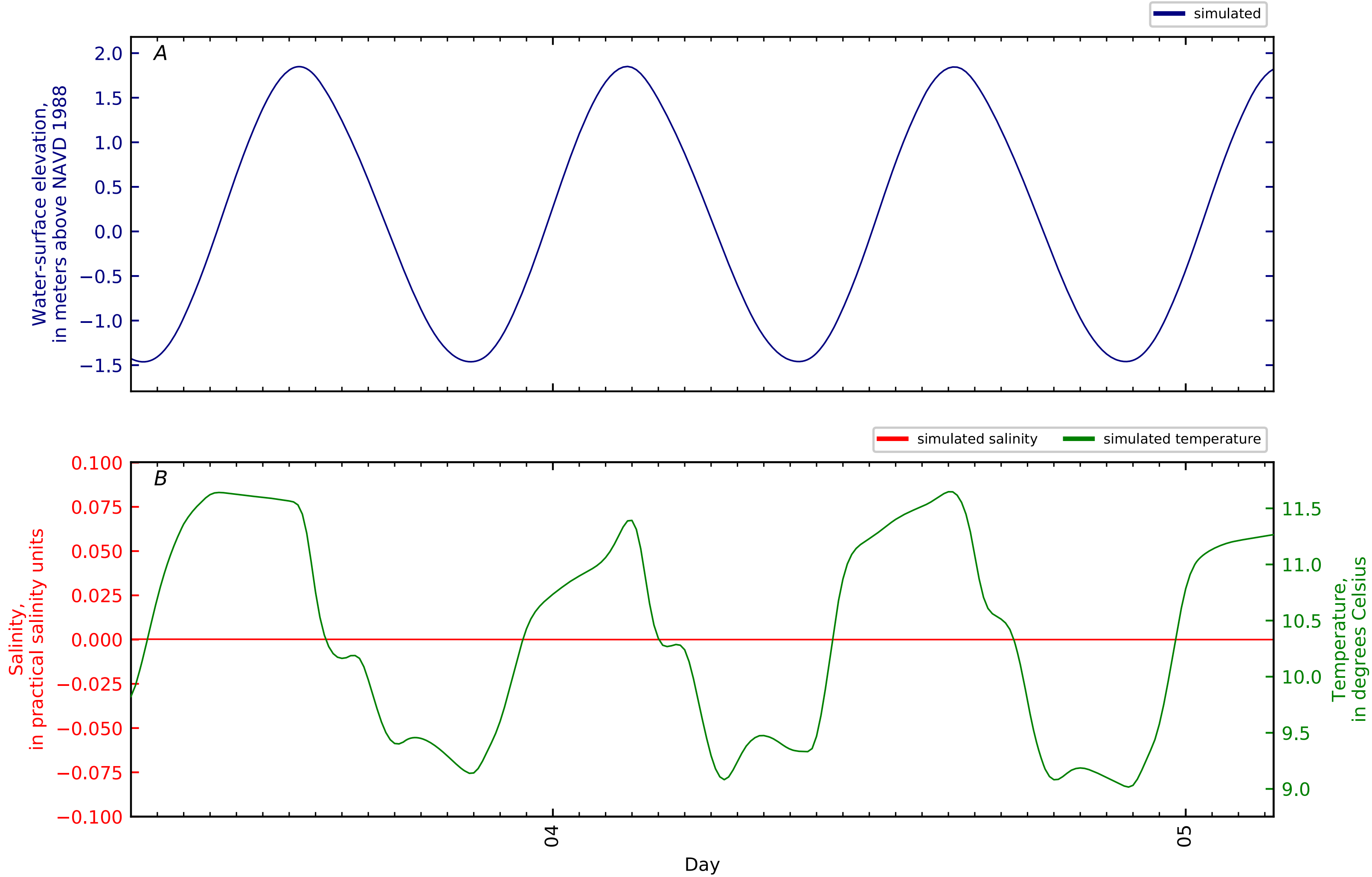

Figure B3-146. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 145, Mendall Marsh KM0.4 GS CTD2-10. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

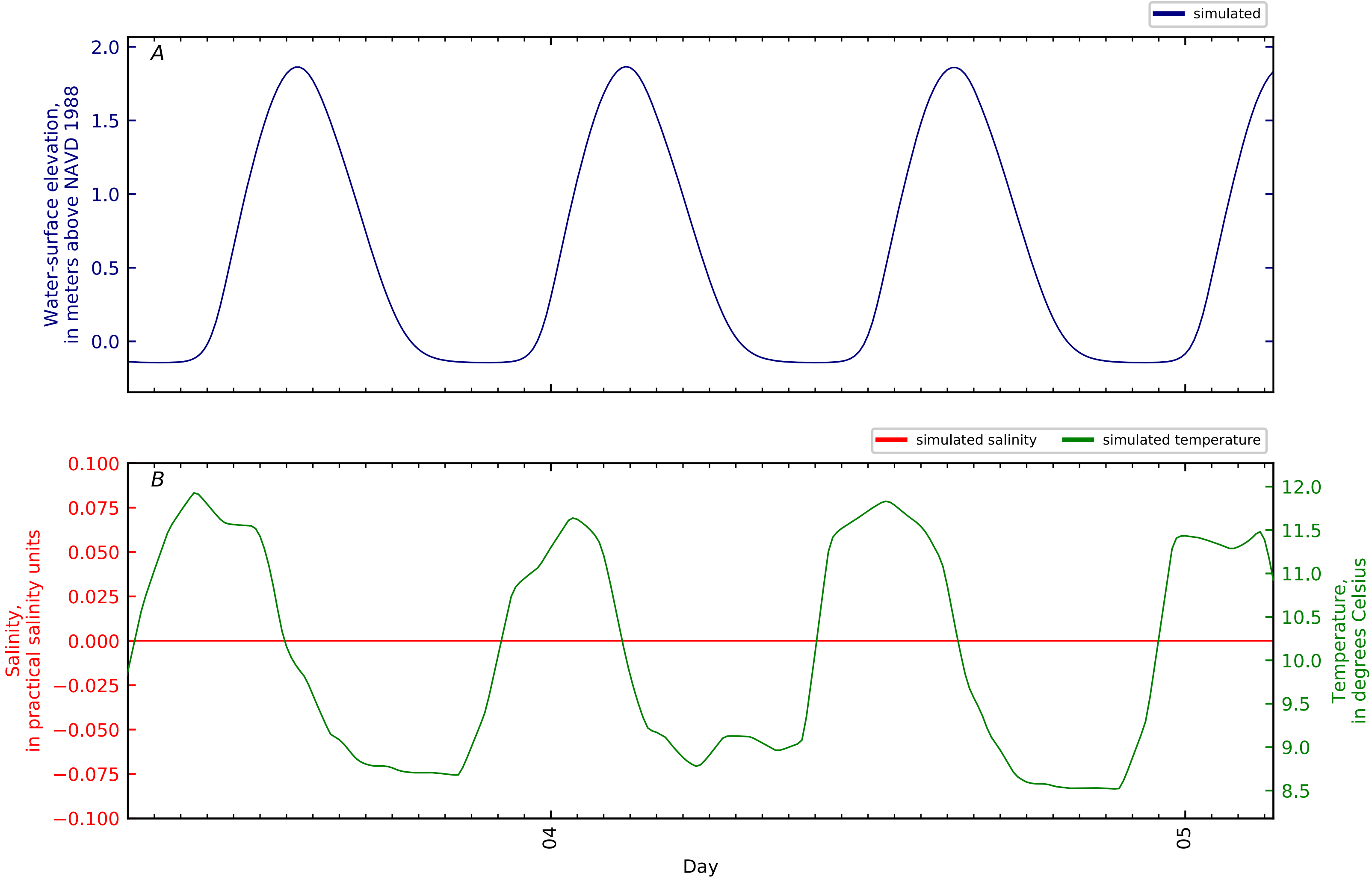

Figure B3-147. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 146, Mendall Marsh KM1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

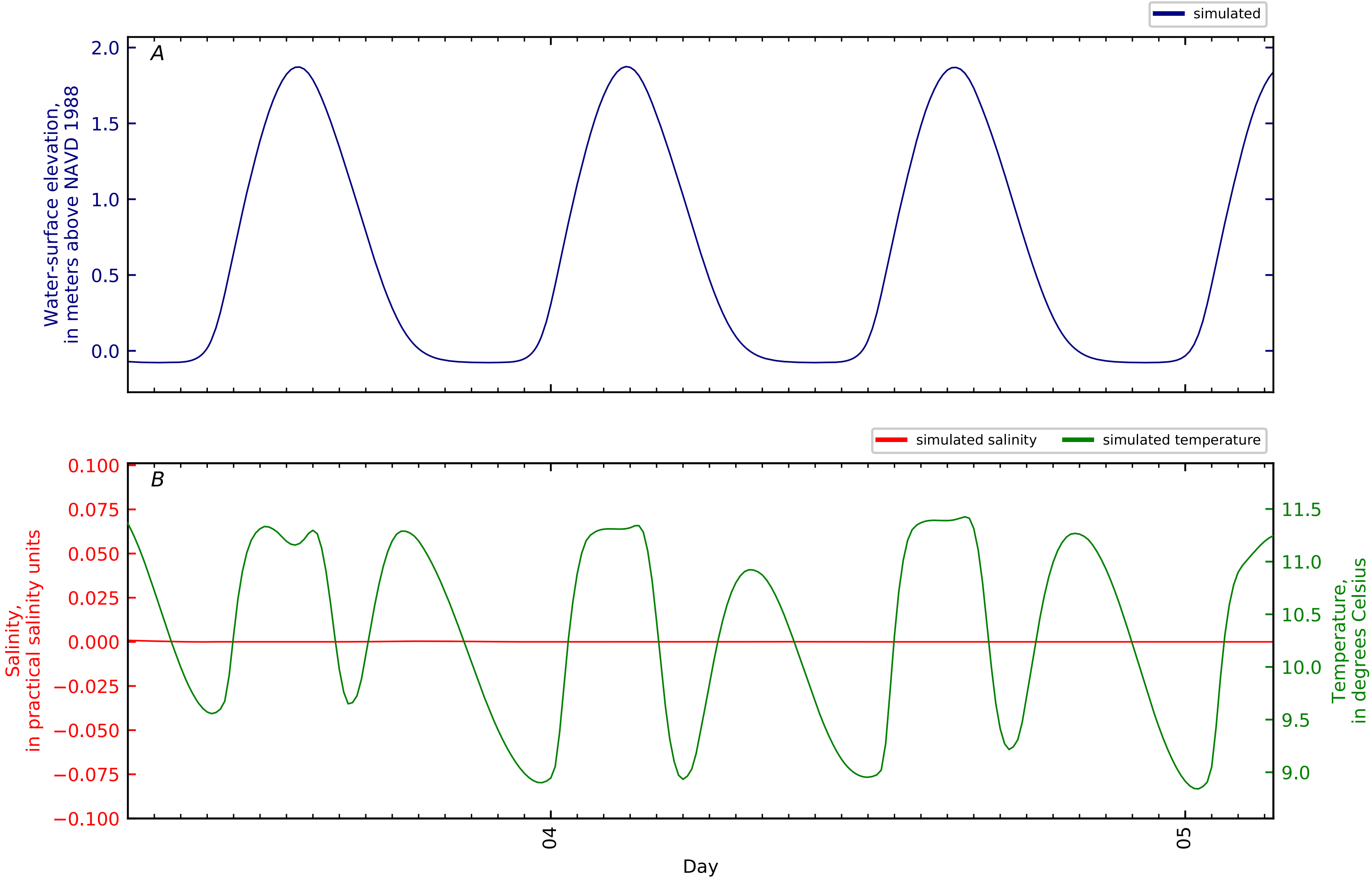

Figure B3-148. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 147, Mendall Marsh KM1.5 WHOI3 2010. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

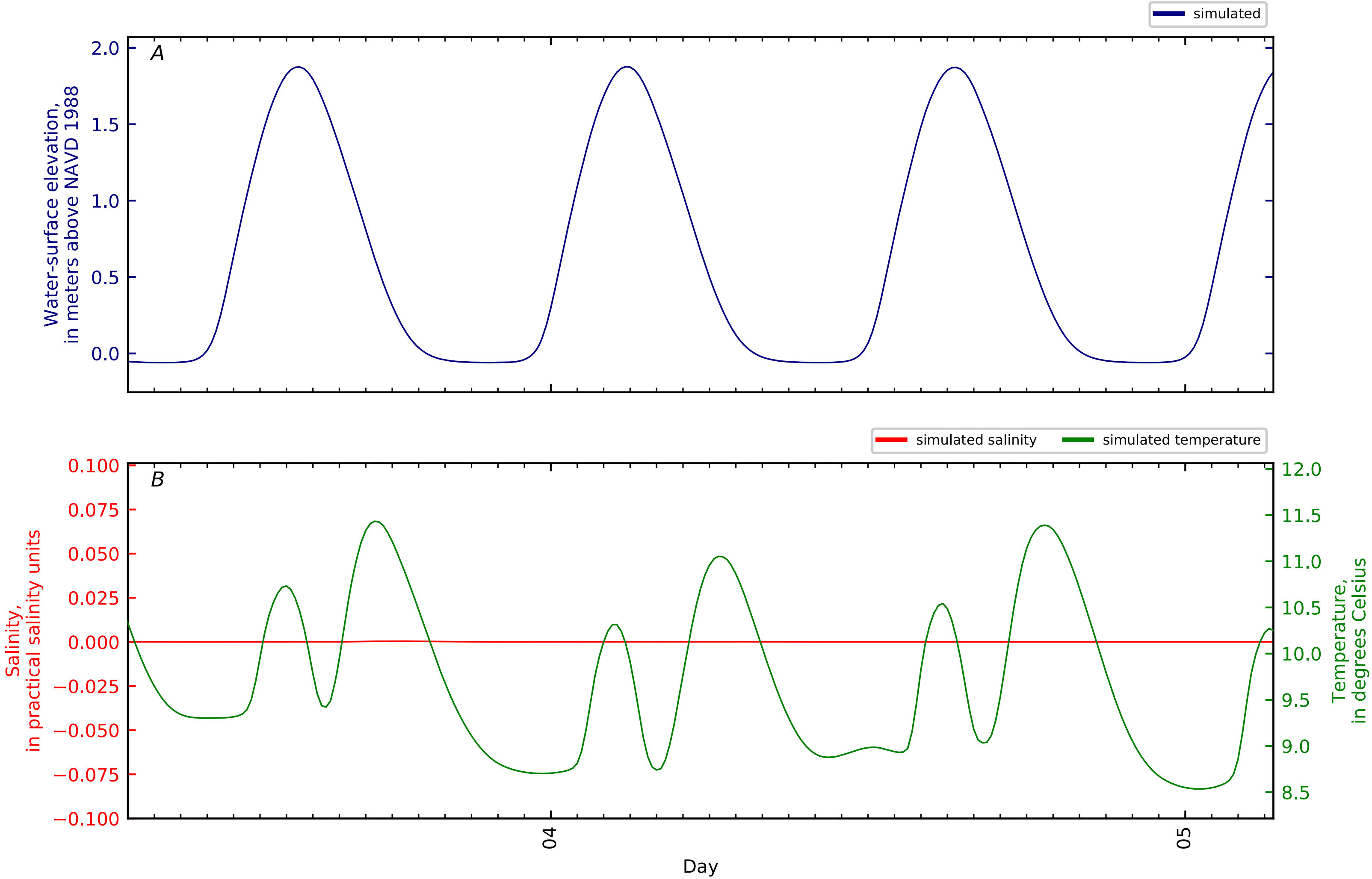

Figure B3-149. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 148, Mendall Marsh KM2. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

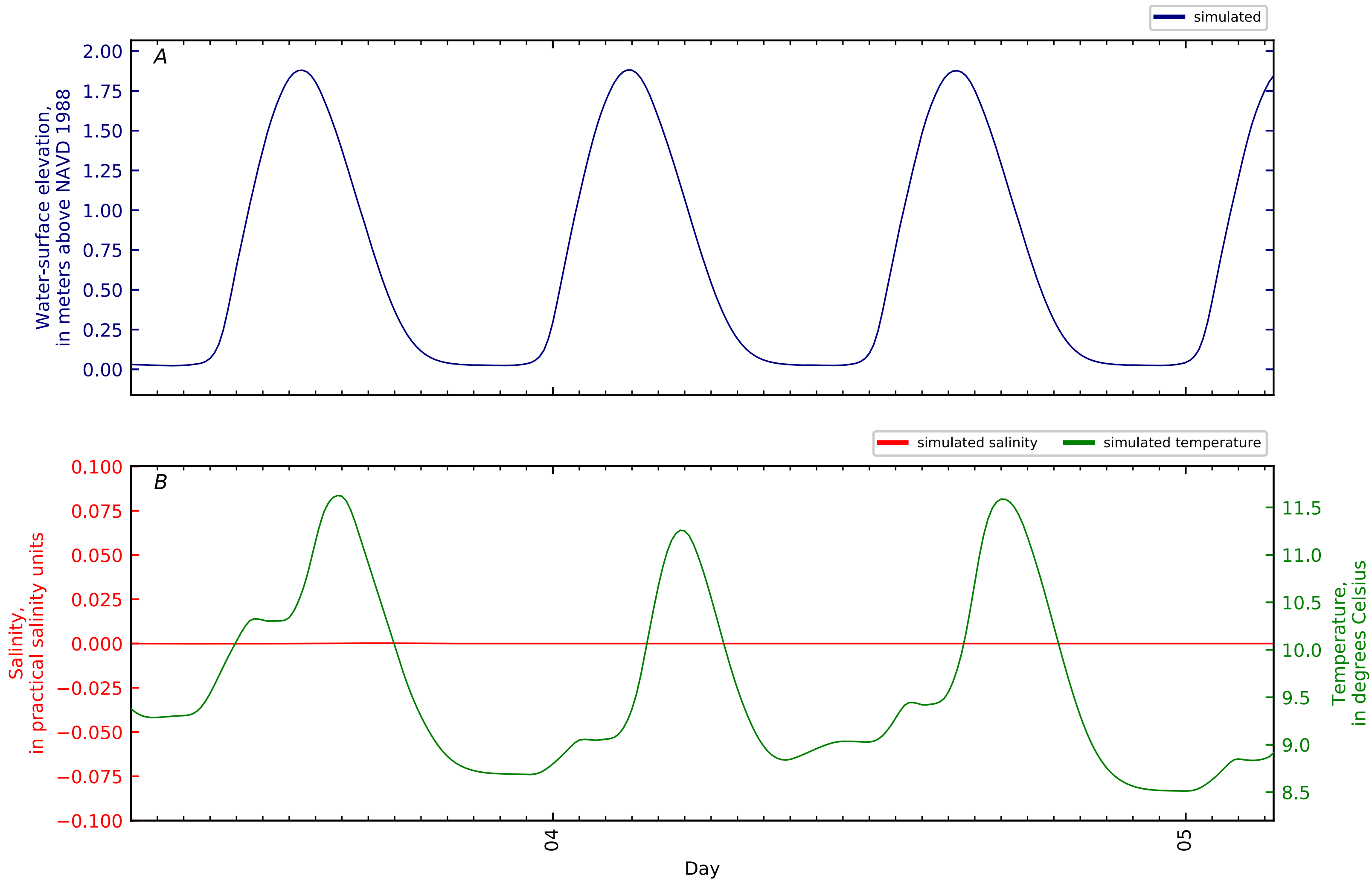

Figure B3-150. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 149, Mendall Marsh KM3. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

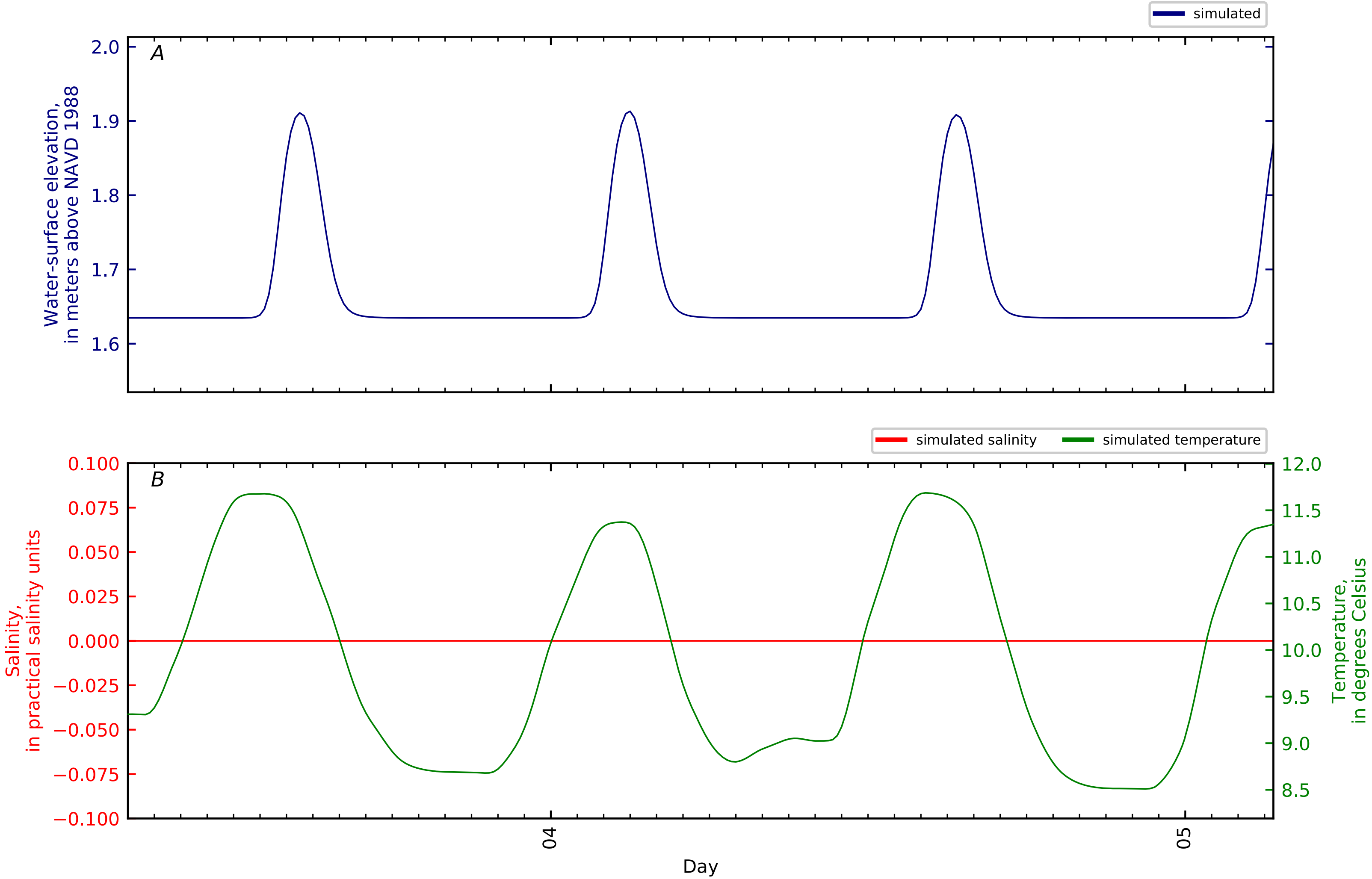

Figure B3-151. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 150, Mendall Marsh KM4. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

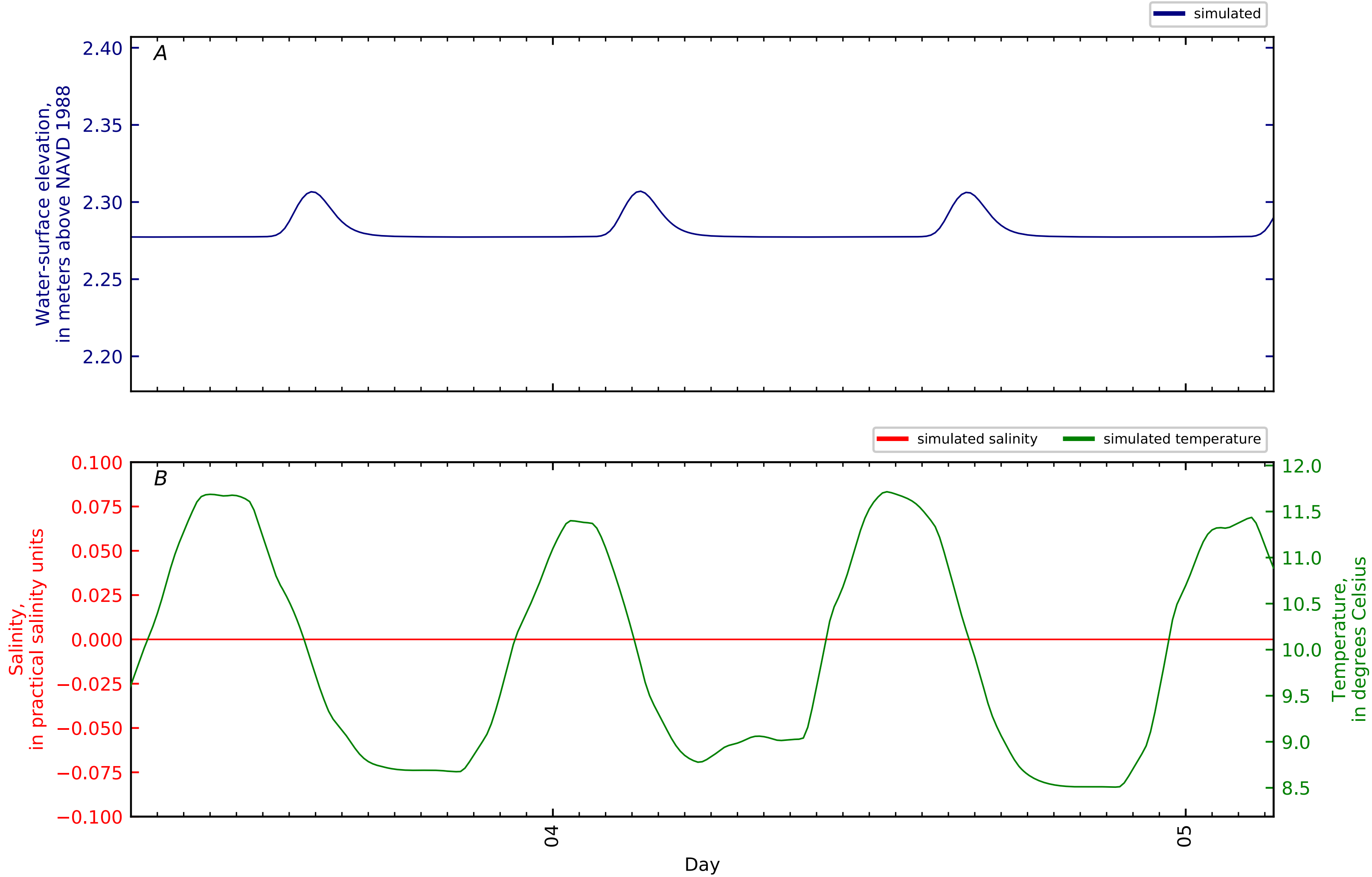

Figure B3-152. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 151, Mendall Marsh KM5. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

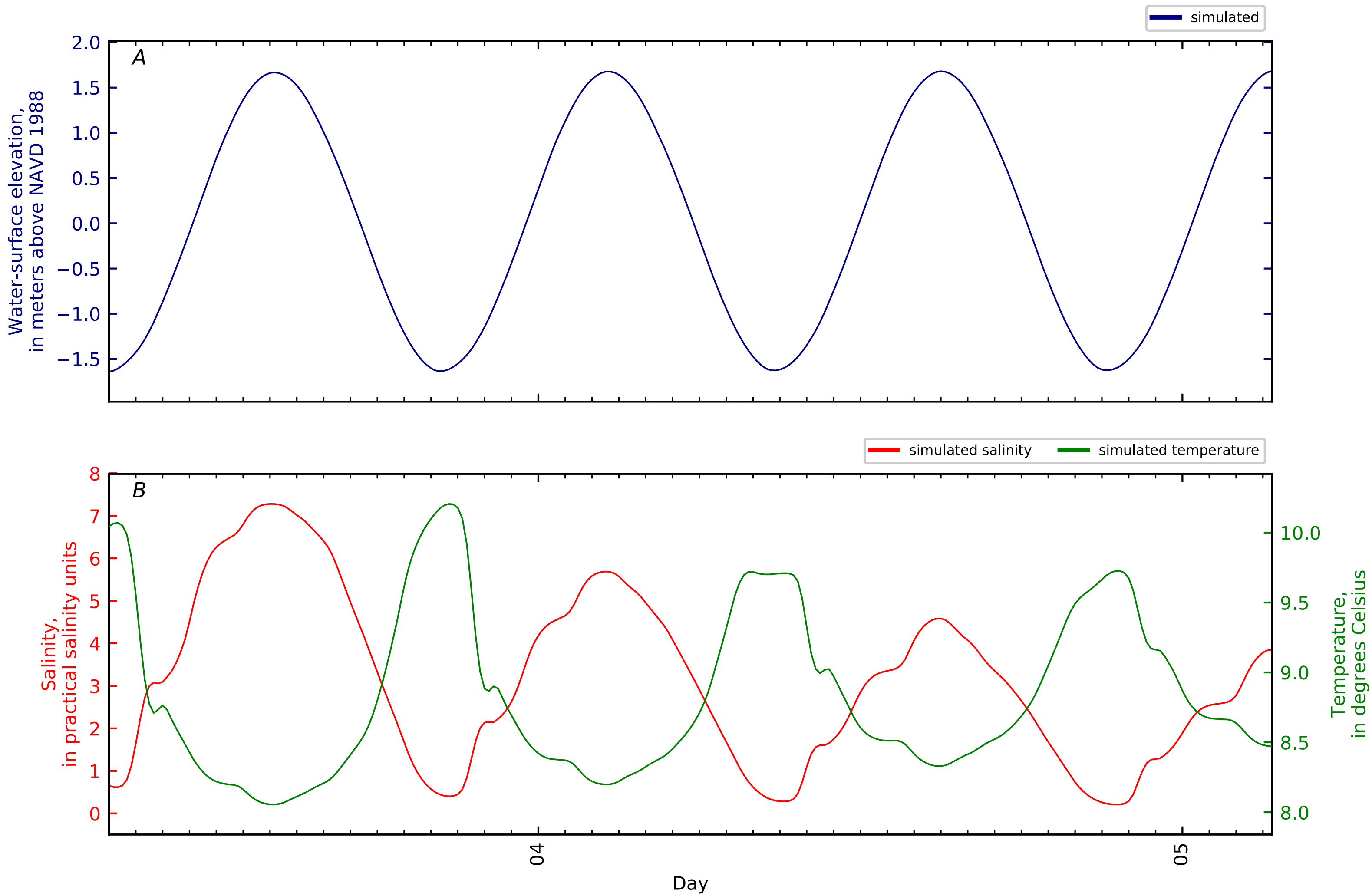

Figure B3-153. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 152, Orland Riv KM0. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

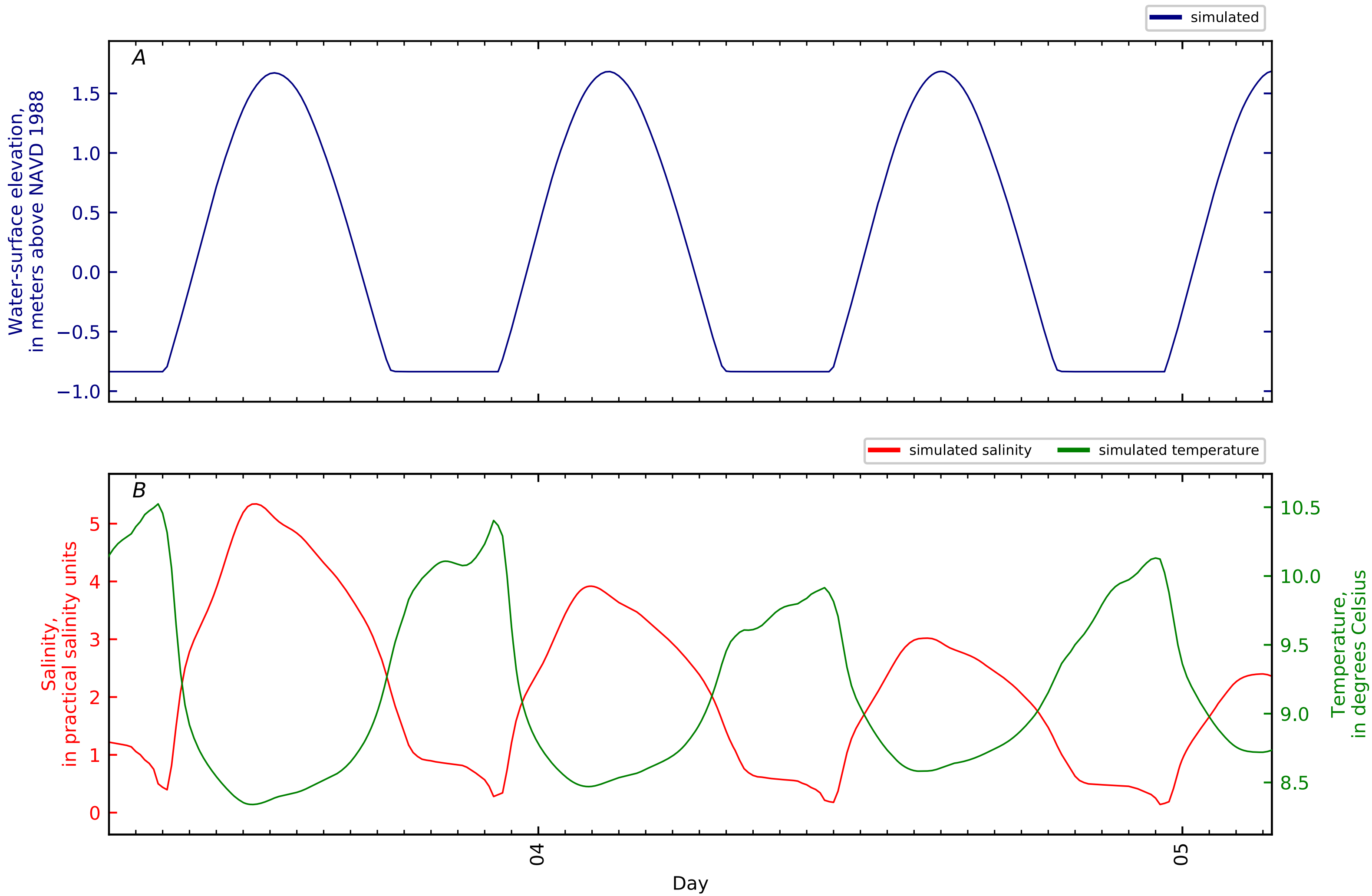

Figure B3-154. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 153, Orland Riv KM0.9 ERDC5 OR-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

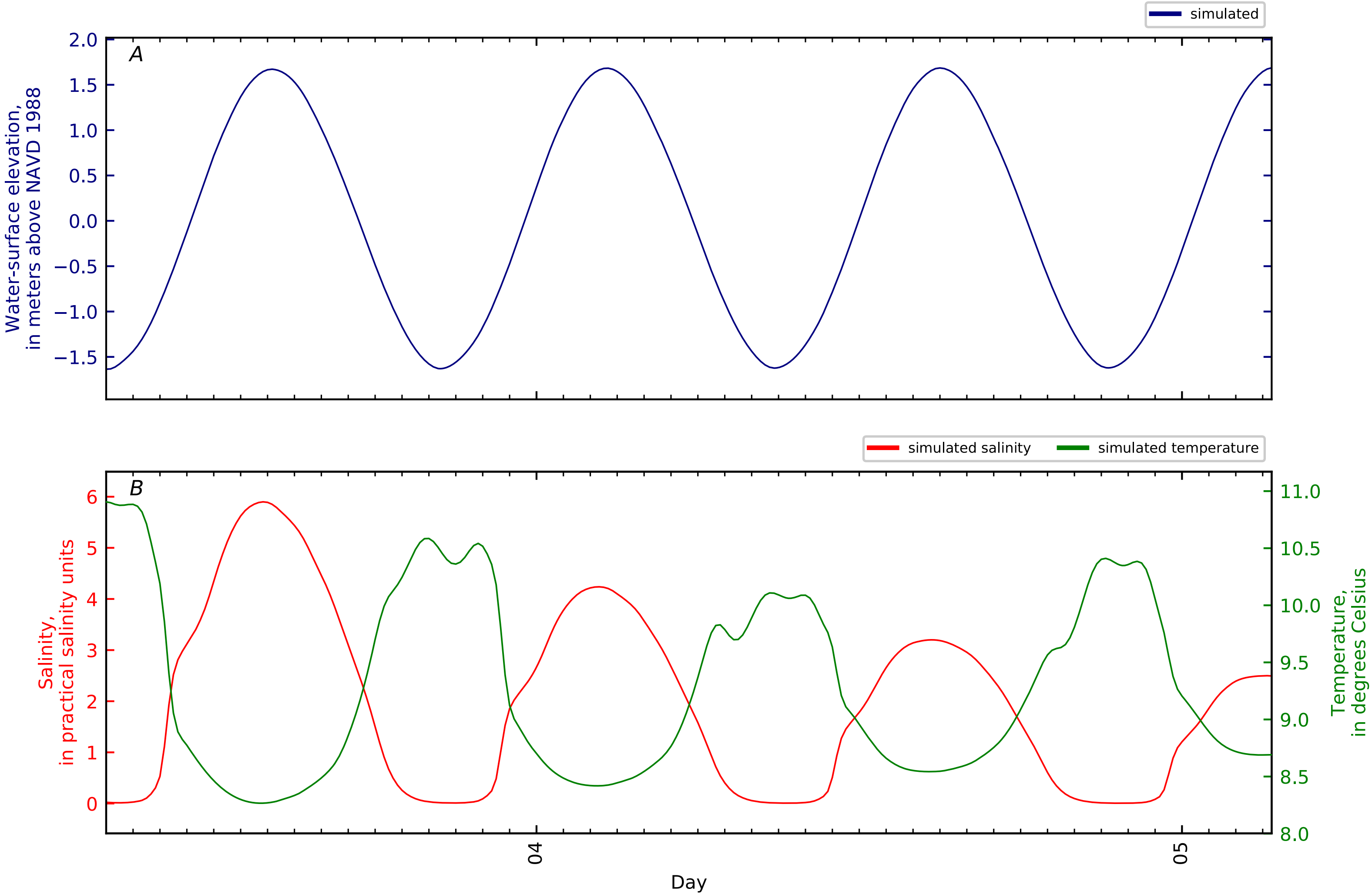

Figure B3-155. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 154, Orland Riv KM0.9 ERDC6 OR-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

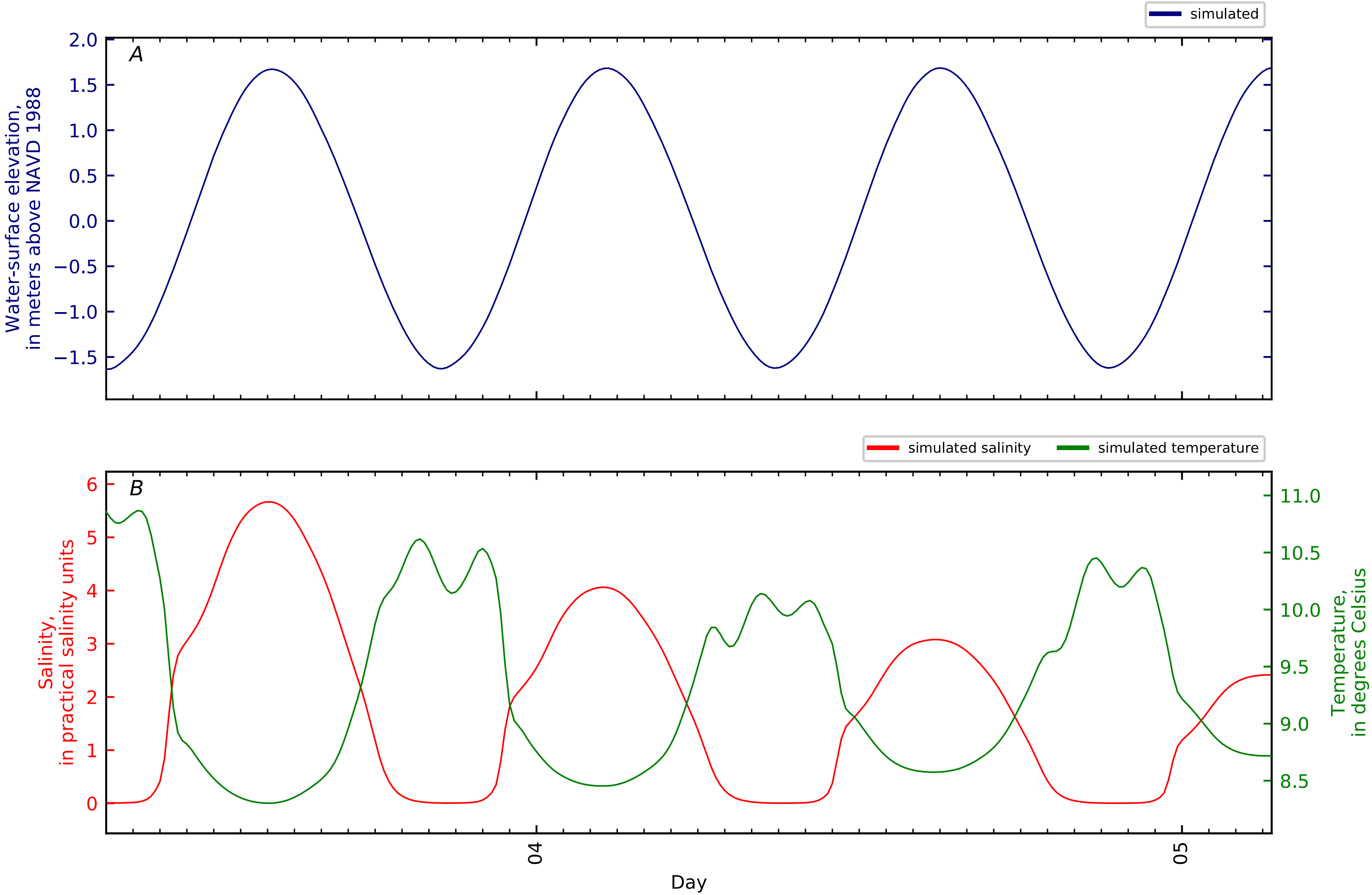

Figure B3-156. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 155, Orland Riv KM1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

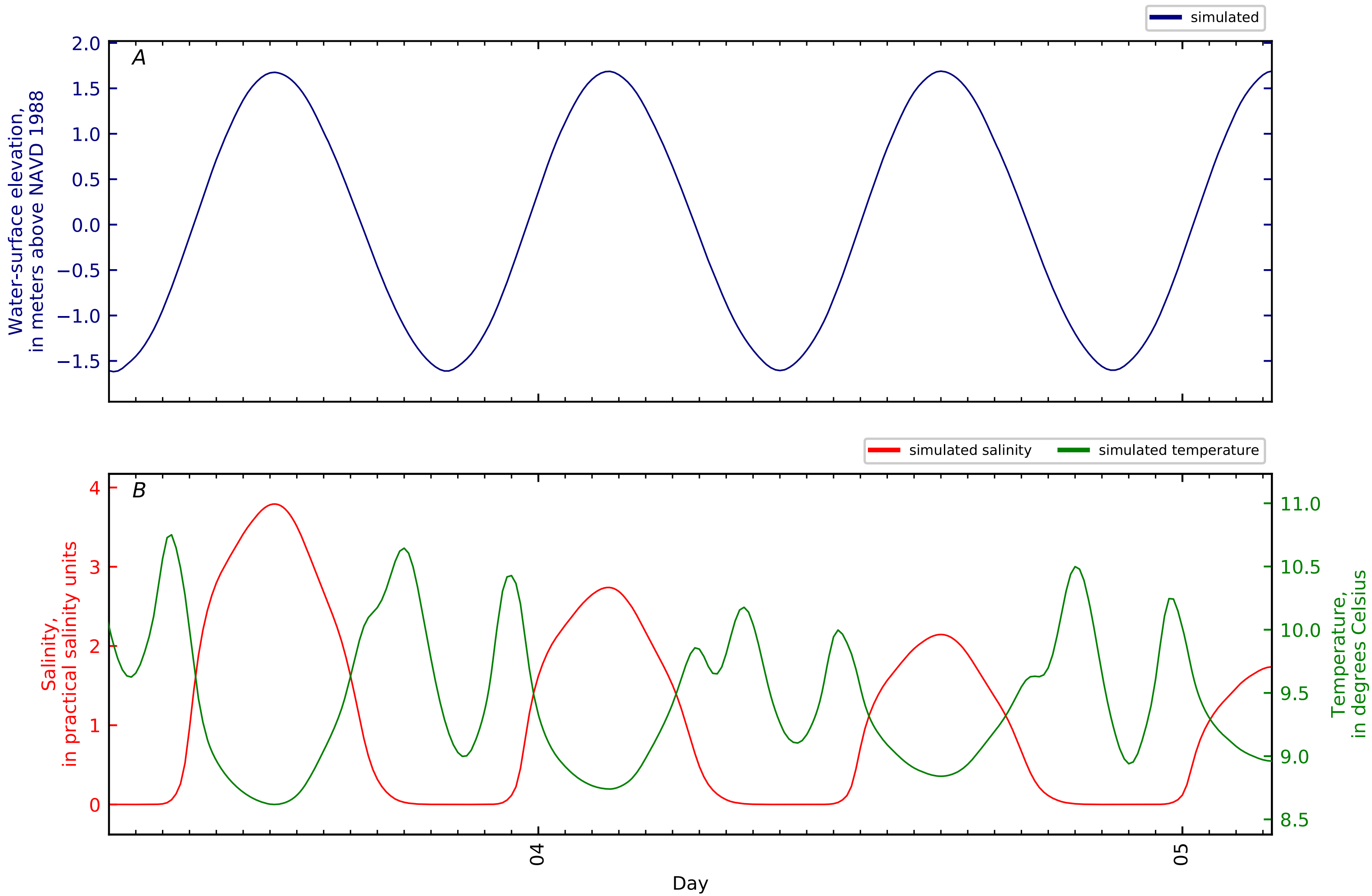

Figure B3-157. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 156, Orland Riv KM1.6 WHOI4 2010. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

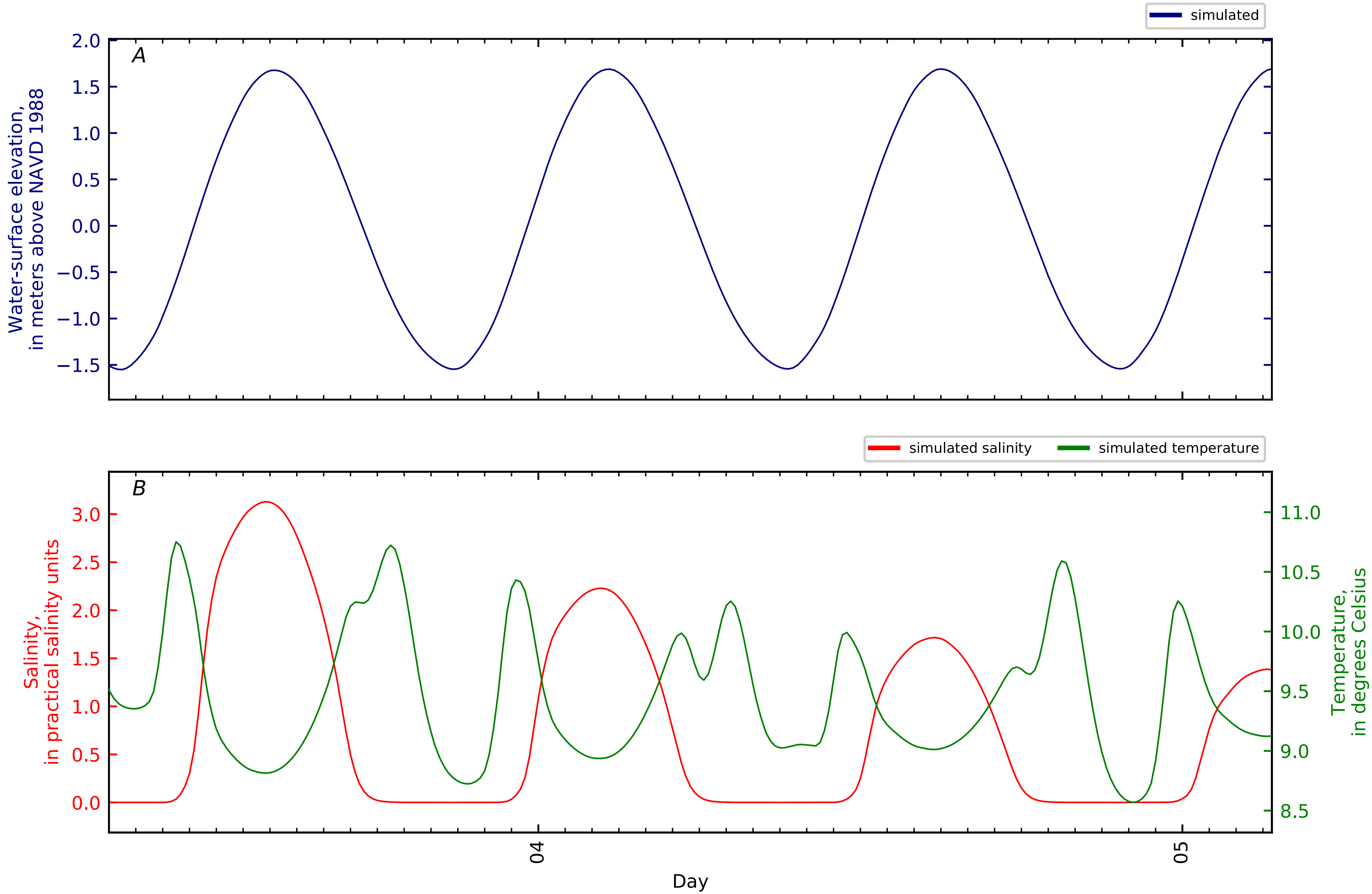

Figure B3-158. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 157, Orland Riv KM2. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

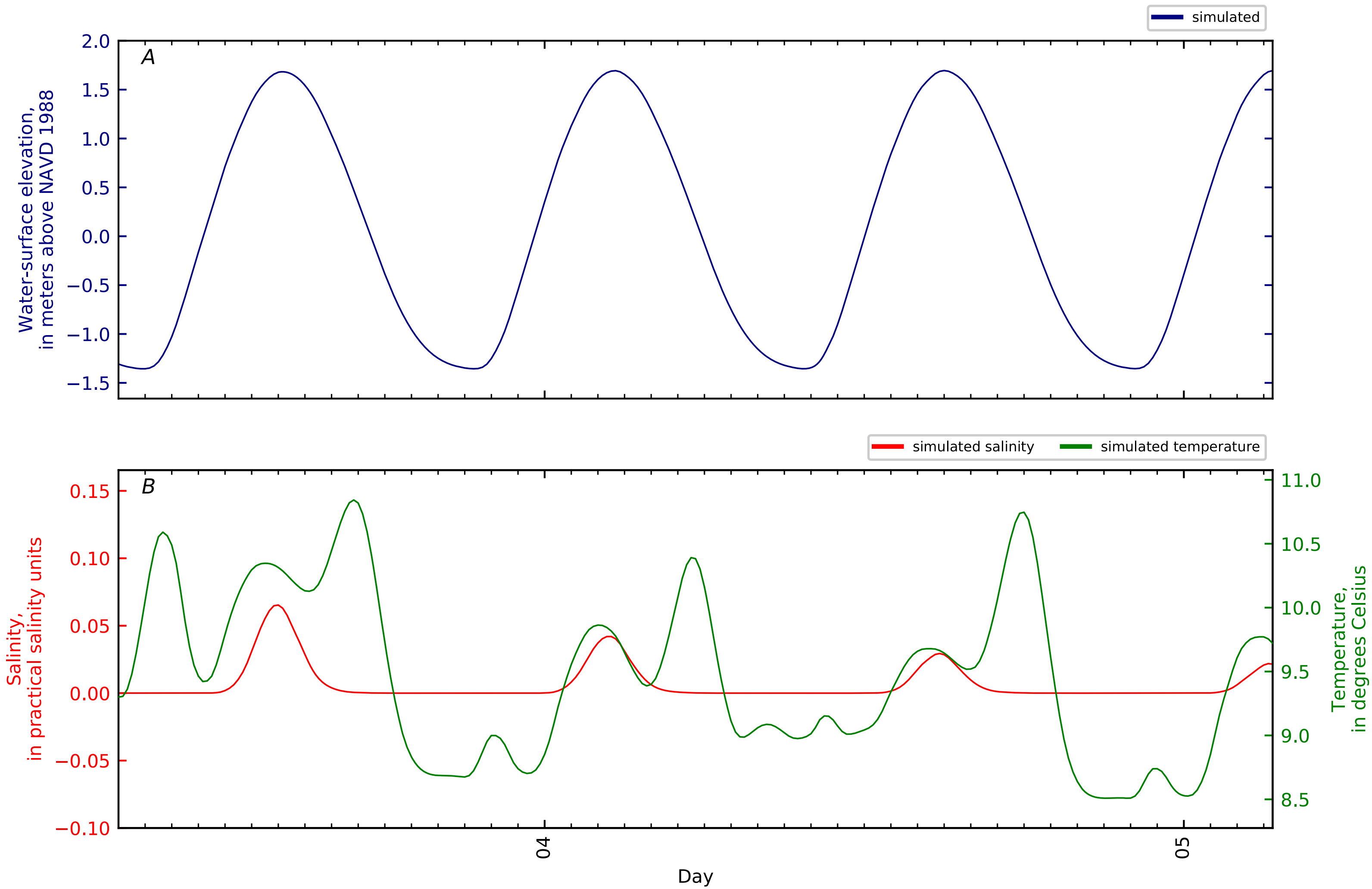

Figure B3-159. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 158, Orland Riv KM3. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

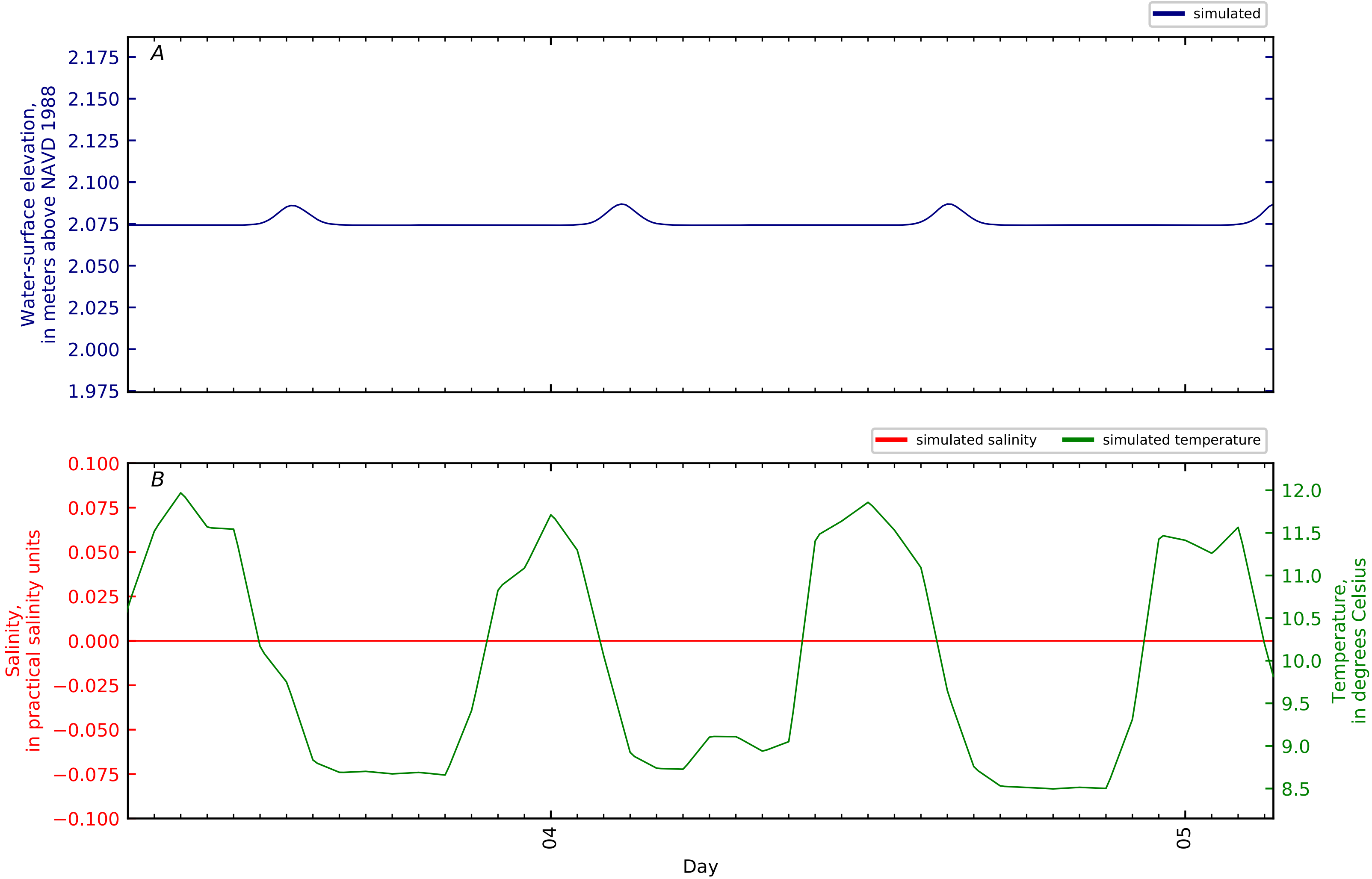

Figure B3-160. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 159, Orland Riv KM4. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

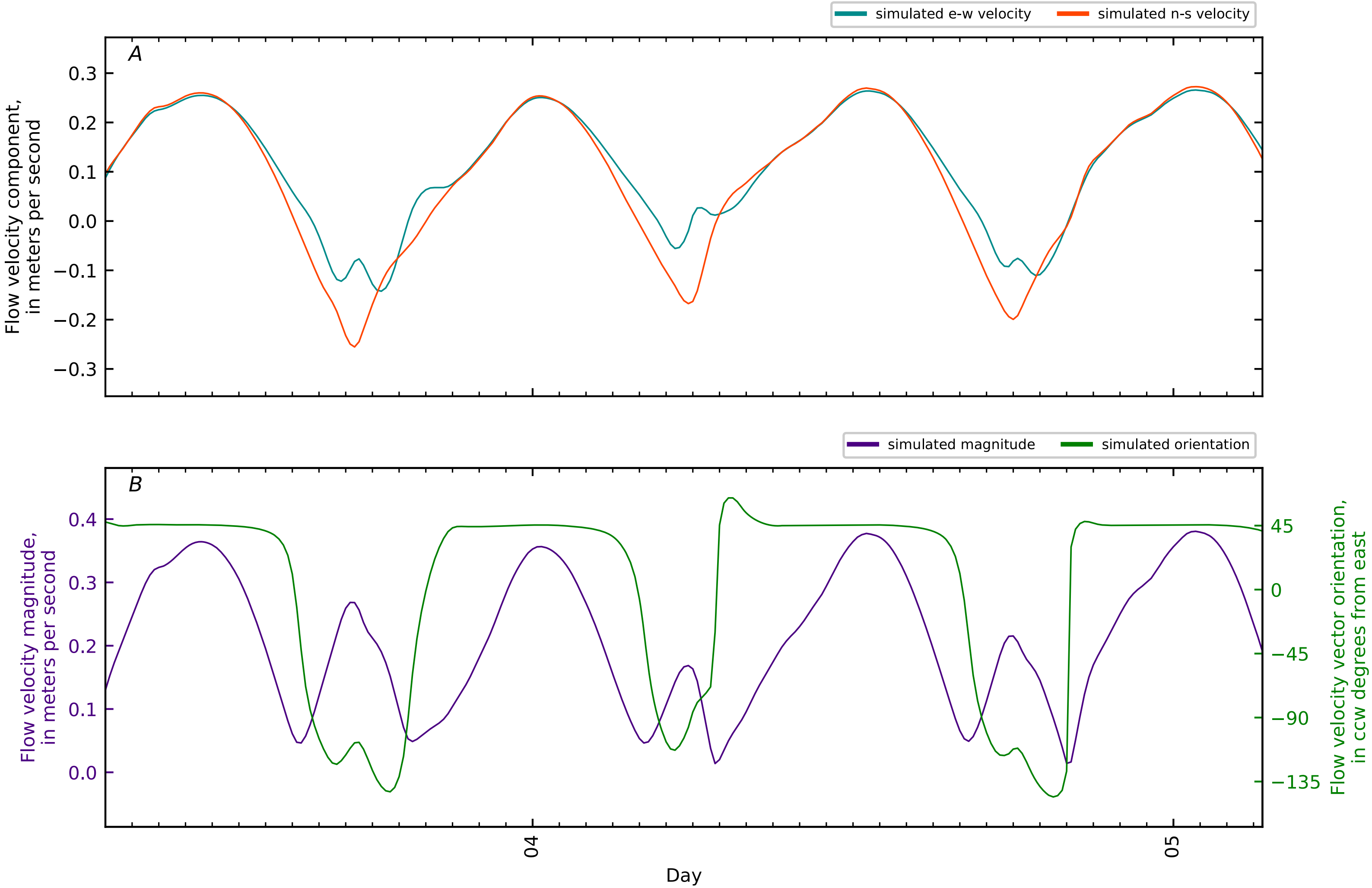

Figure B3-161. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 0, Penob Riv -KM5 nr Cape Jellison boundary. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

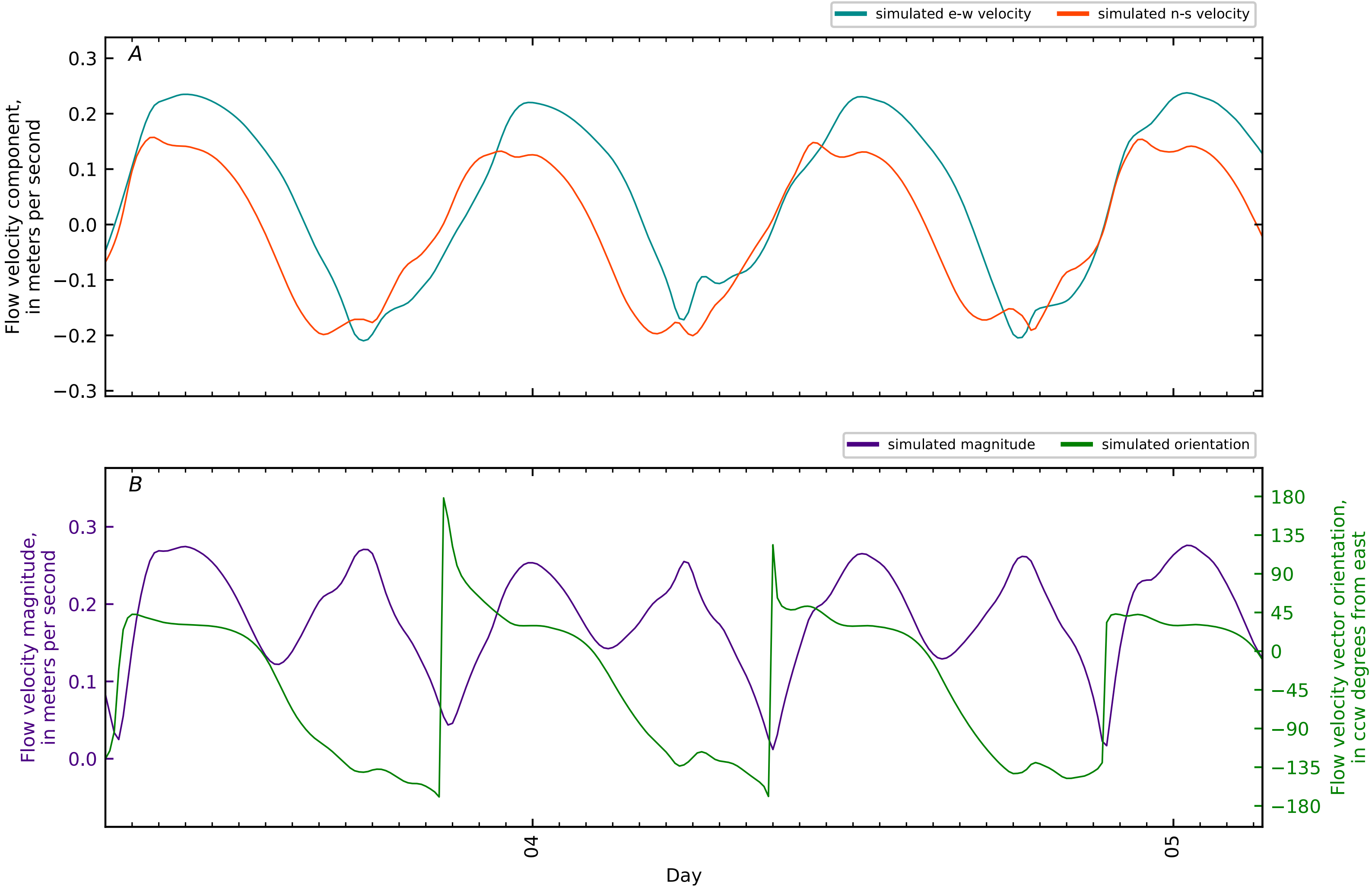

Figure B3-162. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 1, Penob Riv -KM4 nr Cape Jellison XS. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

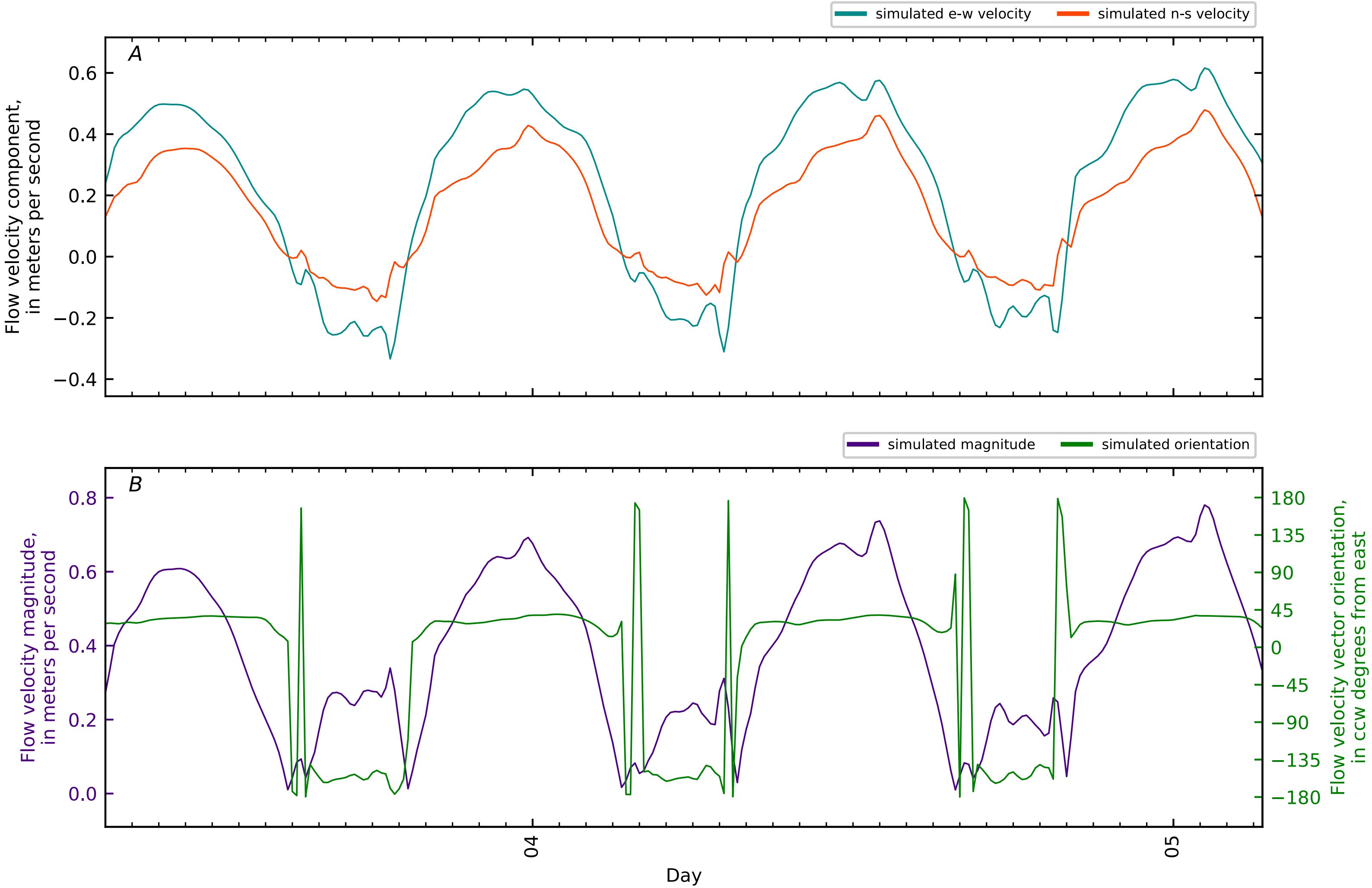

Figure B3-163. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 2, Penob Riv -KM1.5 d/s Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

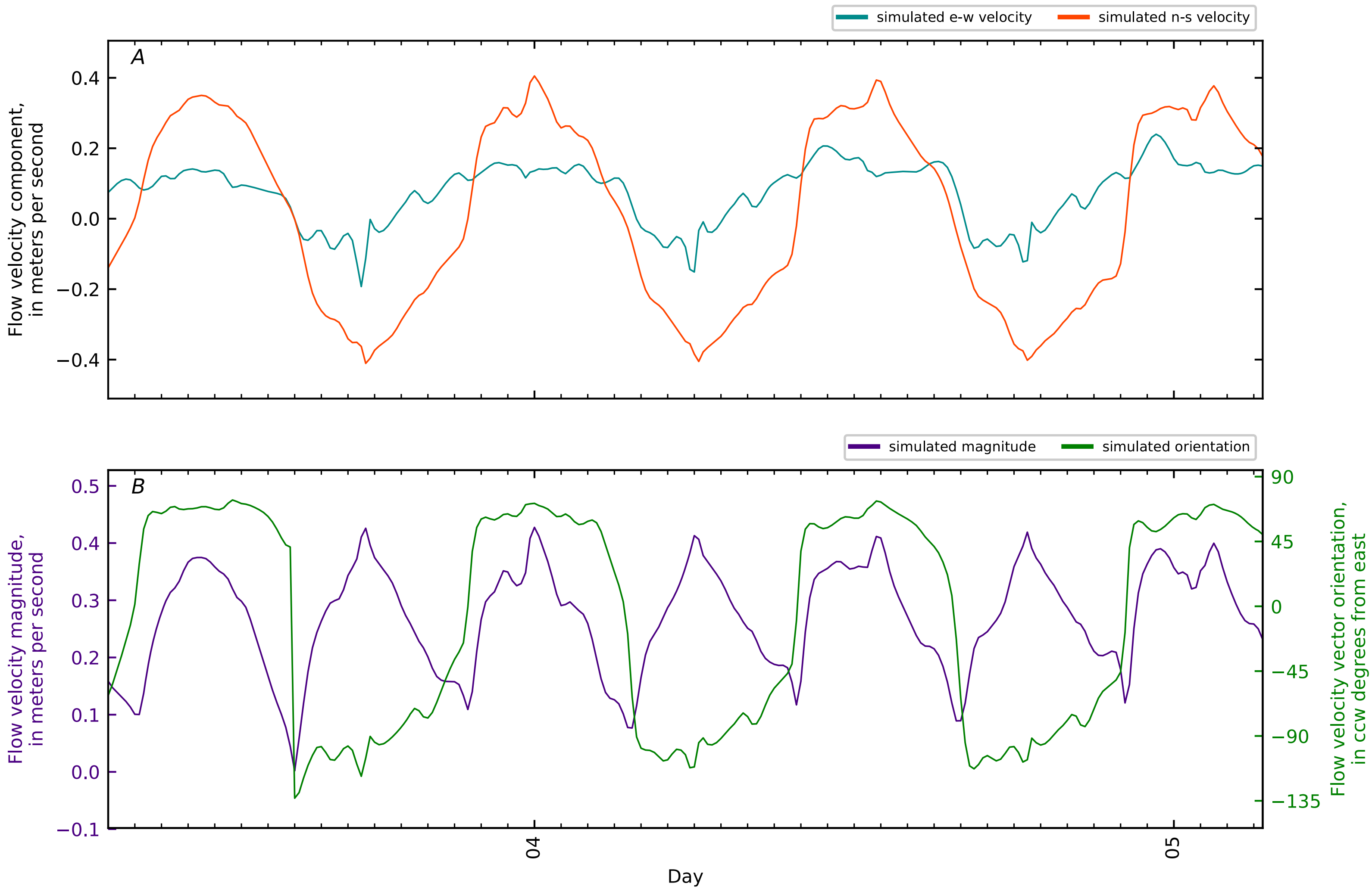

Figure B3-164. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 3, Penob Riv KM0 Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

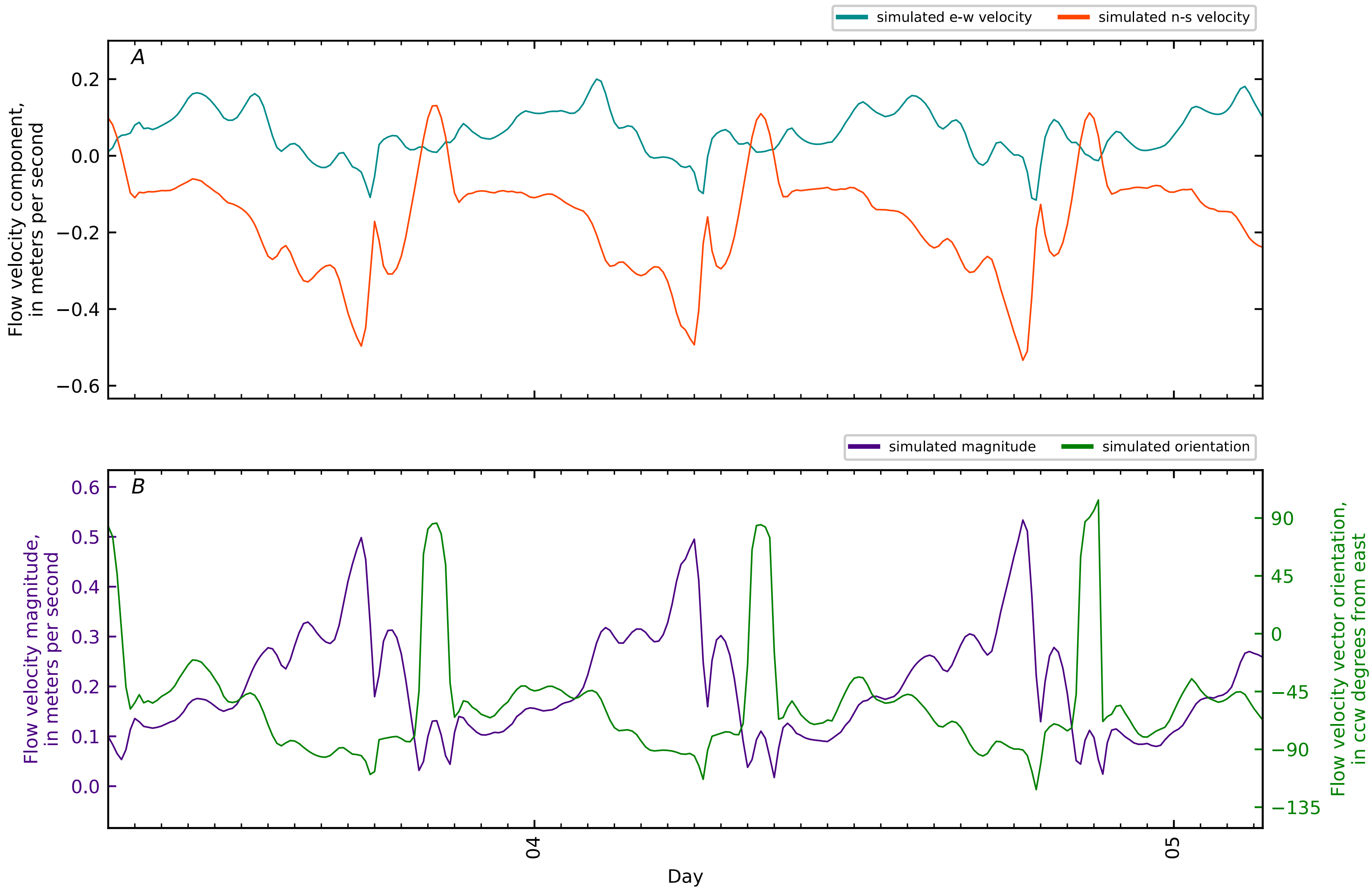

Figure B3-165. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 4, Penob Riv KM0 GS CTD5-01. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

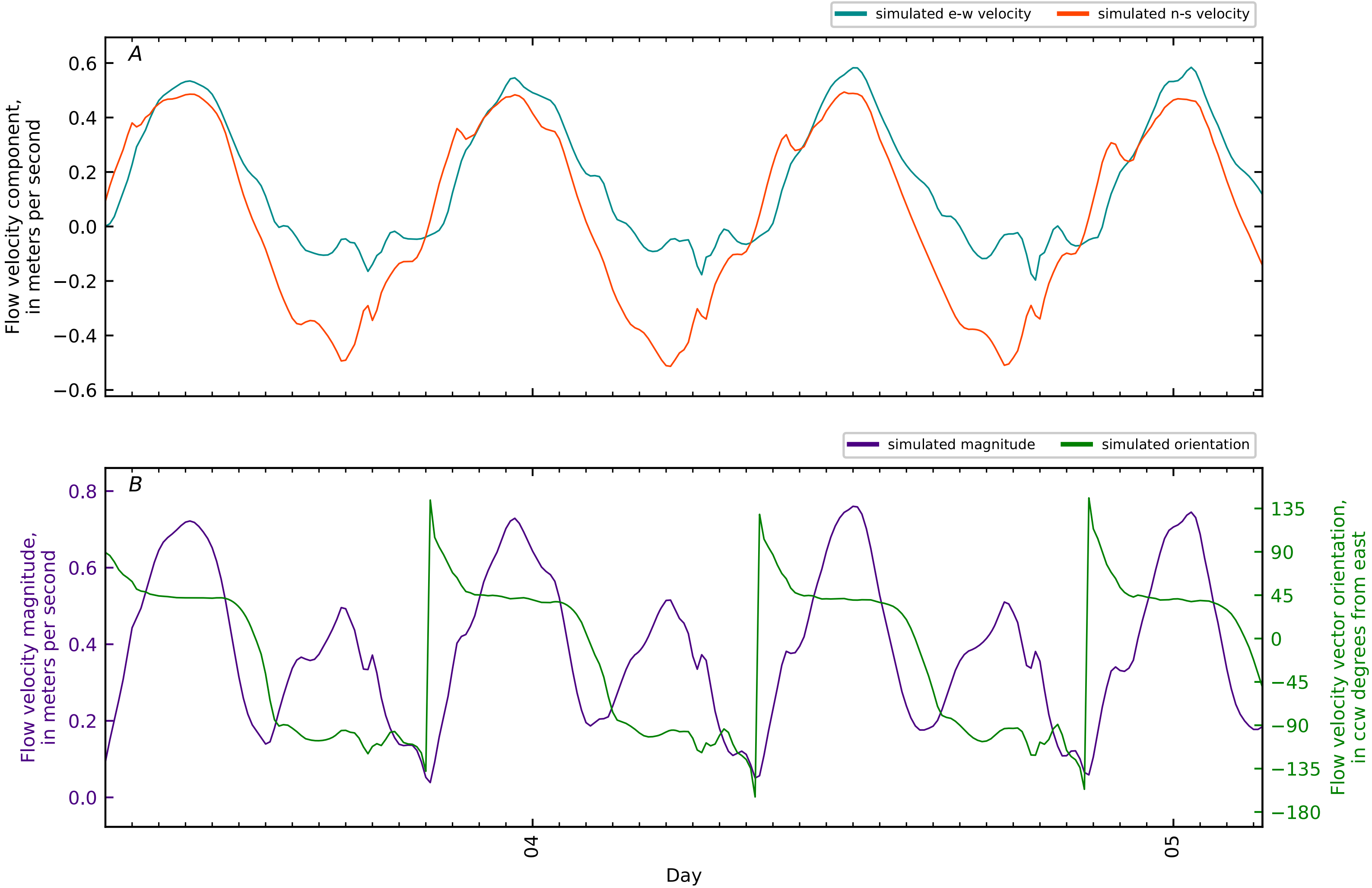

Figure B3-166. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 5, Penob Riv KM0 GS CTD5-02. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

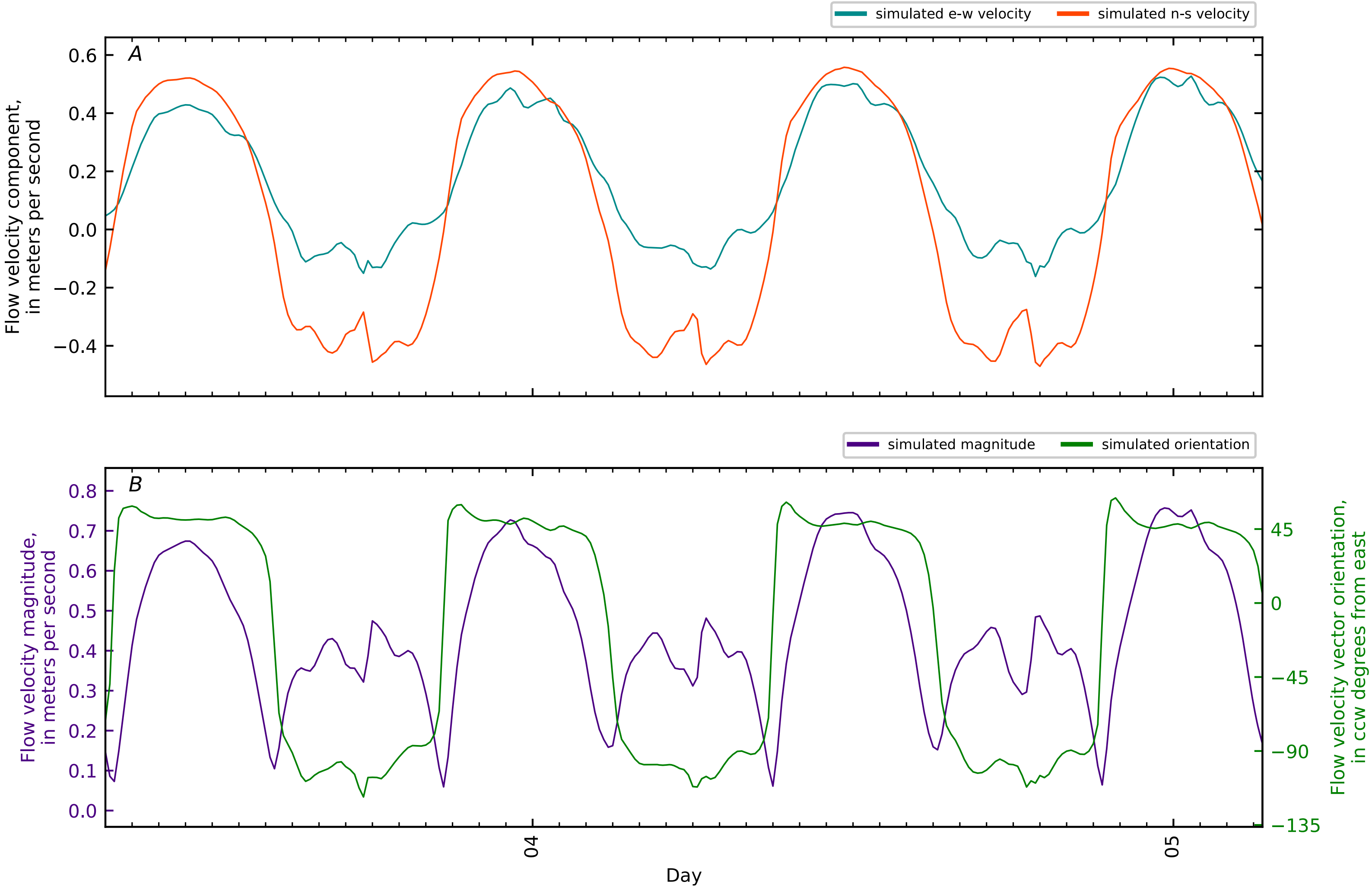

Figure B3-167. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 6, Penob Riv KM0 GS CTD5-03. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

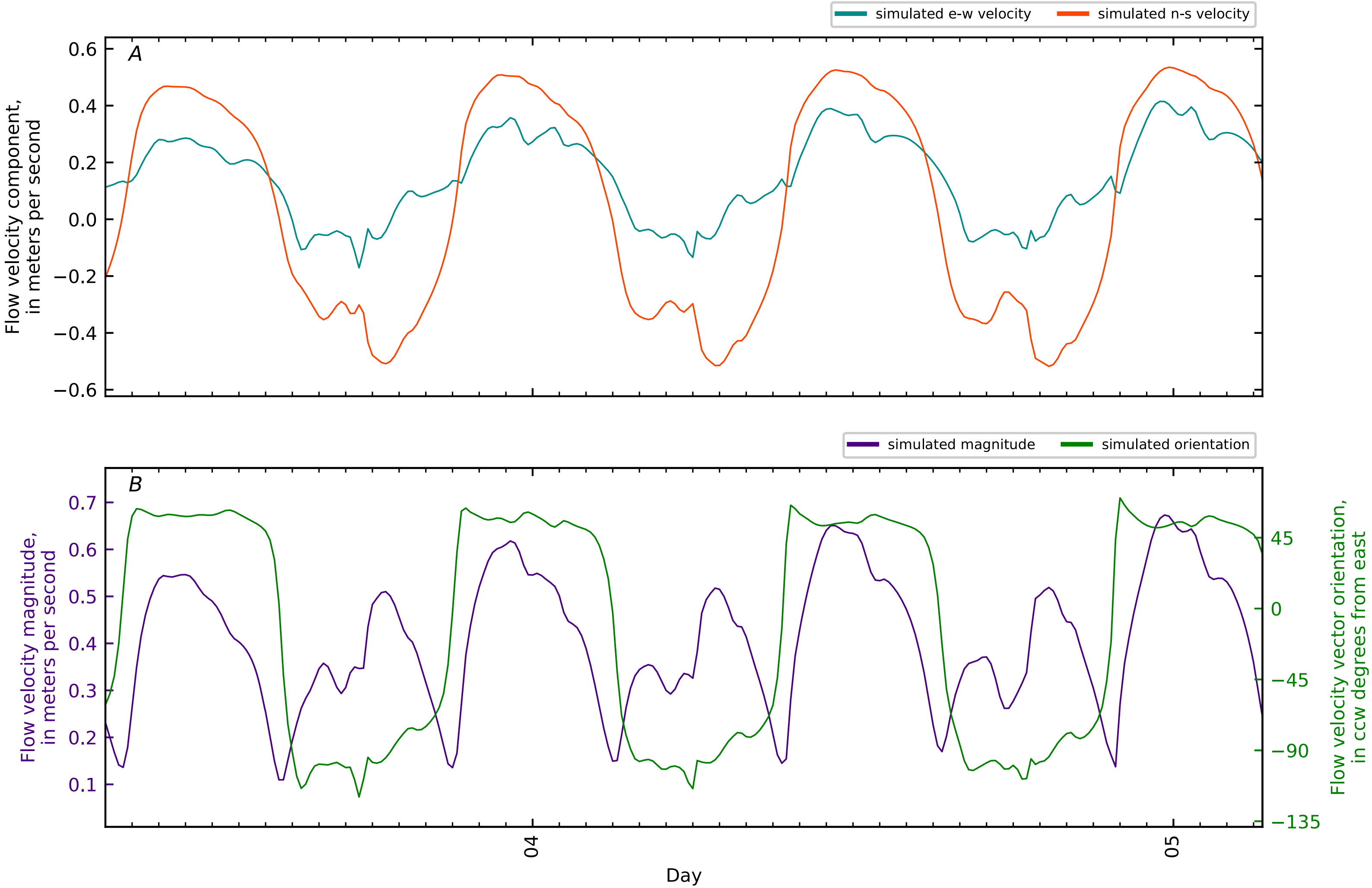

Figure B3-168. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 7, Penob Riv KM0 GS CTD5-04. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

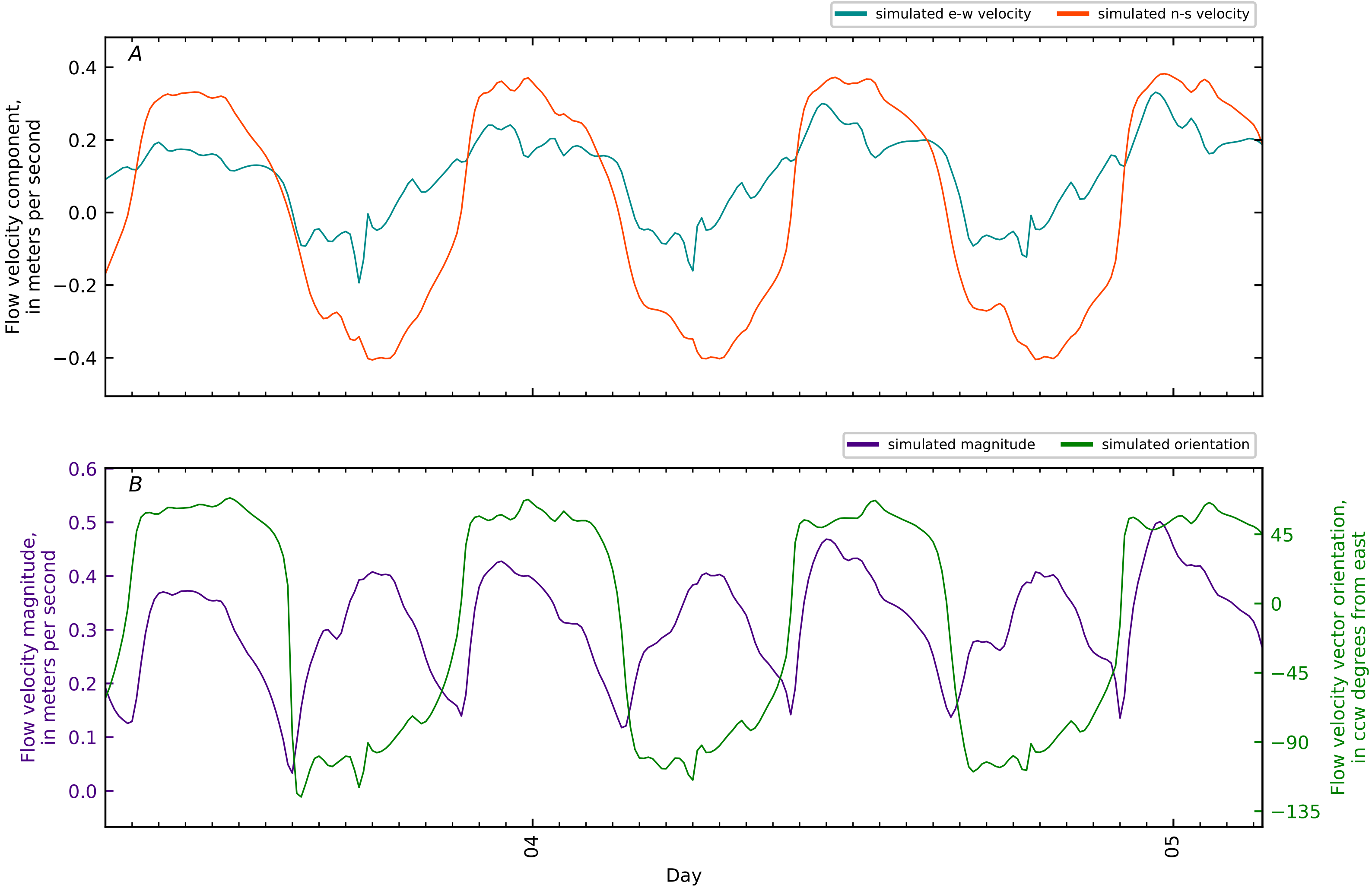

Figure B3-169. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 8, Penob Riv KM0 GS CTD5-05. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

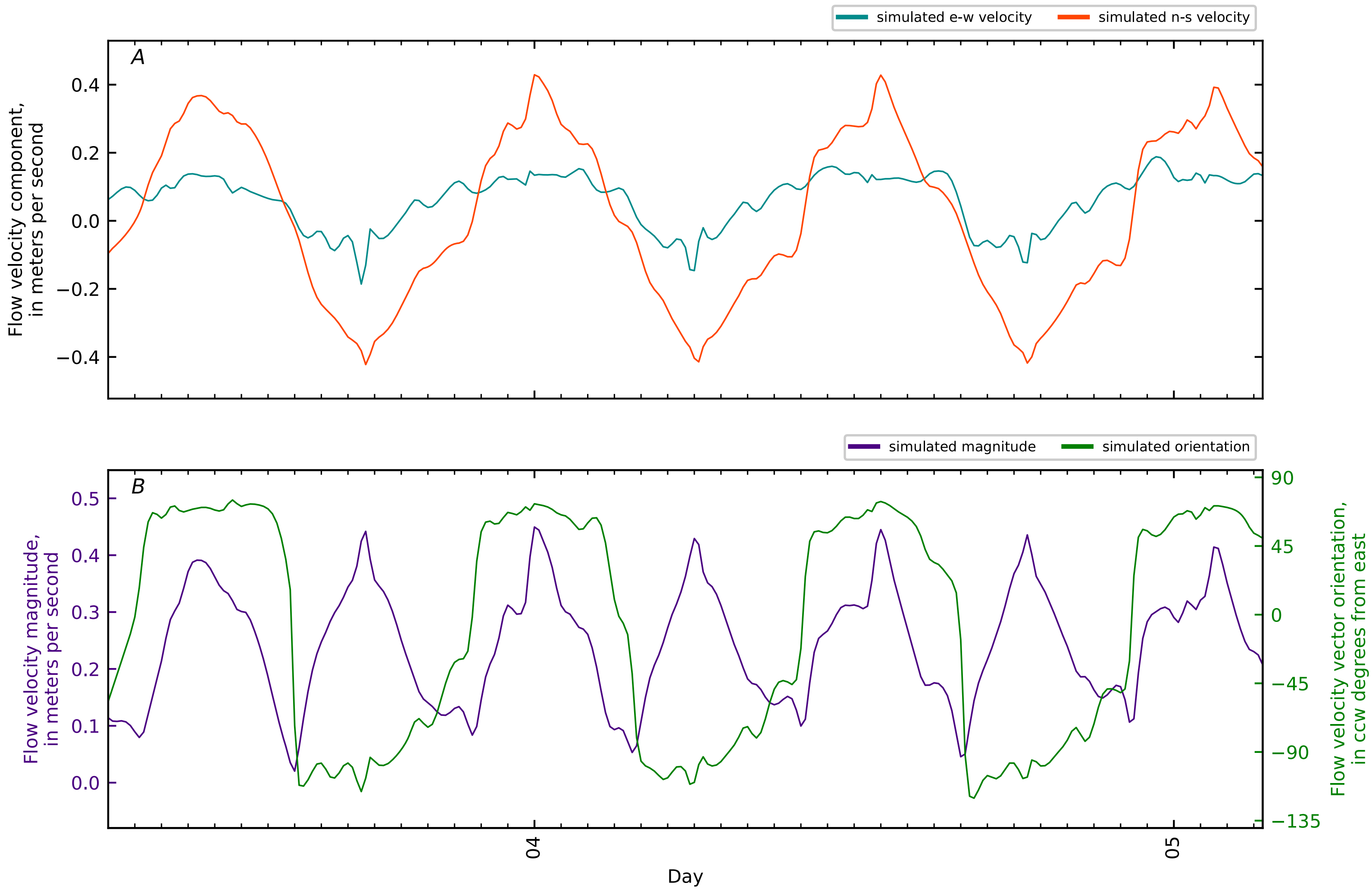

Figure B3-170. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 9, Penob Riv KM0 GS CTD5-06. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

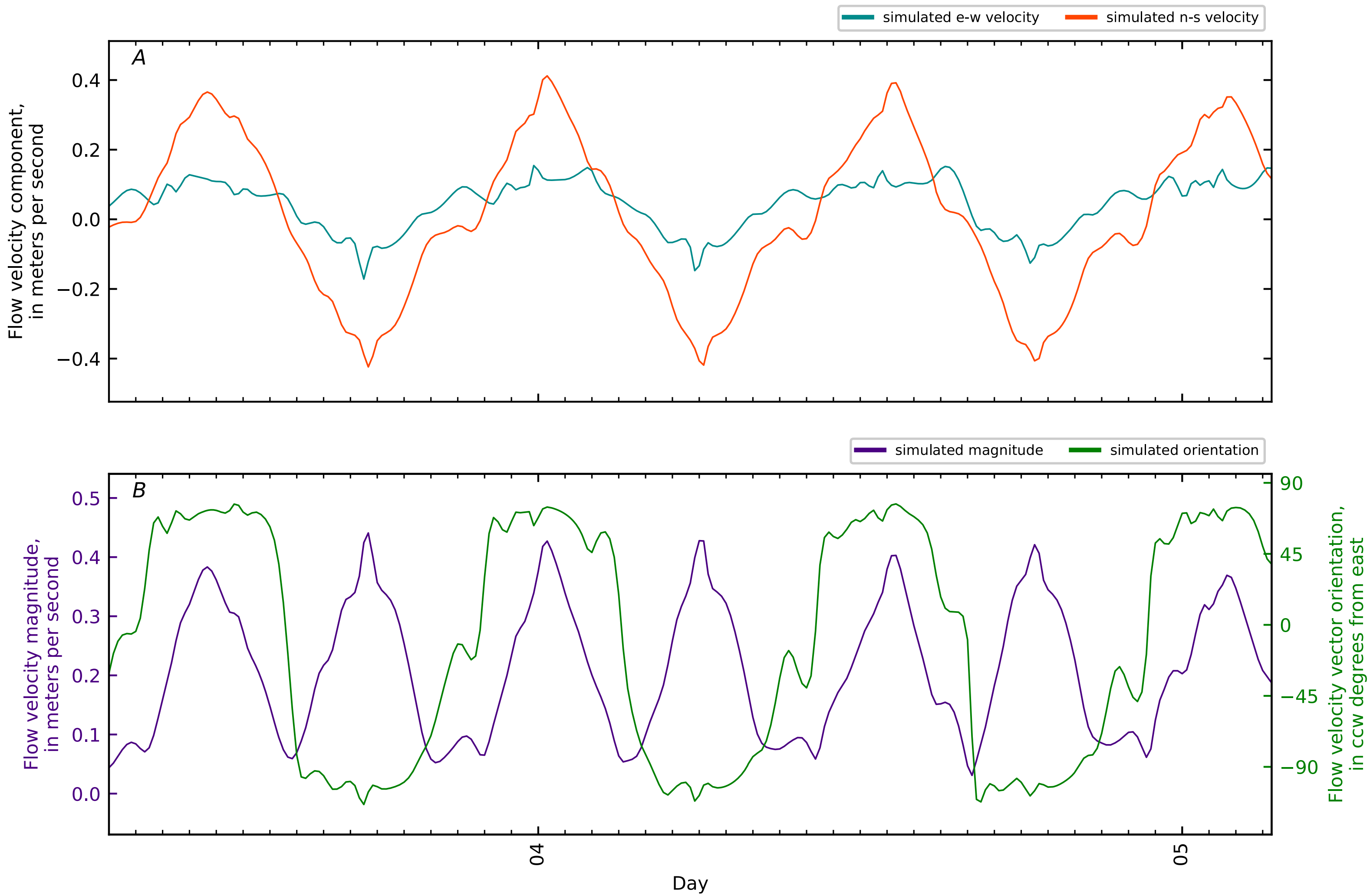

Figure B3-171. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 10, Penob Riv KM0 GS CTD5-07. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

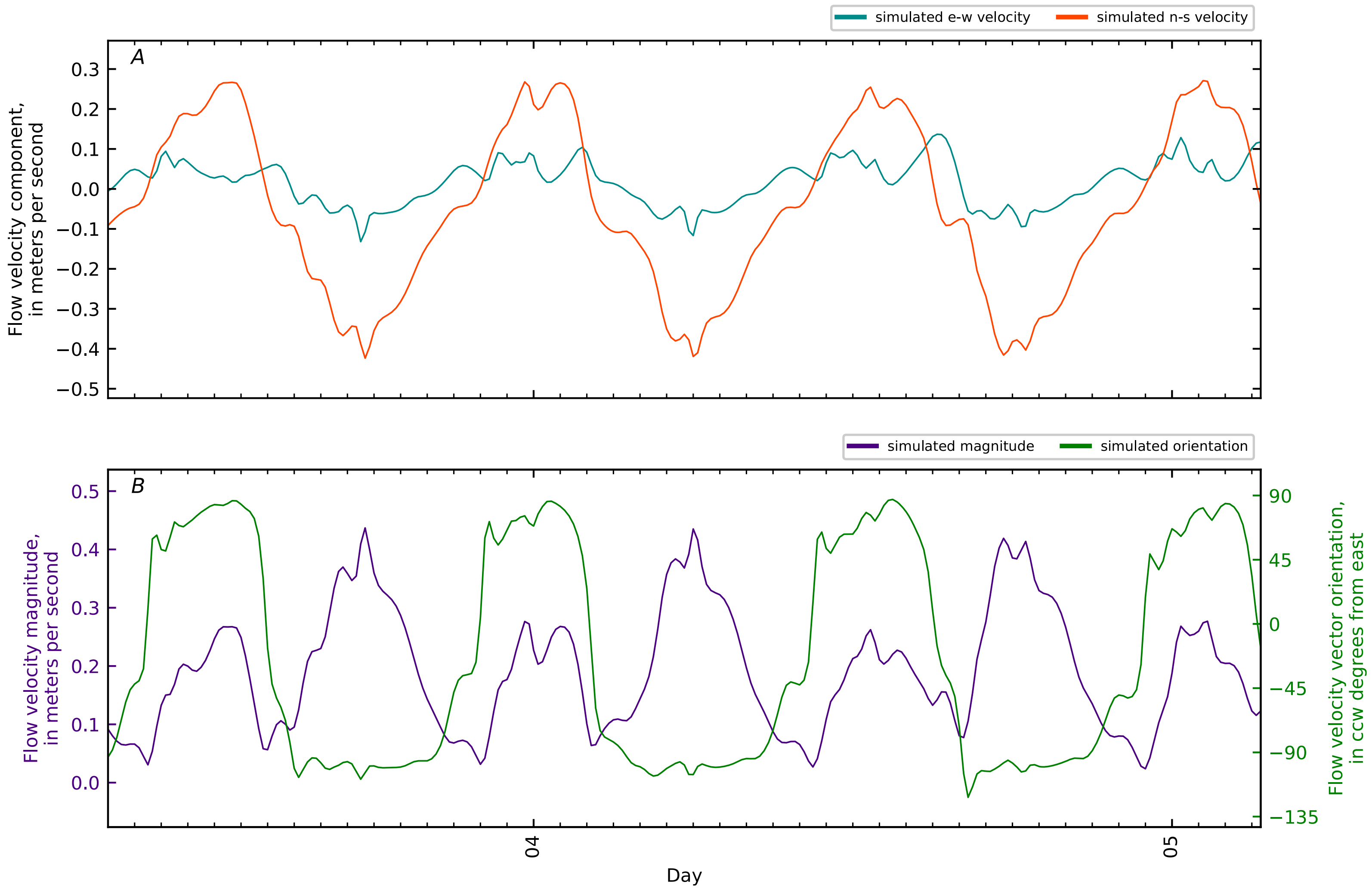

Figure B3-172. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 11, Penob Riv KM0 GS CTD5-08. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

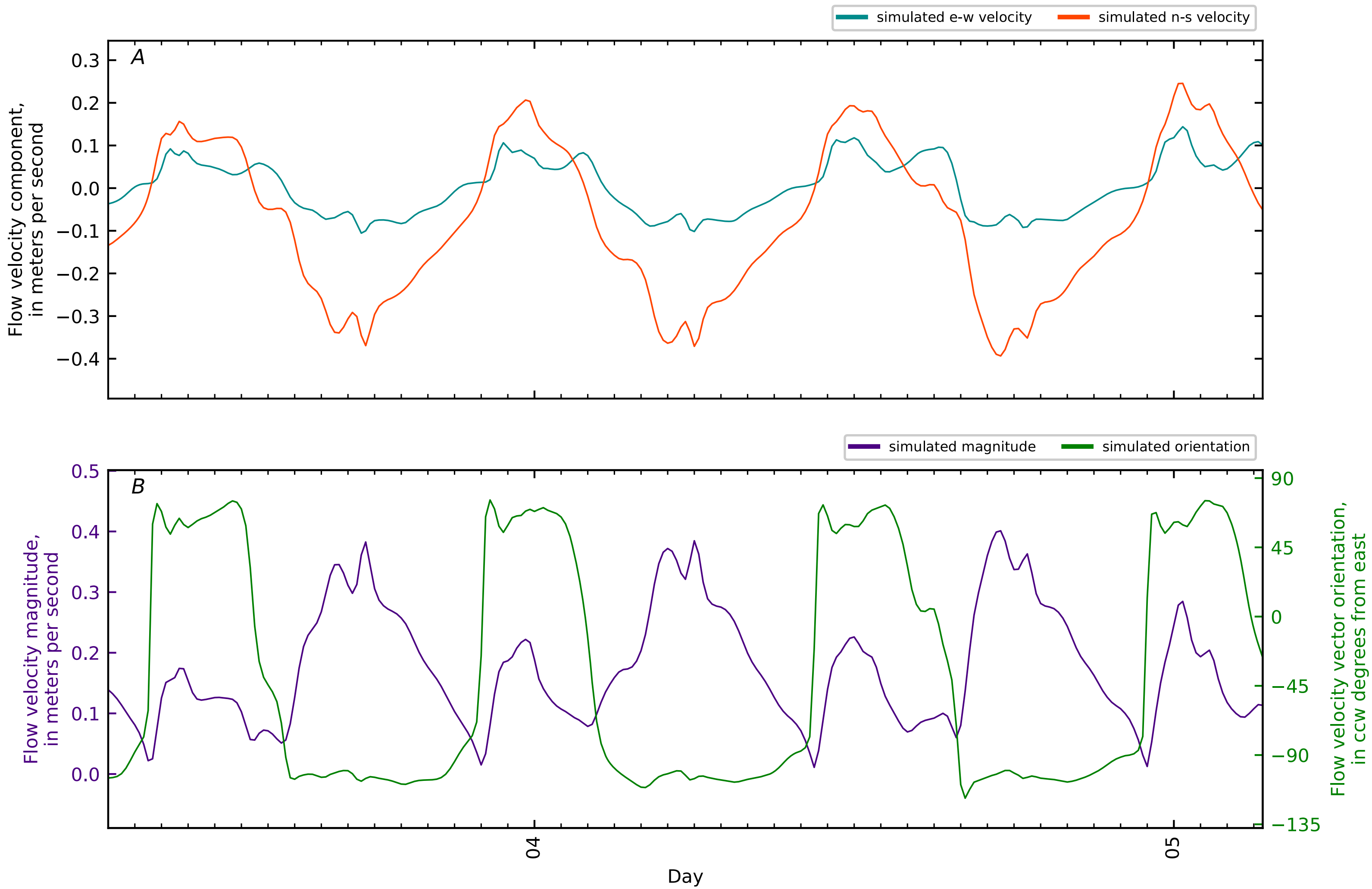

Figure B3-173. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 12, Penob Riv KM0 GS CTD5-09. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

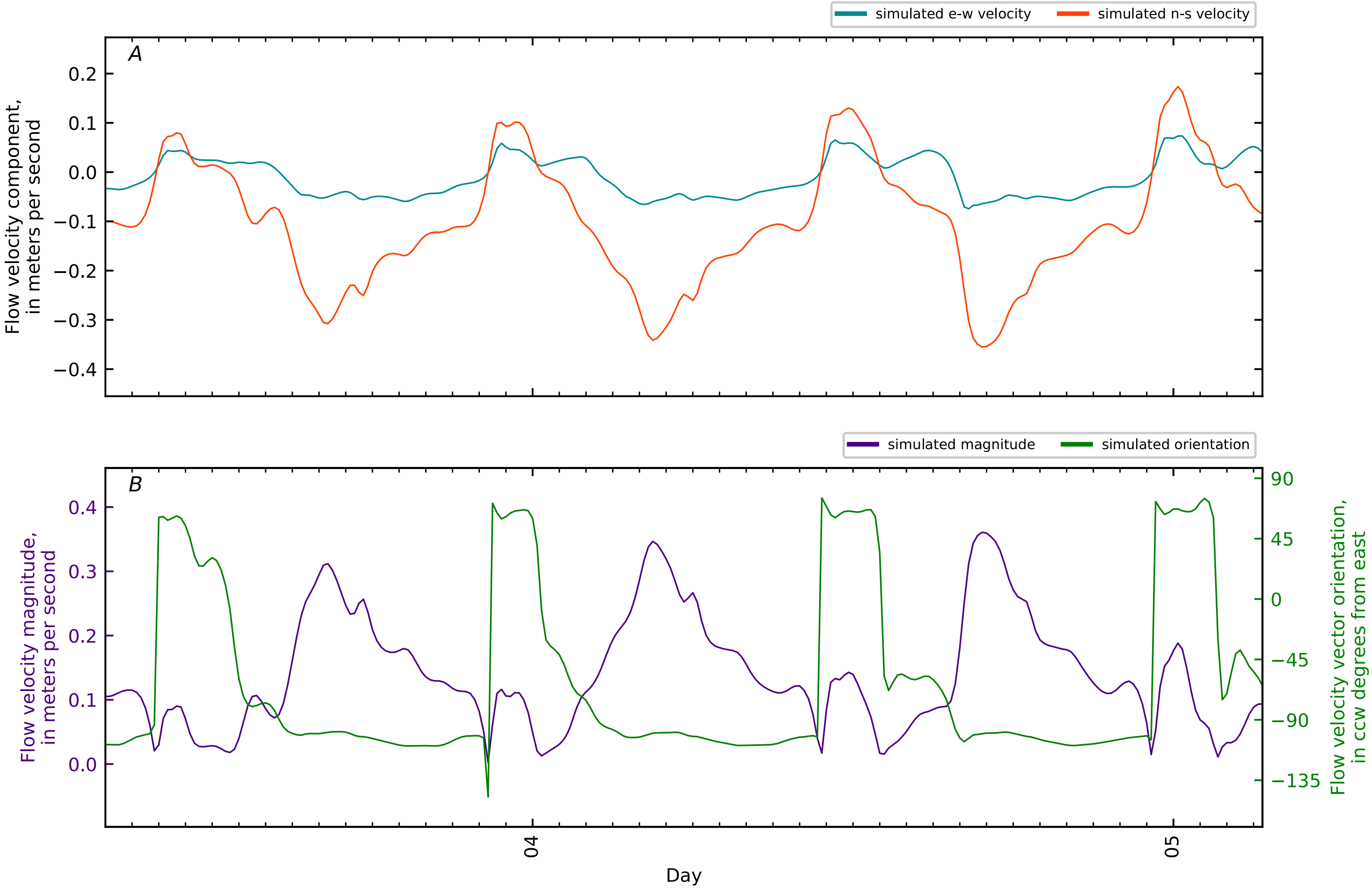

Figure B3-174. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 13, Penob Riv KM0 GS CTD5-10. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

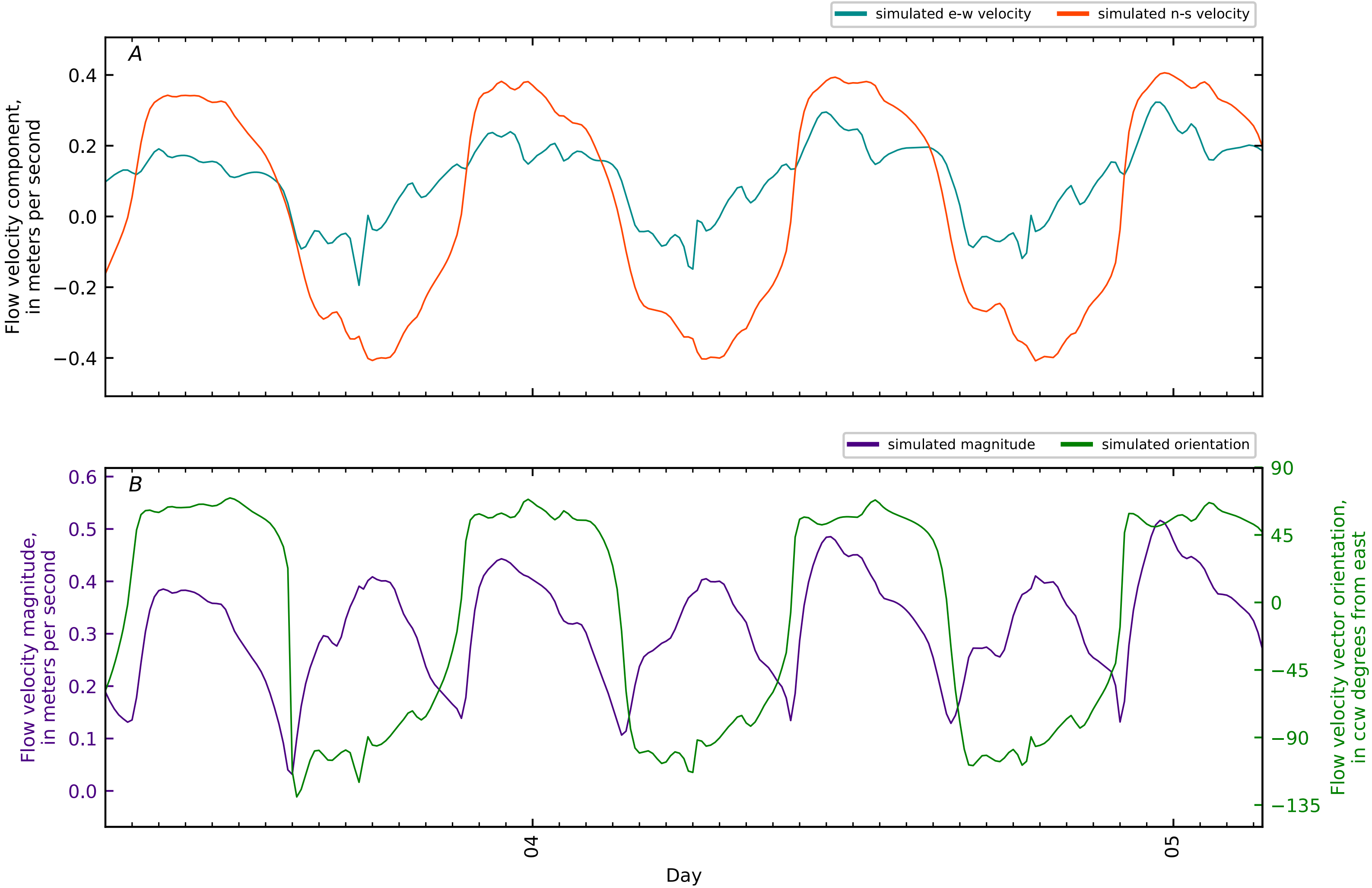

Figure B3-175. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 14, Penob Riv KM0.04 WHOI1 Ft Point 2010. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

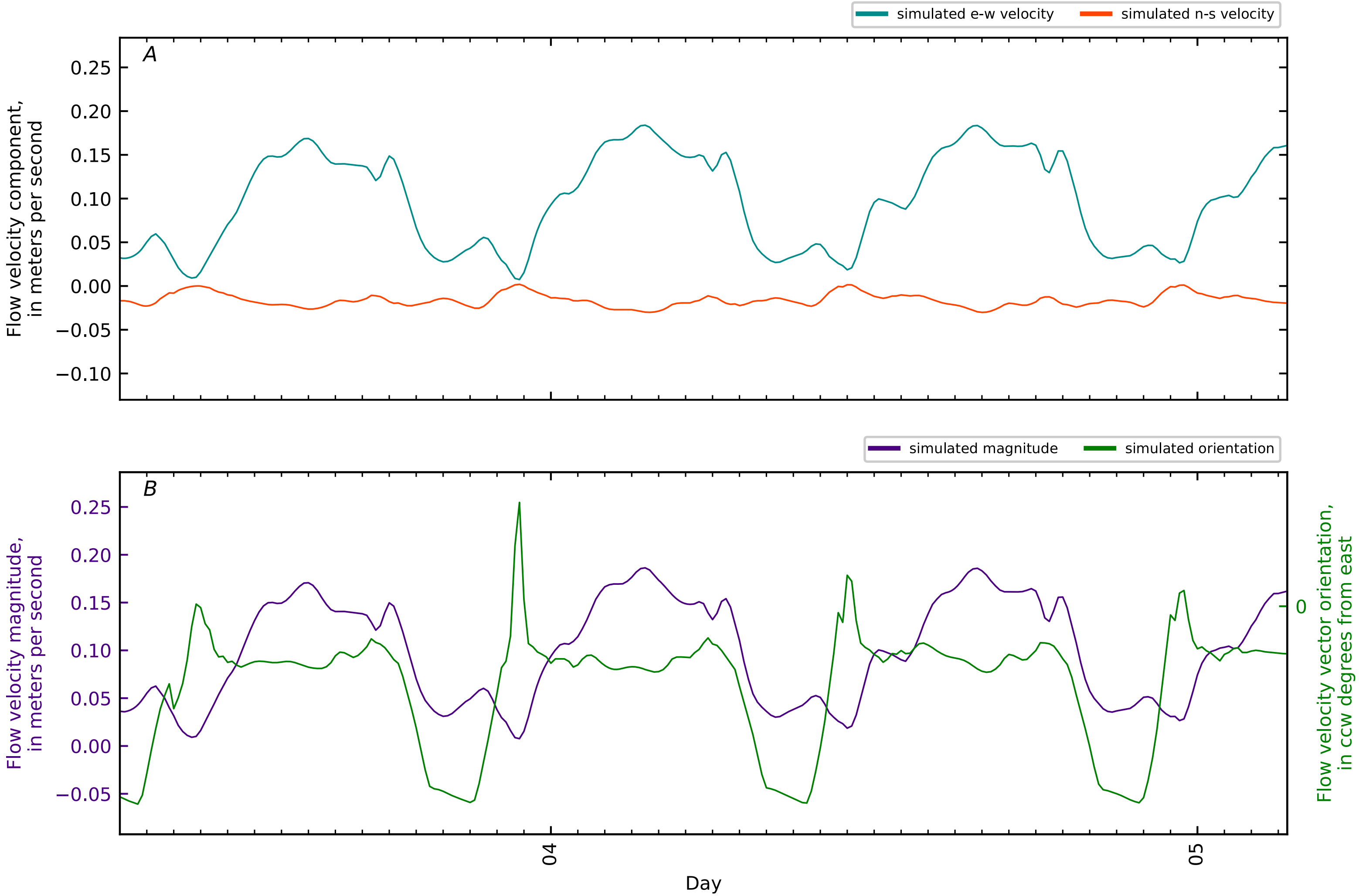

Figure B3-176. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 15, Penob Riv KM0.1 GS 442810068480101 at Ft. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

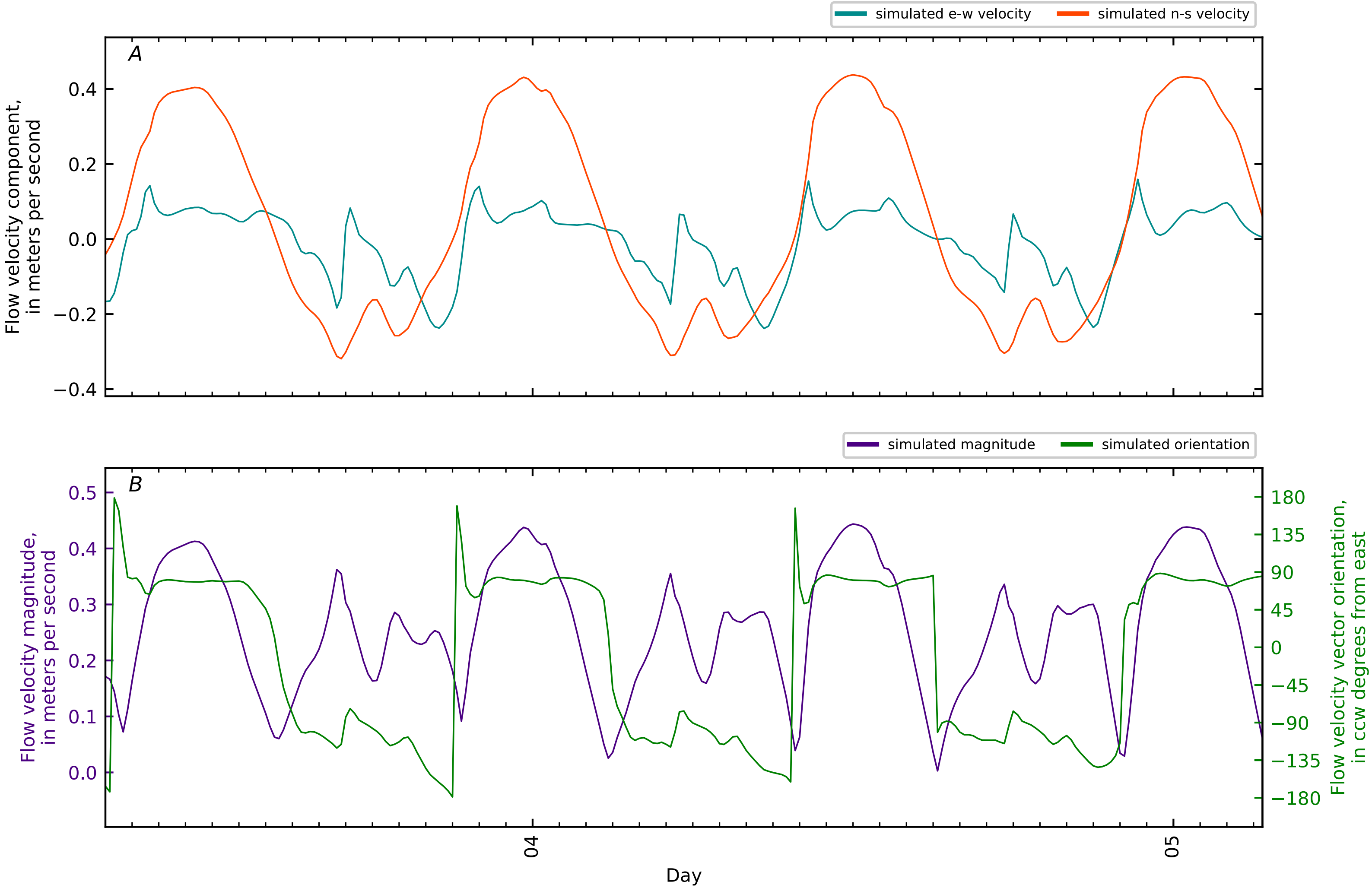

Figure B3-177. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 16, Penob Riv KM1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

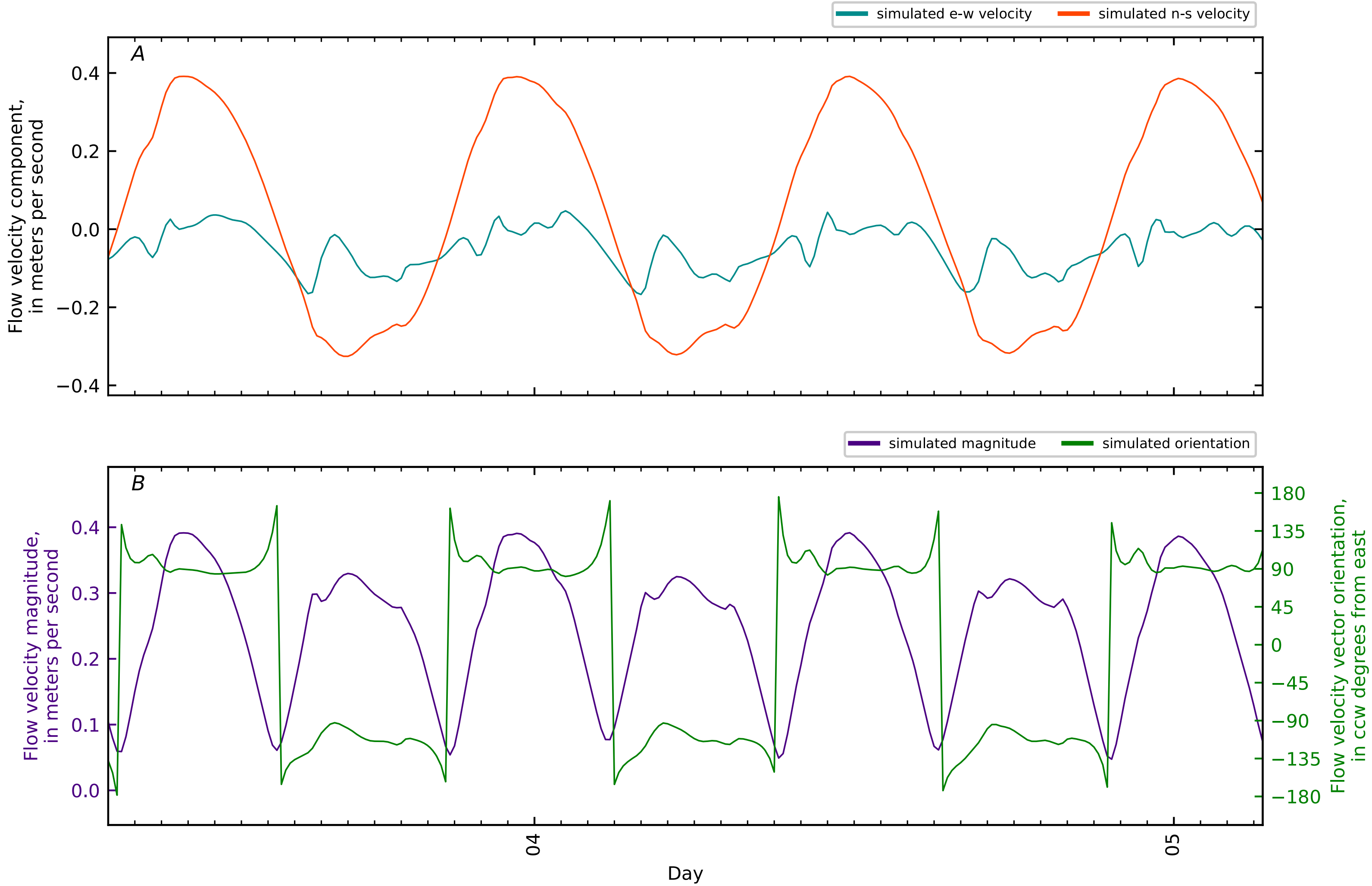

Figure B3-178. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 17, Penob Riv KM2. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

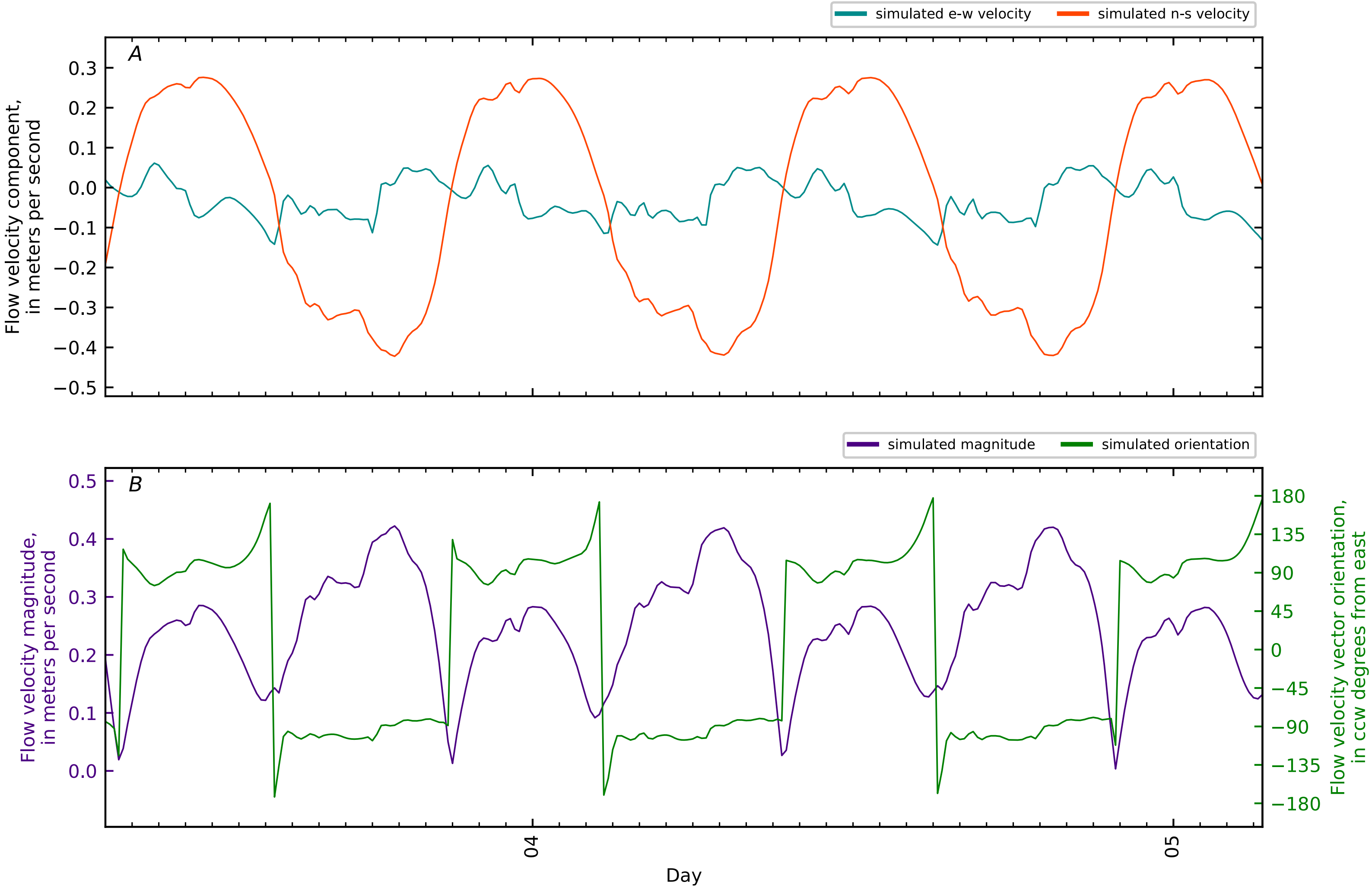

Figure B3-179. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 18, Penob Riv KM3. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

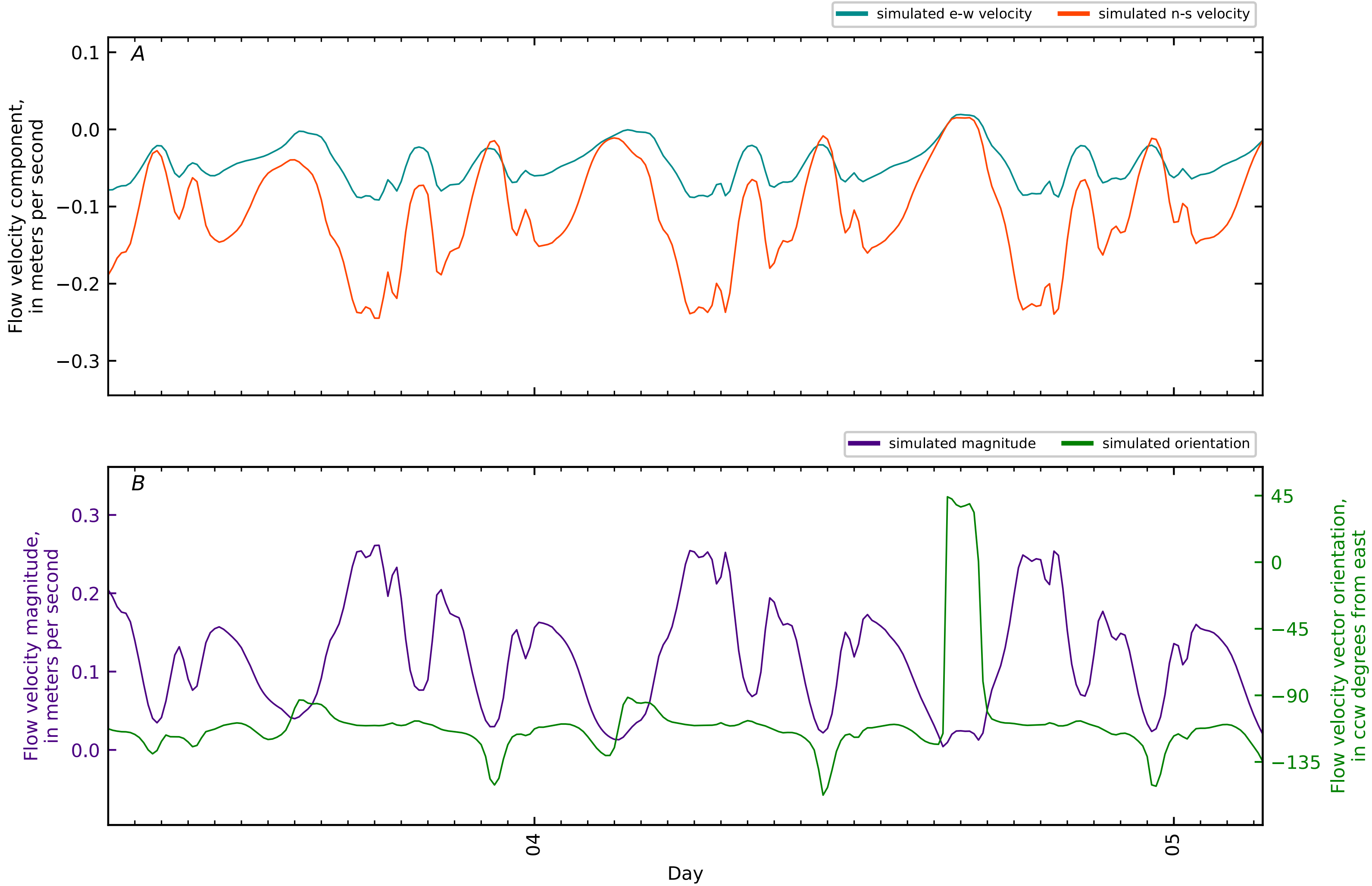

Figure B3-180. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 19, Penob Riv KM3.8 GS CTD3-01. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

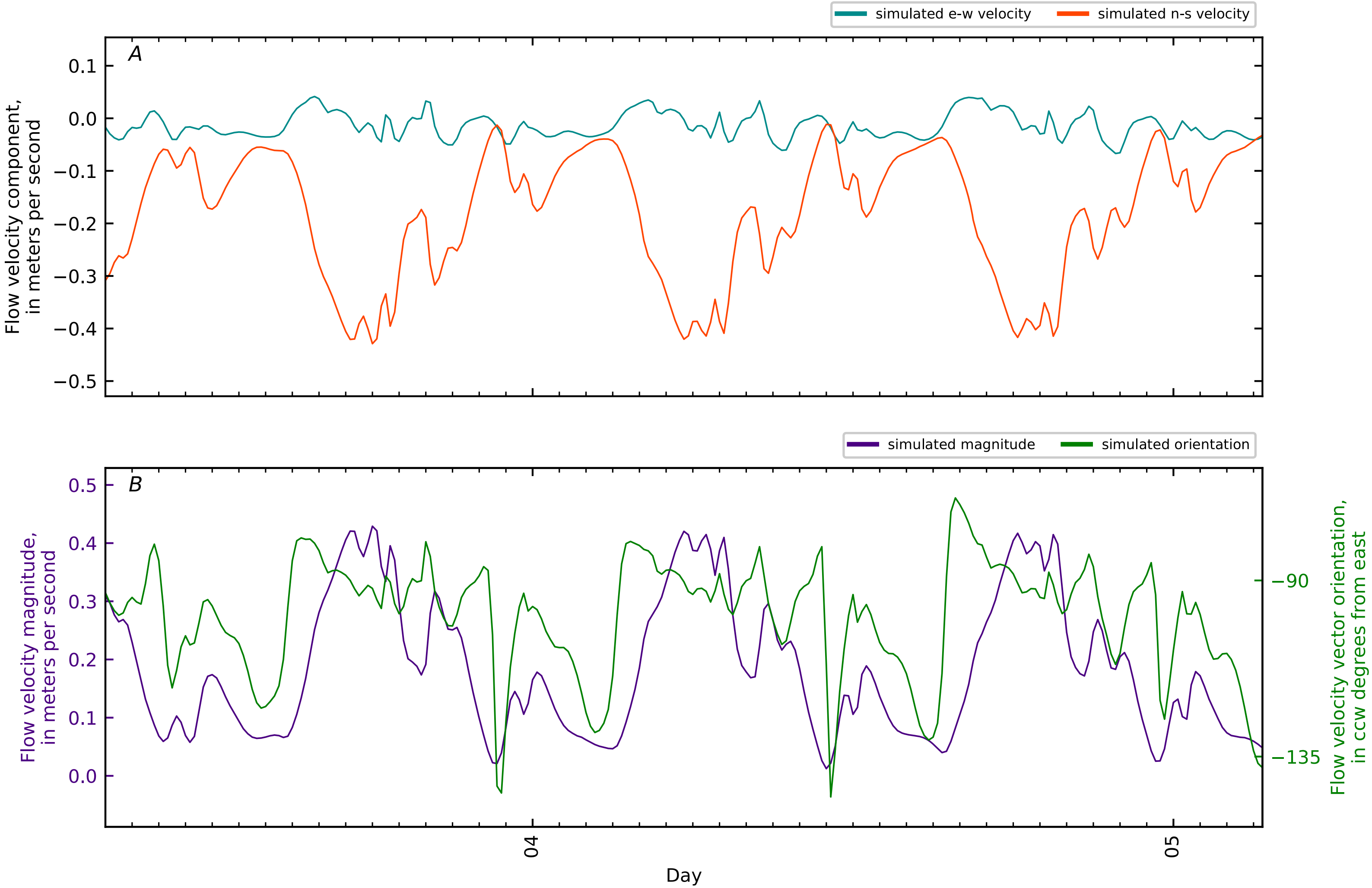

Figure B3-181. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 20, Penob Riv KM3.8 GS CTD3-02. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

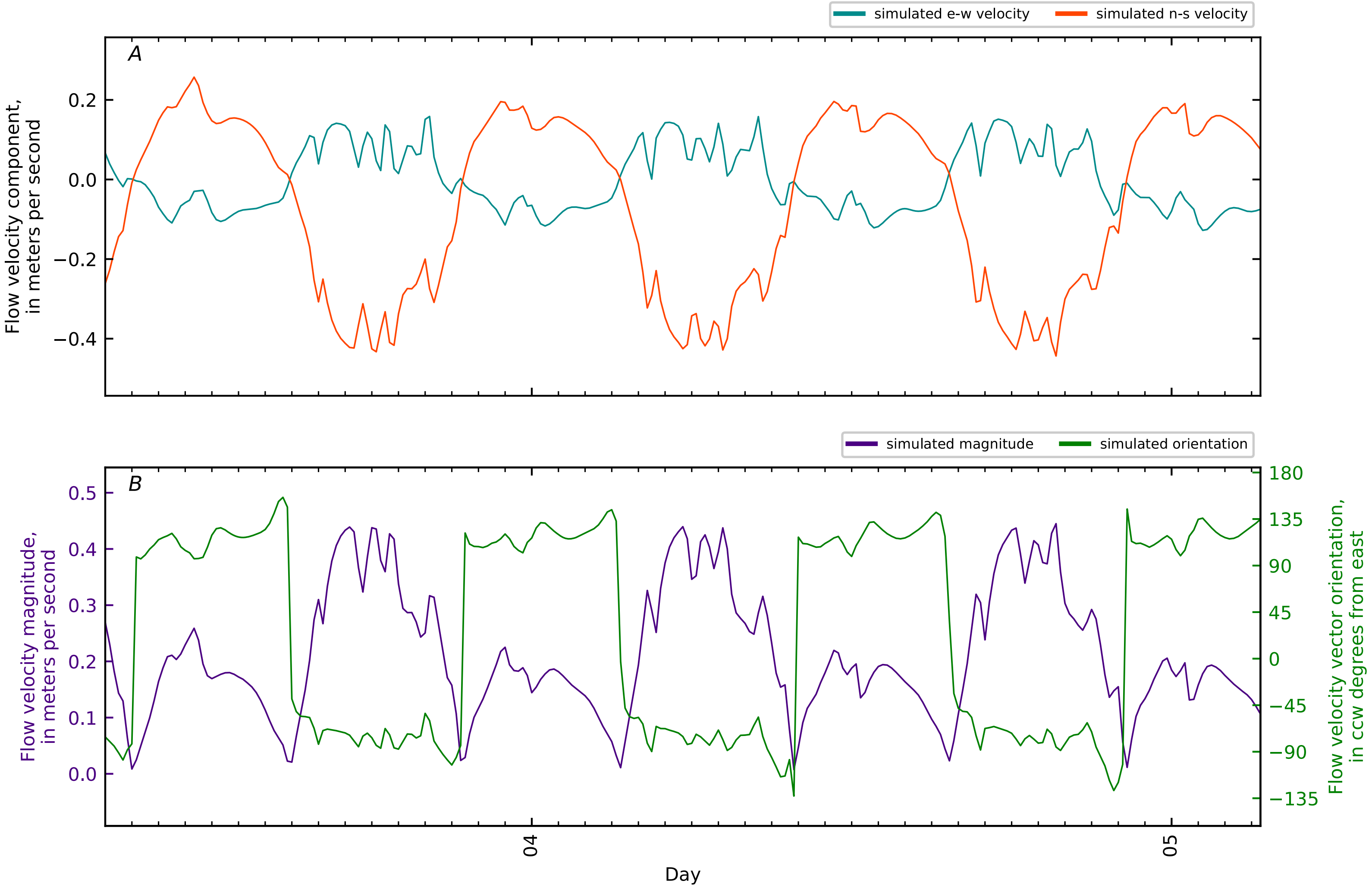

Figure B3-182. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 21, Penob Riv KM3.8 GS CTD3-03. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

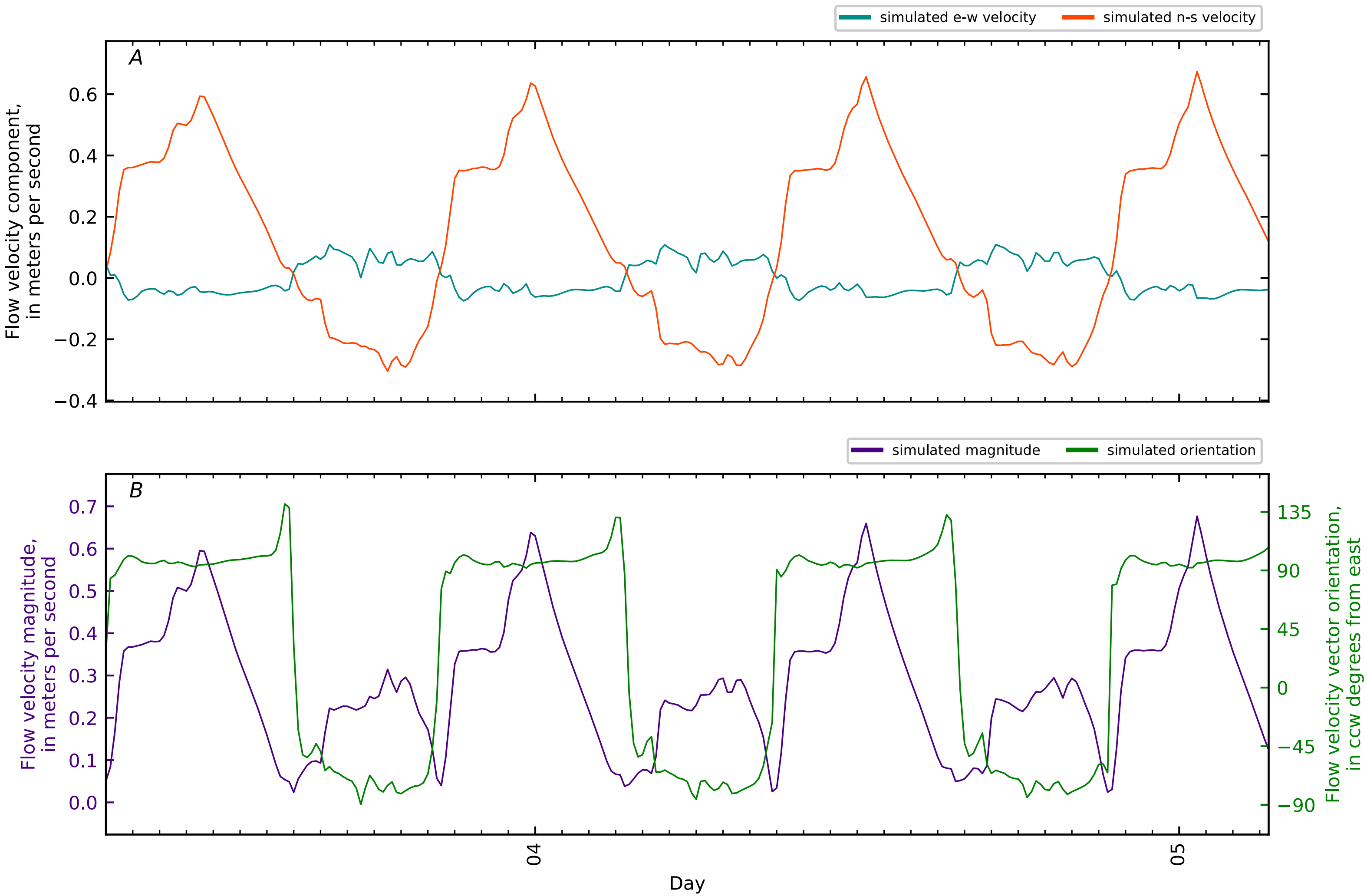

Figure B3-183. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 22, Penob Riv KM3.8 GS CTD3-04. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

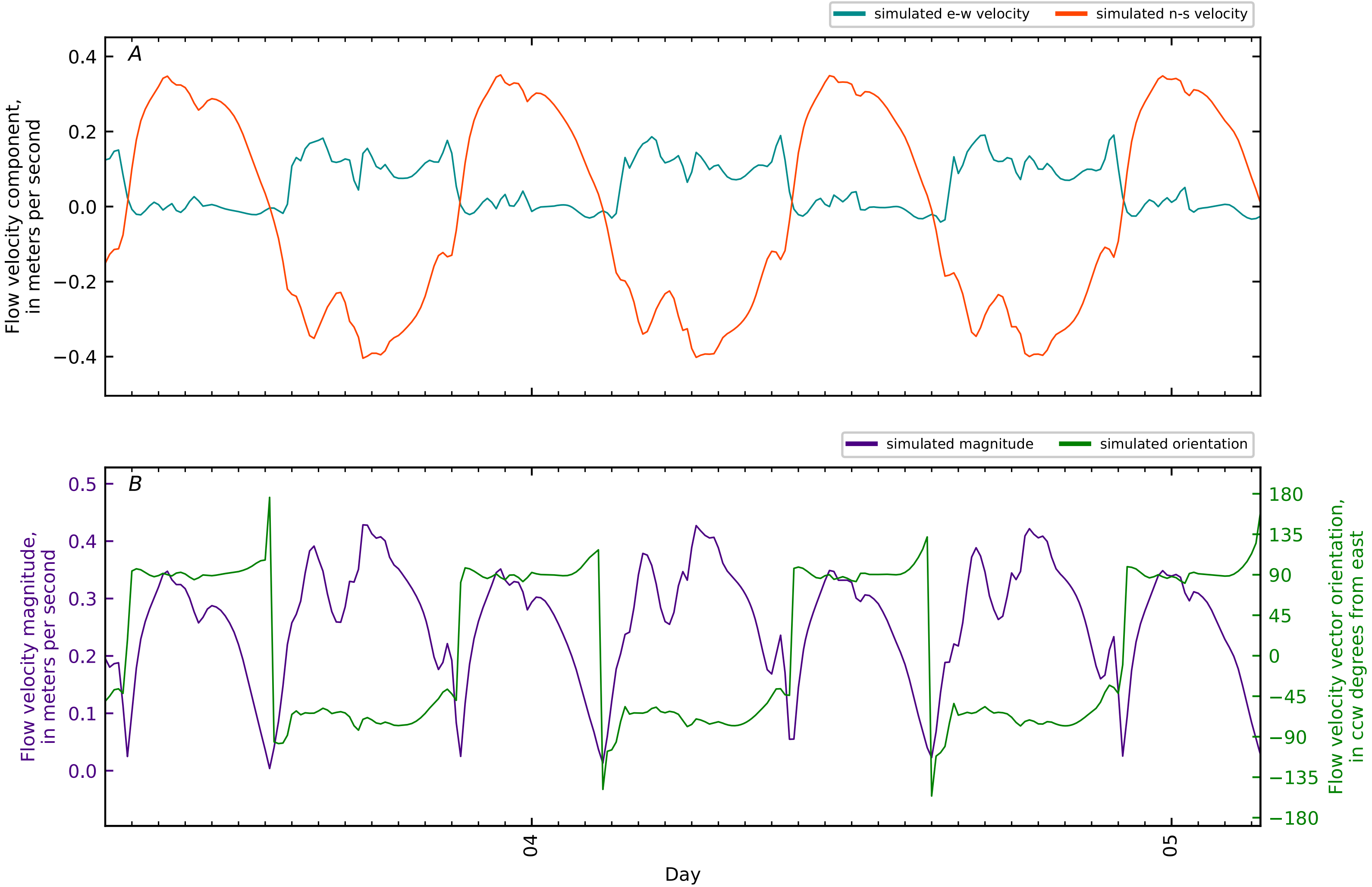

Figure B3-184. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 23, Penob Riv KM3.8 GS CTD3-05. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

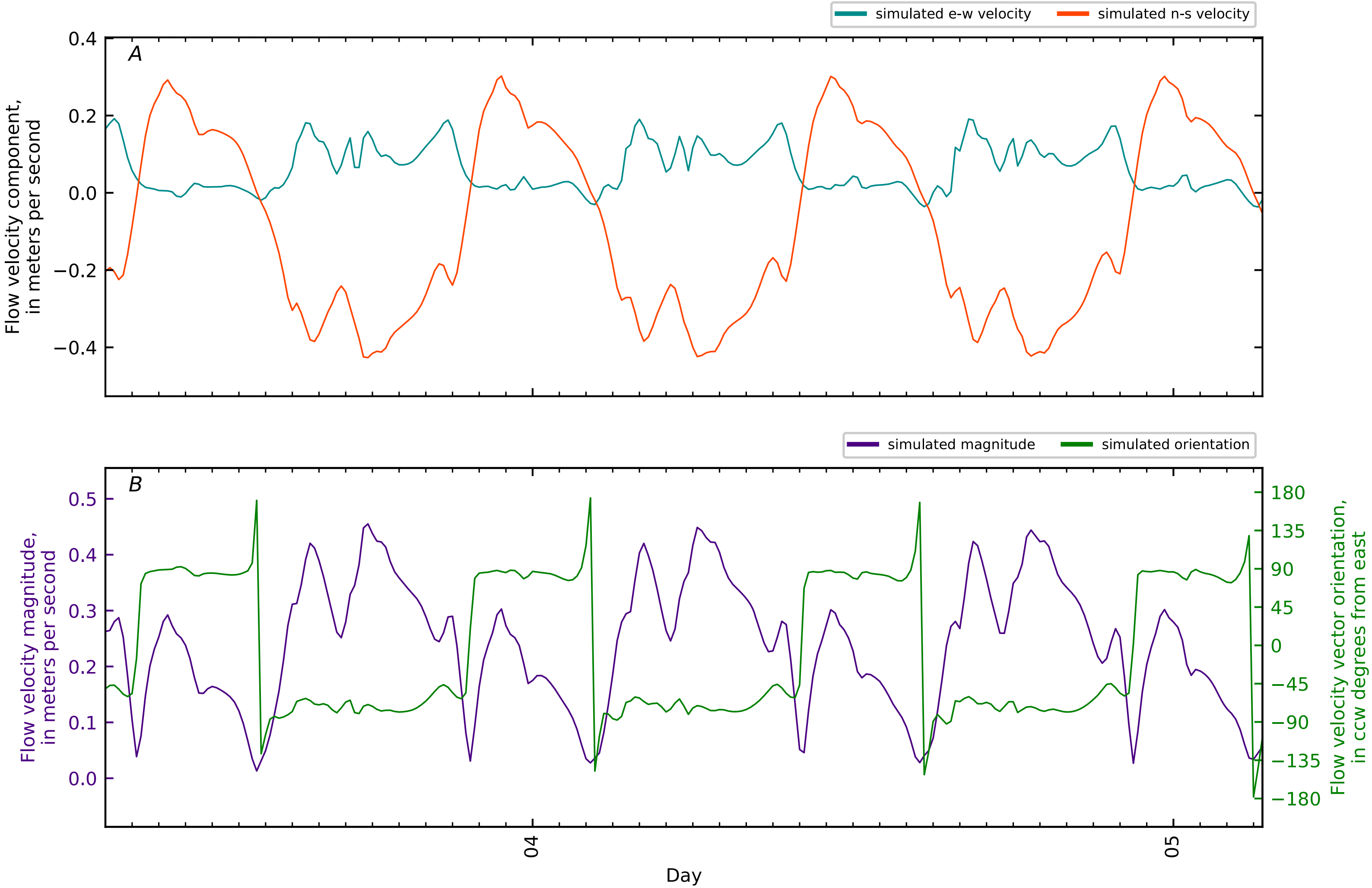

Figure B3-185. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 24, Penob Riv KM3.8 GS CTD3-06. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

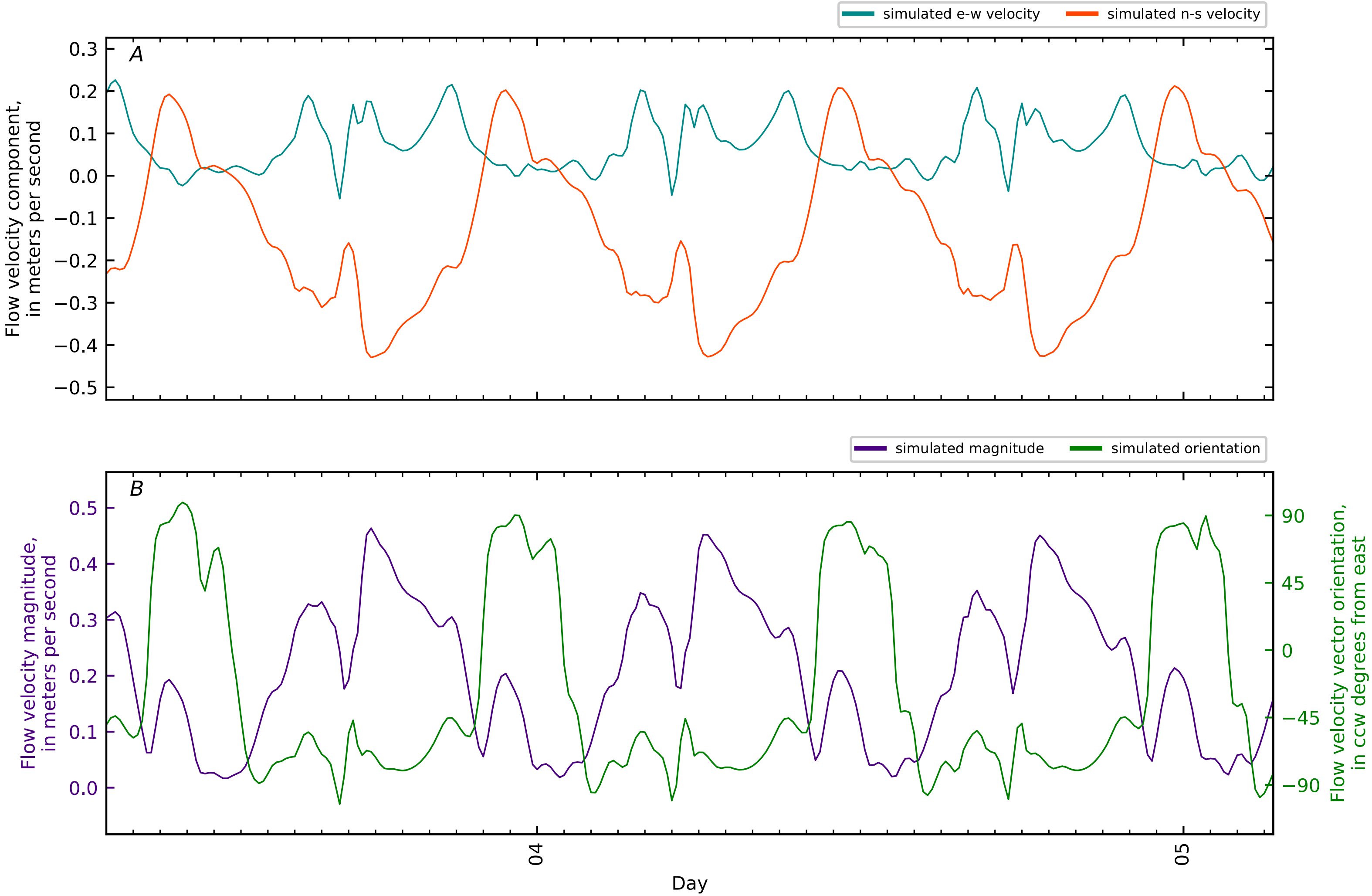

Figure B3-186. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 25, Penob Riv KM3.8 GS CTD3-07. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

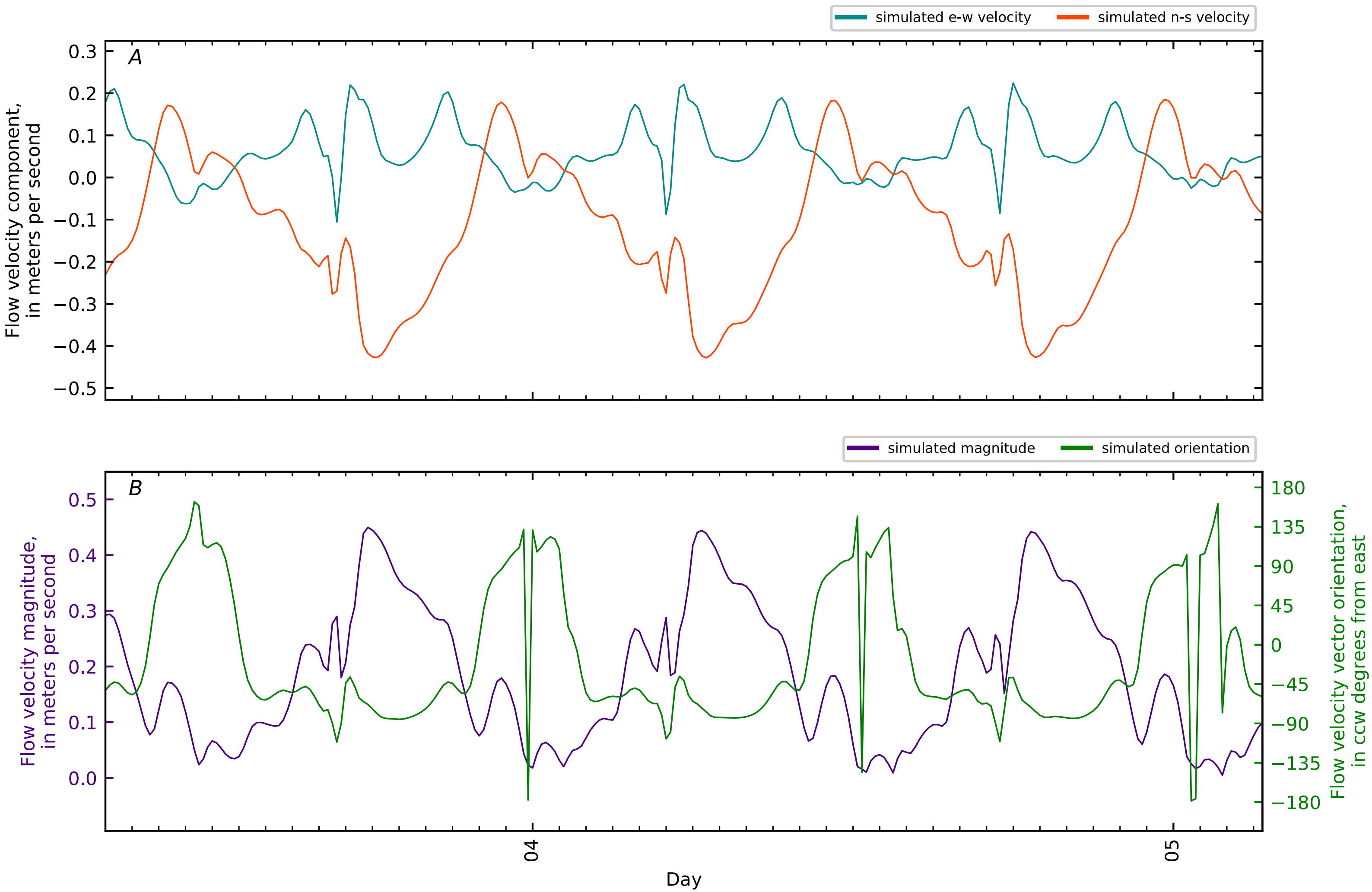

Figure B3-187. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 26, Penob Riv KM3.8 GS CTD3-08. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

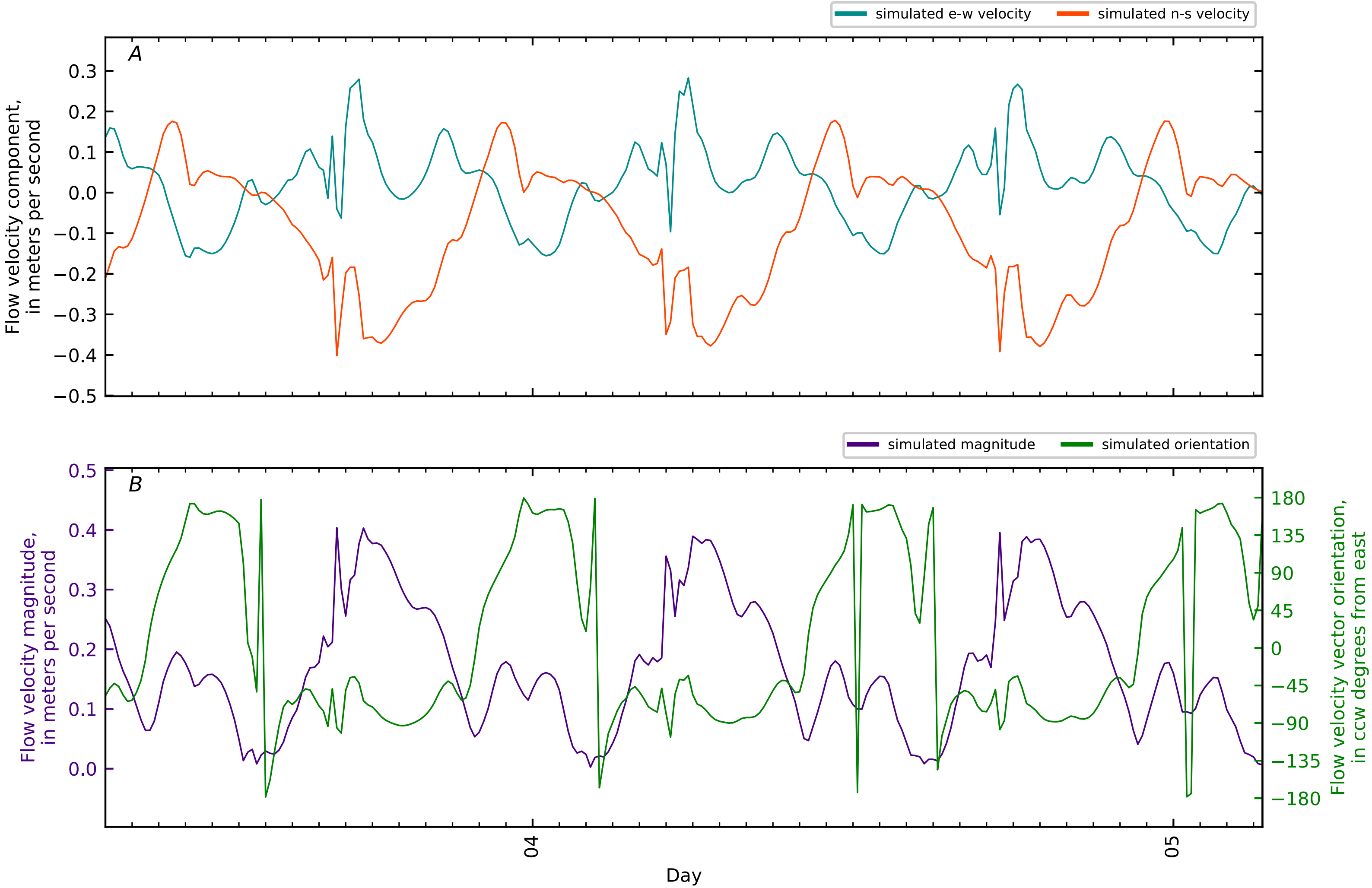

Figure B3-188. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 27, Penob Riv KM3.8 GS CTD3-09. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

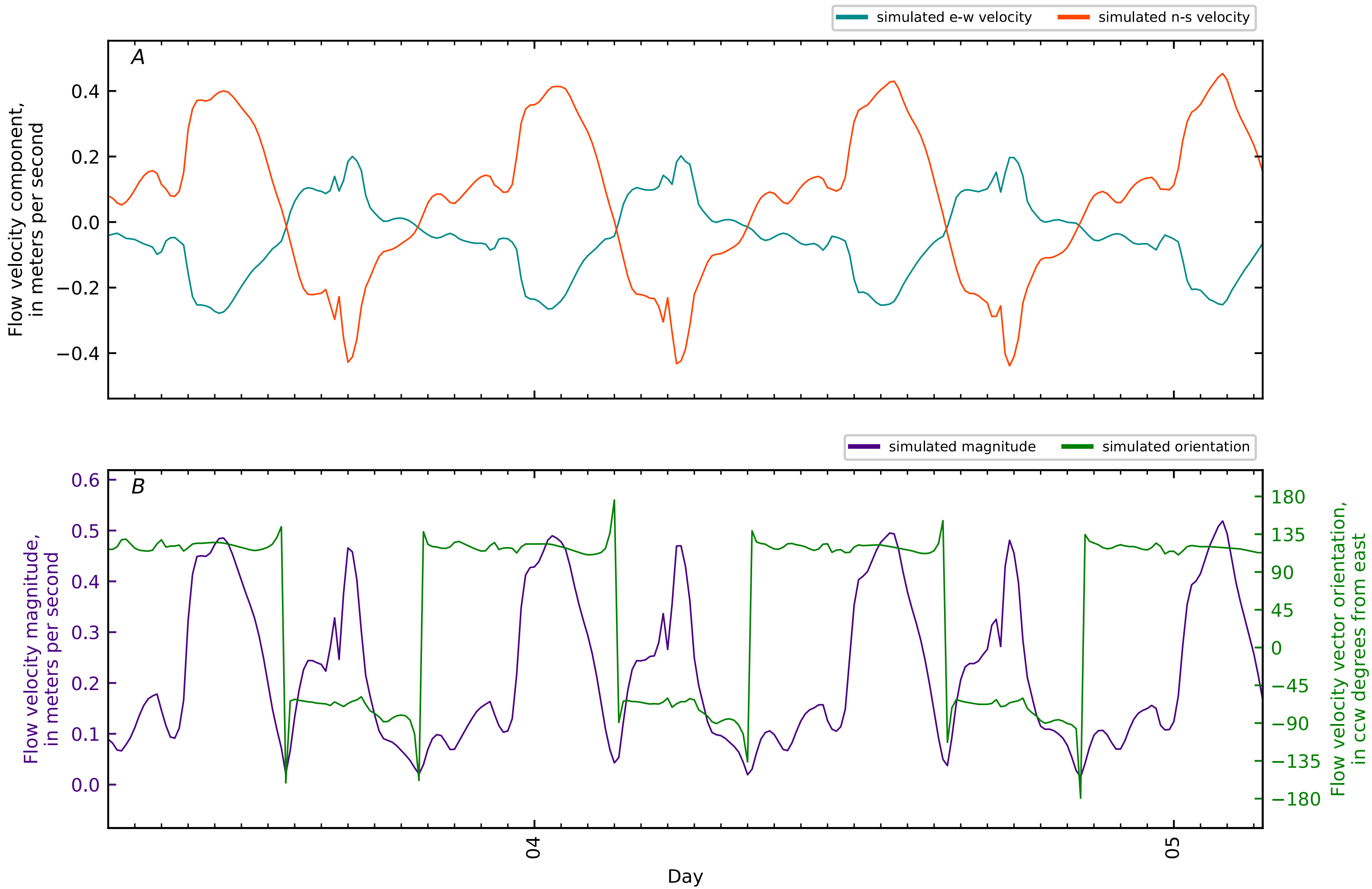

Figure B3-189. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 28, Penob Riv KM3.8 GS CTD3-10. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

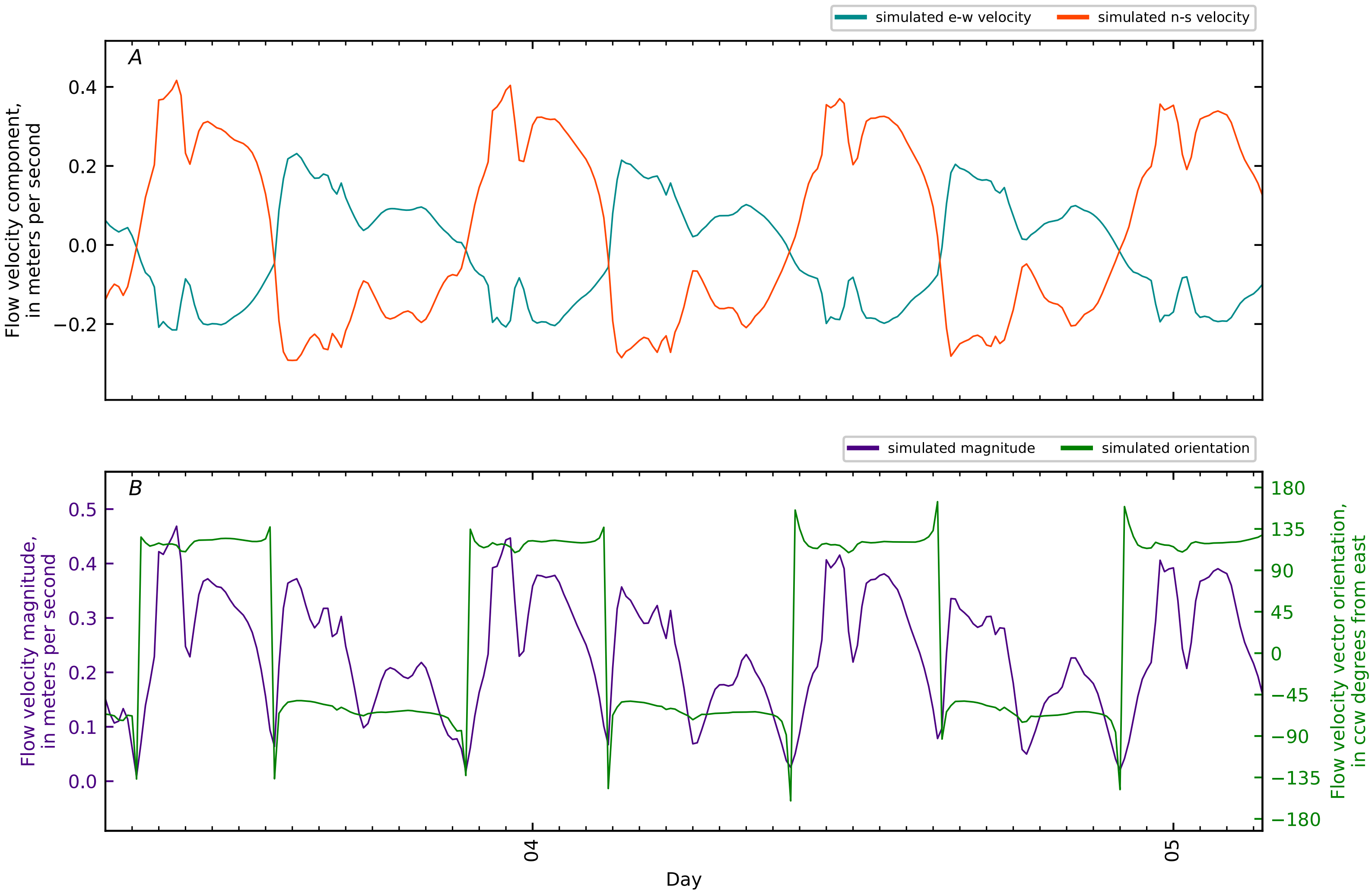

Figure B3-190. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 29, Penob Riv KM3.85 fmr NOAA gage Gross Poi. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

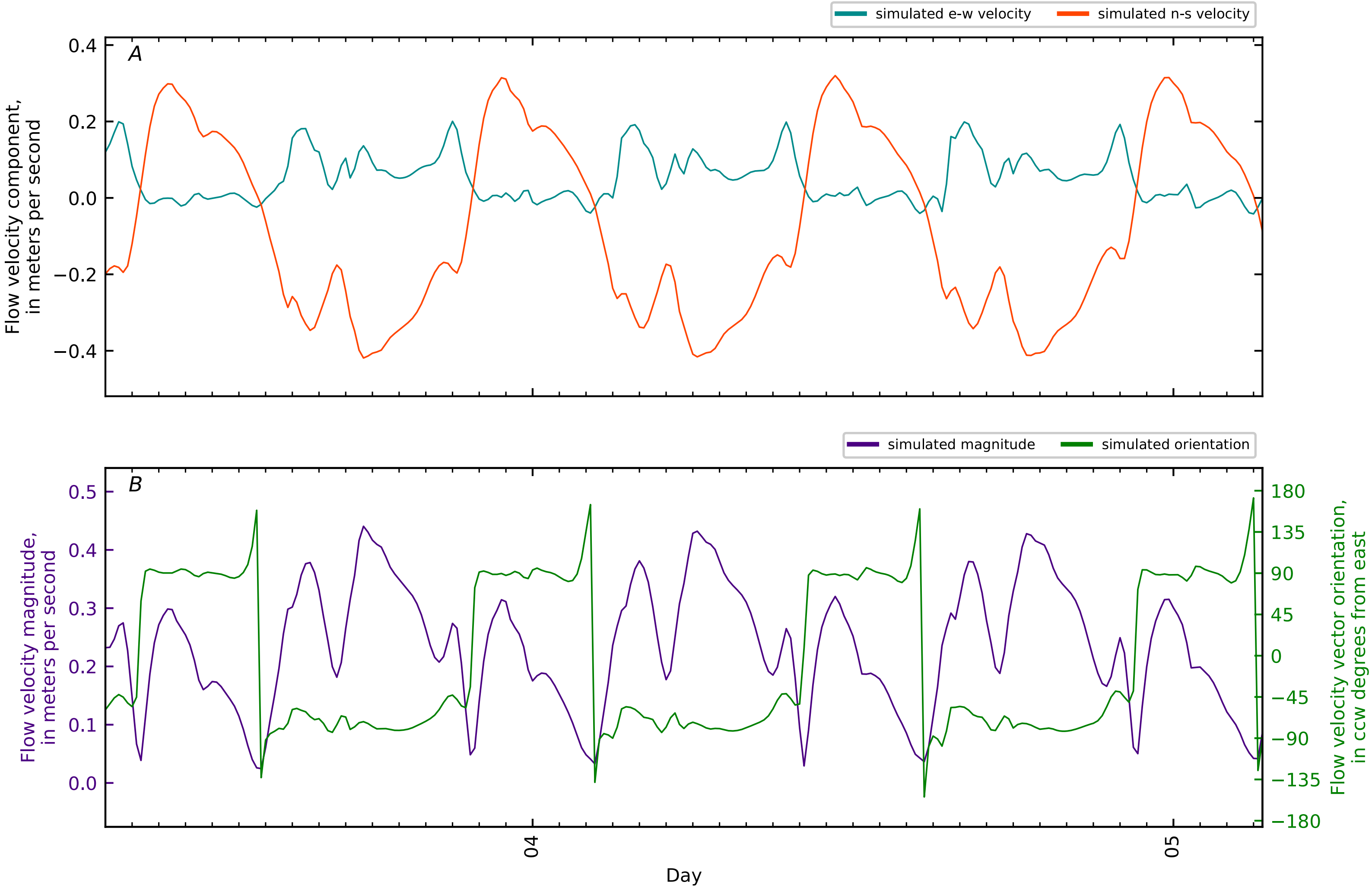

Figure B3-191. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 30, Penob Riv KM4. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

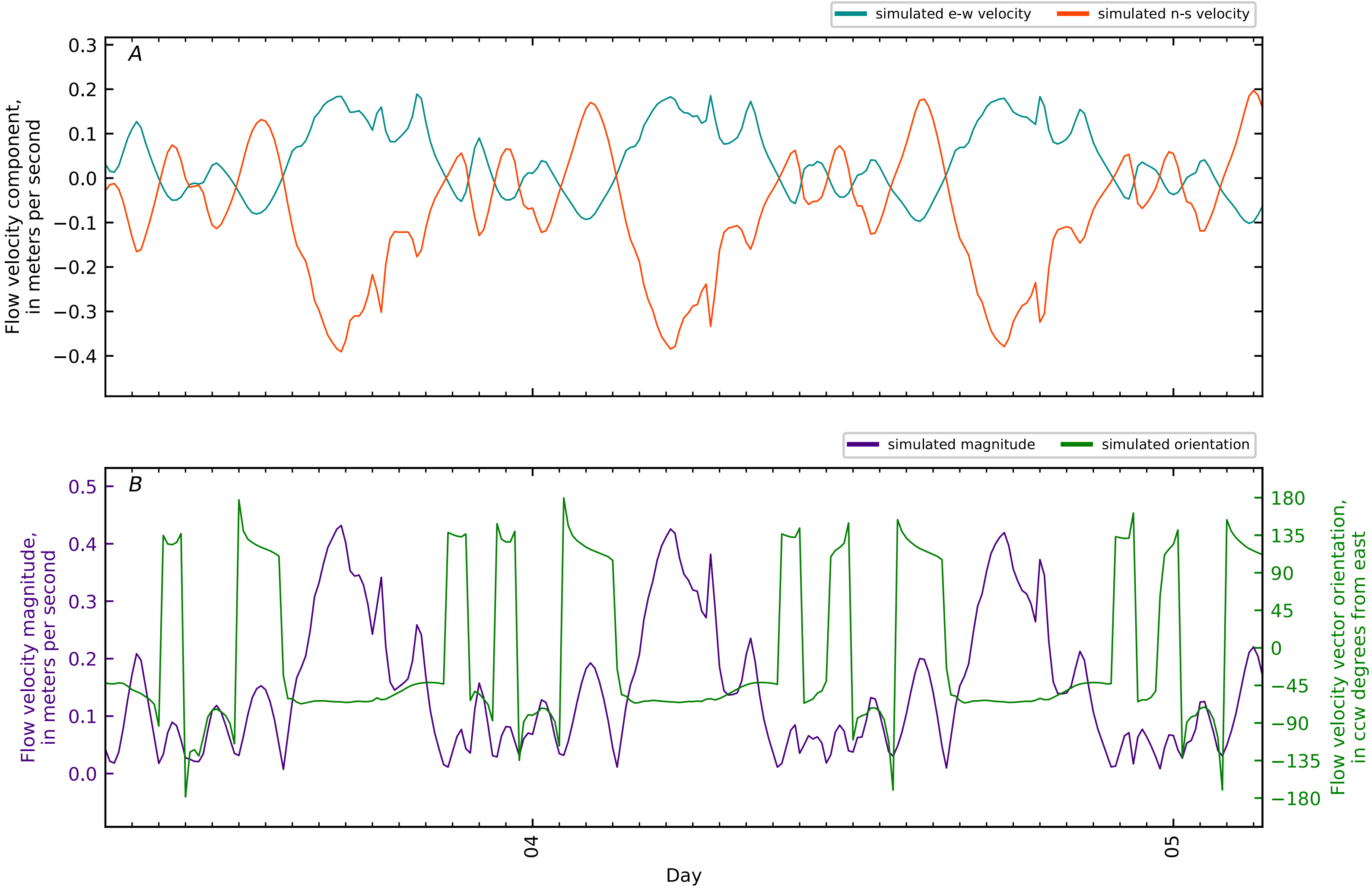

Figure B3-192. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 31, Penob Riv KM4.3 fmr NOAA gage Sandy Beac. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

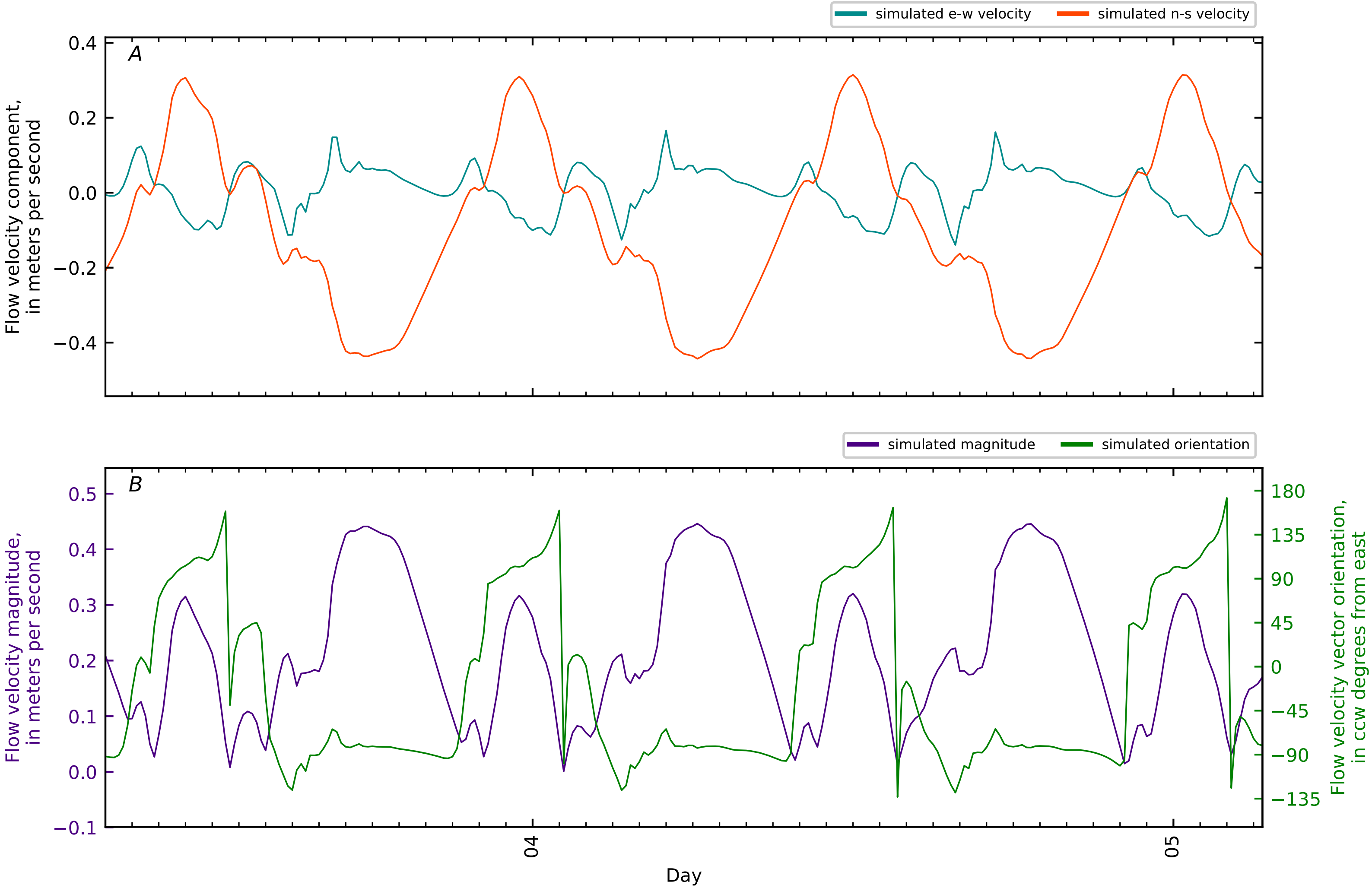

Figure B3-193. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 32, Penob Riv KM5. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

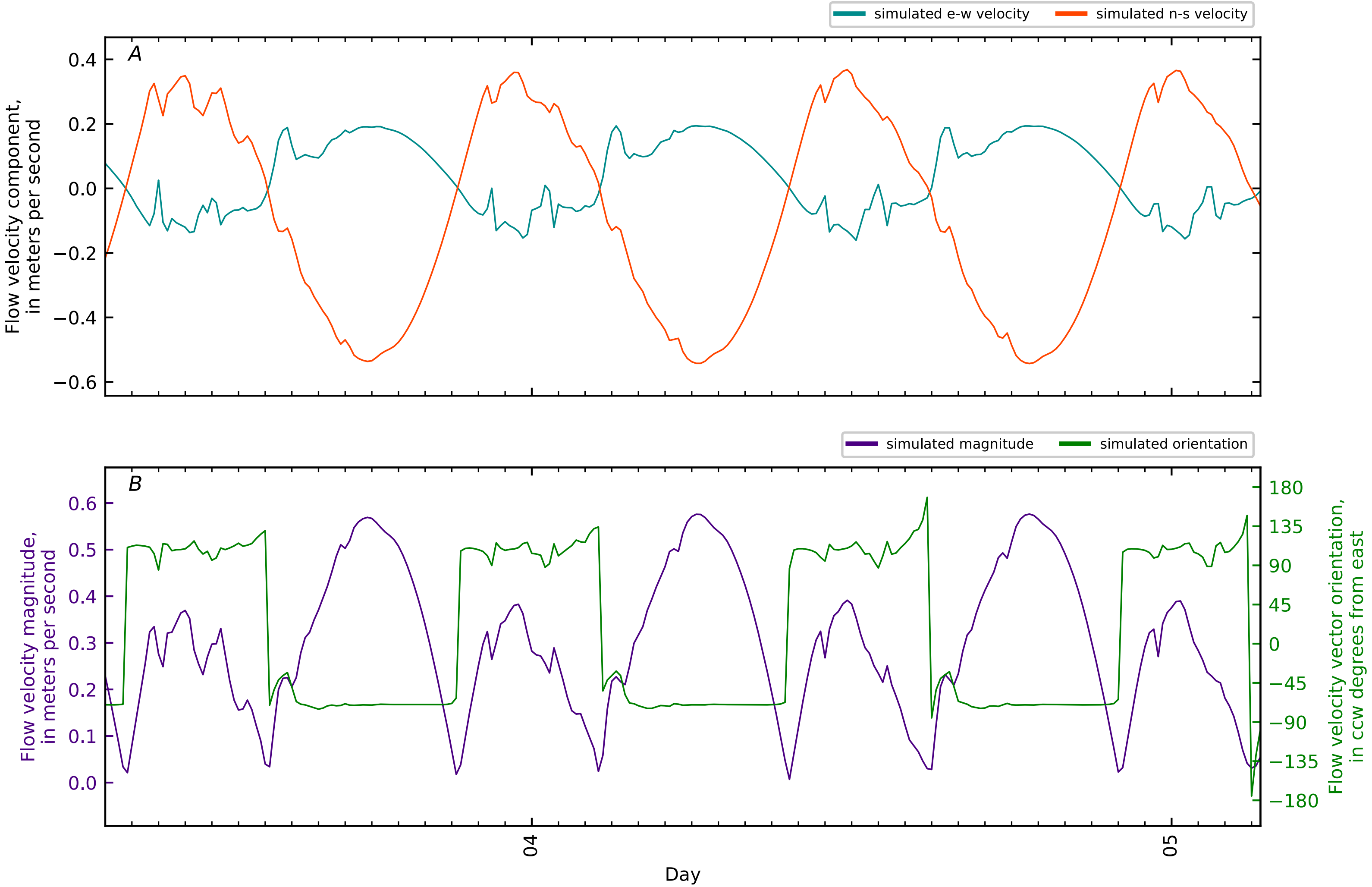

Figure B3-194. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 33, Penob Riv KM6. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

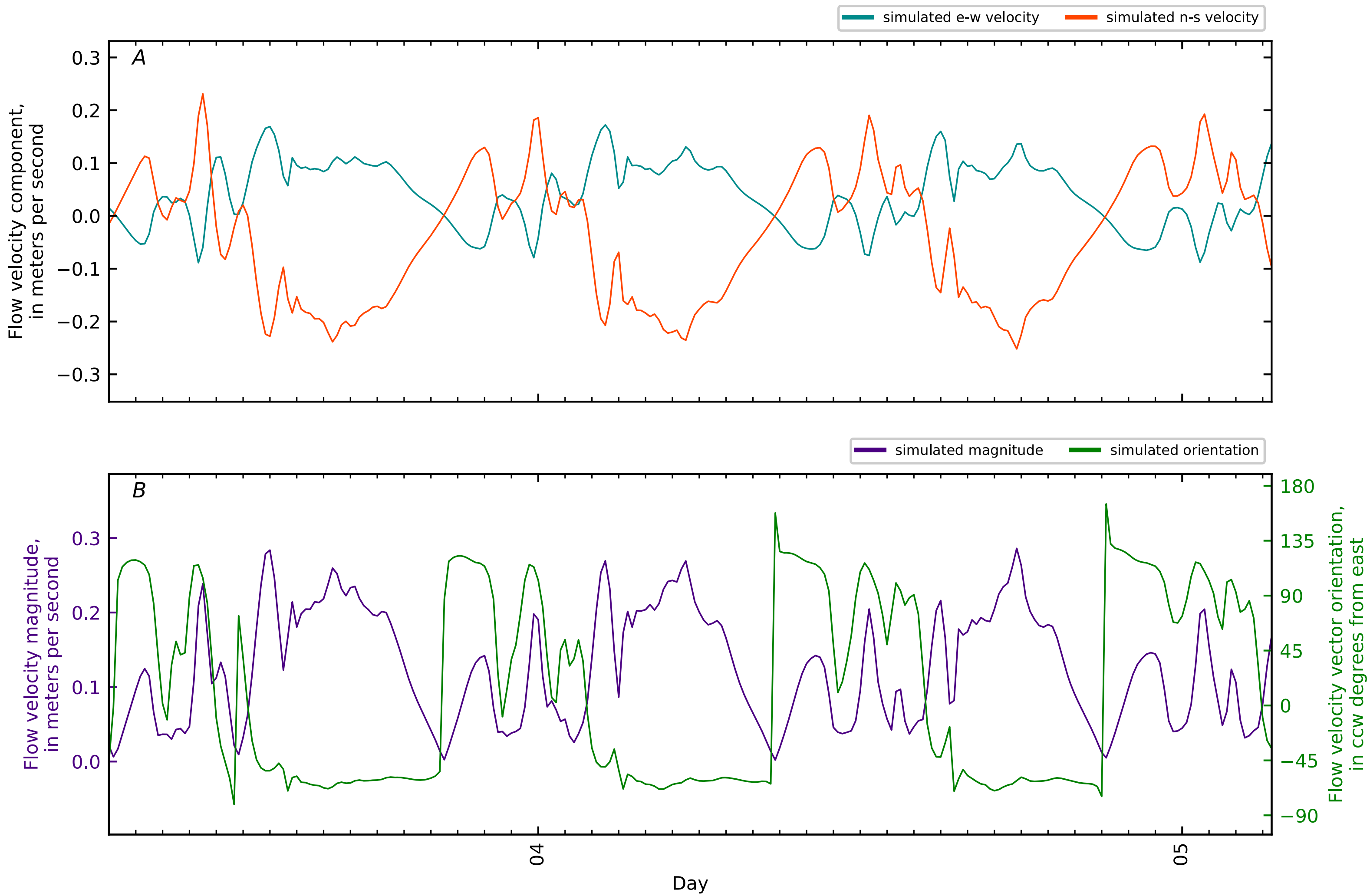

Figure B3-195. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 34, Penob Riv KM6 ERDC11 VW-MU14-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

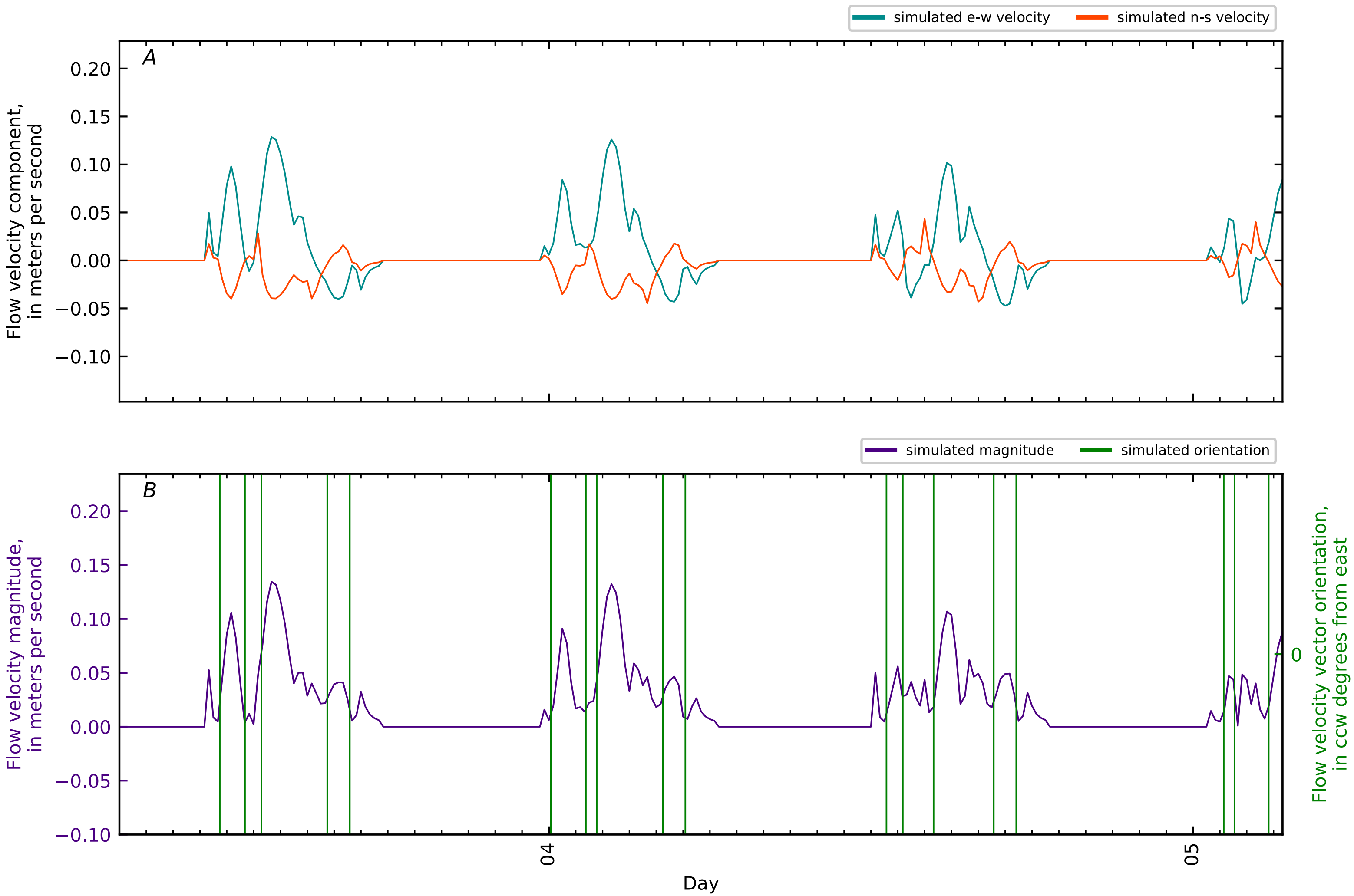

Figure B3-196. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 35, Penob Riv KM6.05 ERDC10 VW-MU7-SF1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

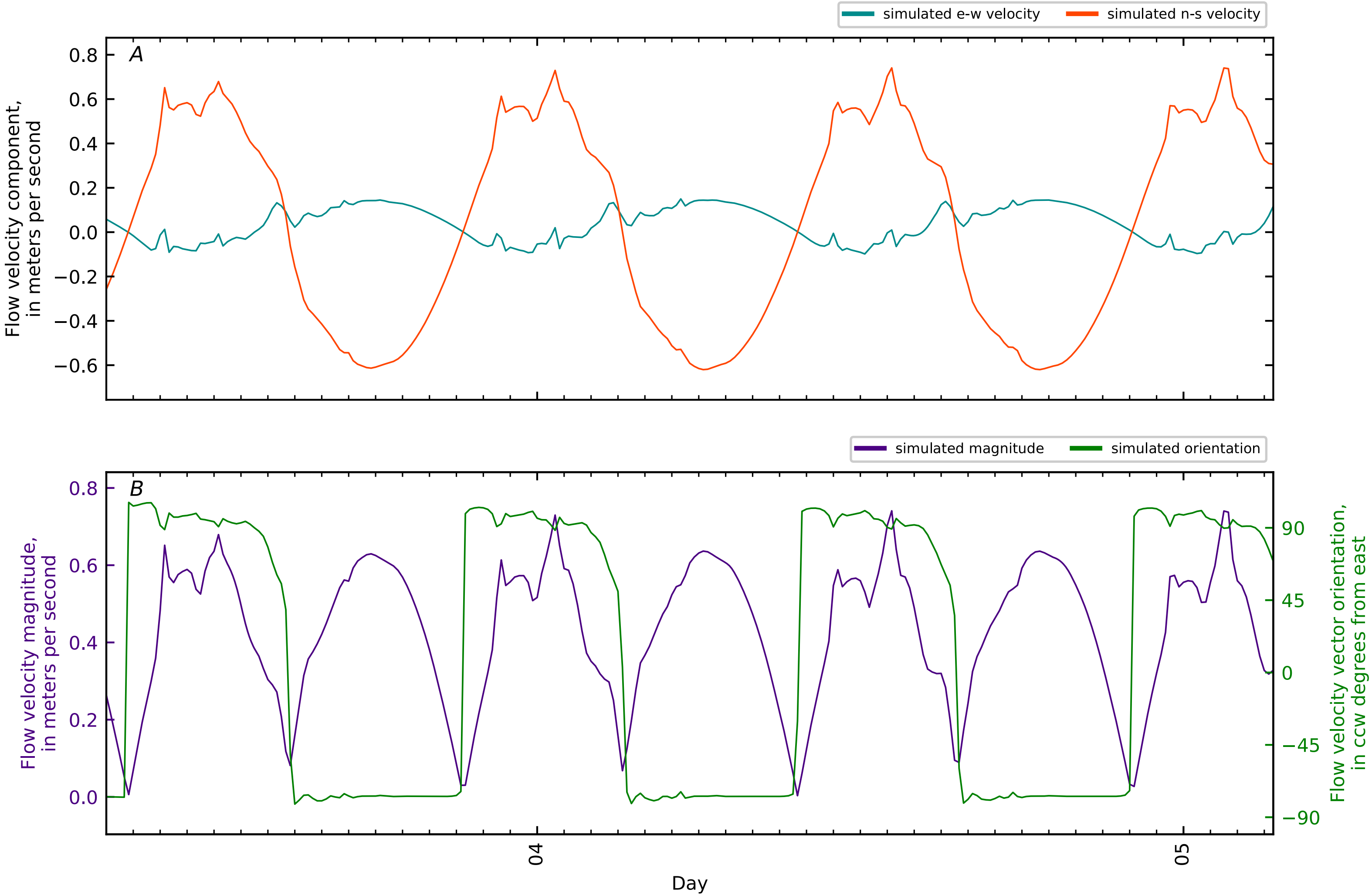

Figure B3-197. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 36, Penob Riv KM6.1 WHOI5 Verona Island 2010. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

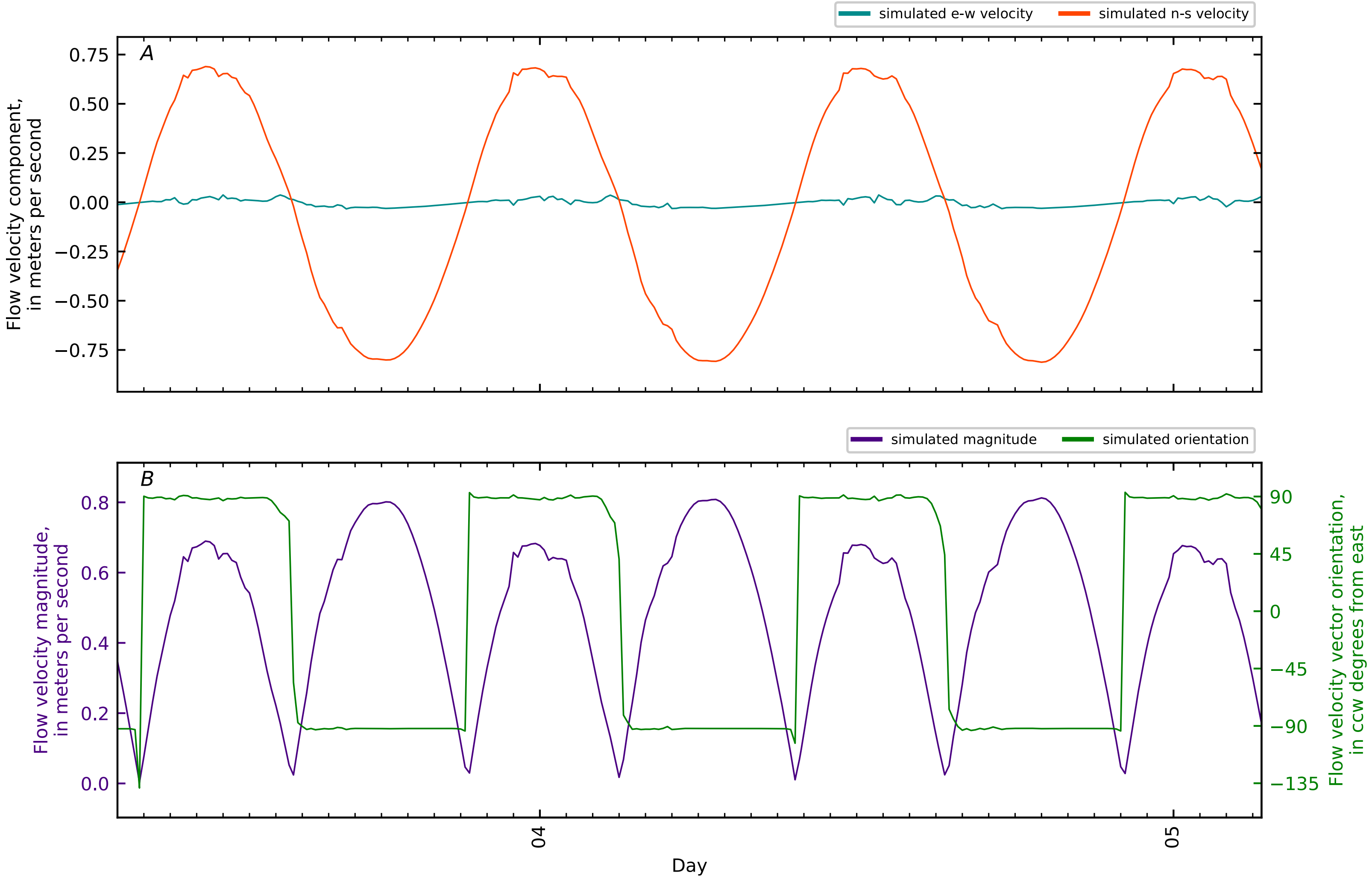

Figure B3-198. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 37, Penob Riv KM7. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

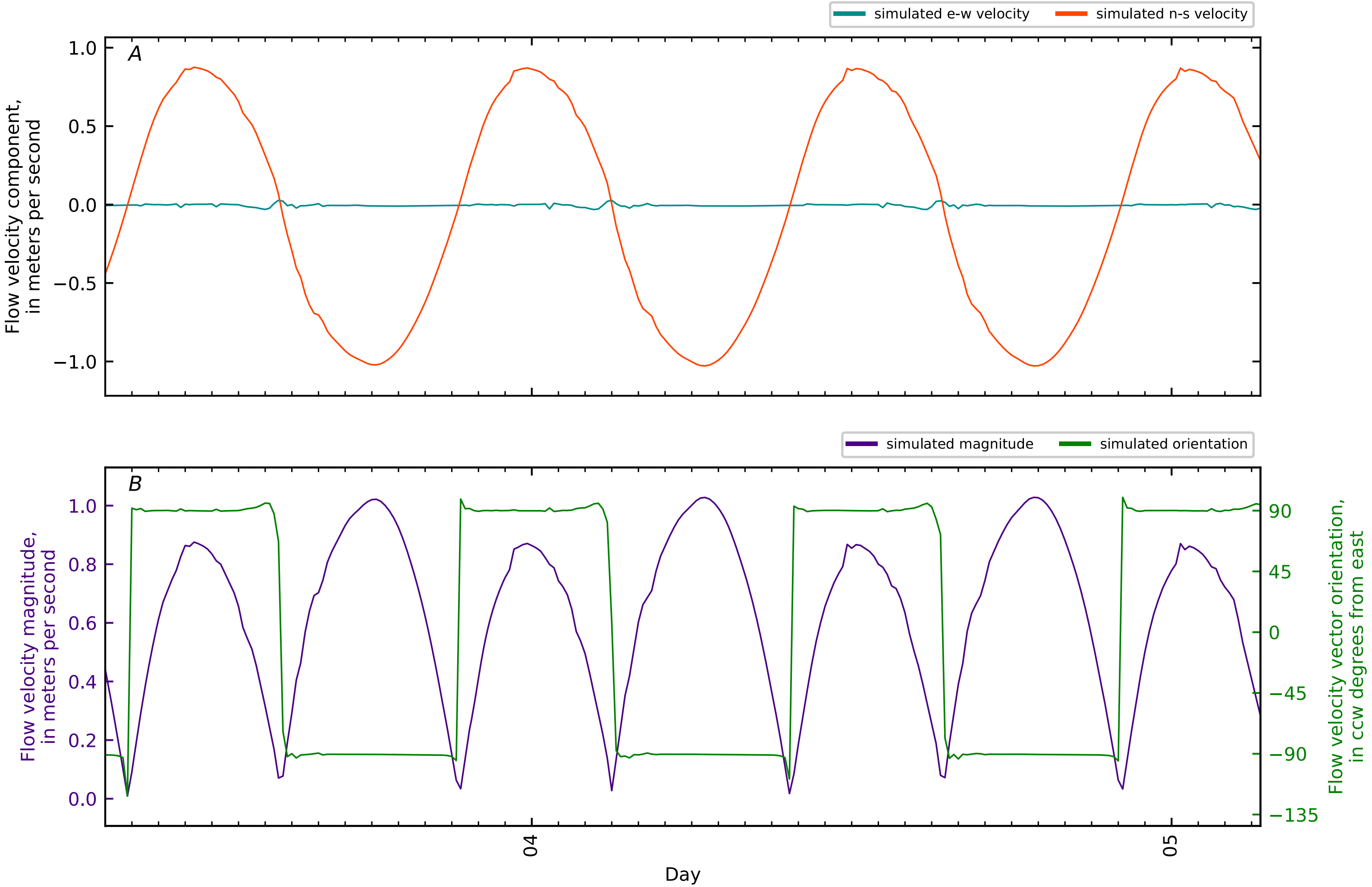

Figure B3-199. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 38, Penob Riv KM8. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

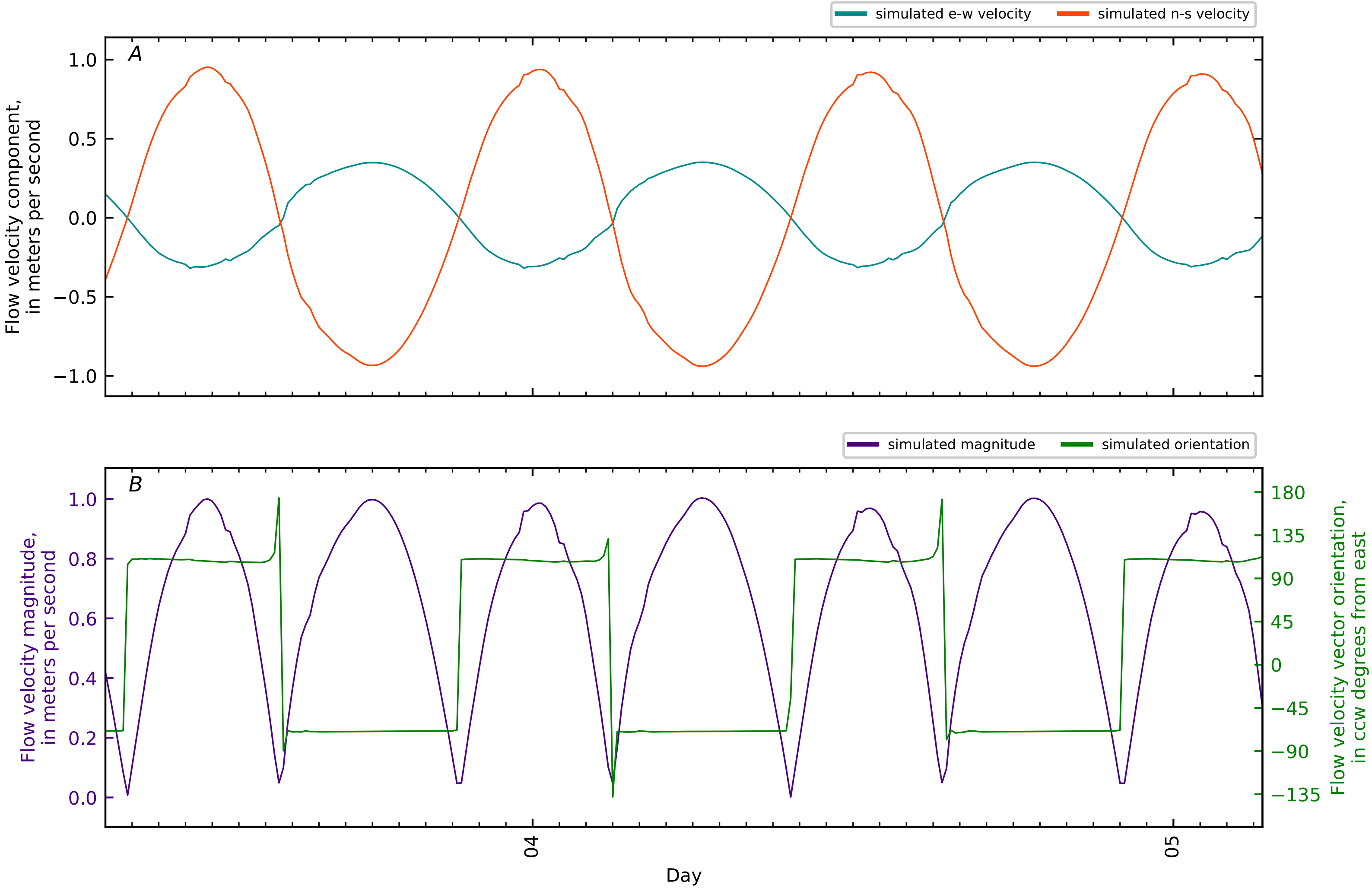

Figure B3-200. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 39, Penob Riv KM9. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

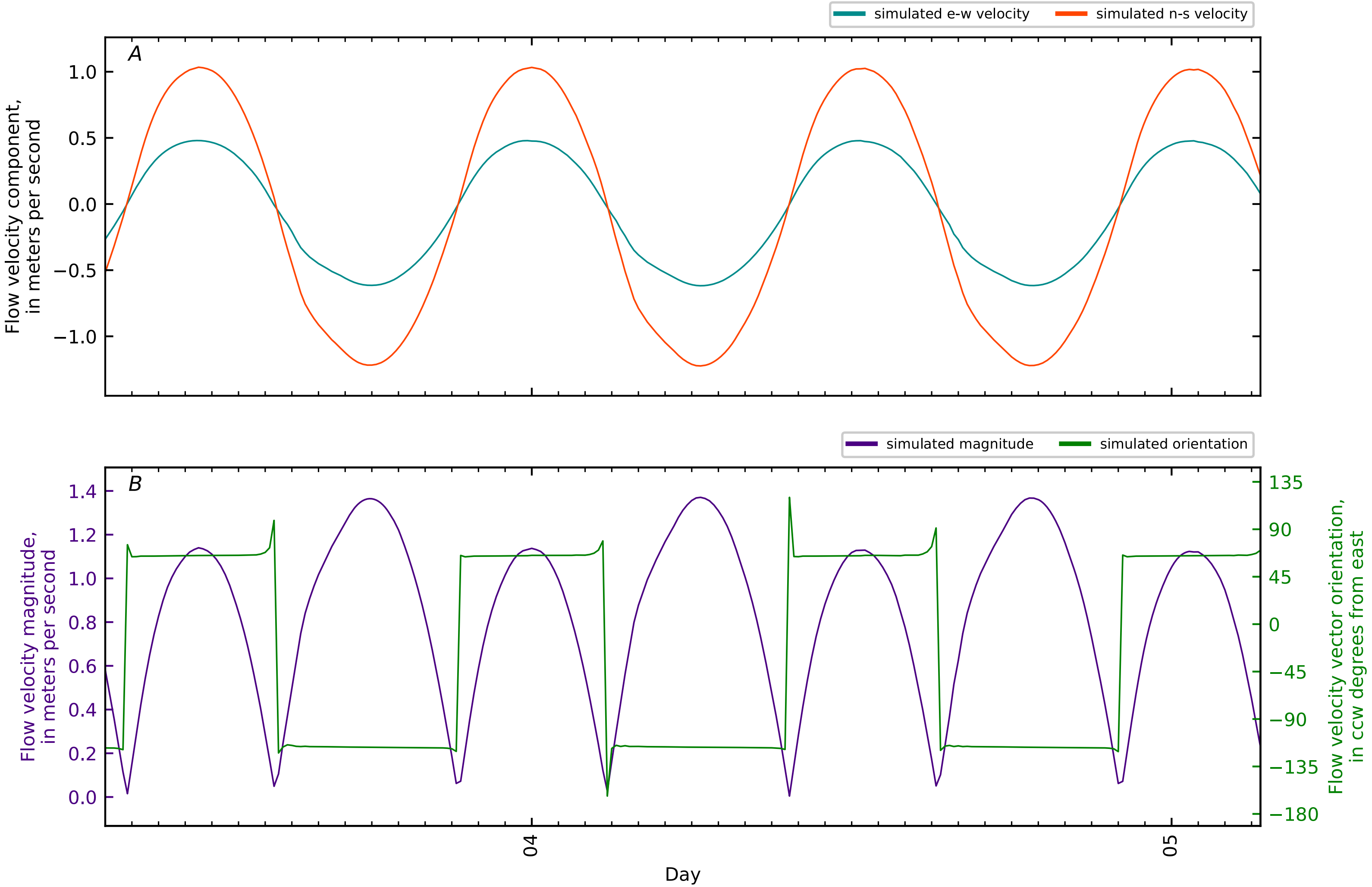

Figure B3-201. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 40, Penob Riv KM10. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

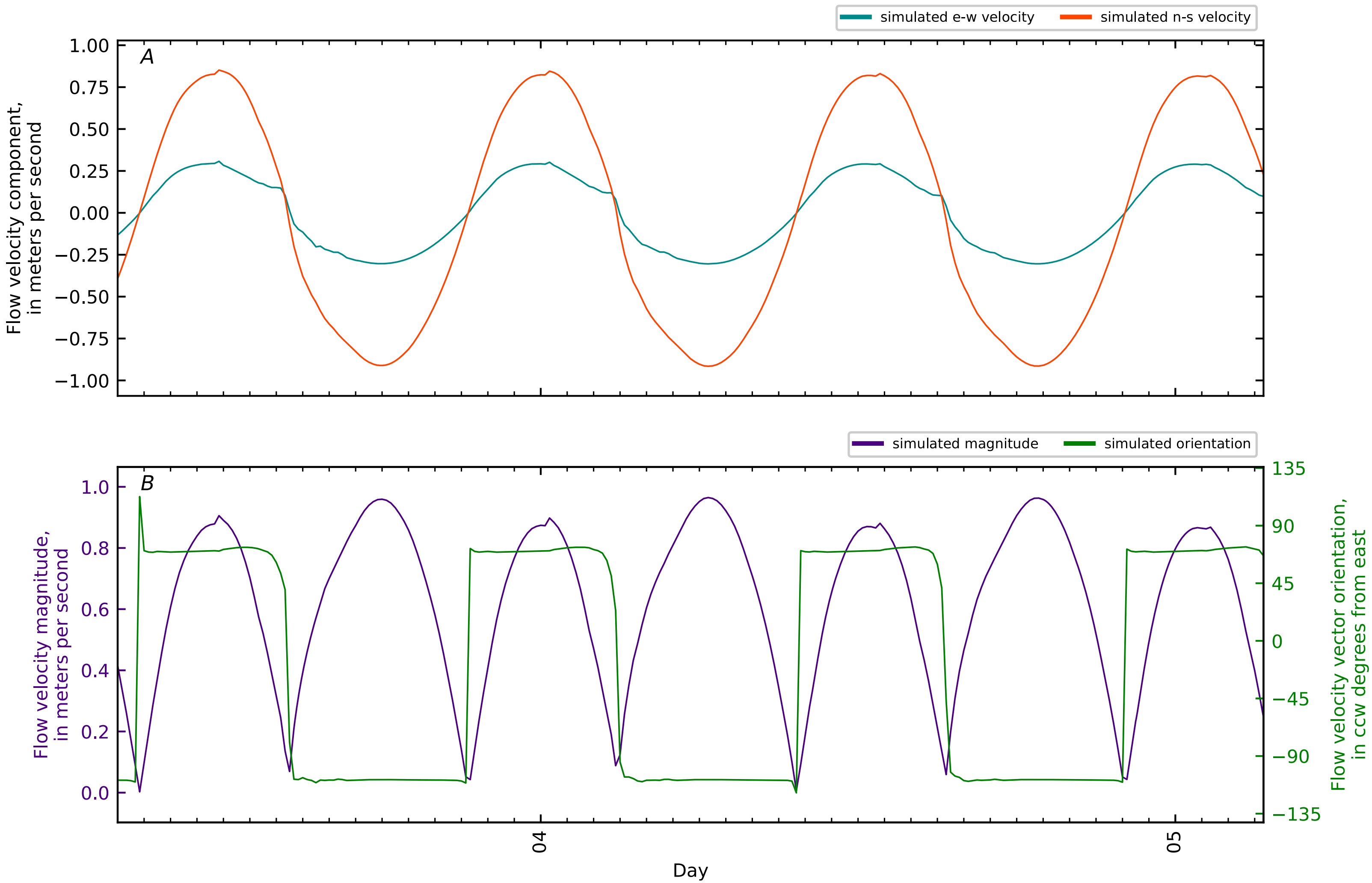

Figure B3-202. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 41, Penob Riv KM11. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

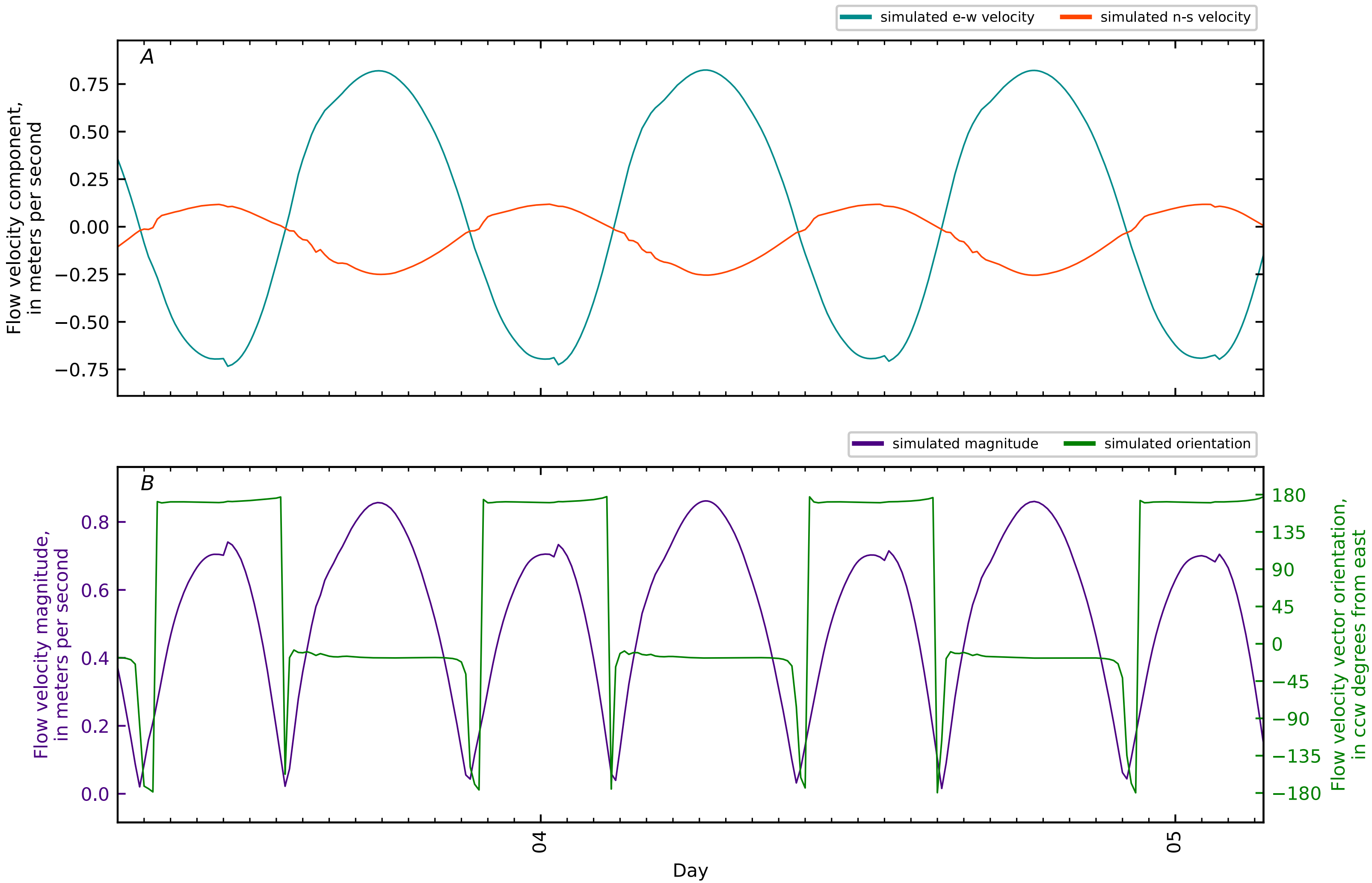

Figure B3-203. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 42, Penob Riv KM12. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

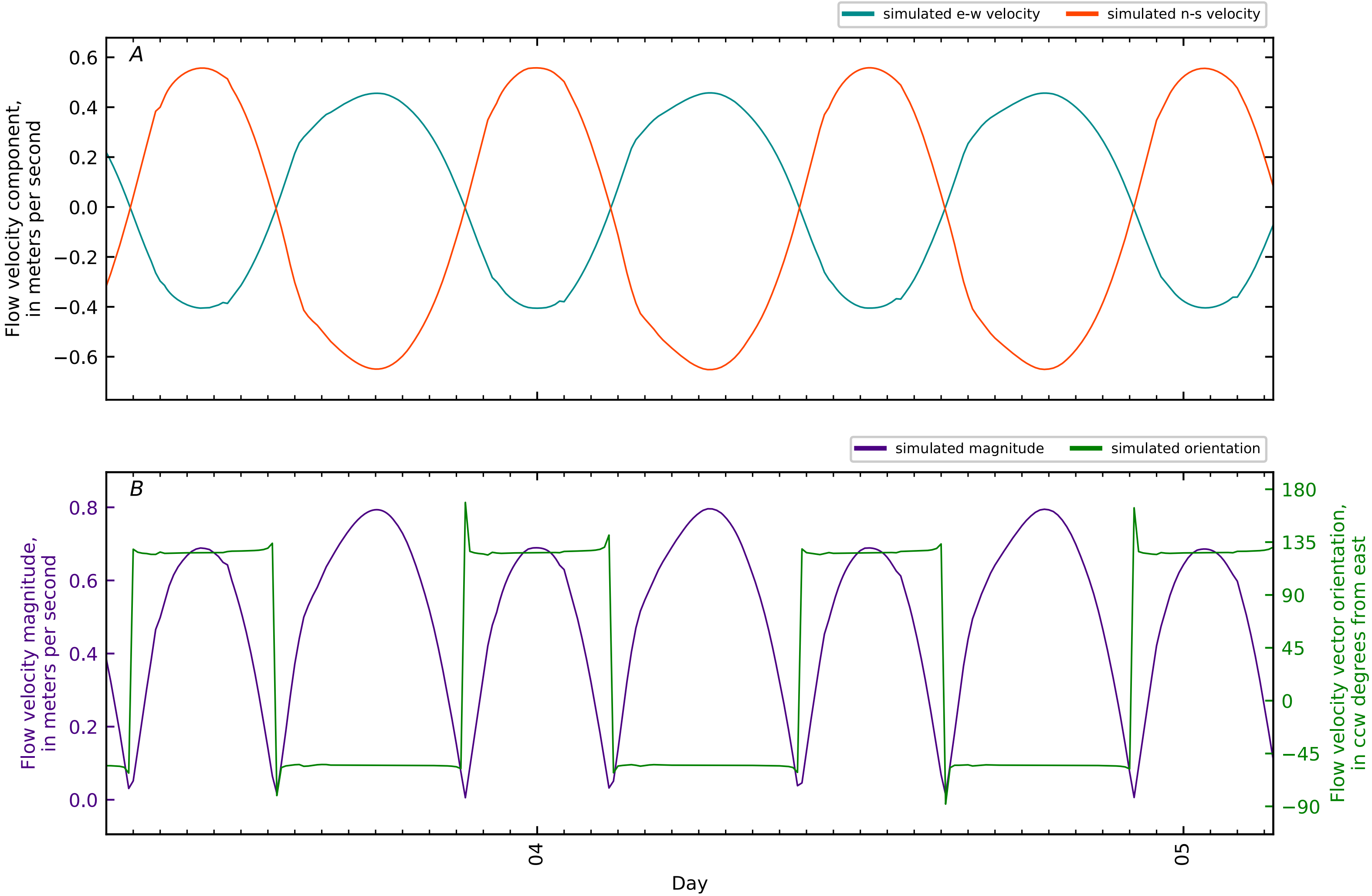

Figure B3-204. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 43, Penob Riv KM12.9 WHOI7 Bucksport 2011. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

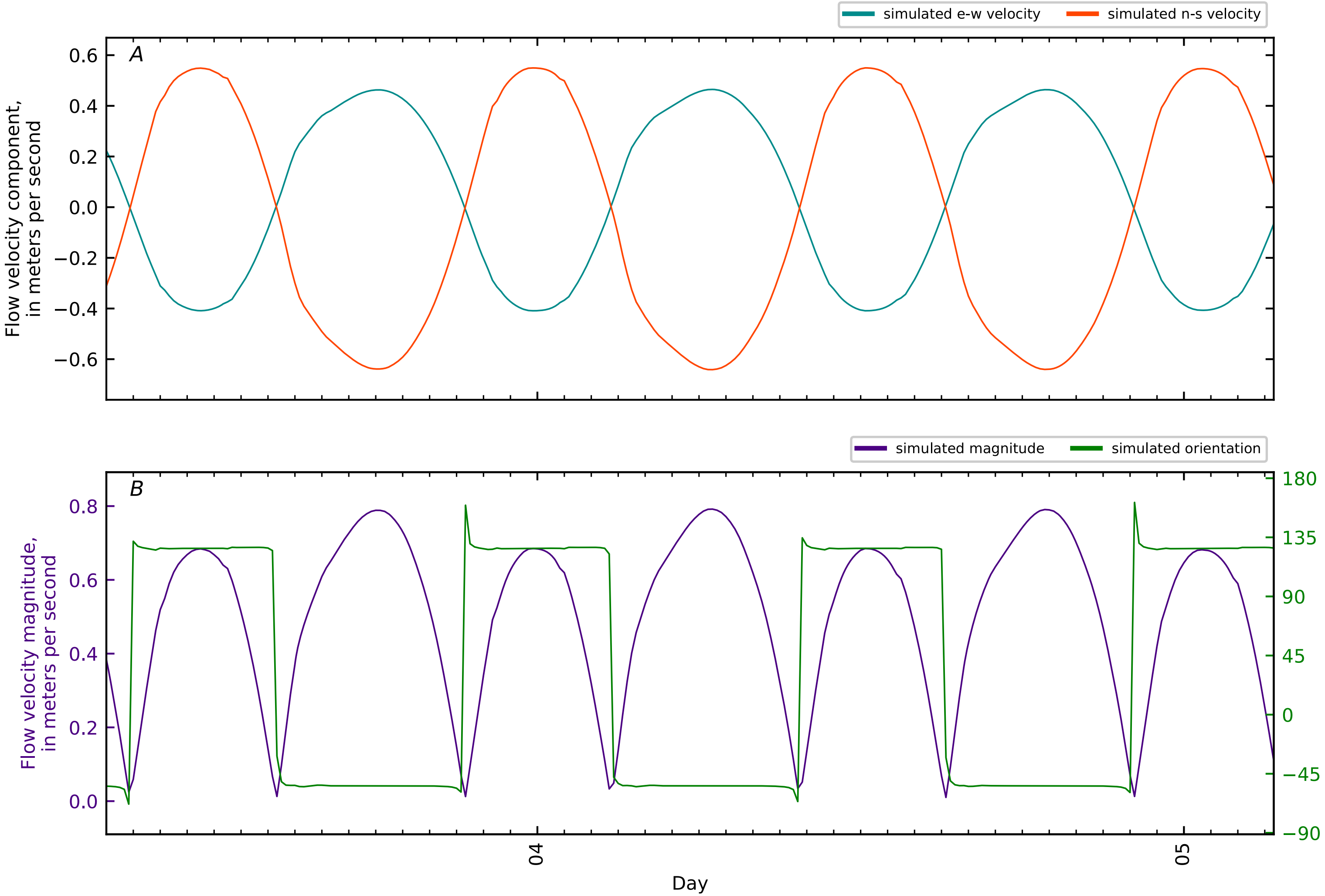

Figure B3-205. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 44, Penob Riv KM13. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

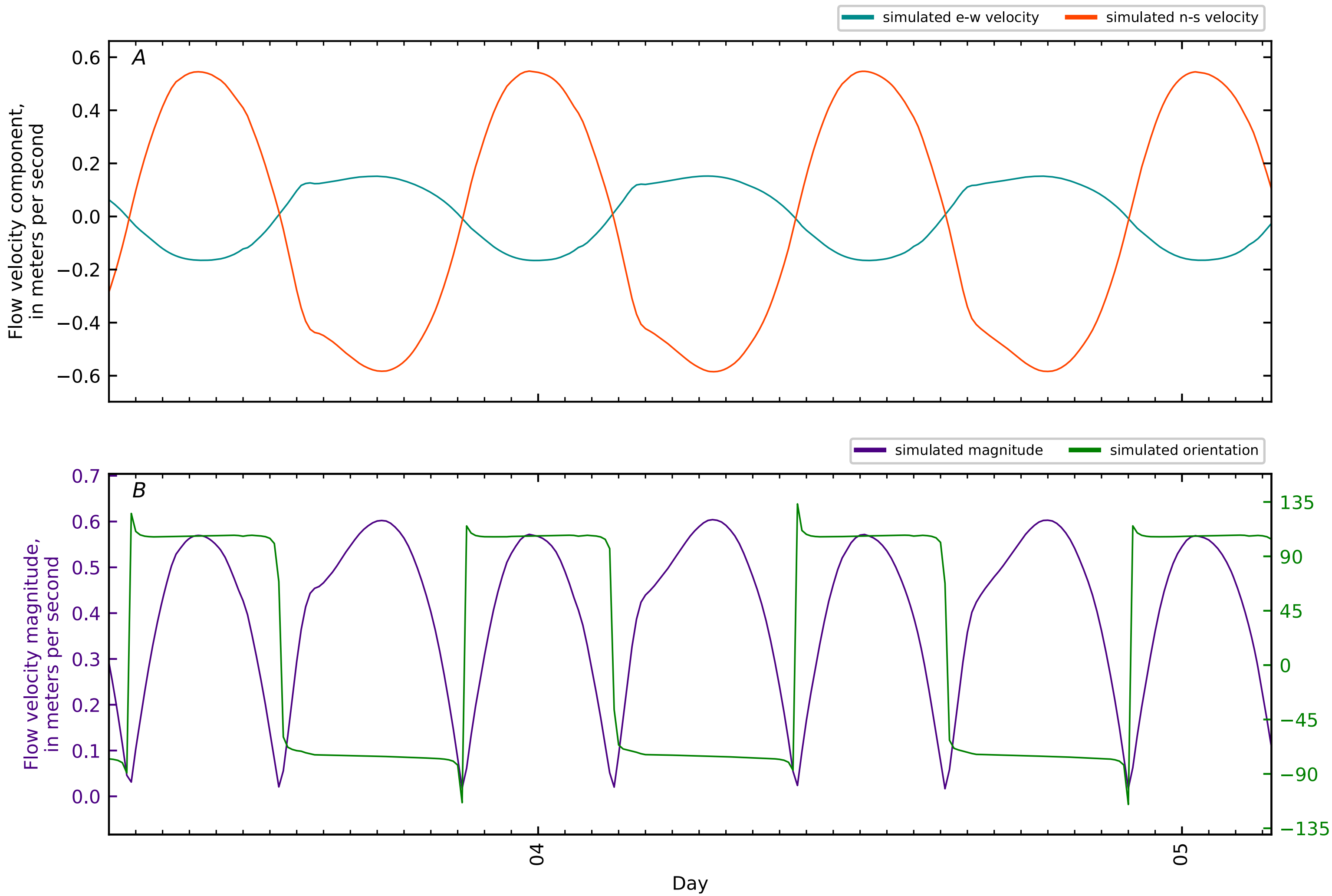

Figure B3-206. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 45, Penob Riv KM14. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

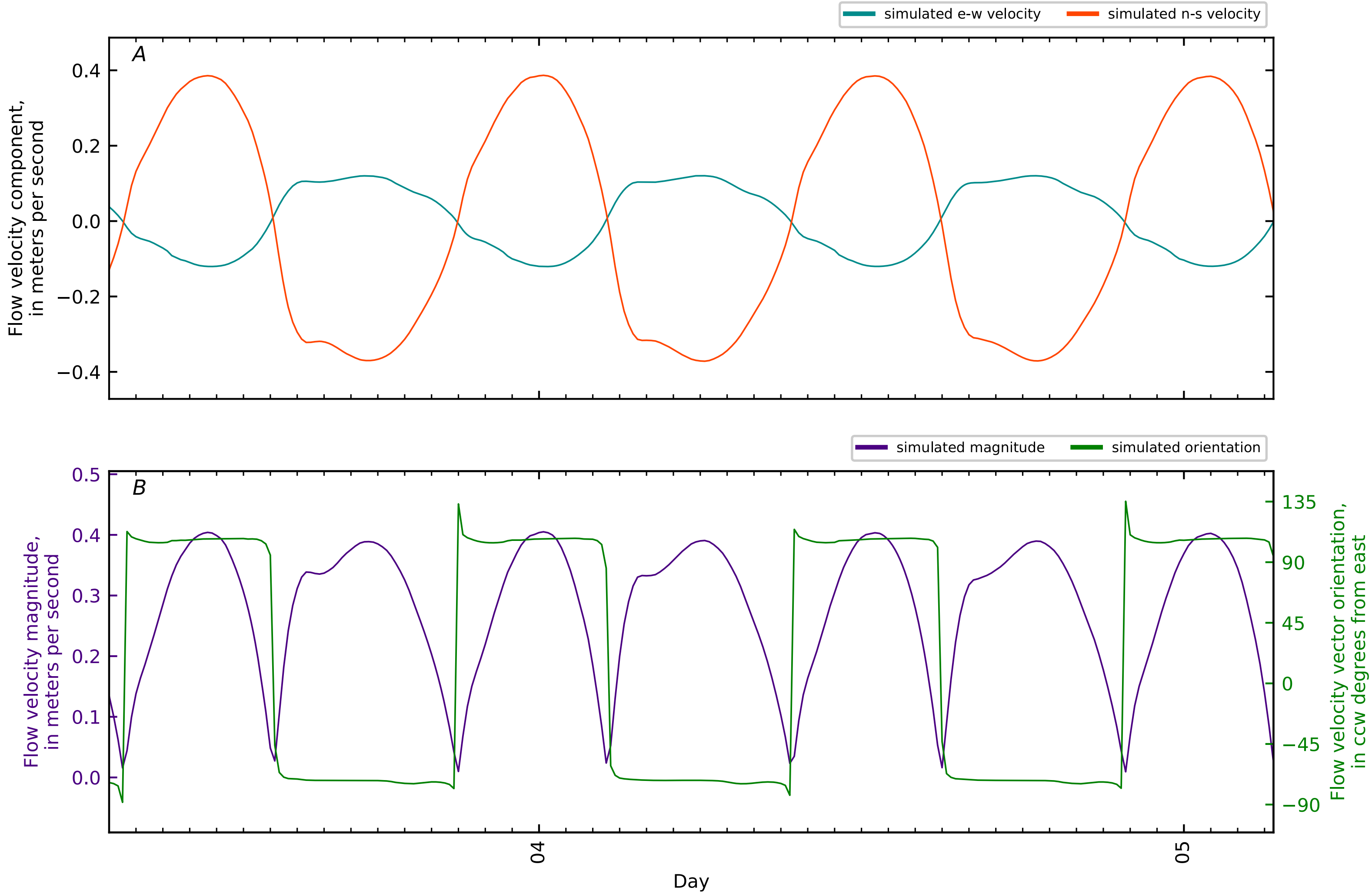

Figure B3-207. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 46, Penob Riv KM14.27 ERDC15 BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

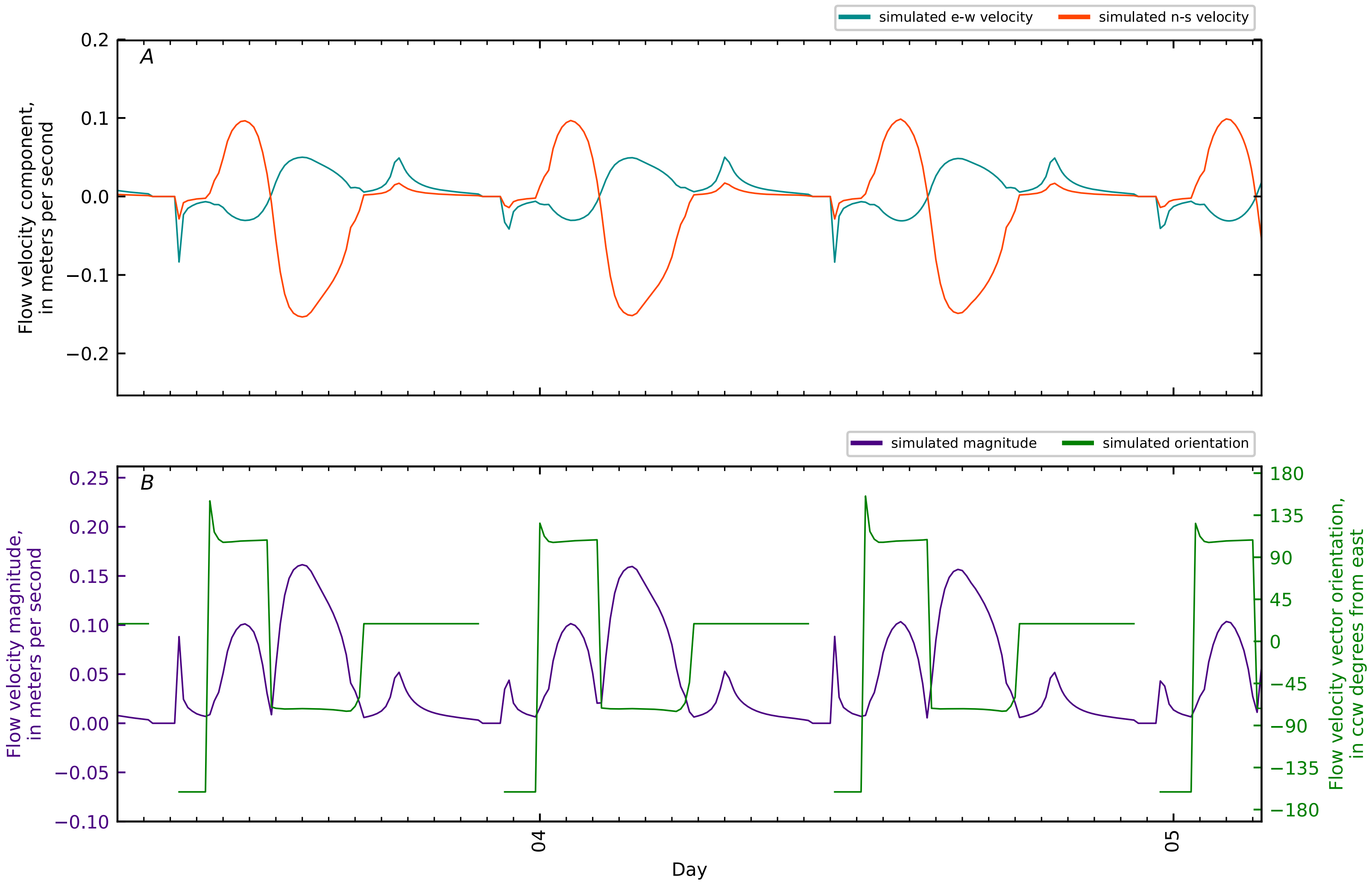

Figure B3-208. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 47, Penob Riv KM14.29 ERDC16B BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

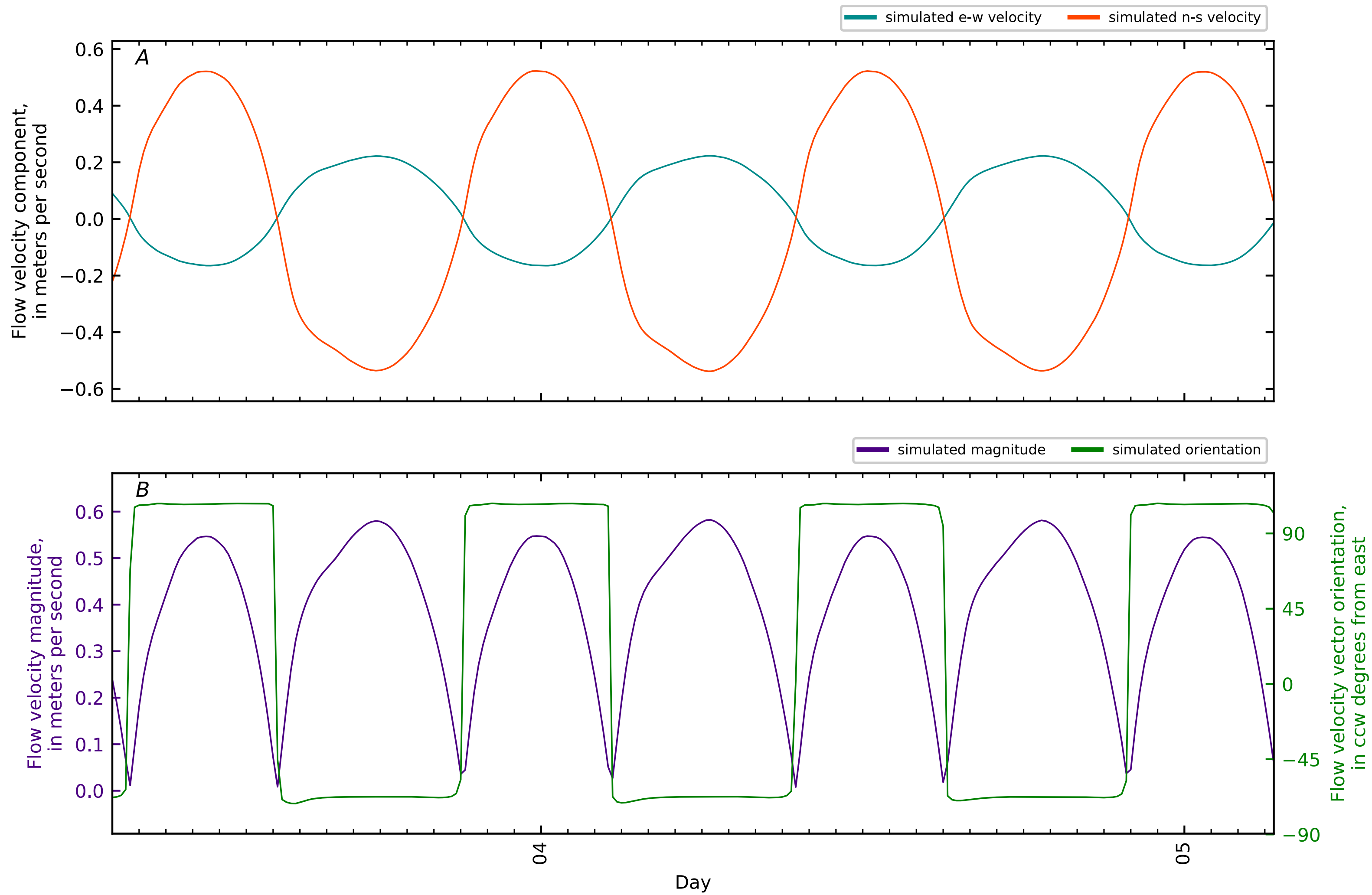

Figure B3-209. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 48, Penob Riv KM15. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

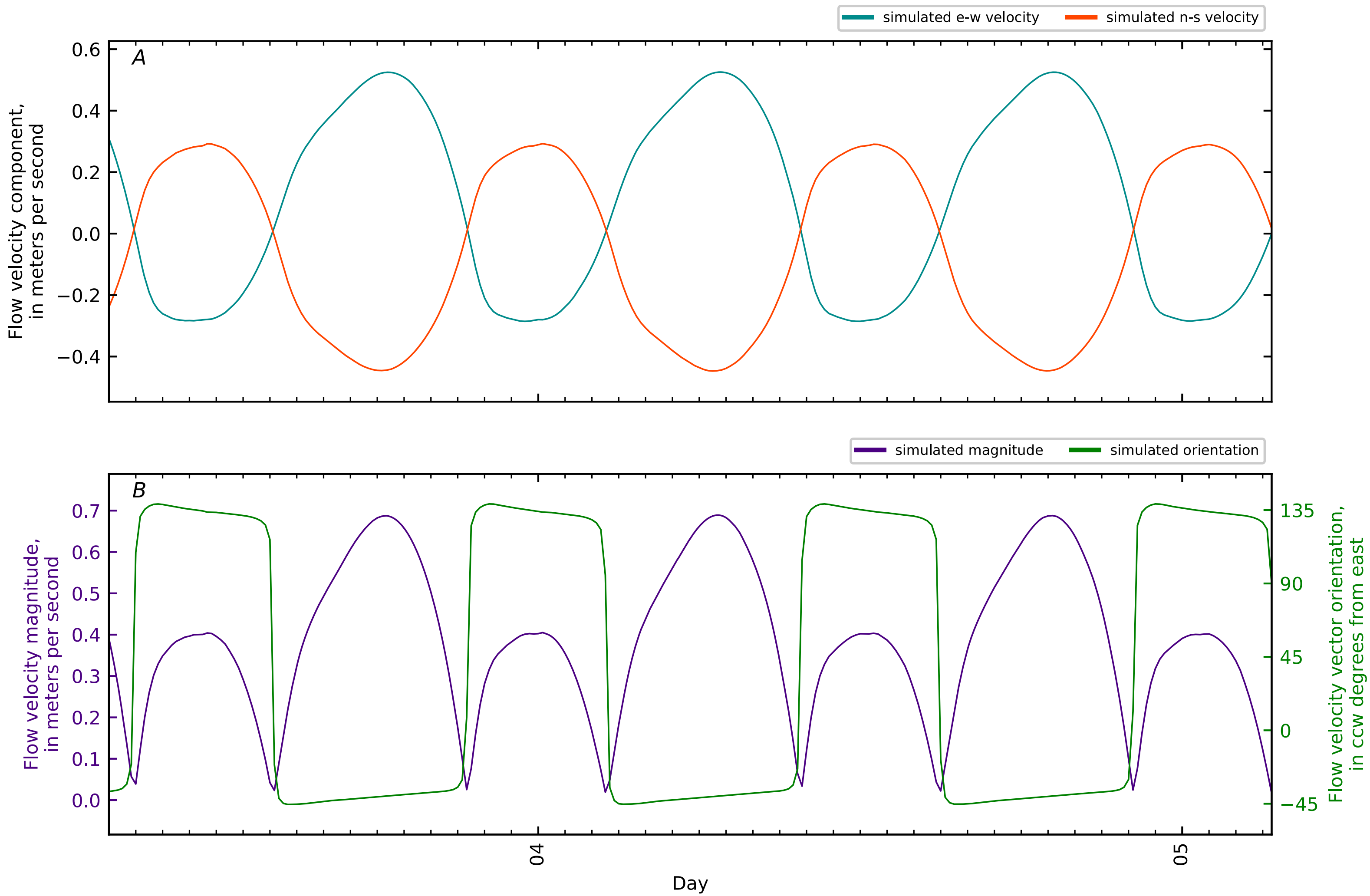

Figure B3-210. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 49, Penob Riv KM16. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

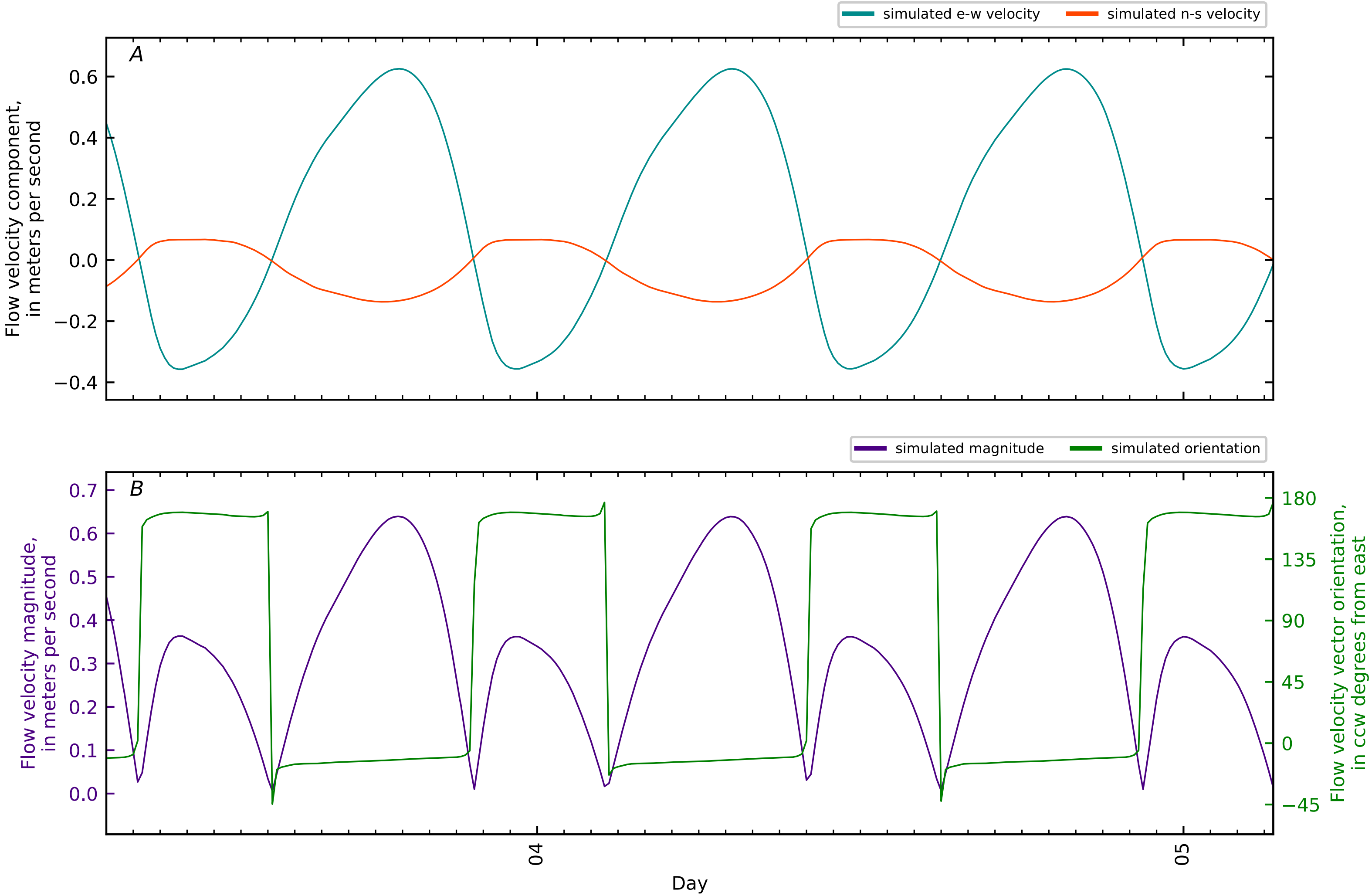

Figure B3-211. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 50, Penob Riv KM17. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

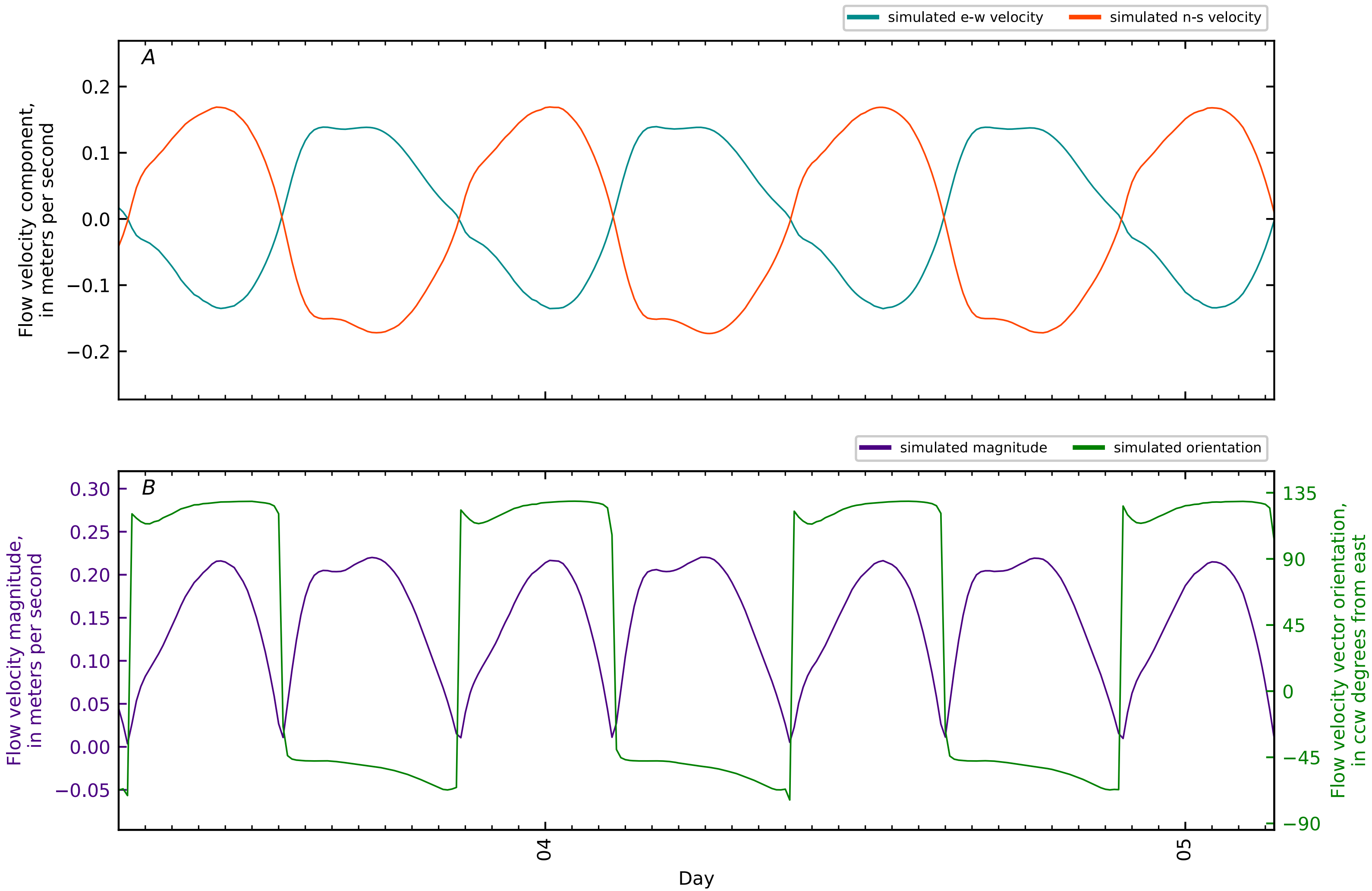

Figure B3-212. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 51, Penob Riv KM17.2 ERDC17B FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

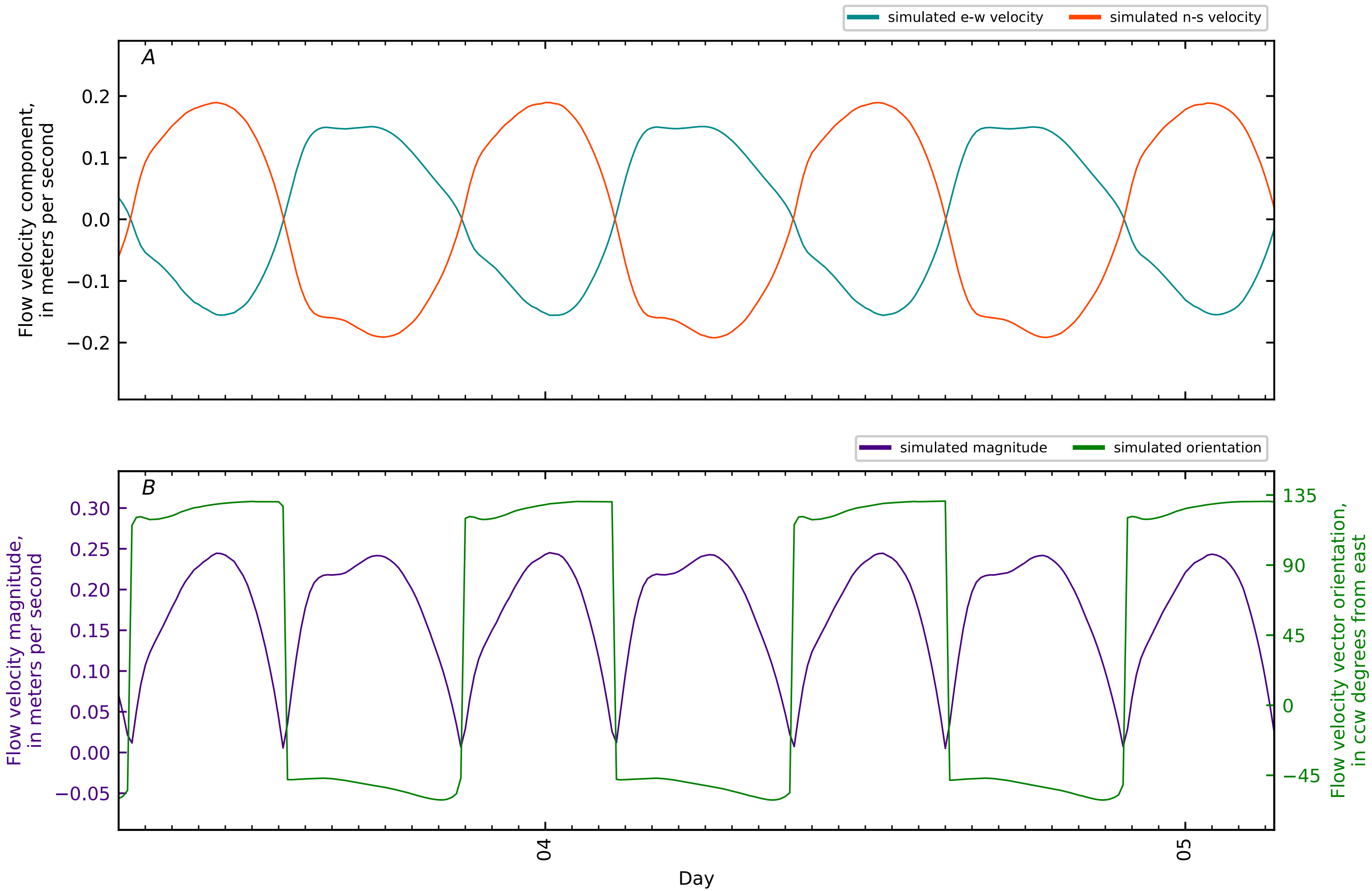

Figure B3-213. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 52, Penob Riv KM17.21 ERDC13 FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

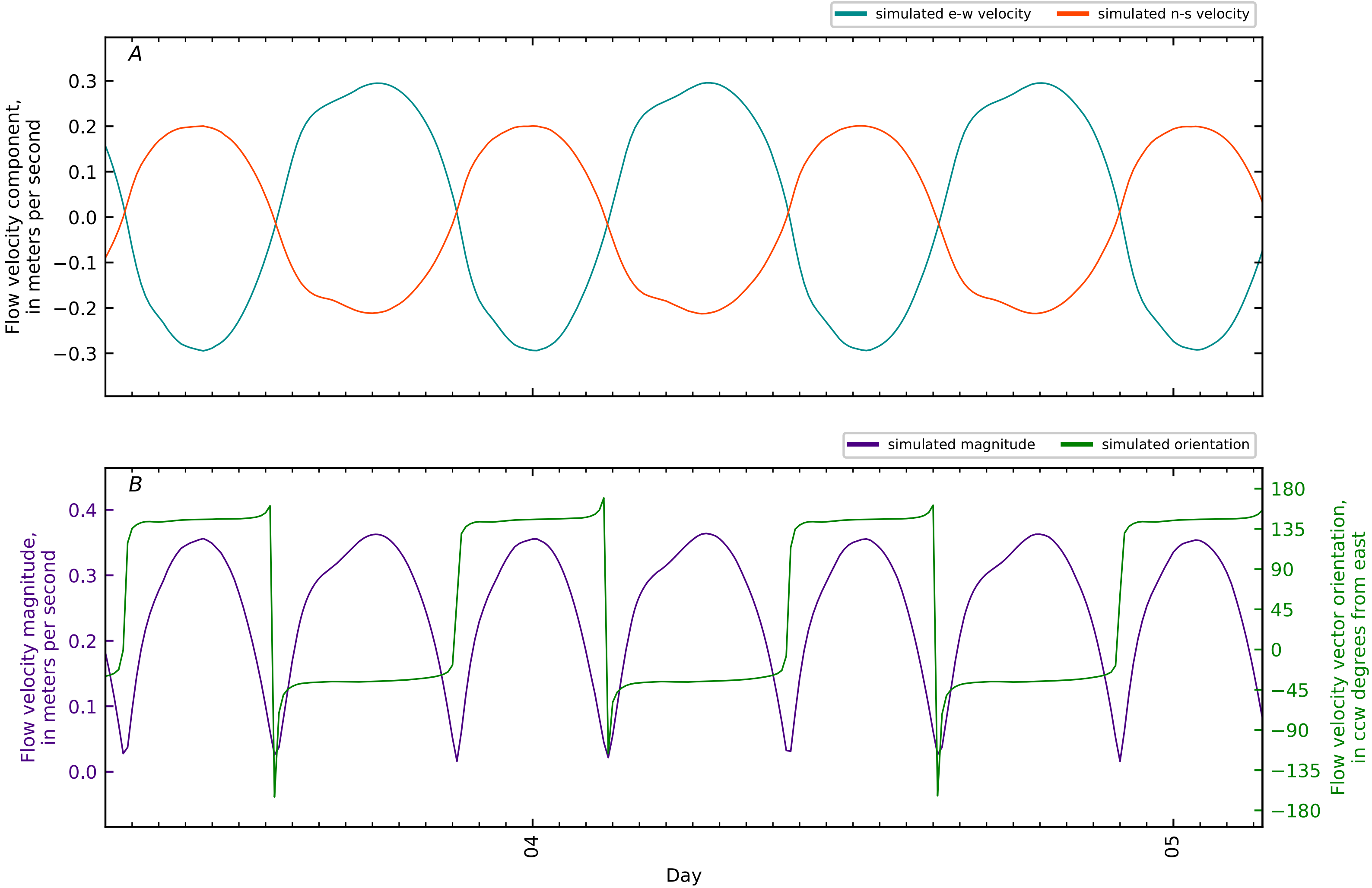

Figure B3-214. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 53, Penob Riv KM17.2 WHOI2 Frankfort Flats 2. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

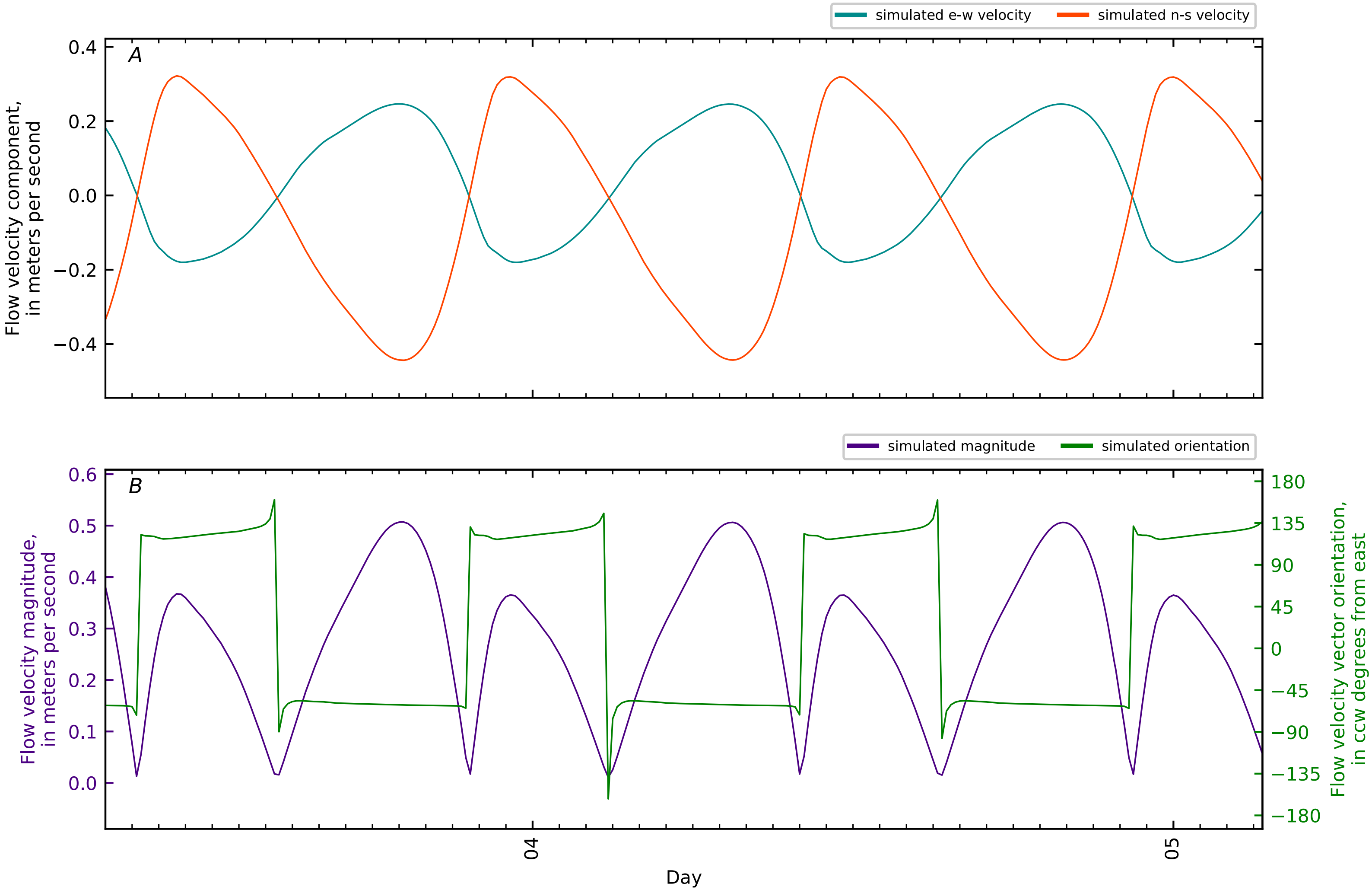

Figure B3-215. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 54, Penob Riv KM18. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

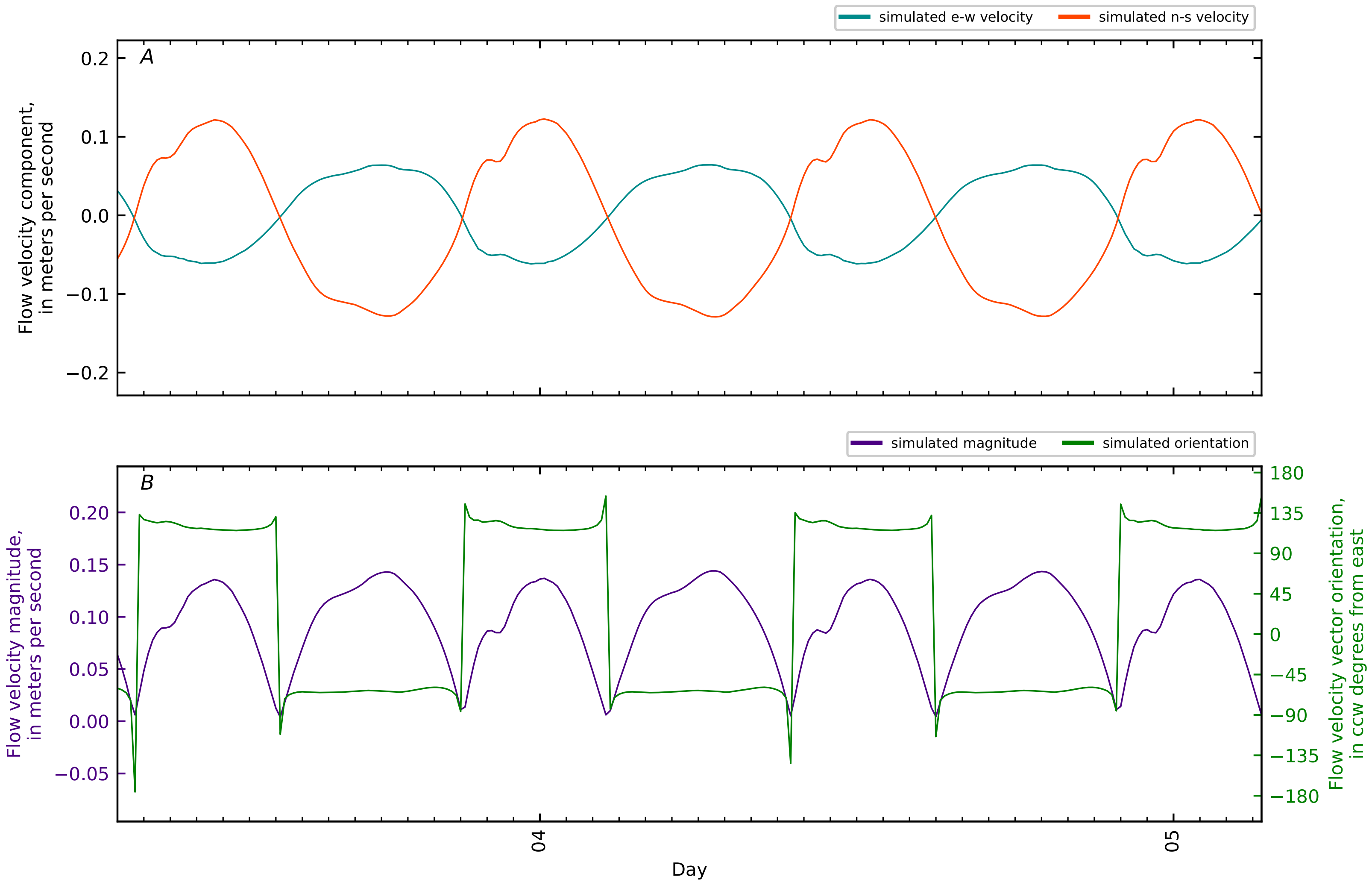

Figure B3-216. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 55, Penob Riv KM18.01 GS CTD1-01. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

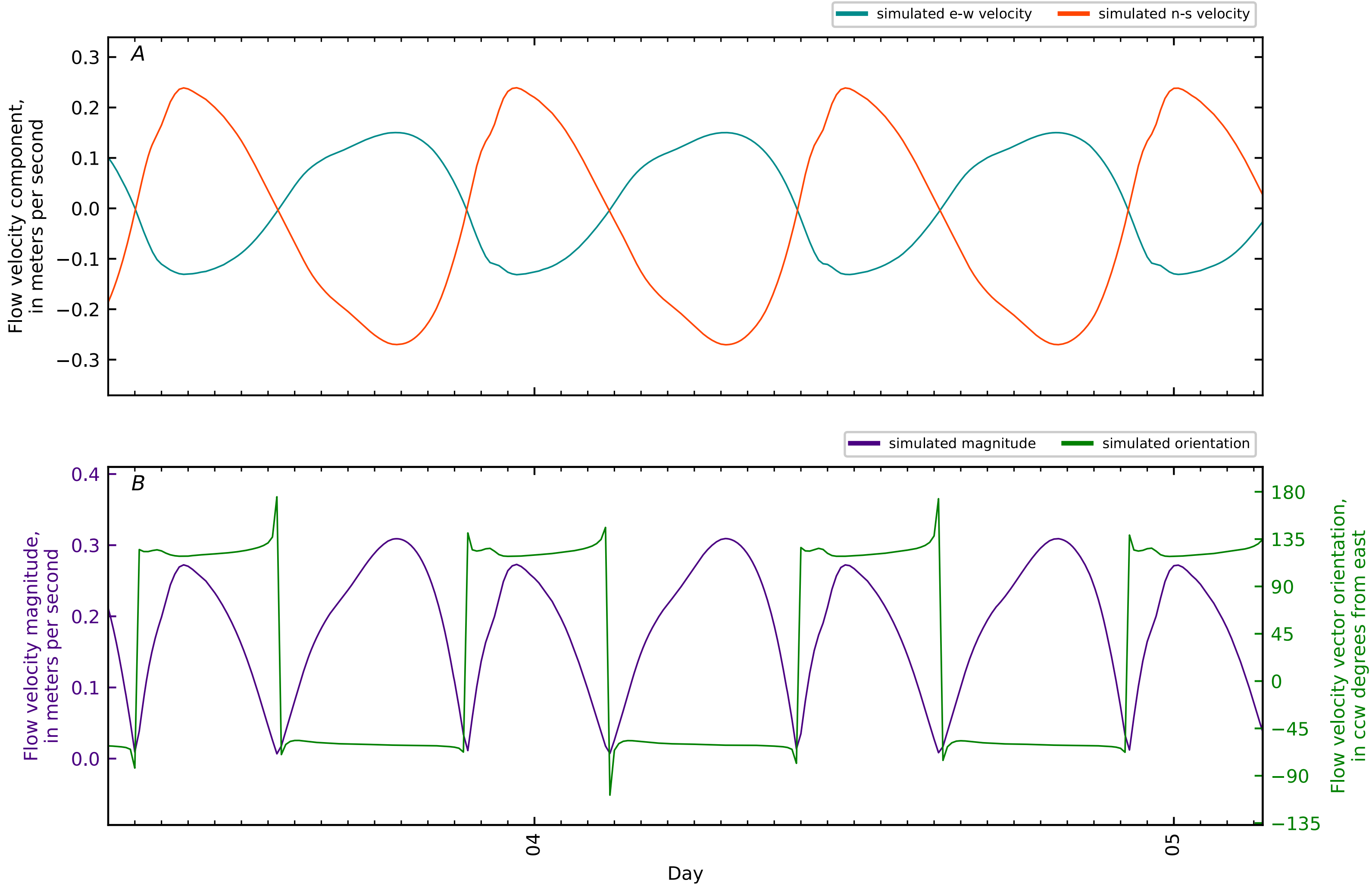

Figure B3-217. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 56, Penob Riv KM18.01 GS CTD1-02. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

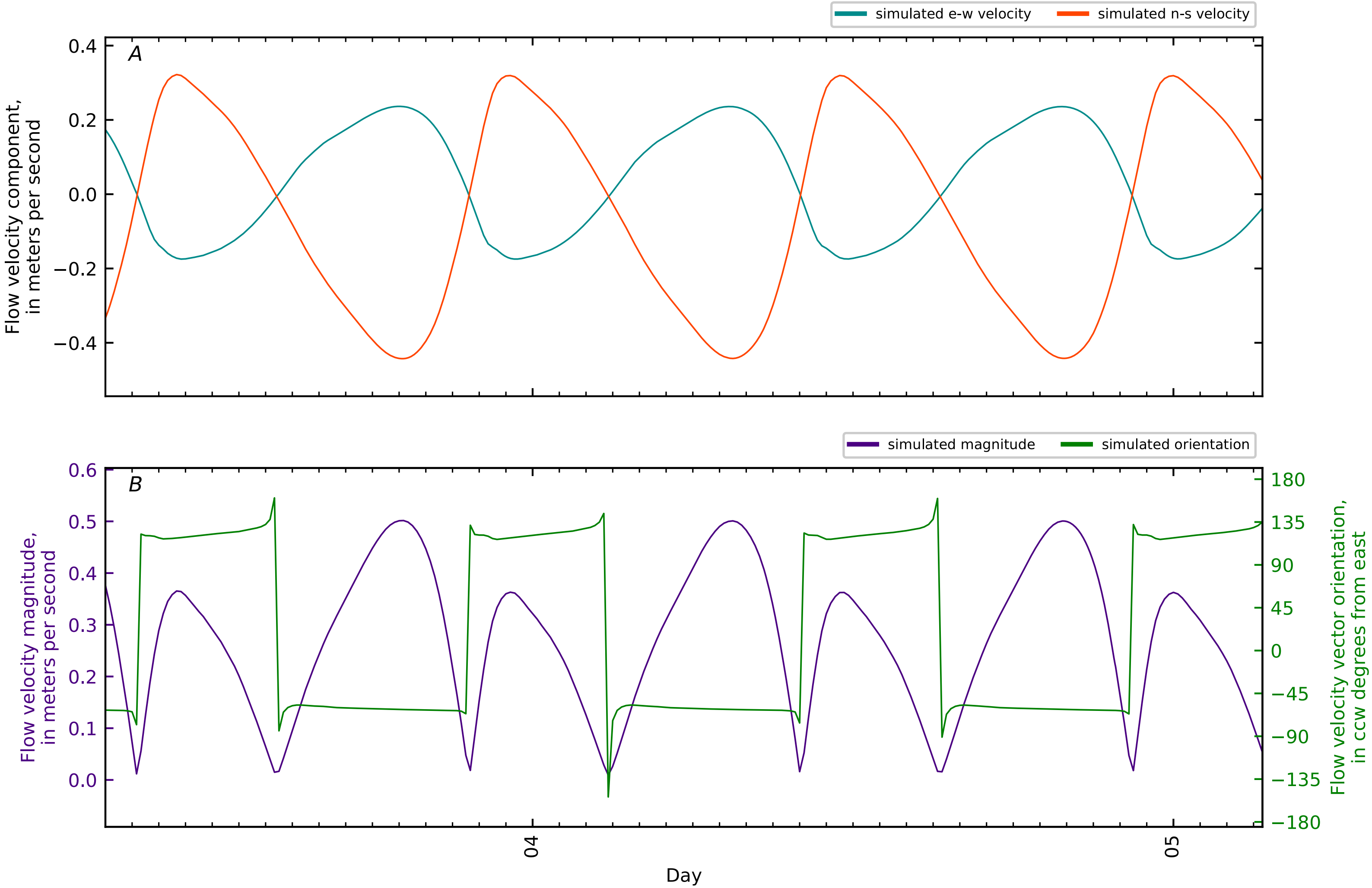

Figure B3-218. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 57, Penob Riv KM18.01 GS CTD1-03. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

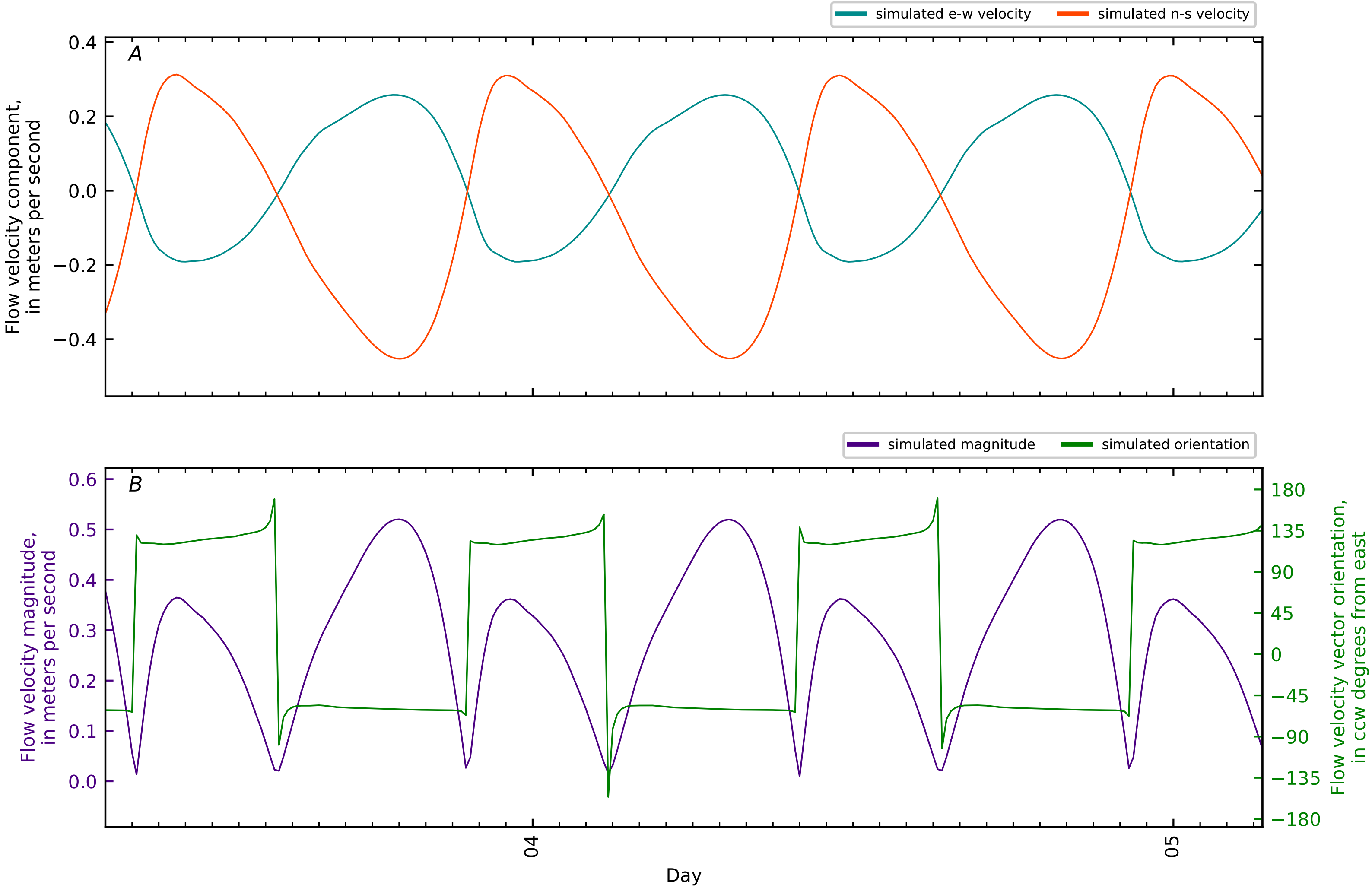

Figure B3-219. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 58, Penob Riv KM18.01 GS CTD1-04. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

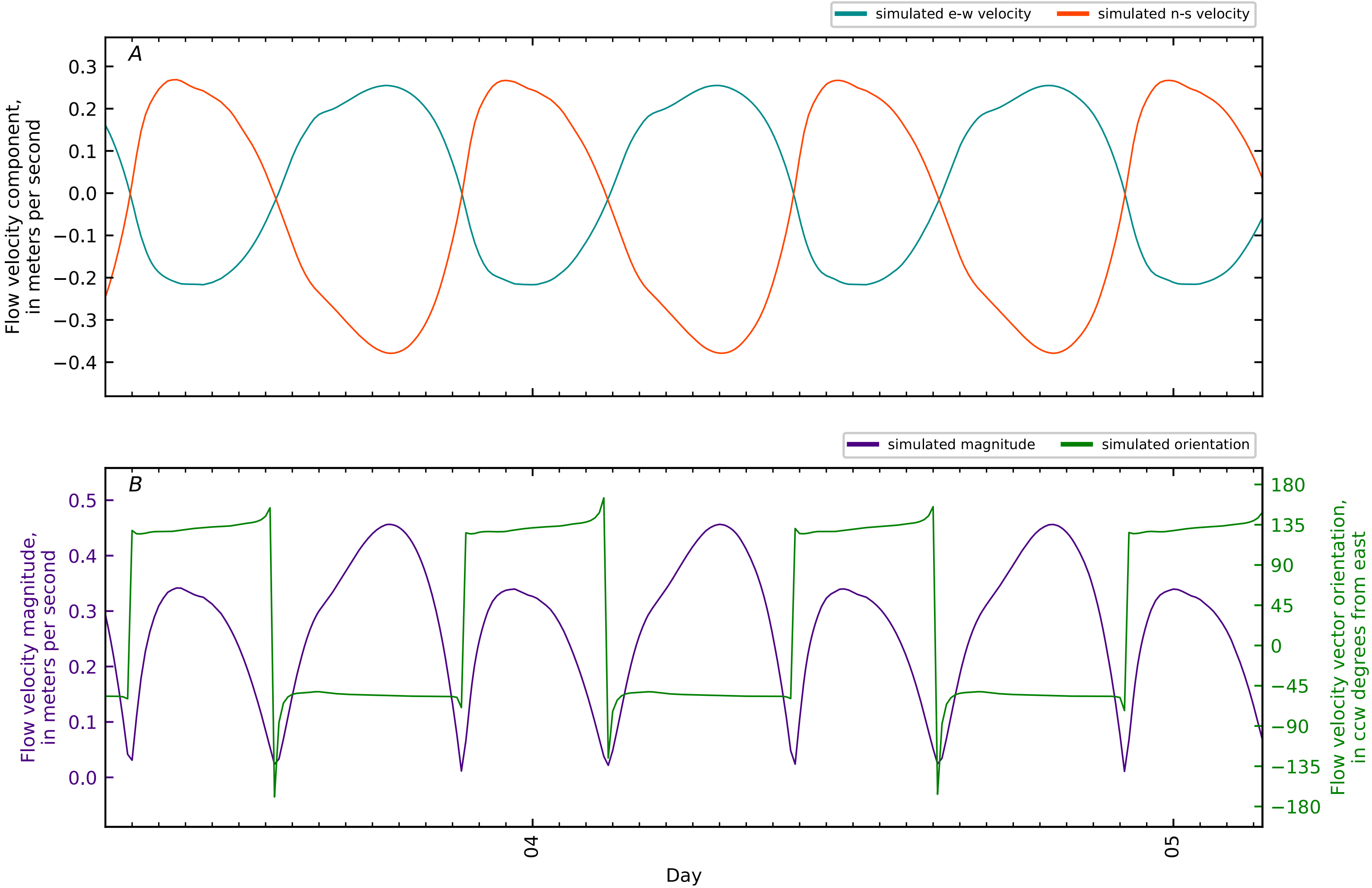

Figure B3-220. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 59, Penob Riv KM18.01 GS CTD1-05. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

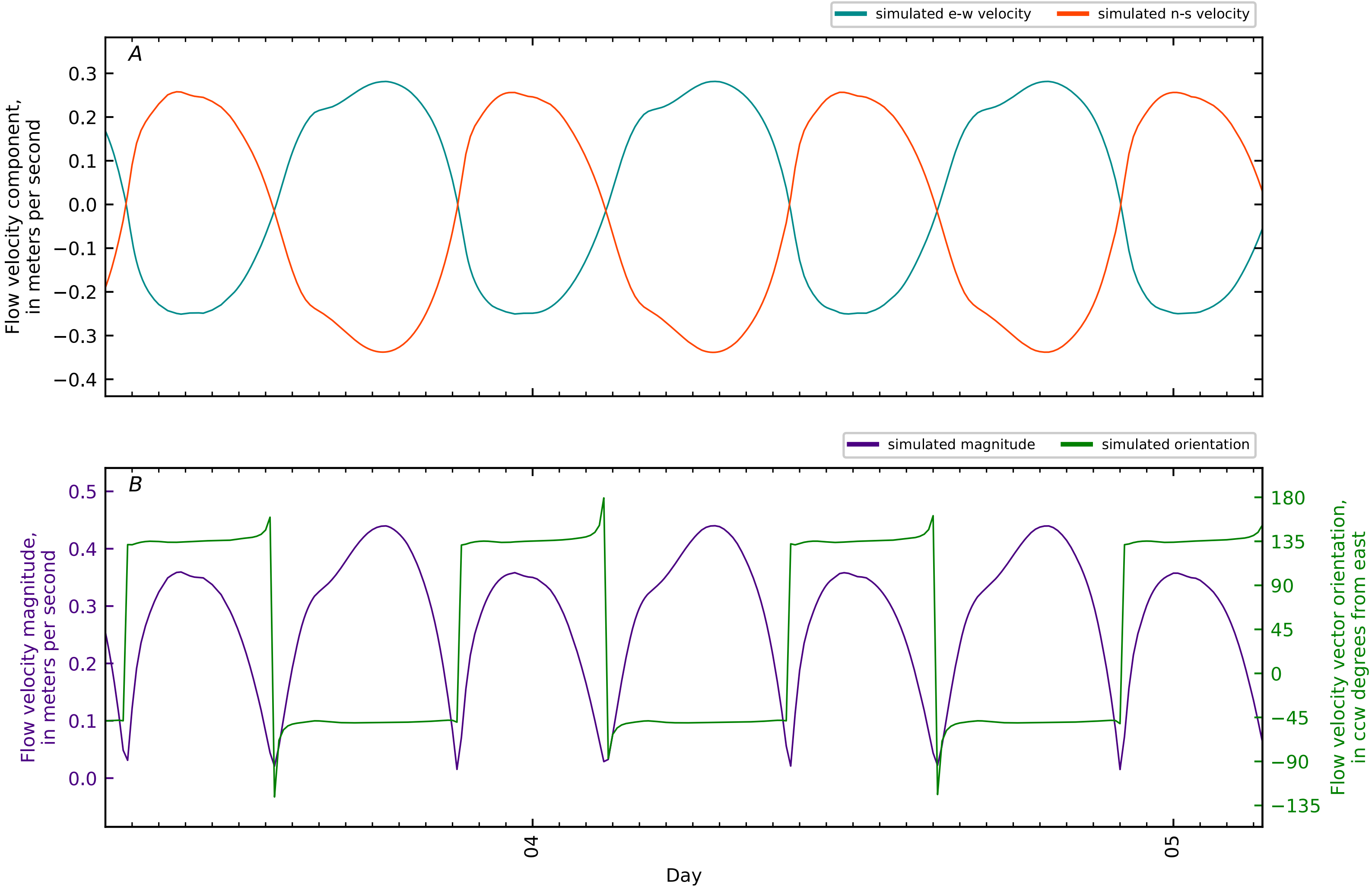

Figure B3-221. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 60, Penob Riv KM18.01 GS CTD1-06. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

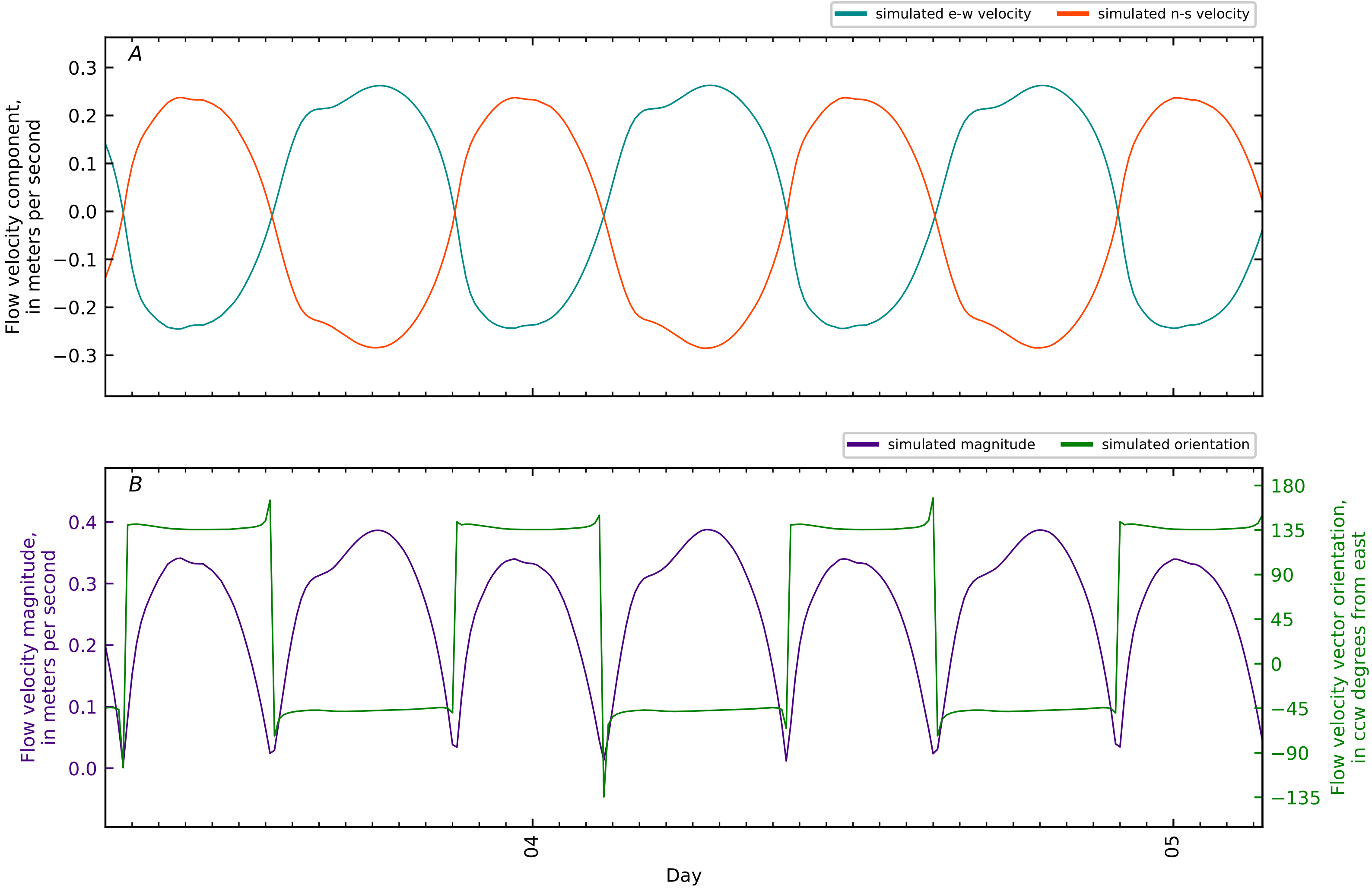

Figure B3-222. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 61, Penob Riv KM18.01 GS CTD1-07. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

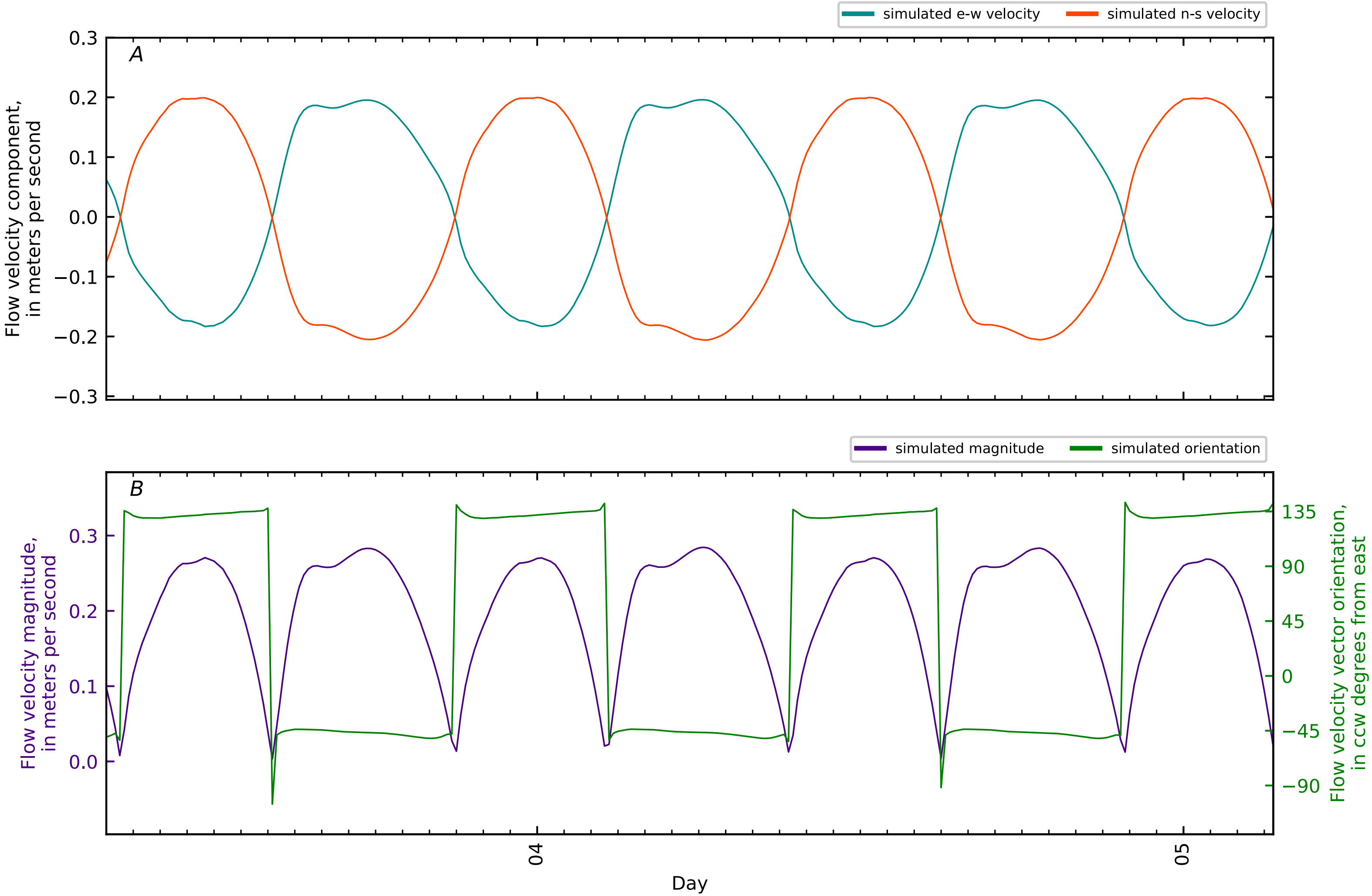

Figure B3-223. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 62, Penob Riv KM18.01 GS CTD1-08. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

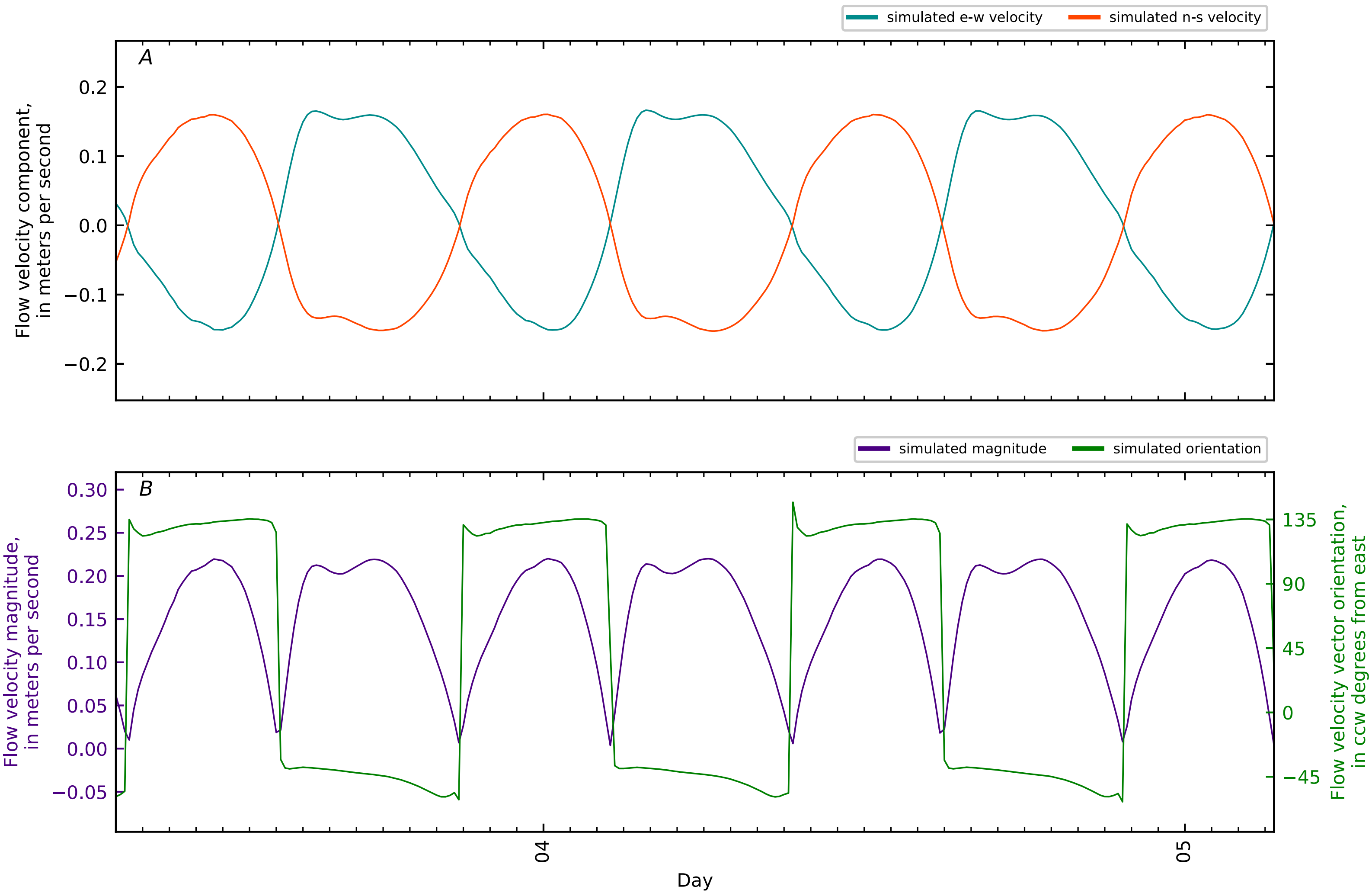

Figure B3-224. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 63, Penob Riv KM18.01 GS CTD1-09. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

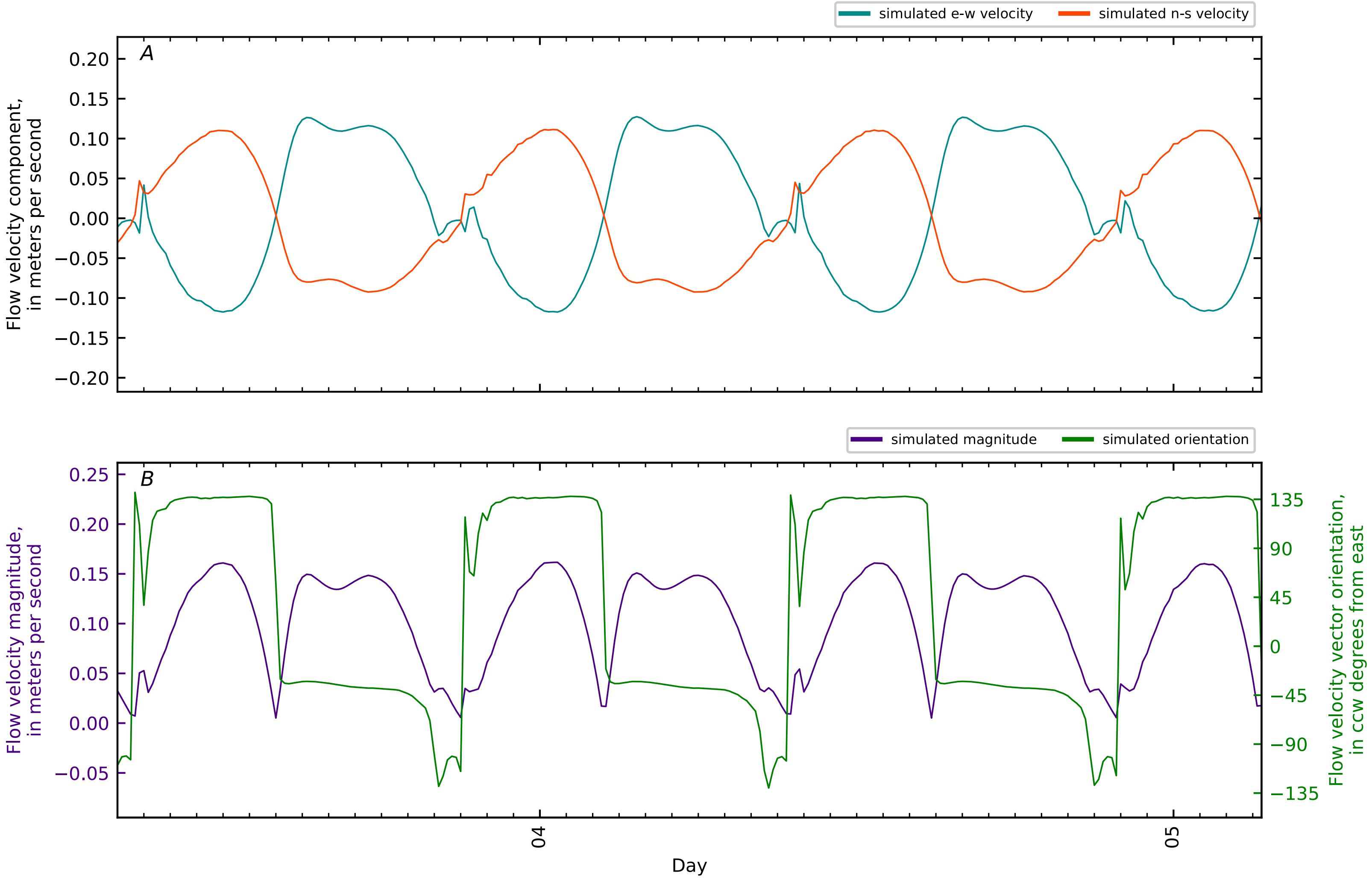

Figure B3-225. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 64, Penob Riv KM18.01 GS CTD1-10. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

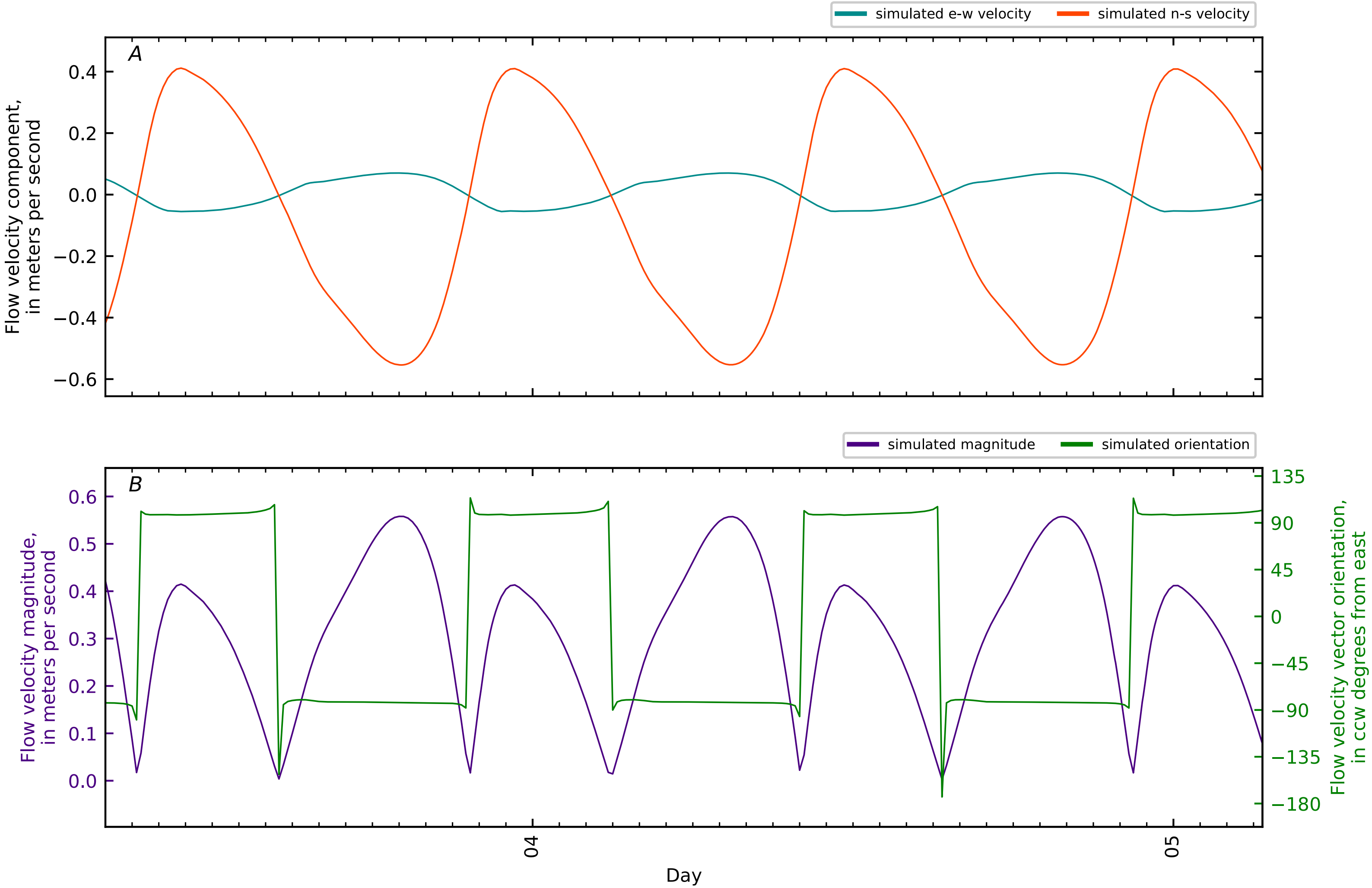

Figure B3-226. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 65, Penob Riv KM18.5 WHOI8 Frankfort Channel. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

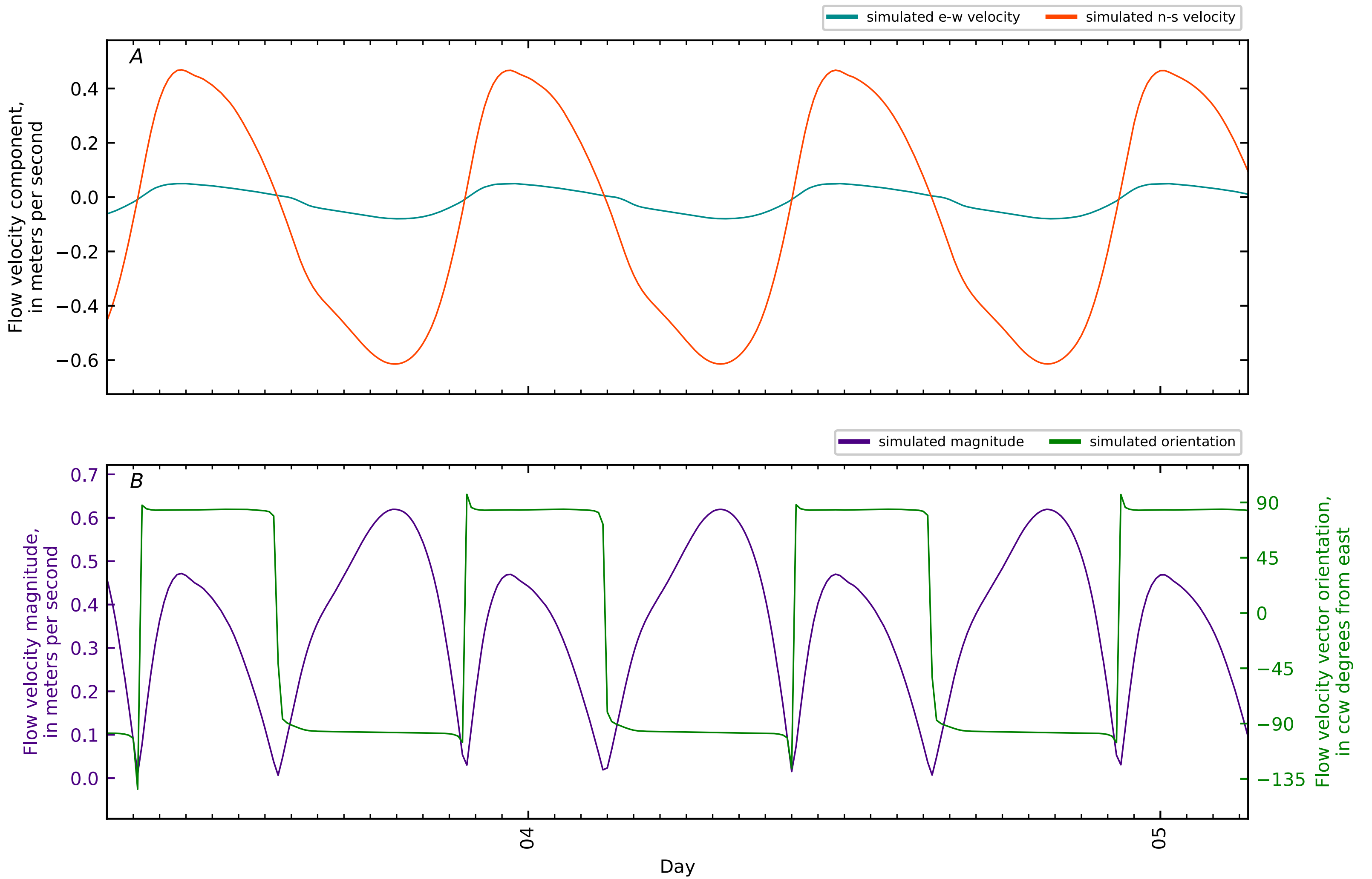

Figure B3-227. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 66, Penob Riv KM19. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

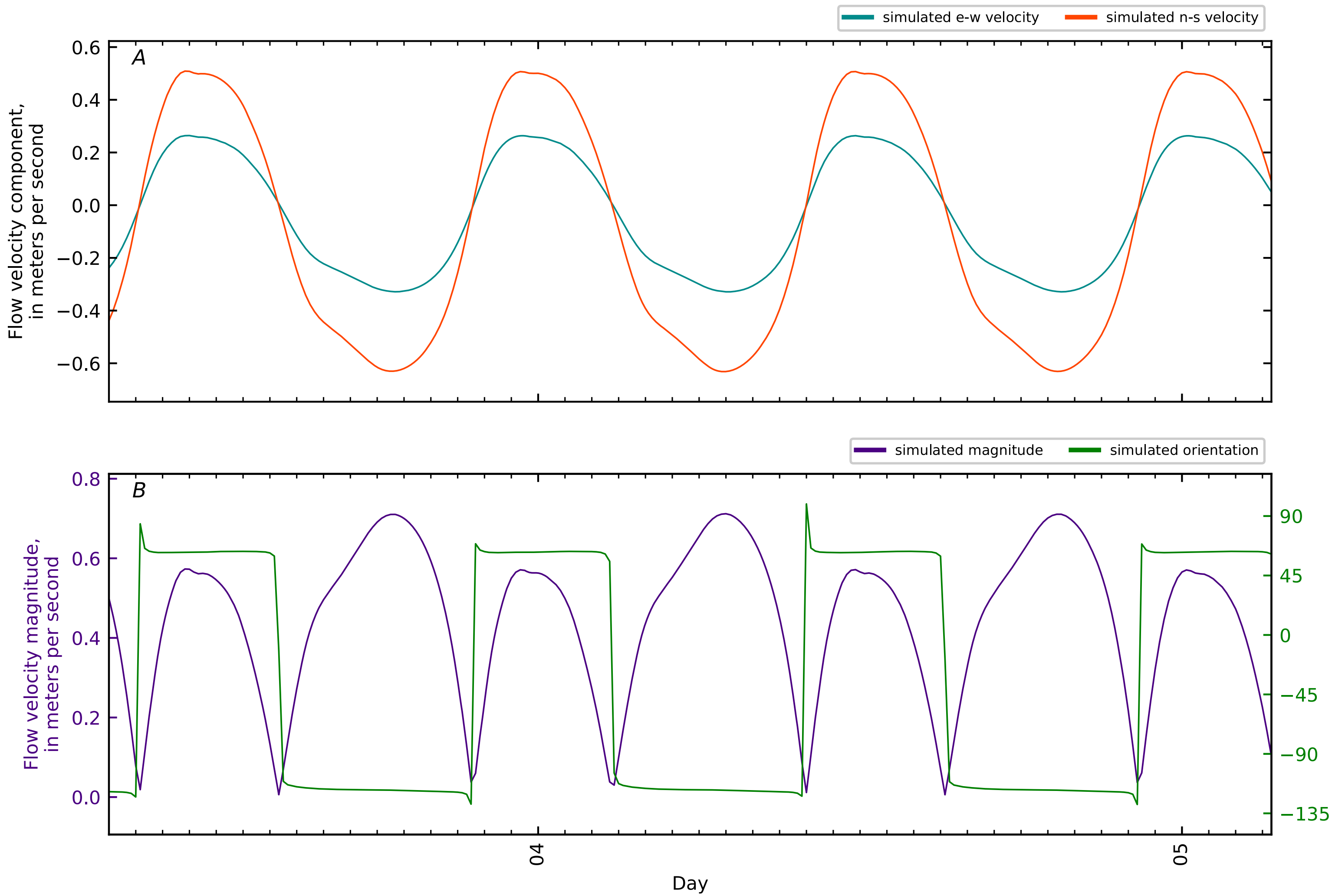

Figure B3-228. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 67, Penob Riv KM20. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

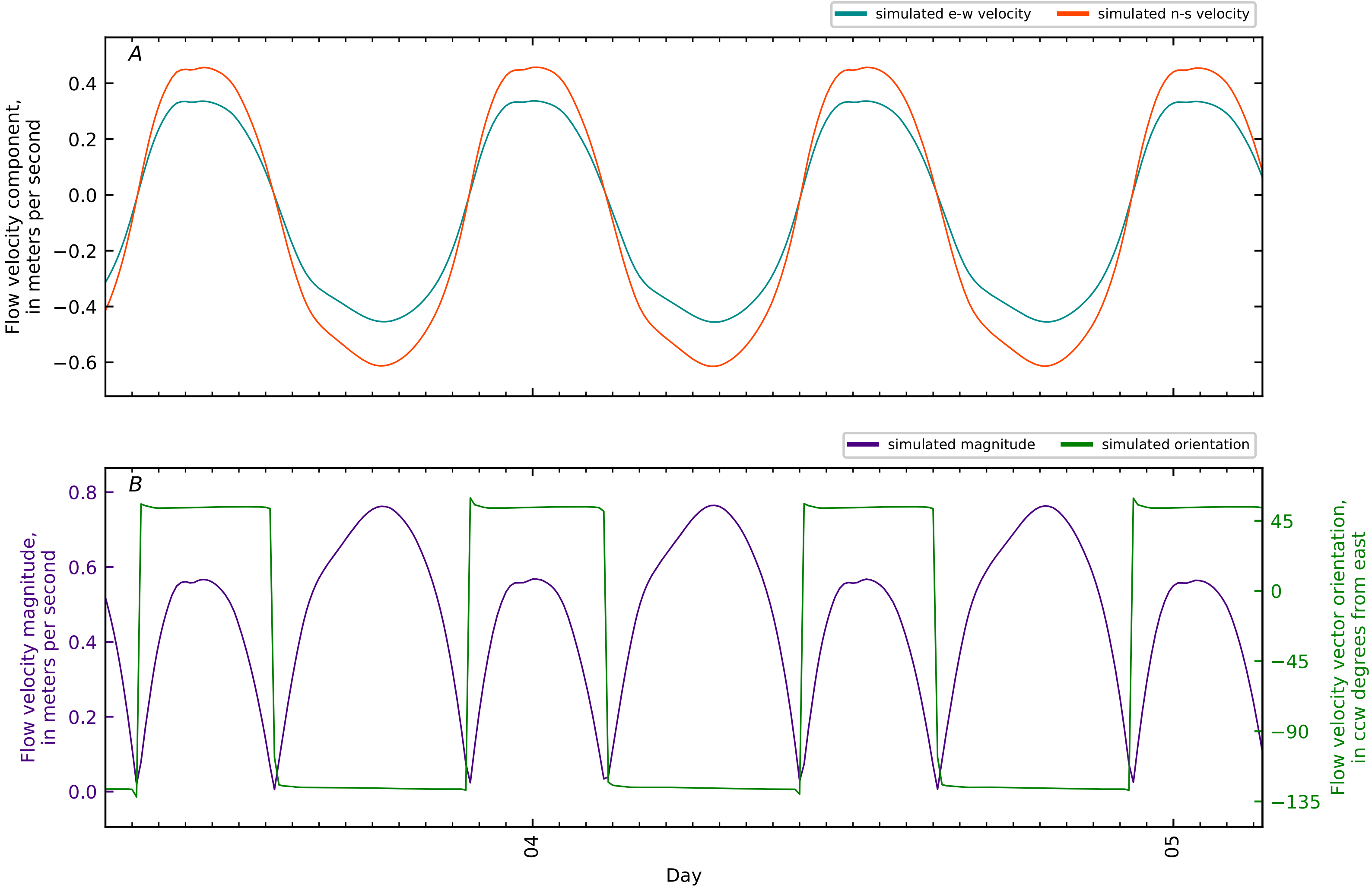

Figure B3-229. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 68, Penob Riv KM21. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

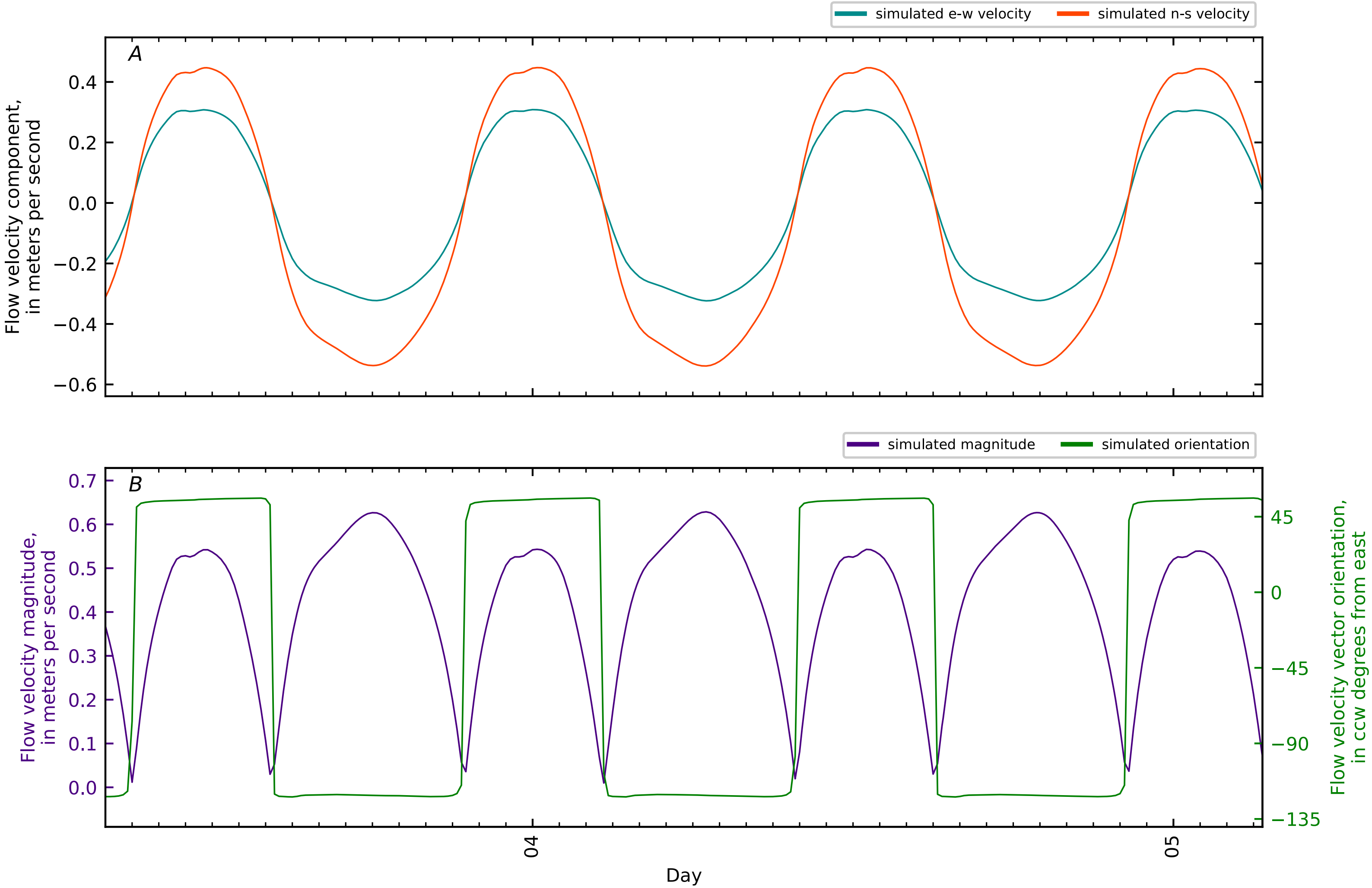

Figure B3-230. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 69, Penob Riv KM21.2 GS 443810068502201 Wint. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

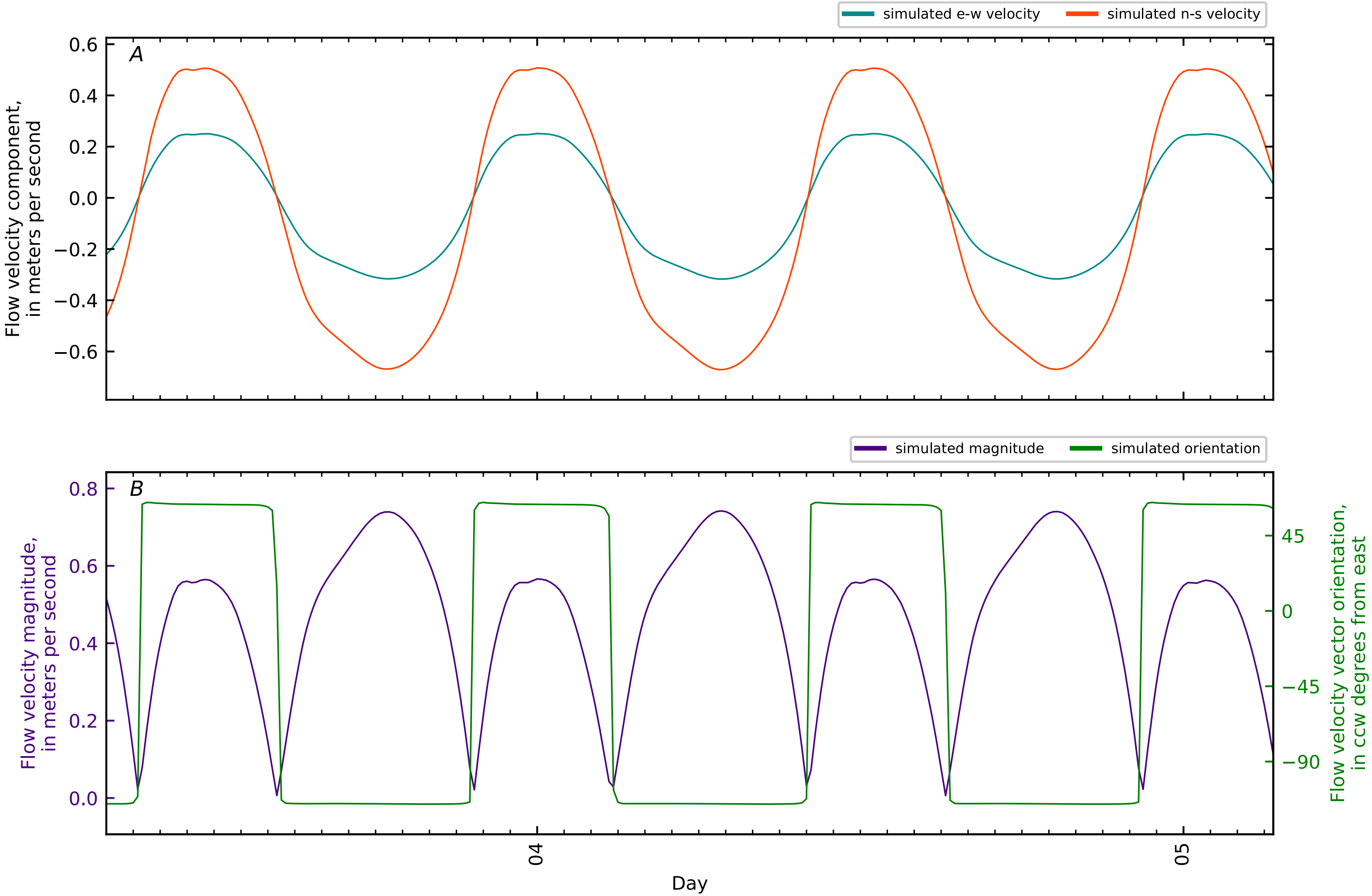

Figure B3-231. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 70, Penob Riv KM21.5 WHOI6 Winterport 2010. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

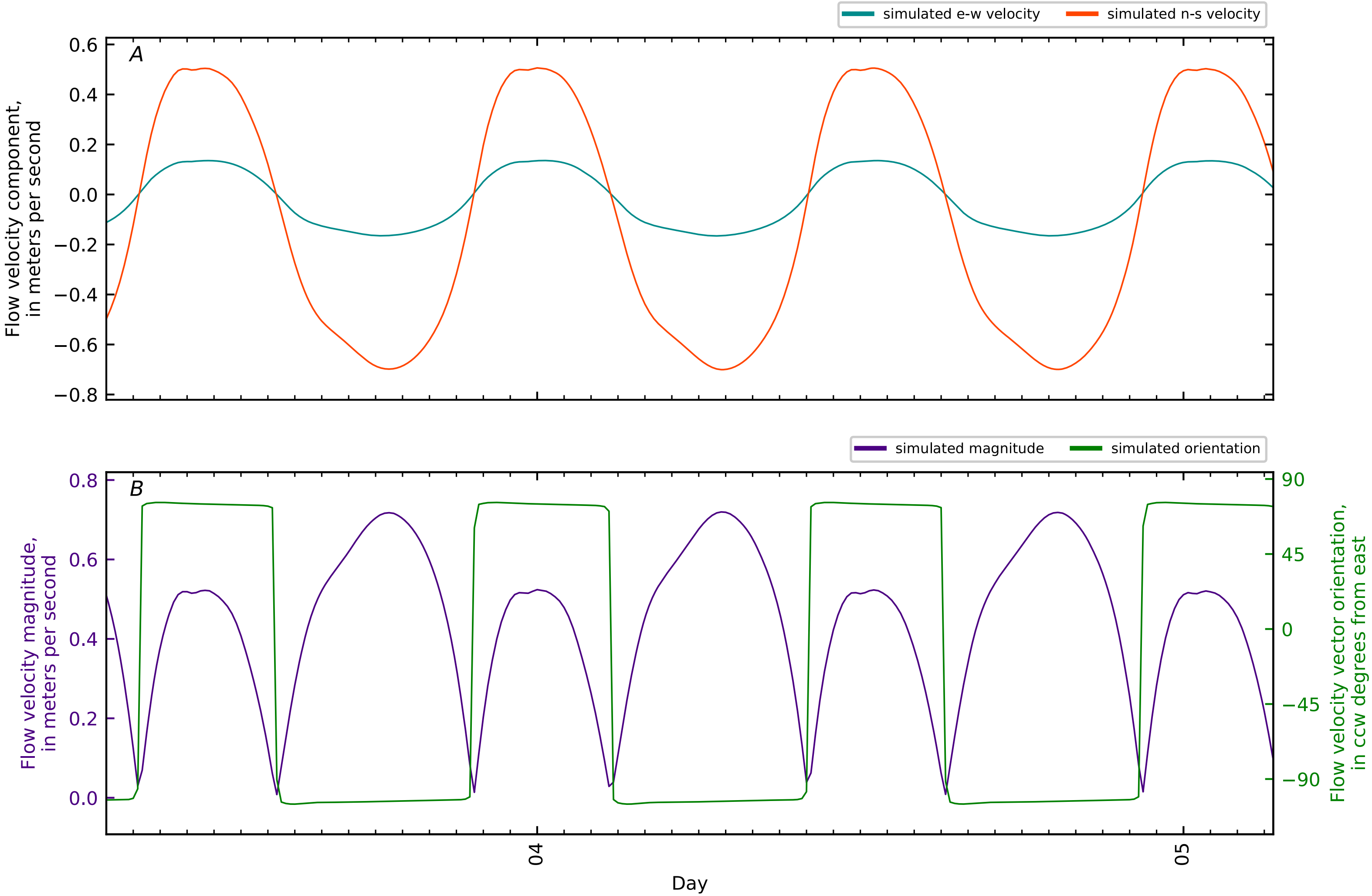

Figure B3-232. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 71, Penob Riv KM22. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

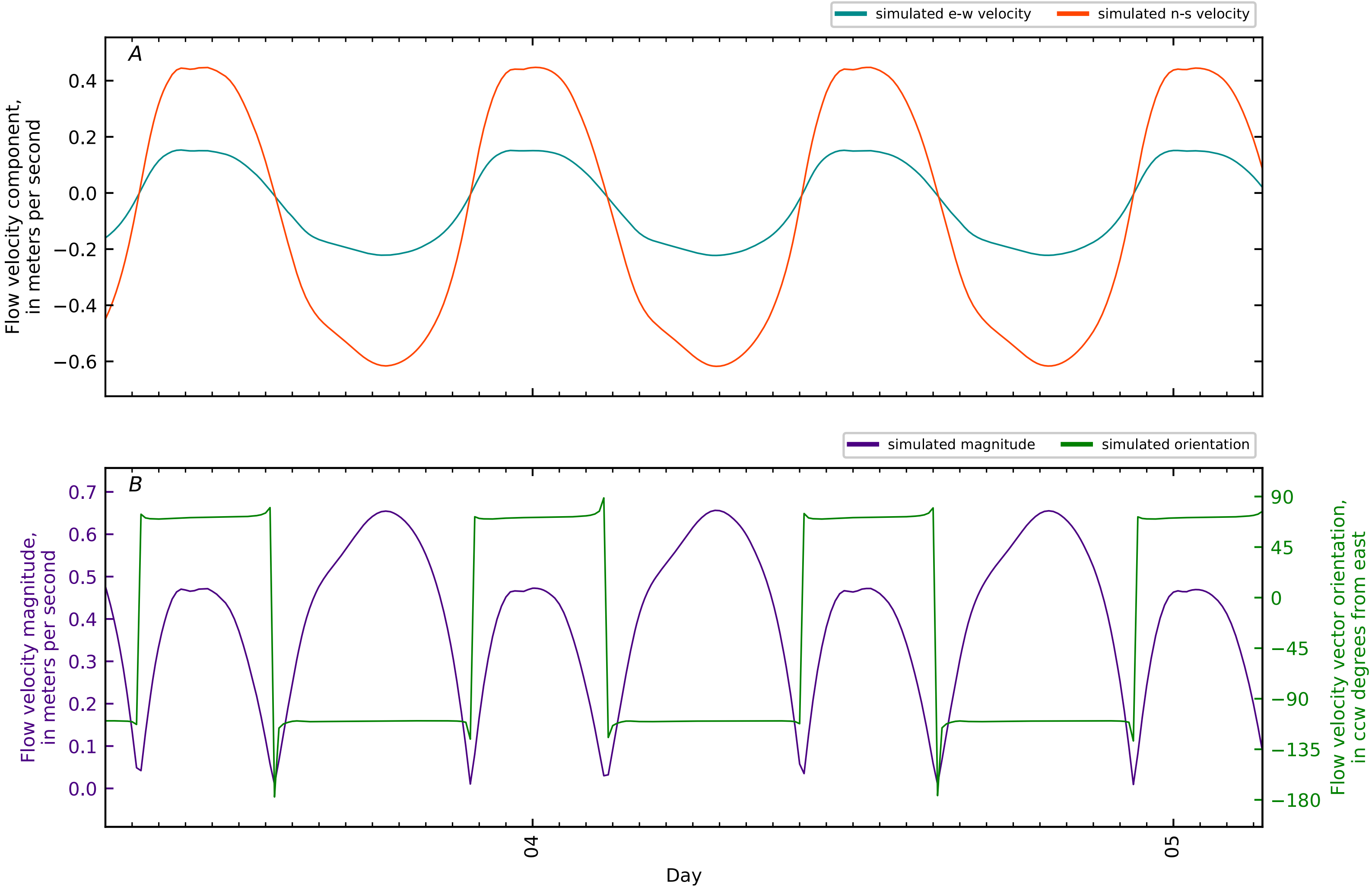

Figure B3-233. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 72, Penob Riv KM23. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

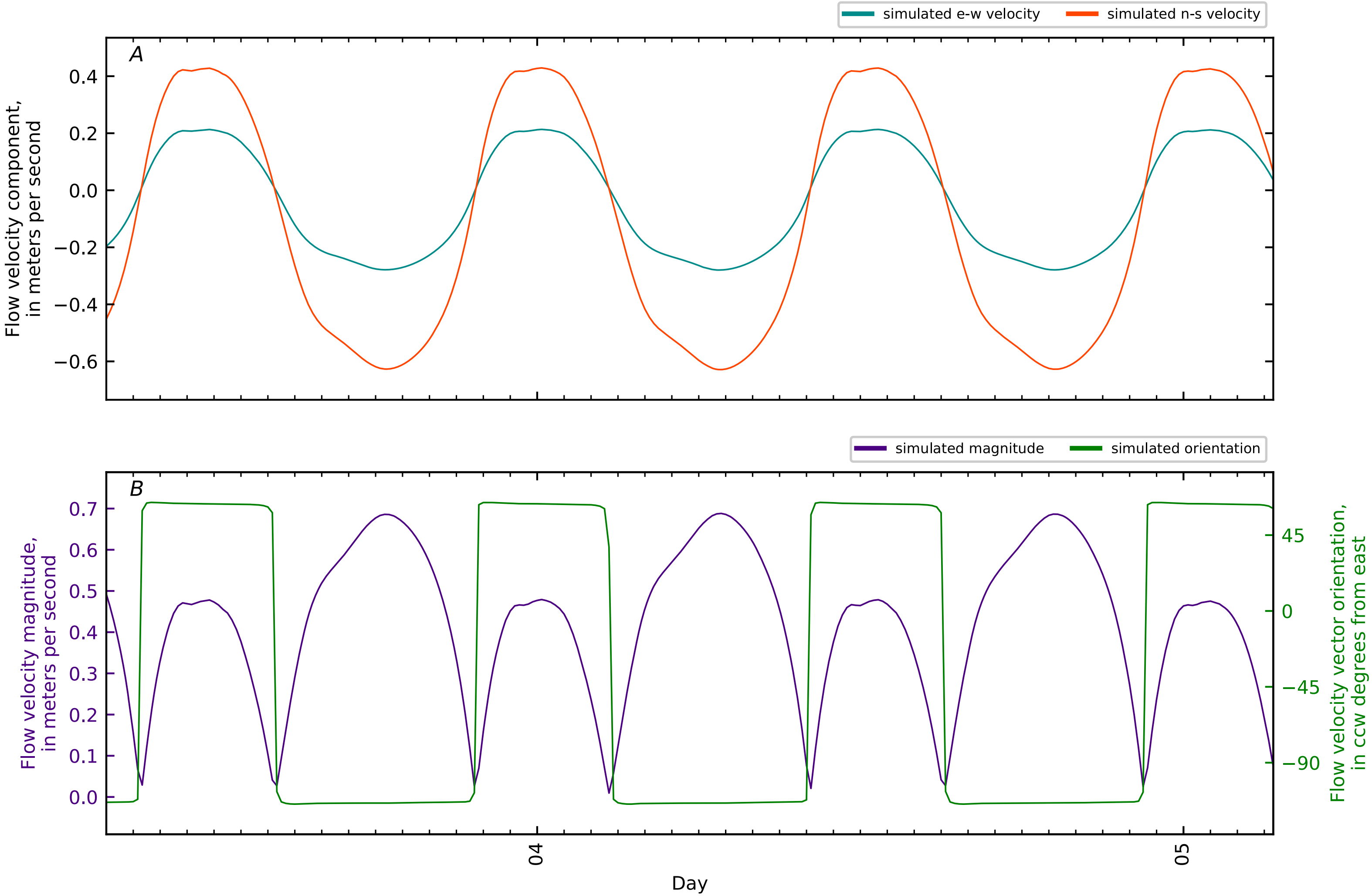

Figure B3-234. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 73, Penob Riv KM24. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

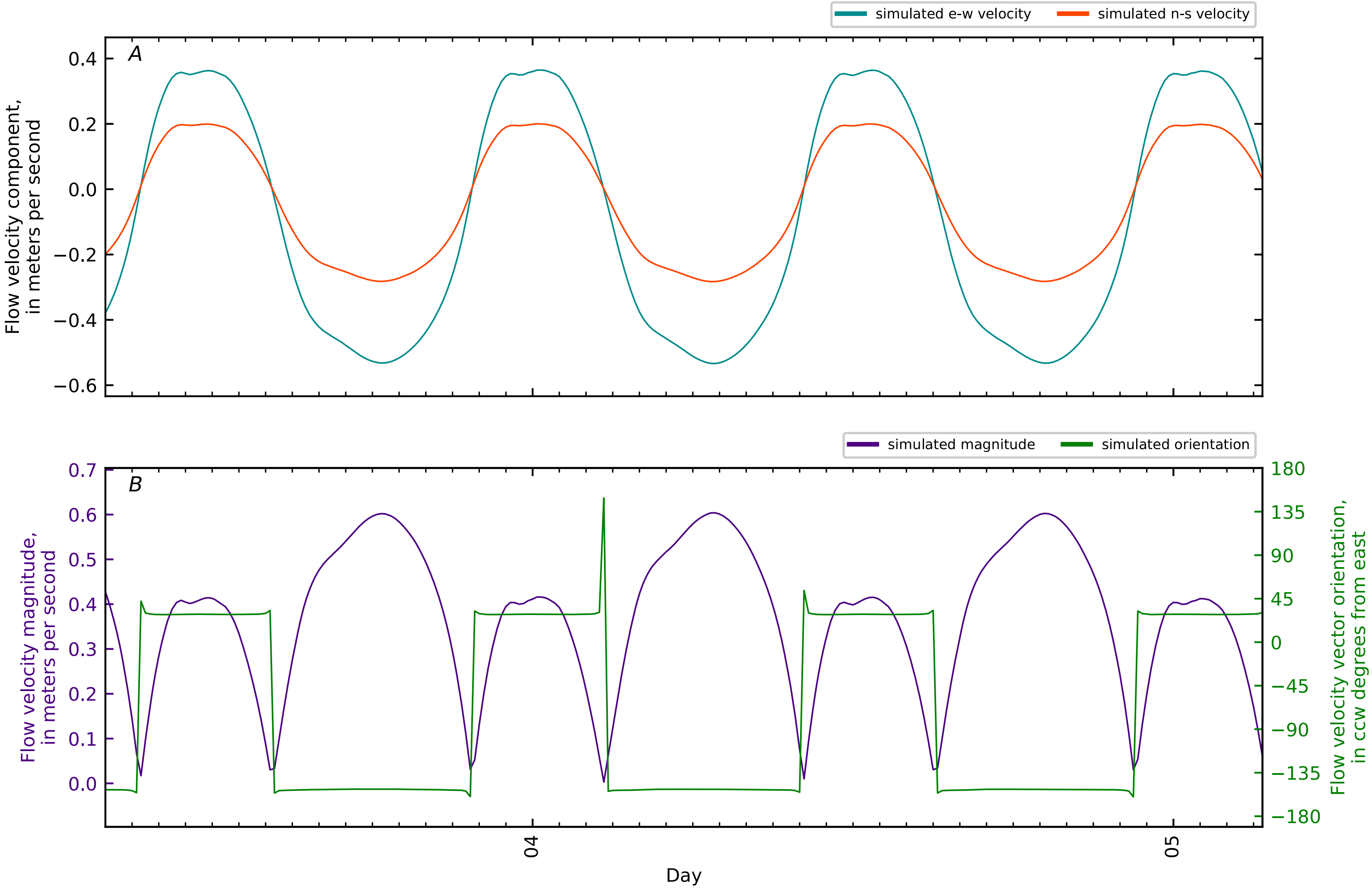

Figure B3-235. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 74, Penob Riv KM25. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

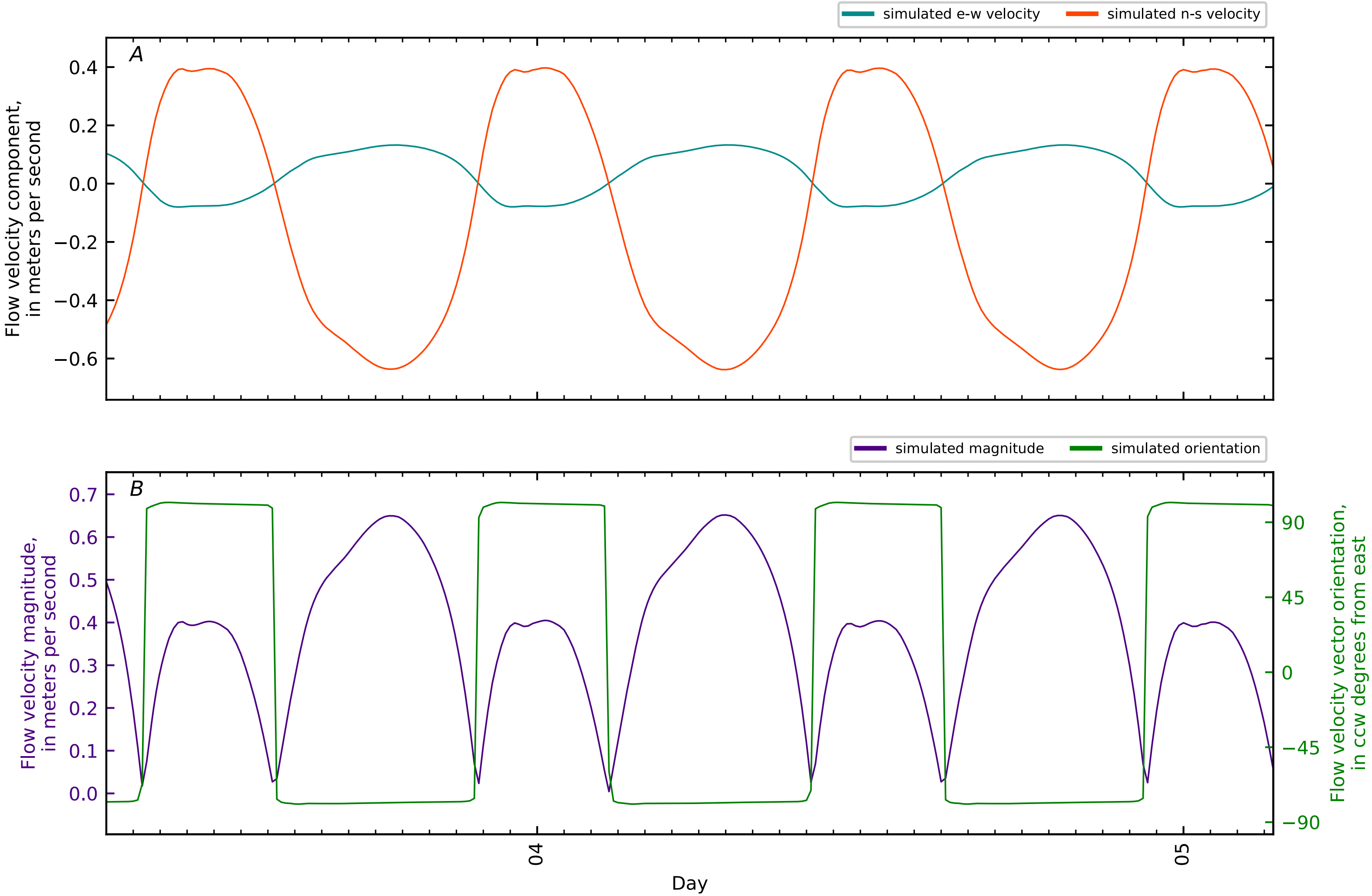

Figure B3-236. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 75, Penob Riv KM26. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

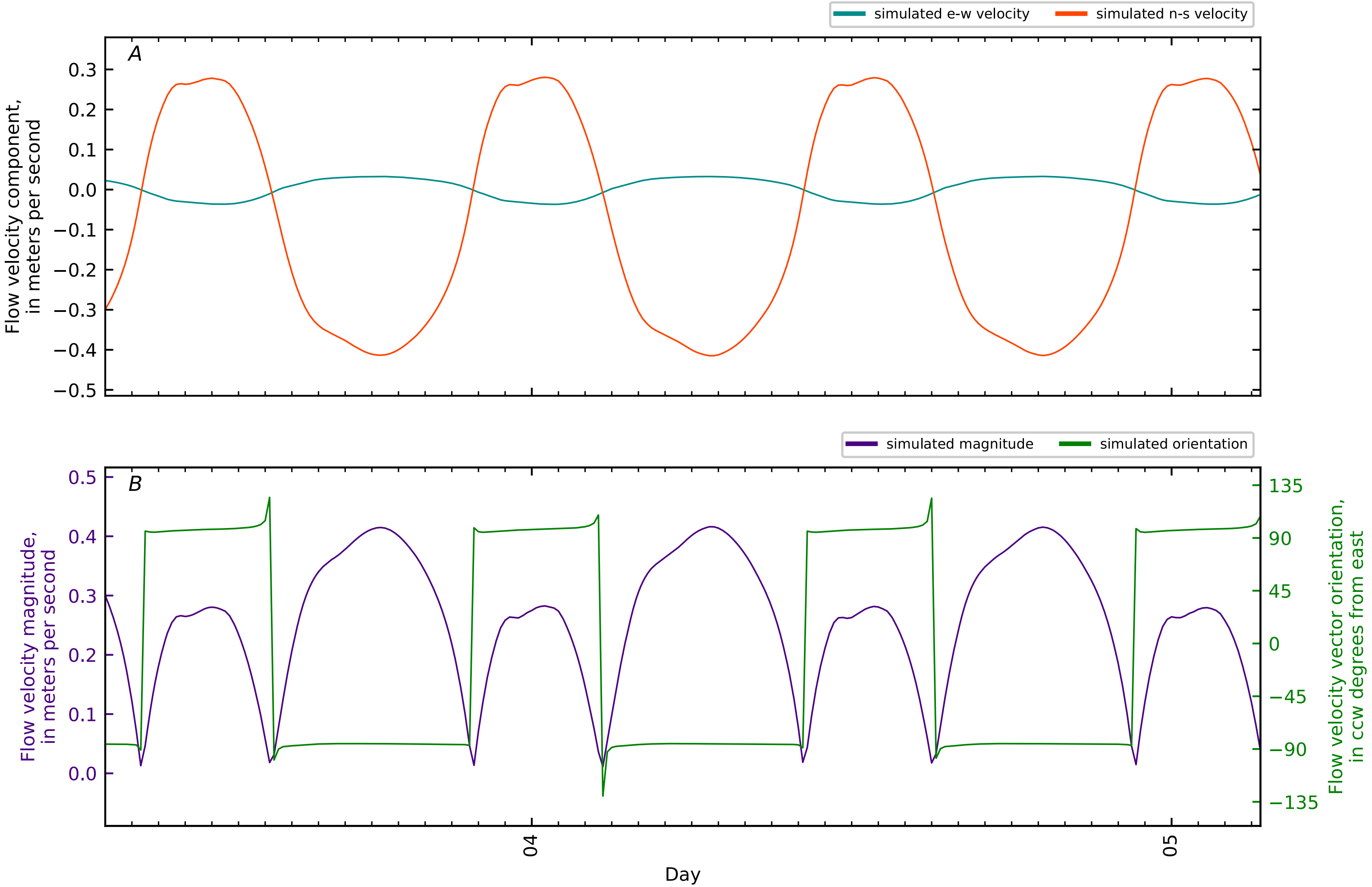

Figure B3-237. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 76, Penob Riv KM27. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

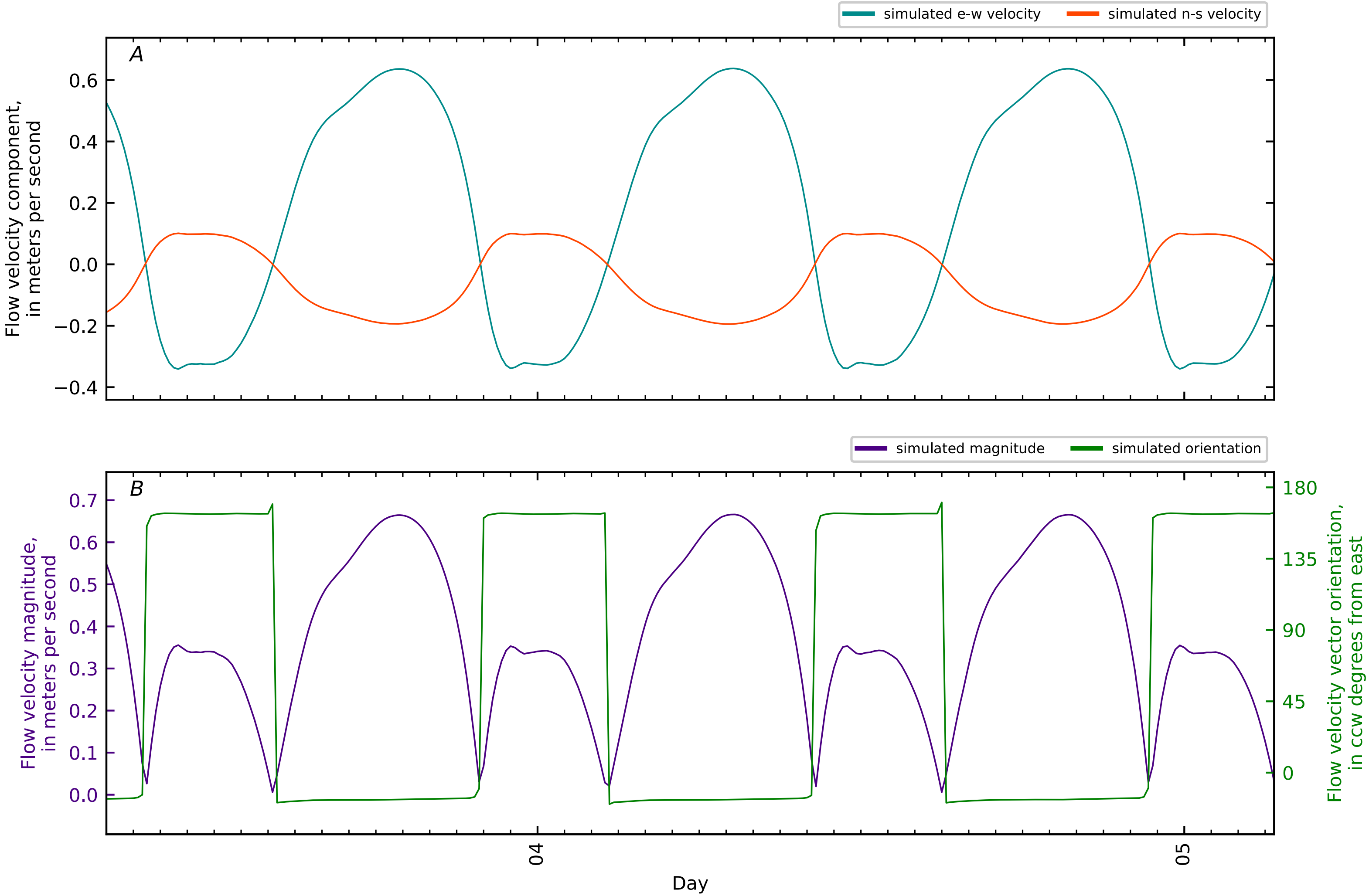

Figure B3-238. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 77, Penob Riv KM28. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

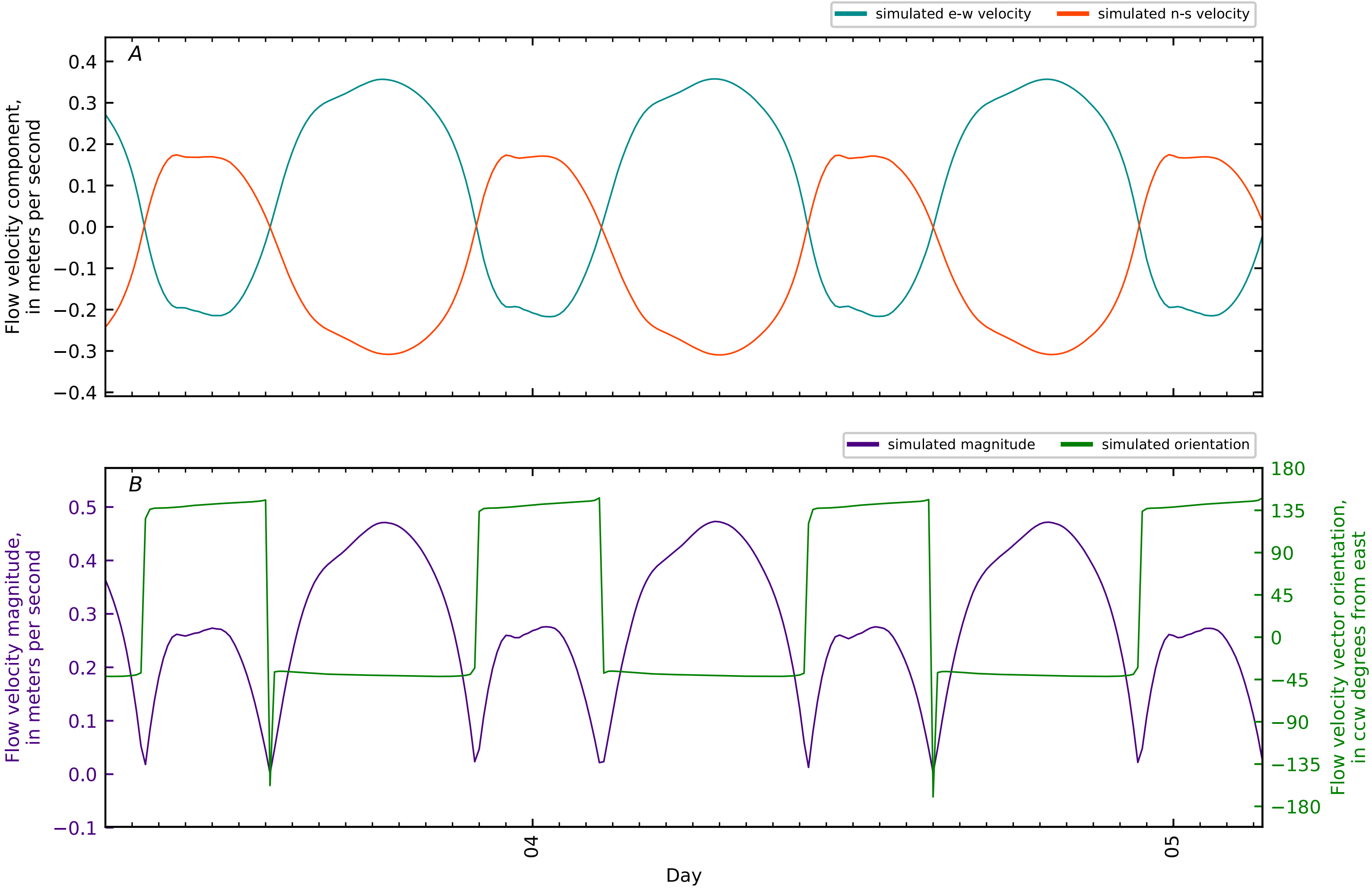

Figure B3-239. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 78, Penob Riv KM29. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

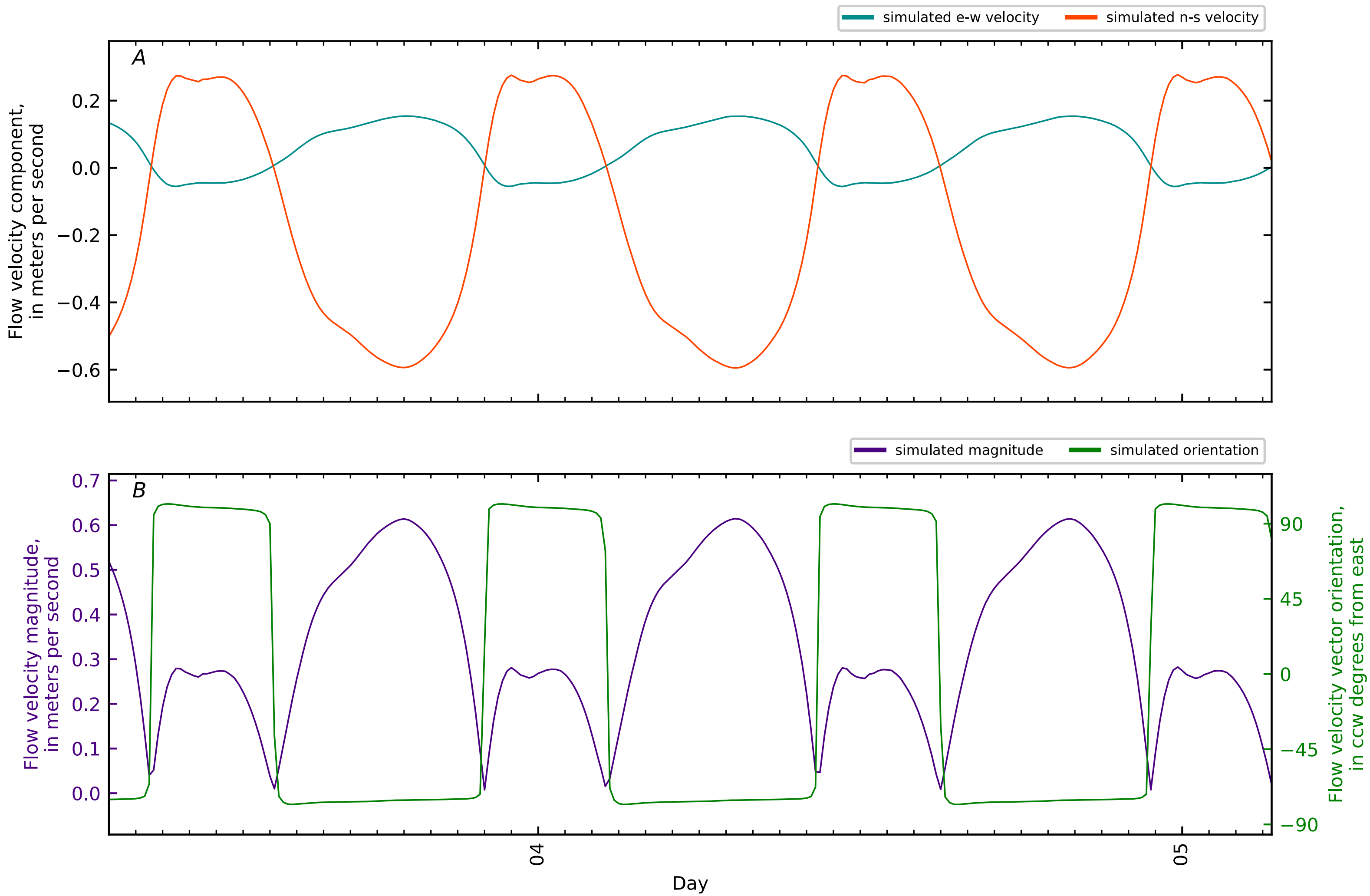

Figure B3-240. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 79, Penob Riv KM30. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

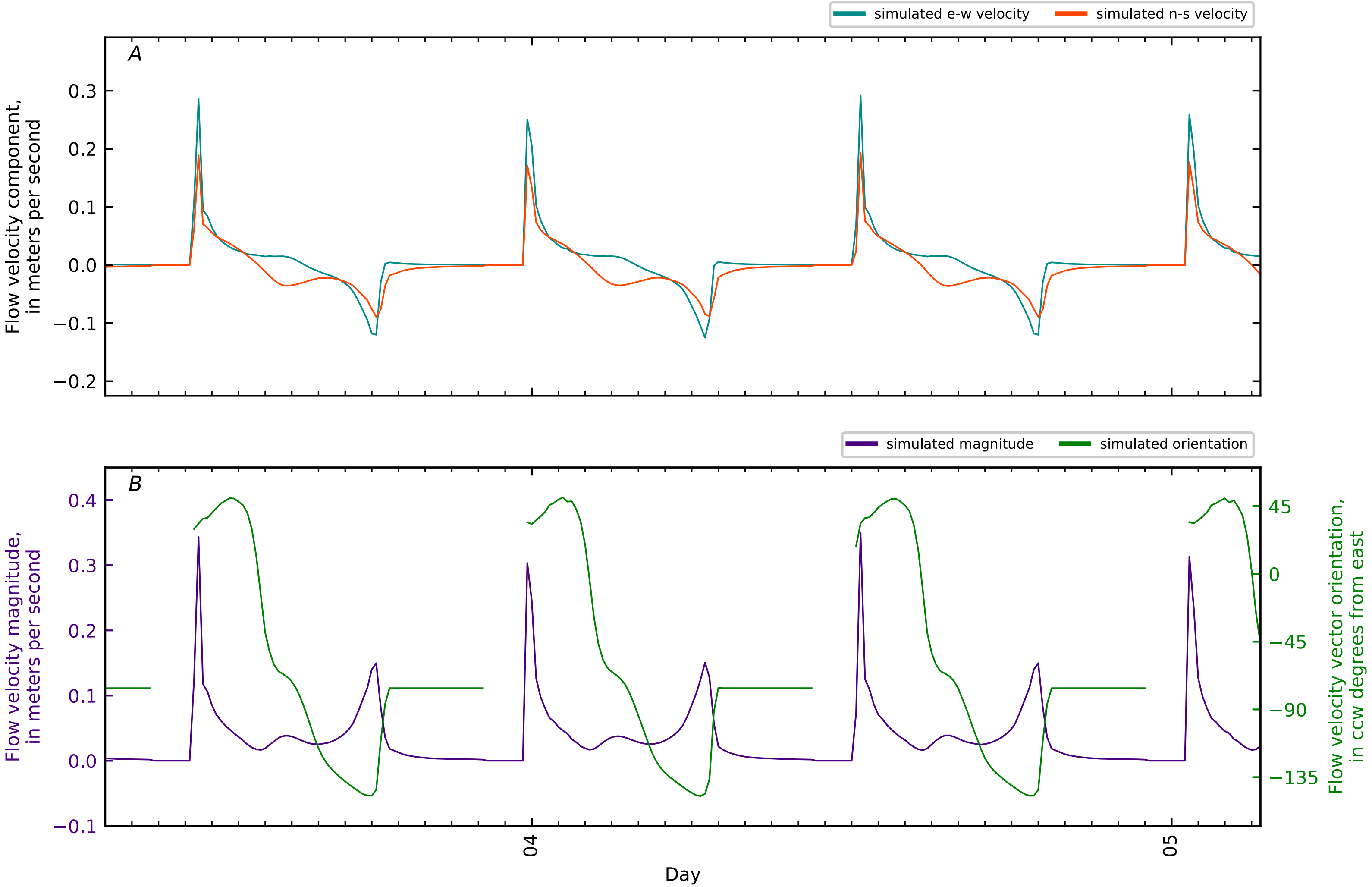

Figure B3-241. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 80, Penob Riv KM30.3 ERDC3 ON-MU2-SF-2 Bartl. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

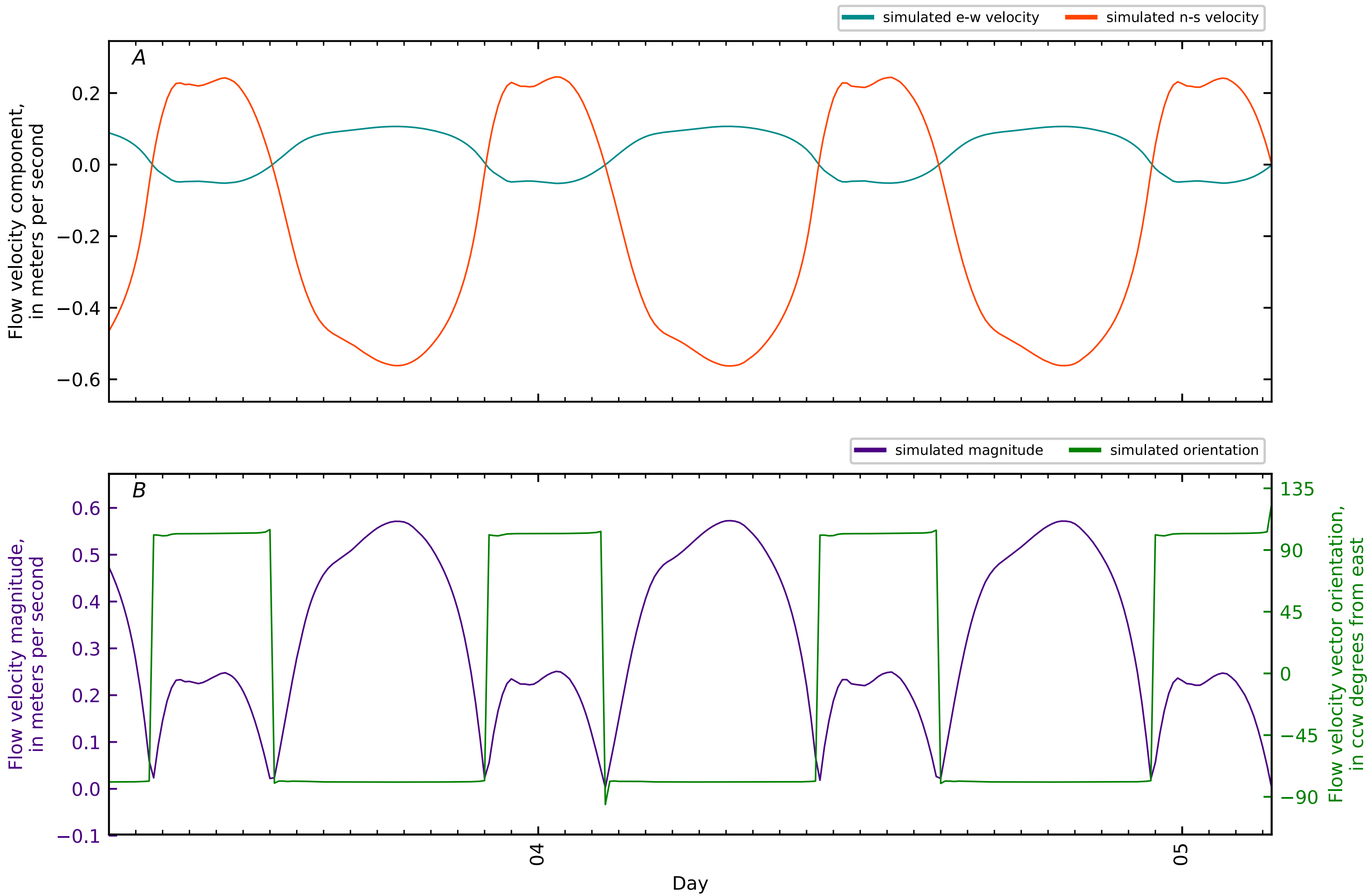

Figure B3-242. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 81, Penob Riv KM31. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

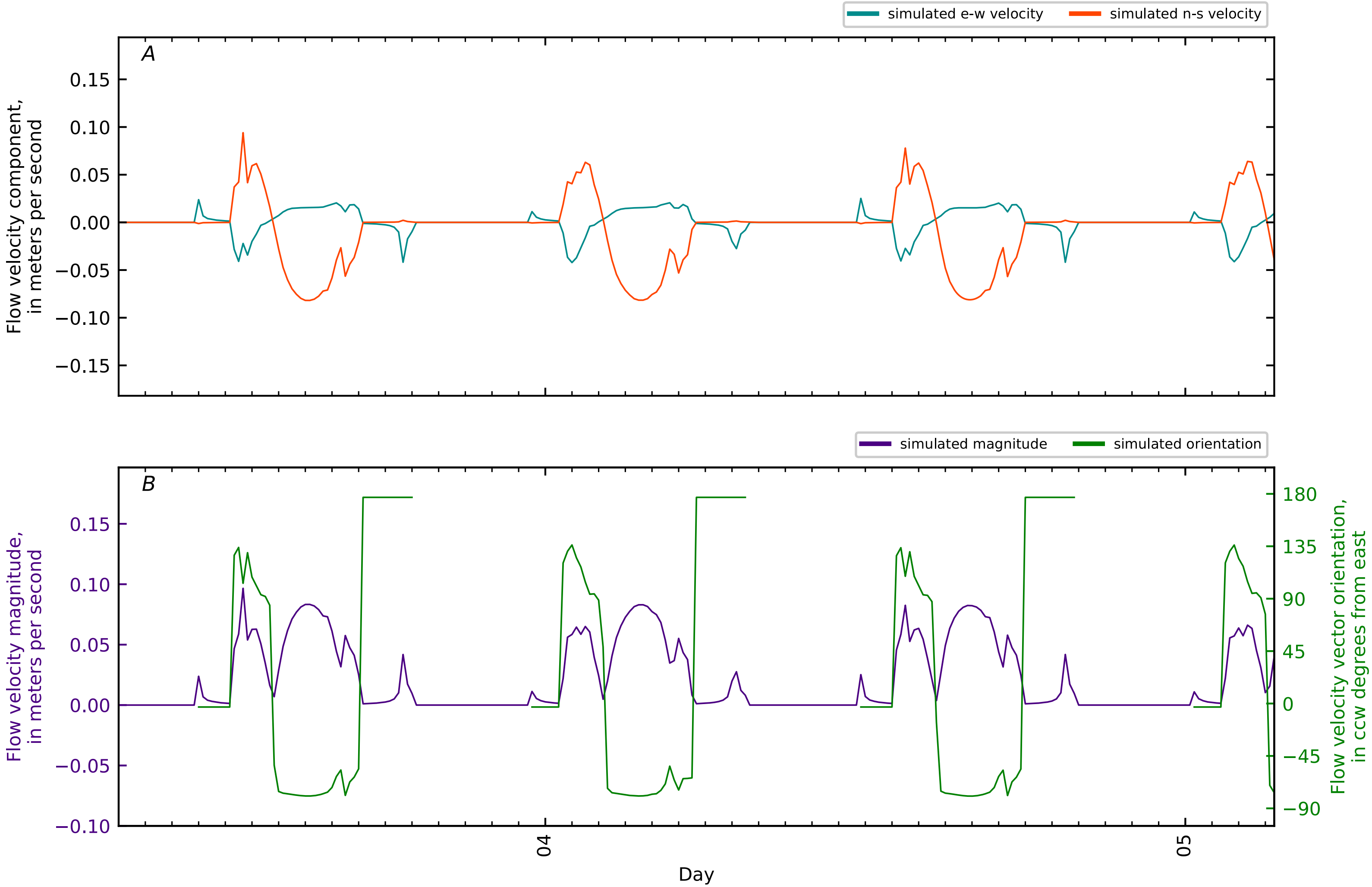

Figure B3-243. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 82, Penob Riv KM31.3 ERDC1 ON-MU2-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

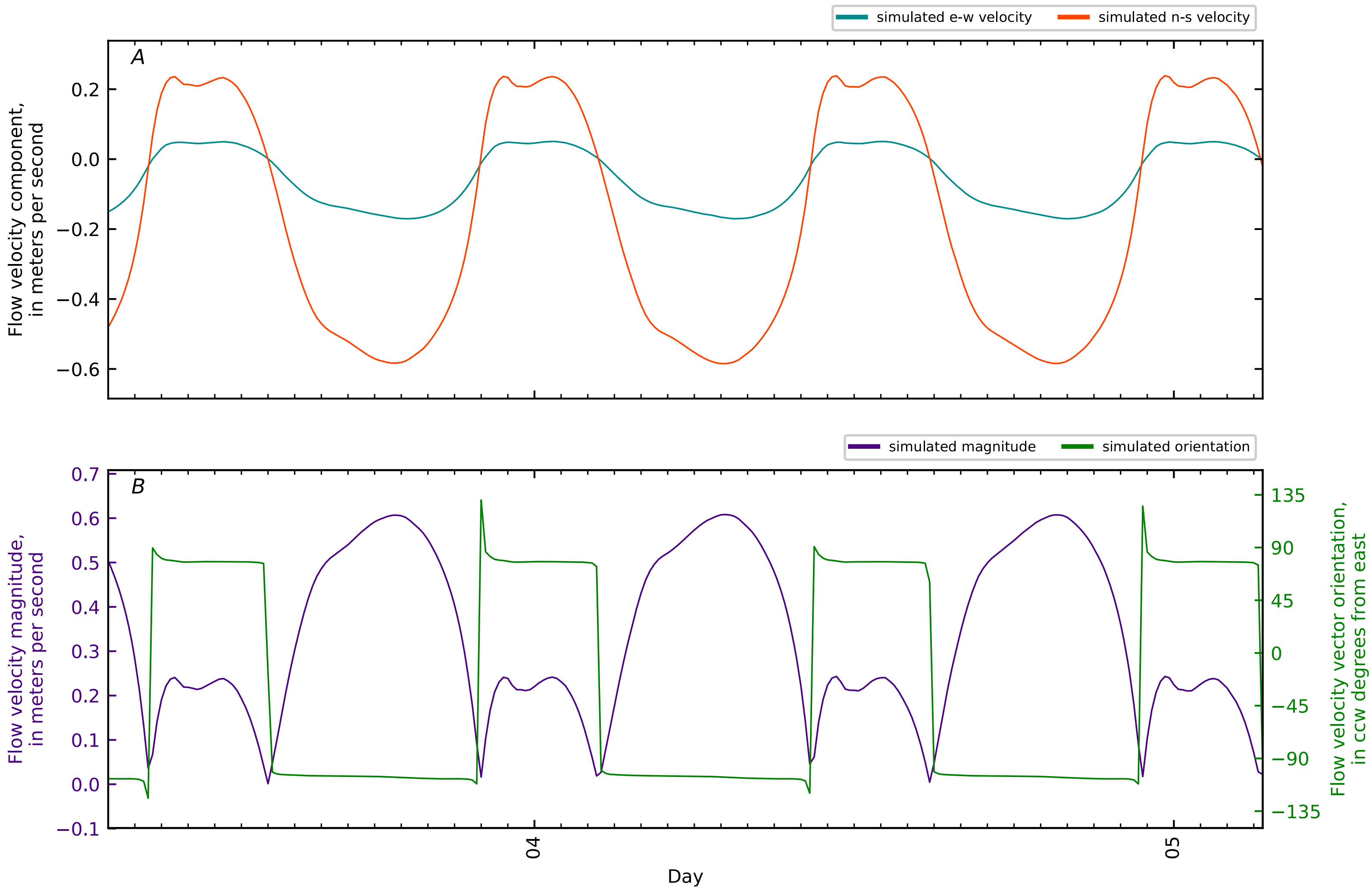

Figure B3-244. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 83, Penob Riv KM31.4 ERDC2 ON-MU13-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

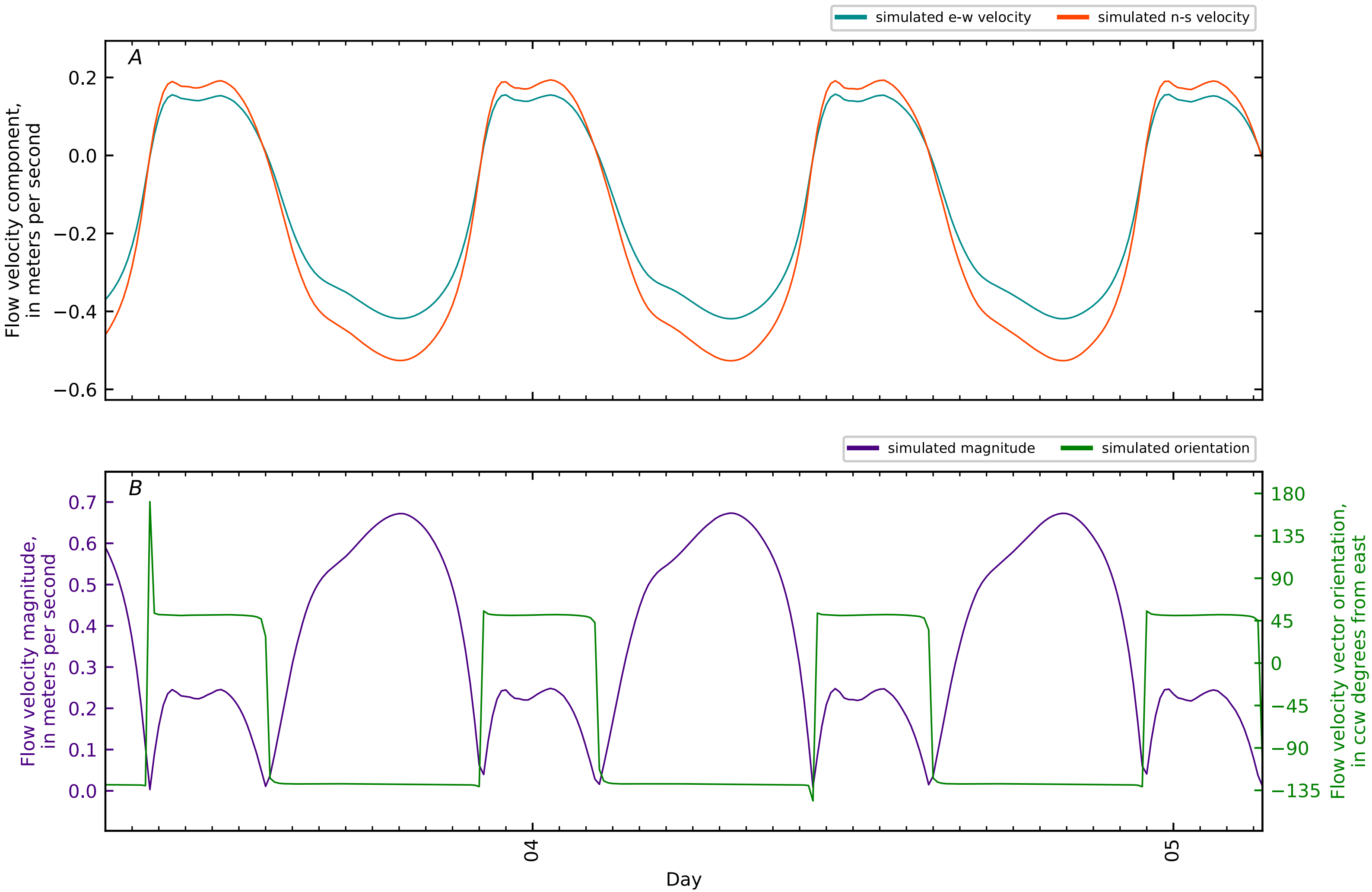

Figure B3-245. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 84, Penob Riv KM32. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

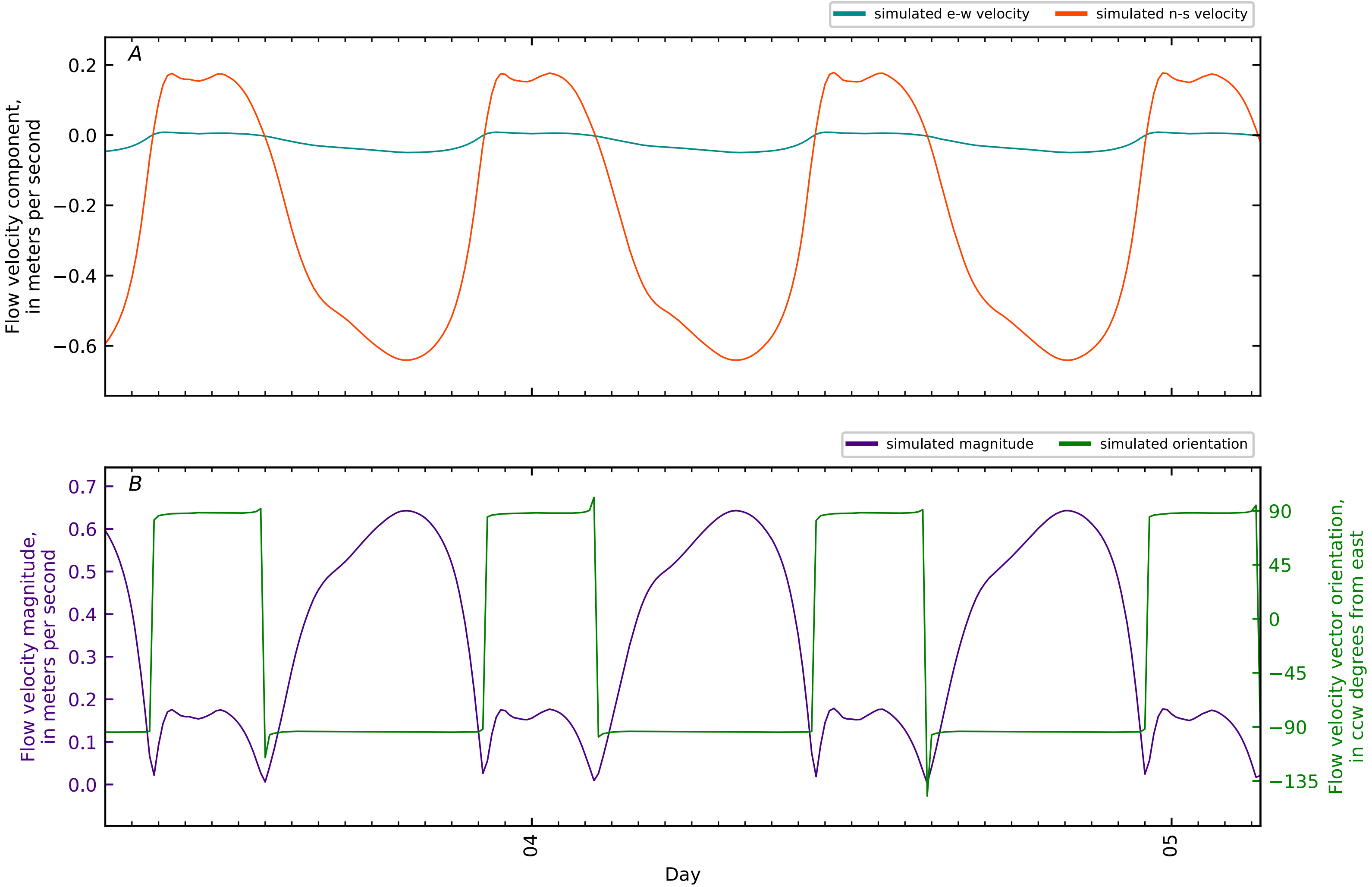

Figure B3-246. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 85, Penob Riv KM33. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

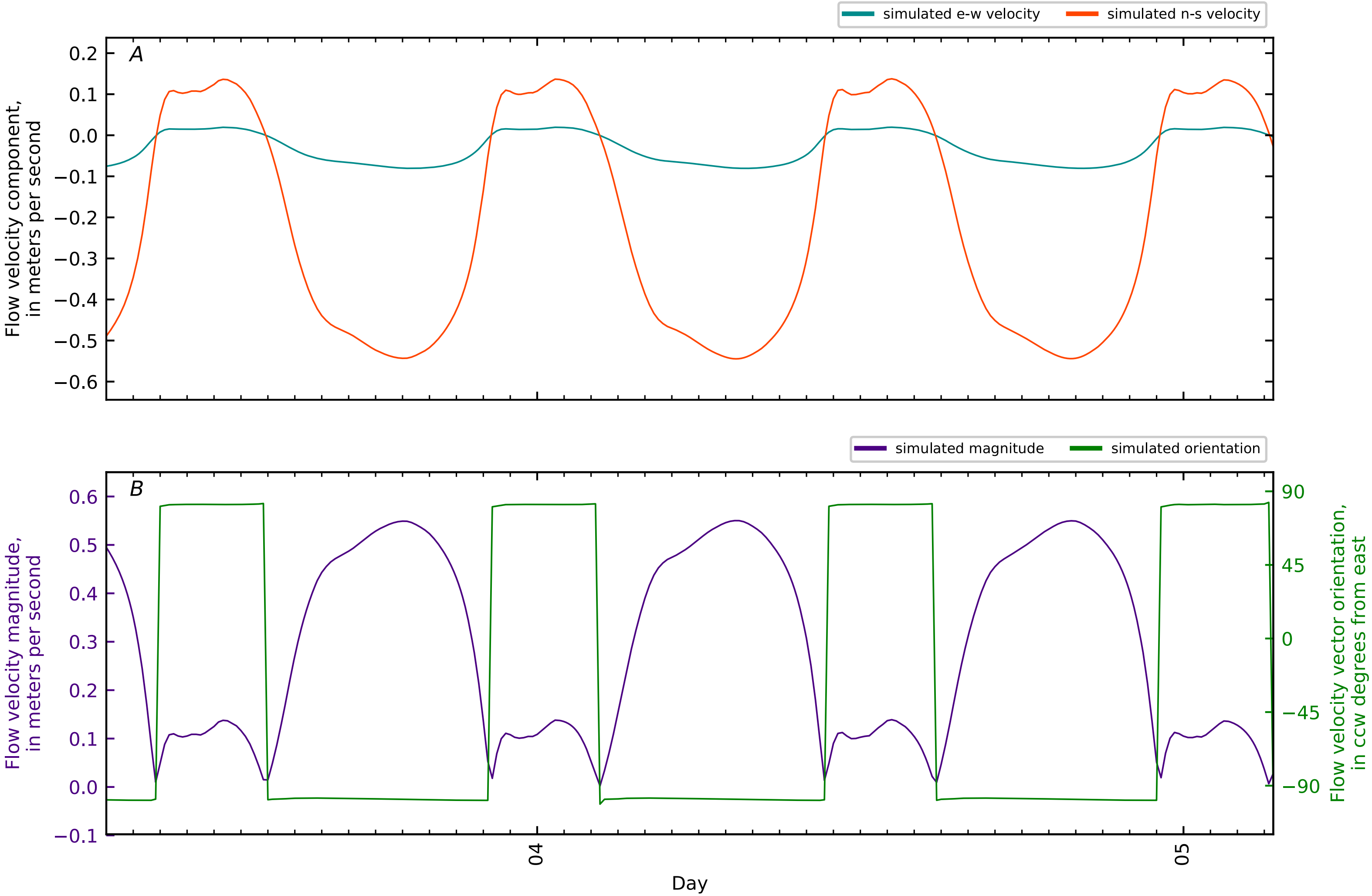

Figure B3-247. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 86, Penob Riv KM34. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

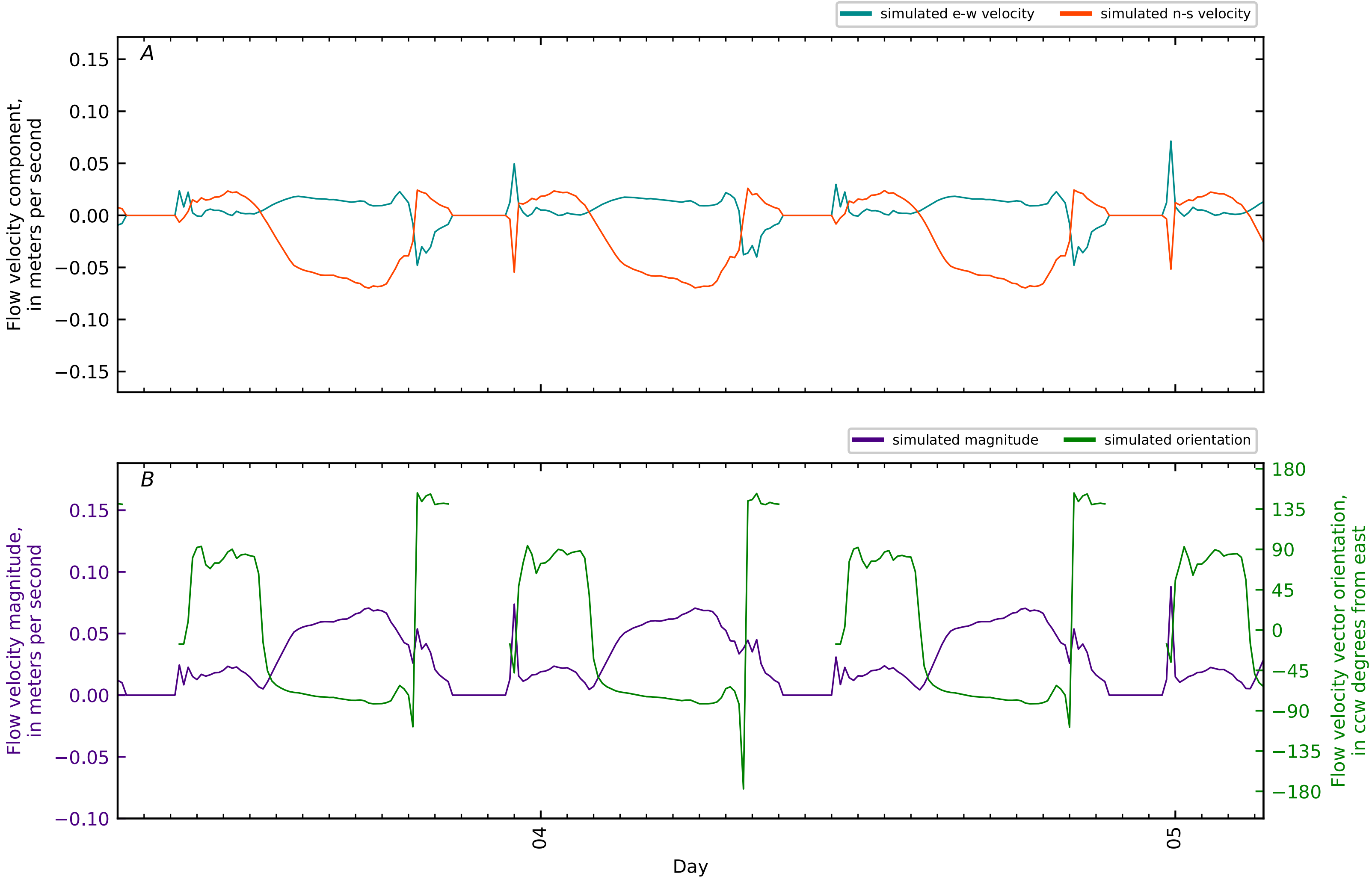

Figure B3-248. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 87, Penob Riv KM34.6 Southern Cove Orrington. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

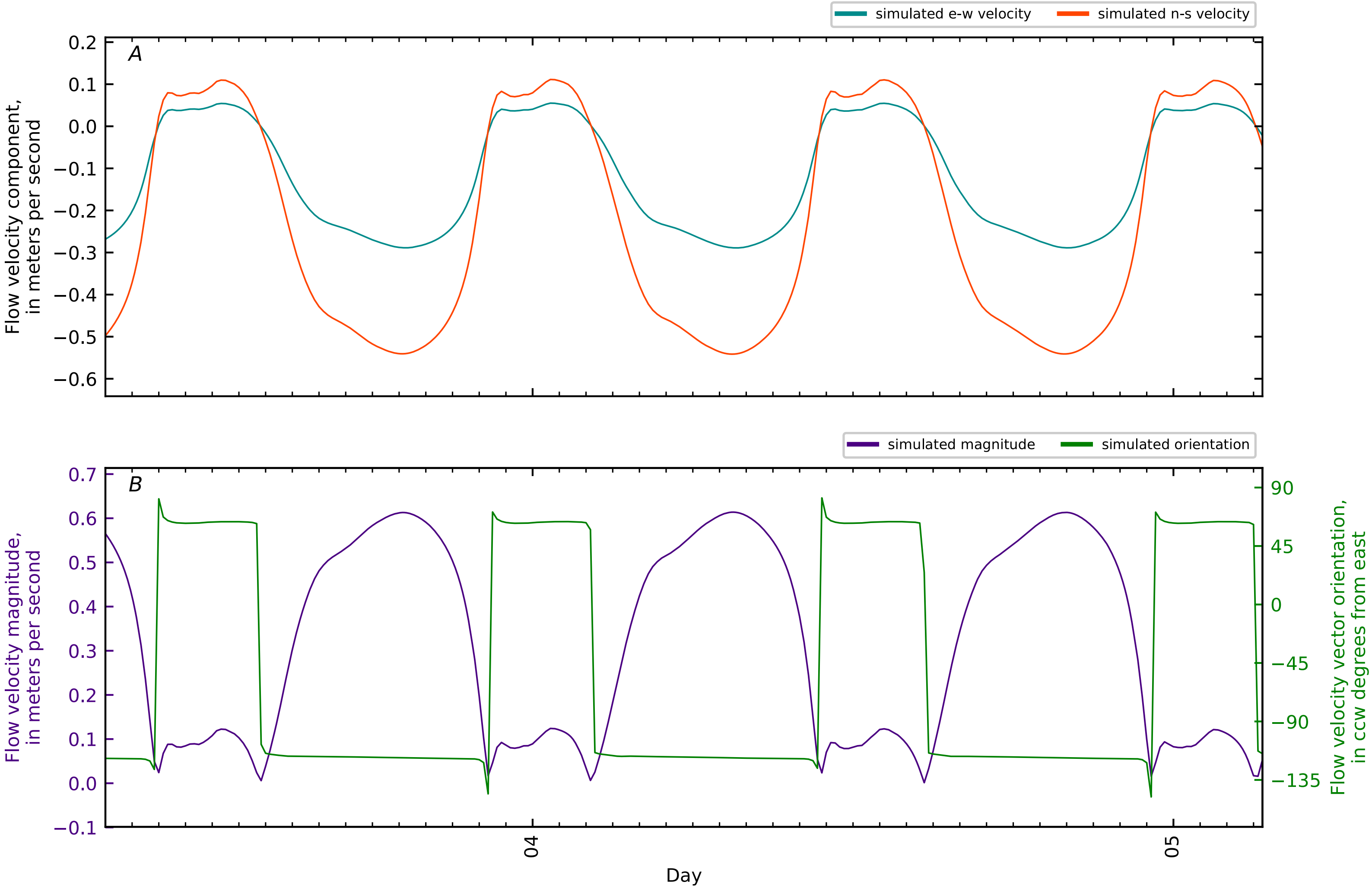

Figure B3-249. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 88, Penob Riv KM35. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

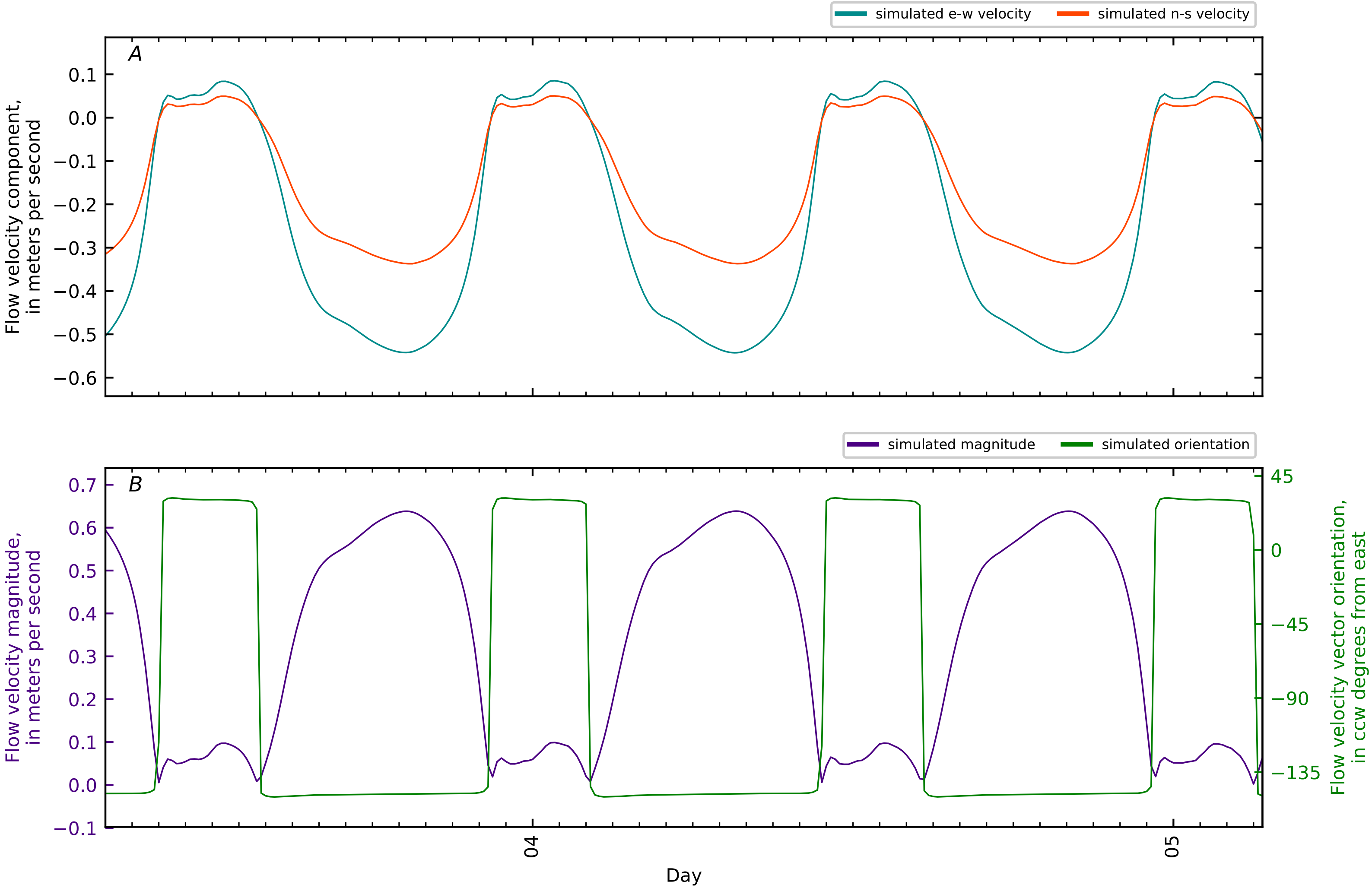

Figure B3-250. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 89, Penob Riv KM36. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

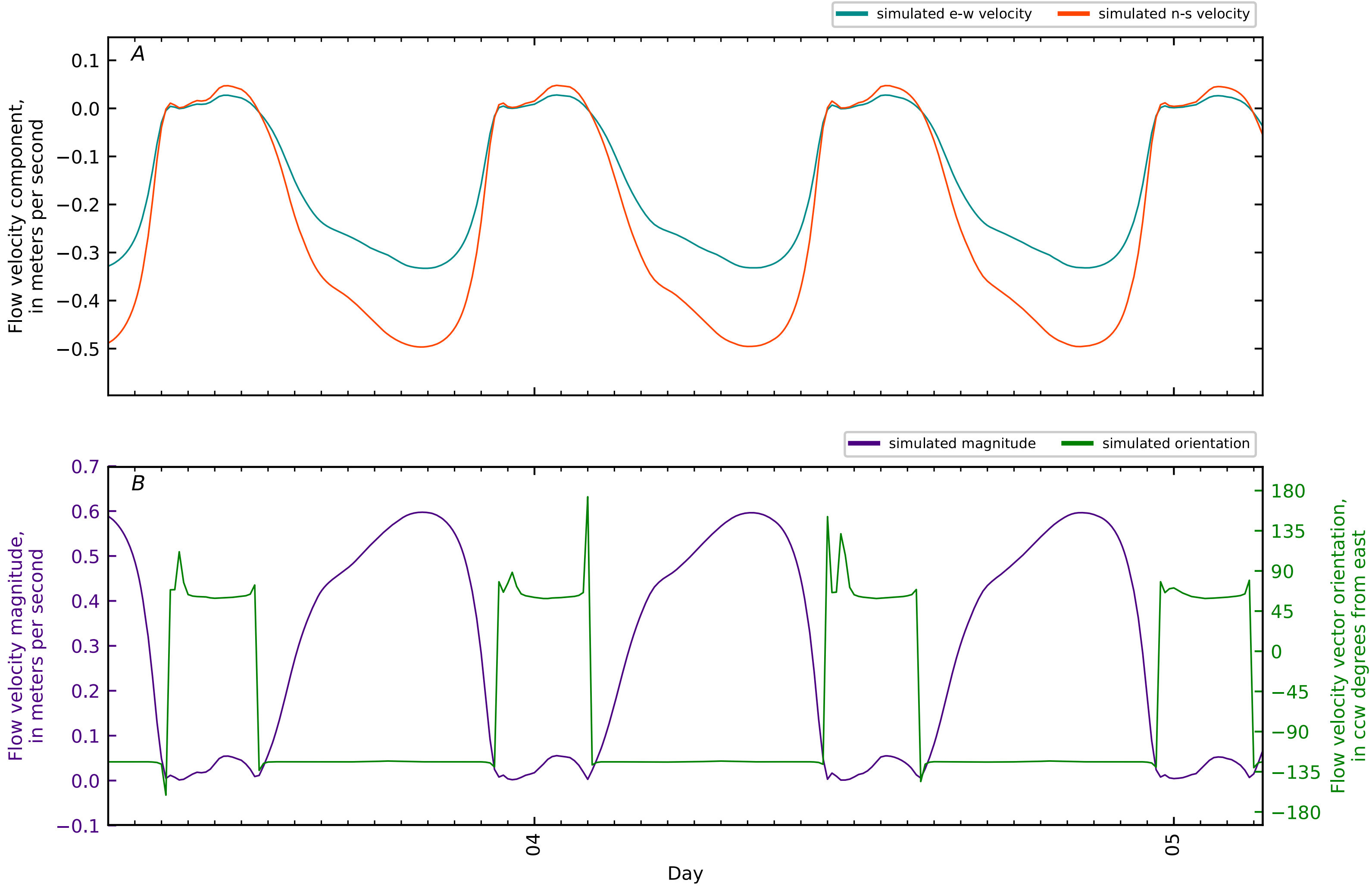

Figure B3-251. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 90, Penob Riv KM37. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

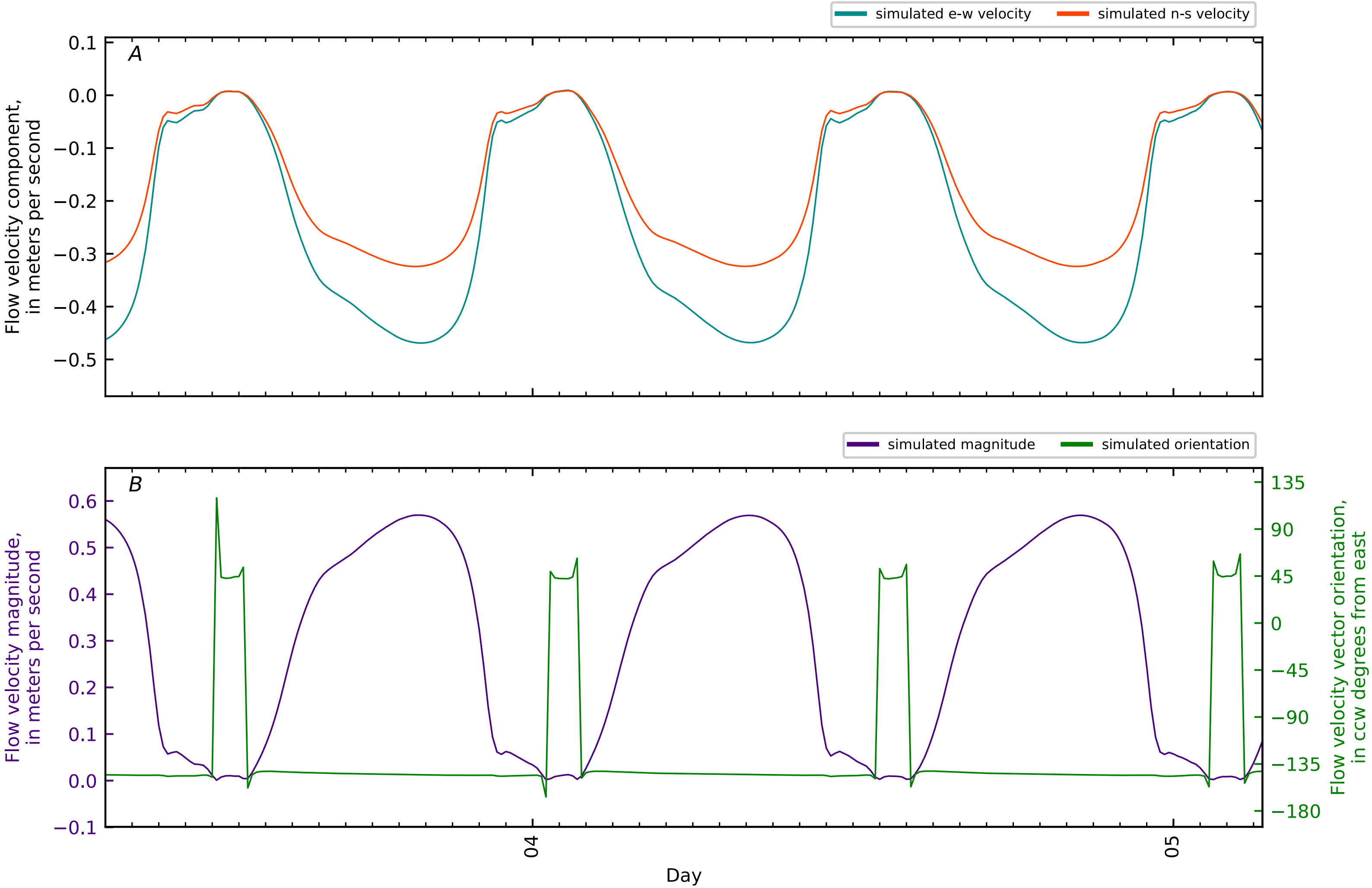

Figure B3-252. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 91, Penob Riv KM38. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

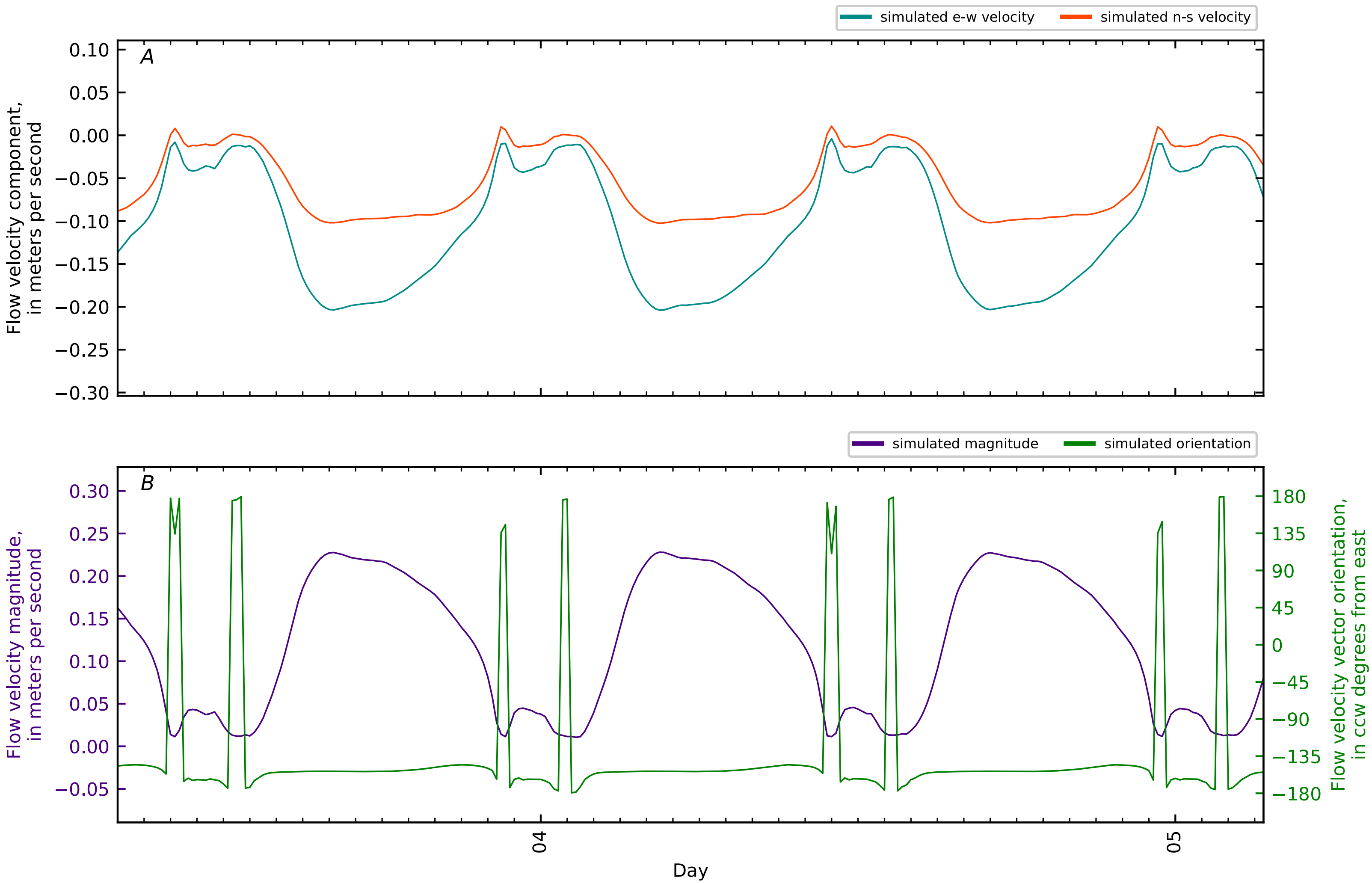

Figure B3-253. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 92, Penob Riv KM38.7 Boat ramp d/s Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

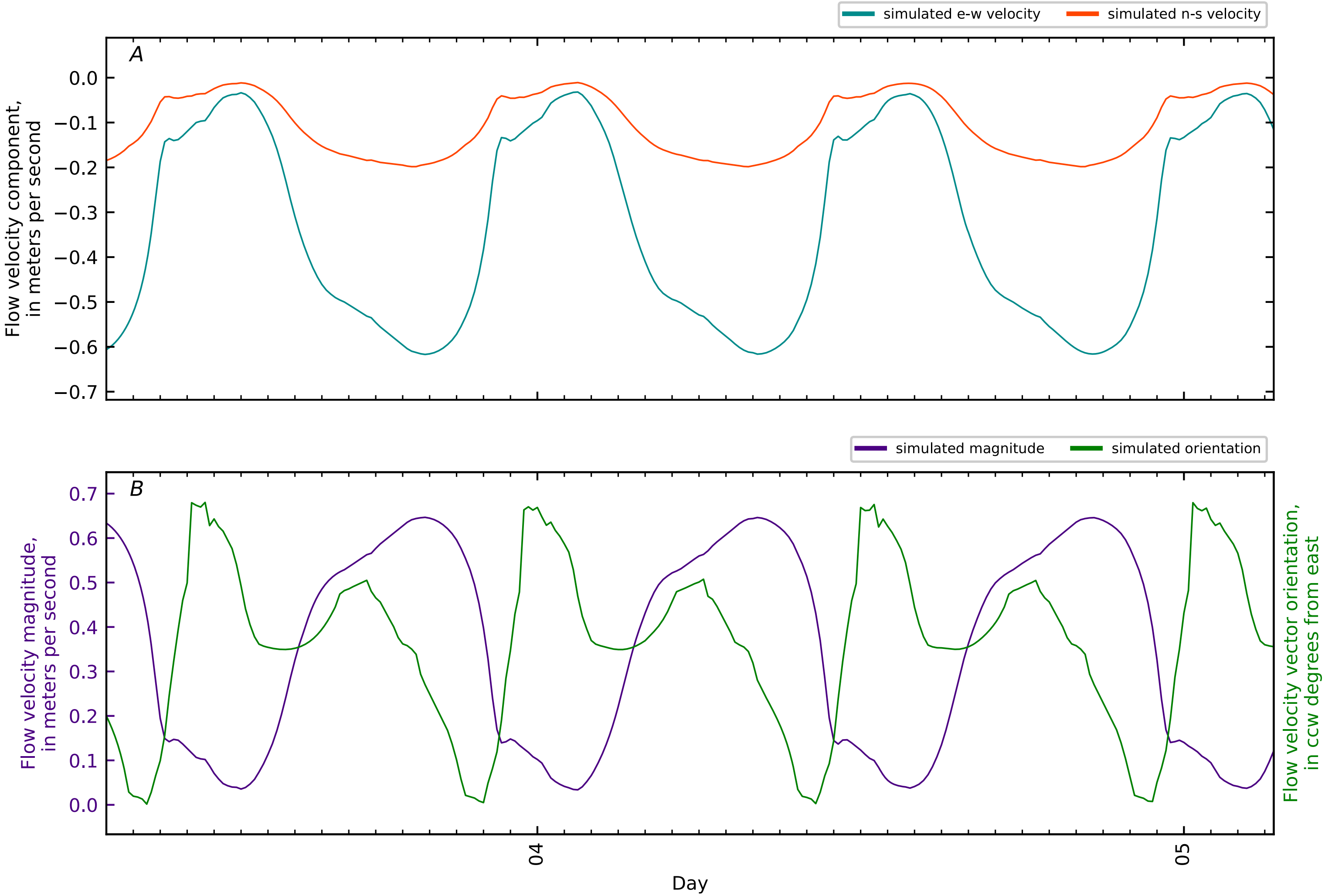

Figure B3-254. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 93, Penob Riv KM39. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

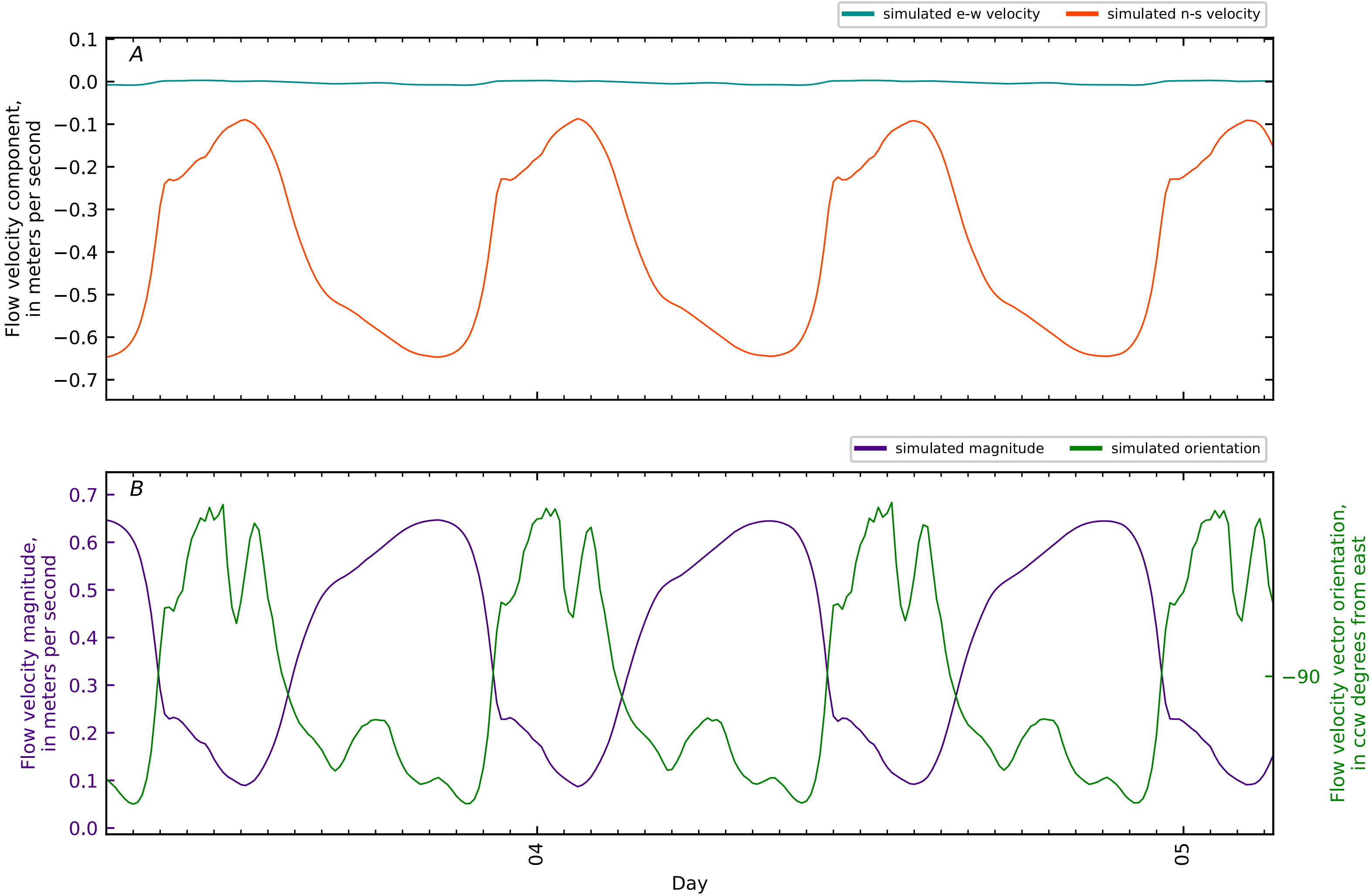

Figure B3-255. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 94, Penob Riv KM40. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

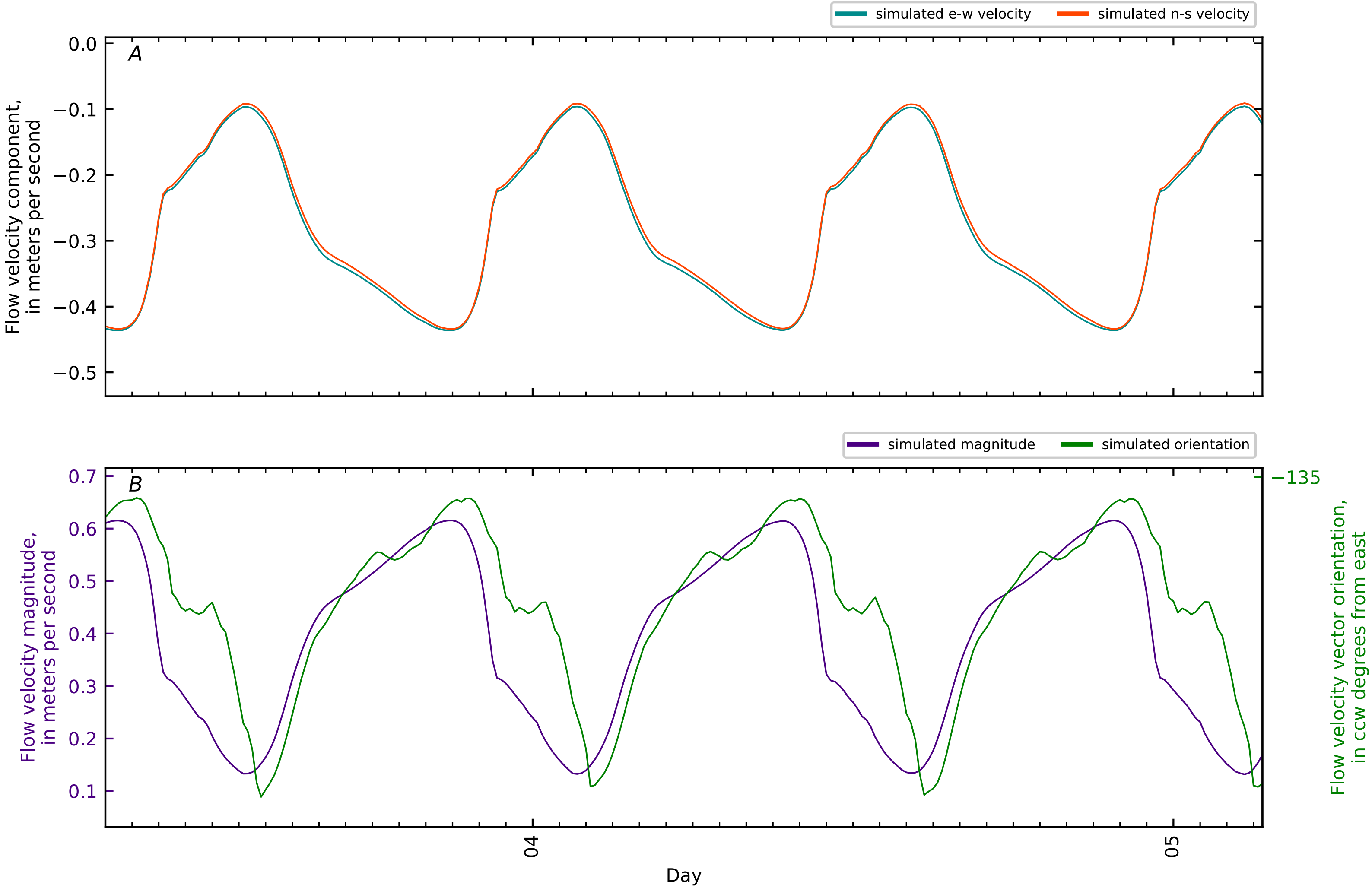

Figure B3-256. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 95, Penob Riv KM41. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

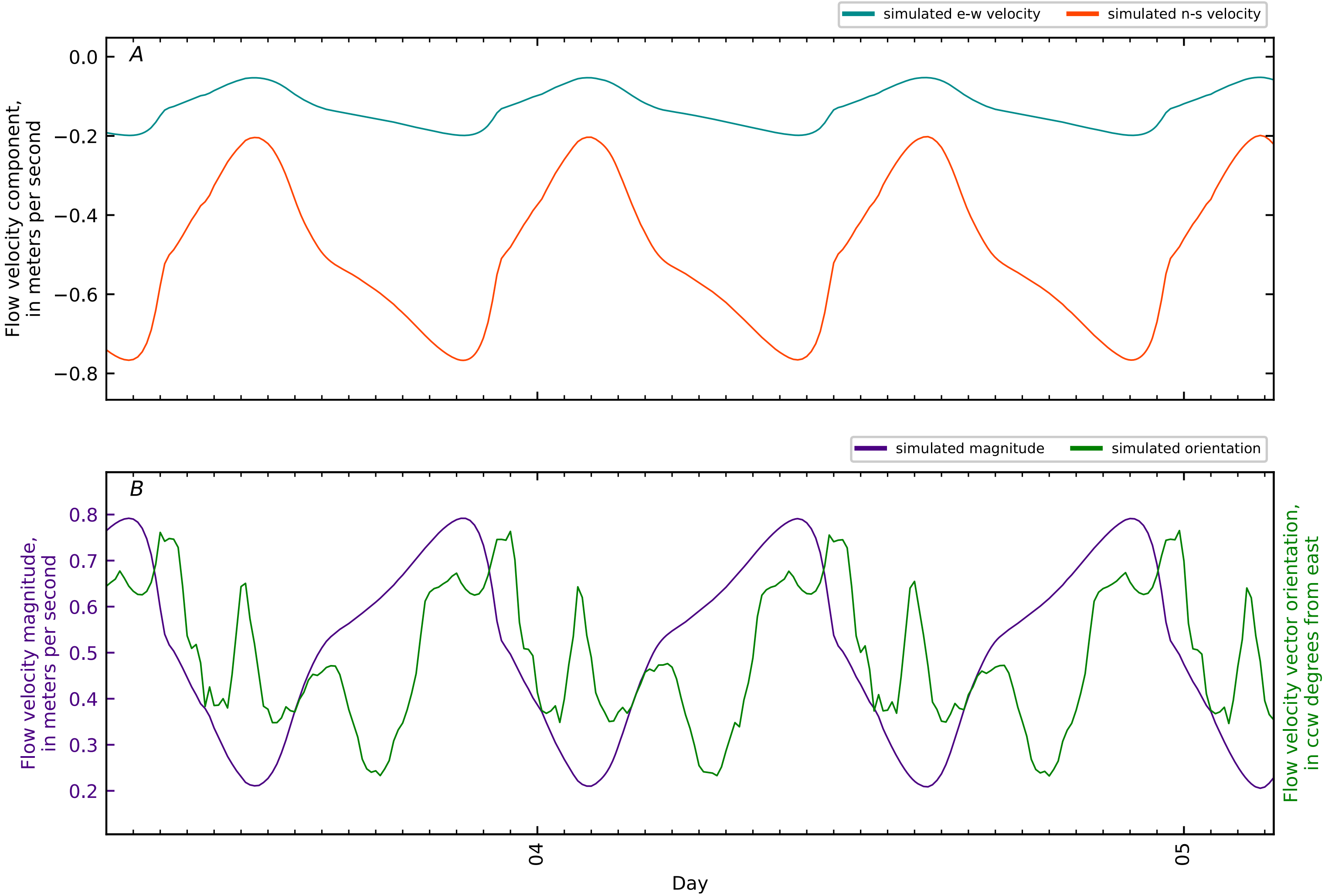

Figure B3-257. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 96, Penob Riv KM42. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

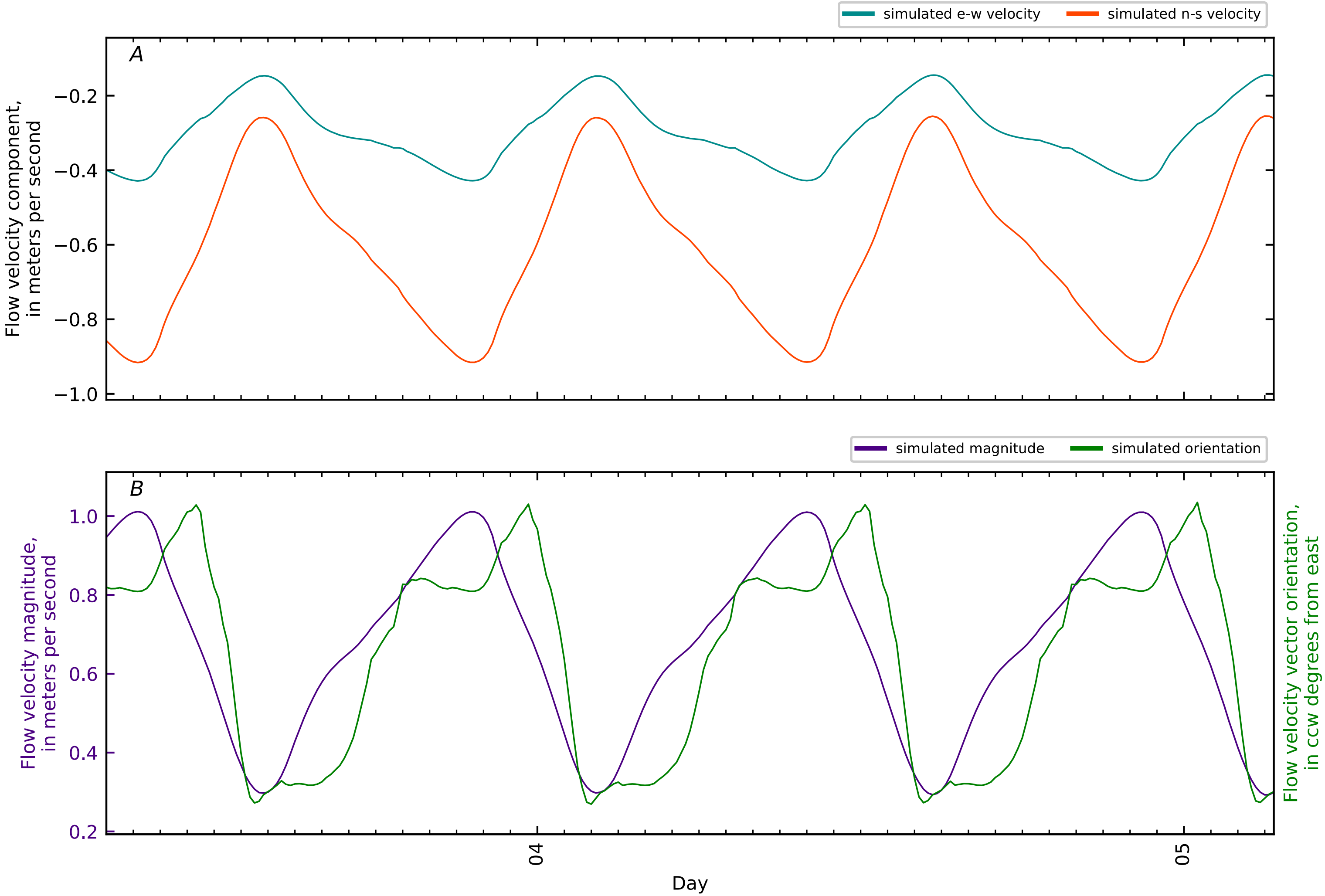

Figure B3-258. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 97, Penob Riv KM43. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

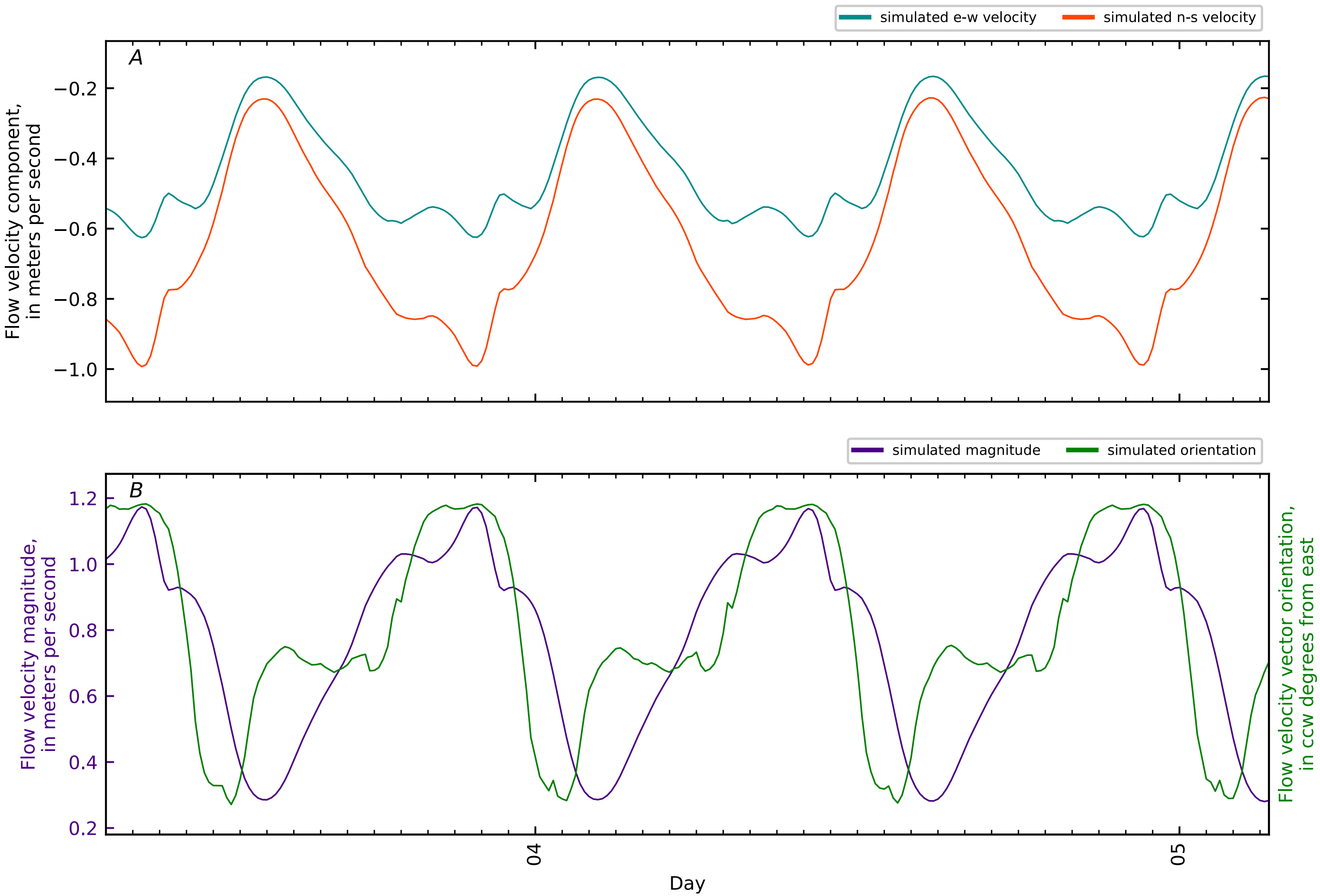

Figure B3-259. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 98, Penob Riv KM43.2 GS 01037050 at Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

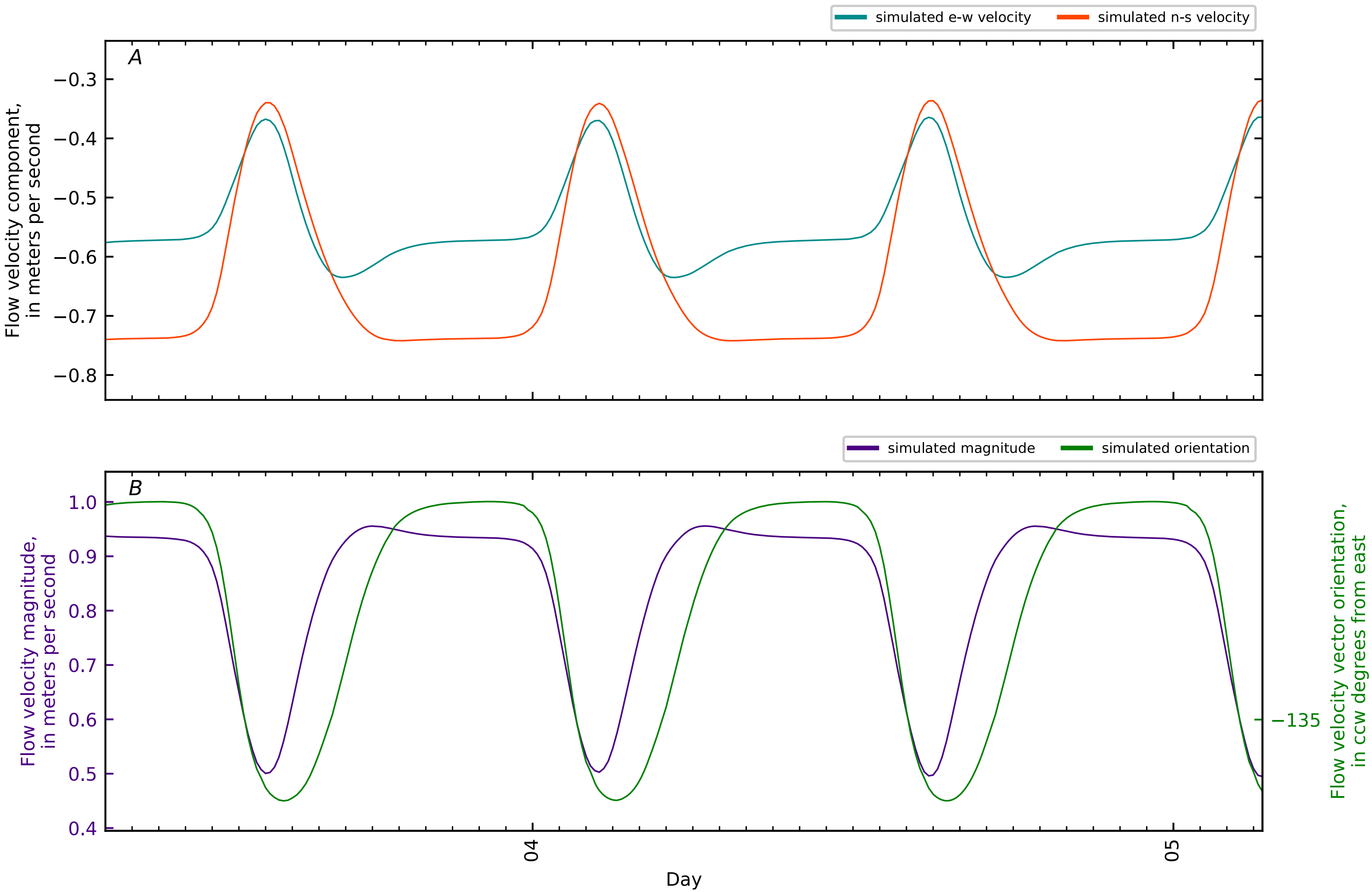

Figure B3-260. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 99, Penob Riv KM44. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

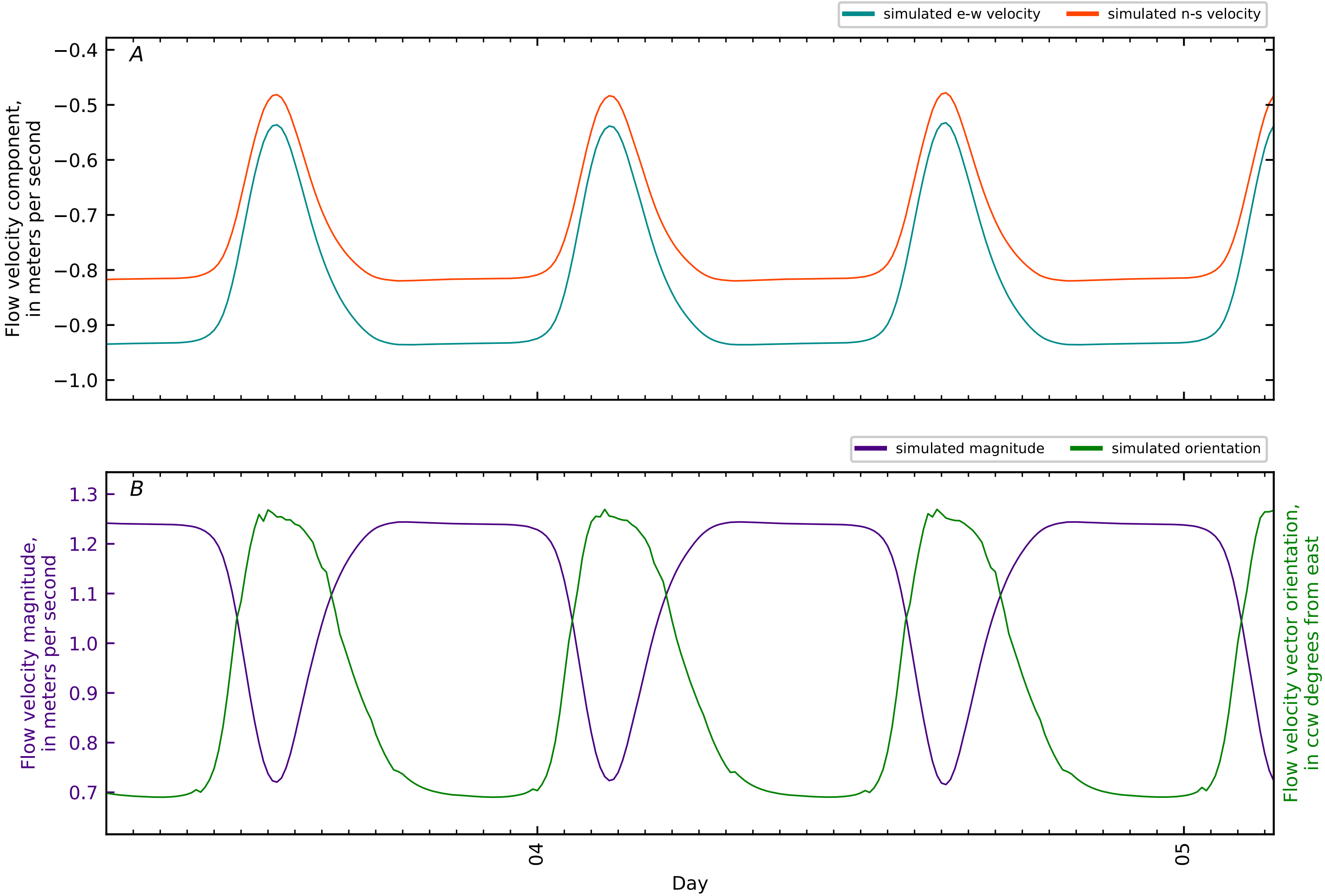

Figure B3-261. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 100, Penob Riv KM45. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

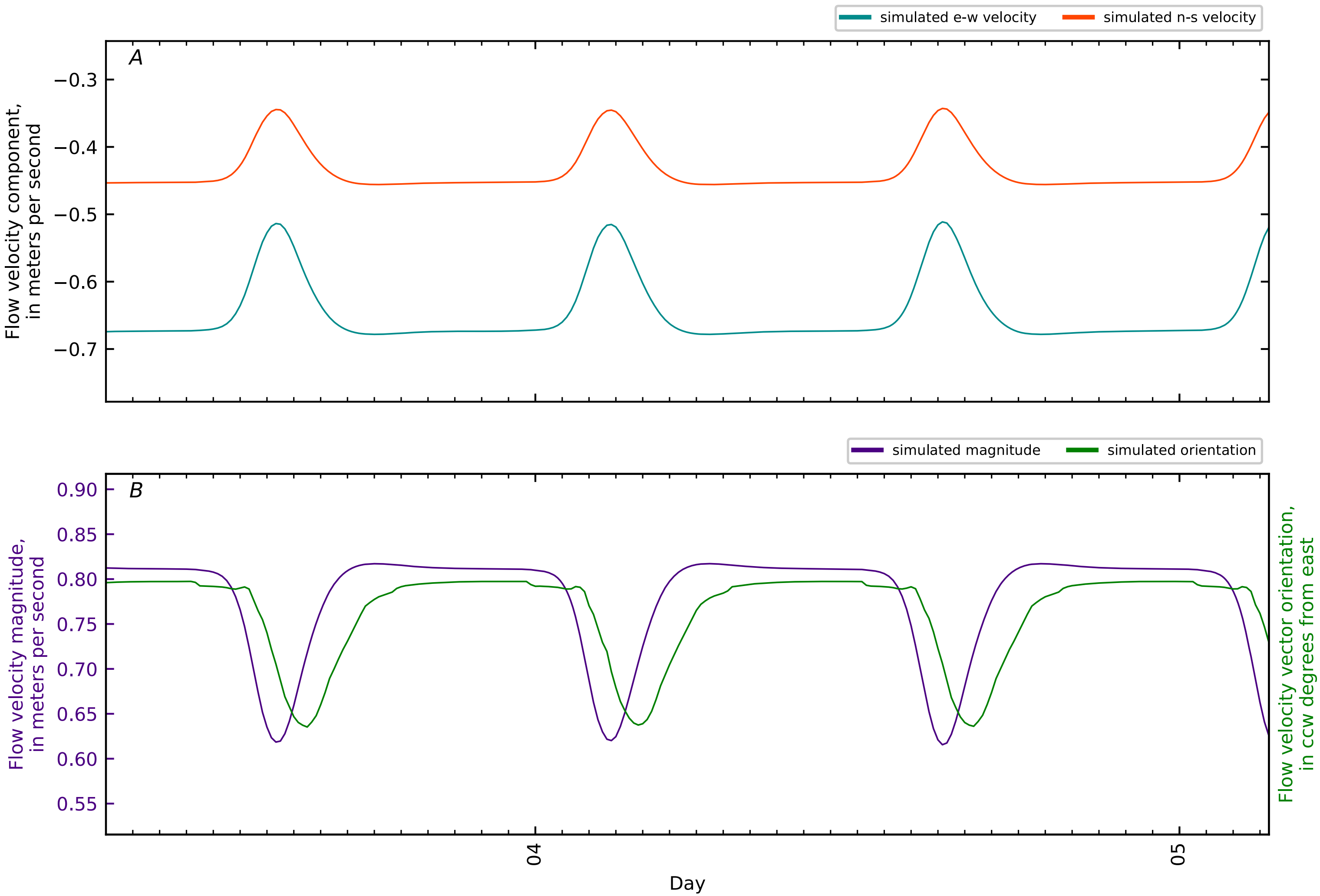

Figure B3-262. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 101, Penob Riv KM46. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

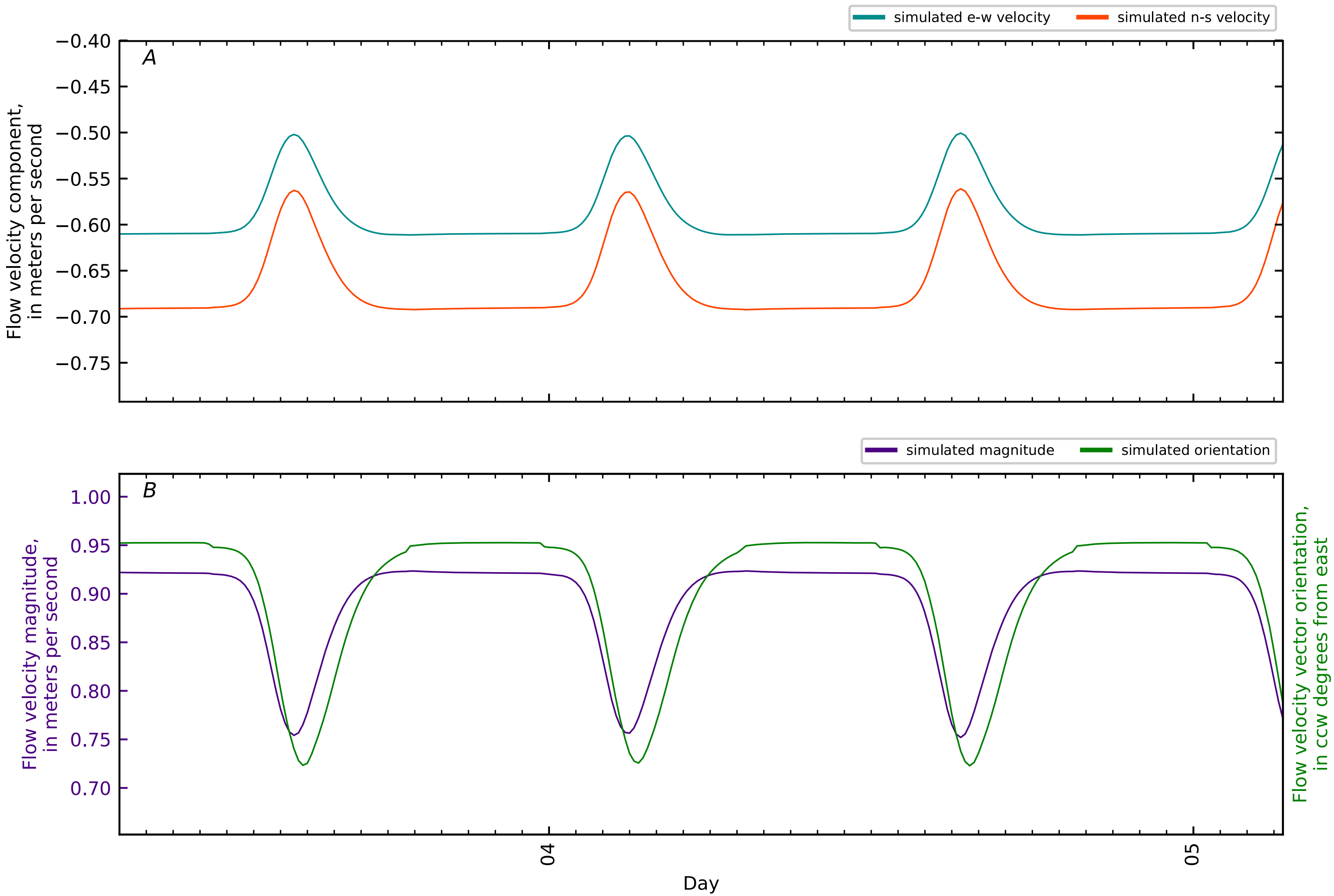

Figure B3-263. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 102, Penob Riv KM47. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

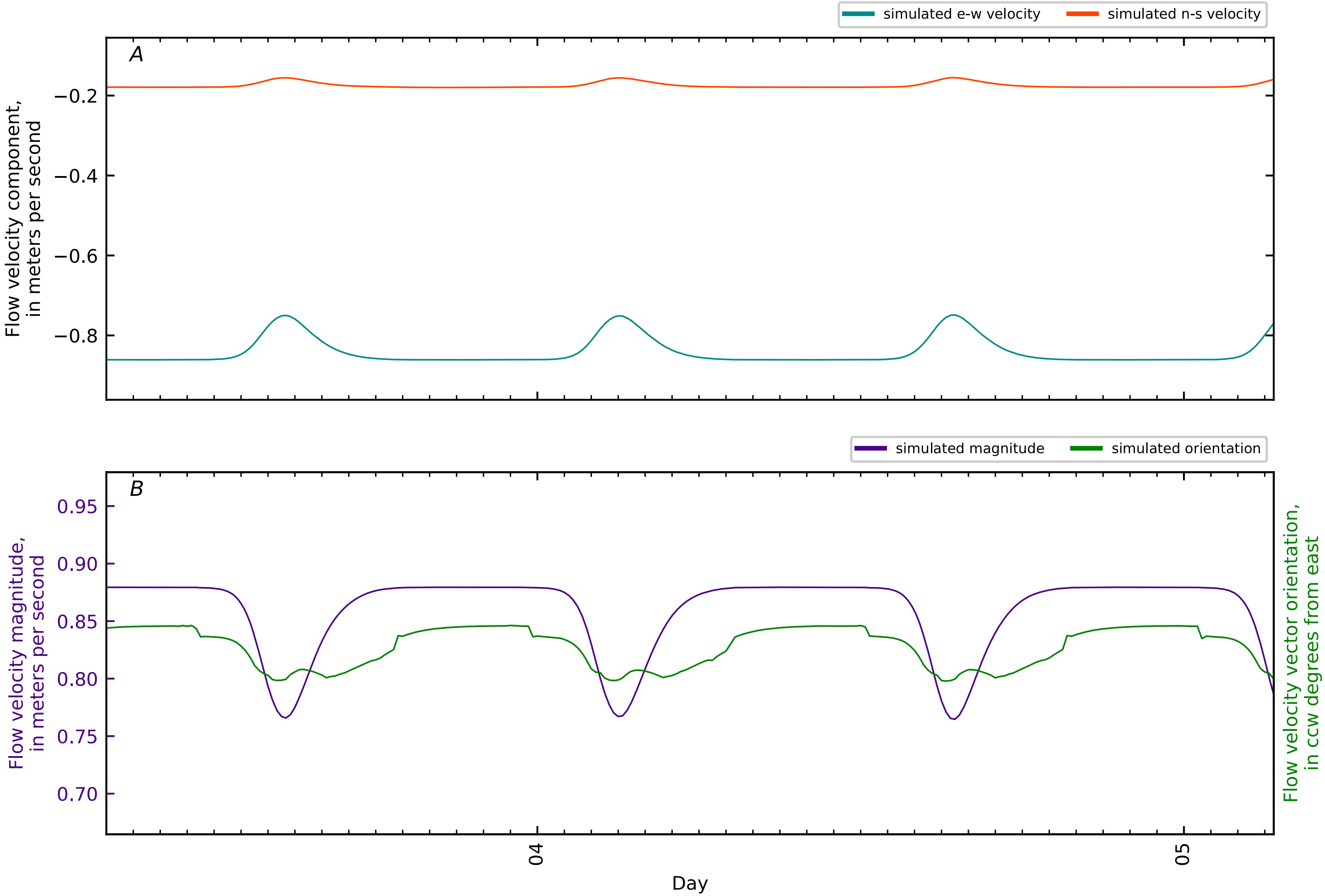

Figure B3-264. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 103, Penob Riv KM48. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

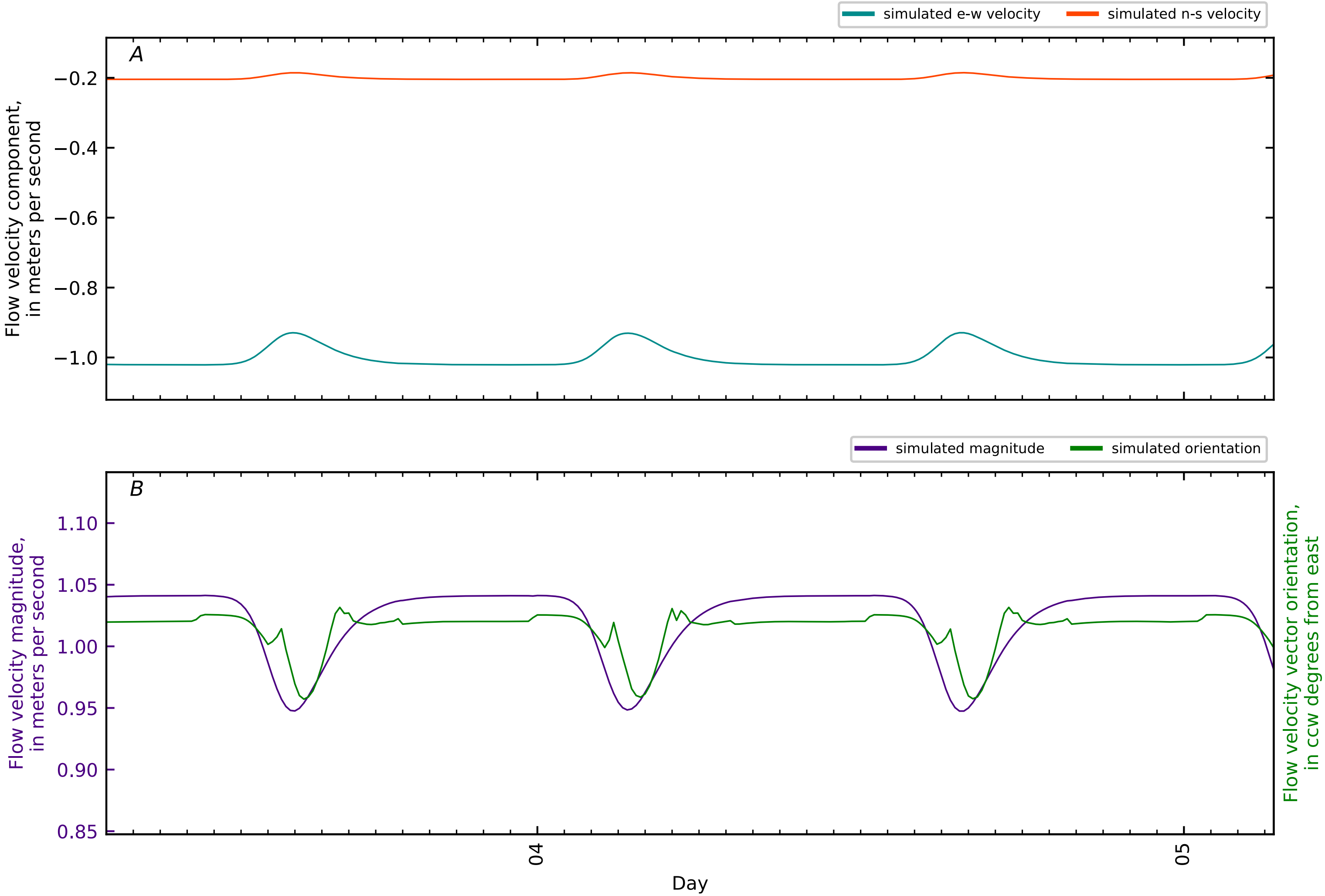

Figure B3-265. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 104, Penob Riv KM49. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

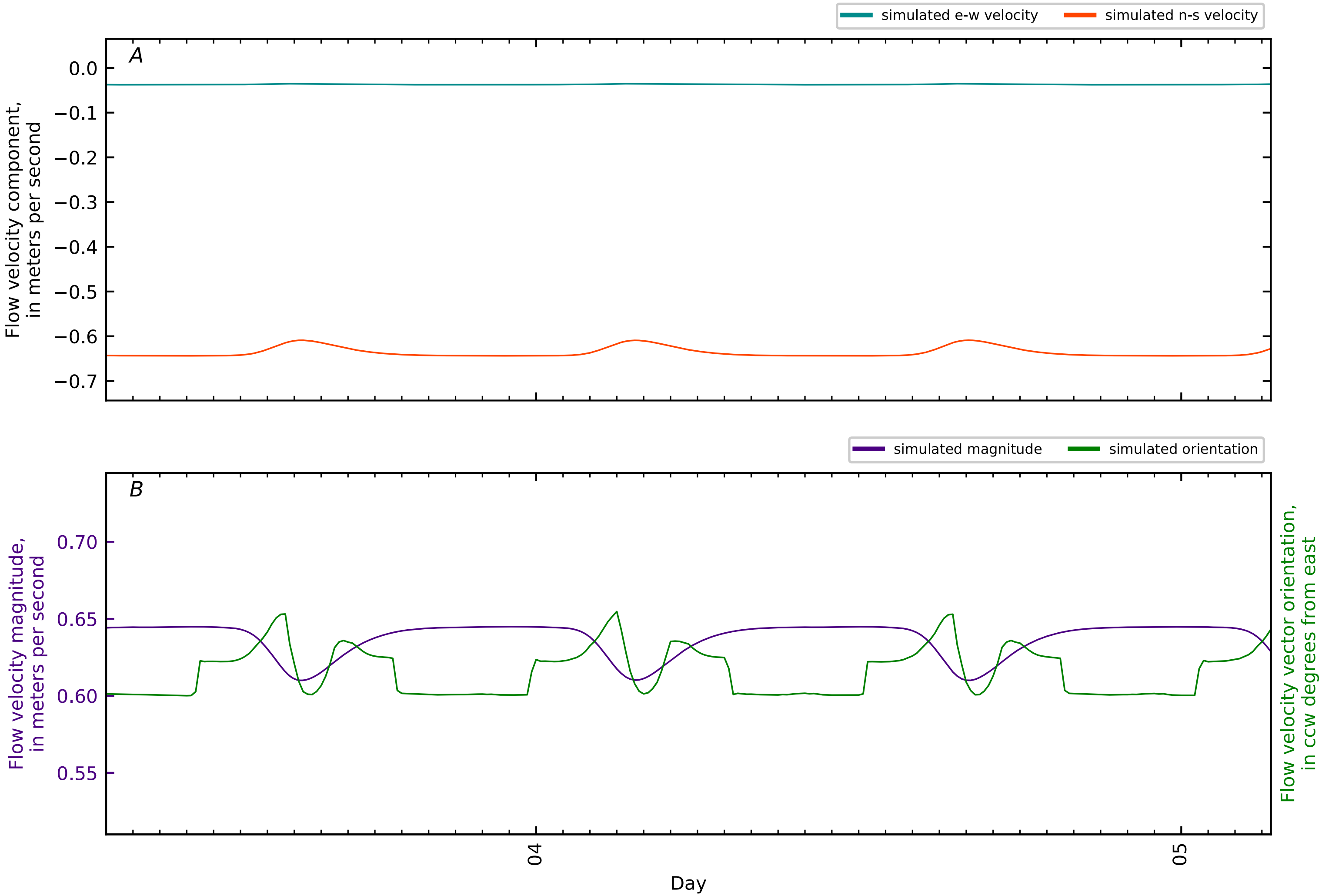

Figure B3-266. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 105, Penob Riv KM50 nr GS gage Eddington. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

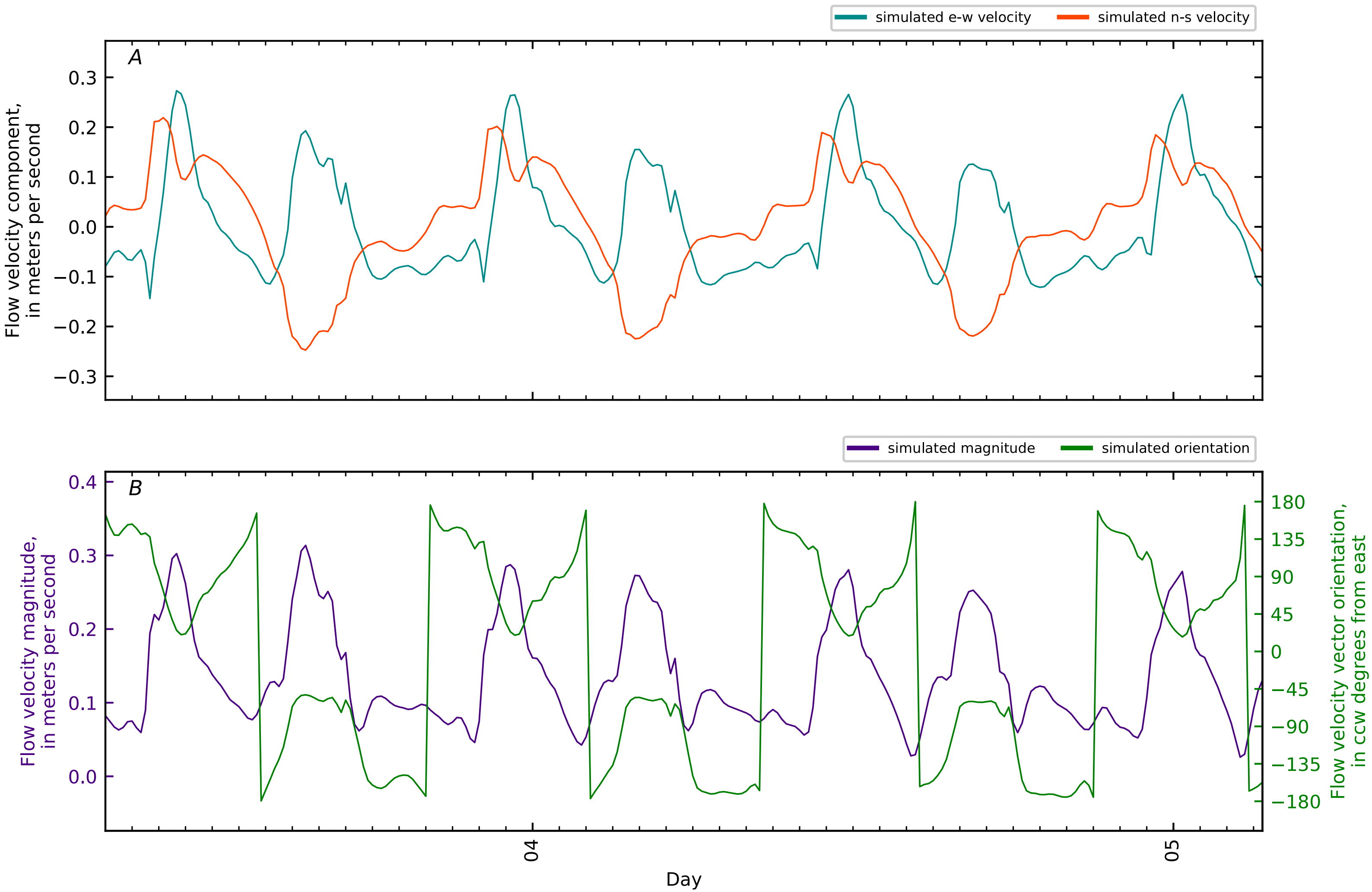

Figure B3-267. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 106, East Channel -KM0.1 ERDC9 VE-MU4-SF-2. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

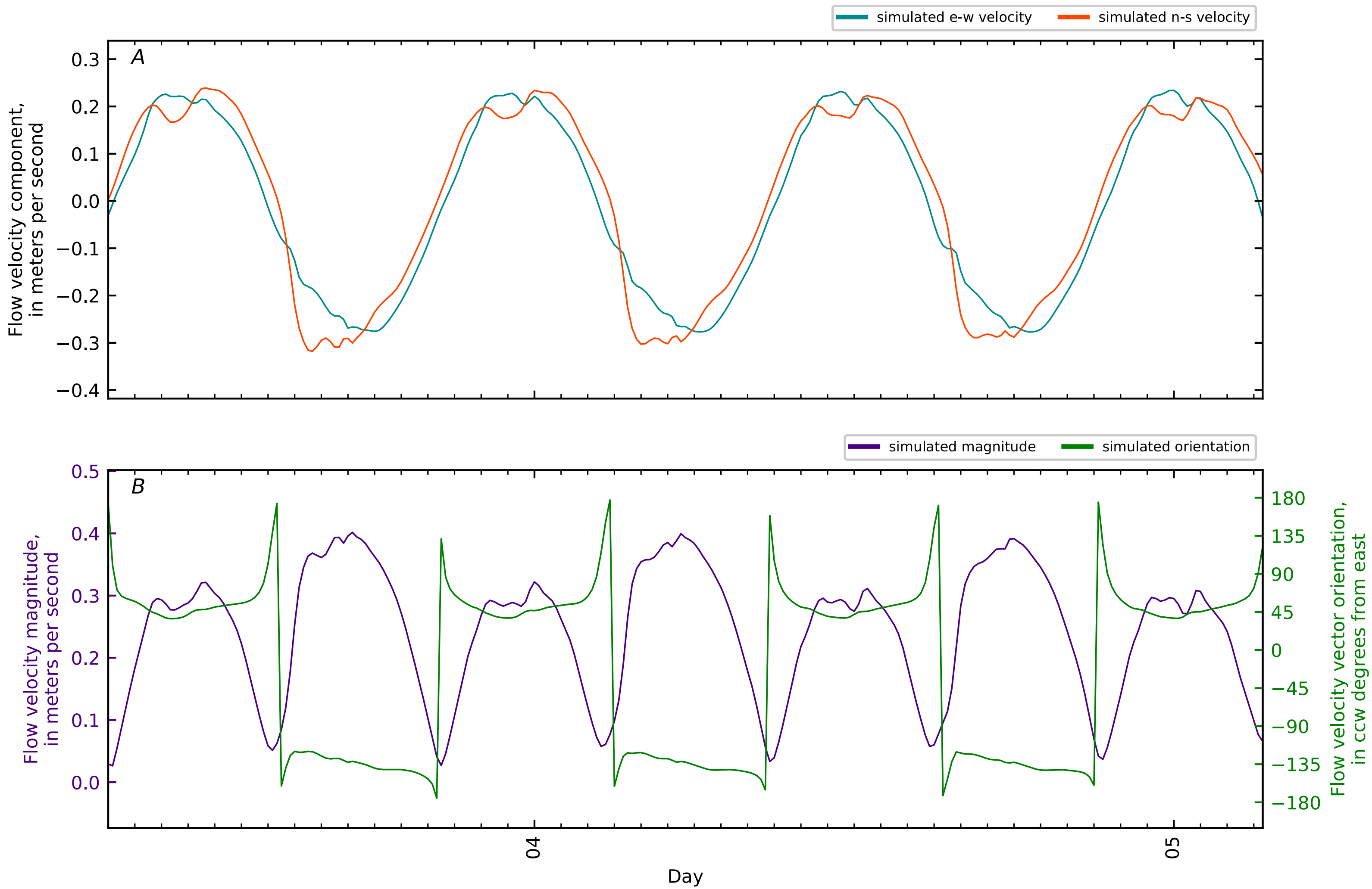

Figure B3-268. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 107, East Channel KM0. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

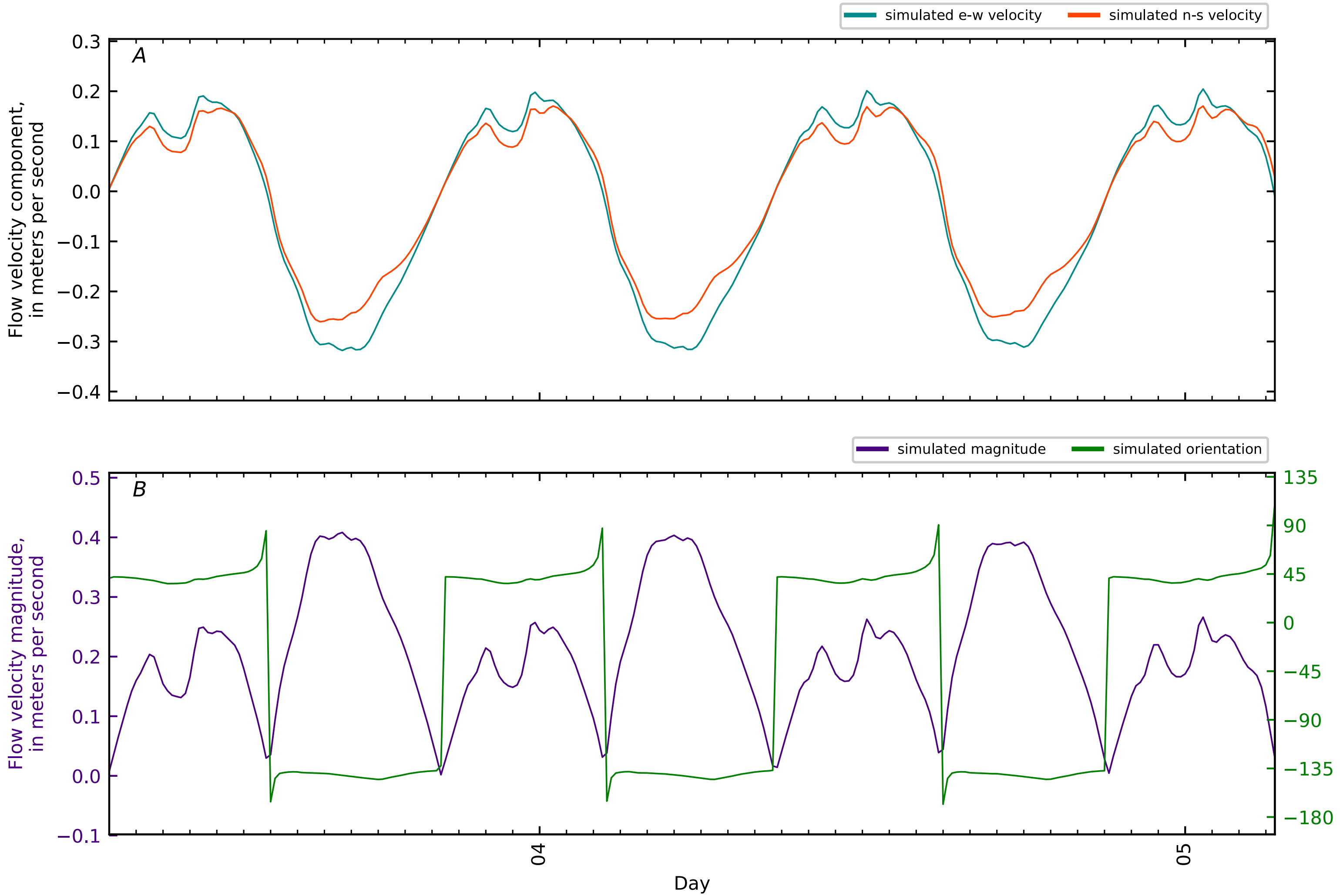

Figure B3-269. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 108, East Channel KM0.1 GS CTD4-01. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

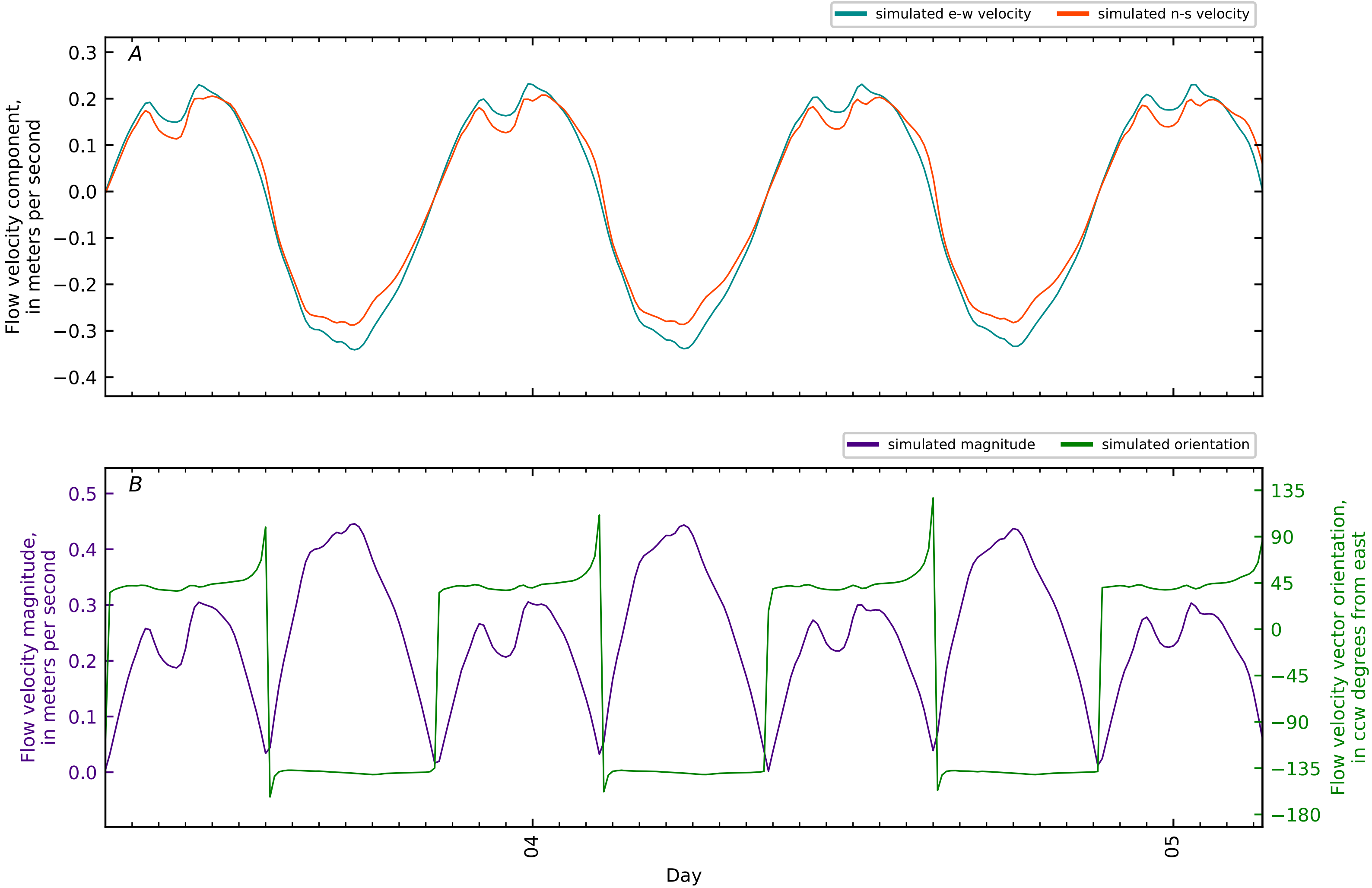

Figure B3-270. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 109, East Channel KM0.1 GS CTD4-02. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

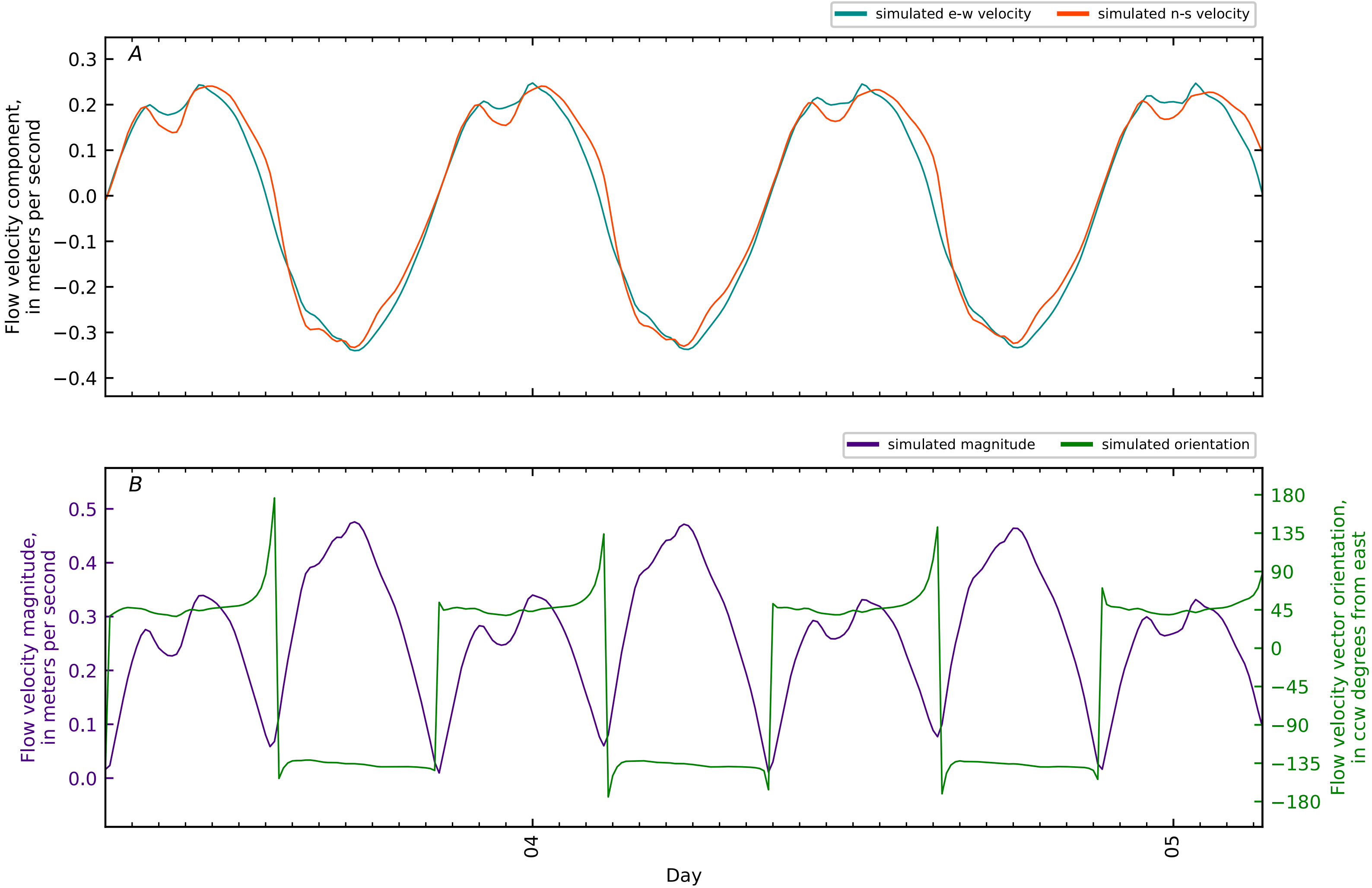

Figure B3-271. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 110, East Channel KM0.1 GS CTD4-03. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

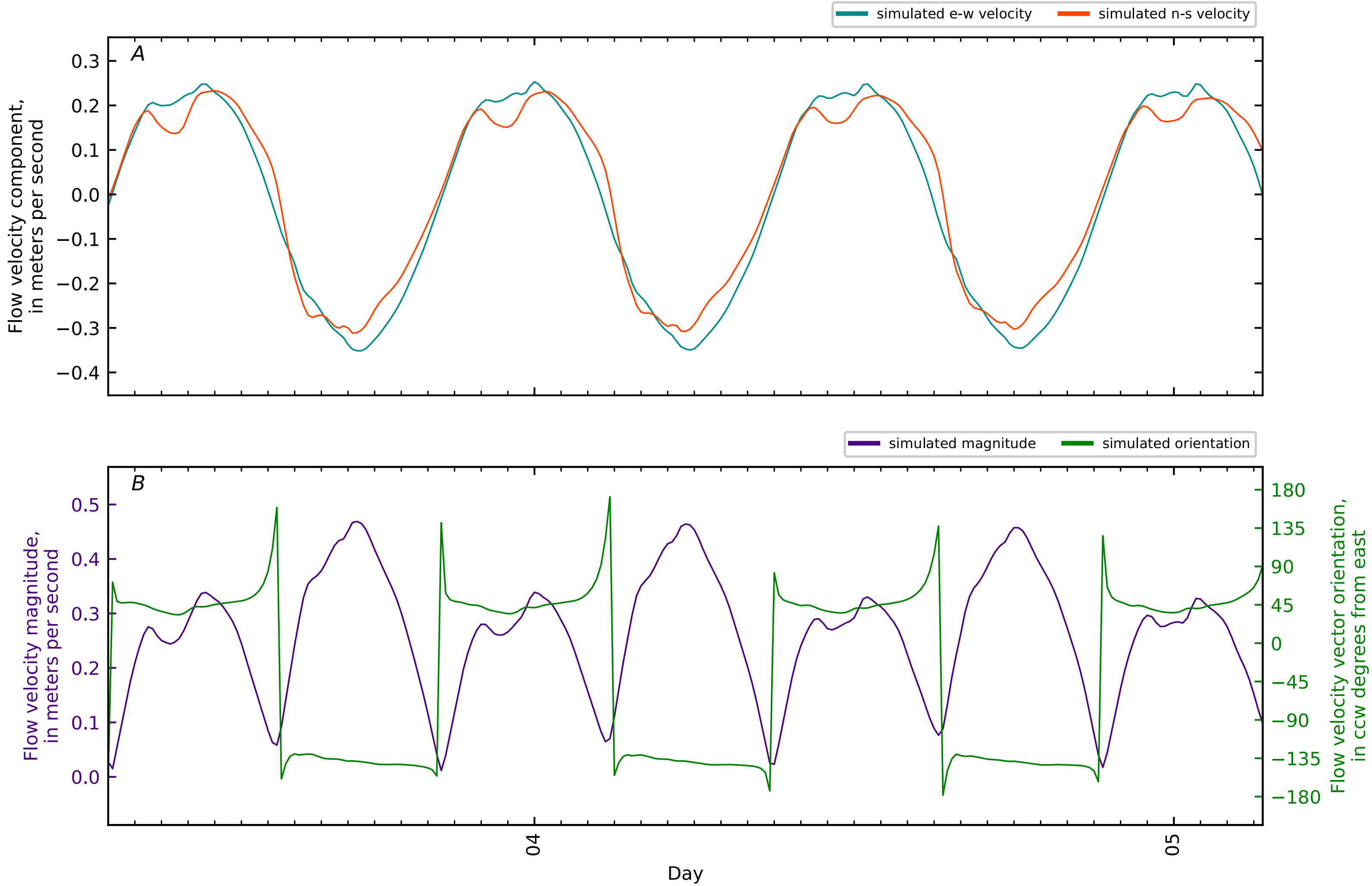

Figure B3-272. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 111, East Channel KM0.1 GS CTD4-04. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

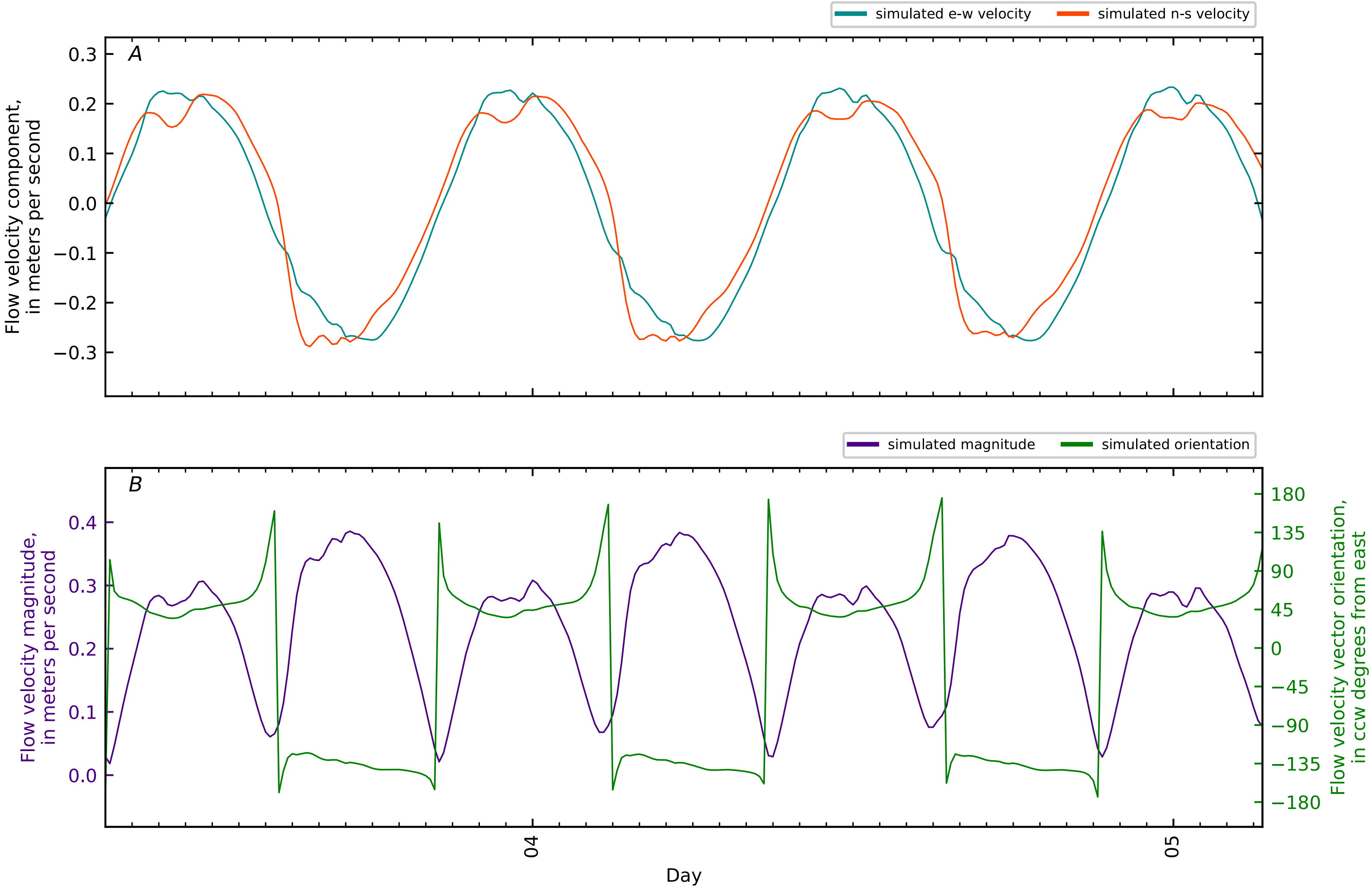

Figure B3-273. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 112, East Channel KM0.1 GS CTD4-05. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

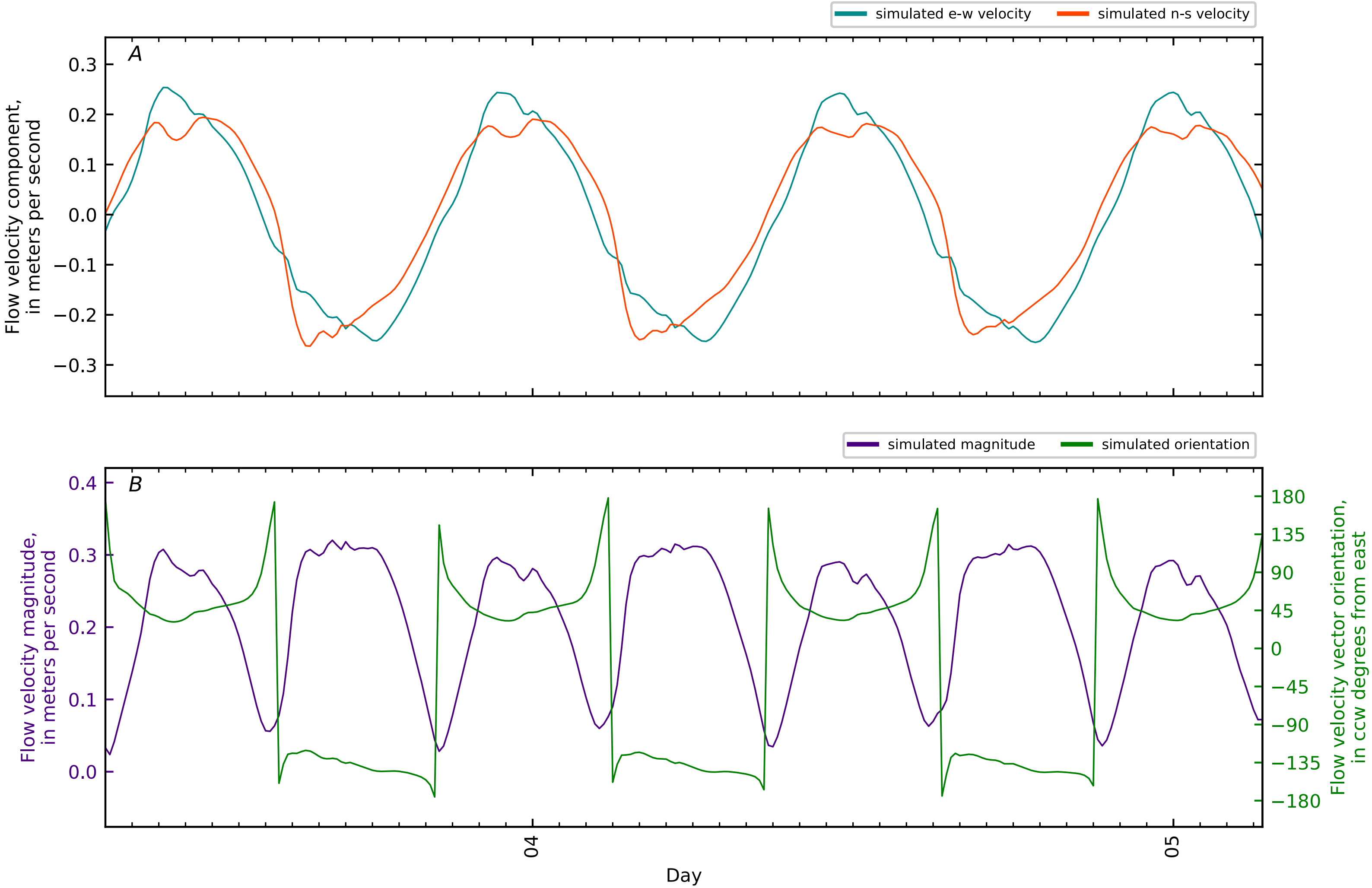

Figure B3-274. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 113, East Channel KM0.1 GS CTD4-06. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

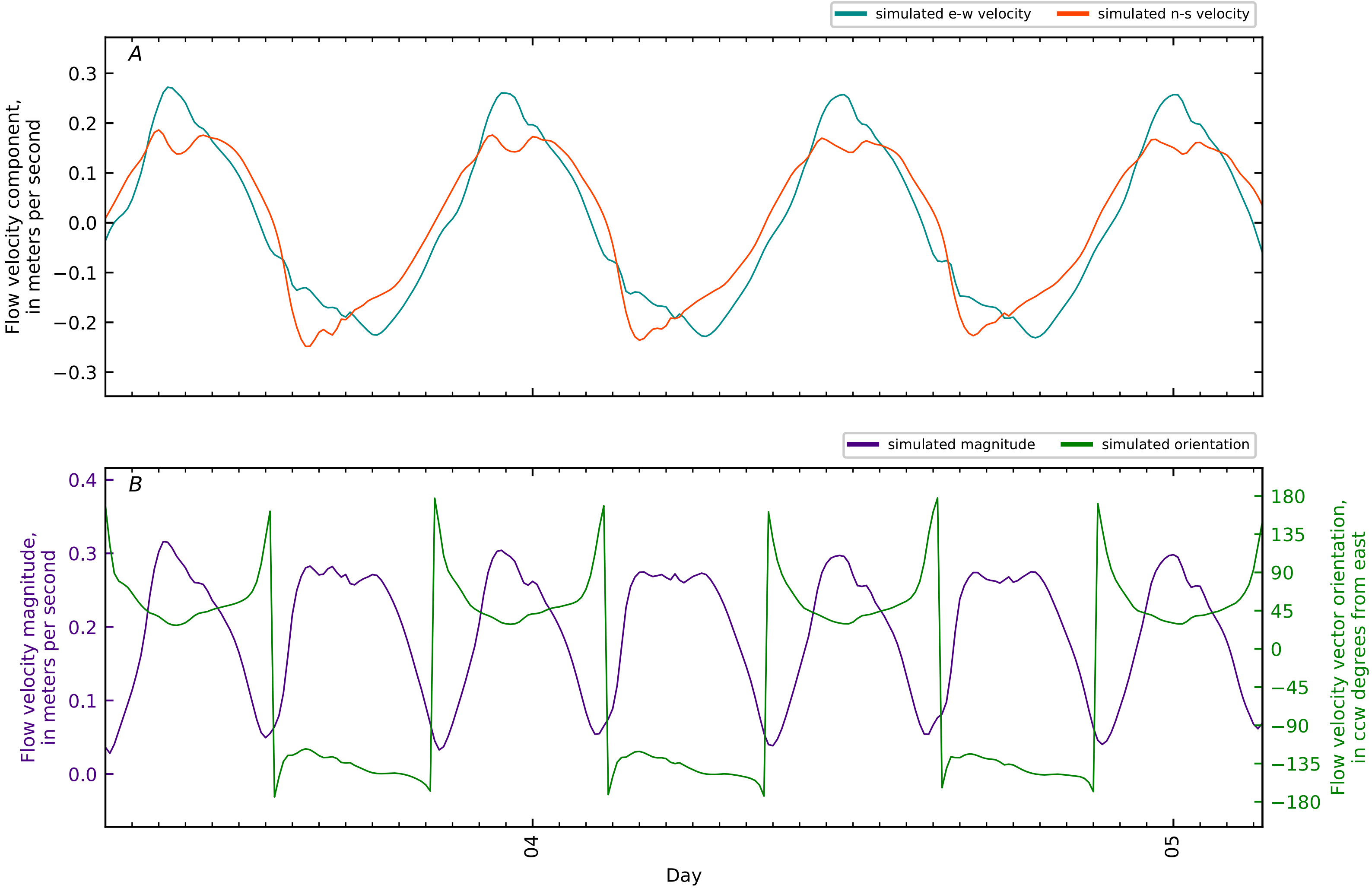

Figure B3-275. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 114, East Channel KM0.1 GS CTD4-07. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

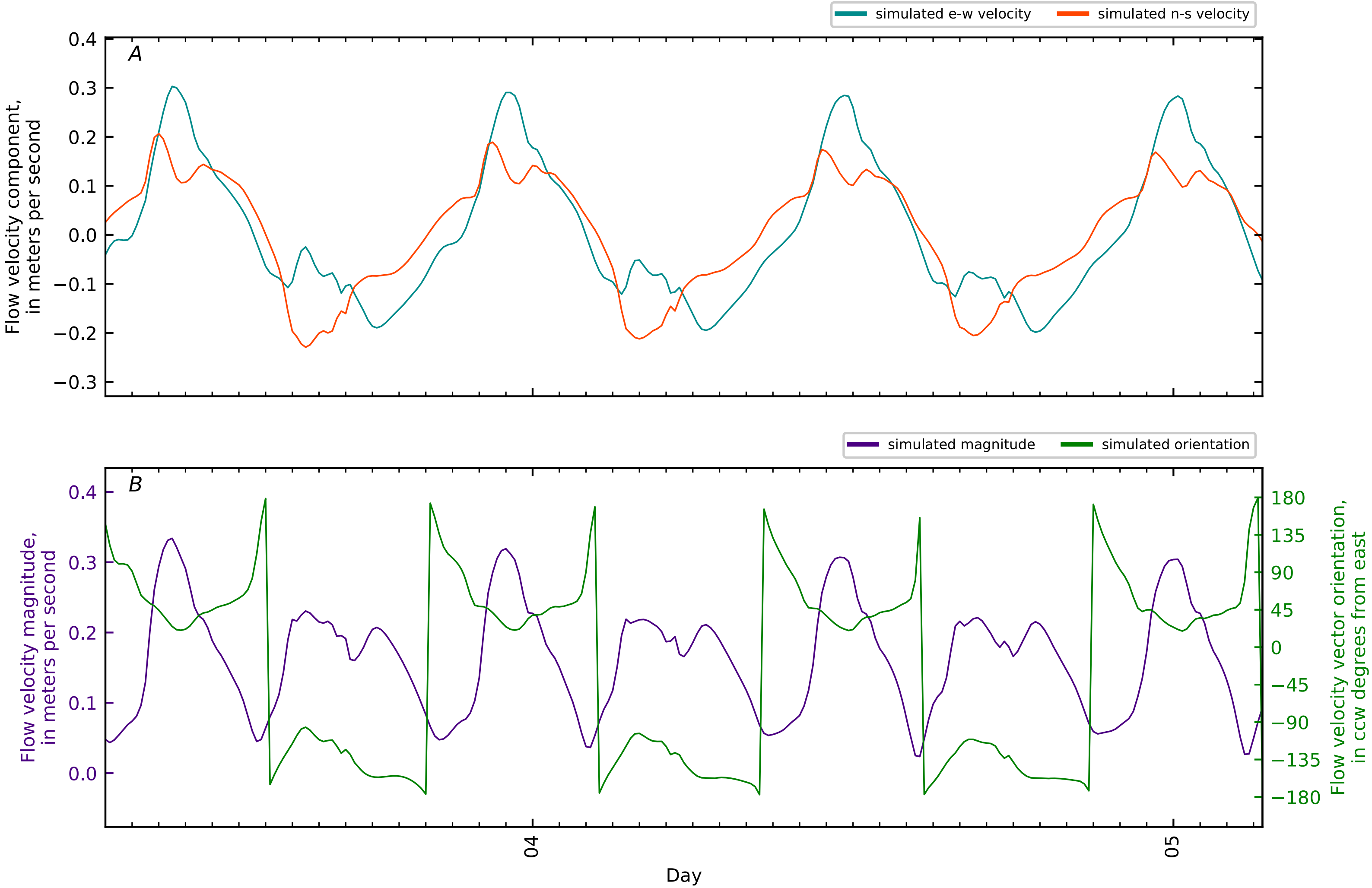

Figure B3-276. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 115, East Channel KM0.1 GS CTD4-08. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

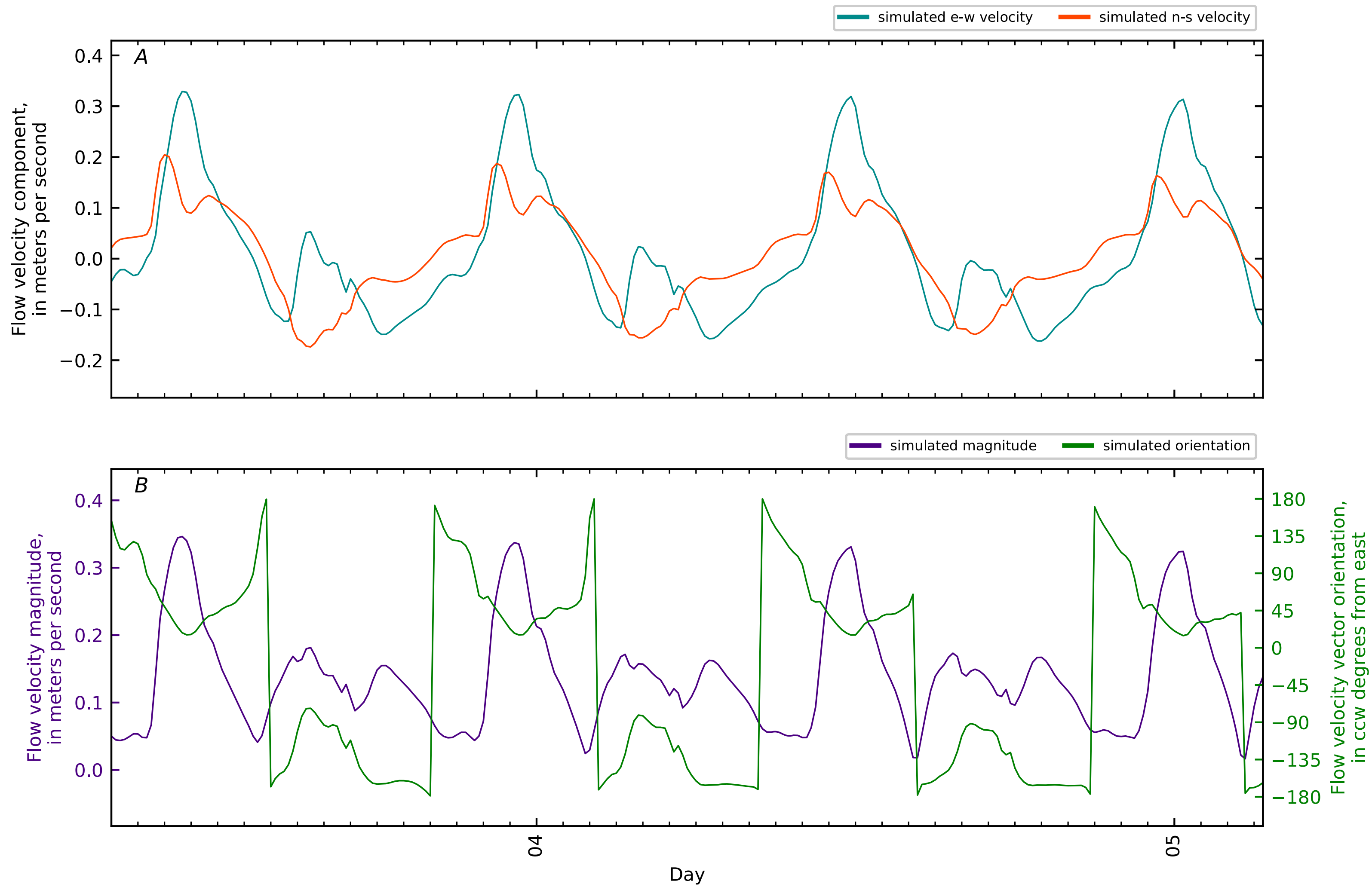

Figure B3-277. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 116, East Channel KM0.1 GS CTD4-09. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

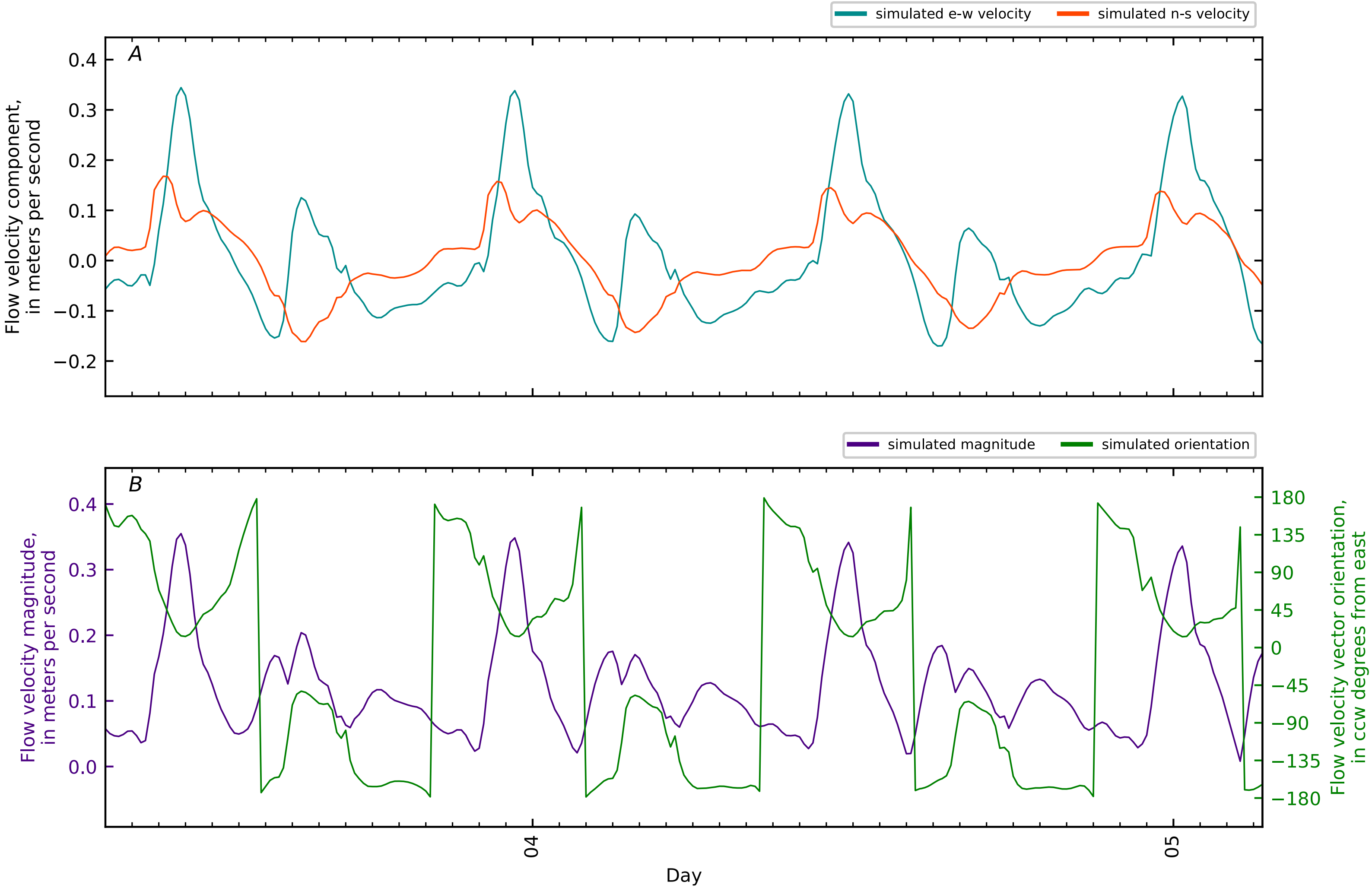

Figure B3-278. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 117, East Channel KM0.1 GS CTD4-10. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

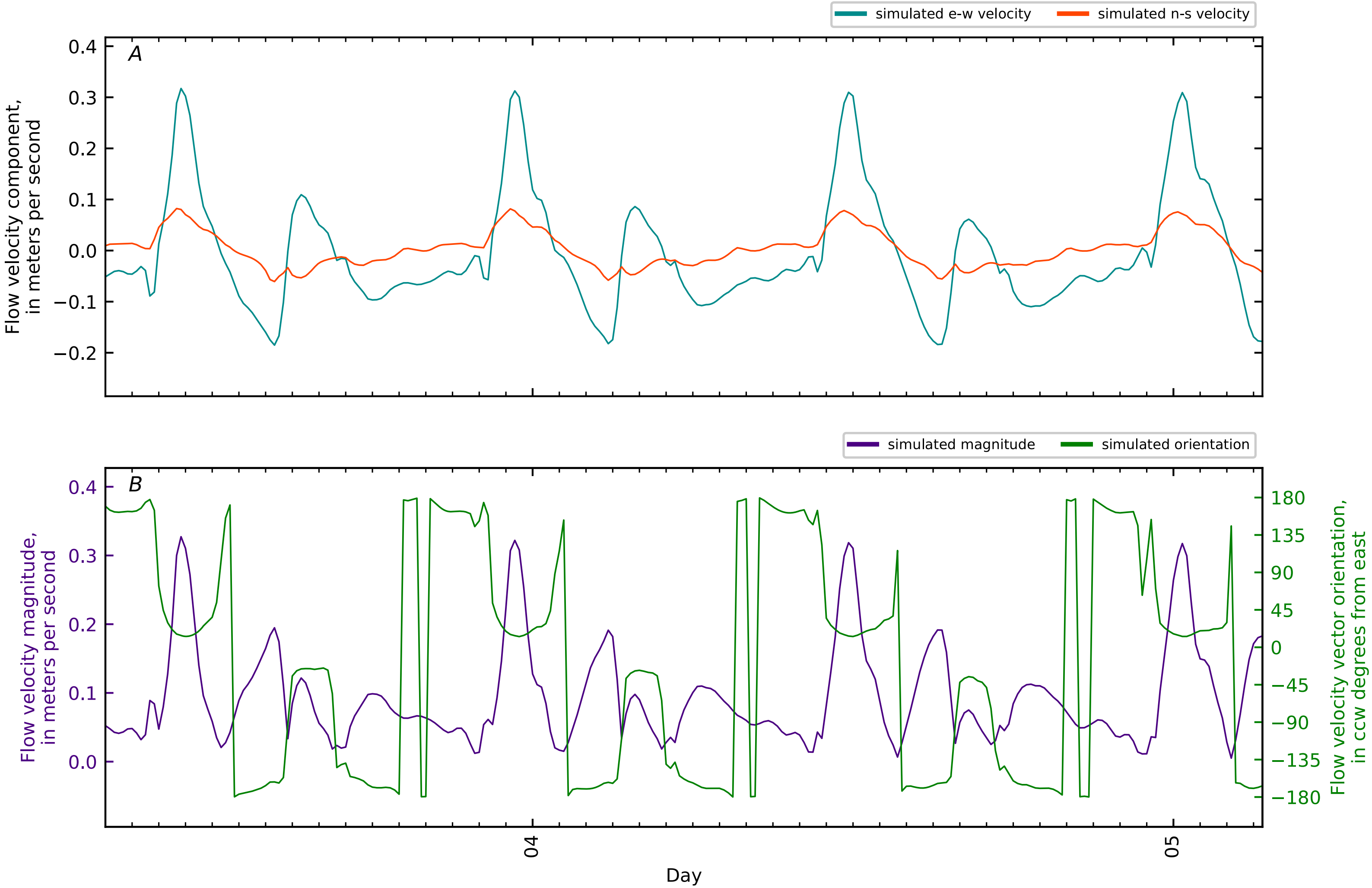

Figure B3-279. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 118, East Channel KM0.1 GS CTD4-11. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

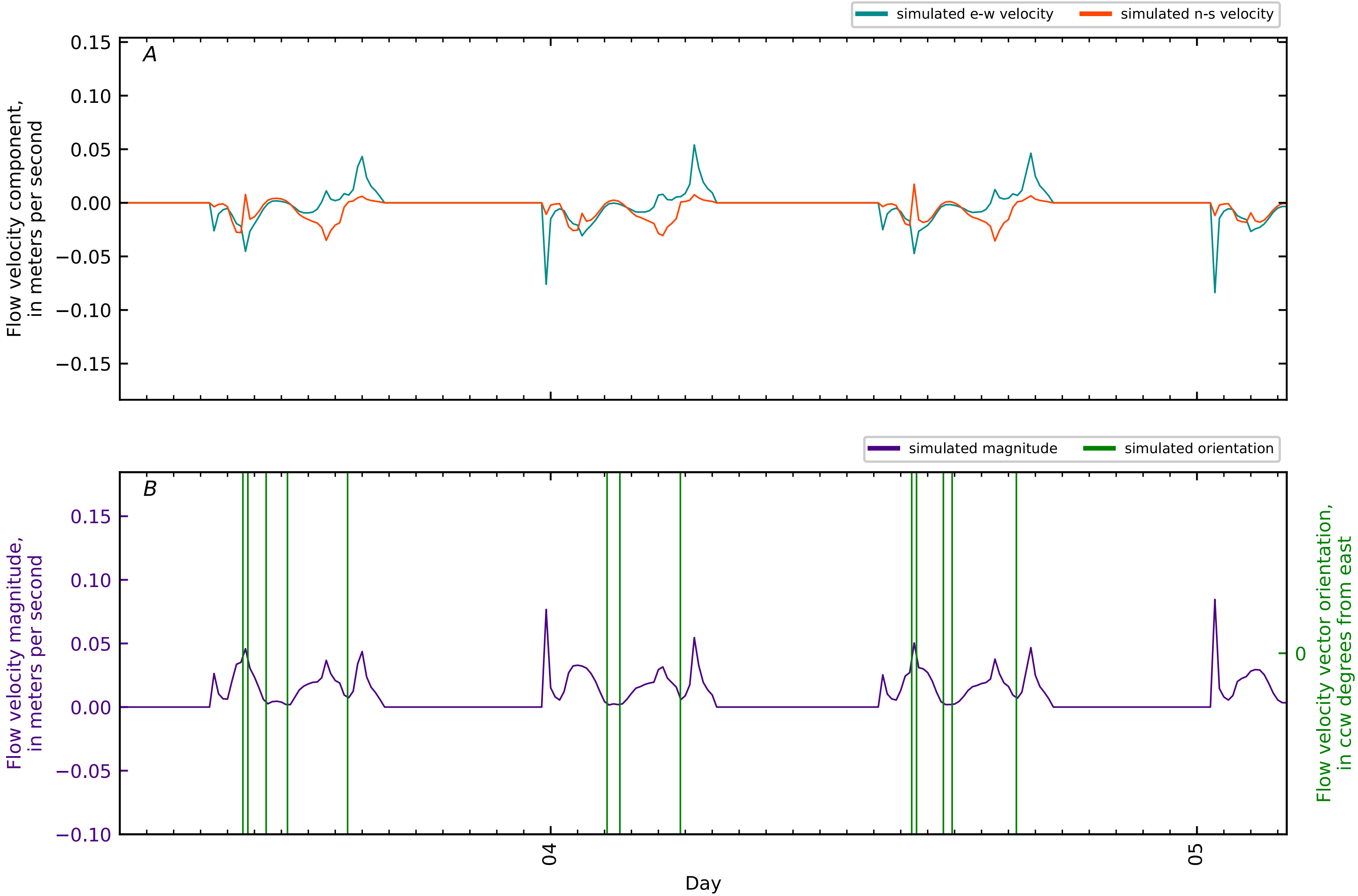

Figure B3-280. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 119, East Channel KM0.78 ERDC7 VE-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

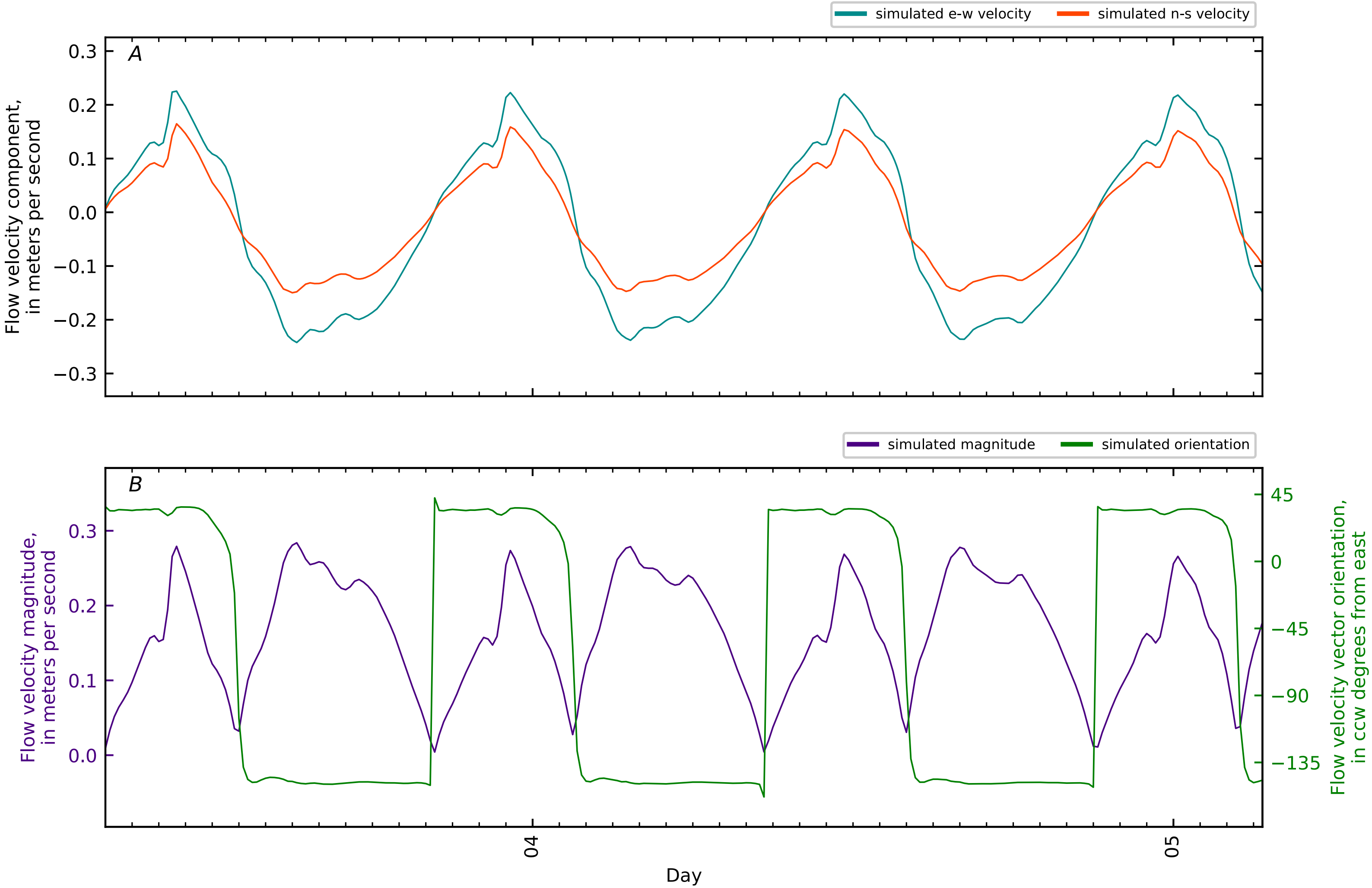

Figure B3-281. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 120, East Channel KM0.8 ERDC8 VE-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

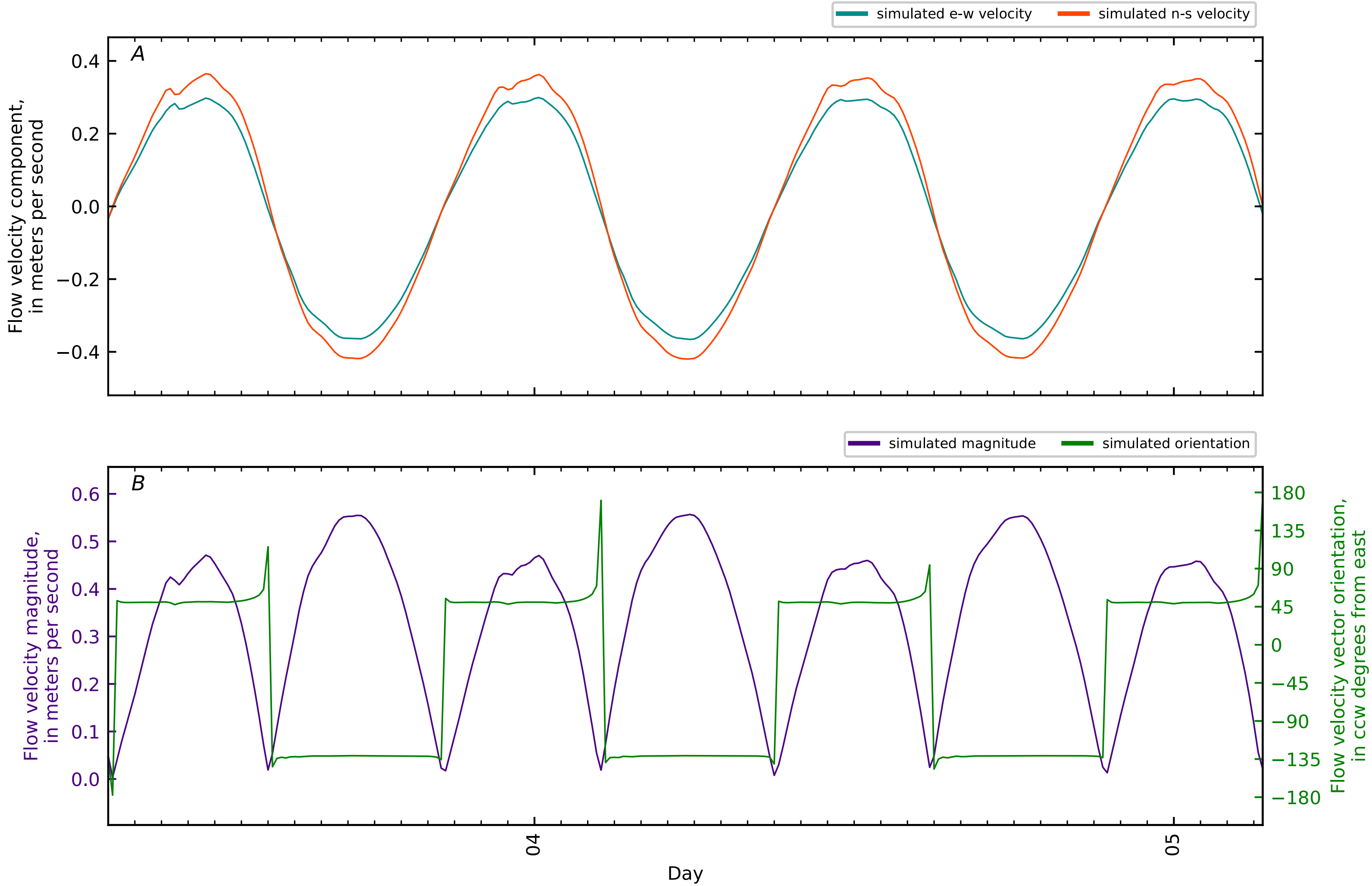

Figure B3-282. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 121, East Channel KM1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

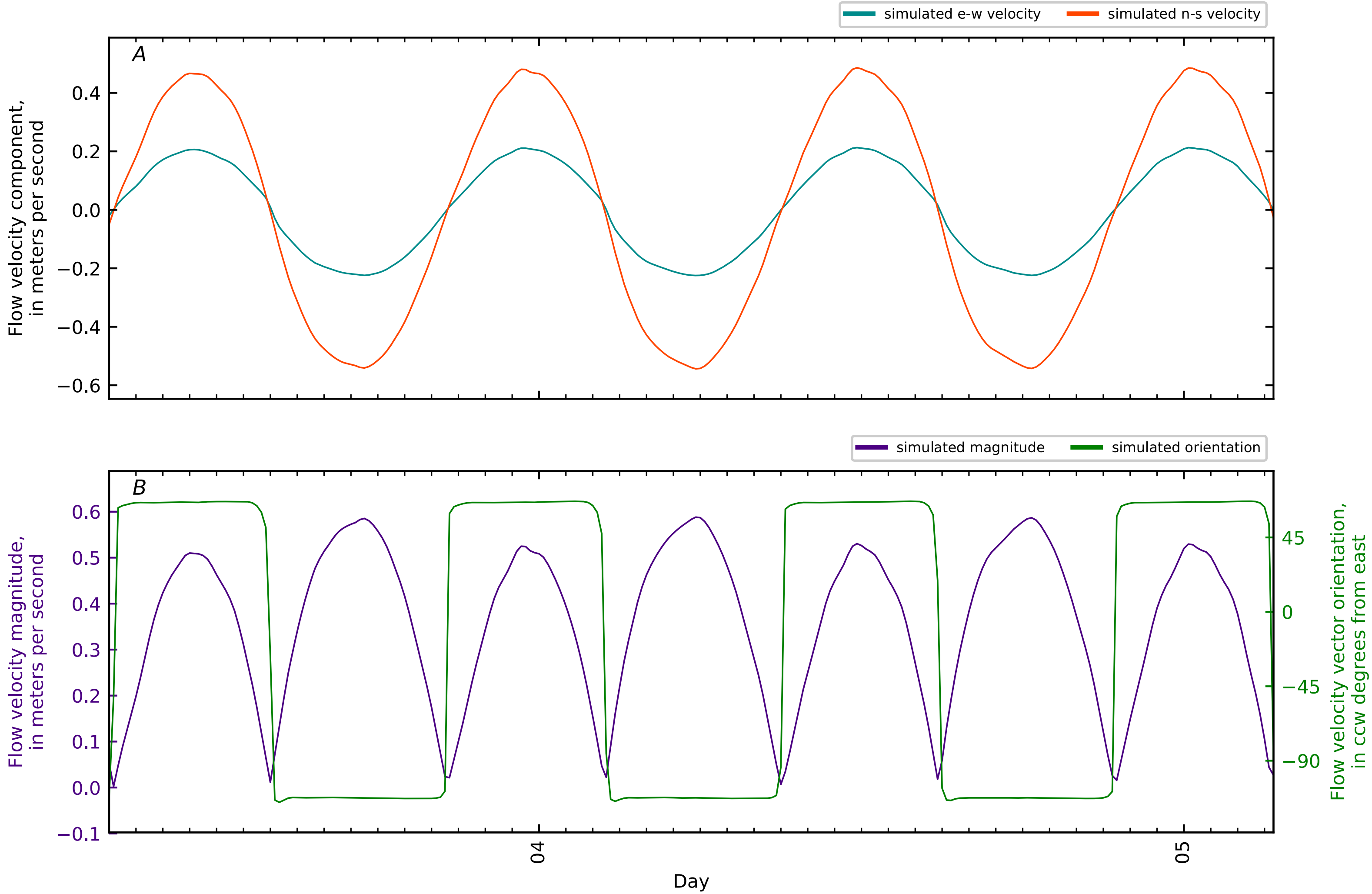

Figure B3-283. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 122, East Channel KM2. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

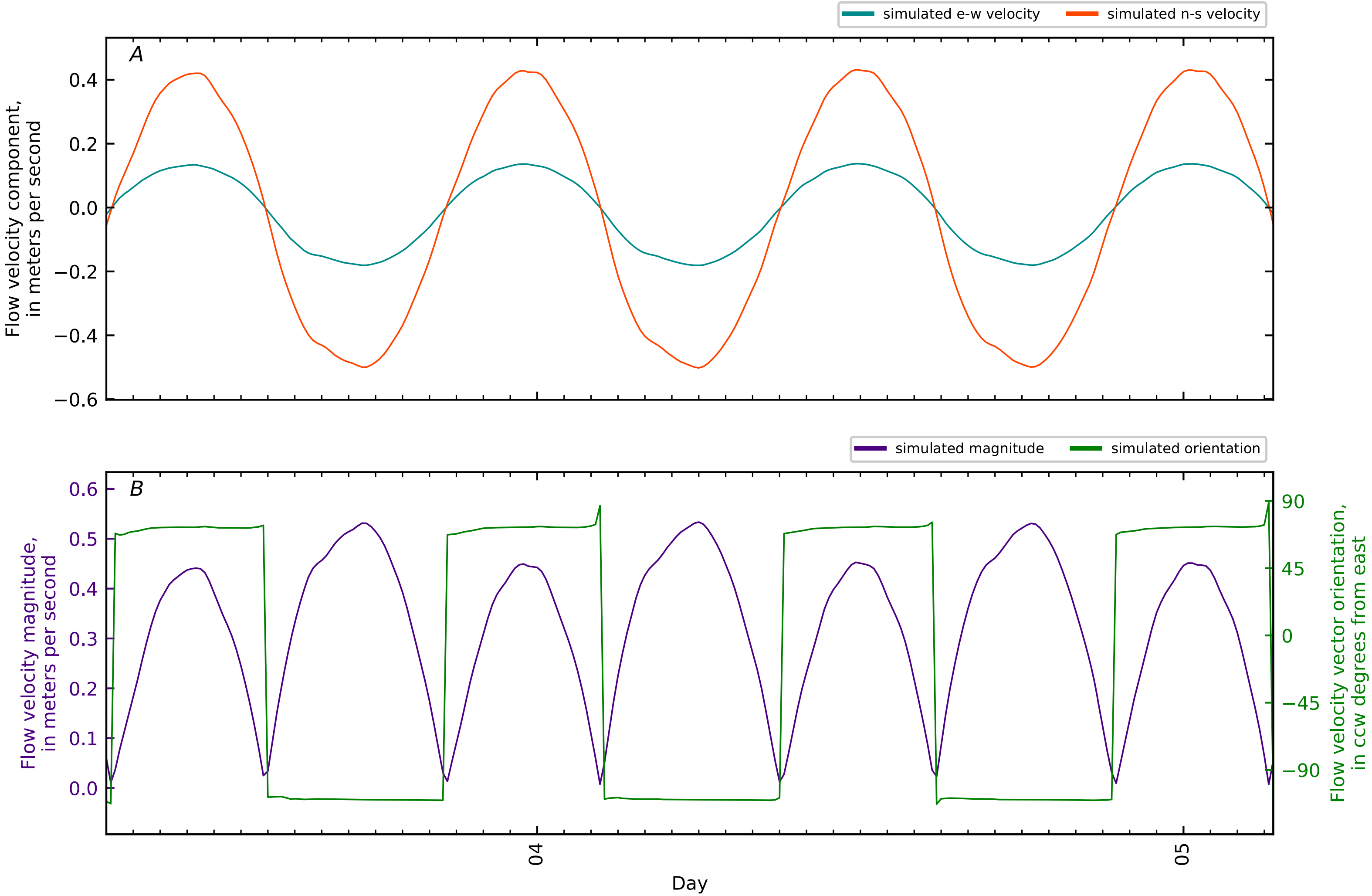

Figure B3-284. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 123, East Channel KM3. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

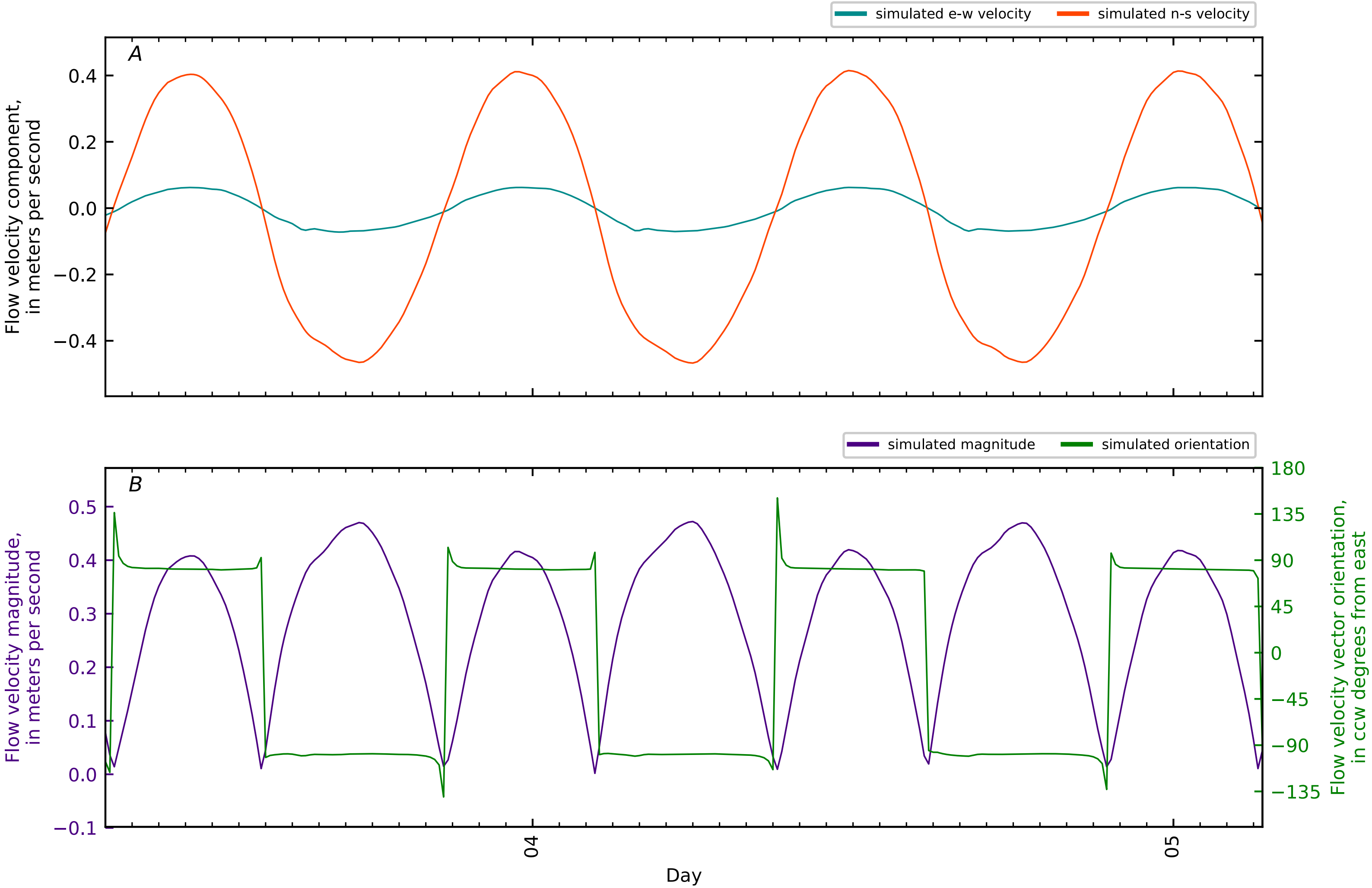

Figure B3-285. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 124, East Channel KM4. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

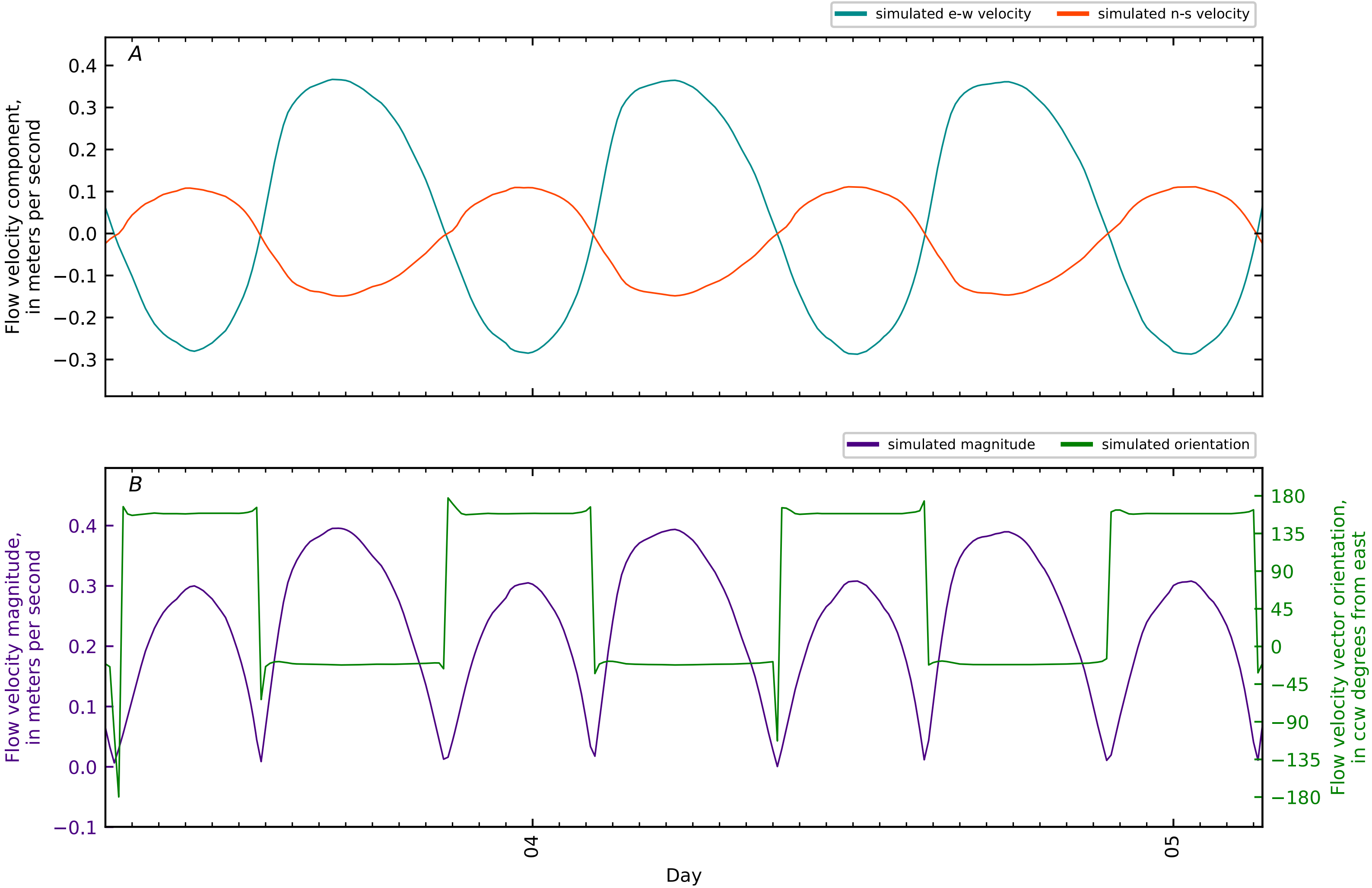

Figure B3-286. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 125, East Channel KM5. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

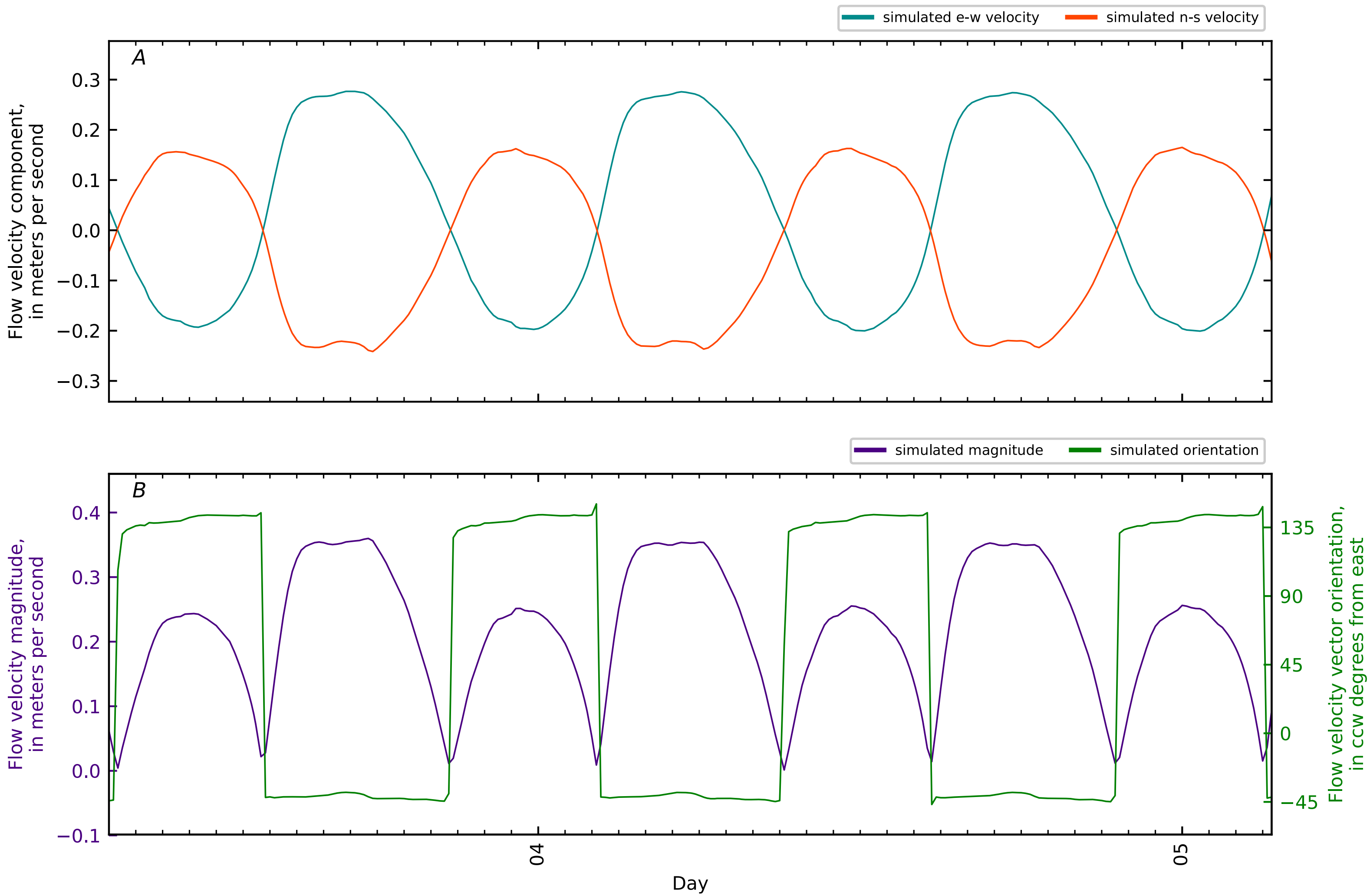

Figure B3-287. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 126, East Channel KM5.3 ERDC4 VN-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

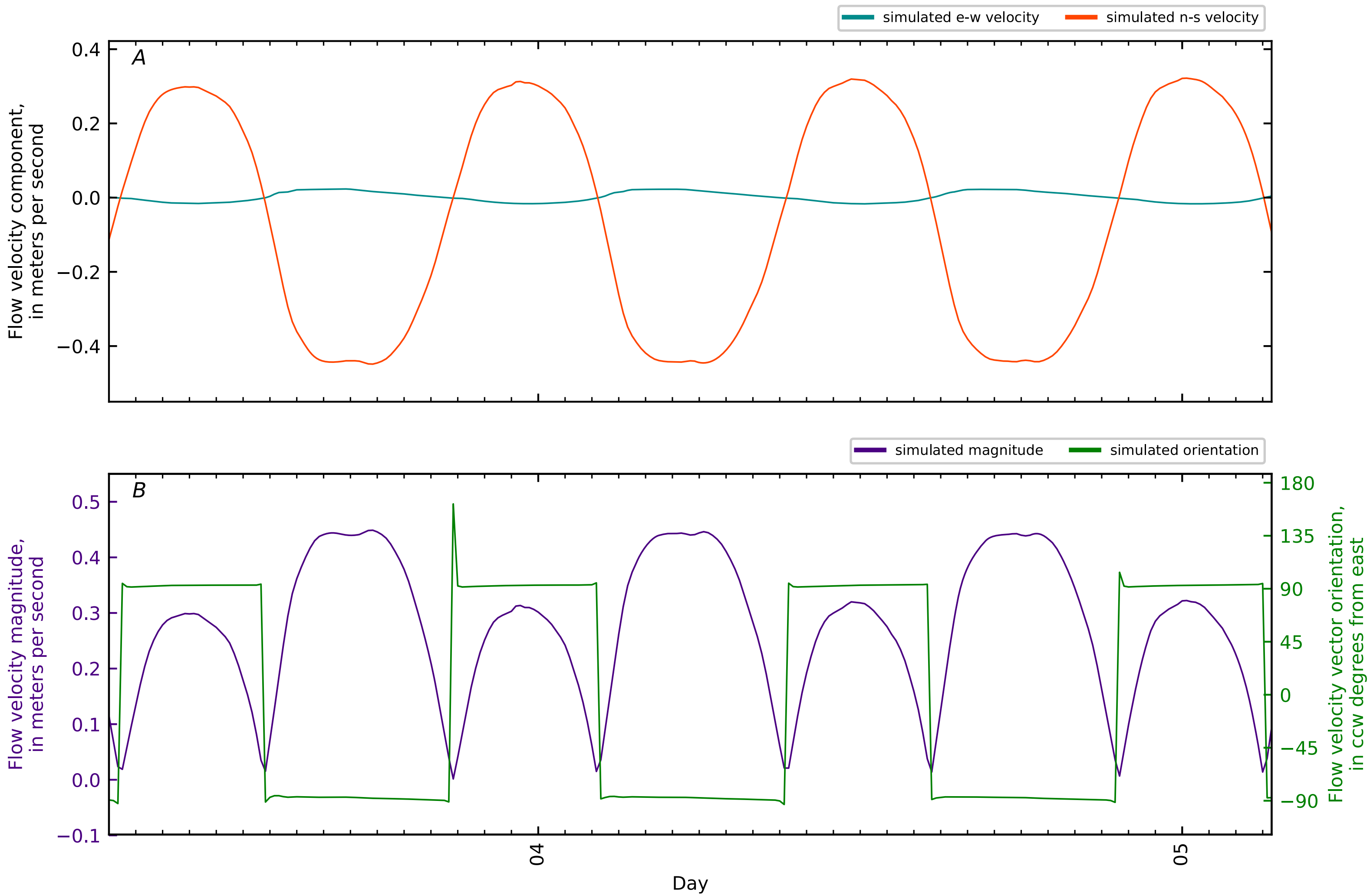

Figure B3-288. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 127, East Channel KM6. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

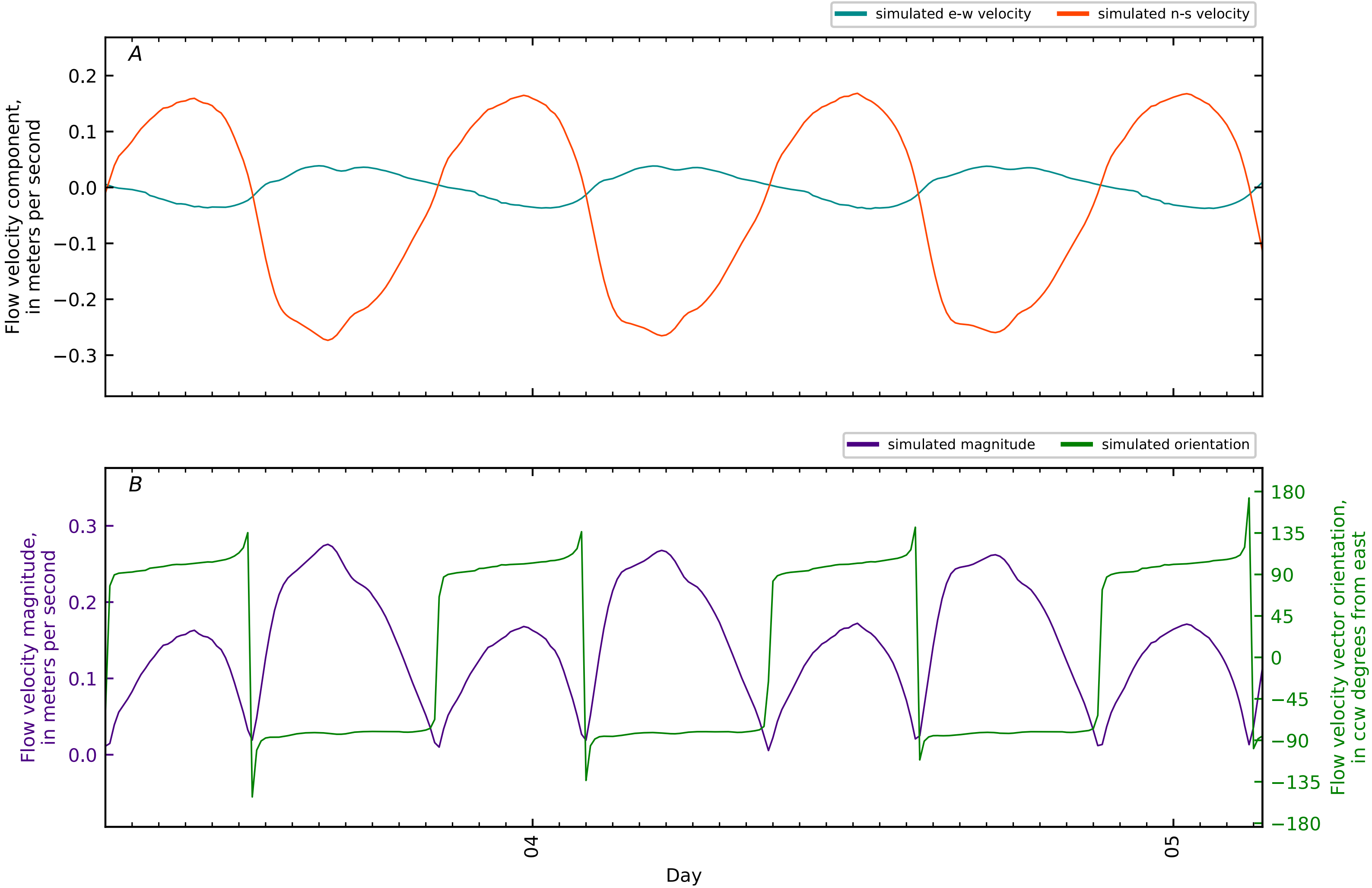

Figure B3-289. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 128, East Channel KM6.8 ERDC12 VN-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

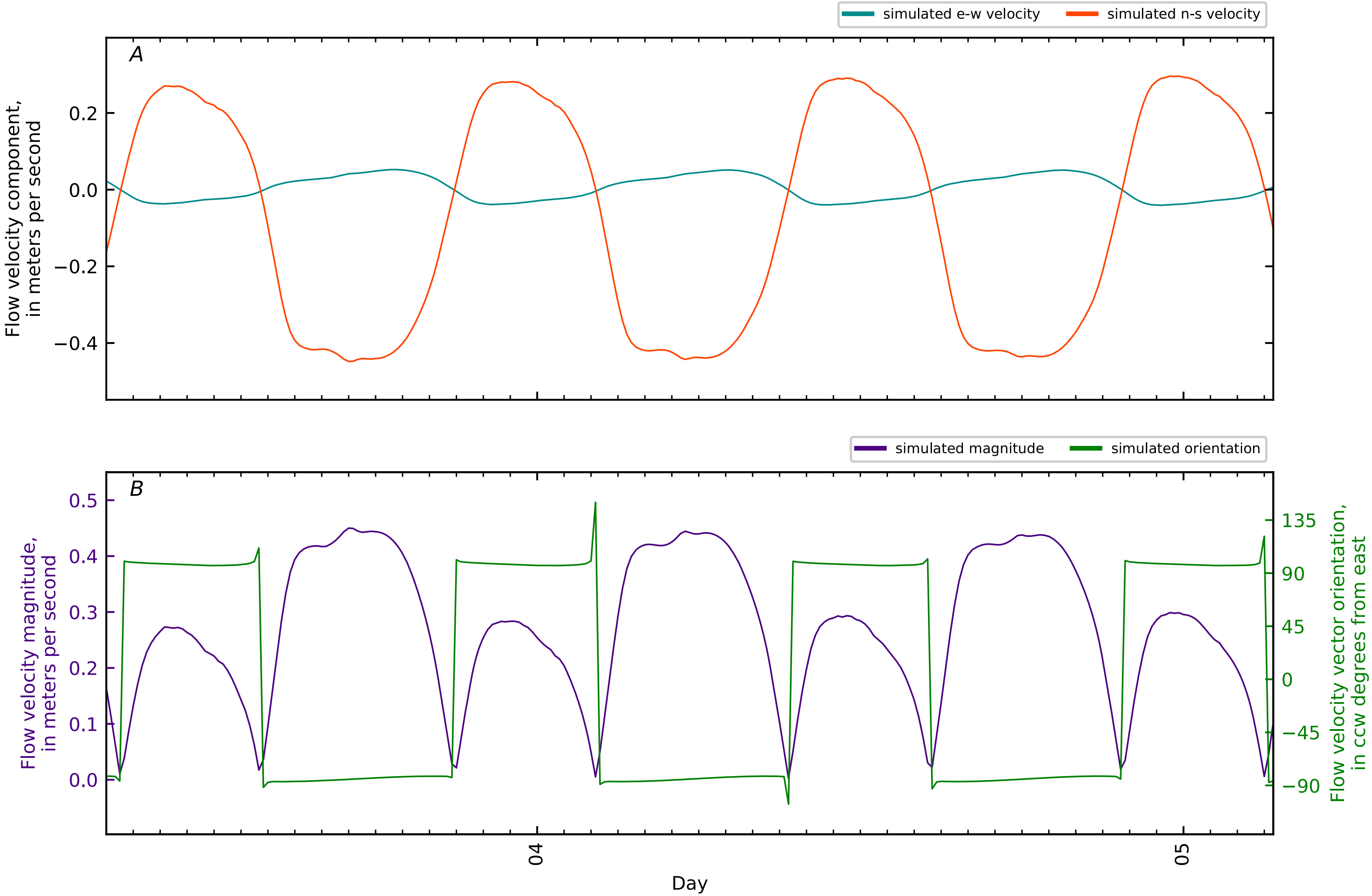

Figure B3-290. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 129, East Channel KM7. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

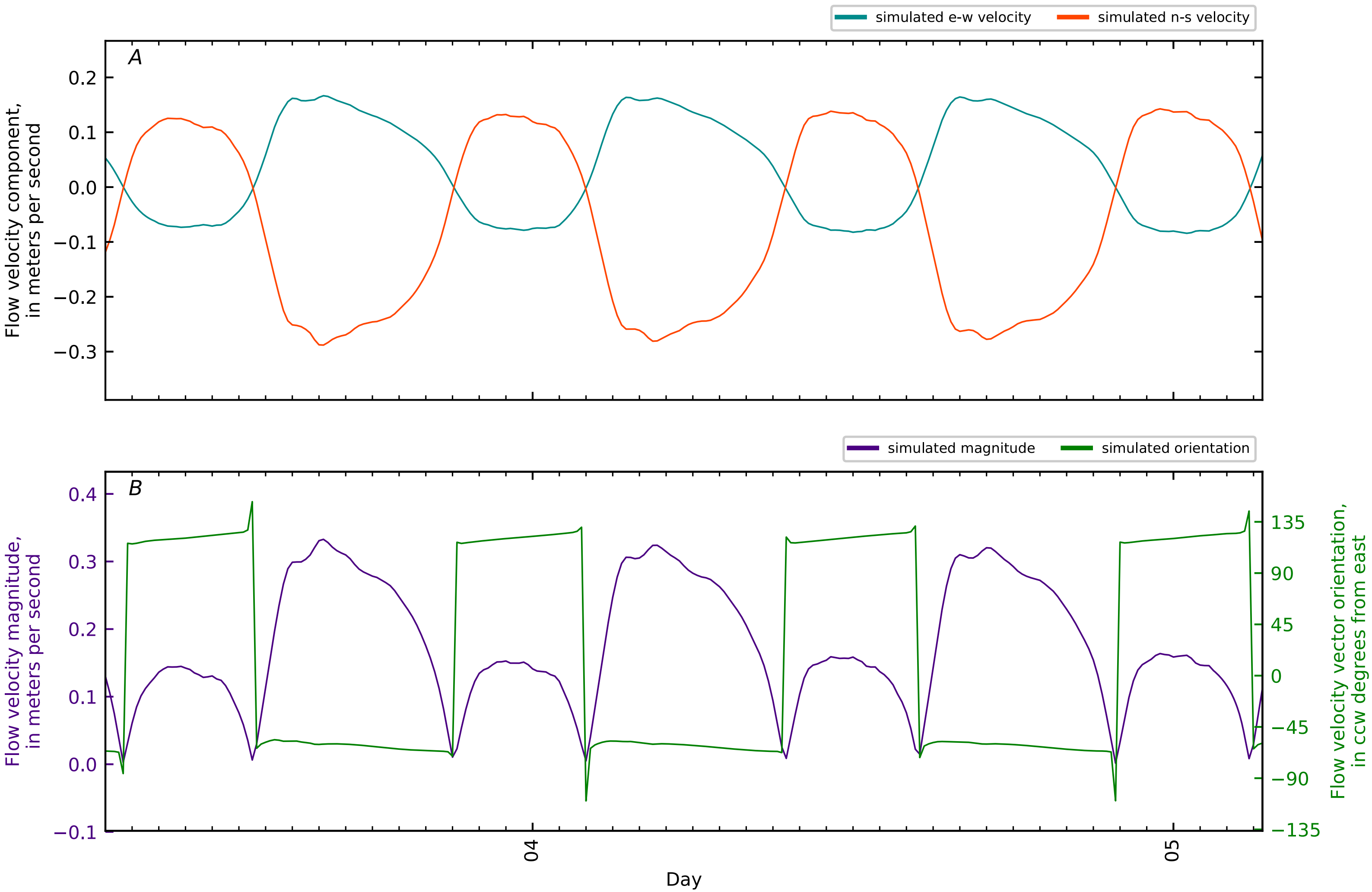

Figure B3-291. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 130, East Channel KM8. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

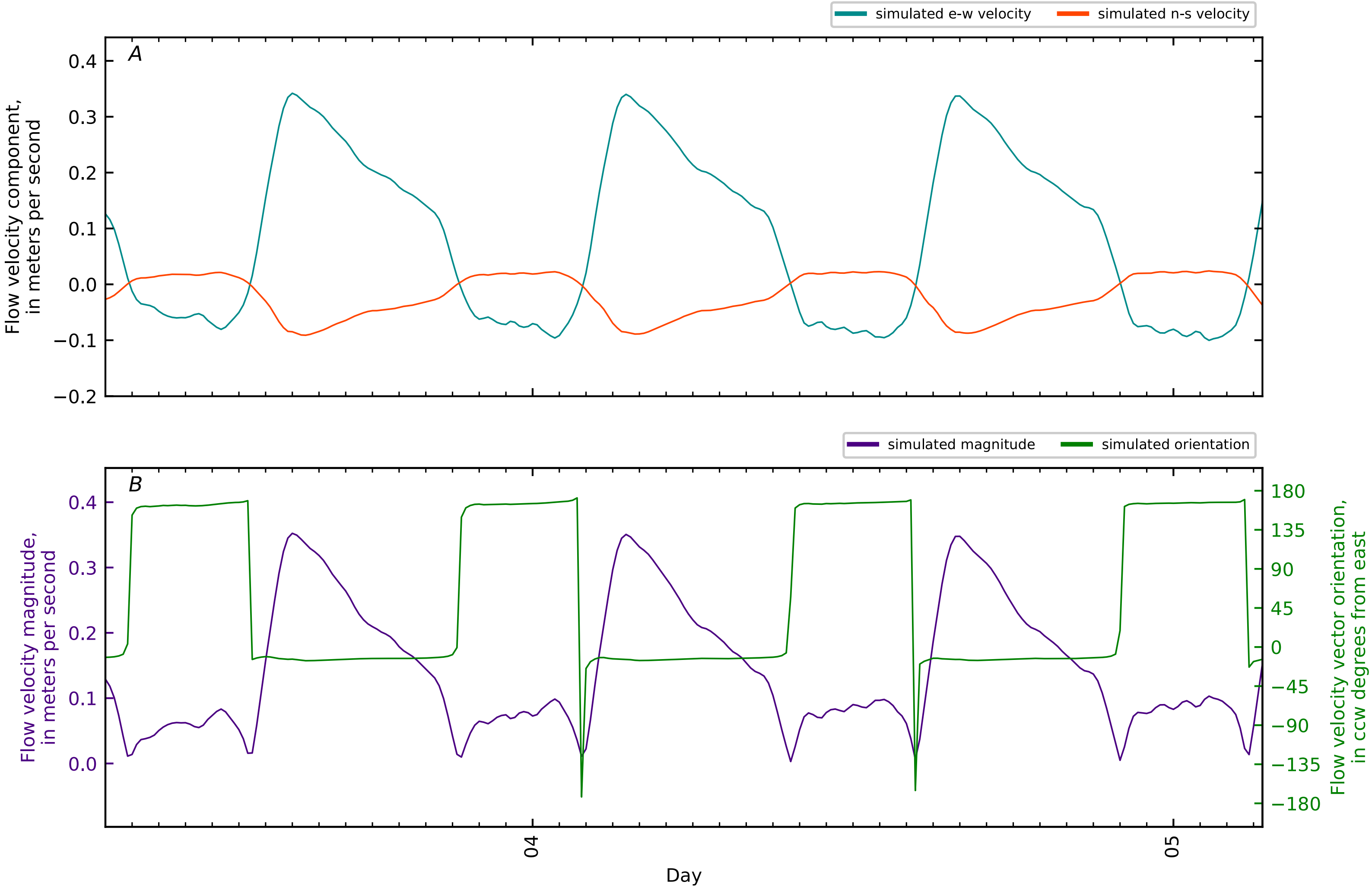

Figure B3-292. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 131, East Channel KM9. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

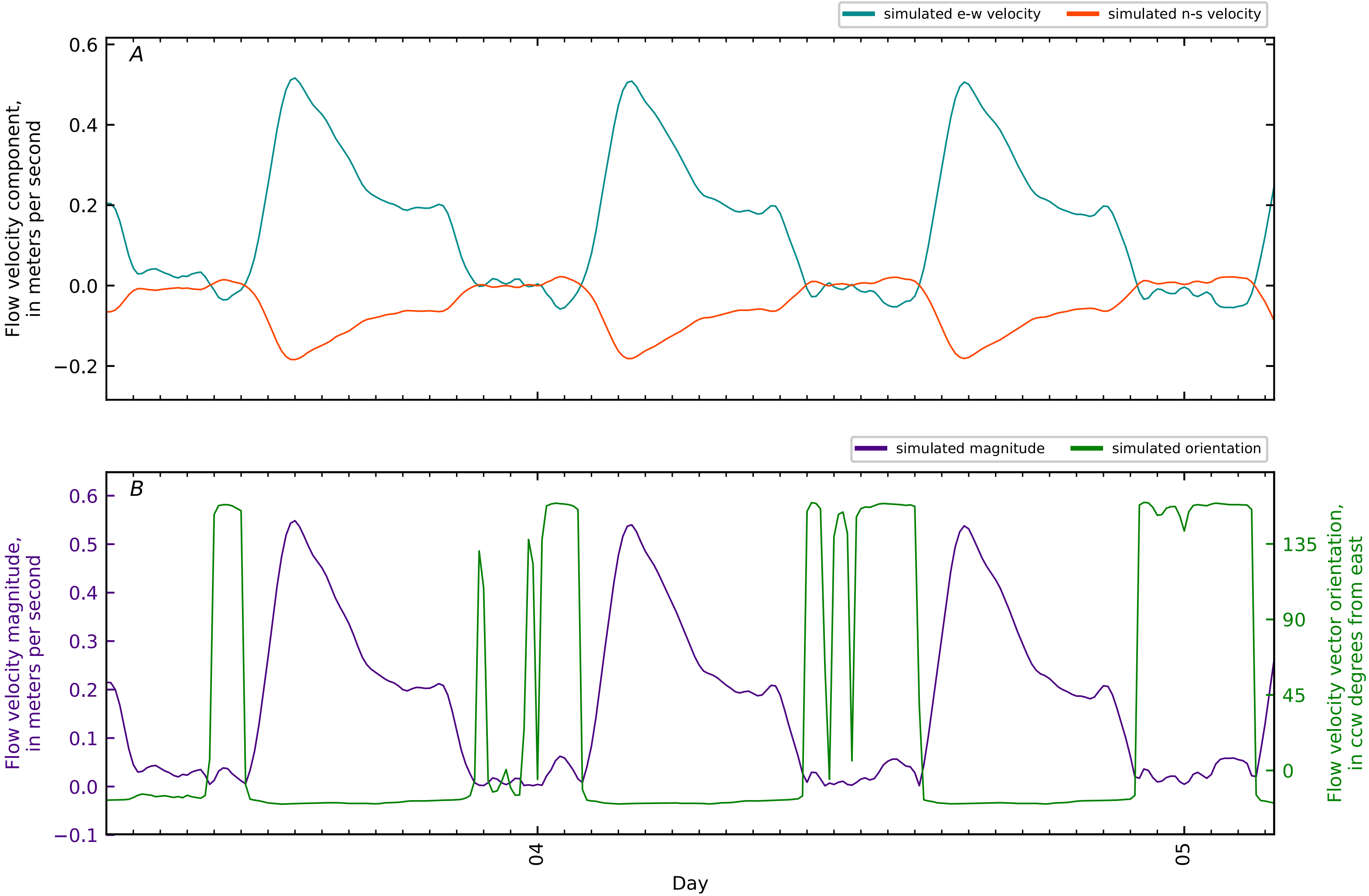

Figure B3-293. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 132, East Channel KM10. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

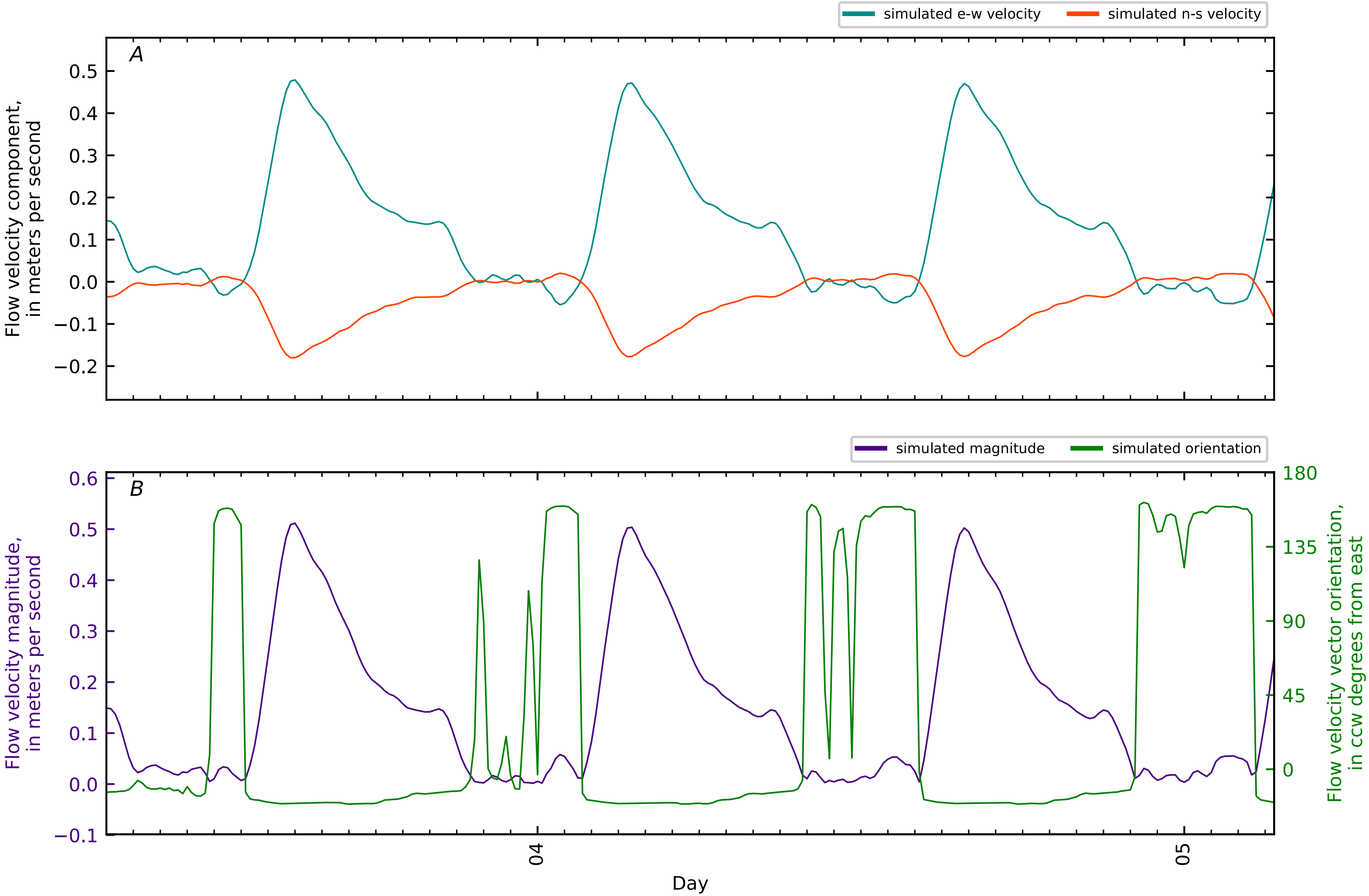

Figure B3-294. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 133, East Channel KM10 GS 443409068471801 at. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

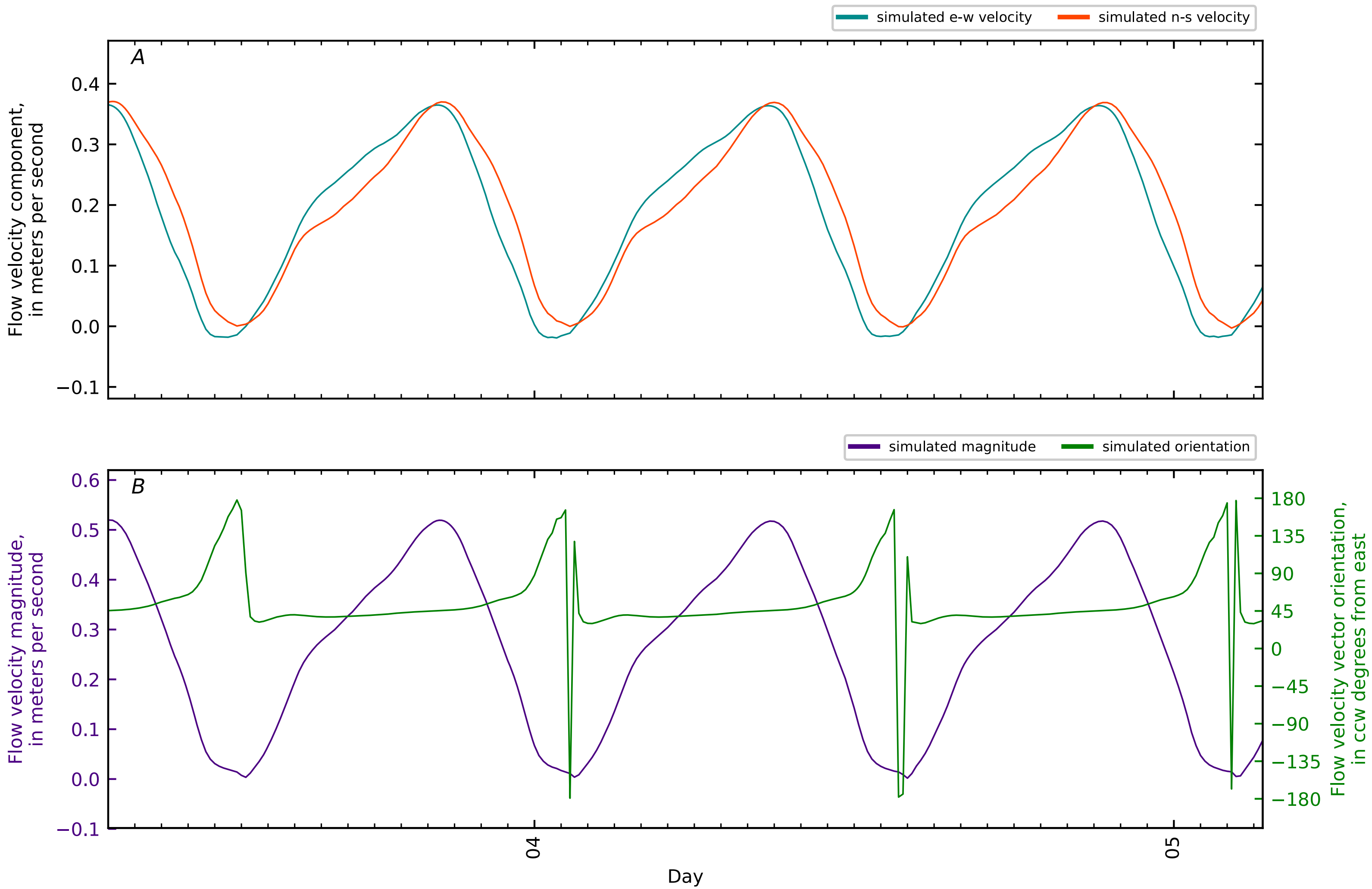

Figure B3-295. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 134, Mendall Marsh KM0. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

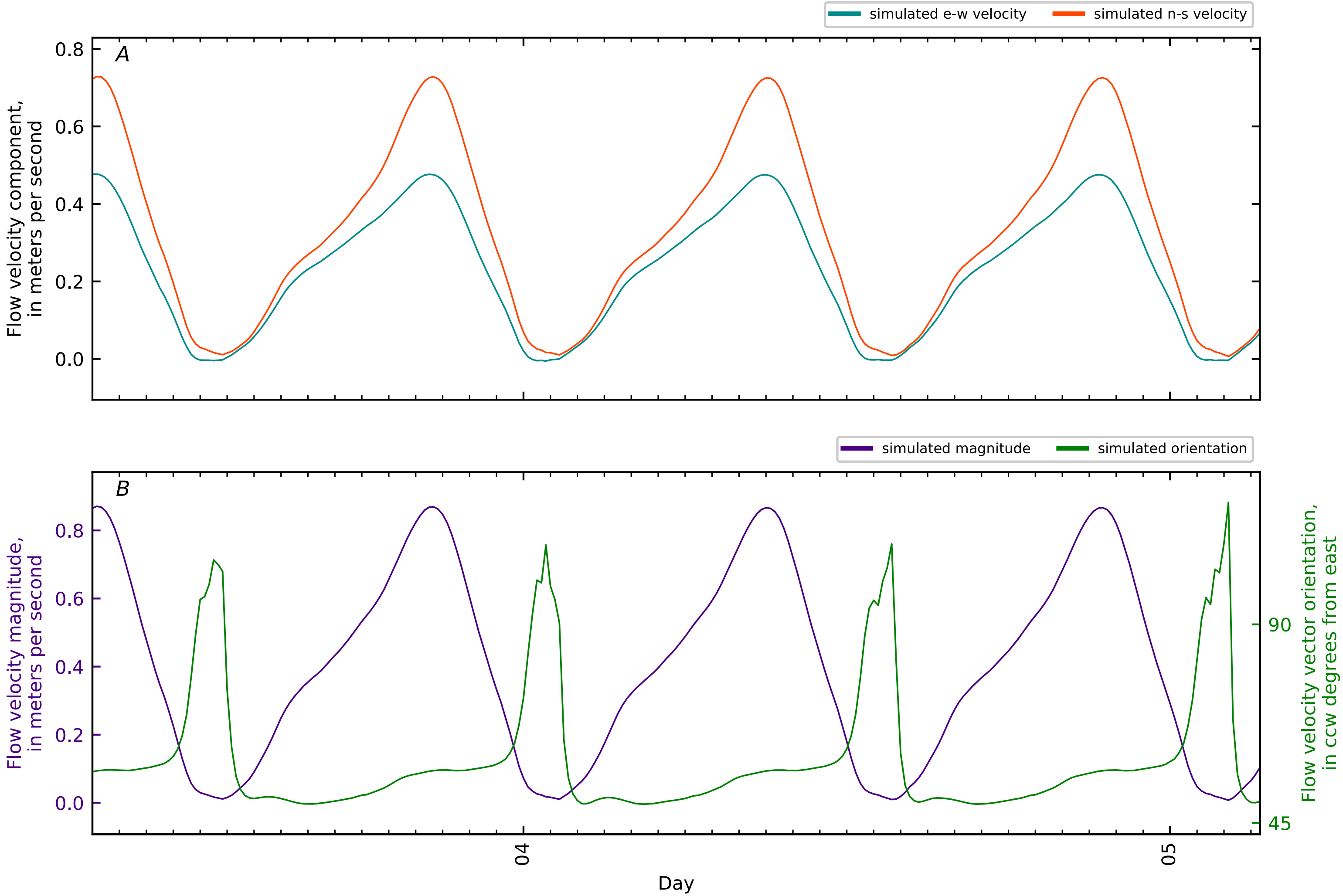

Figure B3-296. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 135, Mendall Marsh KM0.1 ERDC14 MM-MU6-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

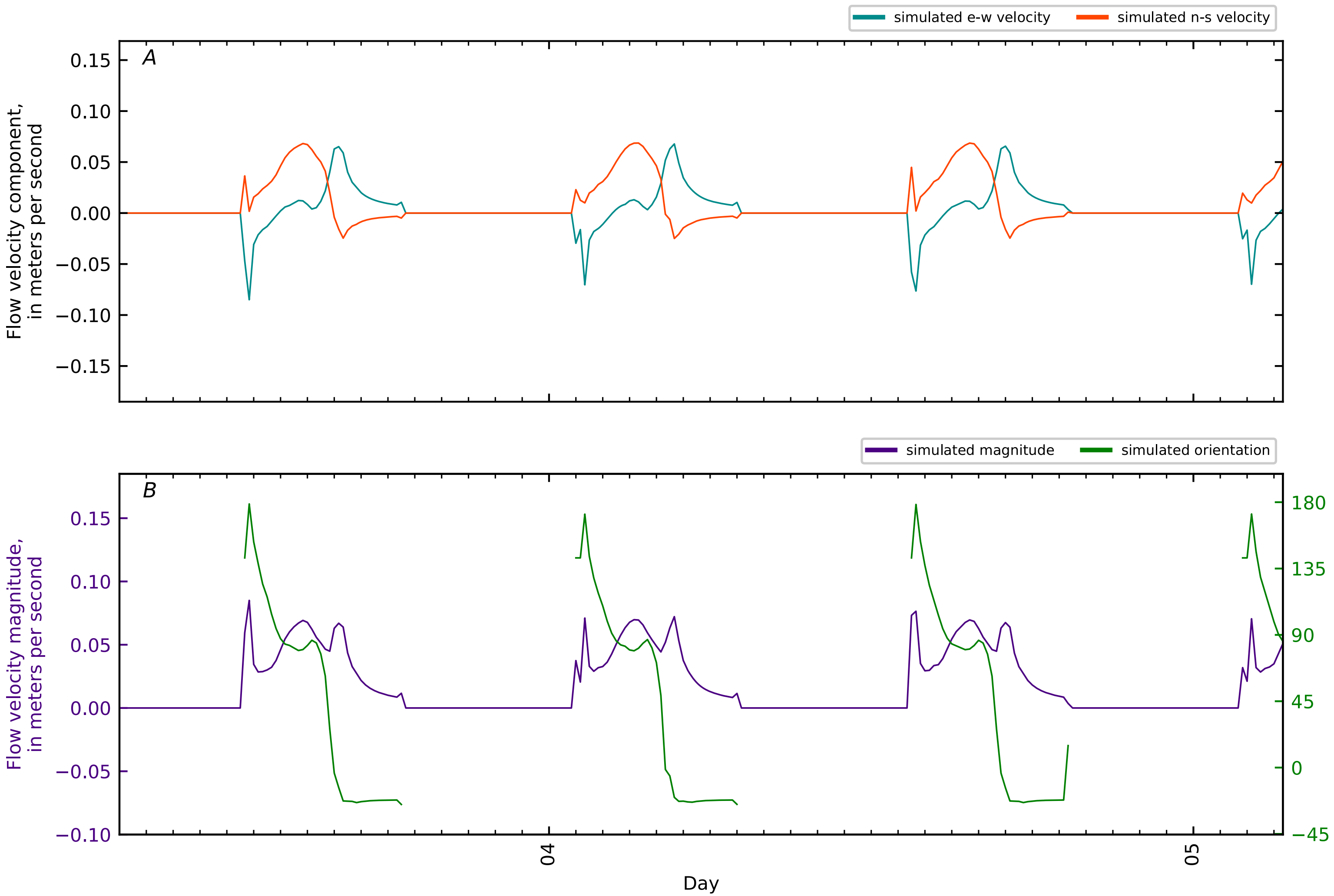

Figure B3-297. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 136, Mendall Marsh KM0.4 GS CTD2-01. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

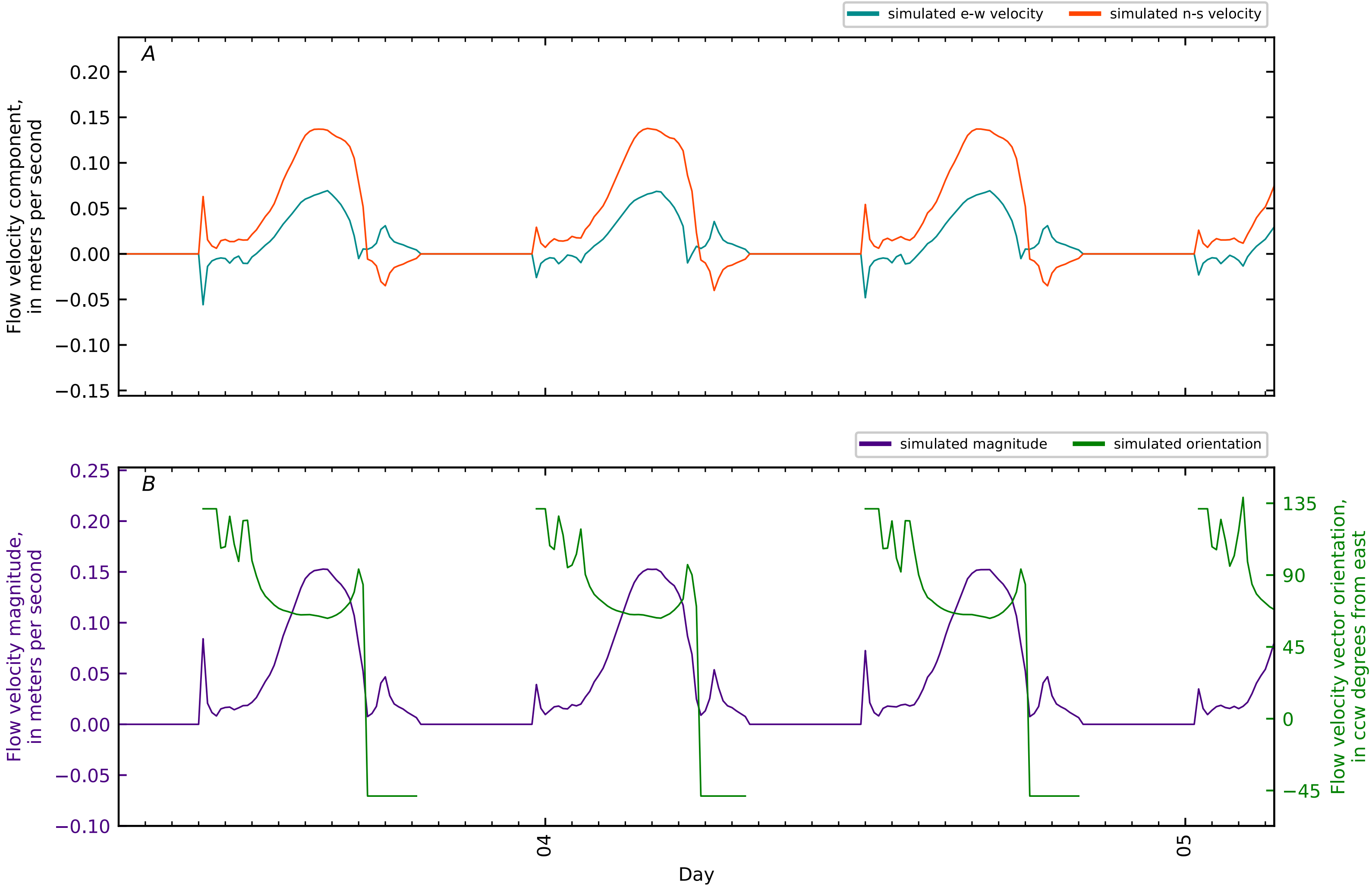

Figure B3-298. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 137, Mendall Marsh KM0.4 GS CTD2-02. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

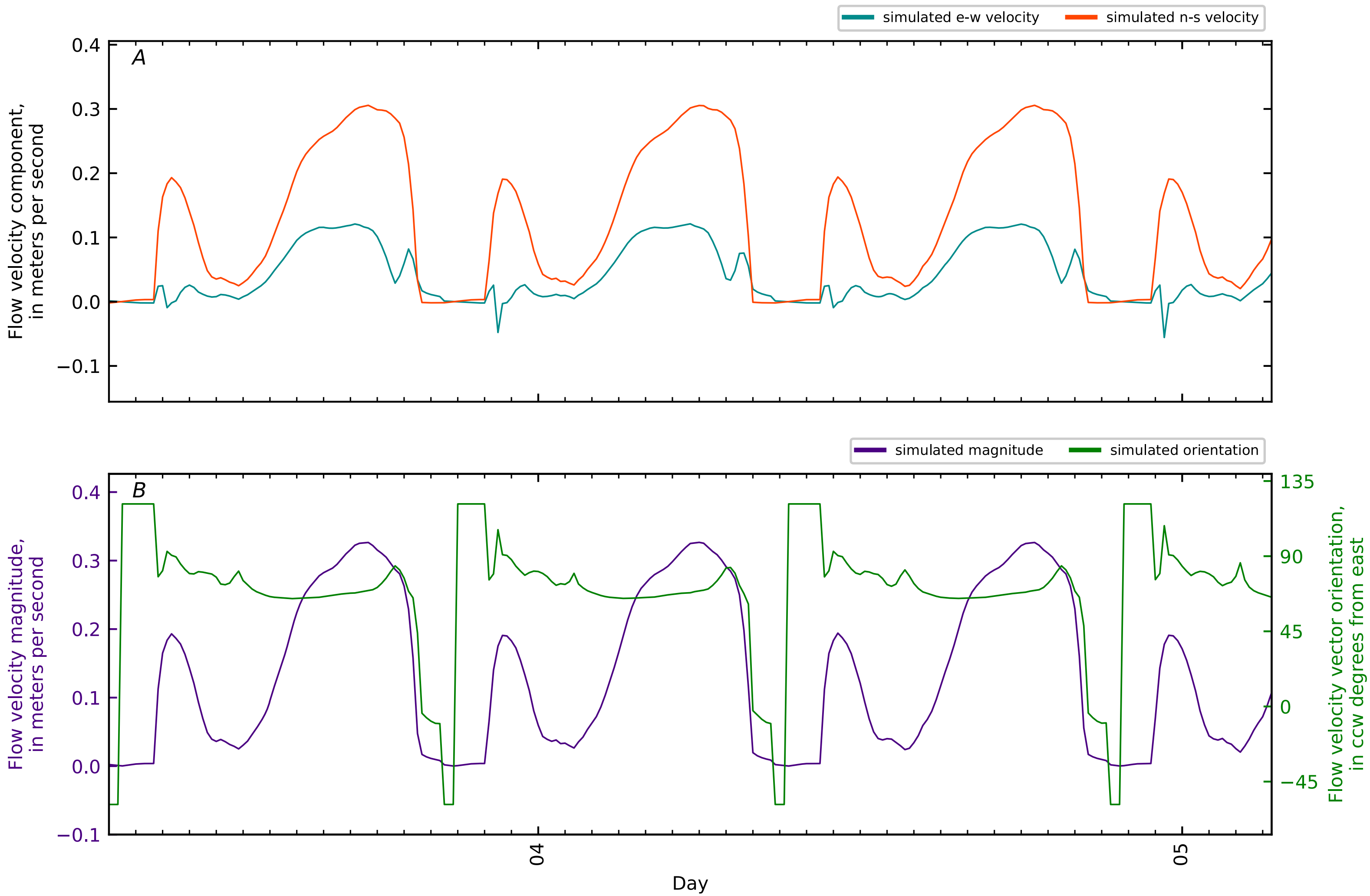

Figure B3-299. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 138, Mendall Marsh KM0.4 GS CTD2-03. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

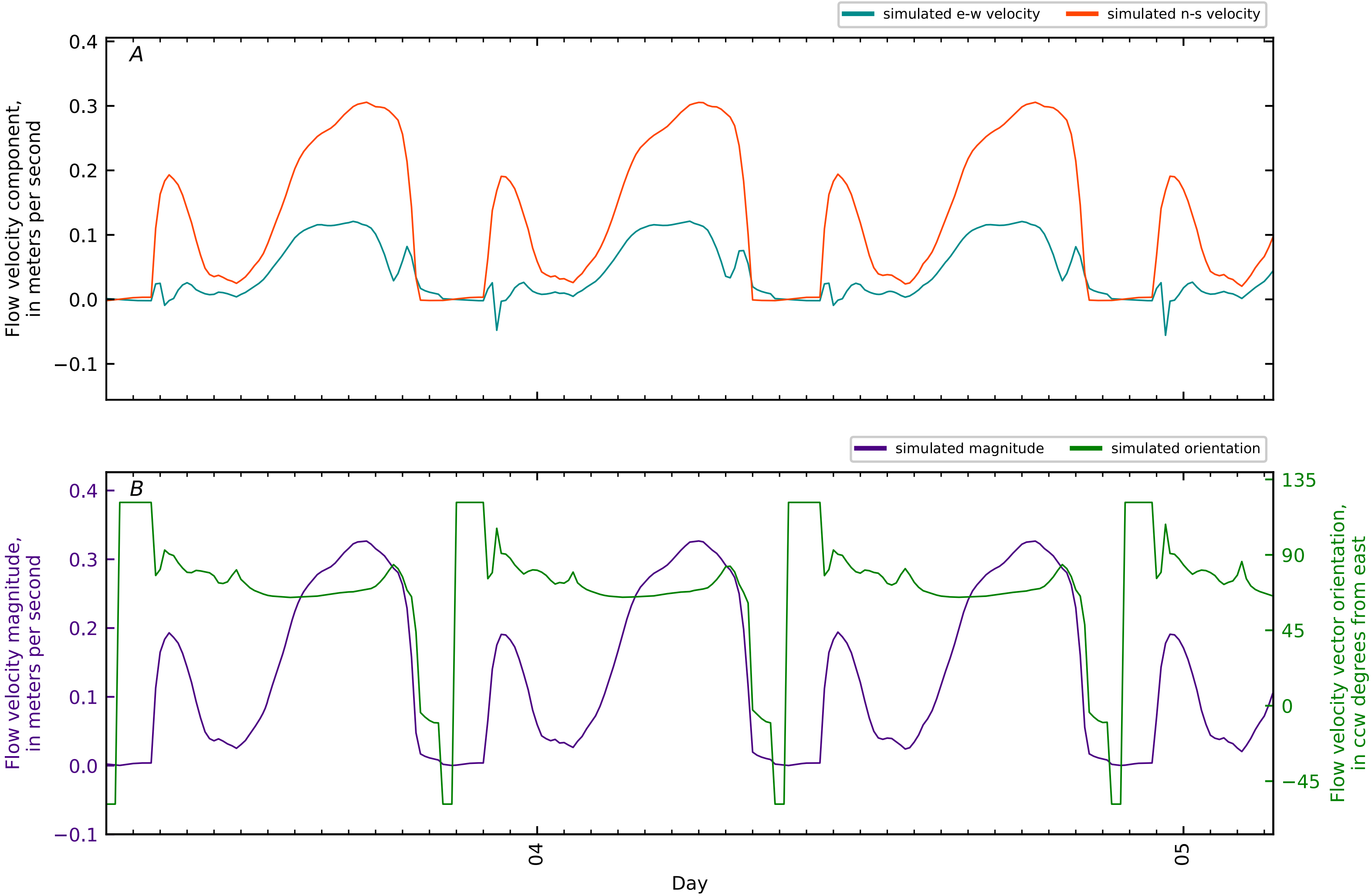

Figure B3-300. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 139, Mendall Marsh KM0.4 GS CTD2-04. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

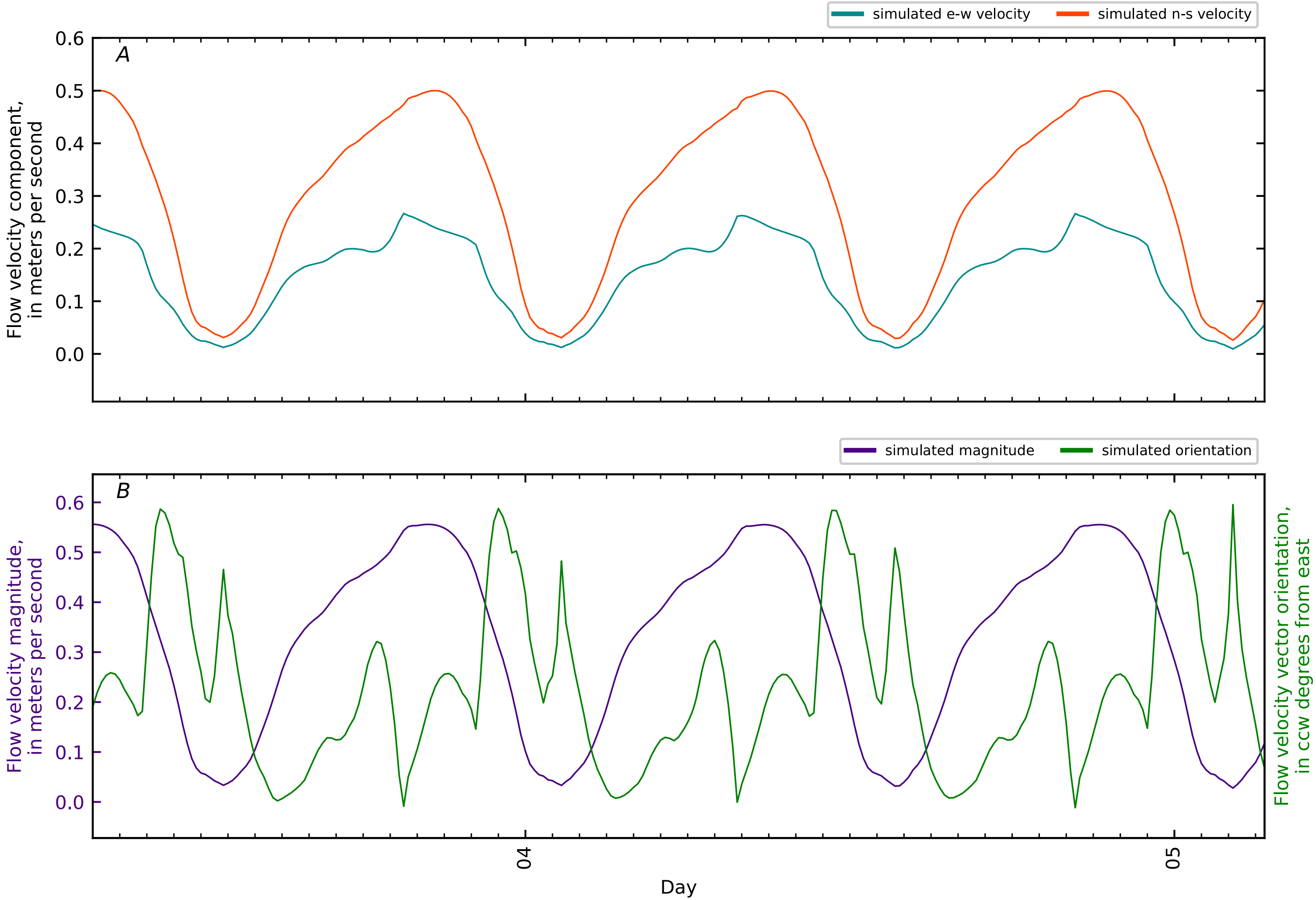

Figure B3-301. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 140, Mendall Marsh KM0.4 GS CTD2-05. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

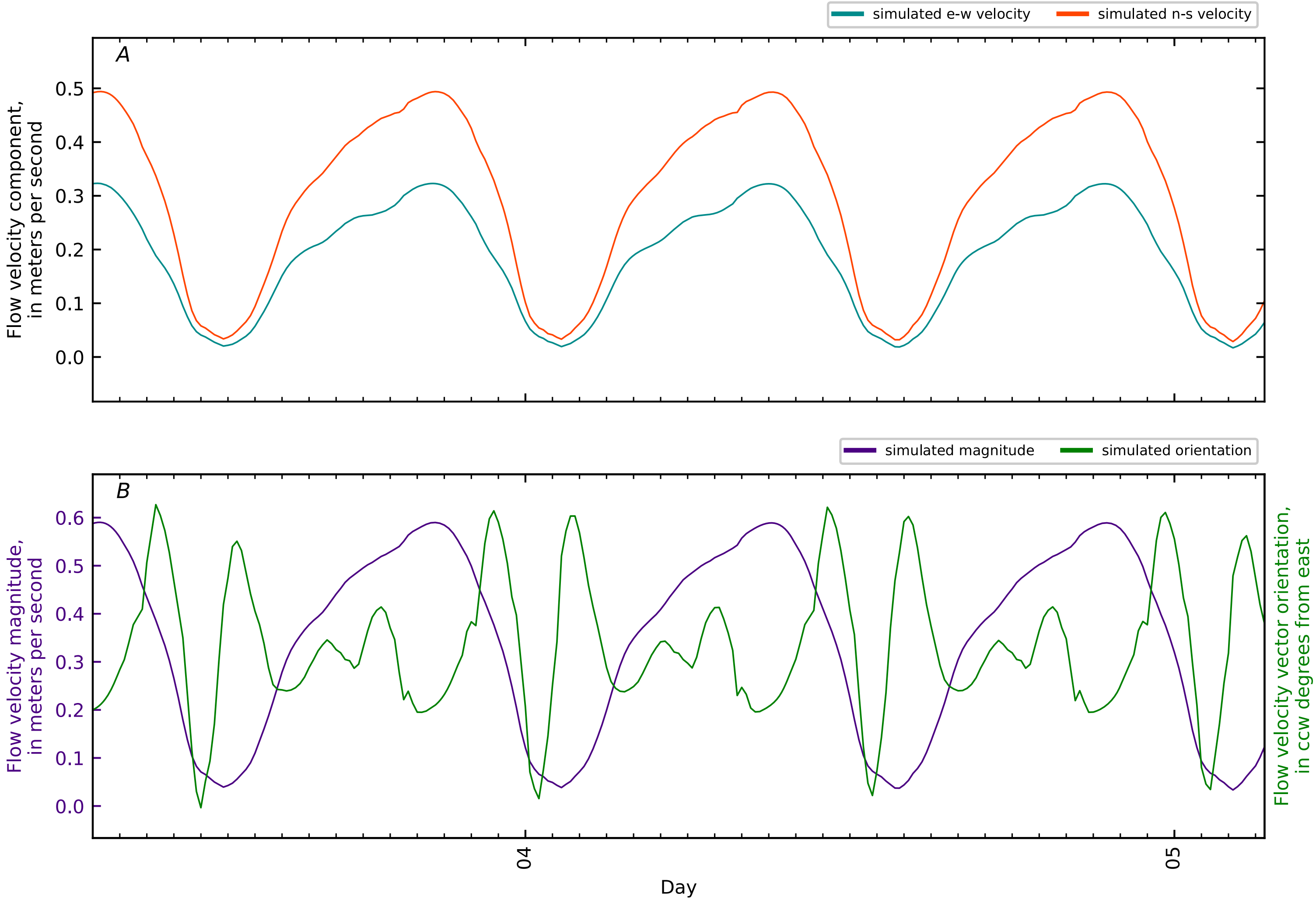

Figure B3-302. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 141, Mendall Marsh KM0.4 GS CTD2-06. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

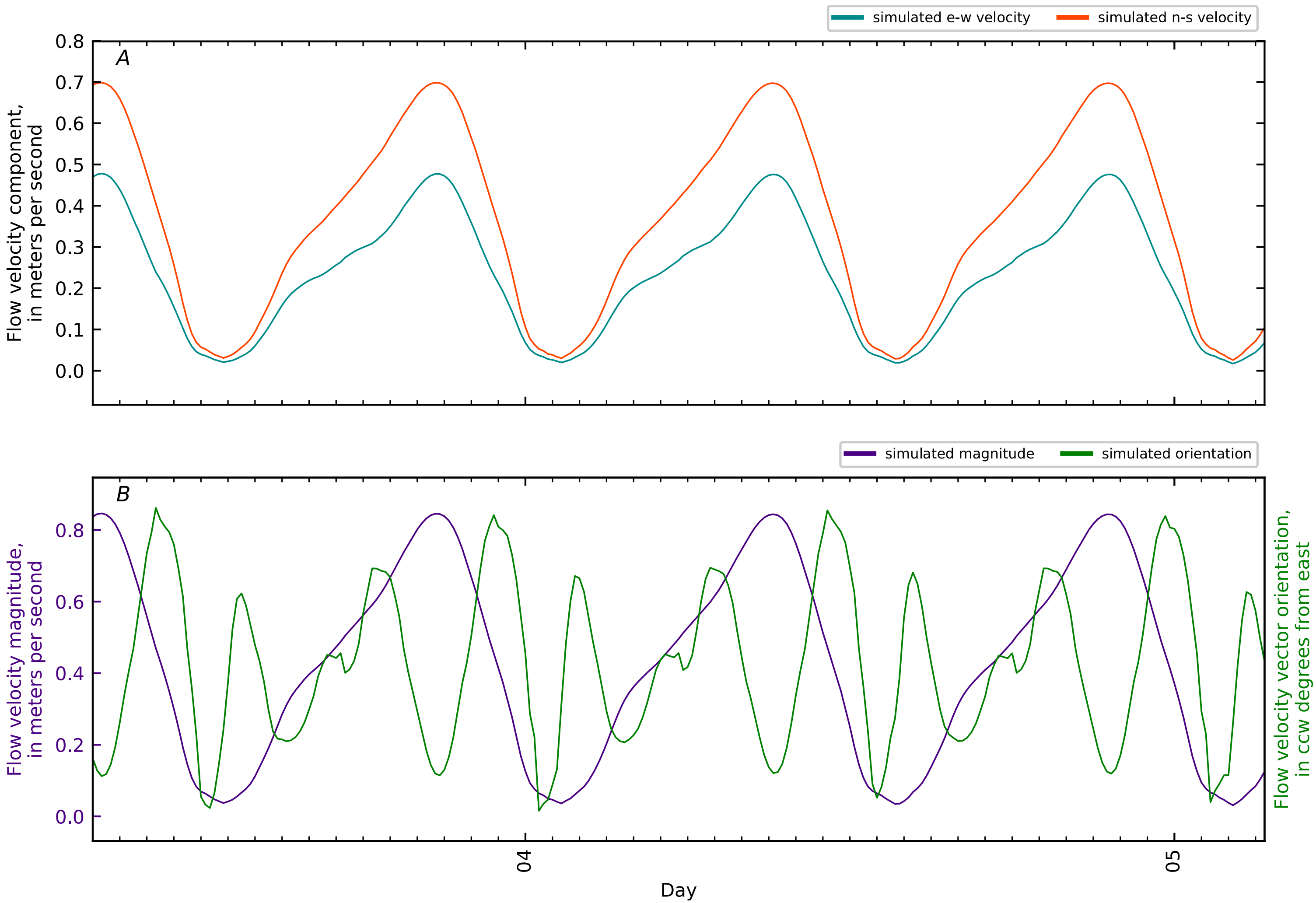

Figure B3-303. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 142, Mendall Marsh KM0.4 GS CTD2-07. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

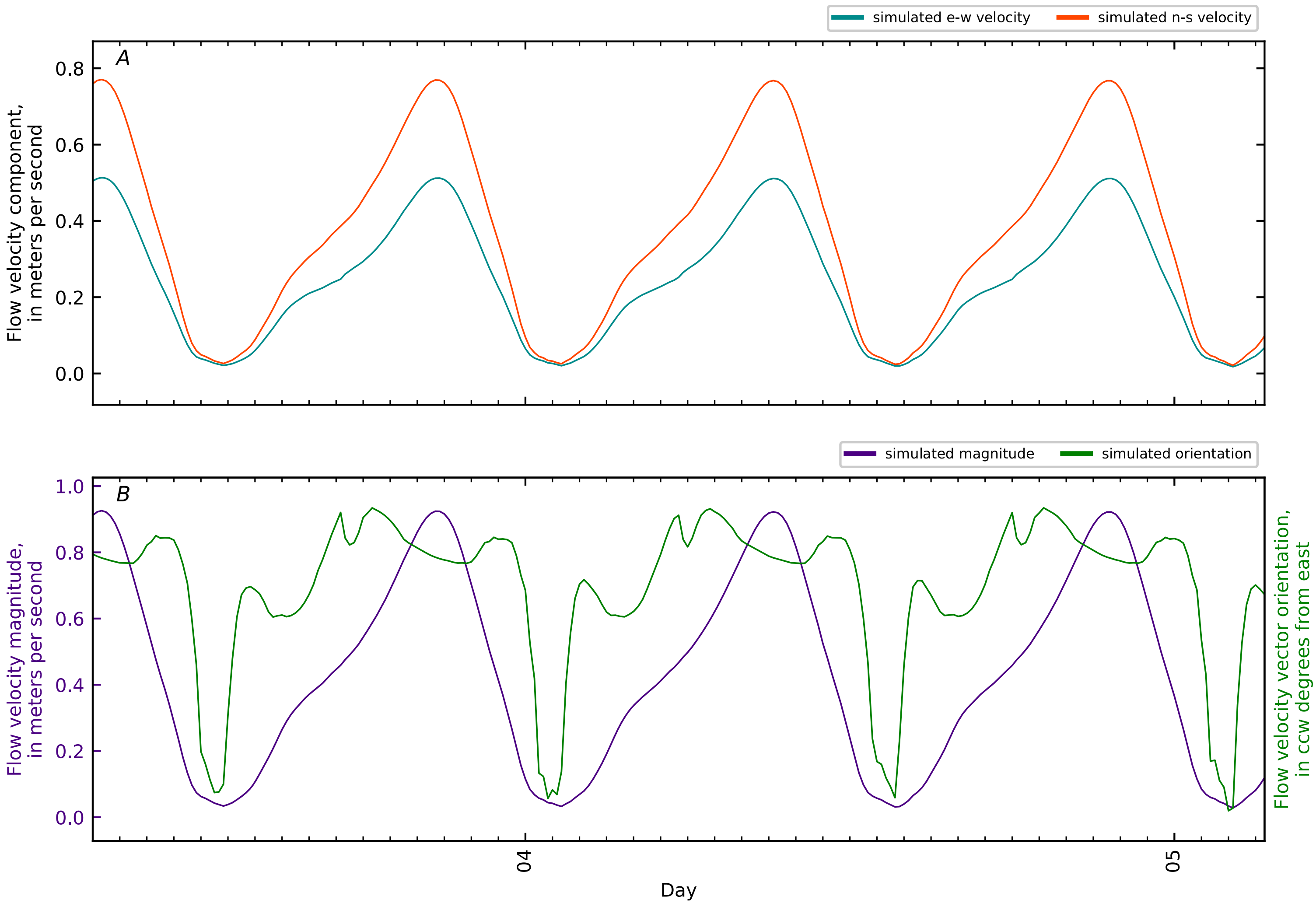

Figure B3-304. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 143, Mendall Marsh KM0.4 GS CTD2-08. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

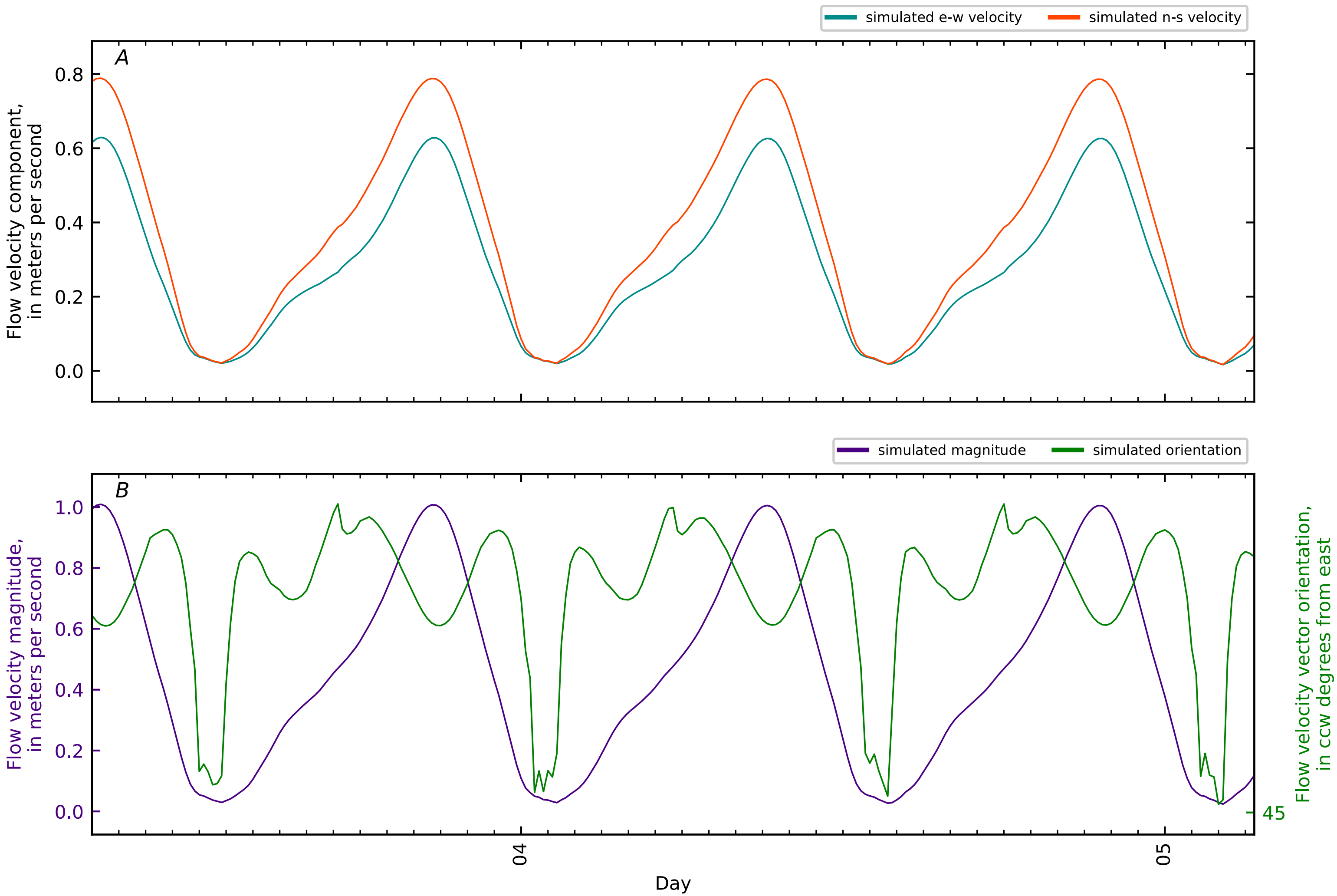

Figure B3-305. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 144, Mendall Marsh KM0.4 GS CTD2-09. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

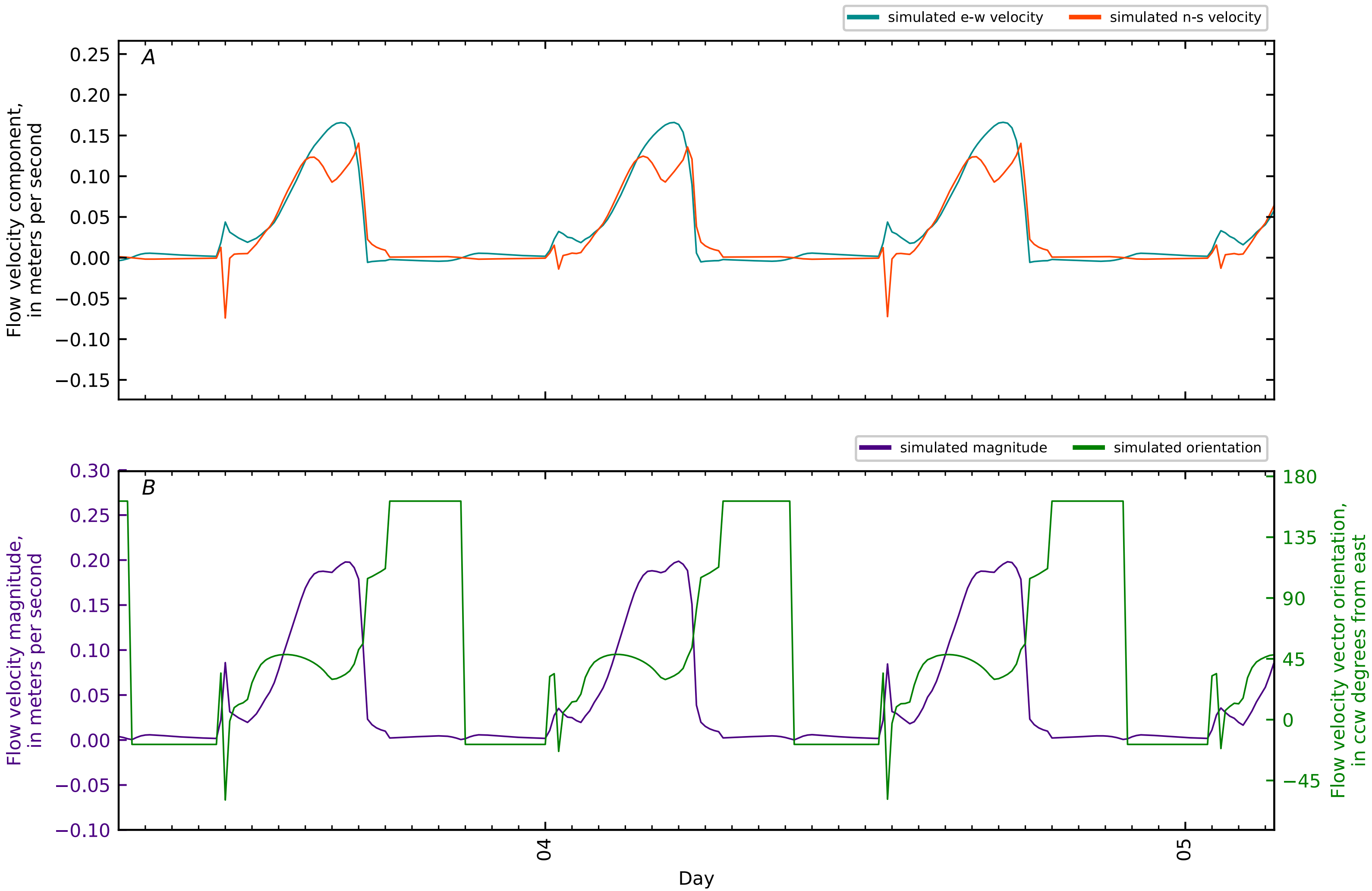

Figure B3-306. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 145, Mendall Marsh KM0.4 GS CTD2-10. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

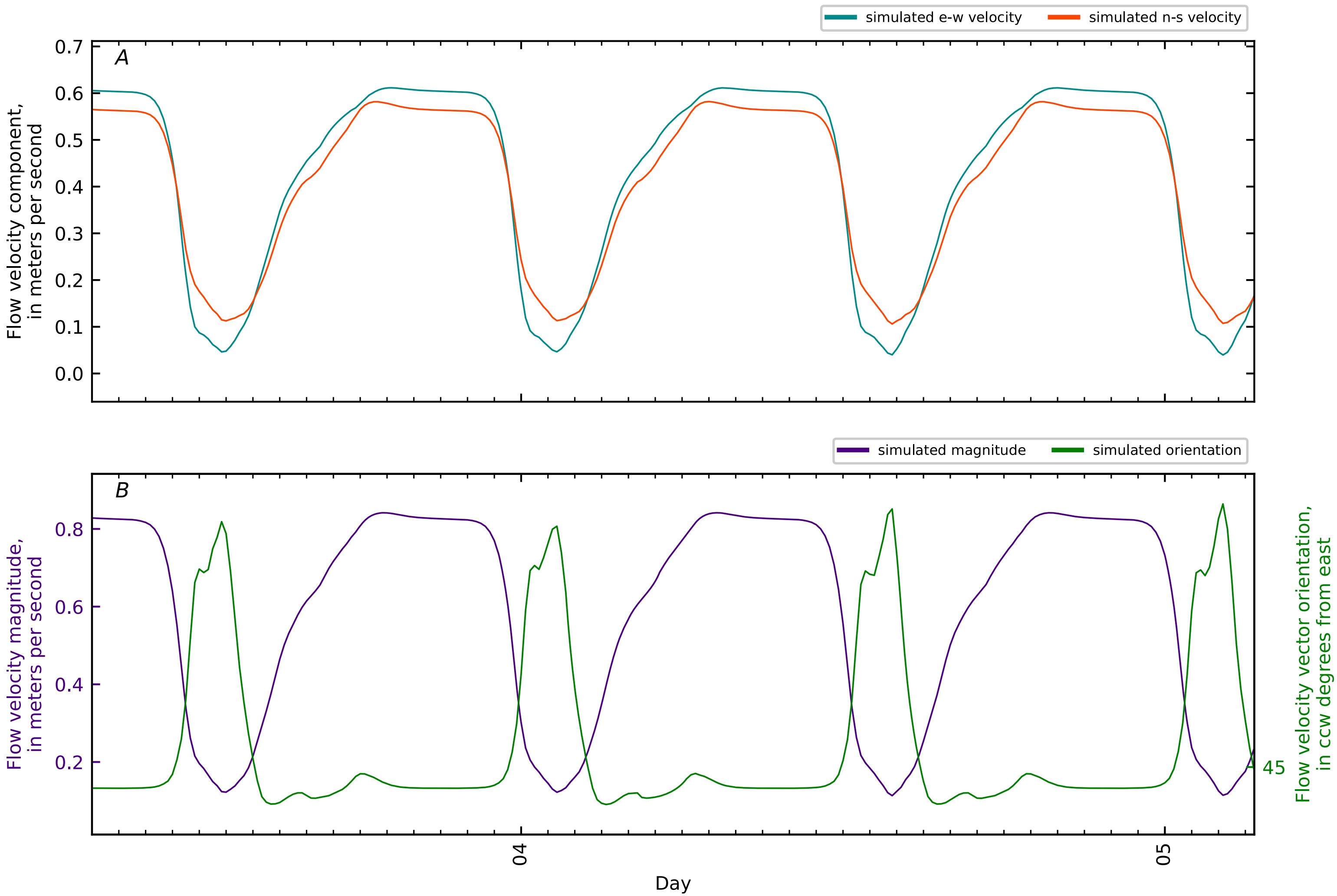

Figure B3-307. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 146, Mendall Marsh KM1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

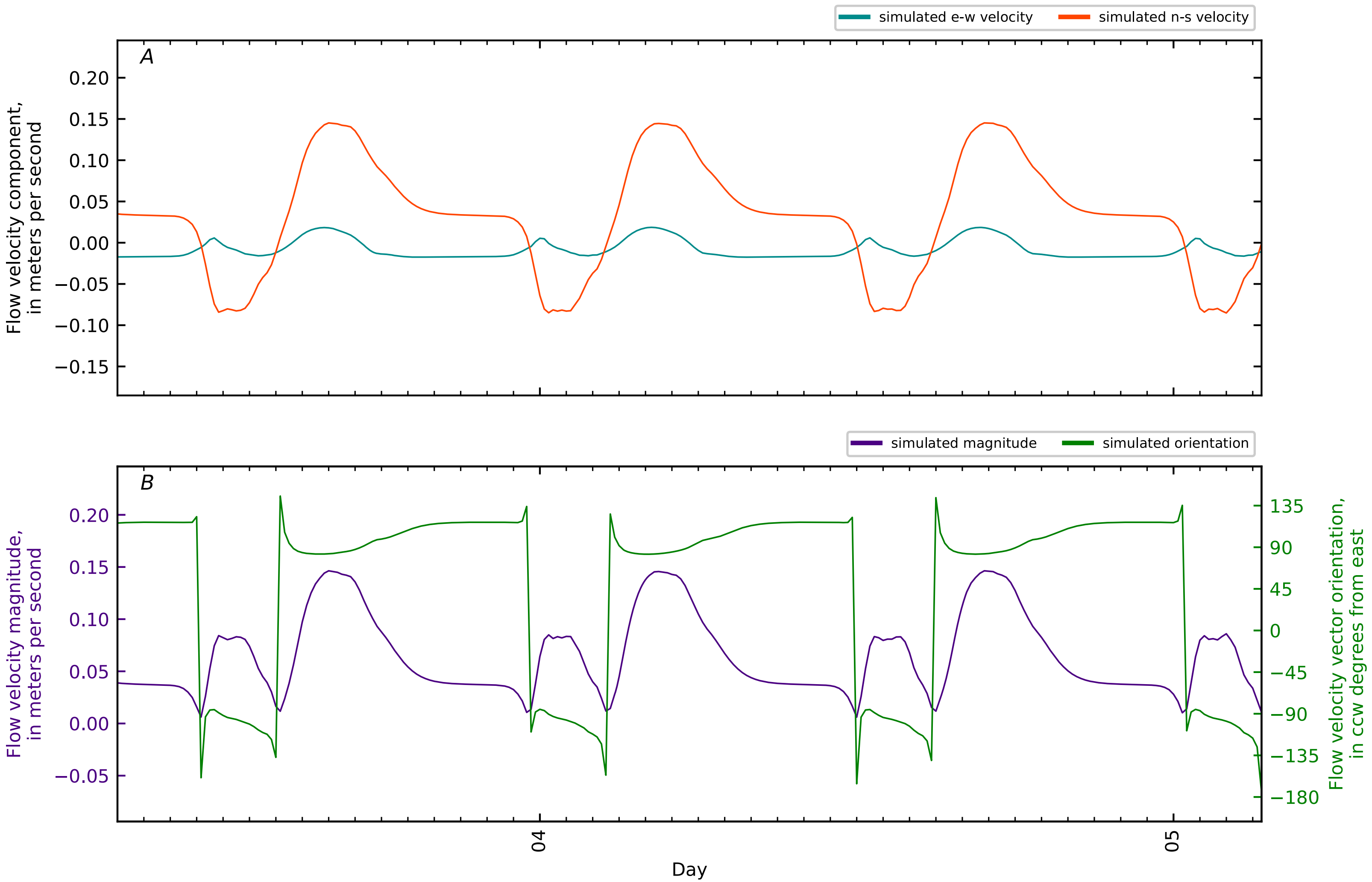

Figure B3-308. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 147, Mendall Marsh KM1.5 WHOI3 2010. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

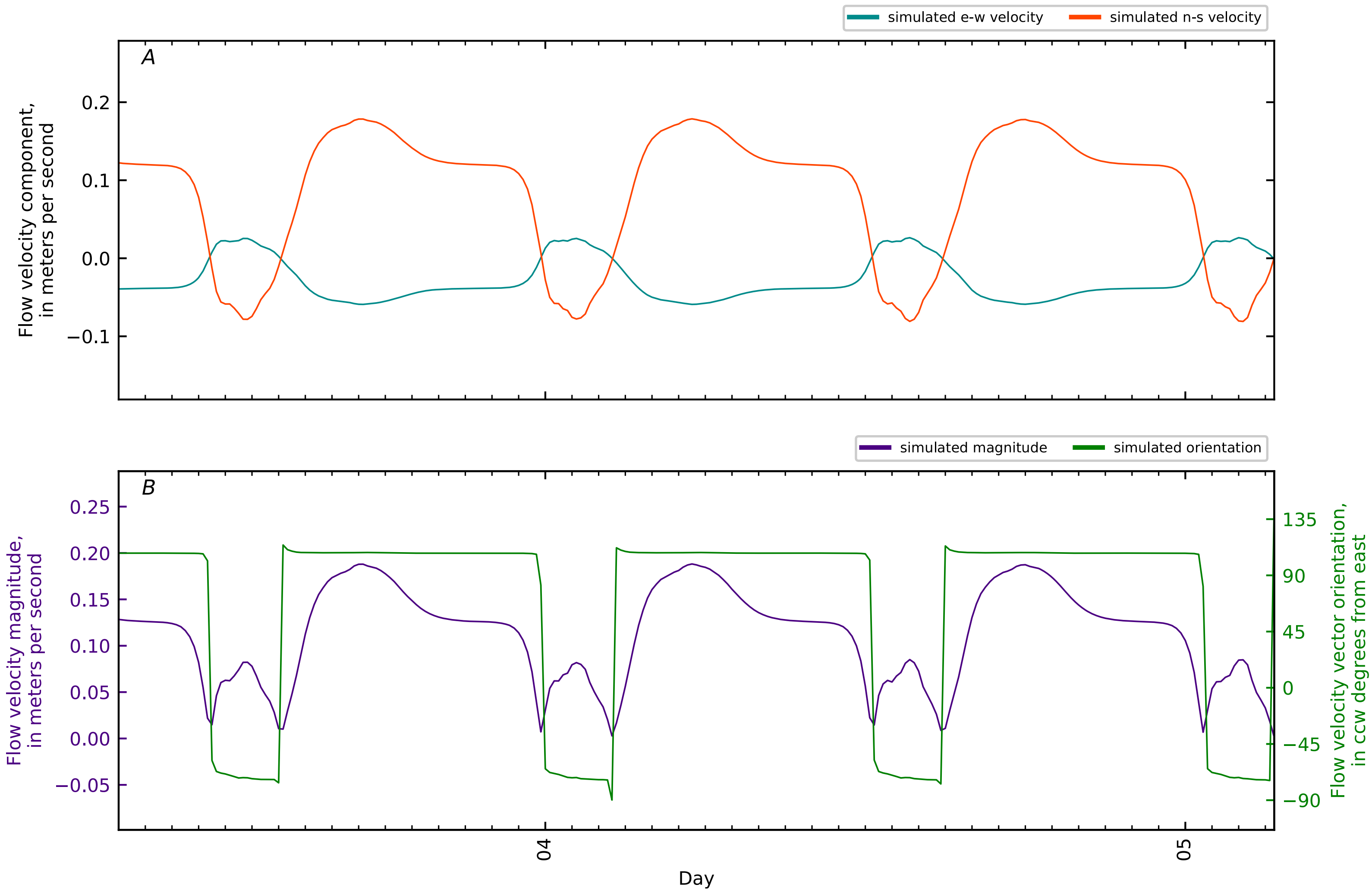

Figure B3-309. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 148, Mendall Marsh KM2. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

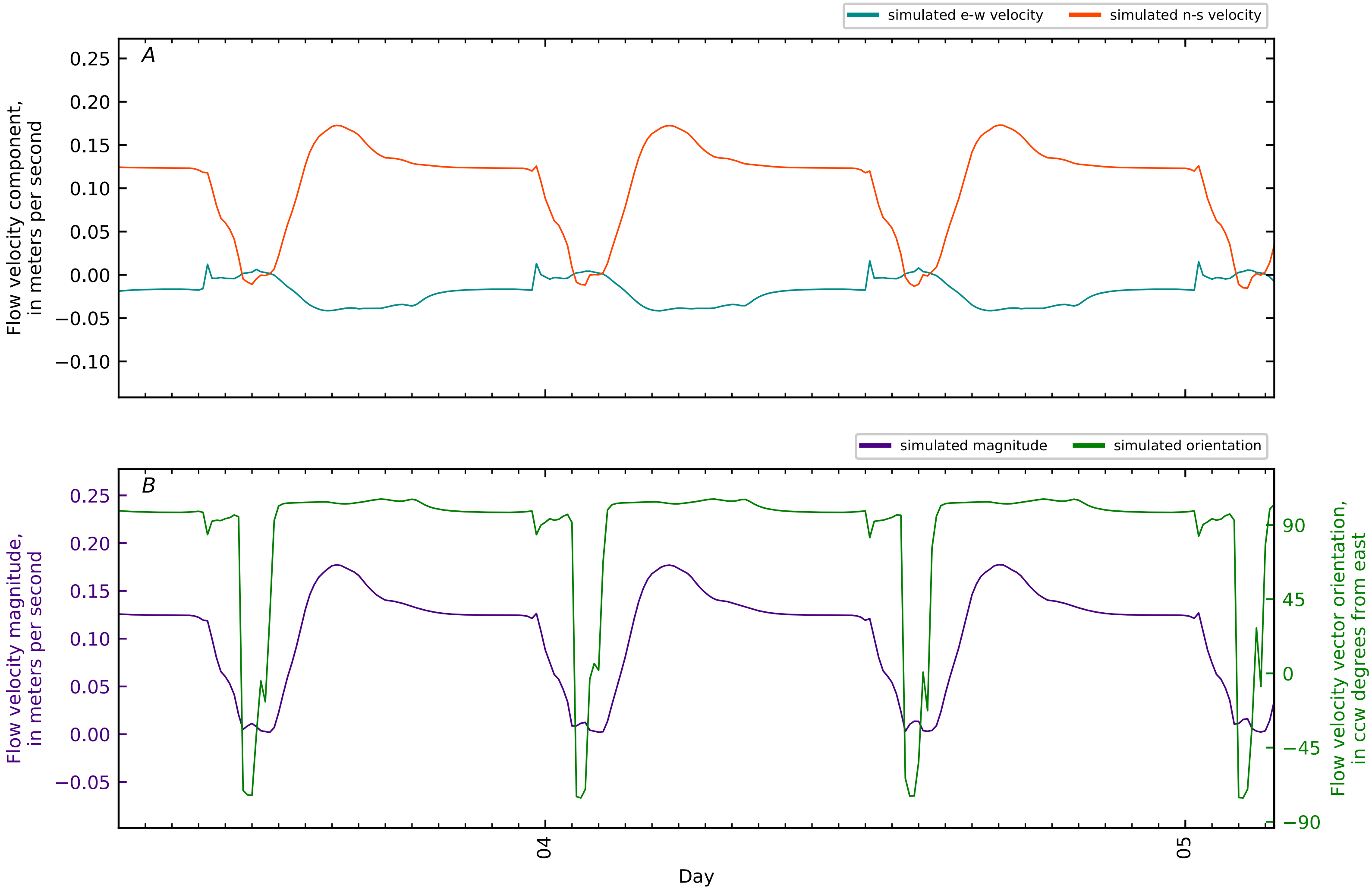

Figure B3-310. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 149, Mendall Marsh KM3. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

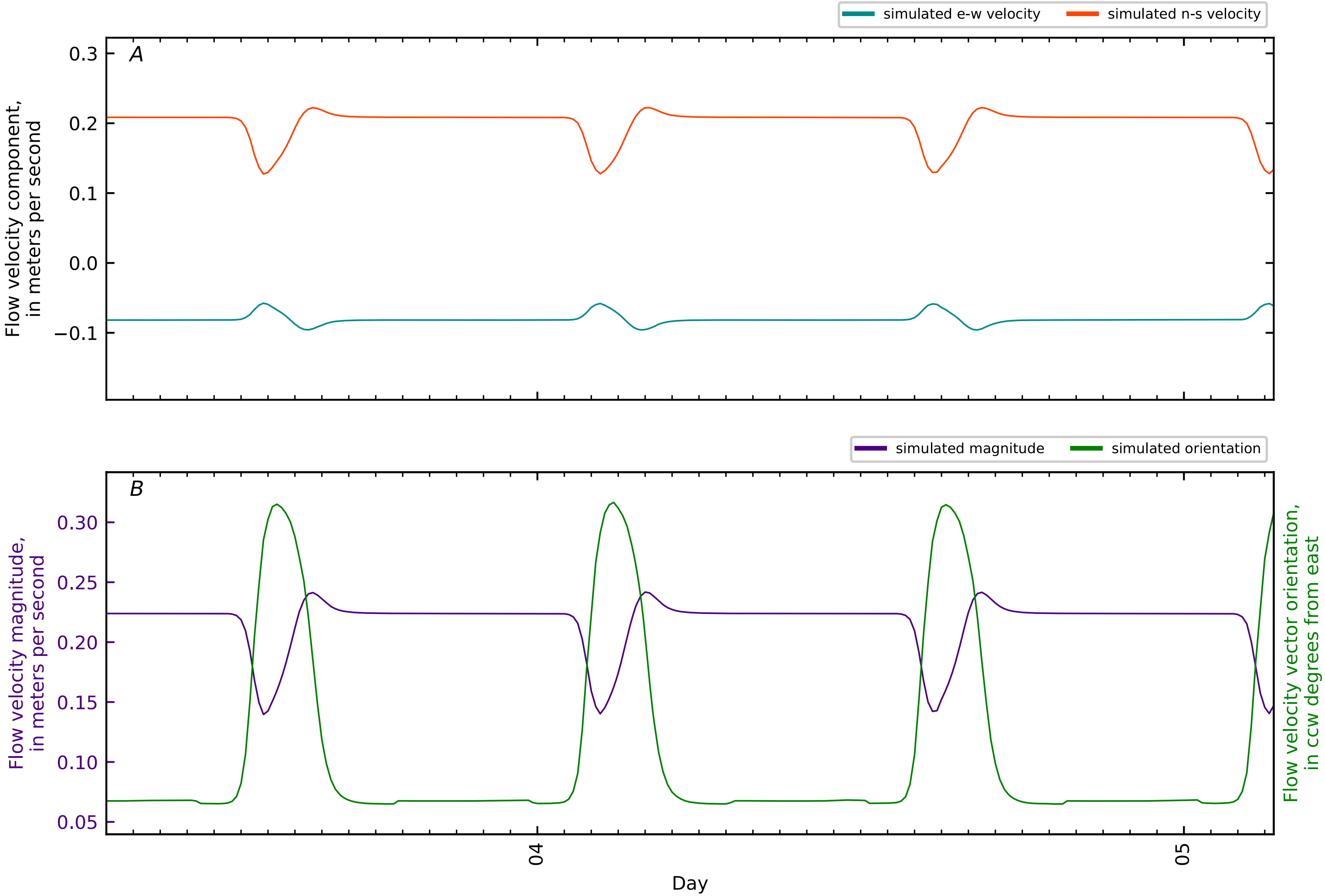

Figure B3-311. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 150, Mendall Marsh KM4. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

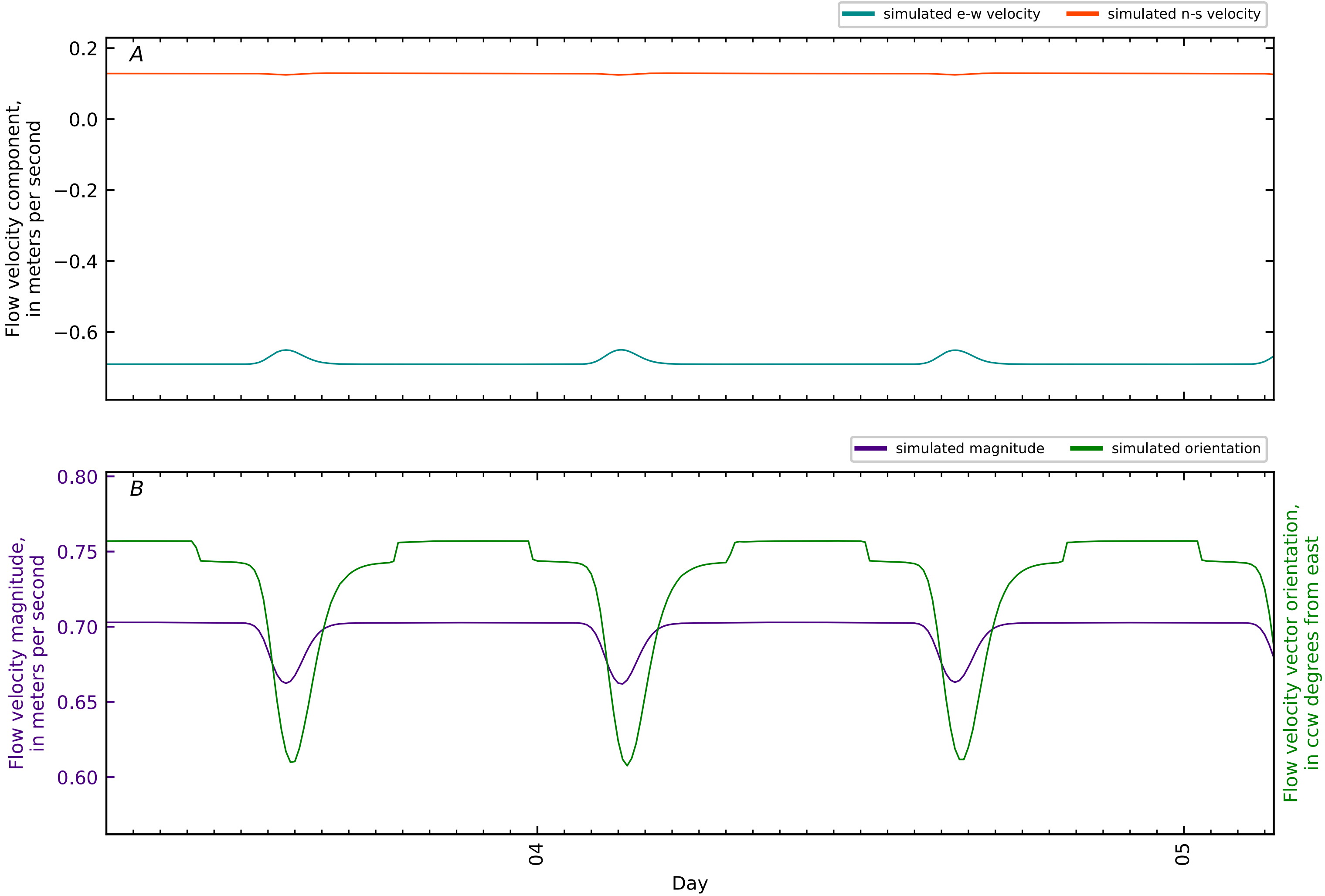

Figure B3-312. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 151, Mendall Marsh KM5. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

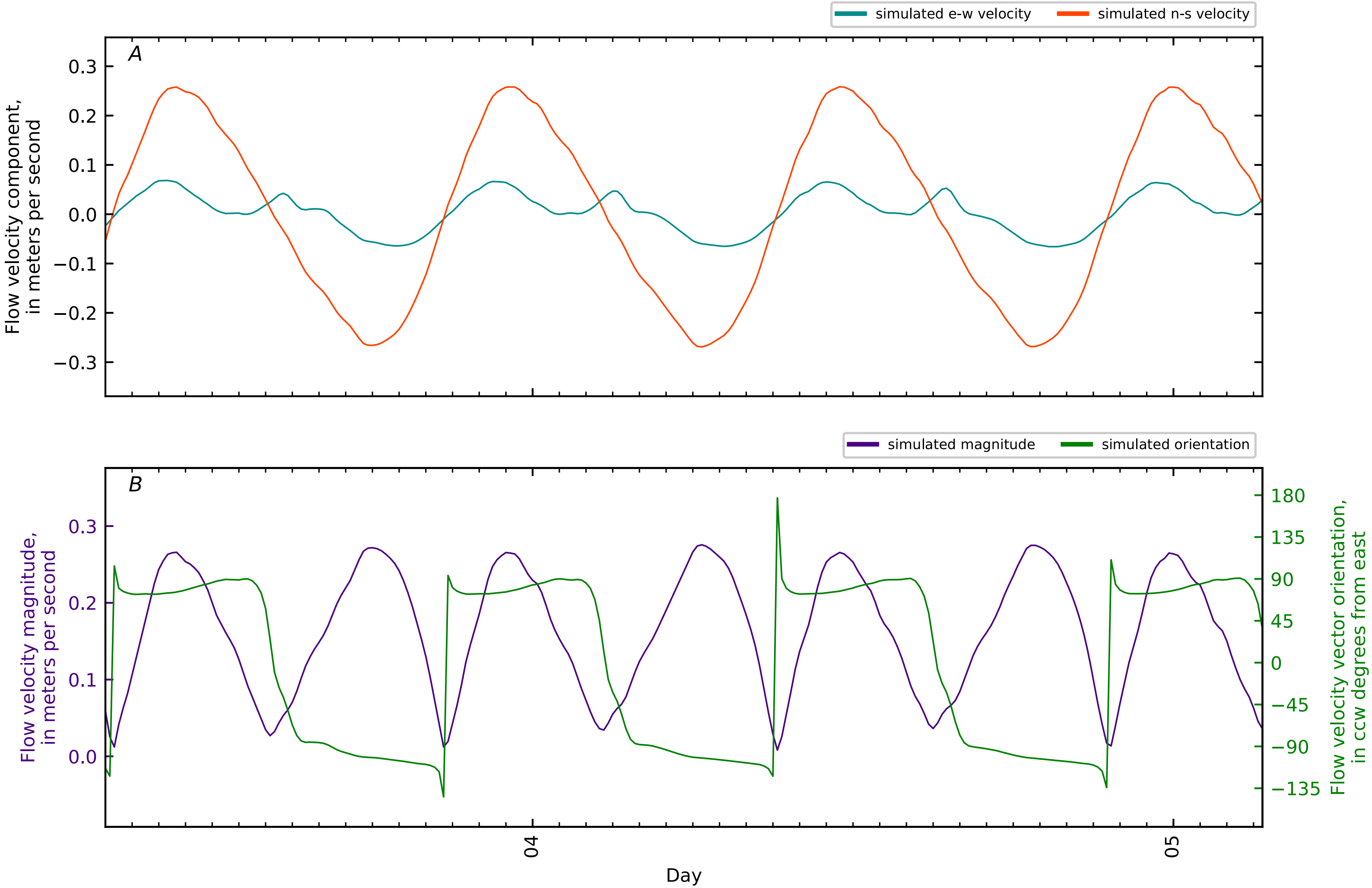

Figure B3-313. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 152, Orland Riv KM0. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

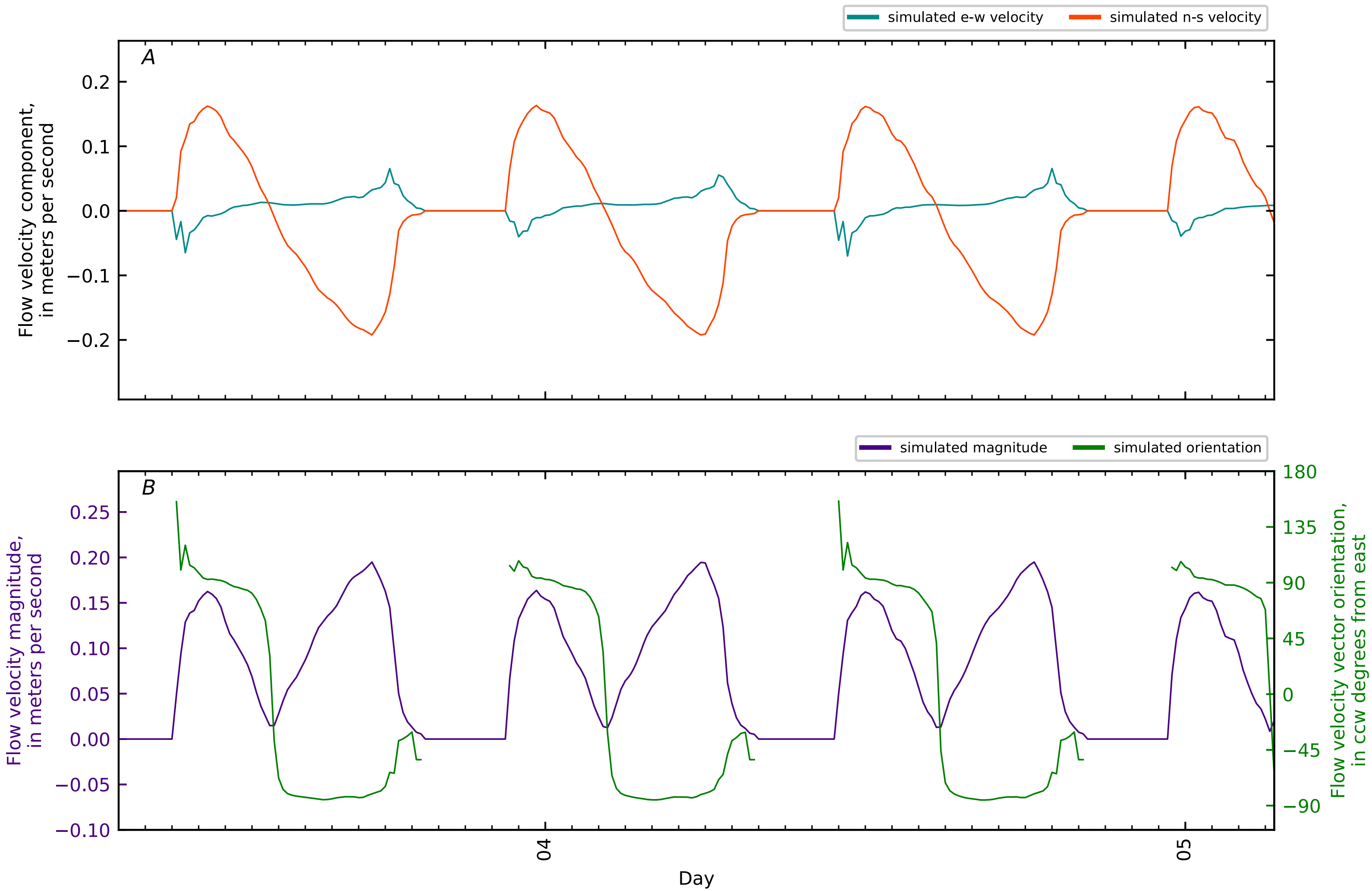

Figure B3-314. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 153, Orland Riv KM0.9 ERDC5 OR-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

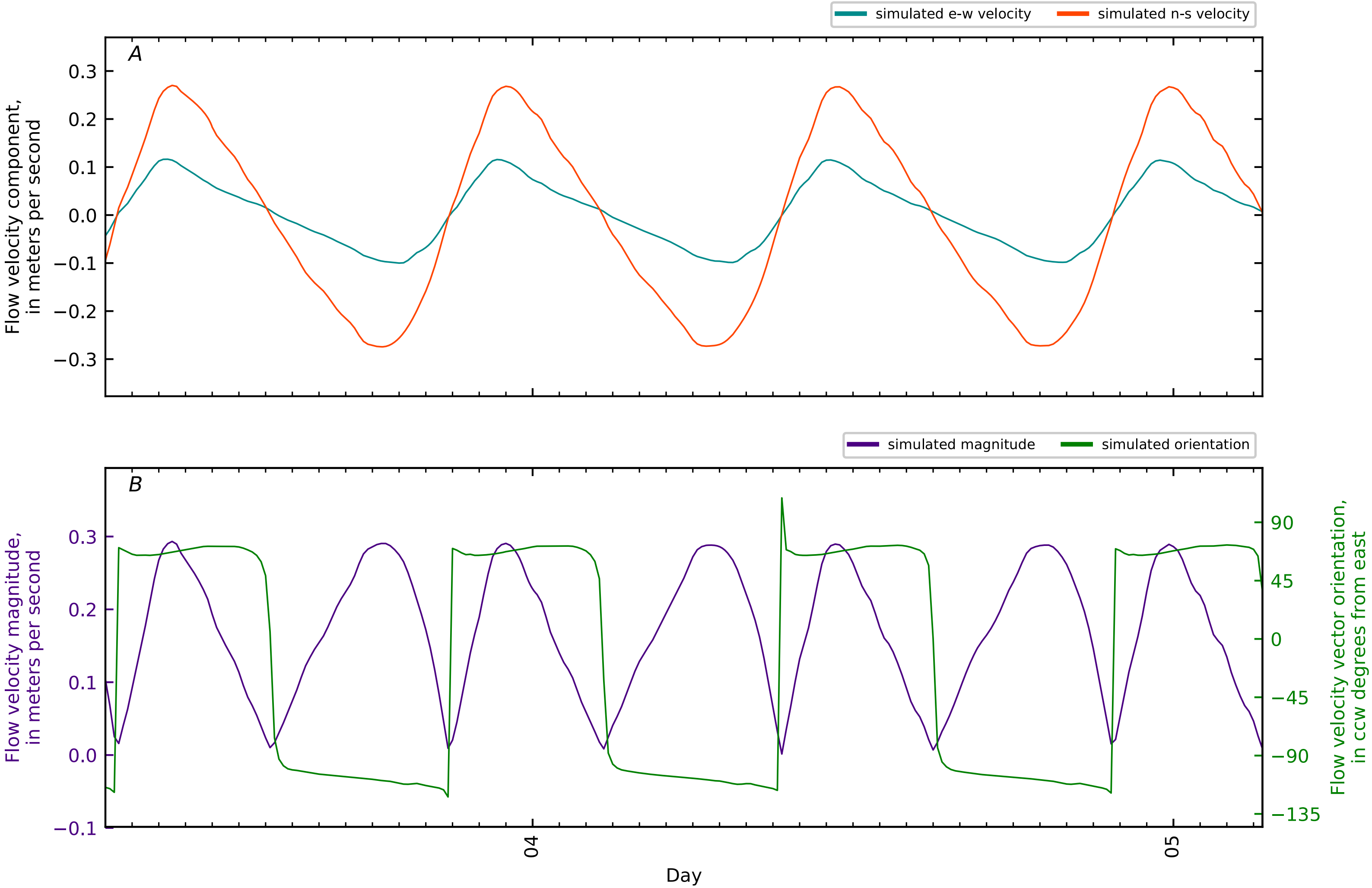

Figure B3-315. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 154, Orland Riv KM0.9 ERDC6 OR-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

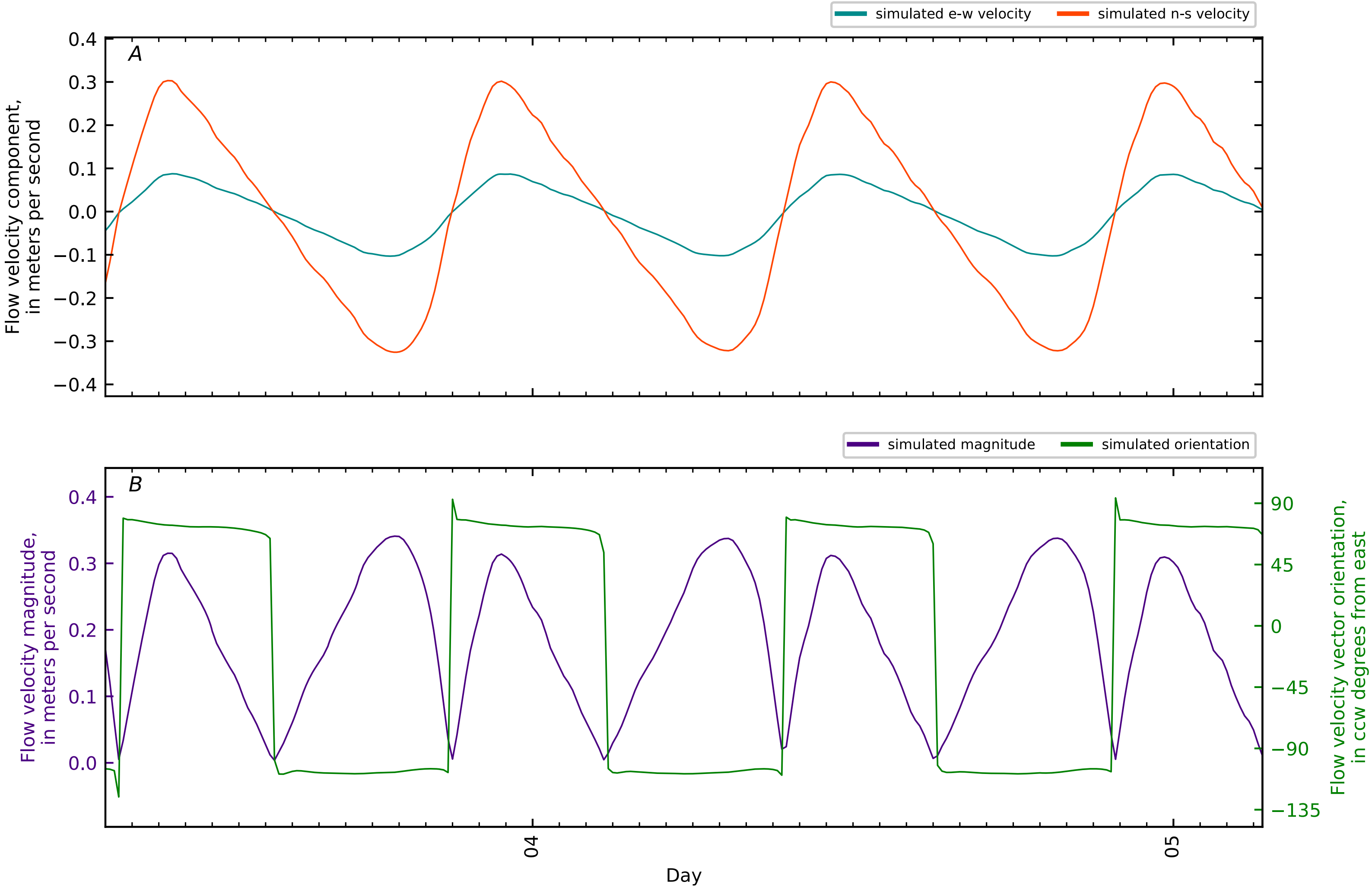

Figure B3-316. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 155, Orland Riv KM1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

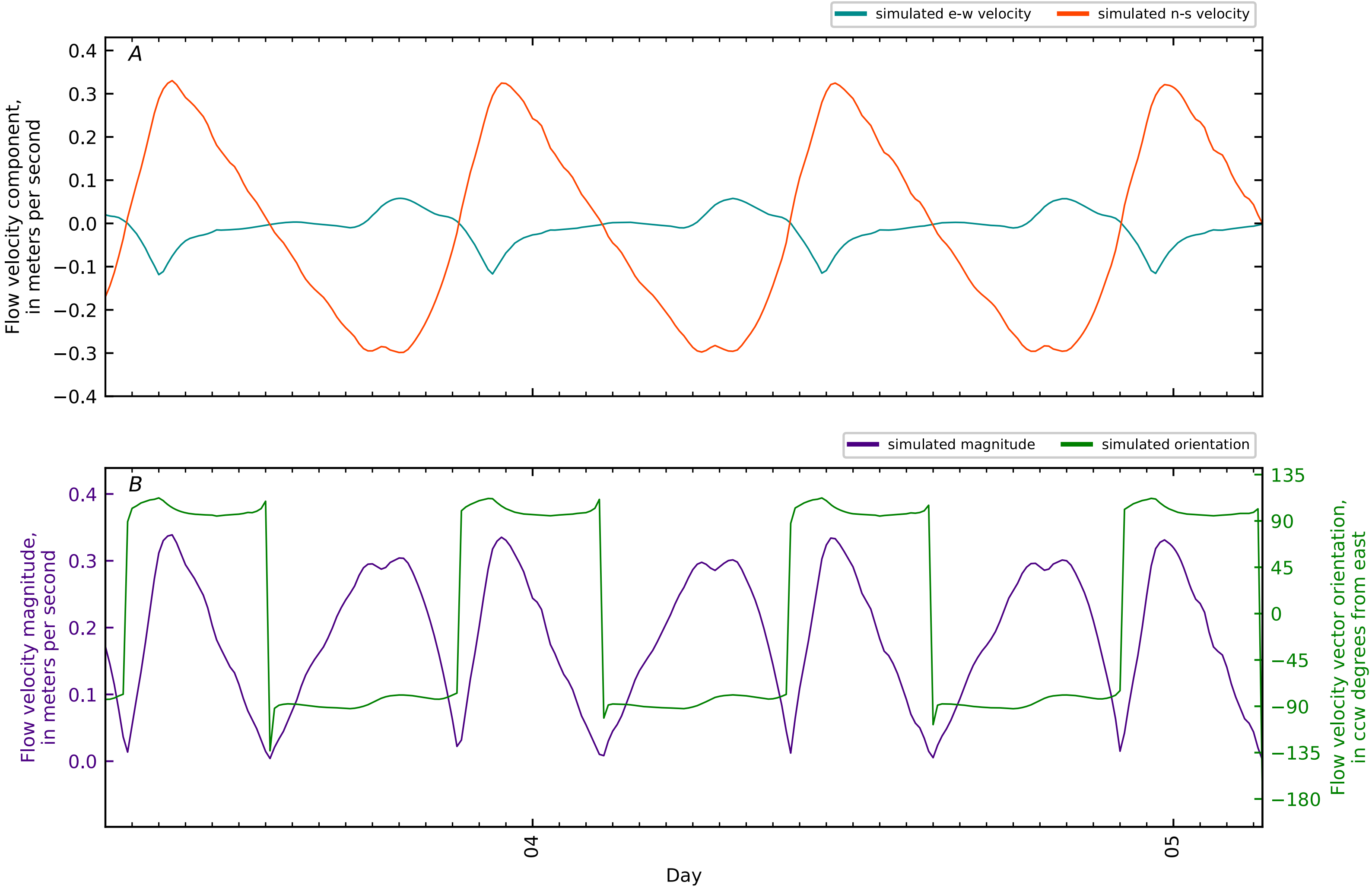

Figure B3-317. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 156, Orland Riv KM1.6 WHOI4 2010. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

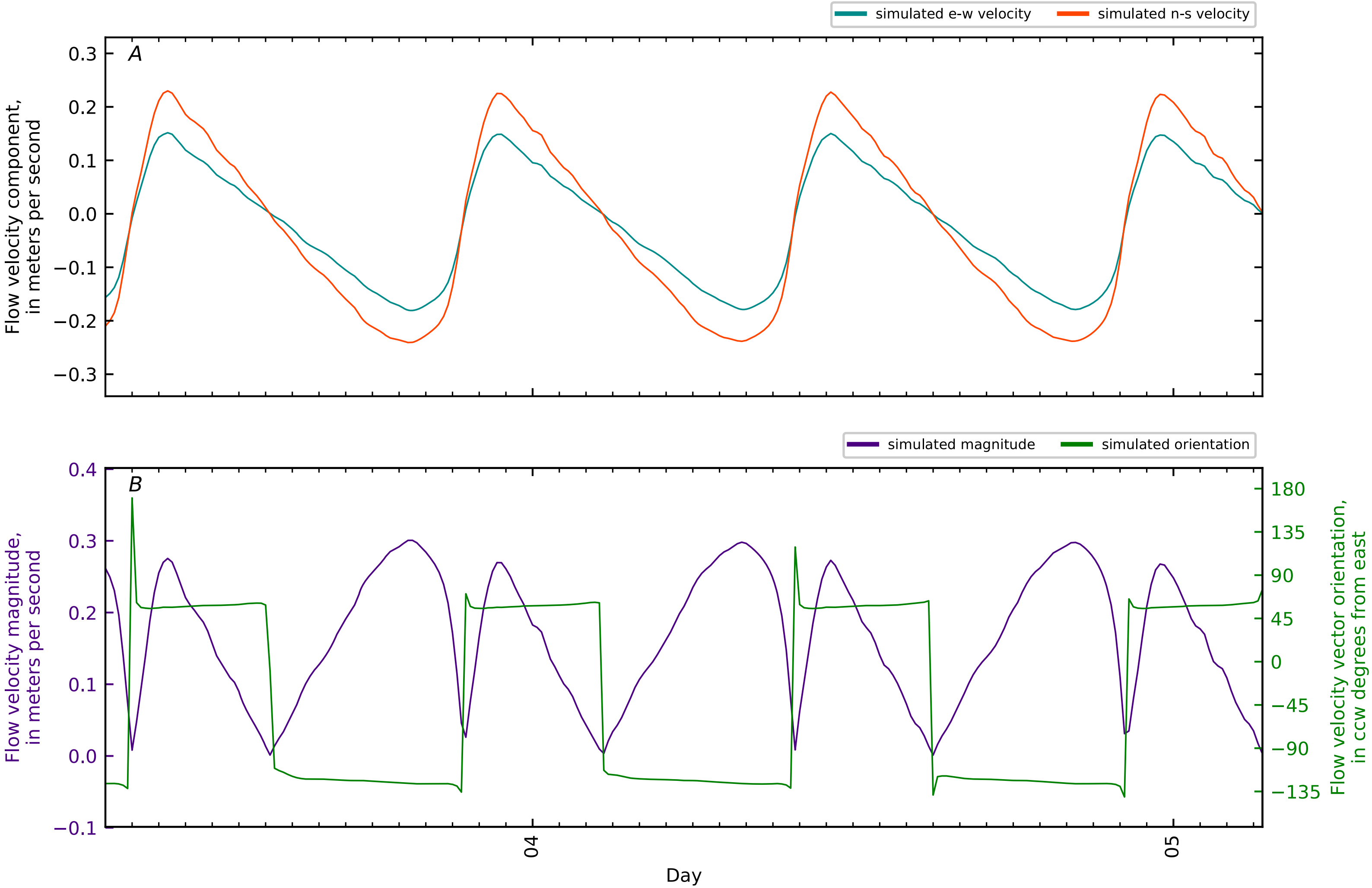

Figure B3-318. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 157, Orland Riv KM2. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

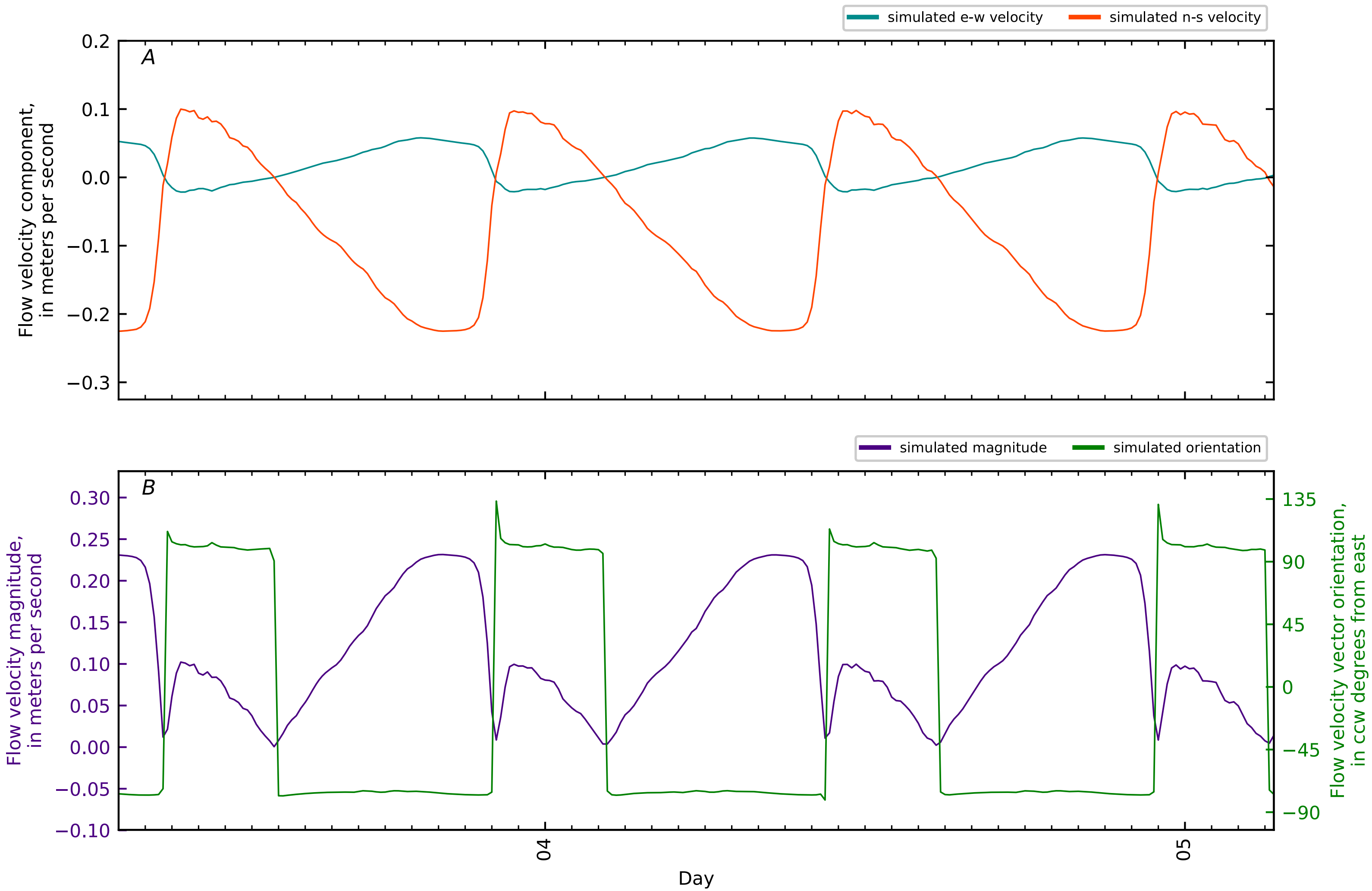

Figure B3-319. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 158, Orland Riv KM3. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

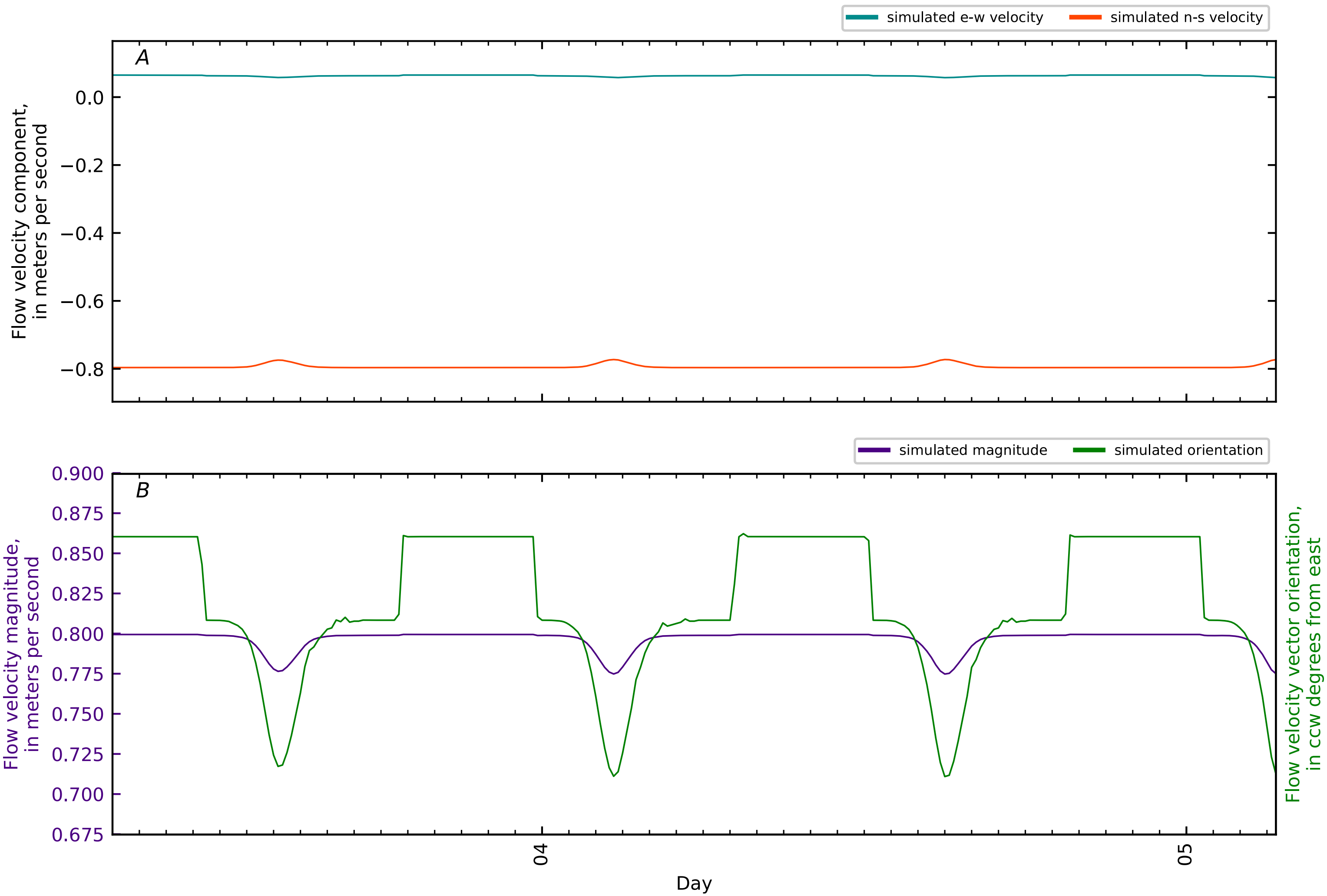

Figure B3-320. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 159, Orland Riv KM4. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

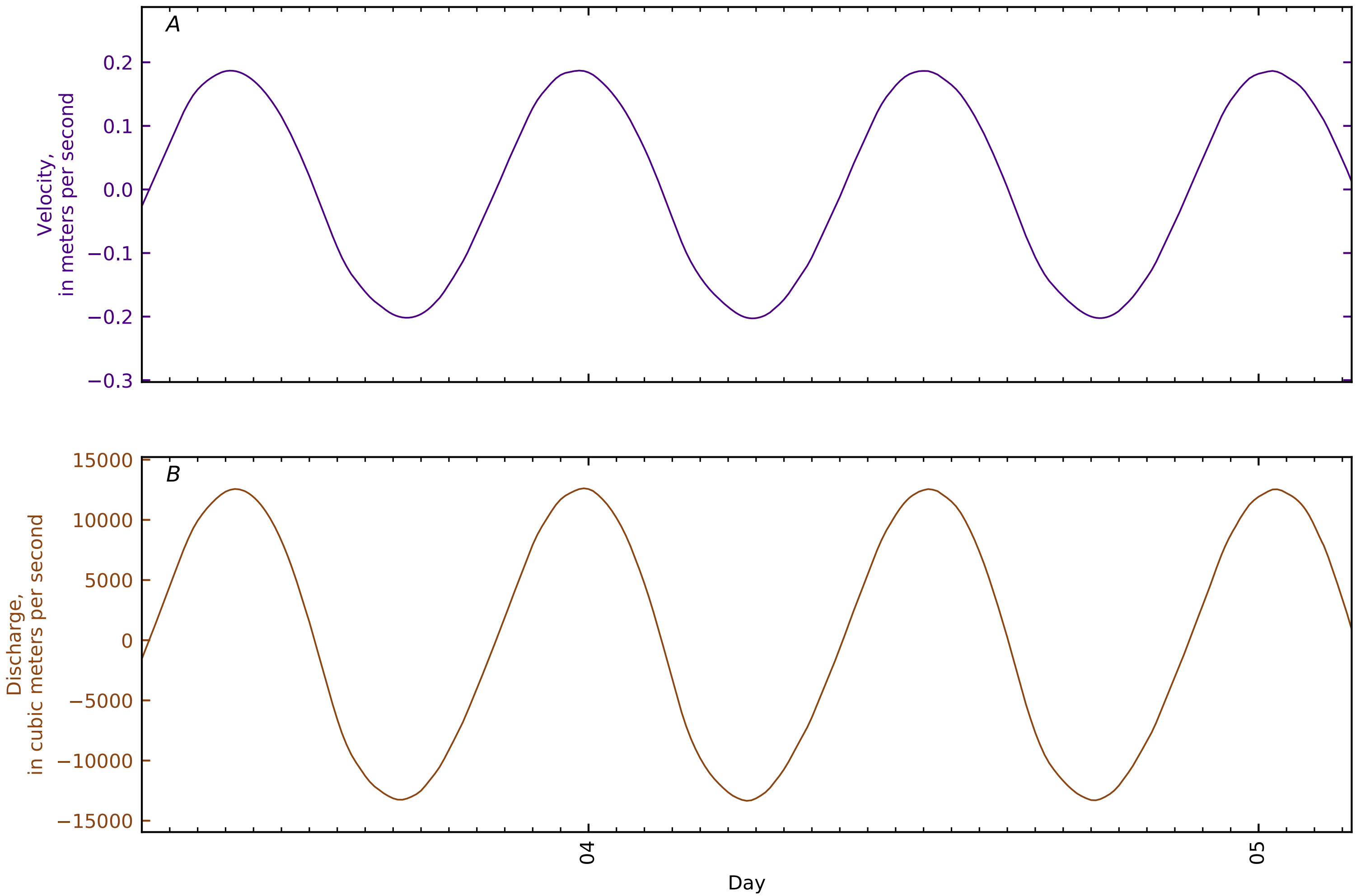

Figure B3-321. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 0, Penob Riv -KM4 Cape Jellison. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

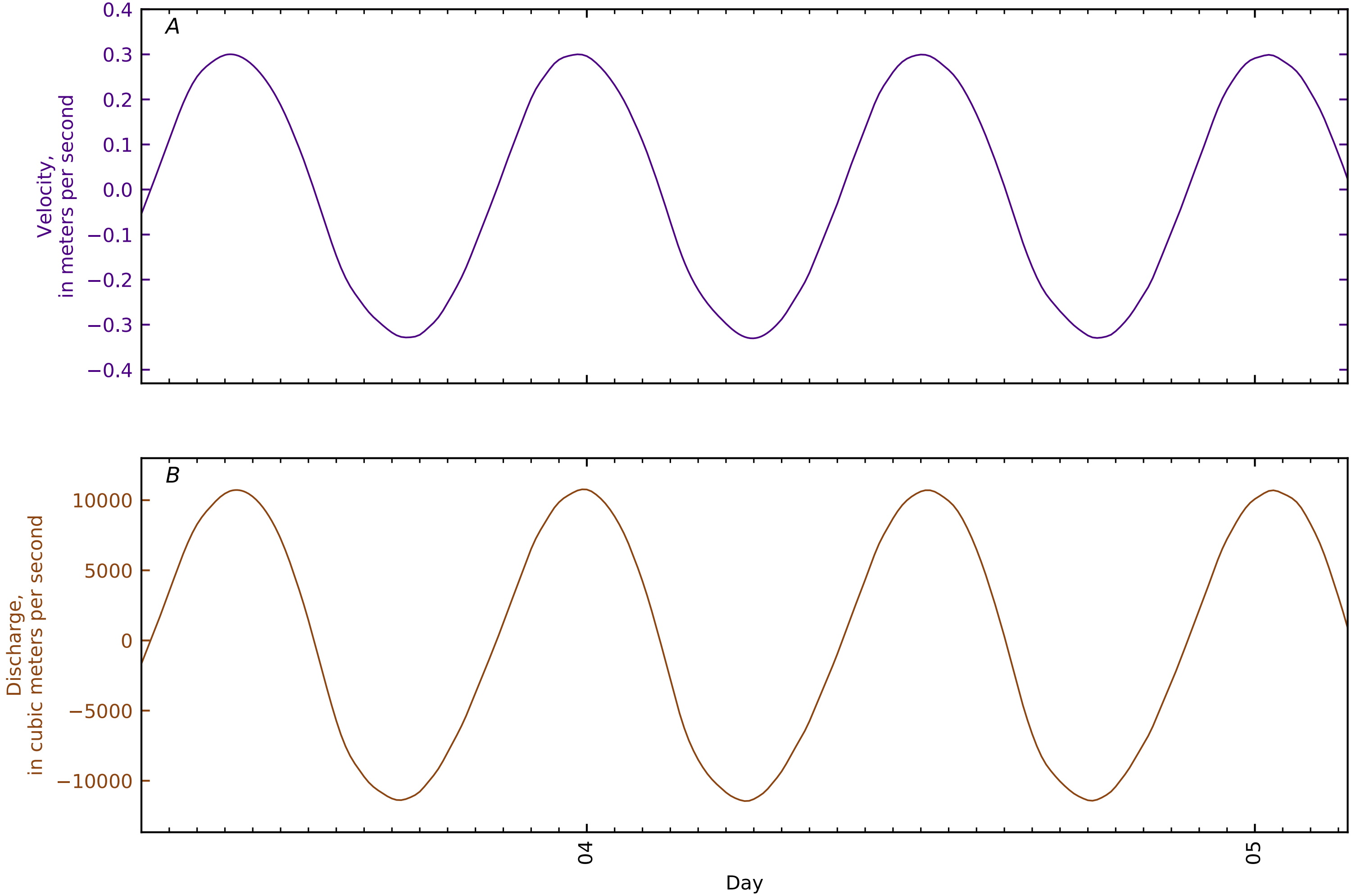

Figure B3-322. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 1, Penob Riv -KM1.5 d/s Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

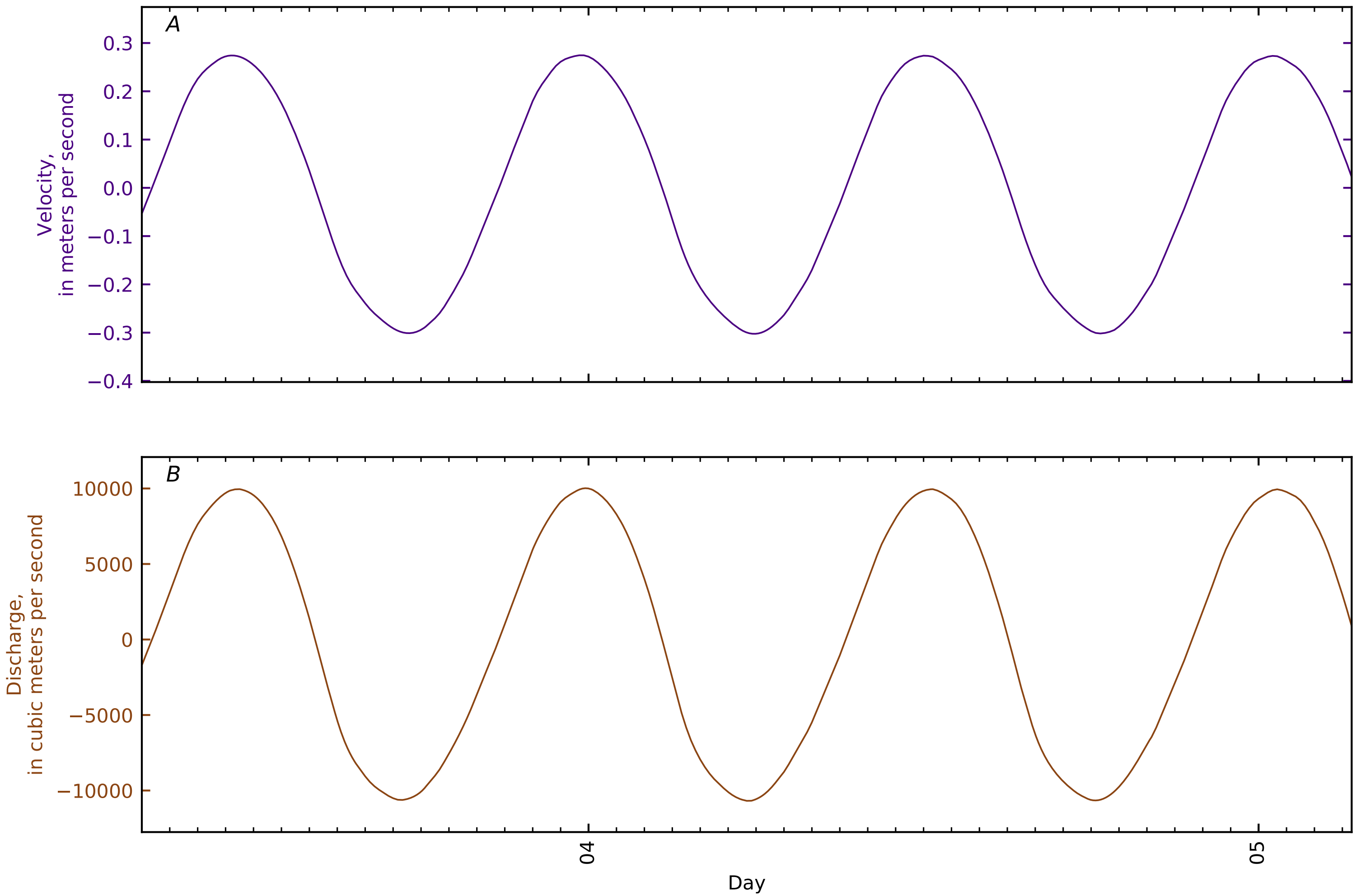

Figure B3-323. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 2, Penob Riv KM0 GS Trnsct5 Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

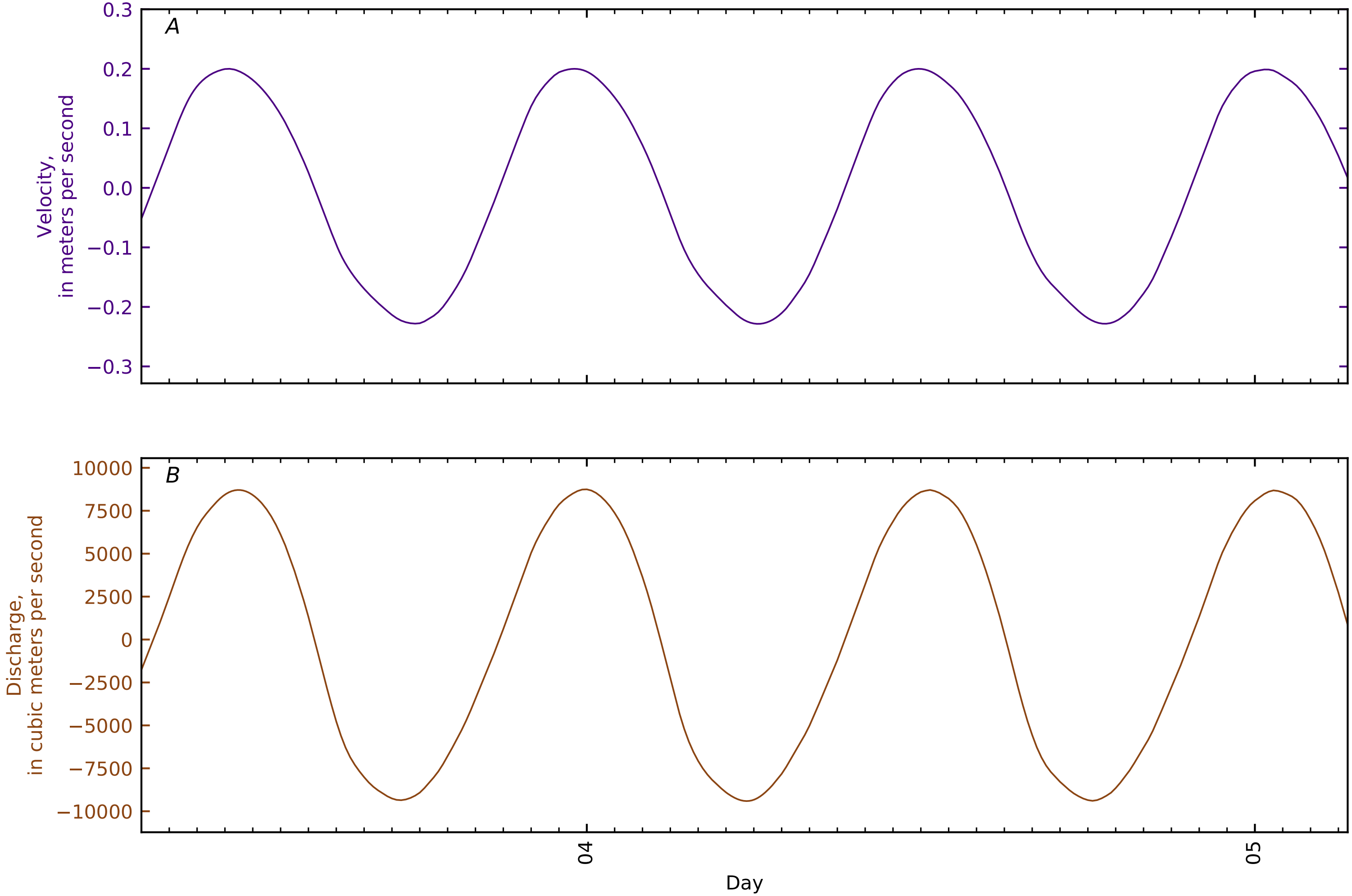

Figure B3-324. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 3, Penob Riv KM1.5 Ft Point Cove. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

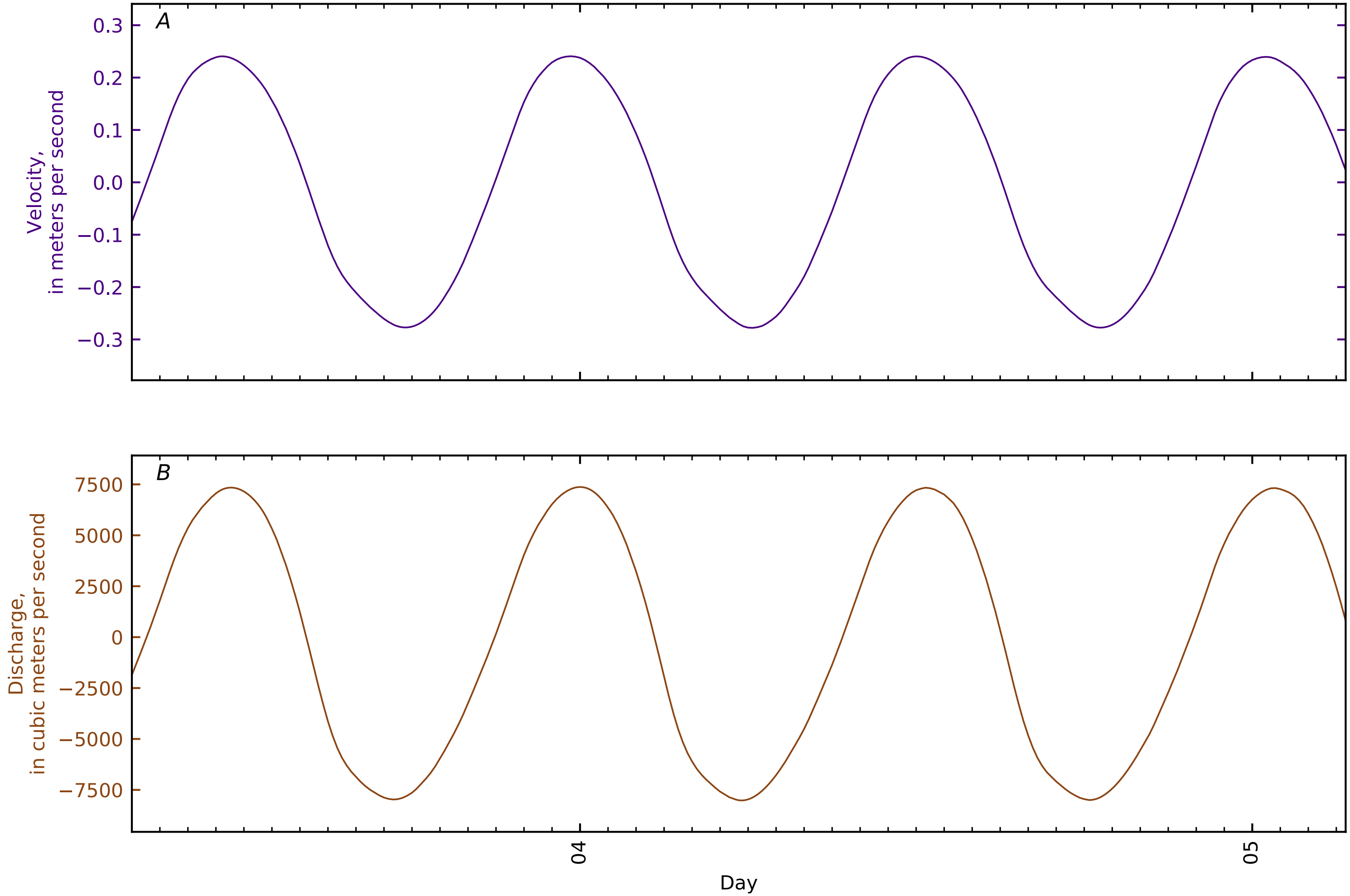

Figure B3-325. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 4, Penob Riv KM3 d/s conf East Ch. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

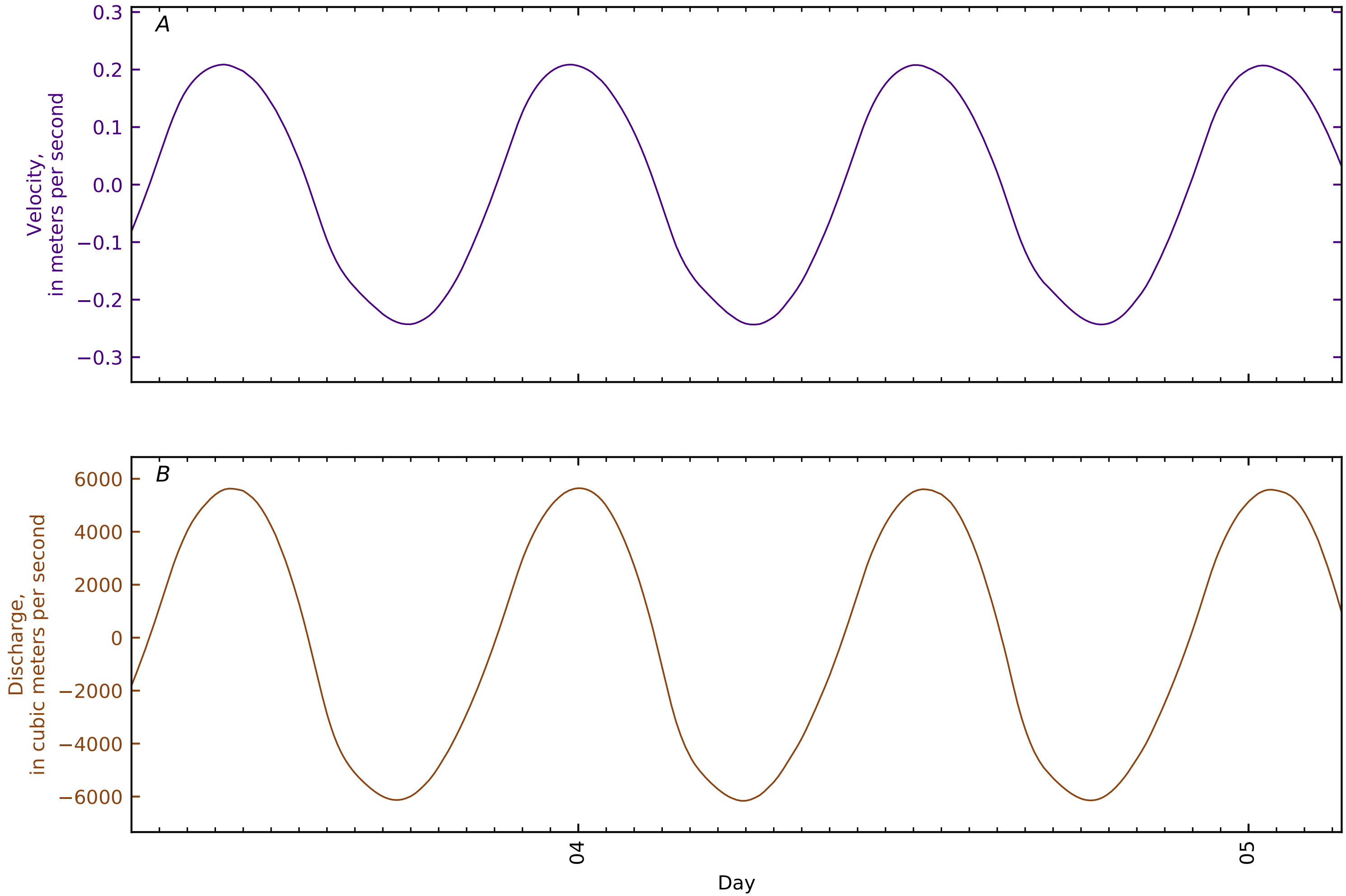

Figure B3-326. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 5, Penob Riv KM3.8 conf East Ch GS Trsct3 Gross Point. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

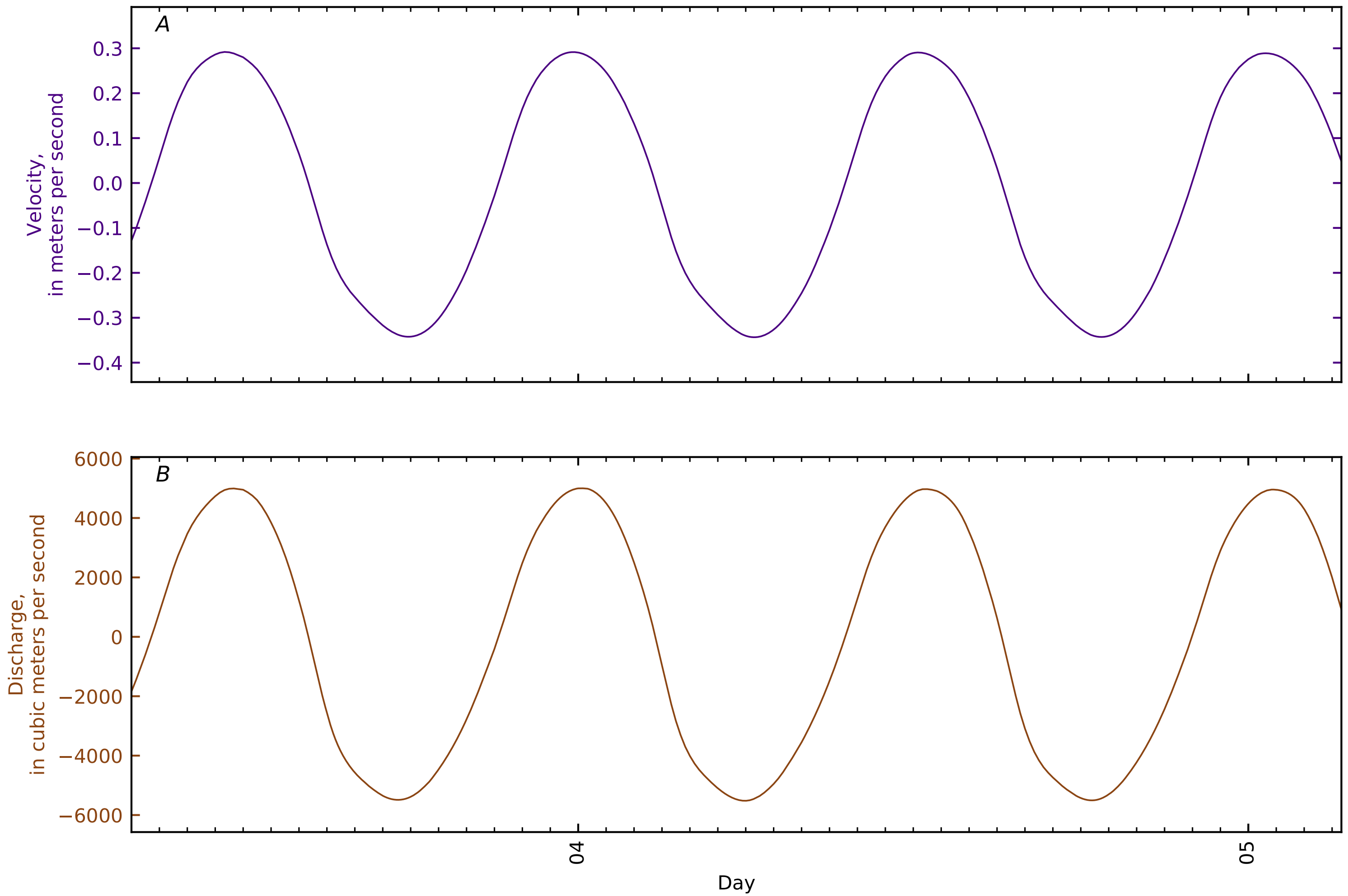

Figure B3-327. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 6, Penob Riv KM5.3 Sandy Point Odom Ledge. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

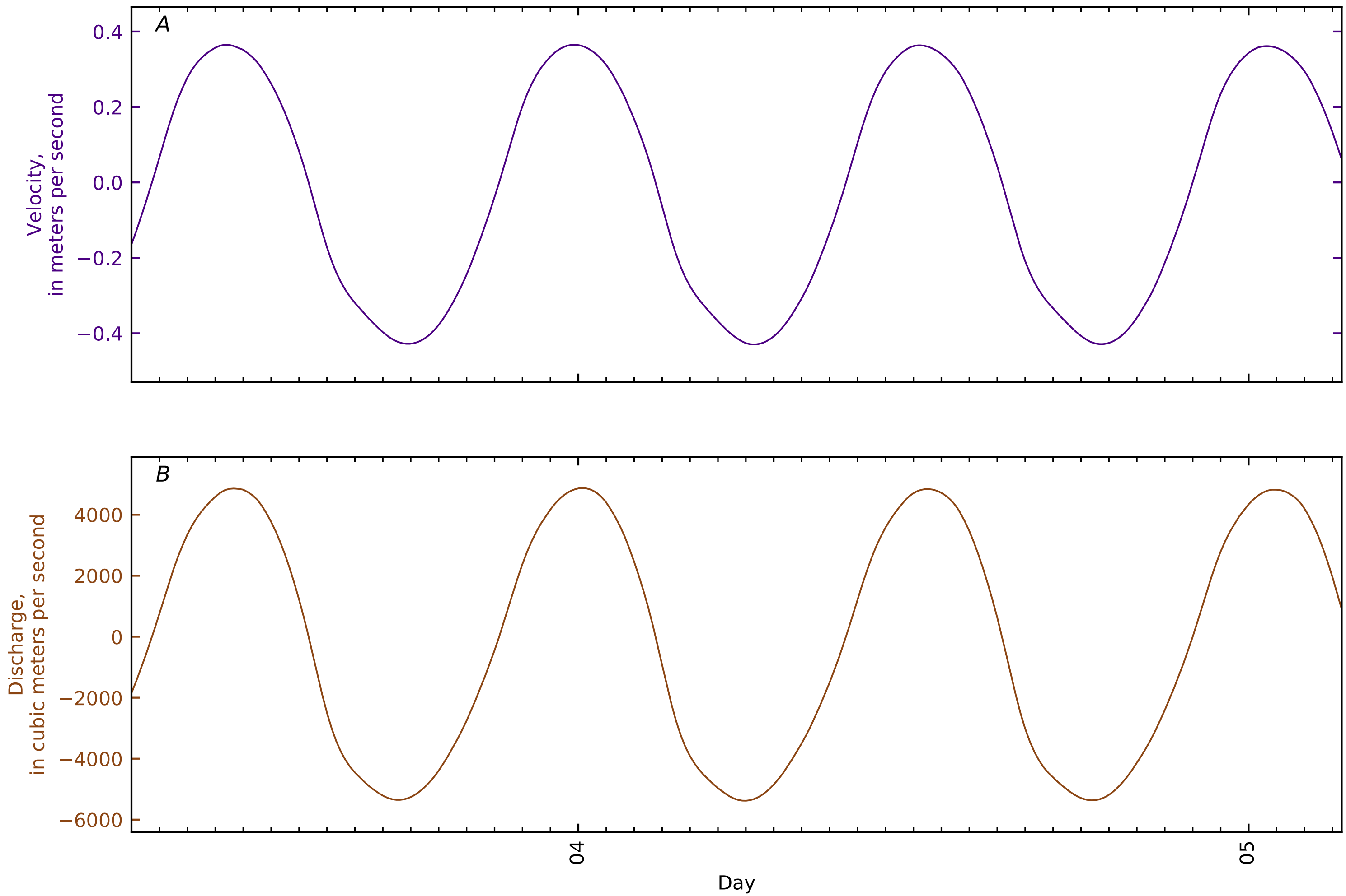

Figure B3-328. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 7, Penob Riv KM6 d/s narrows. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

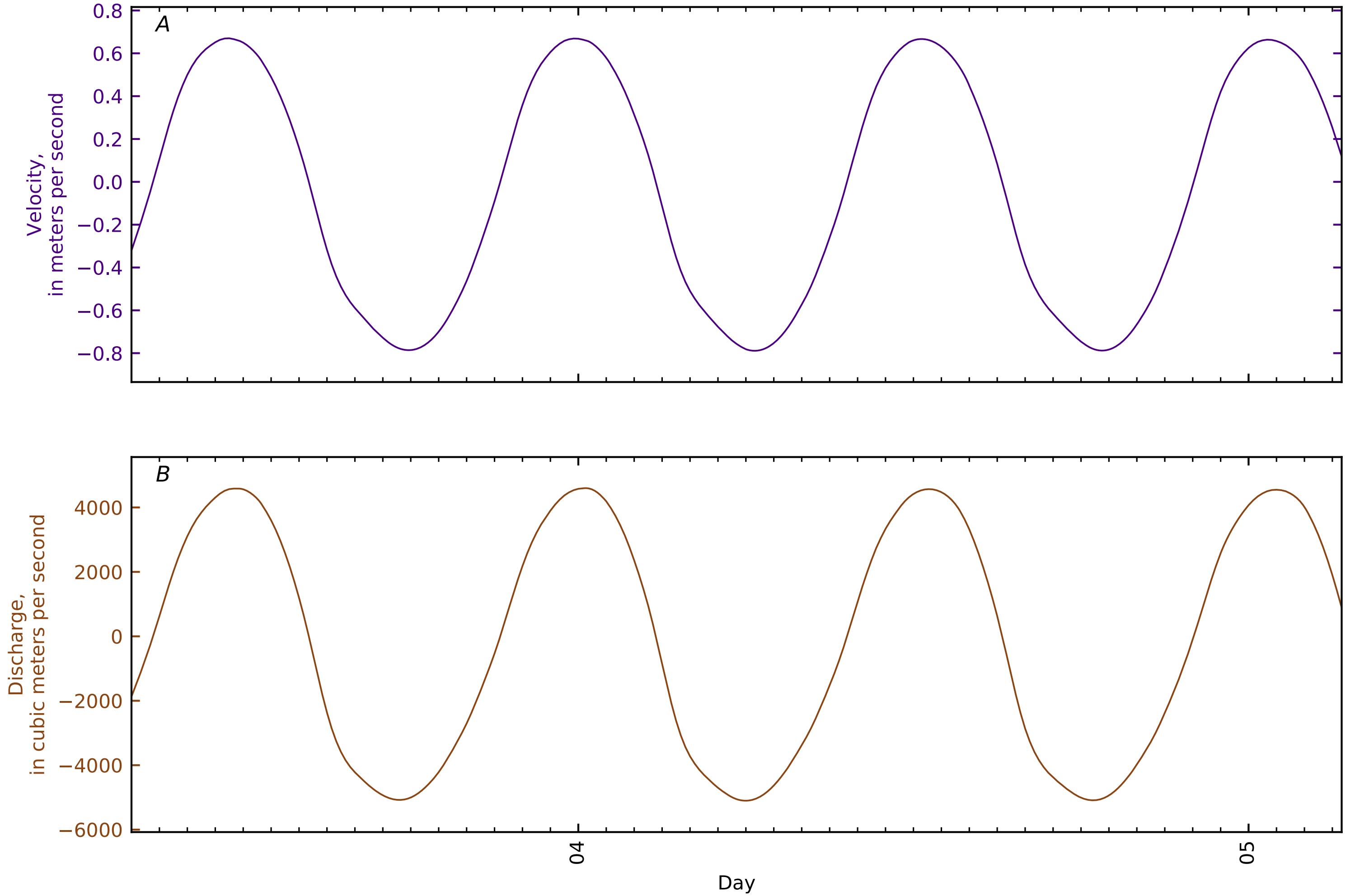

Figure B3-329. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 8, Penob Riv KM8 narrows. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

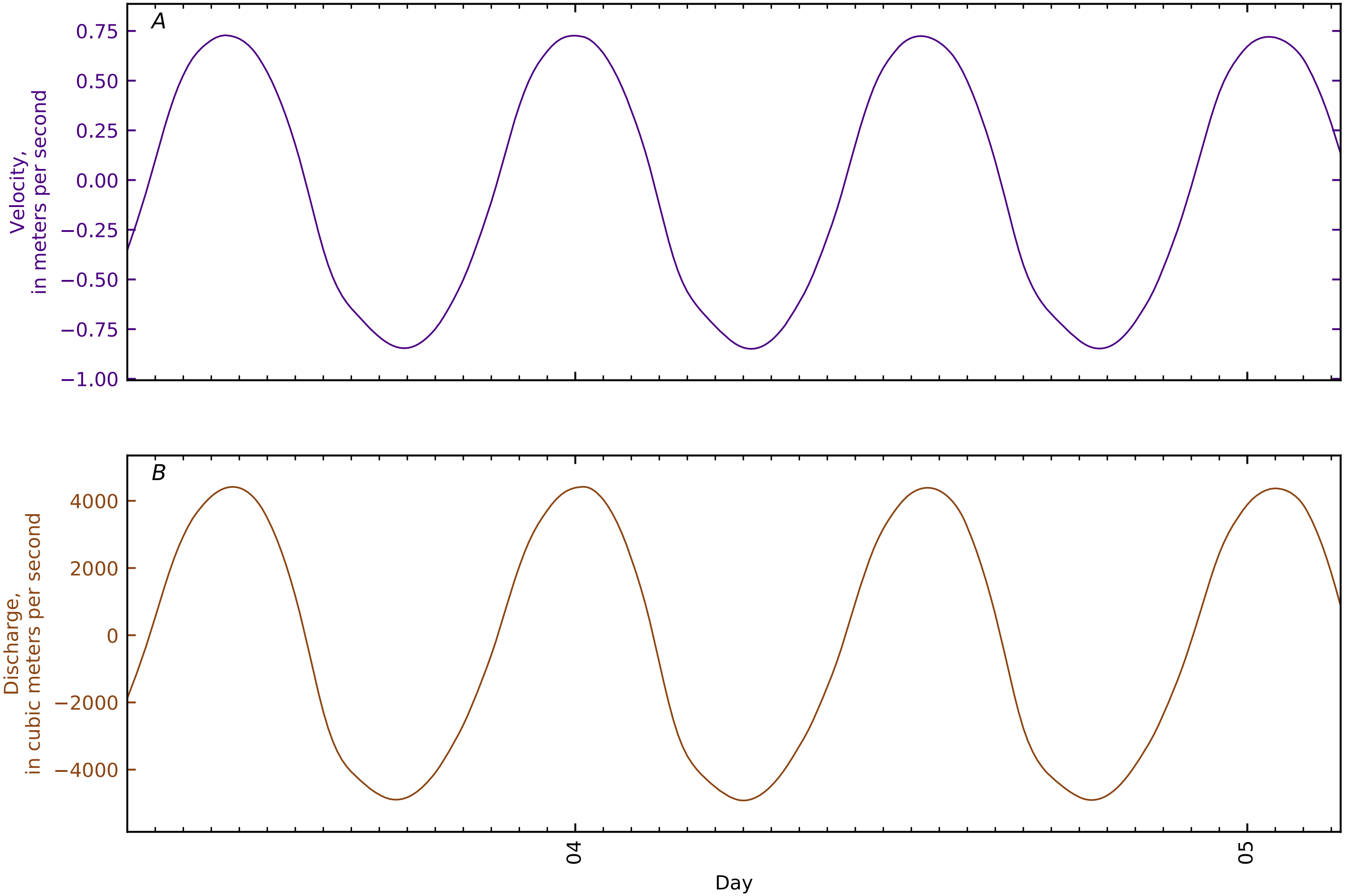

Figure B3-330. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 9, Penob Riv KM10 narrows d/s bridge. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

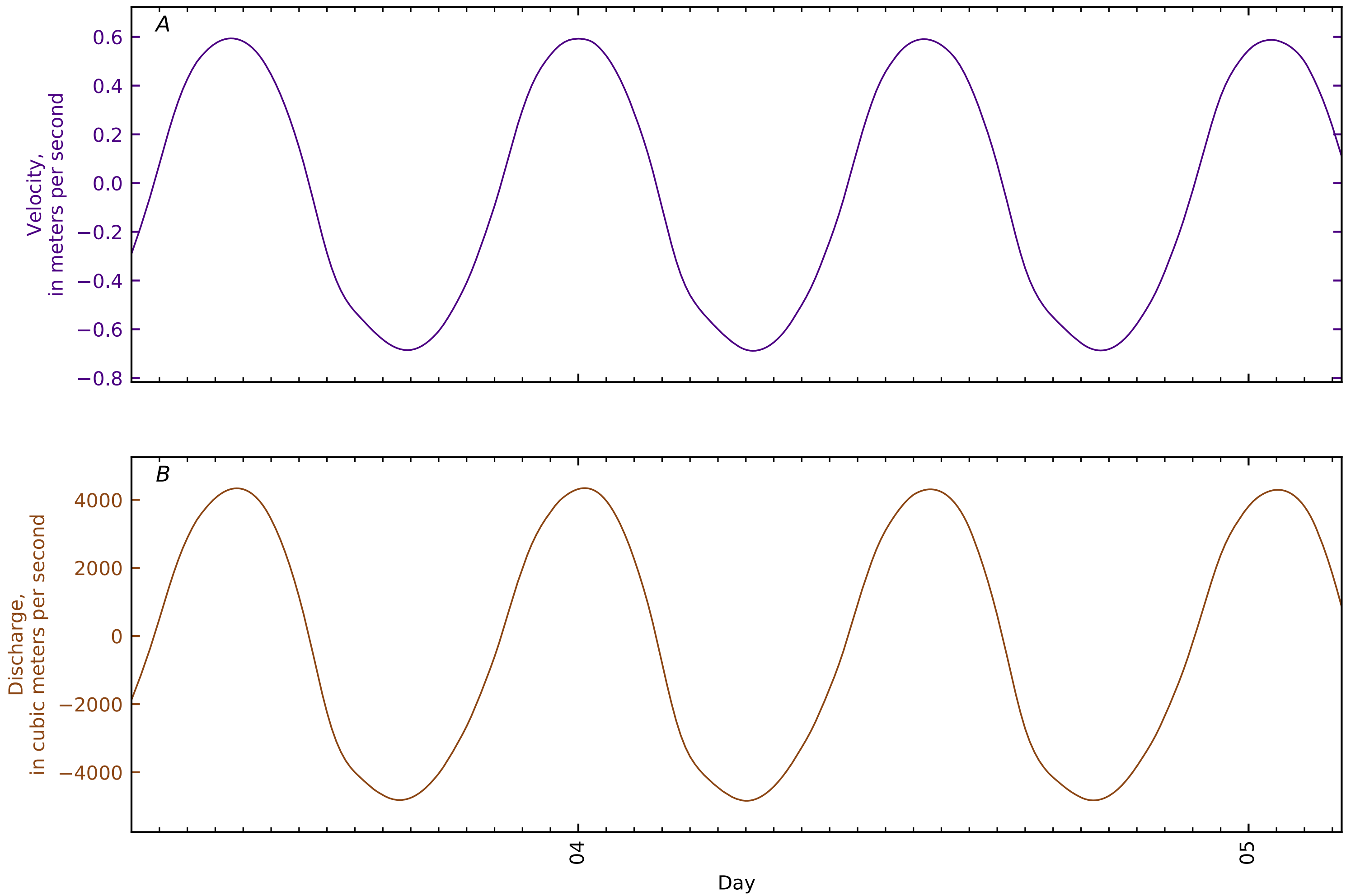

Figure B3-331. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 10, Penob Riv KM11 d/s East Ch split nr Bucksport. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

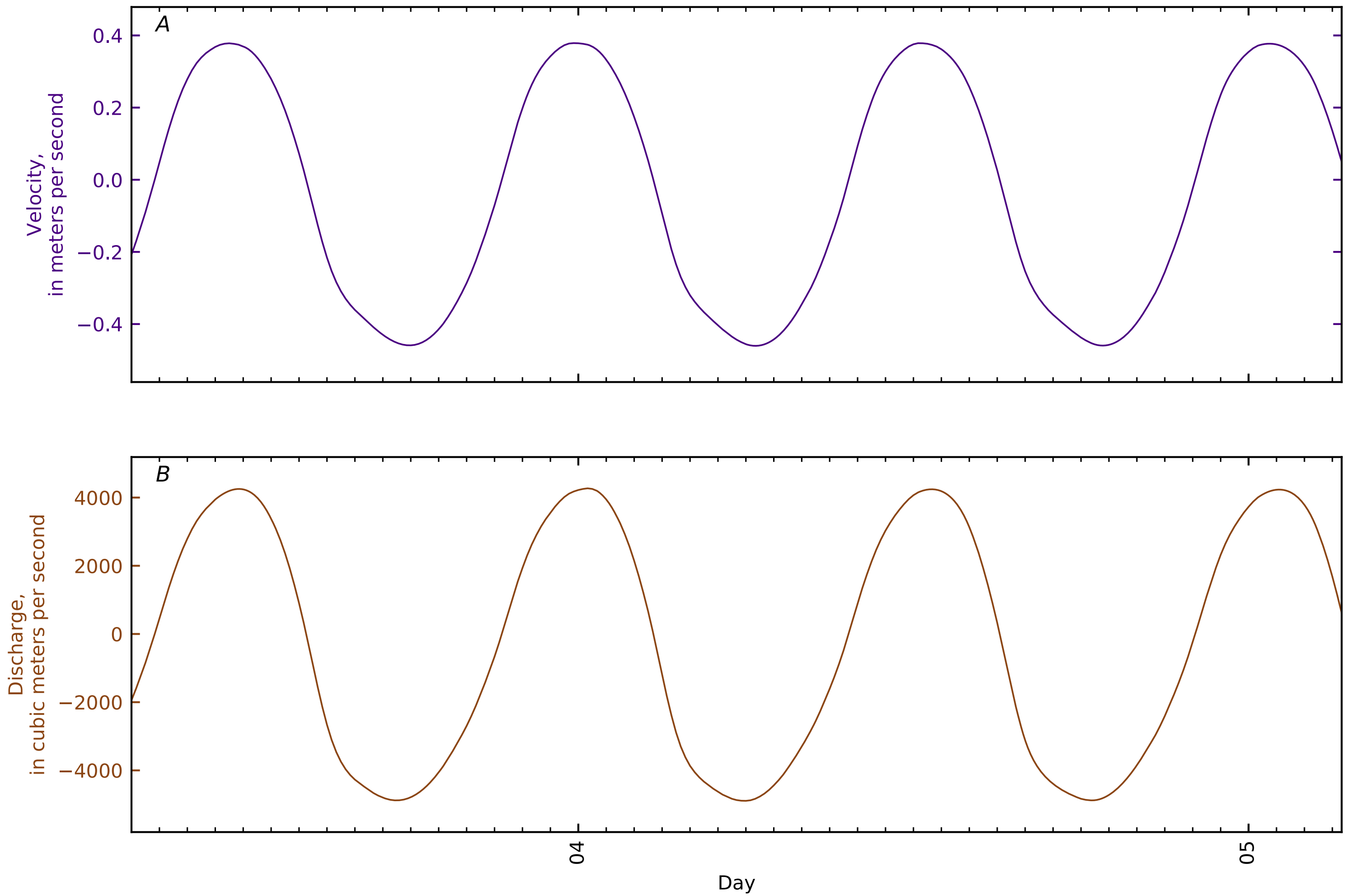

Figure B3-332. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 11, Penob Riv KM11.4 East Ch split nr Bucksport. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

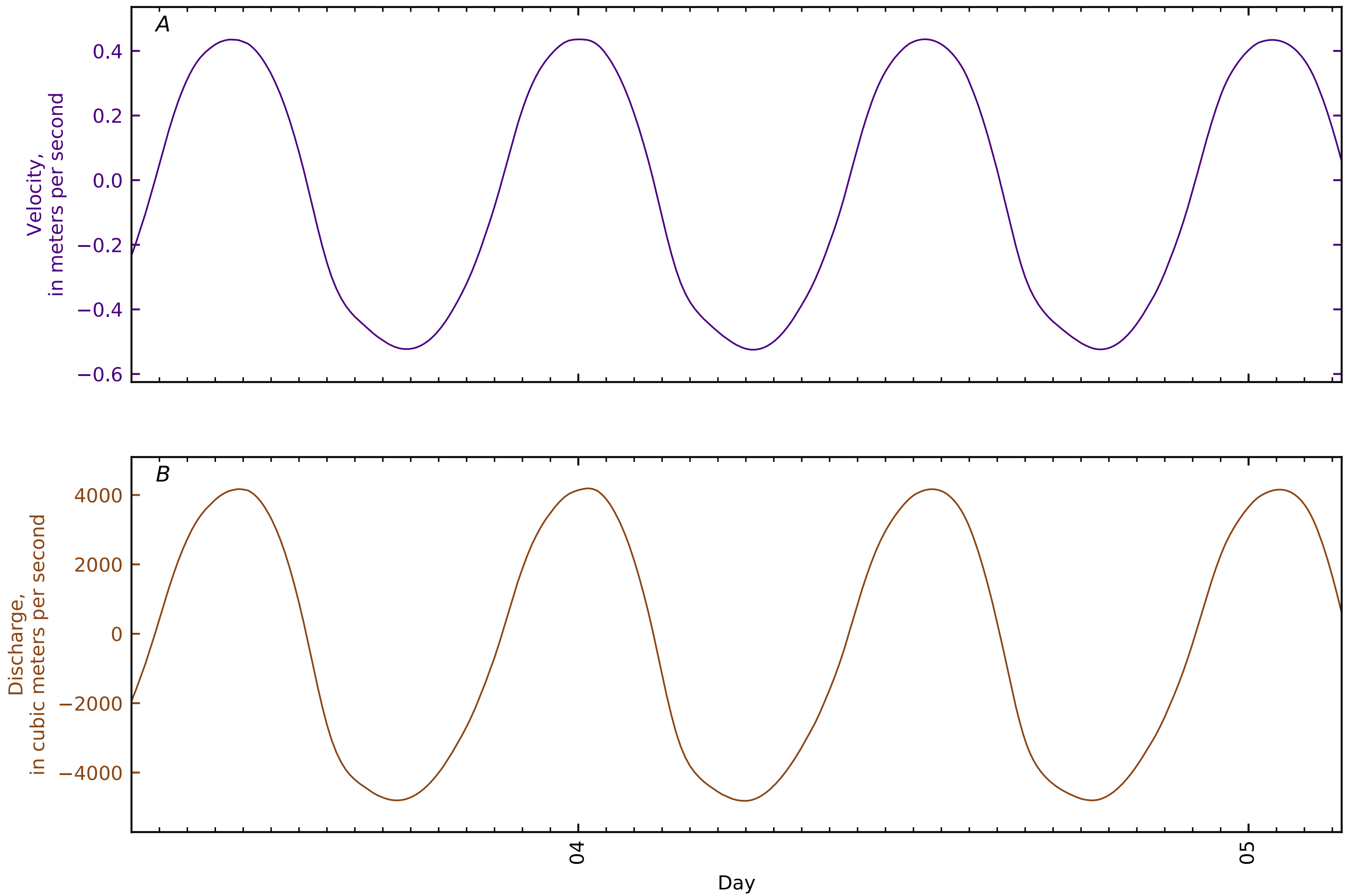

Figure B3-333. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 12, Penob Riv KM12 Bucksport. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

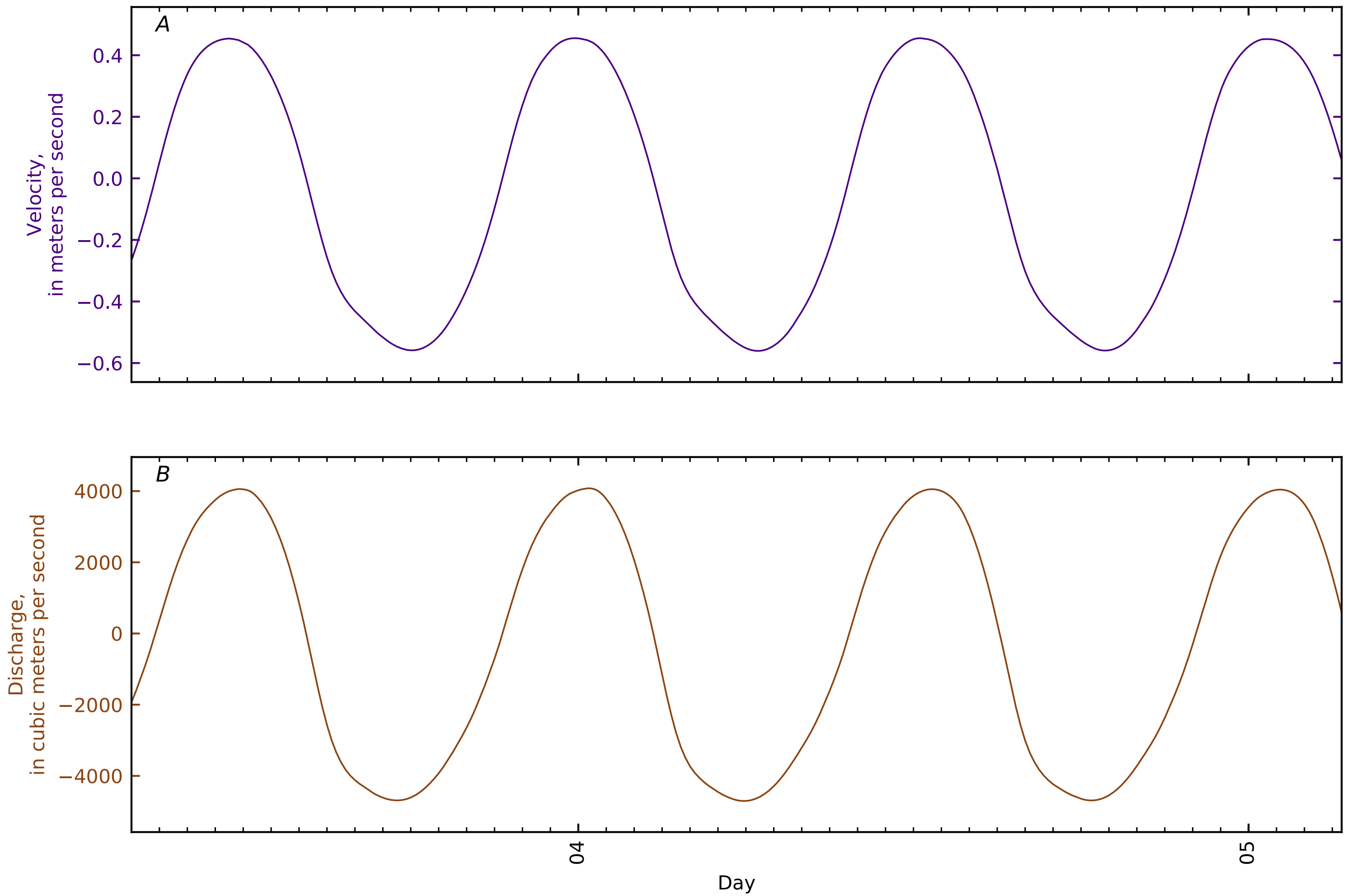

Figure B3-334. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 13, Penob Riv KM13 dropoff u/s Bucksport. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

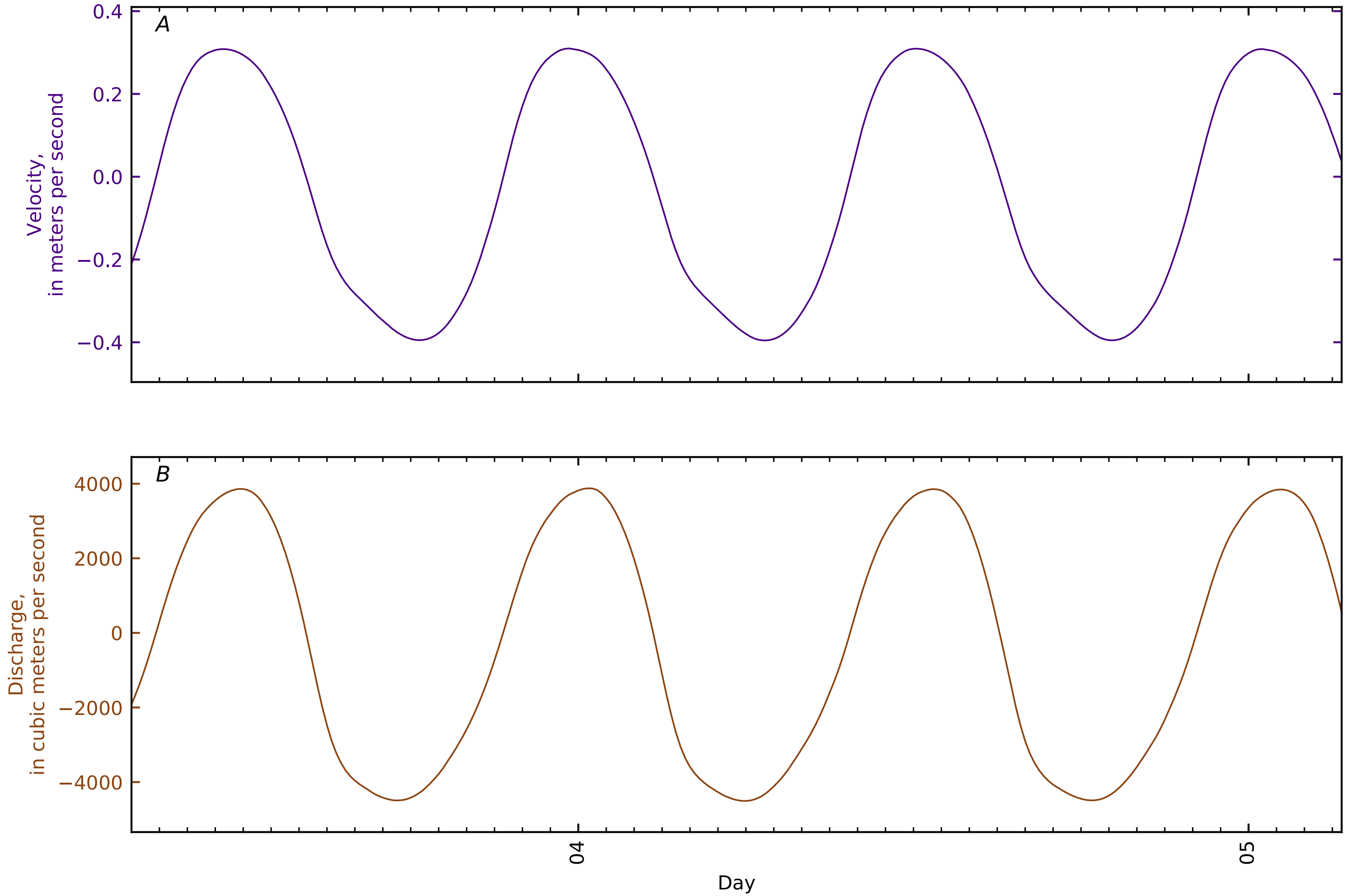

Figure B3-335. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 14, Penob Riv KM14 u/s dropoff. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

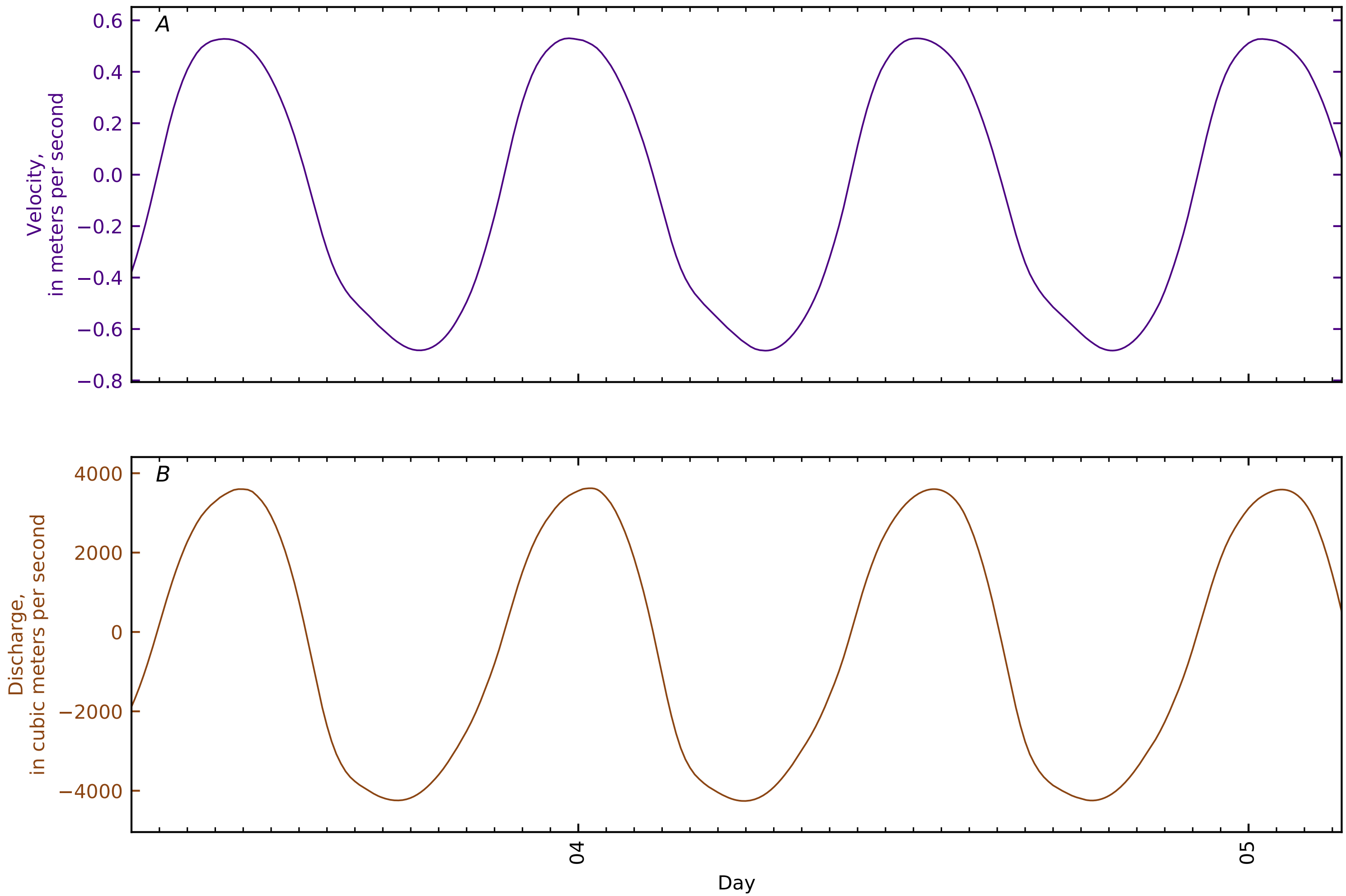

Figure B3-336. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 15, Penob Riv KM15 d/s conf Mendall Marsh. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

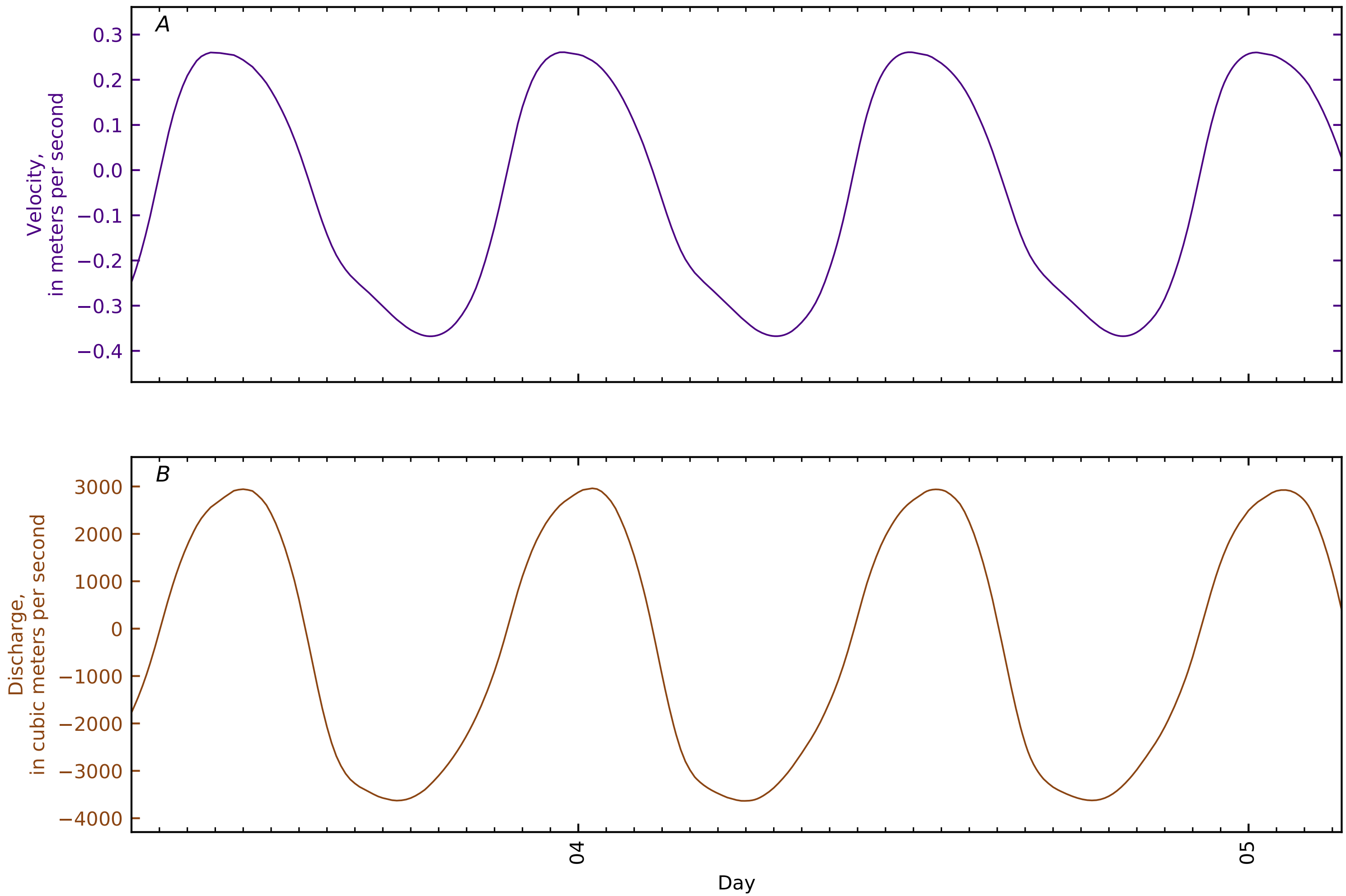

Figure B3-337. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 16, Penob Riv KM17 Frankfort Flats d/s Mendall Marsh. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

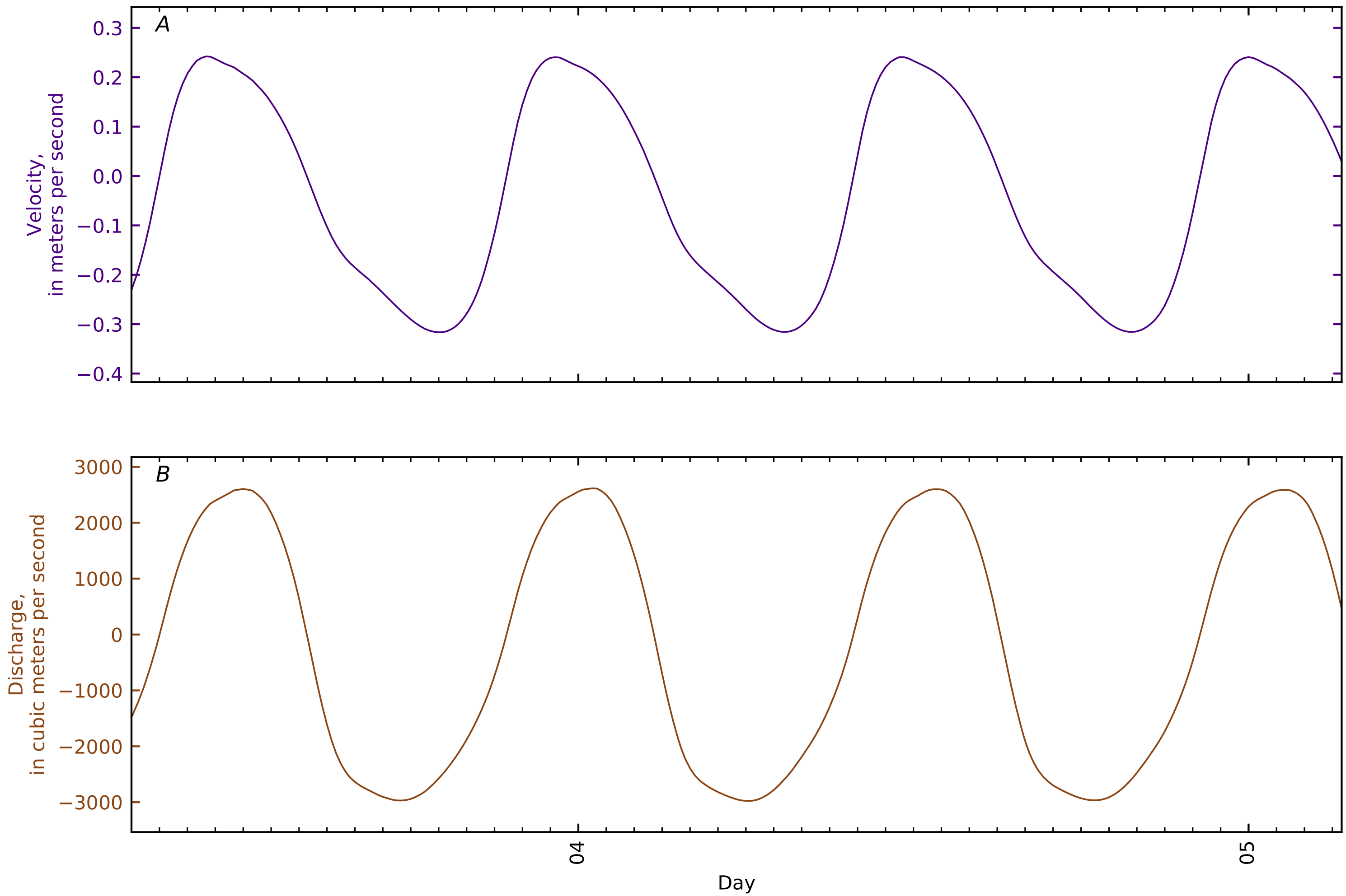

Figure B3-338. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 17, Penob Riv KM18 Frankfort Flats u/s Mendall Marsh GS Trnsct1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

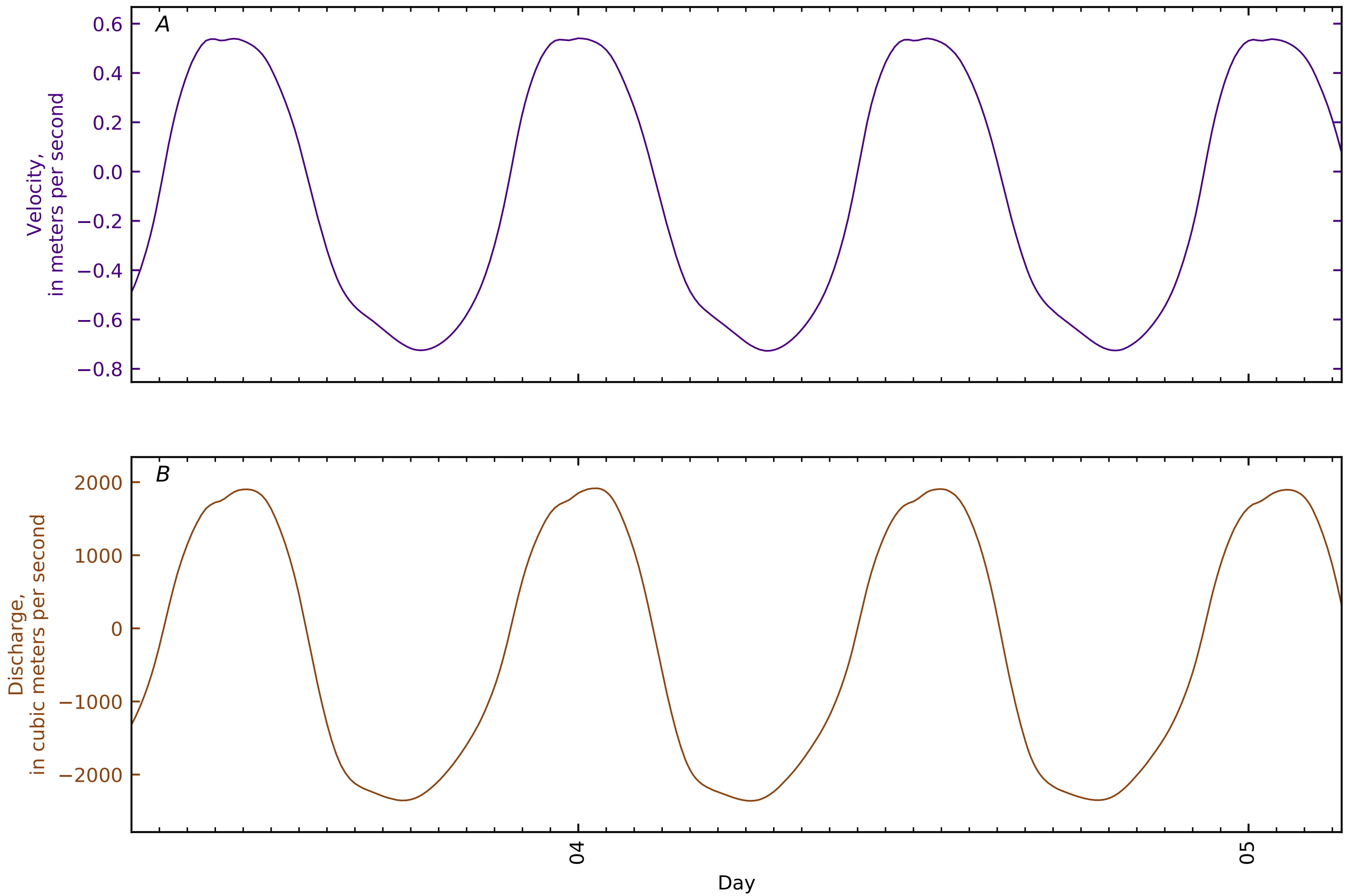

Figure B3-339. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 18, Penob Riv KM21.2 GS 443810068502201 Winterport. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

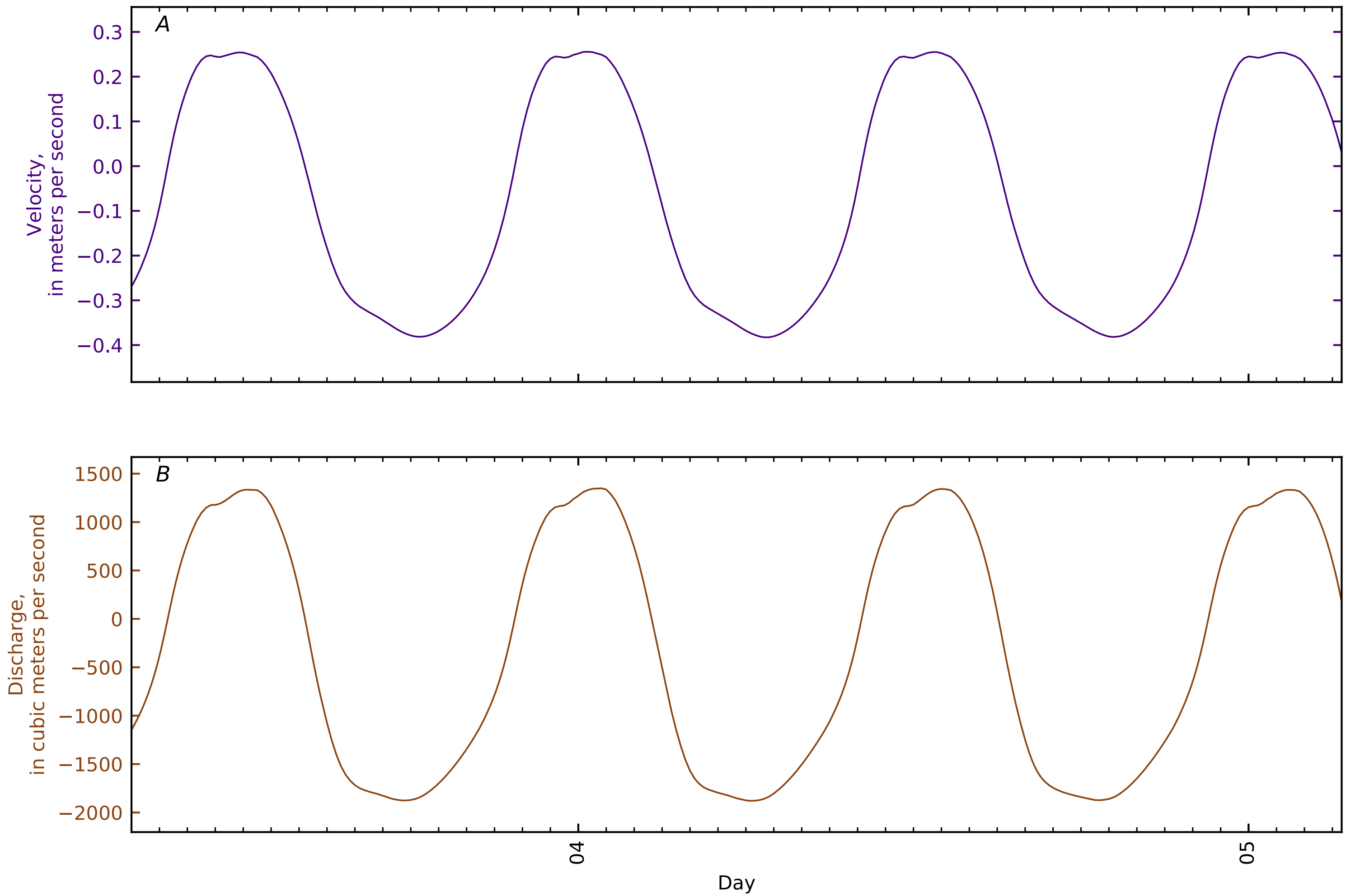

Figure B3-340. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 19, Penob Riv KM25.2 Oak Pt narrows d/s bend. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

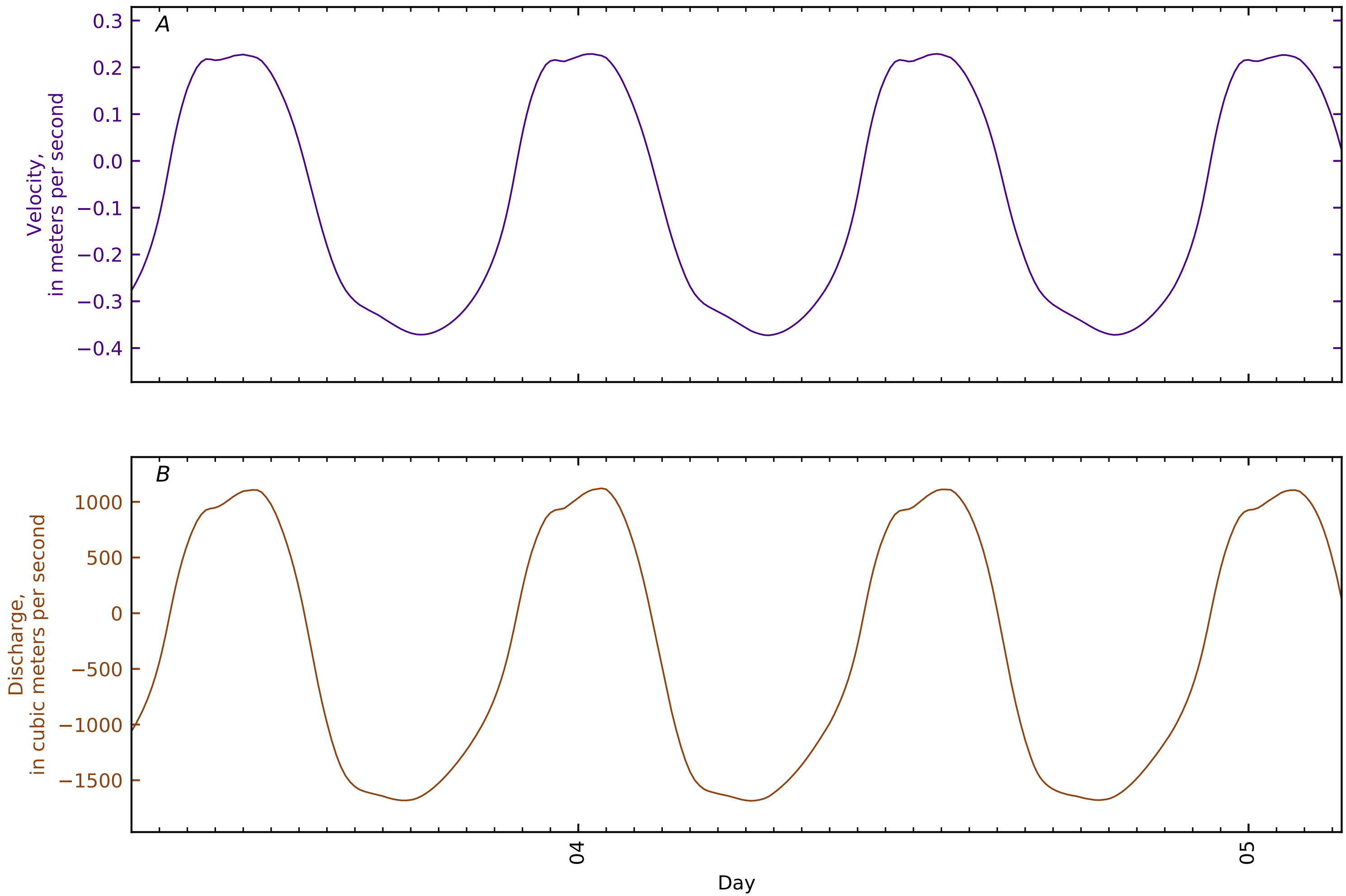

Figure B3-341. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 20, Penob Riv KM27.2 South Orrington. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

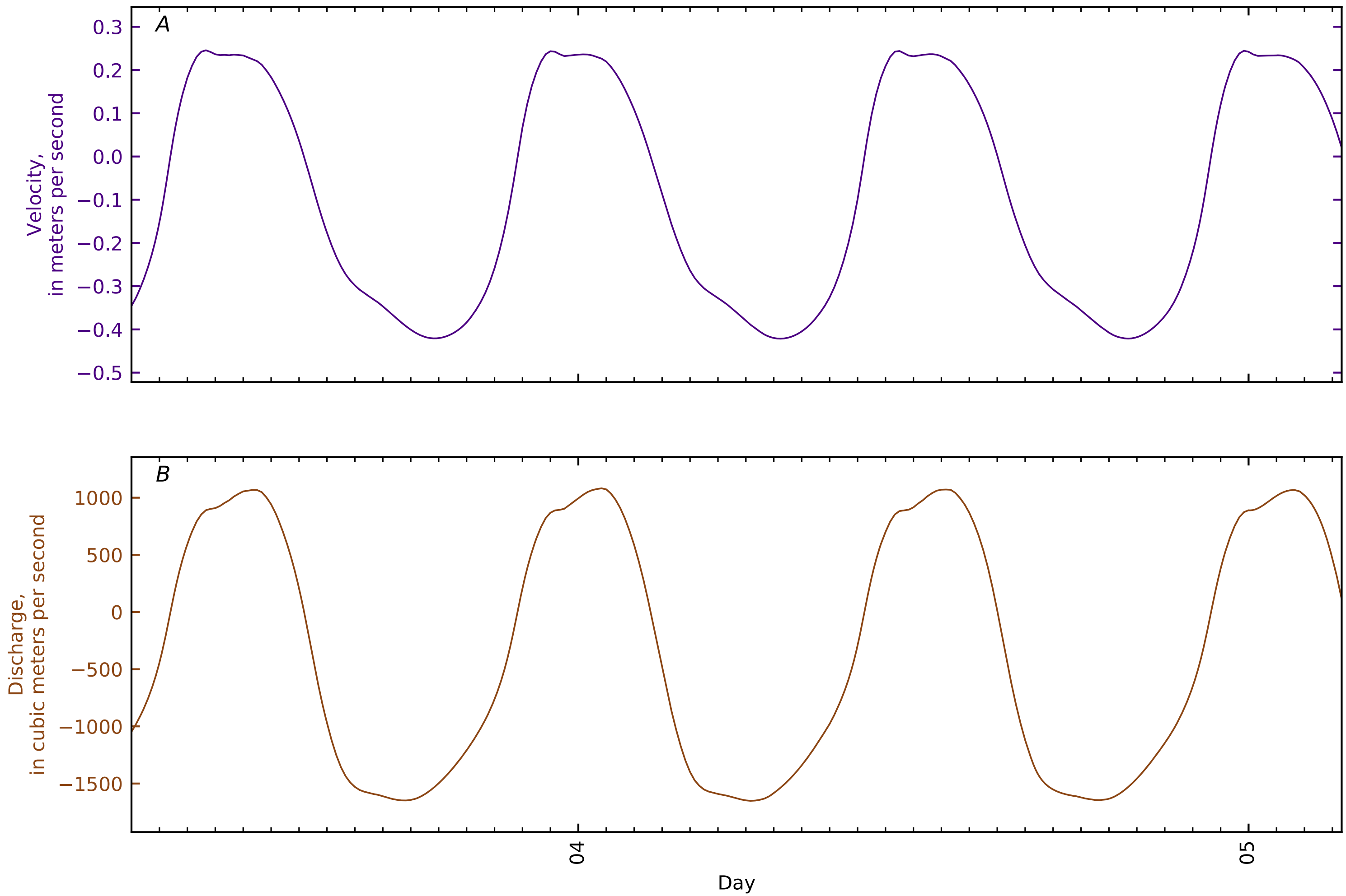

Figure B3-342. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 21, Penob Riv KM27.6 South Orrington u/s bend. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

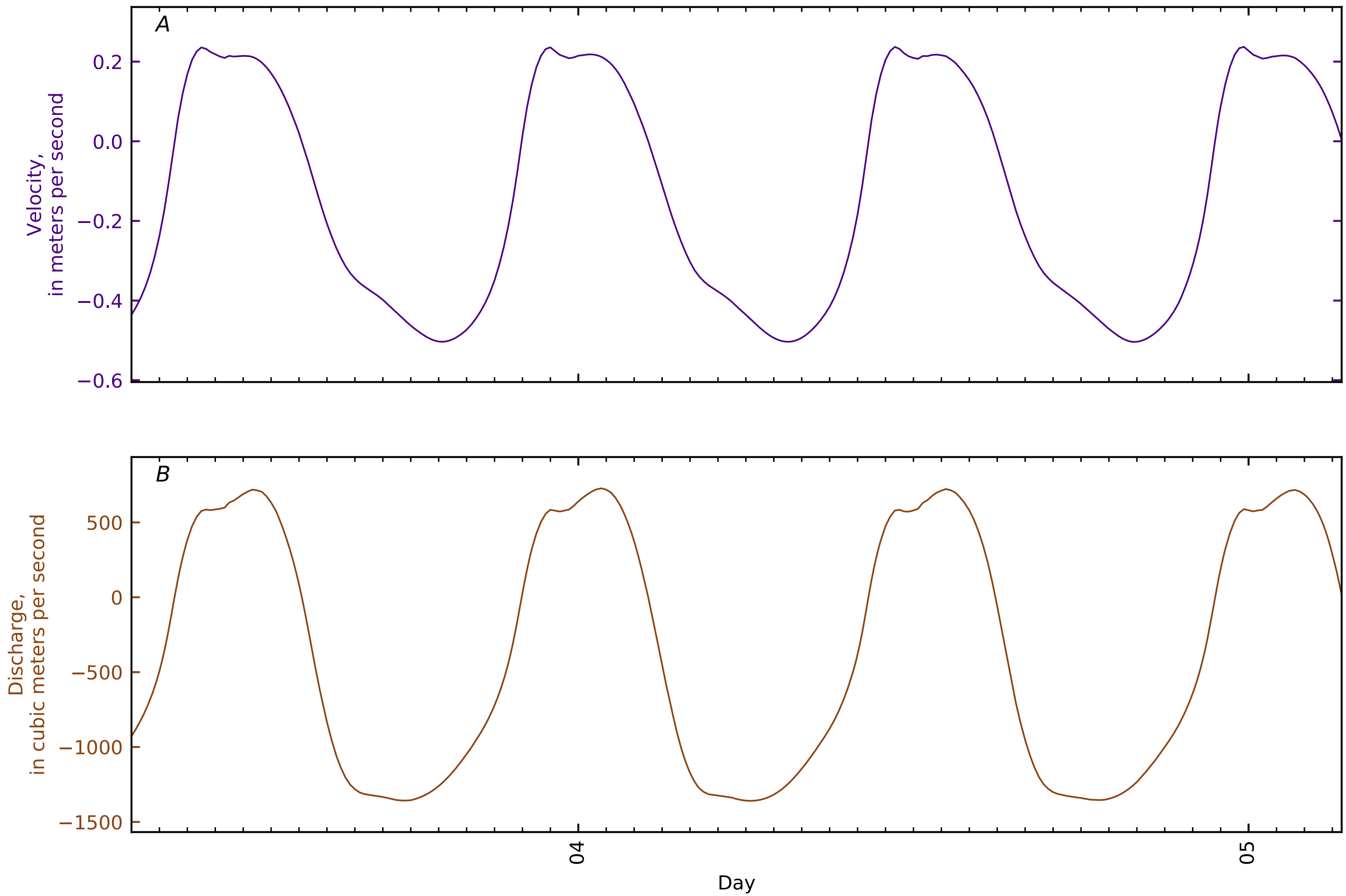

Figure B3-343. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 22, Penob Riv KM30 nr Bald Hill d/s bend. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

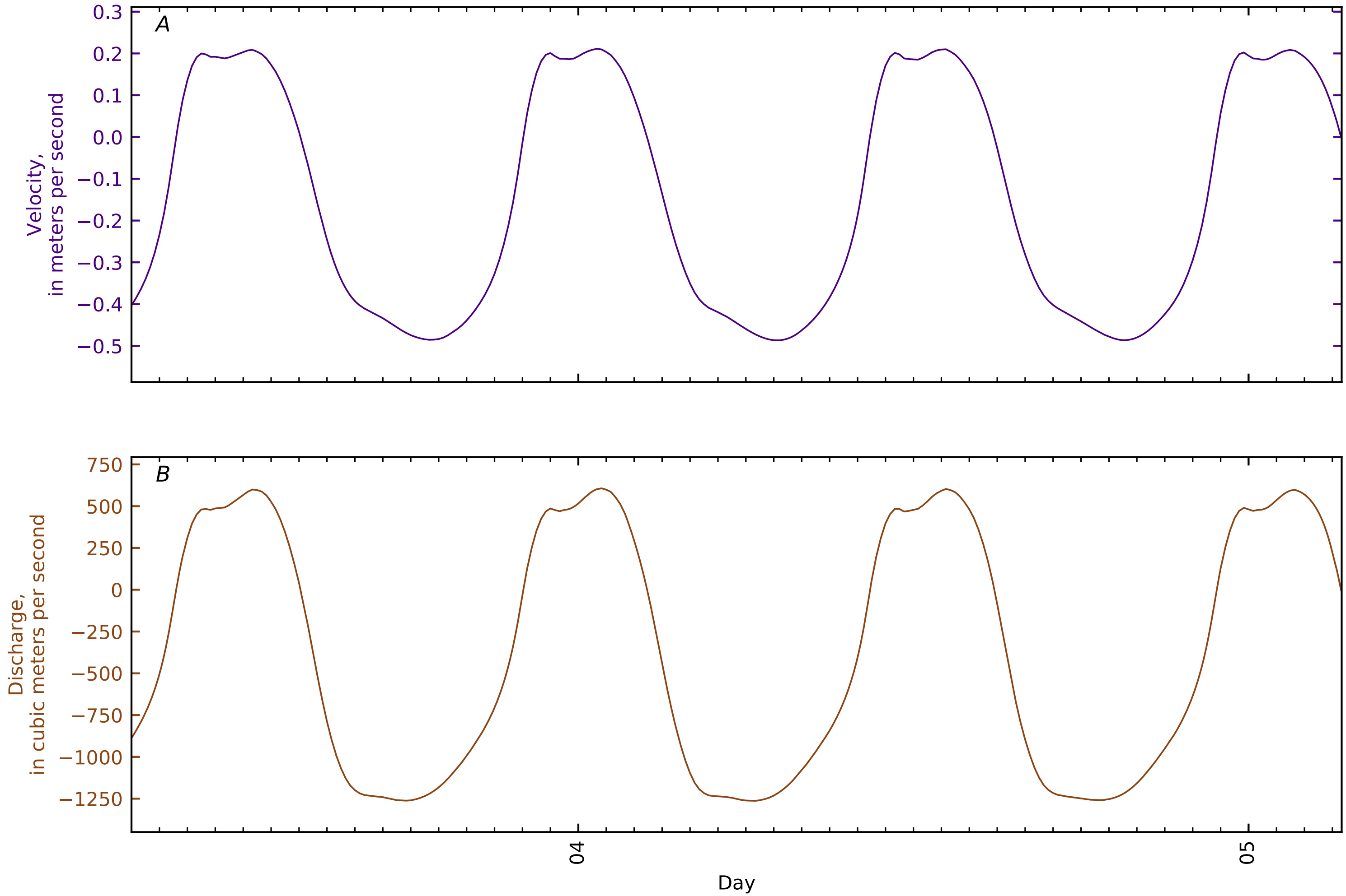

Figure B3-344. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 23, Penob Riv KM31 narrows. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

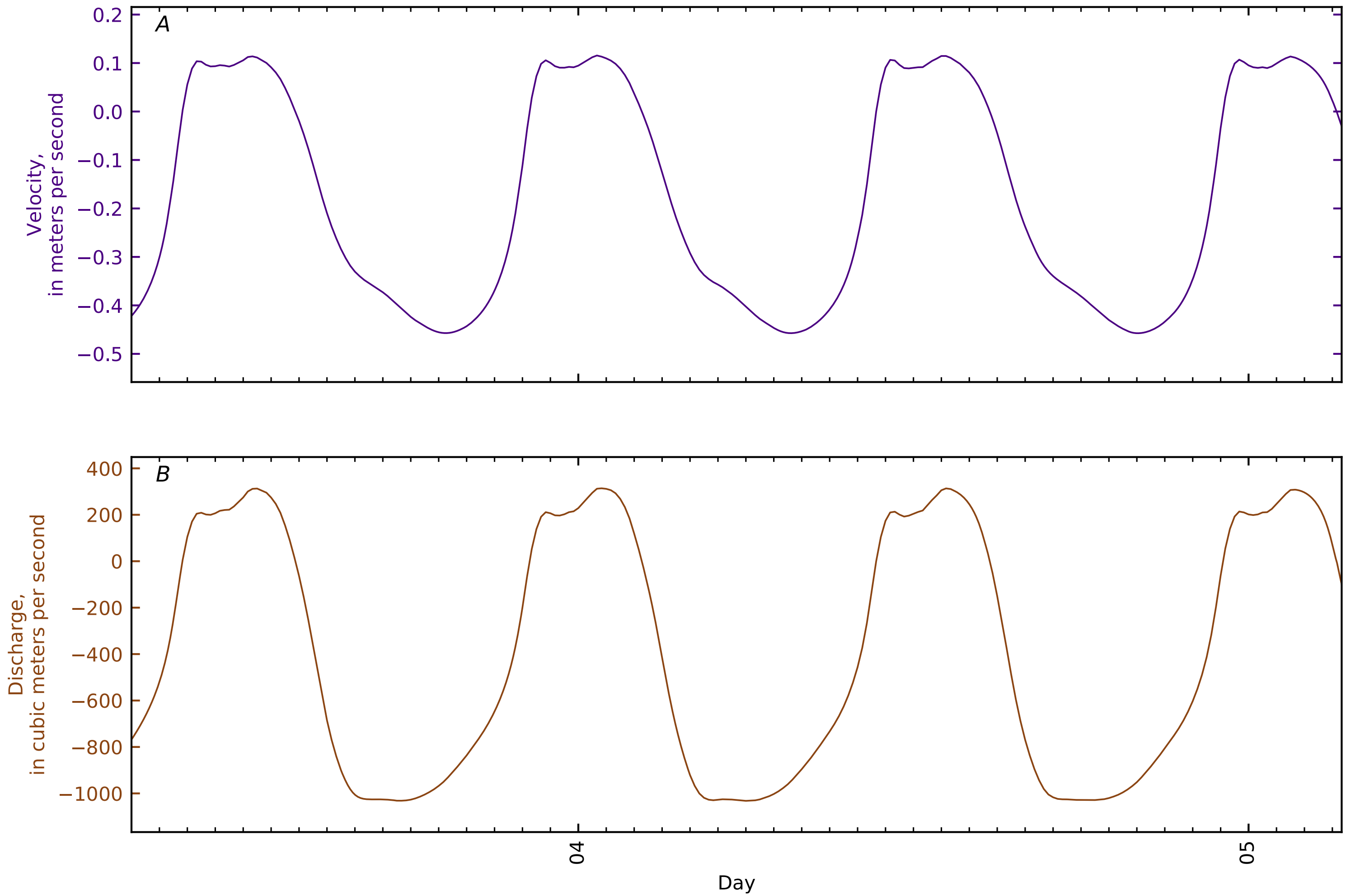

Figure B3-345. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 24, Penob Riv KM34 d/s Orrington. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

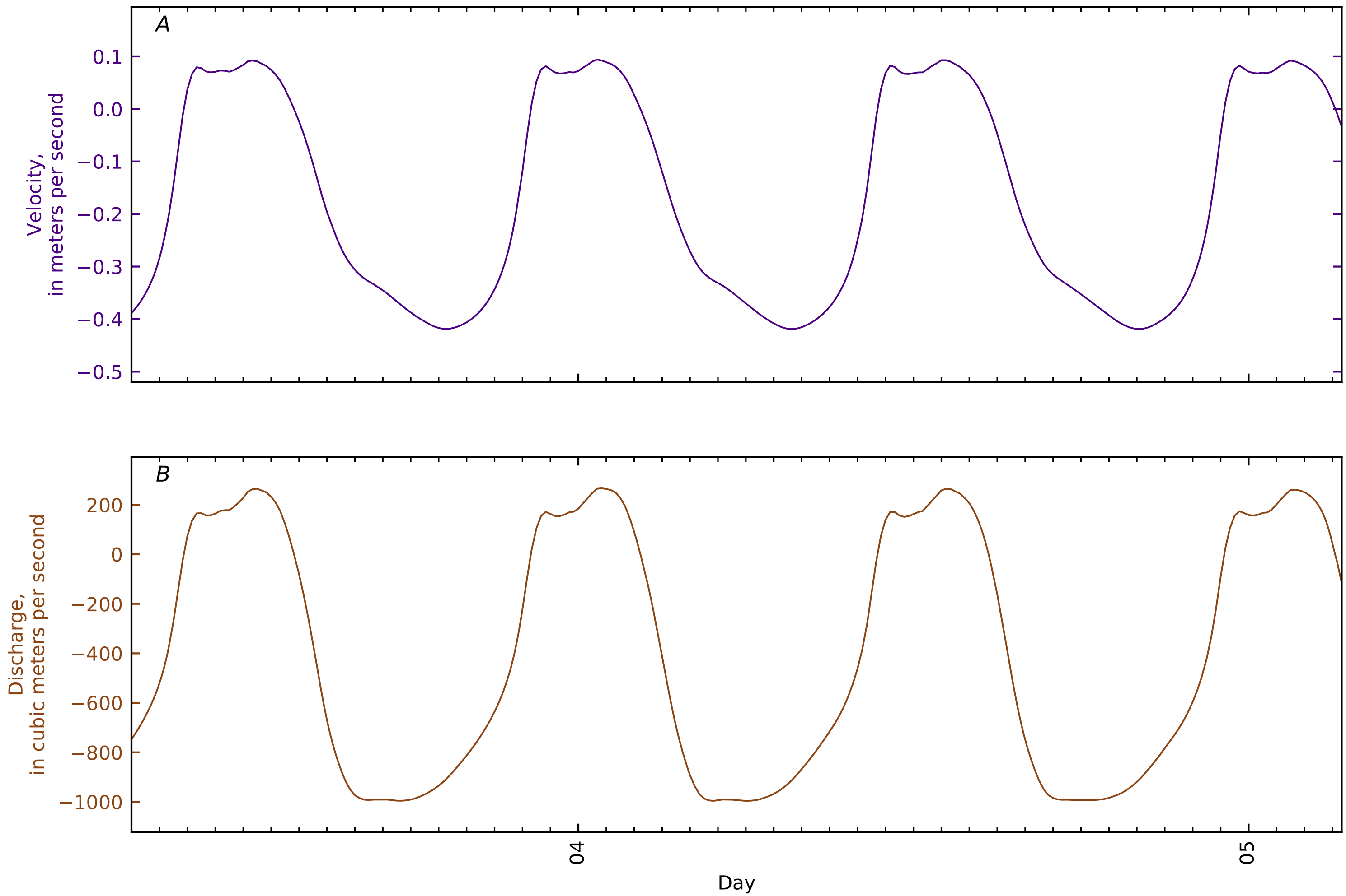

Figure B3-346. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 25, Penob Riv KM34.6 Southern Cove Orrington. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

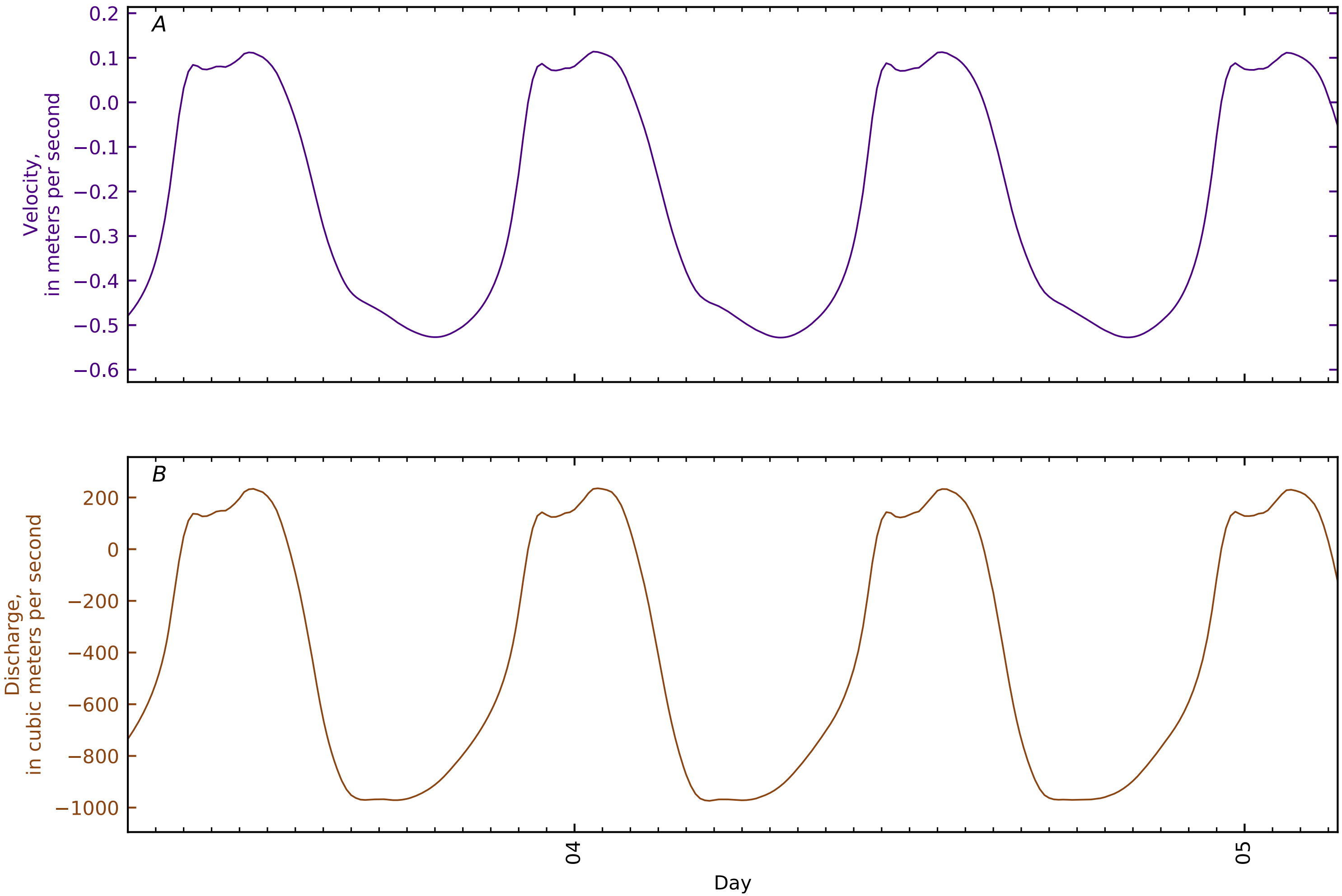

Figure B3-347. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 26, Penob Riv KM35 Orrington d/s Souadabscook Str Hampden. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

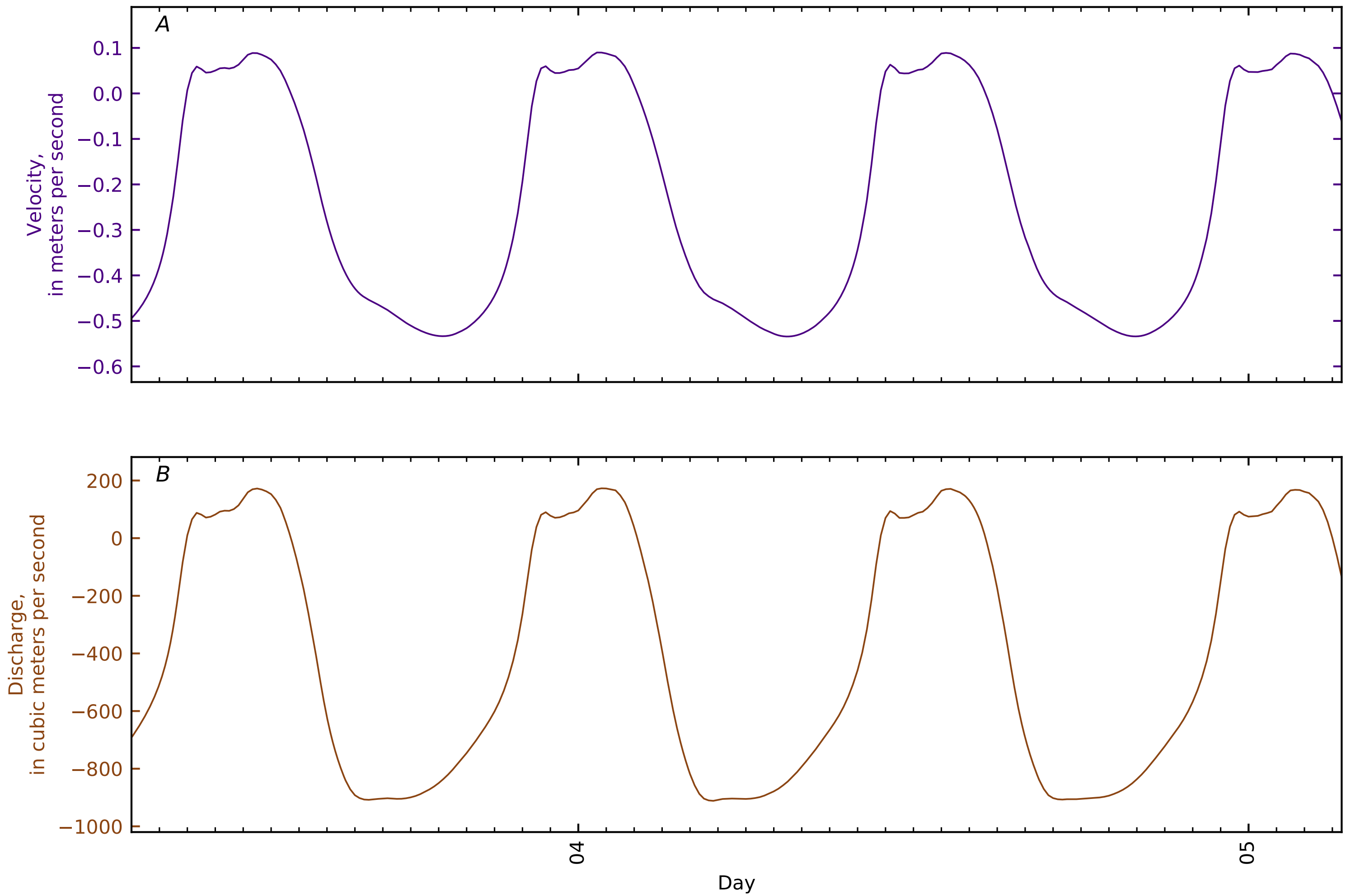

Figure B3-348. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 27, Penob Riv KM36 u/s Souadabscook Str Hampden. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

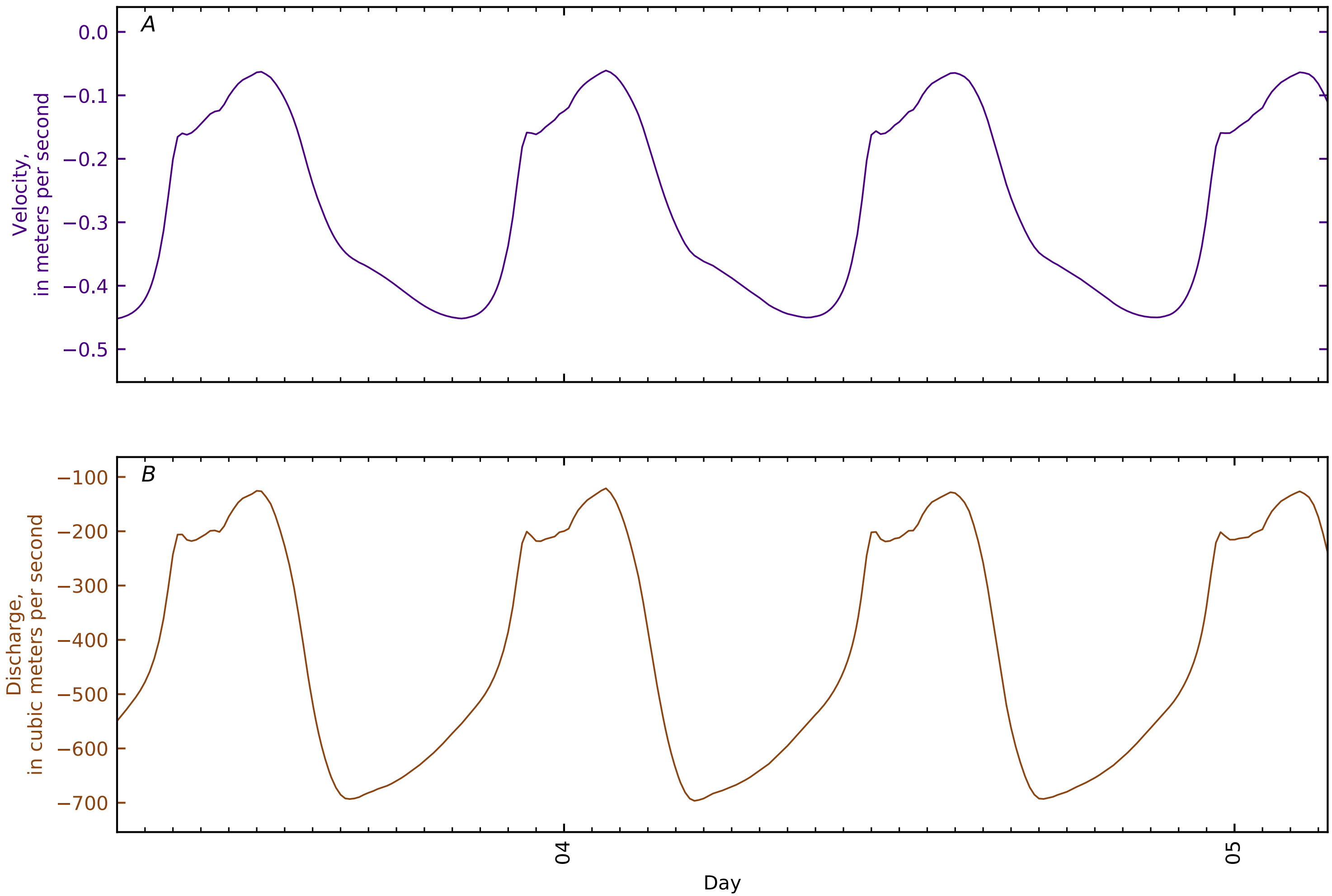

Figure B3-349. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 28, Penob Riv KM40 South Brewer. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

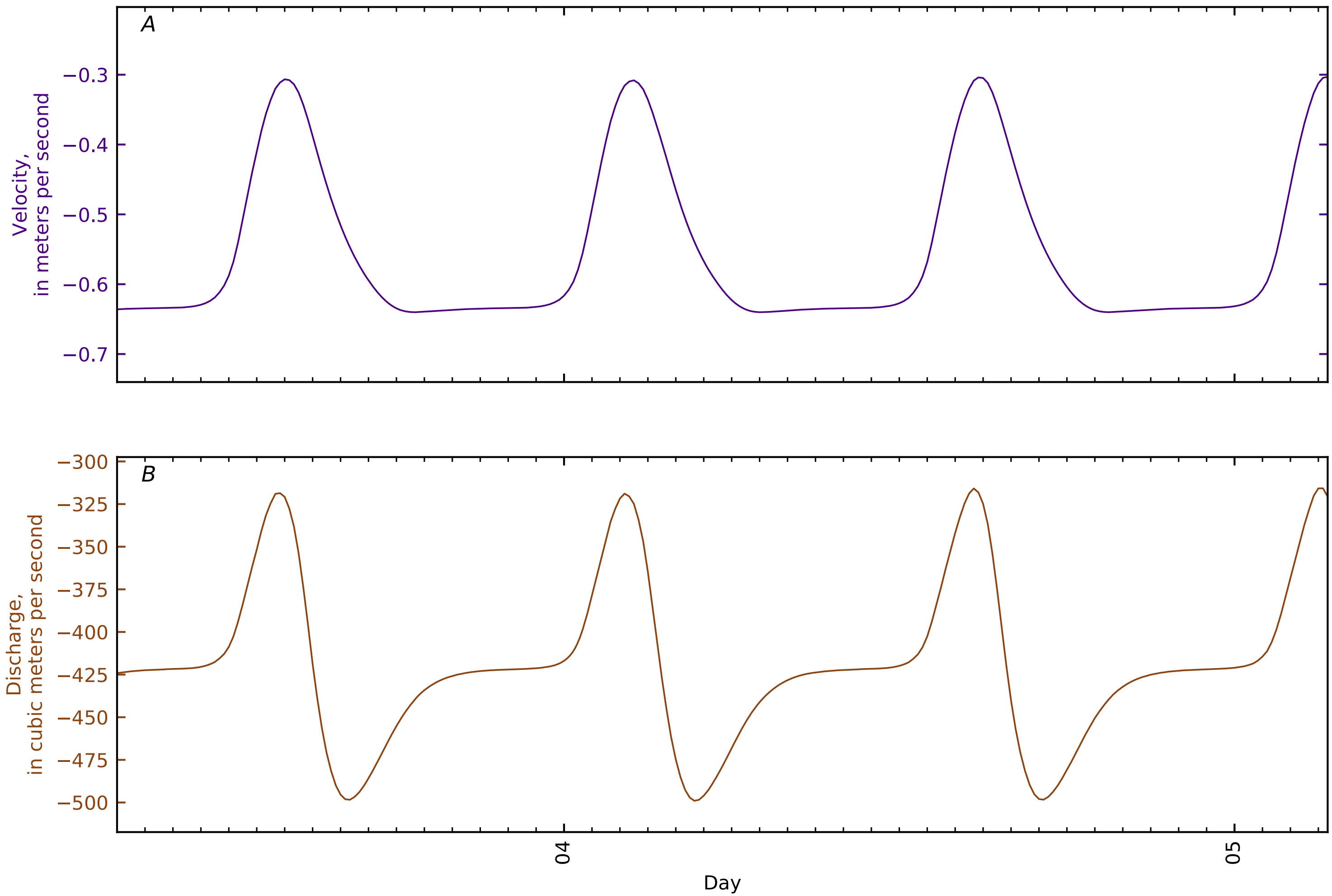

Figure B3-350. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 29, Penob Riv KM43 u/s Kenduskeag Str Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

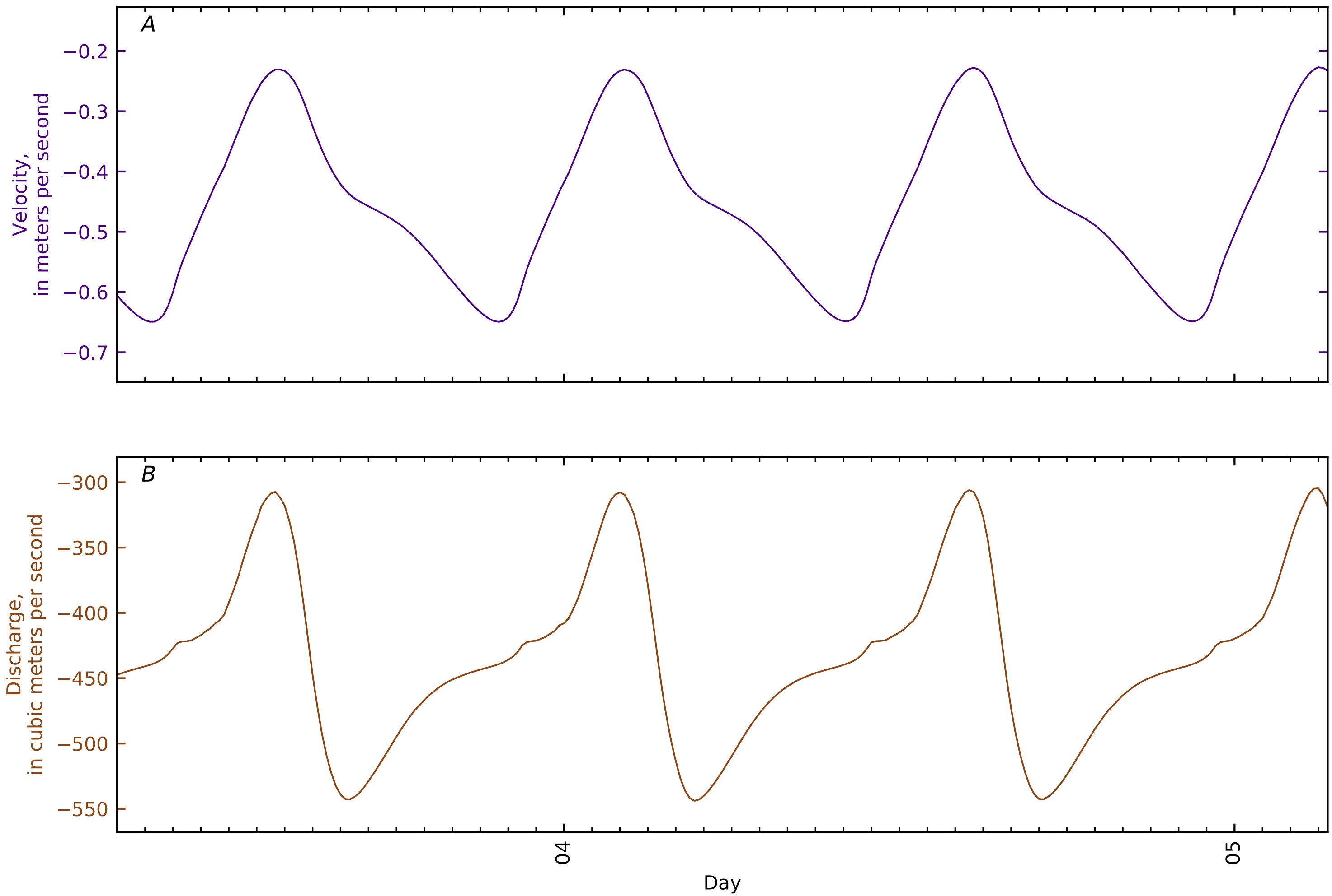

Figure B3-351. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 30, Penob Riv KM43.2 GS 01037050 at Bangor d/s Kenduskeag Str. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

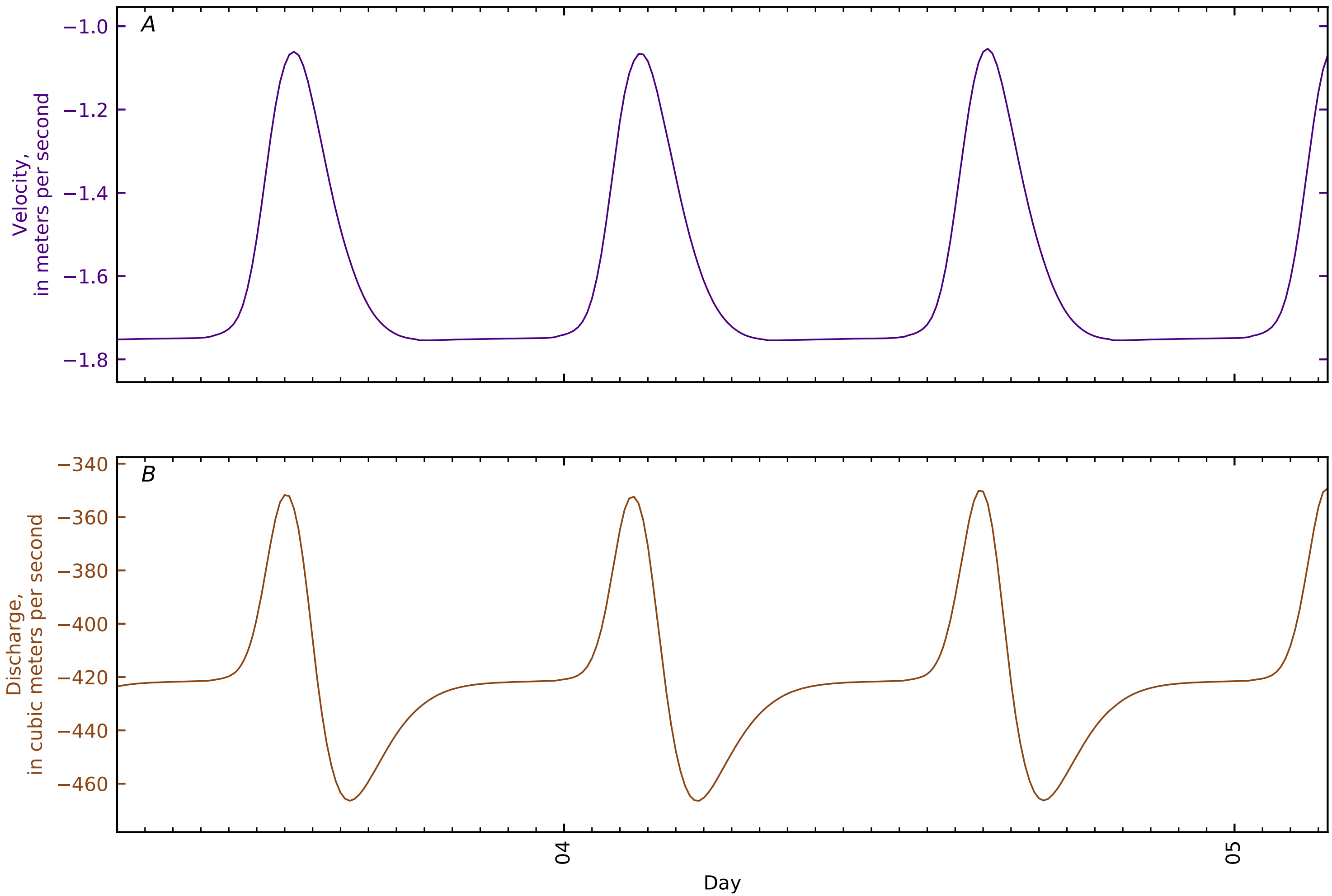

Figure B3-352. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 31, Penob Riv KM45.3 Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

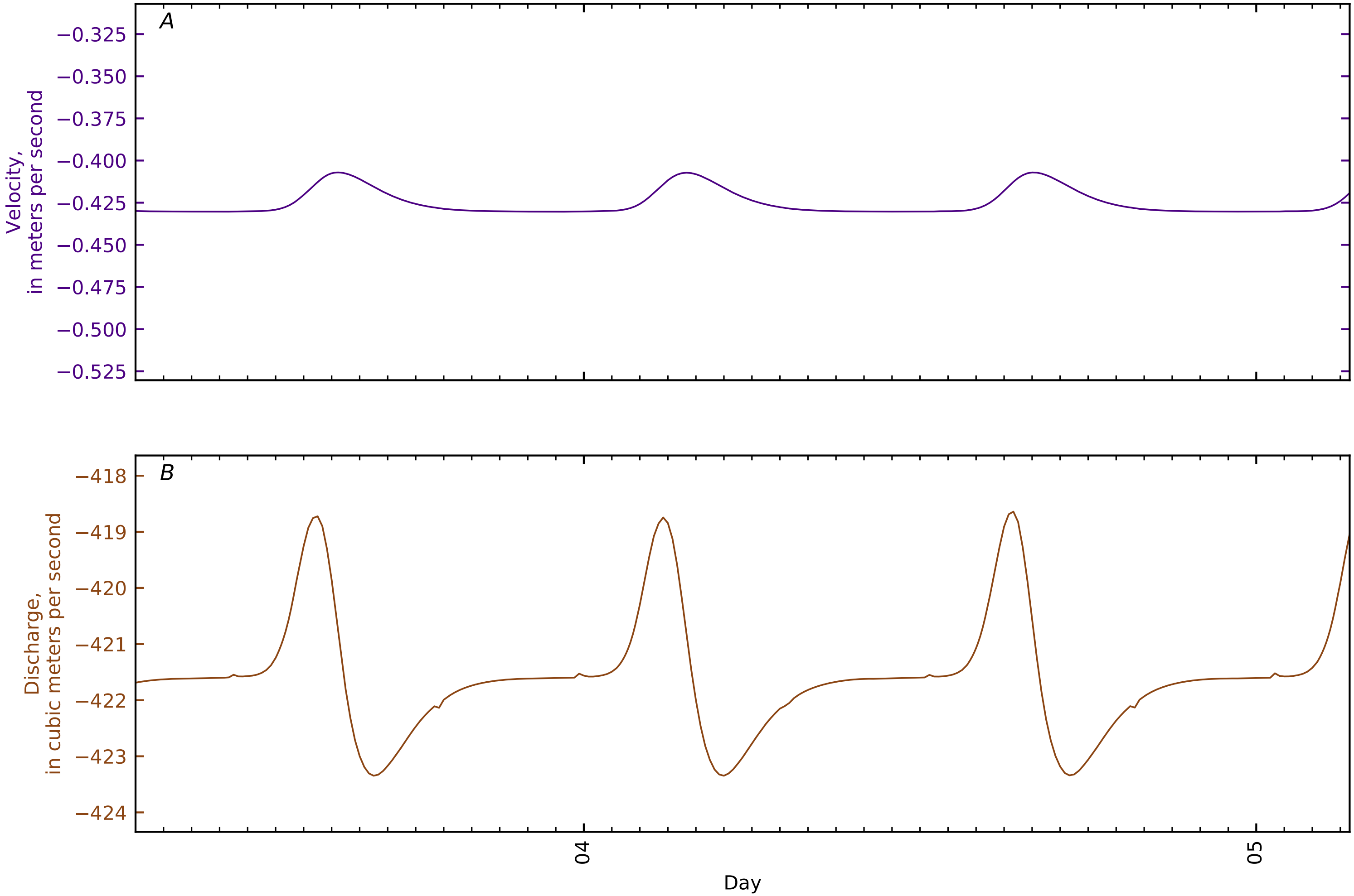

Figure B3-353. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 32, Penob Riv KM50 Eddington. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

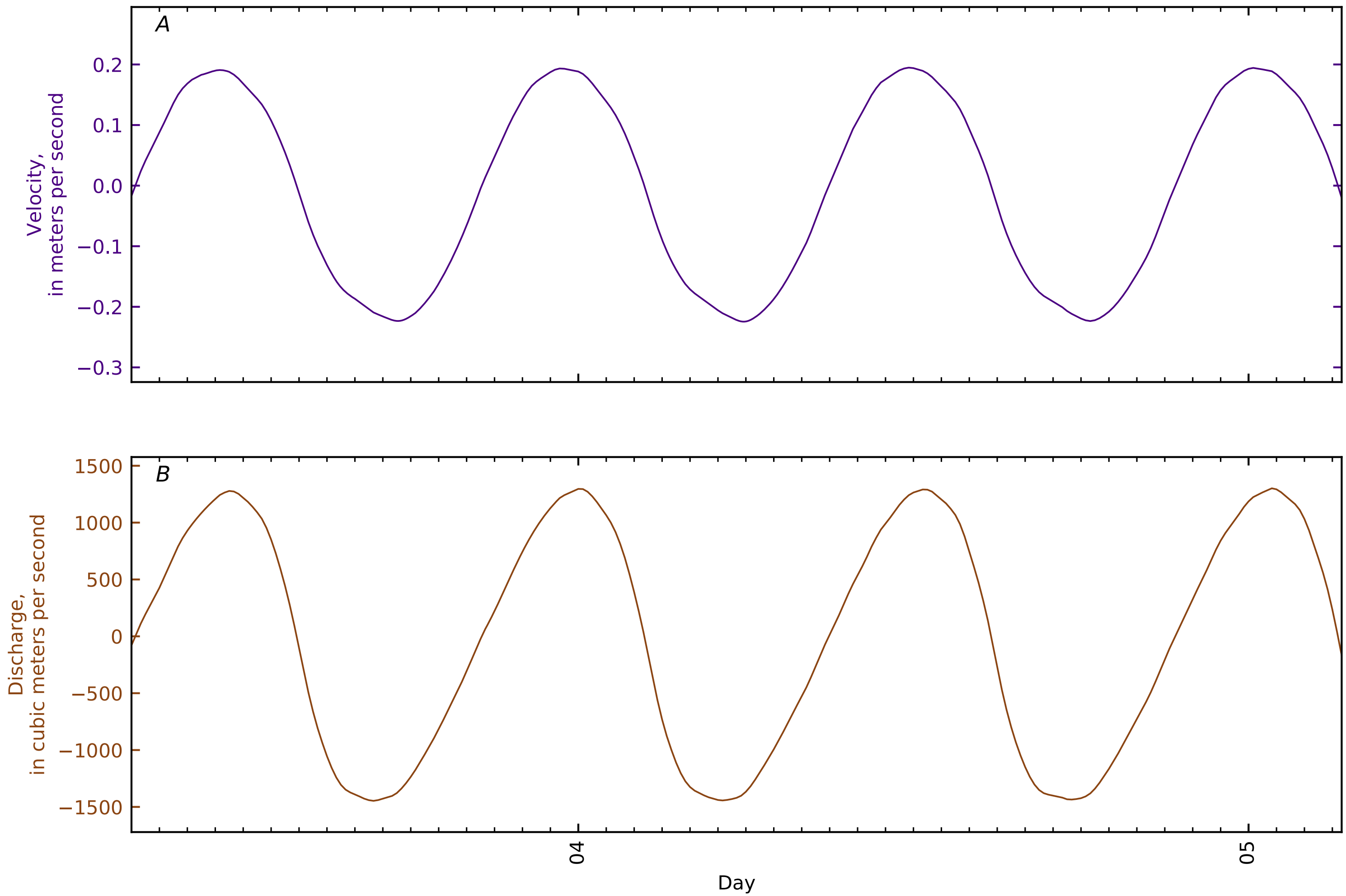

Figure B3-354. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 33, East Ch KM0 at Verona jct at GS Trnsct4. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

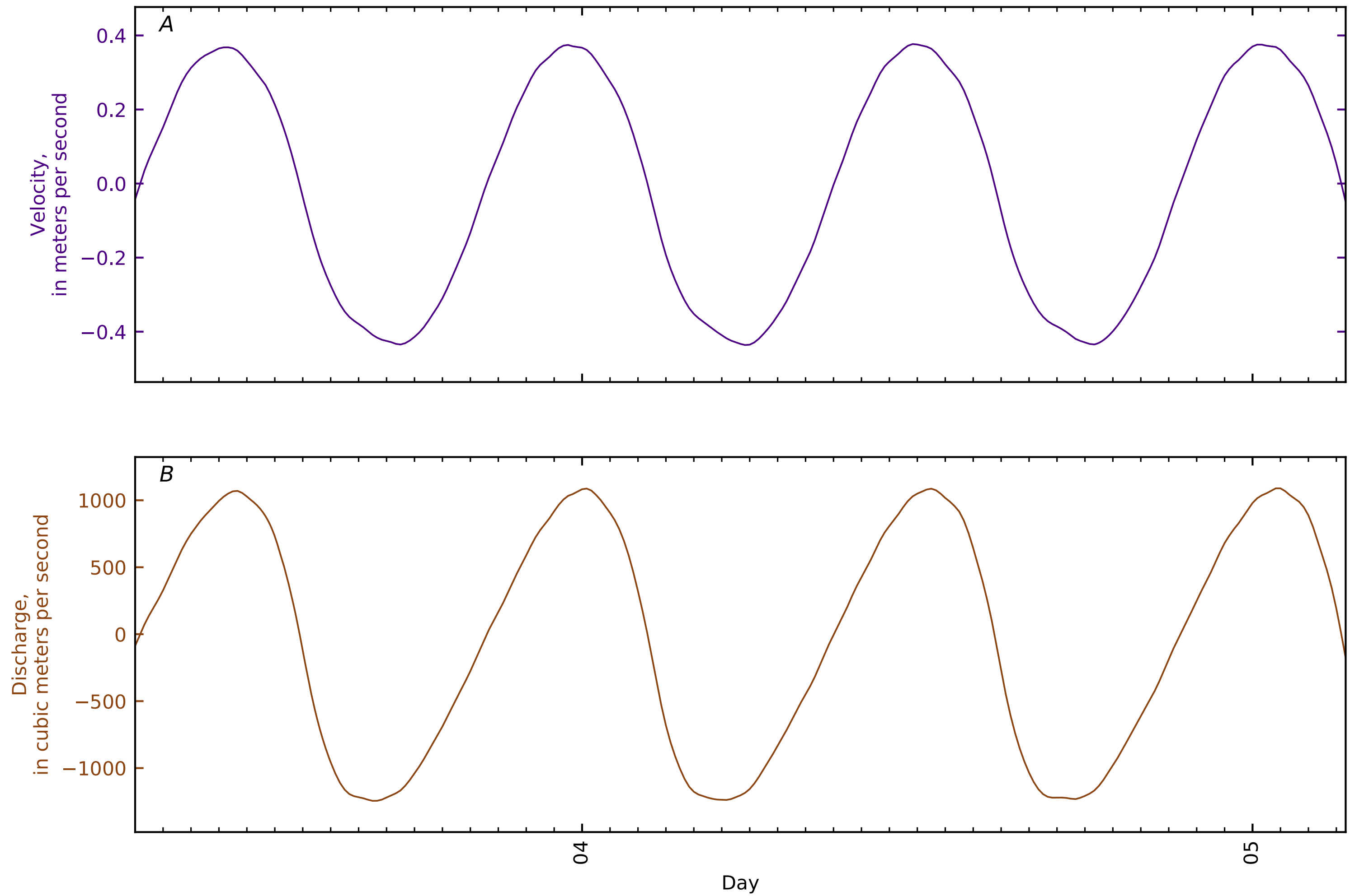

Figure B3-355. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 34, East Ch KM2 d/s Orland Riv. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

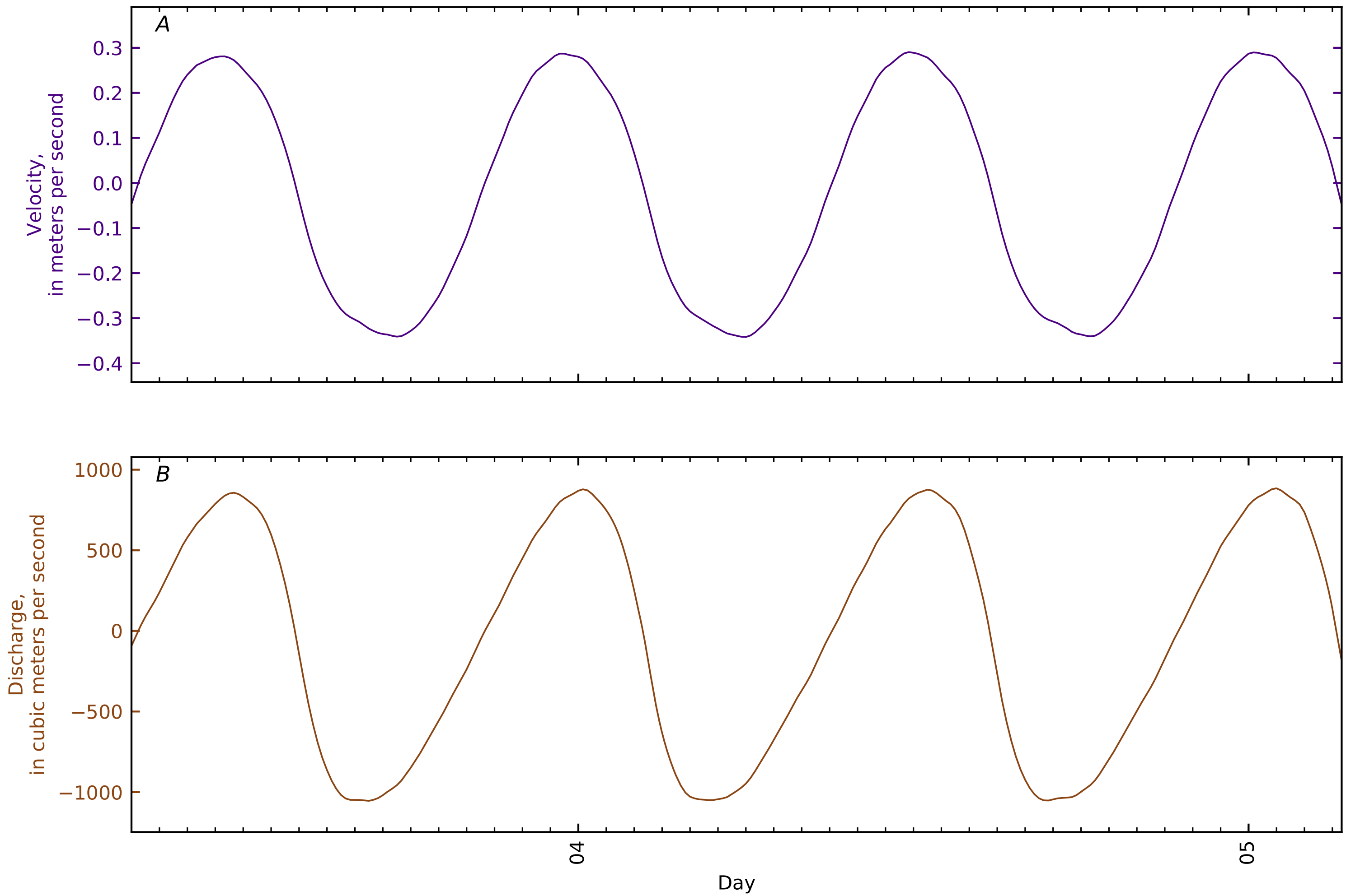

Figure B3-356. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 35, East Ch KM4 d/s Orland Riv. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

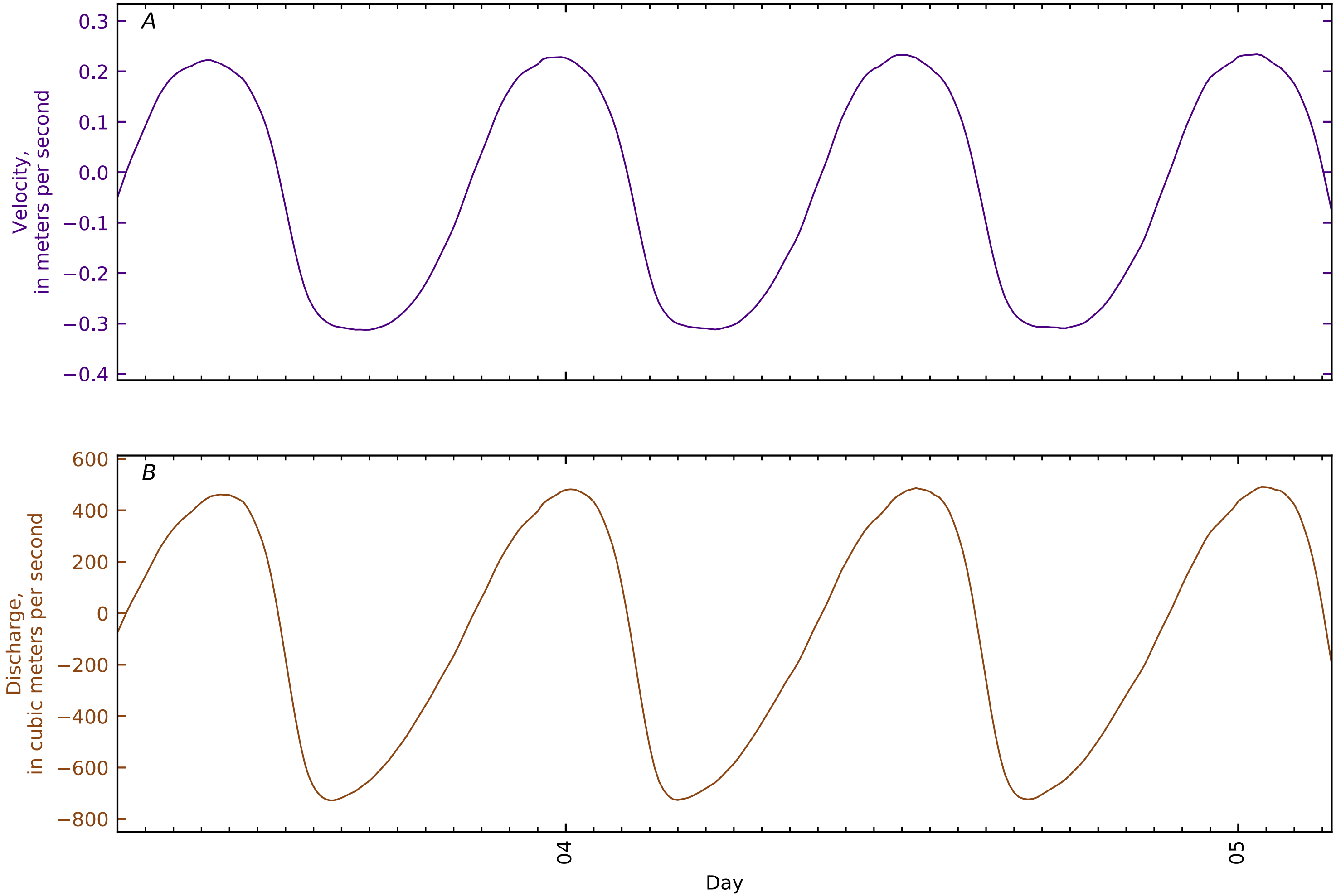

Figure B3-357. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 36, East Ch KM5 u/s Orland Riv. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

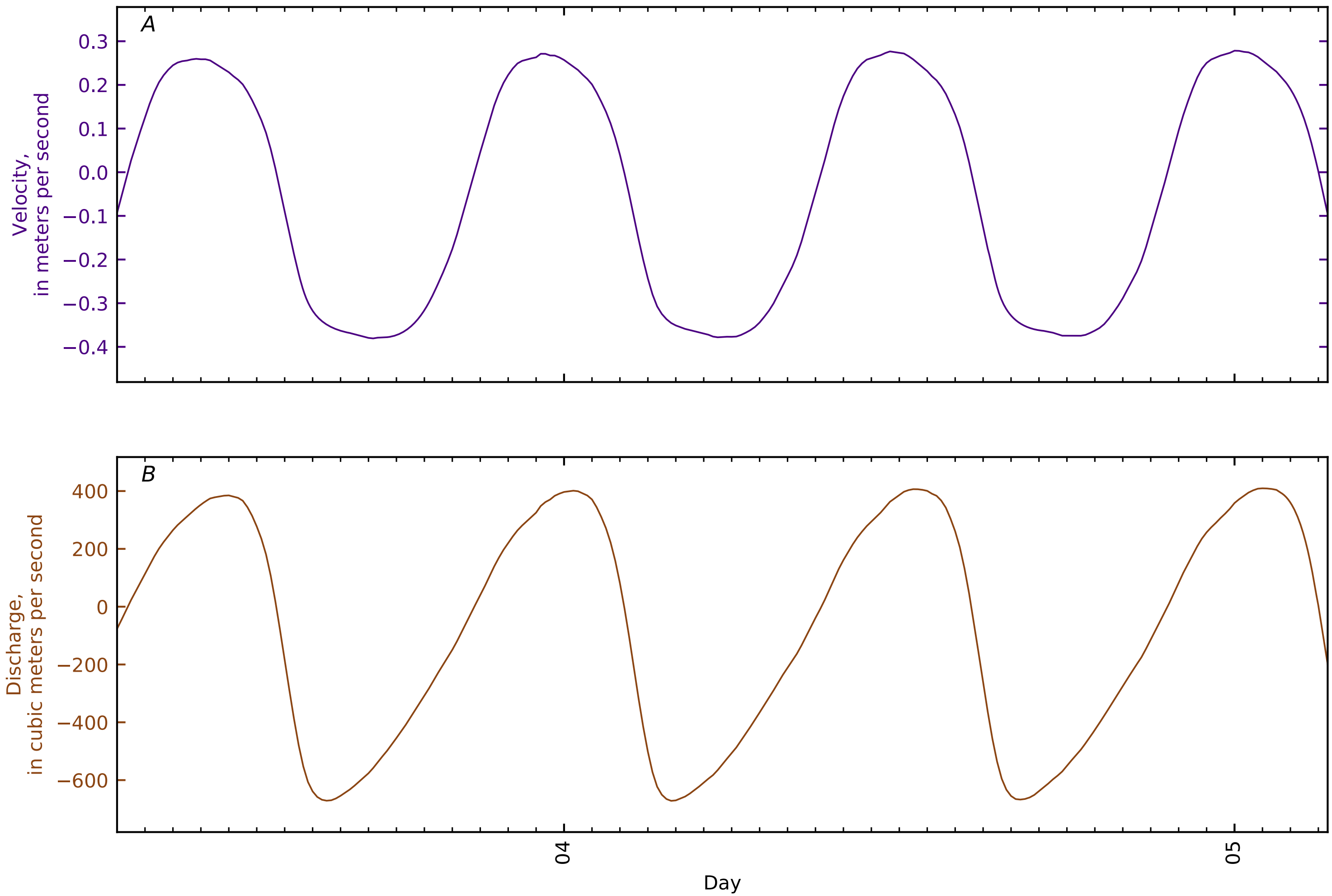

Figure B3-358. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 37, East Ch KM6 u/s Orland Riv d/s flats. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

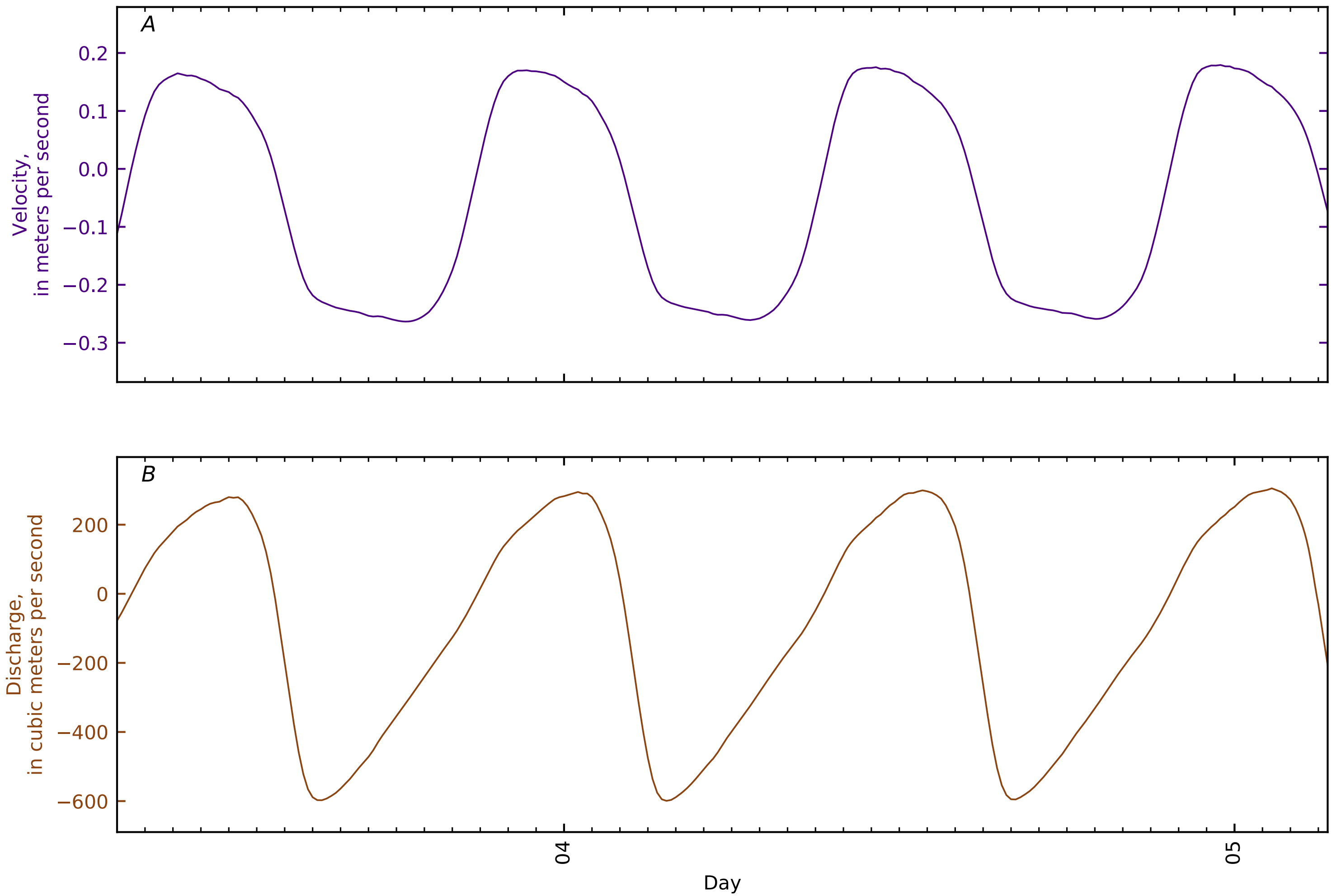

Figure B3-359. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 38, East Ch KM7 d/s Porcupine Is at flats. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

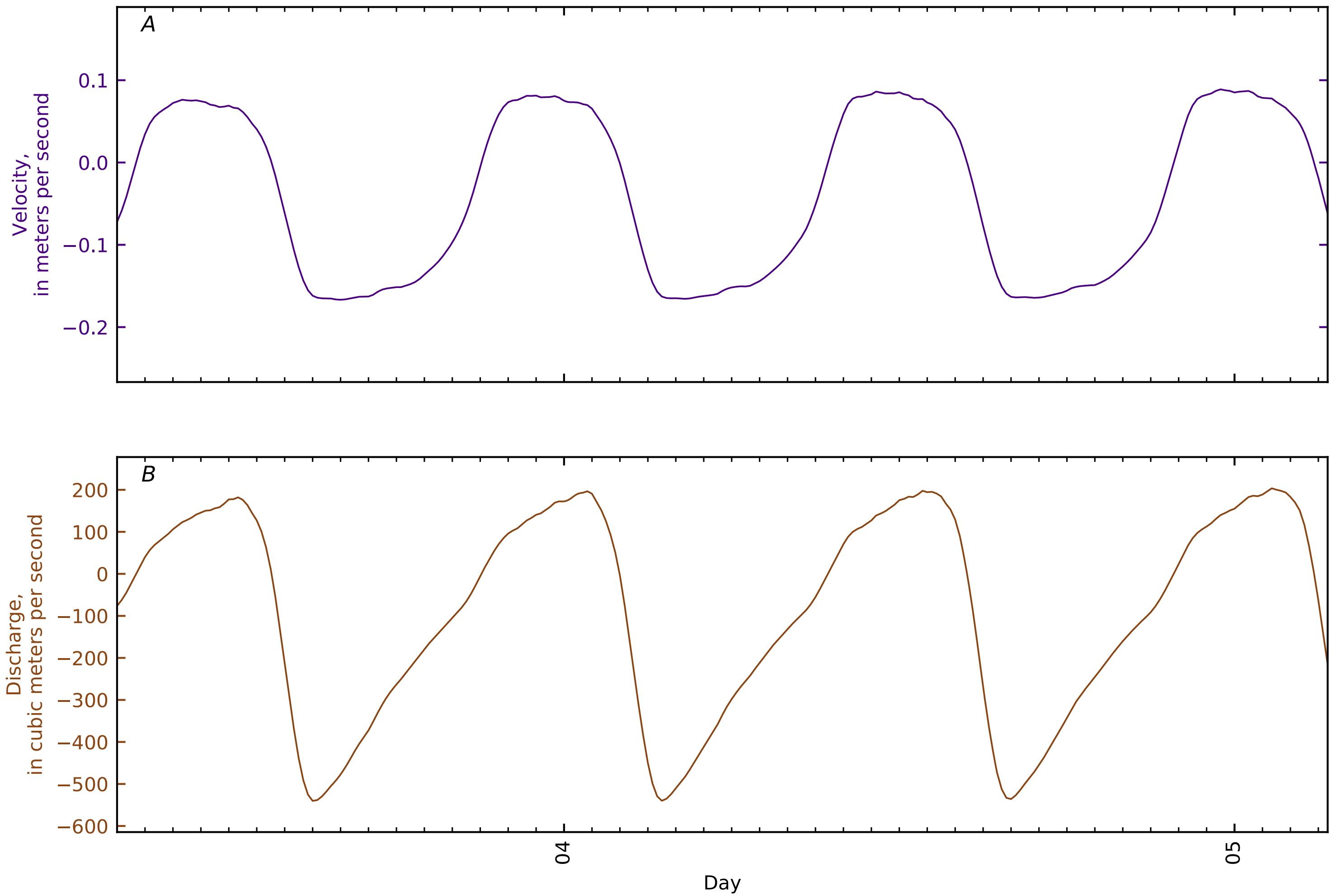

Figure B3-360. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 39, East Ch KM8 u/s flats. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

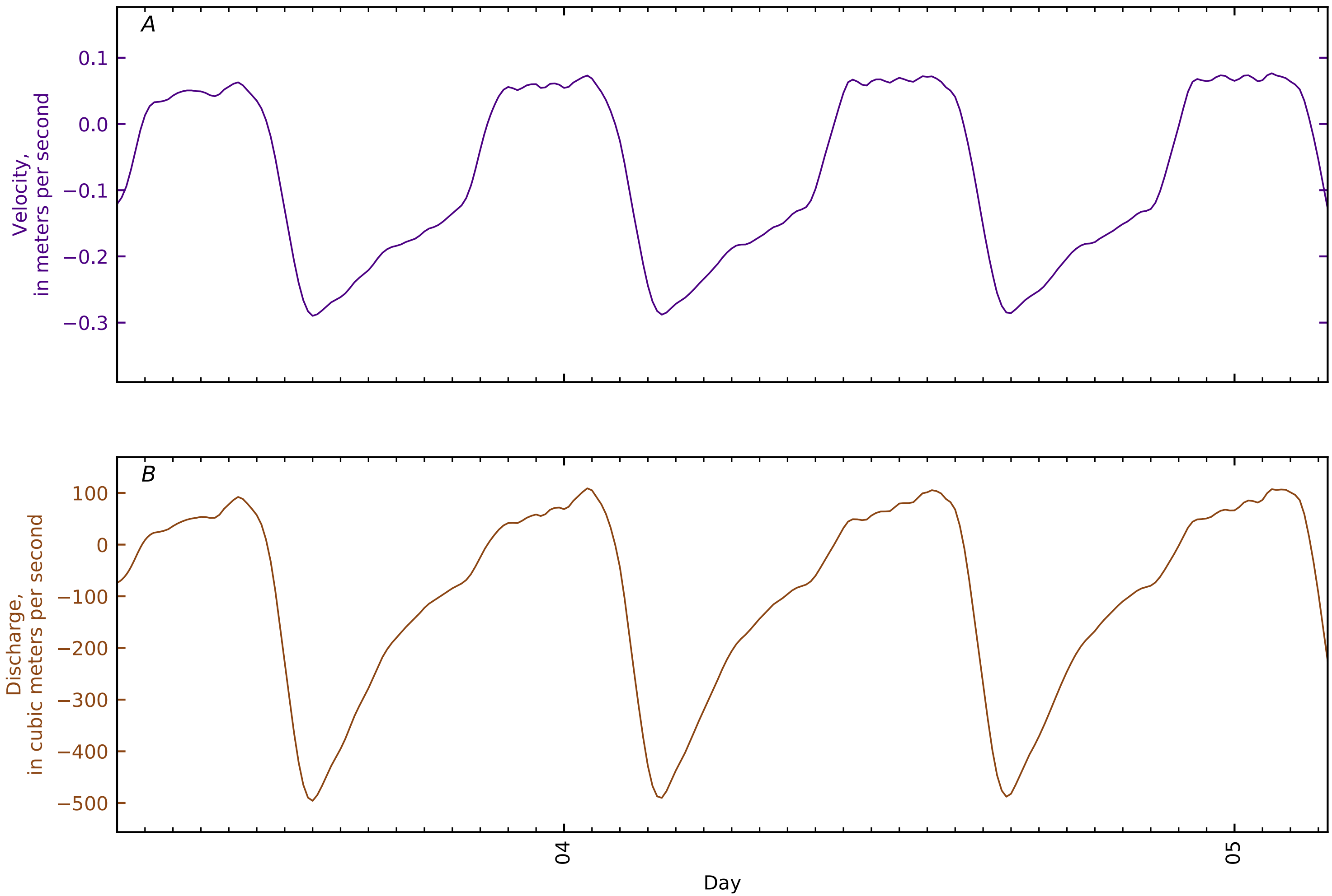

Figure B3-361. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 40, East Ch KM9 north part. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

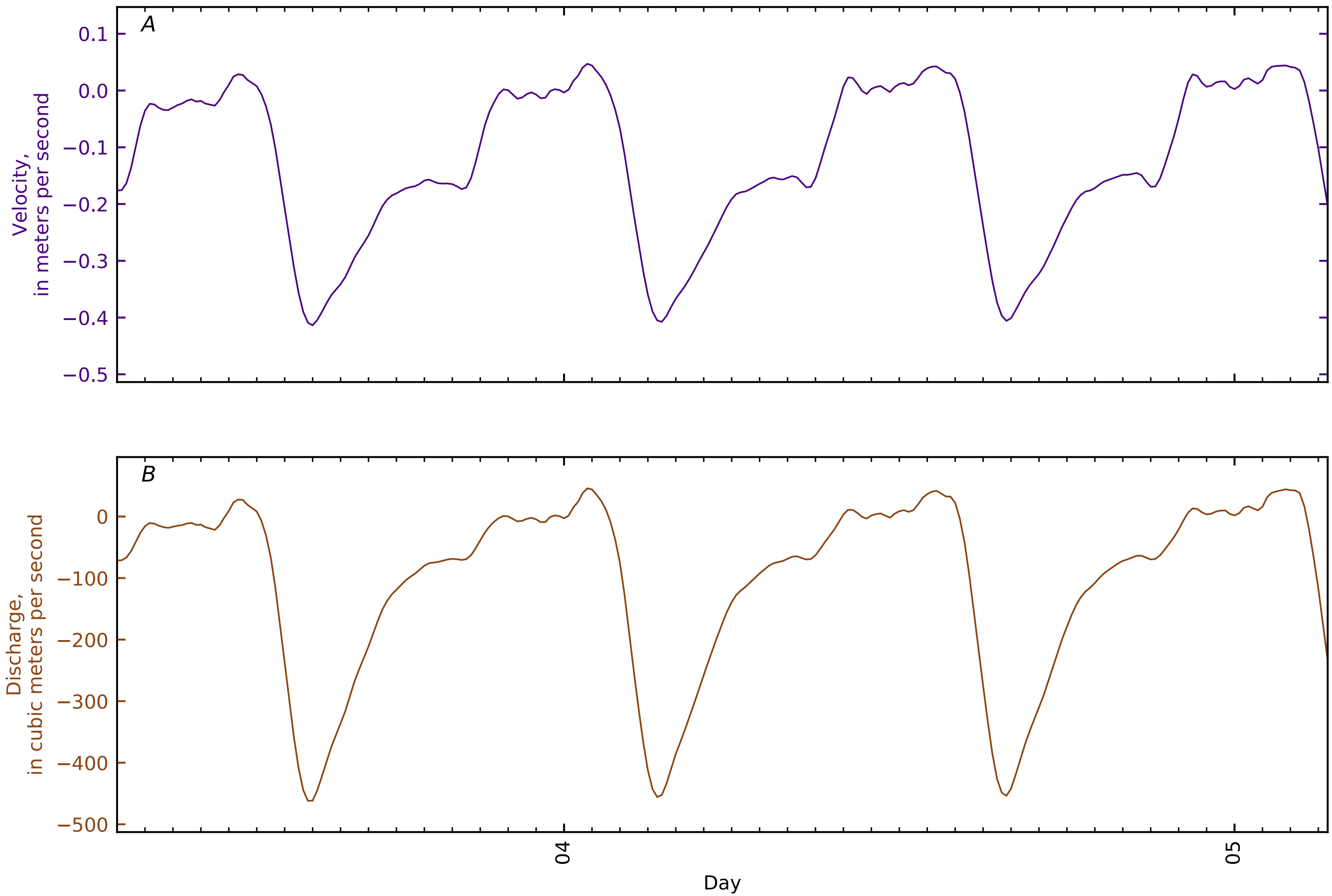

Figure B3-362. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 41, East Channel KM10 GS 443409068471801 at Bucksport d/s conf Silv. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

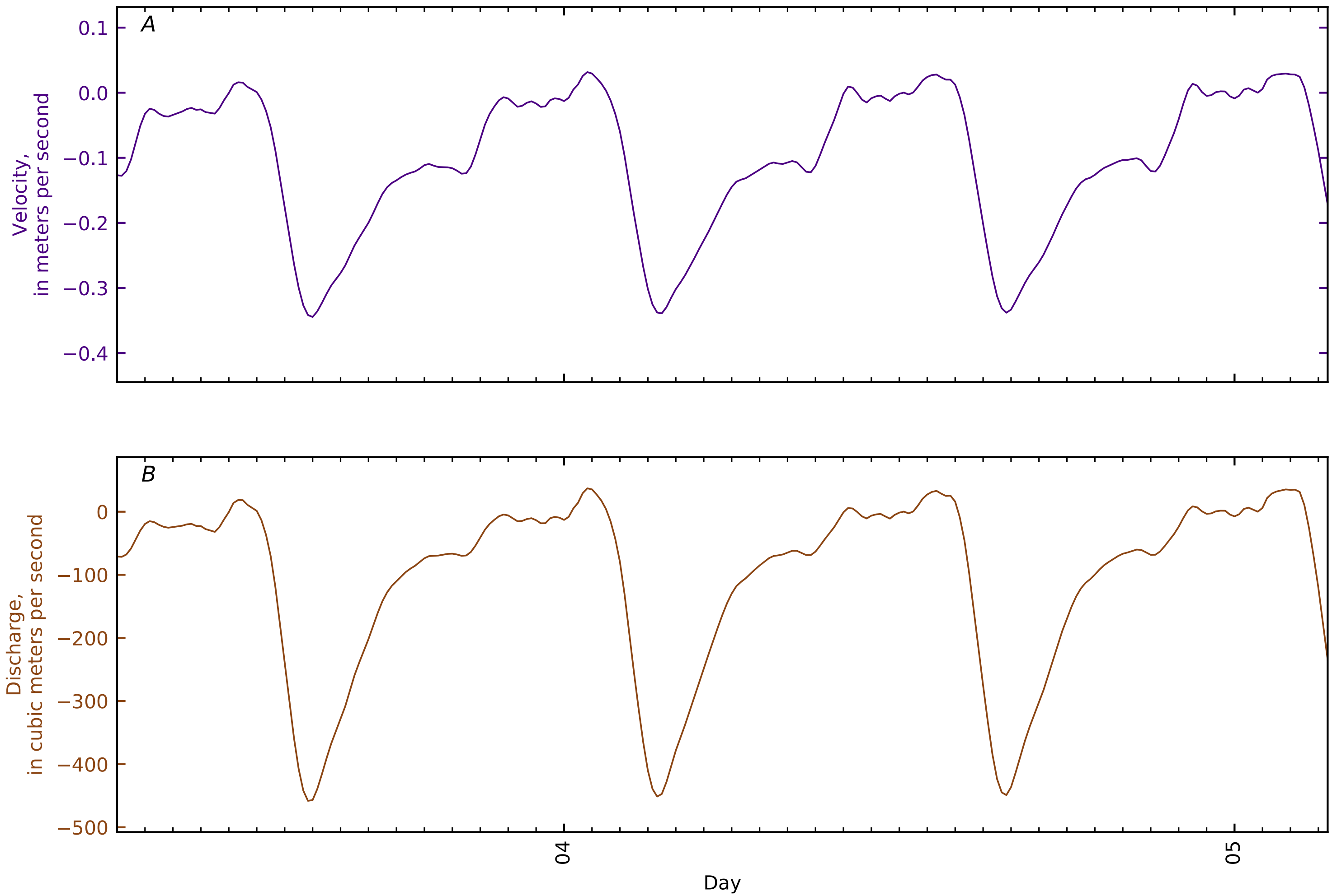

Figure B3-363. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 42, East Ch KM10.2 Bucksport u/s conf Silver Lake discharge. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

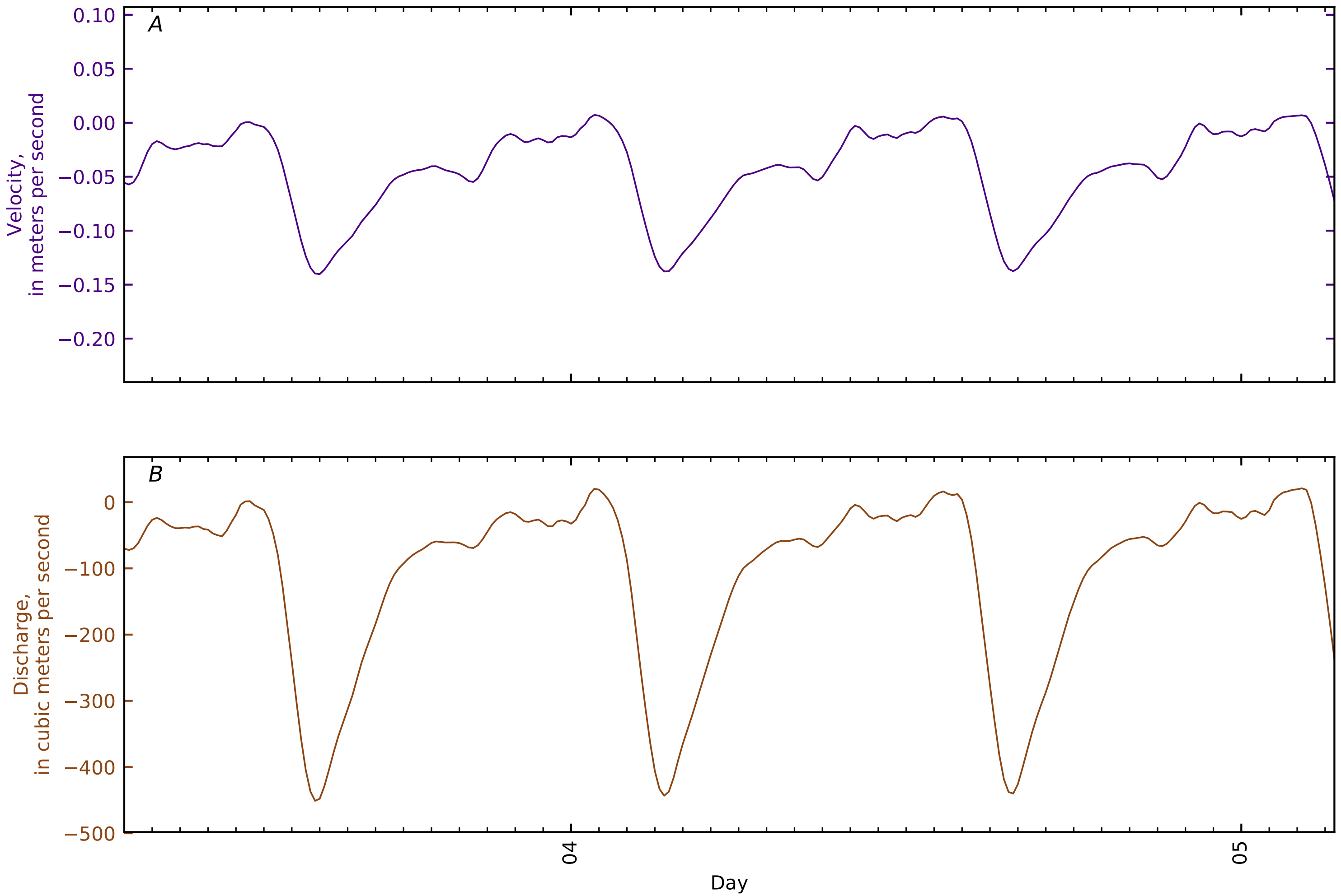

Figure B3-364. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 43, East Ch KM10.5 at Penob River split. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

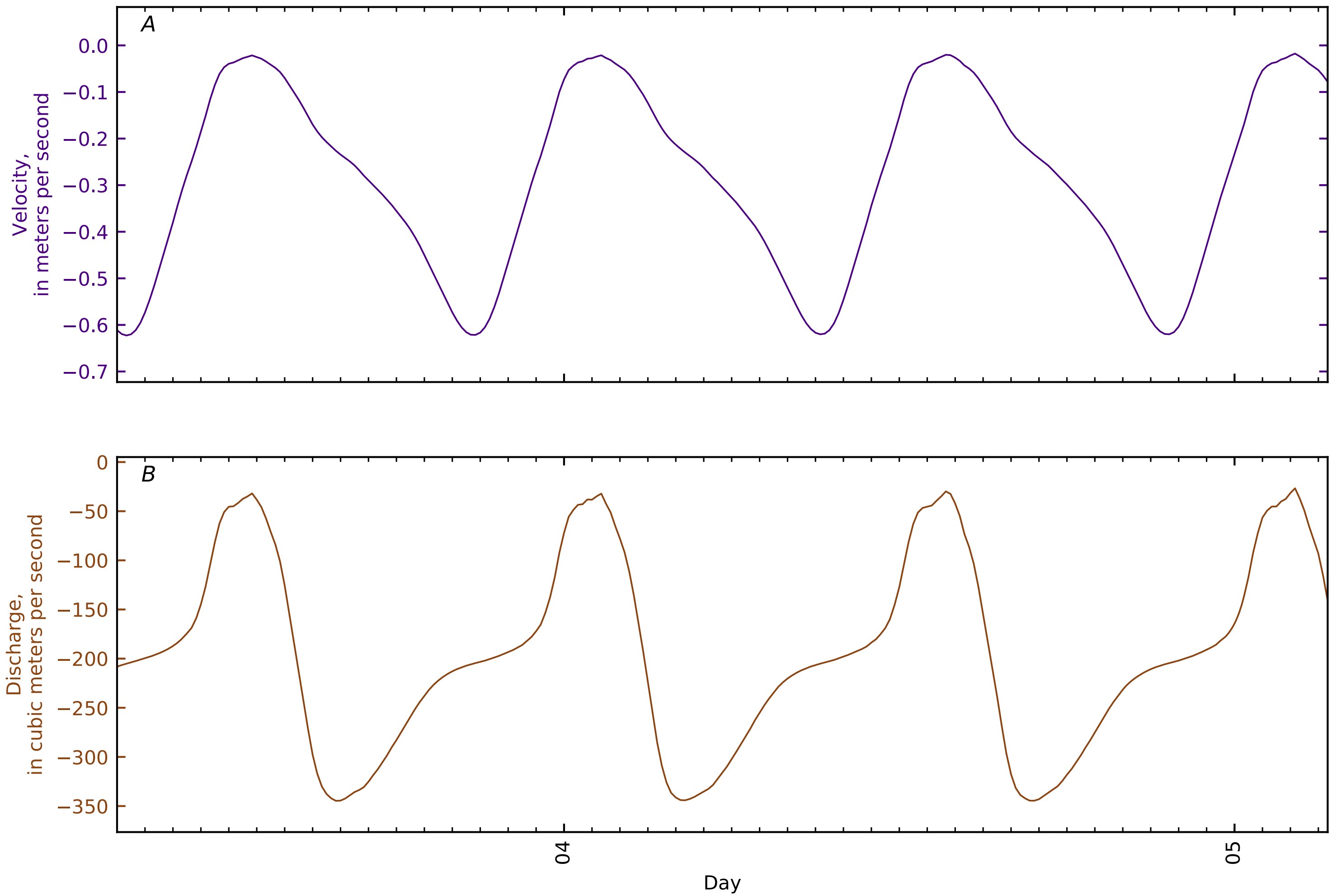

Figure B3-365. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 44, Mendall Marsh KM0.4 at Penob Riv KM17.3 GS Trnsct2. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

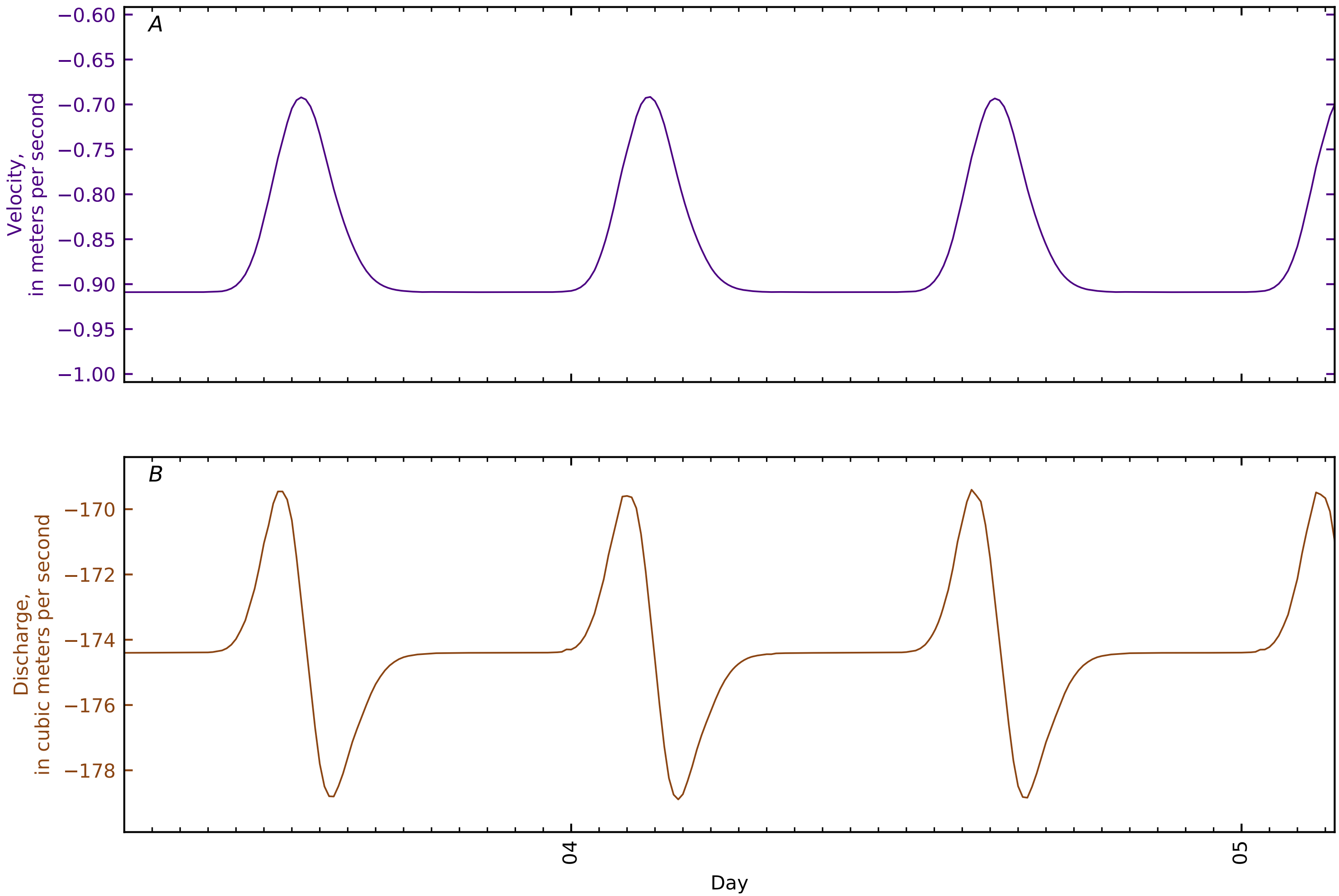

Figure B3-366. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 45, Mendall Marsh KM1 conf North Branch Marsh Riv. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

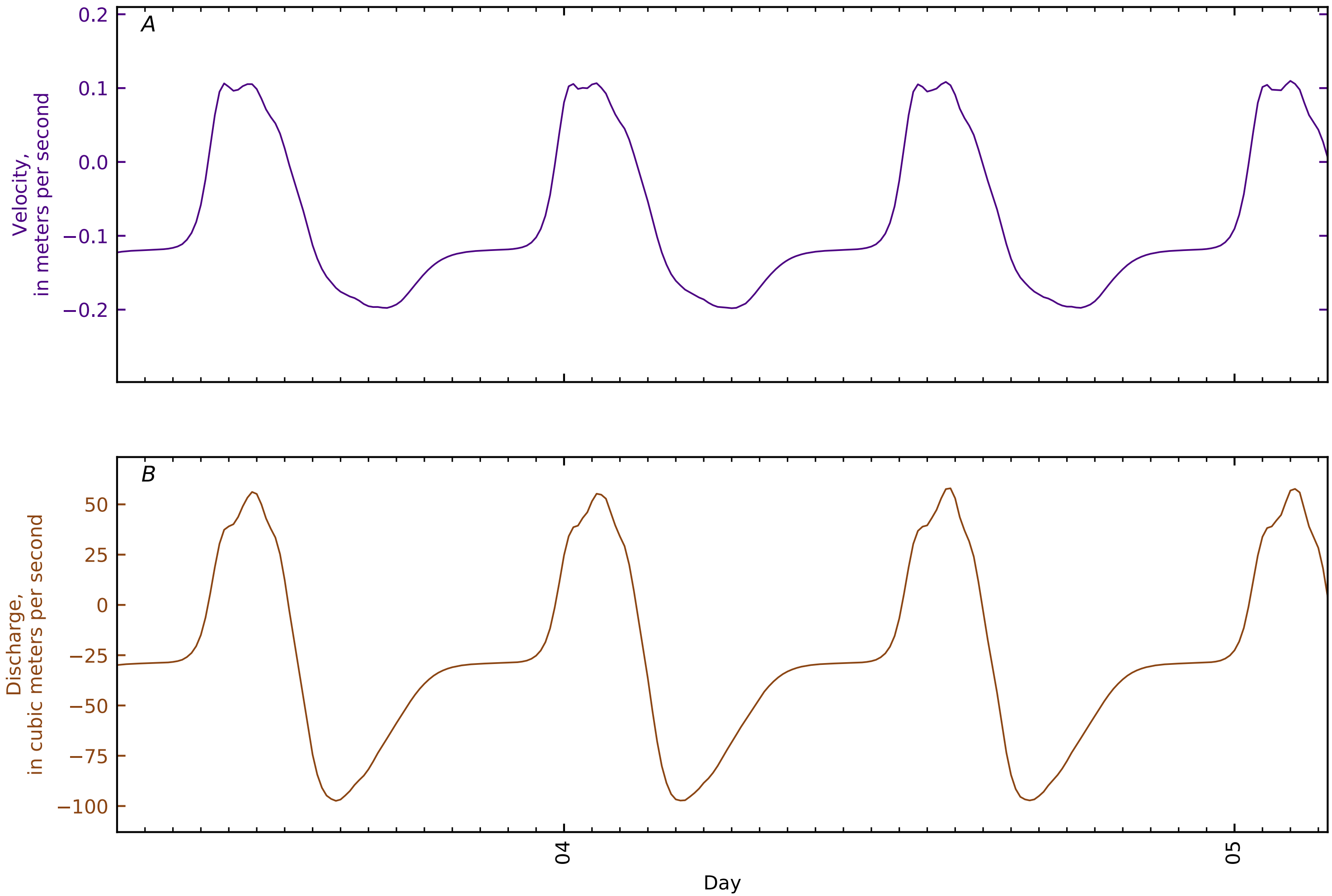

Figure B3-367. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 46, Mendall Marsh KM1.7 at boat launch. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

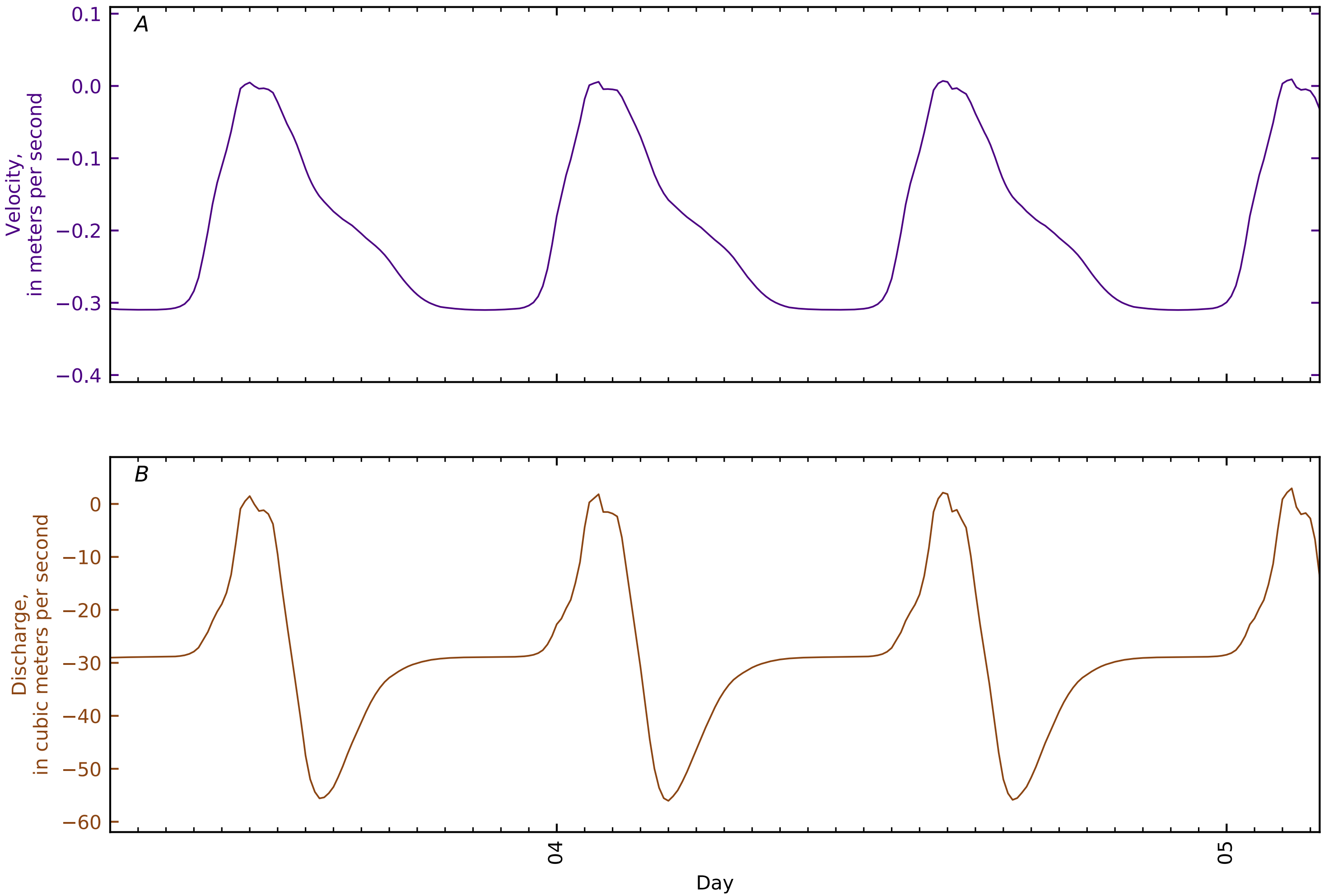

Figure B3-368. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 47, Mendall Marsh KM3 nr Misquito Mtn. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

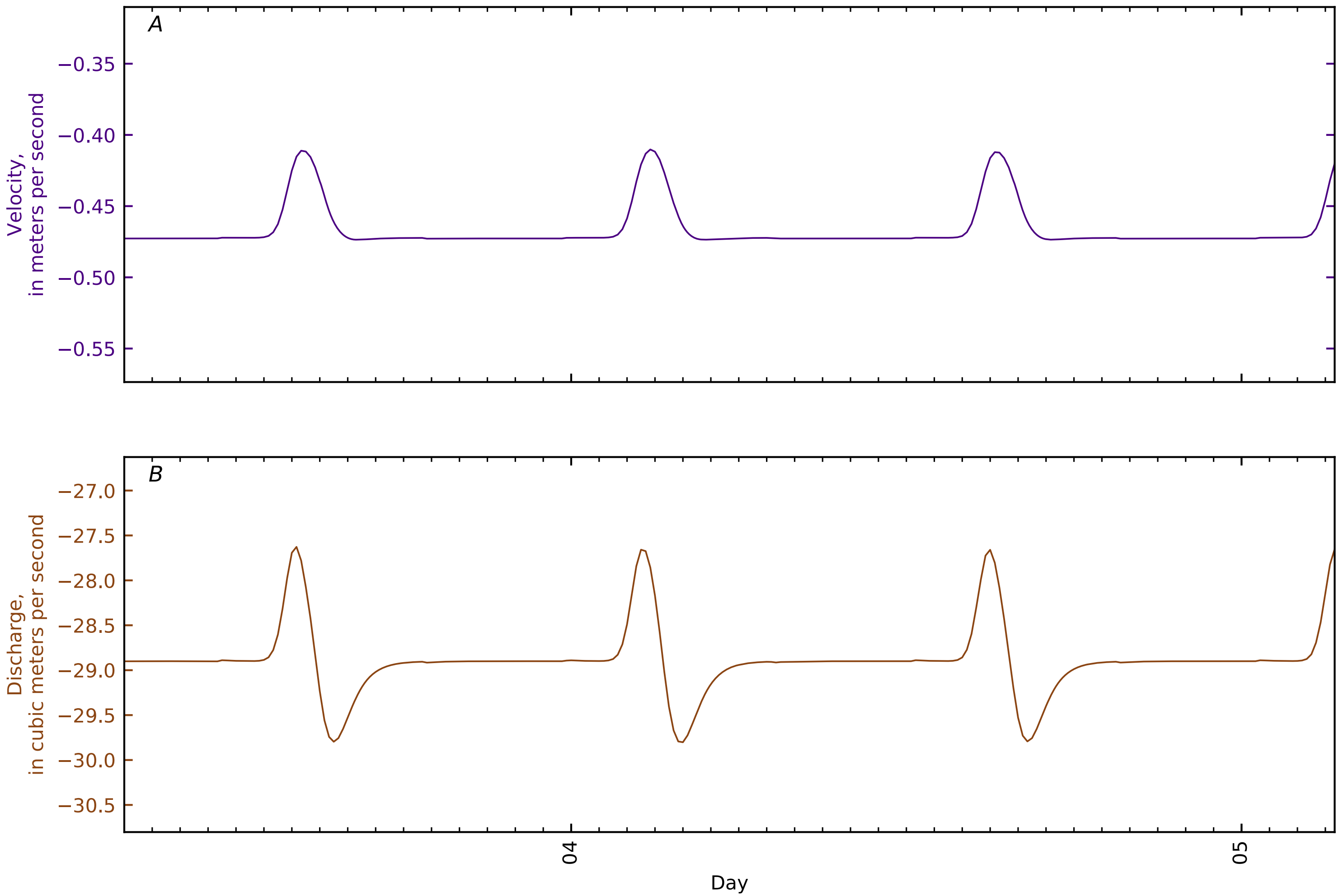

Figure B3-369. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 48, Mendall Marsh KM4.6. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

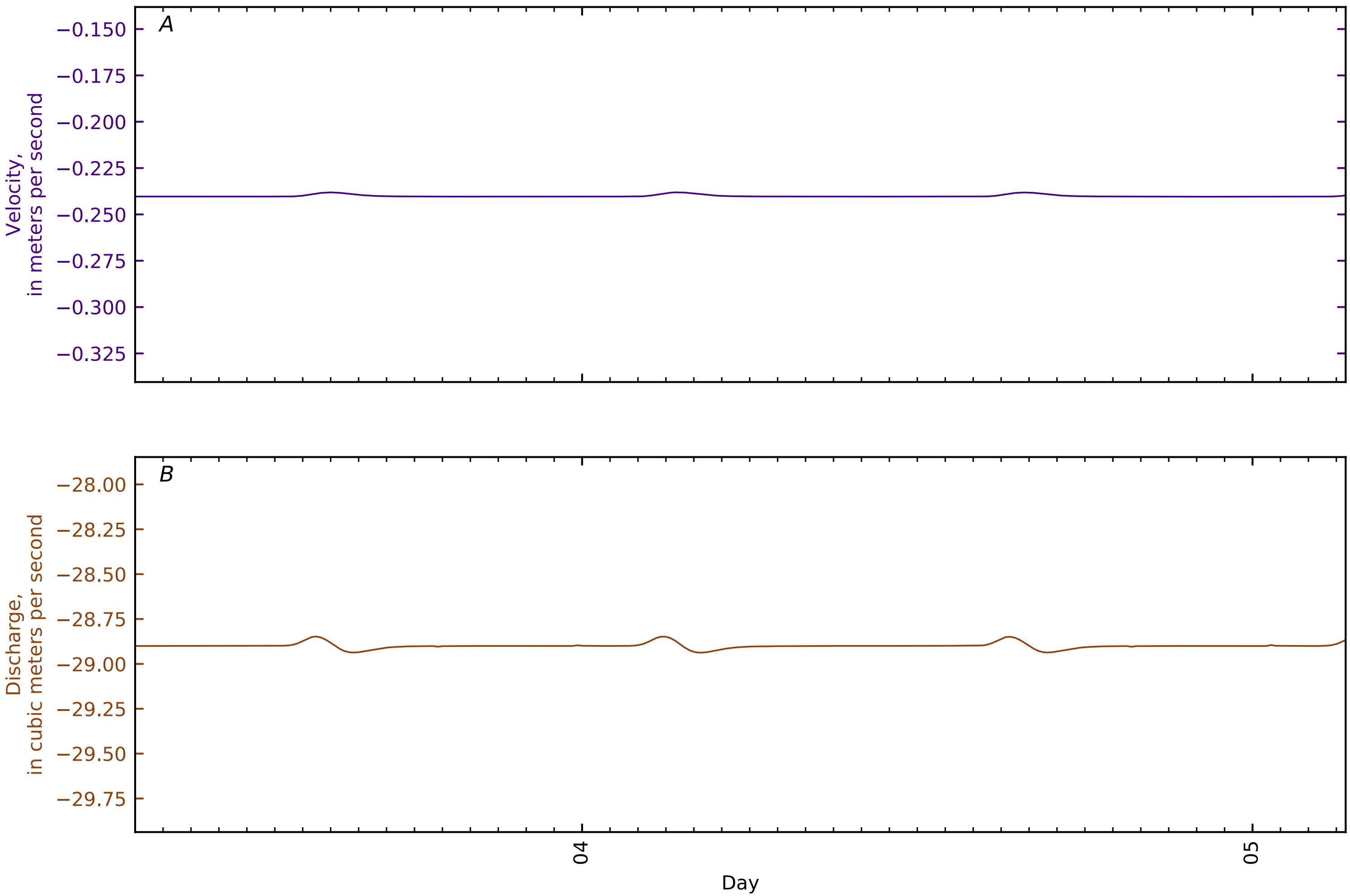

Figure B3-370. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 49, Mendall Marsh KM5.7 nr conf Colson Str. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

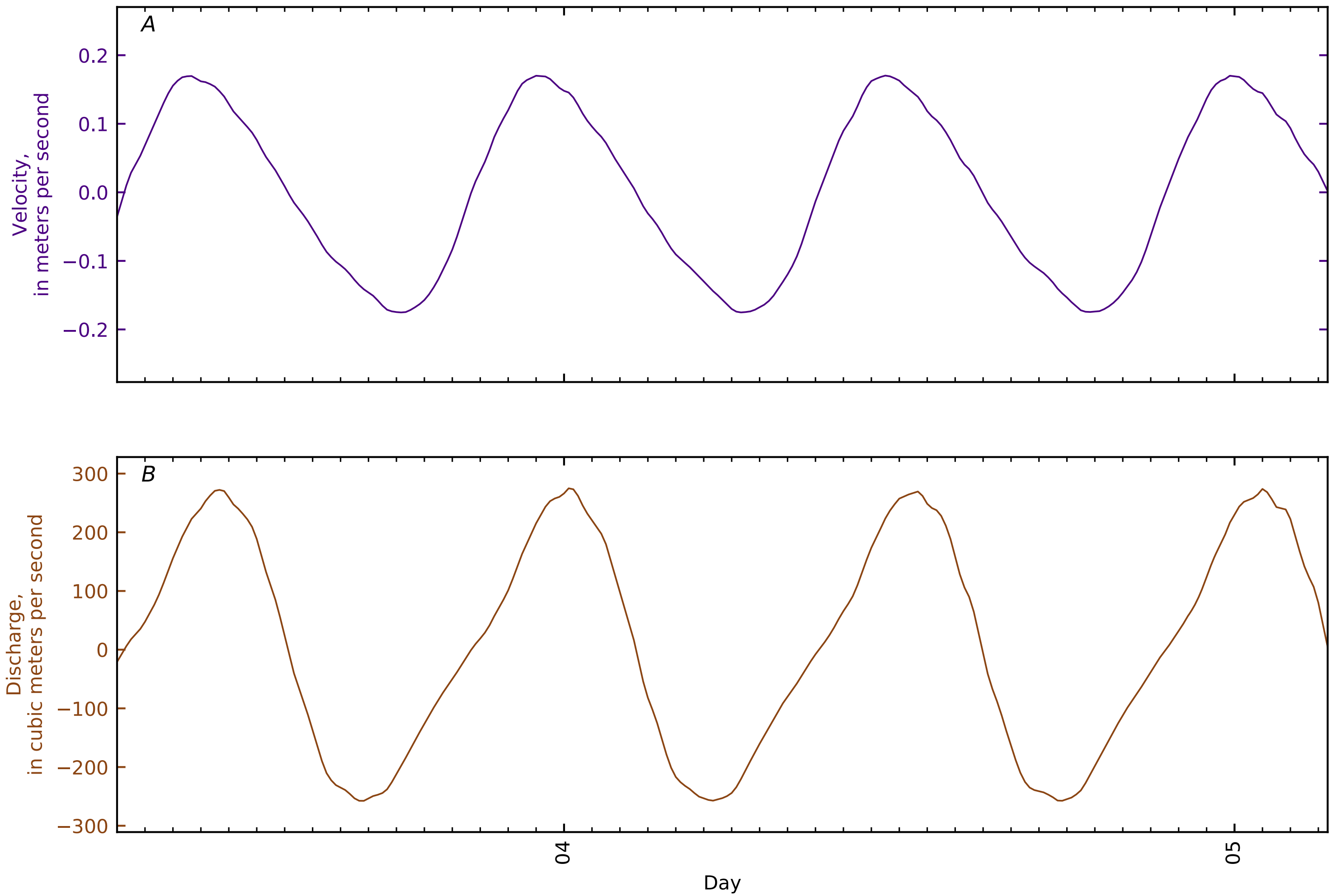

Figure B3-371. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 50, Orland Riv KM0 conf East Ch. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

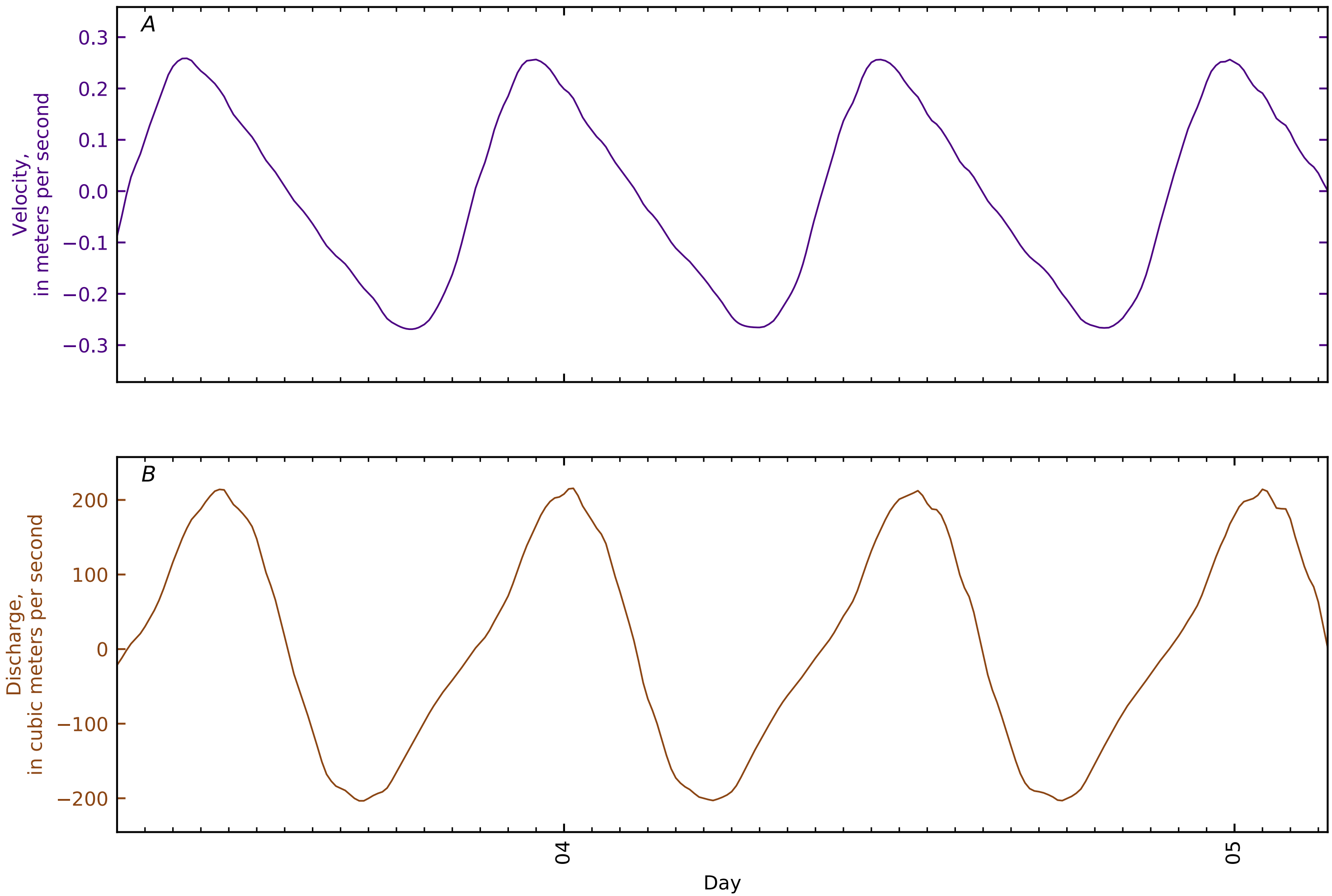

Figure B3-372. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 51, Orland Riv KM0.5. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

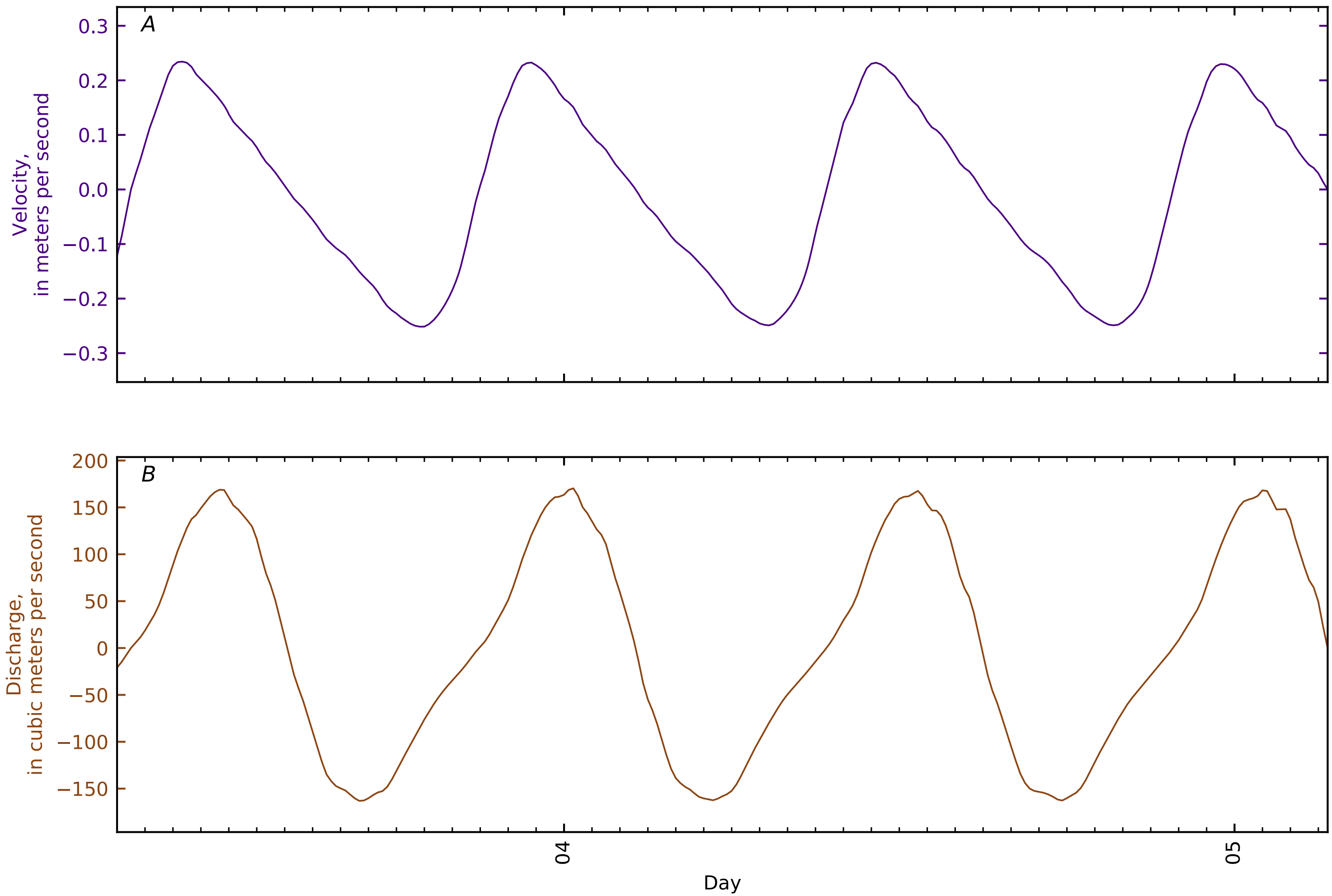

Figure B3-373. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 52, Orland Riv KM1. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

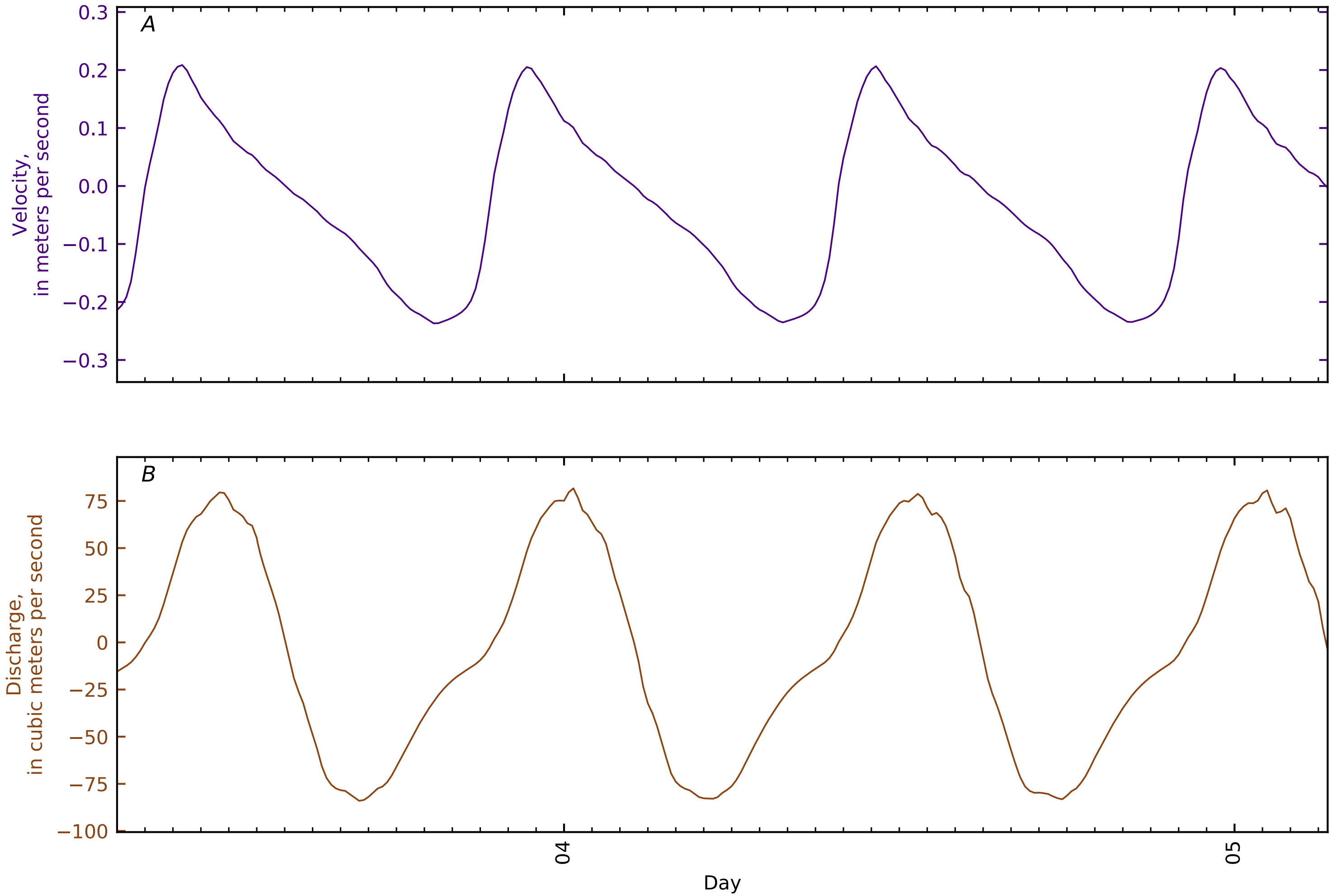

Figure B3-374. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 53, Orland Riv KM2. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

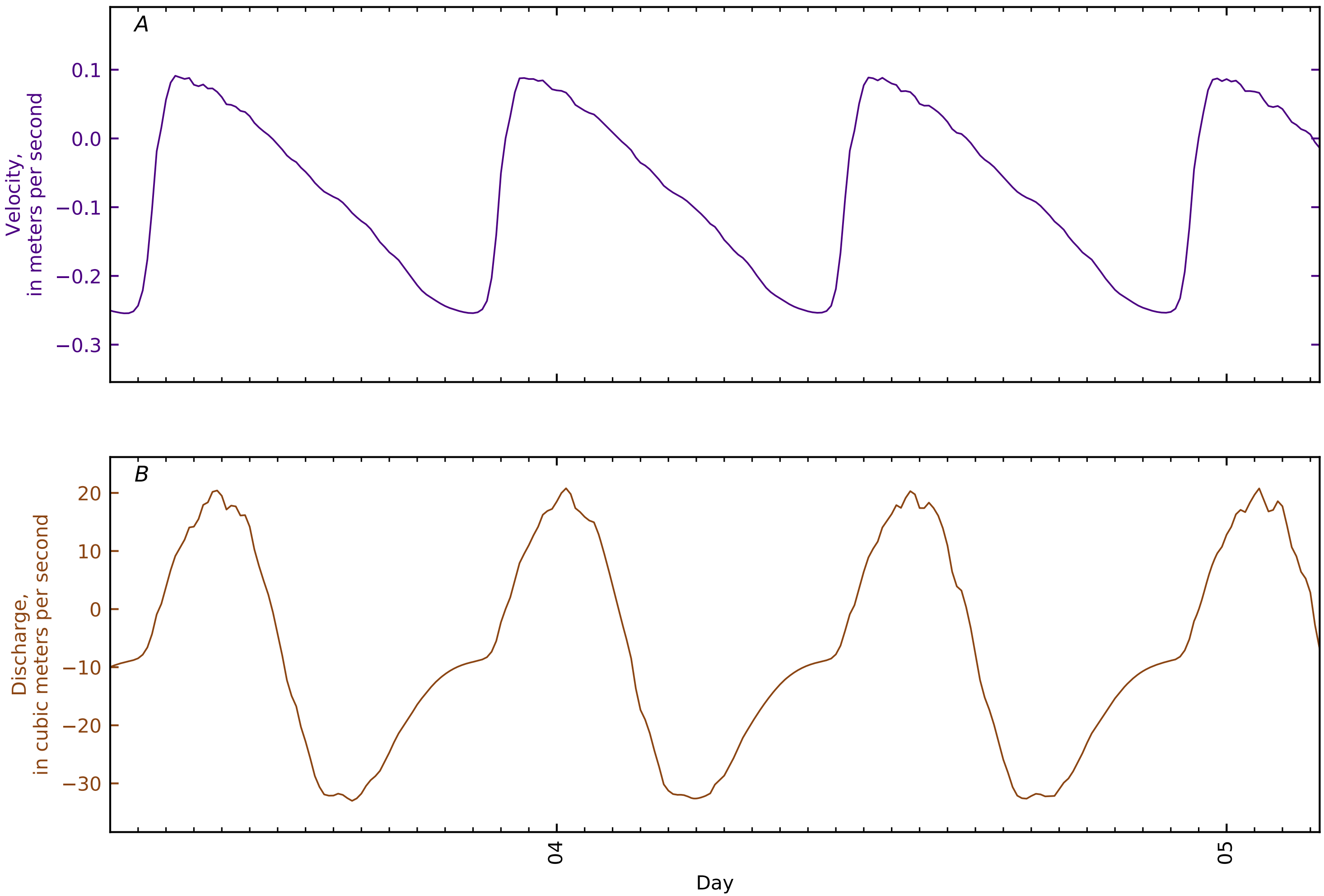

Figure B3-375. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 54, Orland Riv KM3. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

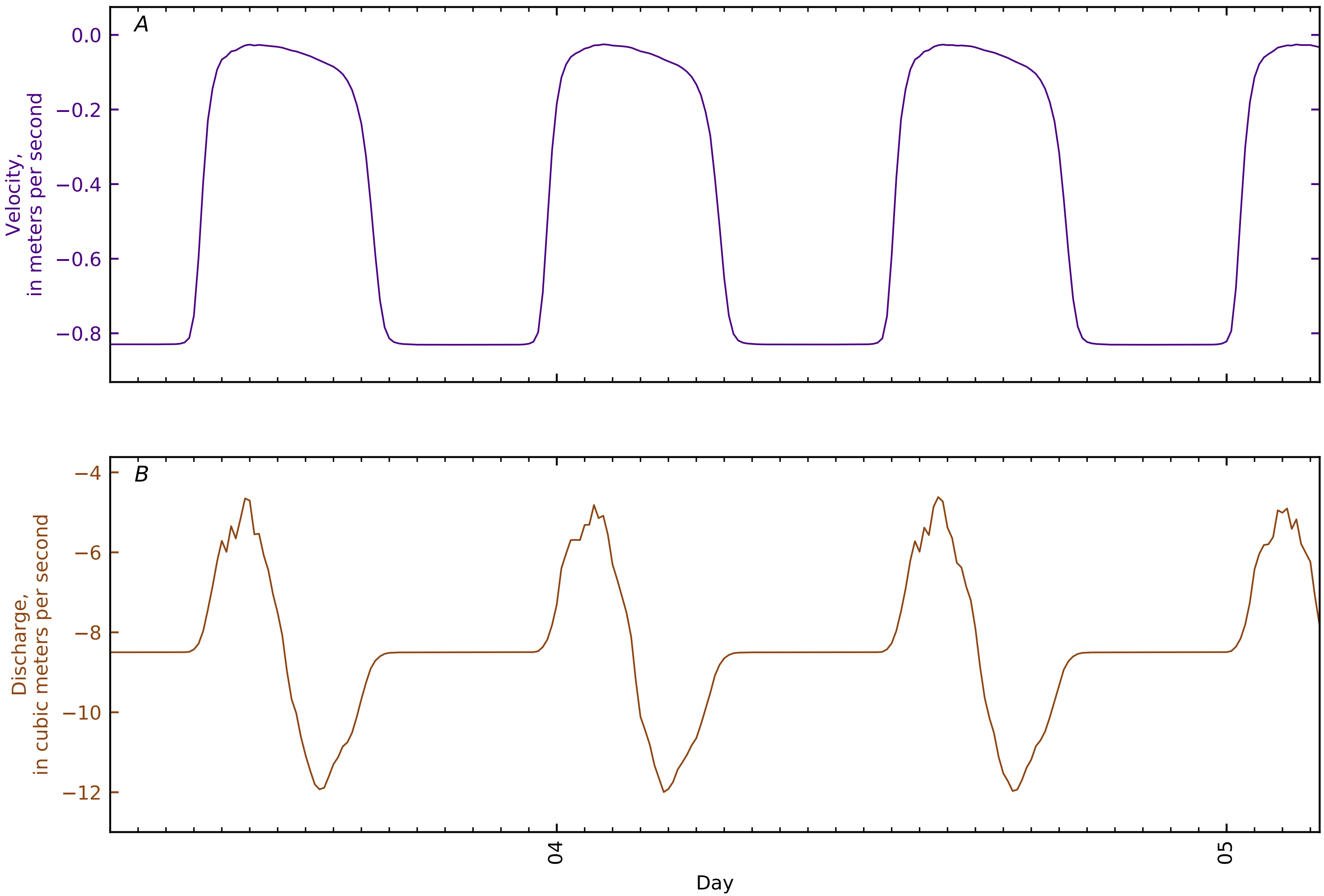

Figure B3-376. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 55, Orland Riv KM3.7 d/s Orland Dam. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

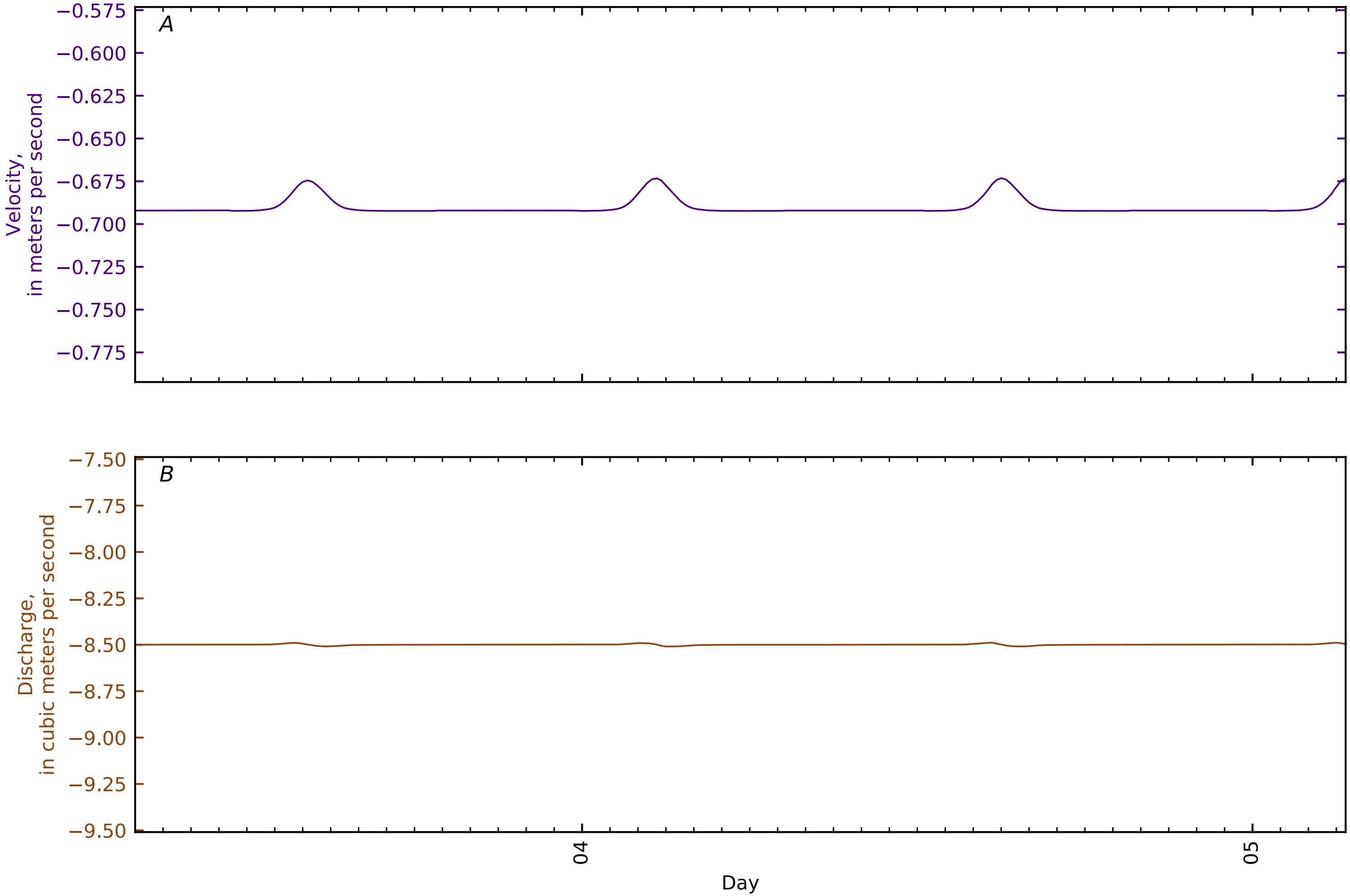

Figure B3-377. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 56, Orland Riv KM3.9 at Orland Dam. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

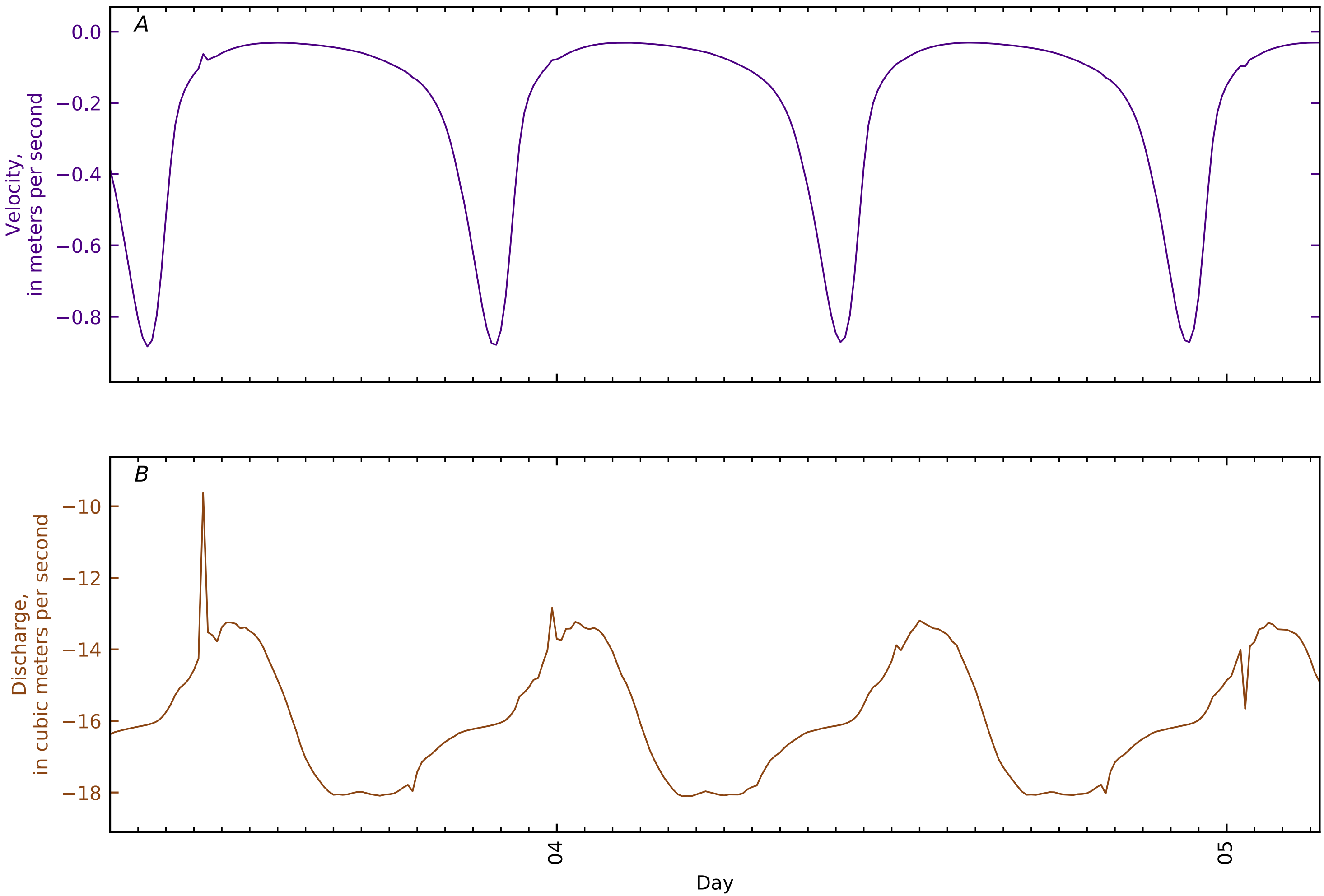

Figure B3-378. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 57, Kenduskeag Str conf Penob Riv KM43.3 Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

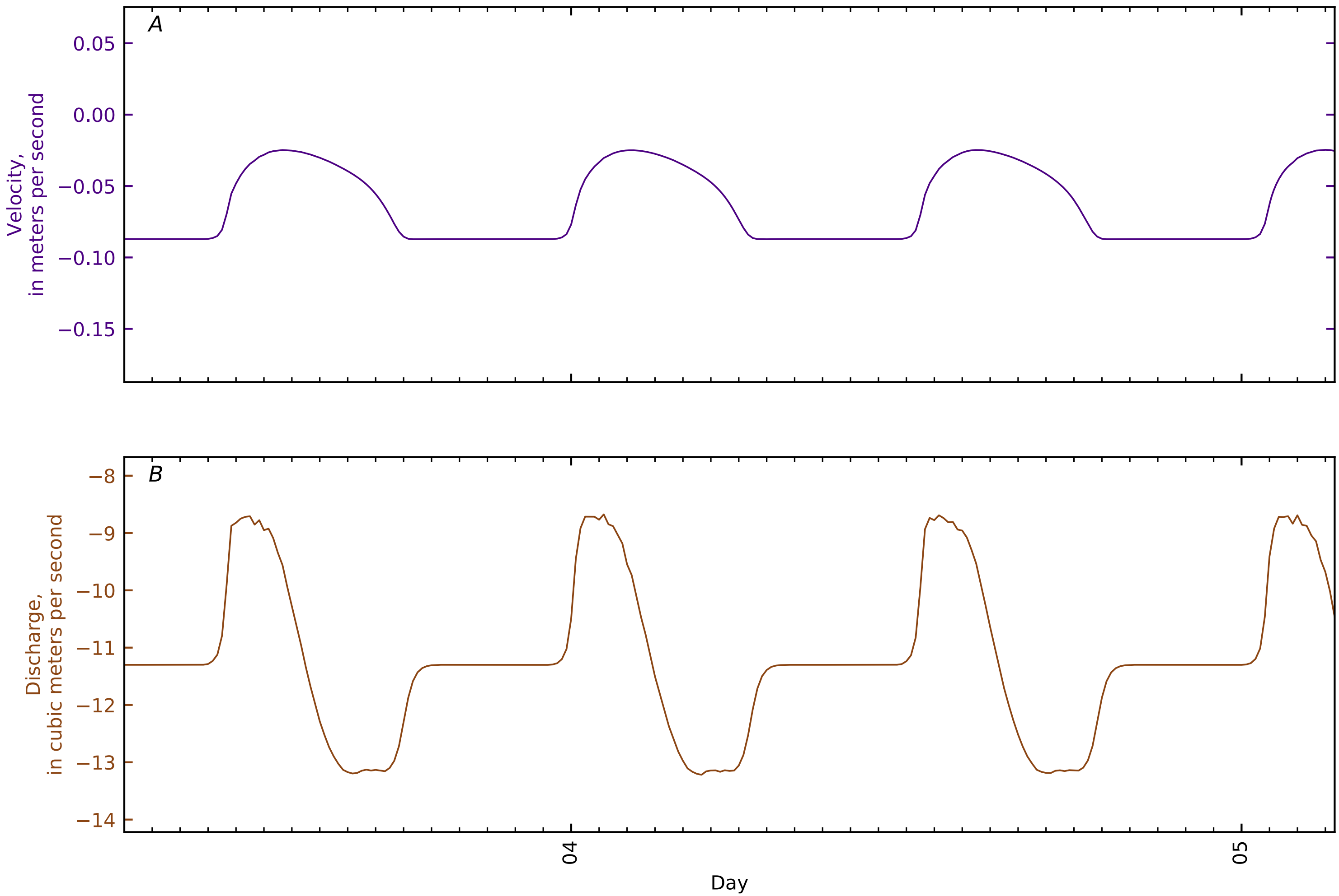

Figure B3-379. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 58, Souadabscook Str conf Penob Riv KM35.3 Hampden. Flow forced by a two-percent annual-exceedance-probability flood in the watershed to Mendall Marsh.

APPENDIX B4

Episodic Riverine Event: Orland River

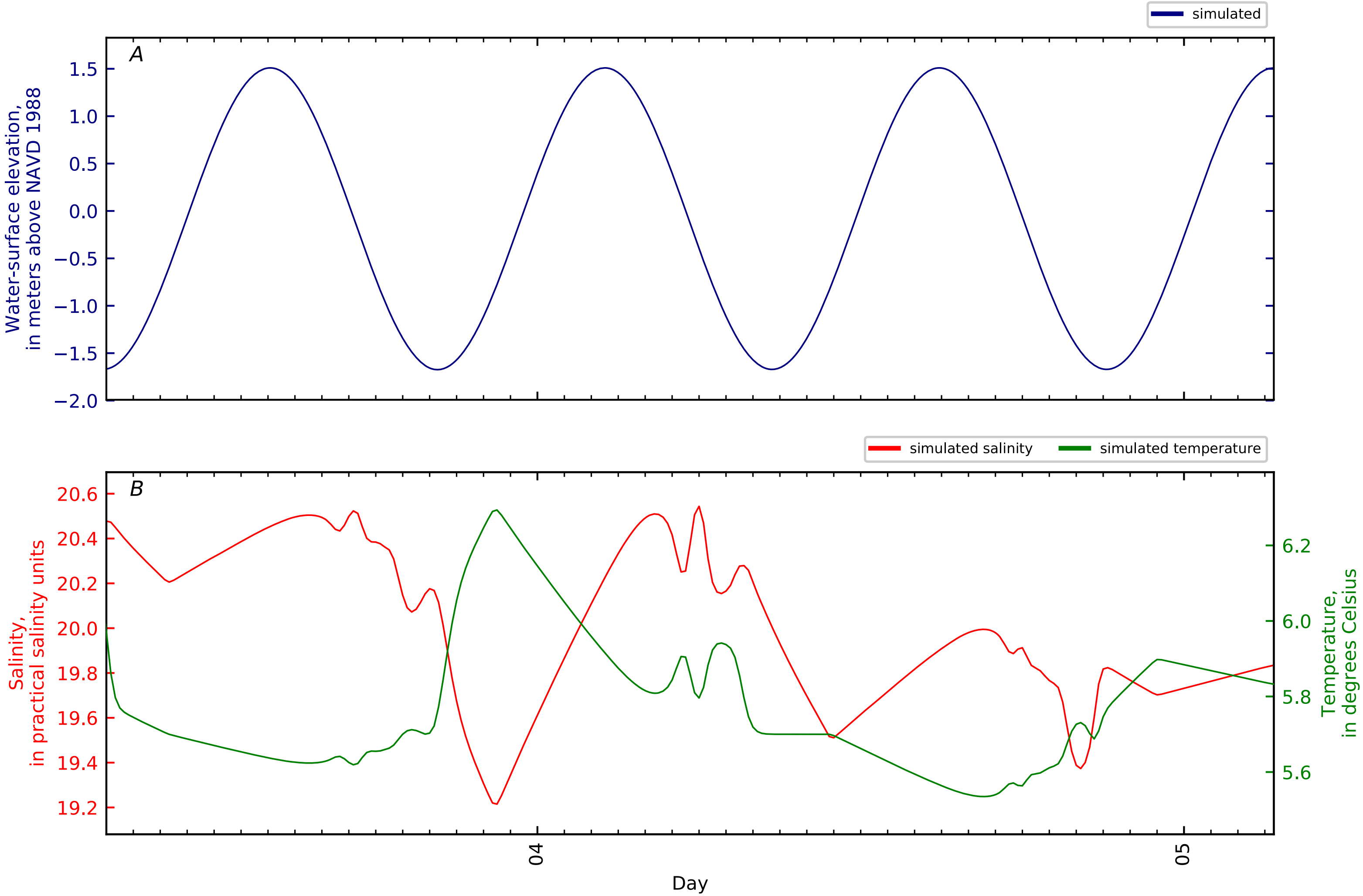

Figure B4-1. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 0, Penob Riv -KM5 nr Cape Jellison boundary. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

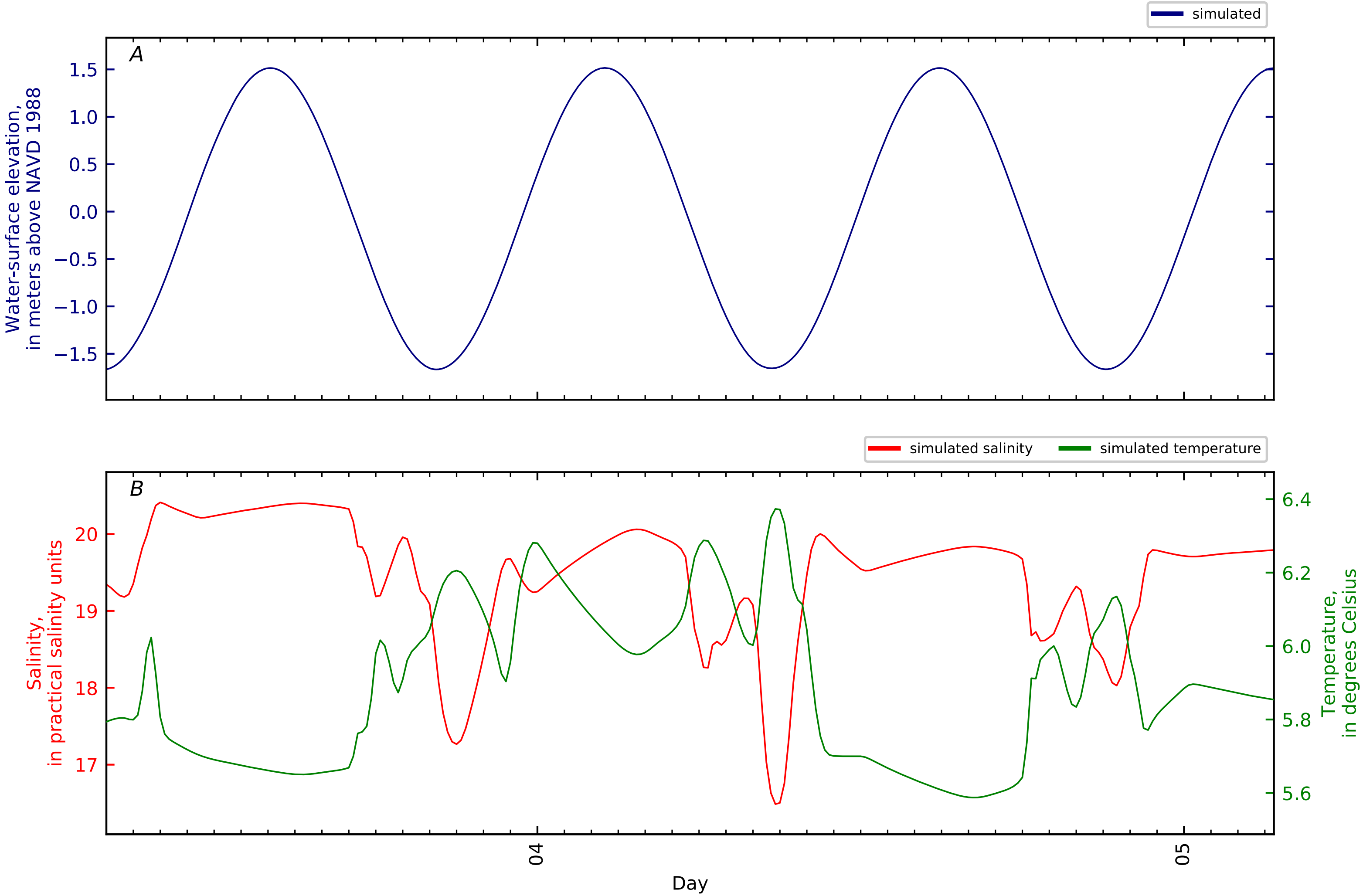

Figure B4-2. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 1, Penob Riv -KM4 nr Cape Jellison XS. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

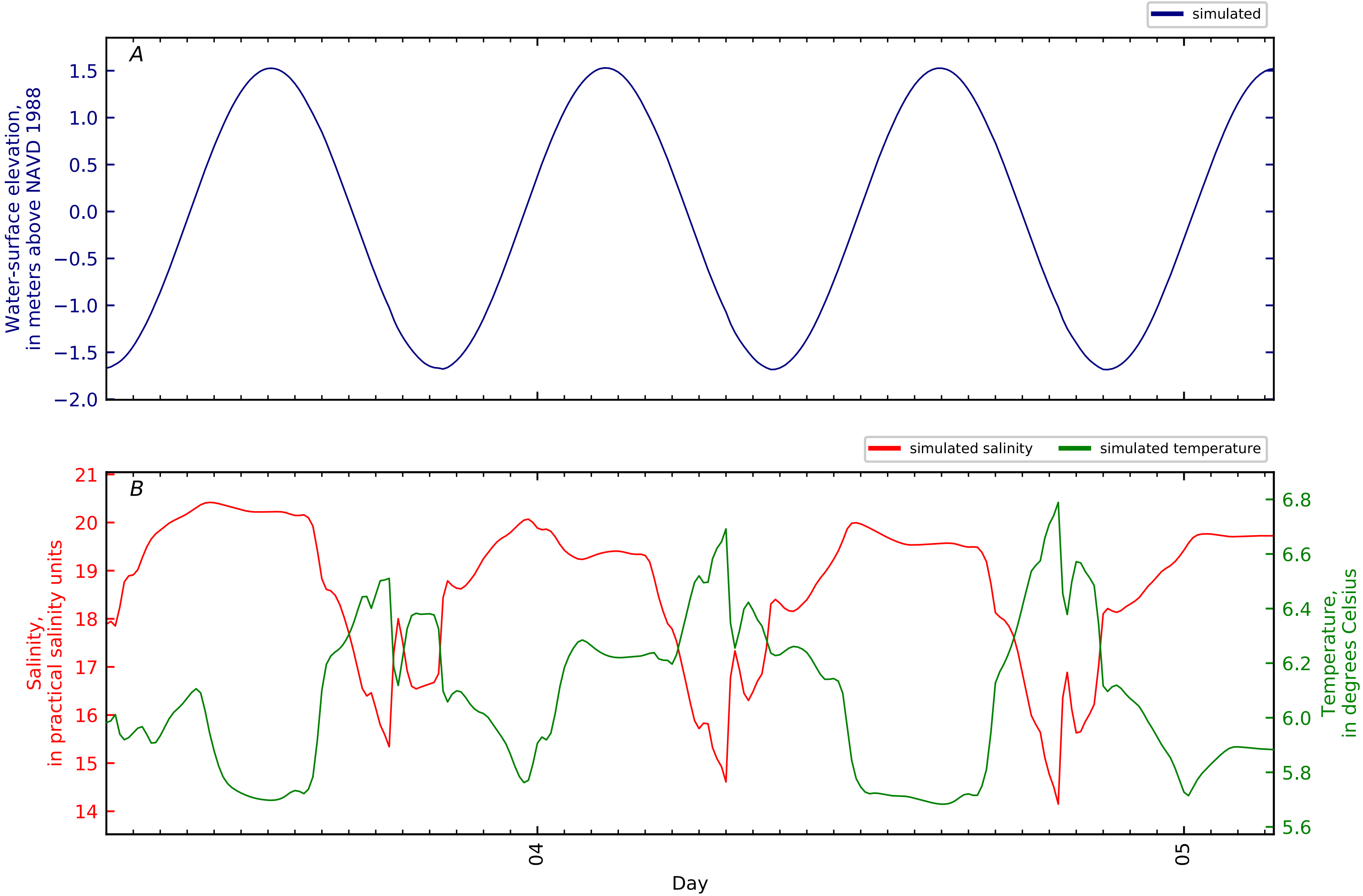

Figure B4-3. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 2, Penob Riv -KM1.5 d/s Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

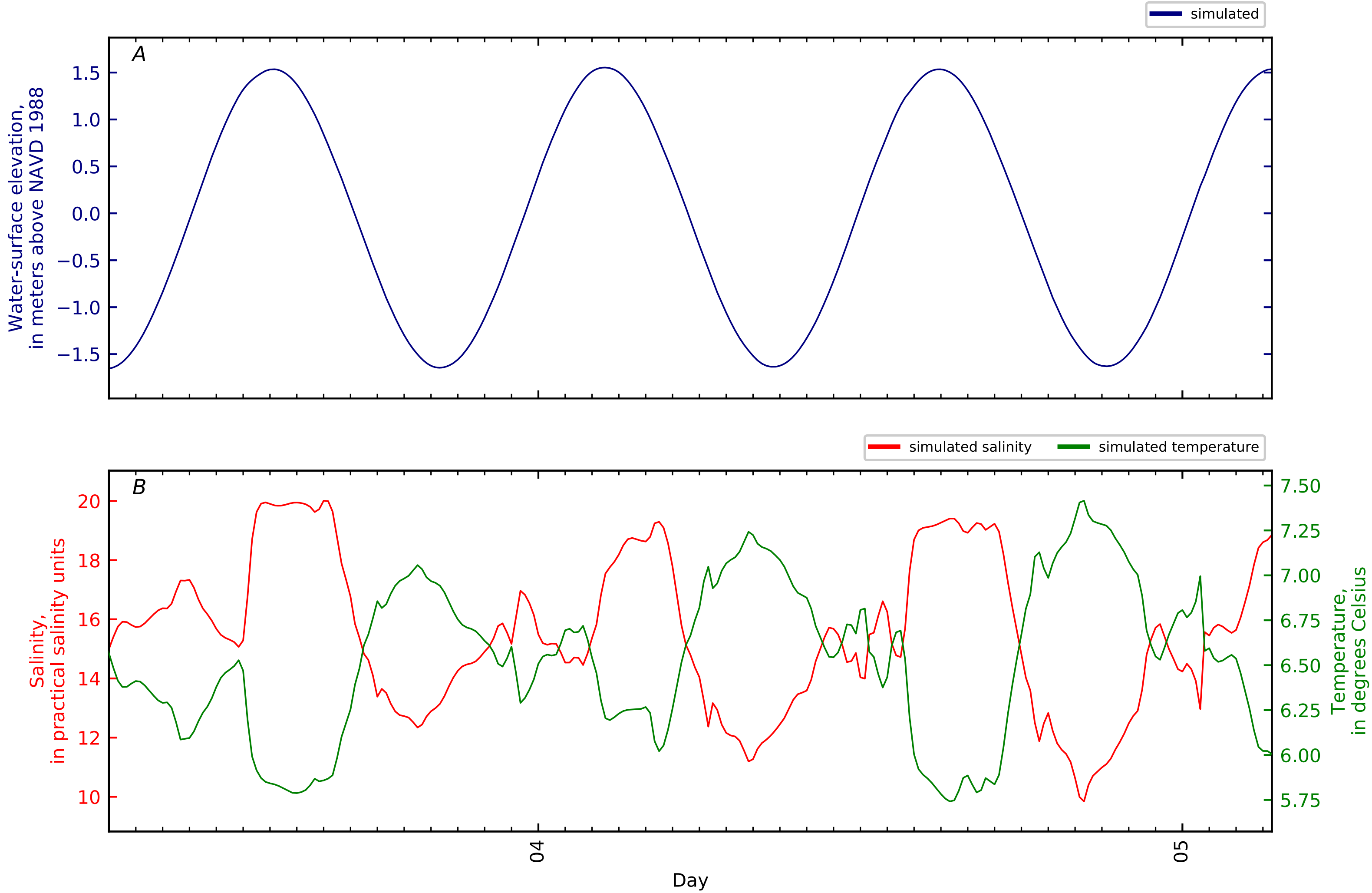

Figure B4-4. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 3, Penob Riv KM0 Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

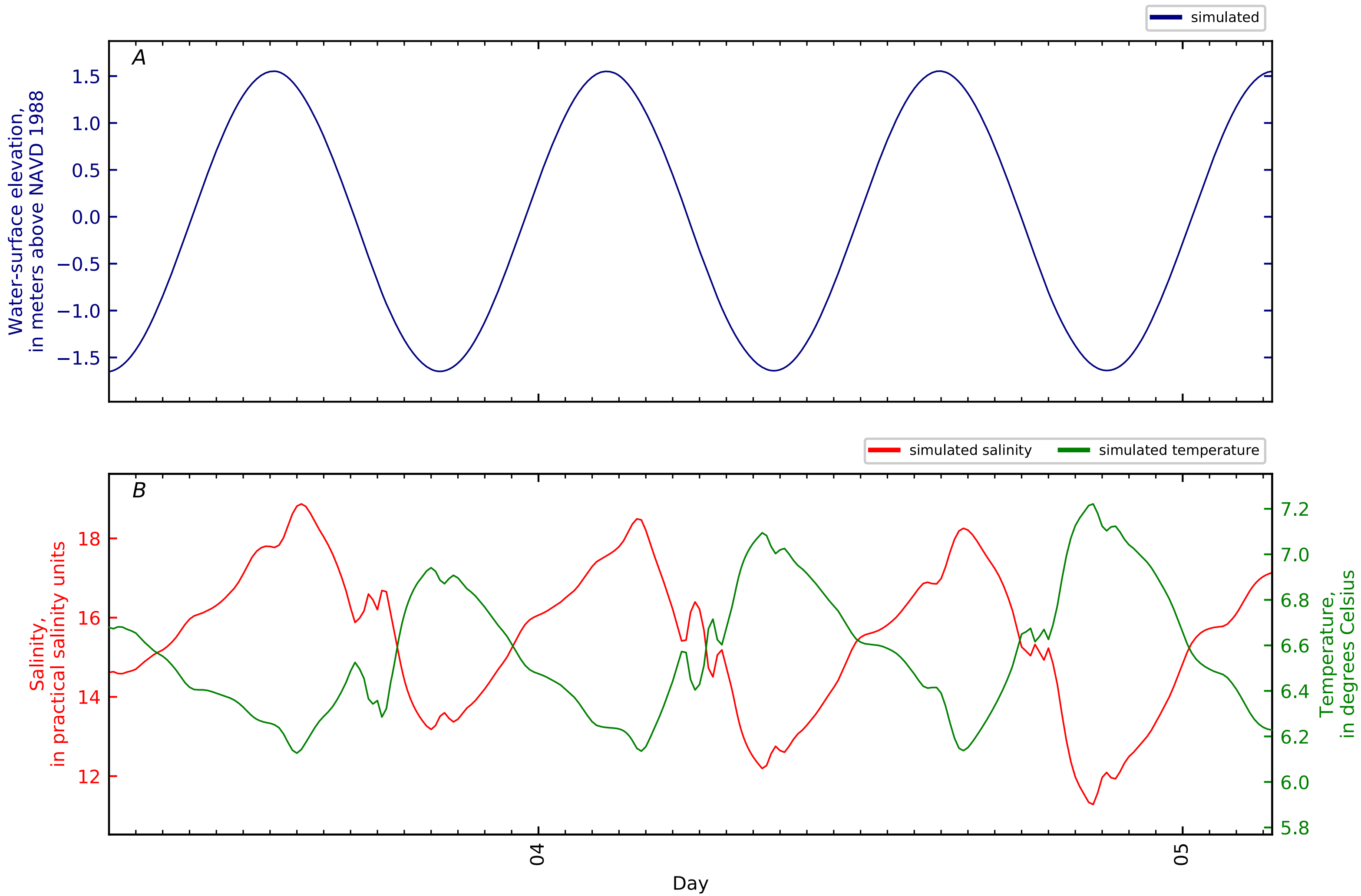

Figure B4-5. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 4, Penob Riv KM0 GS CTD5-01. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

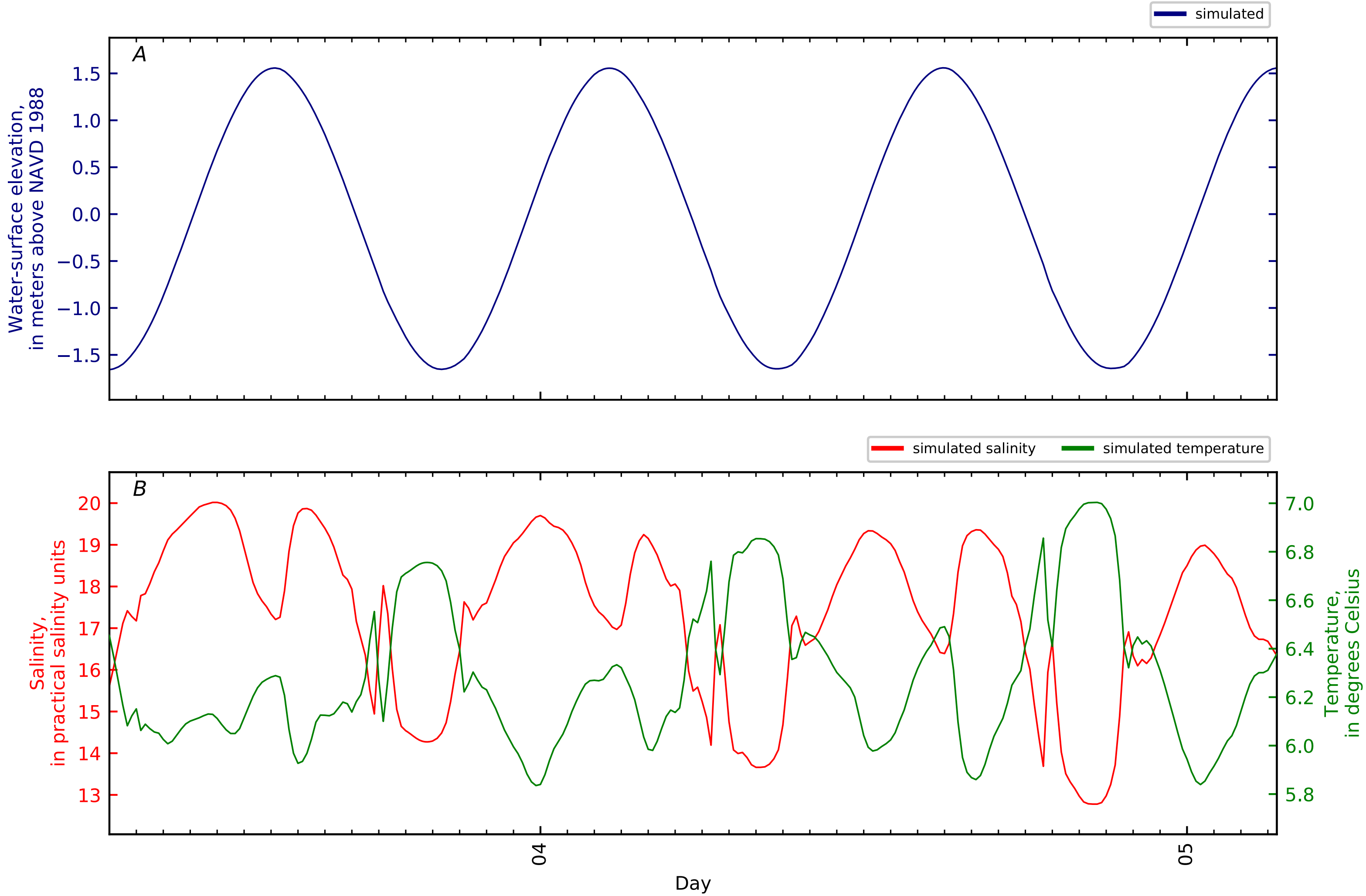

Figure B4-6. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 5, Penob Riv KM0 GS CTD5-02. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

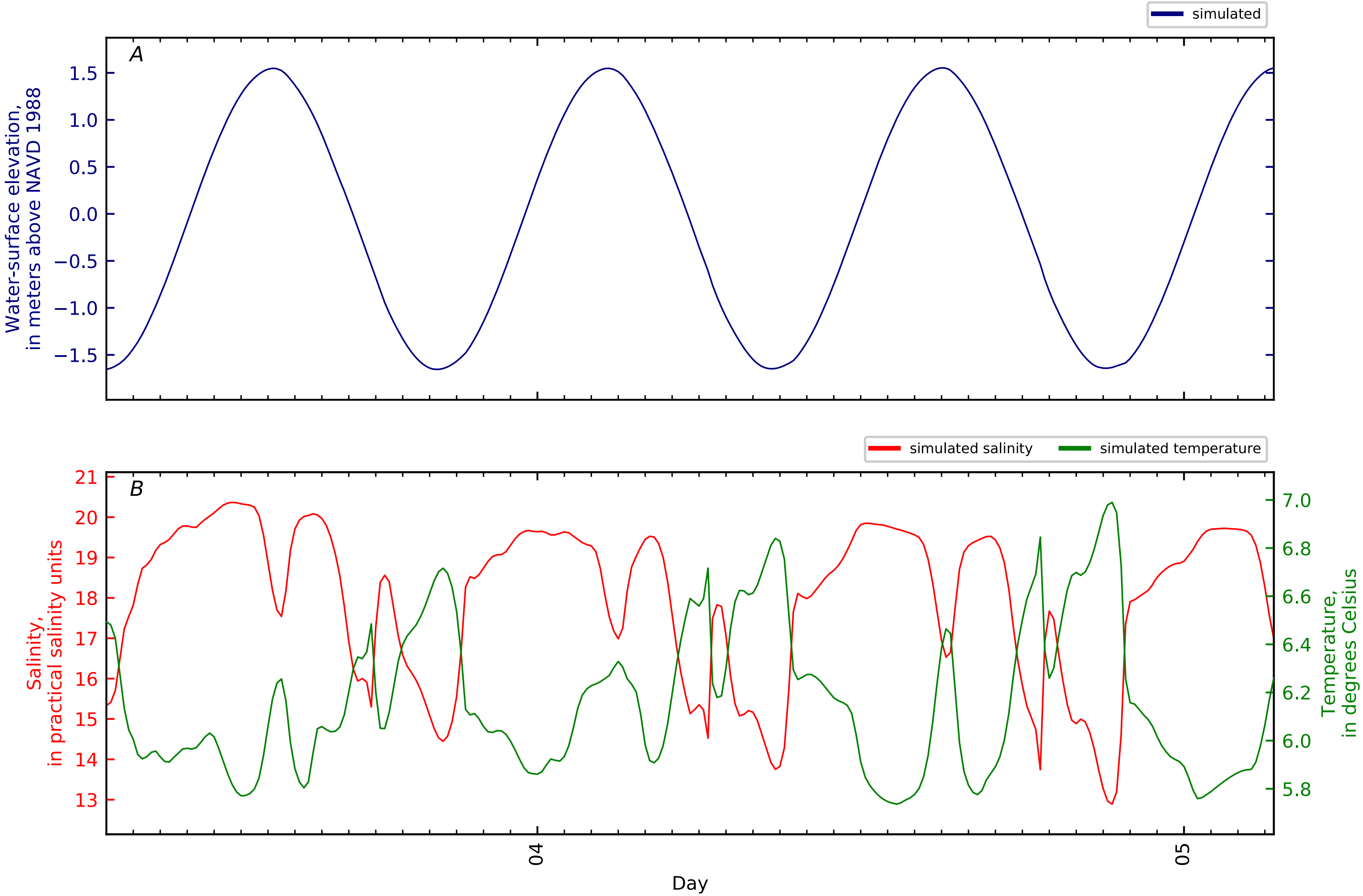

Figure B4-7. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 6, Penob Riv KM0 GS CTD5-03. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

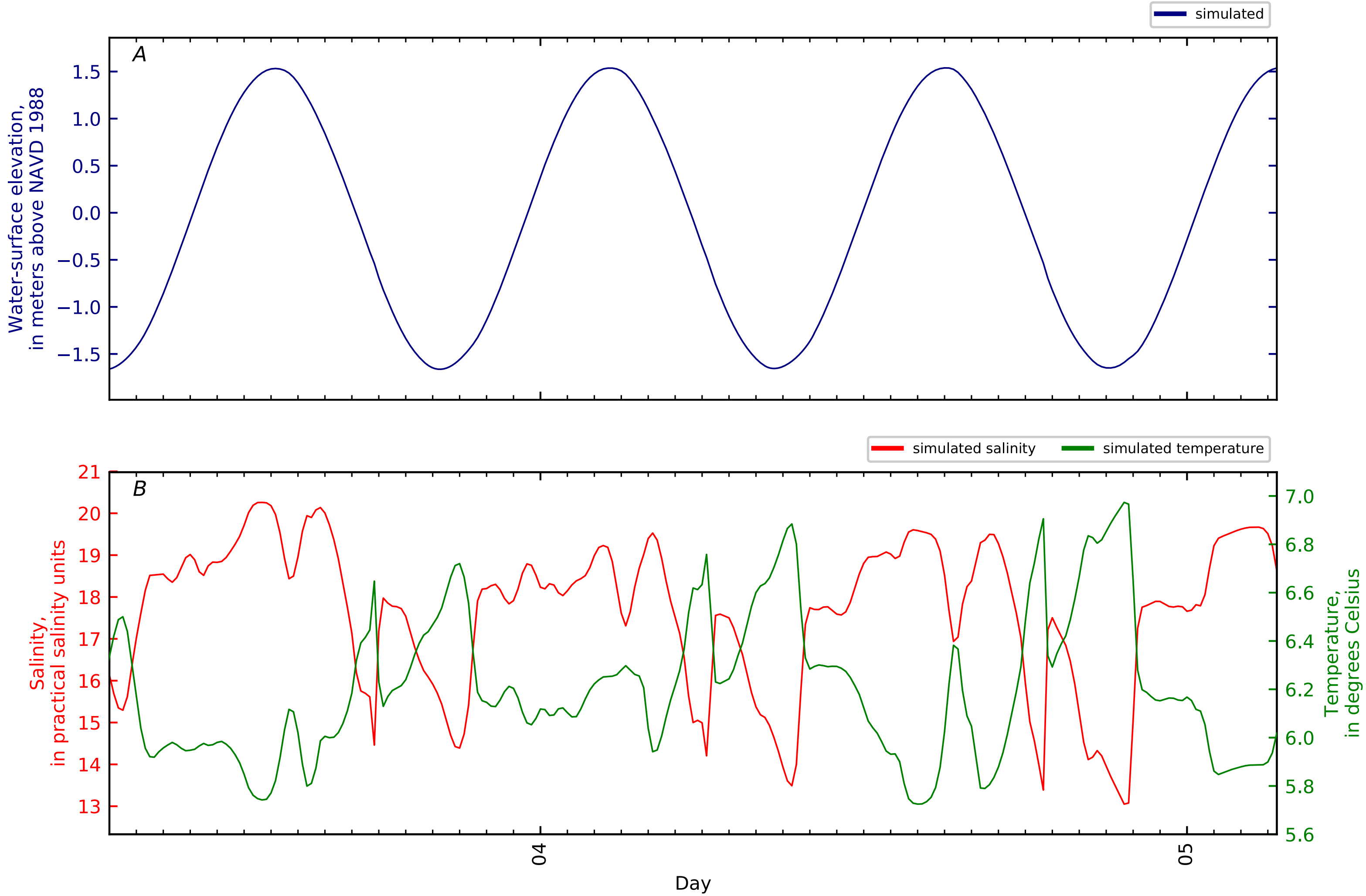

Figure B4-8. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 7, Penob Riv KM0 GS CTD5-04. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

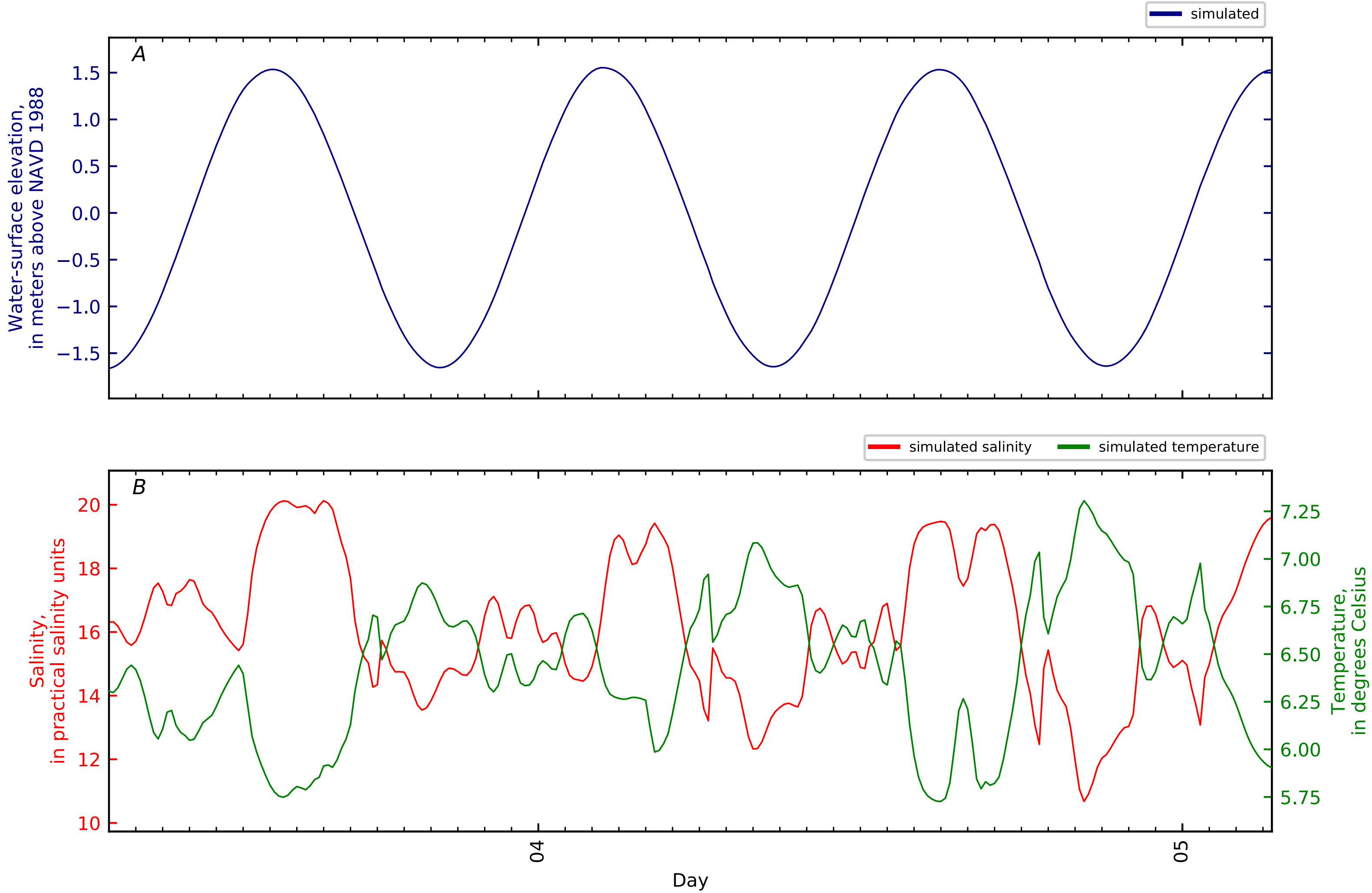

Figure B4-9. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 8, Penob Riv KM0 GS CTD5-05. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

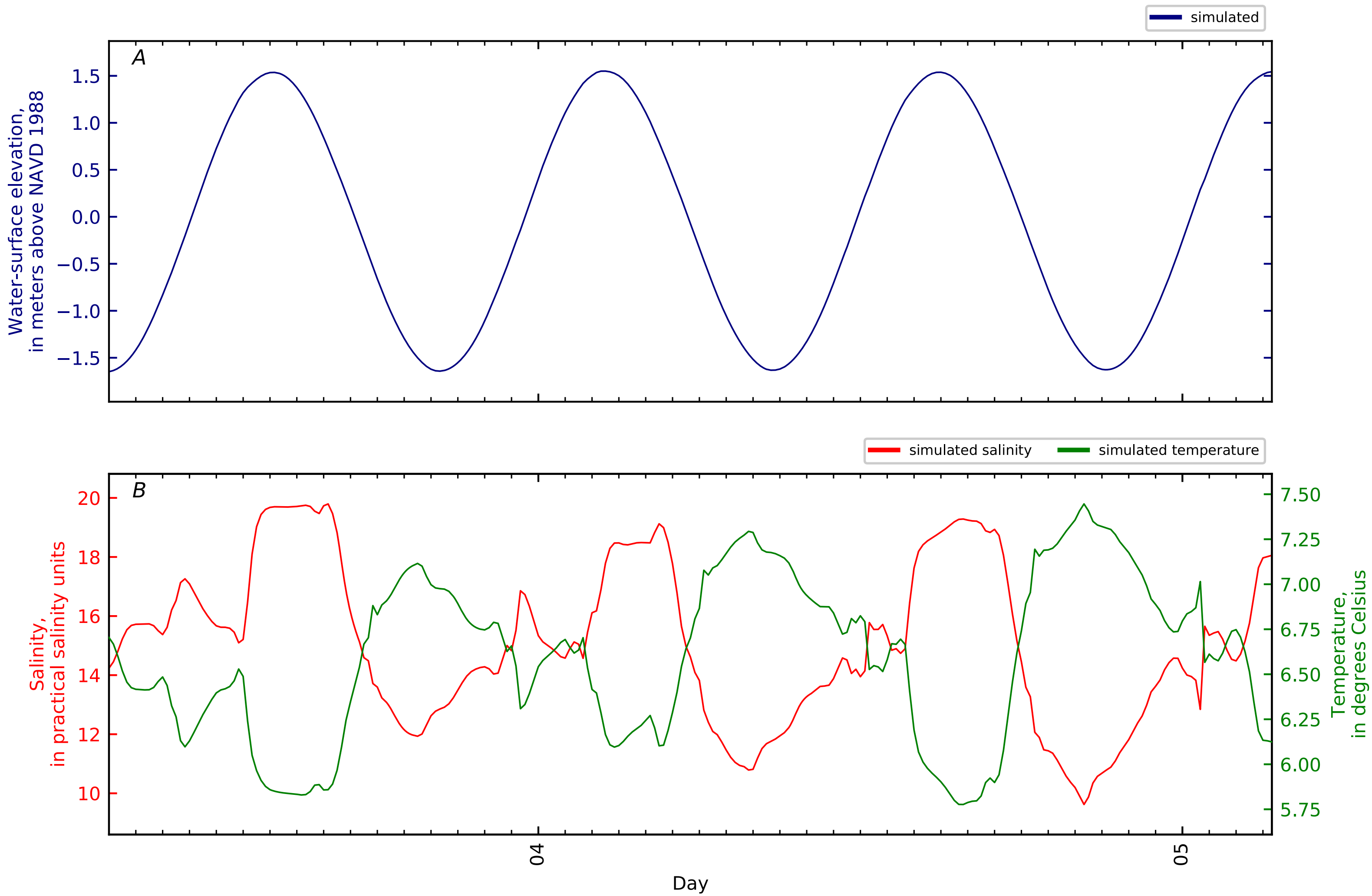

Figure B4-10. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 9, Penob Riv KM0 GS CTD5-06. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

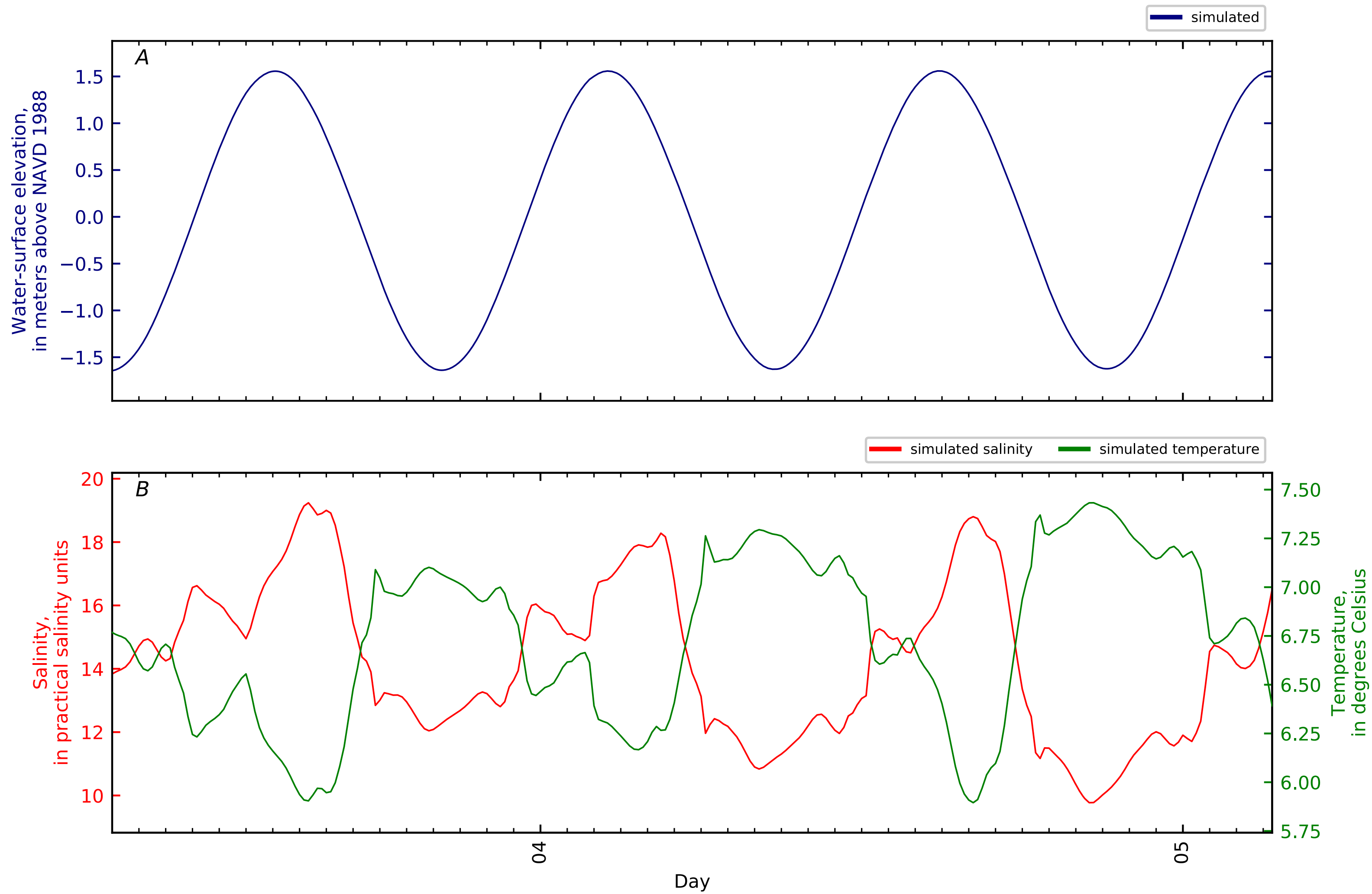

Figure B4-11. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 10, Penob Riv KM0 GS CTD5-07. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

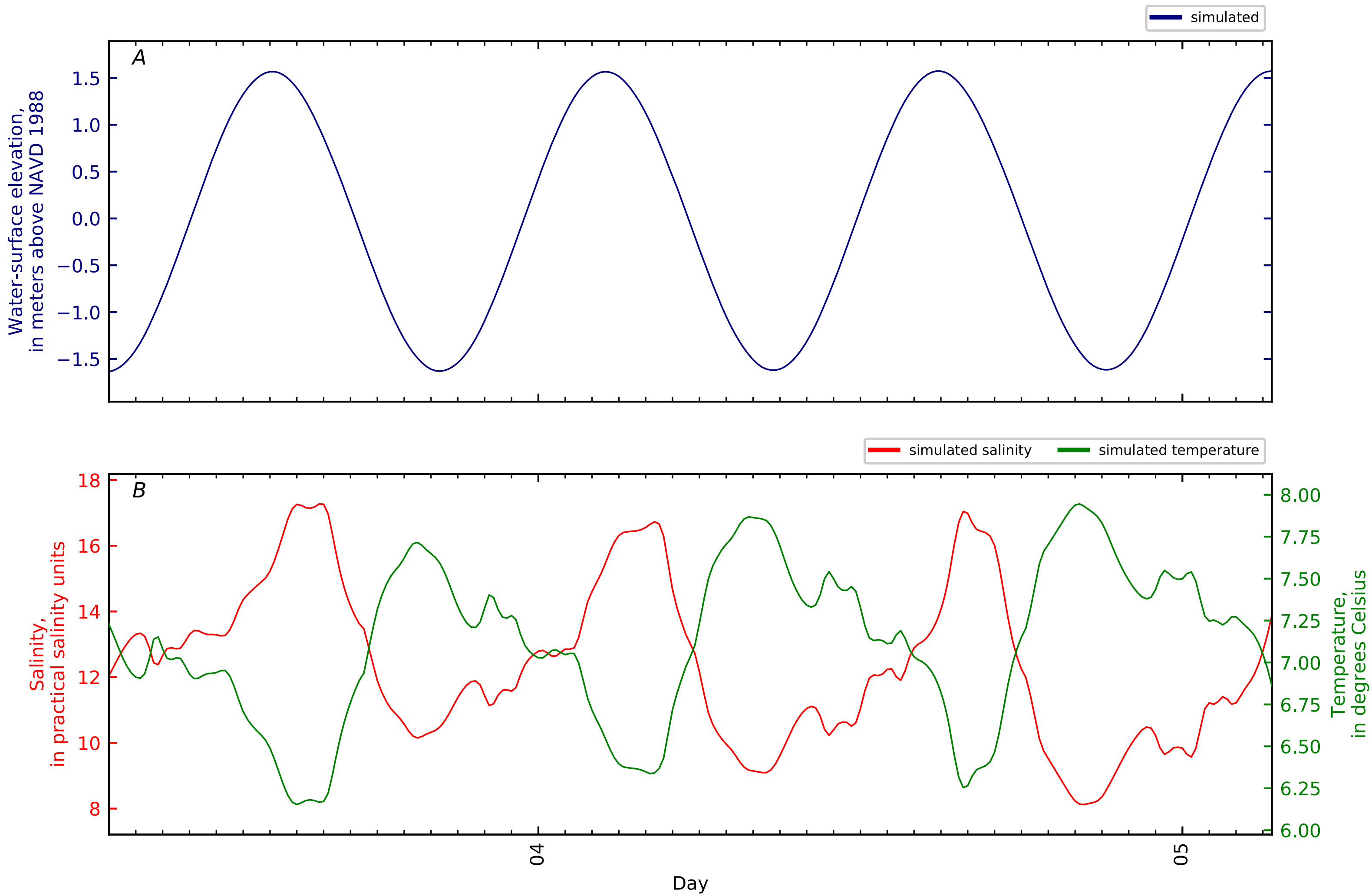

Figure B4-12. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 11, Penob Riv KM0 GS CTD5-08. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

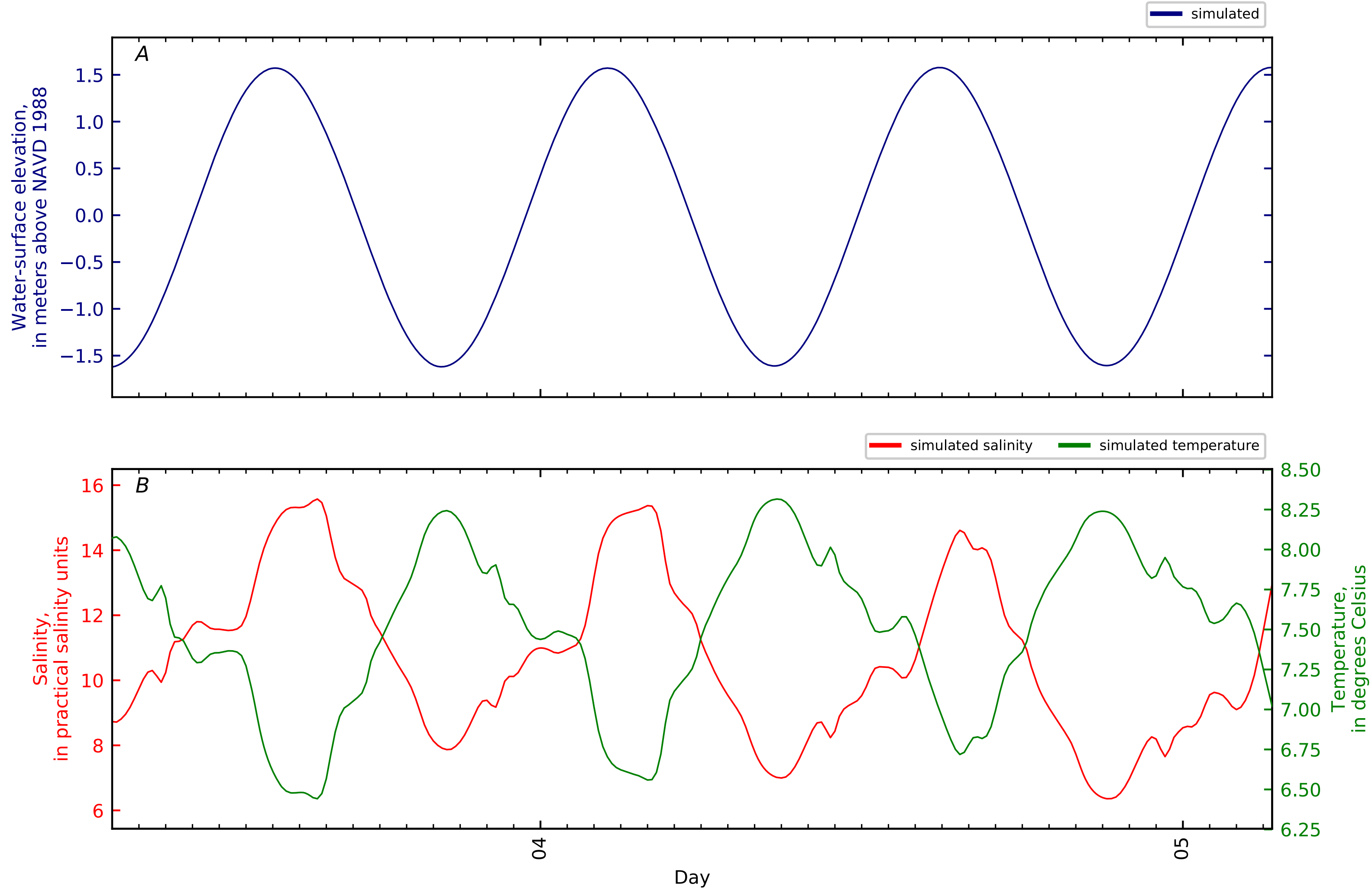

Figure B4-13. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 12, Penob Riv KM0 GS CTD5-09. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

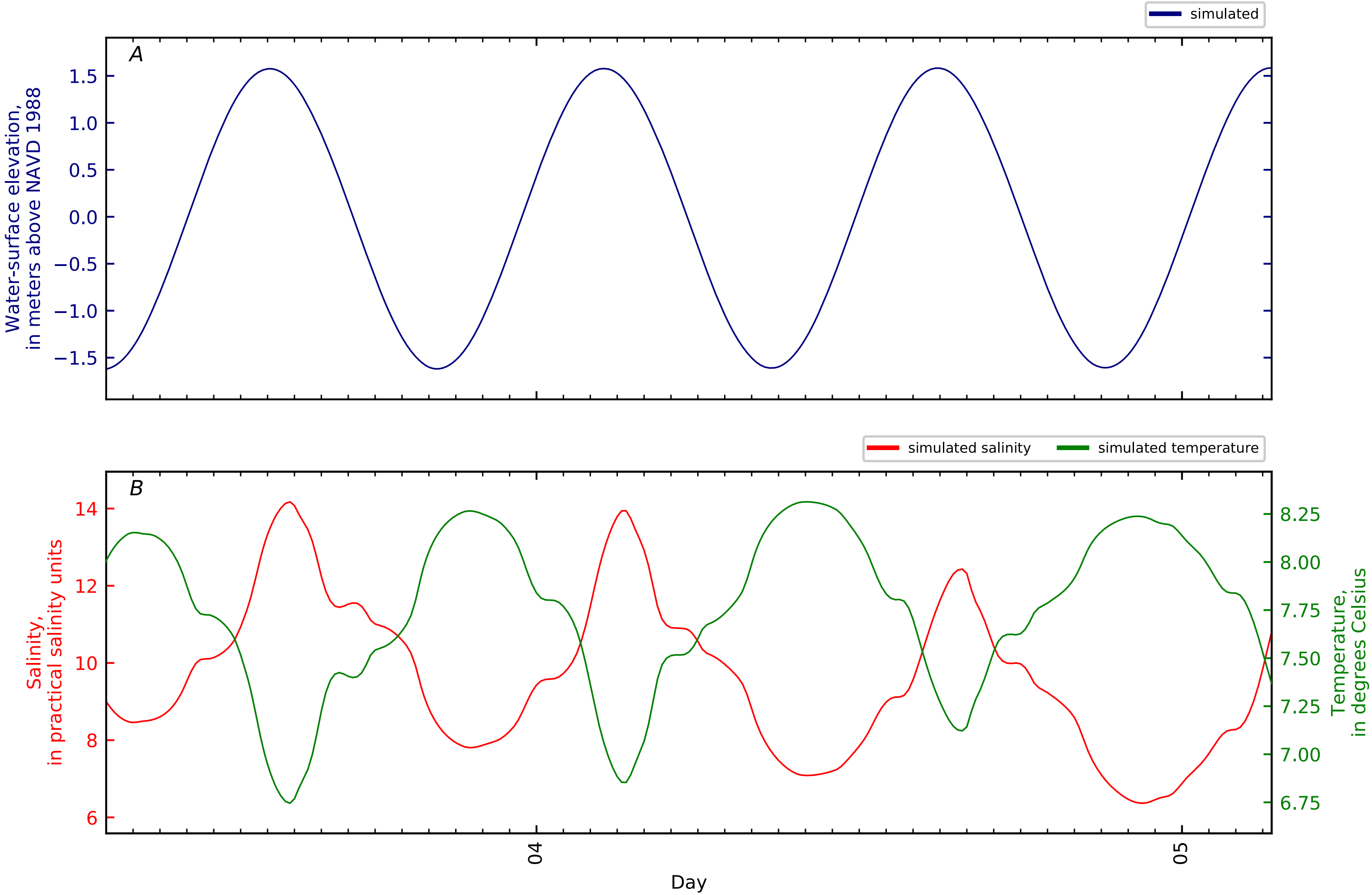

Figure B4-14. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 13, Penob Riv KM0 GS CTD5-10. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

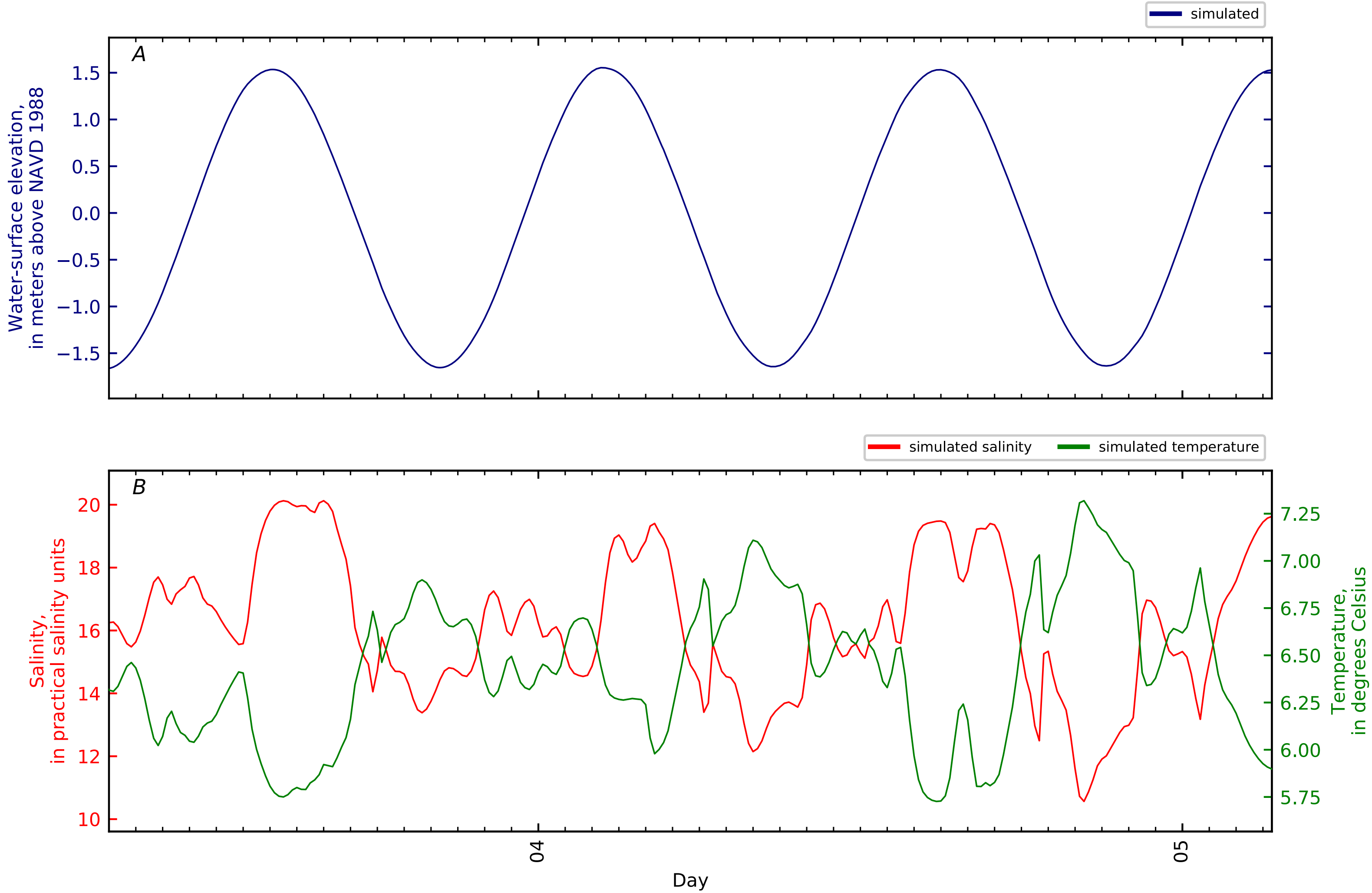

Figure B4-15. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 14, Penob Riv KM0.04 WHOI1 Ft Point 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

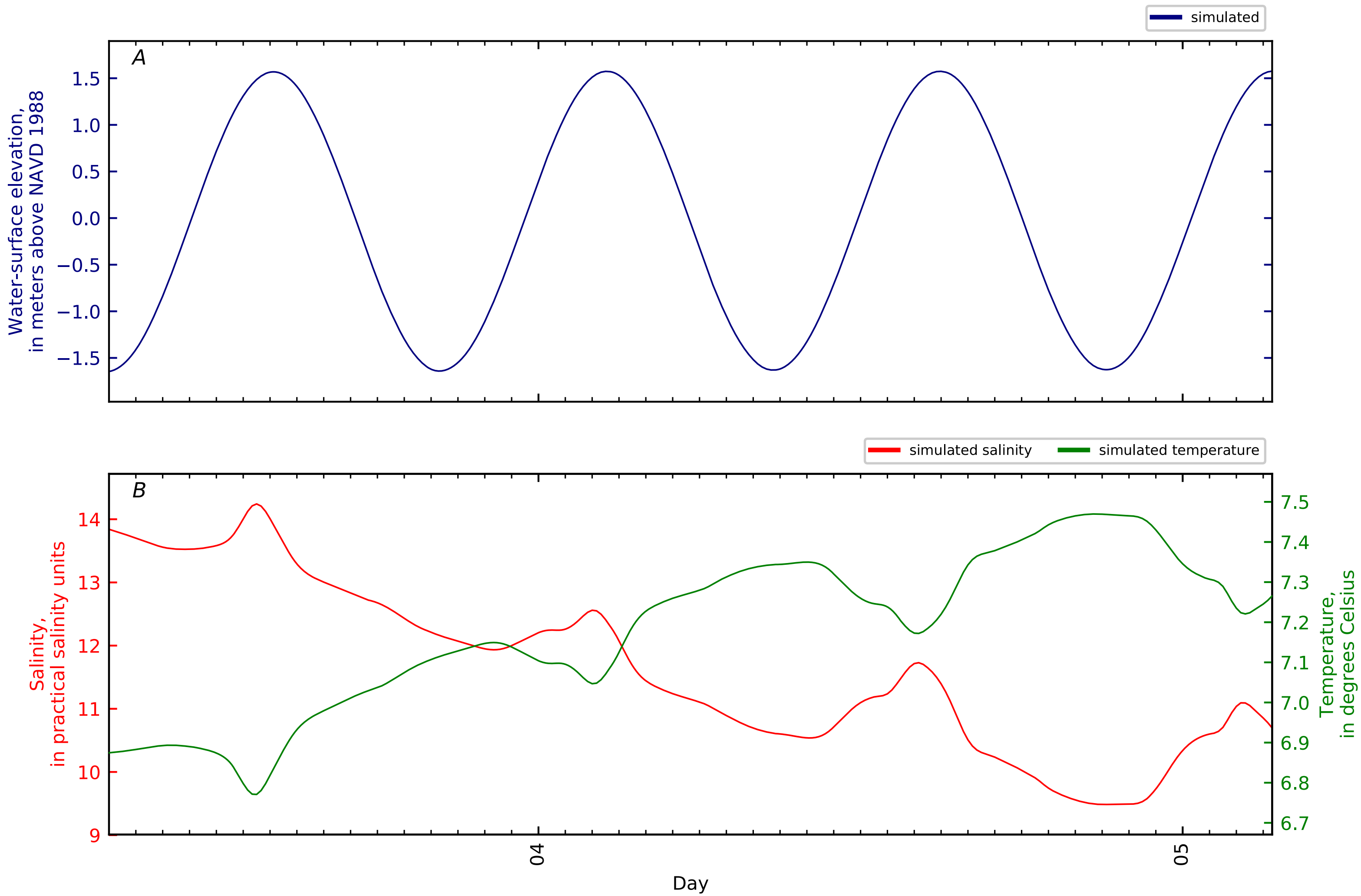

Figure B4-16. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 15, Penob Riv KM0.1 GS 442810068480101 at Ft. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

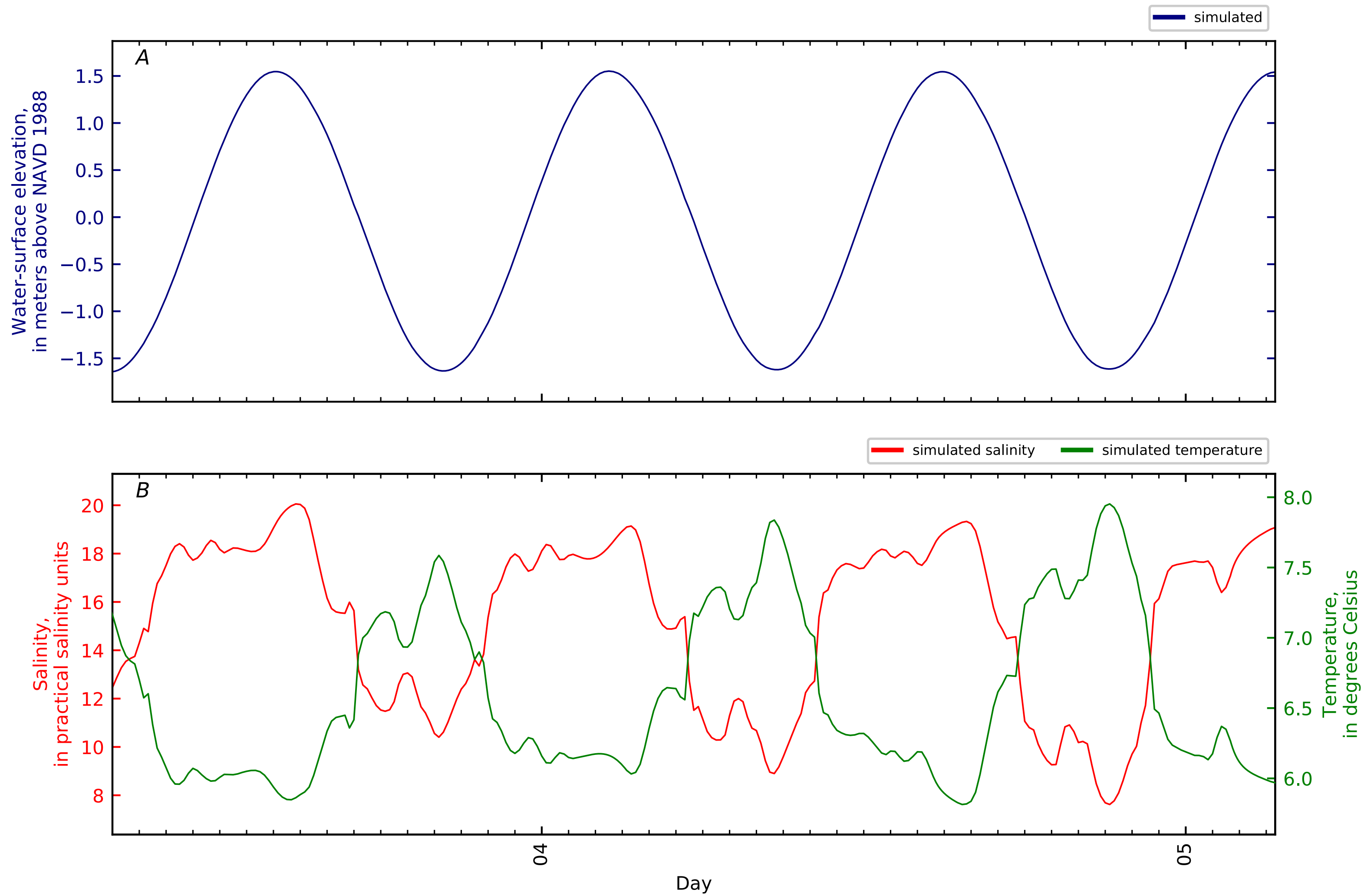

Figure B4-17. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 16, Penob Riv KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

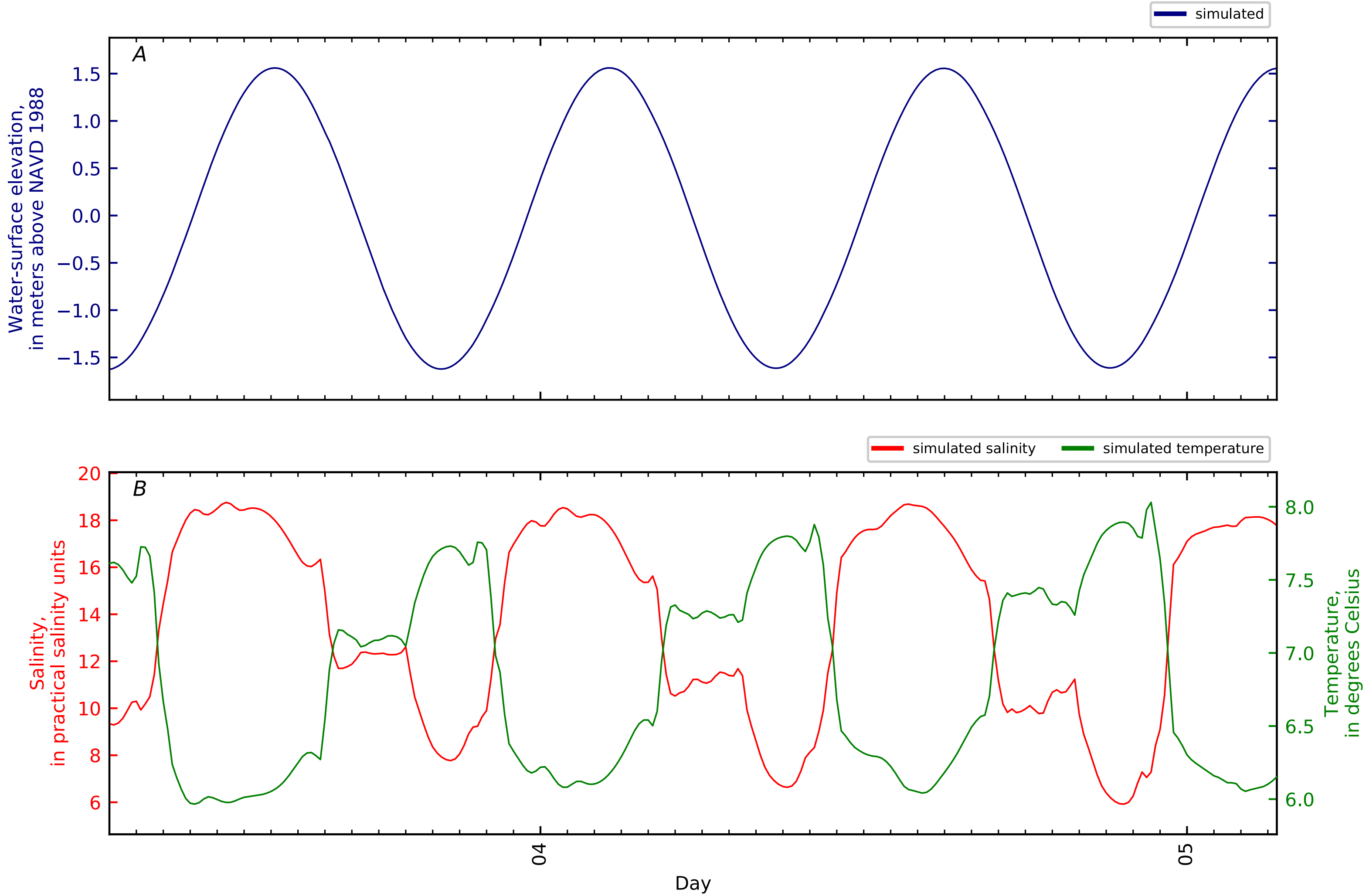

Figure B4-18. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 17, Penob Riv KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

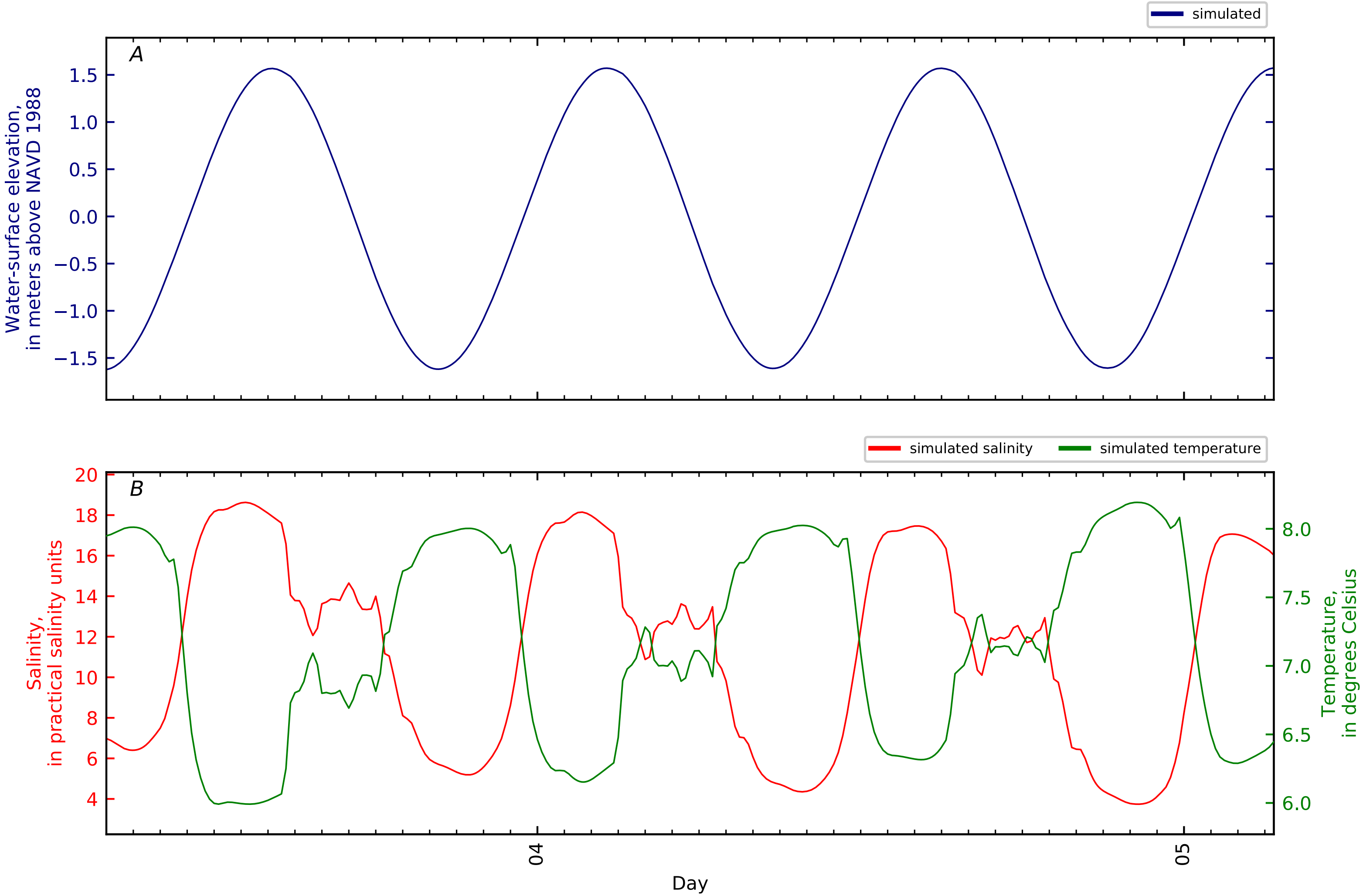

Figure B4-19. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 18, Penob Riv KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

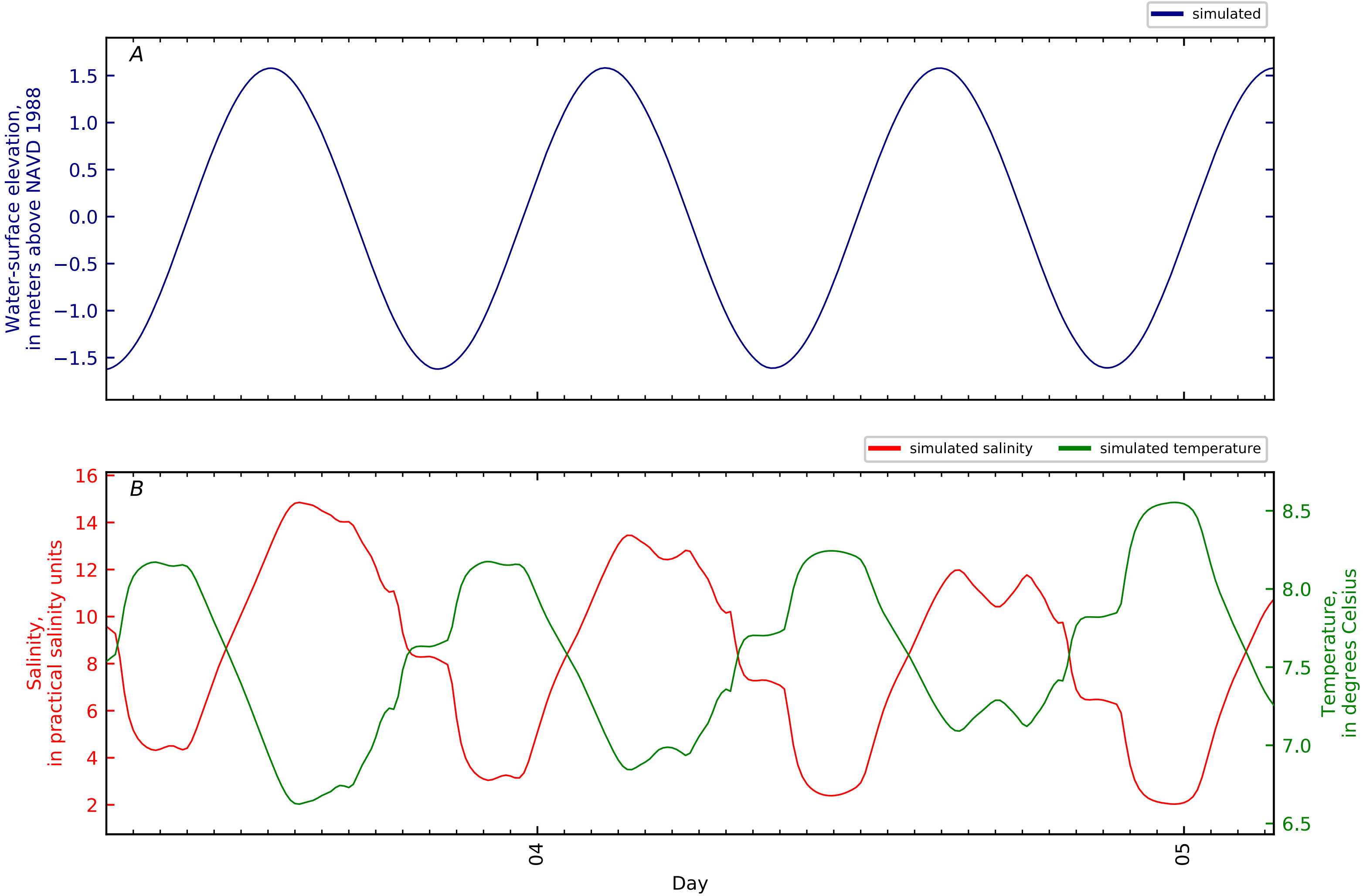

Figure B4-20. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 19, Penob Riv KM3.8 GS CTD3-01. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

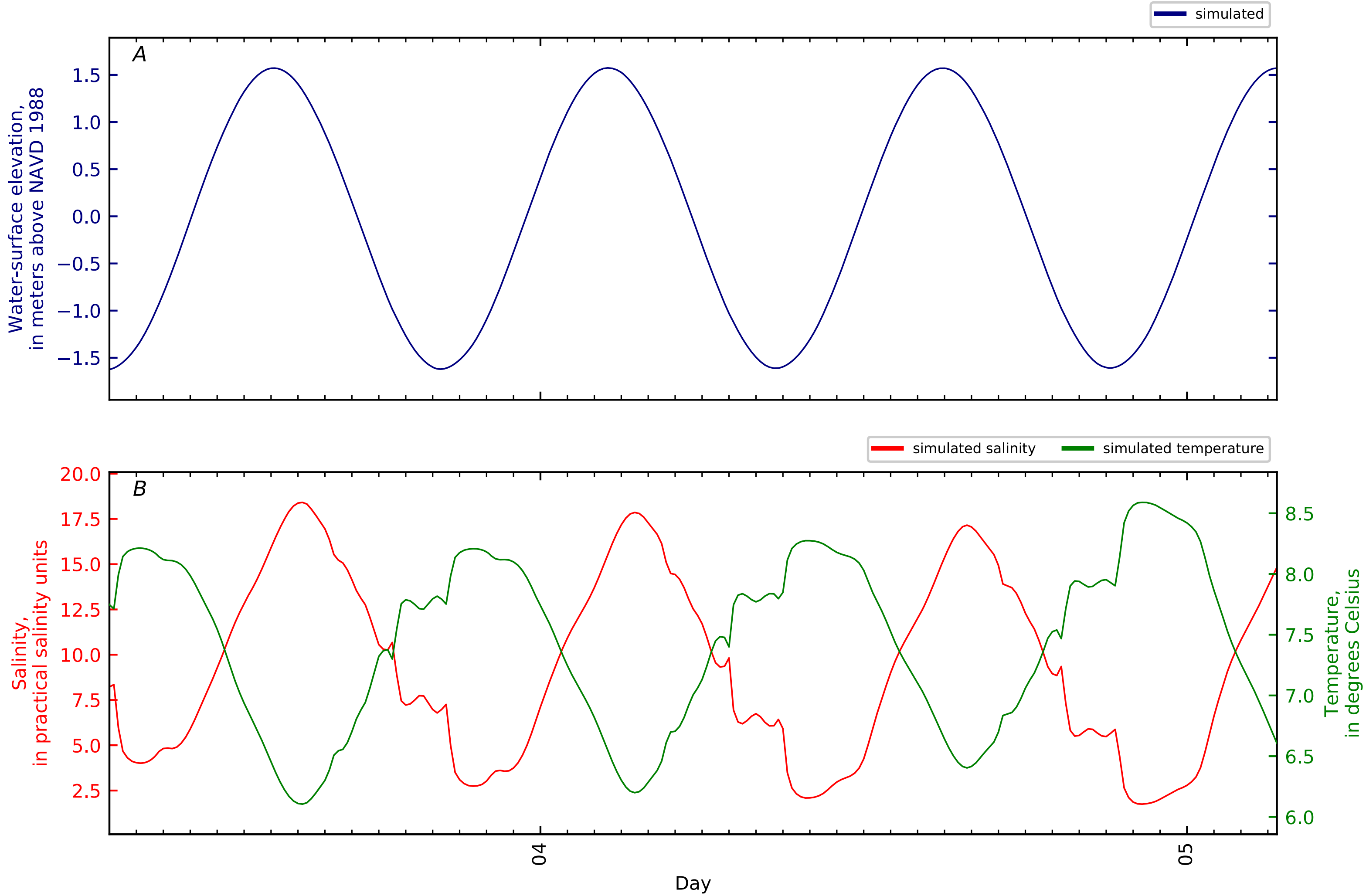

Figure B4-21. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 20, Penob Riv KM3.8 GS CTD3-02. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

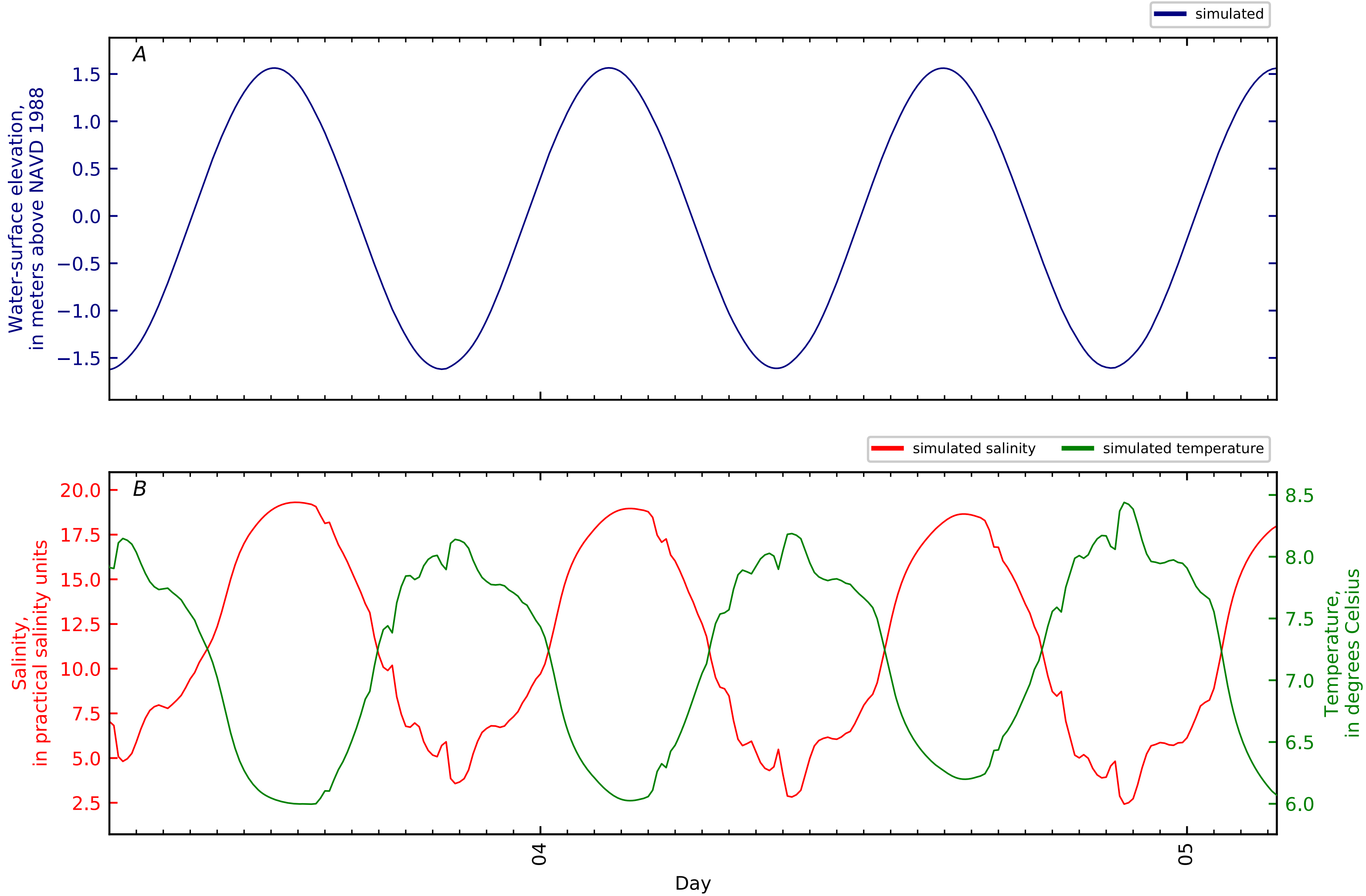

Figure B4-22. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 21, Penob Riv KM3.8 GS CTD3-03. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

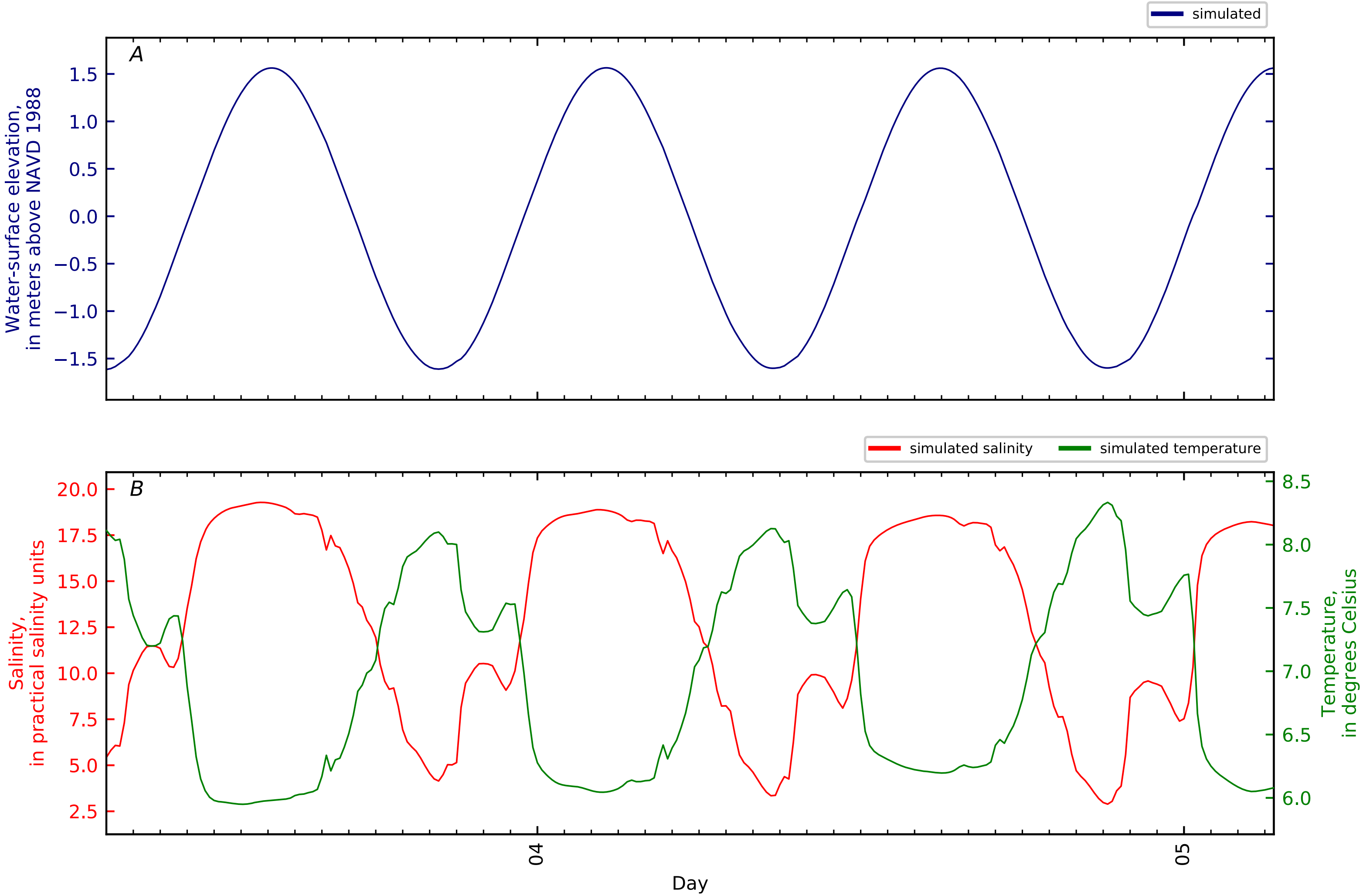

Figure B4-23. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 22, Penob Riv KM3.8 GS CTD3-04. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

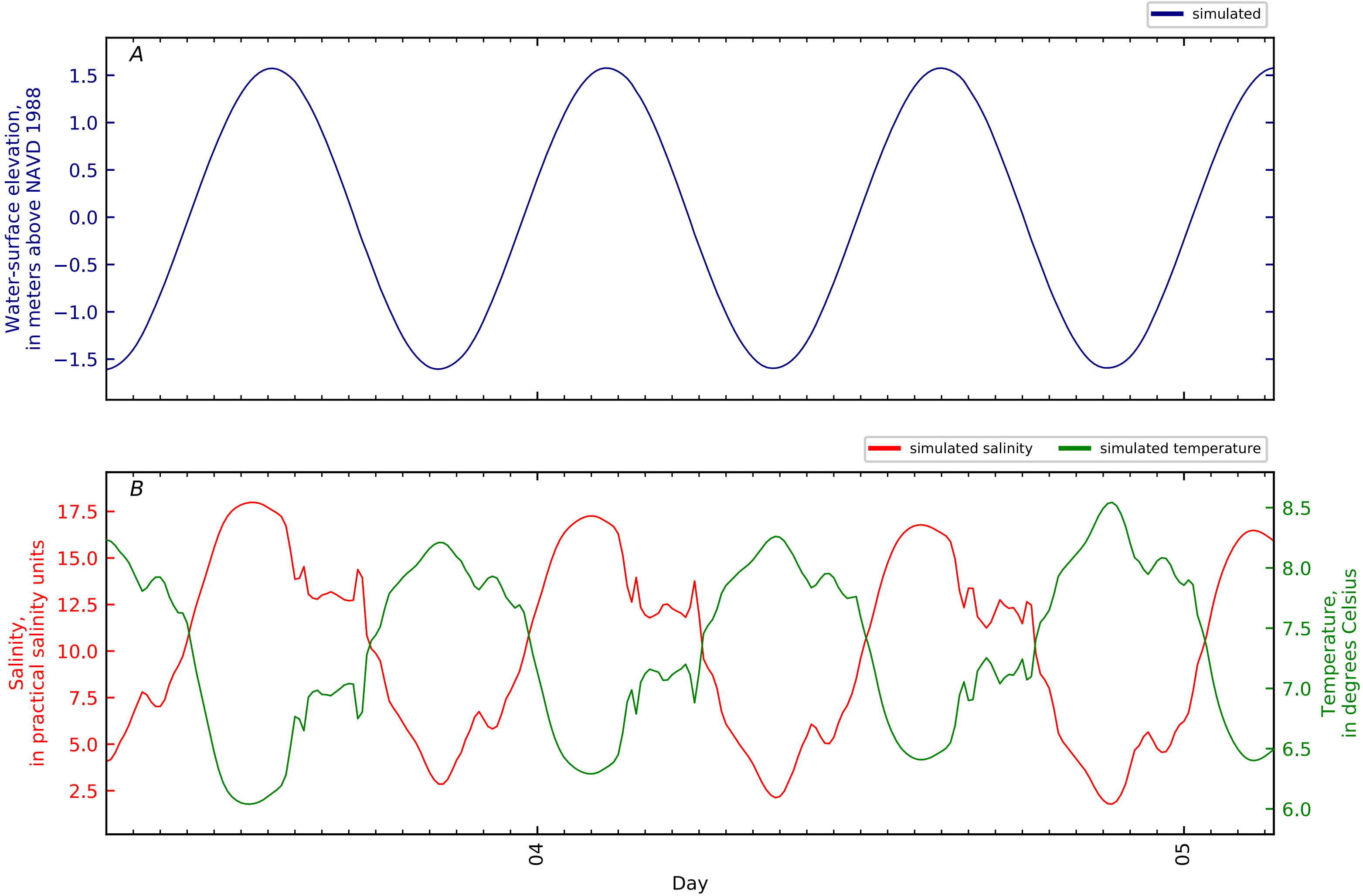

Figure B4-24. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 23, Penob Riv KM3.8 GS CTD3-05. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

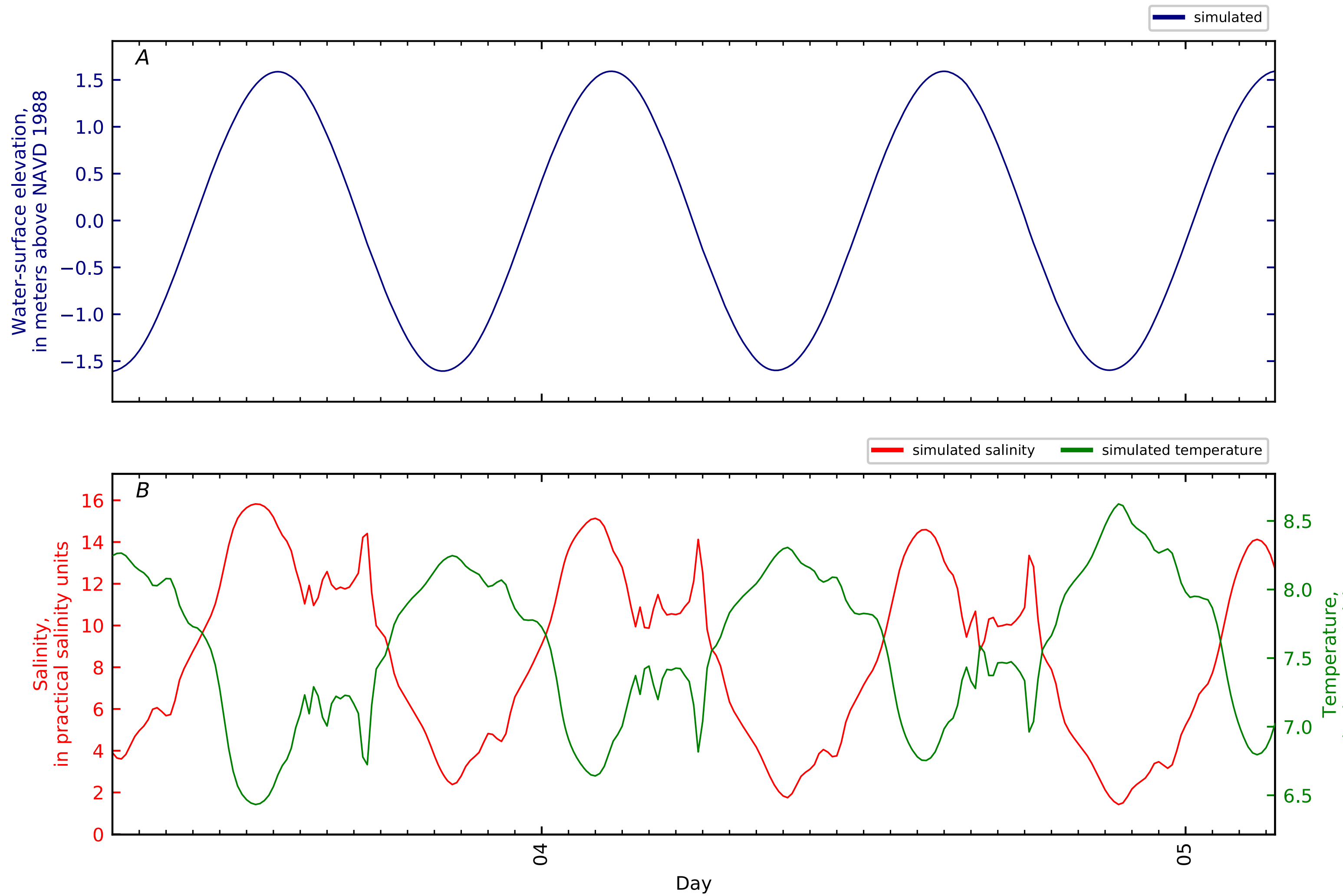

Figure B4-25. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 24, Penob Riv KM3.8 GS CTD3-06. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

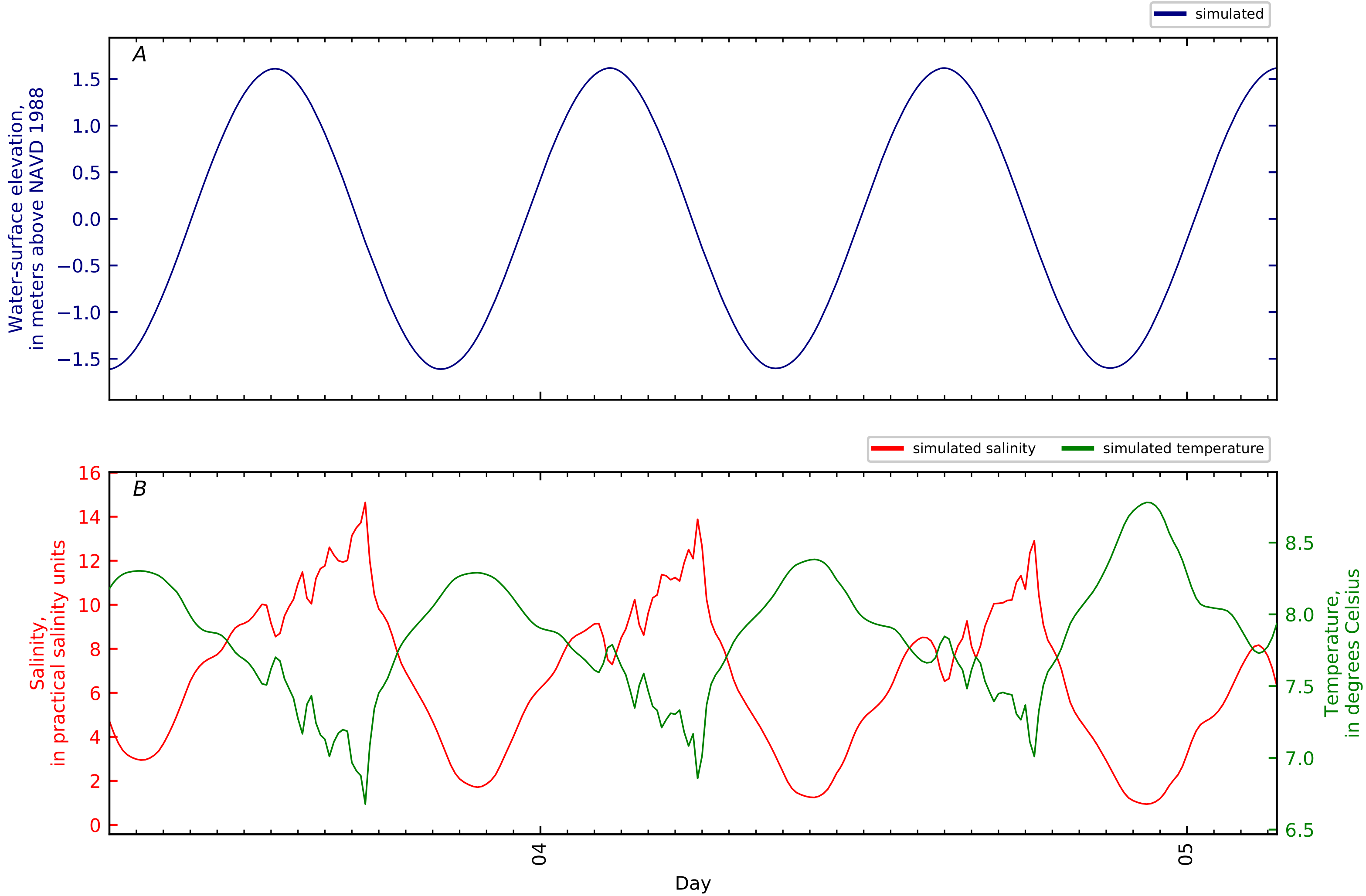

Figure B4-26. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 25, Penob Riv KM3.8 GS CTD3-07. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

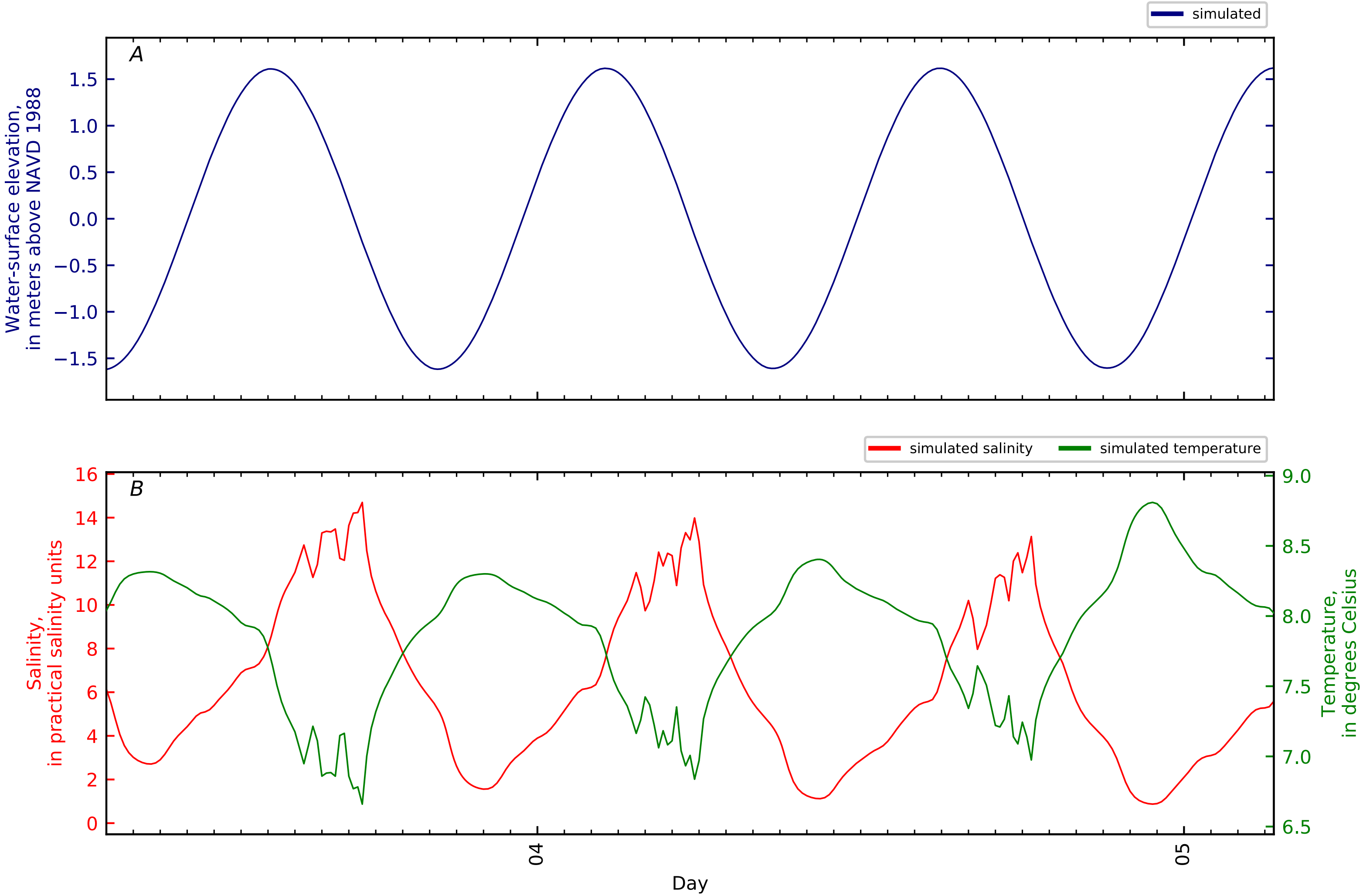

Figure B4-27. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 26, Penob Riv KM3.8 GS CTD3-08. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

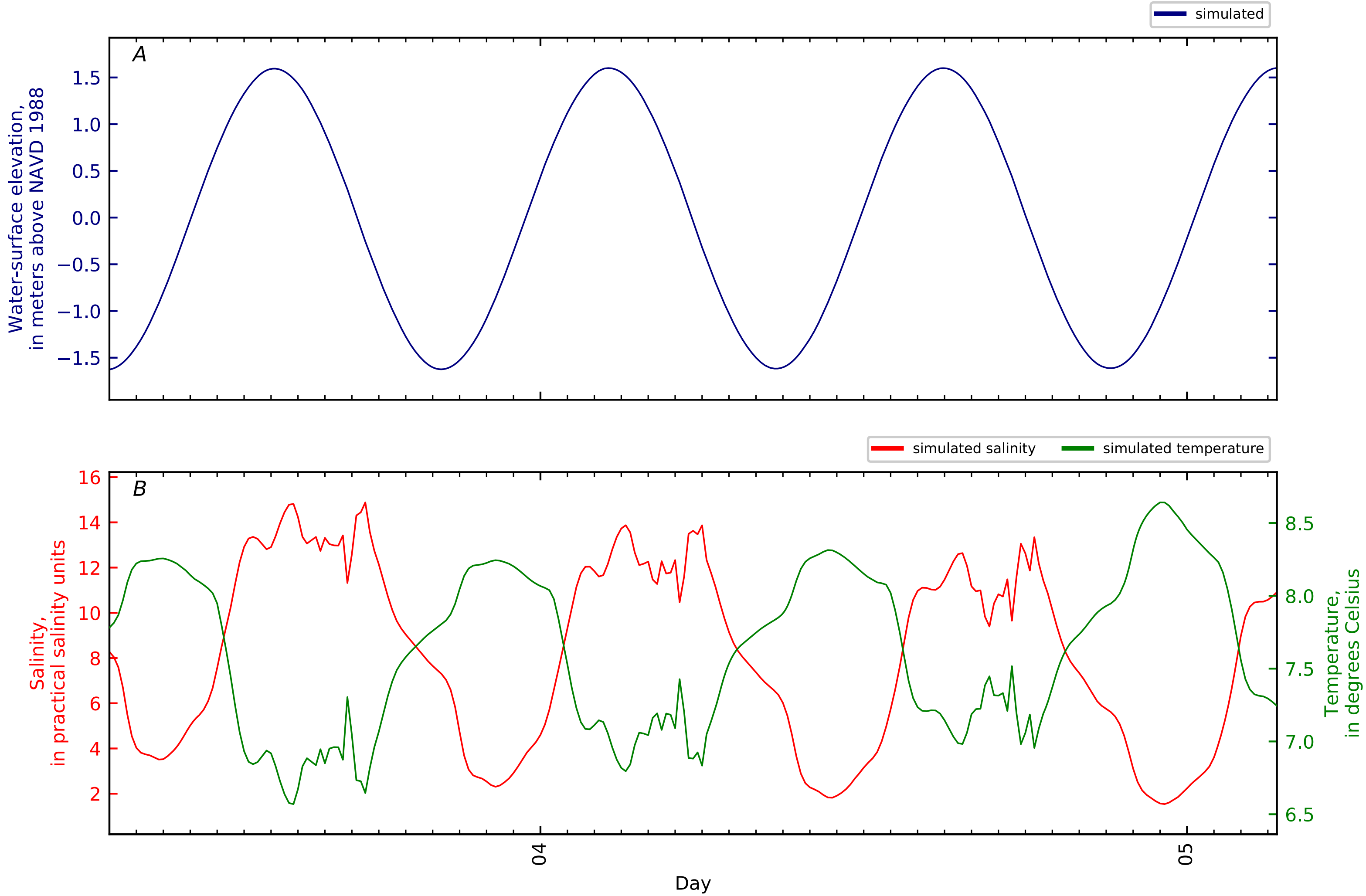

Figure B4-28. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 27, Penob Riv KM3.8 GS CTD3-09. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

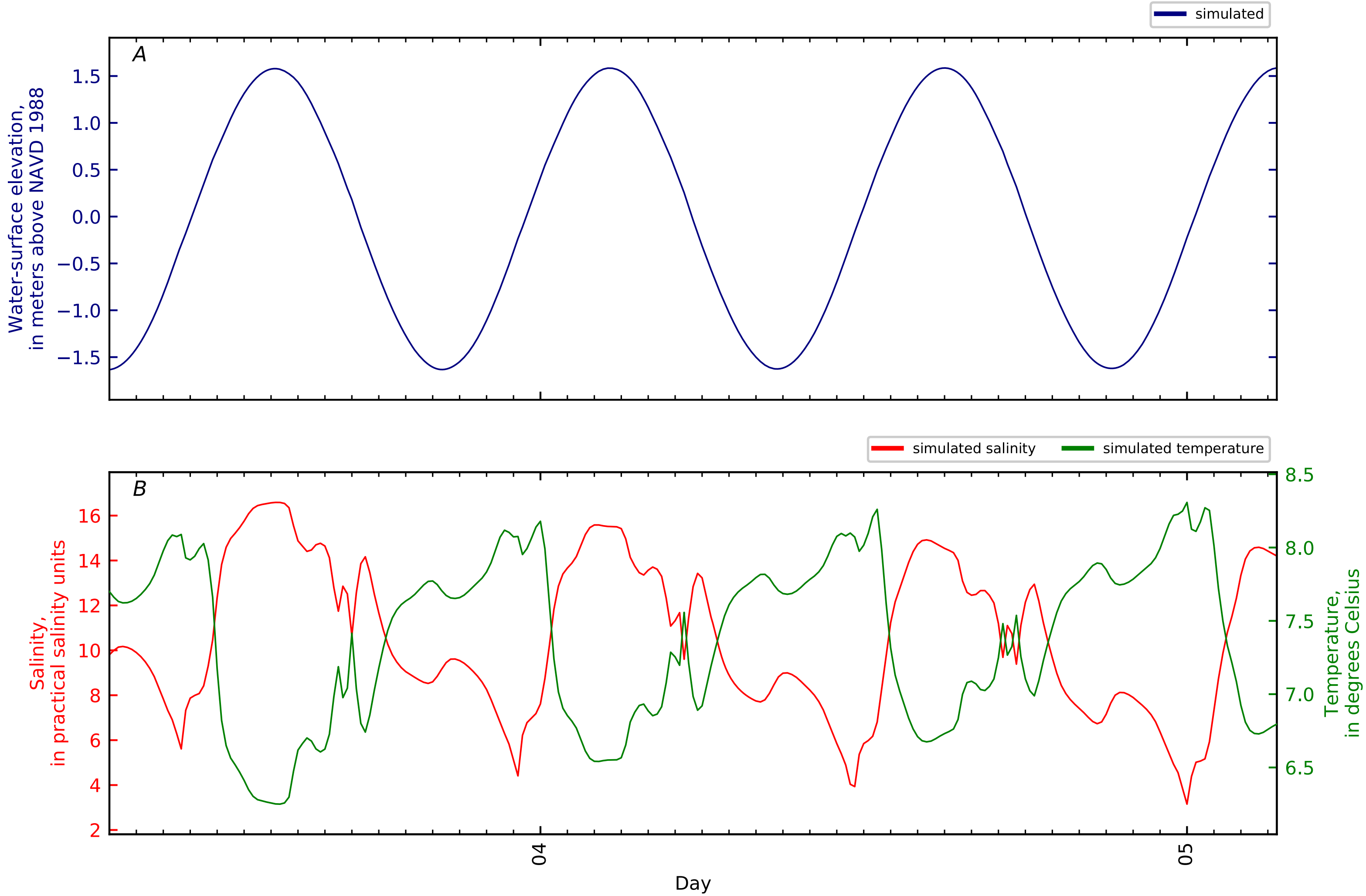

Figure B4-29. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 28, Penob Riv KM3.8 GS CTD3-10. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

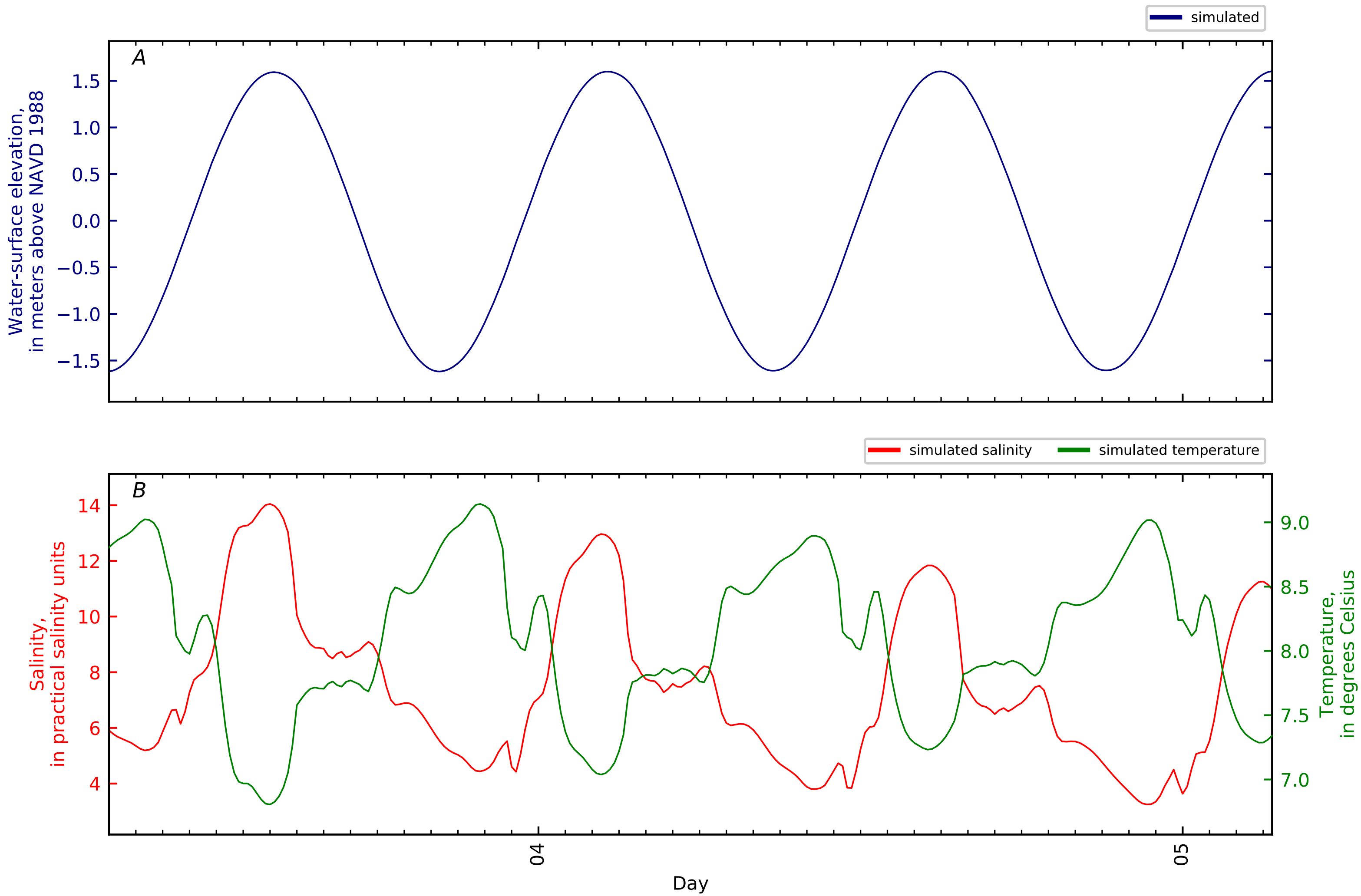

Figure B4-30. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 29, Penob Riv KM3.85 fmr NOAA gage Gross Poi. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

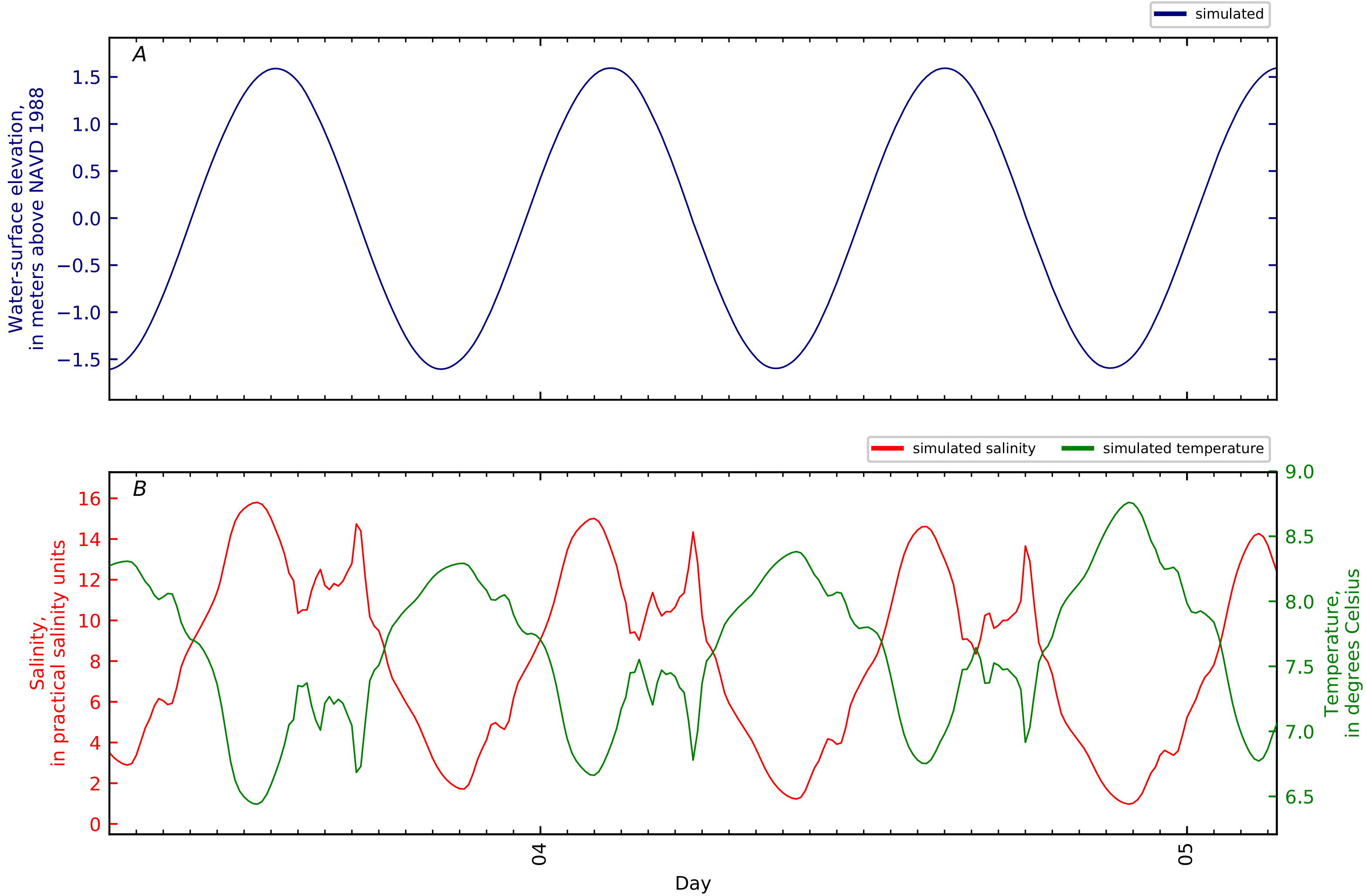

Figure B4-31. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 30, Penob Riv KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

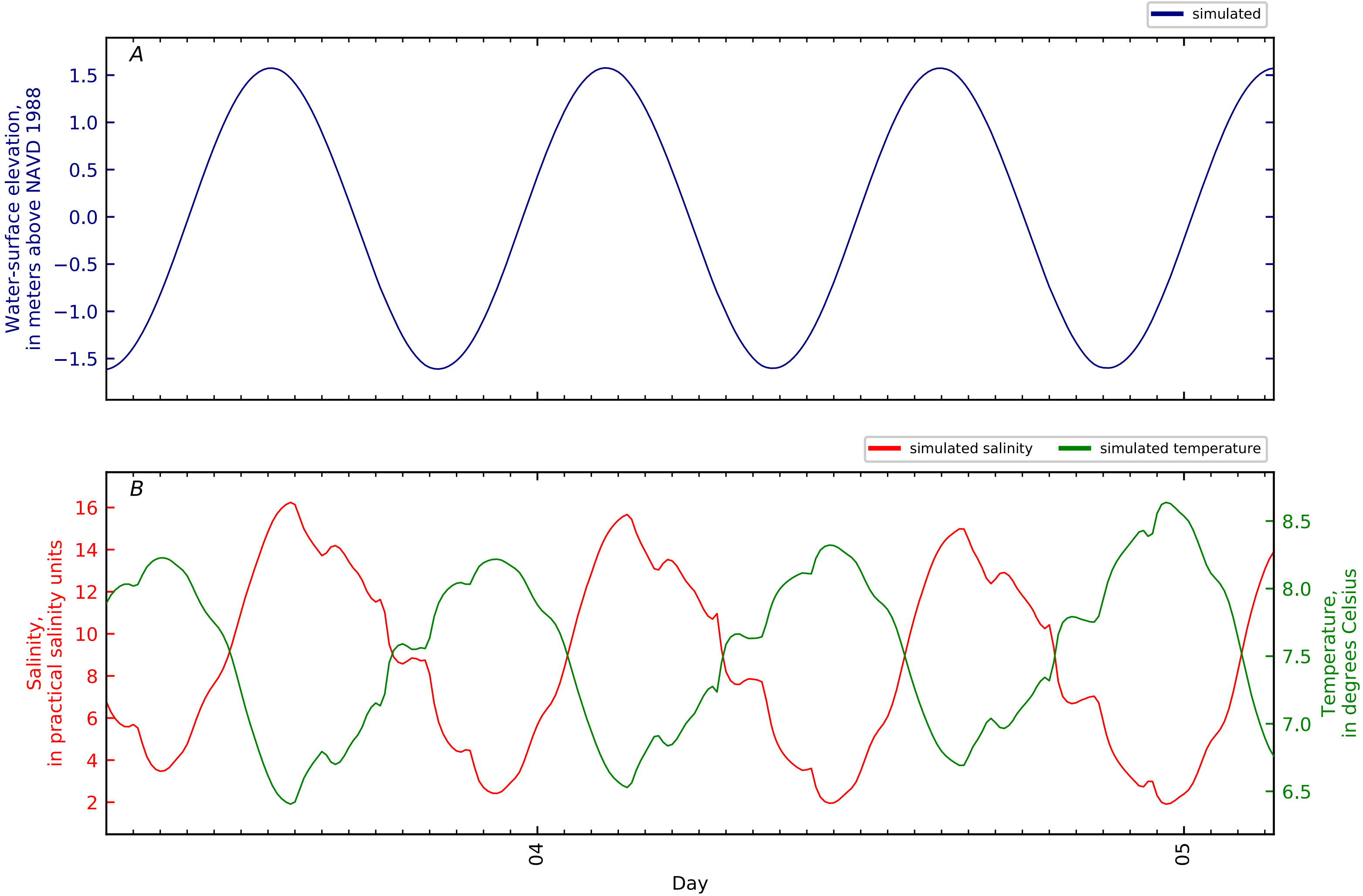

Figure B4-32. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 31, Penob Riv KM4.3 fmr NOAA gage Sandy Beac. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

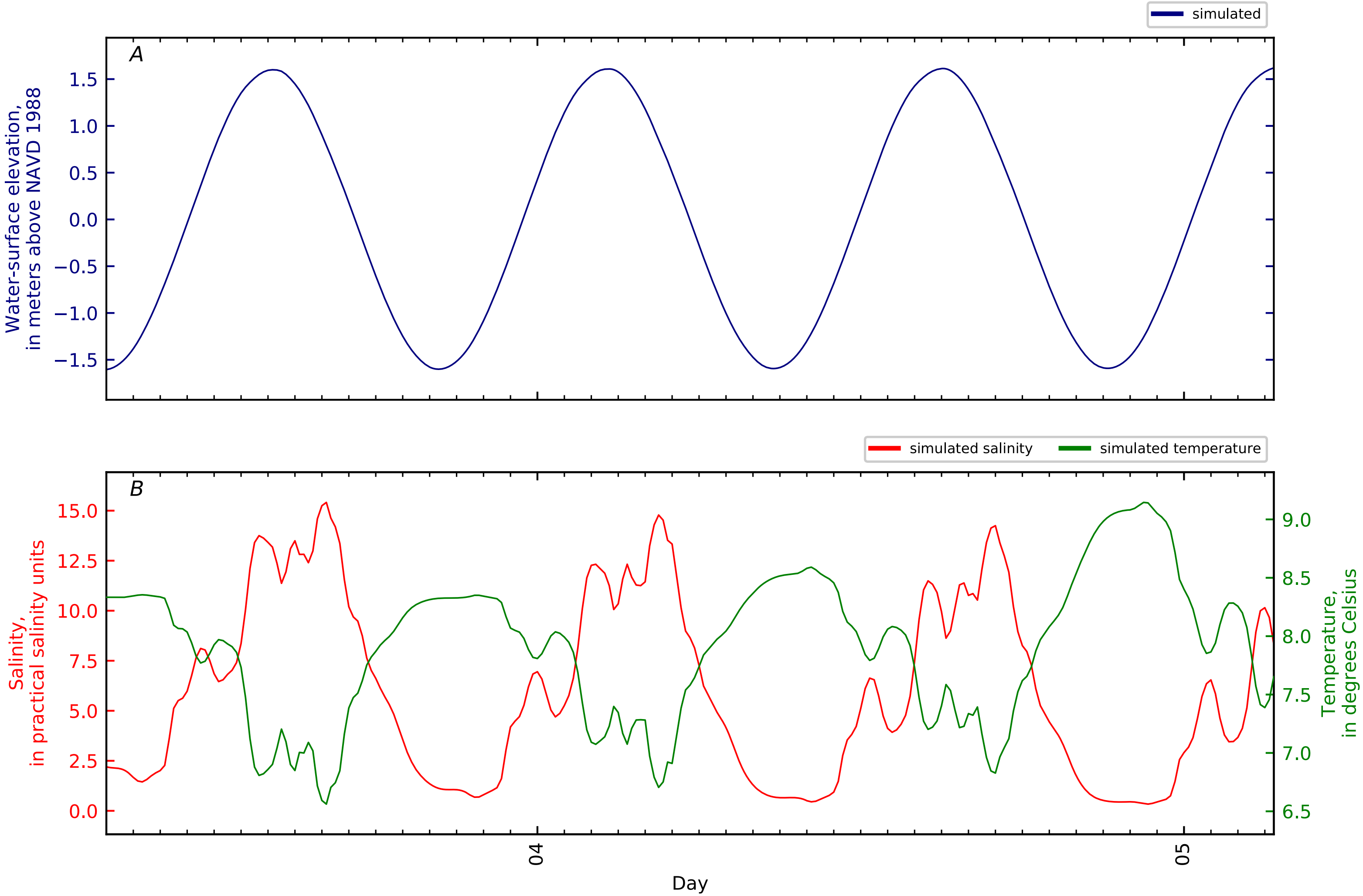

Figure B4-33. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 32, Penob Riv KM5. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

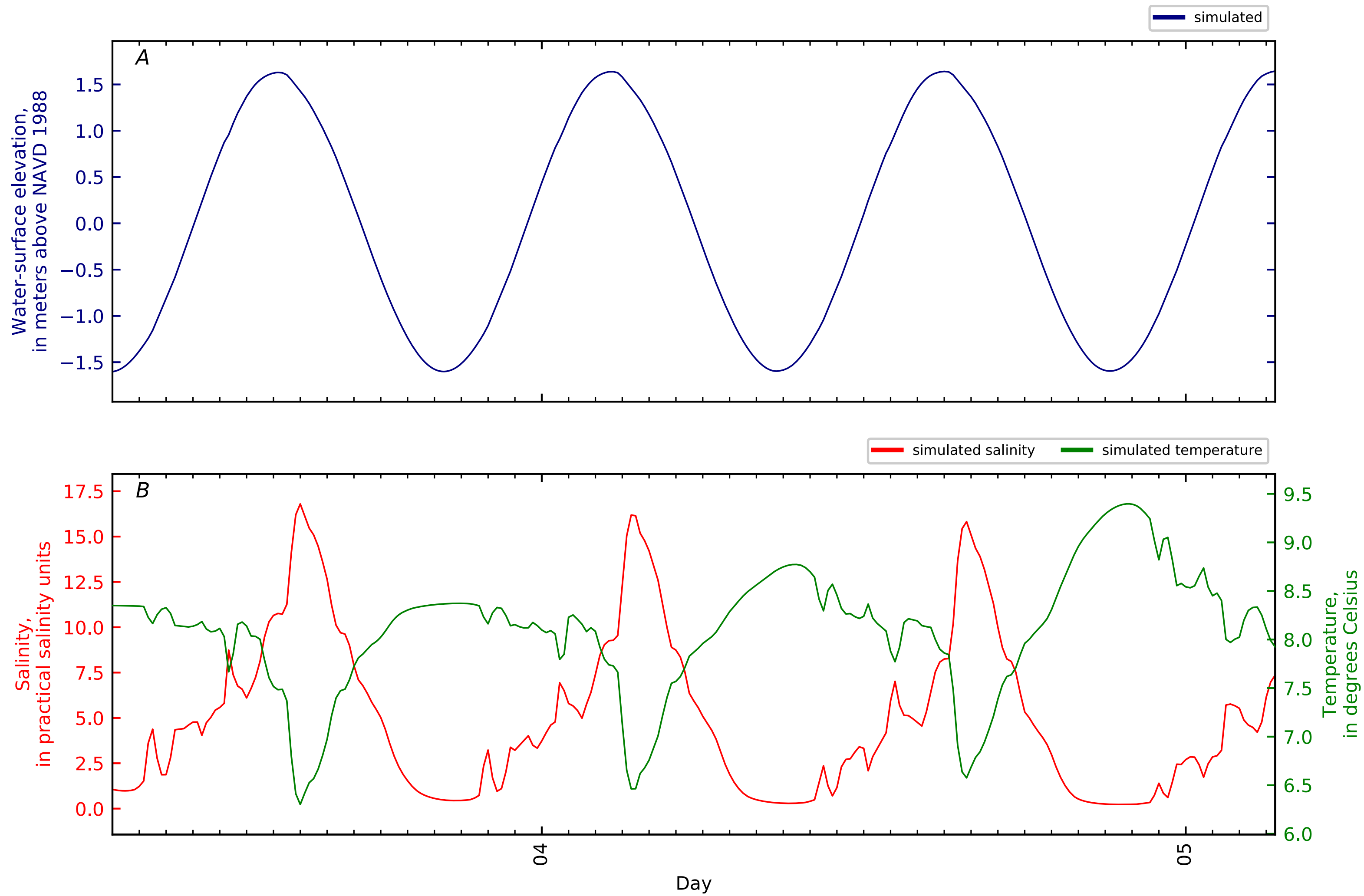

Figure B4-34. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 33, Penob Riv KM6. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

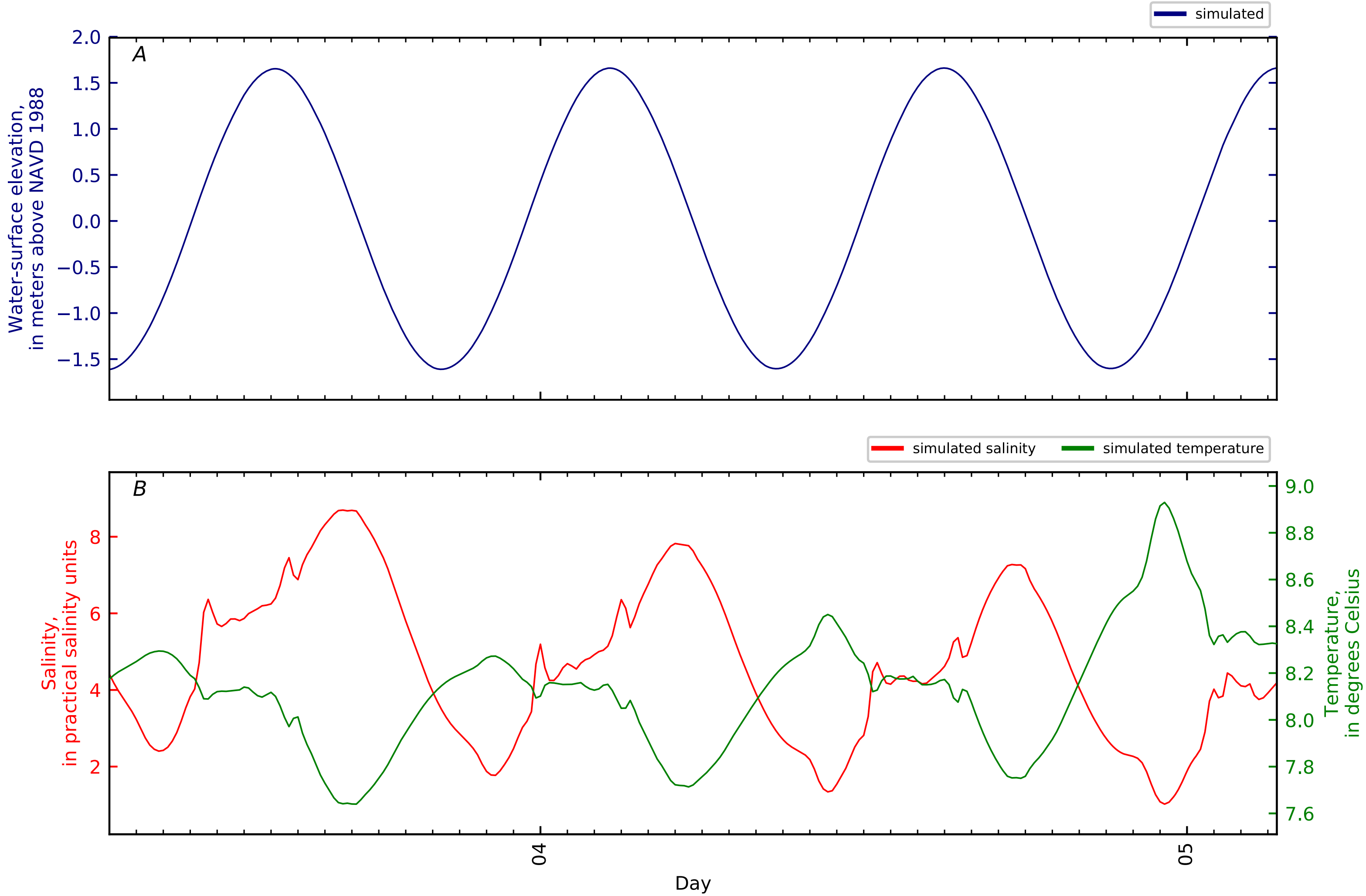

Figure B4-35. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 34, Penob Riv KM6 ERDC11 VW-MU14-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

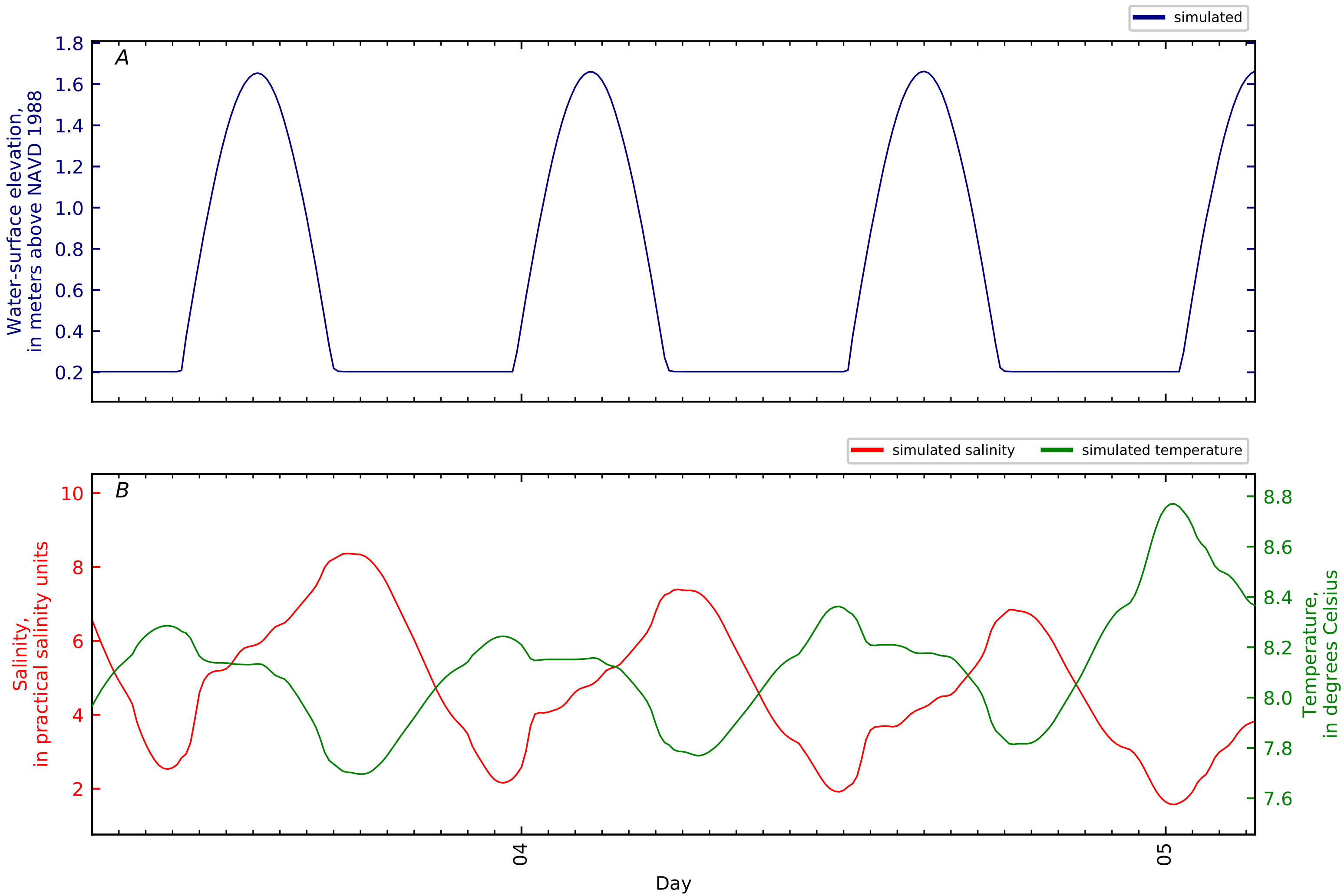

Figure B4-36. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 35, Penob Riv KM6.05 ERDC10 VW-MU7-SF1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

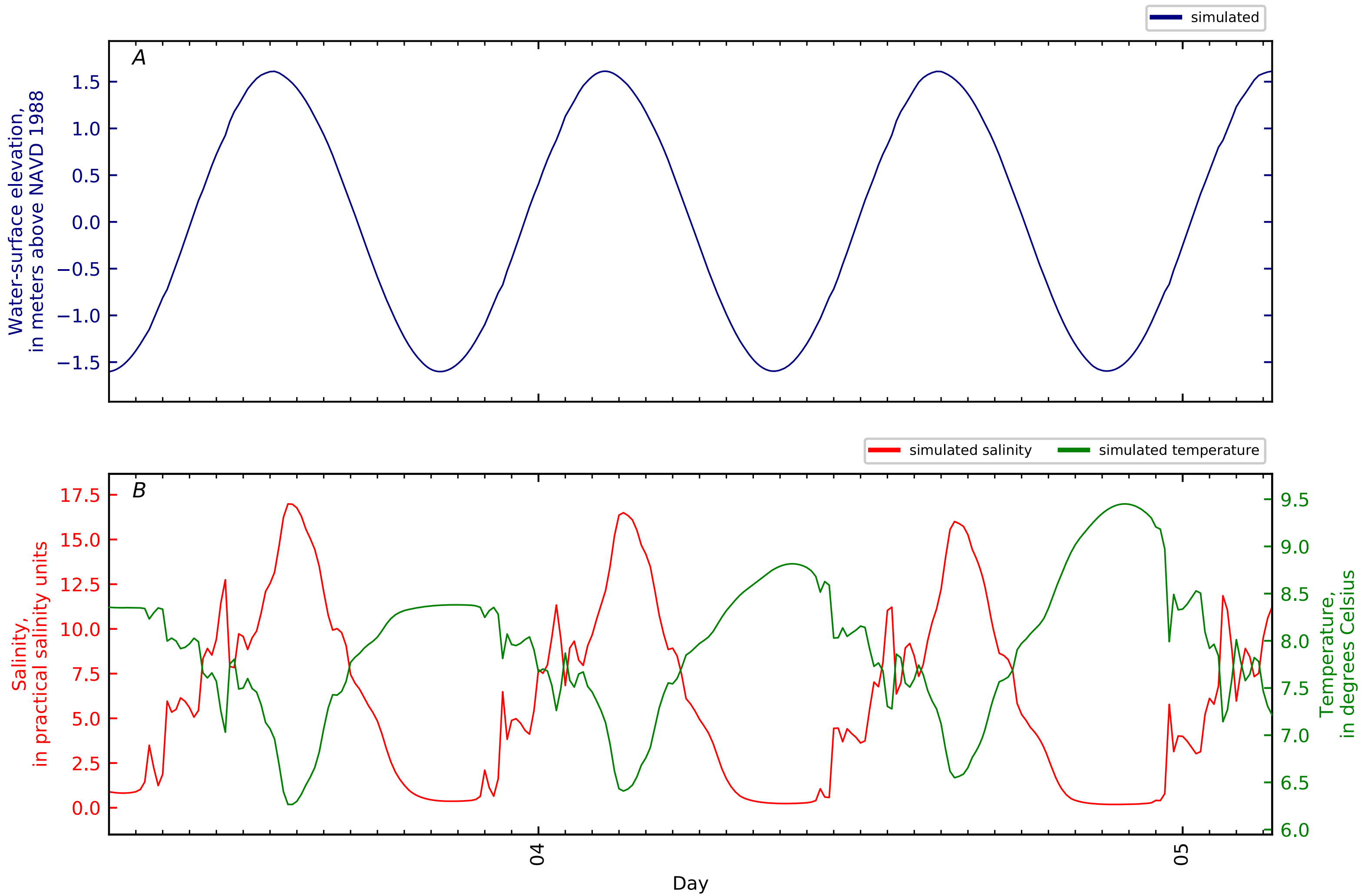

Figure B4-37. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 36, Penob Riv KM6.1 WHOI5 Verona Island 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

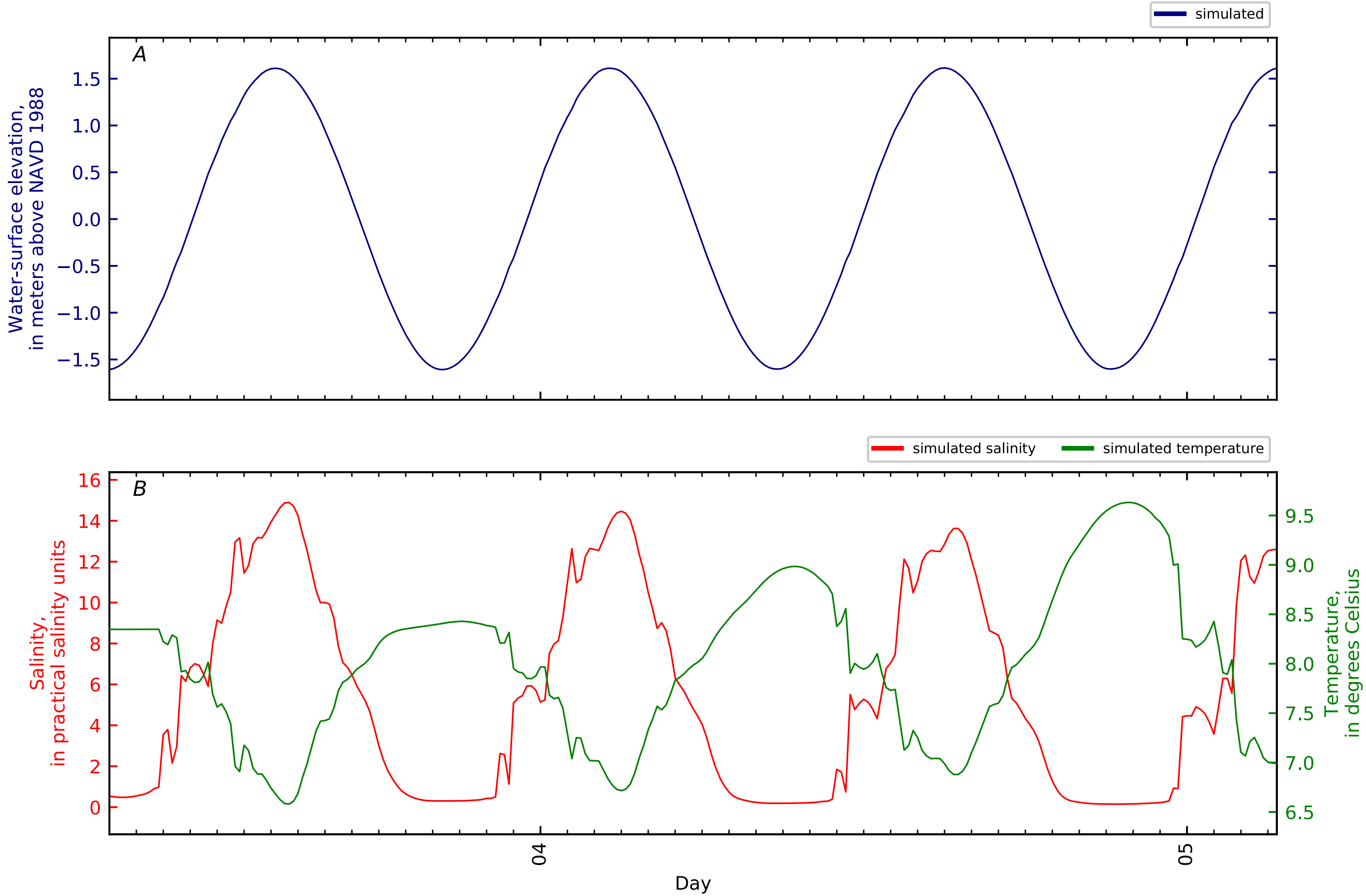

Figure B4-38. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 37, Penob Riv KM7. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

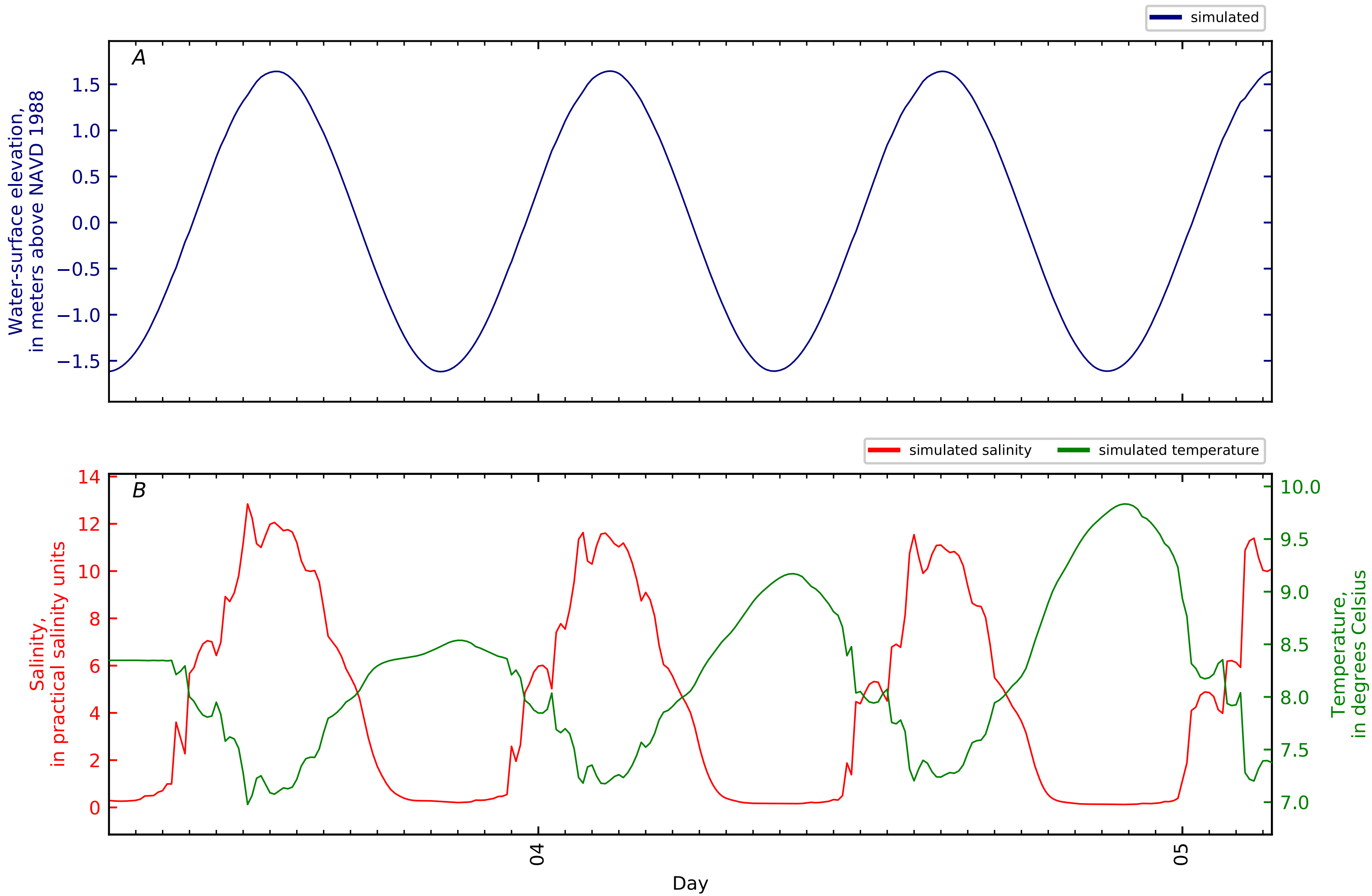

Figure B4-39. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 38, Penob Riv KM8. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

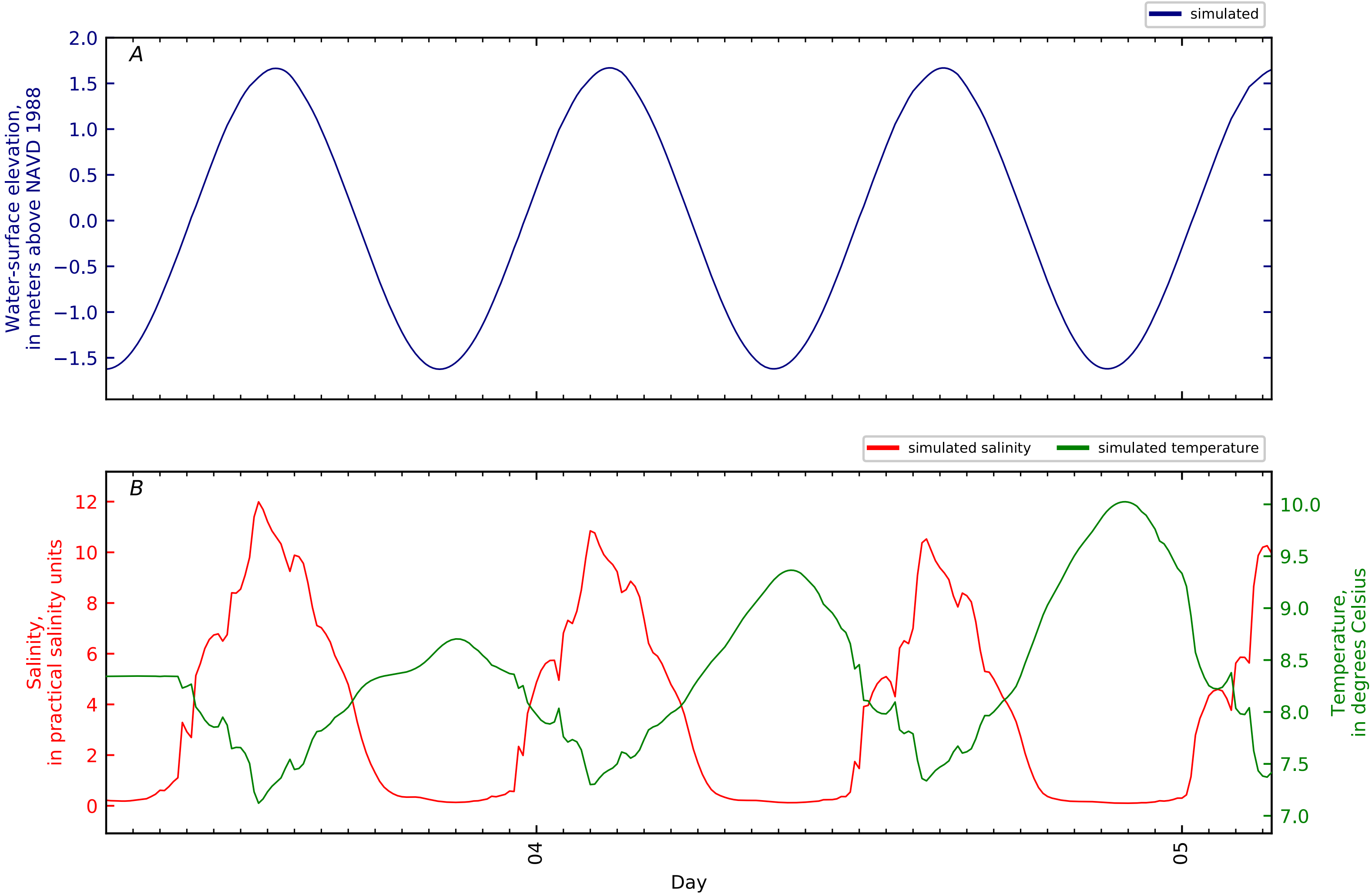

Figure B4-40. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 39, Penob Riv KM9. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

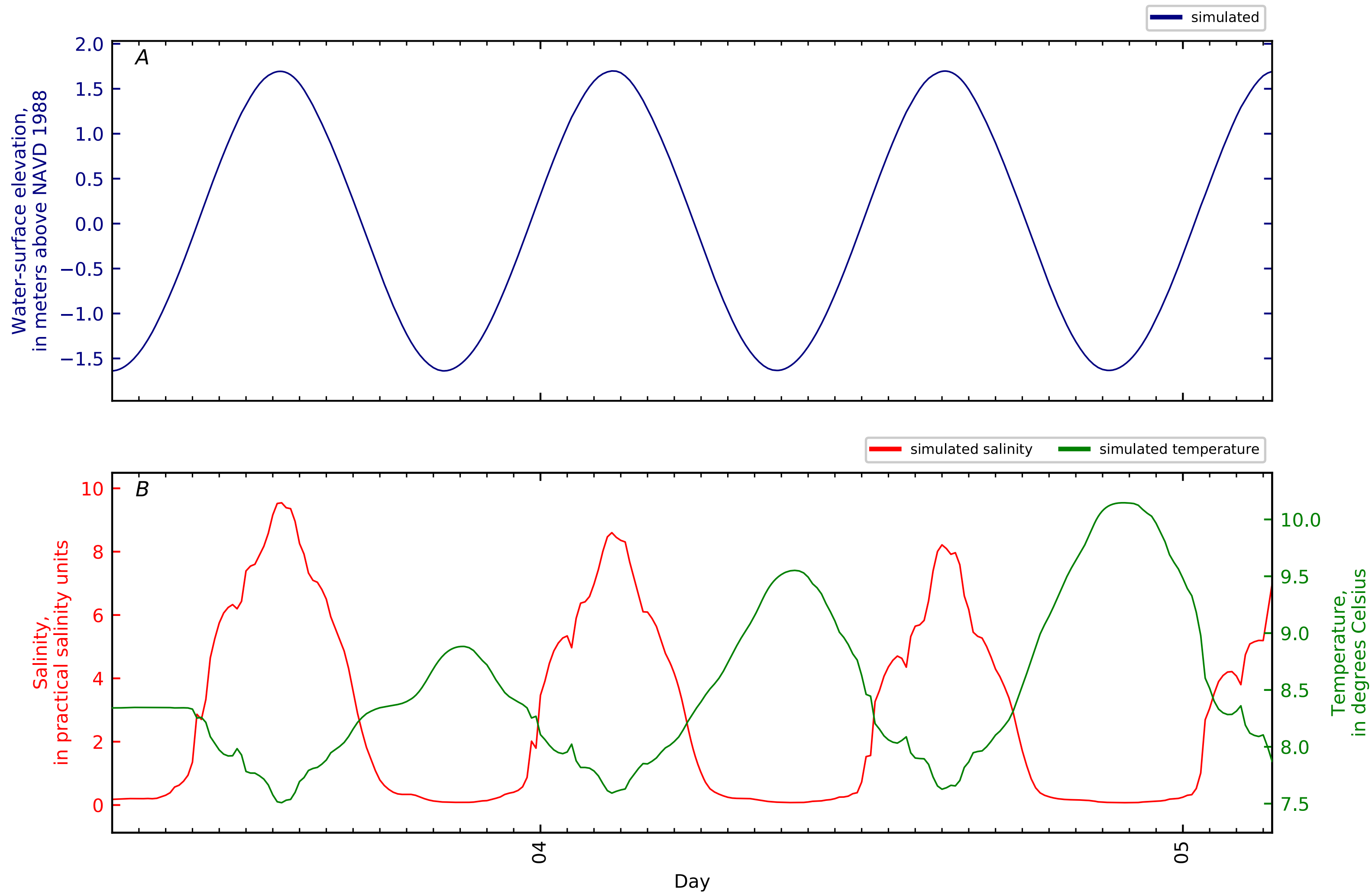

Figure B4-41. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 40, Penob Riv KM10. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

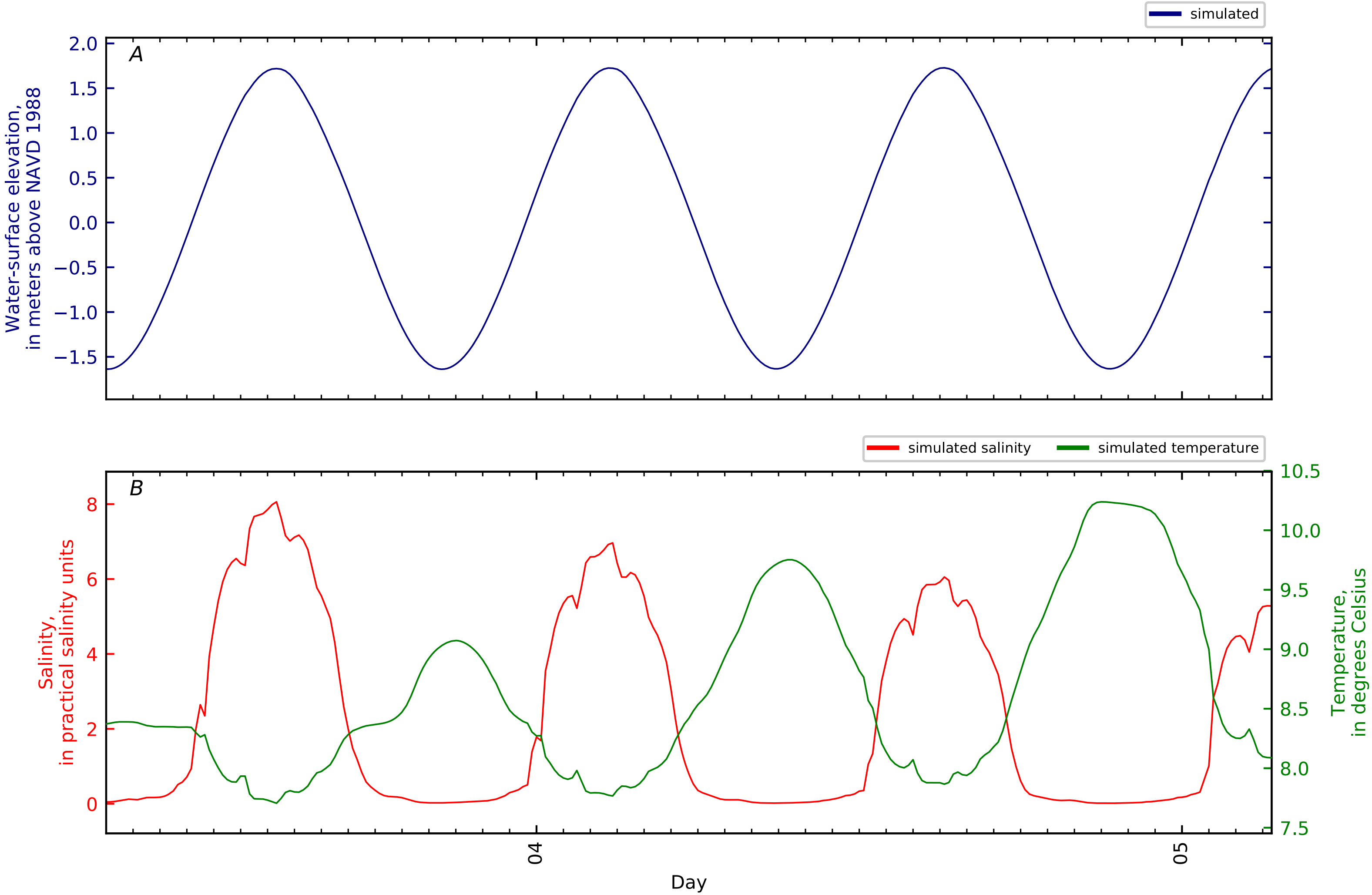

Figure B4-42. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 41, Penob Riv KM11. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

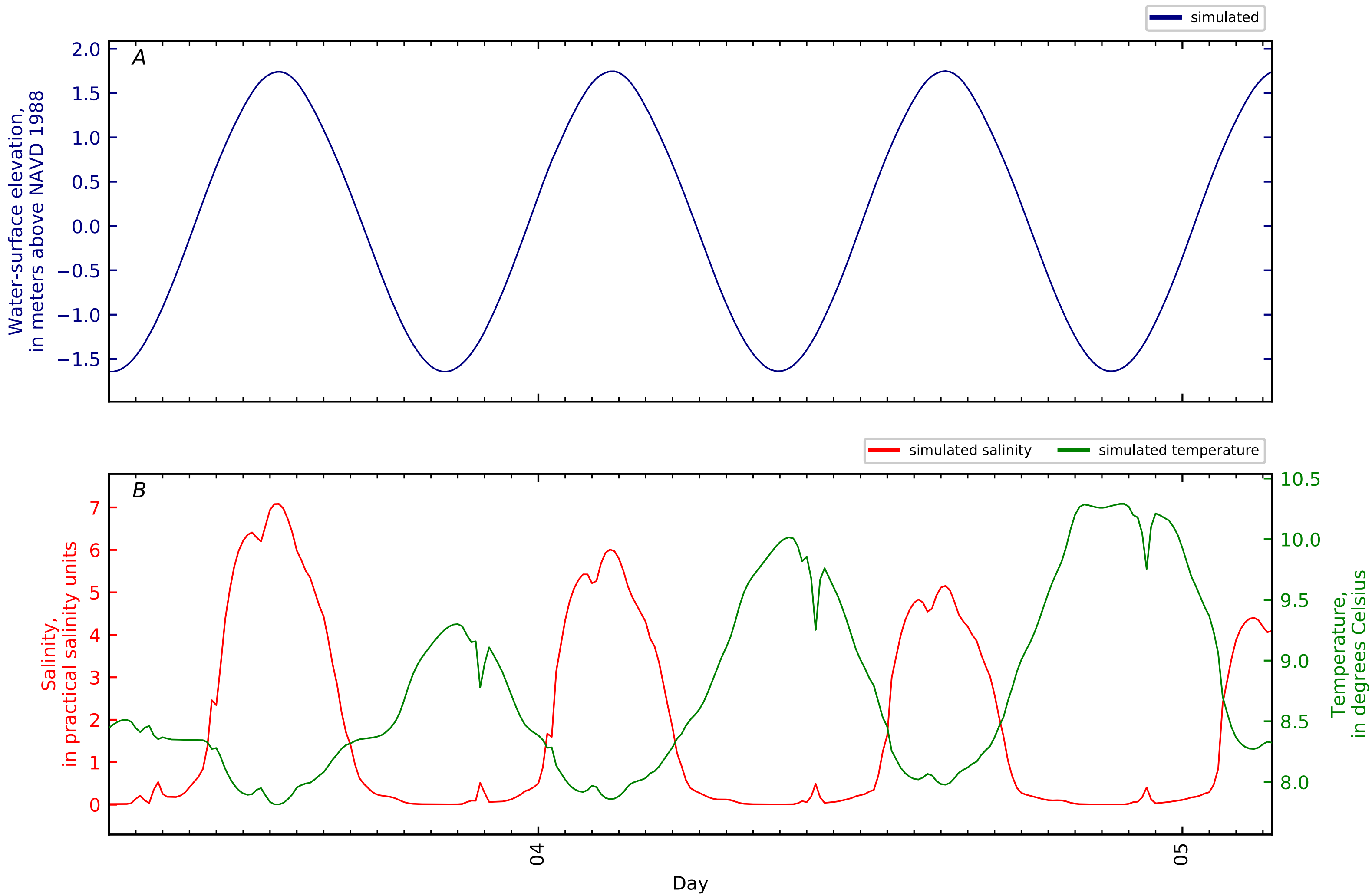

Figure B4-43. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 42, Penob Riv KM12. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

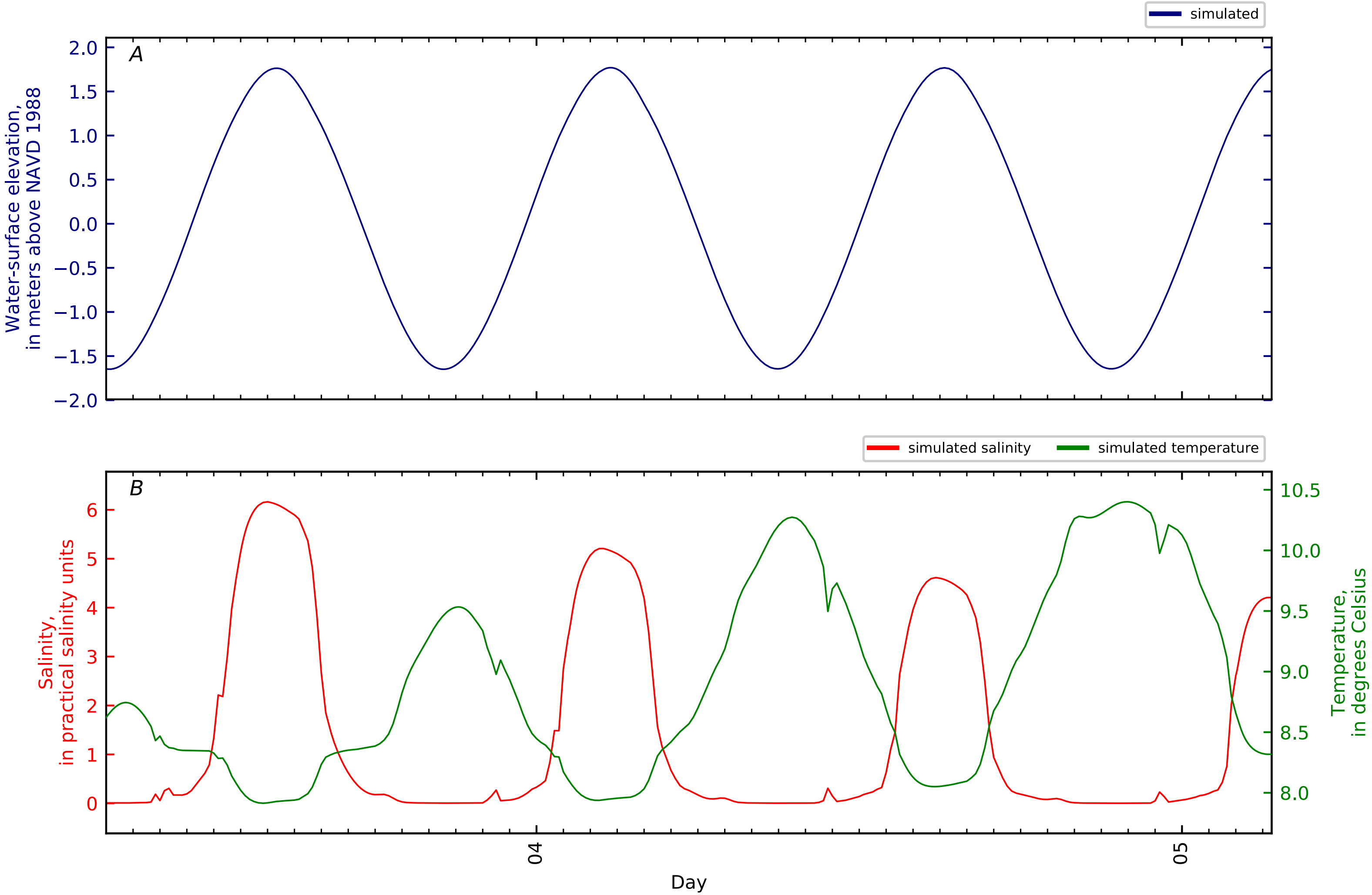

Figure B4-44. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 43, Penob Riv KM12.9 WHOI7 Bucksport 2011. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

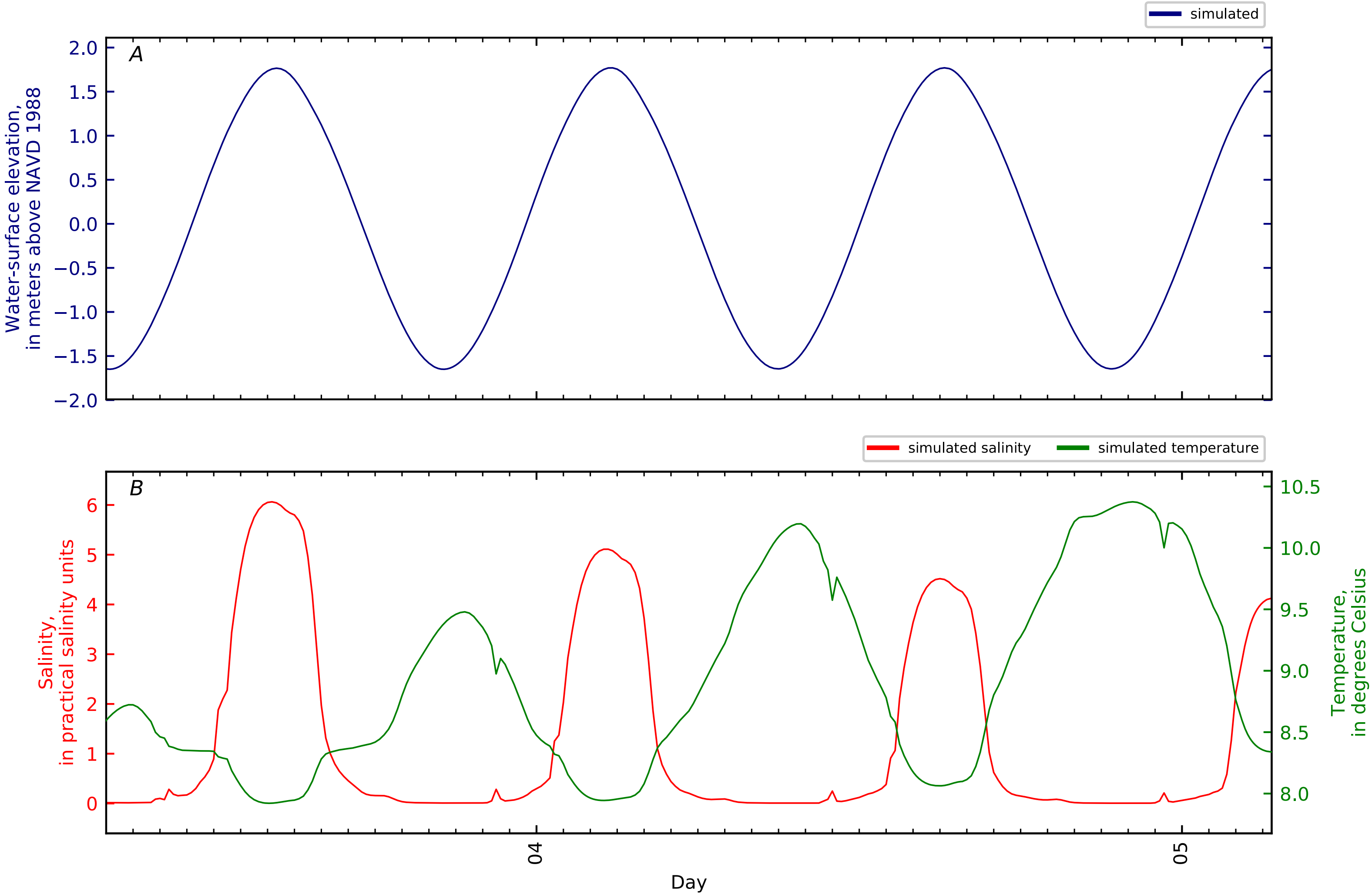

Figure B4-45. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 44, Penob Riv KM13. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

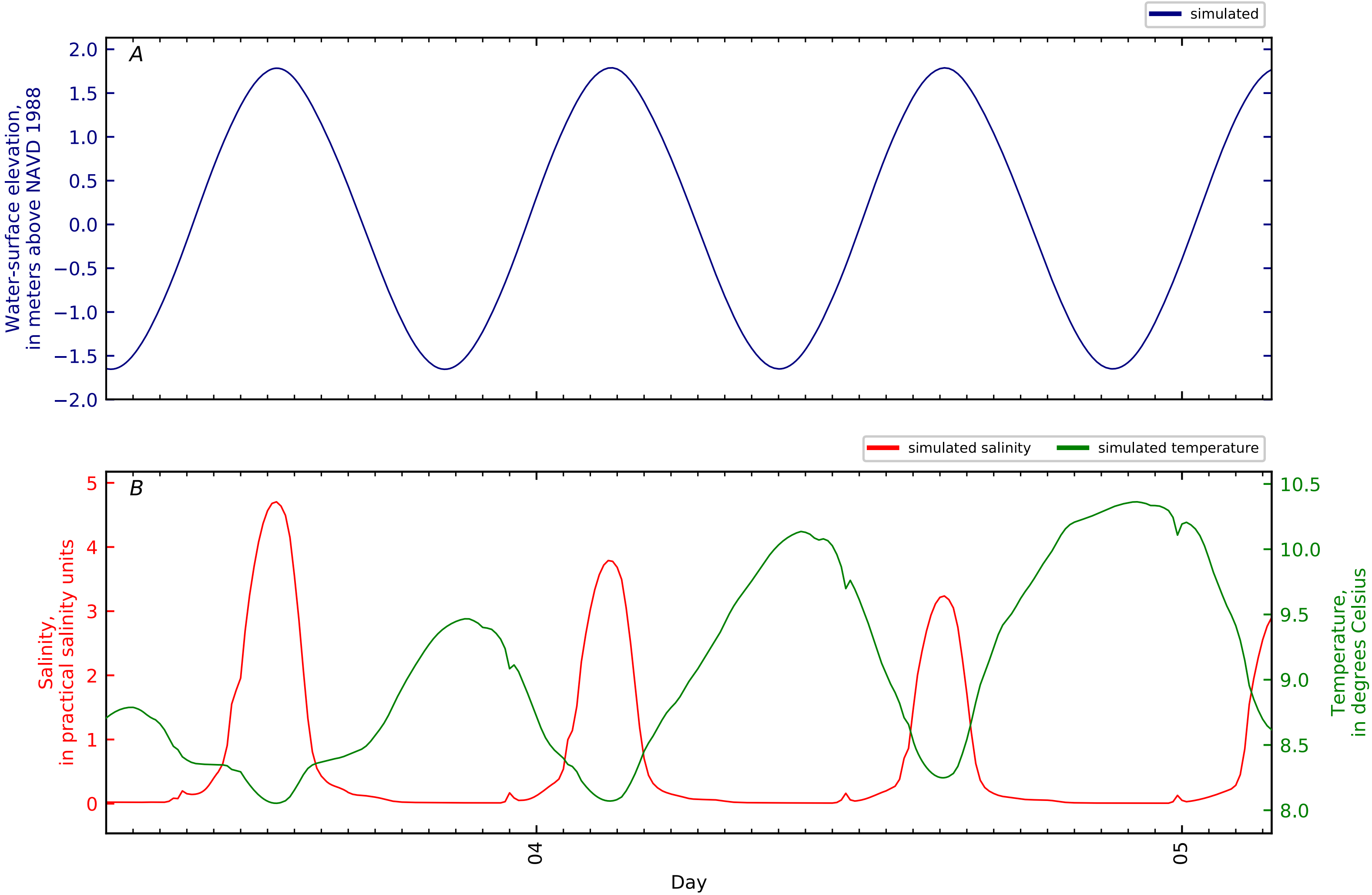

Figure B4-46. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 45, Penob Riv KM14. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

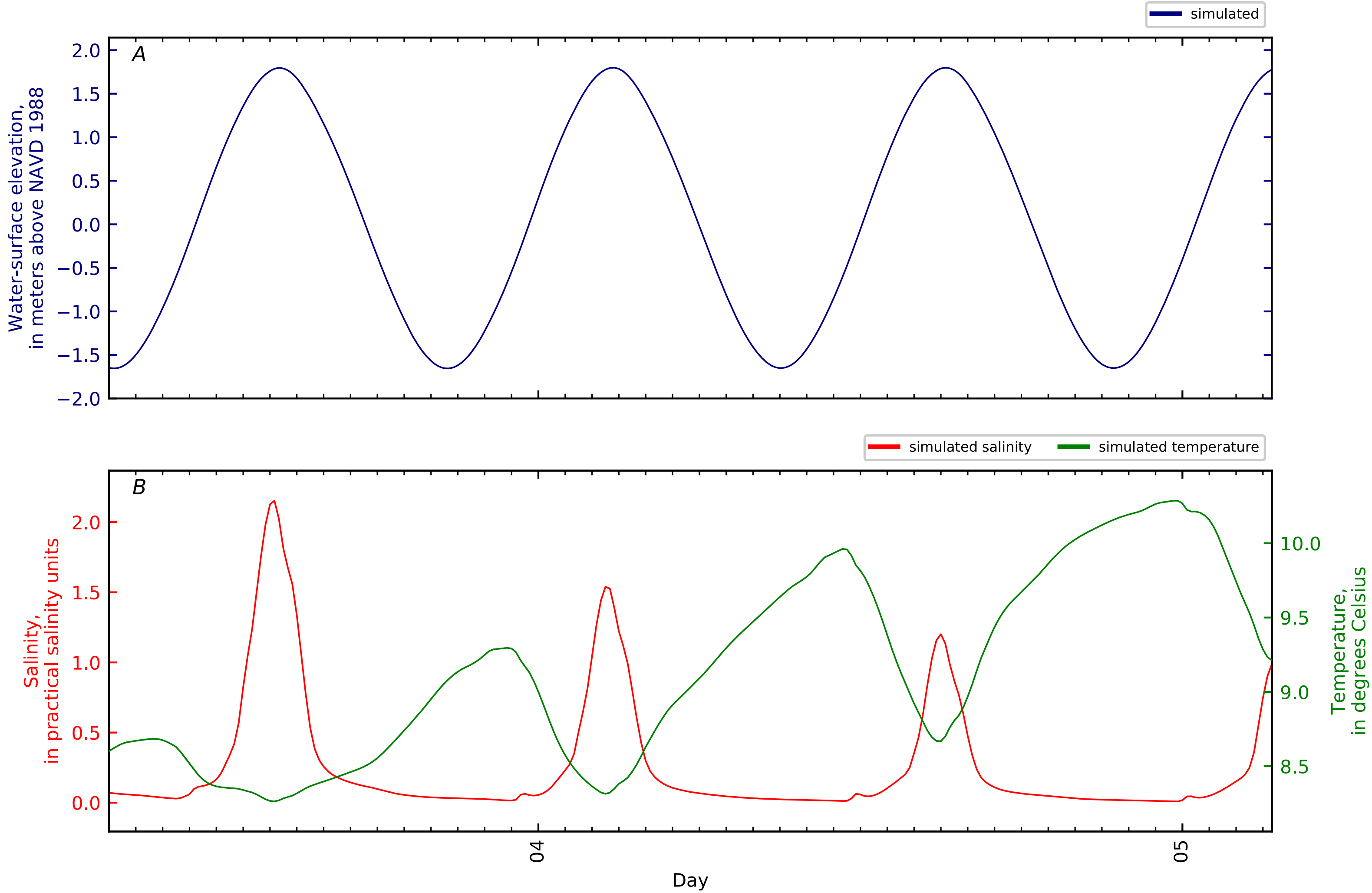

Figure B4-47. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 46, Penob Riv KM14.27 ERDC15 BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

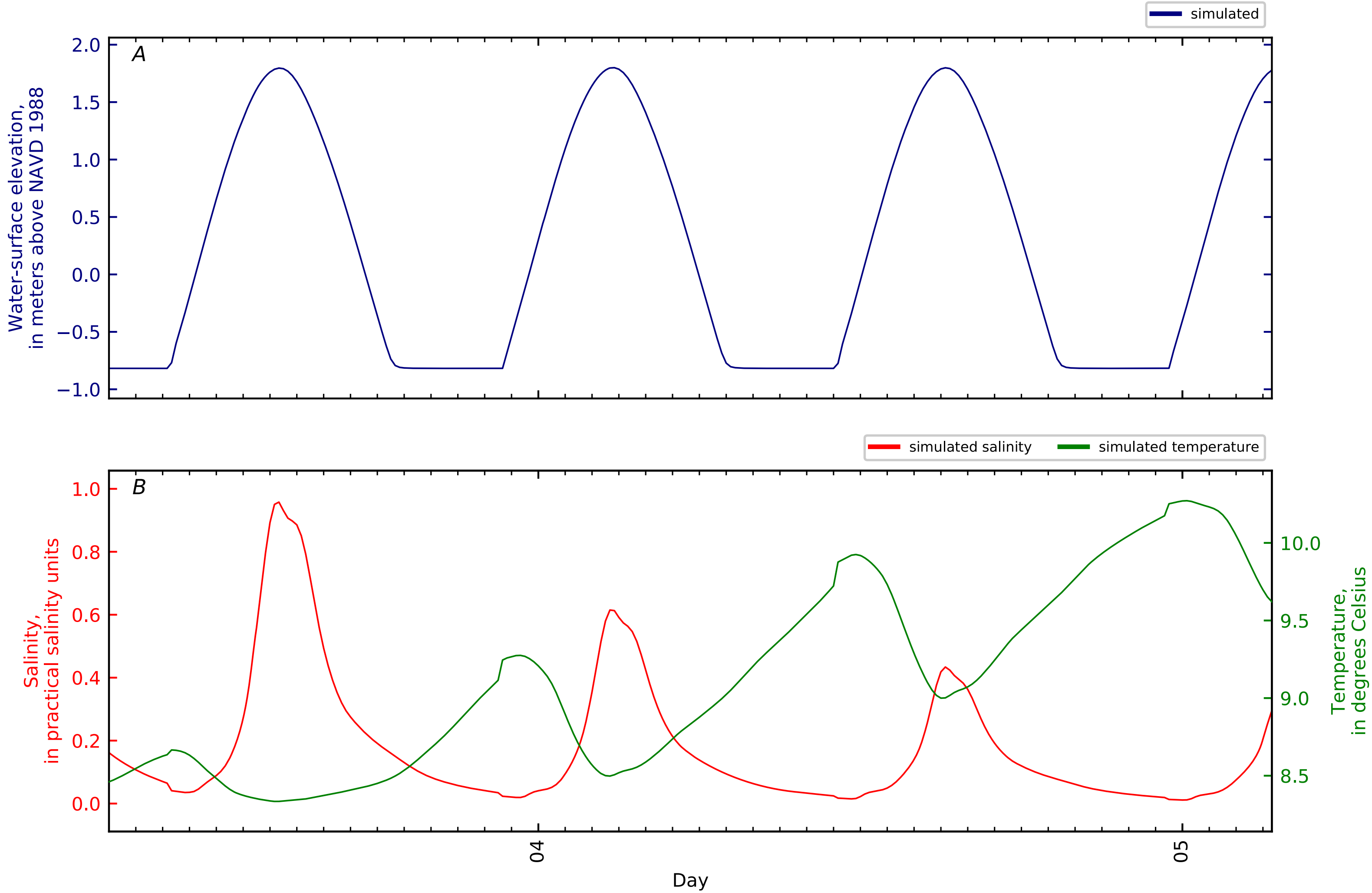

Figure B4-48. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 47, Penob Riv KM14.29 ERDC16B BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

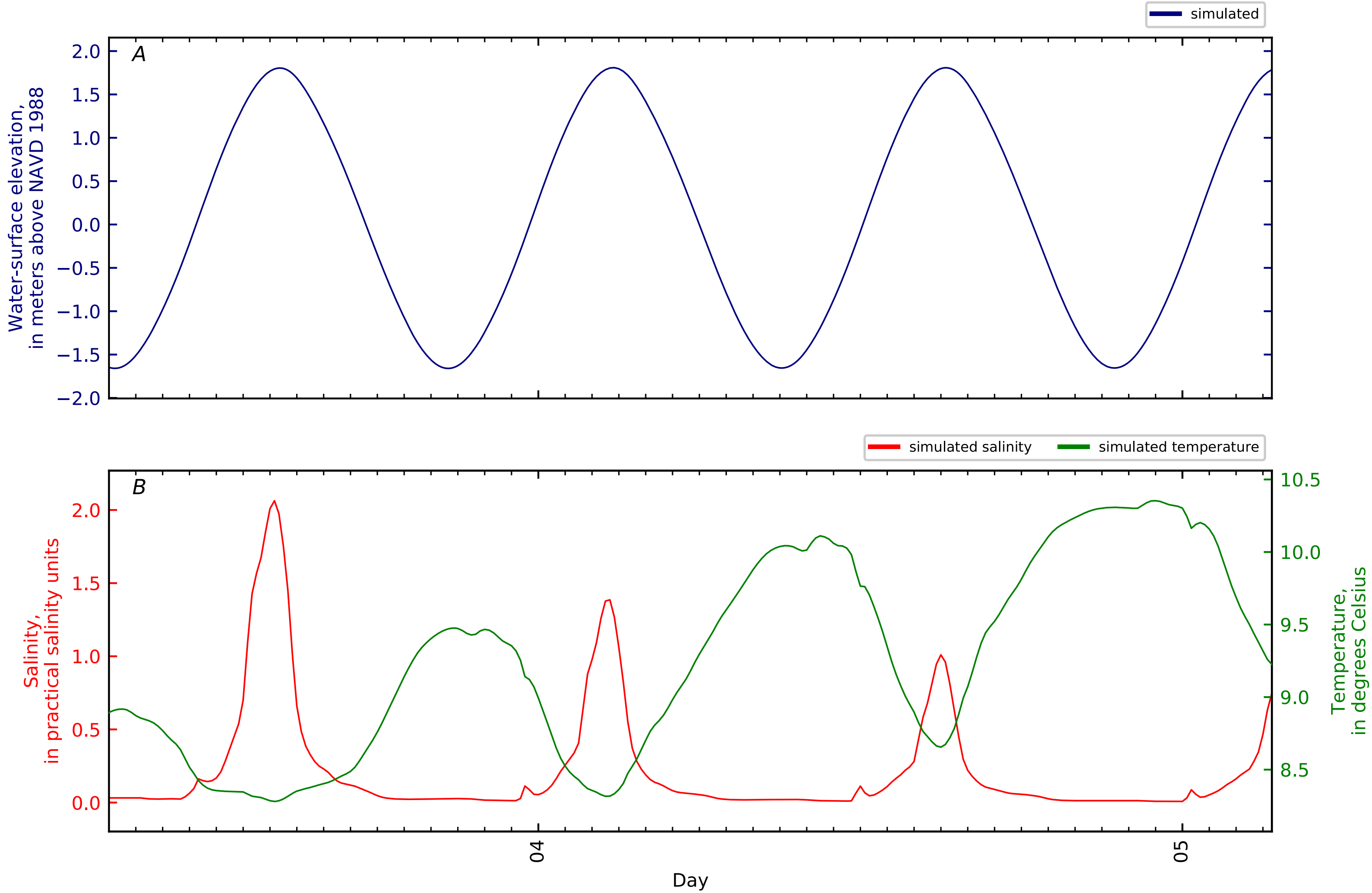

Figure B4-49. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 48, Penob Riv KM15. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

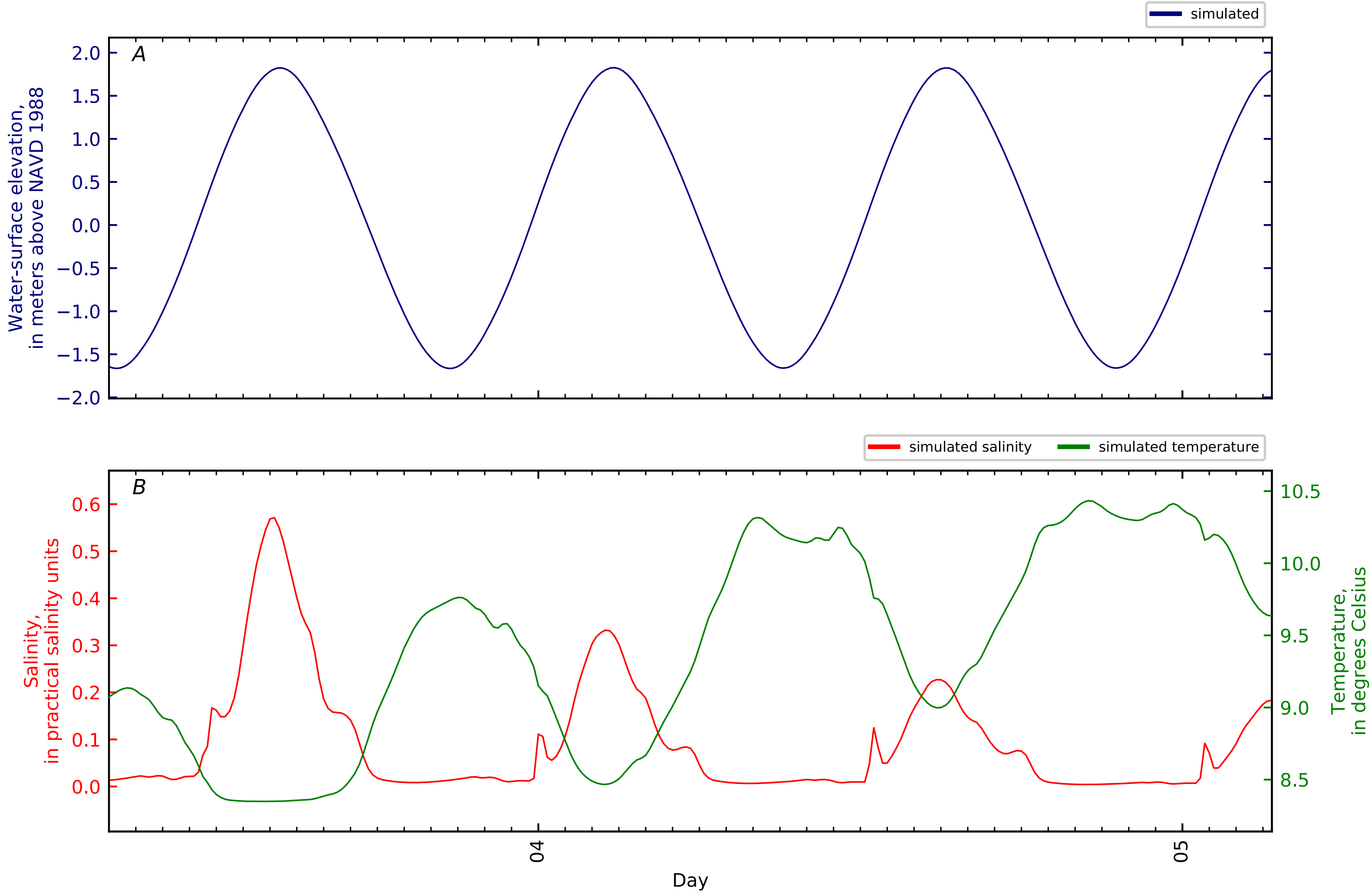

Figure B4-50. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 49, Penob Riv KM16. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

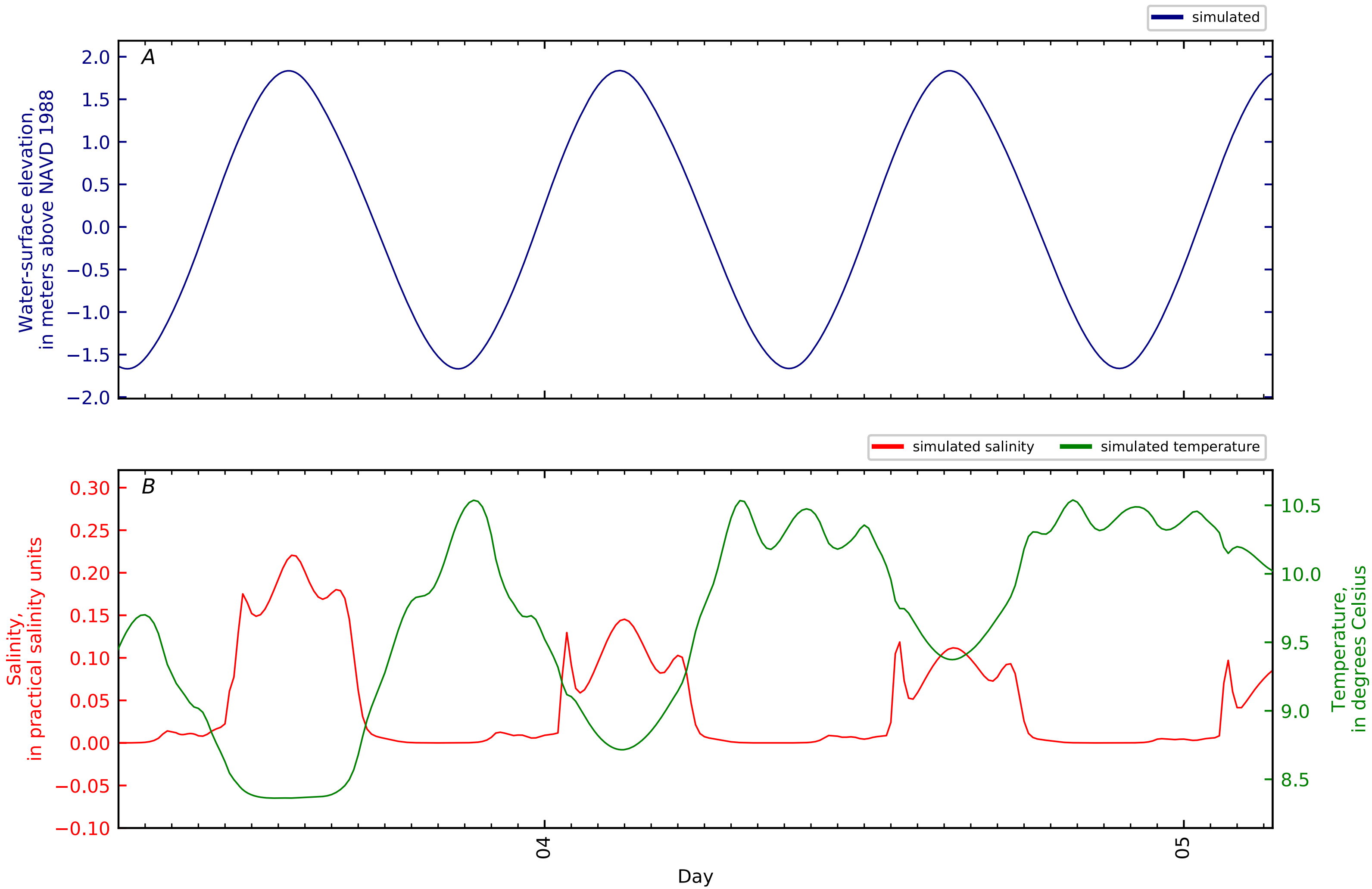

Figure B4-51. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 50, Penob Riv KM17. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

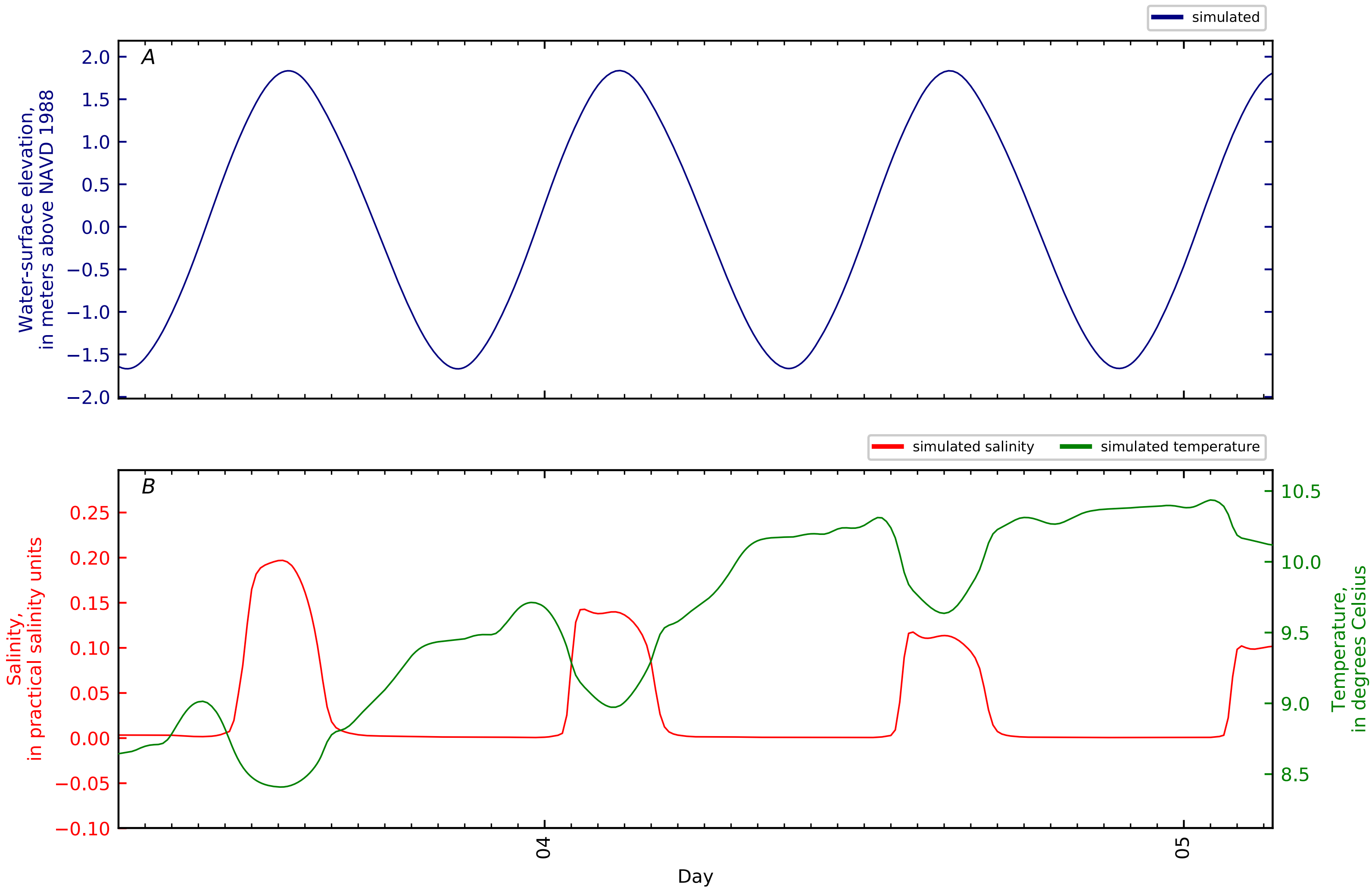

Figure B4-52. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 51, Penob Riv KM17.2 ERDC17B FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

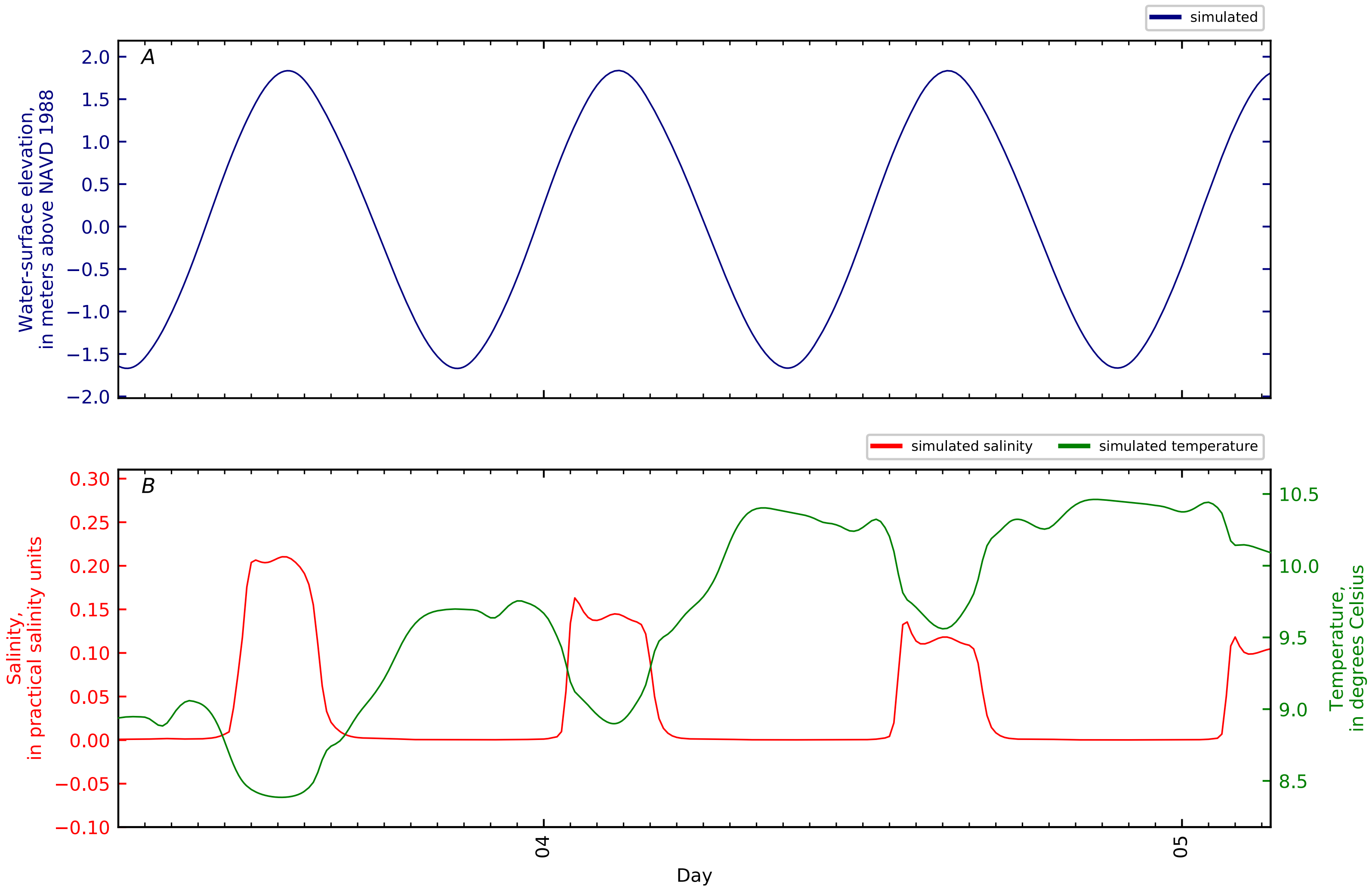

Figure B4-53. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 52, Penob Riv KM17.21 ERDC13 FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

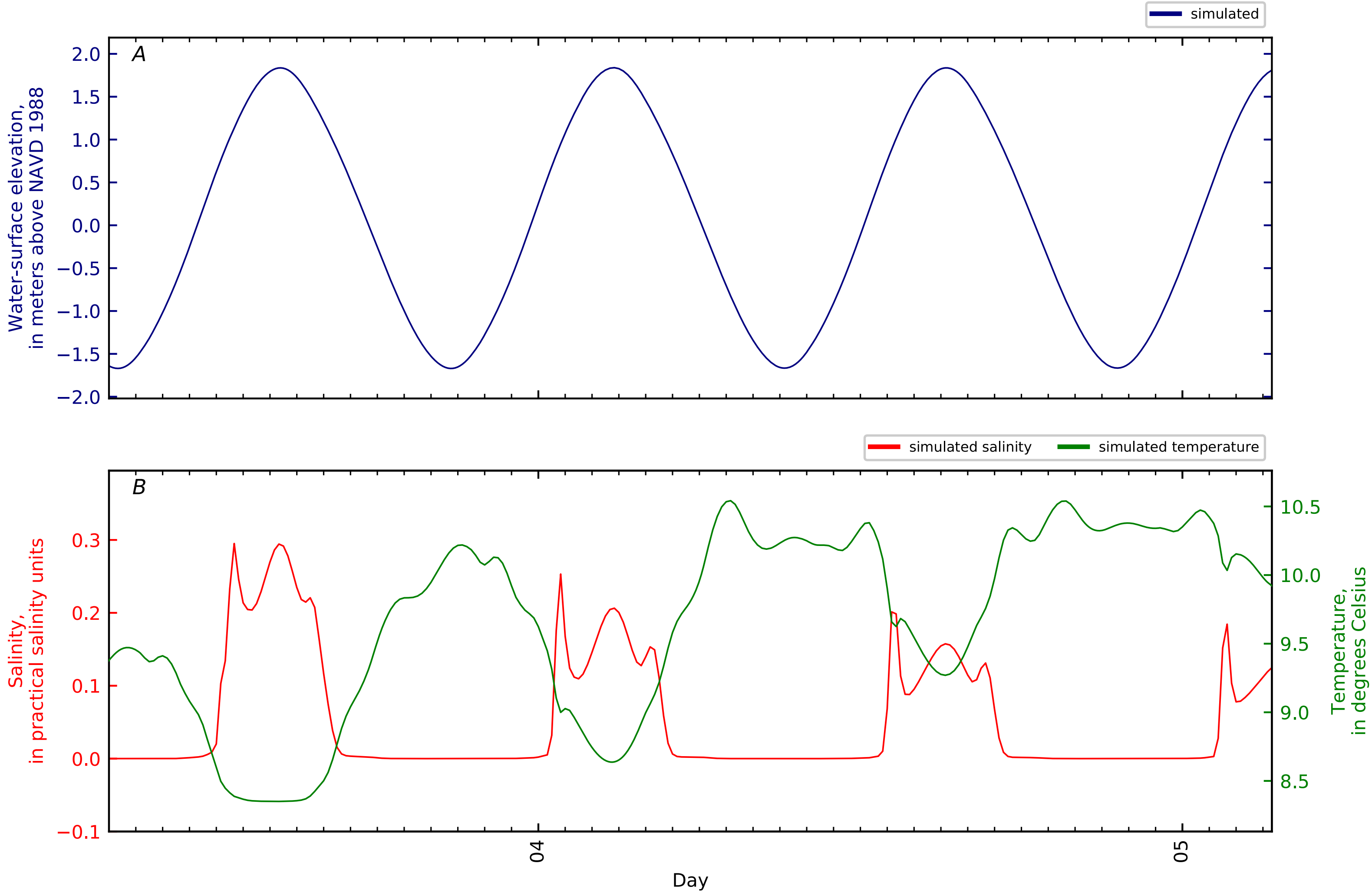

Figure B4-54. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 53, Penob Riv KM17.2 WHOI2 Frankfort Flats 2. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

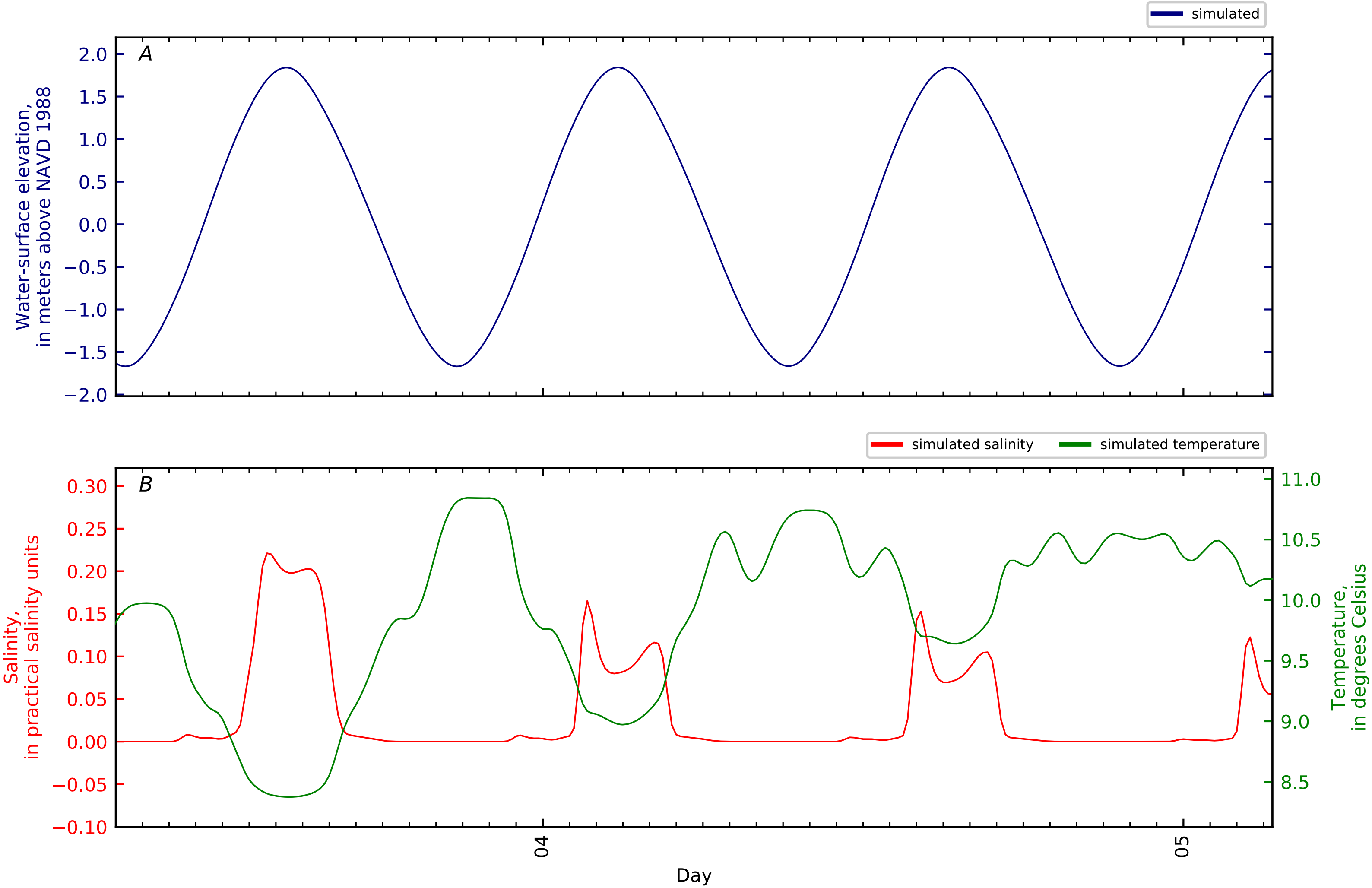

Figure B4-55. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 54, Penob Riv KM18. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

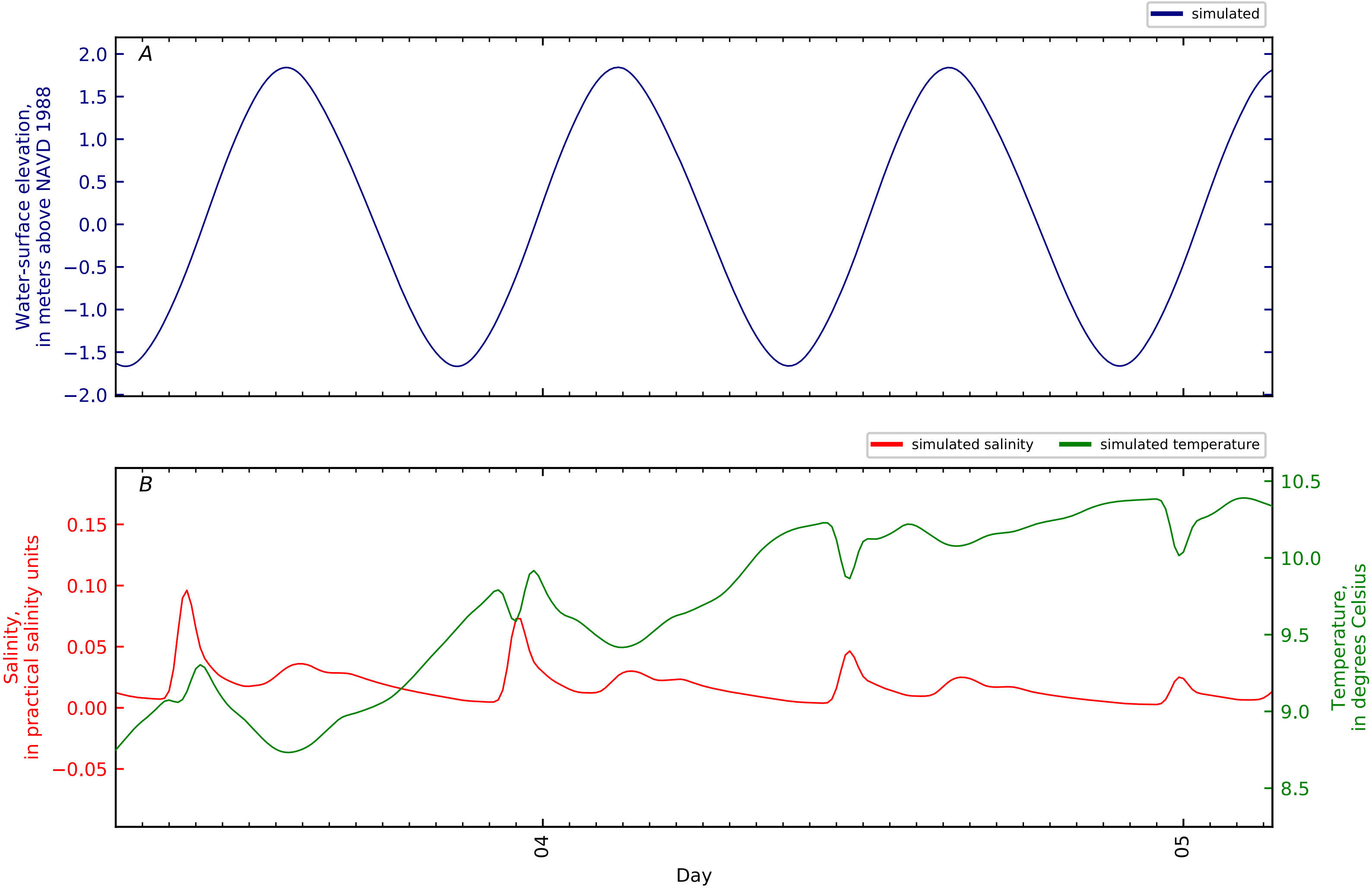

Figure B4-56. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 55, Penob Riv KM18.01 GS CTD1-01. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

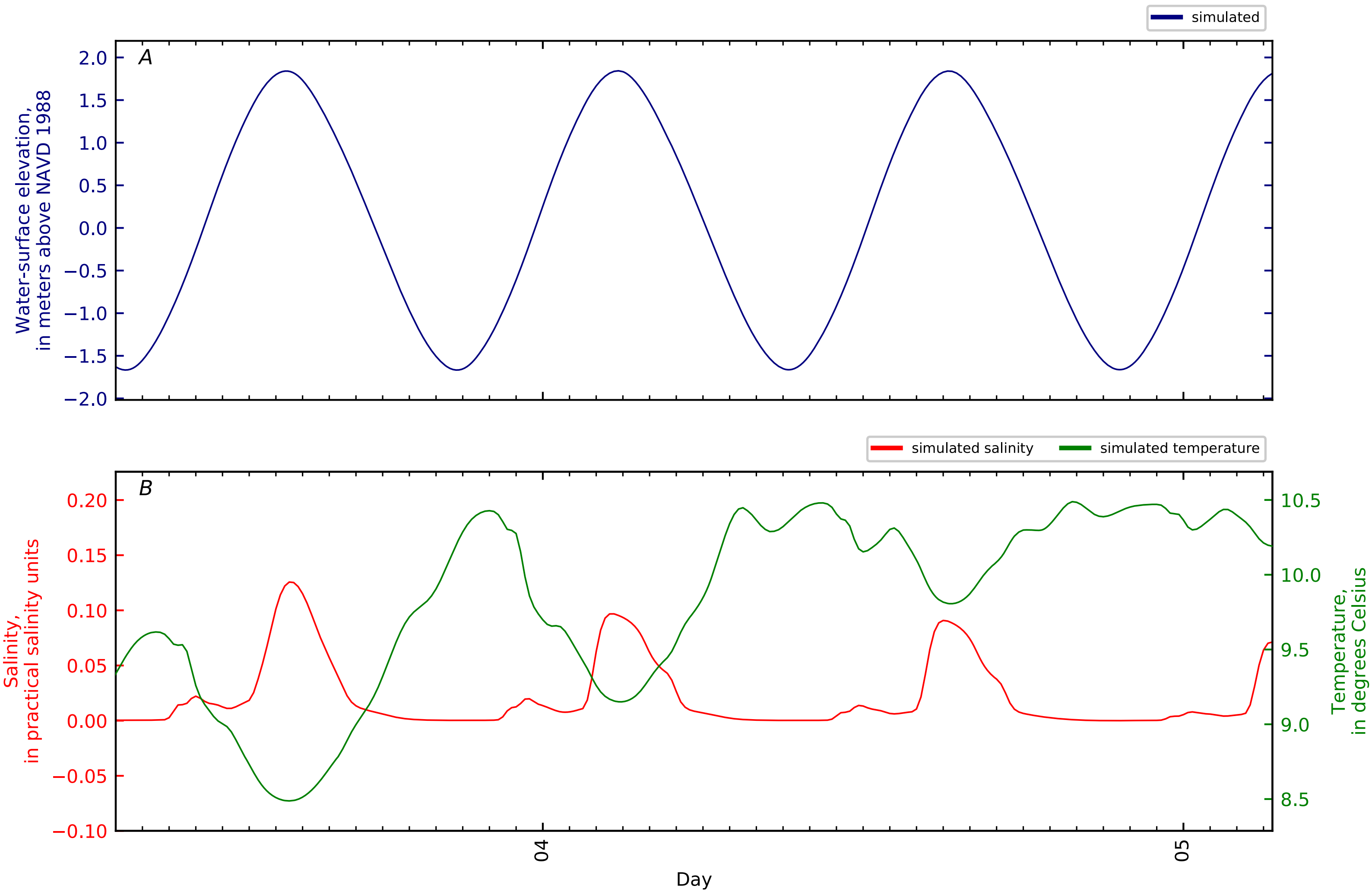

Figure B4-57. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 56, Penob Riv KM18.01 GS CTD1-02. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

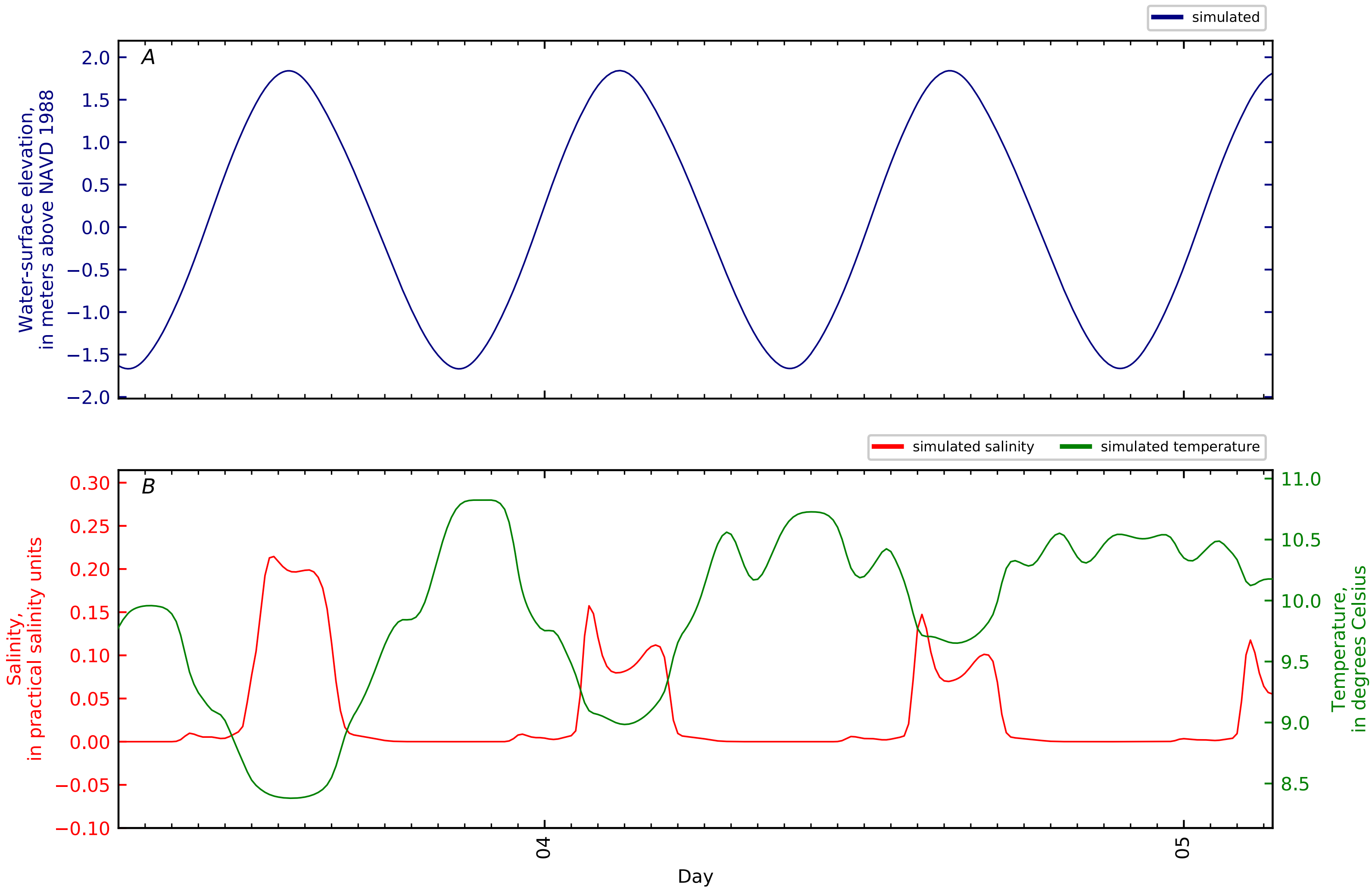

Figure B4-58. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 57, Penob Riv KM18.01 GS CTD1-03. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

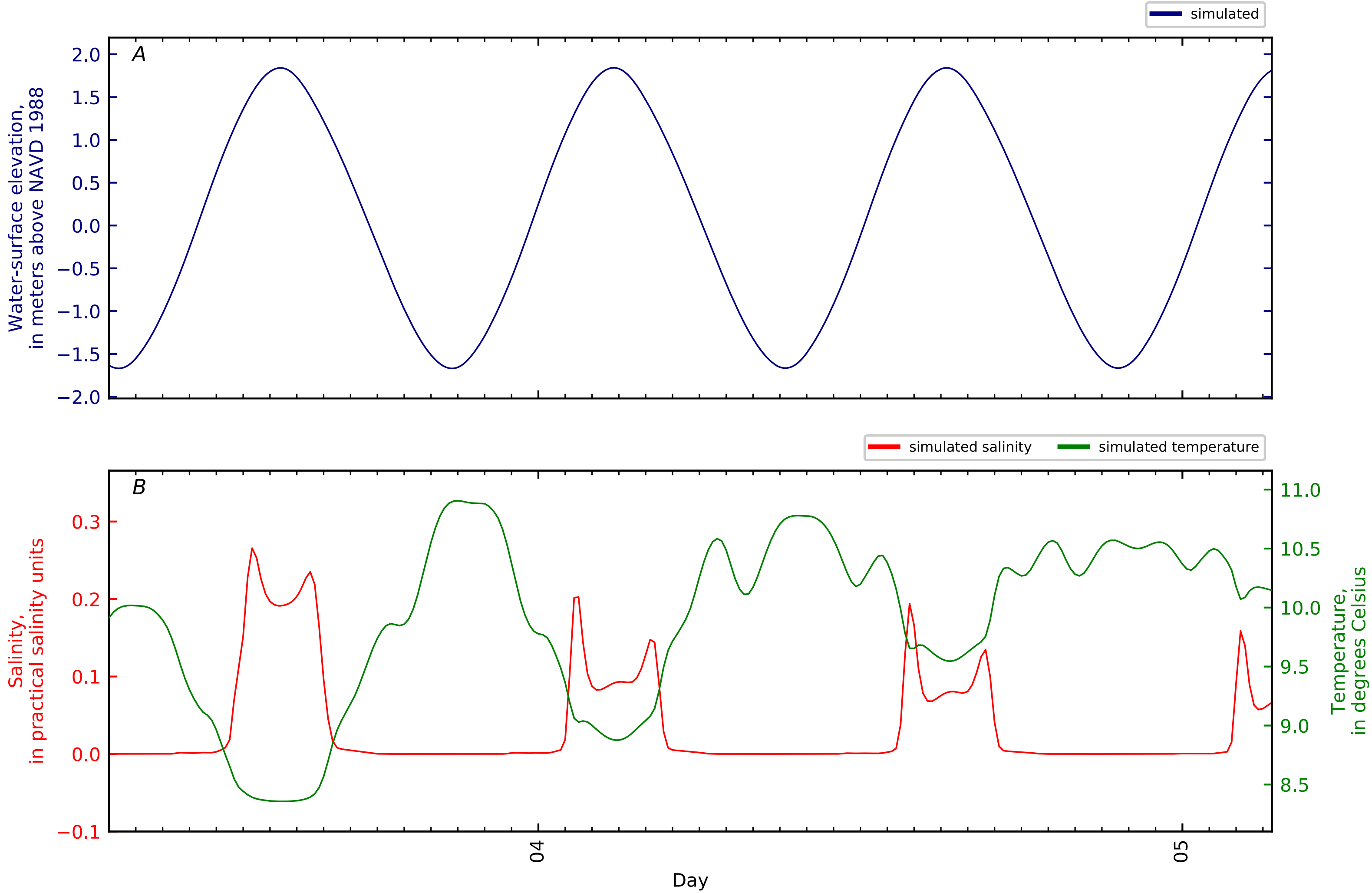

Figure B4-59. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 58, Penob Riv KM18.01 GS CTD1-04. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

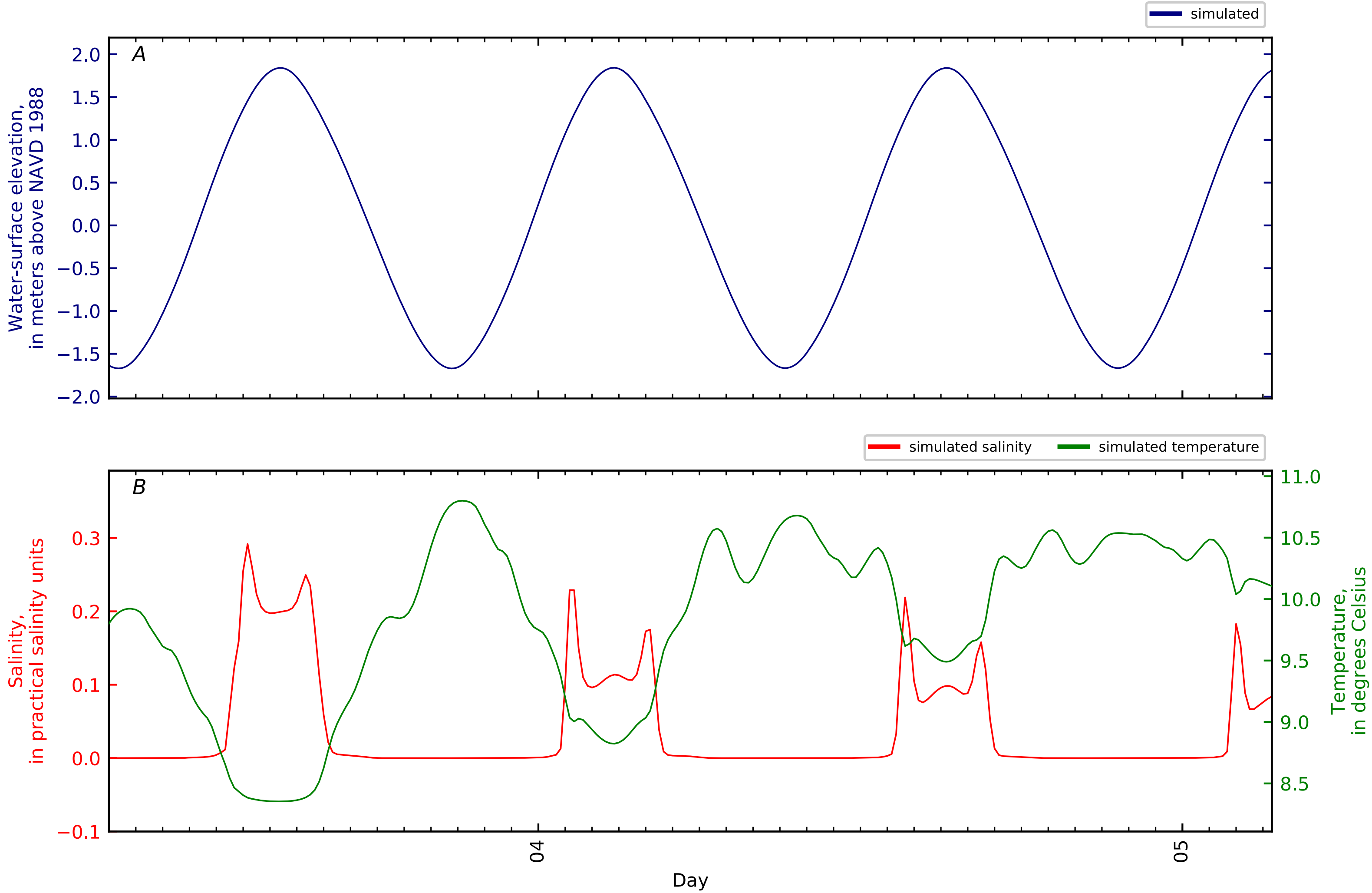

Figure B4-60. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 59, Penob Riv KM18.01 GS CTD1-05. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

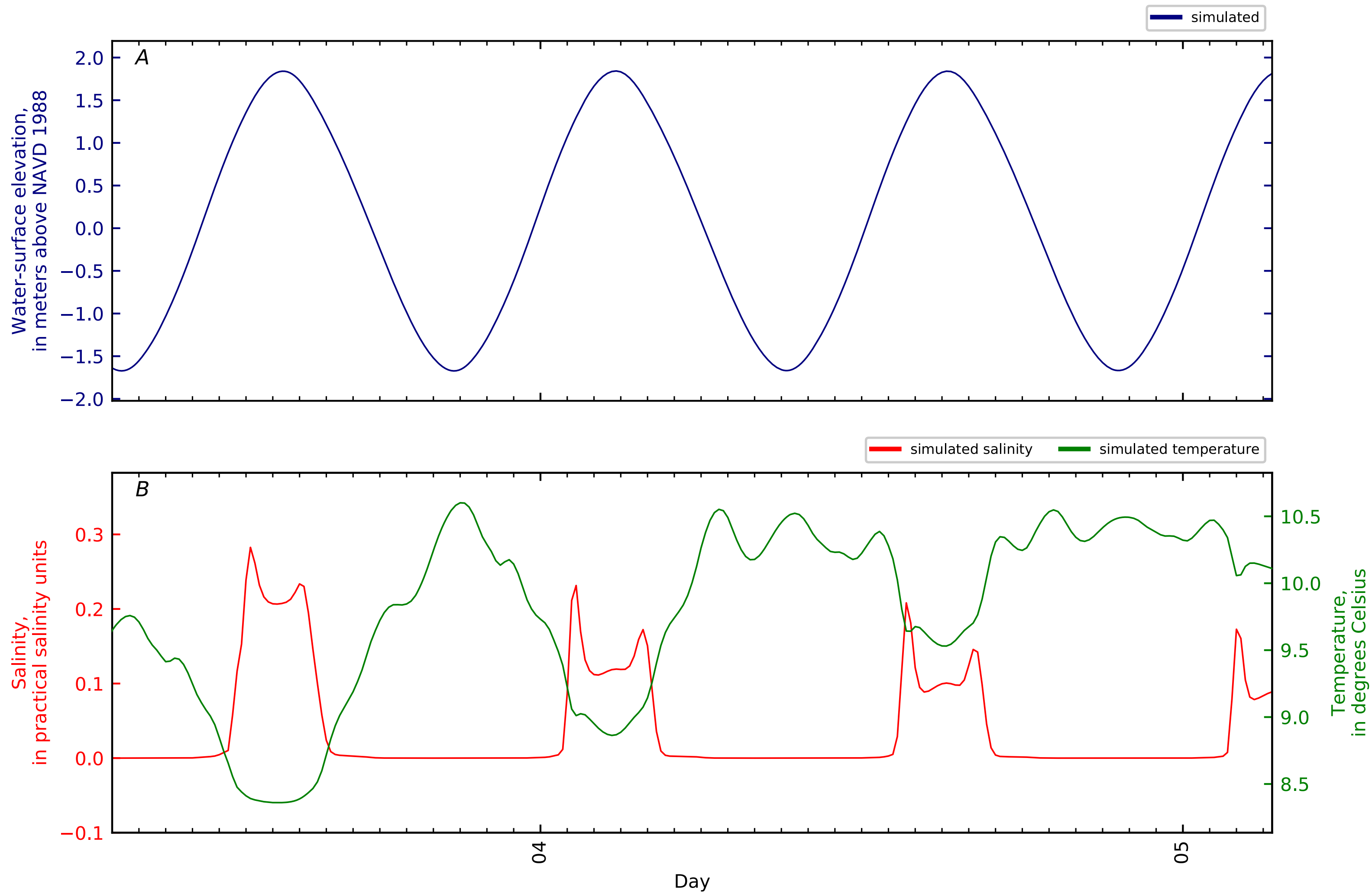

Figure B4-61. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 60, Penob Riv KM18.01 GS CTD1-06. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

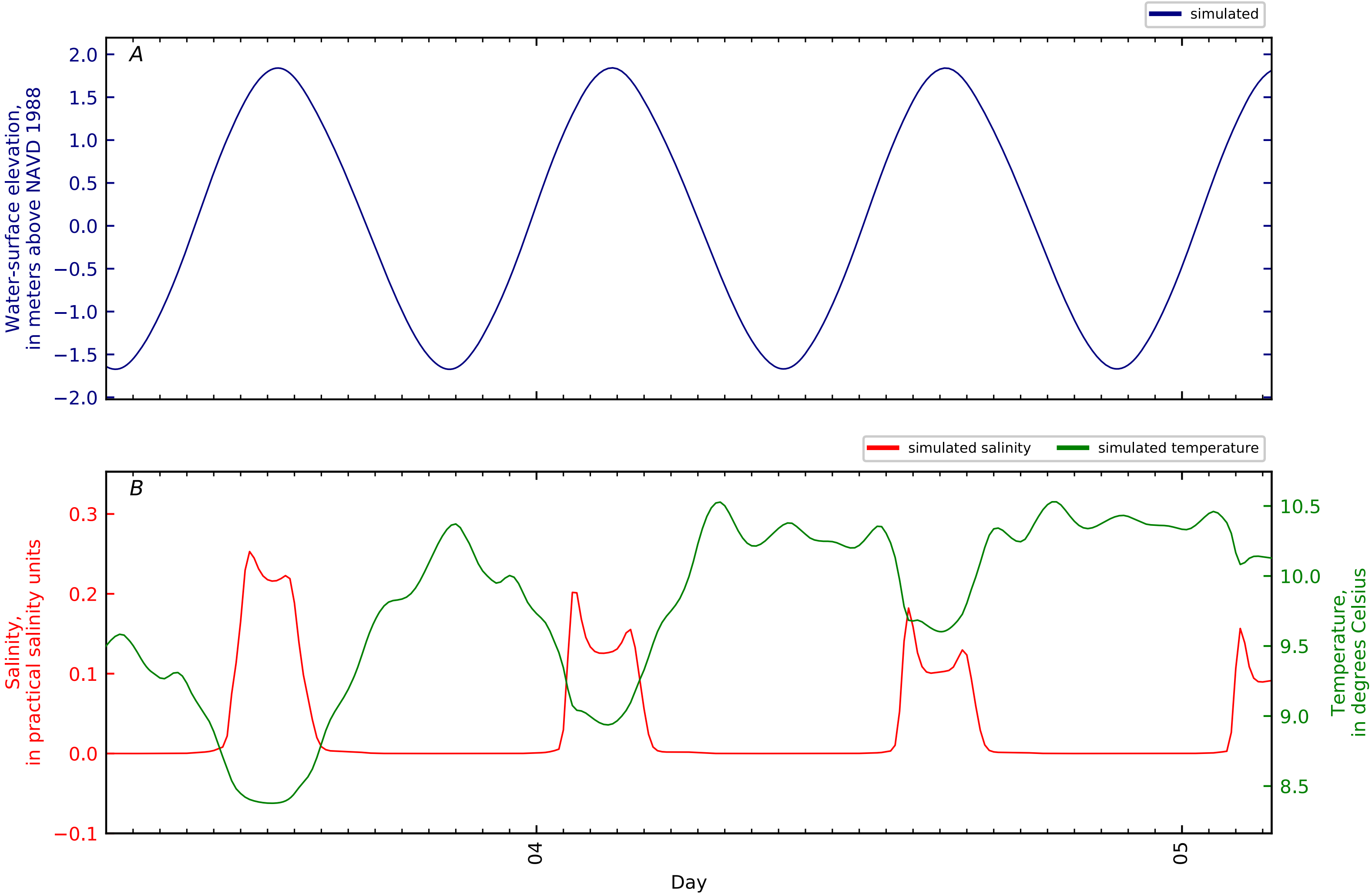

Figure B4-62. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 61, Penob Riv KM18.01 GS CTD1-07. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

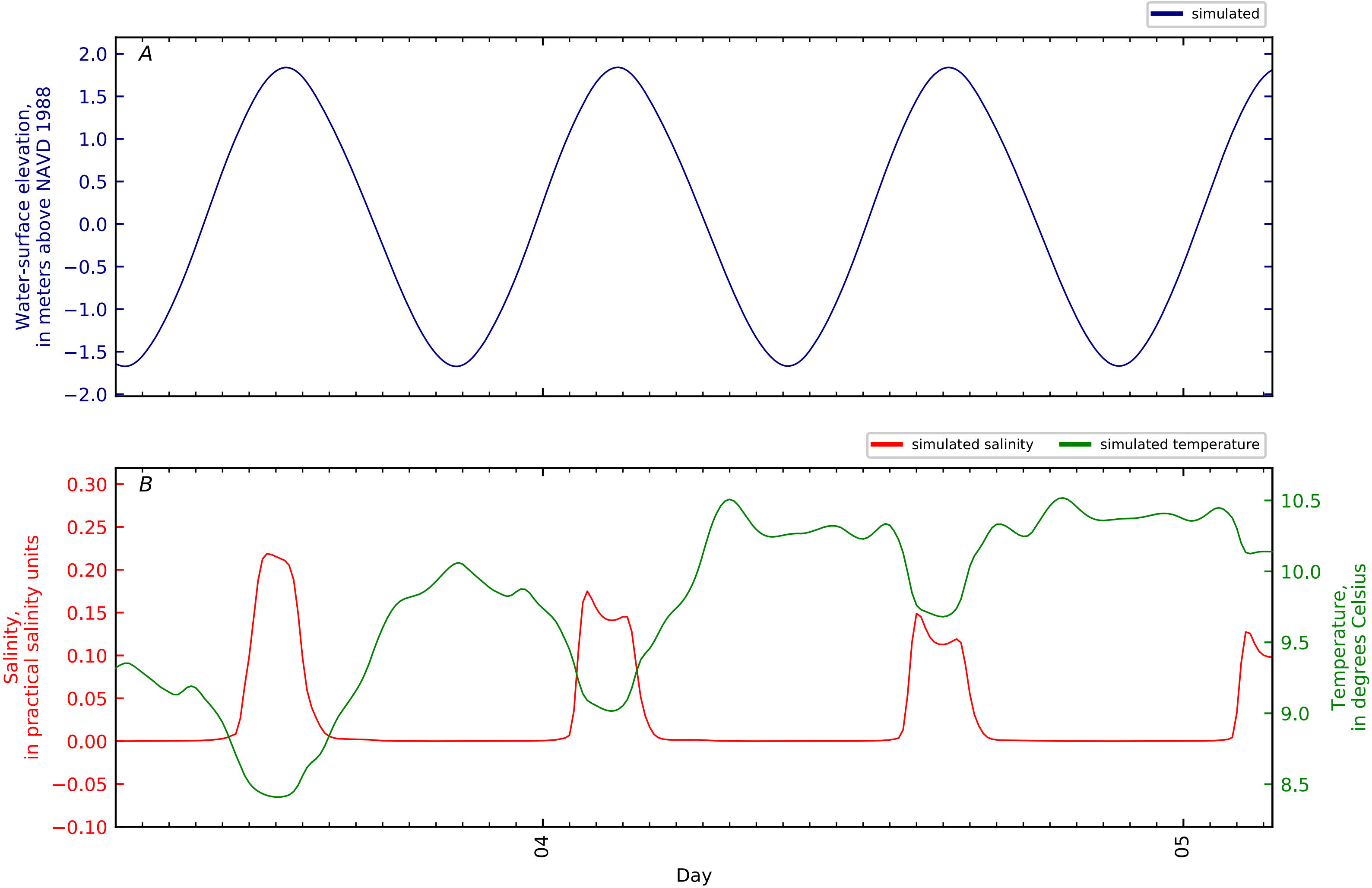

Figure B4-63. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 62, Penob Riv KM18.01 GS CTD1-08. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

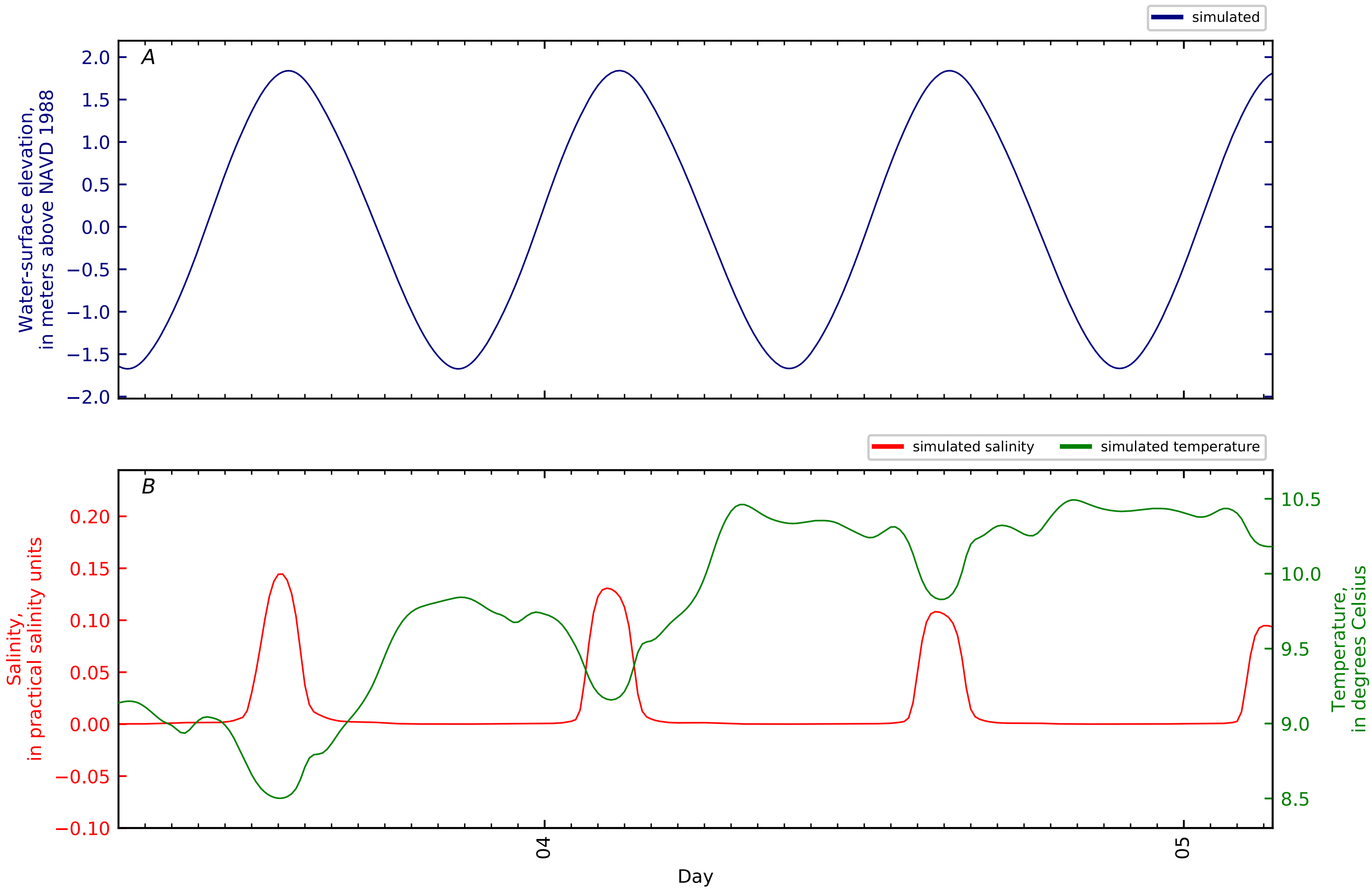

Figure B4-64. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 63, Penob Riv KM18.01 GS CTD1-09. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

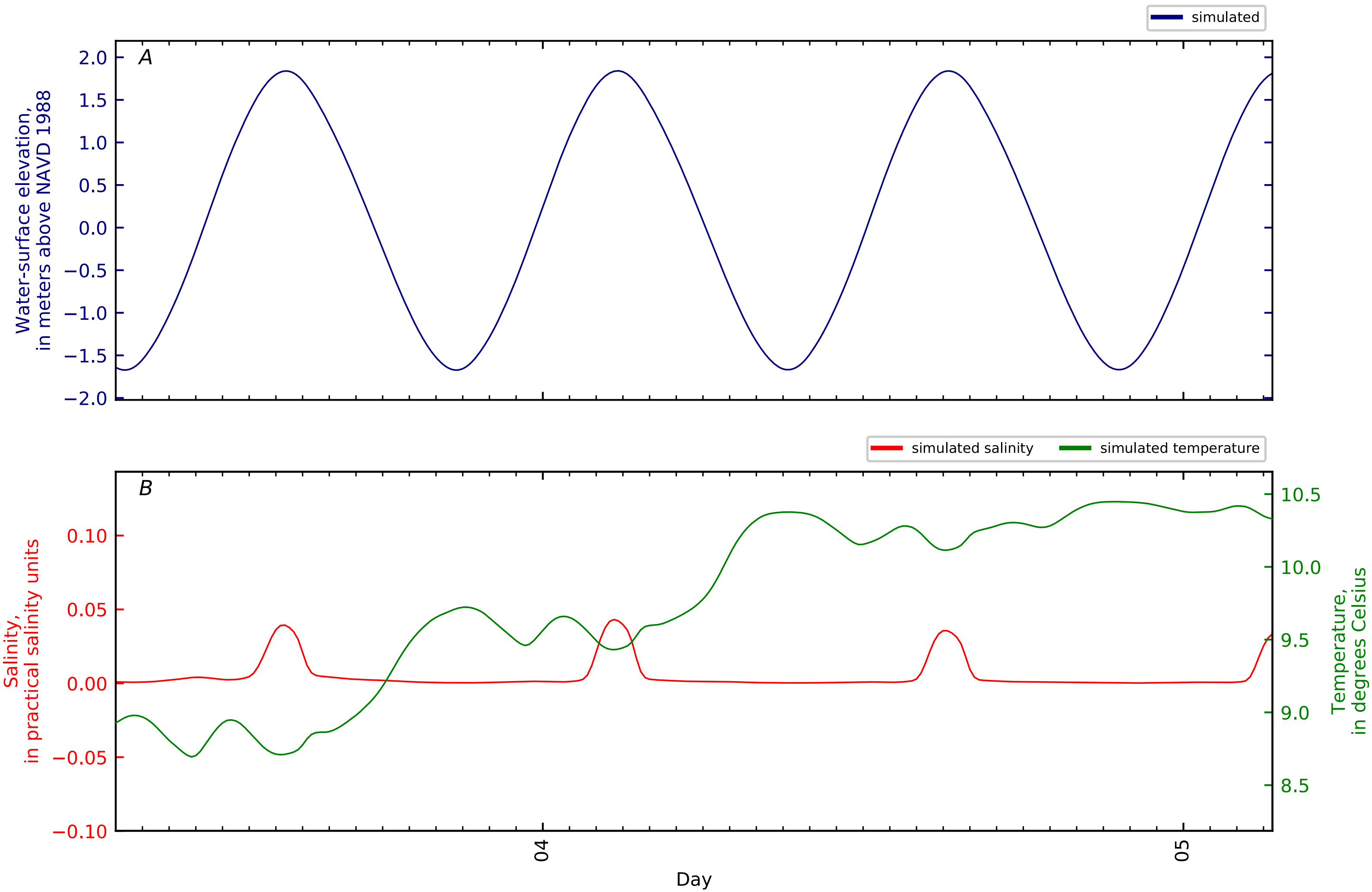

Figure B4-65. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 64, Penob Riv KM18.01 GS CTD1-10. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

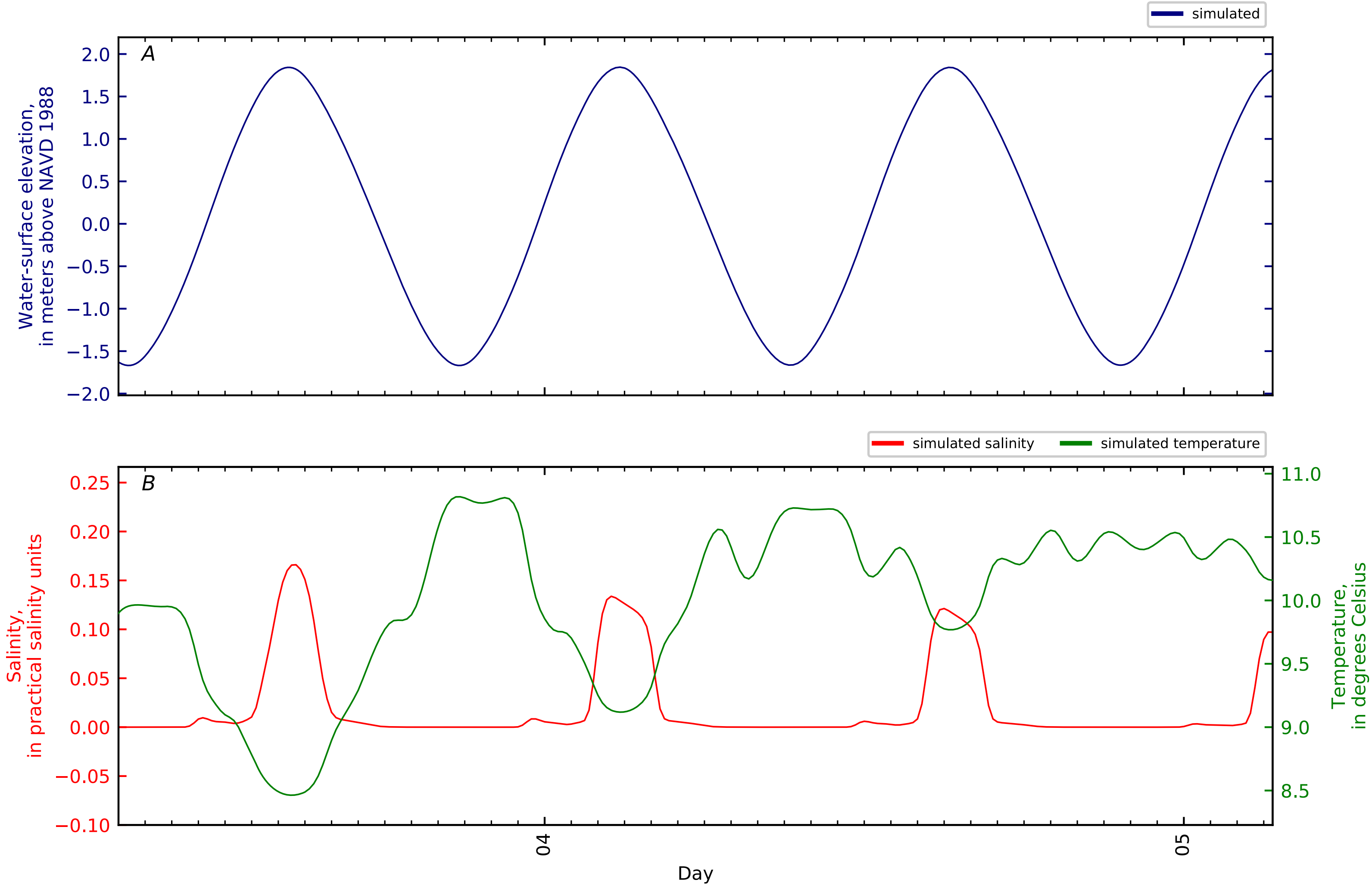

Figure B4-66. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 65, Penob Riv KM18.5 WHOI8 Frankfort Channel. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

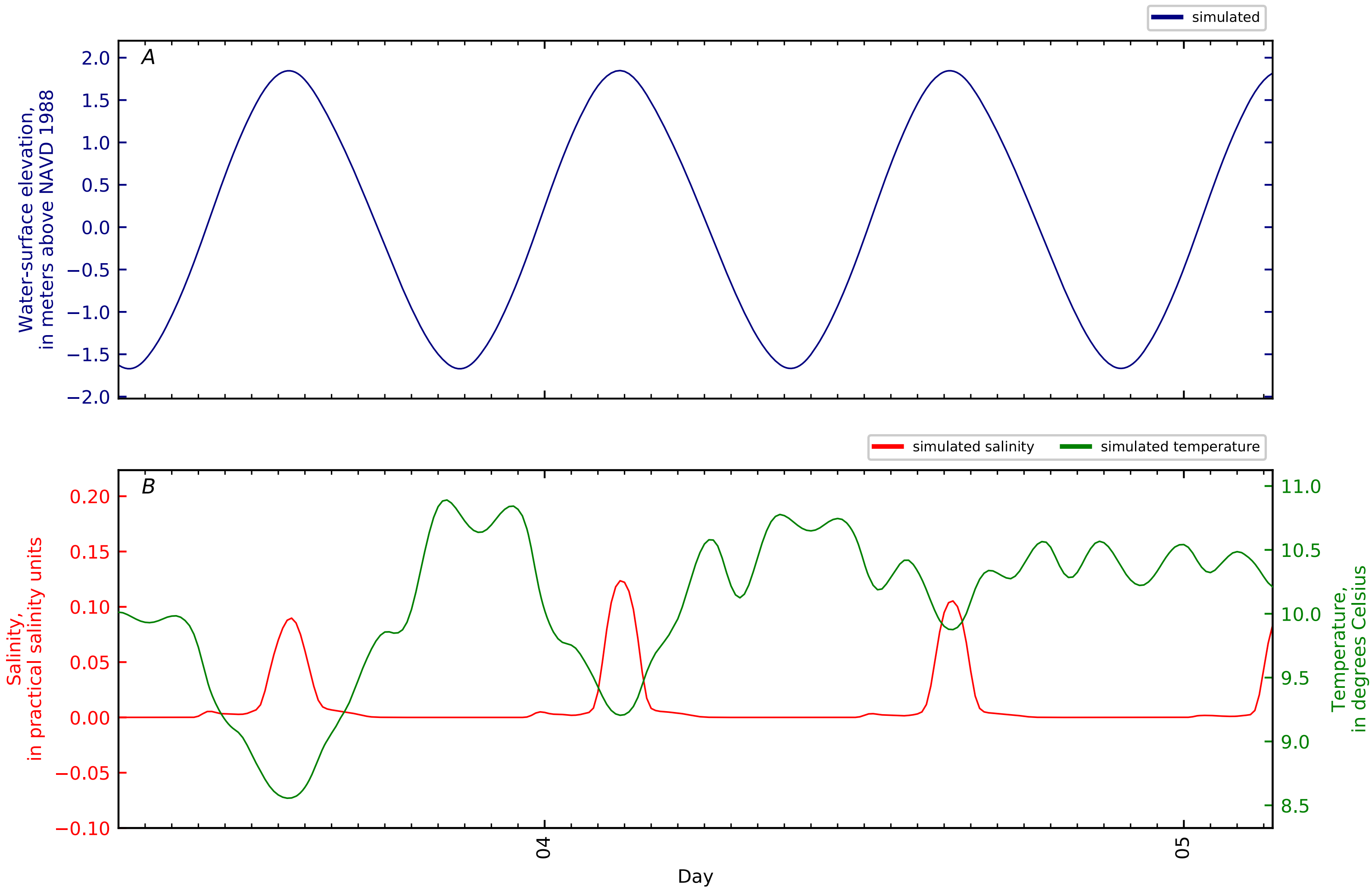

Figure B4-67. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 66, Penob Riv KM19. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

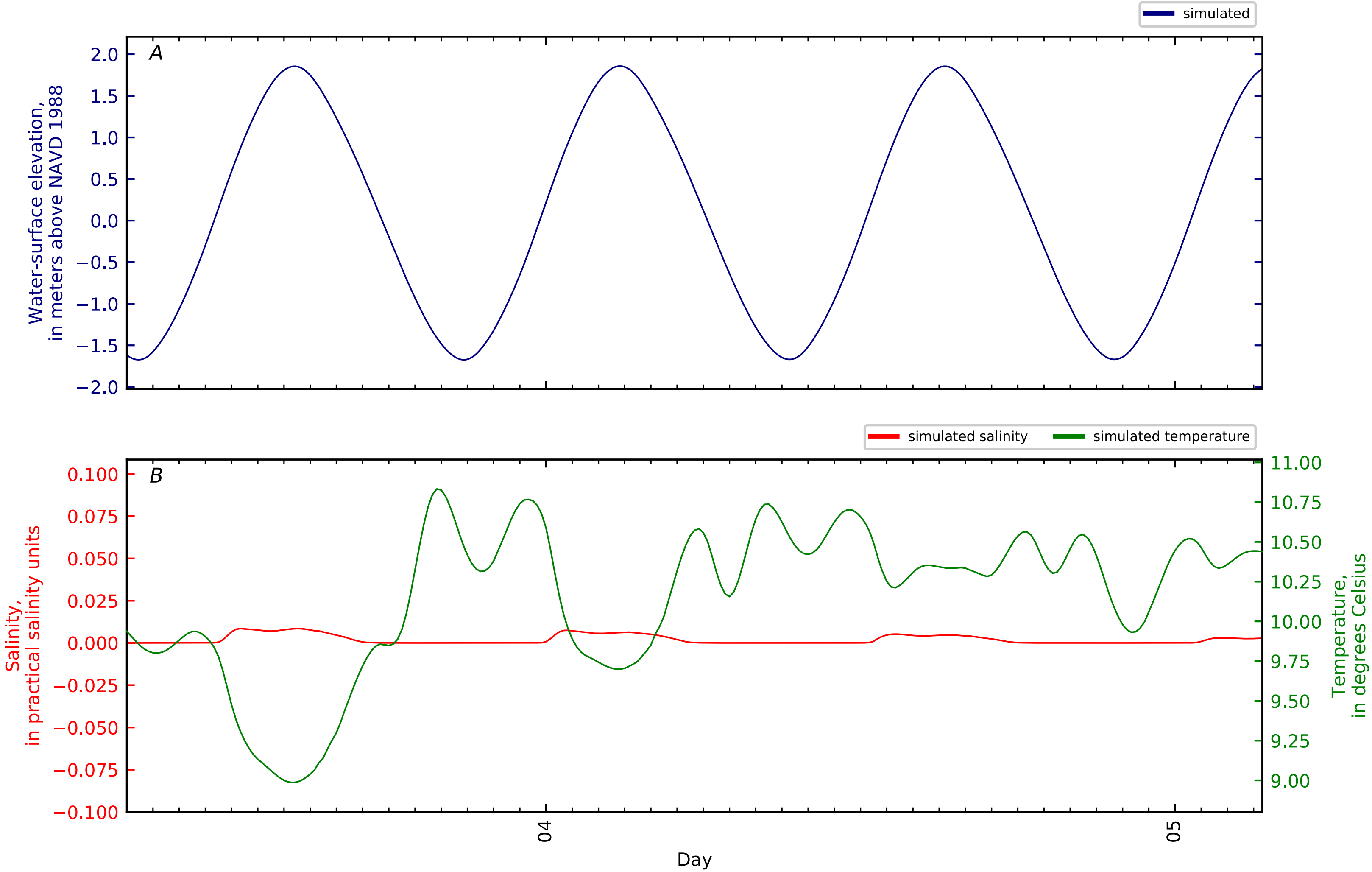

Figure B4-68. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 67, Penob Riv KM20. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

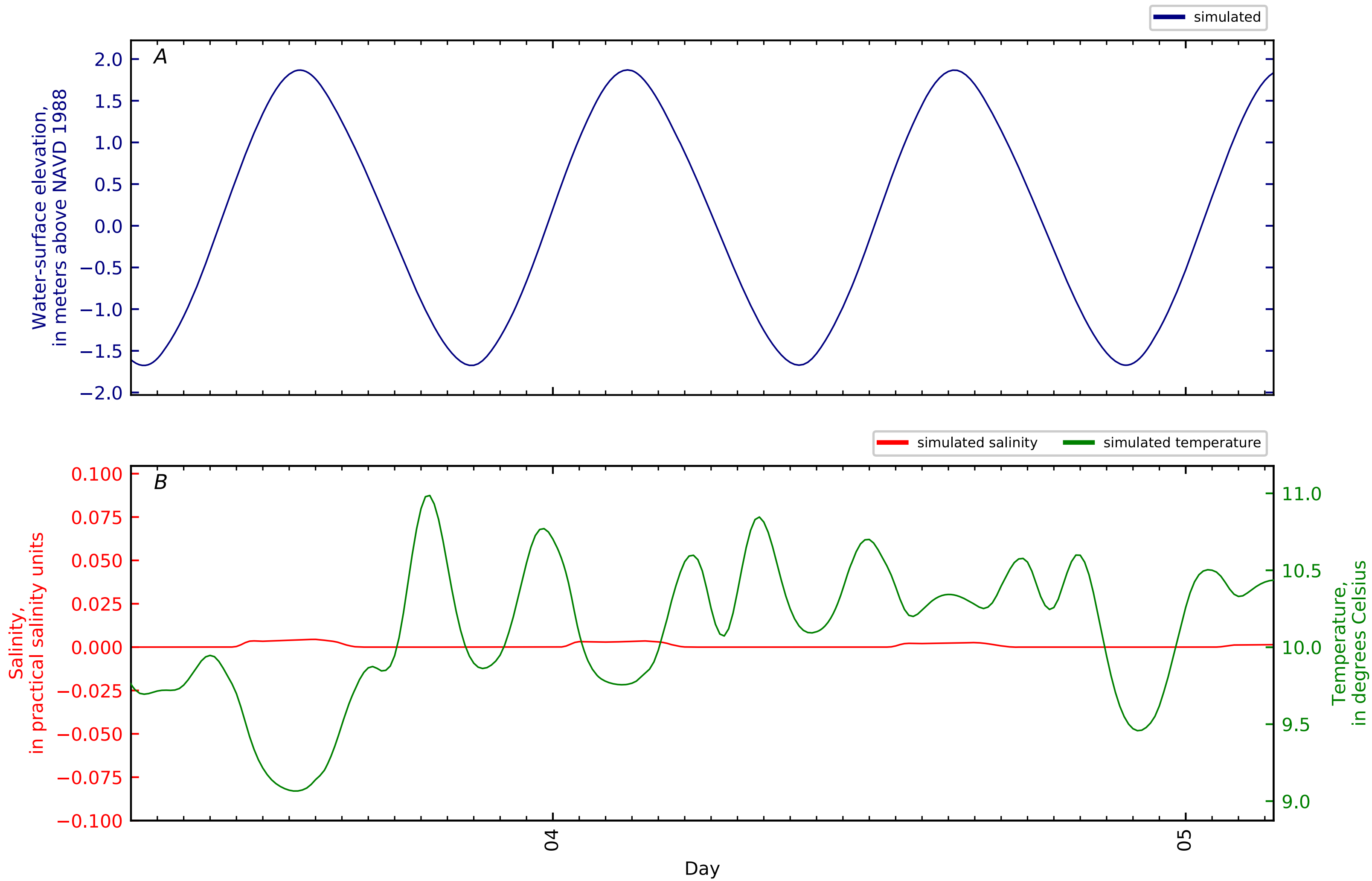

Figure B4-69. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 68, Penob Riv KM21. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

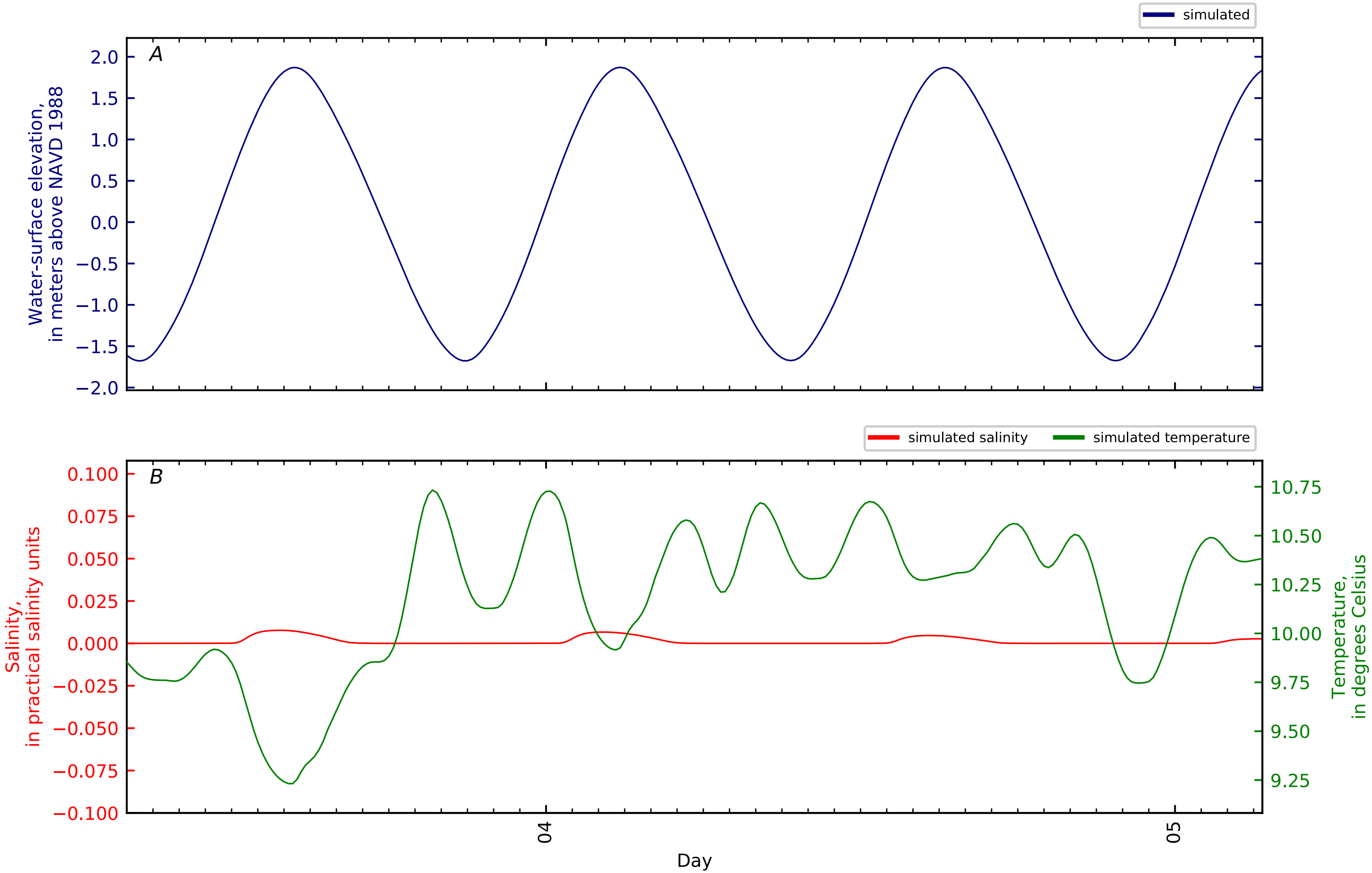

Figure B4-70. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 69, Penob Riv KM21.2 GS 443810068502201 Wint. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

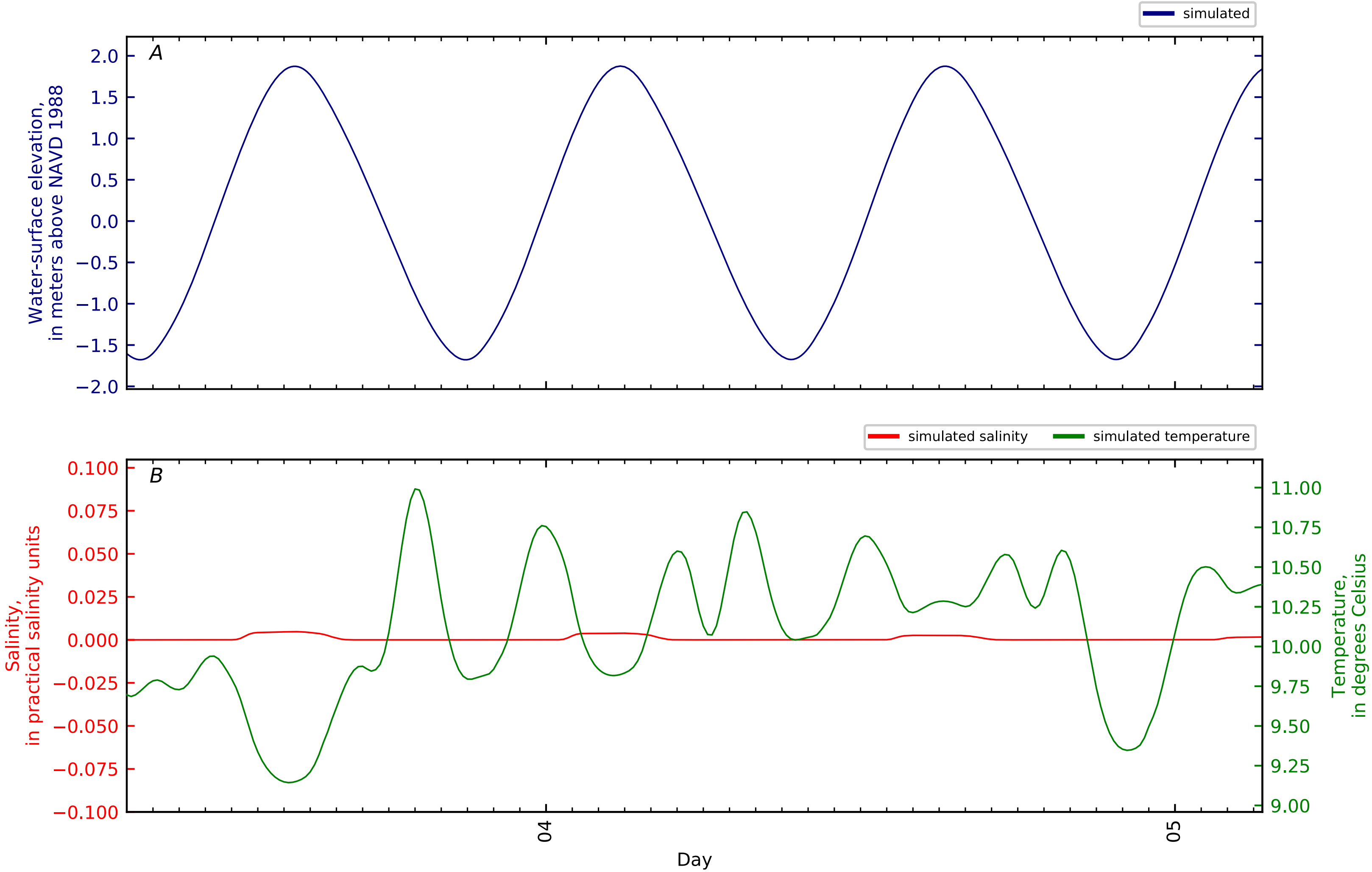

Figure B4-71. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 70, Penob Riv KM21.5 WHOI6 Winterport 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

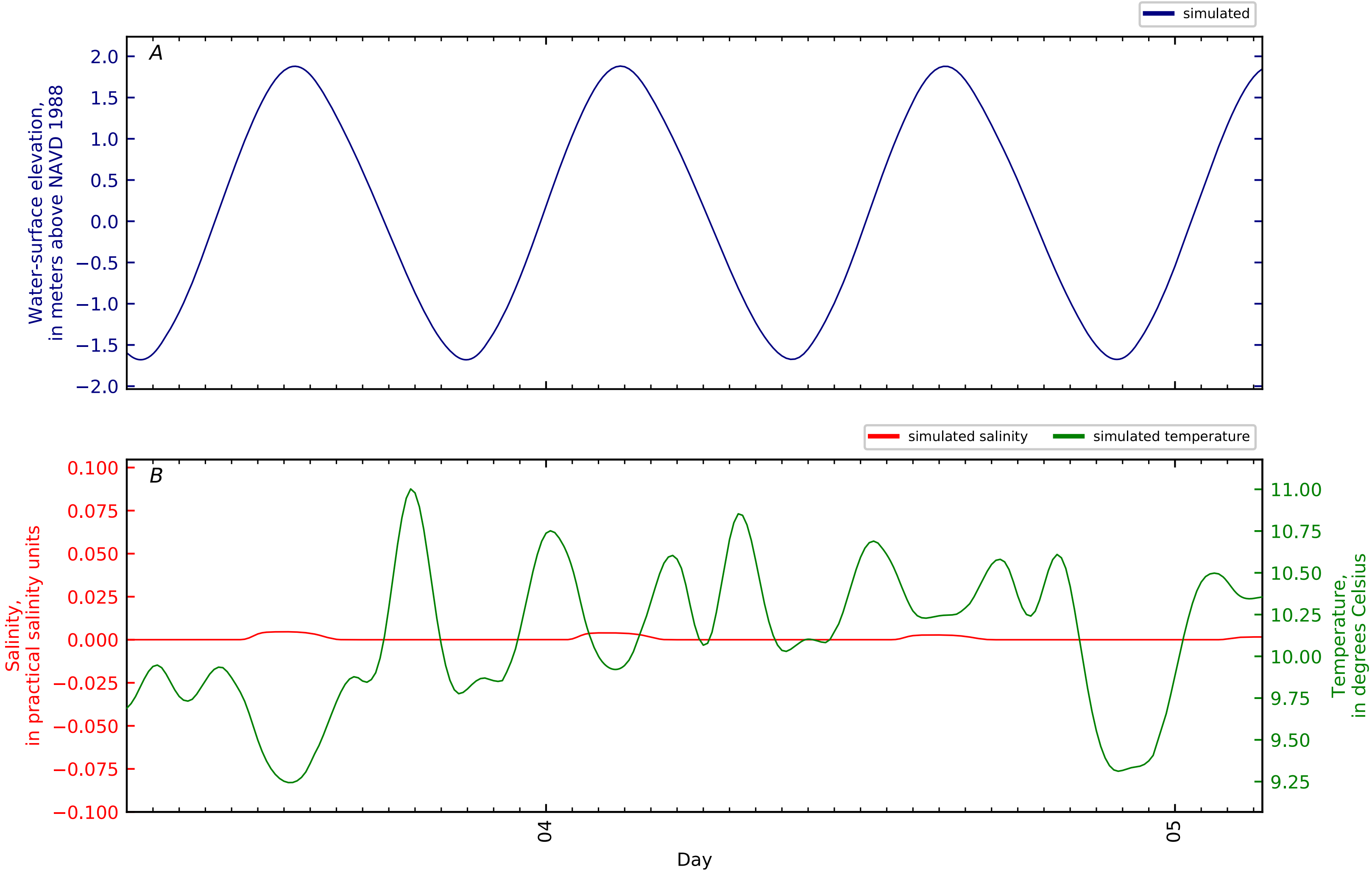

Figure B4-72. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 71, Penob Riv KM22. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

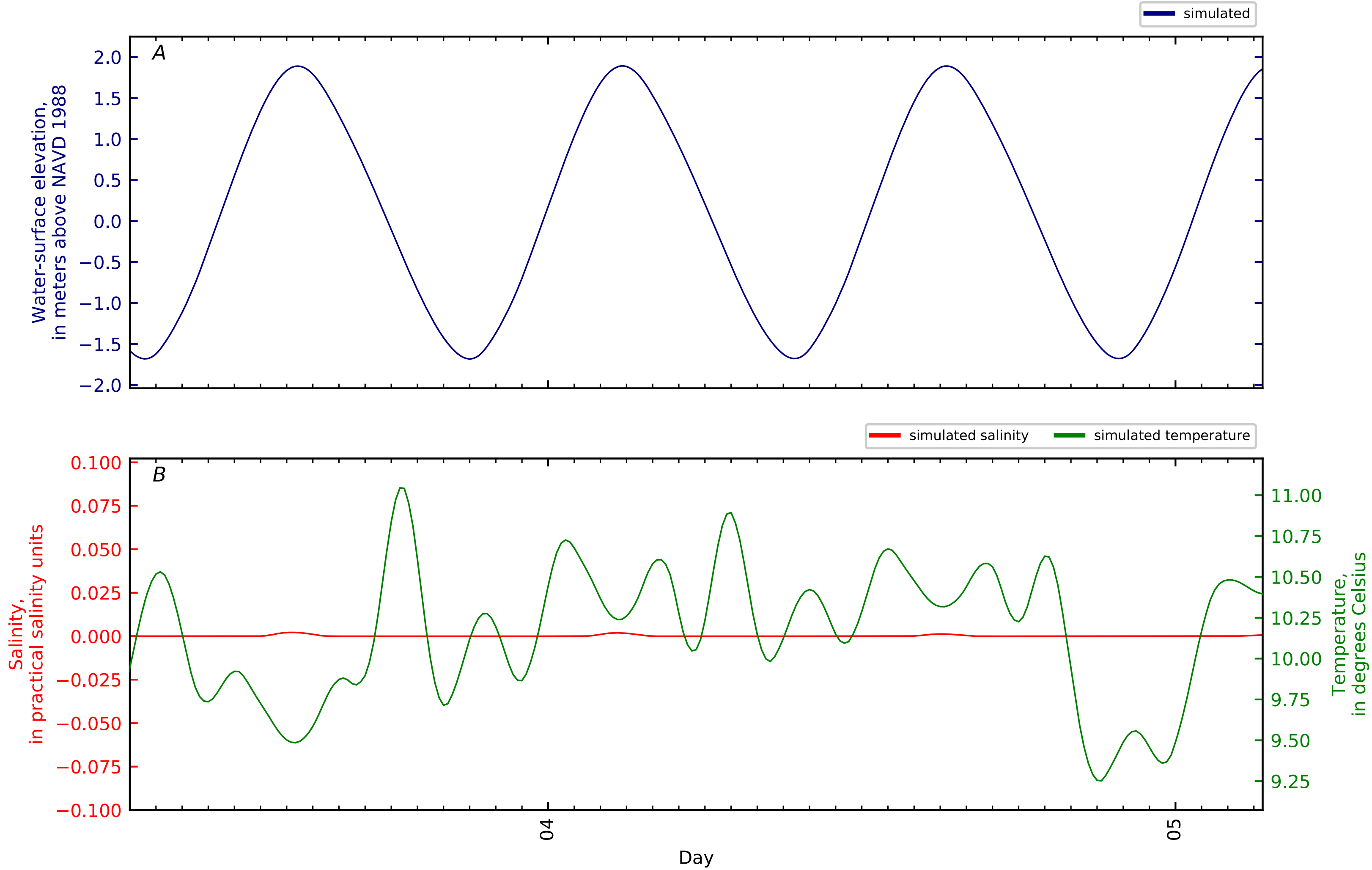

Figure B4-73. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 72, Penob Riv KM23. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

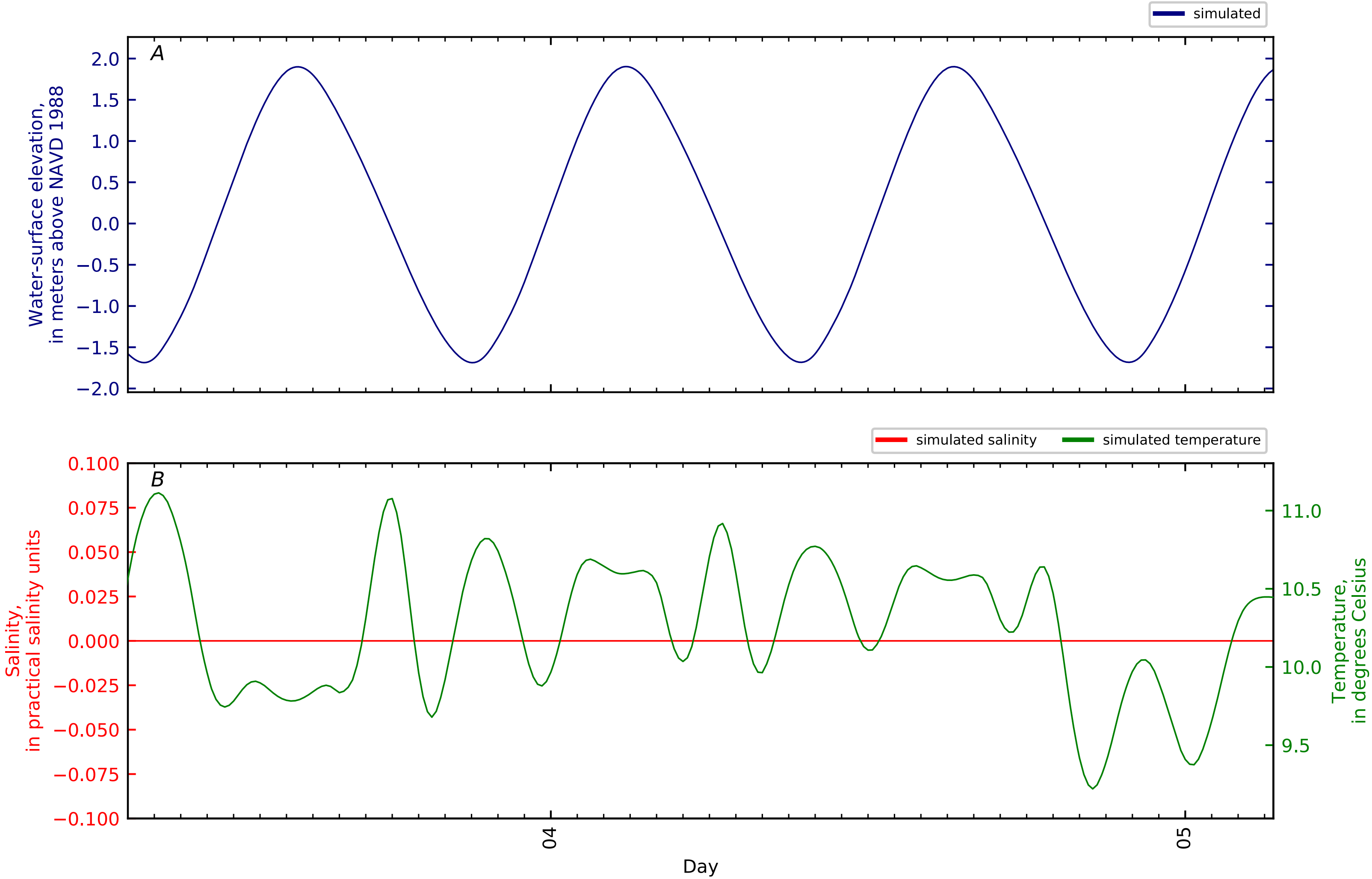

Figure B4-74. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 73, Penob Riv KM24. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

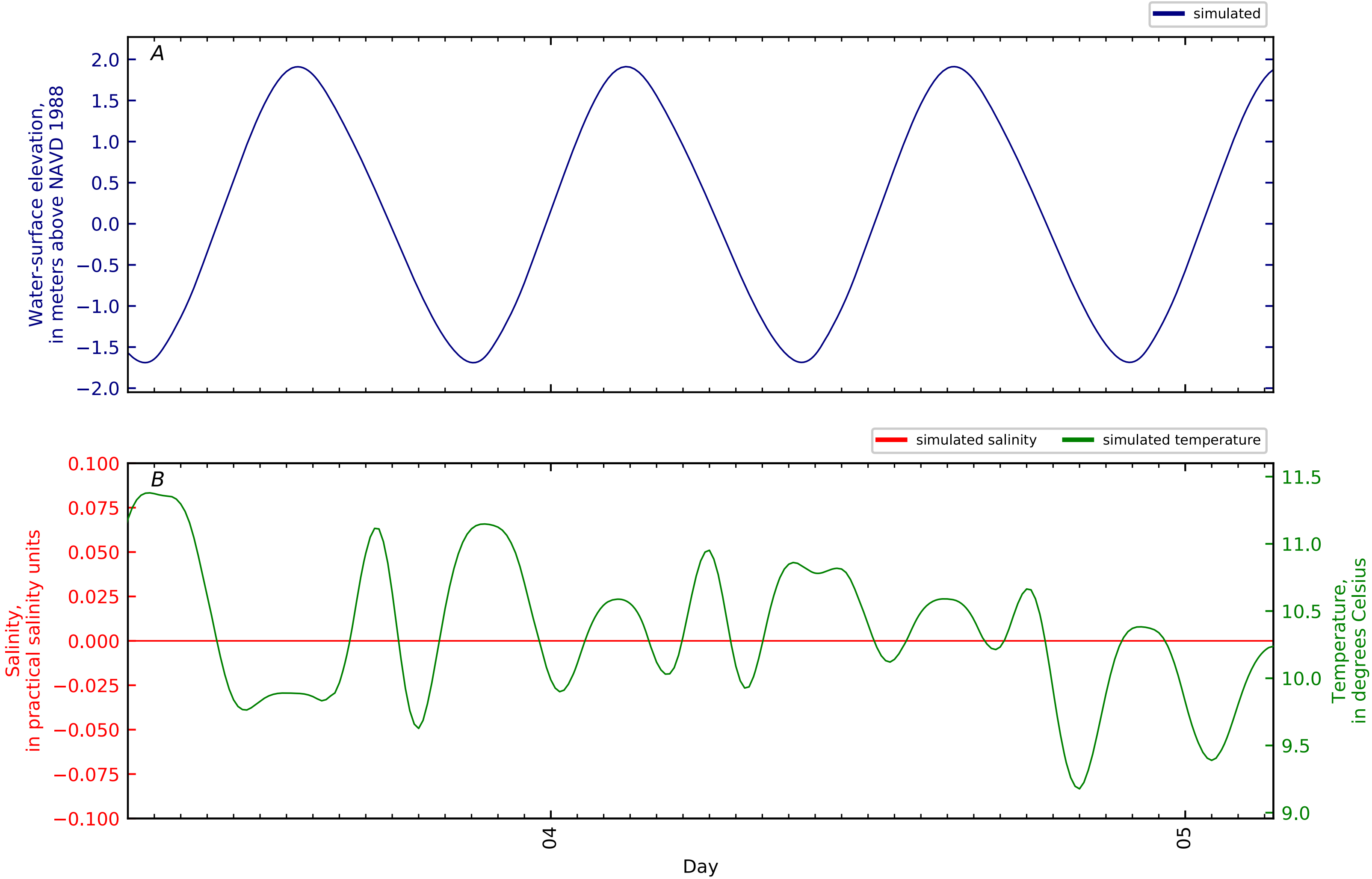

Figure B4-75. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 74, Penob Riv KM25. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

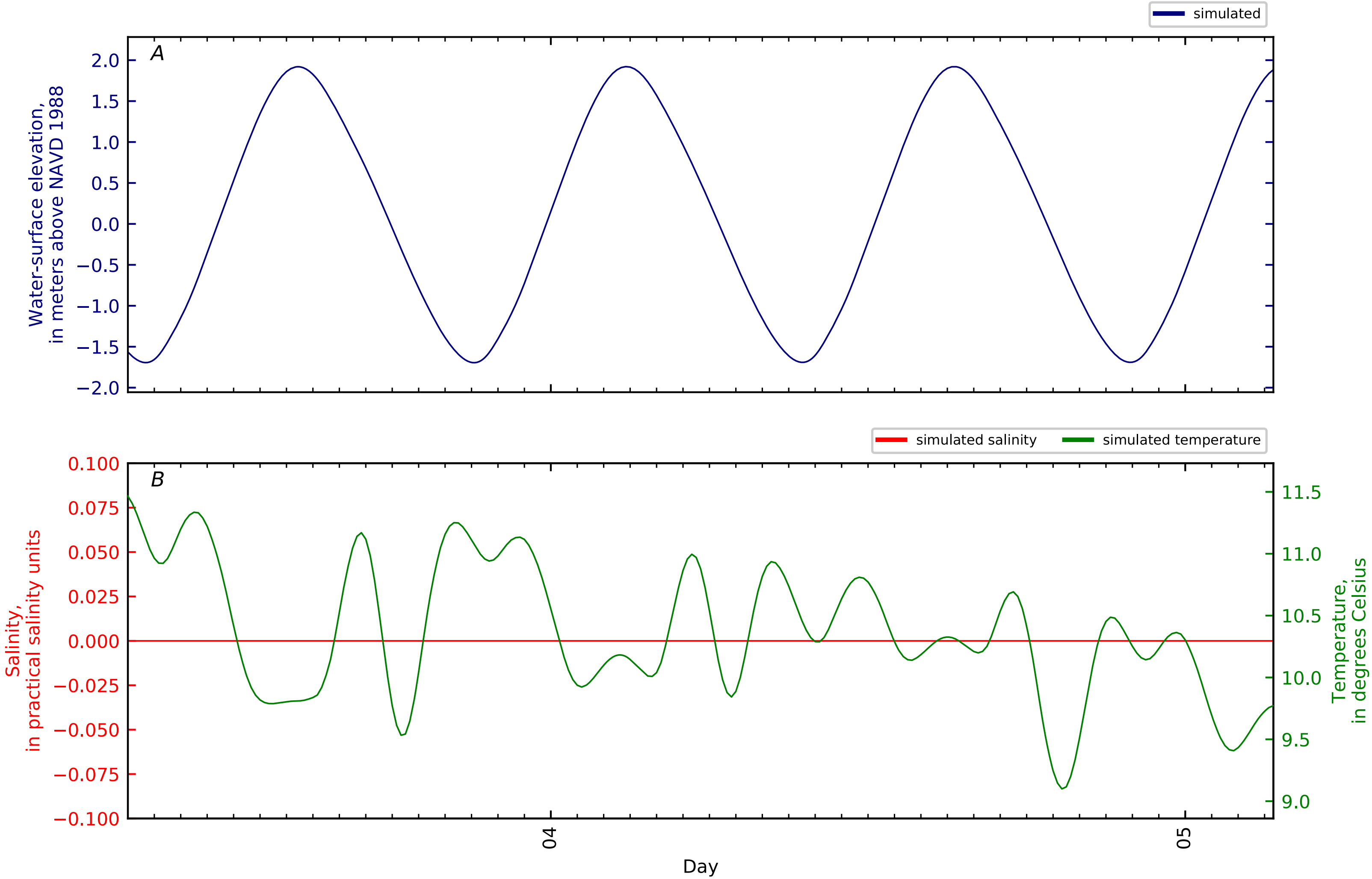

Figure B4-76. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 75, Penob Riv KM26. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

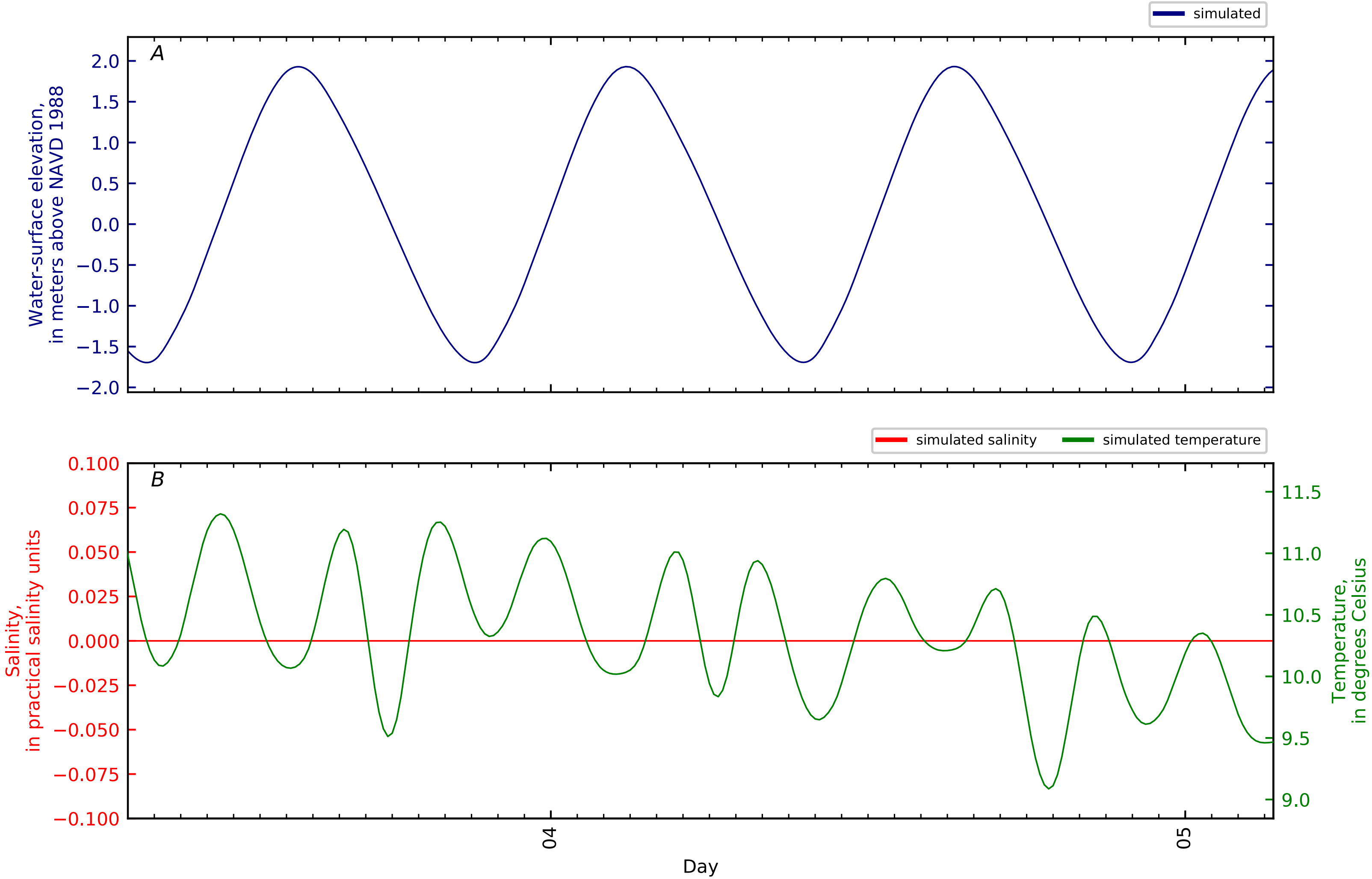

Figure B4-77. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 76, Penob Riv KM27. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

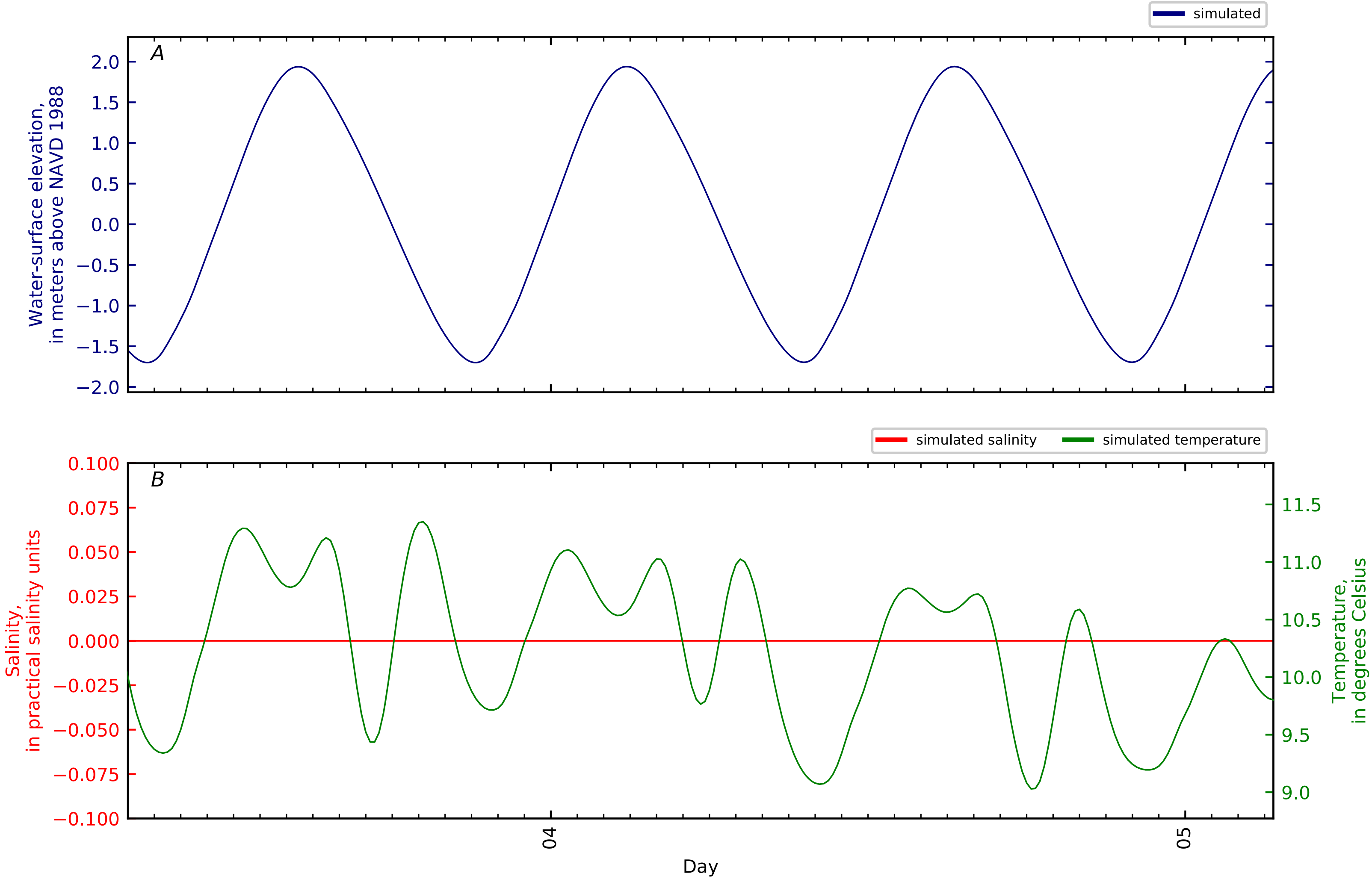

Figure B4-78. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 77, Penob Riv KM28. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

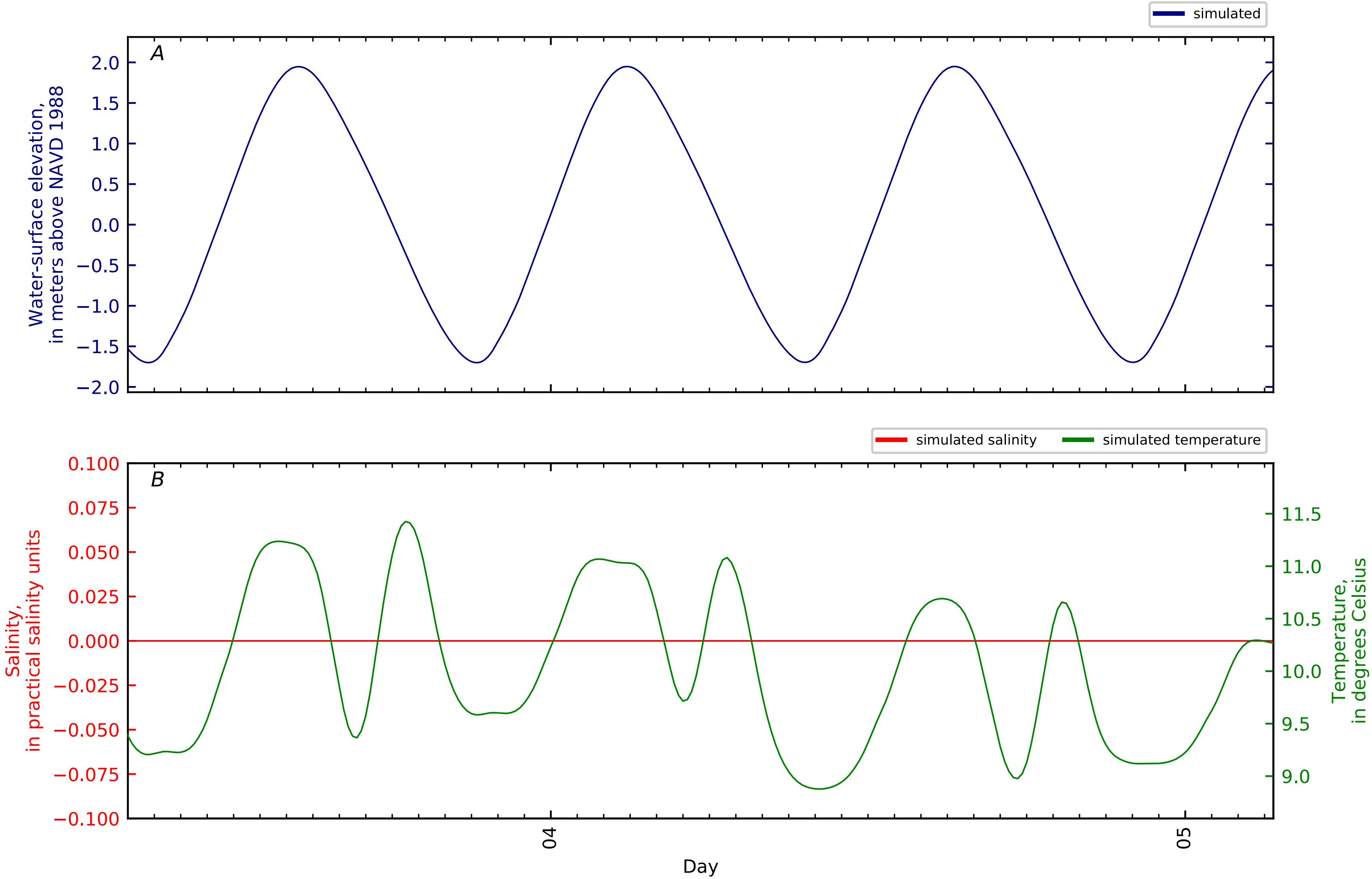

Figure B4-79. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 78, Penob Riv KM29. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

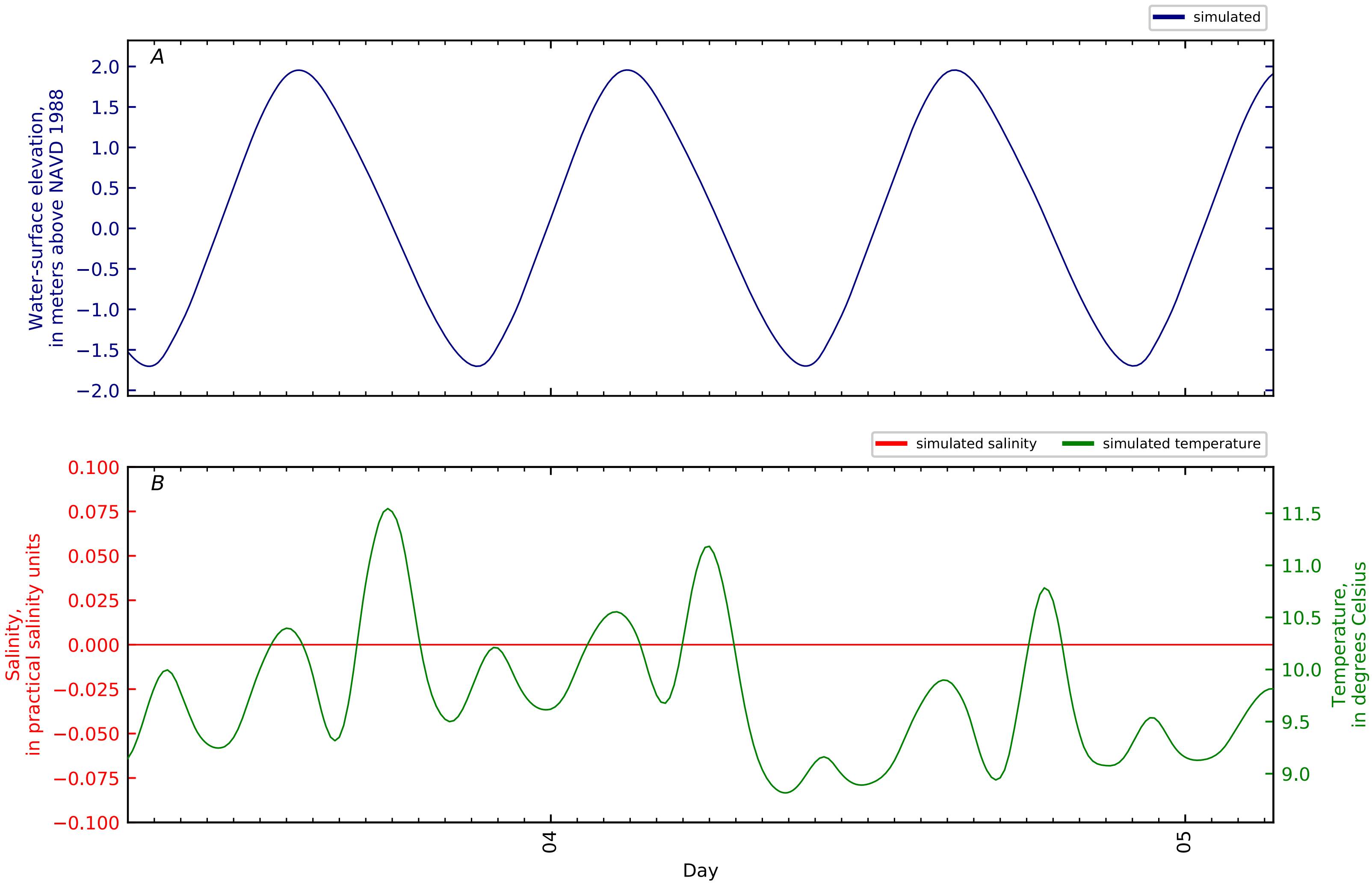

Figure B4-80. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 79, Penob Riv KM30. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

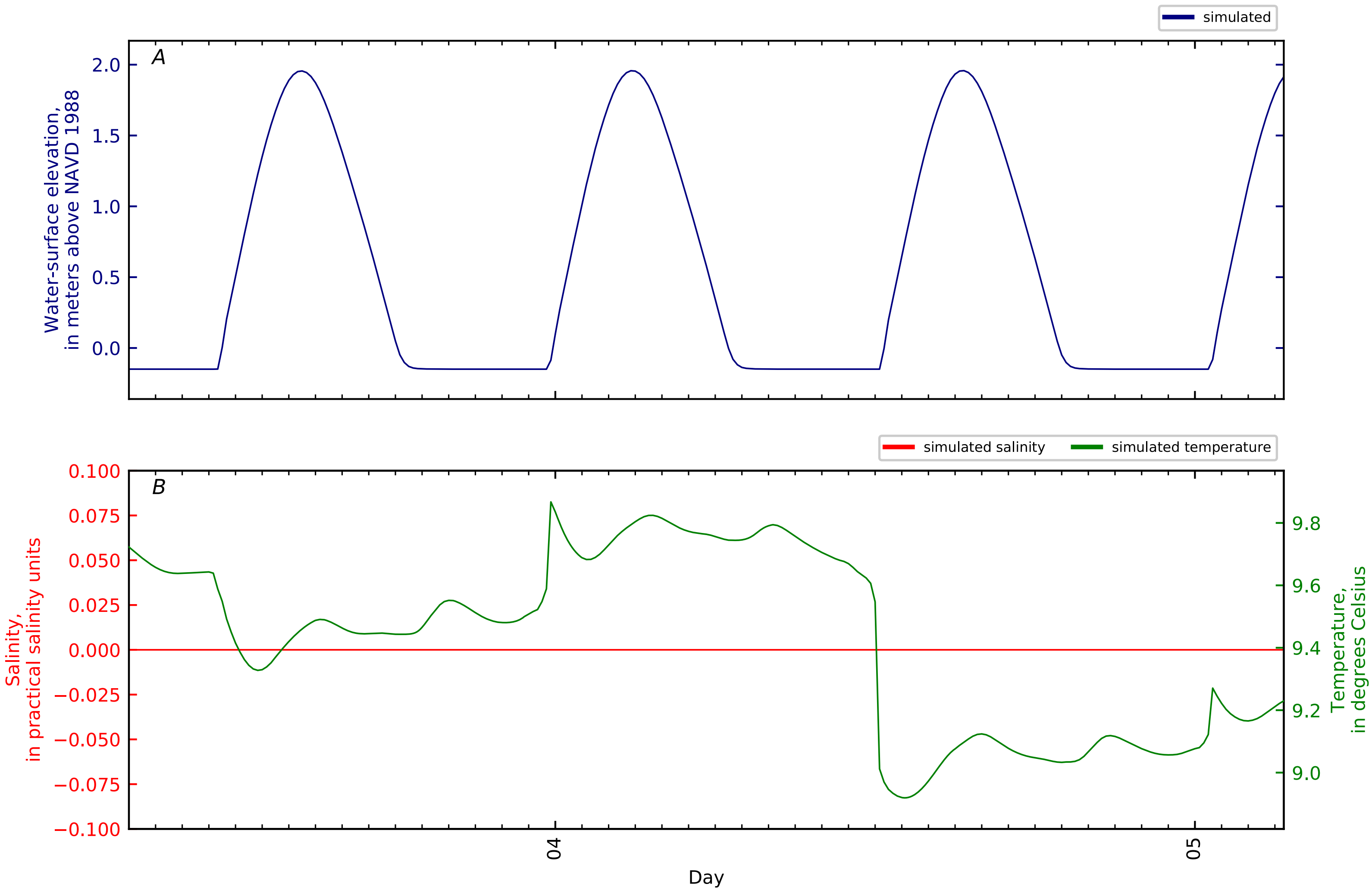

Figure B4-81. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 80, Penob Riv KM30.3 ERDC3 ON-MU2-SF-2 Bartl. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

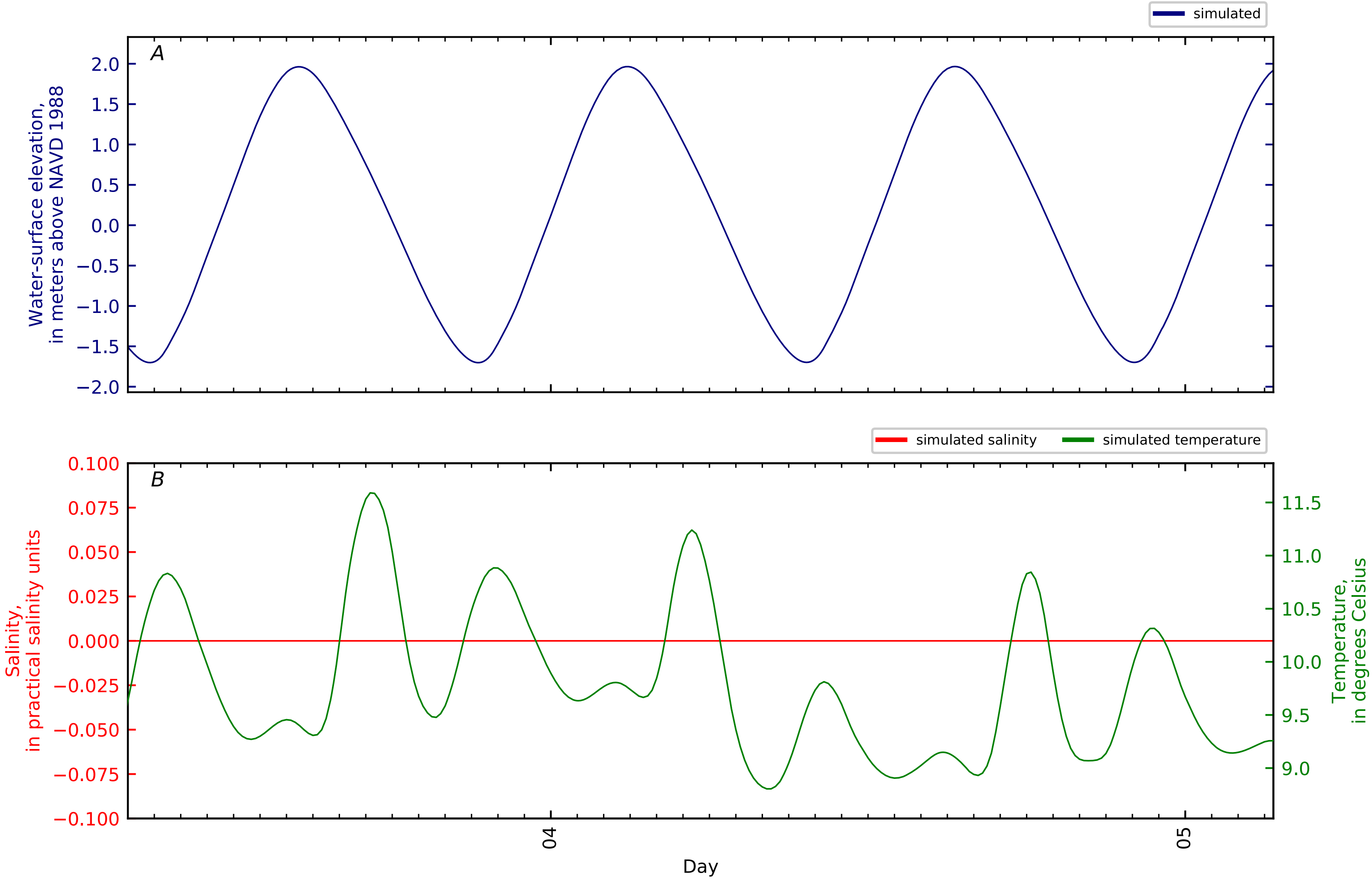

Figure B4-82. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 81, Penob Riv KM31. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

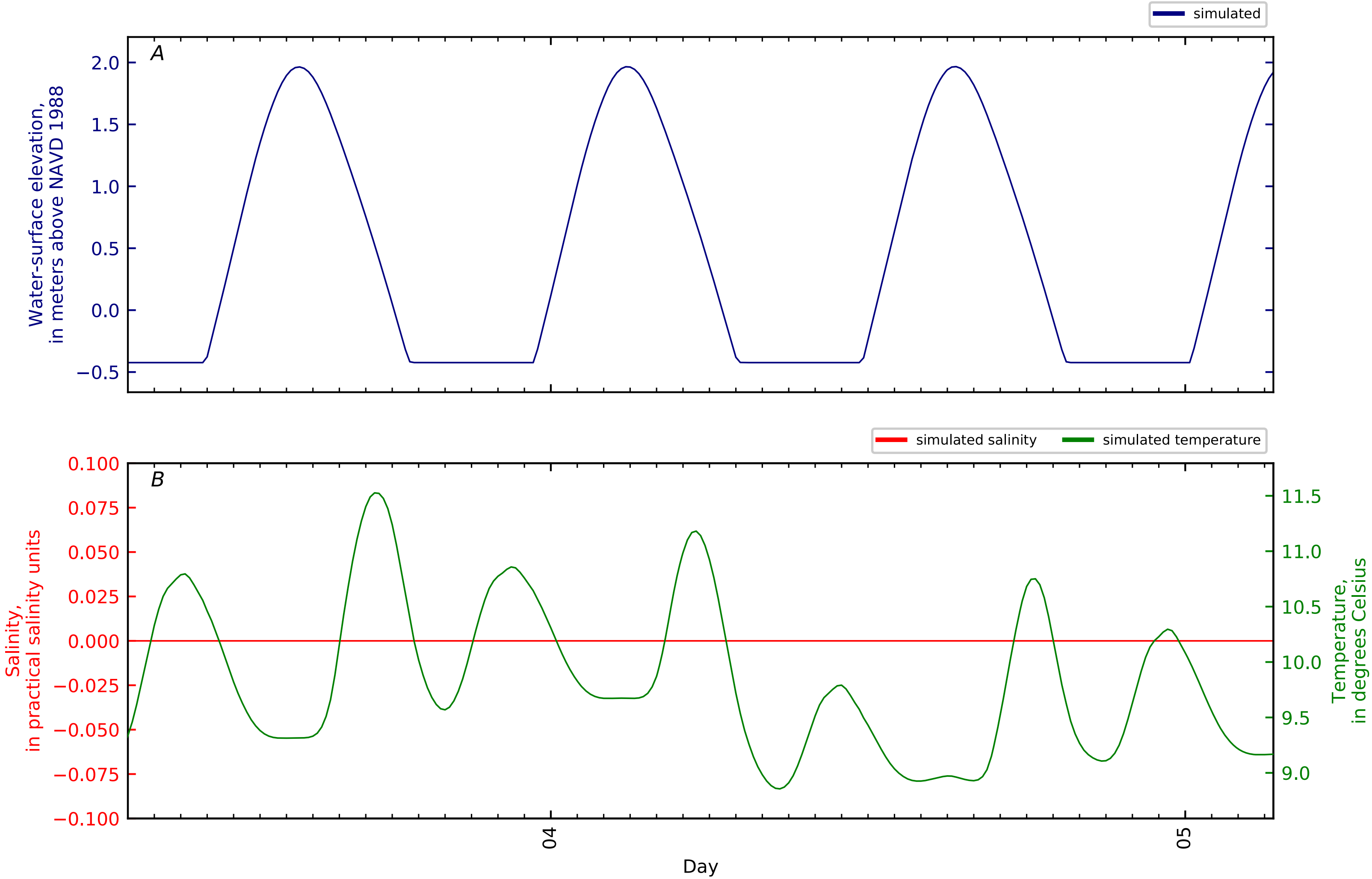

Figure B4-83. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 82, Penob Riv KM31.3 ERDC1 ON-MU2-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

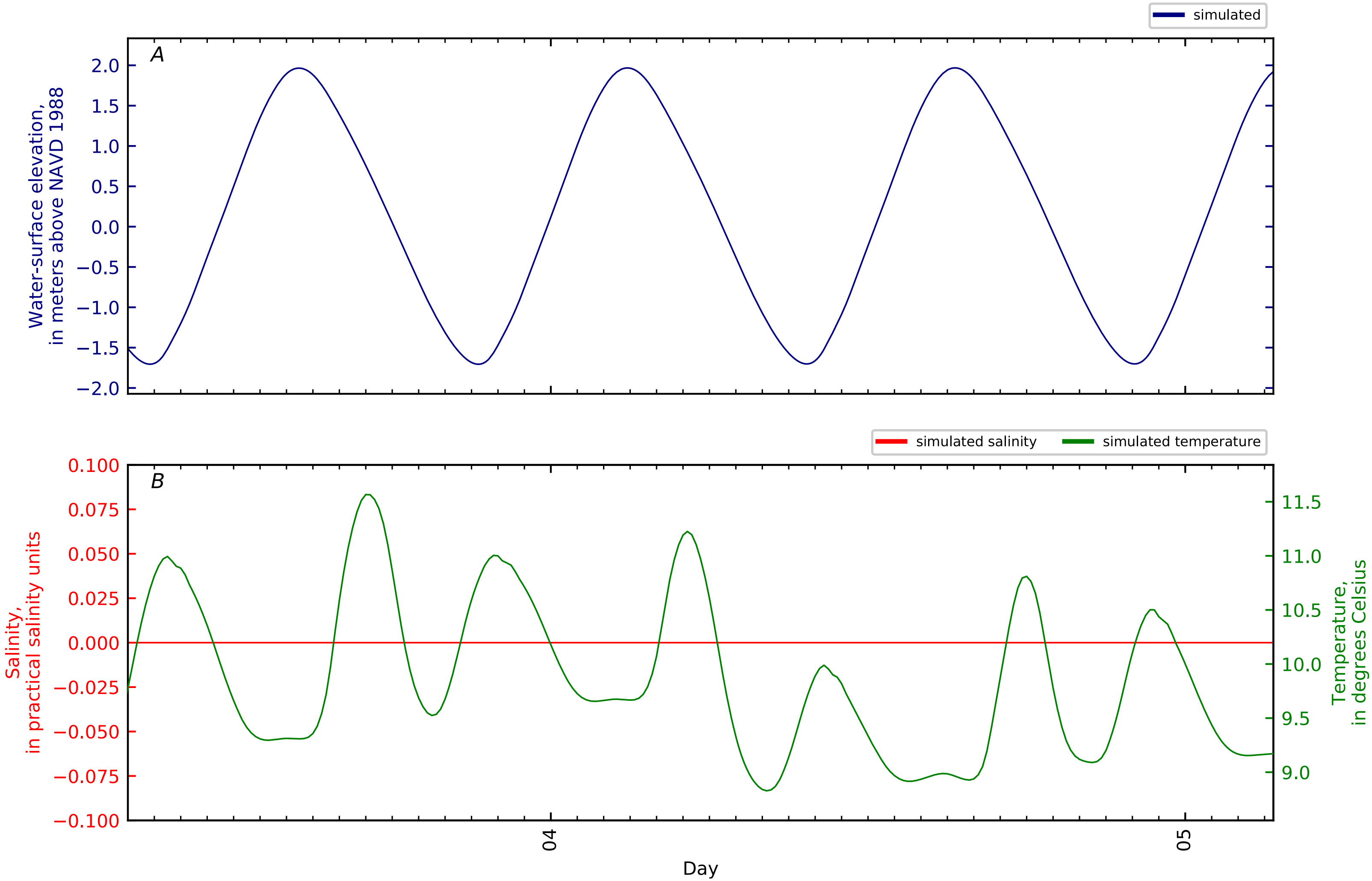

Figure B4-84. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 83, Penob Riv KM31.4 ERDC2 ON-MU13-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

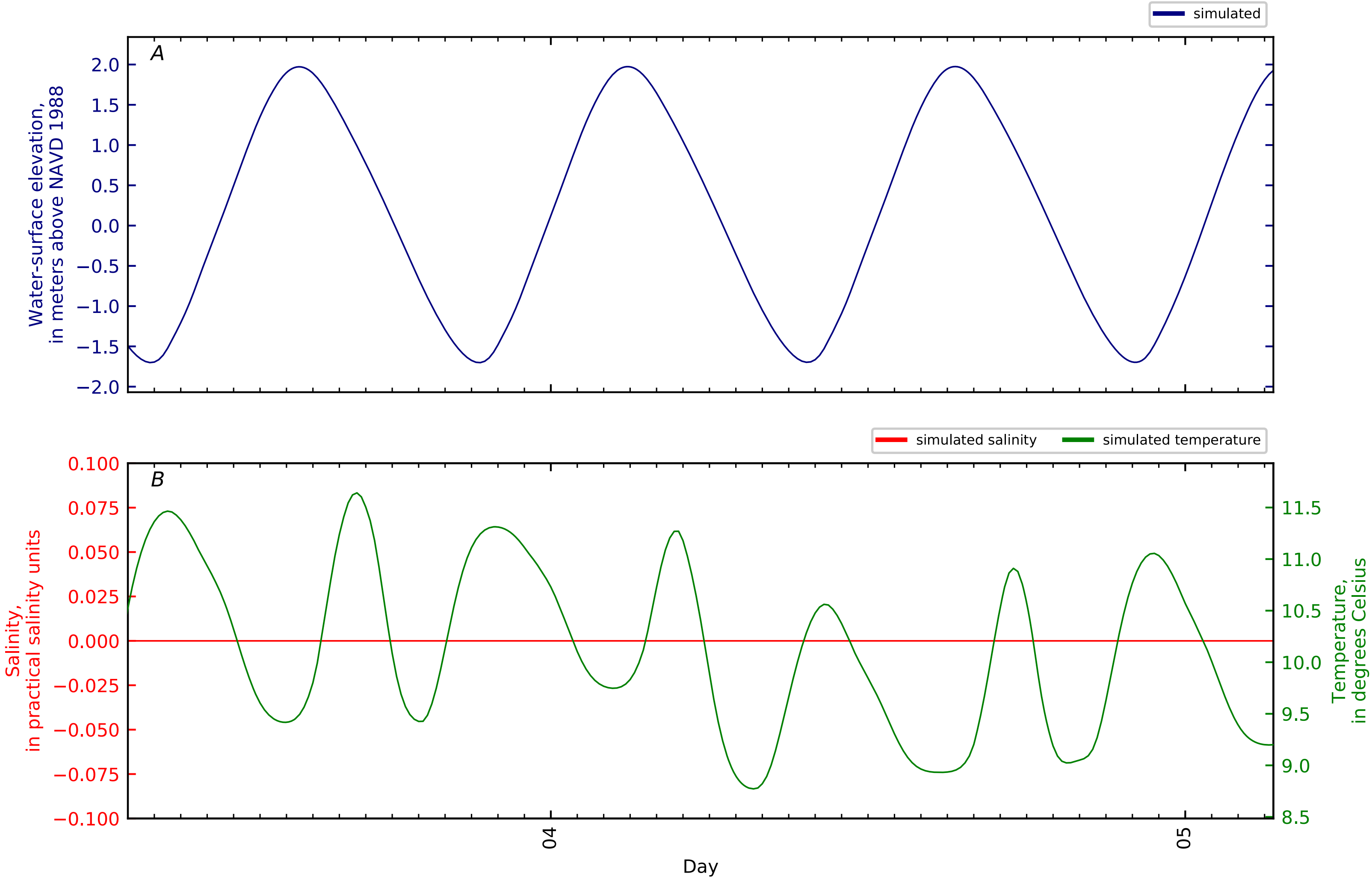

Figure B4-85. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 84, Penob Riv KM32. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

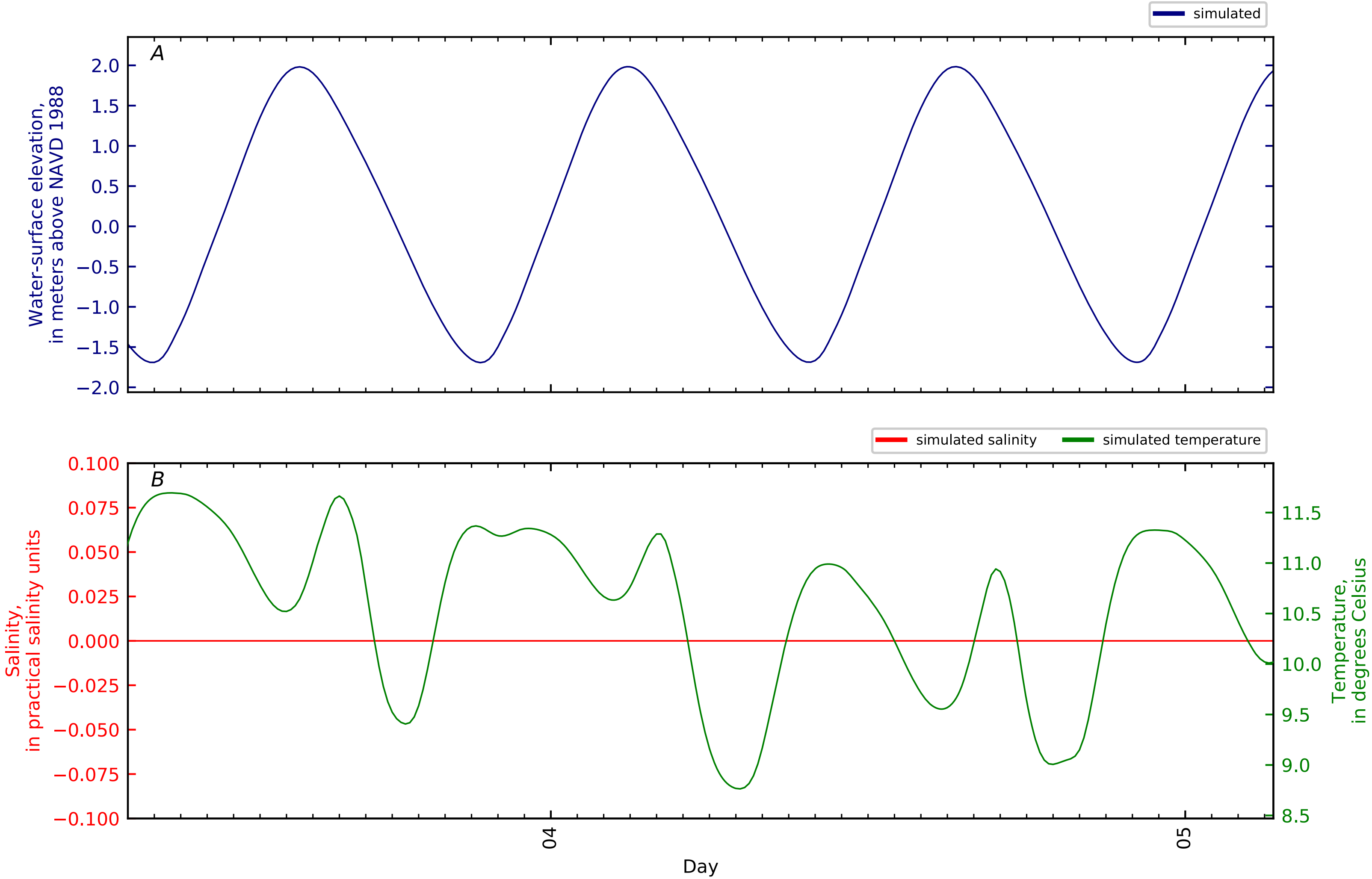

Figure B4-86. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 85, Penob Riv KM33. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

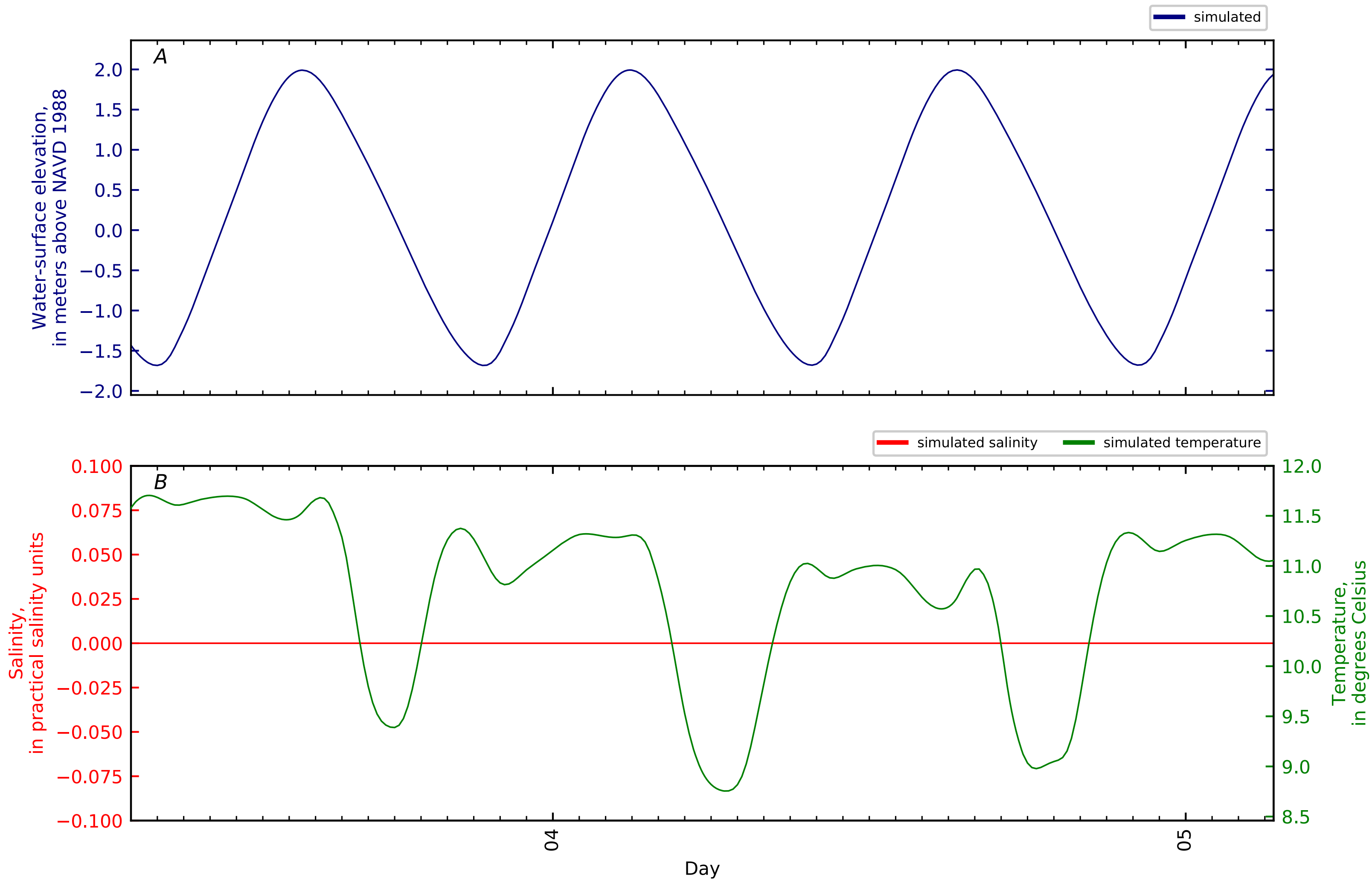

Figure B4-87. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 86, Penob Riv KM34. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

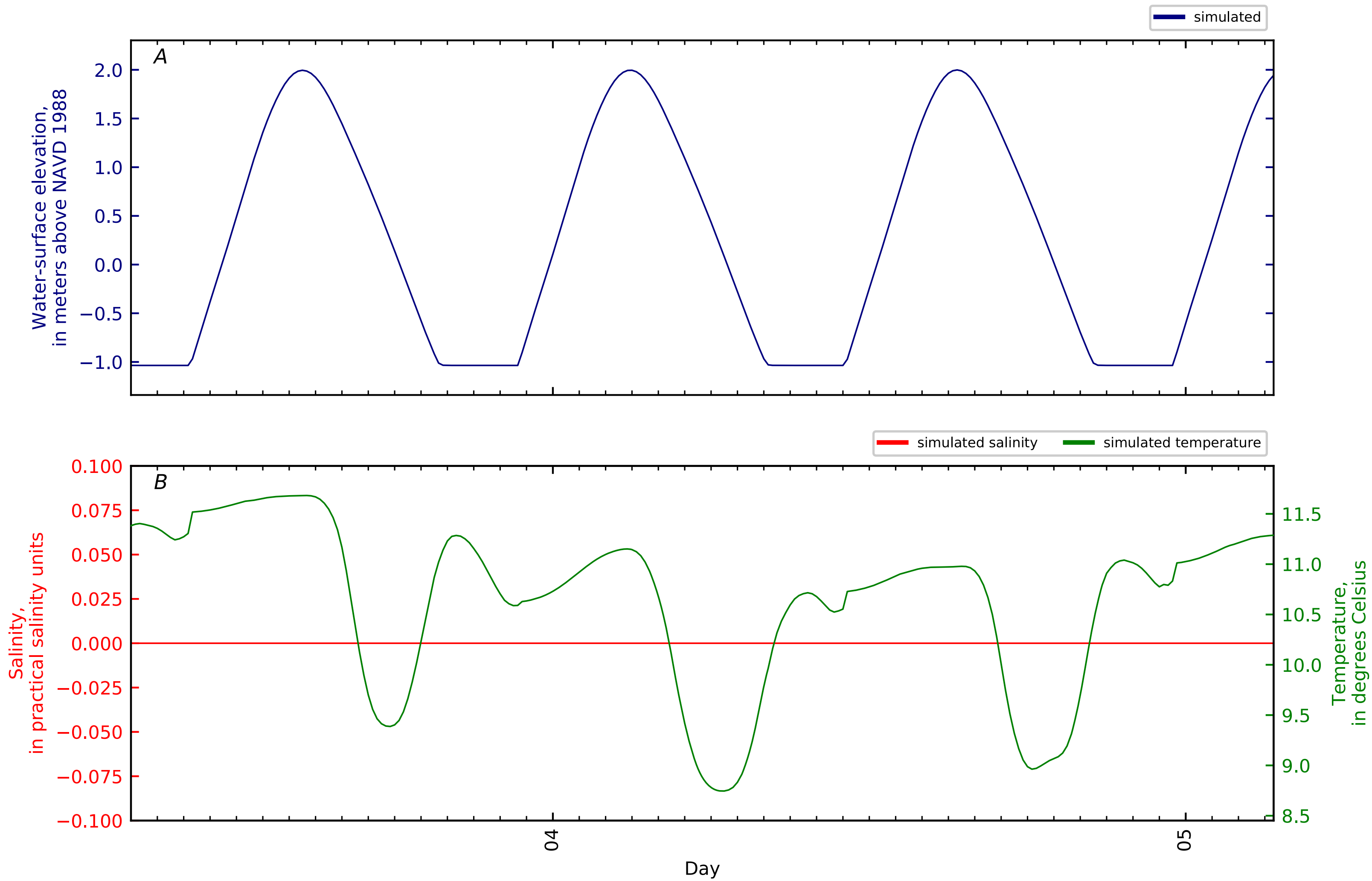

Figure B4-88. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 87, Penob Riv KM34.6 Southern Cove Orrington. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

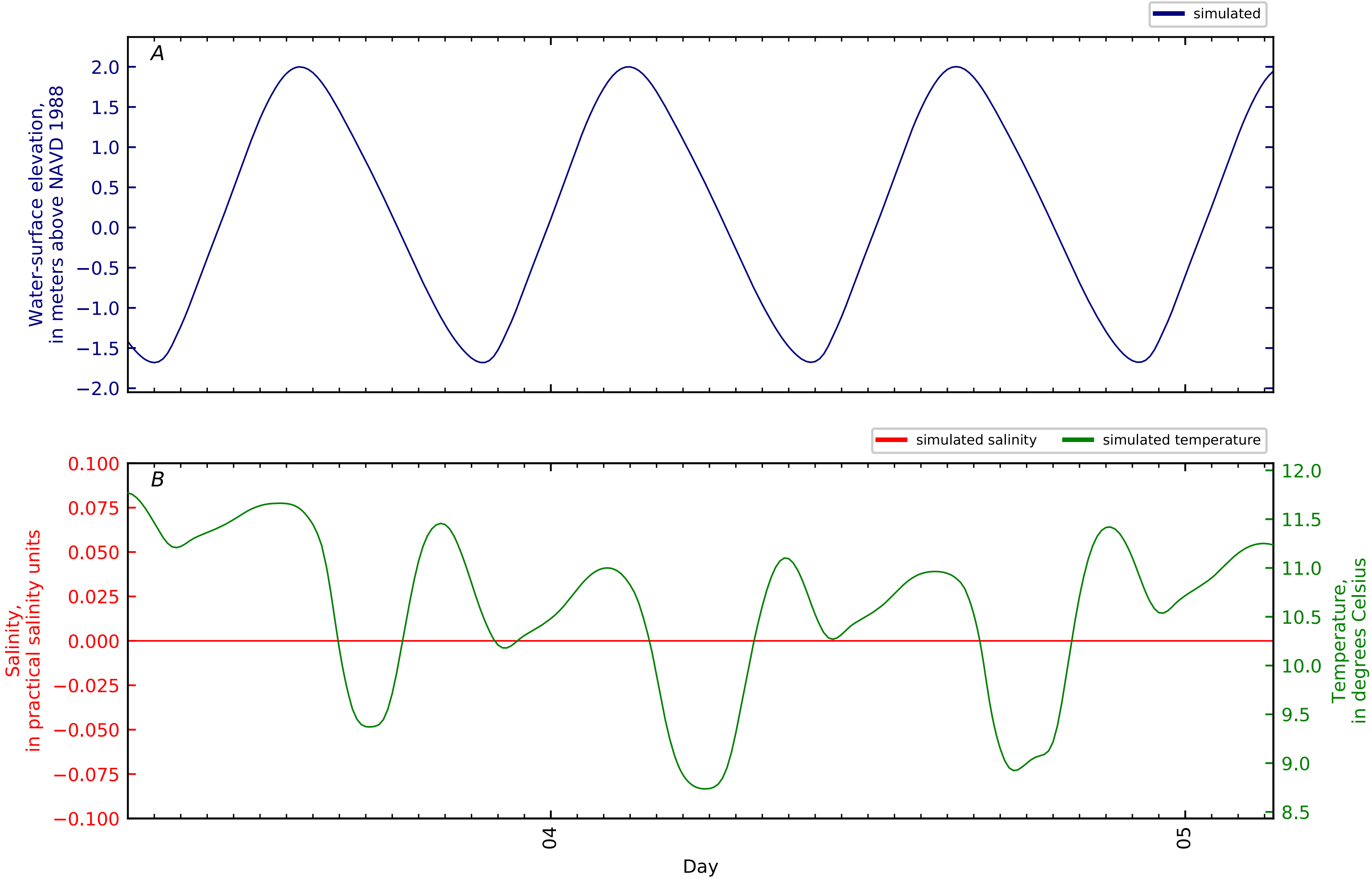

Figure B4-89. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 88, Penob Riv KM35. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

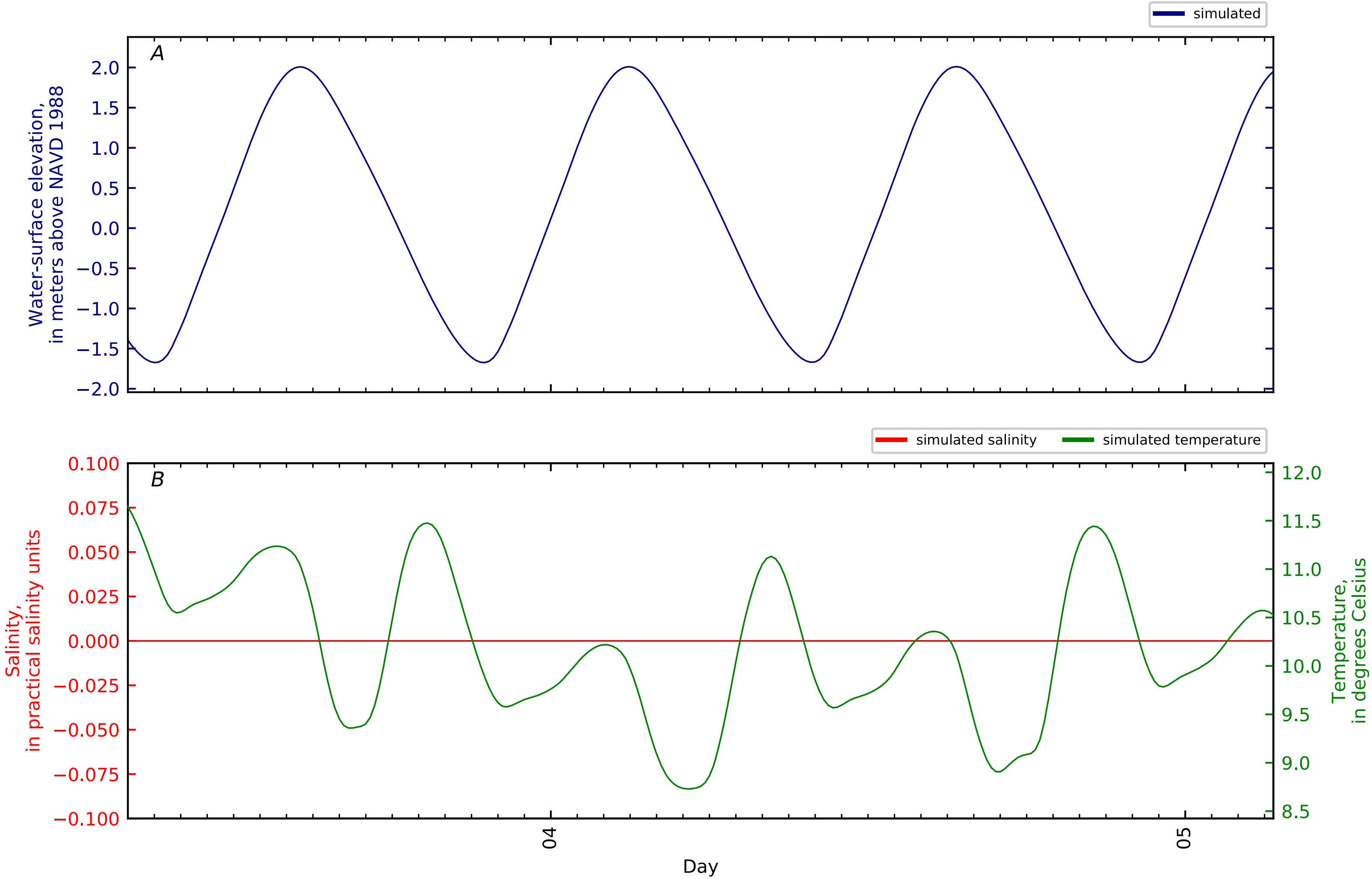

Figure B4-90. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 89, Penob Riv KM36. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

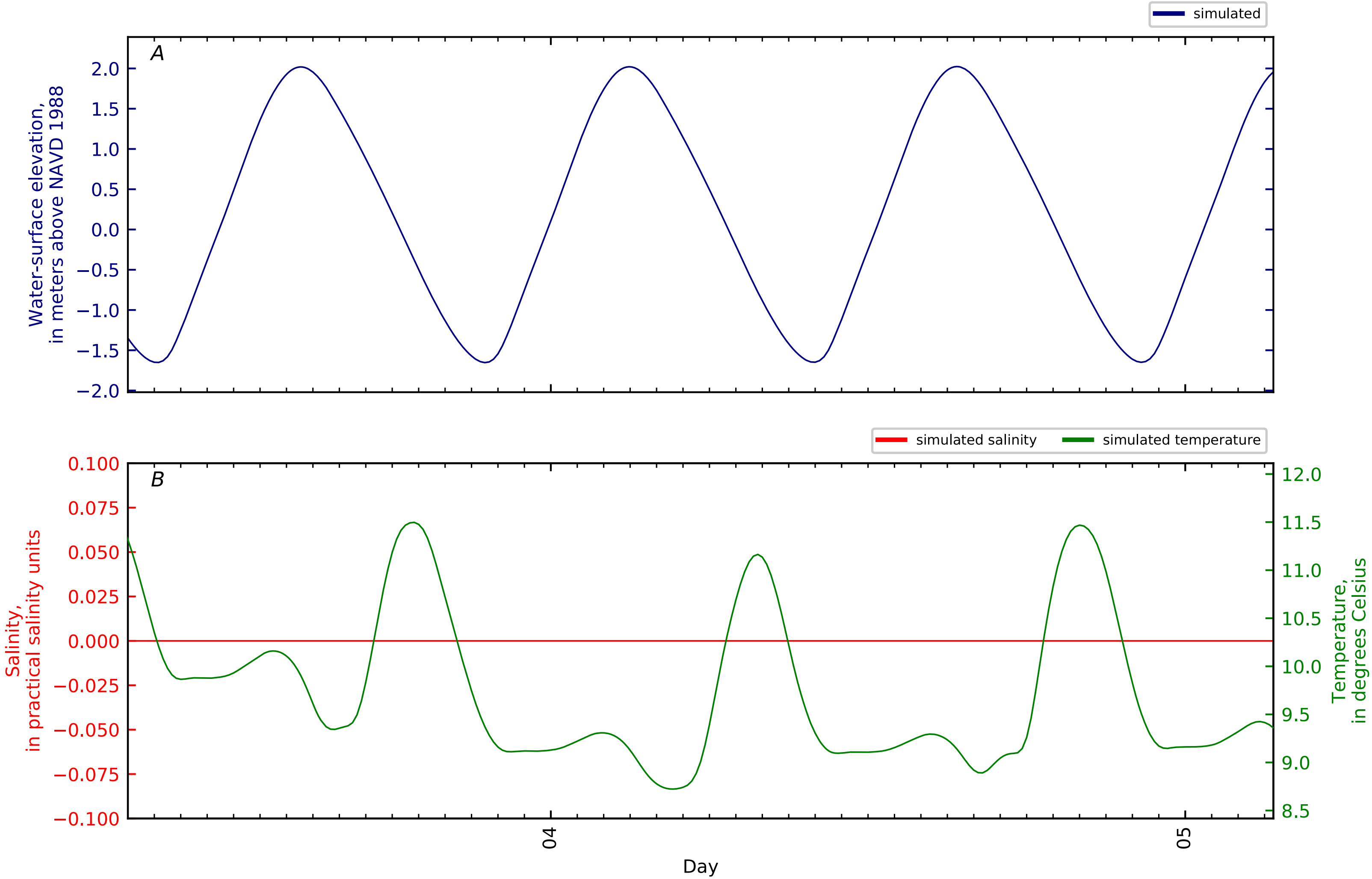

Figure B4-91. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 90, Penob Riv KM37. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

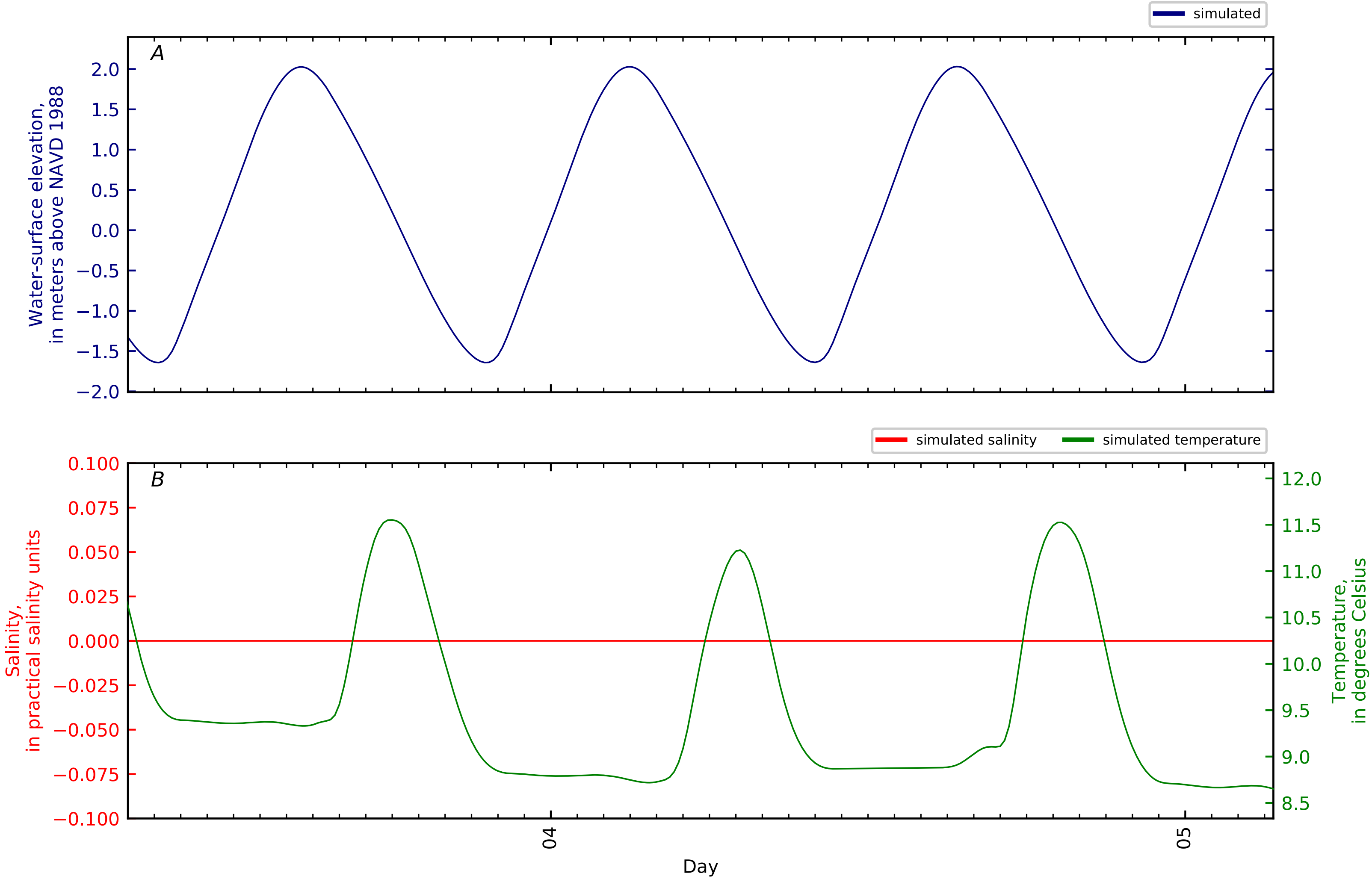

Figure B4-92. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 91, Penob Riv KM38. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

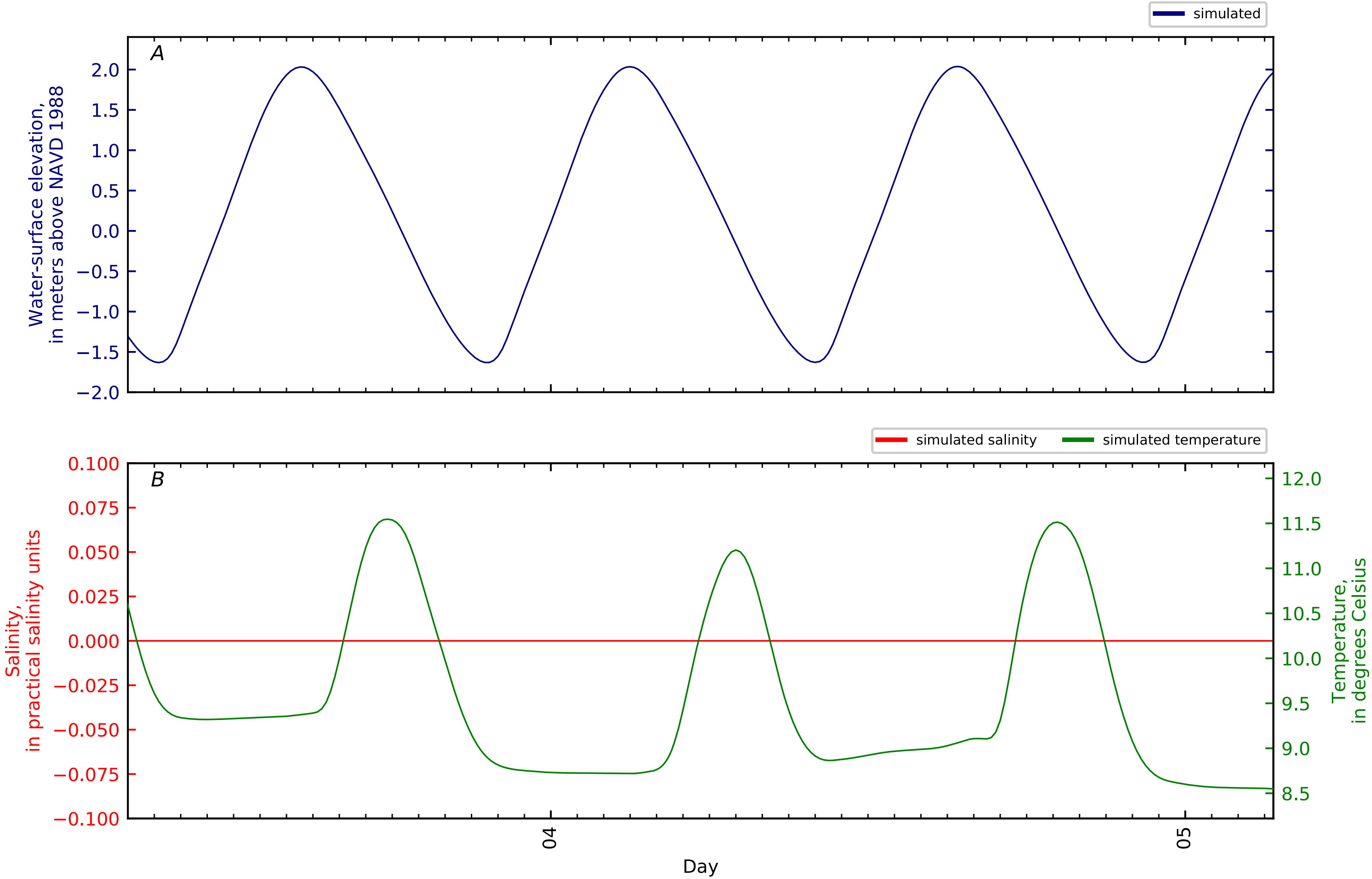

Figure B4-93. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 92, Penob Riv KM38.7 Boat ramp d/s Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

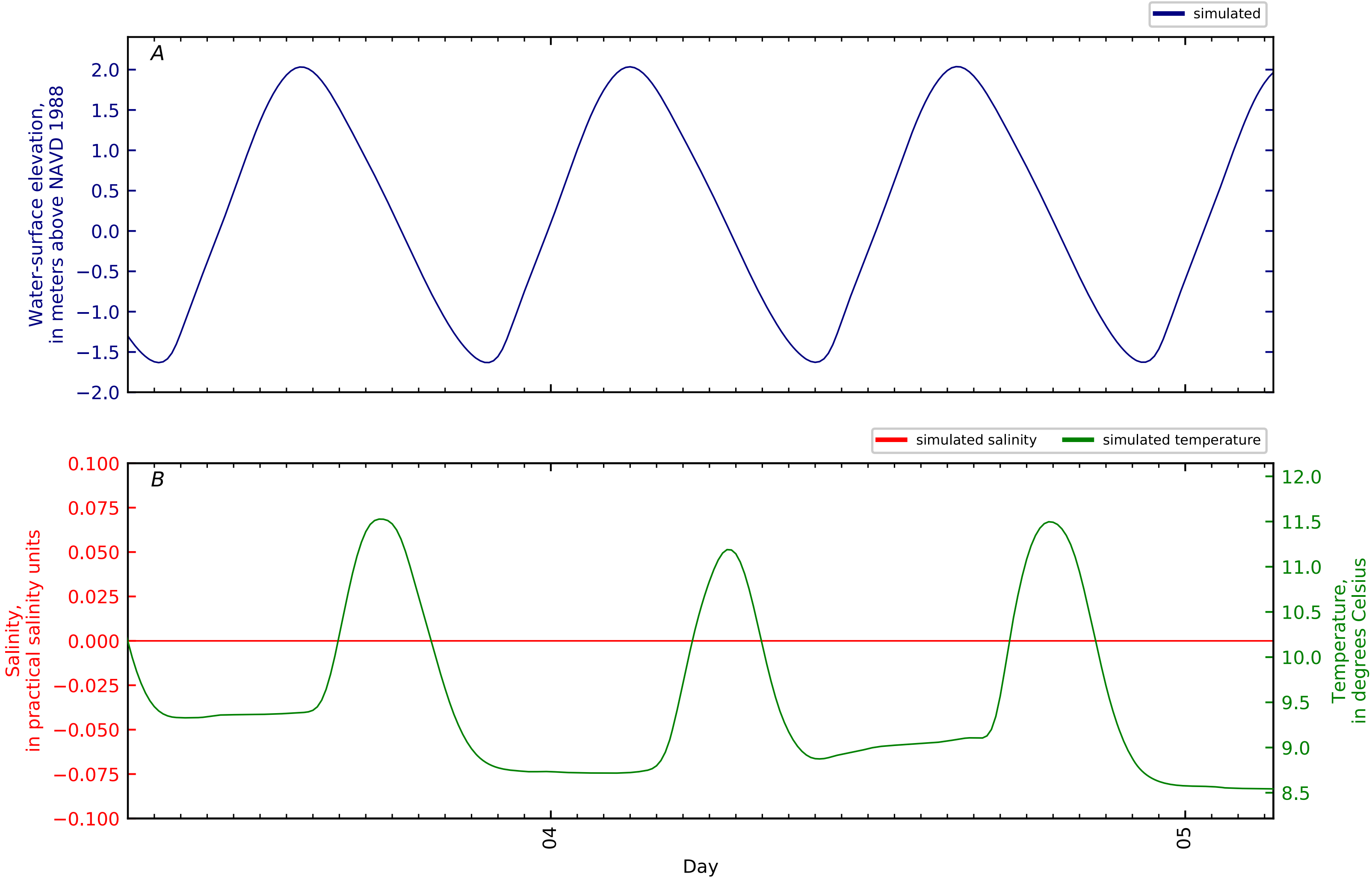

Figure B4-94. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 93, Penob Riv KM39. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

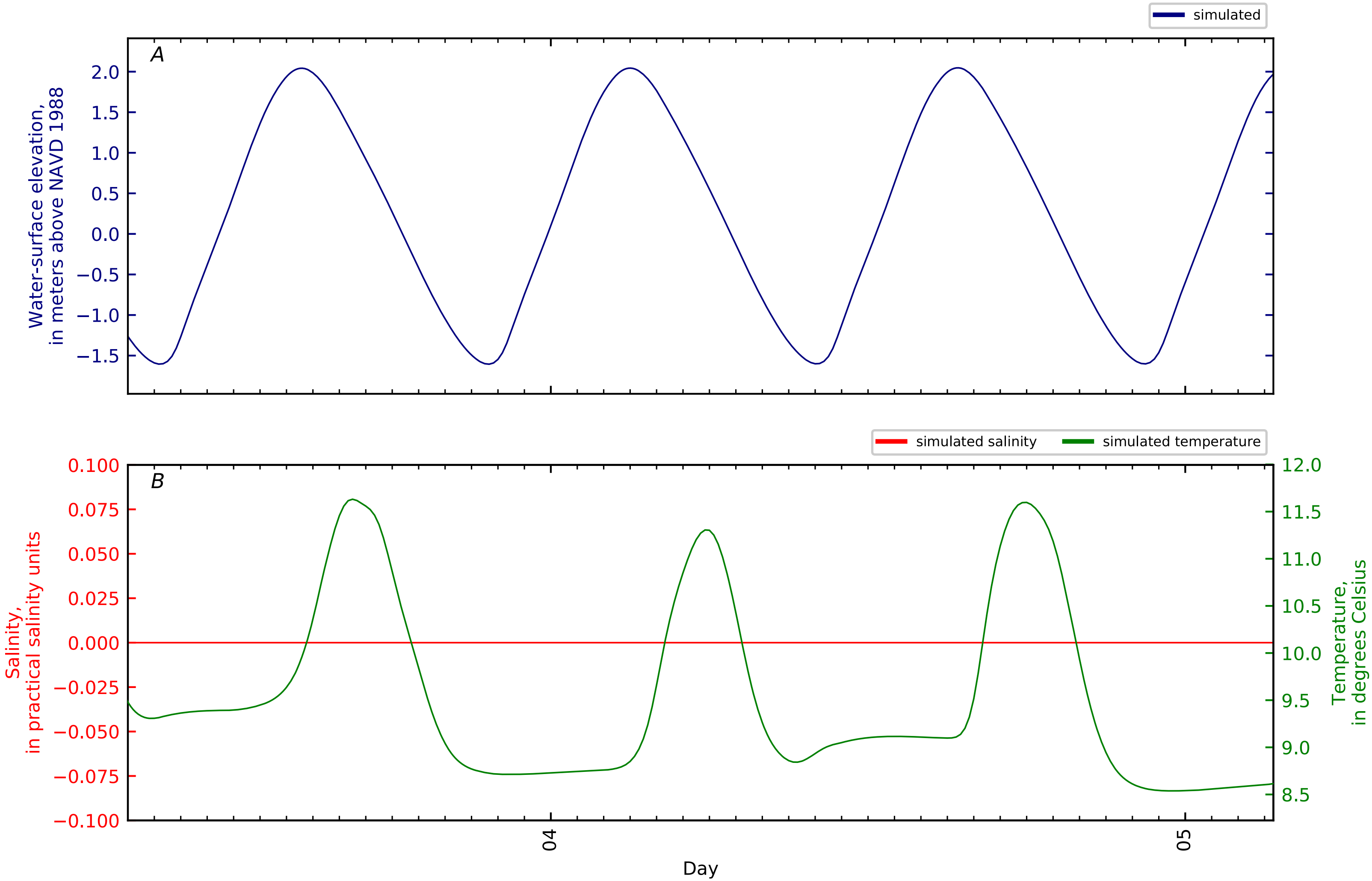

Figure B4-95. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 94, Penob Riv KM40. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

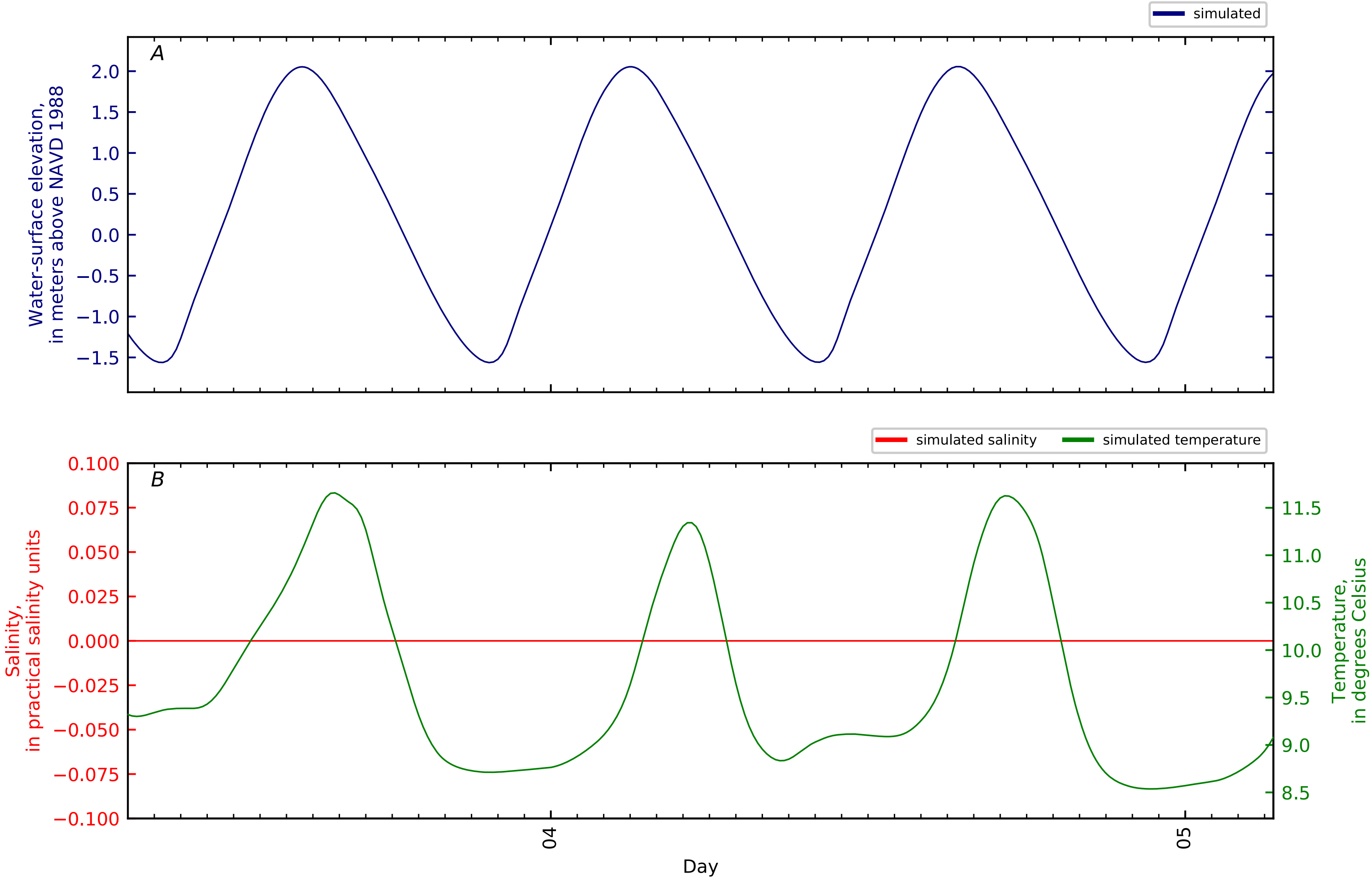

Figure B4-96. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 95, Penob Riv KM41. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

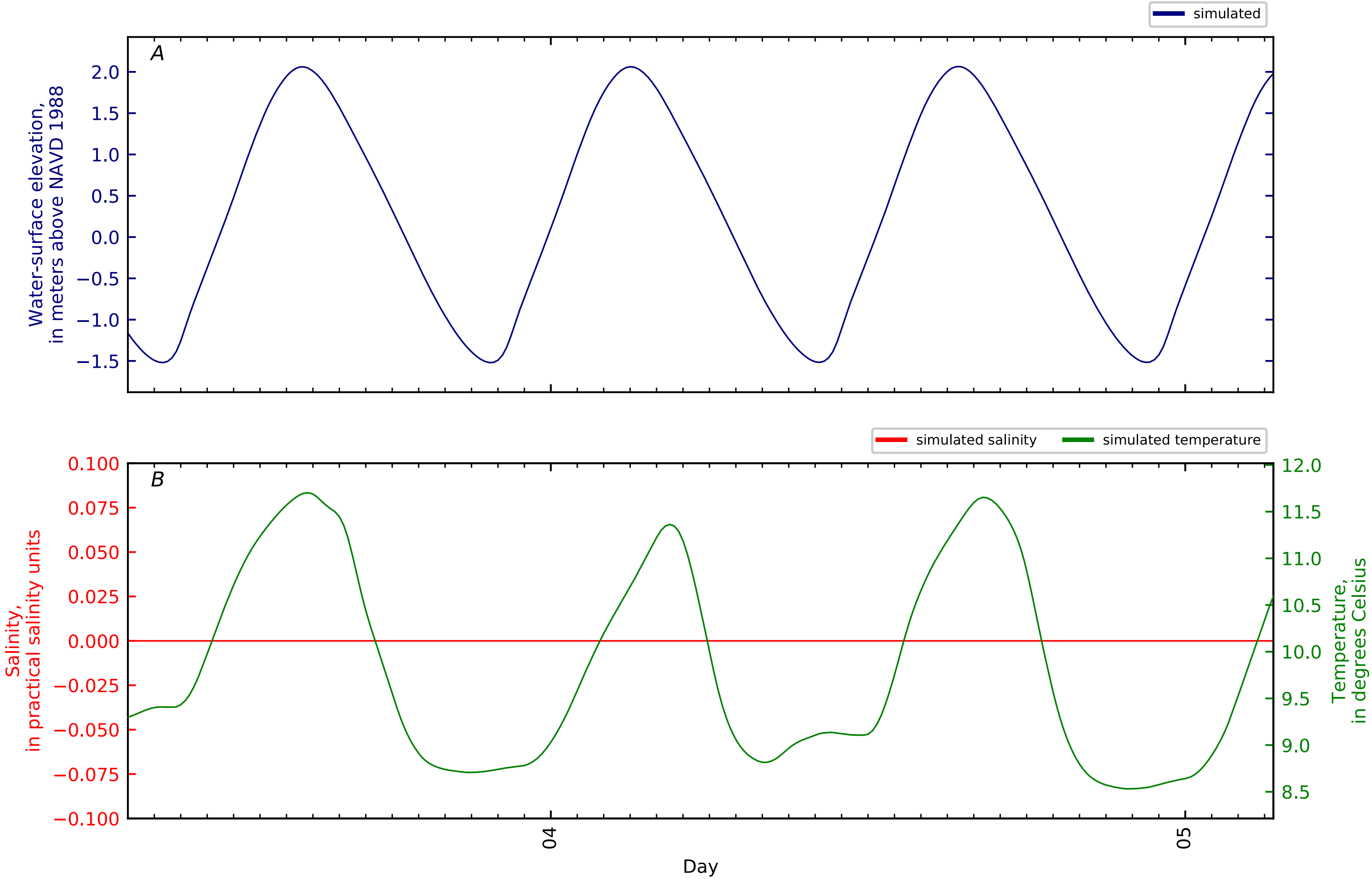

Figure B4-97. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 96, Penob Riv KM42. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

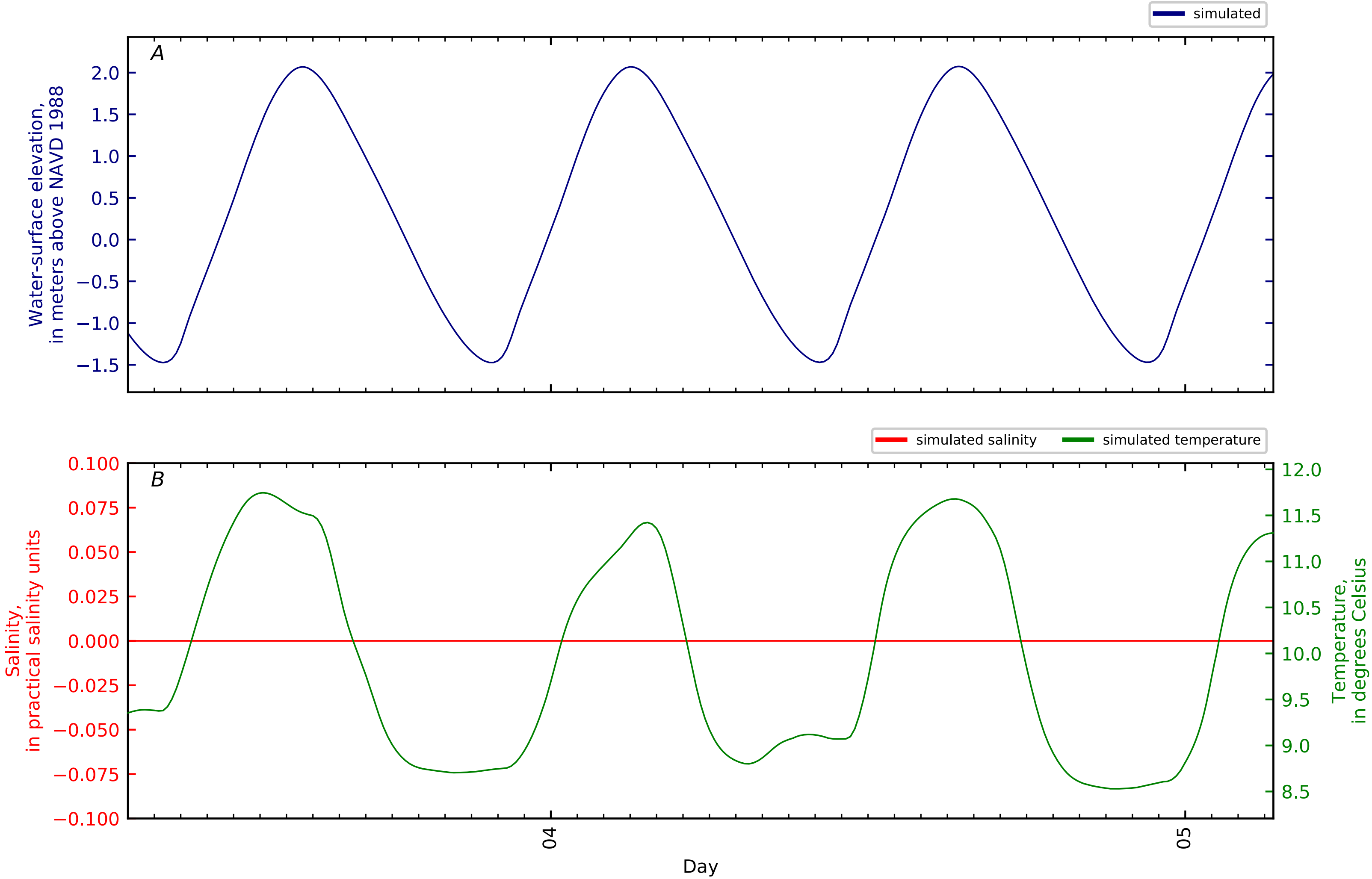

Figure B4-98. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 97, Penob Riv KM43. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

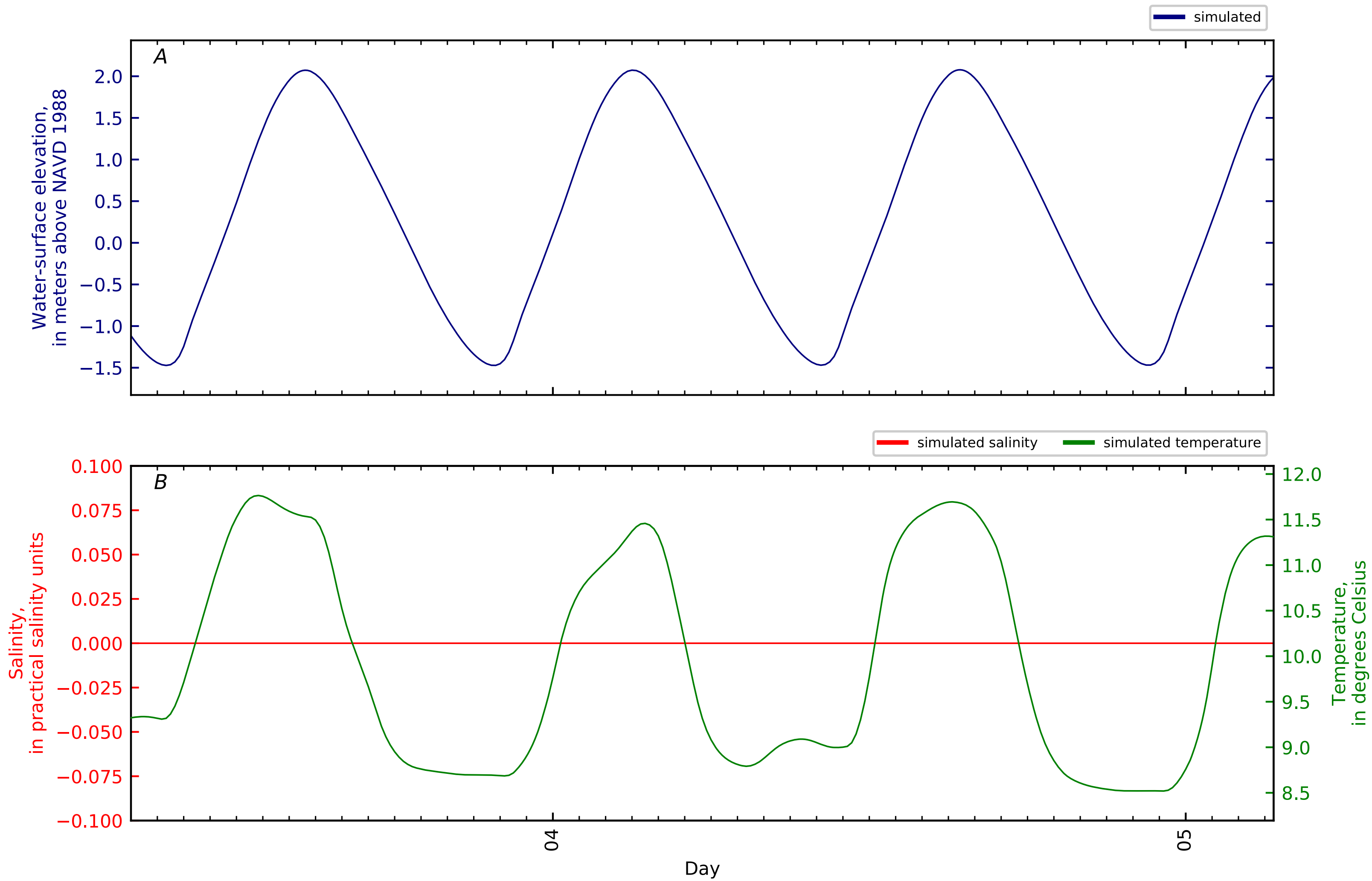

Figure B4-99. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 98, Penob Riv KM43.2 GS 01037050 at Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

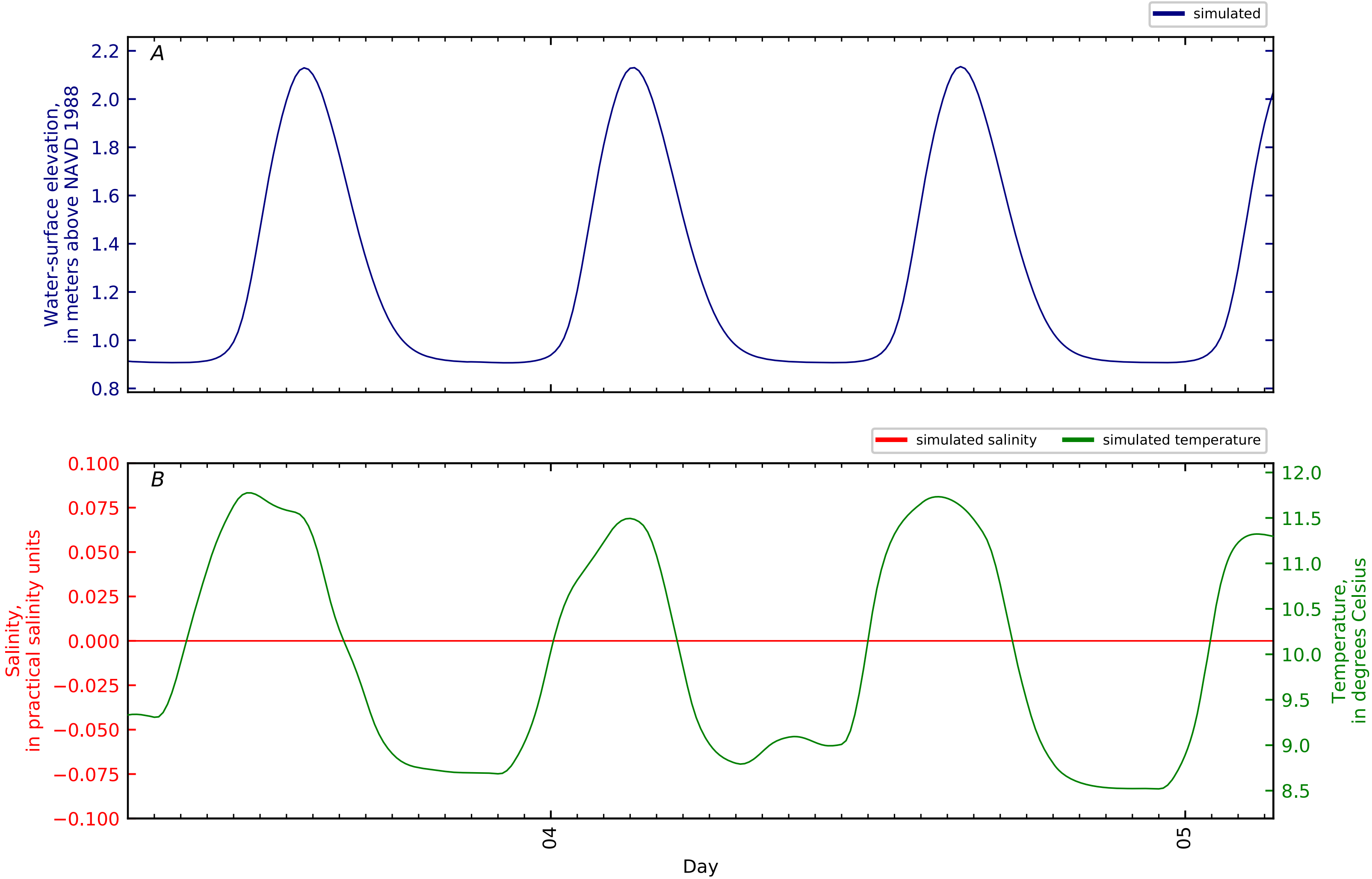

Figure B4-100. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 99, Penob Riv KM44. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

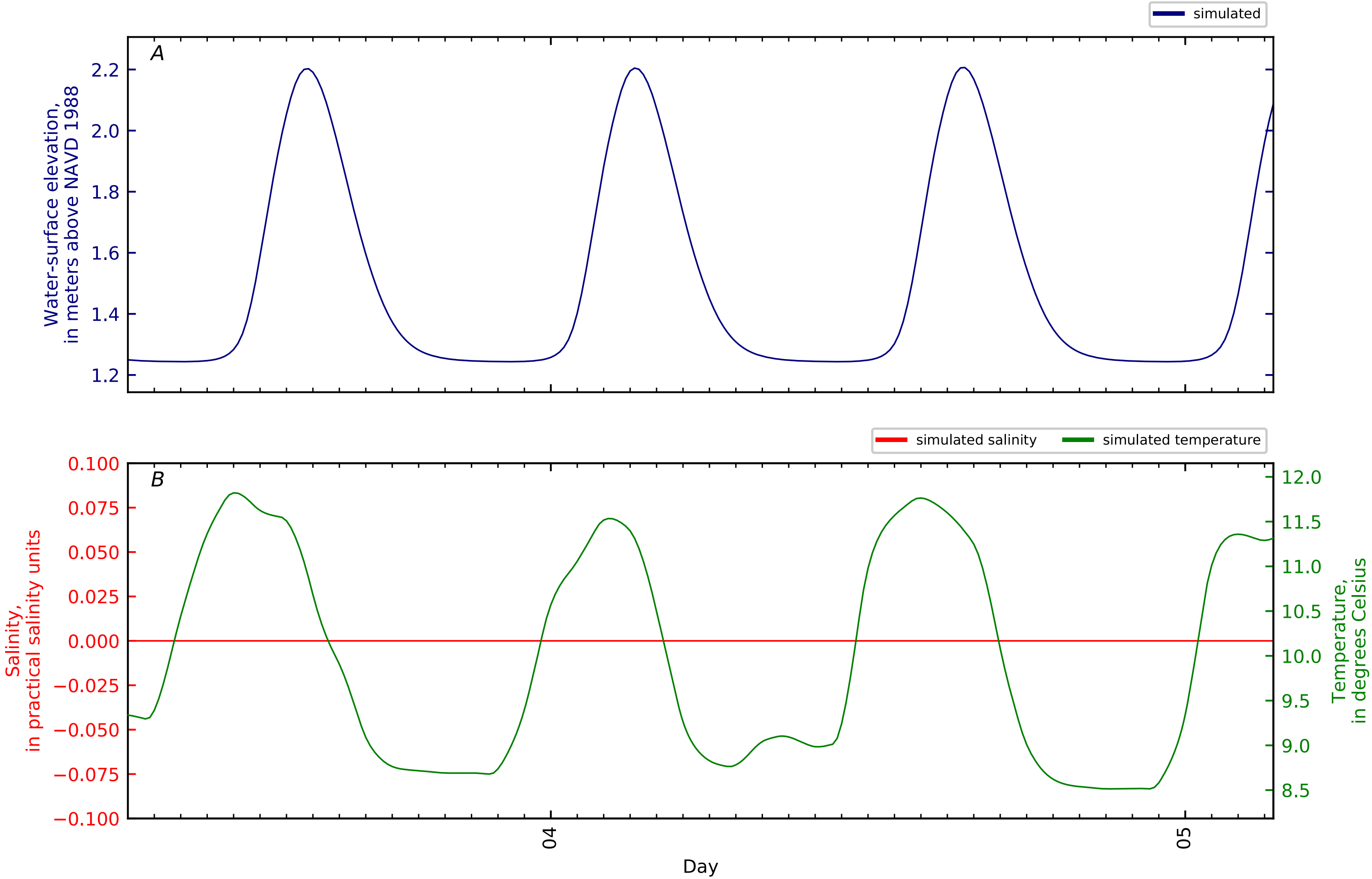

Figure B4-101. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 100, Penob Riv KM45. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

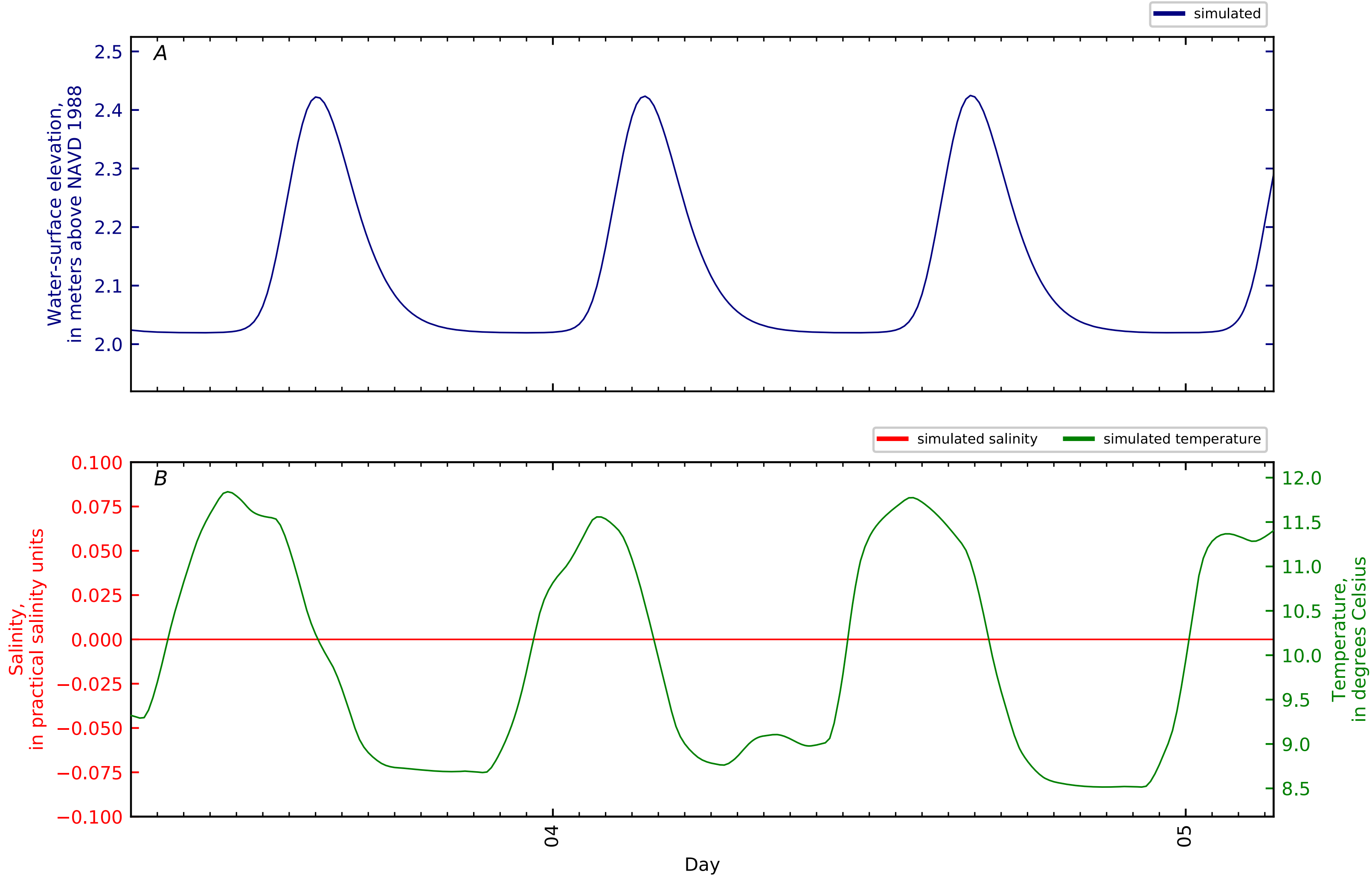

Figure B4-102. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 101, Penob Riv KM46. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

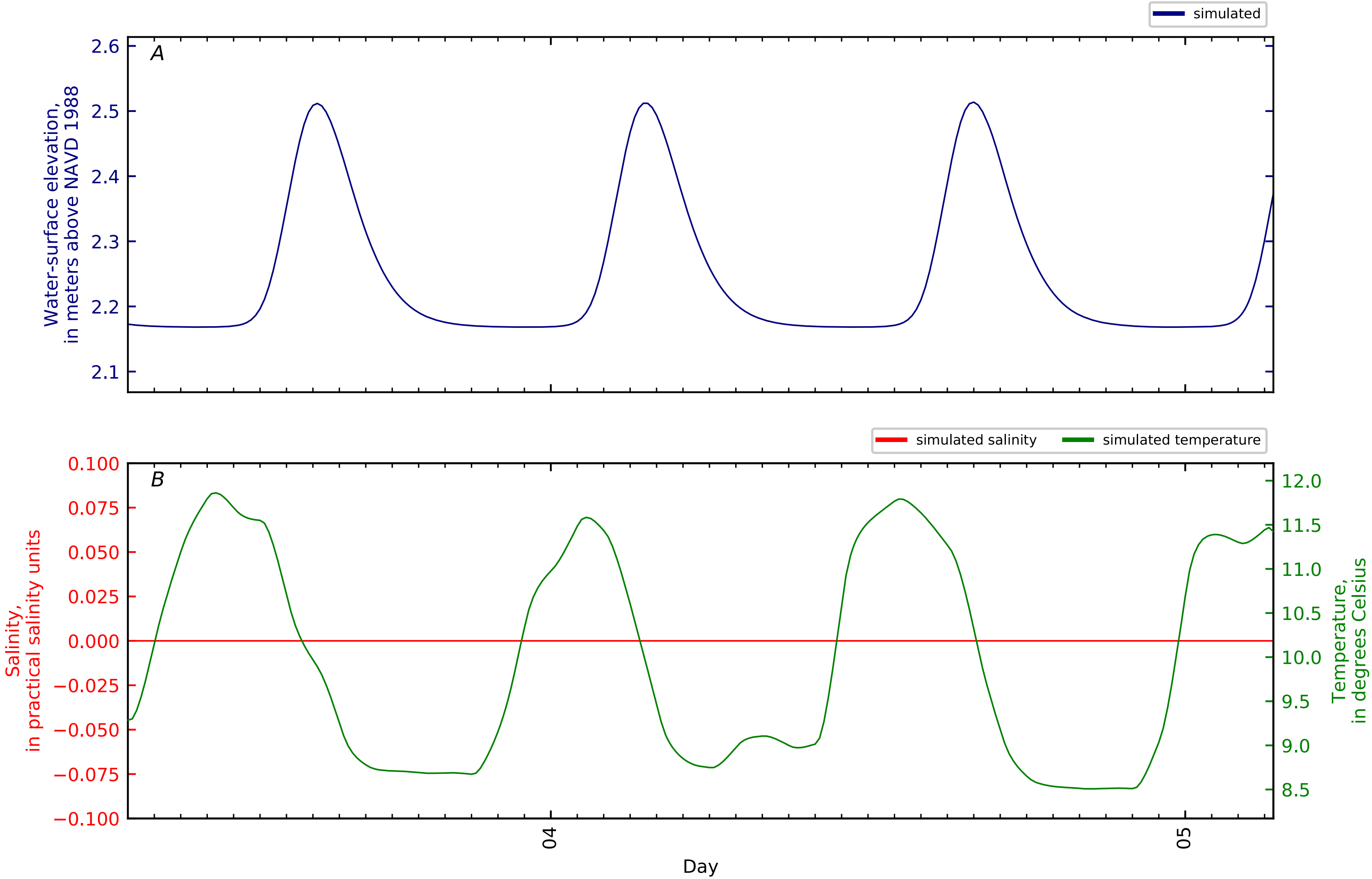

Figure B4-103. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 102, Penob Riv KM47. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

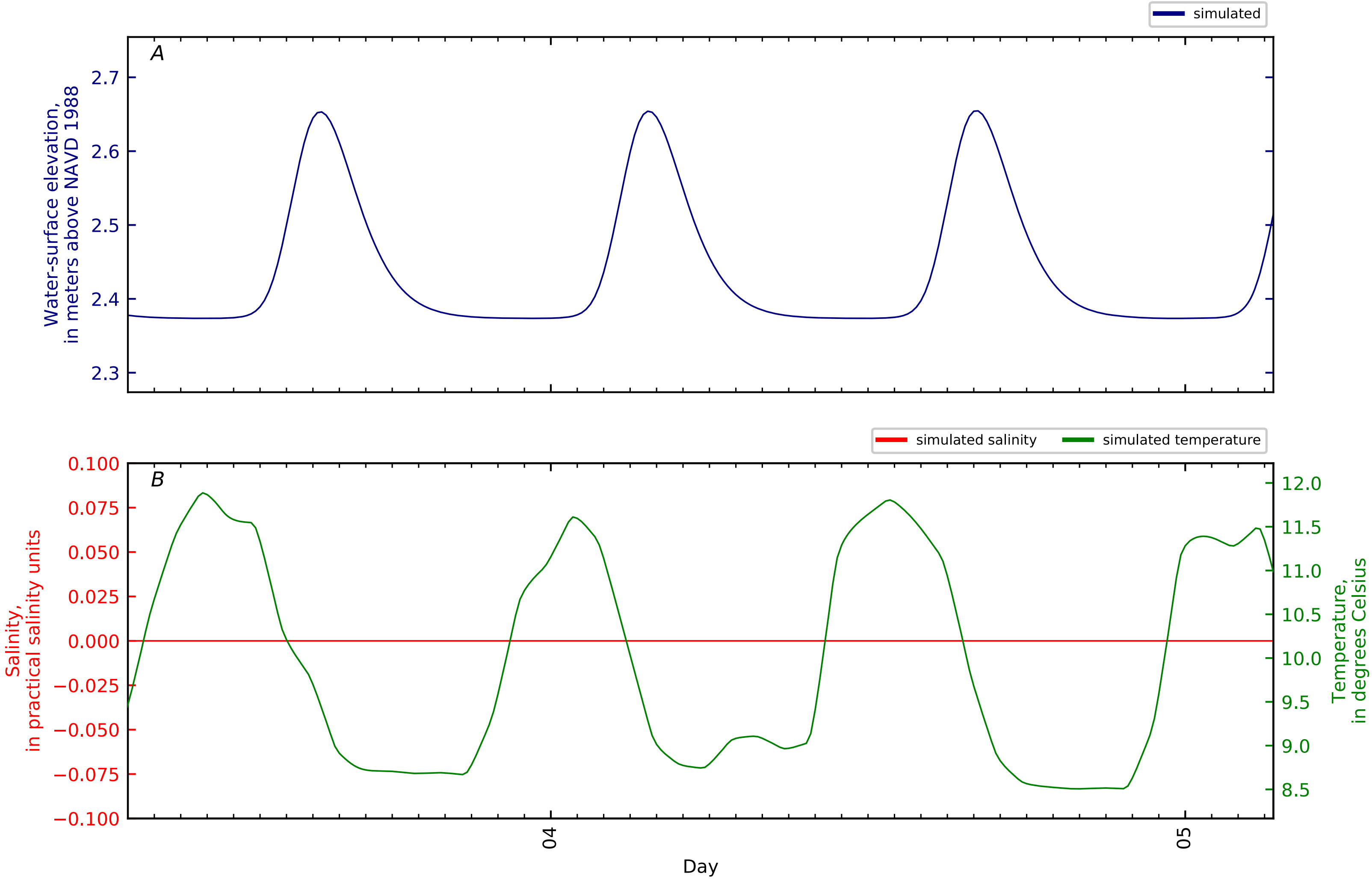

Figure B4-104. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 103, Penob Riv KM48. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

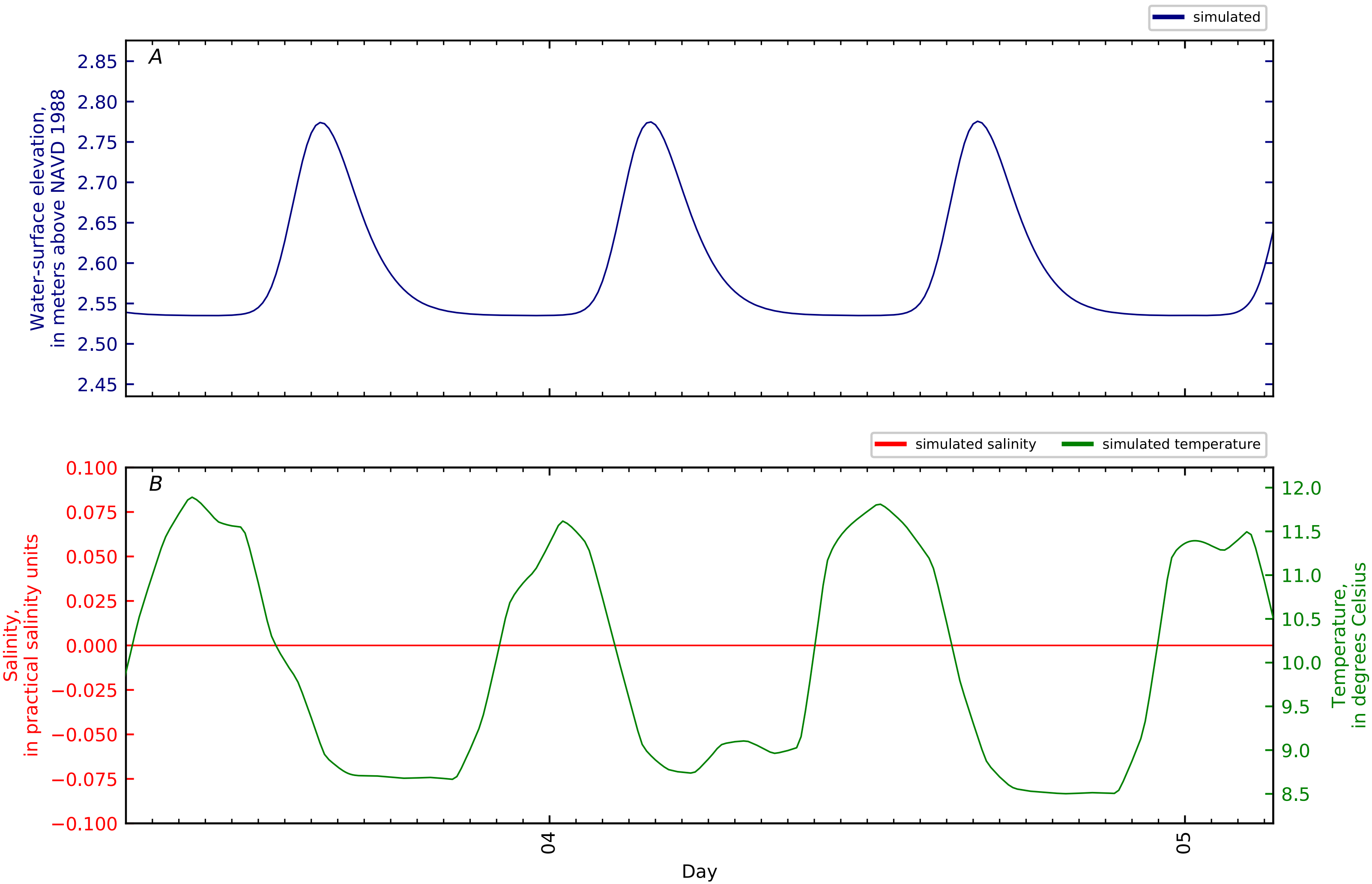

Figure B4-105. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 104, Penob Riv KM49. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

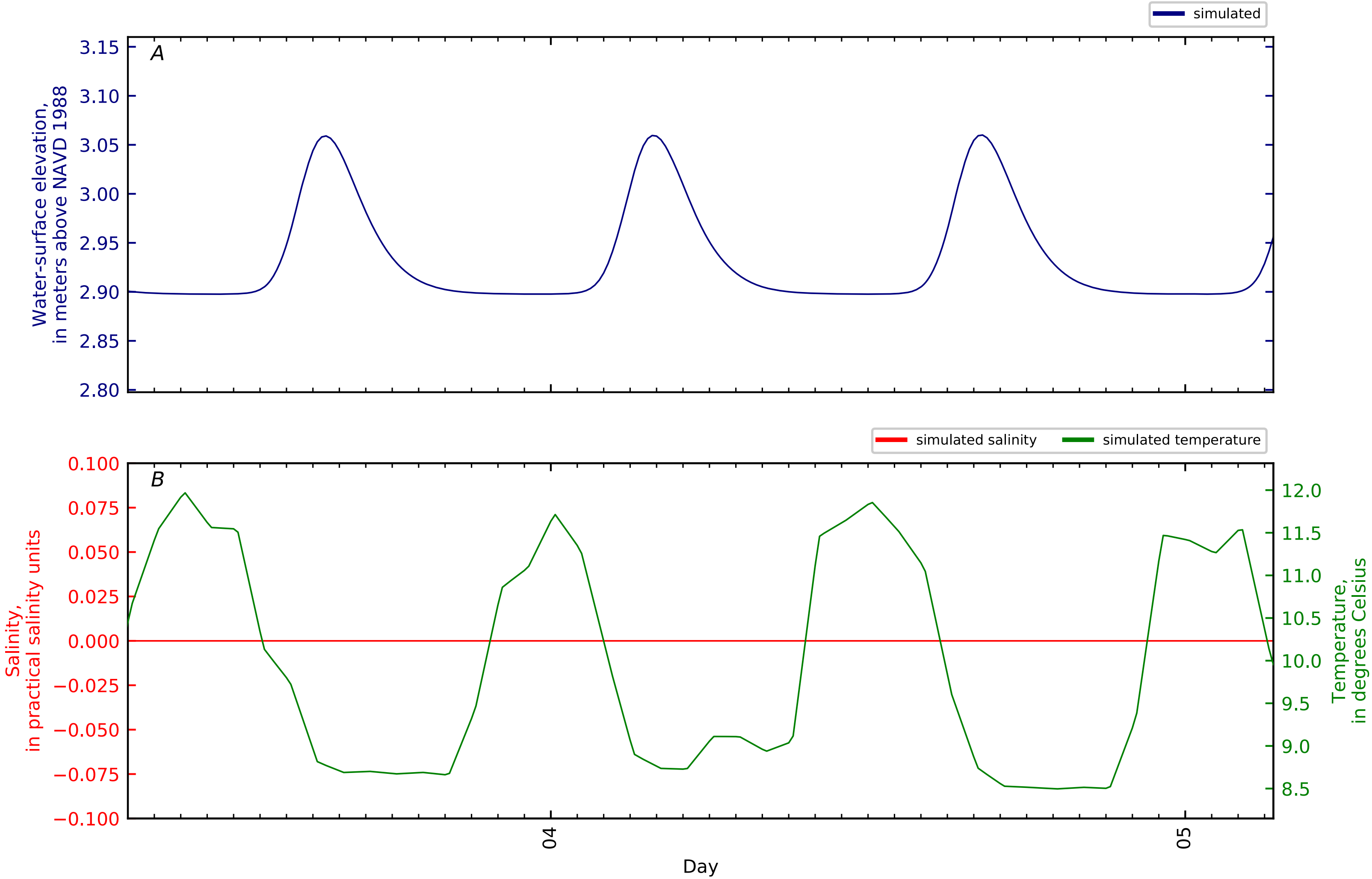

Figure B4-106. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 105, Penob Riv KM50 nr GS gage Eddington. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

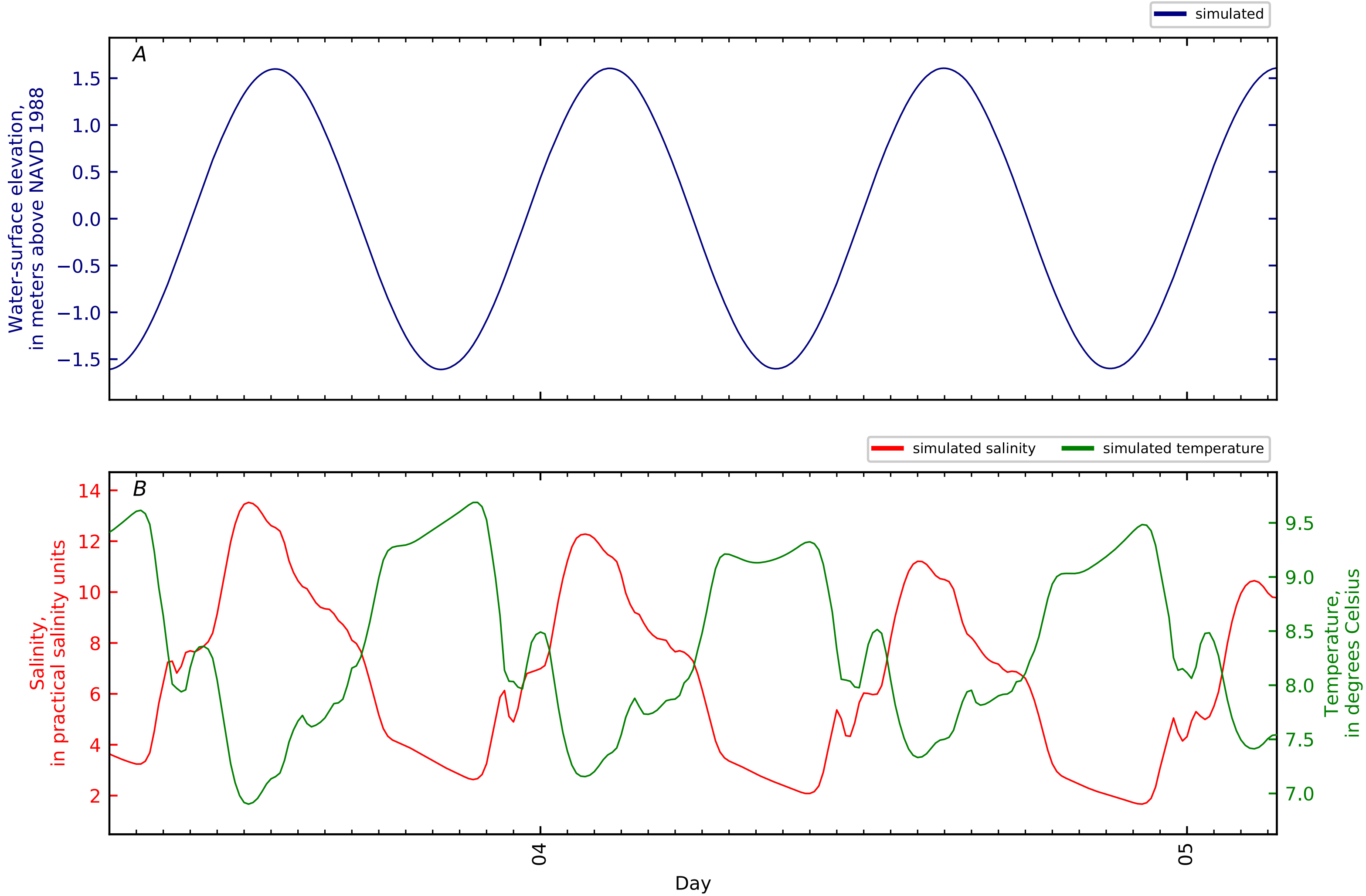

Figure B4-107. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 106, East Channel -KM0.1 ERDC9 VE-MU4-SF-2. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

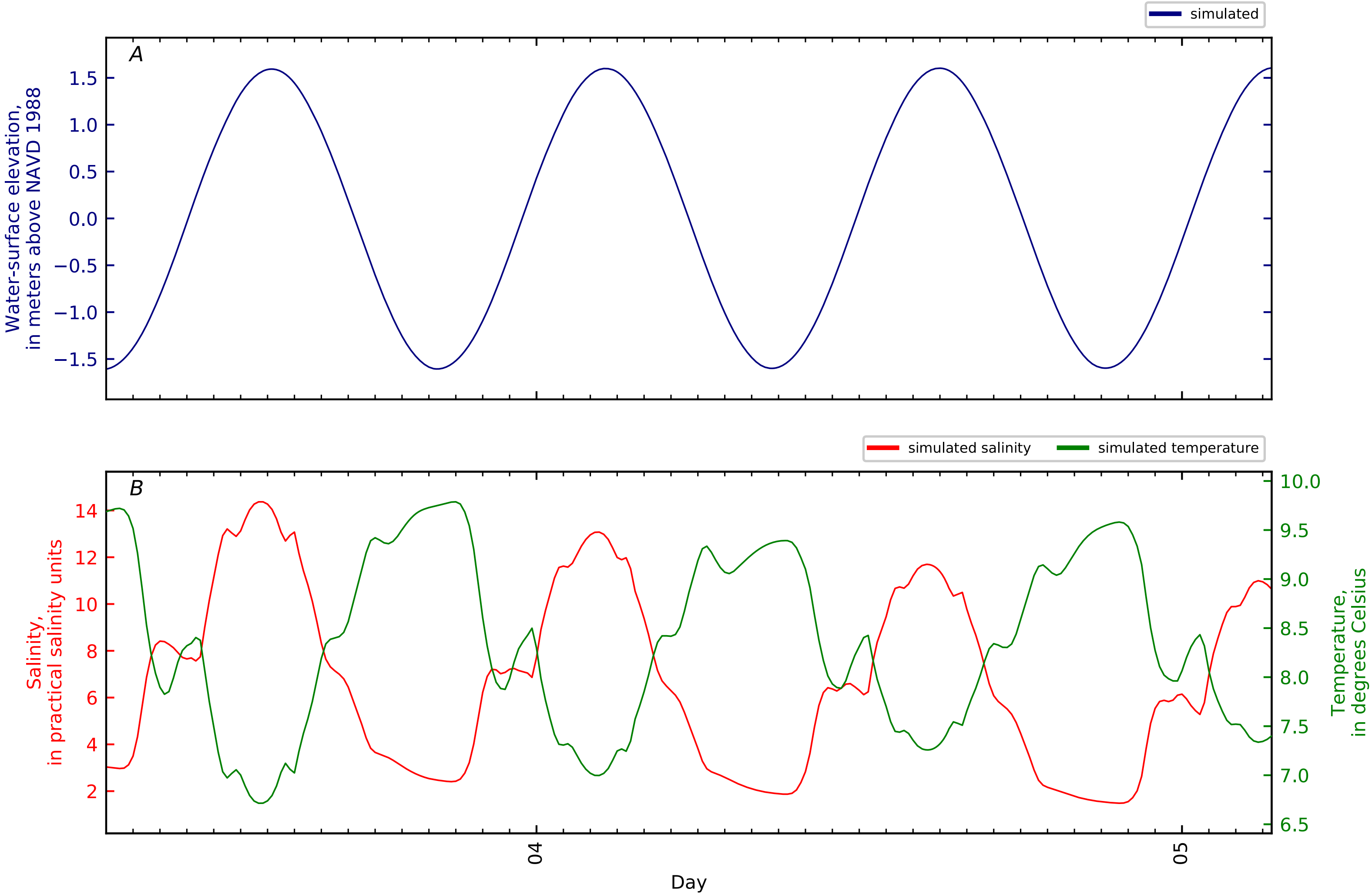

Figure B4-108. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 107, East Channel KM0. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

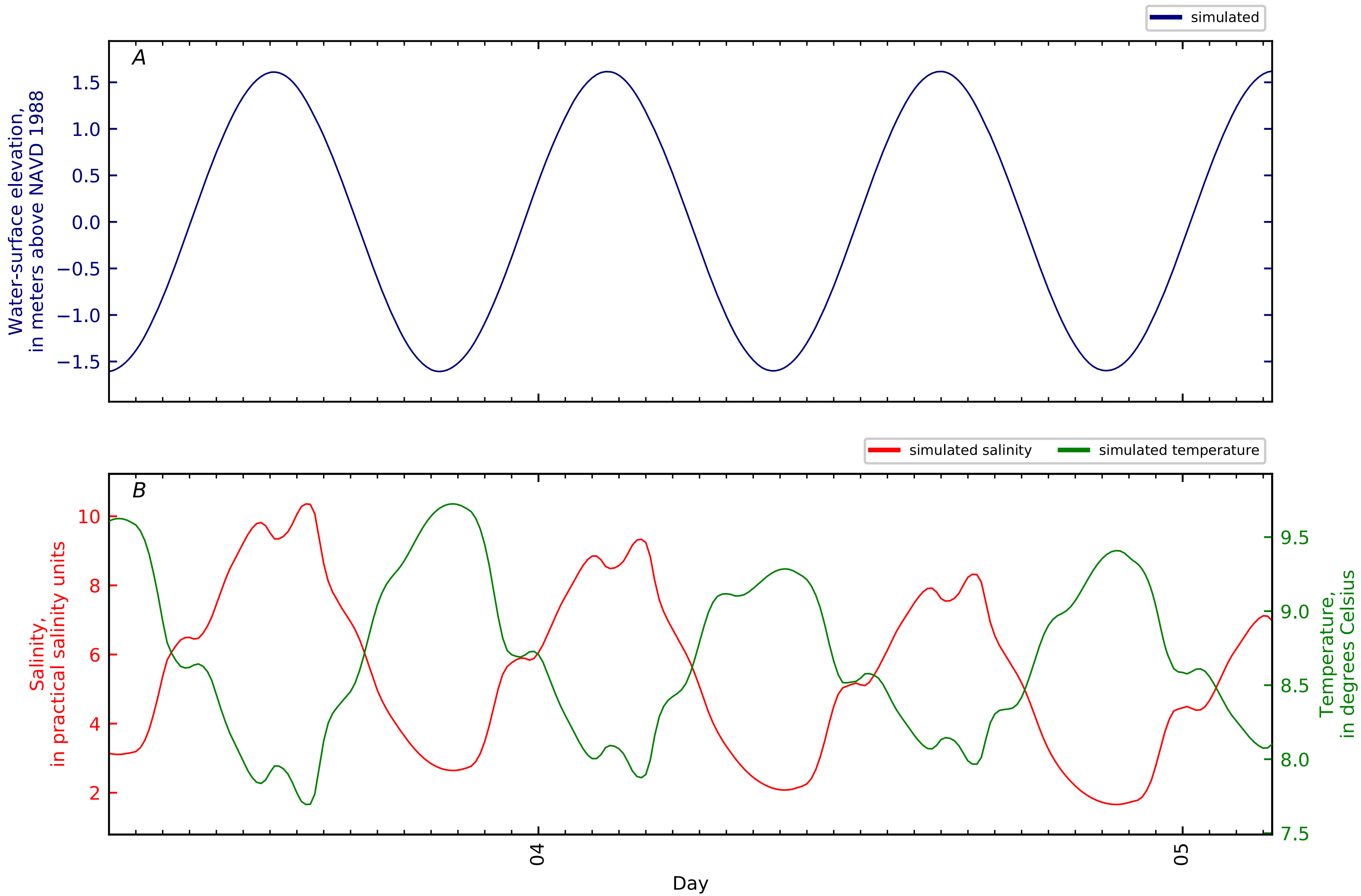

Figure B4-109. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 108, East Channel KM0.1 GS CTD4-01. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

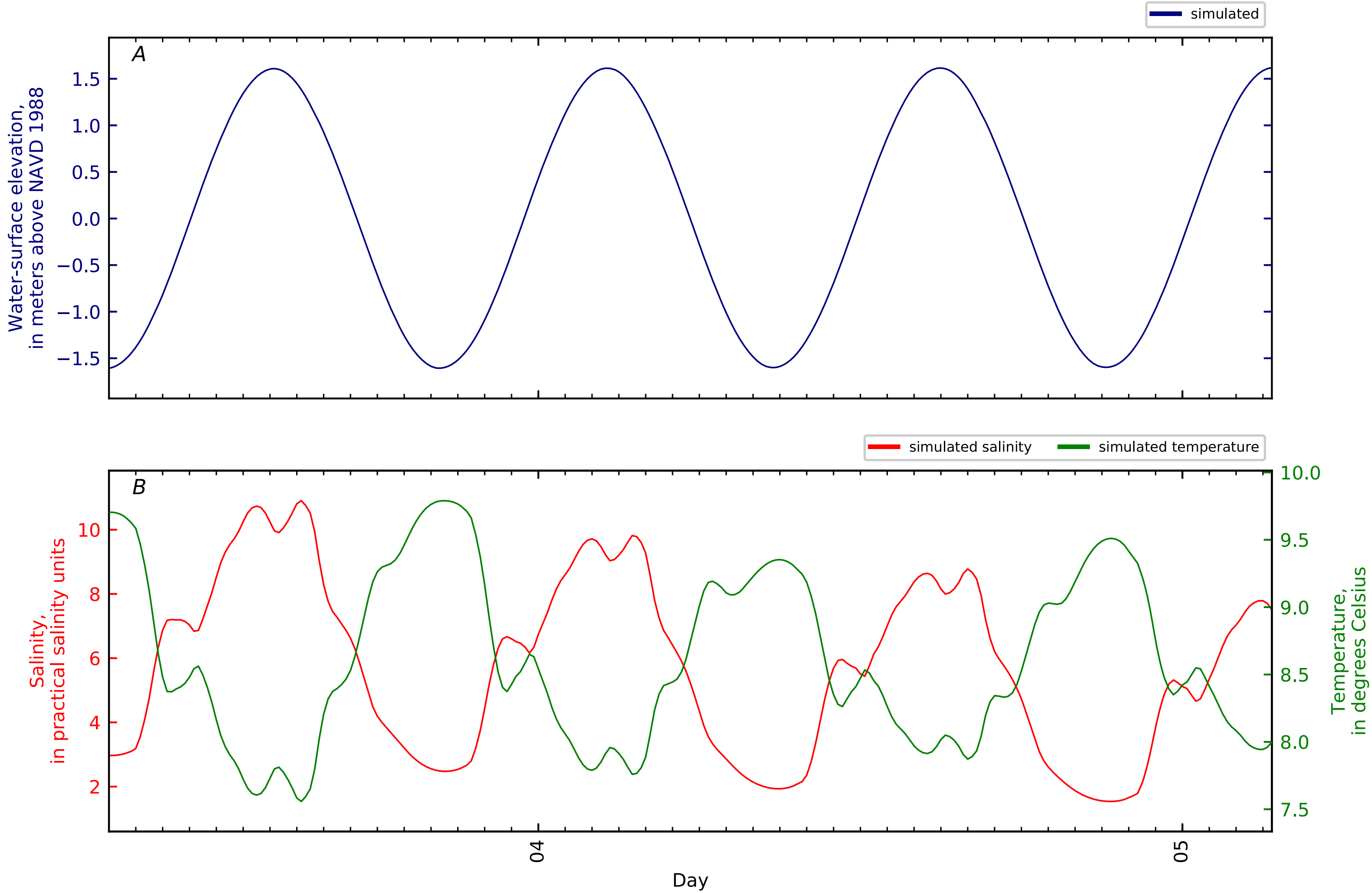

Figure B4-110. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 109, East Channel KM0.1 GS CTD4-02. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

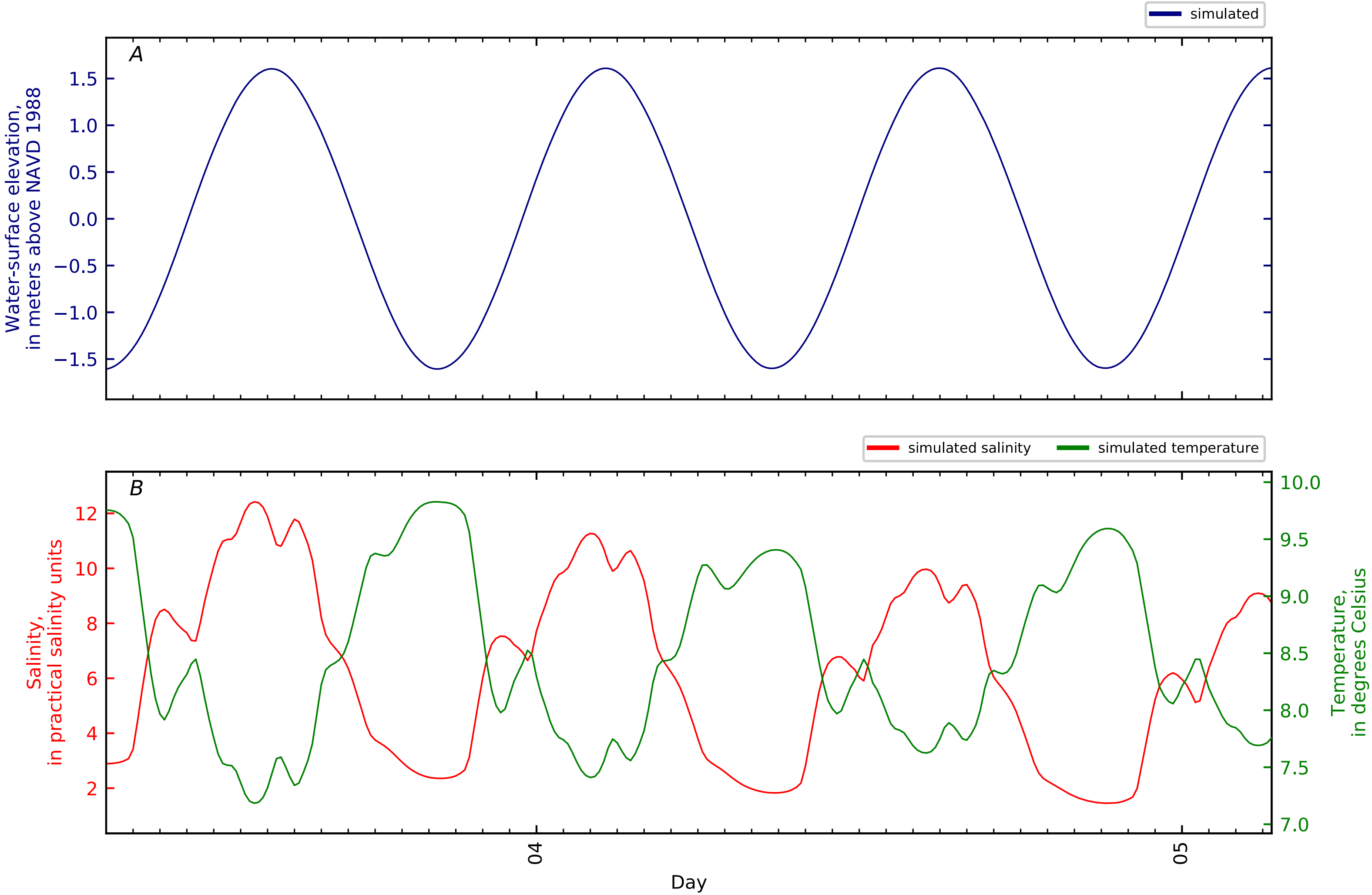

Figure B4-111. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 110, East Channel KM0.1 GS CTD4-03. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

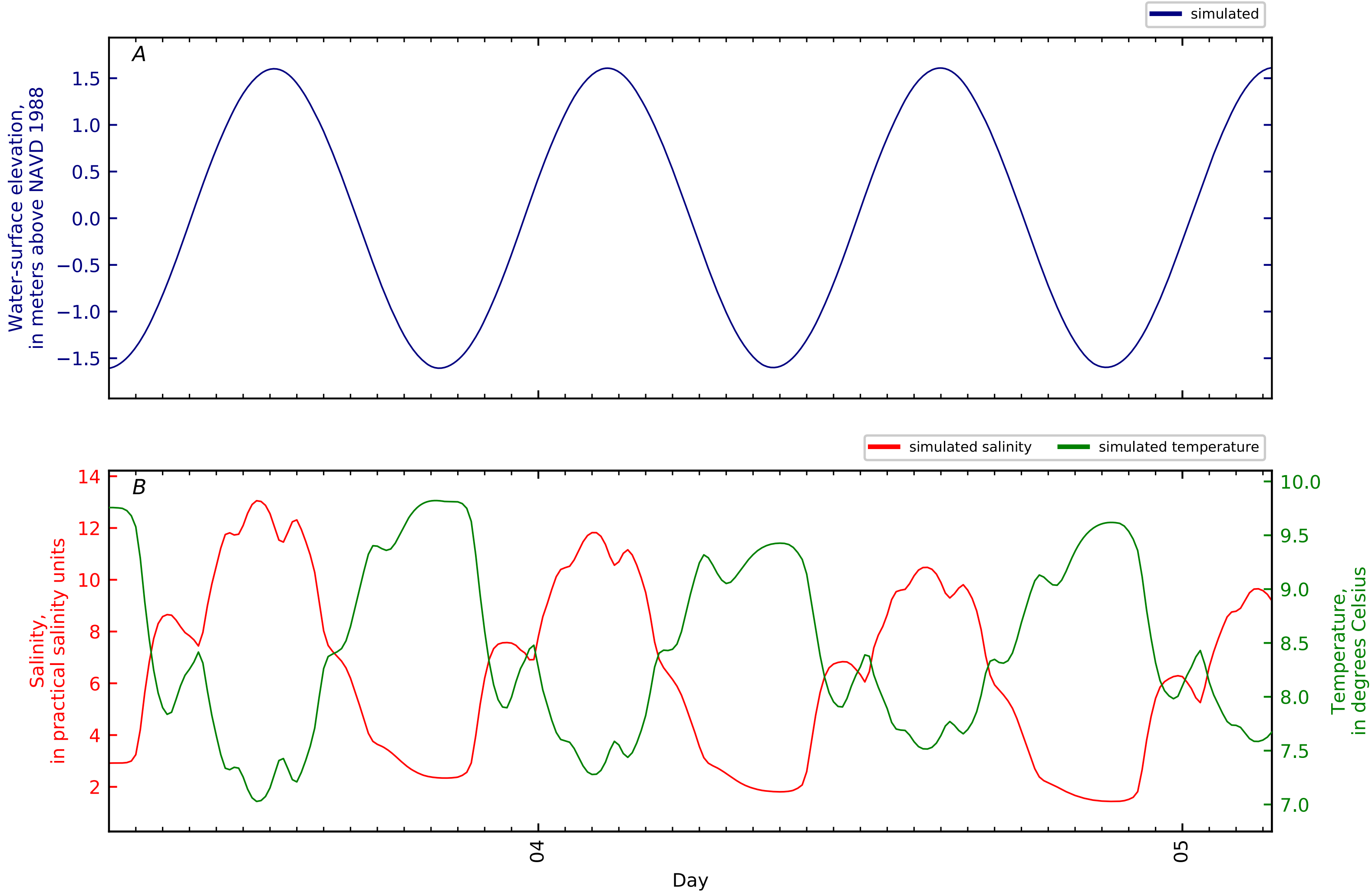

Figure B4-112. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 111, East Channel KM0.1 GS CTD4-04. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

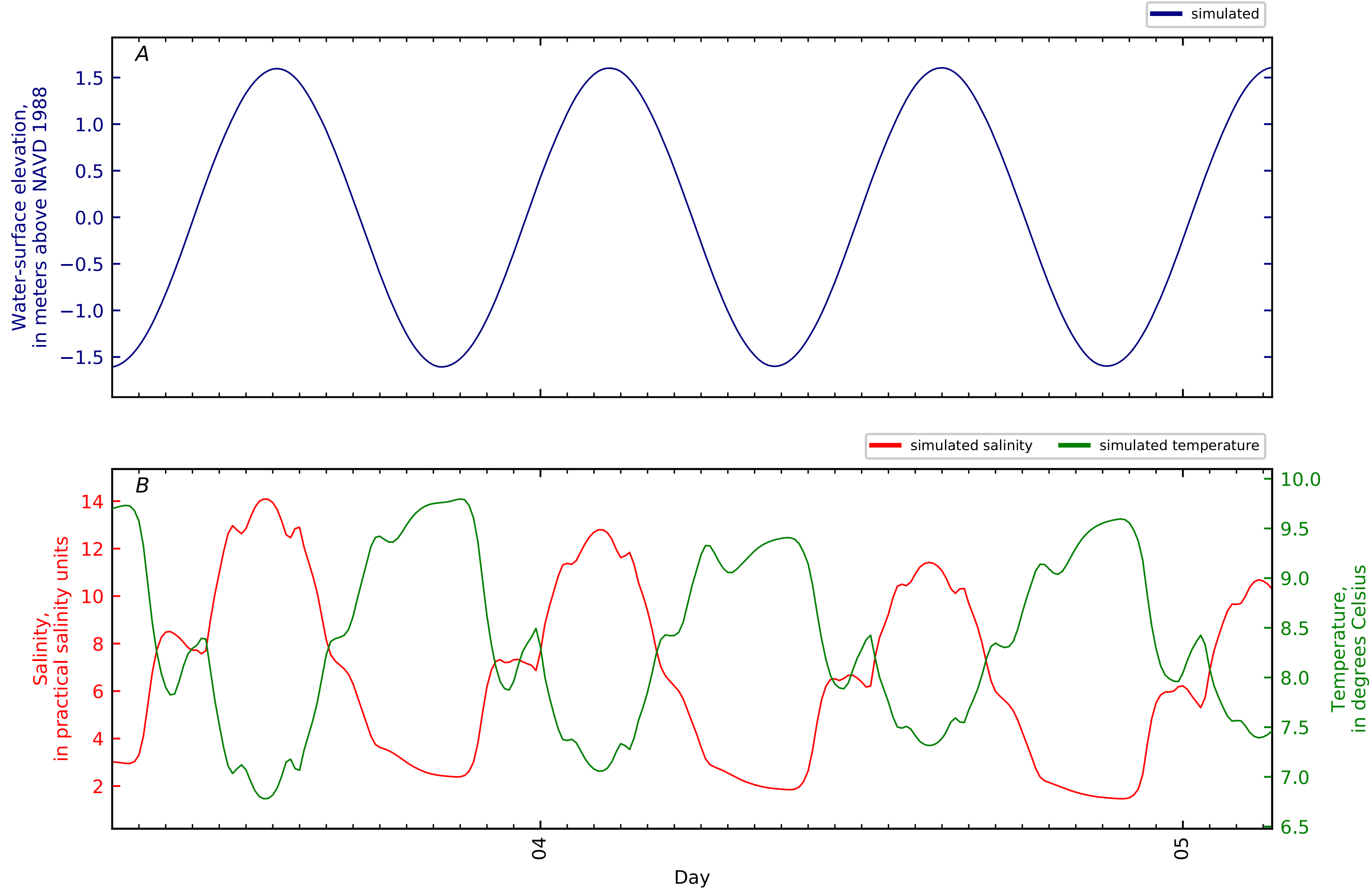

Figure B4-113. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 112, East Channel KM0.1 GS CTD4-05. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

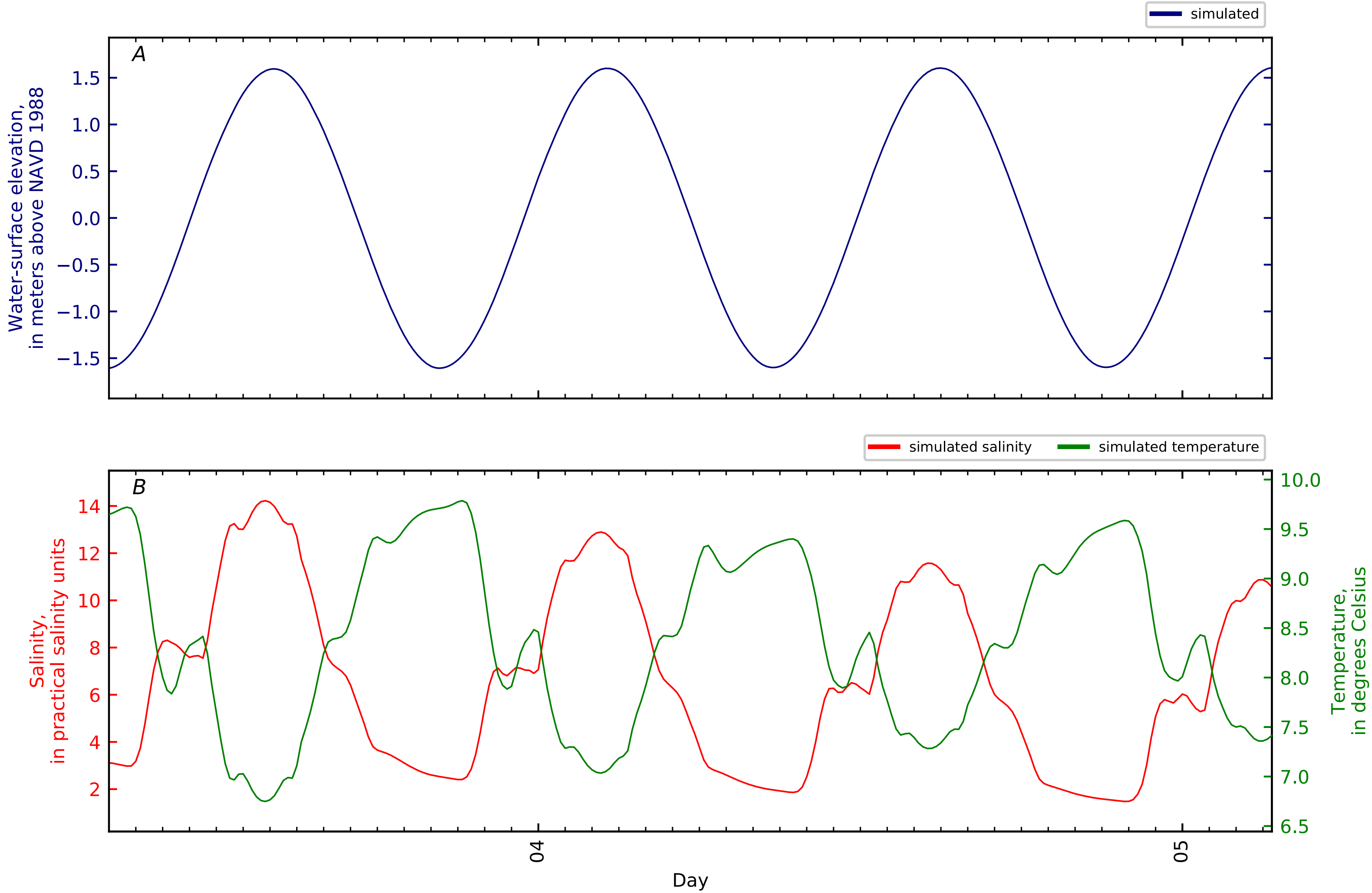

Figure B4-114. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 113, East Channel KM0.1 GS CTD4-06. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

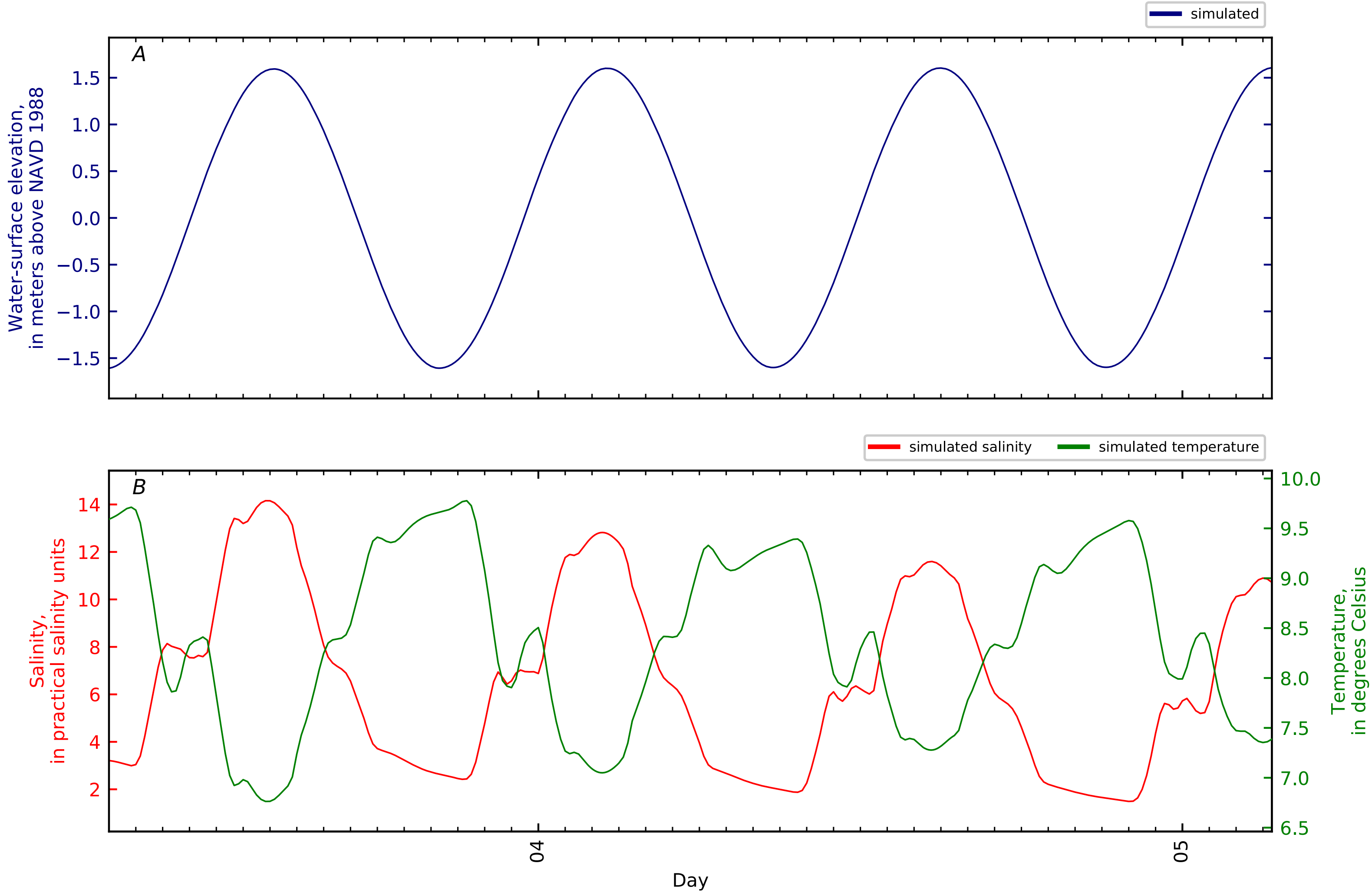

Figure B4-115. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 114, East Channel KM0.1 GS CTD4-07. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

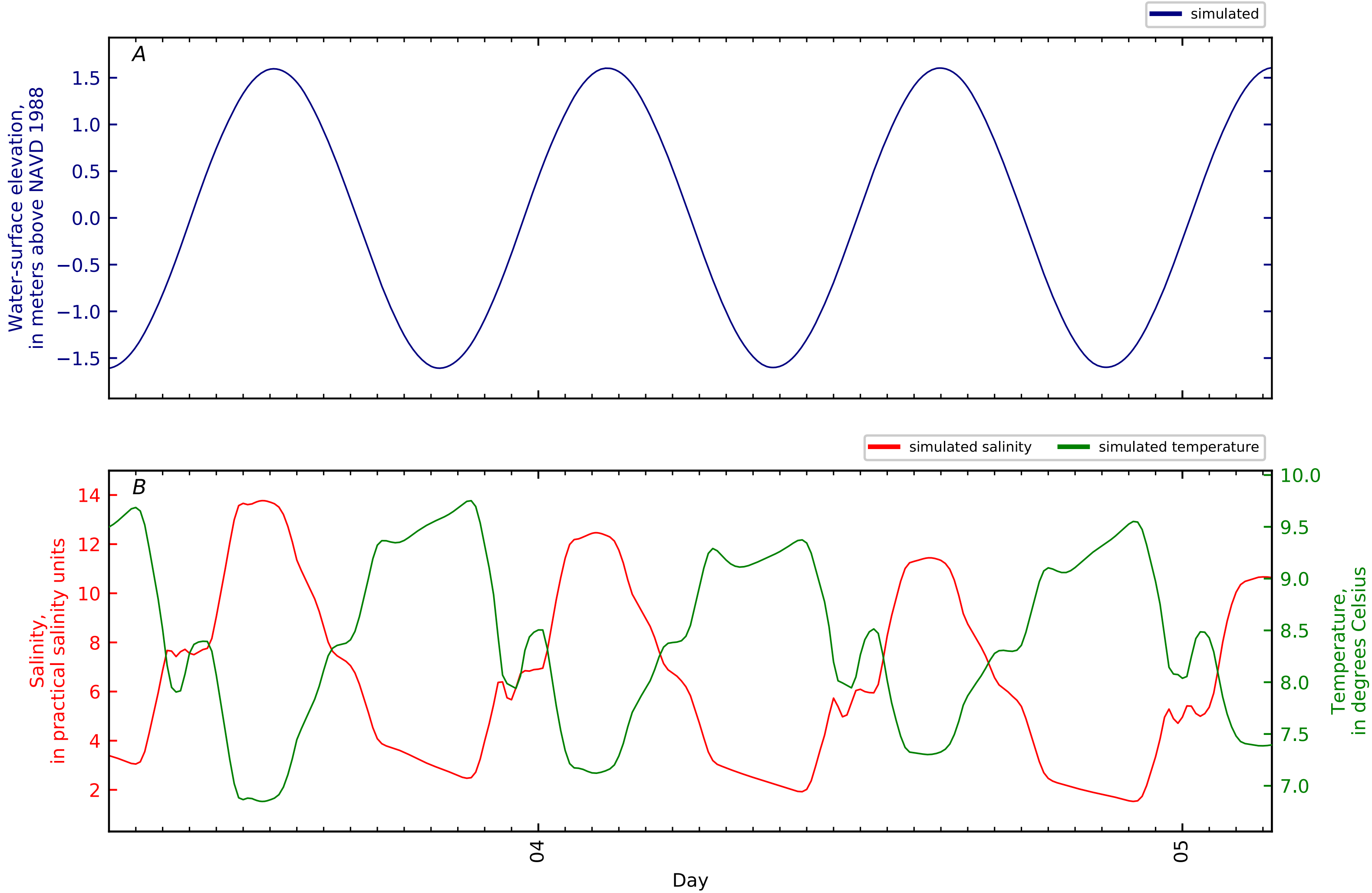

Figure B4-116. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 115, East Channel KM0.1 GS CTD4-08. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

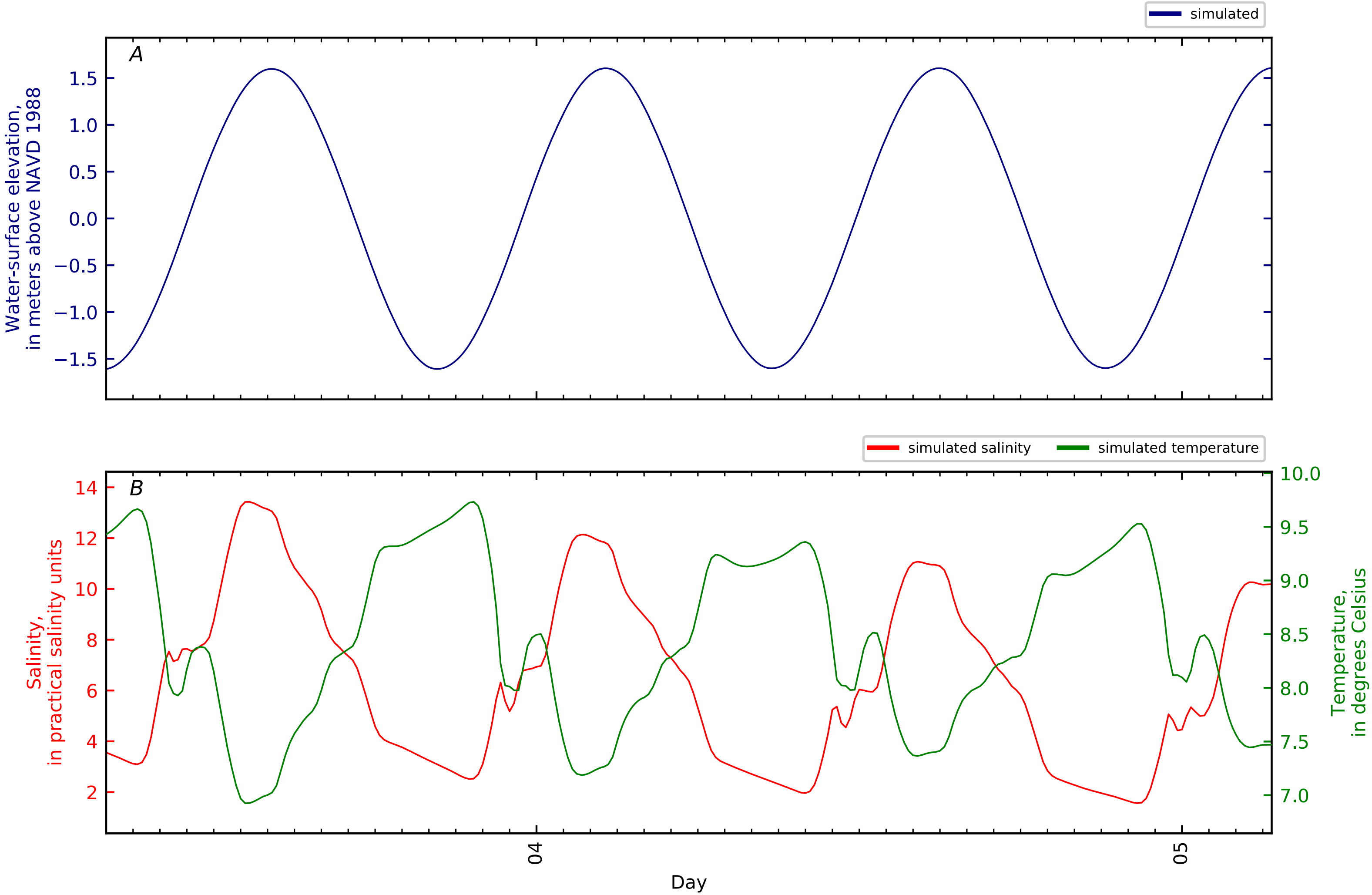

Figure B4-117. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 116, East Channel KM0.1 GS CTD4-09. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

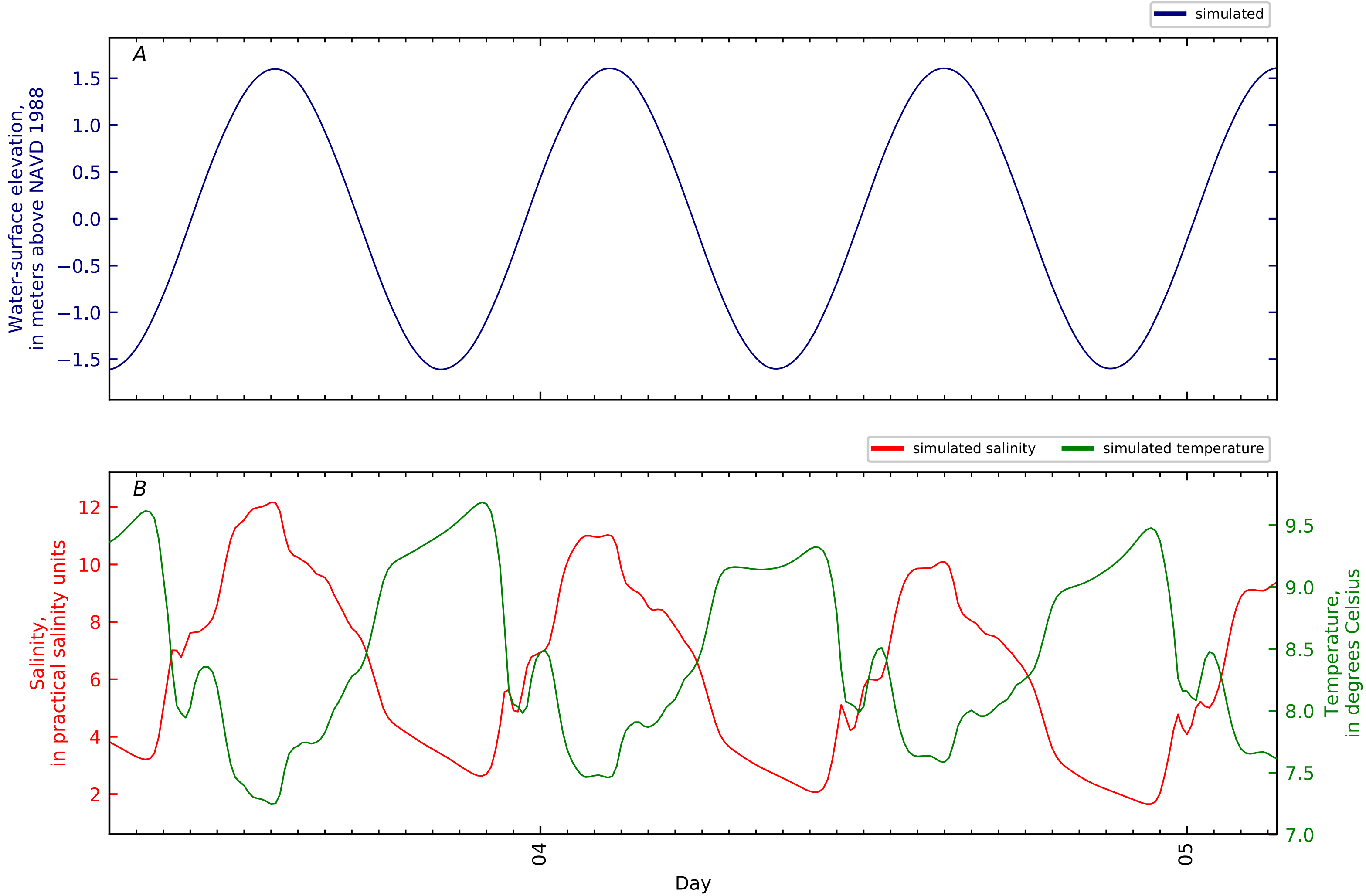

Figure B4-118. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 117, East Channel KM0.1 GS CTD4-10. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

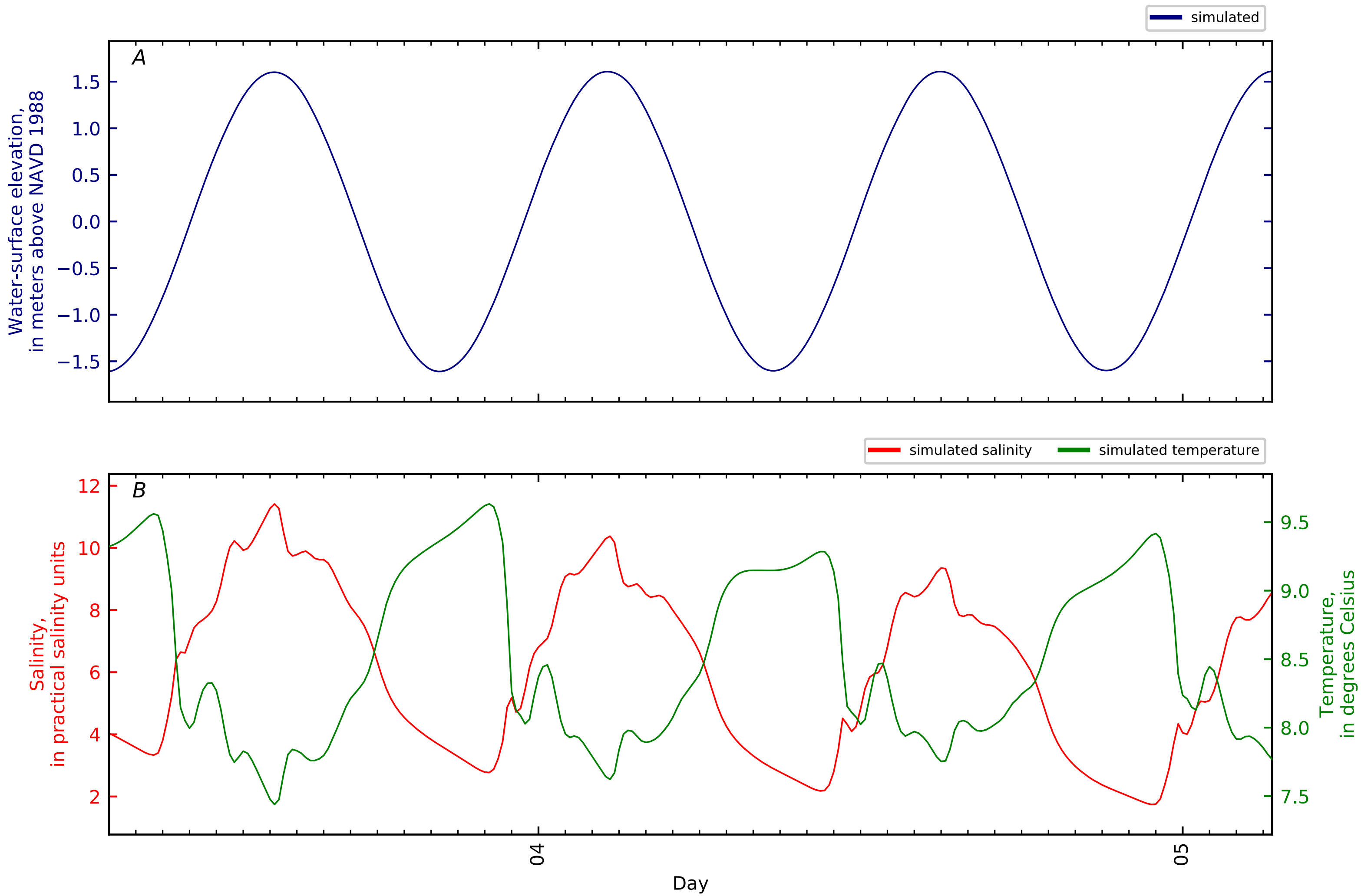

Figure B4-119. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 118, East Channel KM0.1 GS CTD4-11. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

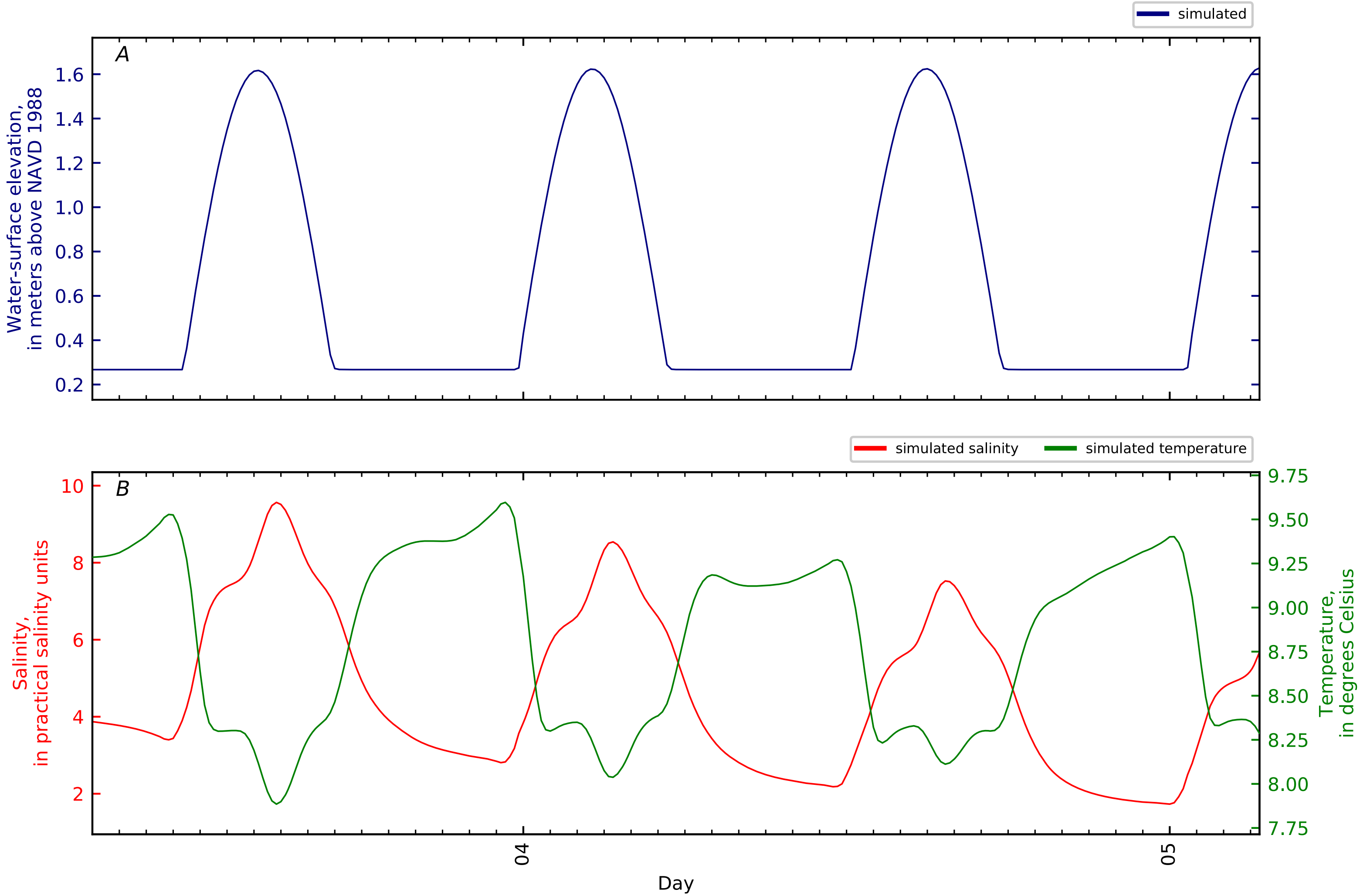

Figure B4-120. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 119, East Channel KM0.78 ERDC7 VE-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

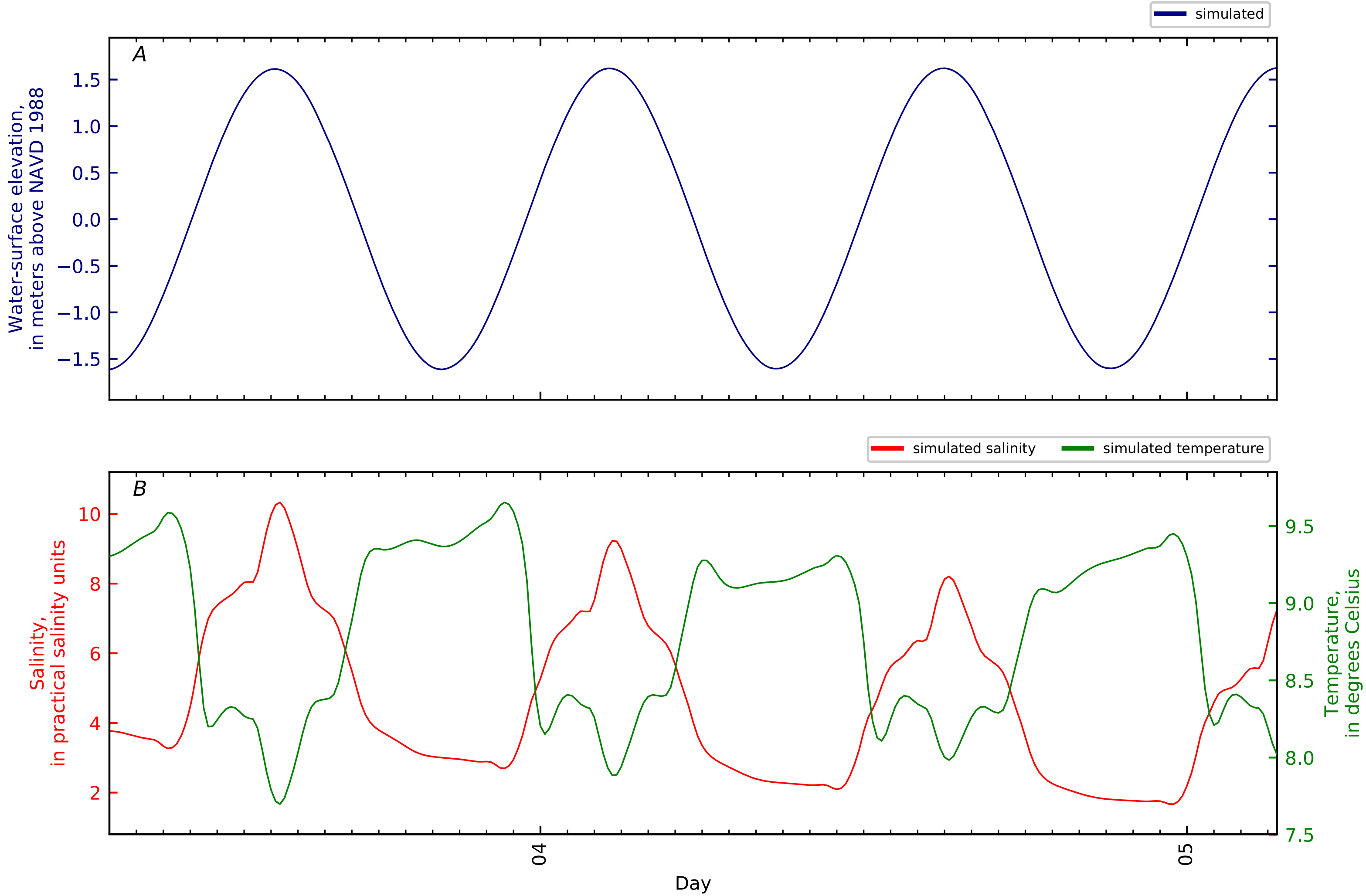

Figure B4-121. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 120, East Channel KM0.8 ERDC8 VE-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

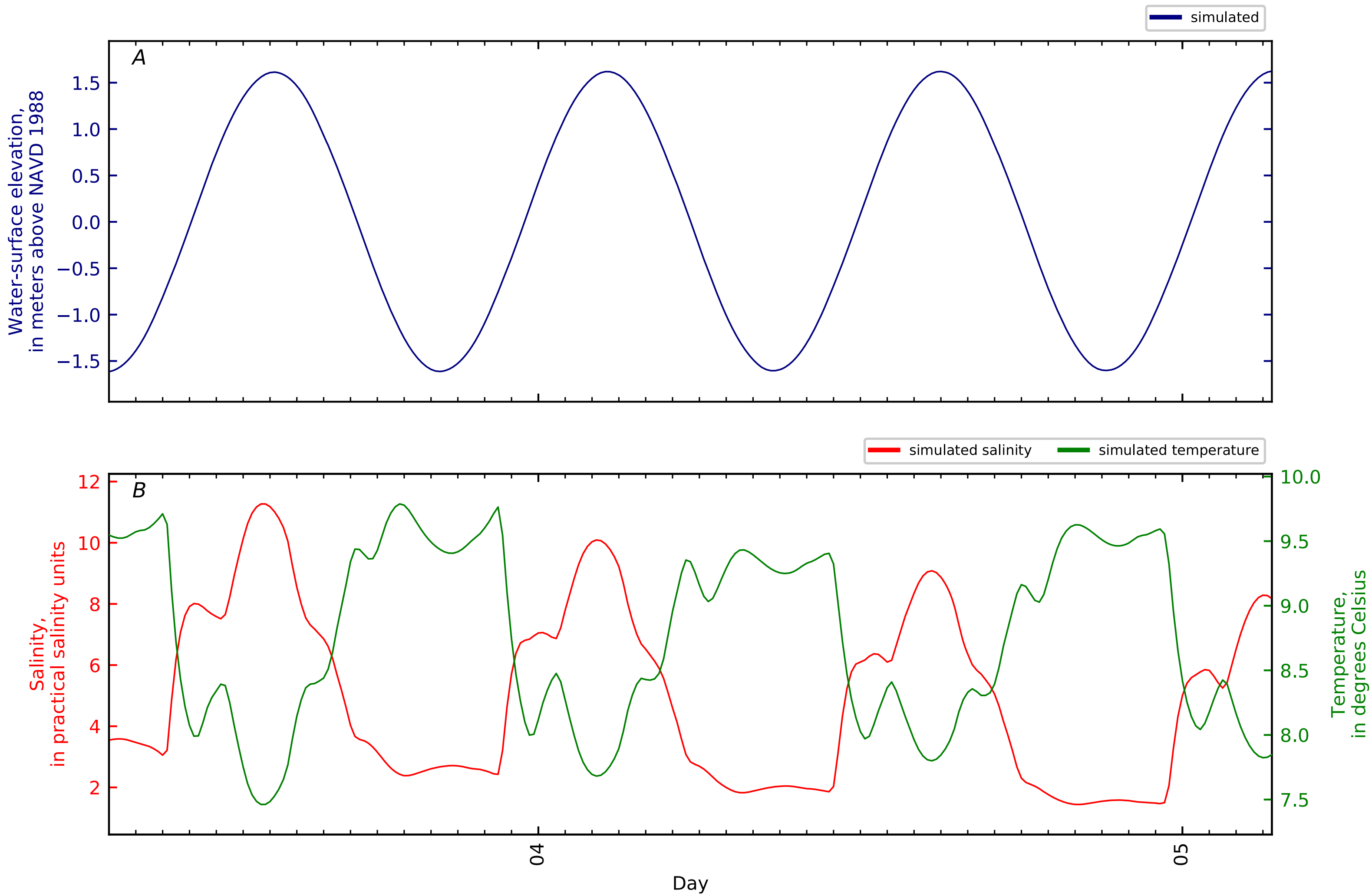

Figure B4-122. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 121, East Channel KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

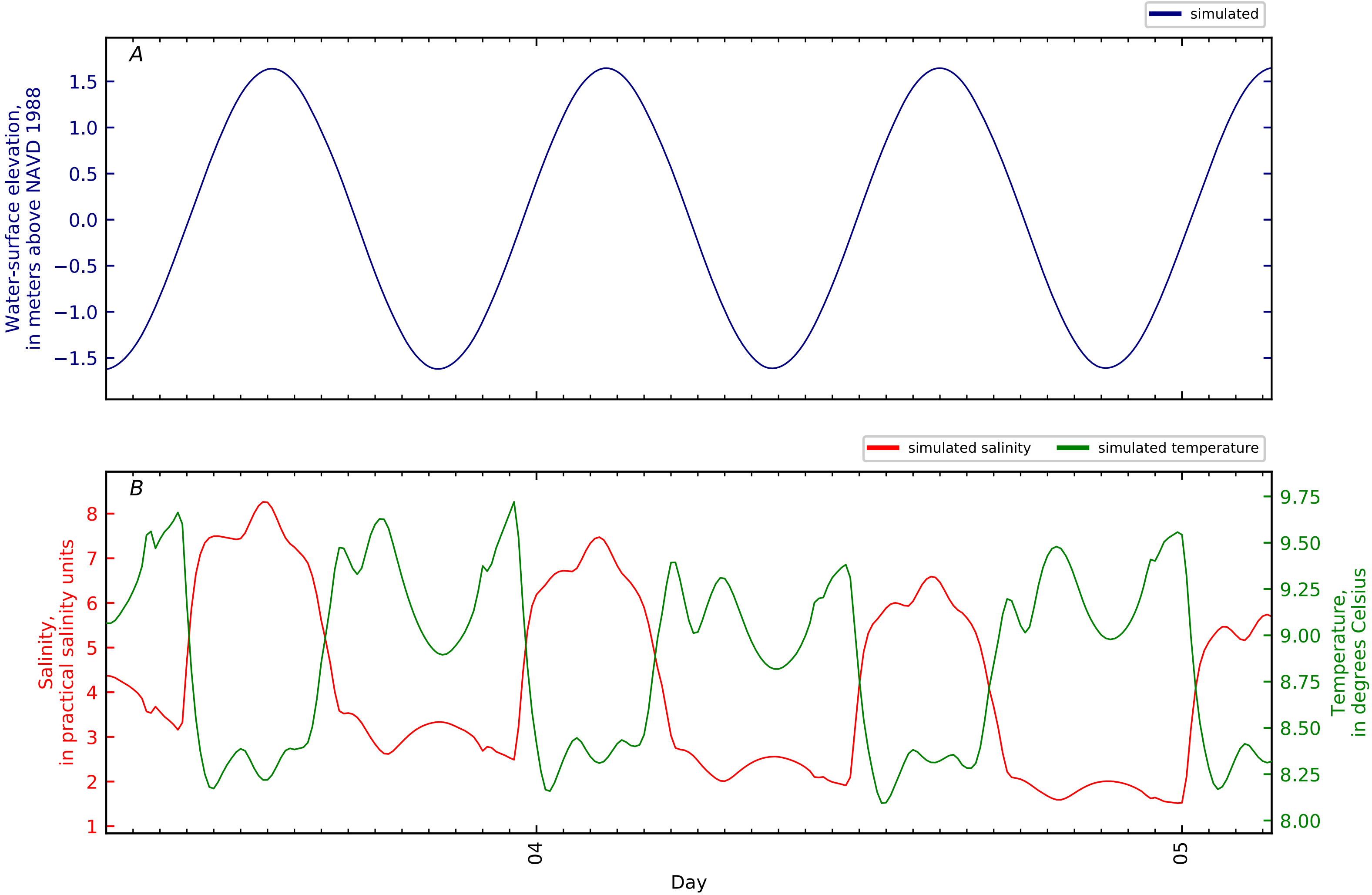

Figure B4-123. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 122, East Channel KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

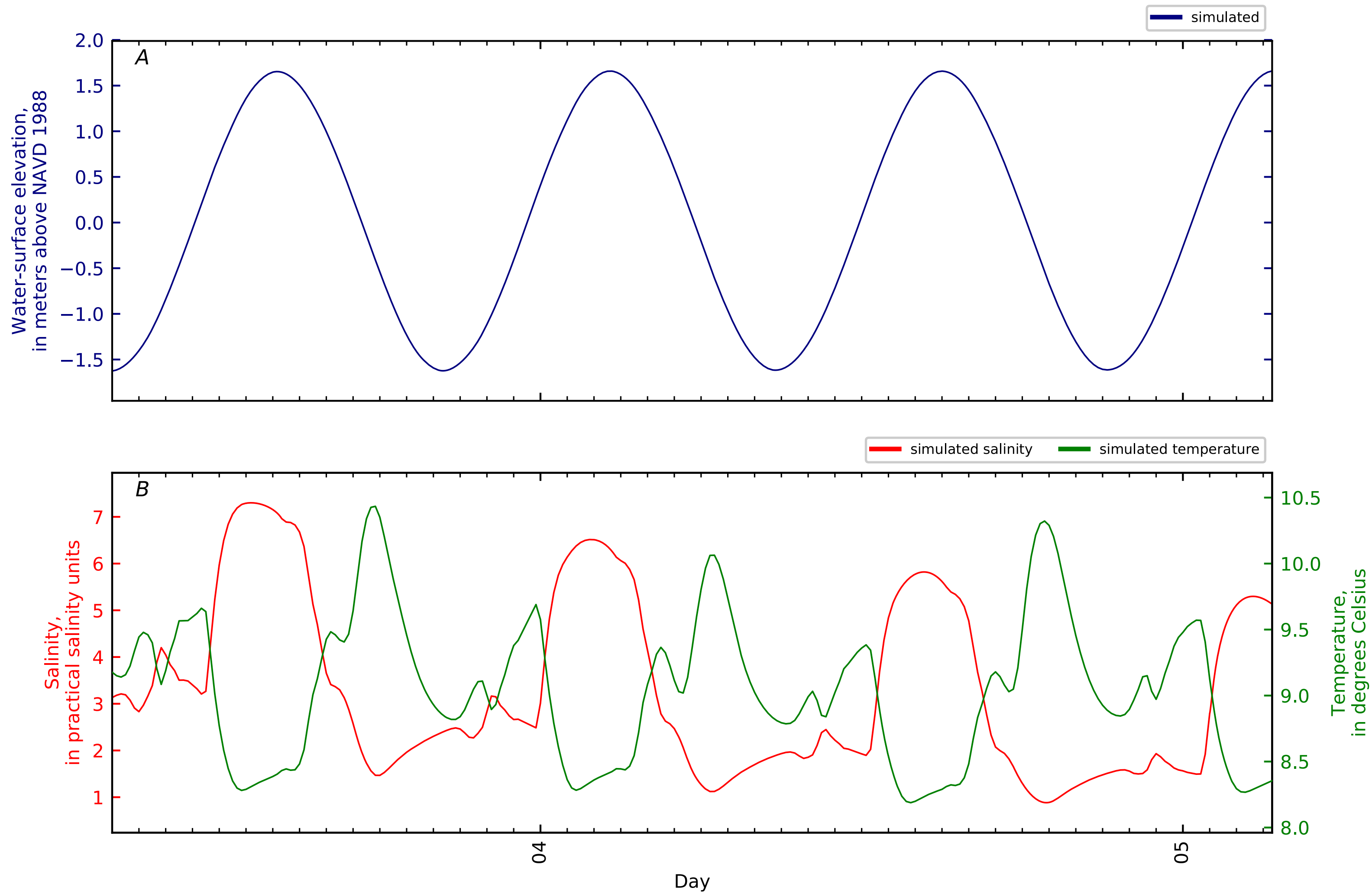

Figure B4-124. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 123, East Channel KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

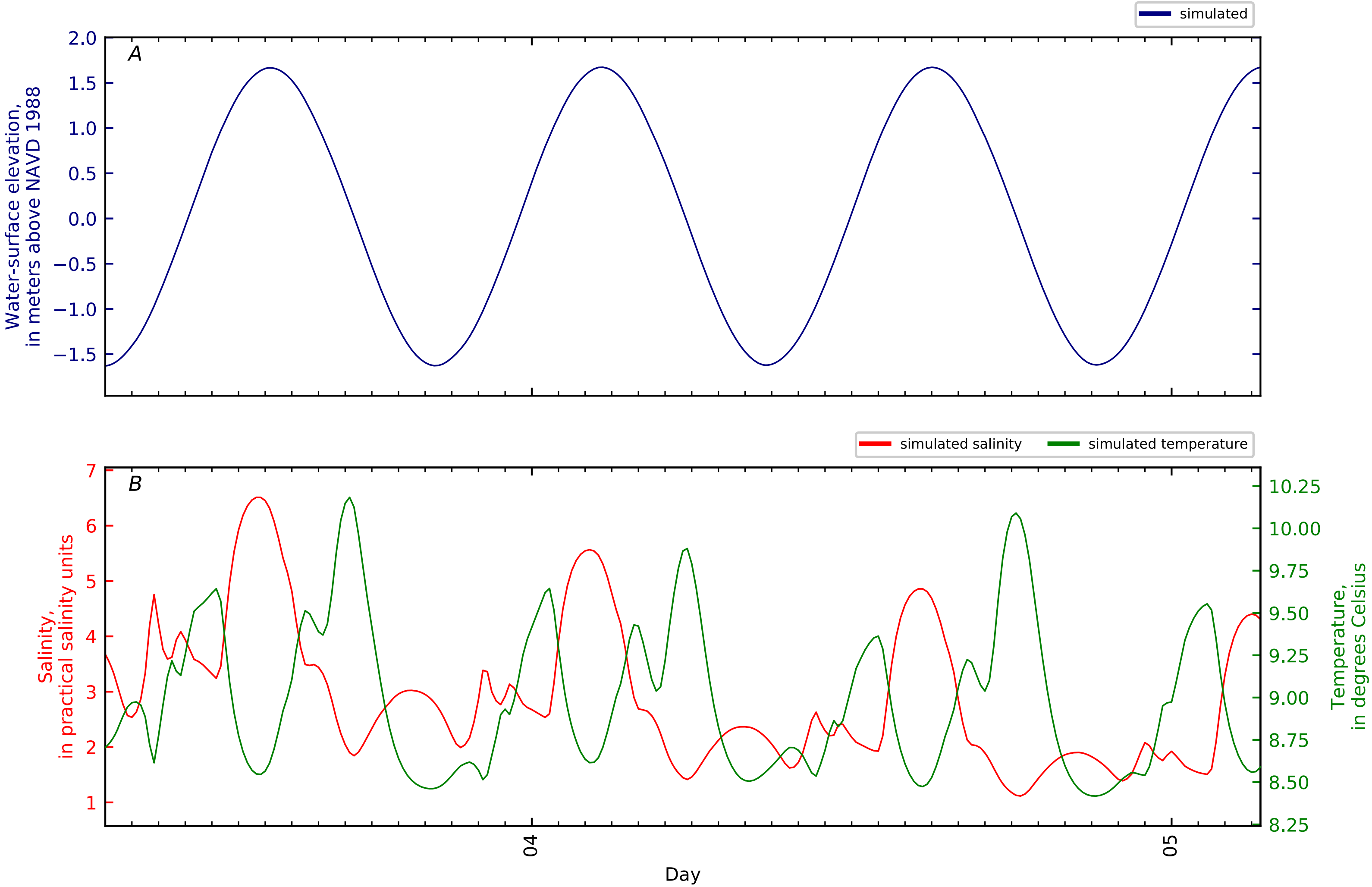

Figure B4-125. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 124, East Channel KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

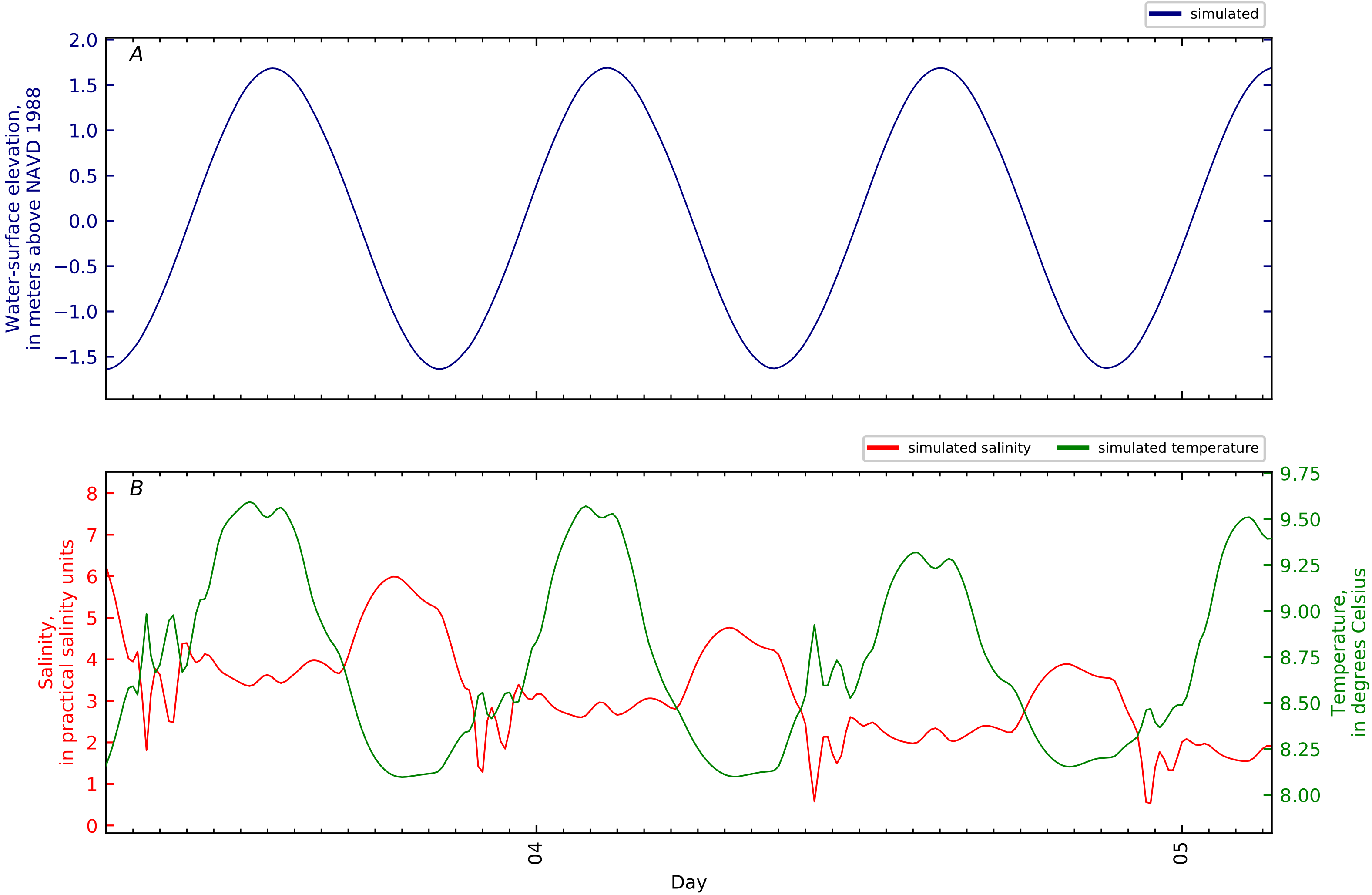

Figure B4-126. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 125, East Channel KM5. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

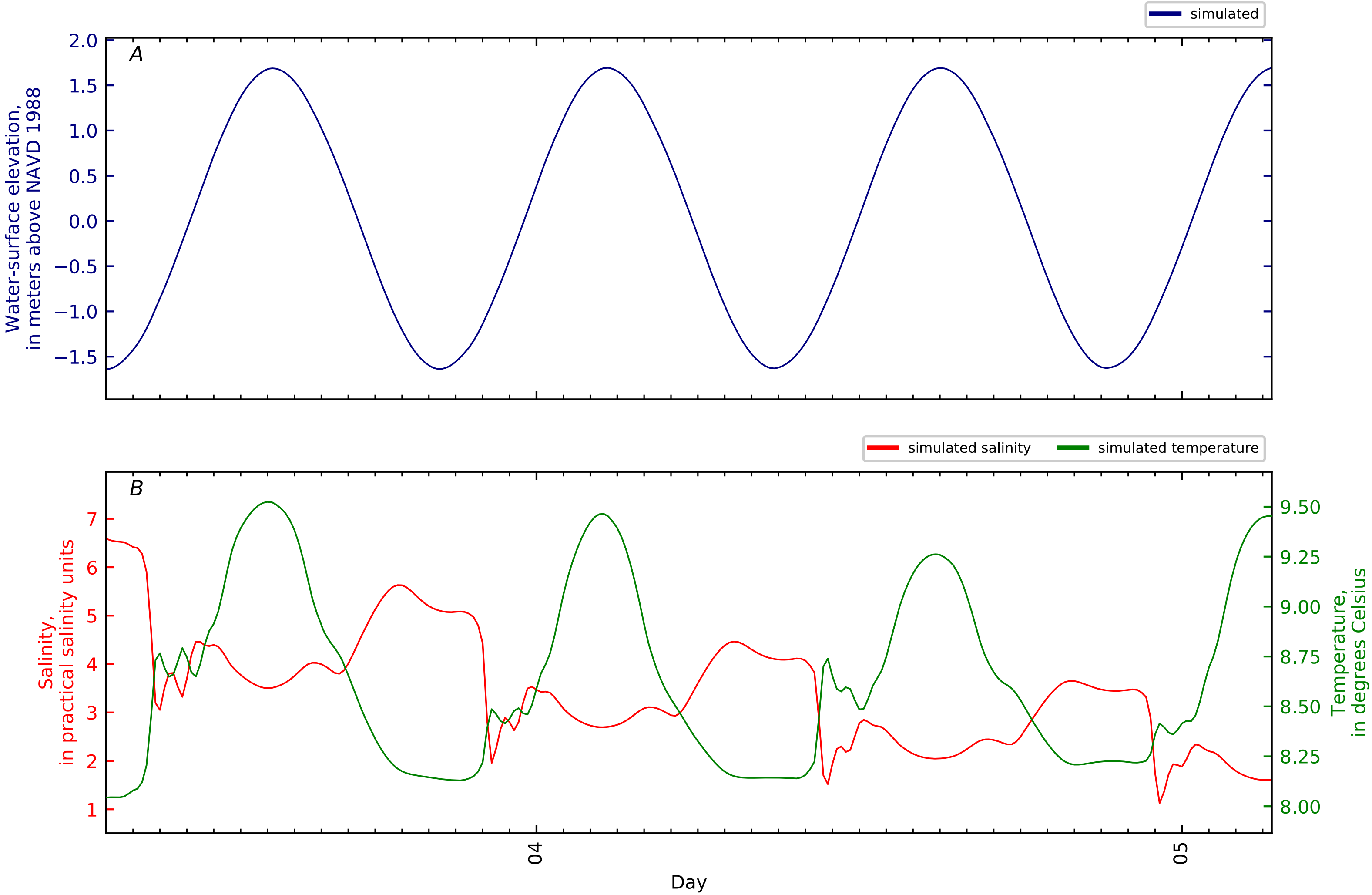

Figure B4-127. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 126, East Channel KM5.3 ERDC4 VN-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

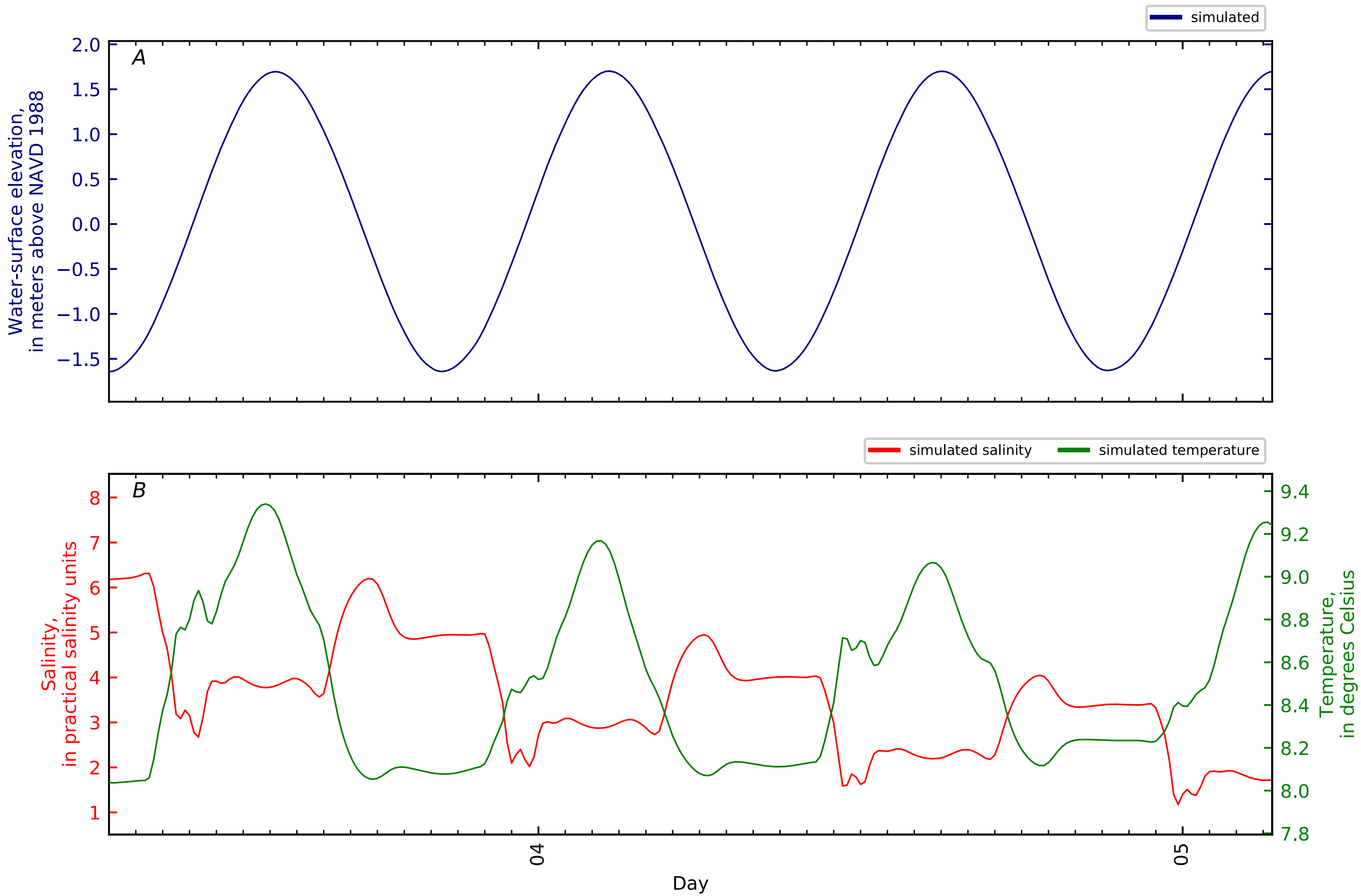

Figure B4-128. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 127, East Channel KM6. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

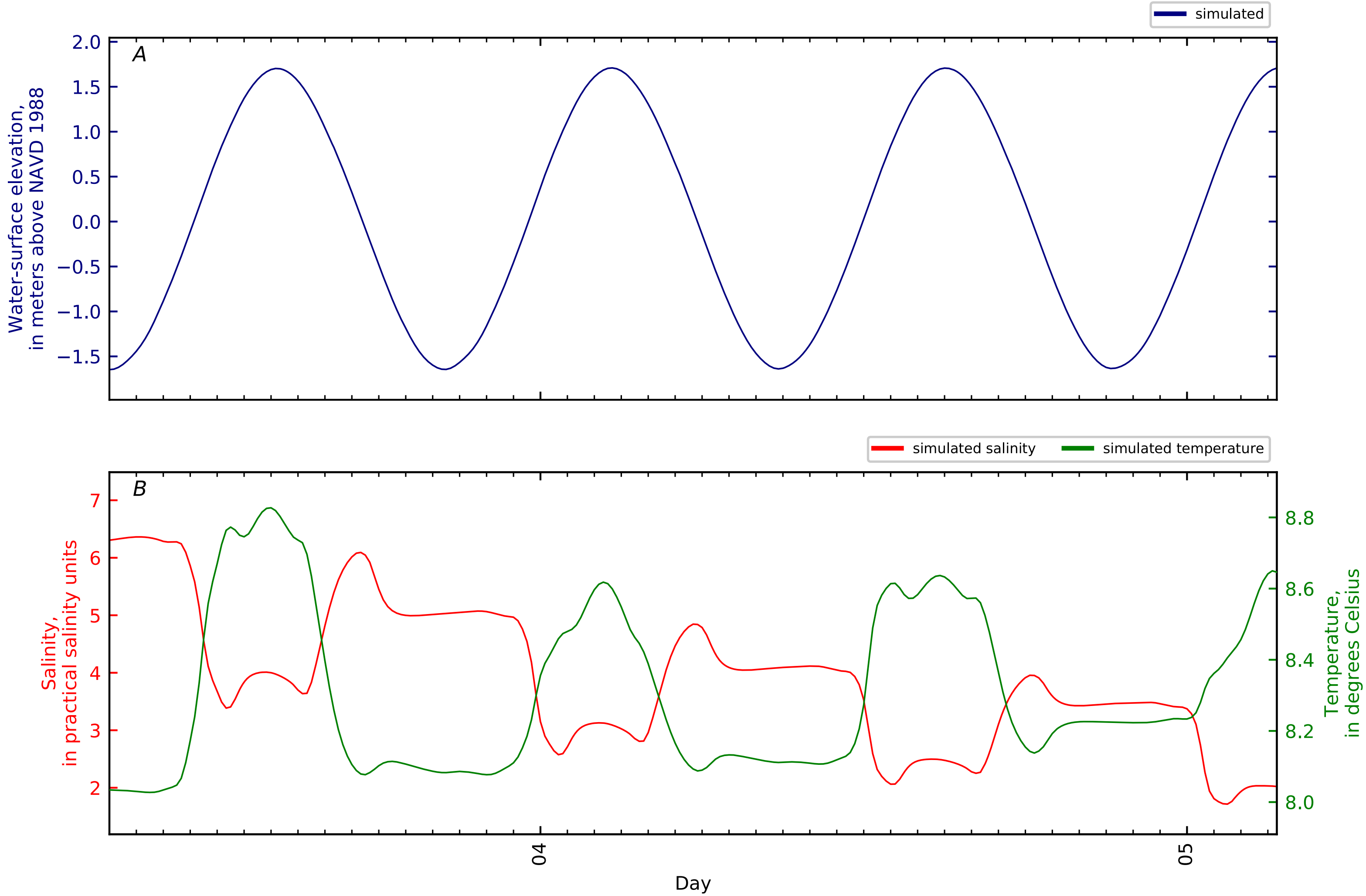

Figure B4-129. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 128, East Channel KM6.8 ERDC12 VN-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

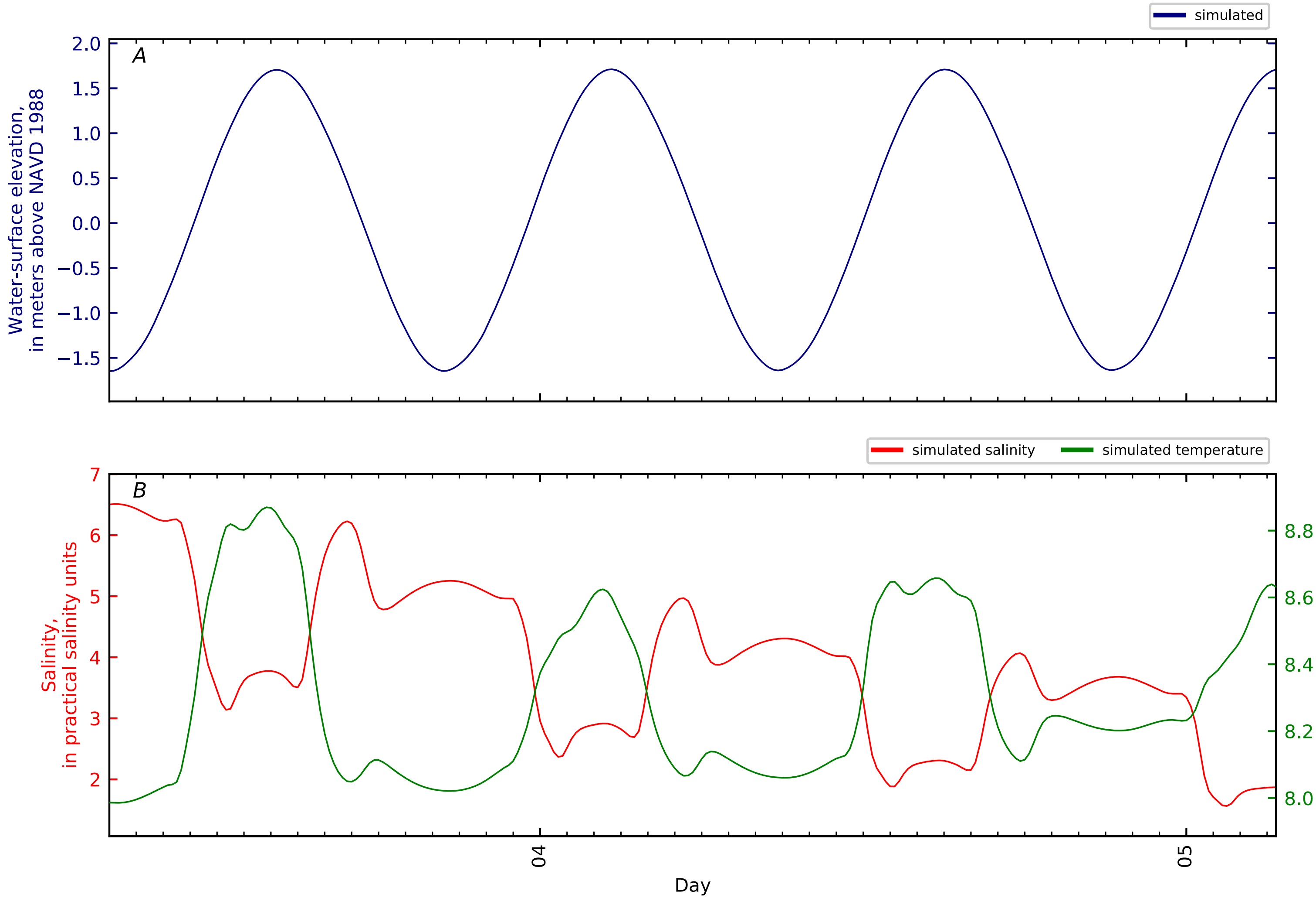

Figure B4-130. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 129, East Channel KM7. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

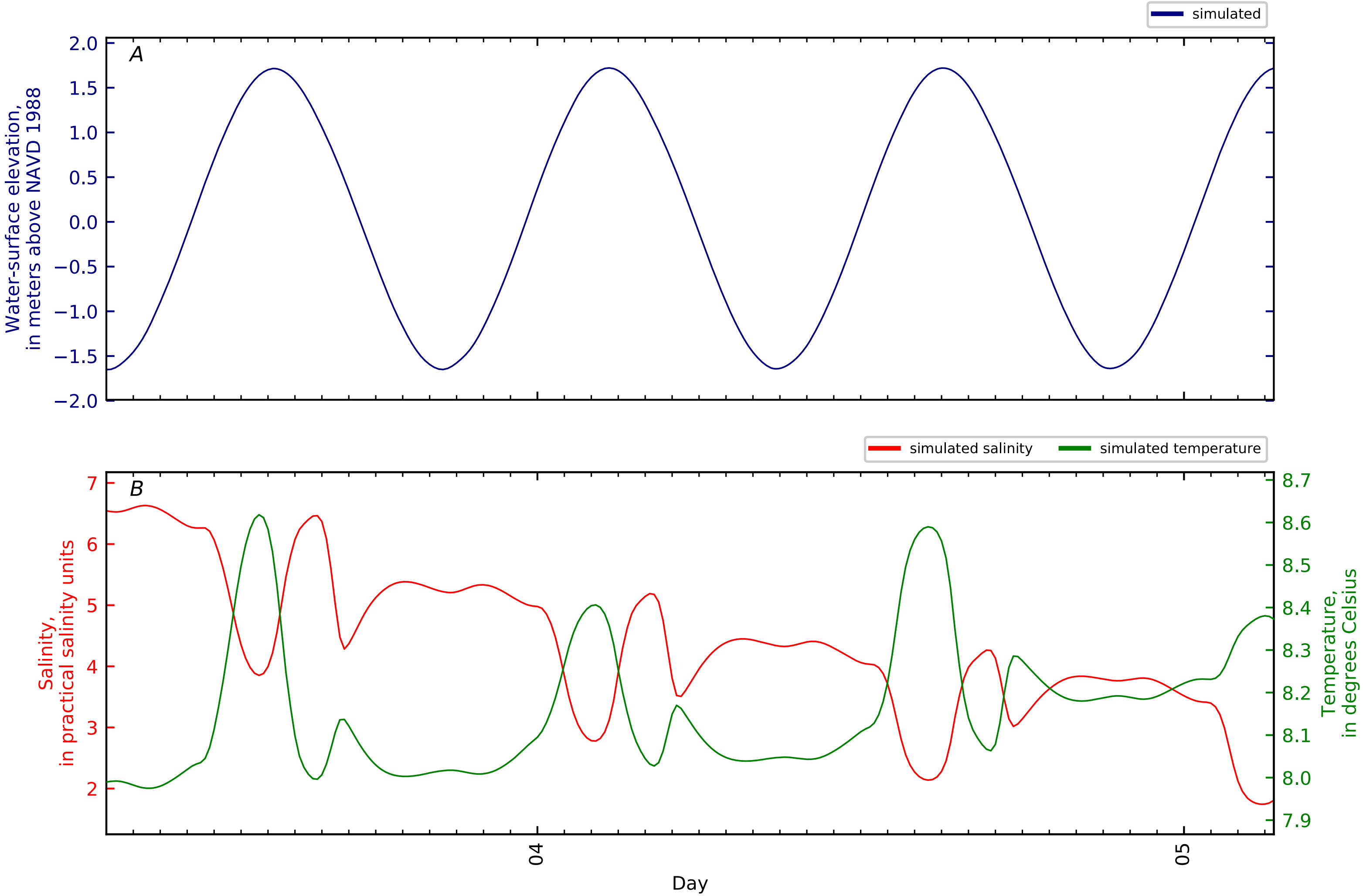

Figure B4-131. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 130, East Channel KM8. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

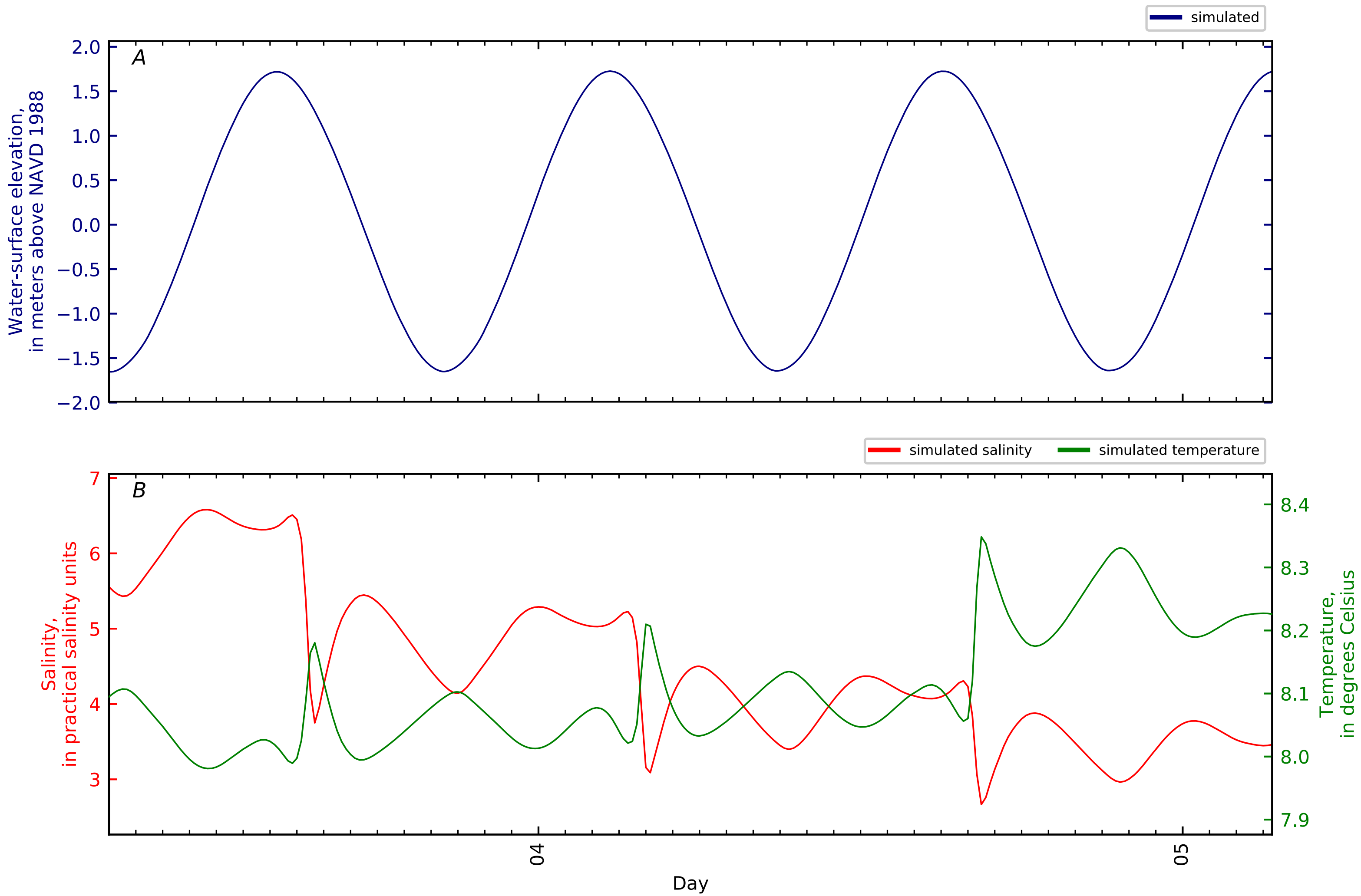

Figure B4-132. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 131, East Channel KM9. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

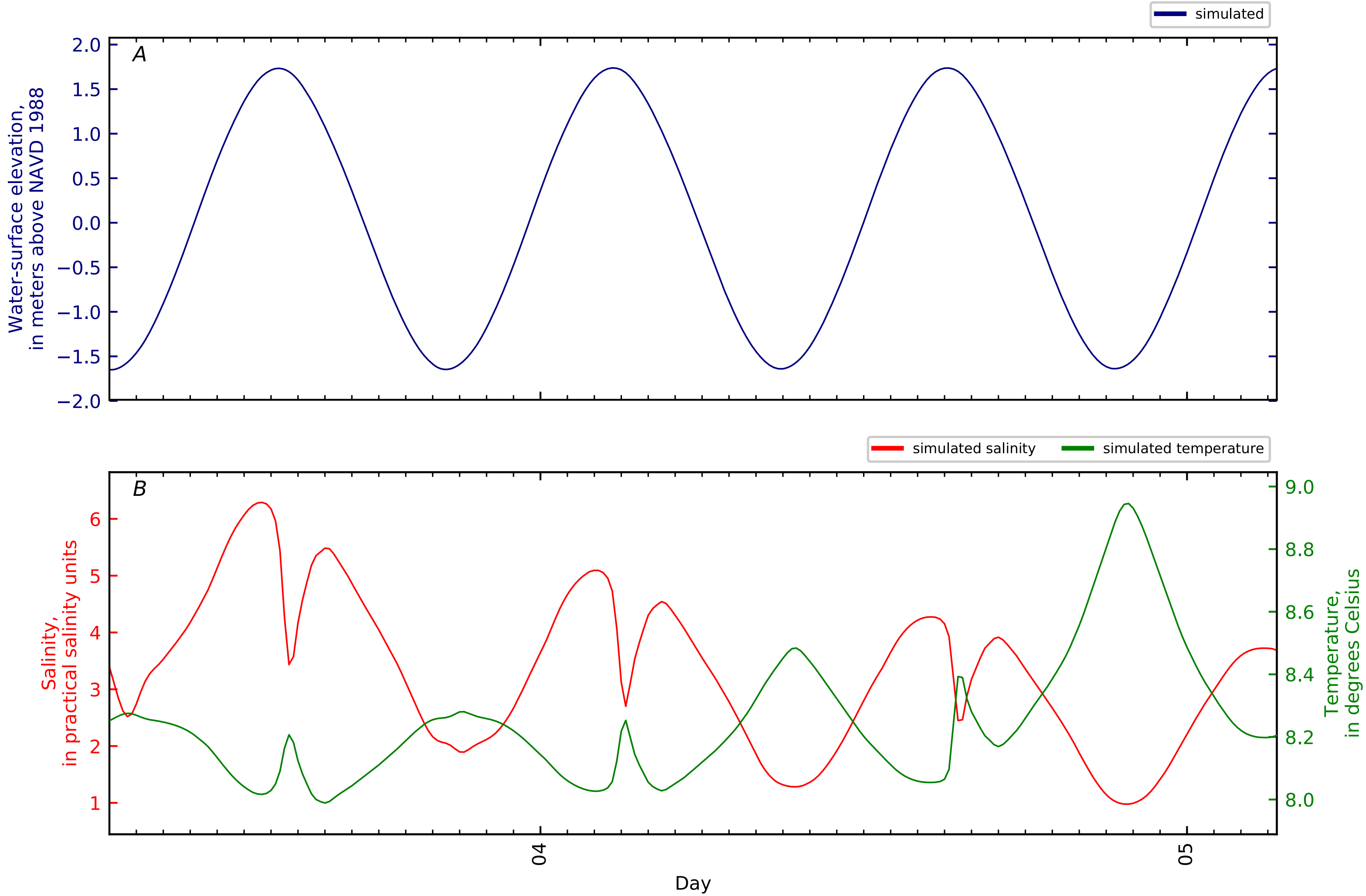

Figure B4-133. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 132, East Channel KM10. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

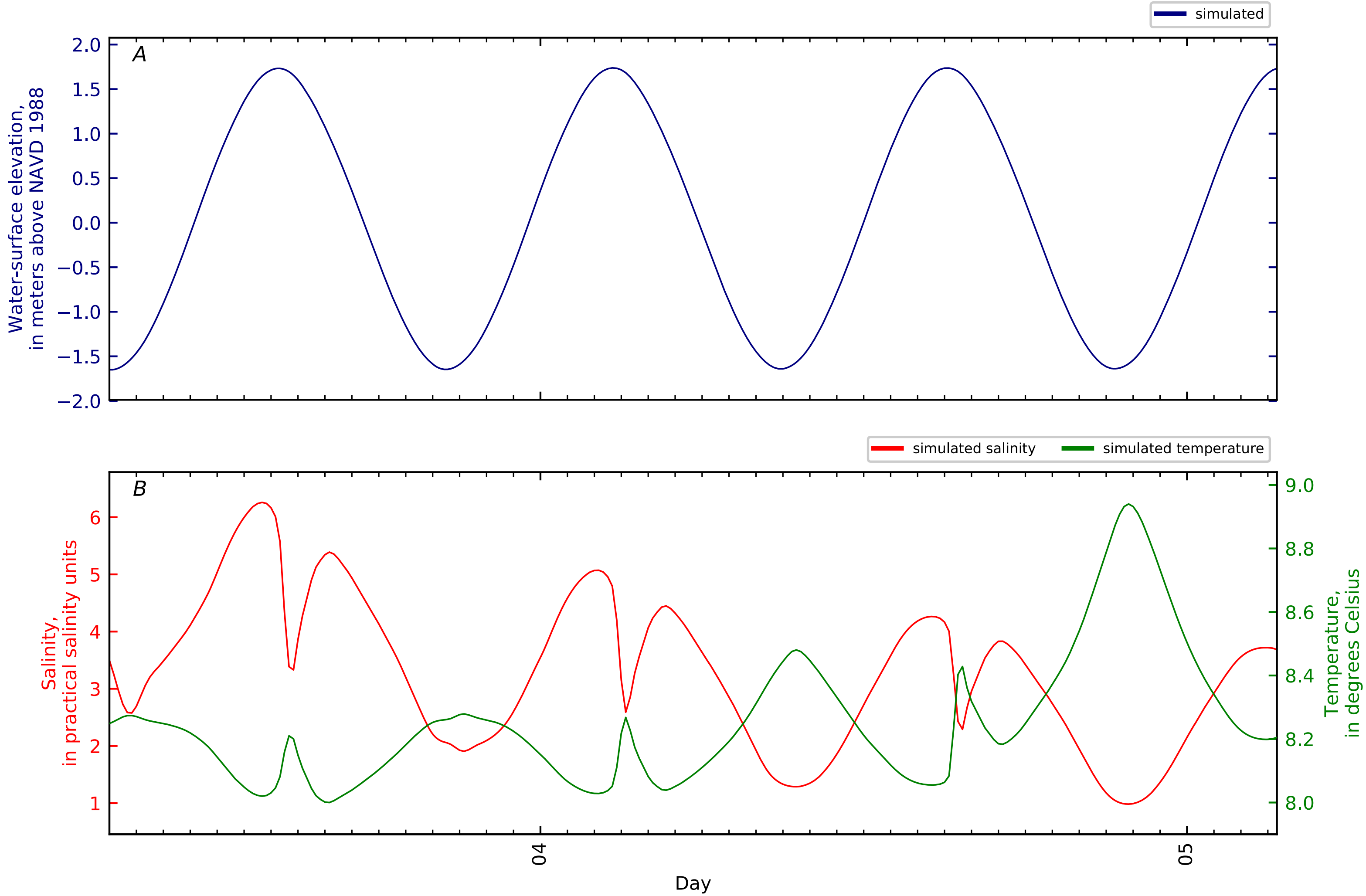

Figure B4-134. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 133, East Channel KM10 GS 443409068471801 at. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

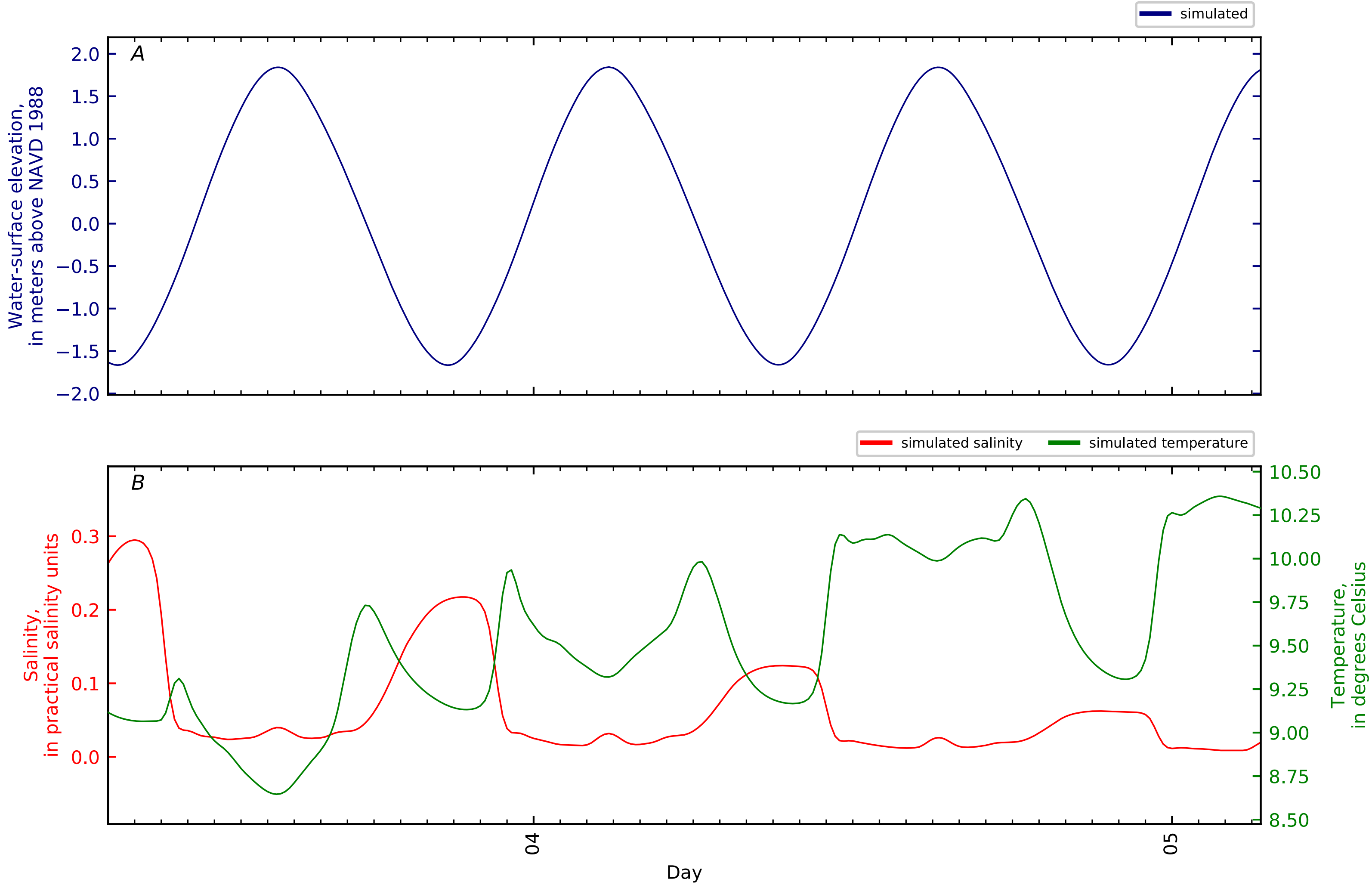

Figure B4-135. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 134, Mendall Marsh KM0. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

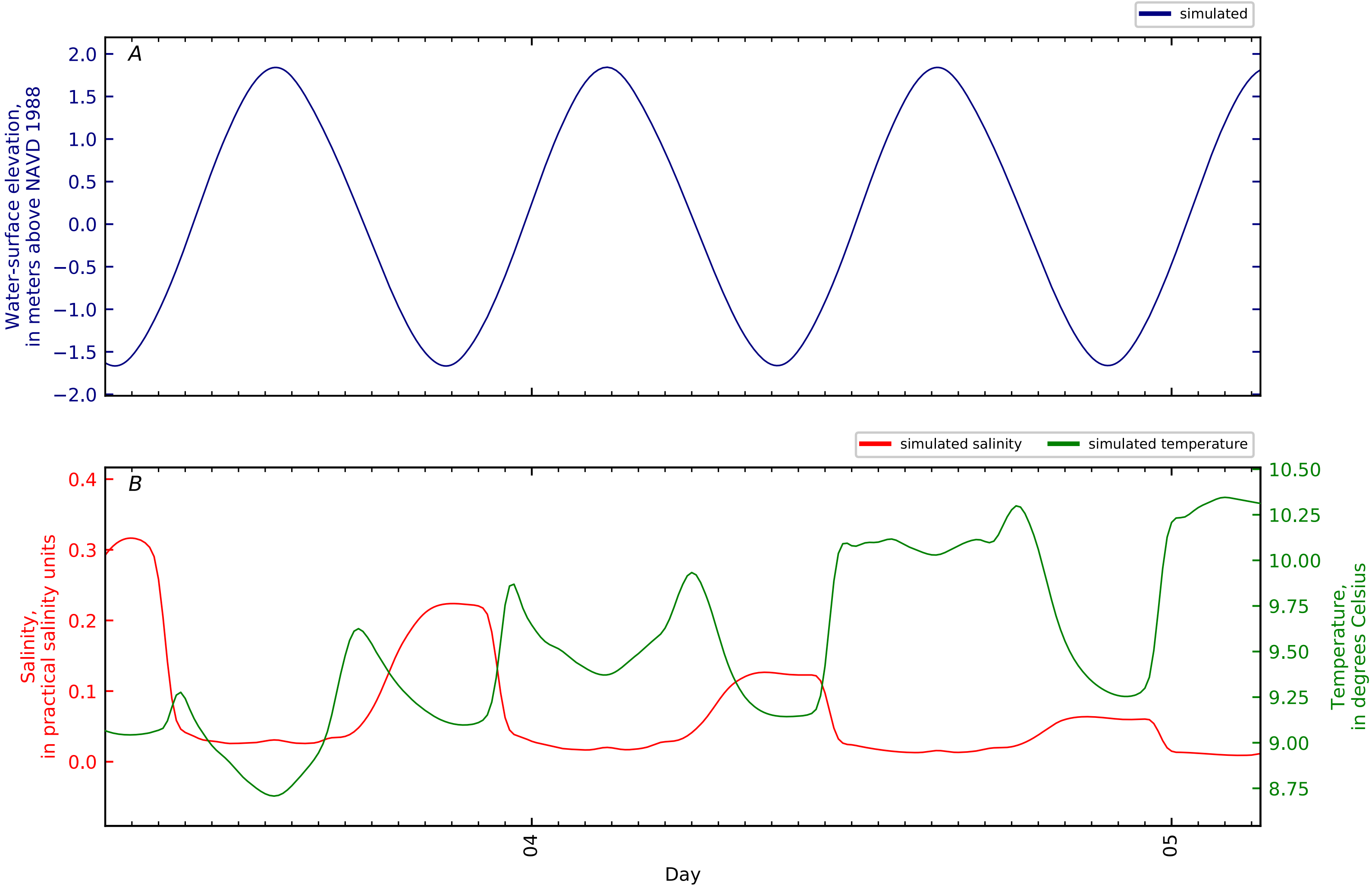

Figure B4-136. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 135, Mendall Marsh KM0.1 ERDC14 MM-MU6-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

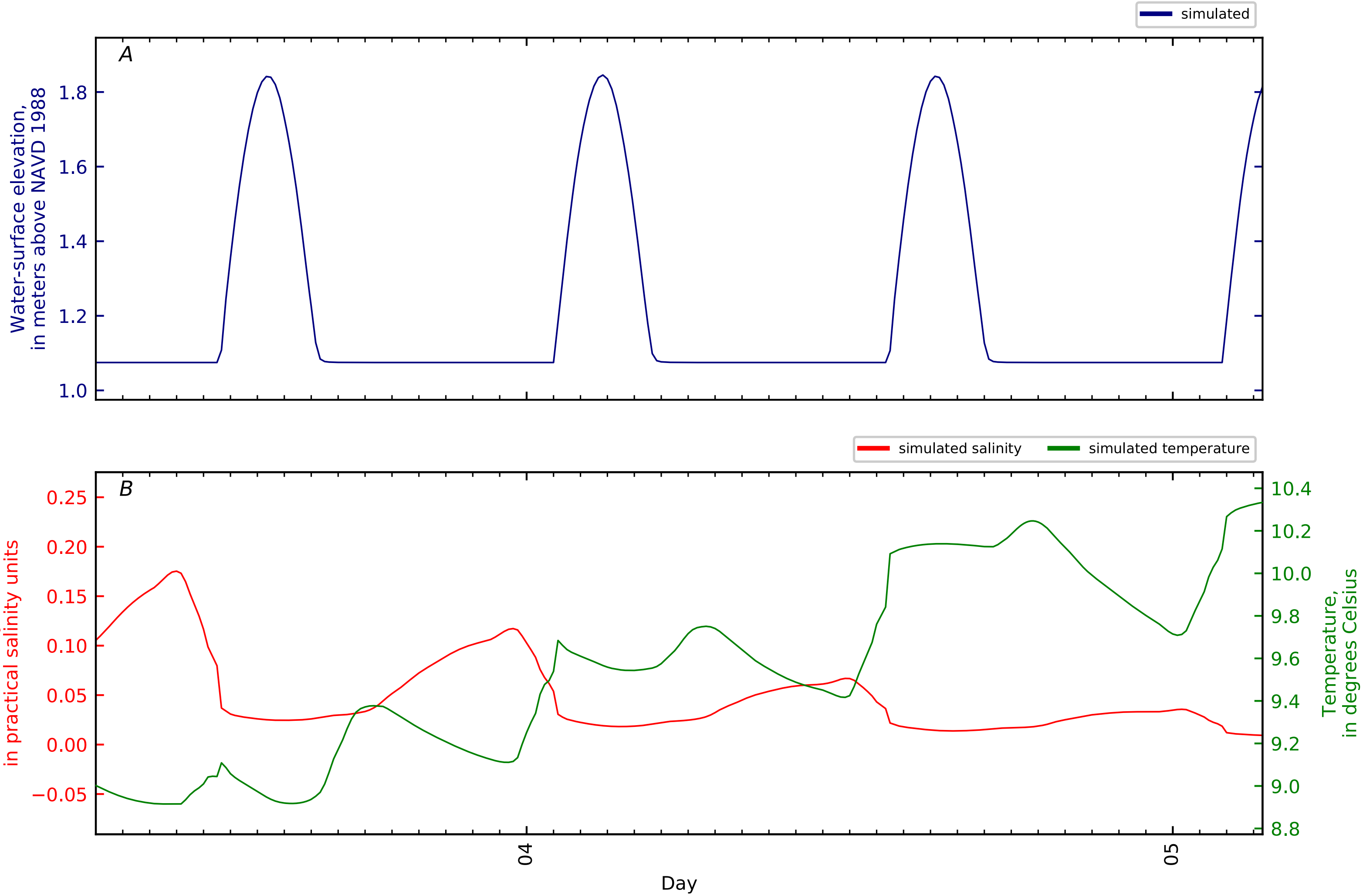

Figure B4-137. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 136, Mendall Marsh KM0.4 GS CTD2-01. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

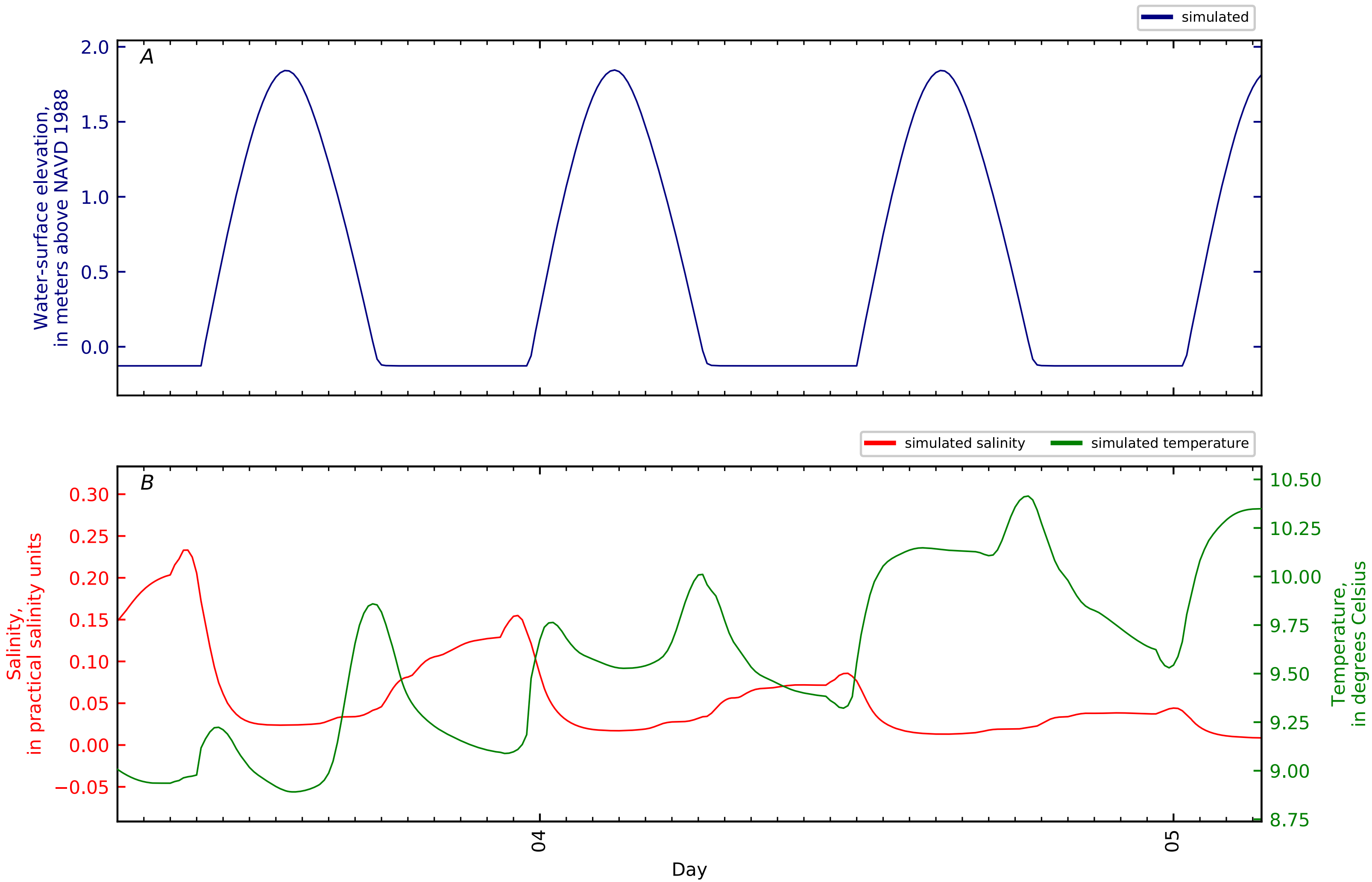

Figure B4-138. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 137, Mendall Marsh KM0.4 GS CTD2-02. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

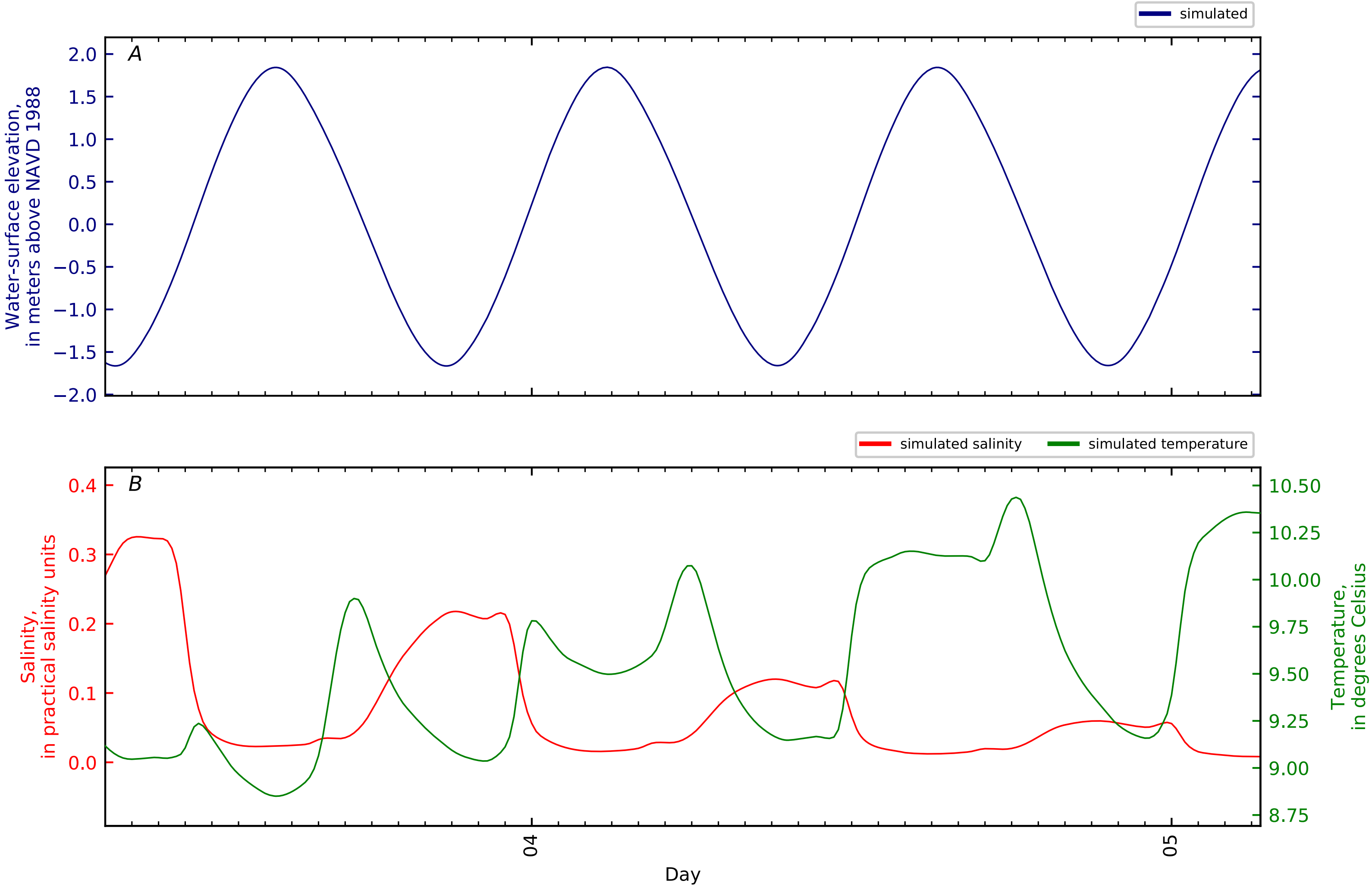

Figure B4-139. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 138, Mendall Marsh KM0.4 GS CTD2-03. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

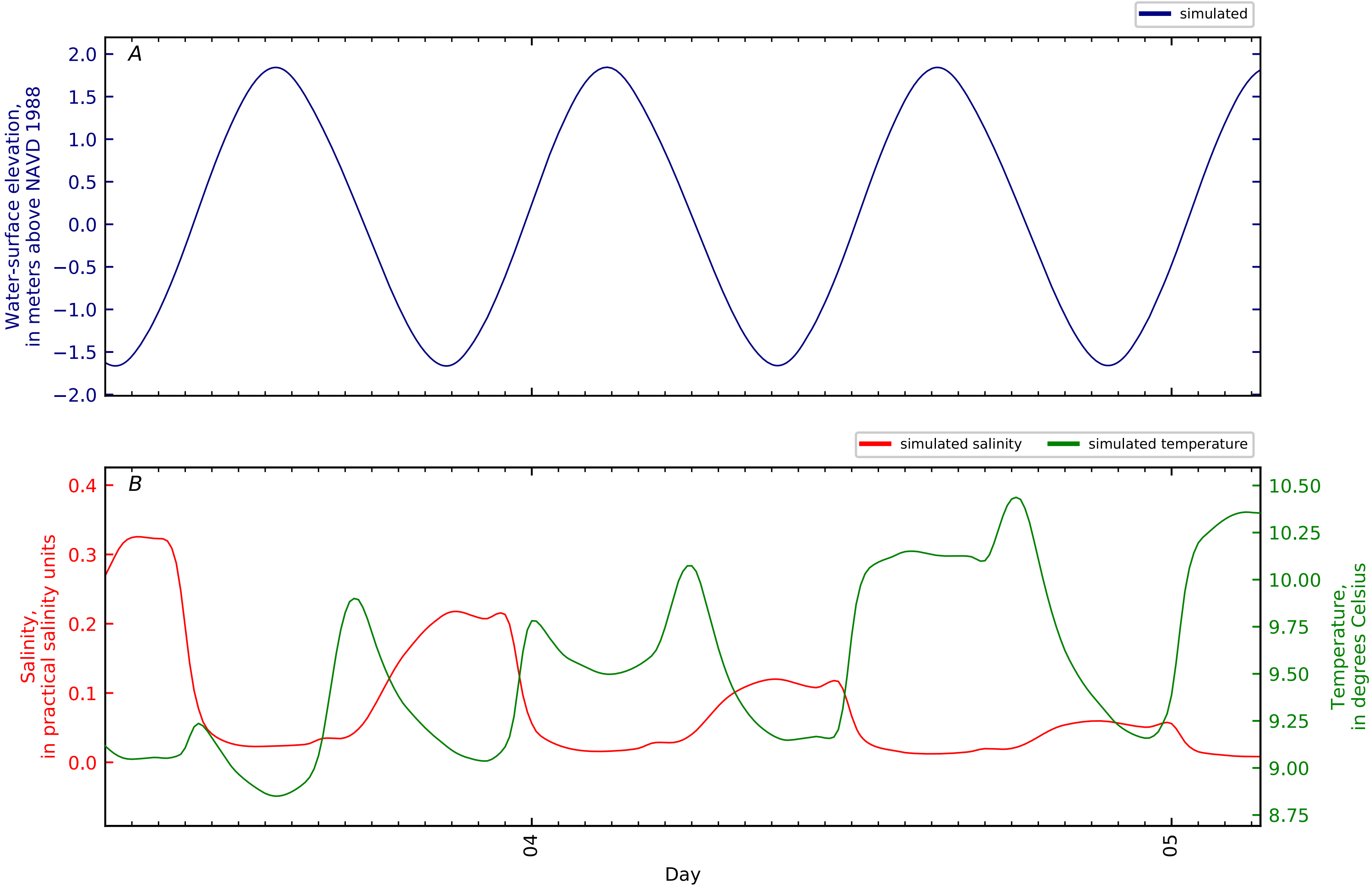

Figure B4-140. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 139, Mendall Marsh KM0.4 GS CTD2-04. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

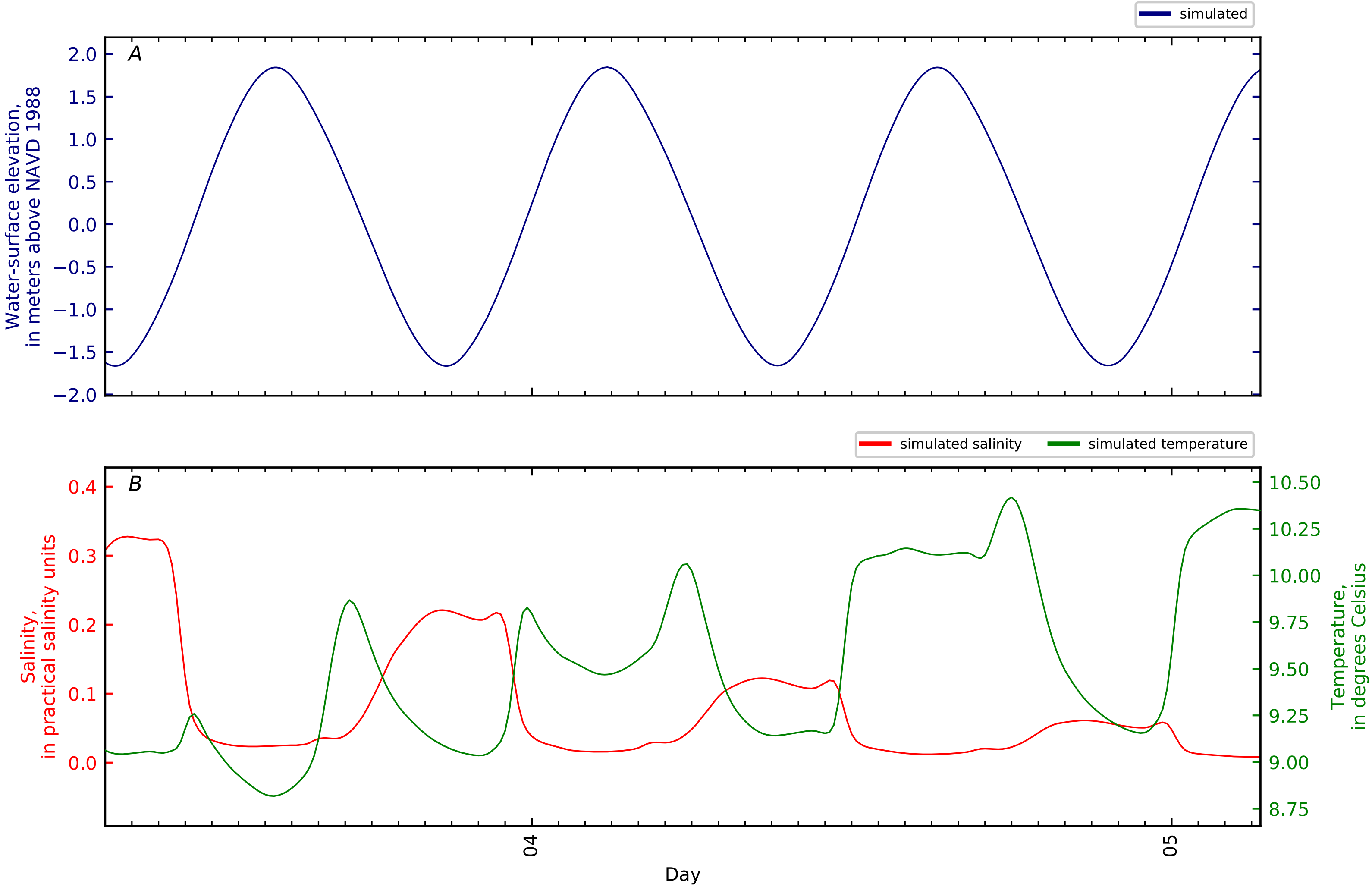

Figure B4-141. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 140, Mendall Marsh KM0.4 GS CTD2-05. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

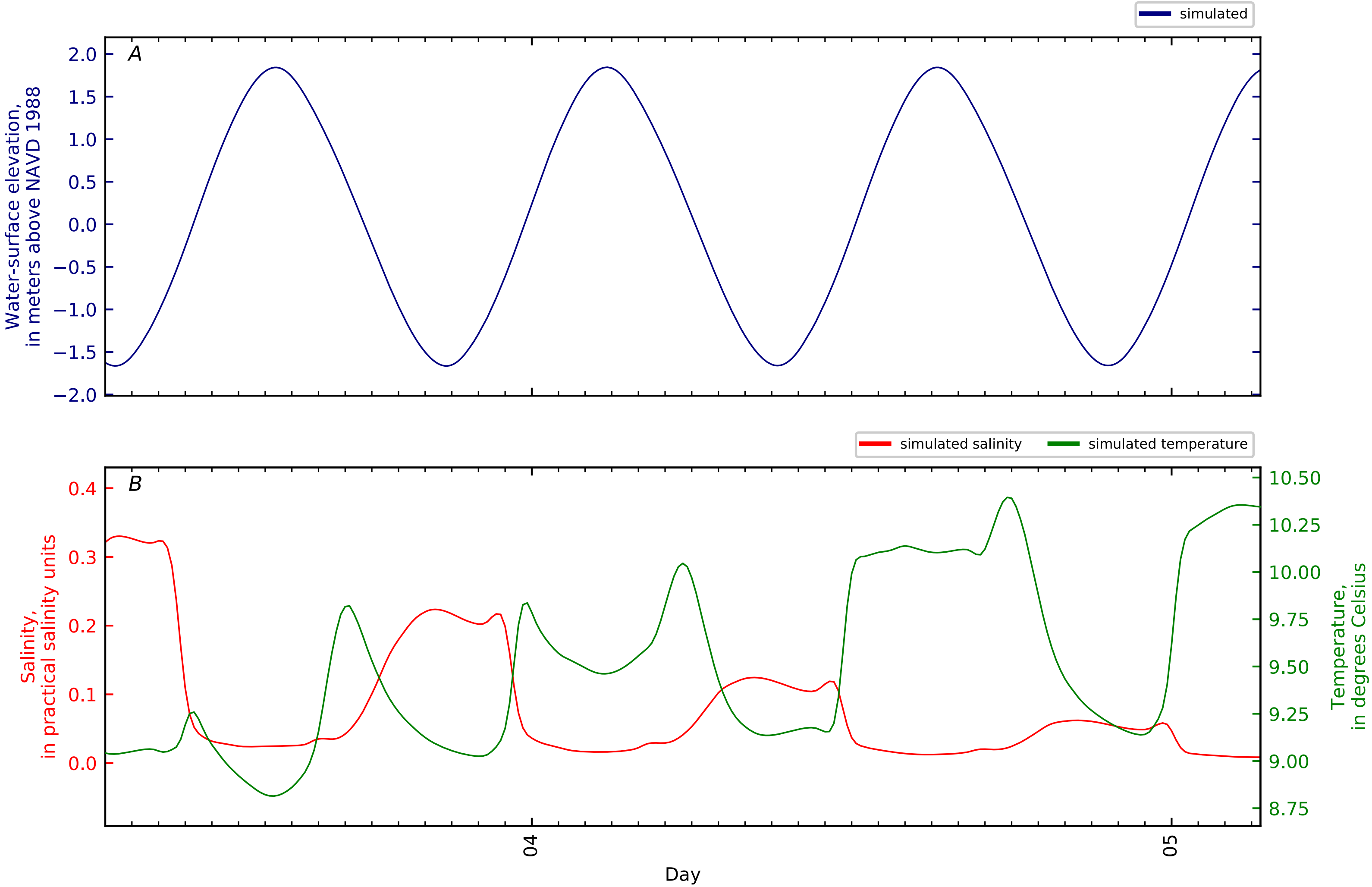

Figure B4-142. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 141, Mendall Marsh KM0.4 GS CTD2-06. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

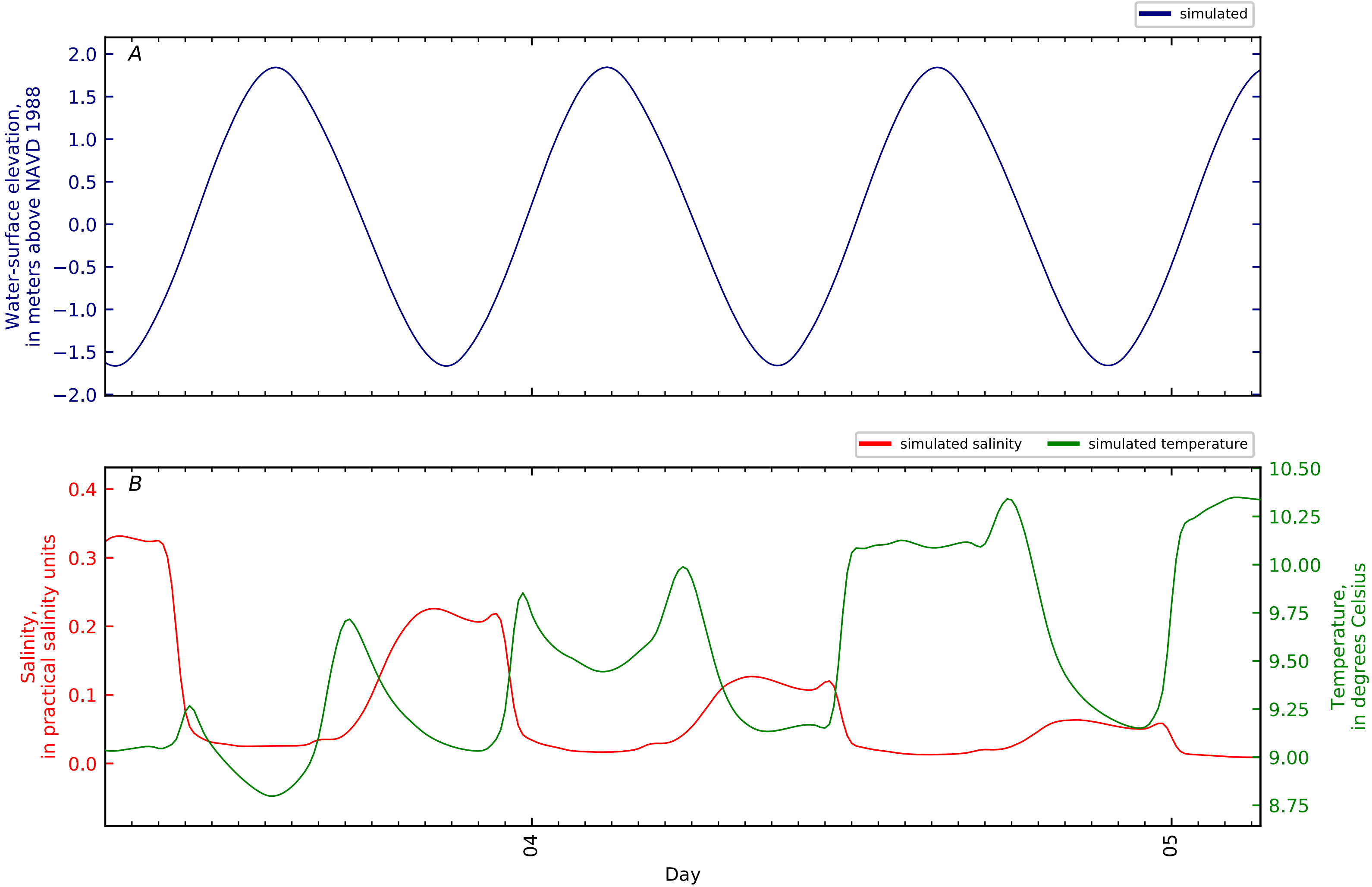

Figure B4-143. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 142, Mendall Marsh KM0.4 GS CTD2-07. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

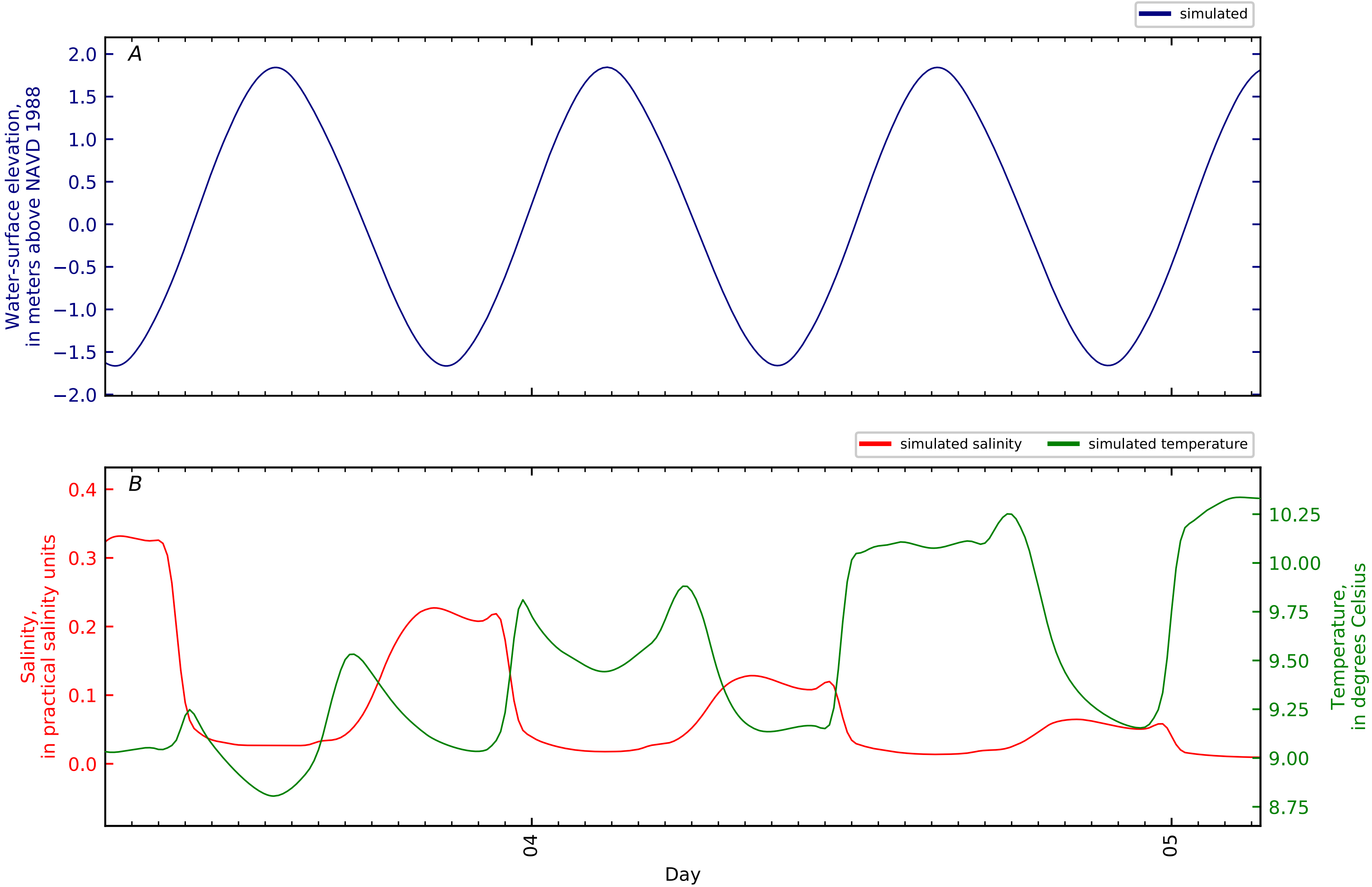

Figure B4-144. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 143, Mendall Marsh KM0.4 GS CTD2-08. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

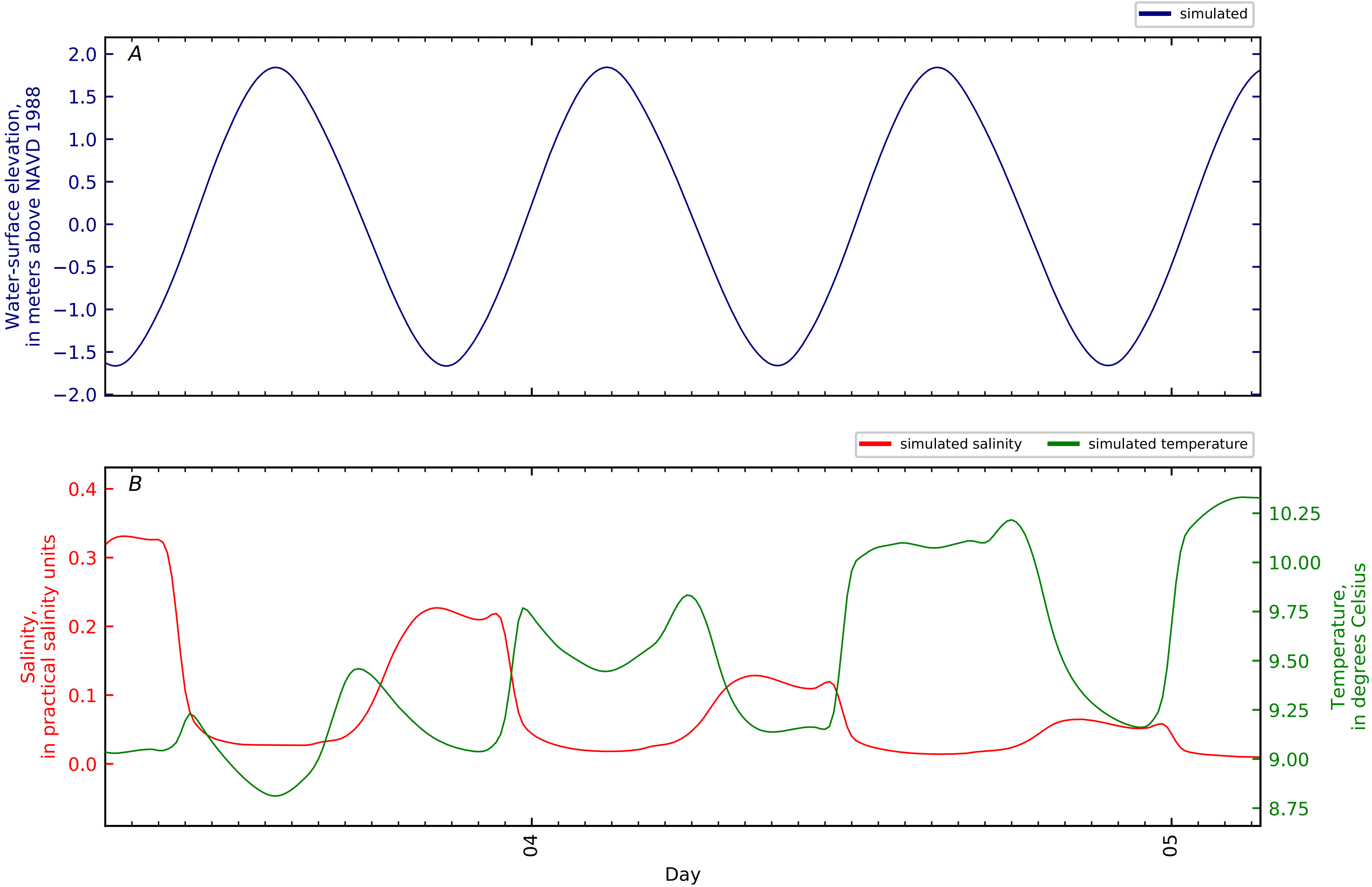

Figure B4-145. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 144, Mendall Marsh KM0.4 GS CTD2-09. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

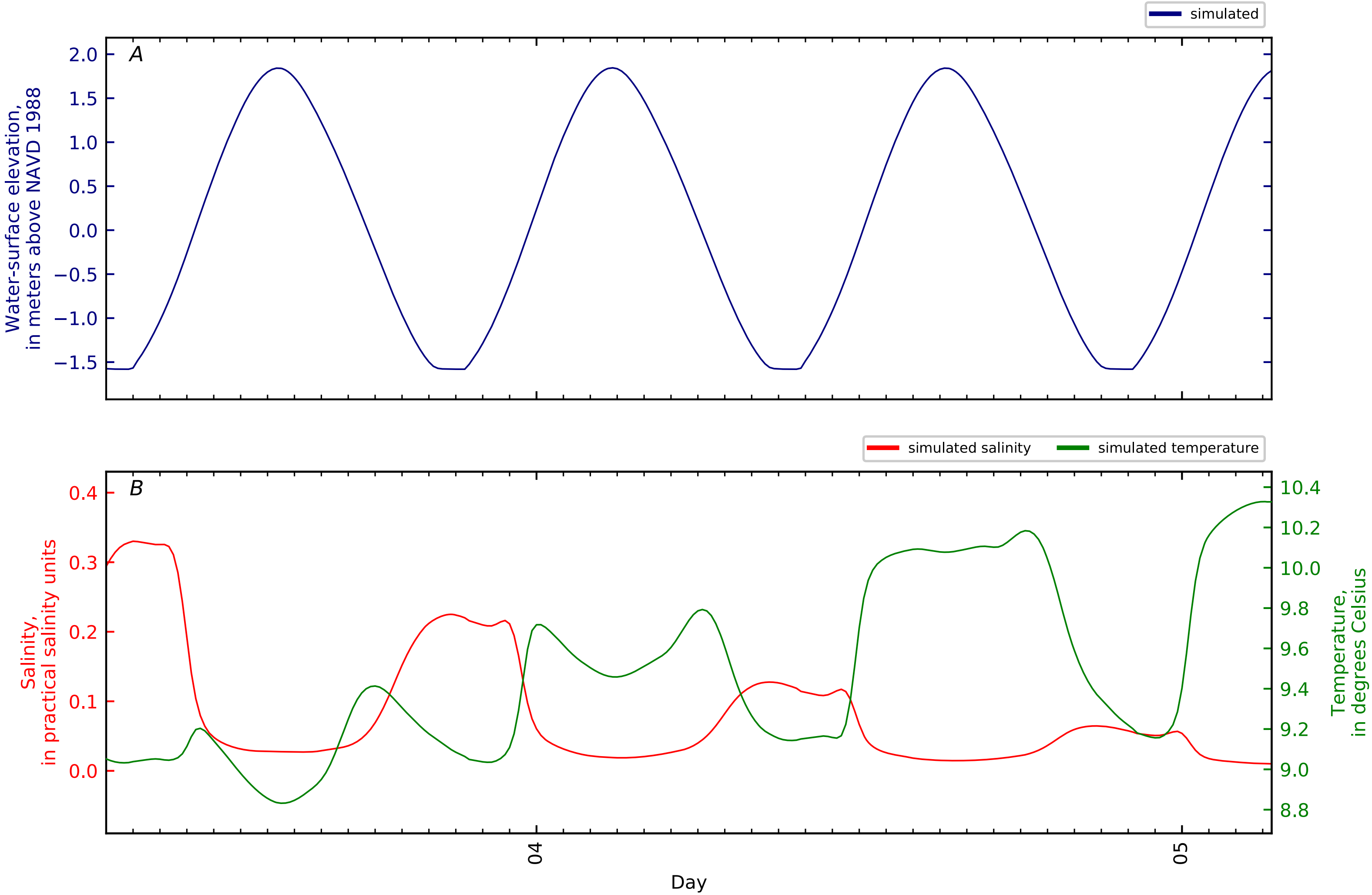

Figure B4-146. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 145, Mendall Marsh KM0.4 GS CTD2-10. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

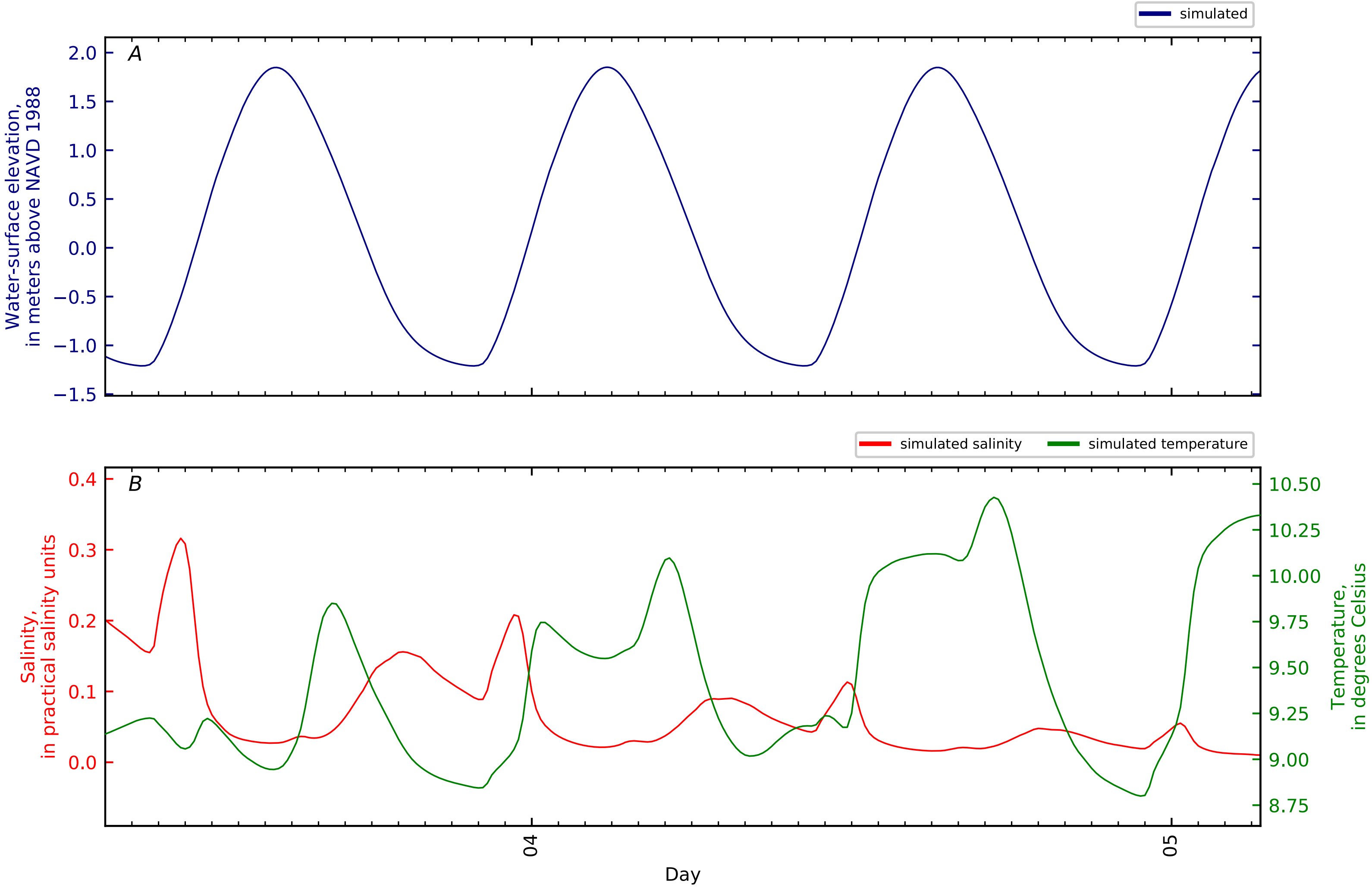

Figure B4-147. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 146, Mendall Marsh KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

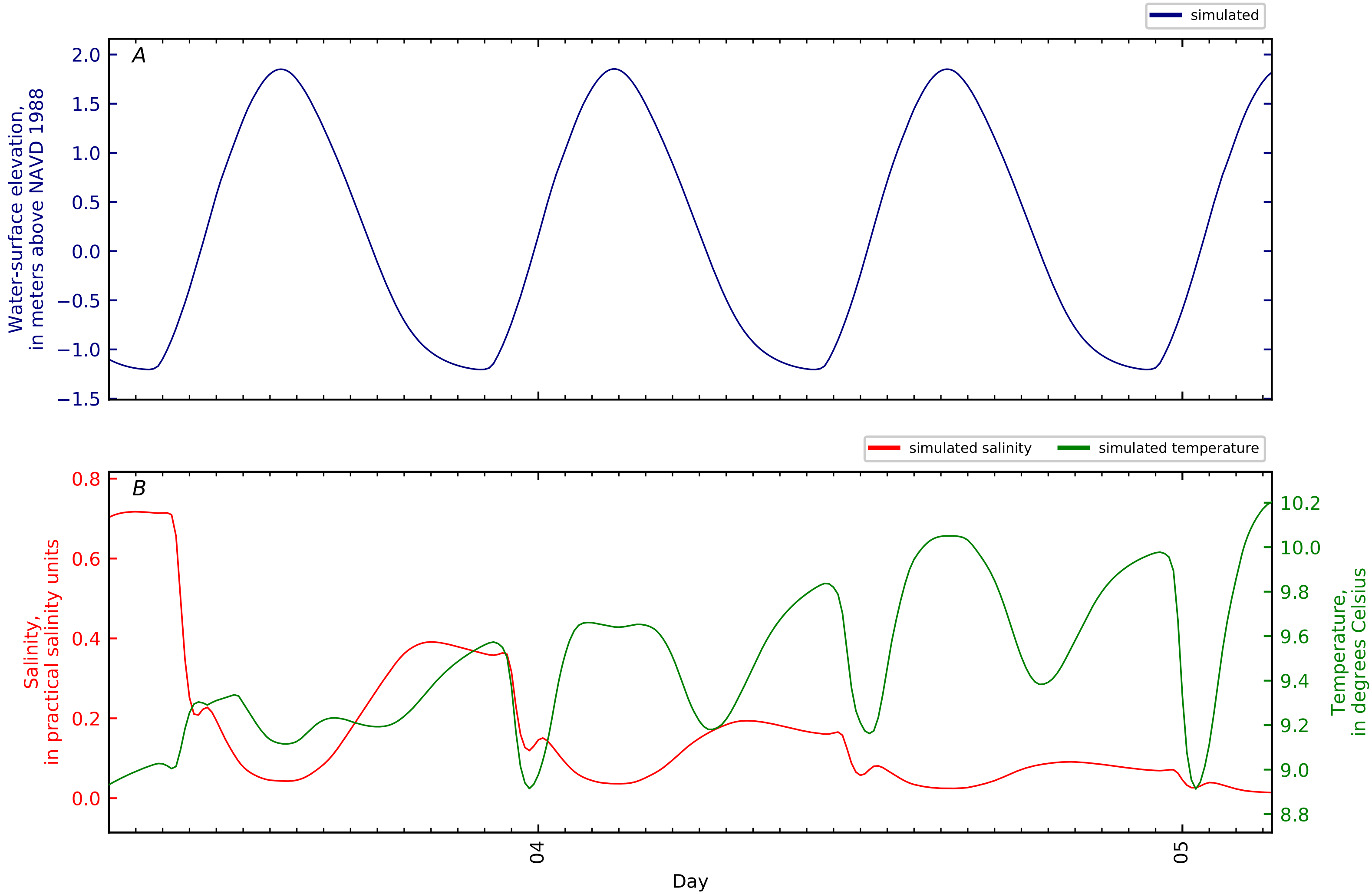

Figure B4-148. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 147, Mendall Marsh KM1.5 WHOI3 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

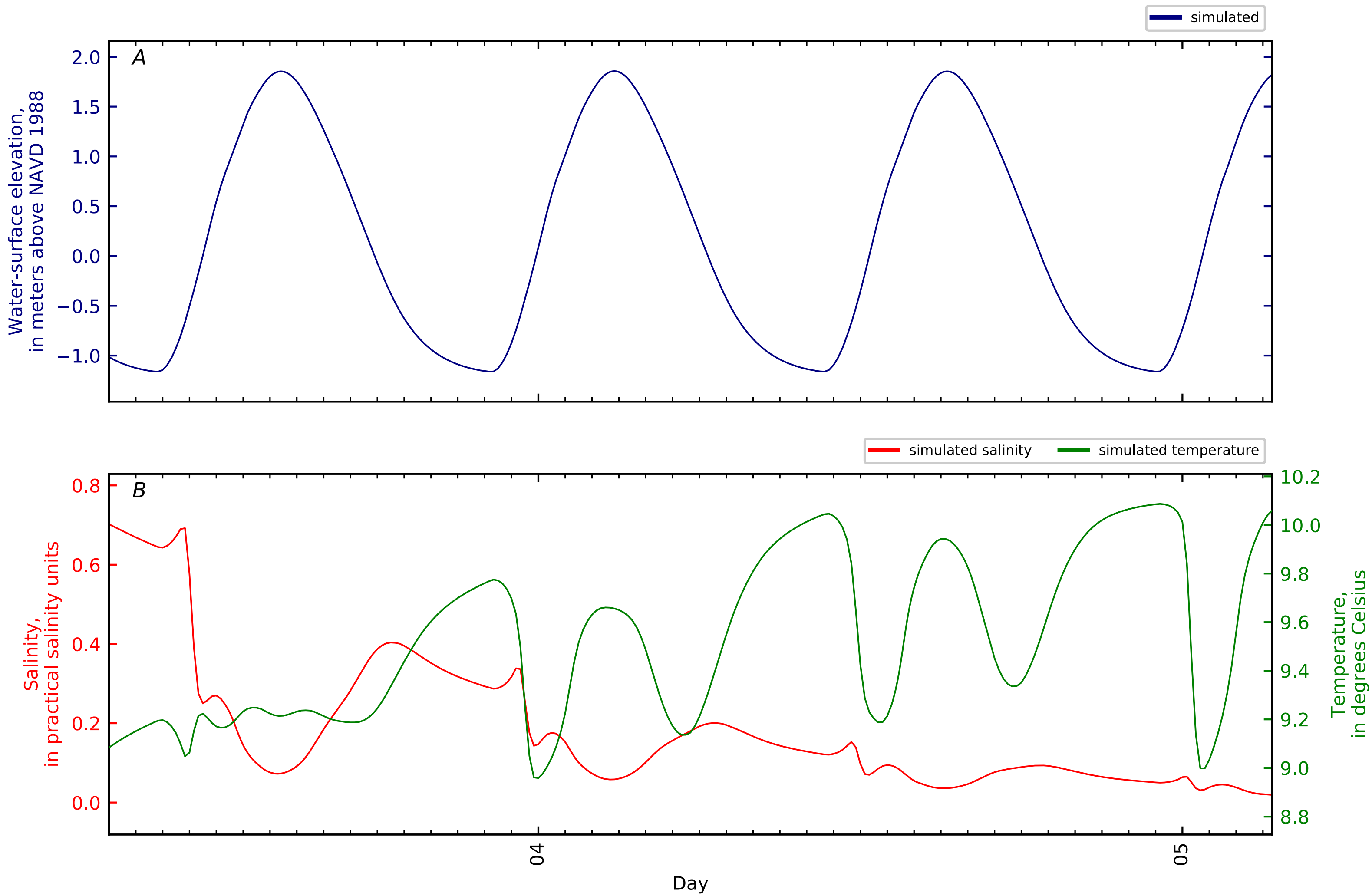

Figure B4-149. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 148, Mendall Marsh KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

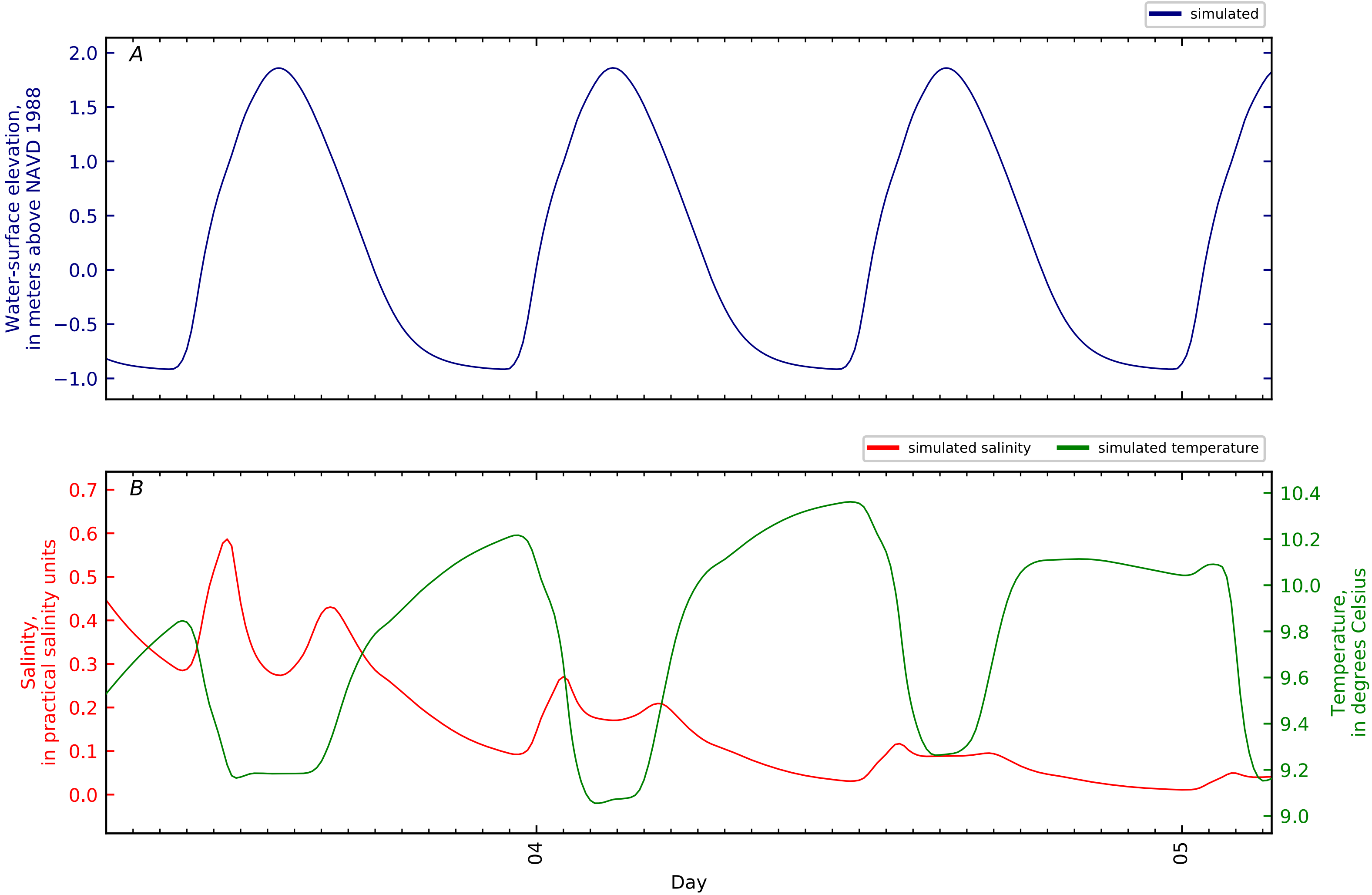

Figure B4-150. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 149, Mendall Marsh KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

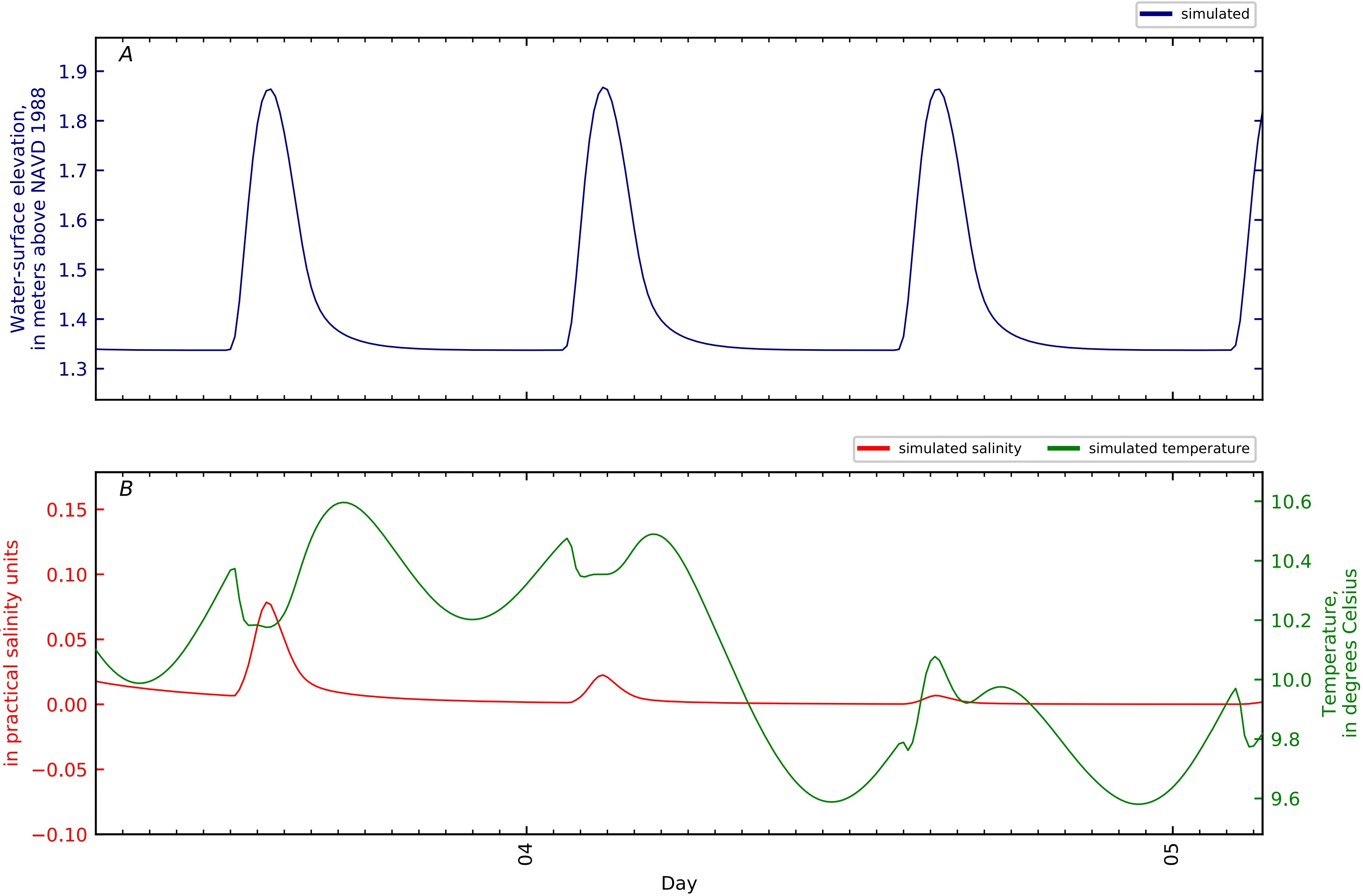

Figure B4-151. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 150, Mendall Marsh KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

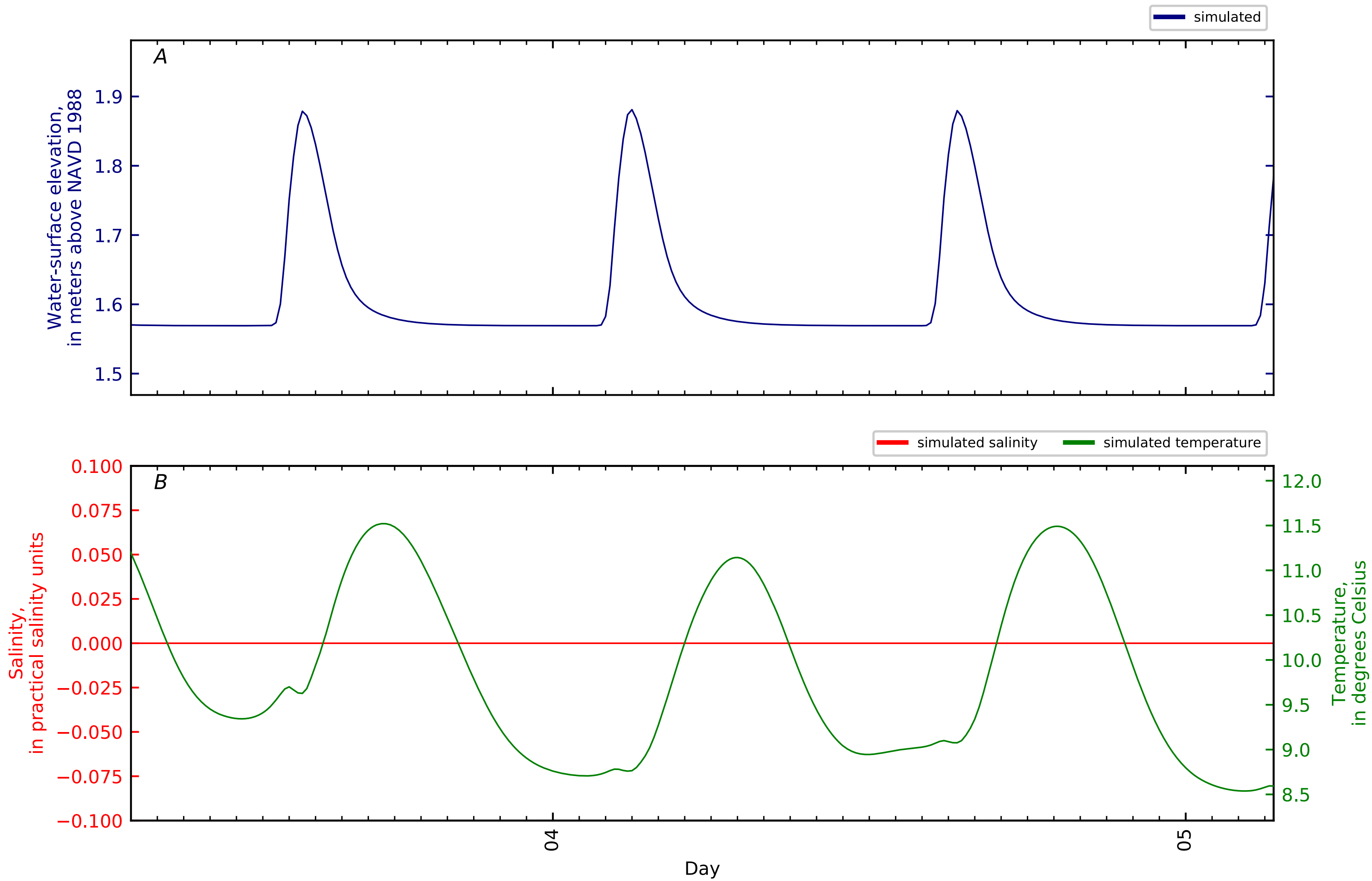

Figure B4-152. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 151, Mendall Marsh KM5. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

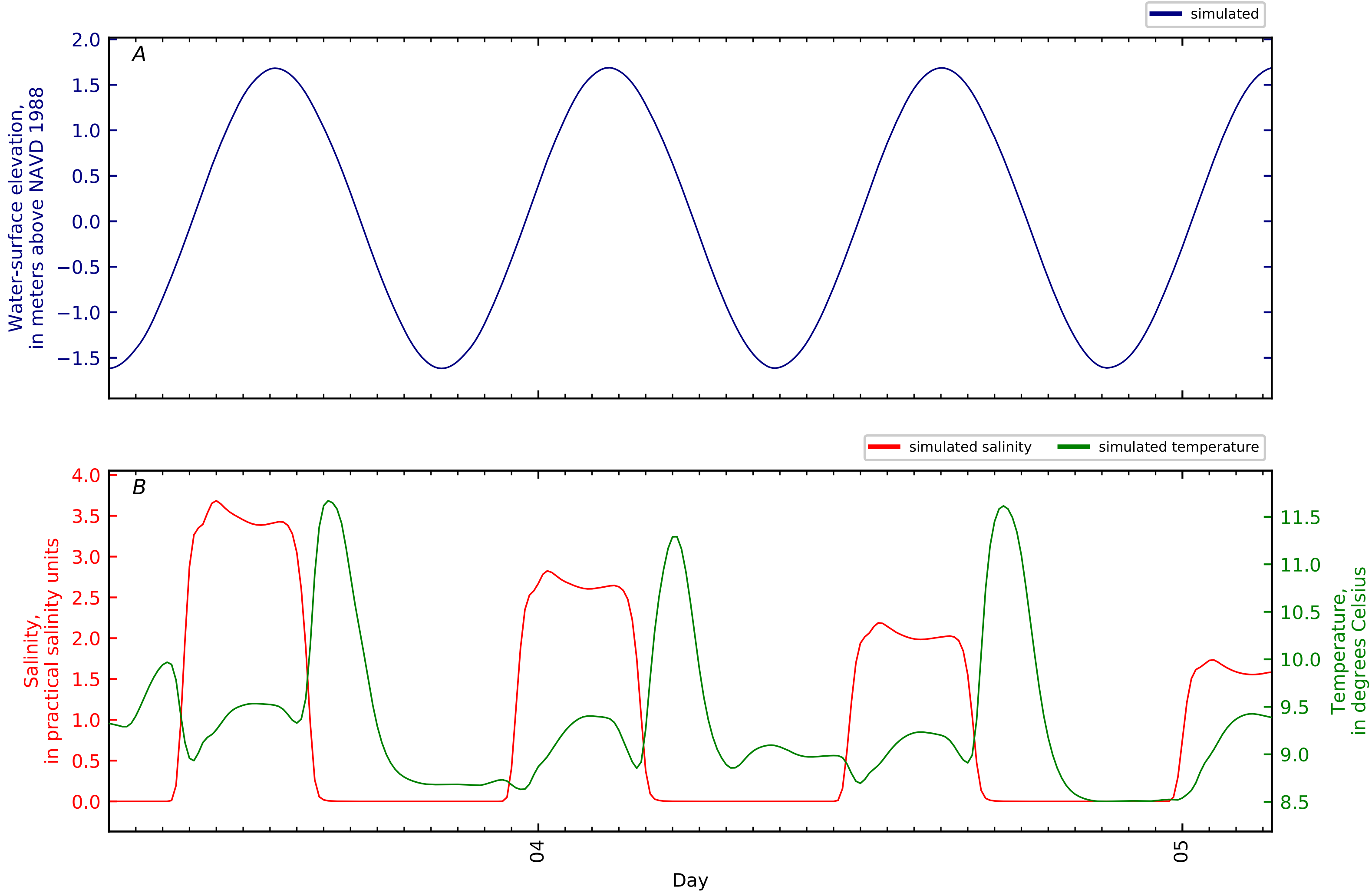

Figure B4-153. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 152, Orland Riv KM0. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

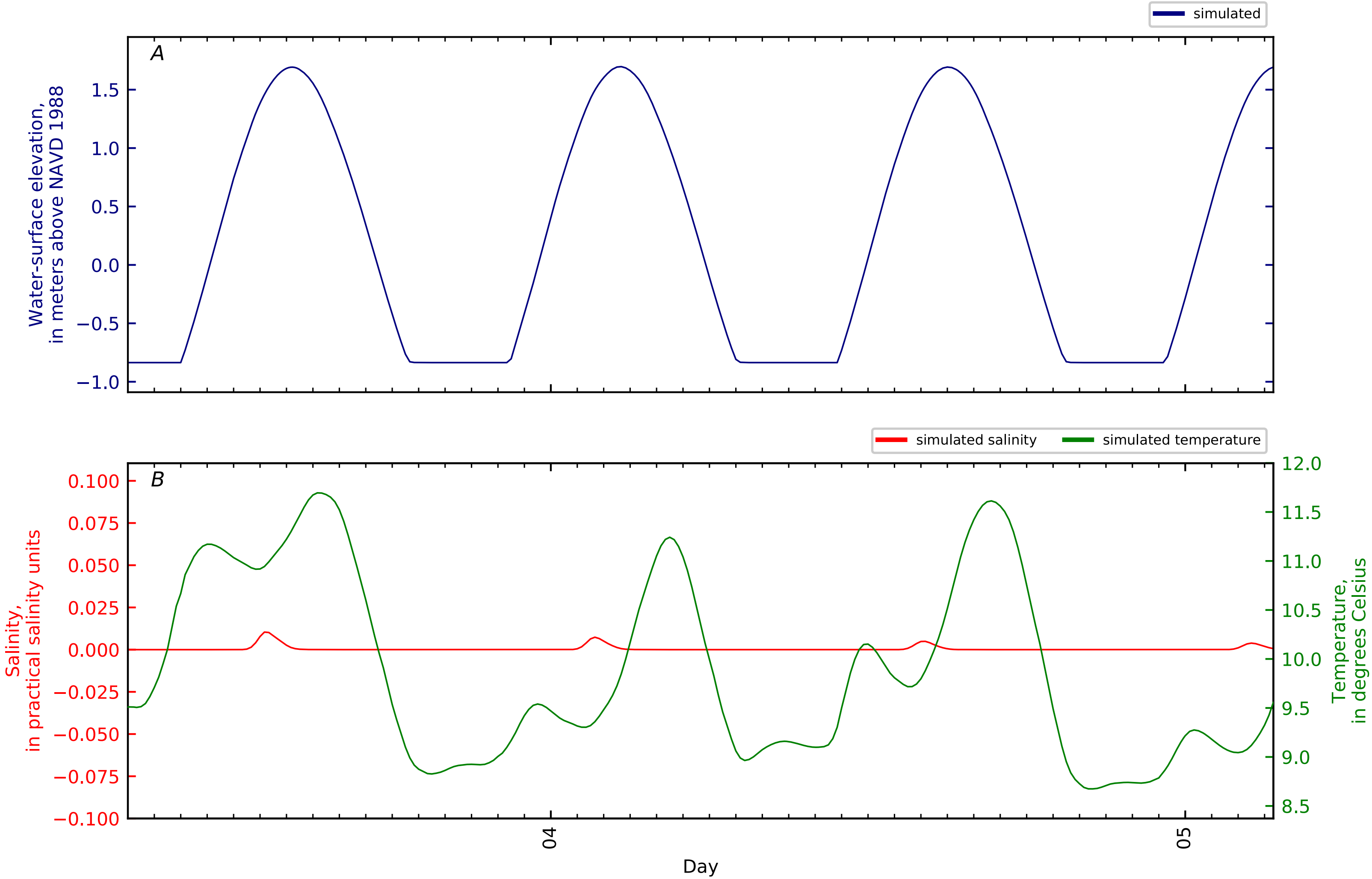

Figure B4-154. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 153, Orland Riv KM0.9 ERDC5 OR-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

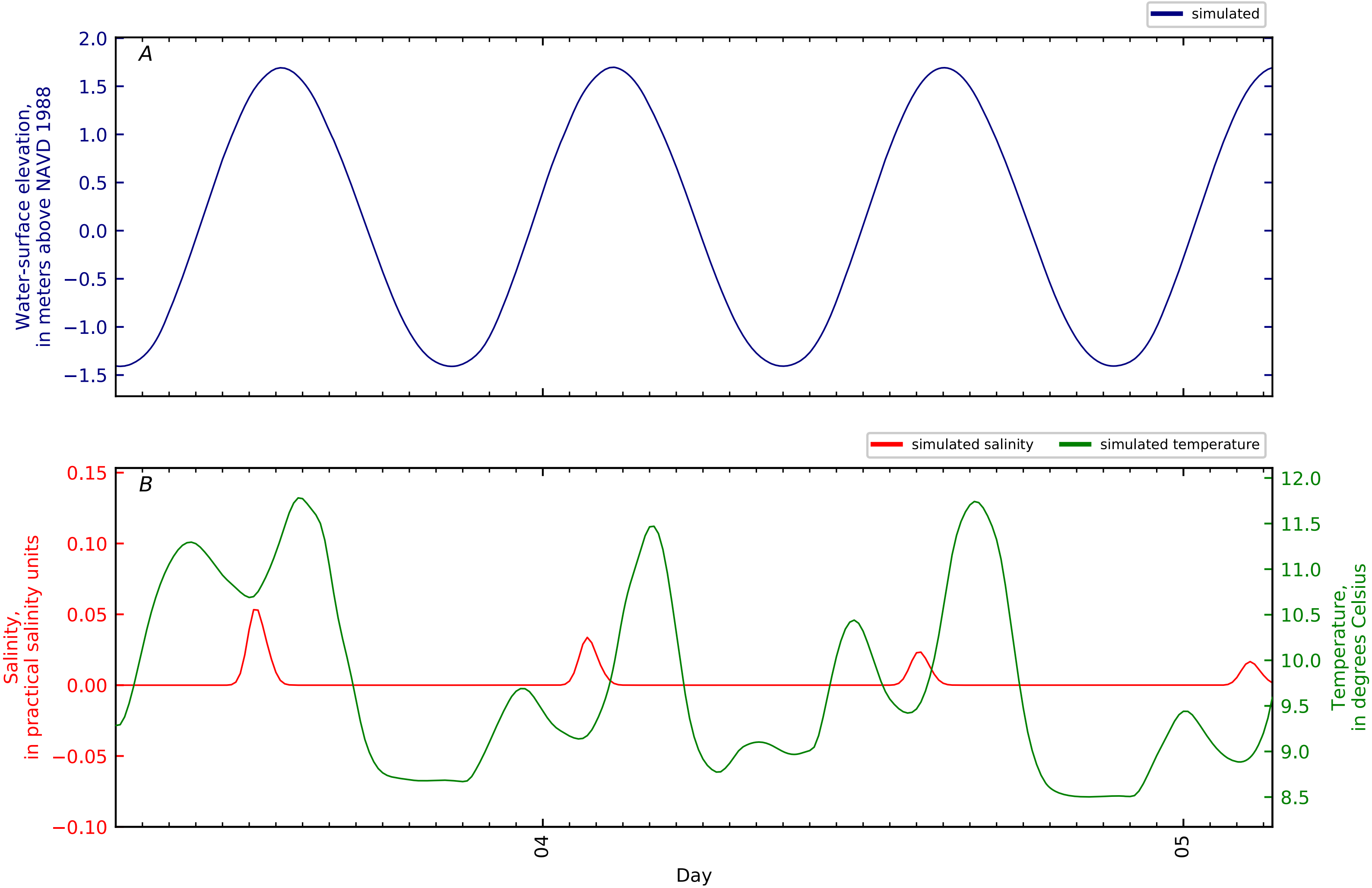

Figure B4-155. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 154, Orland Riv KM0.9 ERDC6 OR-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

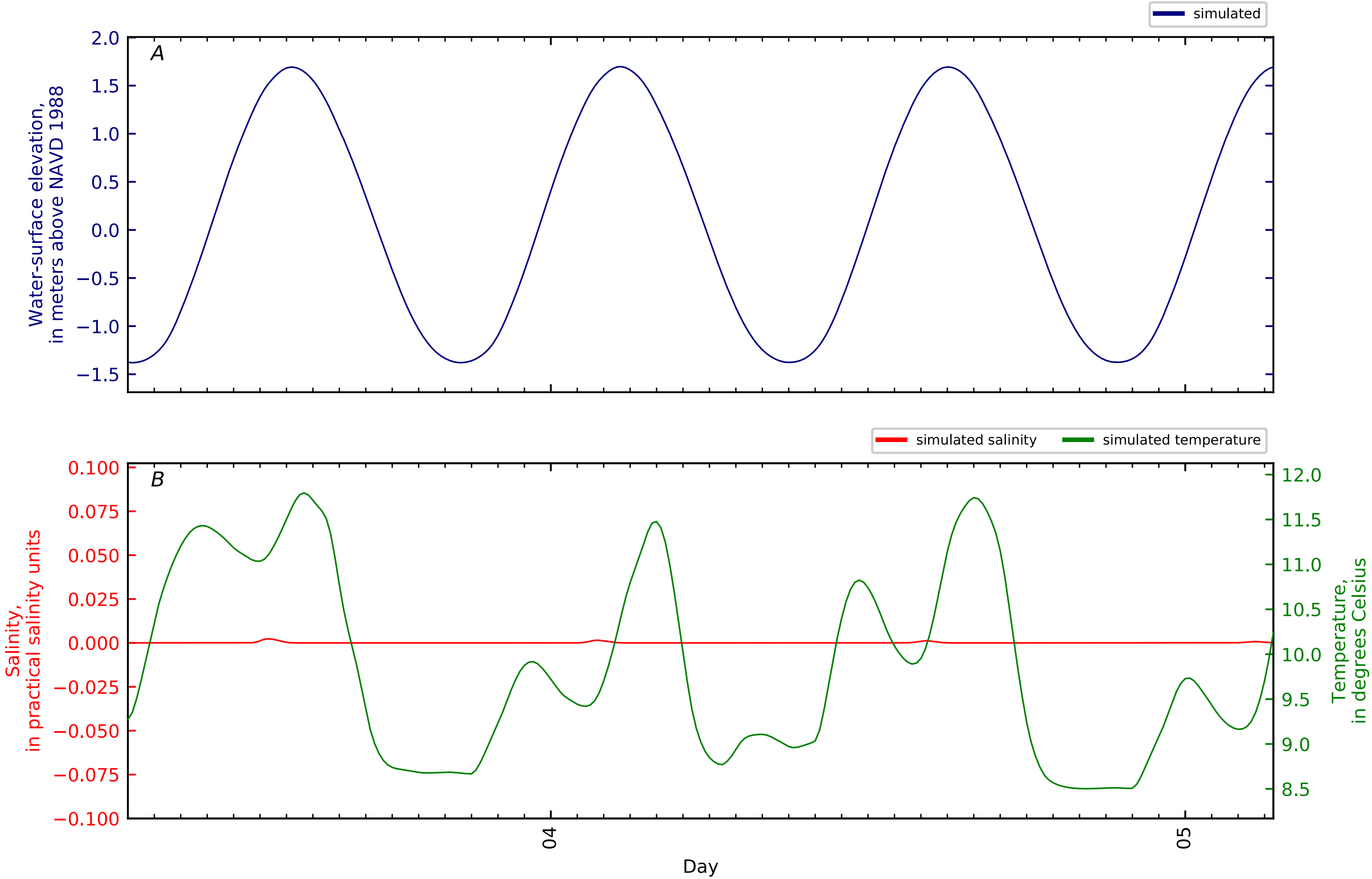

Figure B4-156. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 155, Orland Riv KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

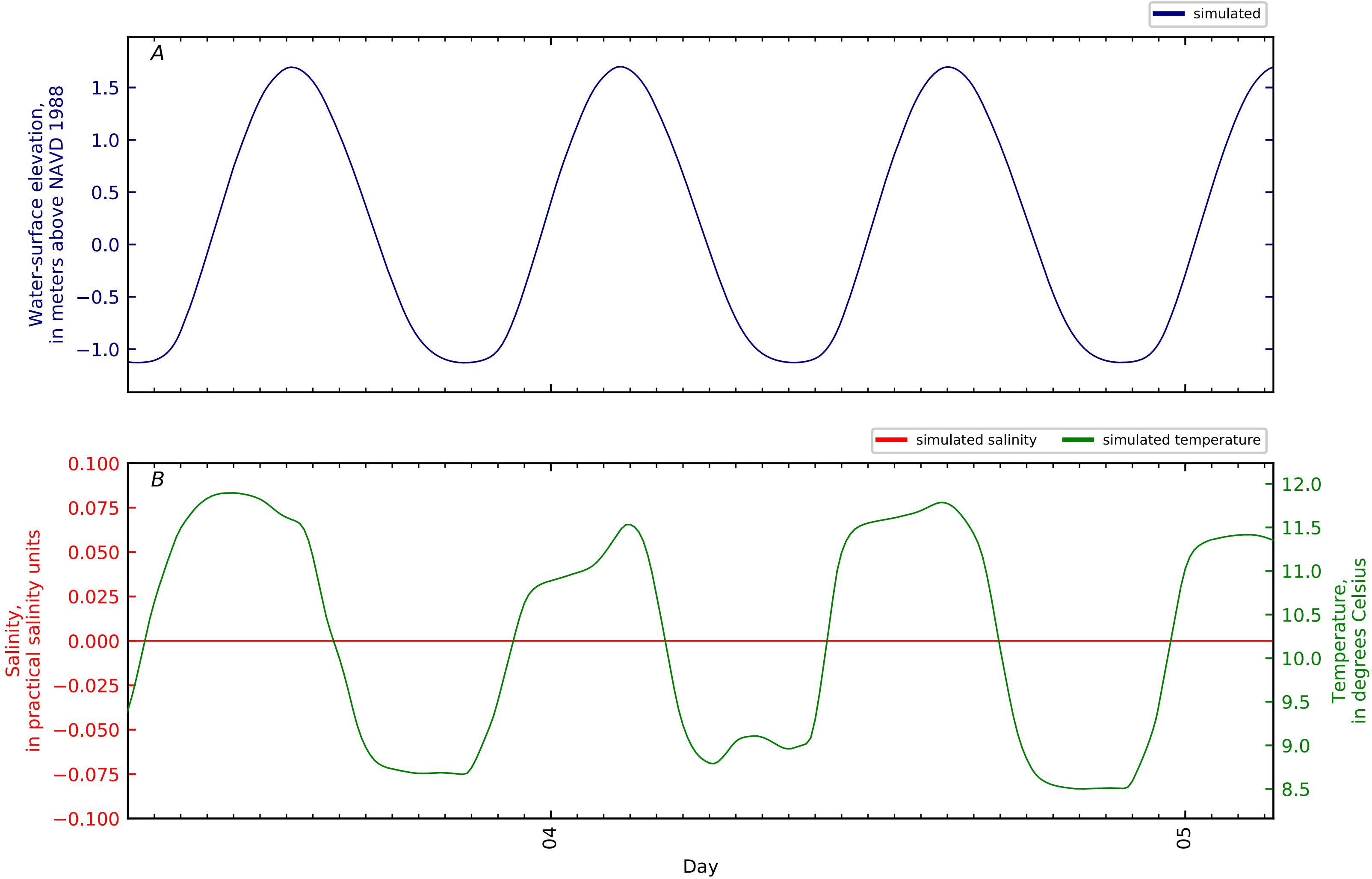

Figure B4-157. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 156, Orland Riv KM1.6 WHOI4 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

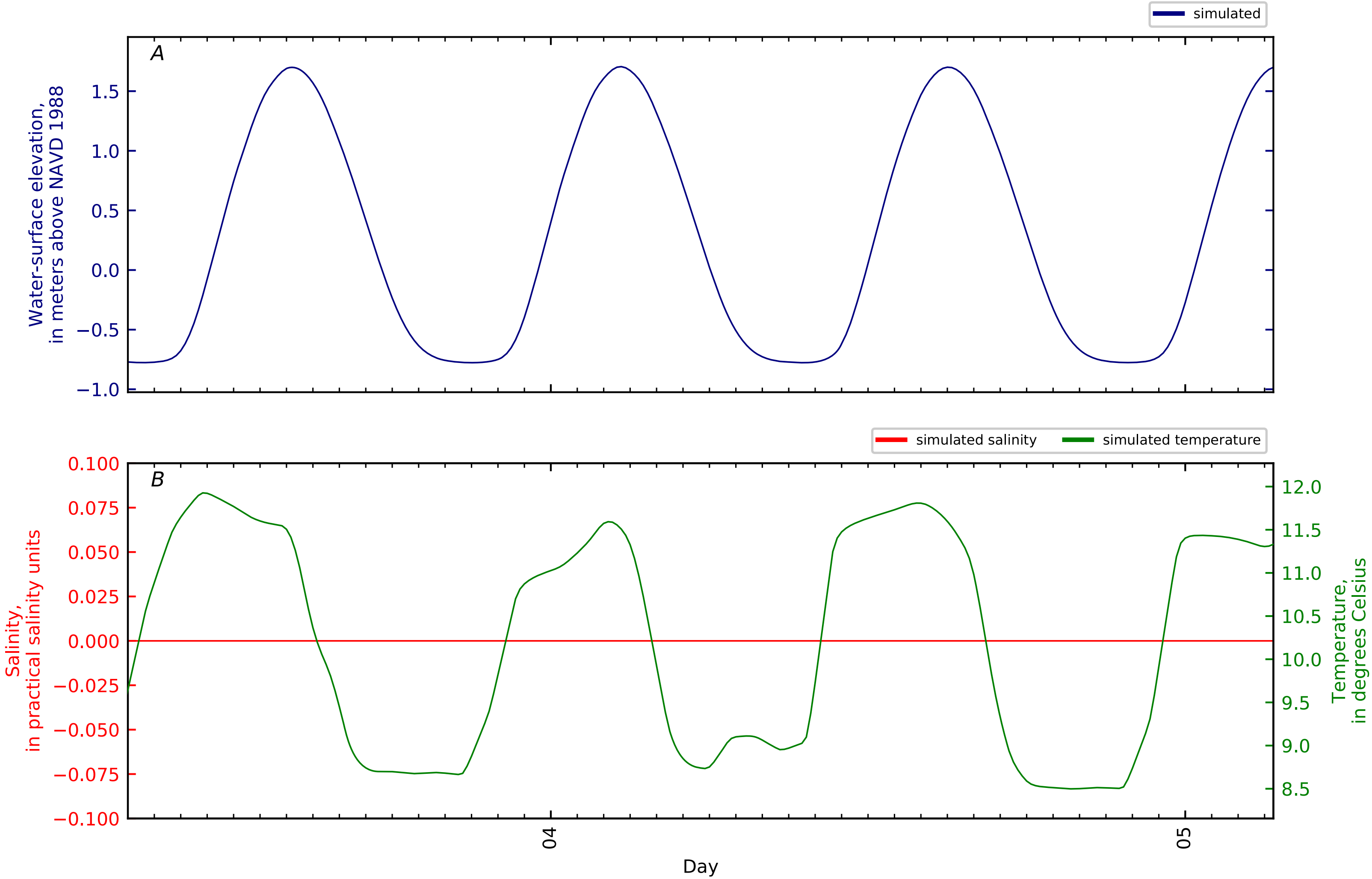

Figure B4-158. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 157, Orland Riv KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

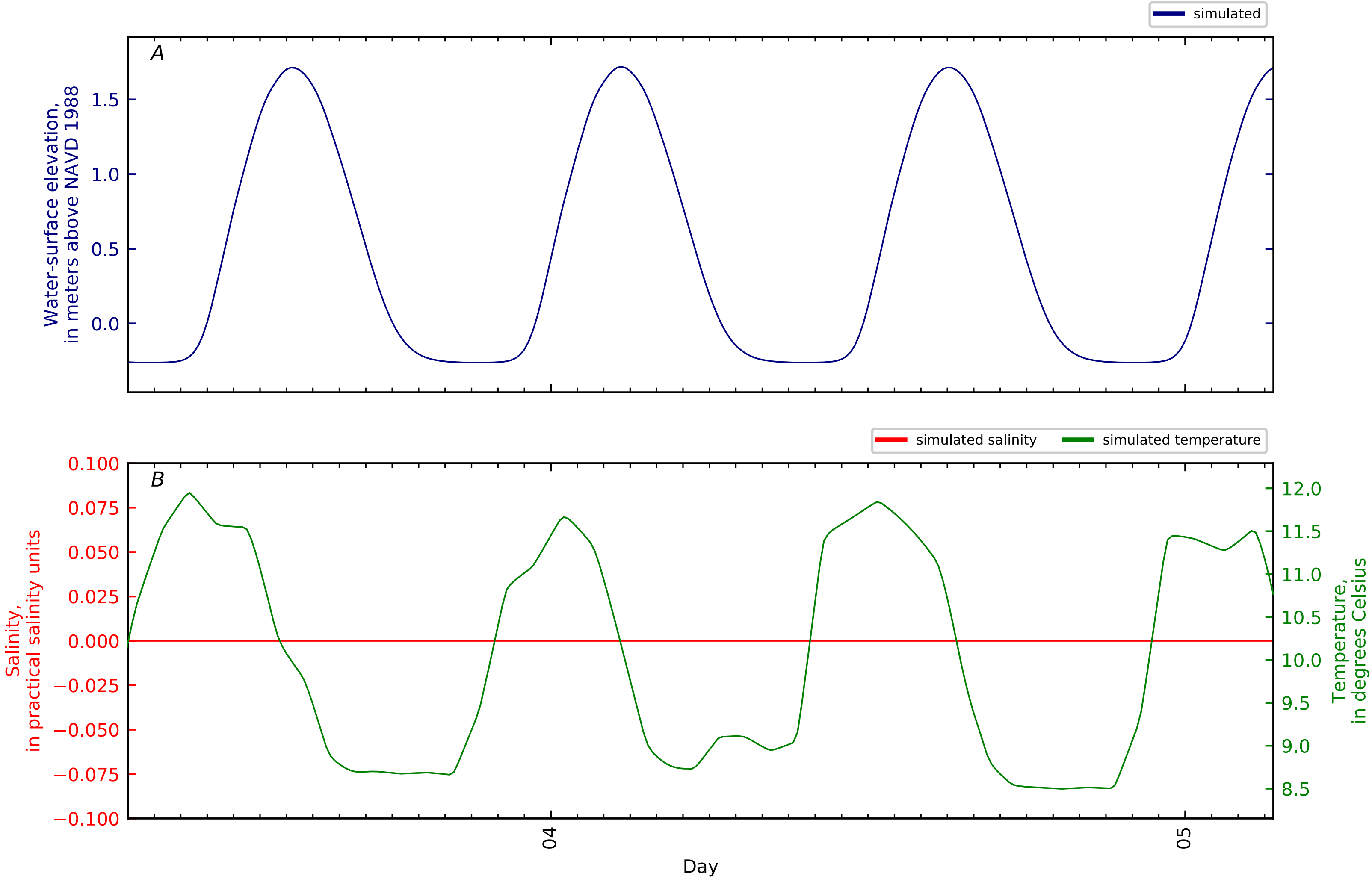

Figure B4-159. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 158, Orland Riv KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

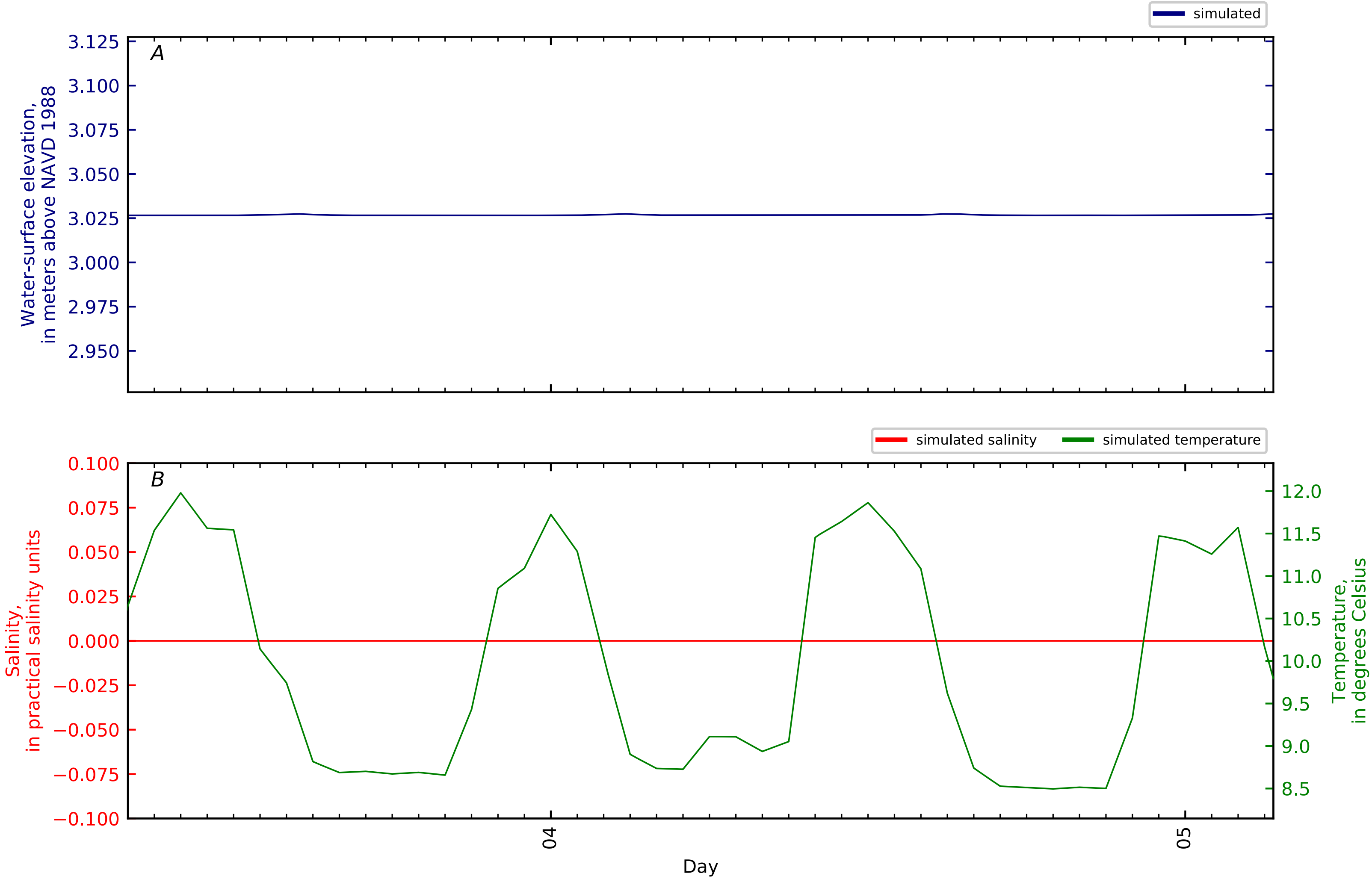

Figure B4-160. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 159, Orland Riv KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

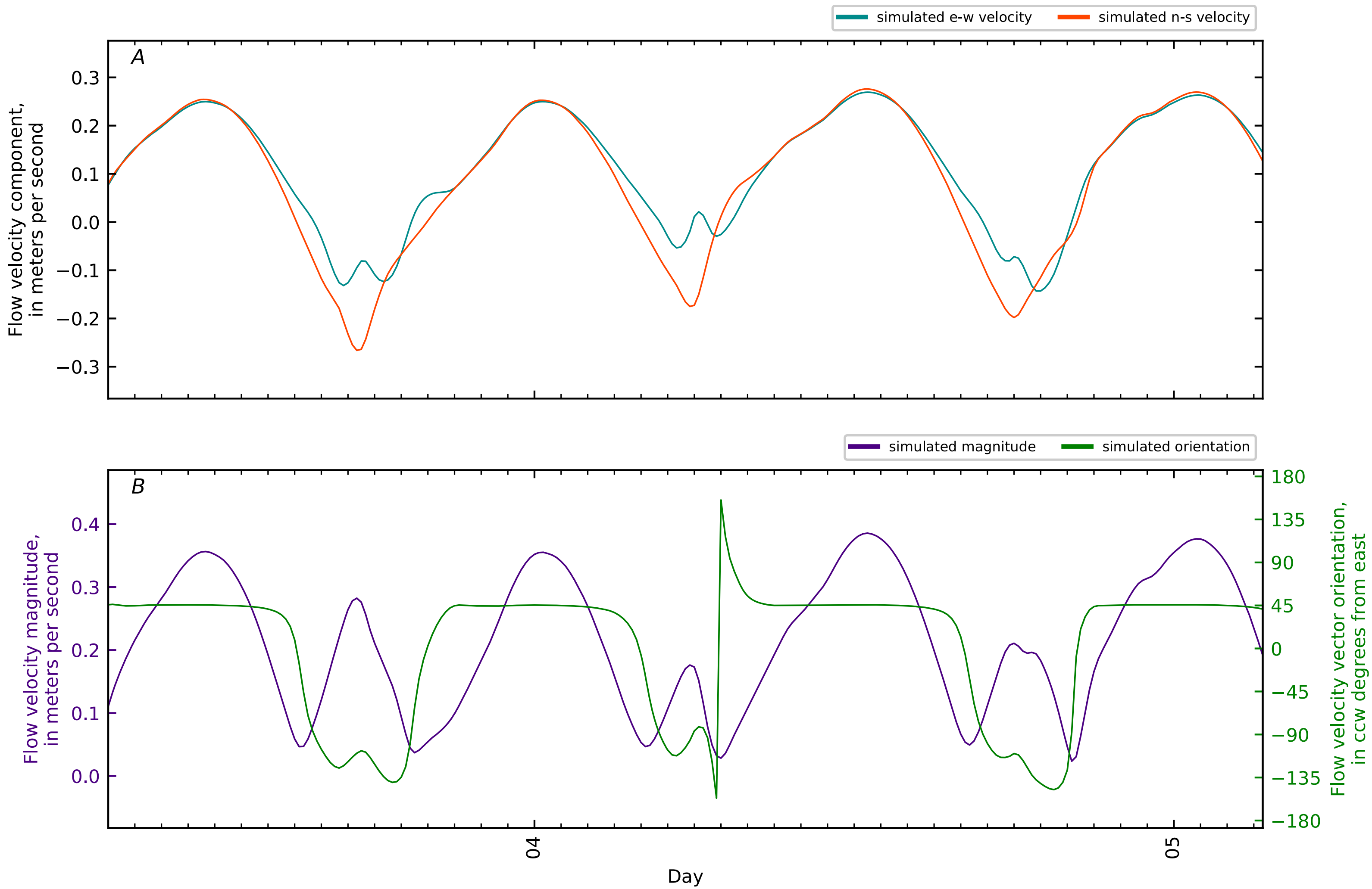

Figure B4-161. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 0, Penob Riv -KM5 nr Cape Jellison boundary. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

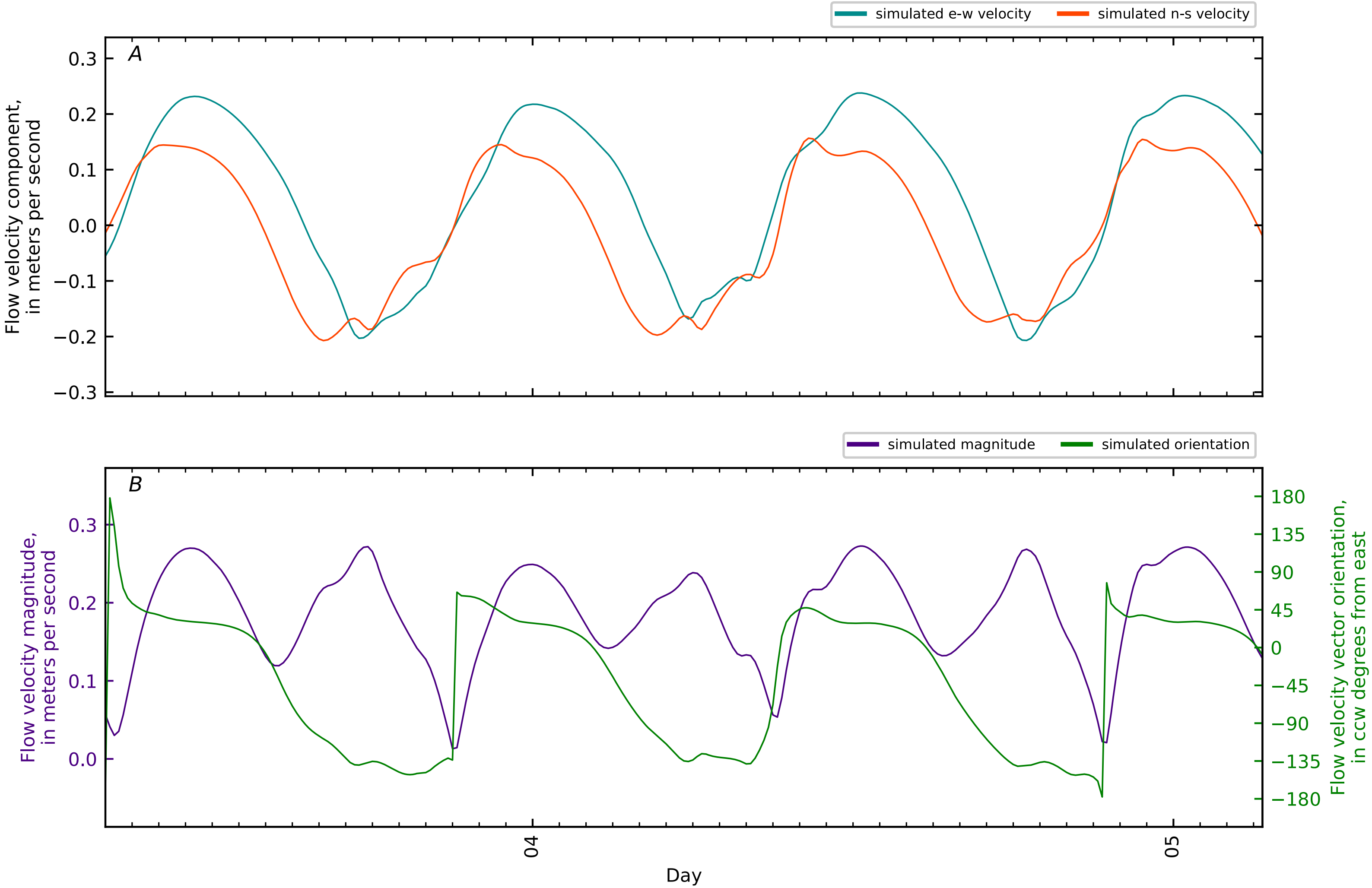

Figure B4-162. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 1, Penob Riv -KM4 nr Cape Jellison XS. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

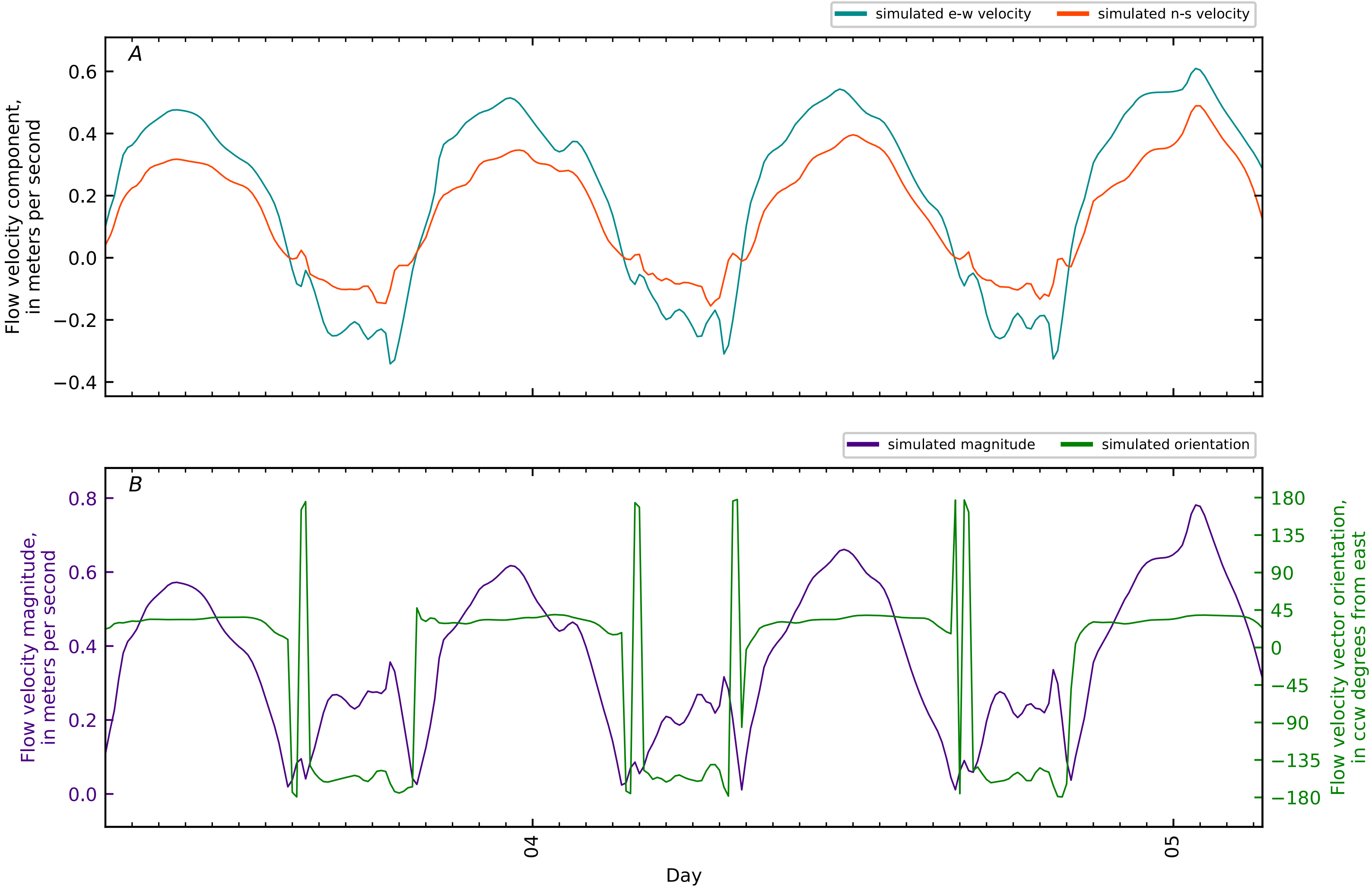

Figure B4-163. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 2, Penob Riv -KM1.5 d/s Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

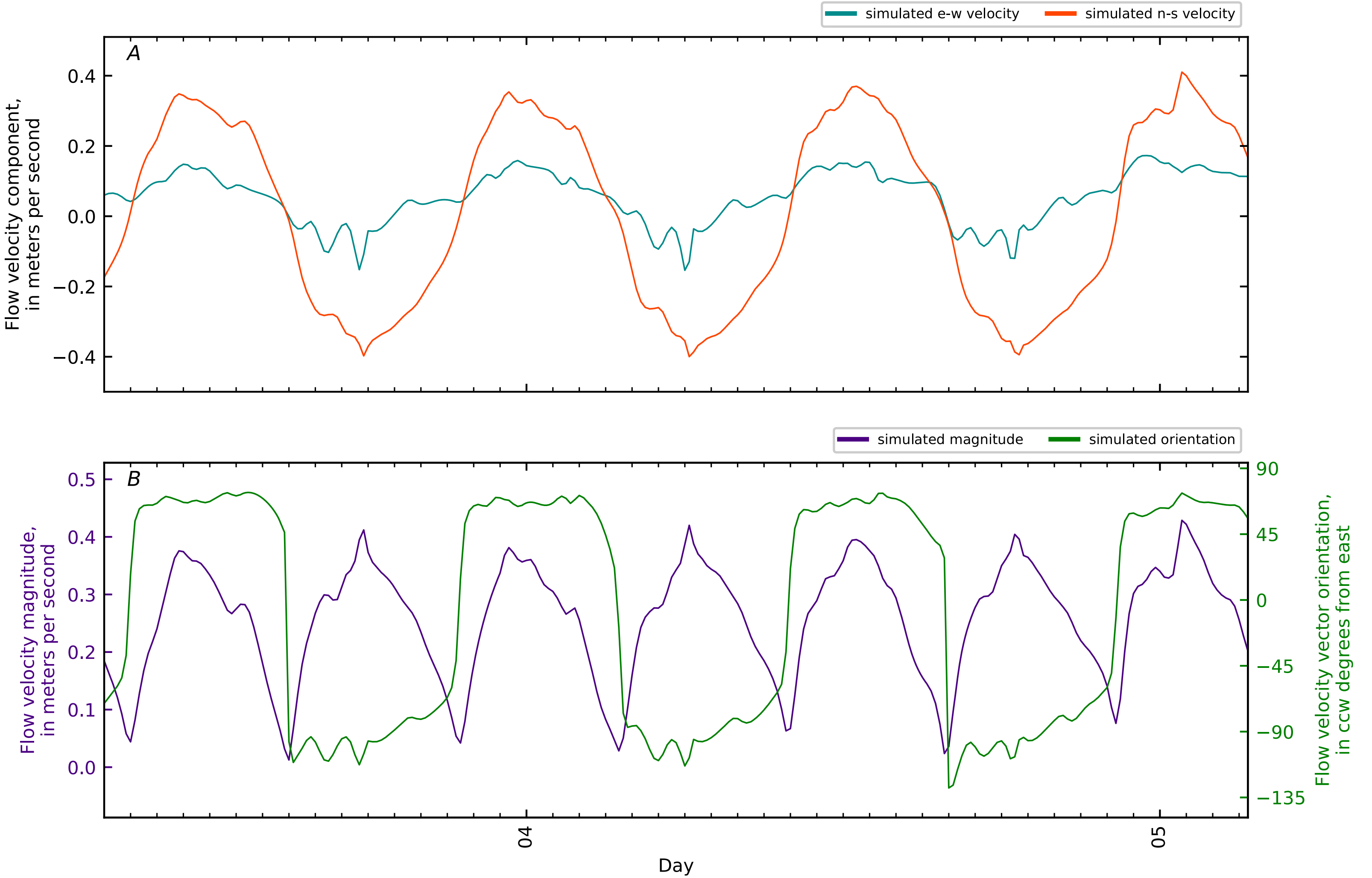

Figure B4-164. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 3, Penob Riv KM0 Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

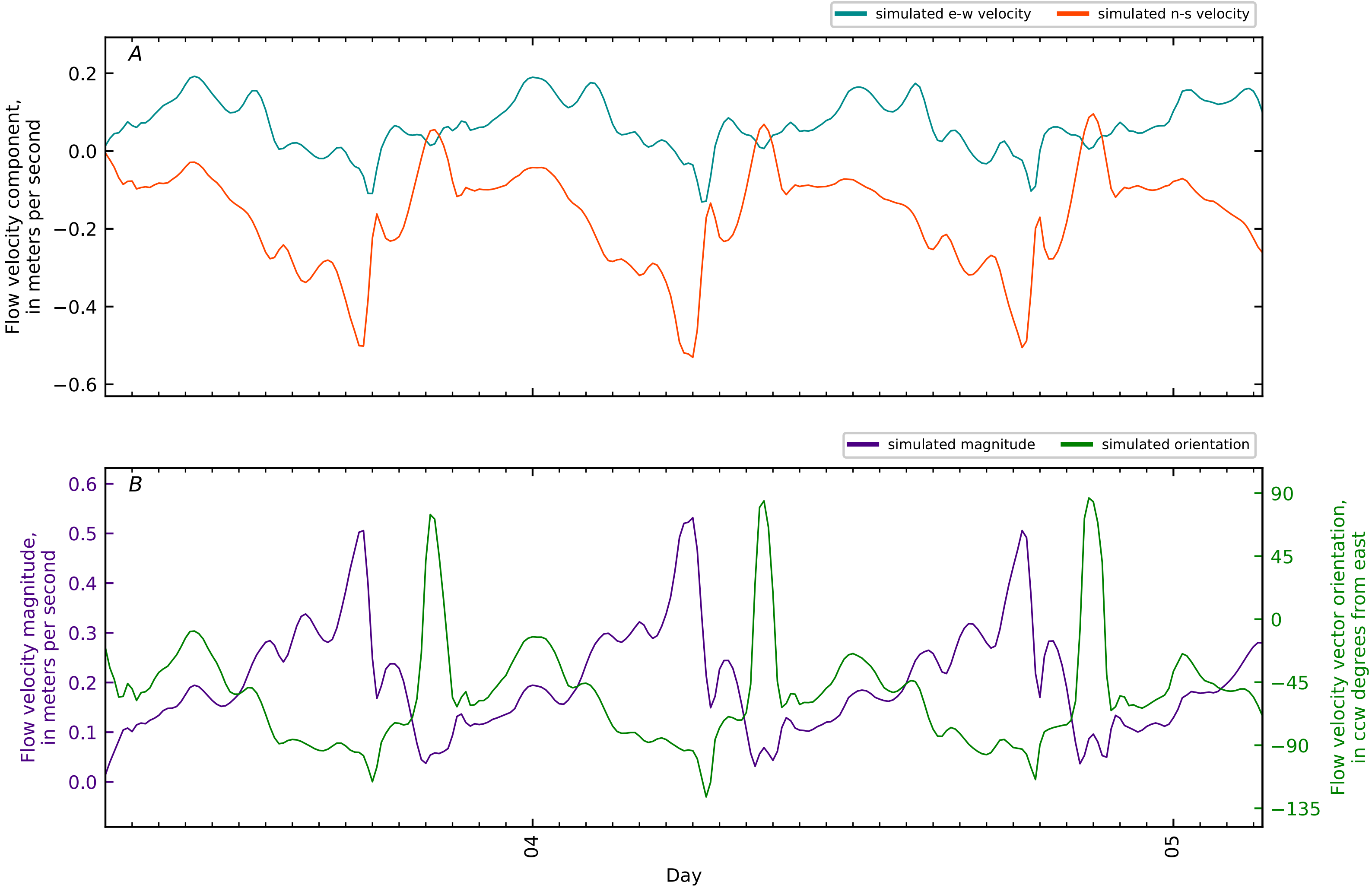

Figure B4-165. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 4, Penob Riv KM0 GS CTD5-01. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

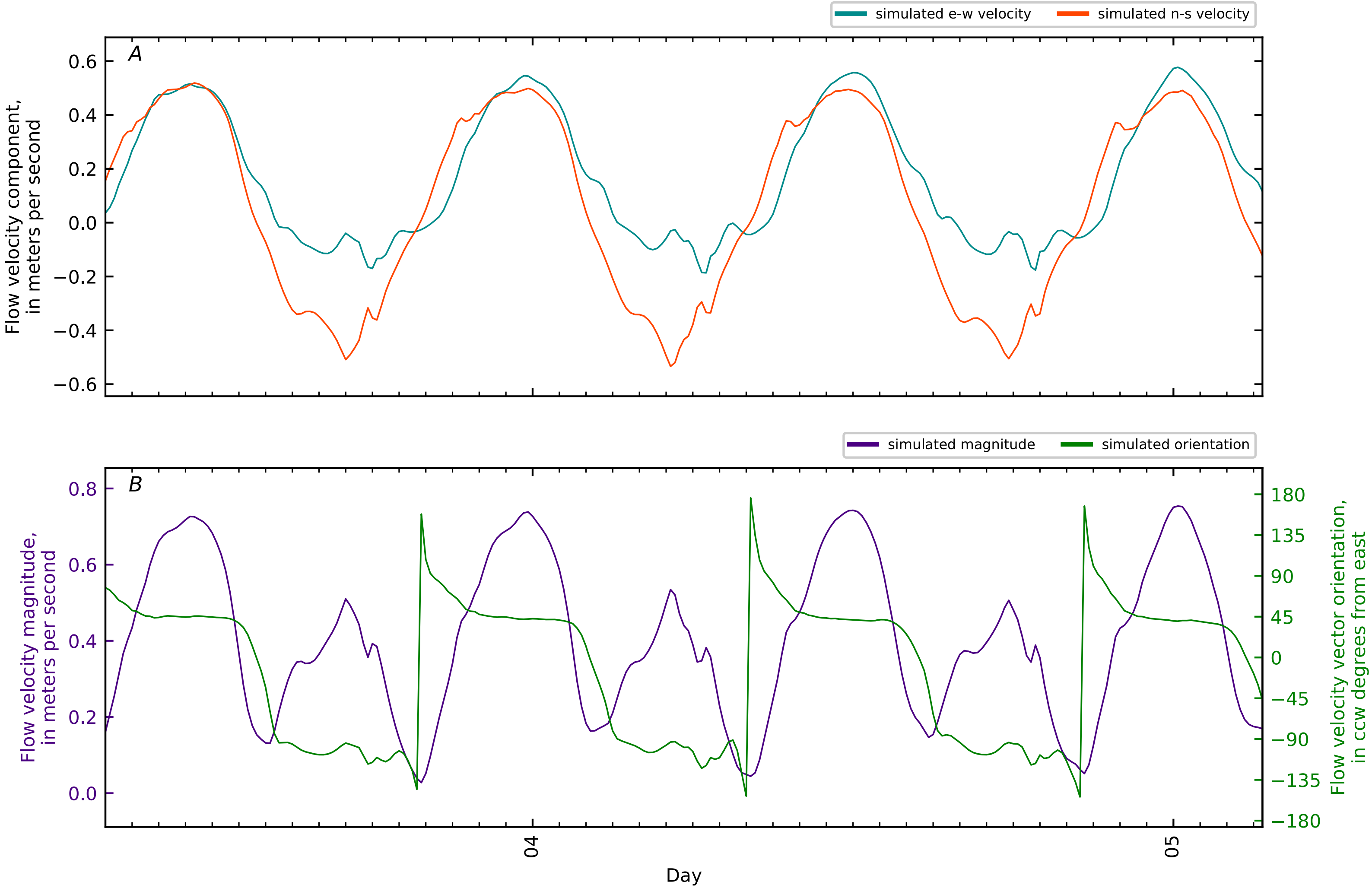

Figure B4-166. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 5, Penob Riv KM0 GS CTD5-02. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

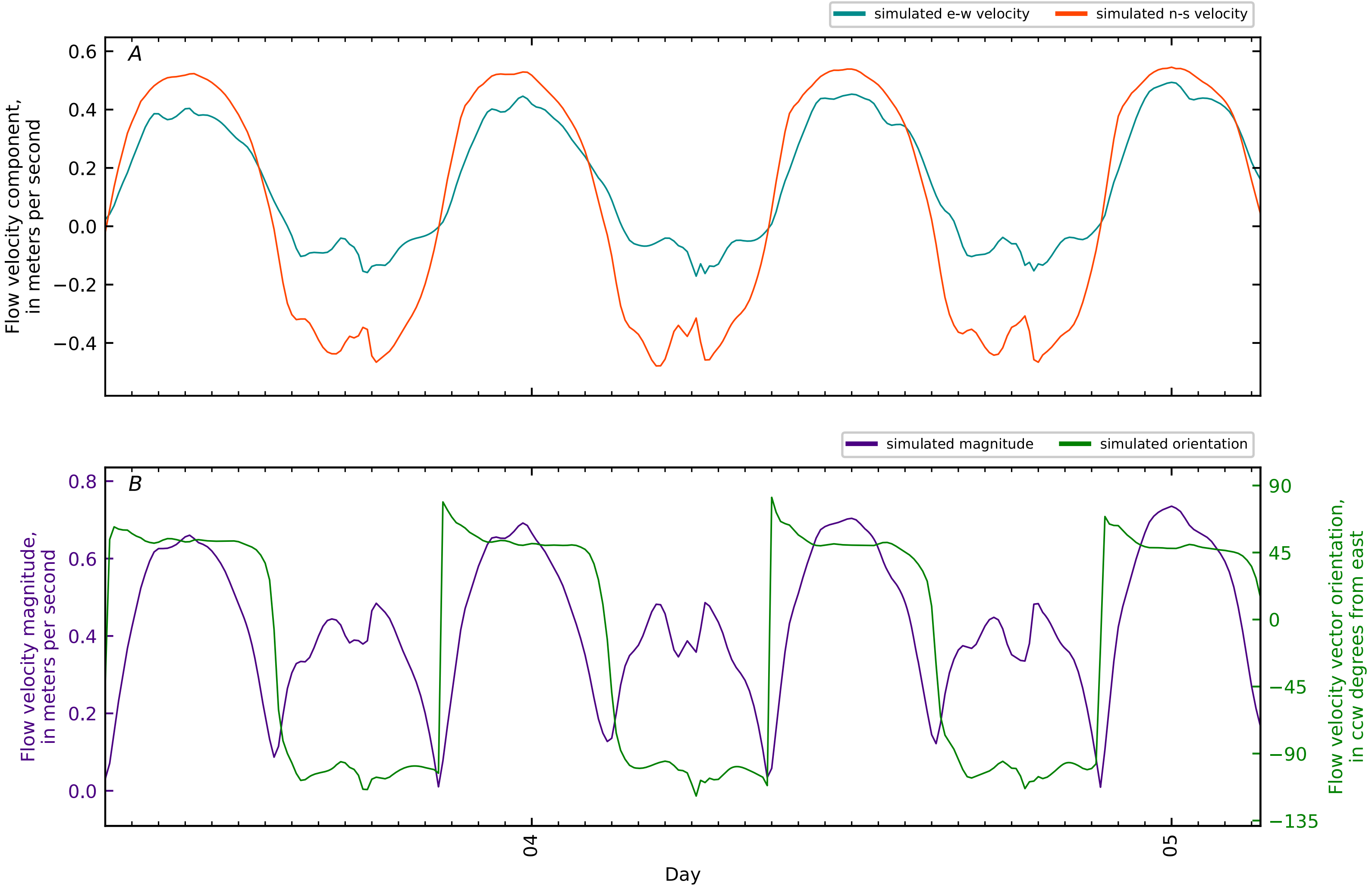

Figure B4-167. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 6, Penob Riv KM0 GS CTD5-03. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

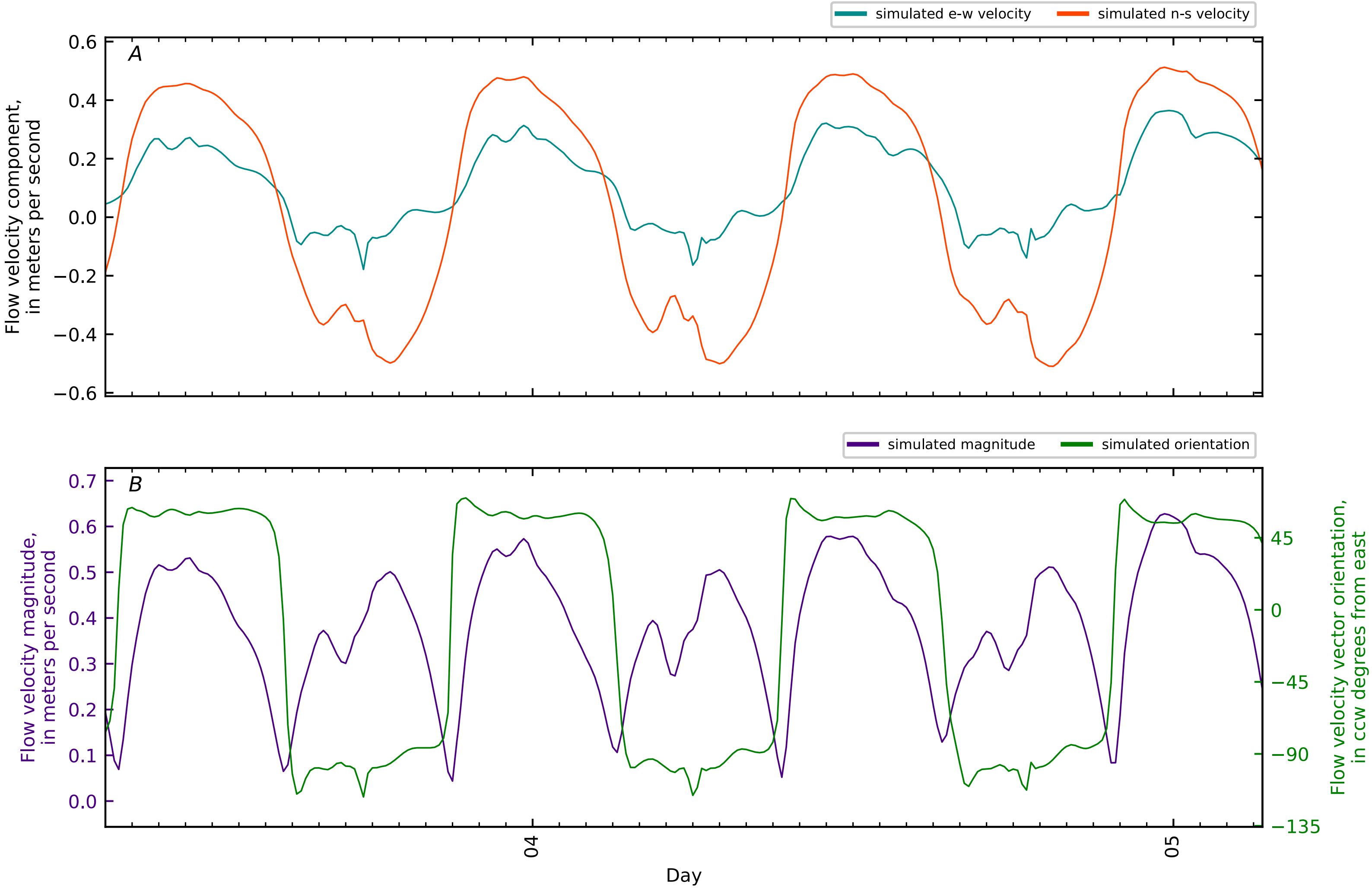

Figure B4-168. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 7, Penob Riv KM0 GS CTD5-04. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

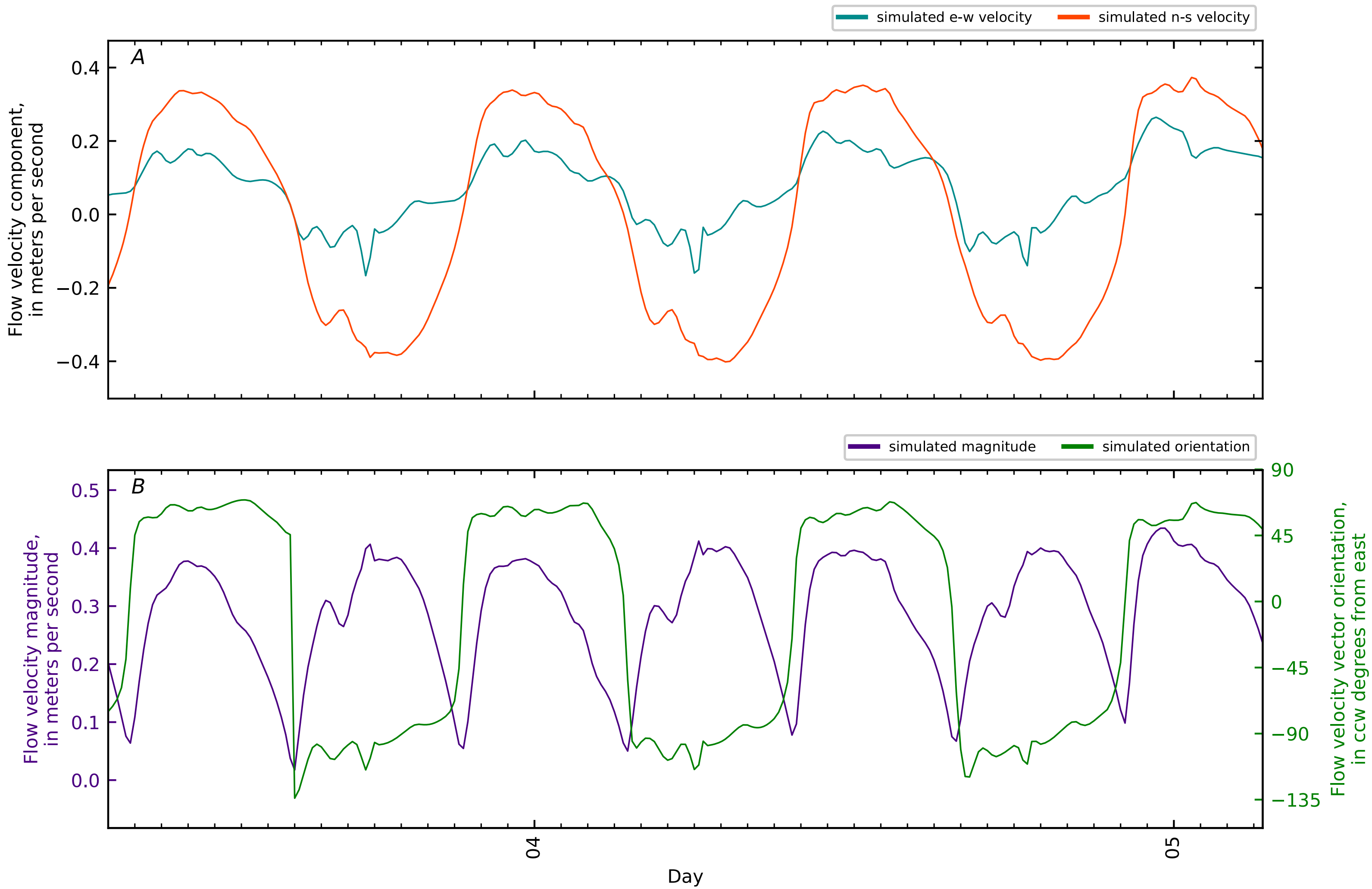

Figure B4-169. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 8, Penob Riv KM0 GS CTD5-05. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

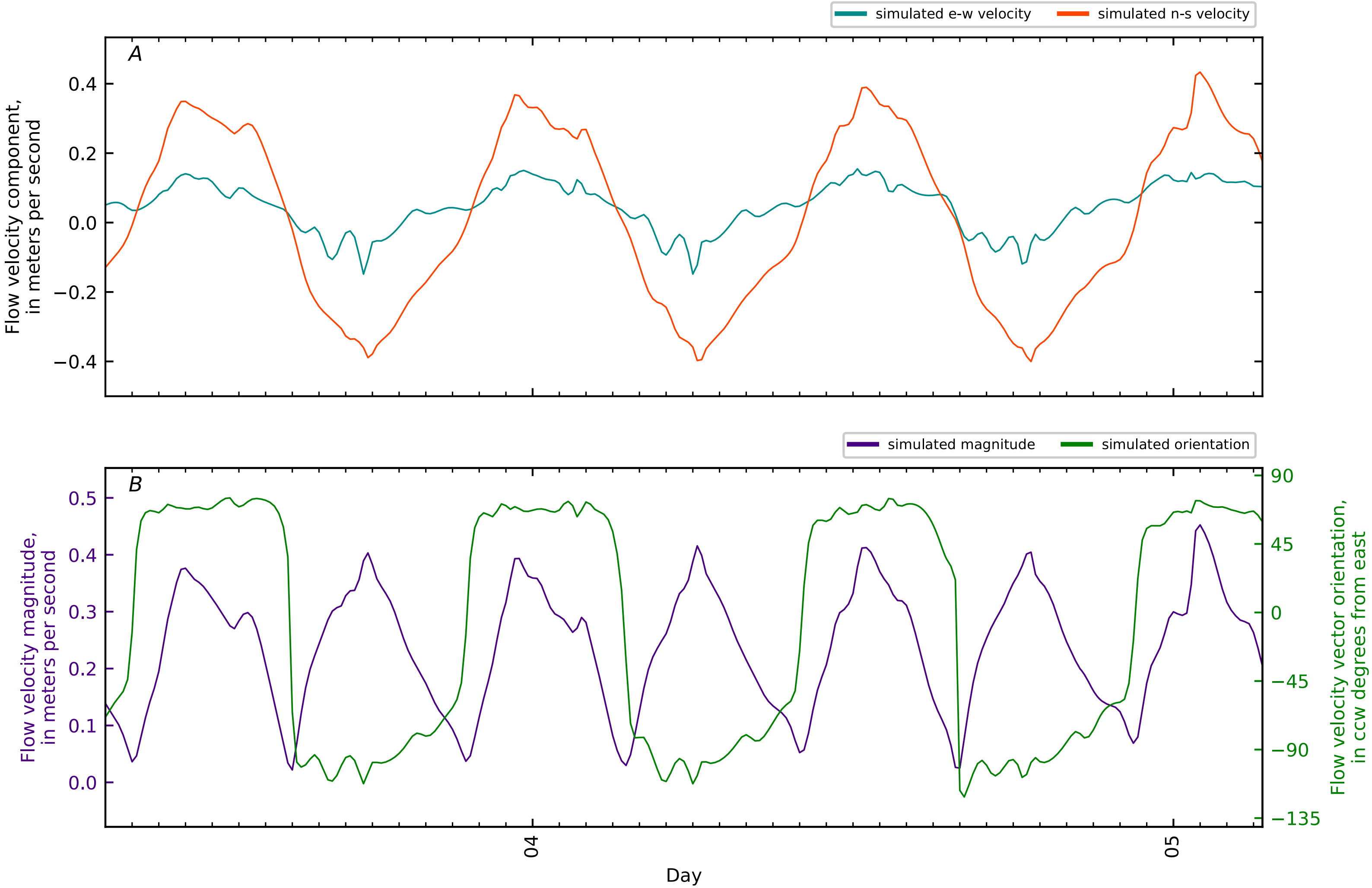

Figure B4-170. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 9, Penob Riv KM0 GS CTD5-06. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

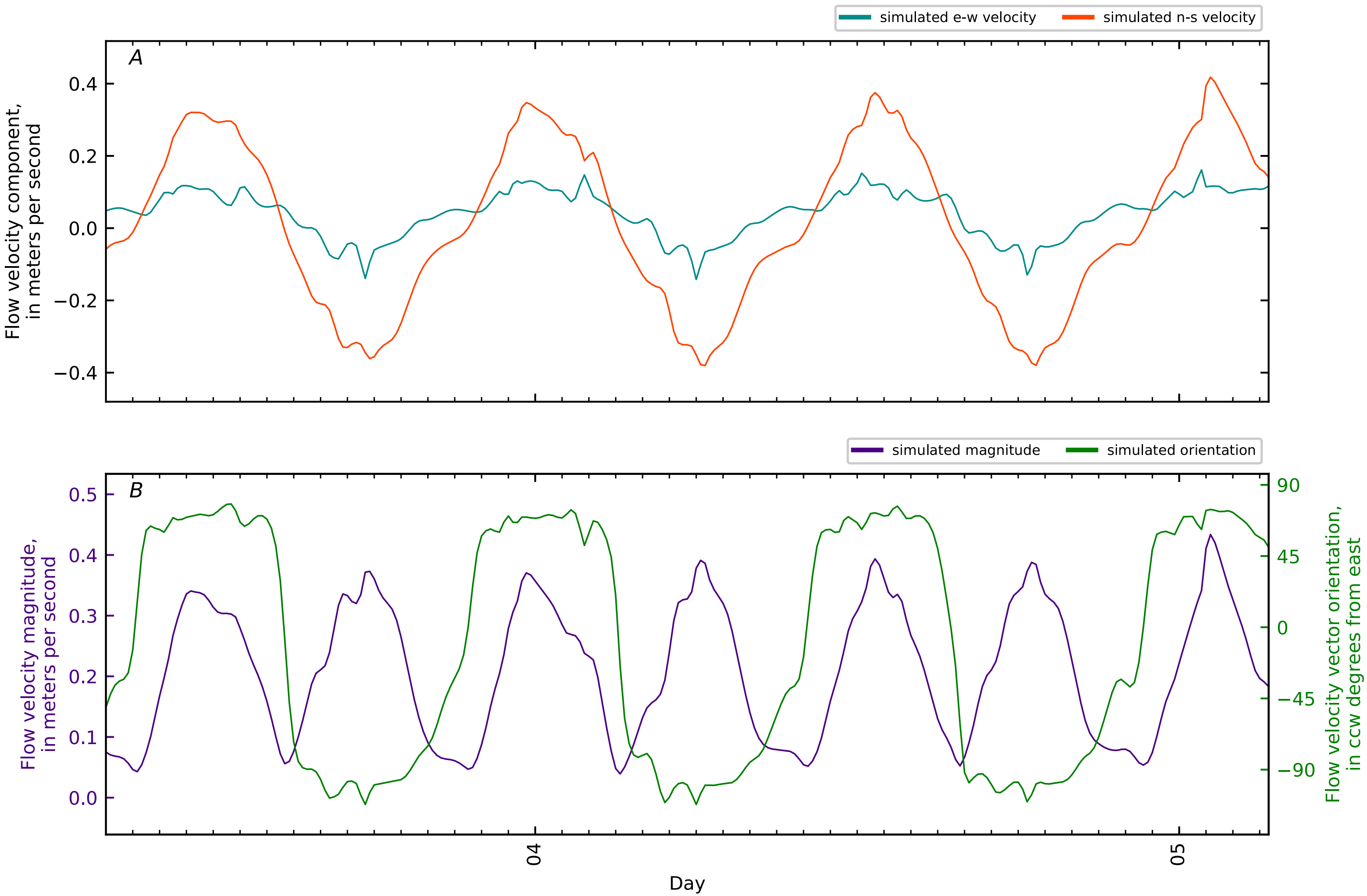

Figure B4-171. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 10, Penob Riv KM0 GS CTD5-07. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

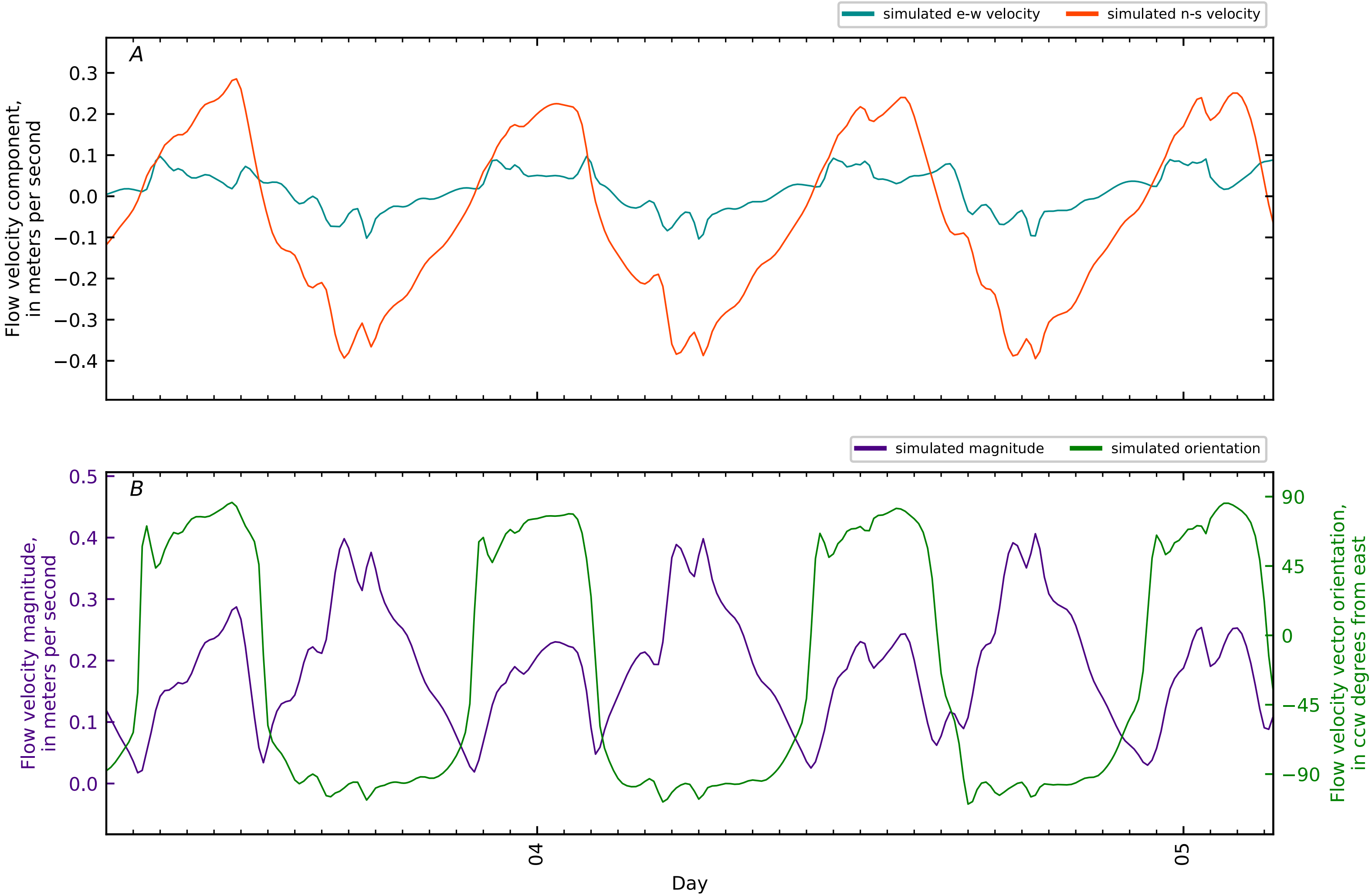

Figure B4-172. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 11, Penob Riv KM0 GS CTD5-08. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

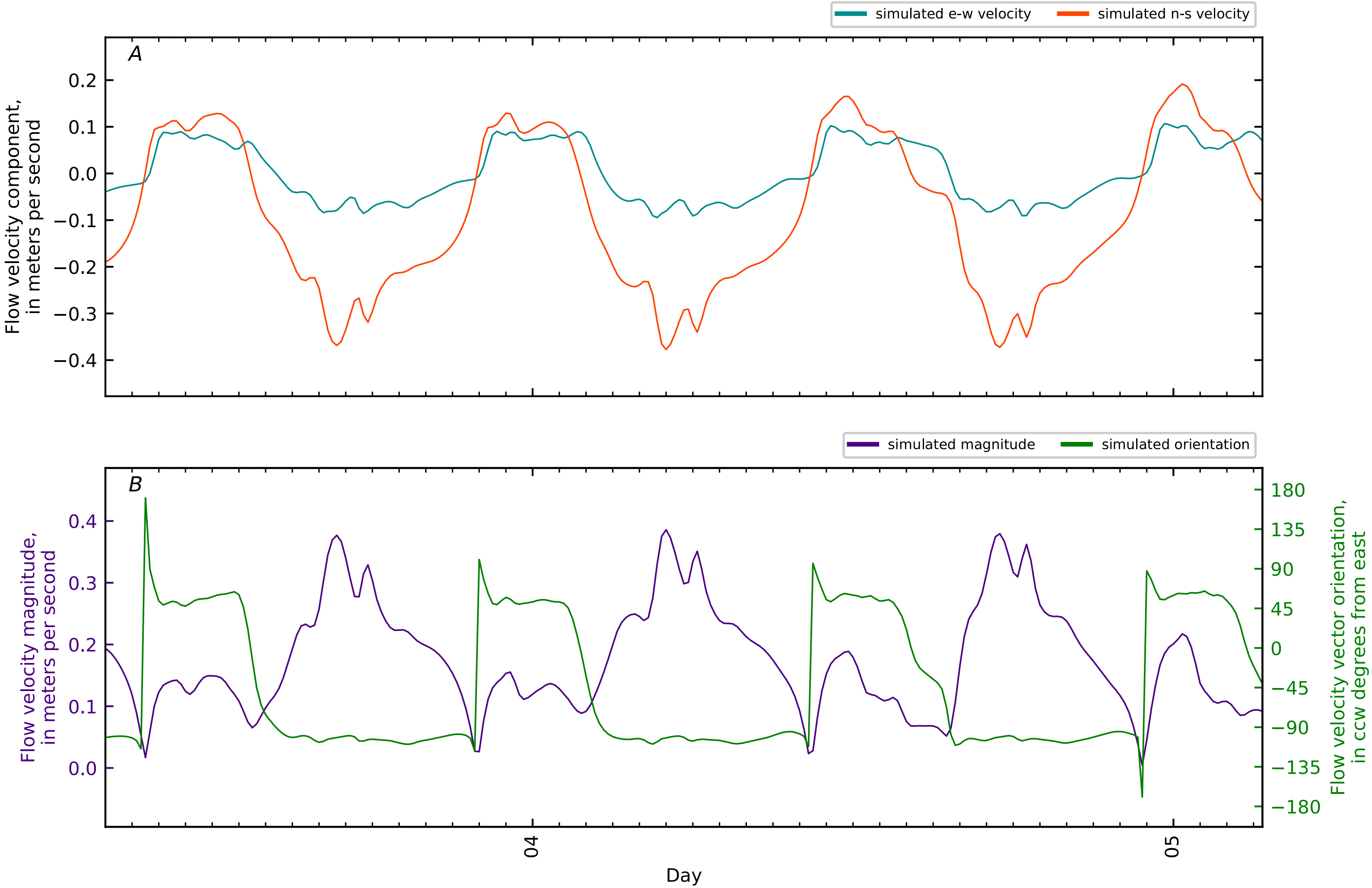

Figure B4-173. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 12, Penob Riv KM0 GS CTD5-09. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

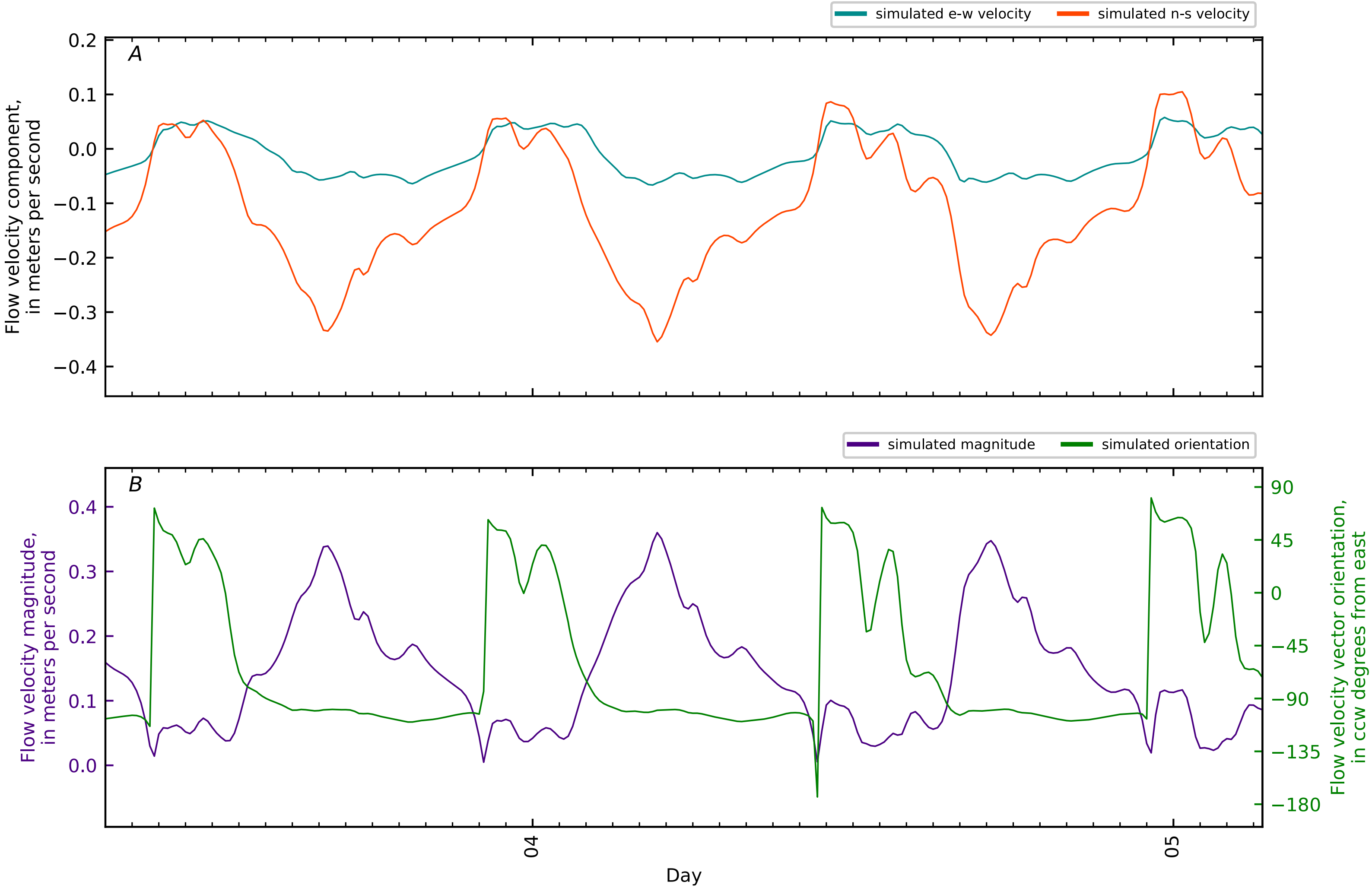

Figure B4-174. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 13, Penob Riv KM0 GS CTD5-10. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

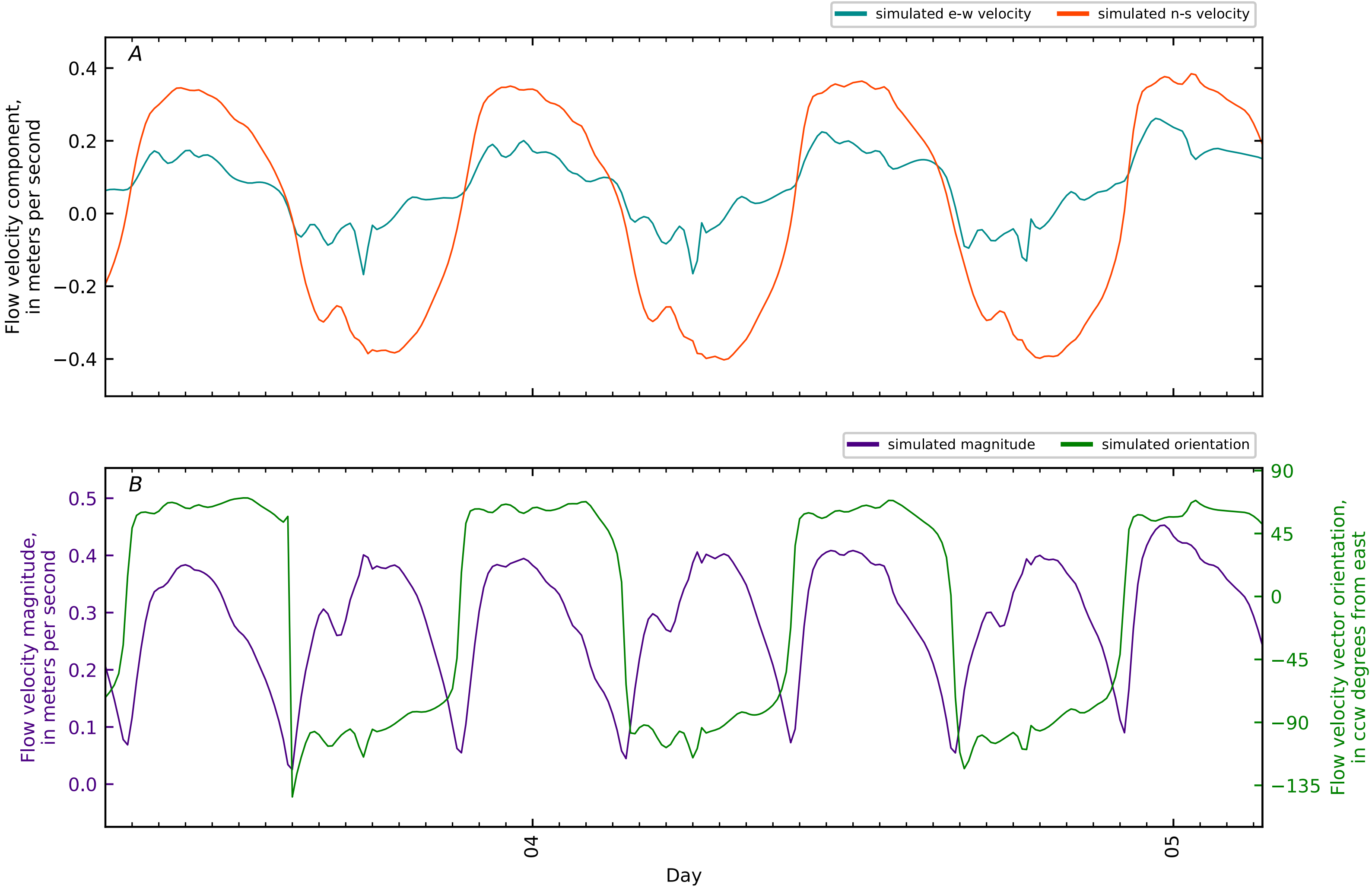

Figure B4-175. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 14, Penob Riv KM0.04 WHOI1 Ft Point 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

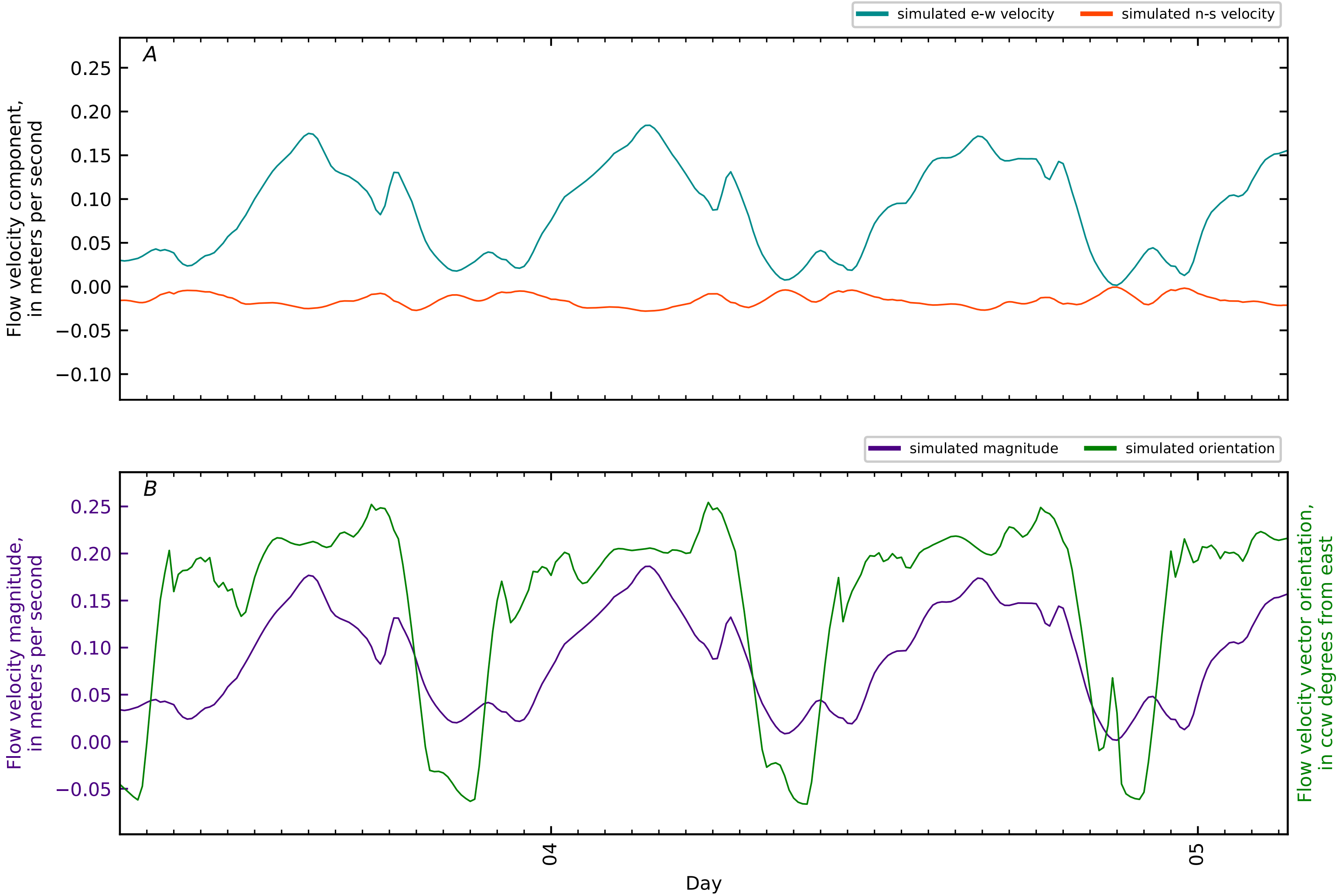

Figure B4-176. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 15, Penob Riv KM0.1 GS 442810068480101 at Ft. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

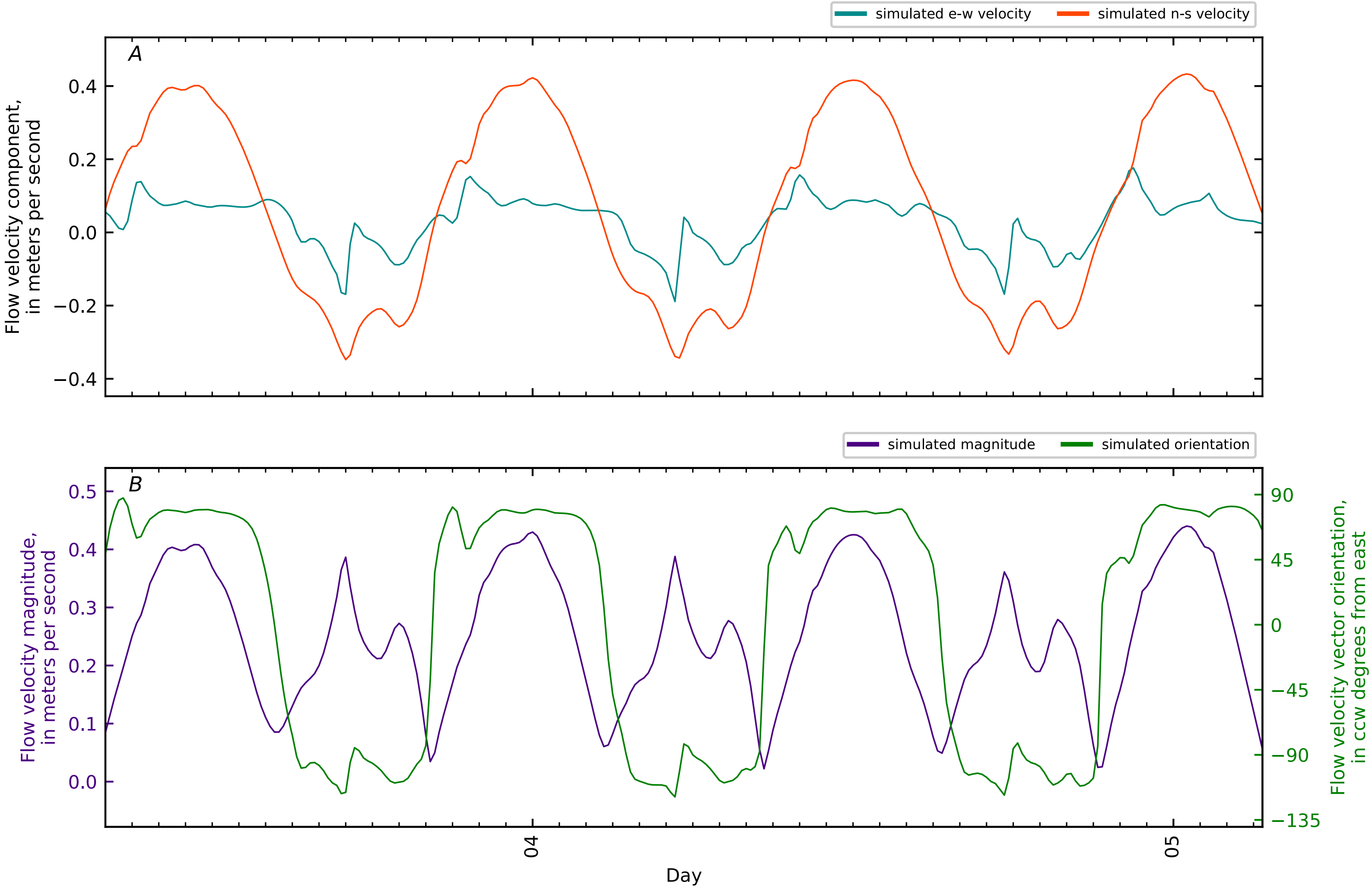

Figure B4-177. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 16, Penob Riv KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

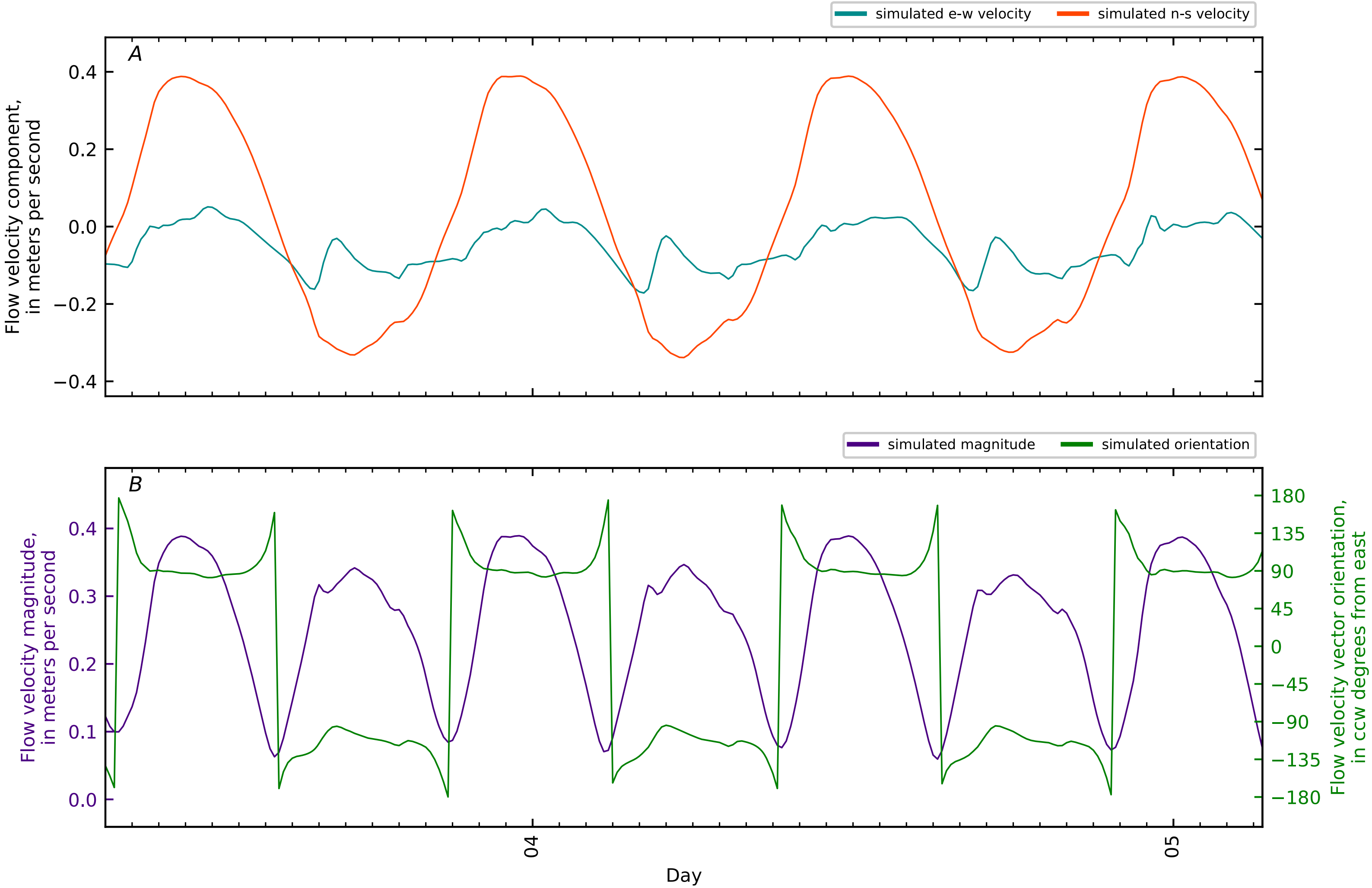

Figure B4-178. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 17, Penob Riv KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

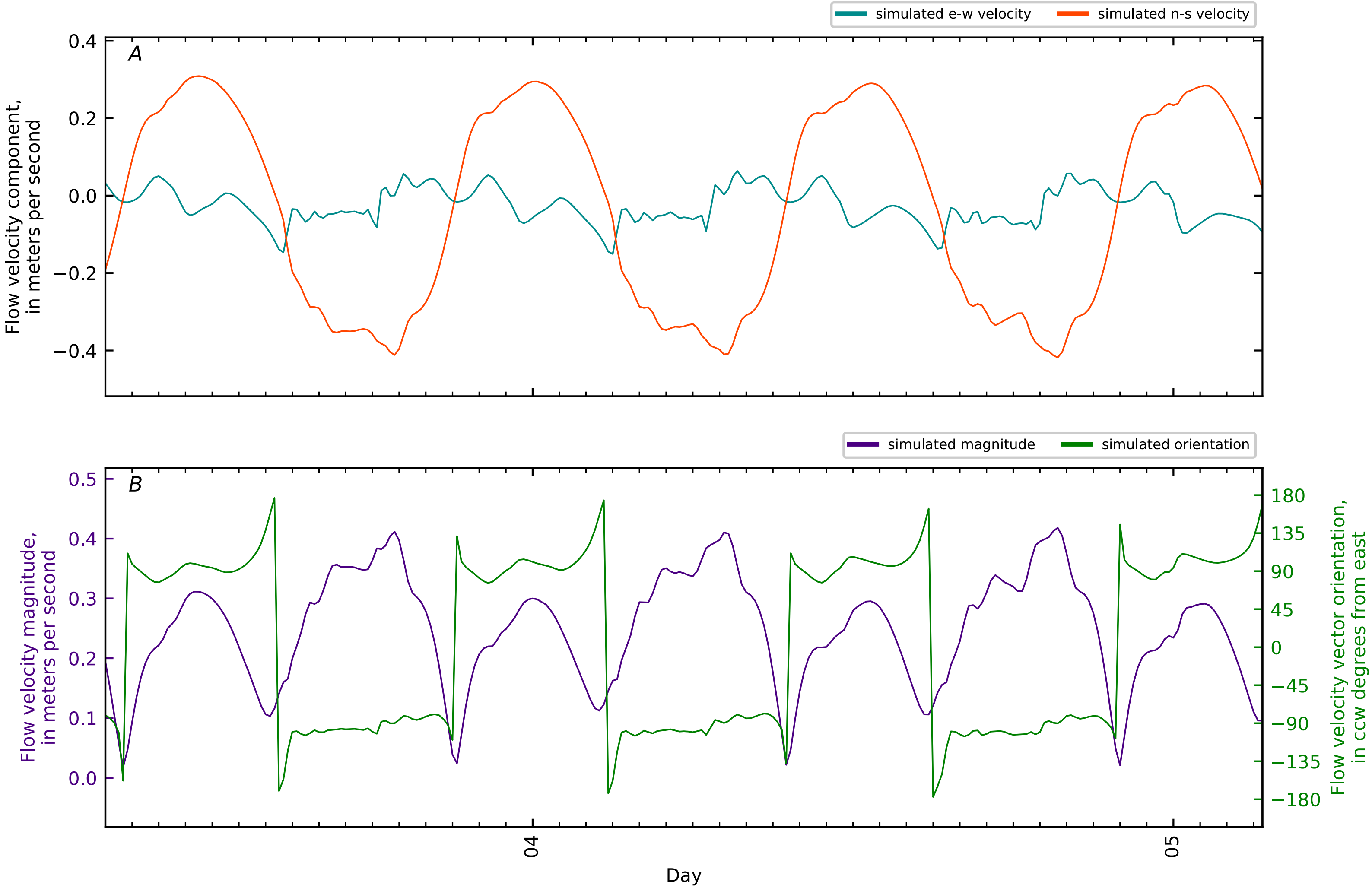

Figure B4-179. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 18, Penob Riv KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

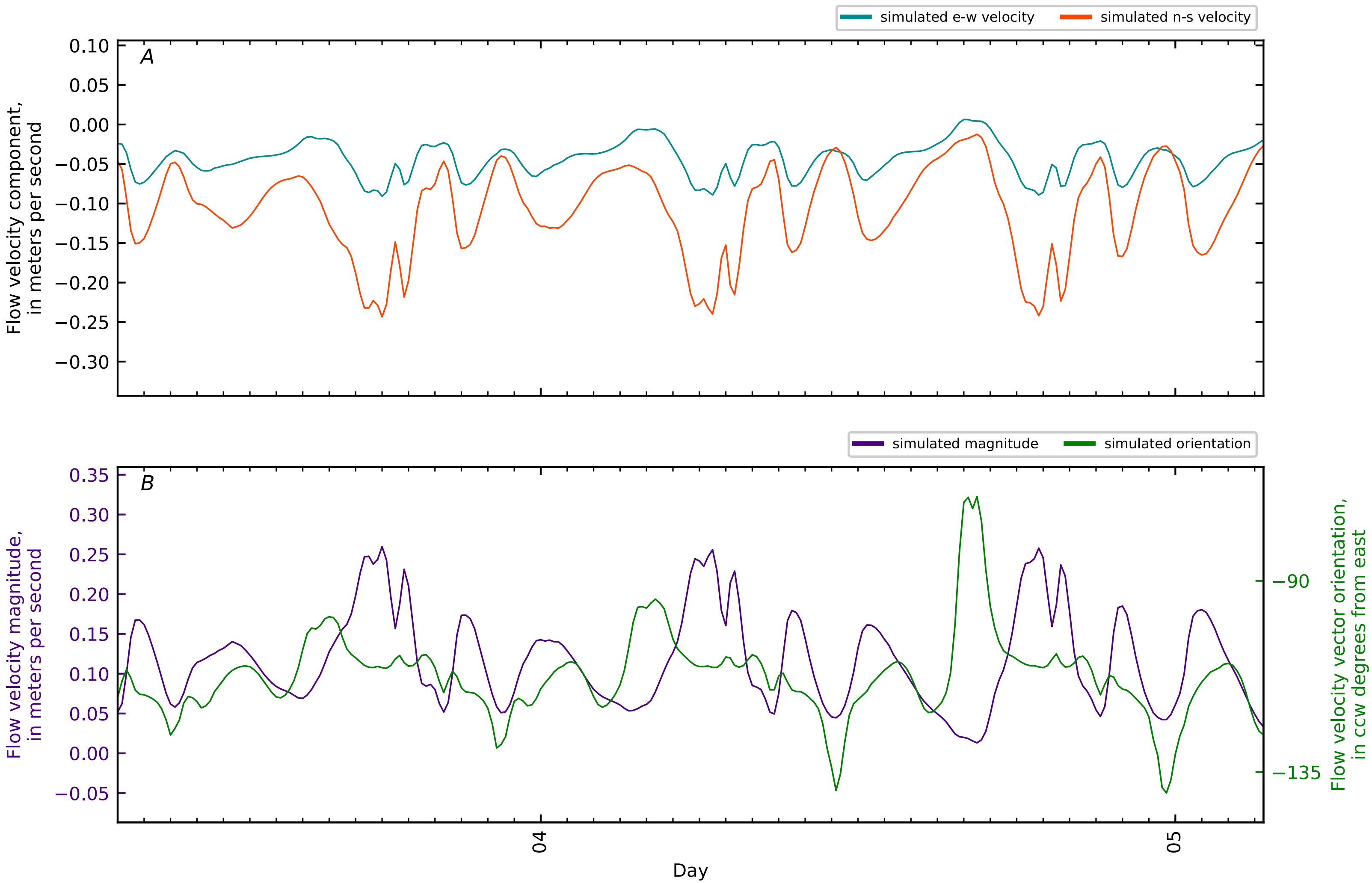

Figure B4-180. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 19, Penob Riv KM3.8 GS CTD3-01. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

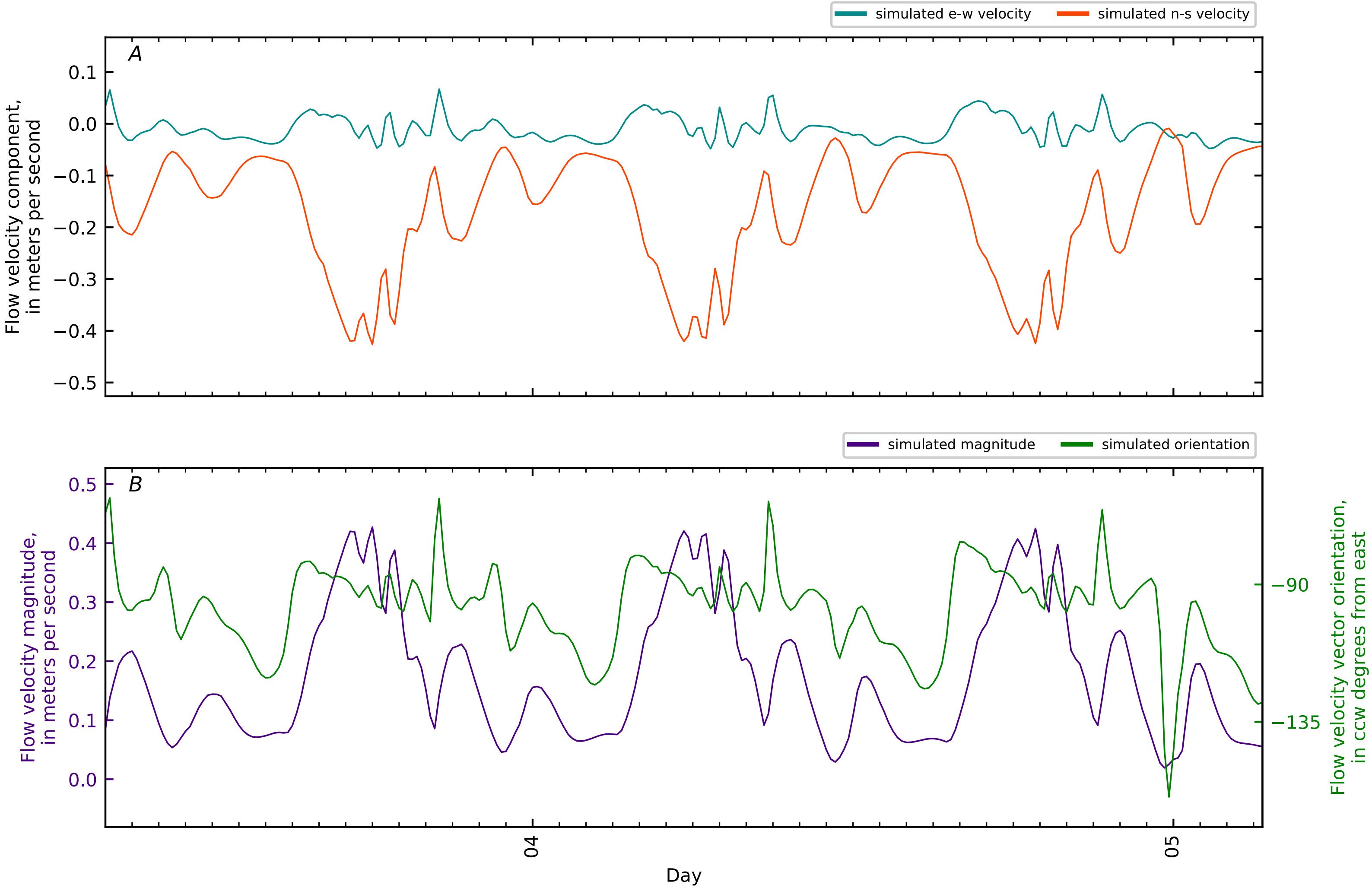

Figure B4-181. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 20, Penob Riv KM3.8 GS CTD3-02. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

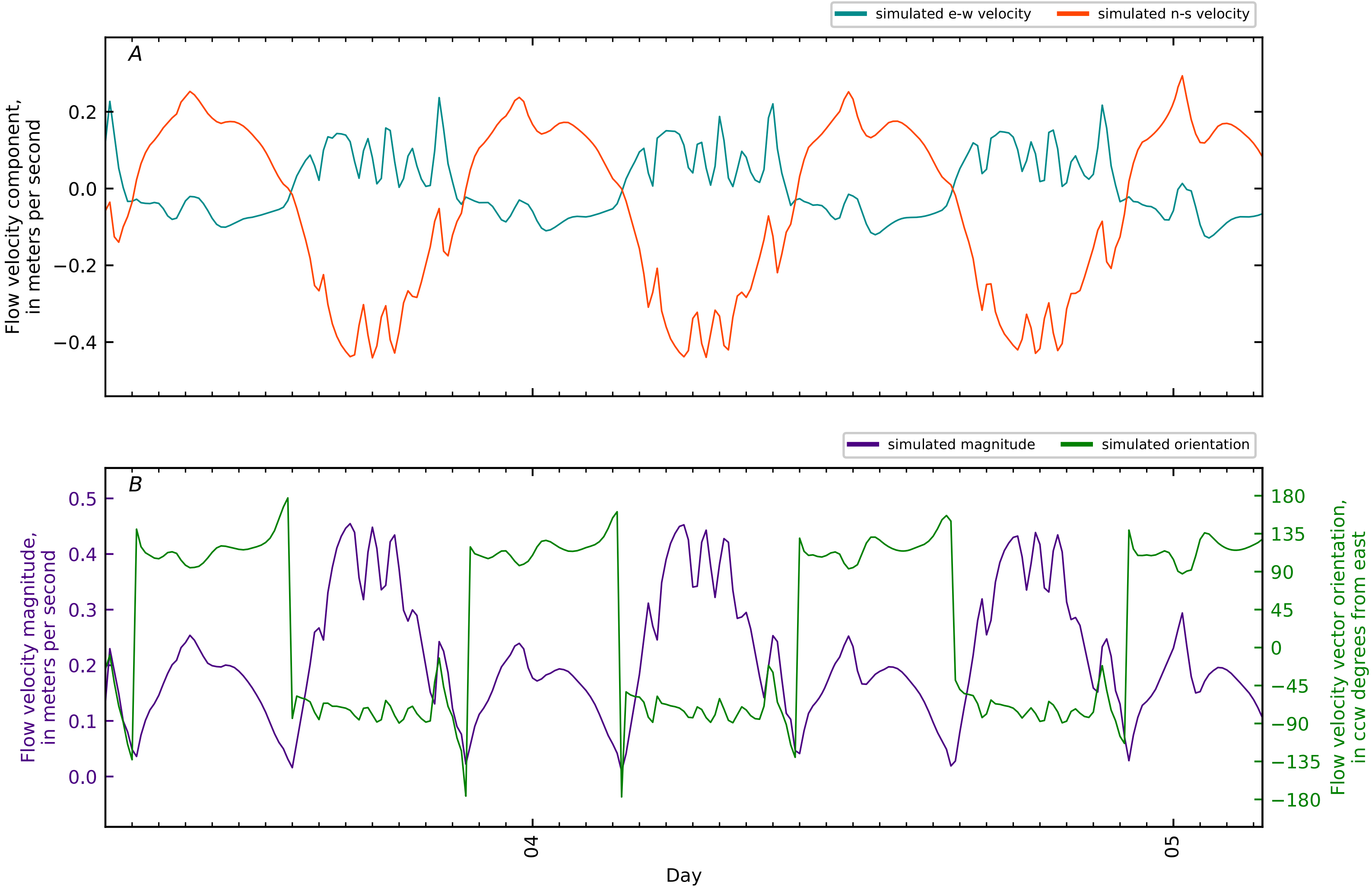

Figure B4-182. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 21, Penob Riv KM3.8 GS CTD3-03. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

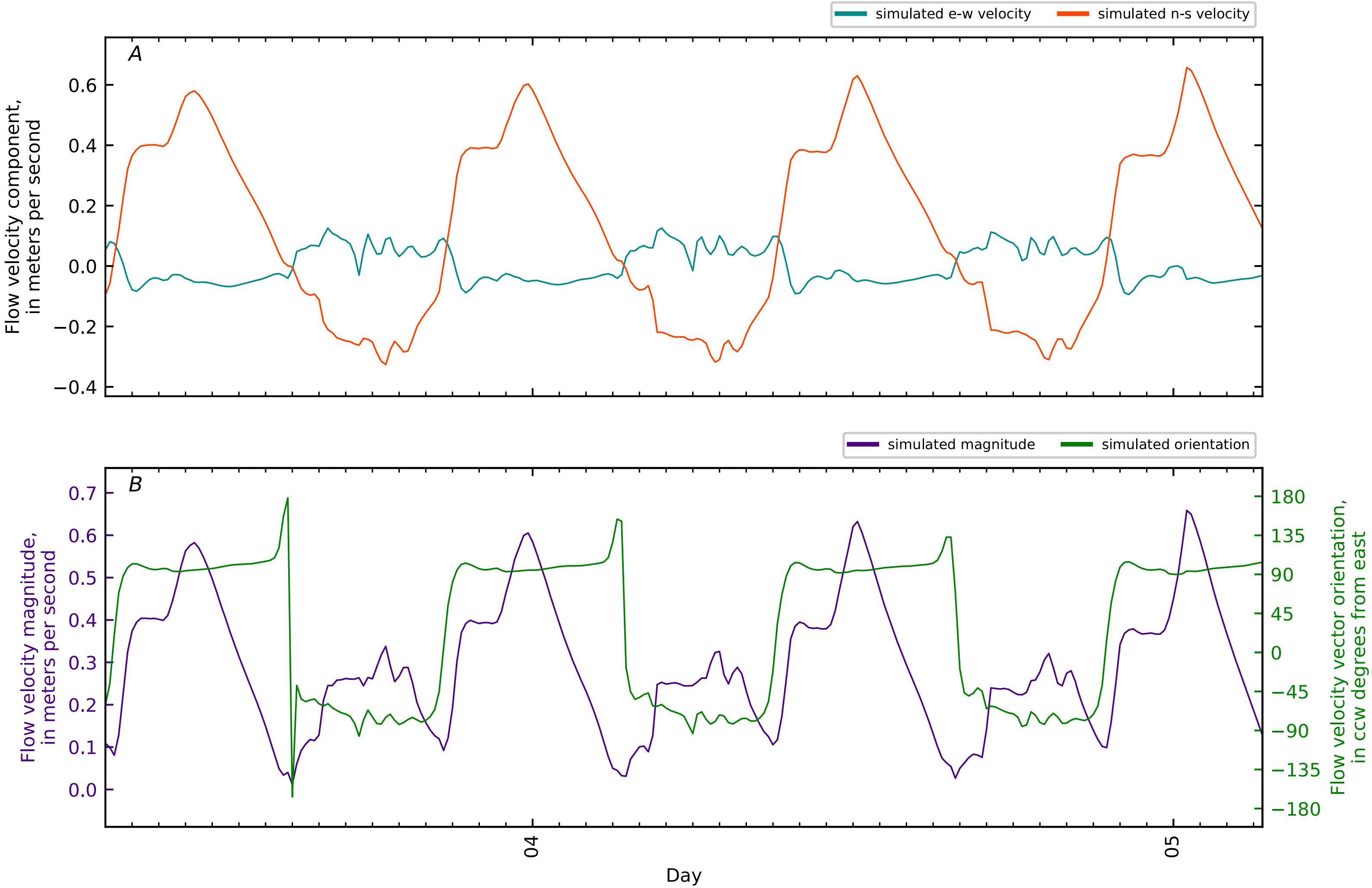

Figure B4-183. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 22, Penob Riv KM3.8 GS CTD3-04. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

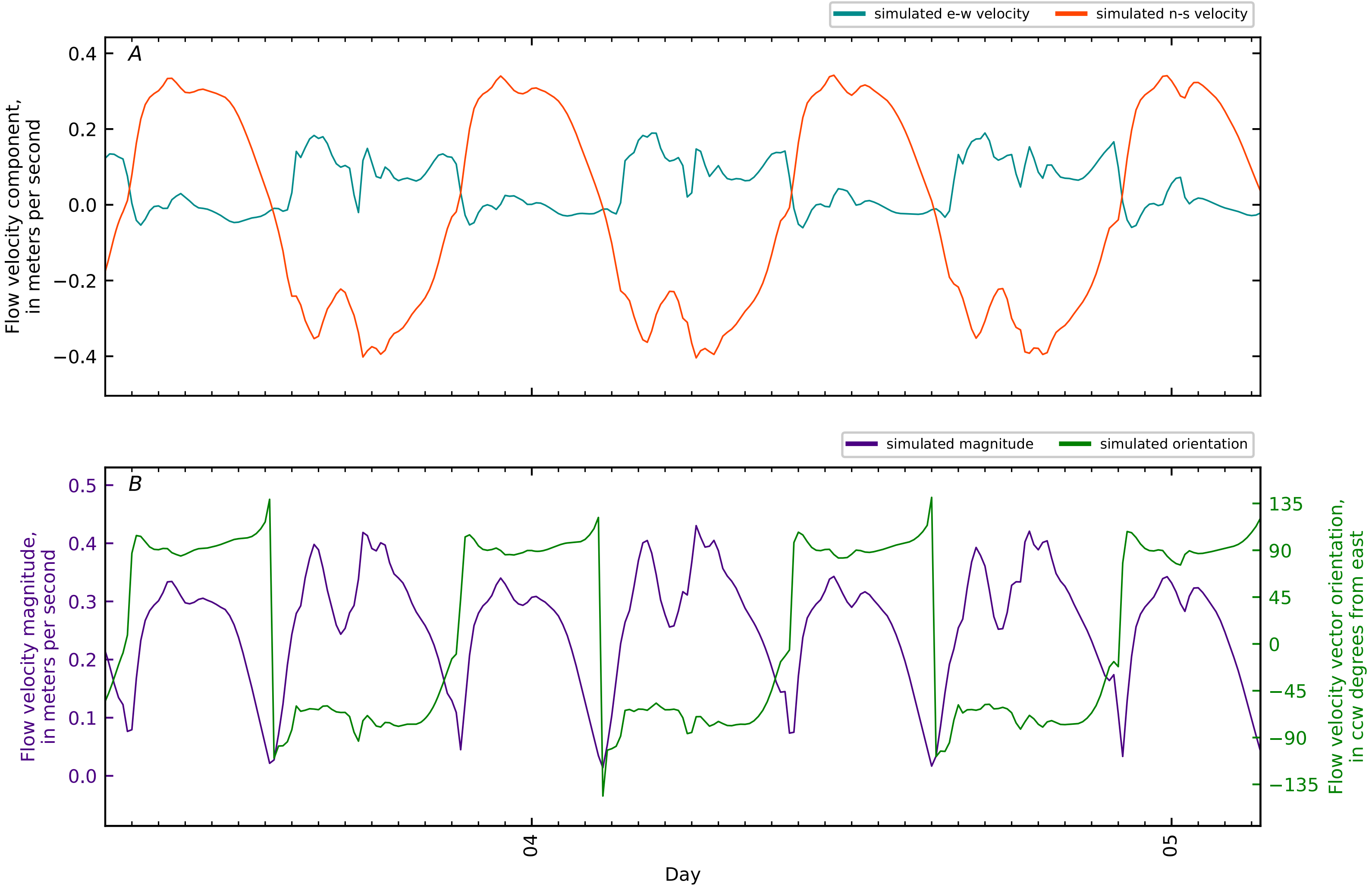

Figure B4-184. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 23, Penob Riv KM3.8 GS CTD3-05. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

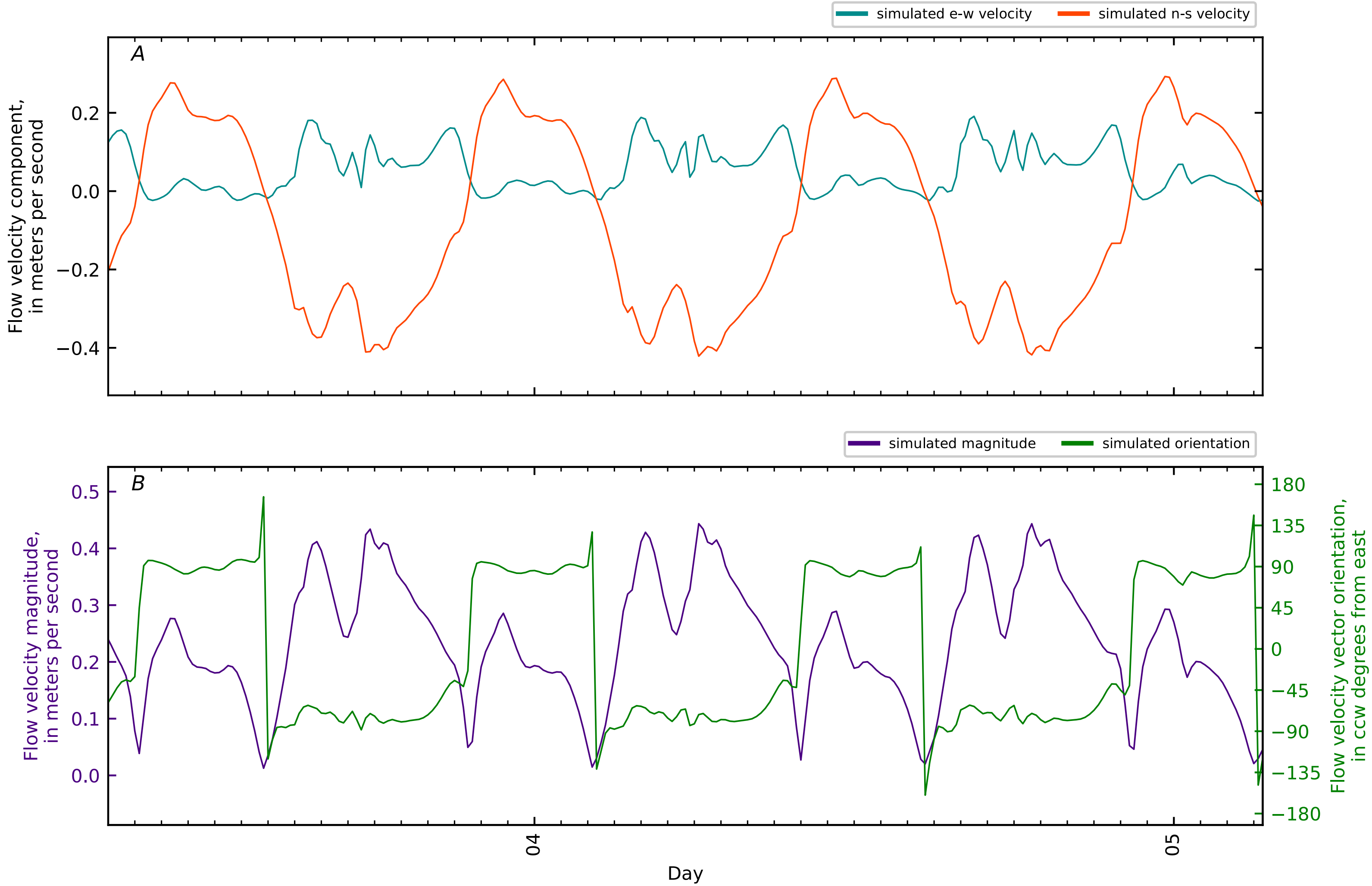

Figure B4-185. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 24, Penob Riv KM3.8 GS CTD3-06. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

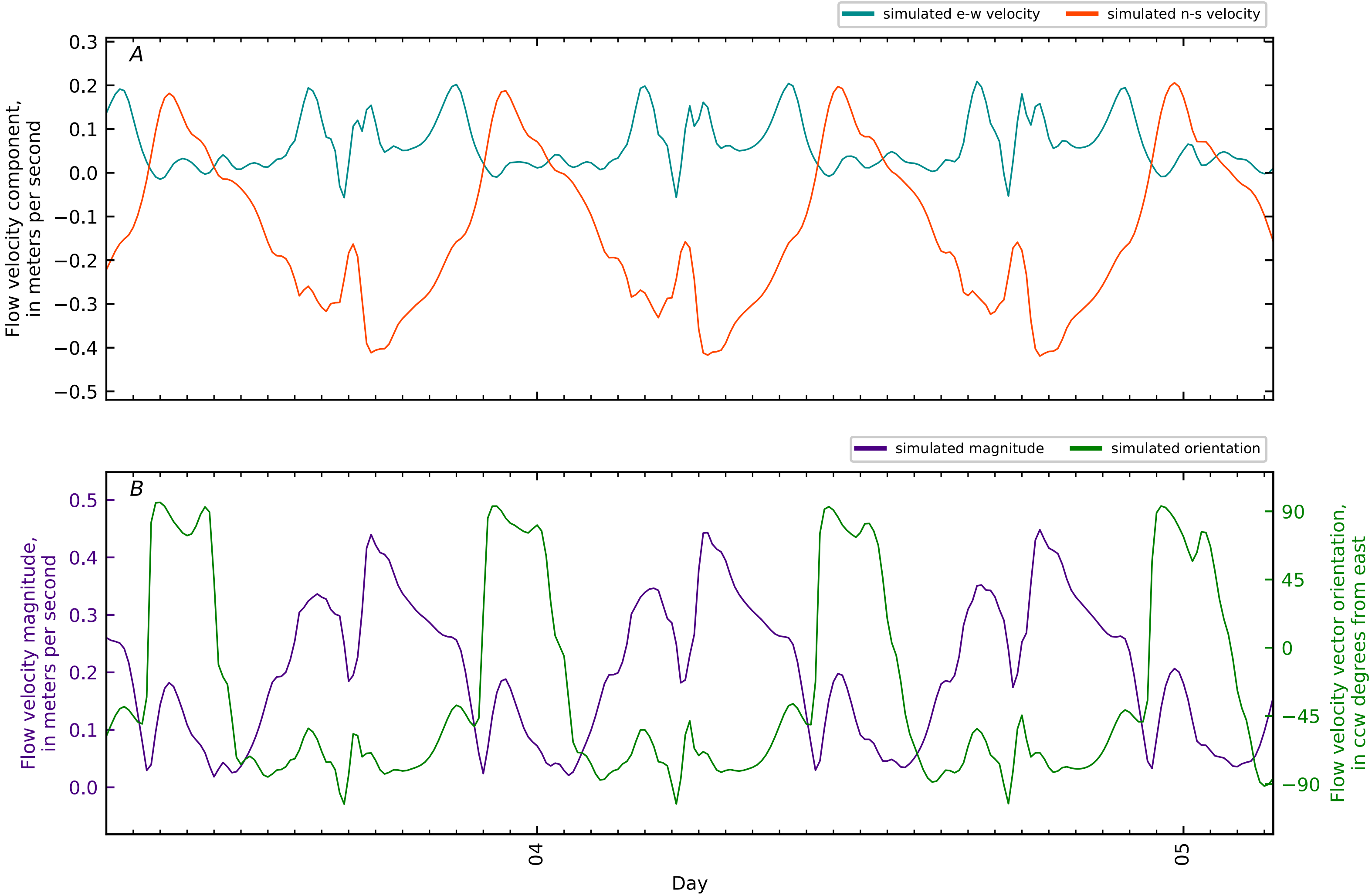

Figure B4-186. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 25, Penob Riv KM3.8 GS CTD3-07. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

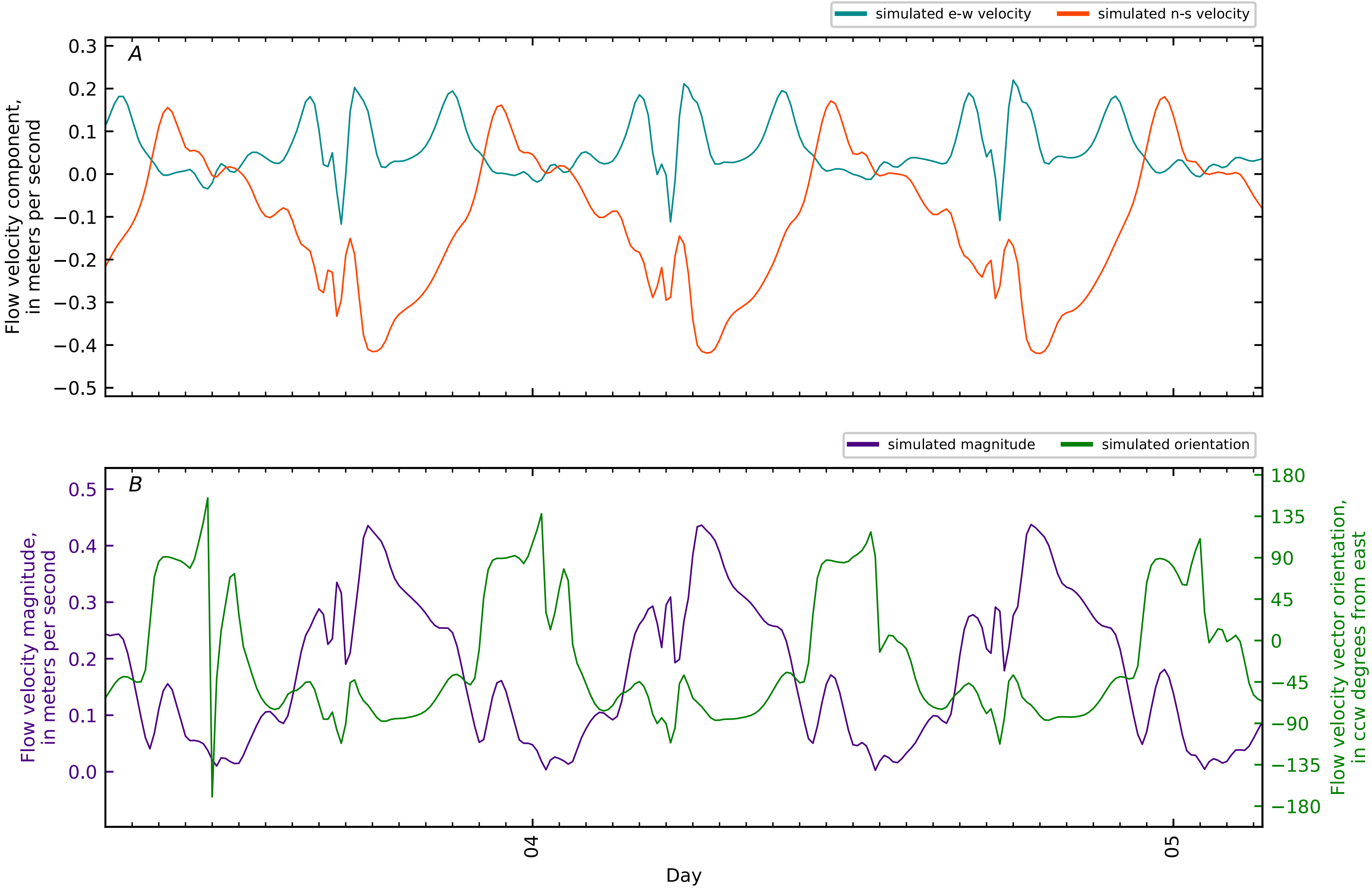

Figure B4-187. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 26, Penob Riv KM3.8 GS CTD3-08. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

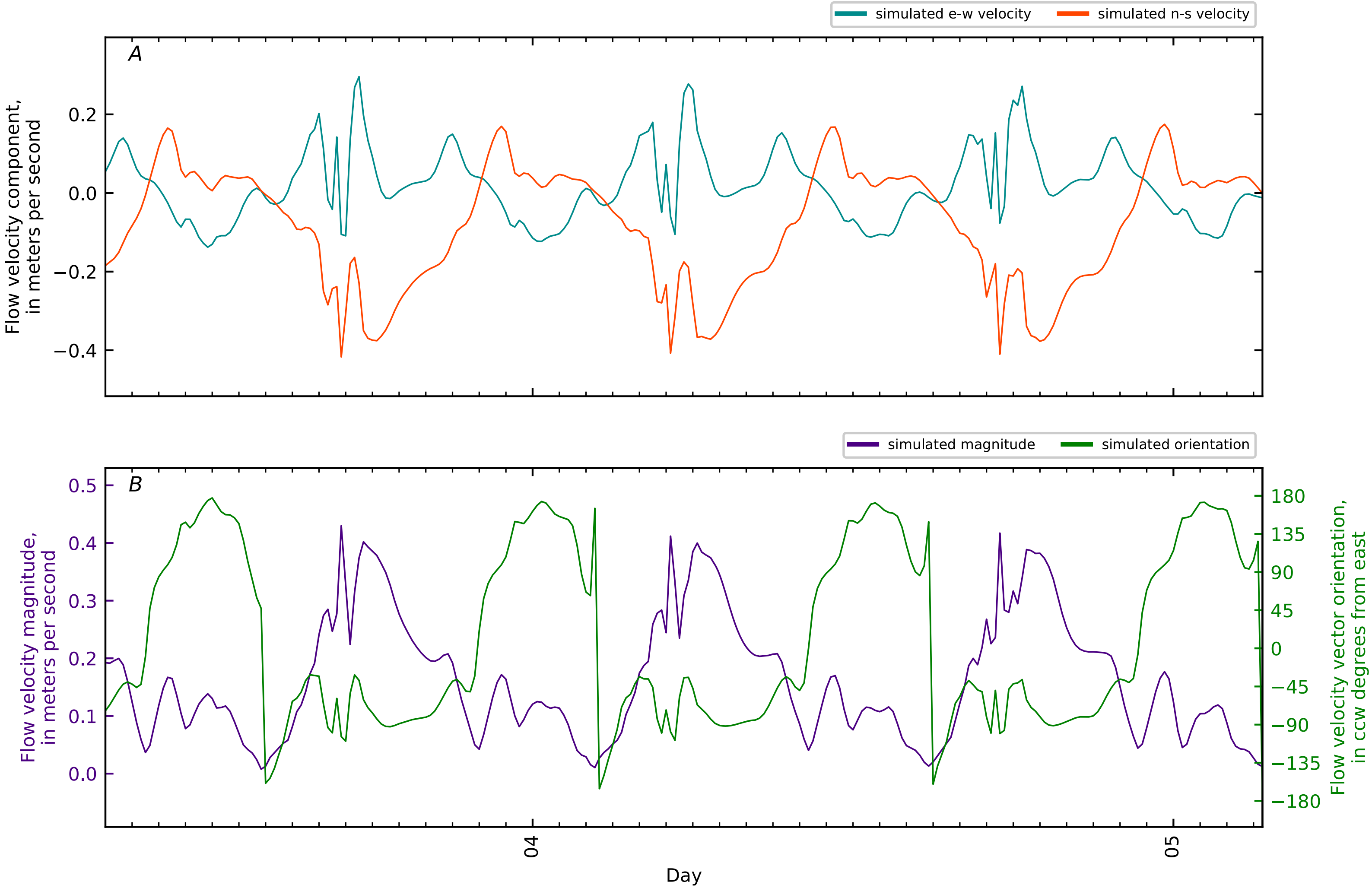

Figure B4-188. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 27, Penob Riv KM3.8 GS CTD3-09. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

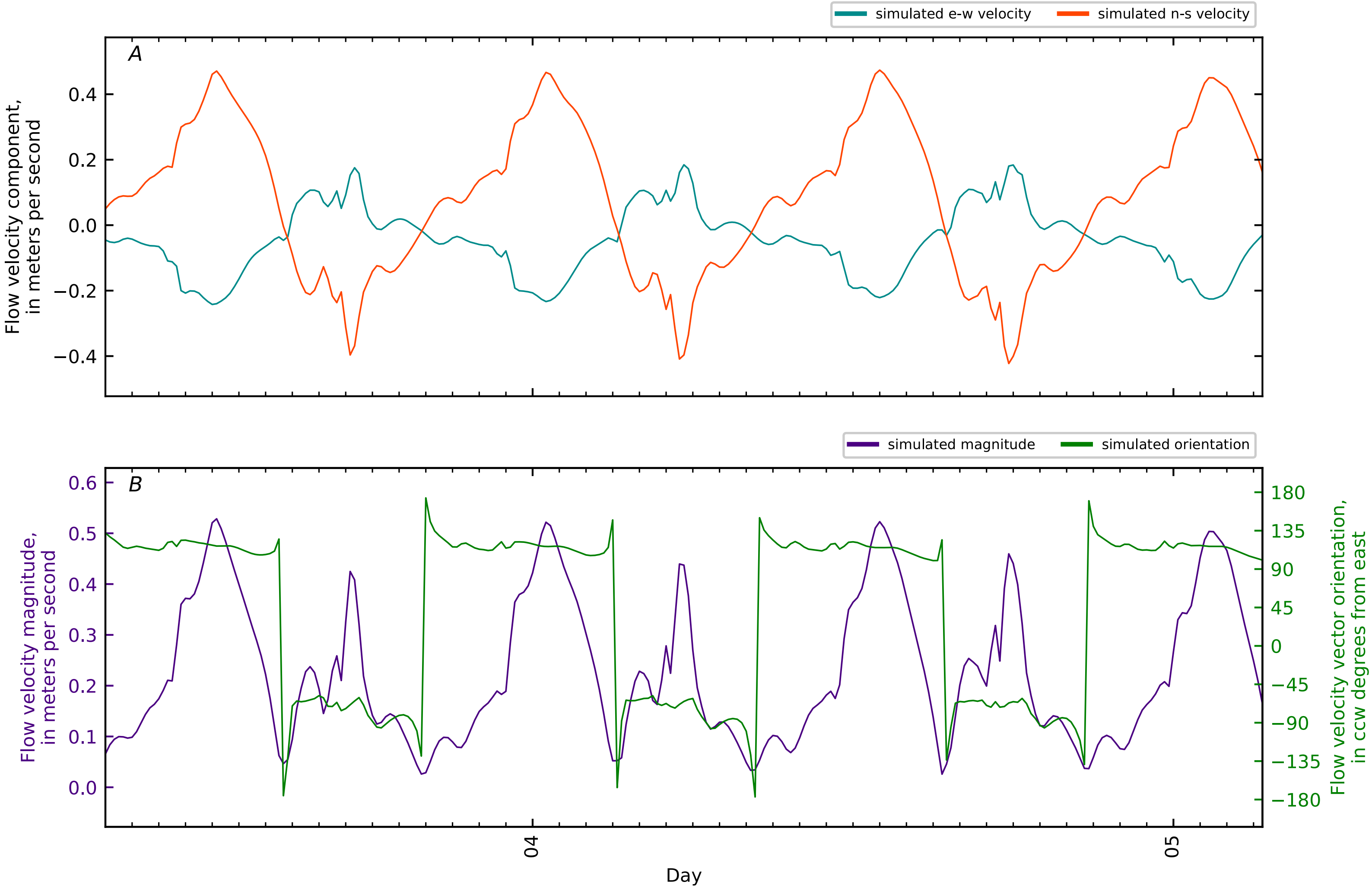

Figure B4-189. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 28, Penob Riv KM3.8 GS CTD3-10. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

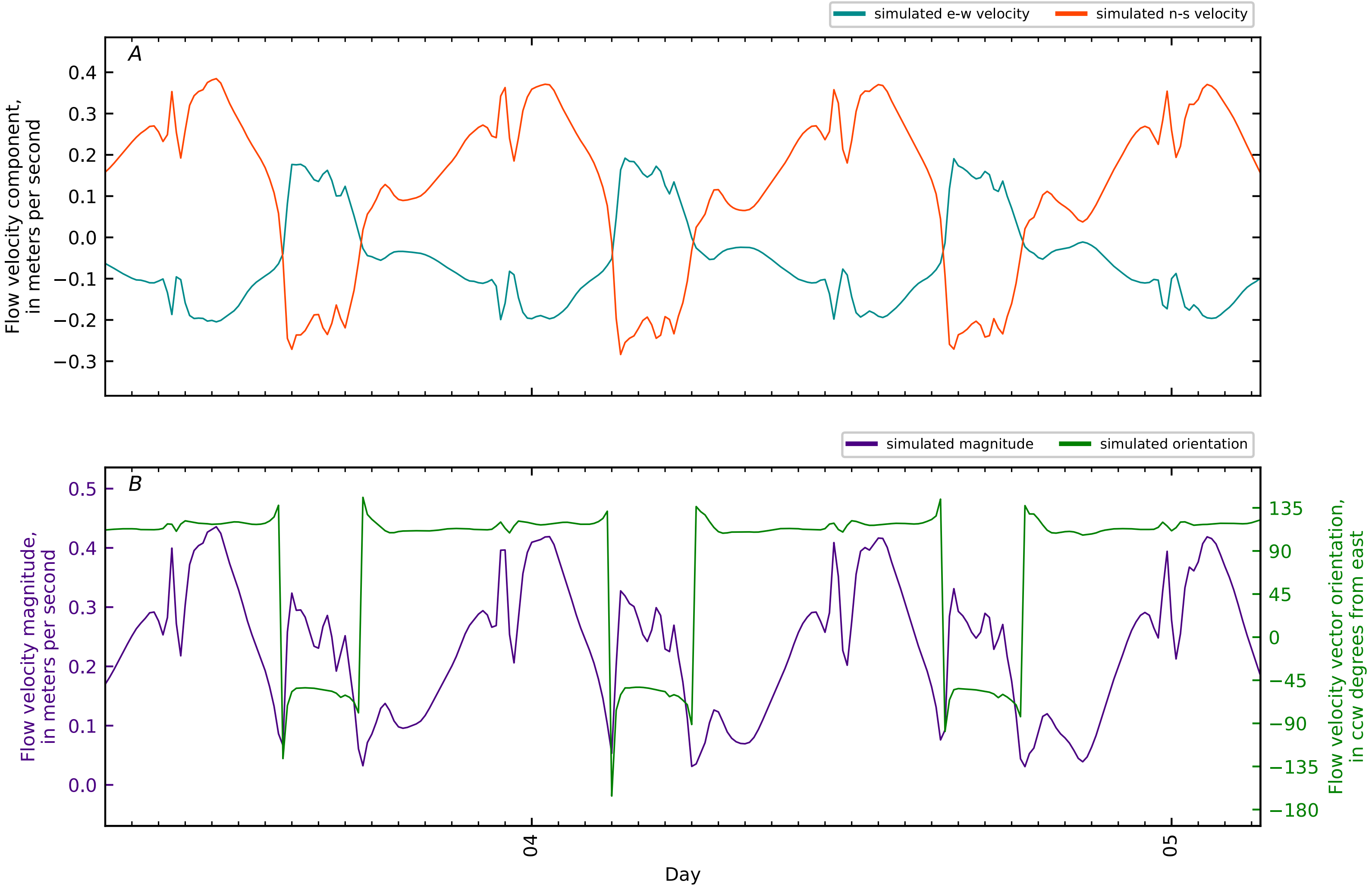

Figure B4-190. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 29, Penob Riv KM3.85 fmr NOAA gage Gross Poi. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

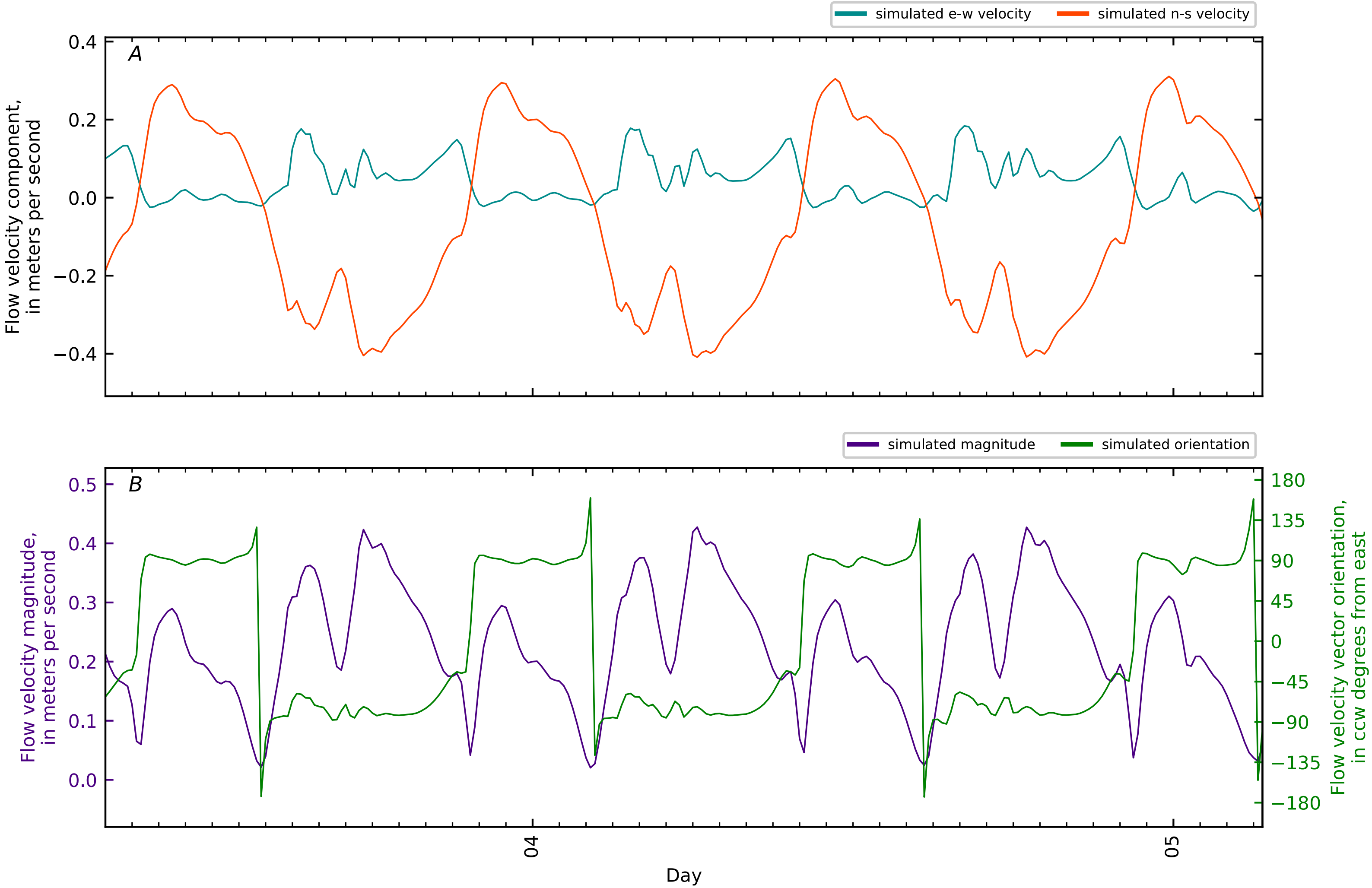

Figure B4-191. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 30, Penob Riv KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

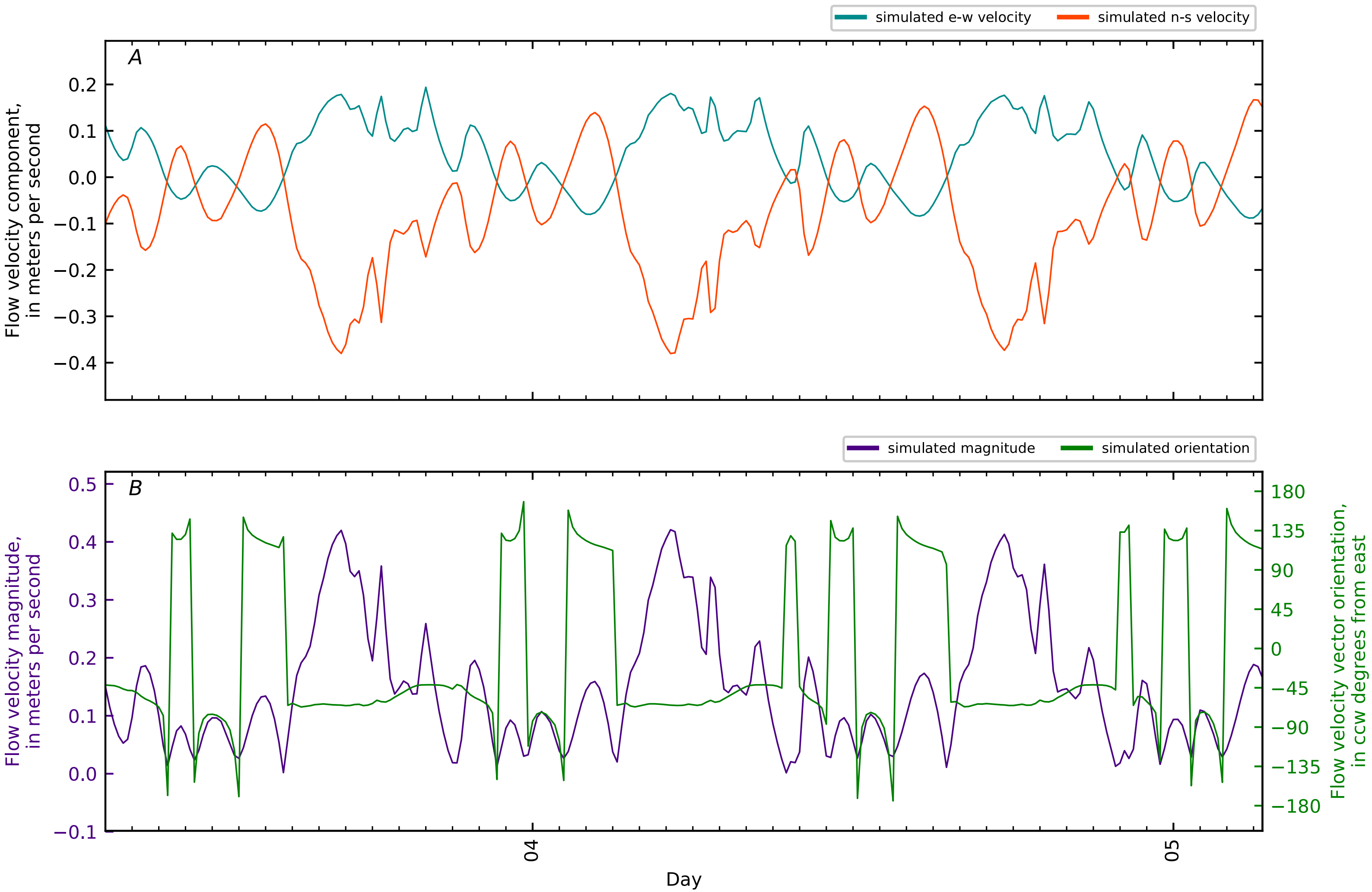

Figure B4-192. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 31, Penob Riv KM4.3 fmr NOAA gage Sandy Beac. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

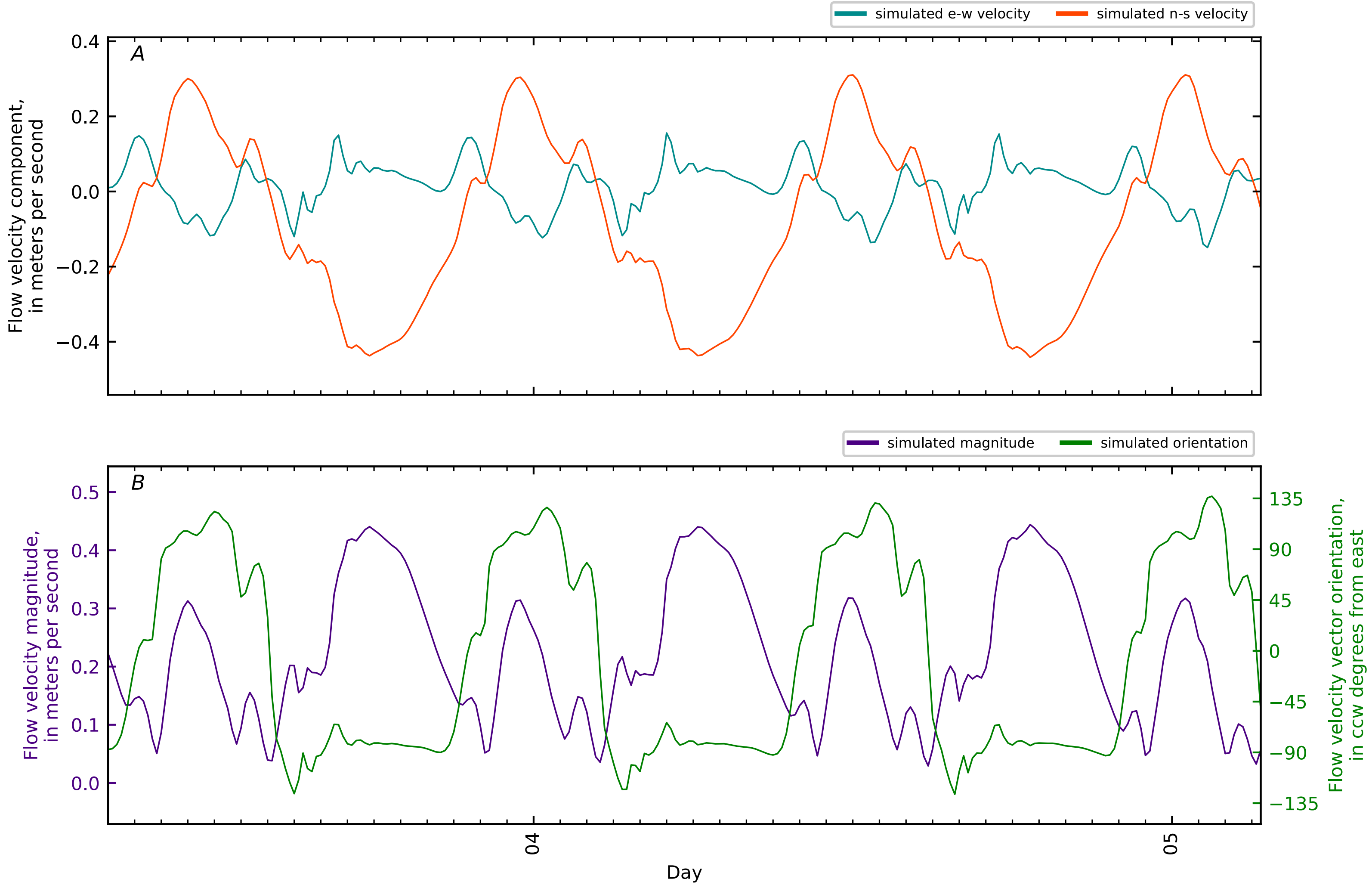

Figure B4-193. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 32, Penob Riv KM5. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

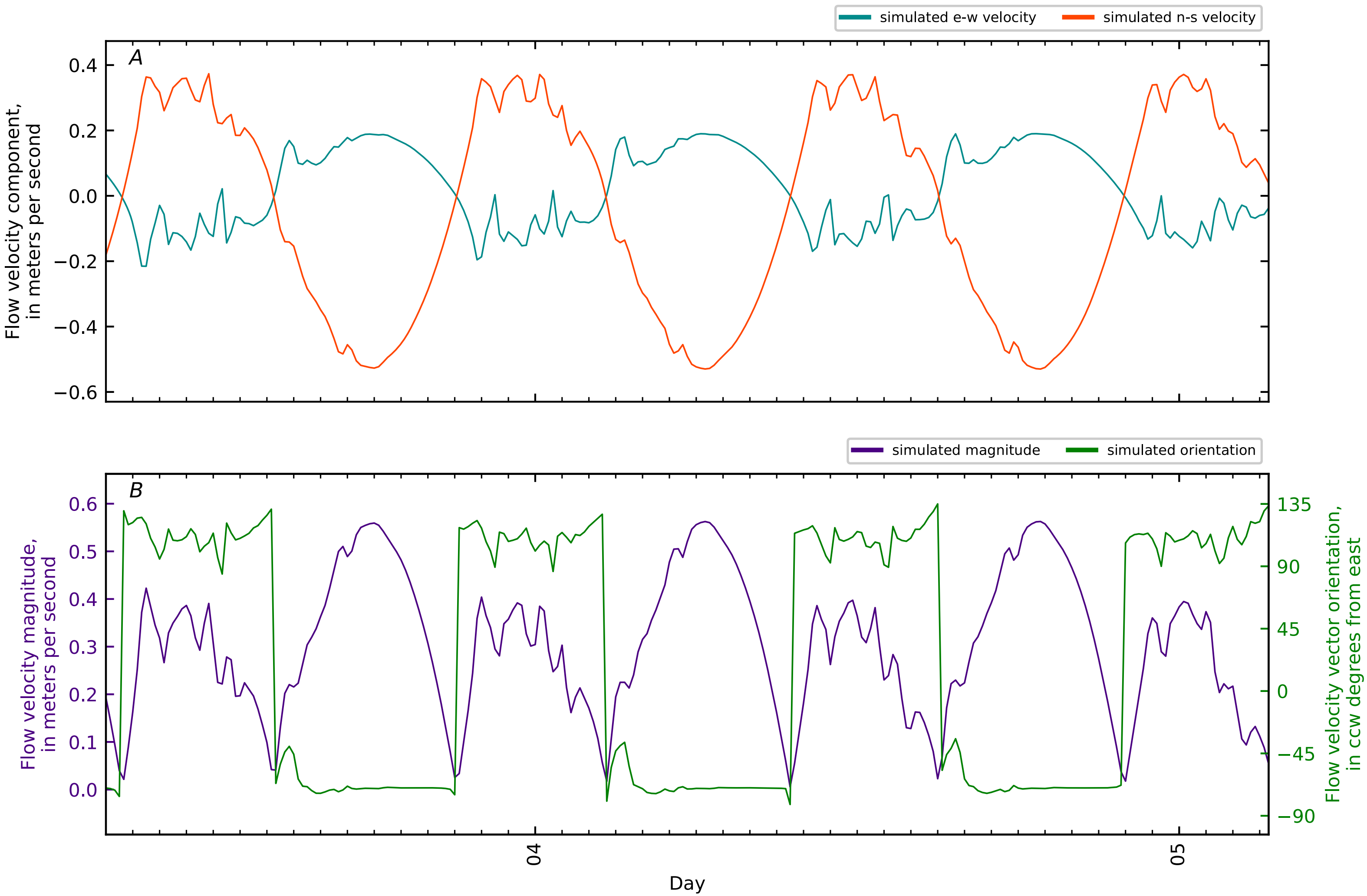

Figure B4-194. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 33, Penob Riv KM6. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

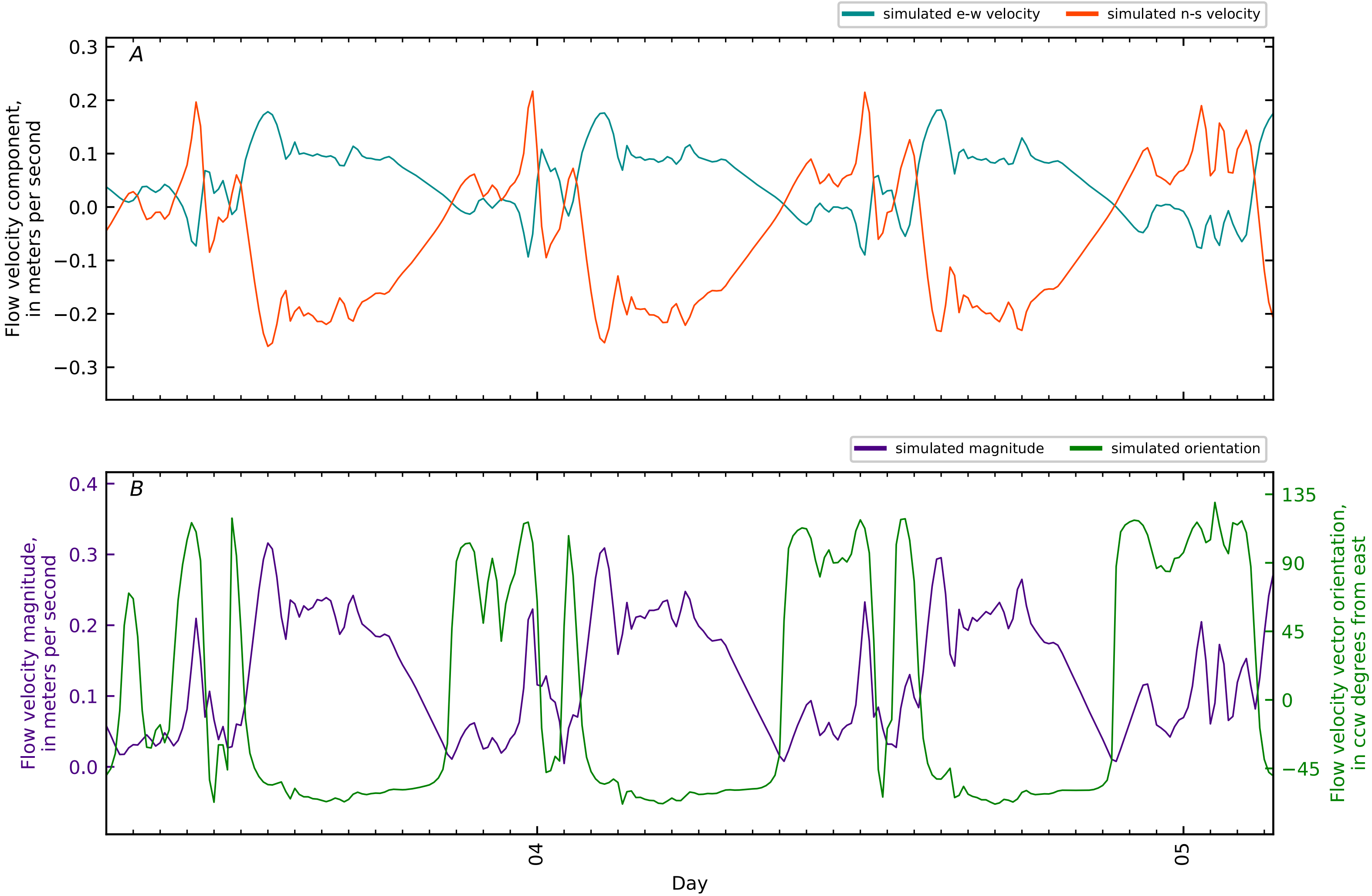

Figure B4-195. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 34, Penob Riv KM6 ERDC11 VW-MU14-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

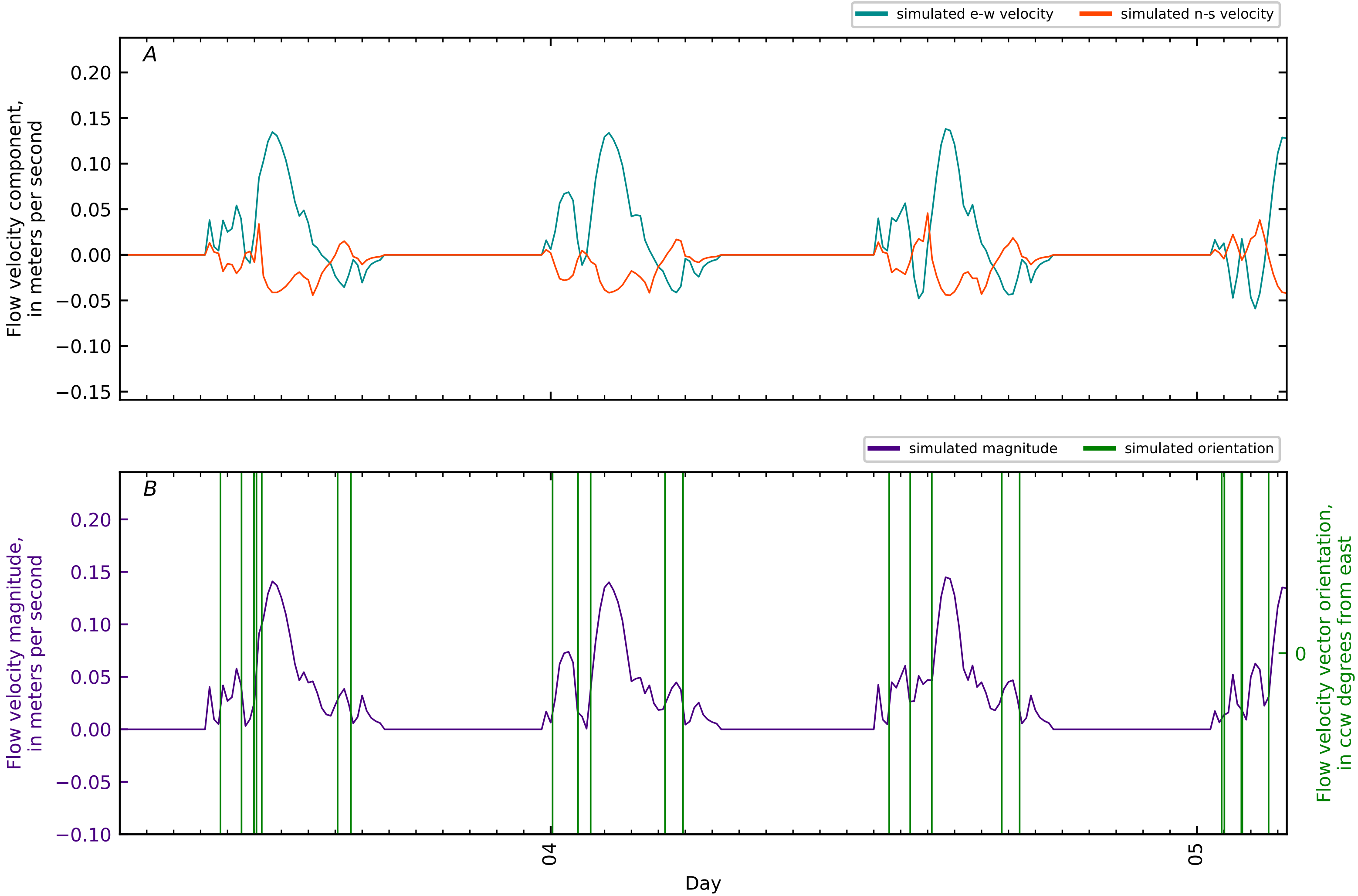

Figure B4-196. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 35, Penob Riv KM6.05 ERDC10 VW-MU7-SF1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

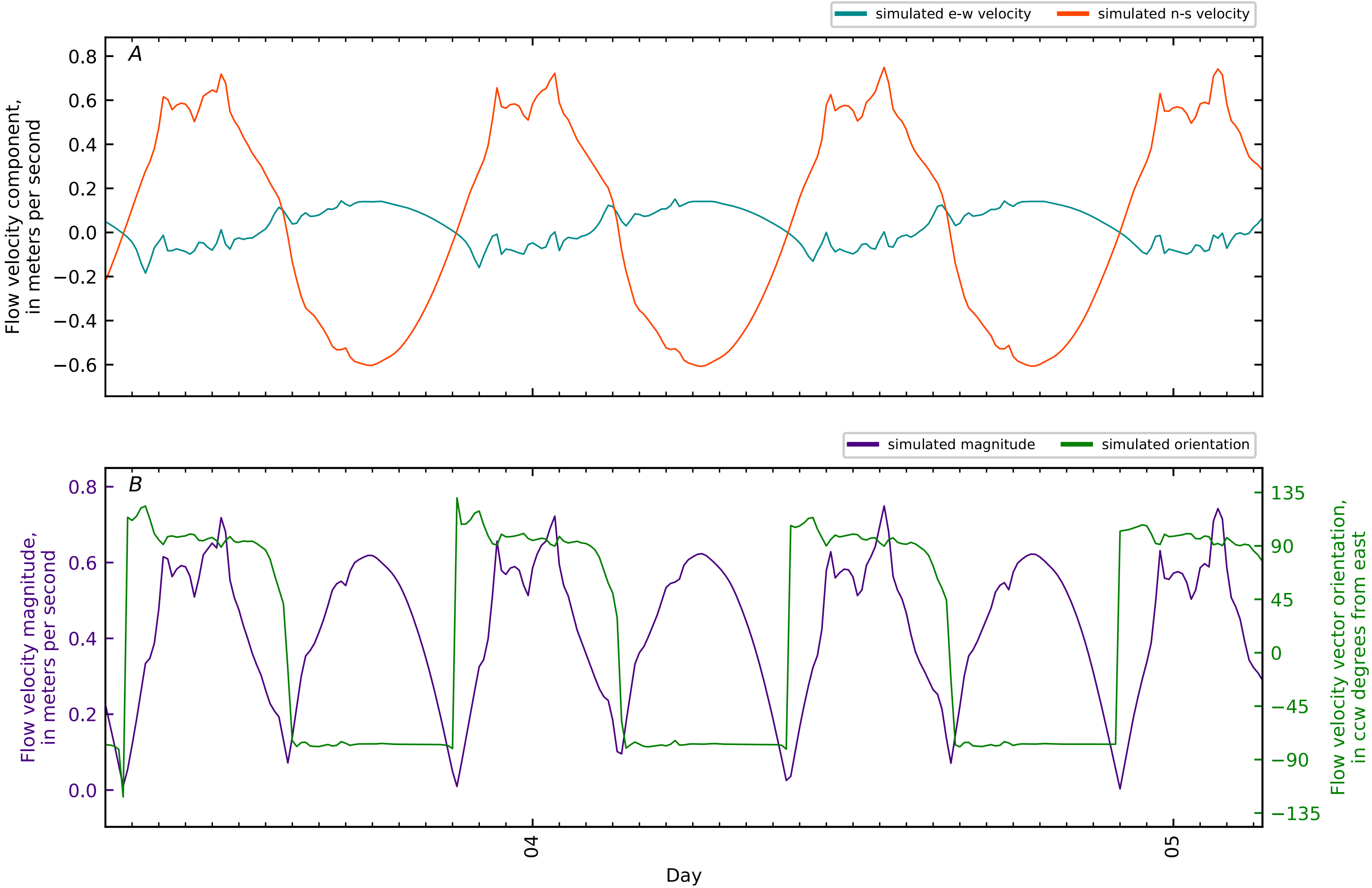

Figure B4-197. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 36, Penob Riv KM6.1 WHOI5 Verona Island 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

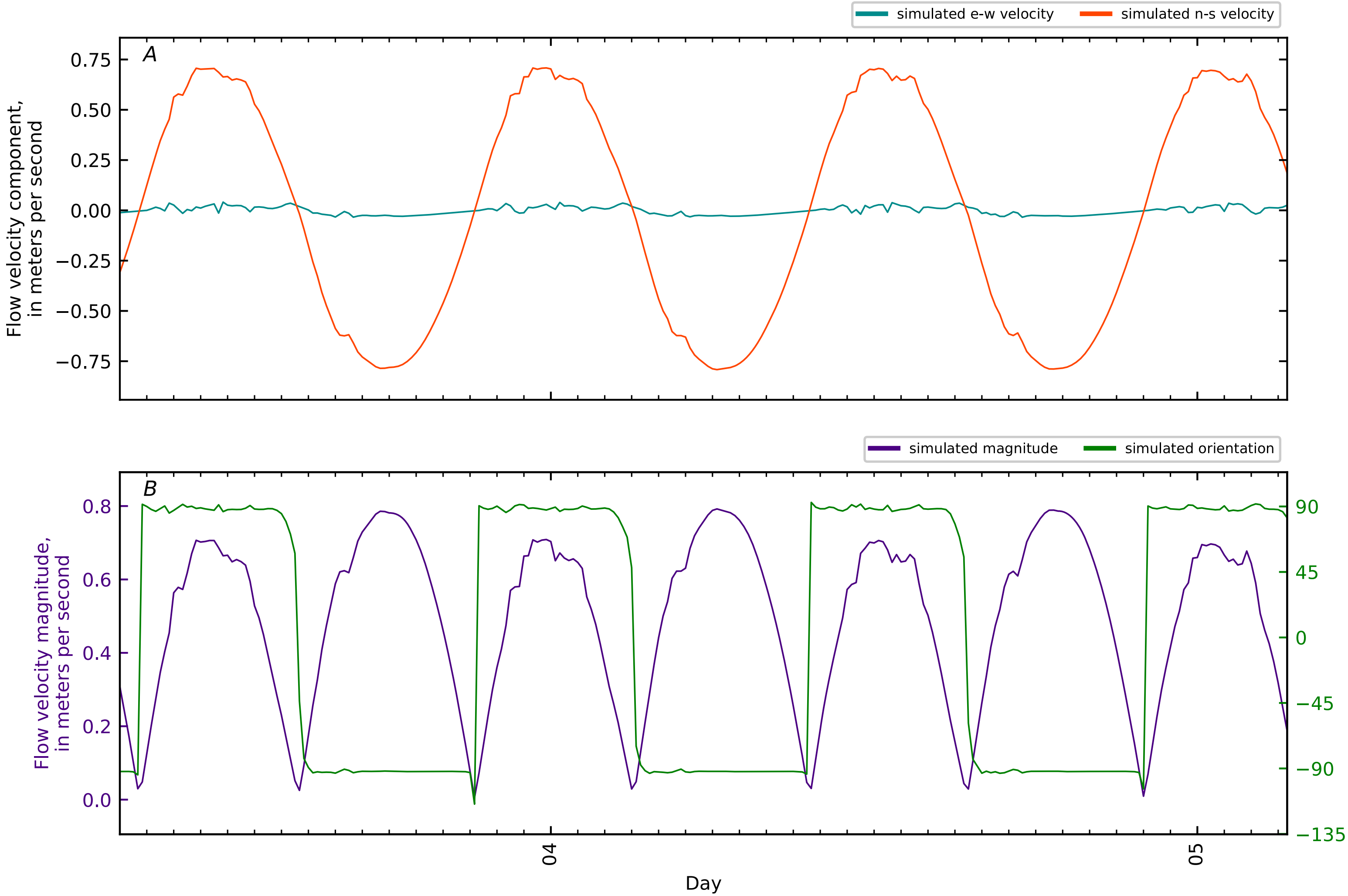

Figure B4-198. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 37, Penob Riv KM7. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

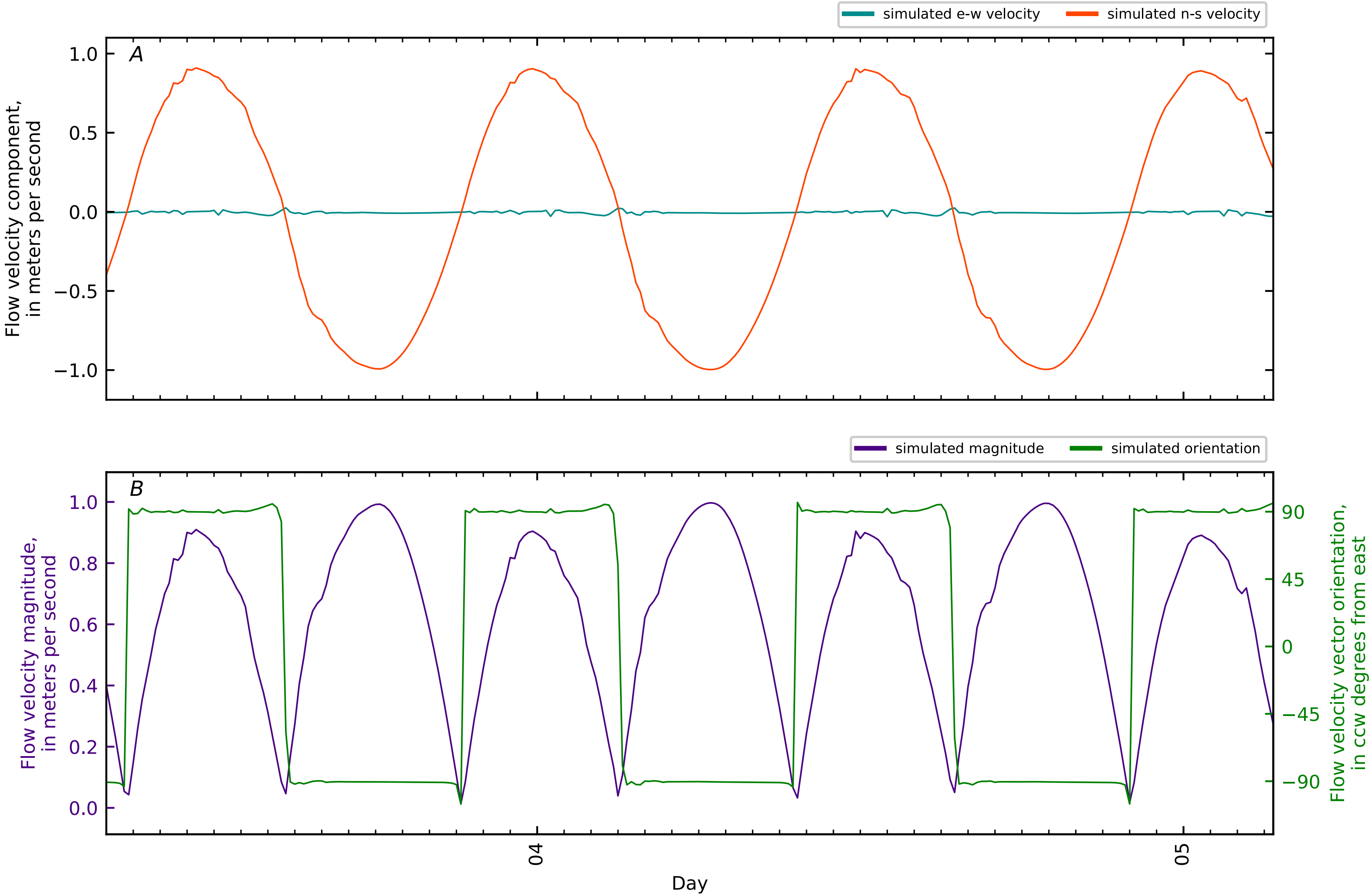

Figure B4-199. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 38, Penob Riv KM8. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

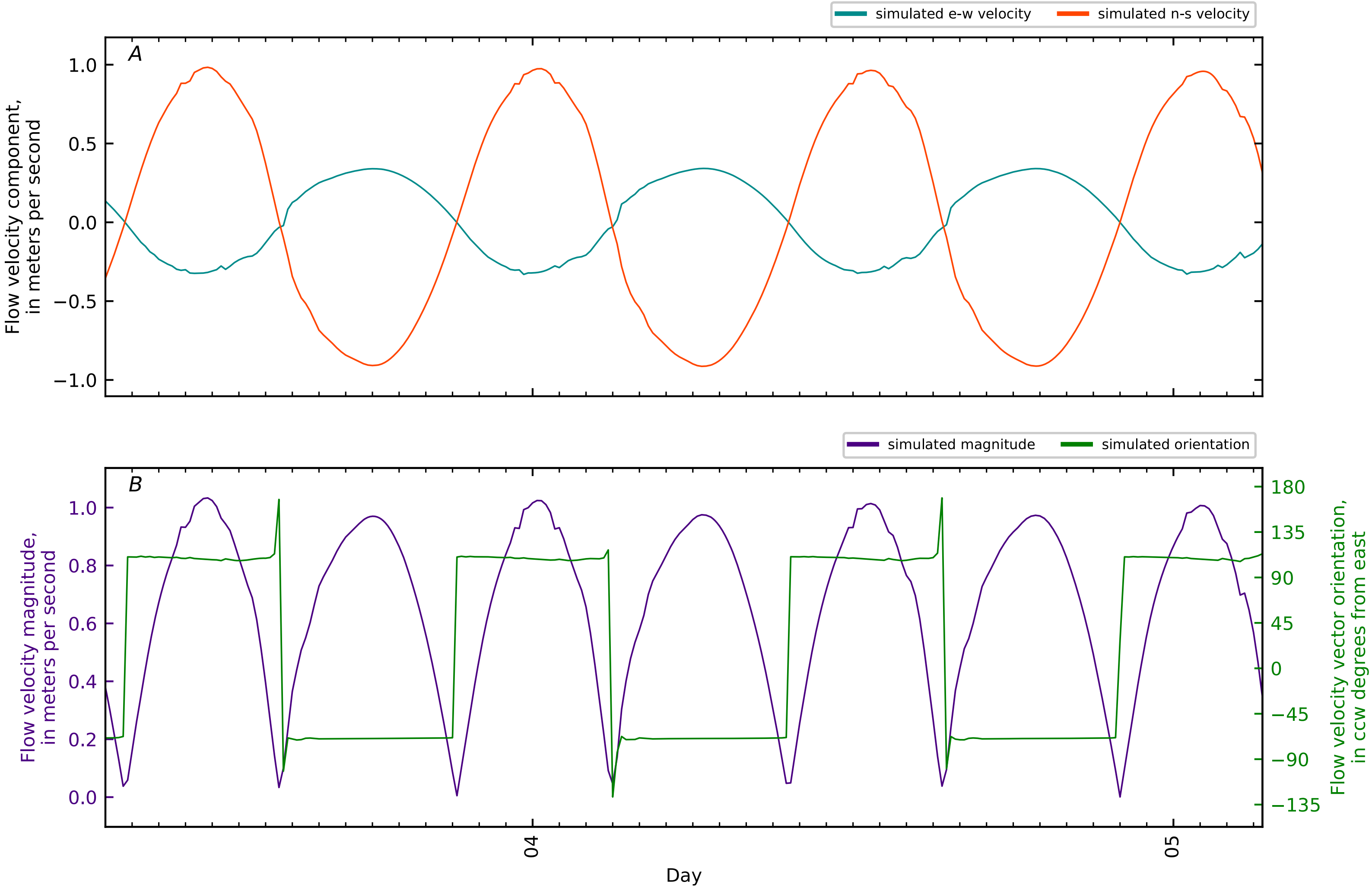

Figure B4-200. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 39, Penob Riv KM9. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

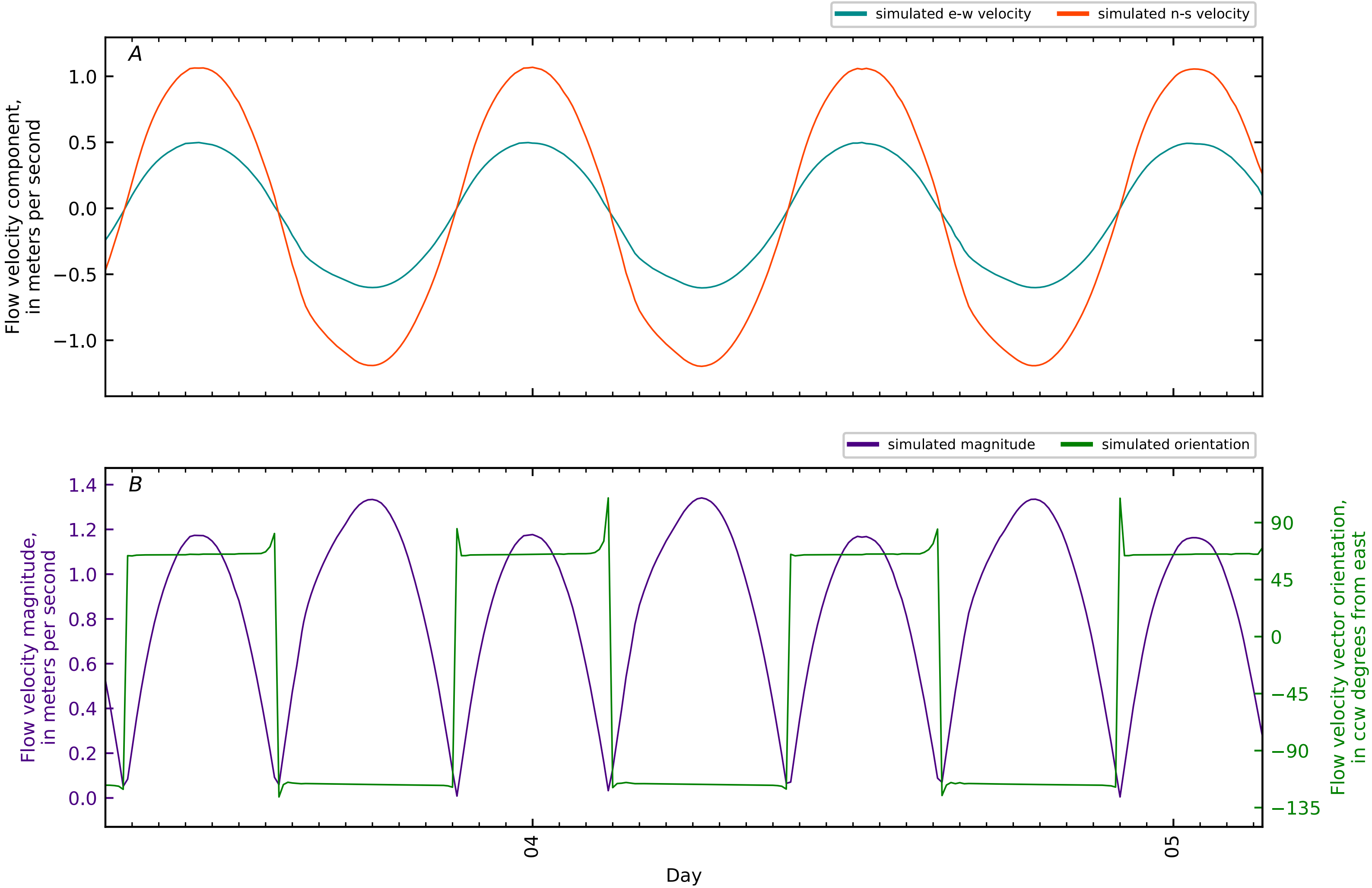

Figure B4-201. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 40, Penob Riv KM10. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

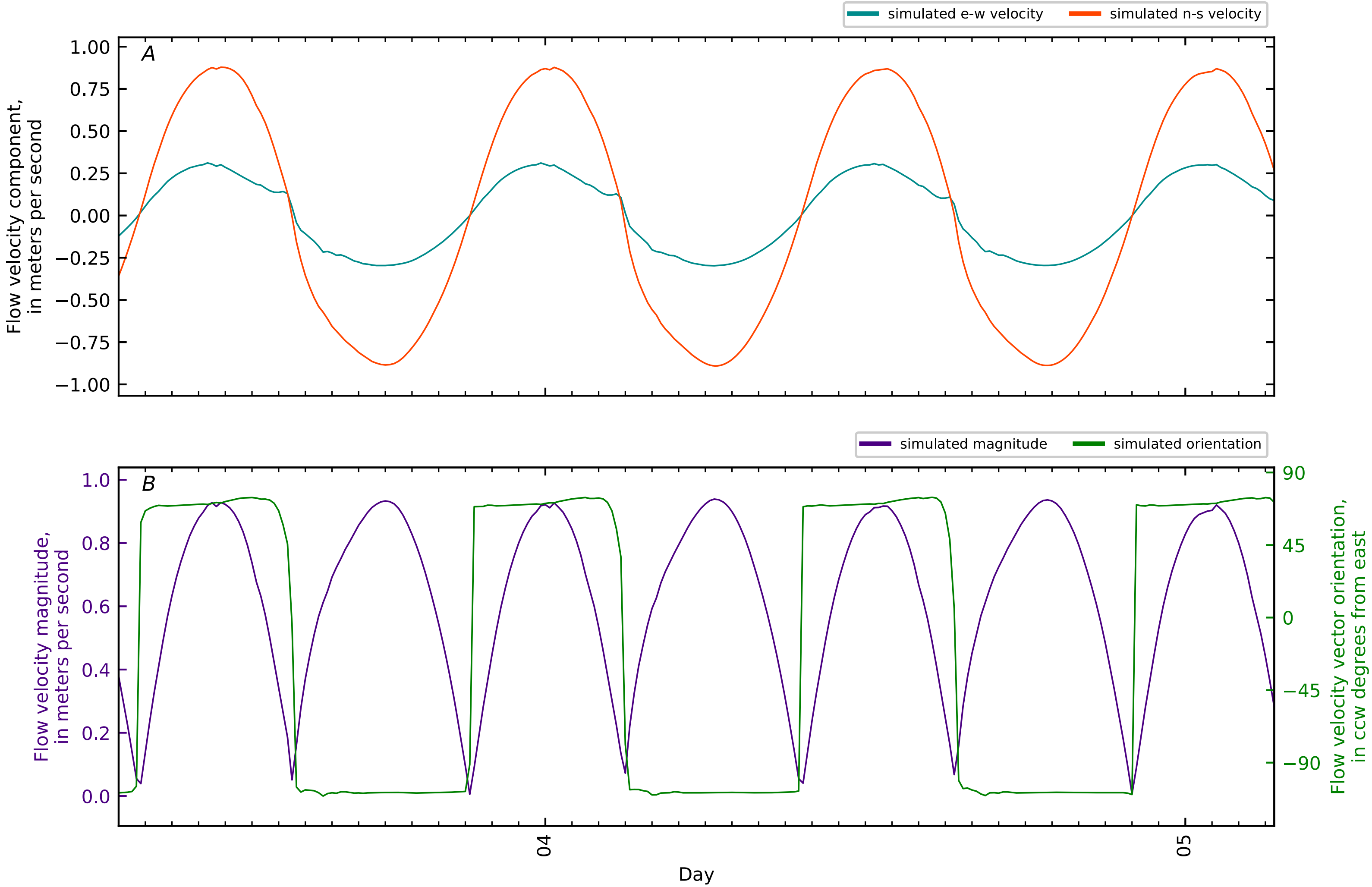

Figure B4-202. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 41, Penob Riv KM11. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

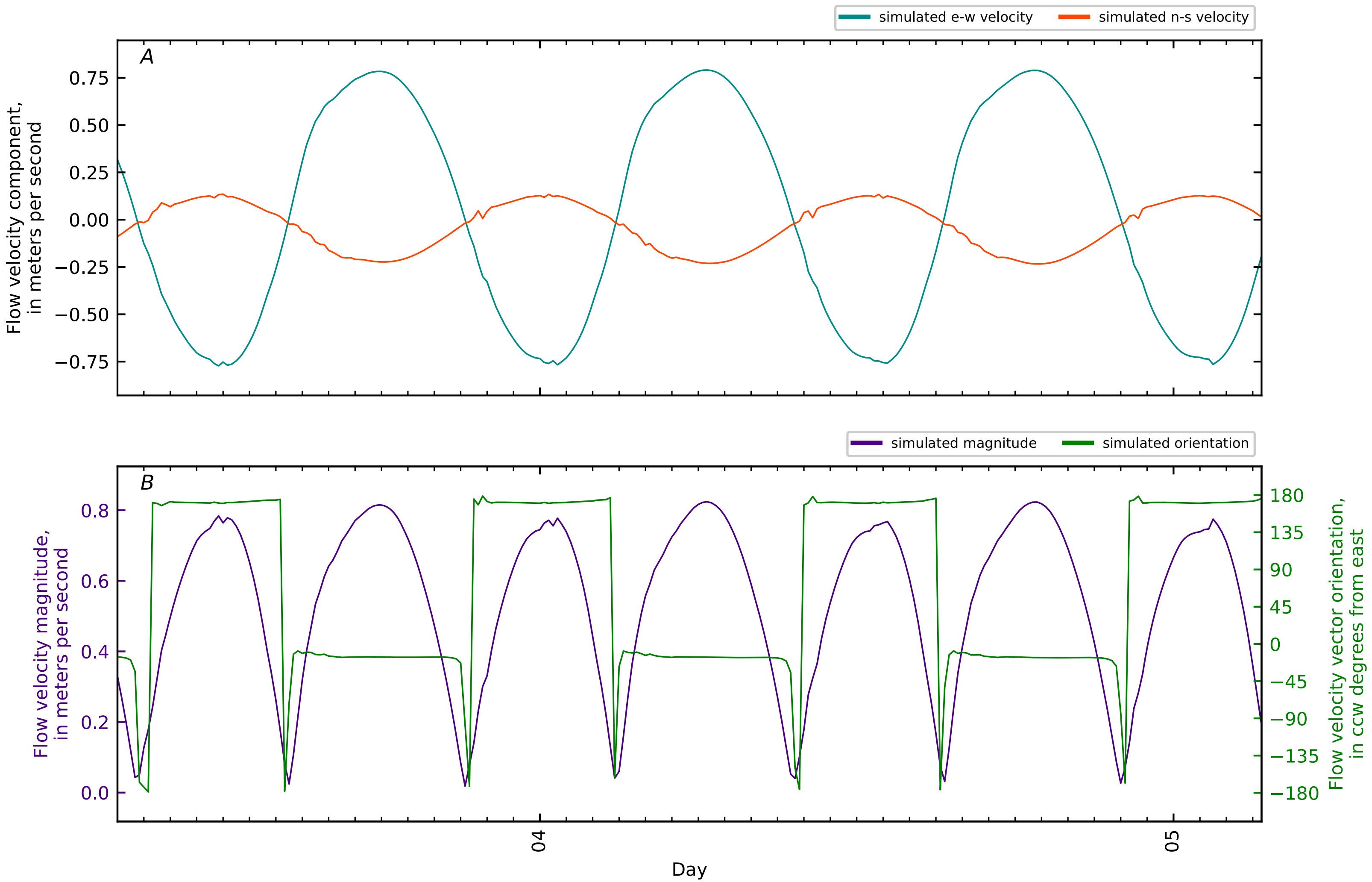

Figure B4-203. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 42, Penob Riv KM12. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

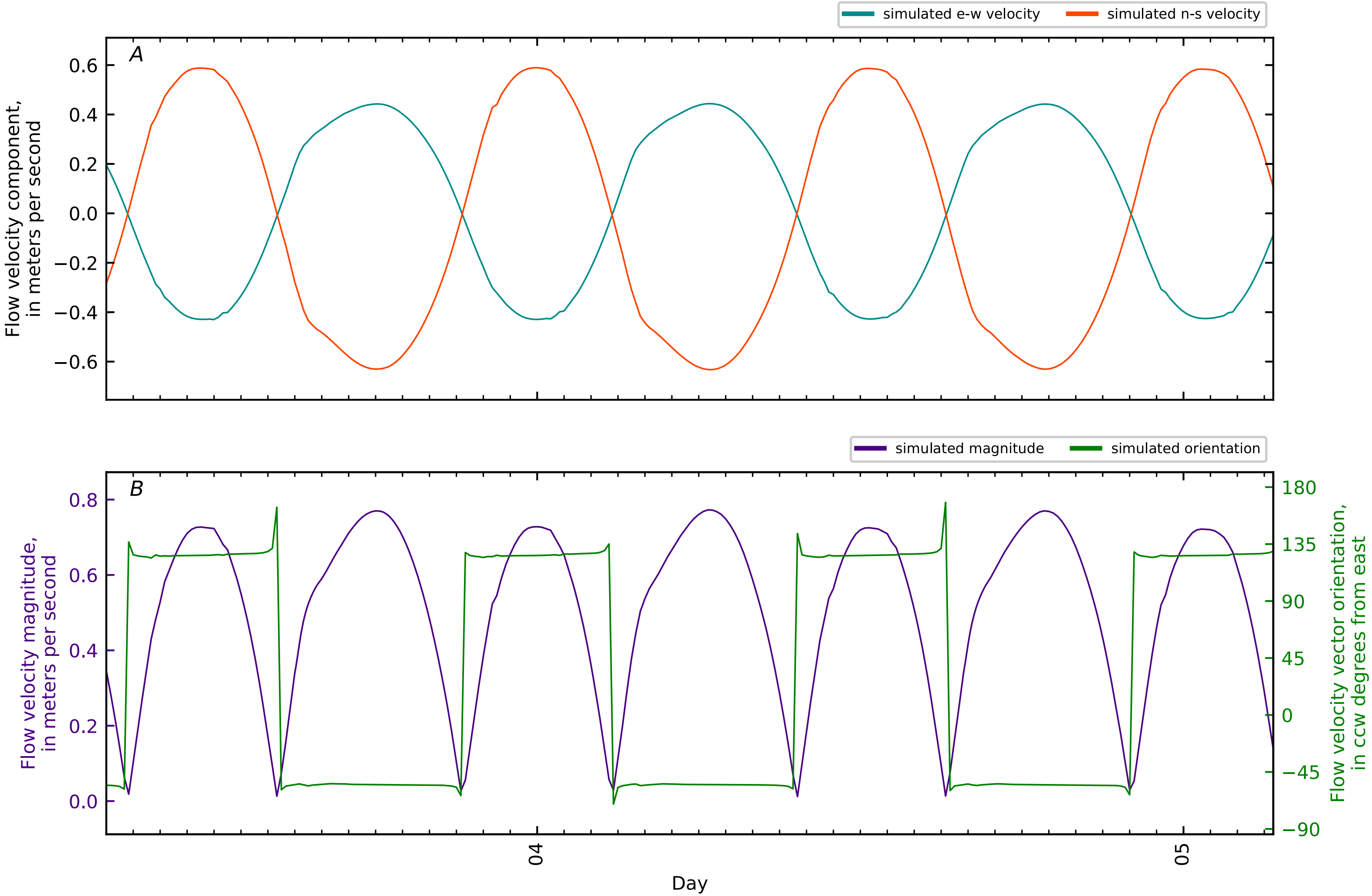

Figure B4-204. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 43, Penob Riv KM12.9 WHOI7 Bucksport 2011. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

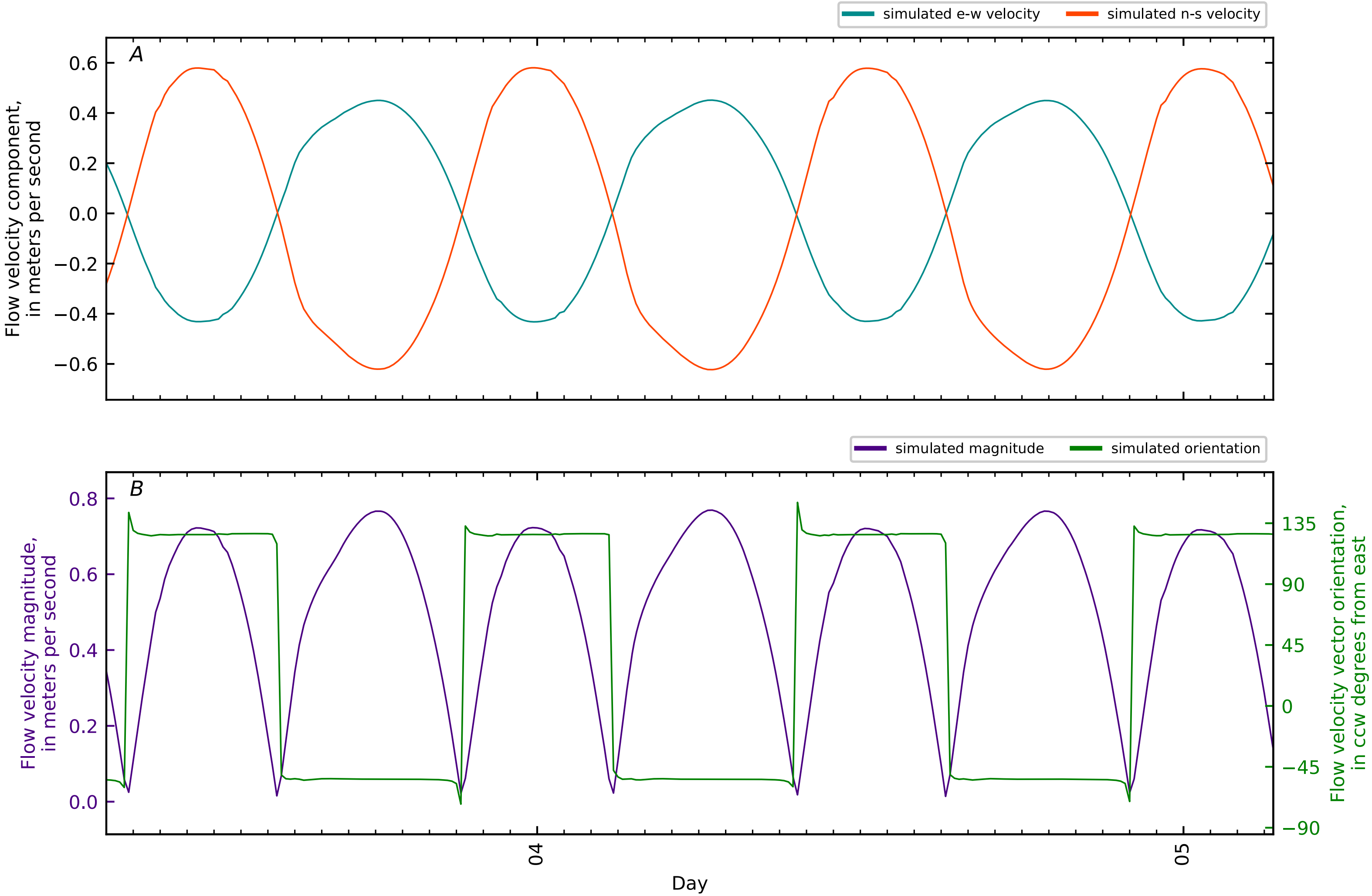

Figure B4-205. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 44, Penob Riv KM13. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

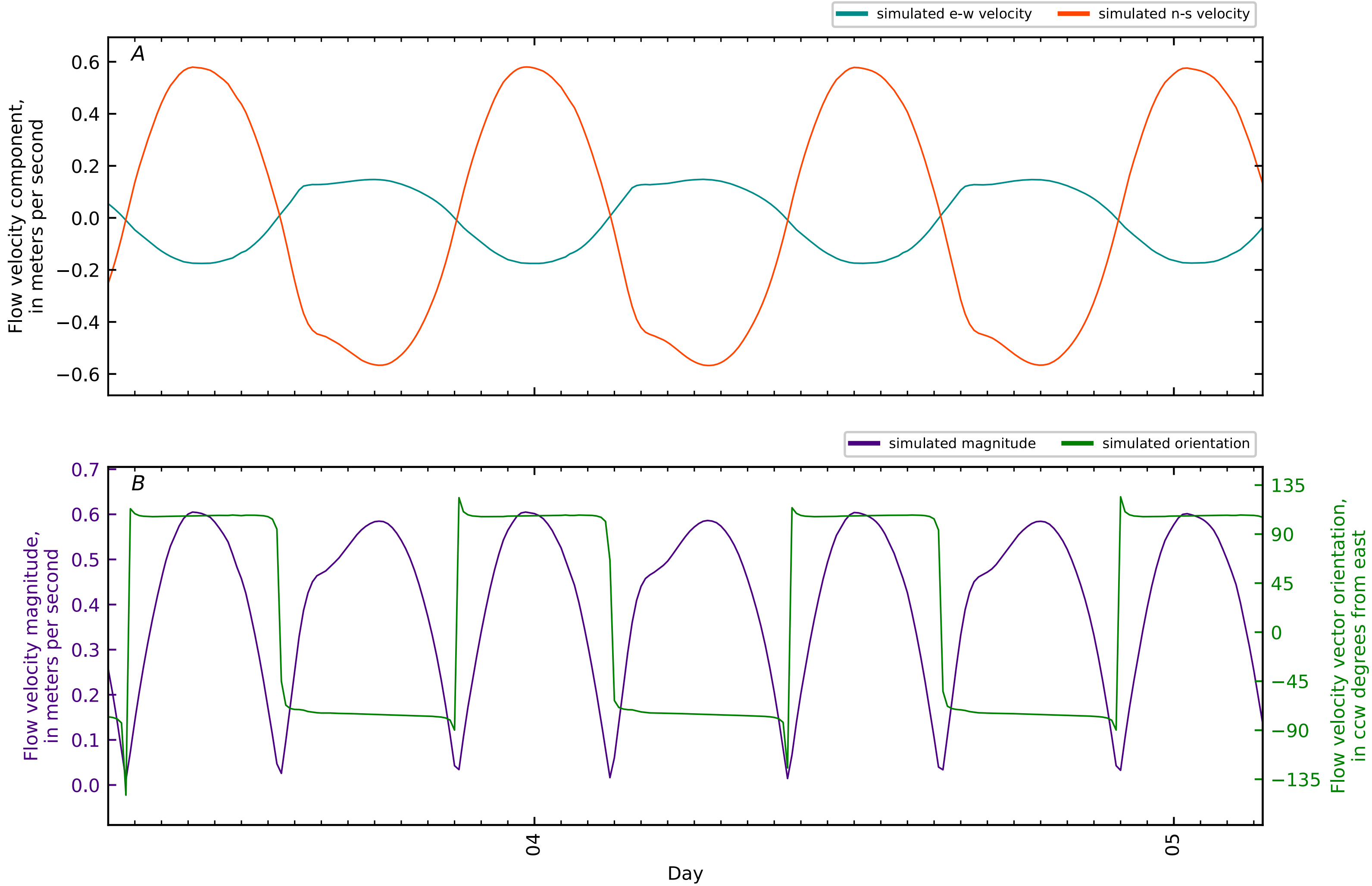

Figure B4-206. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 45, Penob Riv KM14. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

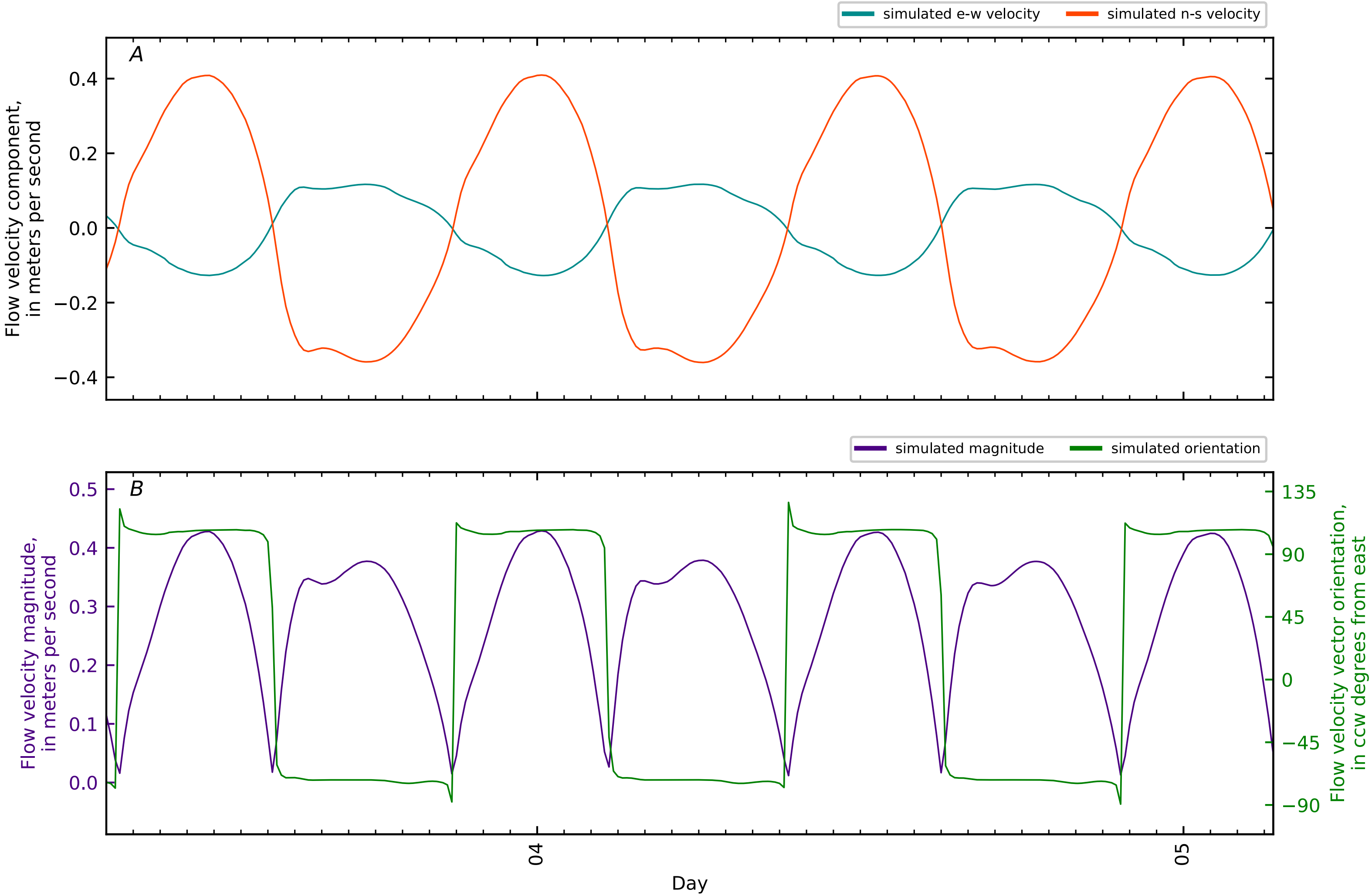

Figure B4-207. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 46, Penob Riv KM14.27 ERDC15 BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

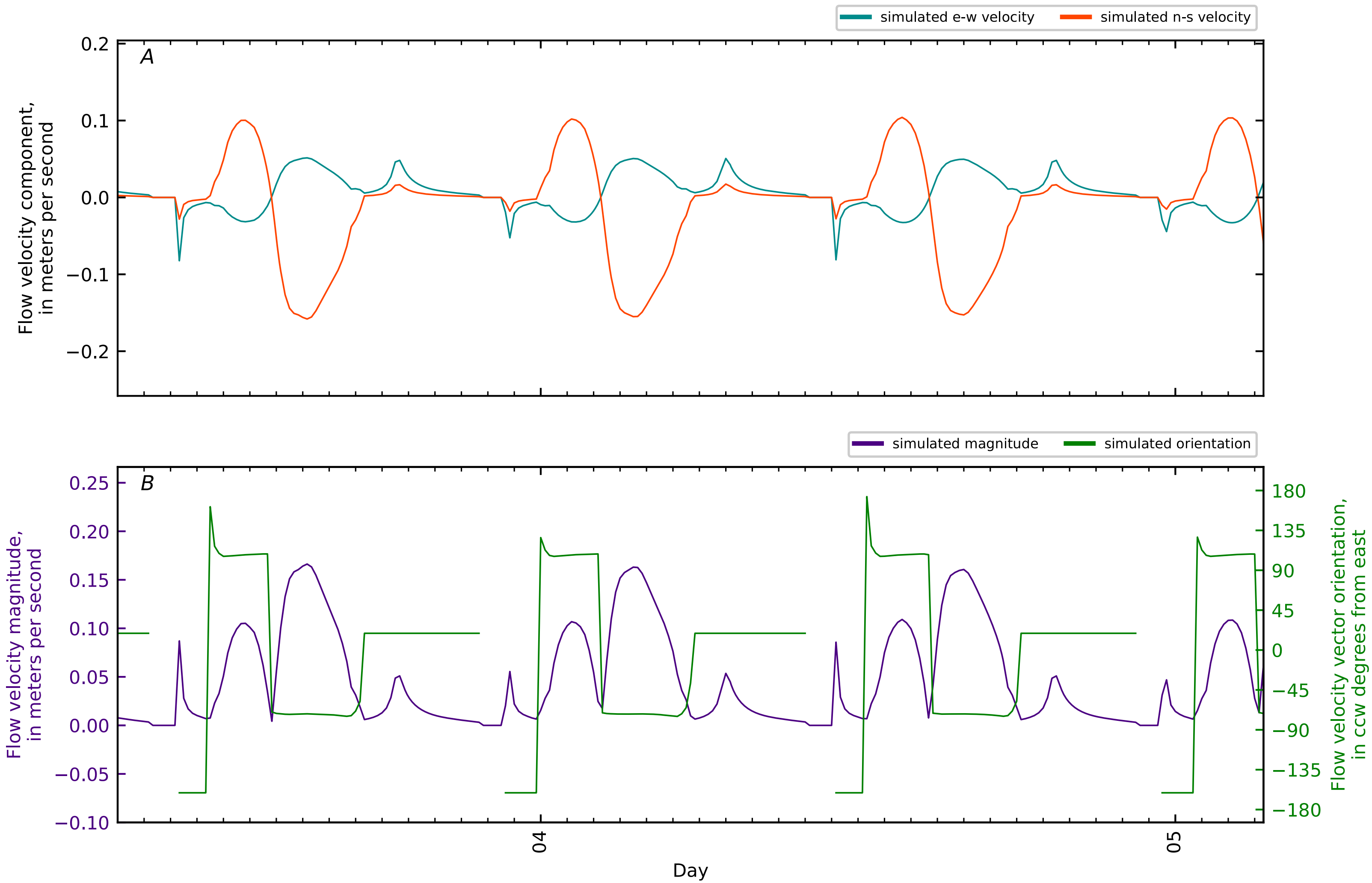

Figure B4-208. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 47, Penob Riv KM14.29 ERDC16B BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

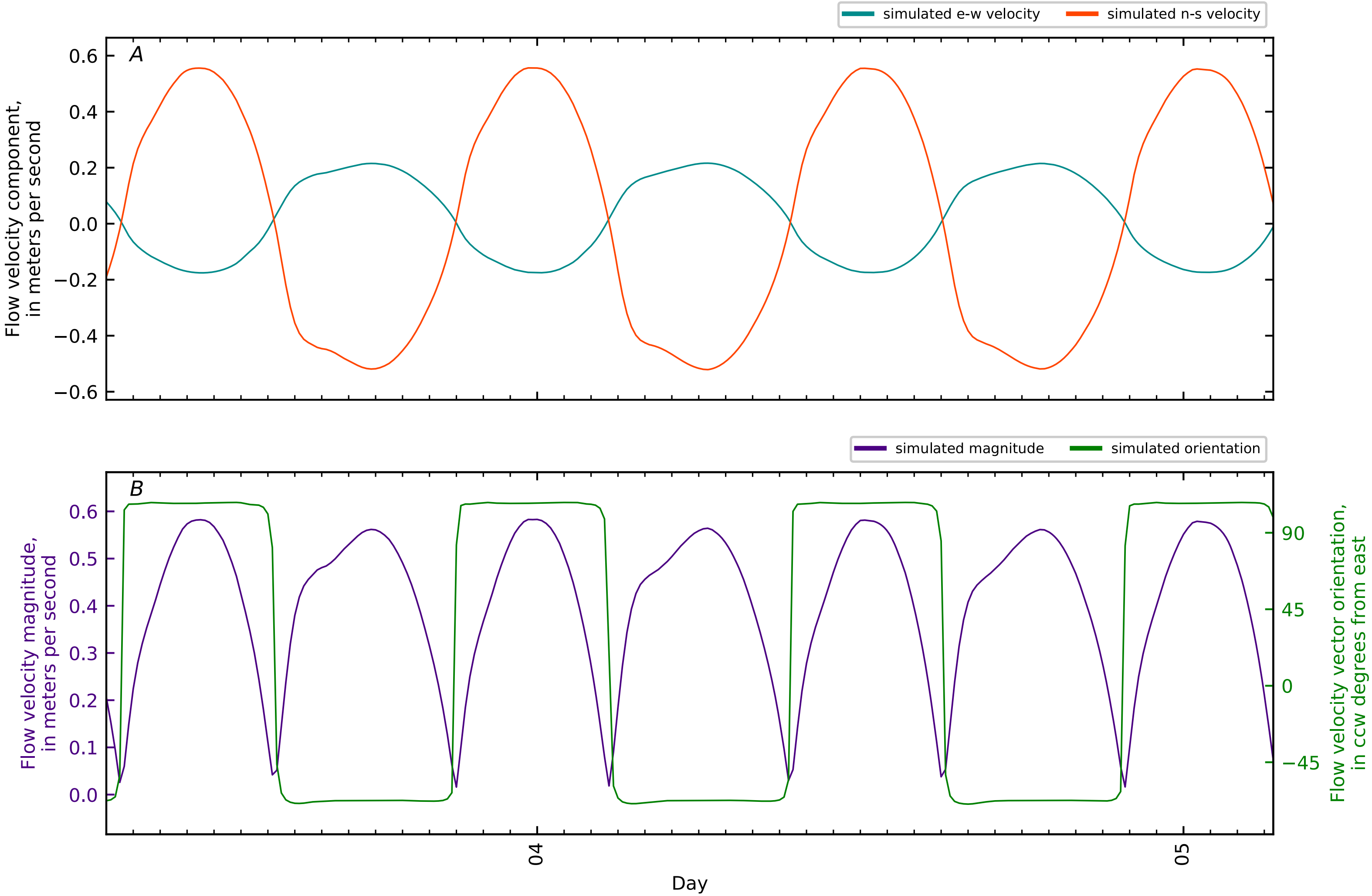

Figure B4-209. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 48, Penob Riv KM15. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

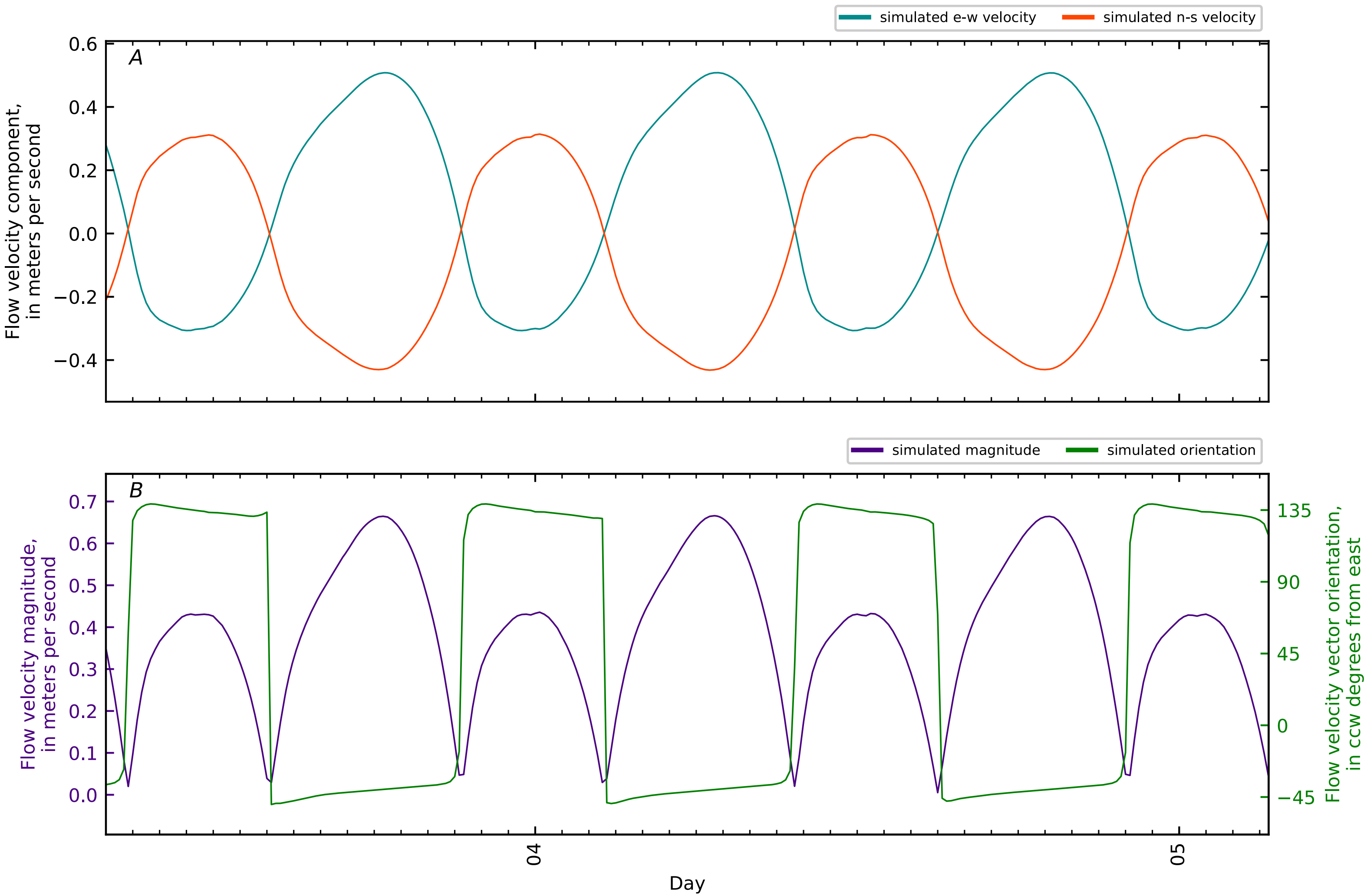

Figure B4-210. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 49, Penob Riv KM16. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

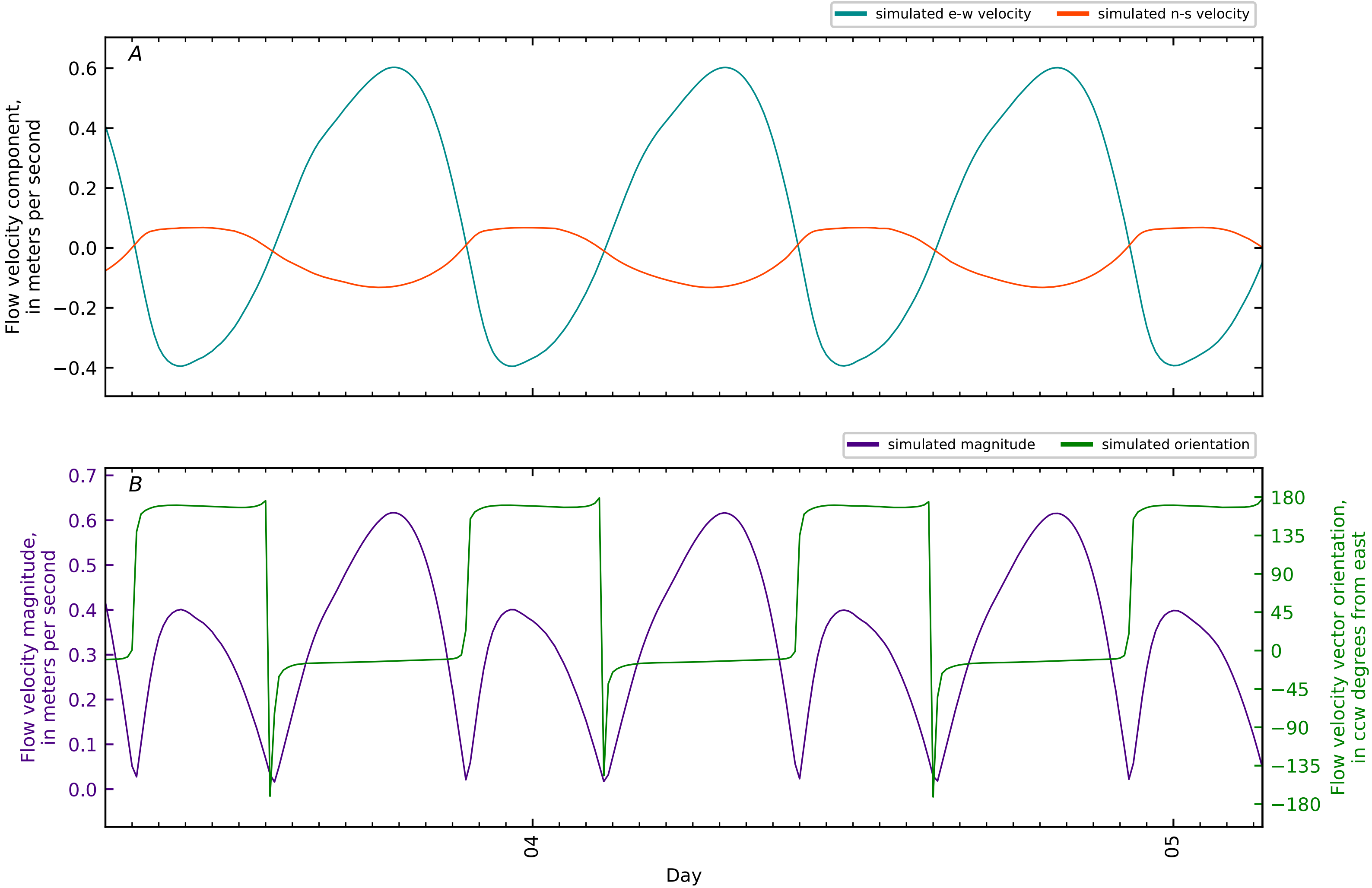

Figure B4-211. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 50, Penob Riv KM17. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

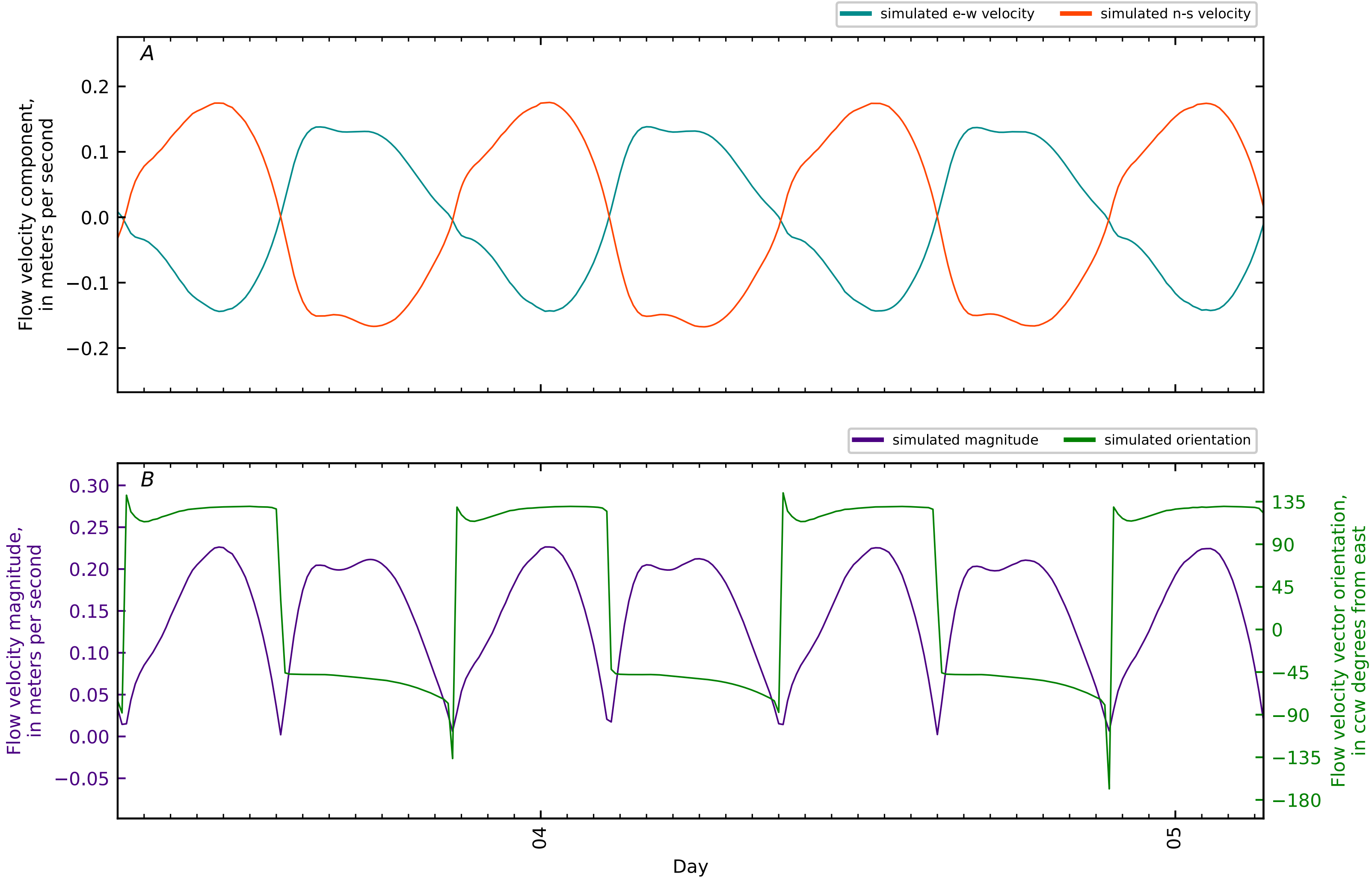

Figure B4-212. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 51, Penob Riv KM17.2 ERDC17B FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

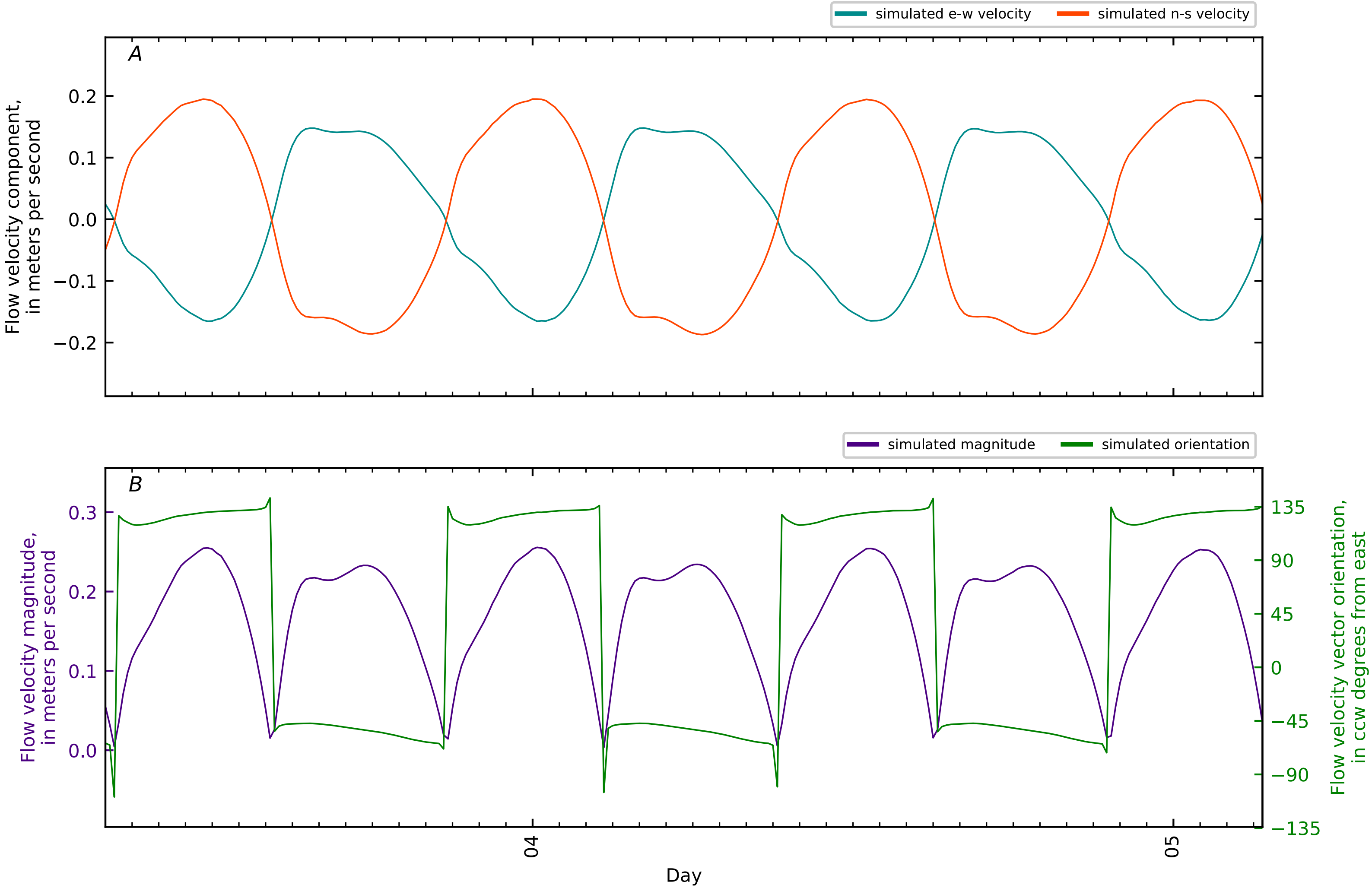

Figure B4-213. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 52, Penob Riv KM17.21 ERDC13 FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

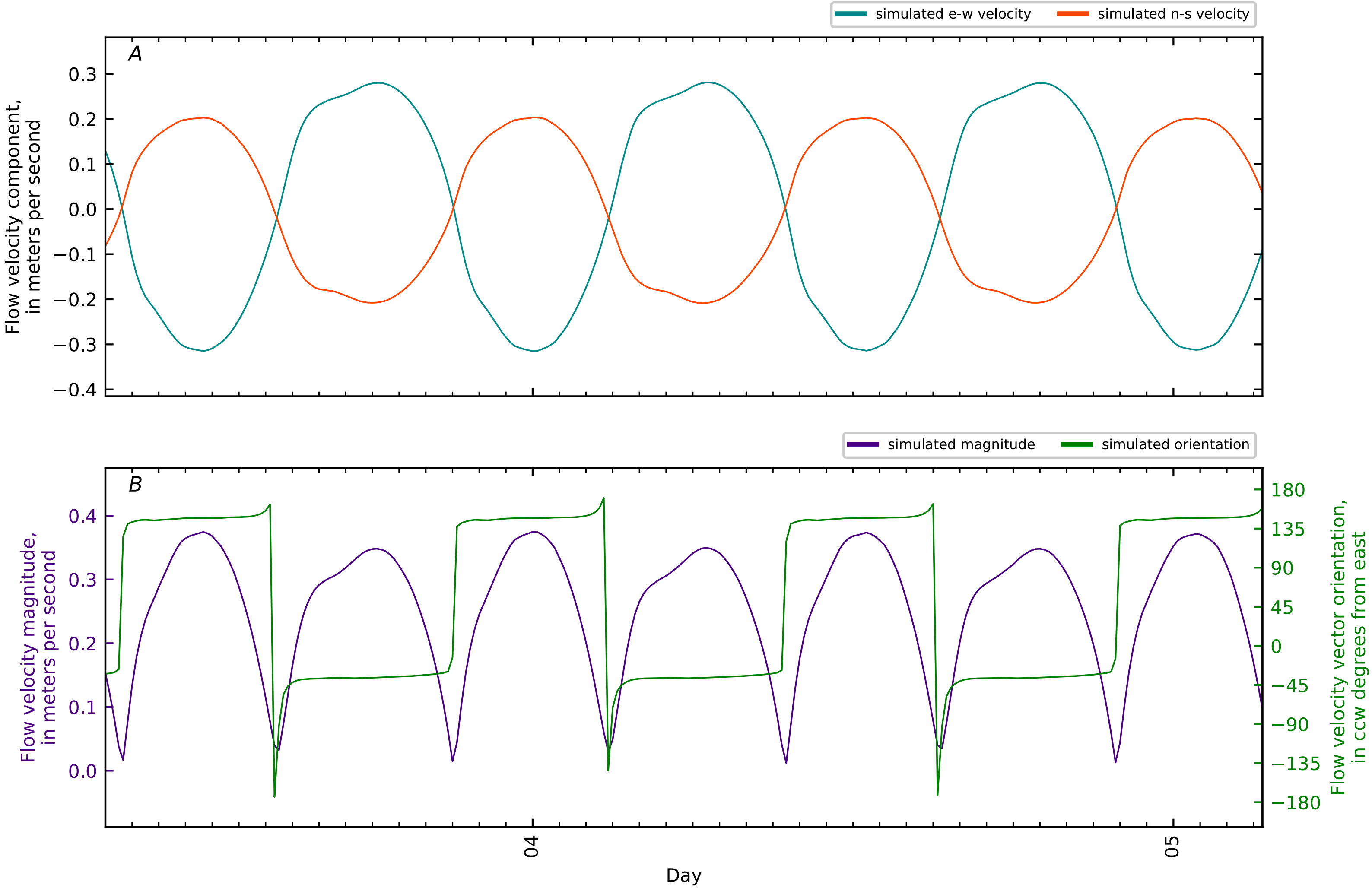

Figure B4-214. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 53, Penob Riv KM17.2 WHOI2 Frankfort Flats 2. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

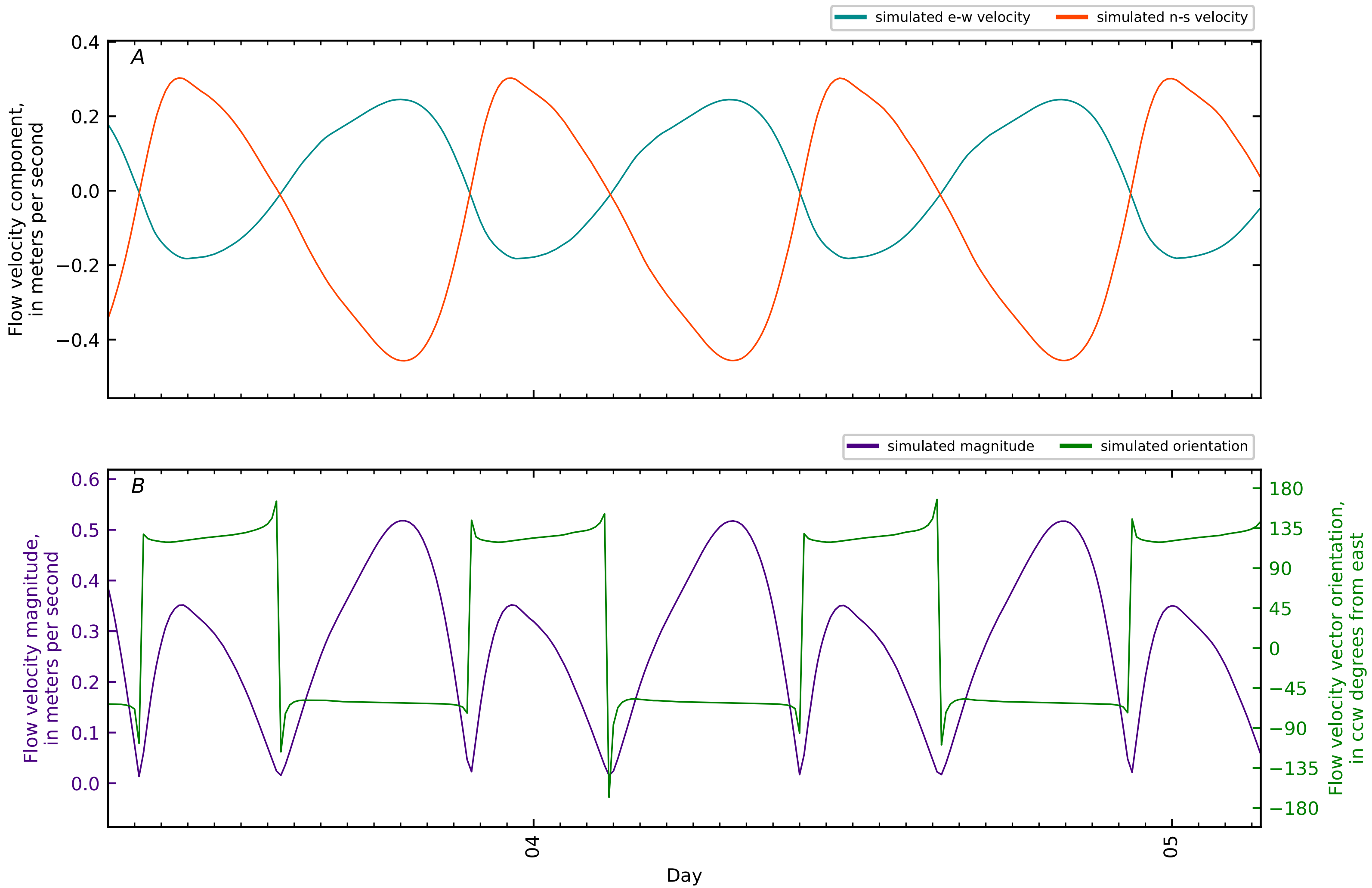

Figure B4-215. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 54, Penob Riv KM18. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

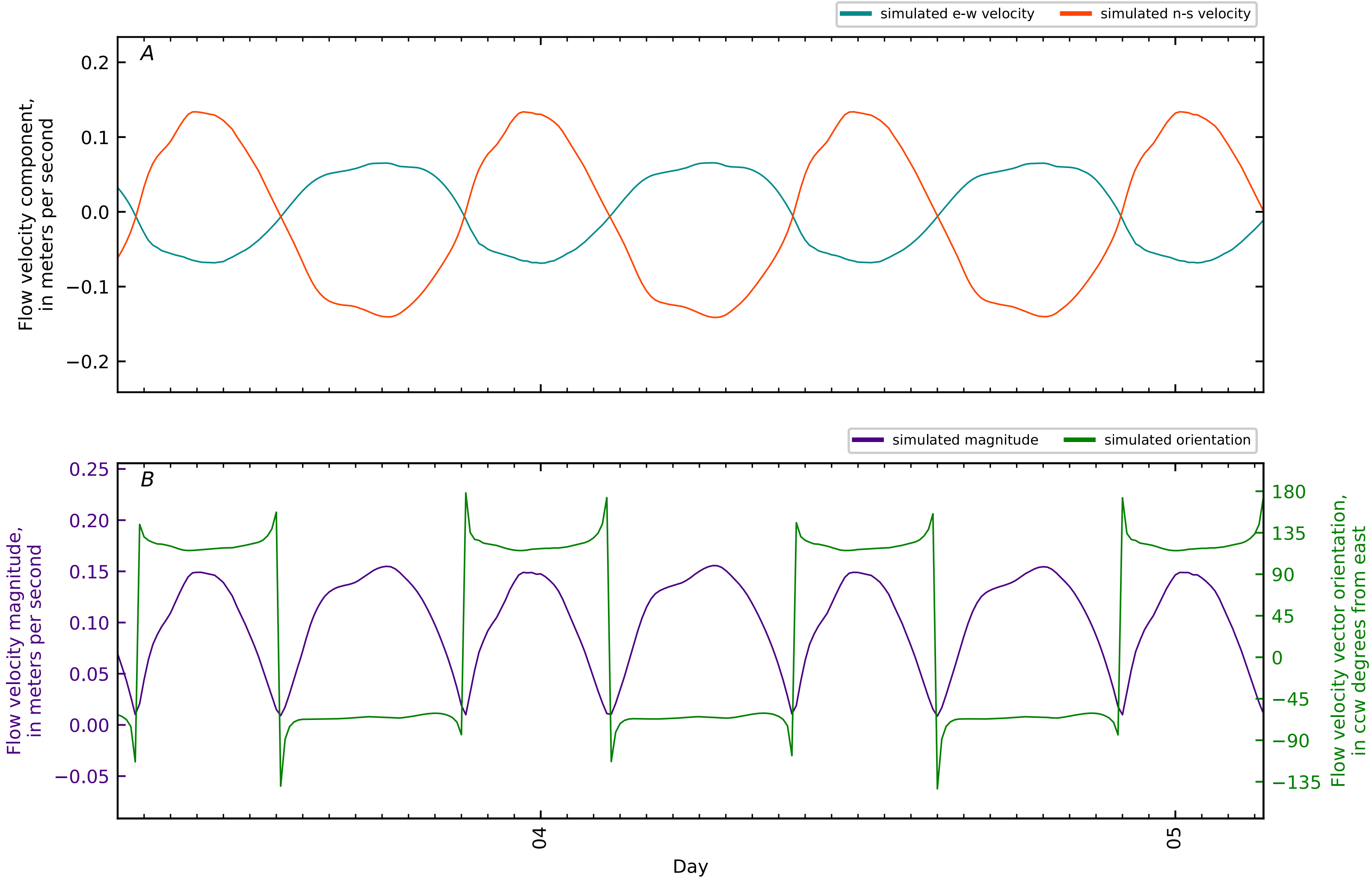

Figure B4-216. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 55, Penob Riv KM18.01 GS CTD1-01. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

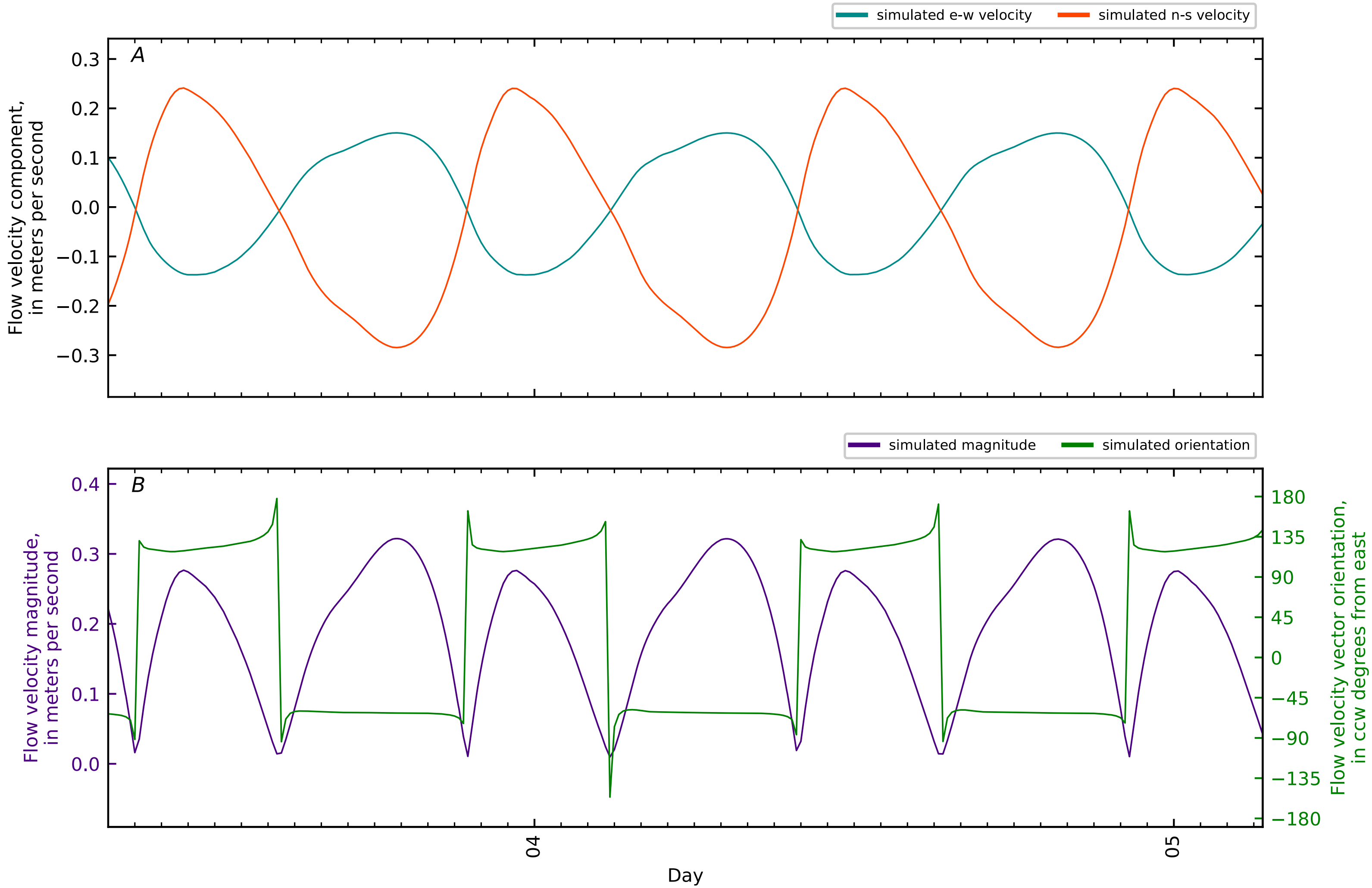

Figure B4-217. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 56, Penob Riv KM18.01 GS CTD1-02. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

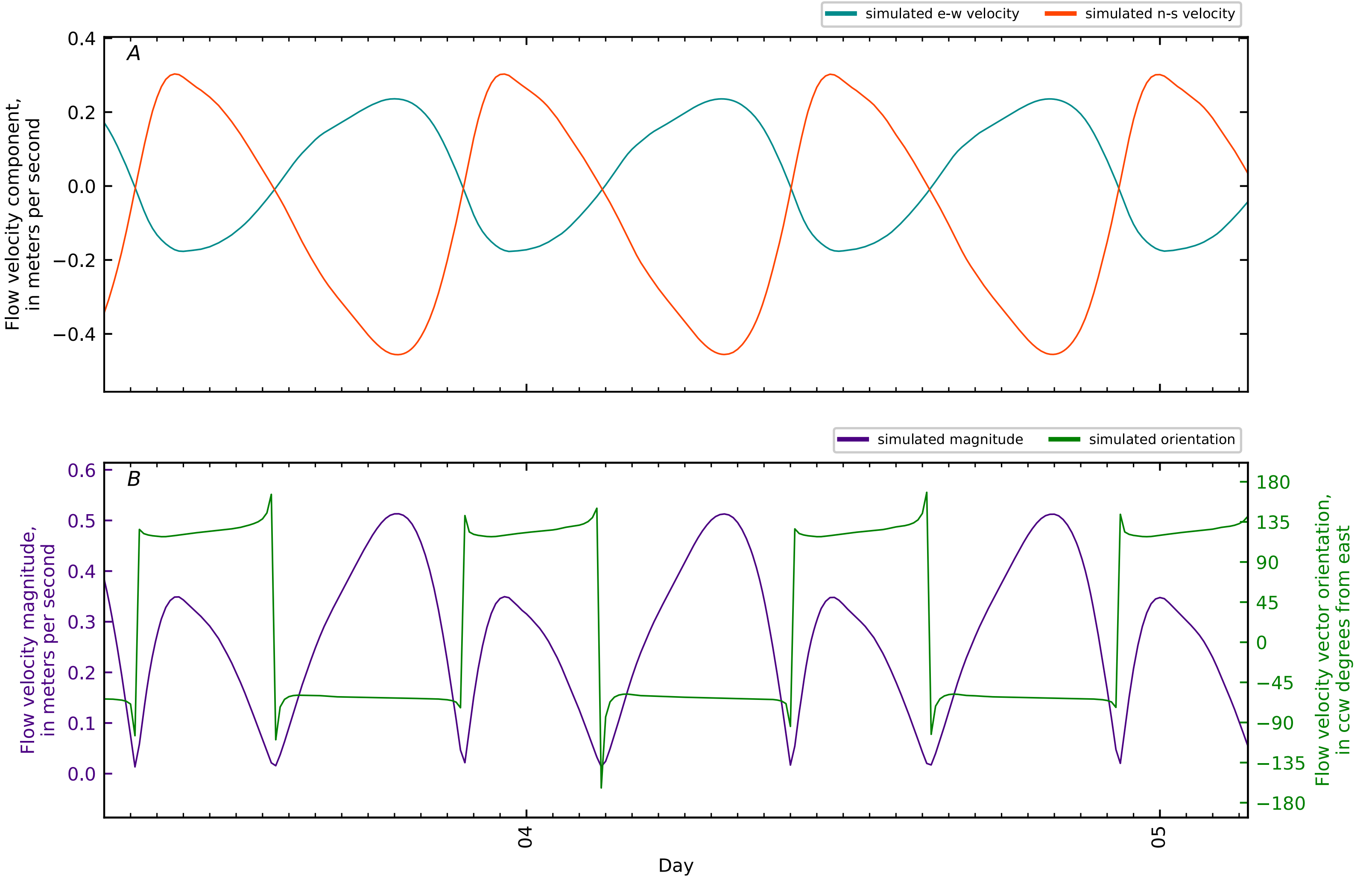

Figure B4-218. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 57, Penob Riv KM18.01 GS CTD1-03. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

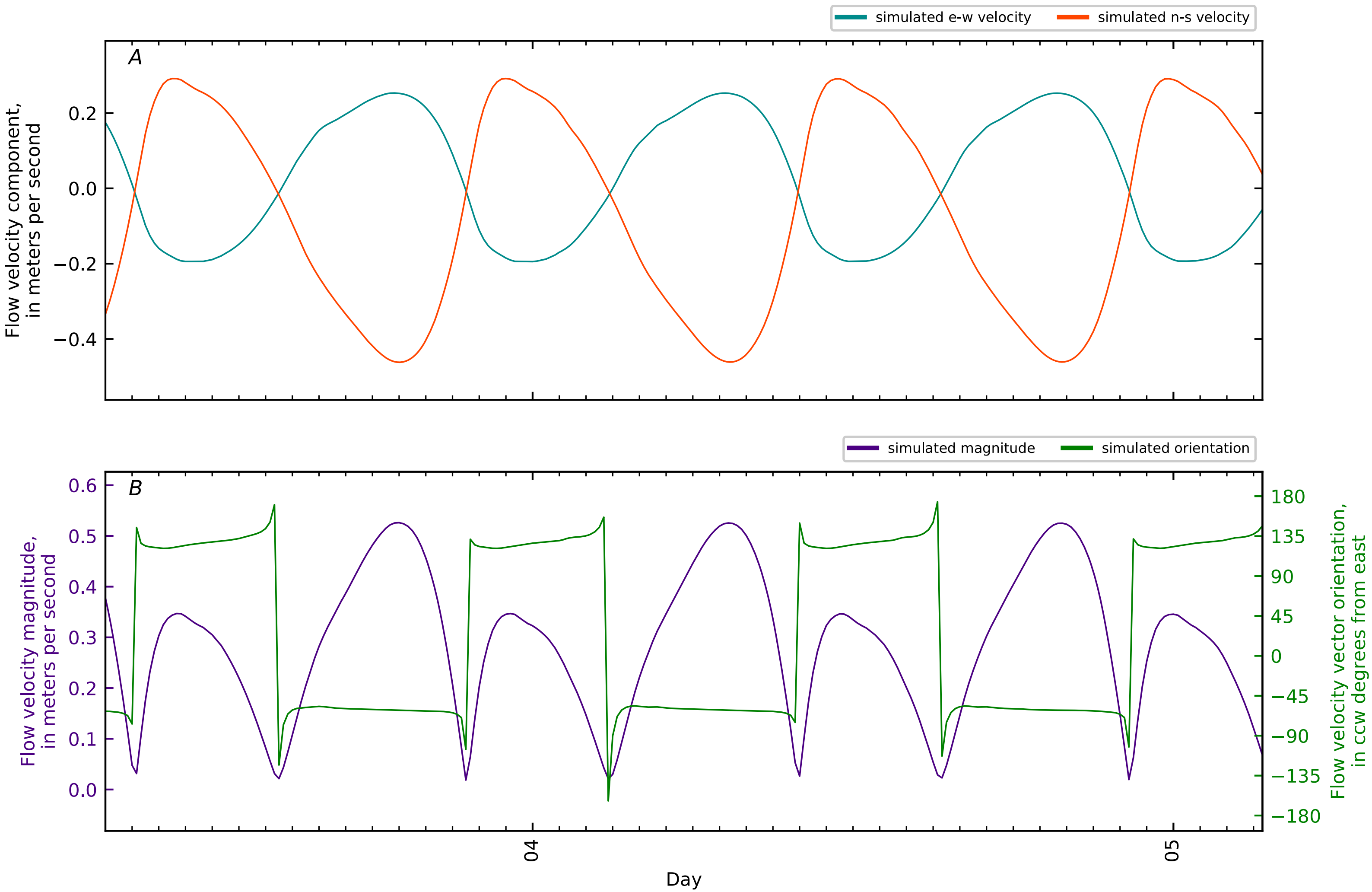

Figure B4-219. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 58, Penob Riv KM18.01 GS CTD1-04. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

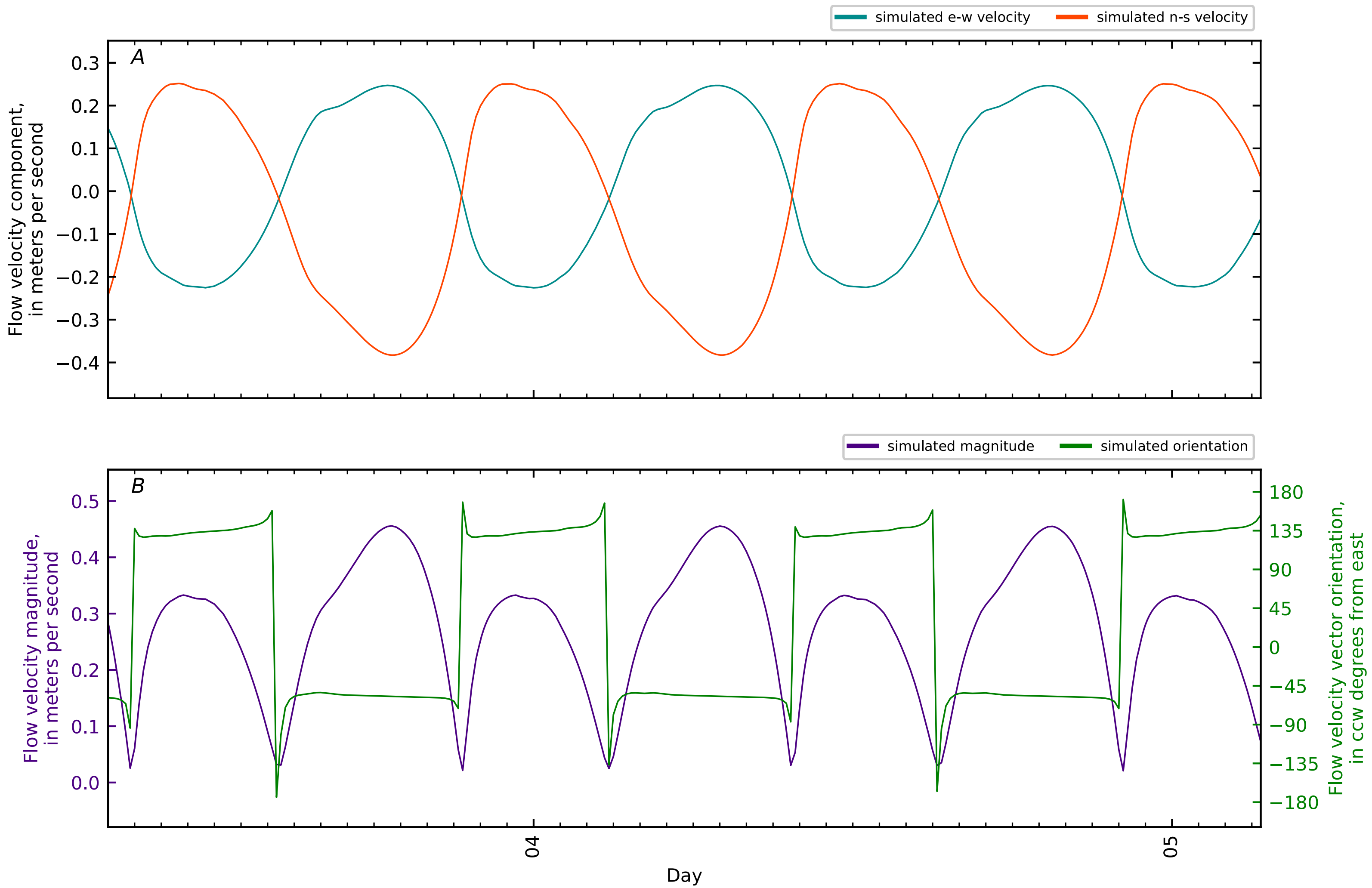

Figure B4-220. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 59, Penob Riv KM18.01 GS CTD1-05. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

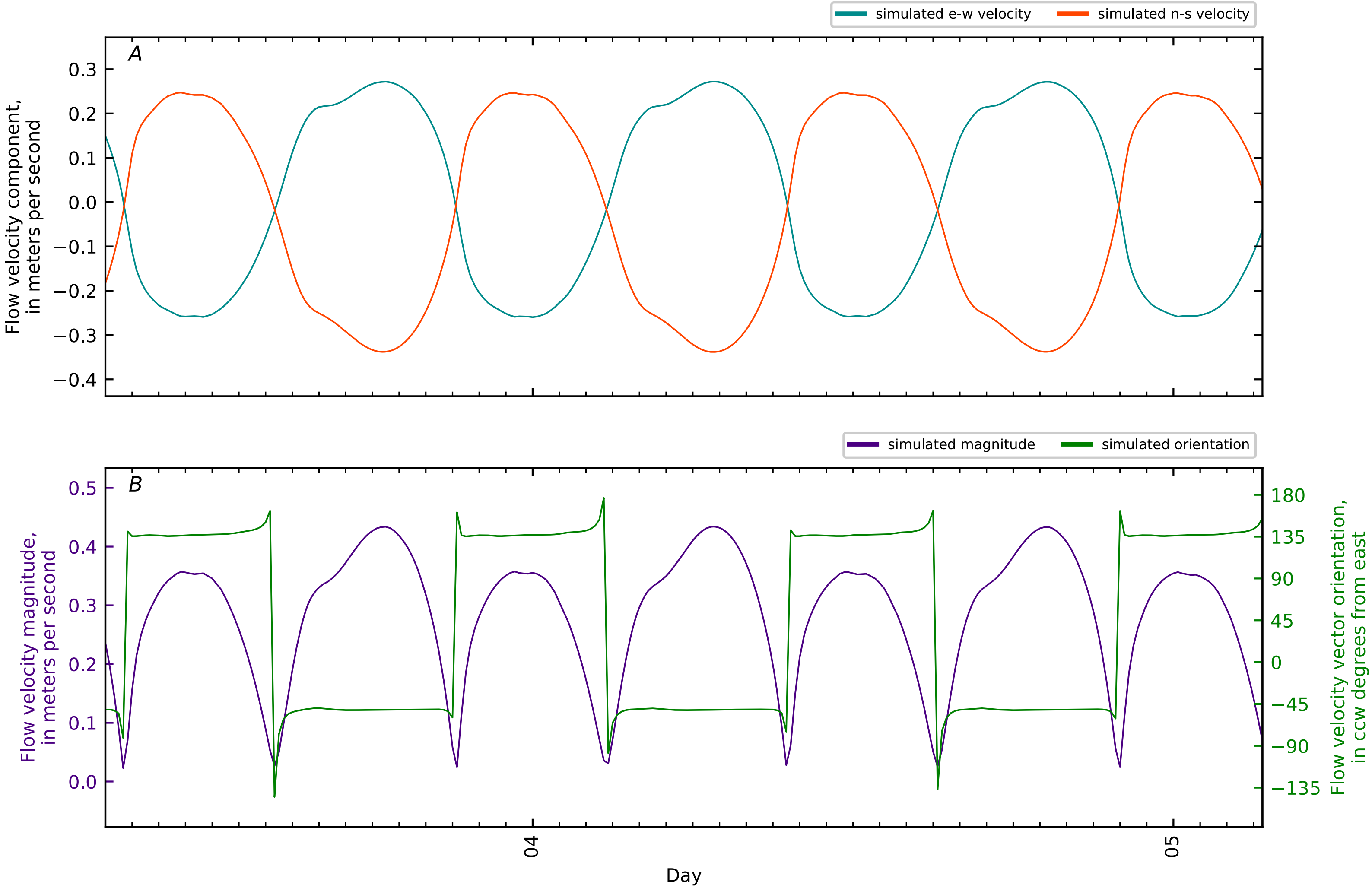

Figure B4-221. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 60, Penob Riv KM18.01 GS CTD1-06. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

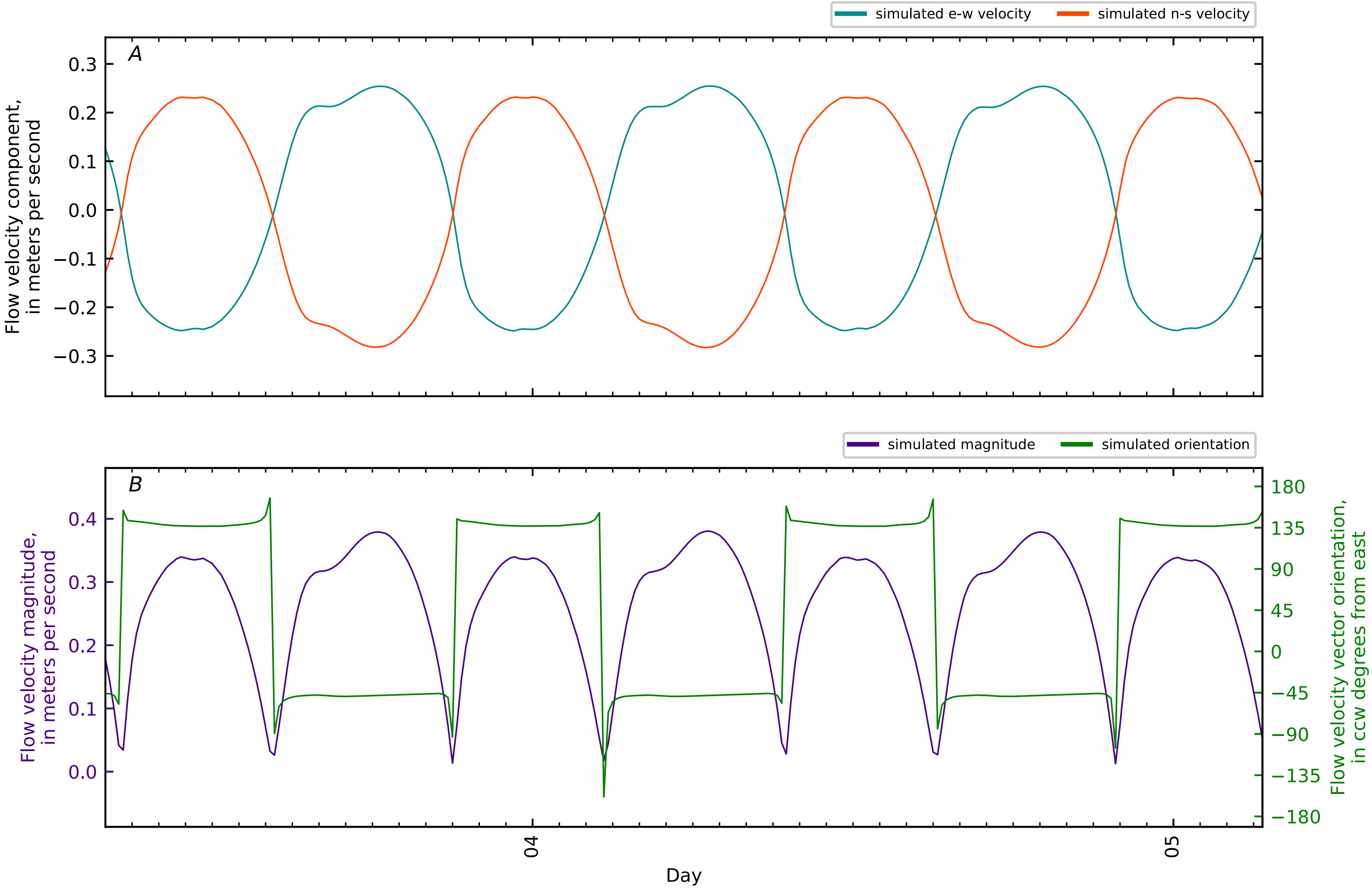

Figure B4-222. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 61, Penob Riv KM18.01 GS CTD1-07. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

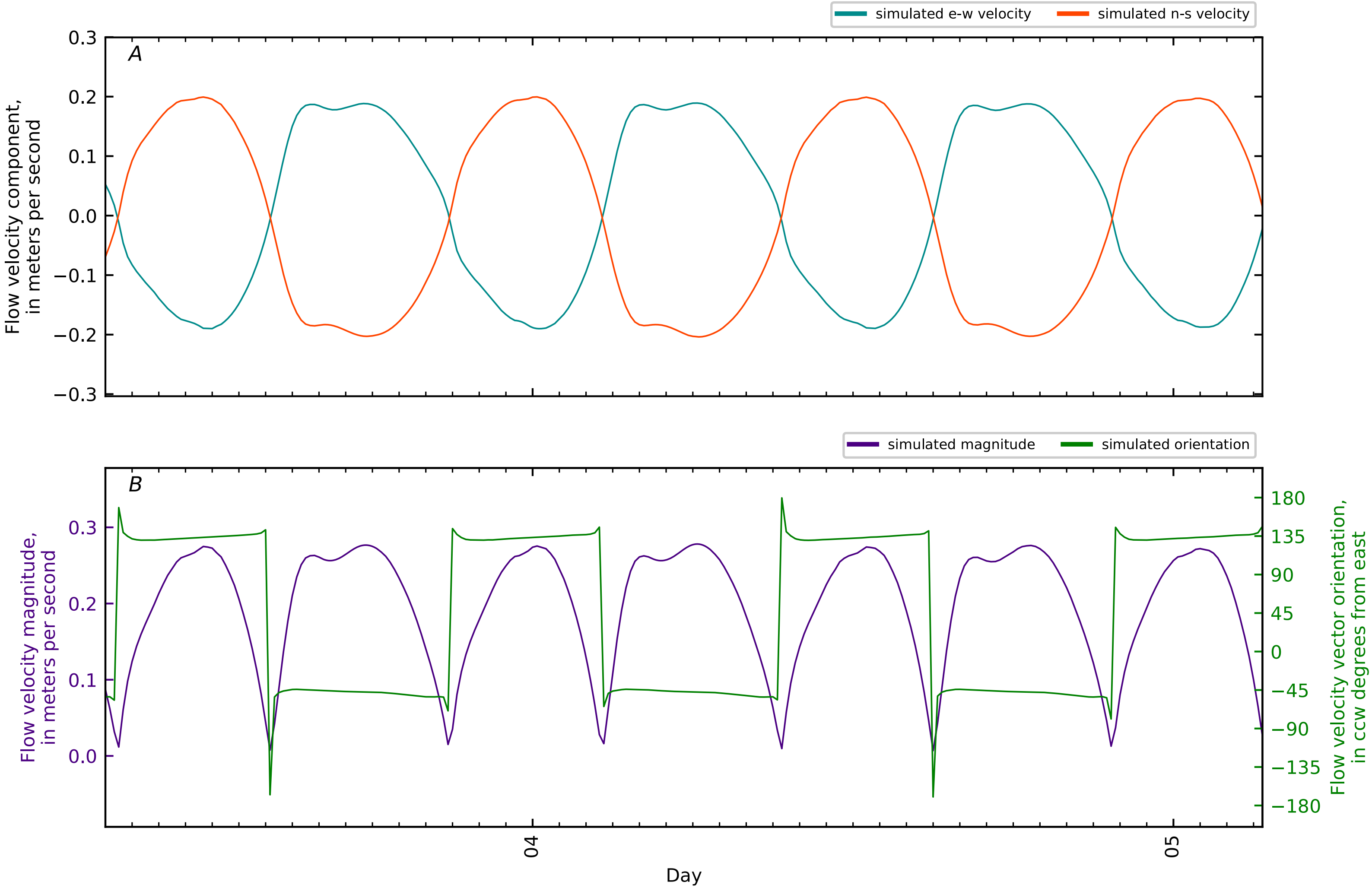

Figure B4-223. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 62, Penob Riv KM18.01 GS CTD1-08. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

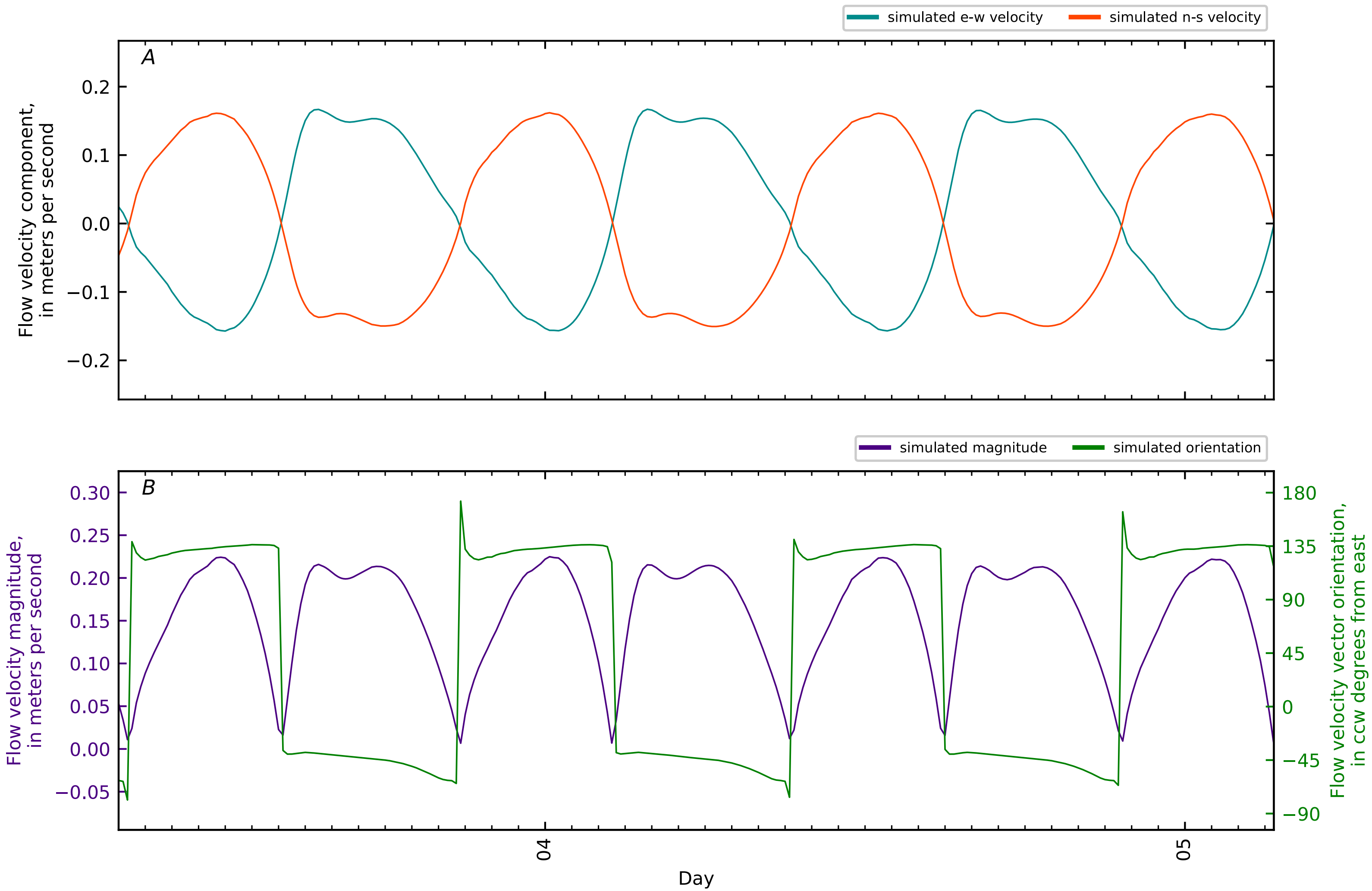

Figure B4-224. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 63, Penob Riv KM18.01 GS CTD1-09. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

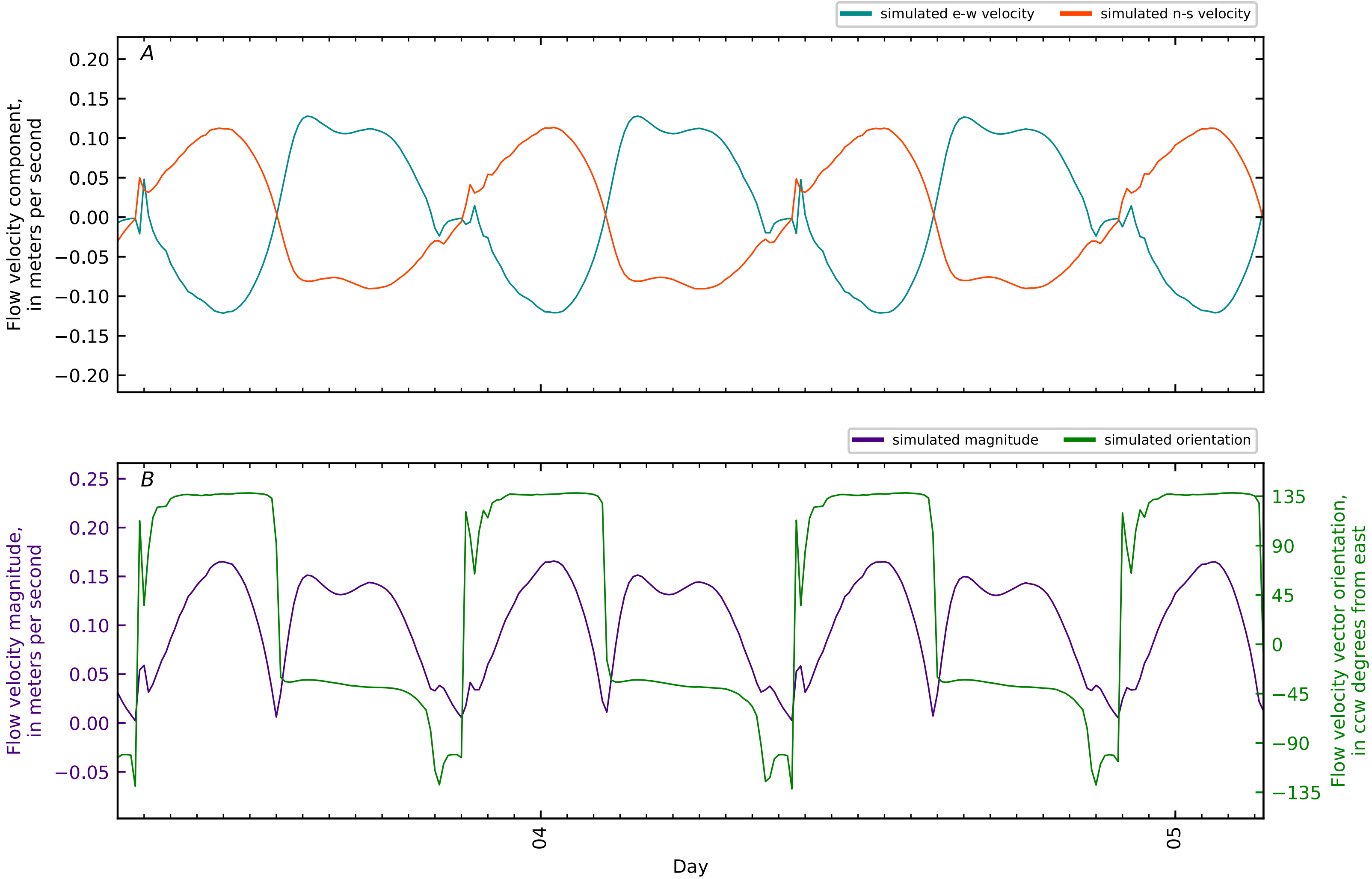

Figure B4-225. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 64, Penob Riv KM18.01 GS CTD1-10. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

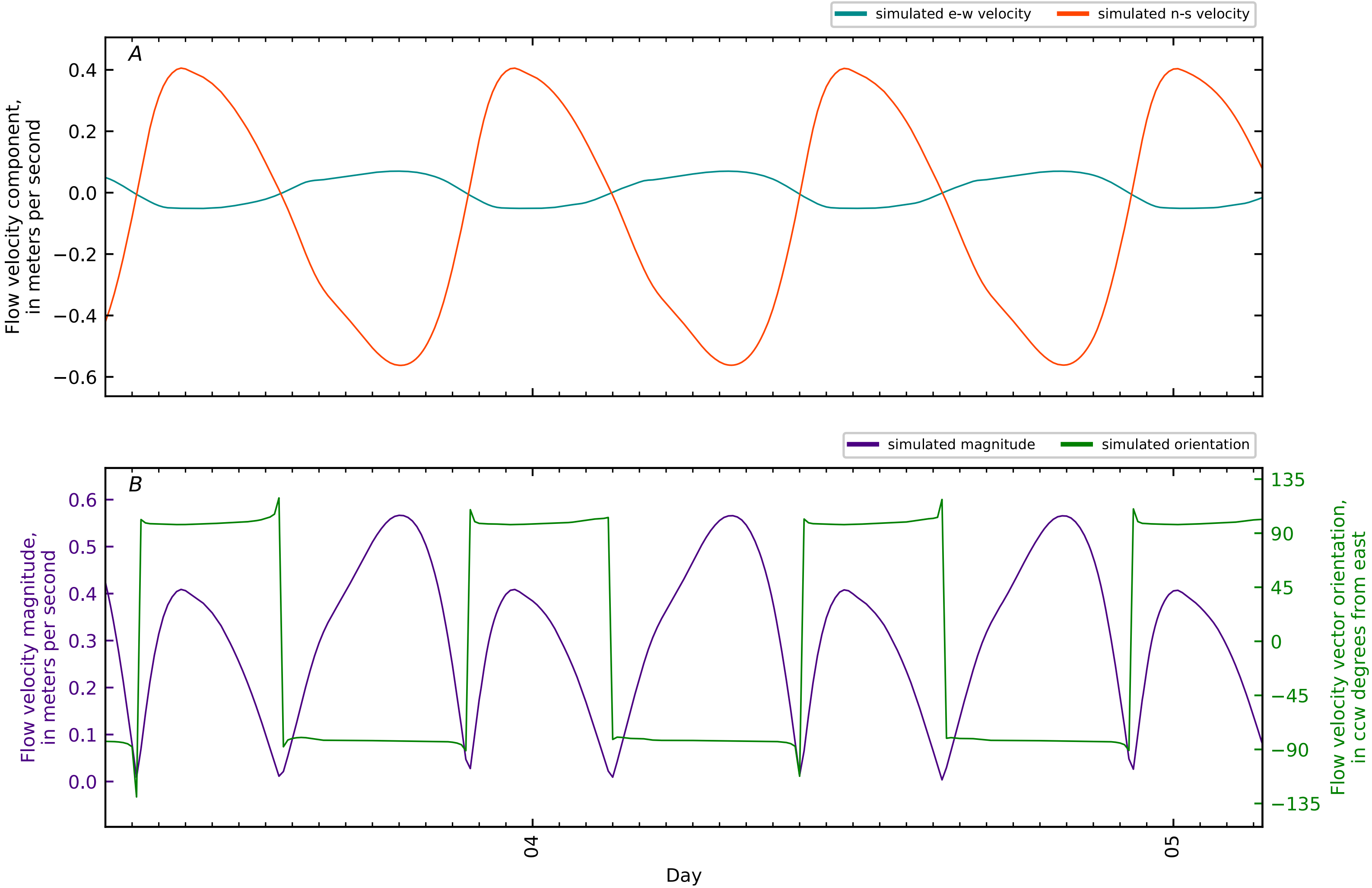

Figure B4-226. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 65, Penob Riv KM18.5 WHOI8 Frankfort Channel. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

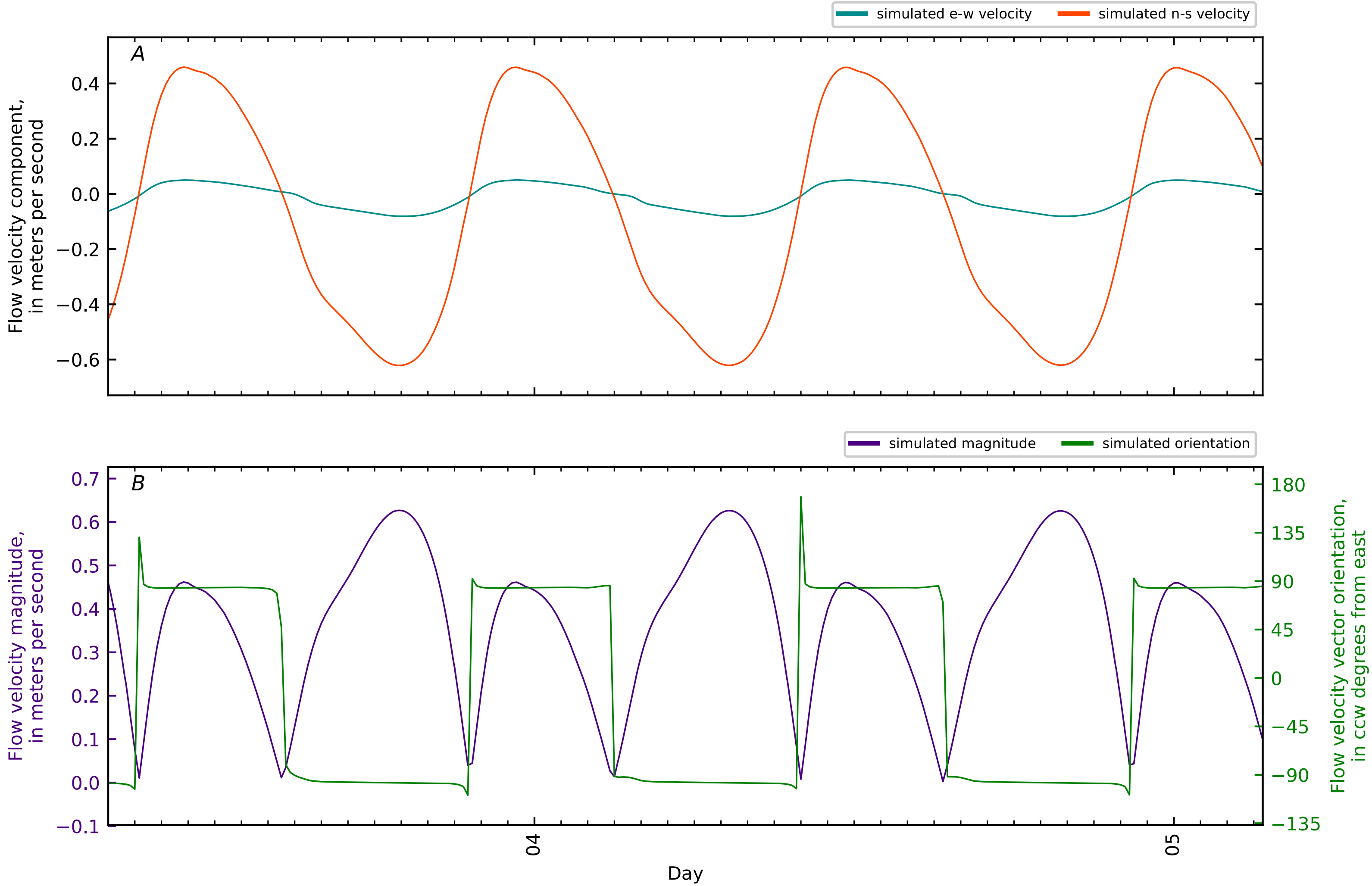

Figure B4-227. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 66, Penob Riv KM19. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

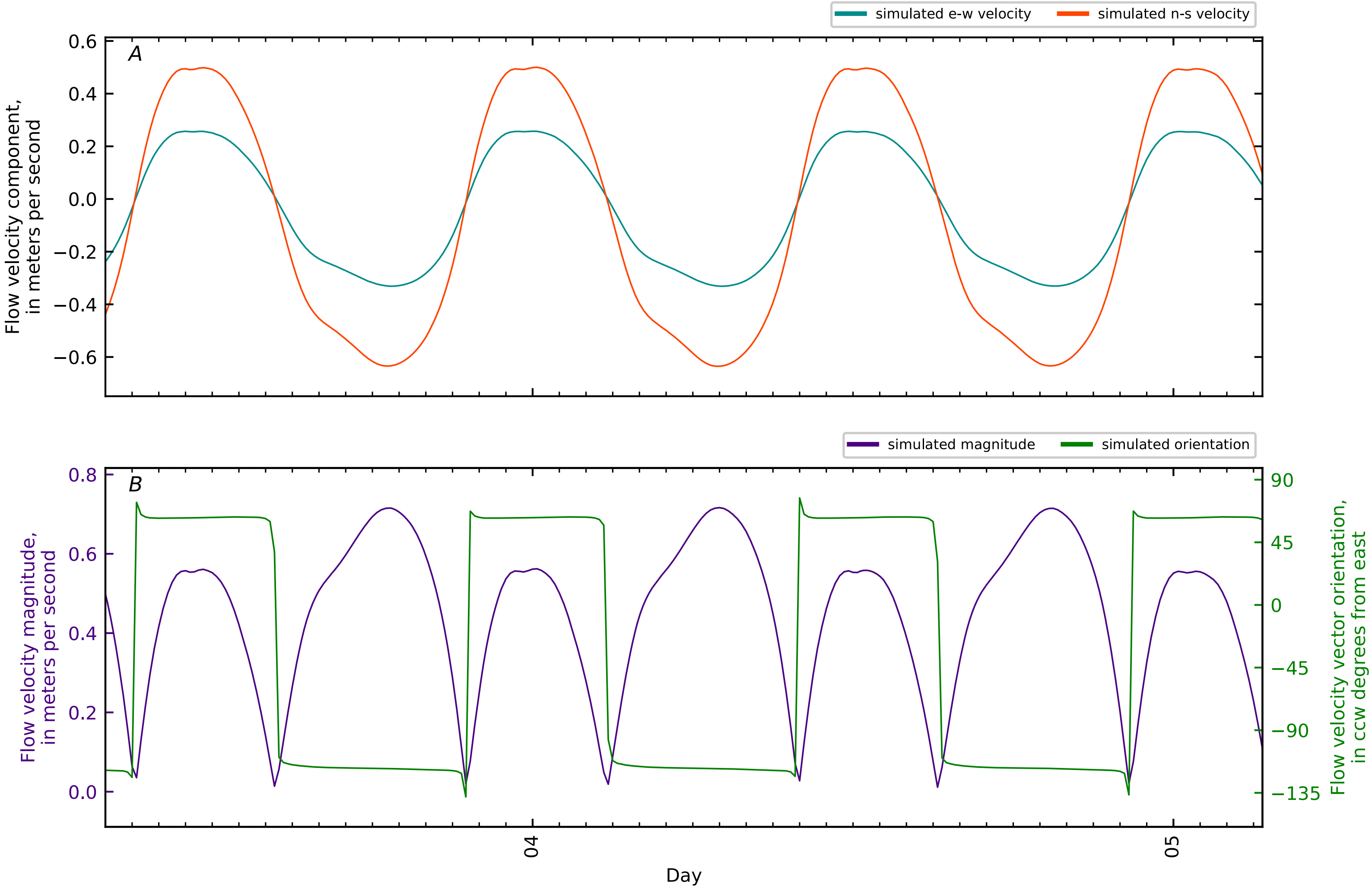

Figure B4-228. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 67, Penob Riv KM20. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

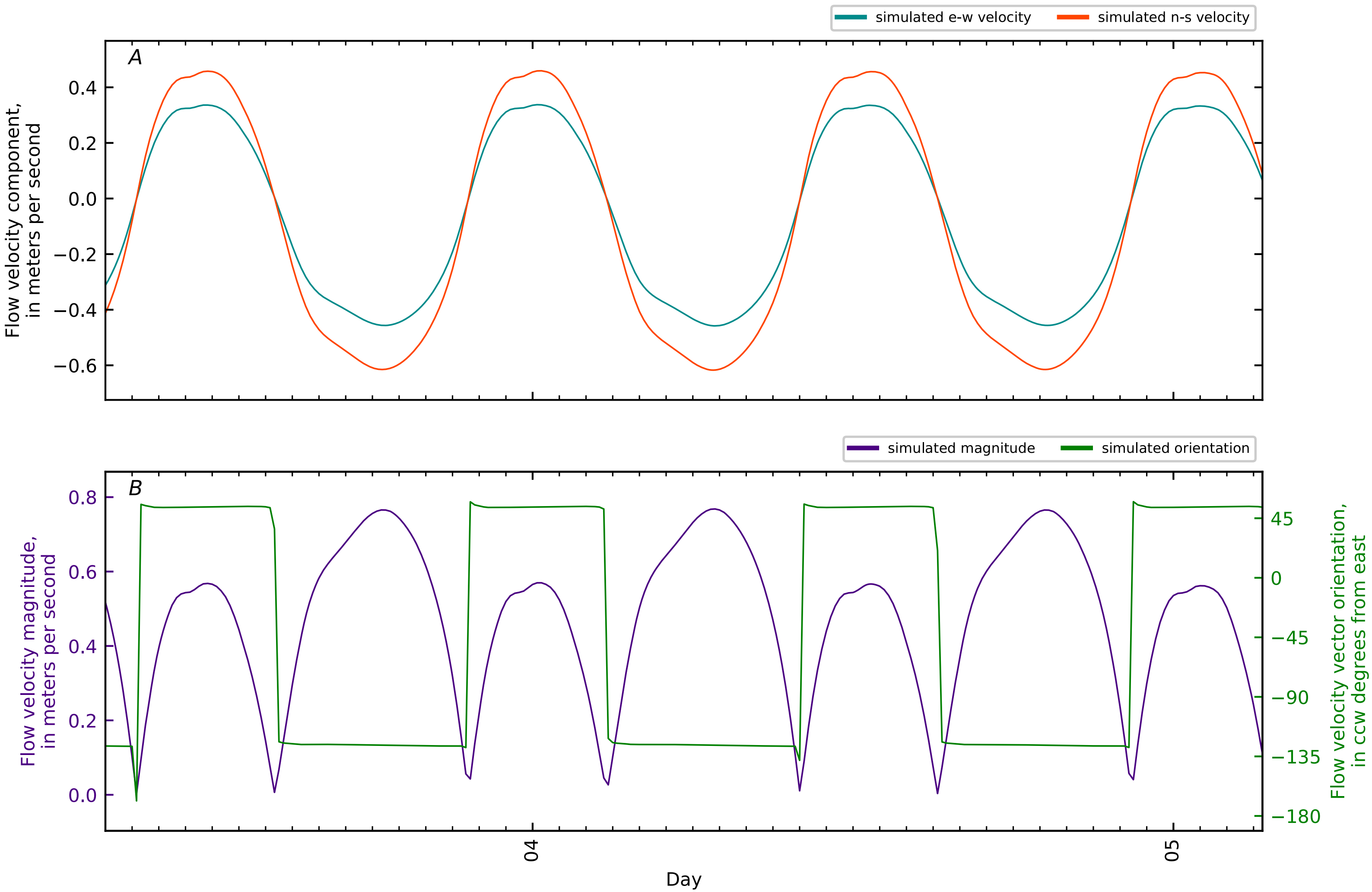

Figure B4-229. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 68, Penob Riv KM21. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

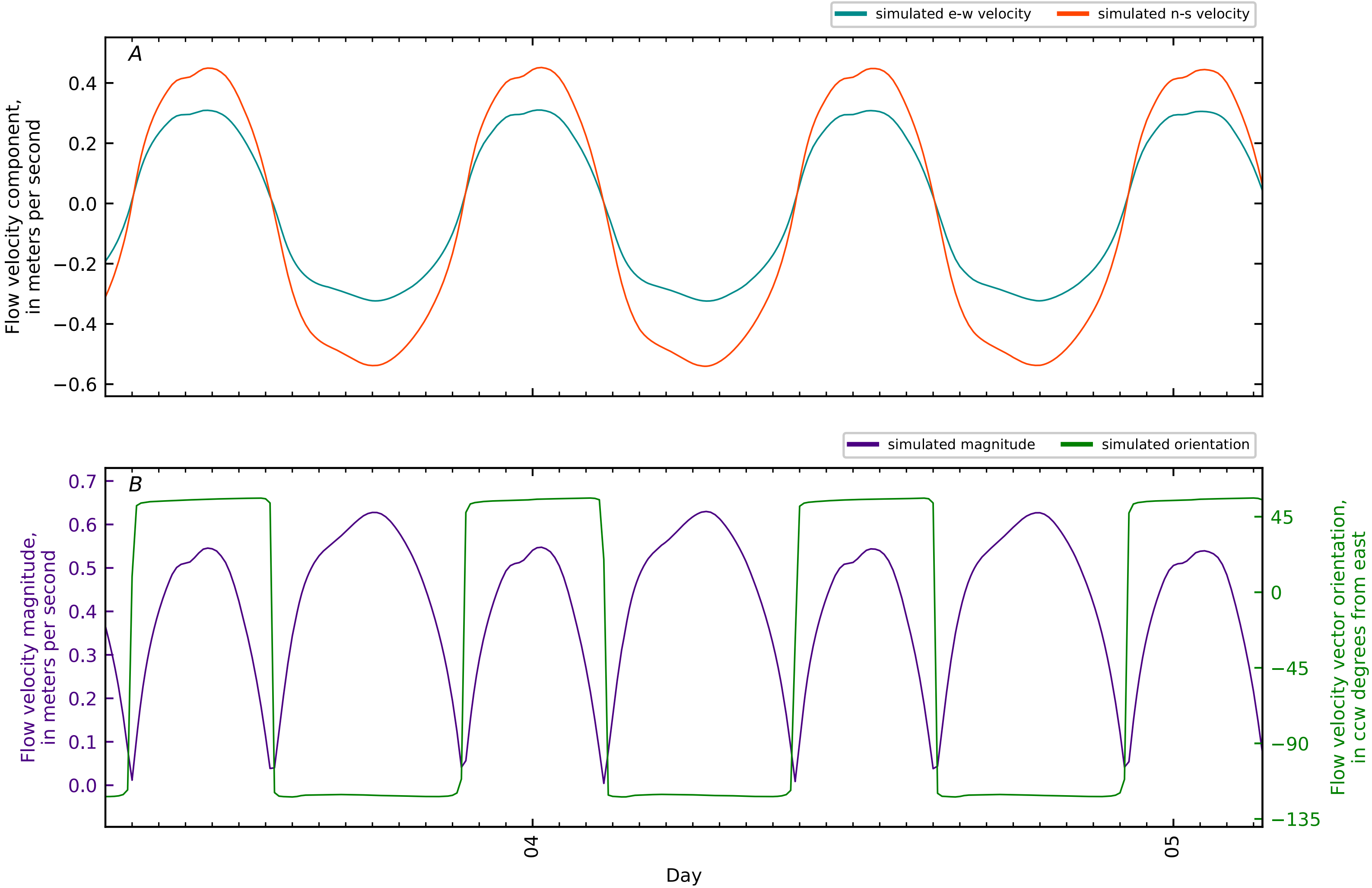

Figure B4-230. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 69, Penob Riv KM21.2 GS 443810068502201 Wint. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

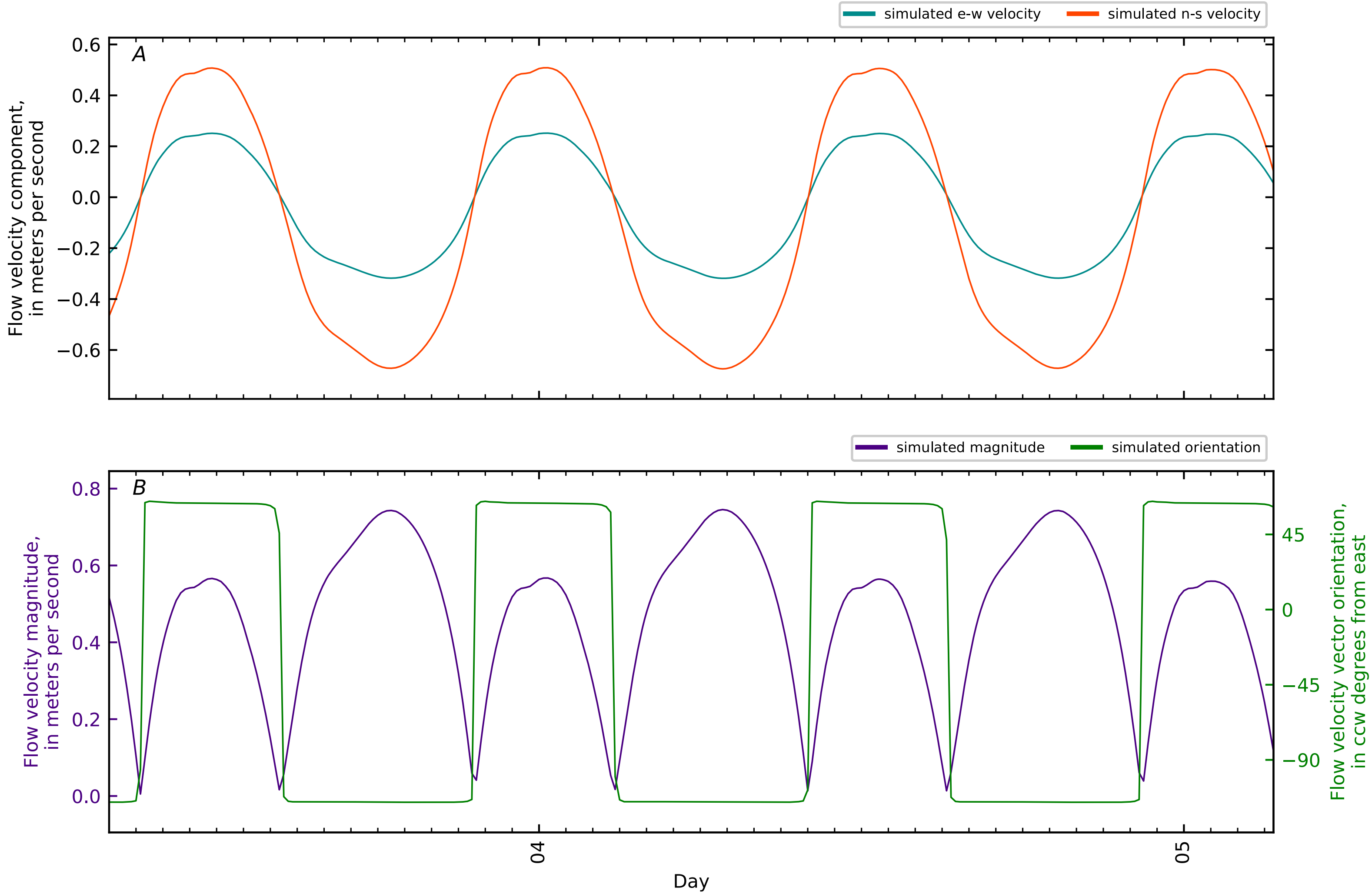

Figure B4-231. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 70, Penob Riv KM21.5 WHOI6 Winterport 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

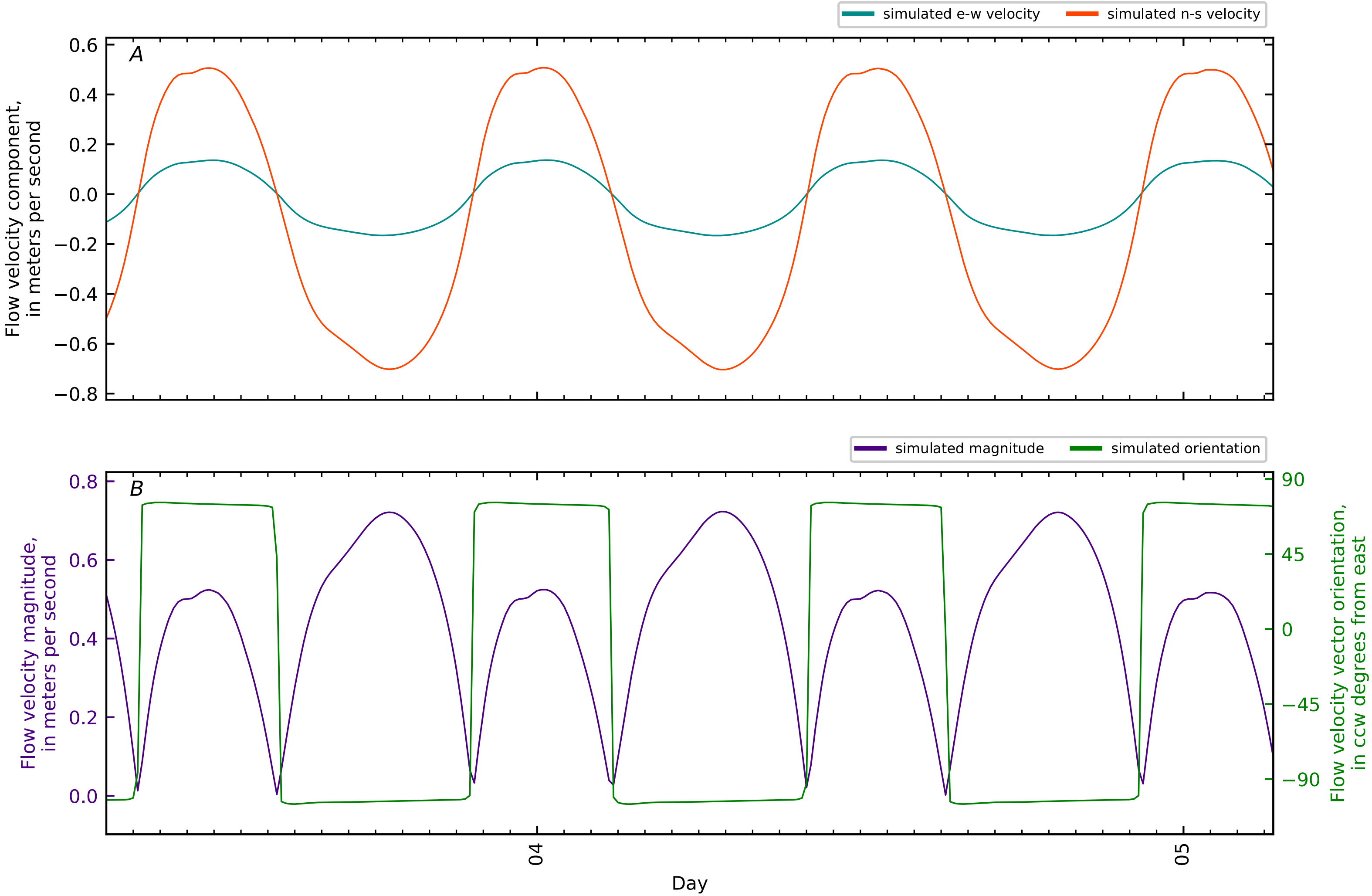

Figure B4-232. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 71, Penob Riv KM22. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

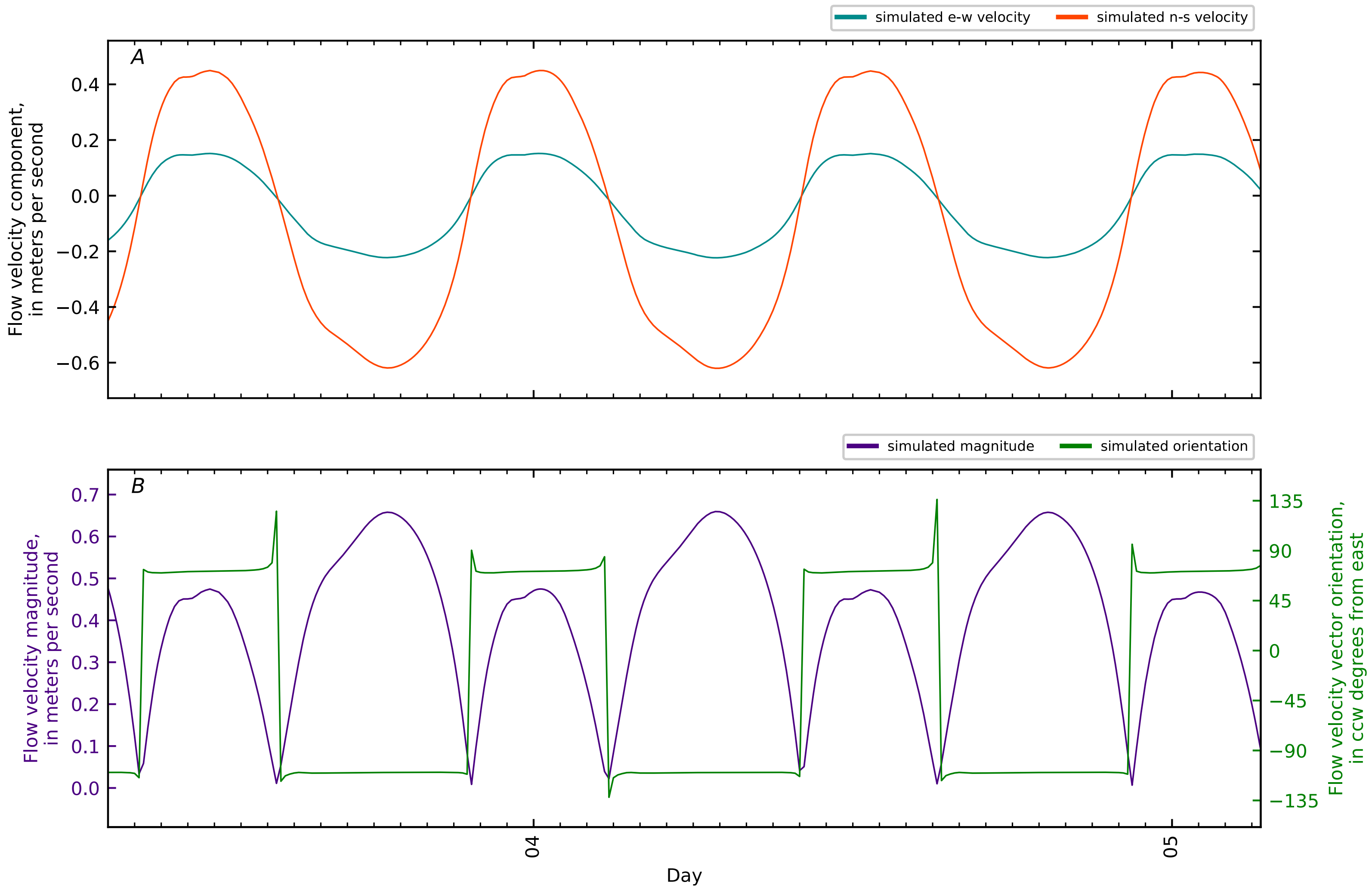

Figure B4-233. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 72, Penob Riv KM23. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

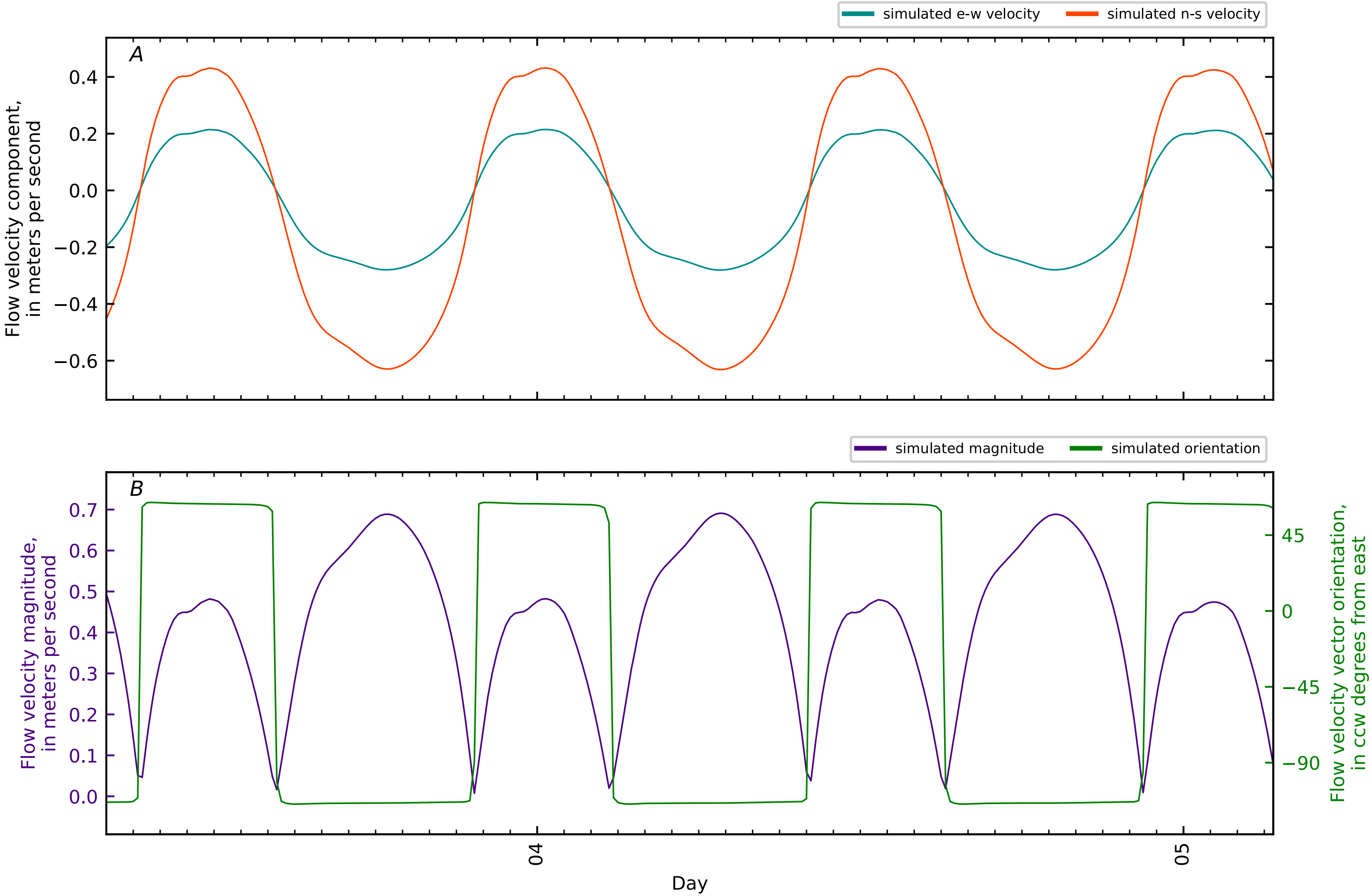

Figure B4-234. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 73, Penob Riv KM24. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

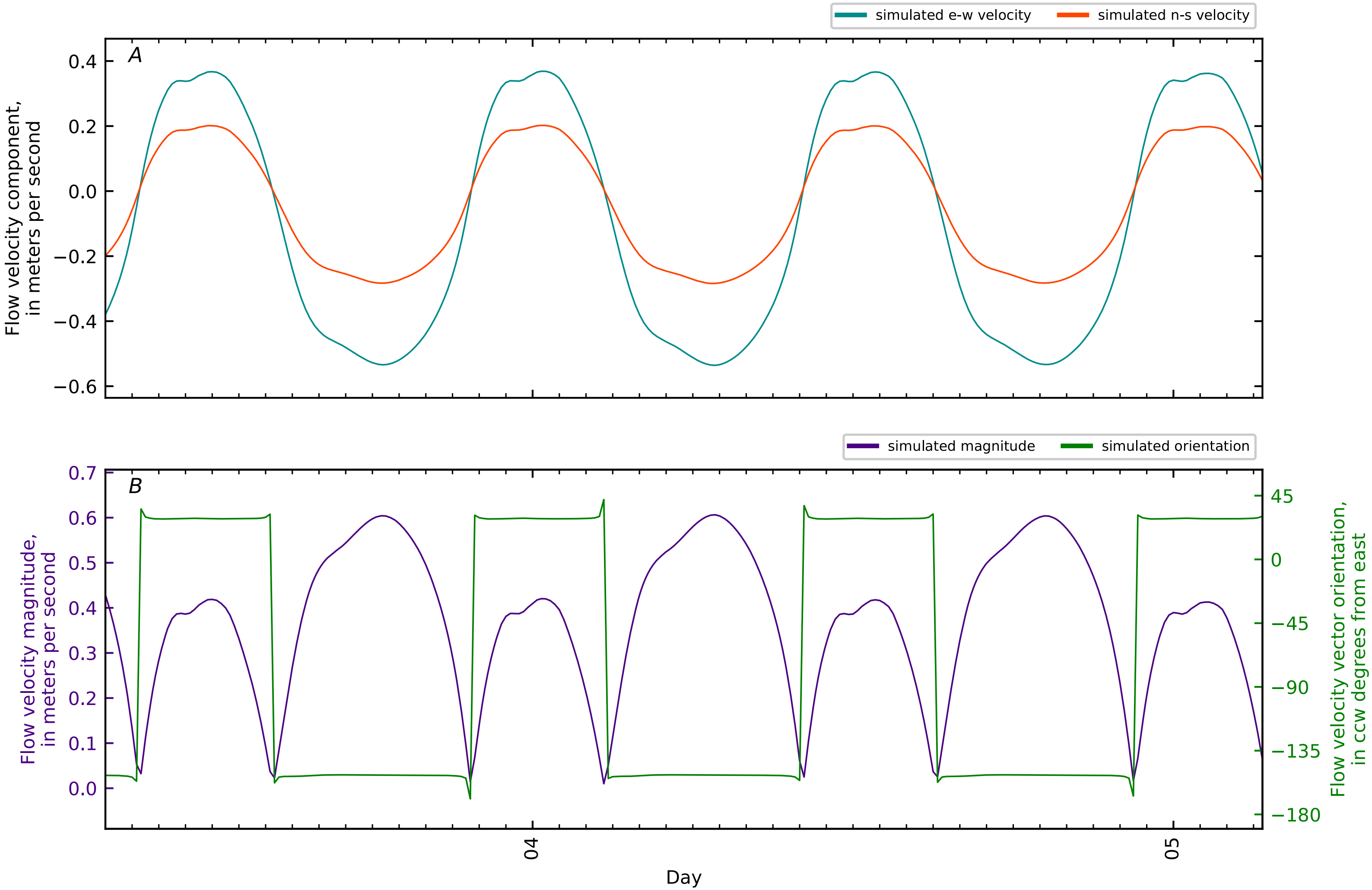

Figure B4-235. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 74, Penob Riv KM25. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

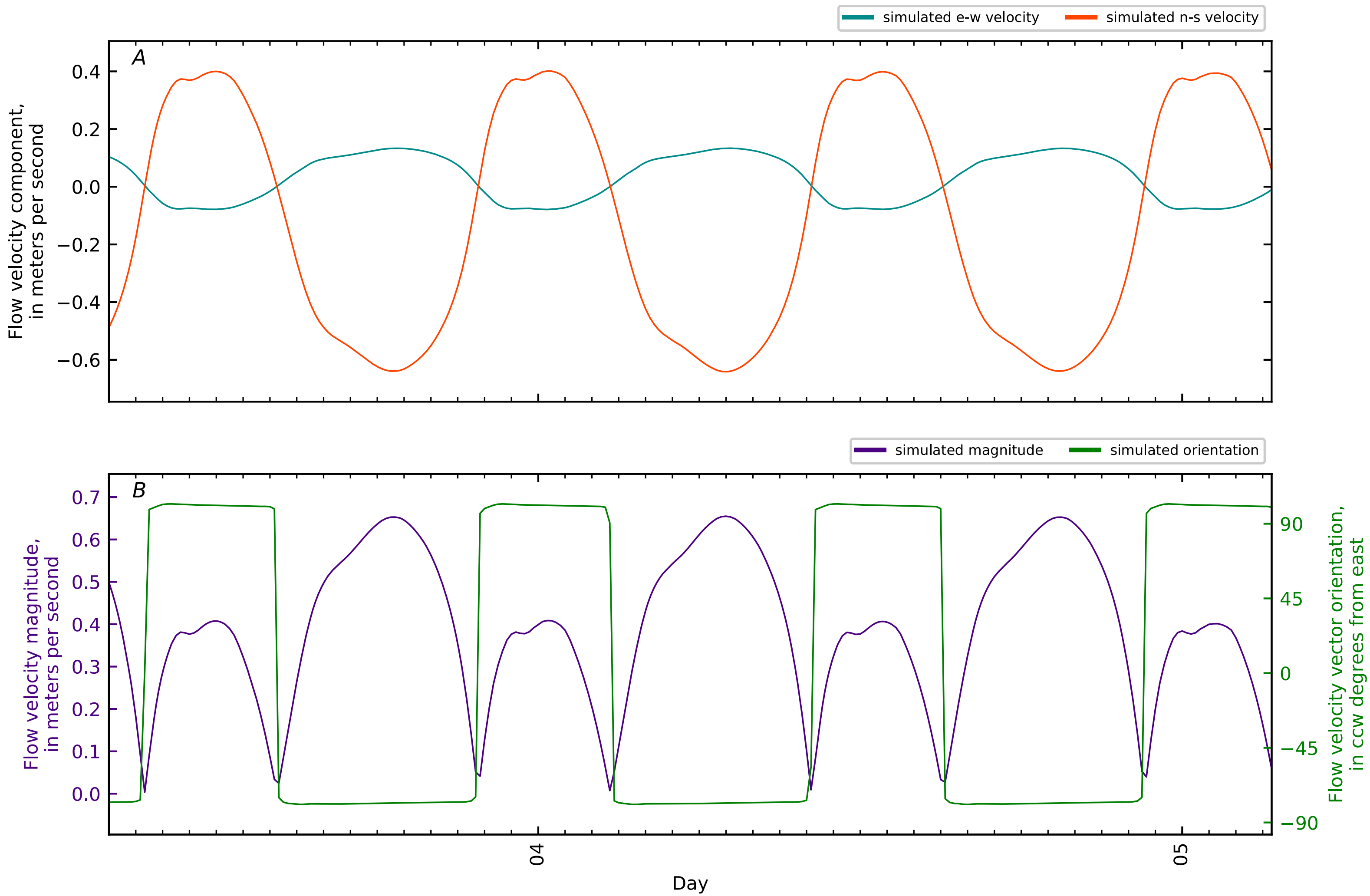

Figure B4-236. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 75, Penob Riv KM26. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

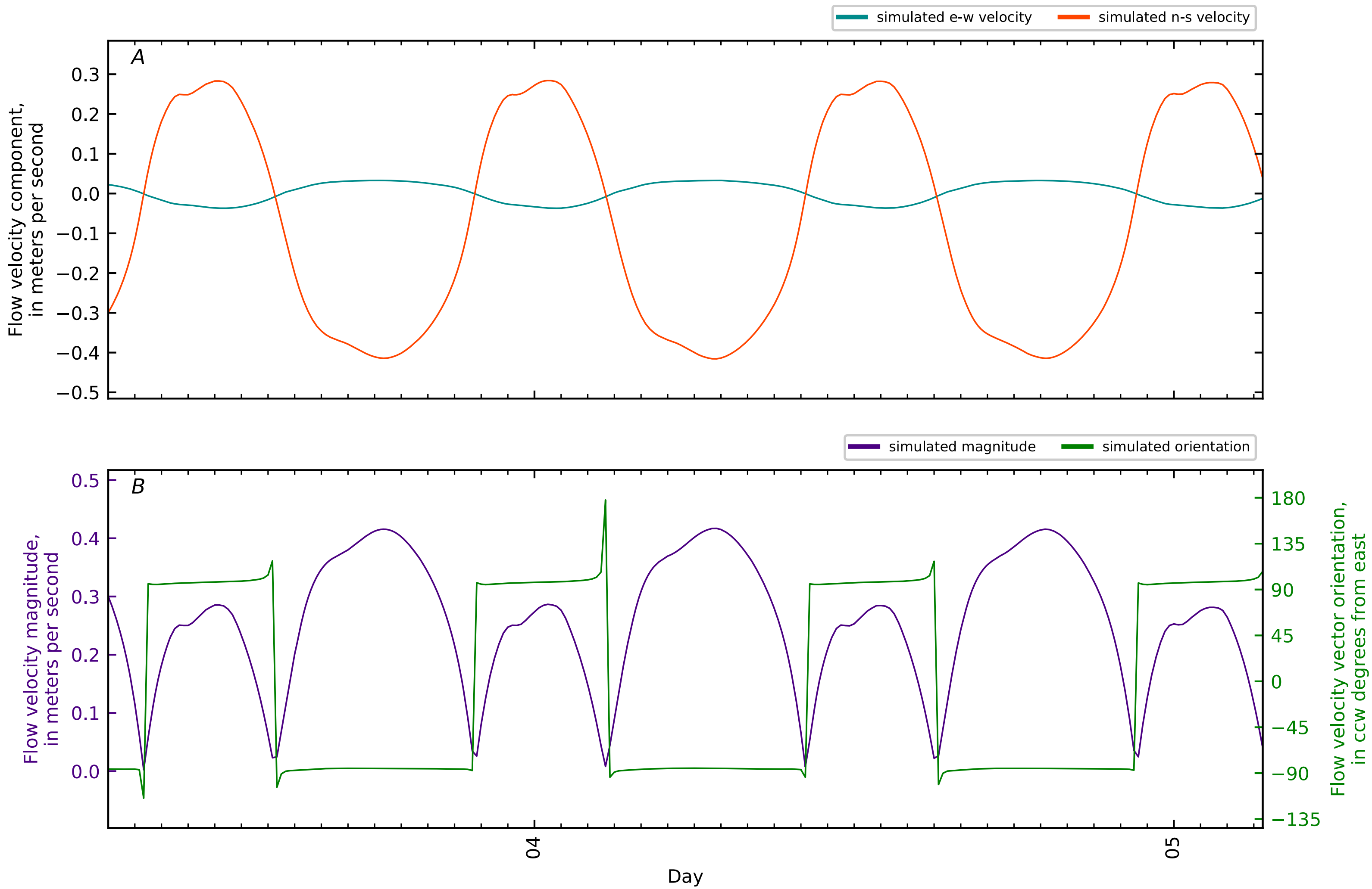

Figure B4-237. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 76, Penob Riv KM27. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

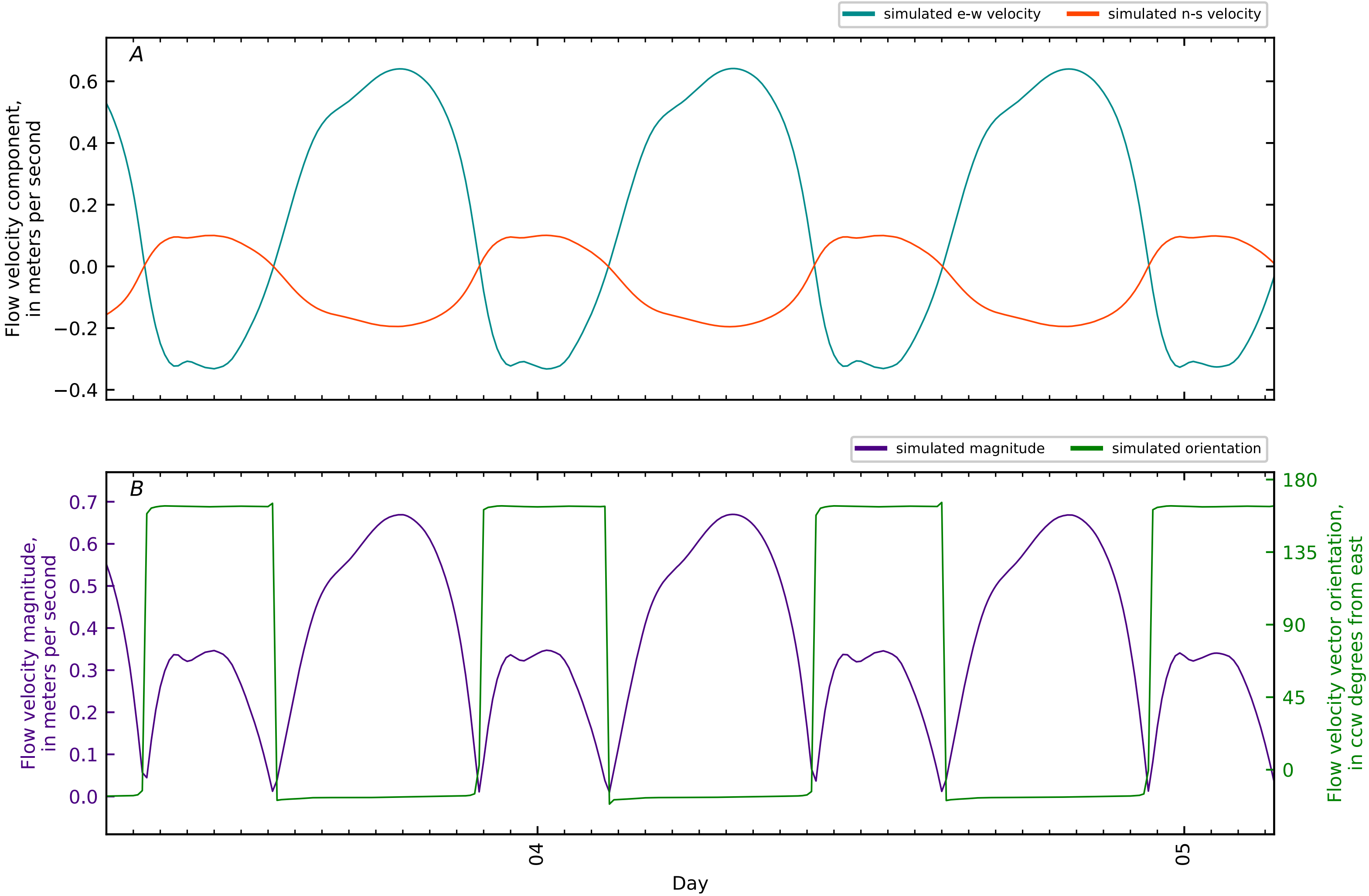

Figure B4-238. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 77, Penob Riv KM28. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

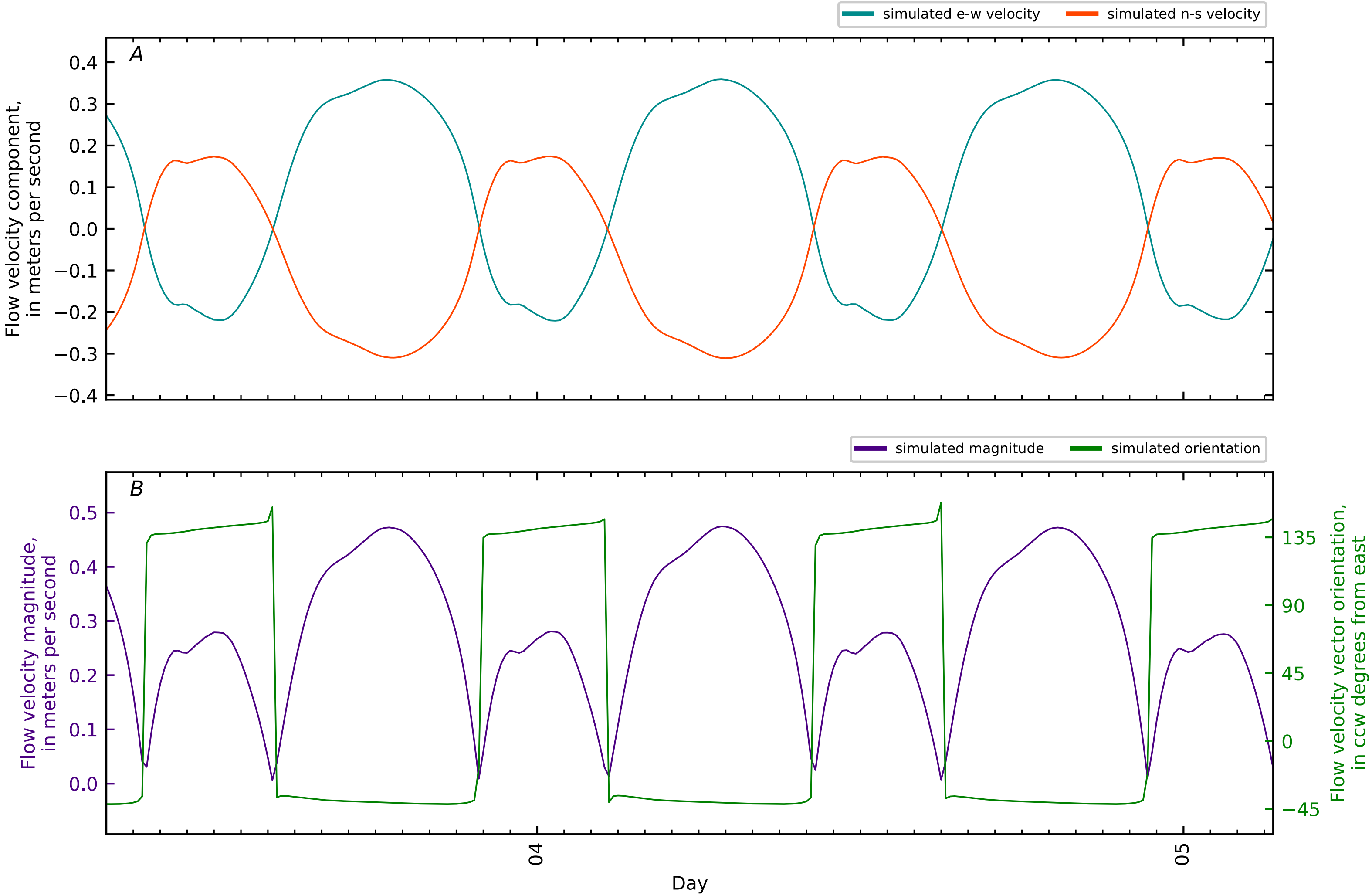

Figure B4-239. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 78, Penob Riv KM29. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

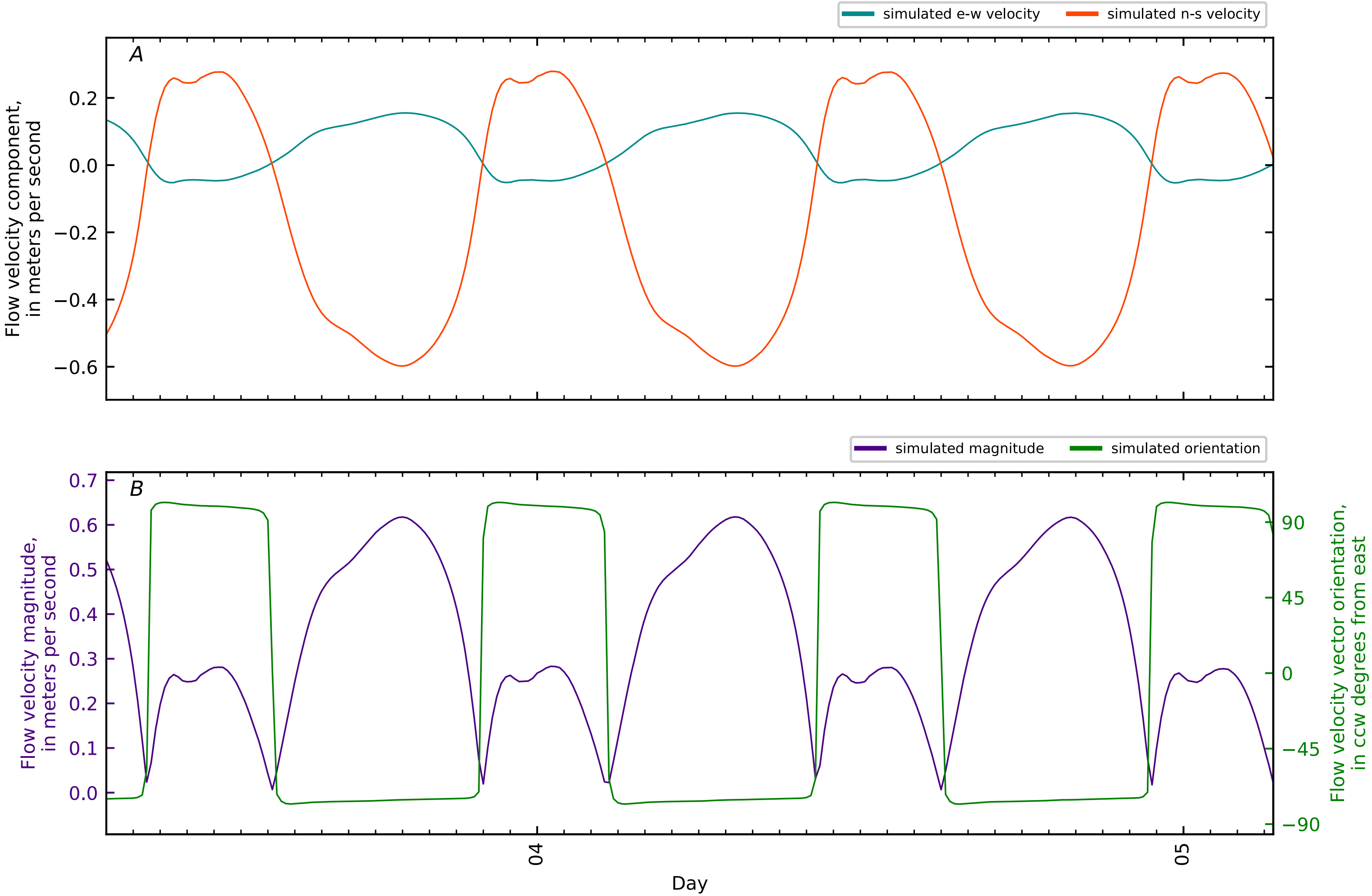

Figure B4-240. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 79, Penob Riv KM30. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

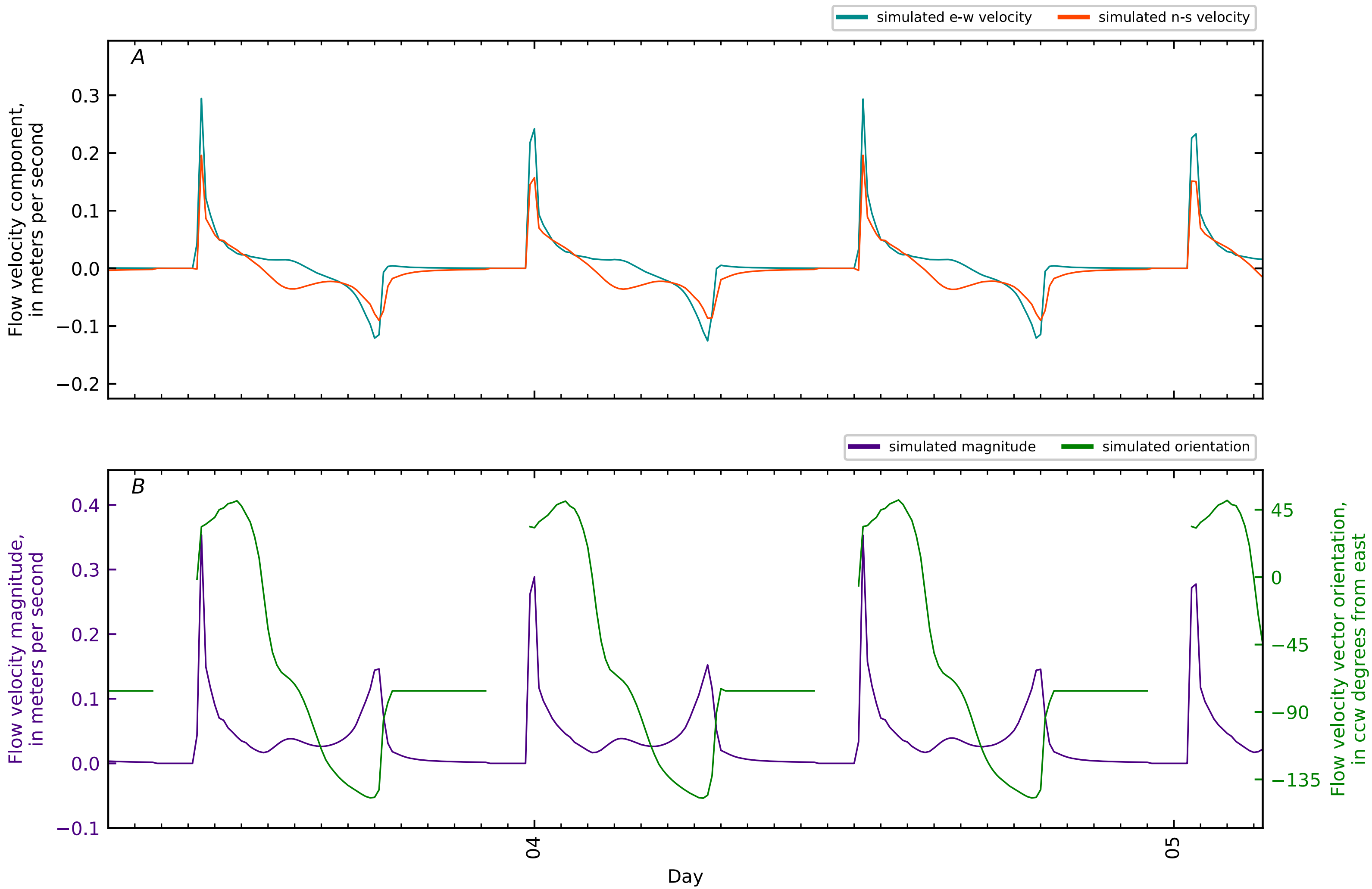

Figure B4-241. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 80, Penob Riv KM30.3 ERDC3 ON-MU2-SF-2 Bartl. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

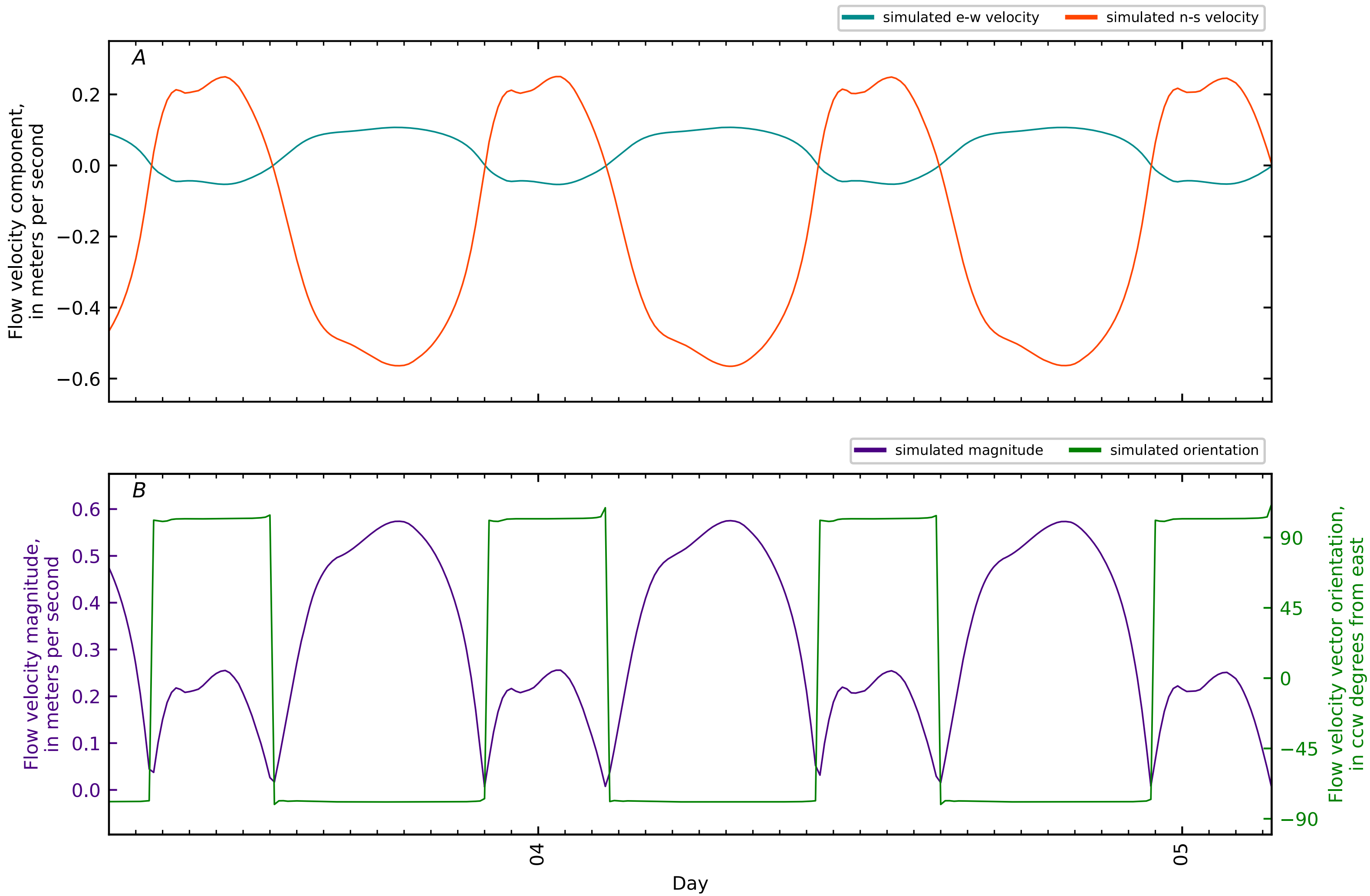

Figure B4-242. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 81, Penob Riv KM31. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

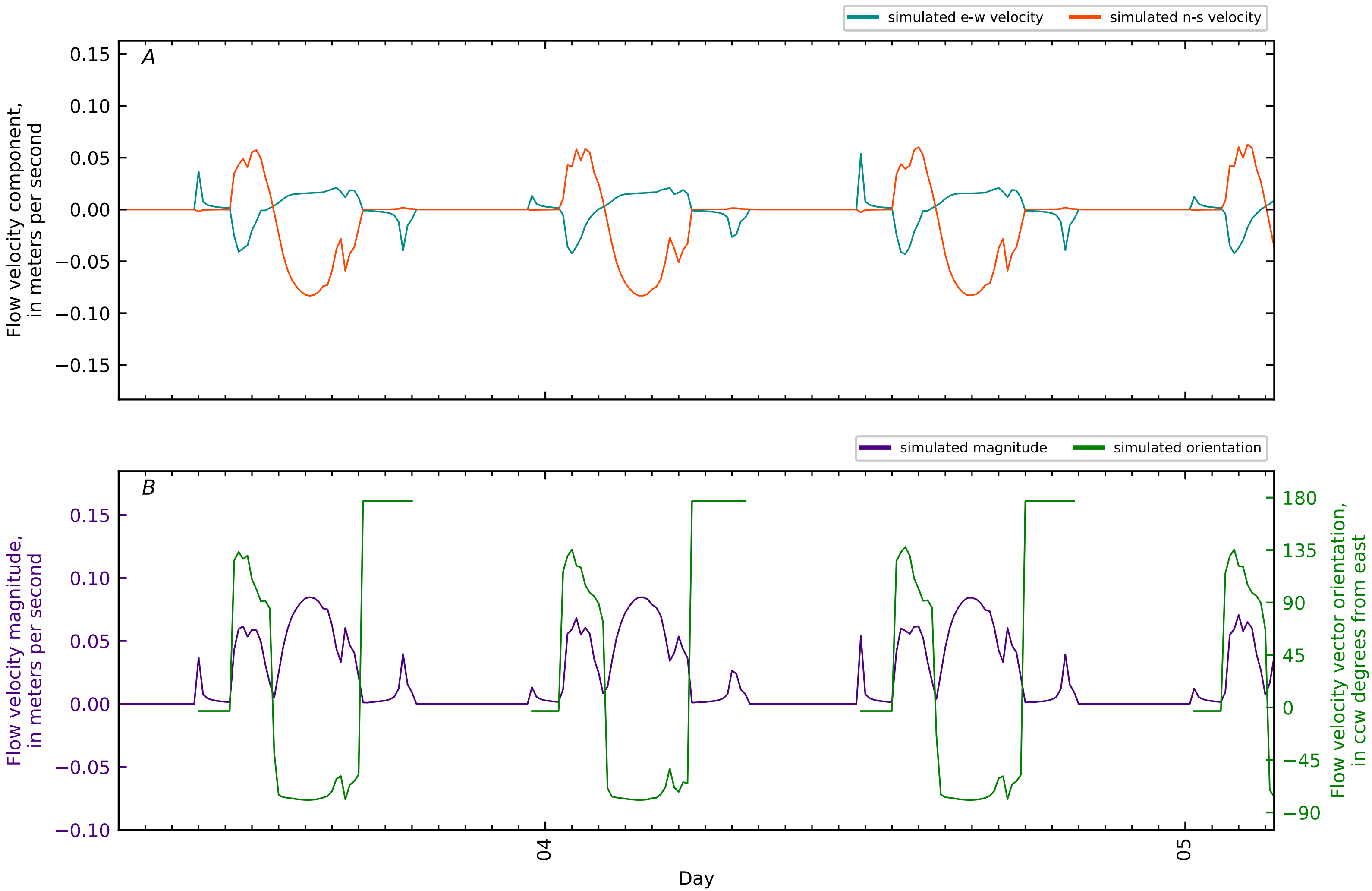

Figure B4-243. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 82, Penob Riv KM31.3 ERDC1 ON-MU2-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

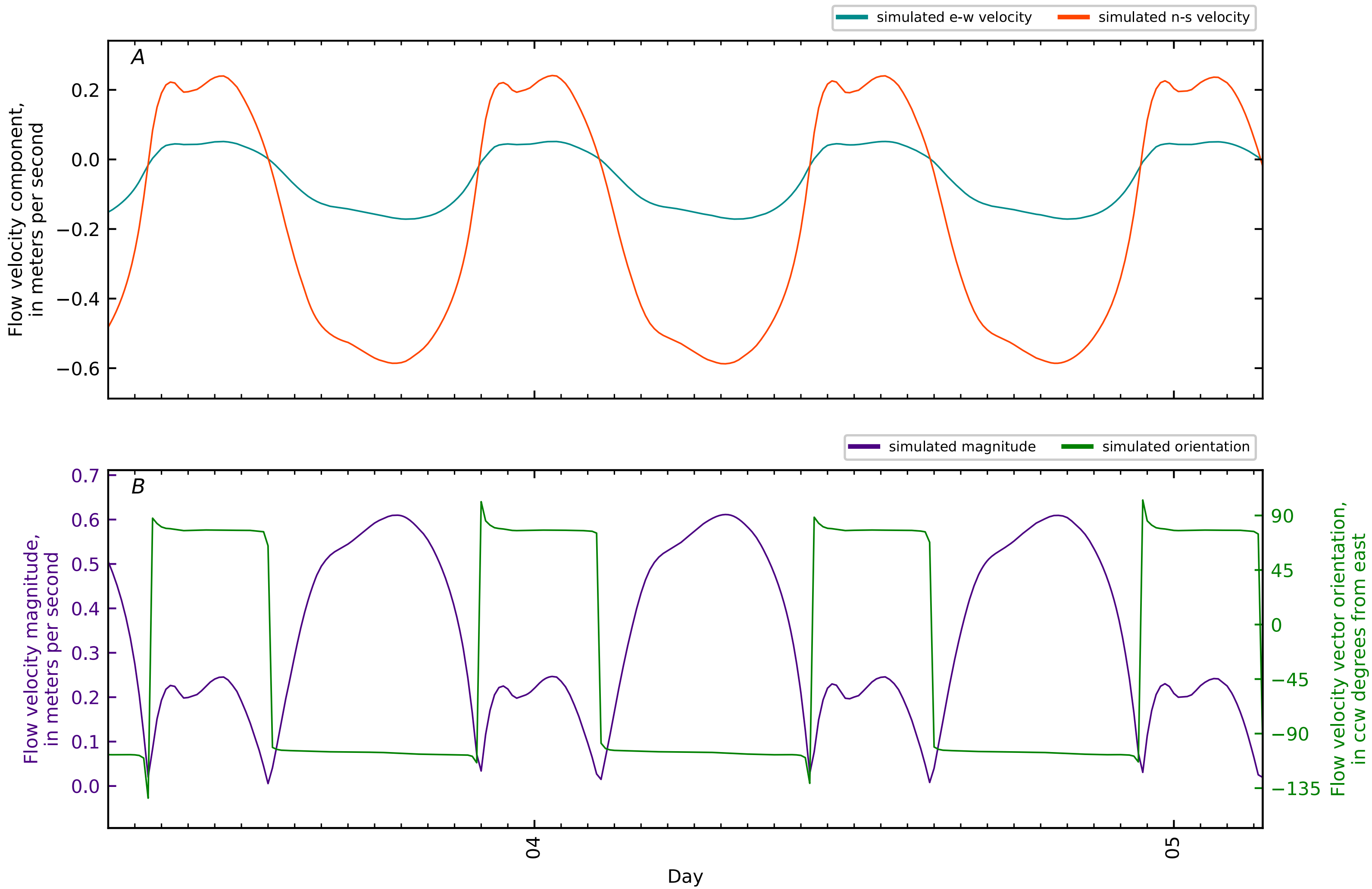

Figure B4-244. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 83, Penob Riv KM31.4 ERDC2 ON-MU13-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

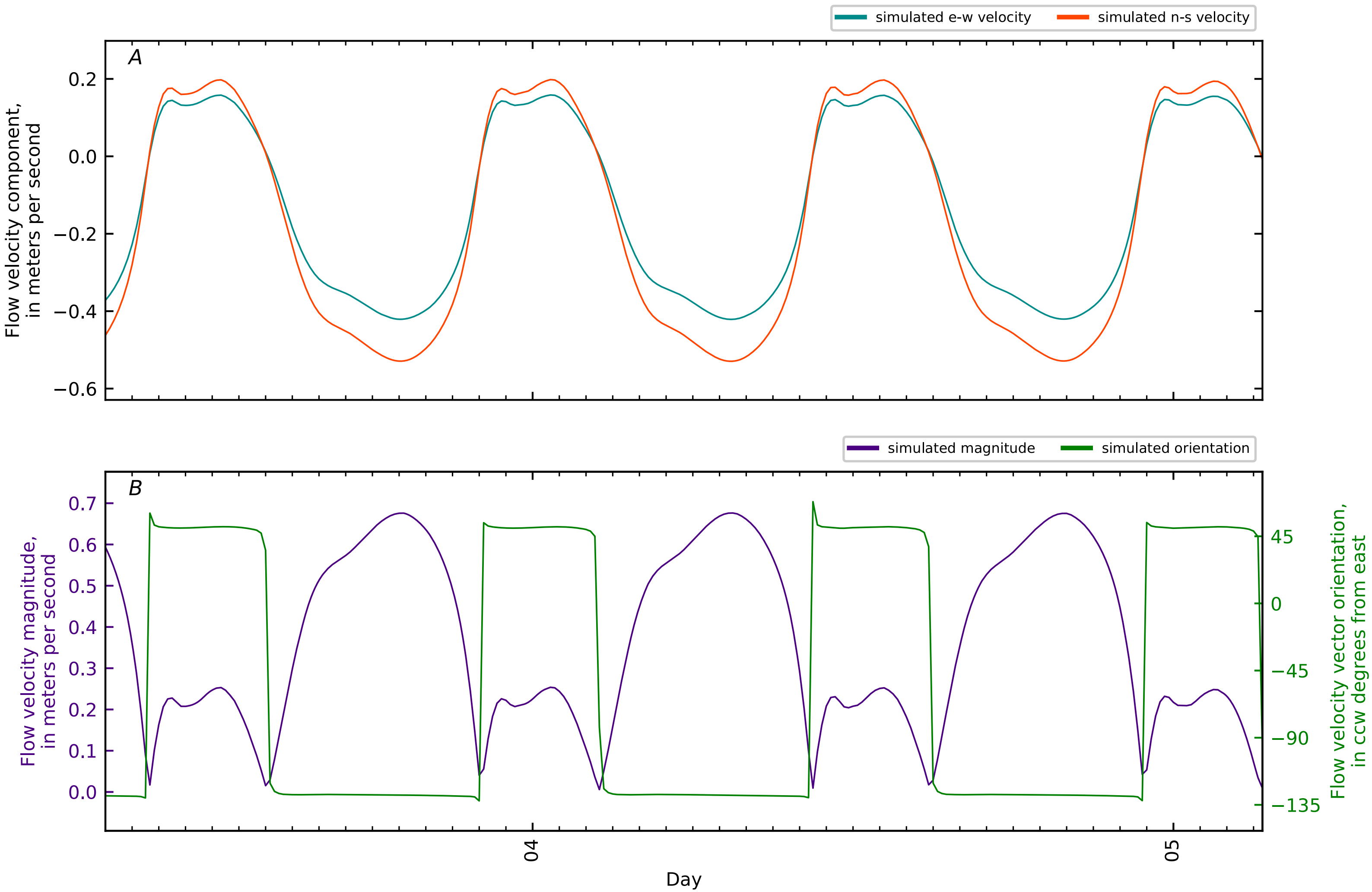

Figure B4-245. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 84, Penob Riv KM32. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

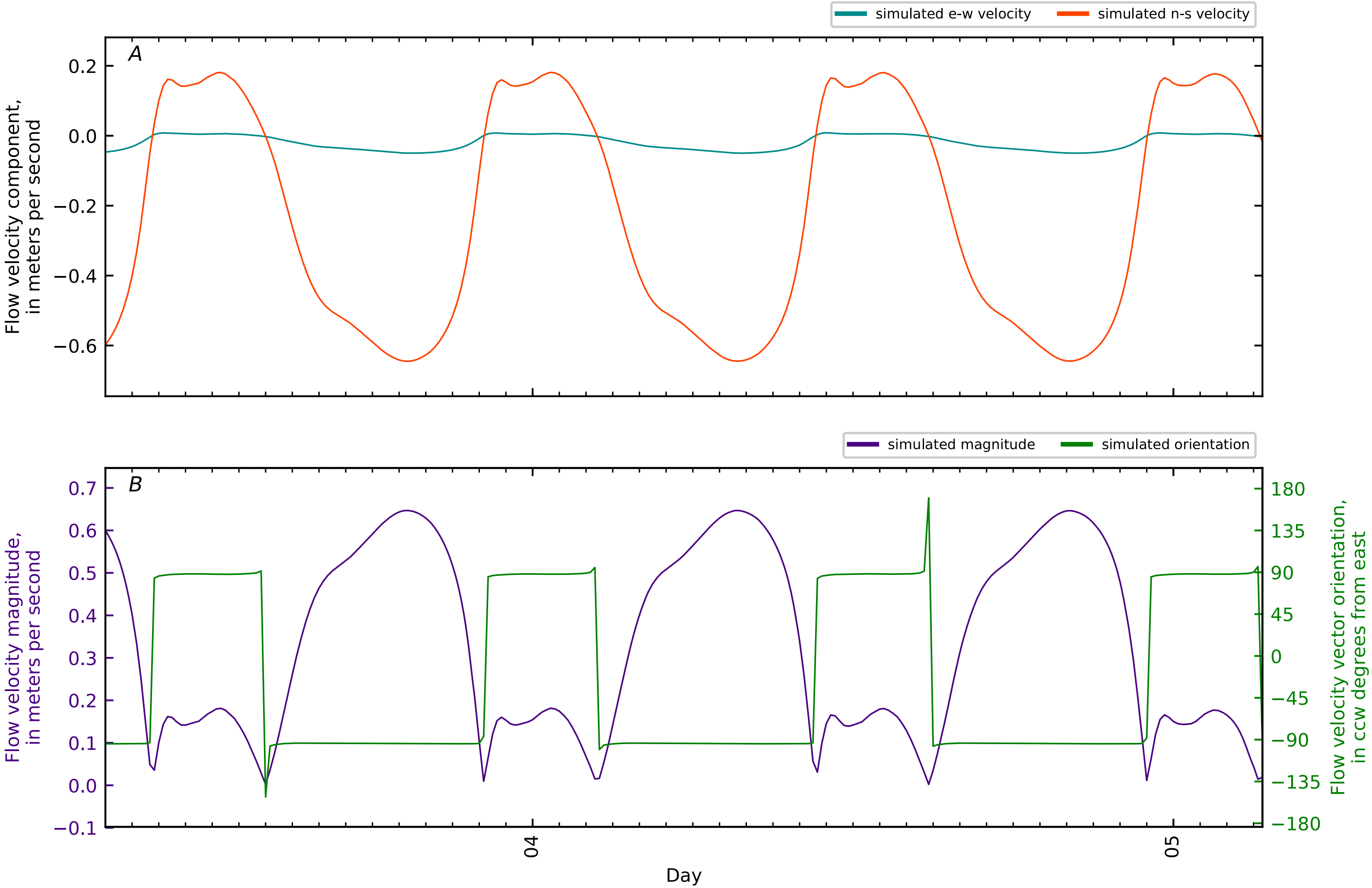

Figure B4-246. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 85, Penob Riv KM33. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

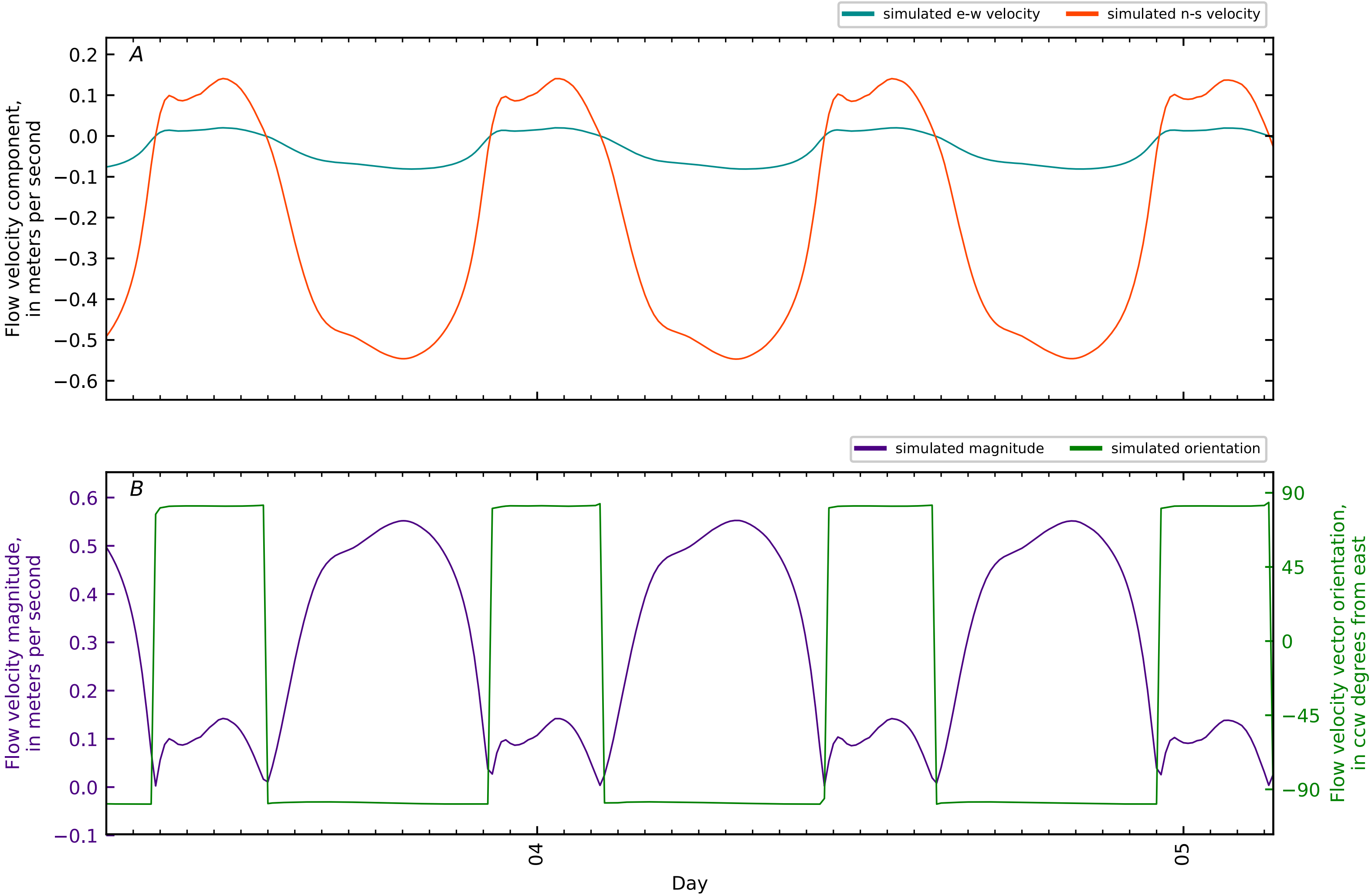

Figure B4-247. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 86, Penob Riv KM34. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

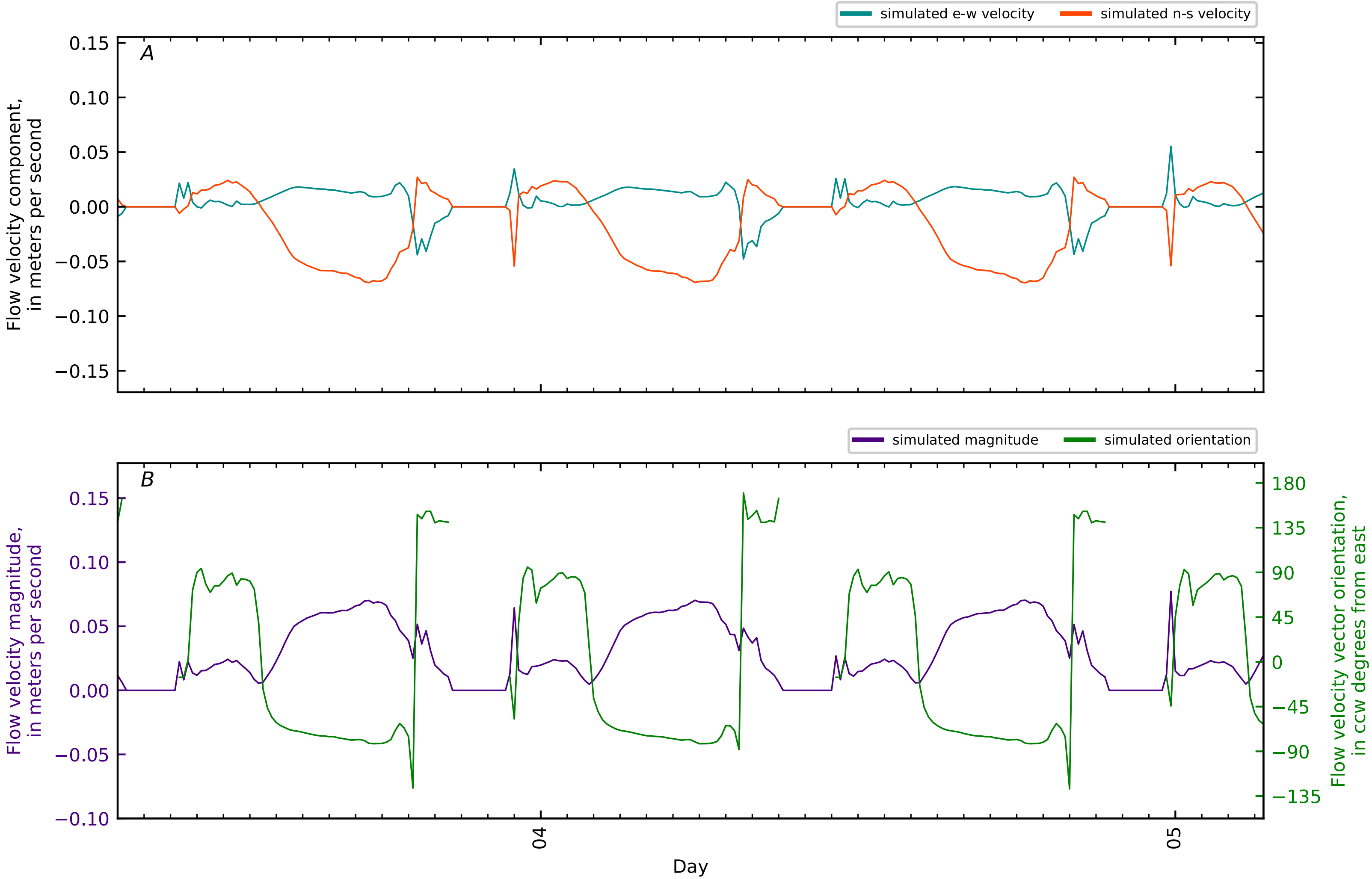

Figure B4-248. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 87, Penob Riv KM34.6 Southern Cove Orrington. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

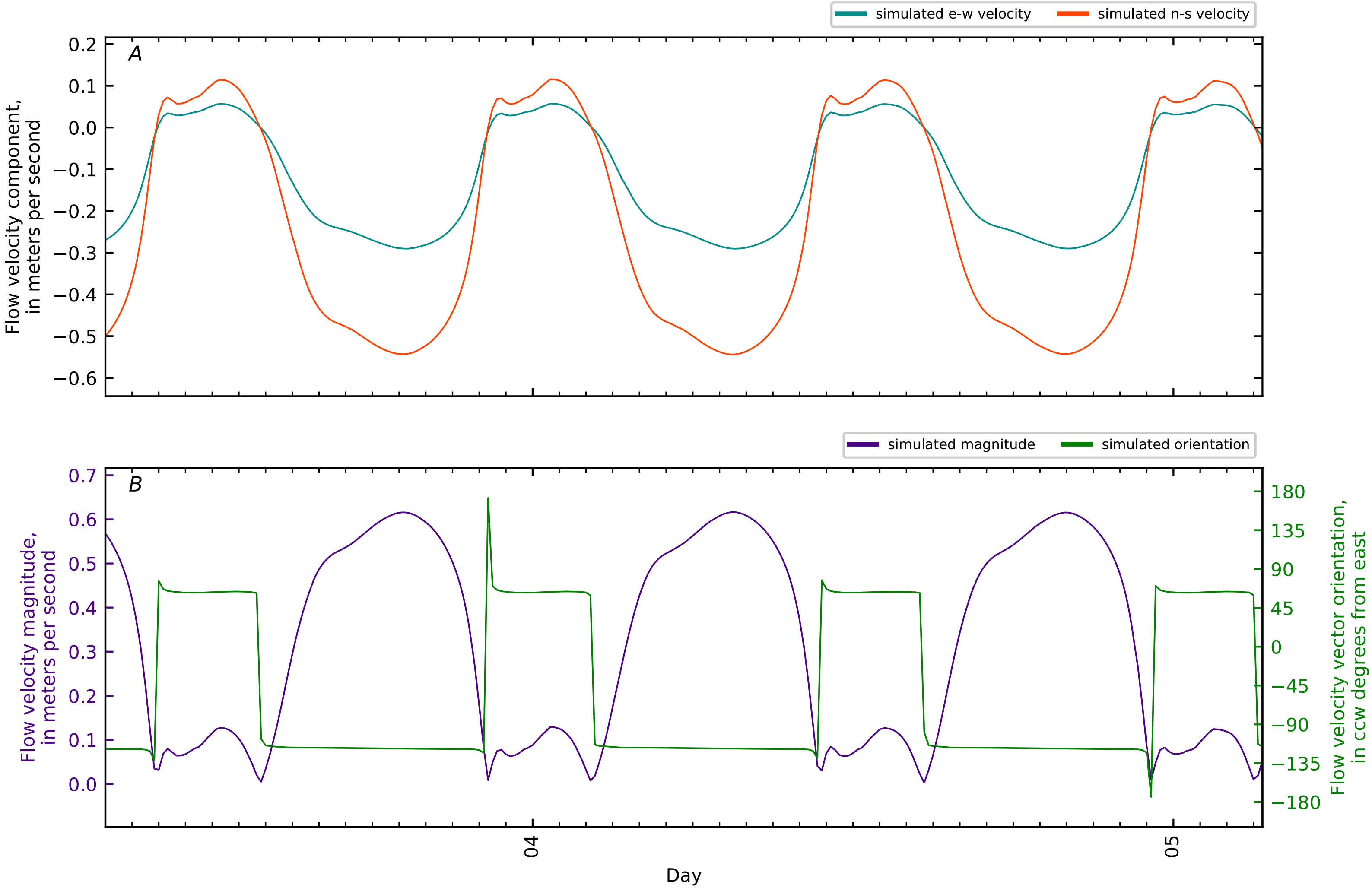

Figure B4-249. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 88, Penob Riv KM35. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

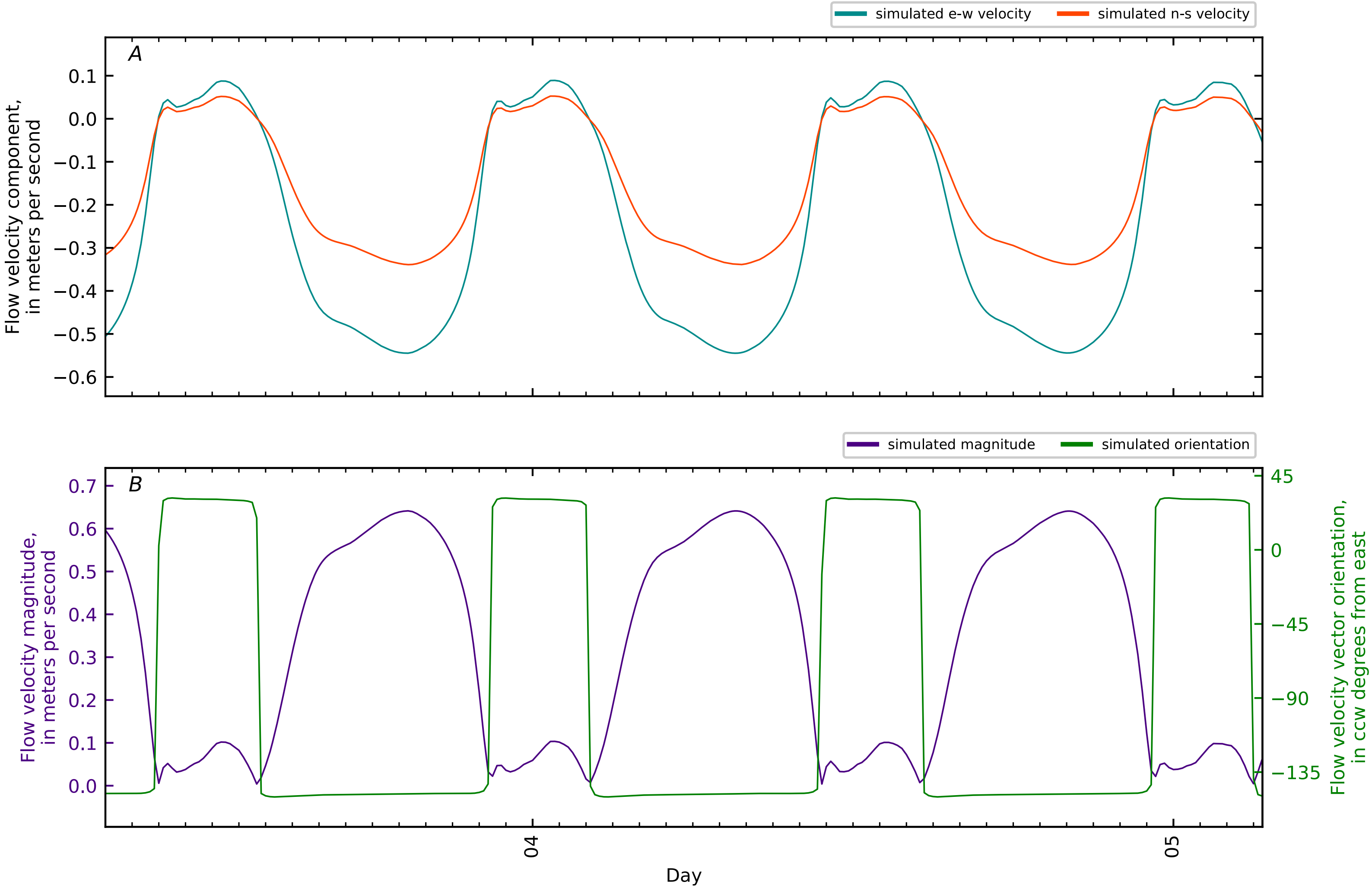

Figure B4-250. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 89, Penob Riv KM36. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

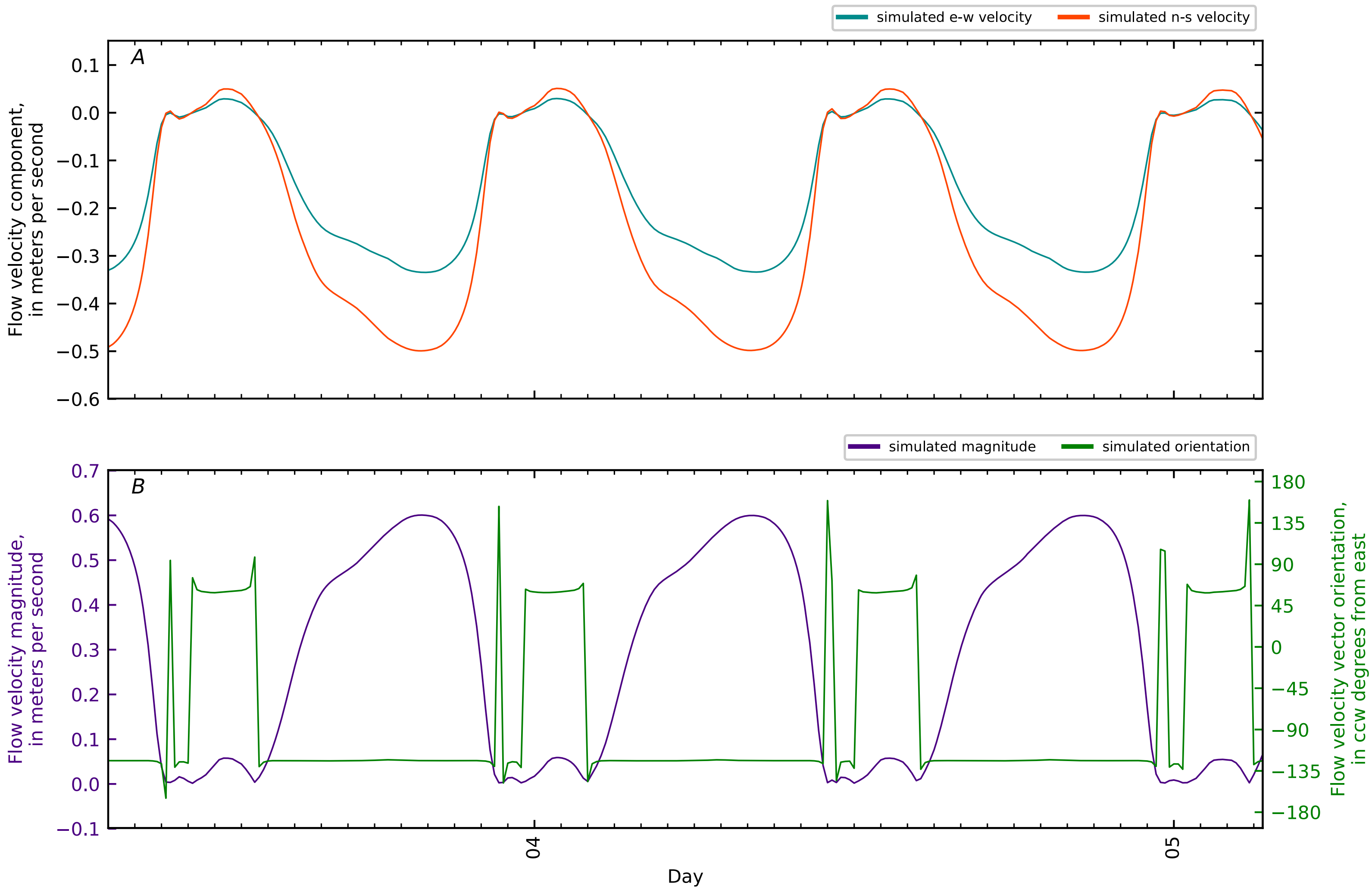

Figure B4-251. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 90, Penob Riv KM37. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

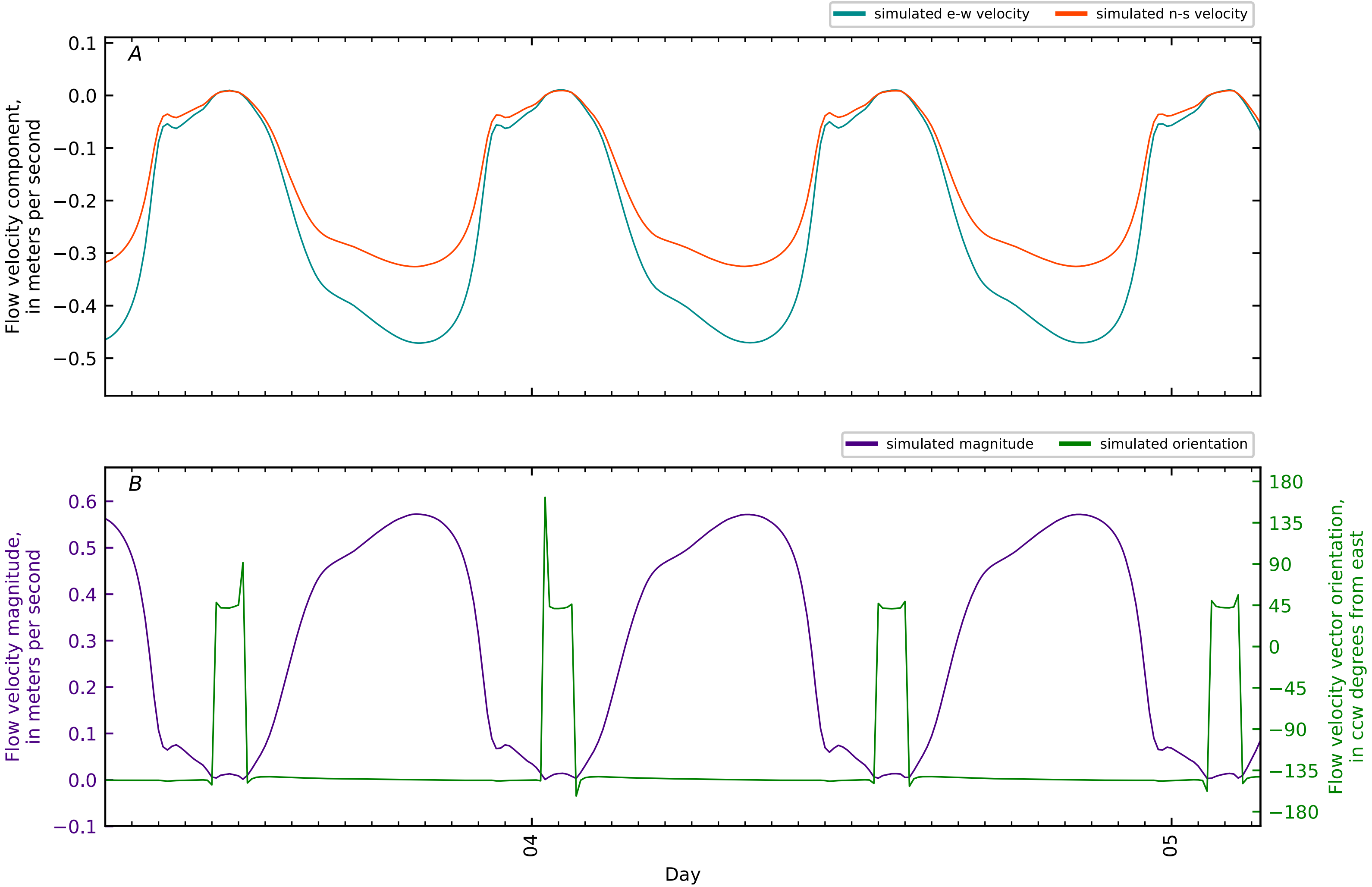

Figure B4-252. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 91, Penob Riv KM38. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

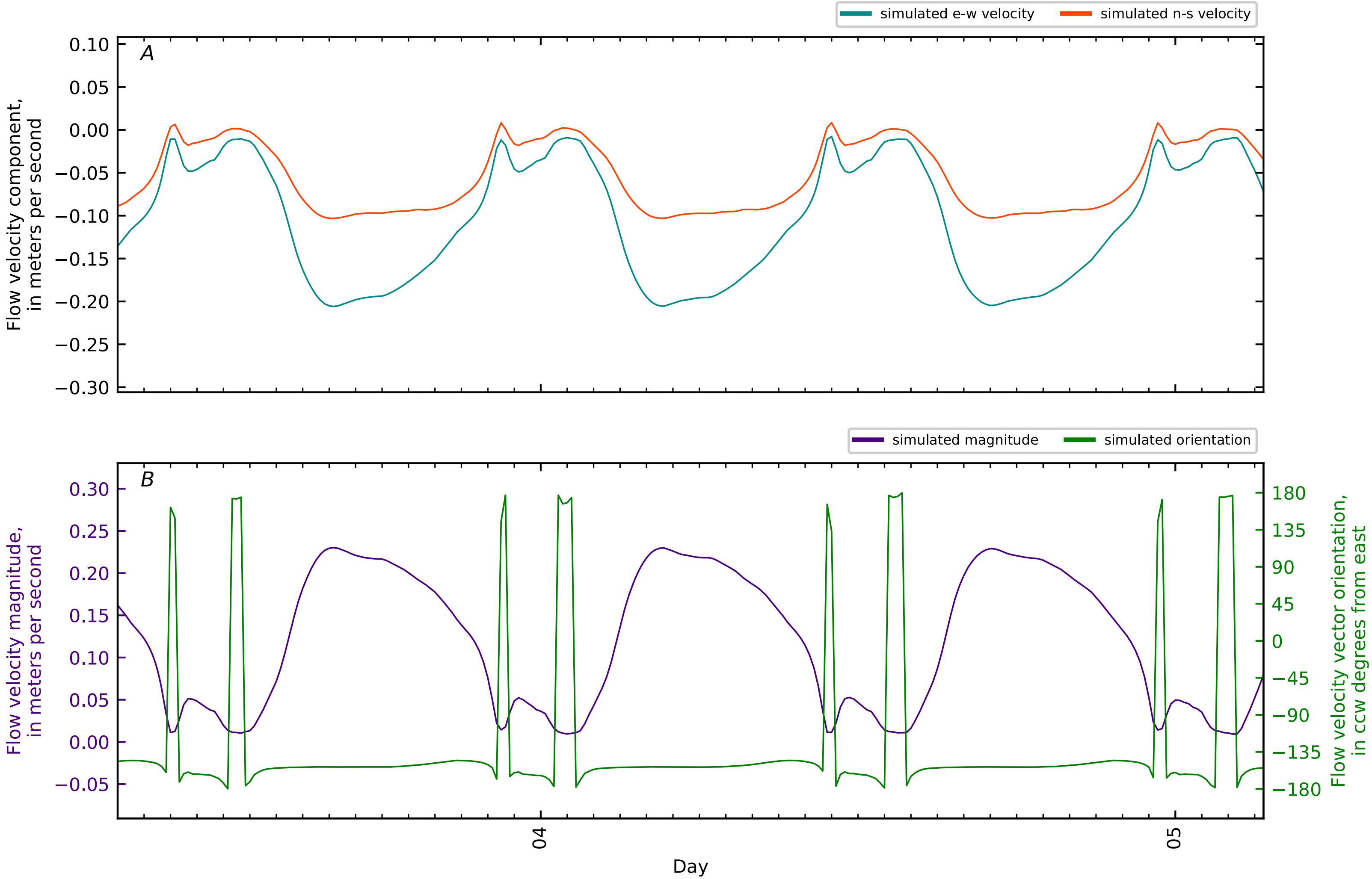

Figure B4-253. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 92, Penob Riv KM38.7 Boat ramp d/s Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

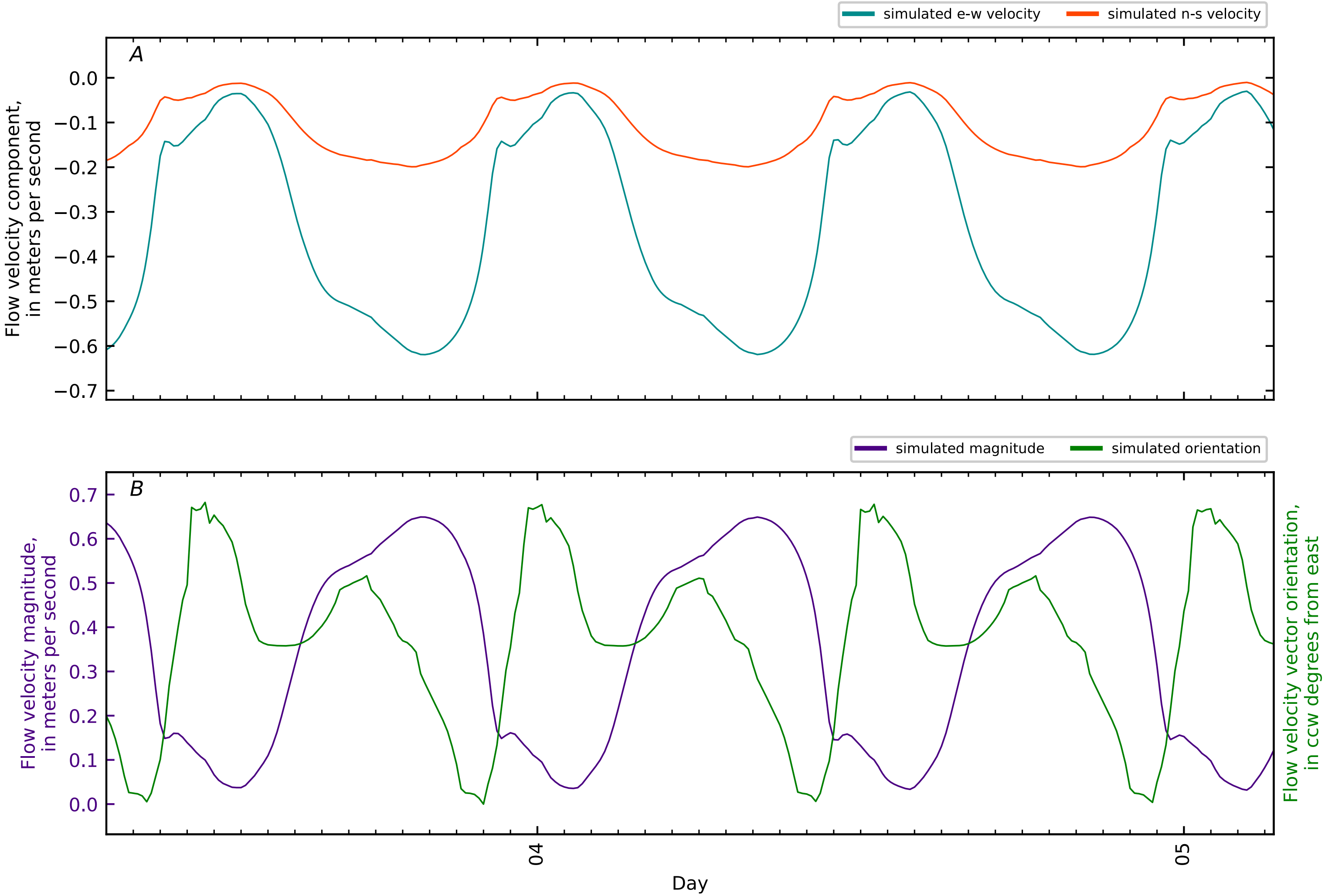

Figure B4-254. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 93, Penob Riv KM39. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

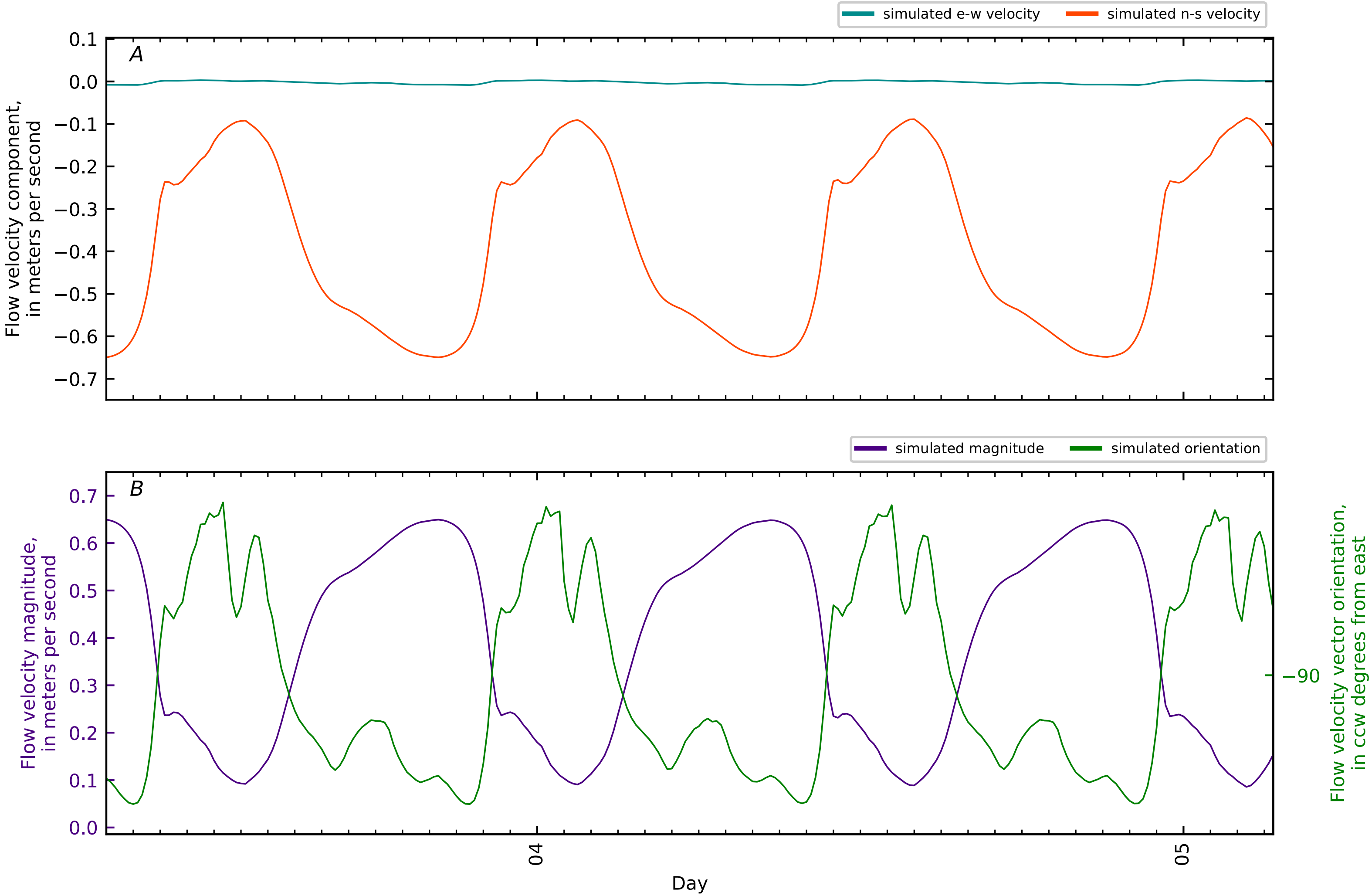

Figure B4-255. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 94, Penob Riv KM40. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

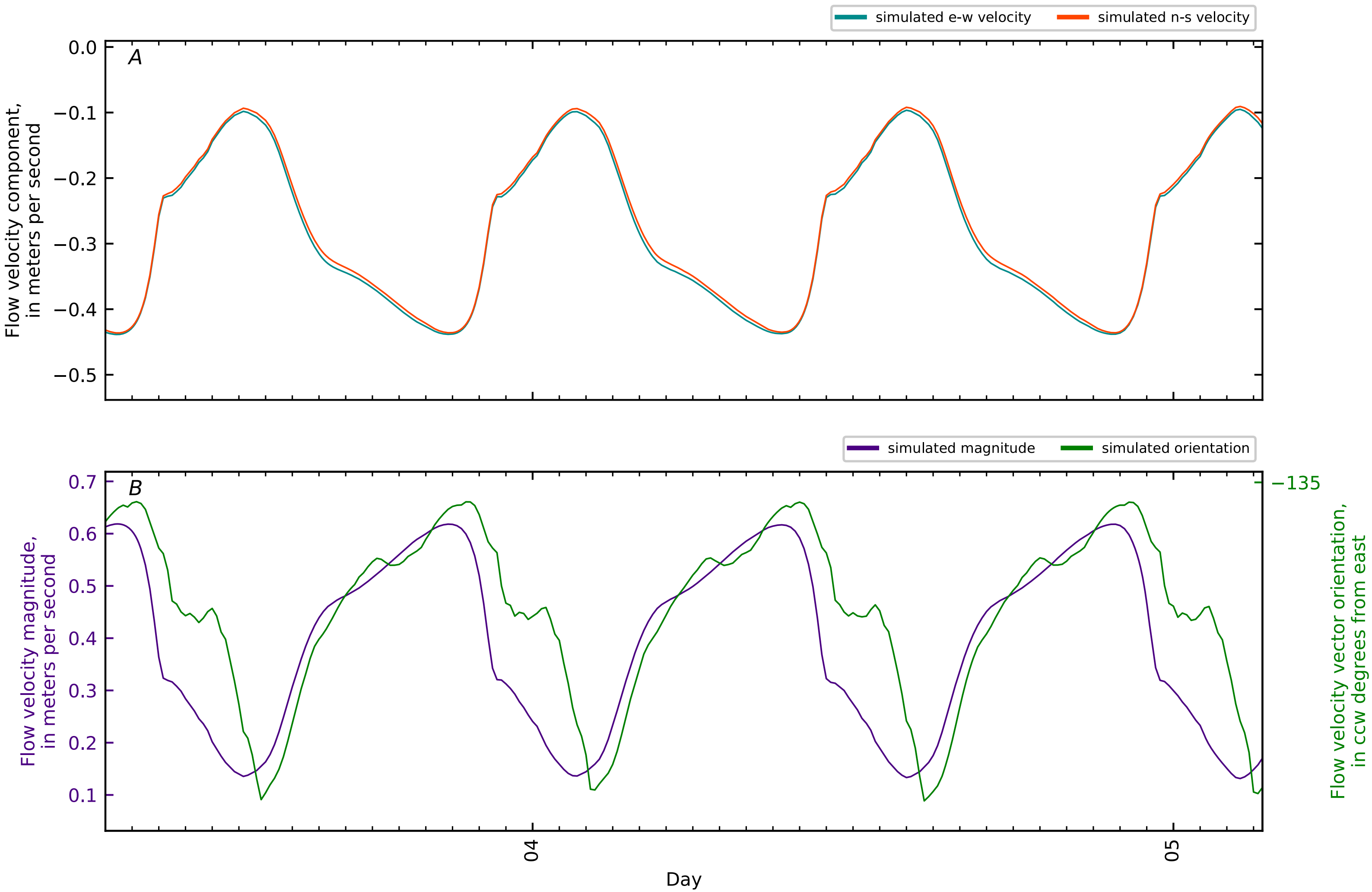

Figure B4-256. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 95, Penob Riv KM41. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

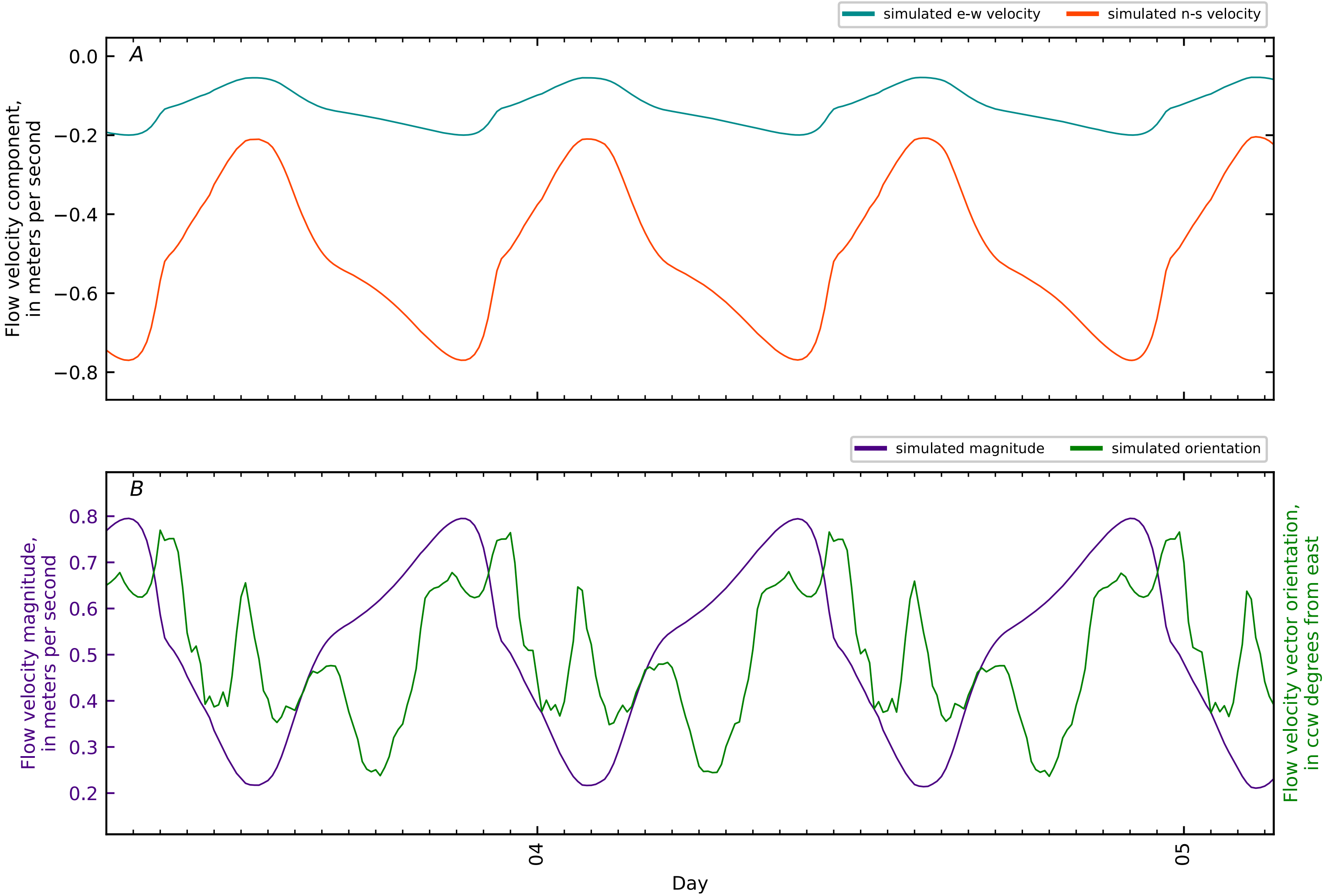

Figure B4-257. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 96, Penob Riv KM42. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

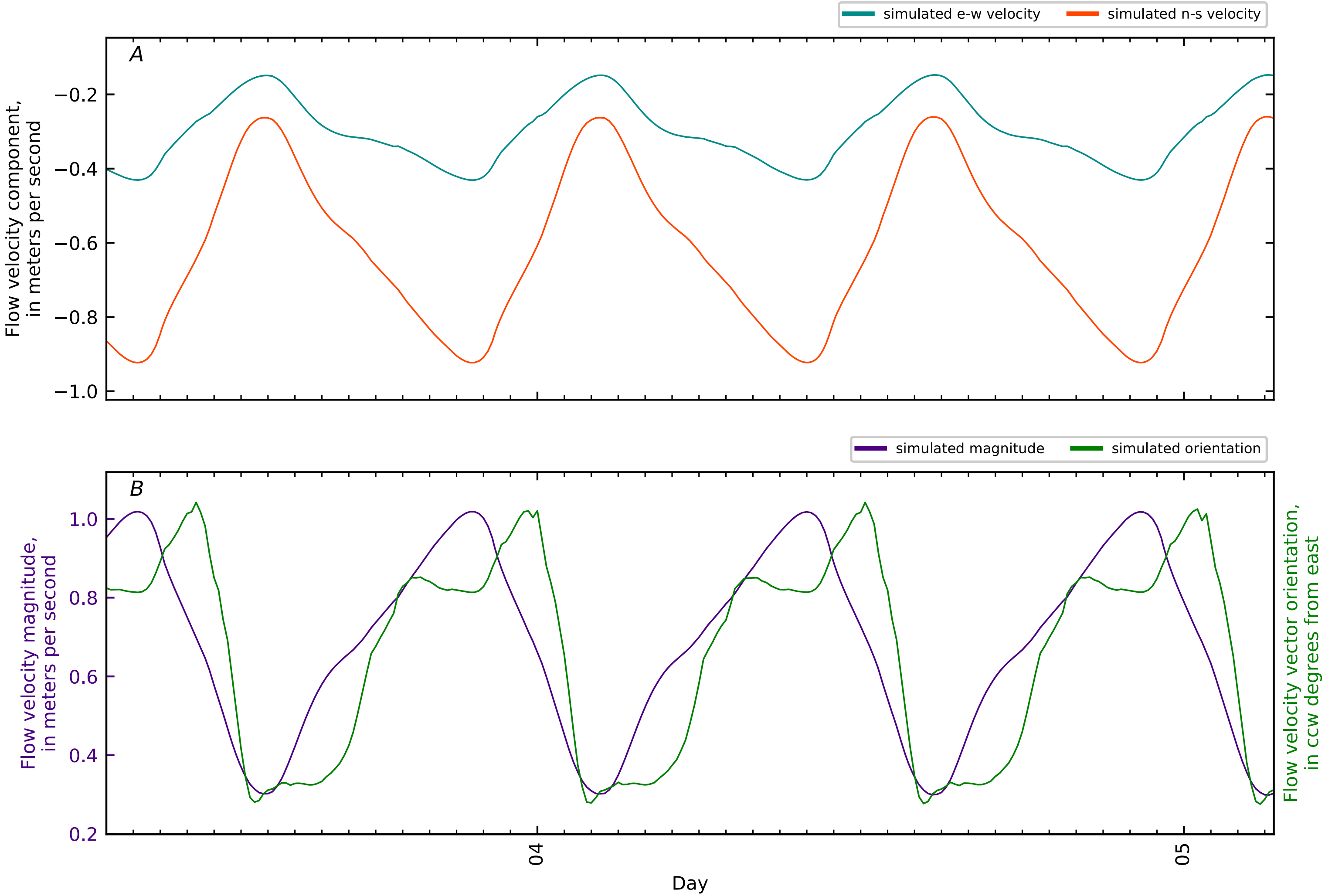

Figure B4-258. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 97, Penob Riv KM43. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

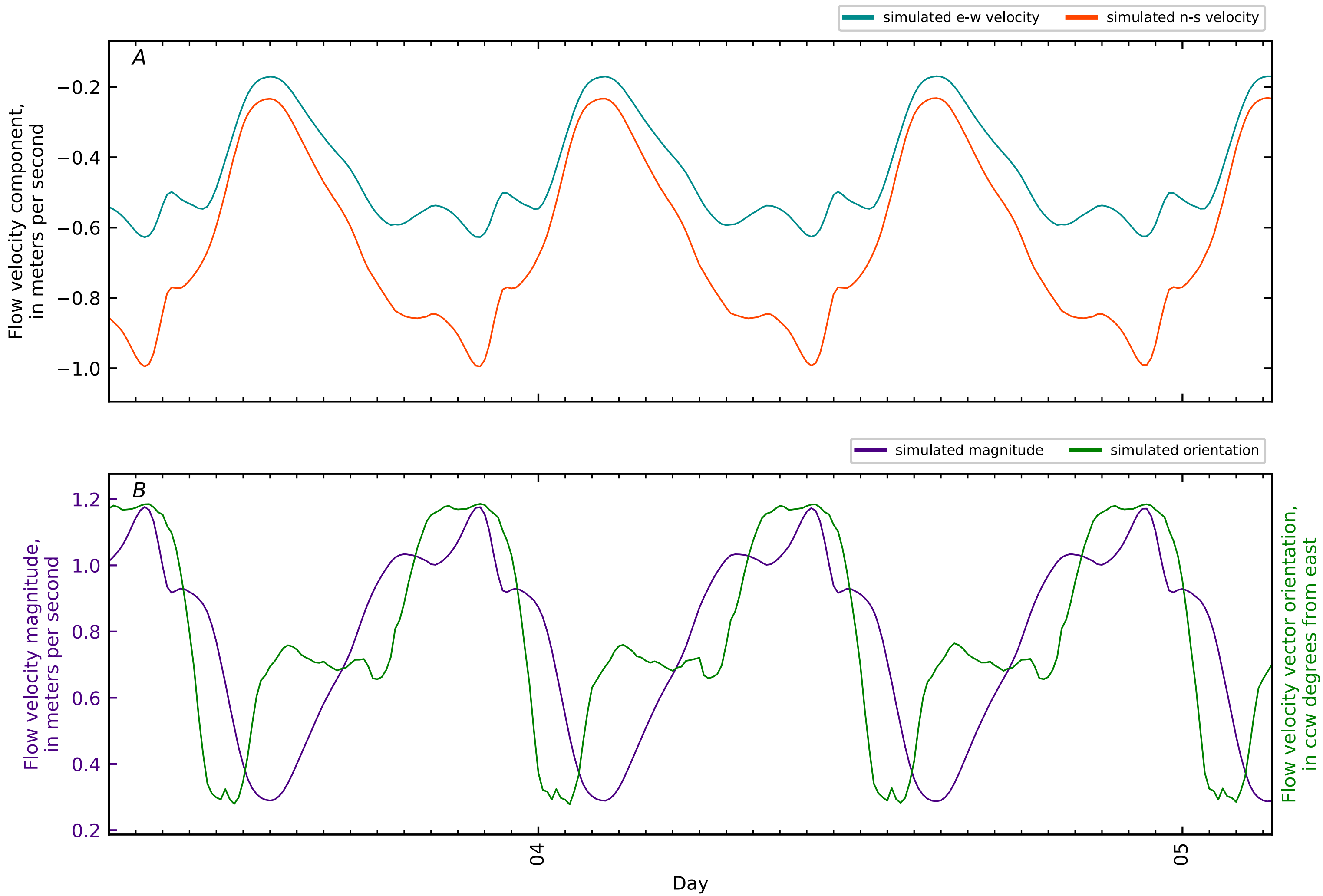

Figure B4-259. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 98, Penob Riv KM43.2 GS 01037050 at Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

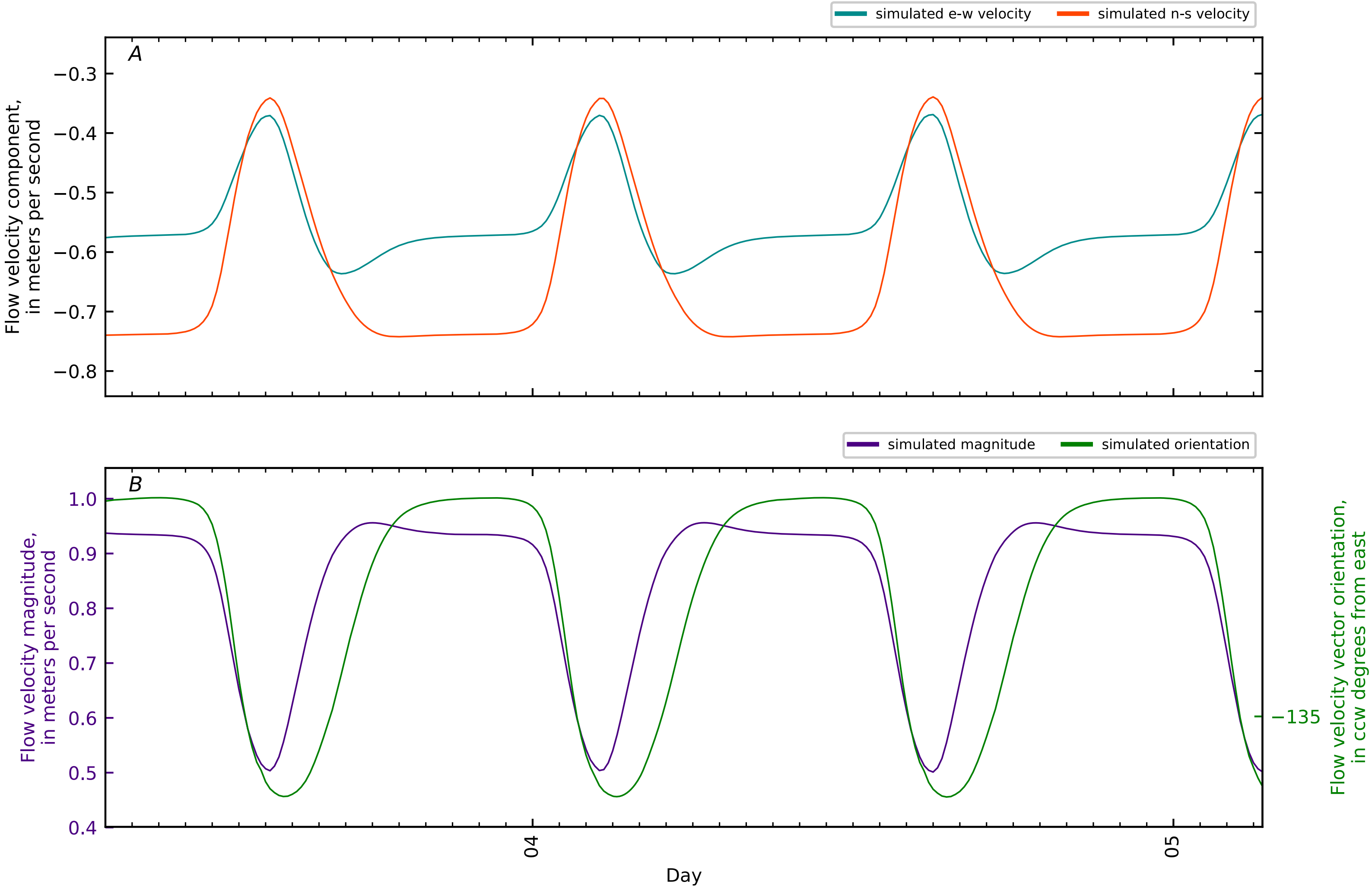

Figure B4-260. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 99, Penob Riv KM44. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

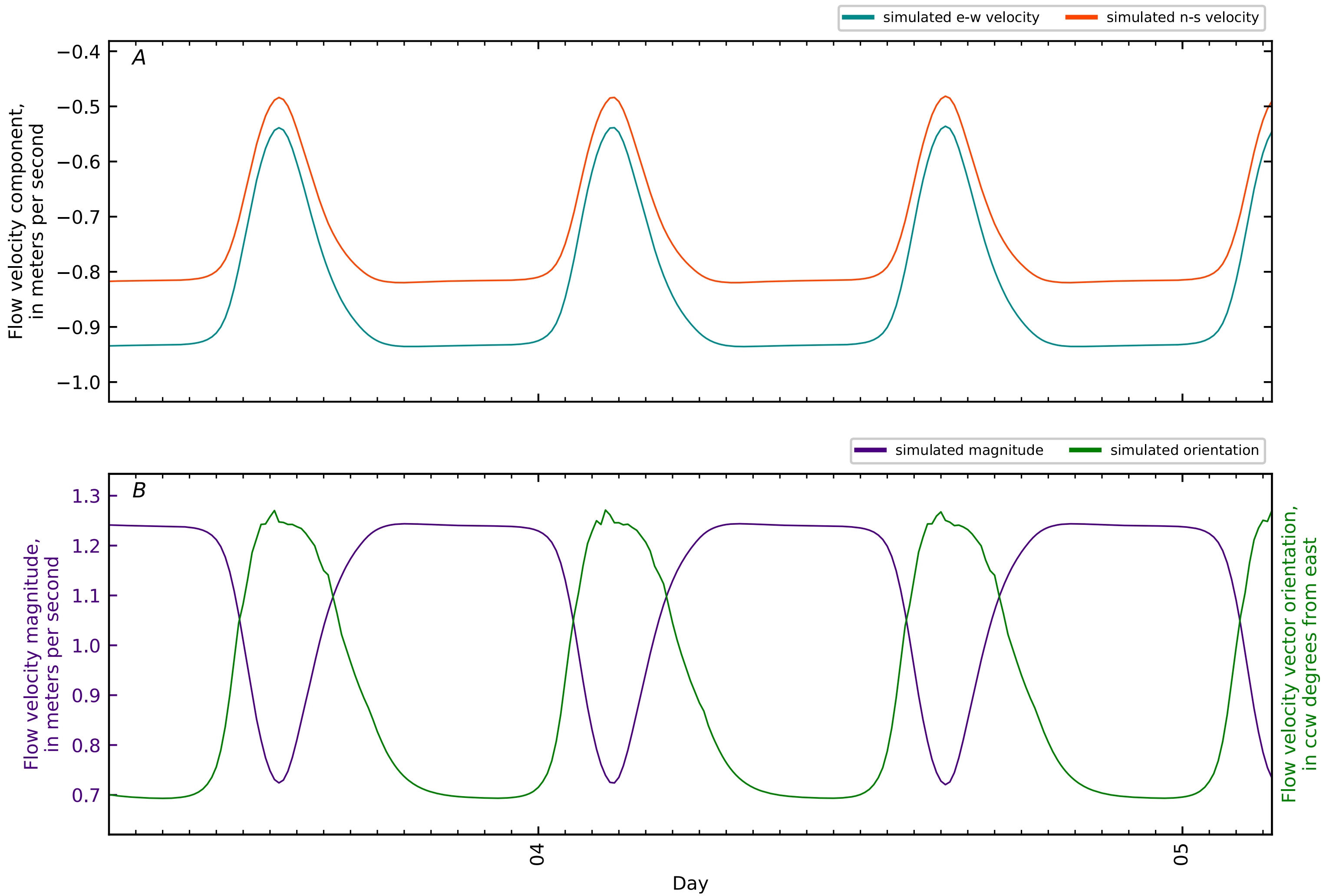

Figure B4-261. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 100, Penob Riv KM45. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

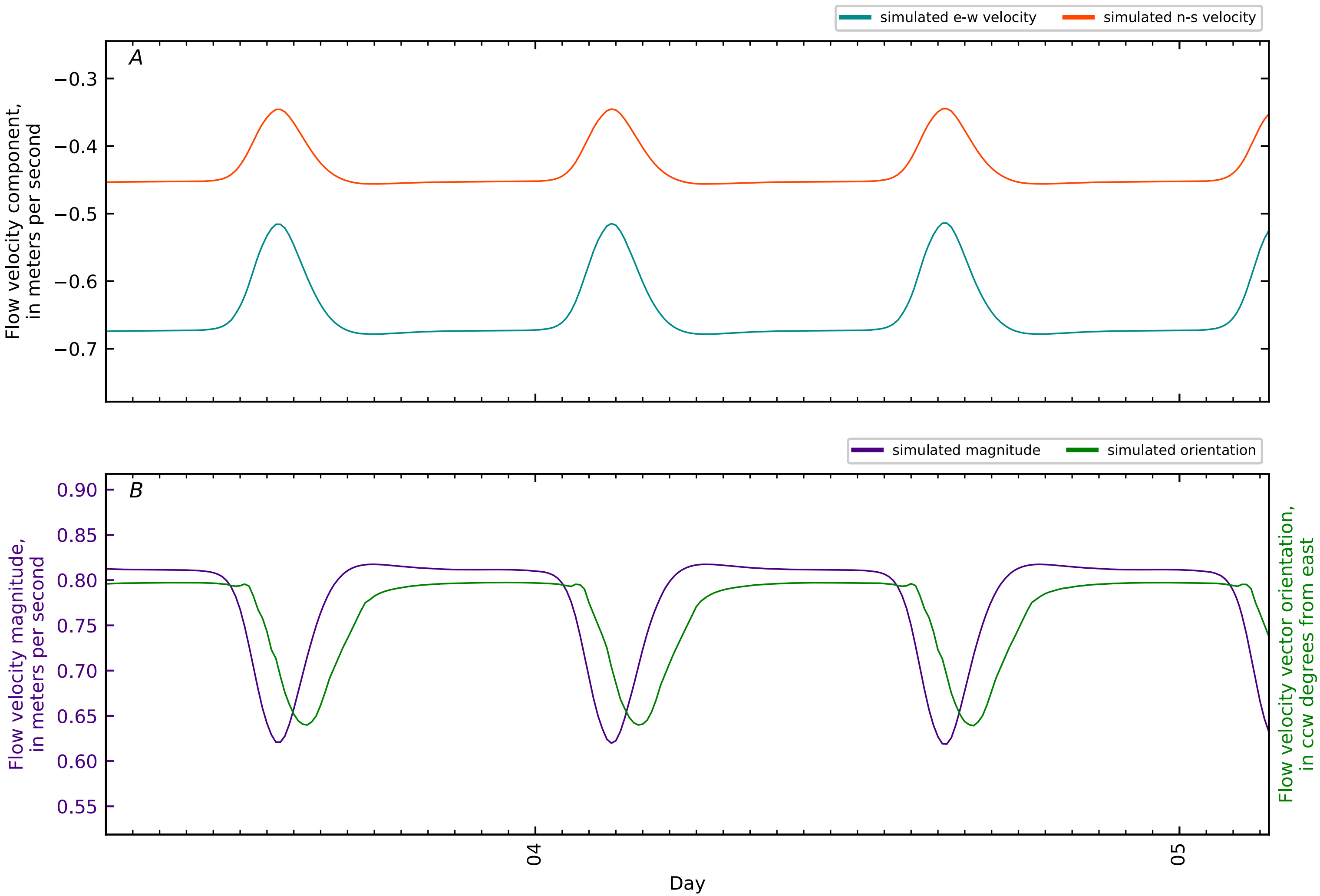

Figure B4-262. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 101, Penob Riv KM46. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

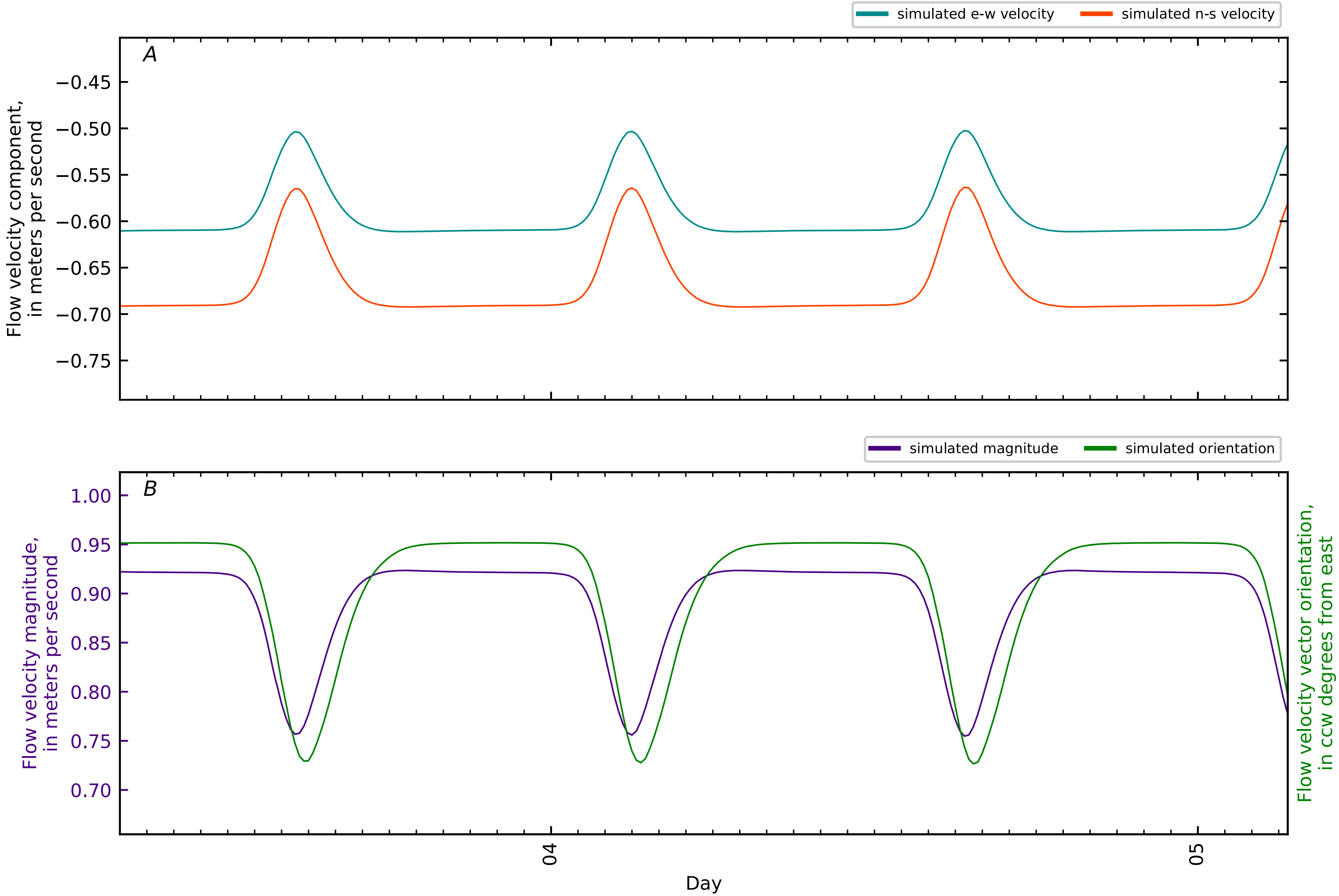

Figure B4-263. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 102, Penob Riv KM47. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

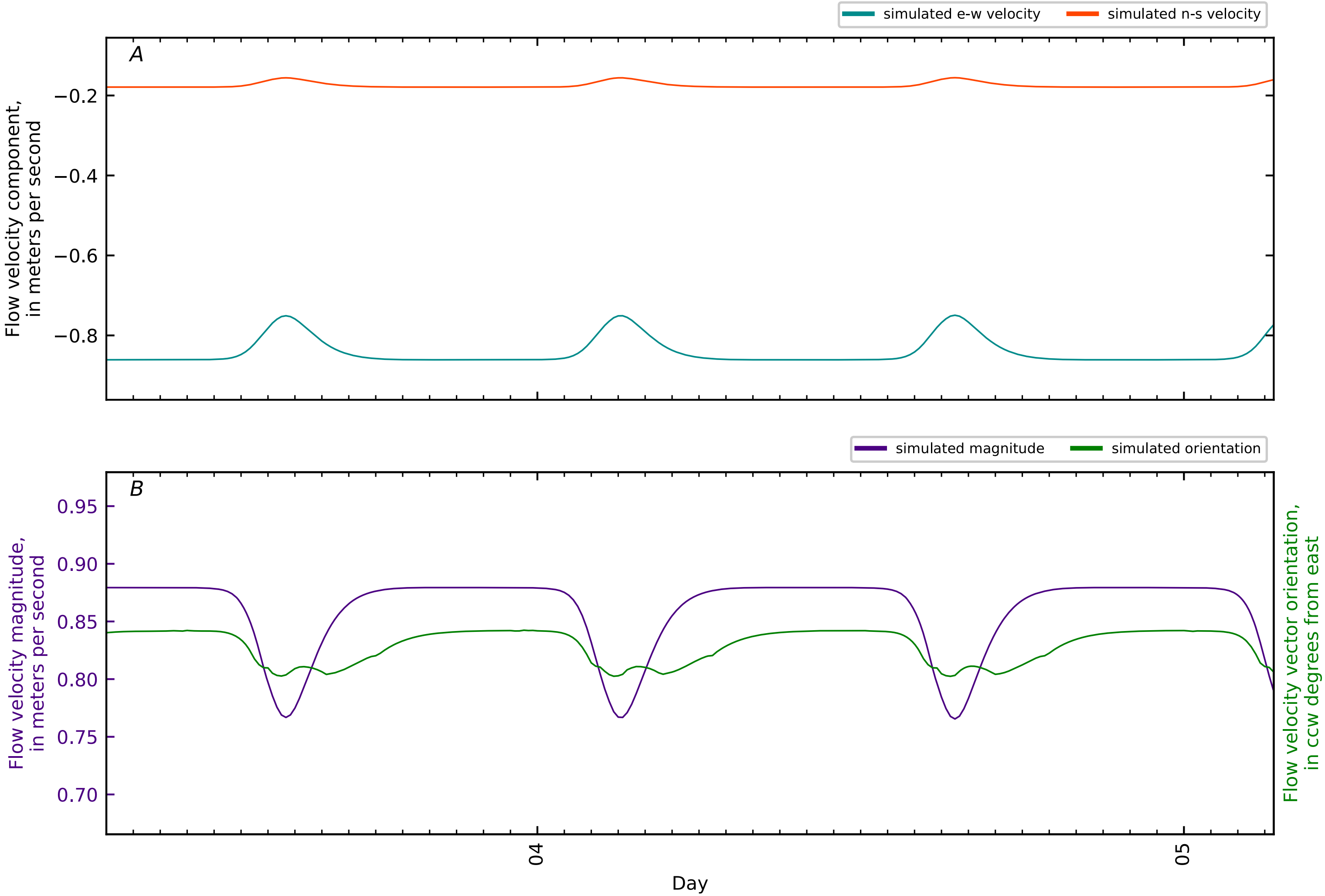

Figure B4-264. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 103, Penob Riv KM48. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

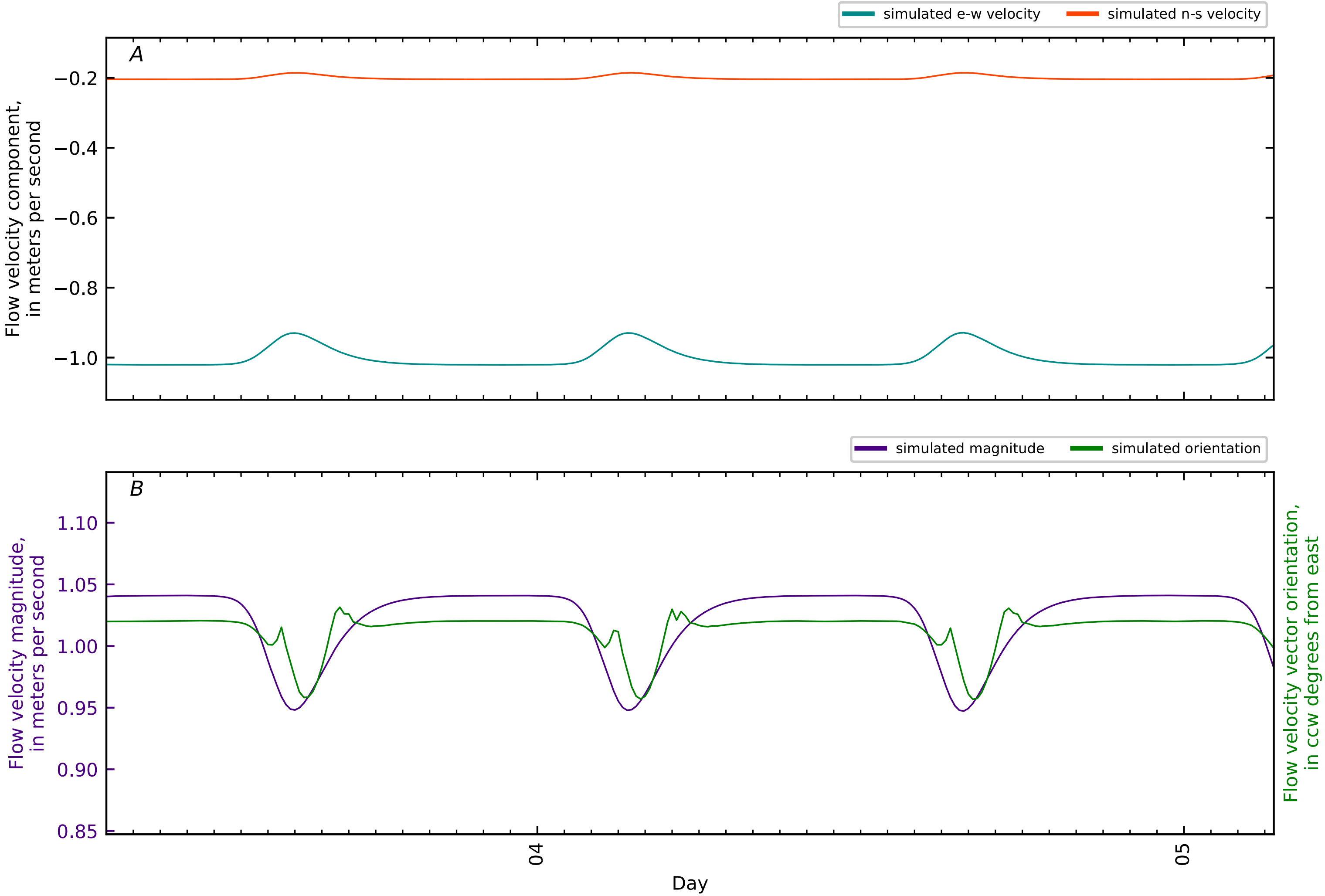

Figure B4-265. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 104, Penob Riv KM49. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

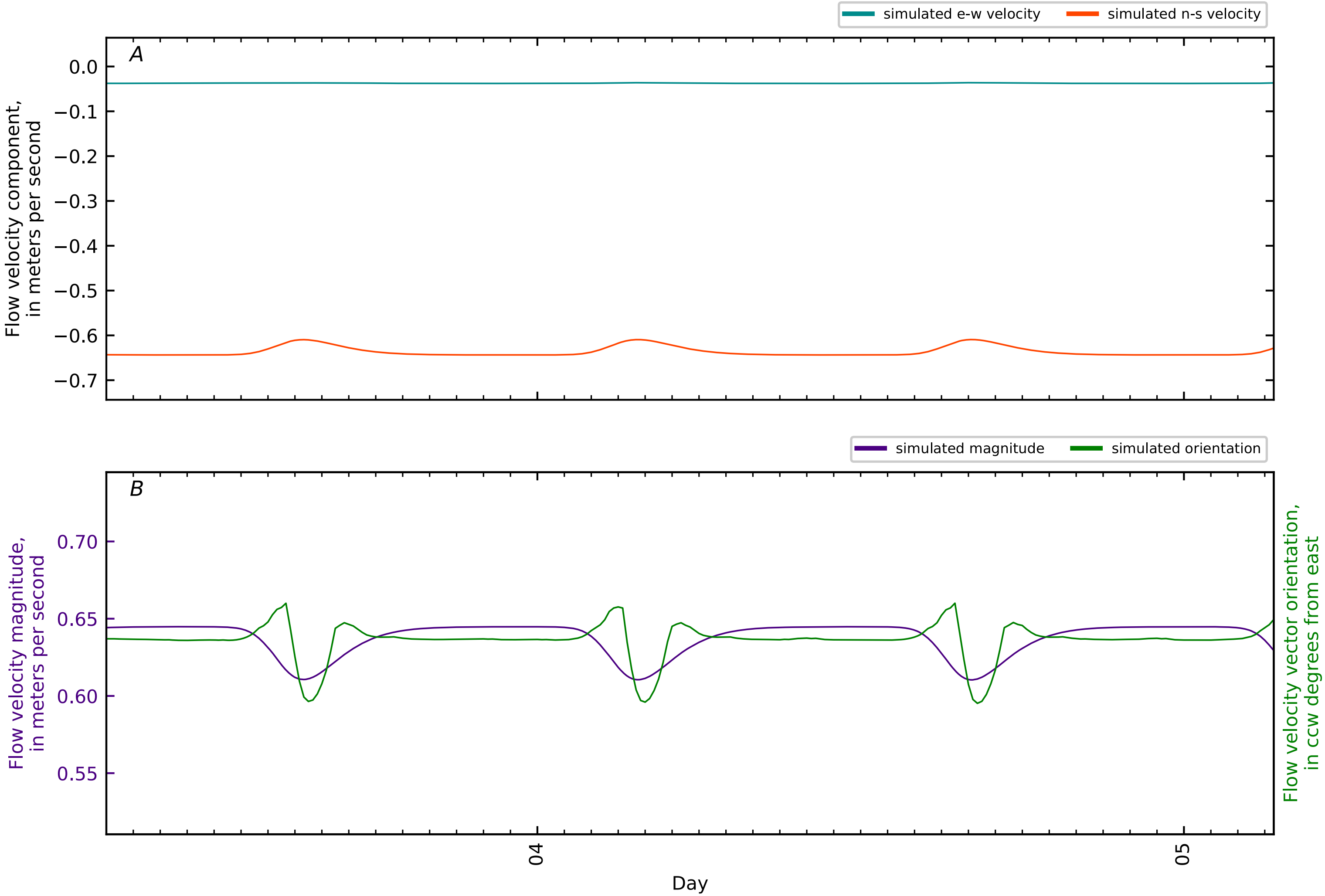

Figure B4-266. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 105, Penob Riv KM50 nr GS gage Eddington. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

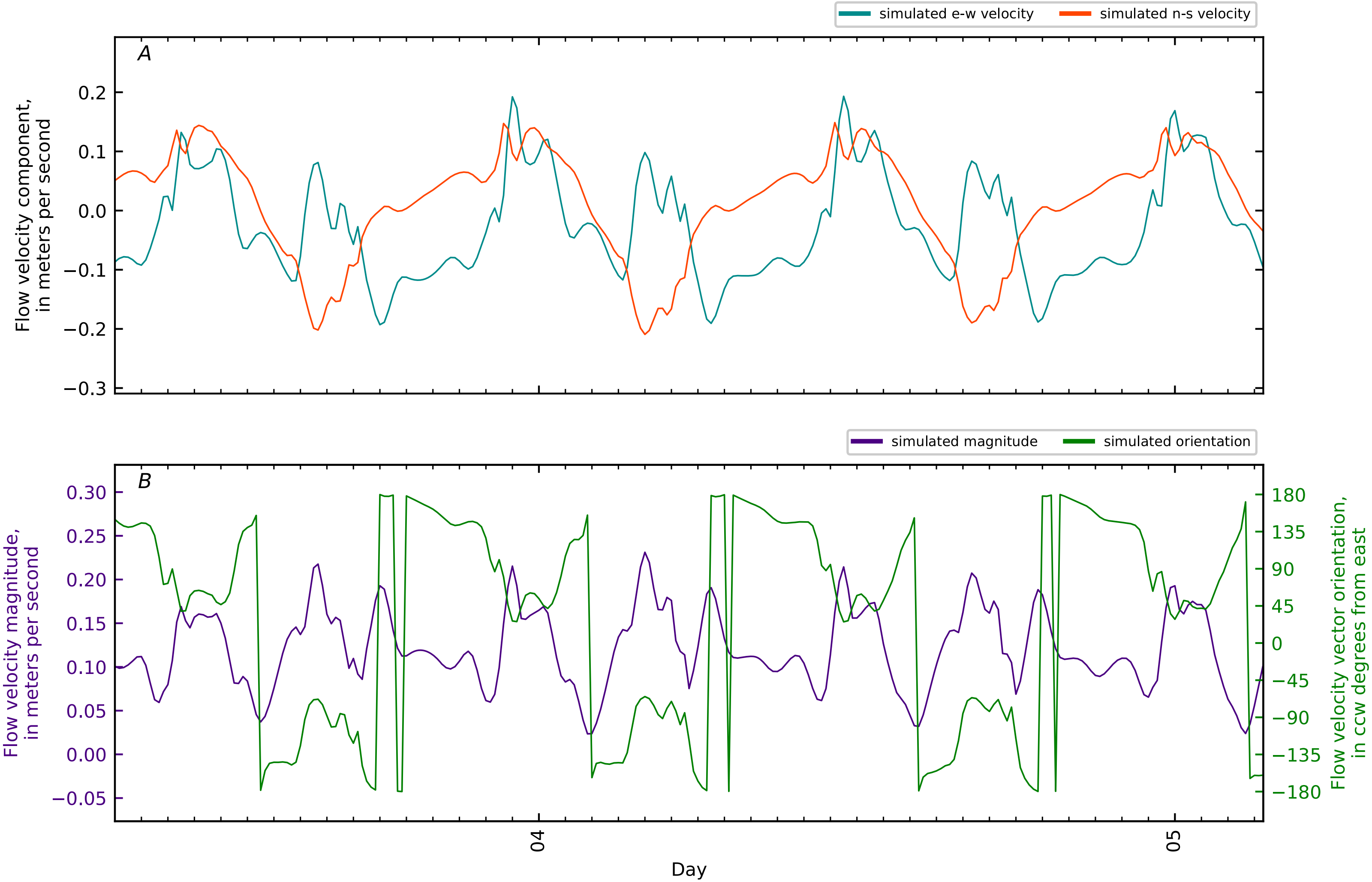

Figure B4-267. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 106, East Channel -KM0.1 ERDC9 VE-MU4-SF-2. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

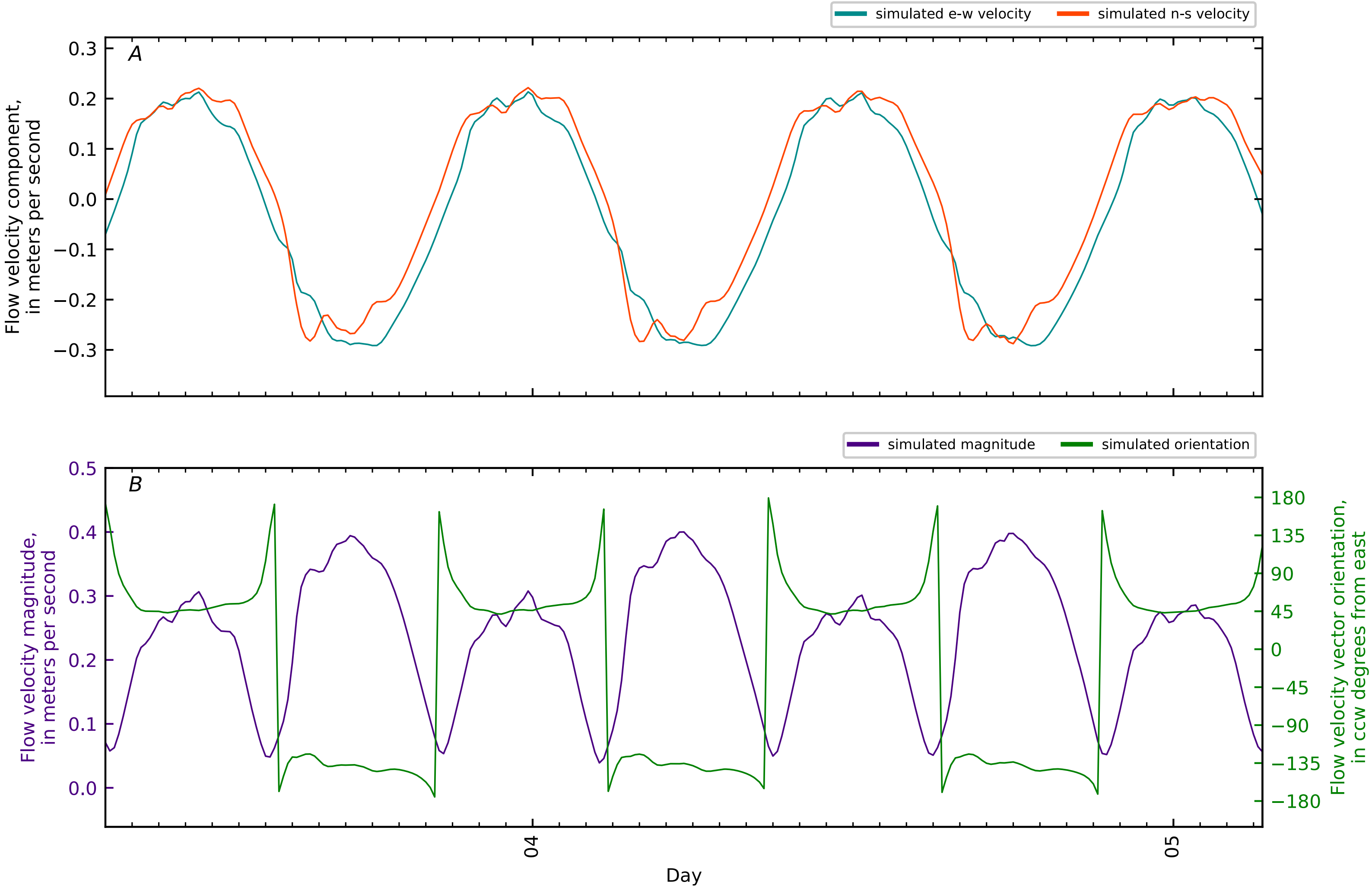

Figure B4-268. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 107, East Channel KM0. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

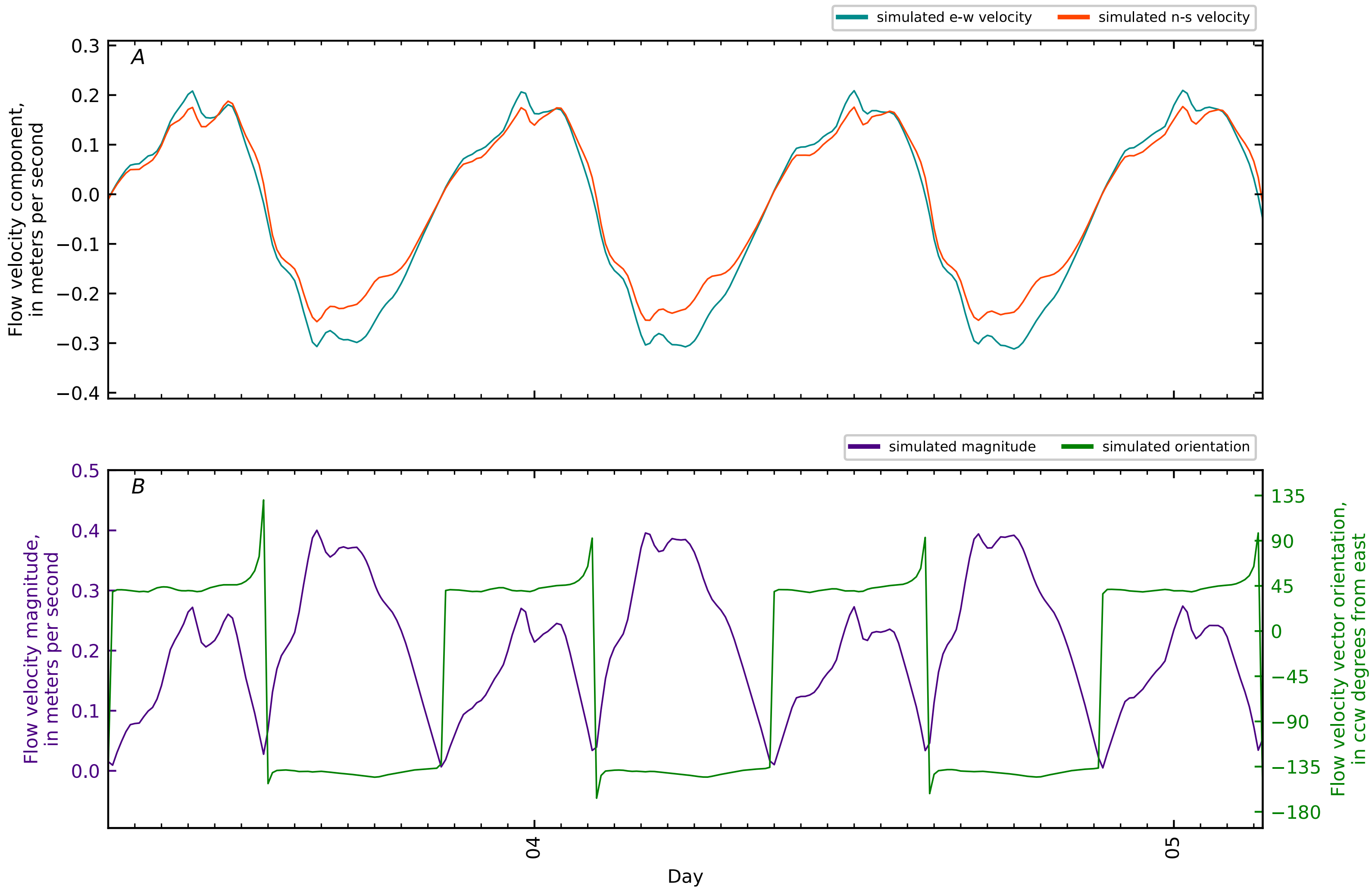

Figure B4-269. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 108, East Channel KM0.1 GS CTD4-01. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

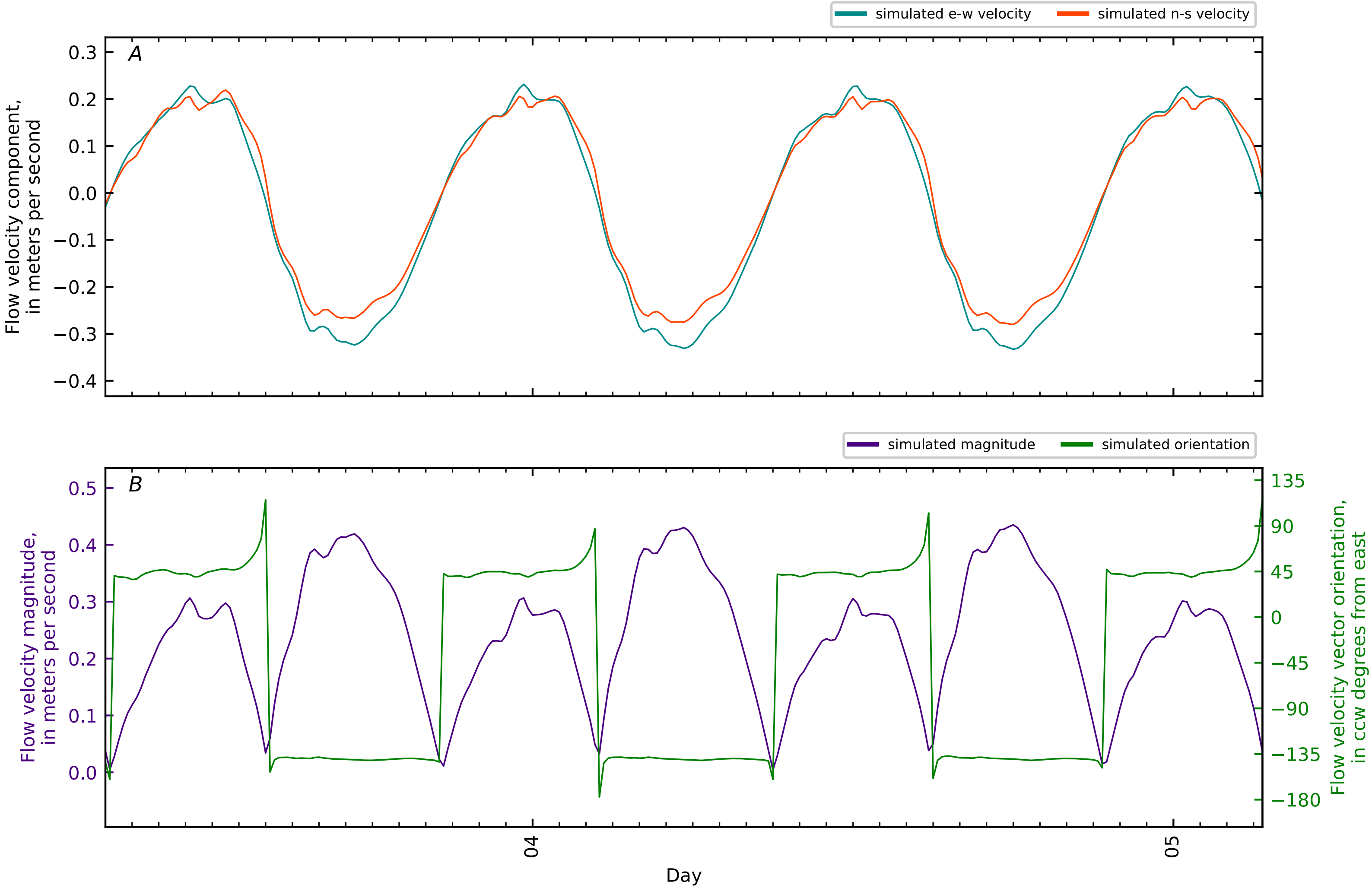

Figure B4-270. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 109, East Channel KM0.1 GS CTD4-02. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

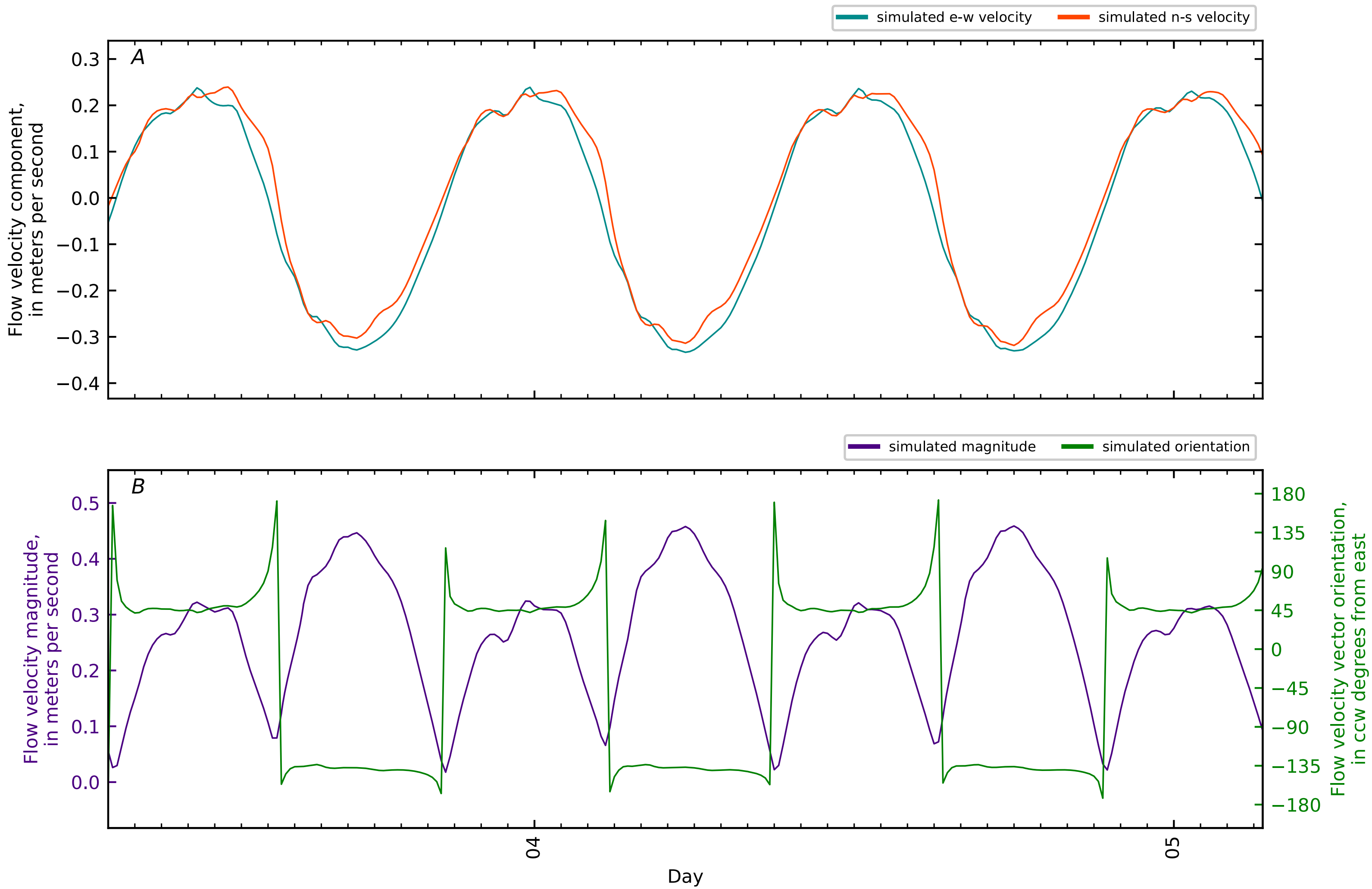

Figure B4-271. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 110, East Channel KM0.1 GS CTD4-03. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

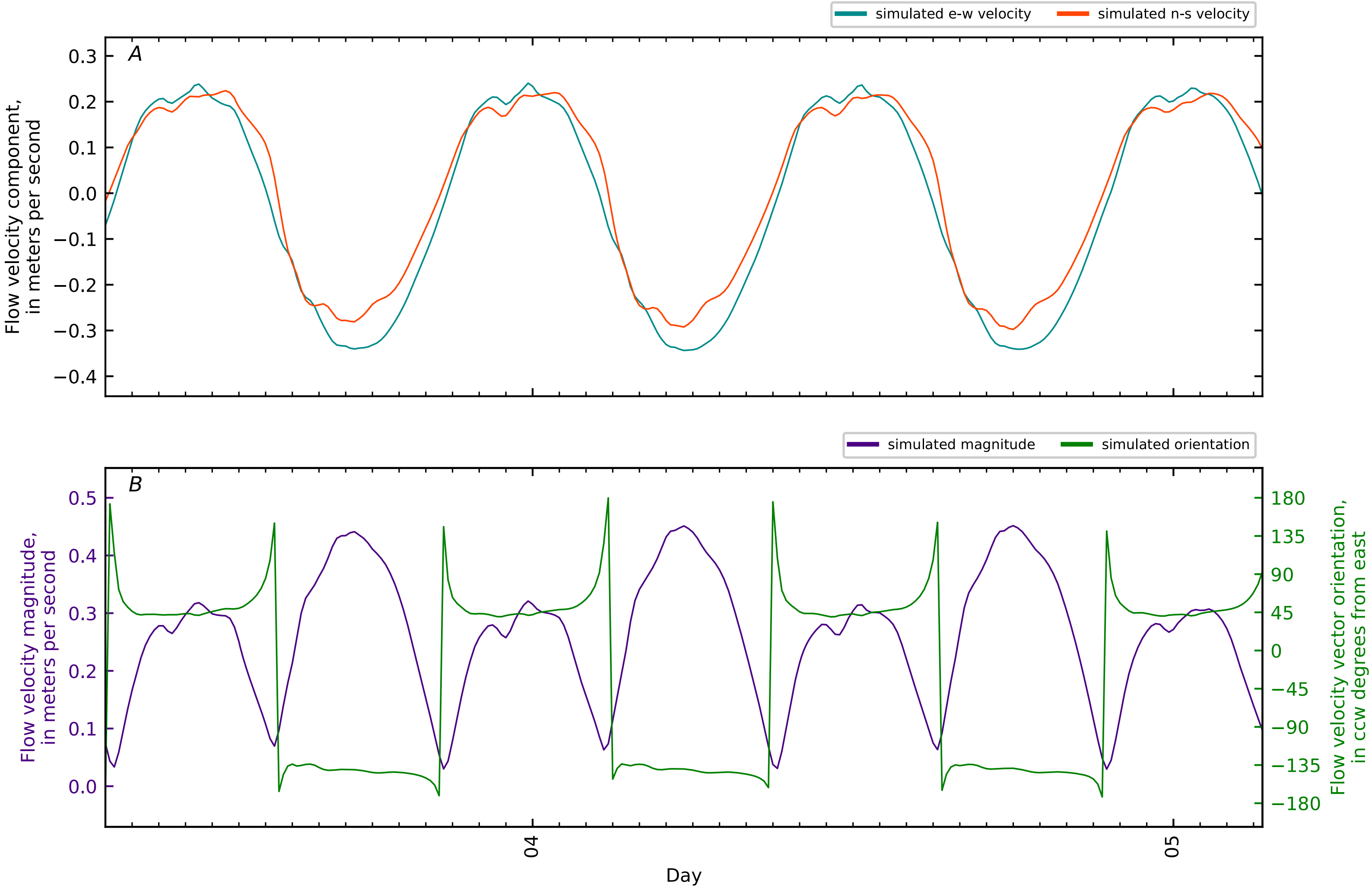

Figure B4-272. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 111, East Channel KM0.1 GS CTD4-04. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

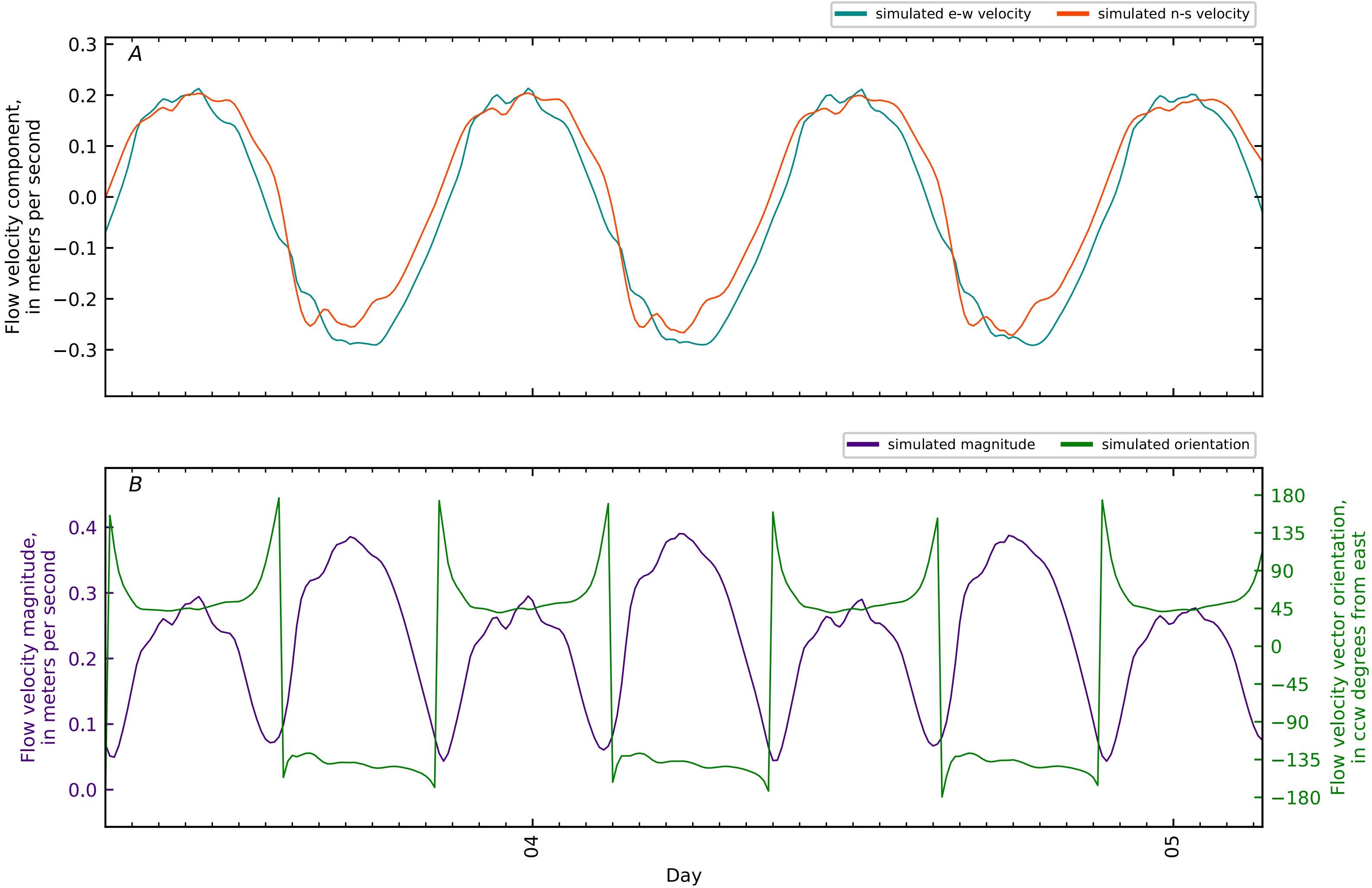

Figure B4-273. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 112, East Channel KM0.1 GS CTD4-05. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

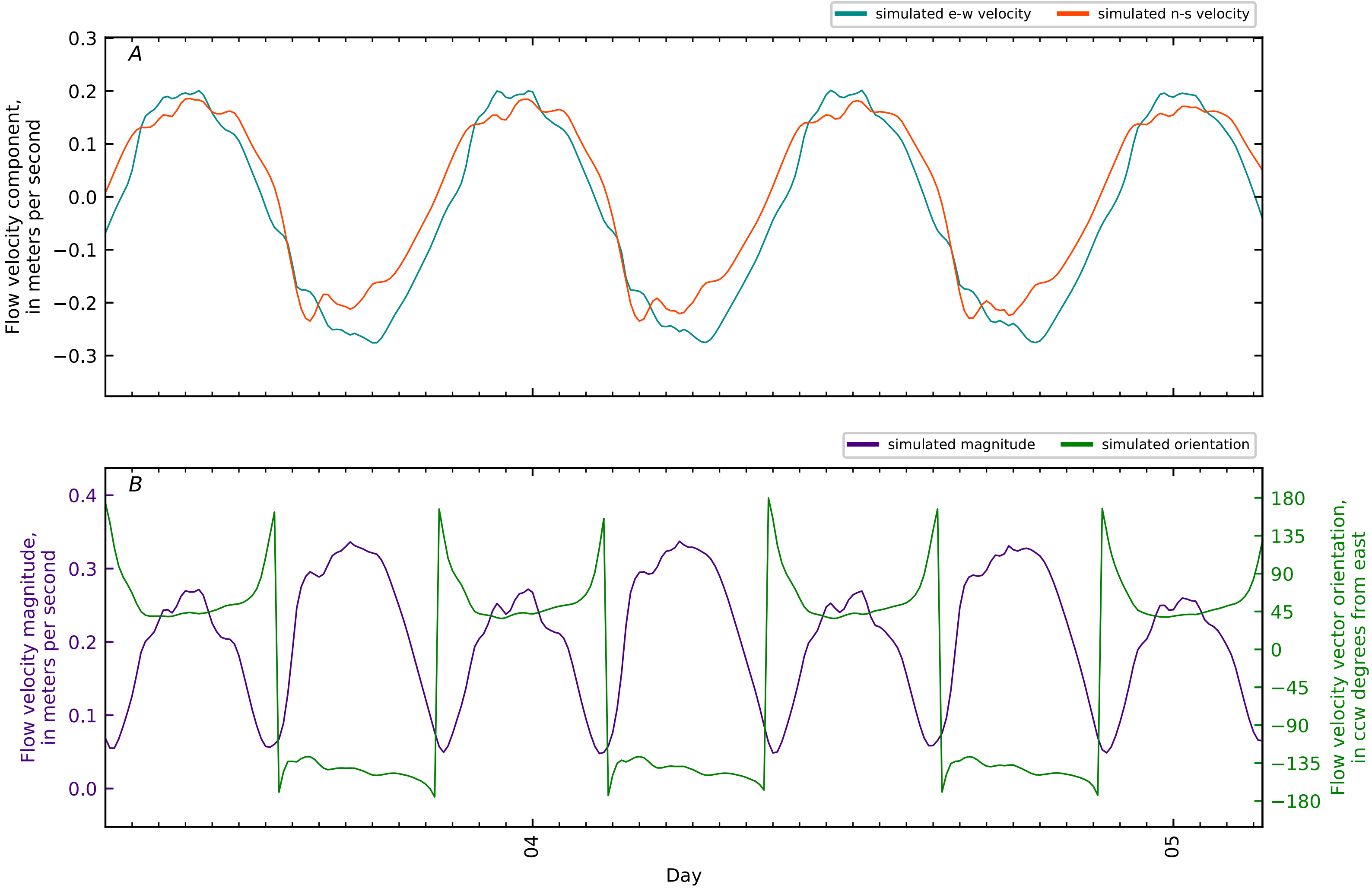

Figure B4-274. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 113, East Channel KM0.1 GS CTD4-06. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

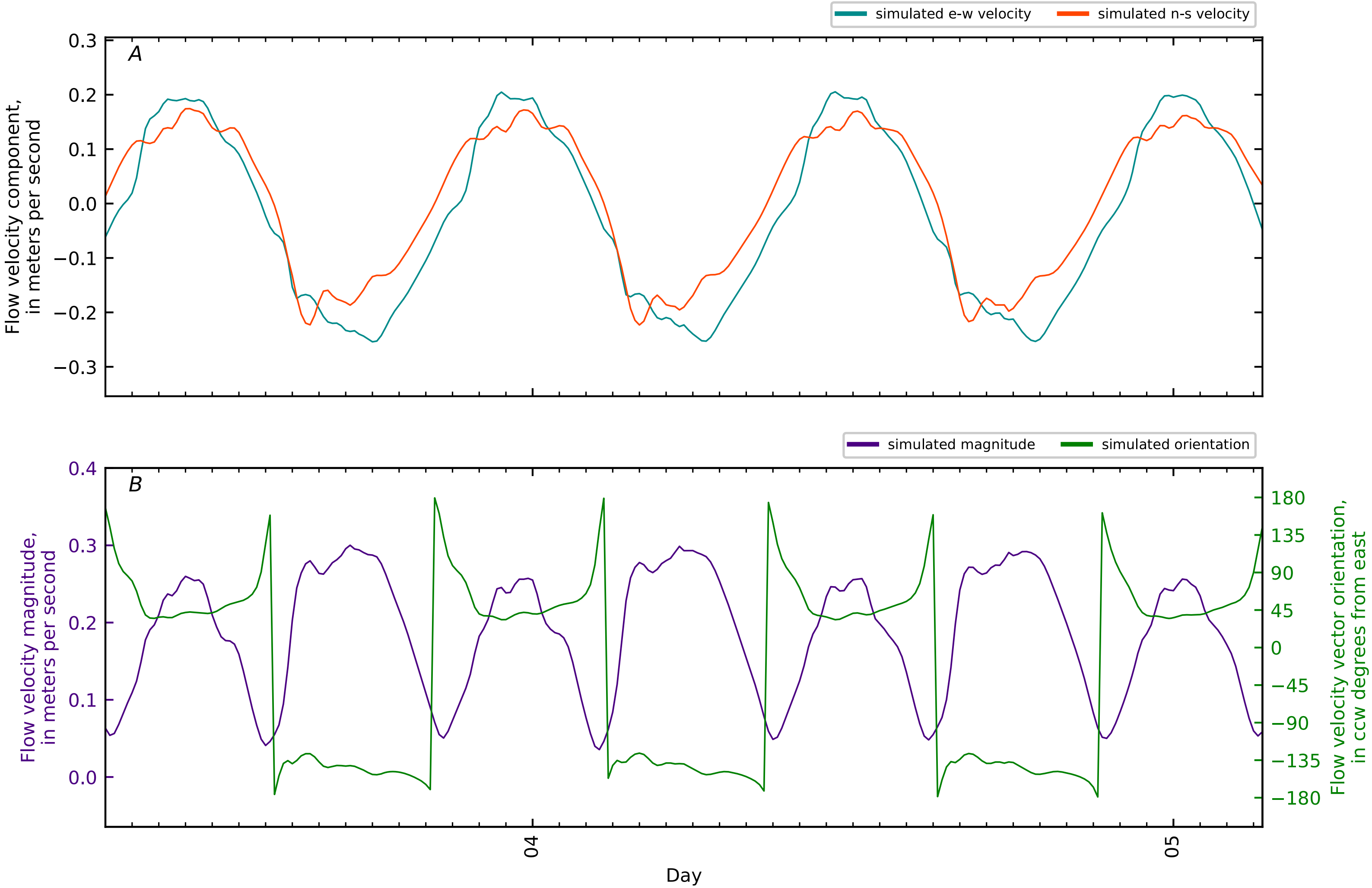

Figure B4-275. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 114, East Channel KM0.1 GS CTD4-07. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

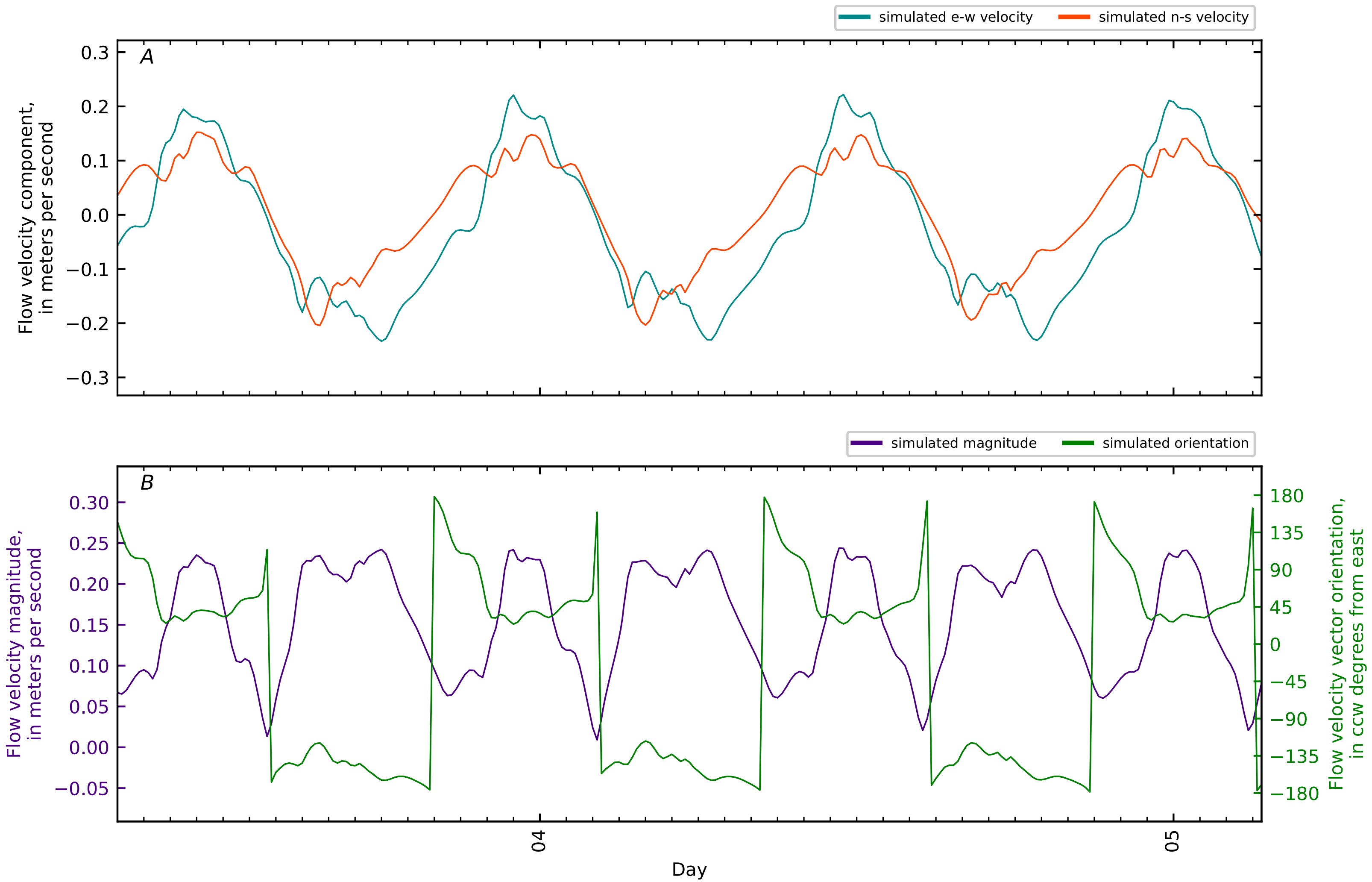

Figure B4-276. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 115, East Channel KM0.1 GS CTD4-08. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

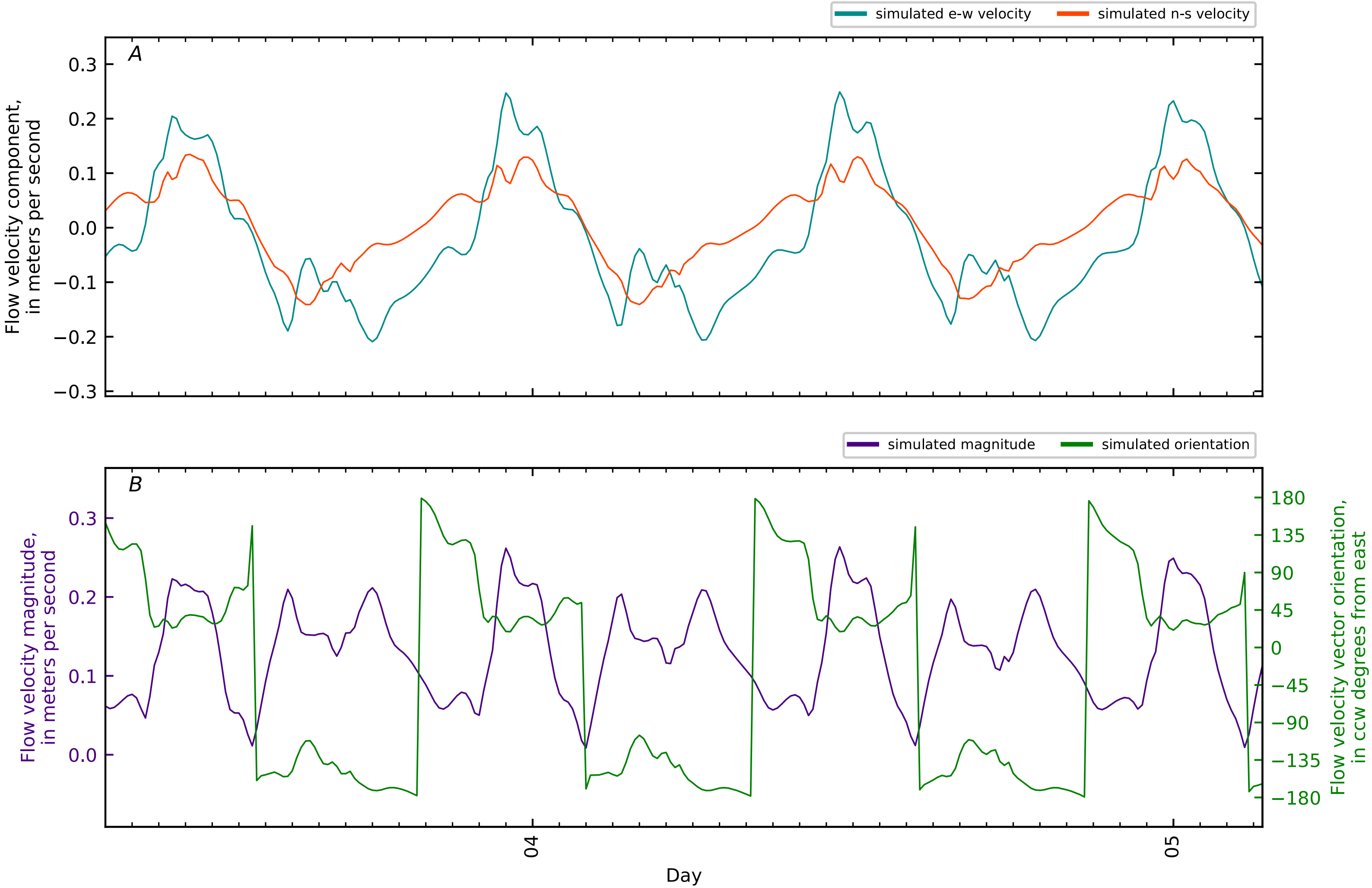

Figure B4-277. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 116, East Channel KM0.1 GS CTD4-09. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

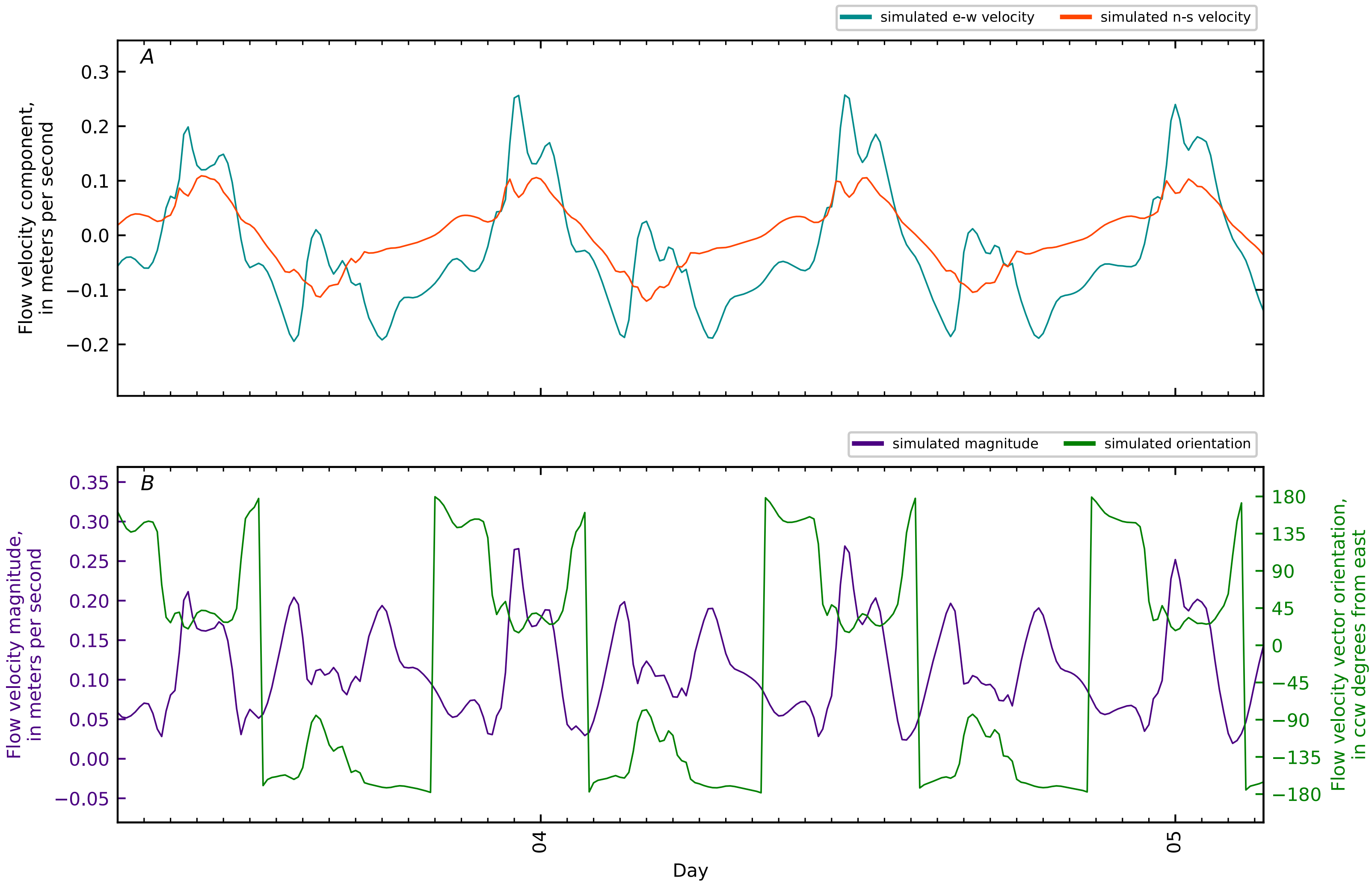

Figure B4-278. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 117, East Channel KM0.1 GS CTD4-10. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

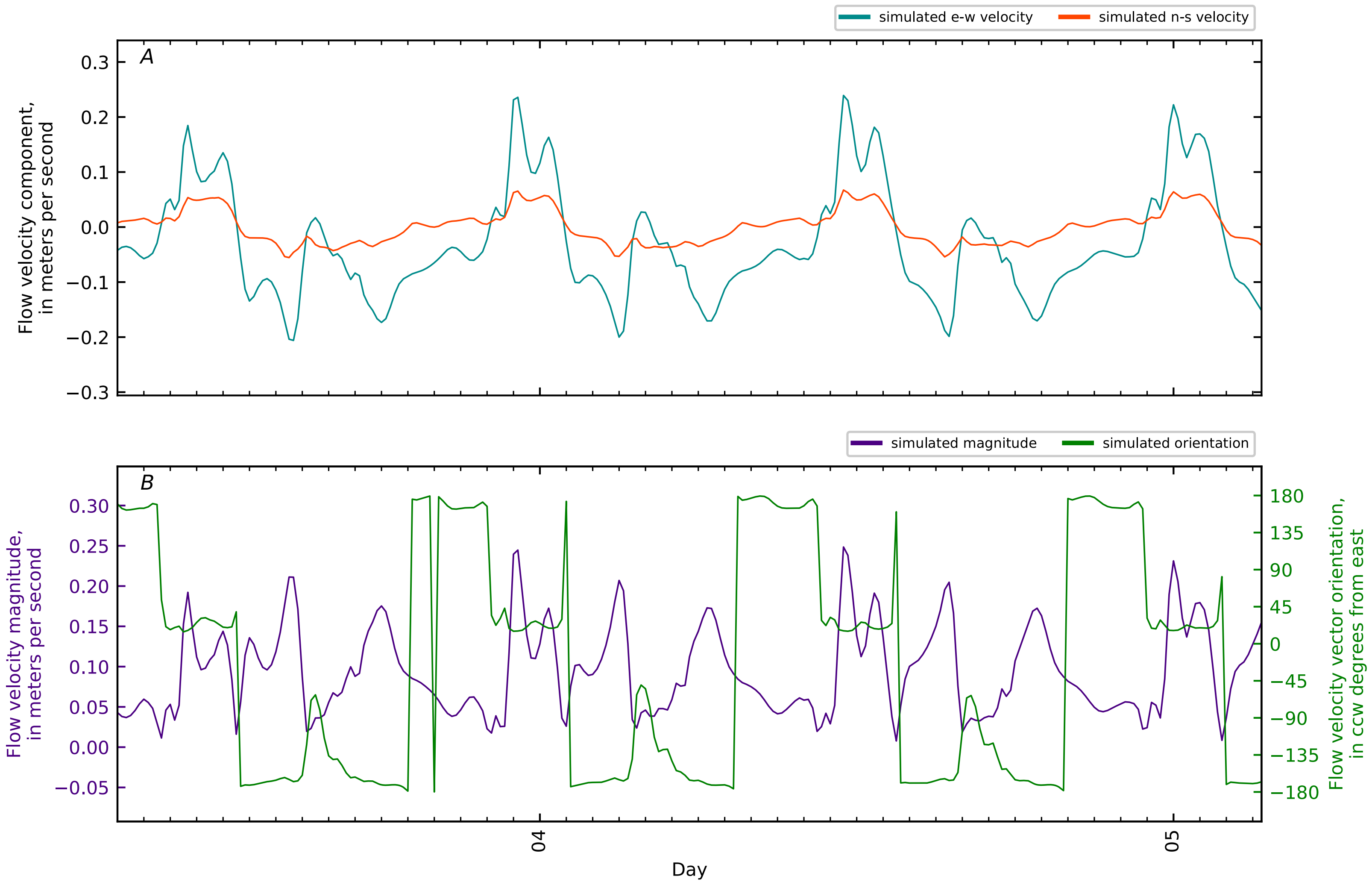

Figure B4-279. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 118, East Channel KM0.1 GS CTD4-11. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

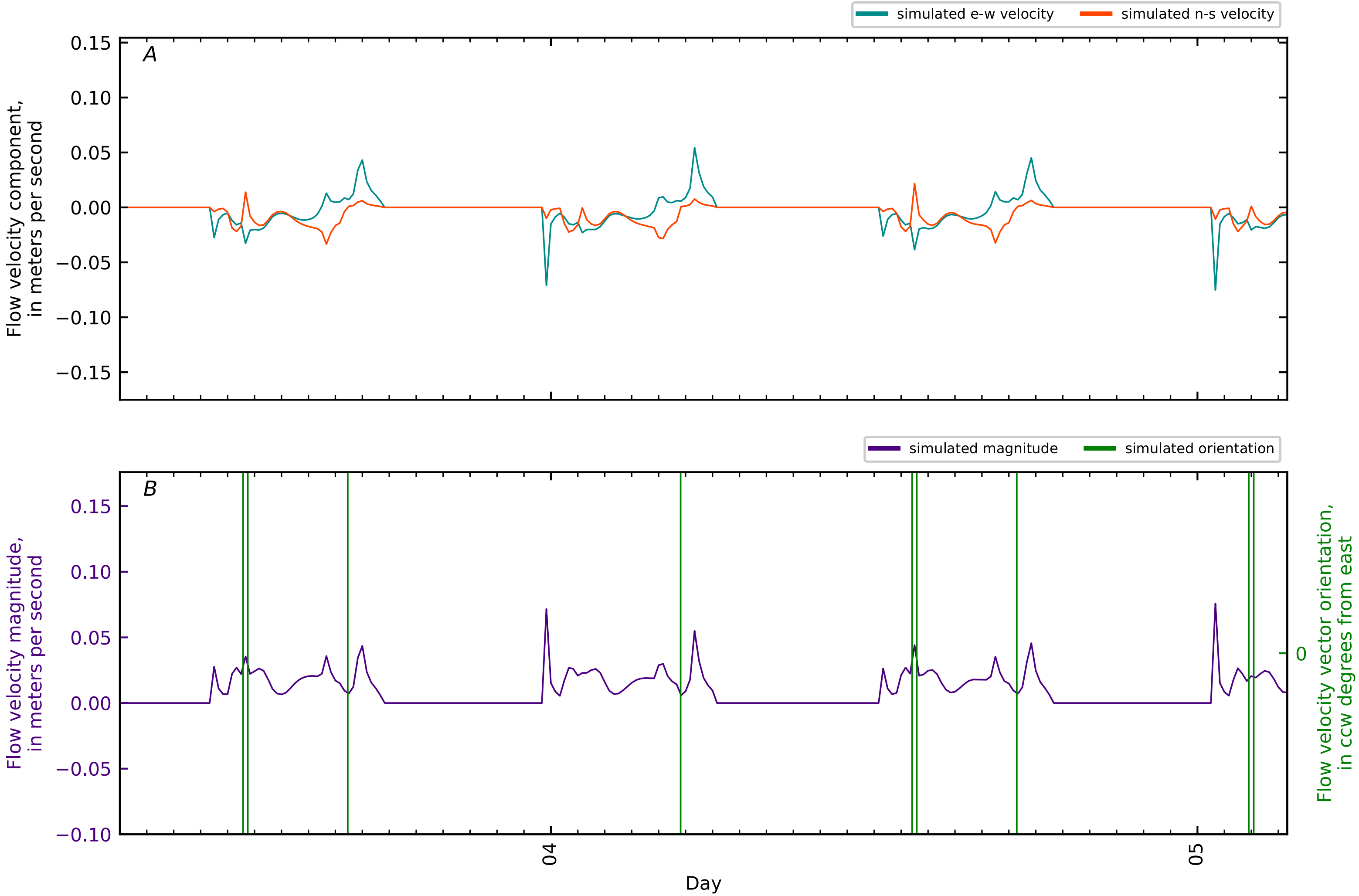

Figure B4-280. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 119, East Channel KM0.78 ERDC7 VE-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

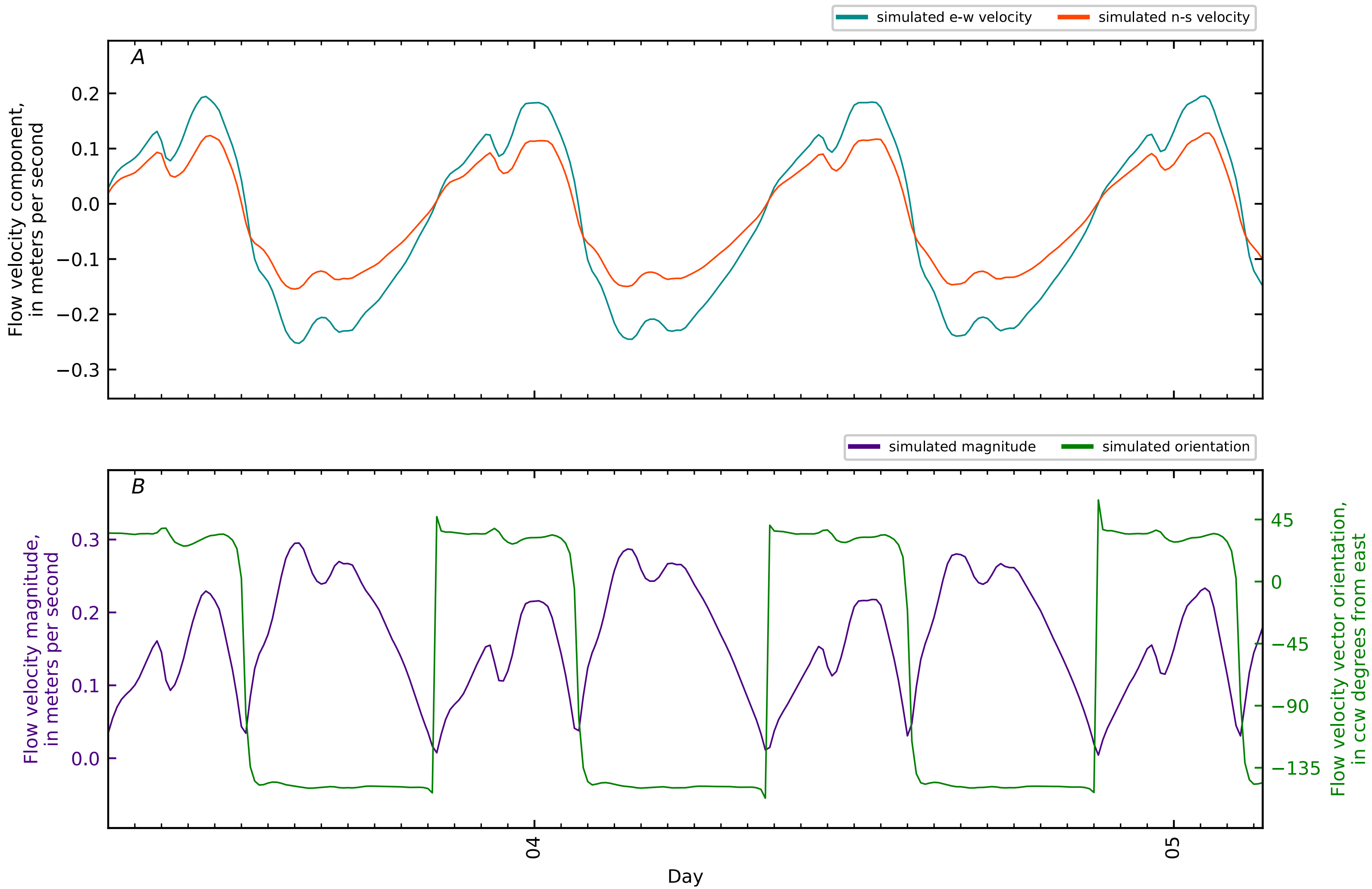

Figure B4-281. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 120, East Channel KM0.8 ERDC8 VE-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

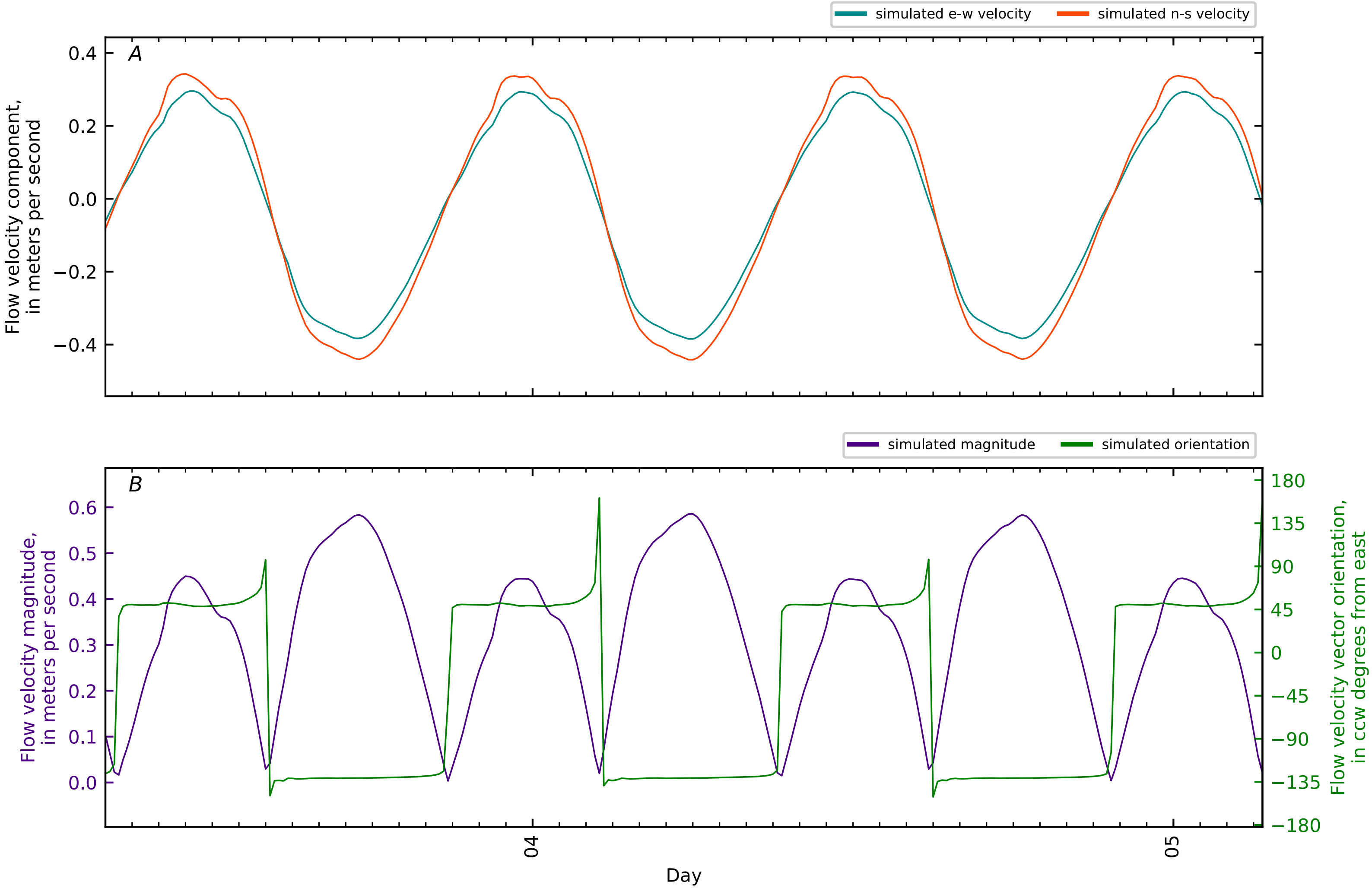

Figure B4-282. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 121, East Channel KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

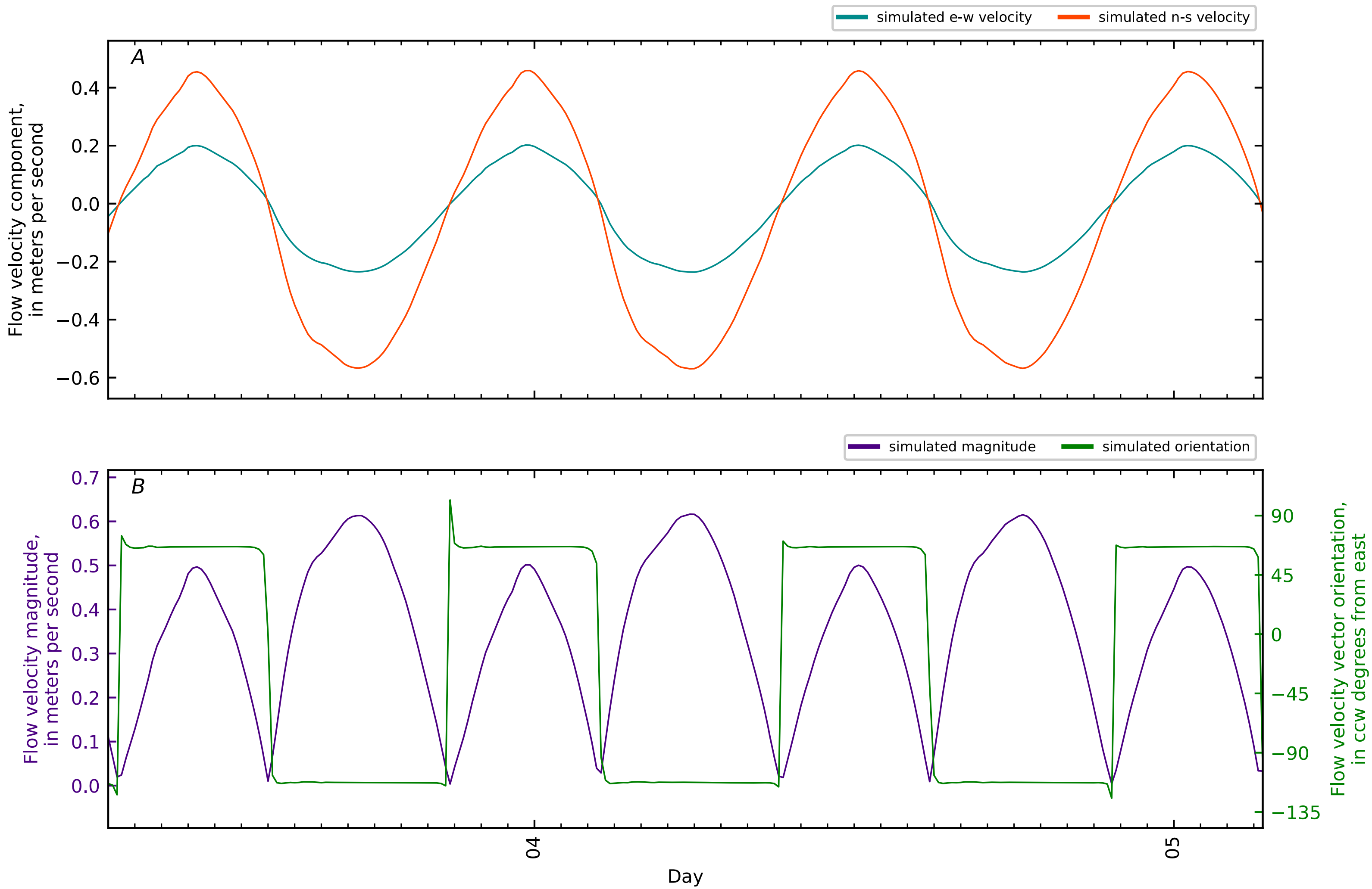

Figure B4-283. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 122, East Channel KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

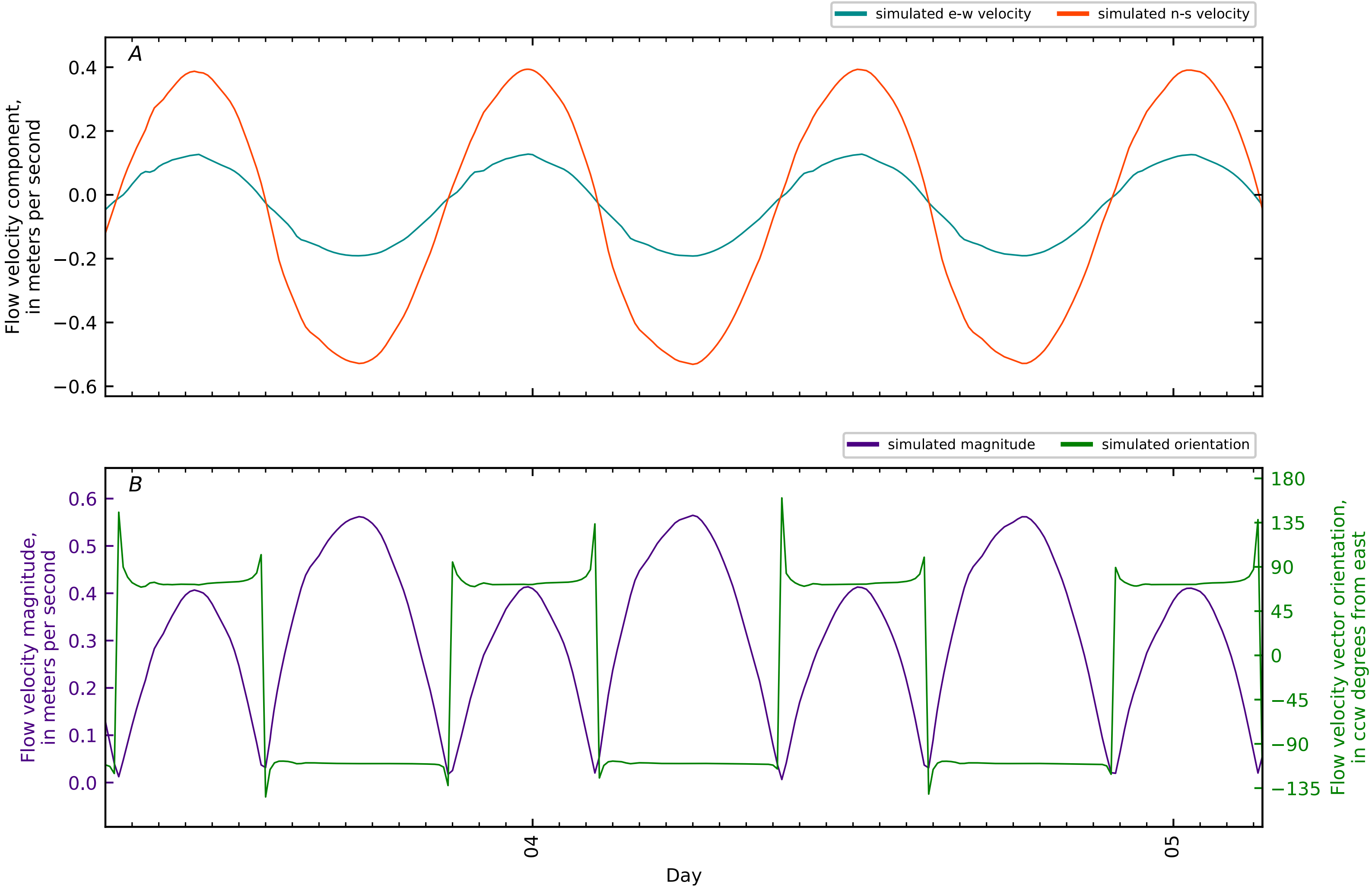

Figure B4-284. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 123, East Channel KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

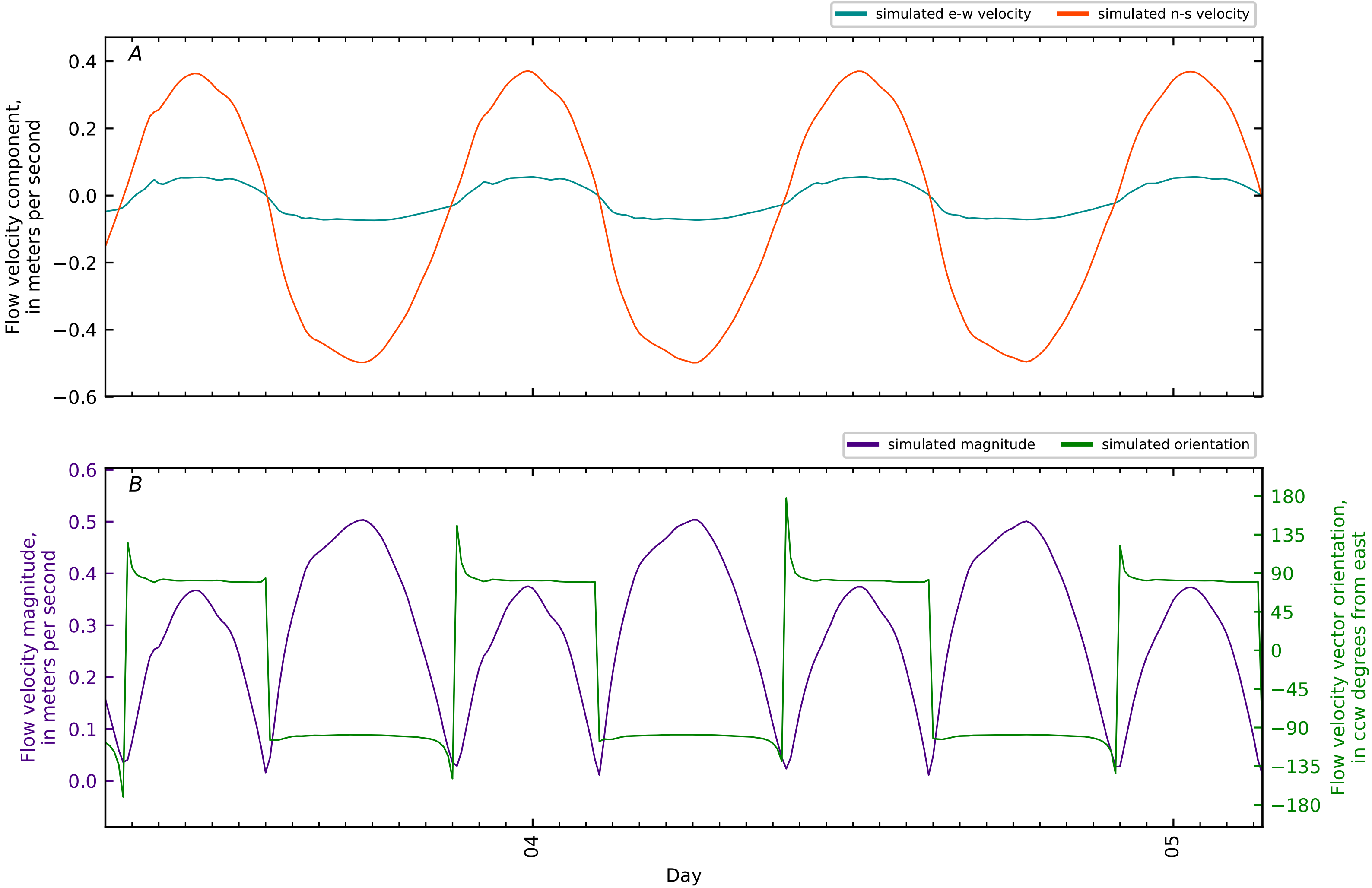

Figure B4-285. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 124, East Channel KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

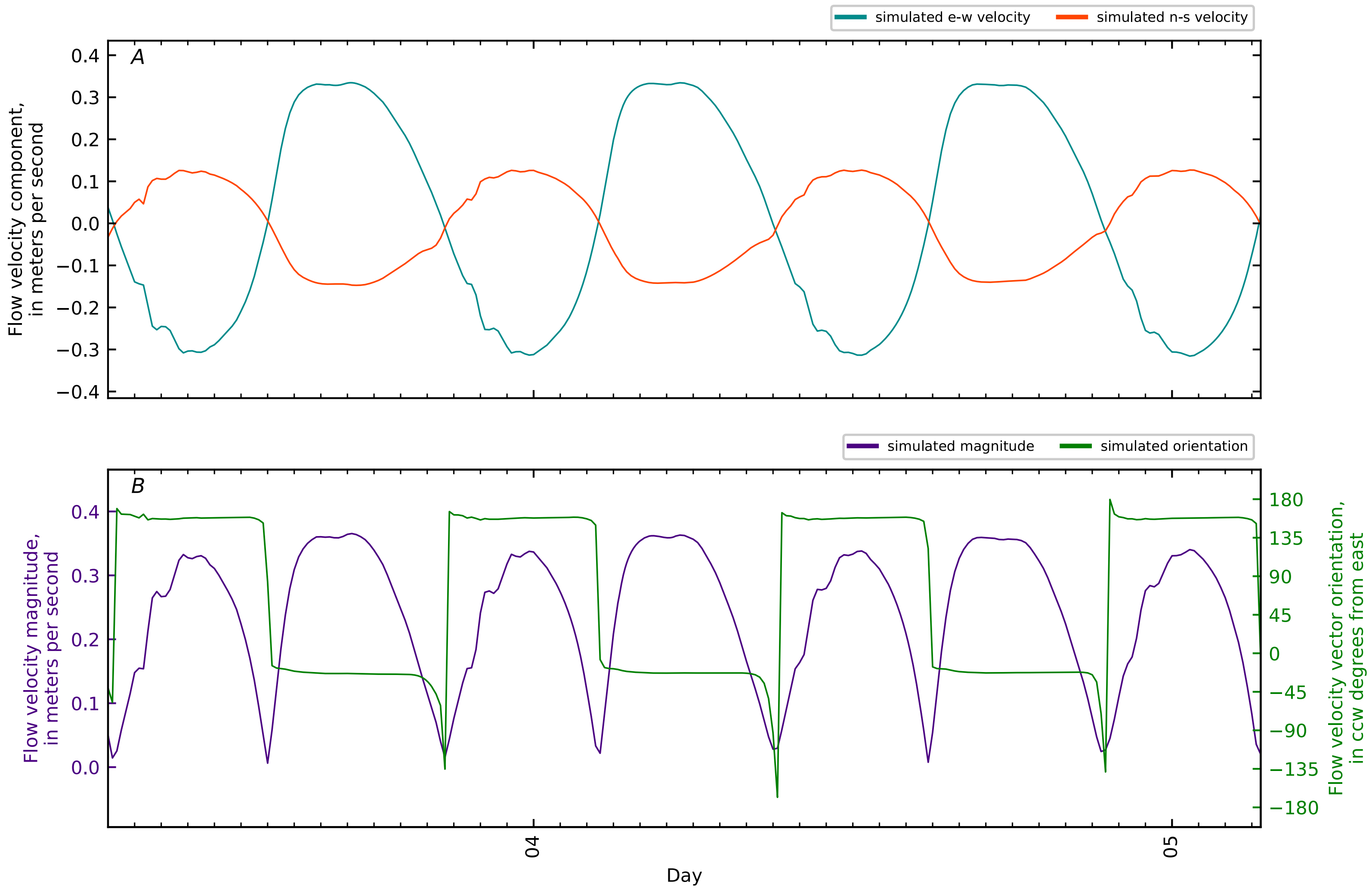

Figure B4-286. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 125, East Channel KM5. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

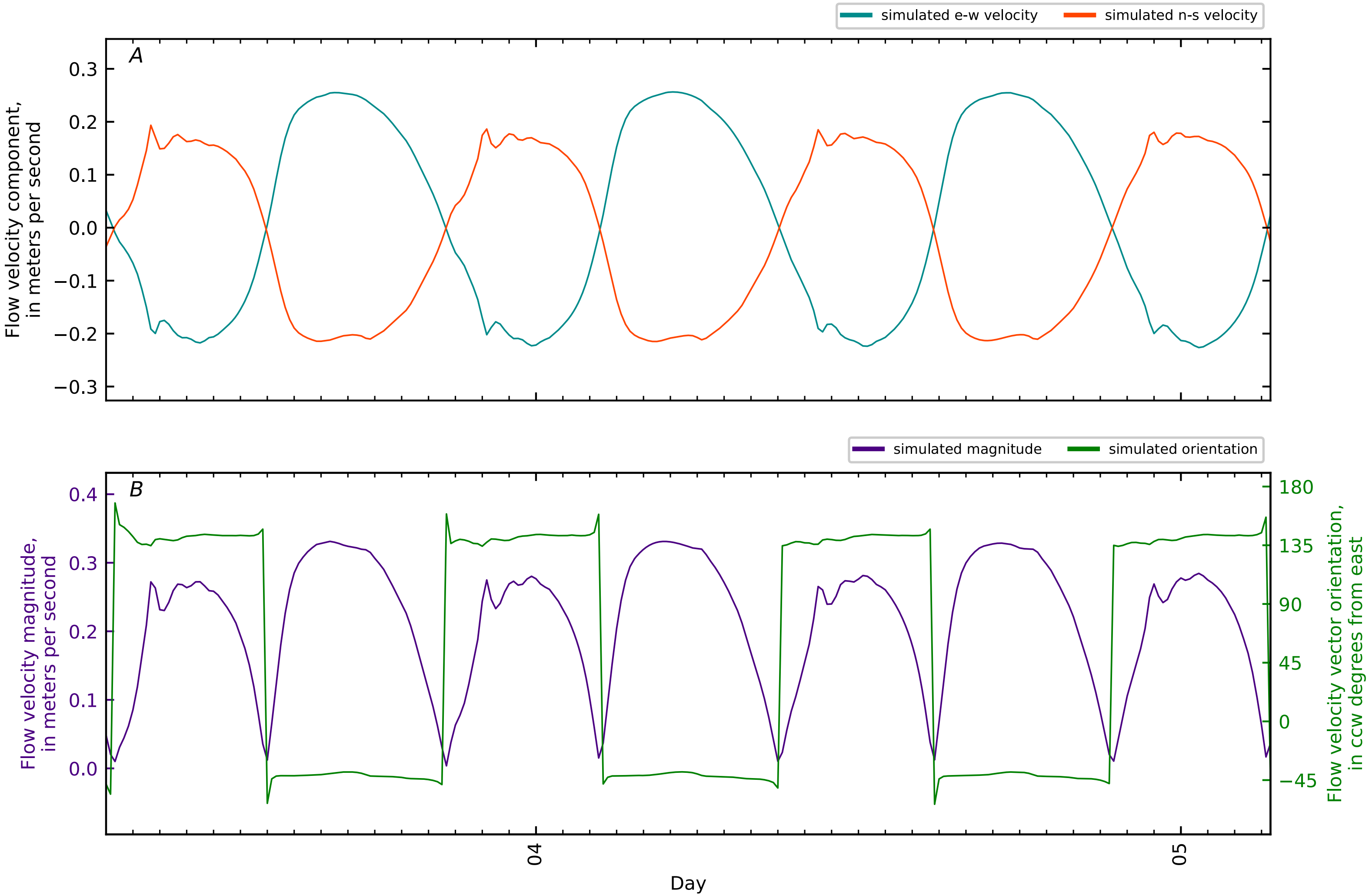

Figure B4-287. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 126, East Channel KM5.3 ERDC4 VN-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

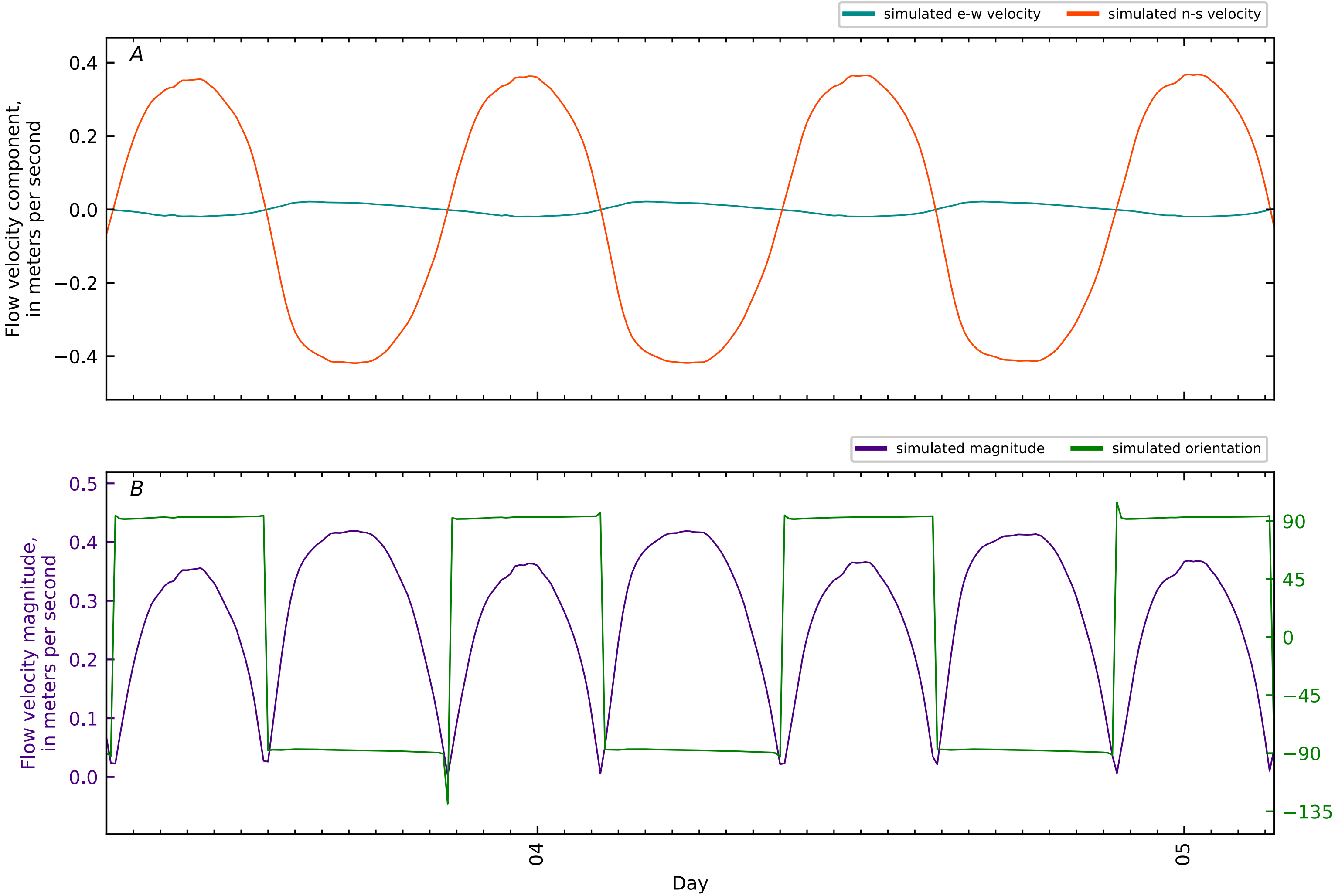

Figure B4-288. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 127, East Channel KM6. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

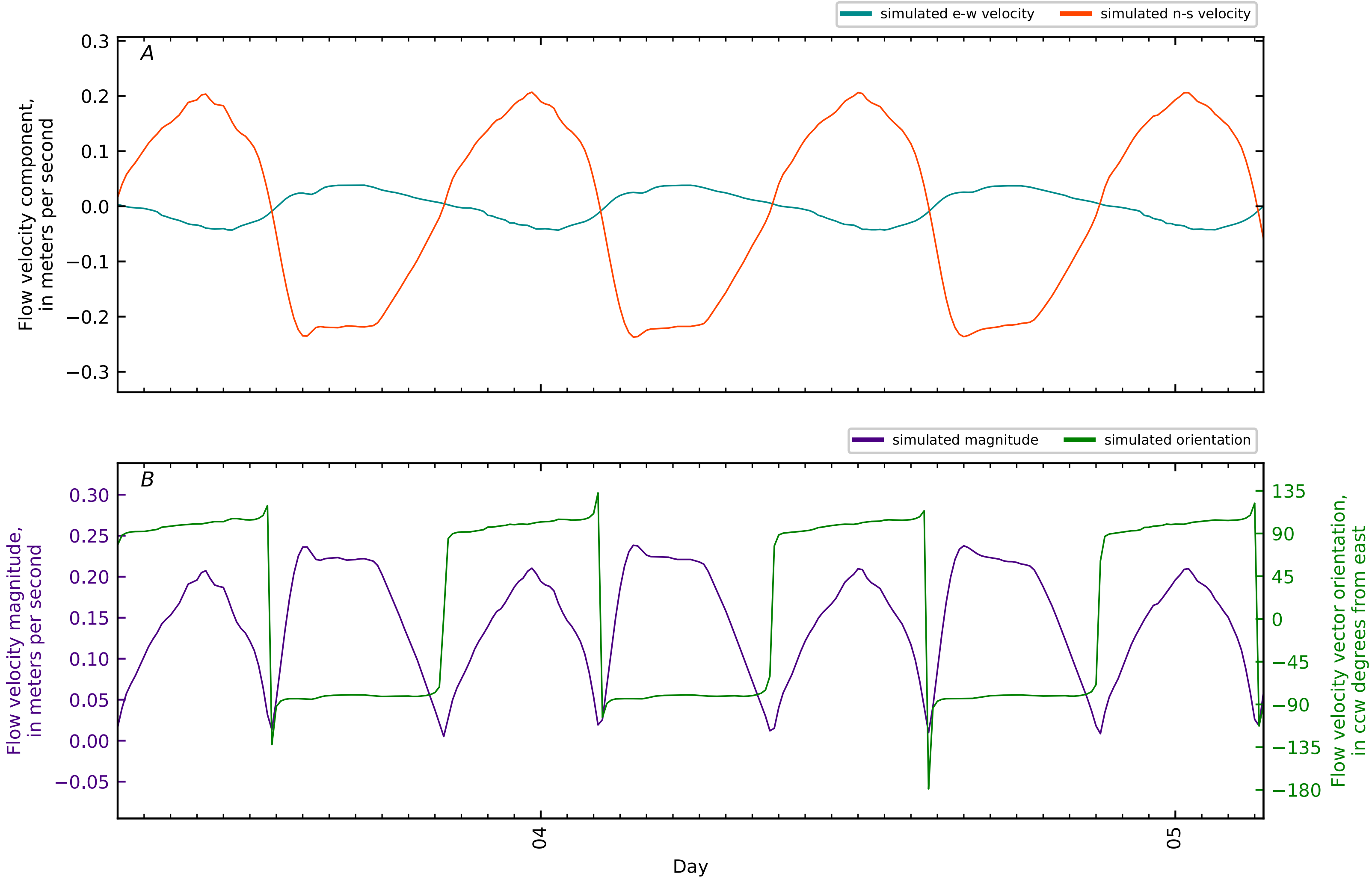

Figure B4-289. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 128, East Channel KM6.8 ERDC12 VN-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

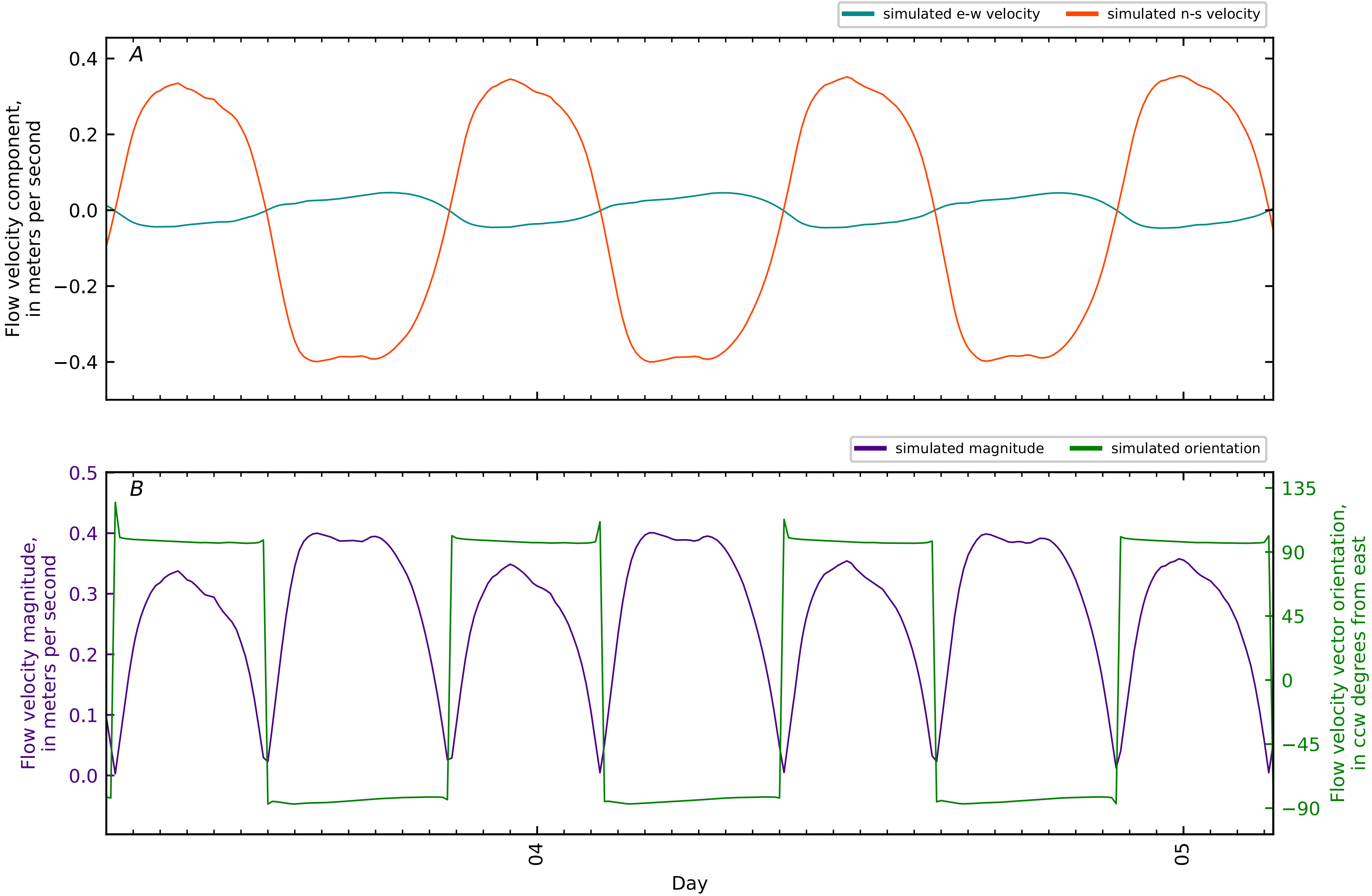

Figure B4-290. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 129, East Channel KM7. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

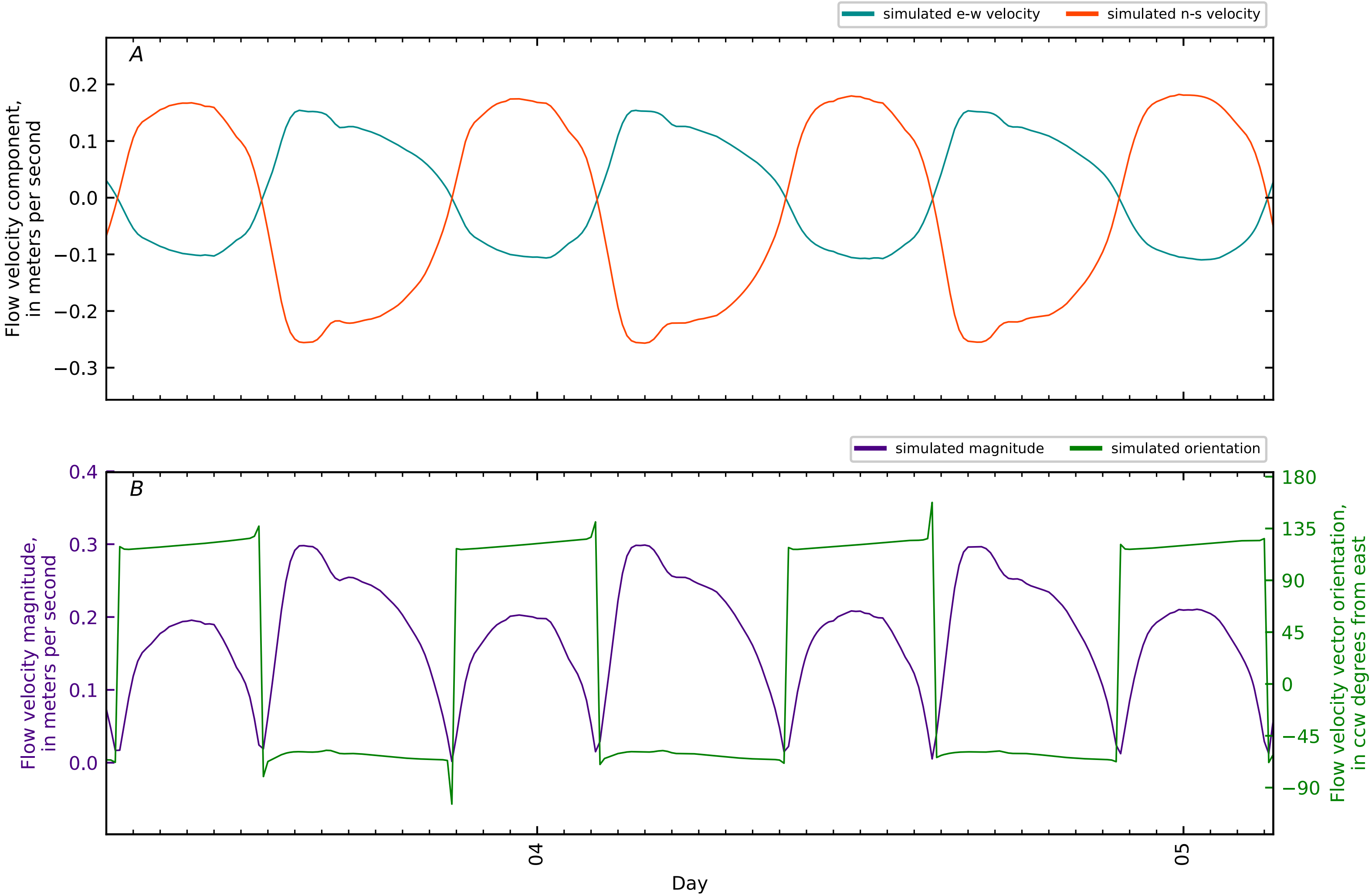

Figure B4-291. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 130, East Channel KM8. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

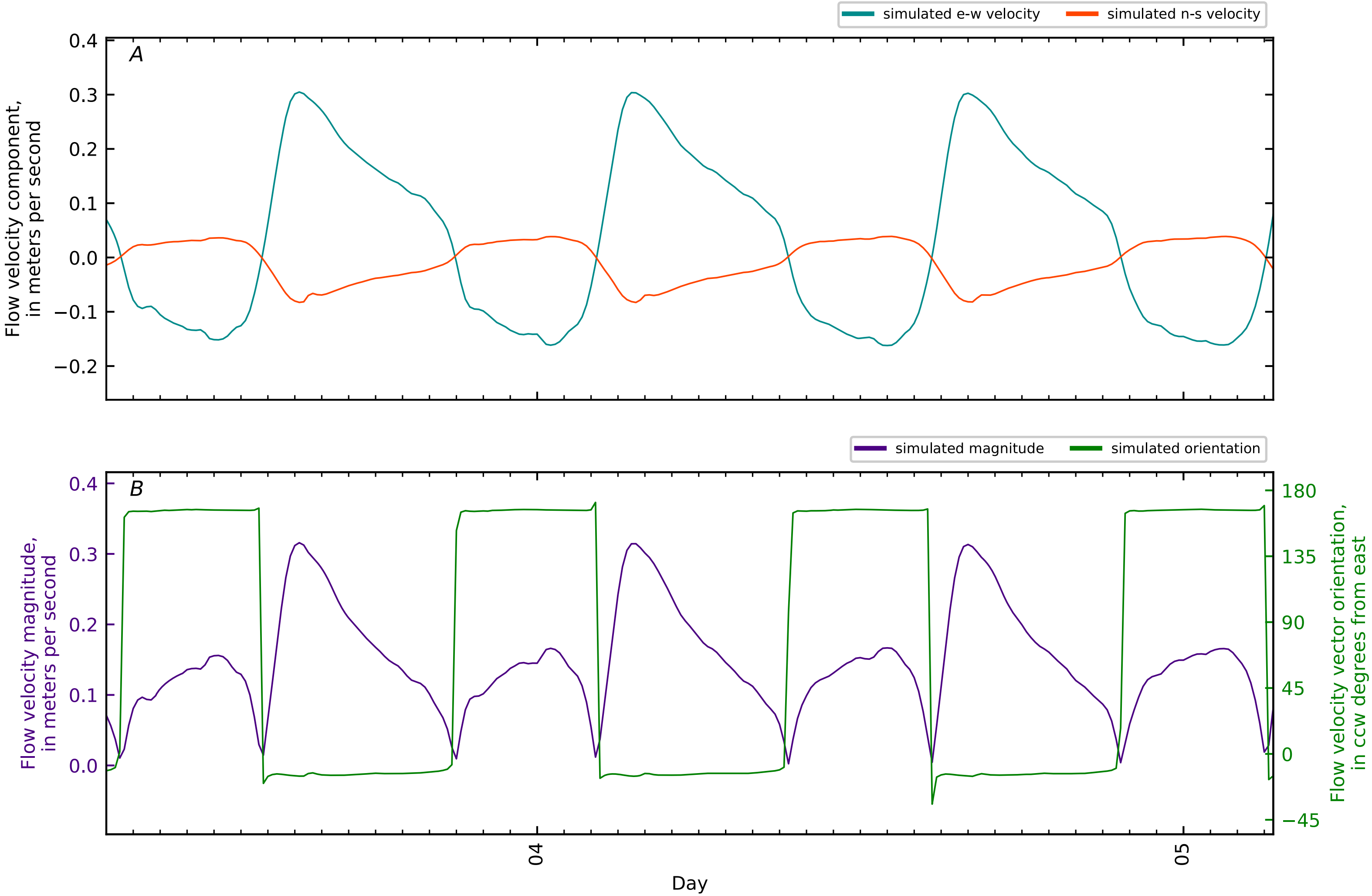

Figure B4-292. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 131, East Channel KM9. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

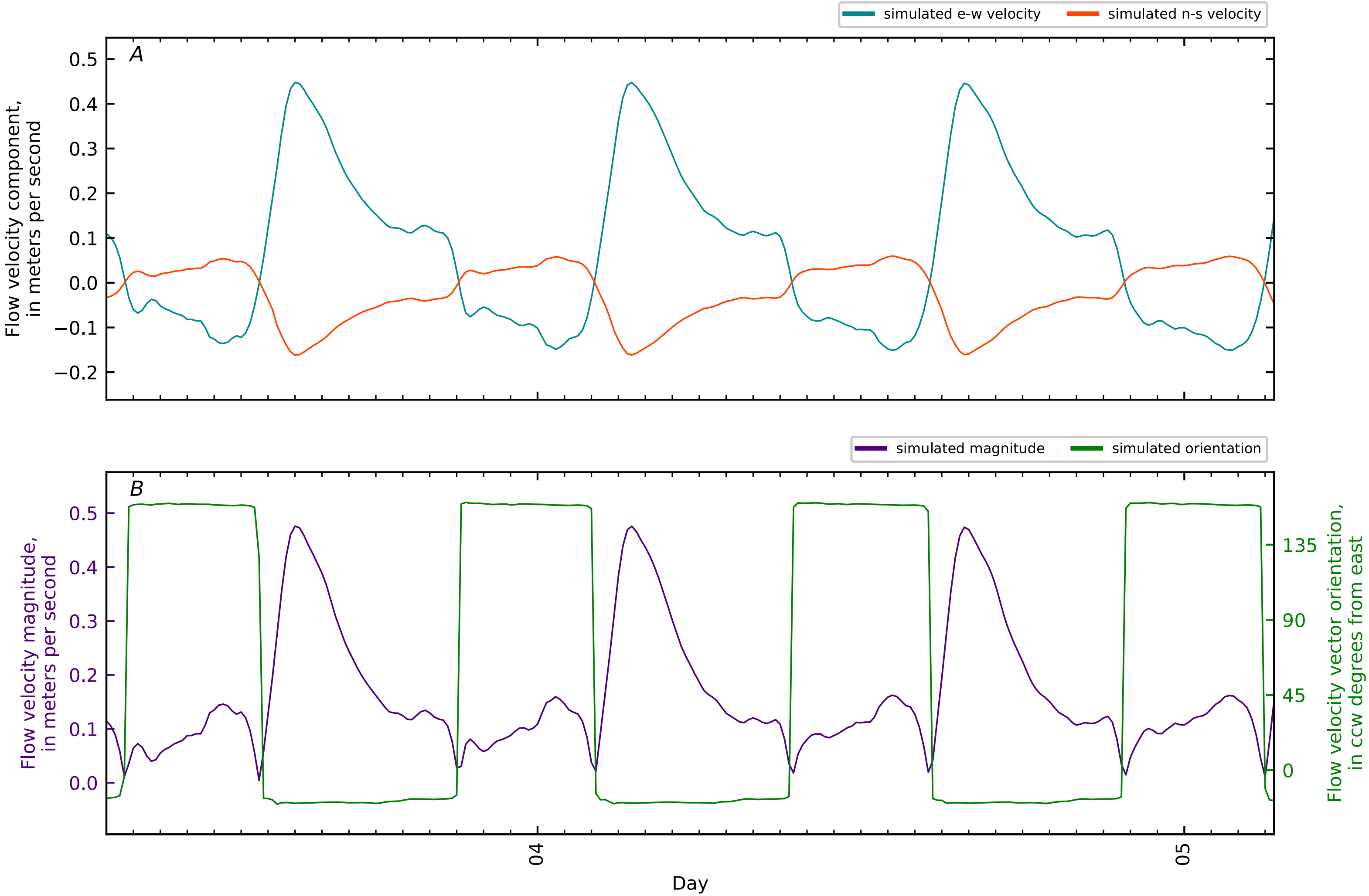

Figure B4-293. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 132, East Channel KM10. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

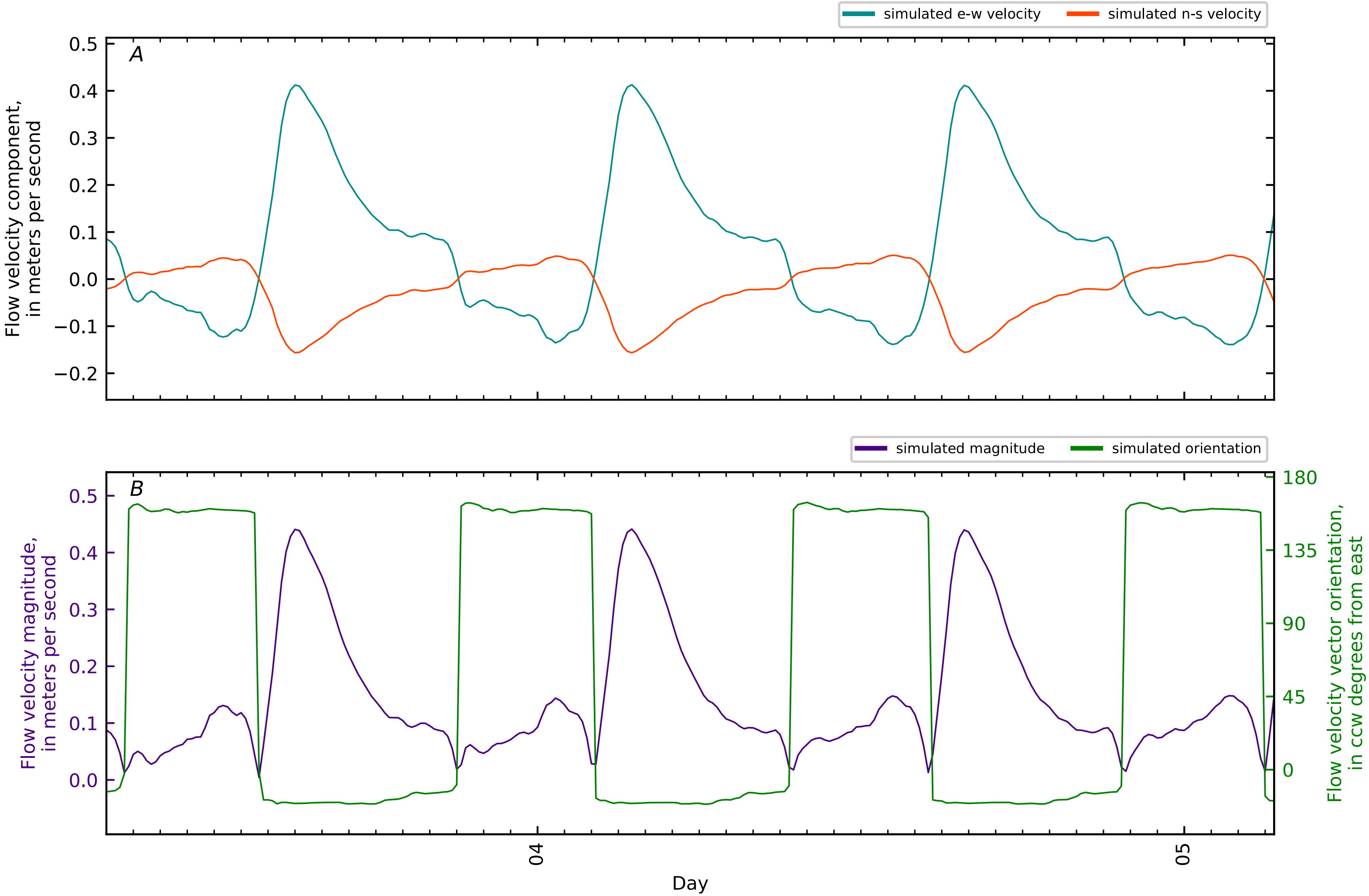

Figure B4-294. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 133, East Channel KM10 GS 443409068471801 at. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

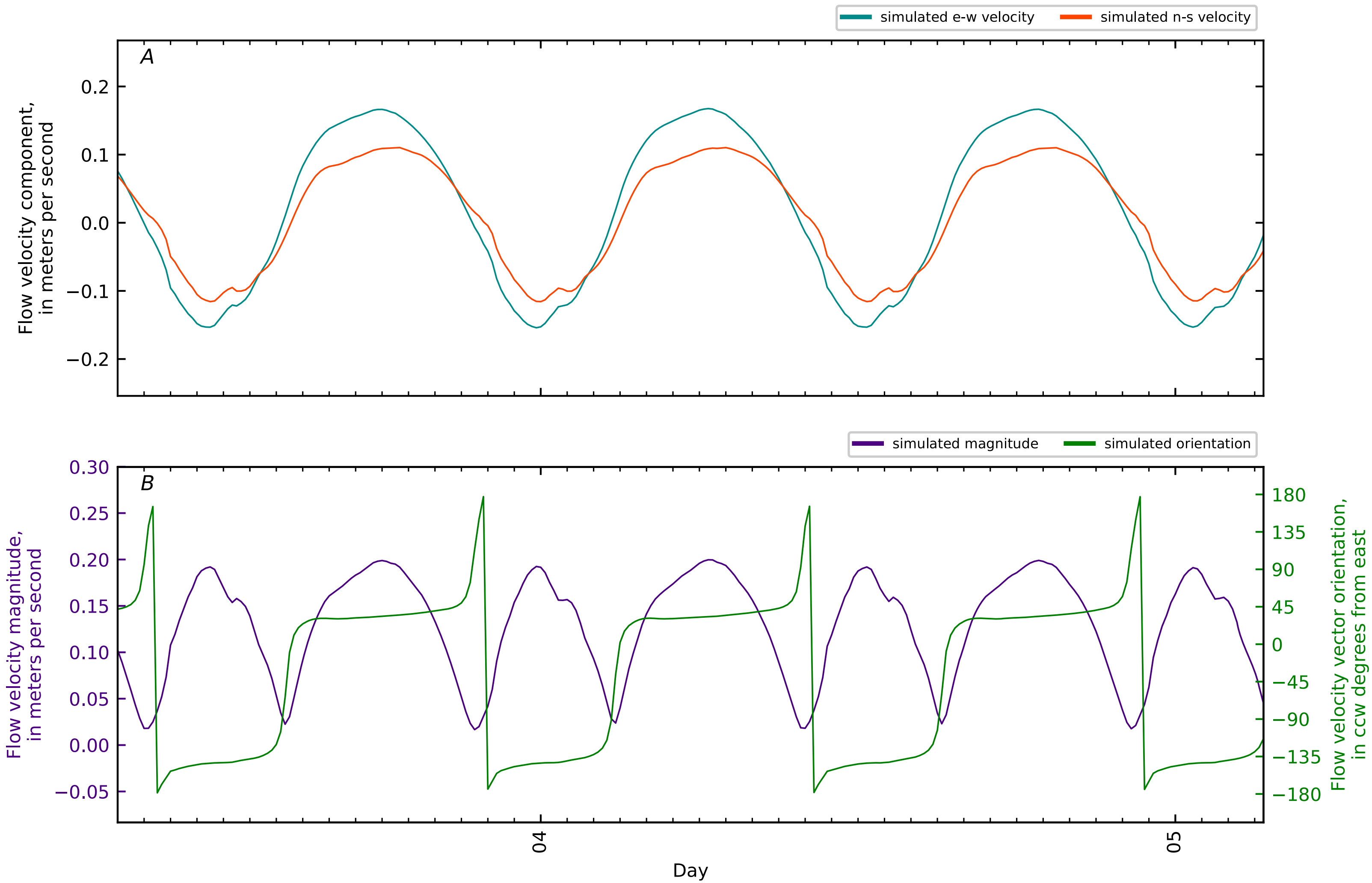

Figure B4-295. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 134, Mendall Marsh KM0. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

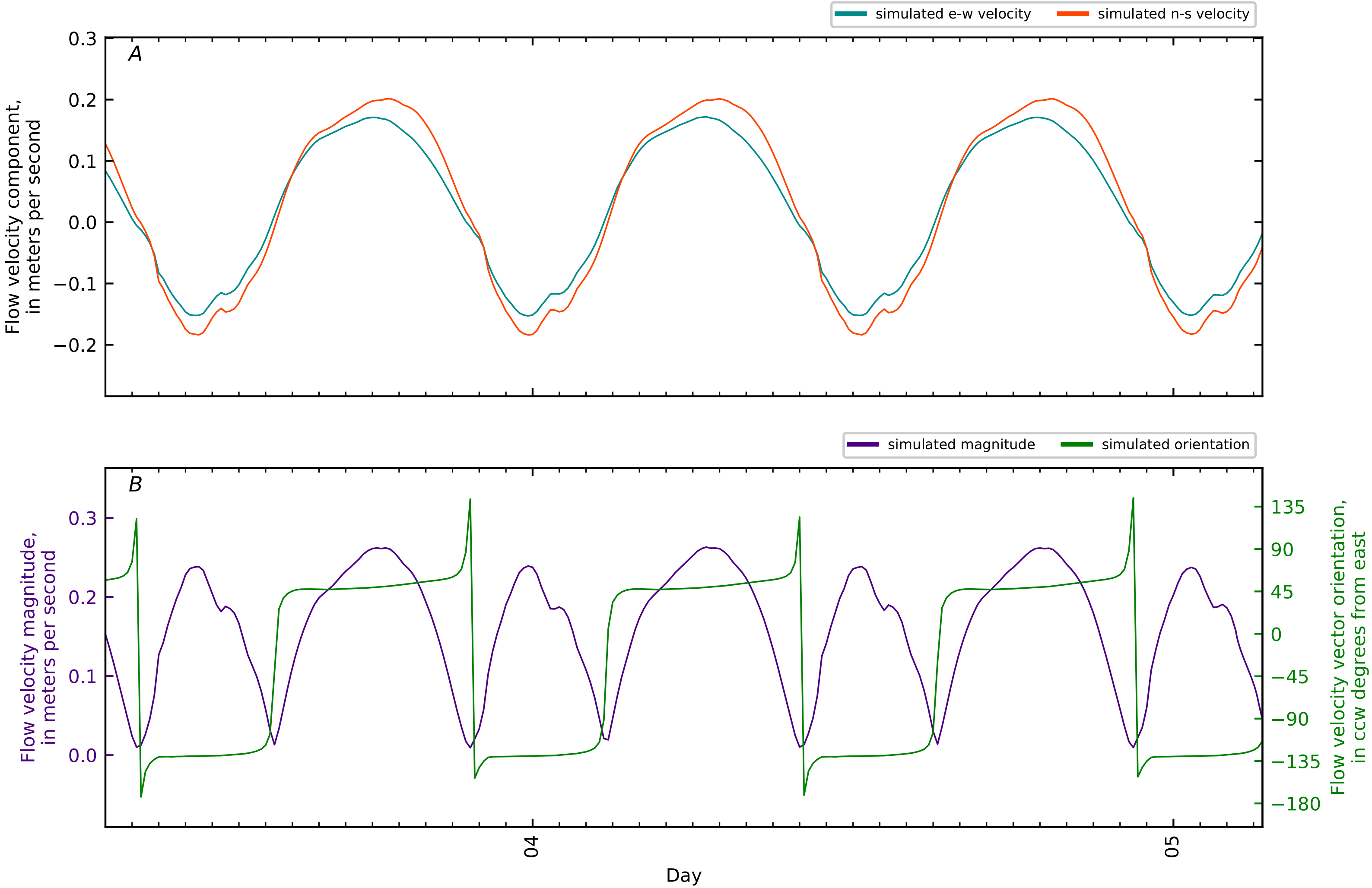

Figure B4-296. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 135, Mendall Marsh KM0.1 ERDC14 MM-MU6-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

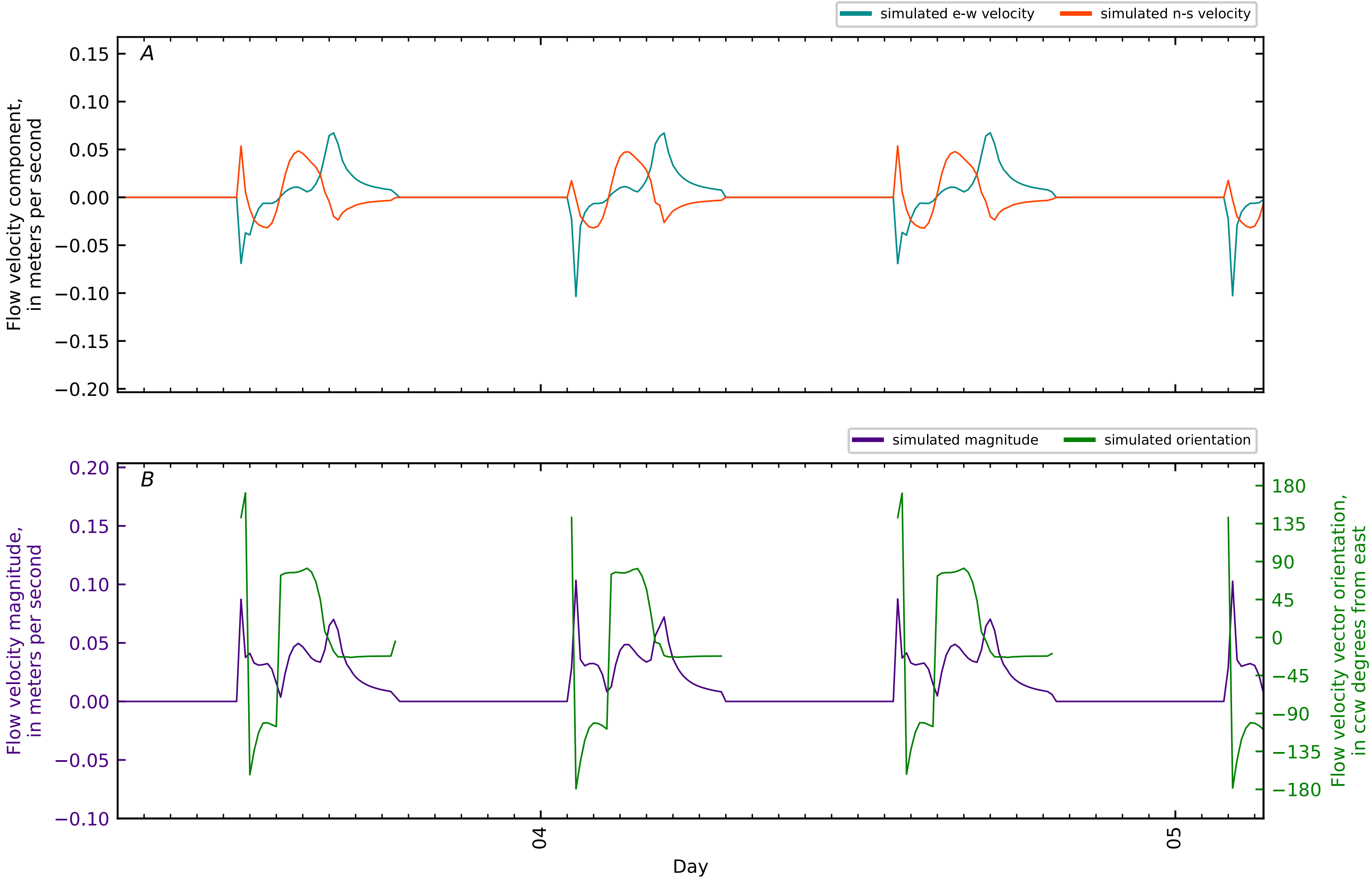

Figure B4-297. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 136, Mendall Marsh KM0.4 GS CTD2-01. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

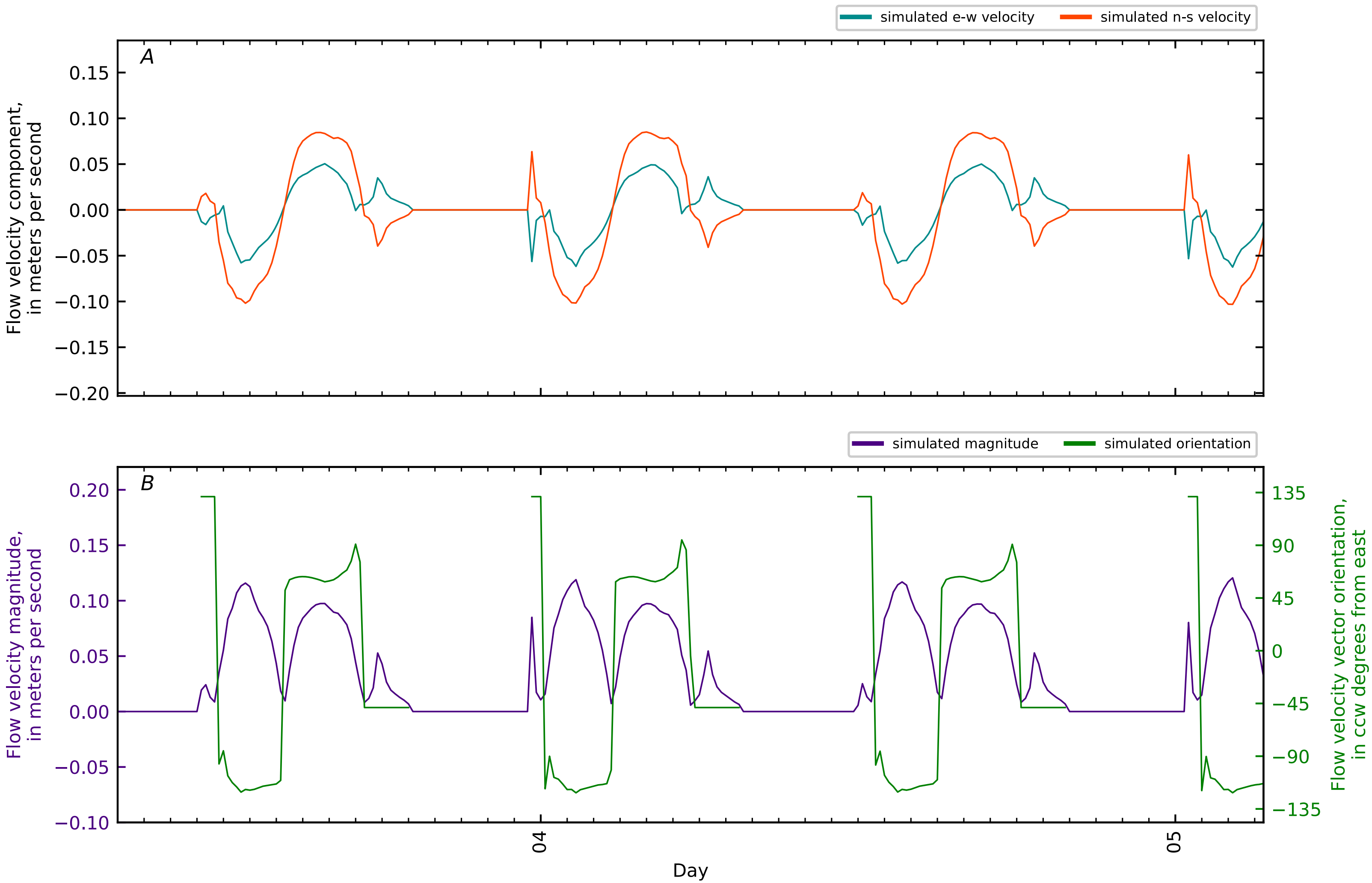

Figure B4-298. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 137, Mendall Marsh KM0.4 GS CTD2-02. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

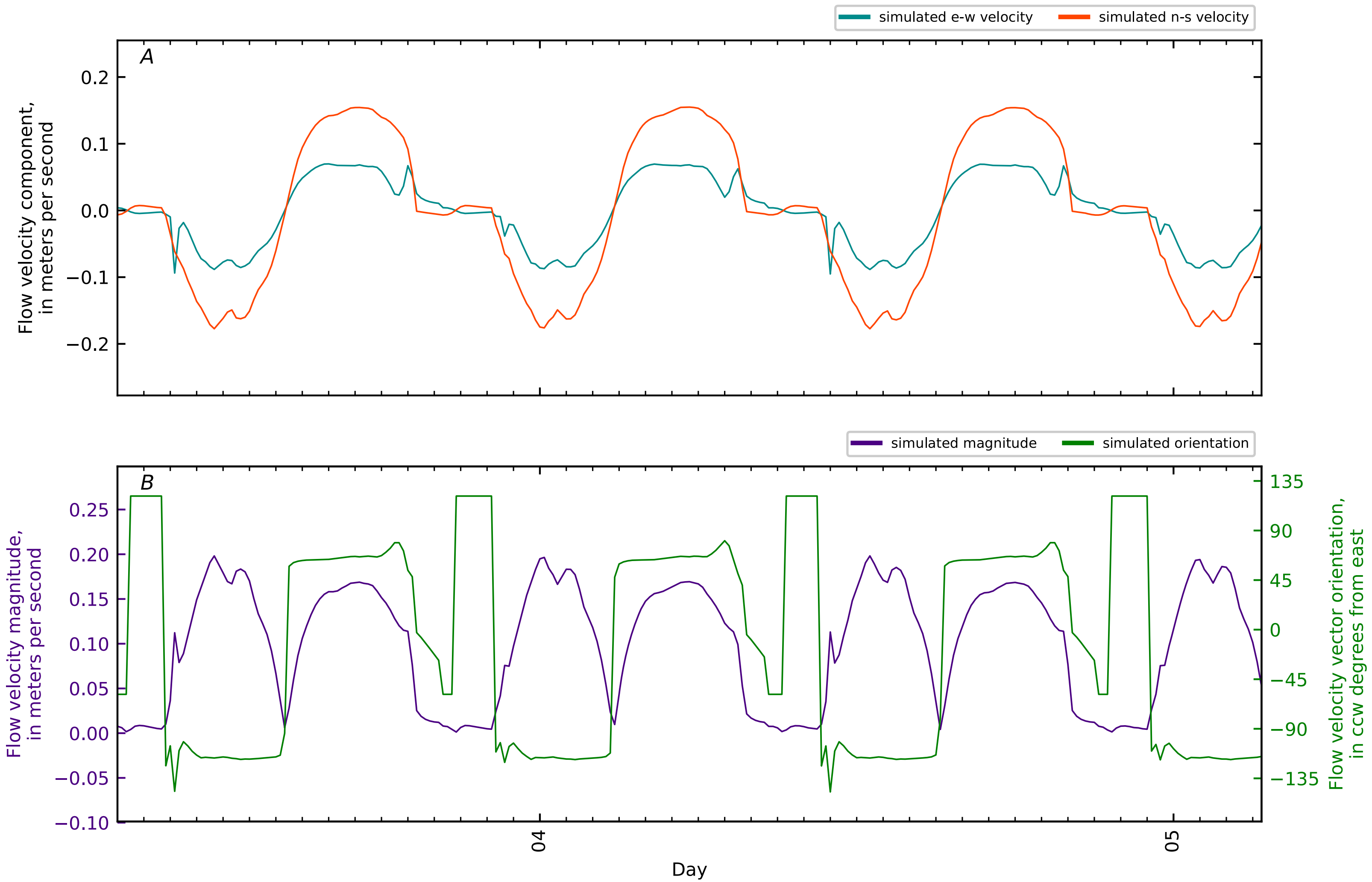

Figure B4-299. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 138, Mendall Marsh KM0.4 GS CTD2-03. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

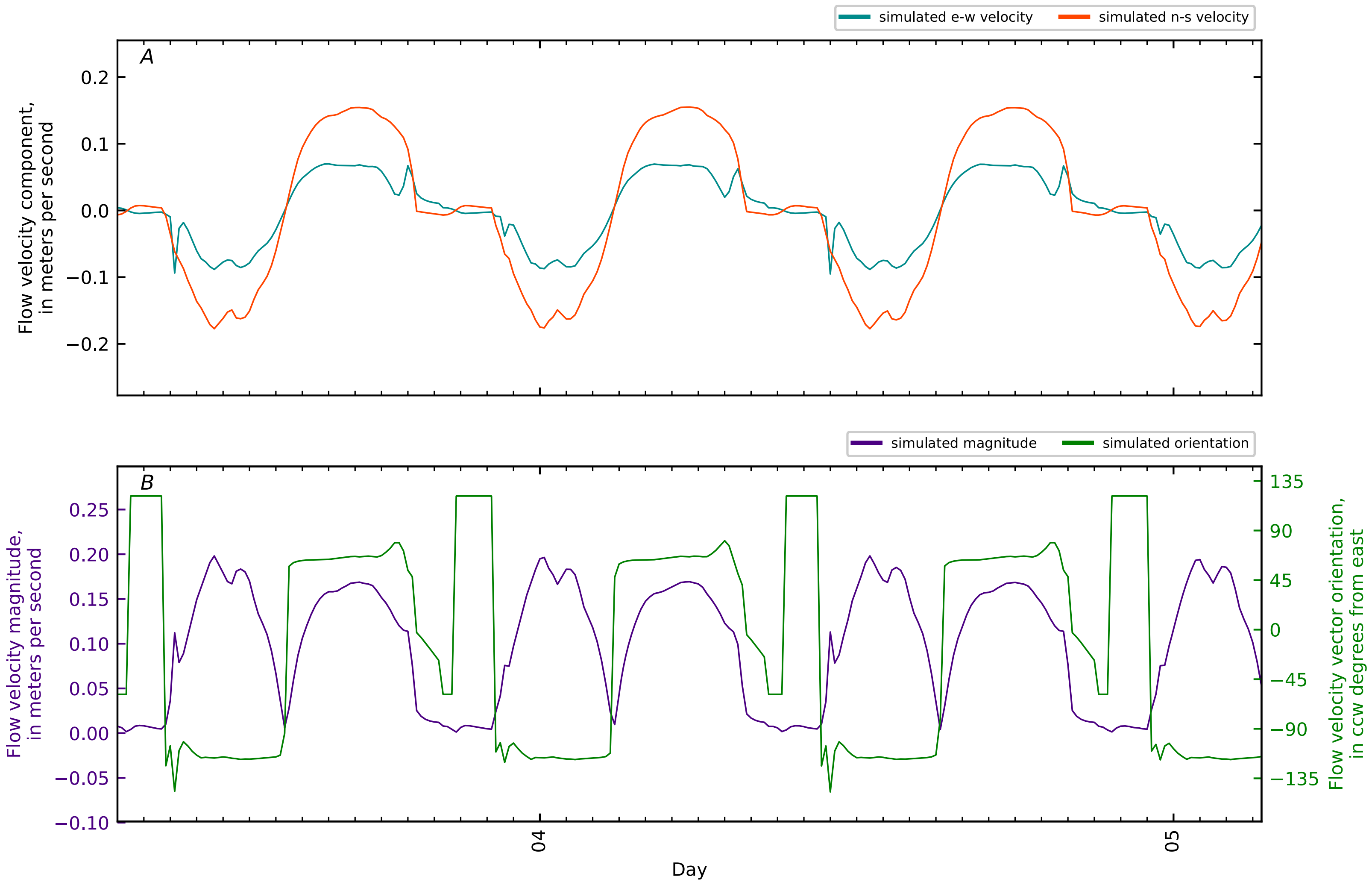

Figure B4-300. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 139, Mendall Marsh KM0.4 GS CTD2-04. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

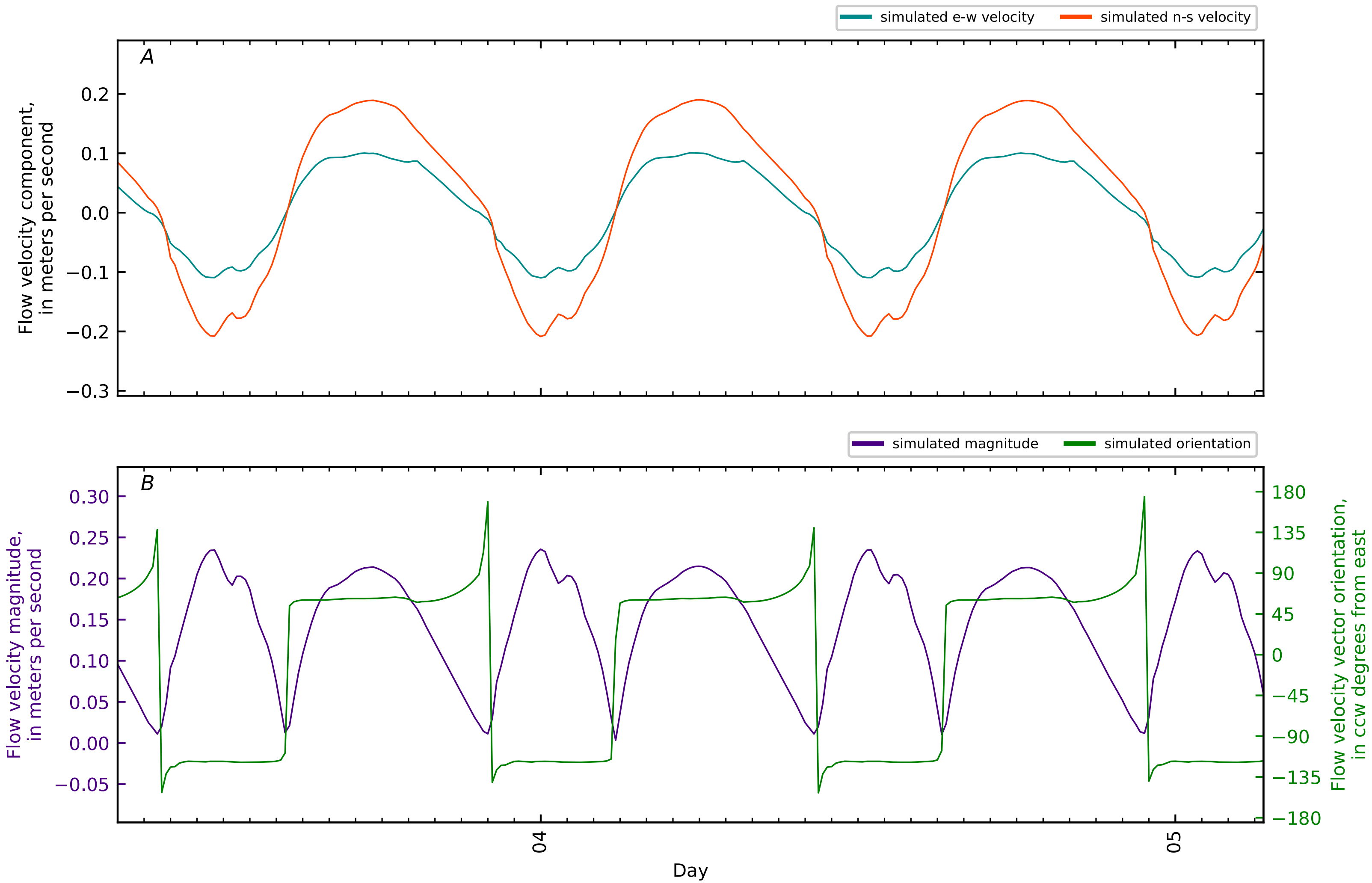

Figure B4-301. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 140, Mendall Marsh KM0.4 GS CTD2-05. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

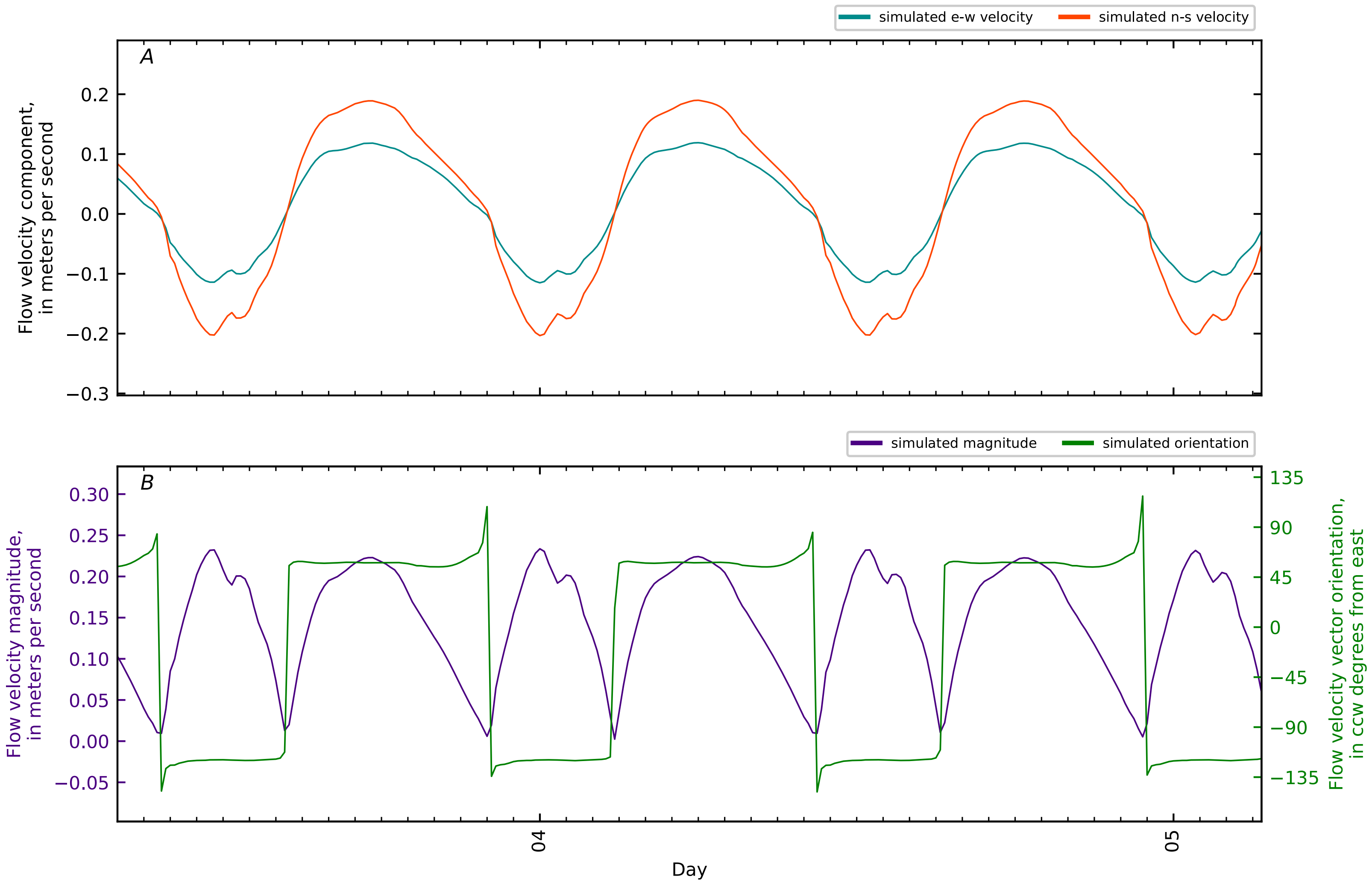

Figure B4-302. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 141, Mendall Marsh KM0.4 GS CTD2-06. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

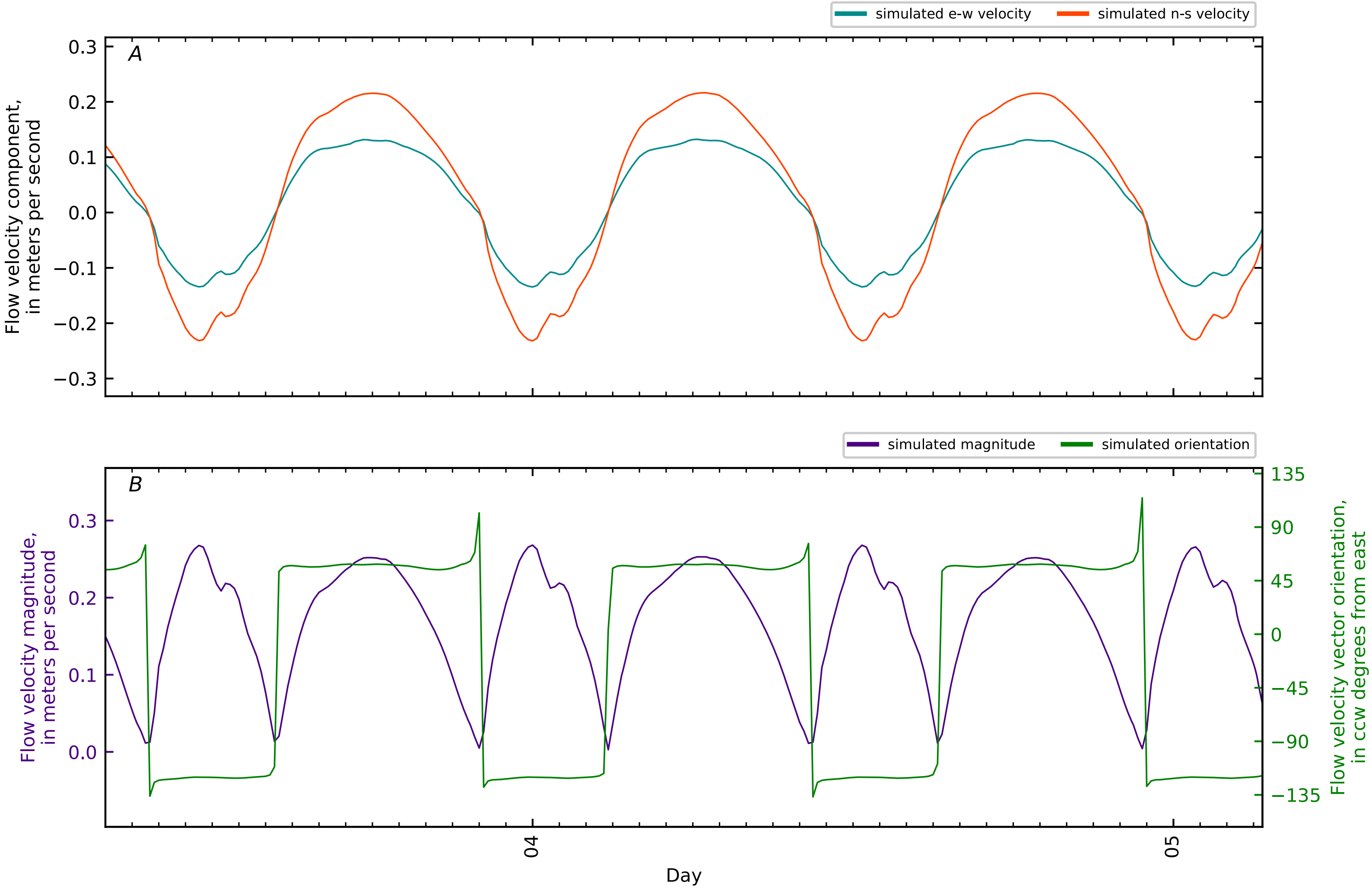

Figure B4-303. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 142, Mendall Marsh KM0.4 GS CTD2-07. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

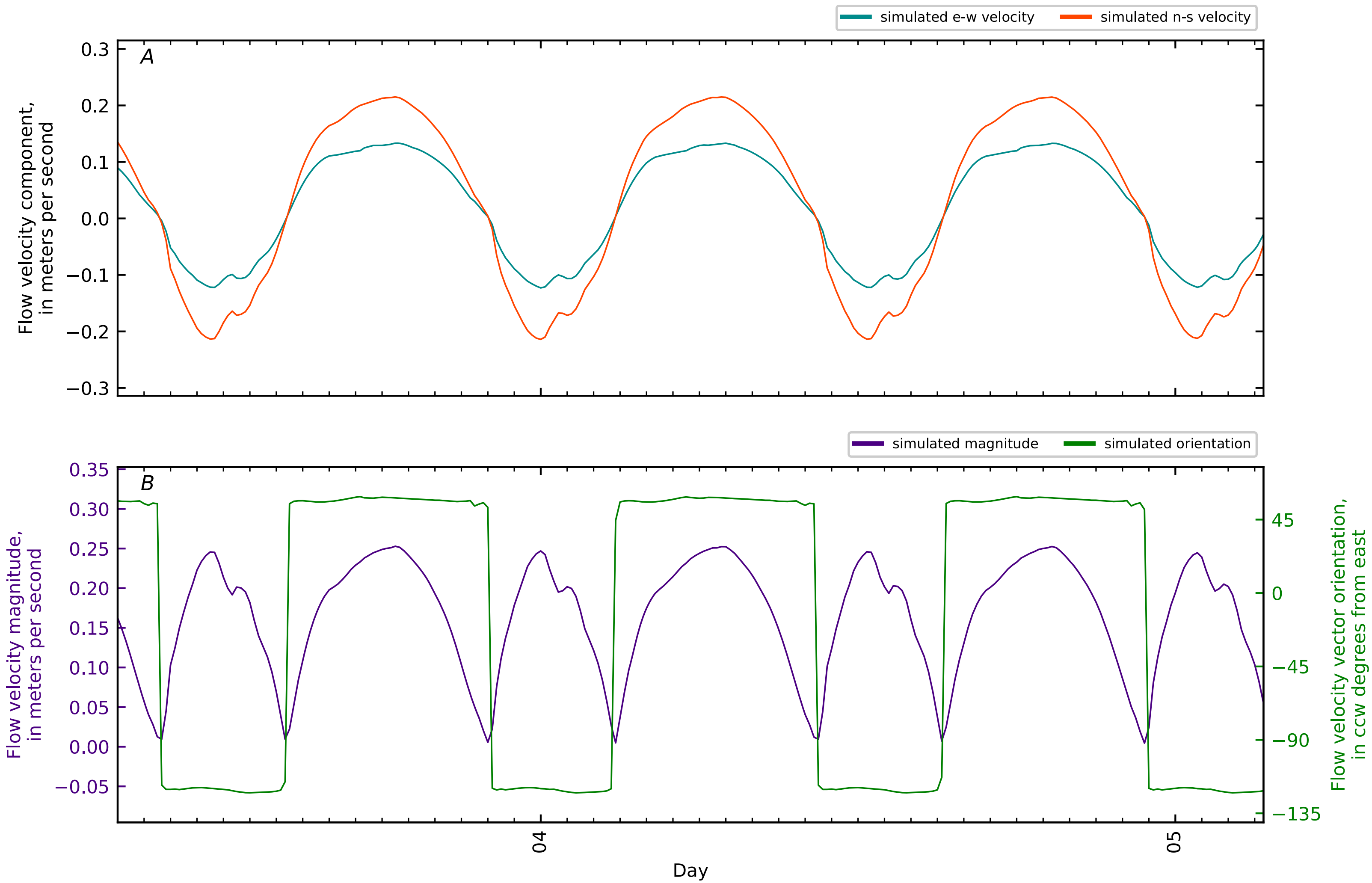

Figure B4-304. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 143, Mendall Marsh KM0.4 GS CTD2-08. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

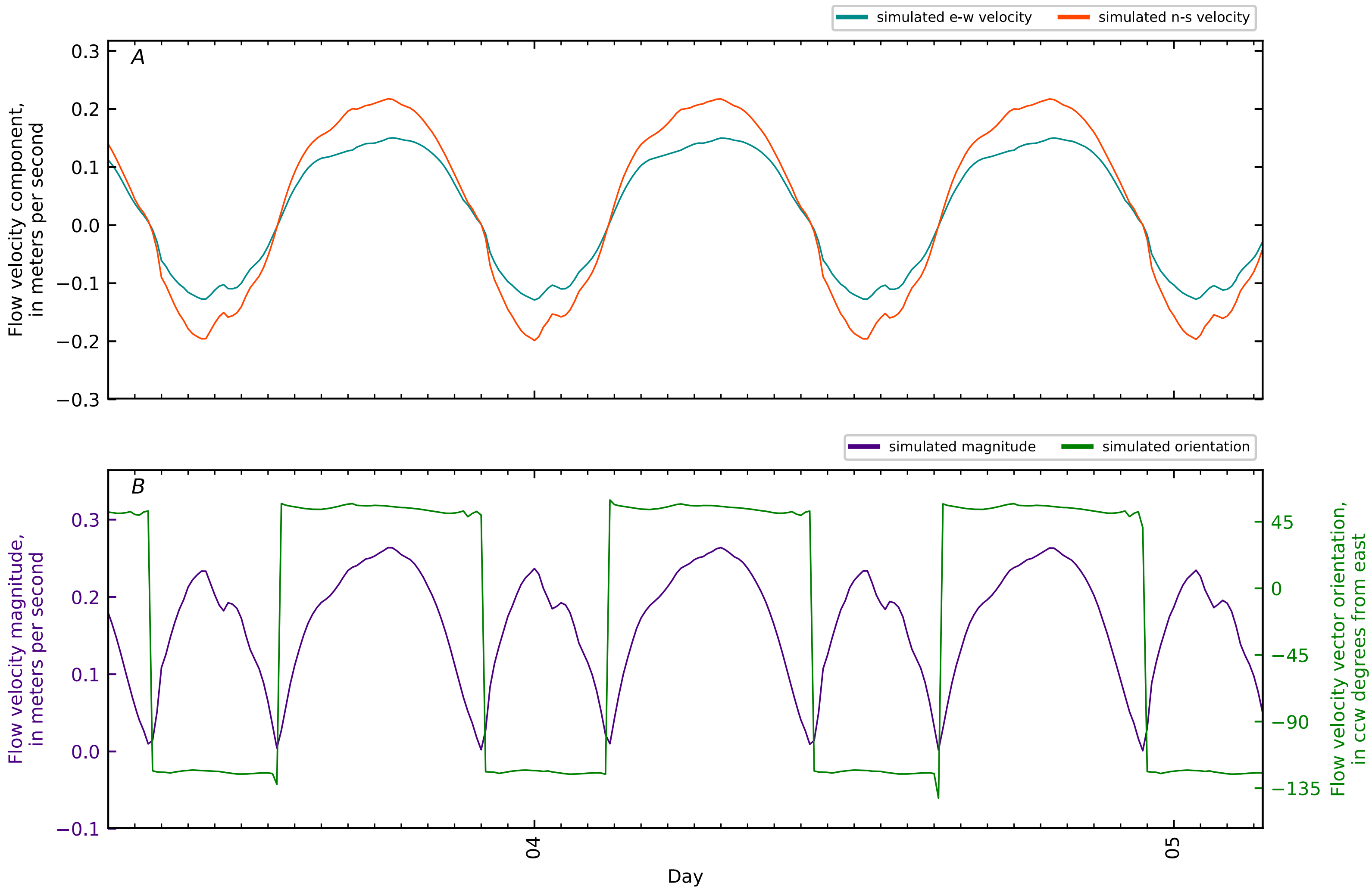

Figure B4-305. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 144, Mendall Marsh KM0.4 GS CTD2-09. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

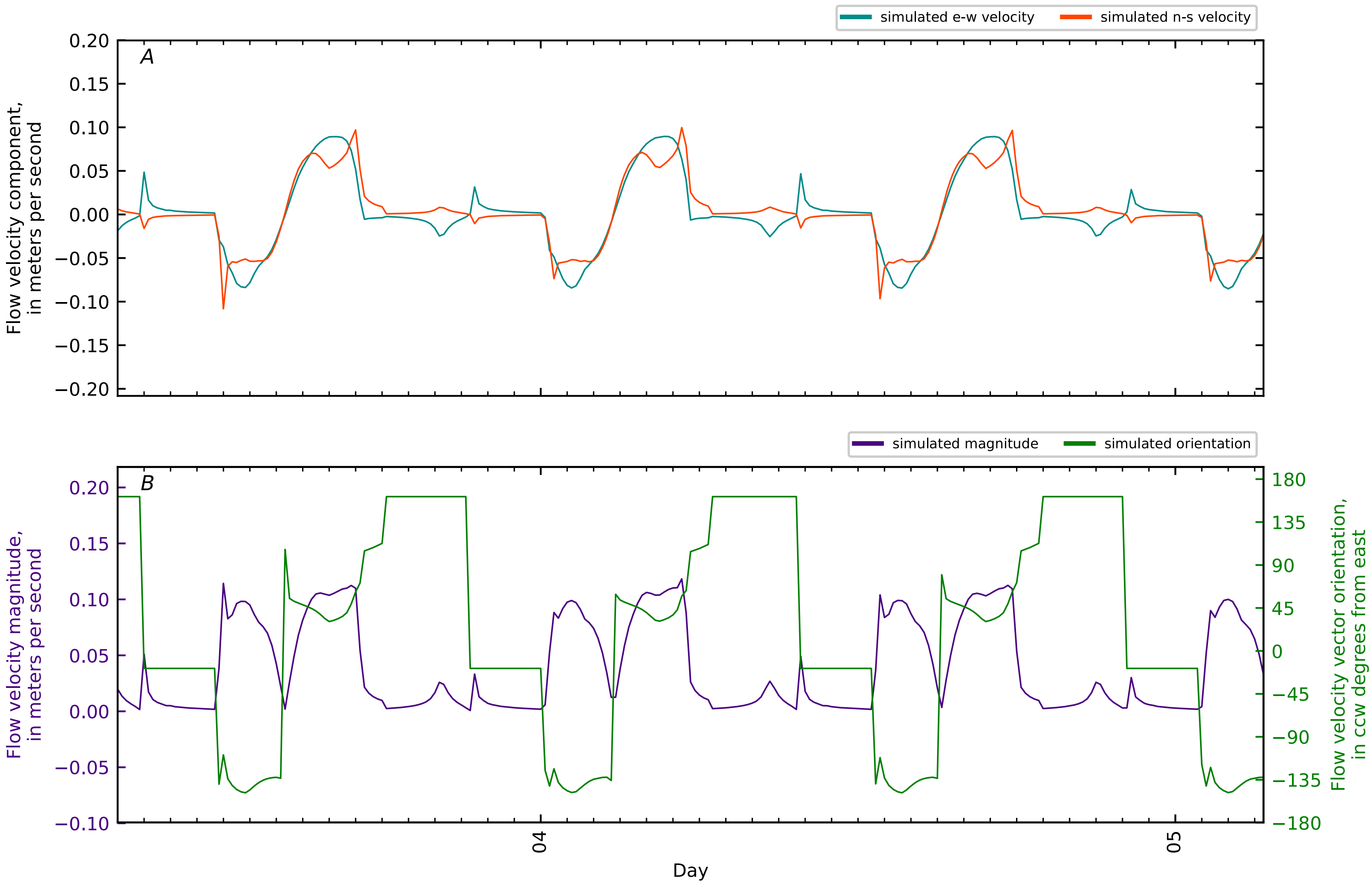

Figure B4-306. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 145, Mendall Marsh KM0.4 GS CTD2-10. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

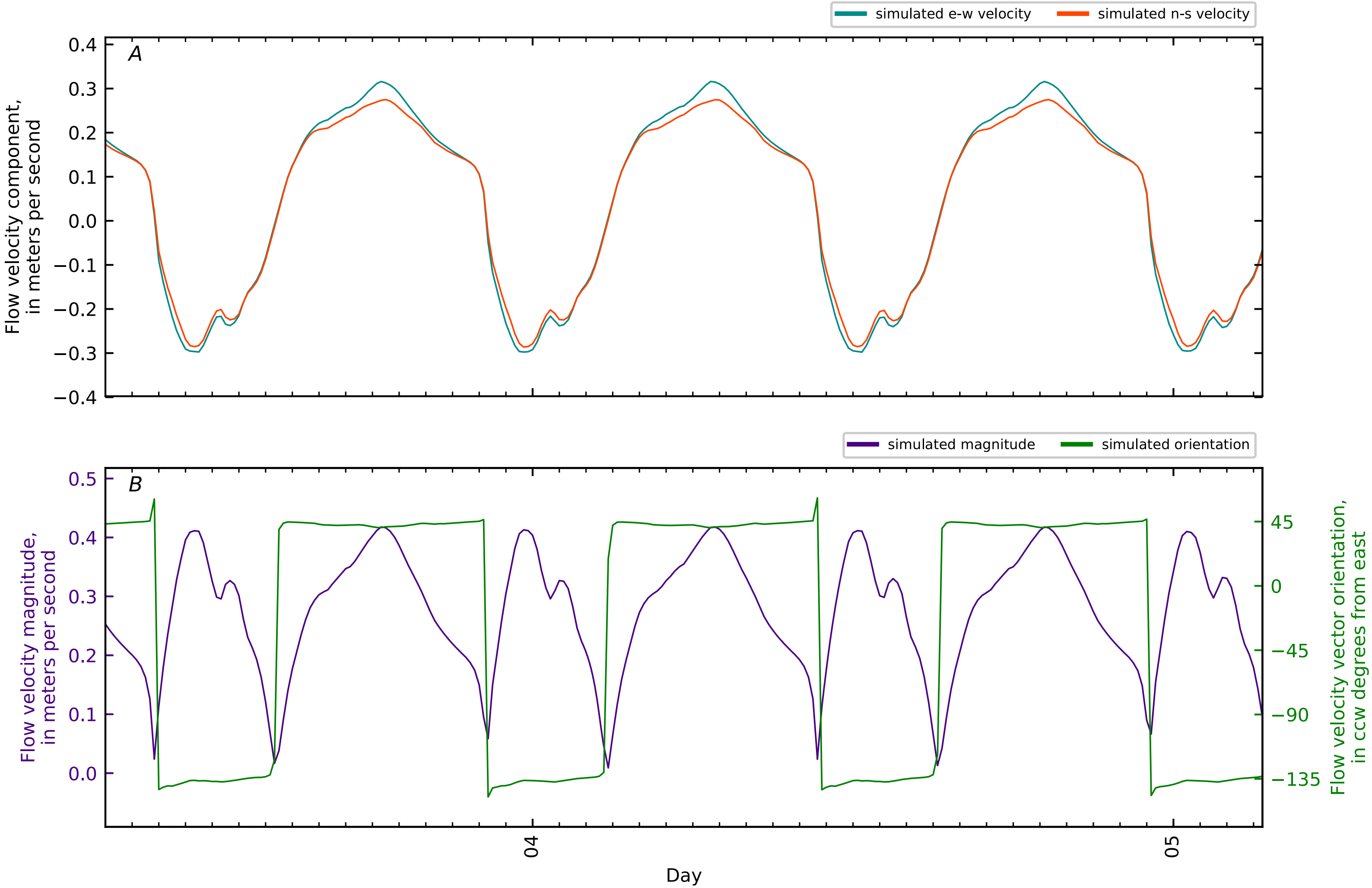

Figure B4-307. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 146, Mendall Marsh KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

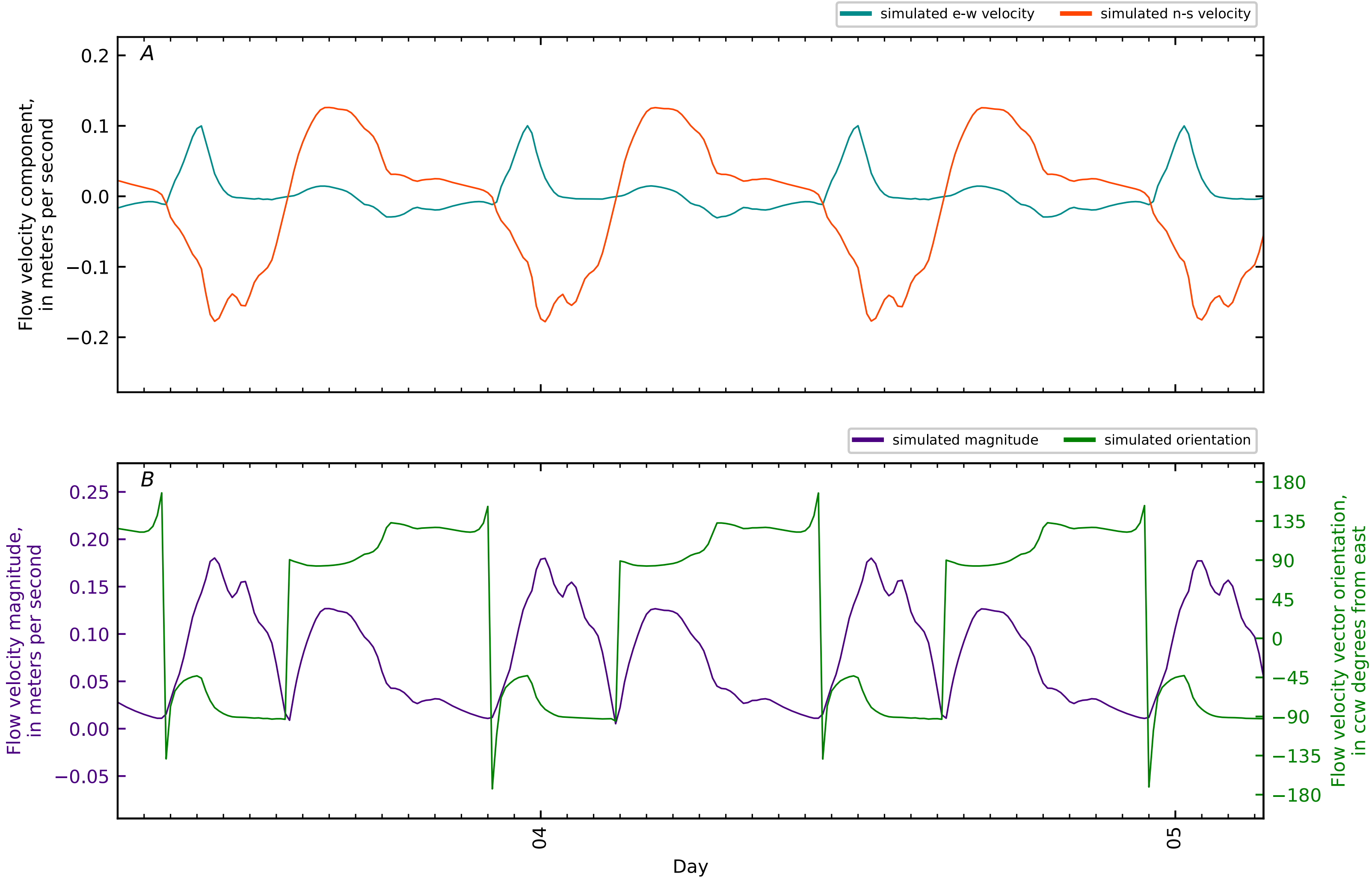

Figure B4-308. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 147, Mendall Marsh KM1.5 WHOI3 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

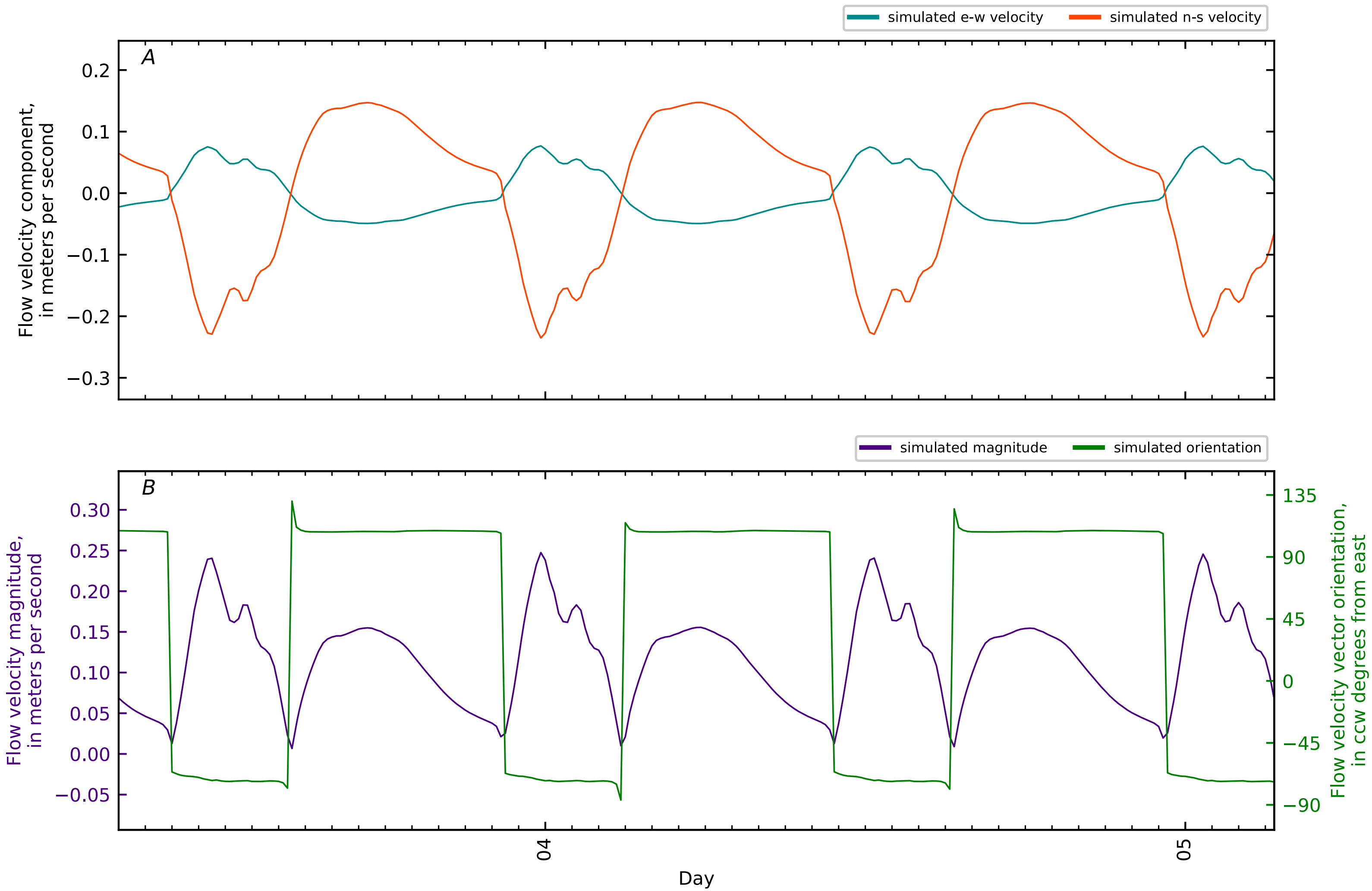

Figure B4-309. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 148, Mendall Marsh KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

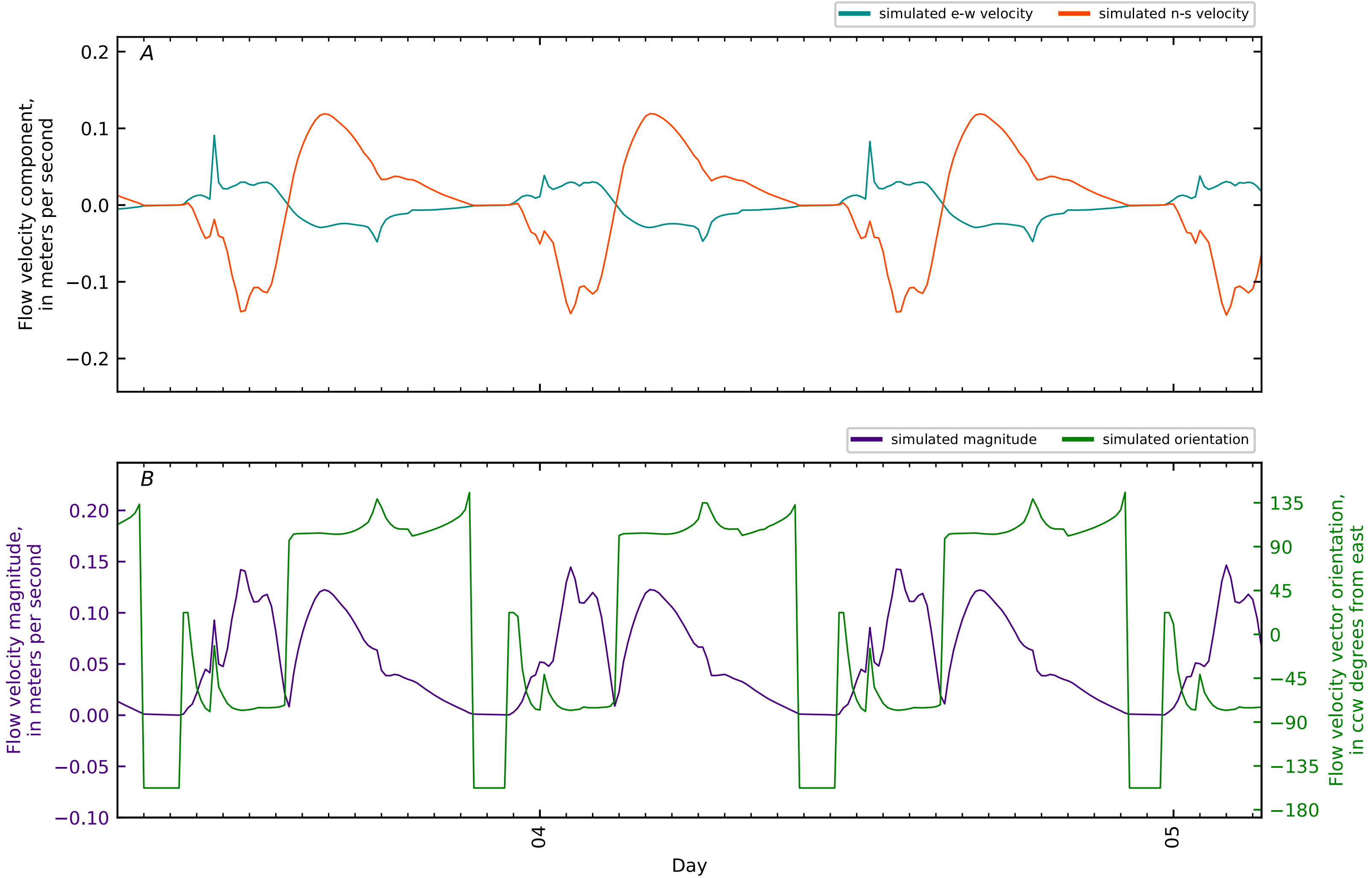

Figure B4-310. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 149, Mendall Marsh KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

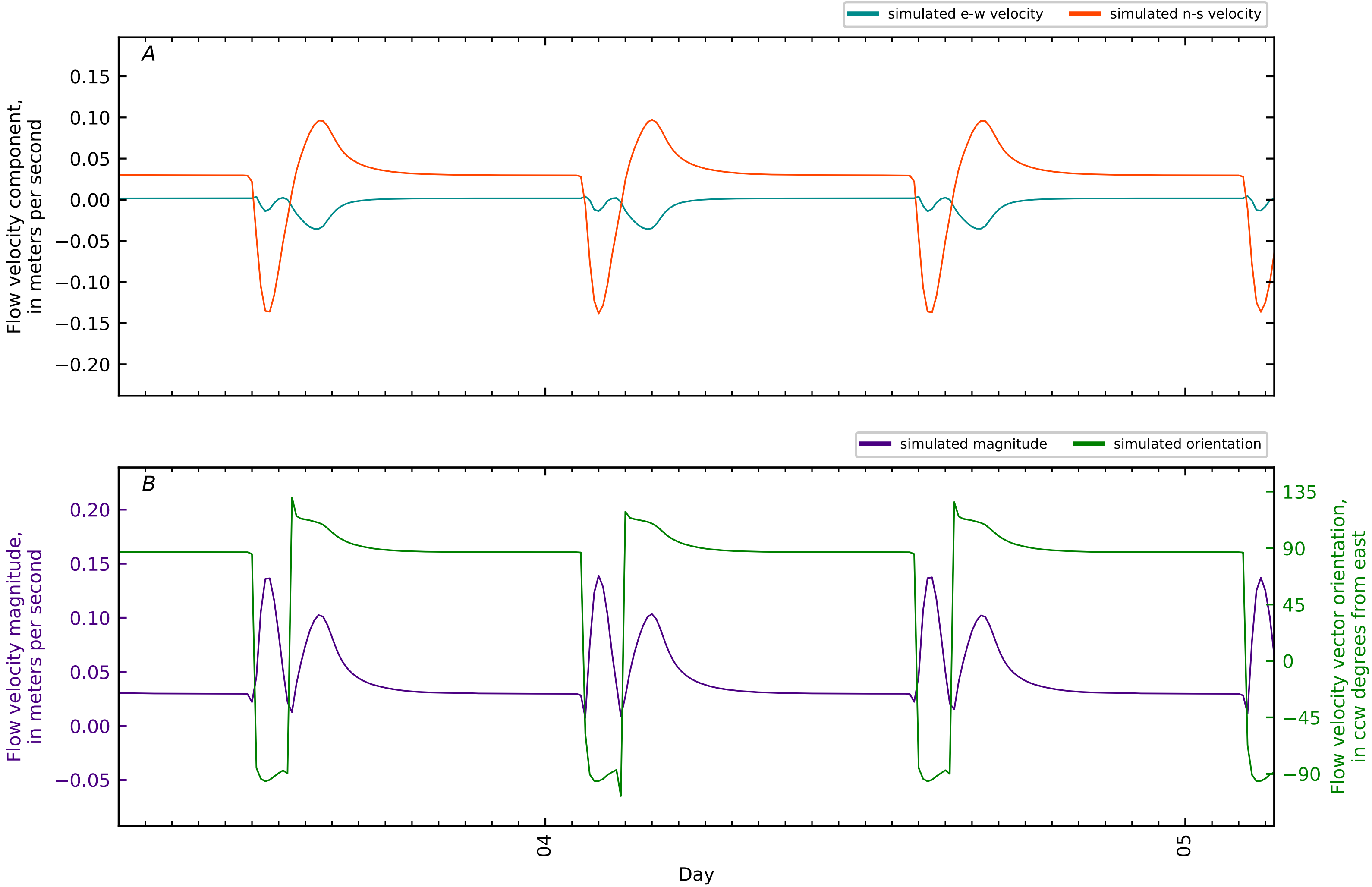

Figure B4-311. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 150, Mendall Marsh KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

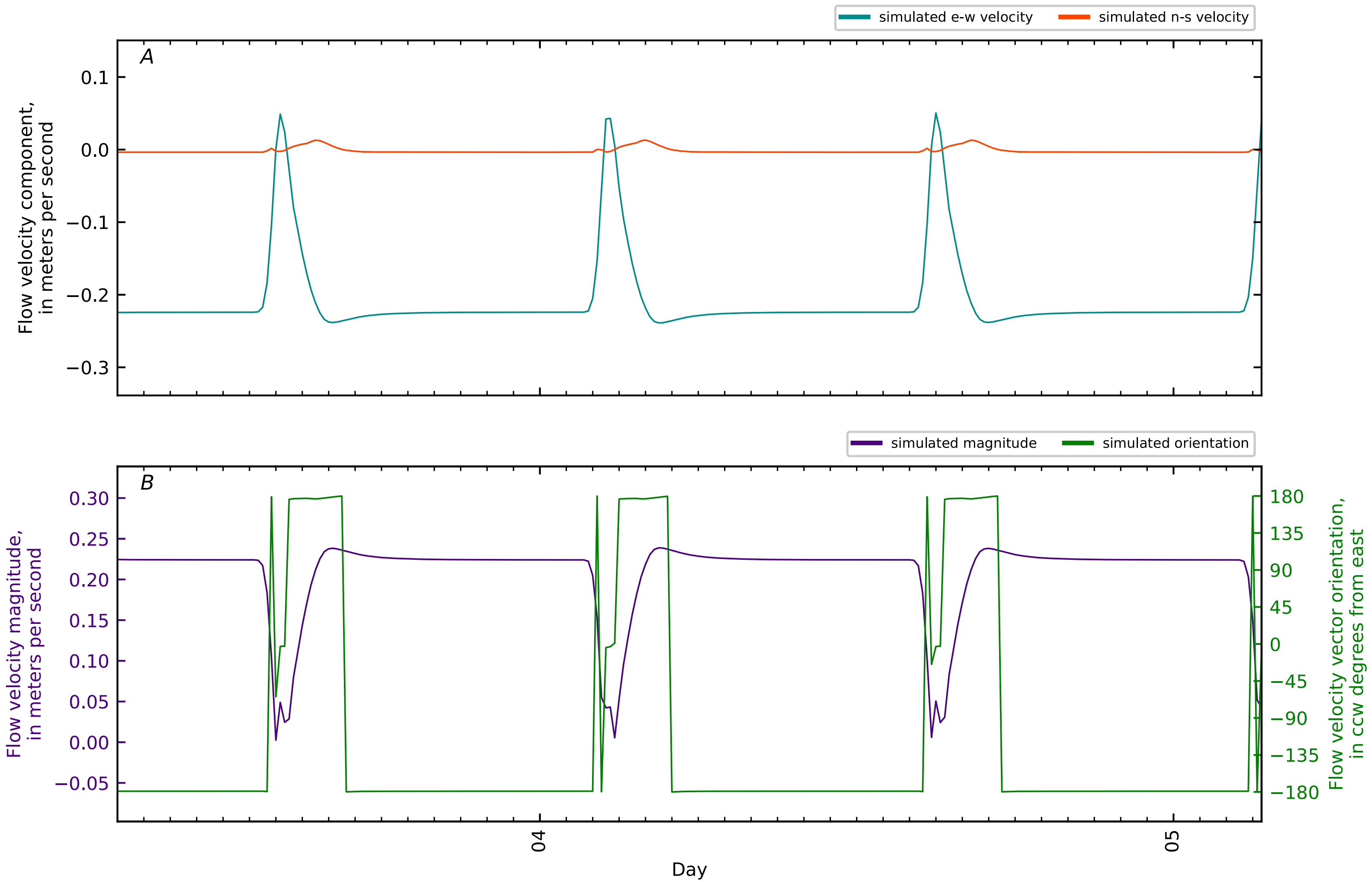

Figure B4-312. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 151, Mendall Marsh KM5. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

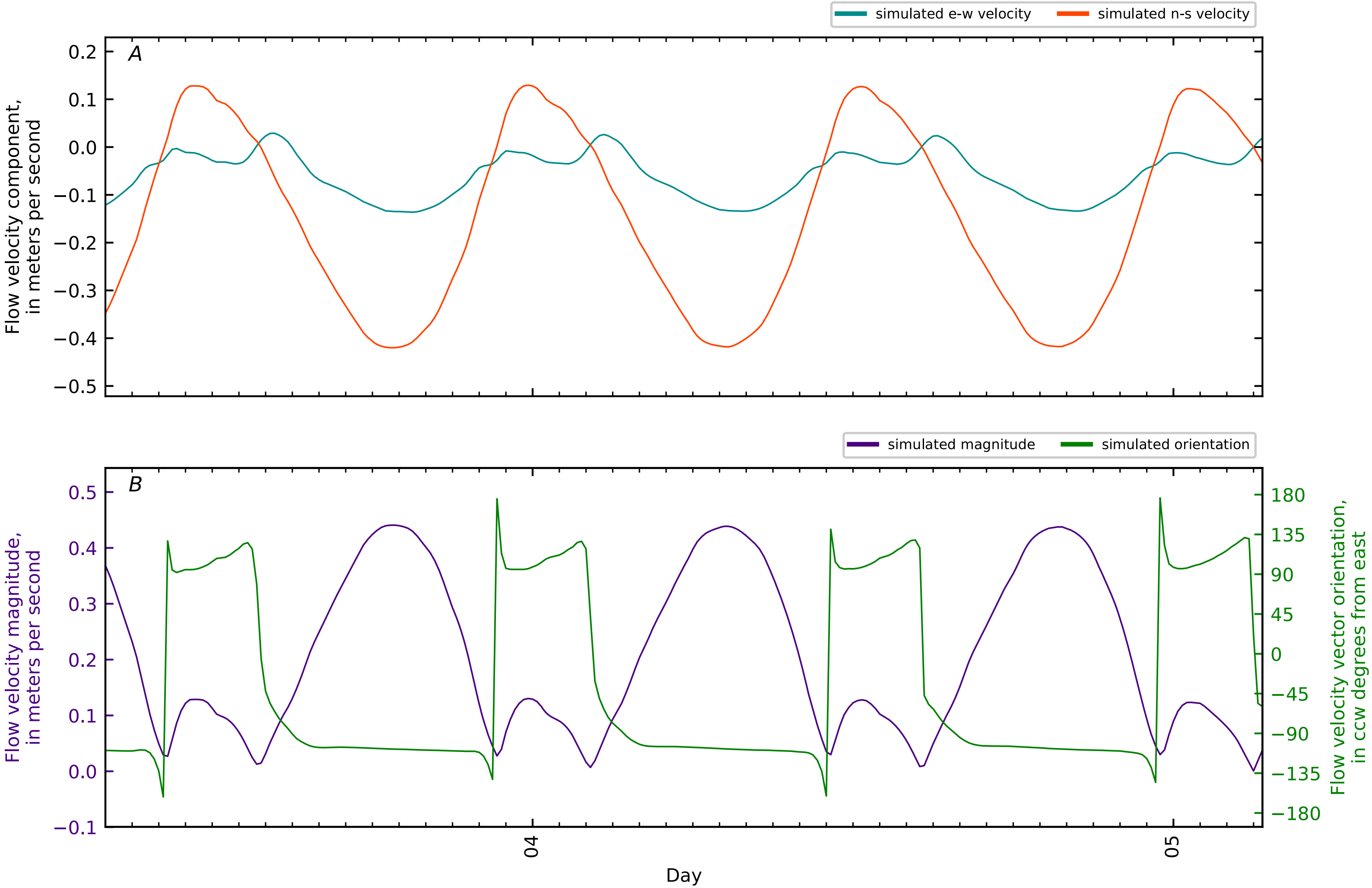

Figure B4-313. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 152, Orland Riv KM0. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

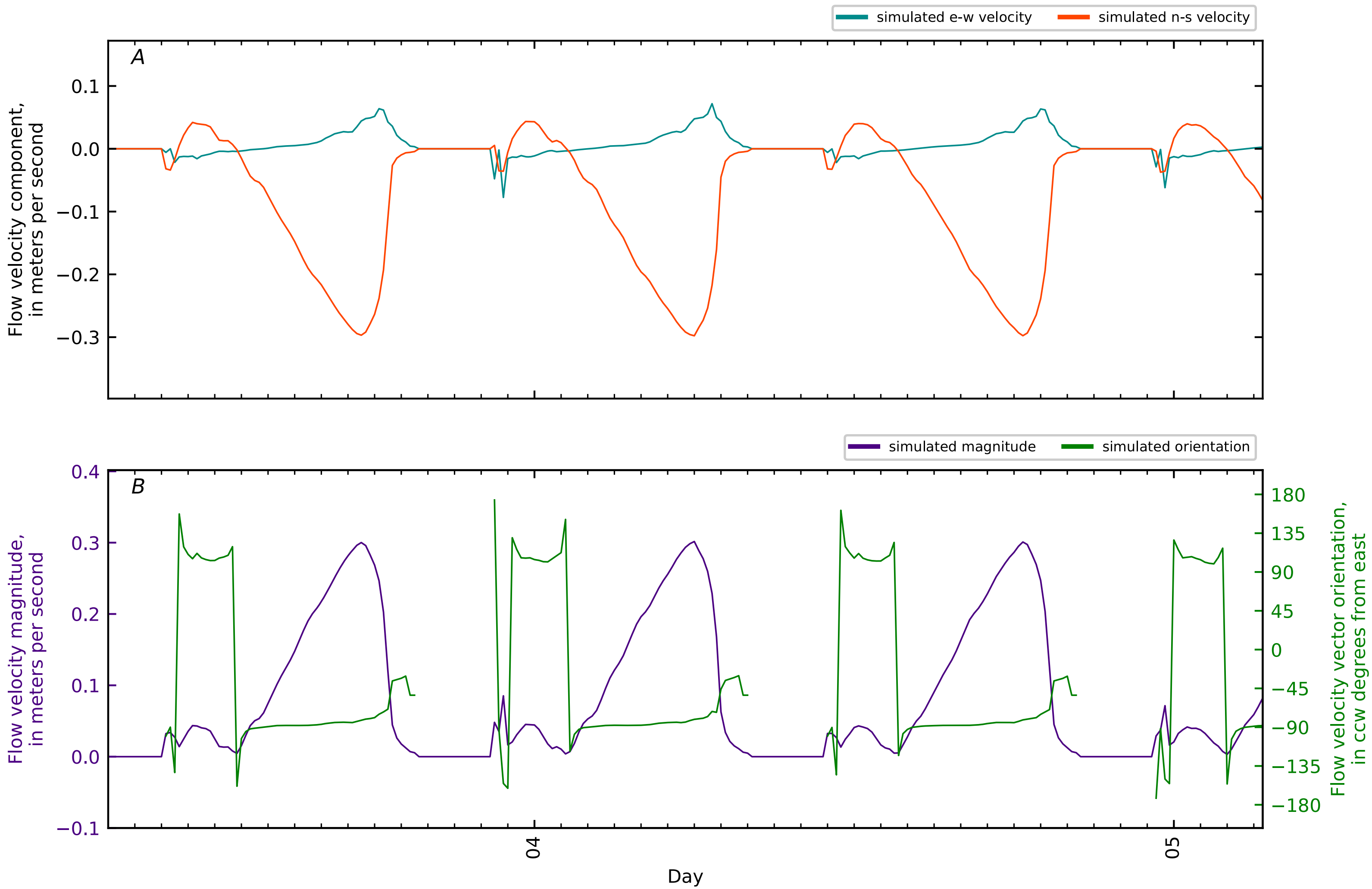

Figure B4-314. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 153, Orland Riv KM0.9 ERDC5 OR-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

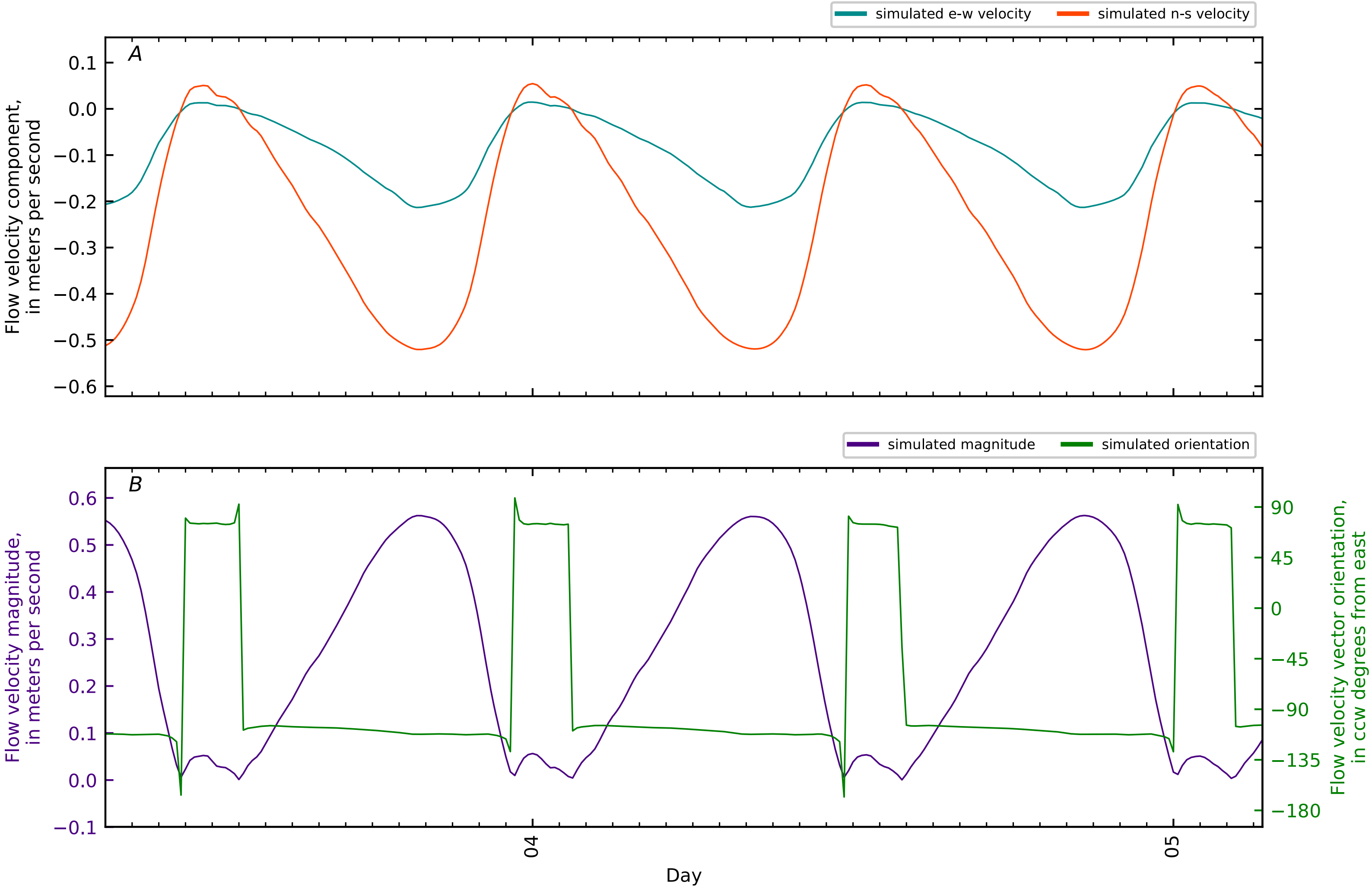

Figure B4-315. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 154, Orland Riv KM0.9 ERDC6 OR-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

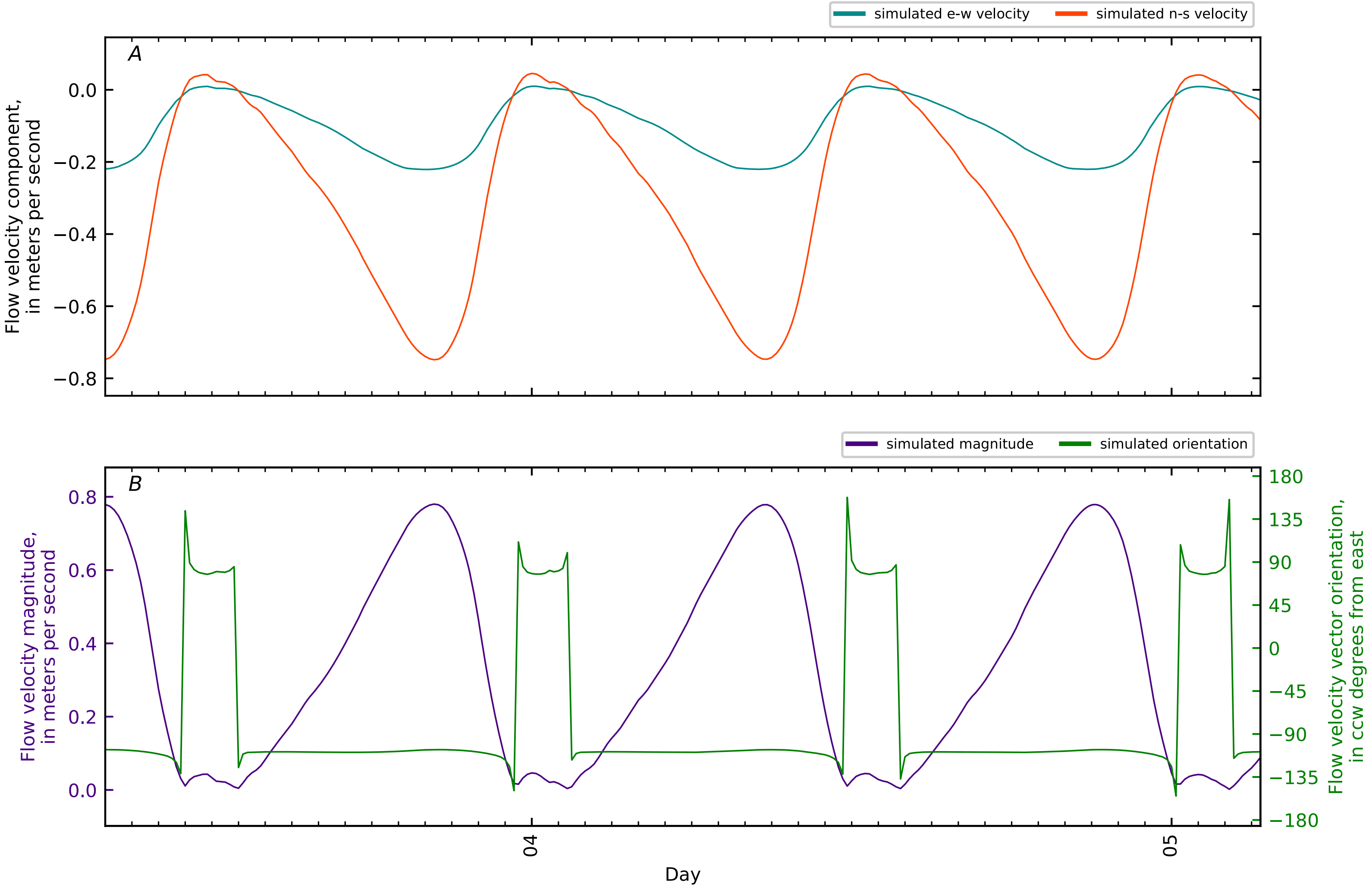

Figure B4-316. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 155, Orland Riv KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

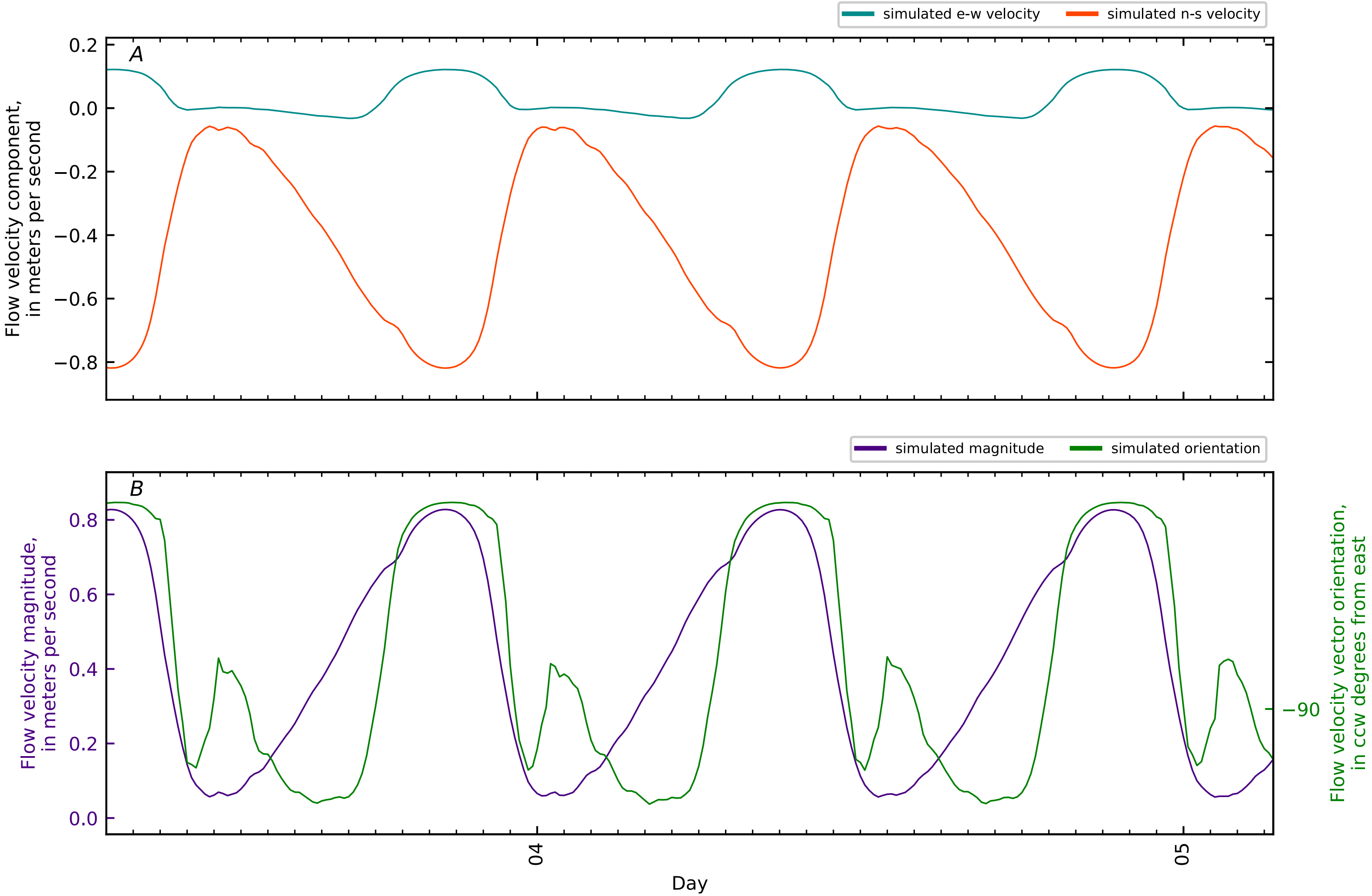

Figure B4-317. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 156, Orland Riv KM1.6 WHOI4 2010. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

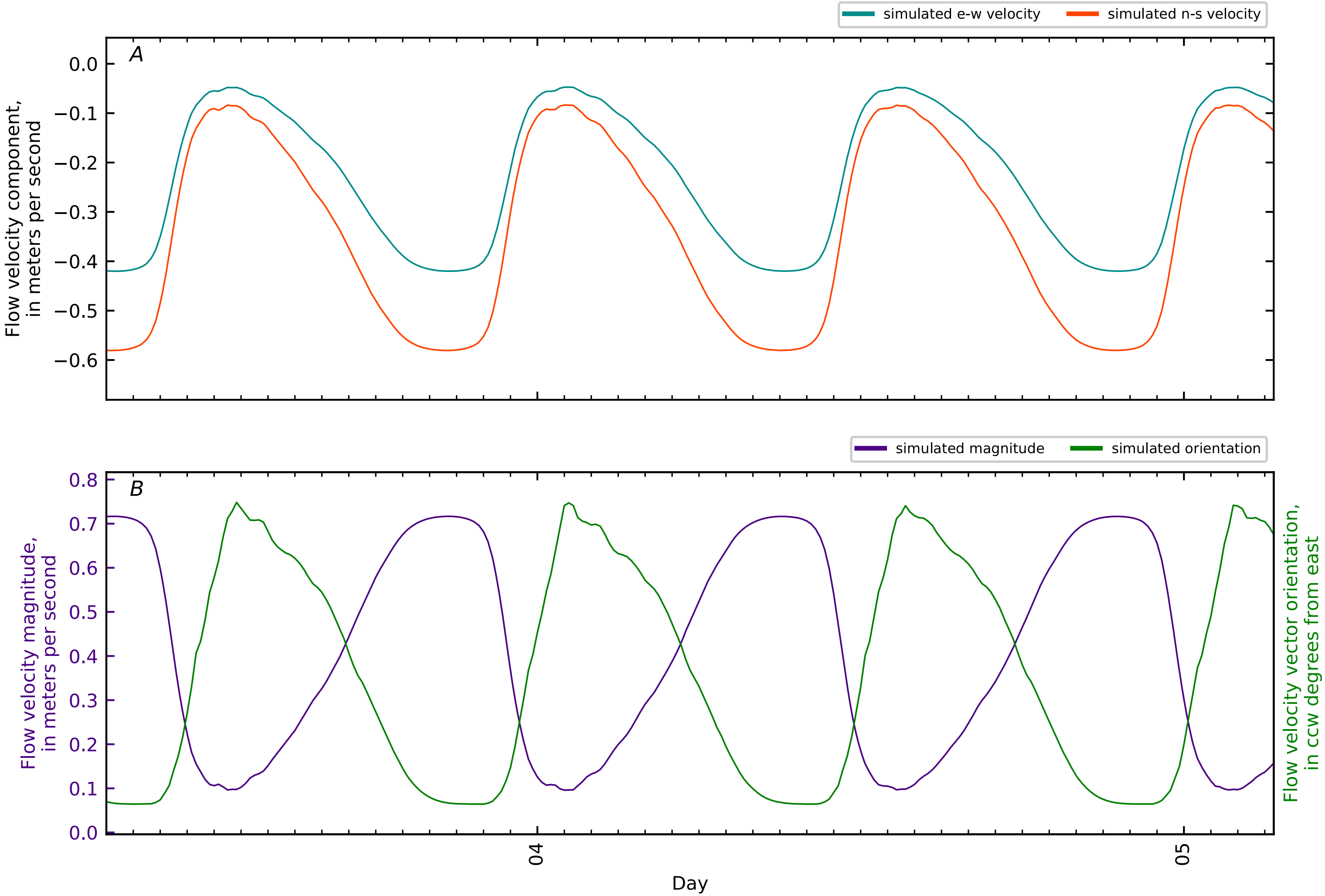

Figure B4-318. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 157, Orland Riv KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

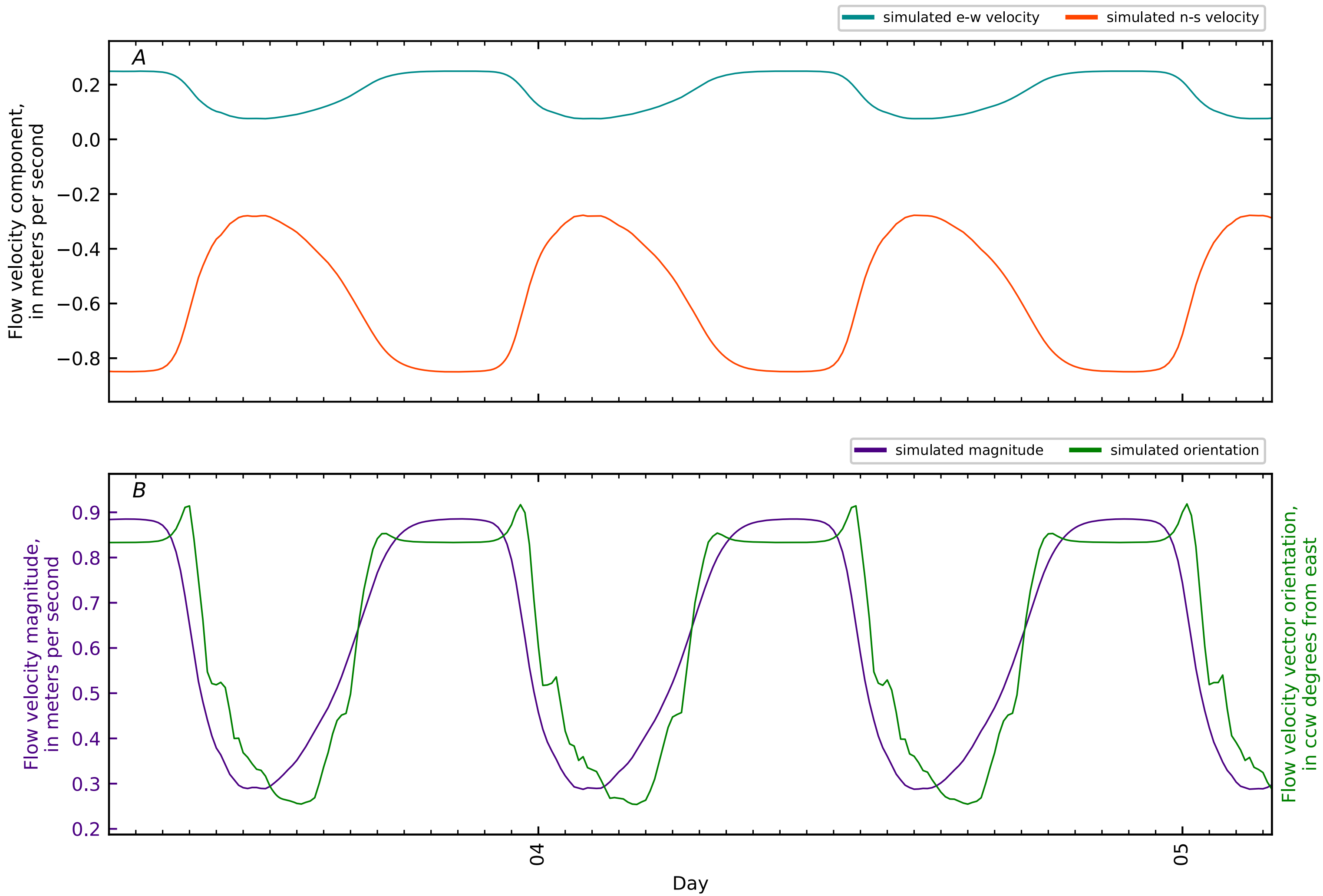

Figure B4-319. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 158, Orland Riv KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

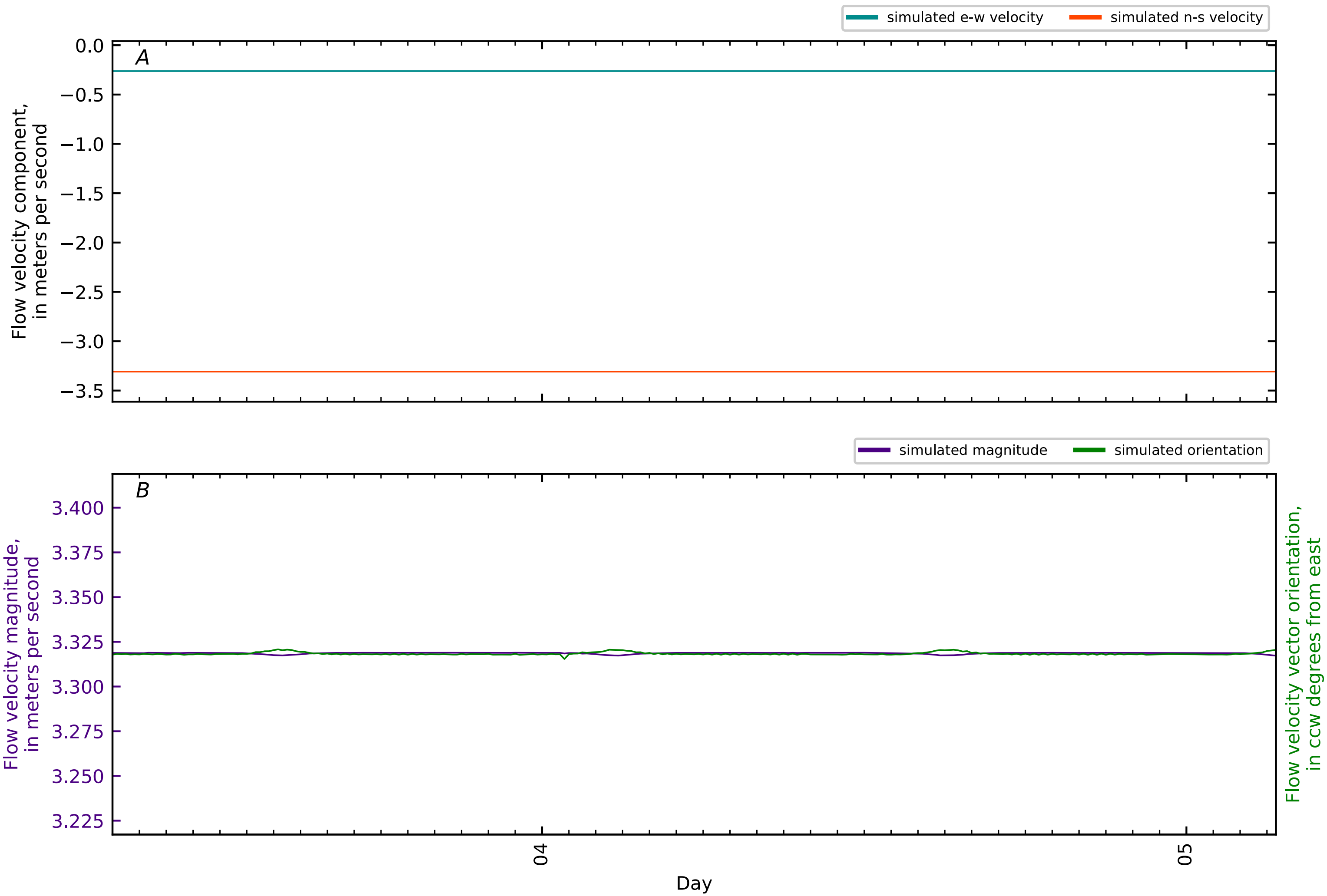

Figure B4-320. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 159, Orland Riv KM4. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

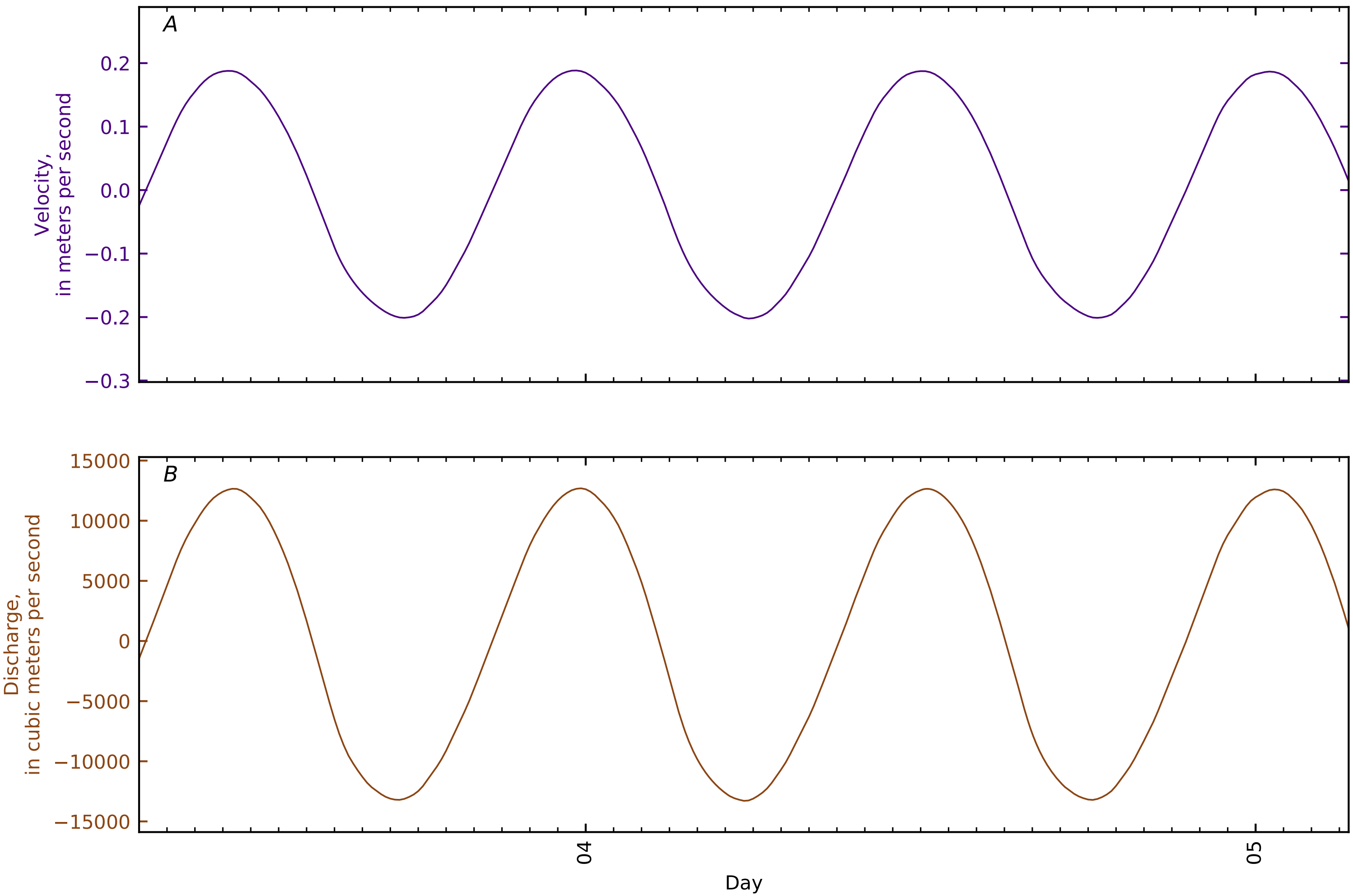

Figure B4-321. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 0, Penob Riv -KM4 Cape Jellison. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

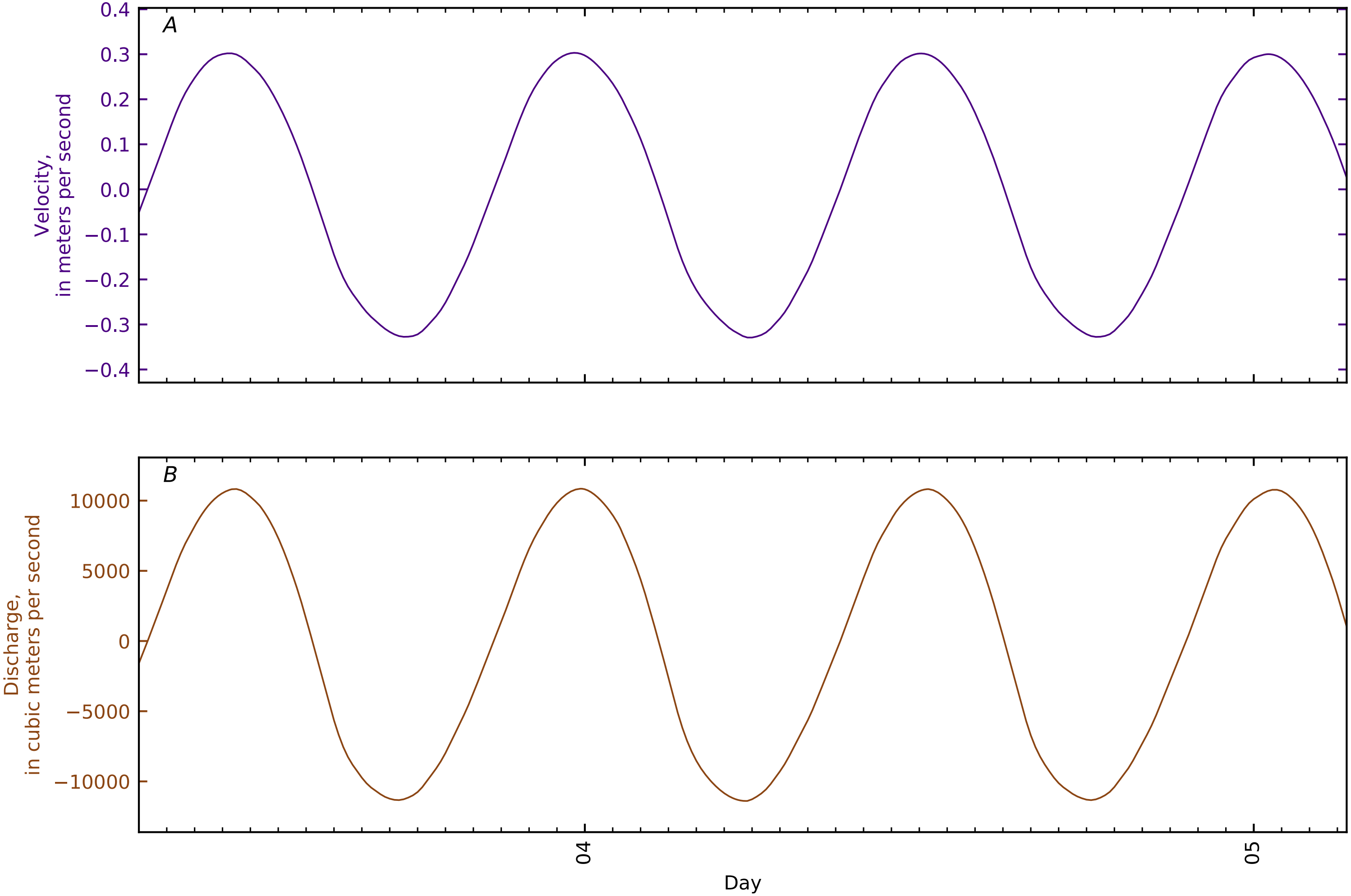

Figure B4-322. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 1, Penob Riv -KM1.5 d/s Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

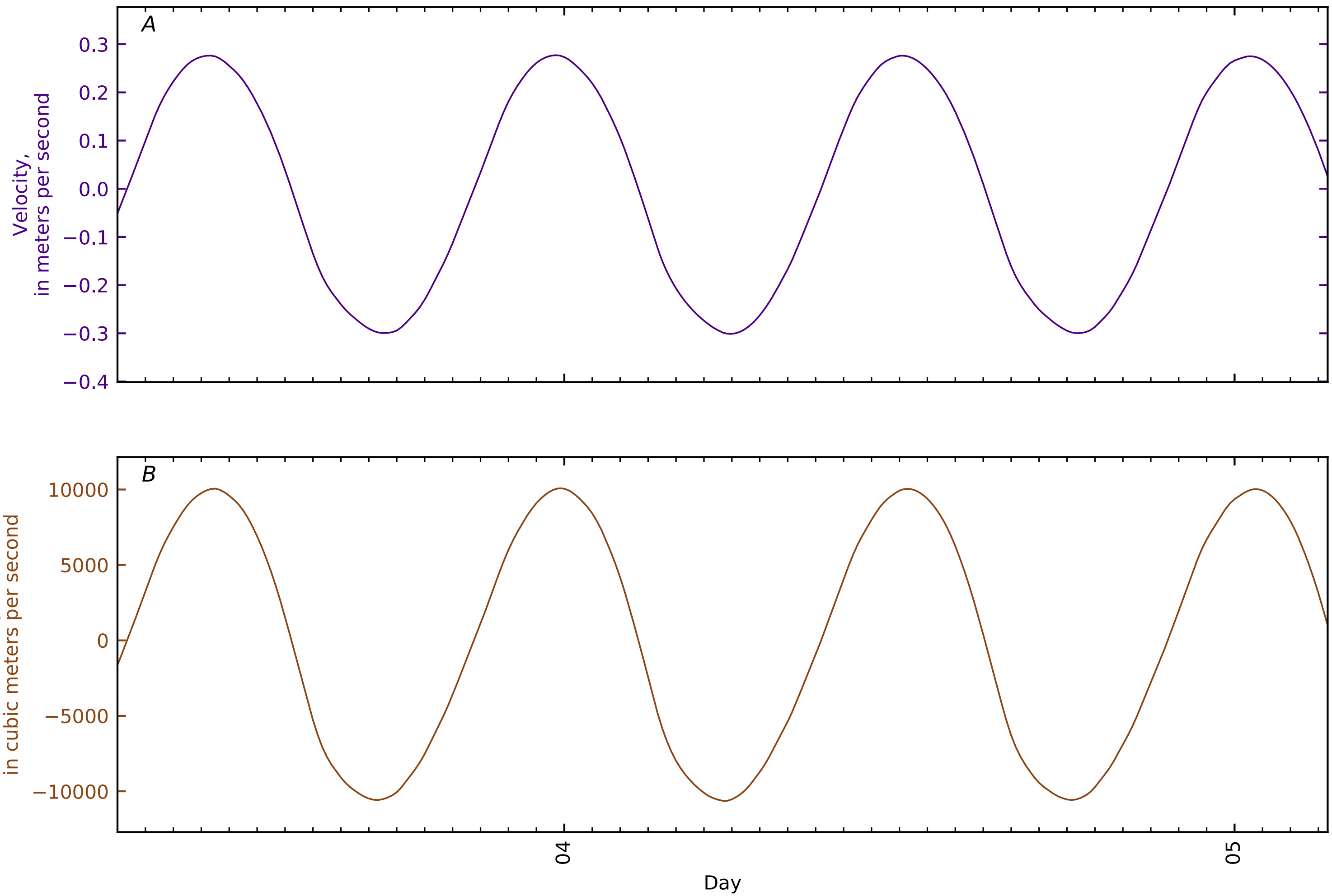

Figure B4-323. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 2, Penob Riv KM0 GS Trnsct5 Ft Point. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

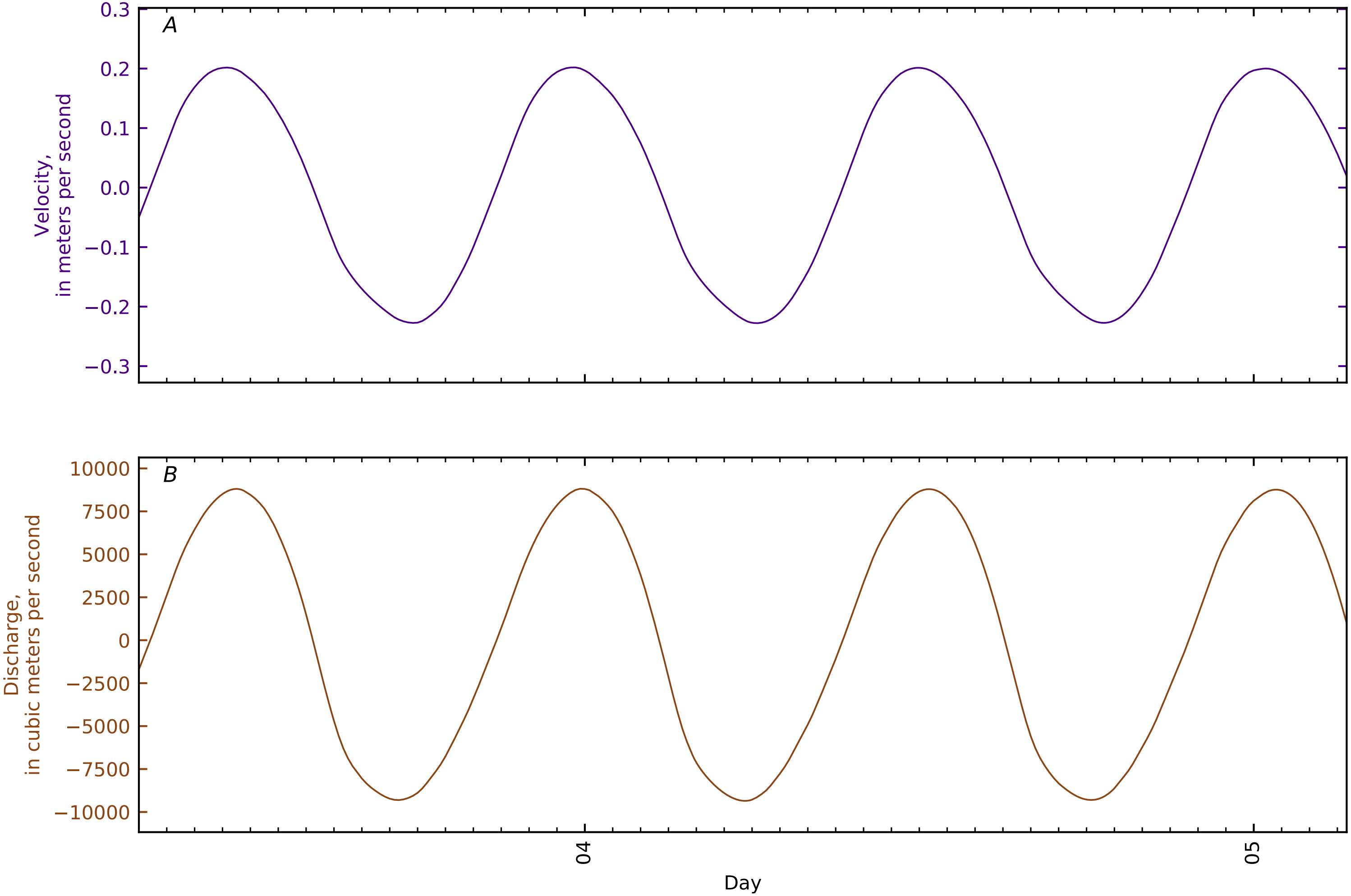

Figure B4-324. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 3, Penob Riv KM1.5 Ft Point Cove. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

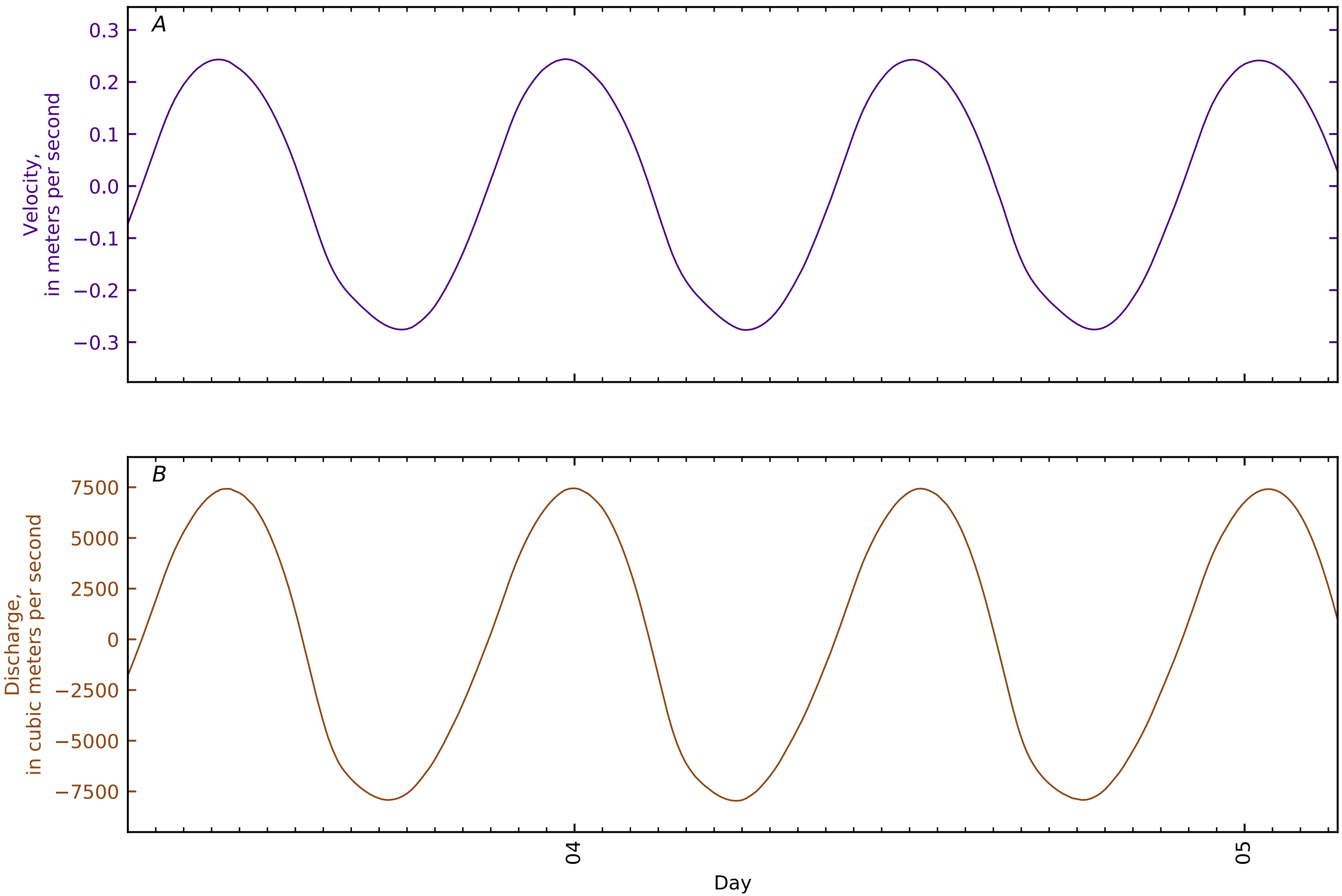

Figure B4-325. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 4, Penob Riv KM3 d/s conf East Ch. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

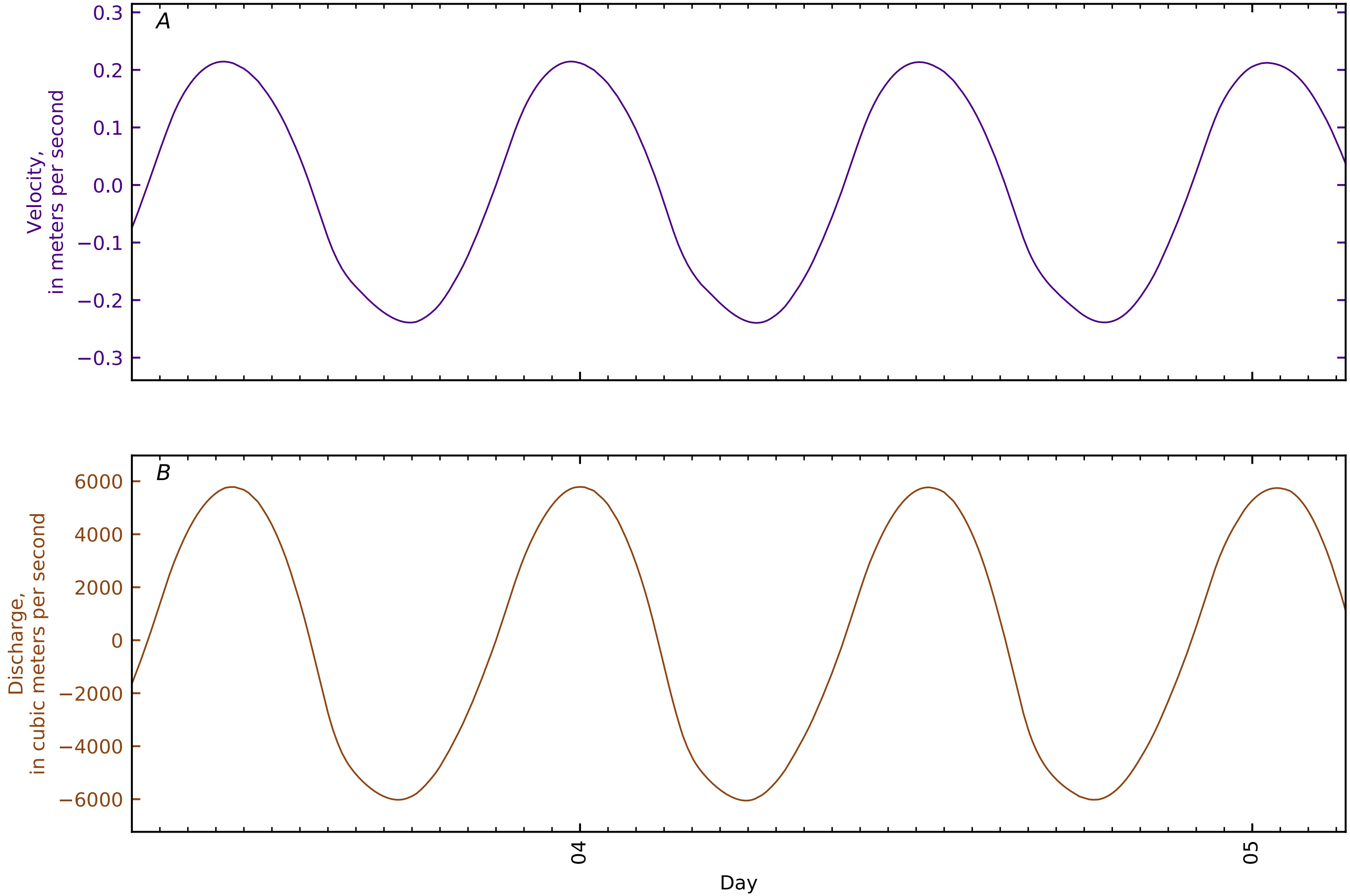

Figure B4-326. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 5, Penob Riv KM3.8 conf East Ch GS Trsct3 Gross Point. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

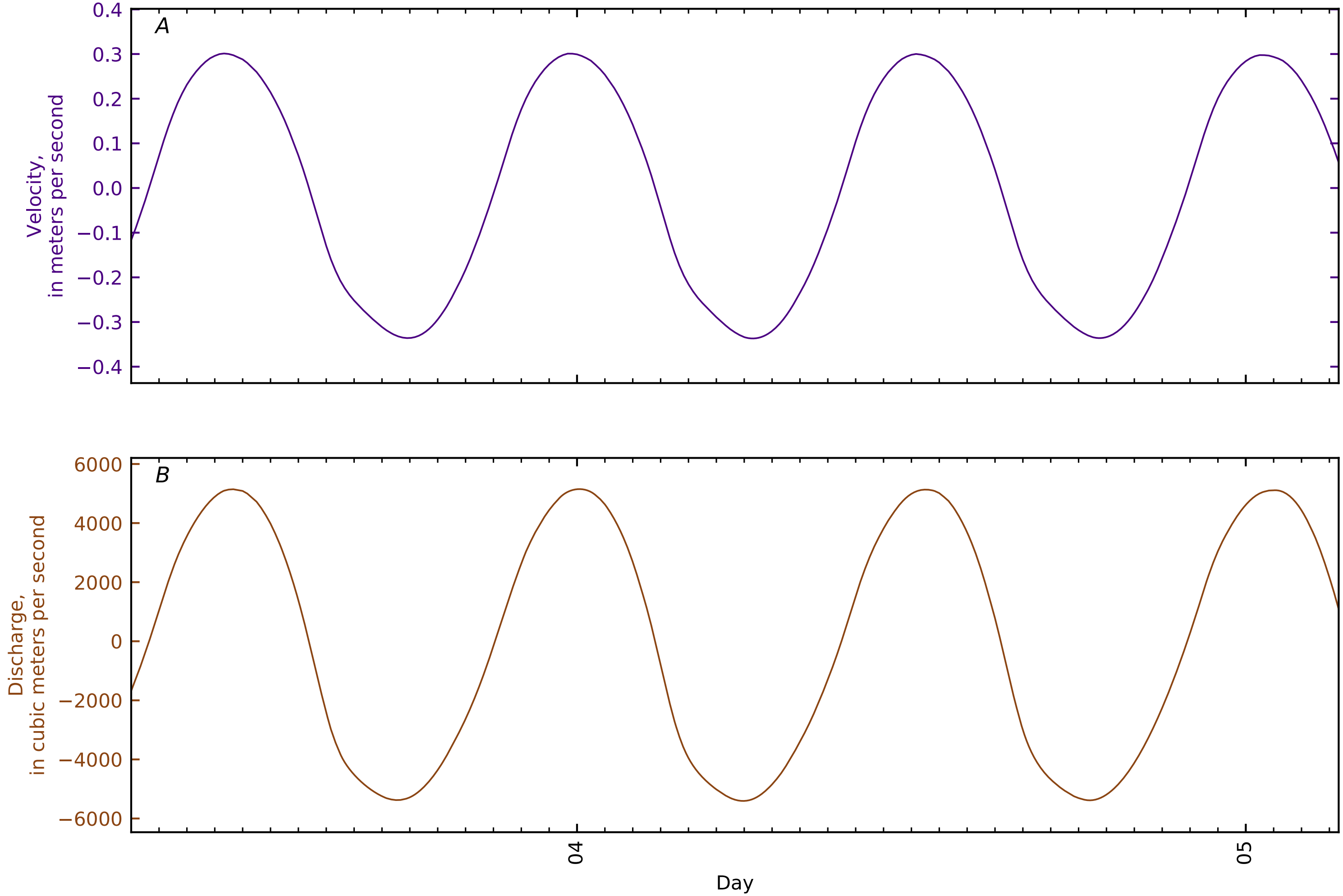

Figure B4-327. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 6, Penob Riv KM5.3 Sandy Point Odom Ledge. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

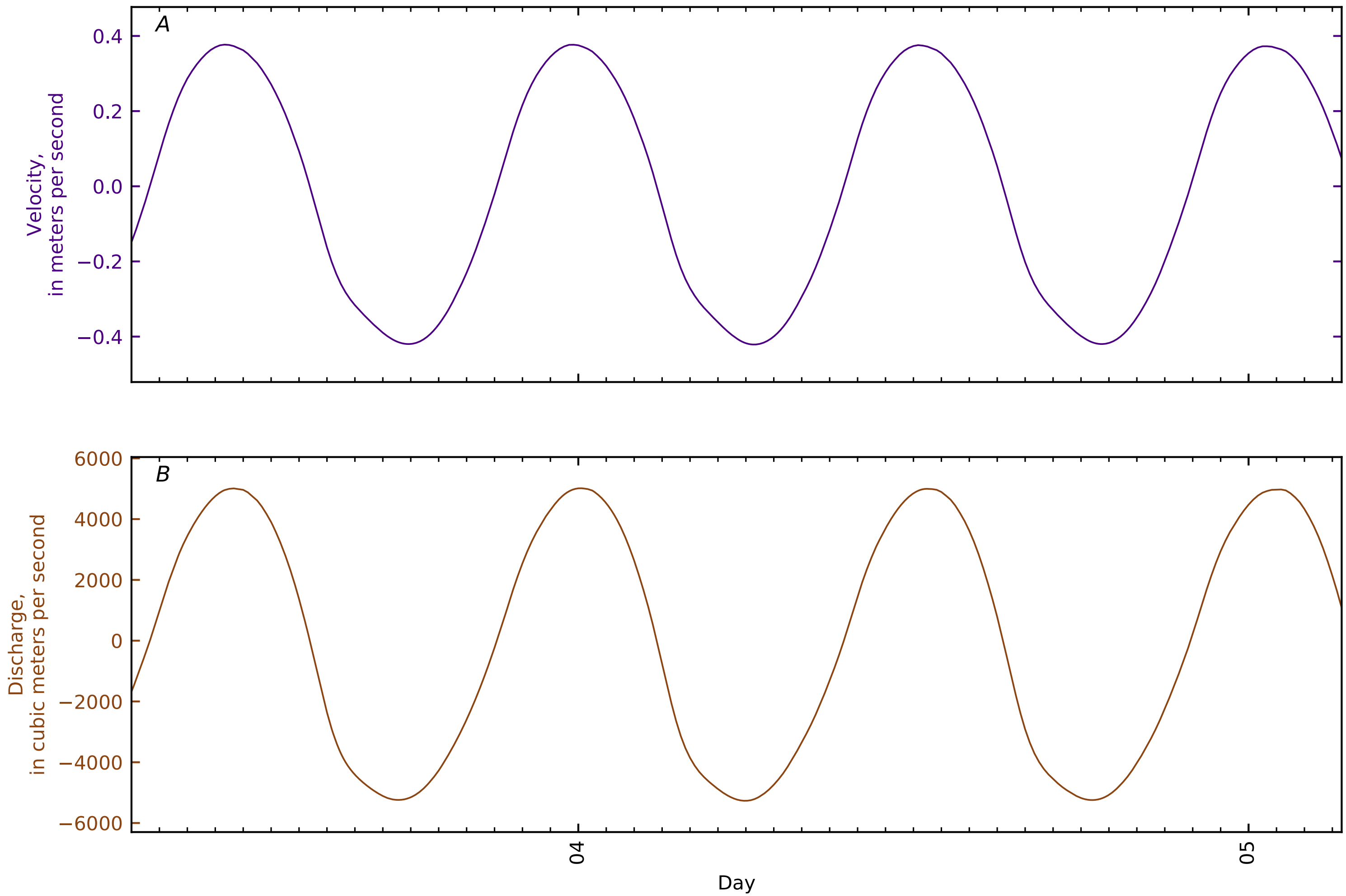

Figure B4-328. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 7, Penob Riv KM6 d/s narrows. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

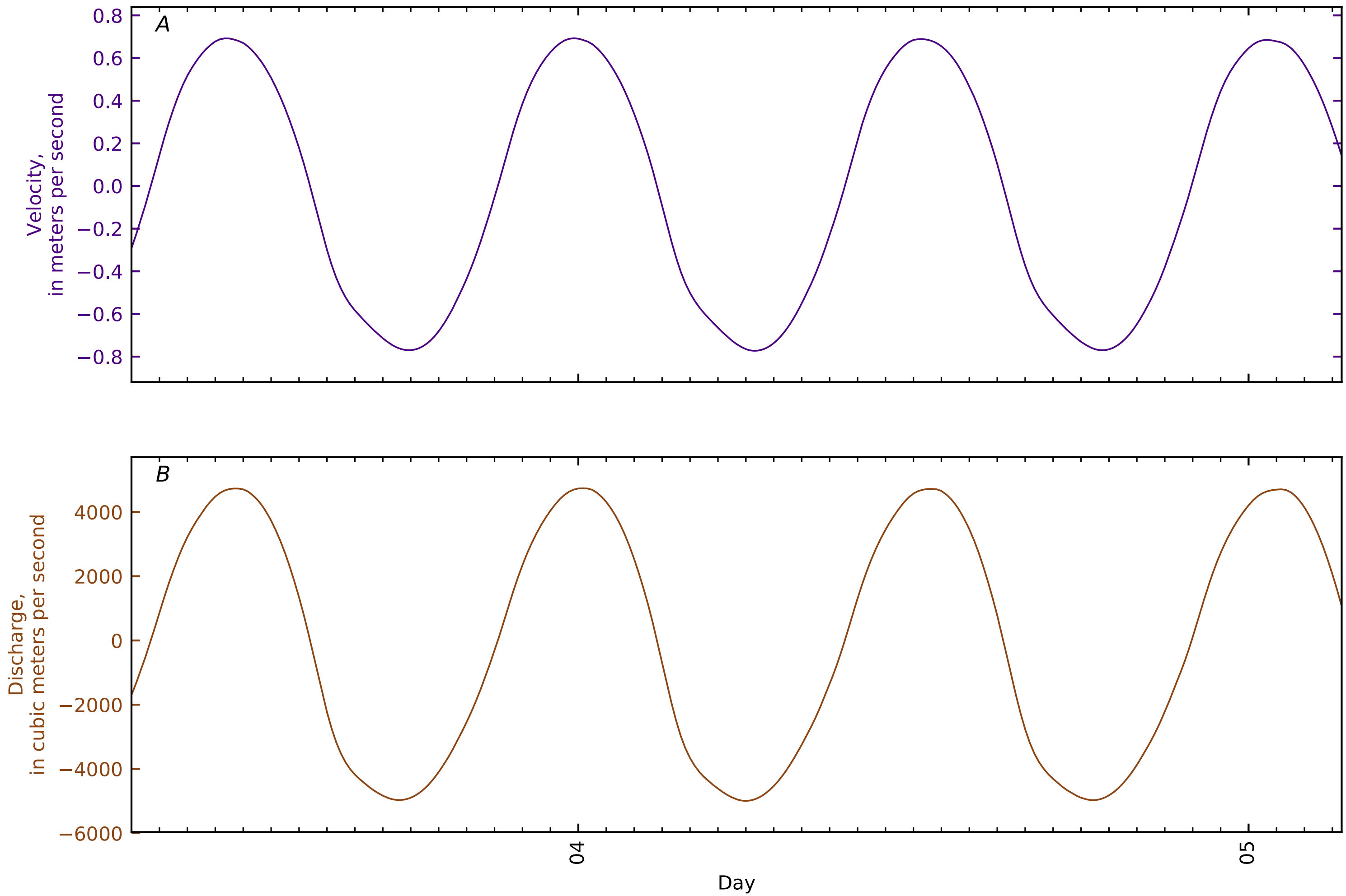

Figure B4-329. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 8, Penob Riv KM8 narrows. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

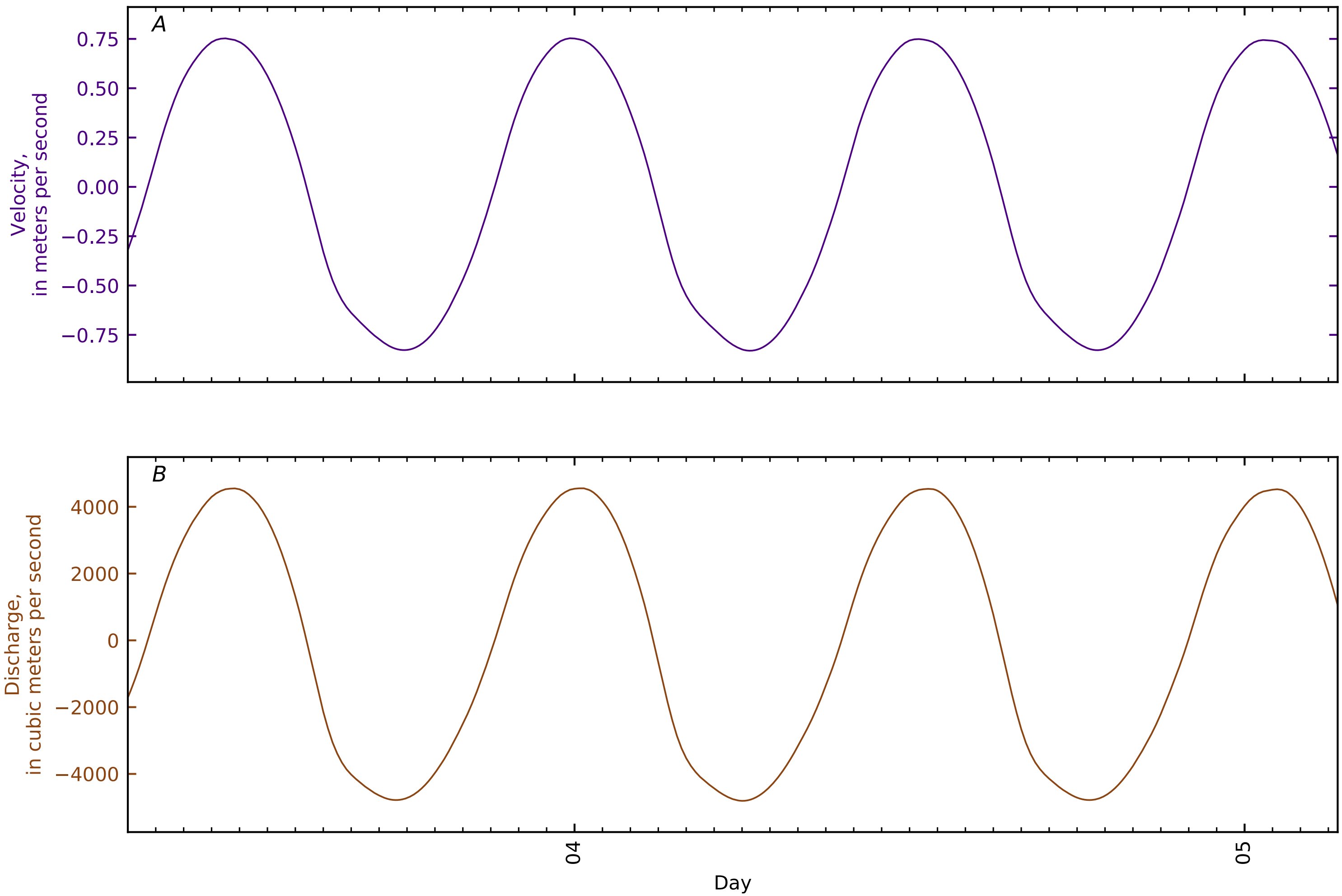

Figure B4-330. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 9, Penob Riv KM10 narrows d/s bridge. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

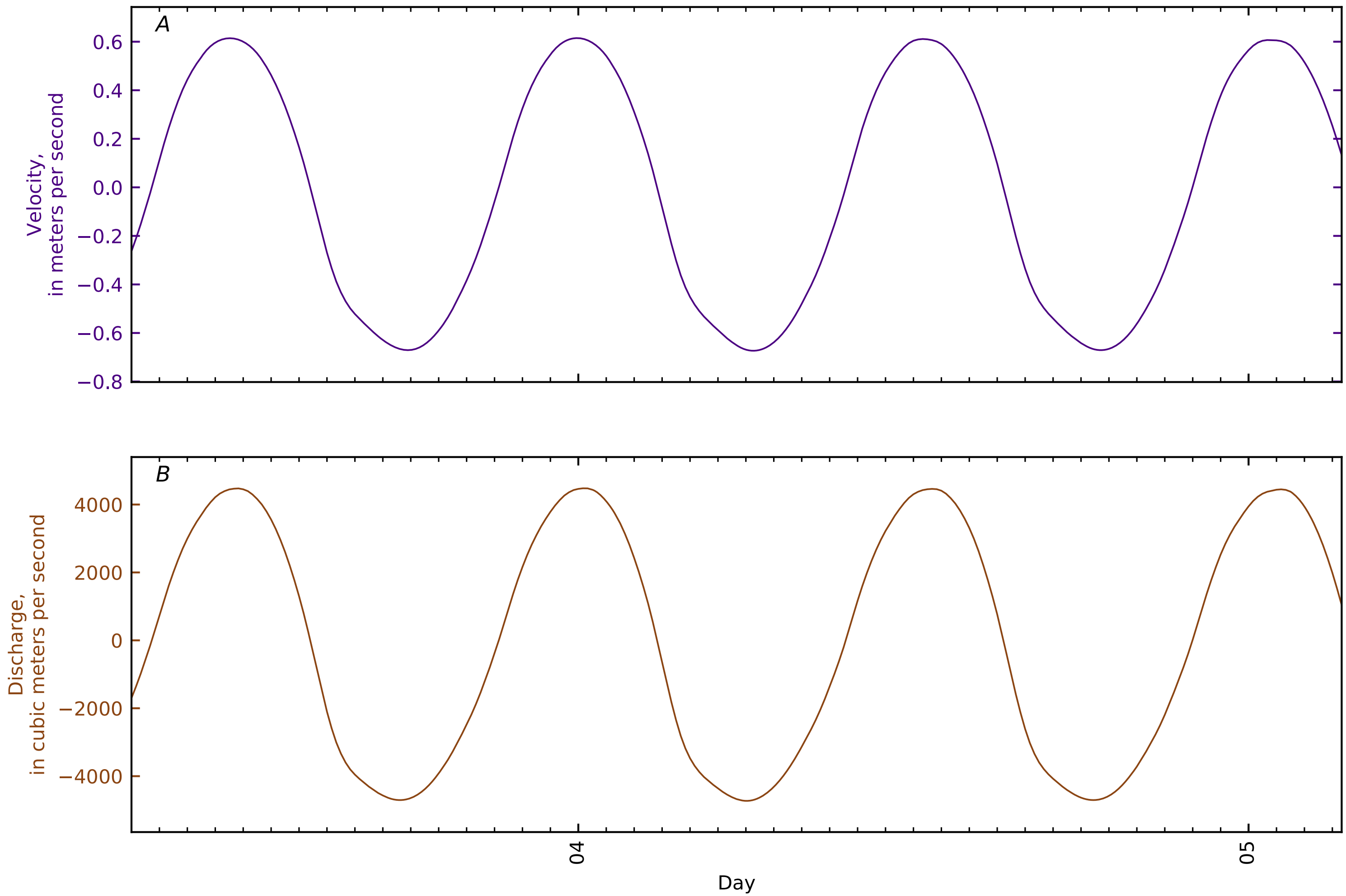

Figure B4-331. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 10, Penob Riv KM11 d/s East Ch split nr Bucksport. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

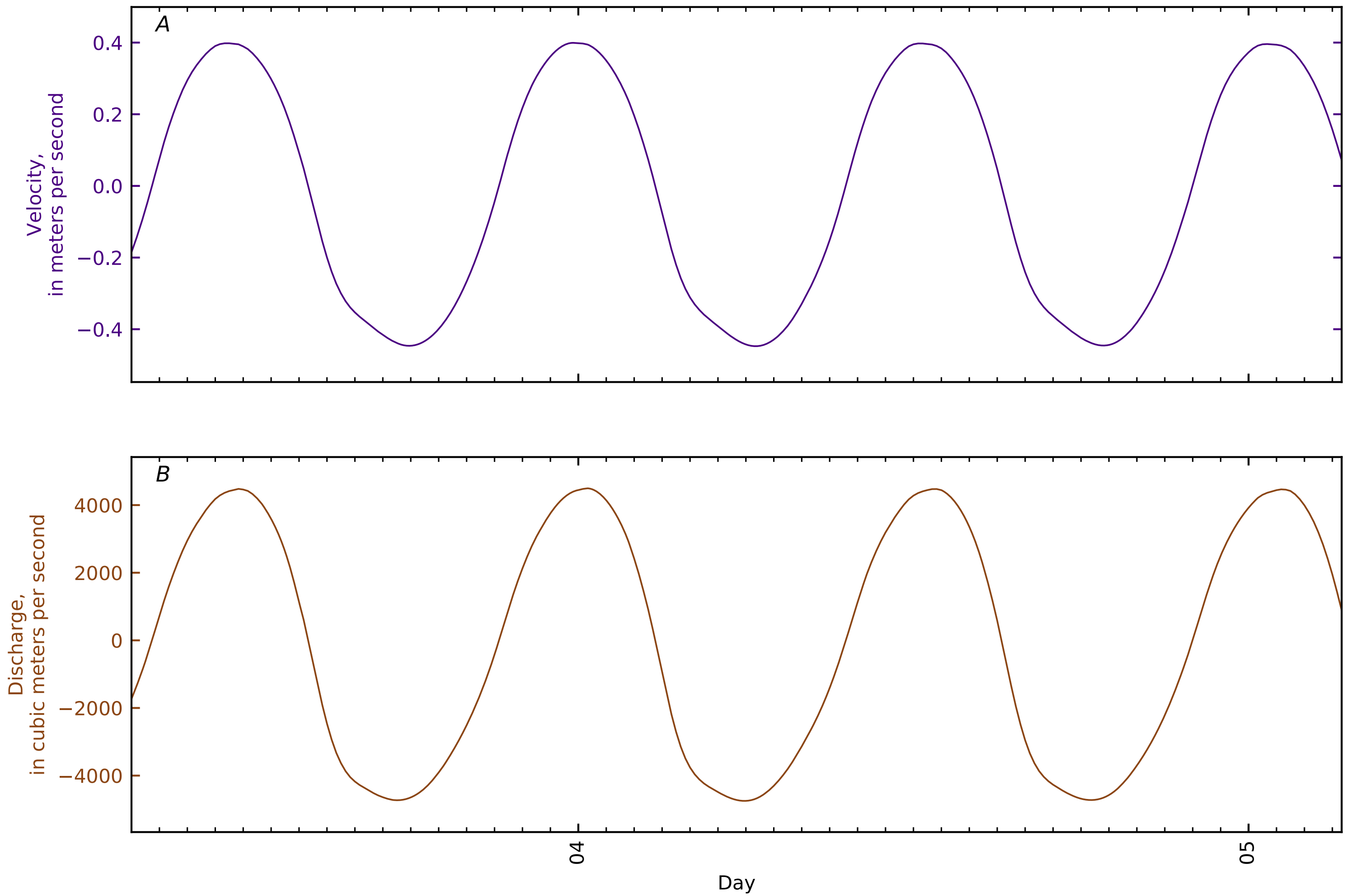

Figure B4-332. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 11, Penob Riv KM11.4 East Ch split nr Bucksport. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

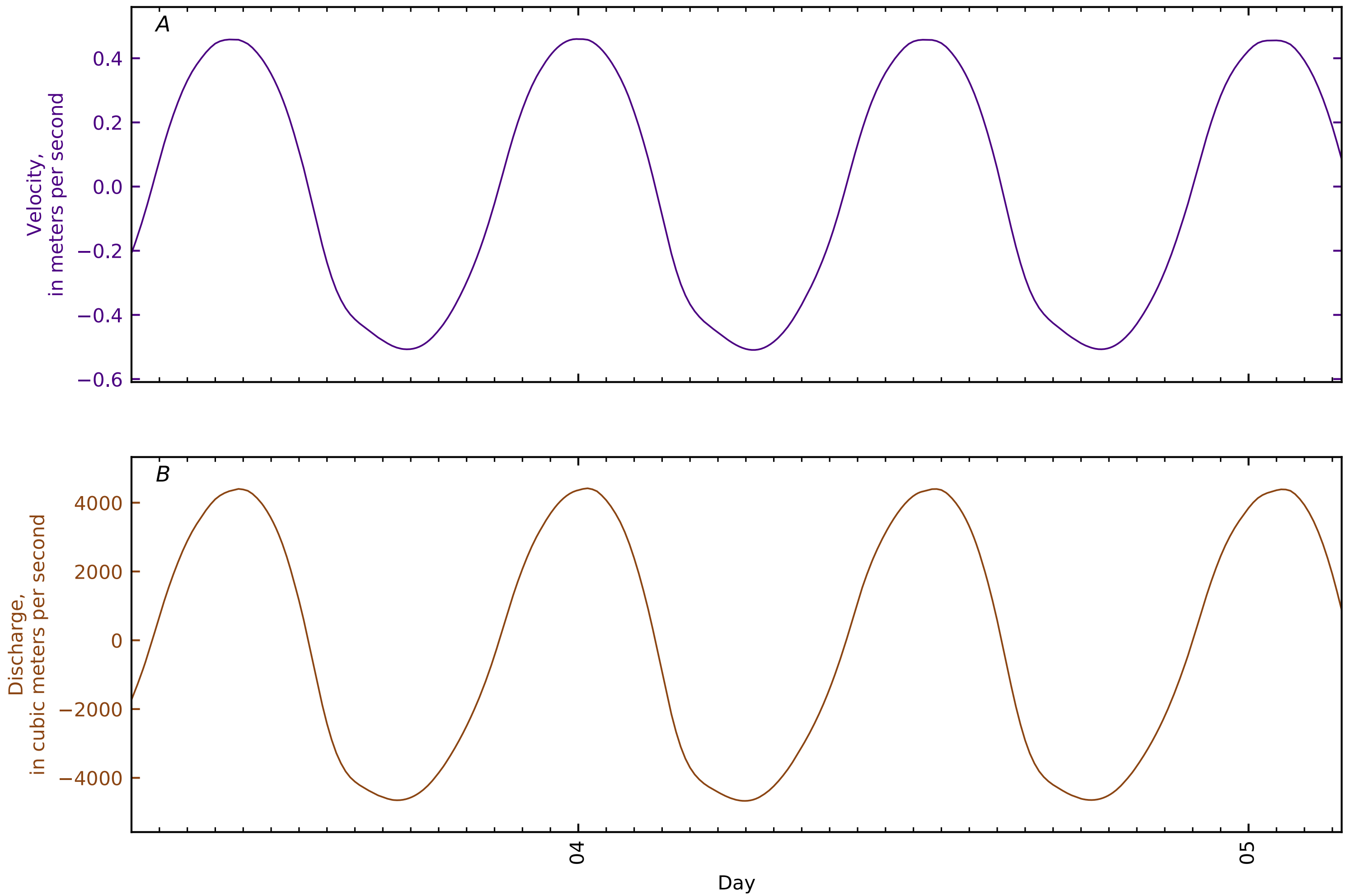

Figure B4-333. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 12, Penob Riv KM12 Bucksport. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

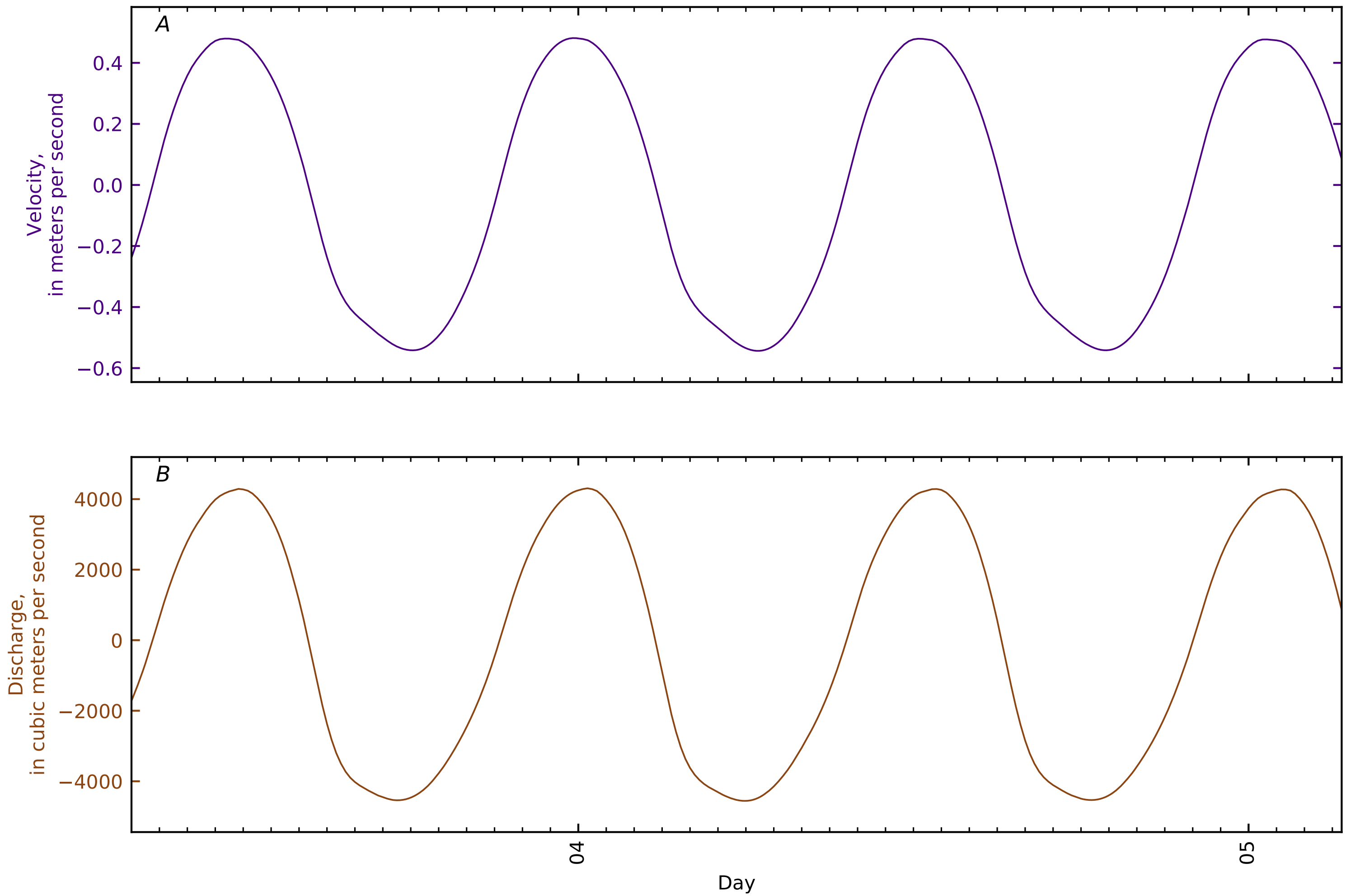

Figure B4-334. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 13, Penob Riv KM13 dropoff u/s Bucksport. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

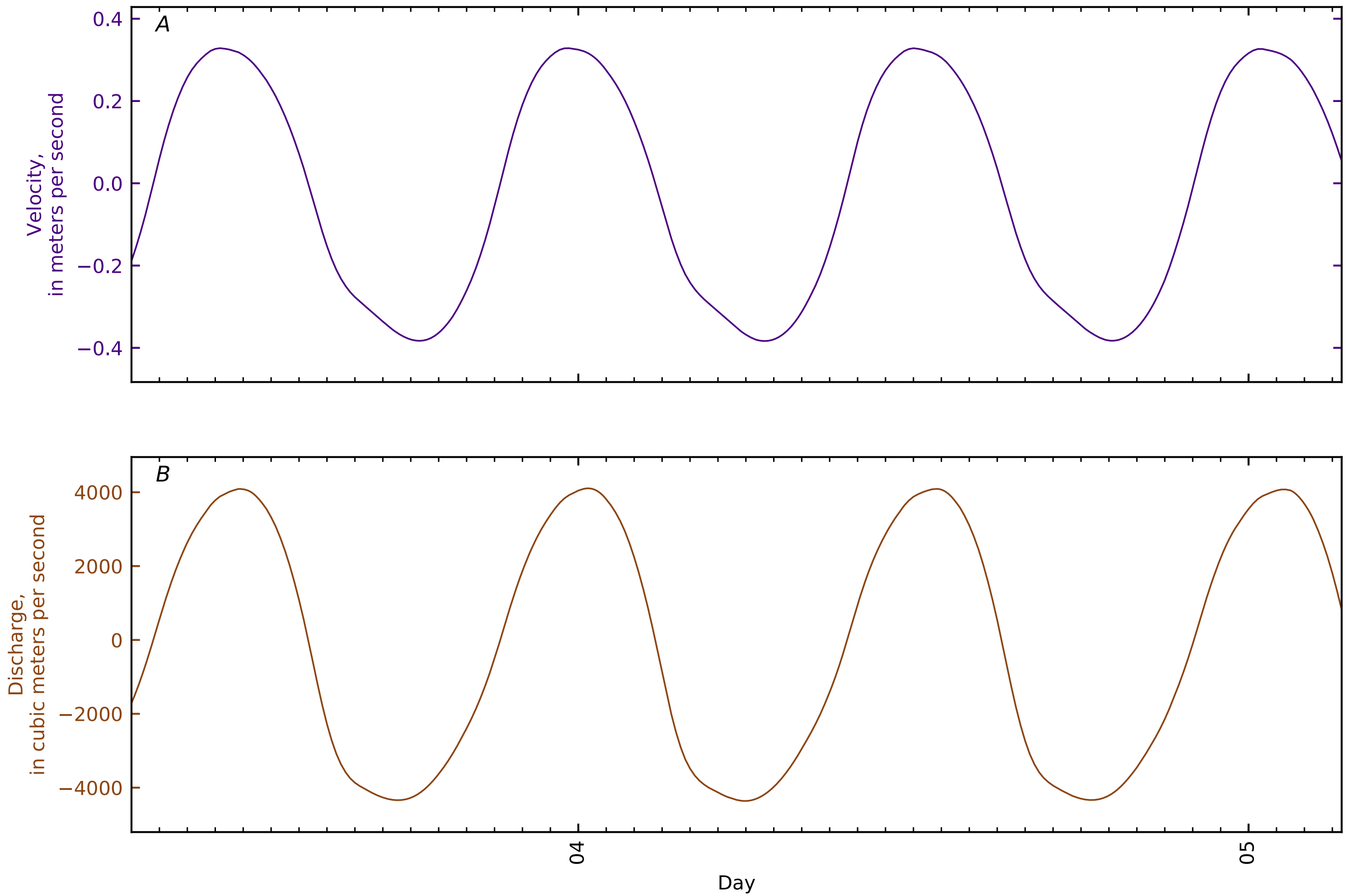

Figure B4-335. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 14, Penob Riv KM14 u/s dropoff. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

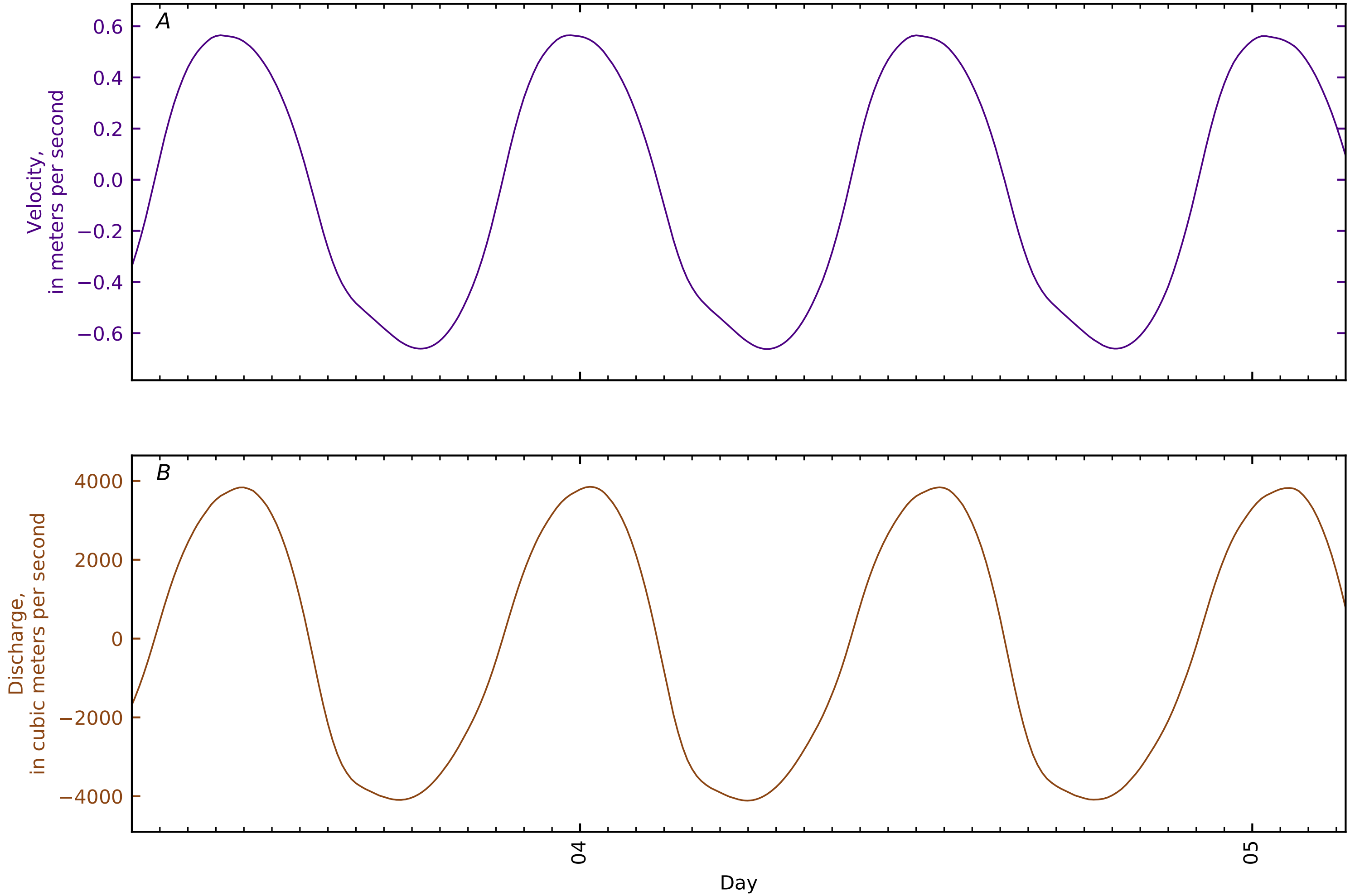

Figure B4-336. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 15, Penob Riv KM15 d/s conf Mendall Marsh. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

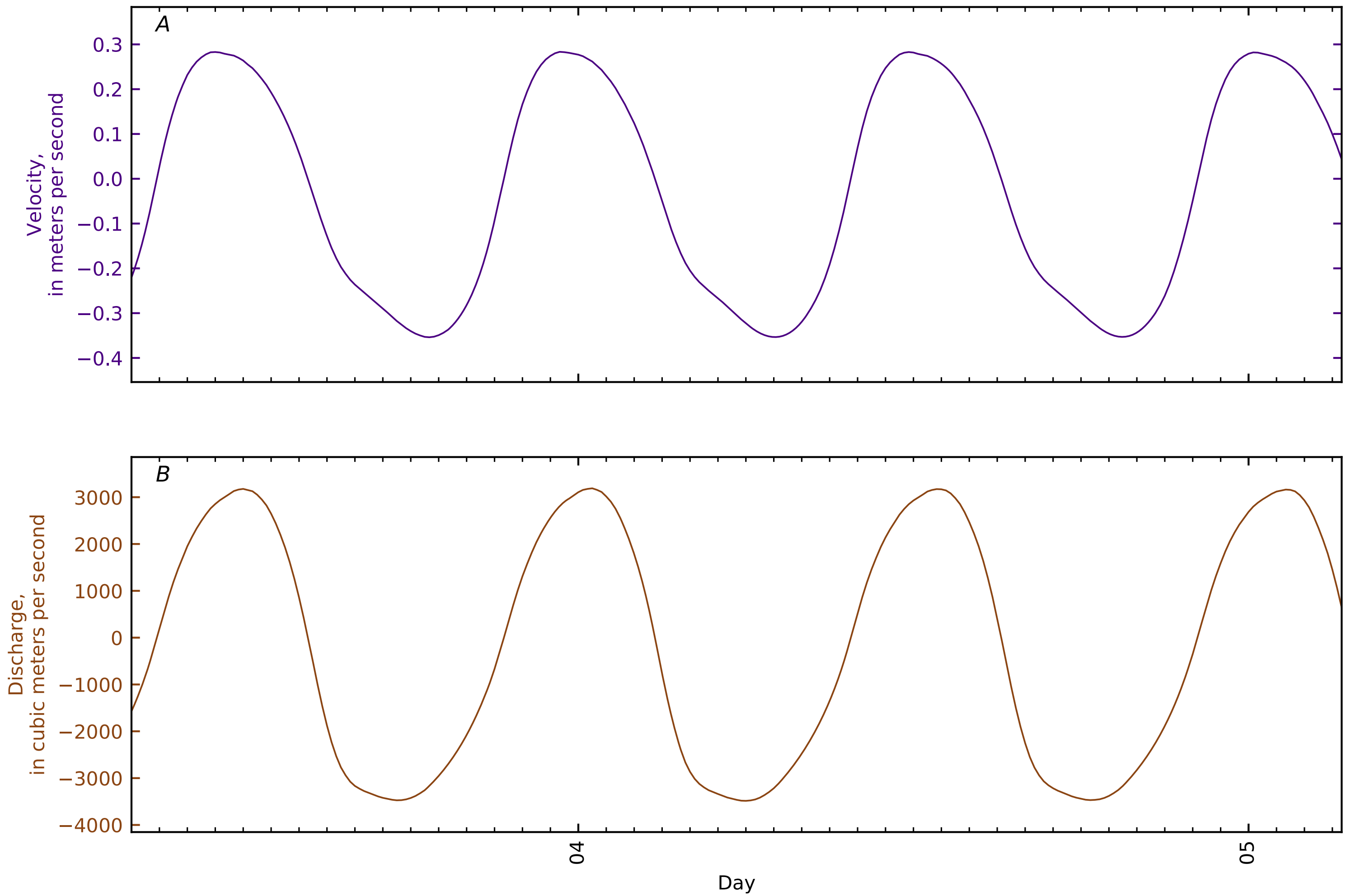

Figure B4-337. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 16, Penob Riv KM17 Frankfort Flats d/s Mendall Marsh. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

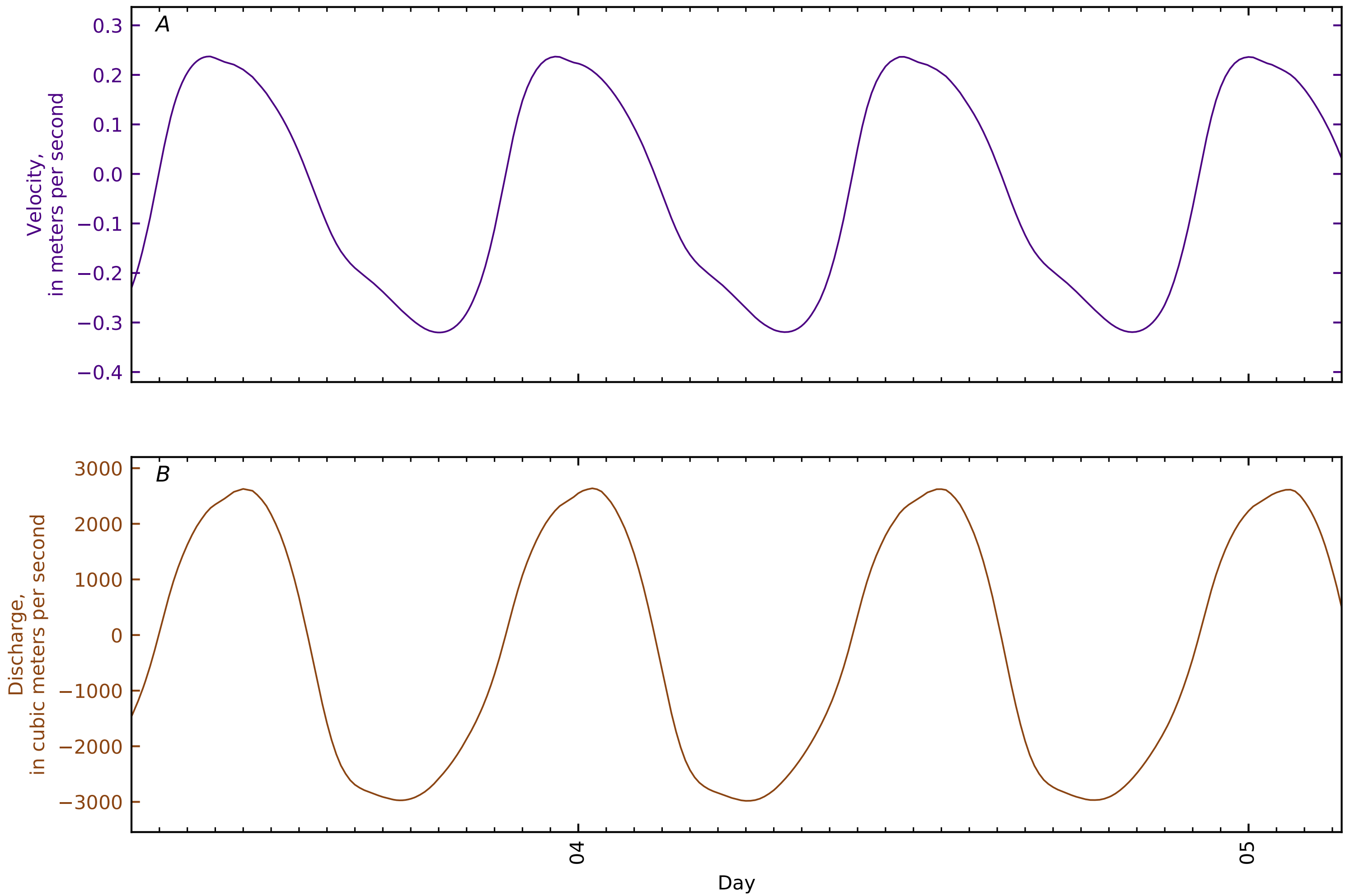

Figure B4-338. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 17, Penob Riv KM18 Frankfort Flats u/s Mendall Marsh GS Trnsct1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

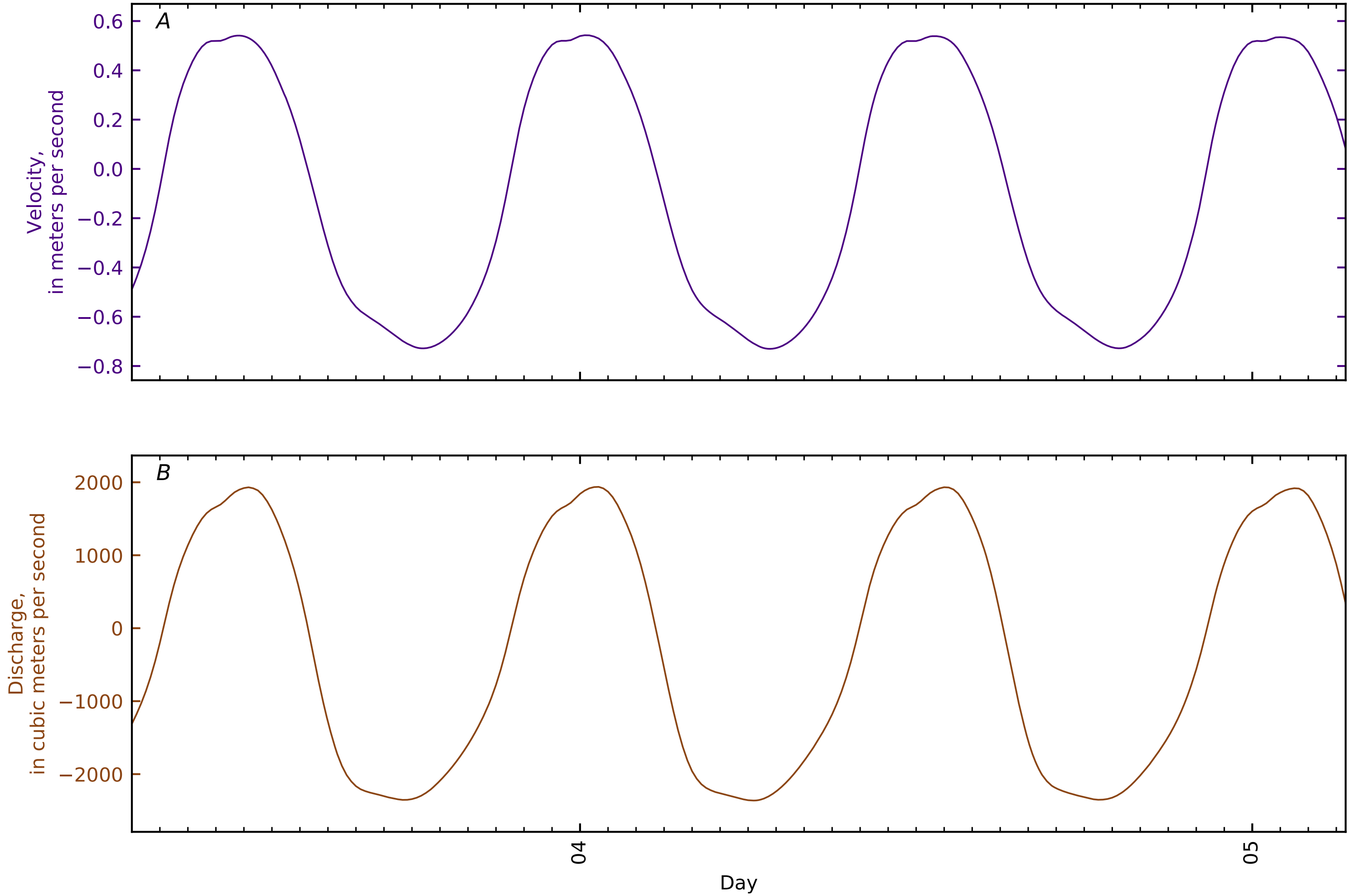

Figure B4-339. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 18, Penob Riv KM21.2 GS 443810068502201 Winterport. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

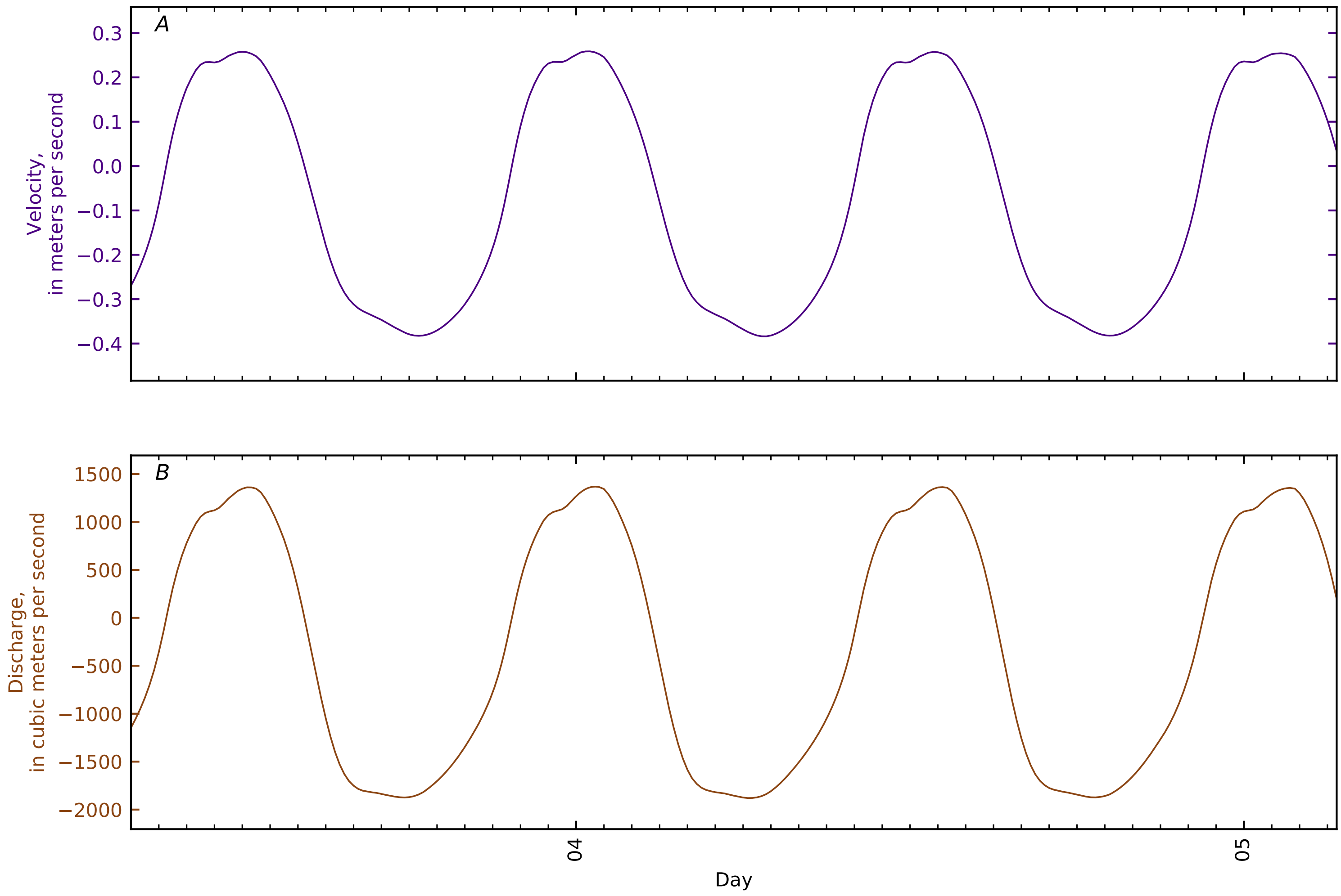

Figure B4-340. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 19, Penob Riv KM25.2 Oak Pt narrows d/s bend. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

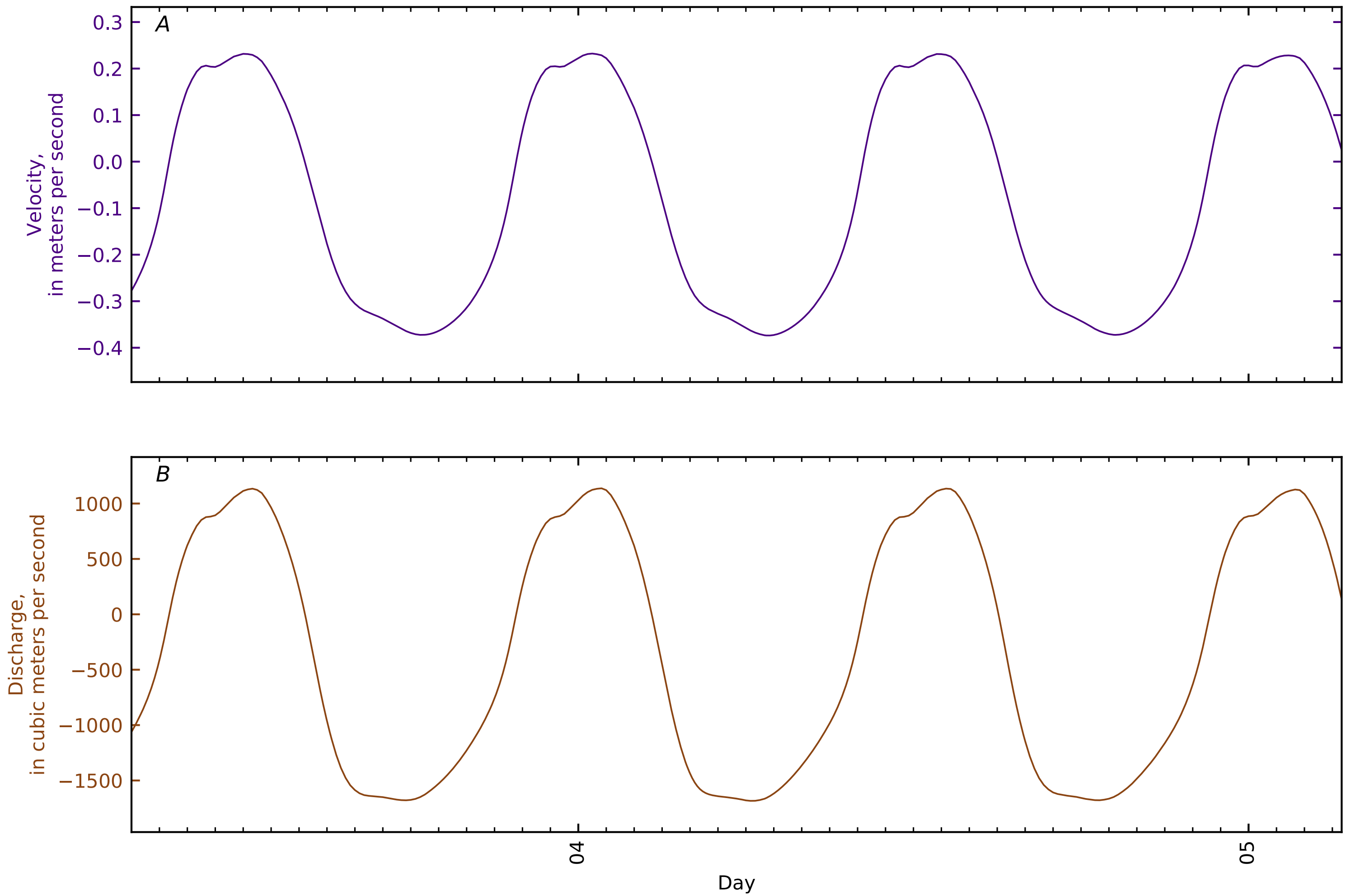

Figure B4-341. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 20, Penob Riv KM27.2 South Orrington. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

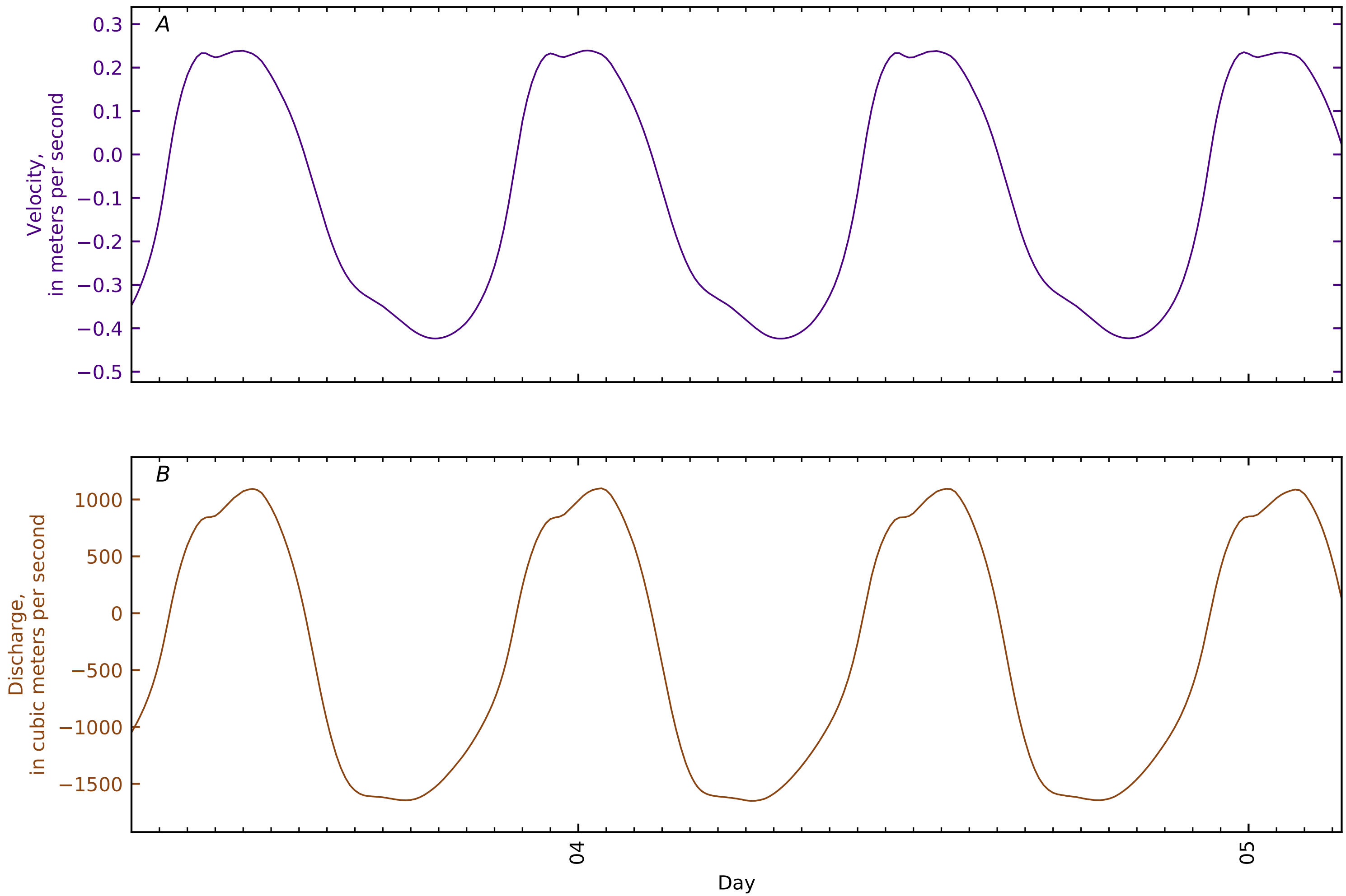

Figure B4-342. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 21, Penob Riv KM27.6 South Orrington u/s bend. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

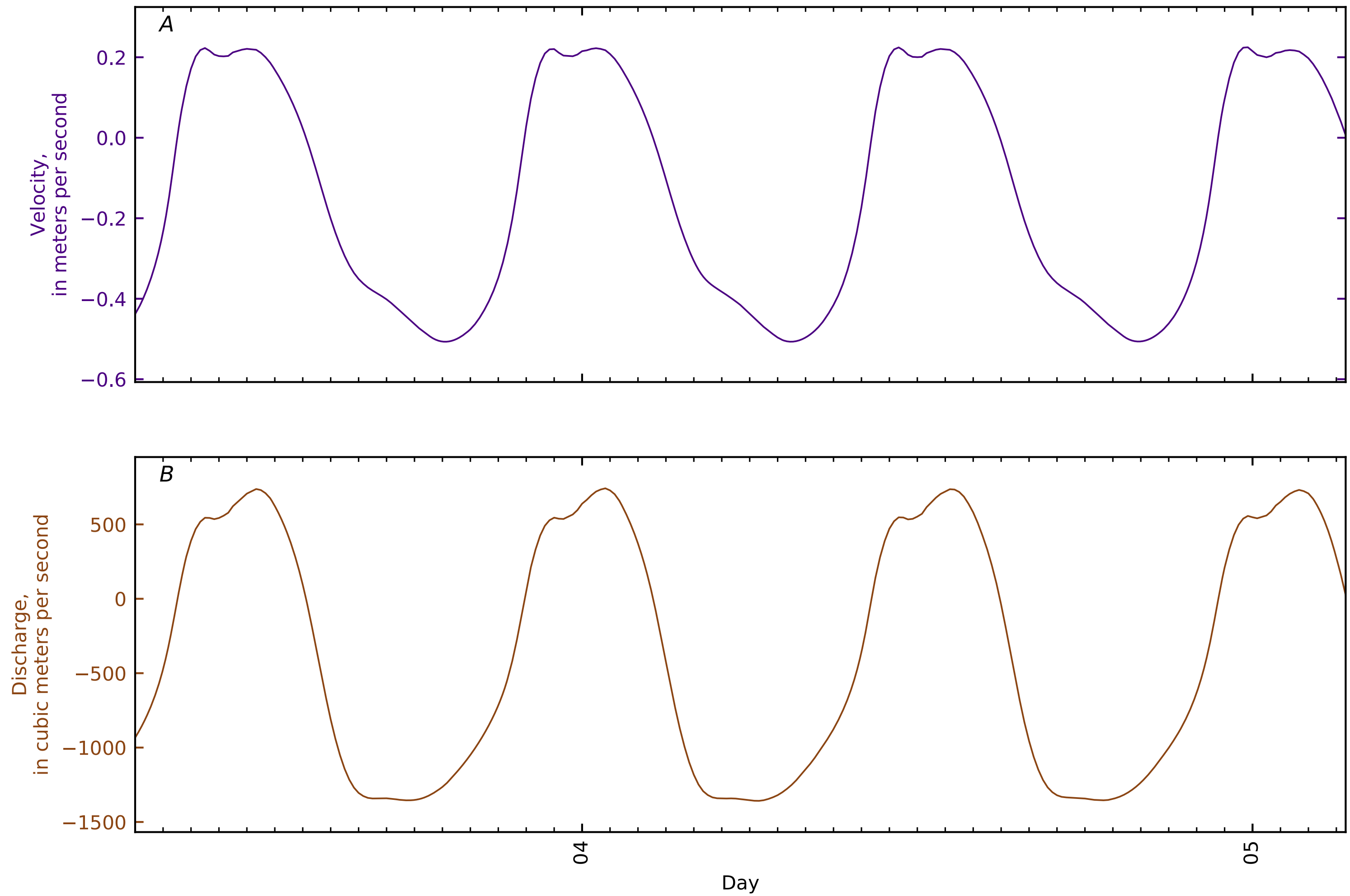

Figure B4-343. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 22, Penob Riv KM30 nr Bald Hill d/s bend. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

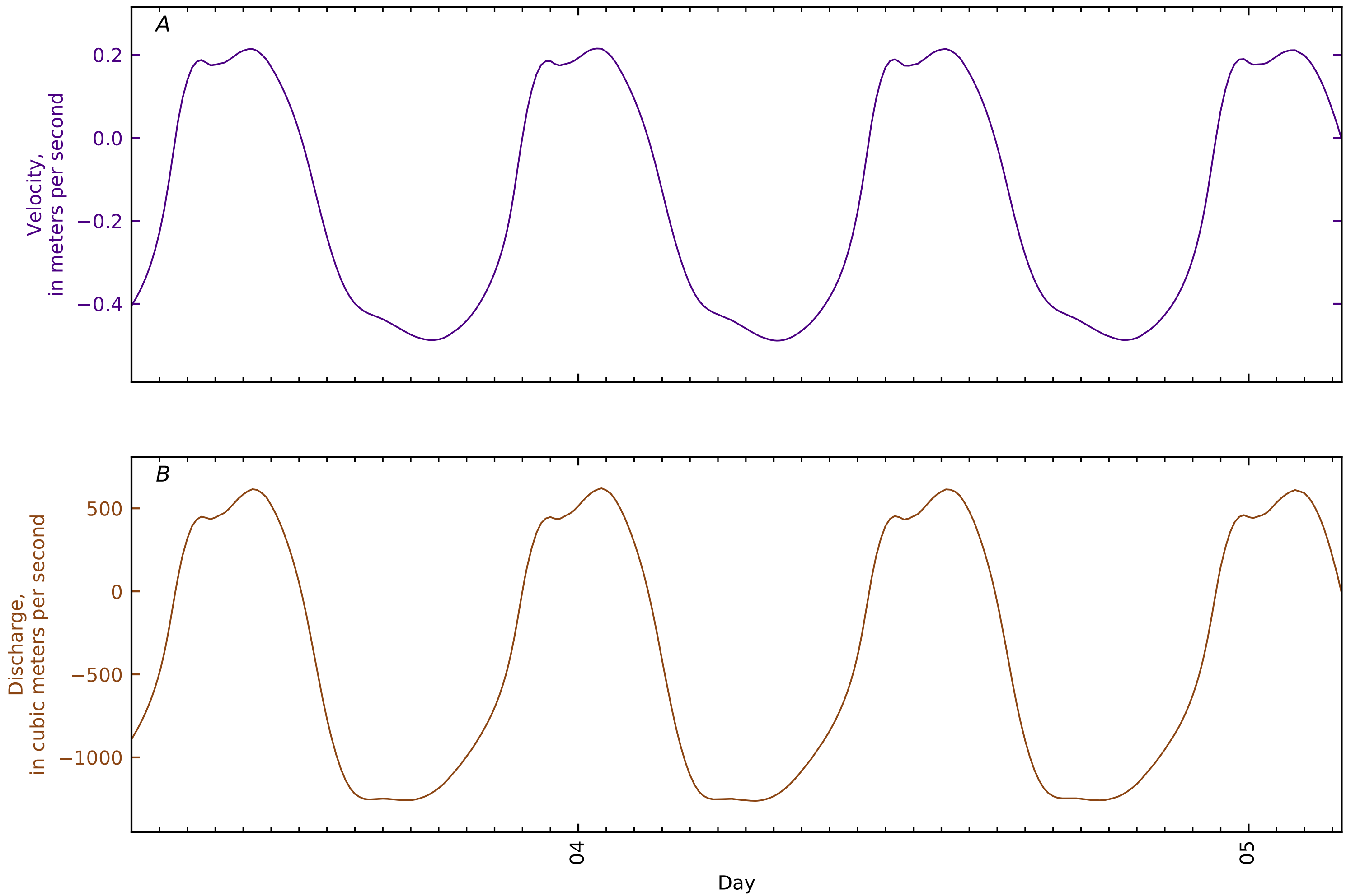

Figure B4-344. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 23, Penob Riv KM31 narrows. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

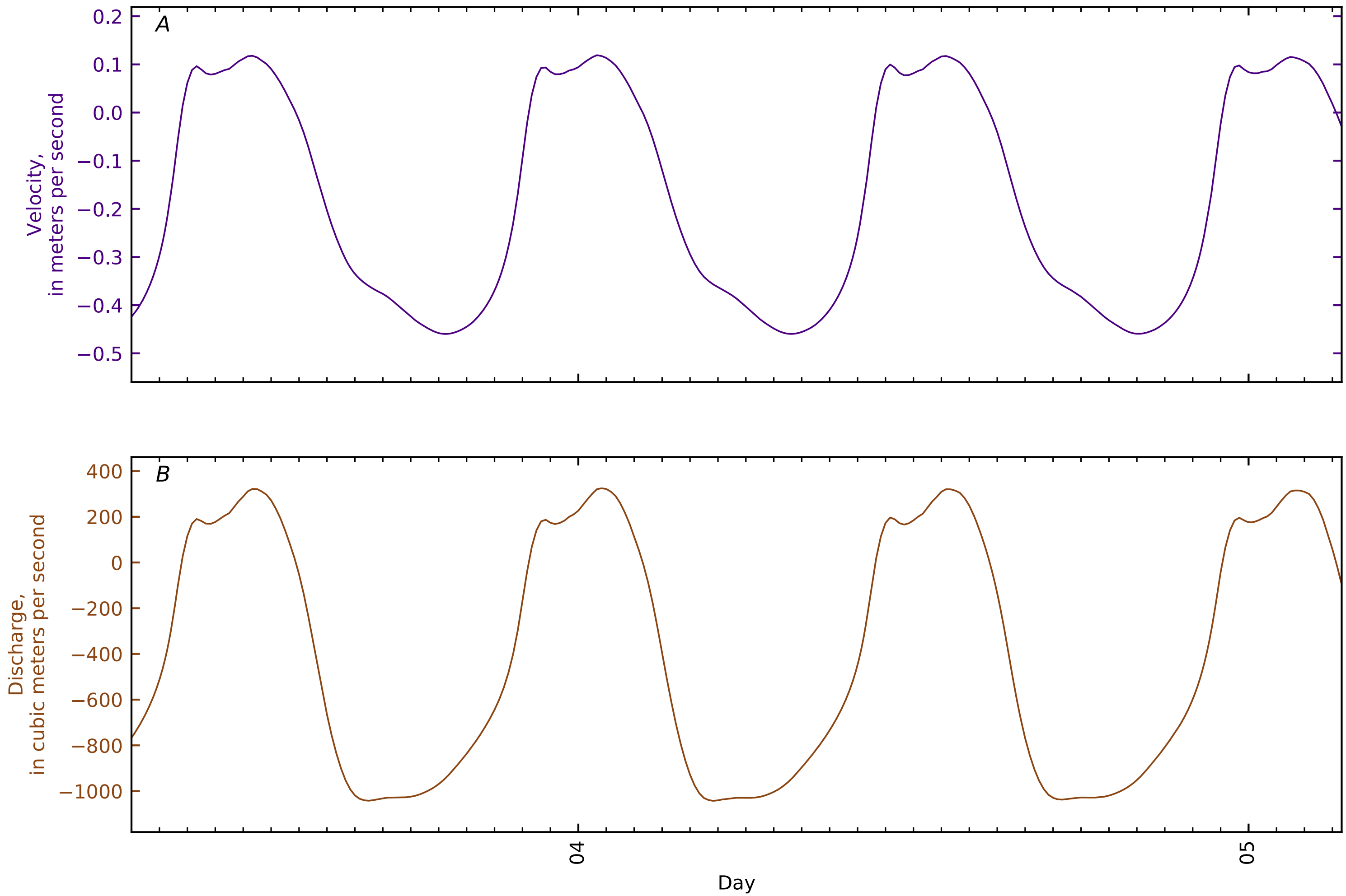

Figure B4-345. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 24, Penob Riv KM34 d/s Orrington. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

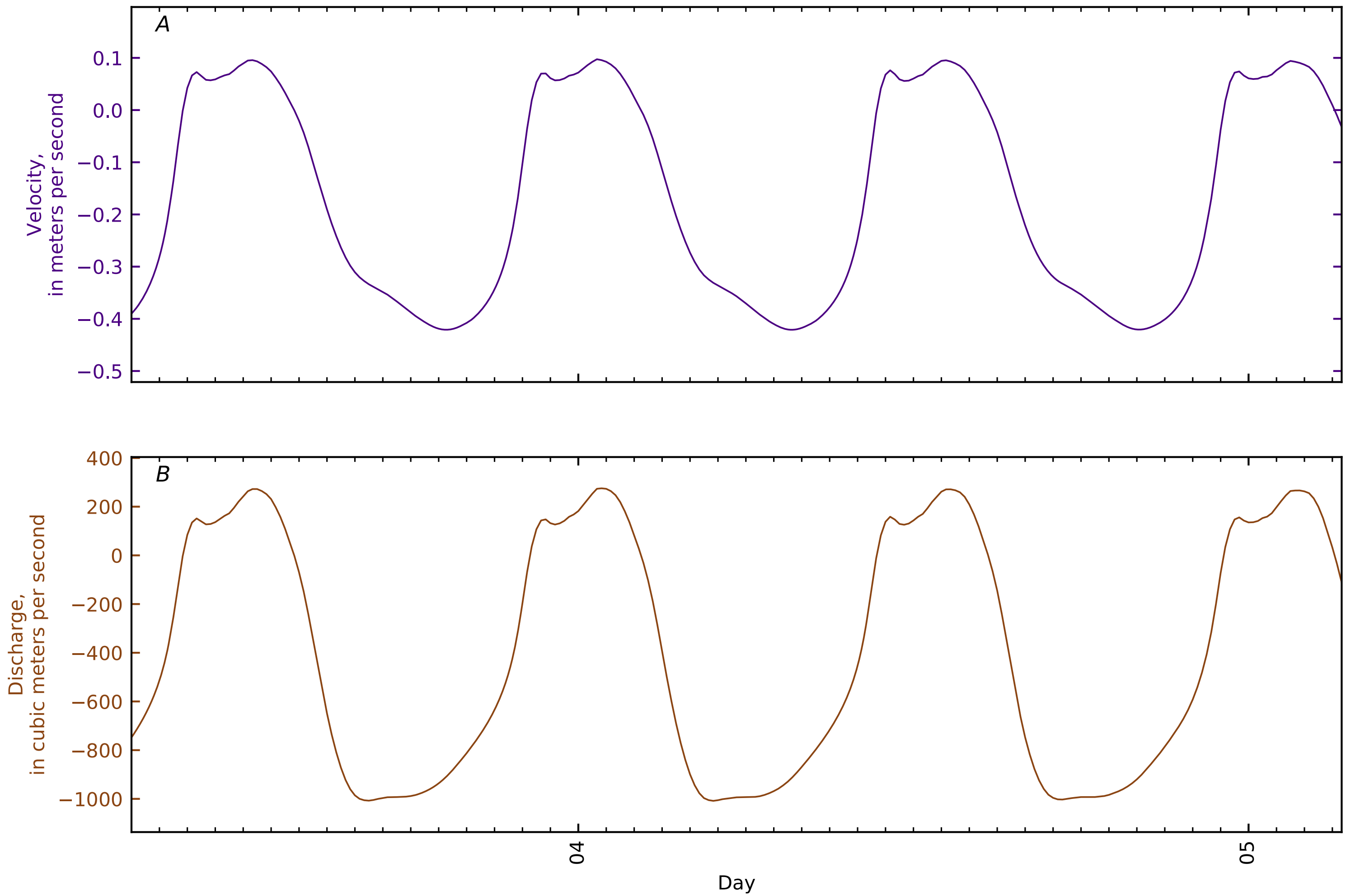

Figure B4-346. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 25, Penob Riv KM34.6 Southern Cove Orrington. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

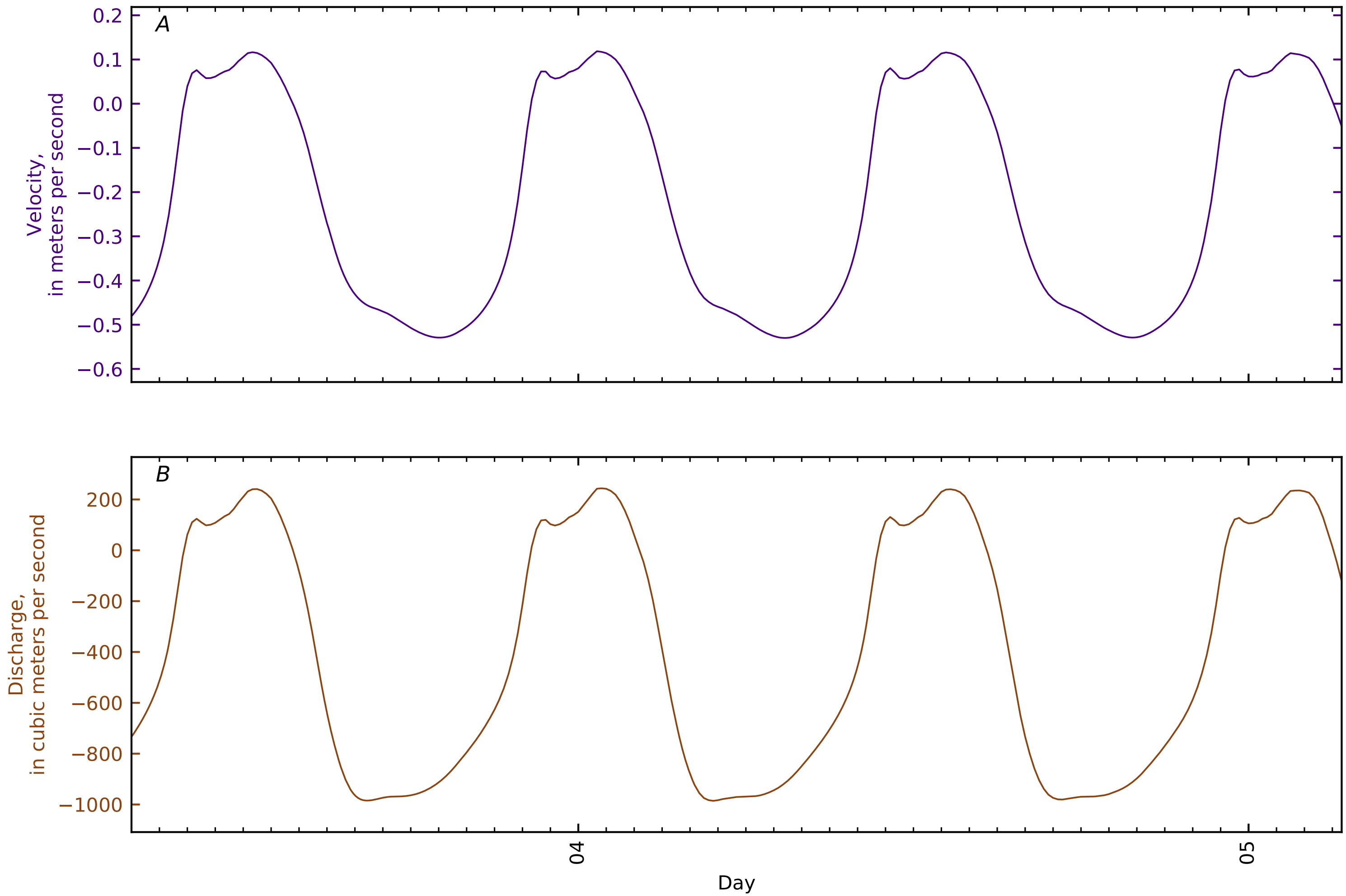

Figure B4-347. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 26, Penob Riv KM35 Orrington d/s Souadabscook Str Hampden. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

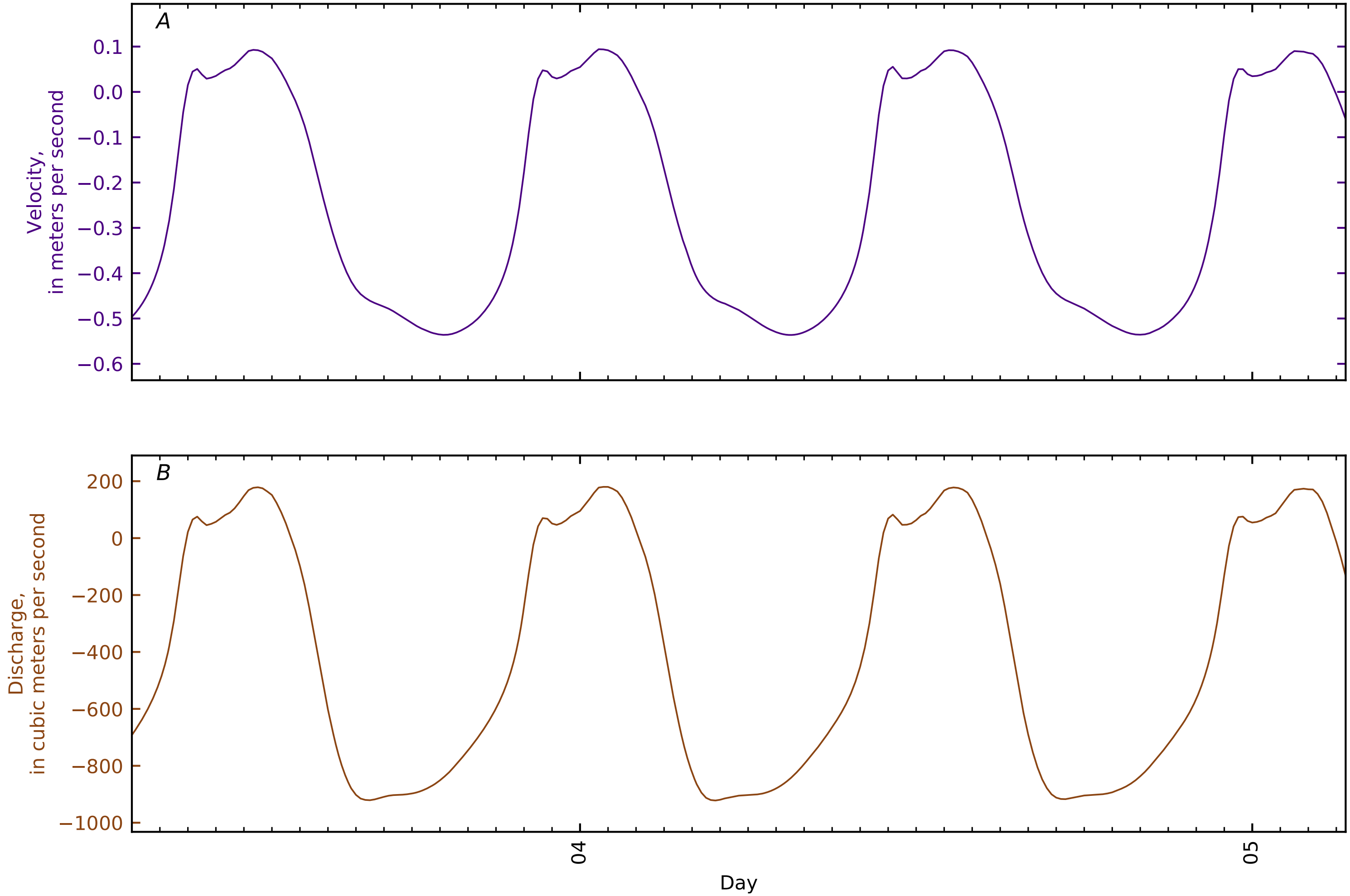

Figure B4-348. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 27, Penob Riv KM36 u/s Souadabscook Str Hampden. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

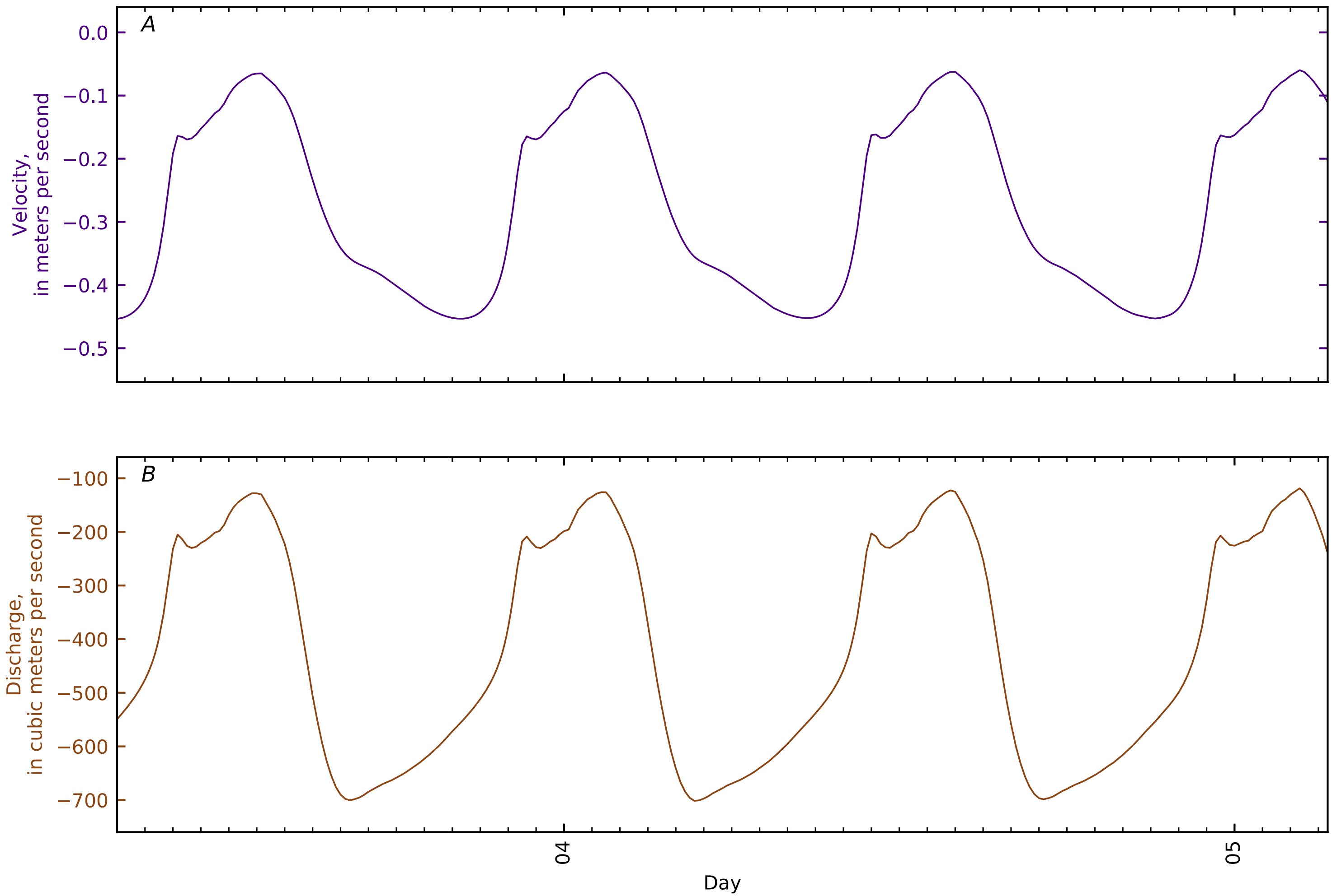

Figure B4-349. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 28, Penob Riv KM40 South Brewer. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

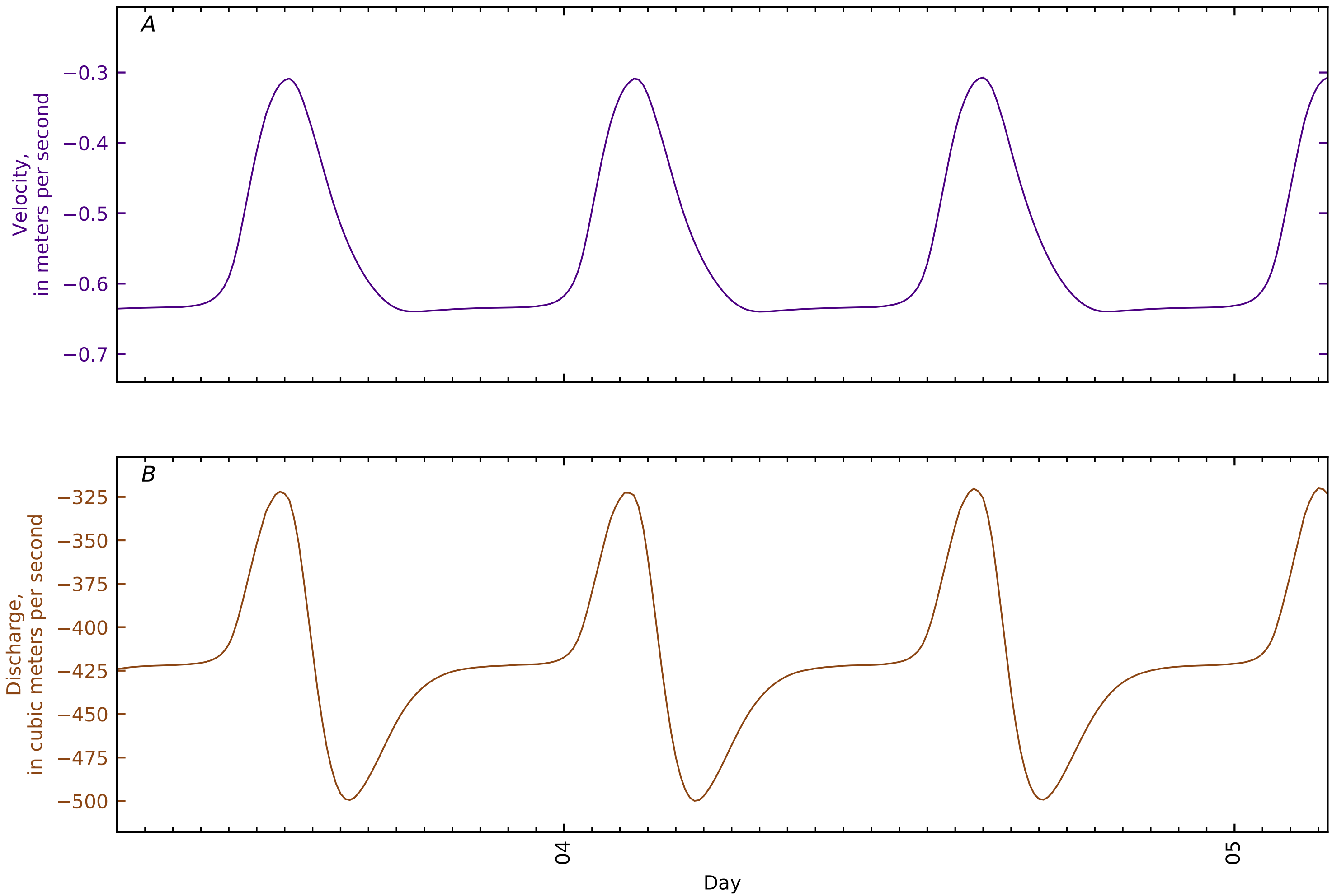

Figure B4-350. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 29, Penob Riv KM43 u/s Kenduskeag Str Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

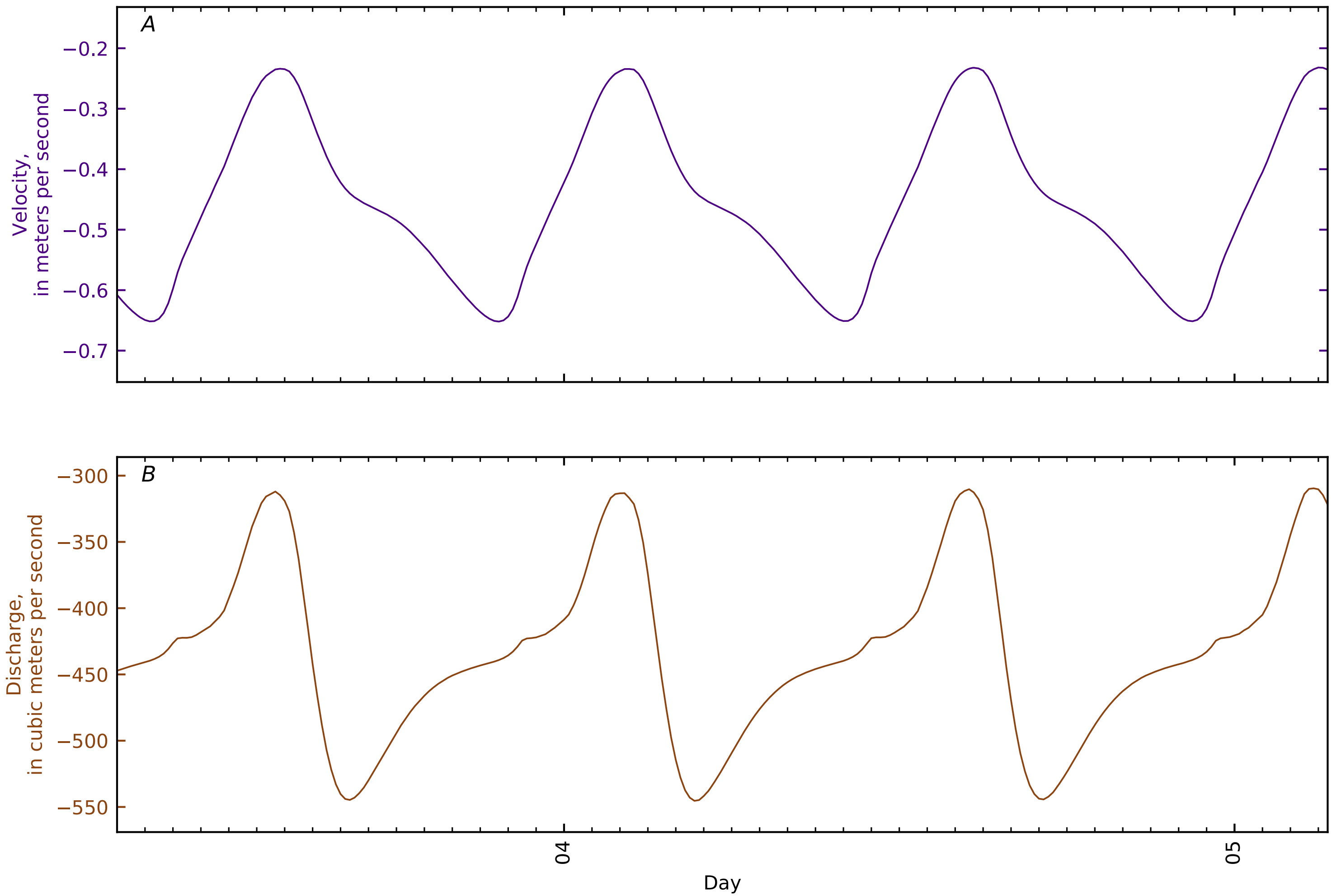

Figure B4-351. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 30, Penob Riv KM43.2 GS 01037050 at Bangor d/s Kenduskeag Str. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

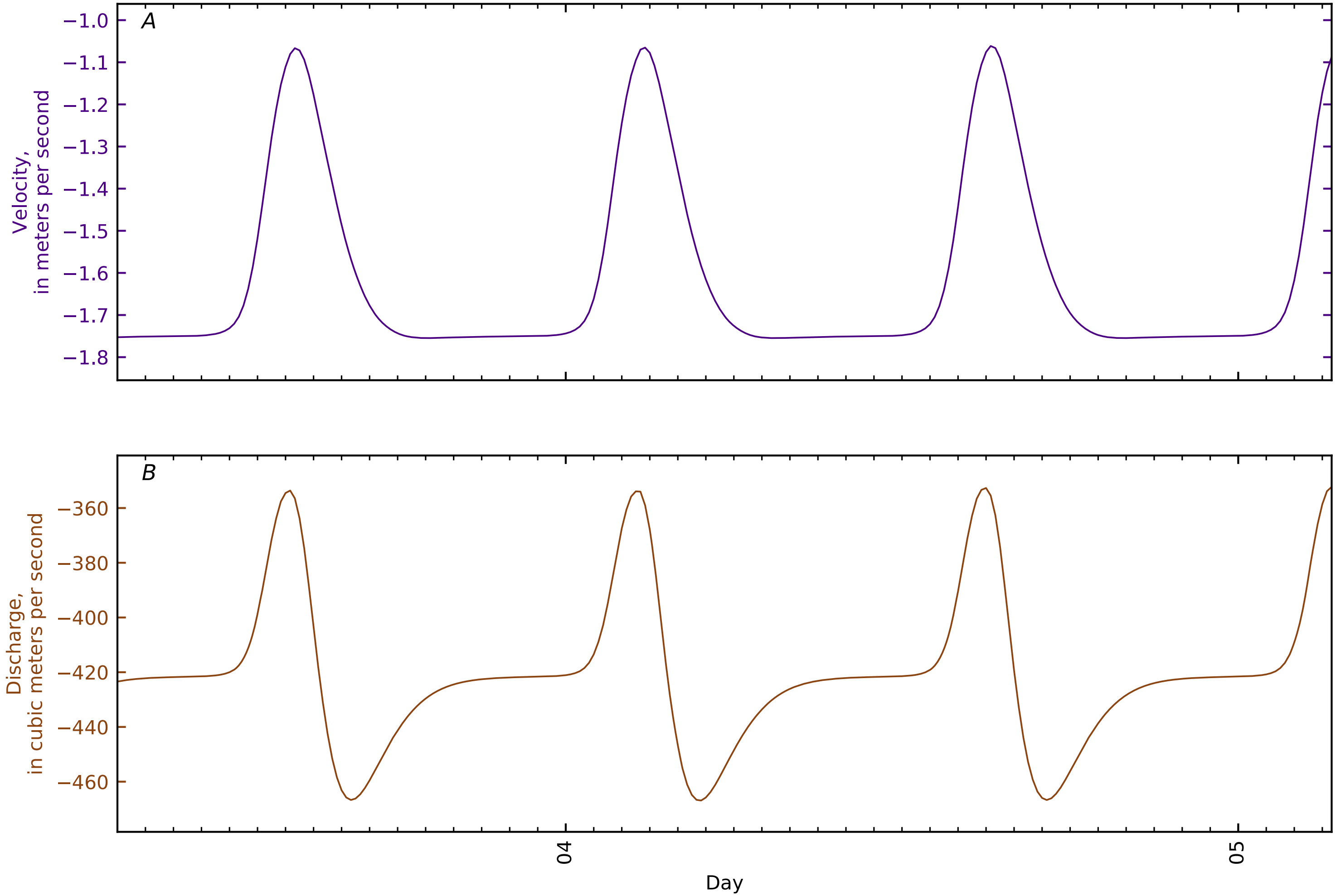

Figure B4-352. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 31, Penob Riv KM45.3 Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

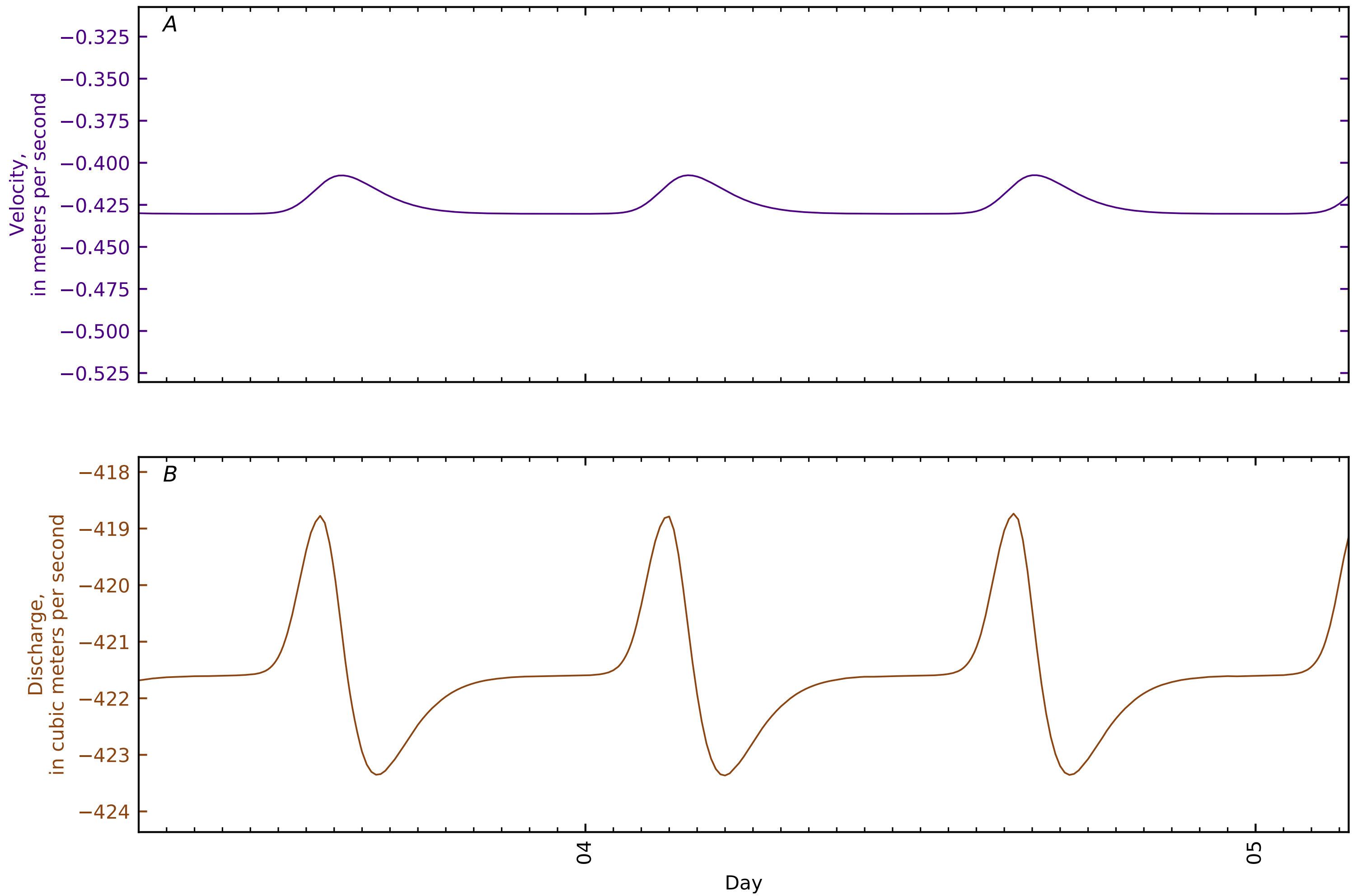

Figure B4-353. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 32, Penob Riv KM50 Eddington. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

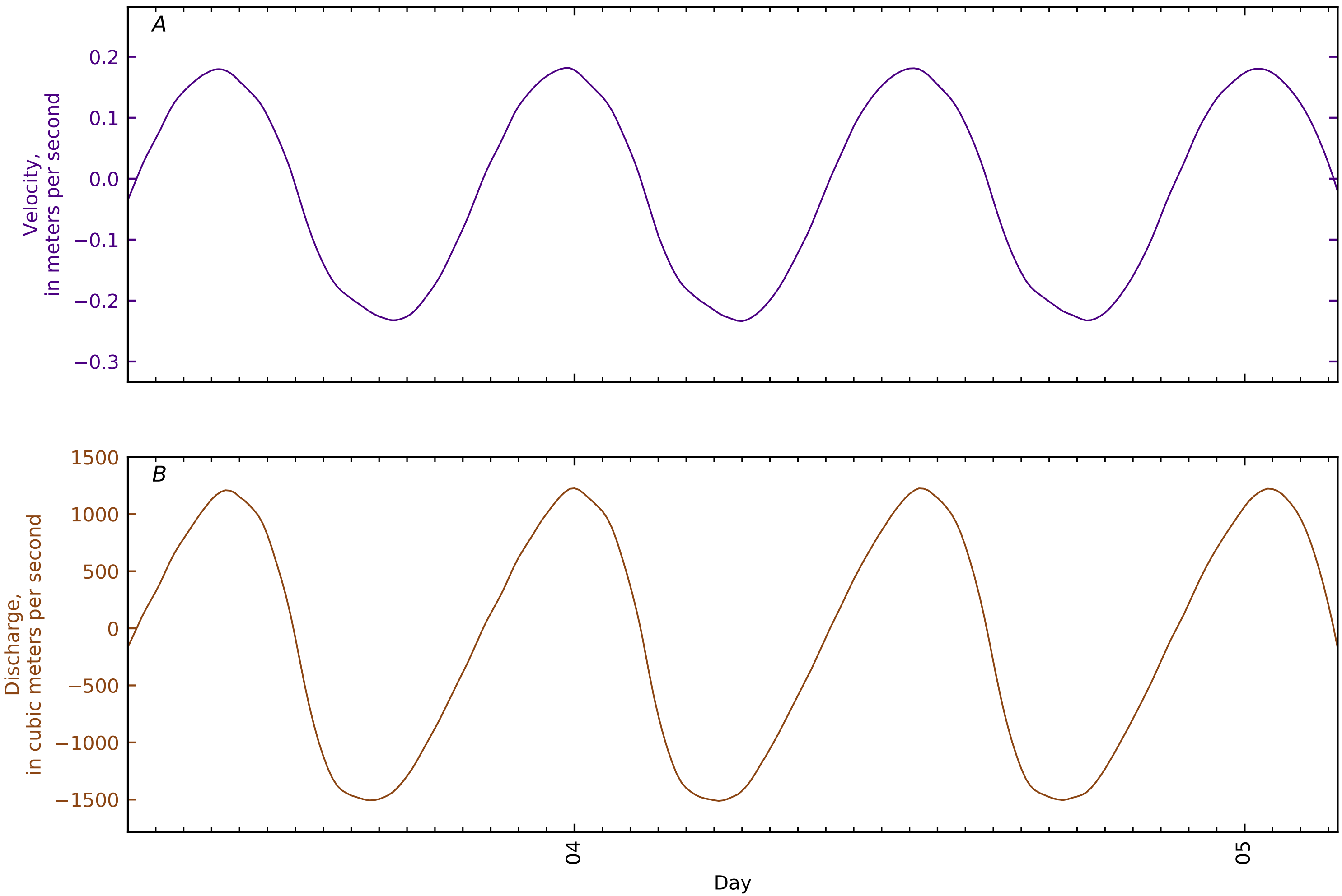

Figure B4-354. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 33, East Ch KM0 at Verona jct at GS Trnsct4. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

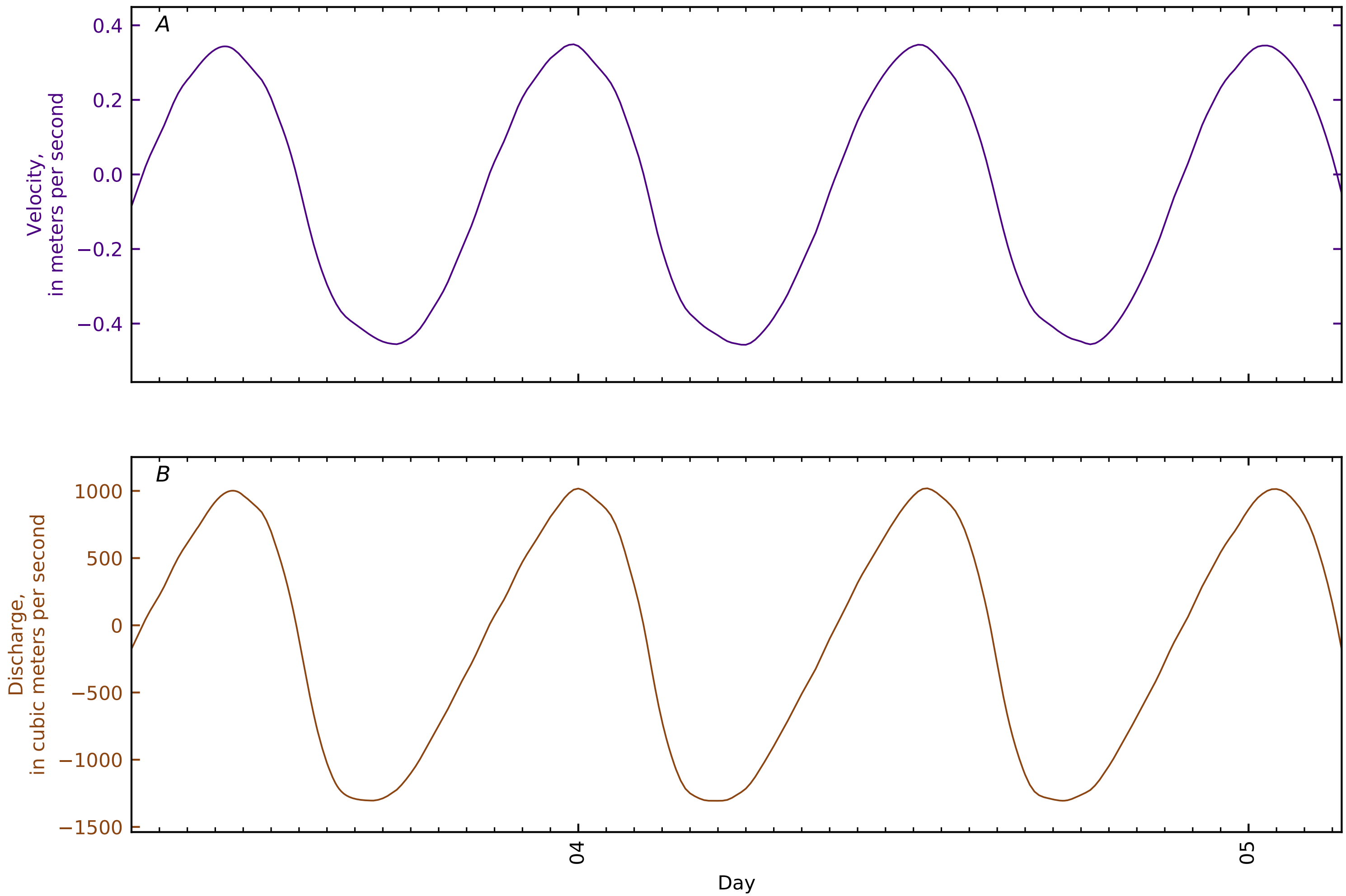

Figure B4-355. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 34, East Ch KM2 d/s Orland Riv. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

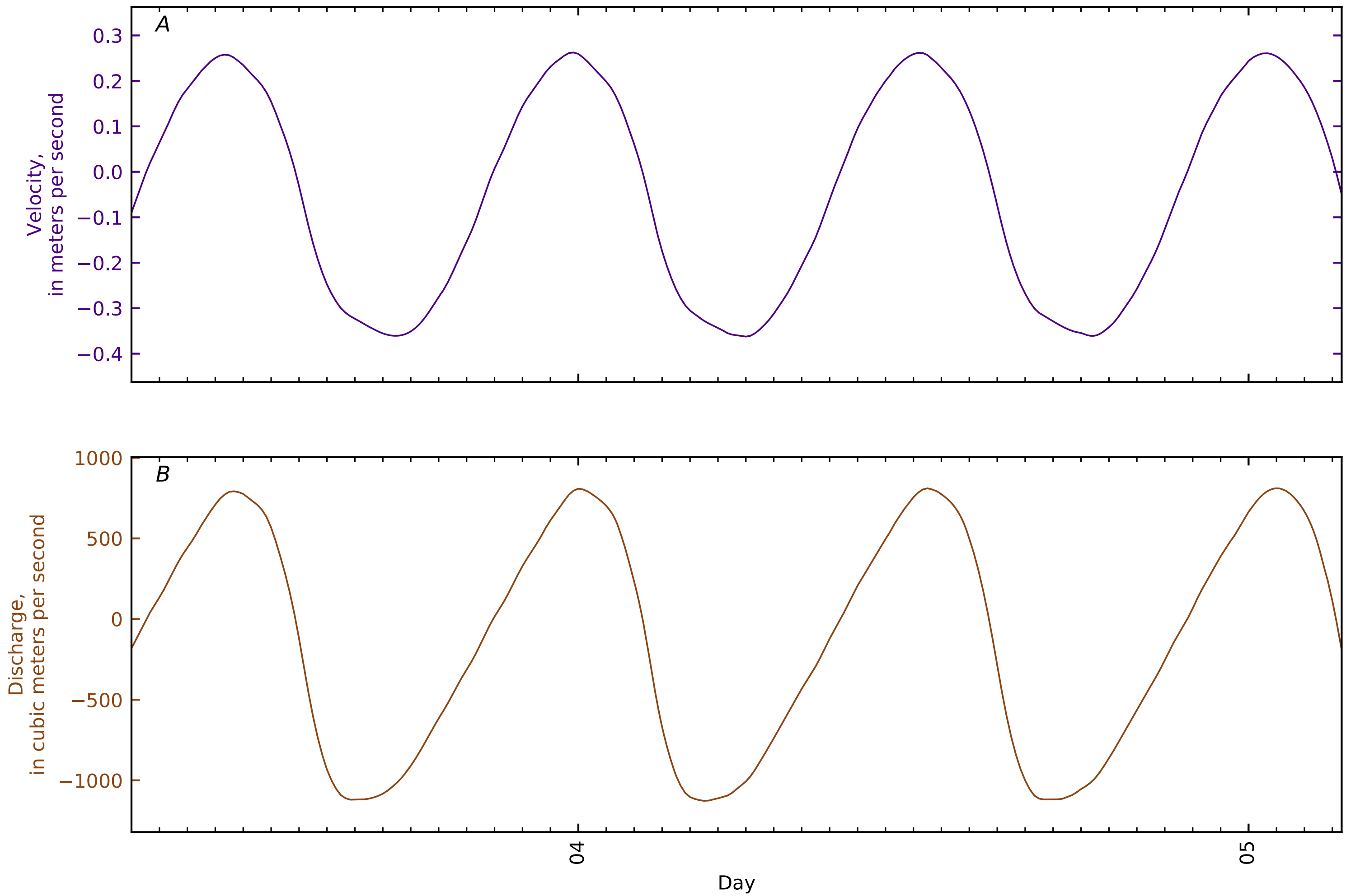

Figure B4-356. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 35, East Ch KM4 d/s Orland Riv. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

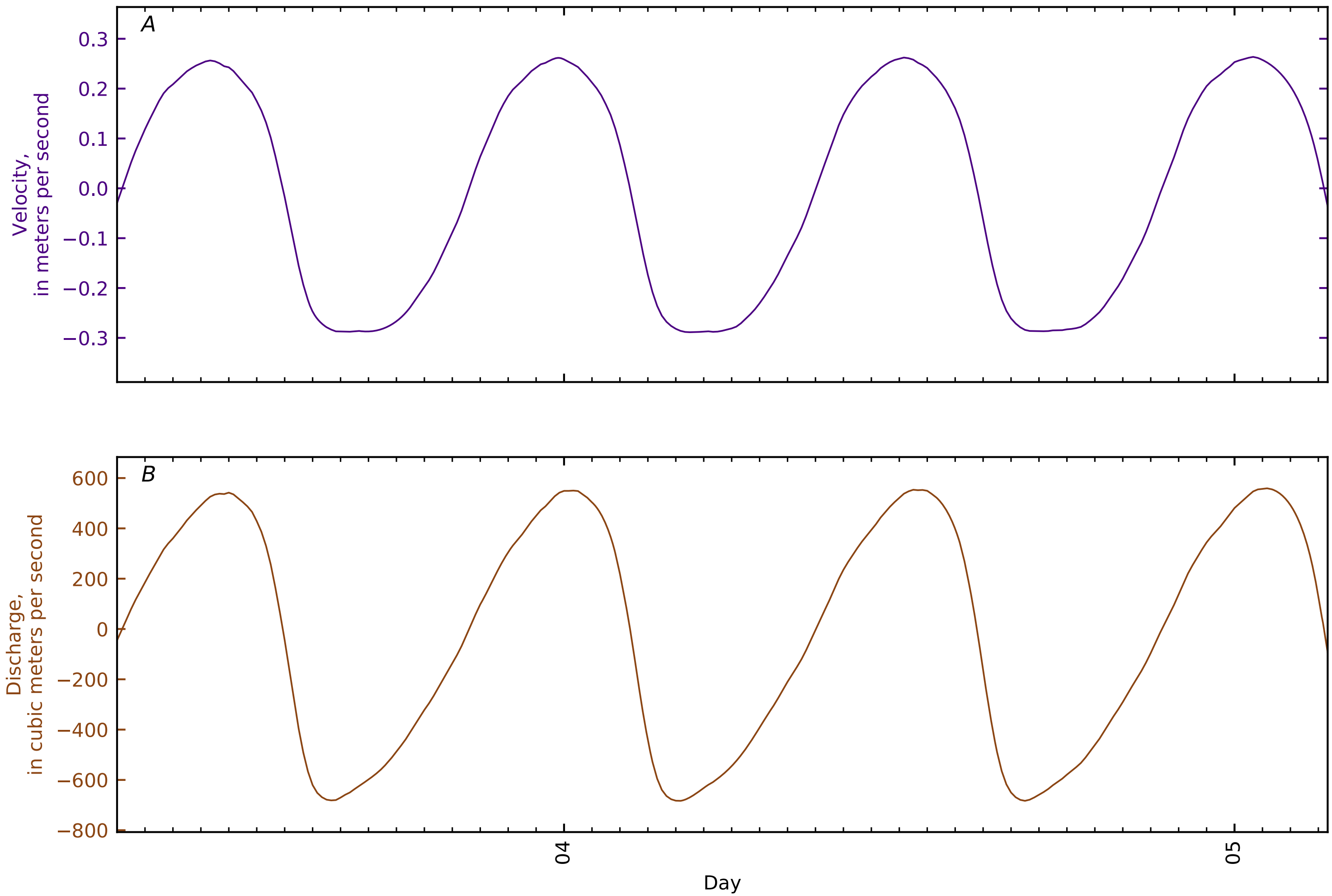

Figure B4-357. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 36, East Ch KM5 u/s Orland Riv. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

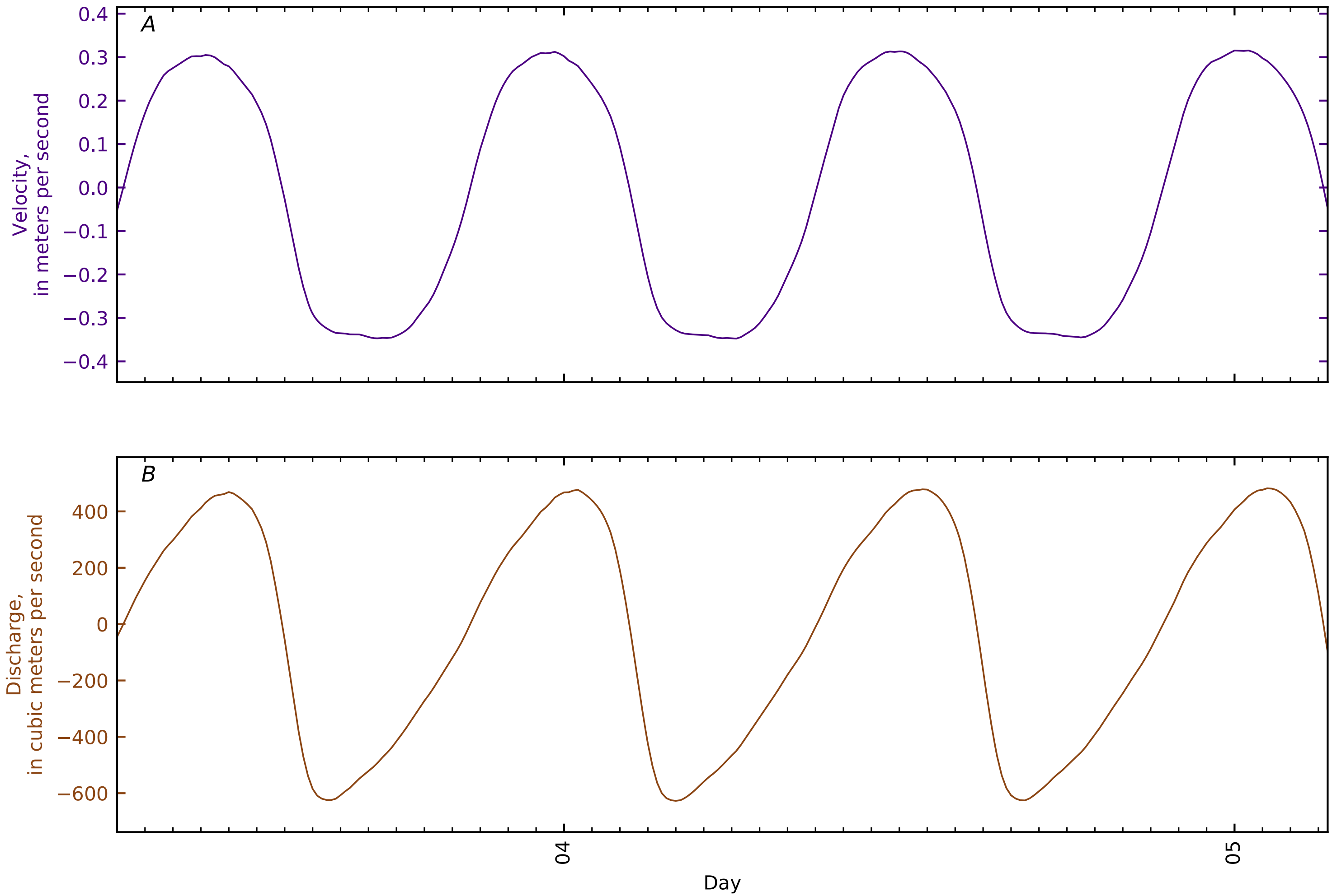

Figure B4-358. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 37, East Ch KM6 u/s Orland Riv d/s flats. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

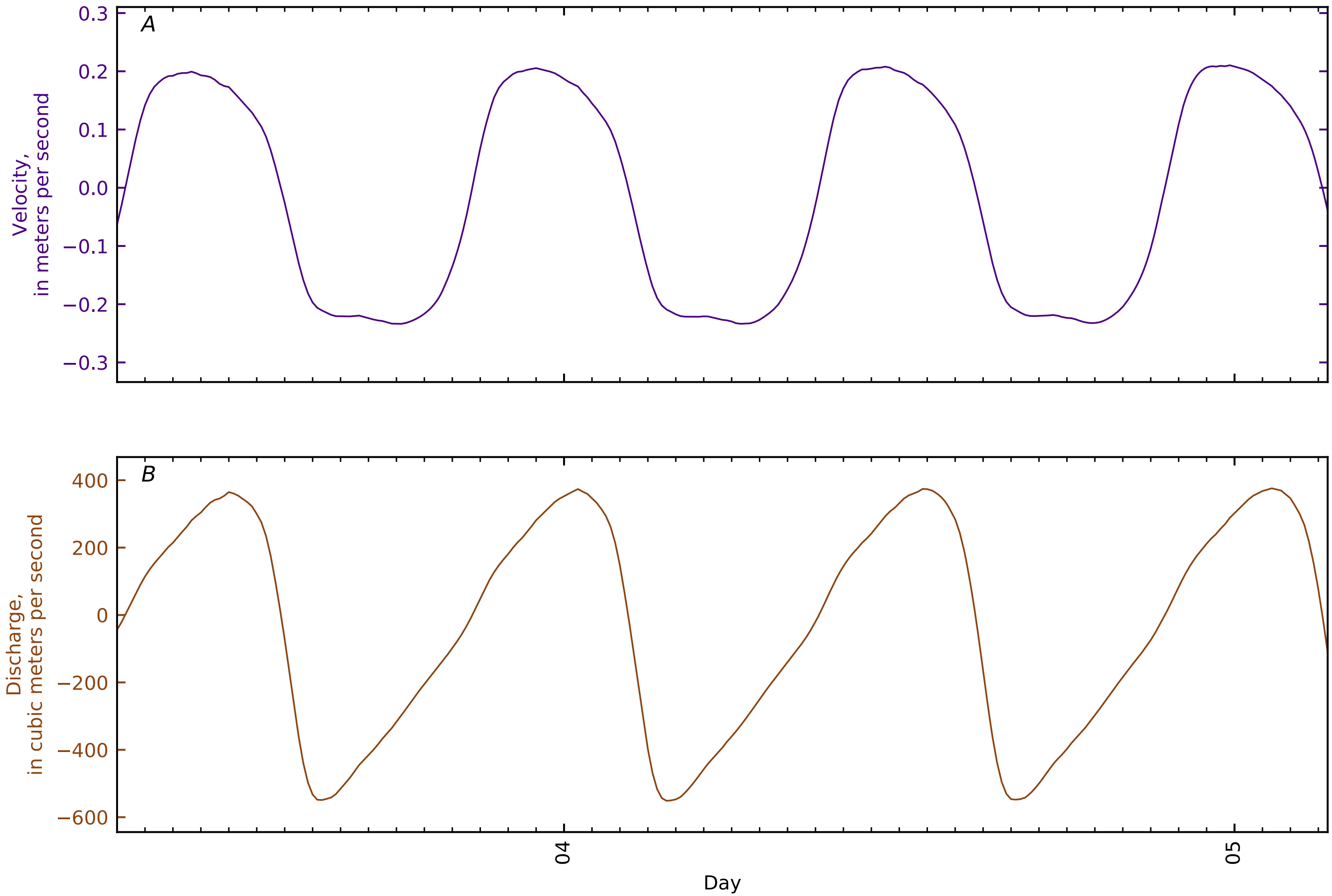

Figure B4-359. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 38, East Ch KM7 d/s Porcupine Is at flats. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

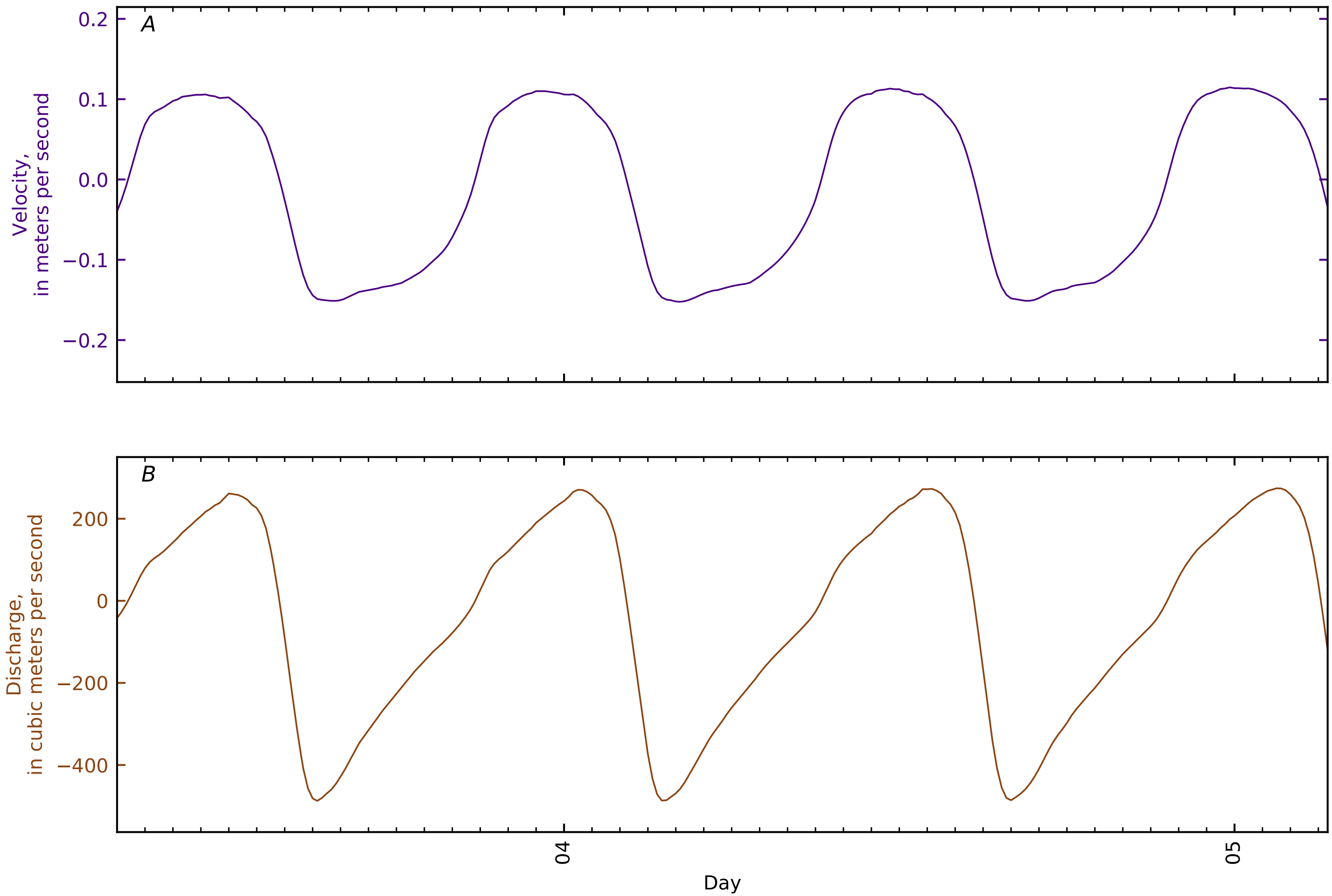

Figure B4-360. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 39, East Ch KM8 u/s flats. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

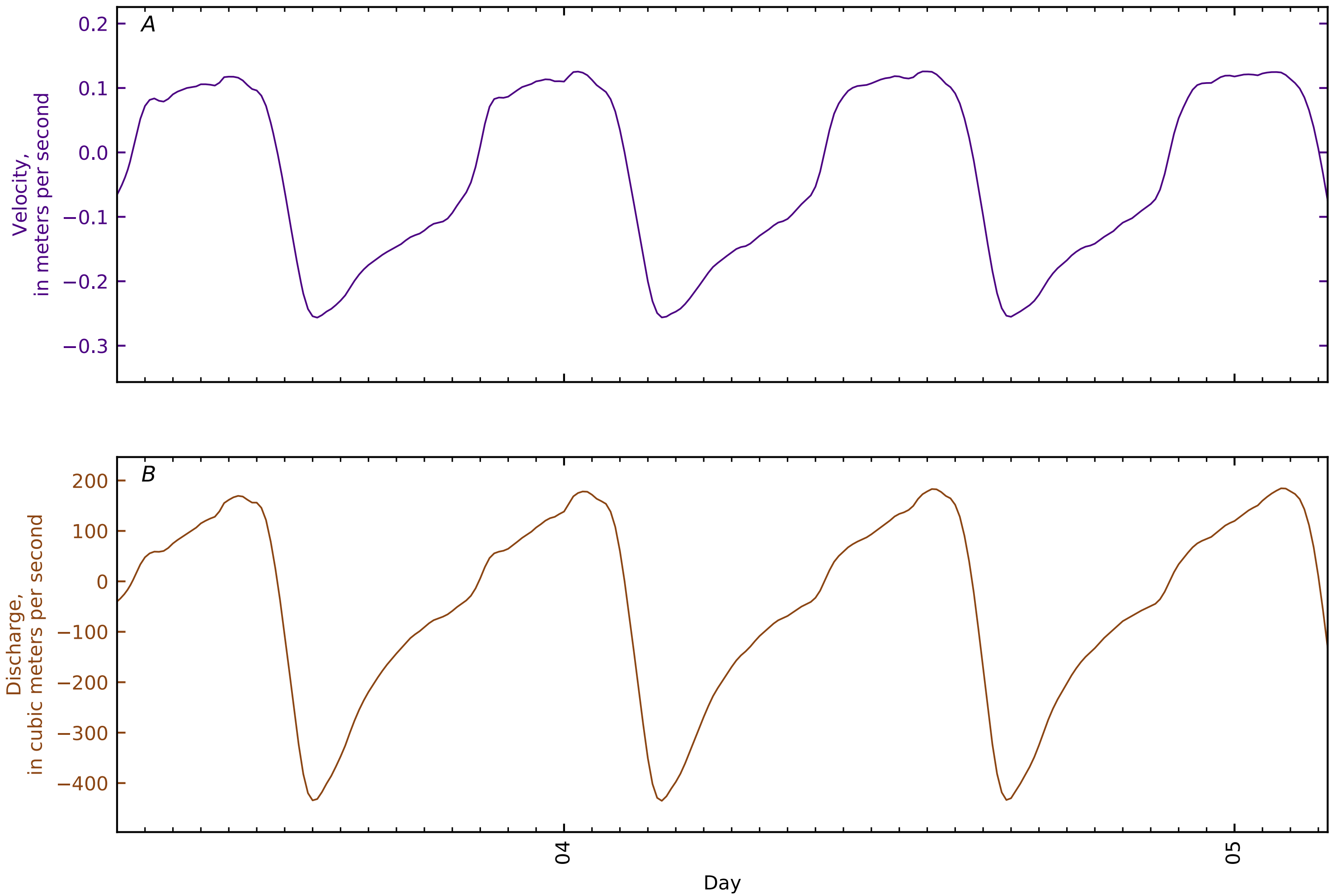

Figure B4-361. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 40, East Ch KM9 north part. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

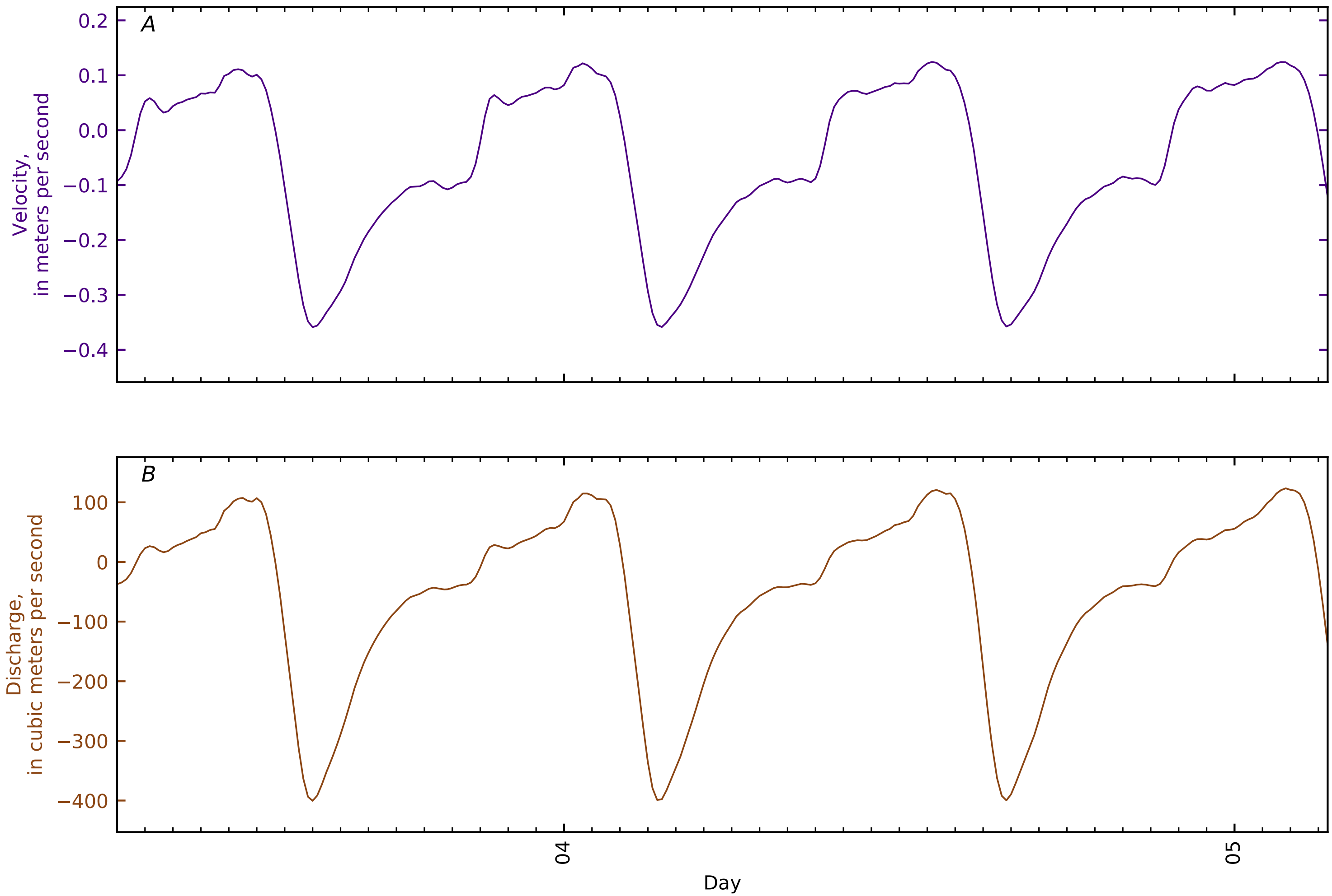

Figure B4-362. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 41, East Channel KM10 GS 443409068471801 at Bucksport d/s conf Silv. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

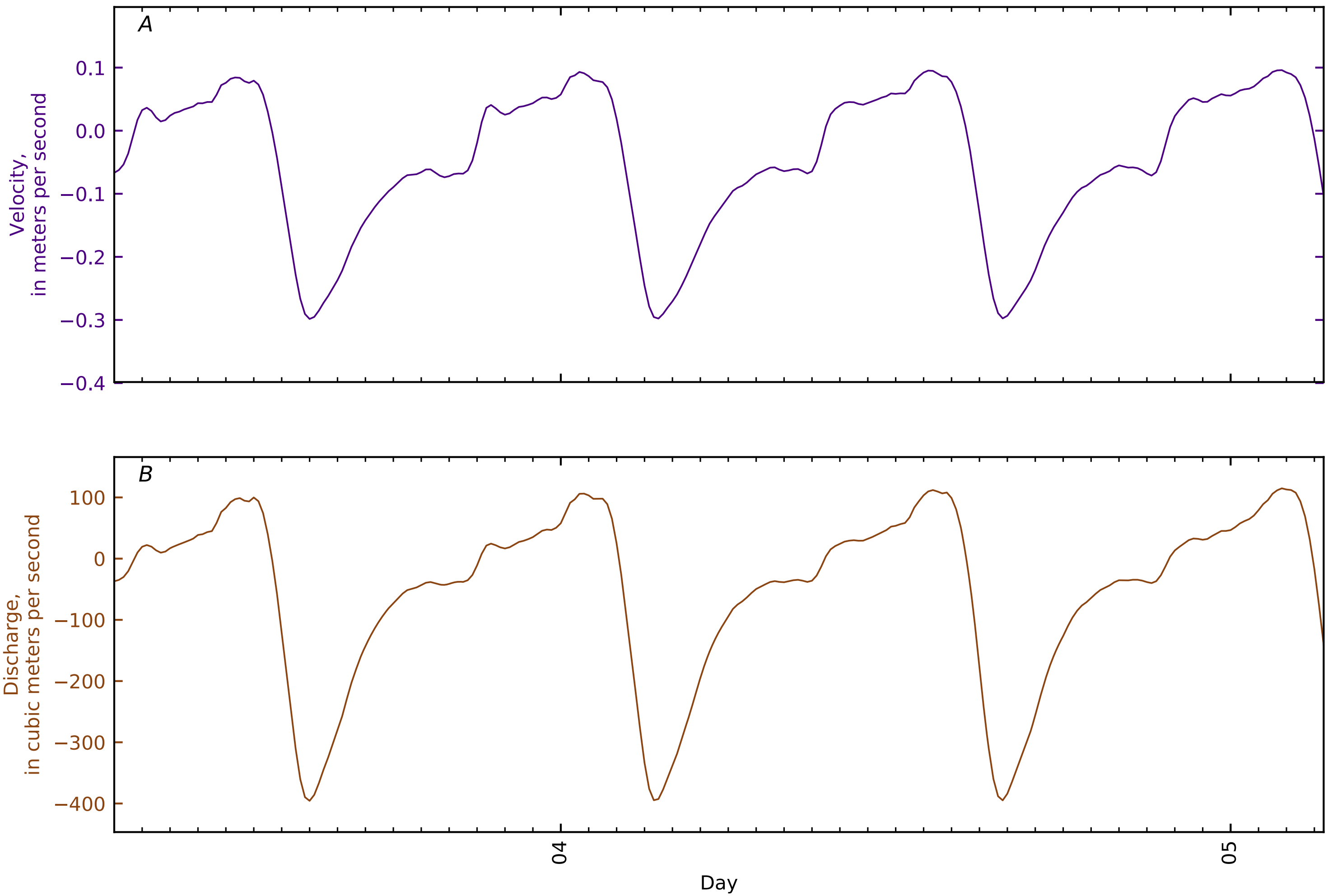

Figure B4-363. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 42, East Ch KM10.2 Bucksport u/s conf Silver Lake discharge. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

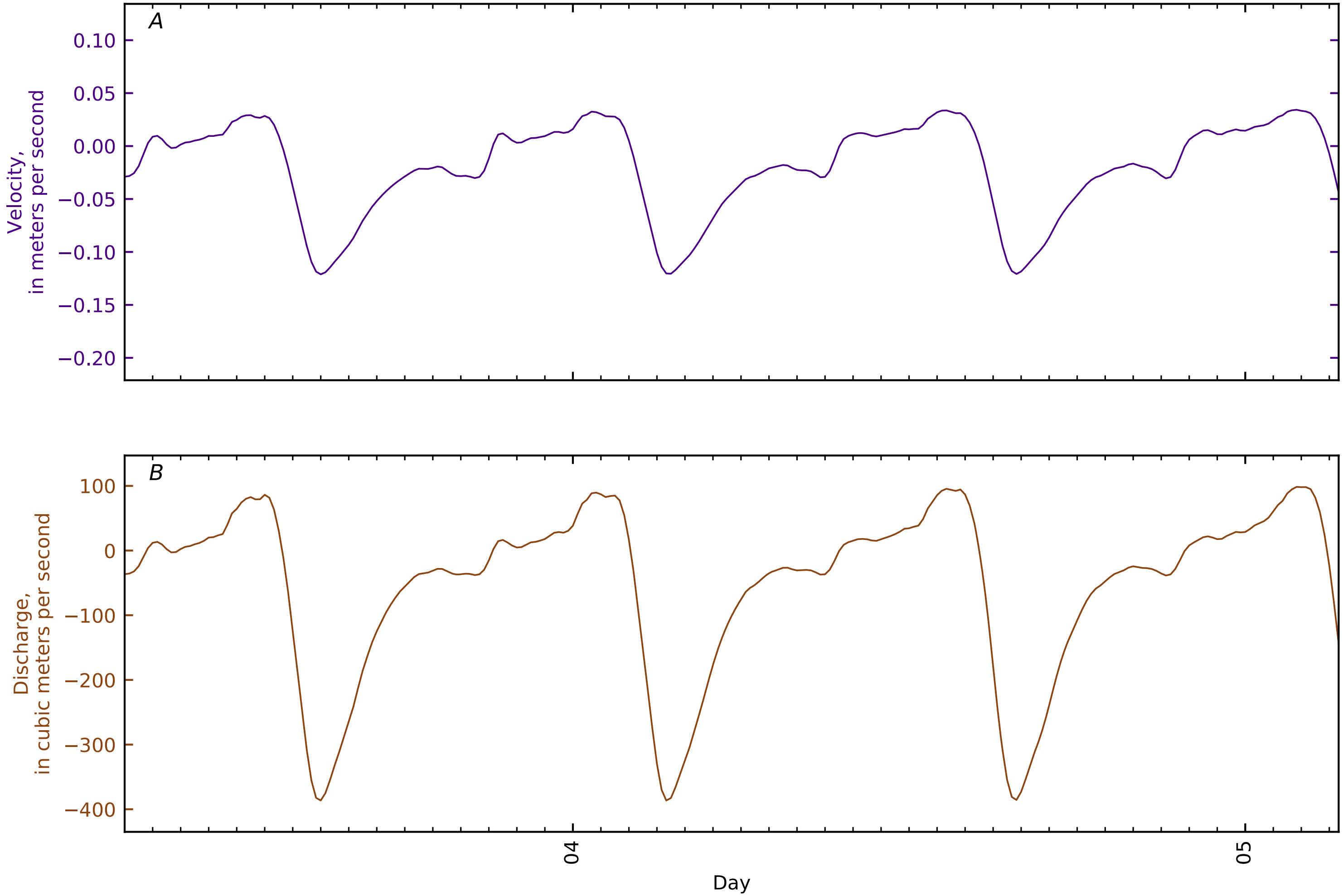

Figure B4-364. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 43, East Ch KM10.5 at Penob River split. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

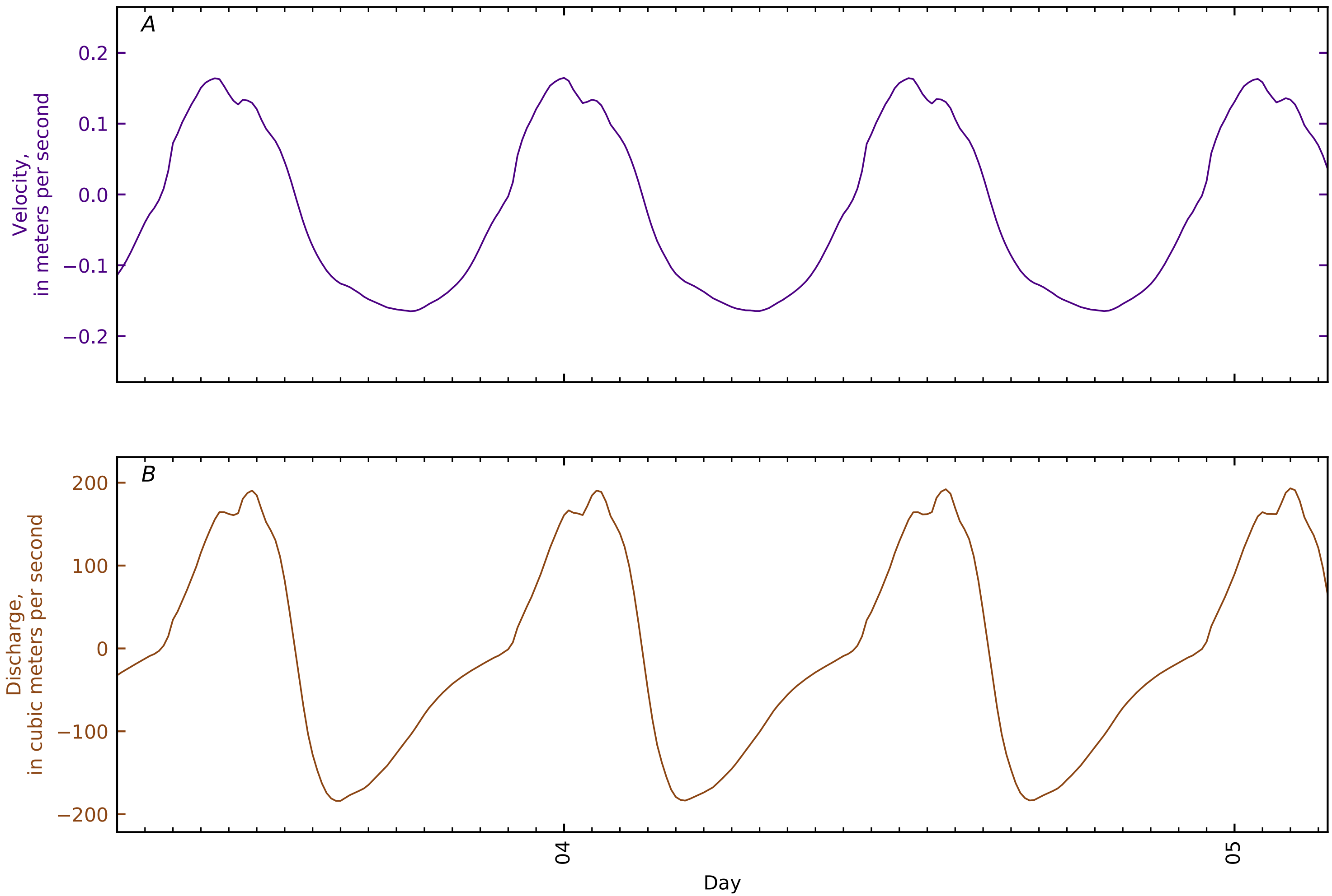

Figure B4-365. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 44, Mendall Marsh KM0.4 at Penob Riv KM17.3 GS Trnsct2. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

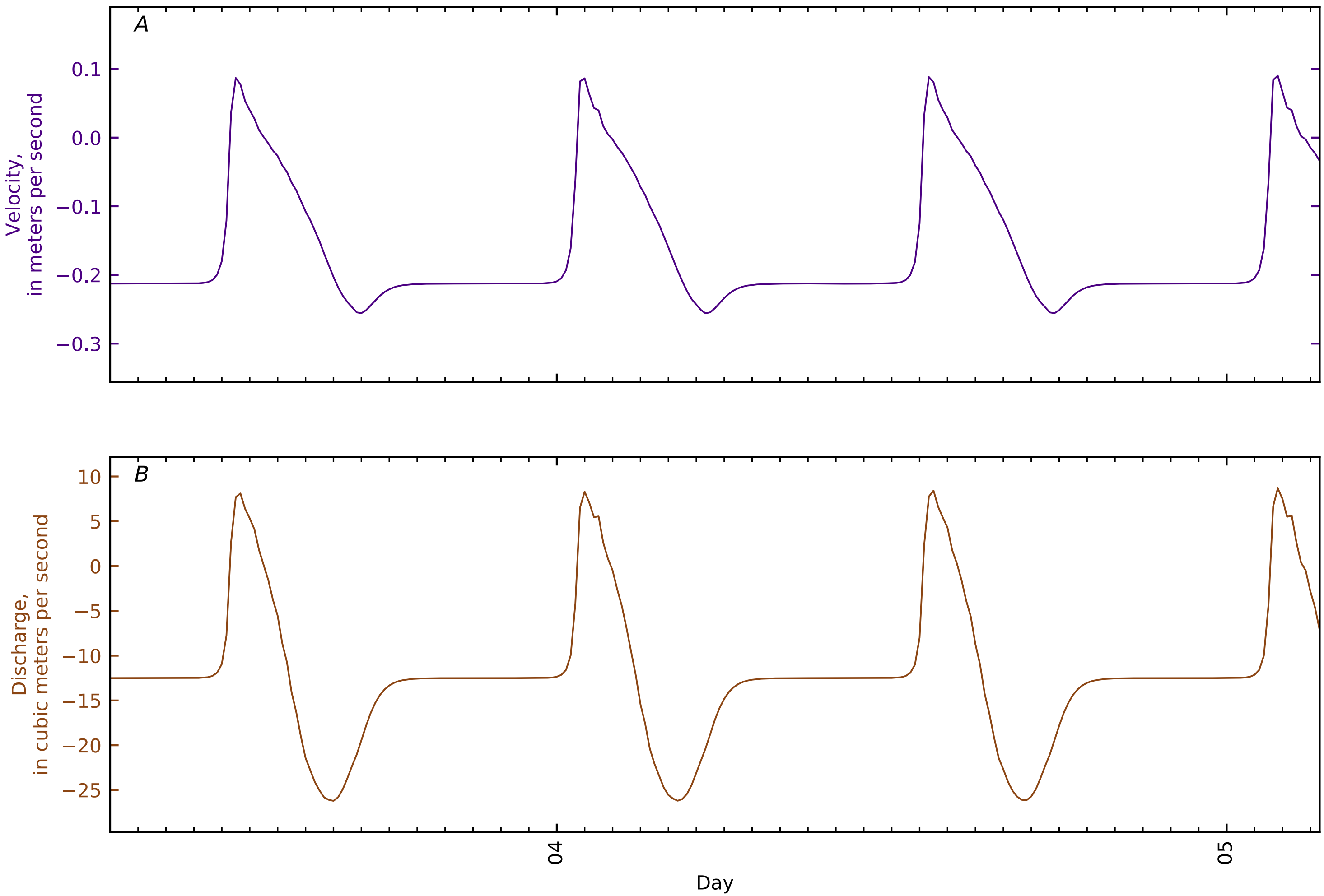

Figure B4-366. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 45, Mendall Marsh KM1 conf North Branch Marsh Riv. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

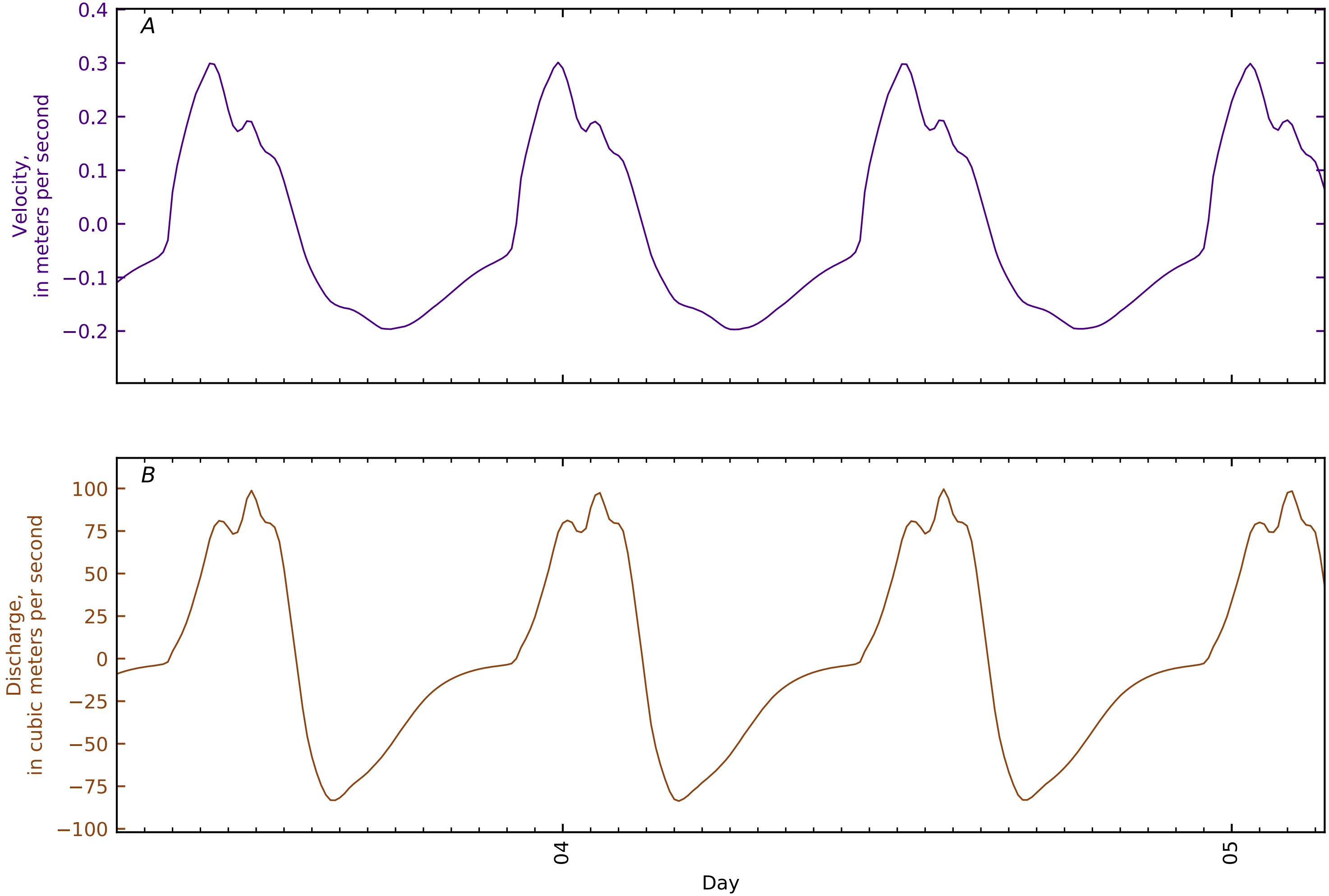

Figure B4-367. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 46, Mendall Marsh KM1.7 at boat launch. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

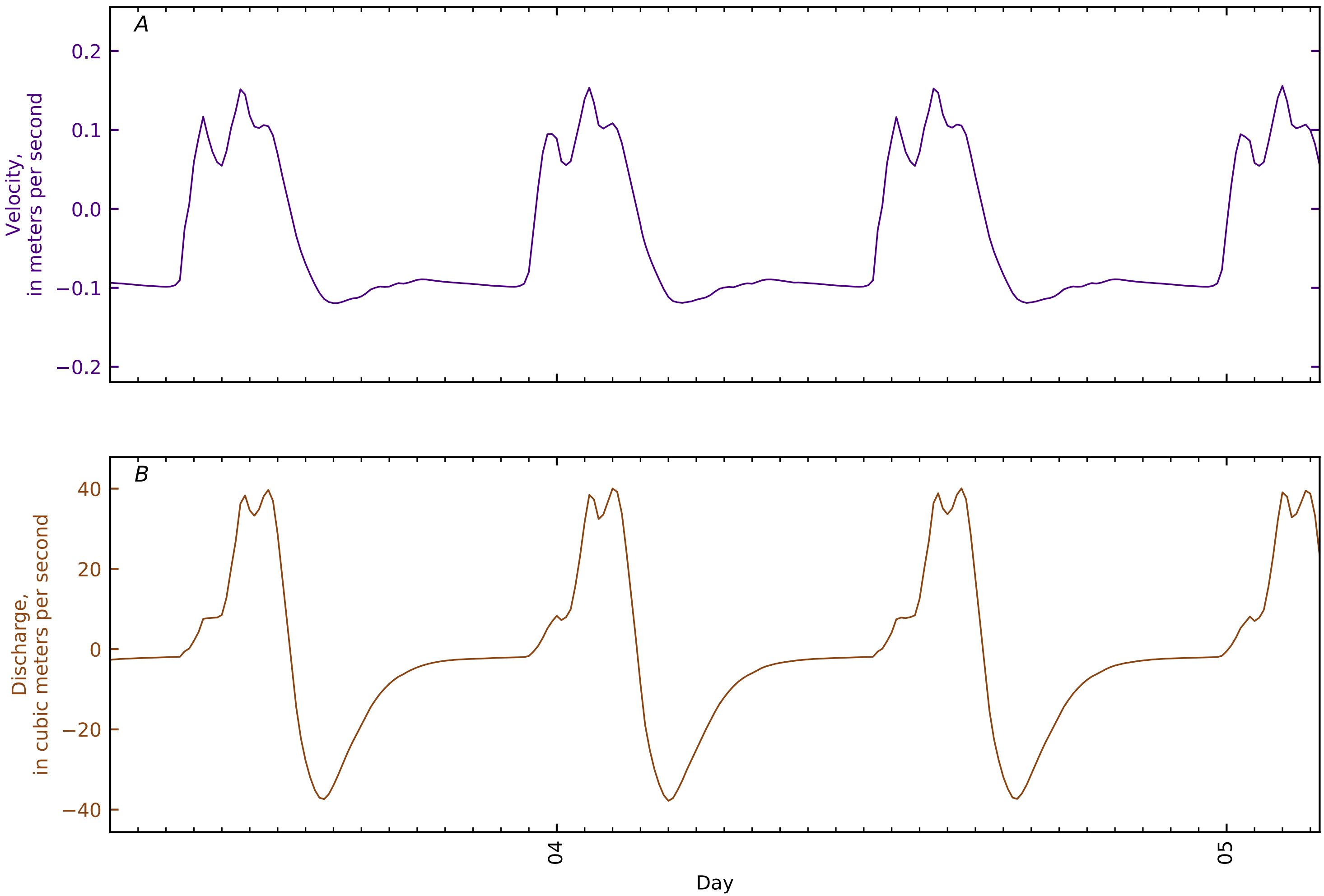

Figure B4-368. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 47, Mendall Marsh KM3 nr Misquito Mtn. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

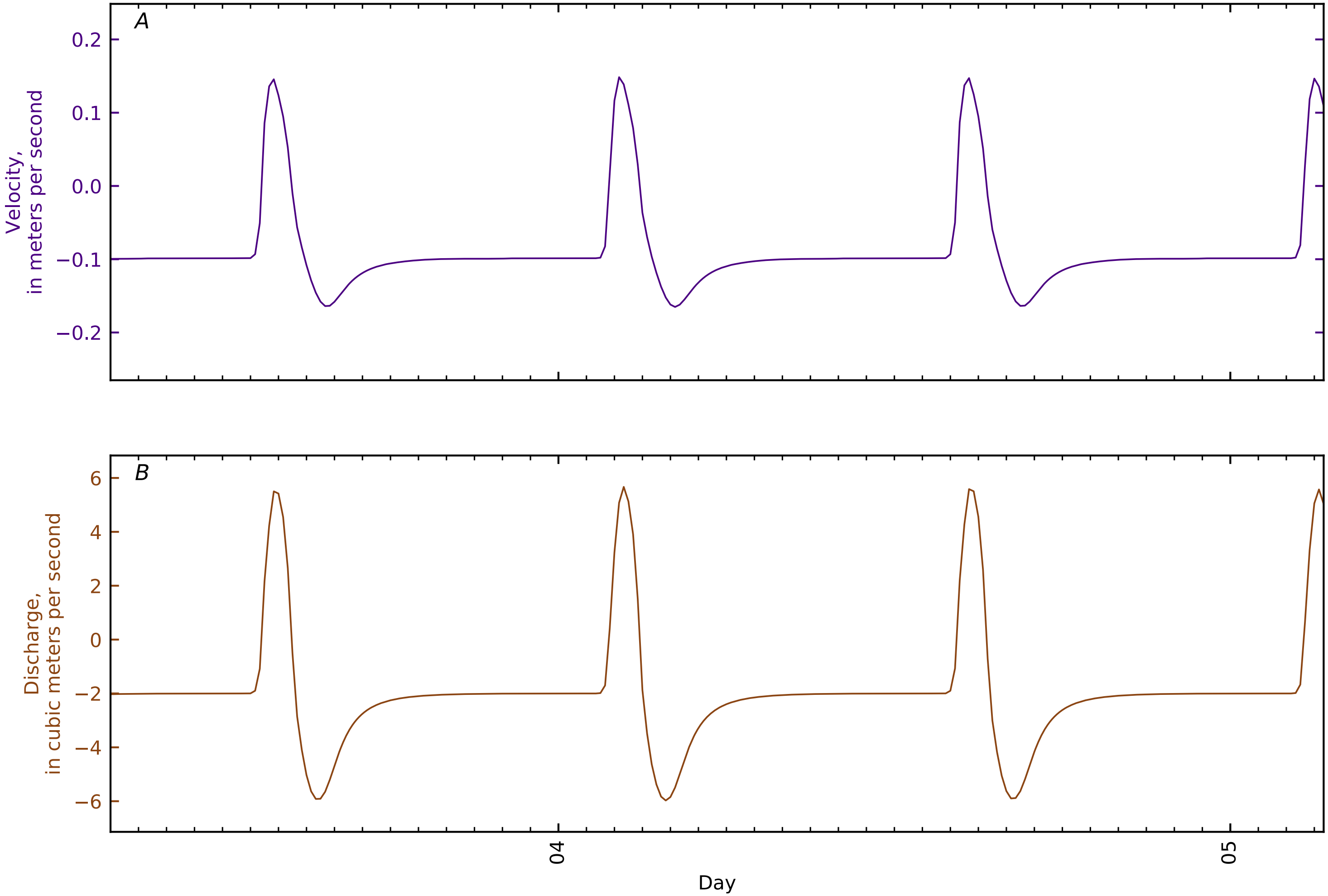

Figure B4-369. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 48, Mendall Marsh KM4.6. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

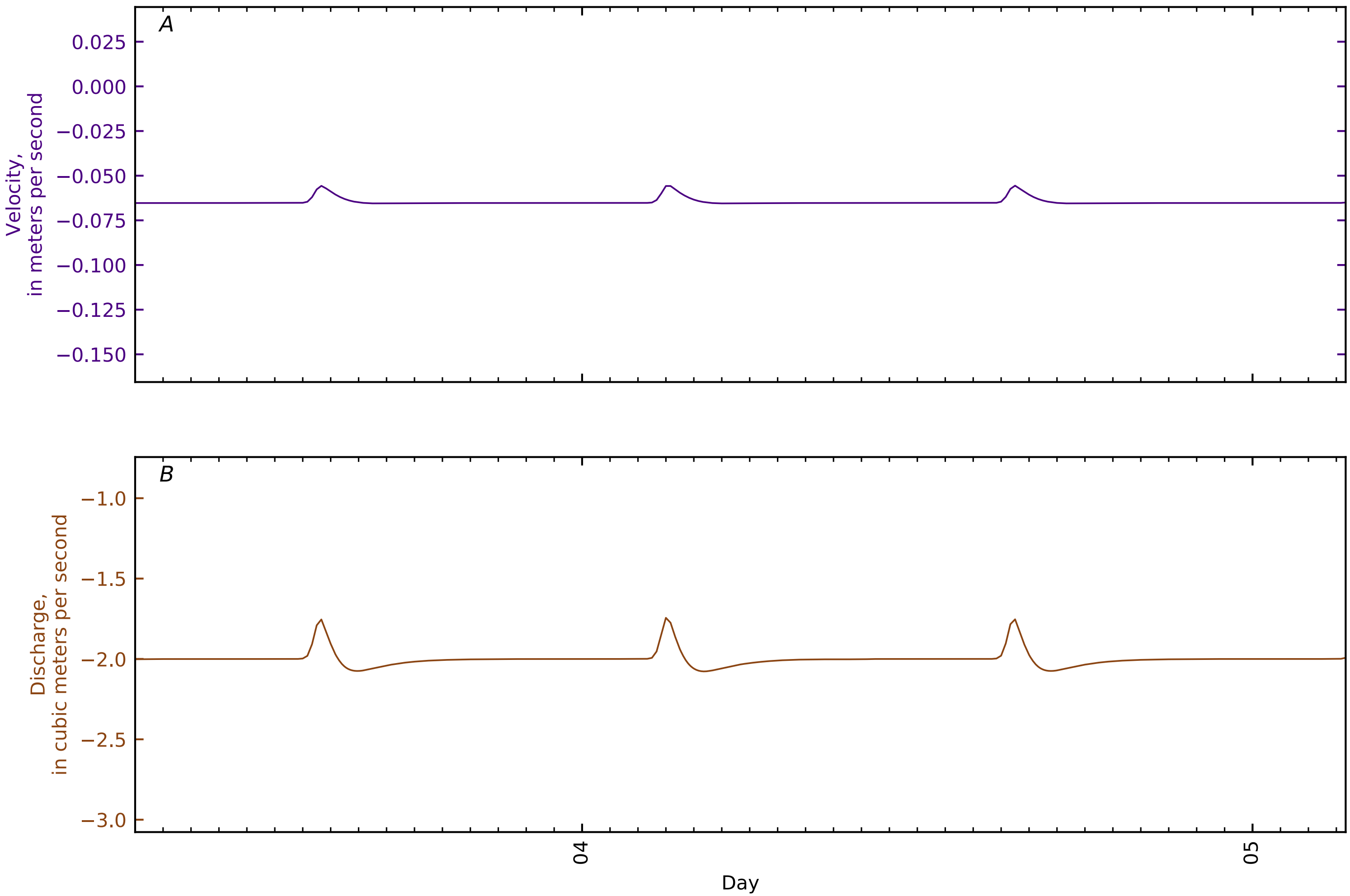

Figure B4-370. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 49, Mendall Marsh KM5.7 nr conf Colson Str. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

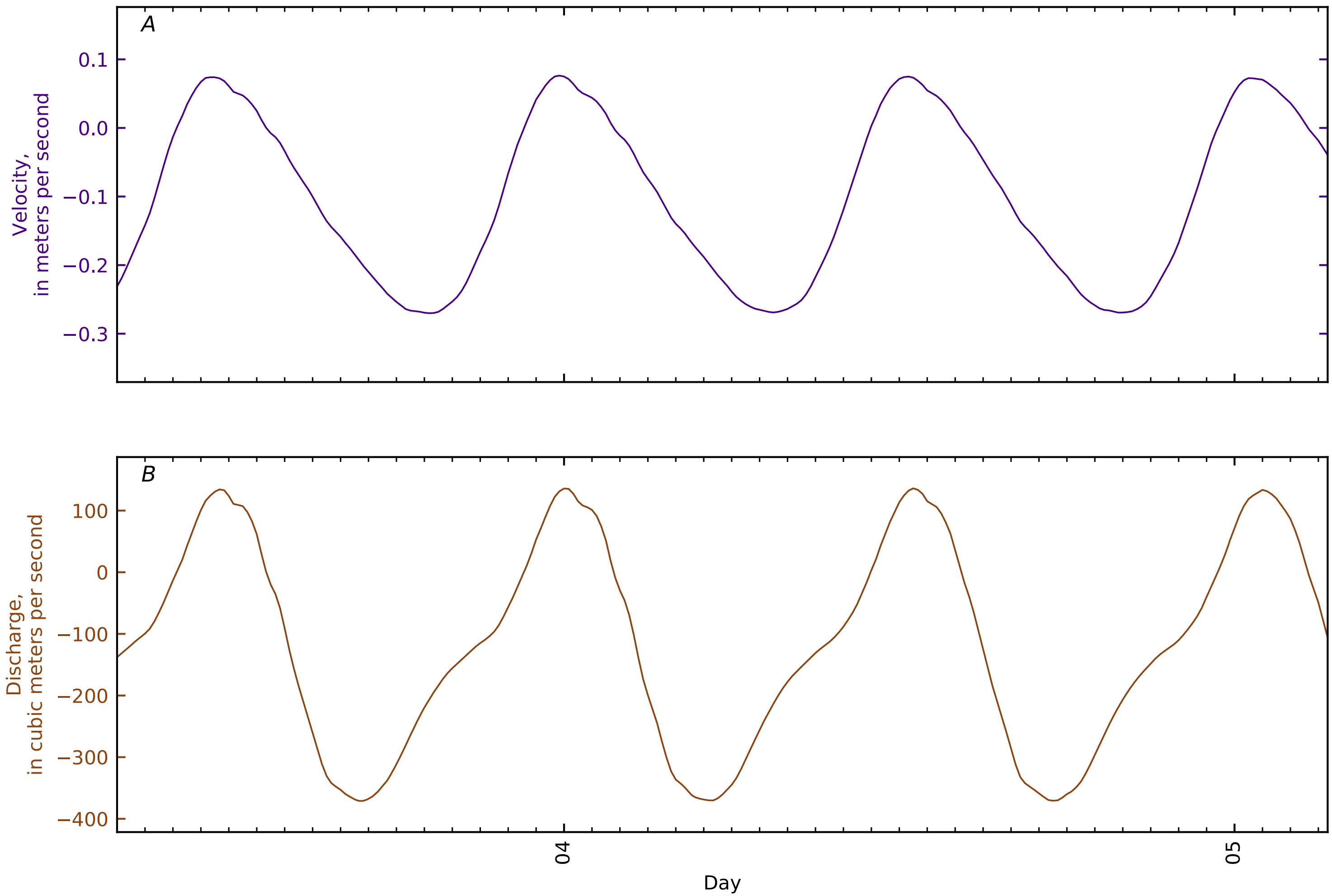

Figure B4-371. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 50, Orland Riv KM0 conf East Ch. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

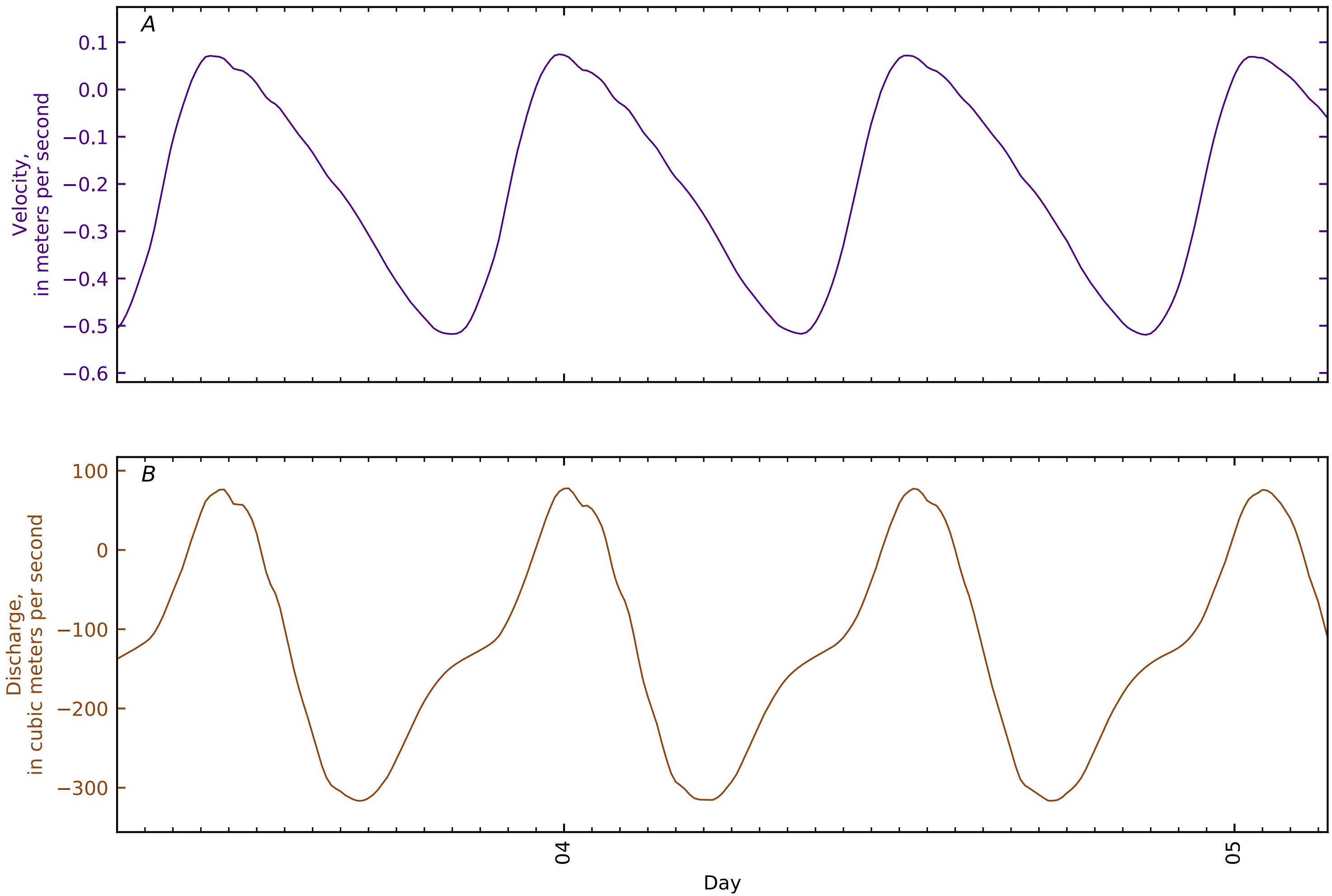

Figure B4-372. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 51, Orland Riv KM0.5. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

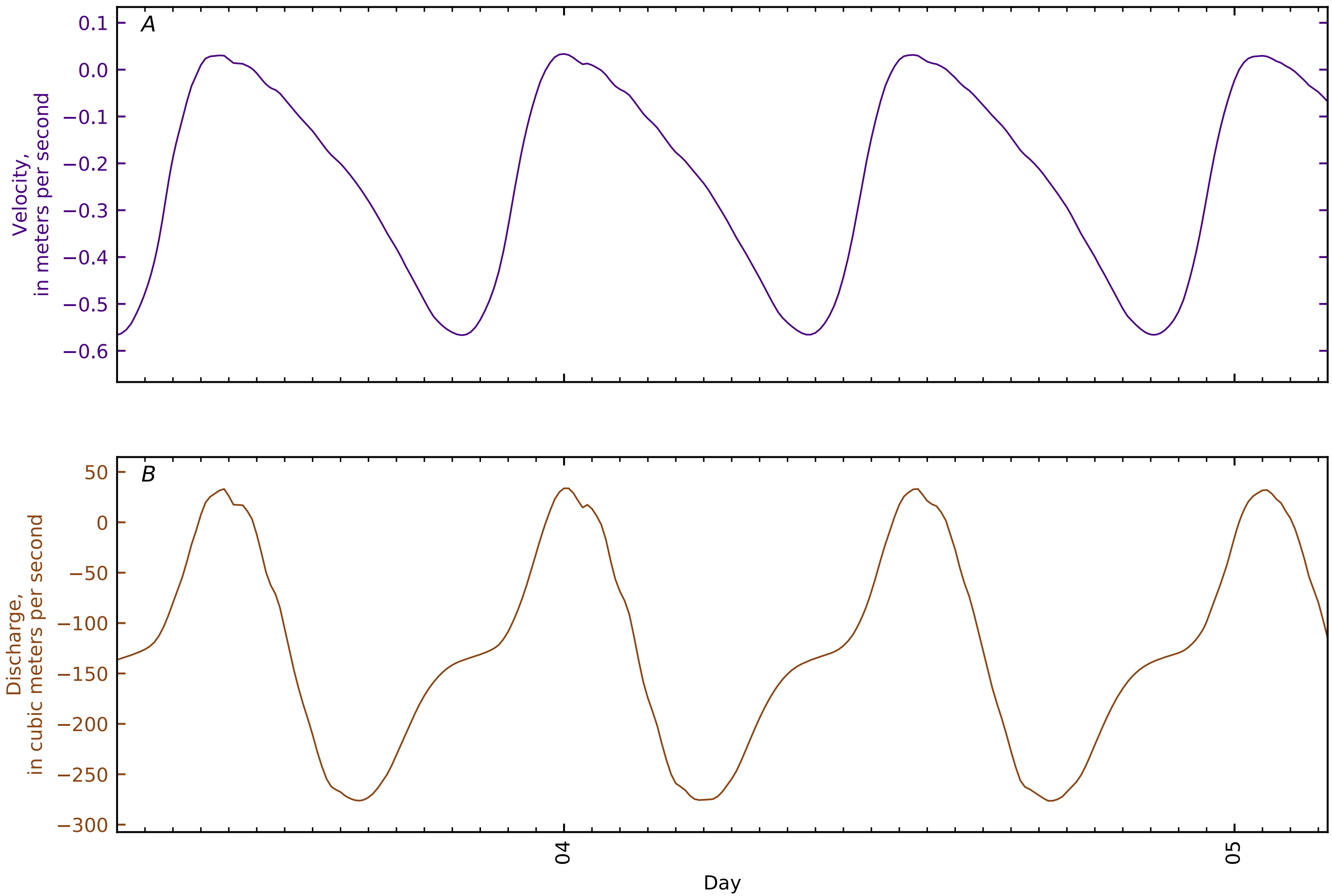

Figure B4-373. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 52, Orland Riv KM1. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

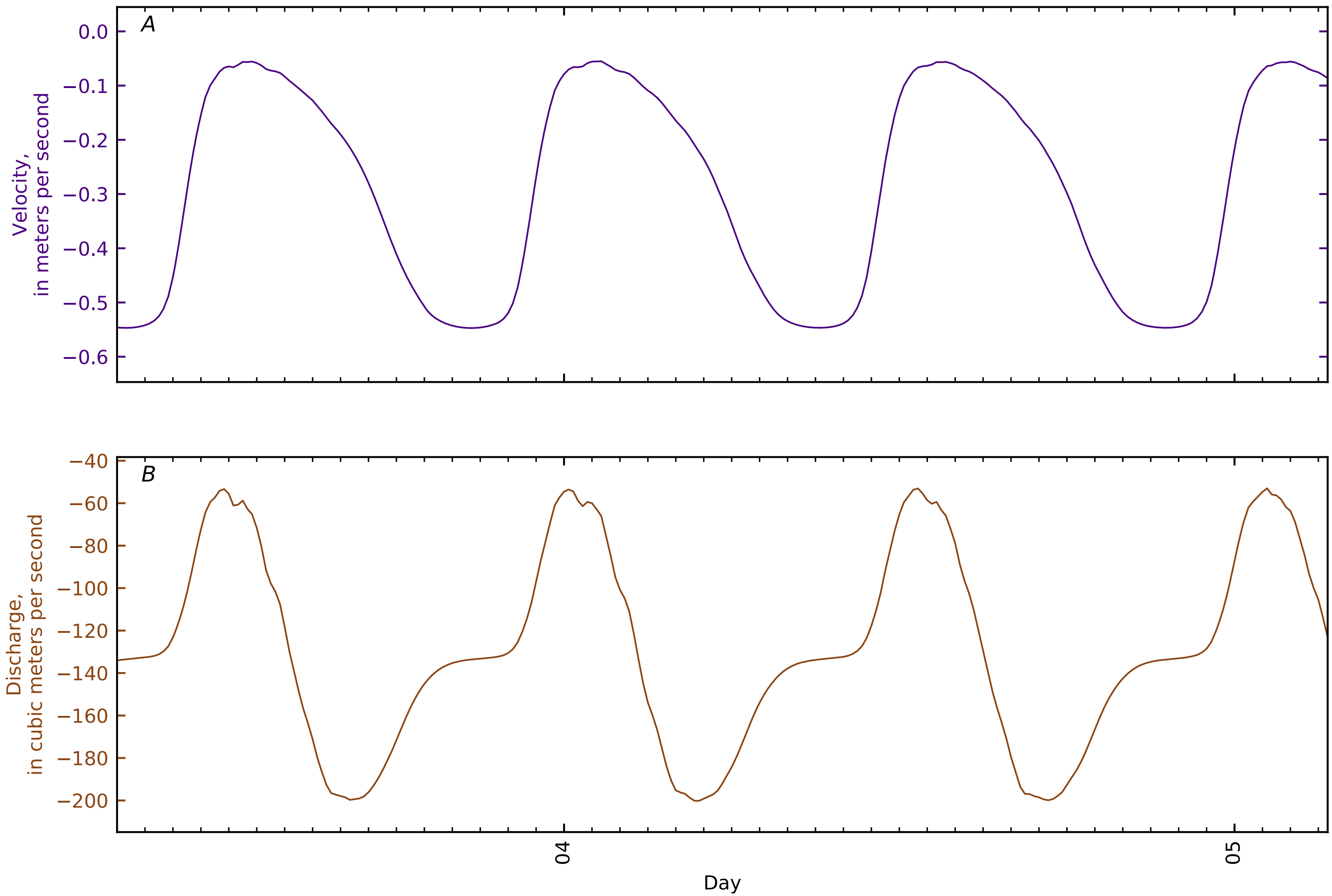

Figure B4-374. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 53, Orland Riv KM2. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

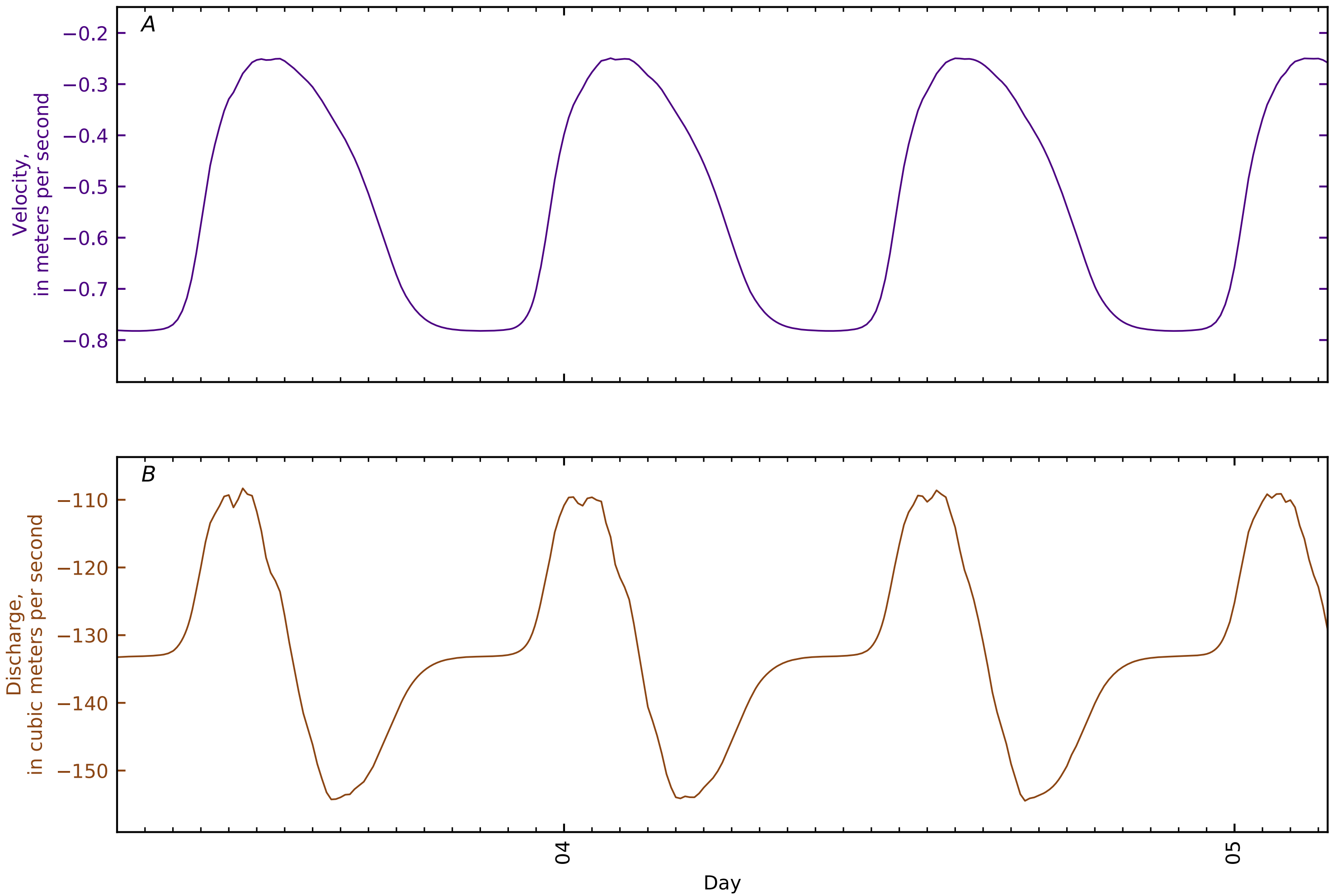

Figure B4-375. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 54, Orland Riv KM3. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

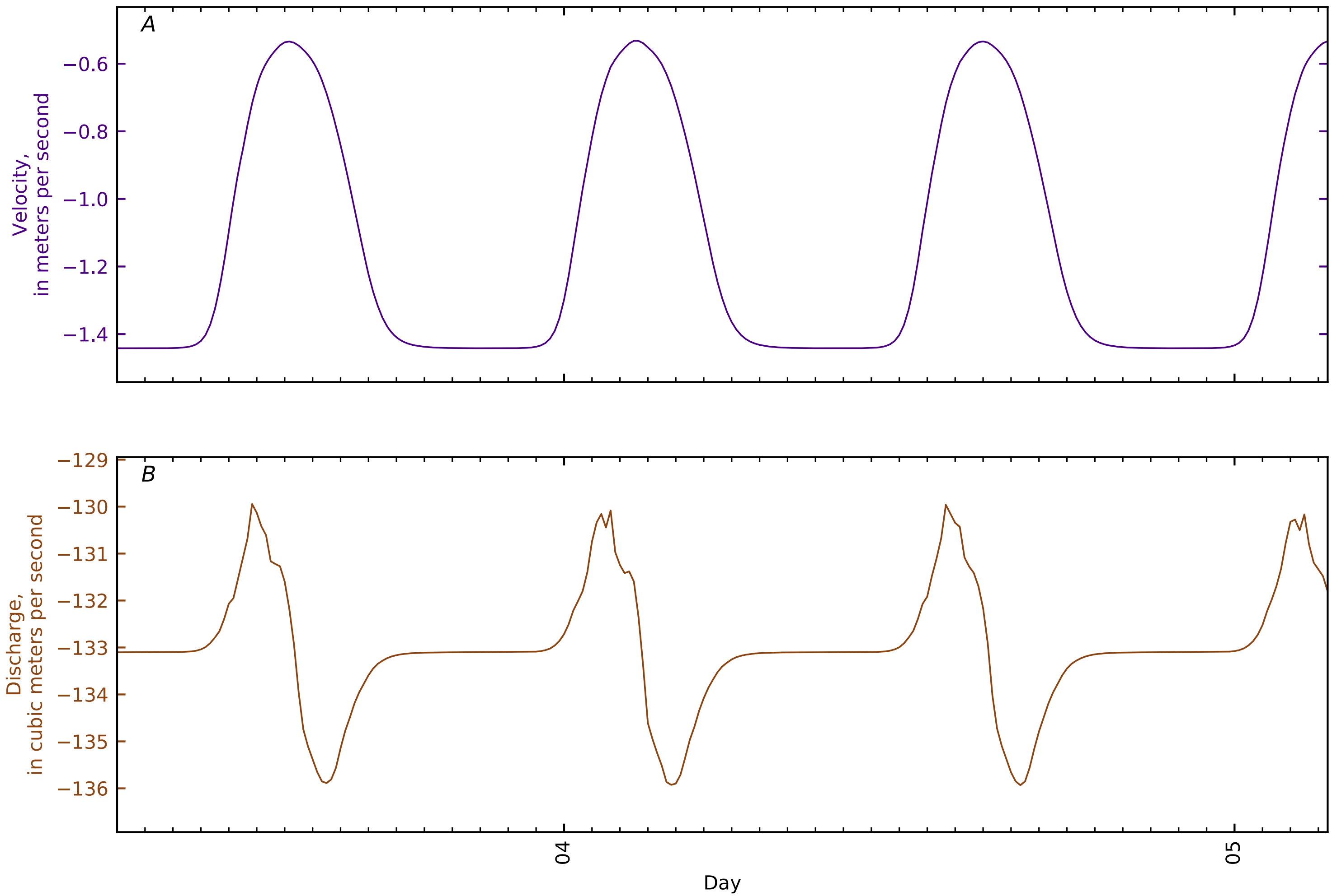

Figure B4-376. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 55, Orland Riv KM3.7 d/s Orland Dam. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

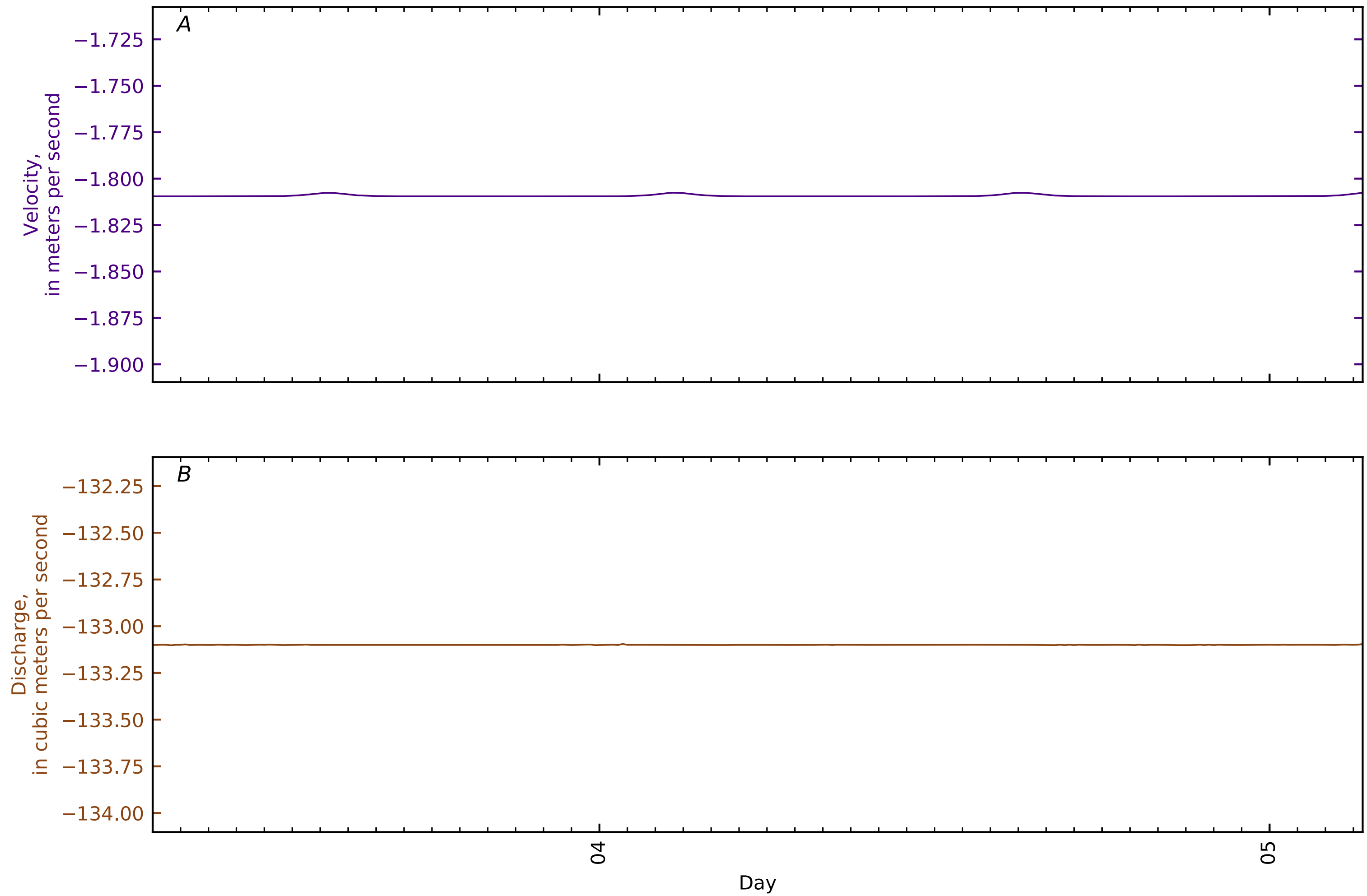

Figure B4-377. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 56, Orland Riv KM3.9 at Orland Dam. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

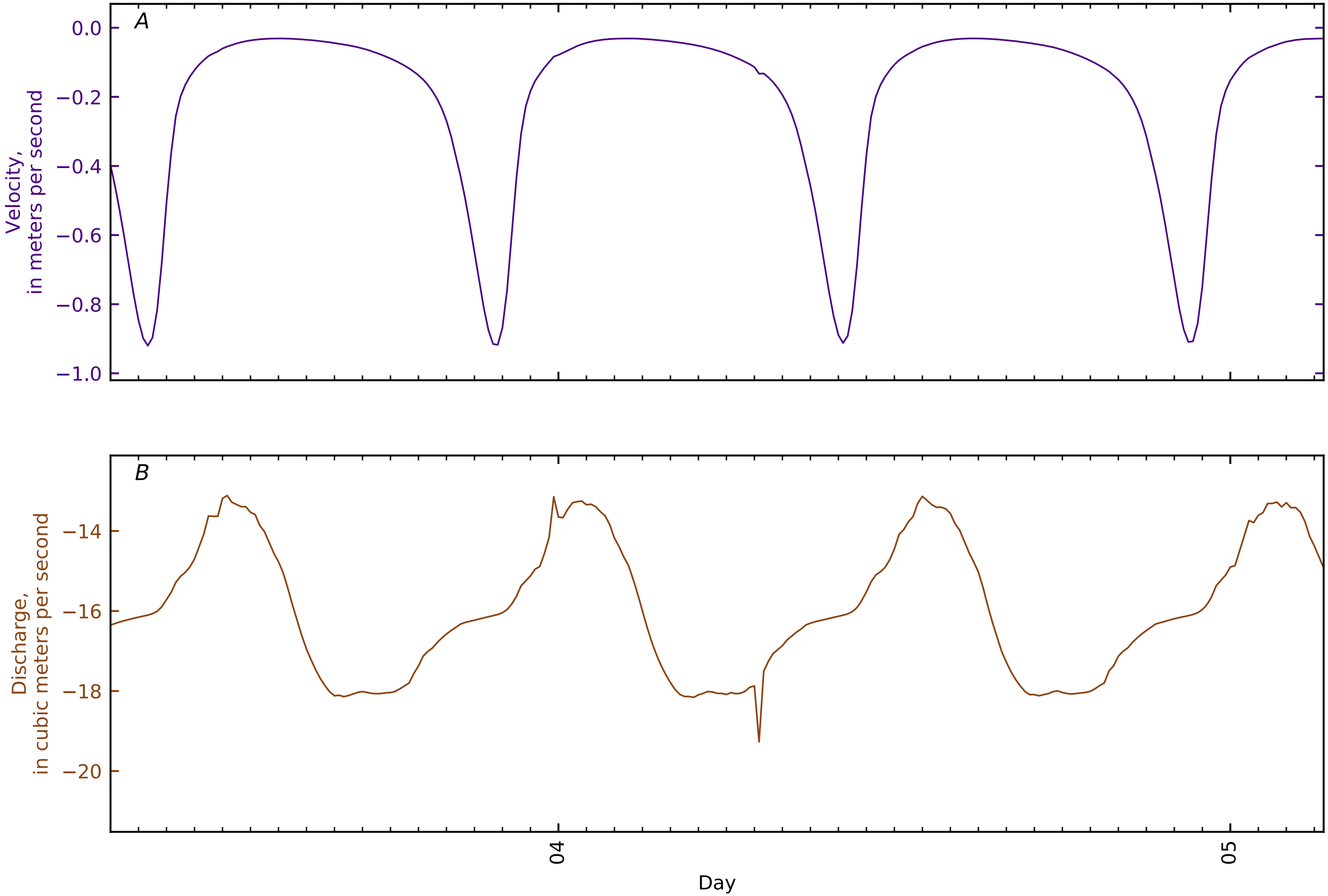

Figure B4-378. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 57, Kenduskeag Str conf Penob Riv KM43.3 Bangor. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

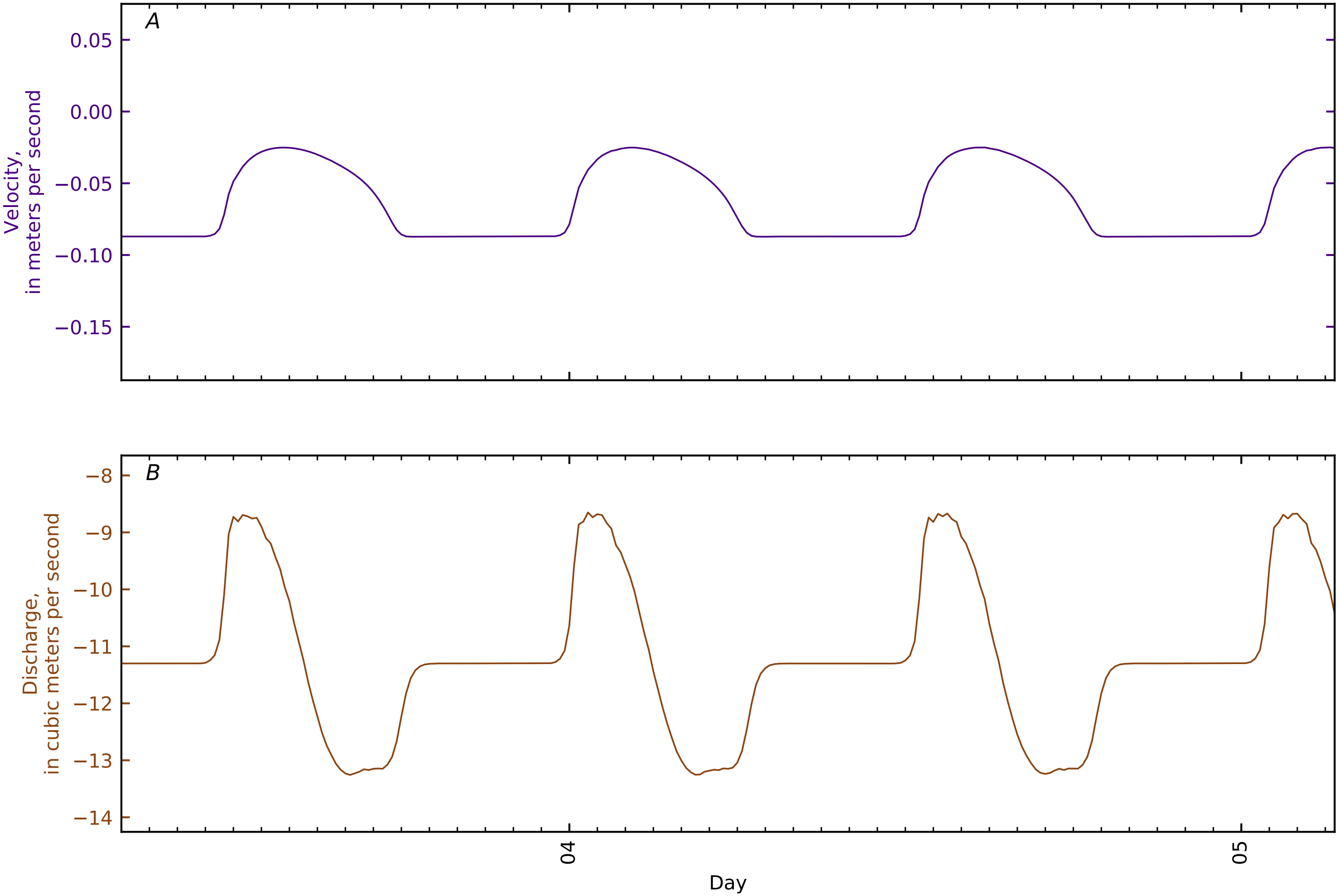

Figure B4-379. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 58, Souadabscook Str conf Penob Riv KM35.3 Hampden. Flow forced by a two-percent annual-exceedance-probability flood in the Orland River at the Orland Dam.

APPENDIX B5

Episodic Coastal Event: Atlantic Ocean

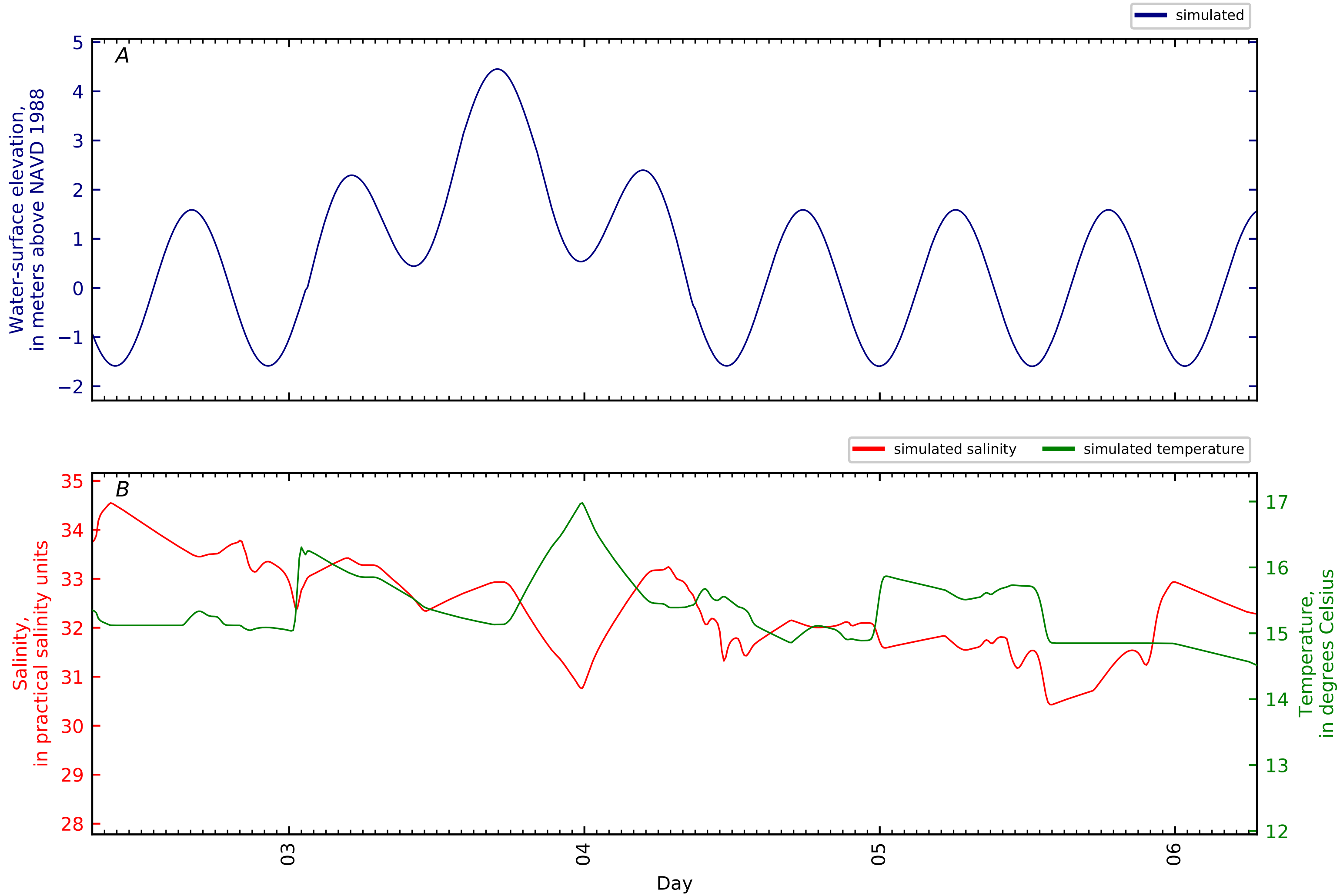

Figure B5-1. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 0, Penob Riv -KM5 nr Cape Jellison boundary. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

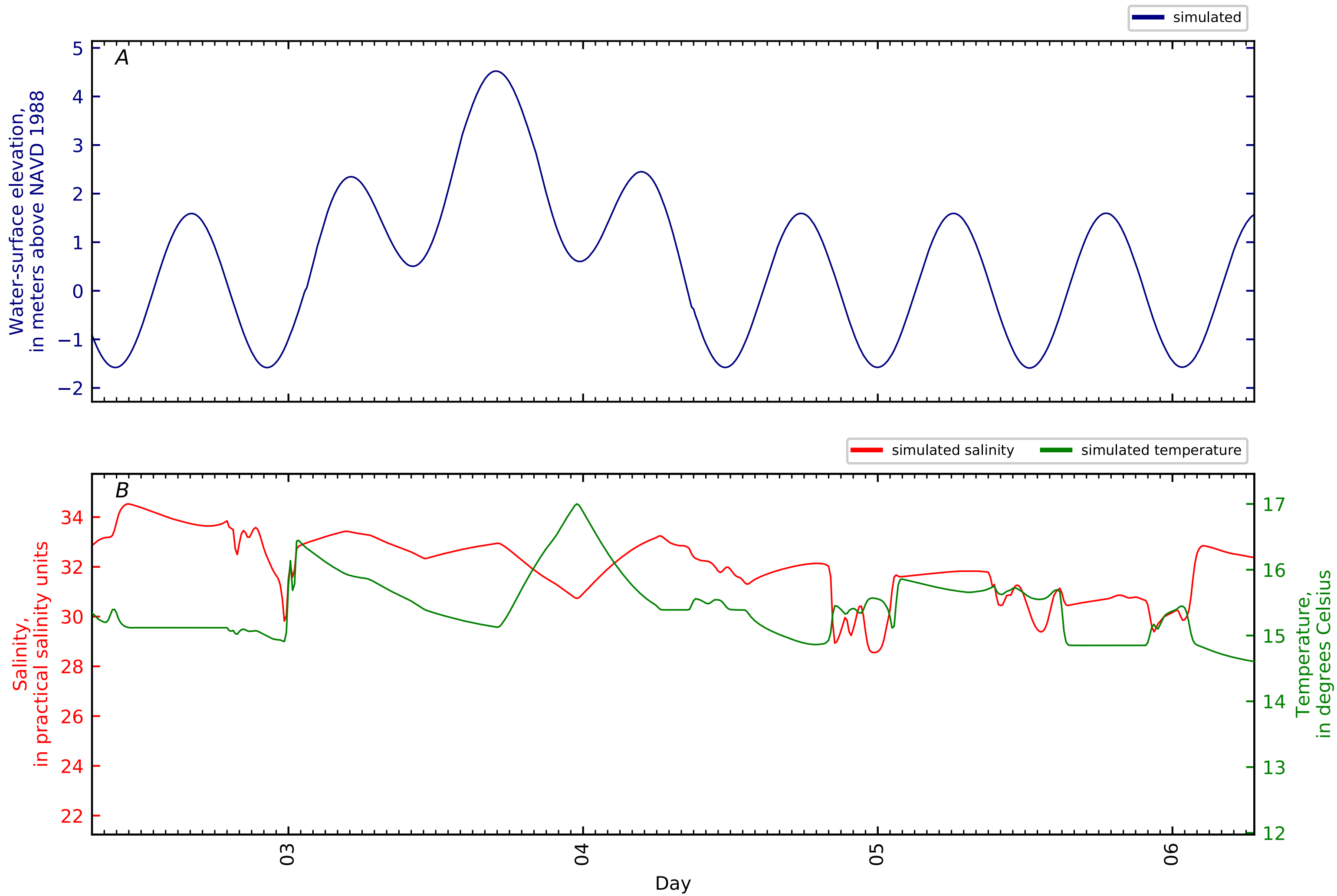

Figure B5-2. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 1, Penob Riv -KM4 nr Cape Jellison XS. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

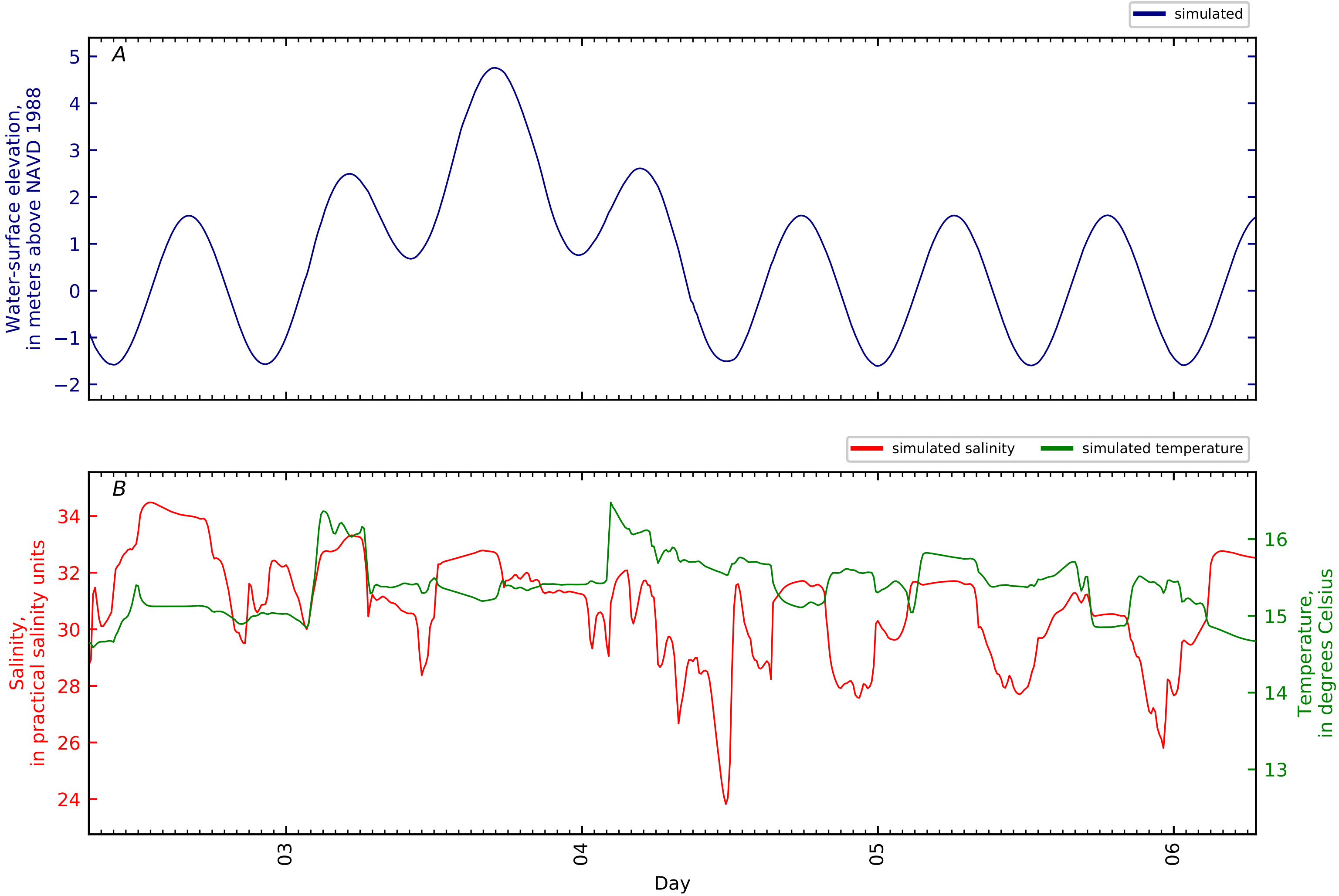

Figure B5-3. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 2, Penob Riv -KM1.5 d/s Ft Point. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

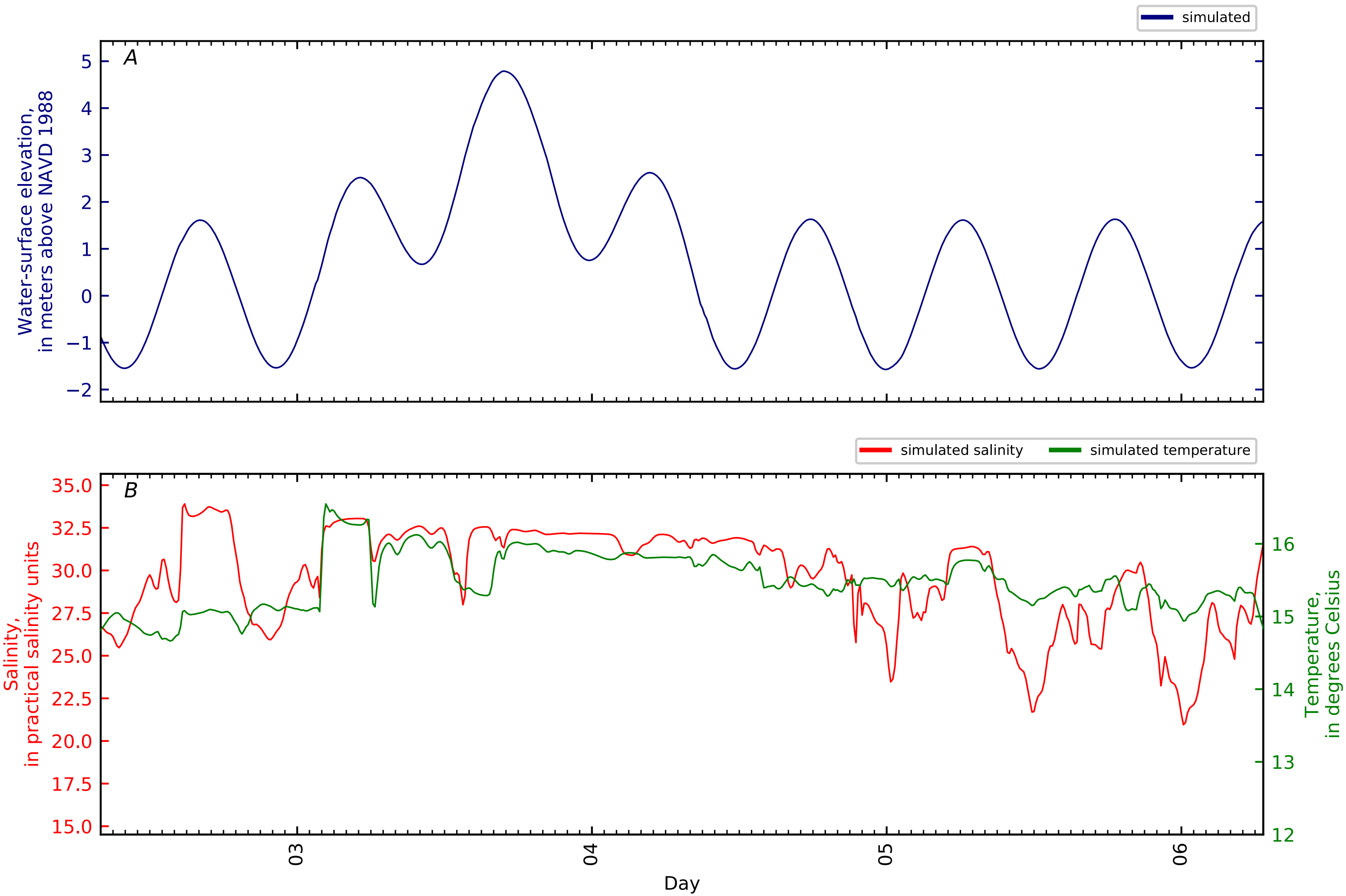

Figure B5-4. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 3, Penob Riv KM0 Ft Point. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

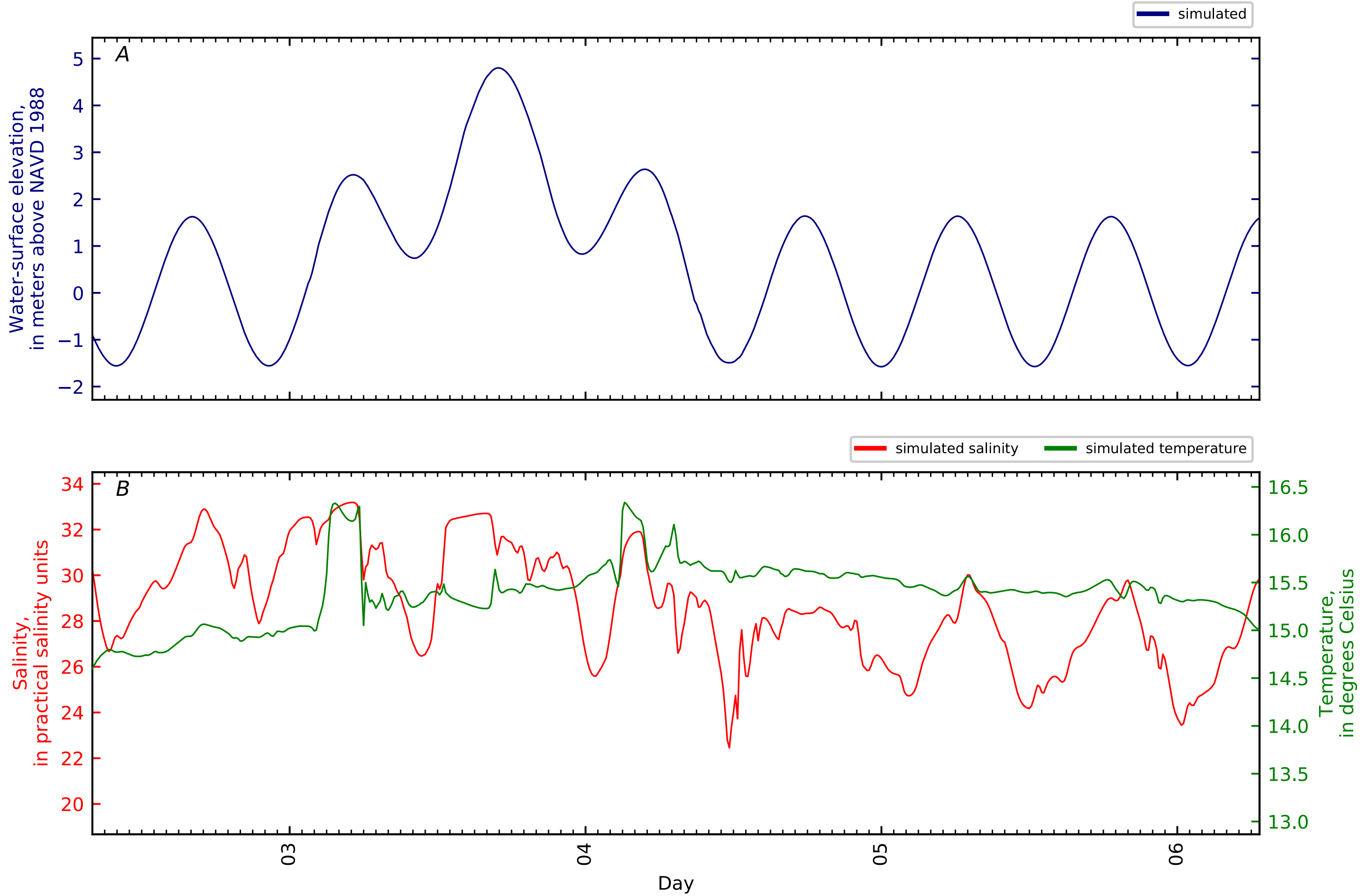

Figure B5-5. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 4, Penob Riv KM0 GS CTD5-01. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

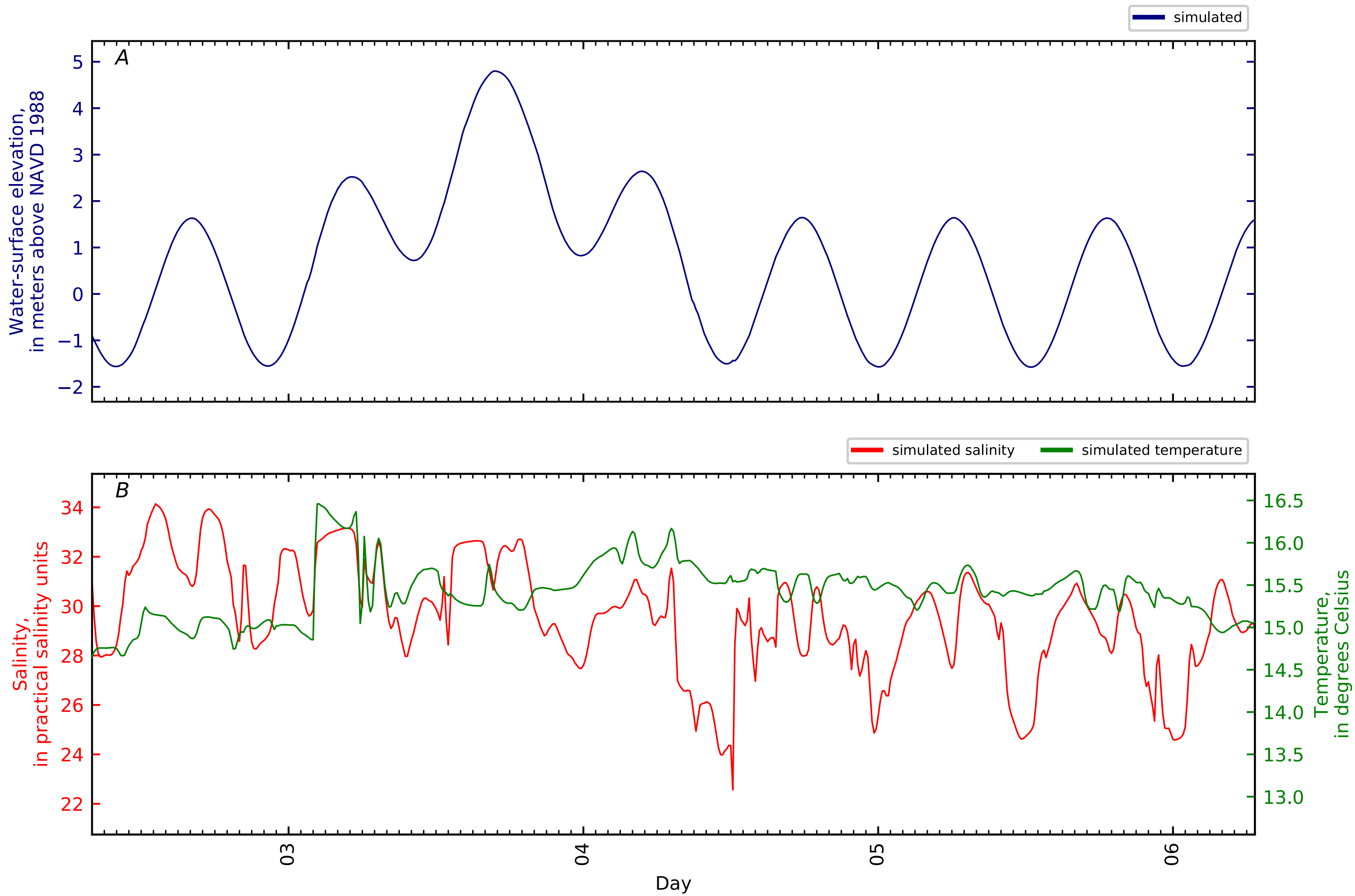

Figure B5-6. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 5, Penob Riv KM0 GS CTD5-02. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

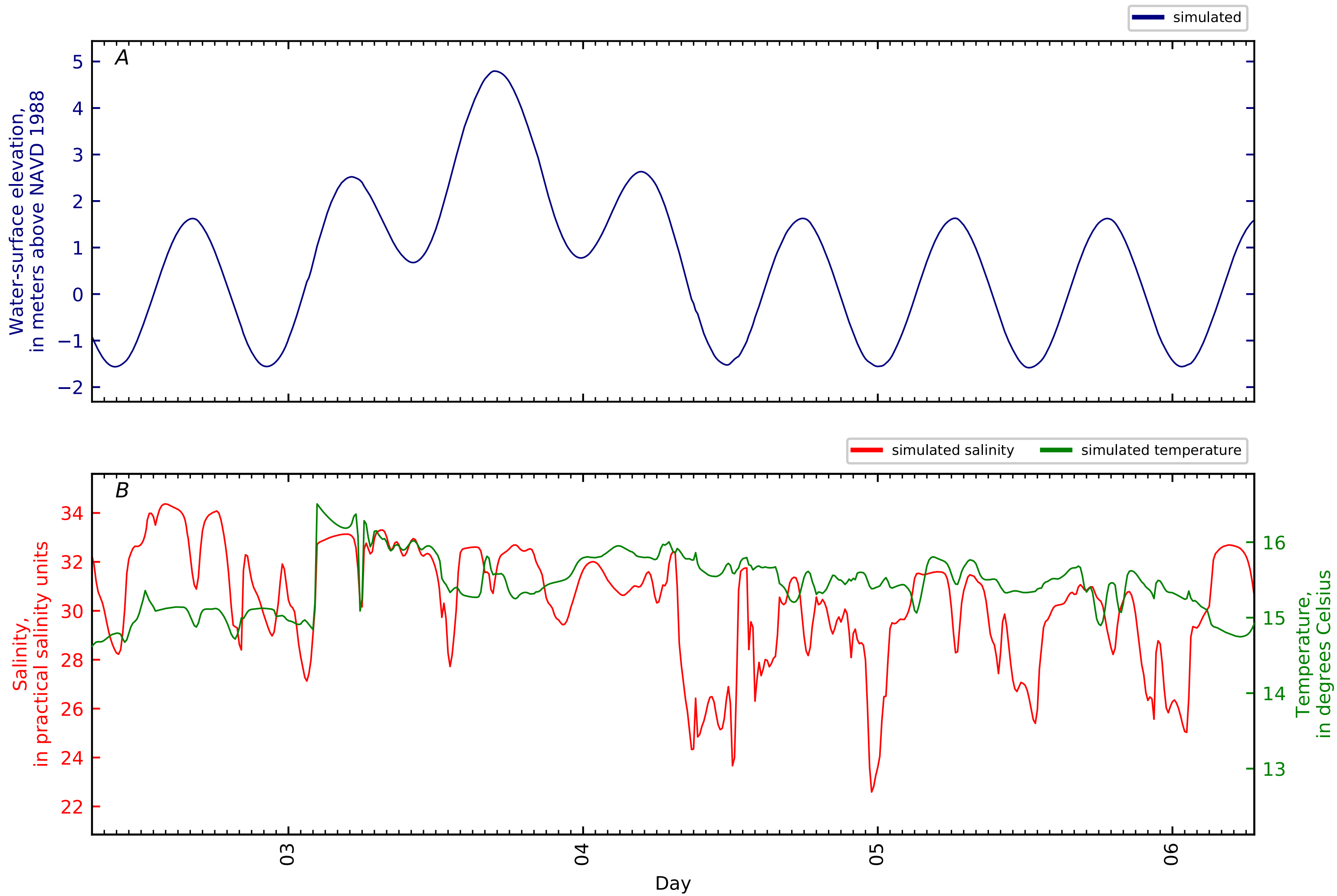

Figure B5-7. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 6, Penob Riv KM0 GS CTD5-03. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

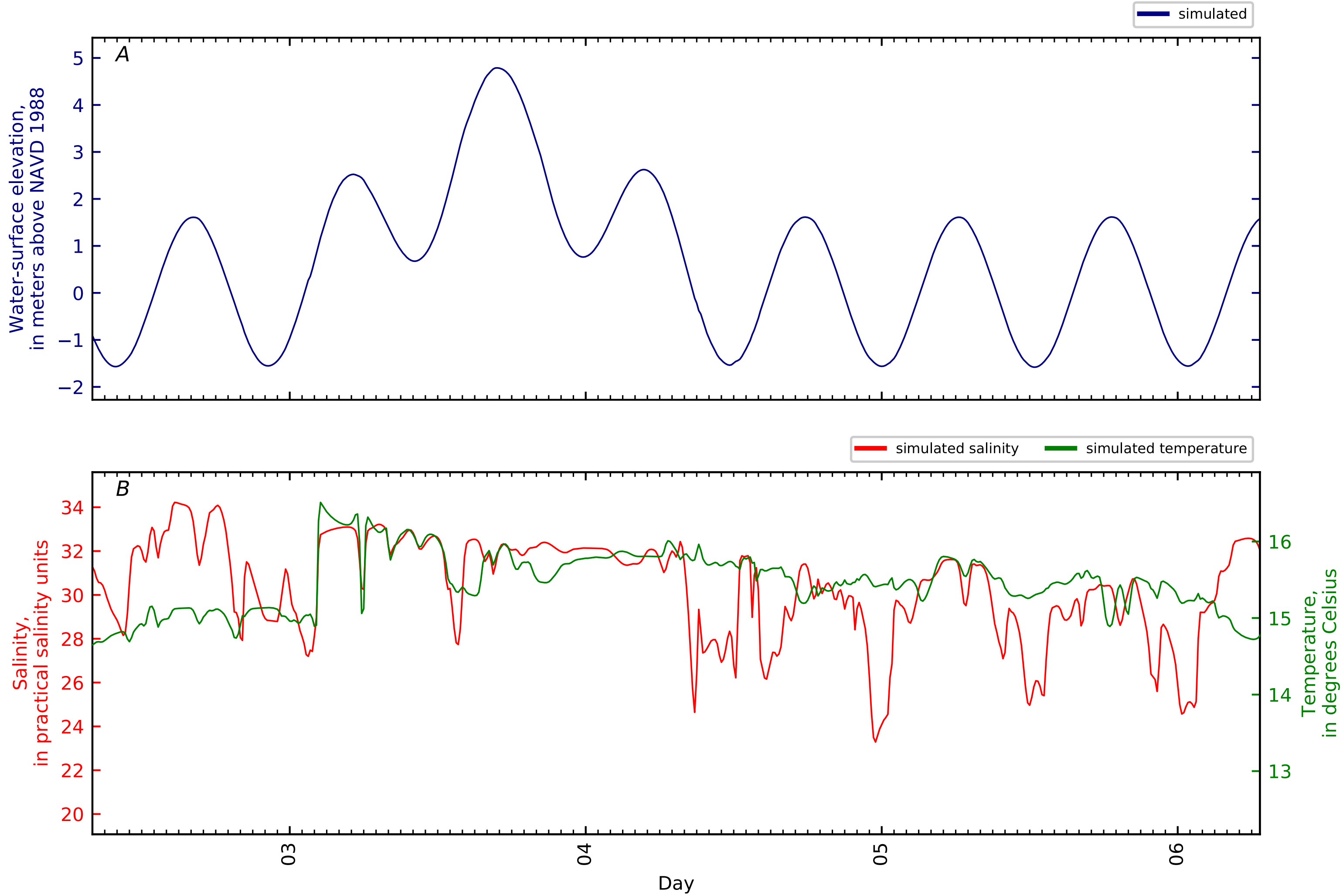

Figure B5-8. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 7, Penob Riv KM0 GS CTD5-04. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

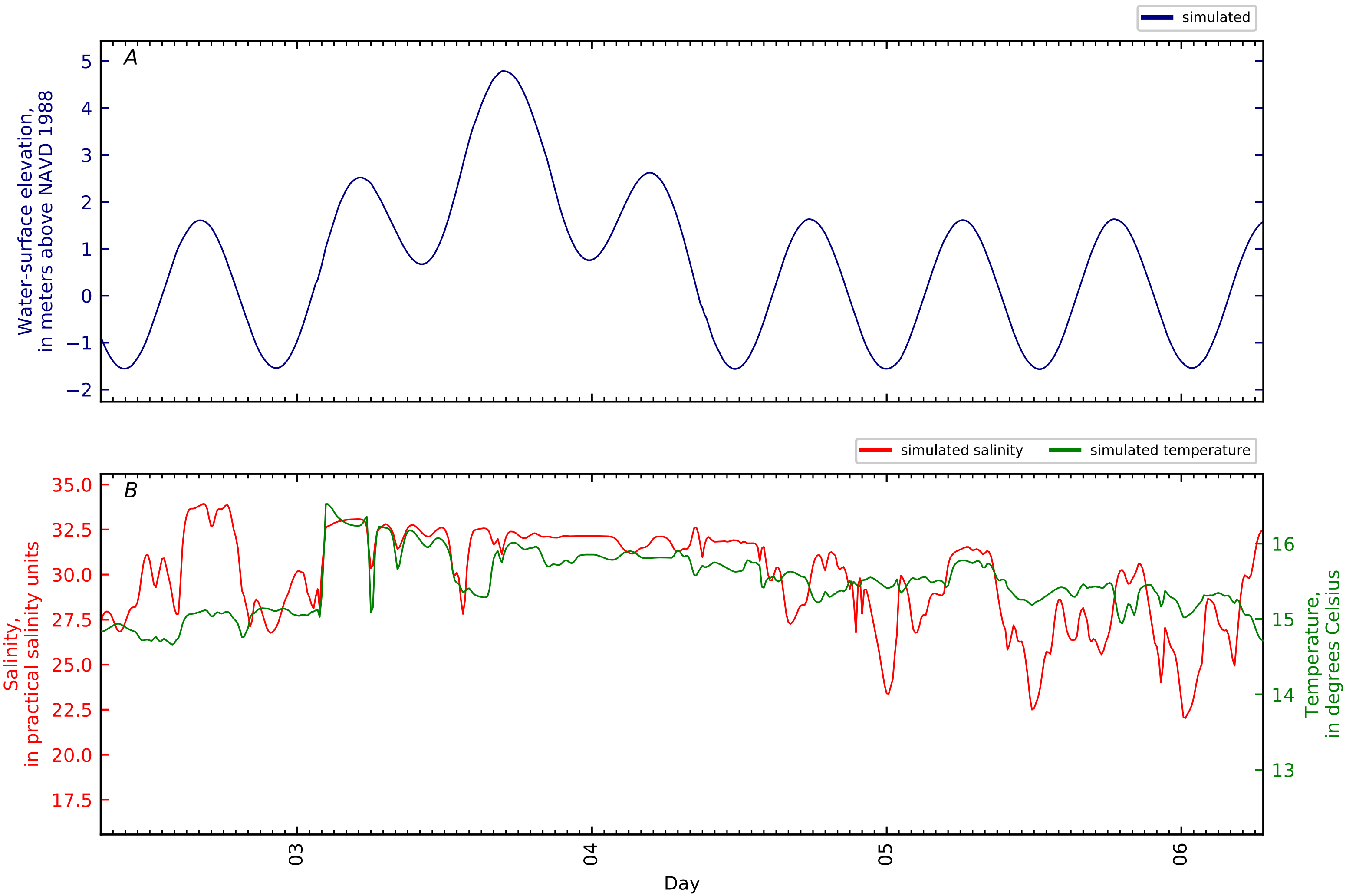

Figure B5-9. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 8, Penob Riv KM0 GS CTD5-05. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

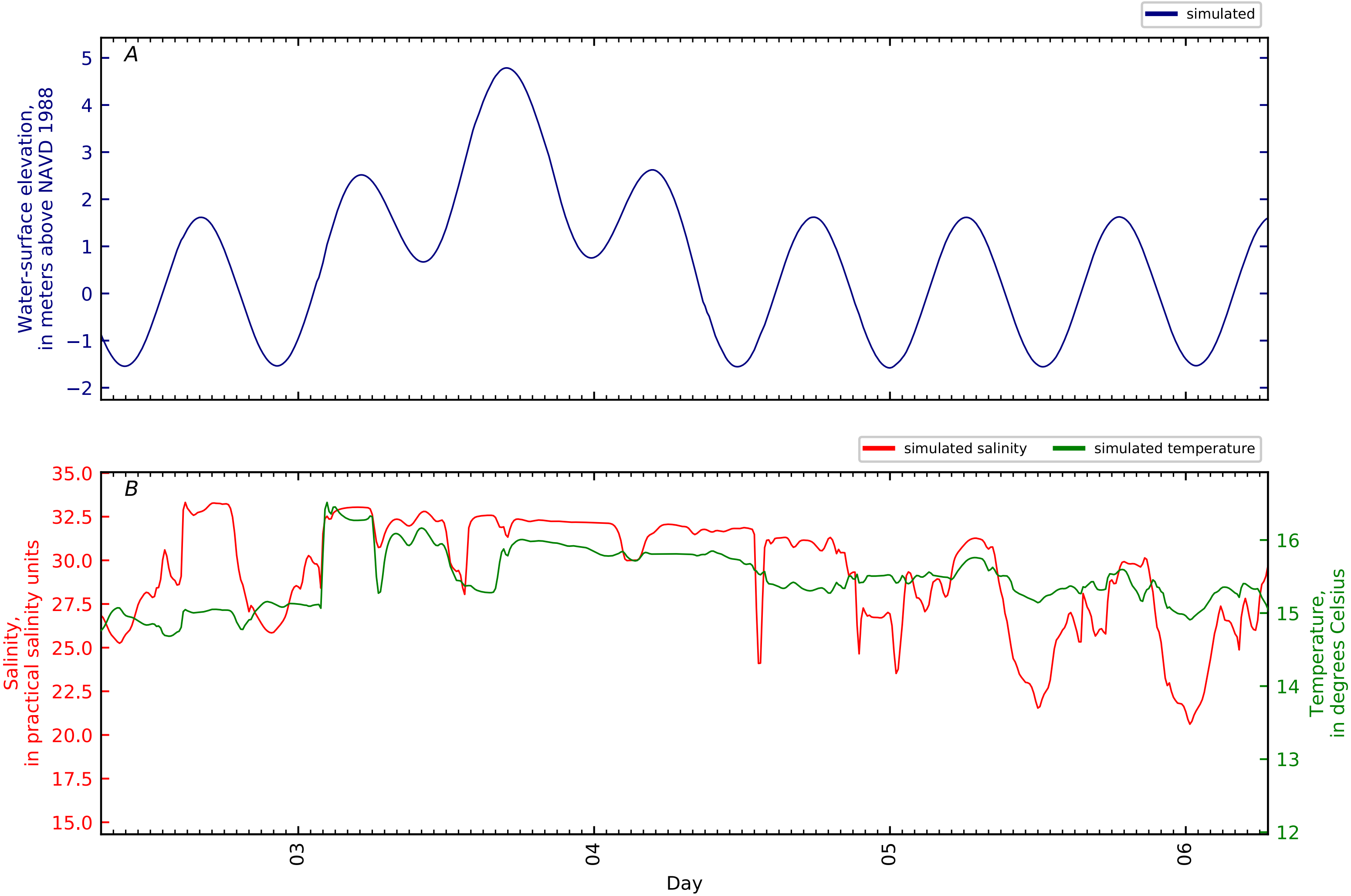

Figure B5-10. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 9, Penob Riv KM0 GS CTD5-06. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

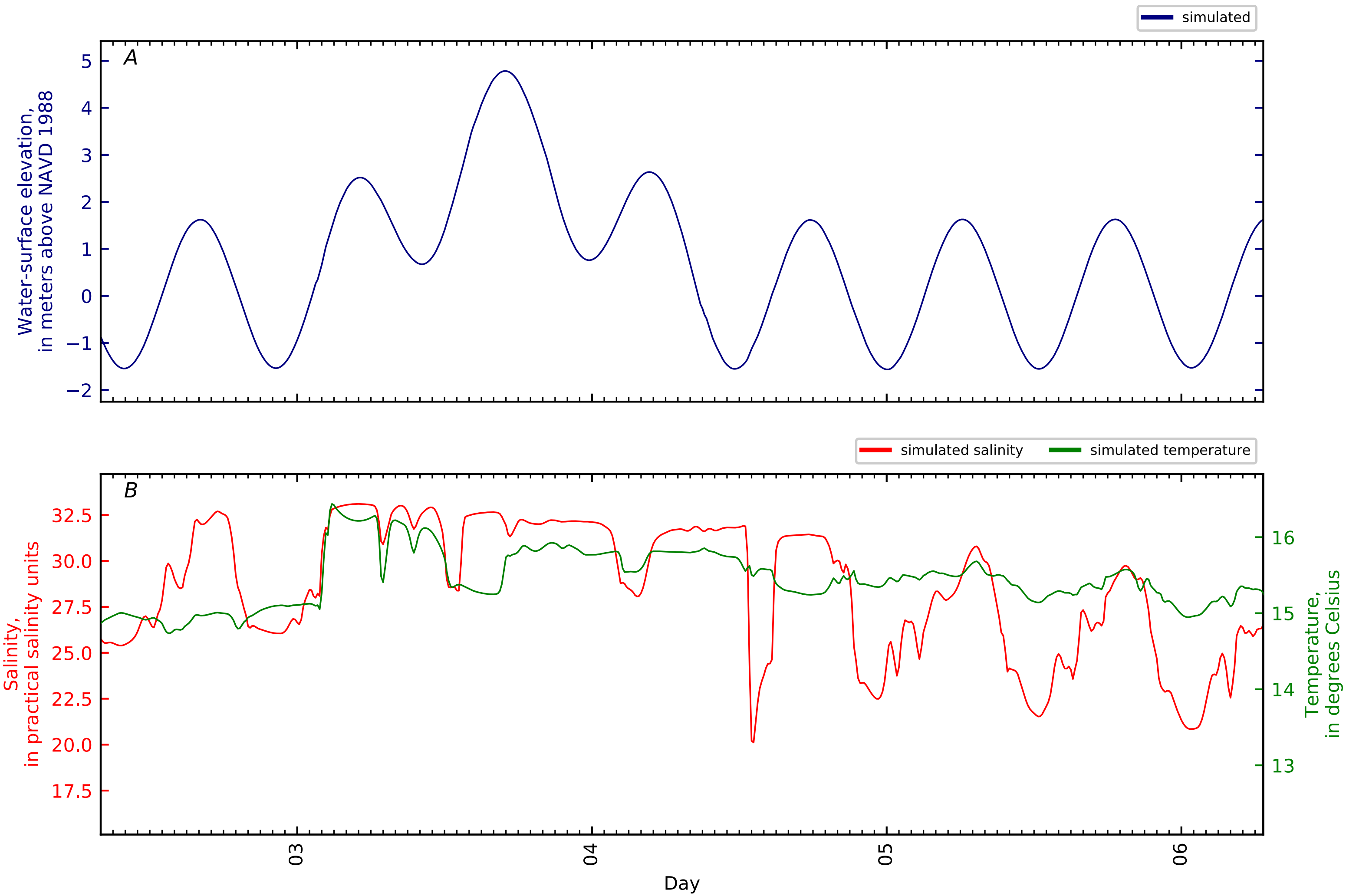

Figure B5-11. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 10, Penob Riv KM0 GS CTD5-07. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

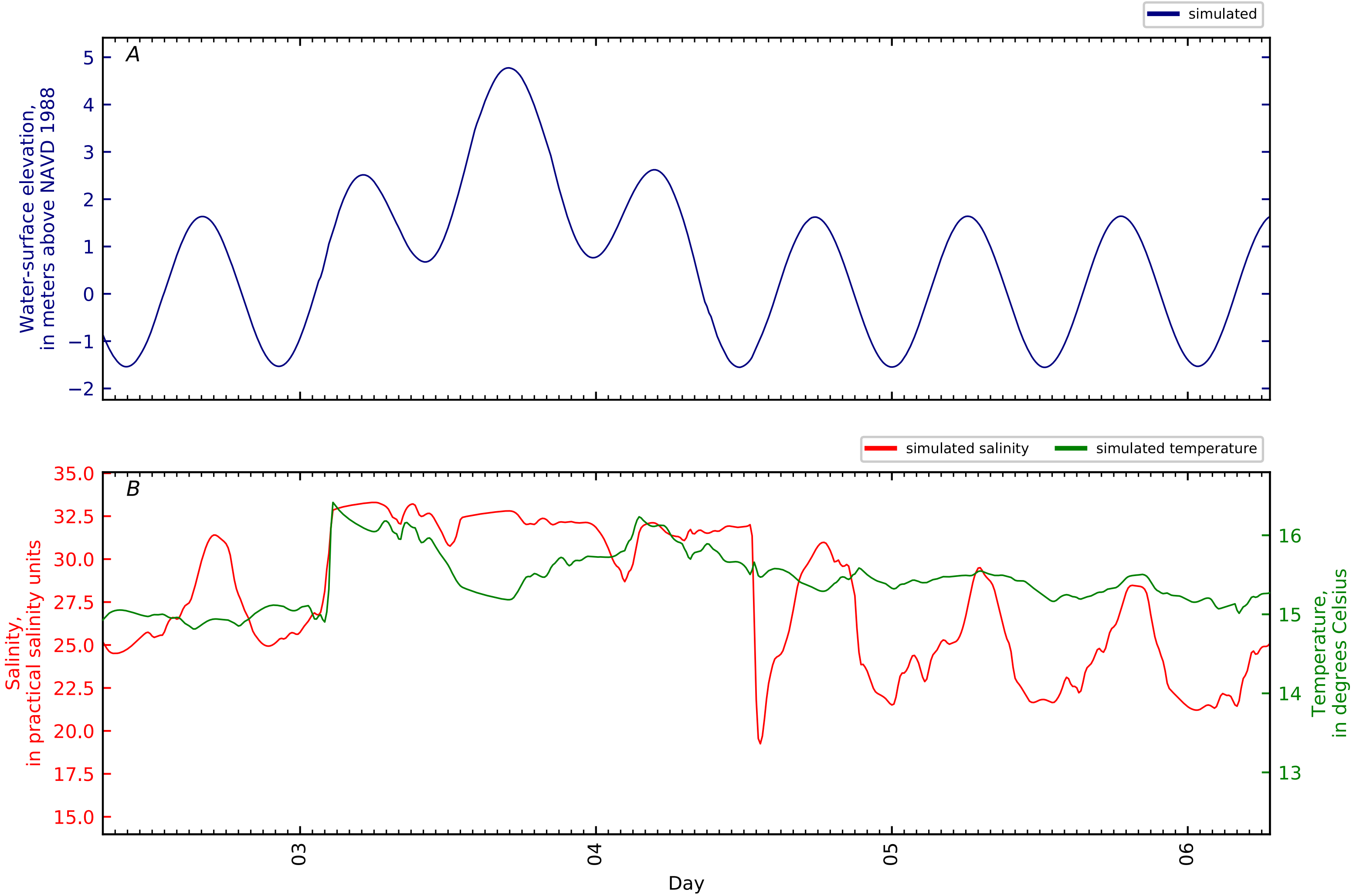

Figure B5-12. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 11, Penob Riv KM0 GS CTD5-08. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

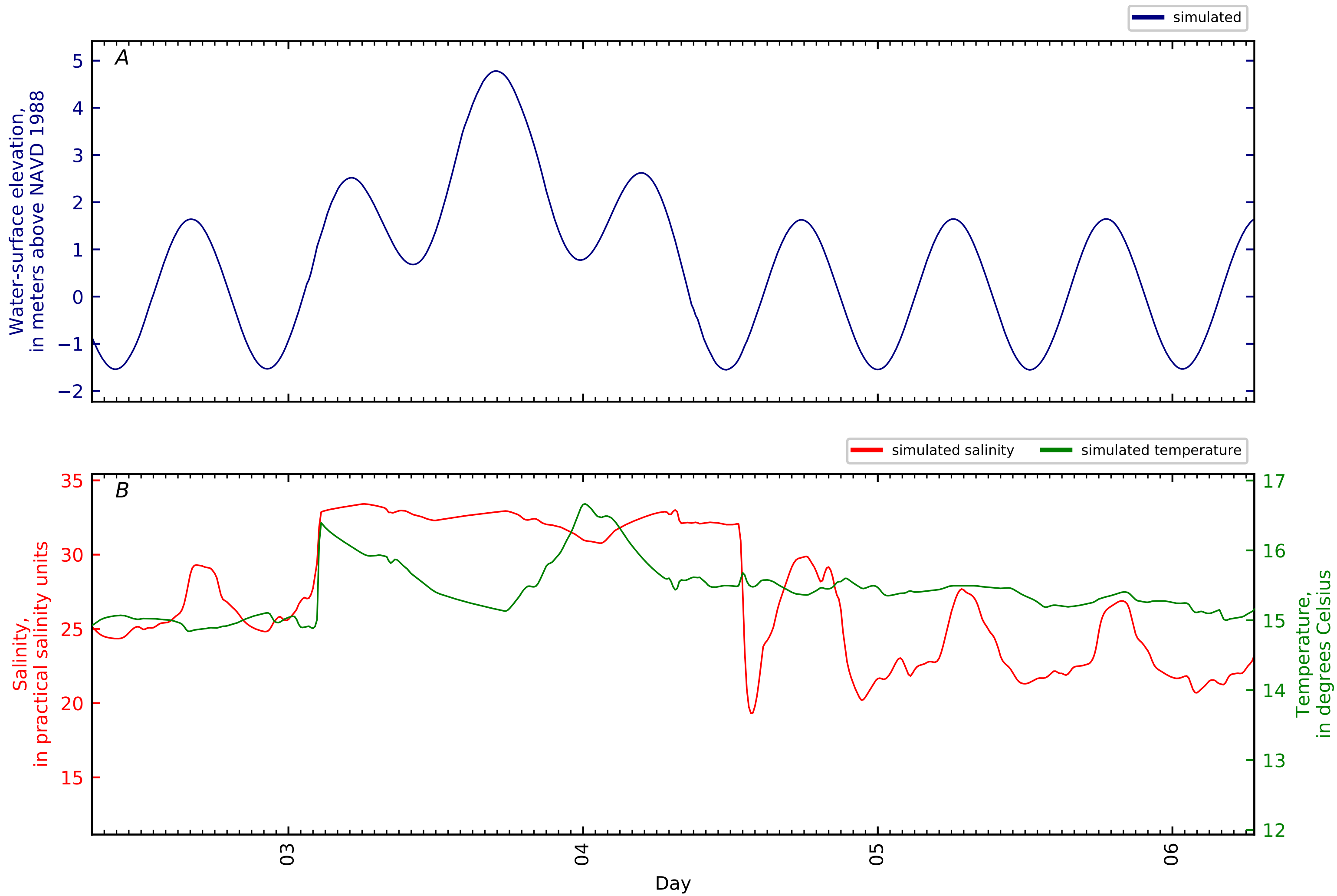

Figure B5-13. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 12, Penob Riv KM0 GS CTD5-09. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

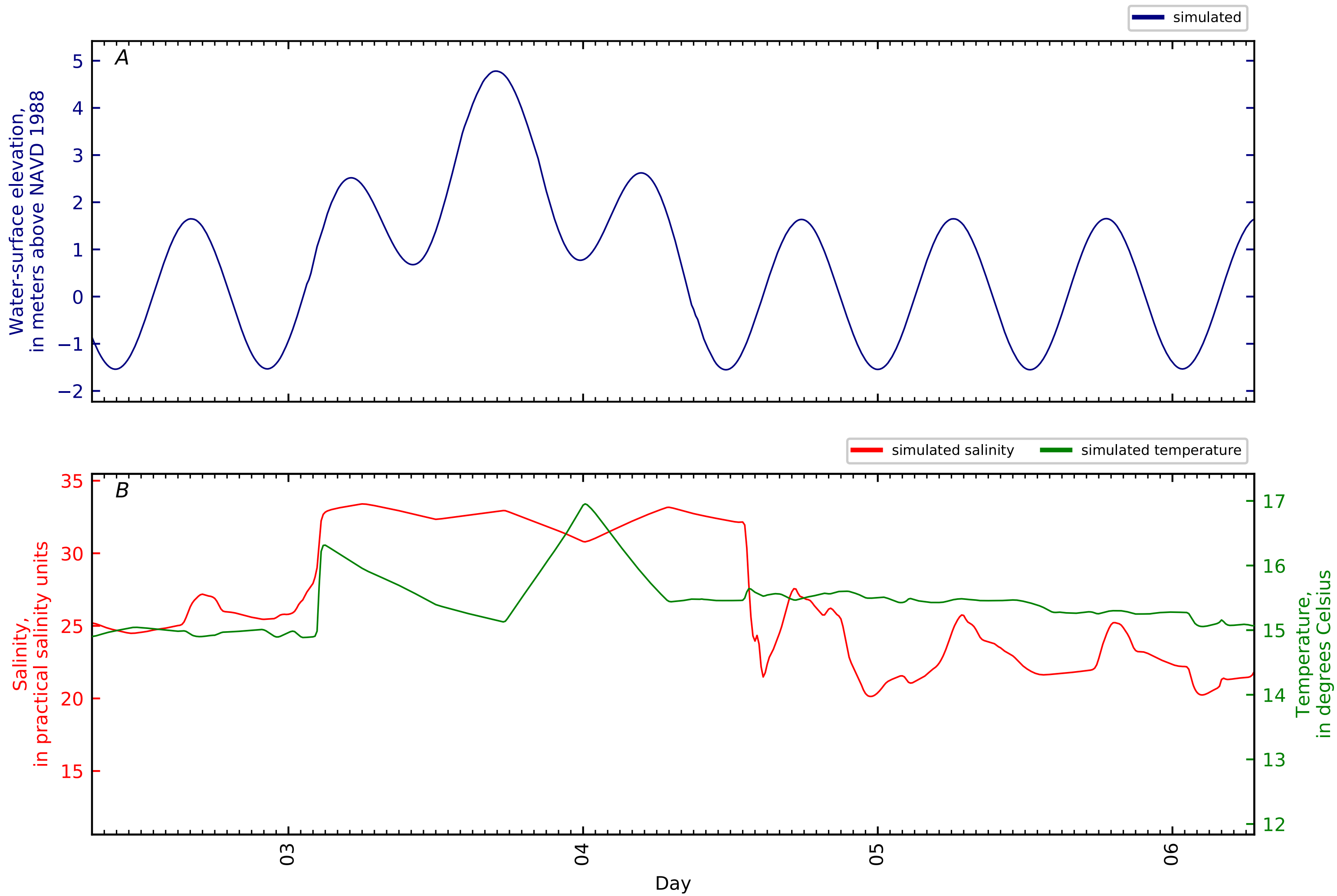

Figure B5-14. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 13, Penob Riv KM0 GS CTD5-10. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

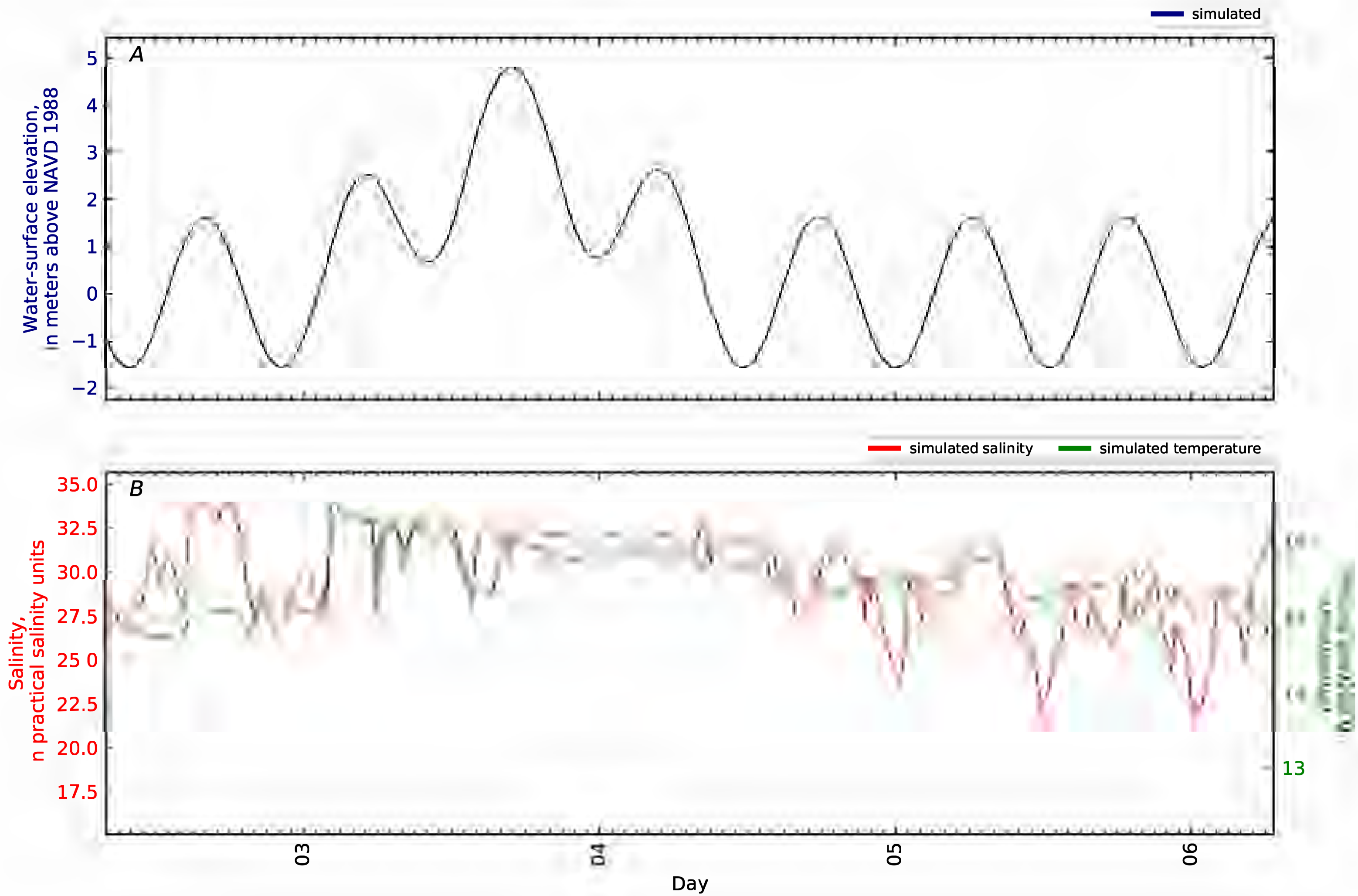

Figure B5-15. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 14, Penob Riv KM0.04 WHOI Ft Point 2010. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

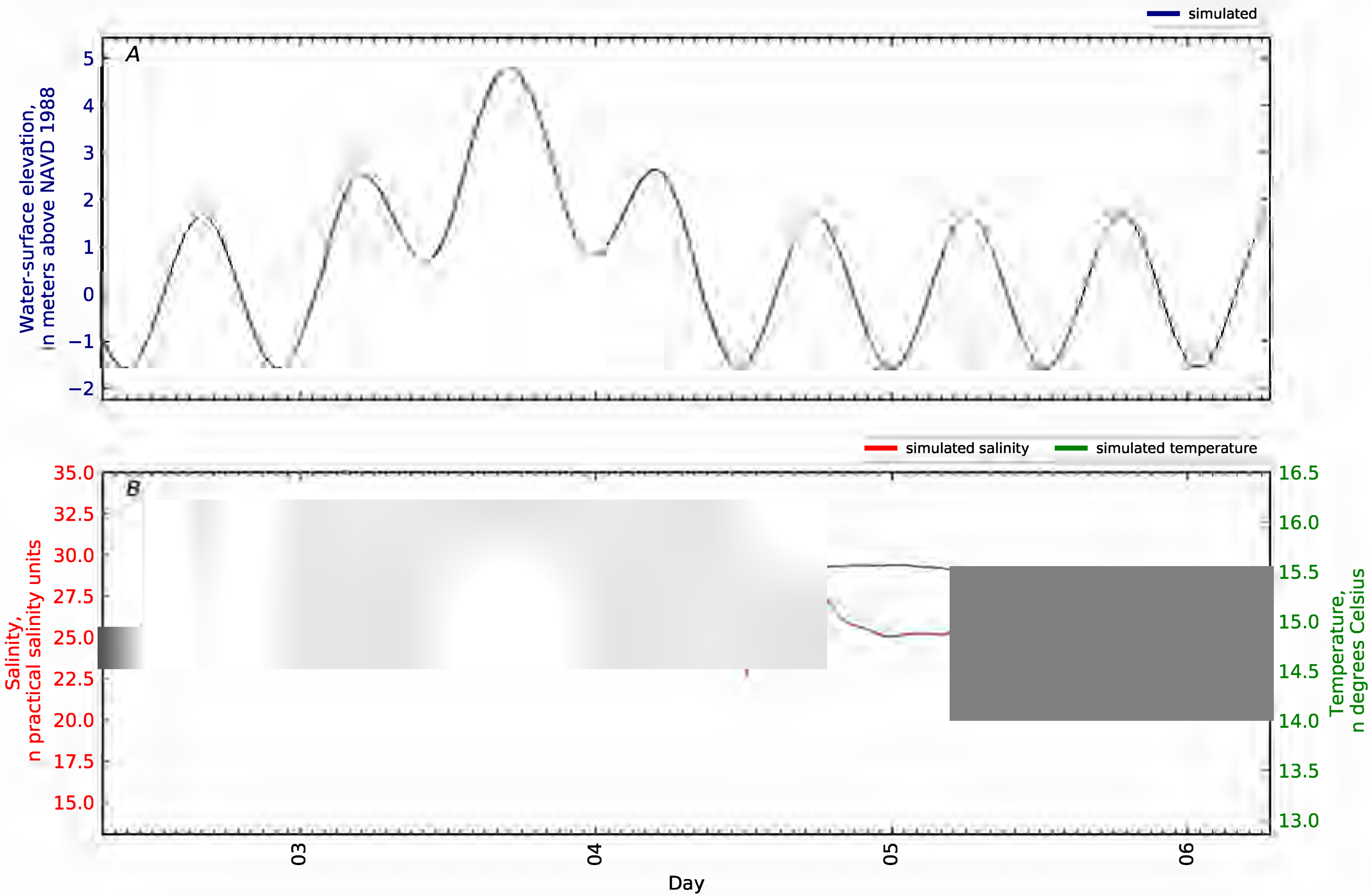

Figure B5-16. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 15, Penob Riv KM0.1 GS 442810068480101. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

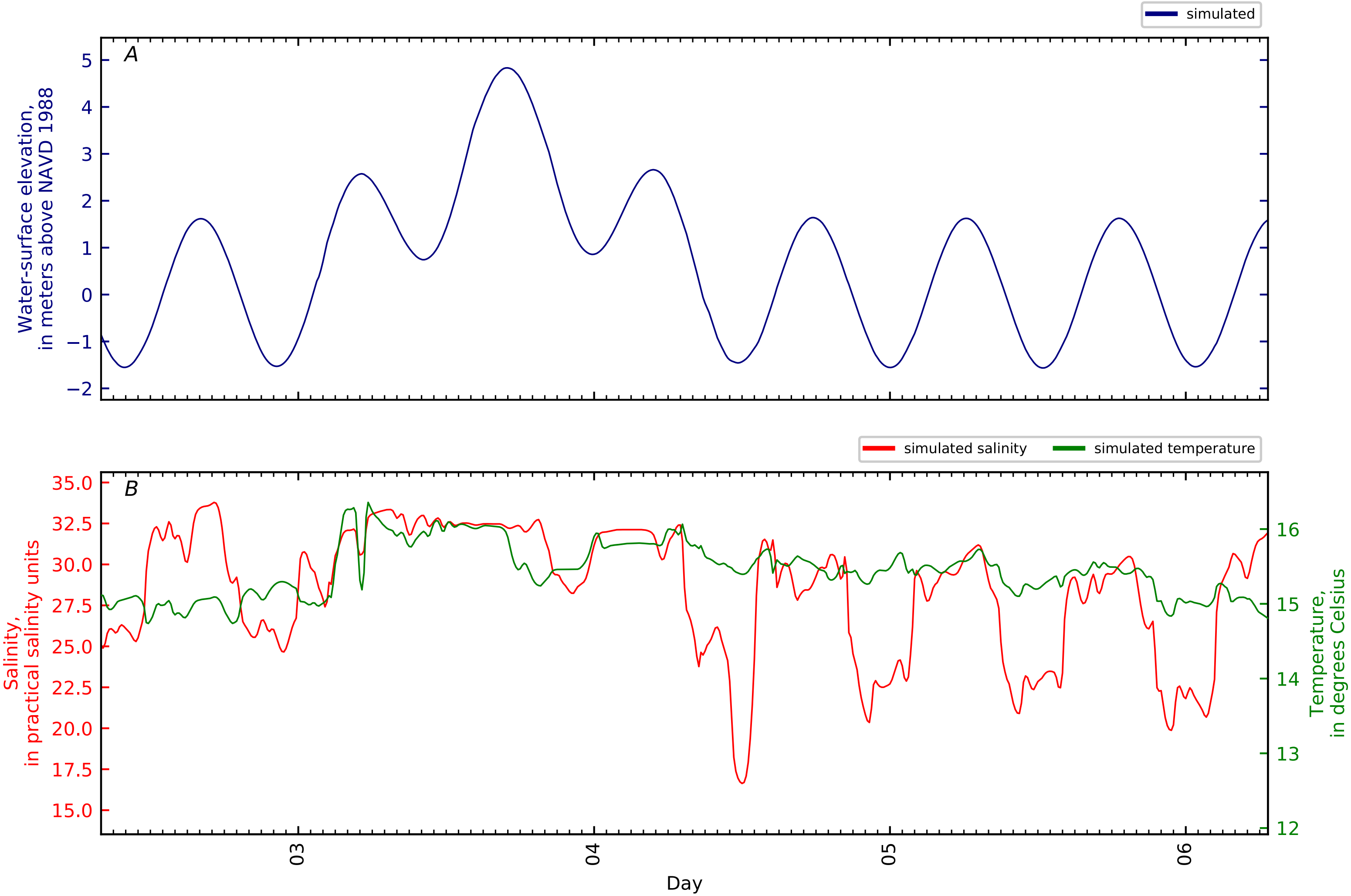

Figure B5-17. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 16, Penob Riv KM1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

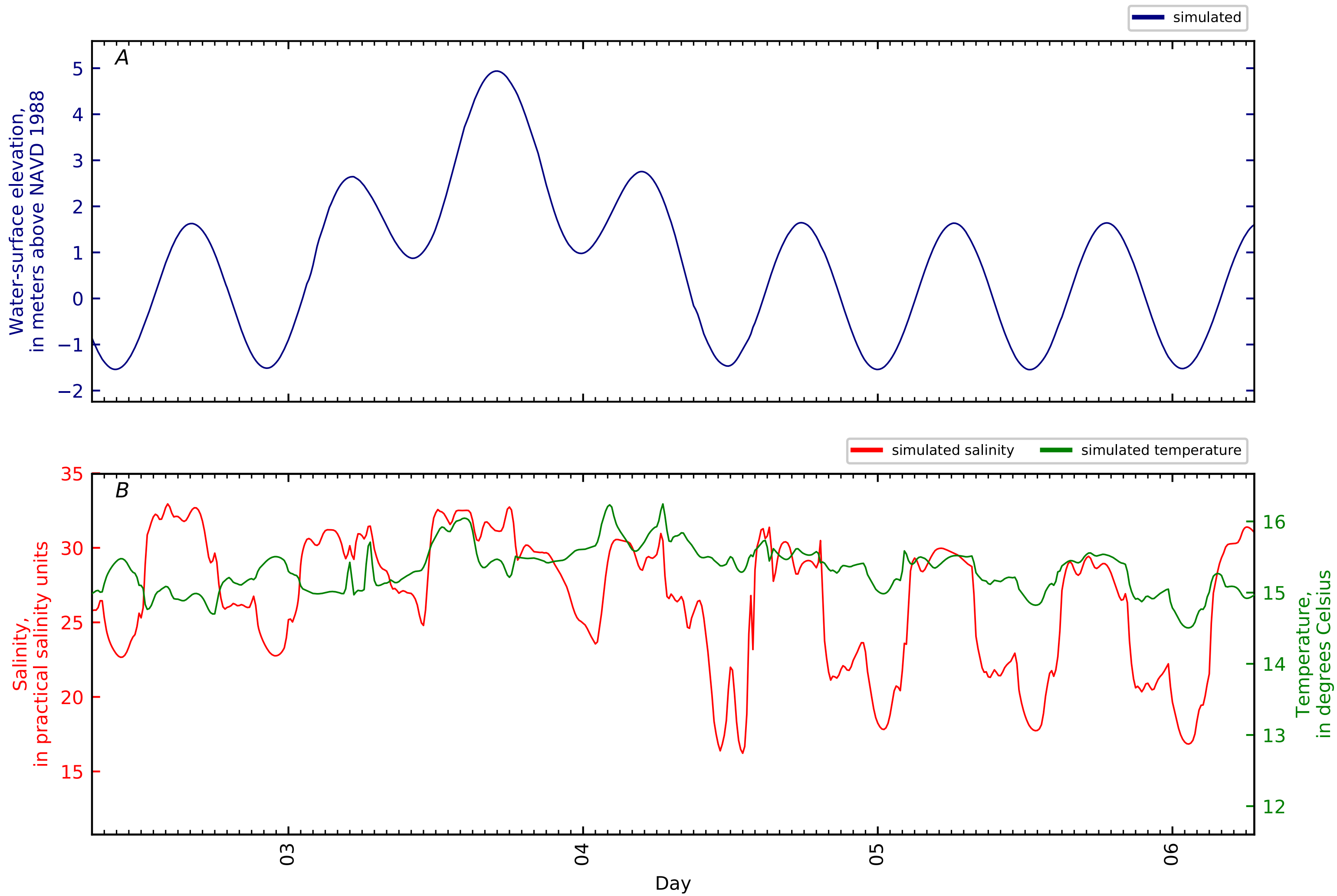

Figure B5-18. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 17, Penob Riv KM2. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

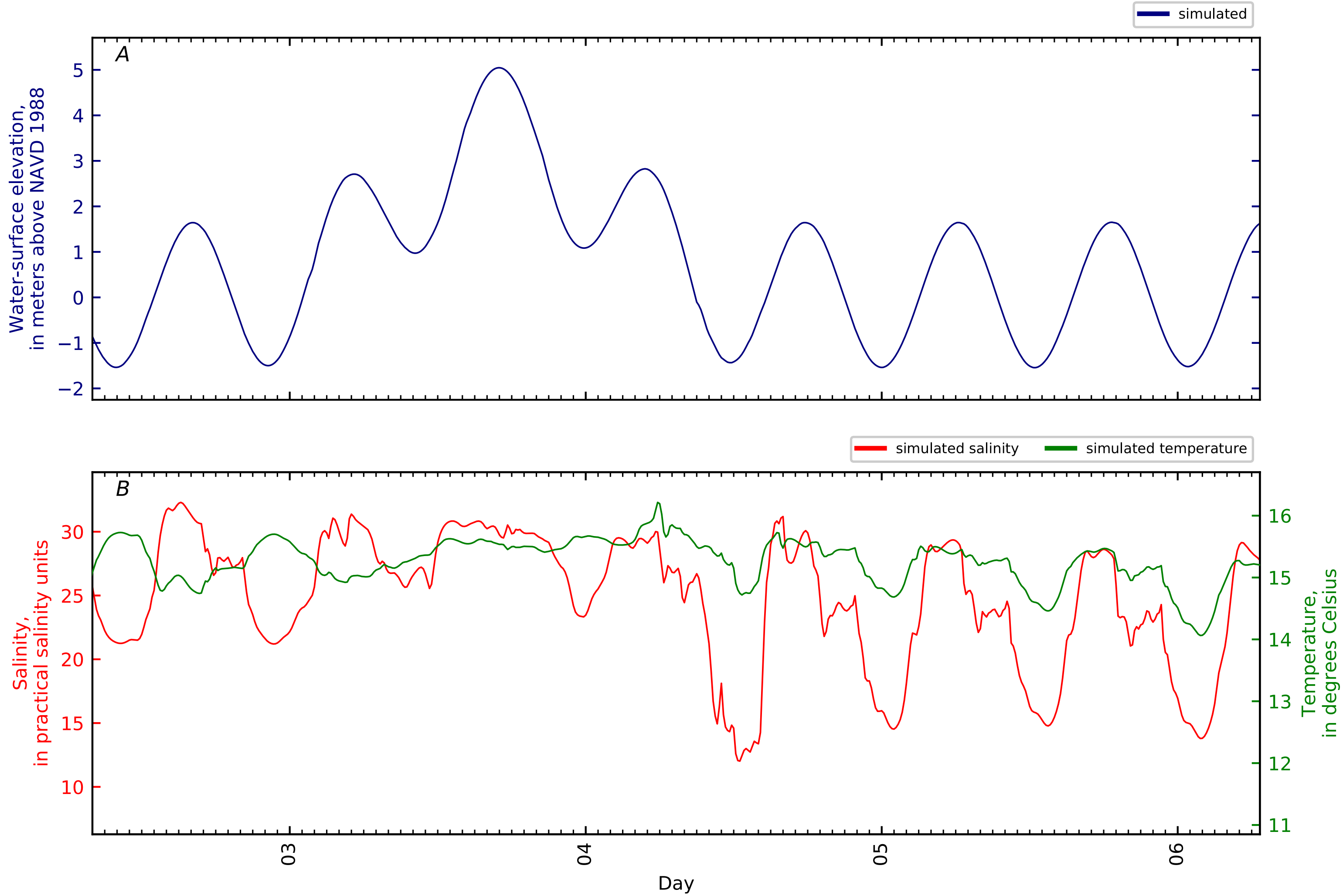

Figure B5-19. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 18, Penob Riv KM3. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

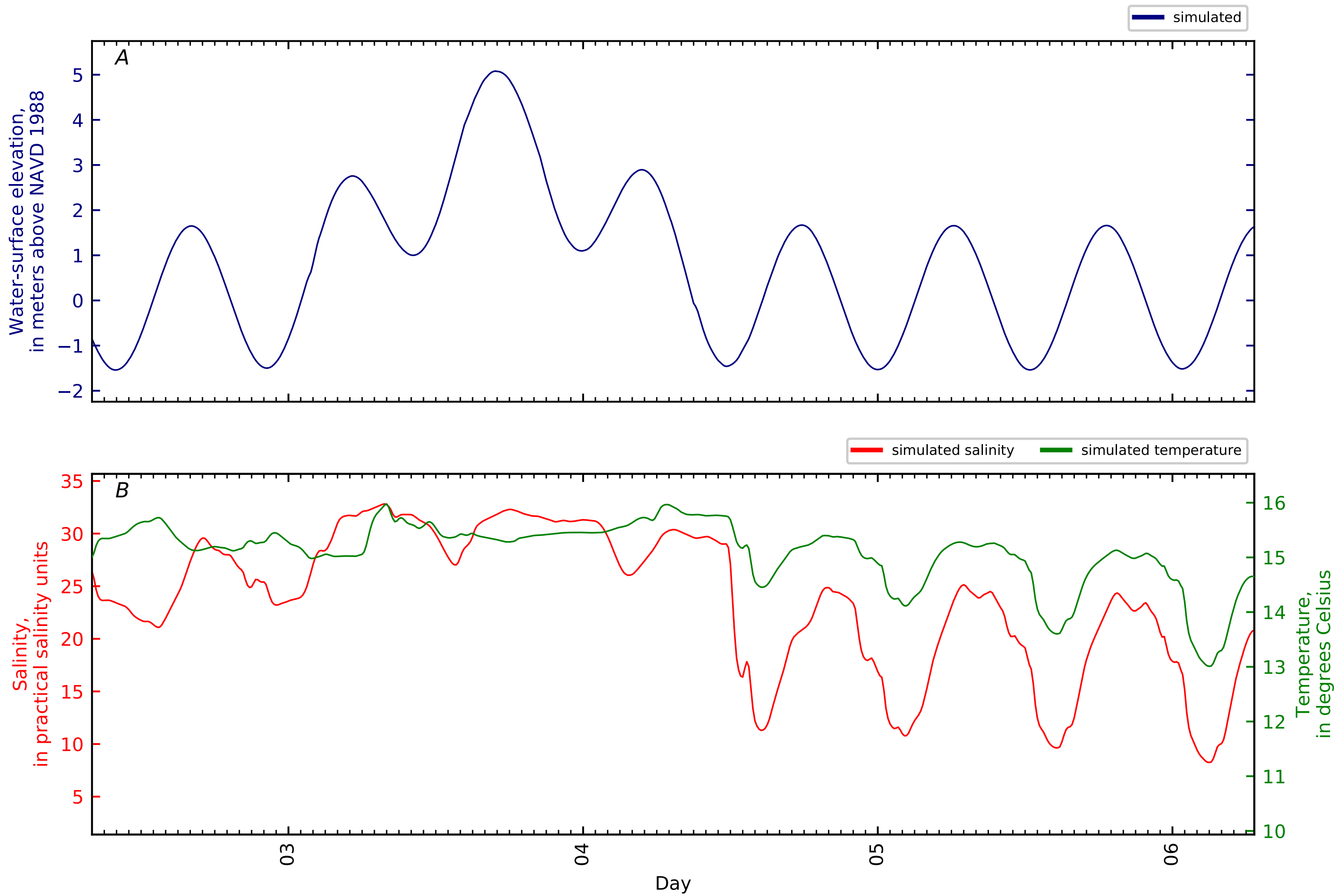

Figure B5-20. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 19, Penob Riv KM3.8 GS CTD3-01. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

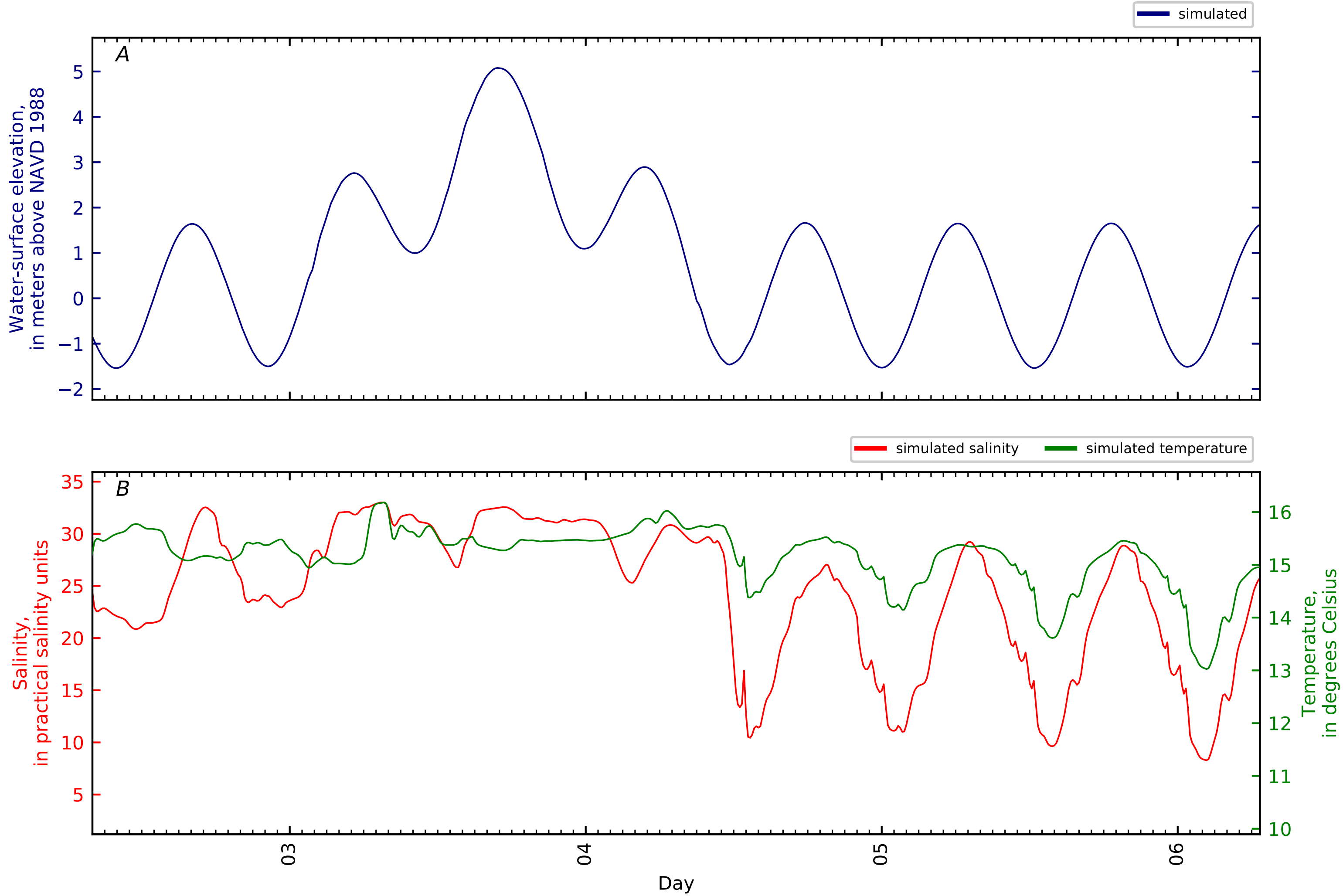

Figure B5-21. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 20, Penob Riv KM3.8 GS CTD3-02. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

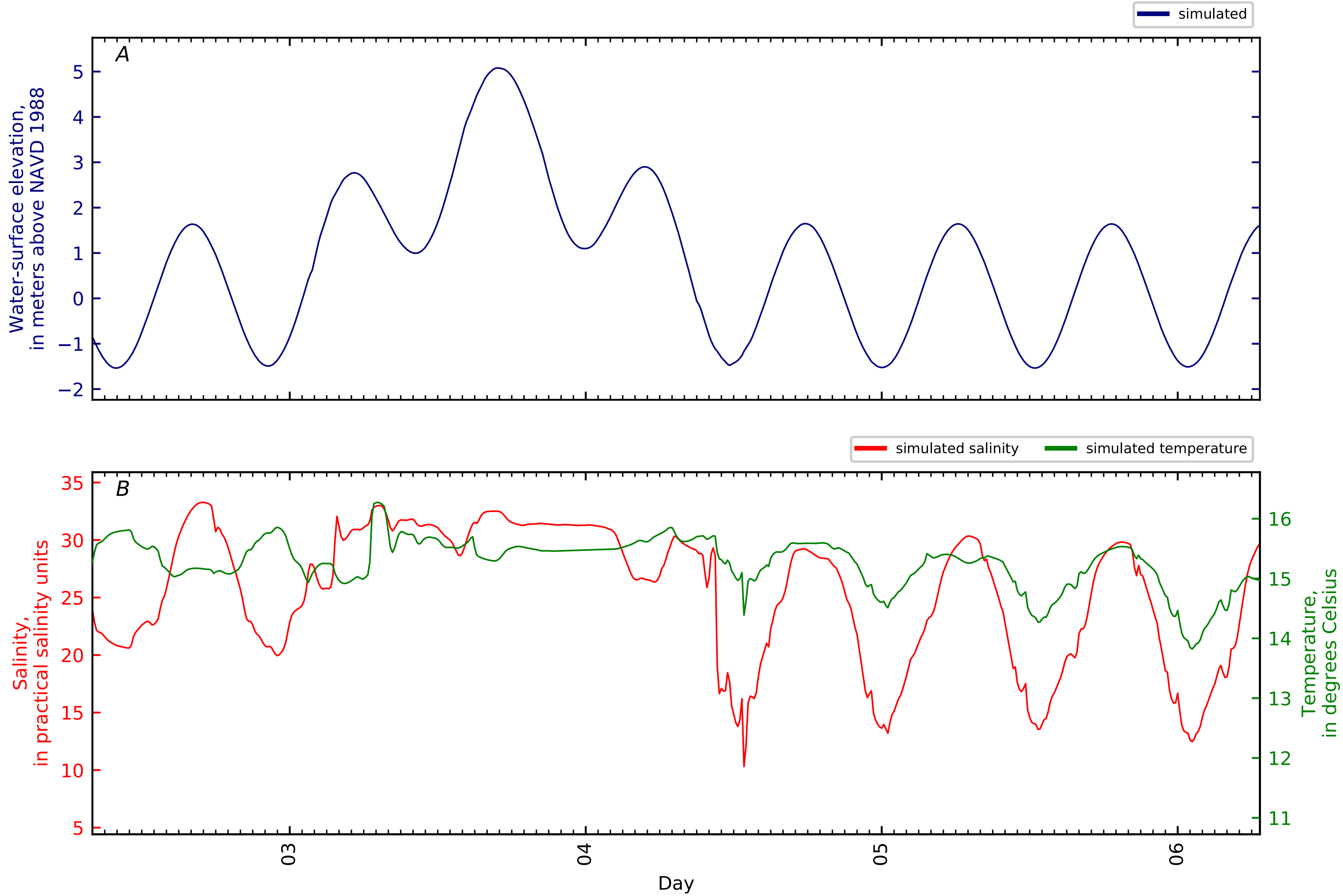

Figure B5-22. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 21, Penob Riv KM3.8 GS CTD3-03. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

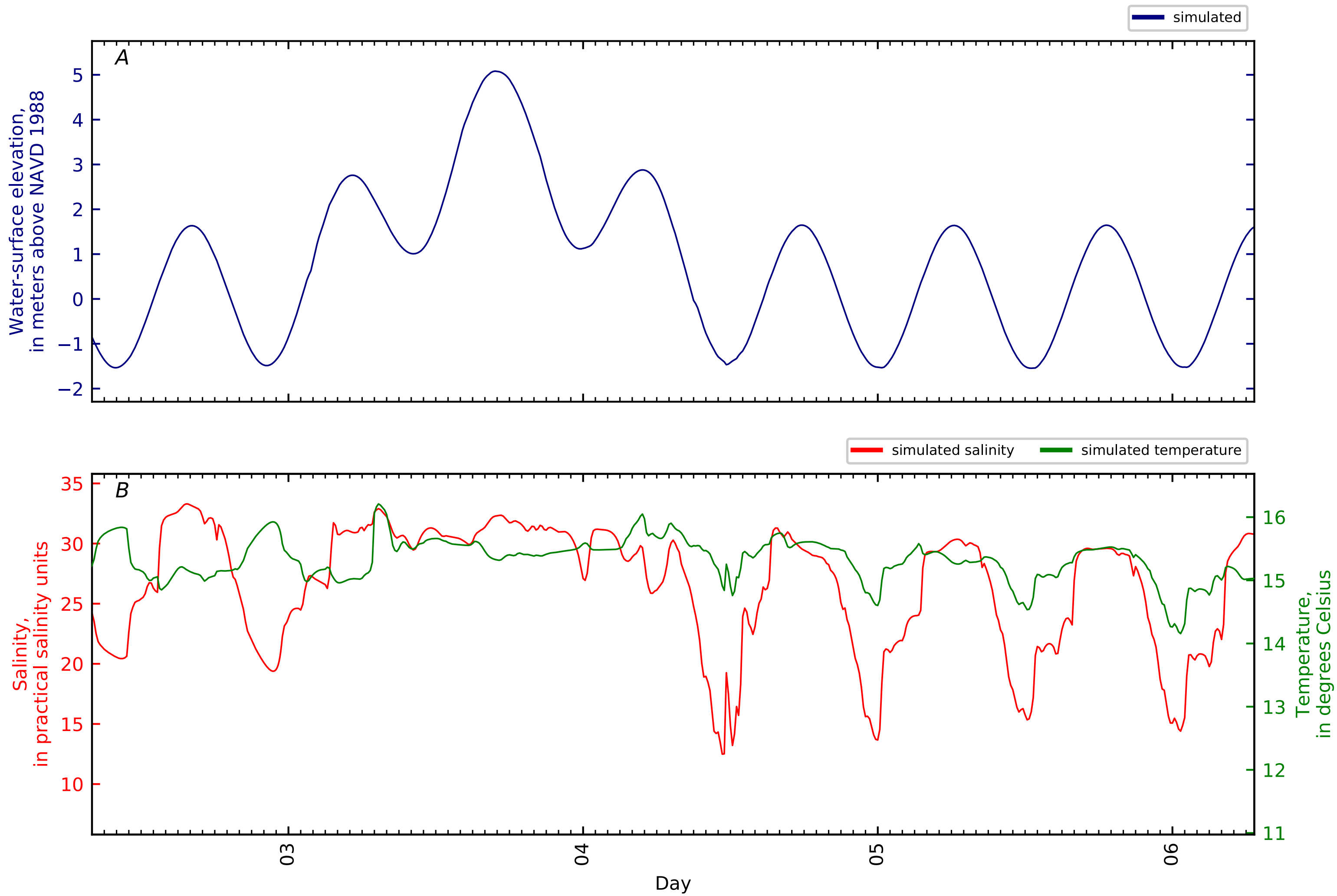

Figure B5-23. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 22, Penob Riv KM3.8 GS CTD3-04. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

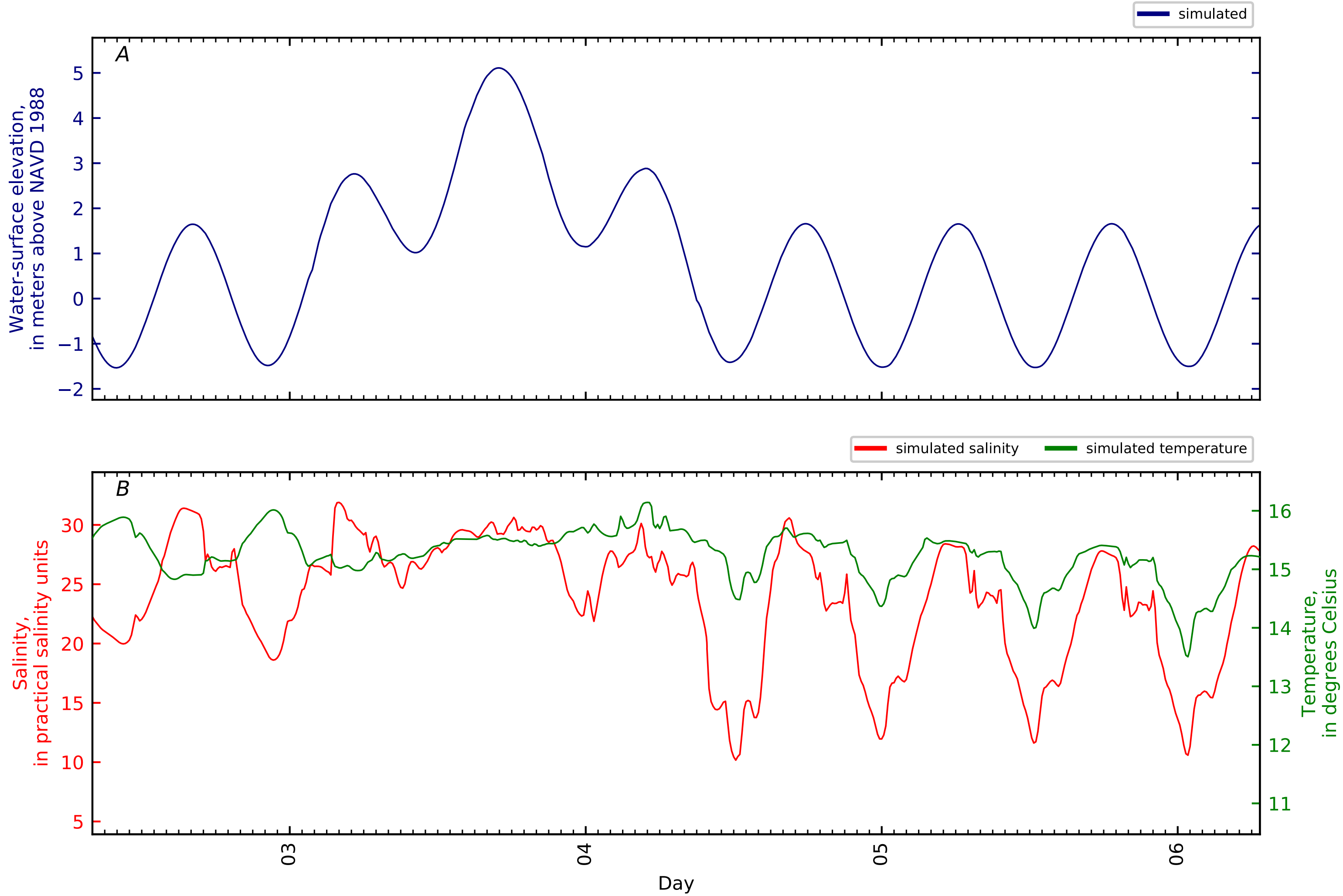

Figure B5-24. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 23, Penob Riv KM3.8 GS CTD3-05. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

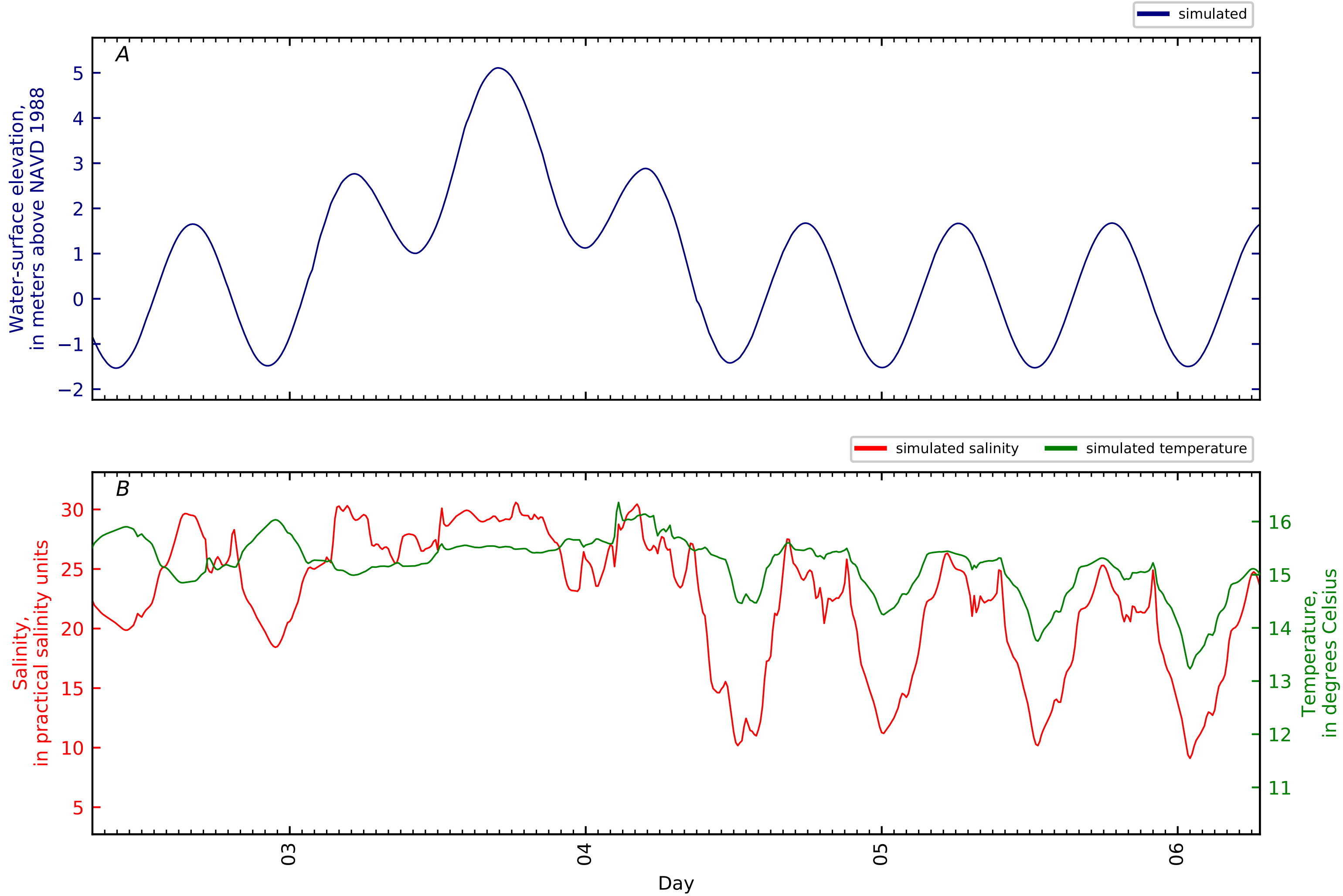

Figure B5-25. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 24, Penob Riv KM3.8 GS CTD3-06. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

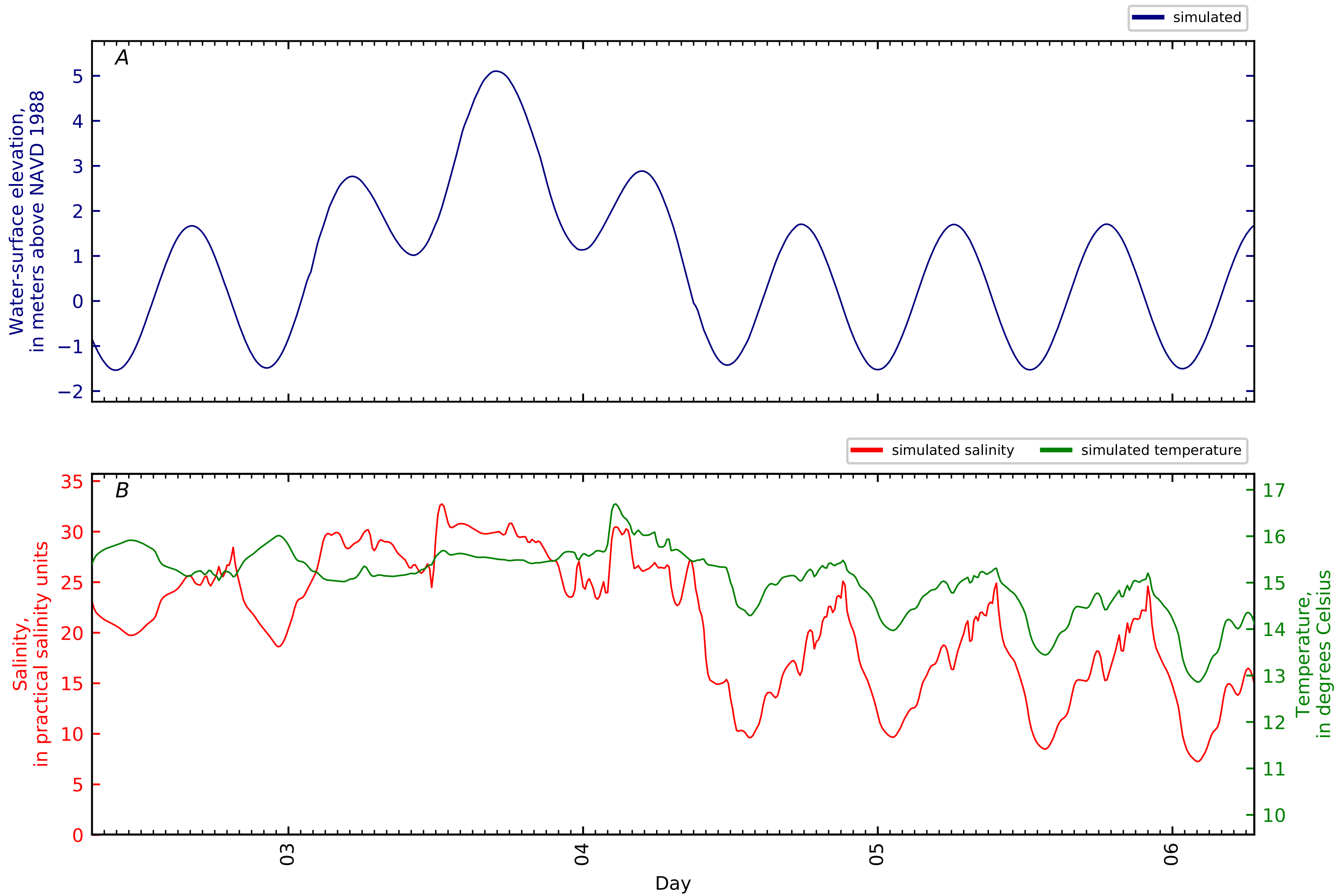

Figure B5-26. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 25, Penob Riv KM3.8 GS CTD3-07. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

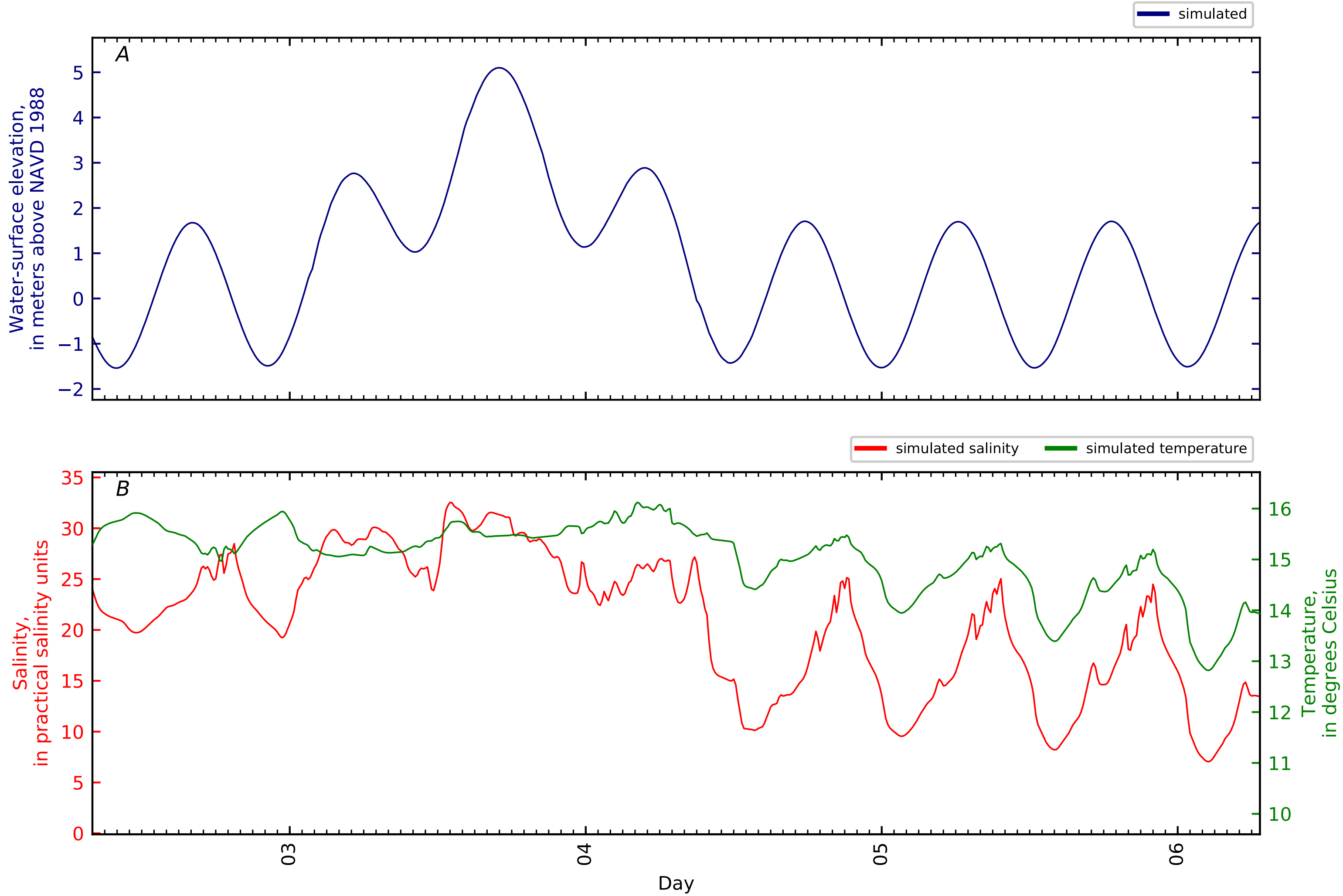

Figure B5-27. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 26, Penob Riv KM3.8 GS CTD3-08. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

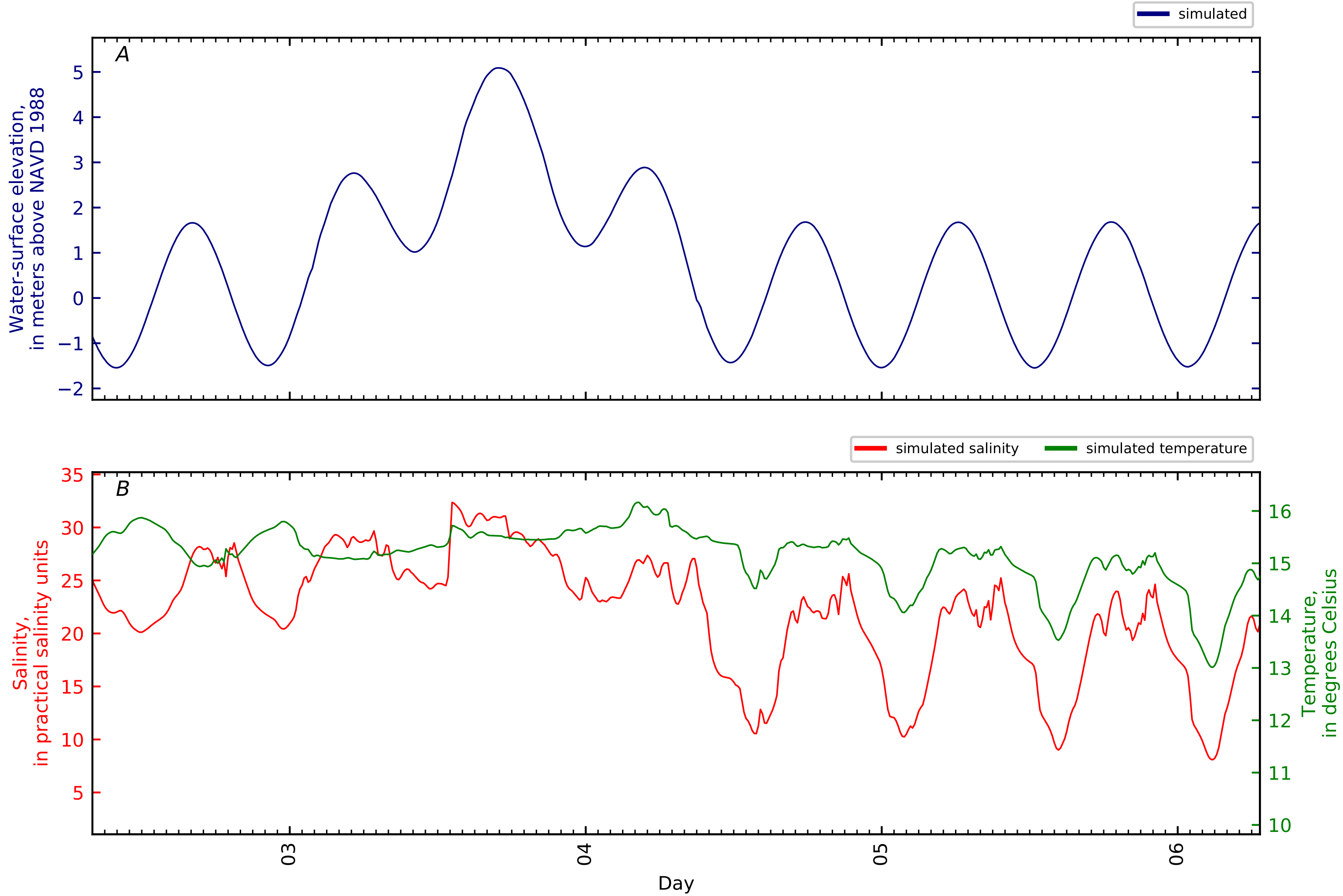

Figure B5-28. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 27, Penob Riv KM3.8 GS CTD3-09. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

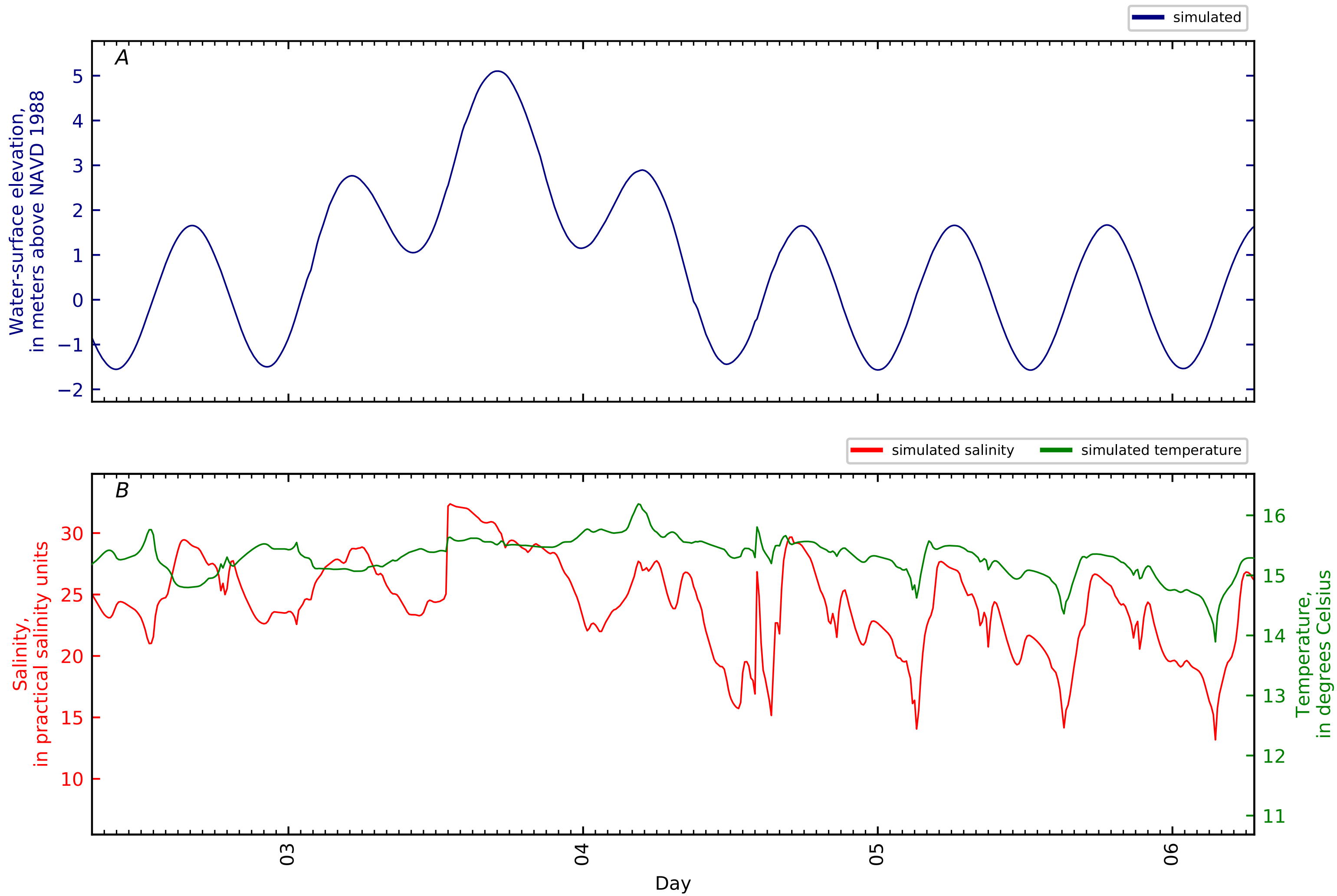

Figure B5-29. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 28, Penob Riv KM3.8 GS CTD3-10. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

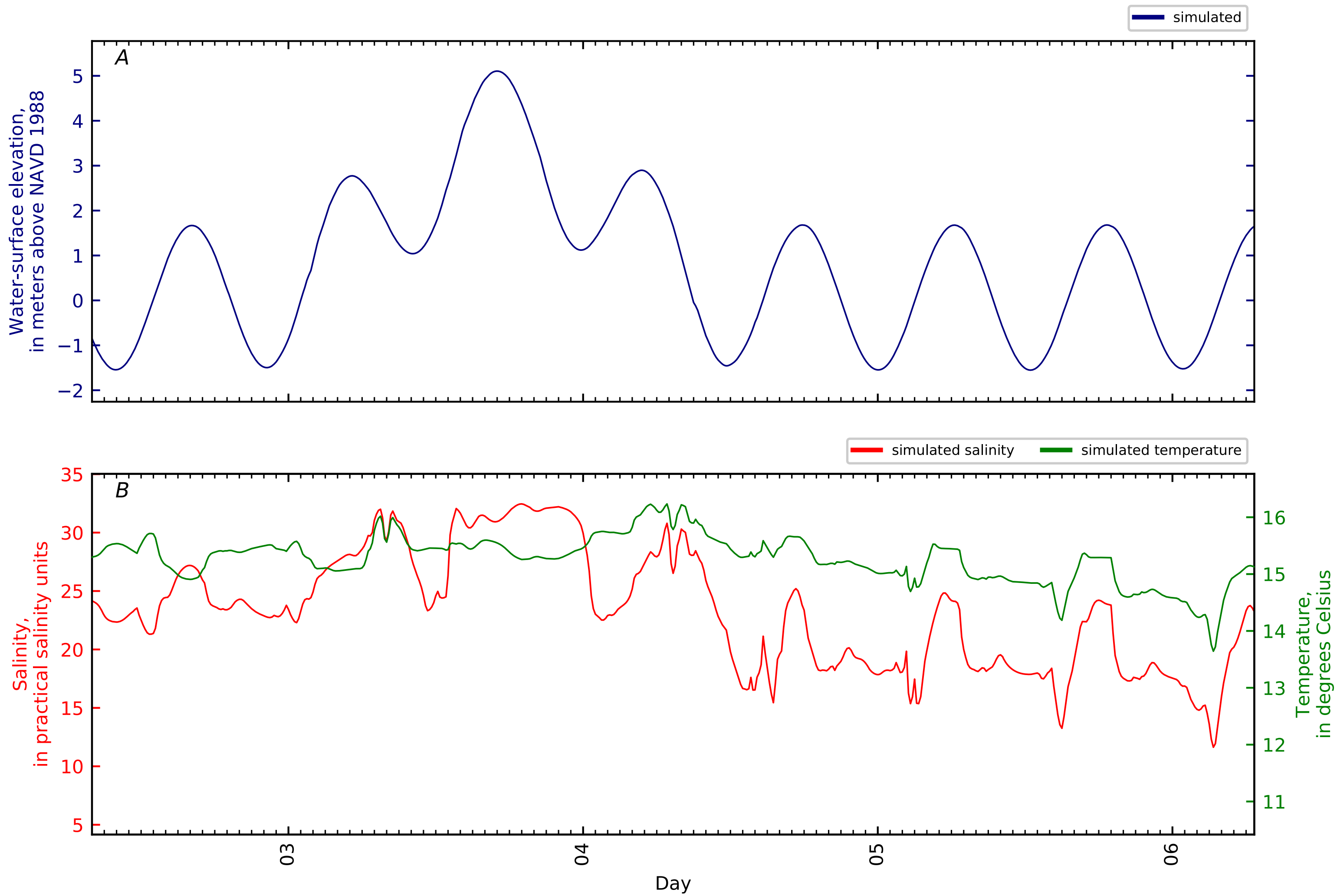

Figure B5-30. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 29, Penob Riv KM3.85 fmr NOAA gage Gross Poi. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

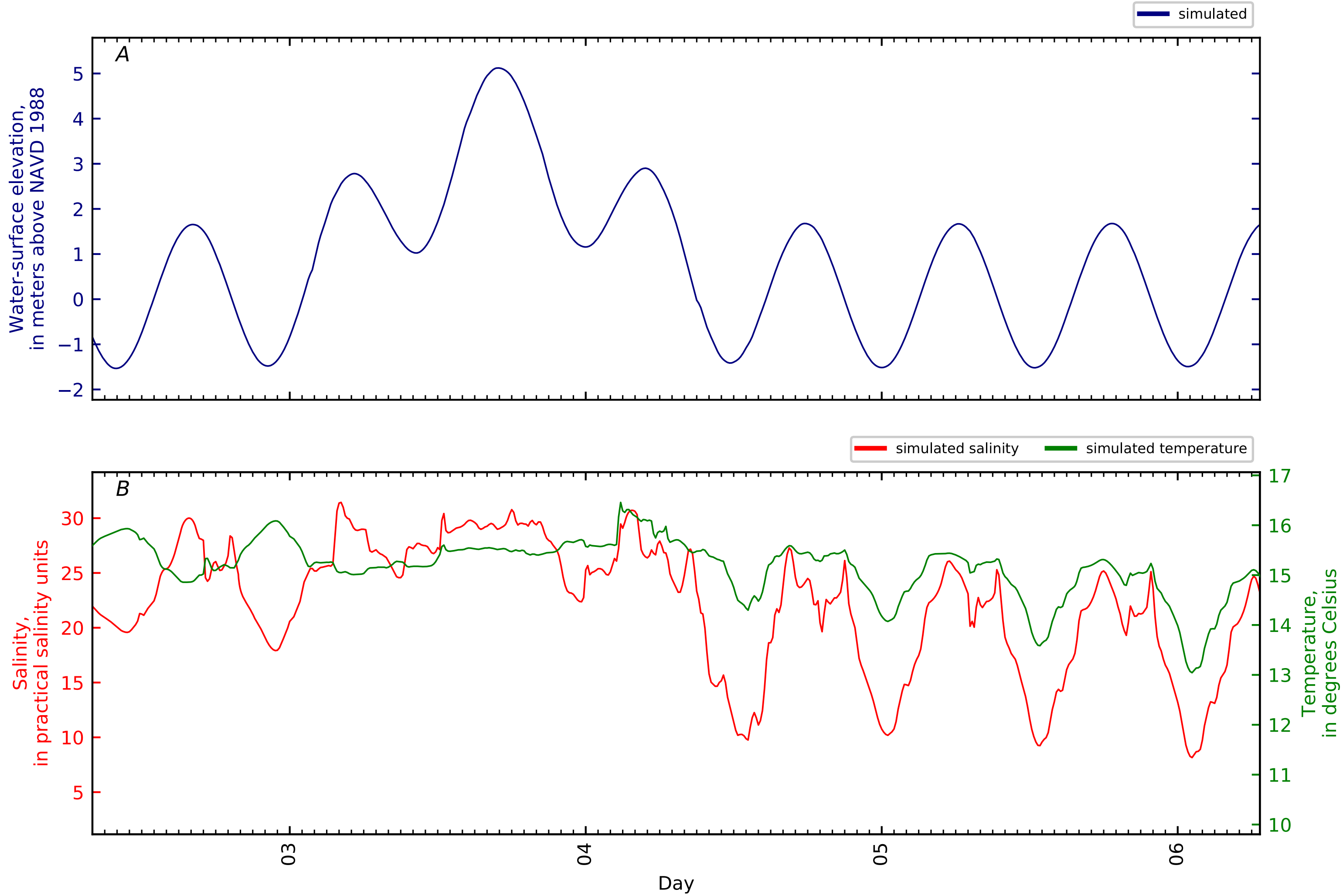

Figure B5-31. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 30, Penob Riv KM4. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

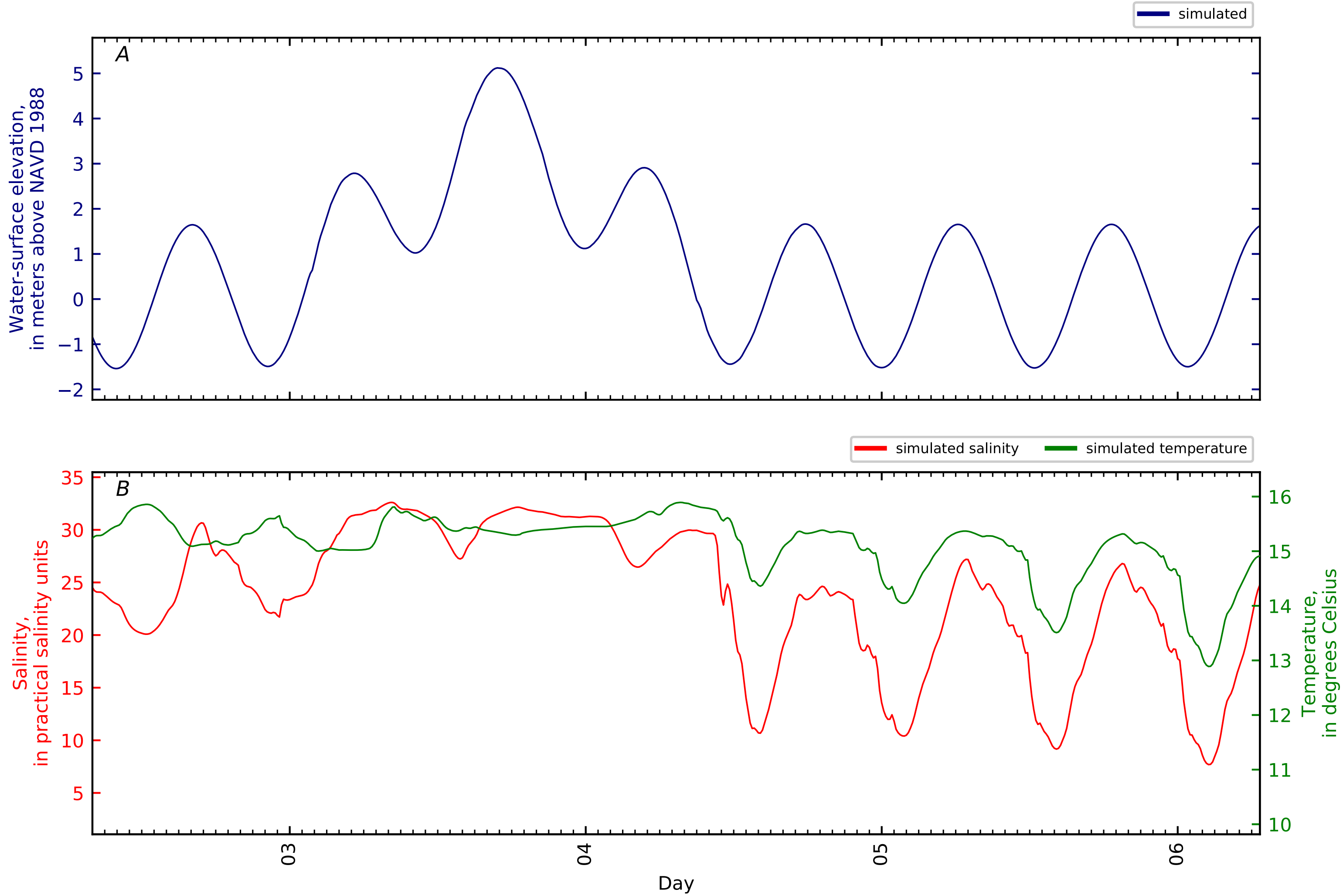

Figure B5-32. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 31, Penob Riv KM4.3 fmr NOAA gage Sandy Beac. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

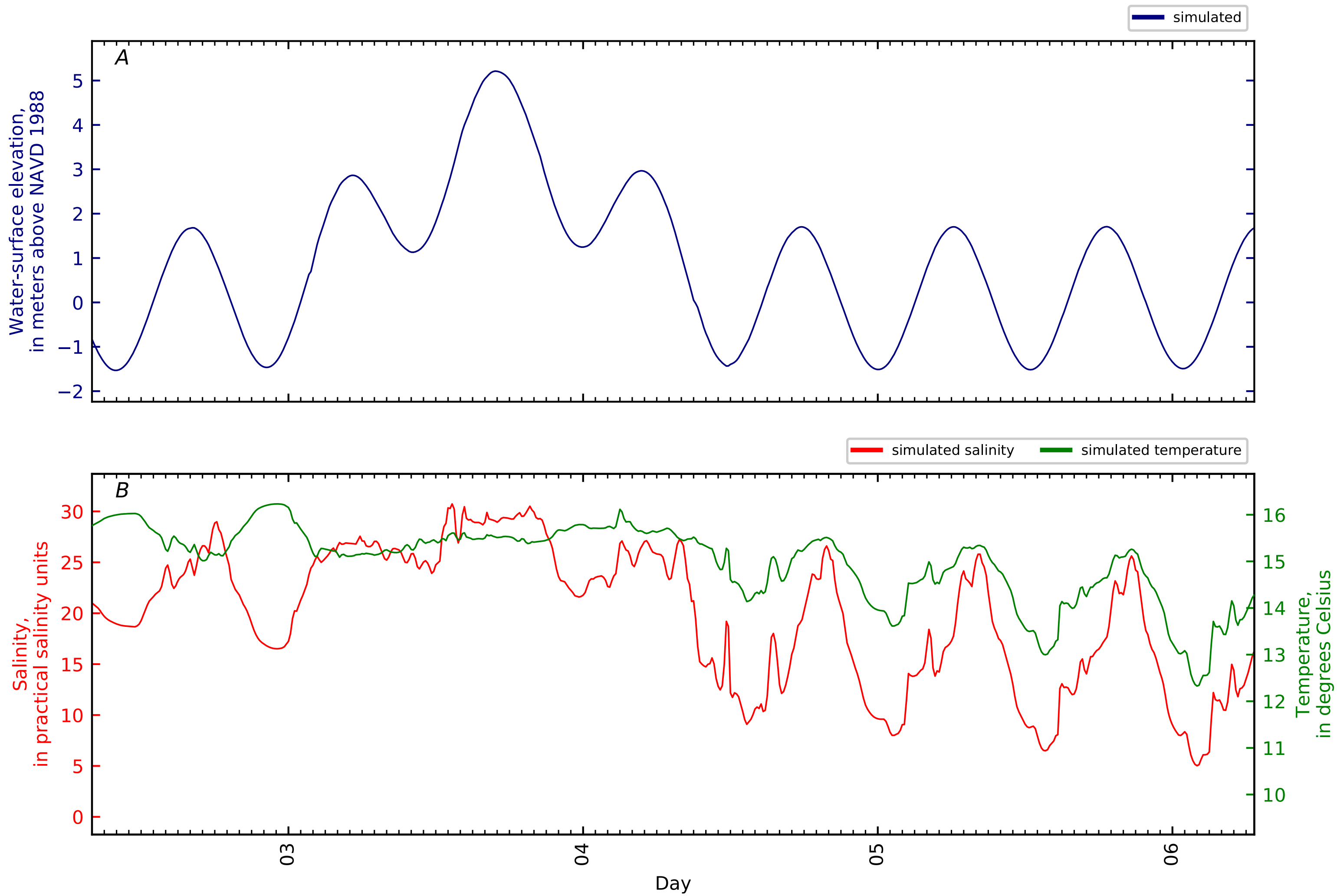

Figure B5-33. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 32, Penob Riv KM5. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

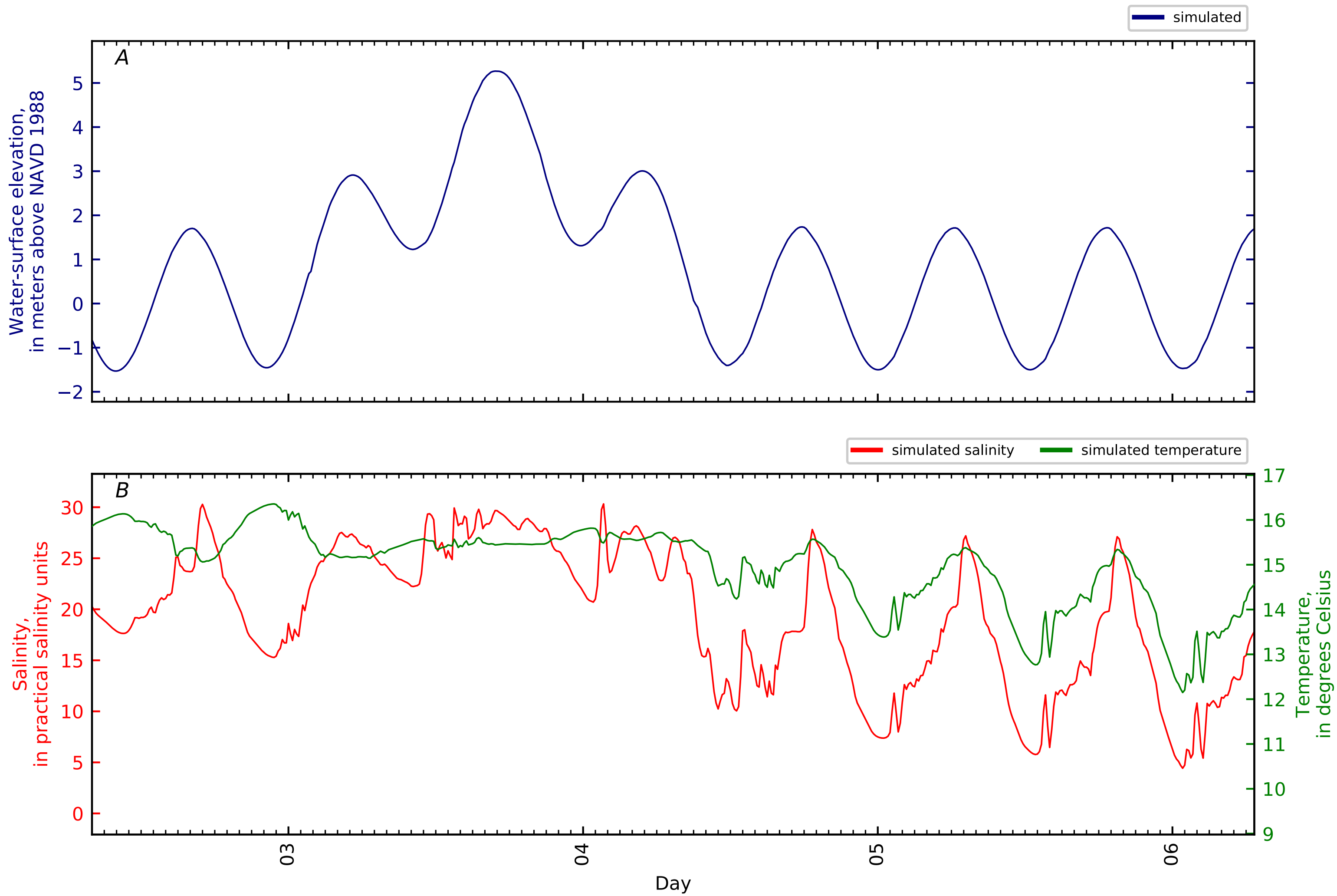

Figure B5-34. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 33, Penob Riv KM6. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

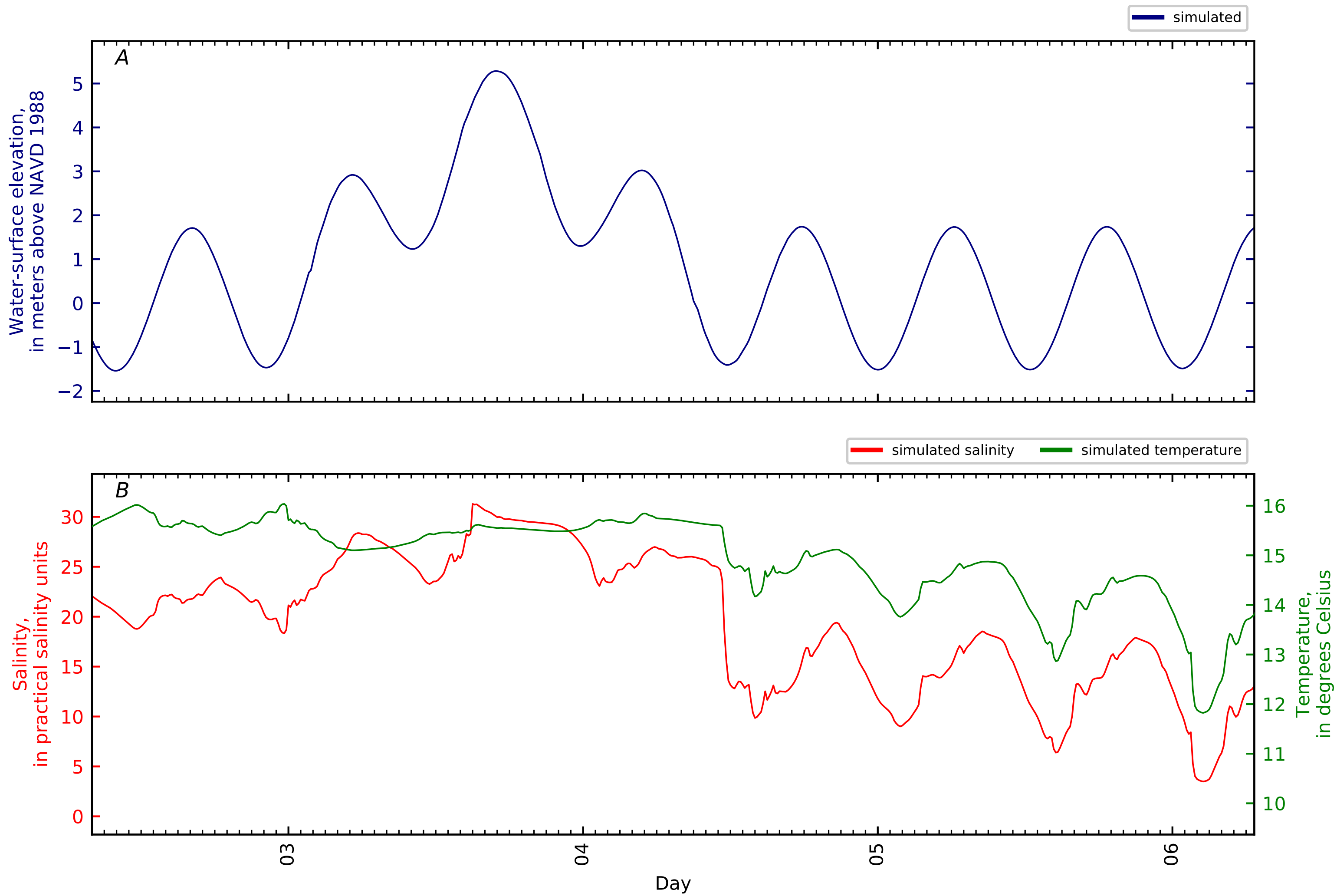

Figure B5-35. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 34, Penob Riv KM6 ERDC11 VW-MU14-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

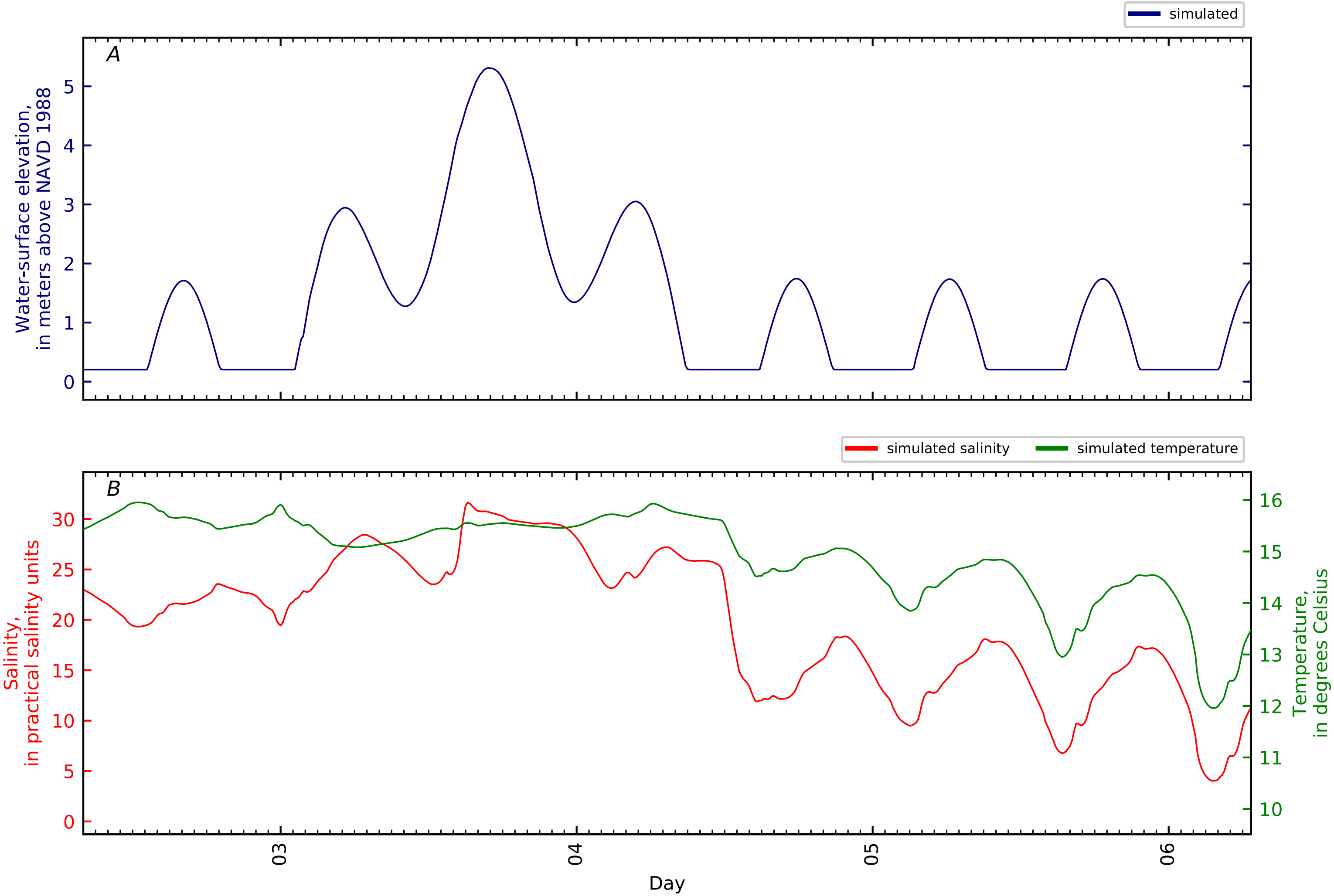

Figure B5-36. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 35, Penob Riv KM6.05 ERDC10 VW-MU7-SF1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

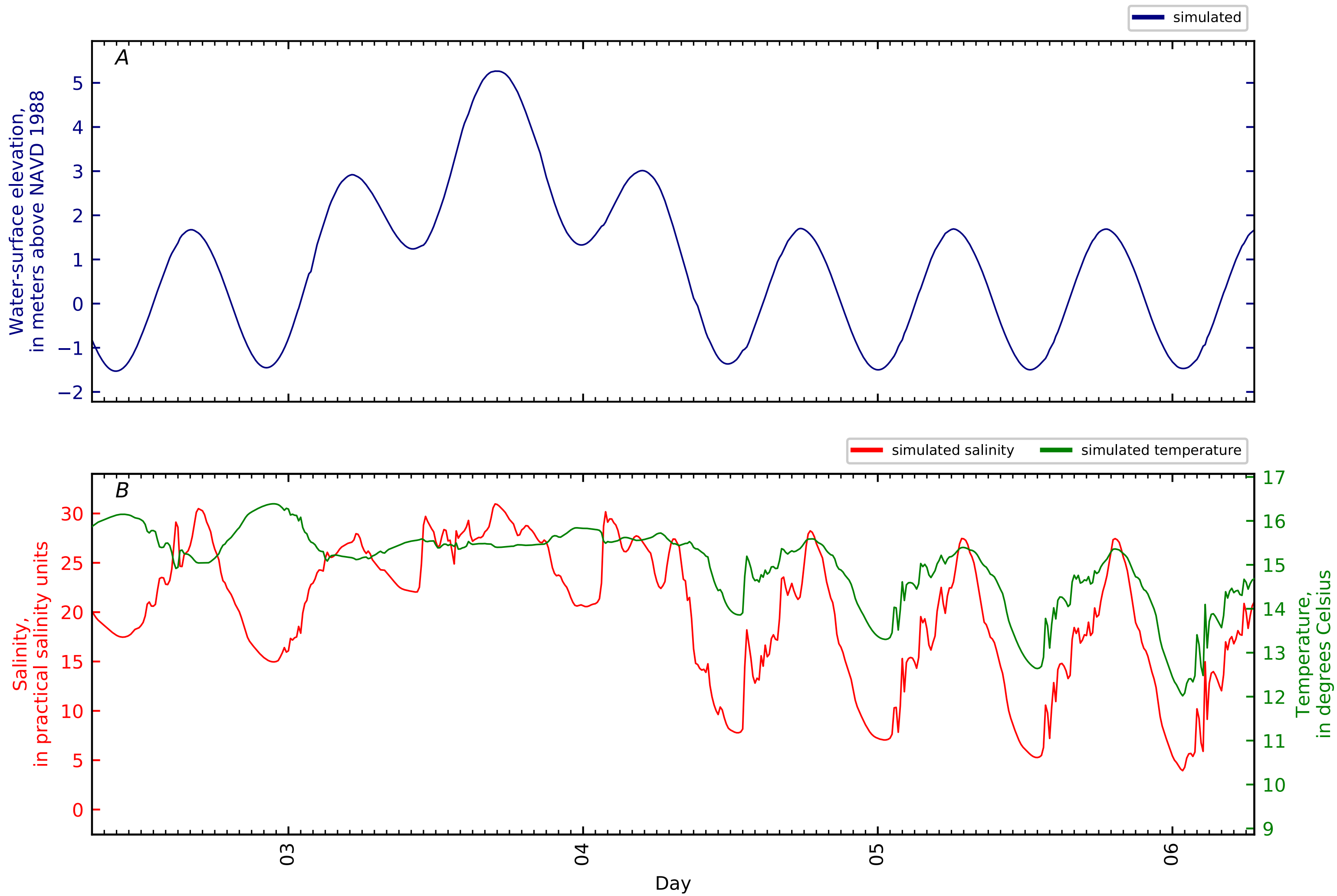

Figure B5-37. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 36, Penob Riv KM6.1 WHOI5 Verona Island 2010. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

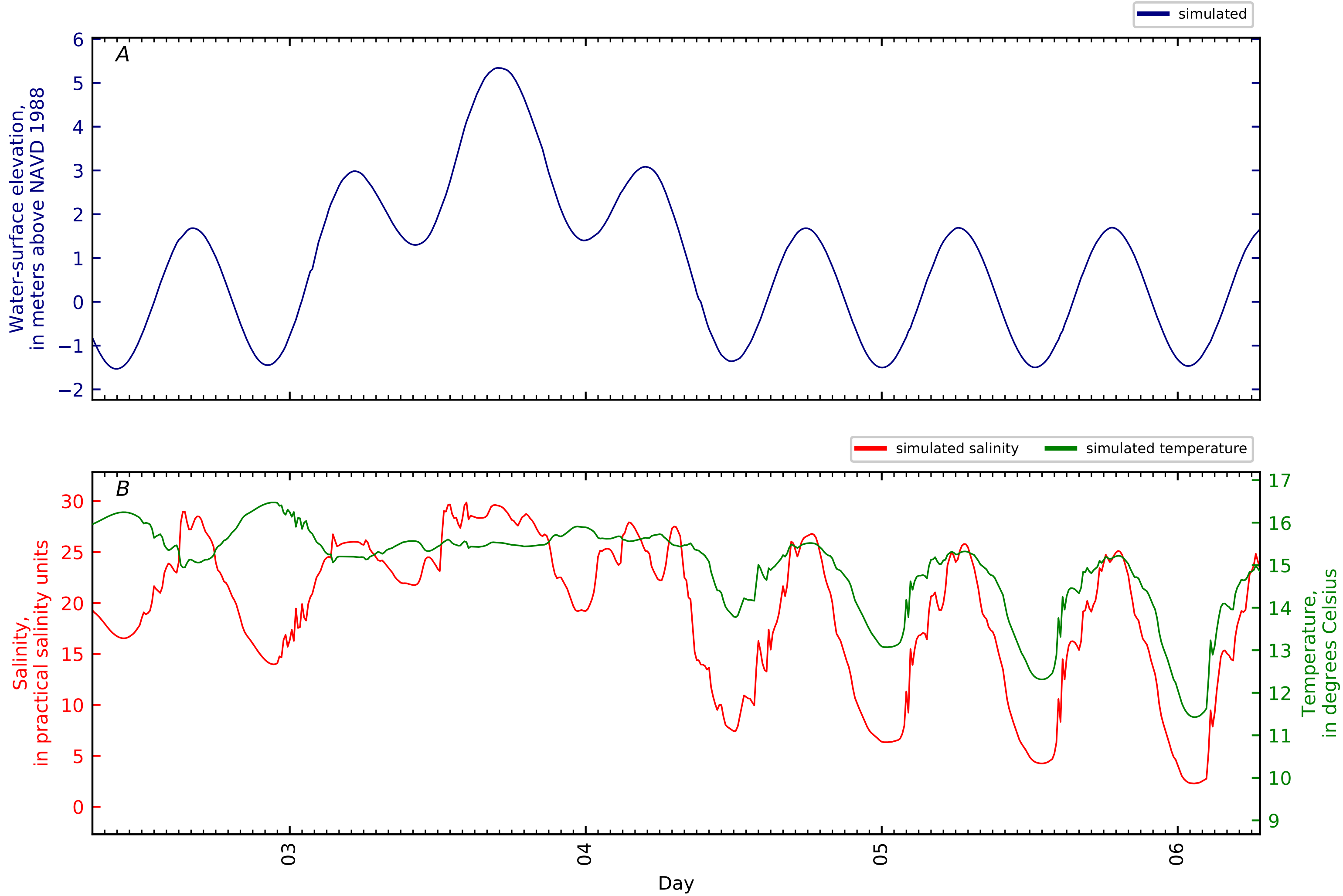

Figure B5-38. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 37, Penob Riv KM7. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

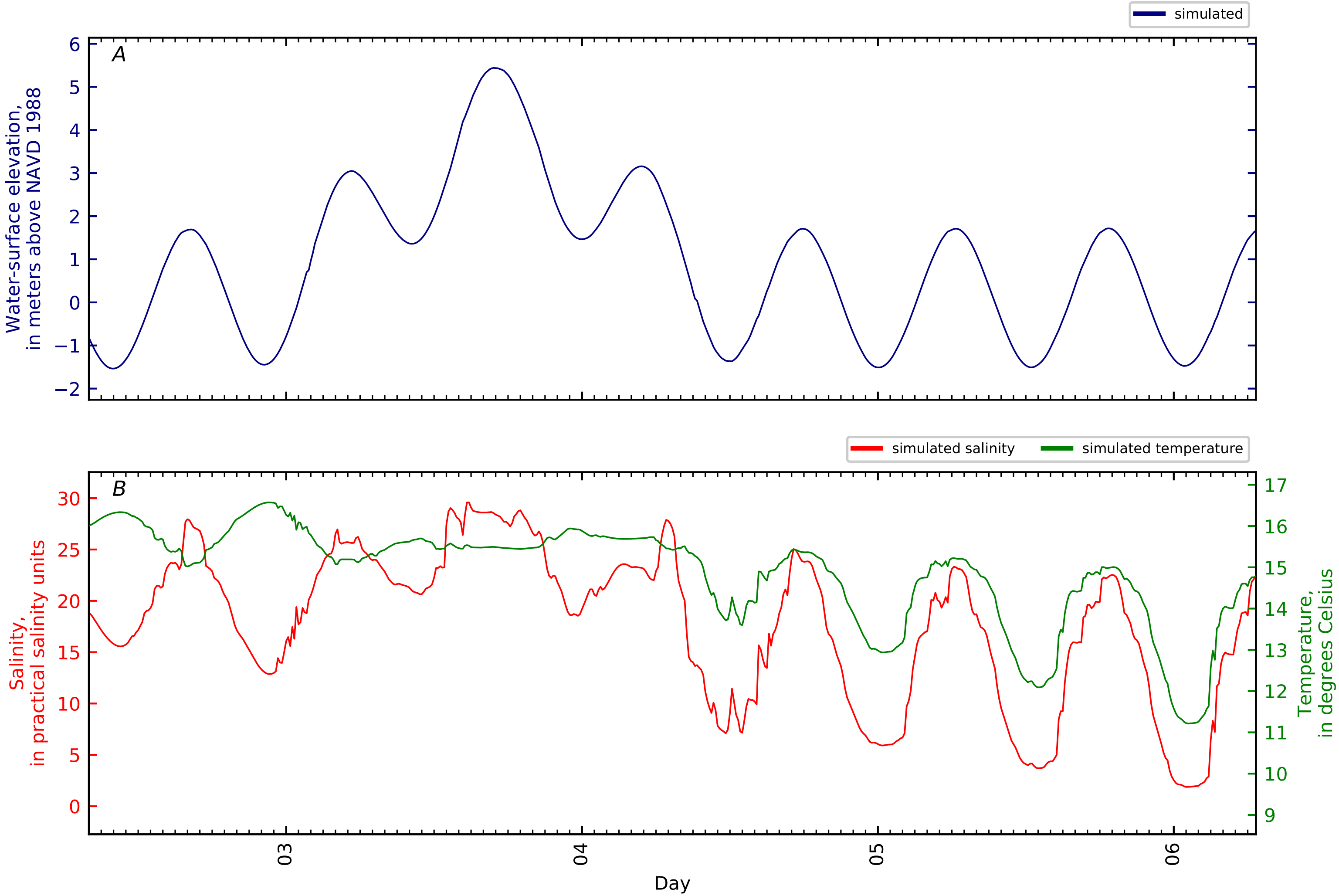

Figure B5-39. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 38, Penob Riv KM8. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

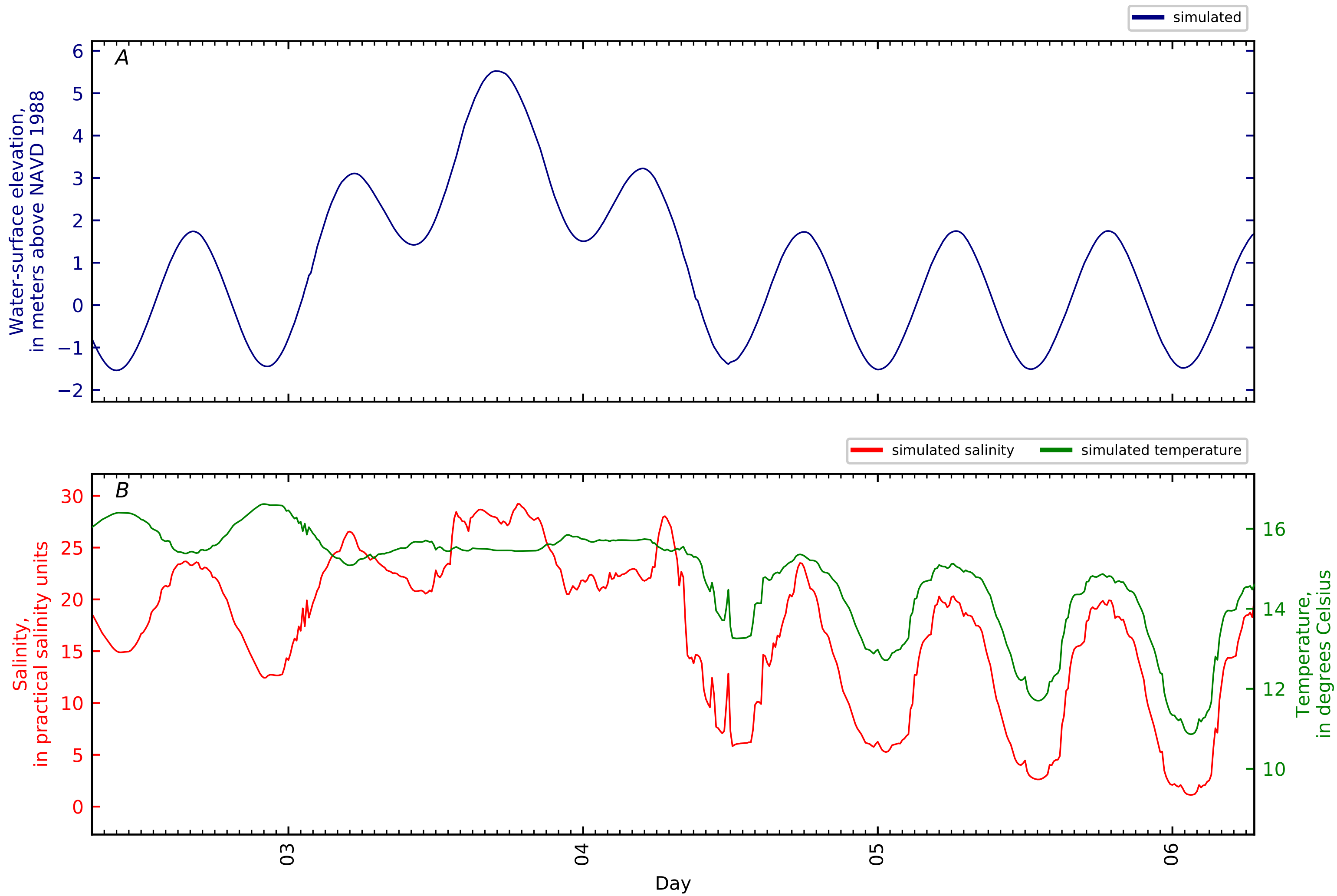

Figure B5-40. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 39, Penob Riv KM9. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

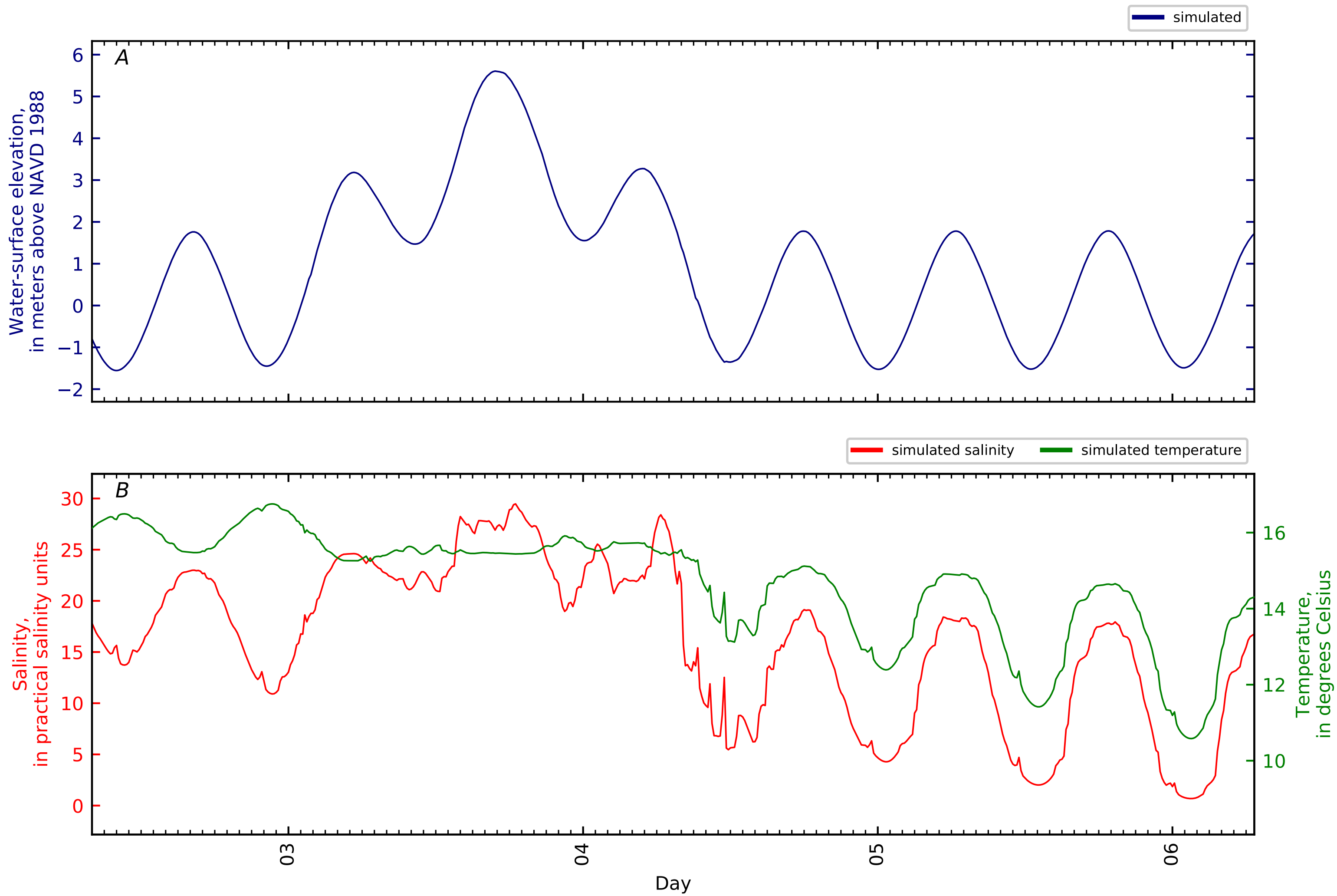

Figure B5-41. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 40, Penob Riv KM10. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

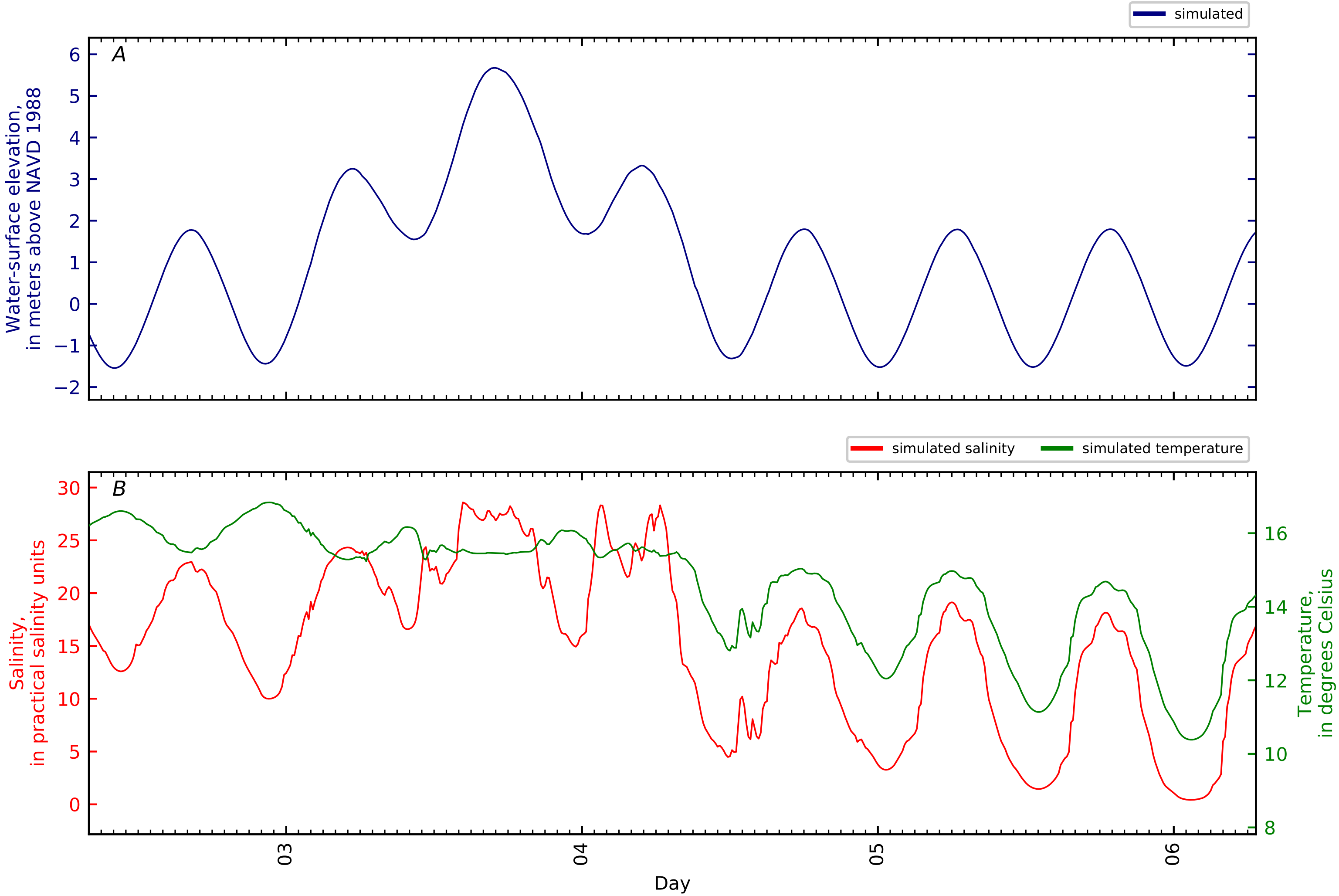

Figure B5-42. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 41, Penob Riv KM11. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

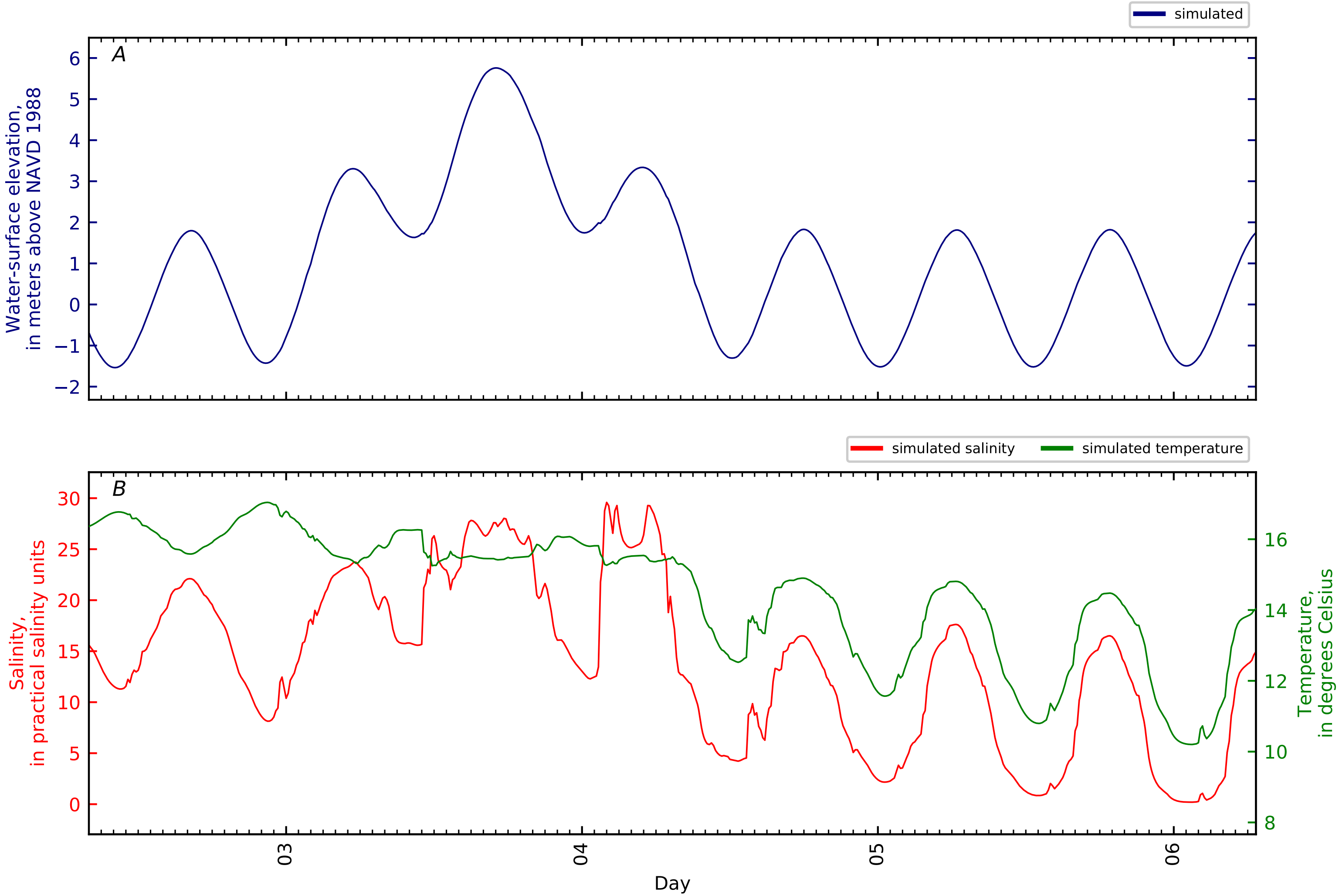

Figure B5-43. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 42, Penob Riv KM12. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

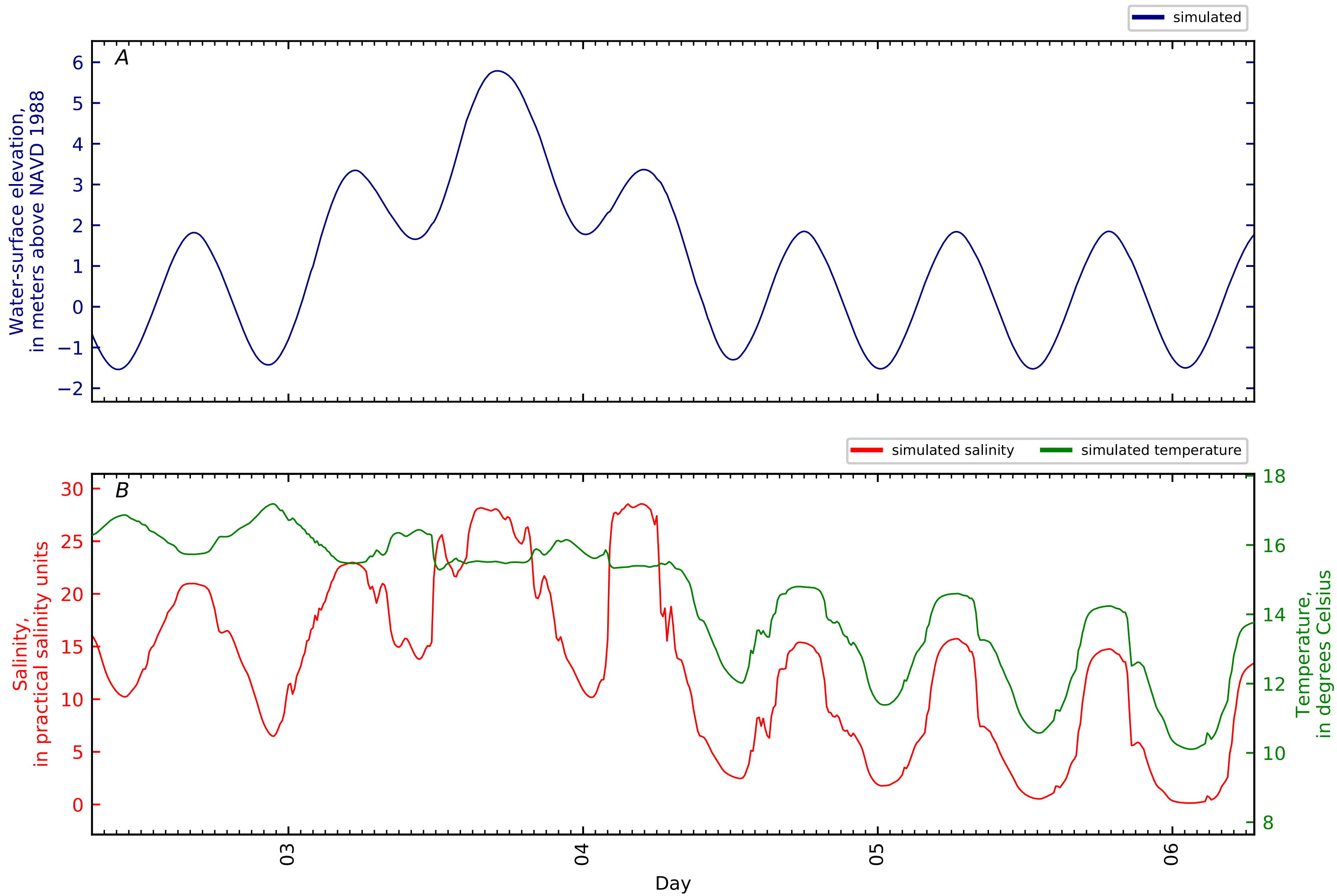

Figure B5-44. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 43, Penob Riv KM12.9 WHOI7 Bucksport 2011. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

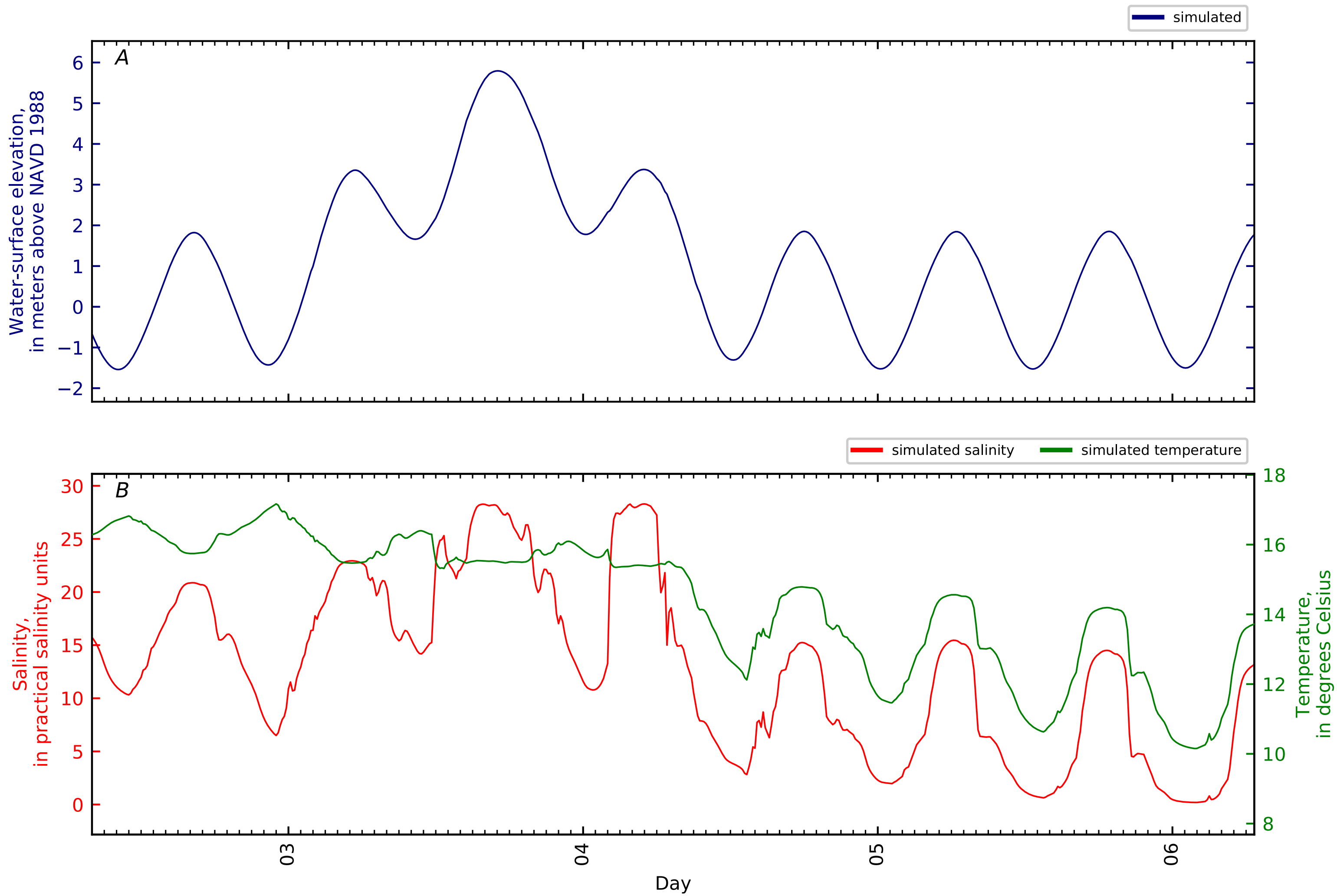

Figure B5-45. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 44, Penob Riv KM13. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

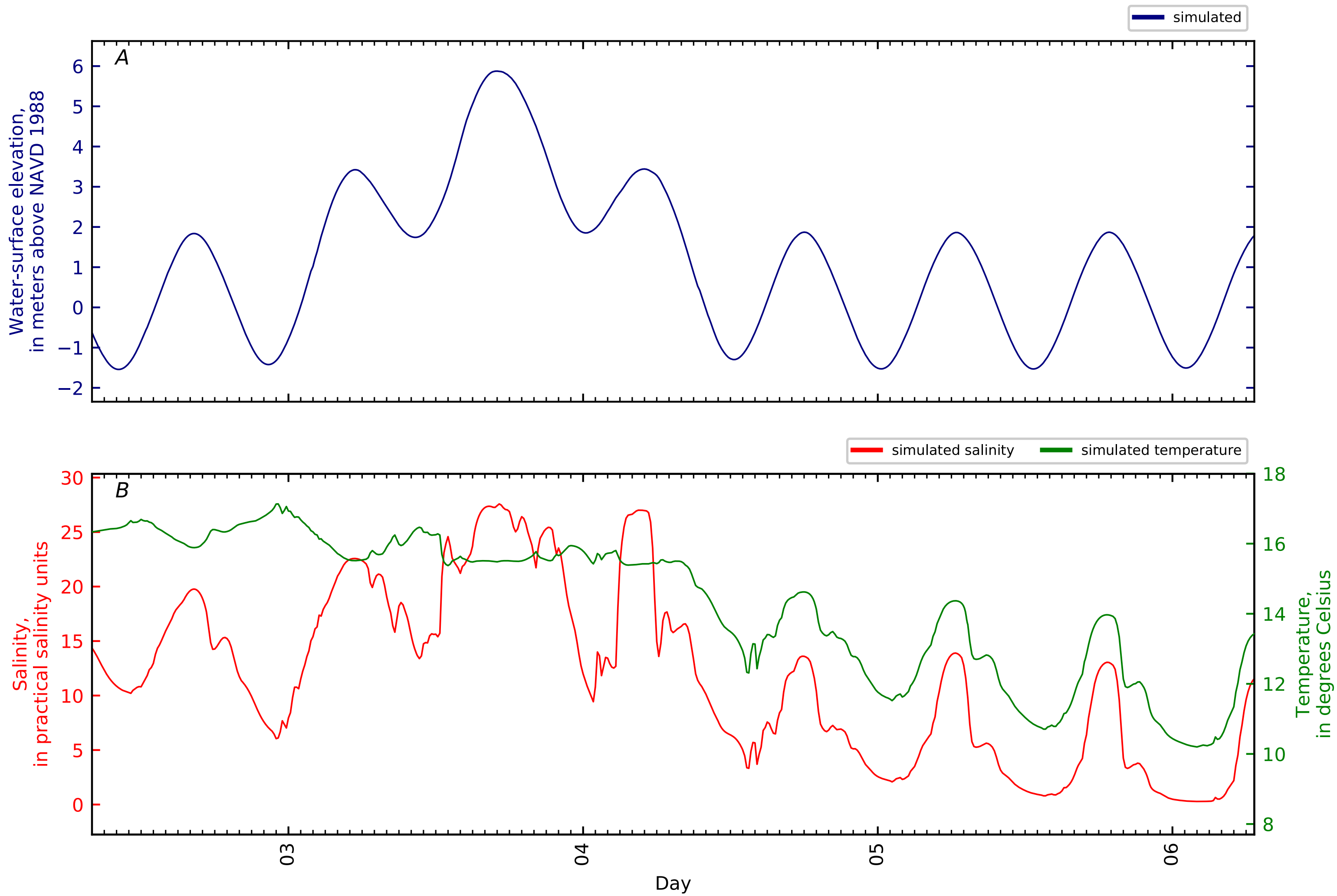

Figure B5-46. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 45, Penob Riv KM14. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

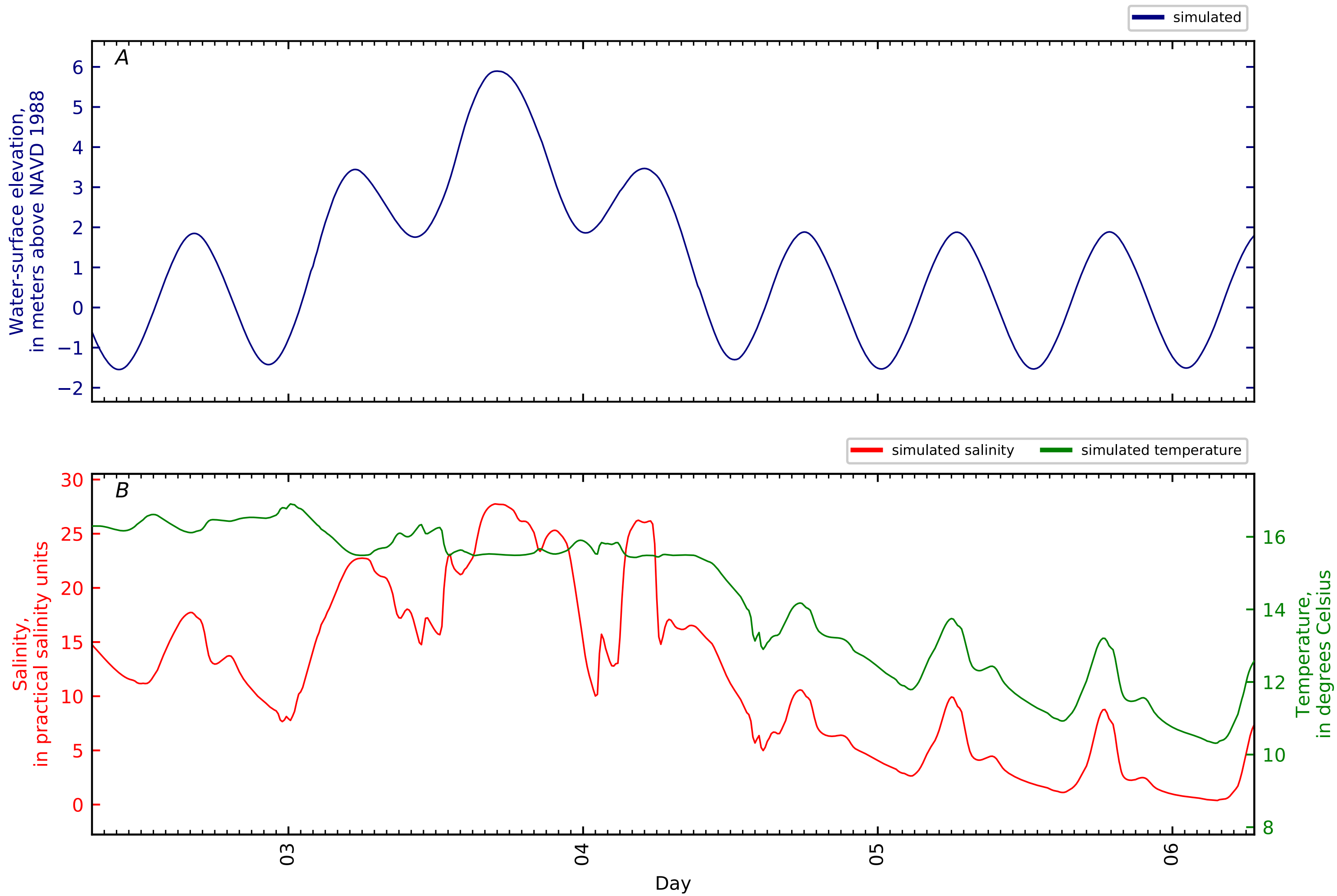

Figure B5-47. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 46, Penob Riv KM14.27 ERDC15 BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

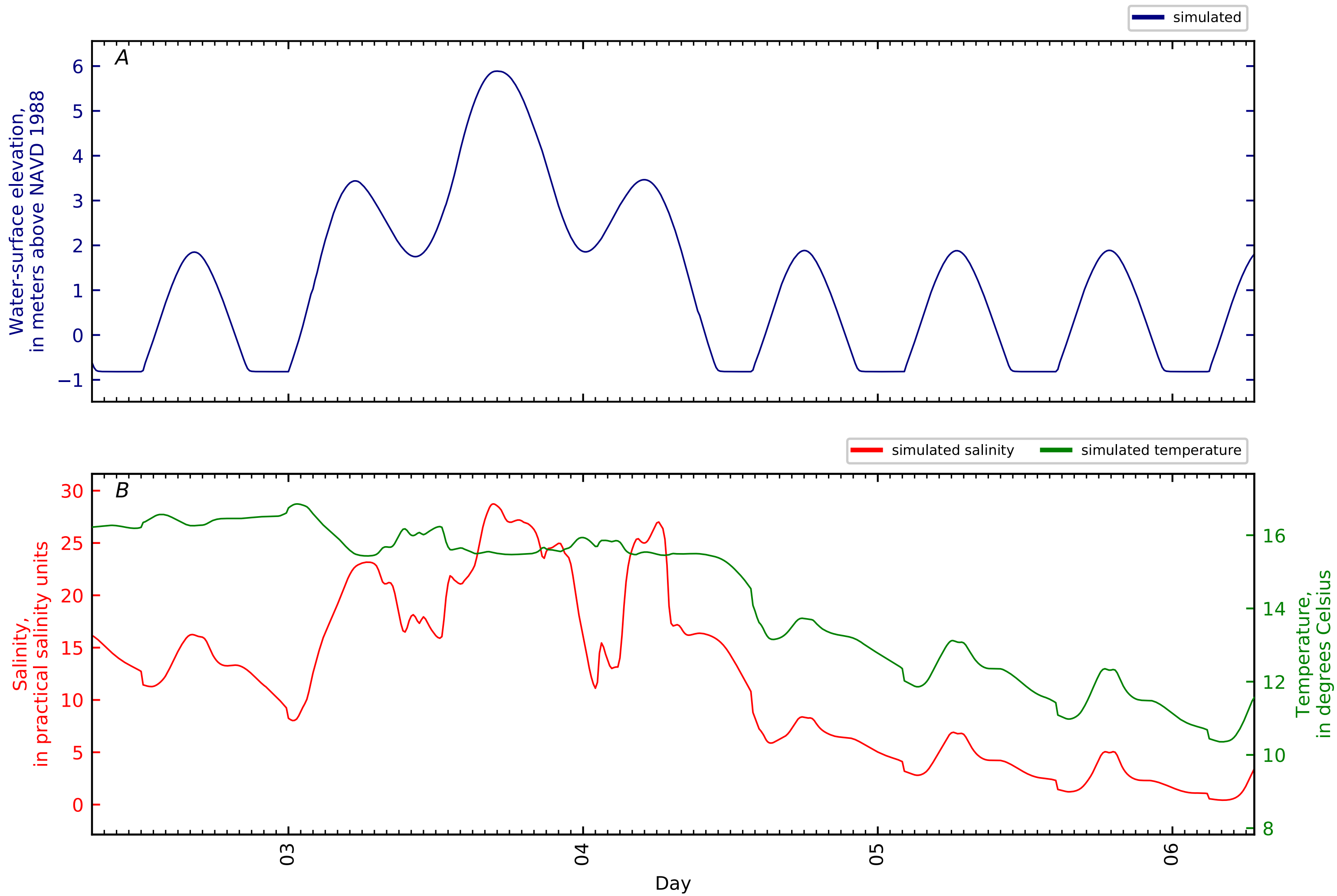

Figure B5-48. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 47, Penob Riv KM14.29 ERDC16B BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

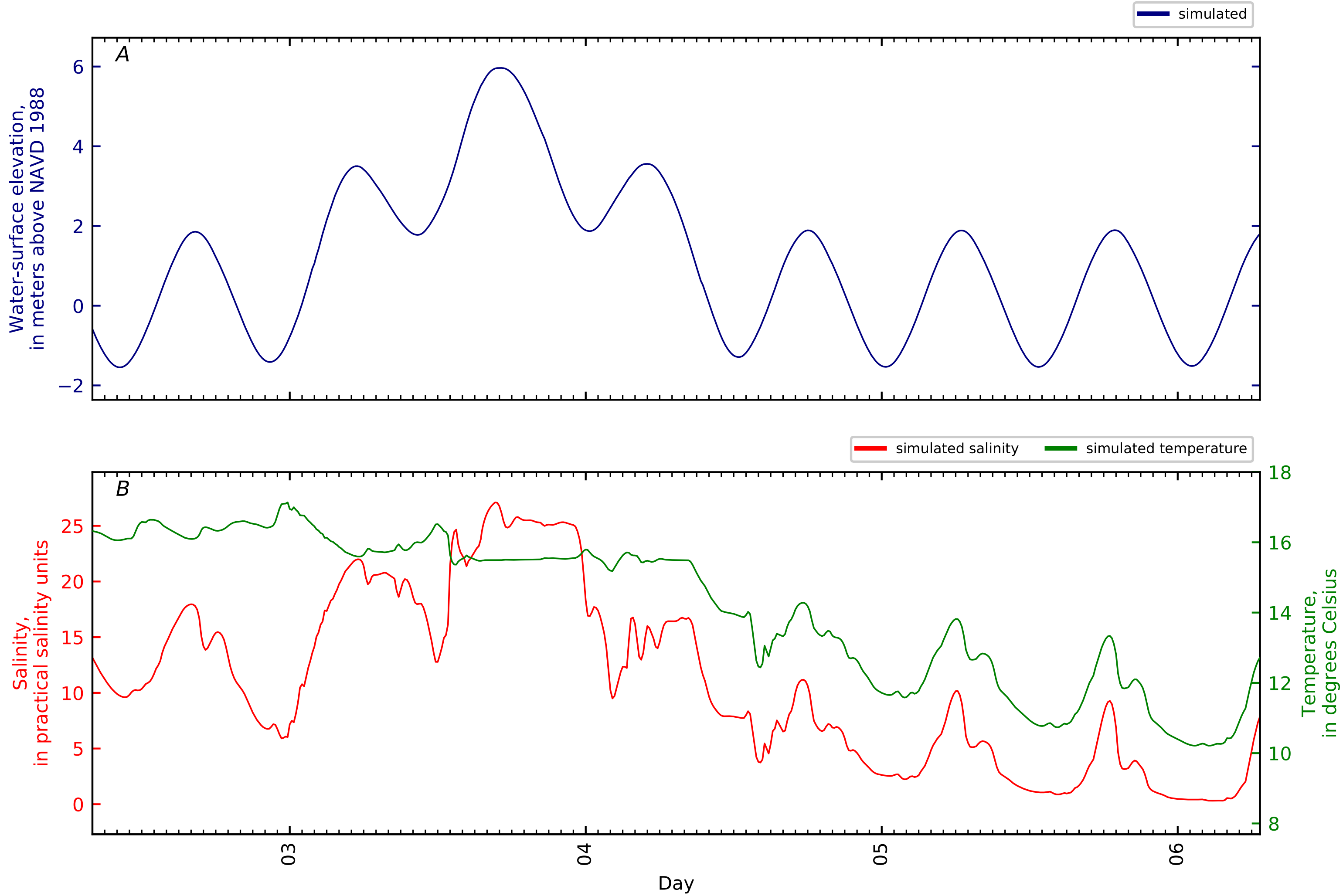

Figure B5-49. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 48, Penob Riv KM15. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

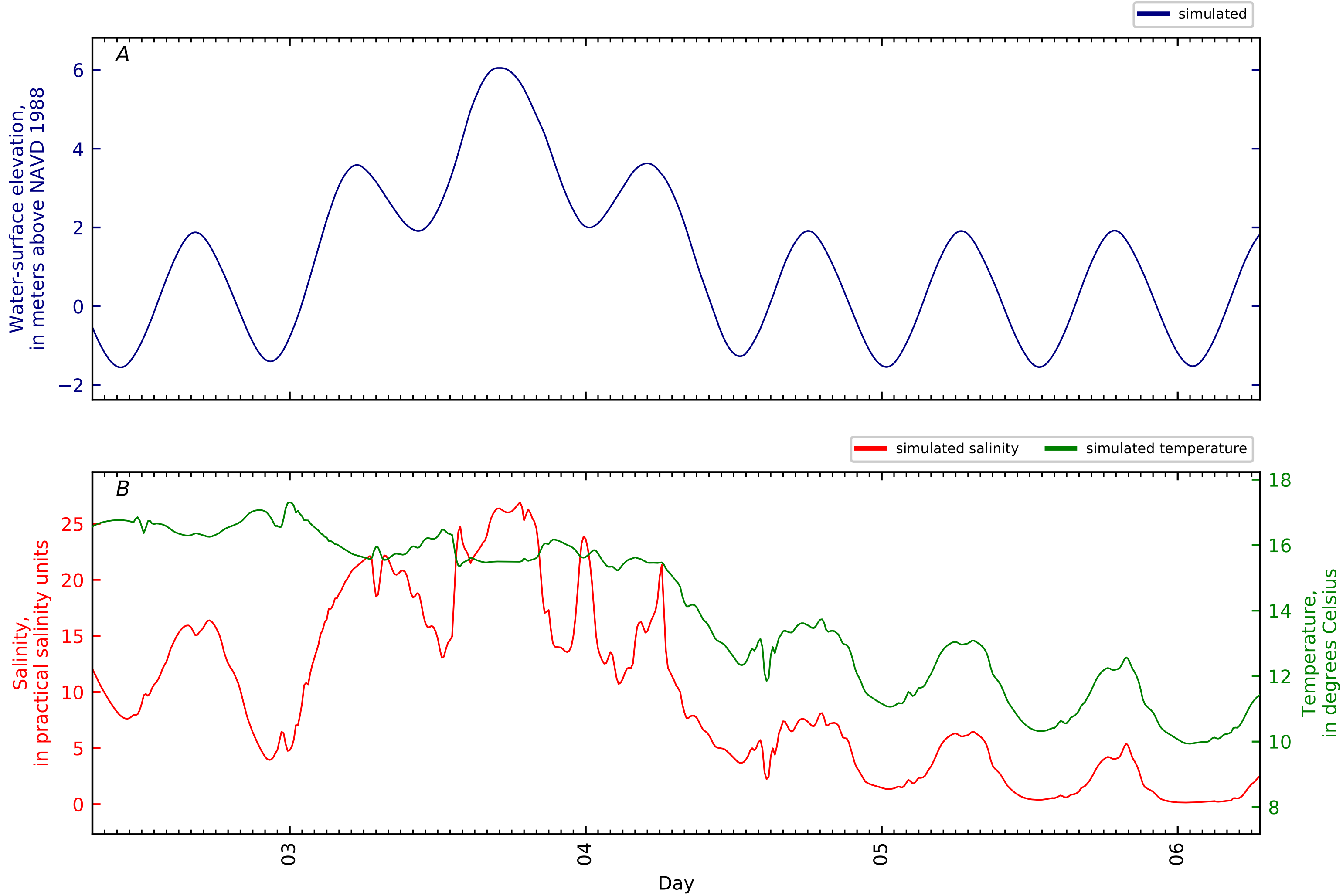

Figure B5-50. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 49, Penob Riv KM16. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

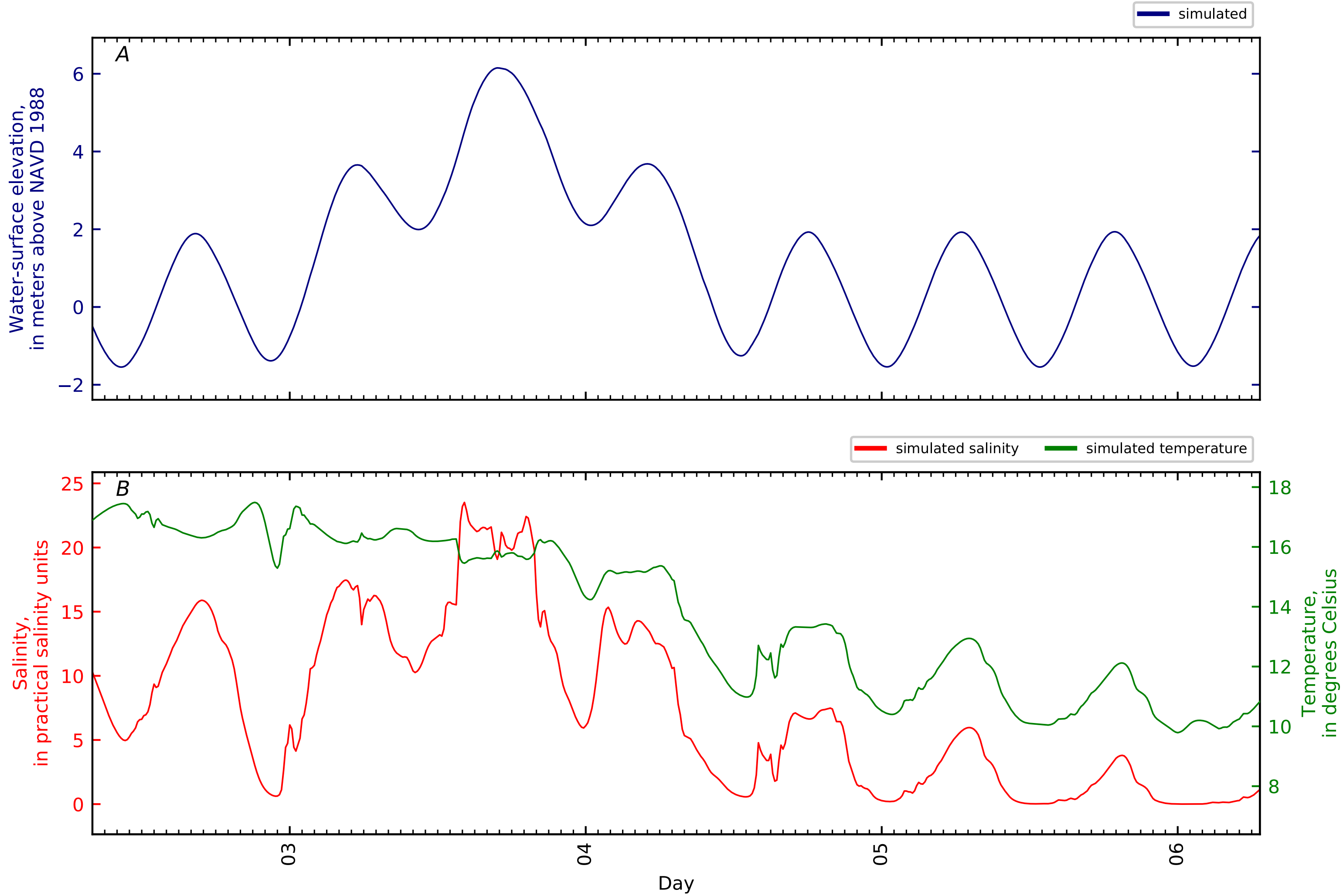

Figure B5-51. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 50, Penob Riv KM17. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

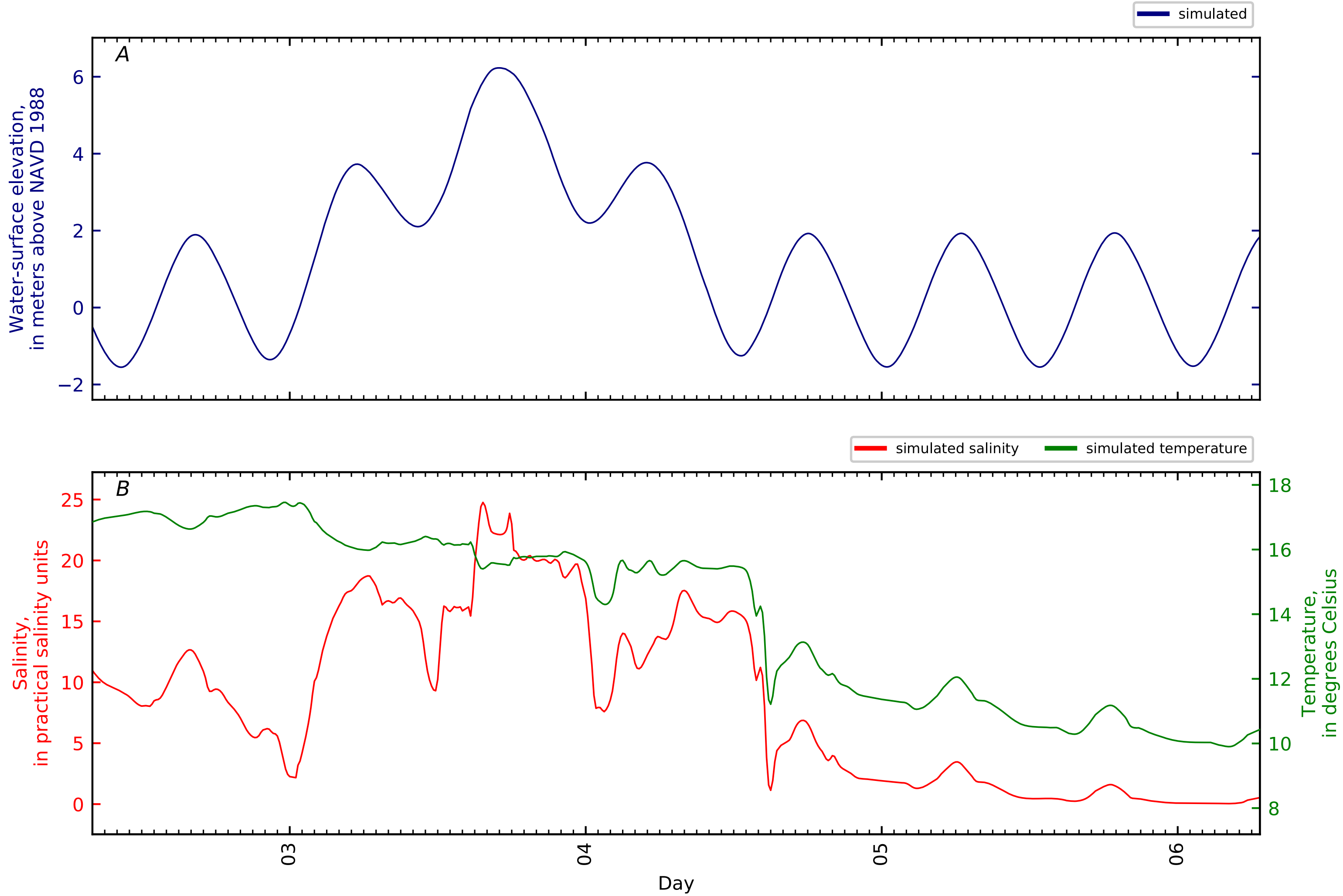

Figure B5-52. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 51, Penob Riv KM17.2 ERDC17B FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

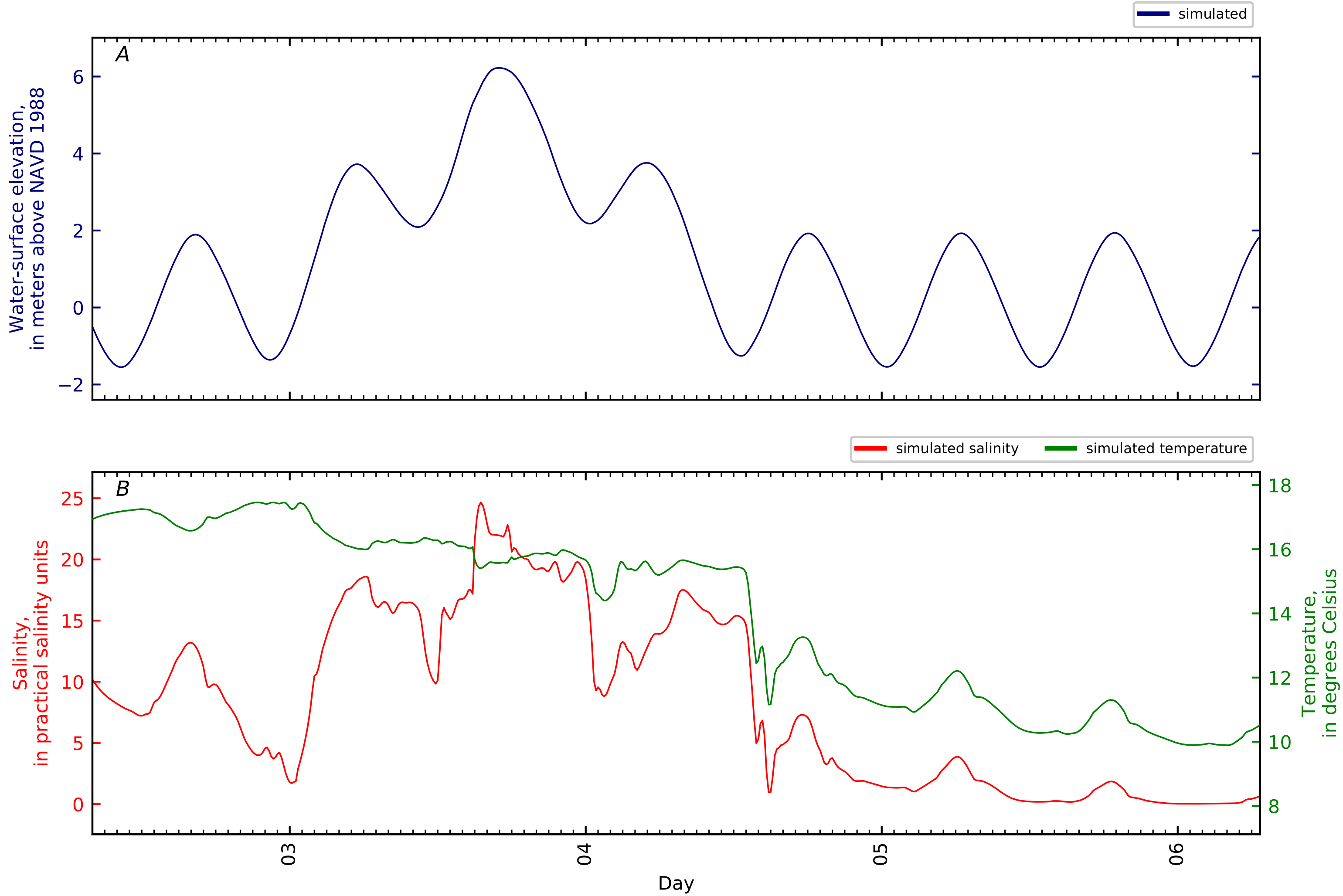

Figure B5-53. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 52, Penob Riv KM17.21 ERDC13 FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

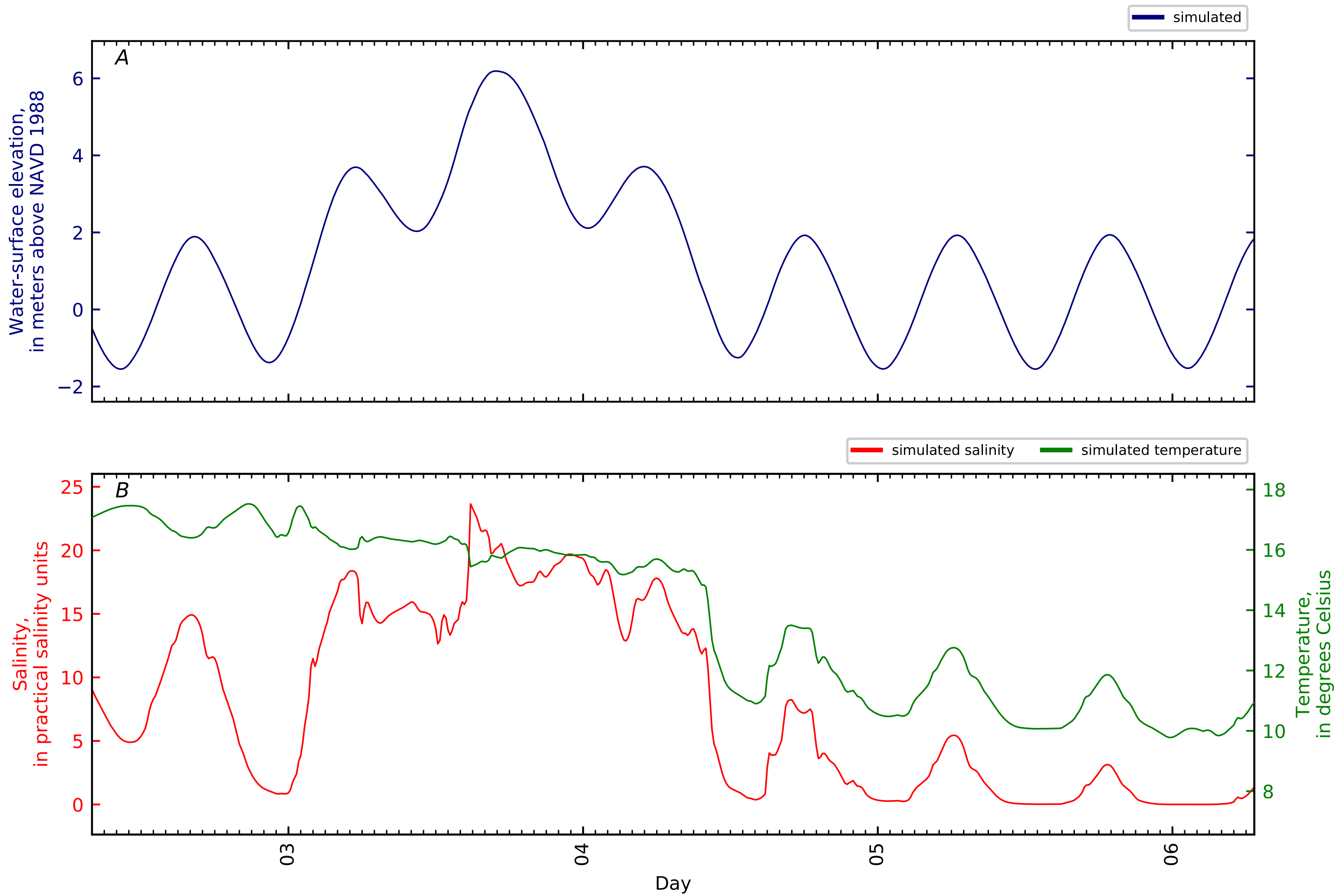

Figure B5-54. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 53, Penob Riv KM17.2 WHOI2 Frankfort Flats 2. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

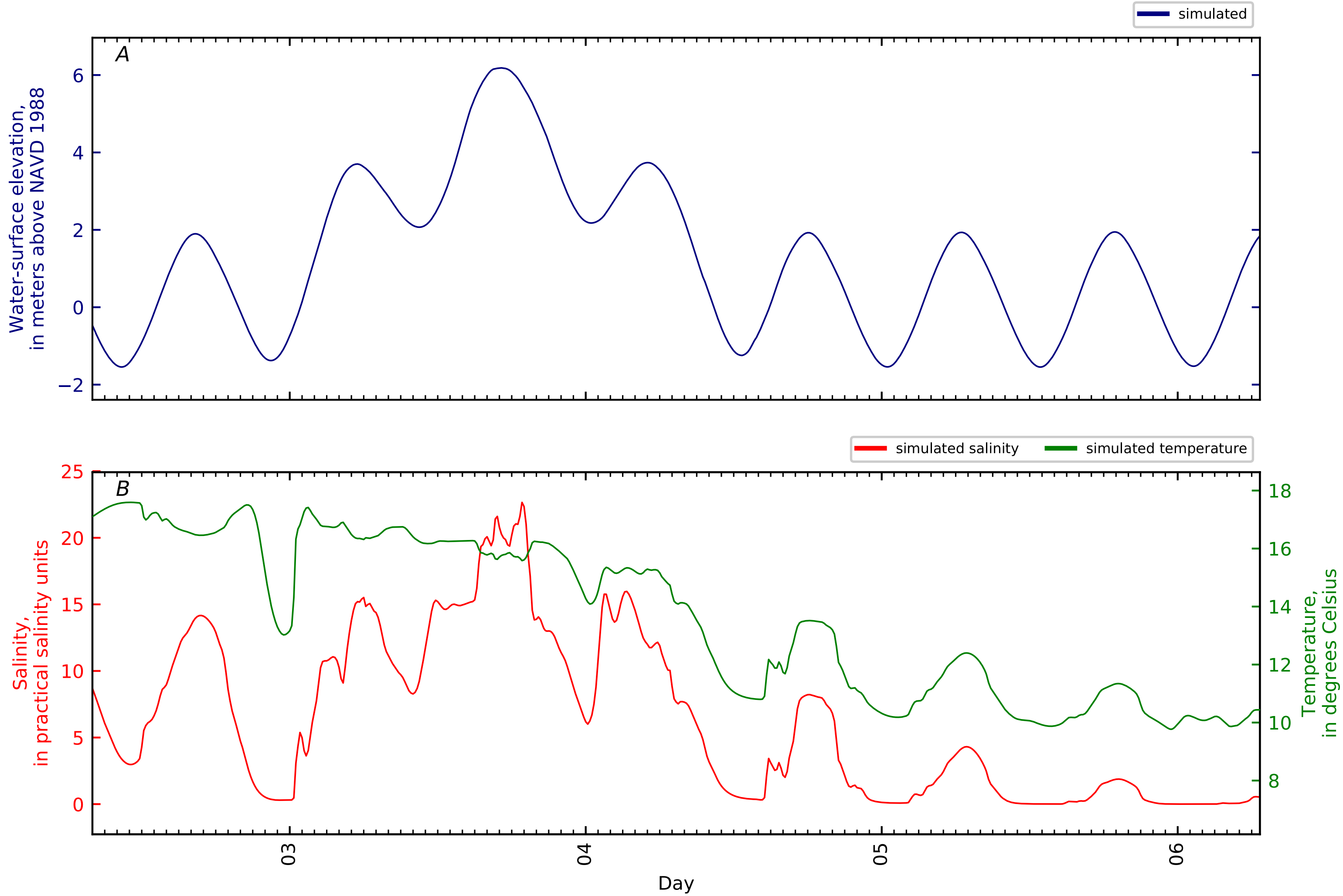

Figure B5-55. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 54, Penob Riv KM18. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

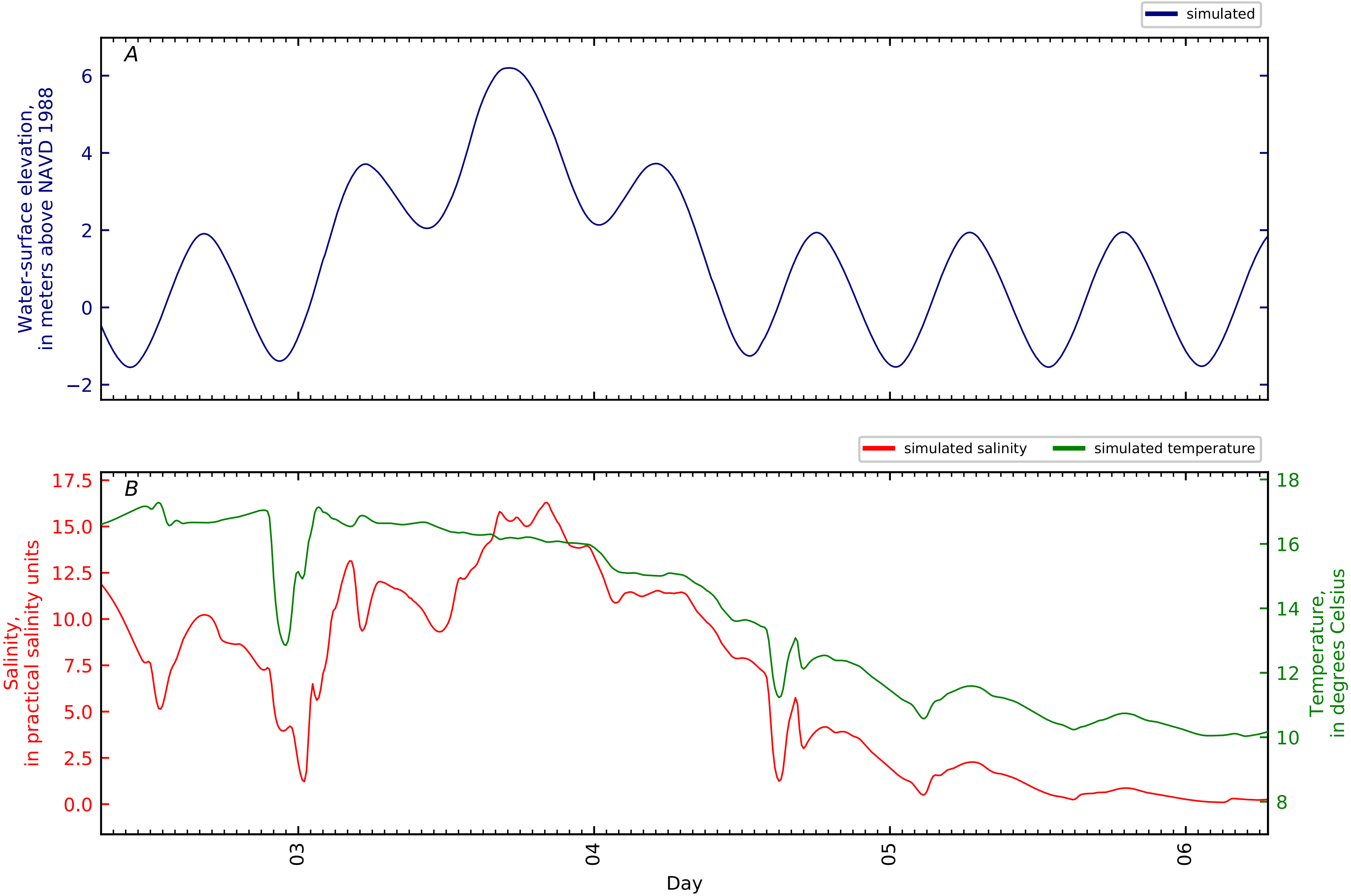

Figure B5-56. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 55, Penob Riv KM18.01 GS CTD1-01. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

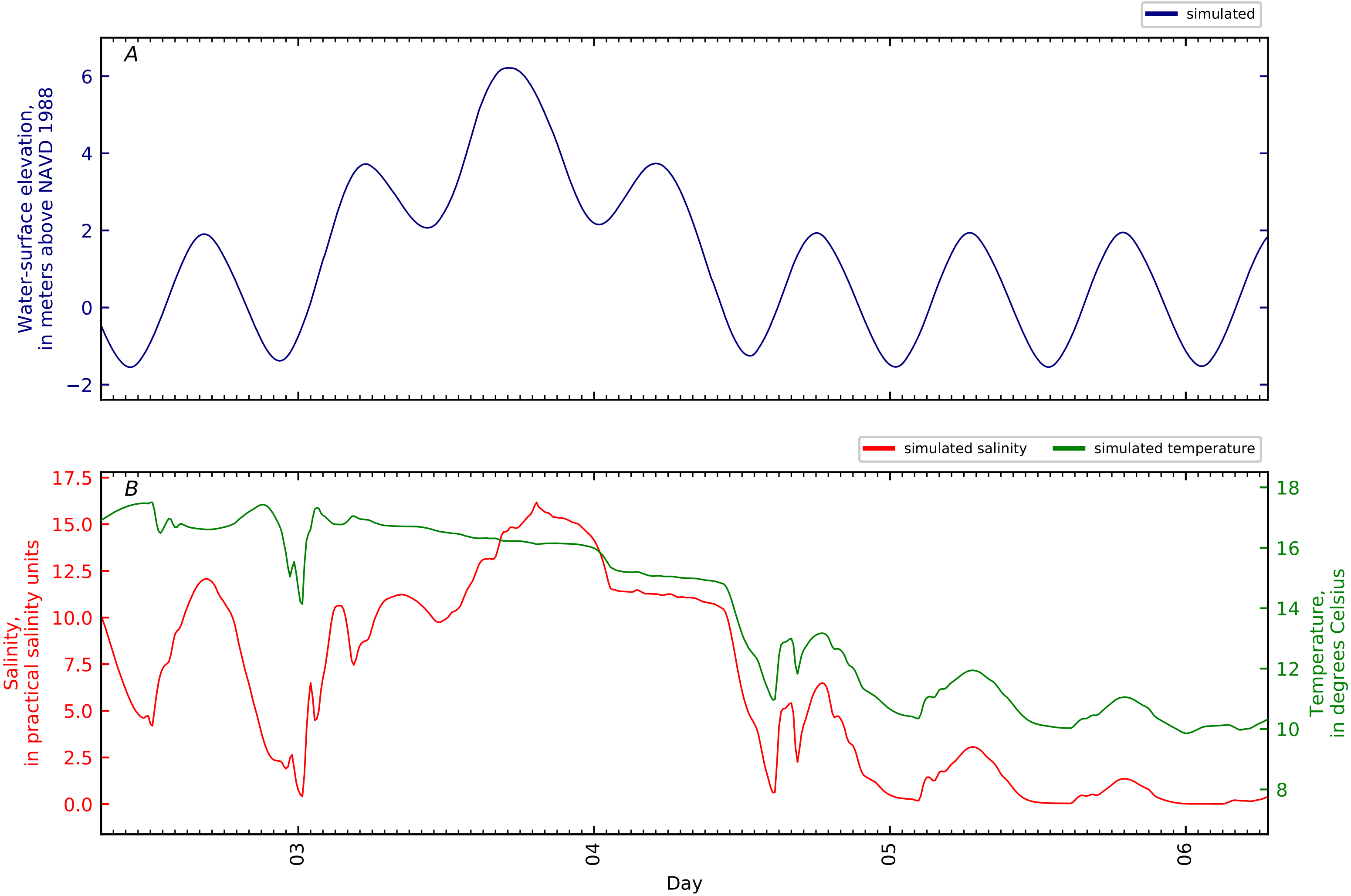

Figure B5-57. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 56, Penob Riv KM18.01 GS CTD1-02. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

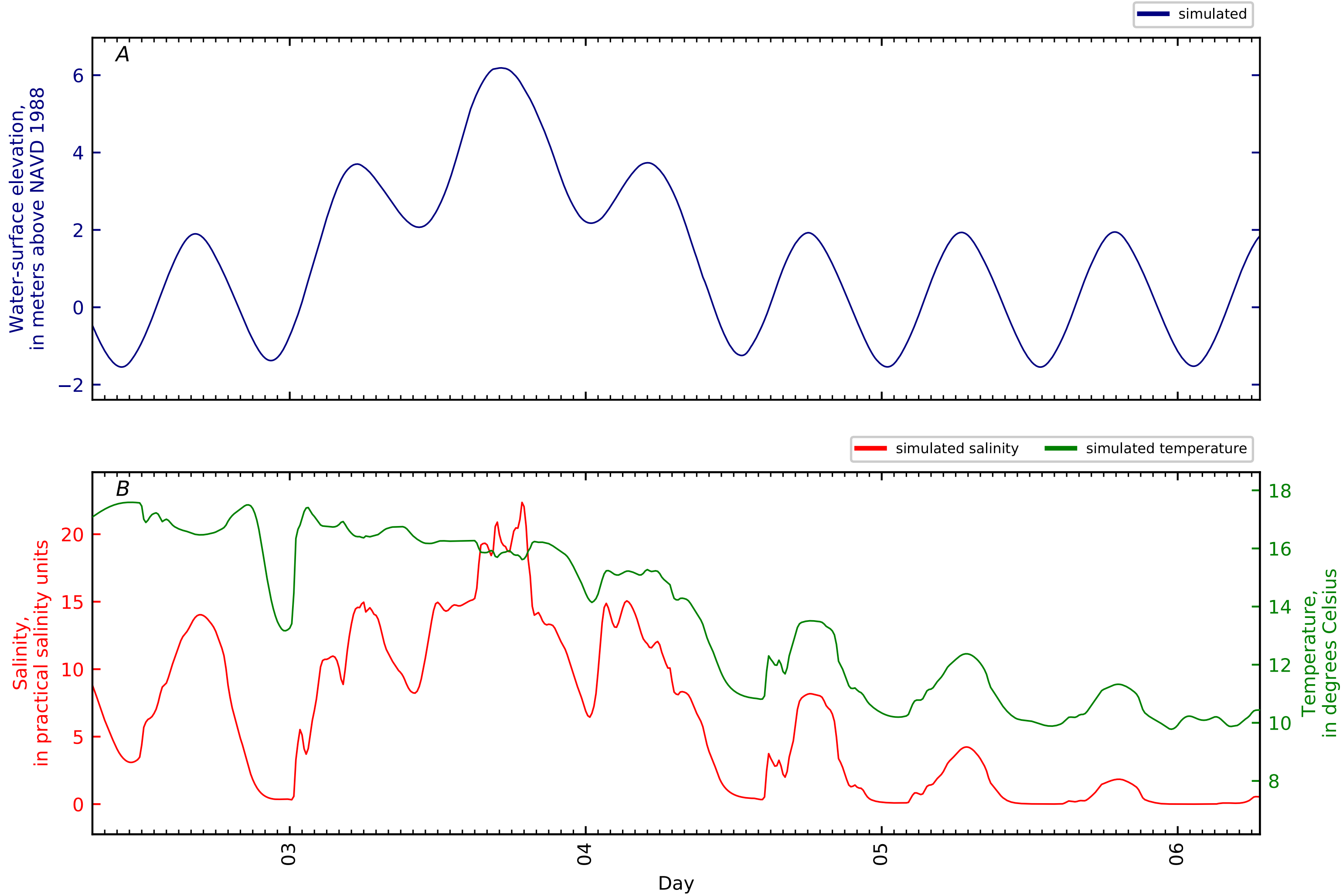

Figure B5-58. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 57, Penob Riv KM18.01 GS CTD1-03. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

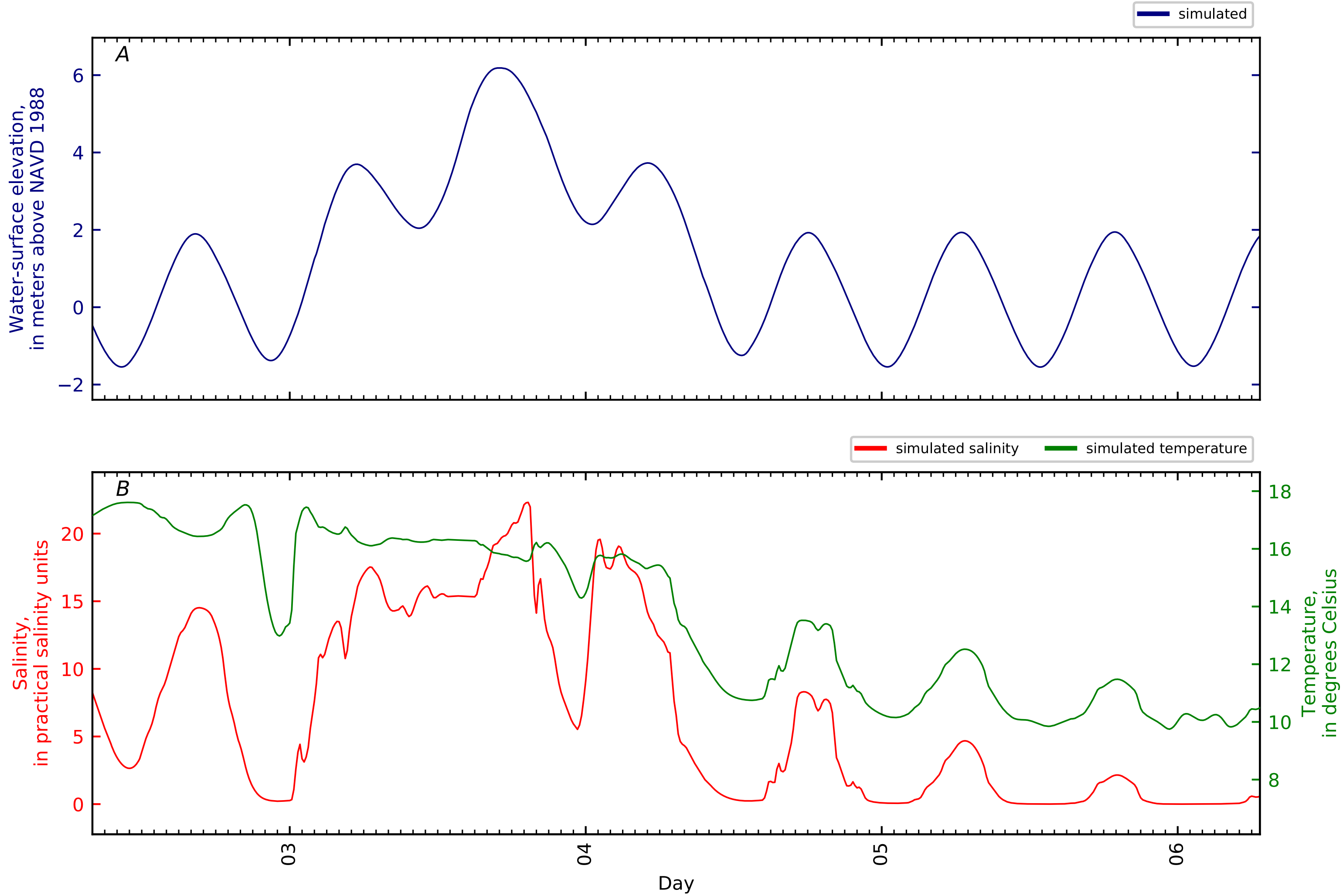

Figure B5-59. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 58, Penob Riv KM18.01 GS CTD1-04. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

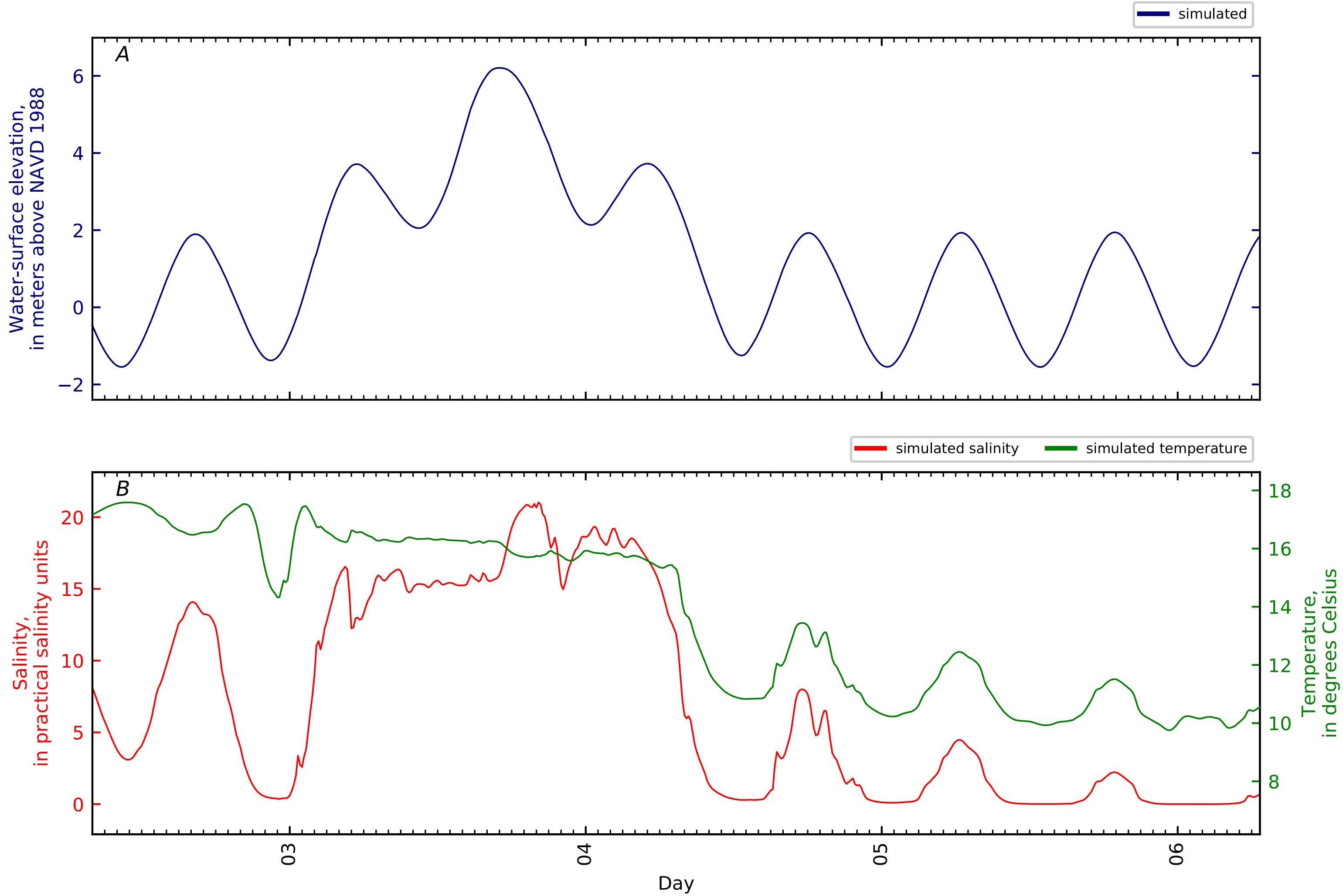

Figure B5-60. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 59, Penob Riv KM18.01 GS CTD1-05. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

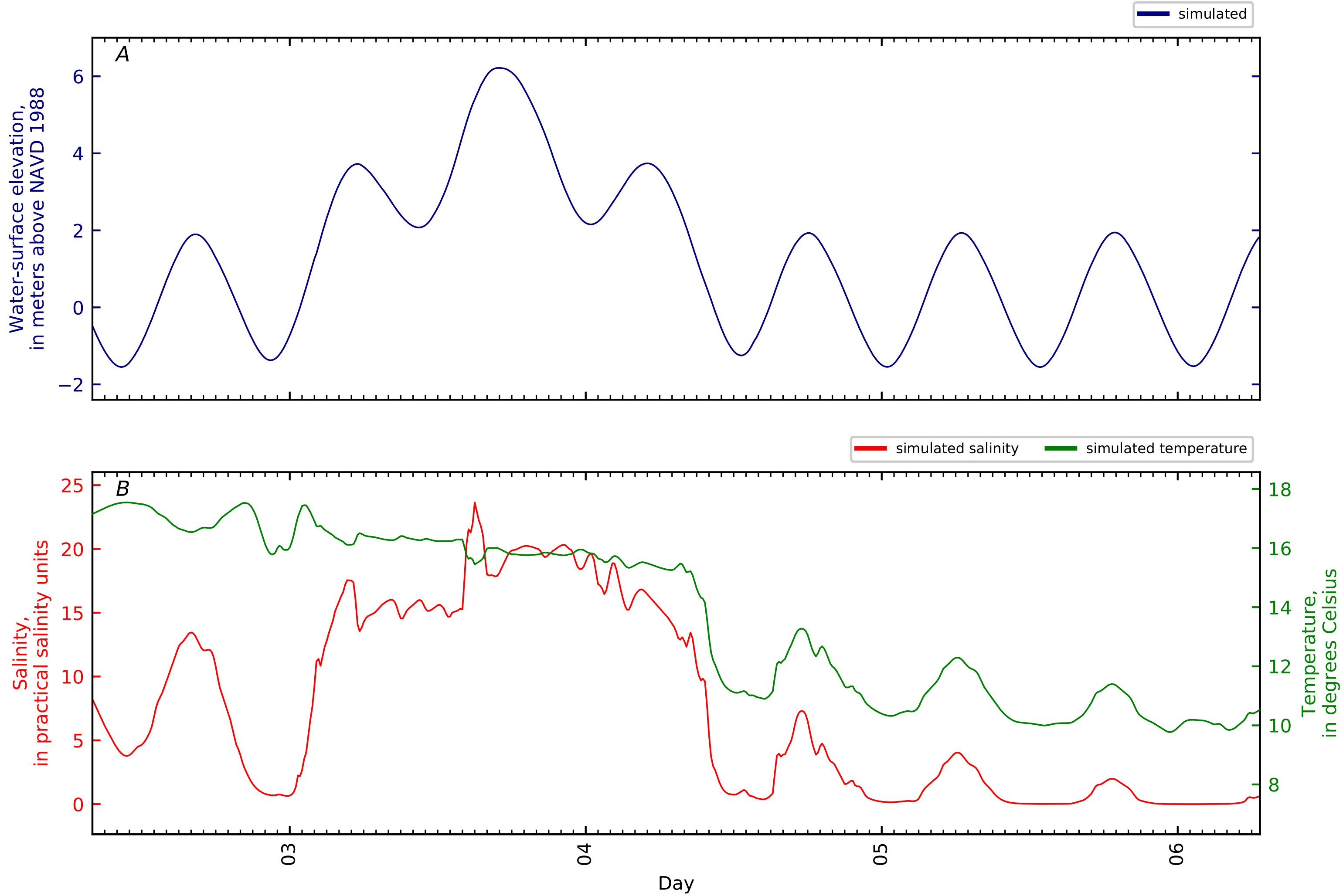

Figure B5-61. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 60, Penob Riv KM18.01 GS CTD1-06. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

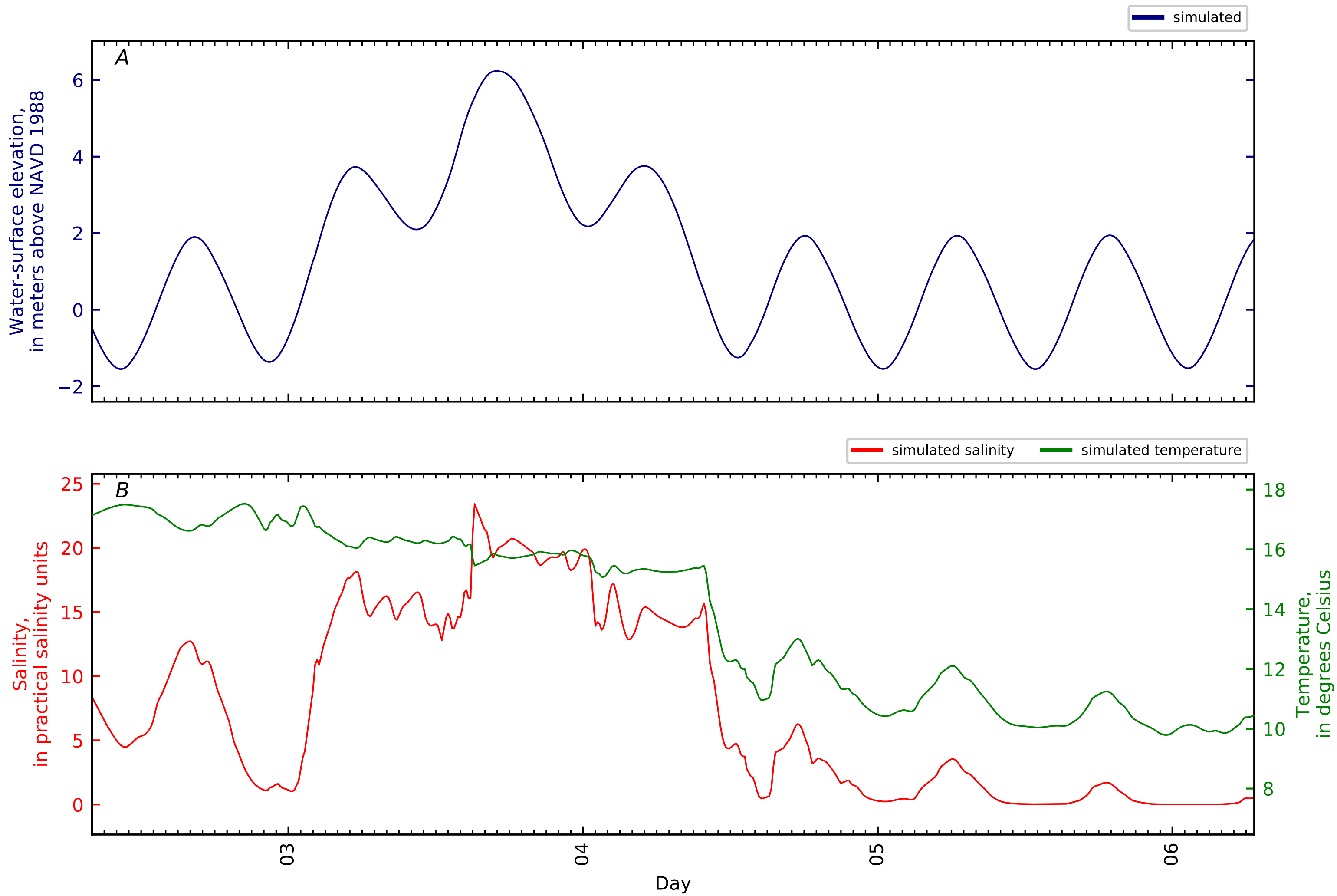

Figure B5-62. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 61, Penob Riv KM18.01 GS CTD1-07. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

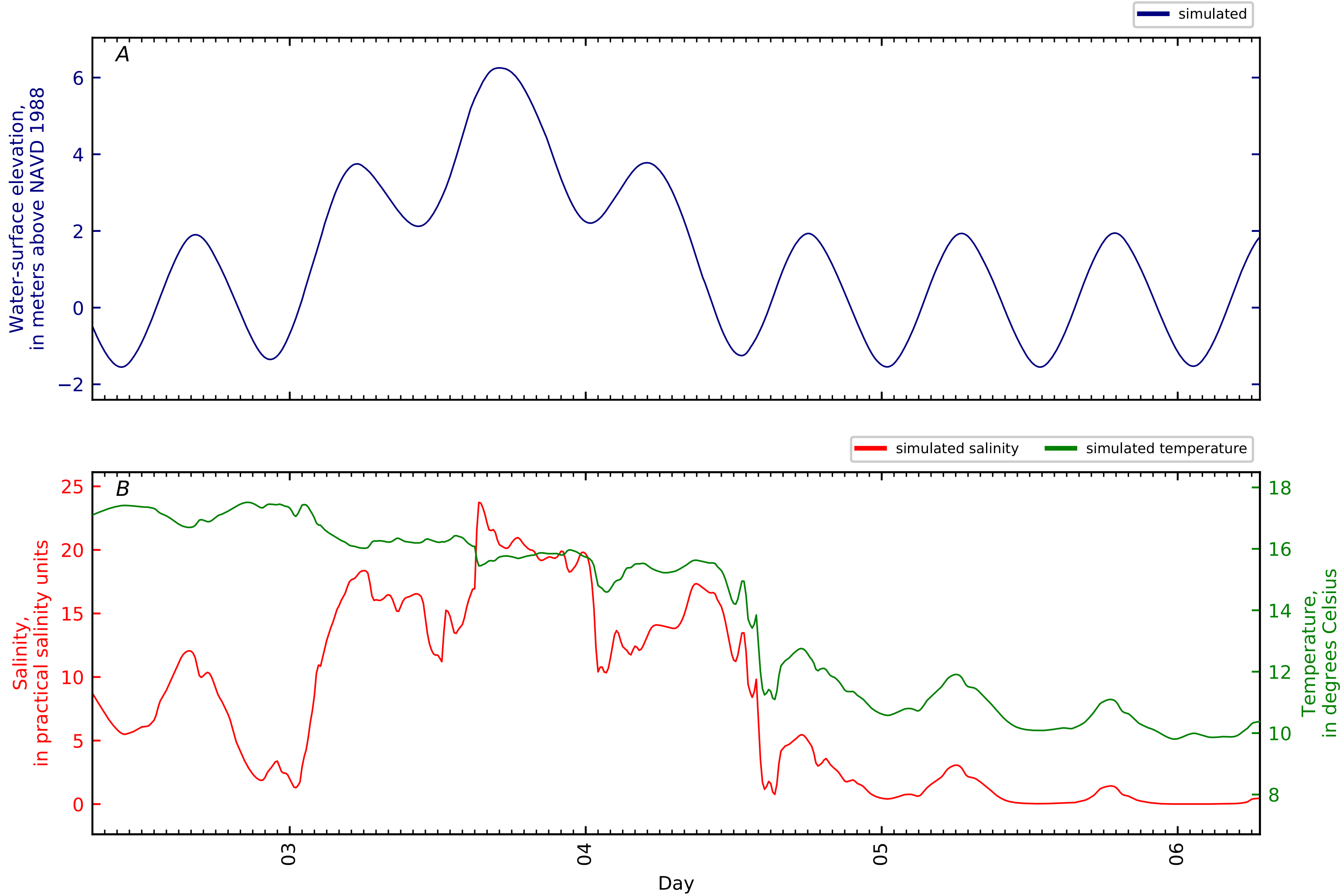

Figure B5-63. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 62, Penob Riv KM18.01 GS CTD1-08. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

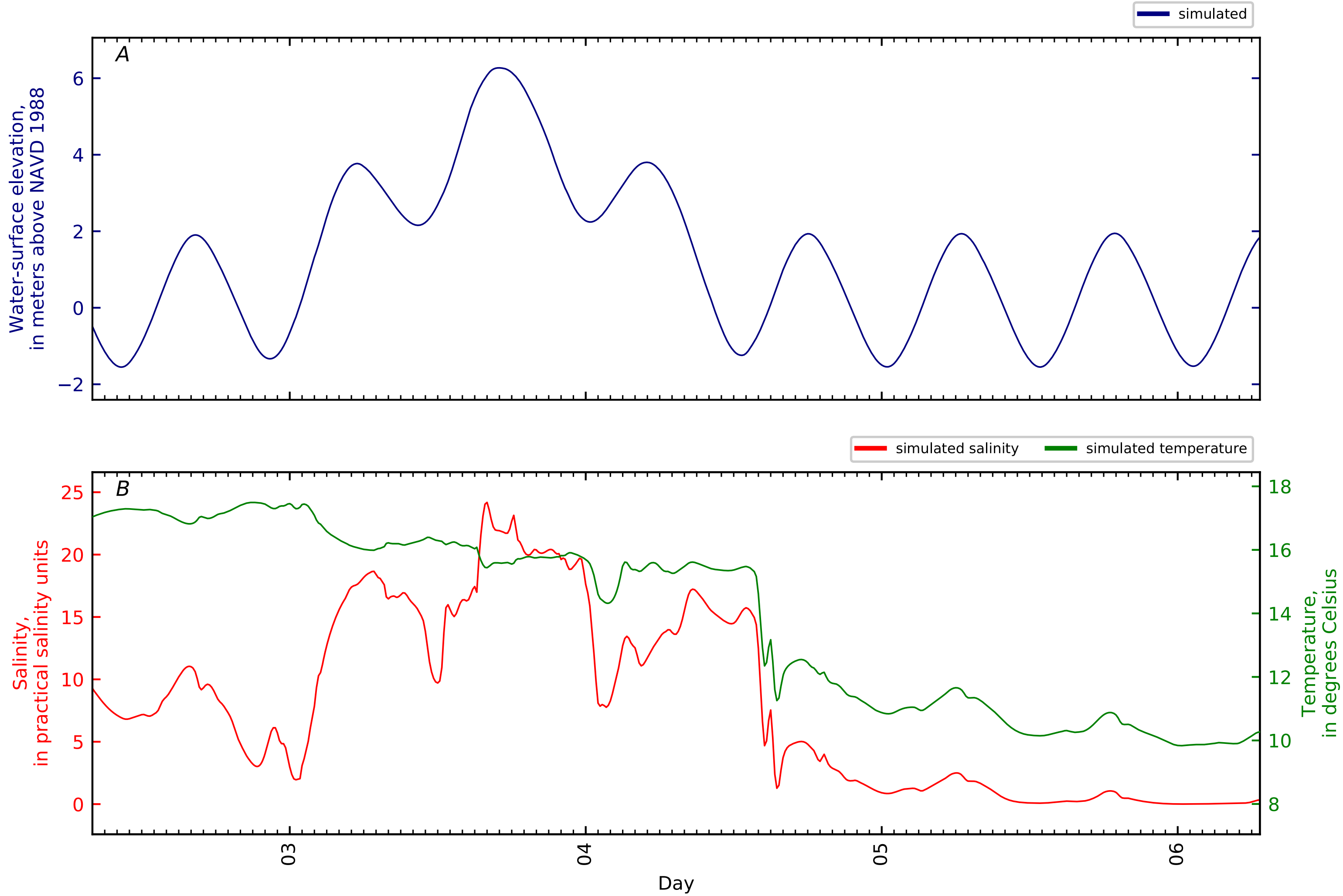

Figure B5-64. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 63, Penob Riv KM18.01 GS CTD1-09. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

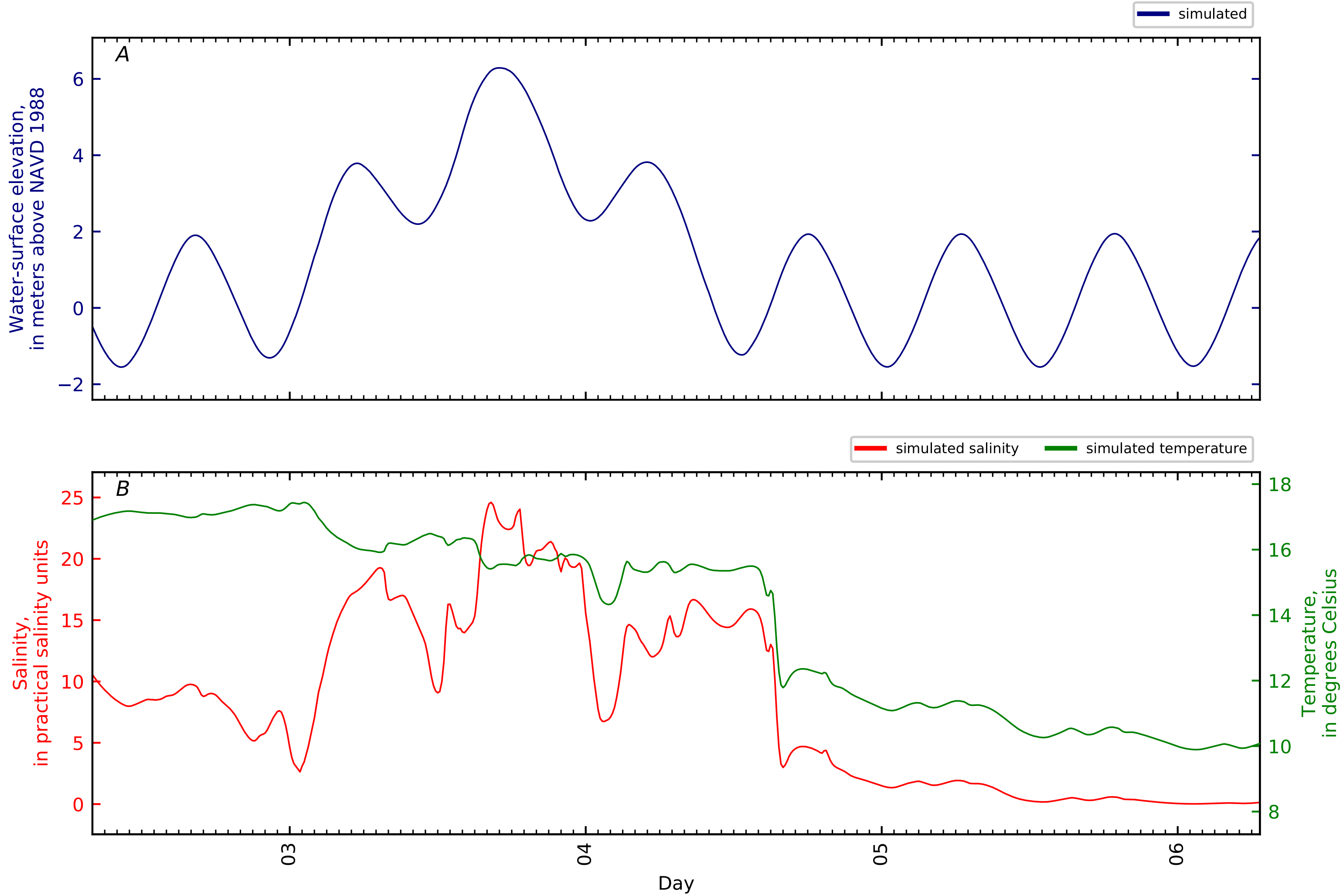

Figure B5-65. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 64, Penob Riv KM18.01 GS CTD1-10. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

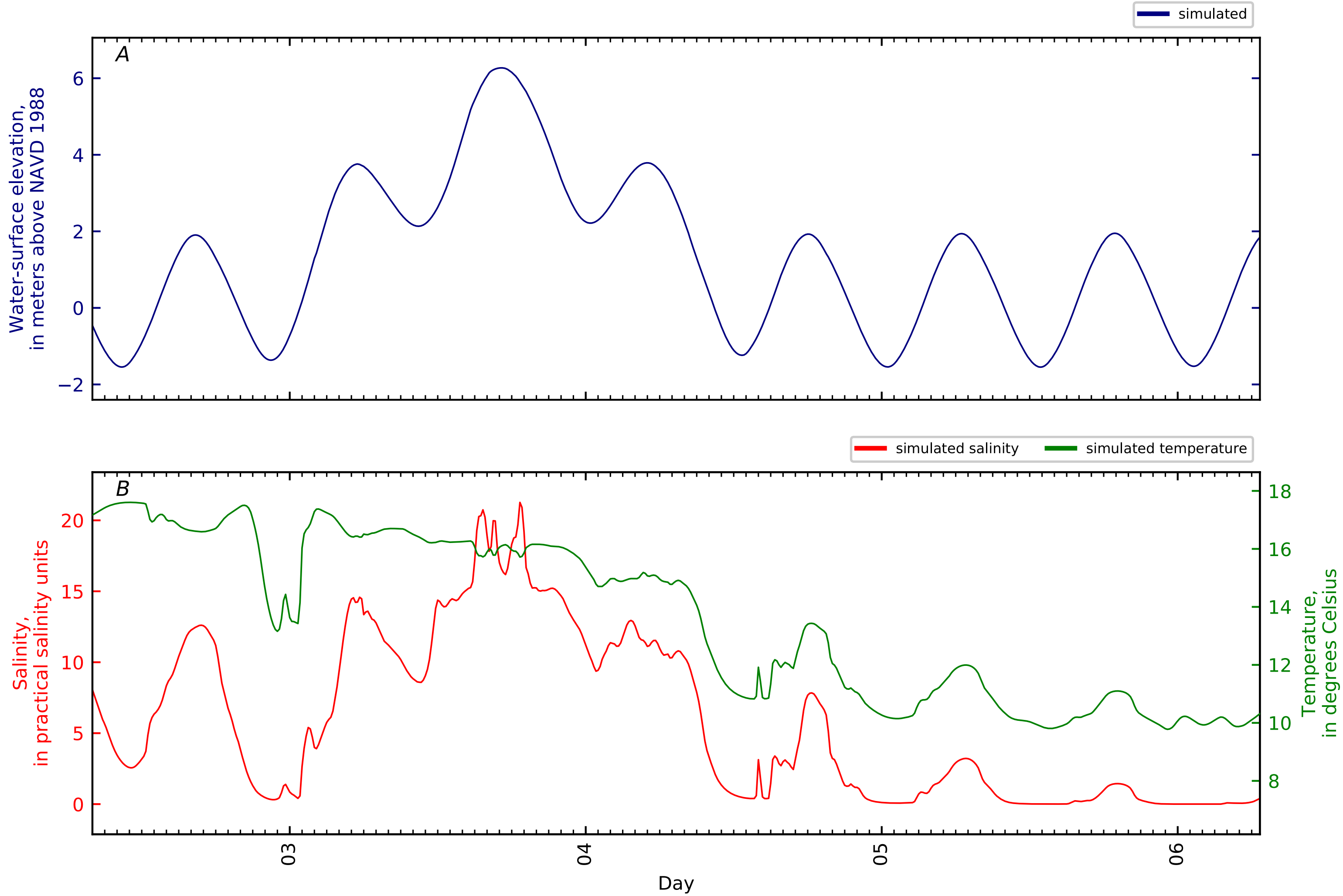

Figure B5-66. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 65, Penob Riv KM18.5 WHOI8 Frankfort Channel. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

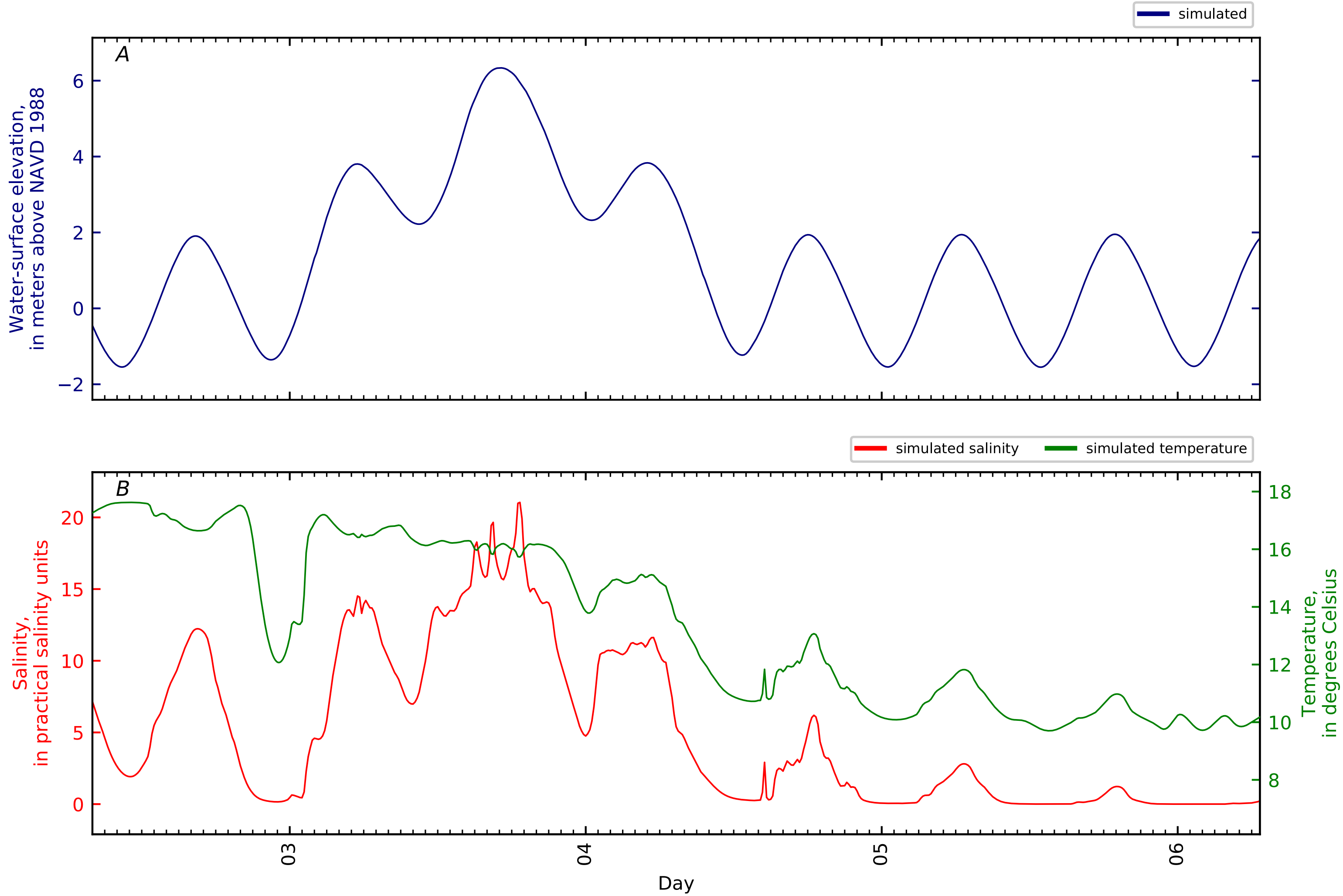

Figure B5-67. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 66, Penob Riv KM19. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

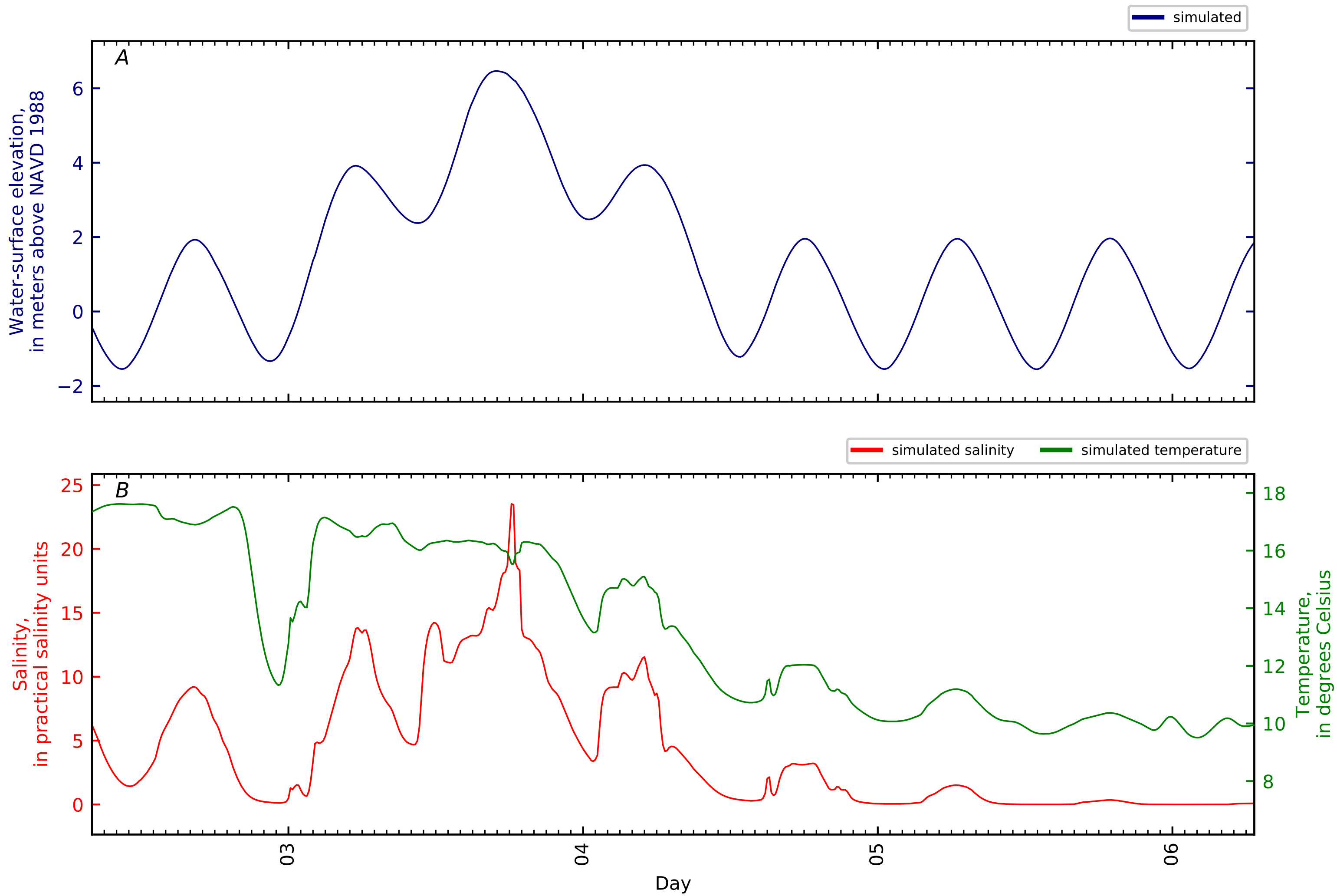

Figure B5-68. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 67, Penob Riv KM20. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

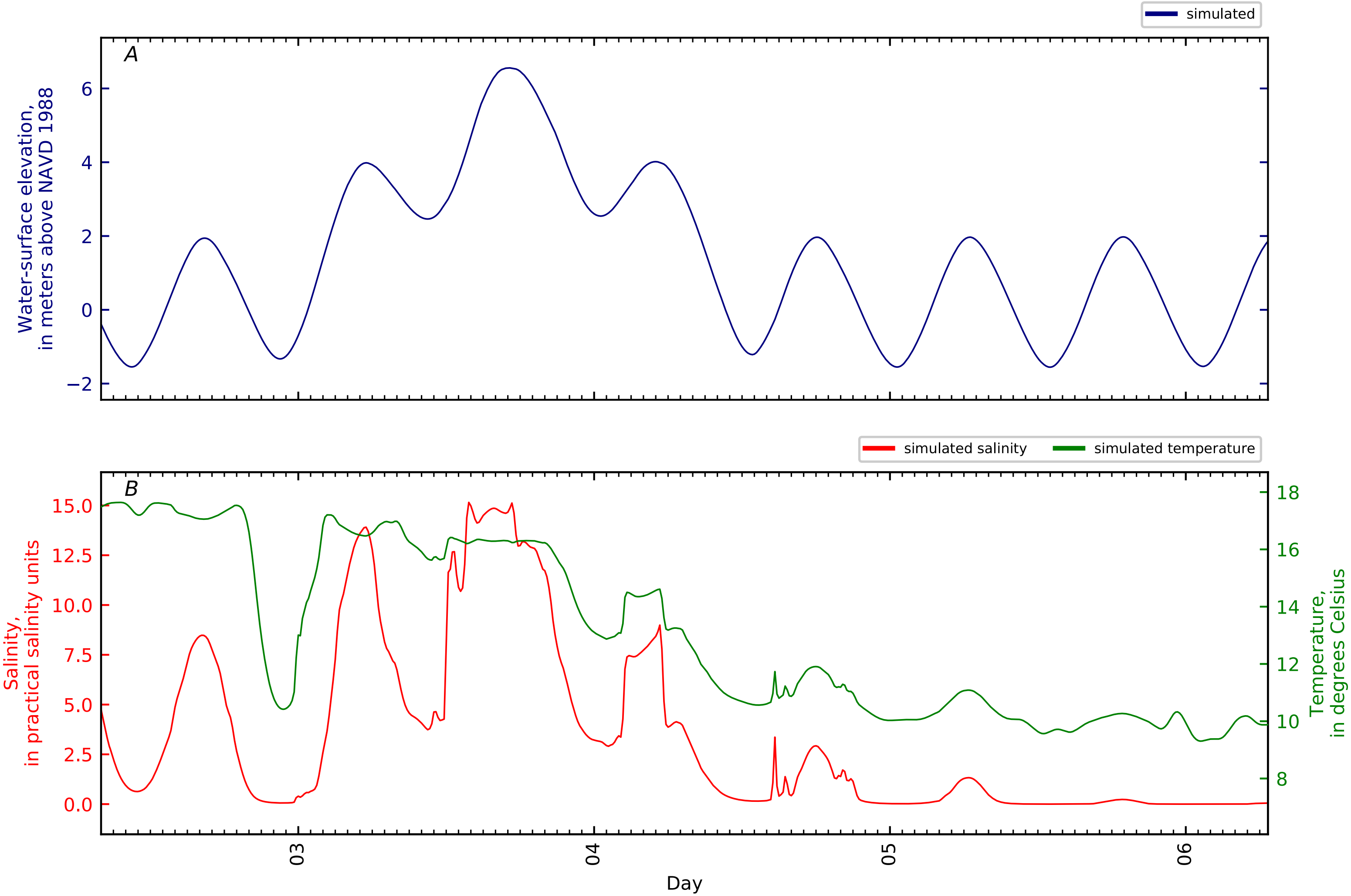

Figure B5-69. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 68, Penob Riv KM21. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

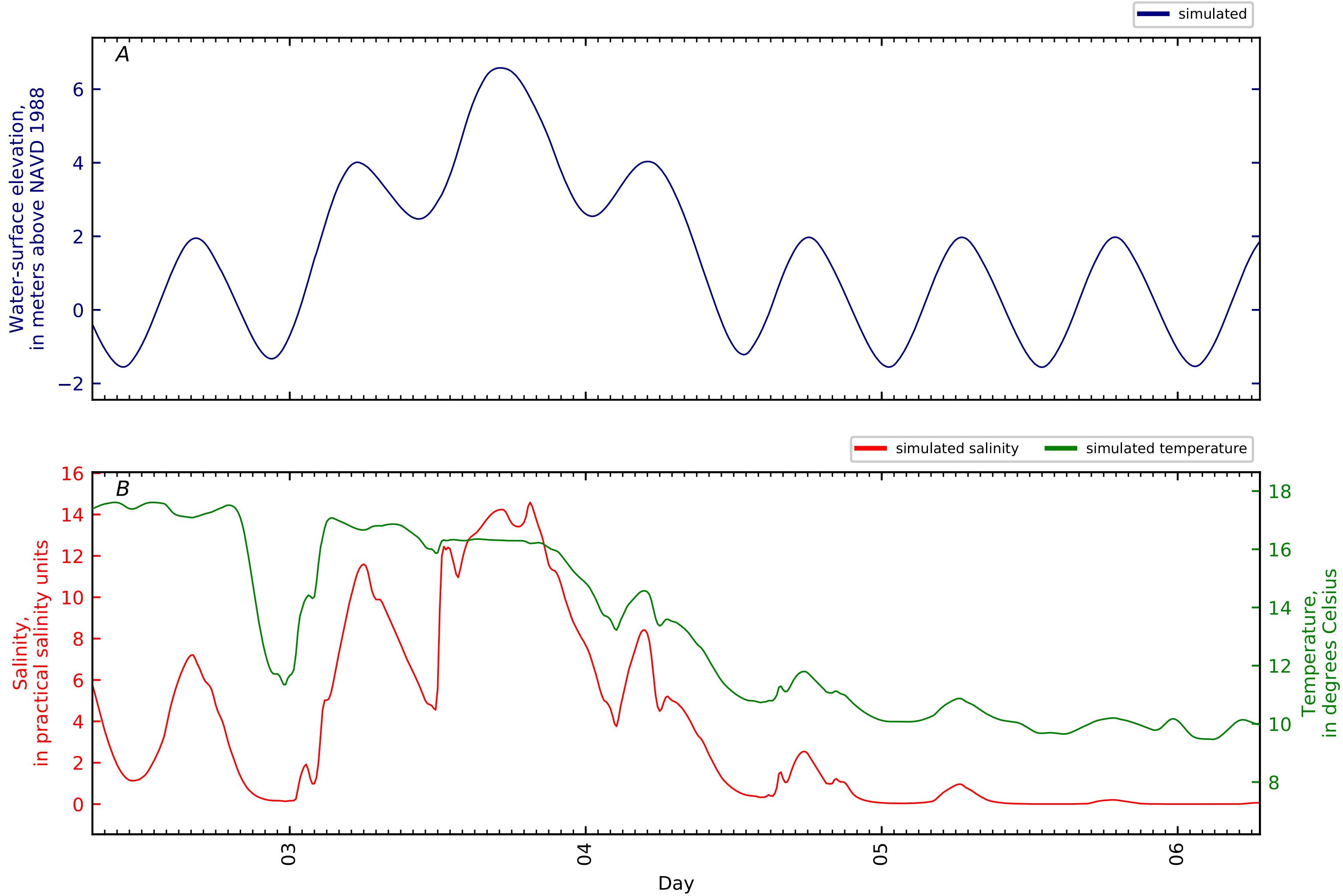

Figure B5-70. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 69, Penob Riv KM21.2 GS 443810068502201 Wint. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

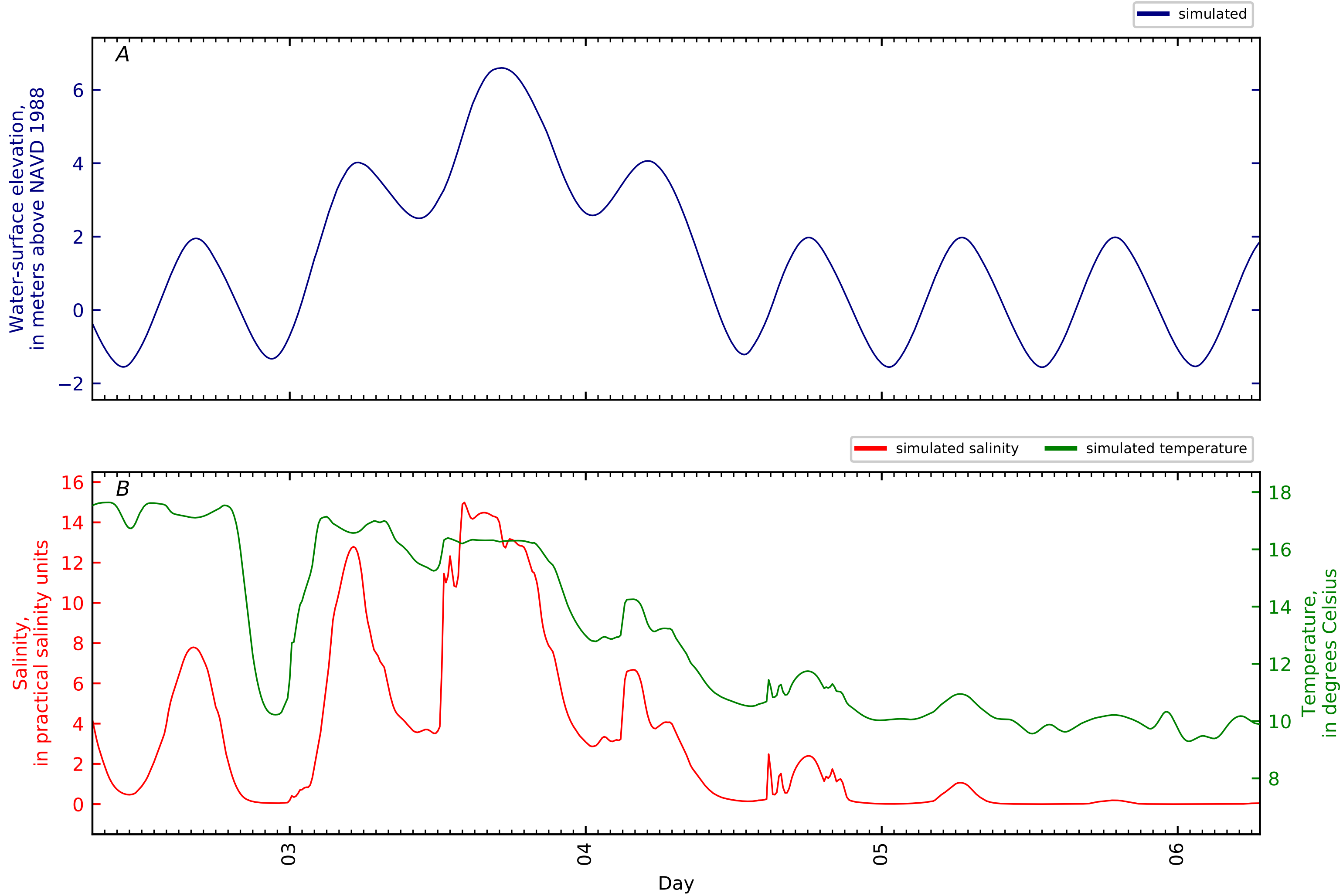

Figure B5-71. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 70, Penob Riv KM21.5 WHOI6 Winterport 2010. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

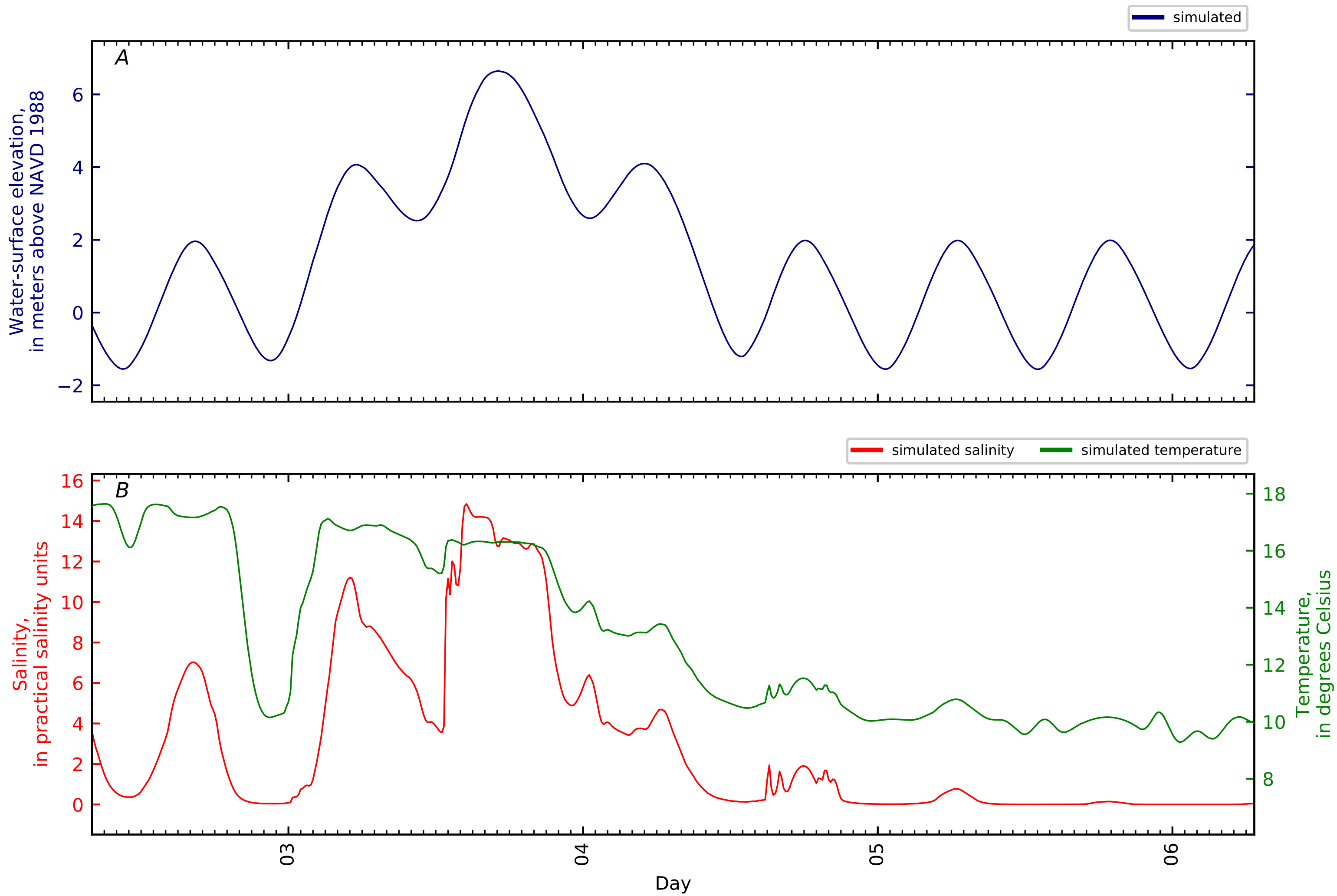

Figure B5-72. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 71, Penob Riv KM22. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

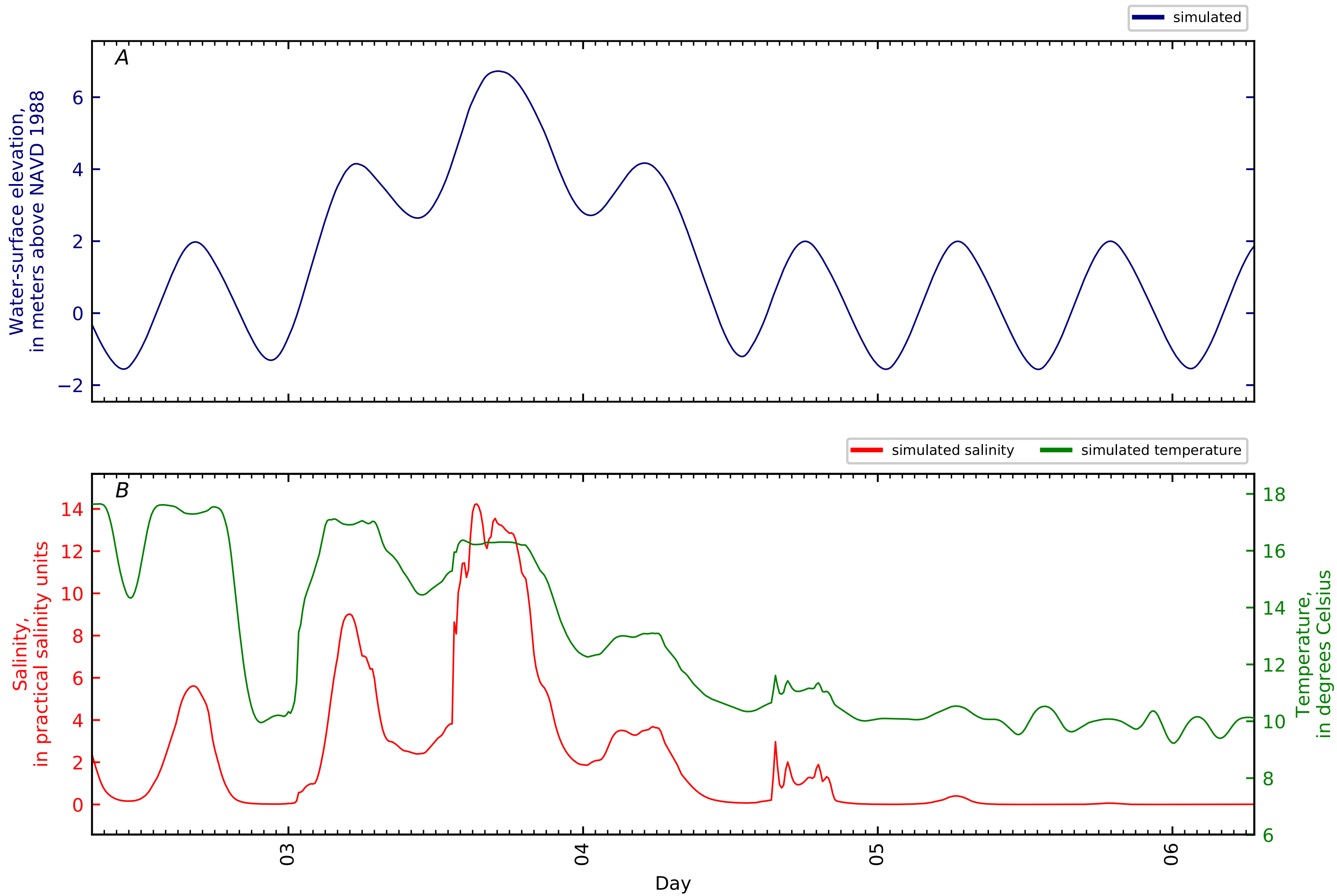

Figure B5-73. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 72, Penob Riv KM23. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

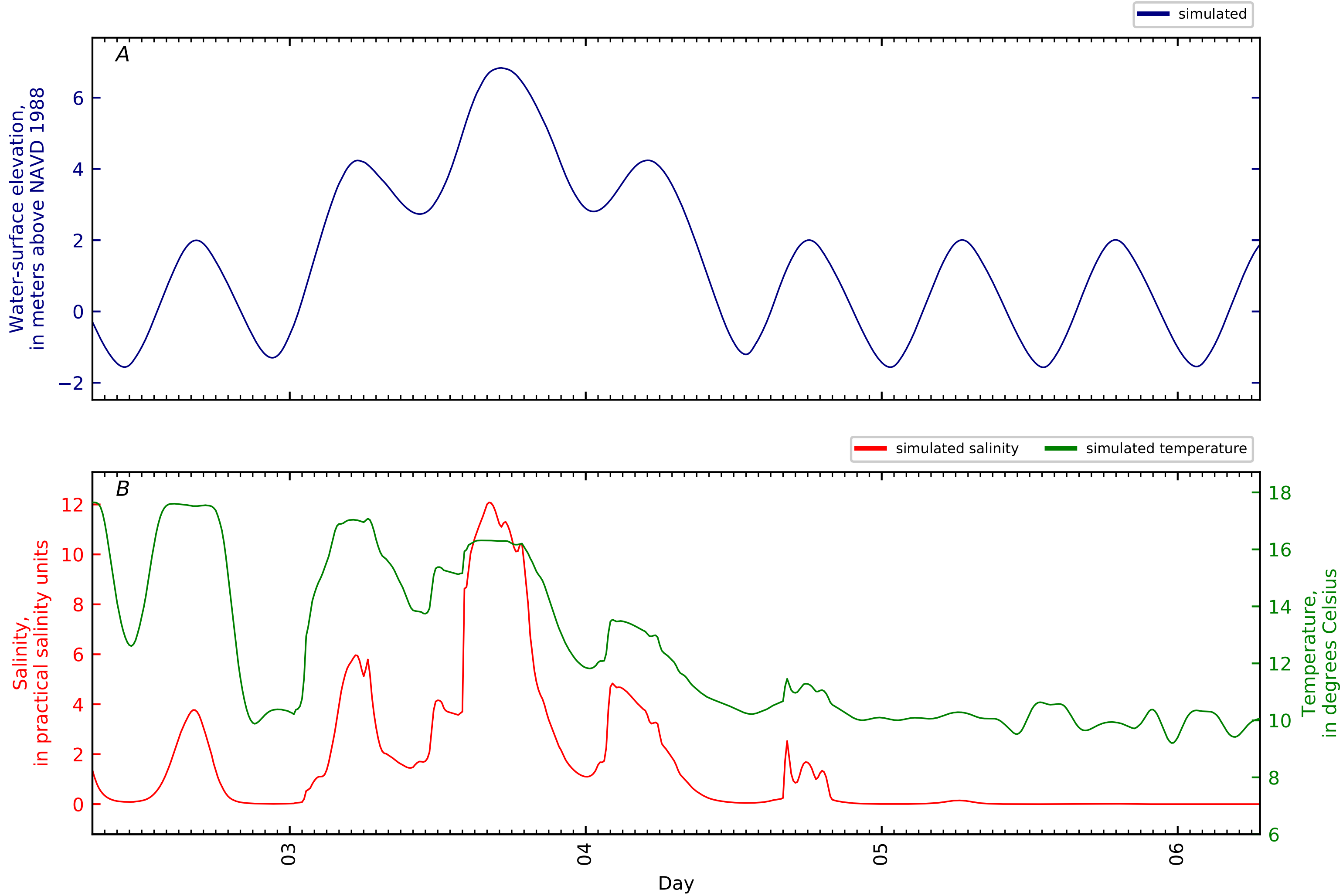

Figure B5-74. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 73, Penob Riv KM24. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

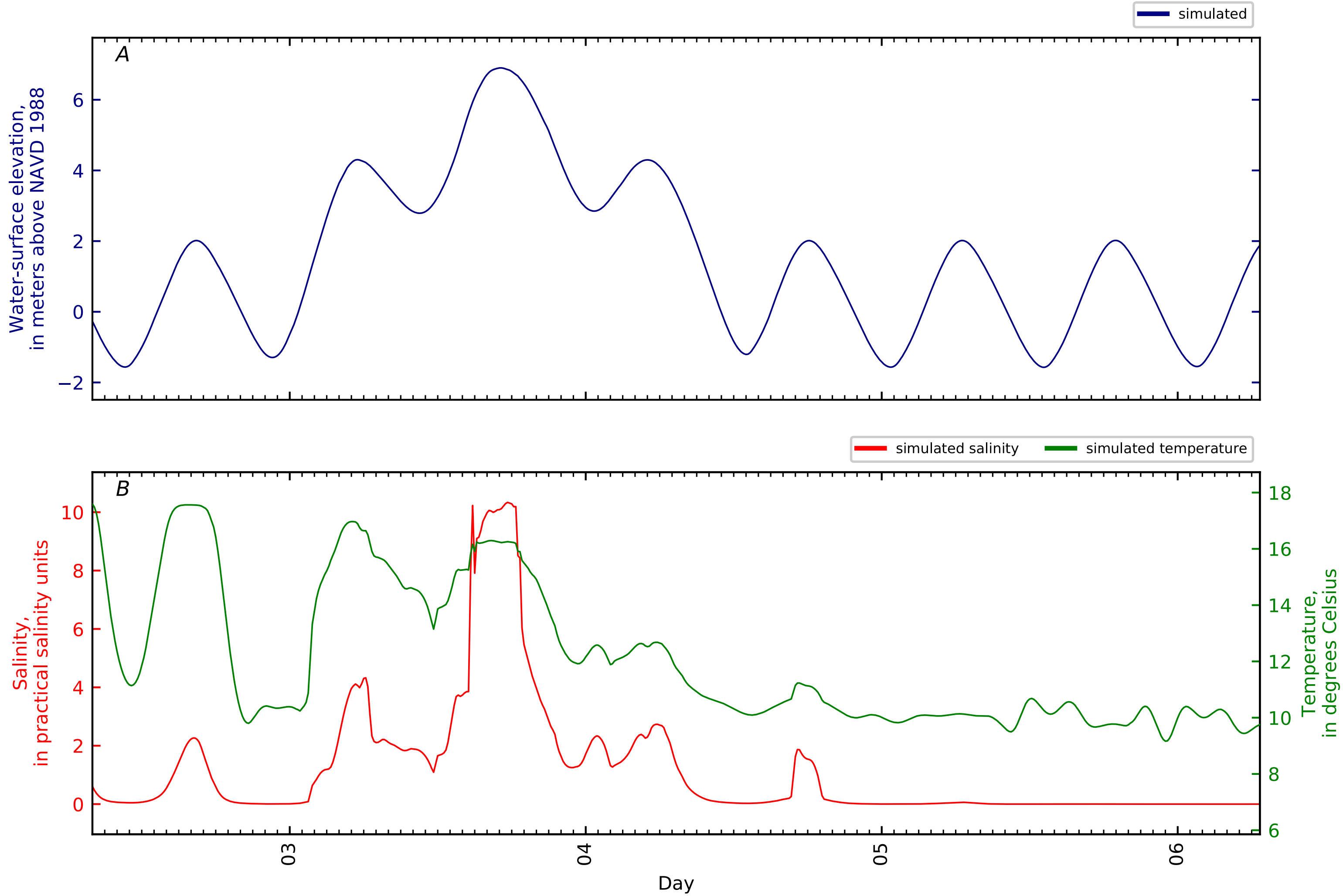

Figure B5-75. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 74, Penob Riv KM25. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

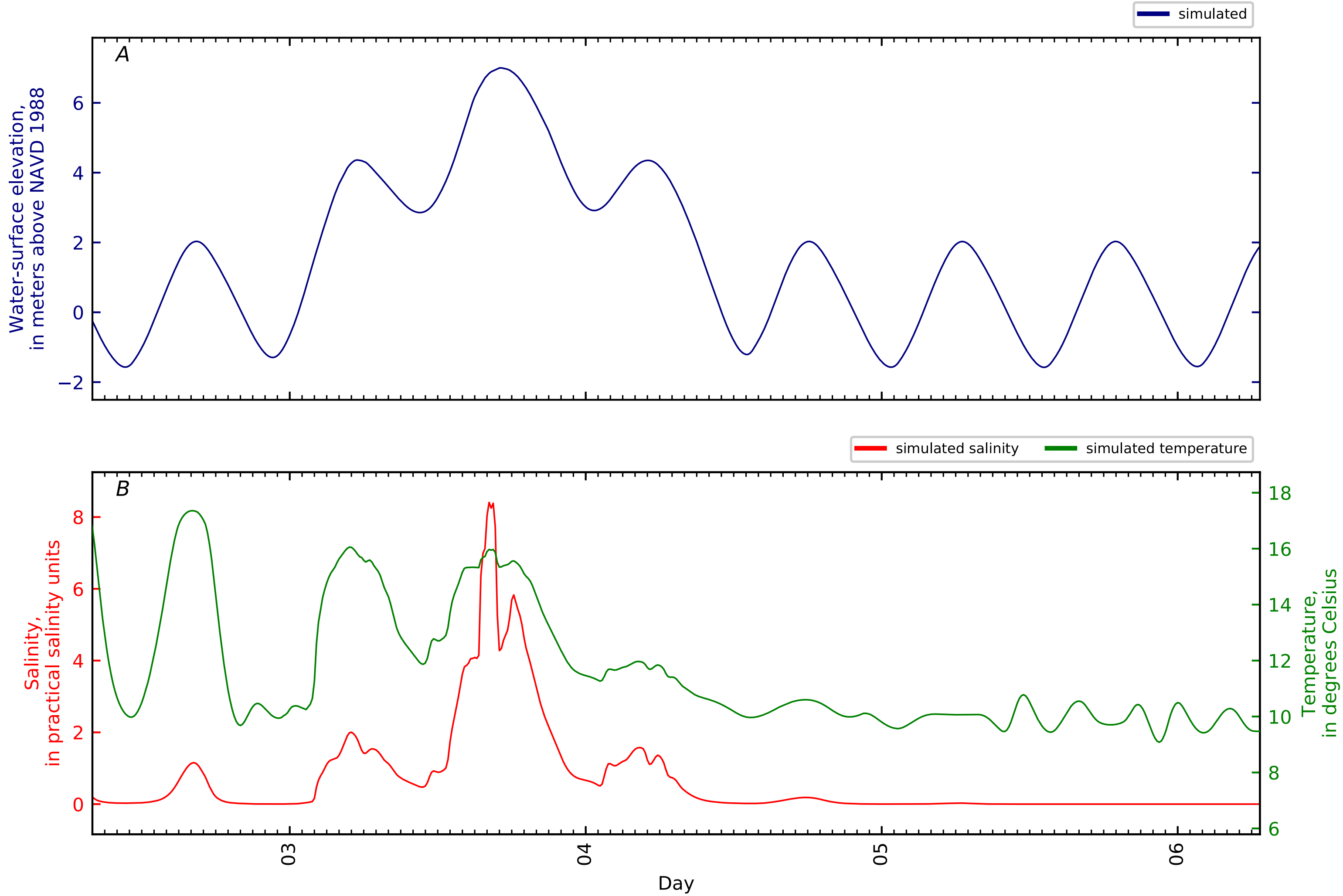

Figure B5-76. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 75, Penob Riv KM26. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

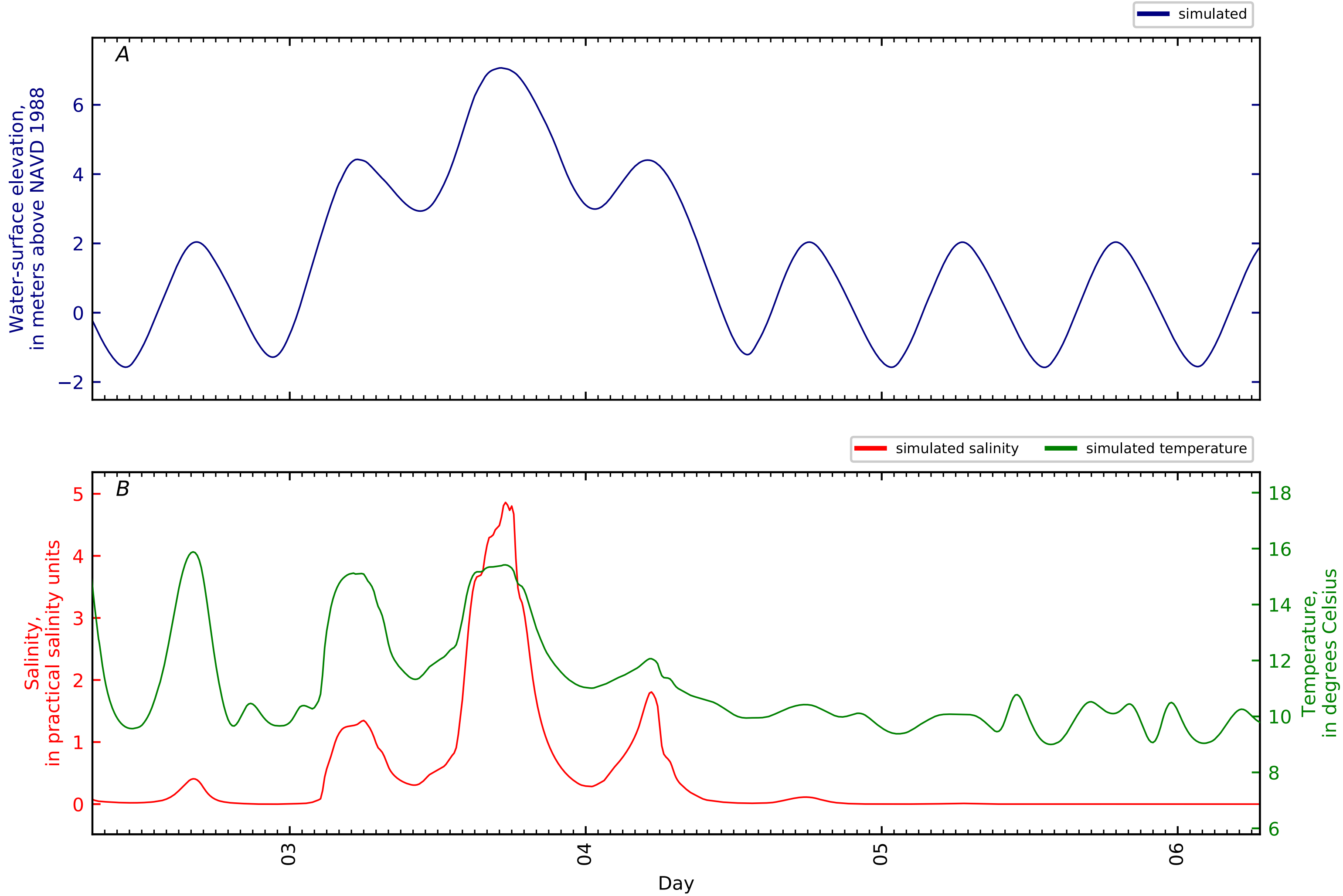

Figure B5-77. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 76, Penob Riv KM27. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

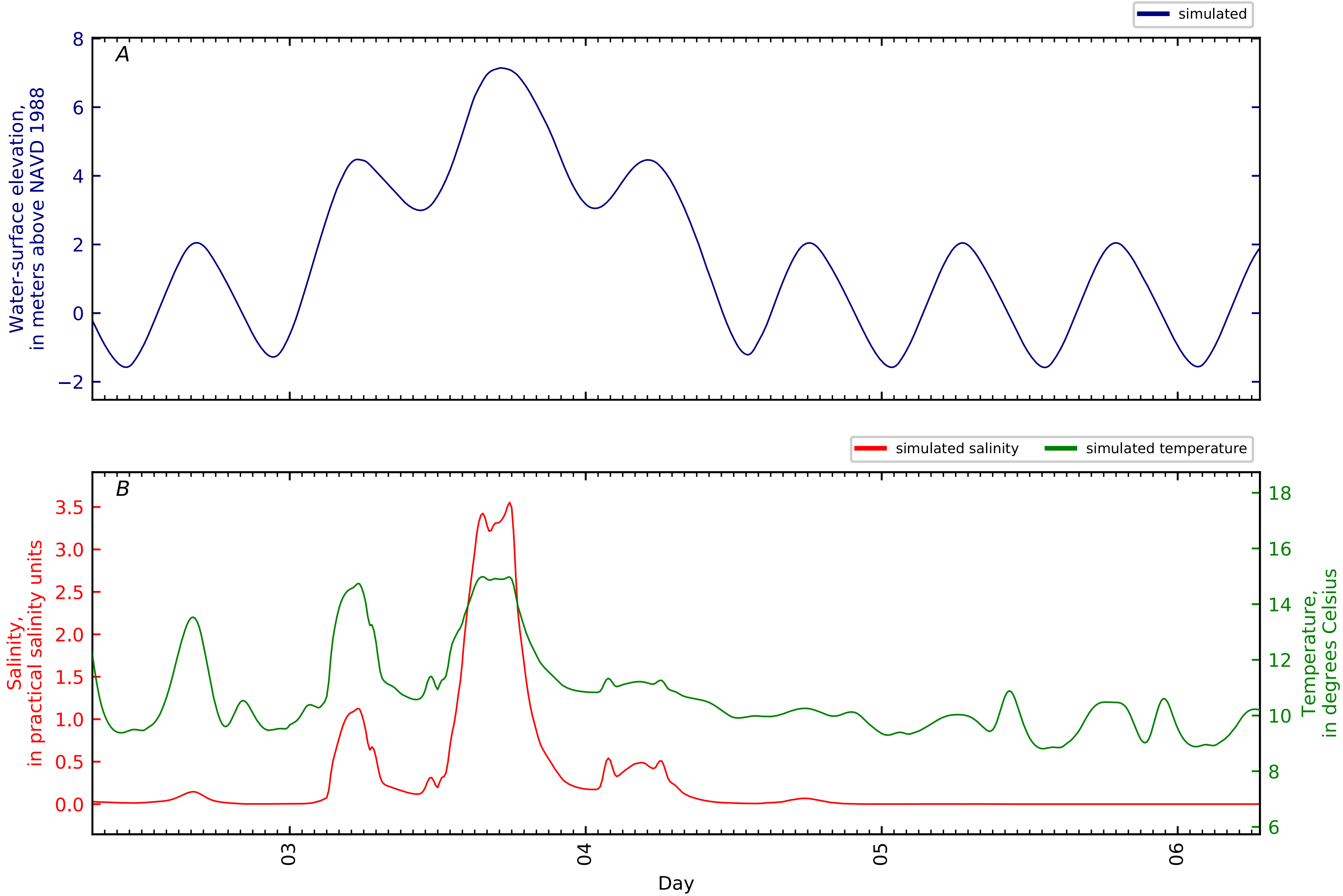

Figure B5-78. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 77, Penob Riv KM28. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

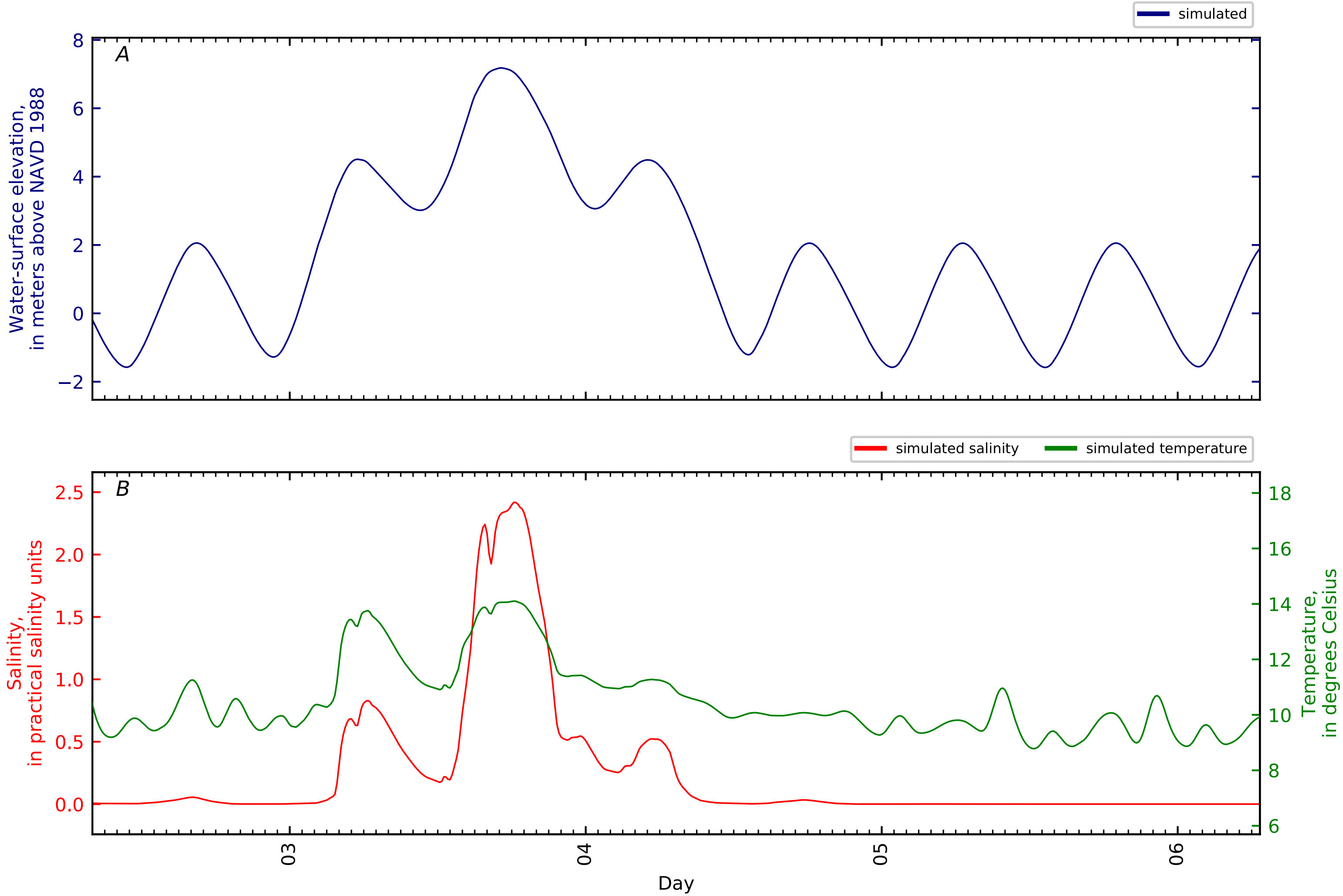

Figure B5-79. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 78, Penob Riv KM29. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

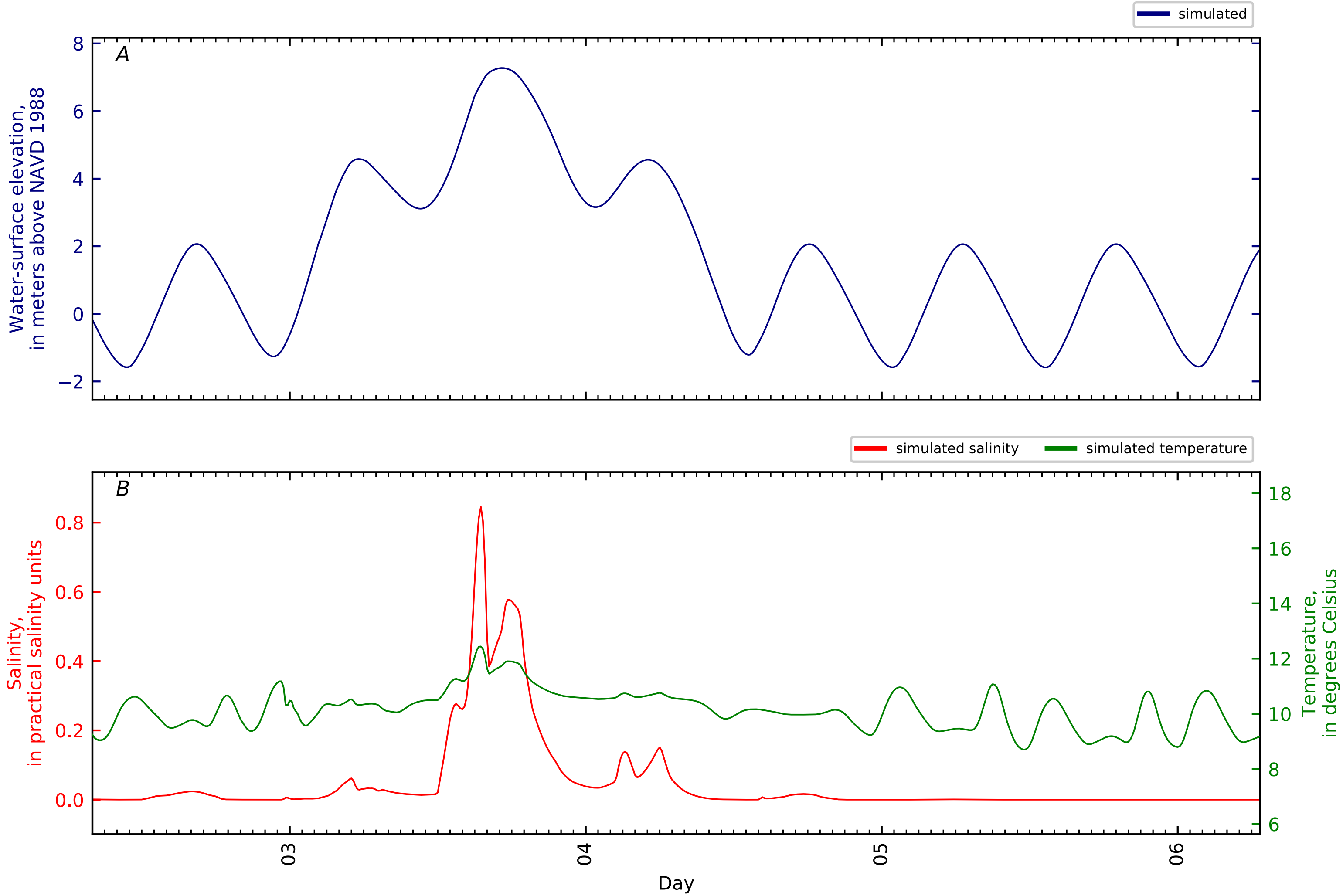

Figure B5-80. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 79, Penob Riv KM30. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

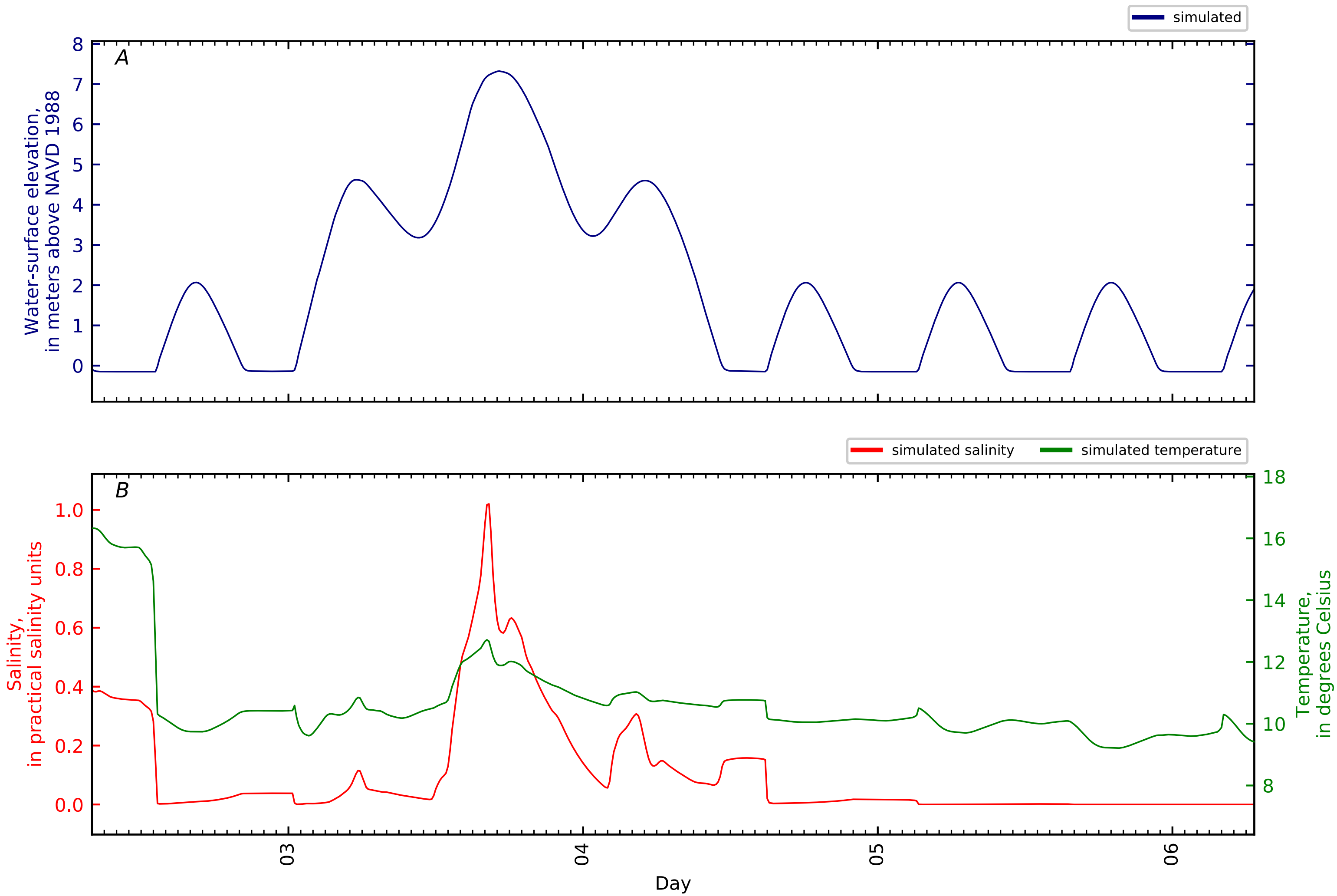

Figure B5-81. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 80, Penob Riv KM30.3 ERDC3 ON-MU2-SF-2 Bartl. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

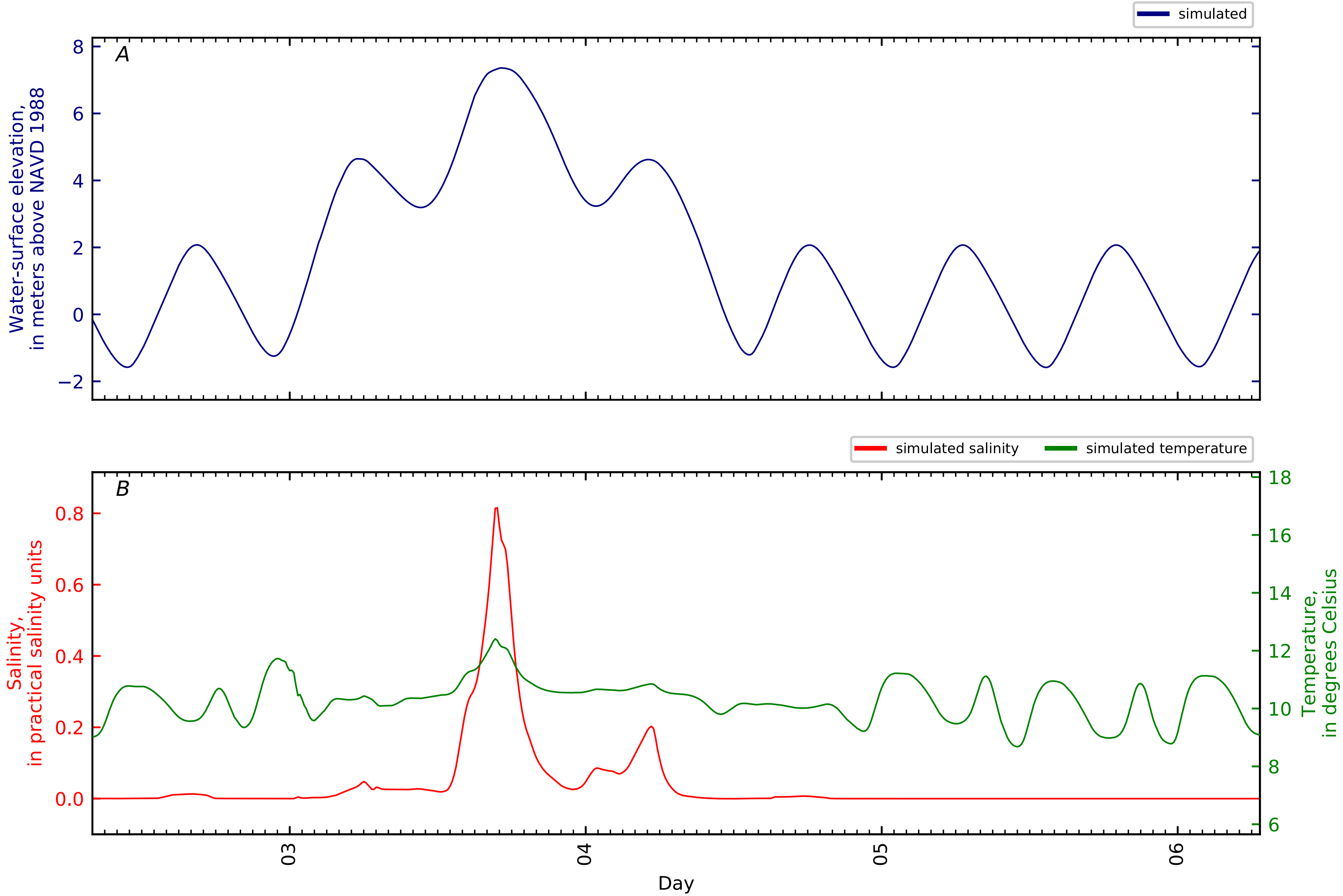

Figure B5-82. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 81, Penob Riv KM31. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

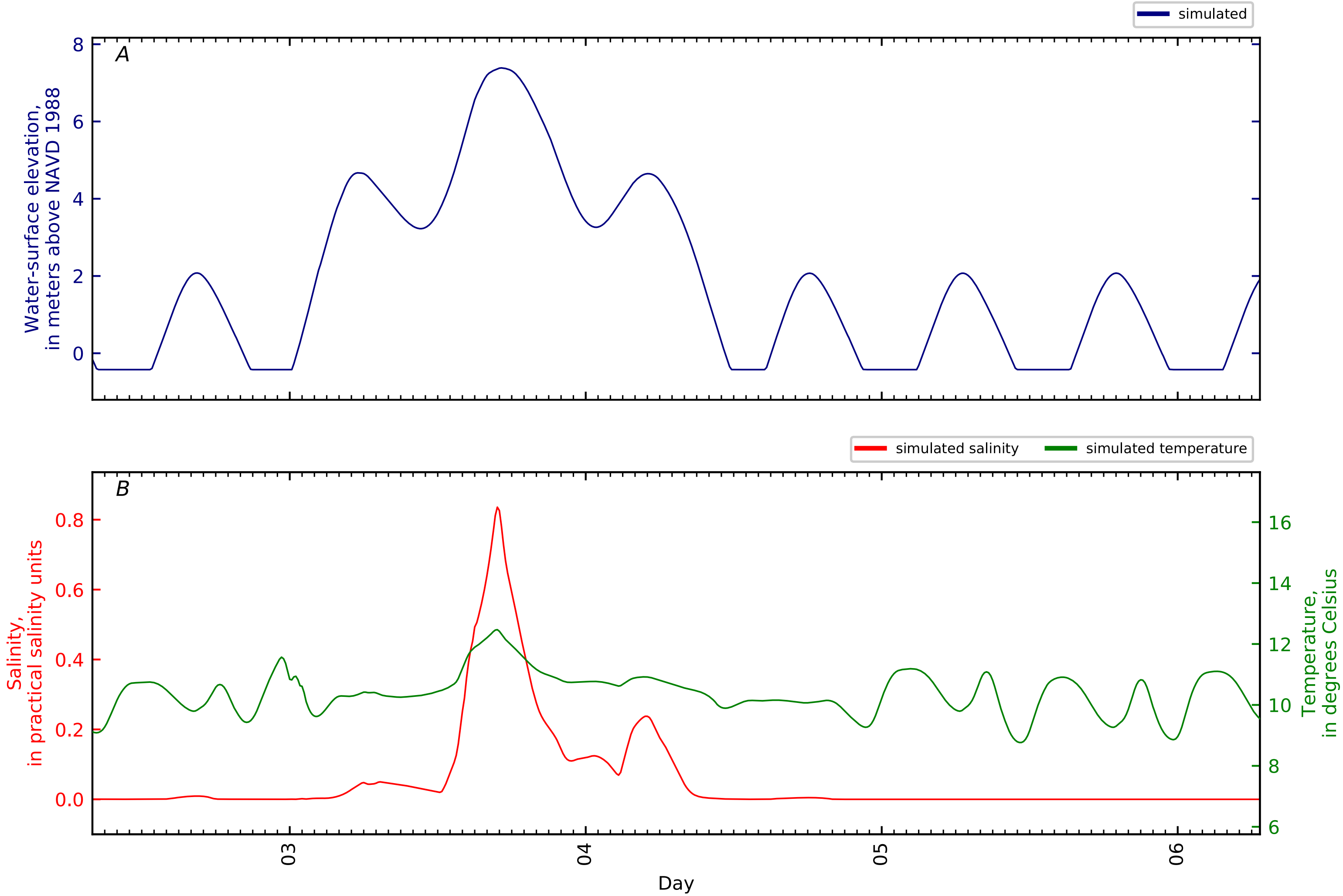

Figure B5-83. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 82, Penob Riv KM31.3 ERDC1 ON-MU2-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

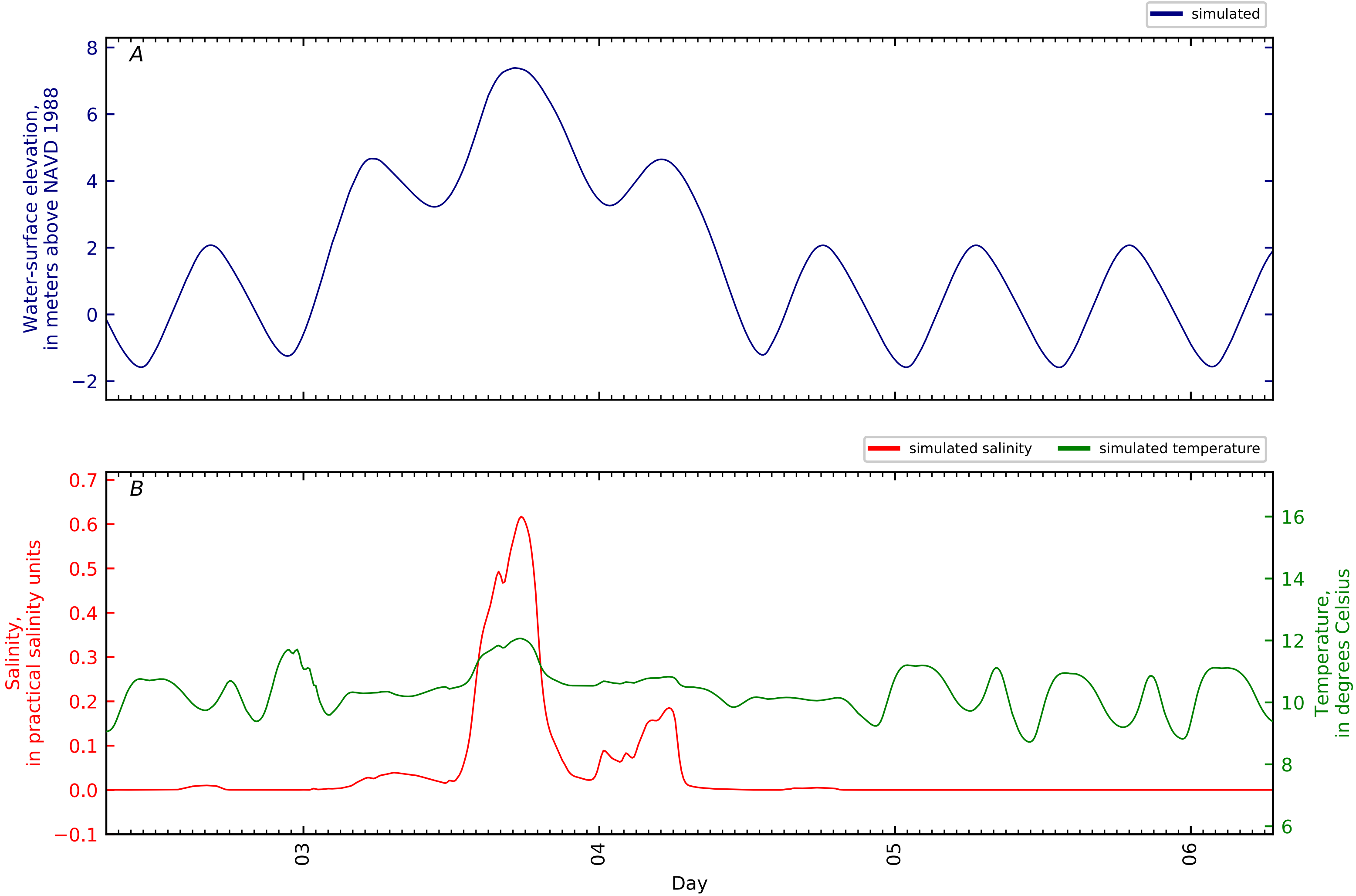

Figure B5-84. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 83, Penob Riv KM31.4 ERDC2 ON-MU13-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

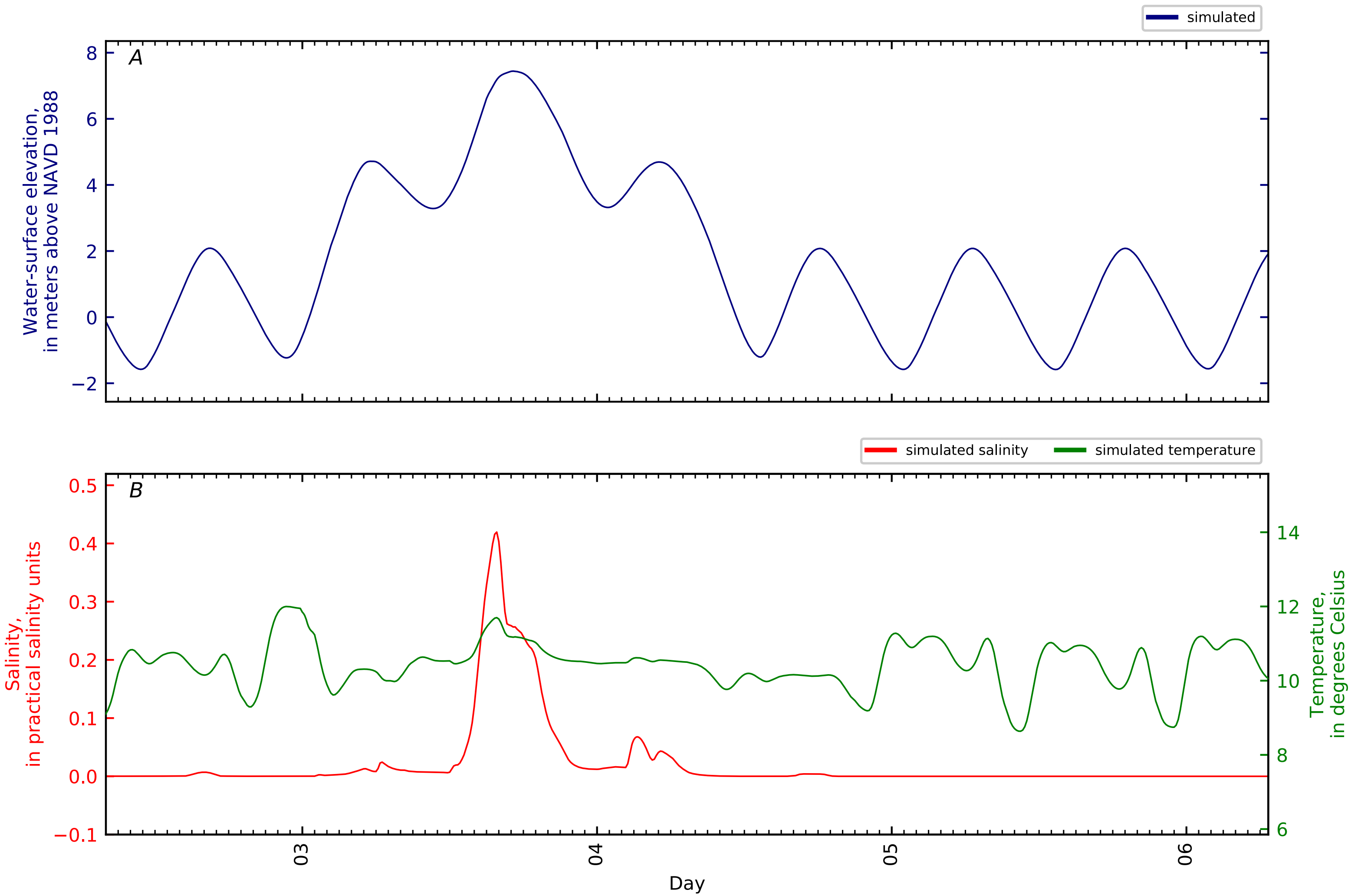

Figure B5-85. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 84, Penob Riv KM32. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

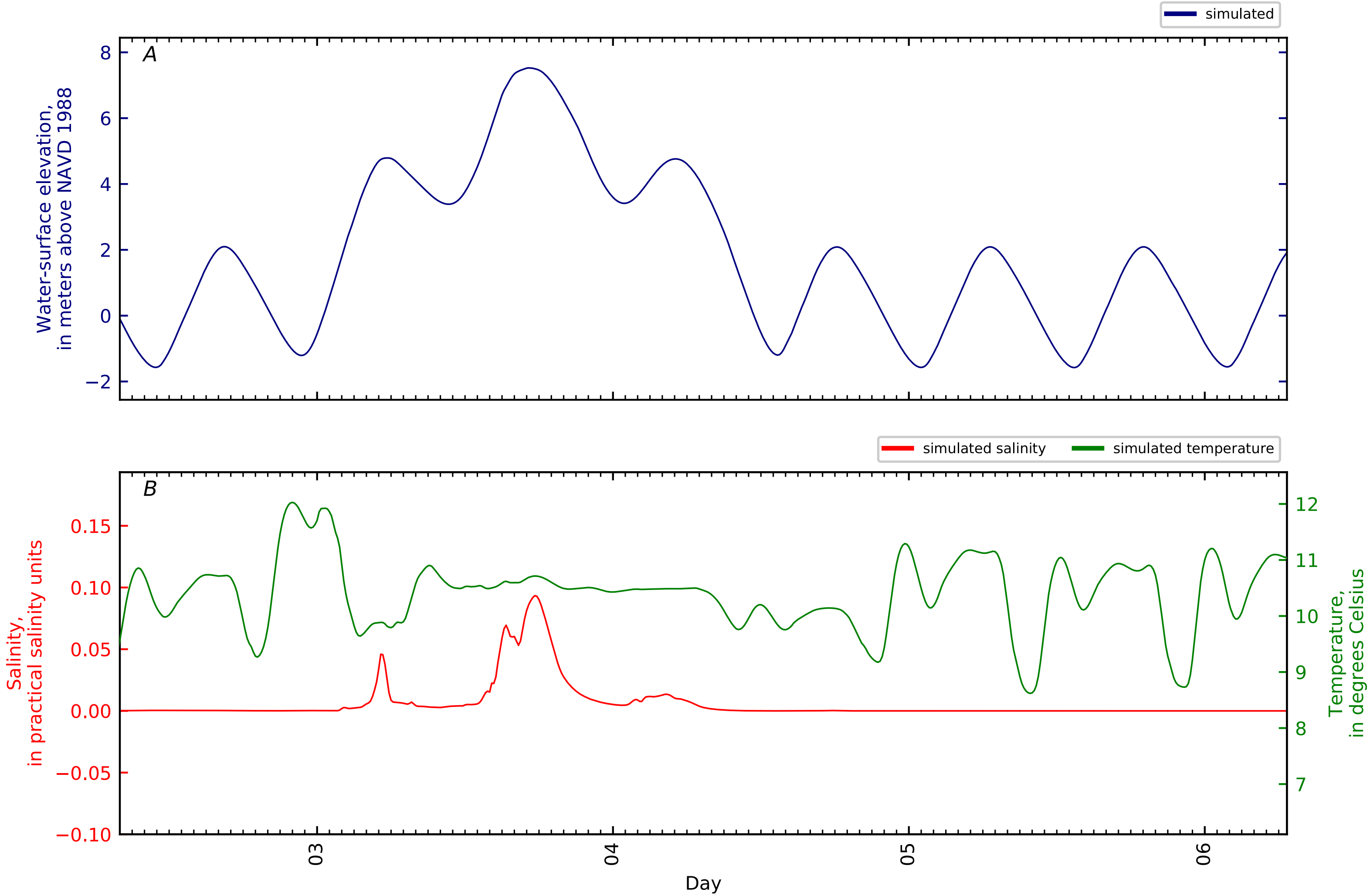

Figure B5-86. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 85, Penob Riv KM33. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

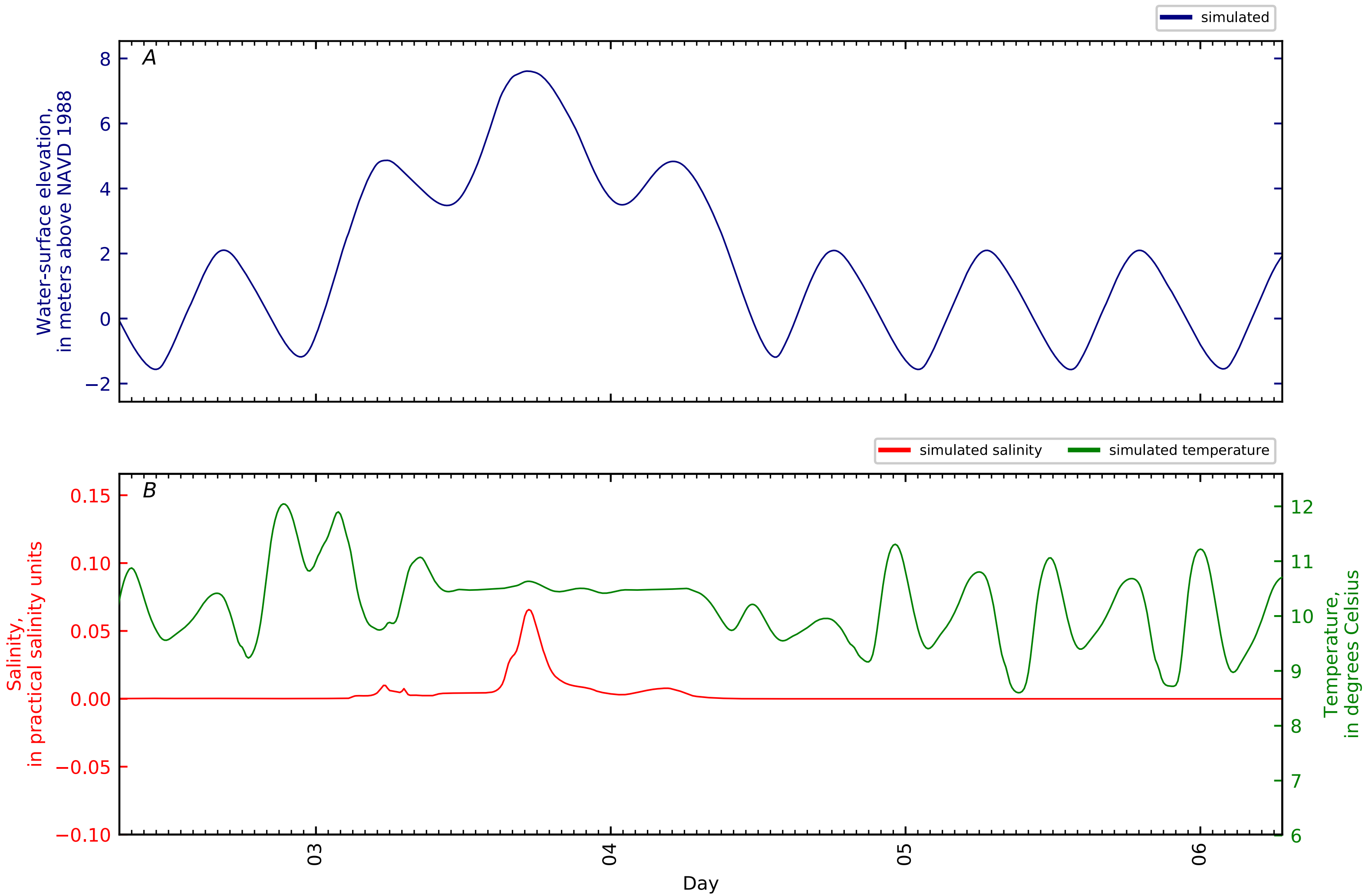

Figure B5-87. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 86, Penob Riv KM34. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

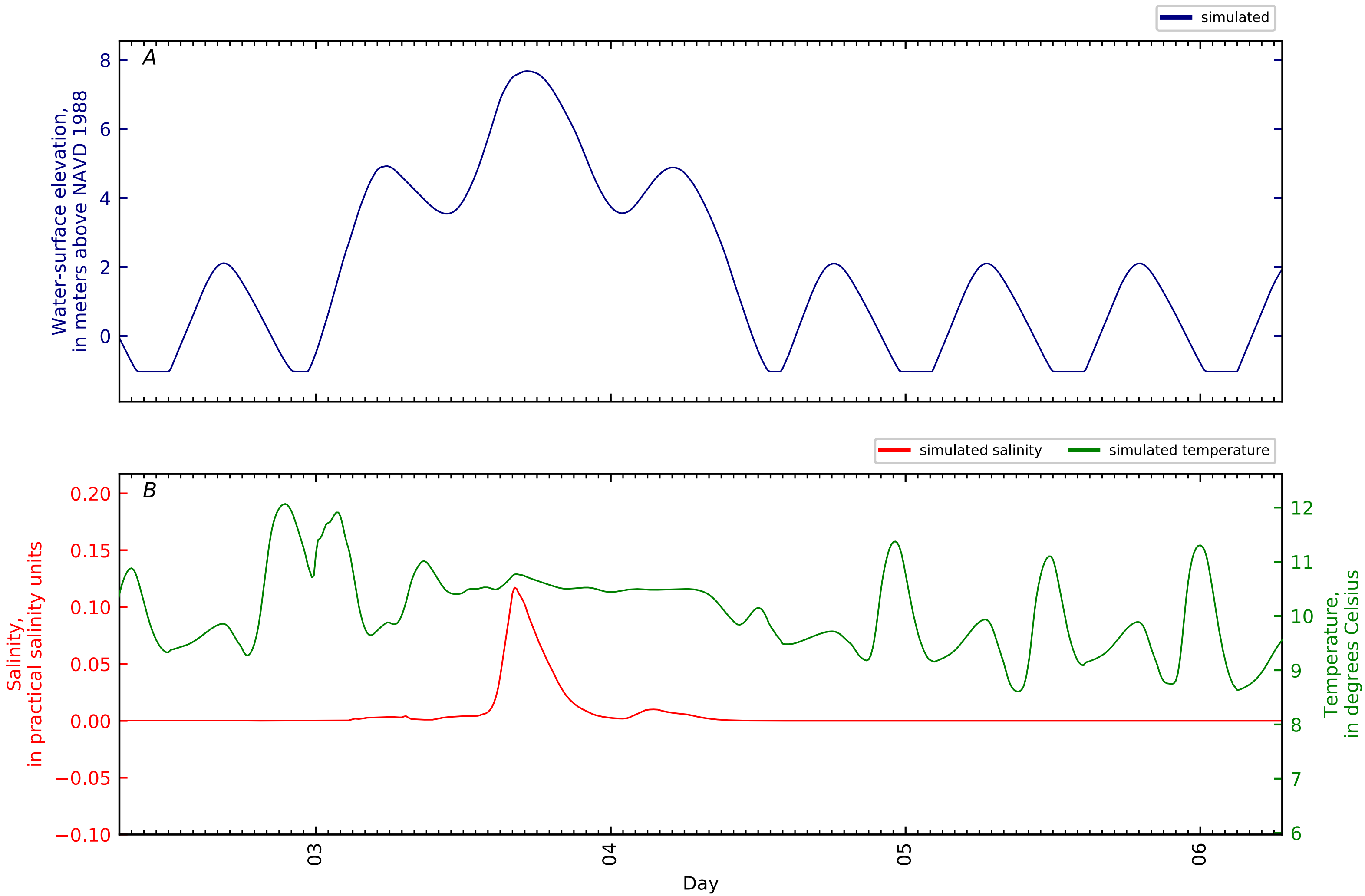

Figure B5-88. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 87, Penob Riv KM34.6 Southern Cove Orrington. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

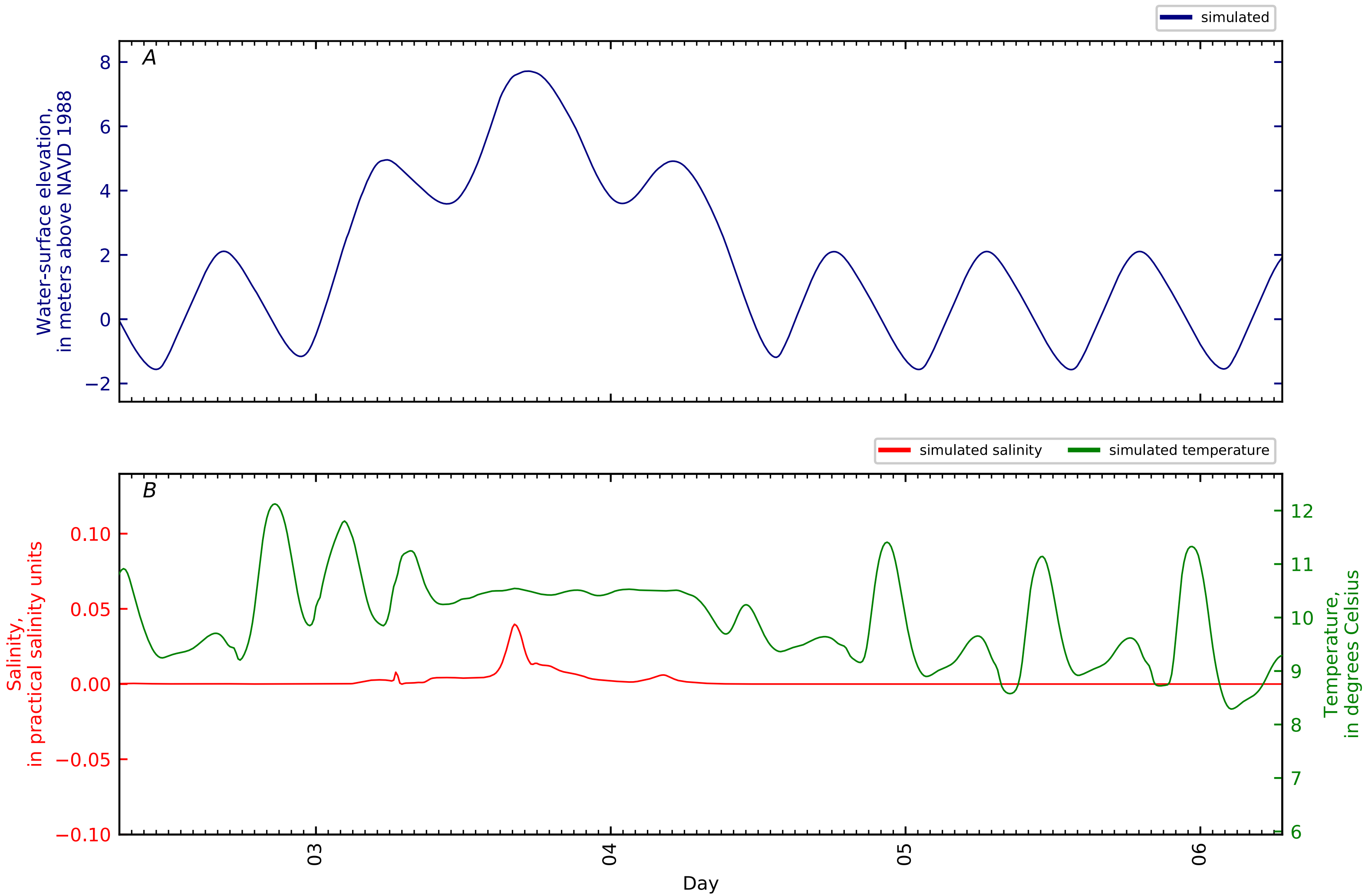

Figure B5-89. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 88, Penob Riv KM35. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

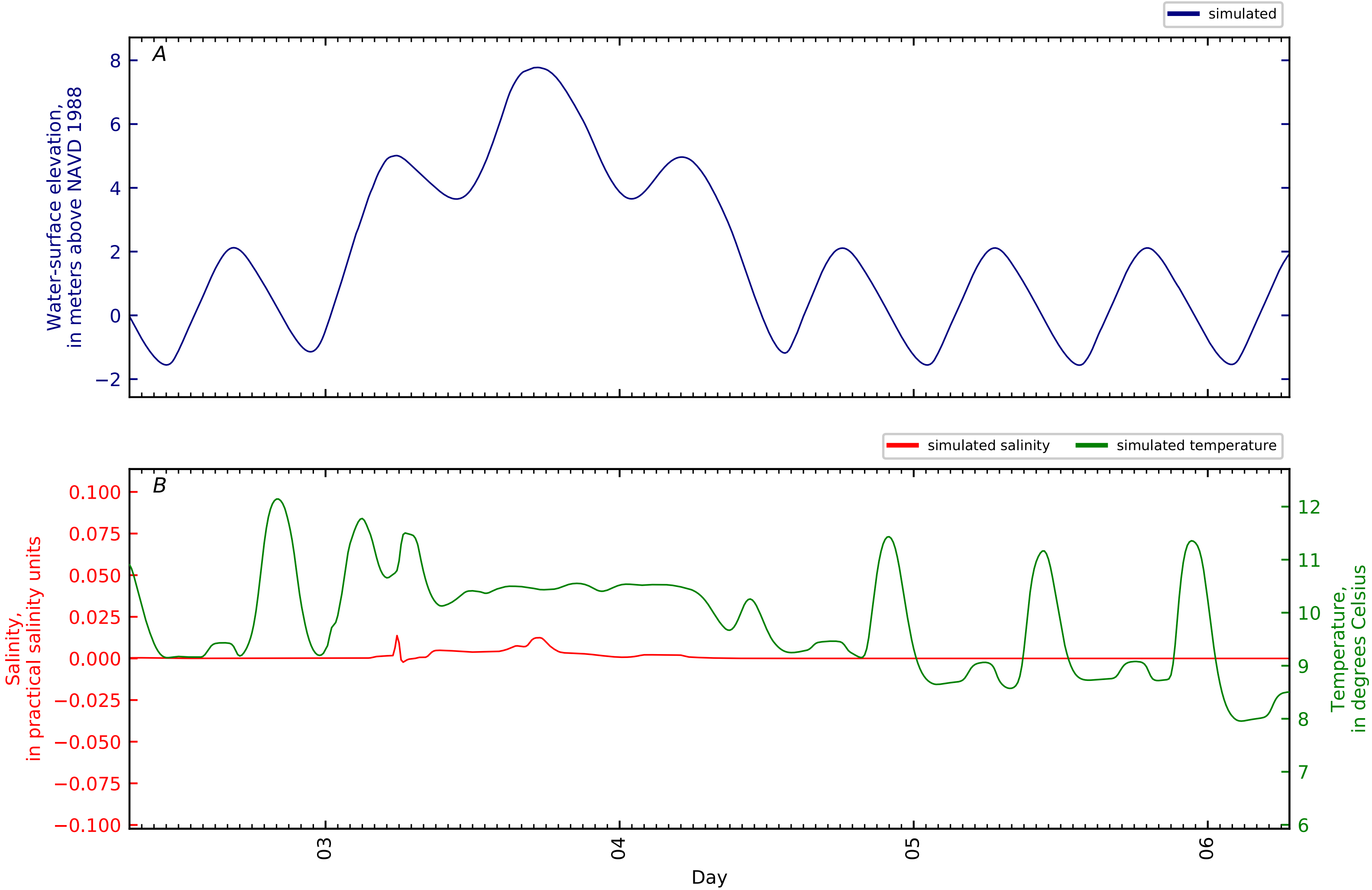

Figure B5-90. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 89, Penob Riv KM36. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

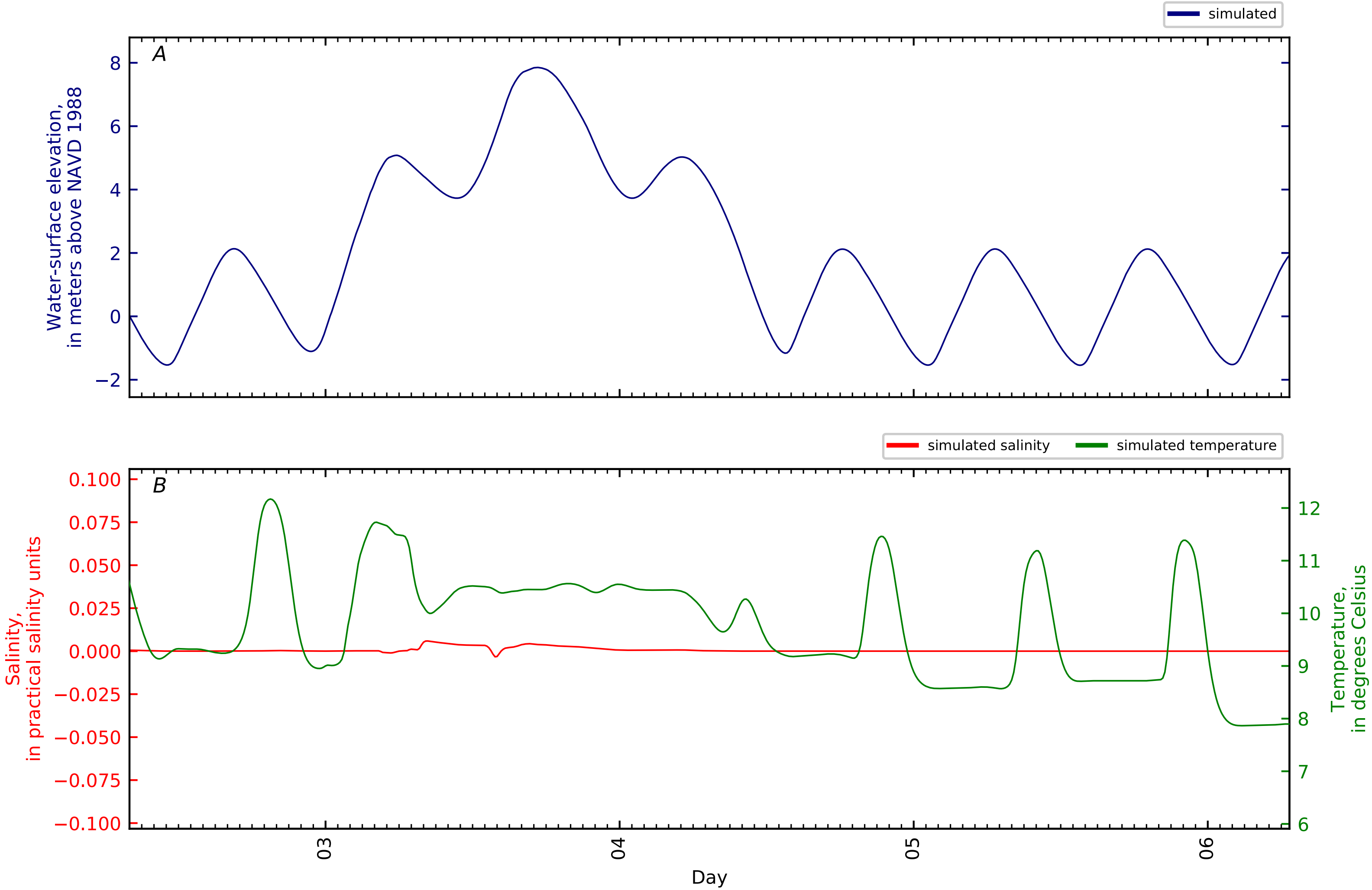

Figure B5-91. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 90, Penob Riv KM37. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

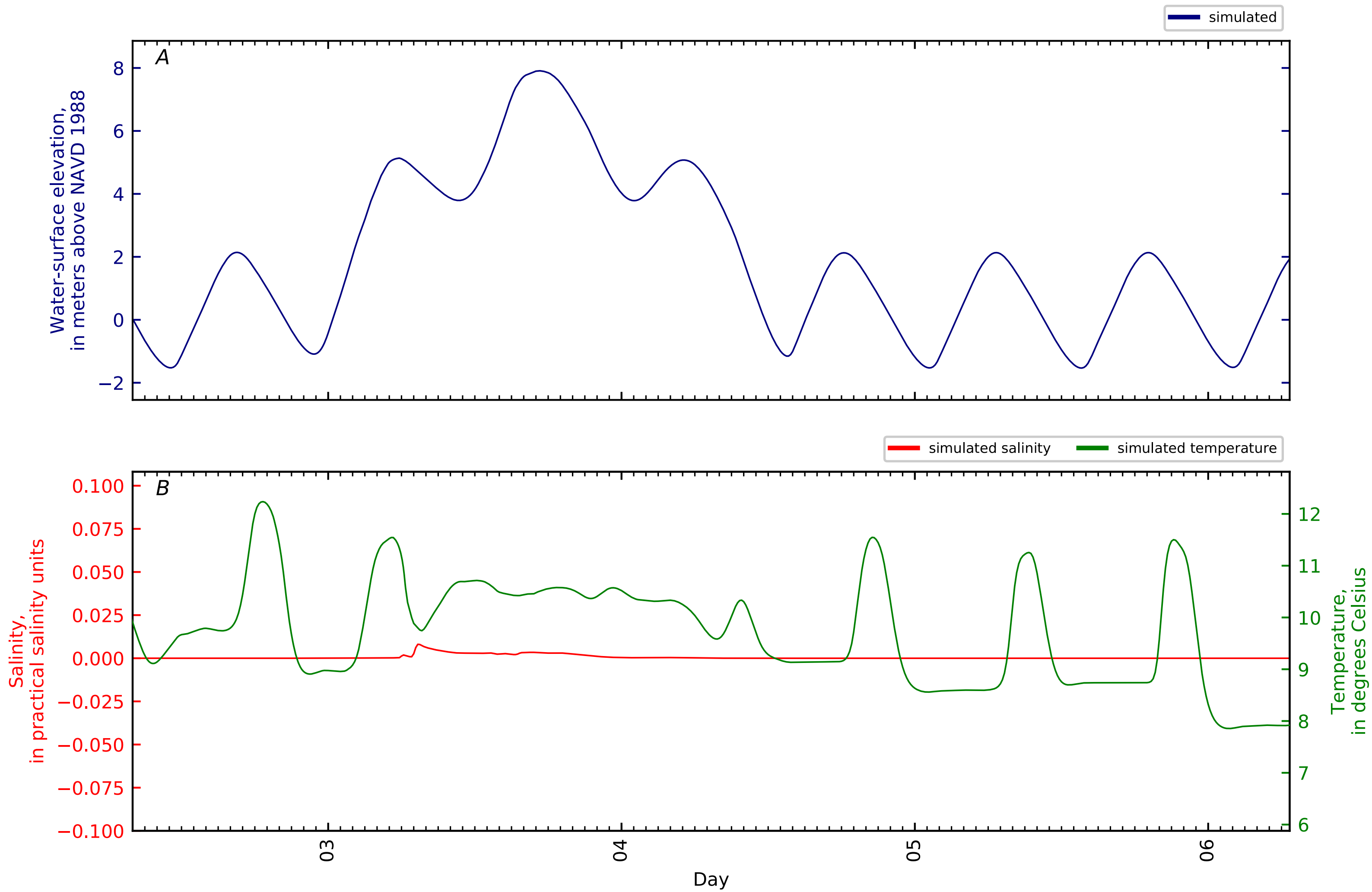

Figure B5-92. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 91, Penob Riv KM38. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

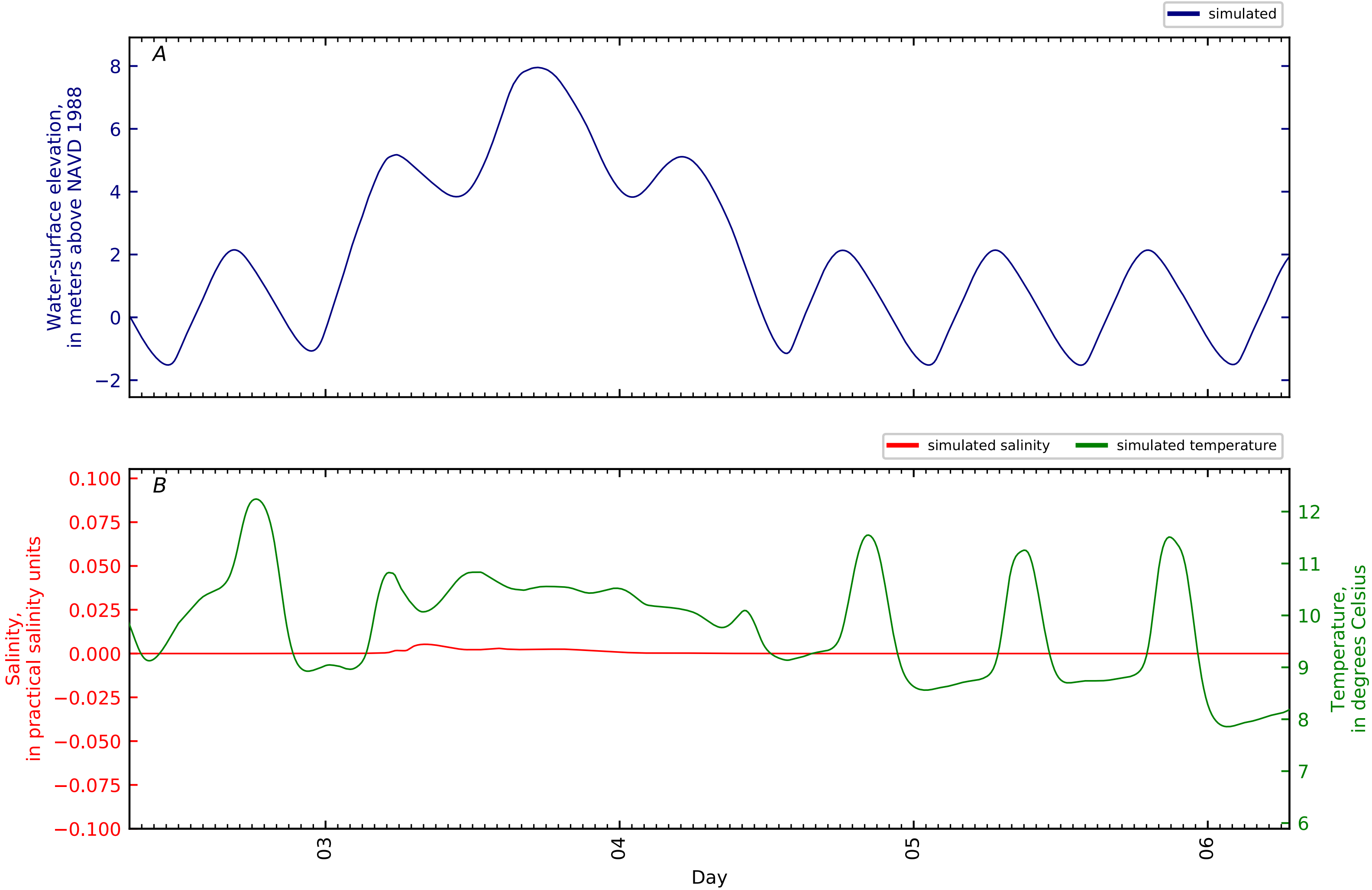

Figure B5-93. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 92, Penob Riv KM38.7 Boat ramp d/s Bangor. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

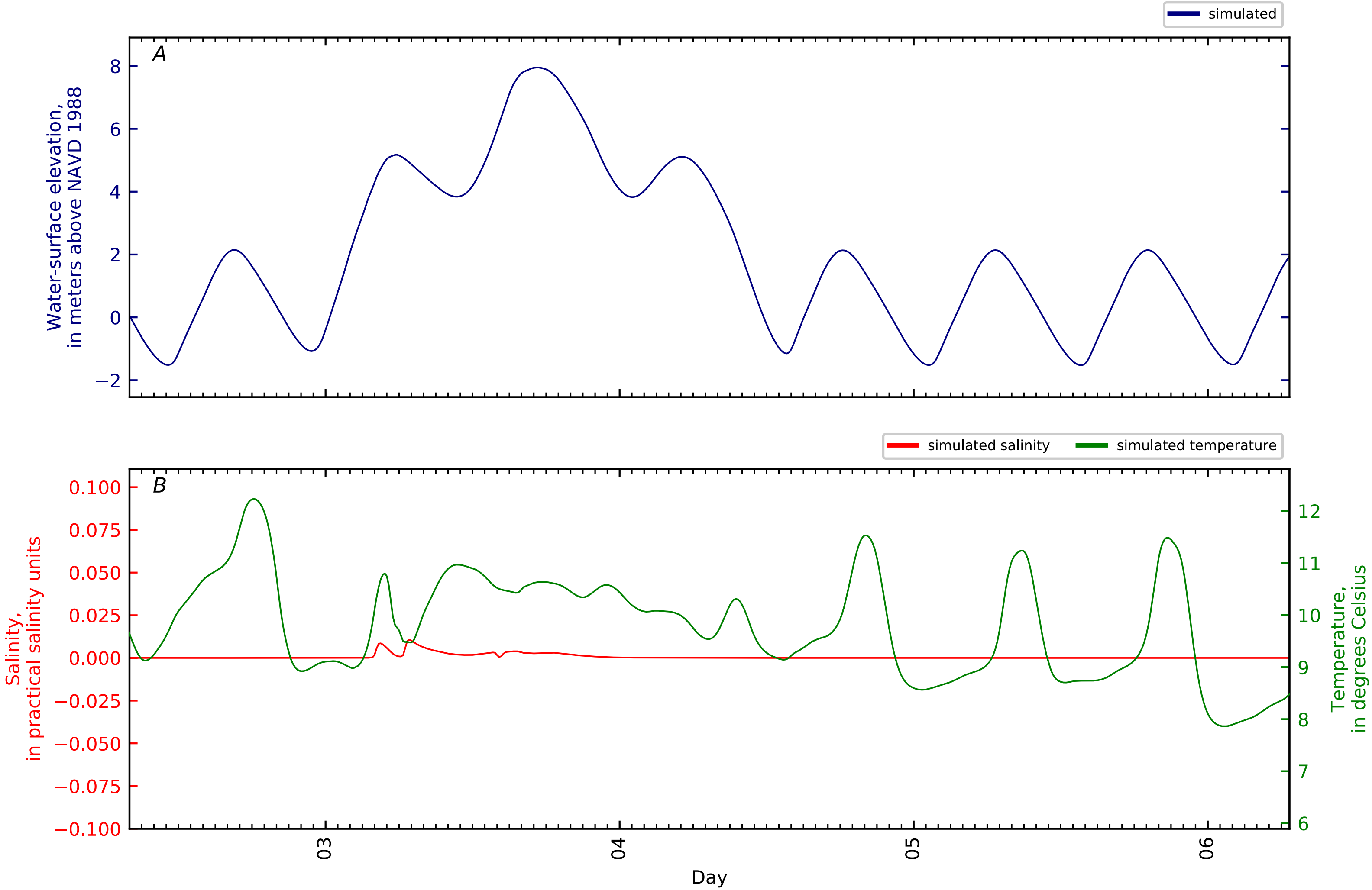

Figure B5-94. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 93, Penob Riv KM39. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

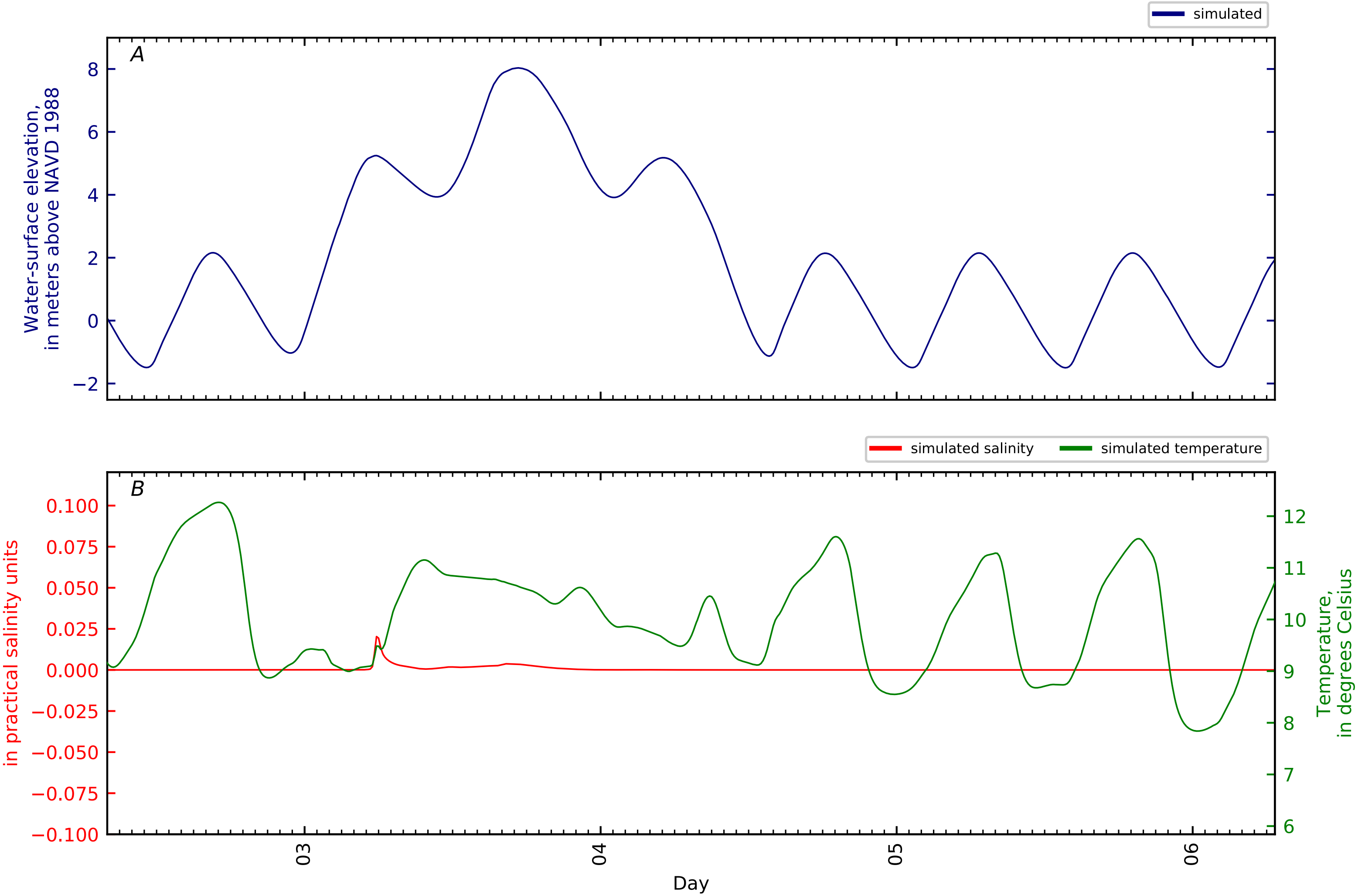

Figure B5-95. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 94, Penob Riv KM40. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

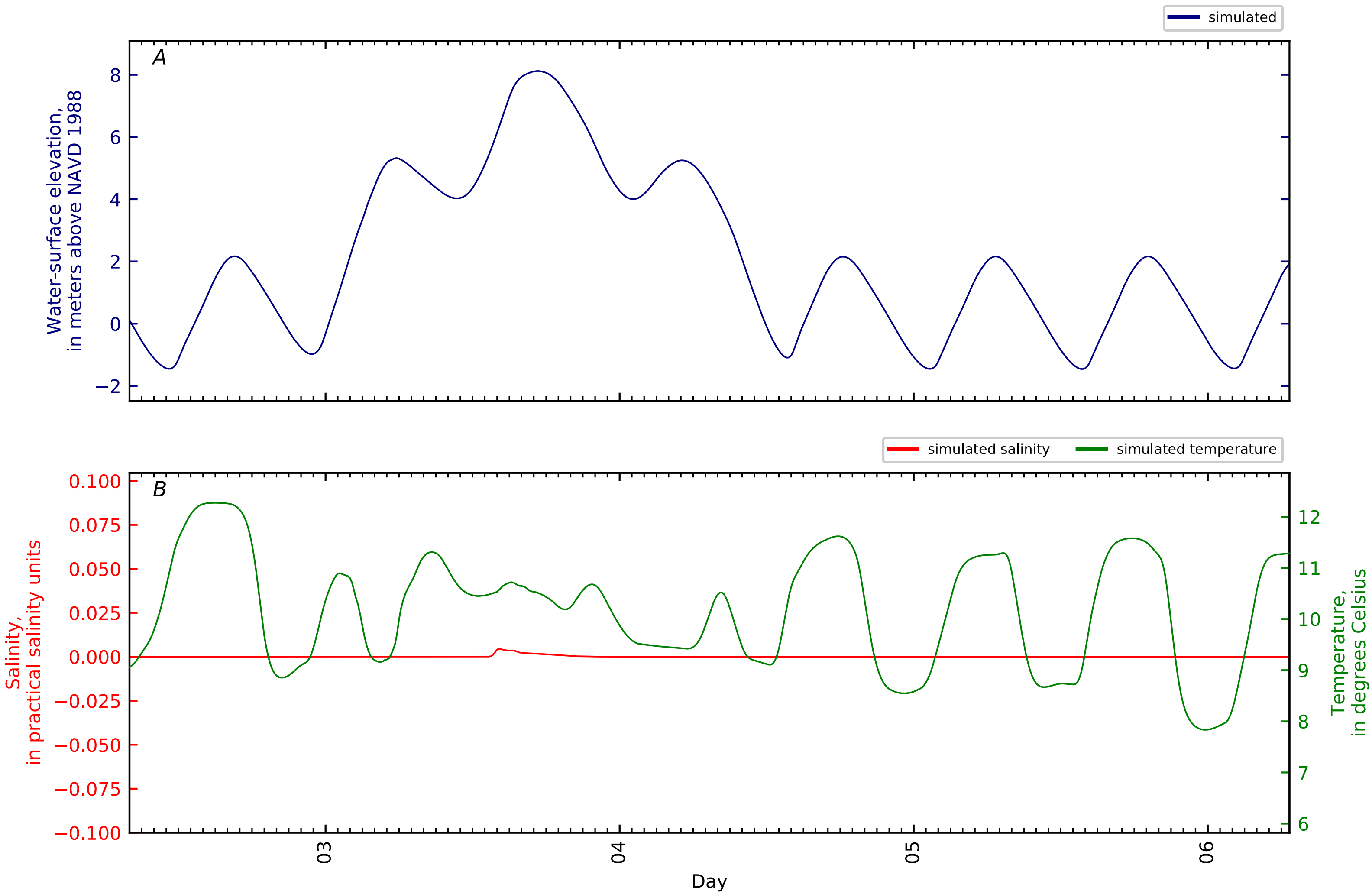

Figure B5-96. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 95, Penob Riv KM41. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

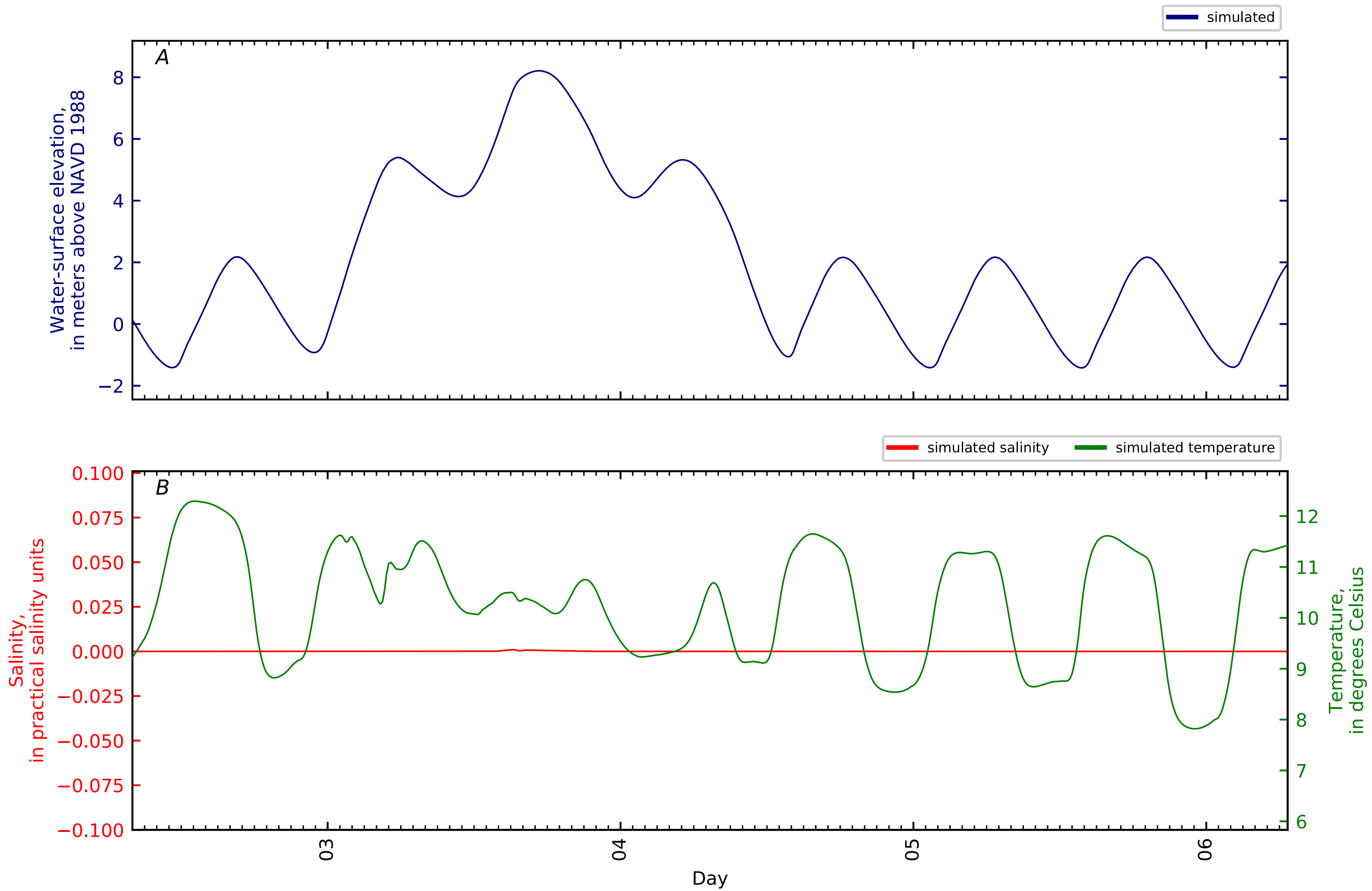

Figure B5-97. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 96, Penob Riv KM42. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

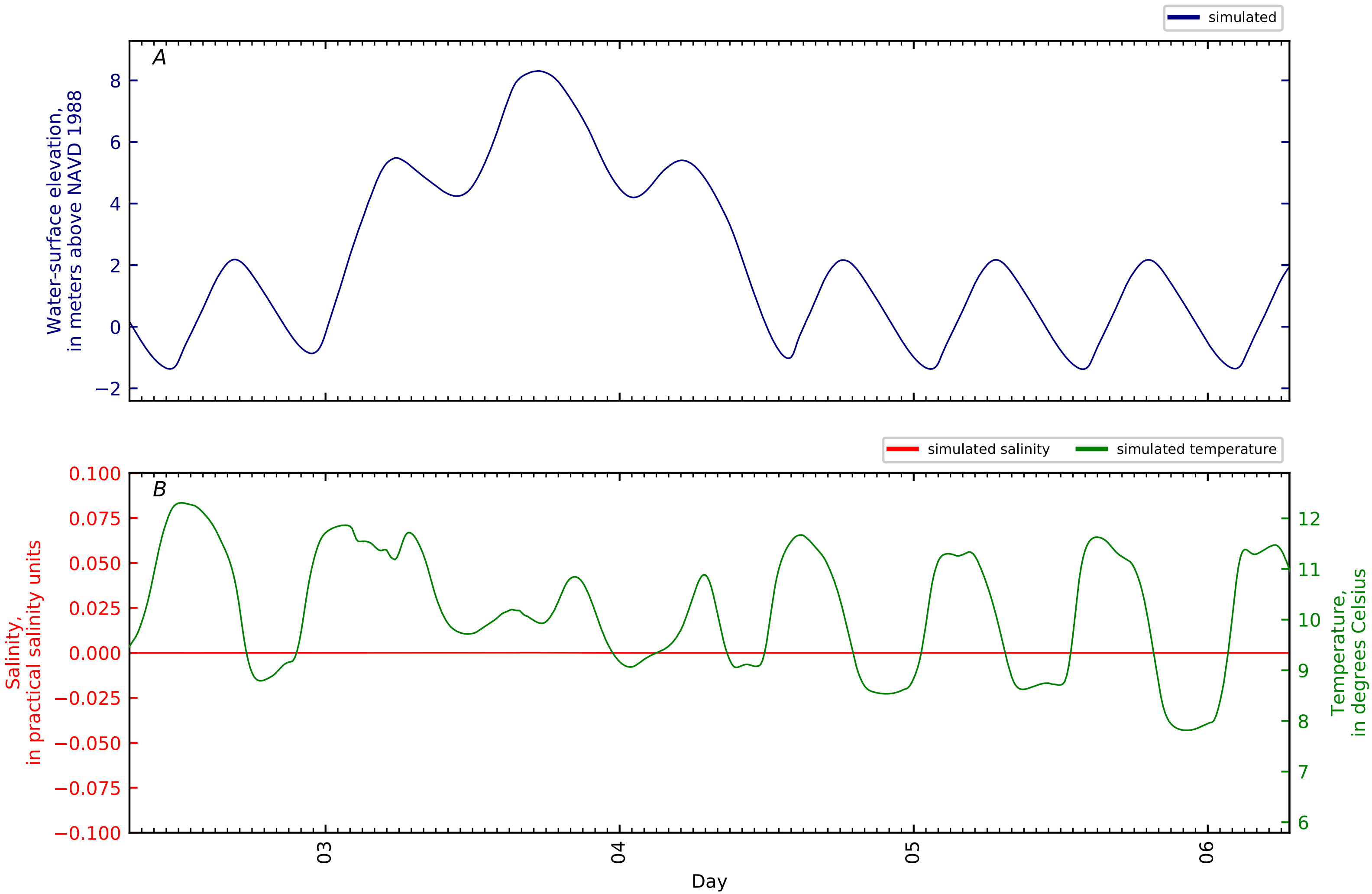

Figure B5-98. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 97, Penob Riv KM43. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

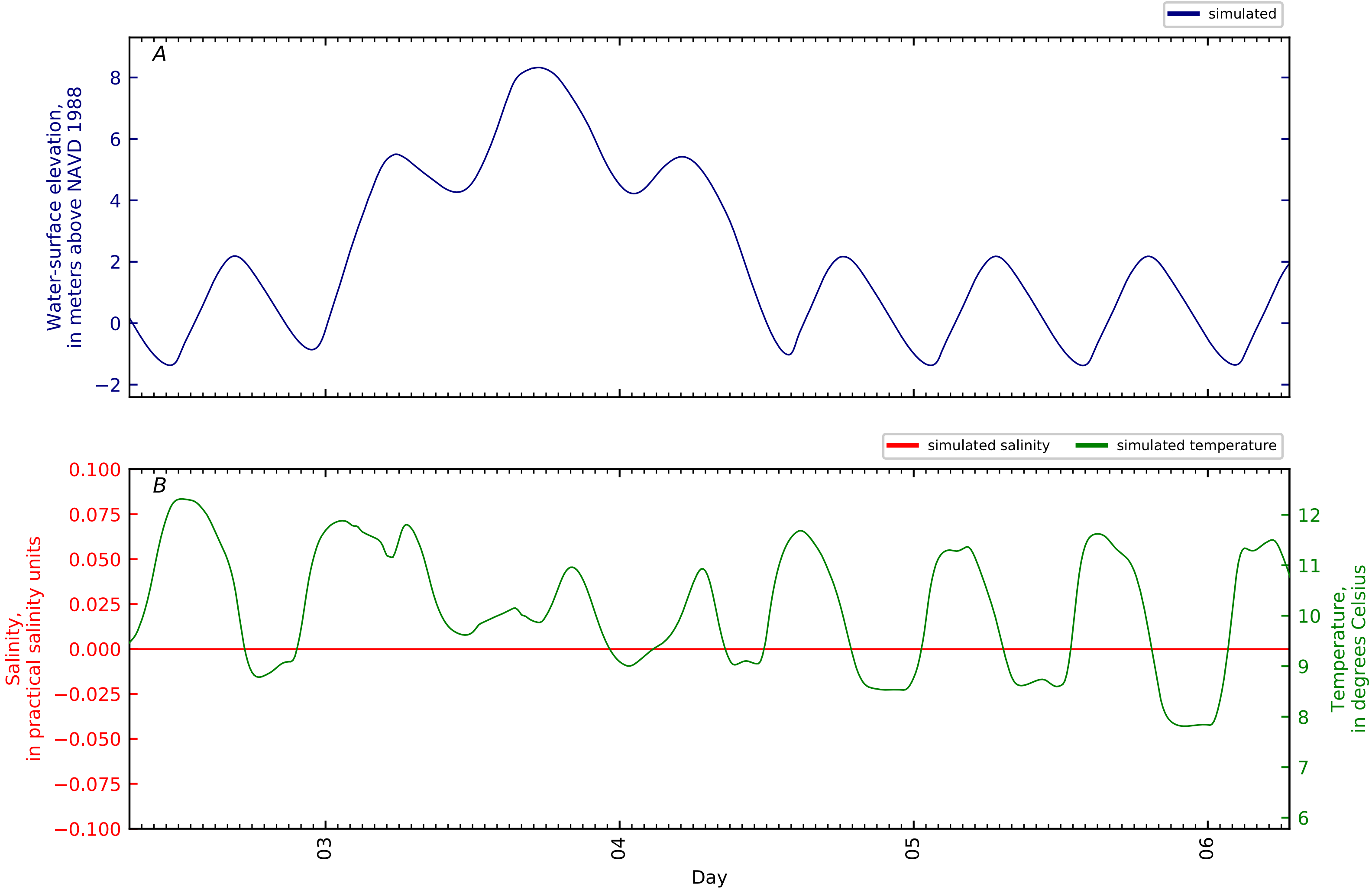

Figure B5-99. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 98, Penob Riv KM43.2 GS 01037050 at Bangor. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

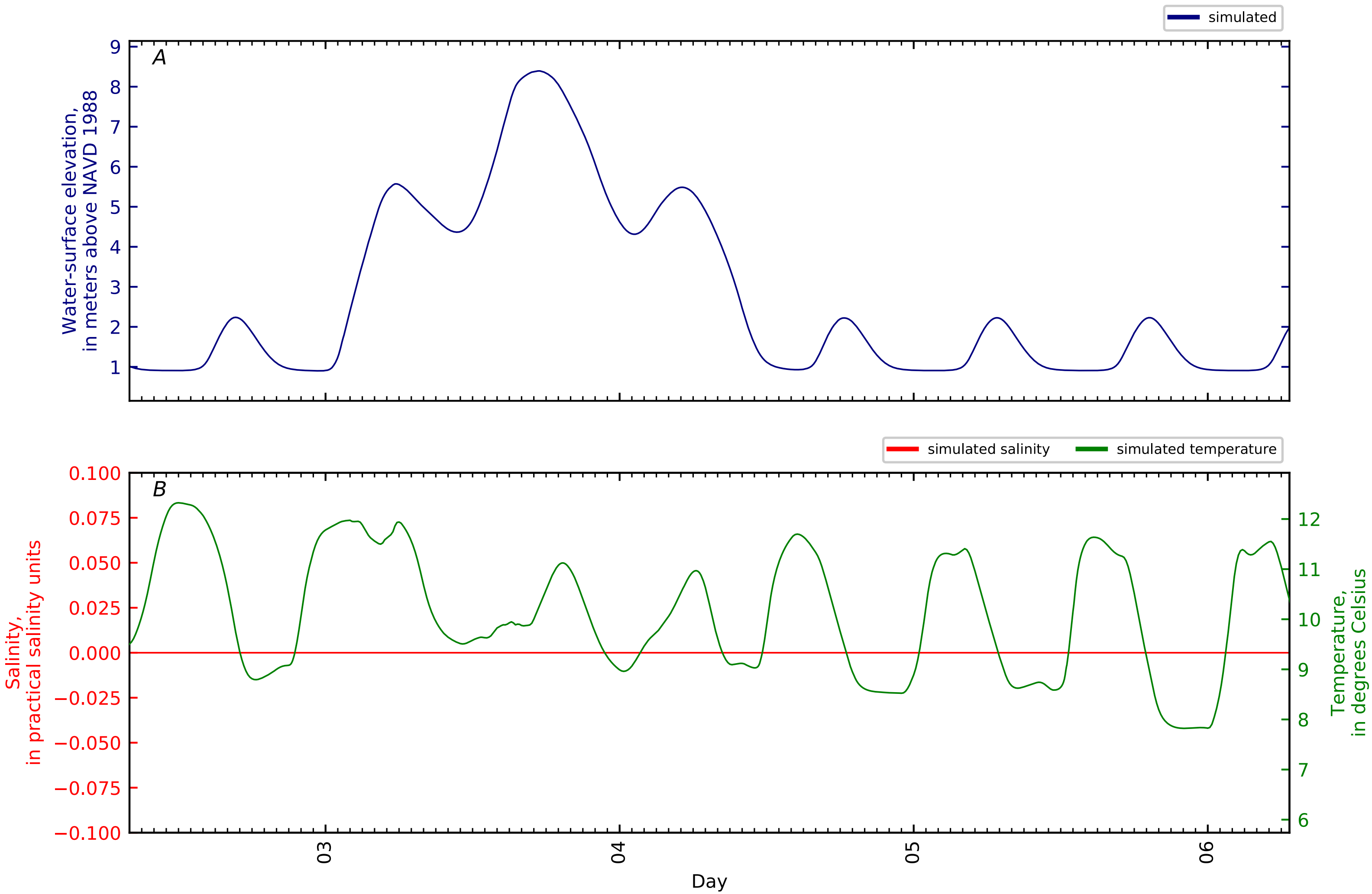

Figure B5-100. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 99, Penob Riv KM44. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

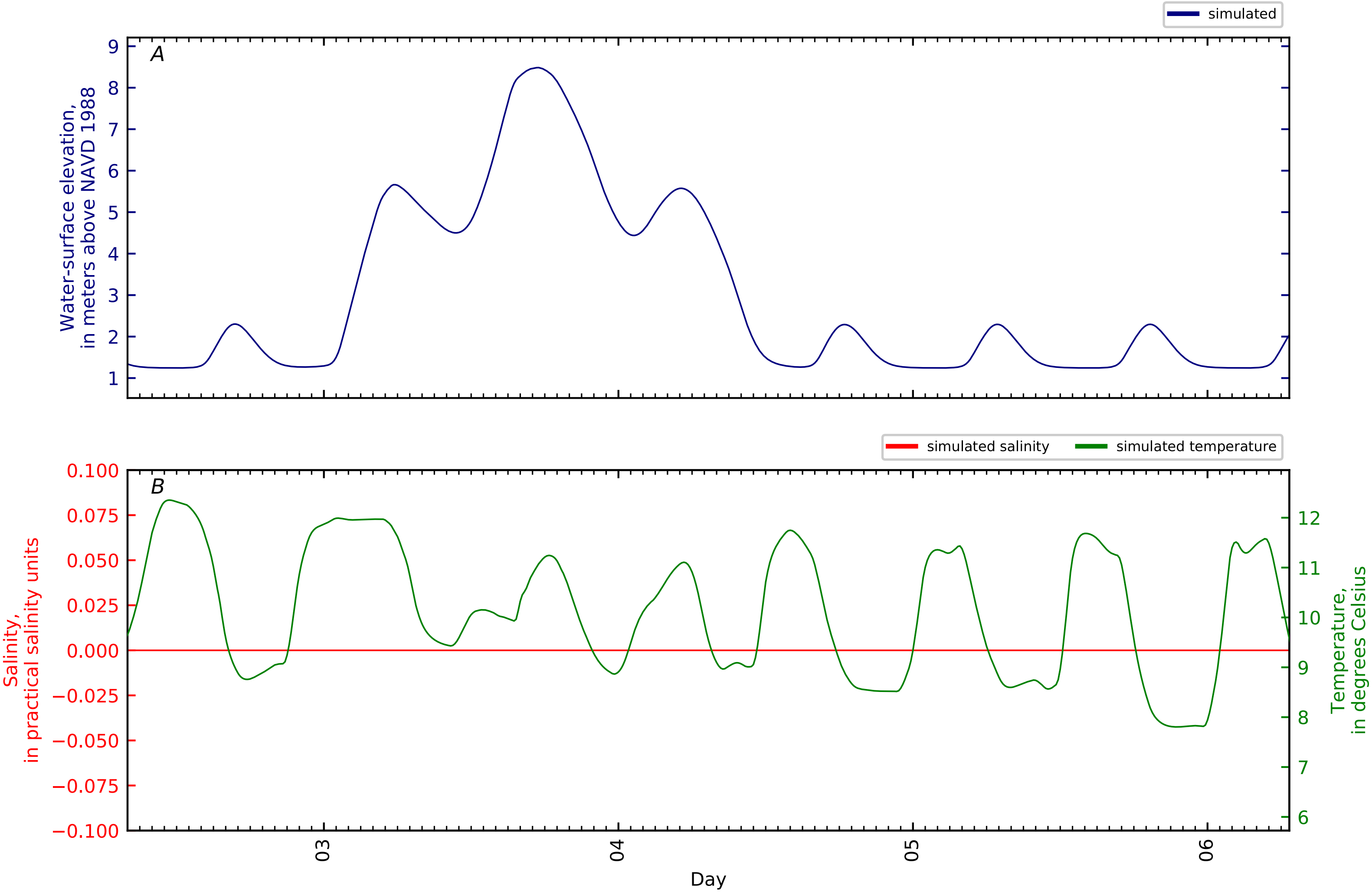

Figure B5-101. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 100, Penob Riv KM45. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

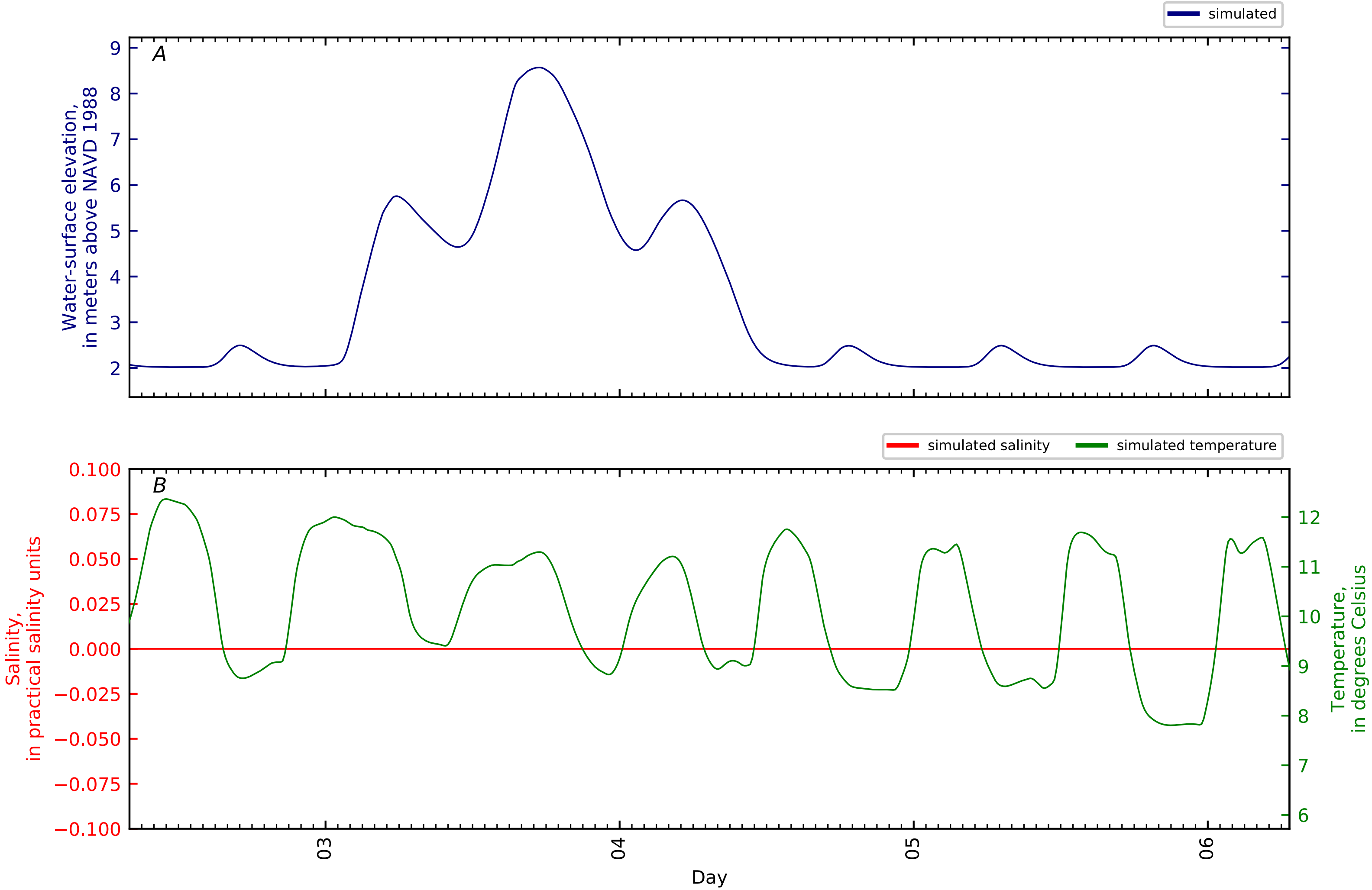

Figure B5-102. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 101, Penob Riv KM46. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

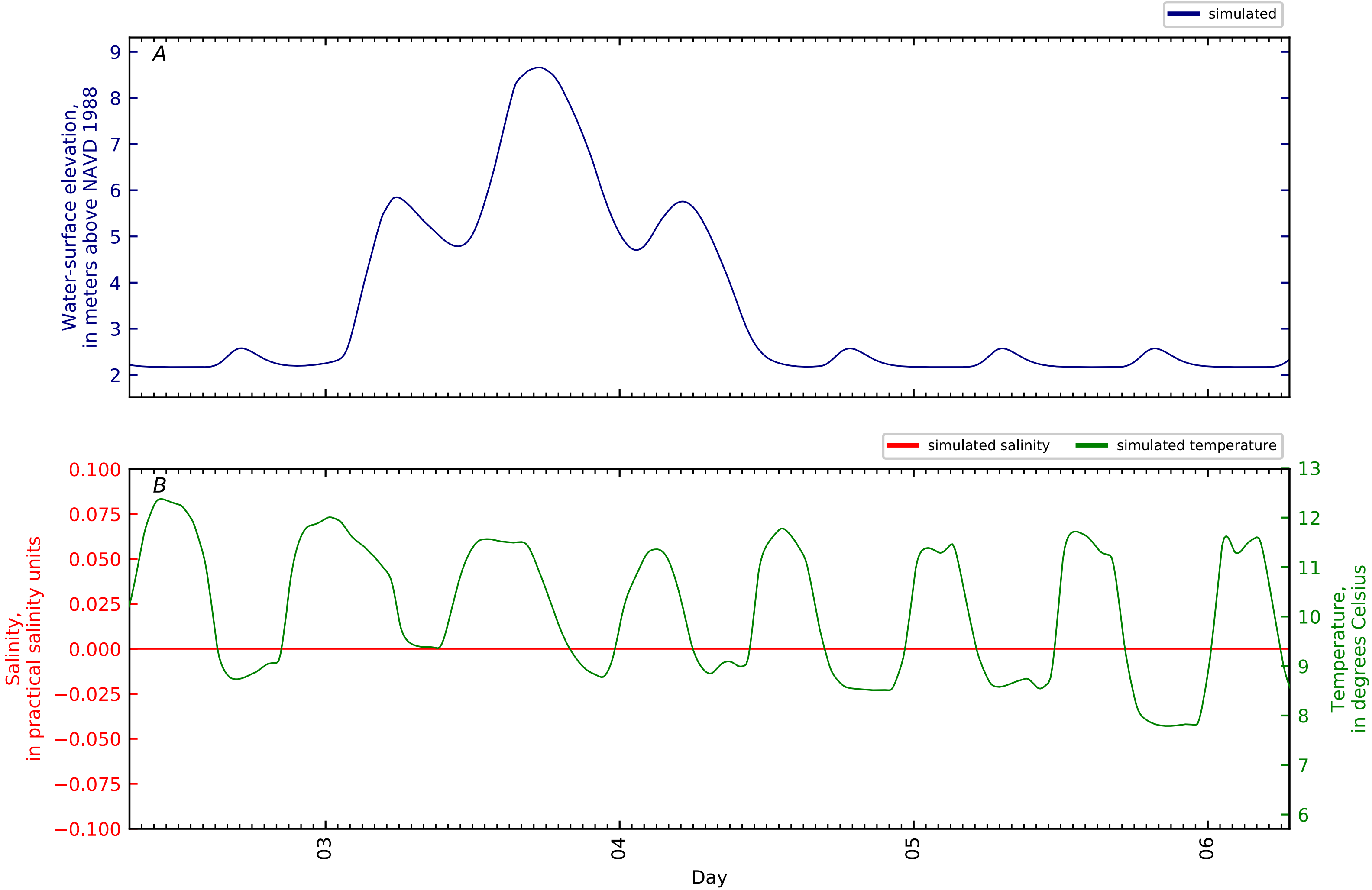

Figure B5-103. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 102, Penob Riv KM47. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

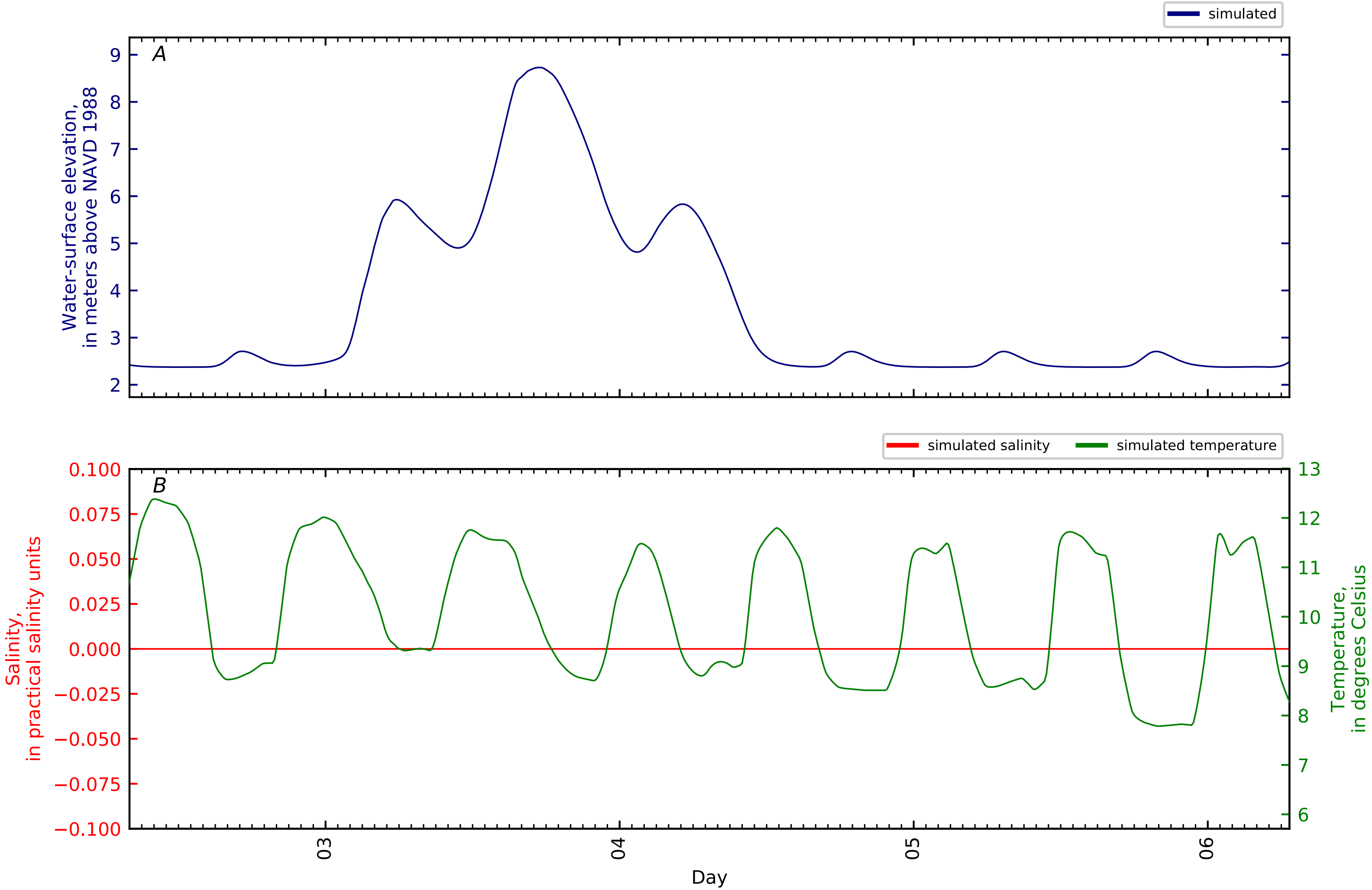

Figure B5-104. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 103, Penob Riv KM48. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

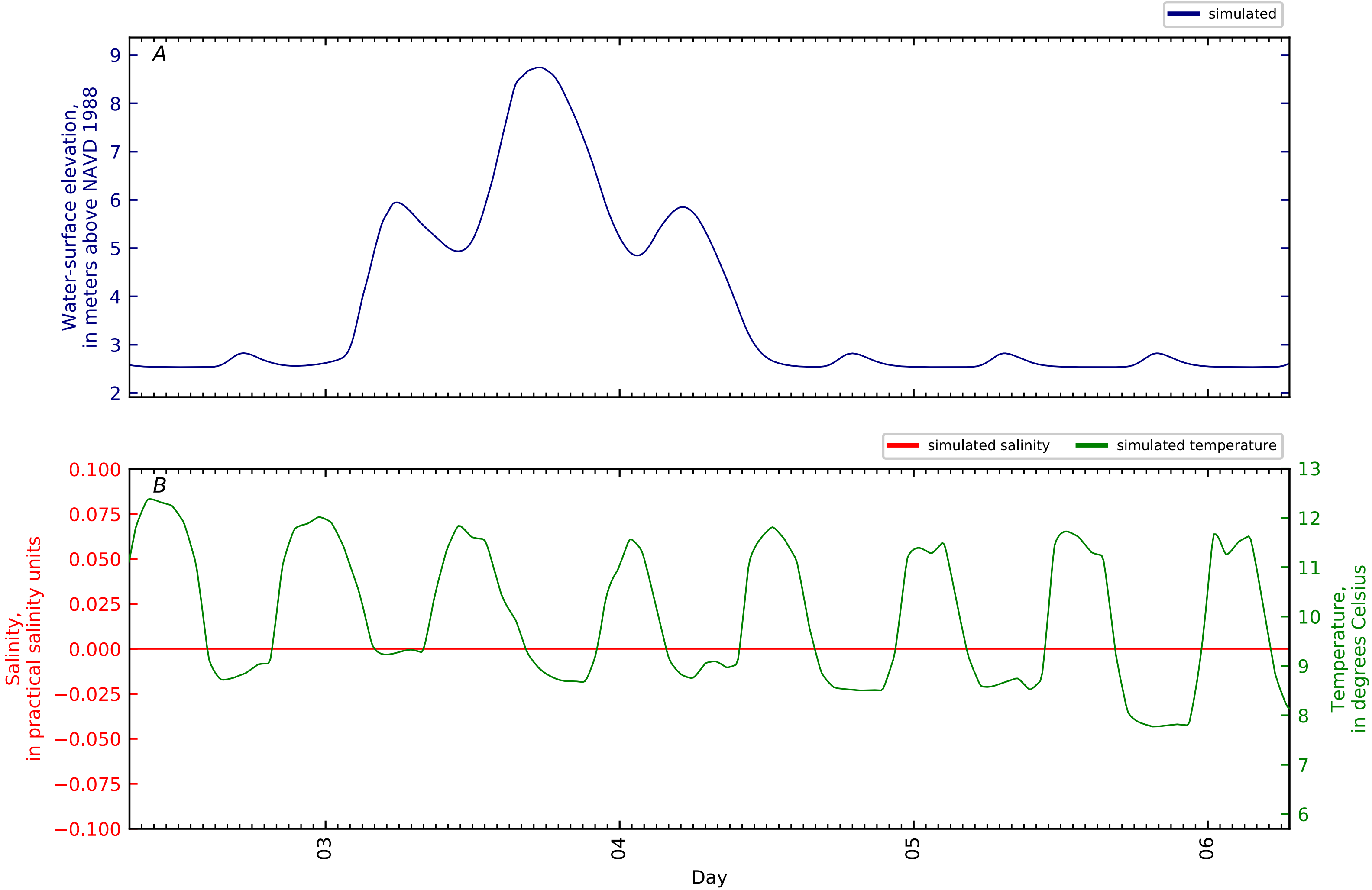

Figure B5-105. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 104, Penob Riv KM49. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

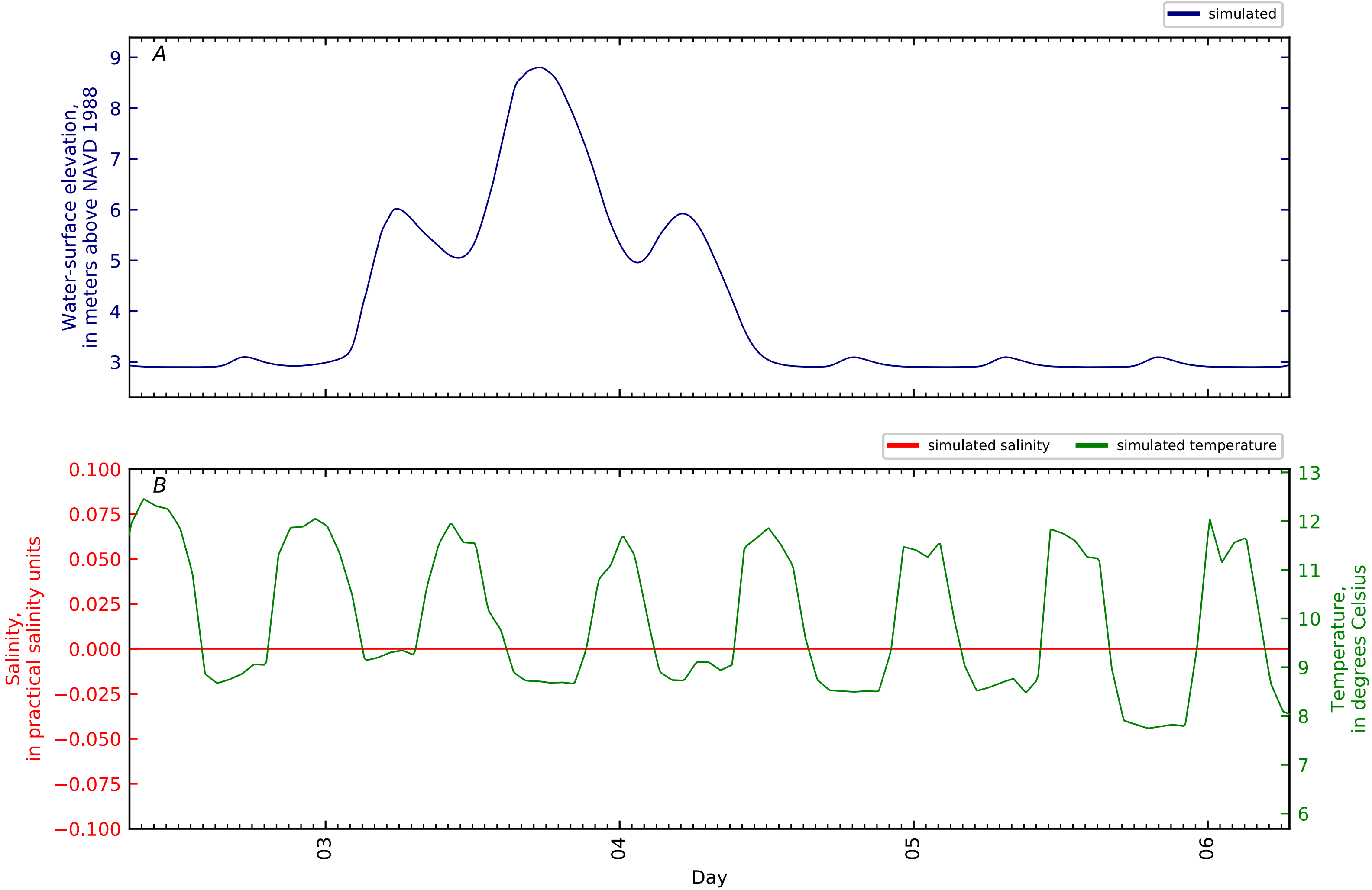

Figure B5-106. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 105, Penob Riv KM50 nr GS gage Eddington. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

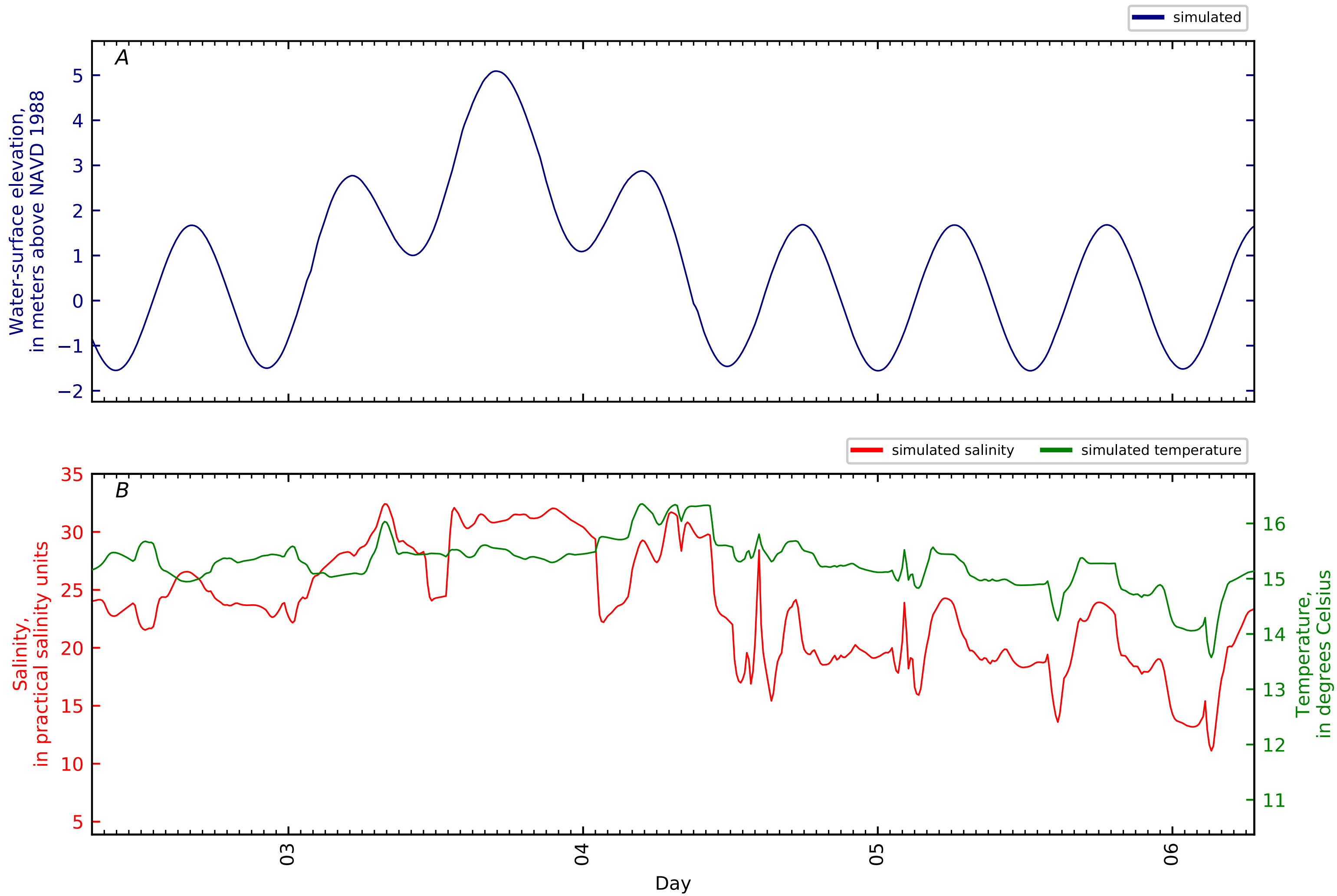

Figure B5-107. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 106, East Channel -KM0.1 ERDC9 VE-MU4-SF-2. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

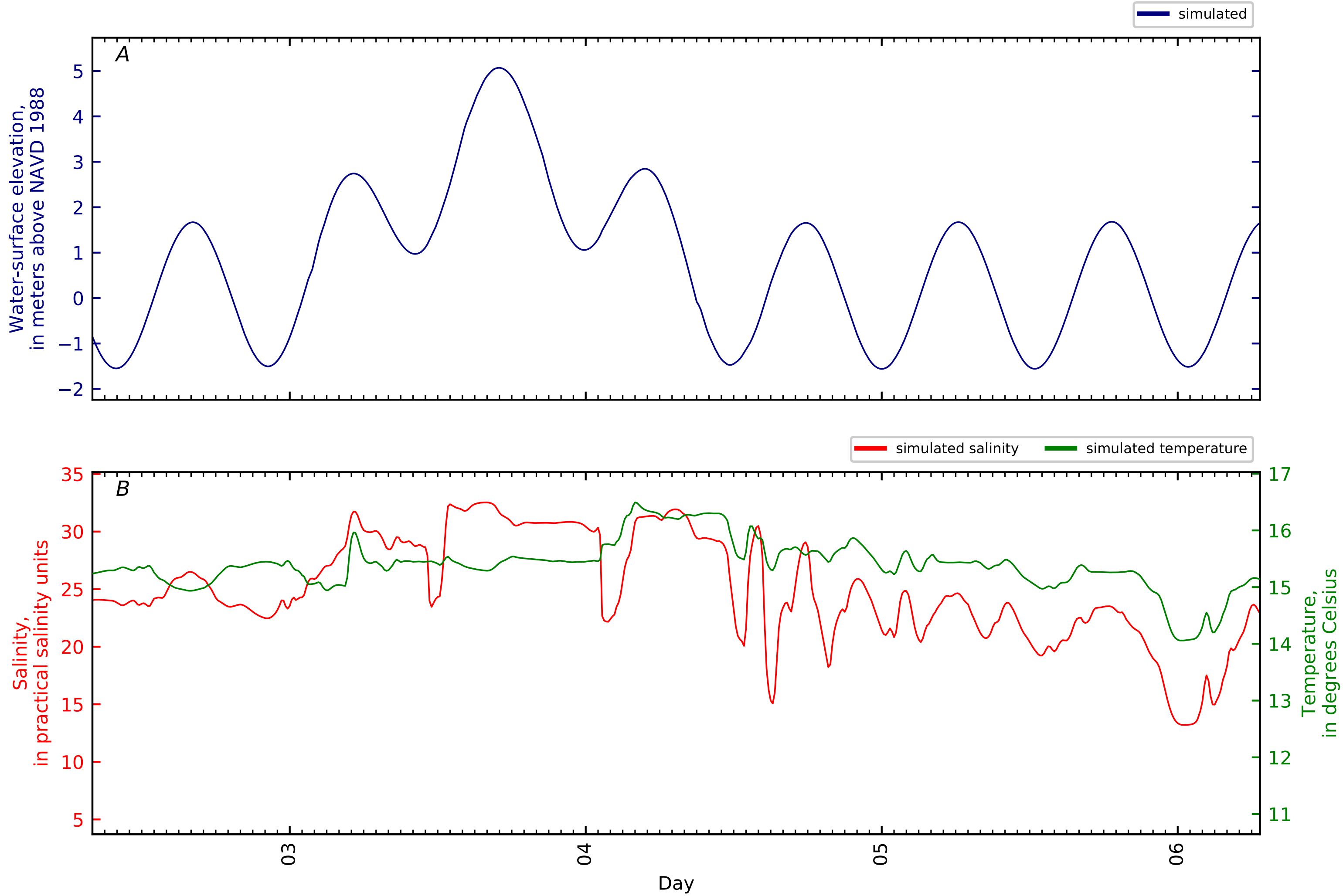

Figure B5-108. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 107, East Channel KM0. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

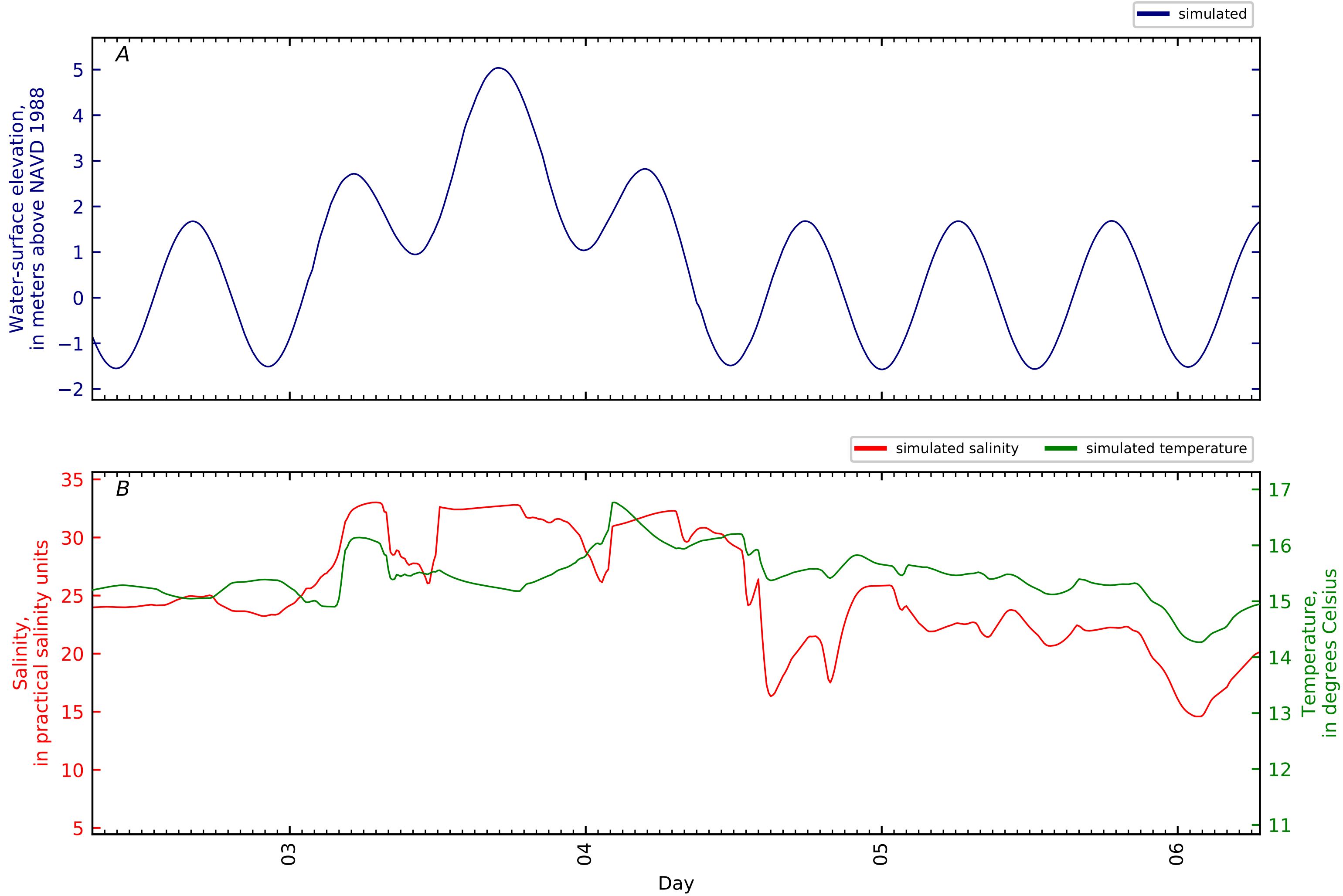

Figure B5-109. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 108, East Channel KM0.1 GS CTD4-01. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

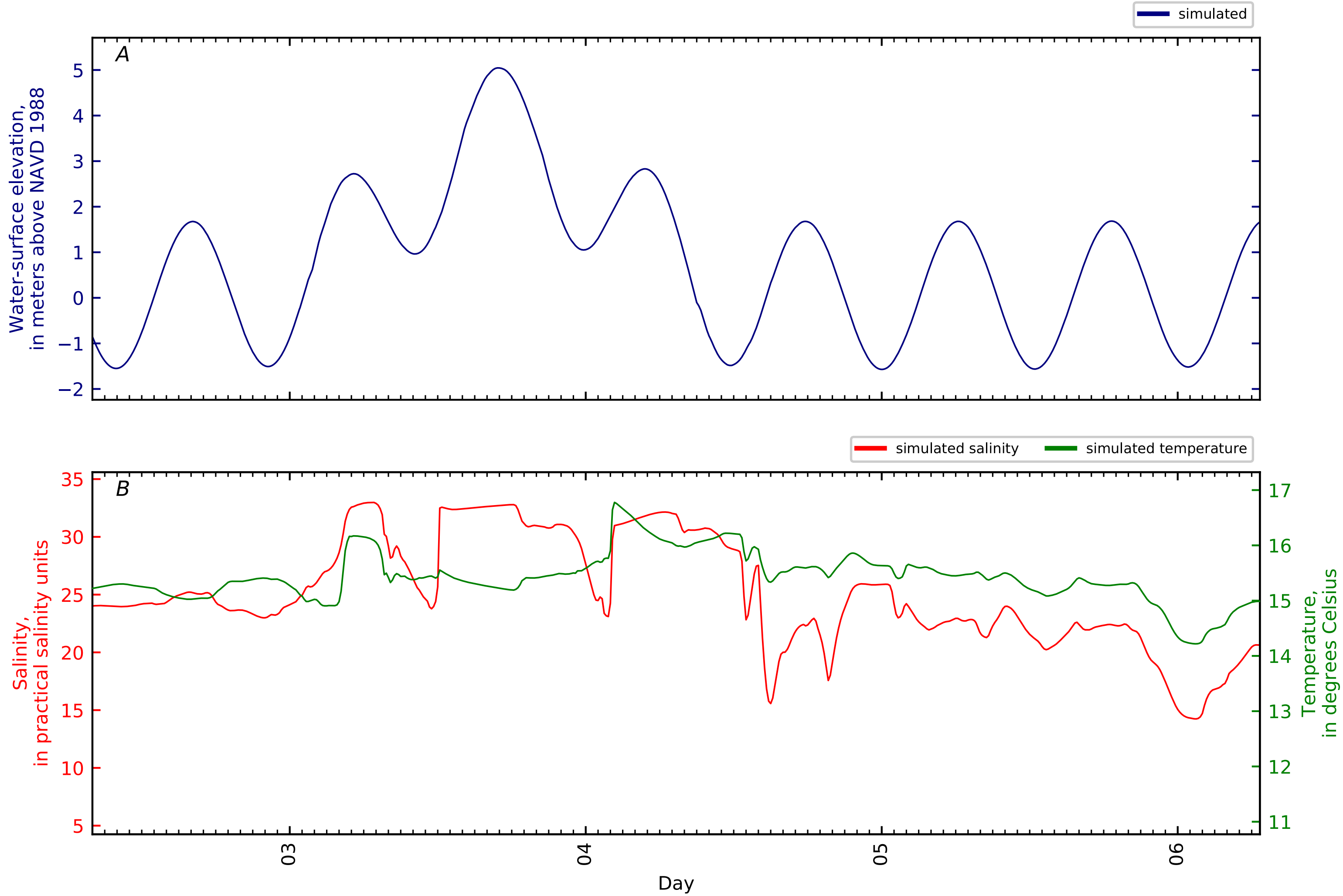

Figure B5-110. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 109, East Channel KM0.1 GS CTD4-02. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

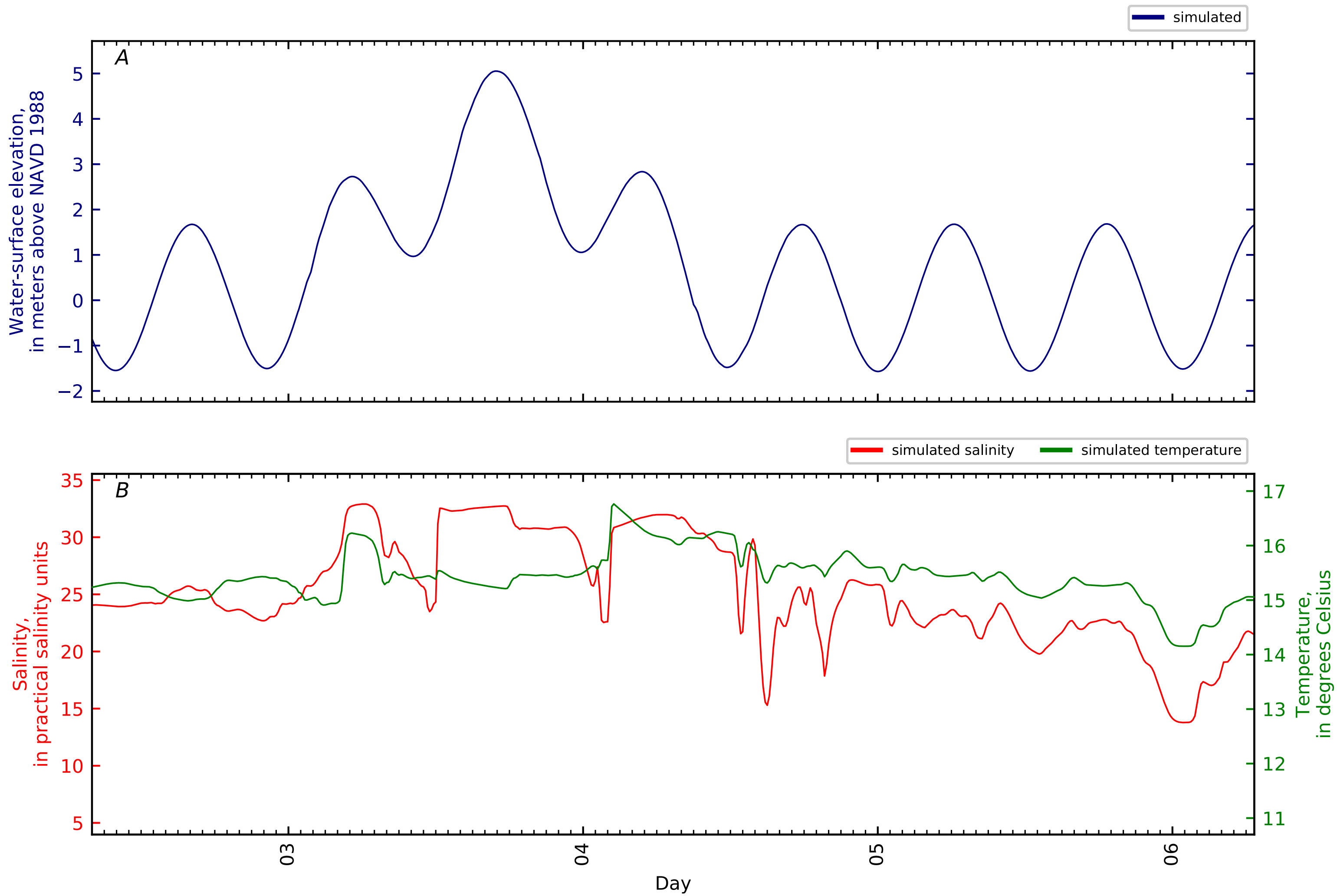

Figure B5-111. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 110, East Channel KM0.1 GS CTD4-03. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

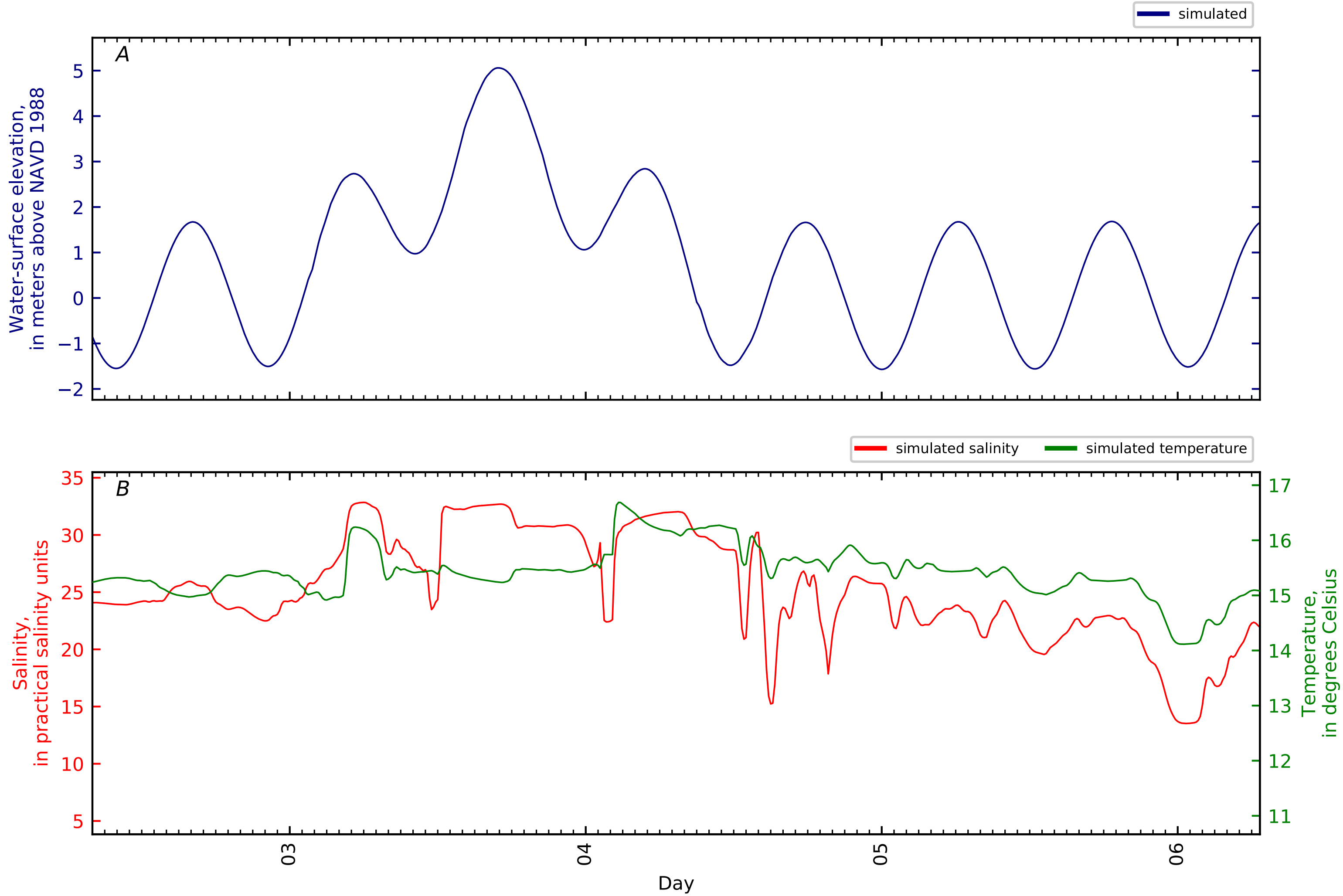

Figure B5-112. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 111, East Channel KM0.1 GS CTD4-04. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

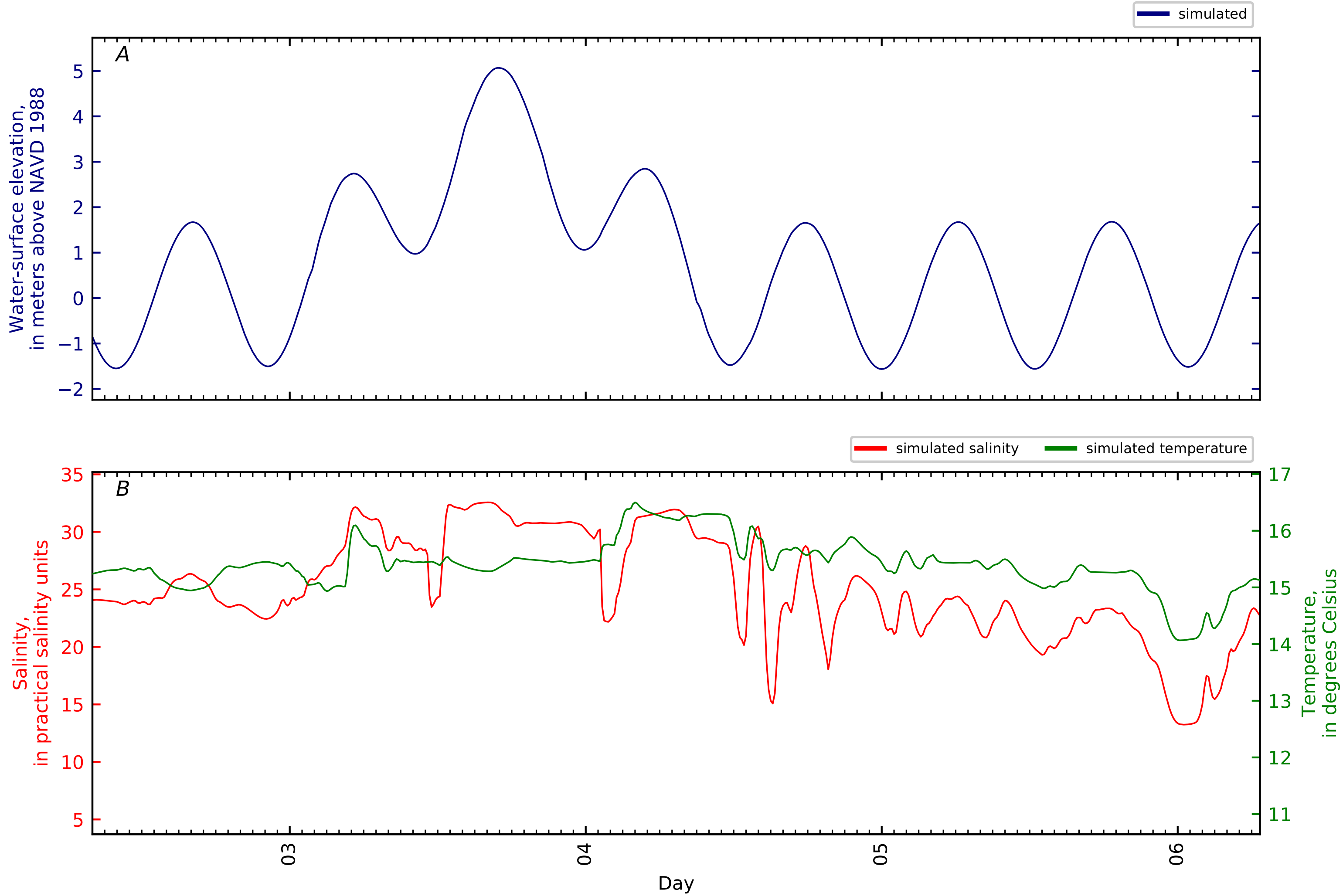

Figure B5-113. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 112, East Channel KM0.1 GS CTD4-05. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

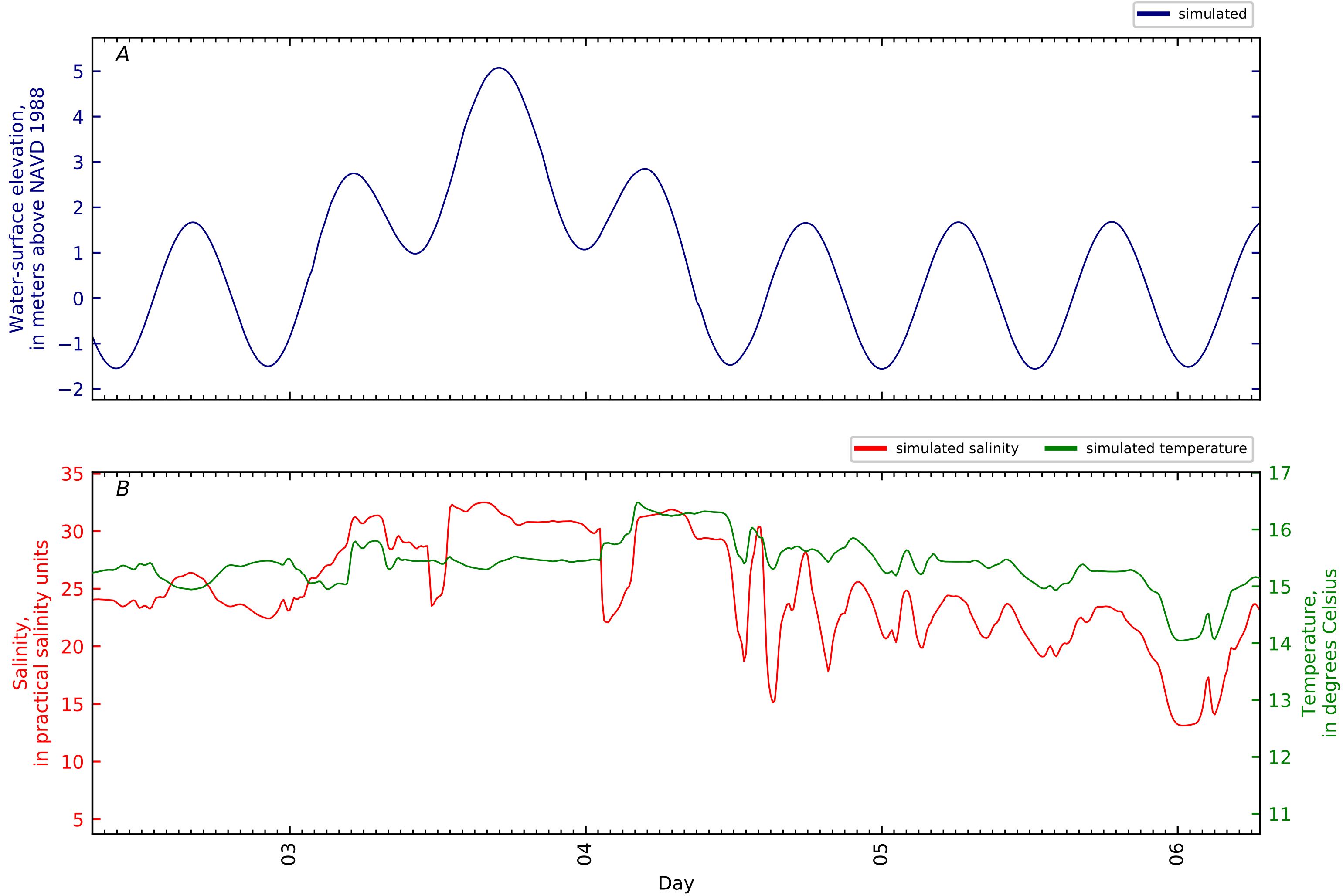

Figure B5-114. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 113, East Channel KM0.1 GS CTD4-06. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

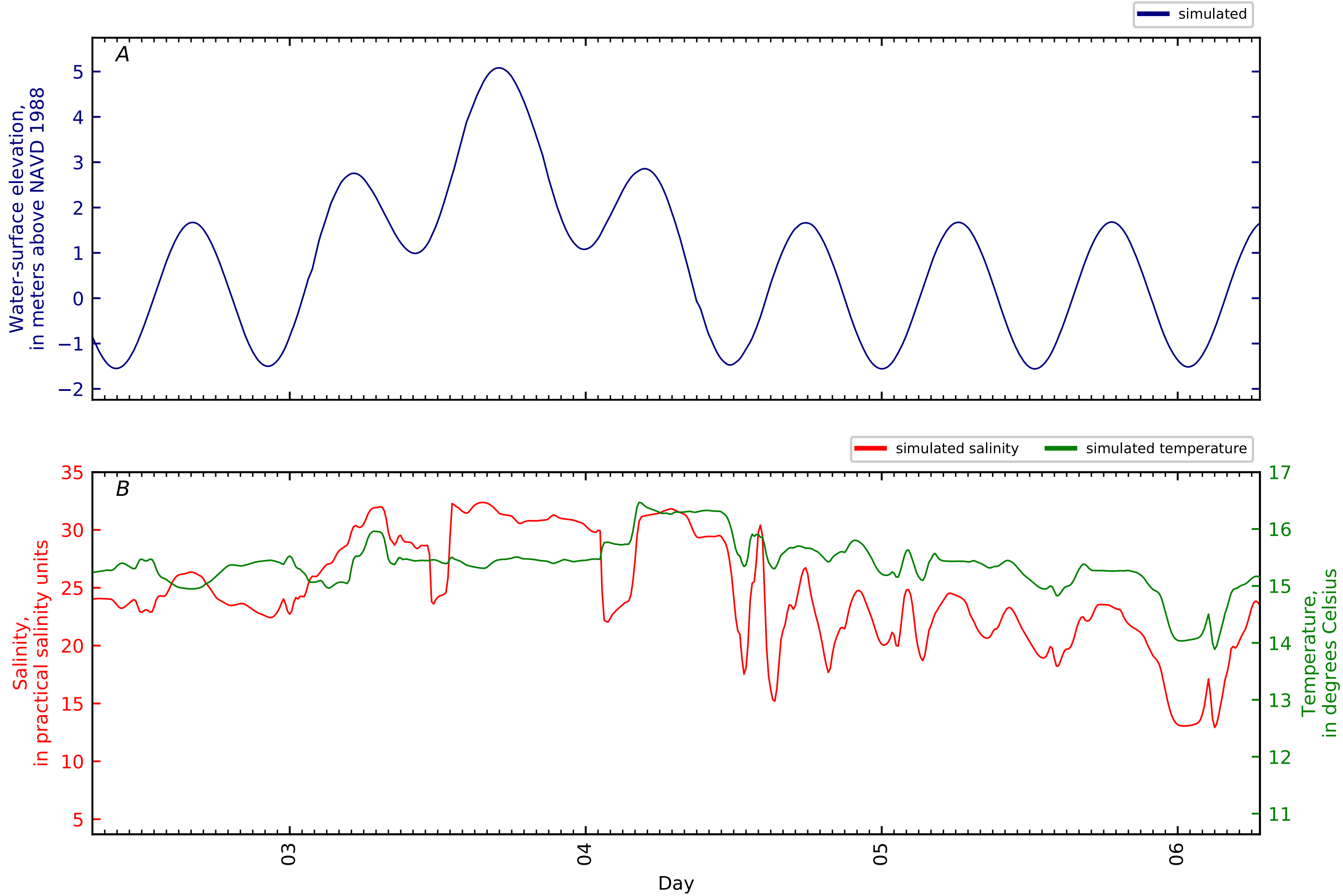

Figure B5-115. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 114, East Channel KM0.1 GS CTD4-07. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

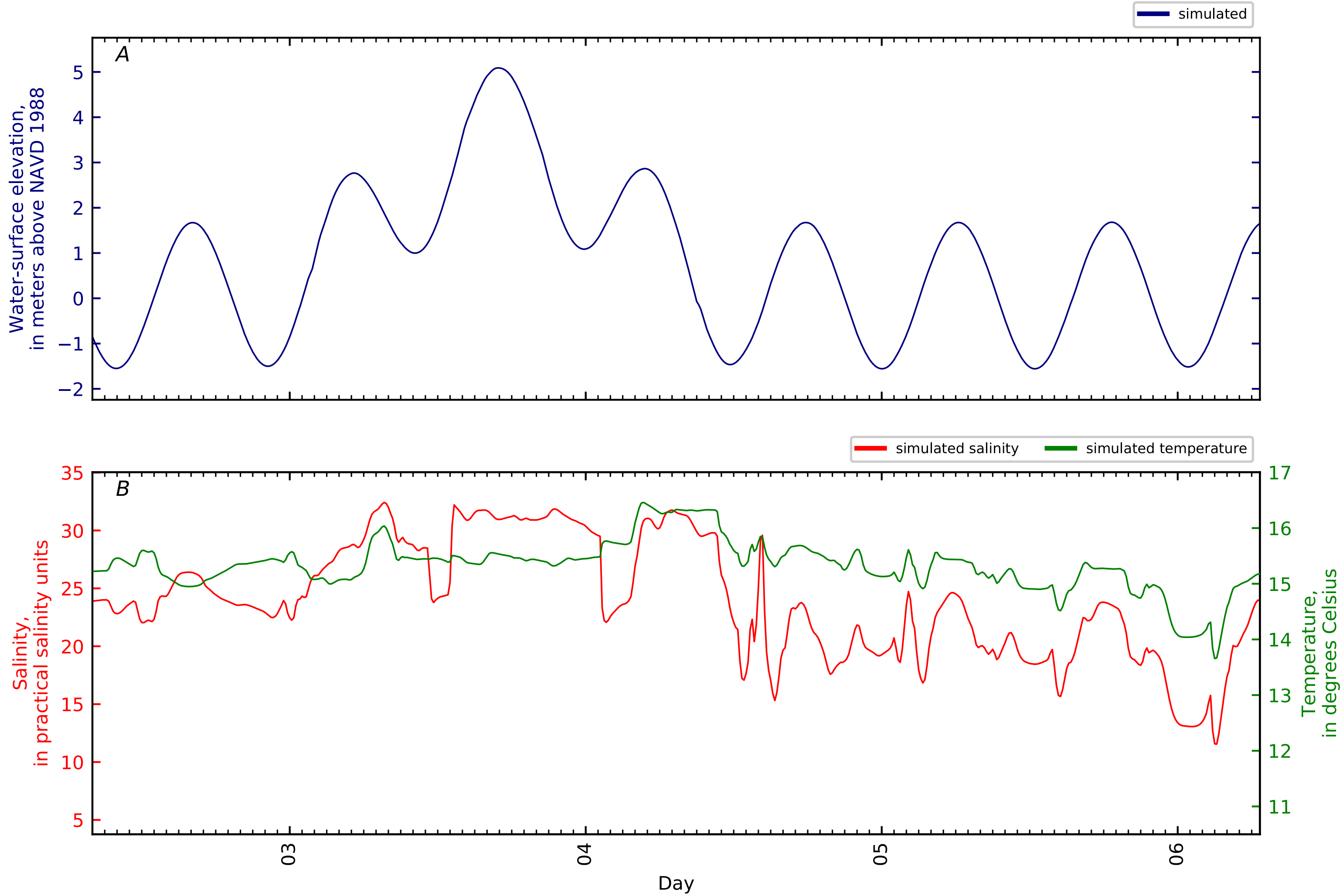

Figure B5-116. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 115, East Channel KM0.1 GS CTD4-08. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

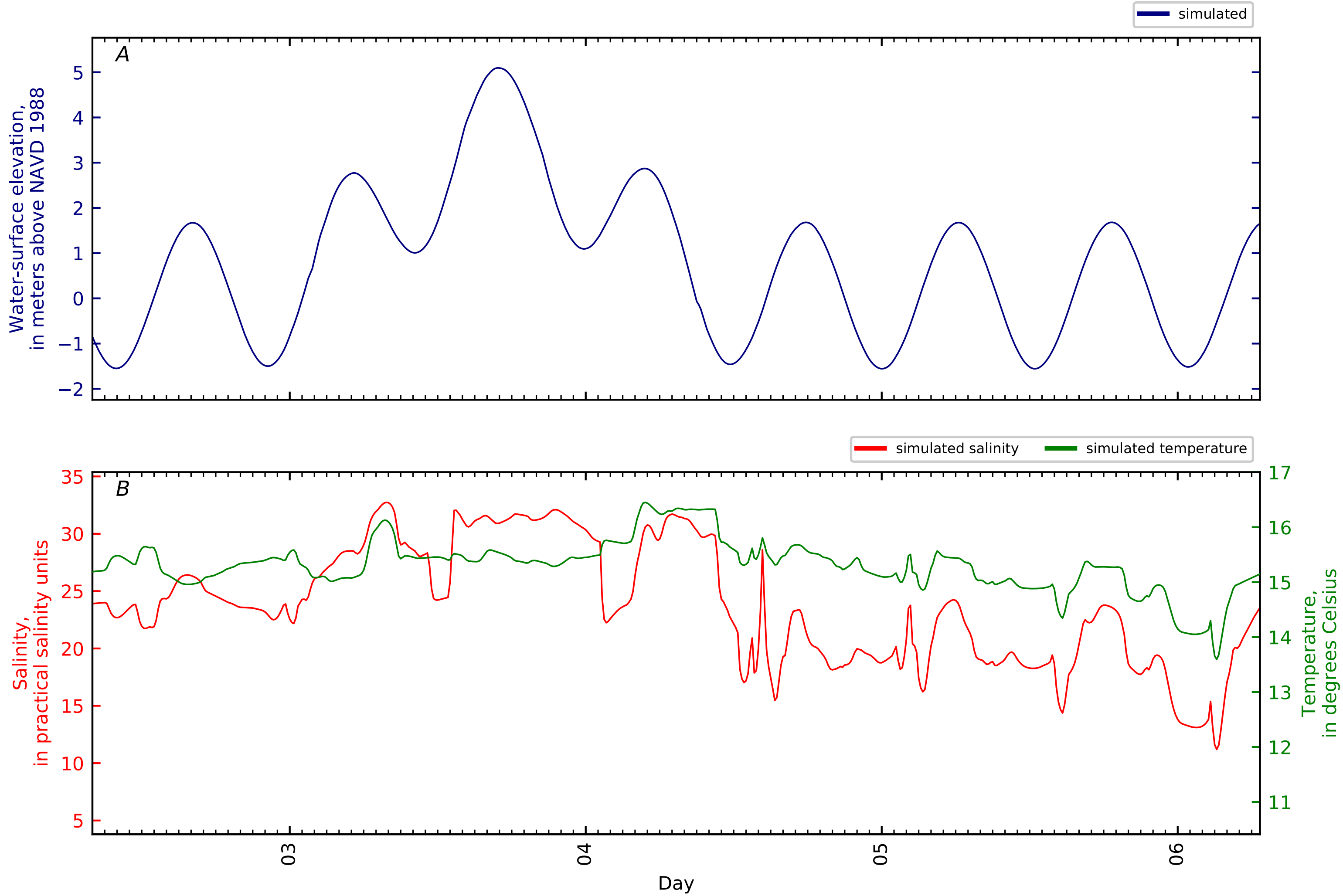

Figure B5-117. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 116, East Channel KM0.1 GS CTD4-09. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

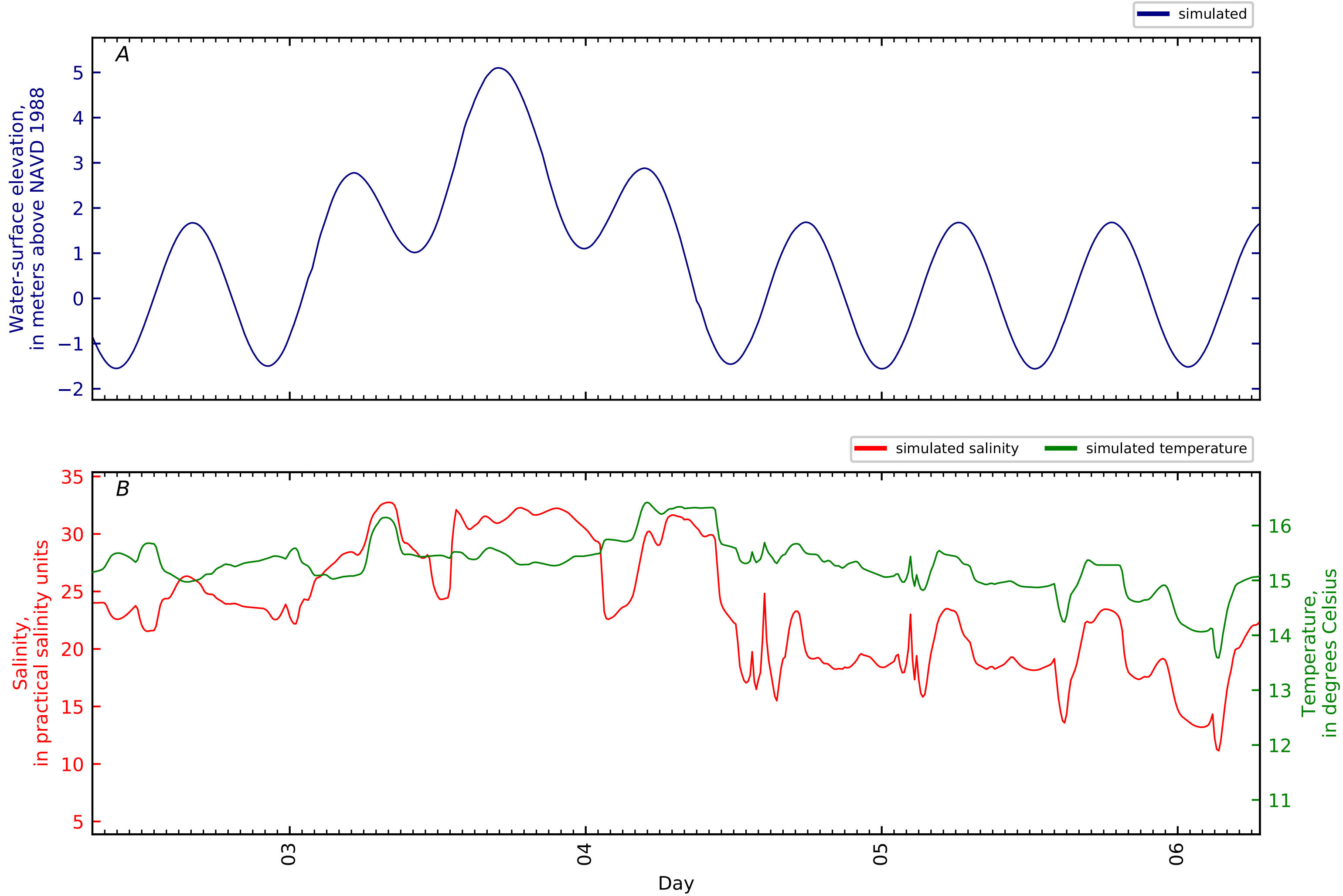

Figure B5-118. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 117, East Channel KM0.1 GS CTD4-10. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

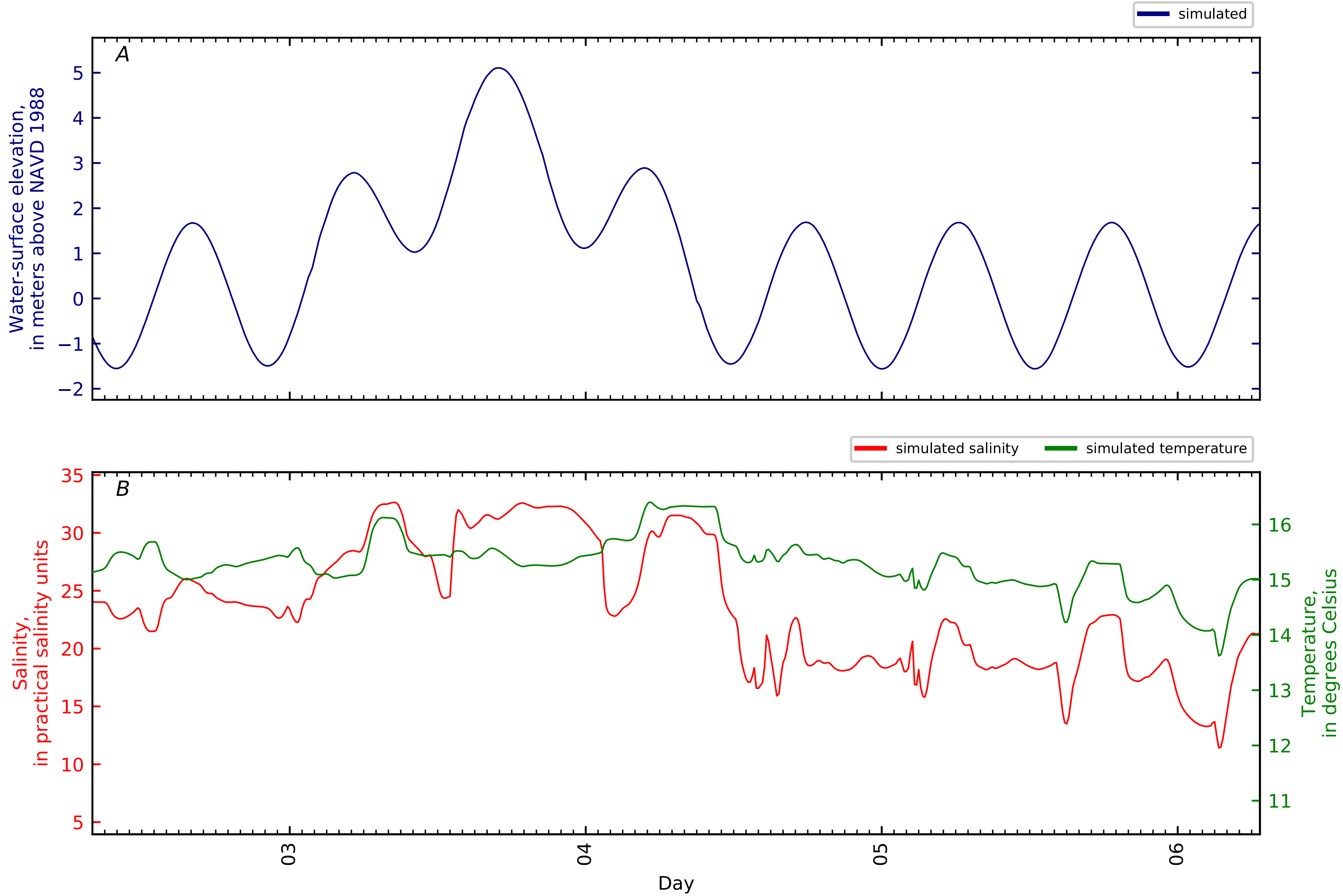

Figure B5-119. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 118, East Channel KM0.1 GS CTD4-11. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

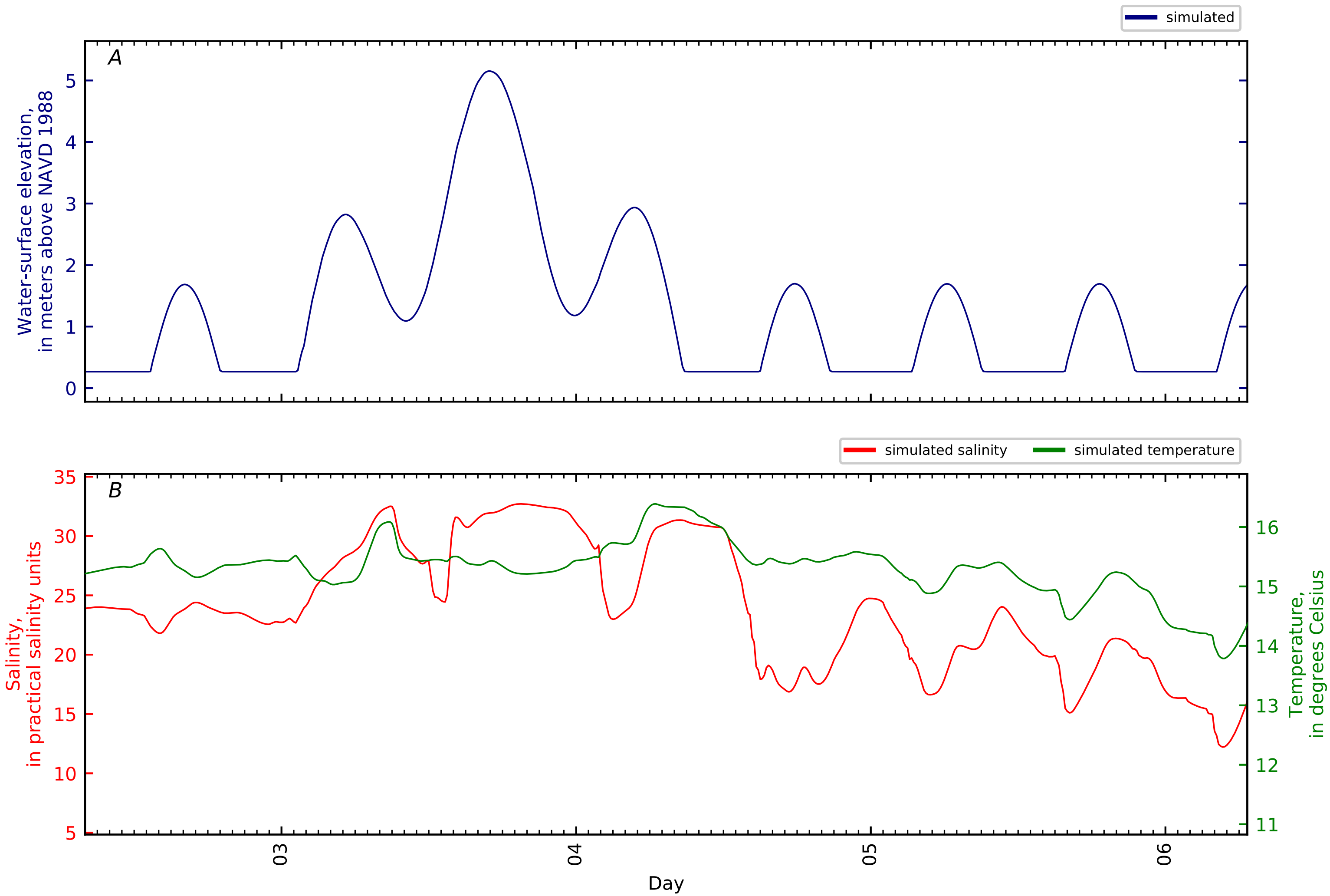

Figure B5-120. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 119, East Channel KM0.78 ERDC7 VE-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

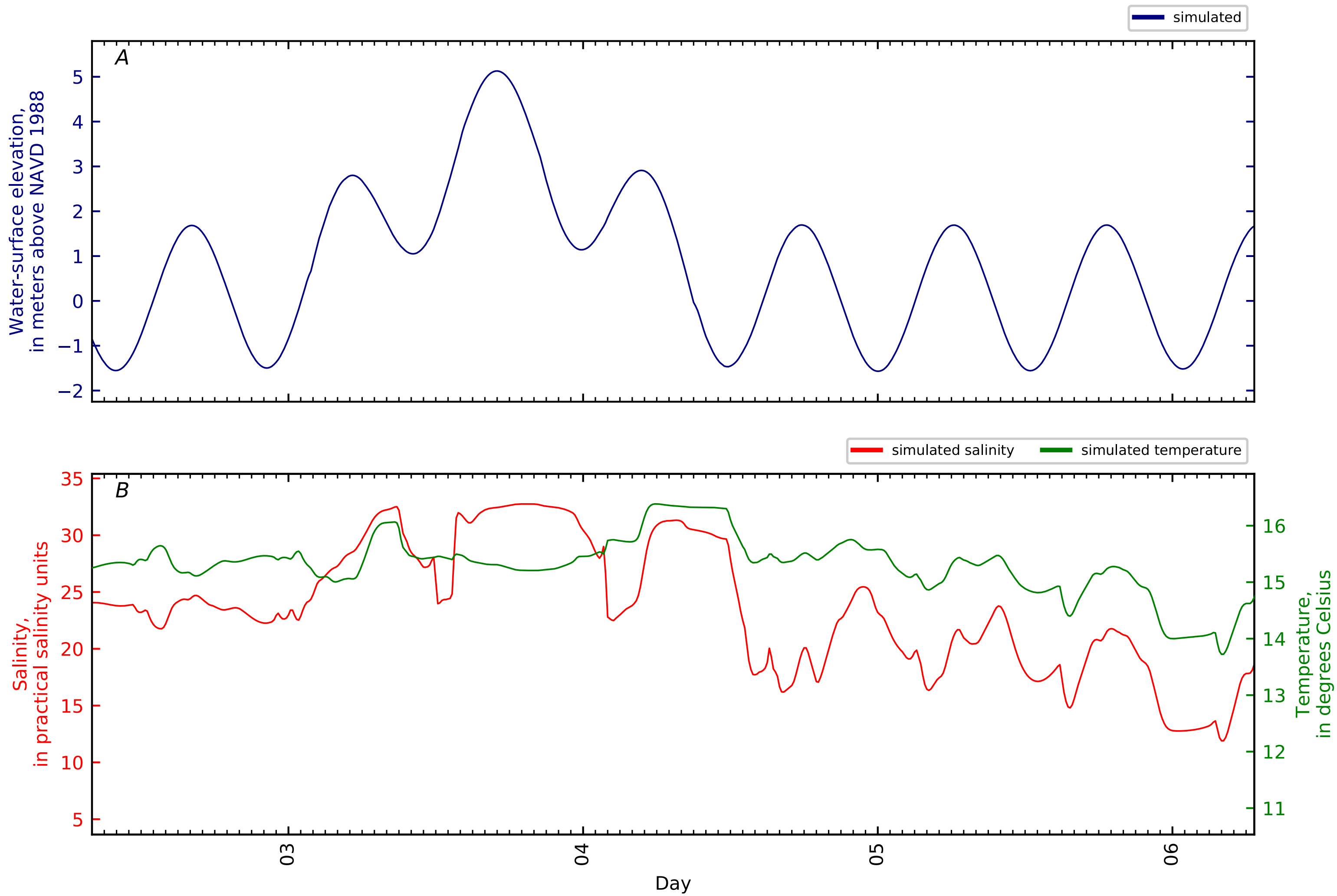

Figure B5-121. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 120, East Channel KM0.8 ERDC8 VE-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

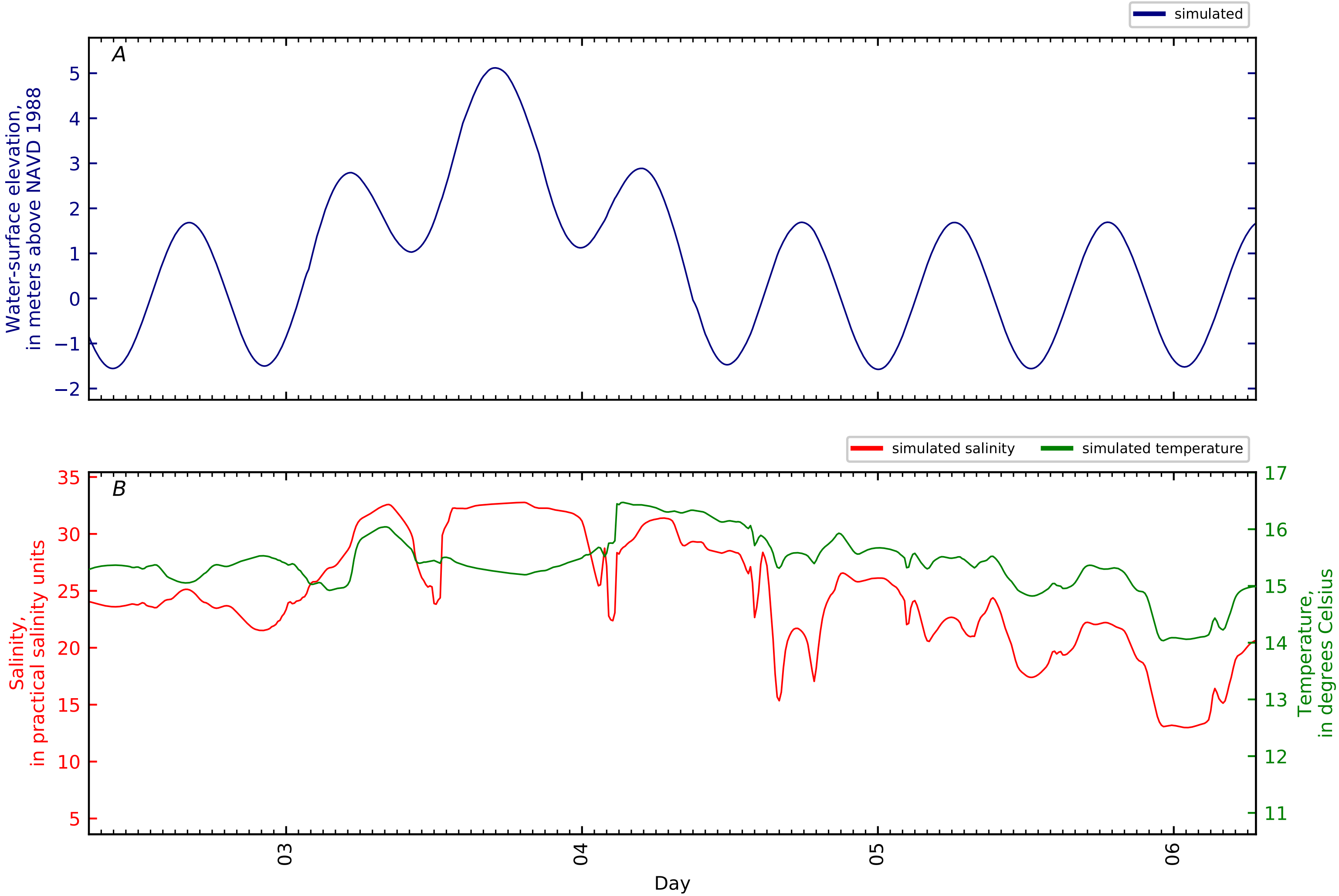

Figure B5-122. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 121, East Channel KM1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

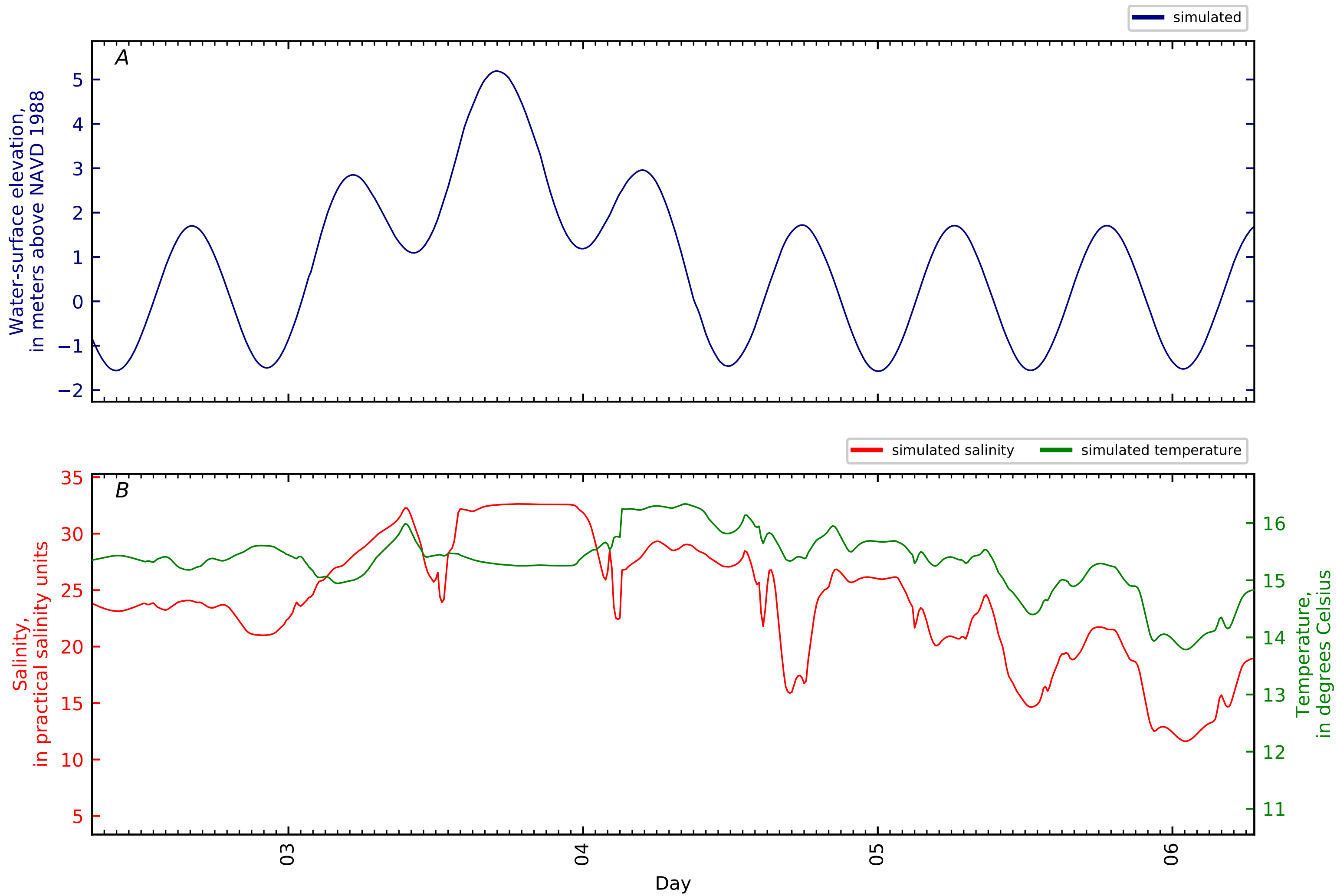

Figure B5-123. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 122, East Channel KM2. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

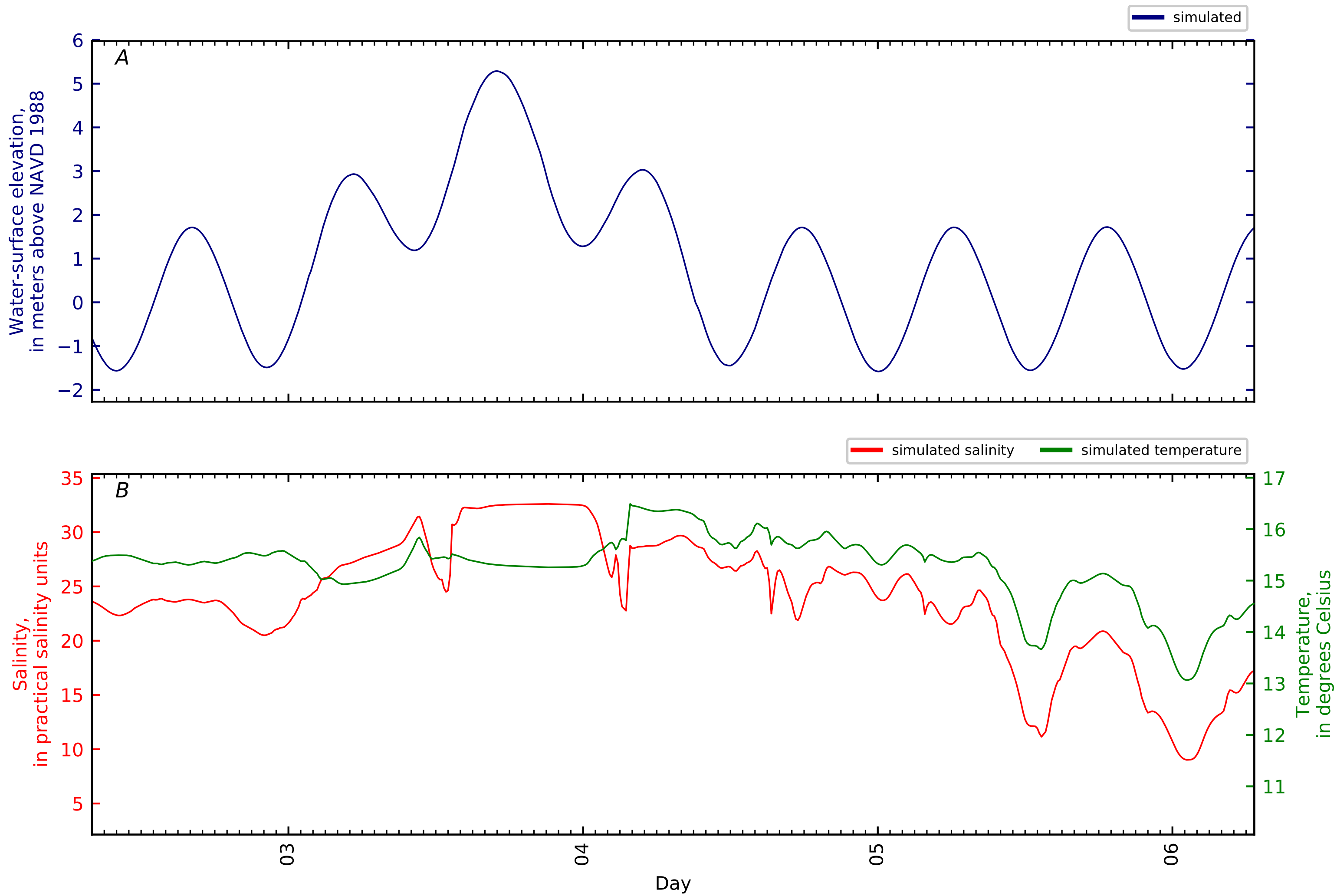

Figure B5-124. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 123, East Channel KM3. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

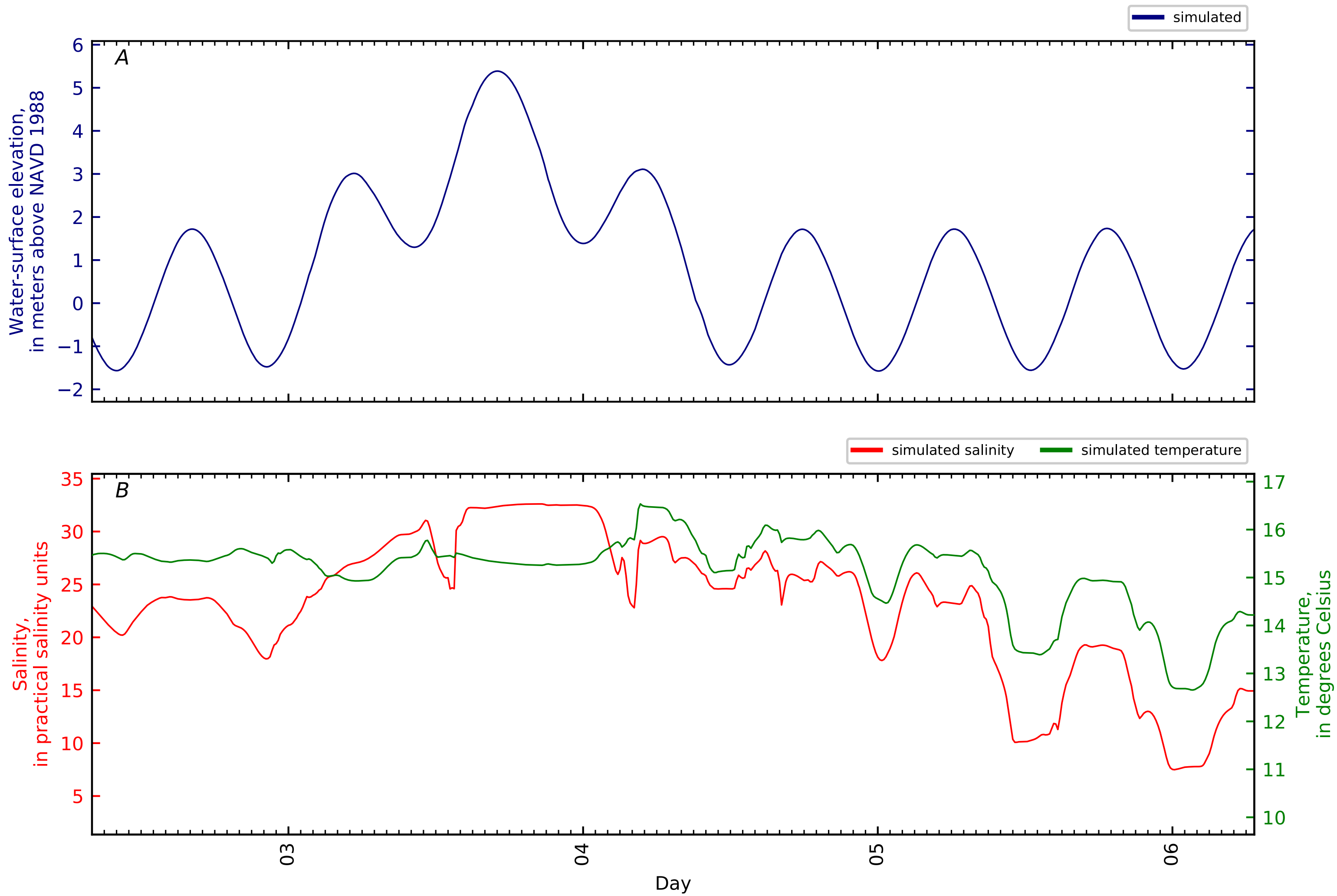

Figure B5-125. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 124, East Channel KM4. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

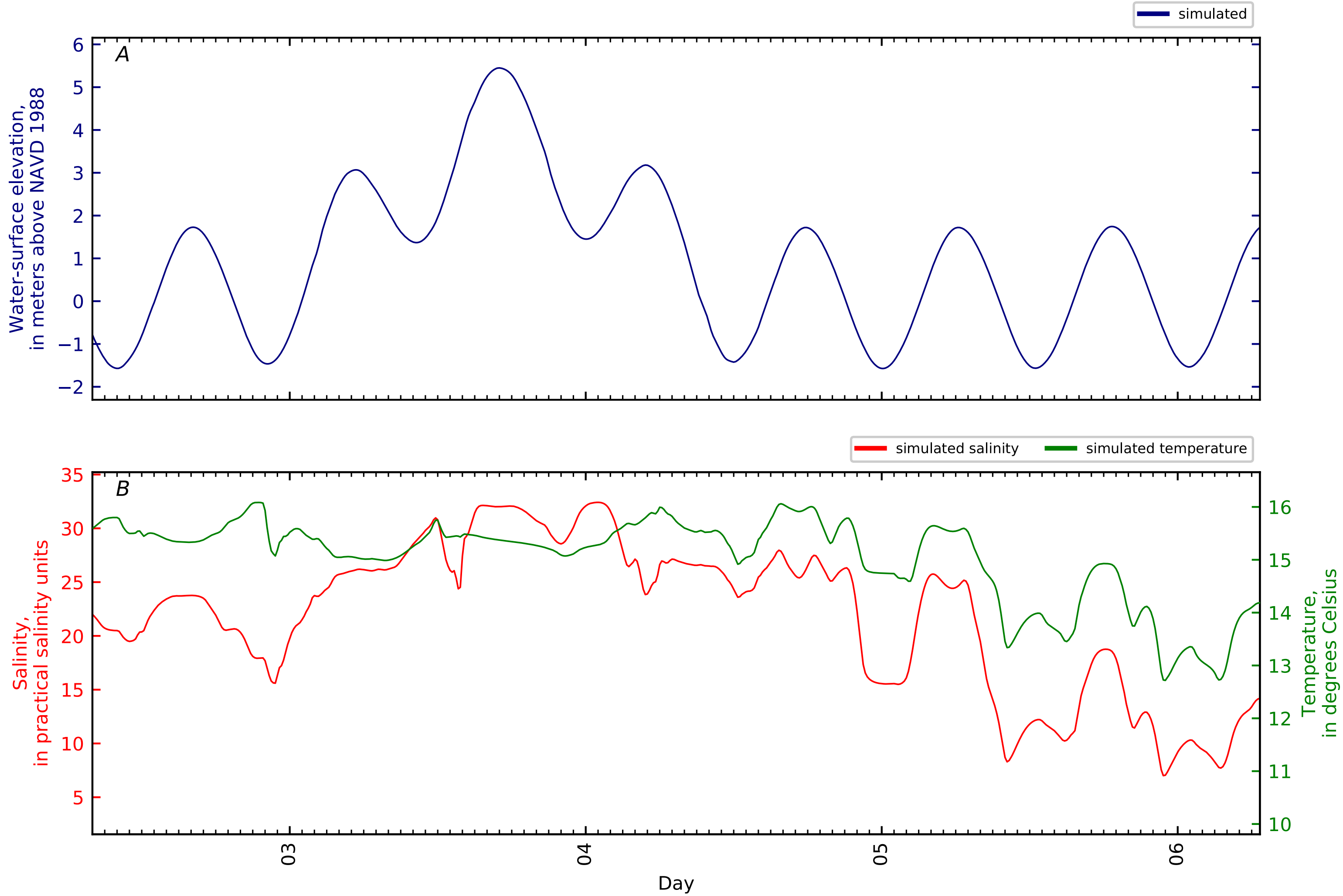

Figure B5-126. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 125, East Channel KM5. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

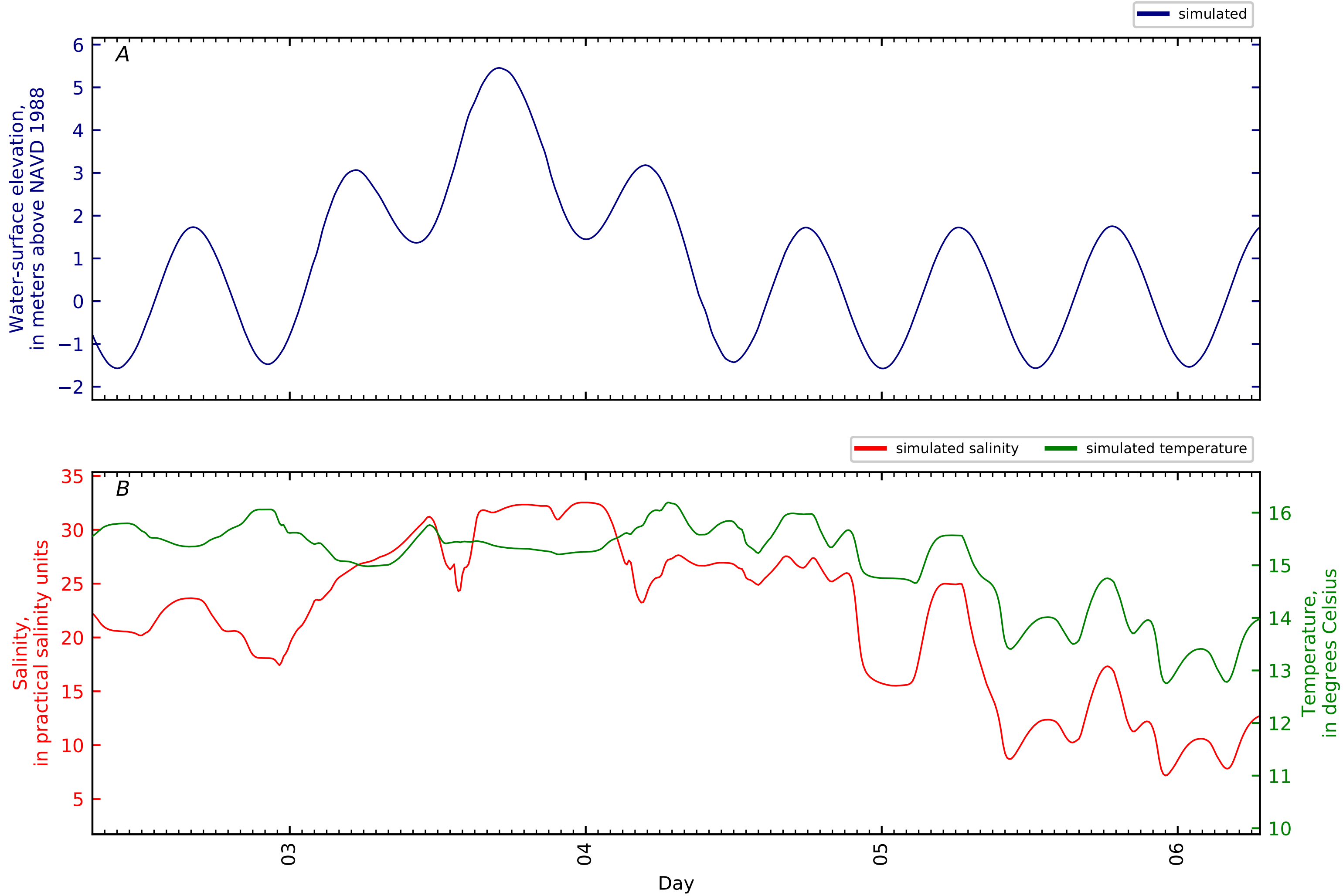

Figure B5-127. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 126, East Channel KM5.3 ERDC4 VN-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

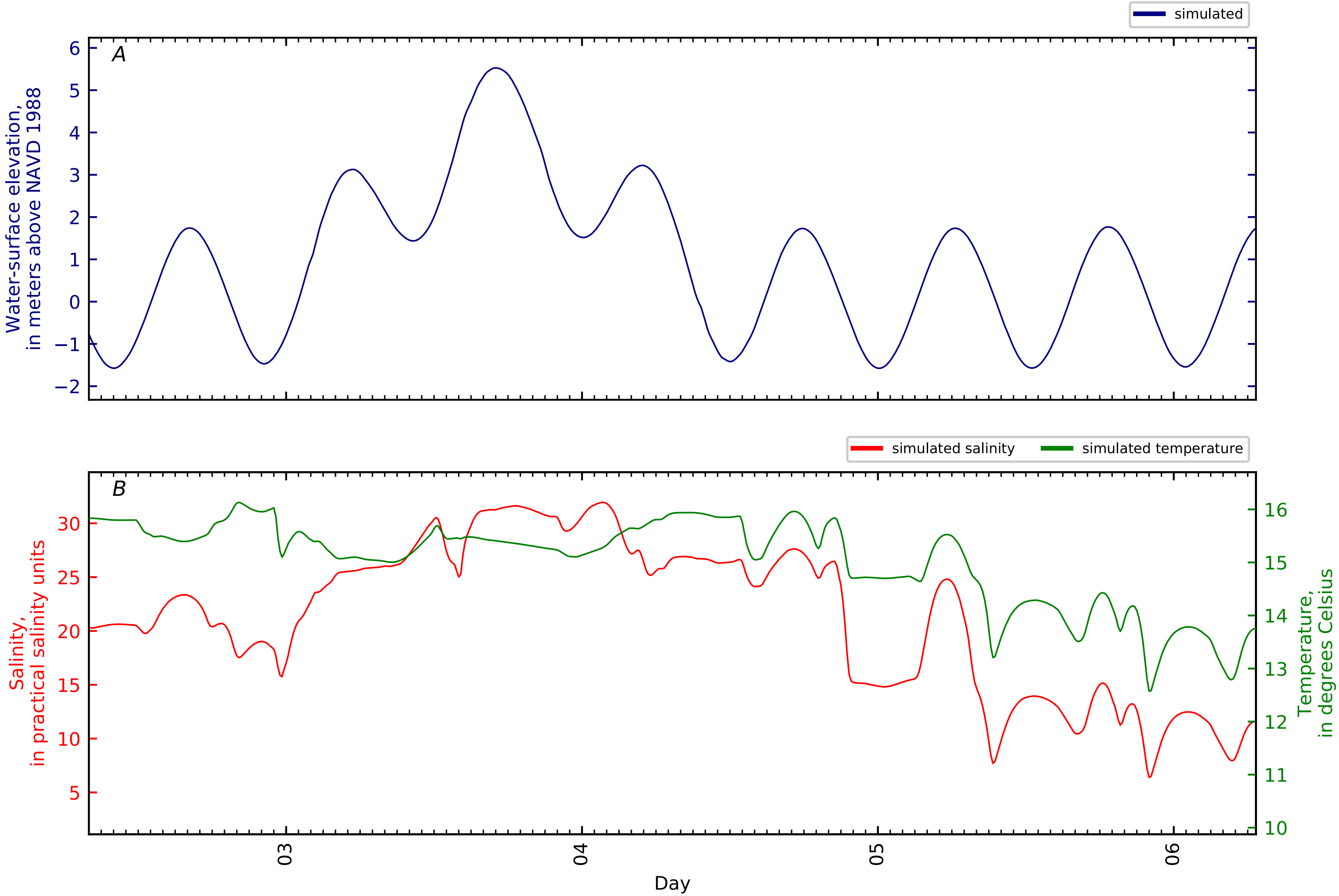

Figure B5-128. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 127, East Channel KM6. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

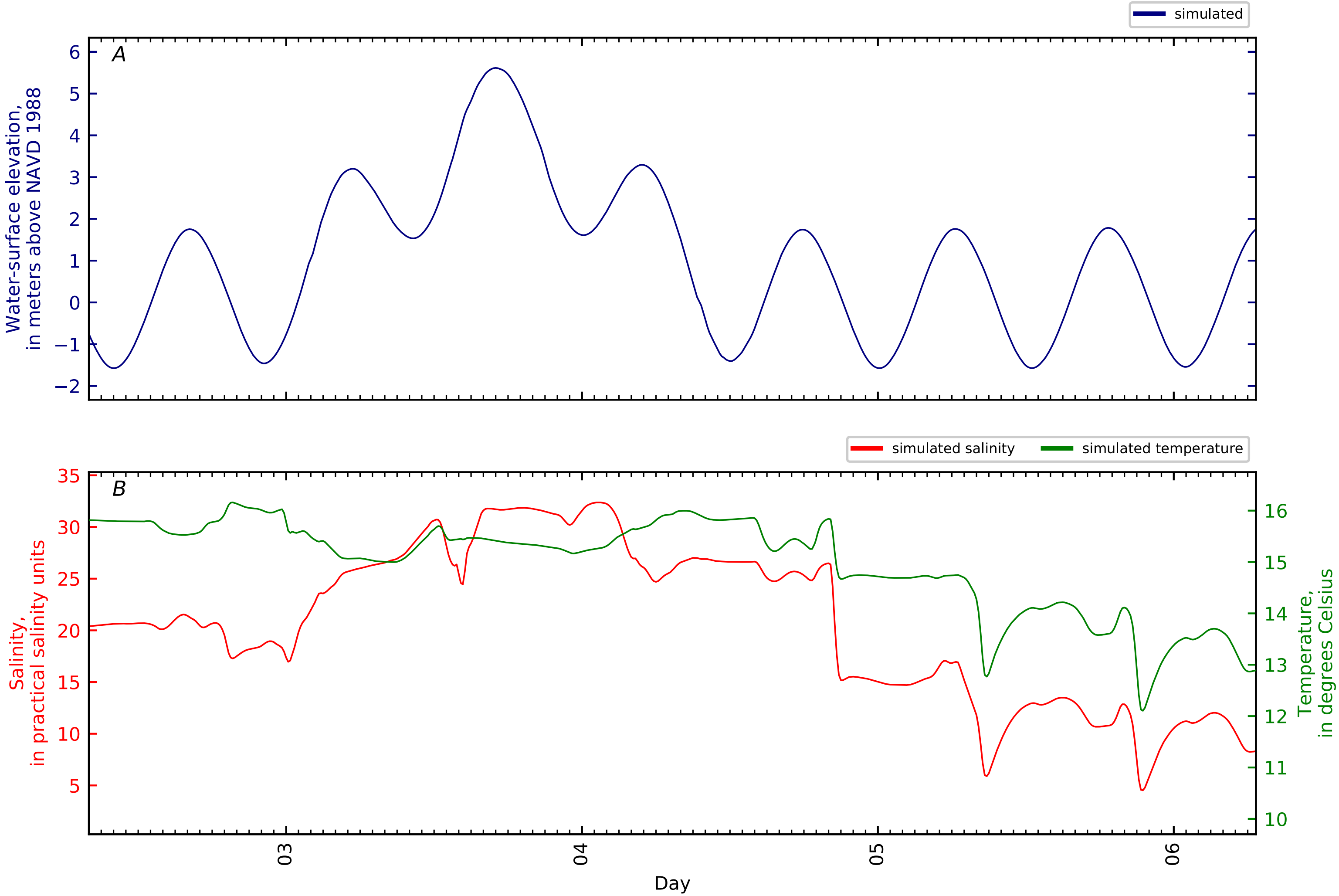

Figure B5-129. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 128, East Channel KM6.8 ERDC12 VN-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

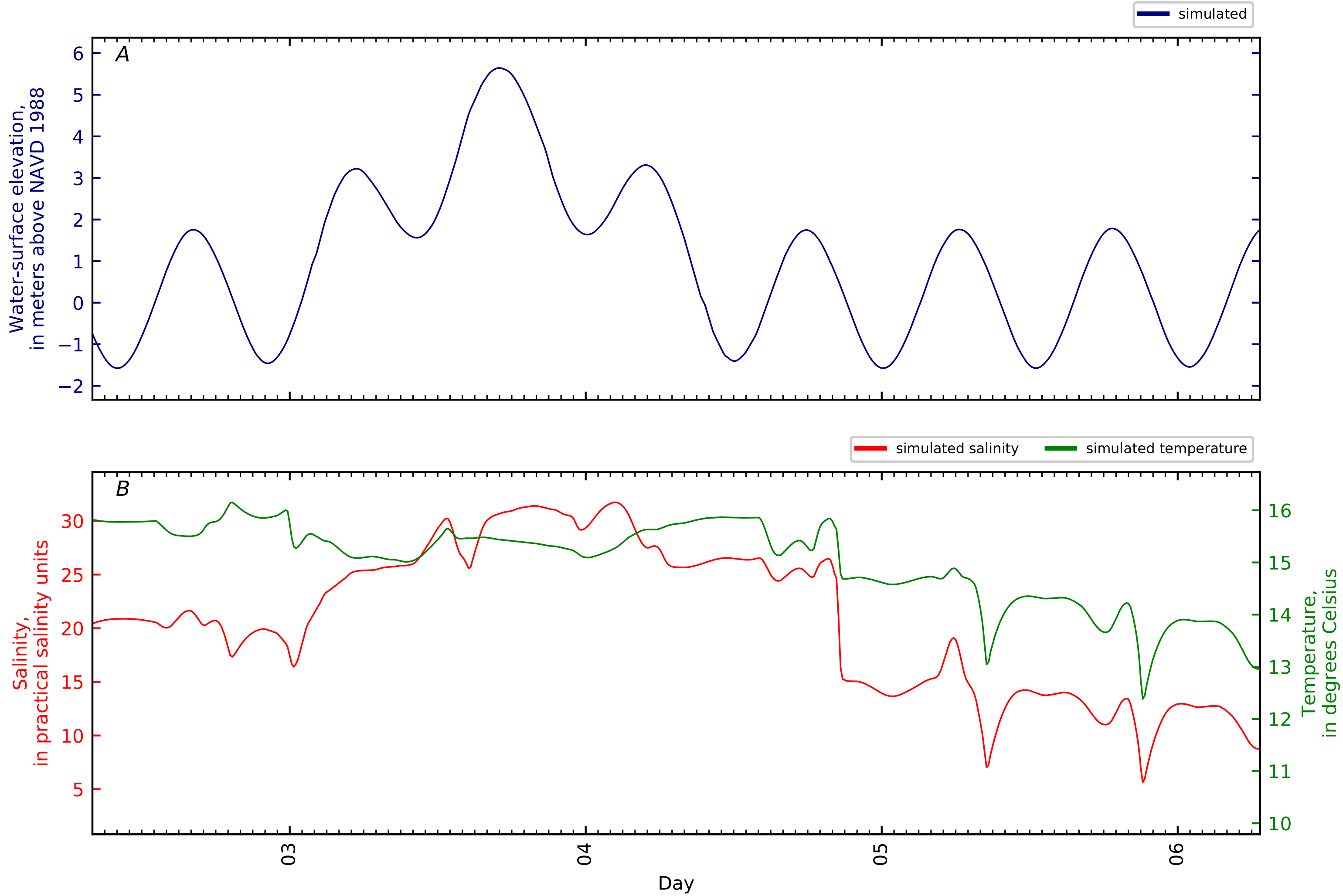

Figure B5-130. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 129, East Channel KM7. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

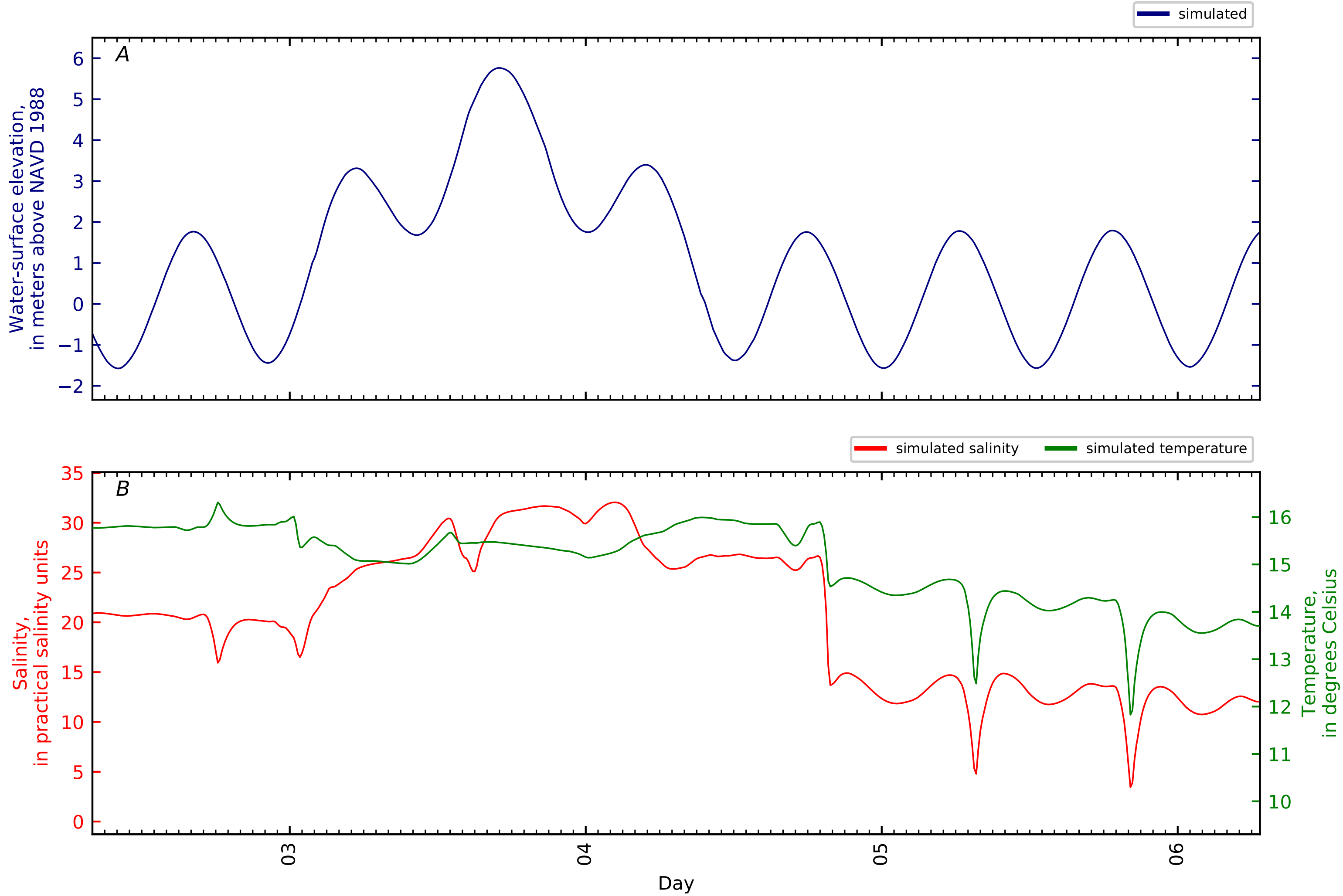

Figure B5-131. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 130, East Channel KM8. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

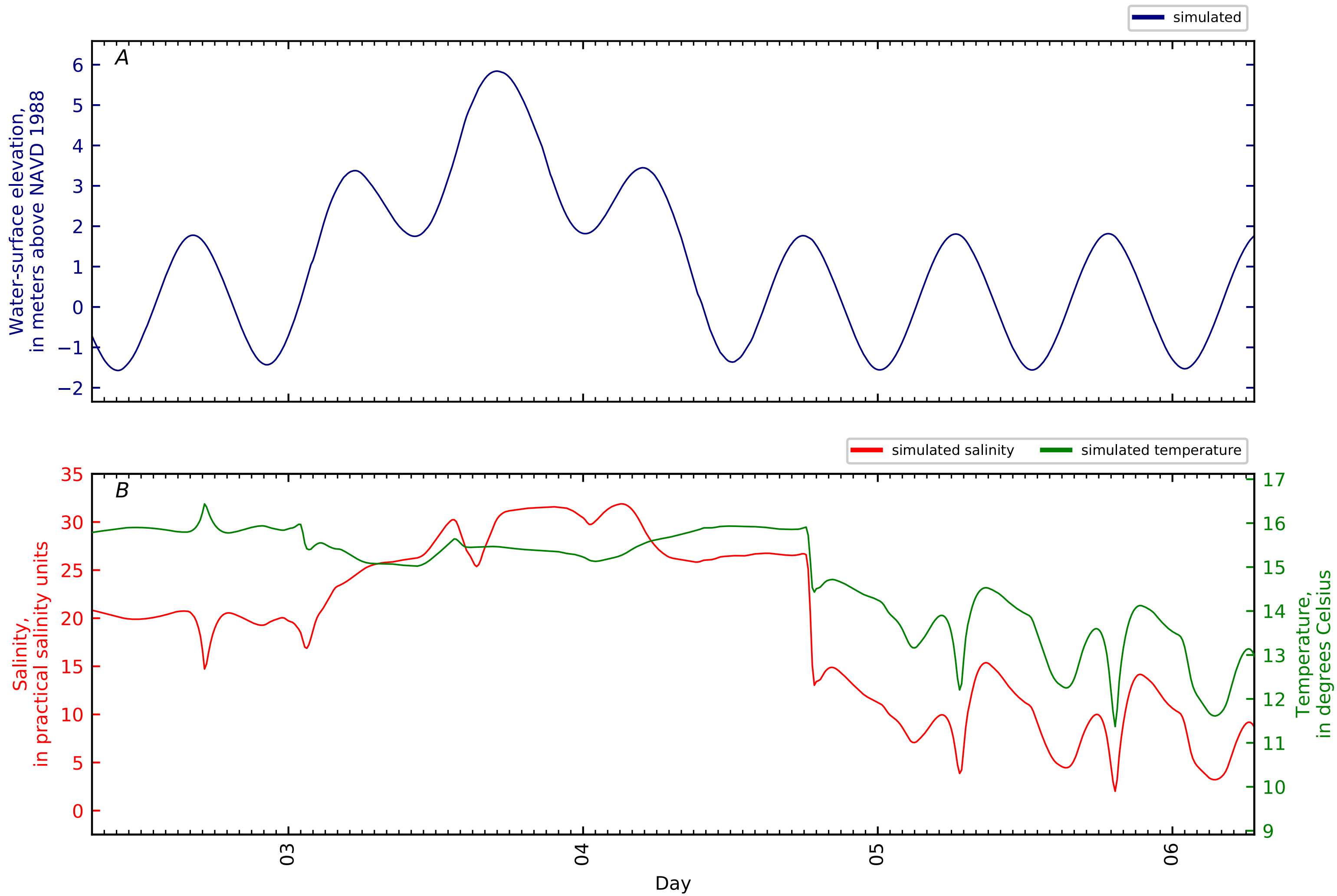

Figure B5-132. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 131, East Channel KM9. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

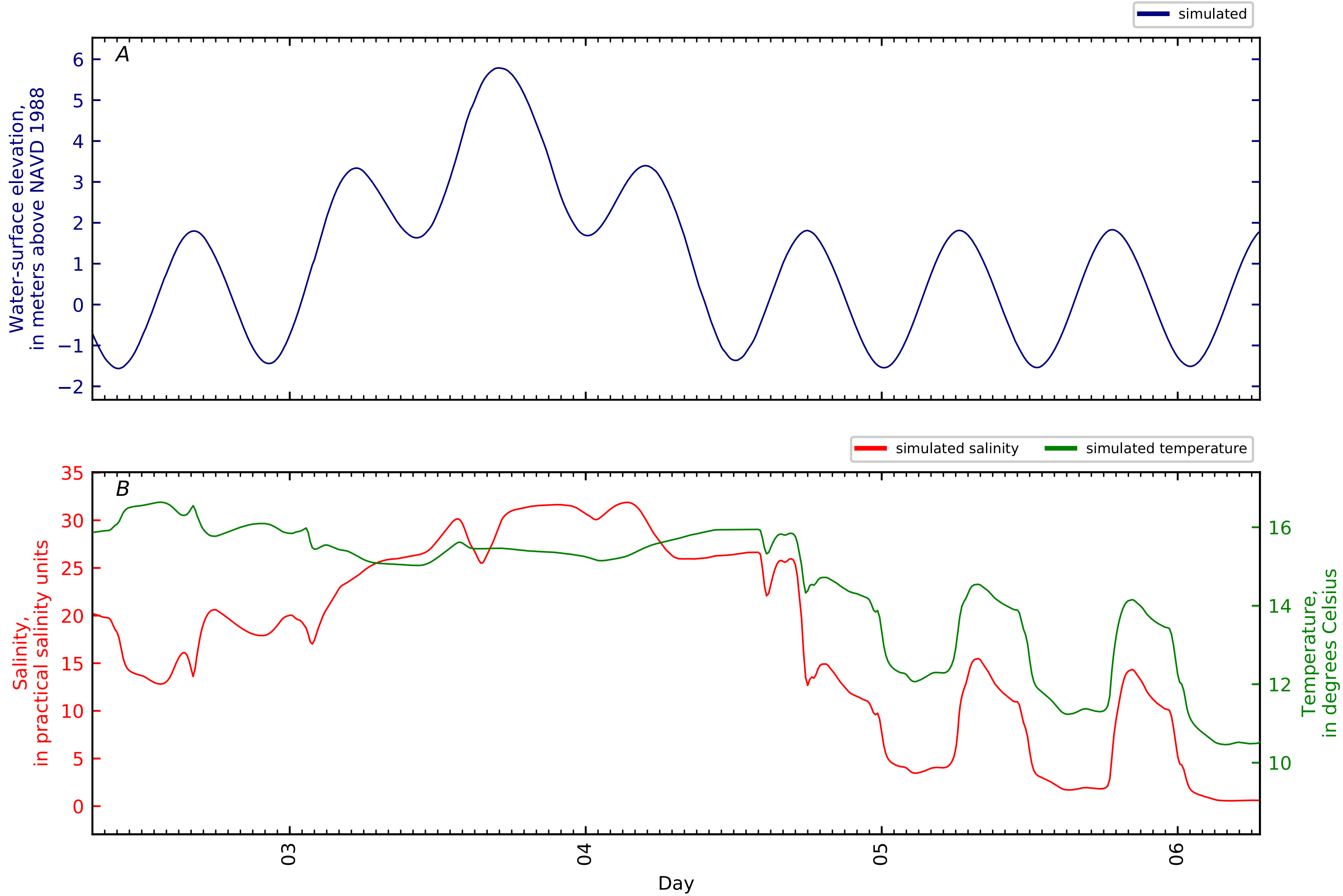

Figure B5-133. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 132, East Channel KM10. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

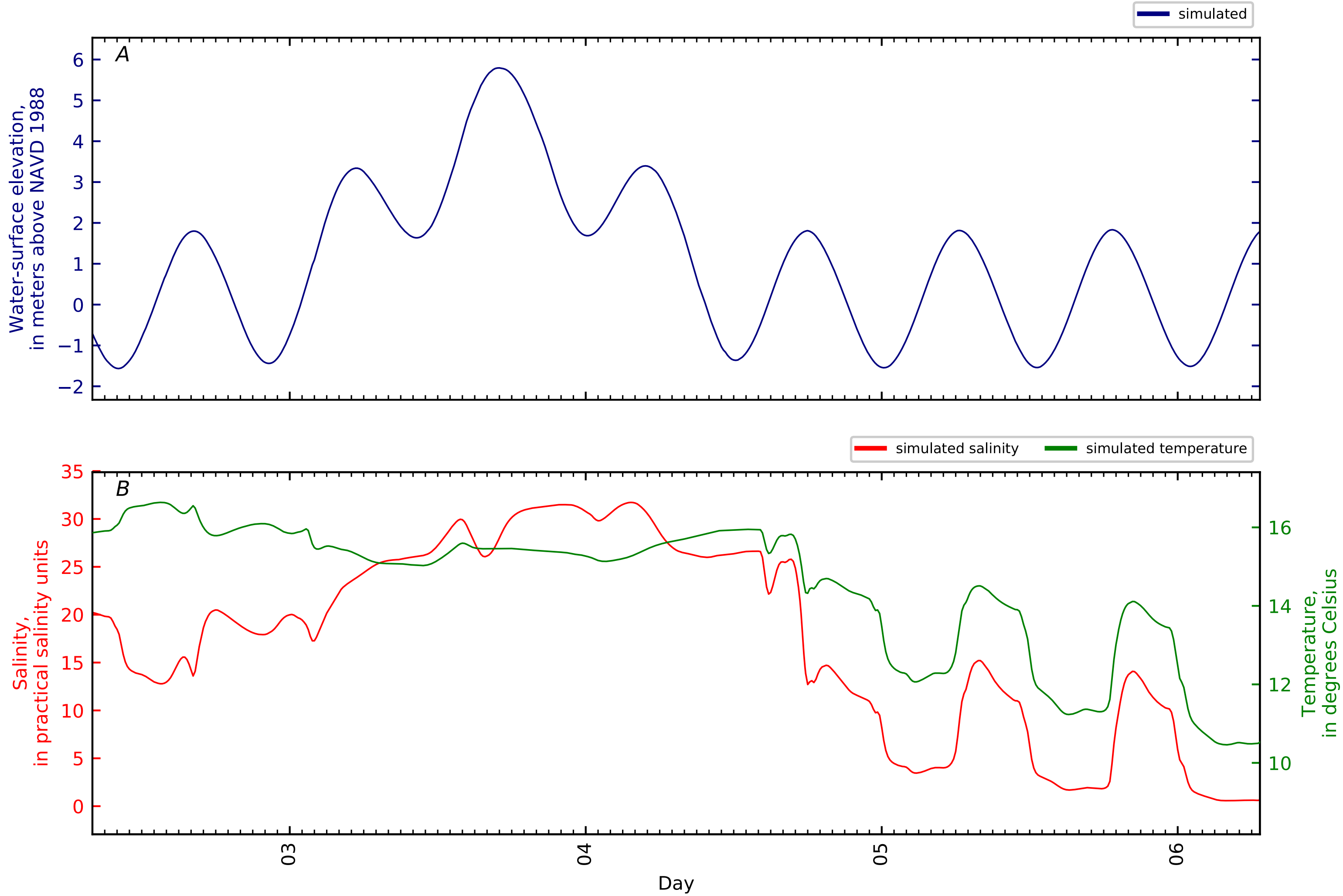

Figure B5-134. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 133, East Channel KM10 GS 443409068471801 at. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

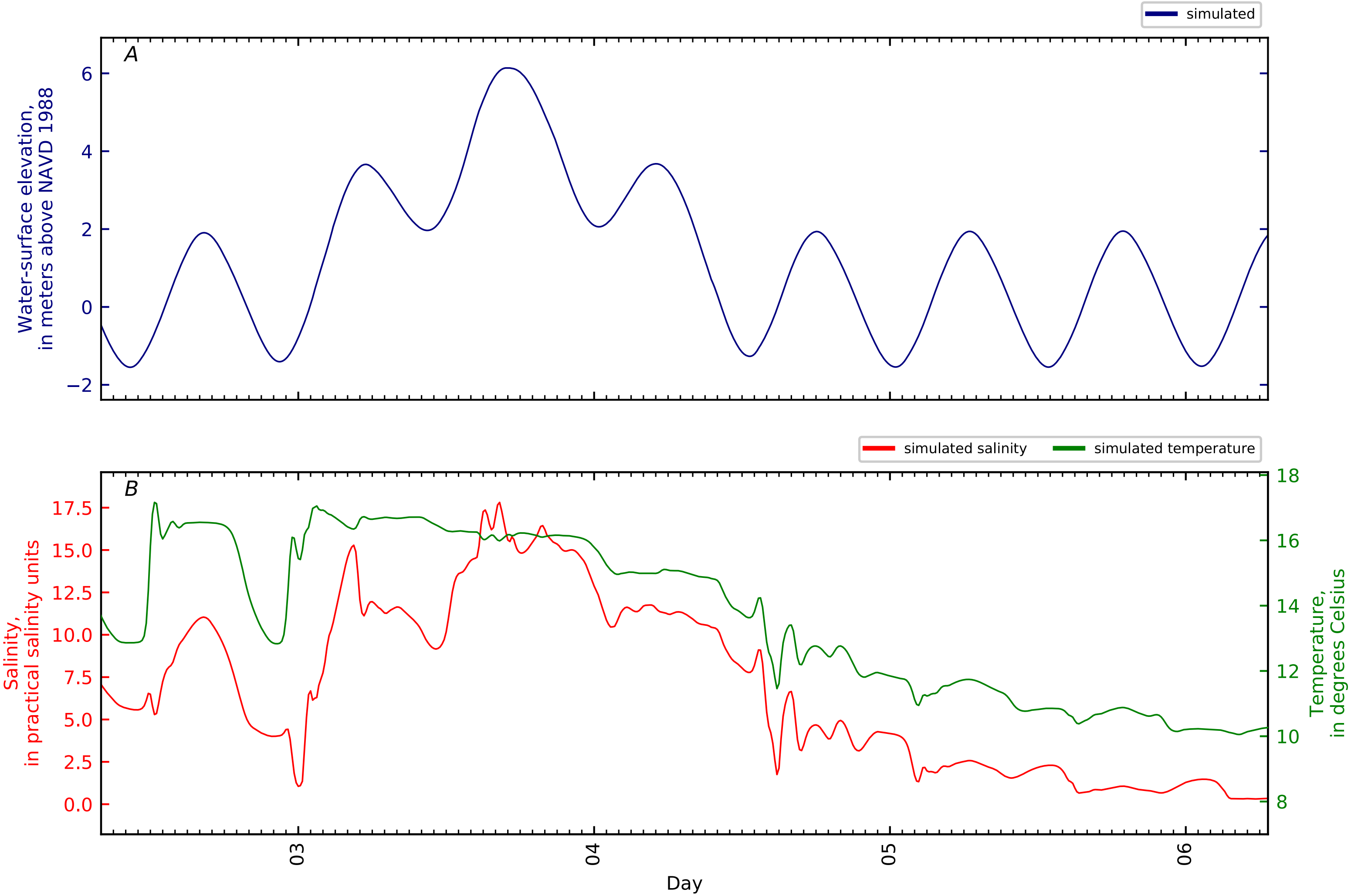

Figure B5-135. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 134, Mendall Marsh KM0. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

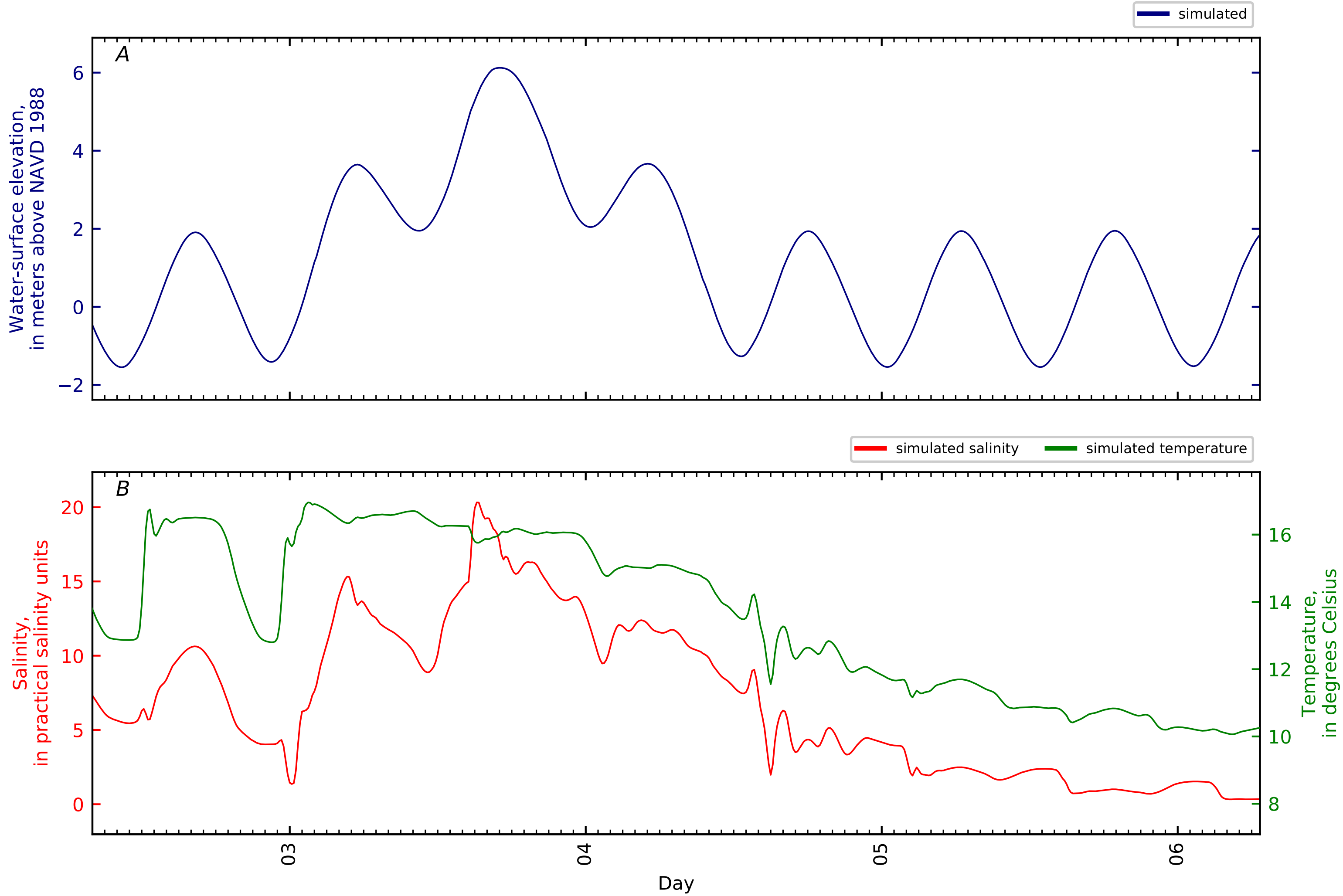

Figure B5-136. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 135, Mendall Marsh KM0.1 ERDC14 MM-MU6-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

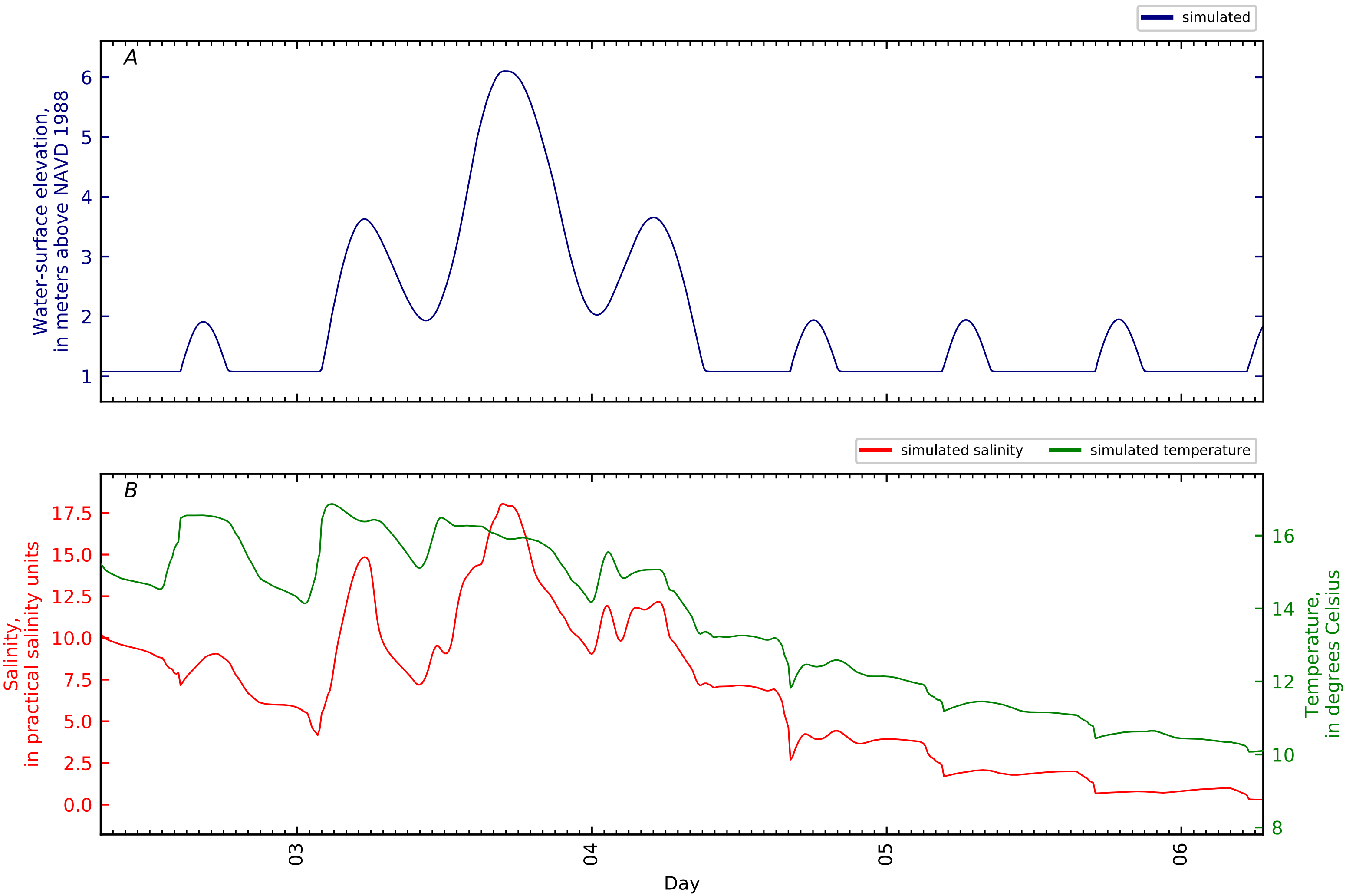

Figure B5-137. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 136, Mendall Marsh KM0.4 GS CTD2-01. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

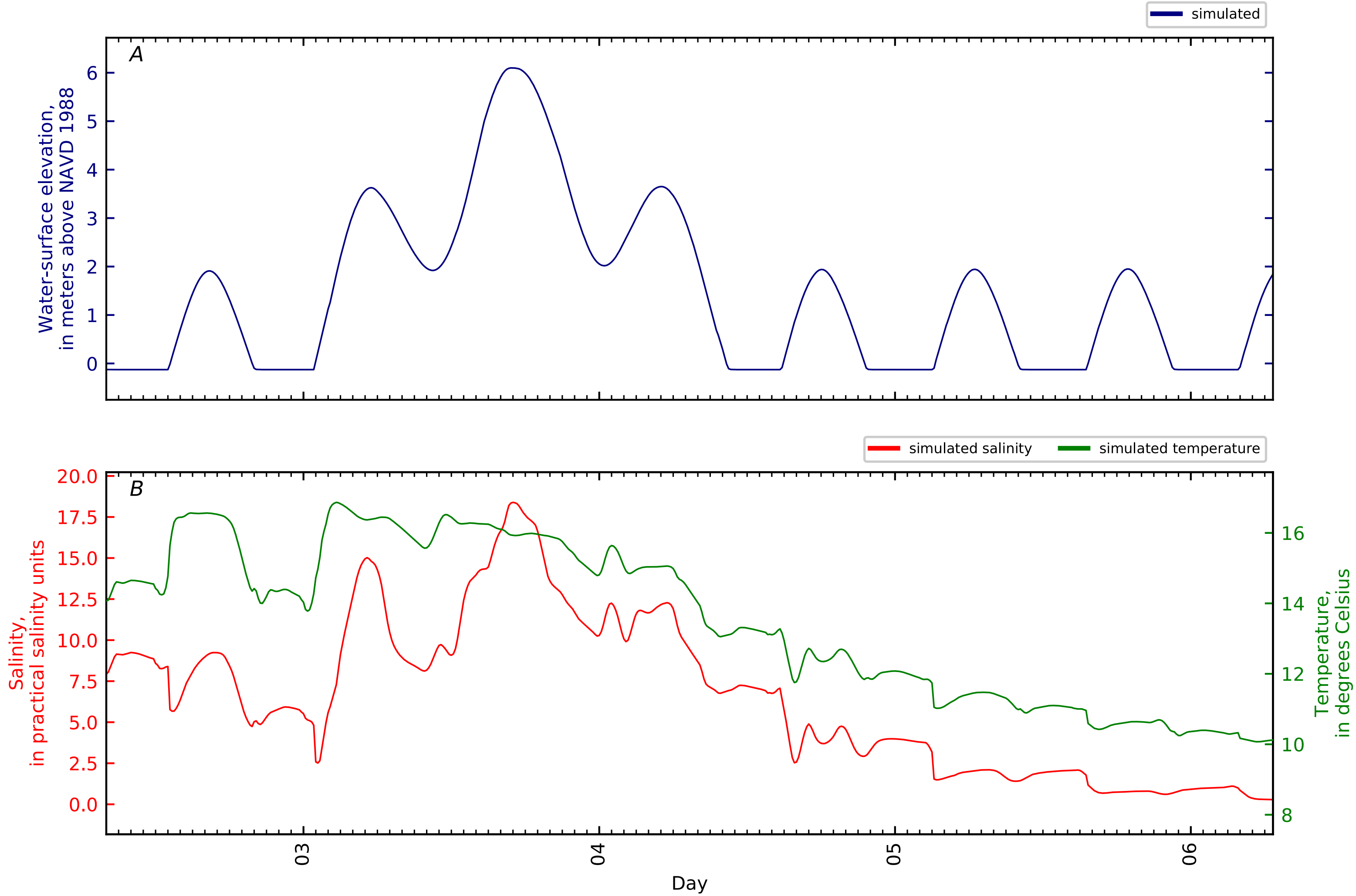

Figure B5-138. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 137, Mendall Marsh KM0.4 GS CTD2-02. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

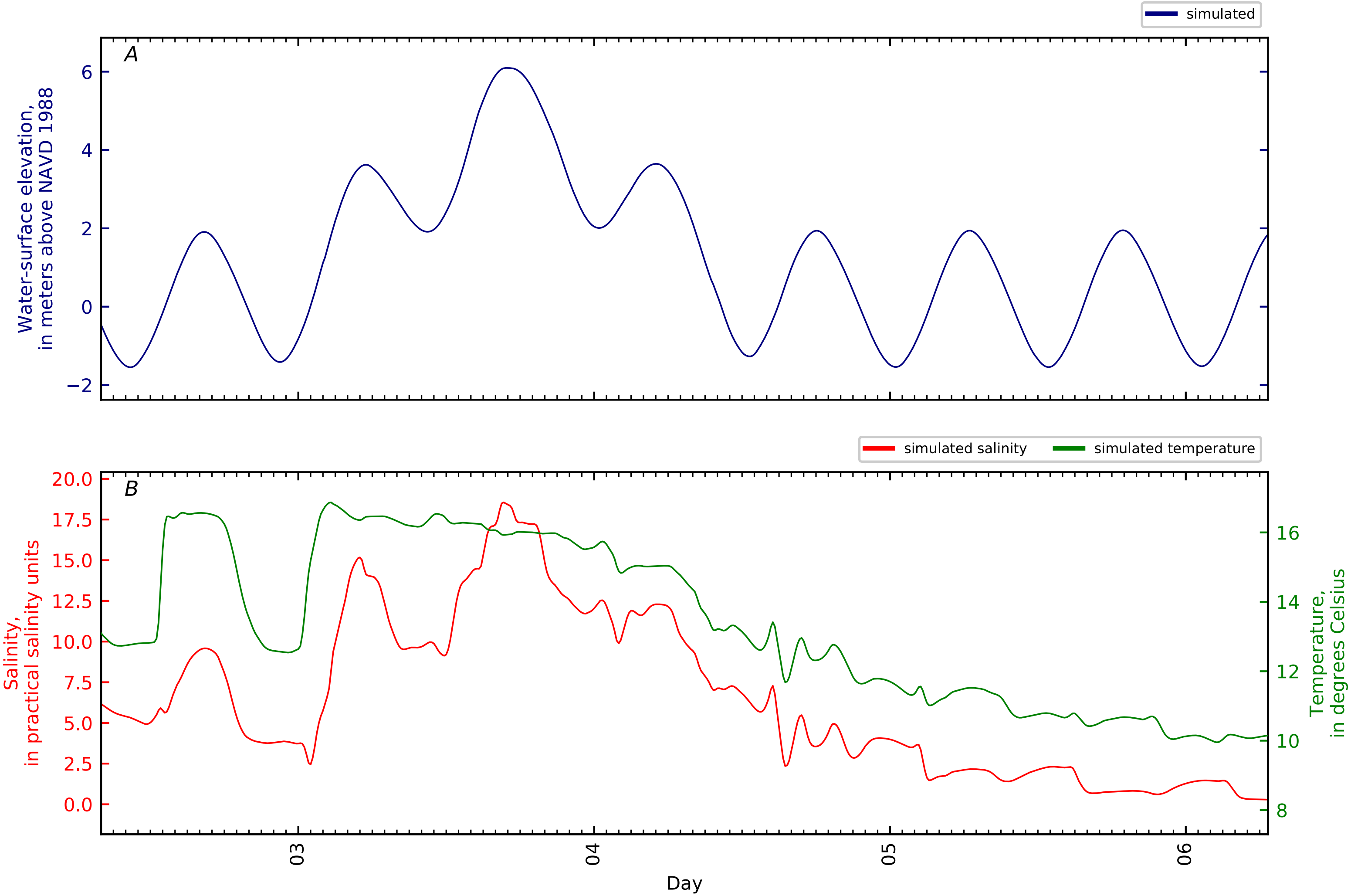

Figure B5-139. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 138, Mendall Marsh KM0.4 GS CTD2-03. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

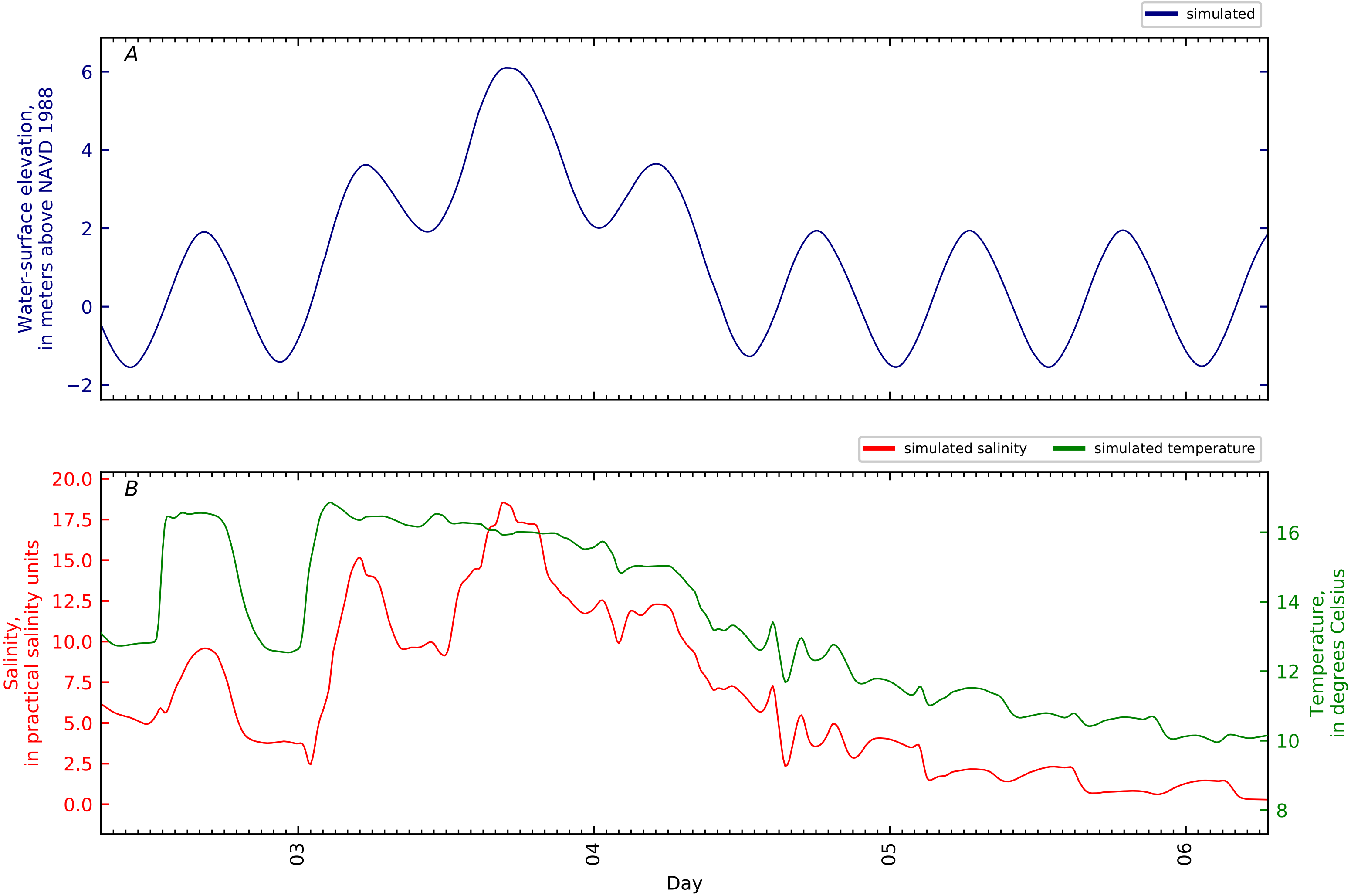

Figure B5-140. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 139, Mendall Marsh KM0.4 GS CTD2-04. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

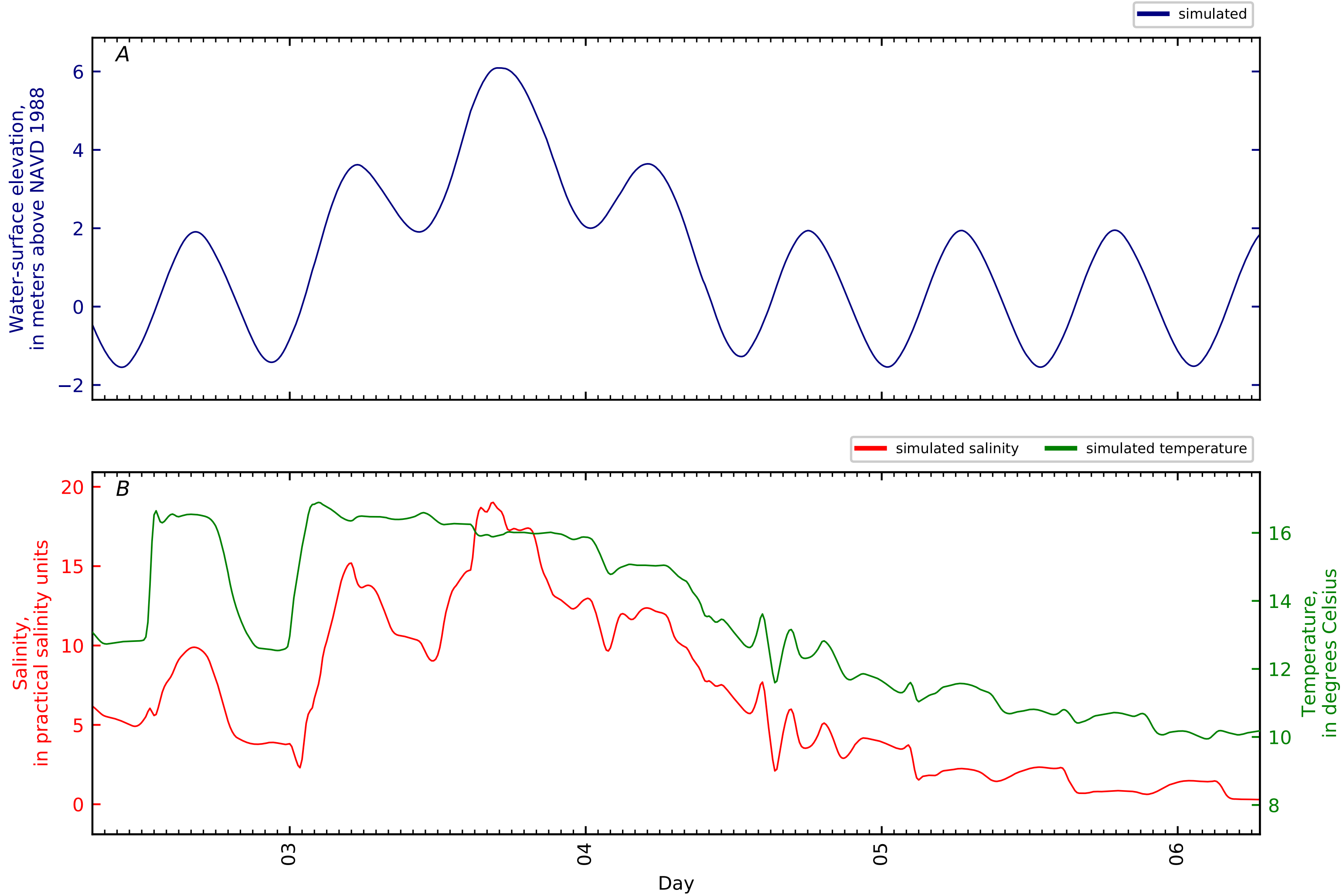

Figure B5-141. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 140, Mendall Marsh KM0.4 GS CTD2-05. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

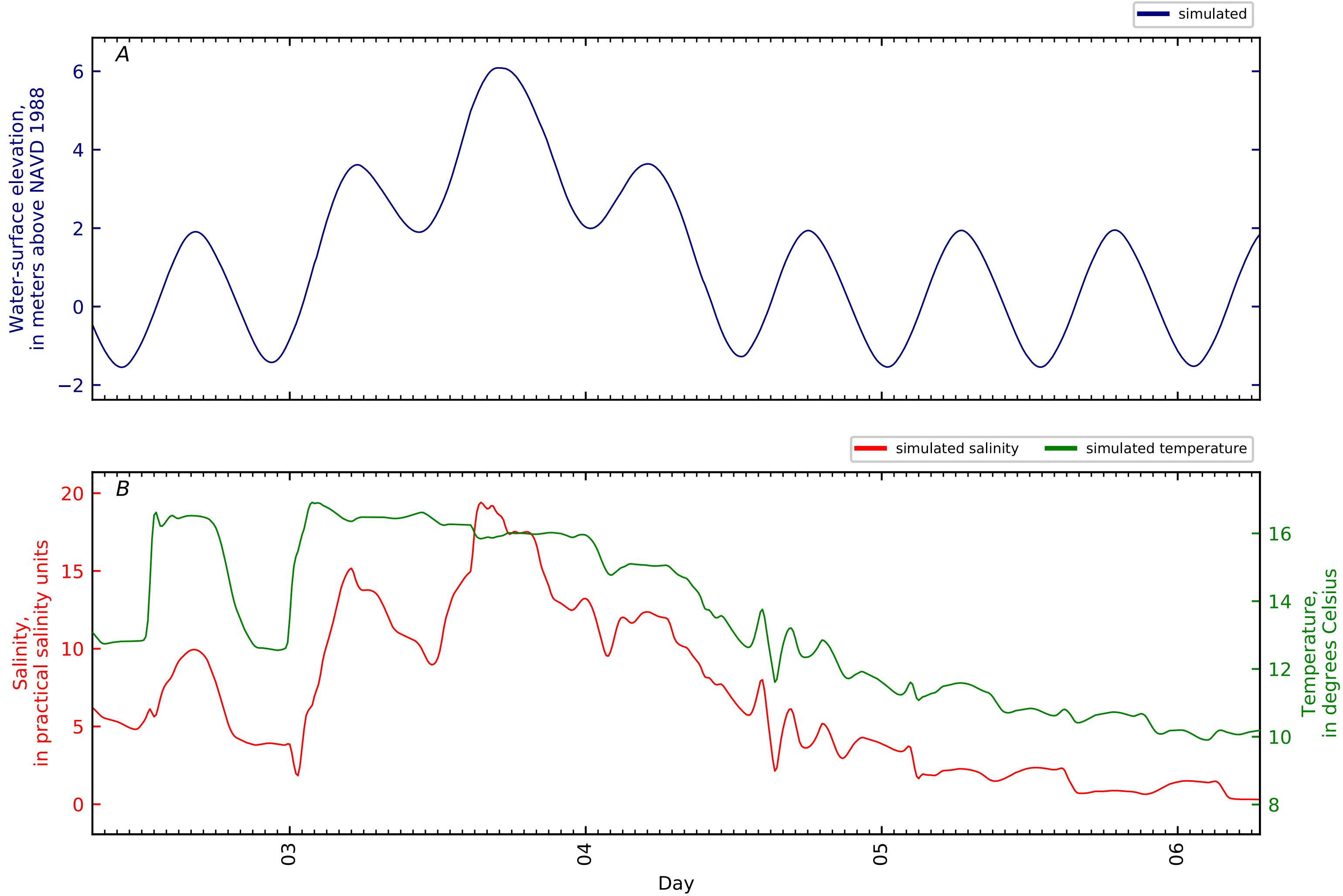

Figure B5-142. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 141, Mendall Marsh KM0.4 GS CTD2-06. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

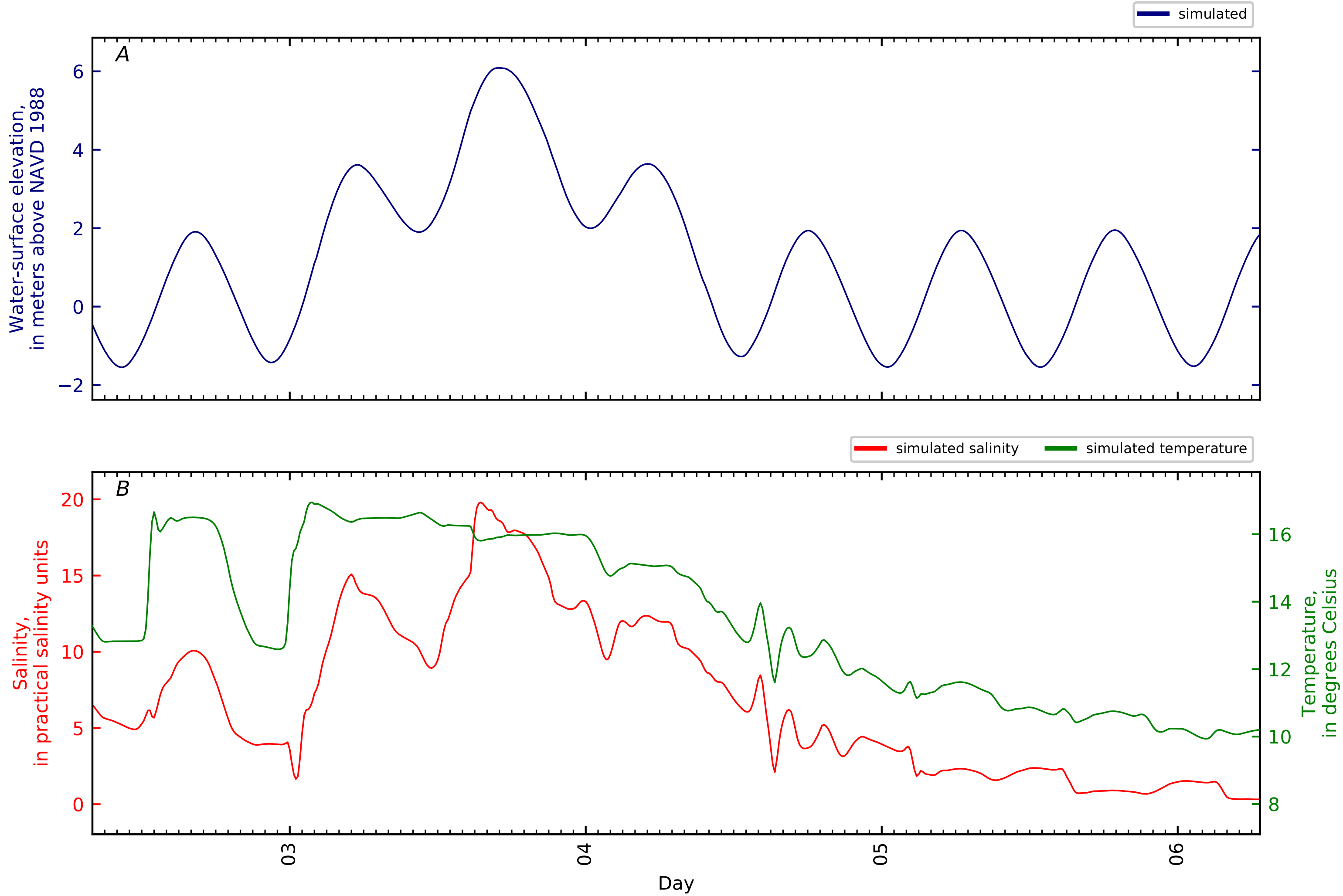

Figure B5-143. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 142, Mendall Marsh KM0.4 GS CTD2-07. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

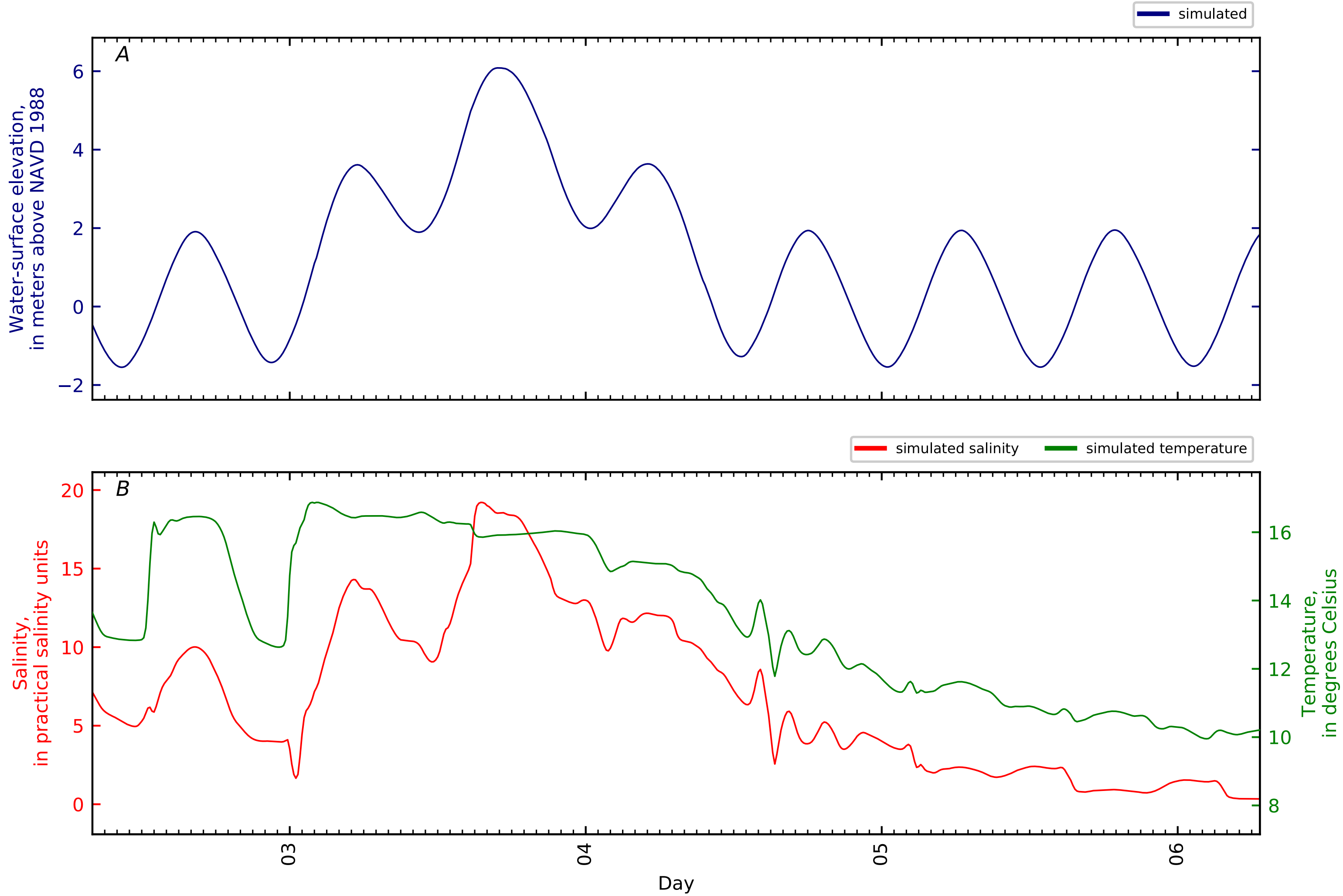

Figure B5-144. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 143, Mendall Marsh KM0.4 GS CTD2-08. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

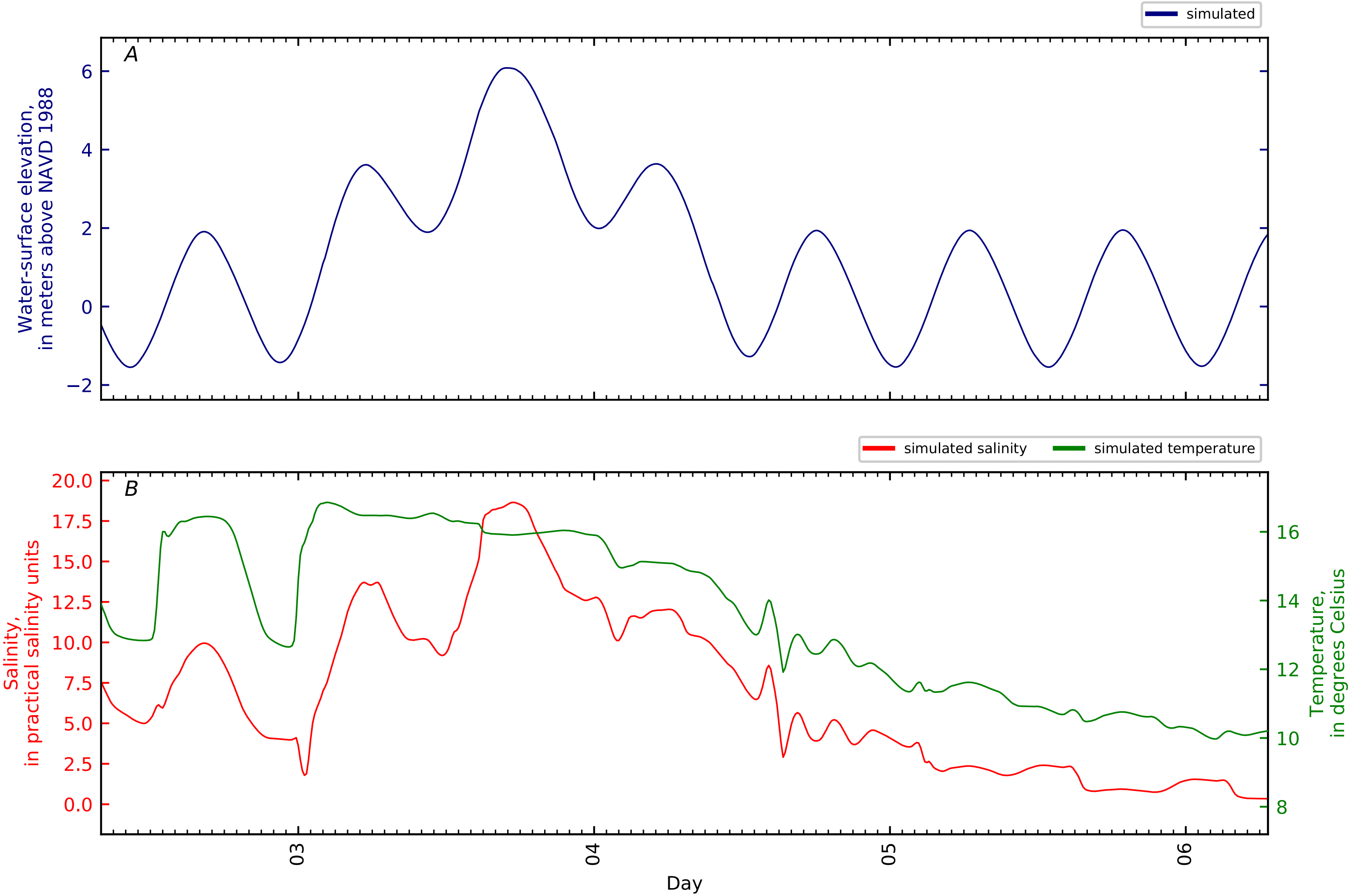

Figure B5-145. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 144, Mendall Marsh KM0.4 GS CTD2-09. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

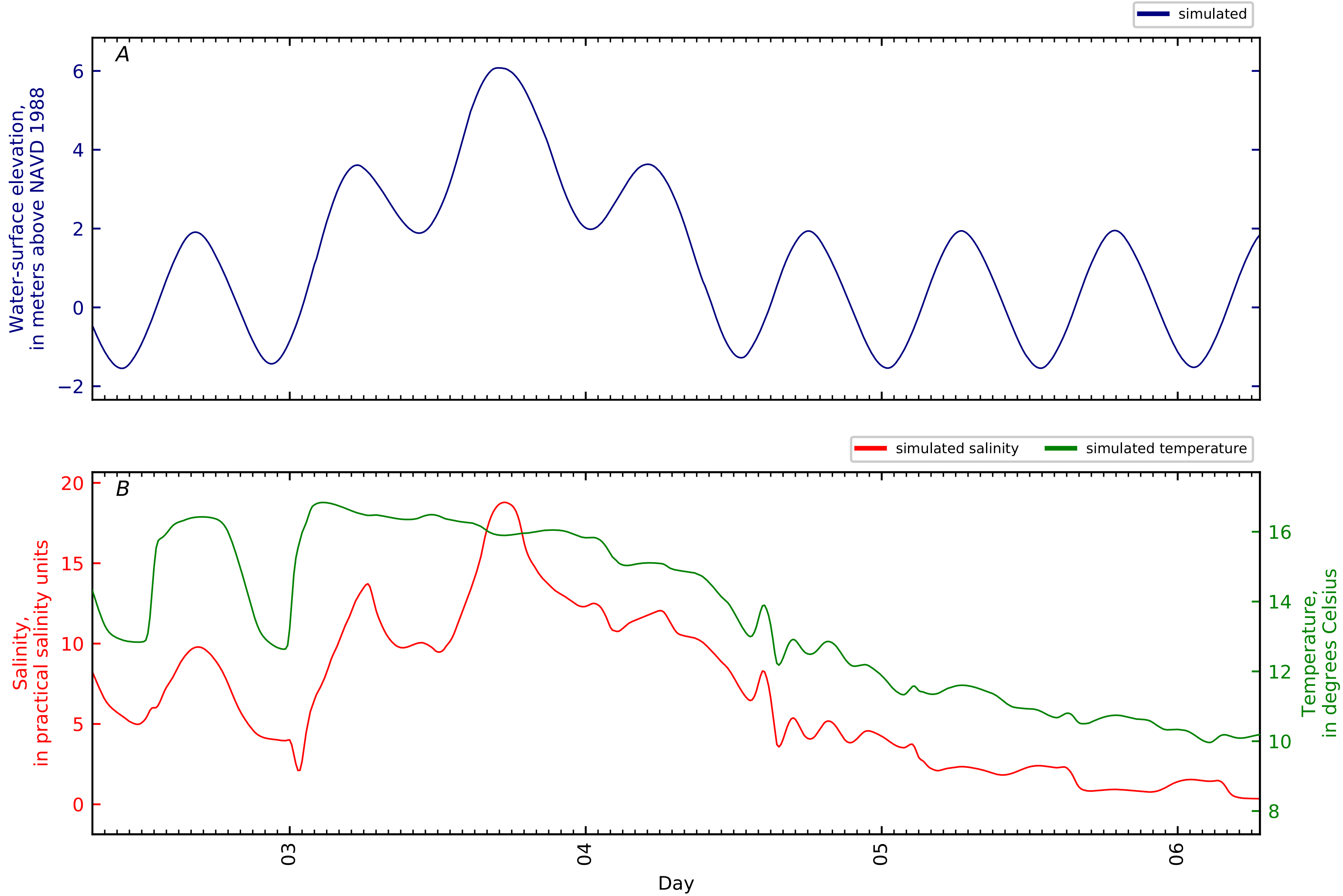

Figure B5-146. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 145, Mendall Marsh KM0.4 GS CTD2-10. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

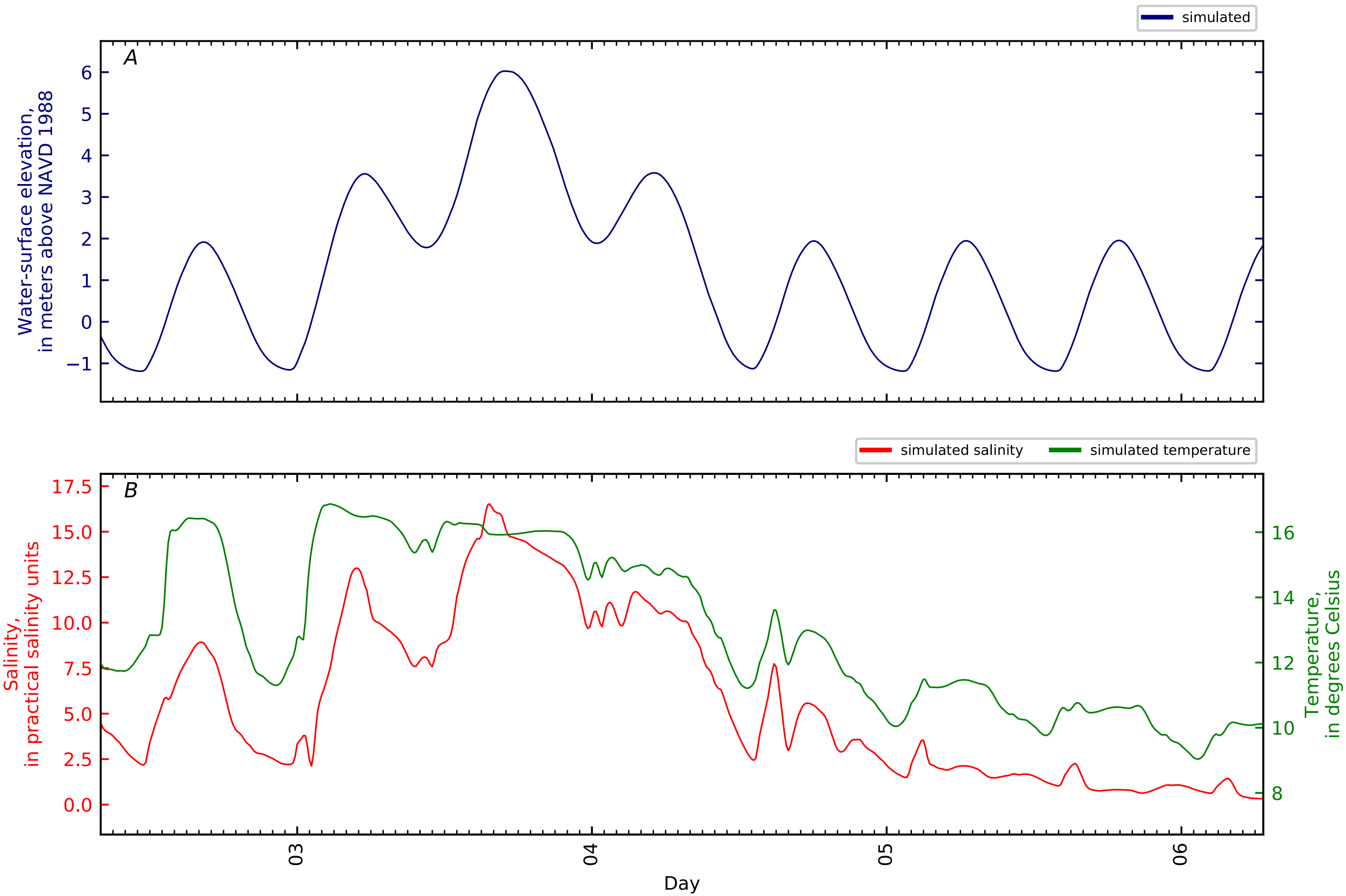

Figure B5-147. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 146, Mendall Marsh KM1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

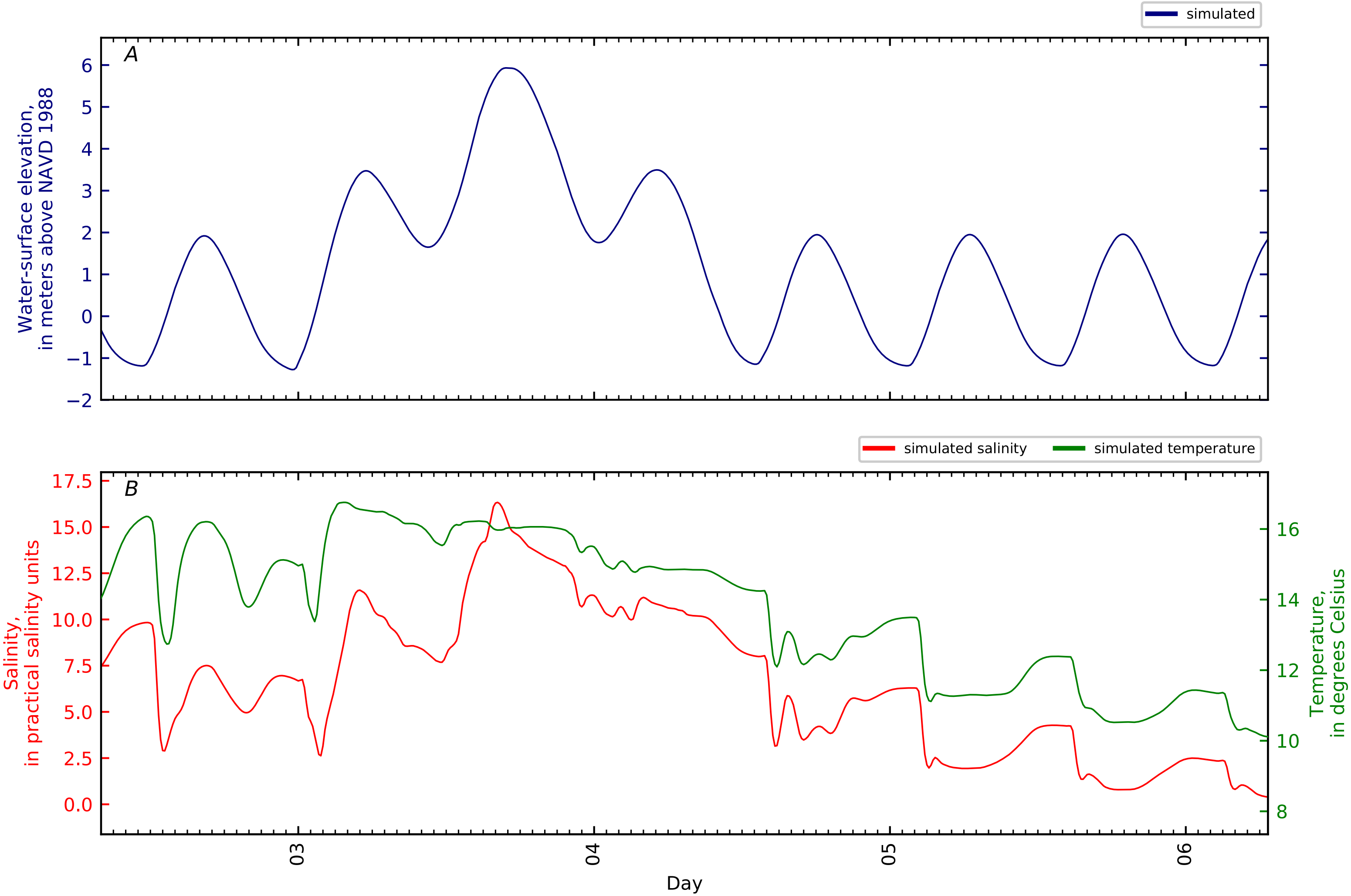

Figure B5-148. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 147, Mendall Marsh KM1.5 WHOI3 2010. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

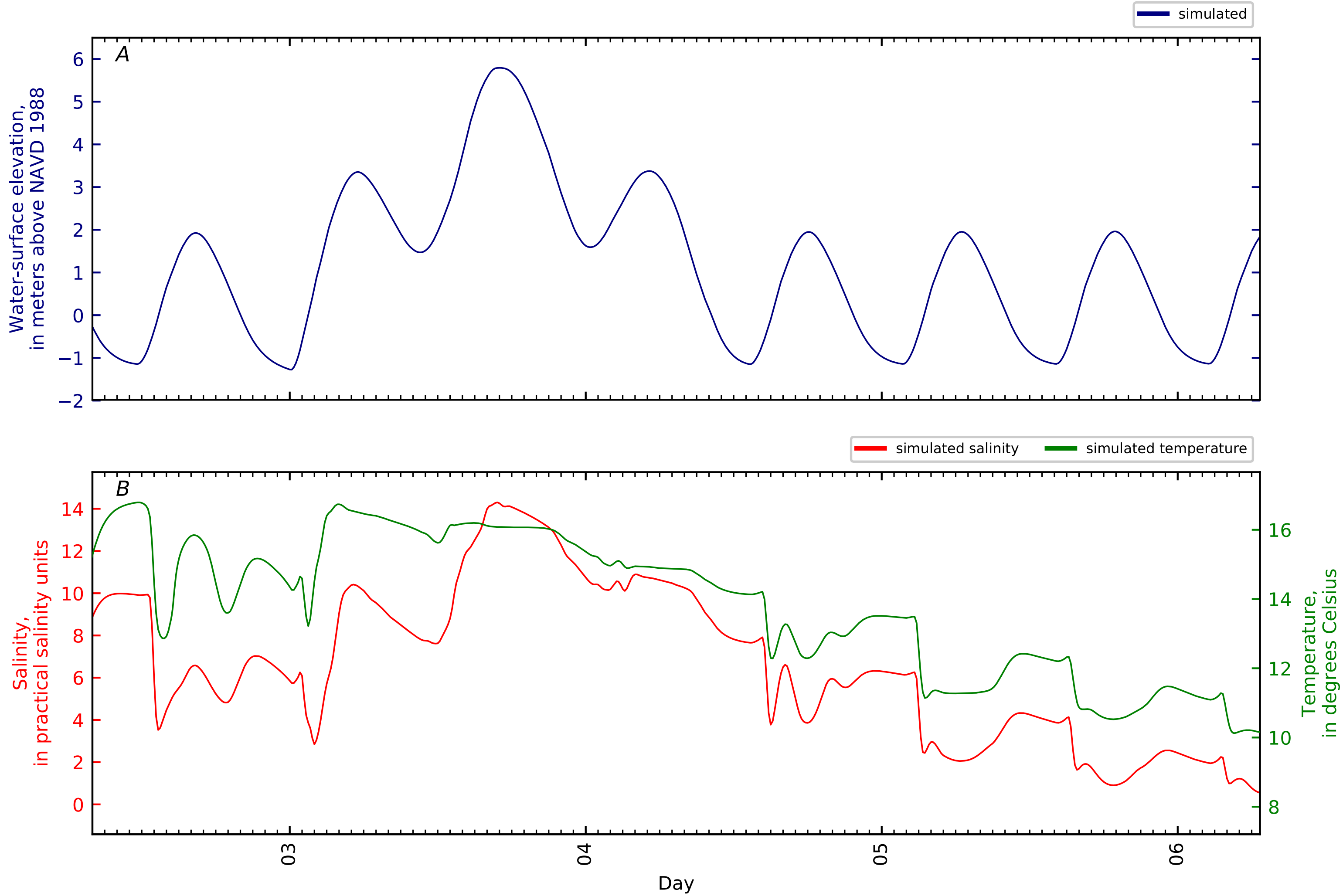

Figure B5-149. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 148, Mendall Marsh KM2. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

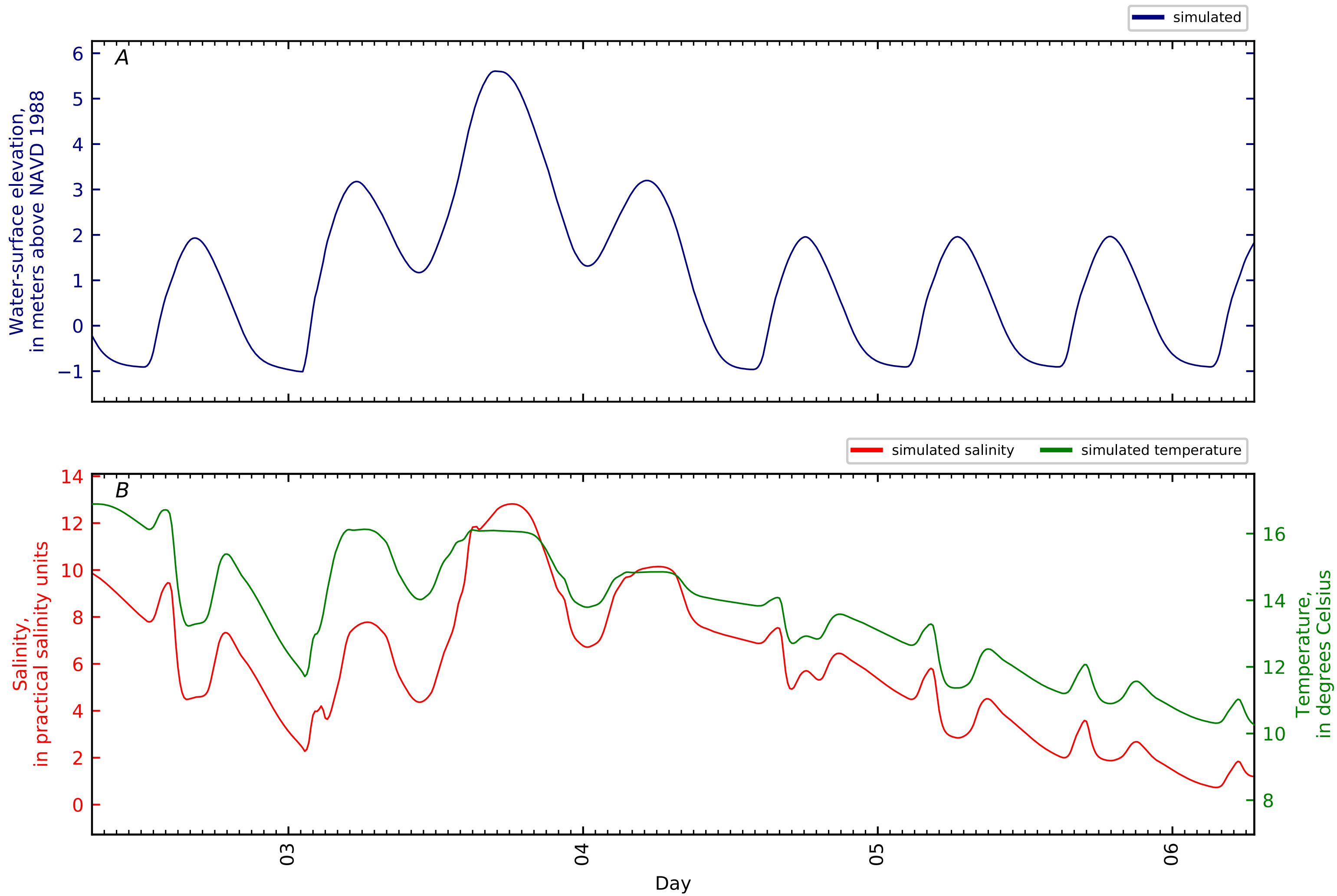

Figure B5-150. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 149, Mendall Marsh KM3. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

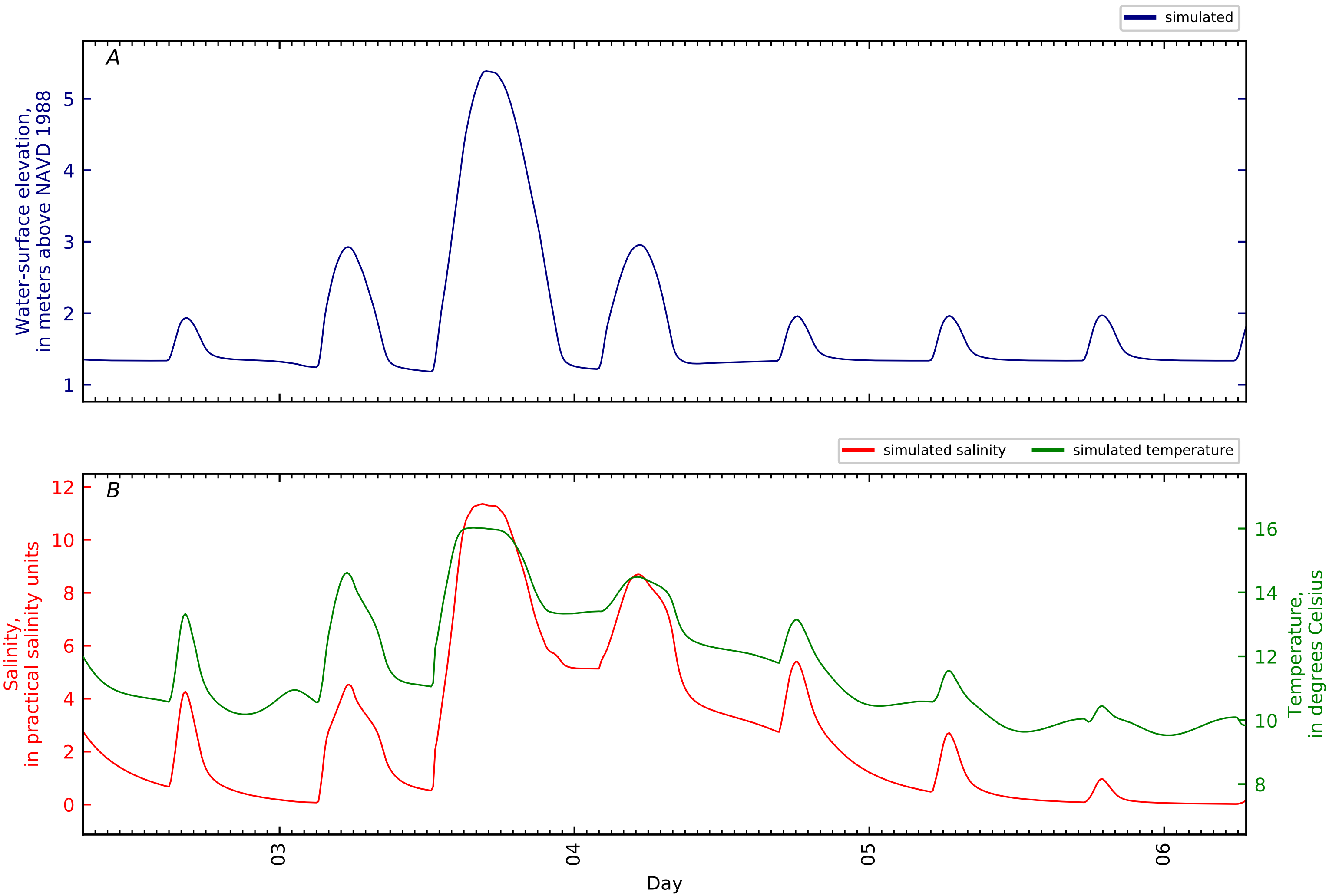

Figure B5-151. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 150, Mendall Marsh KM4. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

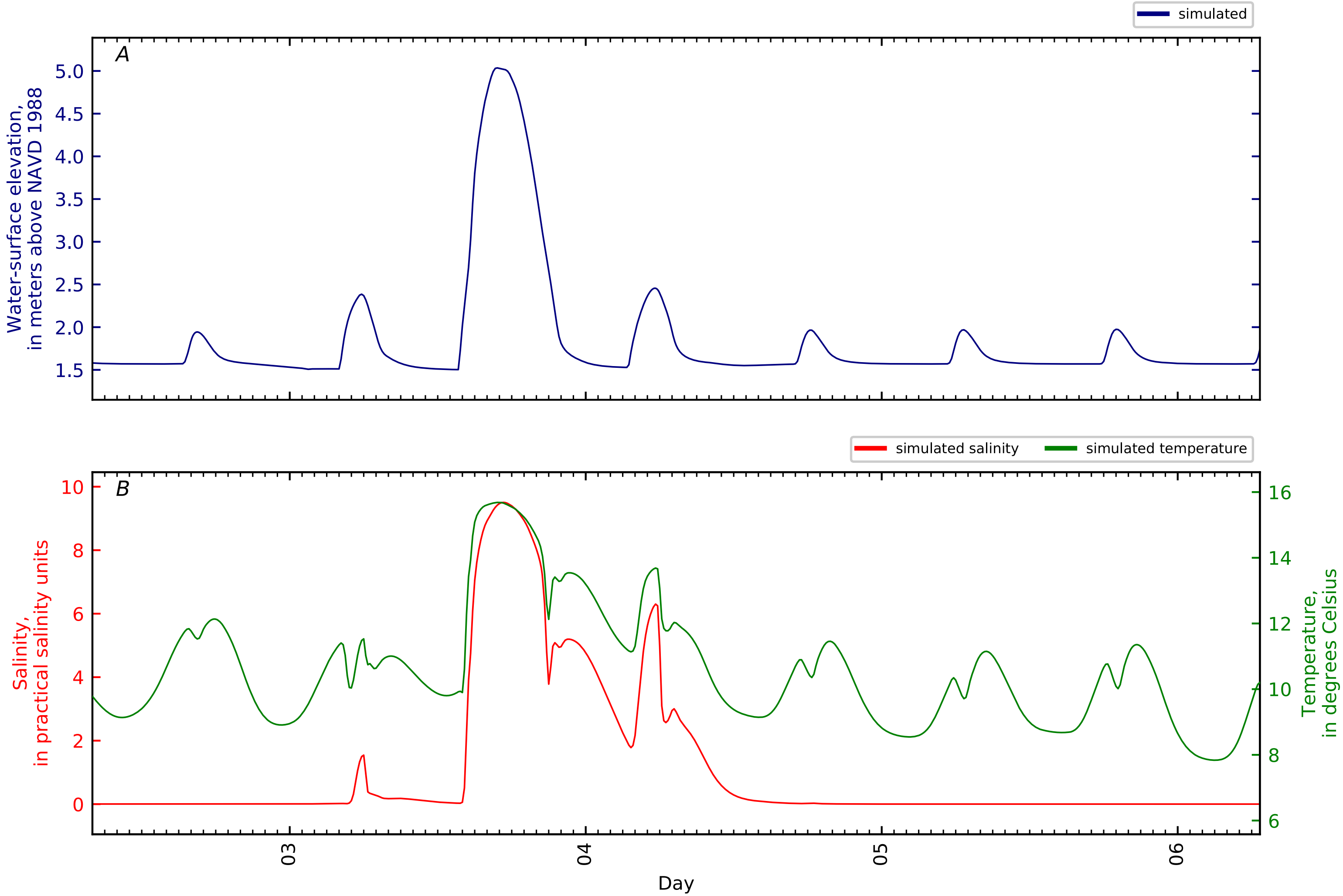

Figure B5-152. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 151, Mendall Marsh KM5. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

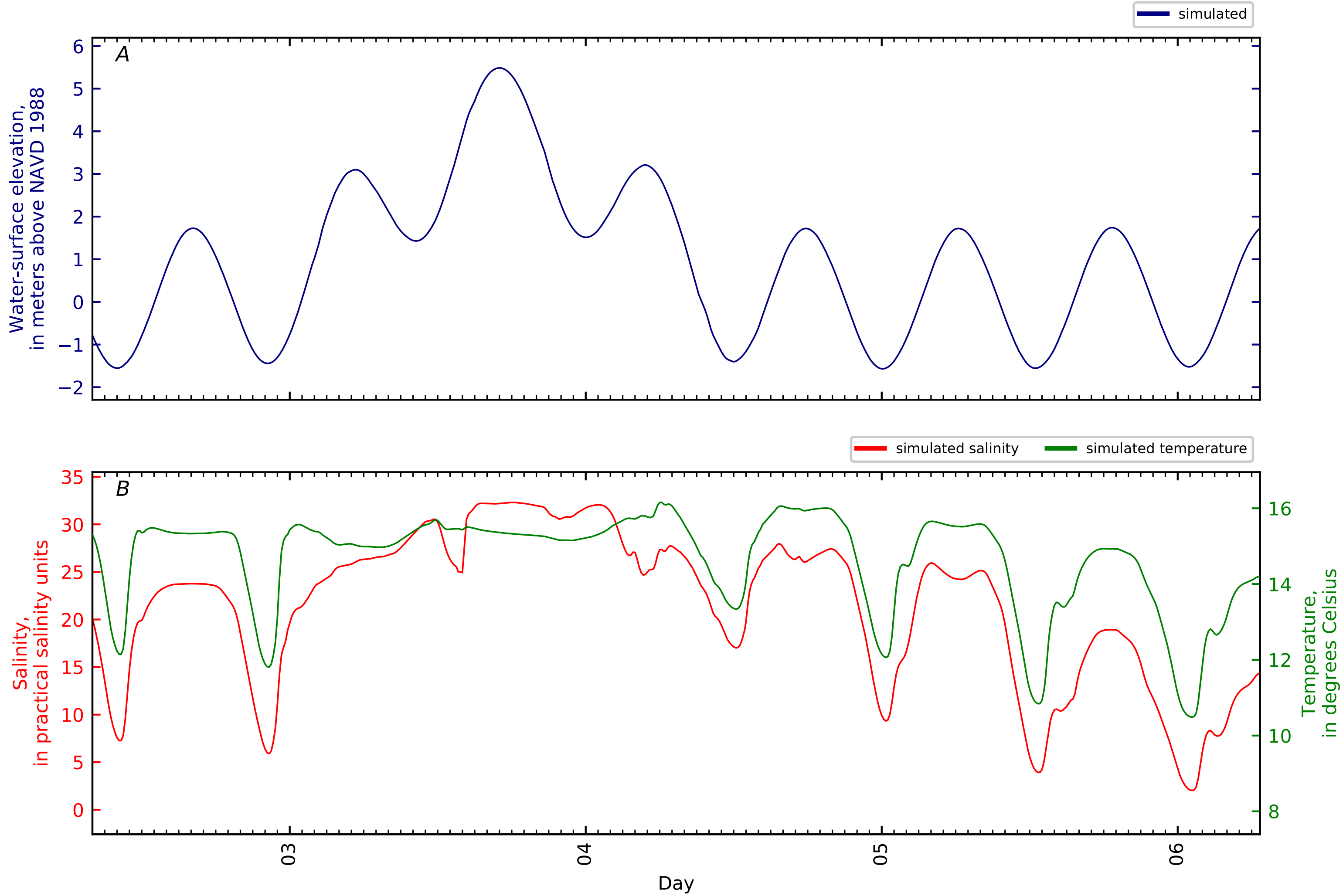

Figure B5-153. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 152, Orland Riv KM0. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

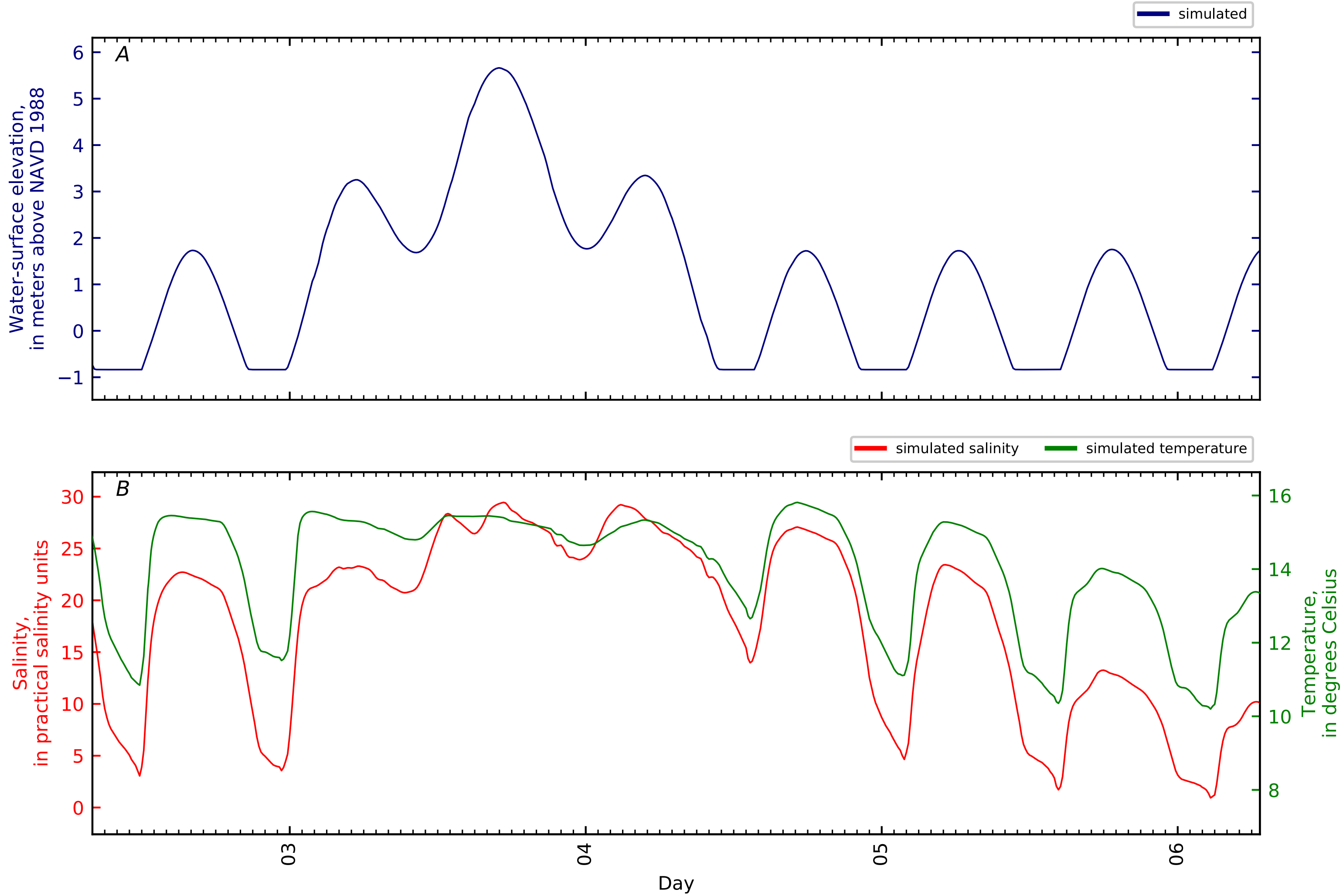

Figure B5-154. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 153, Orland Riv KM0.9 ERDC5 OR-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

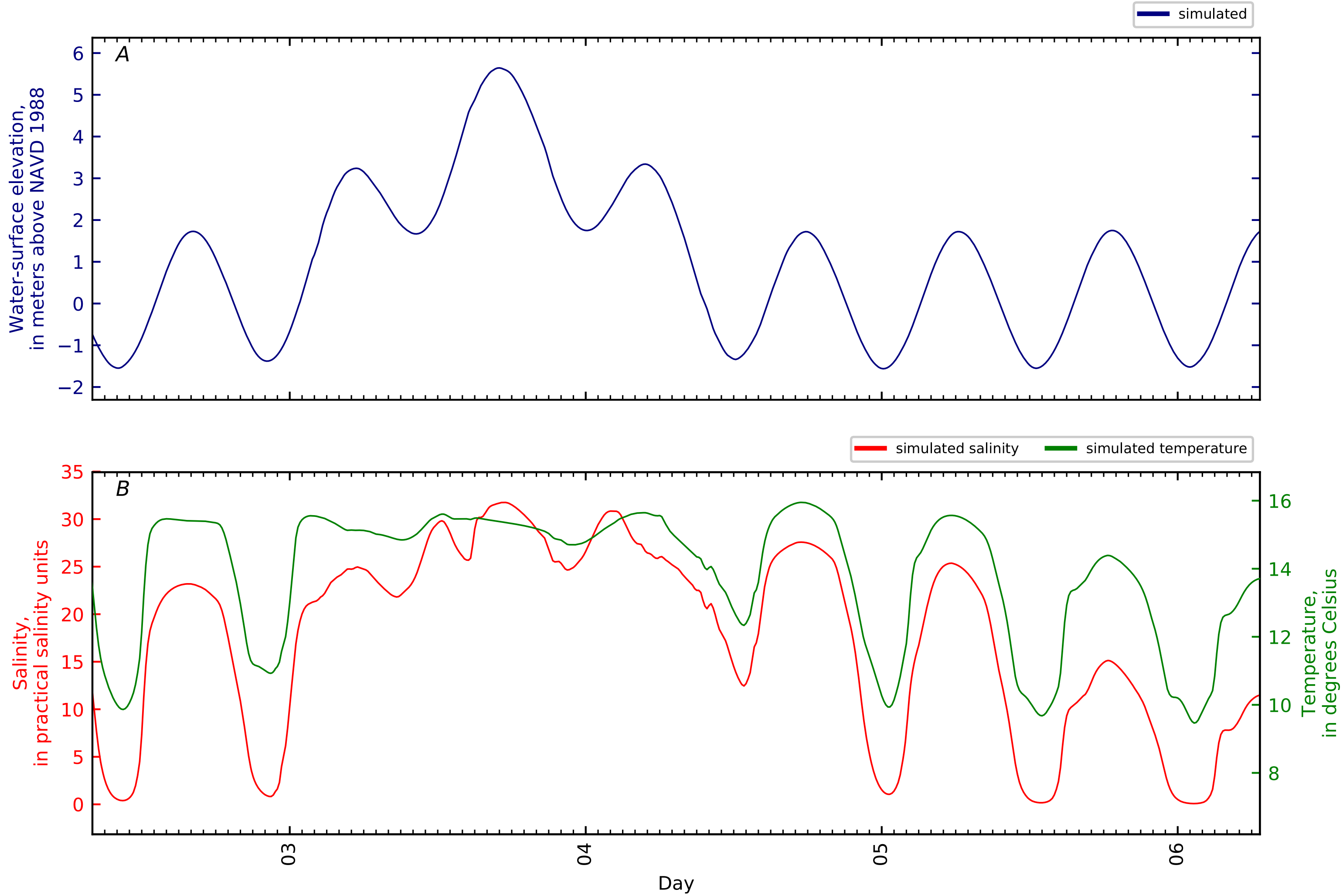

Figure B5-155. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 154, Orland Riv KM0.9 ERDC6 OR-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

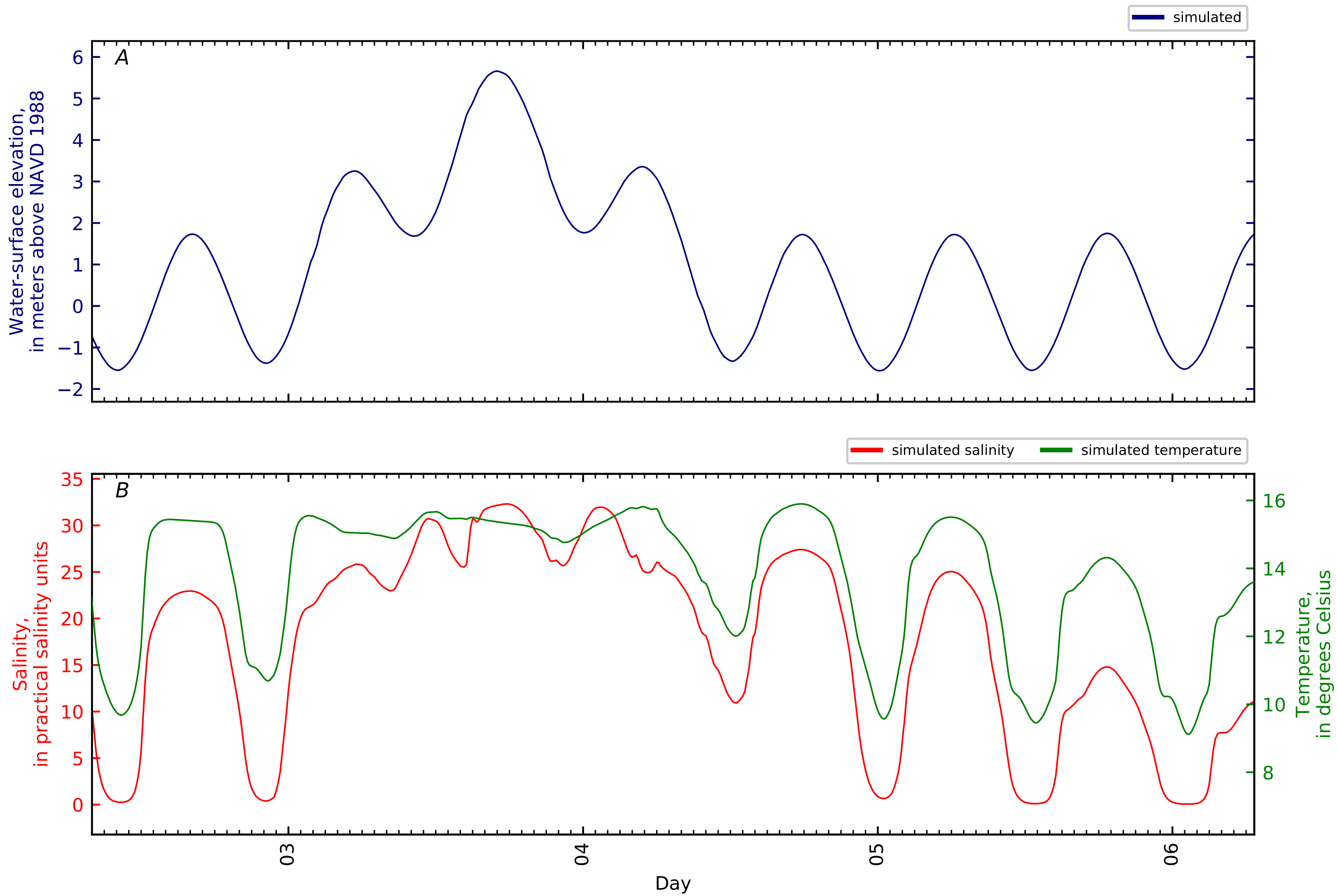

Figure B5-156. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 155, Orland Riv KM1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

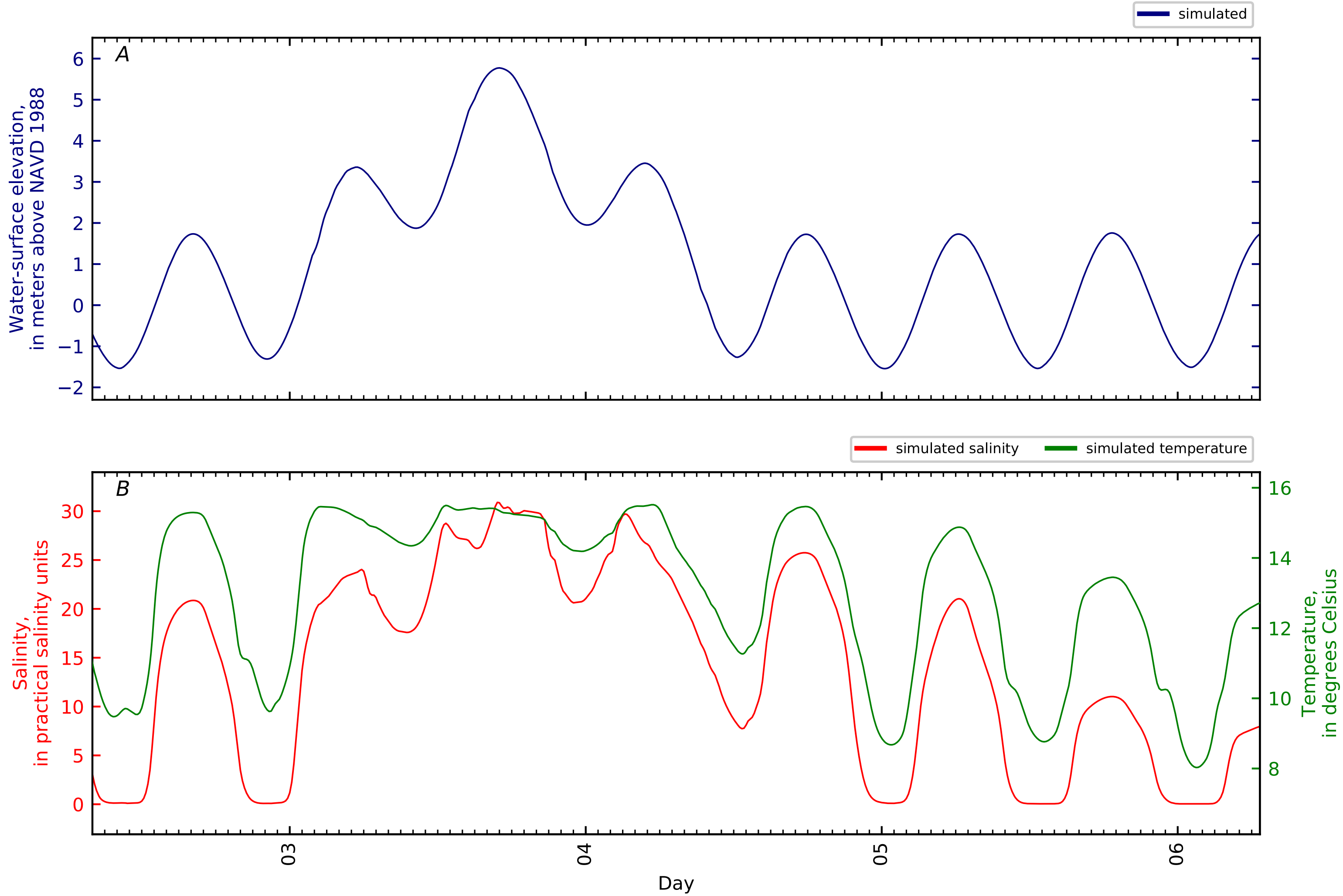

Figure B5-157. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 156, Orland Riv KM1.6 WHOI4 2010. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

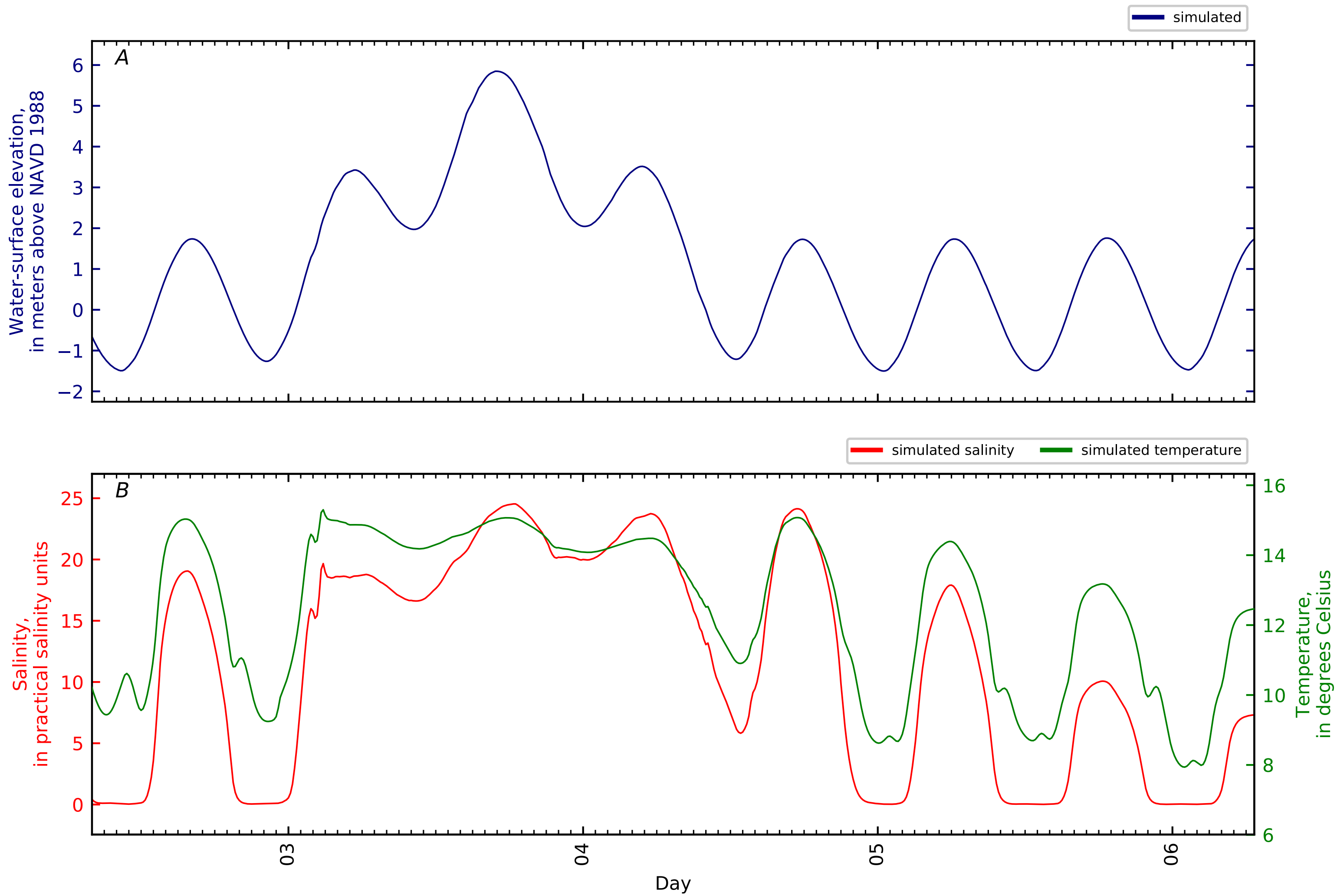

Figure B5-158. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 157, Orland Riv KM2. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

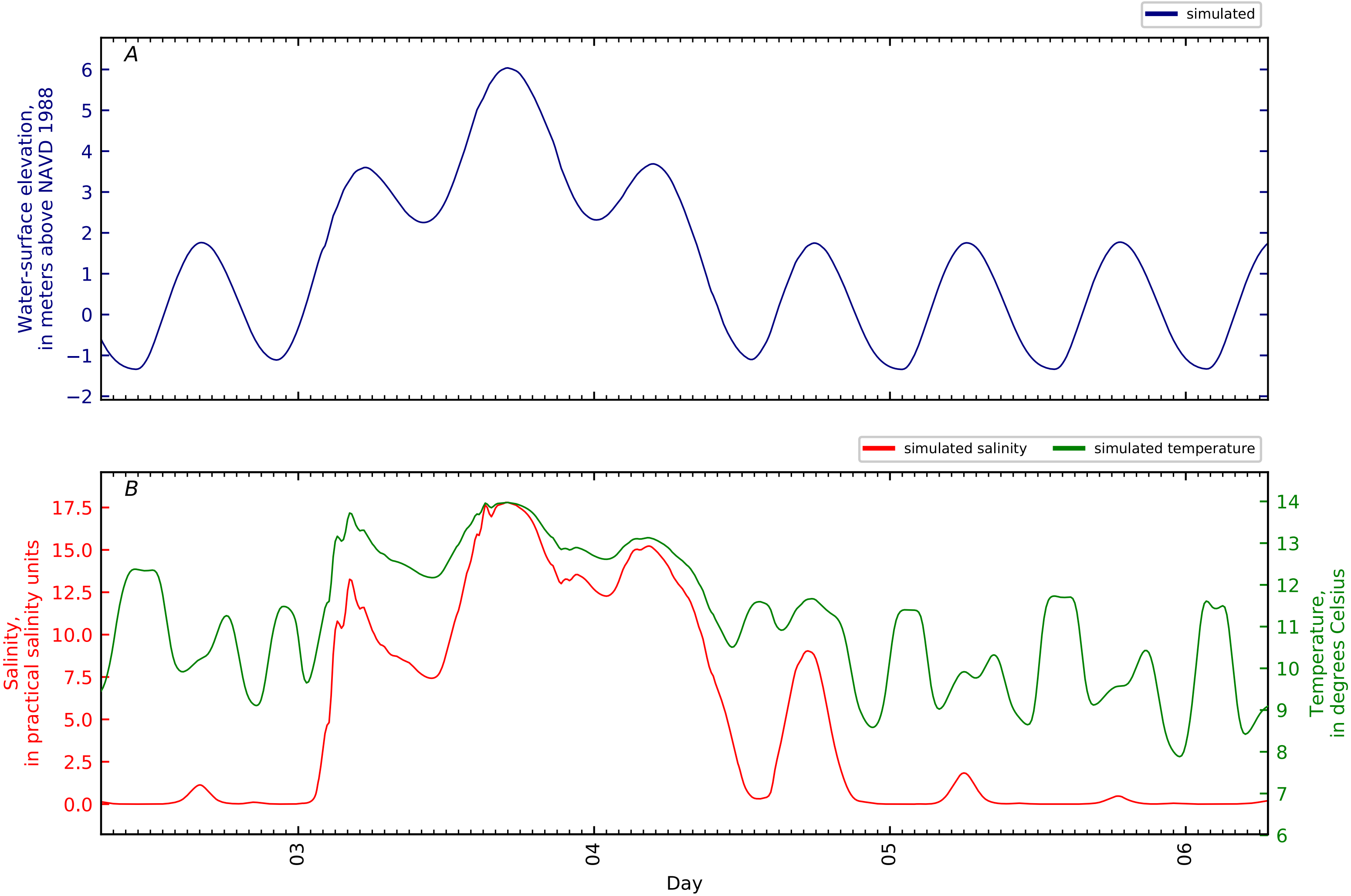

Figure B5-159. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 158, Orland Riv KM3. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

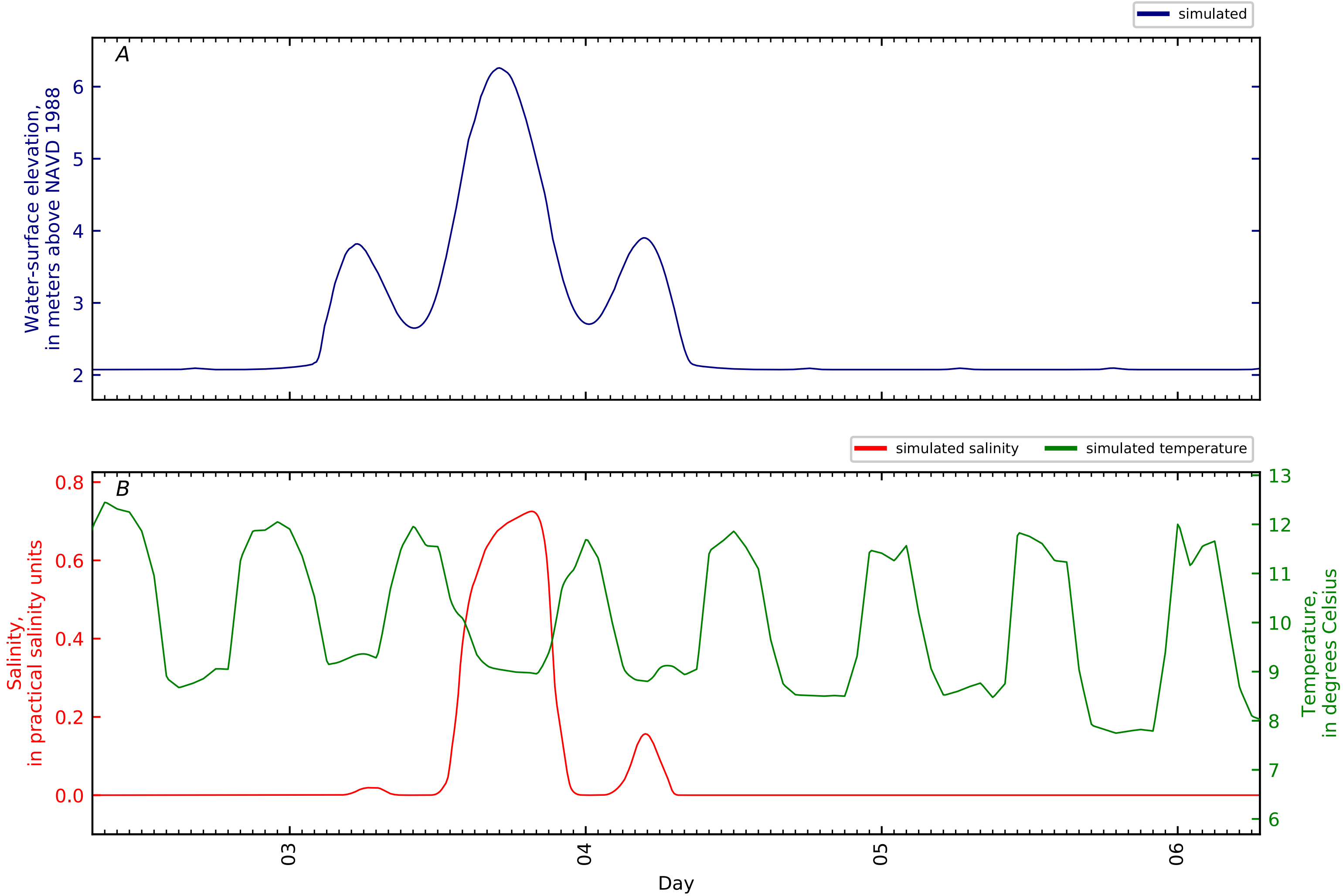

Figure B5-160. Time series for *A*, simulated water-surface elevation; and *B*, simulated salinity and temperature at station 159, Orland Riv KM4. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

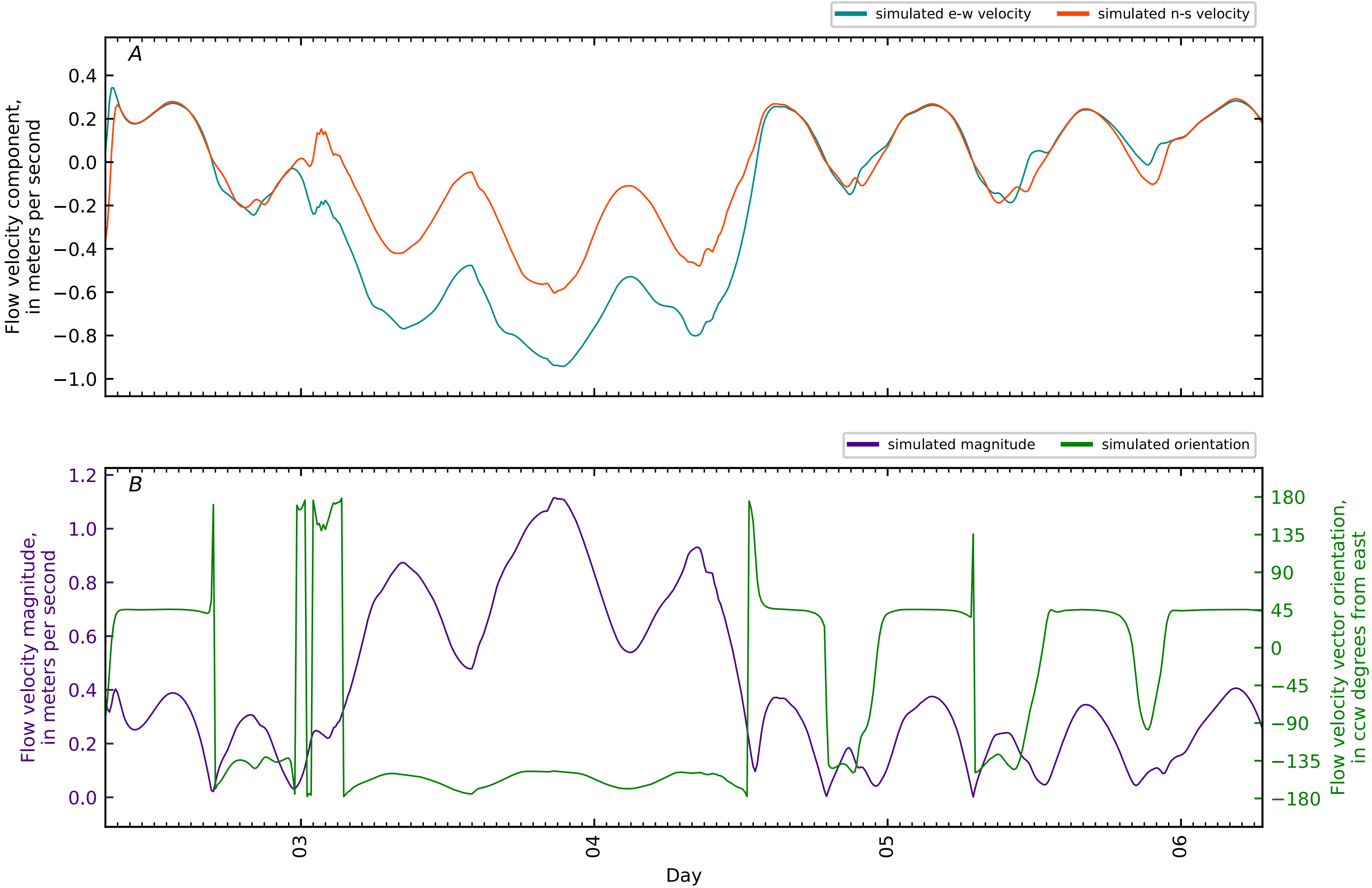

Figure B5-161. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 0, Penob Riv -KM5 nr Cape Jellison boundary. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

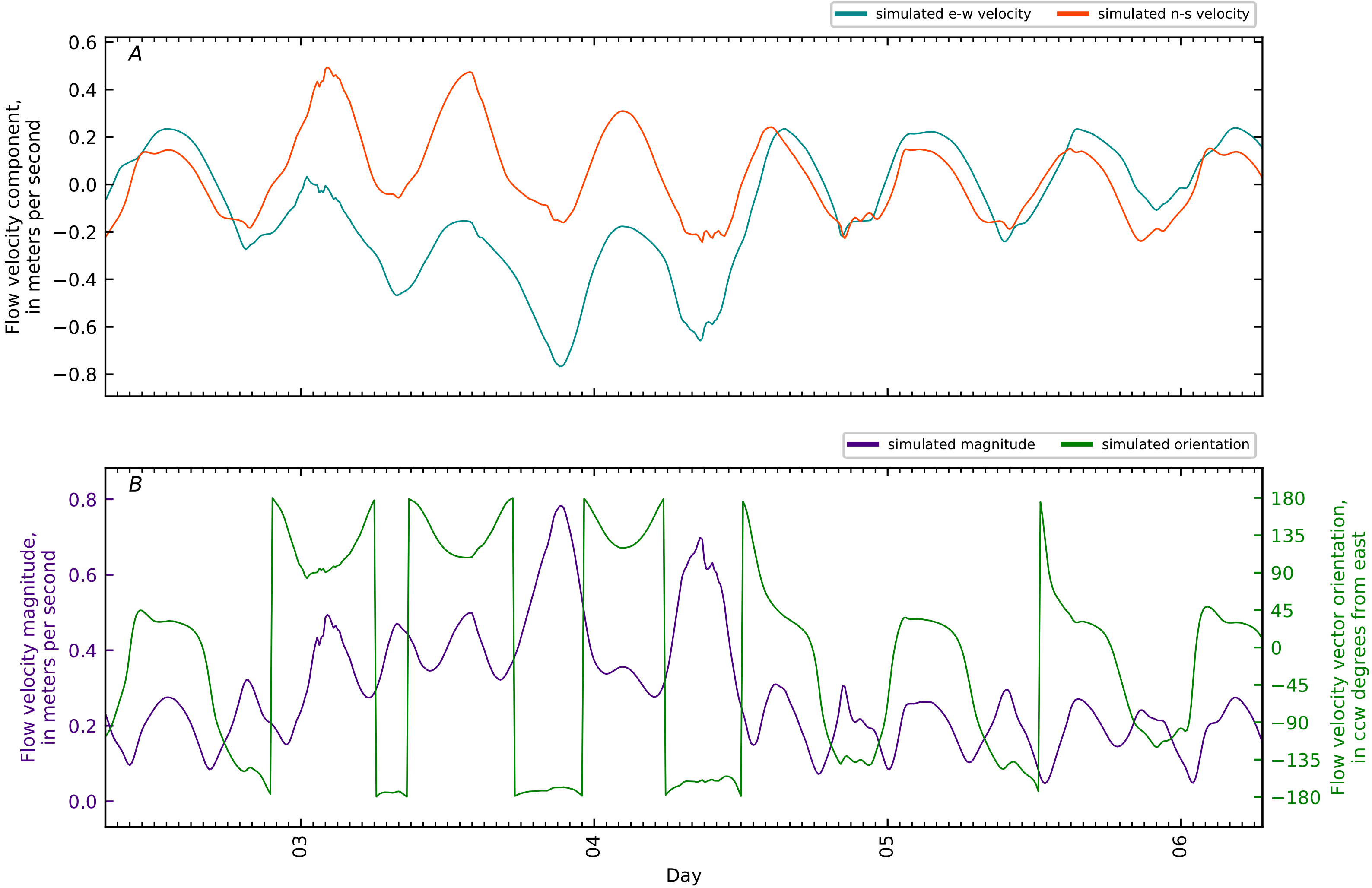

Figure B5-162. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 1, Penob Riv -KM4 nr Cape Jellison XS. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

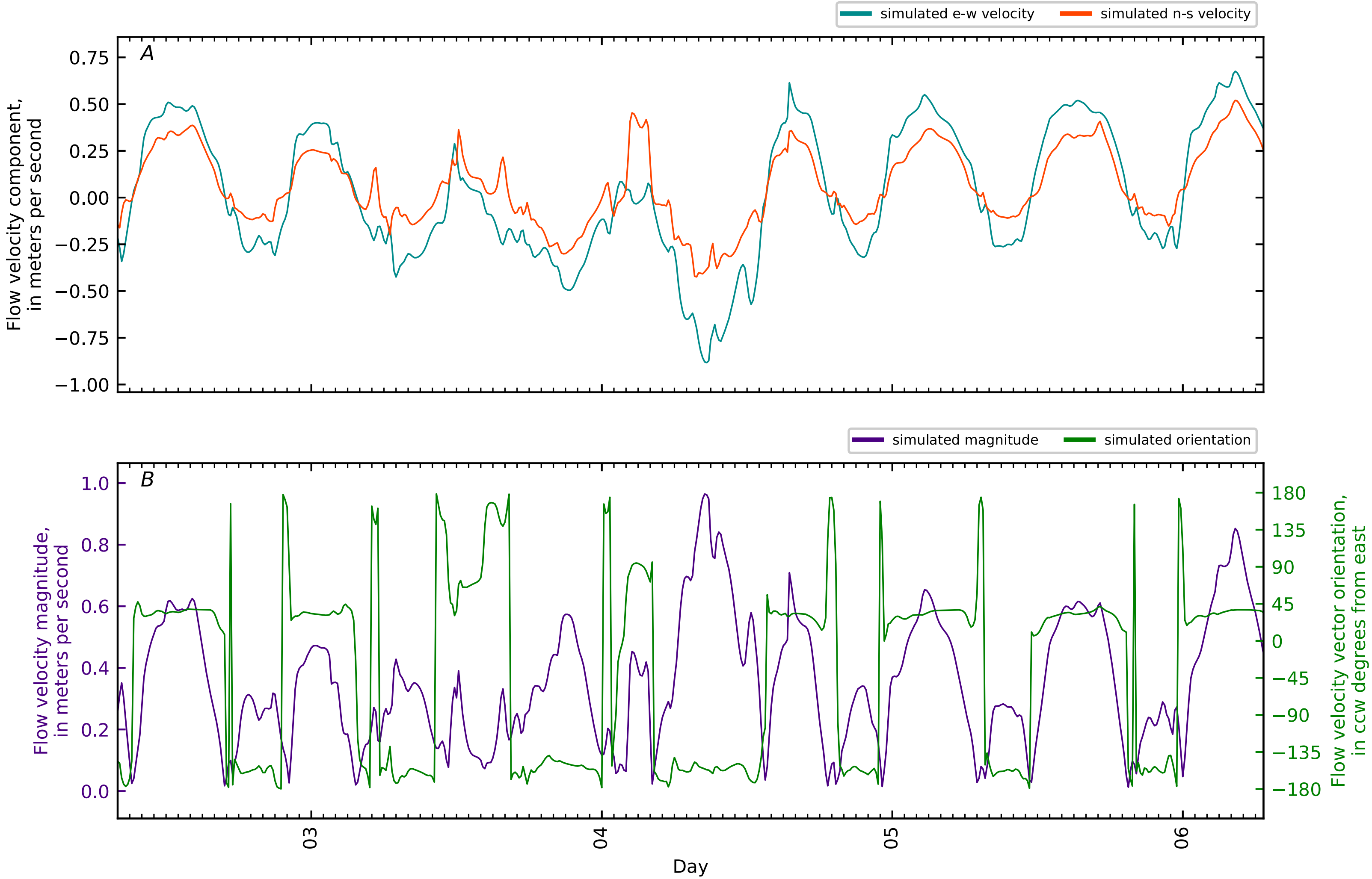

Figure B5-163. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 2, Penob Riv -KM1.5 d/s Ft Point. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

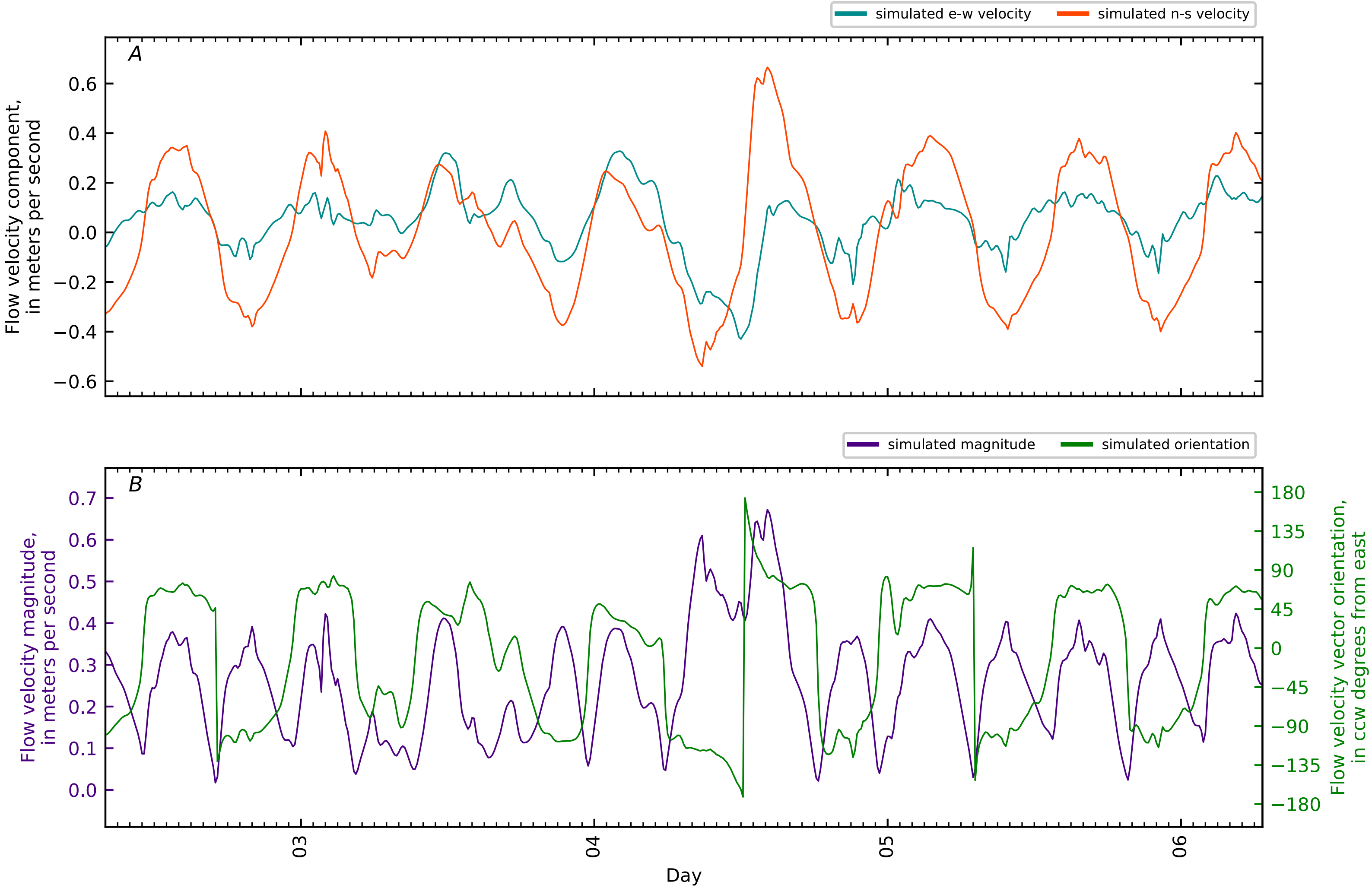

Figure B5-164. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 3, Penob Riv KM0 Ft Point. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

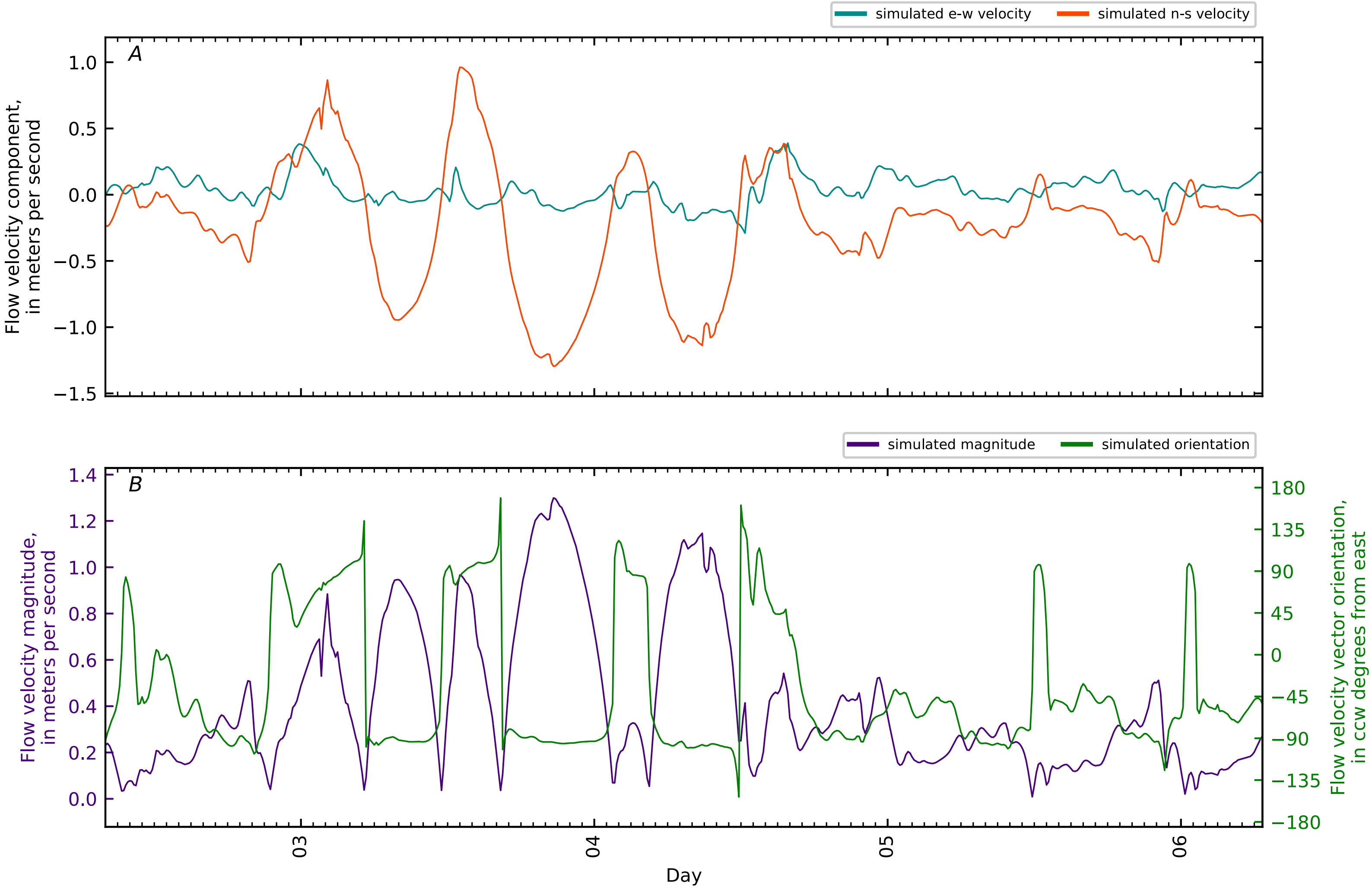

Figure B5-165. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 4, Penob Riv KM0 GS CTD5-01. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

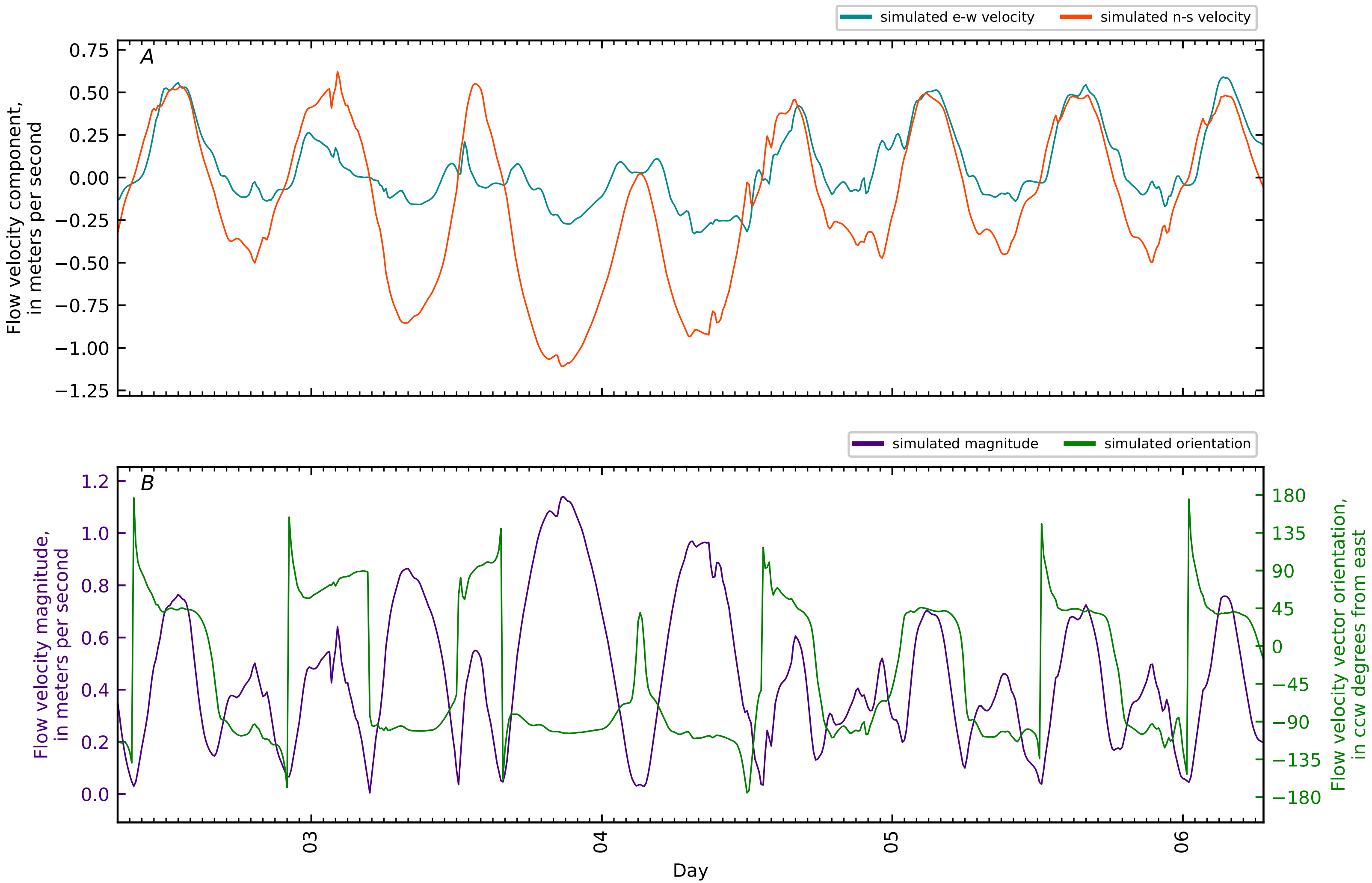

Figure B5-166. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 5, Penob Riv KM0 GS CTD5-02. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

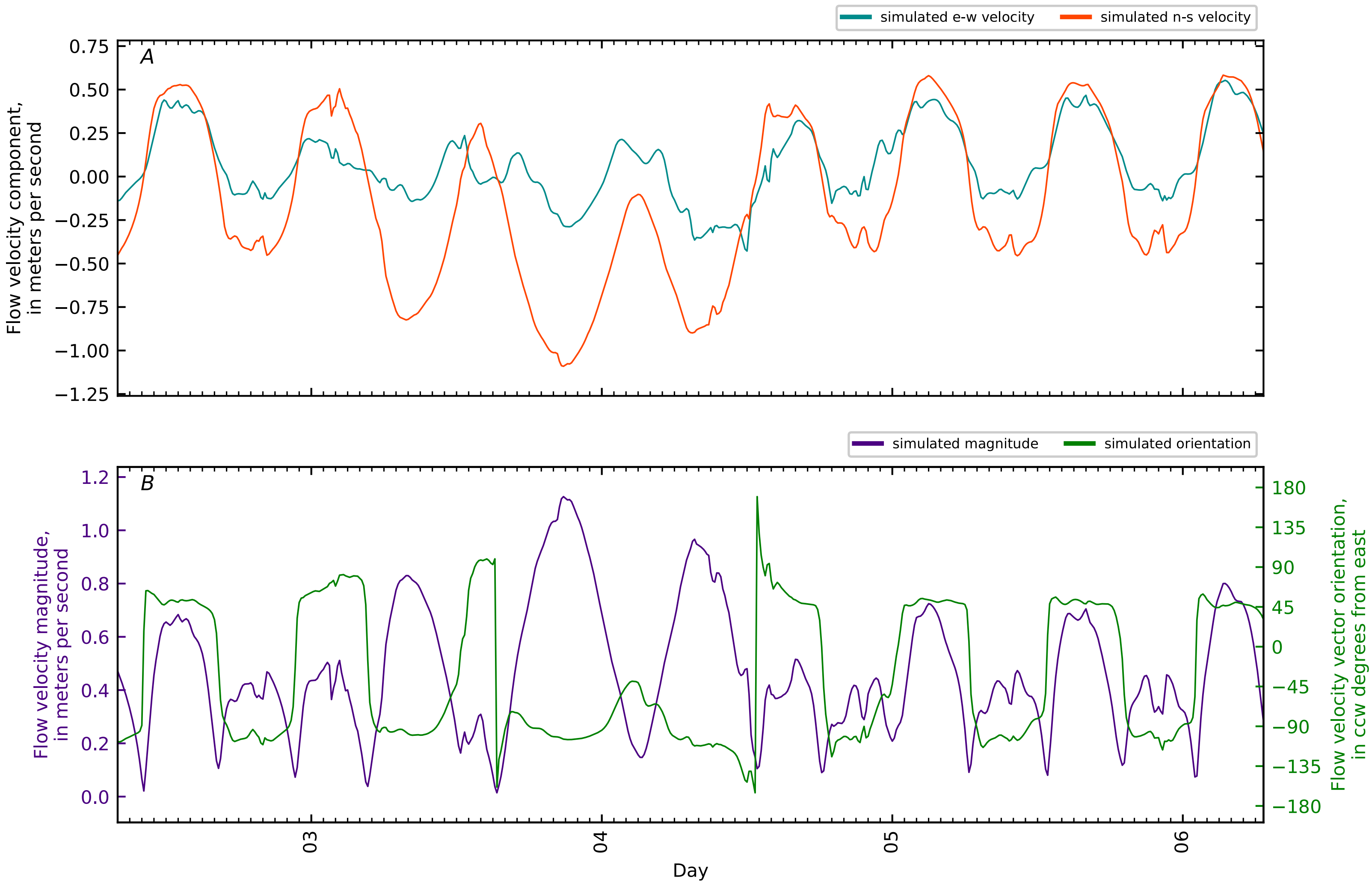

Figure B5-167. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 6, Penob Riv KM0 GS CTD5-03. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

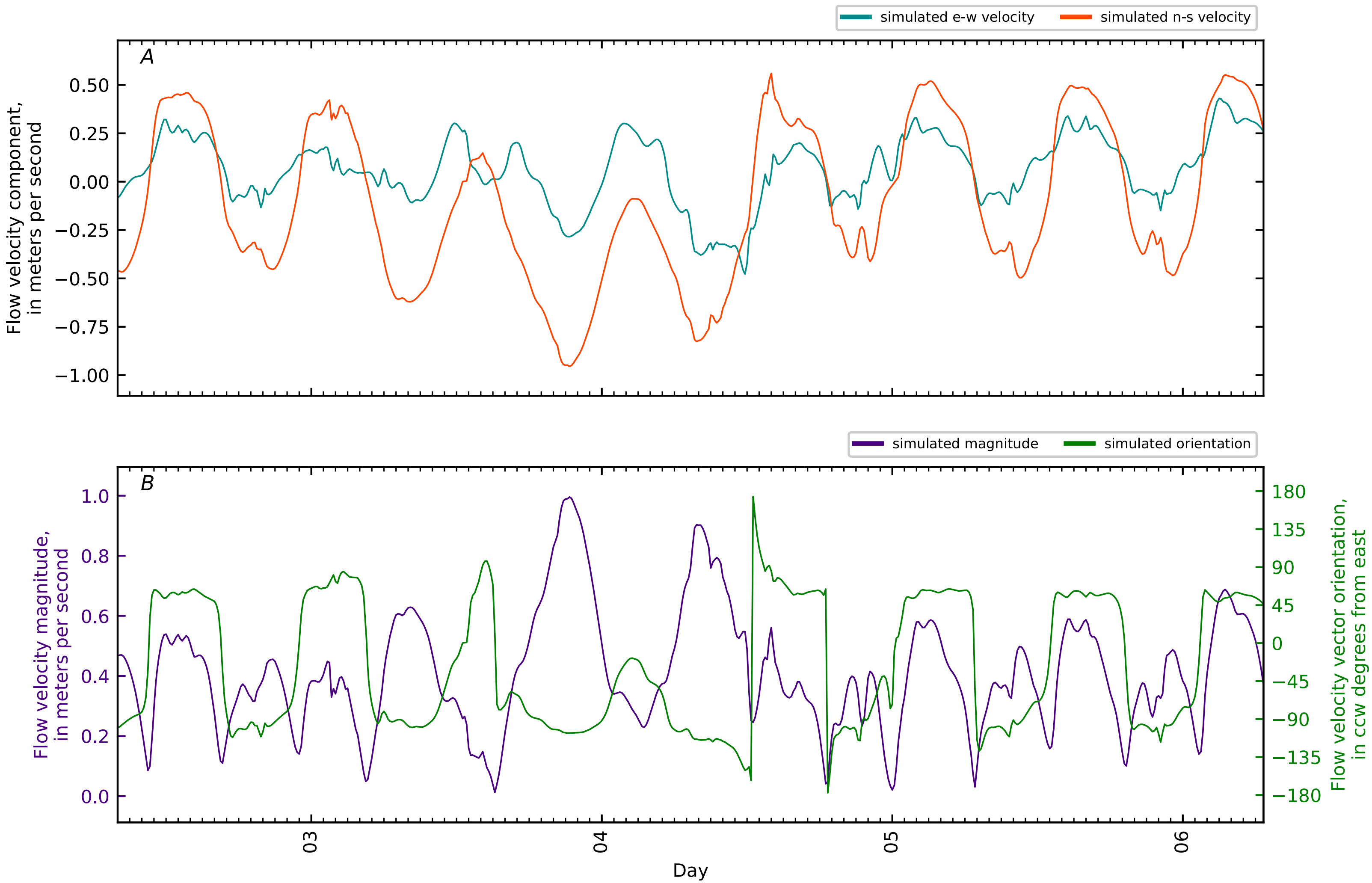

Figure B5-168. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 7, Penob Riv KM0 GS CTD5-04. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

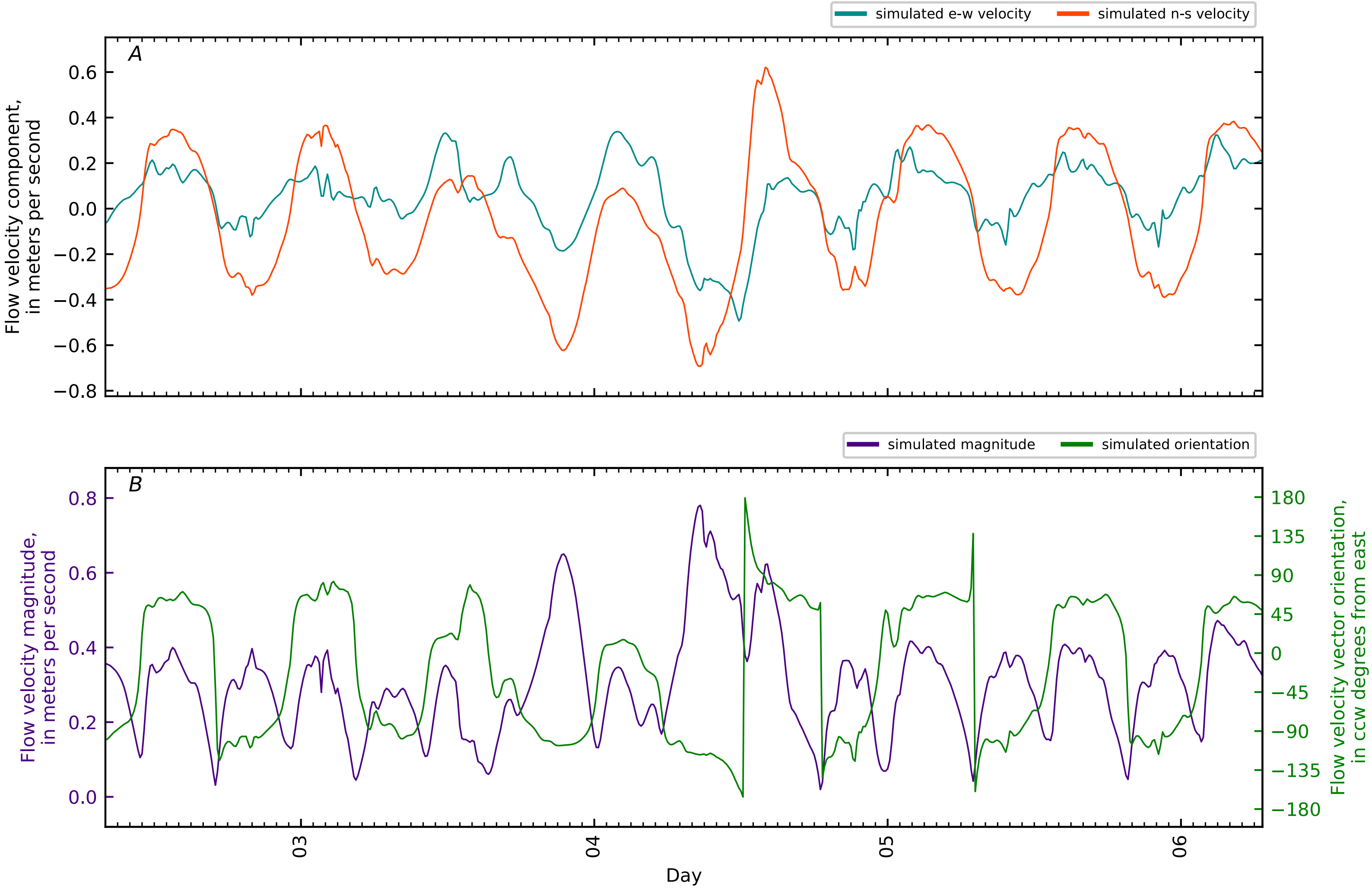

Figure B5-169. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 8, Penob Riv KM0 GS CTD5-05. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

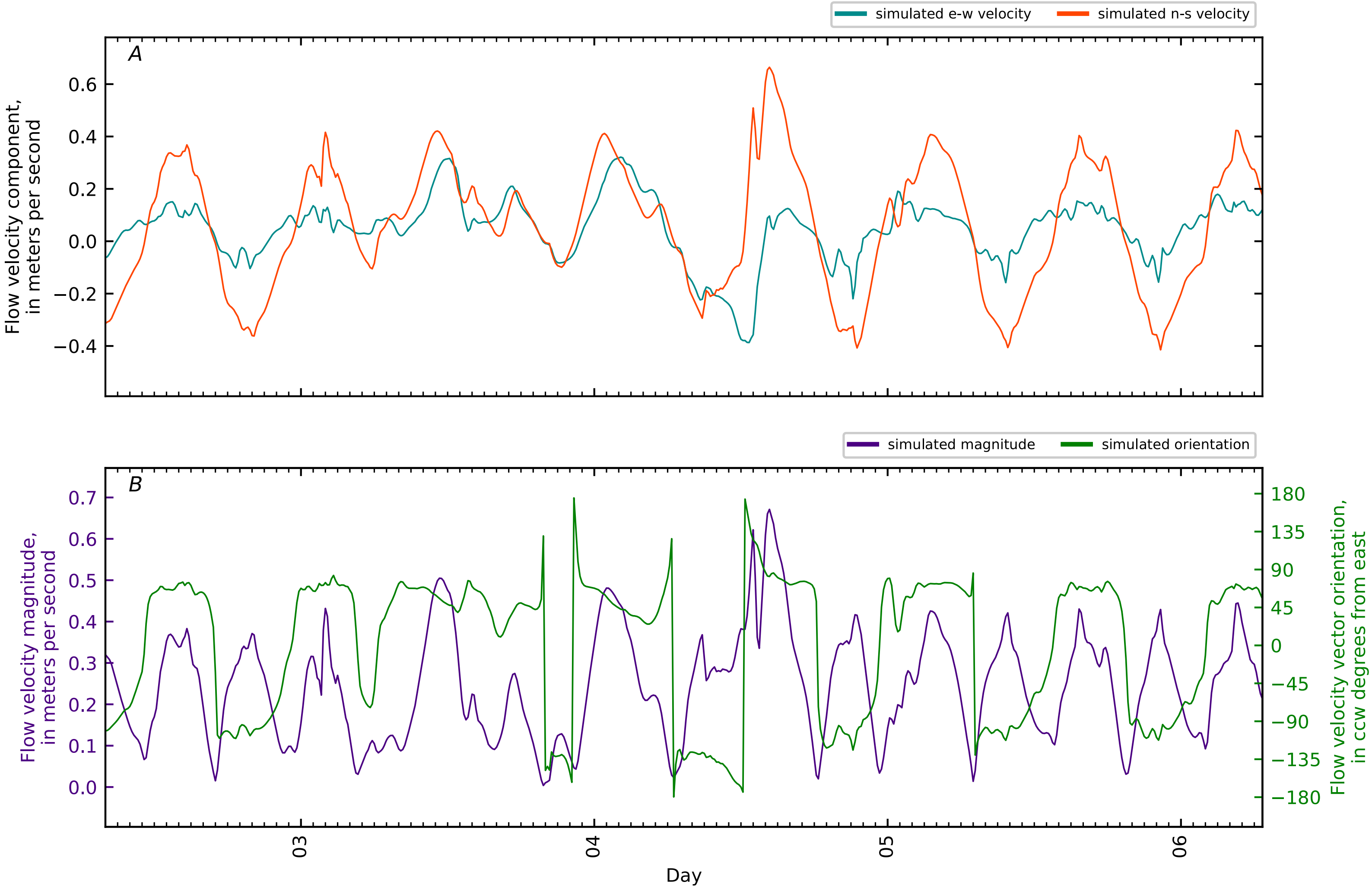

Figure B5-170. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 9, Penob Riv KM0 GS CTD5-06. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

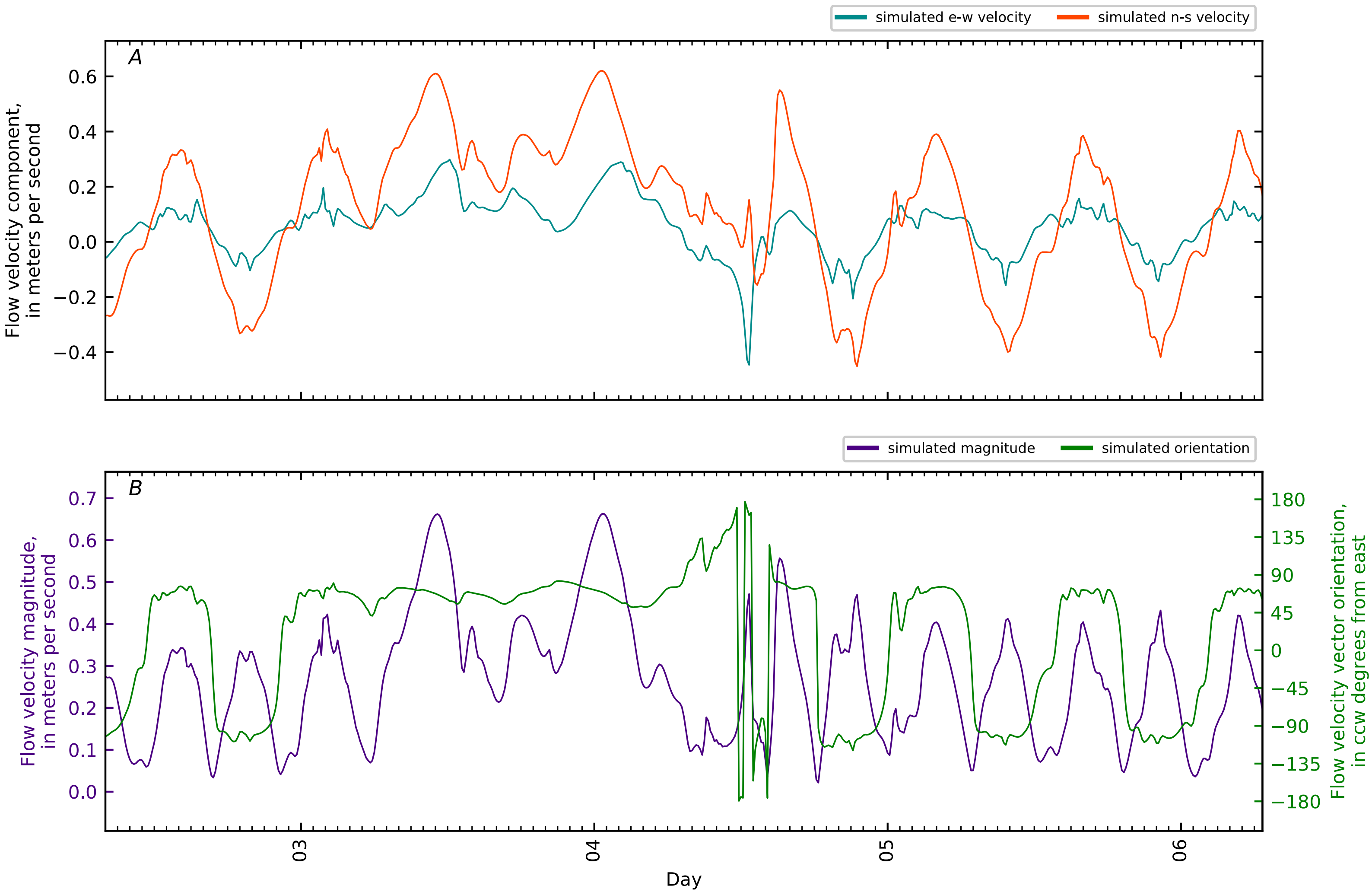

Figure B5-171. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 10, Penob Riv KM0 GS CTD5-07. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

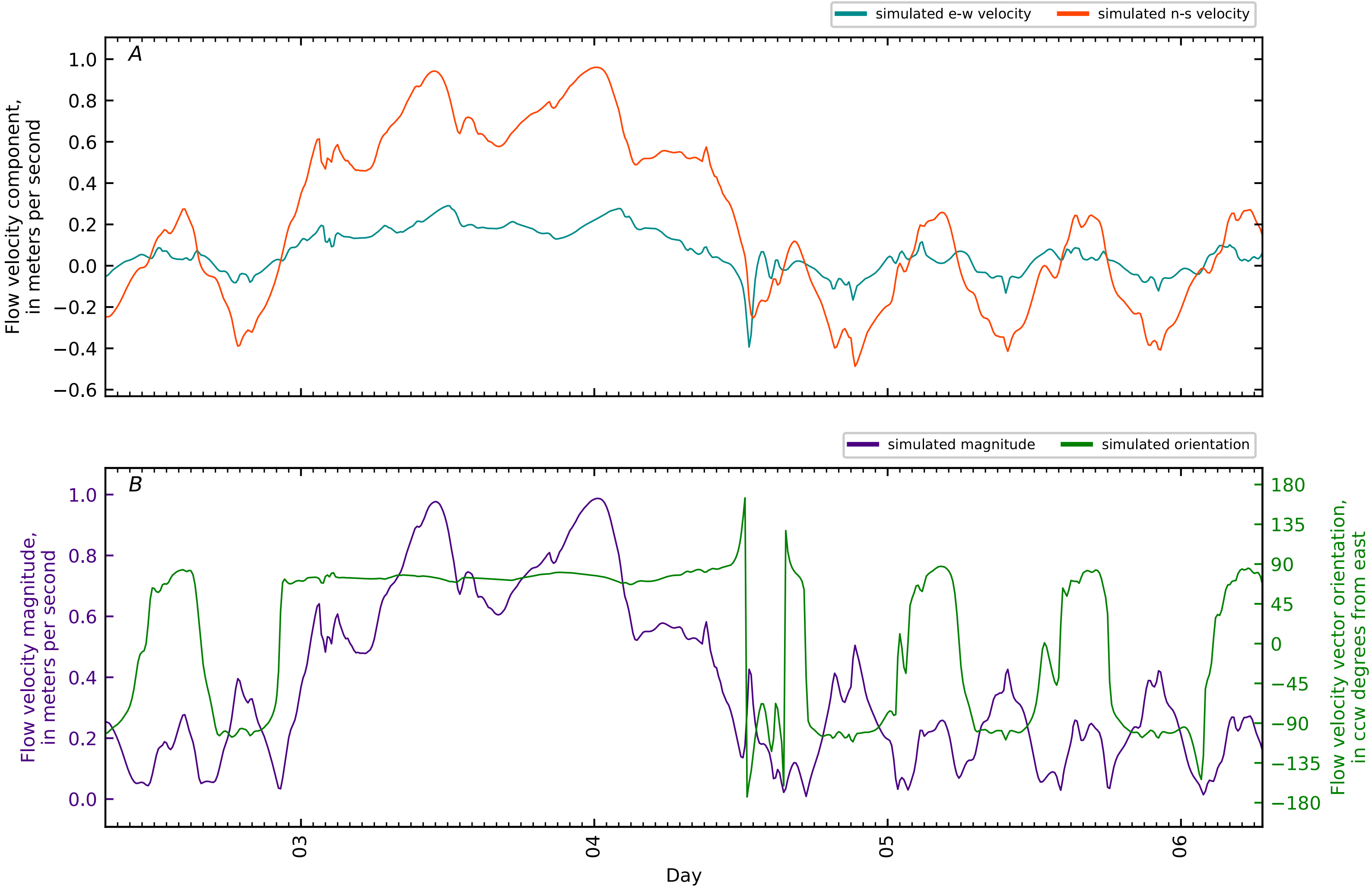

Figure B5-172. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 11, Penob Riv KM0 GS CTD5-08. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

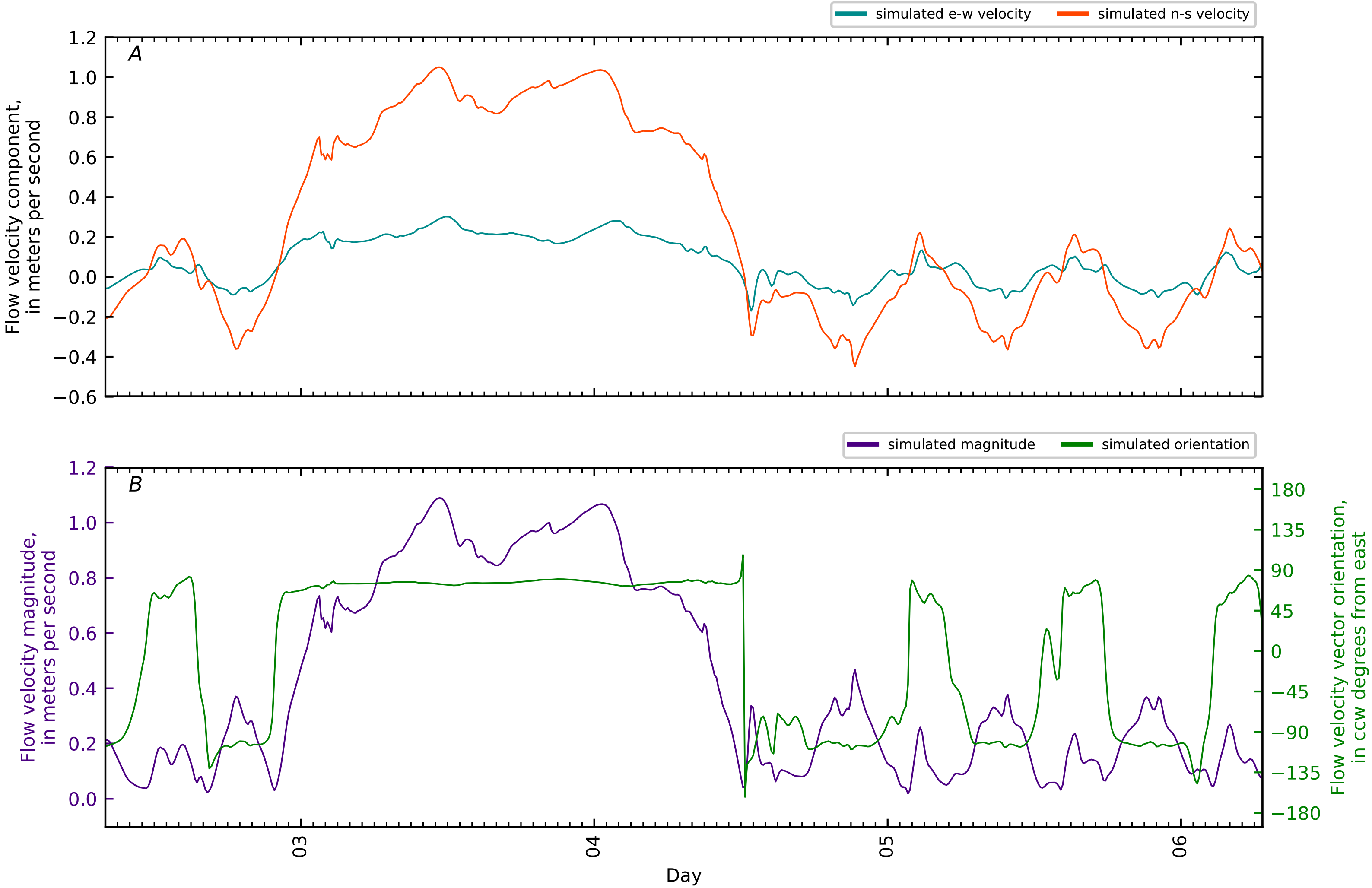

Figure B5-173. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 12, Penob Riv KM0 GS CTD5-09. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

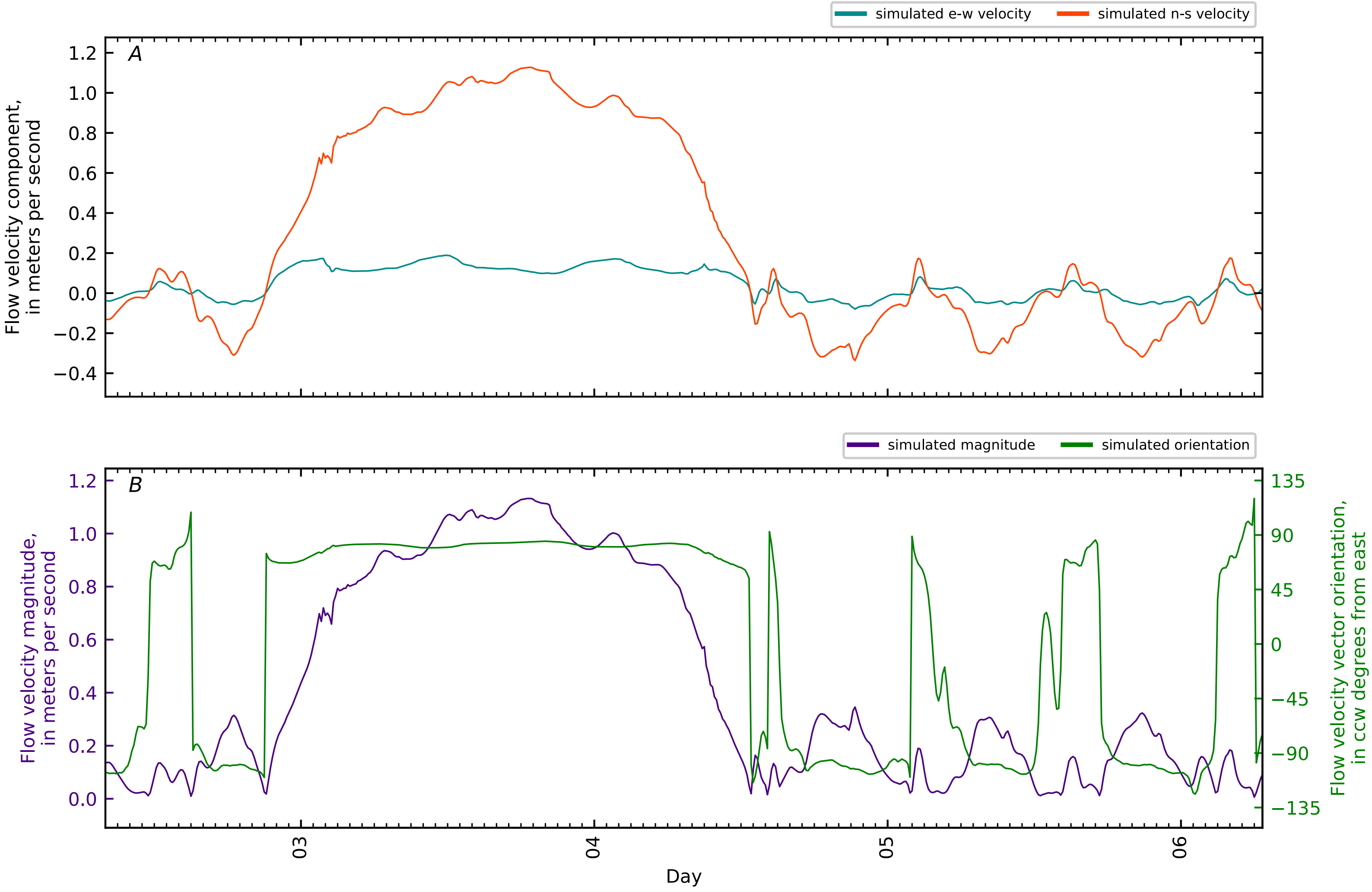

Figure B5-174. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 13, Penob Riv KM0 GS CTD5-10. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

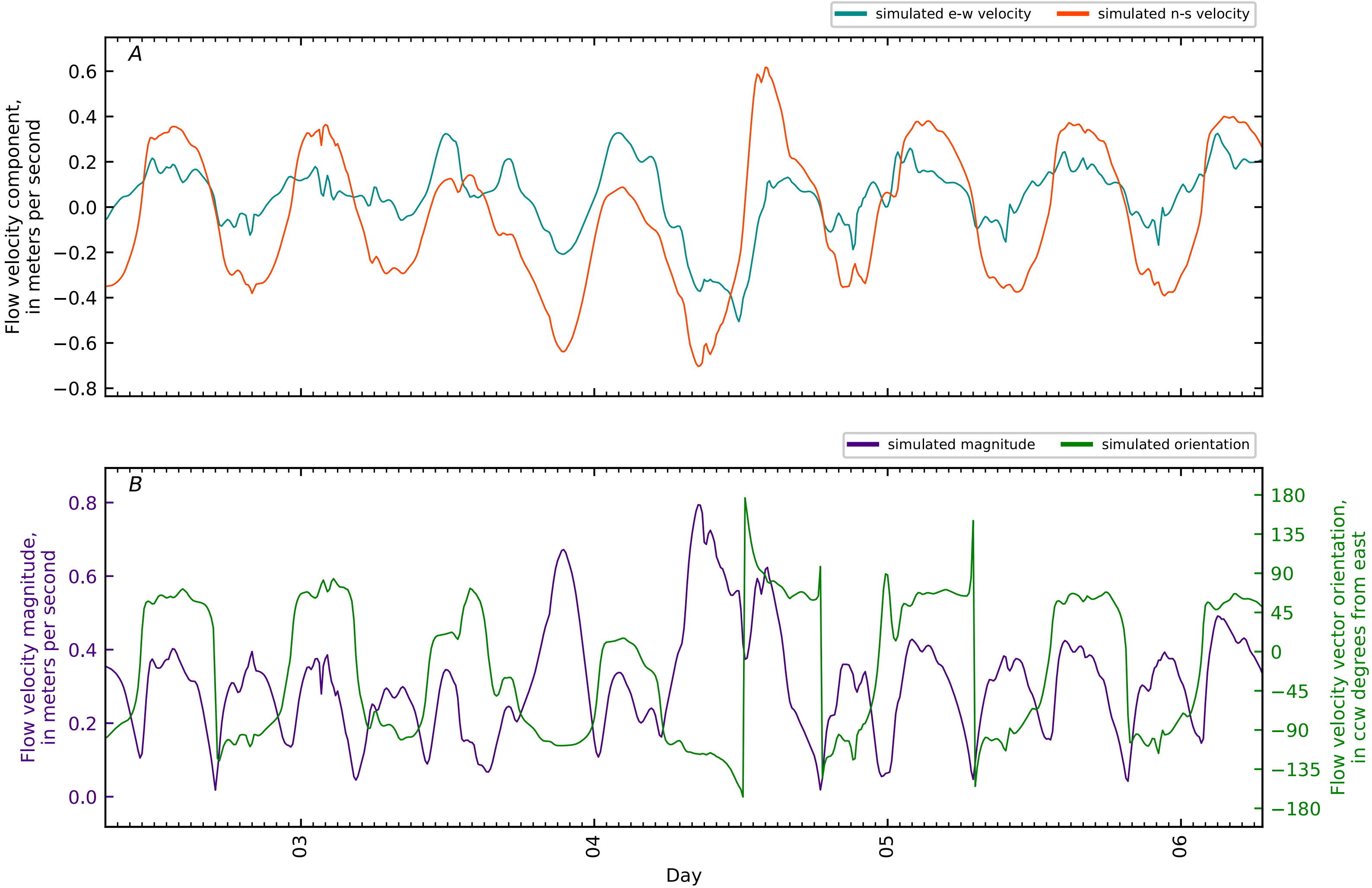

Figure B5-175. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 14, Penob Riv KM0.04 WHOI1 Ft Point 2010. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

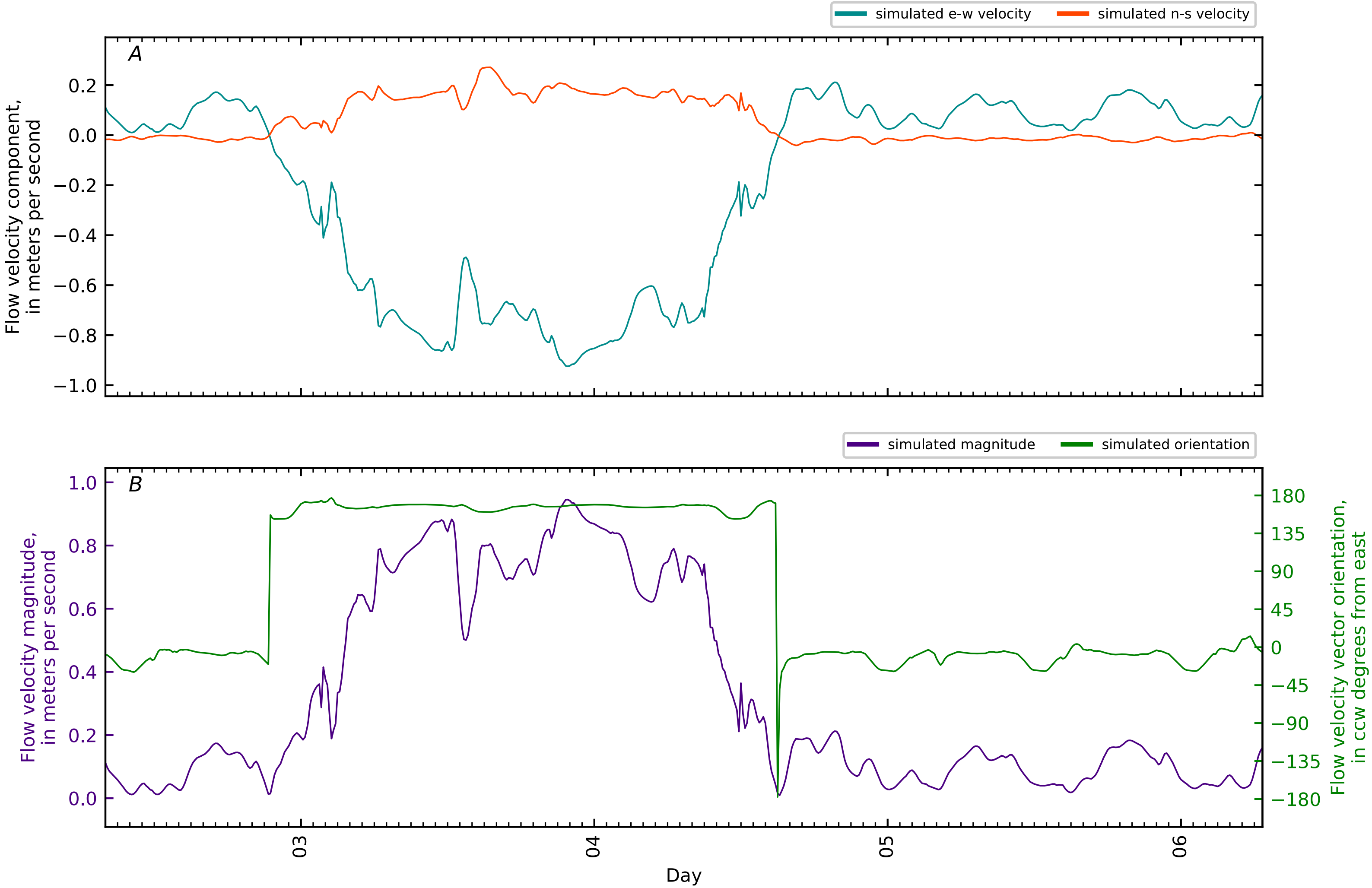

Figure B5-176. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 15, Penob Riv KM0.1 GS 442810068480101 at Ft. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

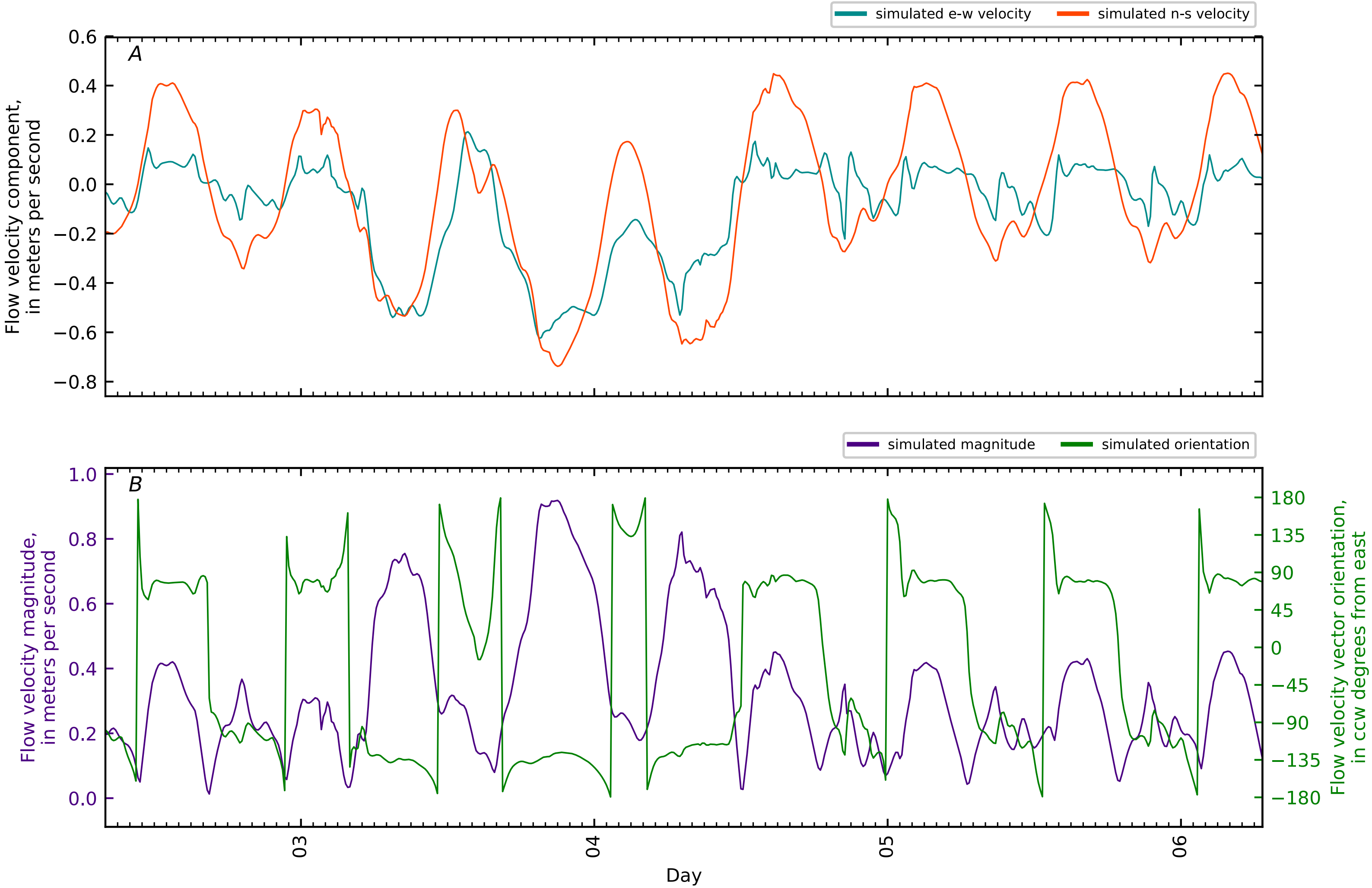

Figure B5-177. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 16, Penob Riv KM1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

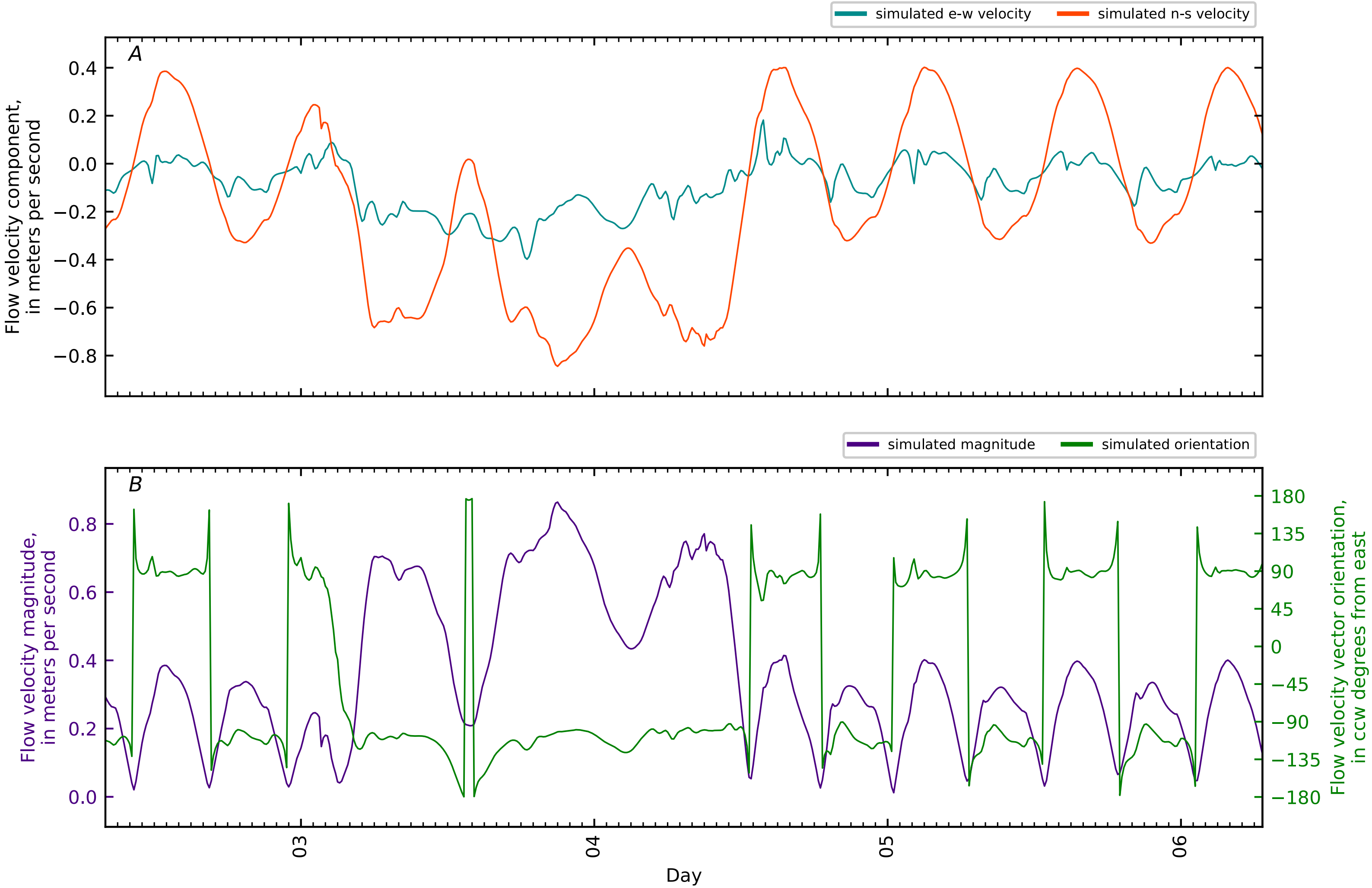

Figure B5-178. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 17, Penob Riv KM2. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

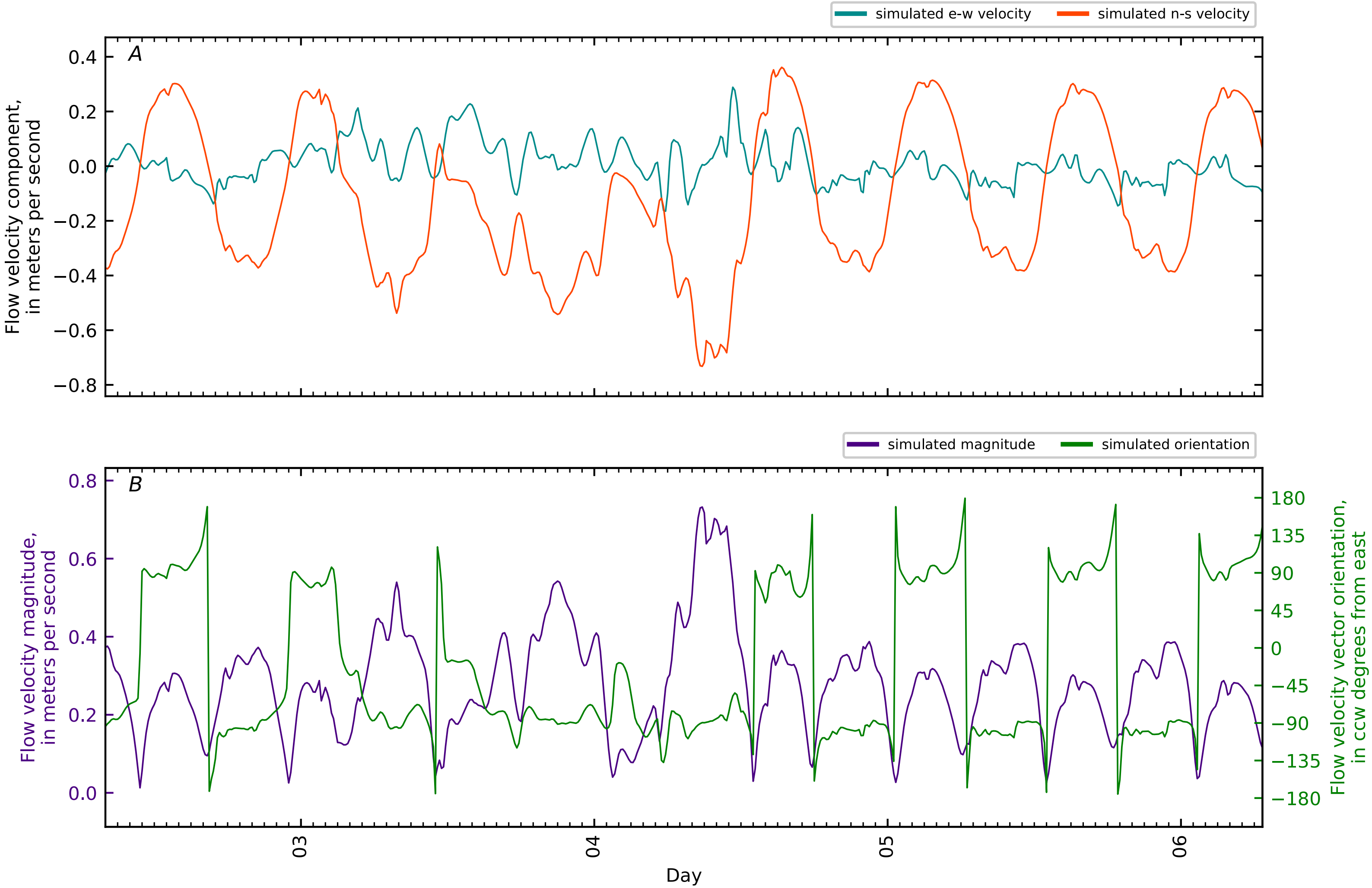

Figure B5-179. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 18, Penob Riv KM3. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

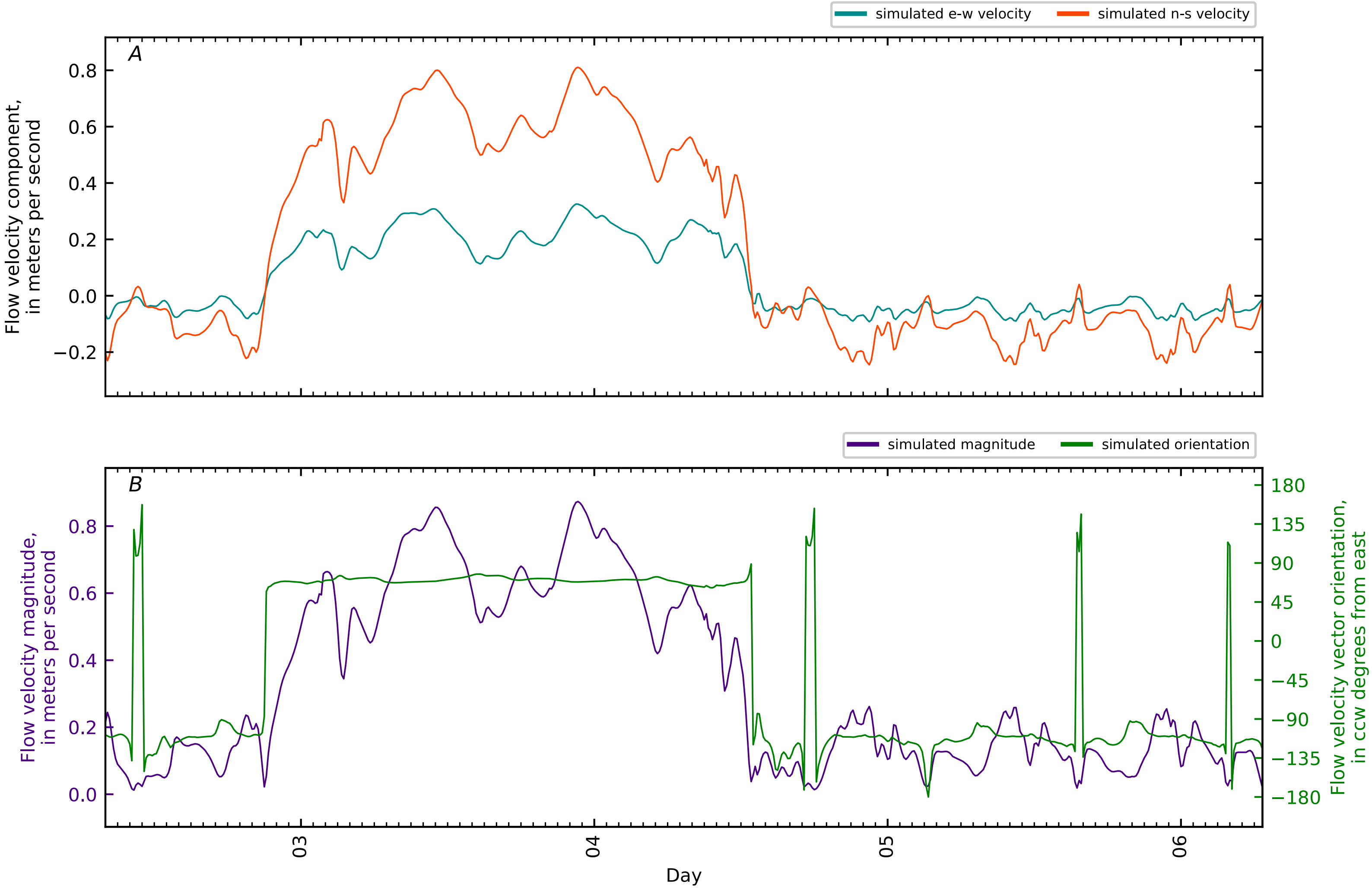

Figure B5-180. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 19, Penob Riv KM3.8 GS CTD3-01. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

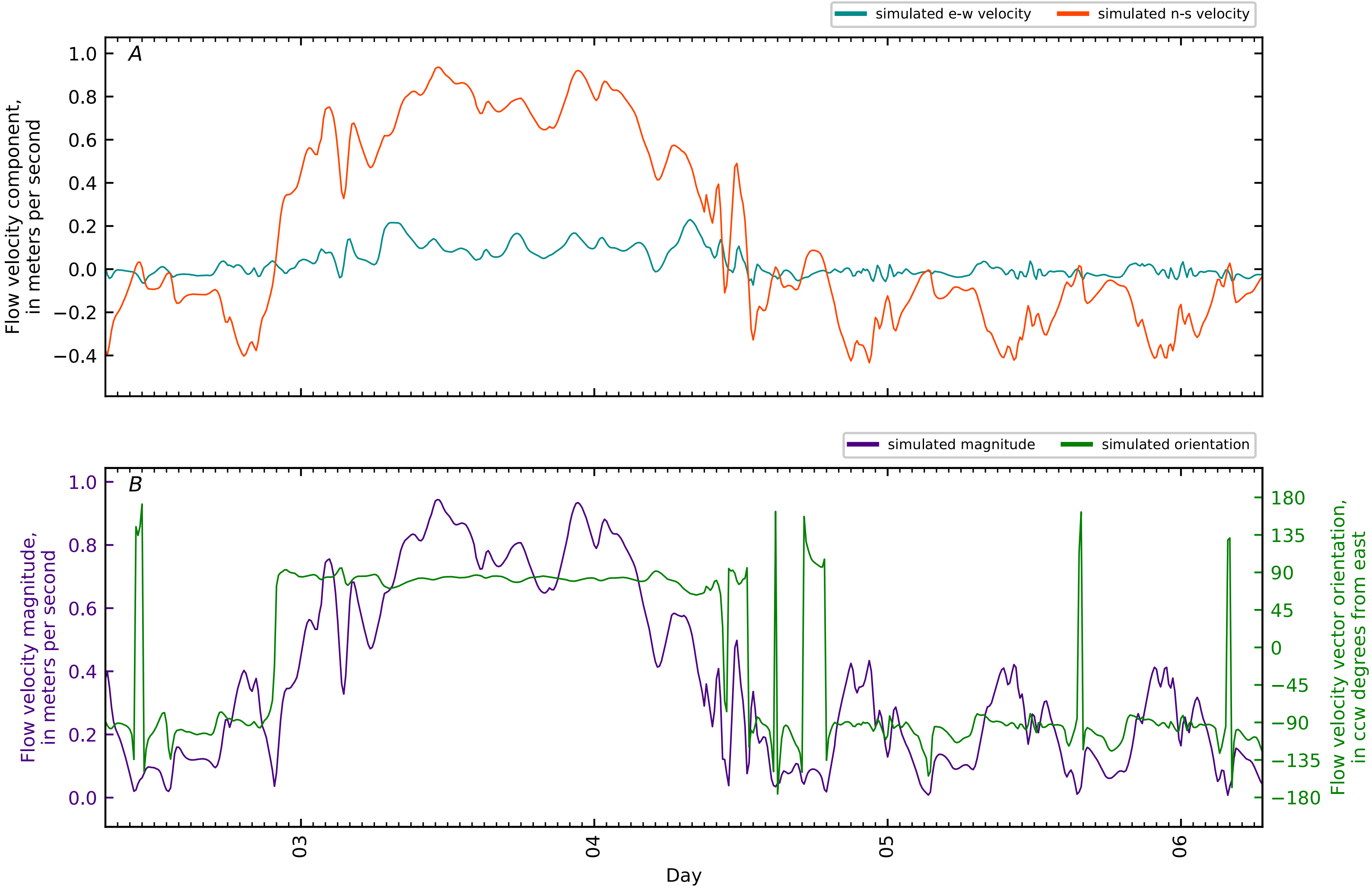

Figure B5-181. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 20, Penob Riv KM3.8 GS CTD3-02. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

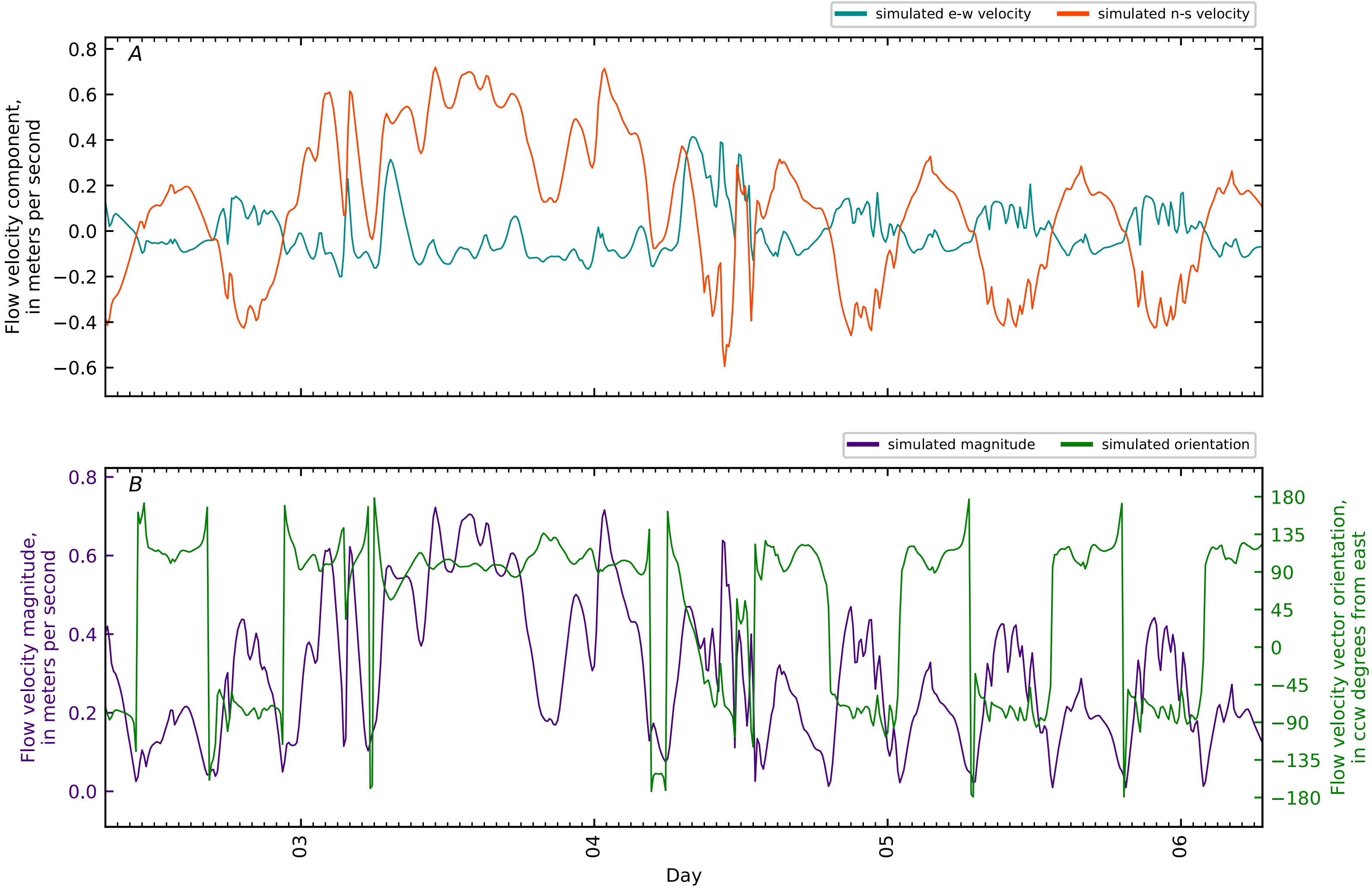

Figure B5-182. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 21, Penob Riv KM3.8 GS CTD3-03. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

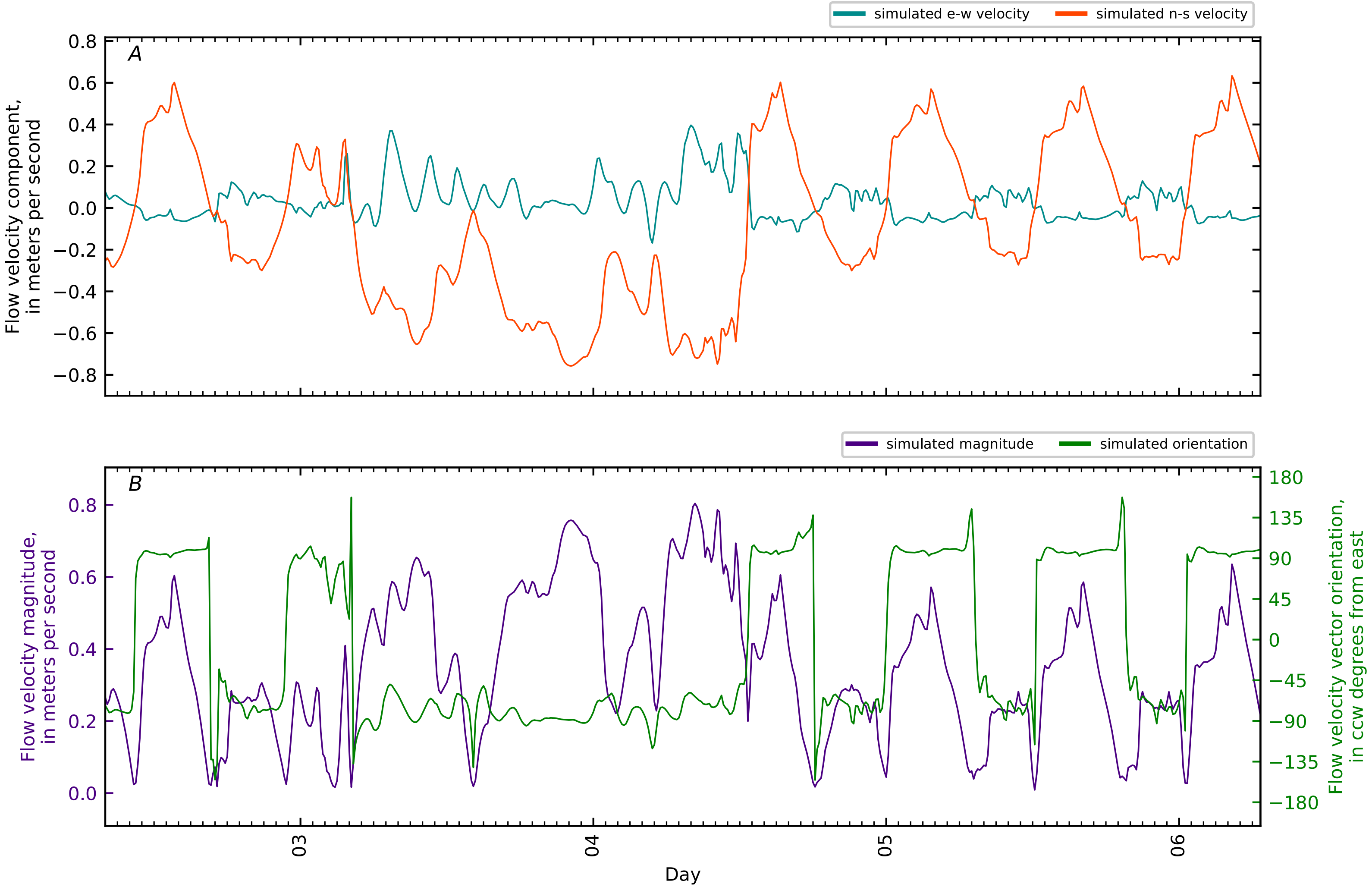

Figure B5-183. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 22, Penob Riv KM3.8 GS CTD3-04. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

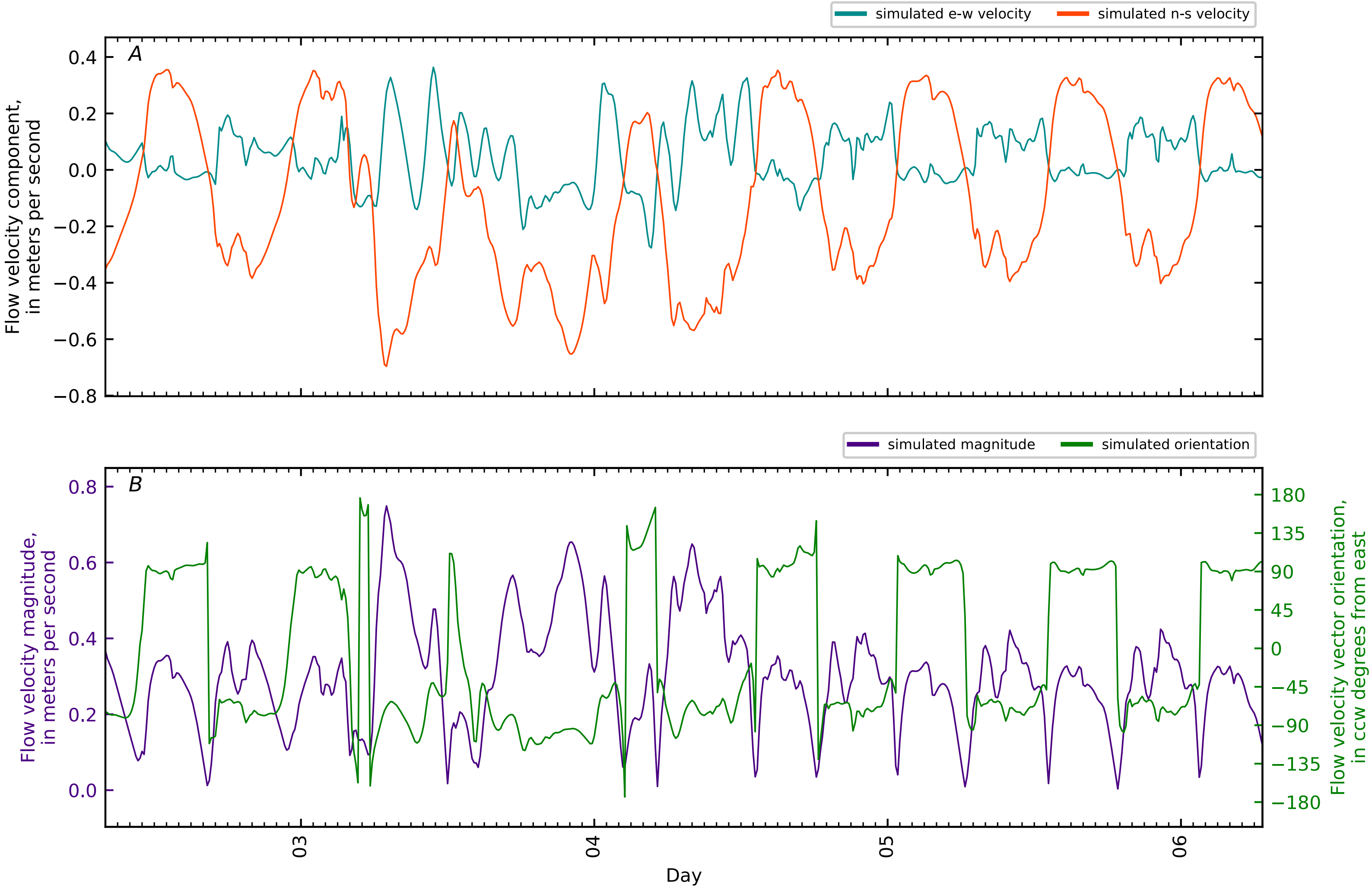

Figure B5-184. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 23, Penob Riv KM3.8 GS CTD3-05. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

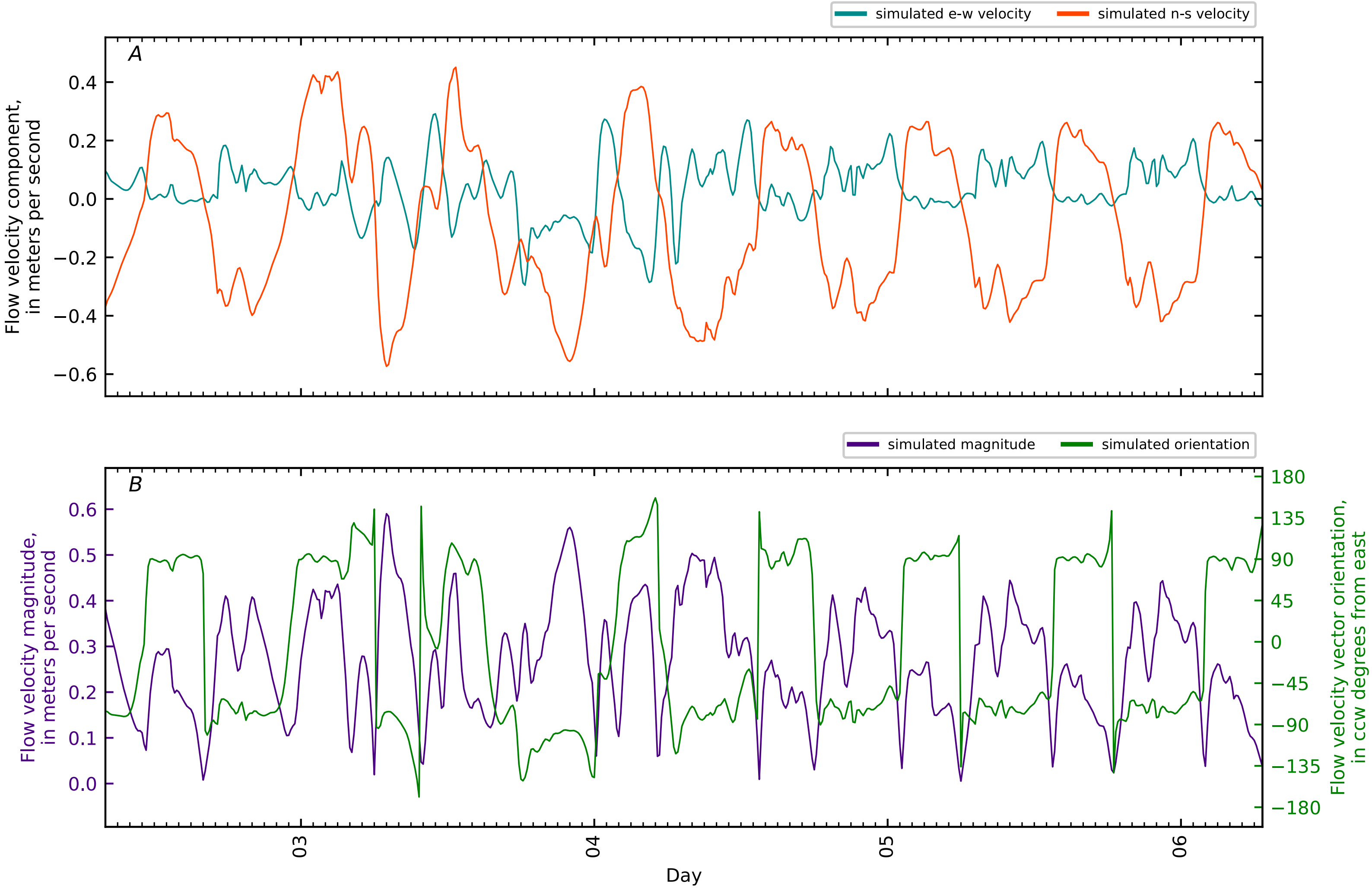

Figure B5-185. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 24, Penob Riv KM3.8 GS CTD3-06. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

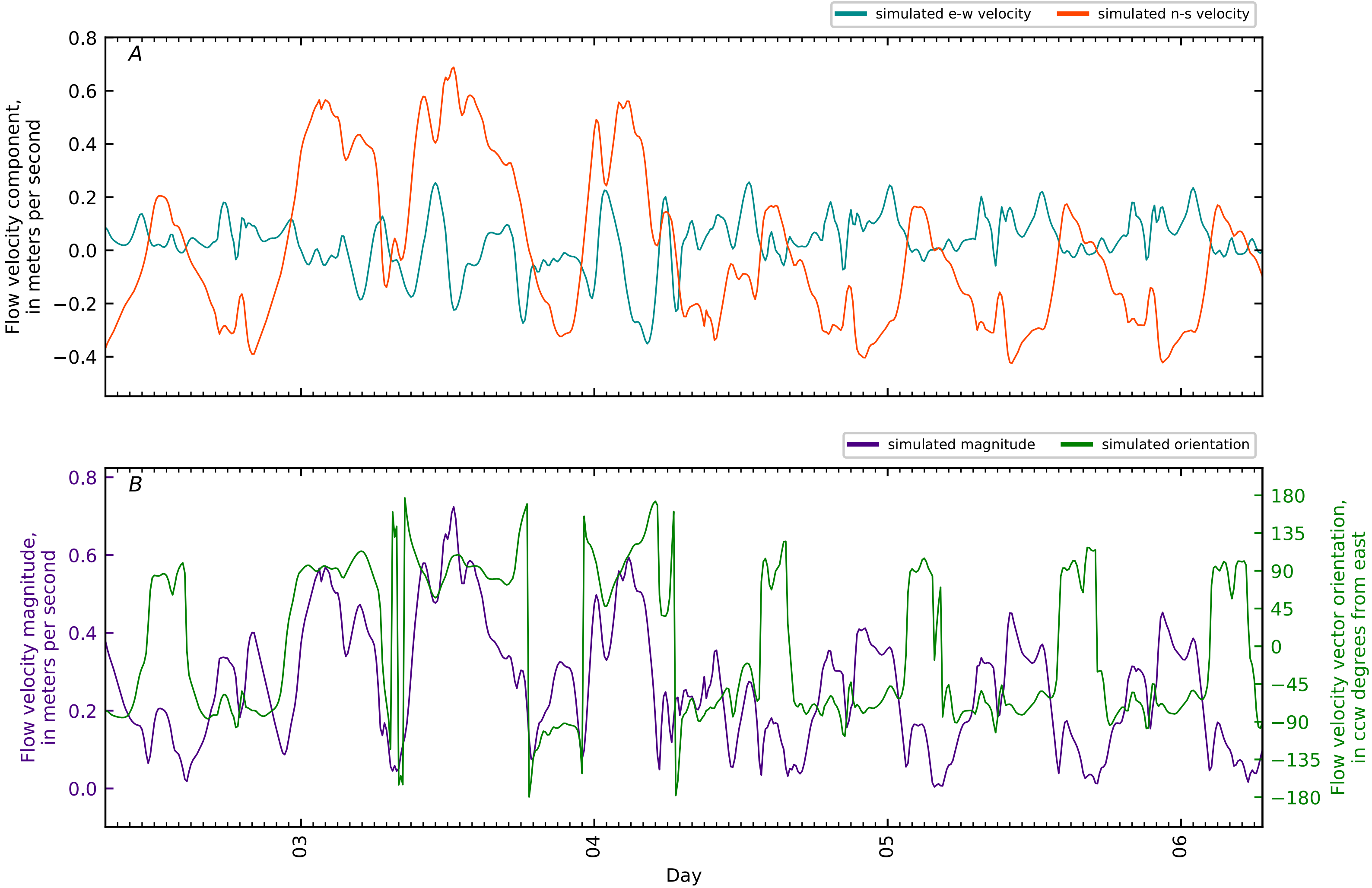

Figure B5-186. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 25, Penob Riv KM3.8 GS CTD3-07. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

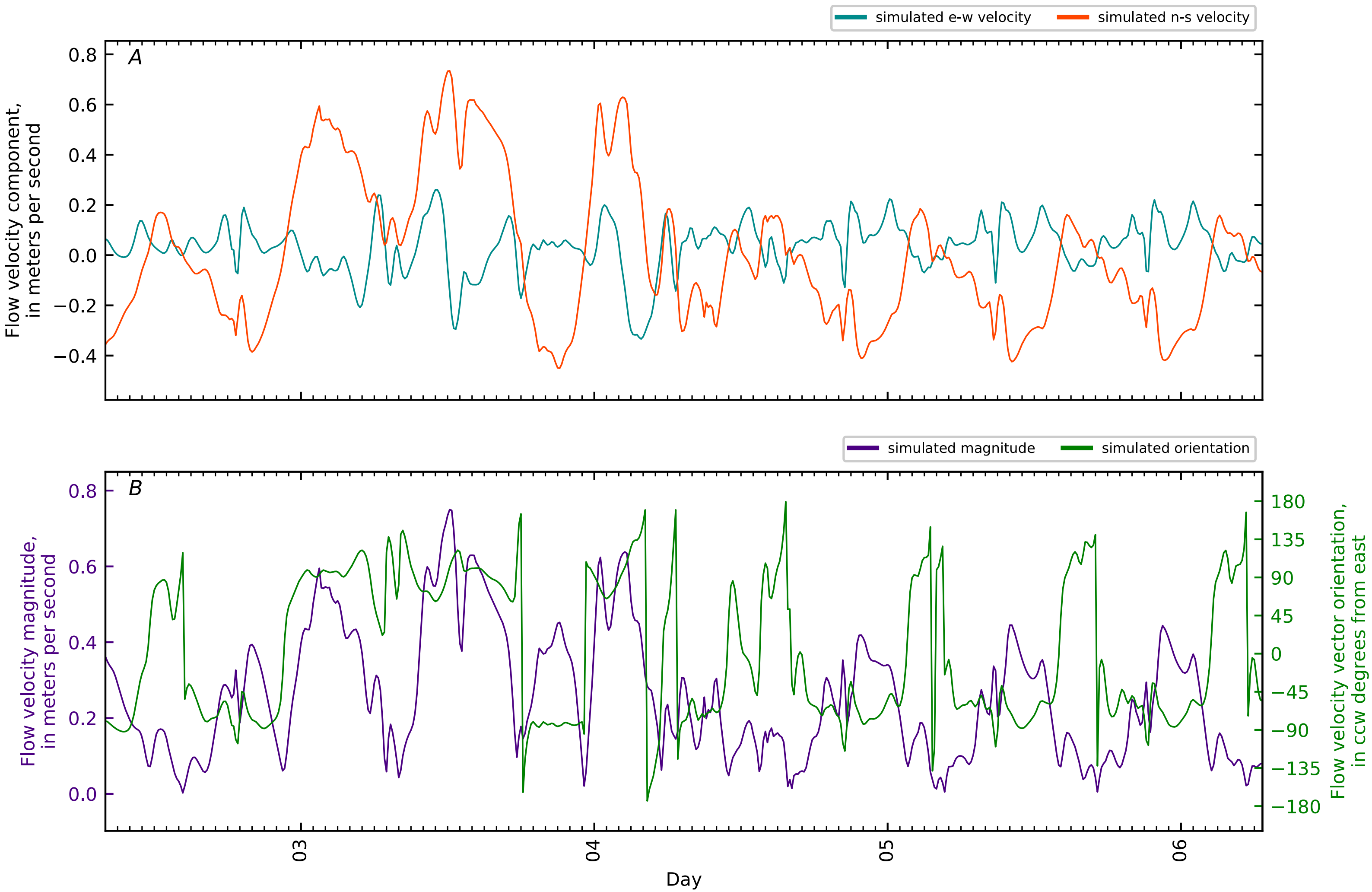

Figure B5-187. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 26, Penob Riv KM3.8 GS CTD3-08. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

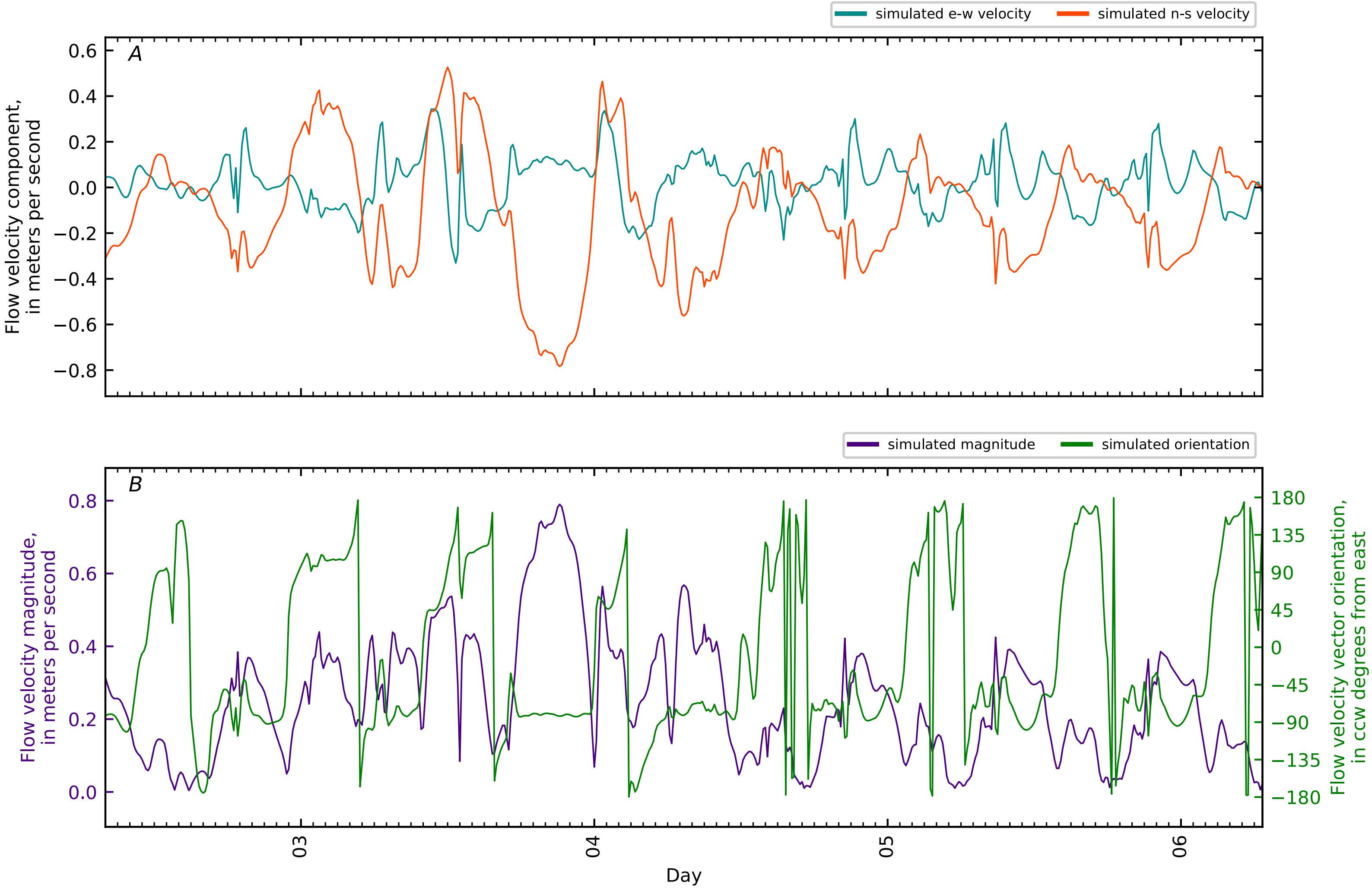

Figure B5-188. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 27, Penob Riv KM3.8 GS CTD3-09. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

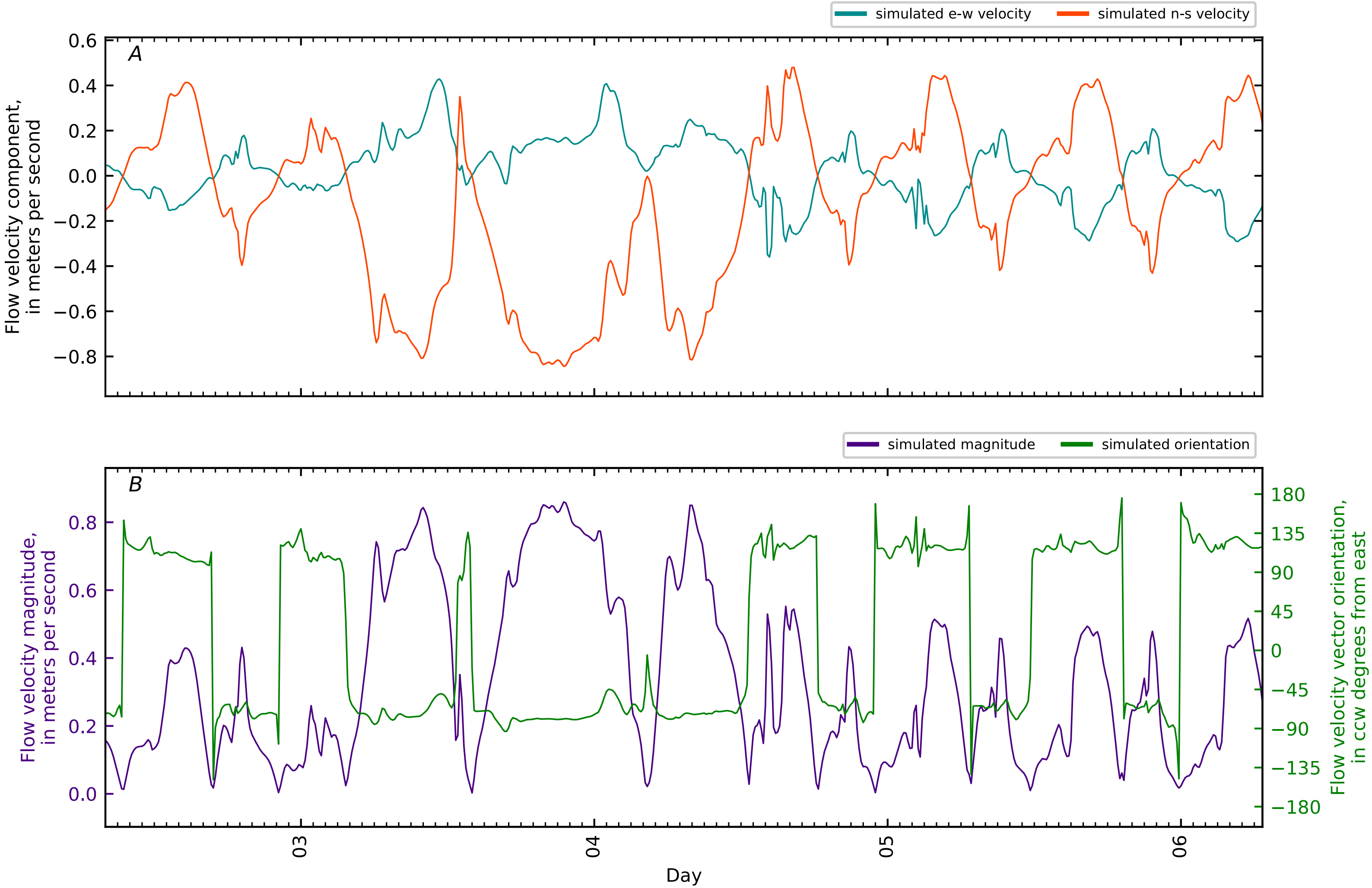

Figure B5-189. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 28, Penob Riv KM3.8 GS CTD3-10. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

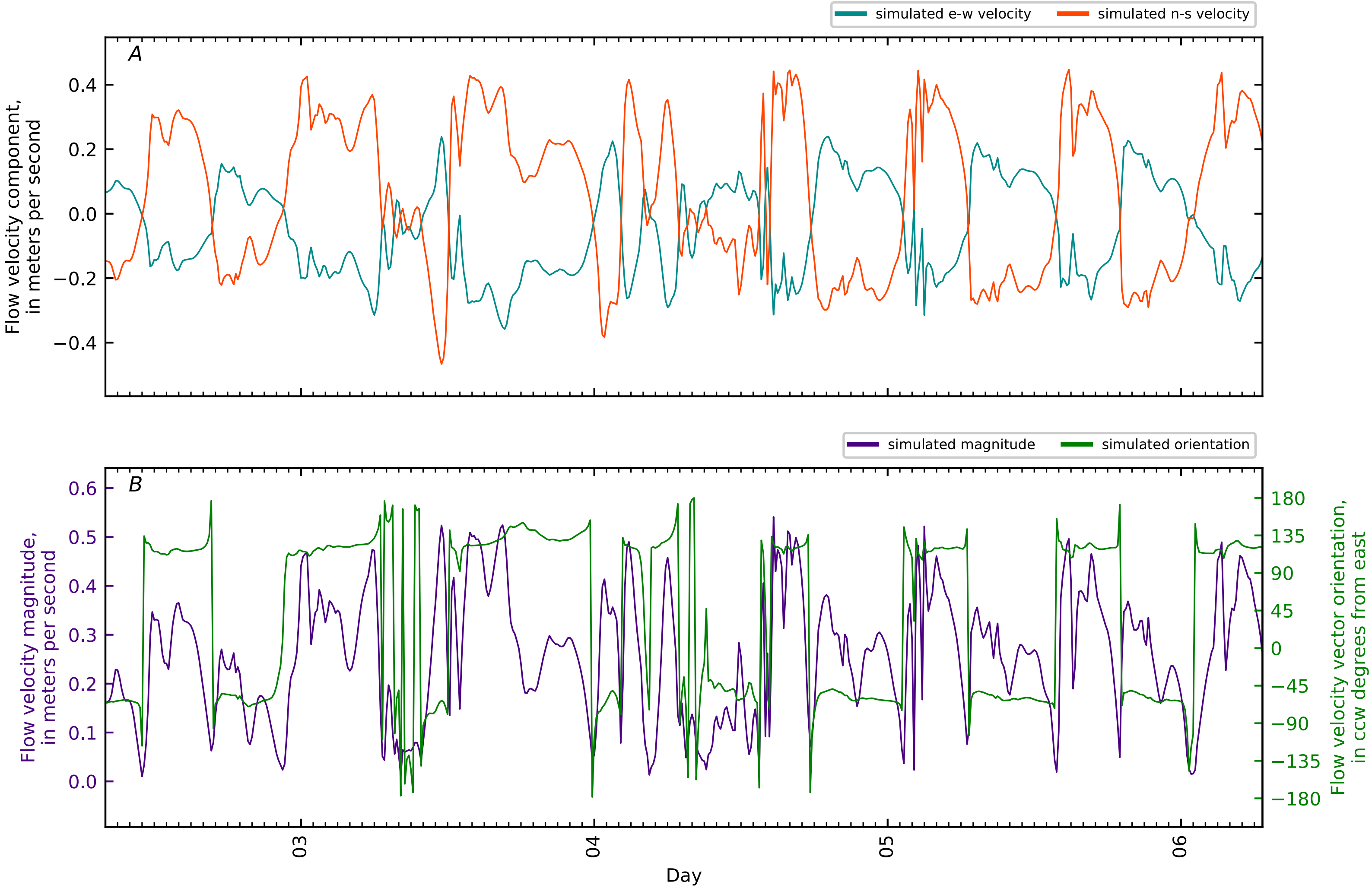

Figure B5-190. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 29, Penob Riv KM3.85 fmr NOAA gage Gross Poi. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

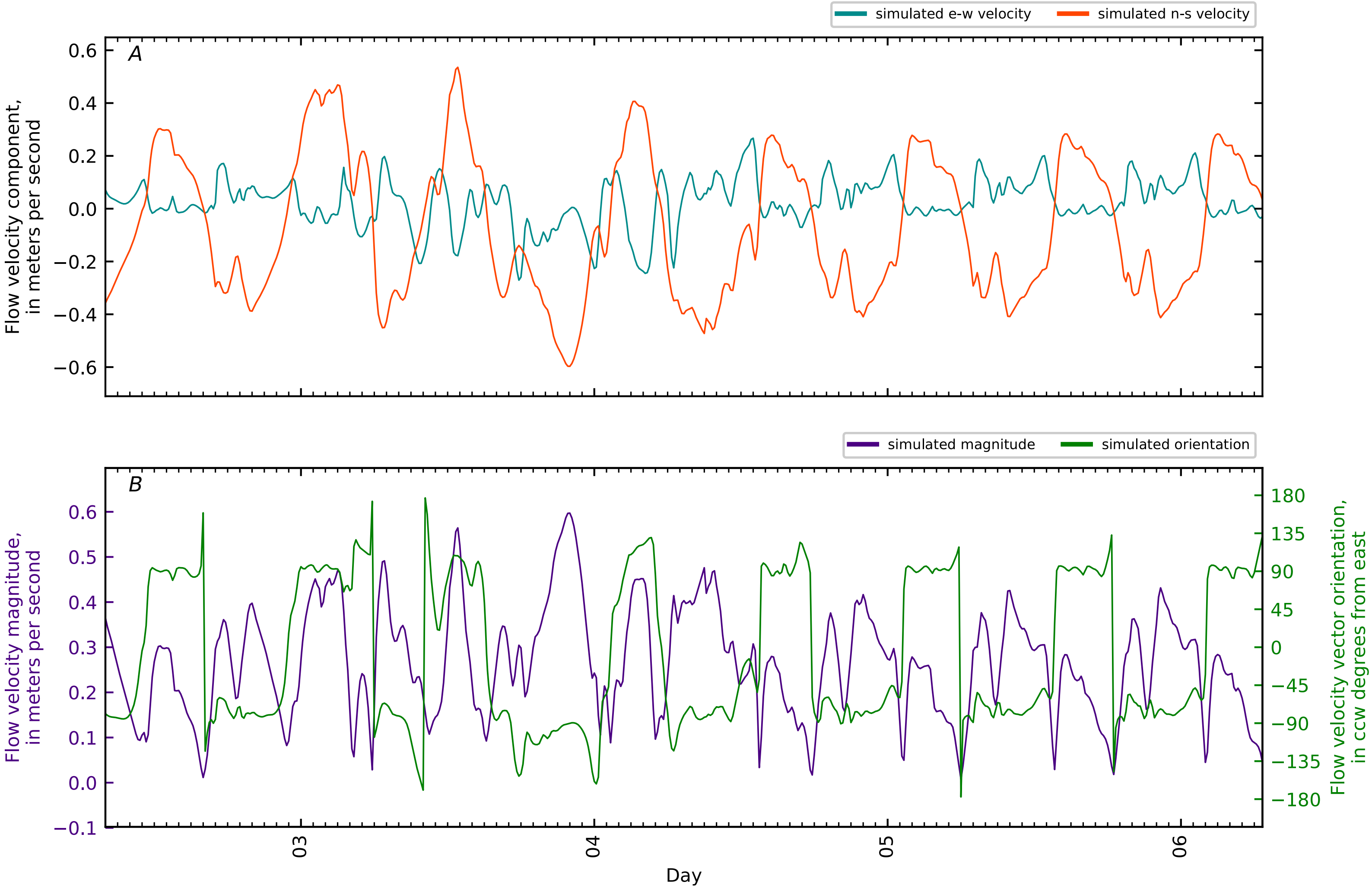

Figure B5-191. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 30, Penob Riv KM4. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

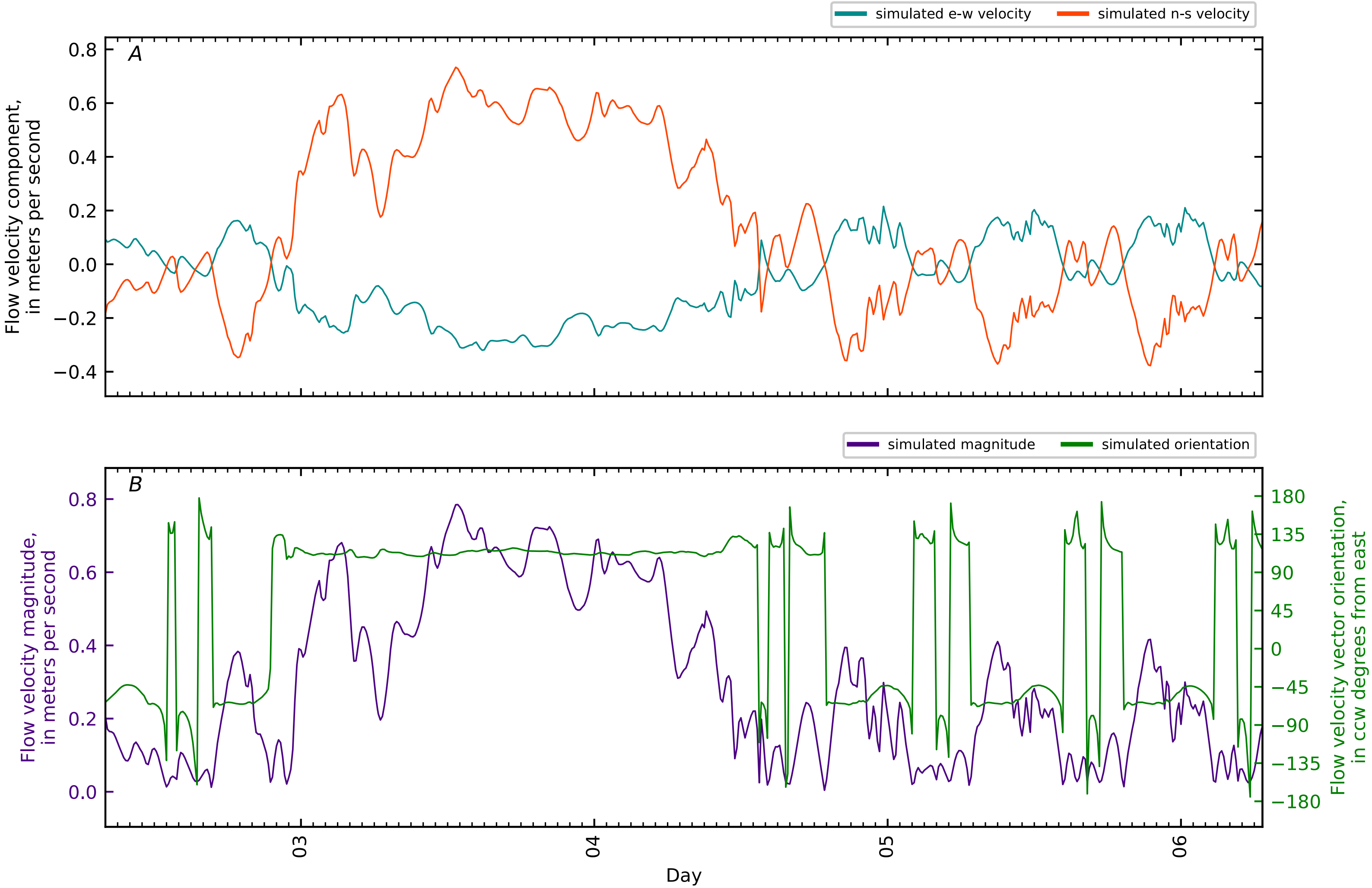

Figure B5-192. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 31, Penob Riv KM4.3 fmr NOAA gage Sandy Beac. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

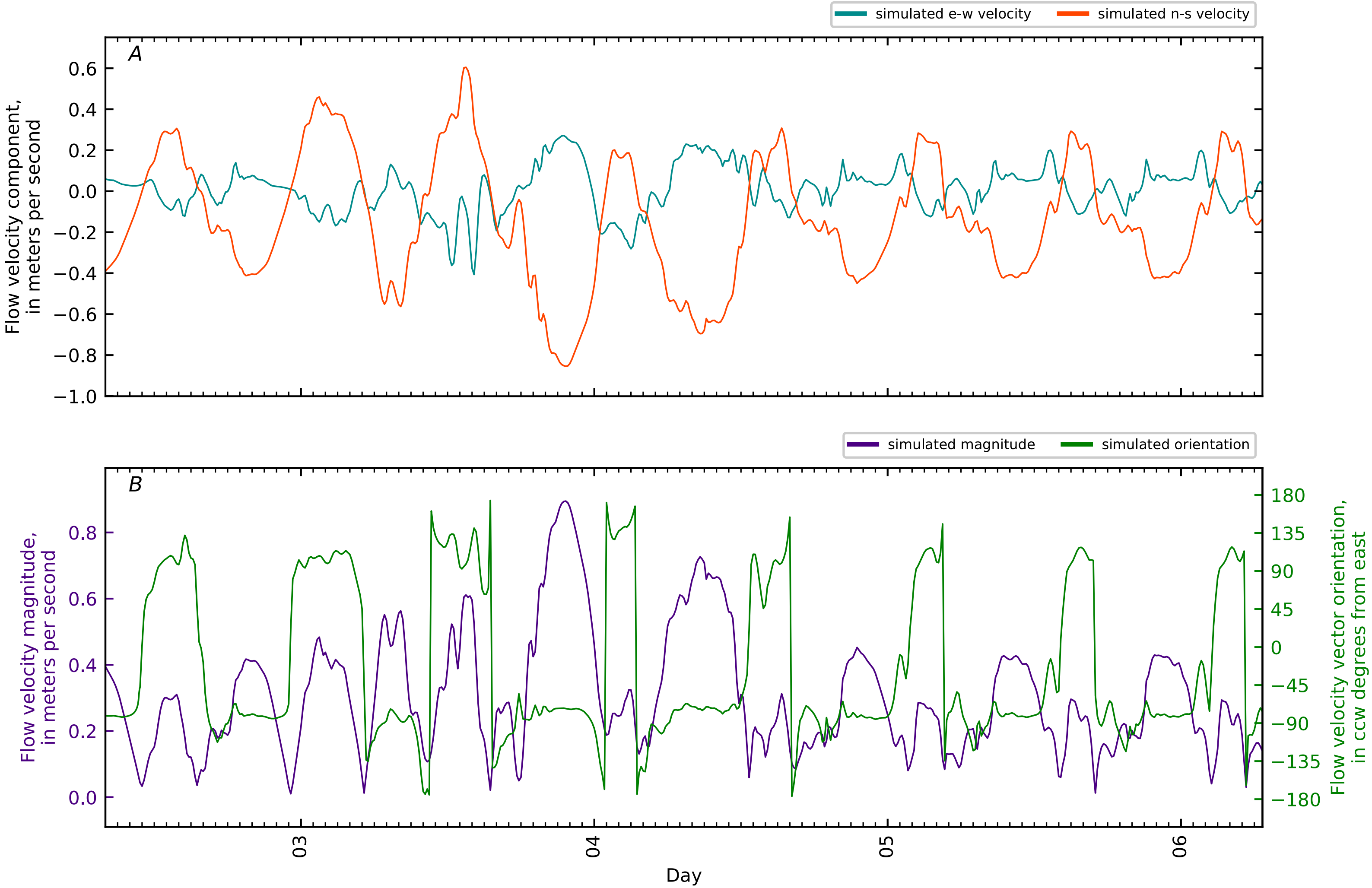

Figure B5-193. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 32, Penob Riv KM5. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

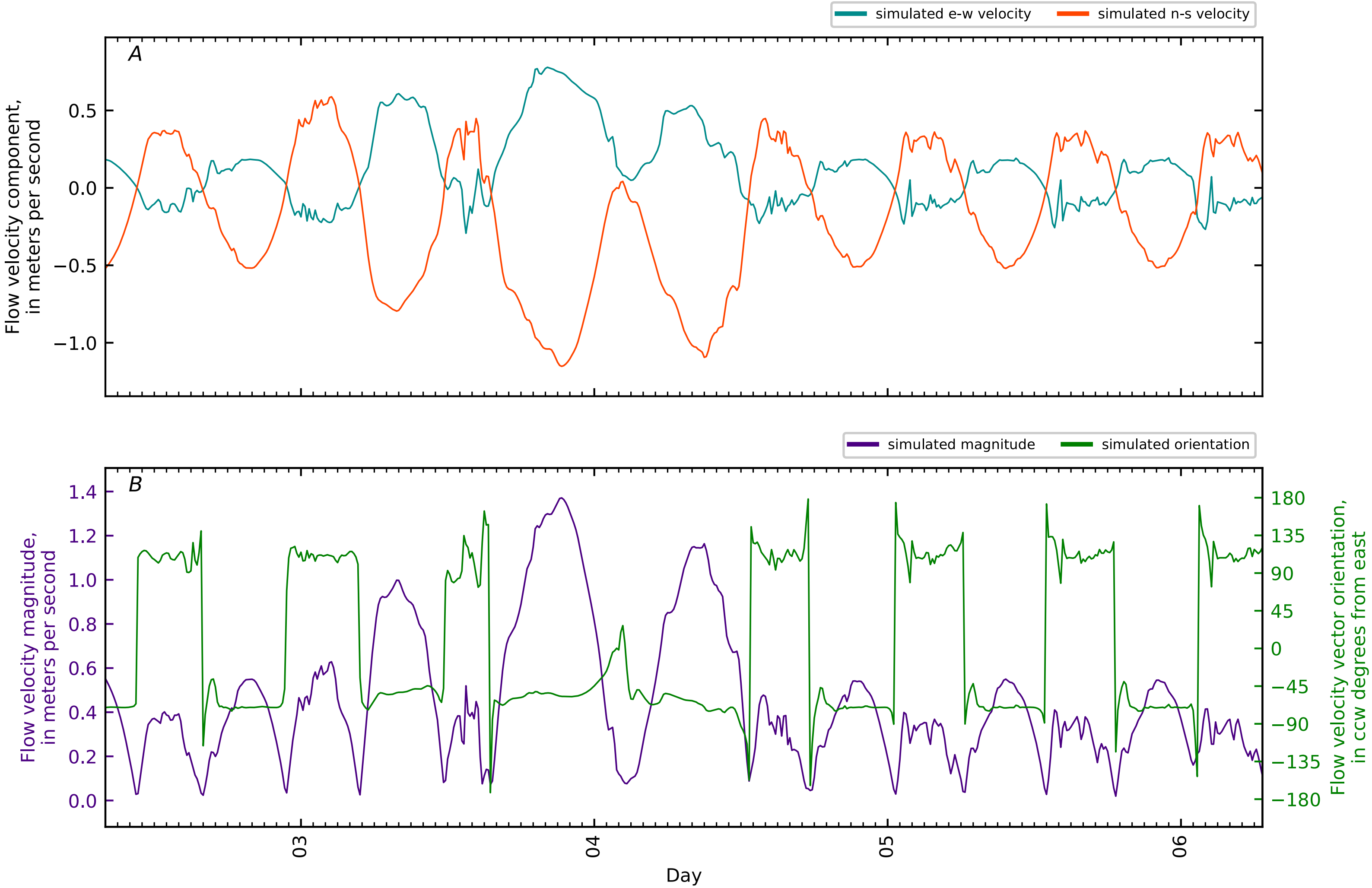

Figure B5-194. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 33, Penob Riv KM6. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

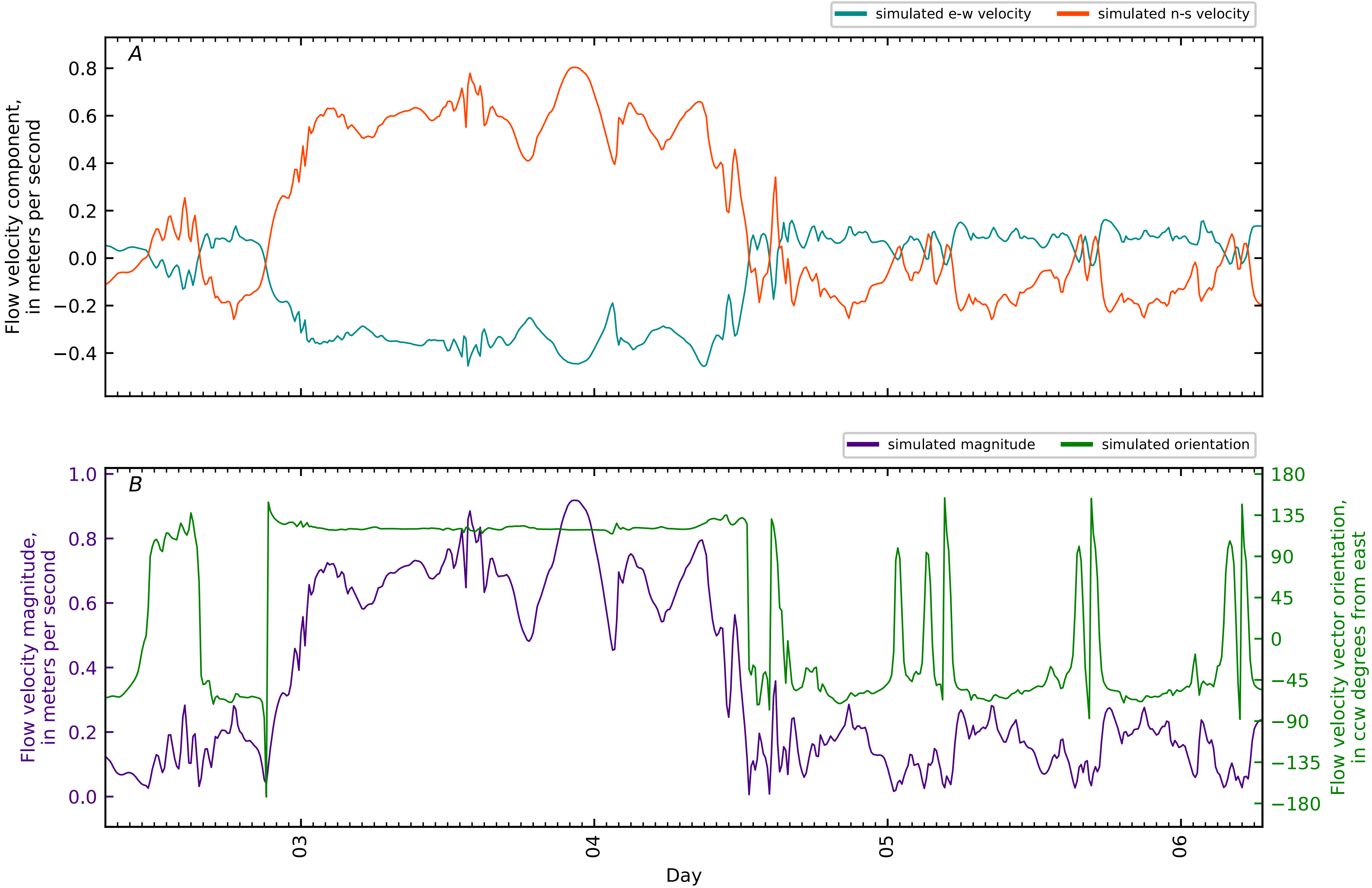

Figure B5-195. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 34, Penob Riv KM6 ERDC11 VW-MU14-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

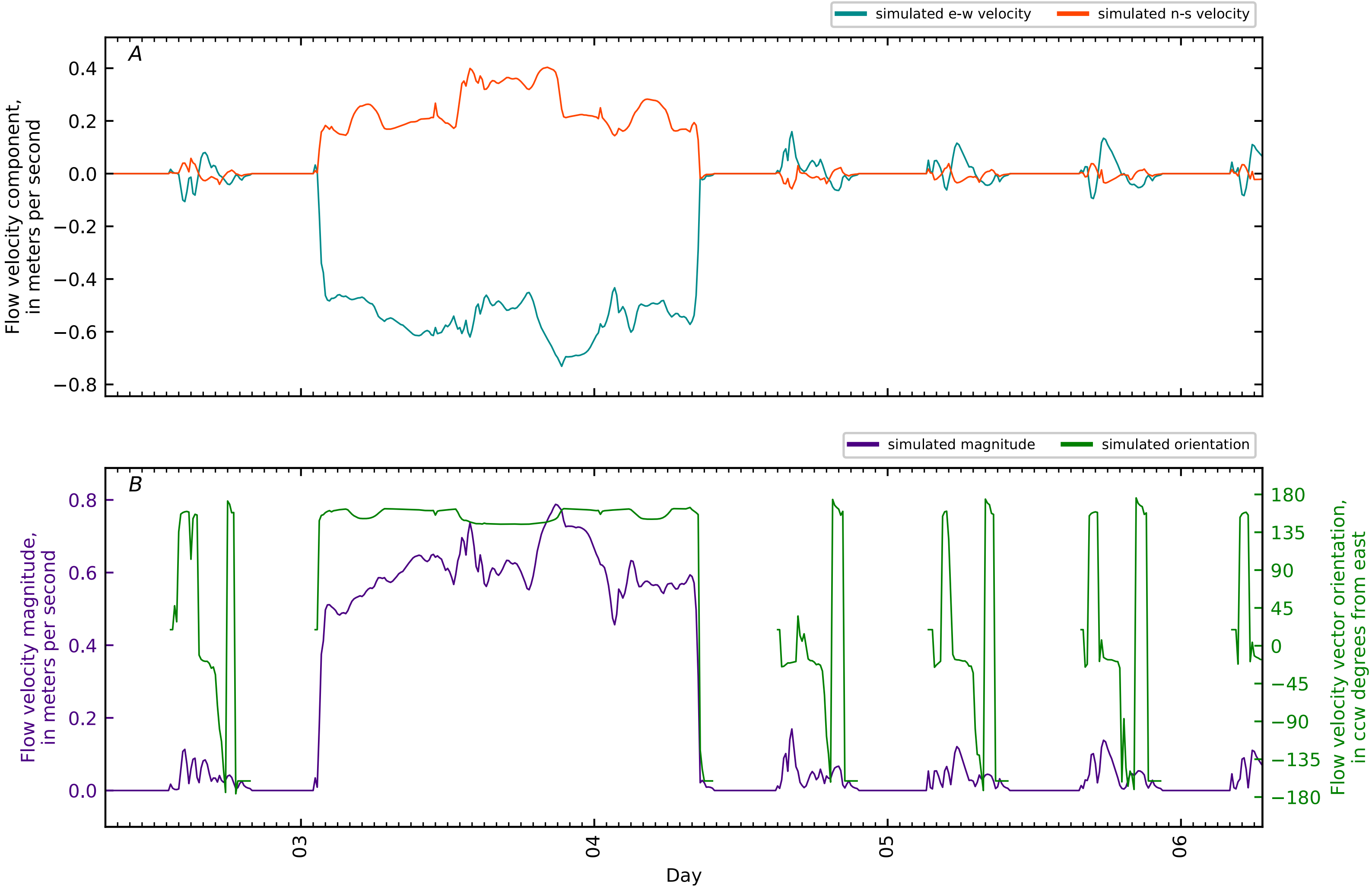

Figure B5-196. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 35, Penob Riv KM6.05 ERDC10 VW-MU7-SF1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

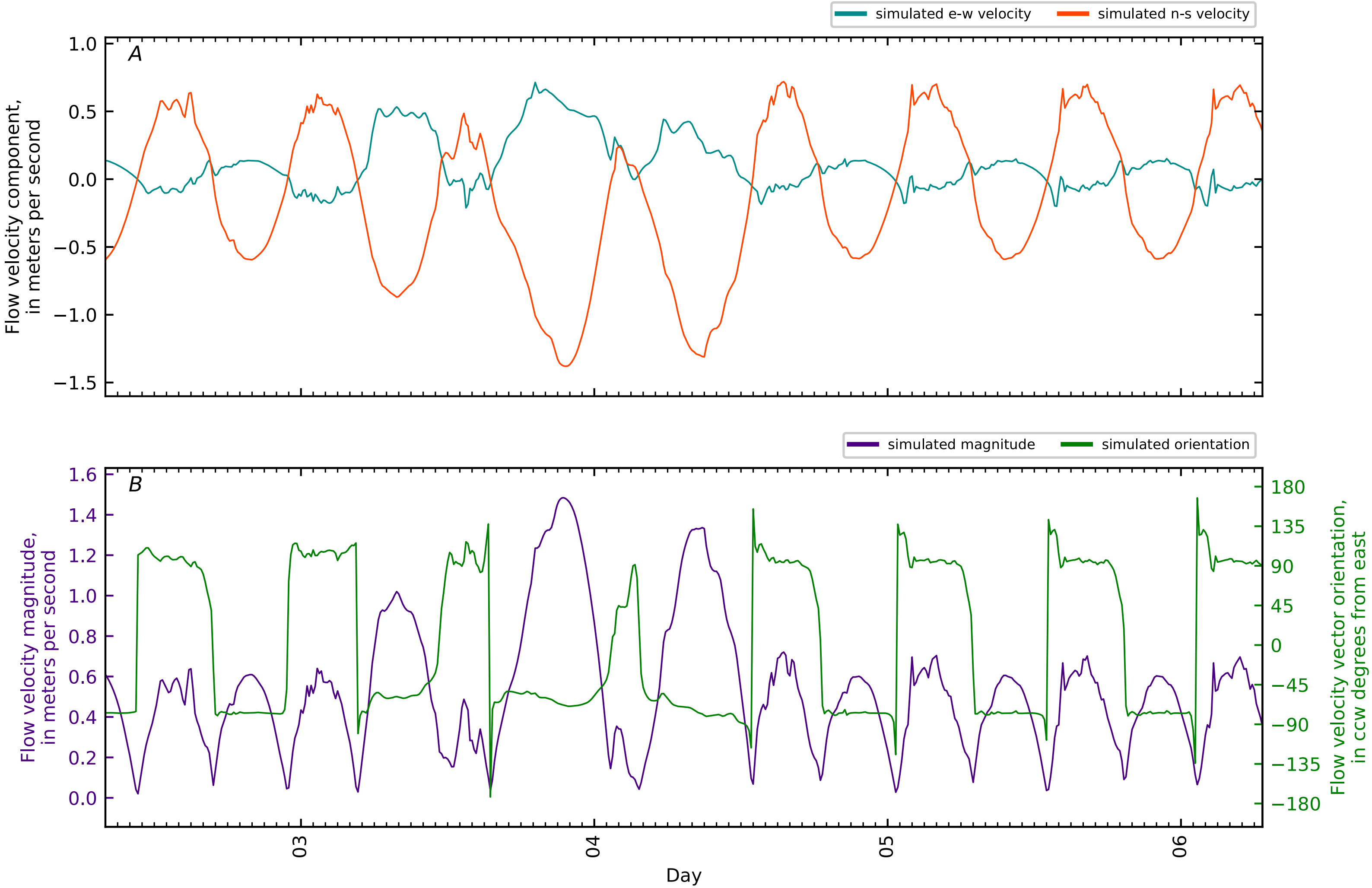

Figure B5-197. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 36, Penob Riv KM6.1 WHOI5 Verona Island 2010. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

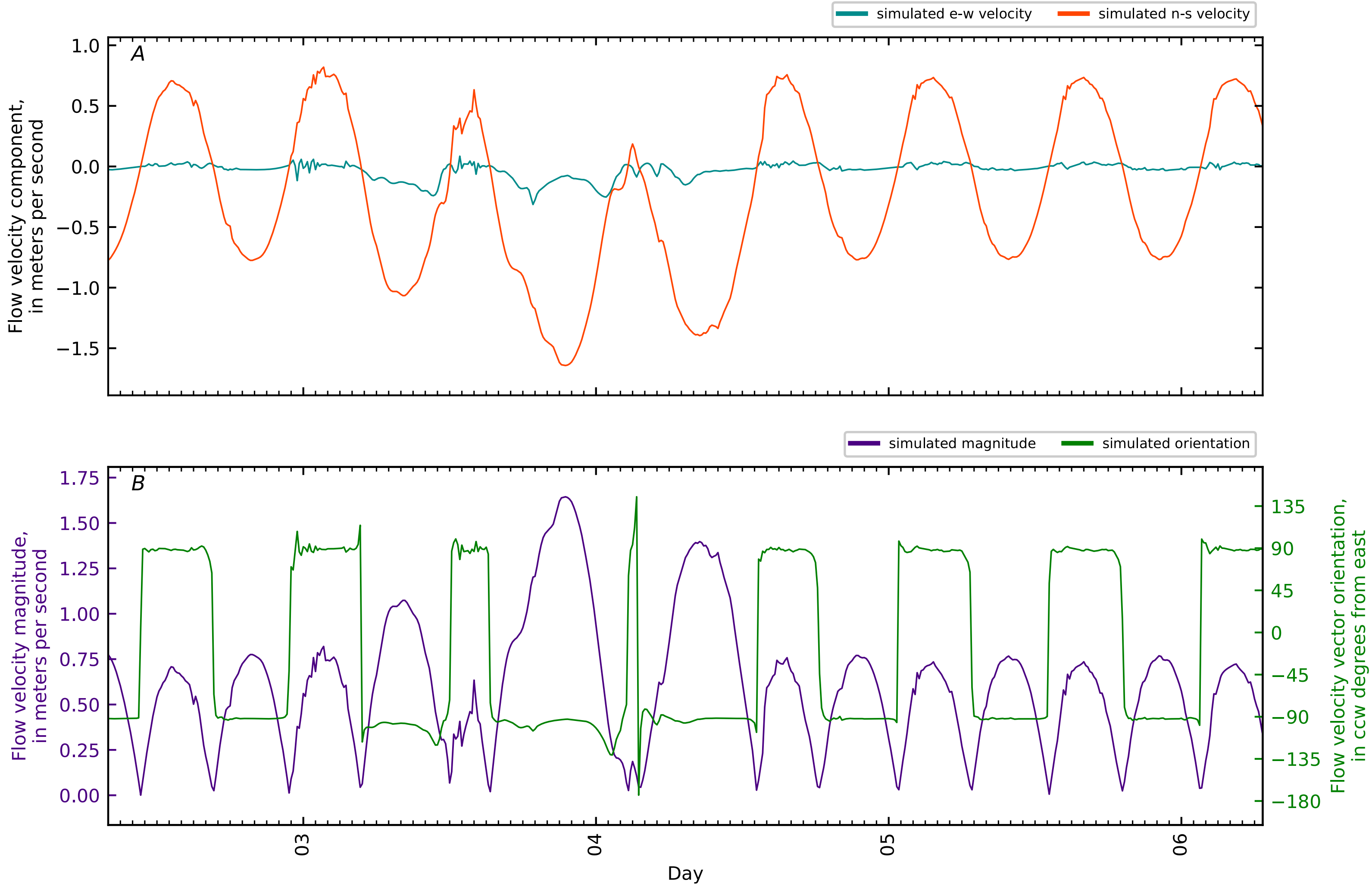

Figure B5-198. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 37, Penob Riv KM7. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

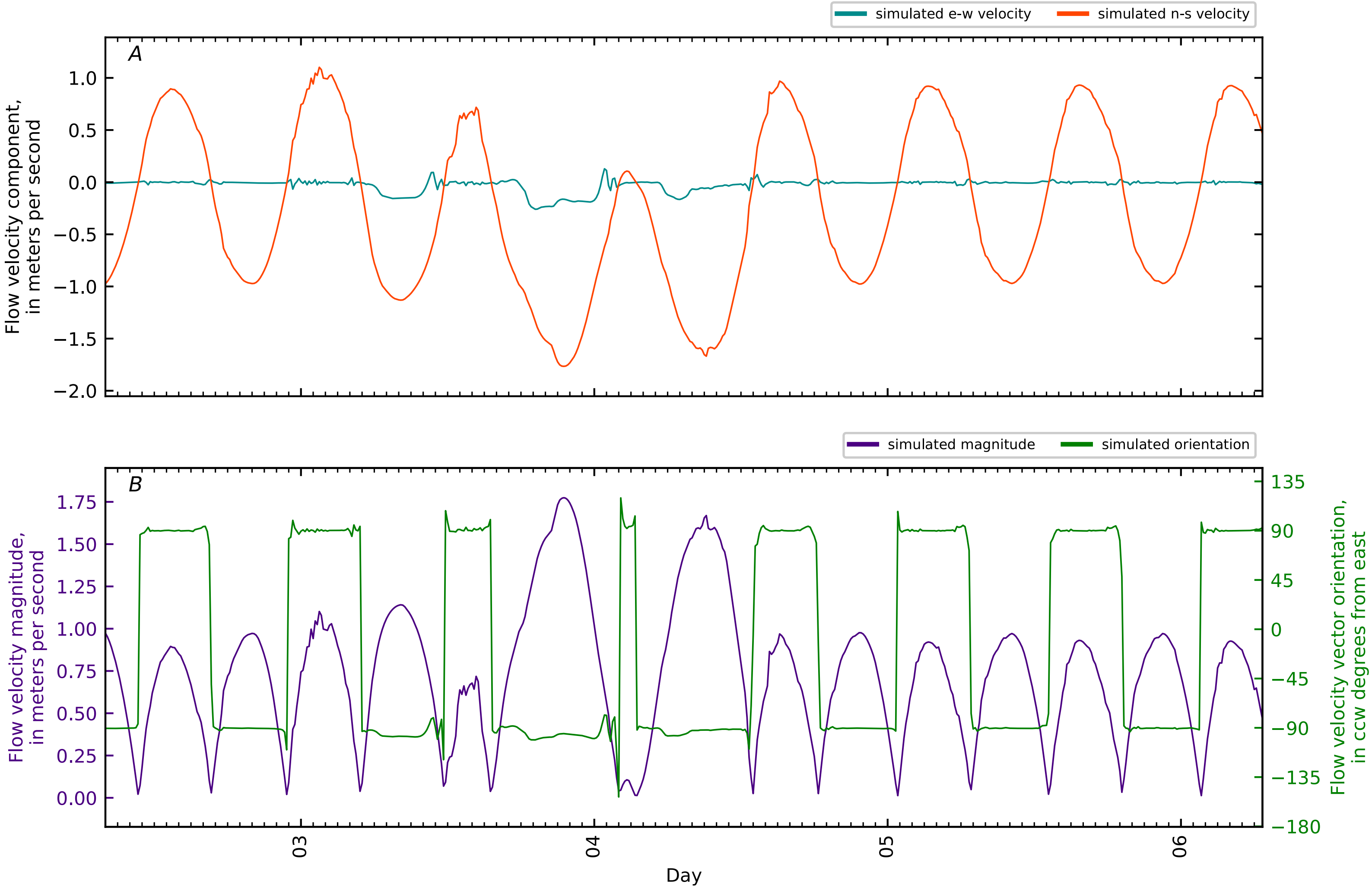

Figure B5-199. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 38, Penob Riv KM8. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

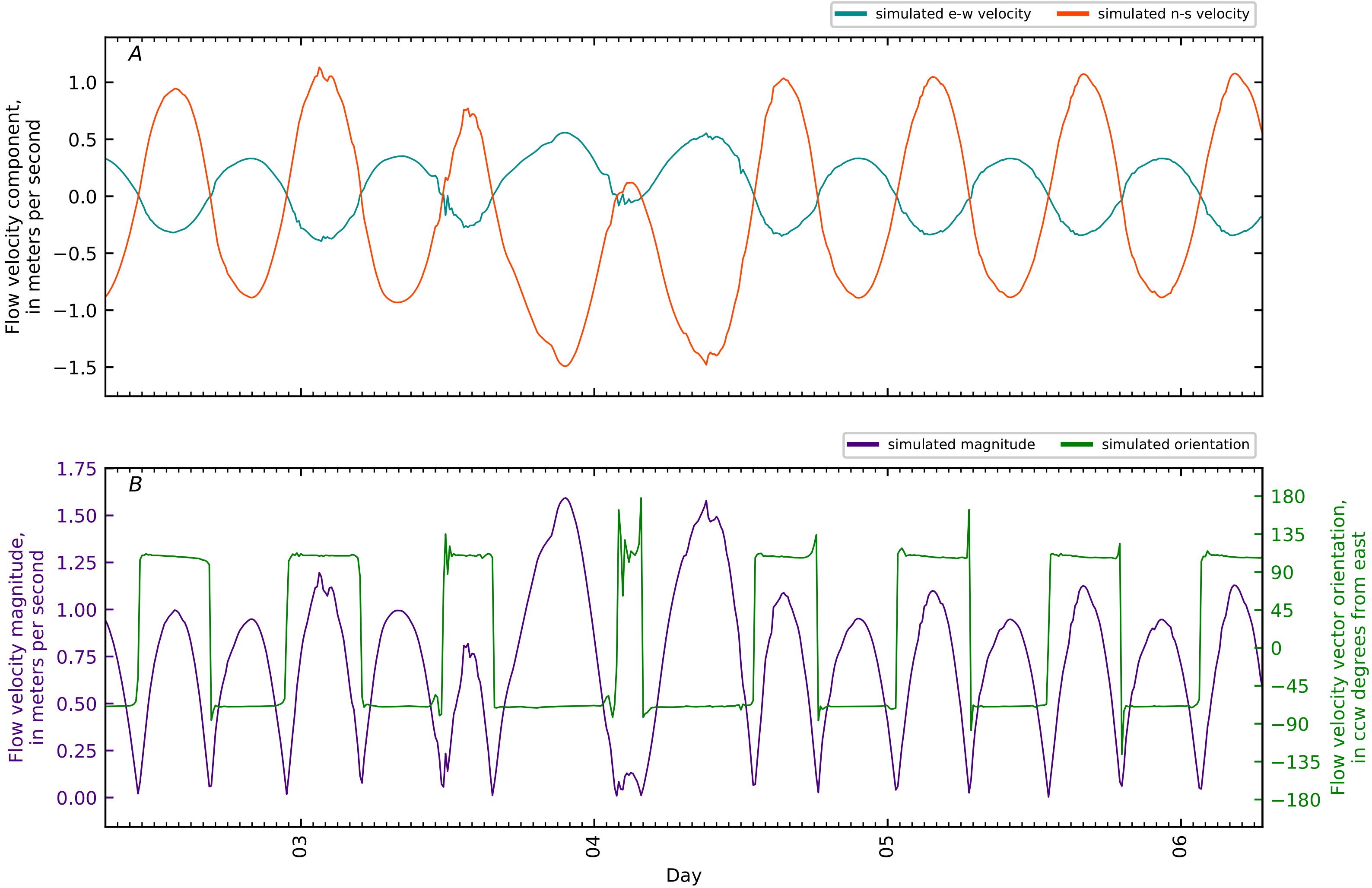

Figure B5-200. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 39, Penob Riv KM9. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

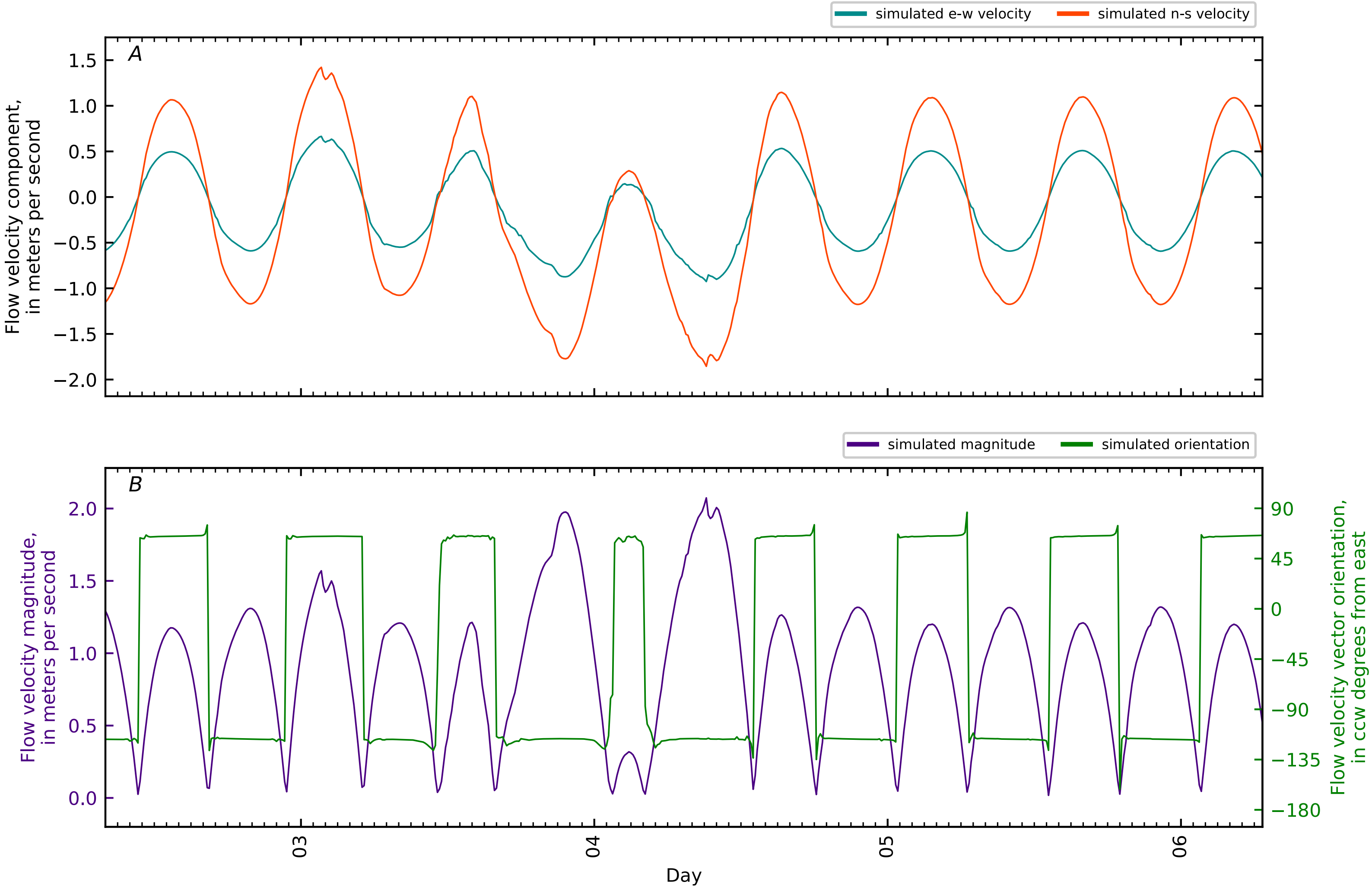

Figure B5-201. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 40, Penob Riv KM10. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

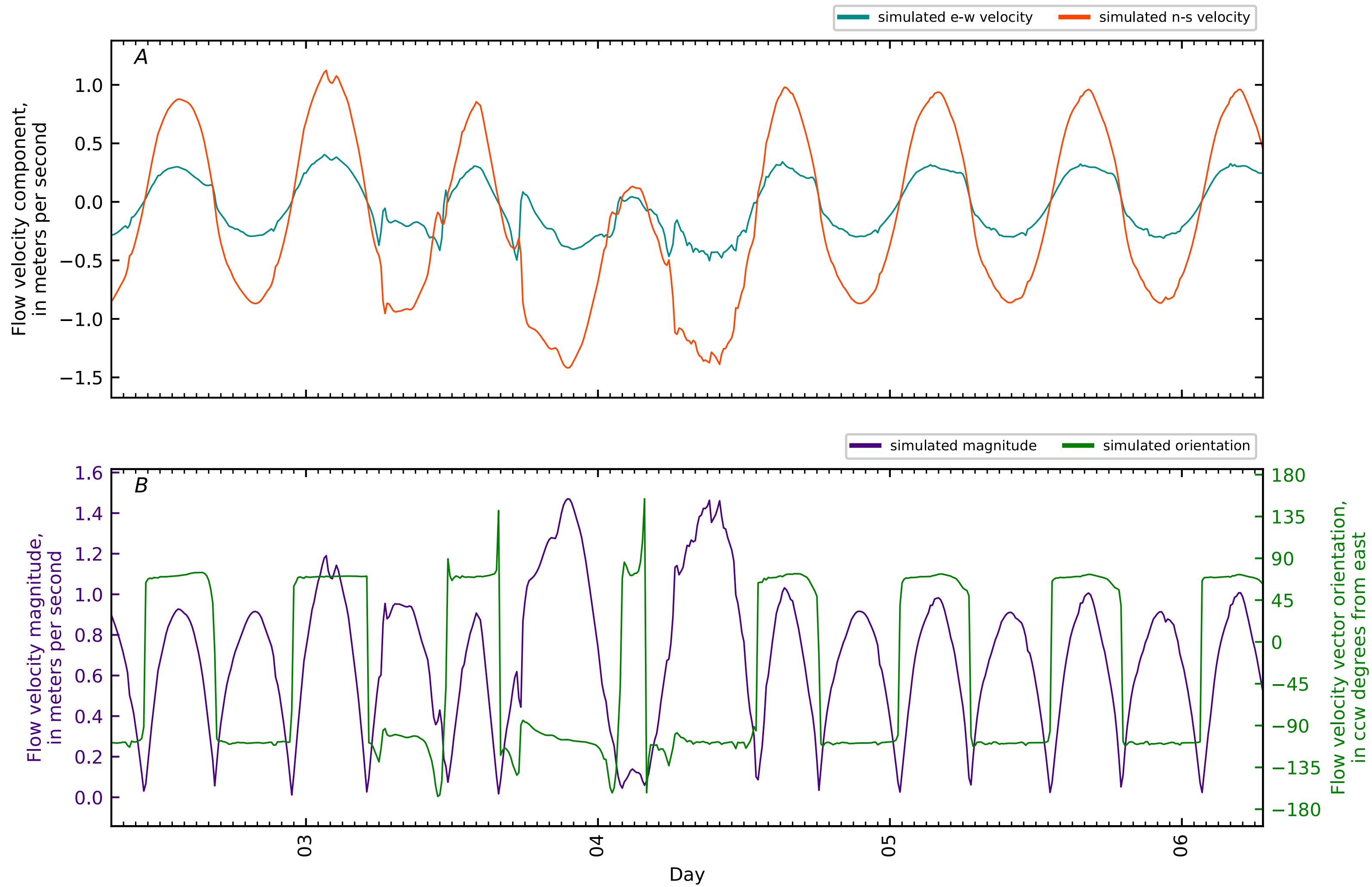

Figure B5-202. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 41, Penob Riv KM11. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

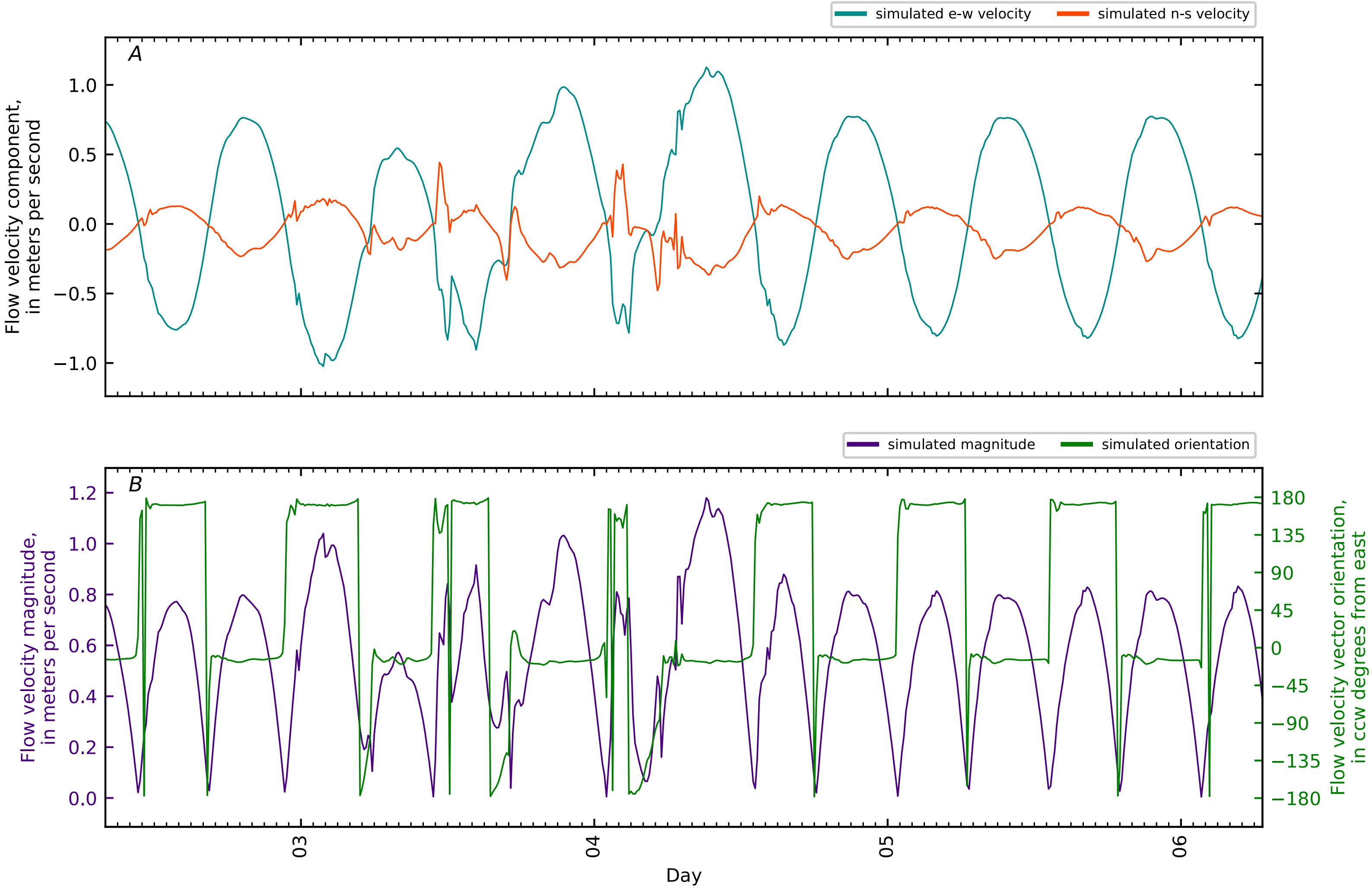

Figure B5-203. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 42, Penob Riv KM12. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

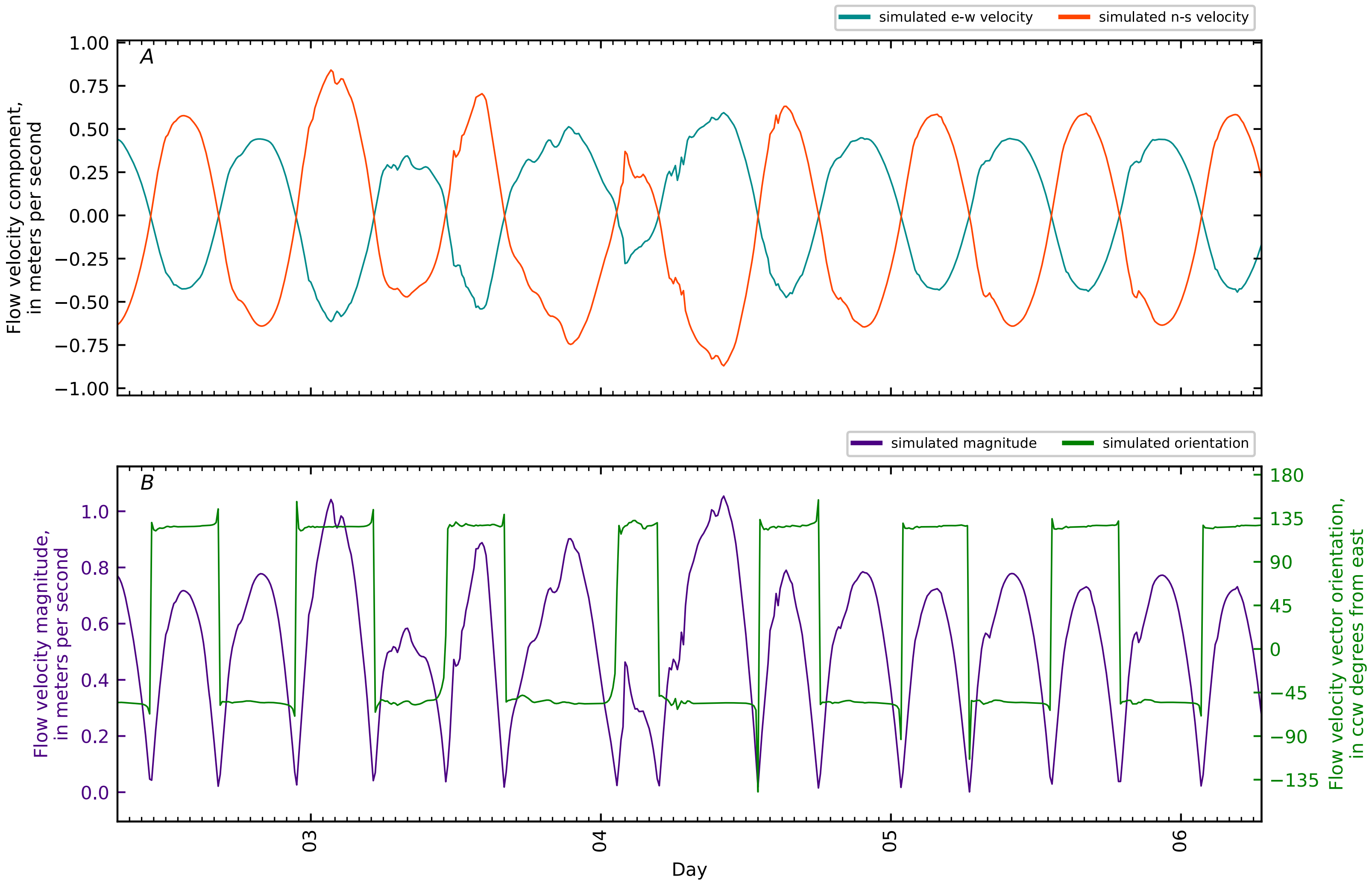

Figure B5-204. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 43, Penob Riv KM12.9 WHOI7 Bucksport 2011. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

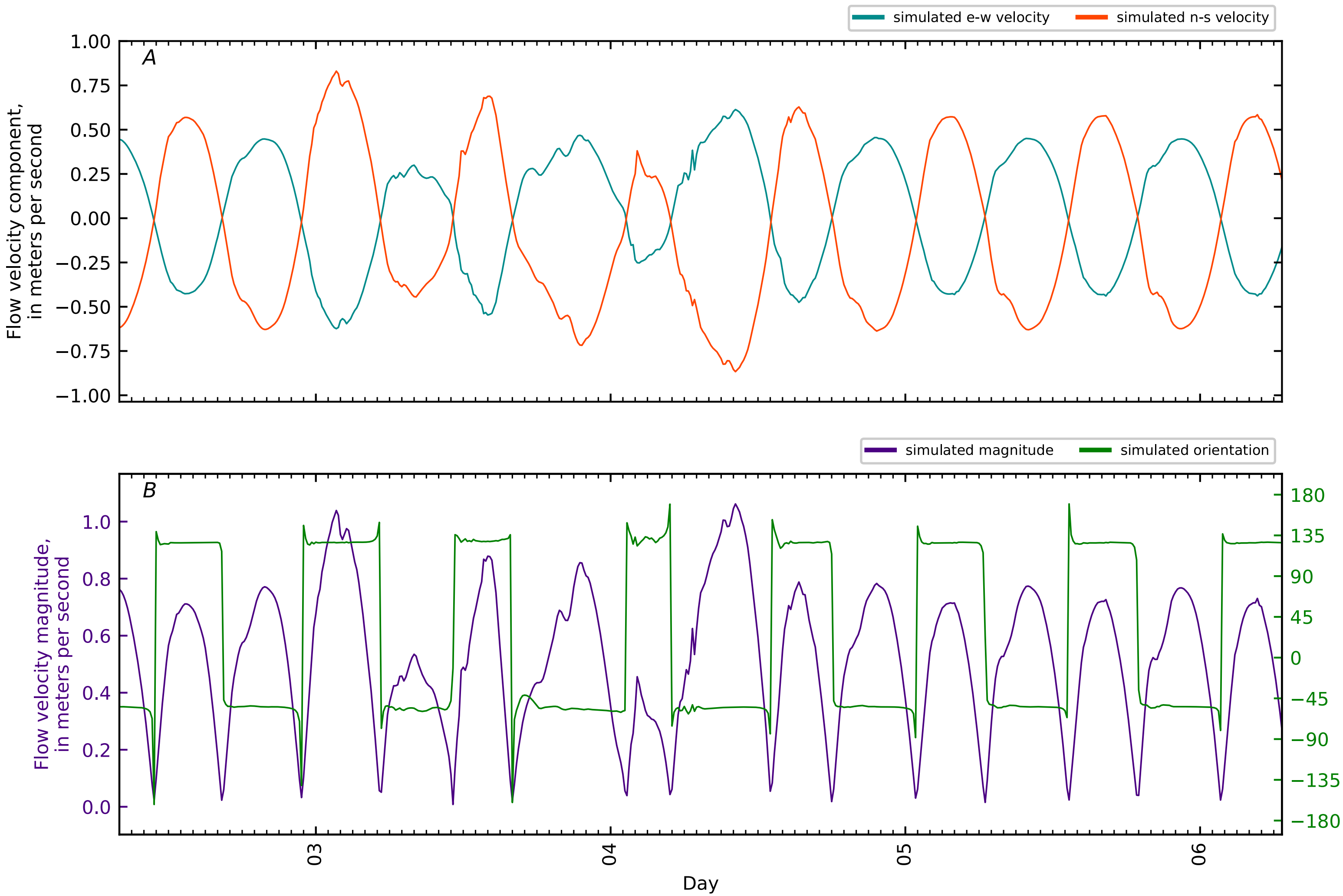

Figure B5-205. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 44, Penob Riv KM13. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

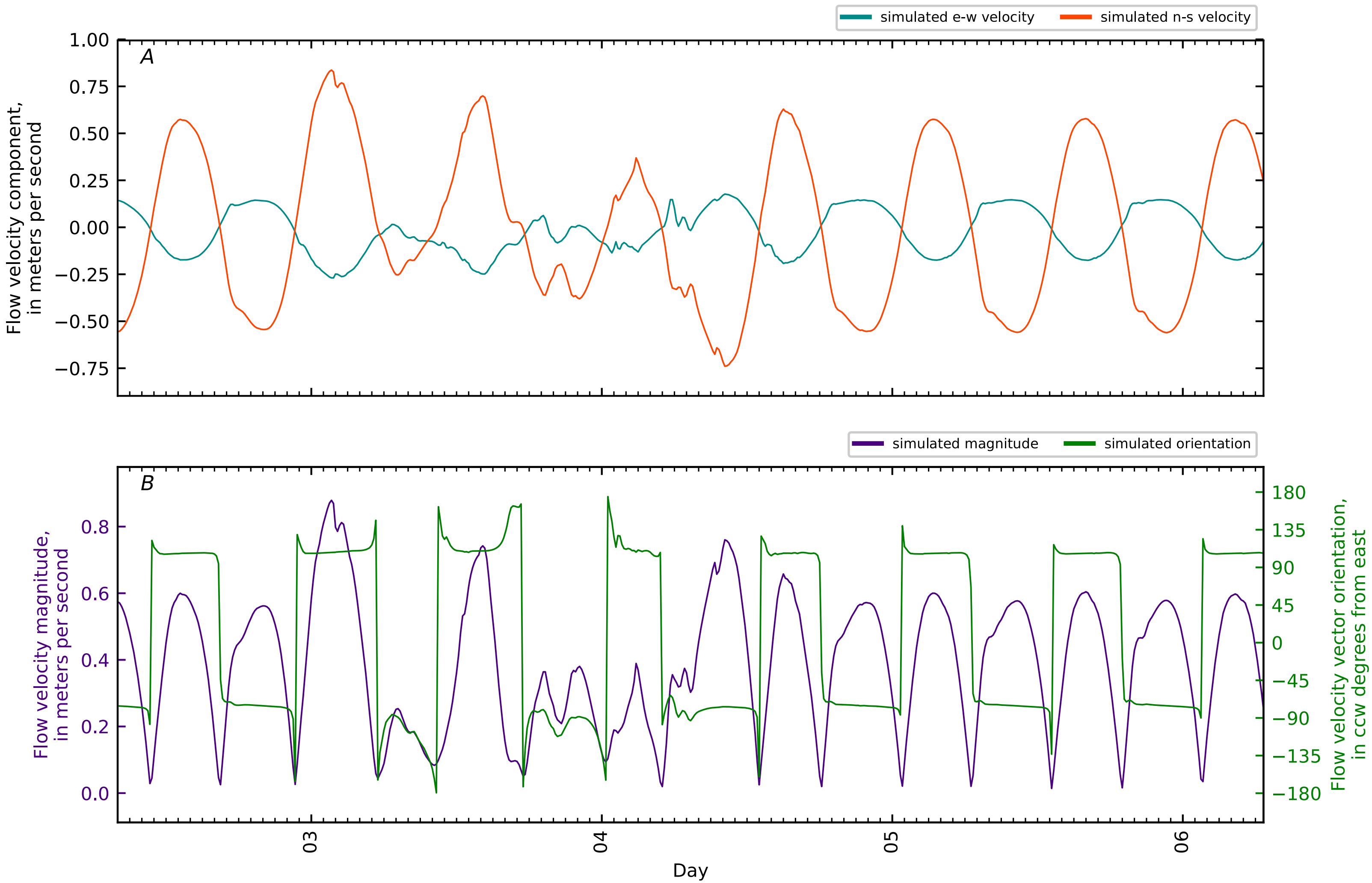

Figure B5-206. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 45, Penob Riv KM14. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

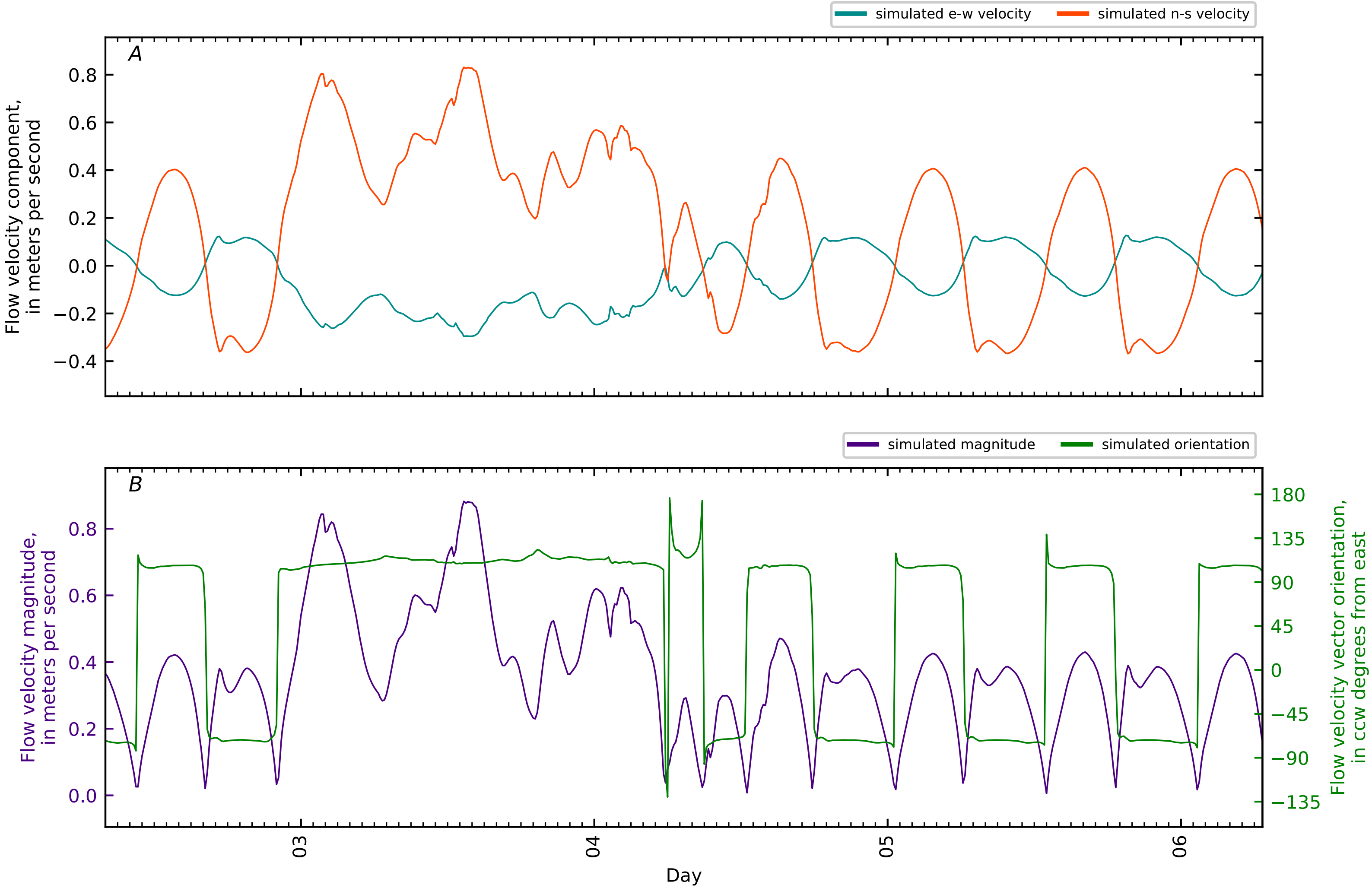

Figure B5-207. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 46, Penob Riv KM14.27 ERDC15 BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

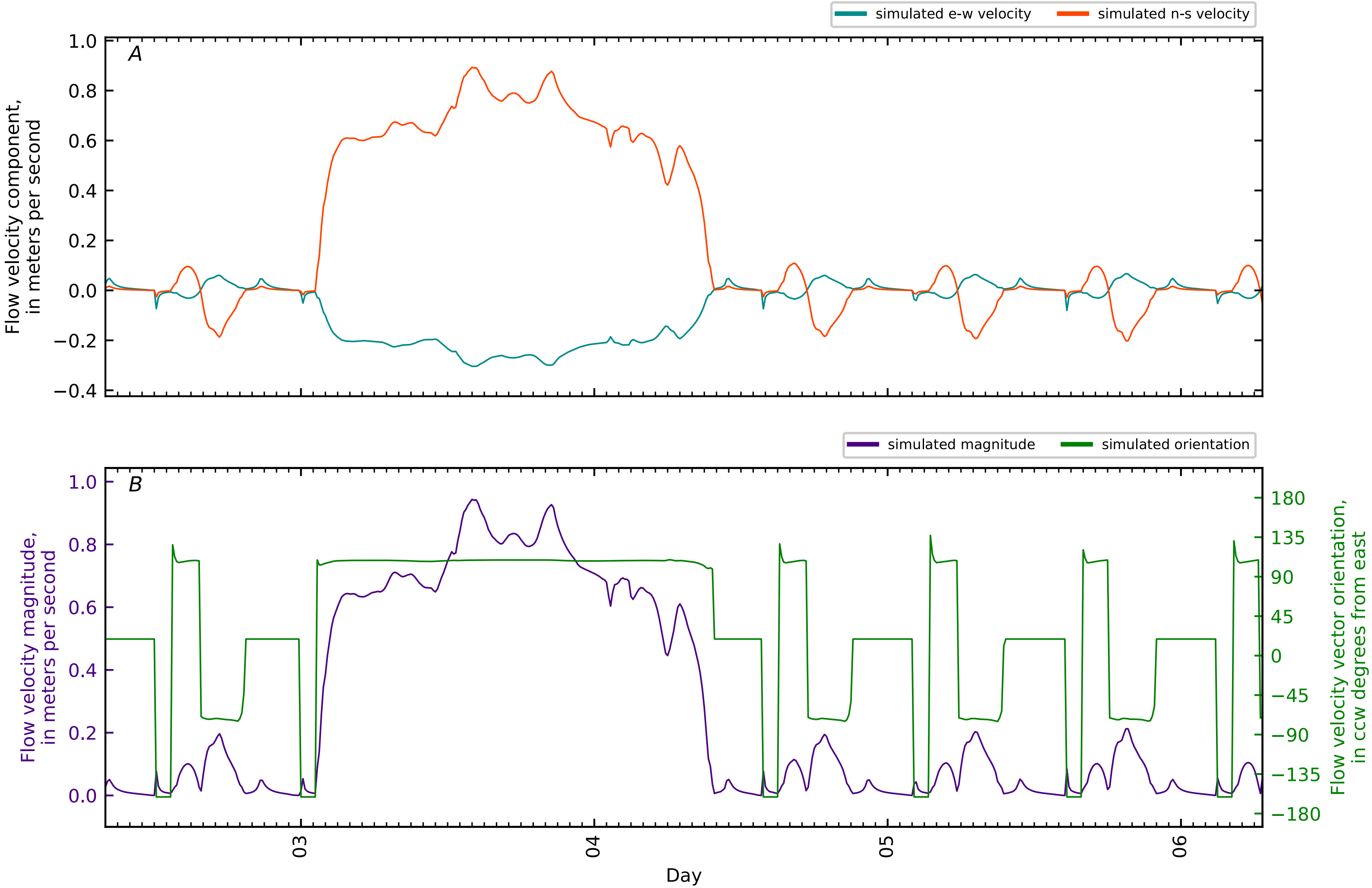

Figure B5-208. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 47, Penob Riv KM14.29 ERDC16B BU-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

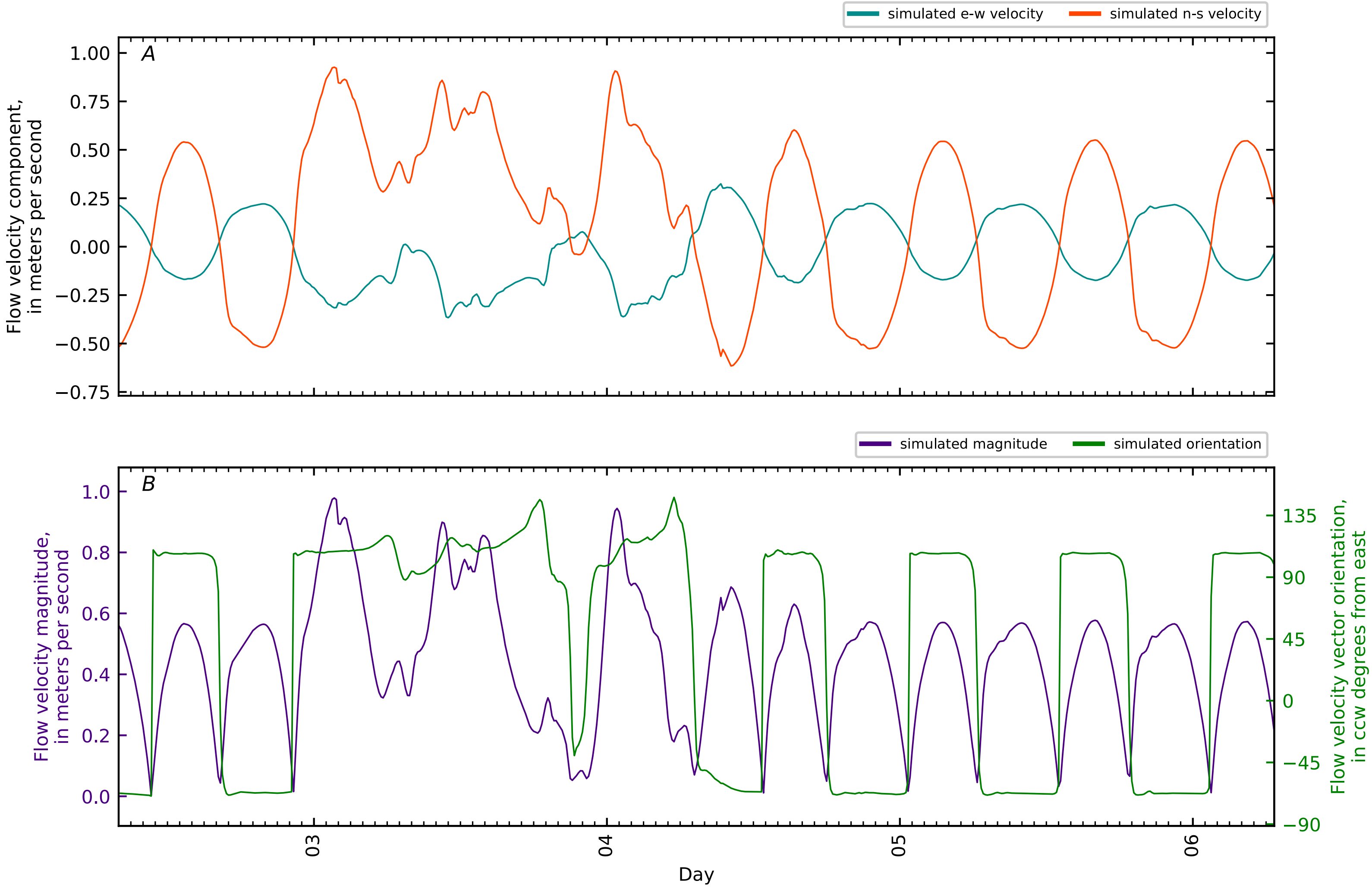

Figure B5-209. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 48, Penob Riv KM15. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

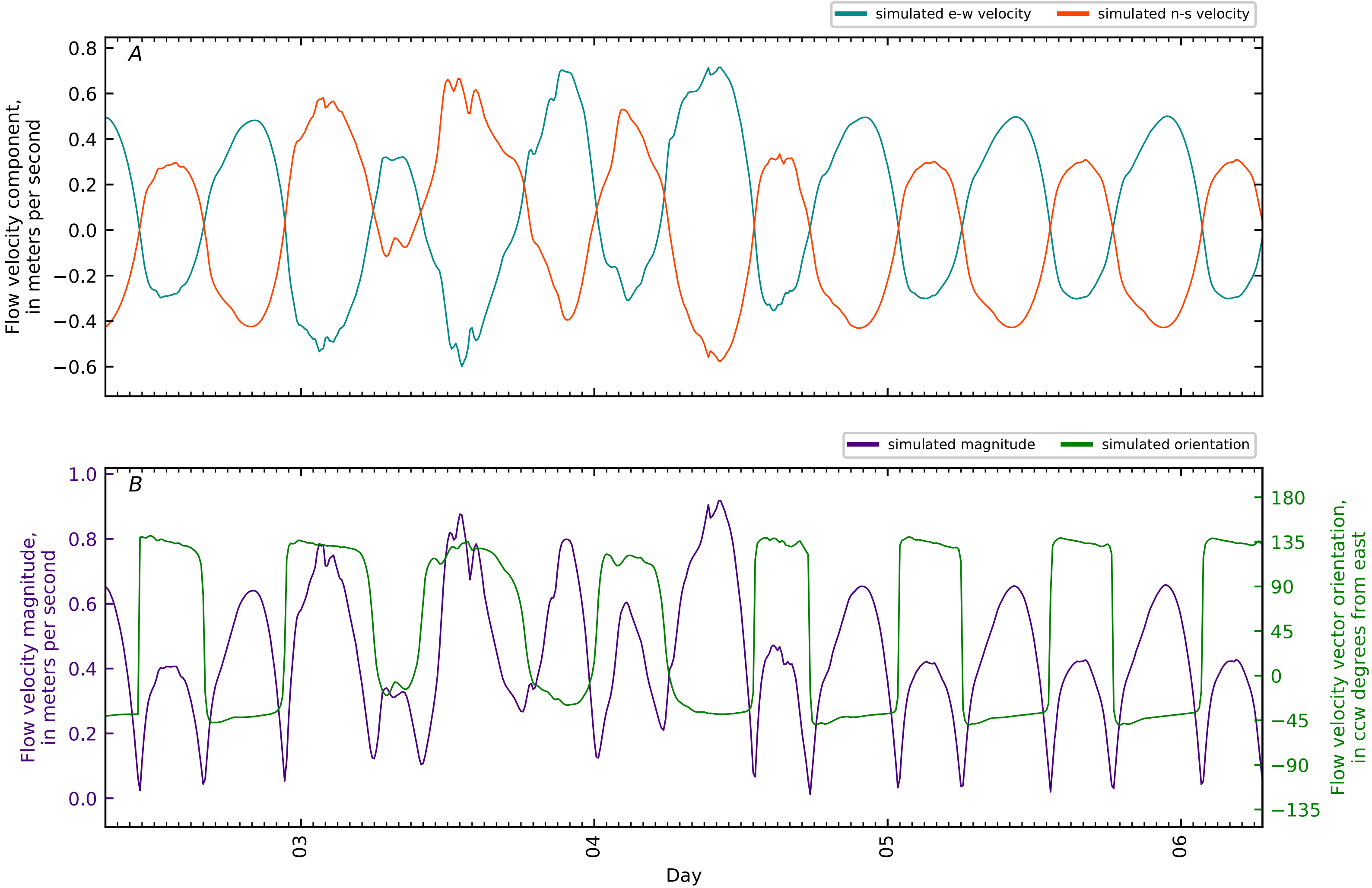

Figure B5-210. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 49, Penob Riv KM16. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

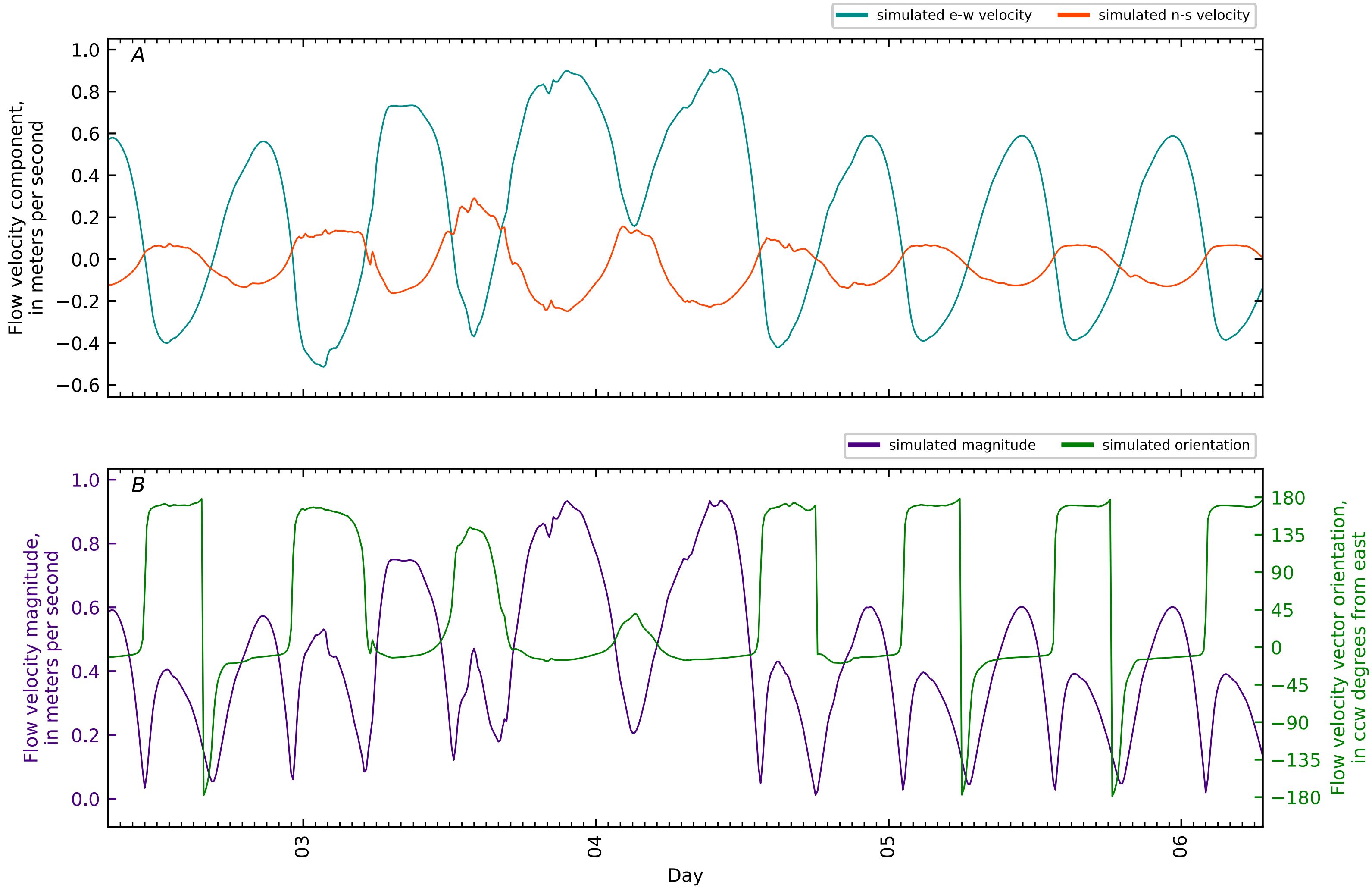

Figure B5-211. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 50, Penob Riv KM17. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

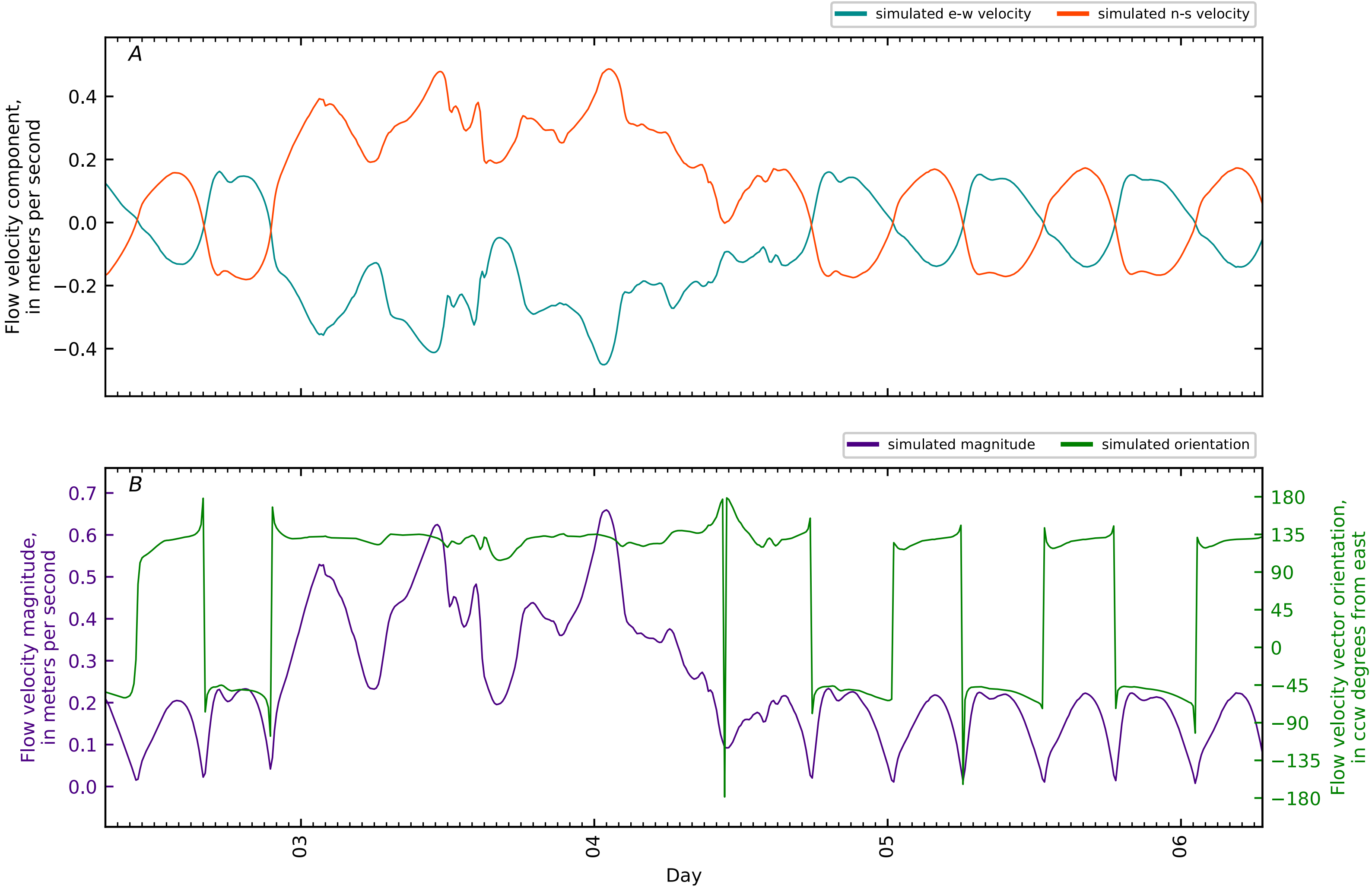

Figure B5-212. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 51, Penob Riv KM17.2 ERDC17B FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

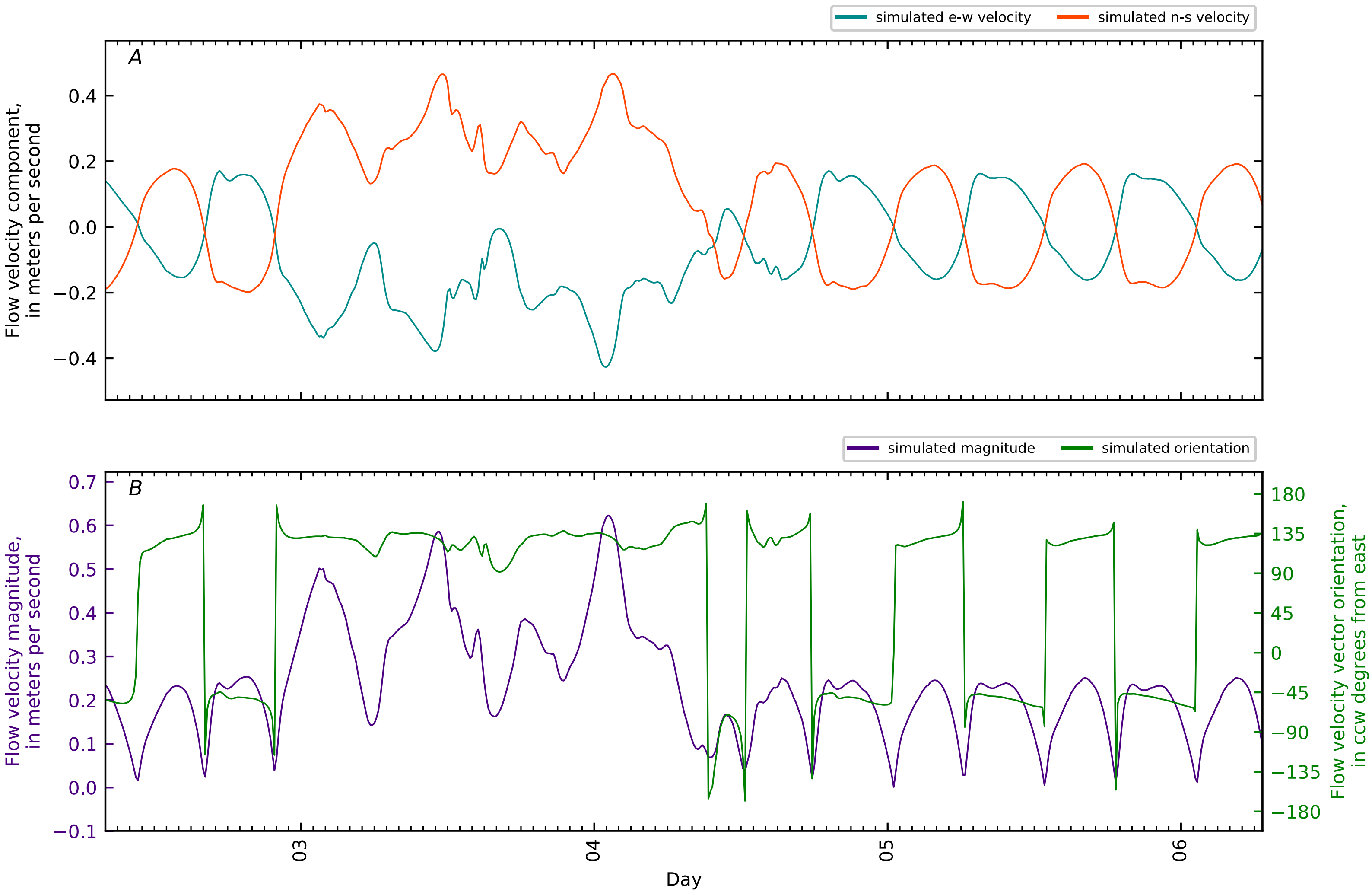

Figure B5-213. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 52, Penob Riv KM17.21 ERDC13 FF-MU7-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

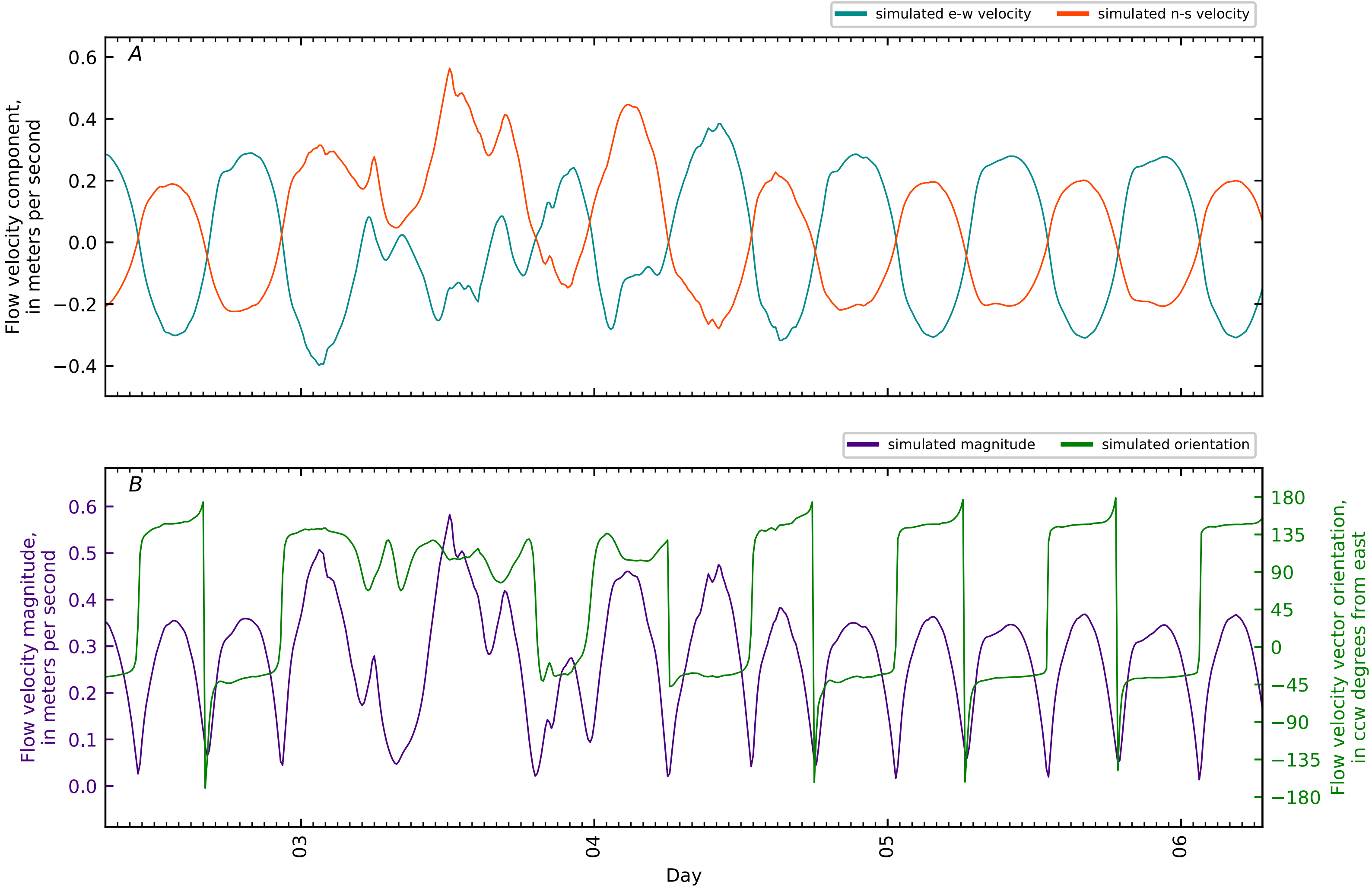

Figure B5-214. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 53, Penob Riv KM17.2 WHOI2 Frankfort Flats 2. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

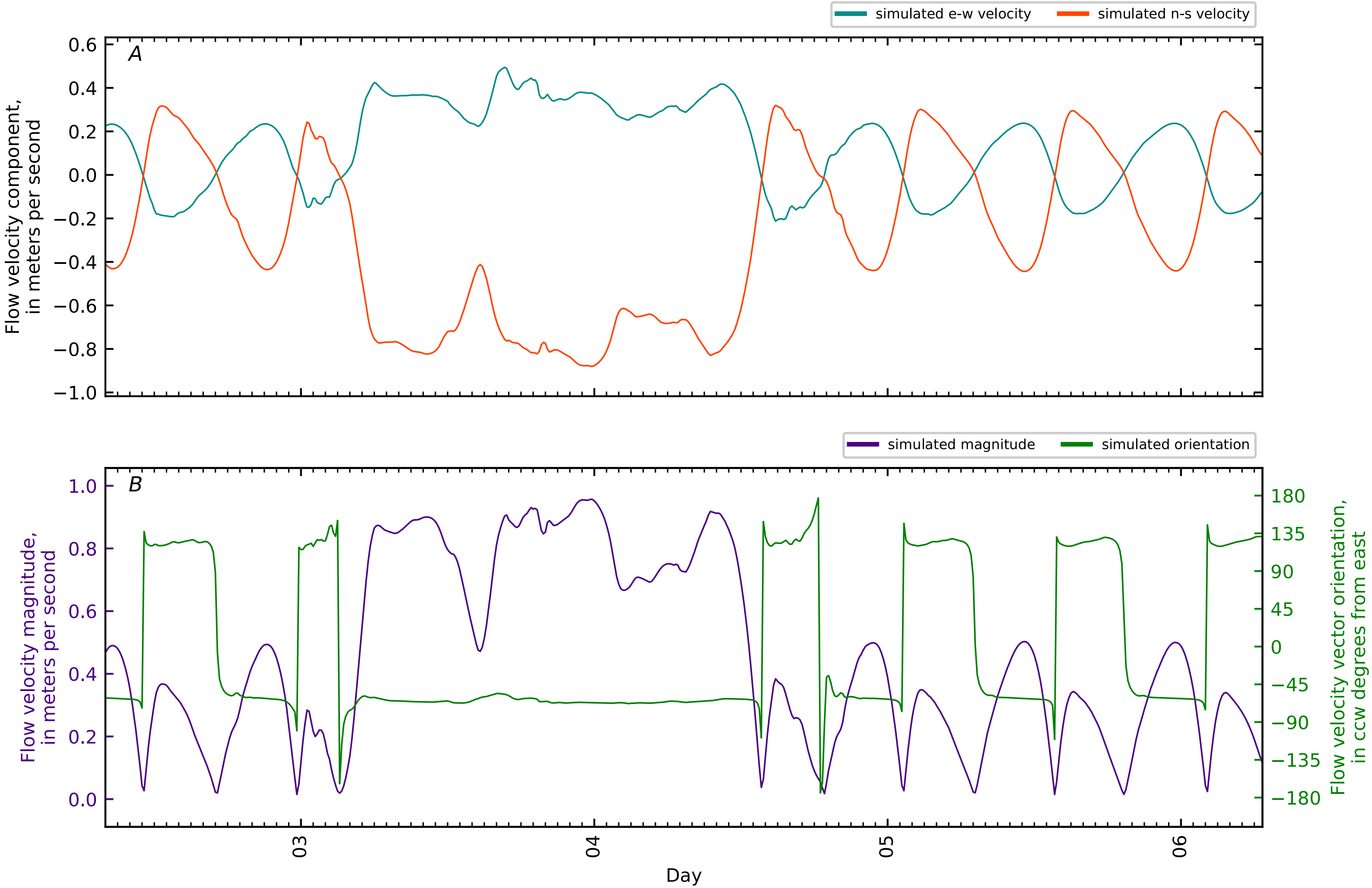

Figure B5-215. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 54, Penob Riv KM18. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

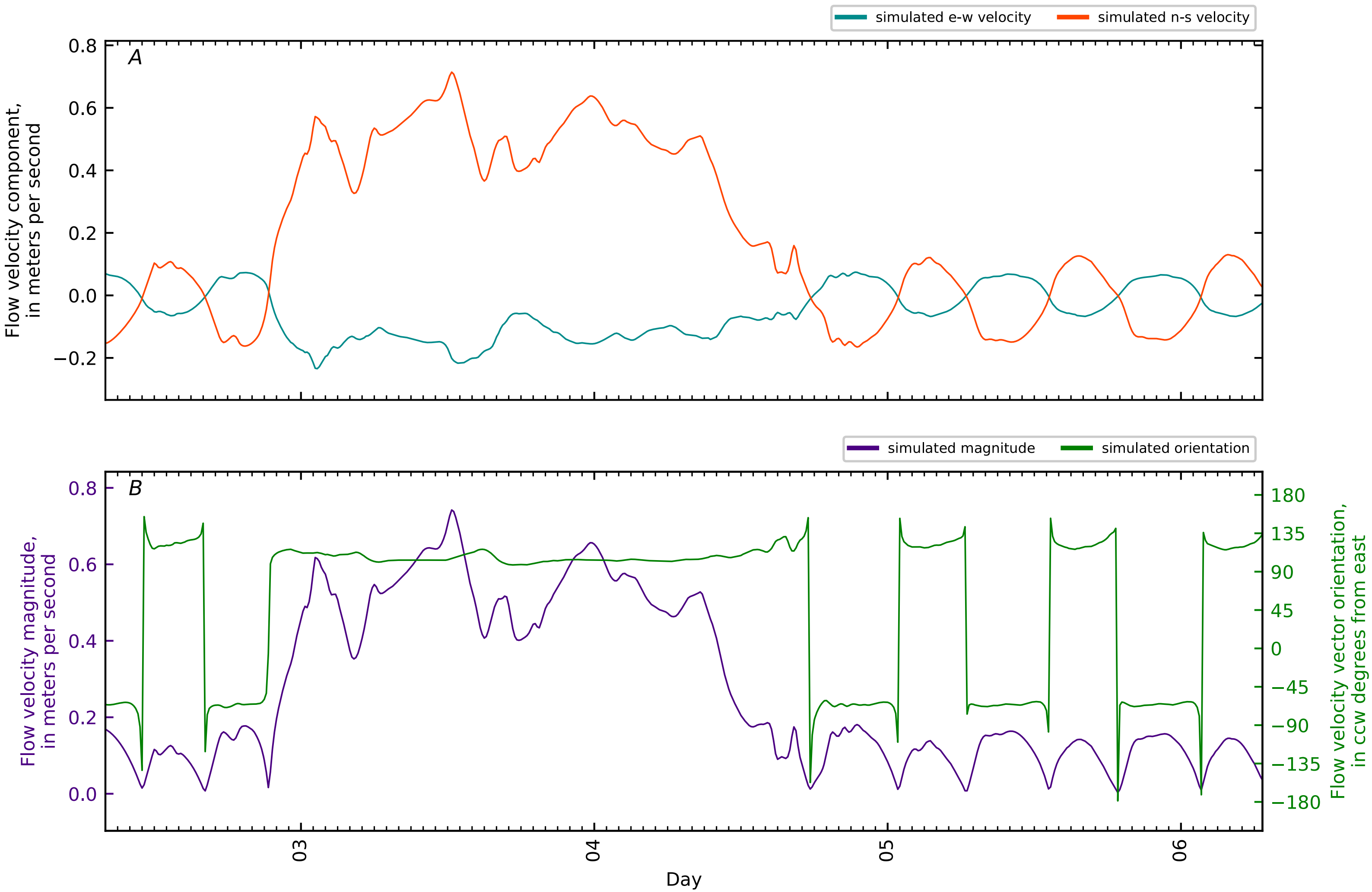

Figure B5-216. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 55, Penob Riv KM18.01 GS CTD1-01. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

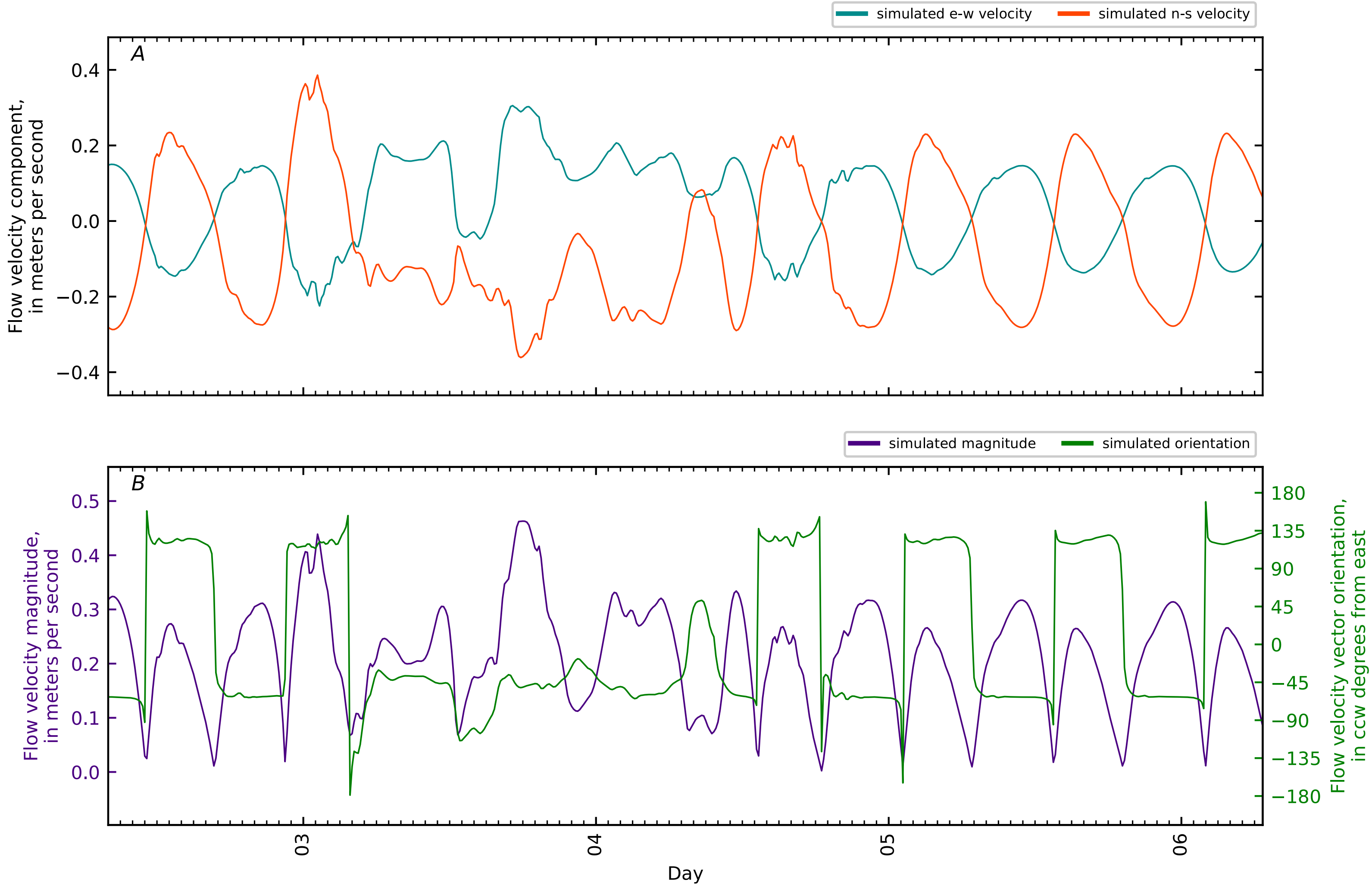

Figure B5-217. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 56, Penob Riv KM18.01 GS CTD1-02. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

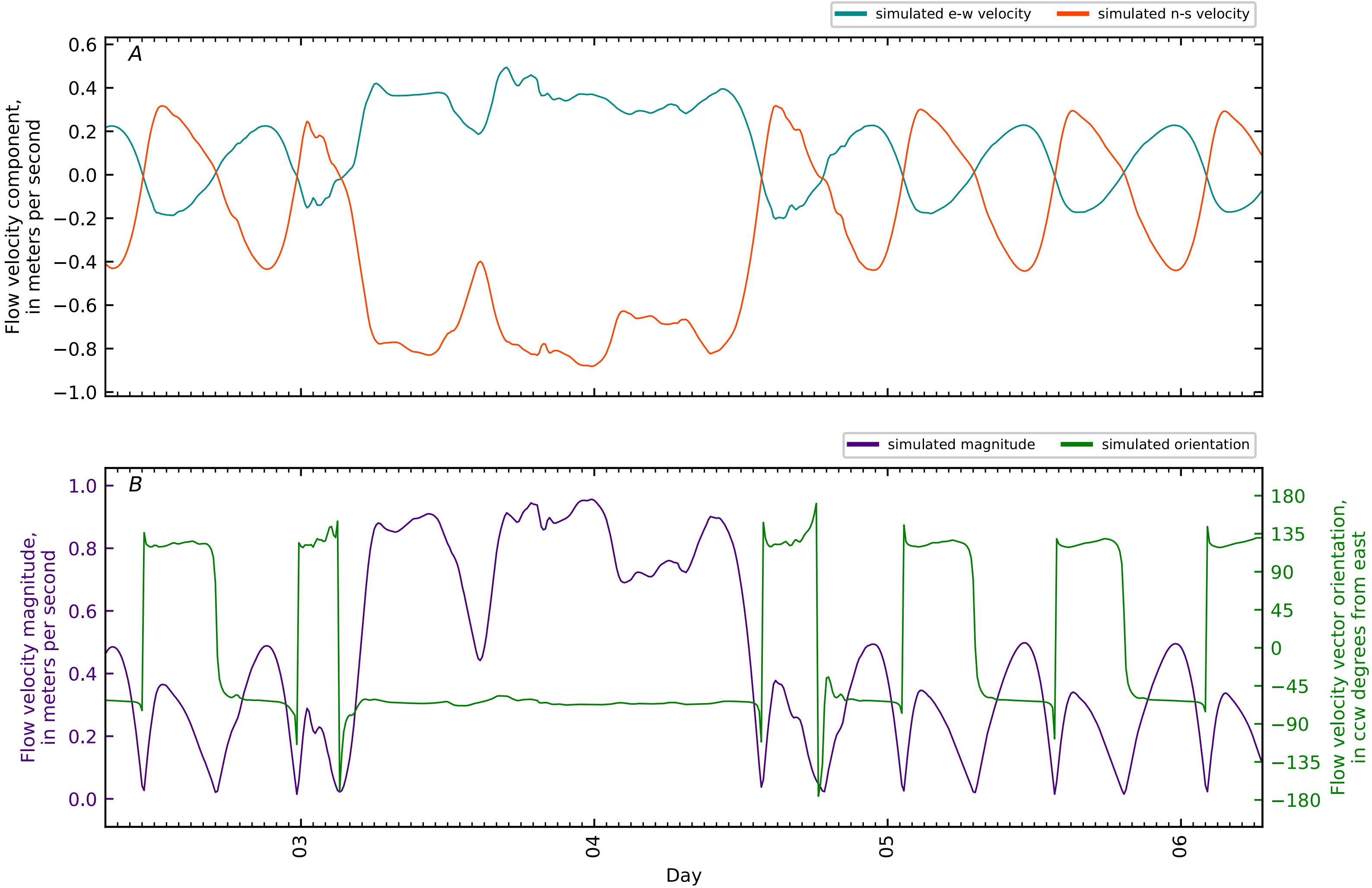

Figure B5-218. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 57, Penob Riv KM18.01 GS CTD1-03. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

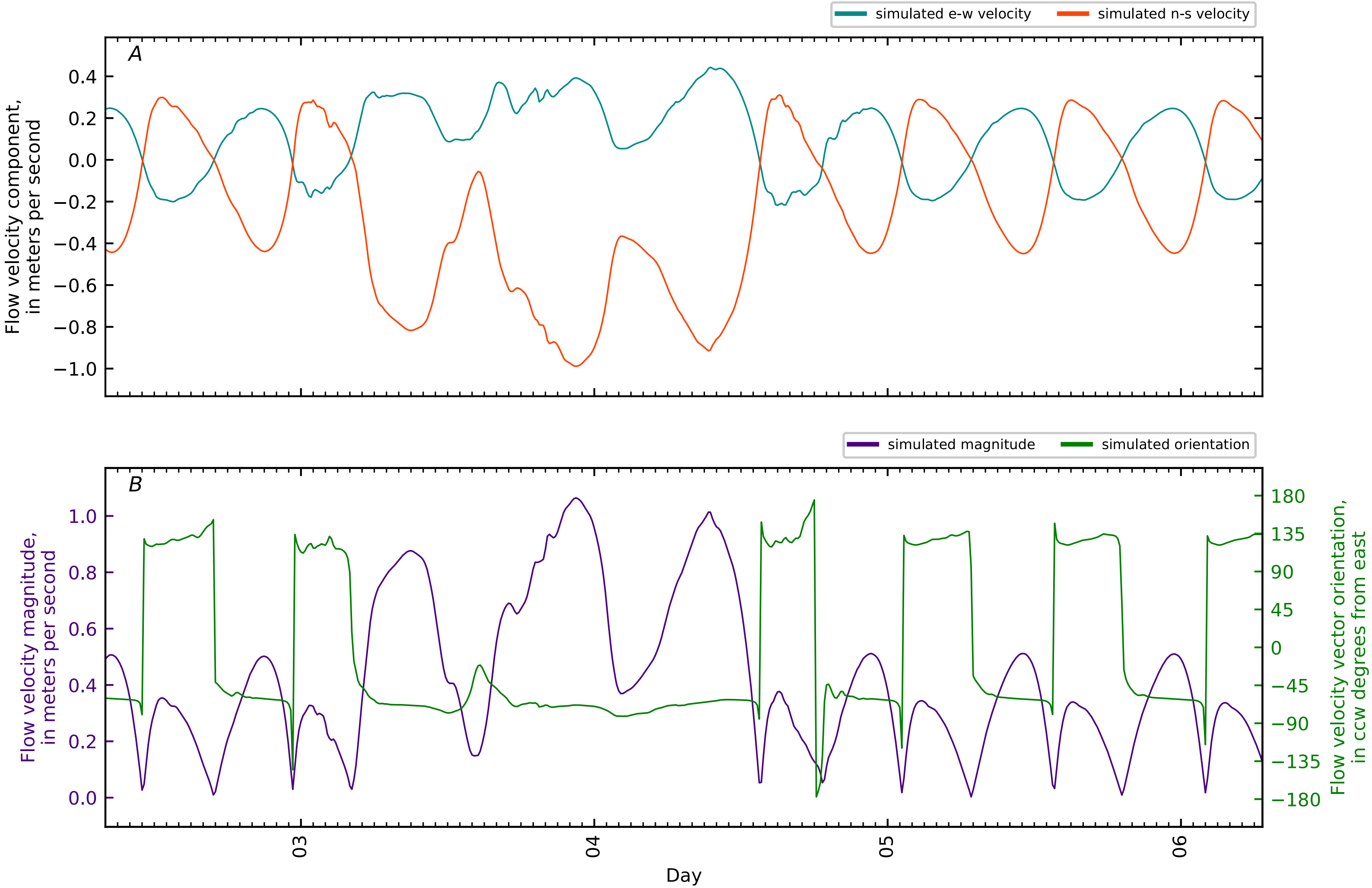

Figure B5-219. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 58, Penob Riv KM18.01 GS CTD1-04. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

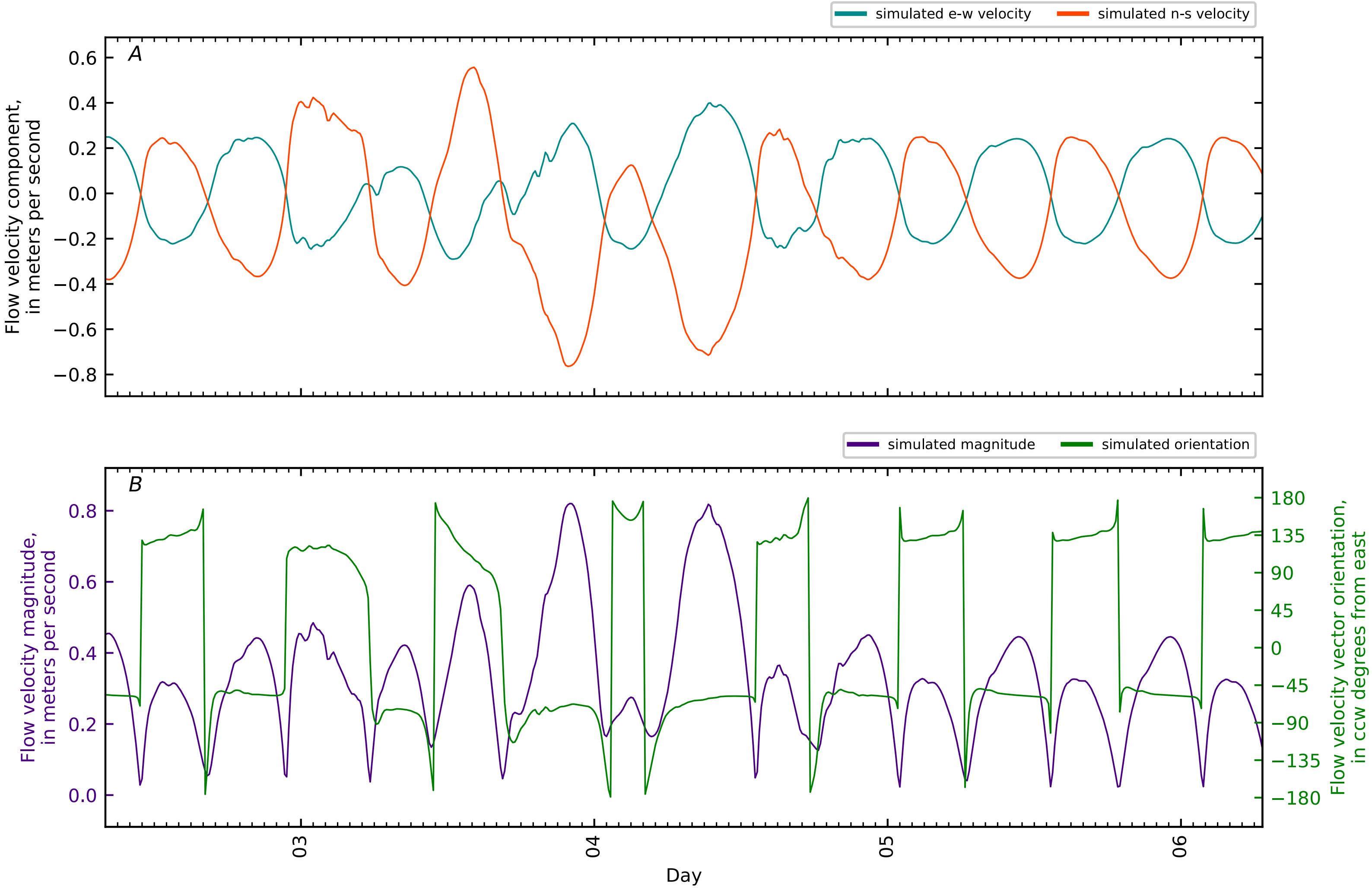

Figure B5-220. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 59, Penob Riv KM18.01 GS CTD1-05. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

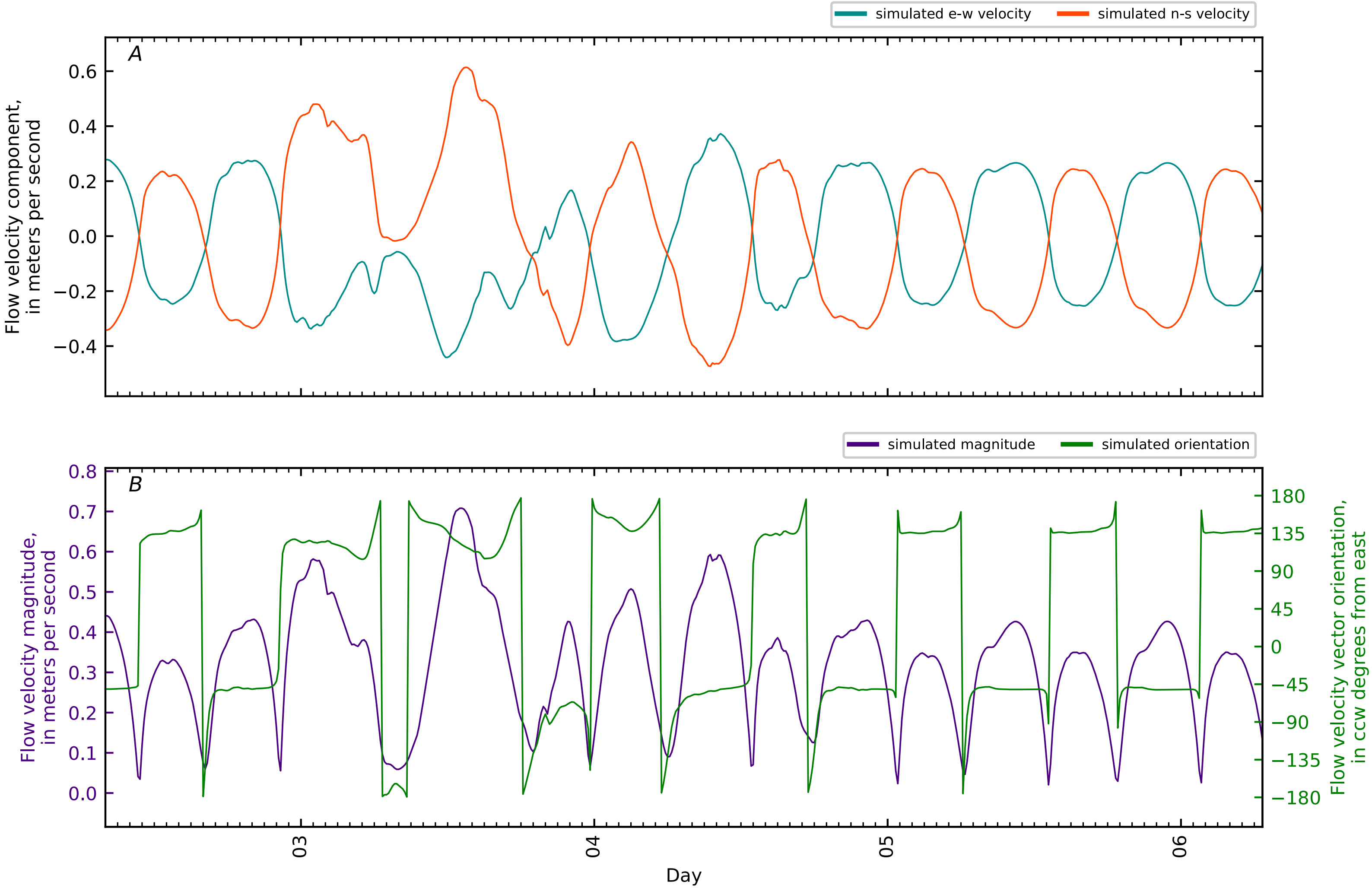

Figure B5-221. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 60, Penob Riv KM18.01 GS CTD1-06. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

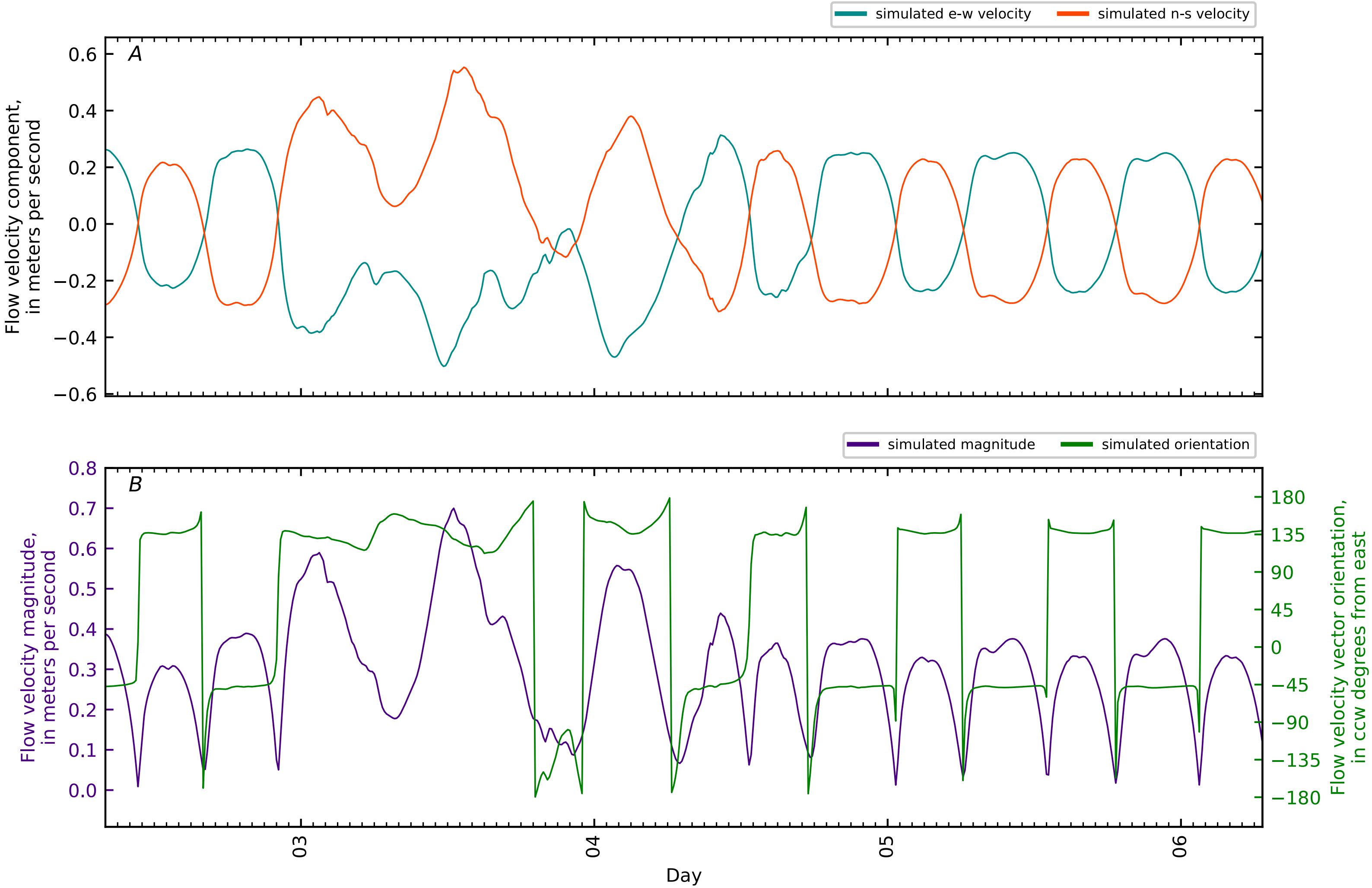

Figure B5-222. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 61, Penob Riv KM18.01 GS CTD1-07. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

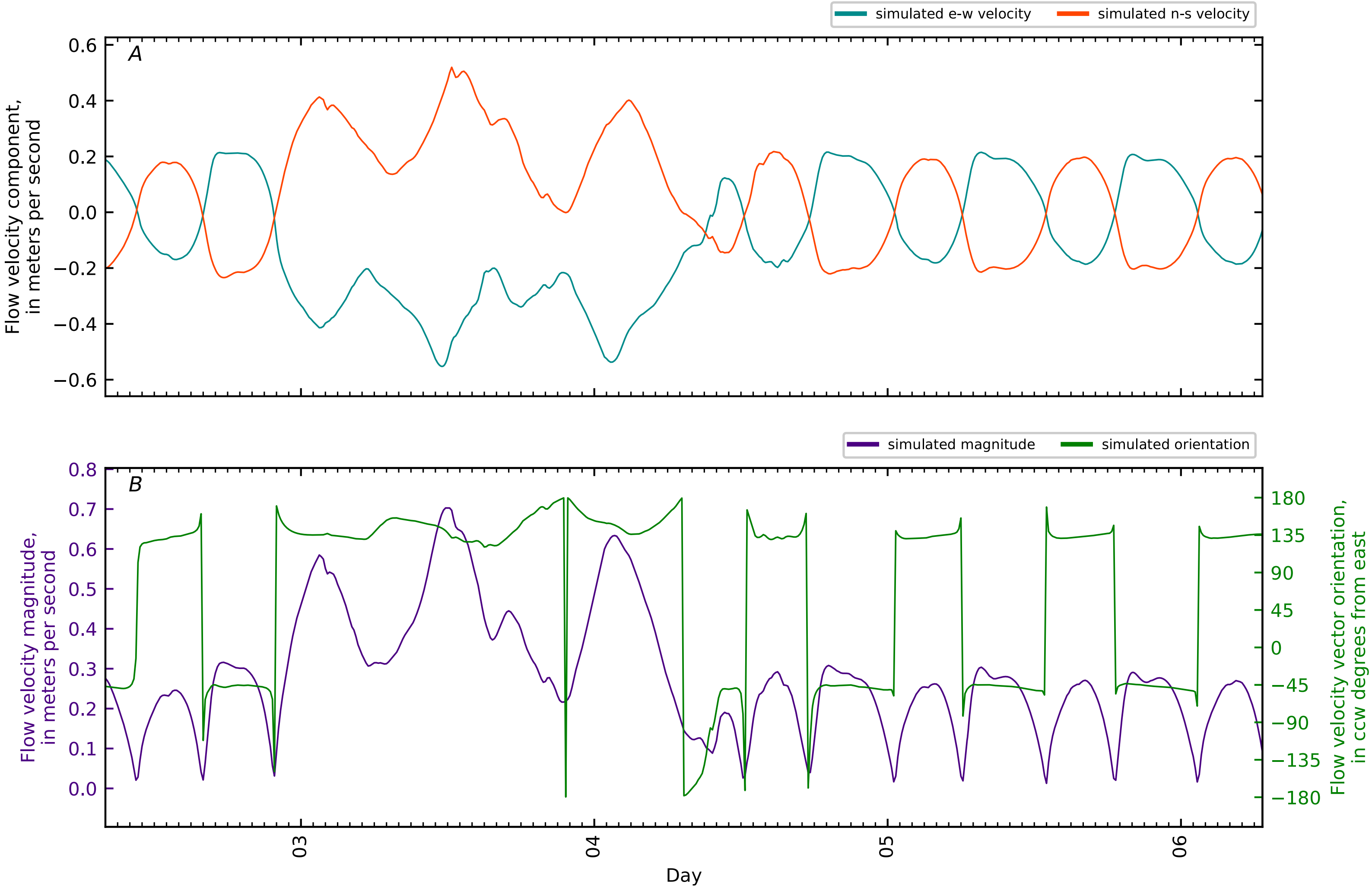

Figure B5-223. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 62, Penob Riv KM18.01 GS CTD1-08. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

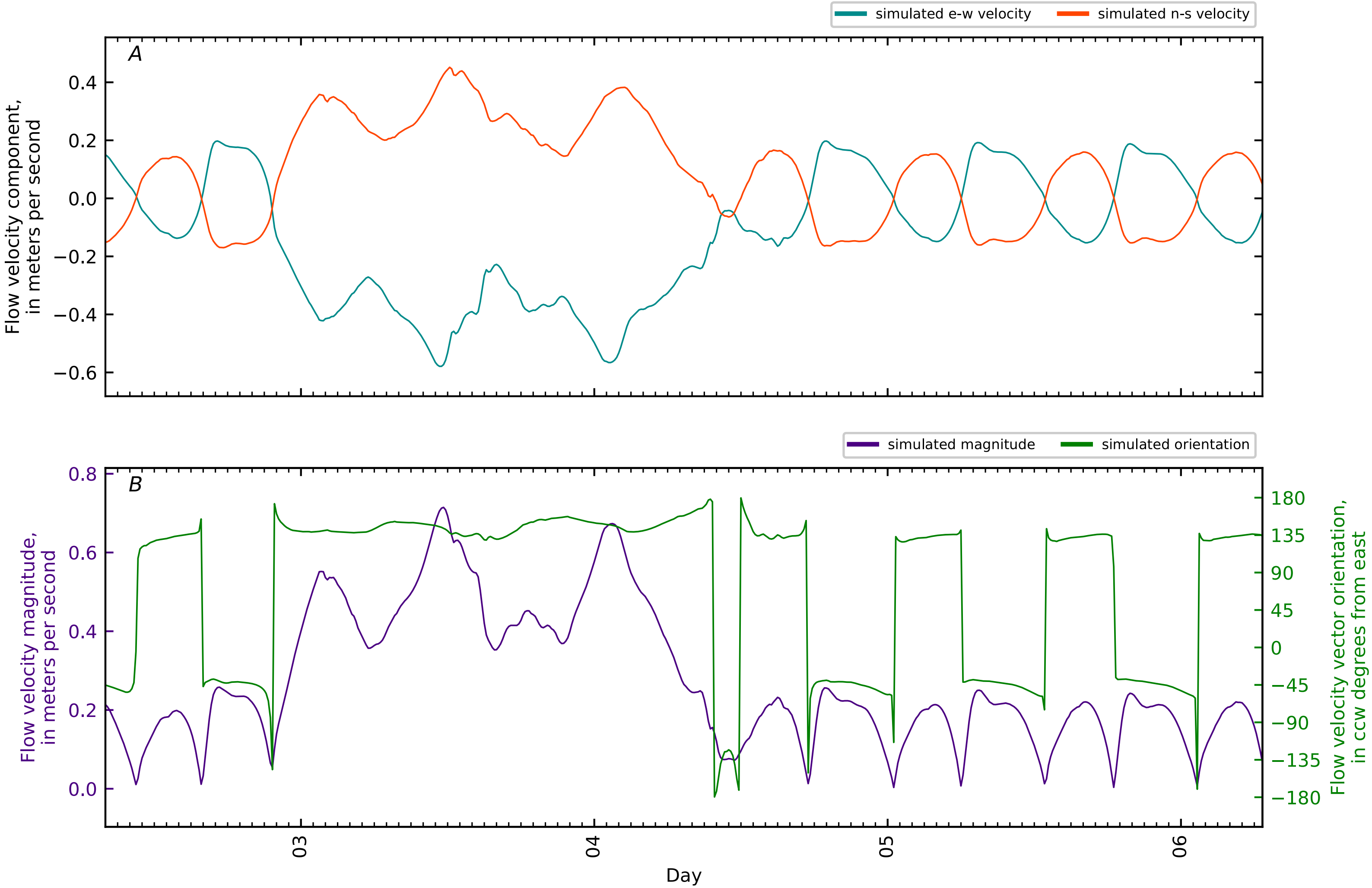

Figure B5-224. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 63, Penob Riv KM18.01 GS CTD1-09. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

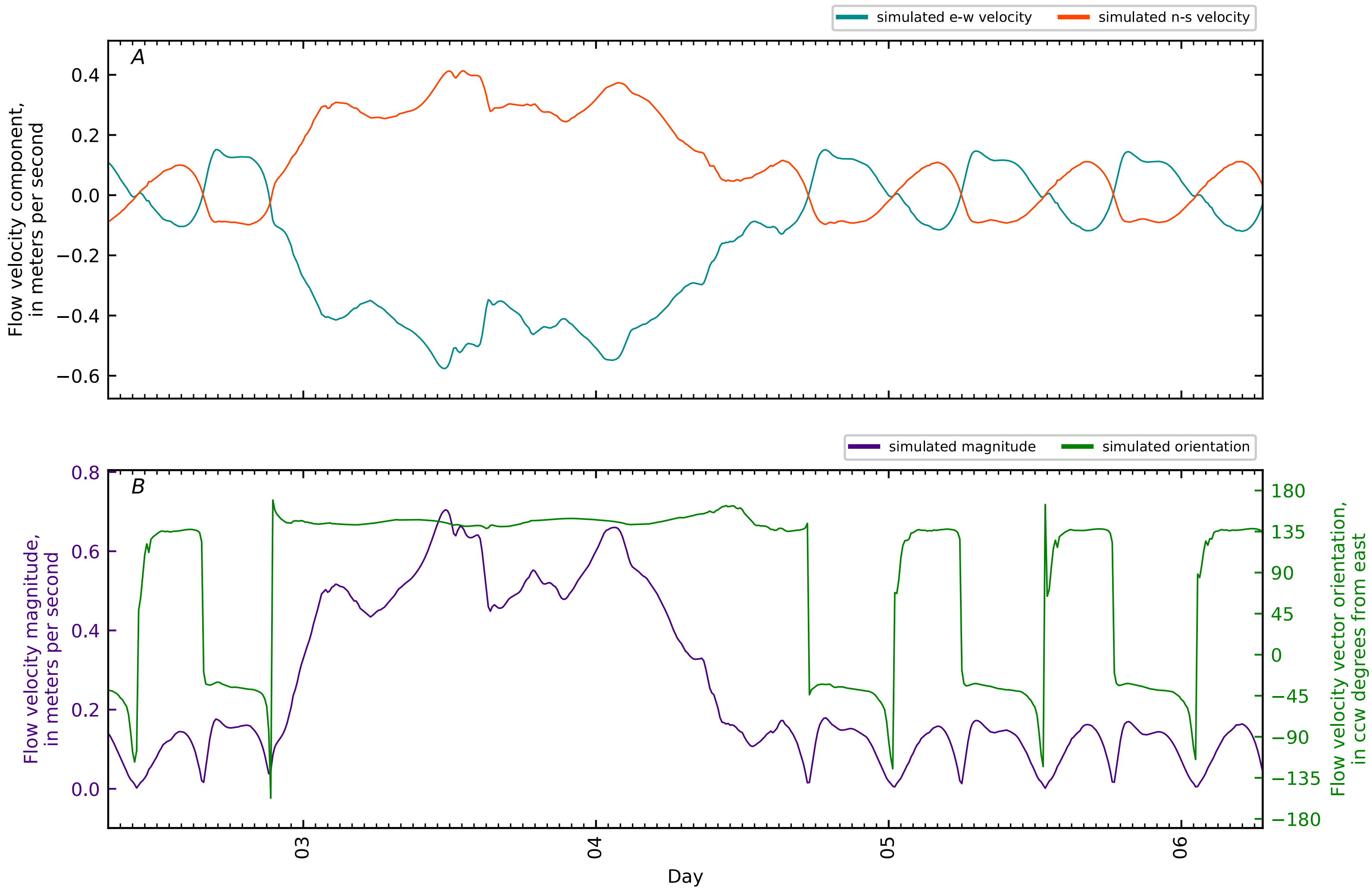

Figure B5-225. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 64, Penob Riv KM18.01 GS CTD1-10. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

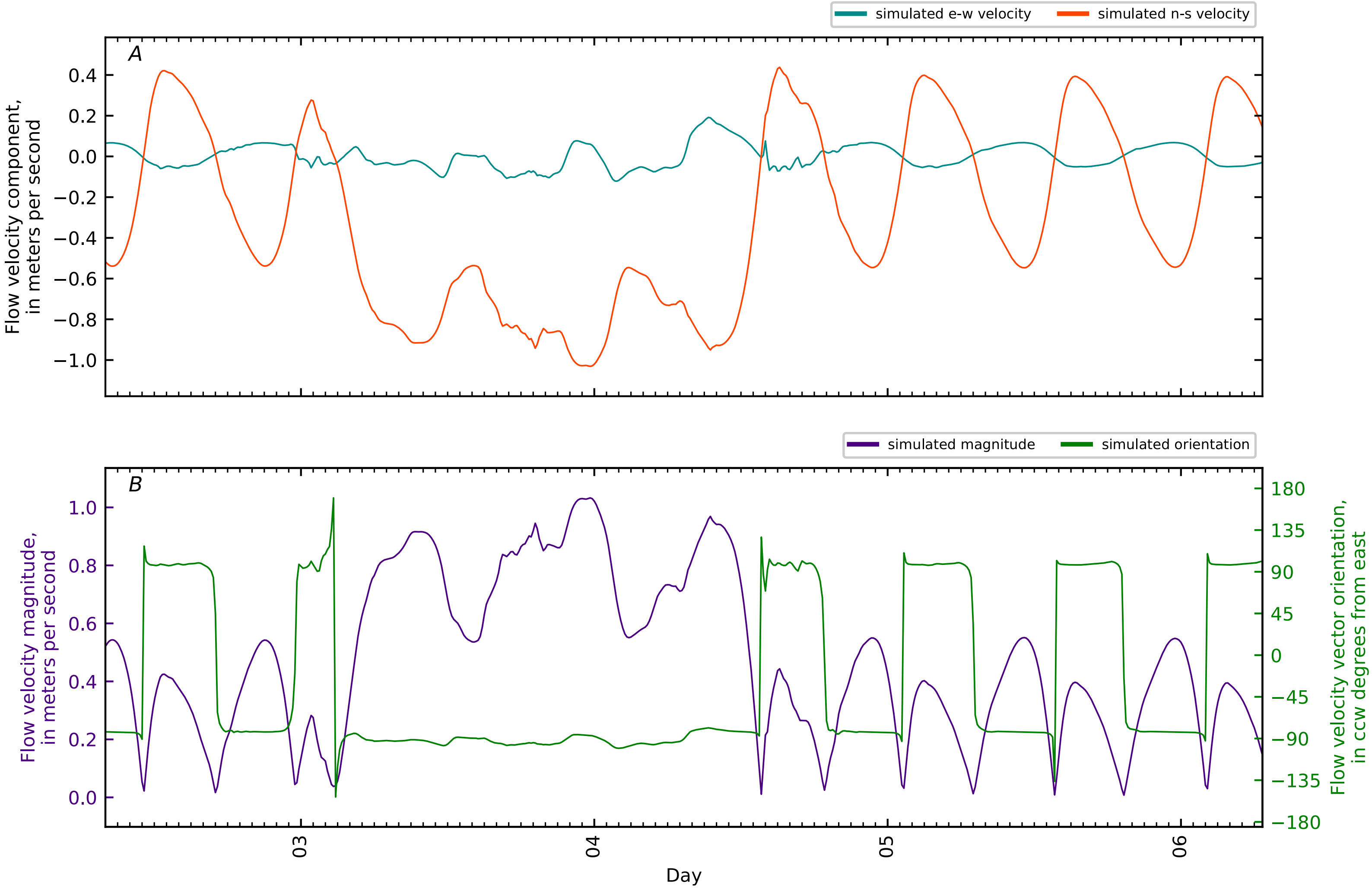

Figure B5-226. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 65, Penob Riv KM18.5 WHOI8 Frankfort Channel. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

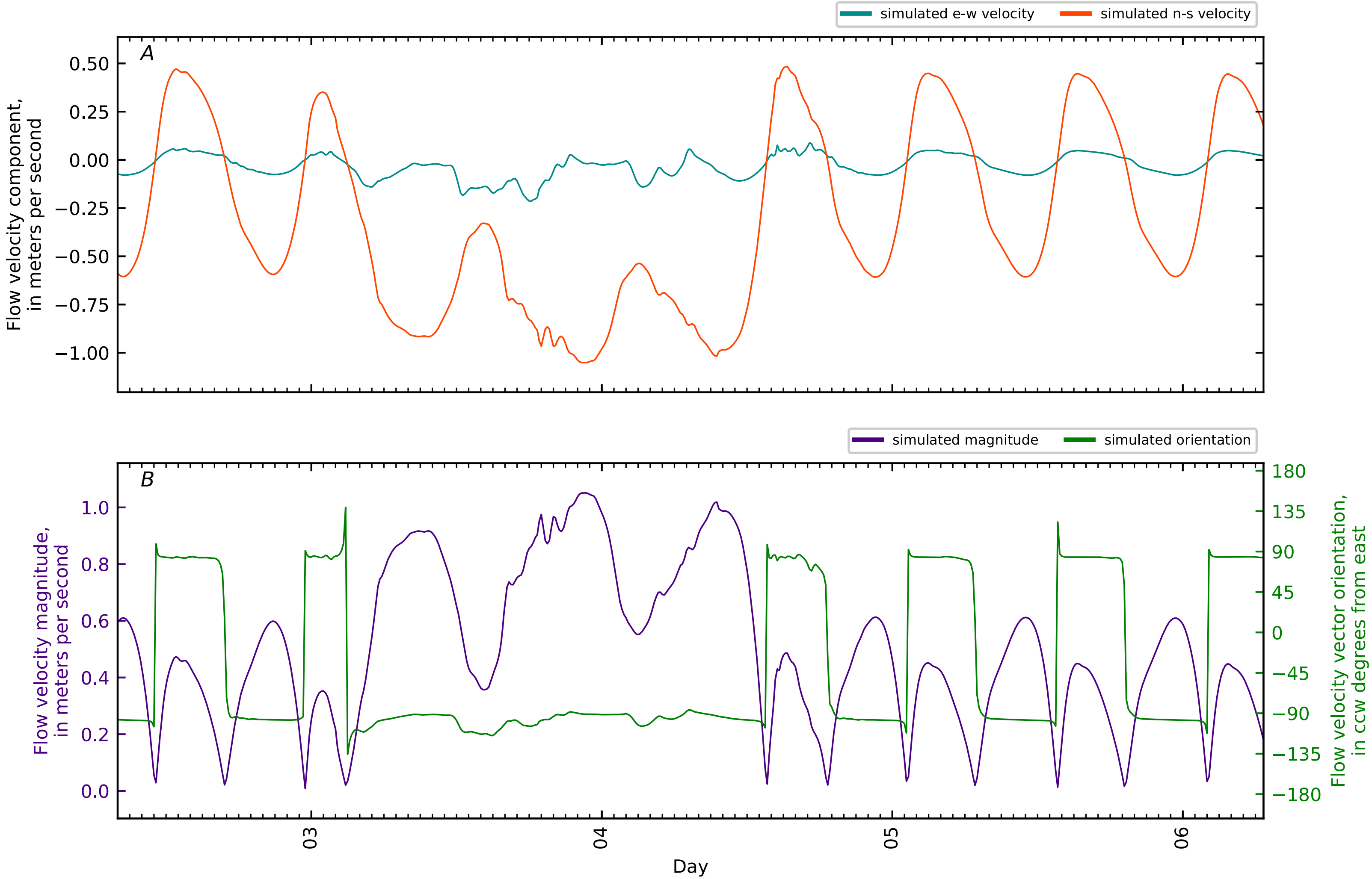

Figure B5-227. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 66, Penob Riv KM19. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

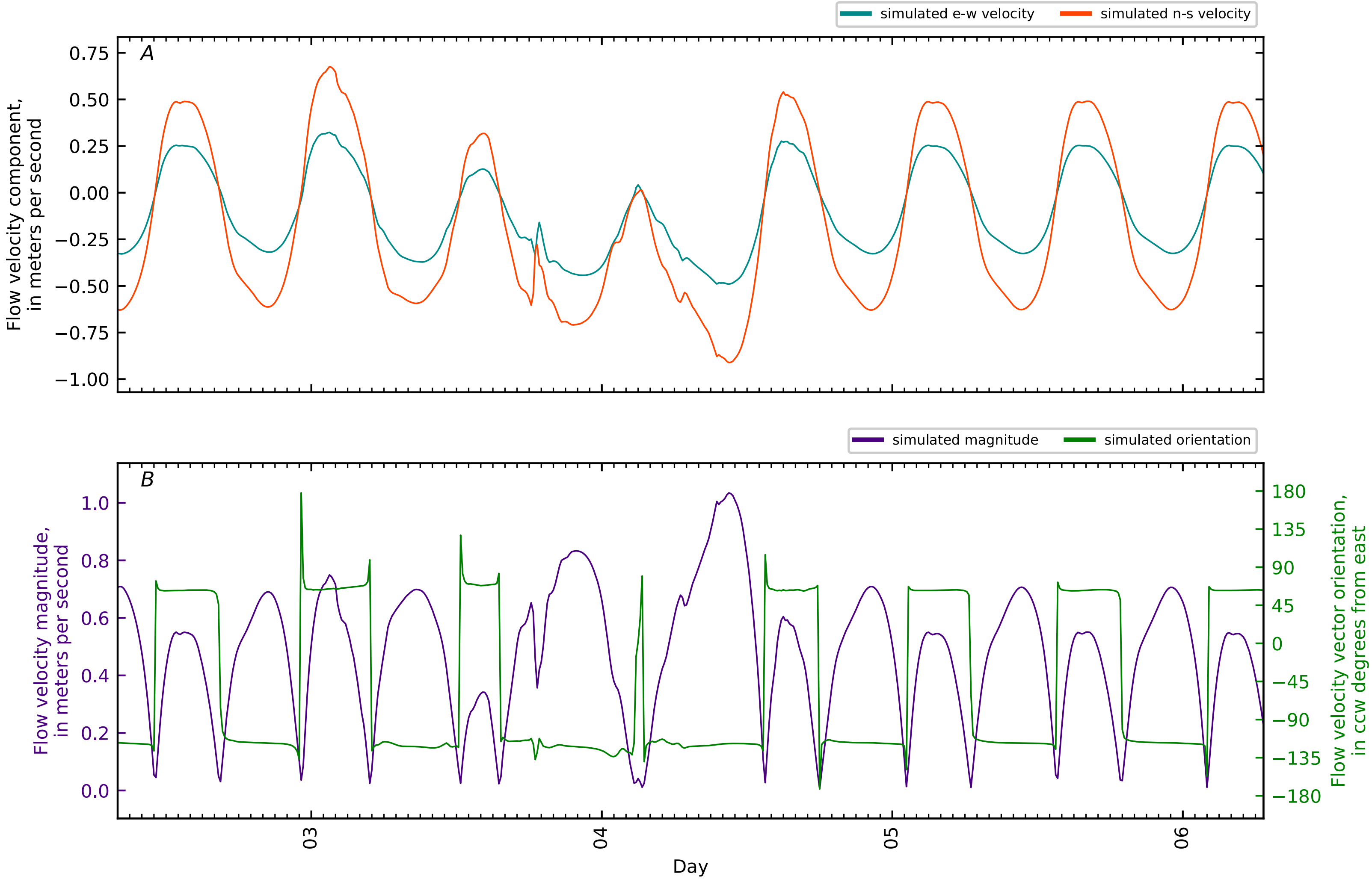

Figure B5-228. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 67, Penob Riv KM20. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

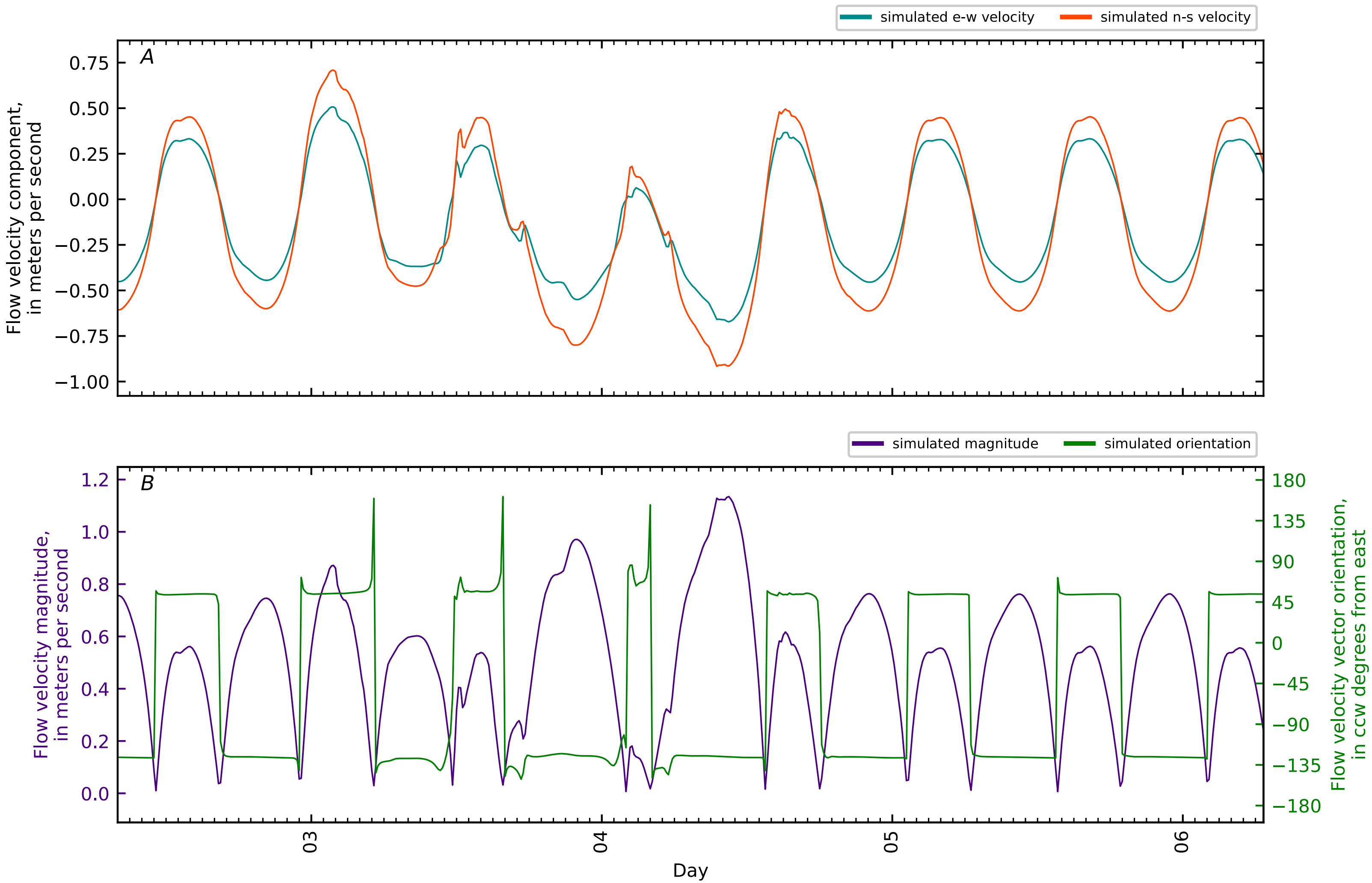

Figure B5-229. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 68, Penob Riv KM21. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

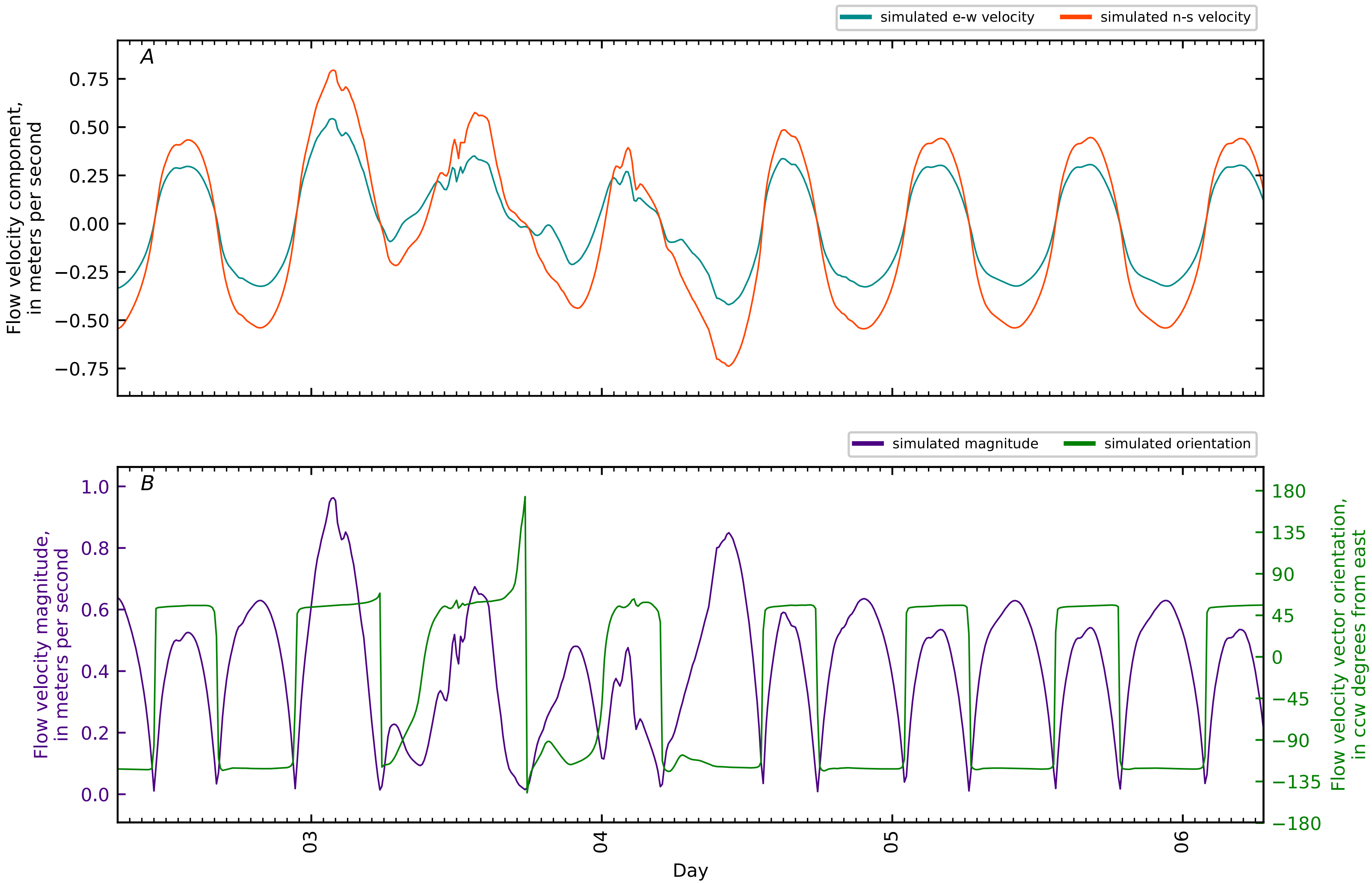

Figure B5-230. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 69, Penob Riv KM21.2 GS 443810068502201 Wint. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

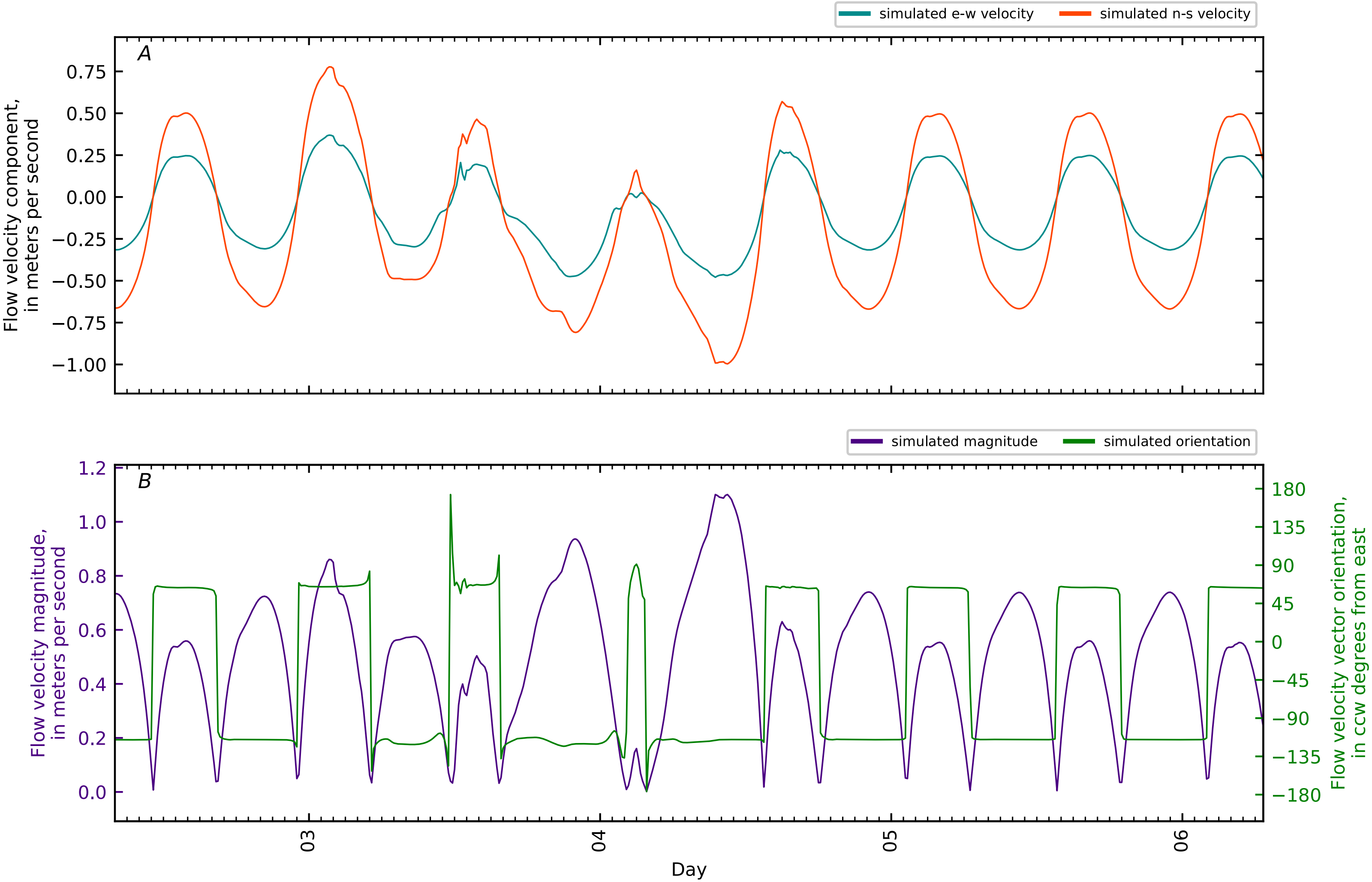

Figure B5-231. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 70, Penob Riv KM21.5 WHOI6 Winterport 2010. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

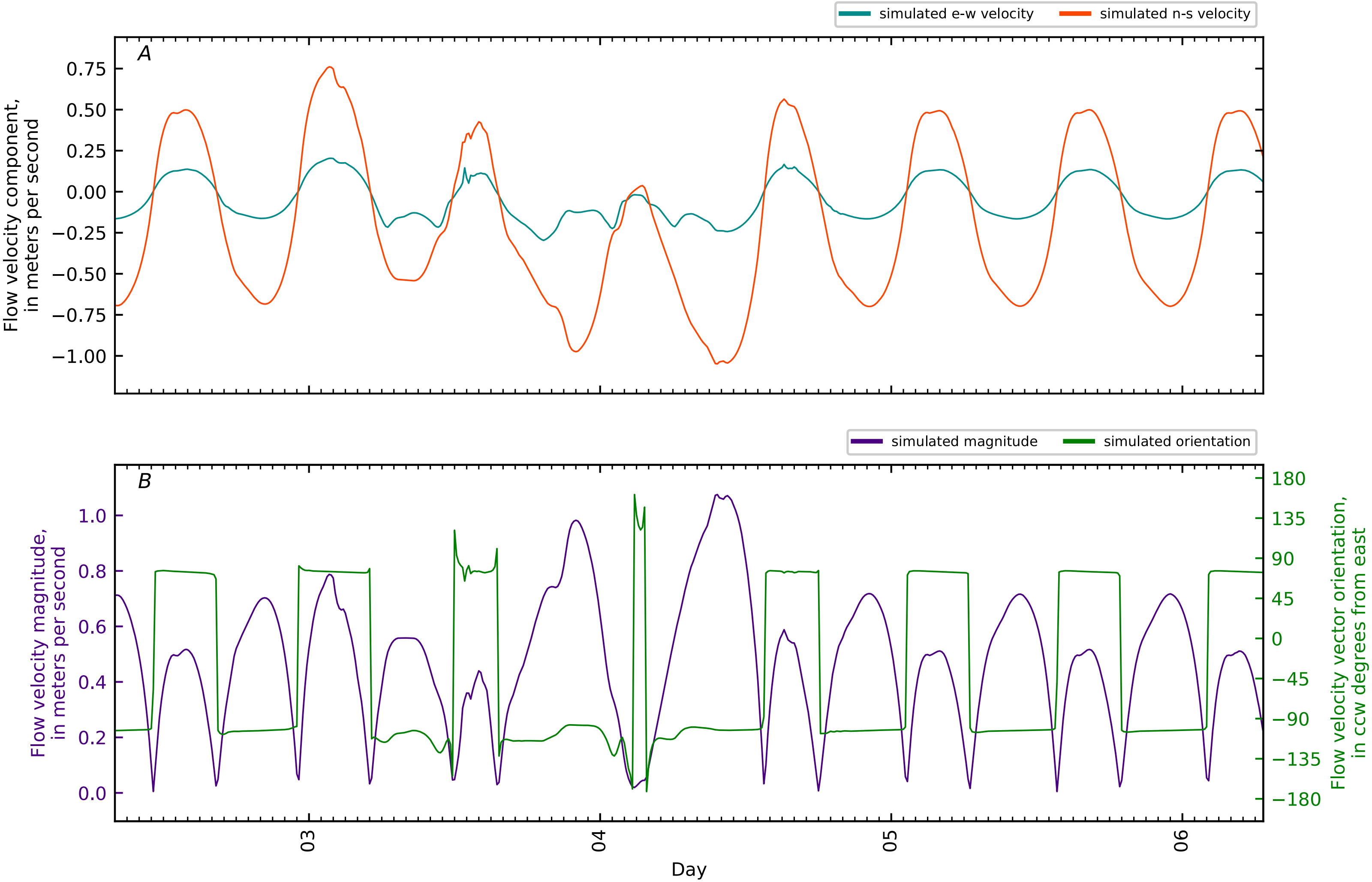

Figure B5-232. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 71, Penob Riv KM22. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

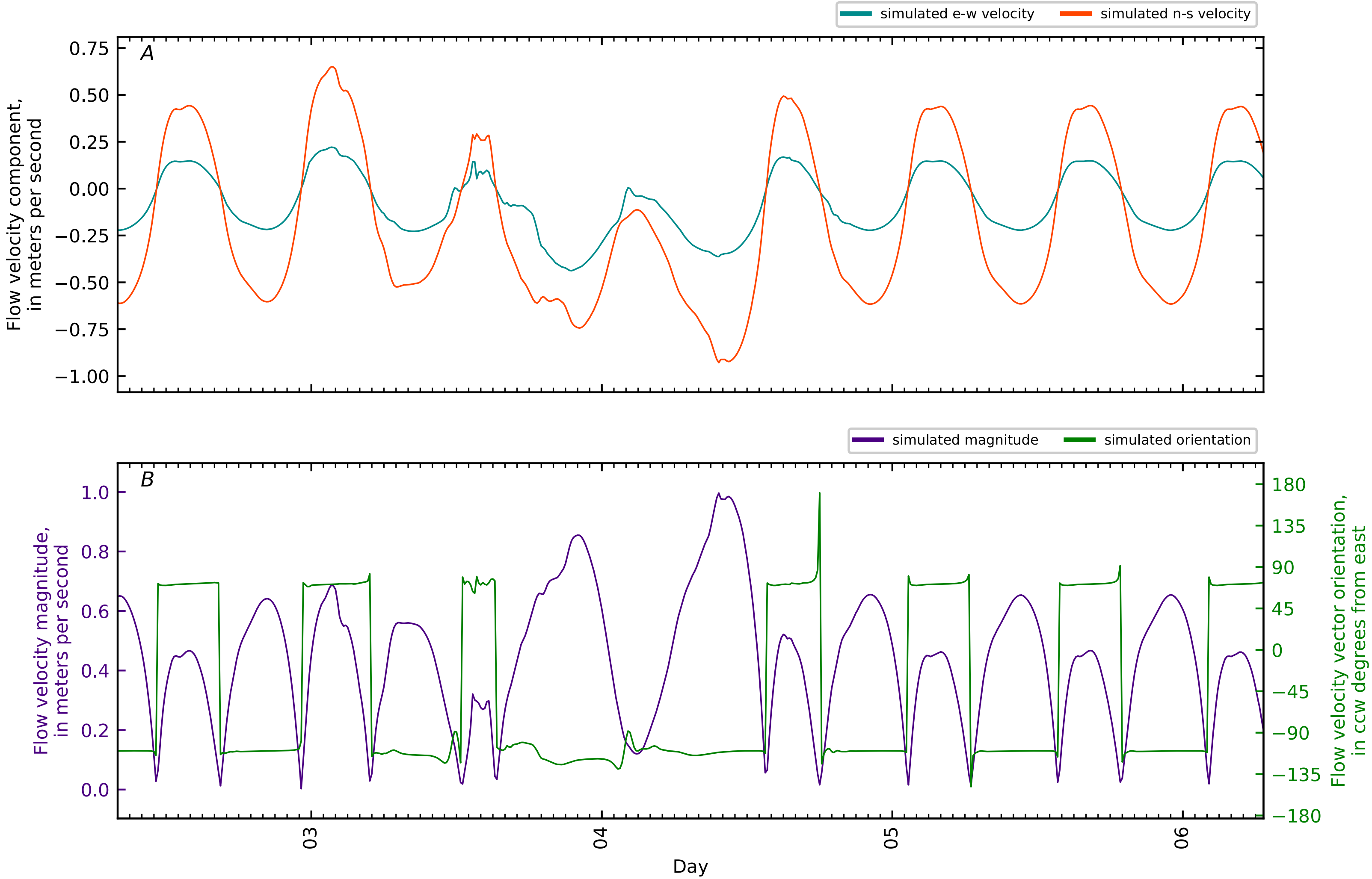

Figure B5-233. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 72, Penob Riv KM23. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

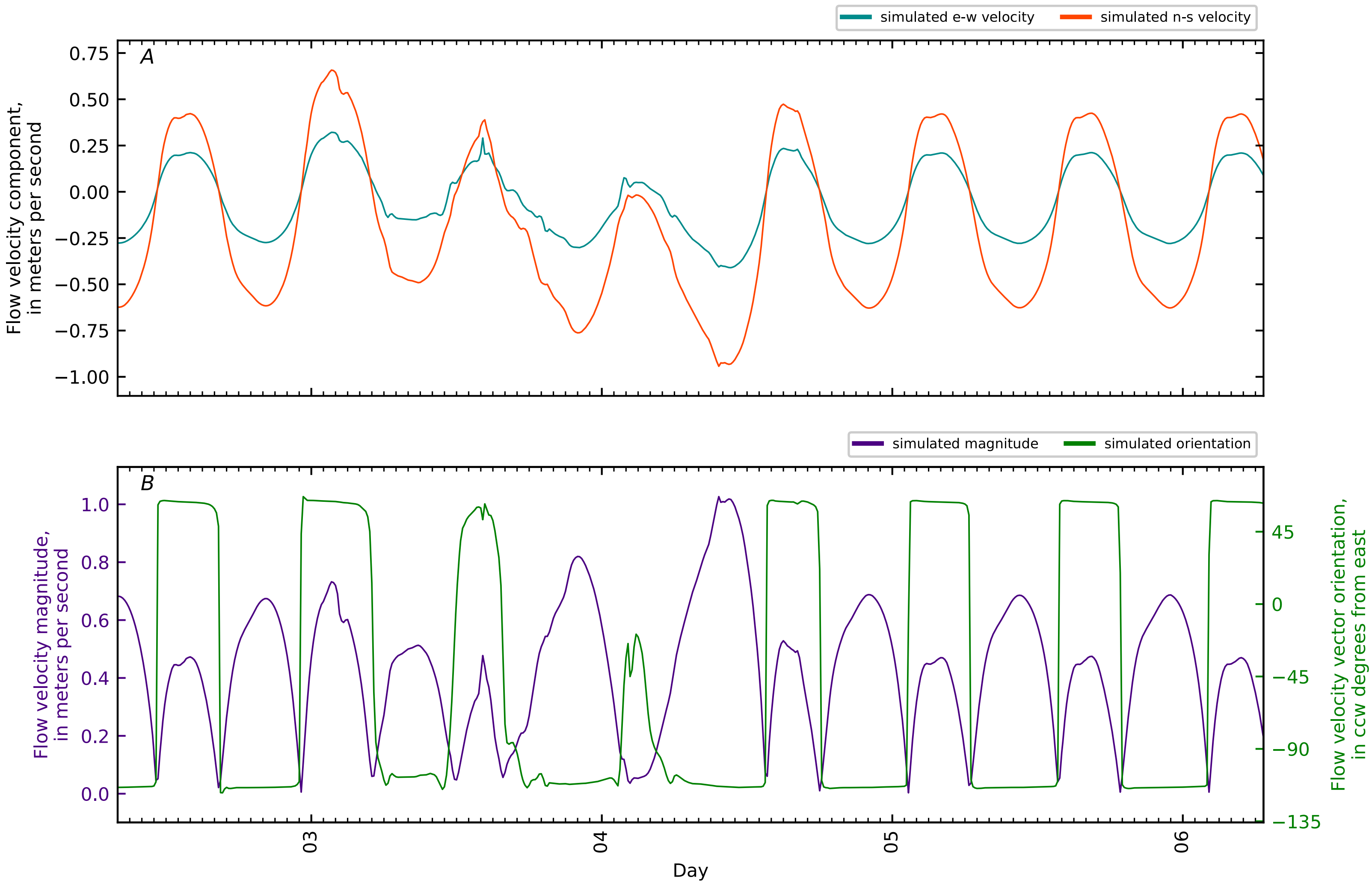

Figure B5-234. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 73, Penob Riv KM24. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

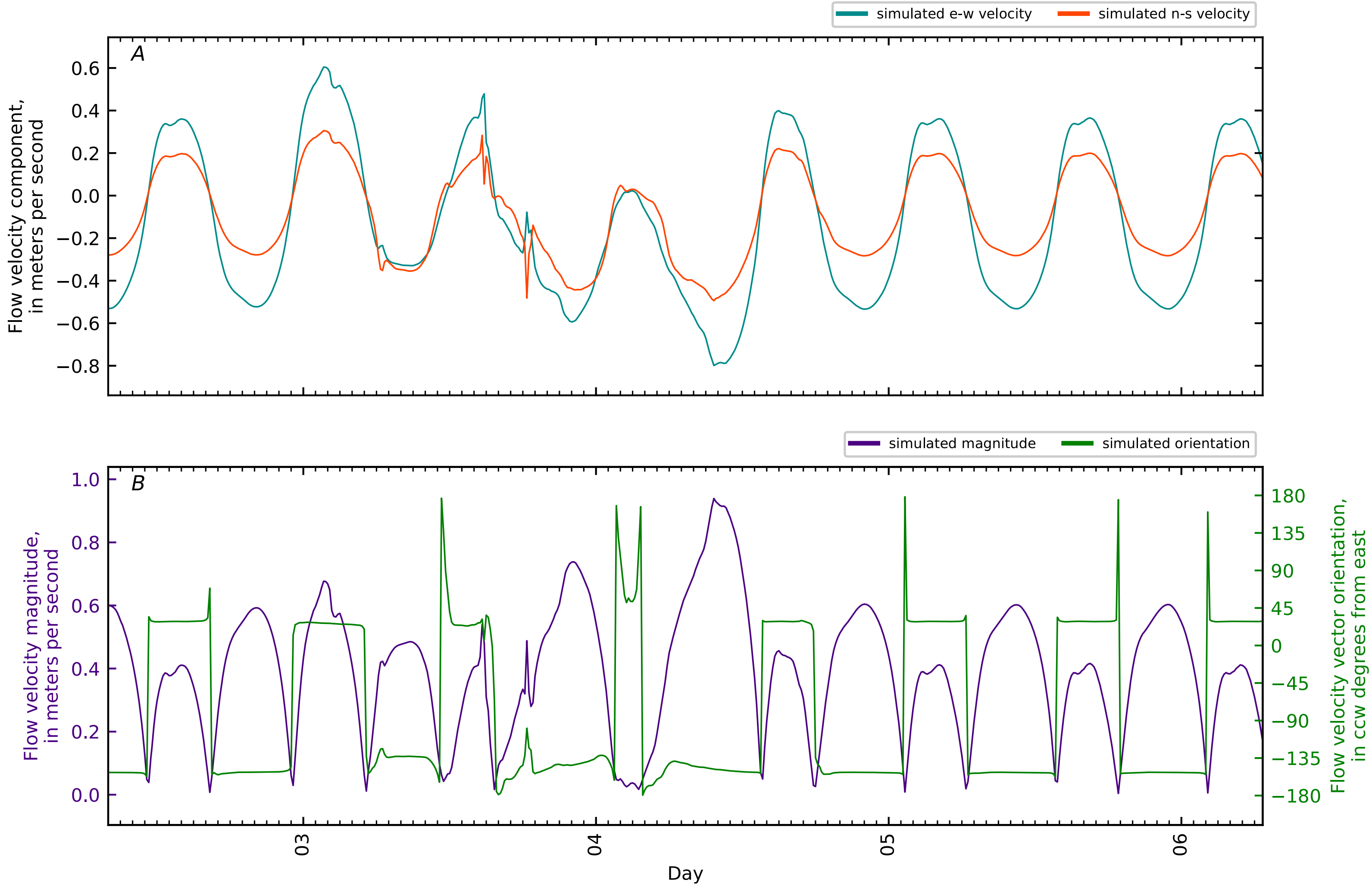

Figure B5-235. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 74, Penob Riv KM25. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

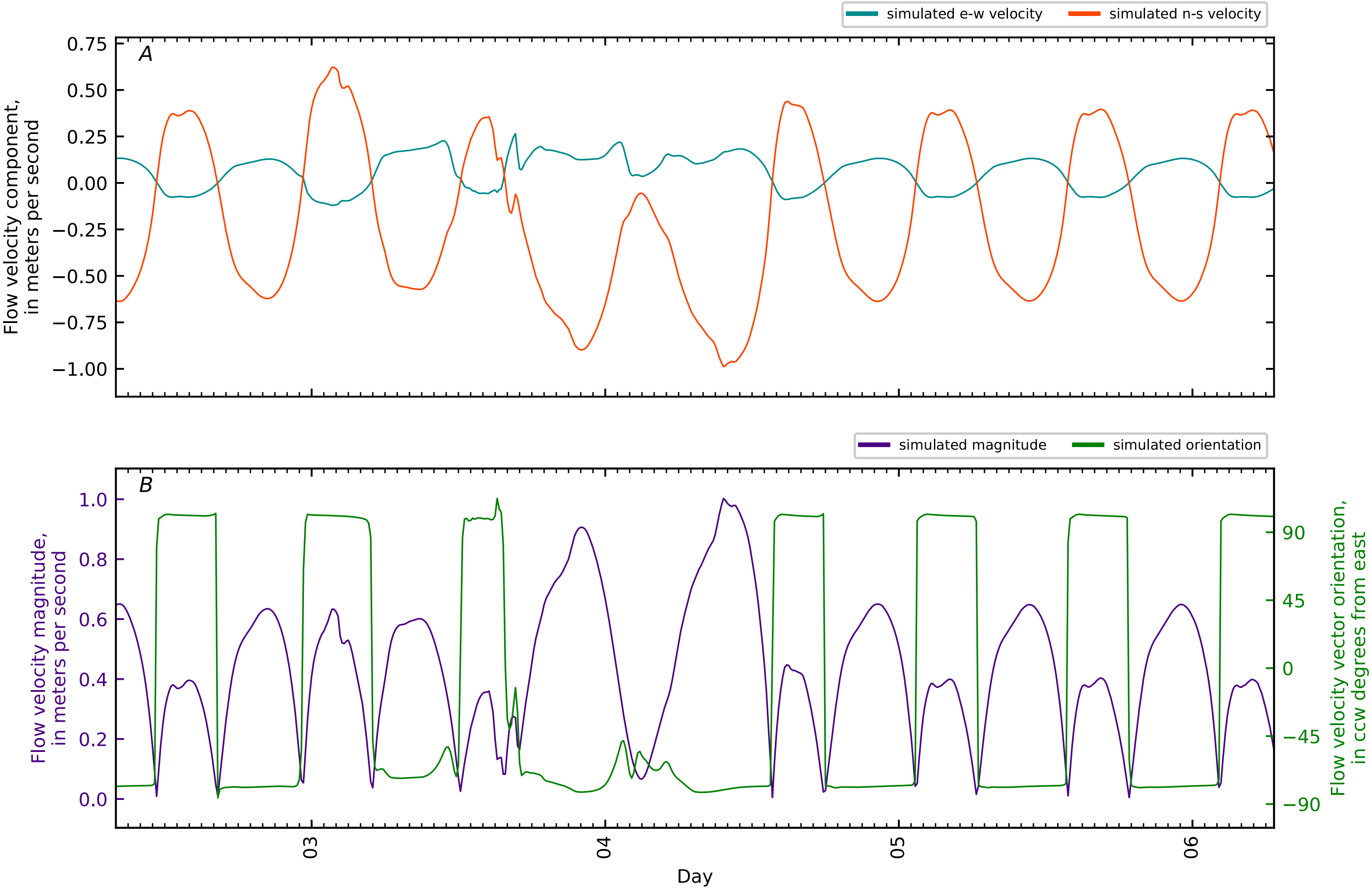

Figure B5-236. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 75, Penob Riv KM26. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

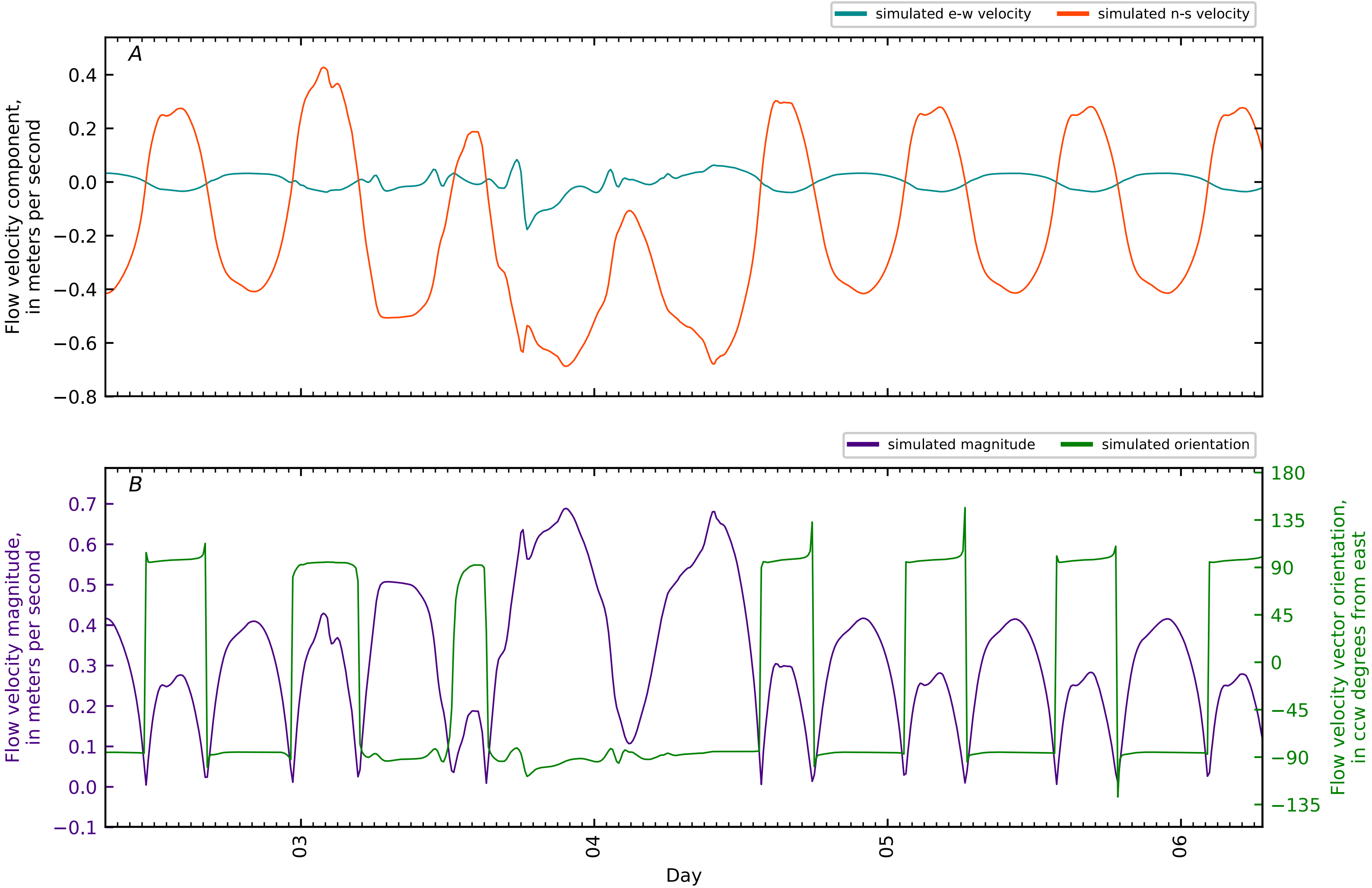

Figure B5-237. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 76, Penob Riv KM27. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

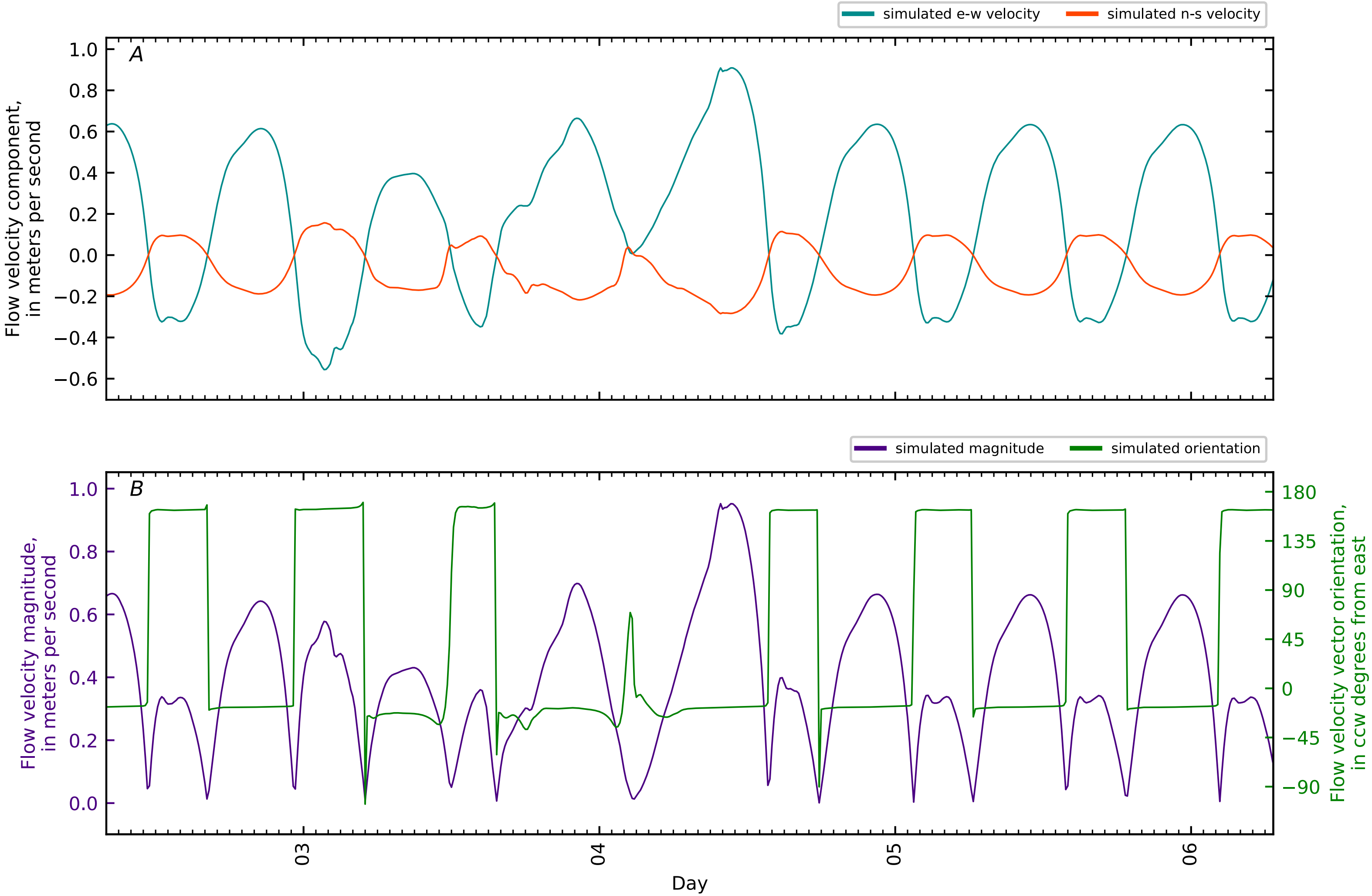

Figure B5-238. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 77, Penob Riv KM28. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

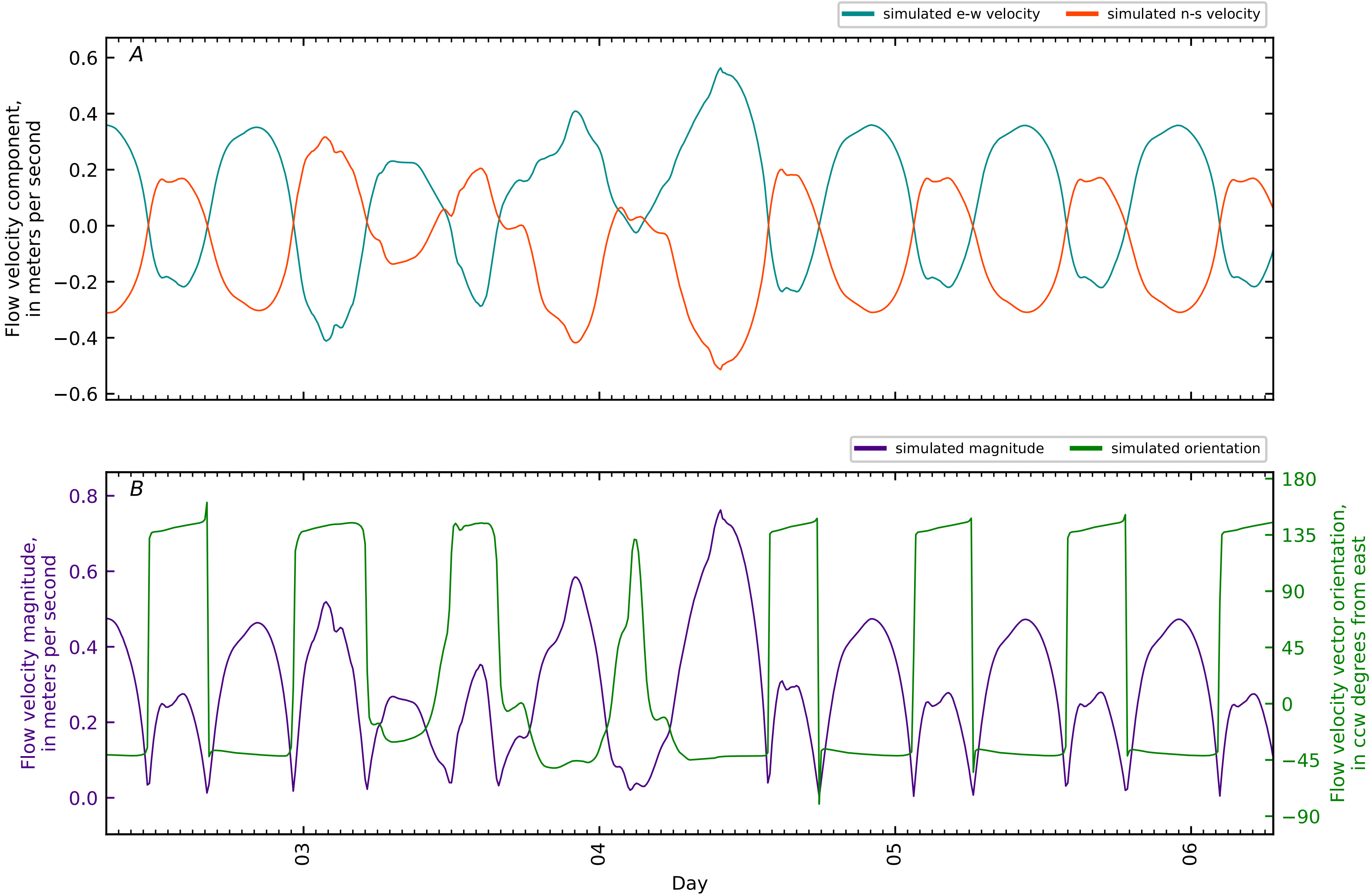

Figure B5-239. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 78, Penob Riv KM29. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

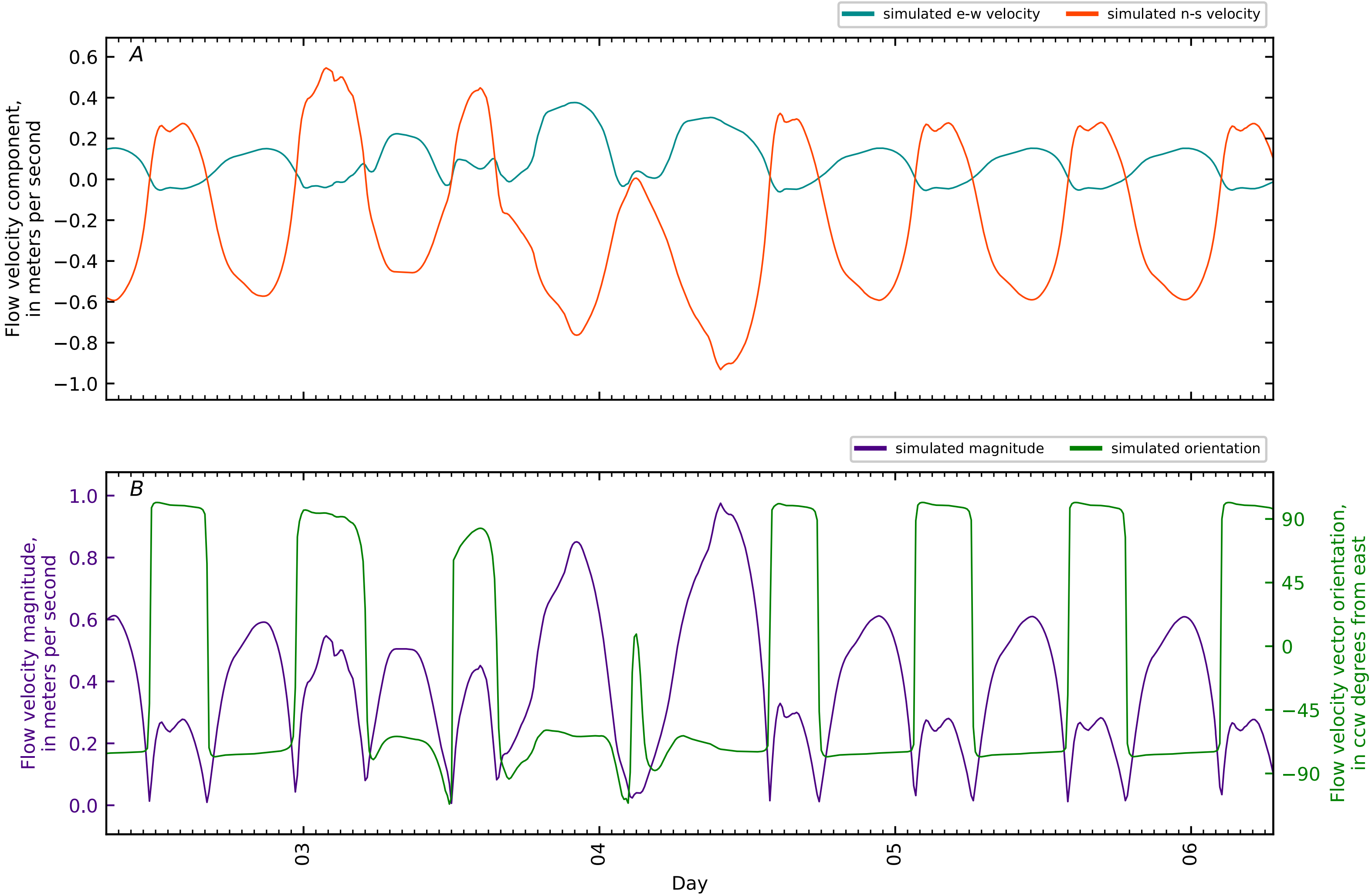

Figure B5-240. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 79, Penob Riv KM30. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

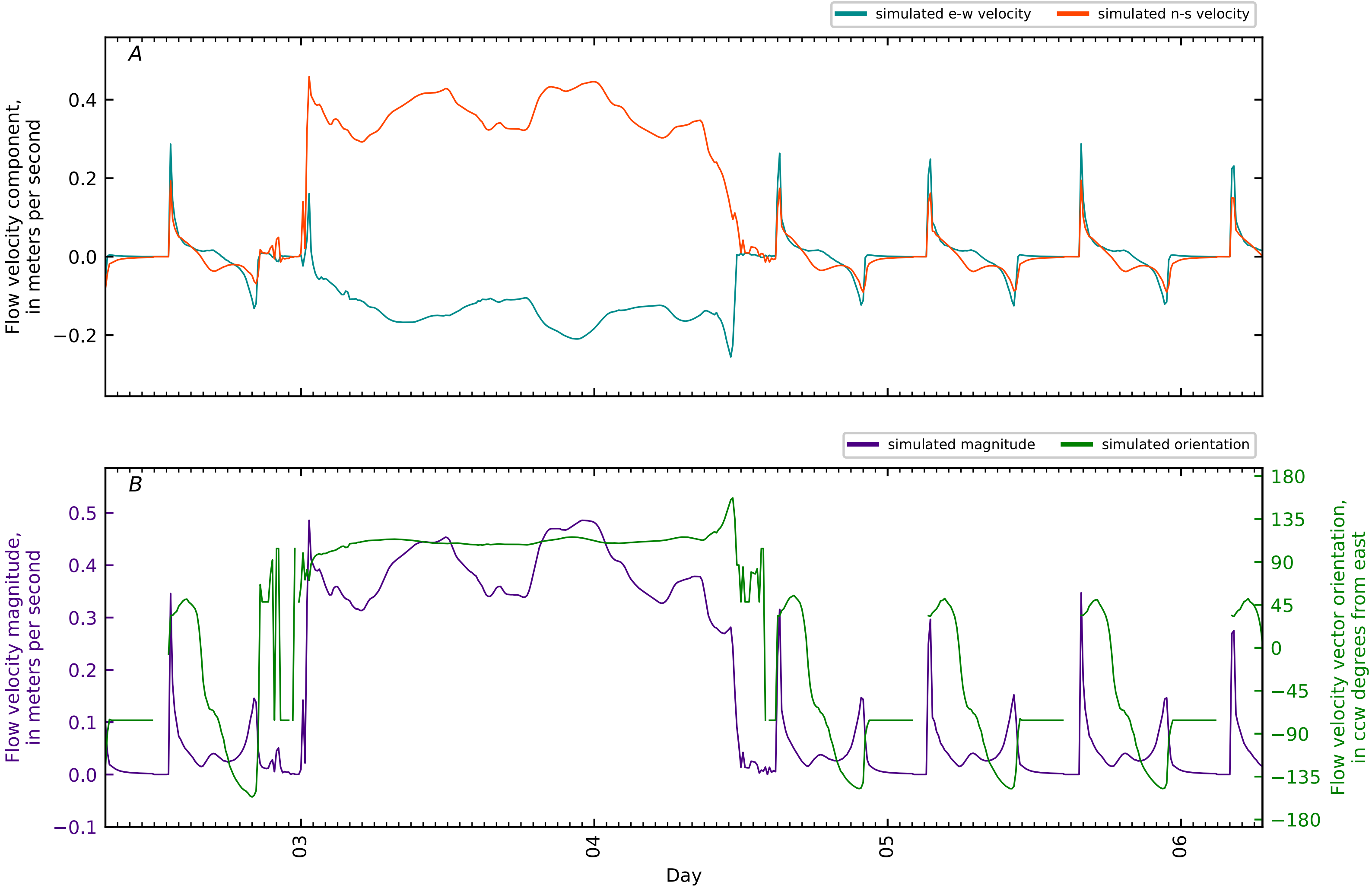

Figure B5-241. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 80, Penob Riv KM30.3 ERDC3 ON-MU2-SF-2 Bartl. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

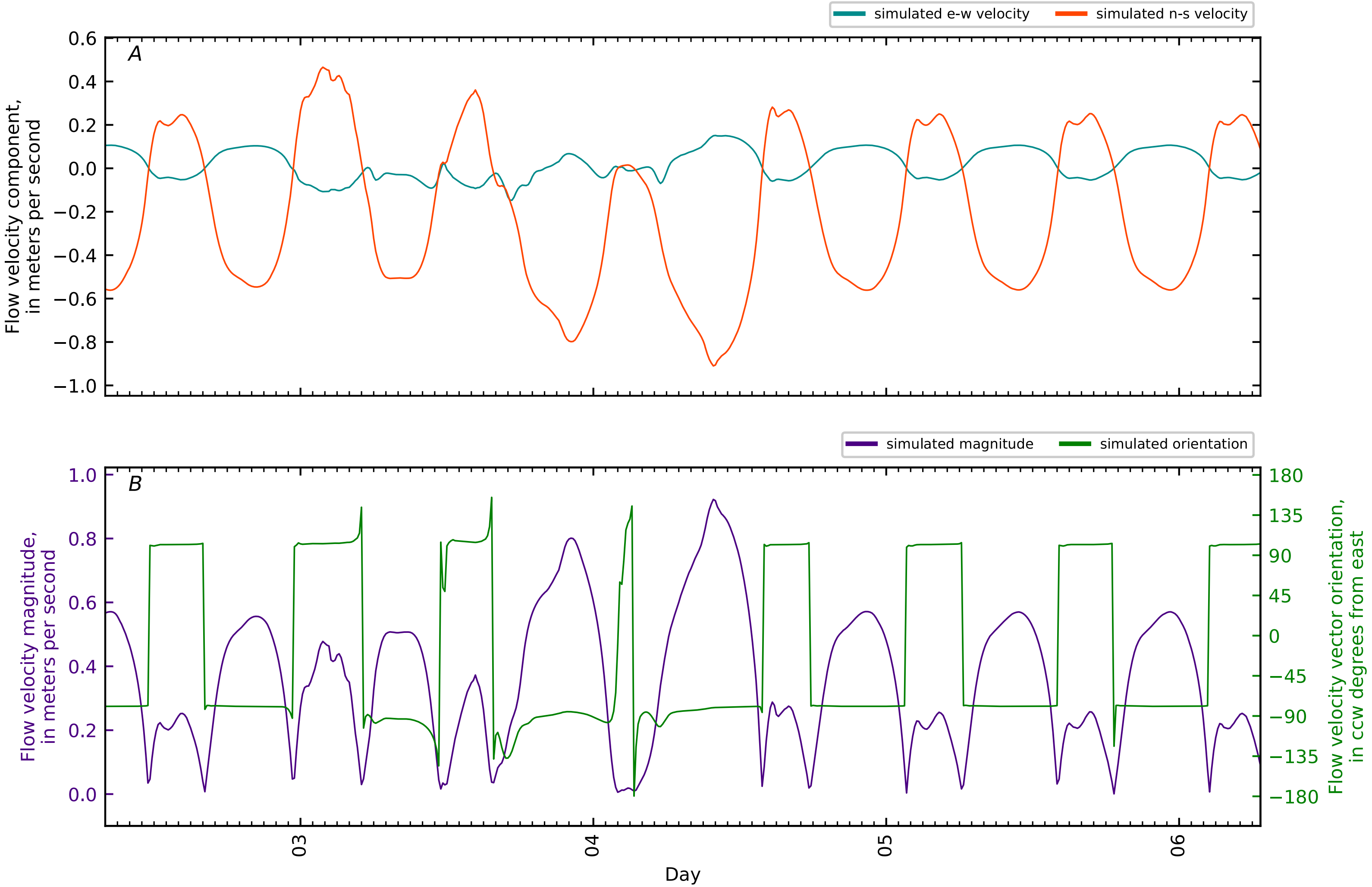

Figure B5-242. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 81, Penob Riv KM31. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

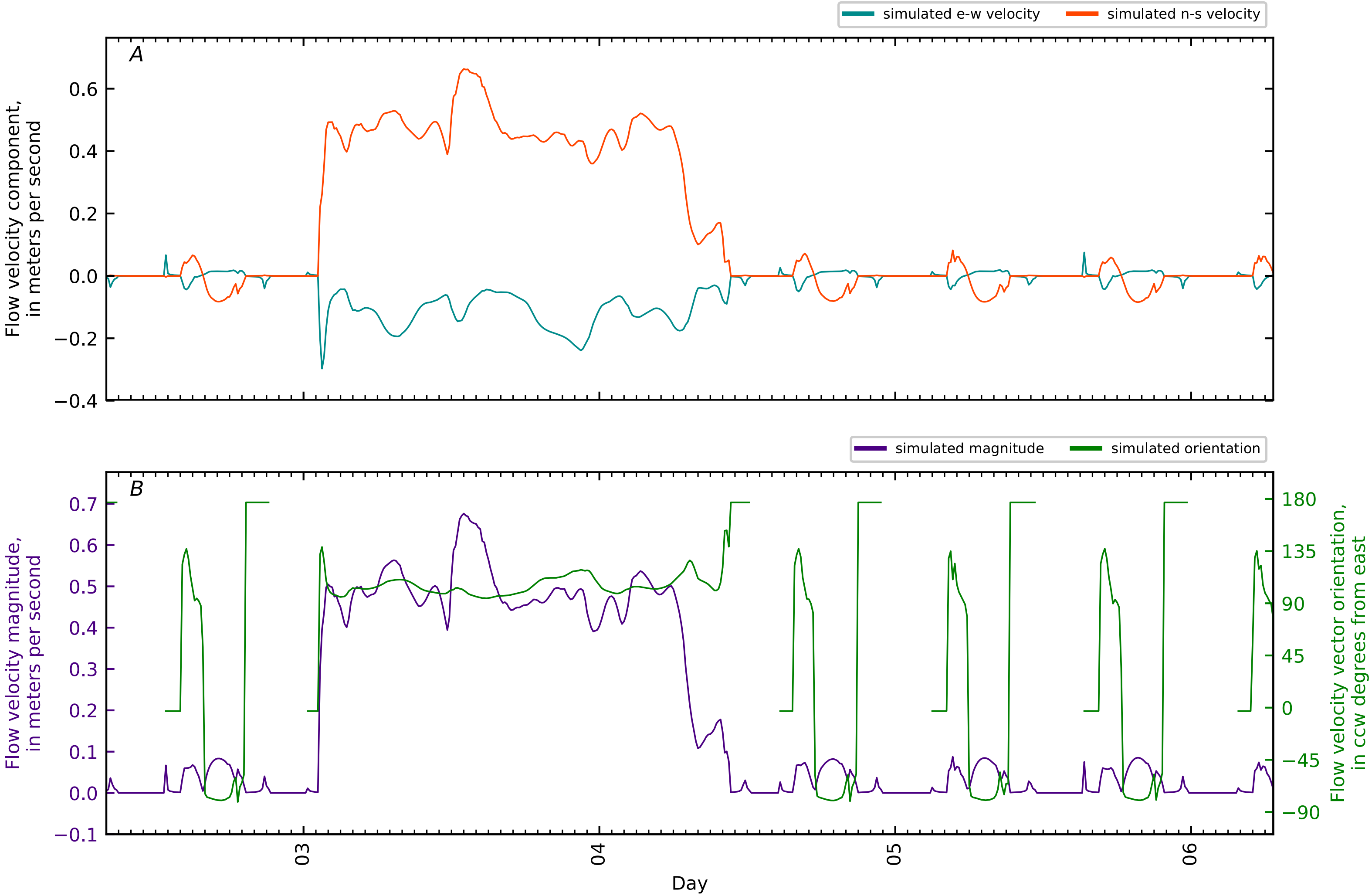

Figure B5-243. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 82, Penob Riv KM31.3 ERDC1 ON-MU2-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

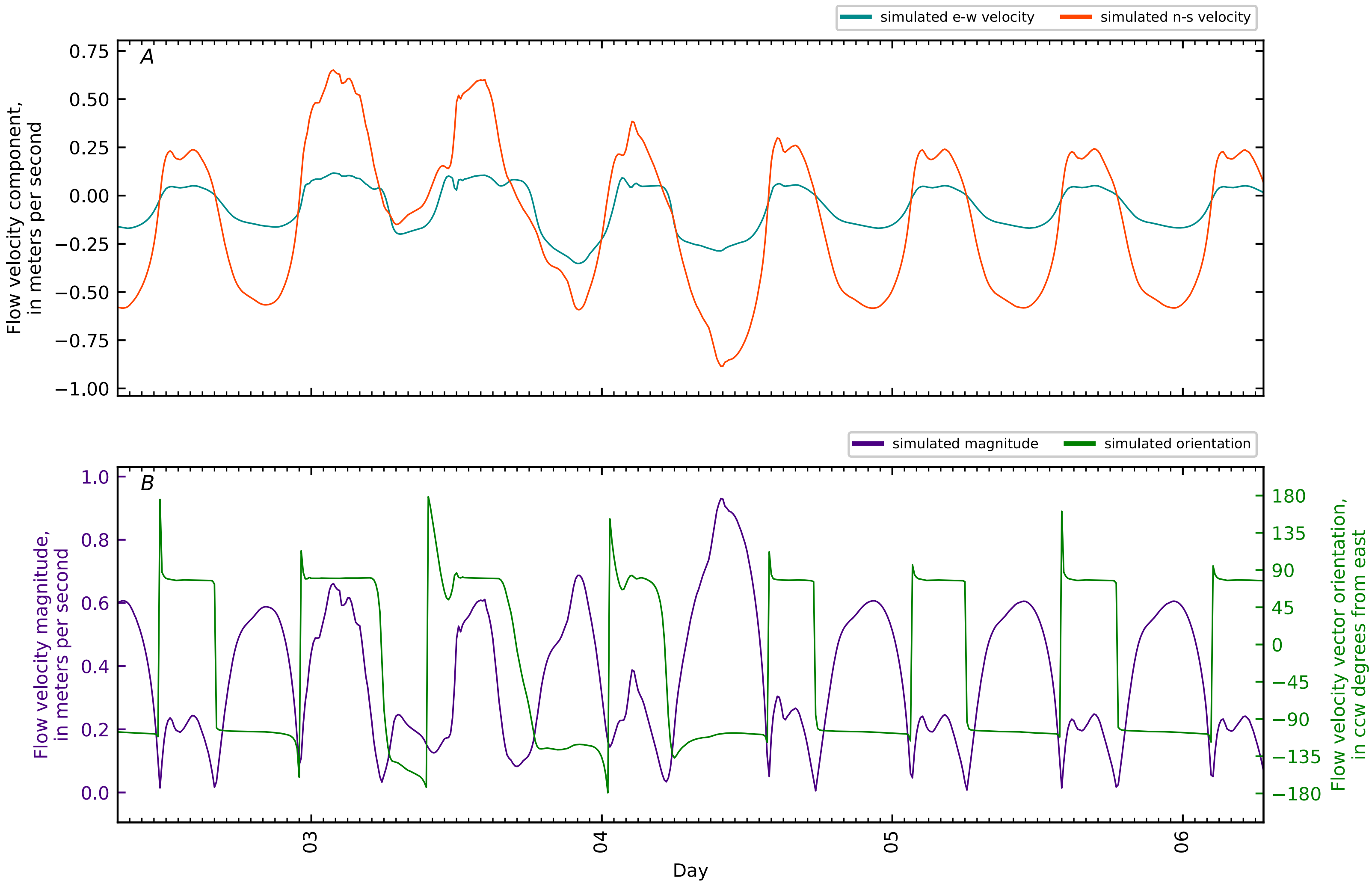

Figure B5-244. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 83, Penob Riv KM31.4 ERDC2 ON-MU13-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

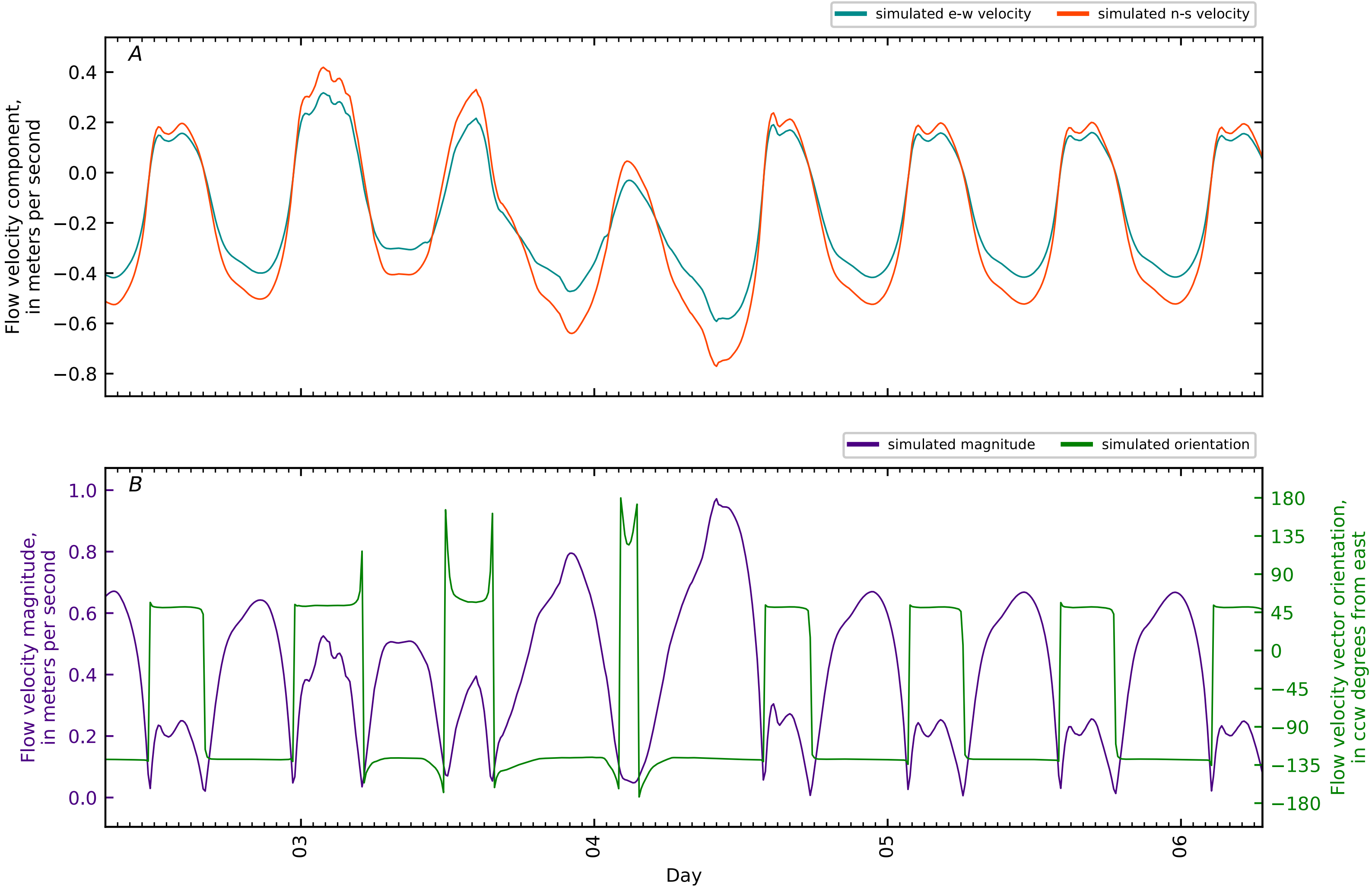

Figure B5-245. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 84, Penob Riv KM32. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

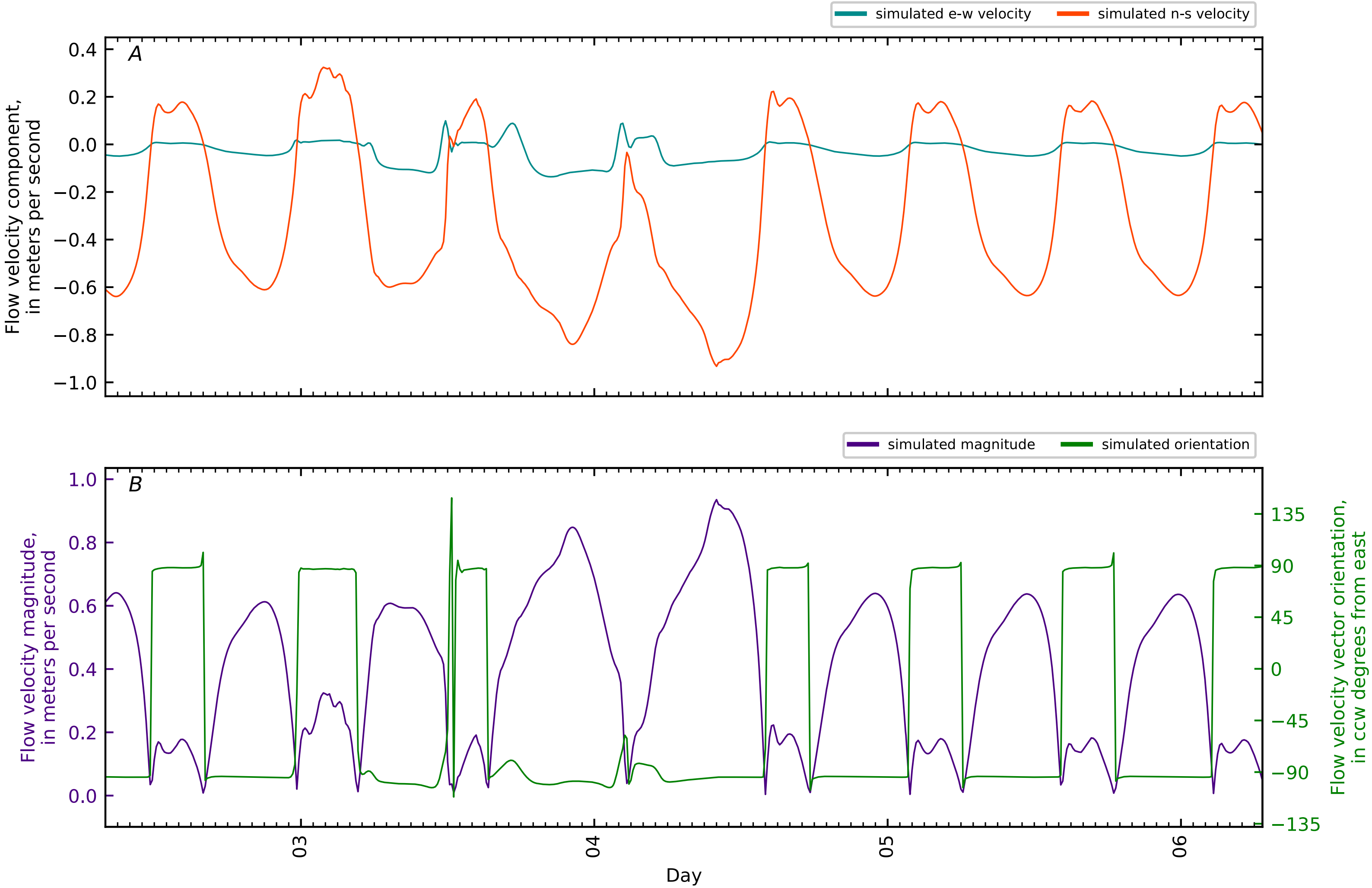

Figure B5-246. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 85, Penob Riv KM33. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

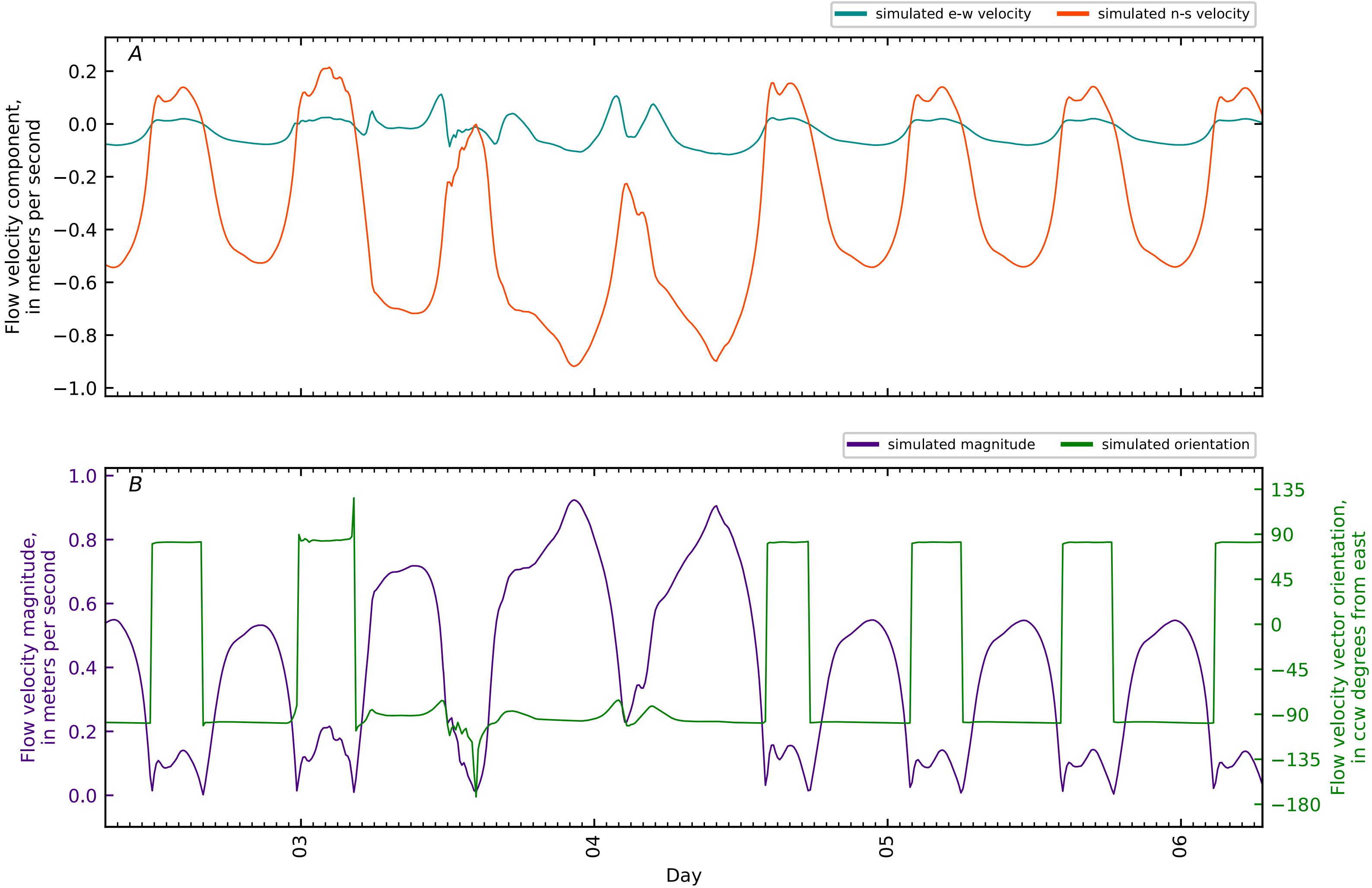

Figure B5-247. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 86, Penob Riv KM34. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

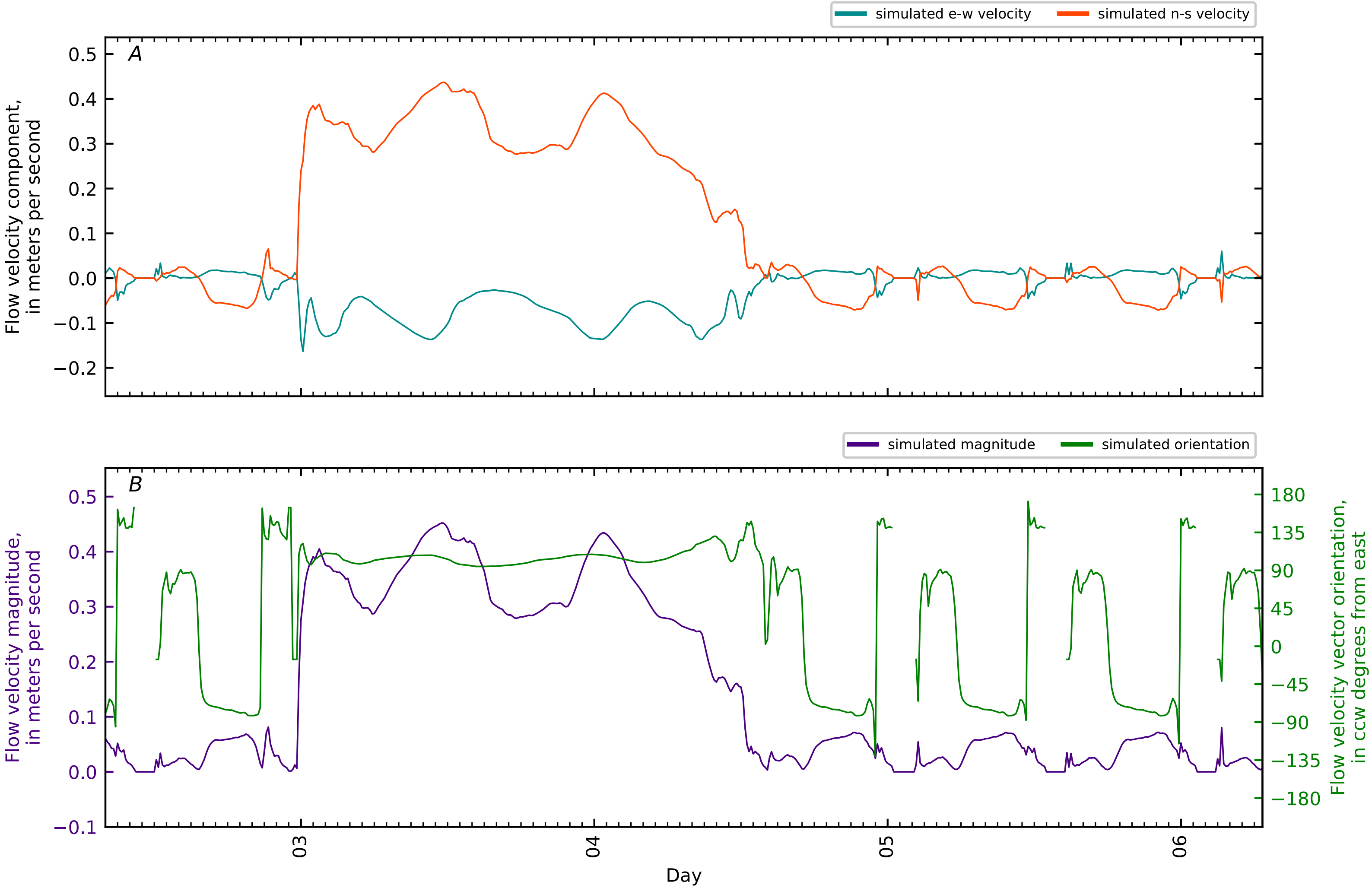

Figure B5-248. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 87, Penob Riv KM34.6 Southern Cove Orrington. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

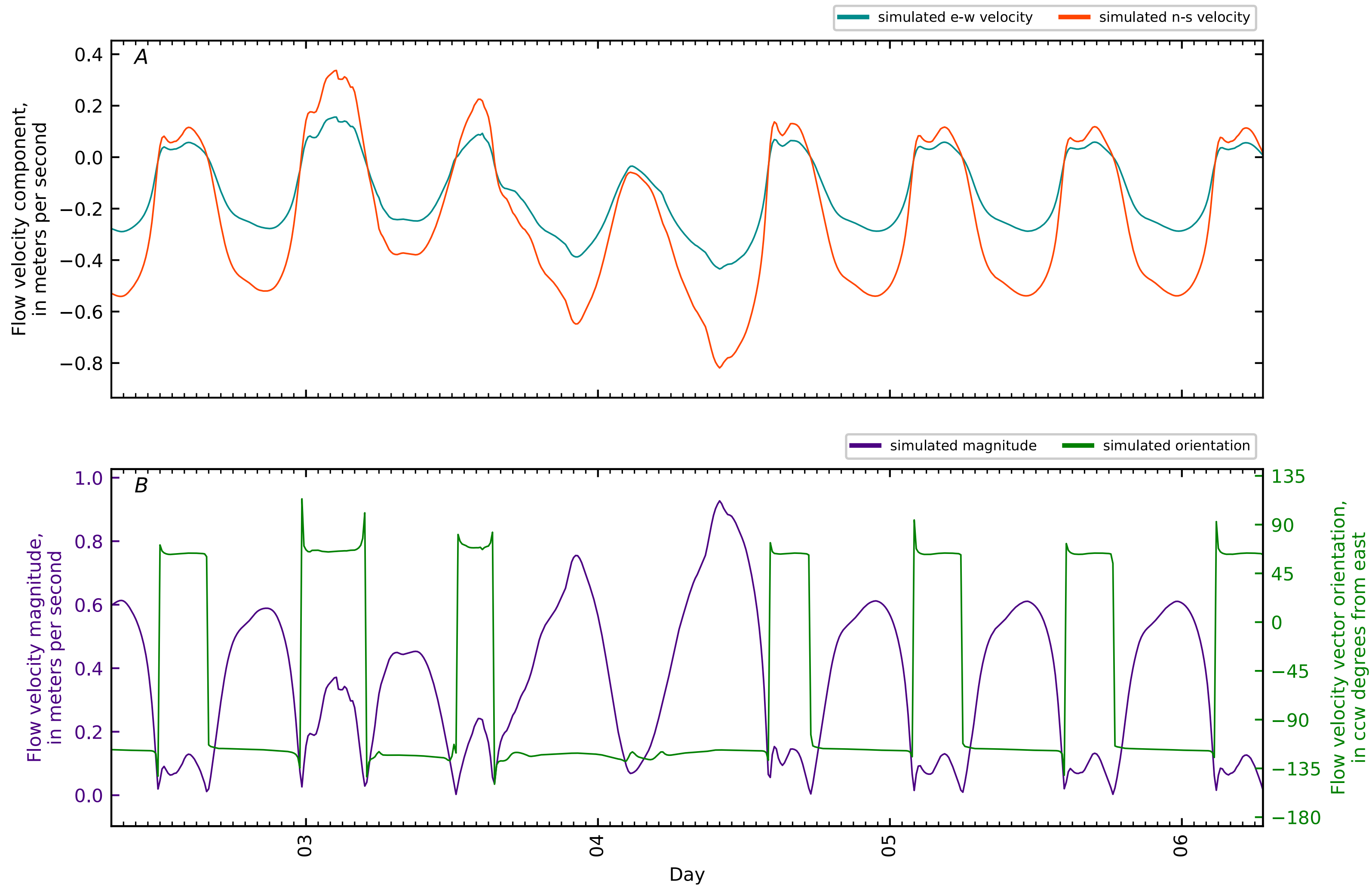

Figure B5-249. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 88, Penob Riv KM35. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

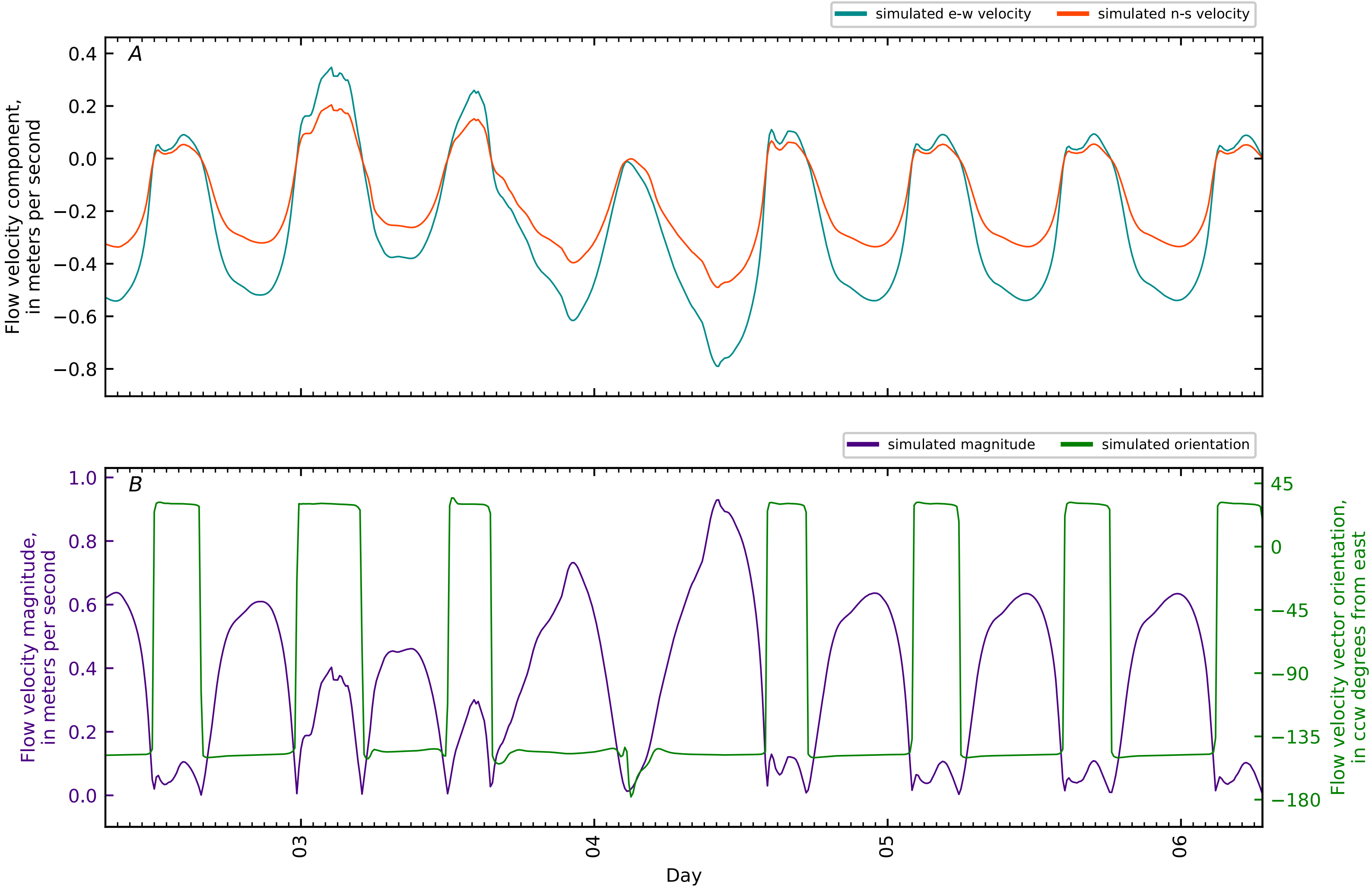

Figure B5-250. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 89, Penob Riv KM36. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

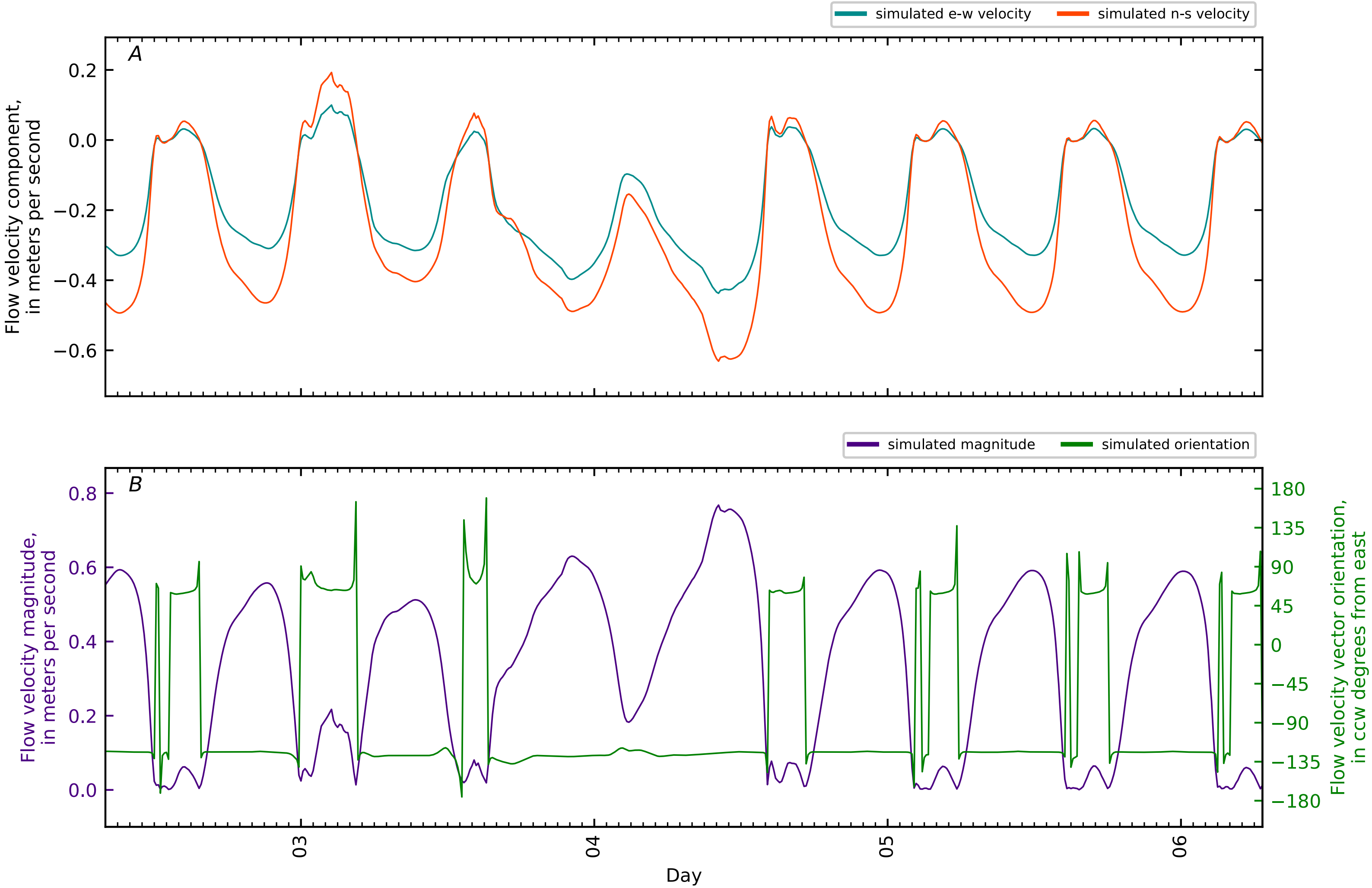

Figure B5-251. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 90, Penob Riv KM37. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

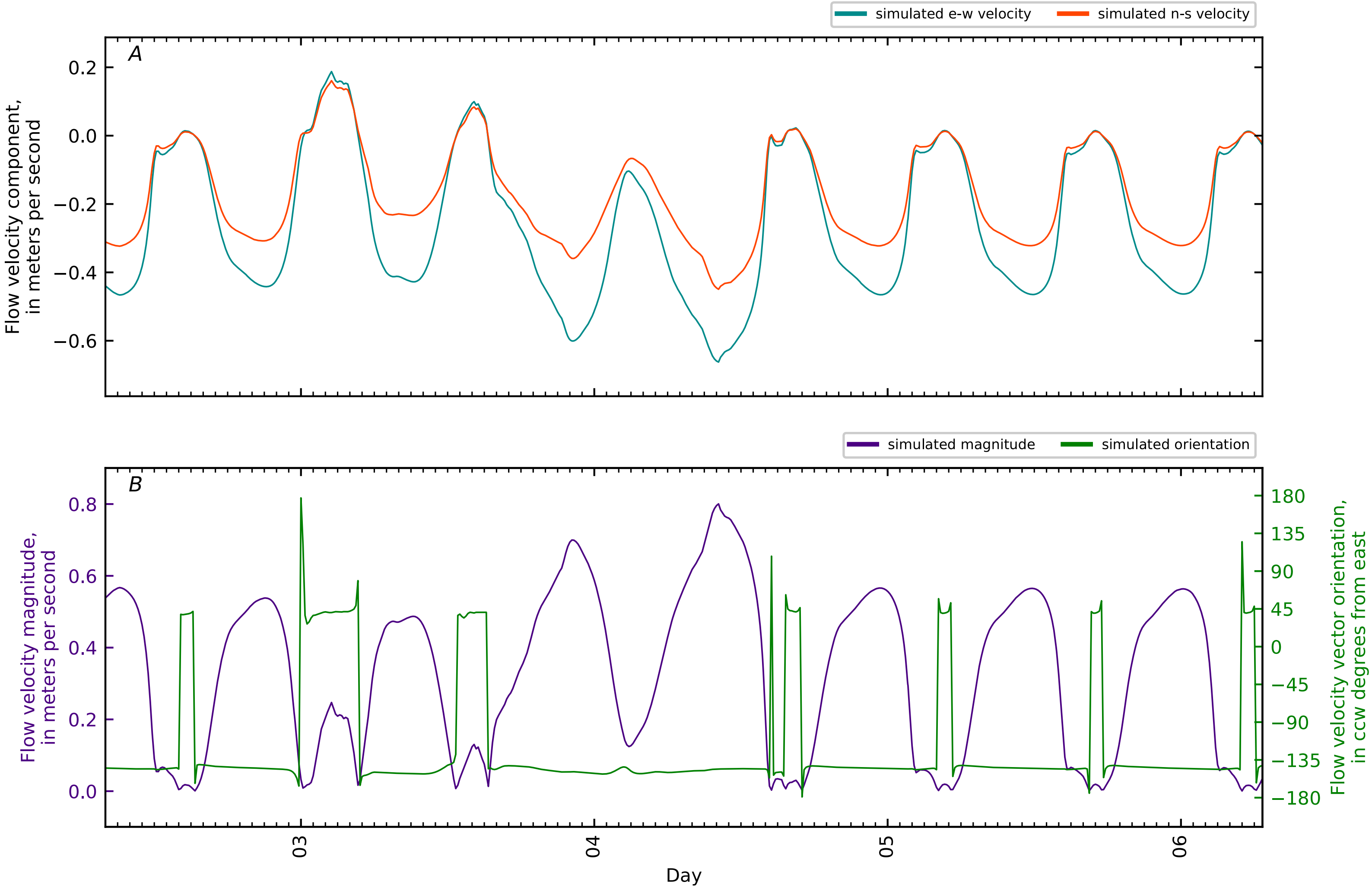

Figure B5-252. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 91, Penob Riv KM38. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

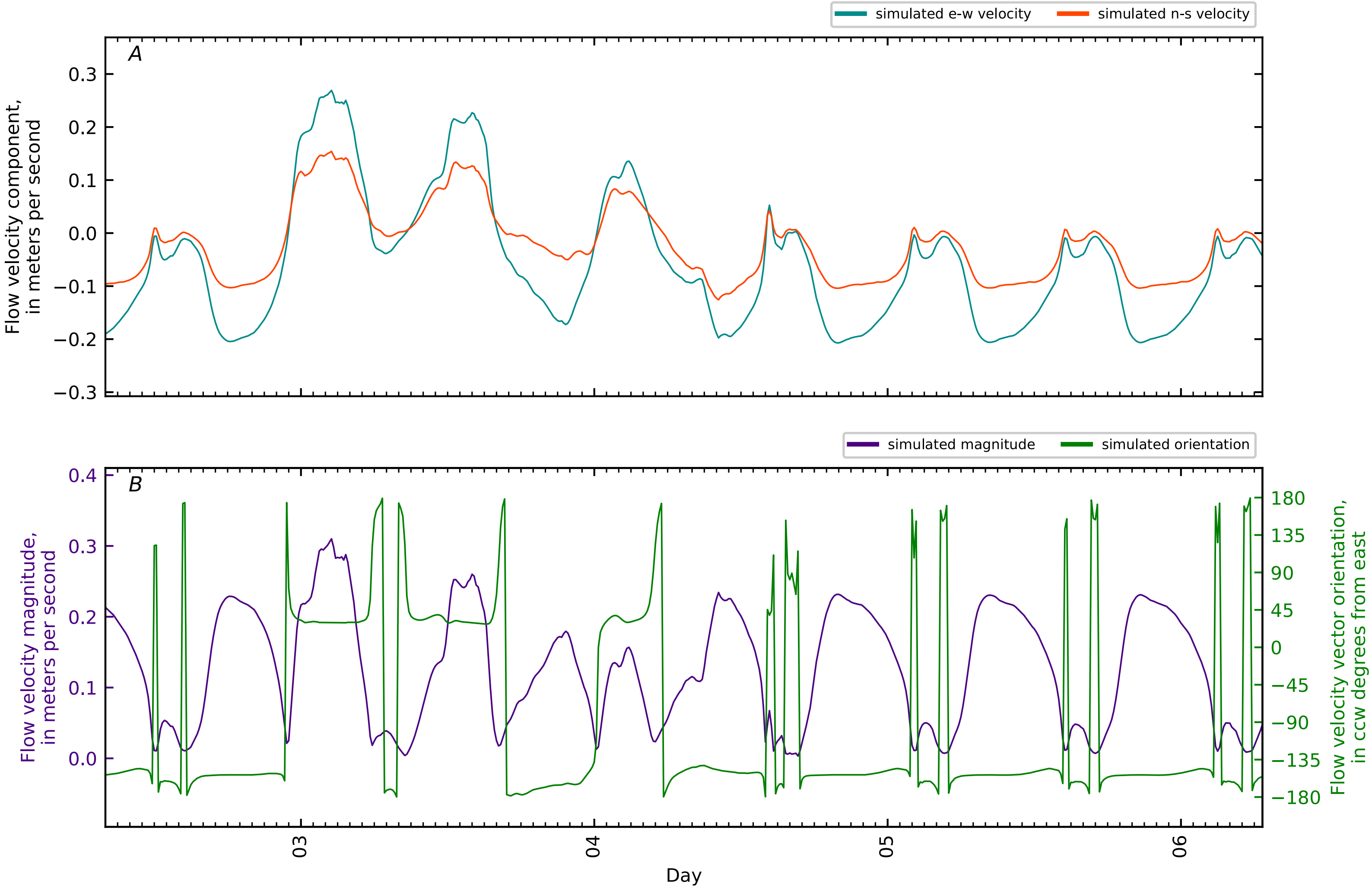

Figure B5-253. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 92, Penob Riv KM38.7 Boat ramp d/s Bangor. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

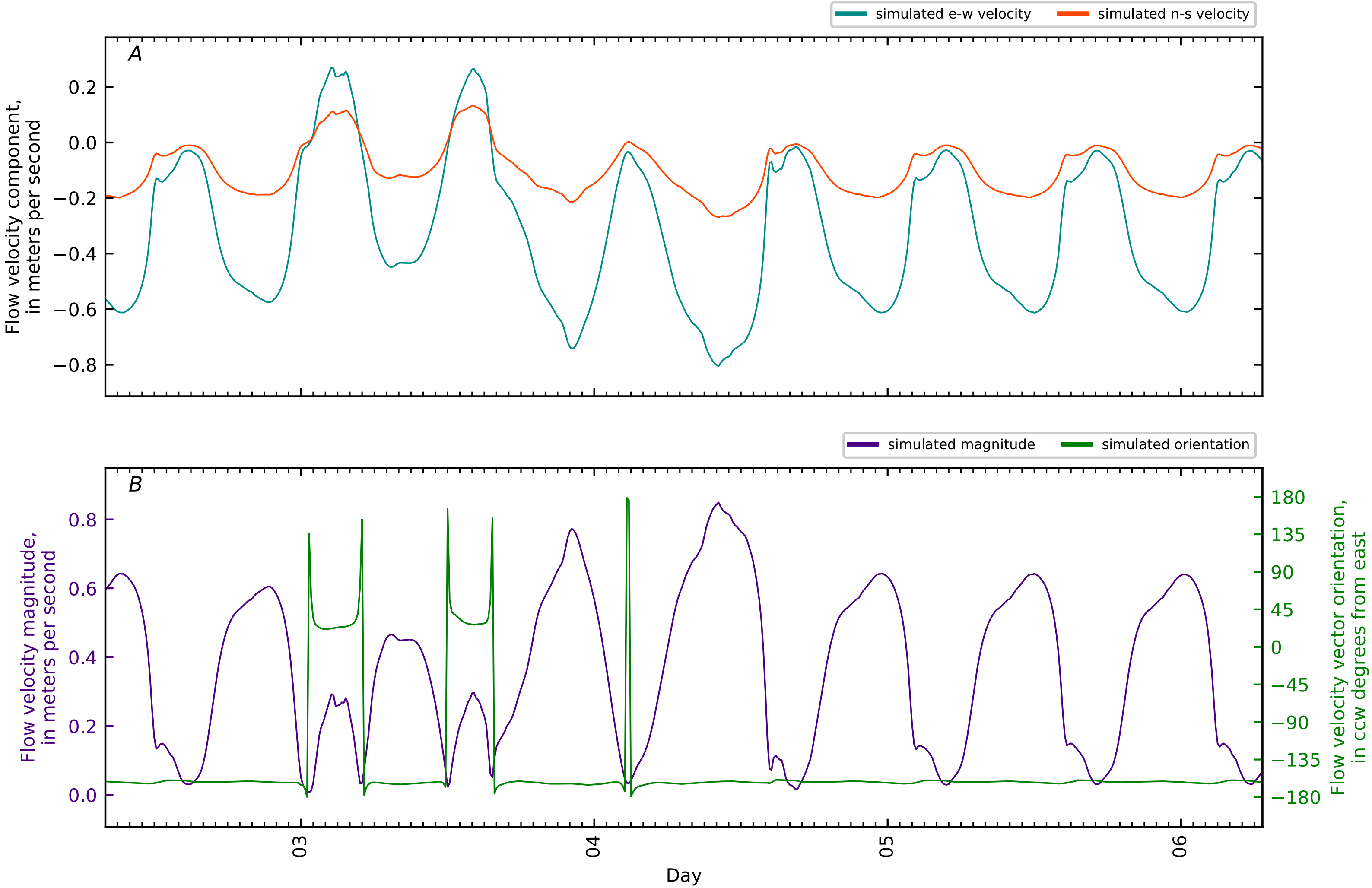

Figure B5-254. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 93, Penob Riv KM39. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

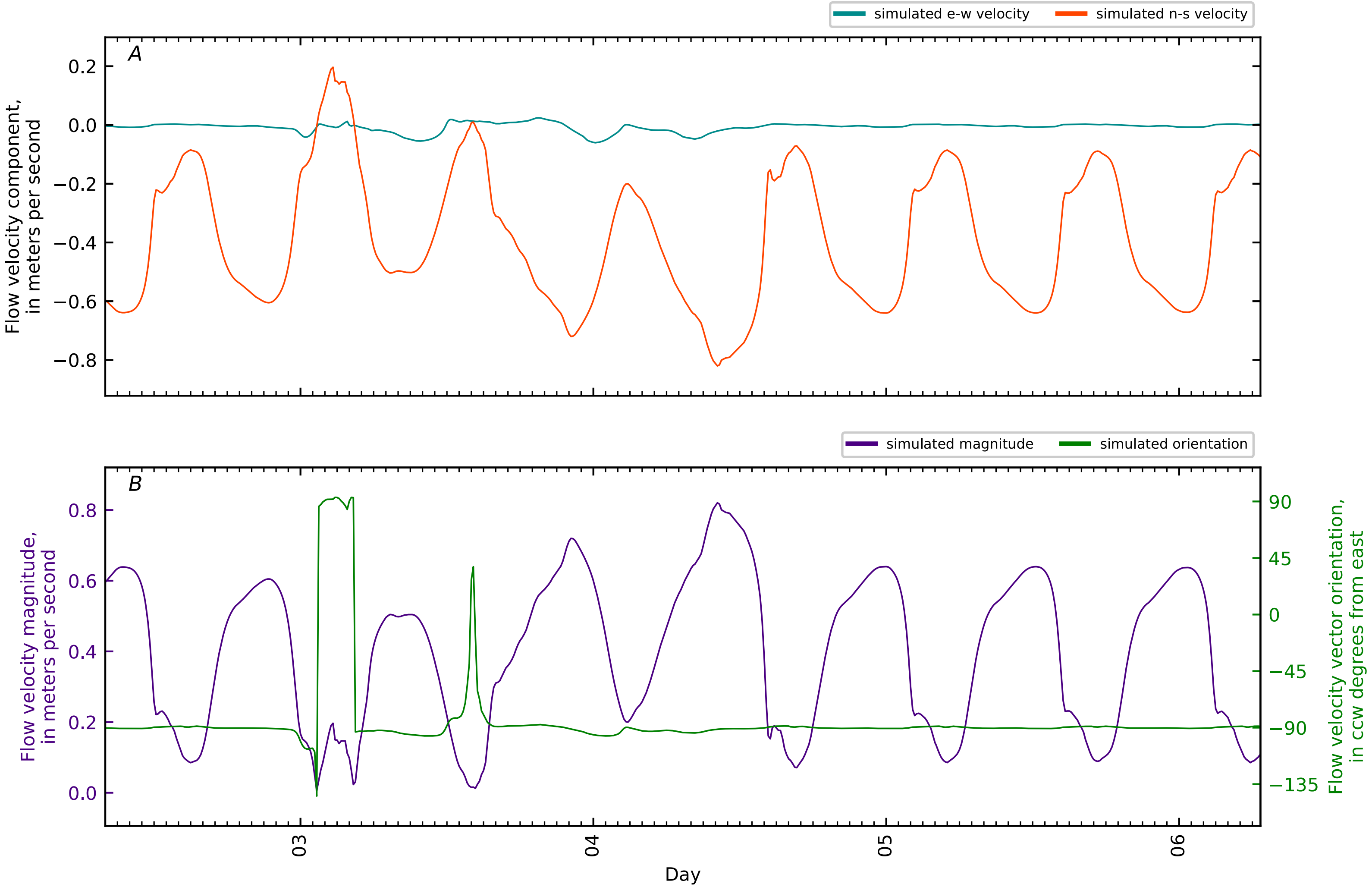

Figure B5-255. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 94, Penob Riv KM40. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

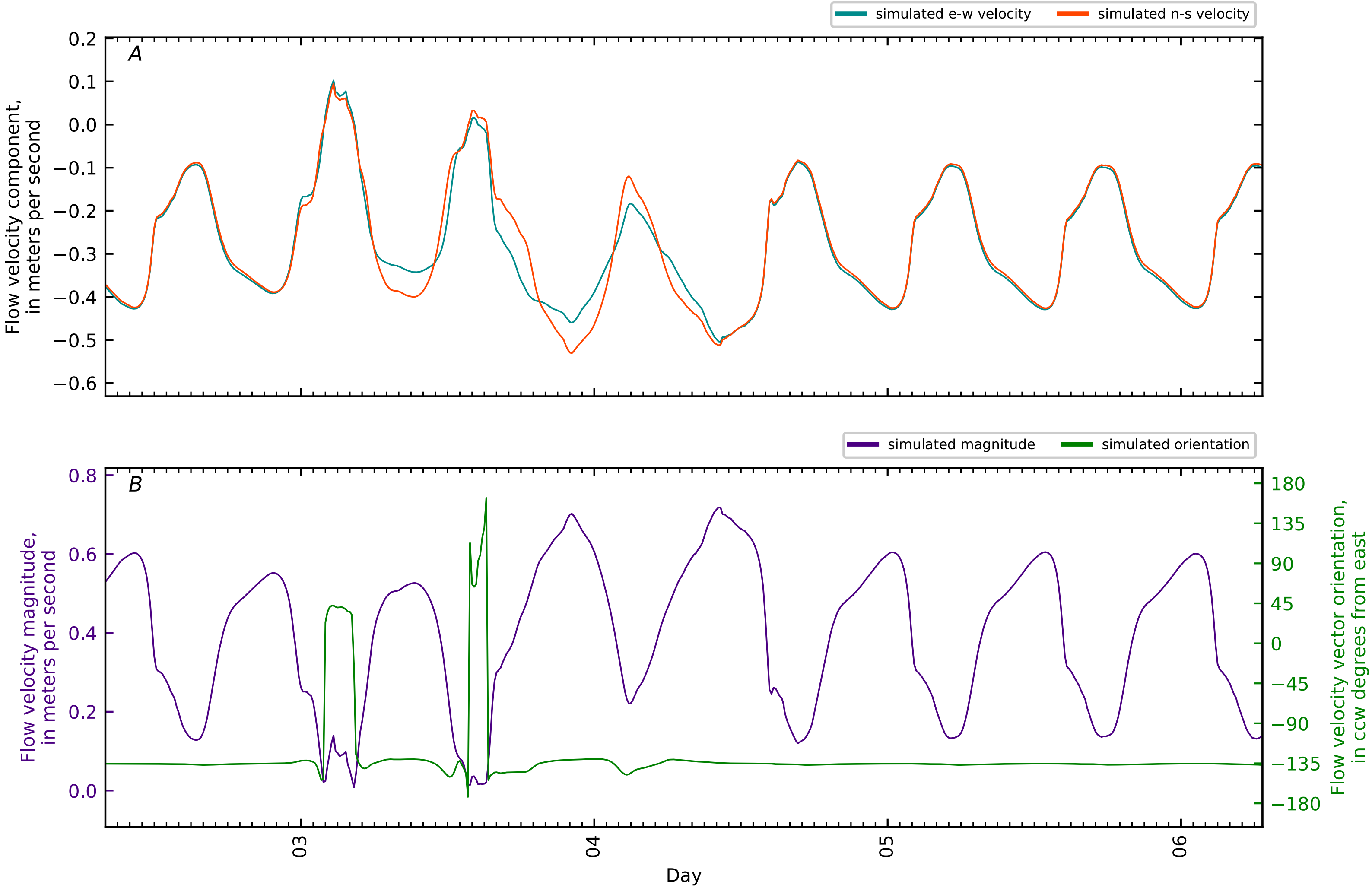

Figure B5-256. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 95, Penob Riv KM41. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

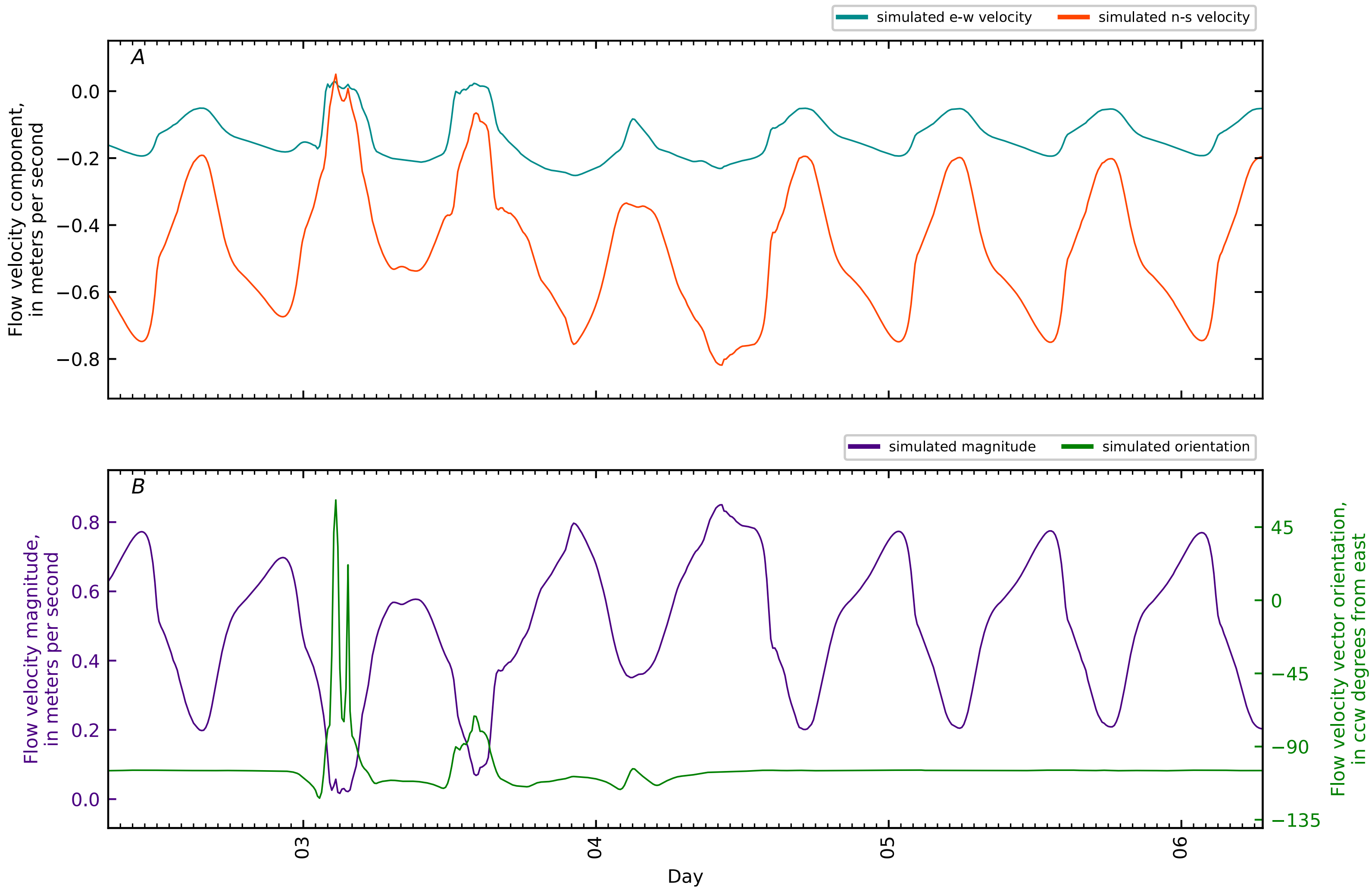

Figure B5-257. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 96, Penob Riv KM42. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

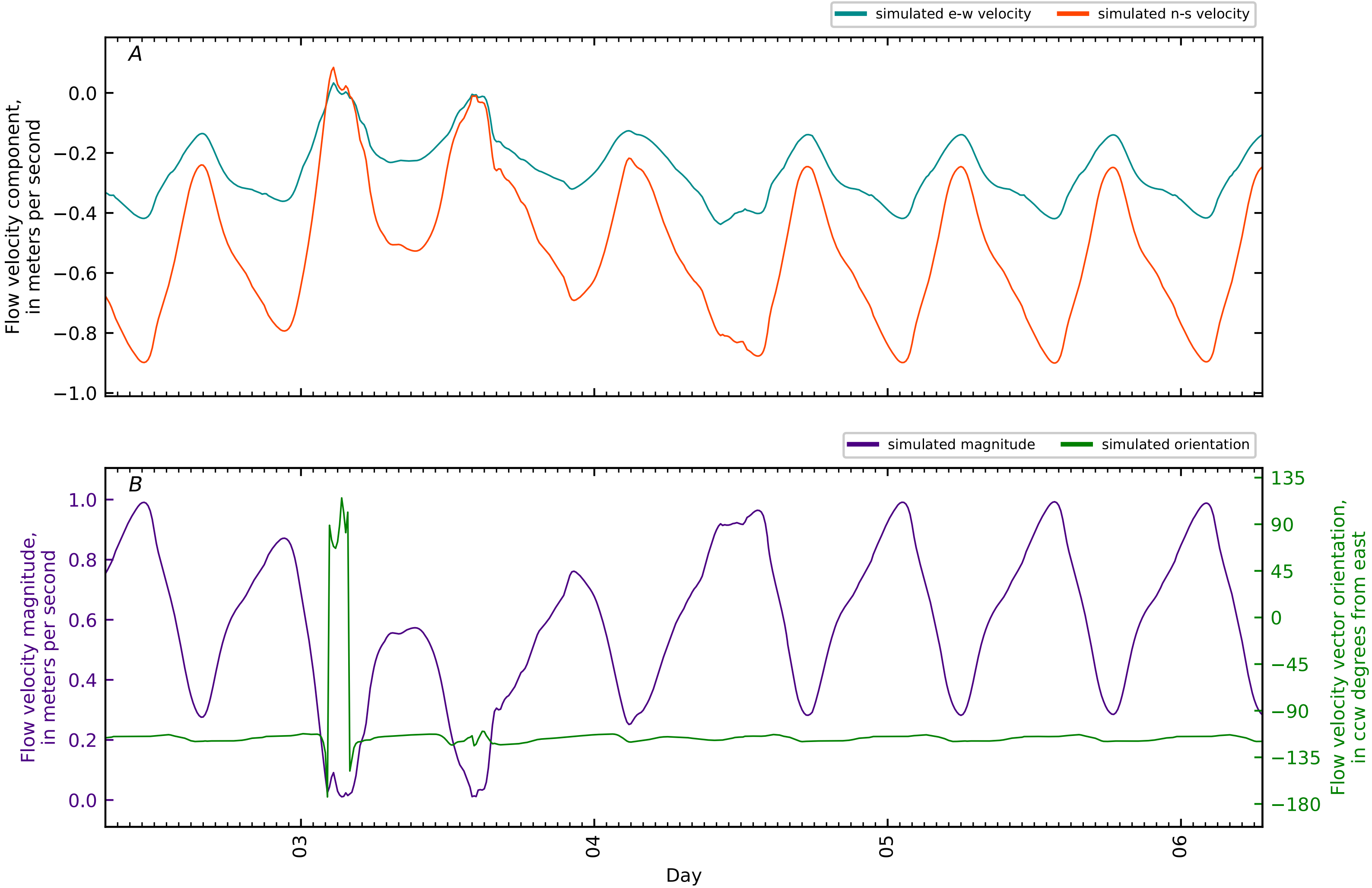

Figure B5-258. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 97, Penob Riv KM43. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

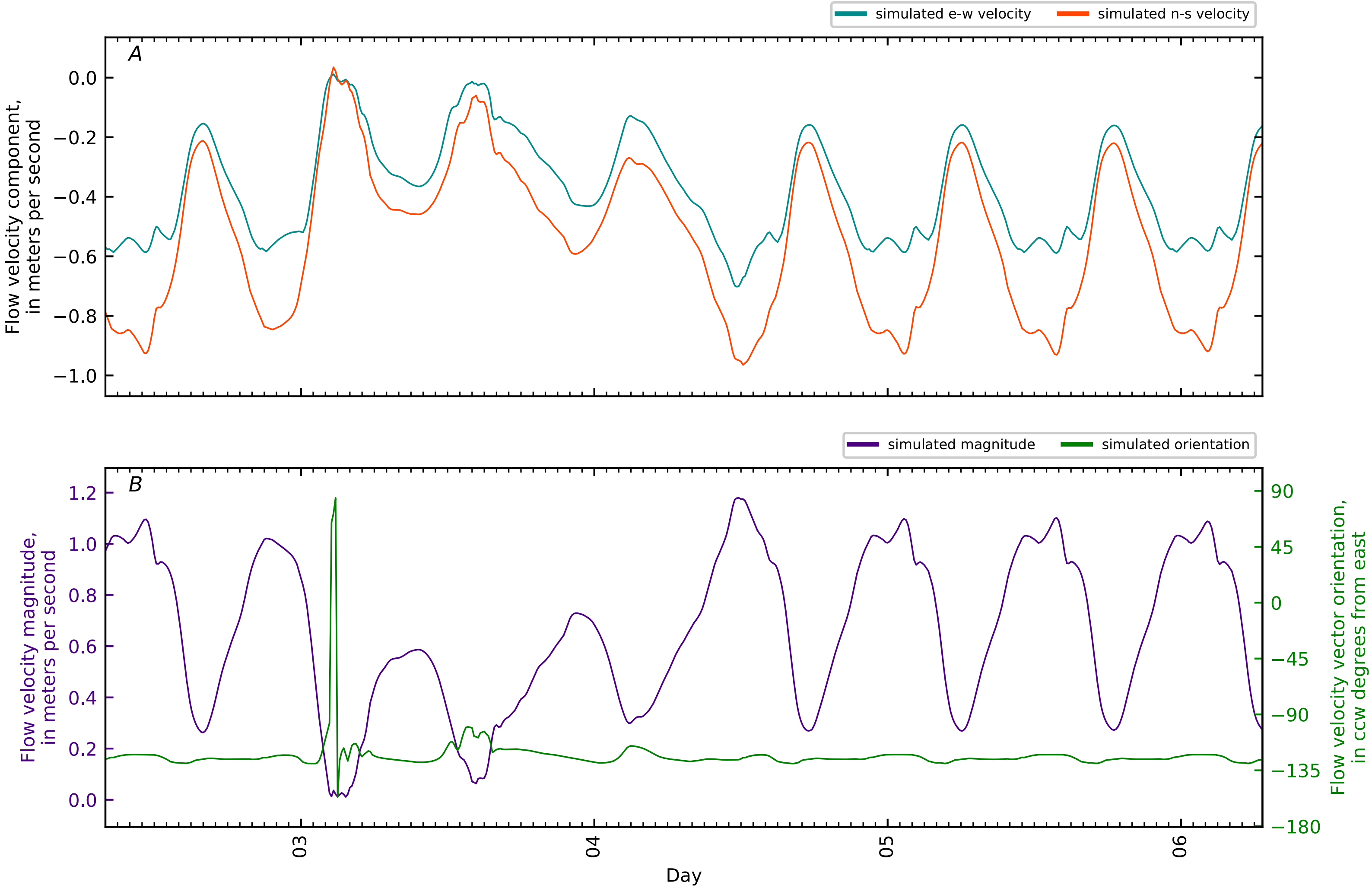

Figure B5-259. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 98, Penob Riv KM43.2 GS 01037050 at Bangor. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

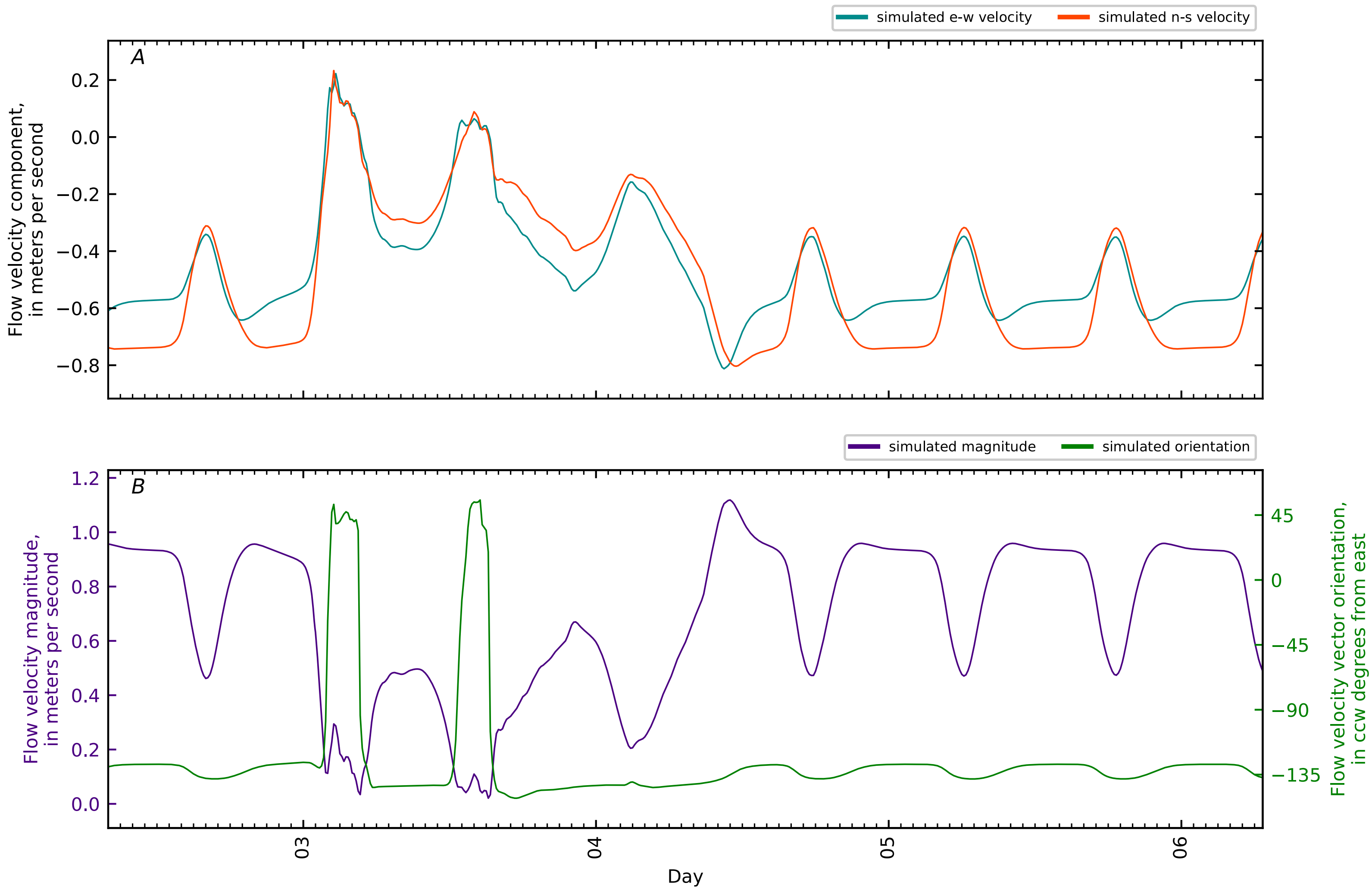

Figure B5-260. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 99, Penob Riv KM44. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

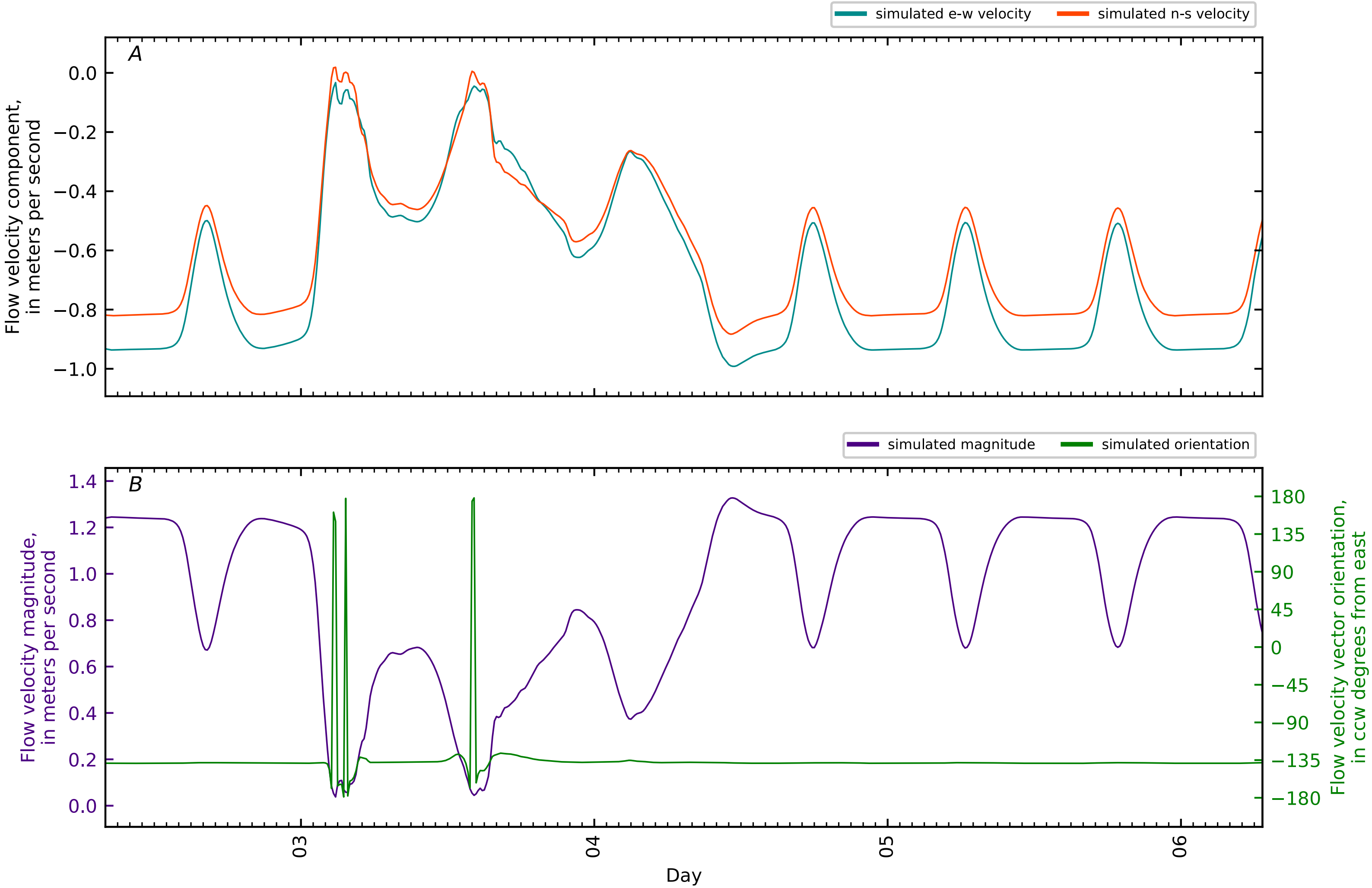

Figure B5-261. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 100, Penob Riv KM45. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

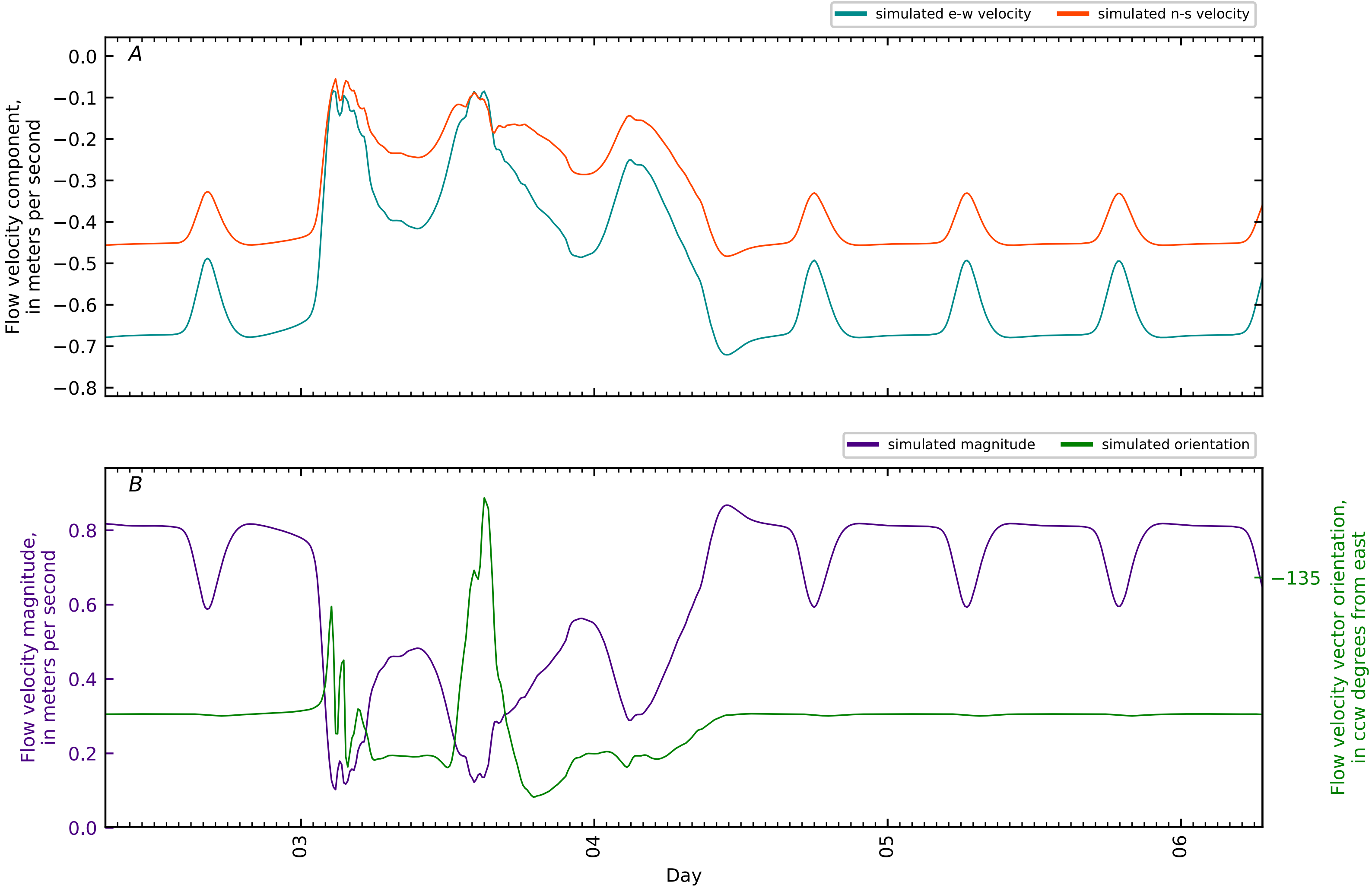

Figure B5-262. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 101, Penob Riv KM46. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

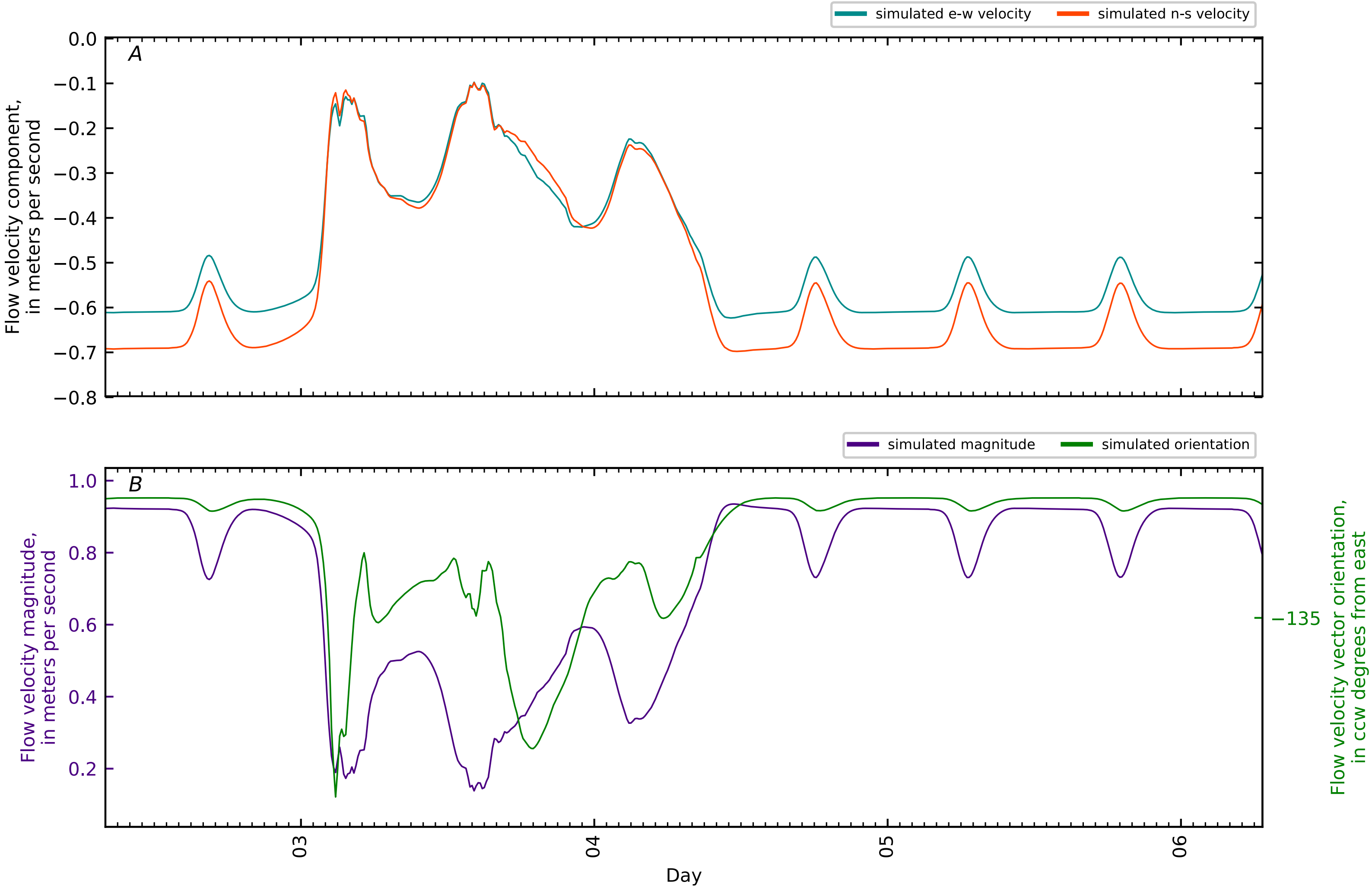

Figure B5-263. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 102, Penob Riv KM47. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

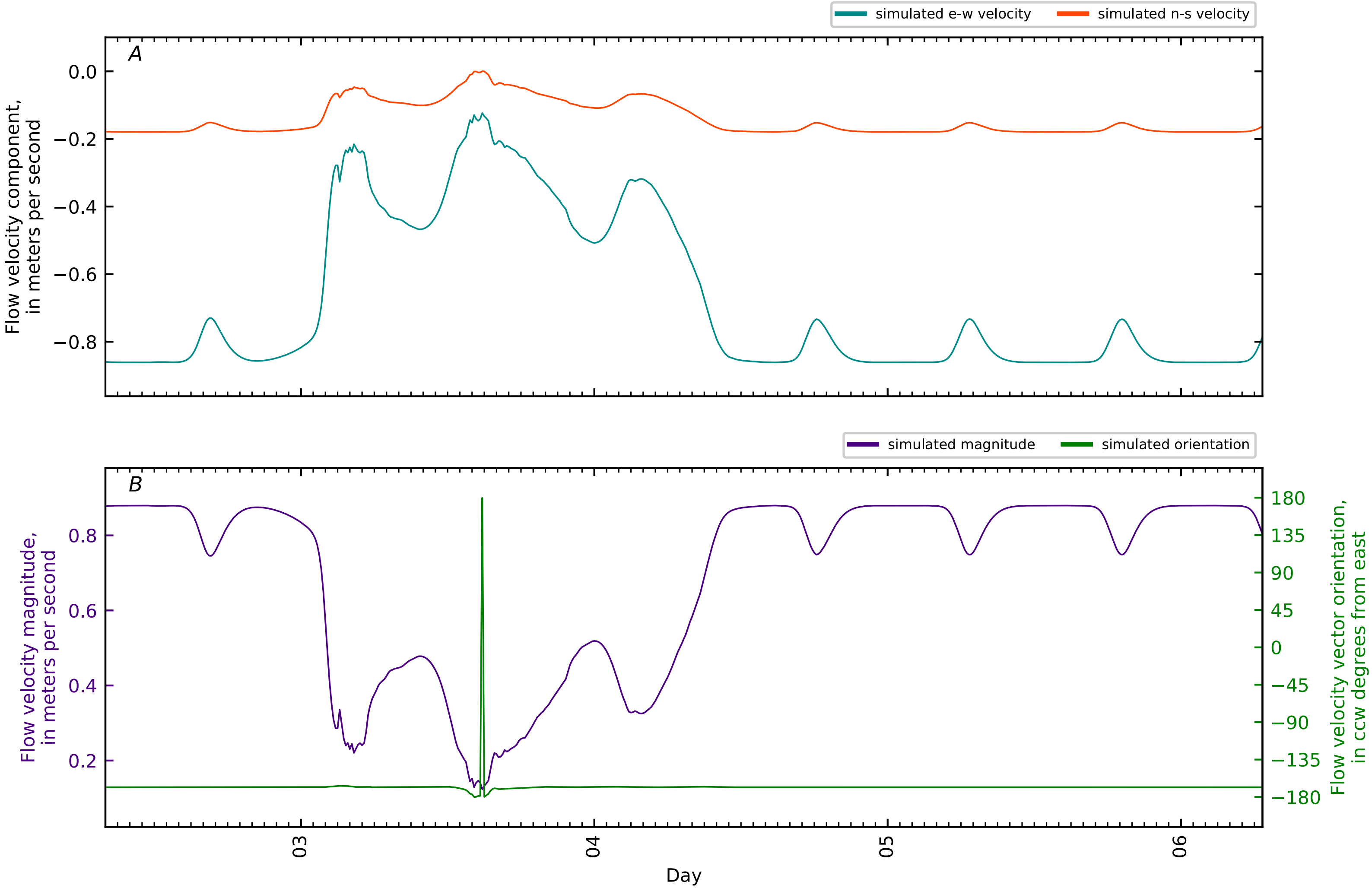

Figure B5-264. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 103, Penob Riv KM48. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

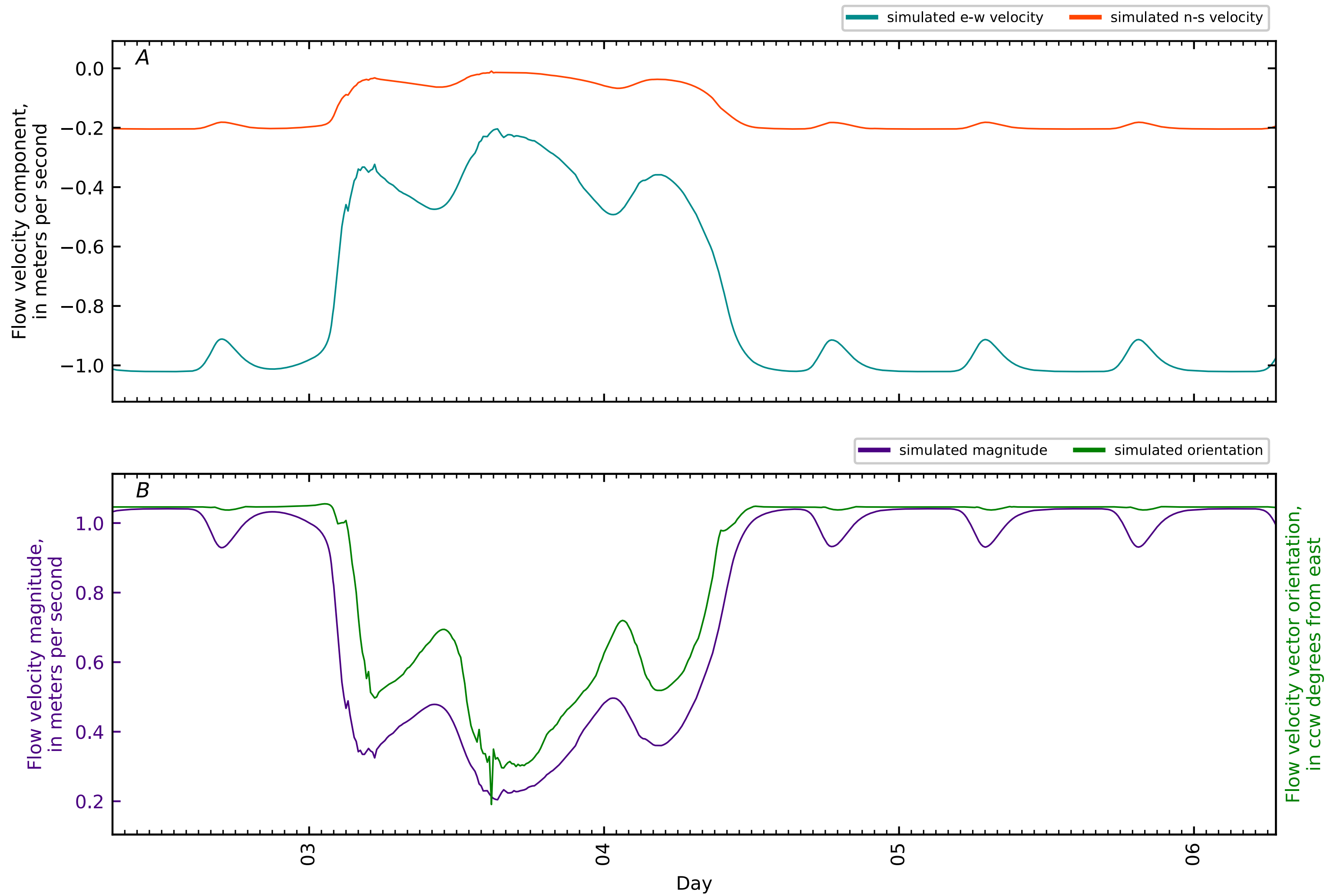

Figure B5-265. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 104, Penob Riv KM49. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

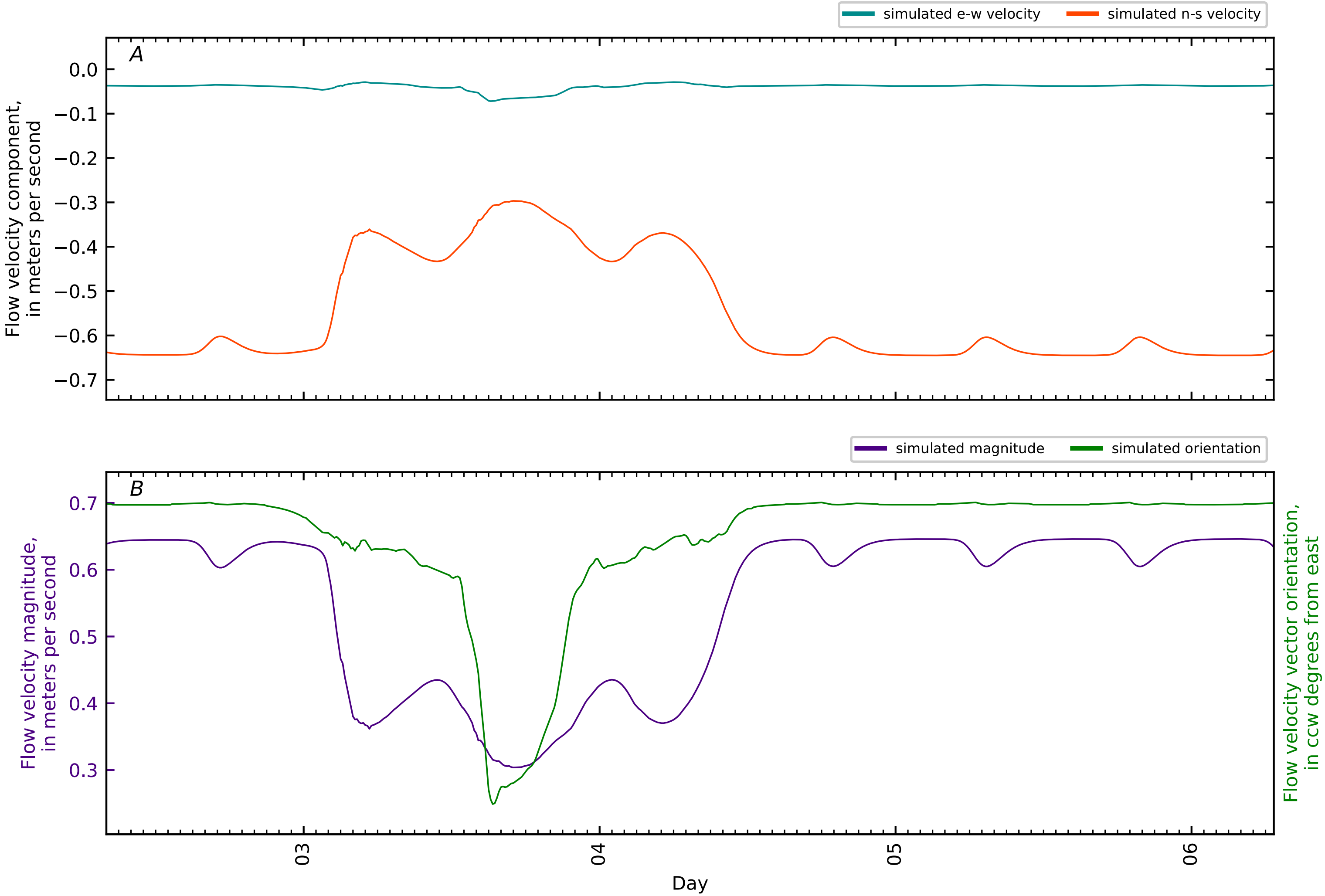

Figure B5-266. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 105, Penob Riv KM50 nr GS gage Eddington. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

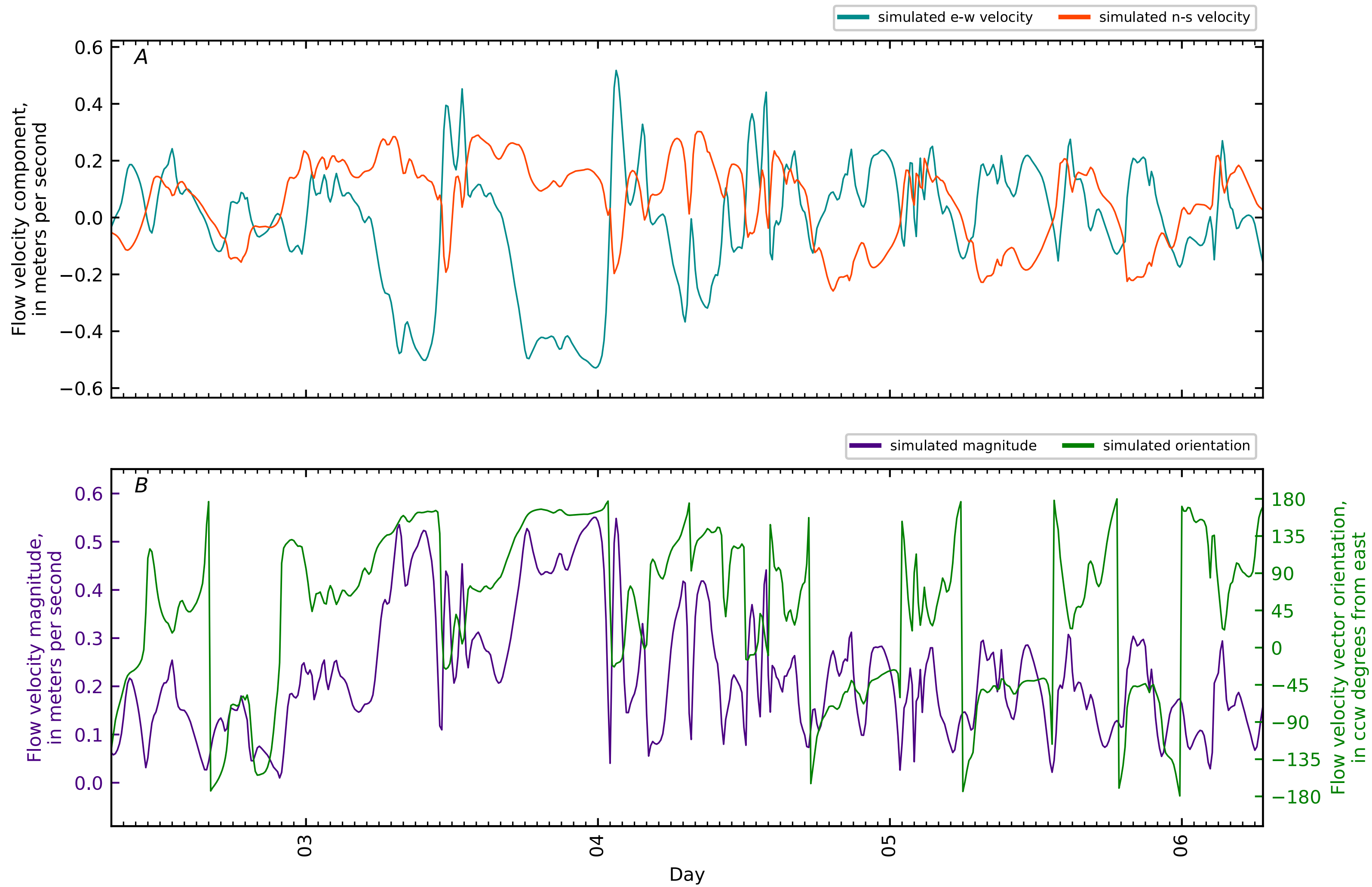

Figure B5-267. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 106, East Channel -KM0.1 ERDC9 VE-MU4-SF-2. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

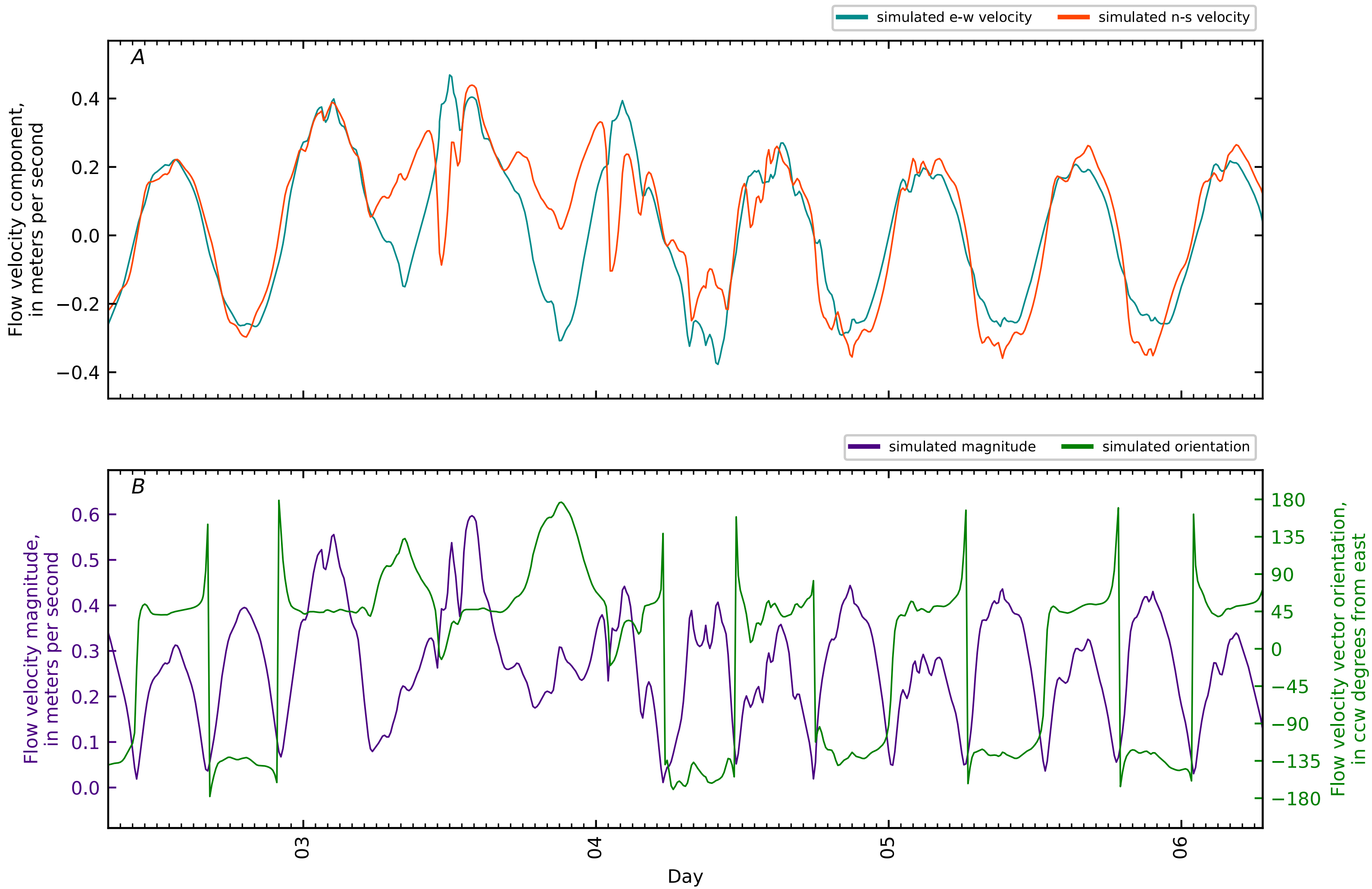

Figure B5-268. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 107, East Channel KM0. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

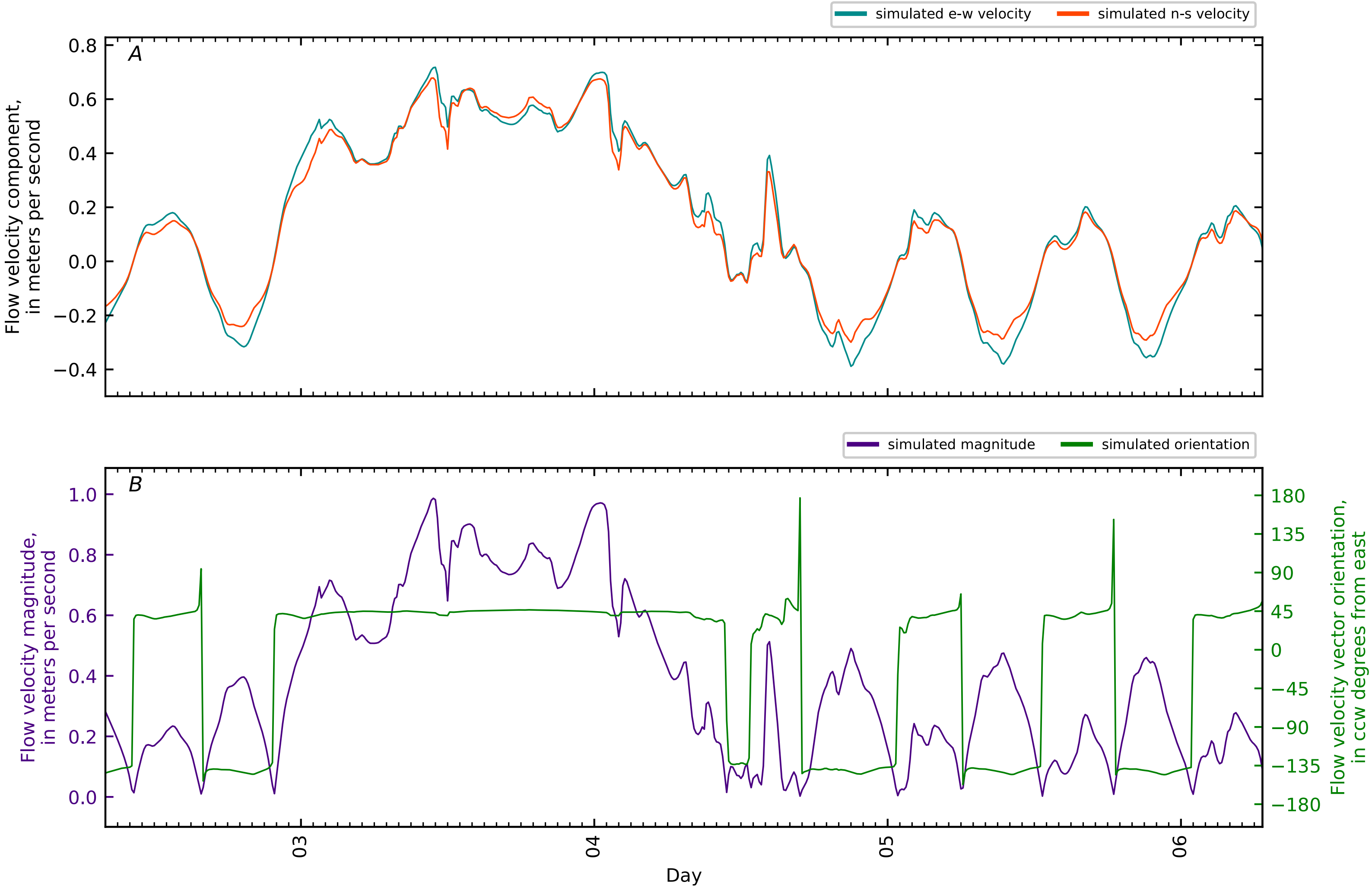

Figure B5-269. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 108, East Channel KM0.1 GS CTD4-01. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

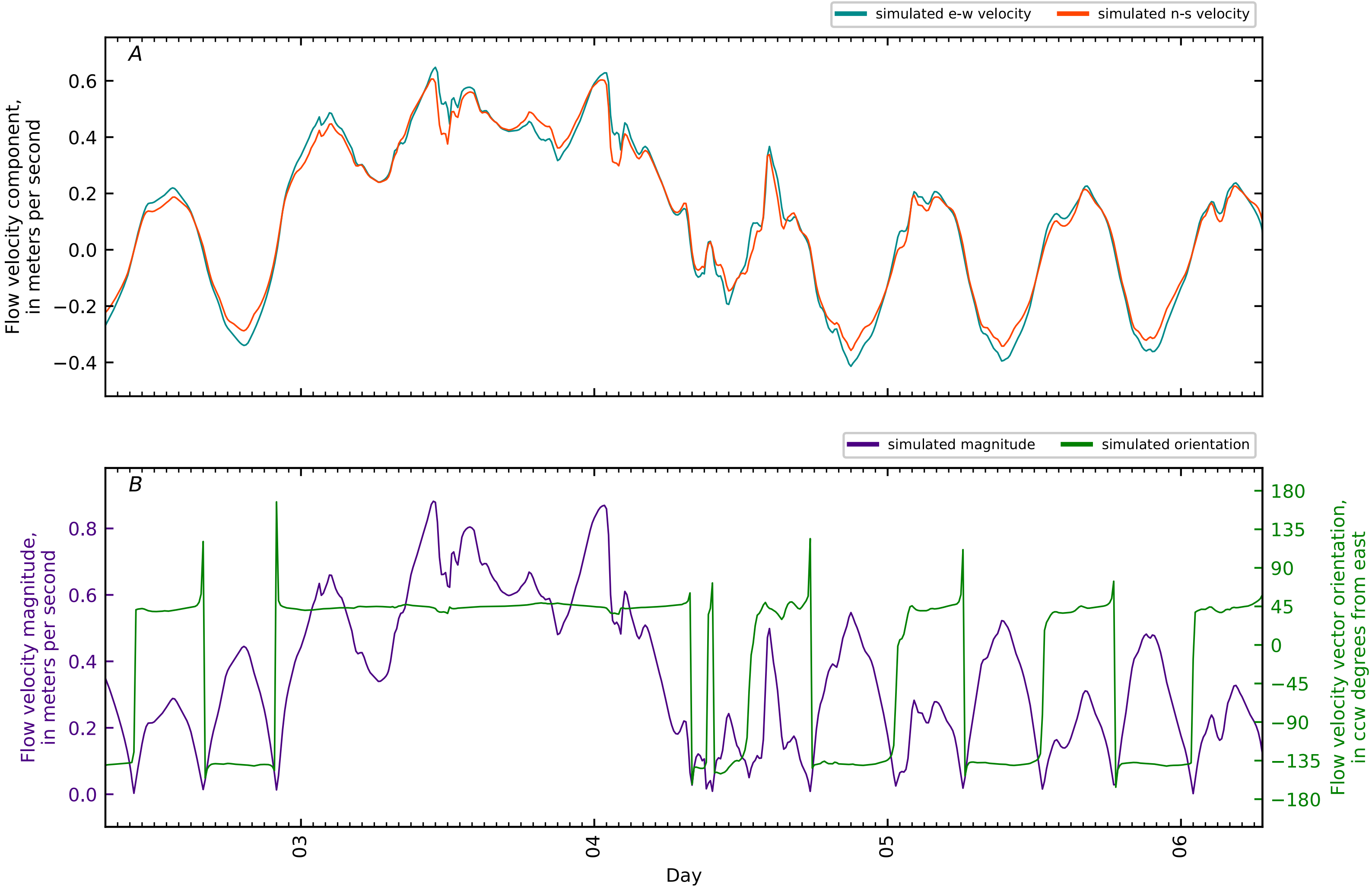

Figure B5-270. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 109, East Channel KM0.1 GS CTD4-02. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

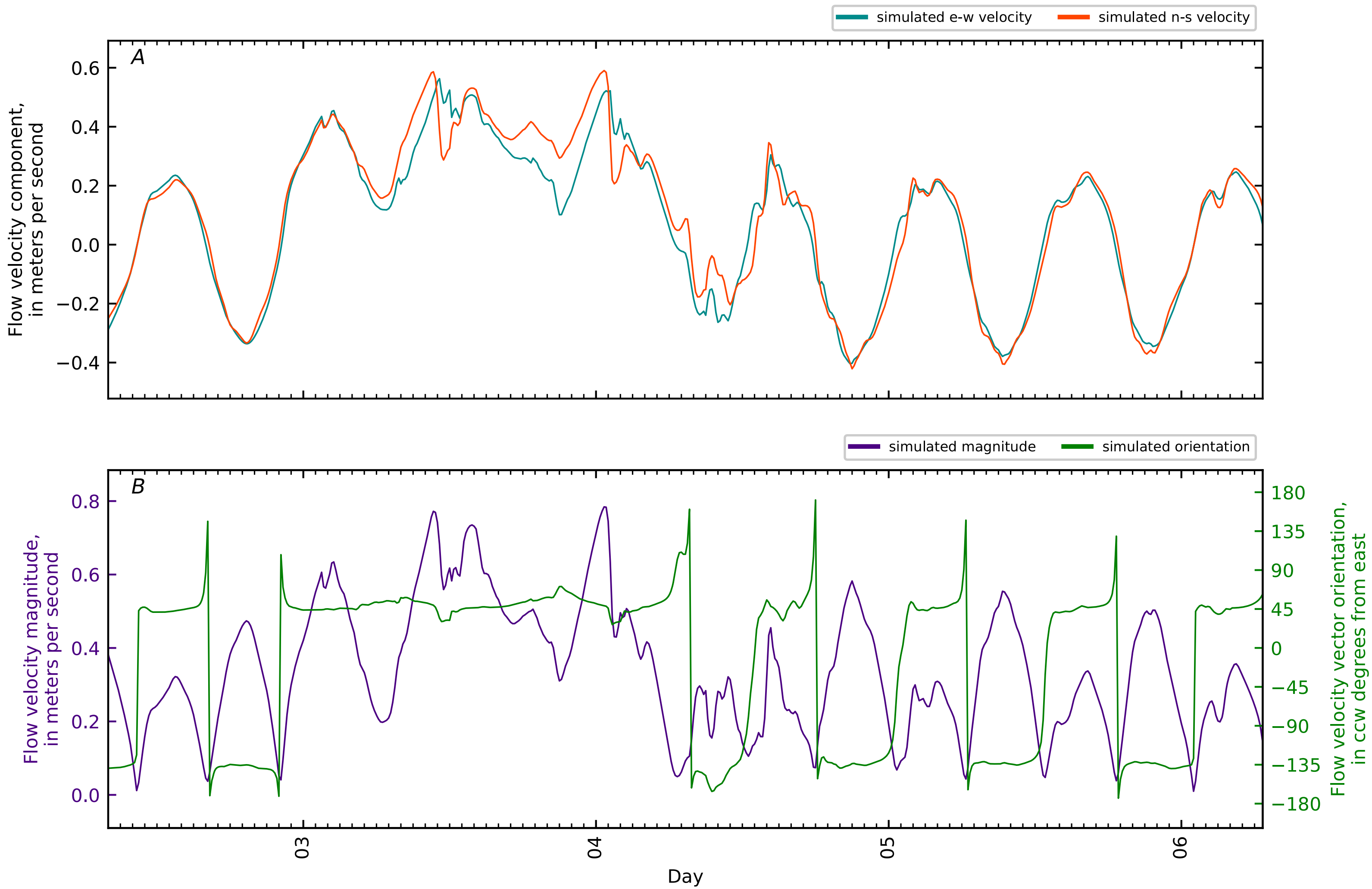

Figure B5-271. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 110, East Channel KM0.1 GS CTD4-03. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

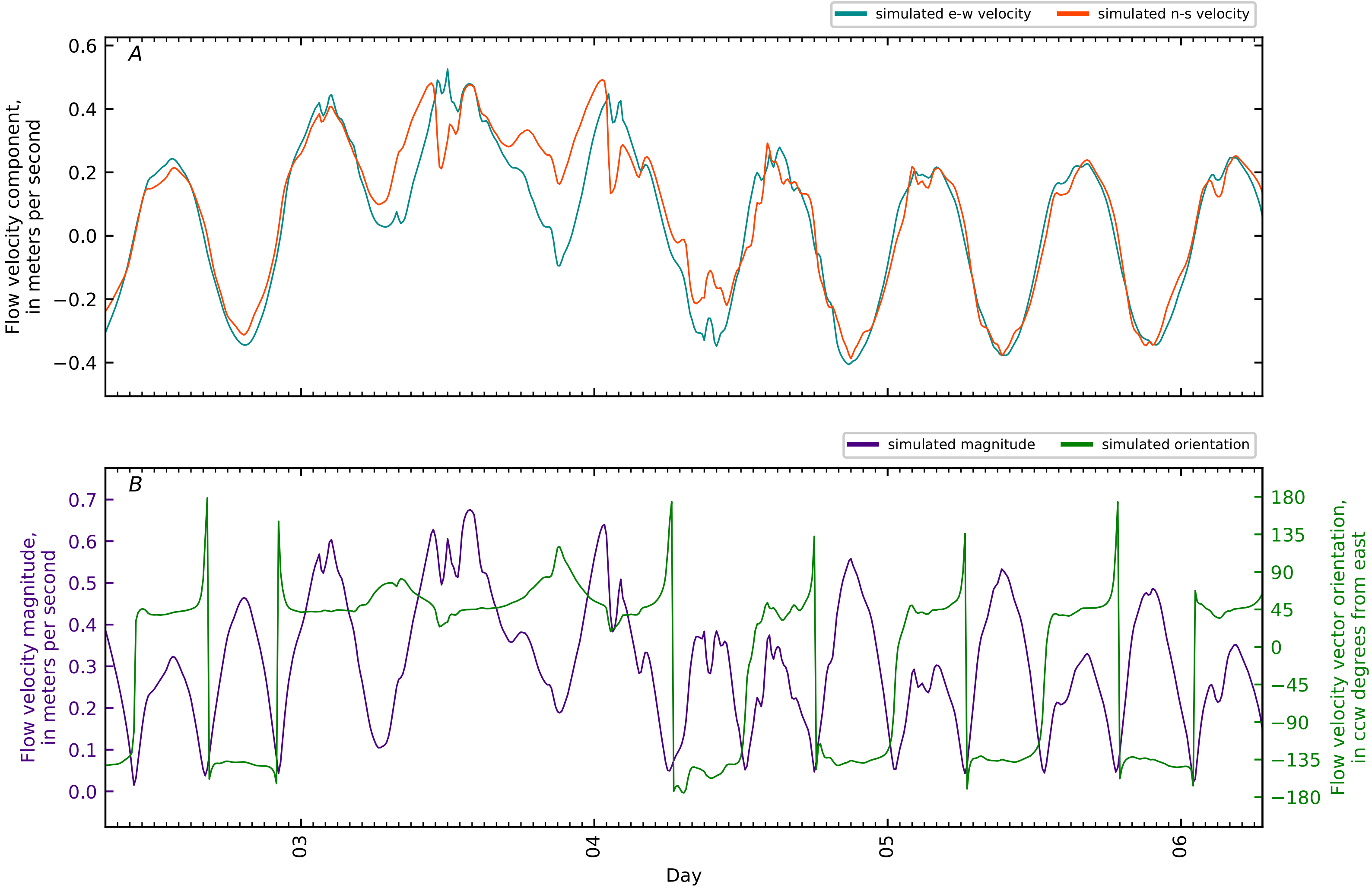

Figure B5-272. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 111, East Channel KM0.1 GS CTD4-04. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

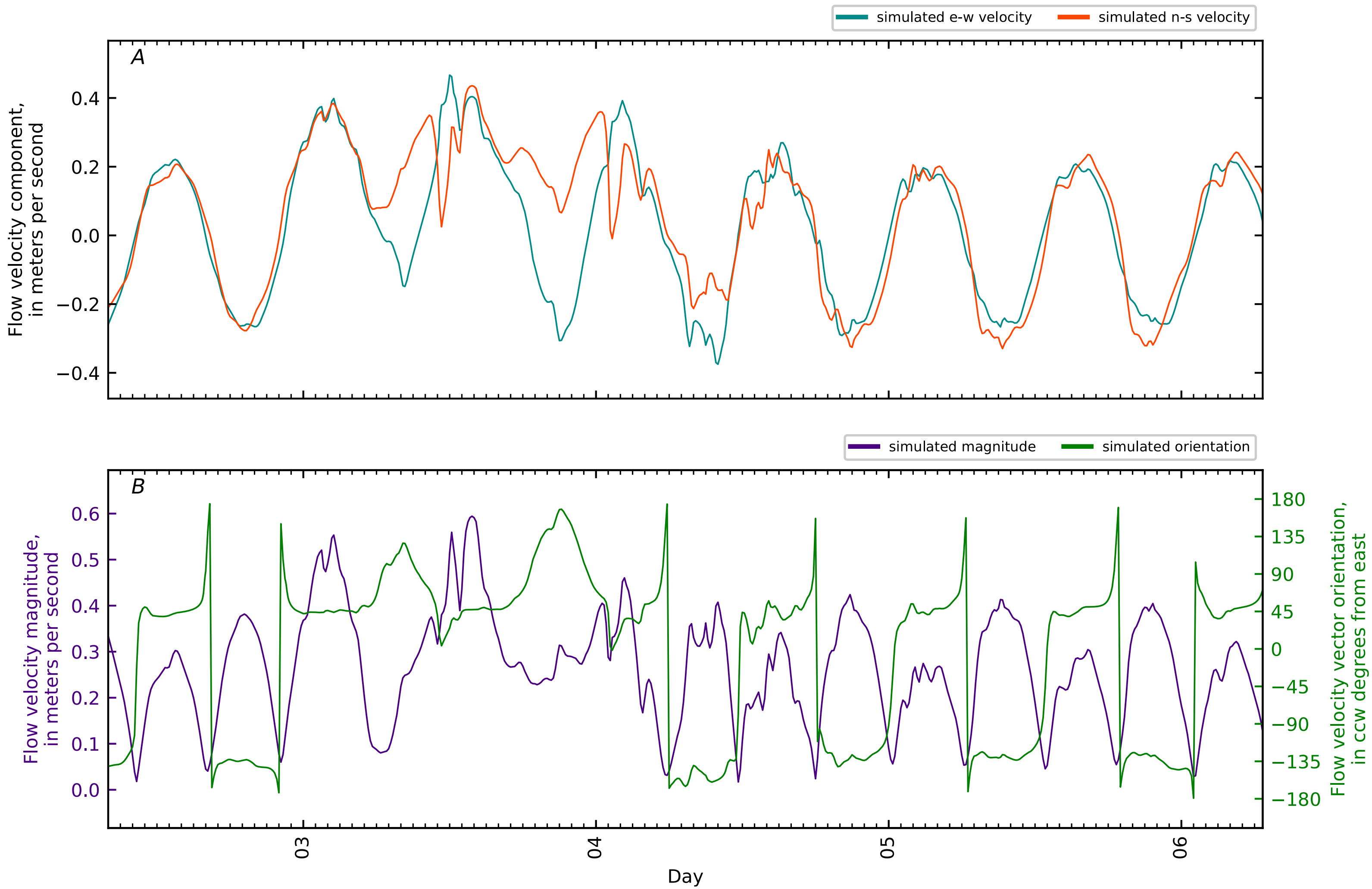

Figure B5-273. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 112, East Channel KM0.1 GS CTD4-05. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

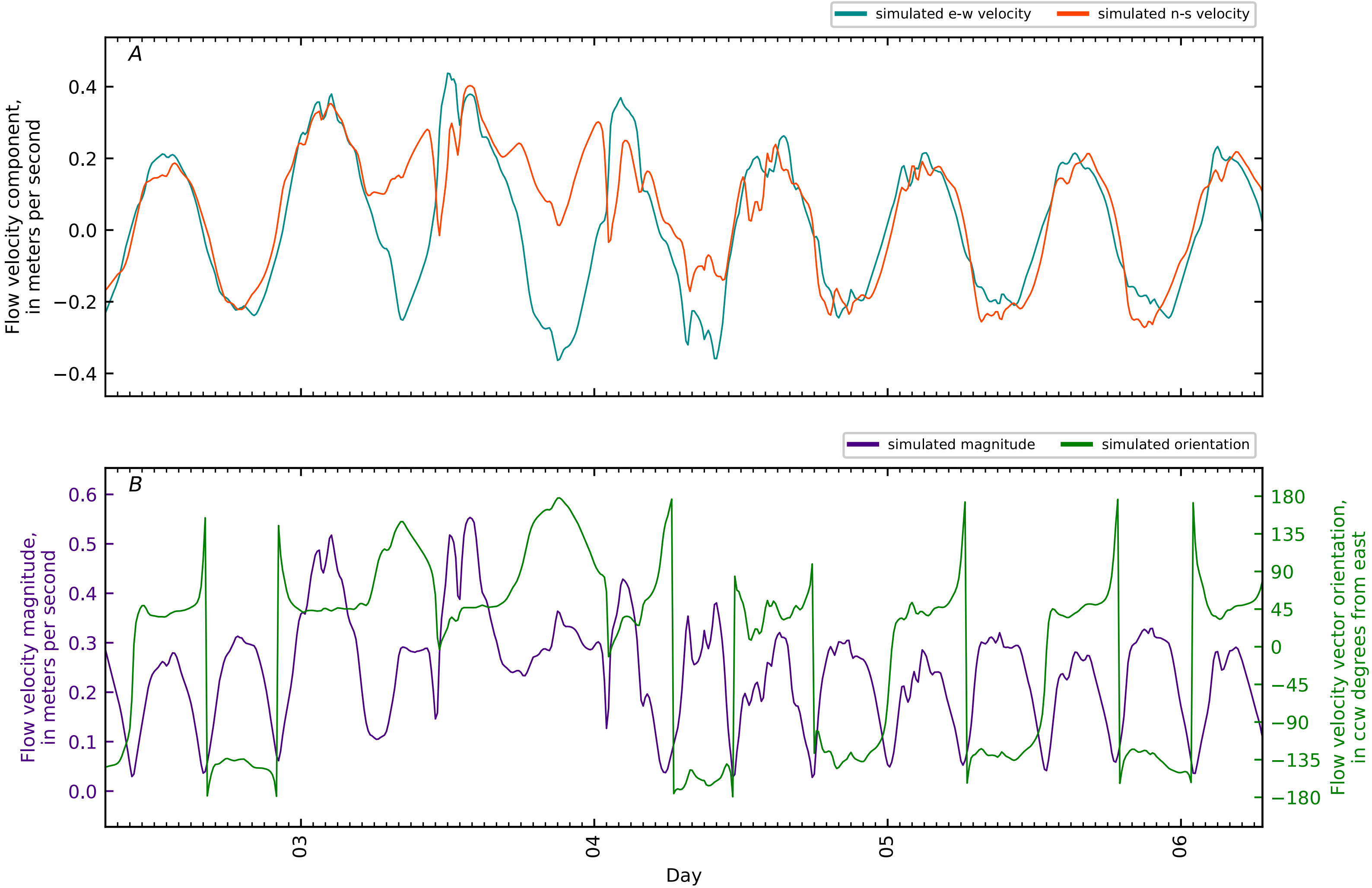

Figure B5-274. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 113, East Channel KM0.1 GS CTD4-06. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

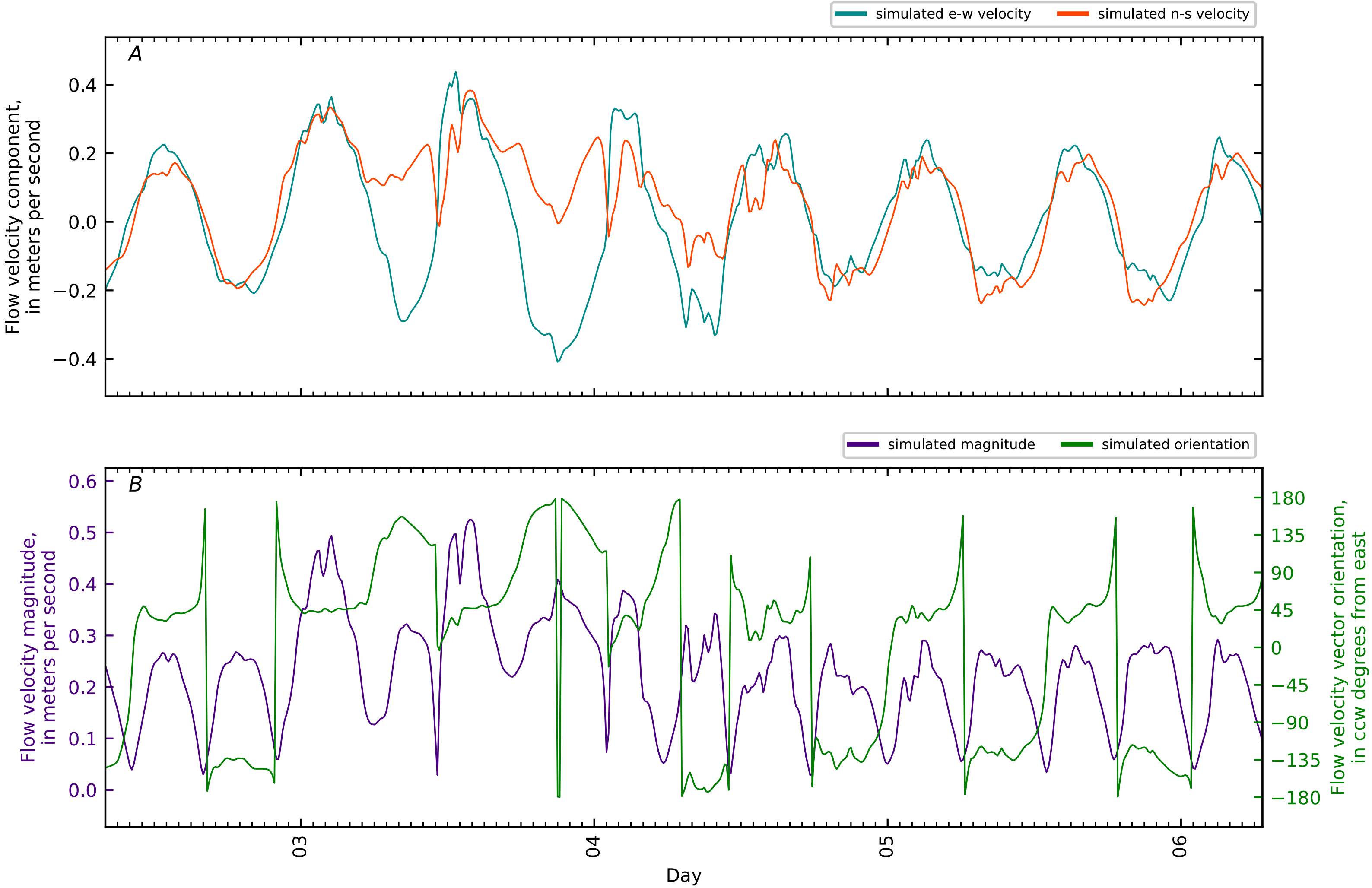

Figure B5-275. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 114, East Channel KM0.1 GS CTD4-07. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

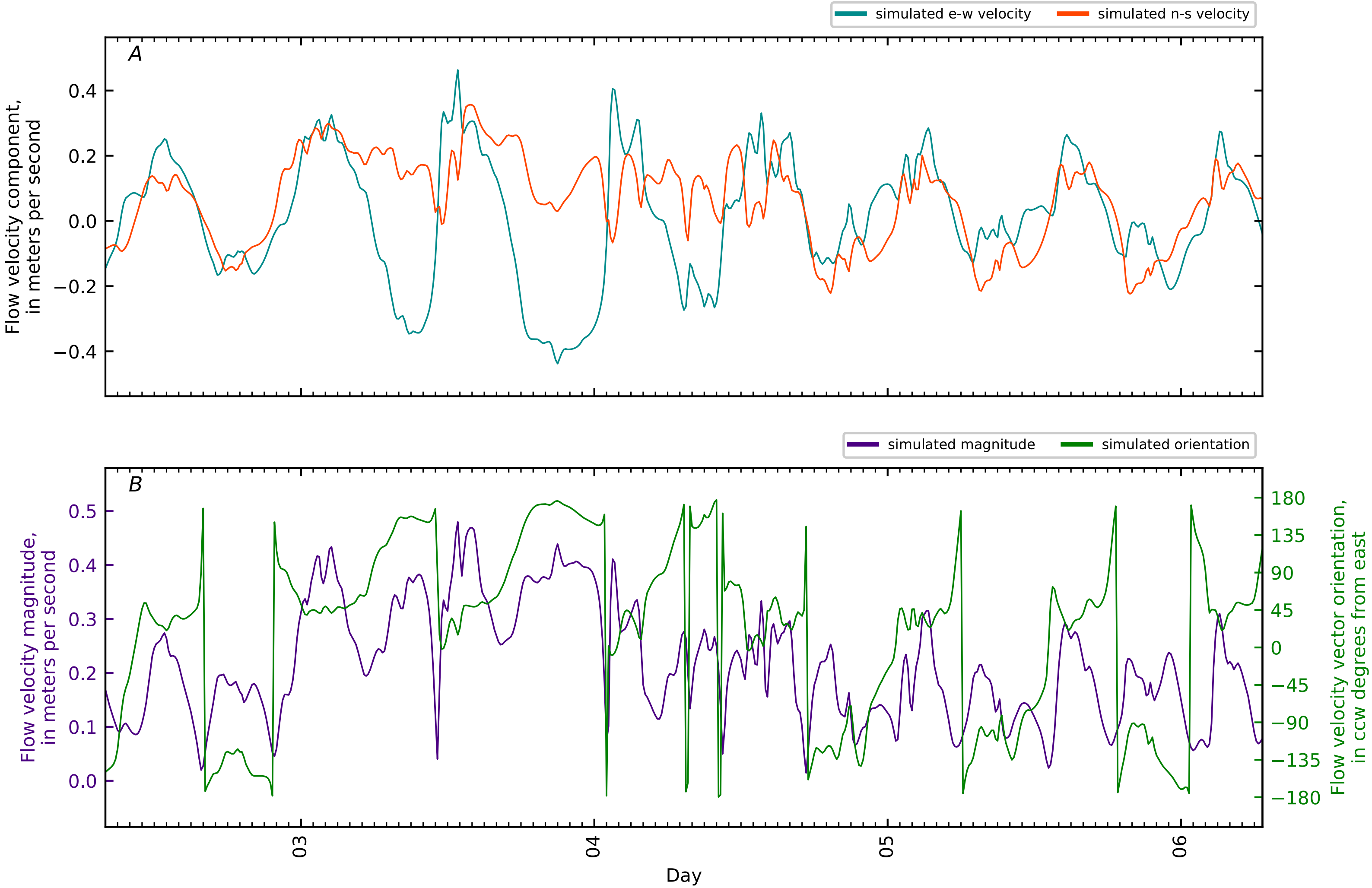

Figure B5-276. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 115, East Channel KM0.1 GS CTD4-08. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

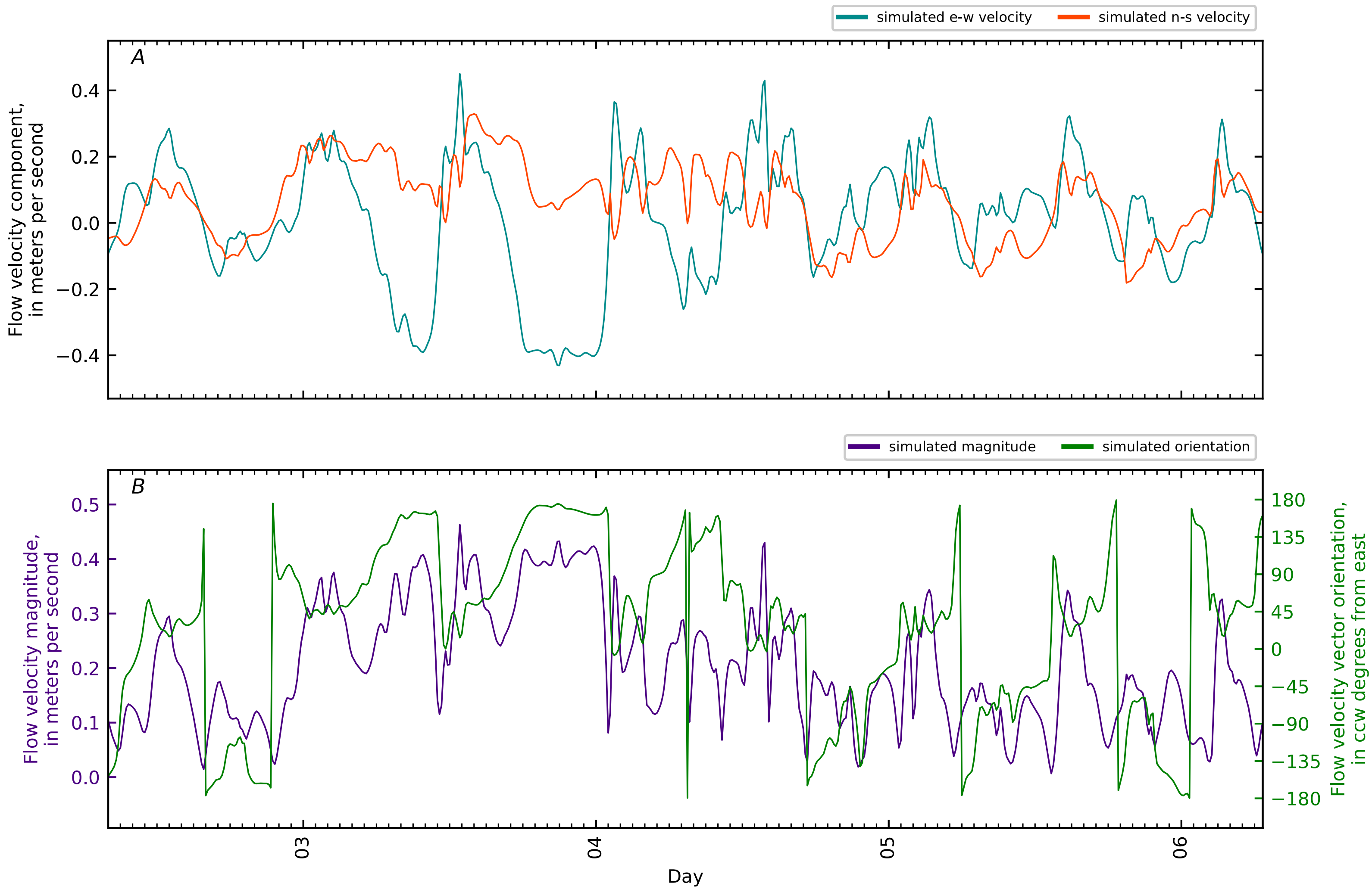

Figure B5-277. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 116, East Channel KM0.1 GS CTD4-09. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

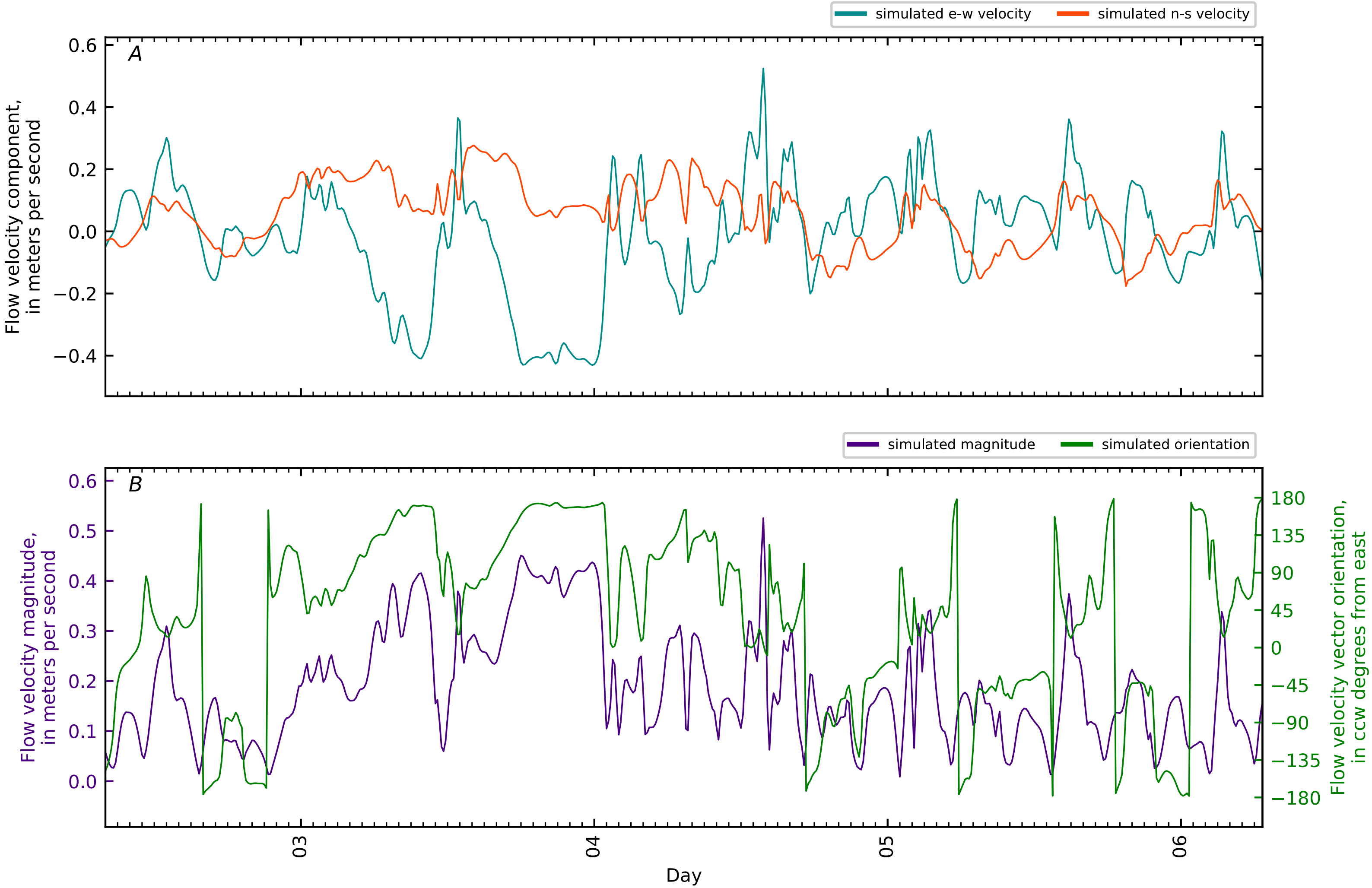

Figure B5-278. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 117, East Channel KM0.1 GS CTD4-10. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

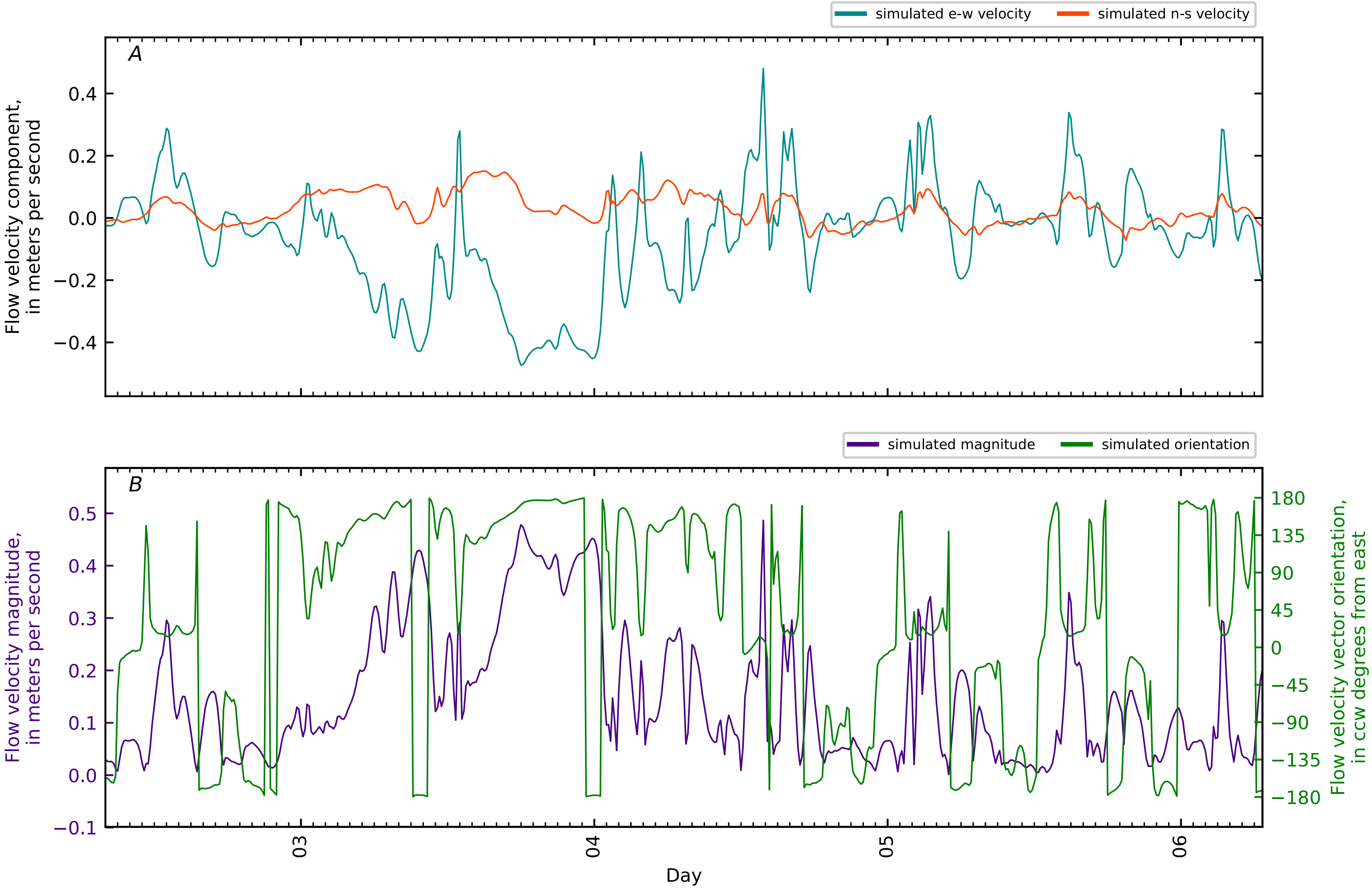

Figure B5-279. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 118, East Channel KM0.1 GS CTD4-11. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

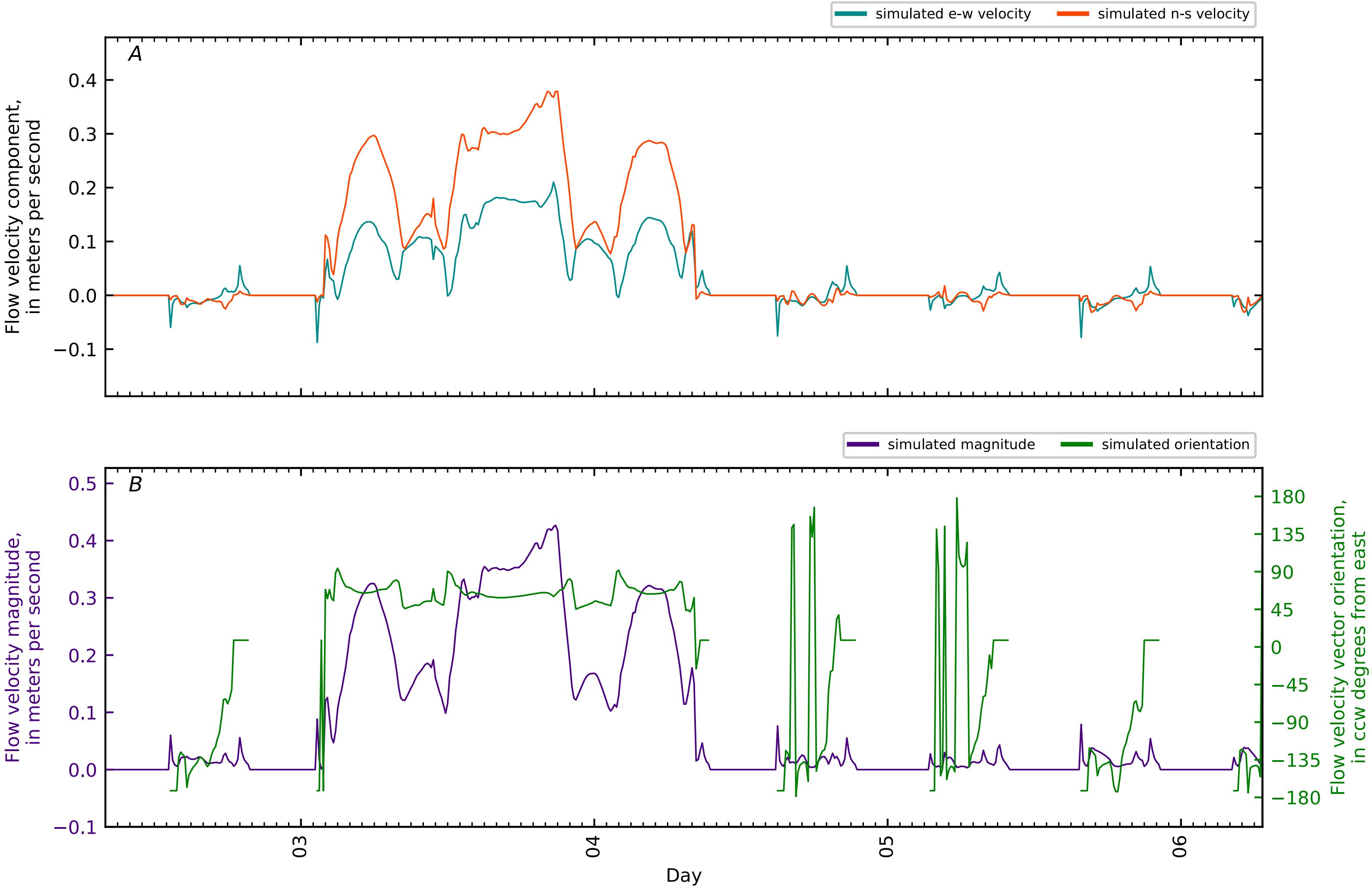

Figure B5-280. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 119, East Channel KM0.78 ERDC7 VE-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

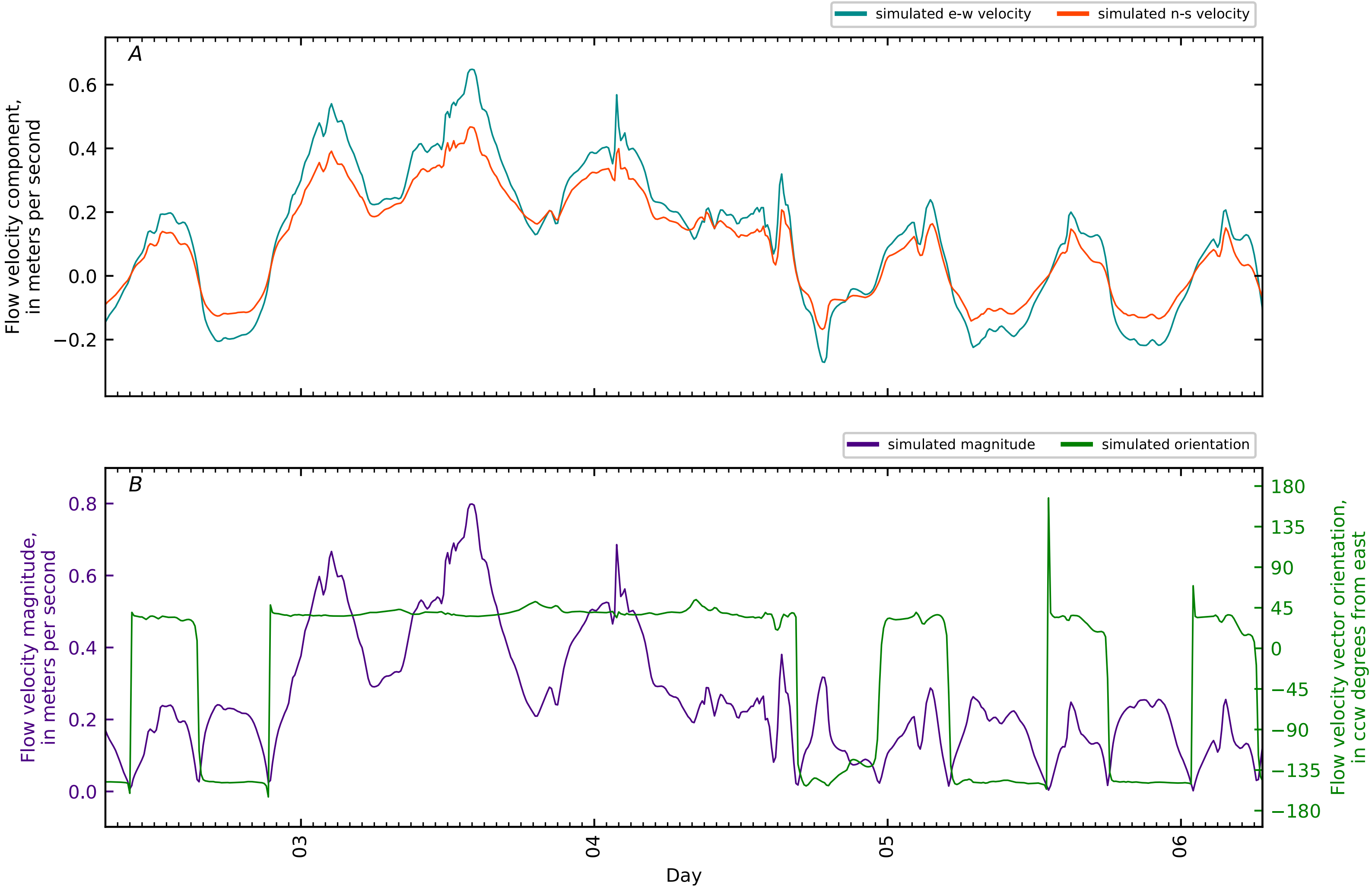

Figure B5-281. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 120, East Channel KM0.8 ERDC8 VE-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

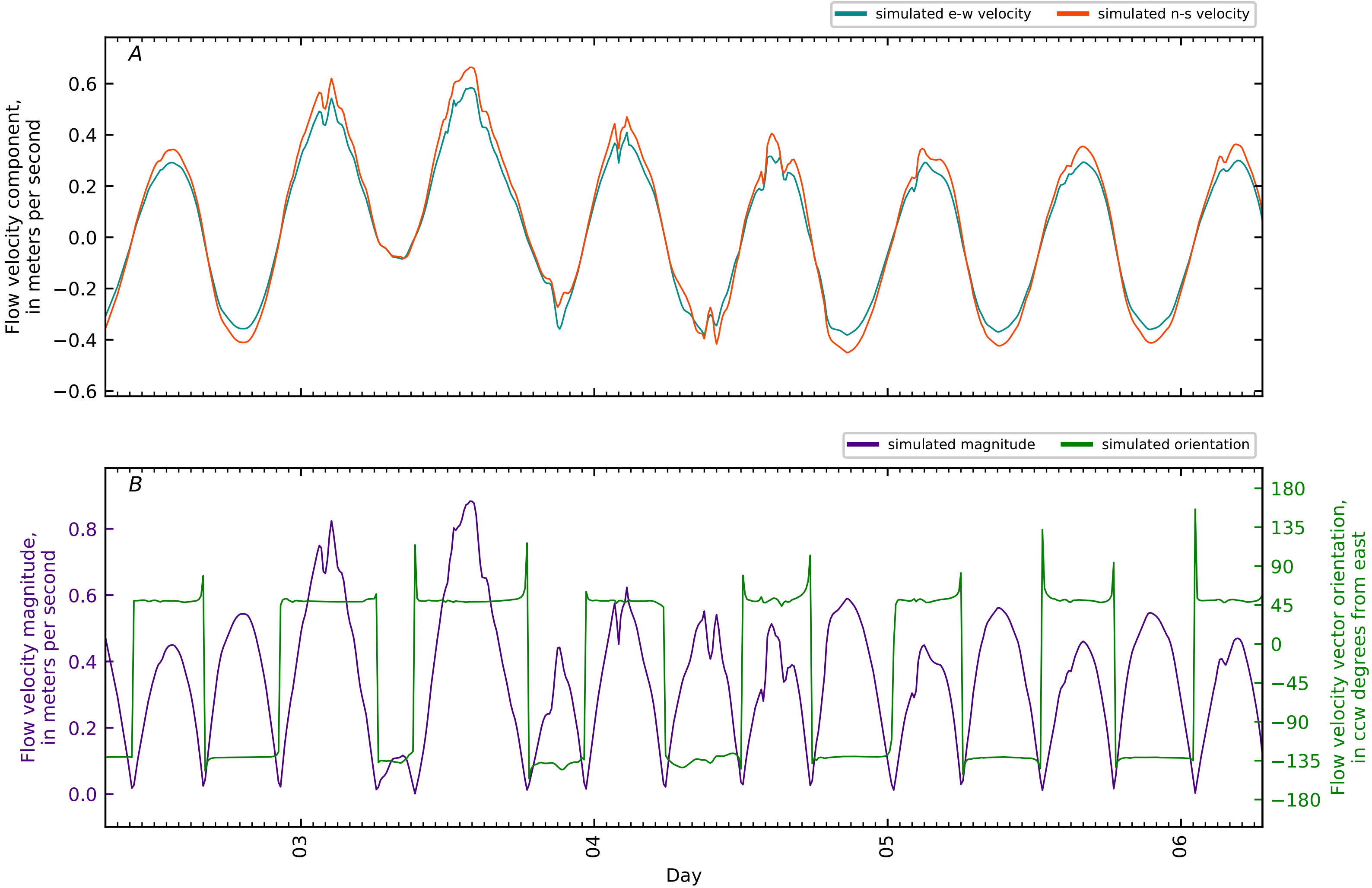

Figure B5-282. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 121, East Channel KM1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

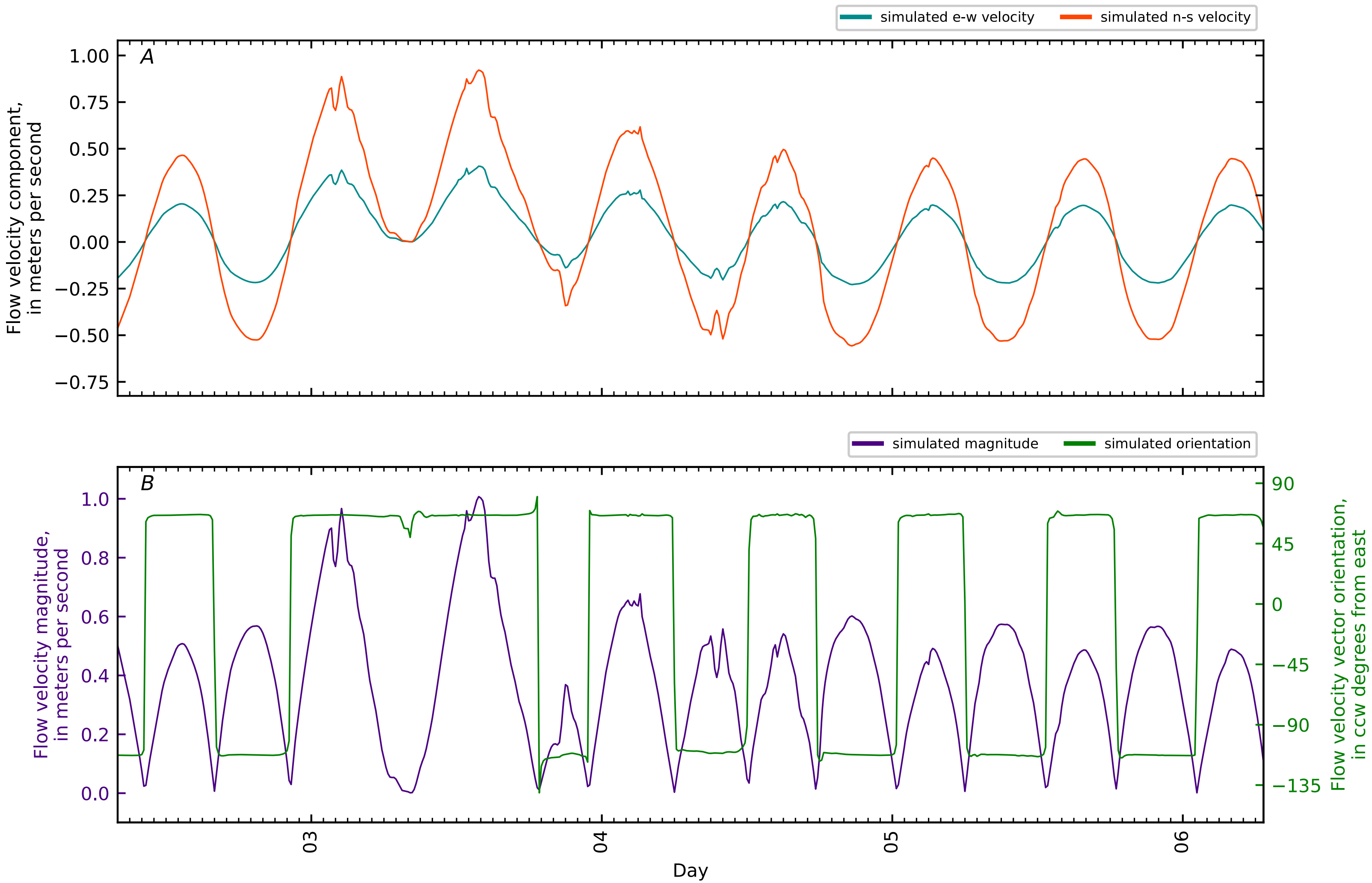

Figure B5-283. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 122, East Channel KM2. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

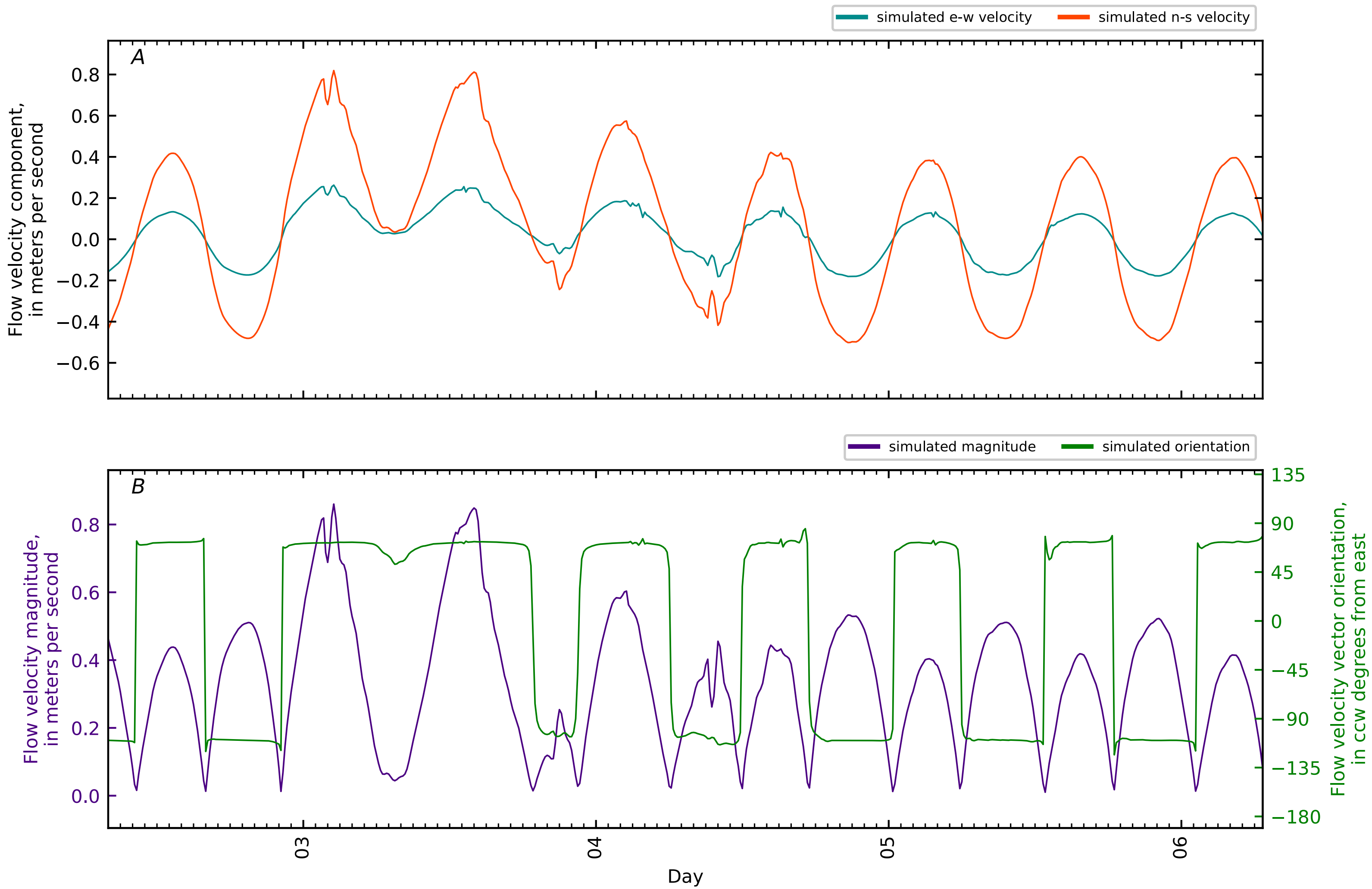

Figure B5-284. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 123, East Channel KM3. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

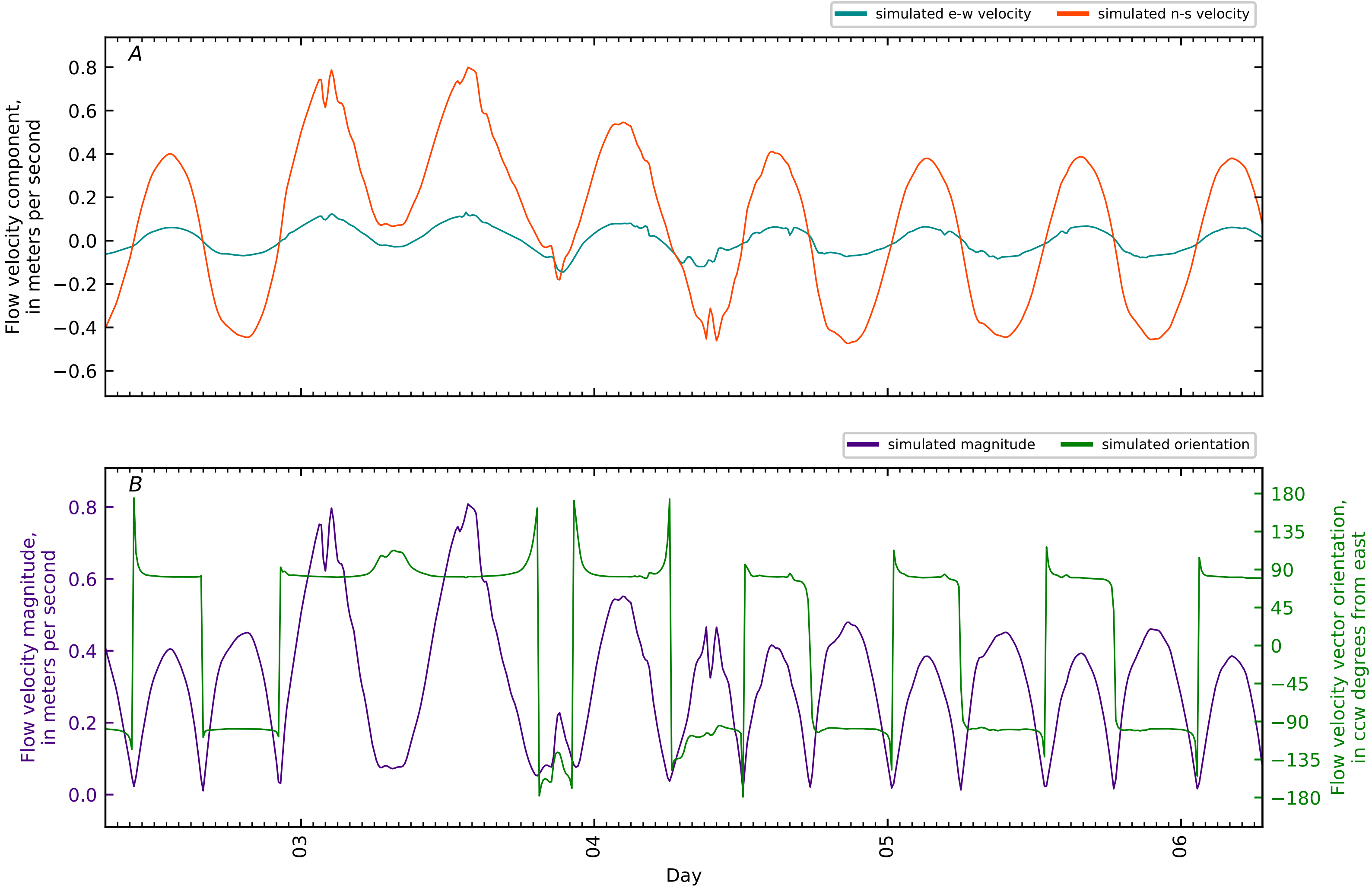

Figure B5-285. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 124, East Channel KM4. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

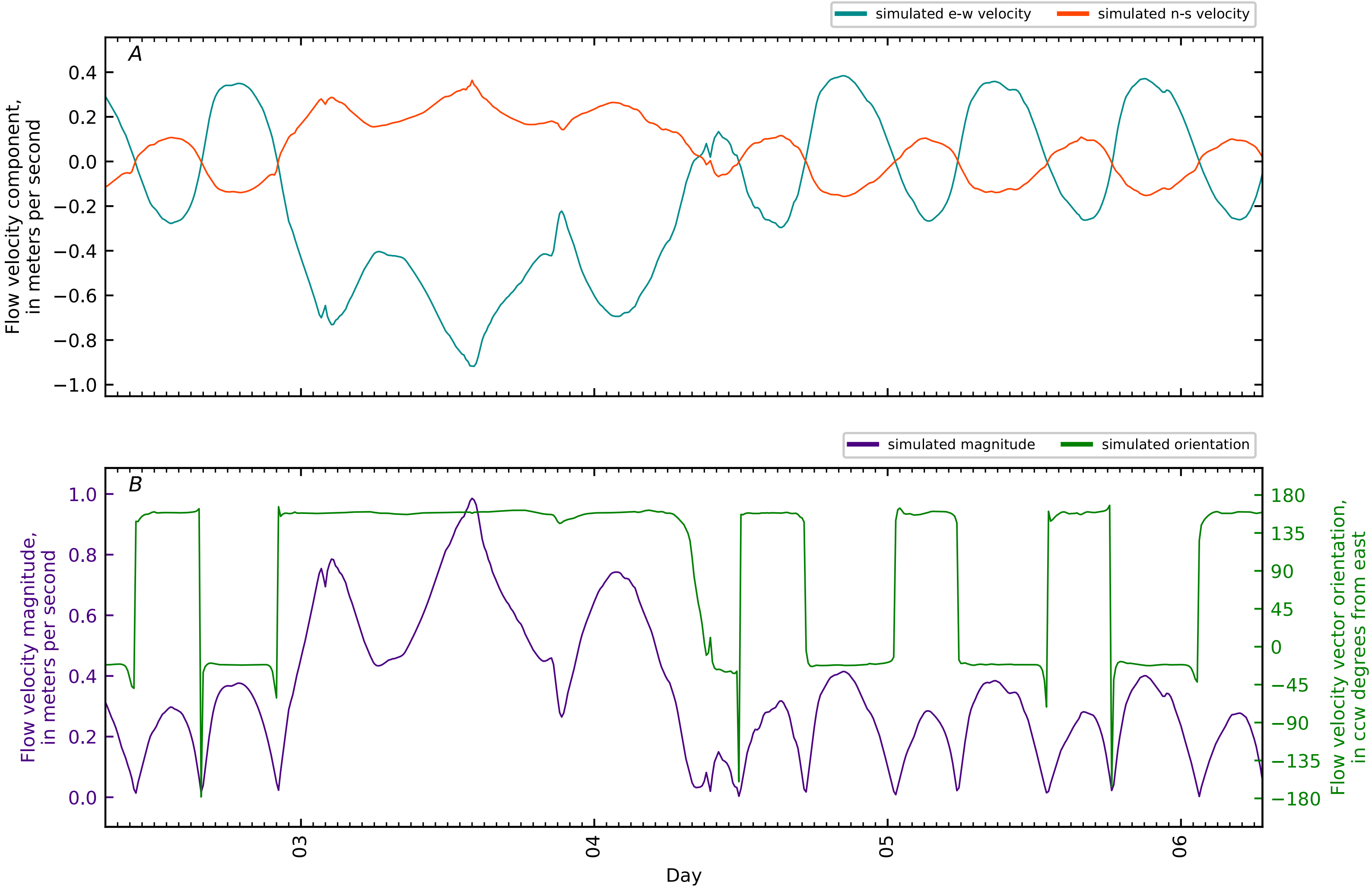

Figure B5-286. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 125, East Channel KM5. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

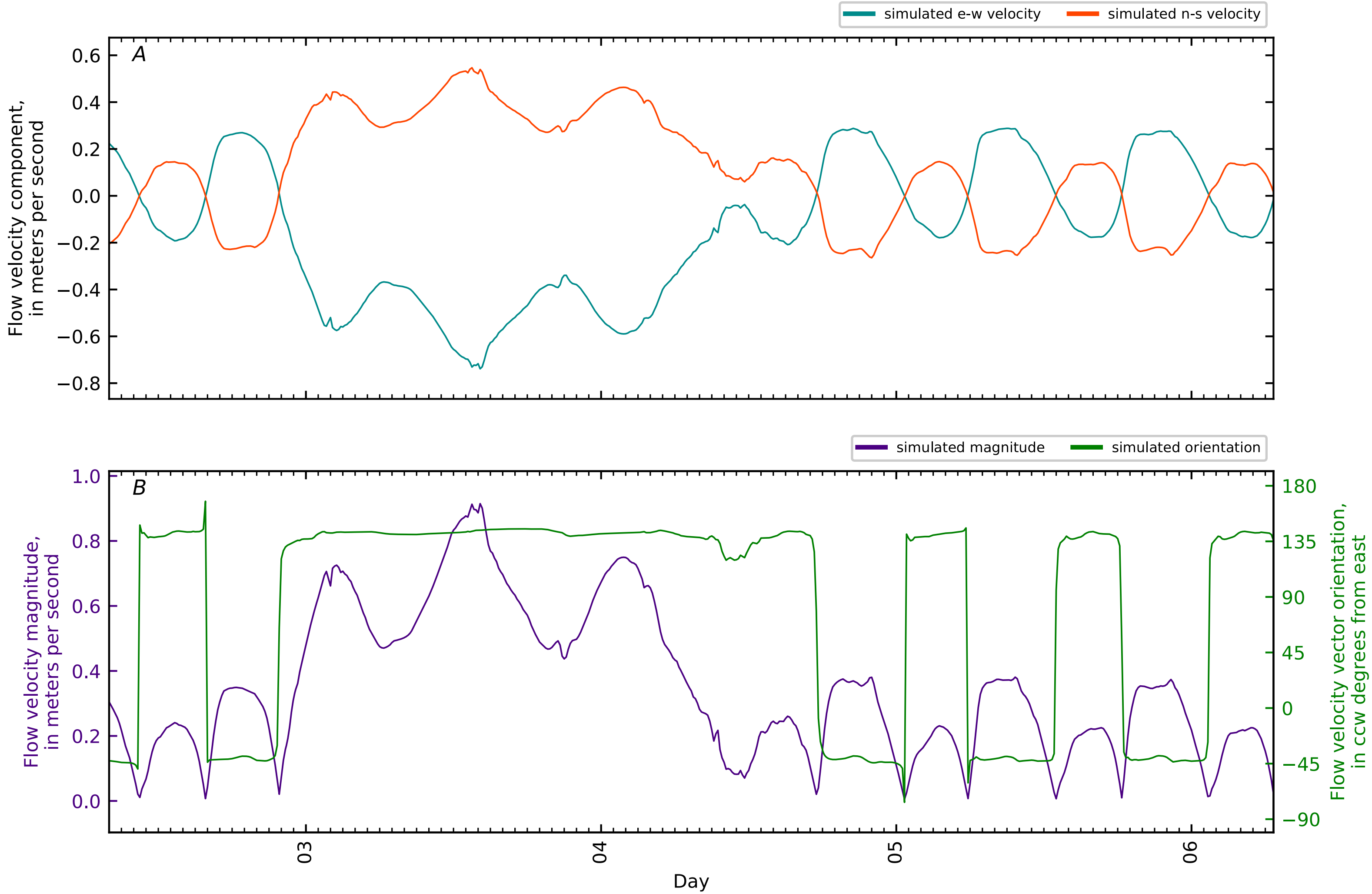

Figure B5-287. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 126, East Channel KM5.3 ERDC4 VN-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

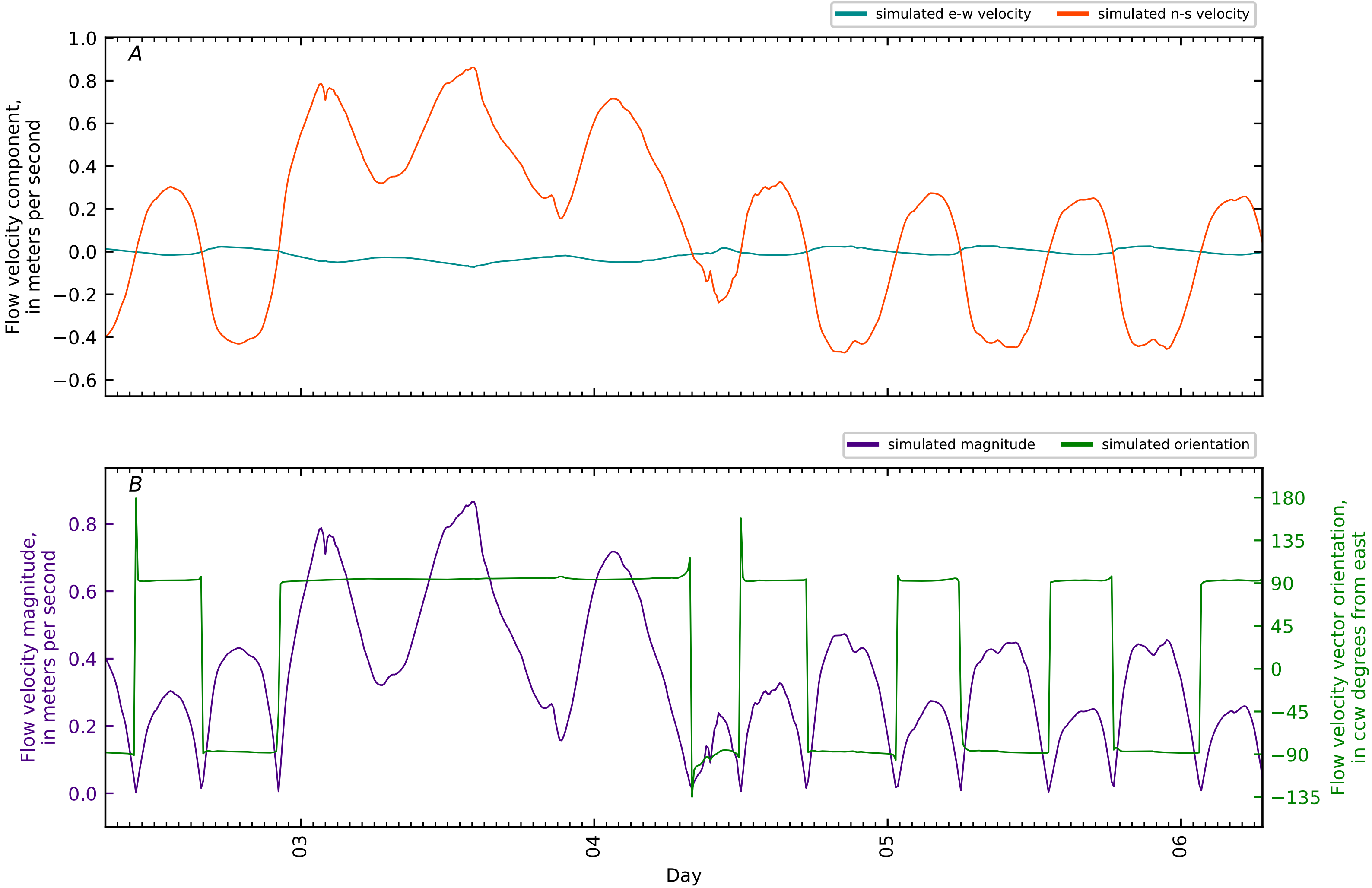

Figure B5-288. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 127, East Channel KM6. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

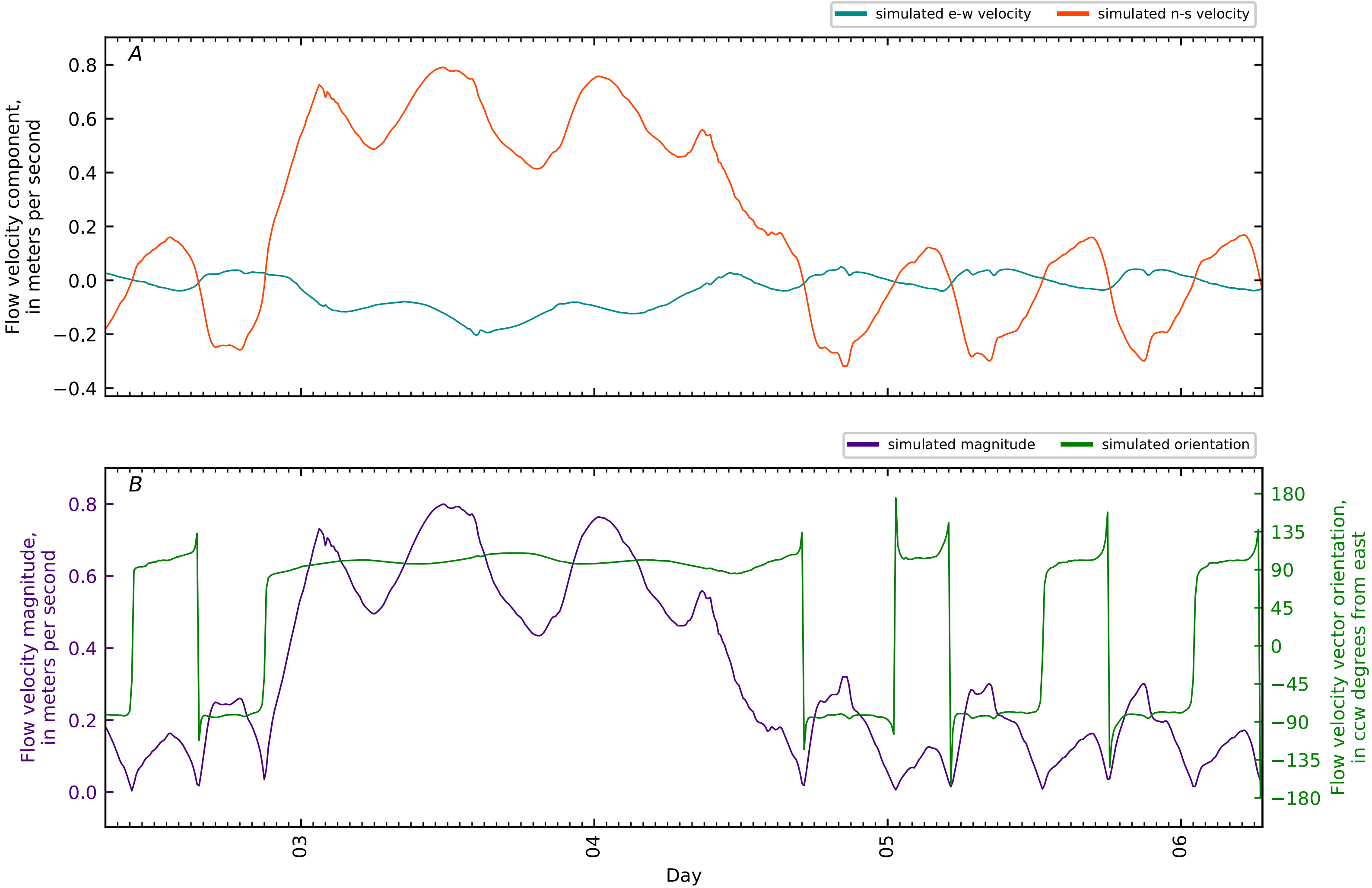

Figure B5-289. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 128, East Channel KM6.8 ERDC12 VN-MU4-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

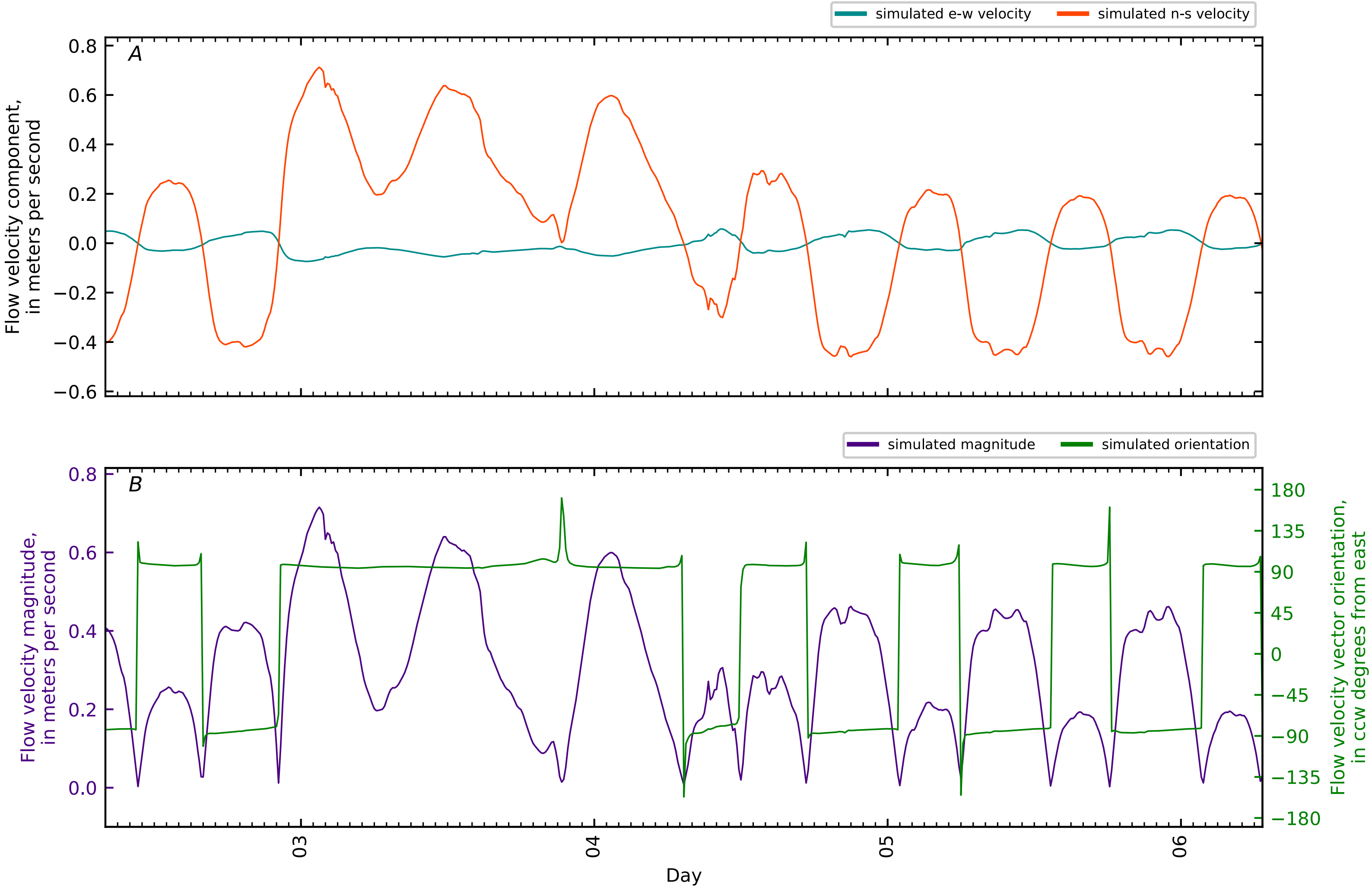

Figure B5-290. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 129, East Channel KM7. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

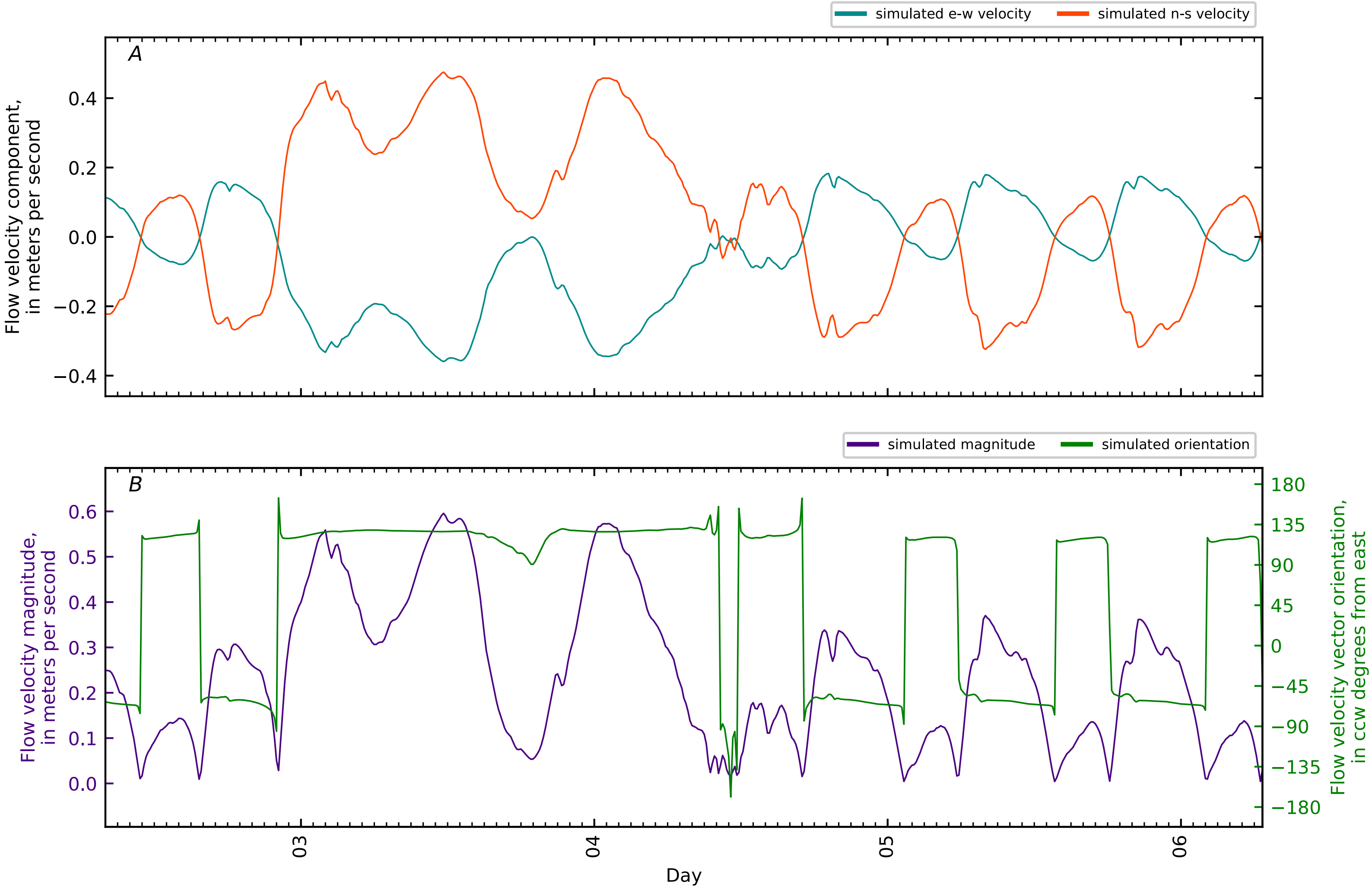

Figure B5-291. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 130, East Channel KM8. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

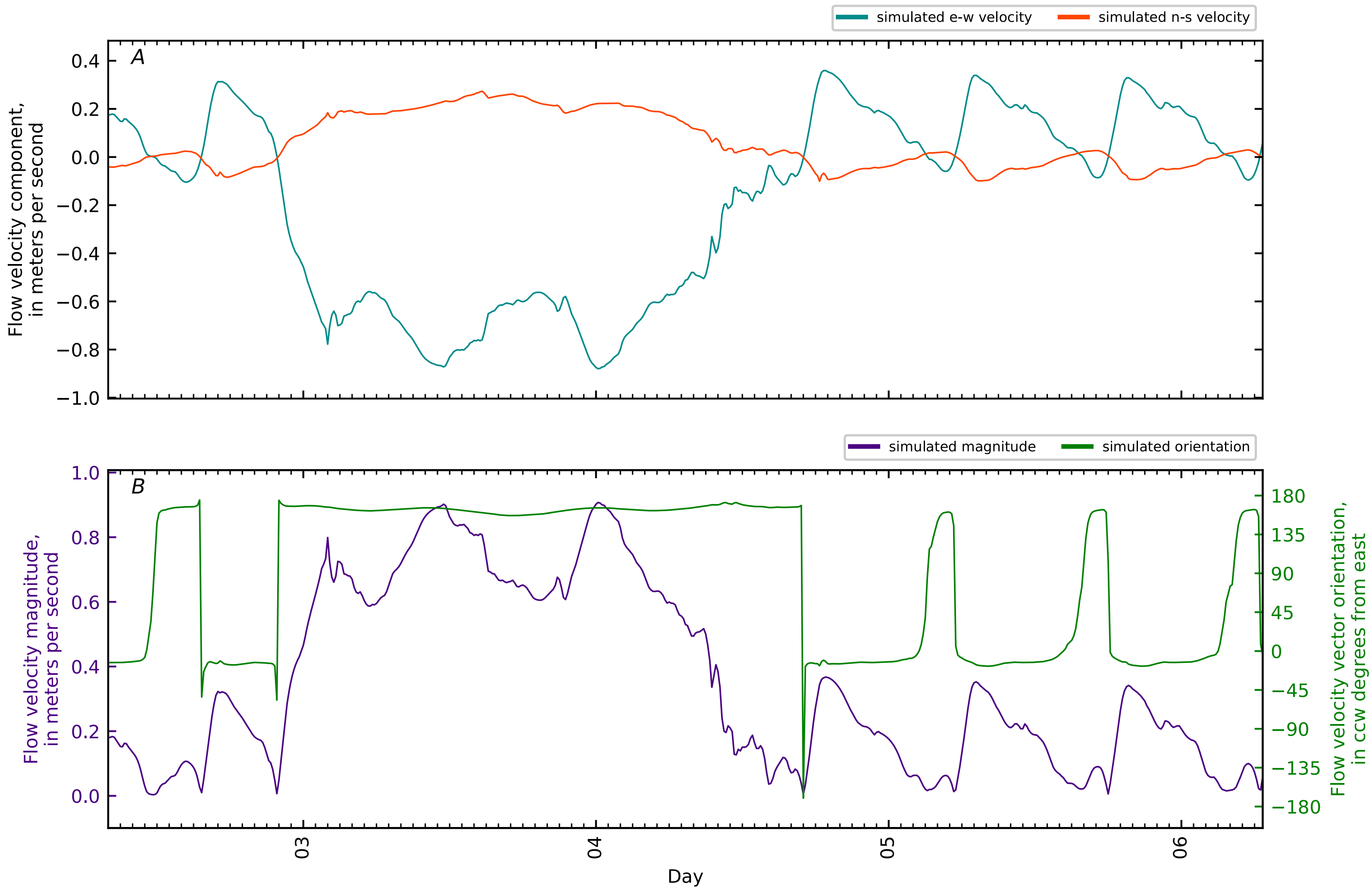

Figure B5-292. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 131, East Channel KM9. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

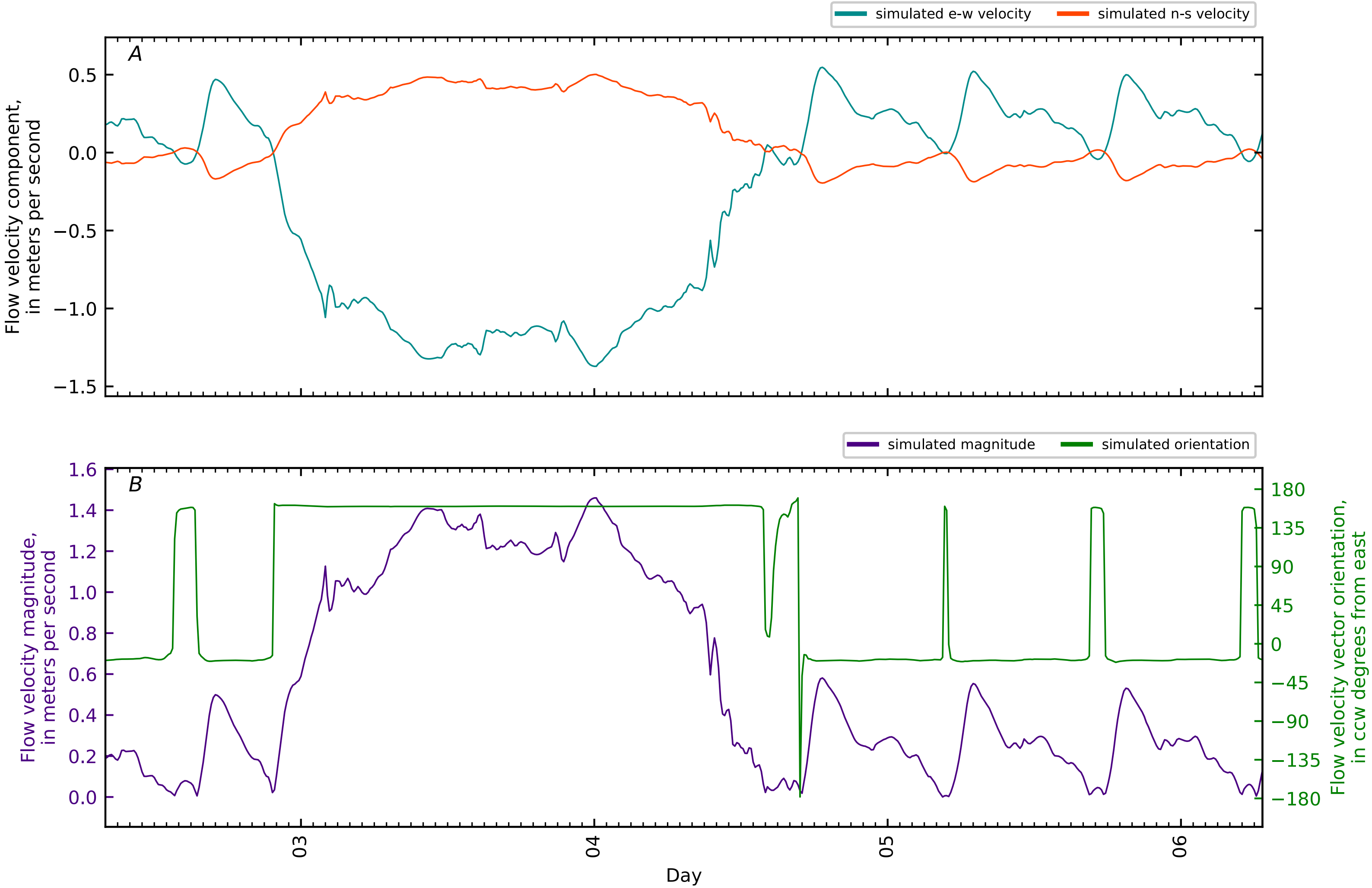

Figure B5-293. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 132, East Channel KM10. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

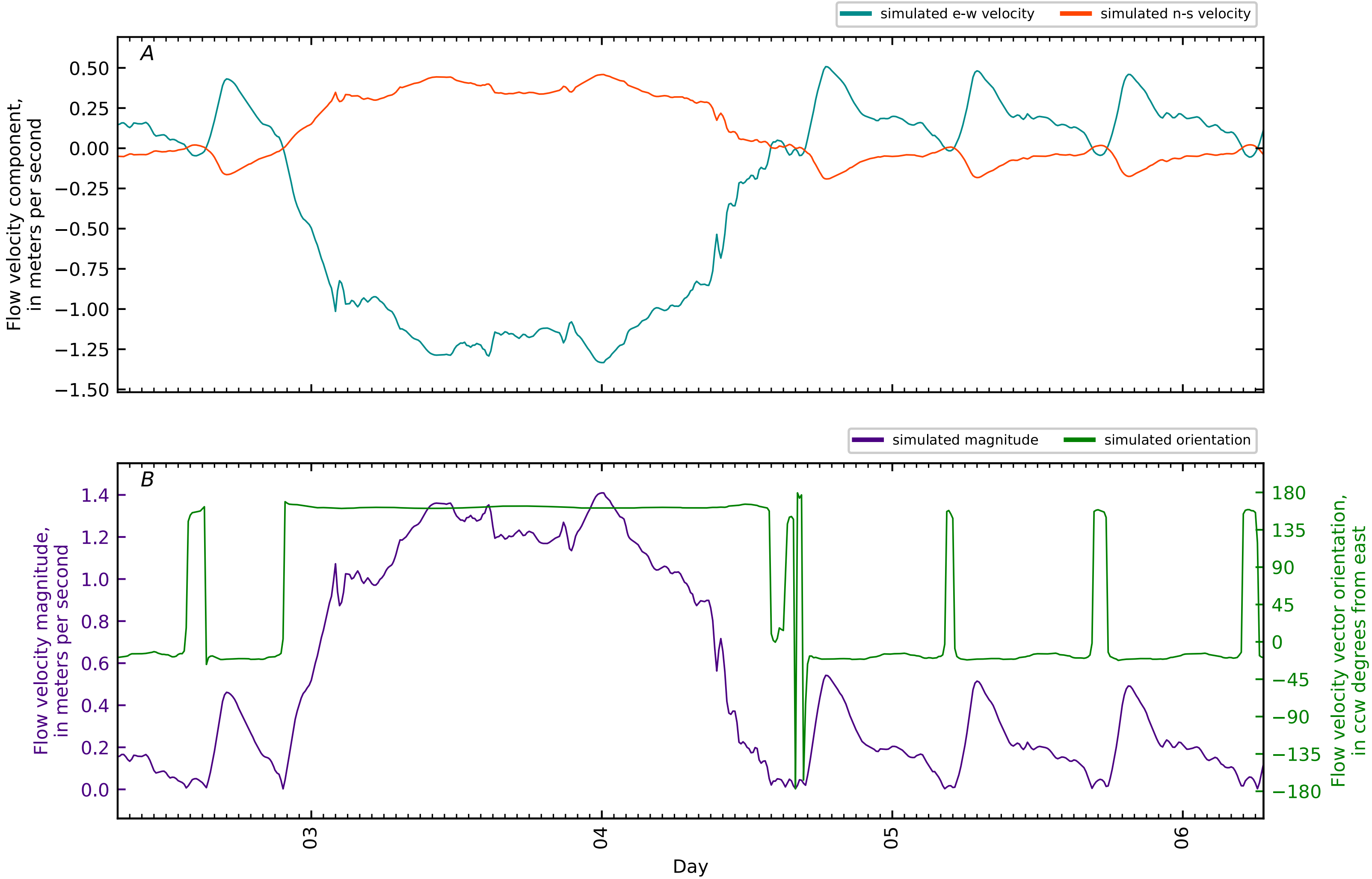

Figure B5-294. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 133, East Channel KM10 GS 443409068471801 at. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

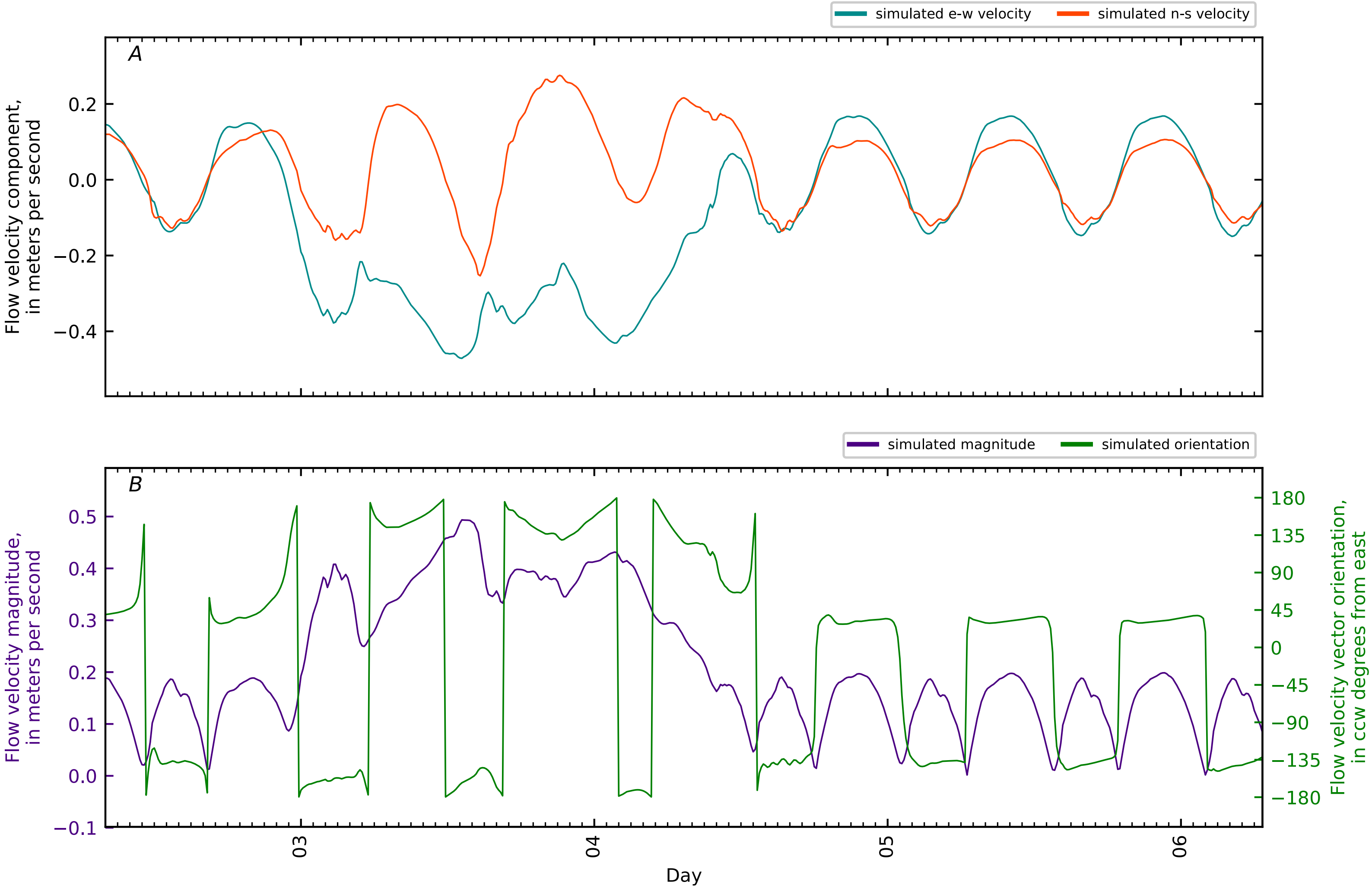

Figure B5-295. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 134, Mendall Marsh KM0. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

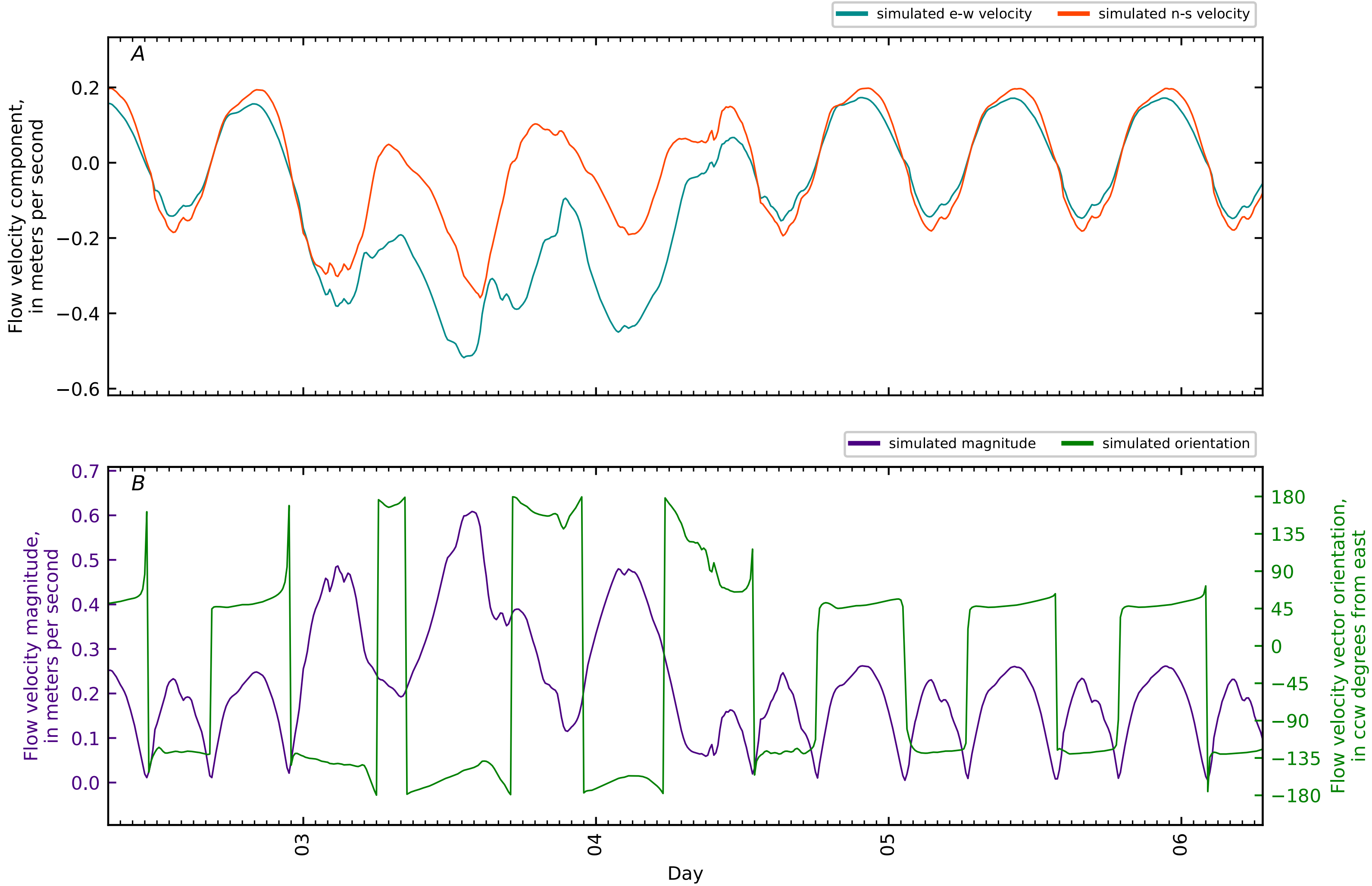

Figure B5-296. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 135, Mendall Marsh KM0.1 ERDC14 MM-MU6-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

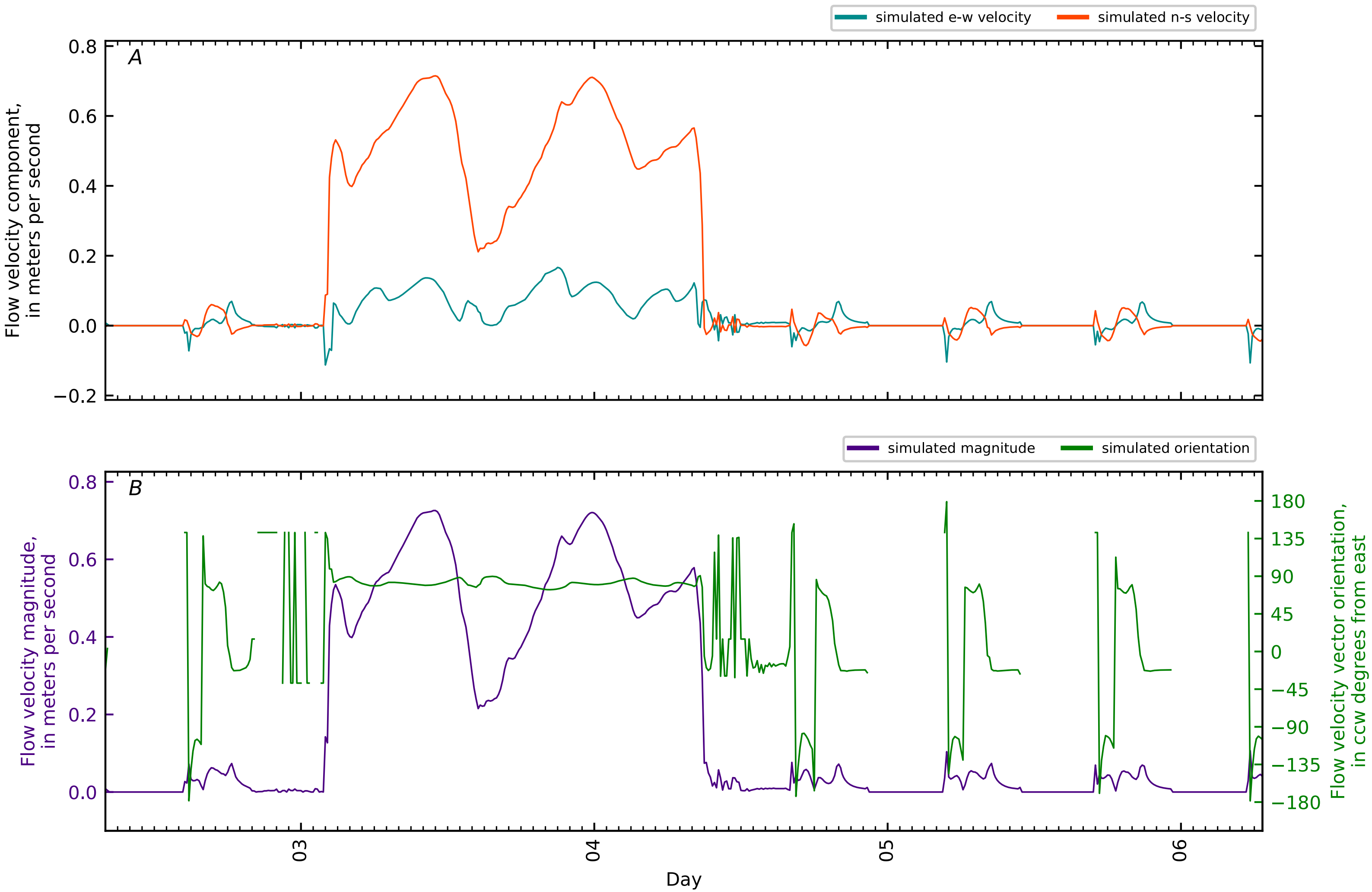

Figure B5-297. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 136, Mendall Marsh KM0.4 GS CTD2-01. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

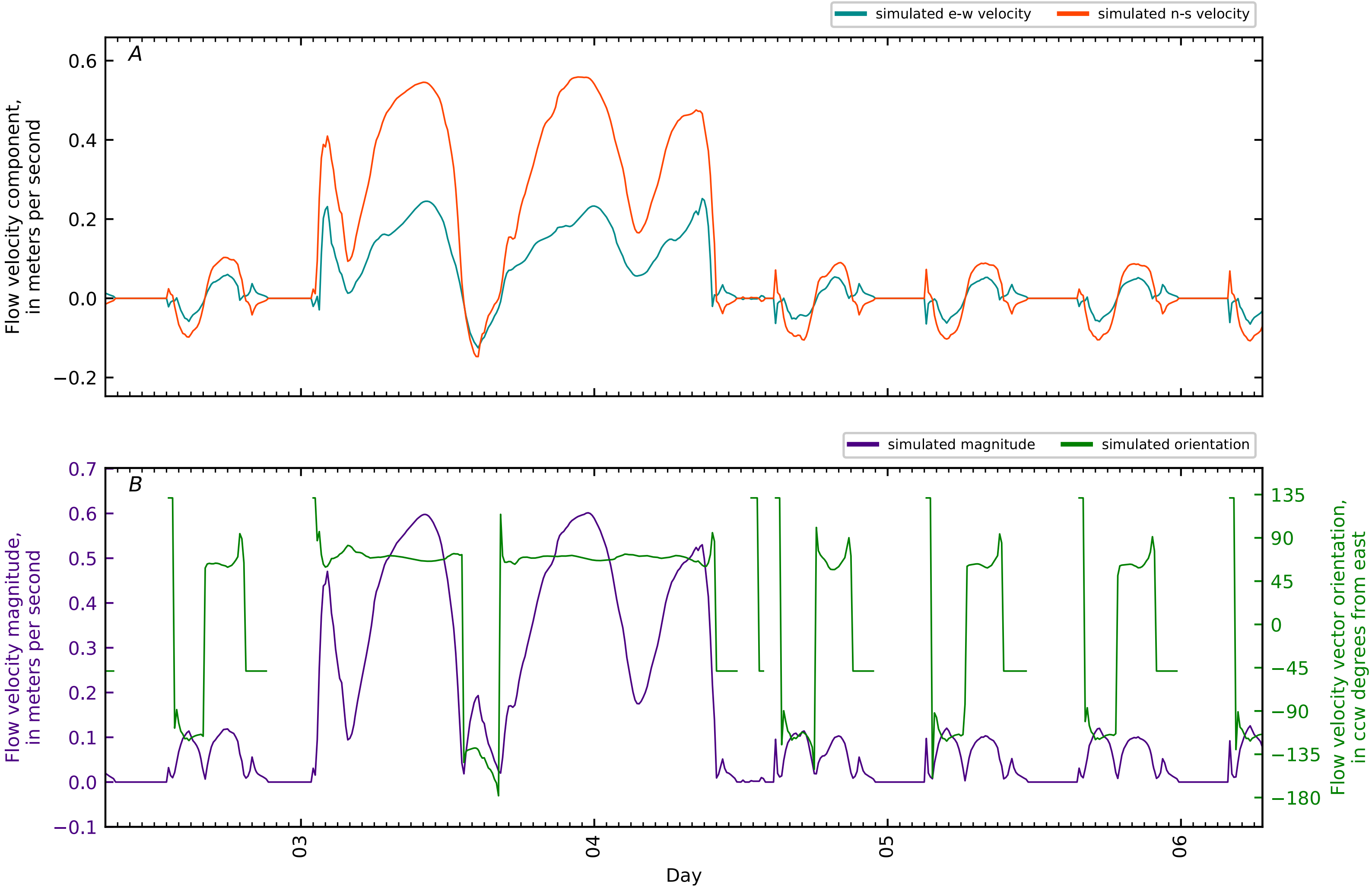

Figure B5-298. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 137, Mendall Marsh KM0.4 GS CTD2-02. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

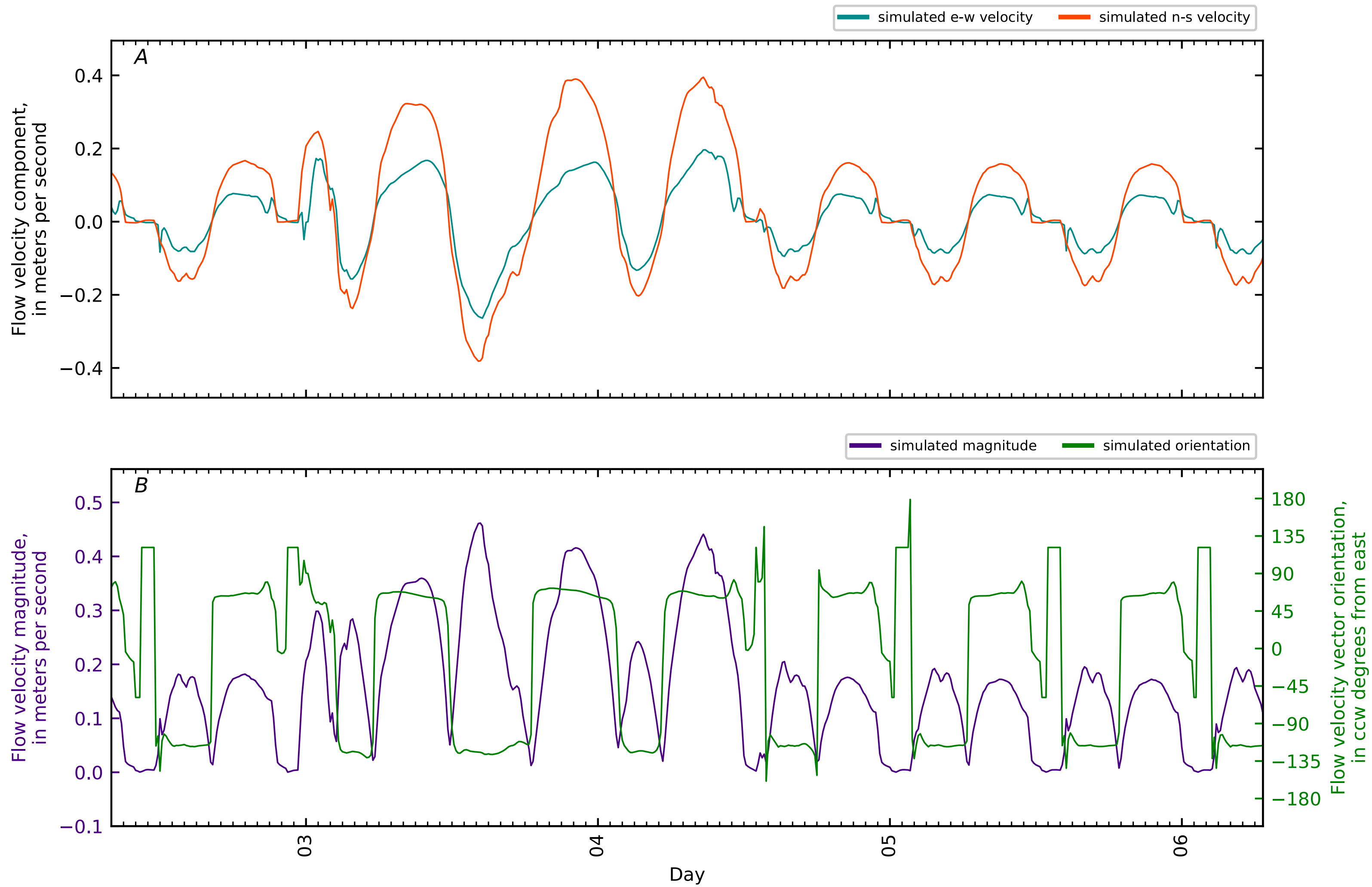

Figure B5-299. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 138, Mendall Marsh KM0.4 GS CTD2-03. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

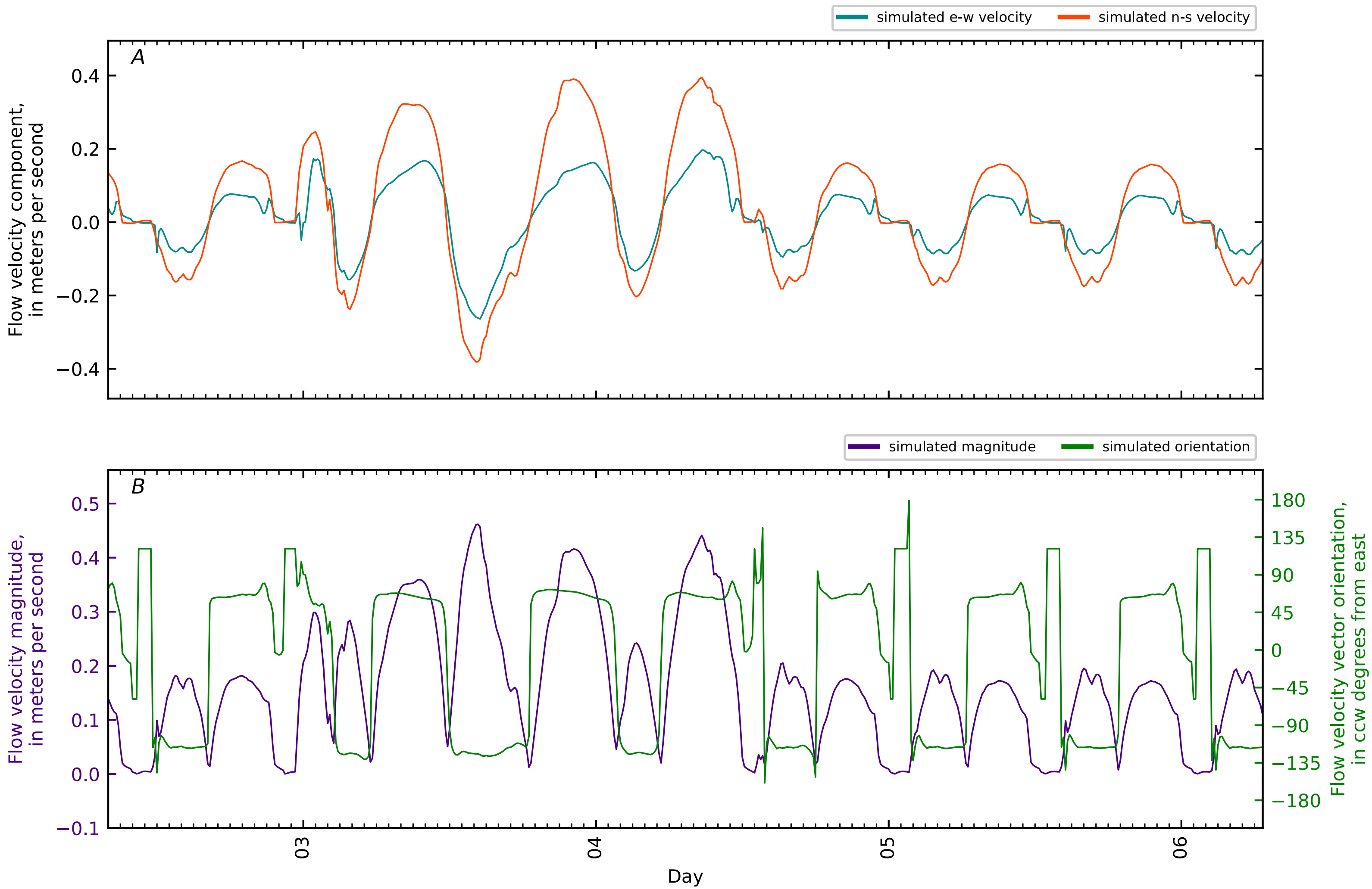

Figure B5-300. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 139, Mendall Marsh KM0.4 GS CTD2-04. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

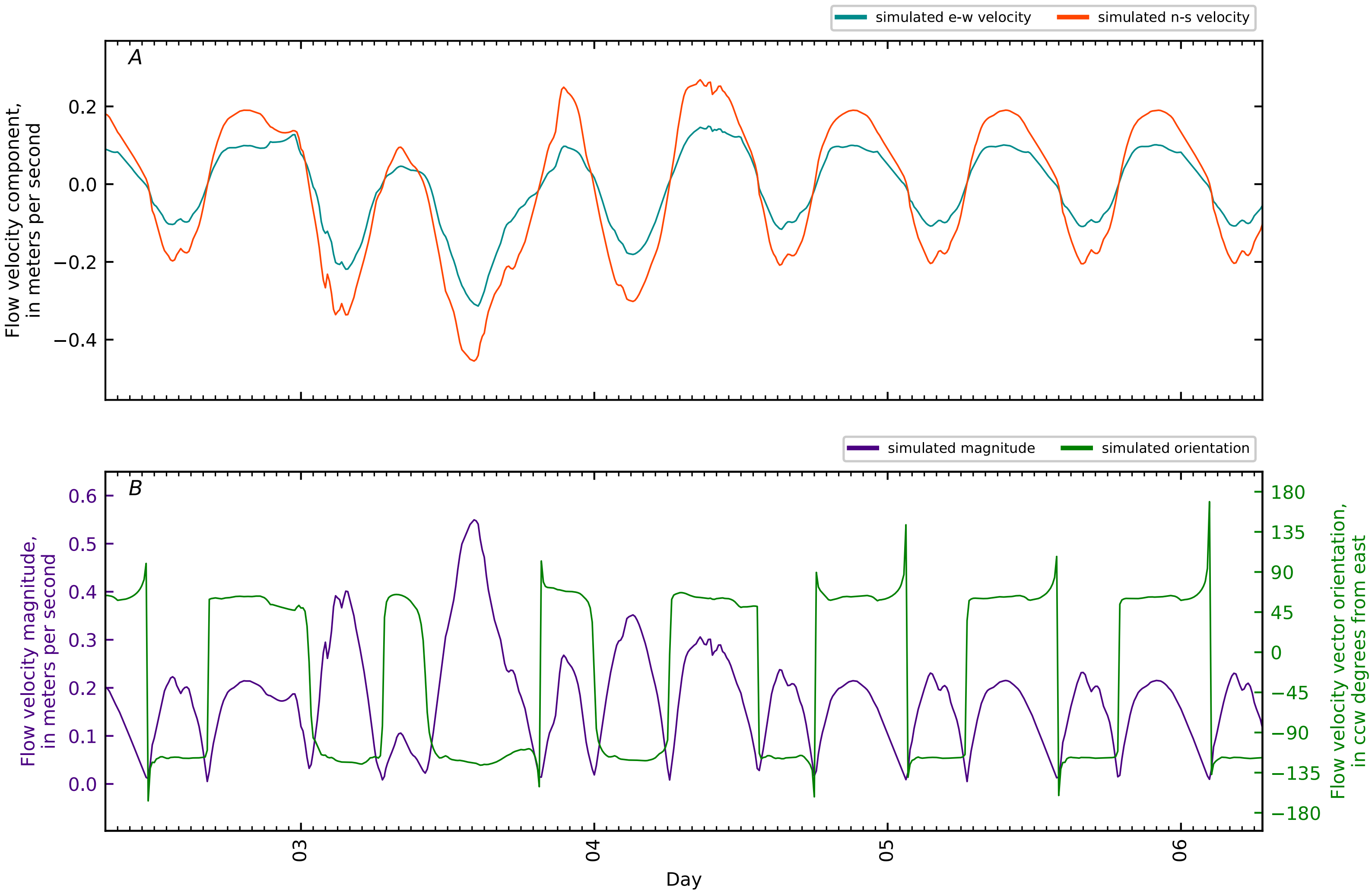

Figure B5-301. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 140, Mendall Marsh KM0.4 GS CTD2-05. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

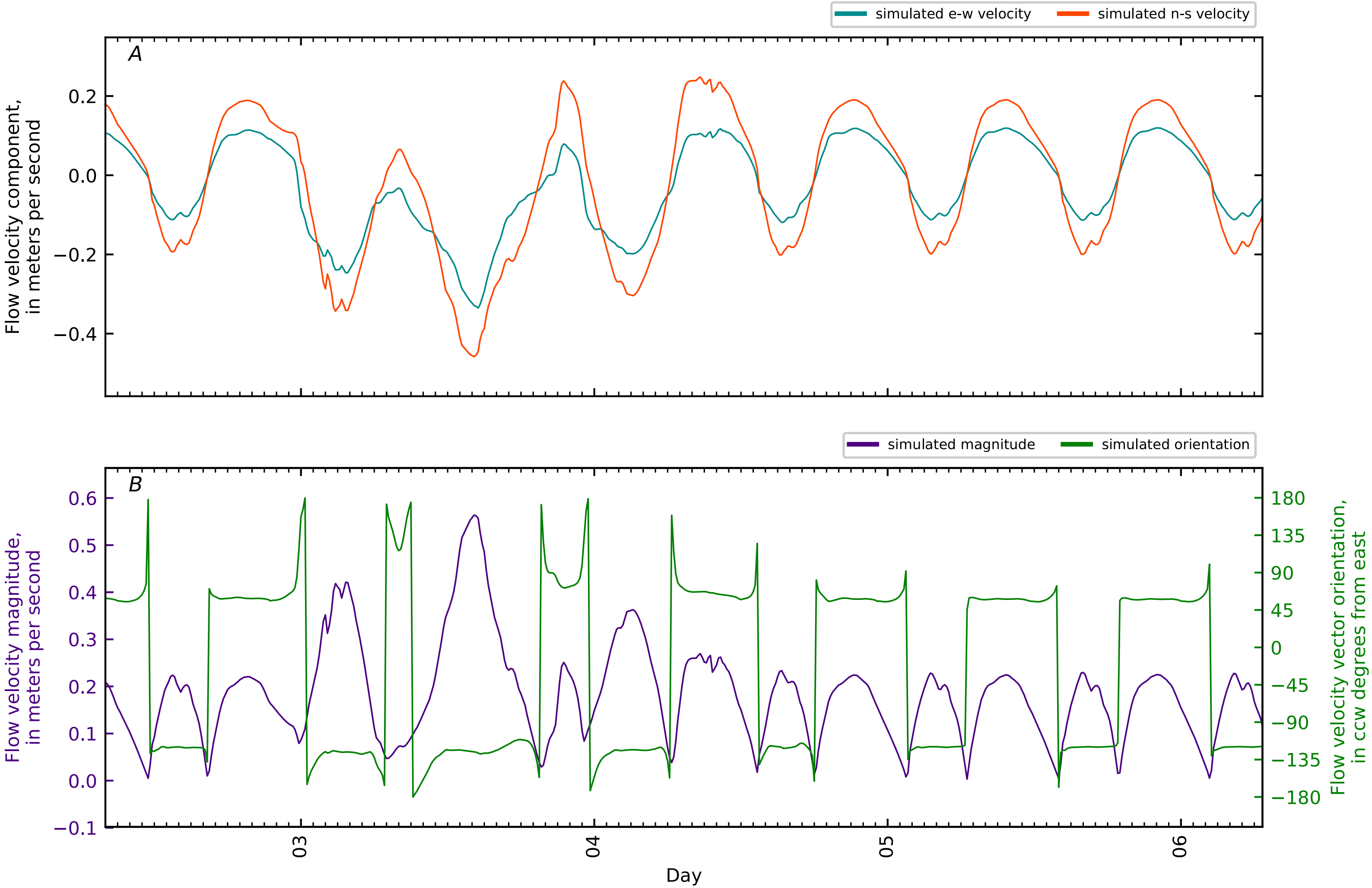

Figure B5-302. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 141, Mendall Marsh KM0.4 GS CTD2-06. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

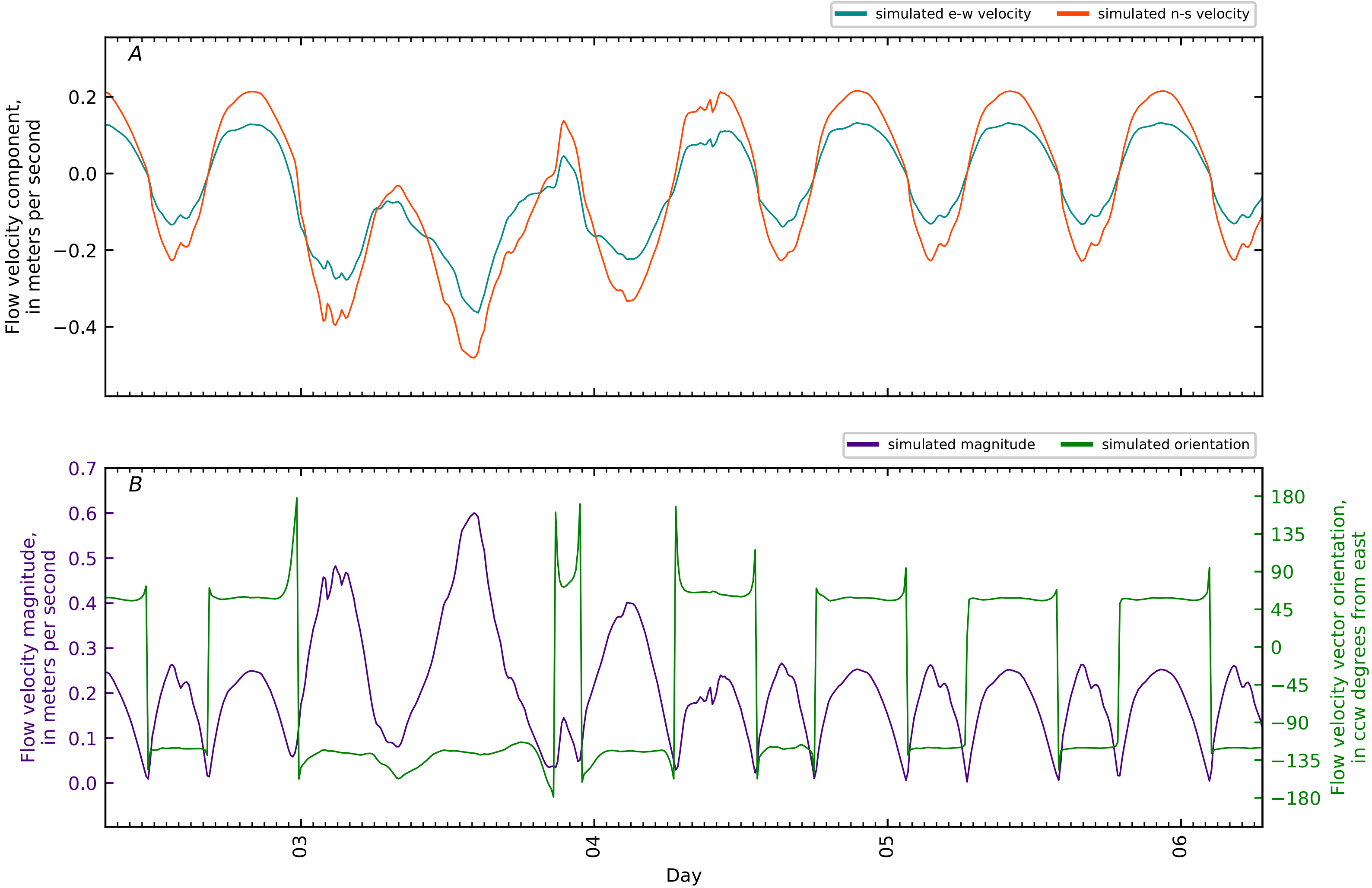

Figure B5-303. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 142, Mendall Marsh KM0.4 GS CTD2-07. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

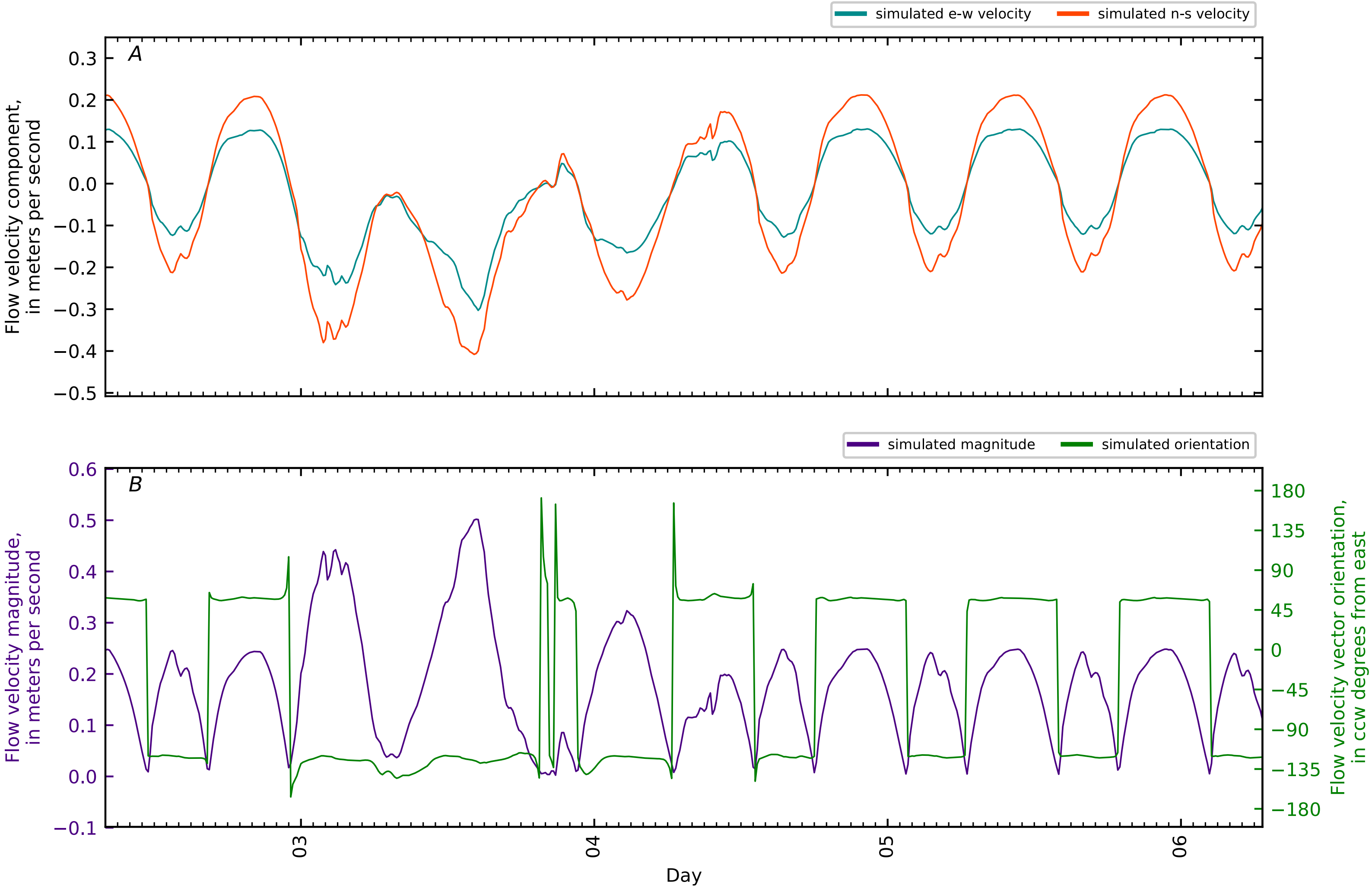

Figure B5-304. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 143, Mendall Marsh KM0.4 GS CTD2-08. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

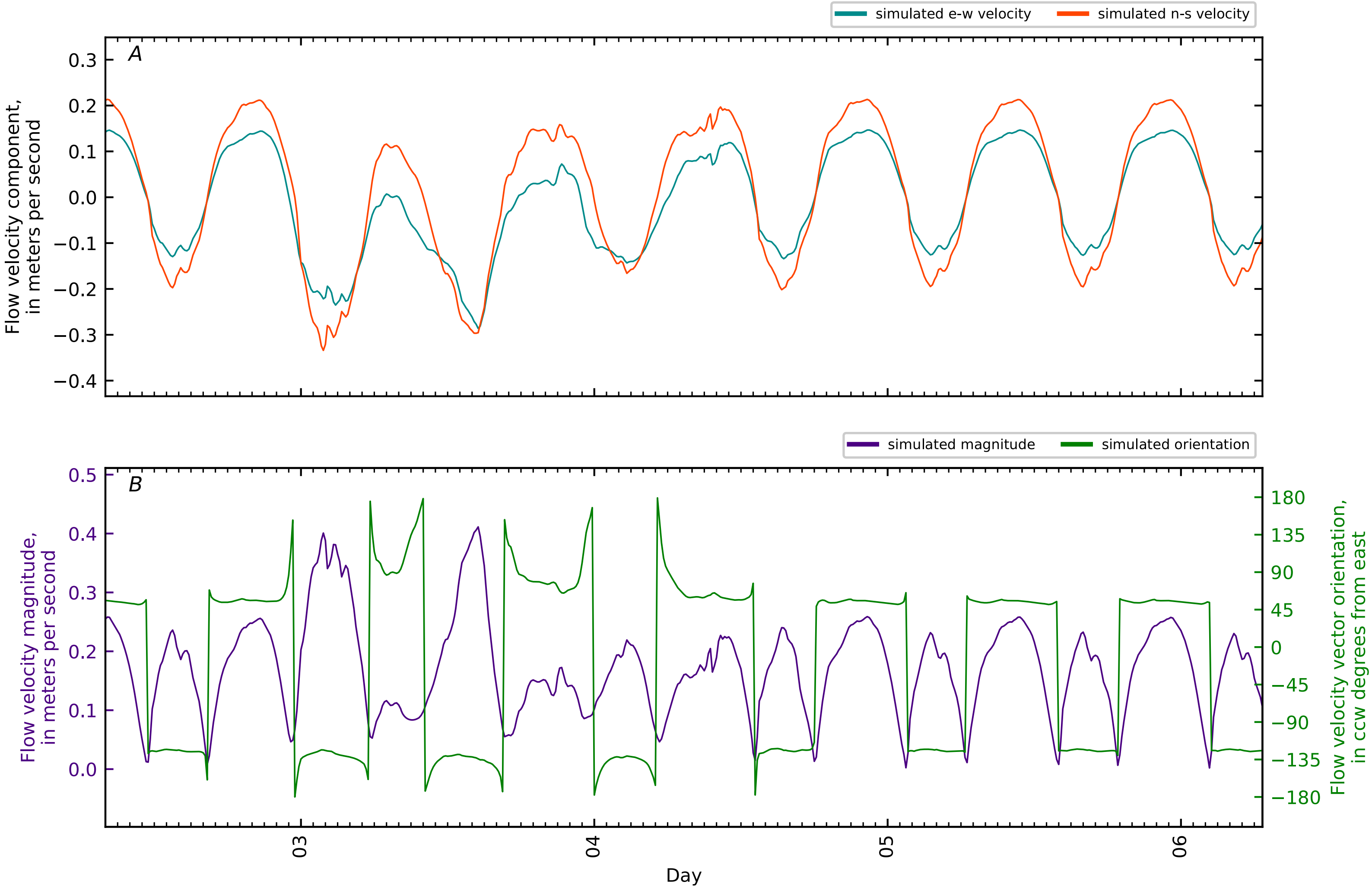

Figure B5-305. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 144, Mendall Marsh KM0.4 GS CTD2-09. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

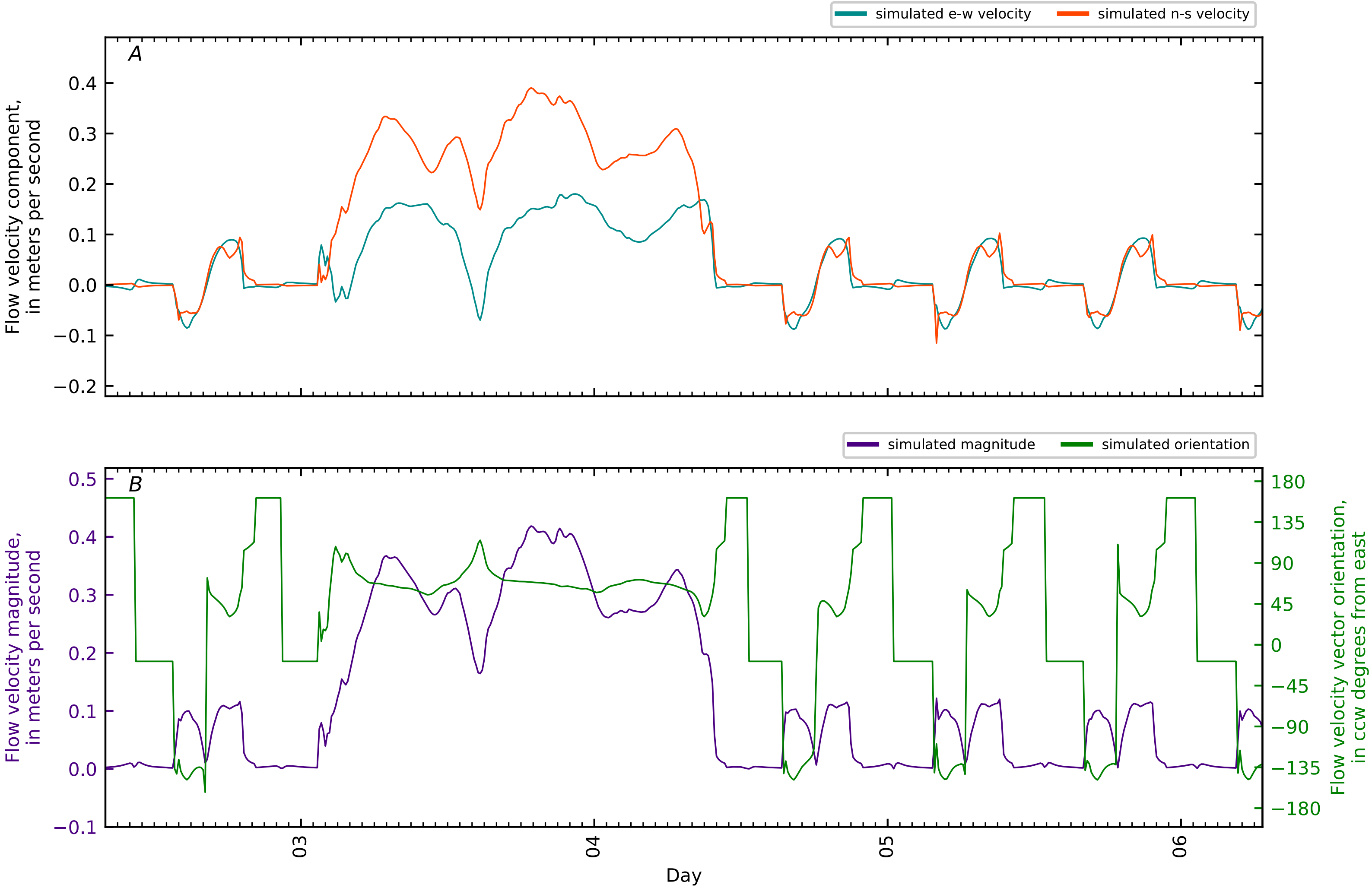

Figure B5-306. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 145, Mendall Marsh KM0.4 GS CTD2-10. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

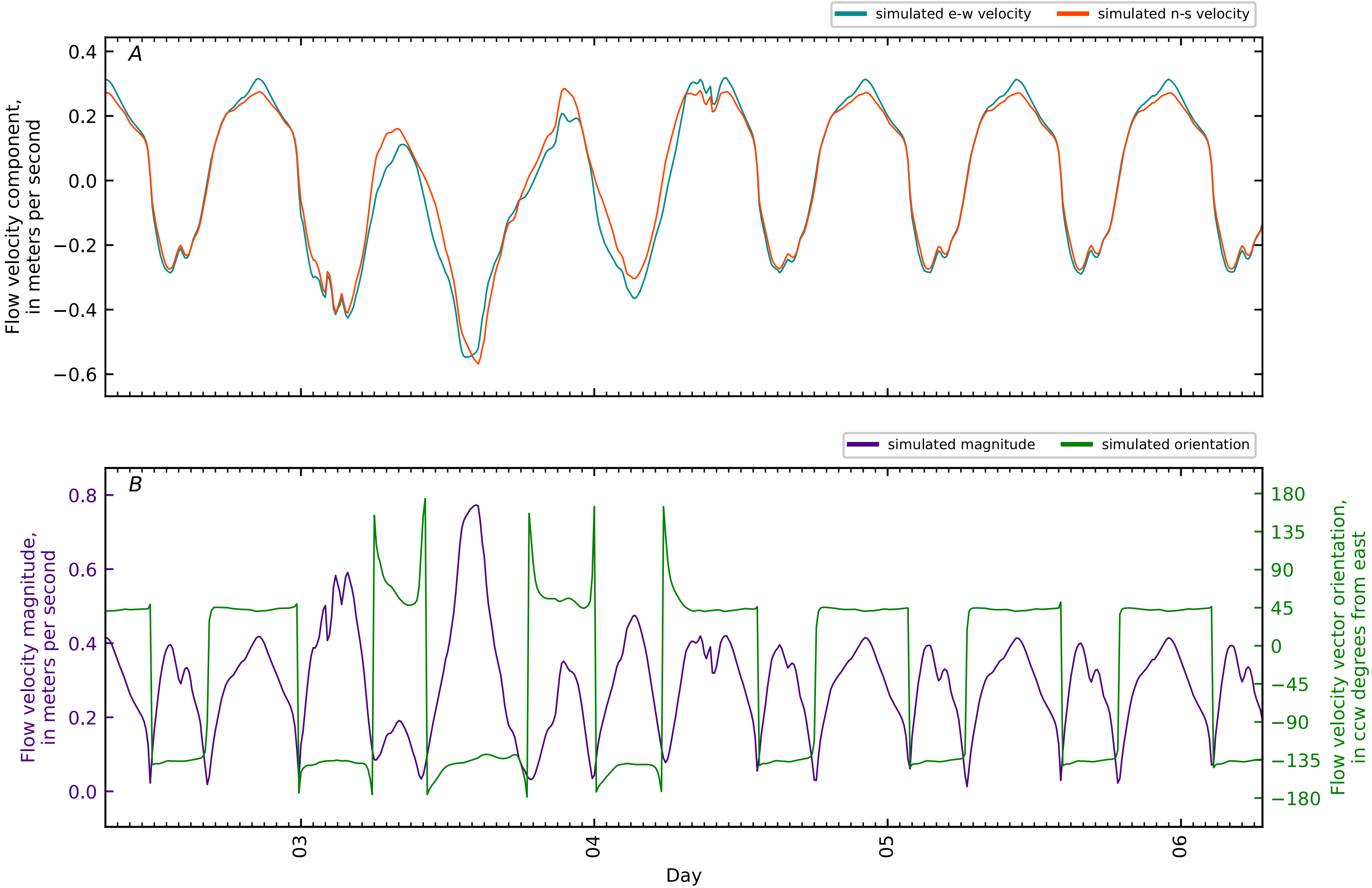

Figure B5-307. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 146, Mendall Marsh KM1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

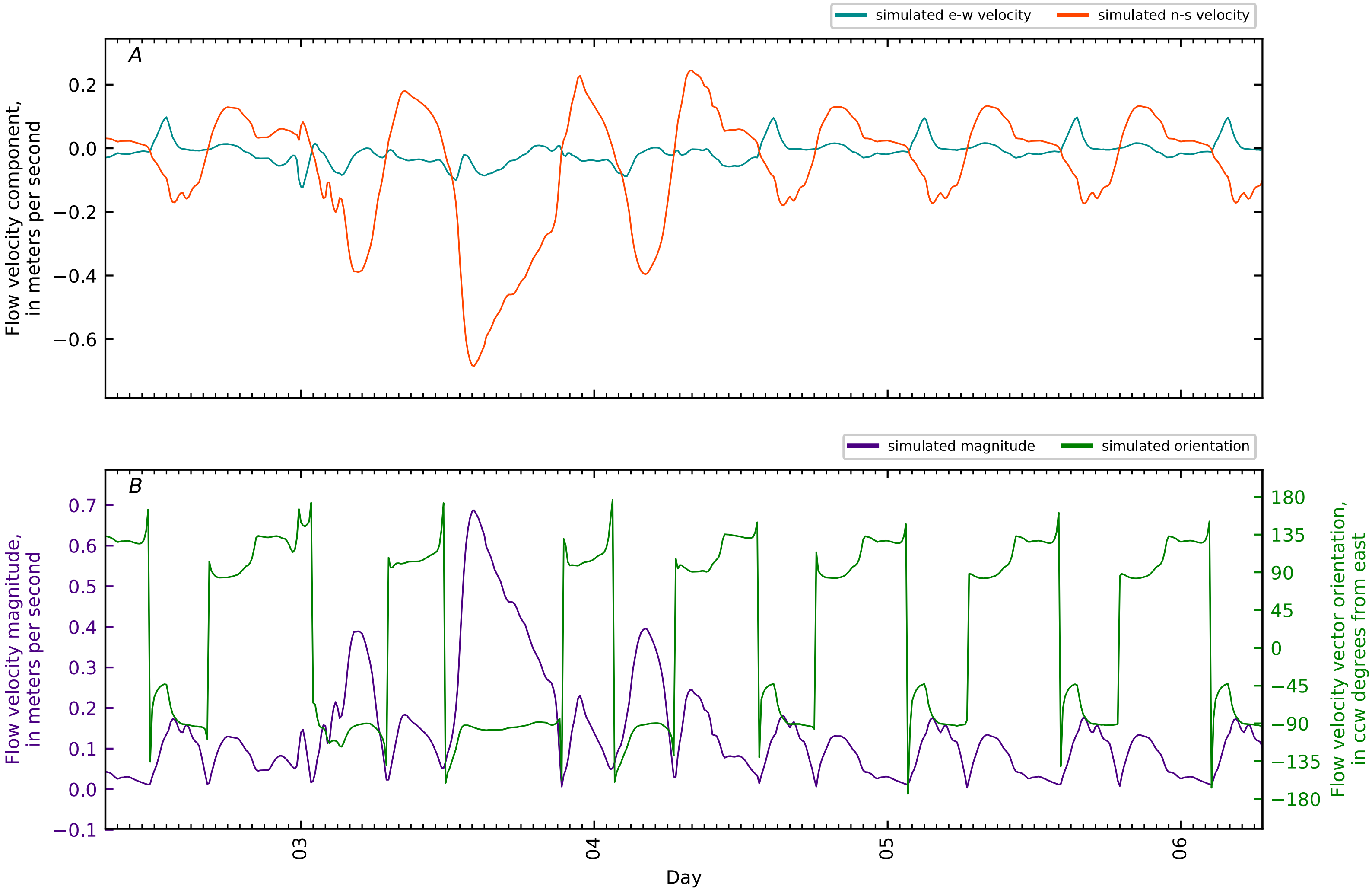

Figure B5-308. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 147, Mendall Marsh KM1.5 WHOI3 2010. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

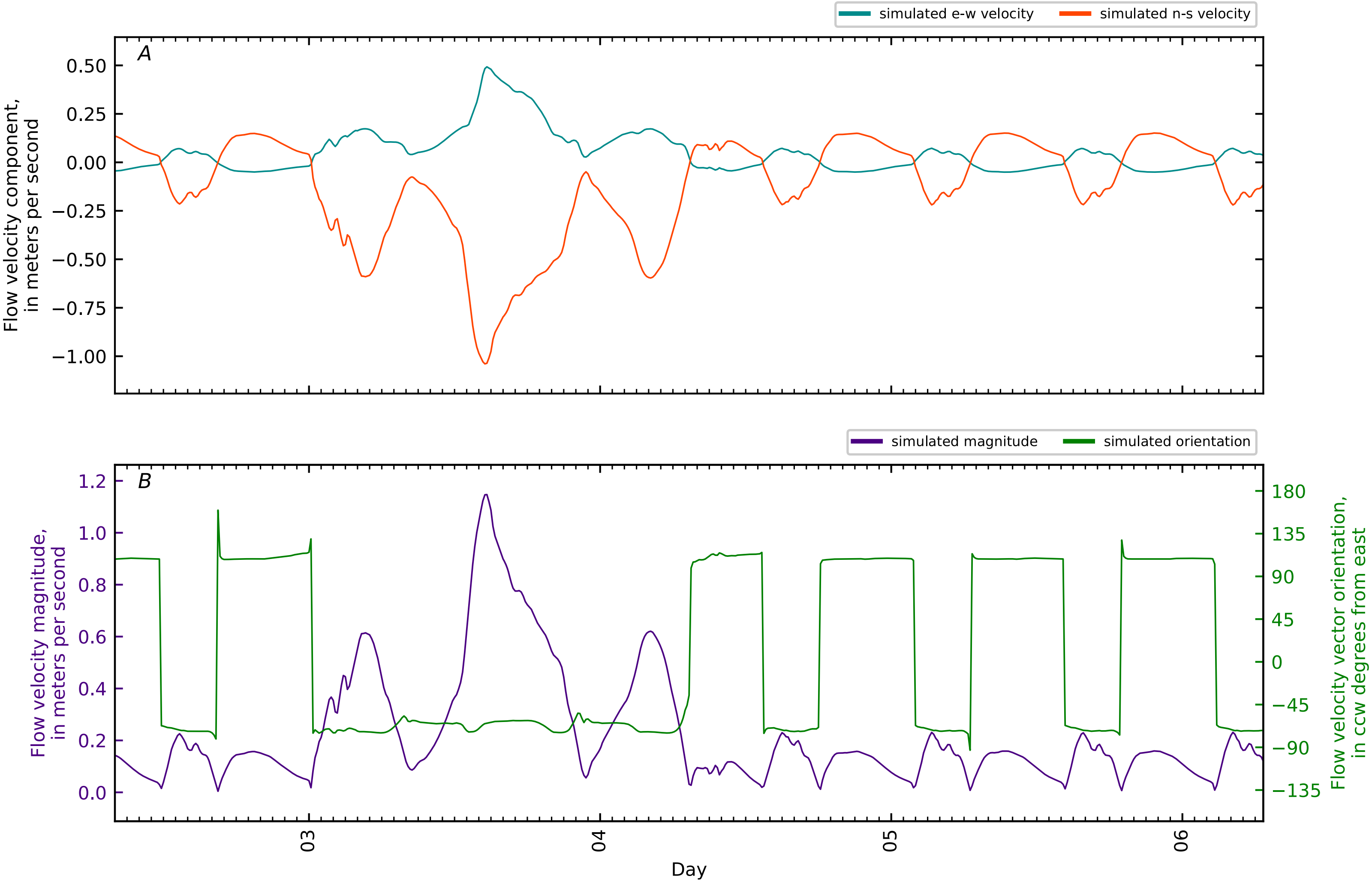

Figure B5-309. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 148, Mendall Marsh KM2. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

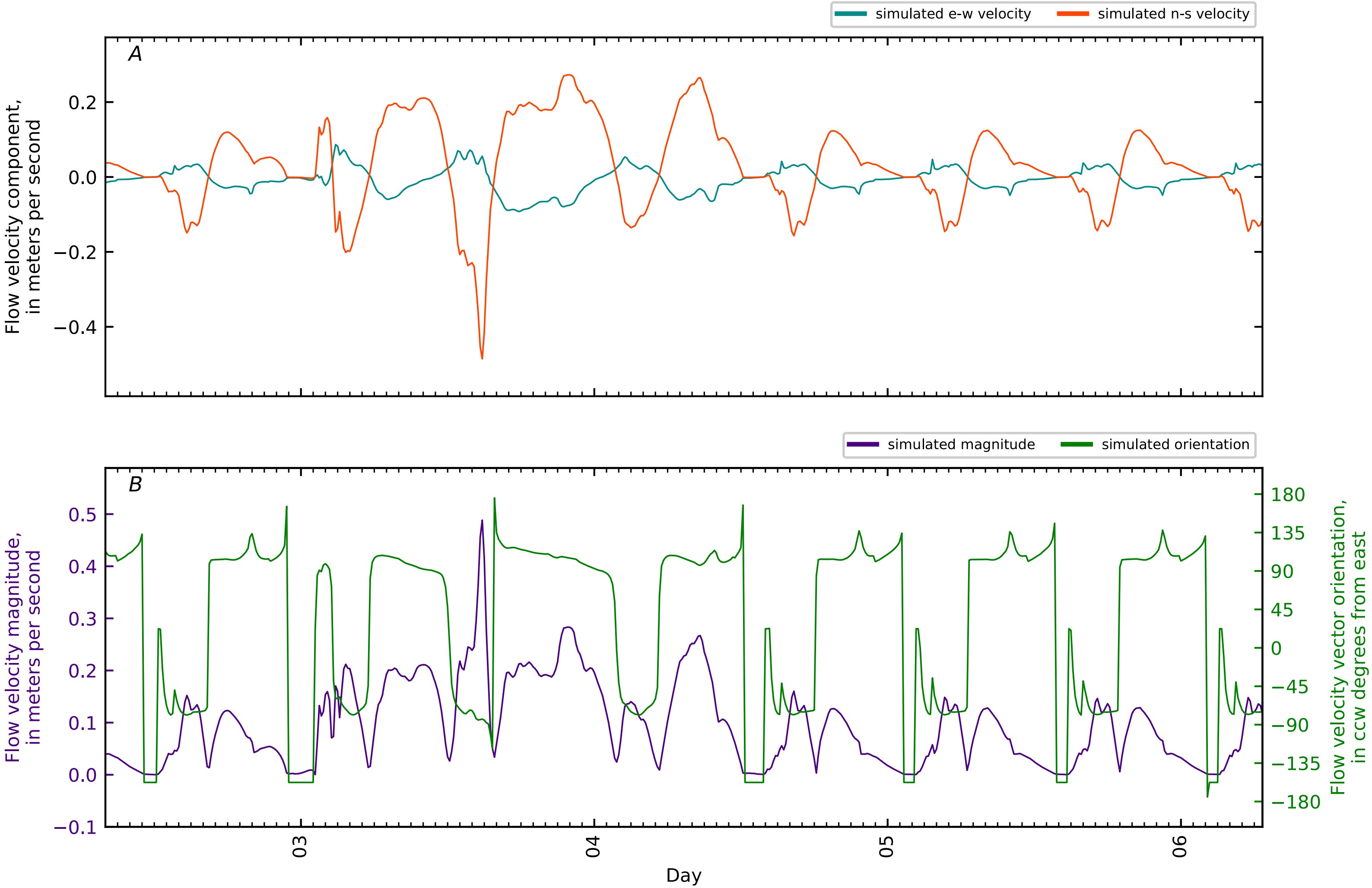

Figure B5-310. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 149, Mendall Marsh KM3. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

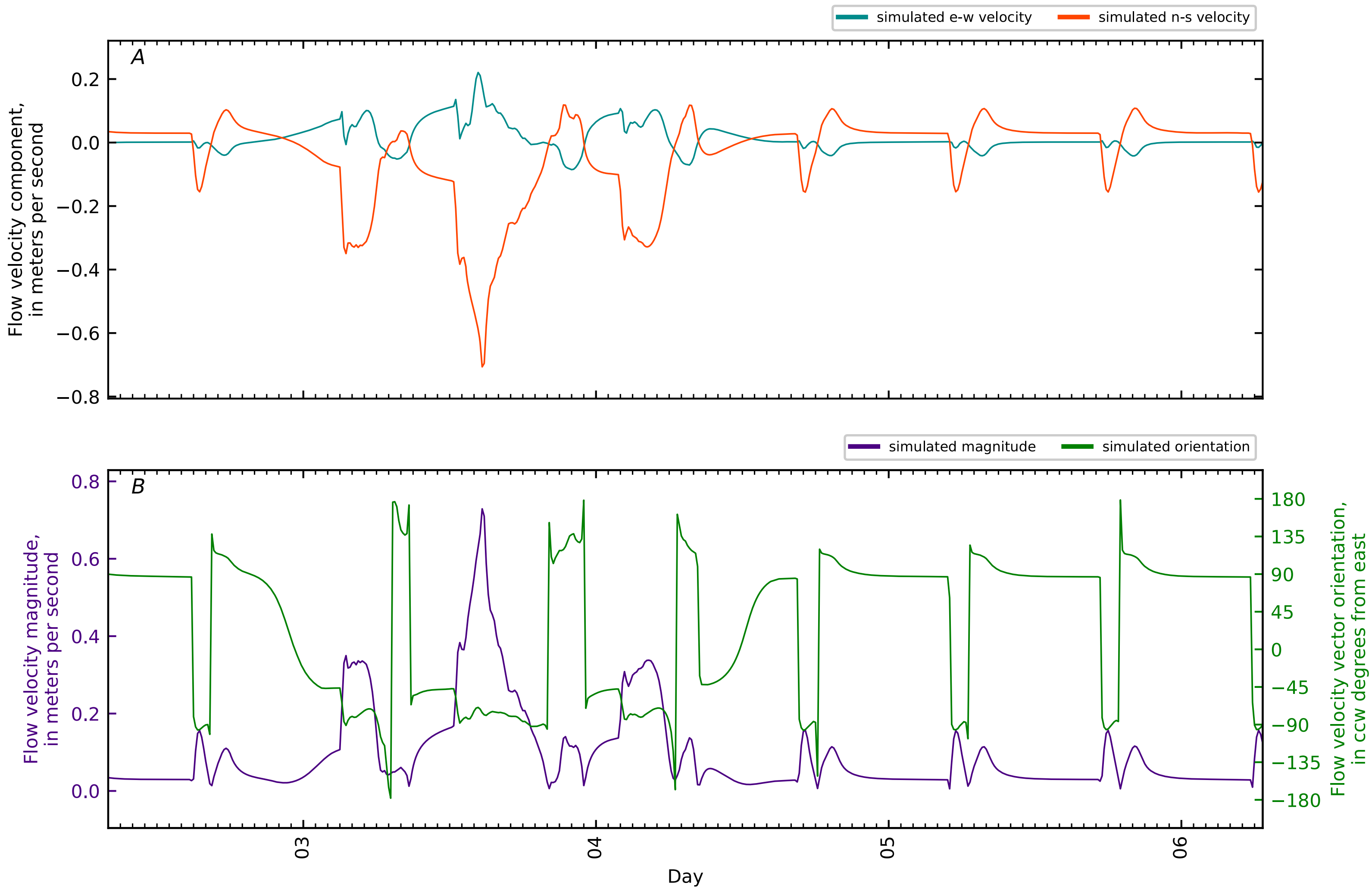

Figure B5-311. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 150, Mendall Marsh KM4. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

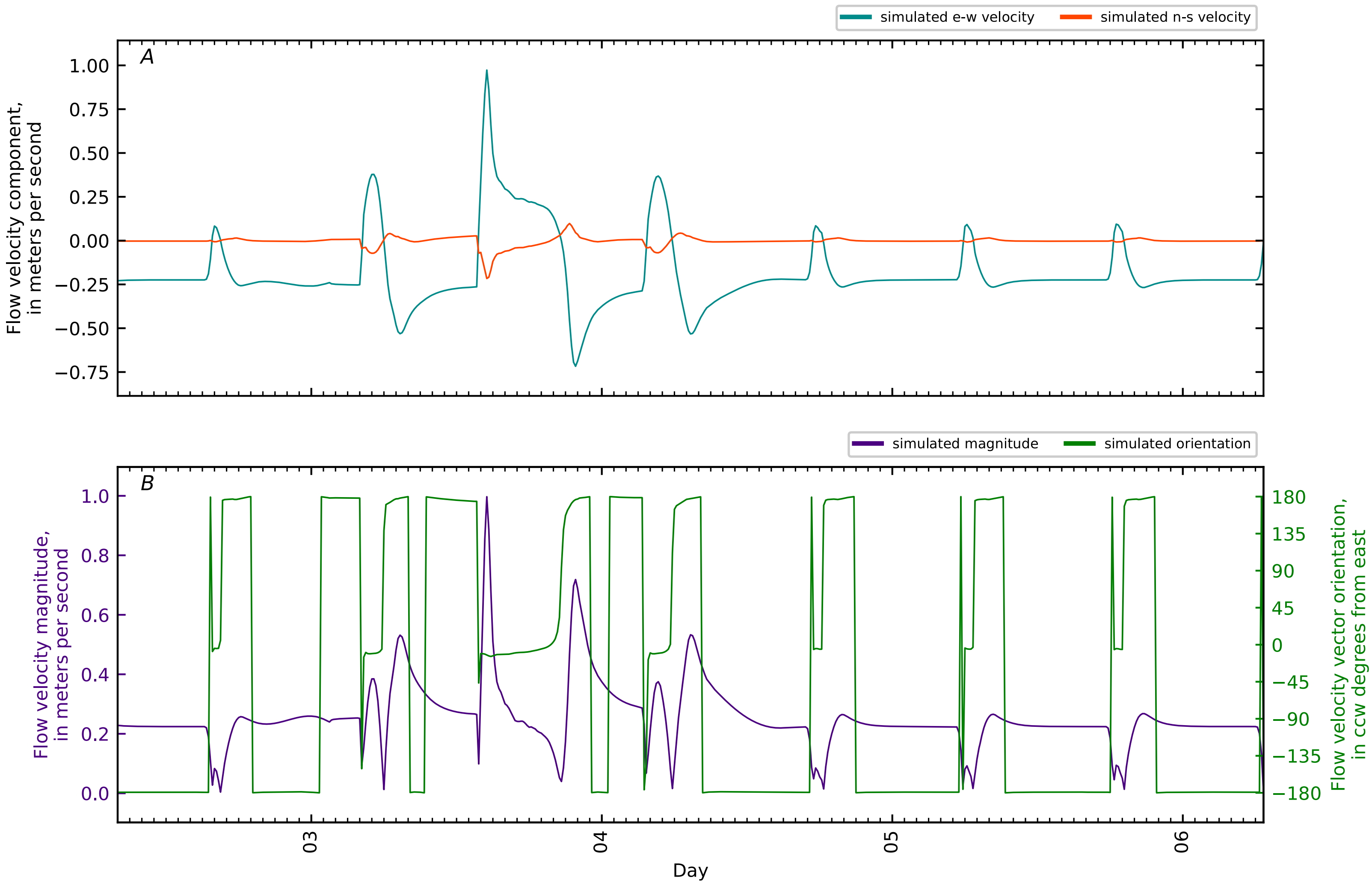

Figure B5-312. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 151, Mendall Marsh KM5. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

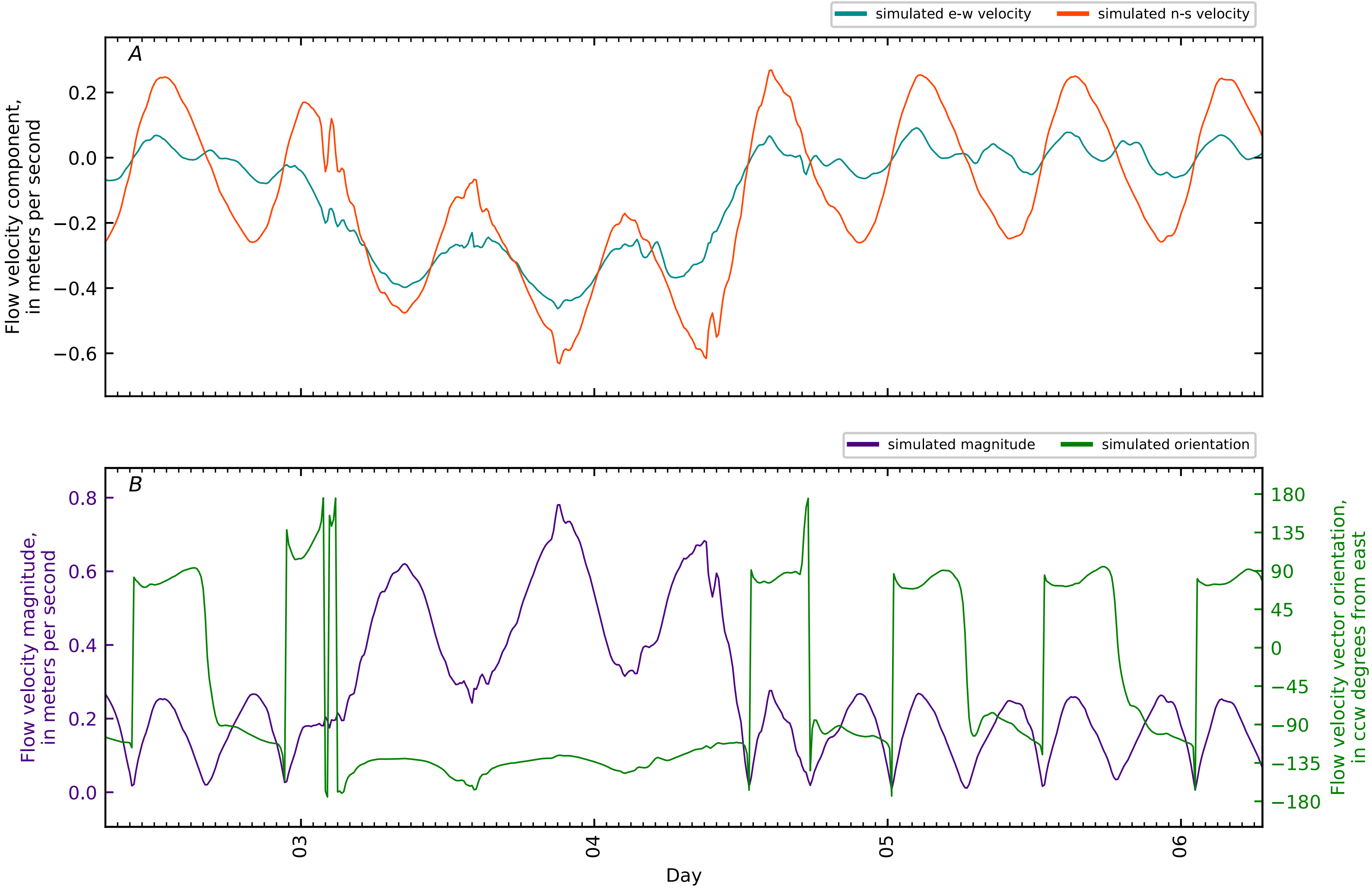

Figure B5-313. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 152, Orland Riv KM0. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

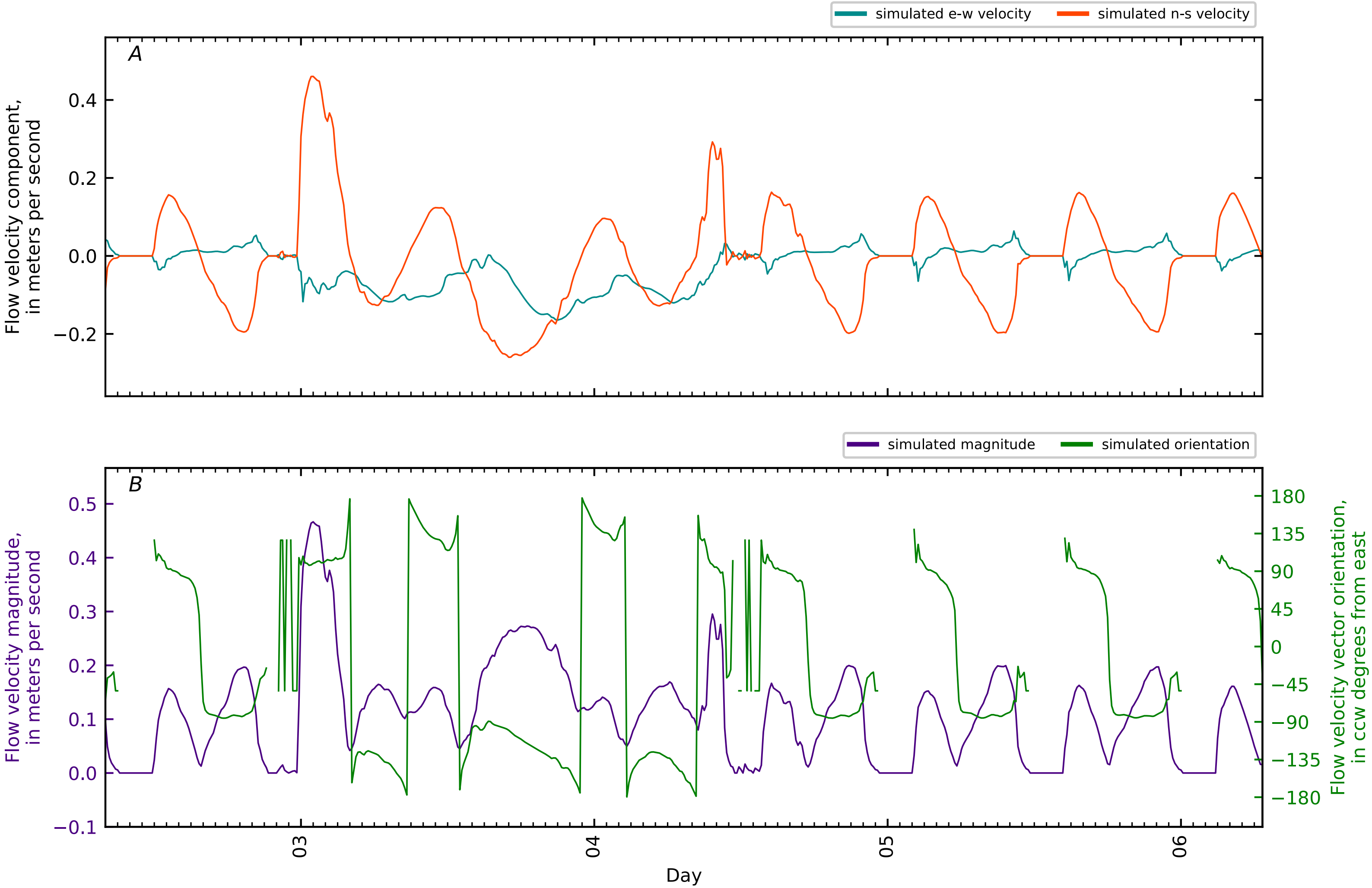

Figure B5-314. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 153, Orland Riv KM0.9 ERDC5 OR-MU1-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

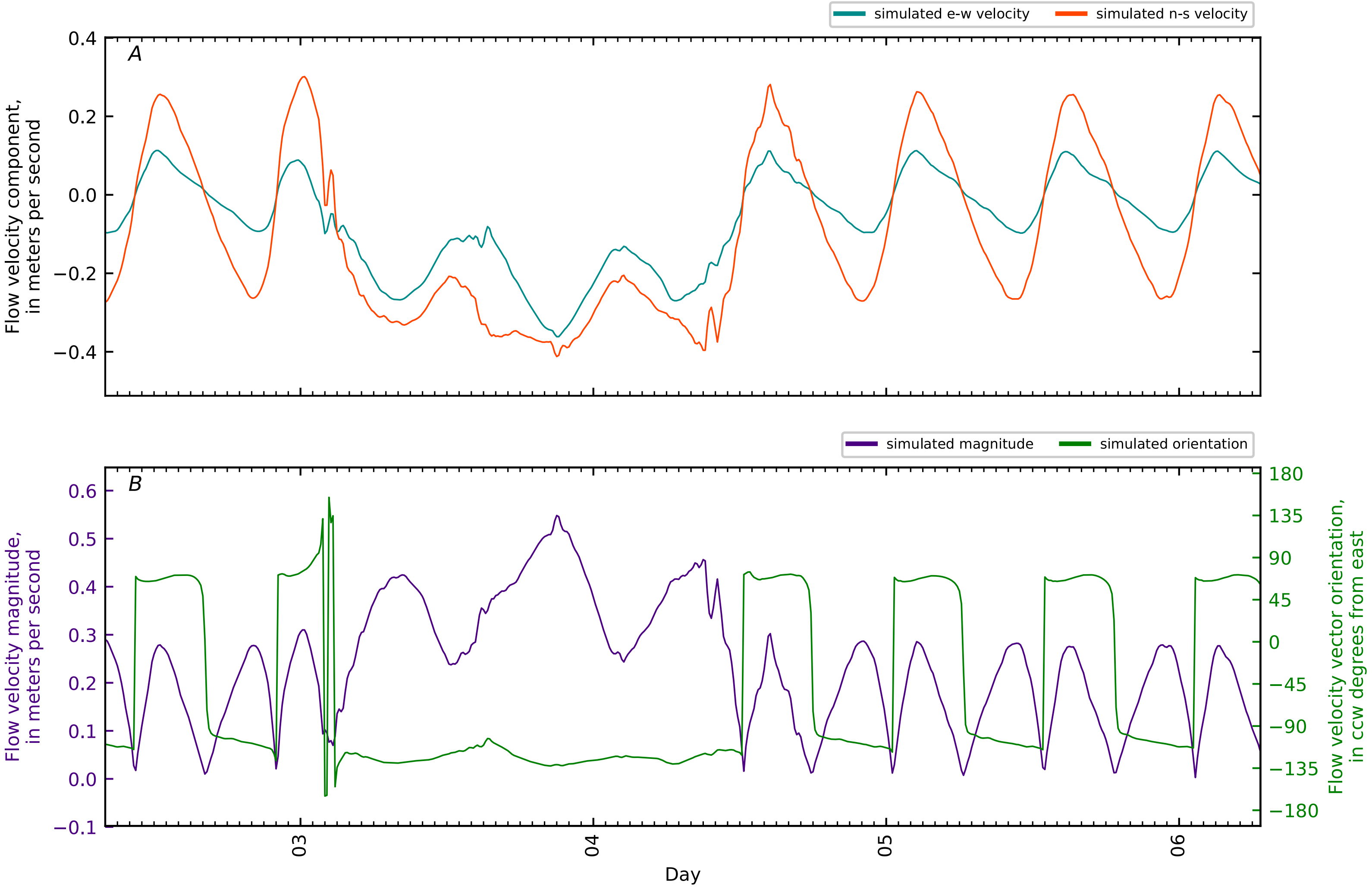

Figure B5-315. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 154, Orland Riv KM0.9 ERDC6 OR-MU3-SF-1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

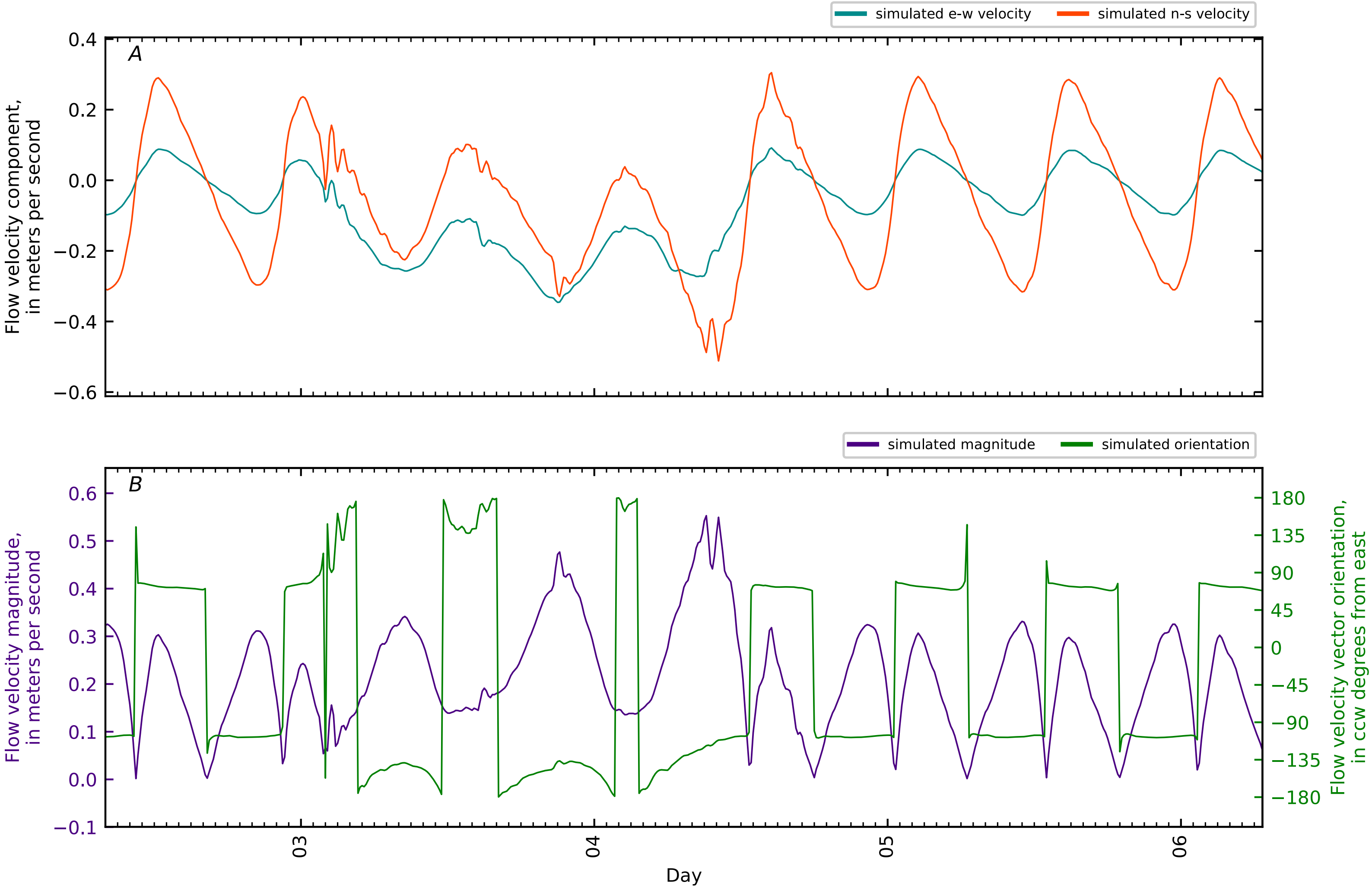

Figure B5-316. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 155, Orland Riv KM1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

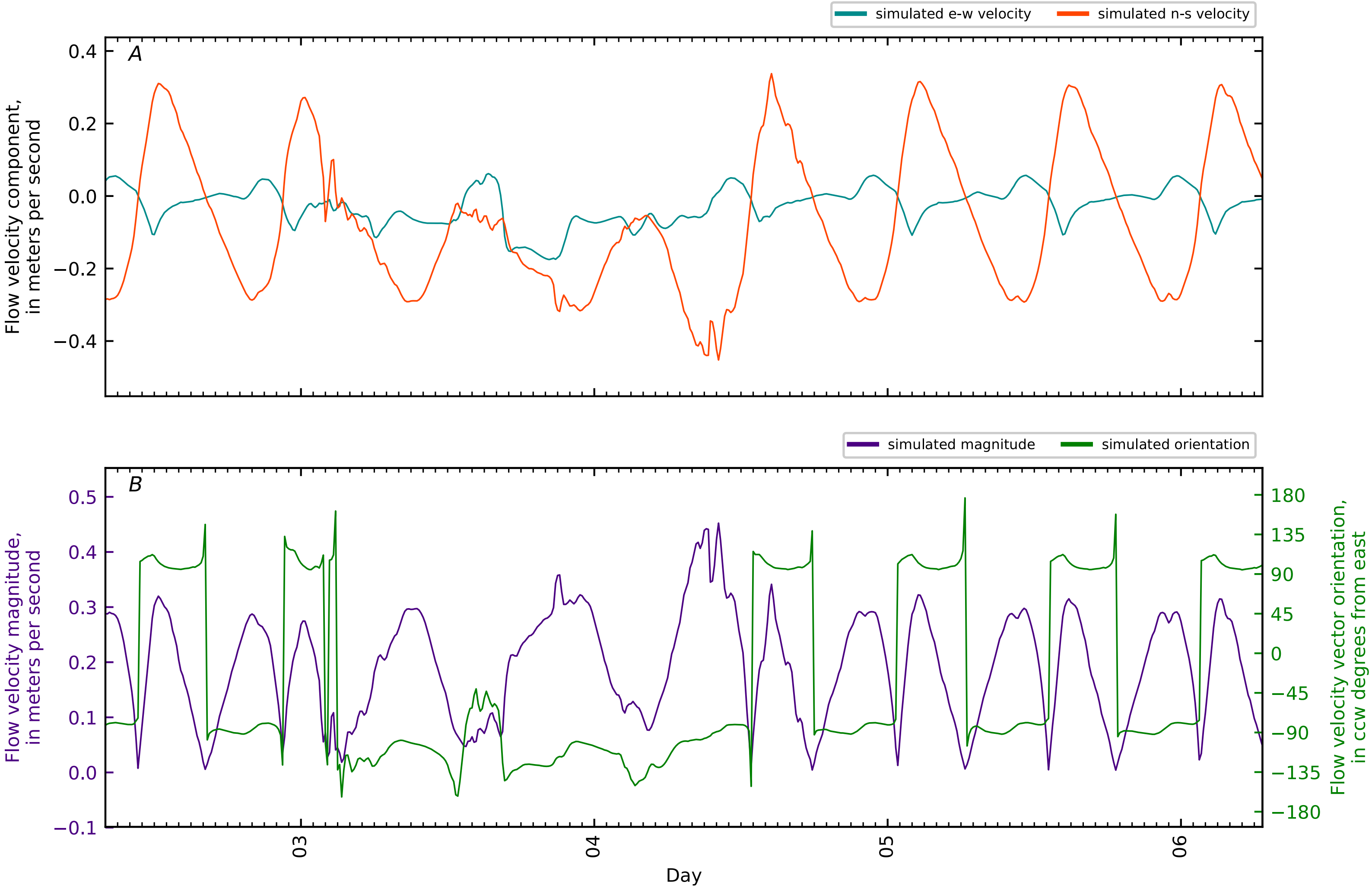

Figure B5-317. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 156, Orland Riv KM1.6 WHOI4 2010. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

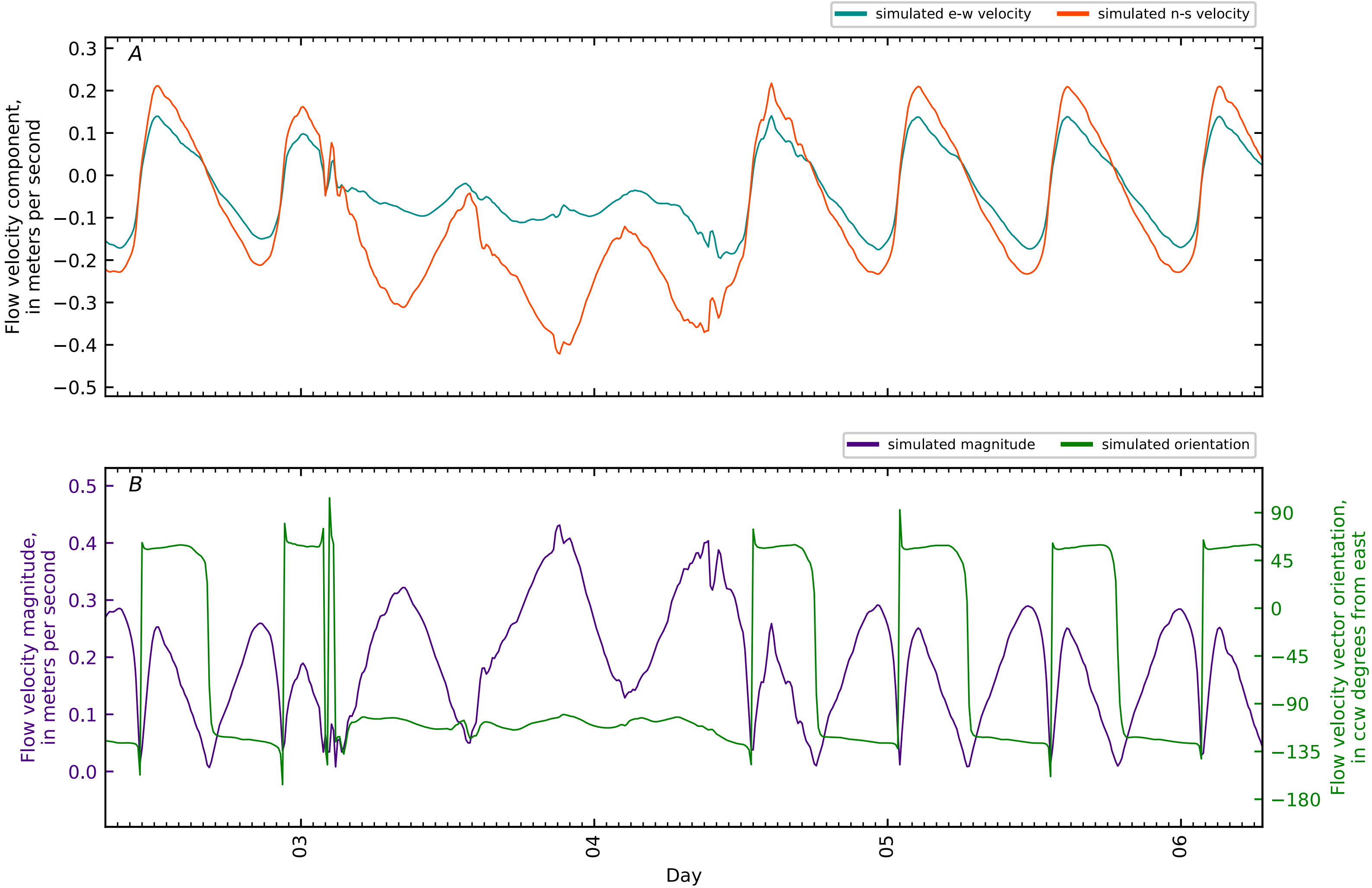

Figure B5-318. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 157, Orland Riv KM2. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

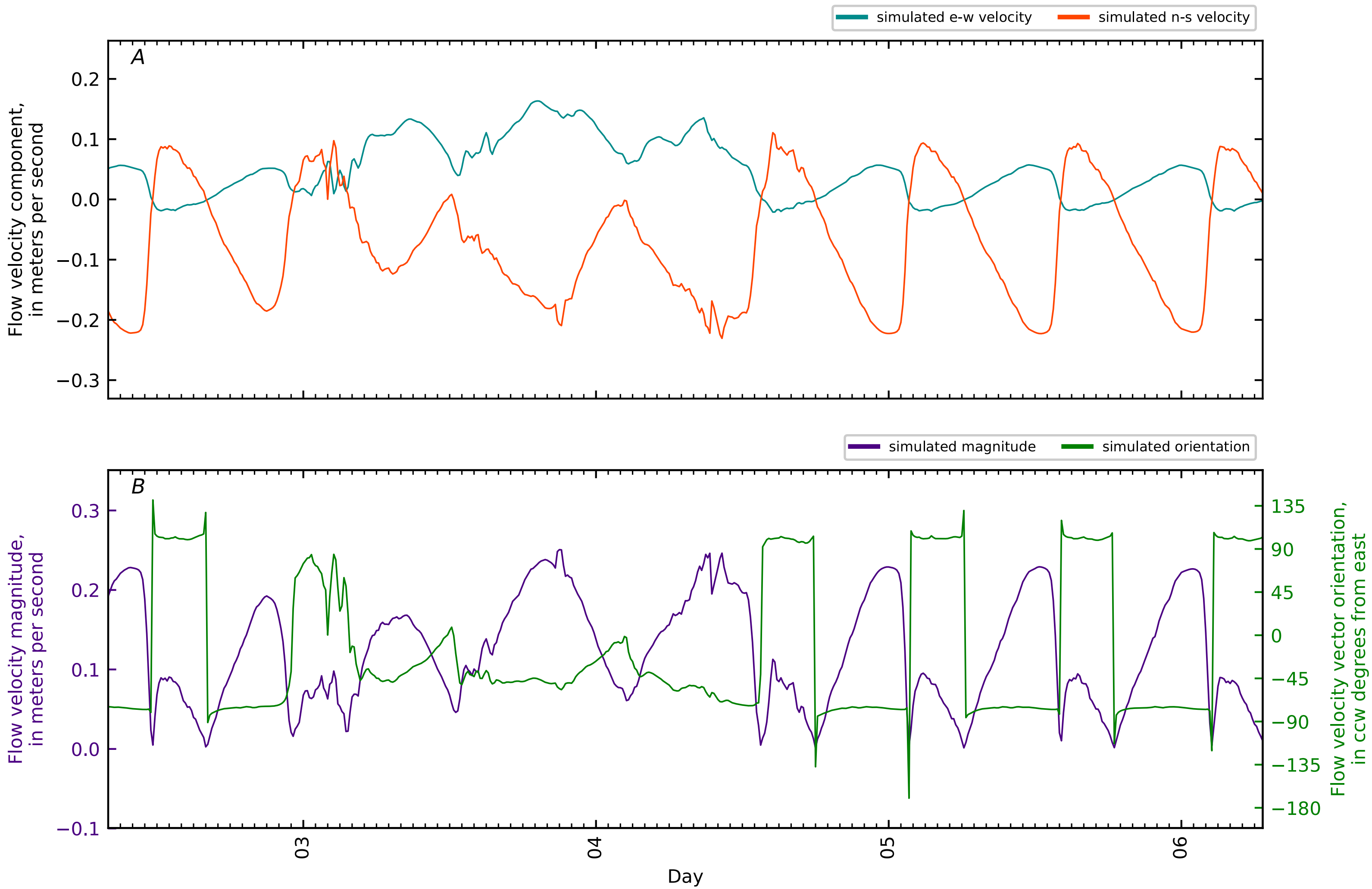

Figure B5-319. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 158, Orland Riv KM3. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

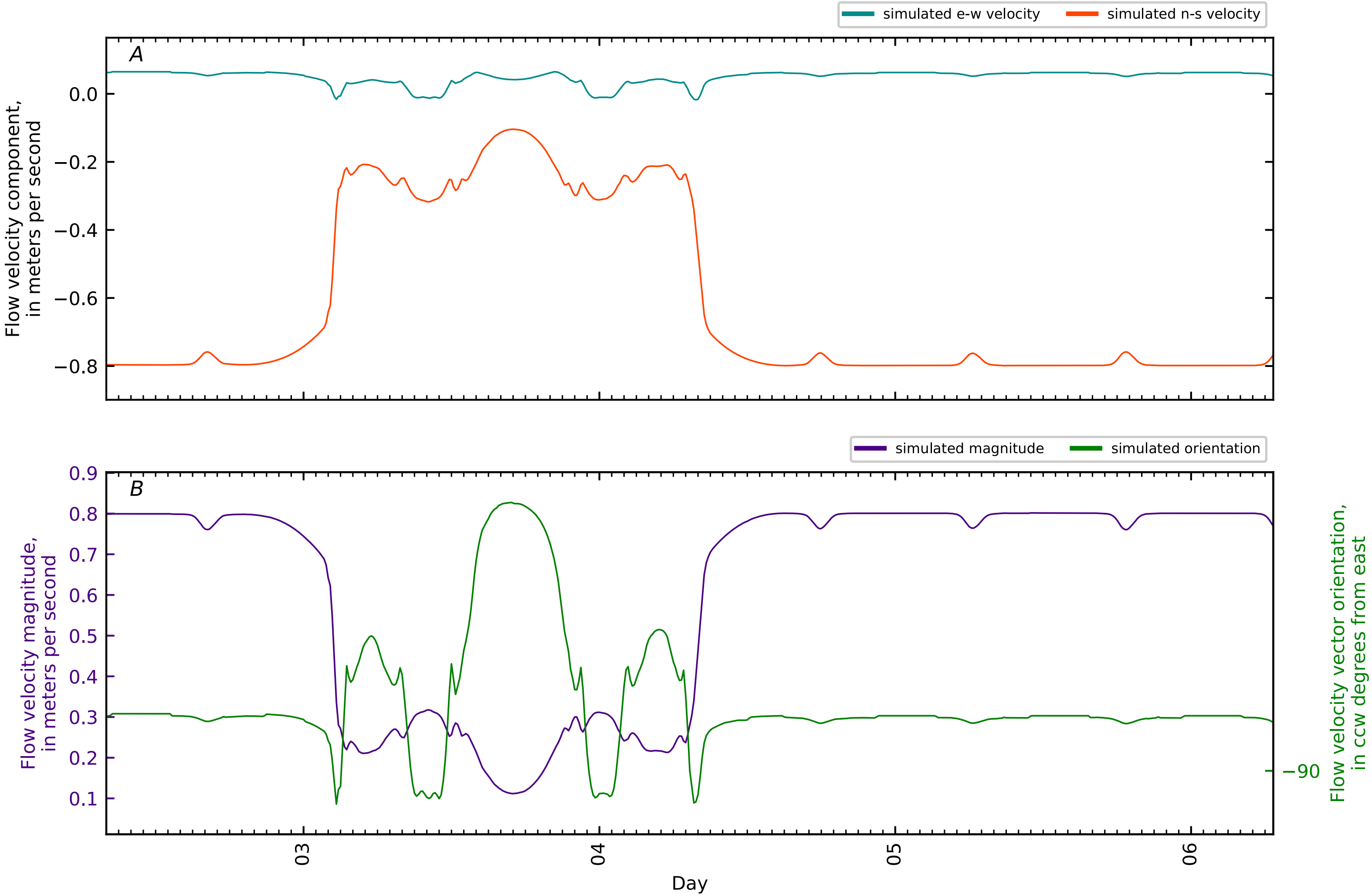

Figure B5-320. Time series for *A*, simulated flow velocity components; and *B*, simulated velocity magnitude and velocity vector orientation at station 159, Orland Riv KM4. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

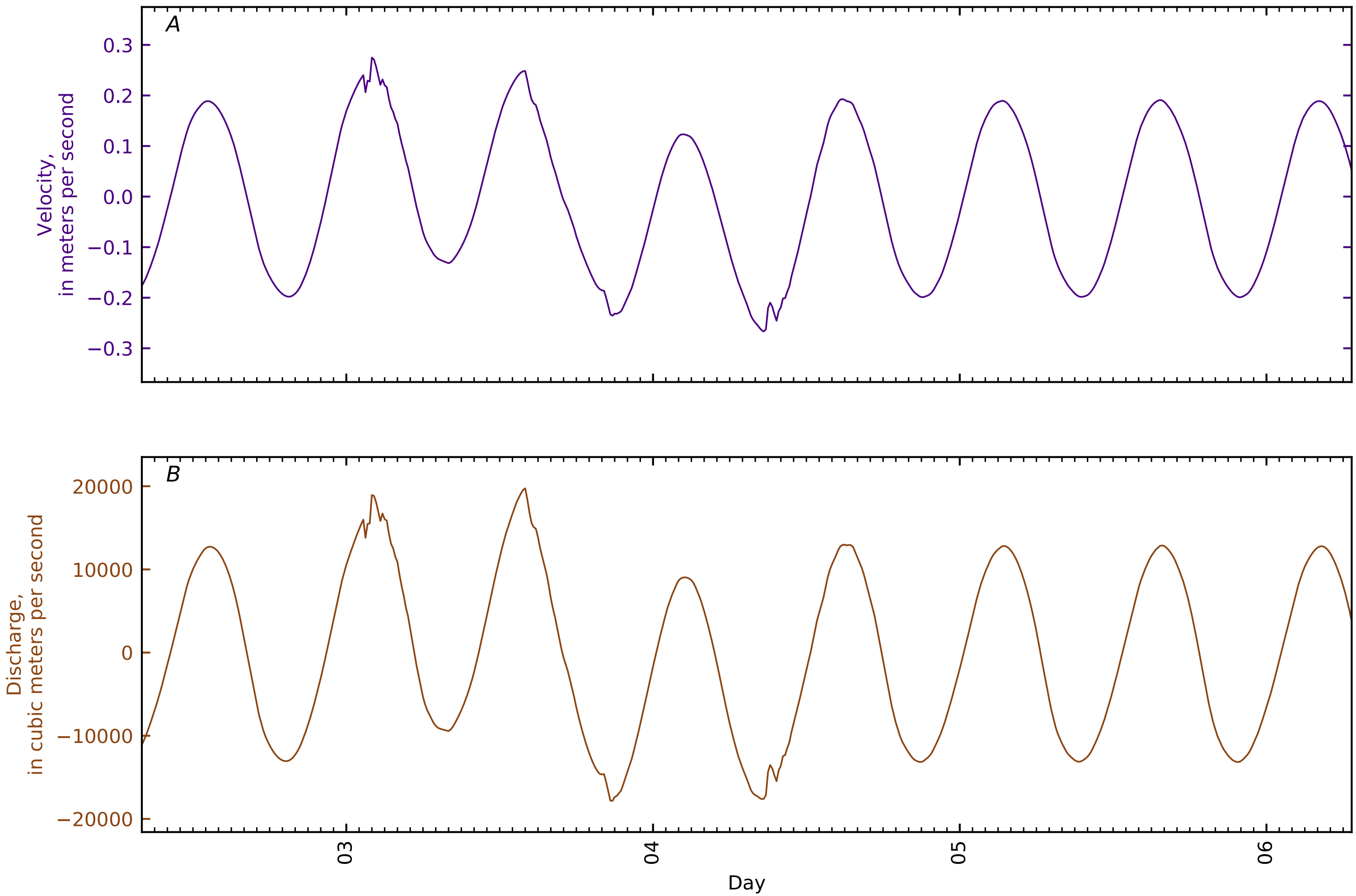

Figure B5-321. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 0, Penob Riv -KM4 Cape Jellison. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

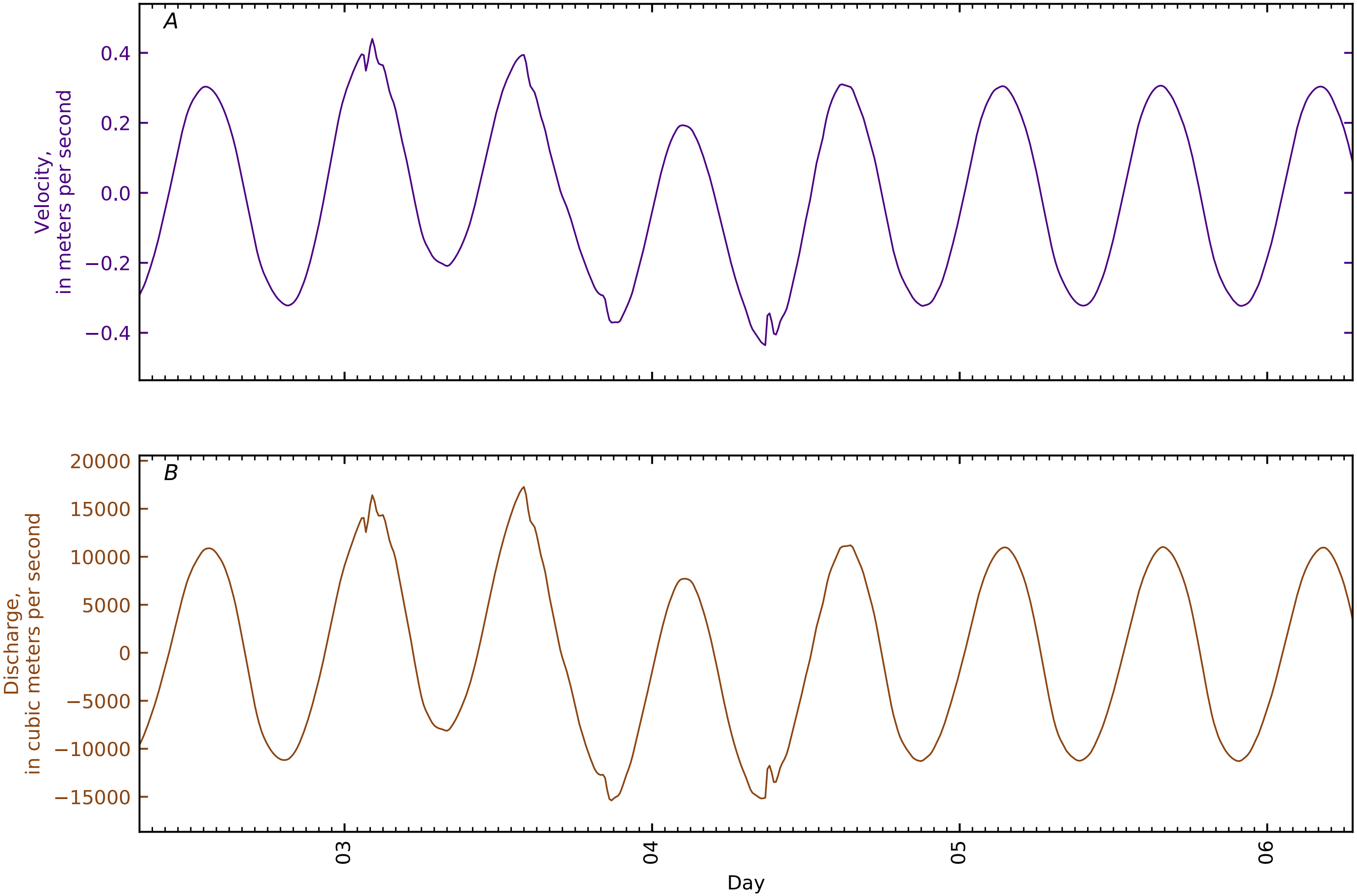

Figure B5-322. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 1, Penob Riv -KM1.5 d/s Ft Point. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

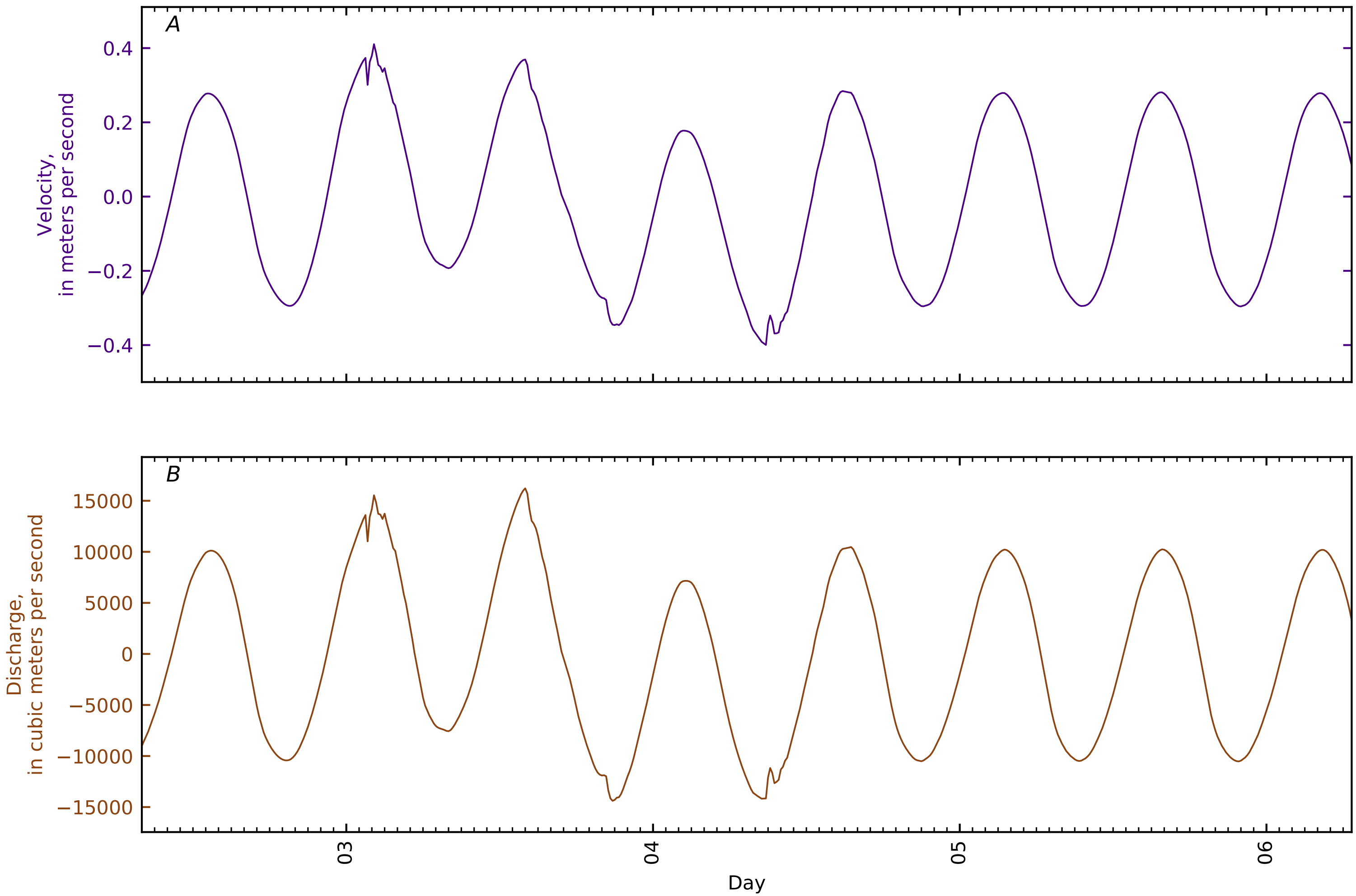

Figure B5-323. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 2, Penob Riv KM0 GS Trnsct5 Ft Point. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

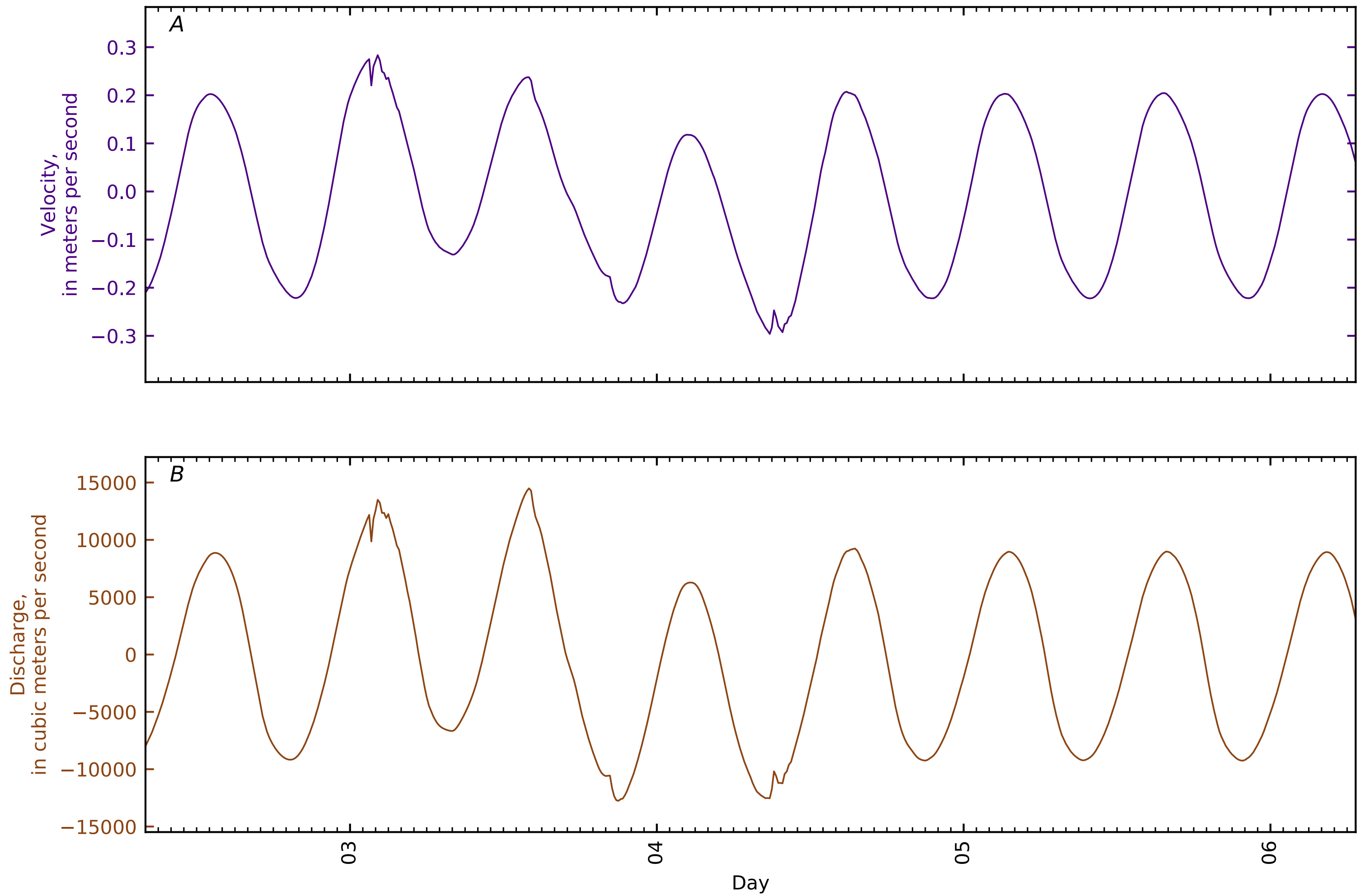

Figure B5-324. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 3, Penob Riv KM1.5 Ft Point Cove. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

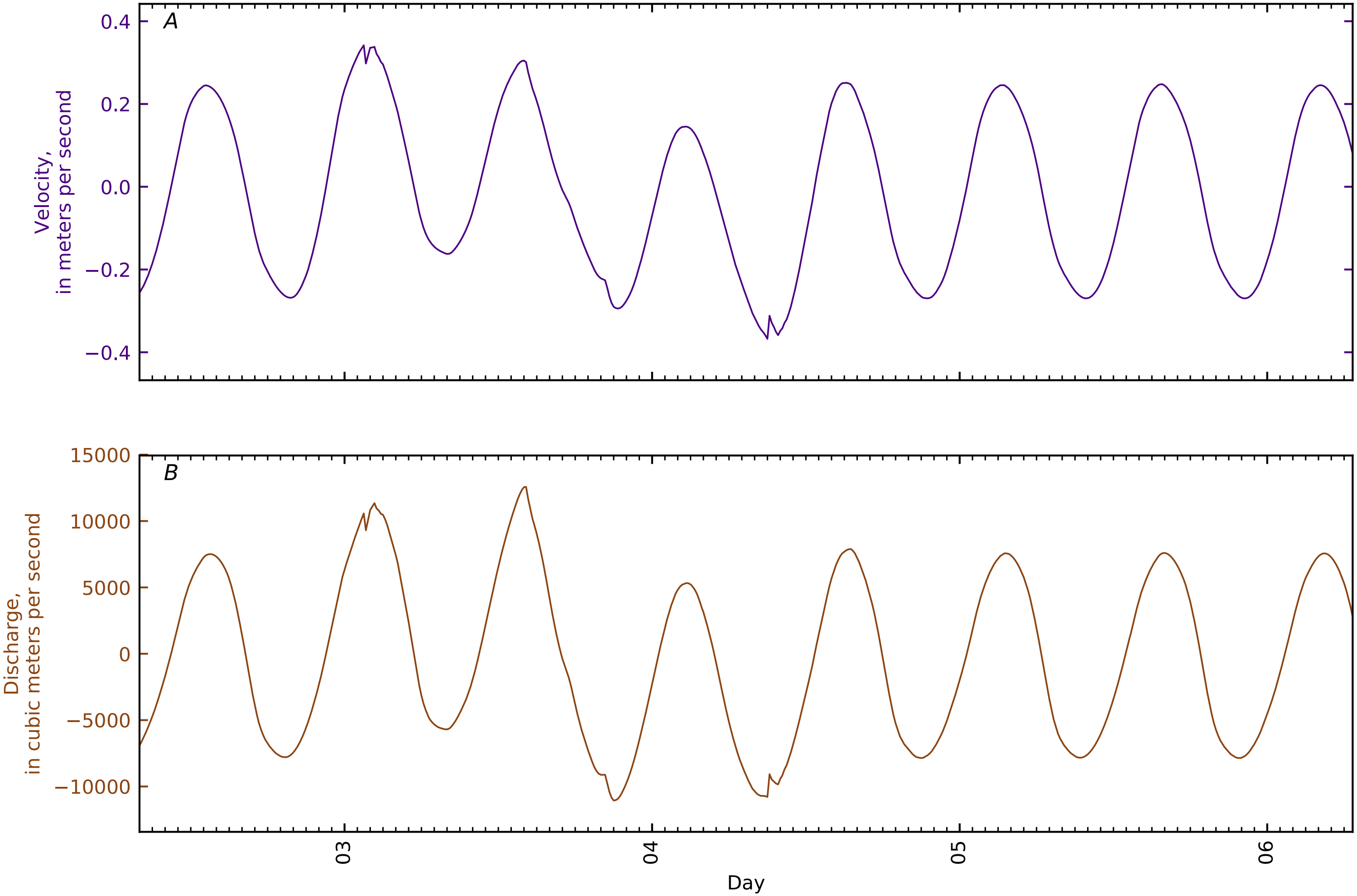

Figure B5-325. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 4, Penob Riv KM3 d/s conf East Ch. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

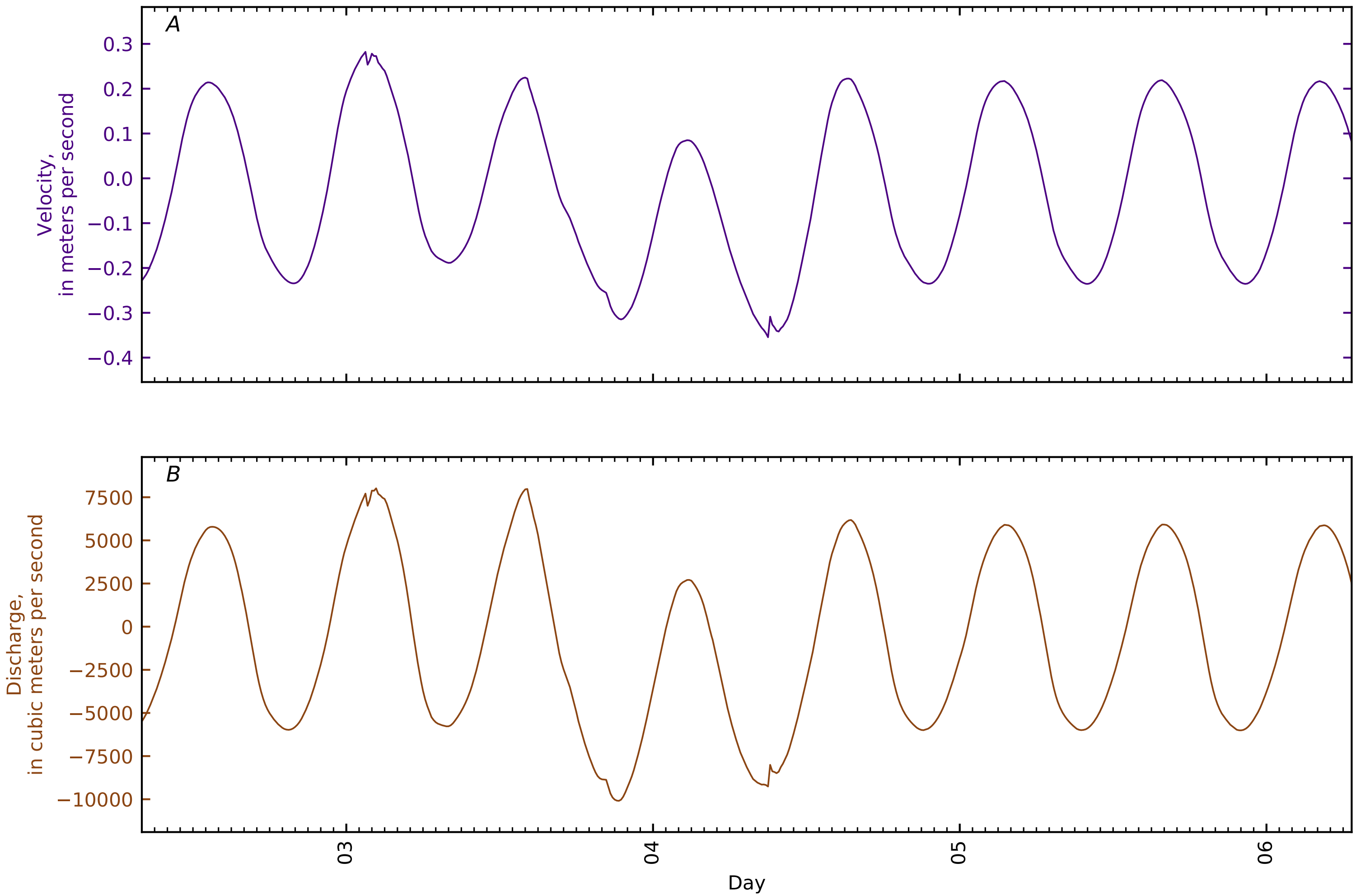

Figure B5-326. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 5, Penob Riv KM3.8 conf East Ch GS Trsct3 Gross Point. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

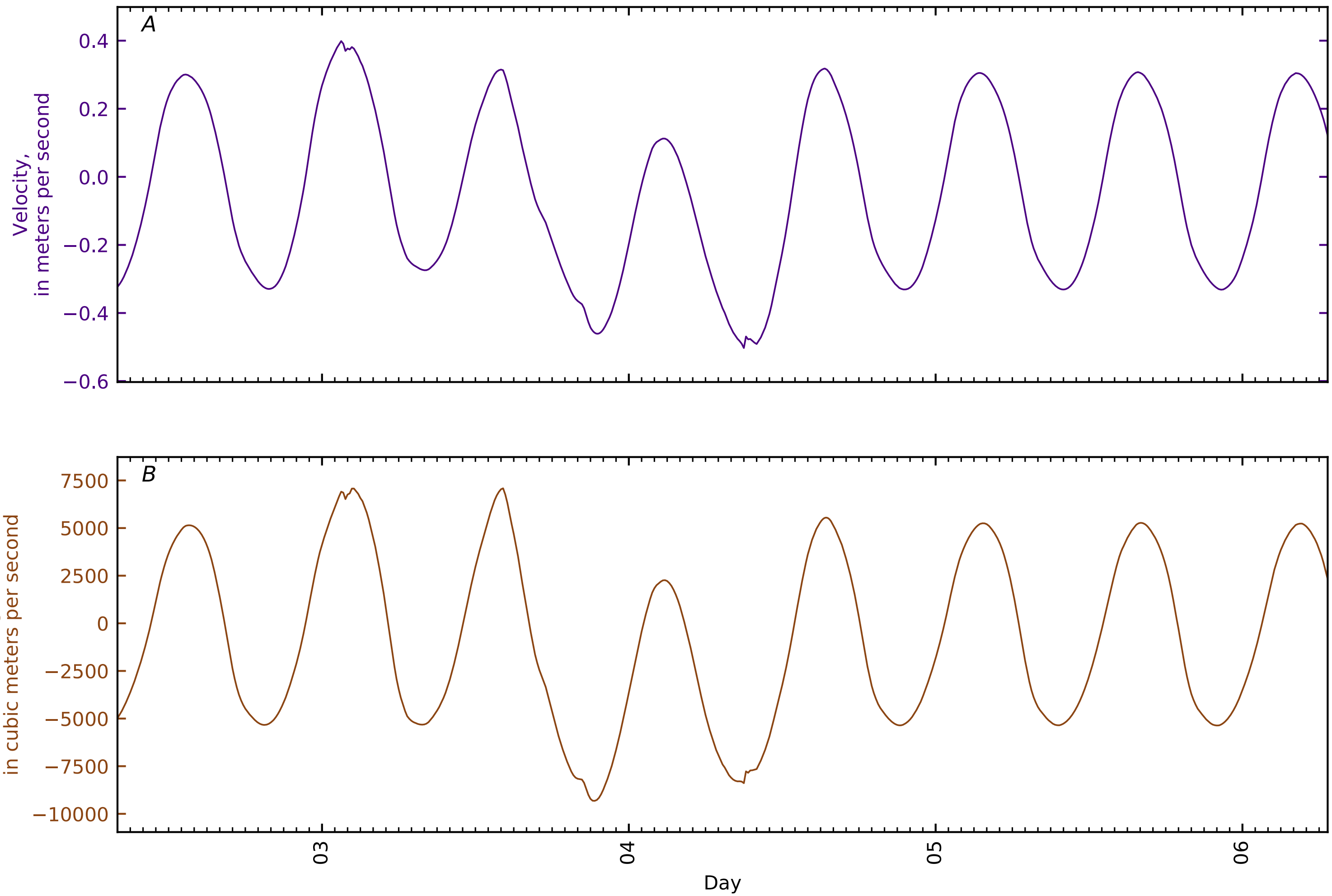

Figure B5-327. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 6, Penob Riv KM5.3 Sandy Point Odom Ledge. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

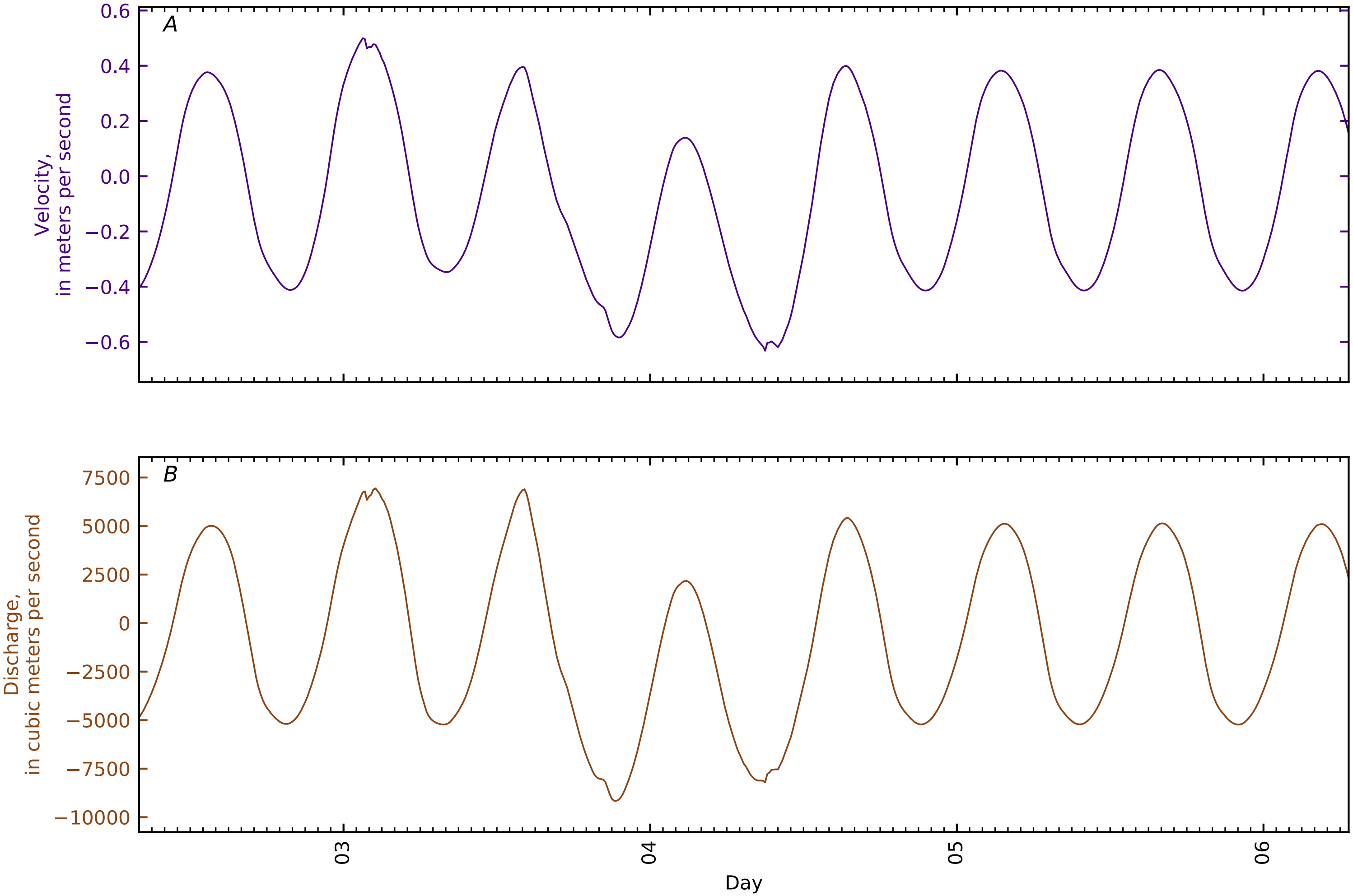

Figure B5-328. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 7, Penob Riv KM6 d/s narrows. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

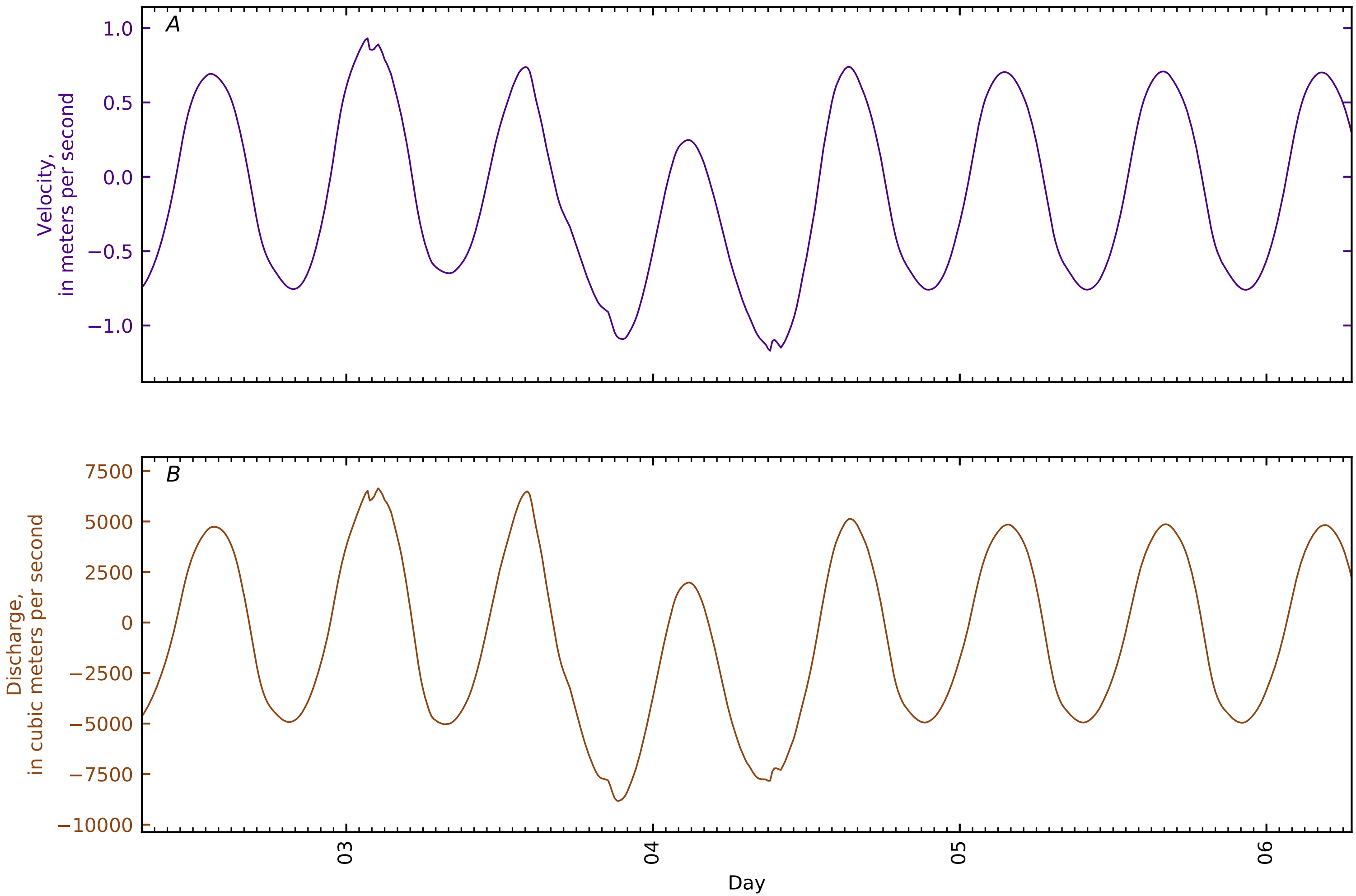

Figure B5-329. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 8, Penob Riv KM8 narrows. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

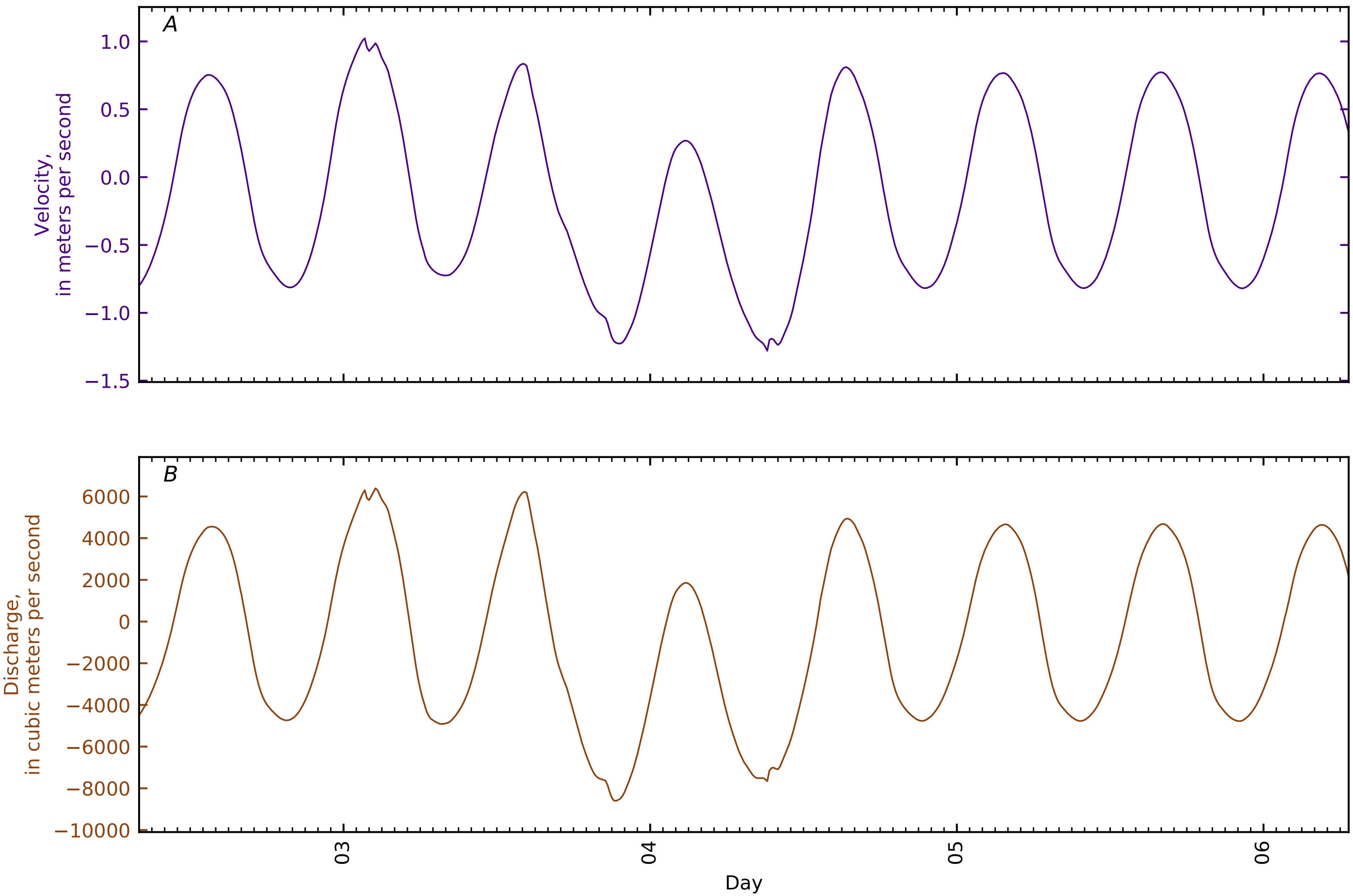

Figure B5-330. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 9, Penob Riv KM10 narrows d/s bridge. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

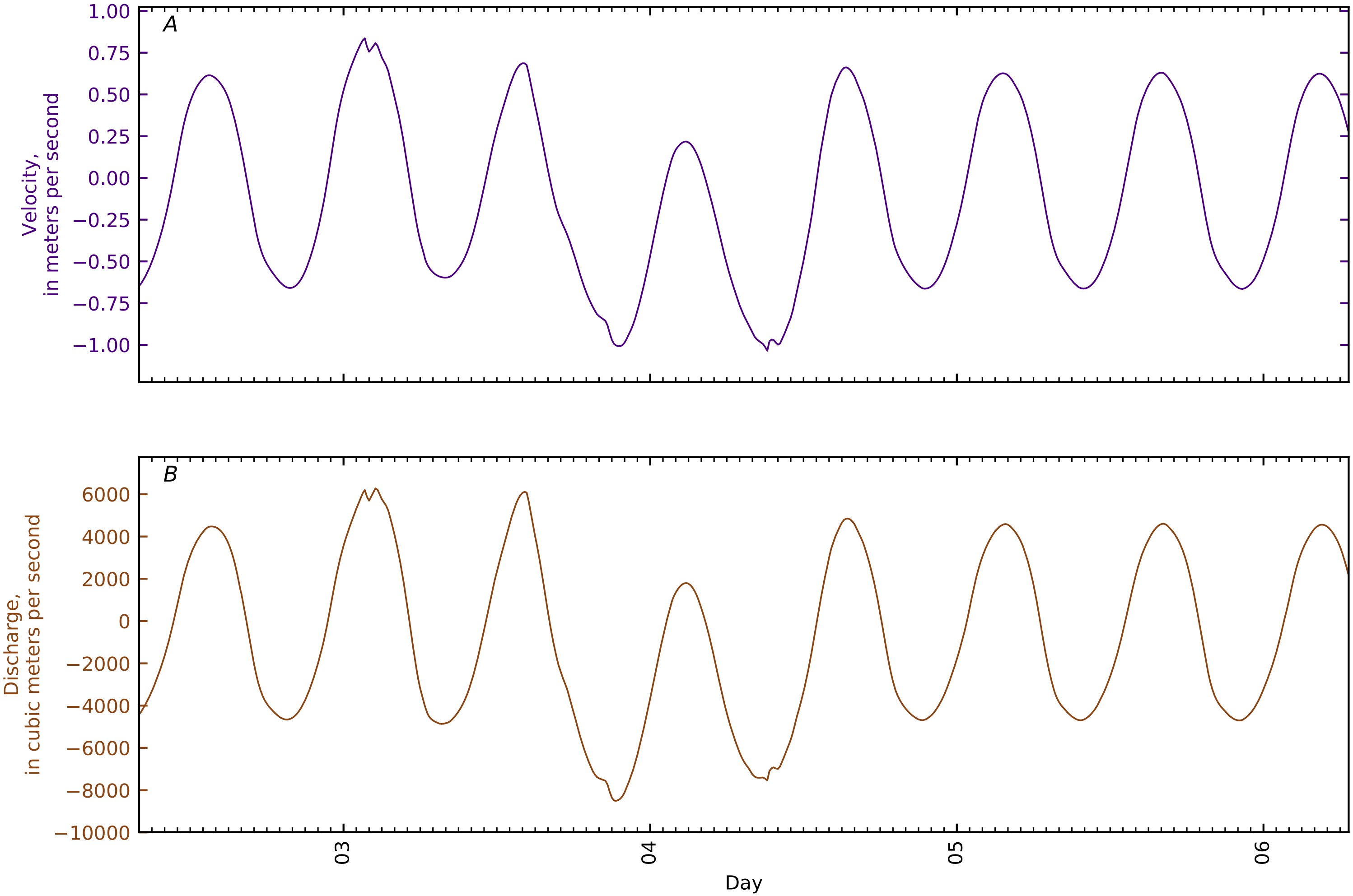

Figure B5-331. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 10, Penob Riv KM11 d/s East Ch split nr Bucksport. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

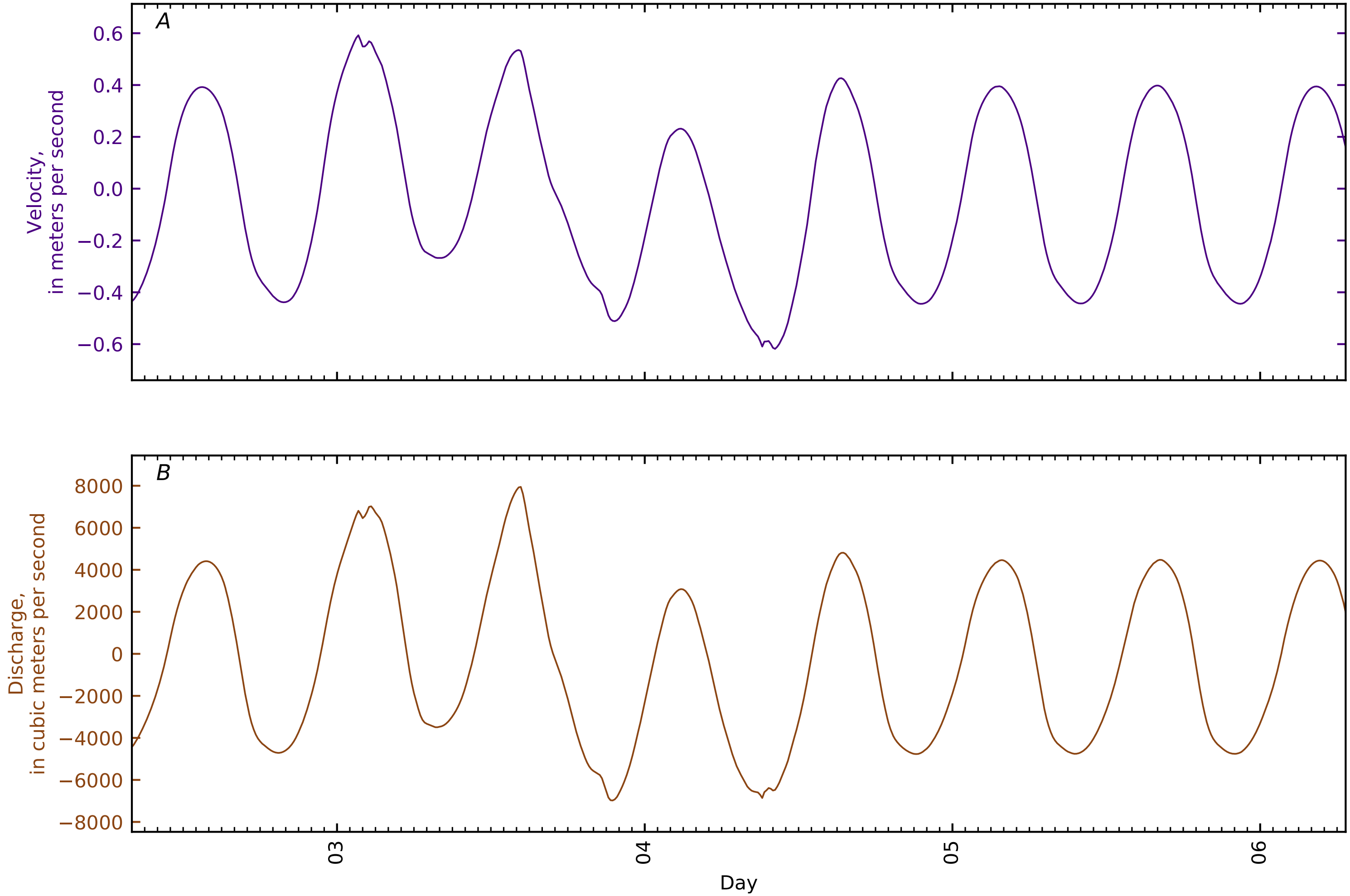

Figure B5-332. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 11, Penob Riv KM11.4 East Ch split nr Bucksport. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

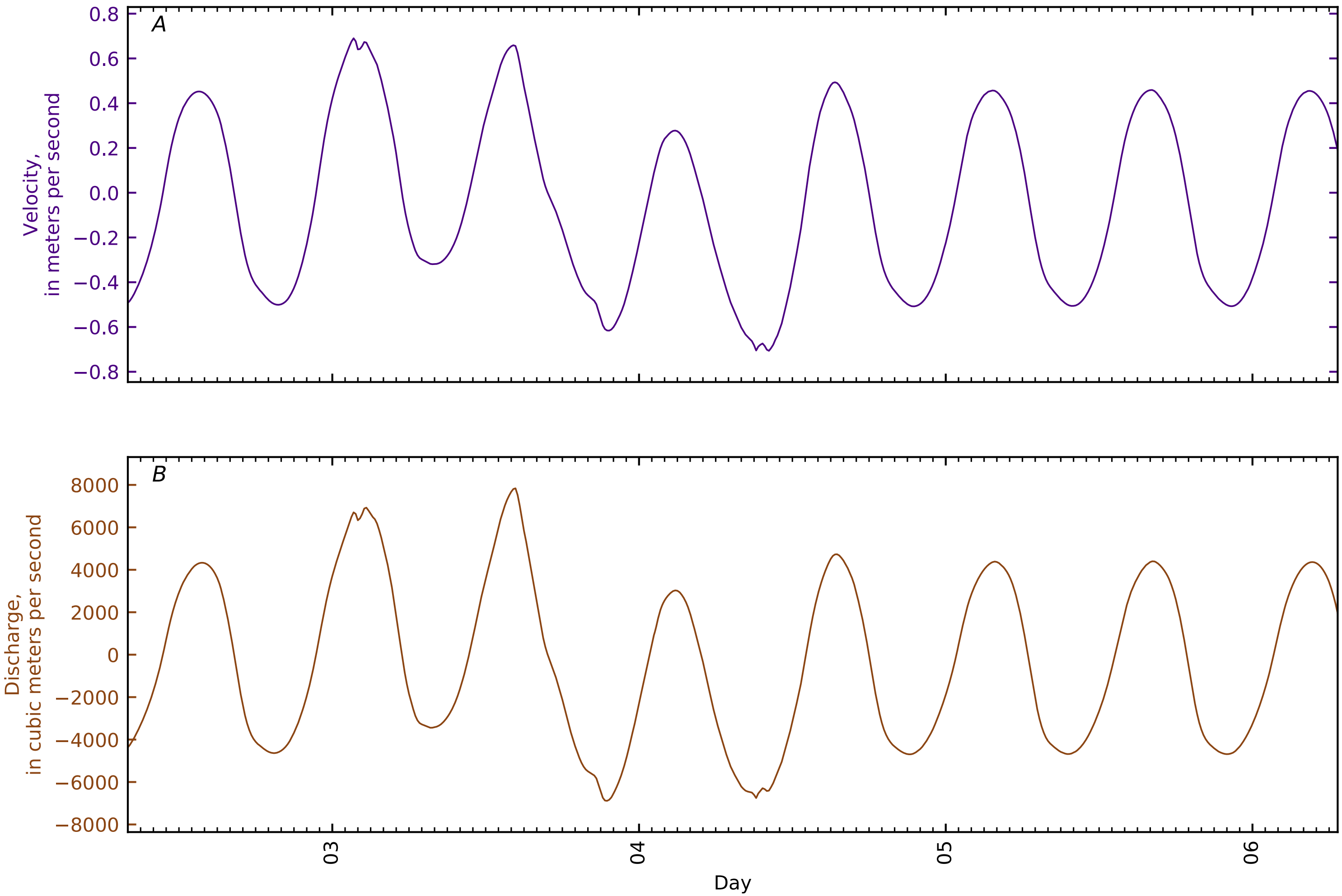

Figure B5-333. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 12, Penob Riv KM12 Bucksport. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

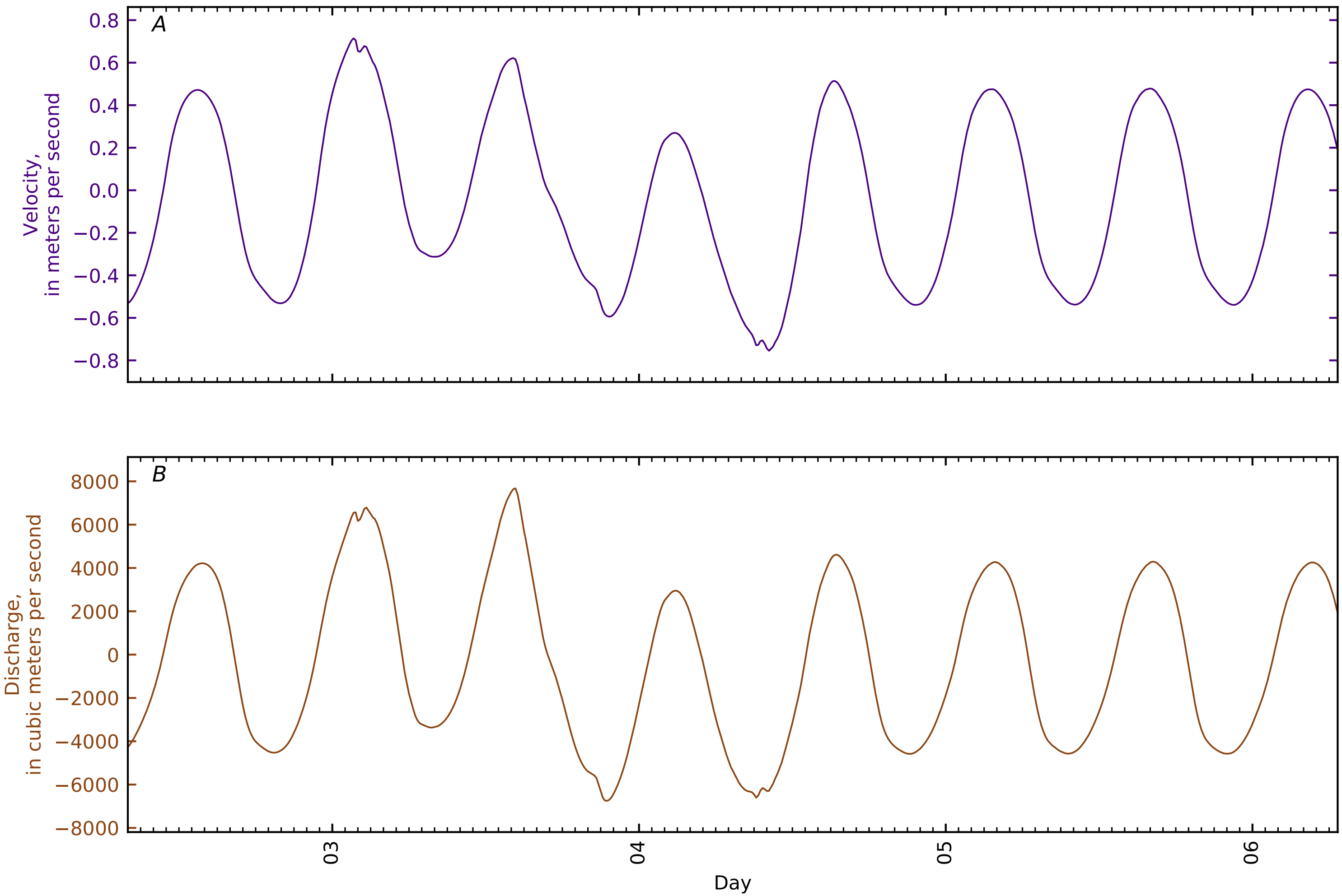

Figure B5-334. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 13, Penob Riv KM13 dropoff u/s Bucksport. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

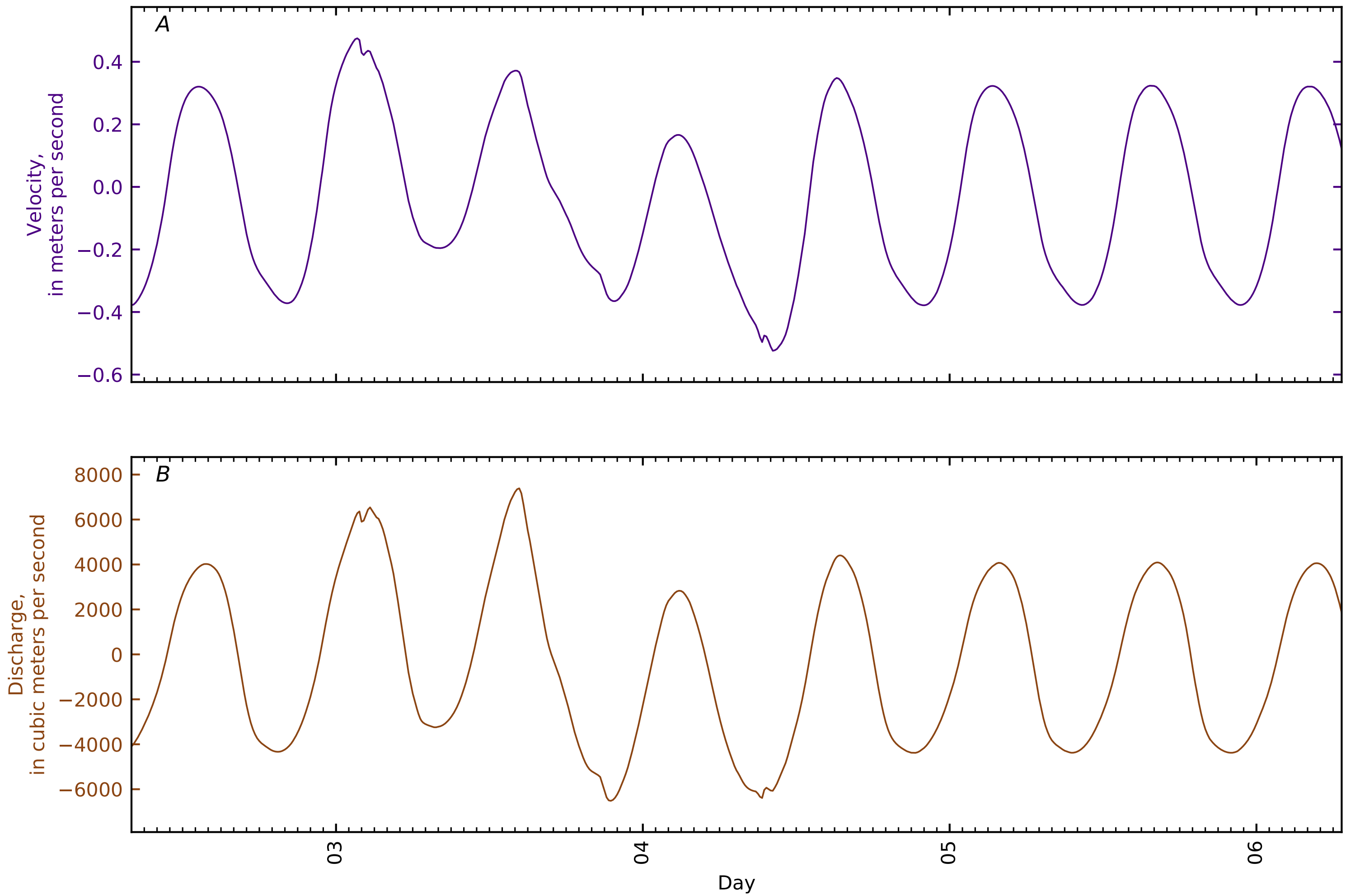

Figure B5-335. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 14, Penob Riv KM14 u/s dropoff. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

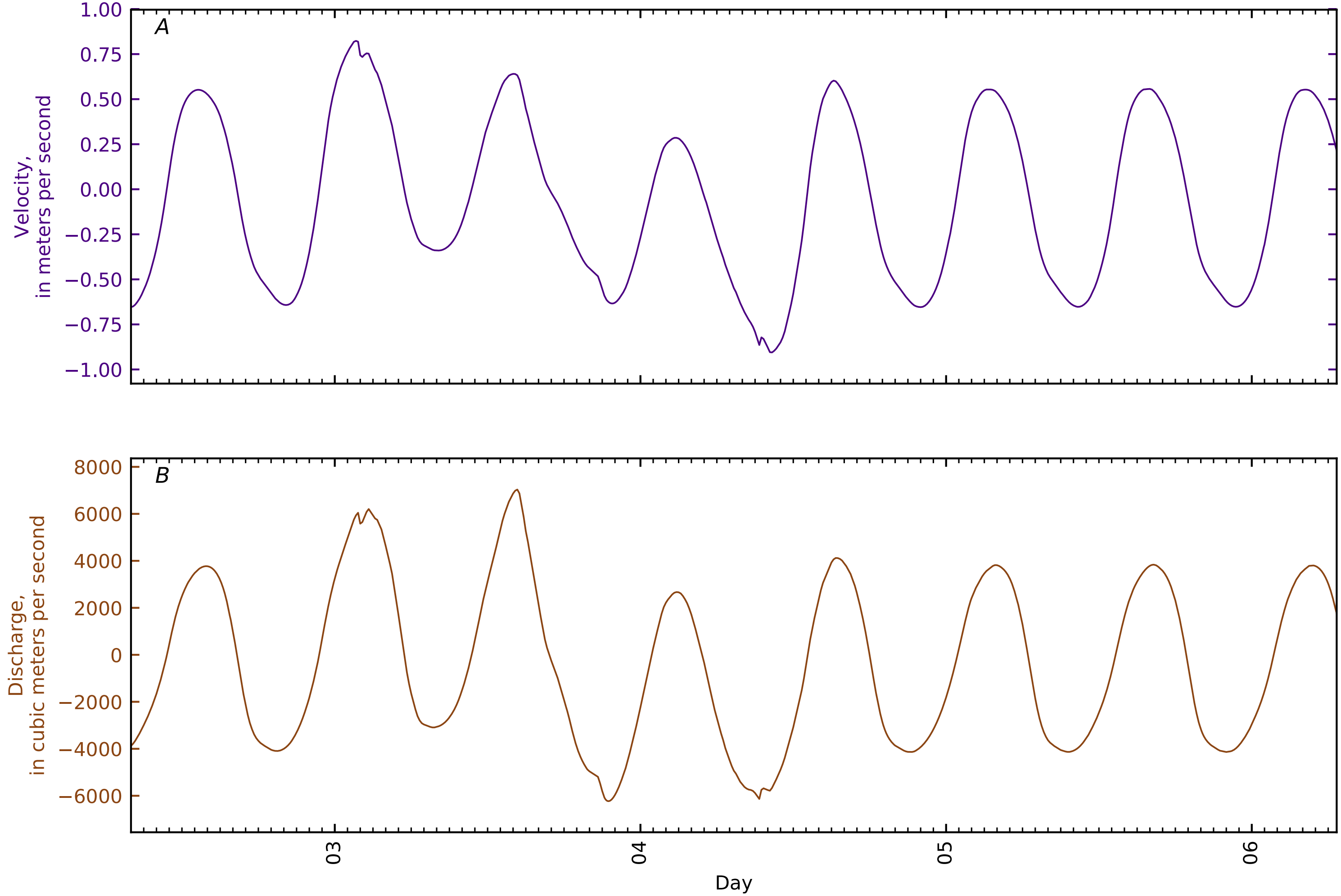

Figure B5-336. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 15, Penob Riv KM15 d/s conf Mendall Marsh. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

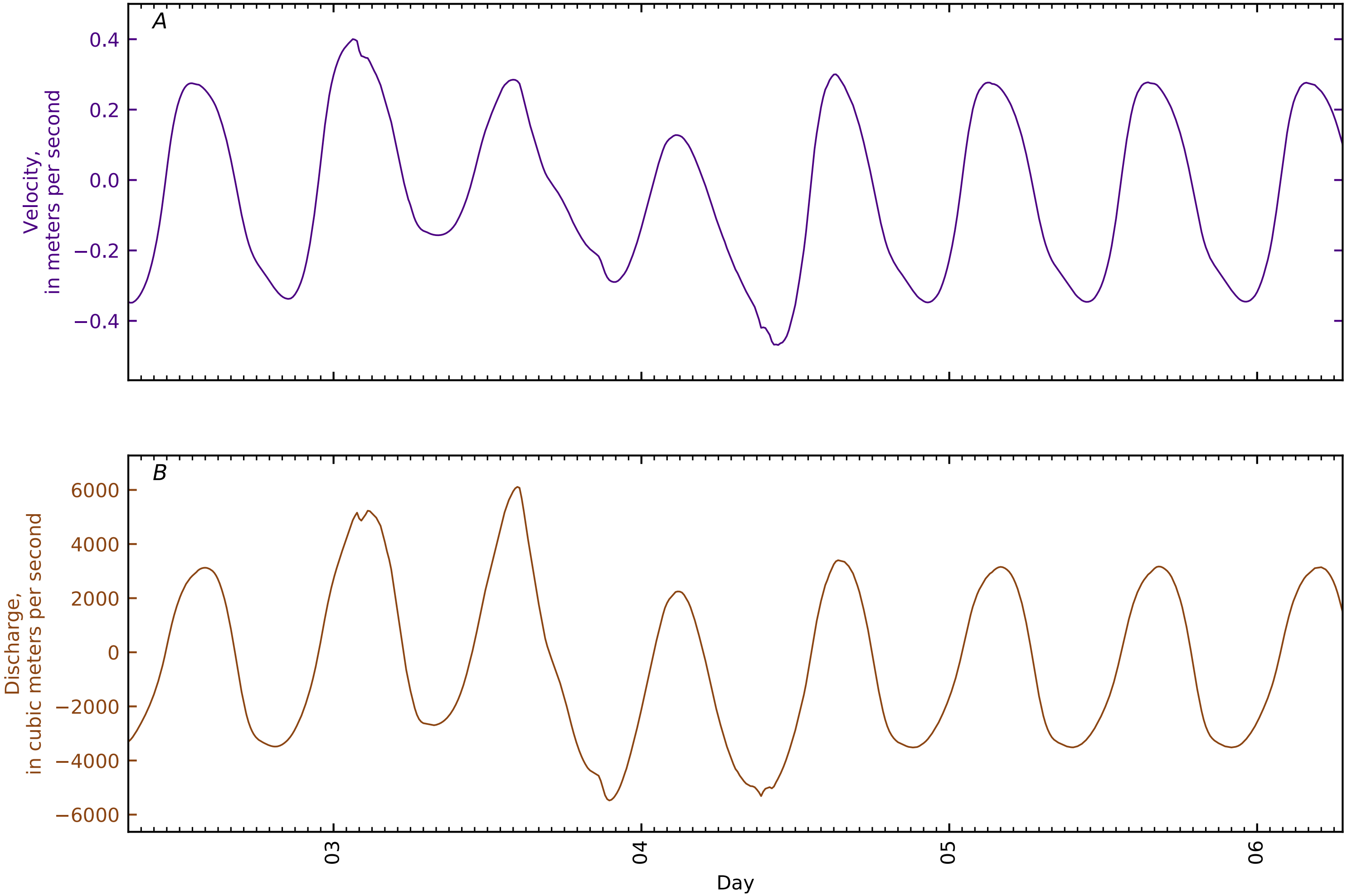

Figure B5-337. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 16, Penob Riv KM17 Frankfort Flats d/s Mendall Marsh. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

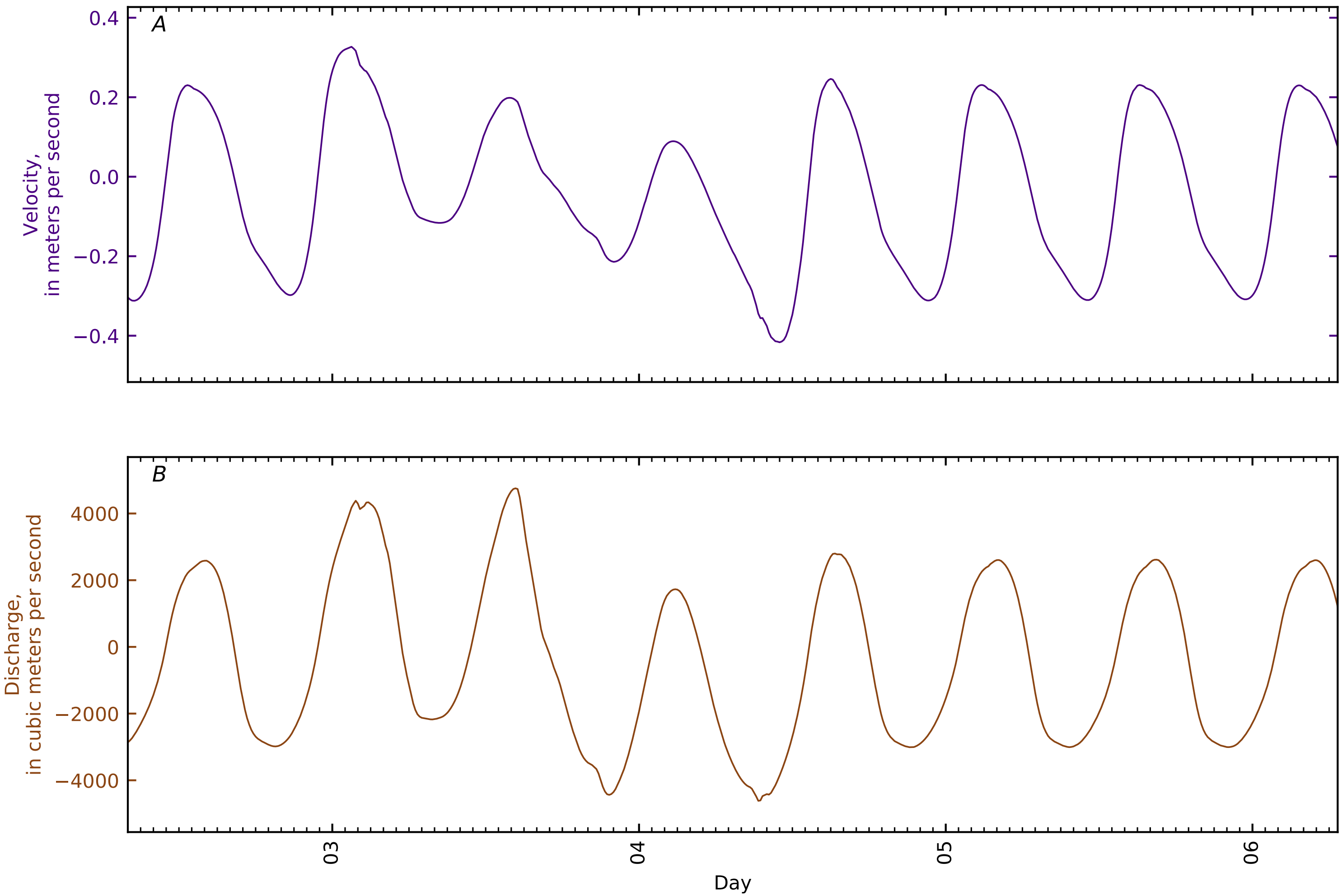

Figure B5-338. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 17, Penob Riv KM18 Frankfort Flats u/s Mendall Marsh GS Trnsct1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

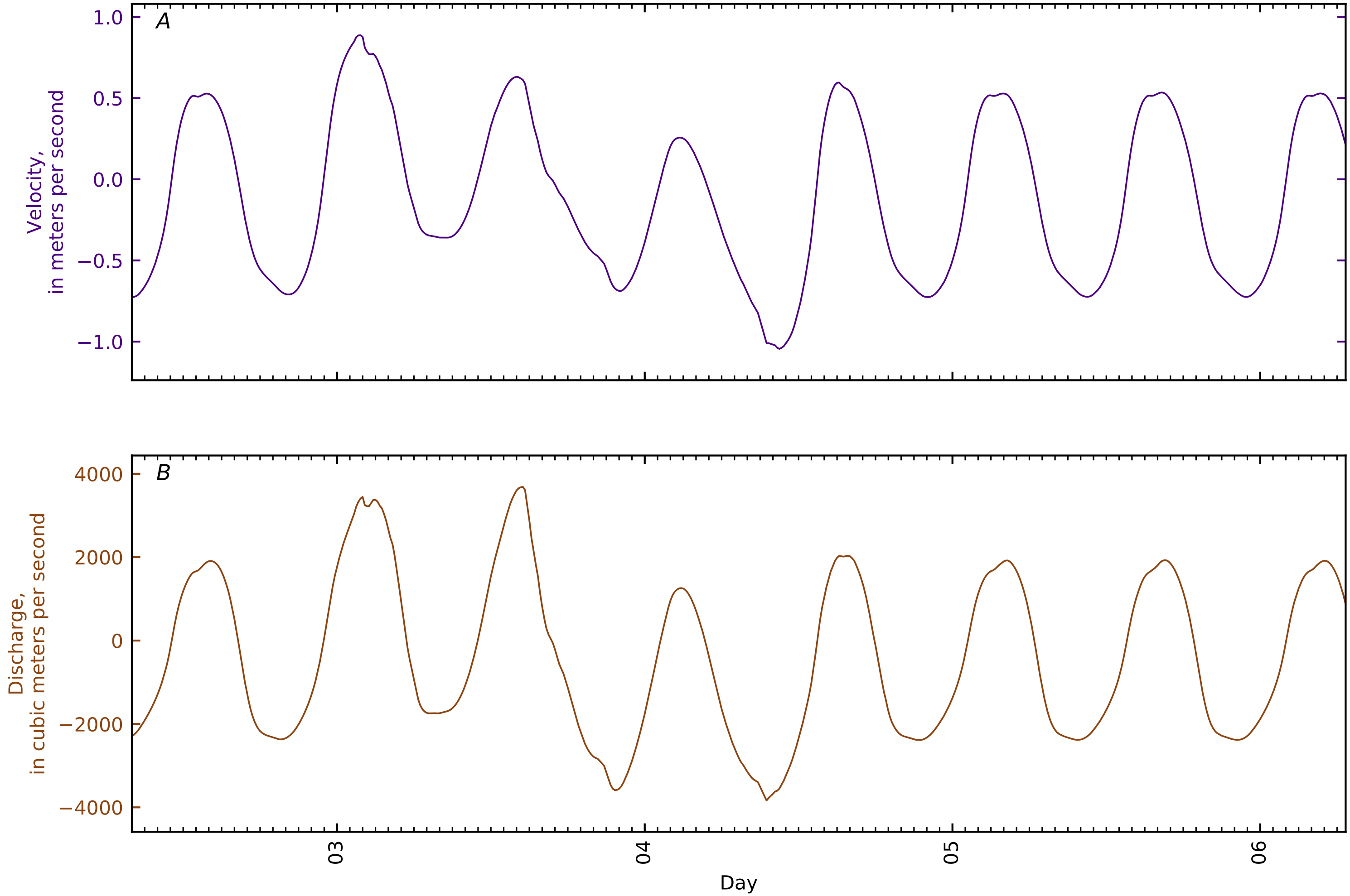

Figure B5-339. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 18, Penob Riv KM21.2 GS 443810068502201 Winterport. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

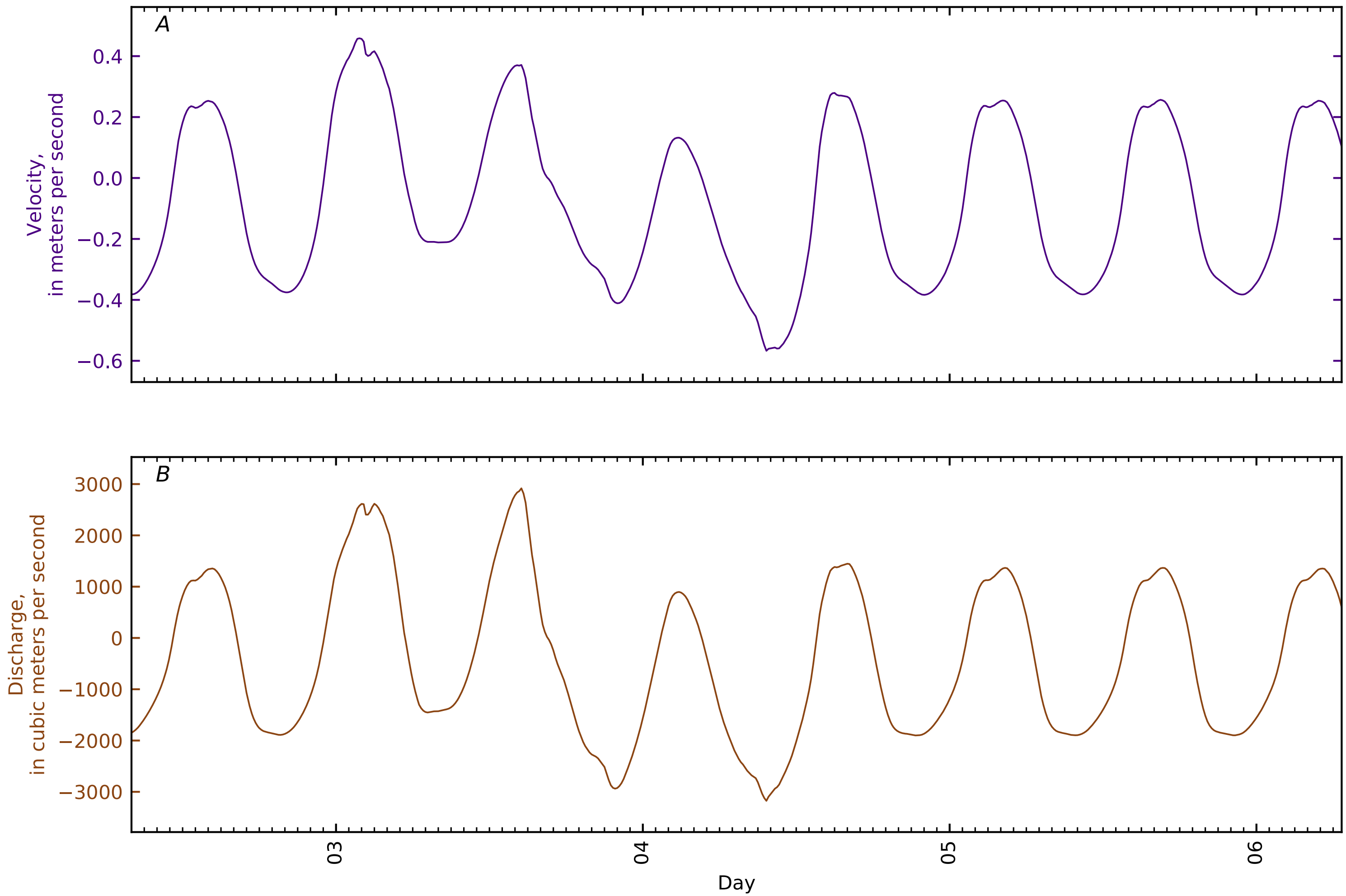

Figure B5-340. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 19, Penob Riv KM25.2 Oak Pt narrows d/s bend. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

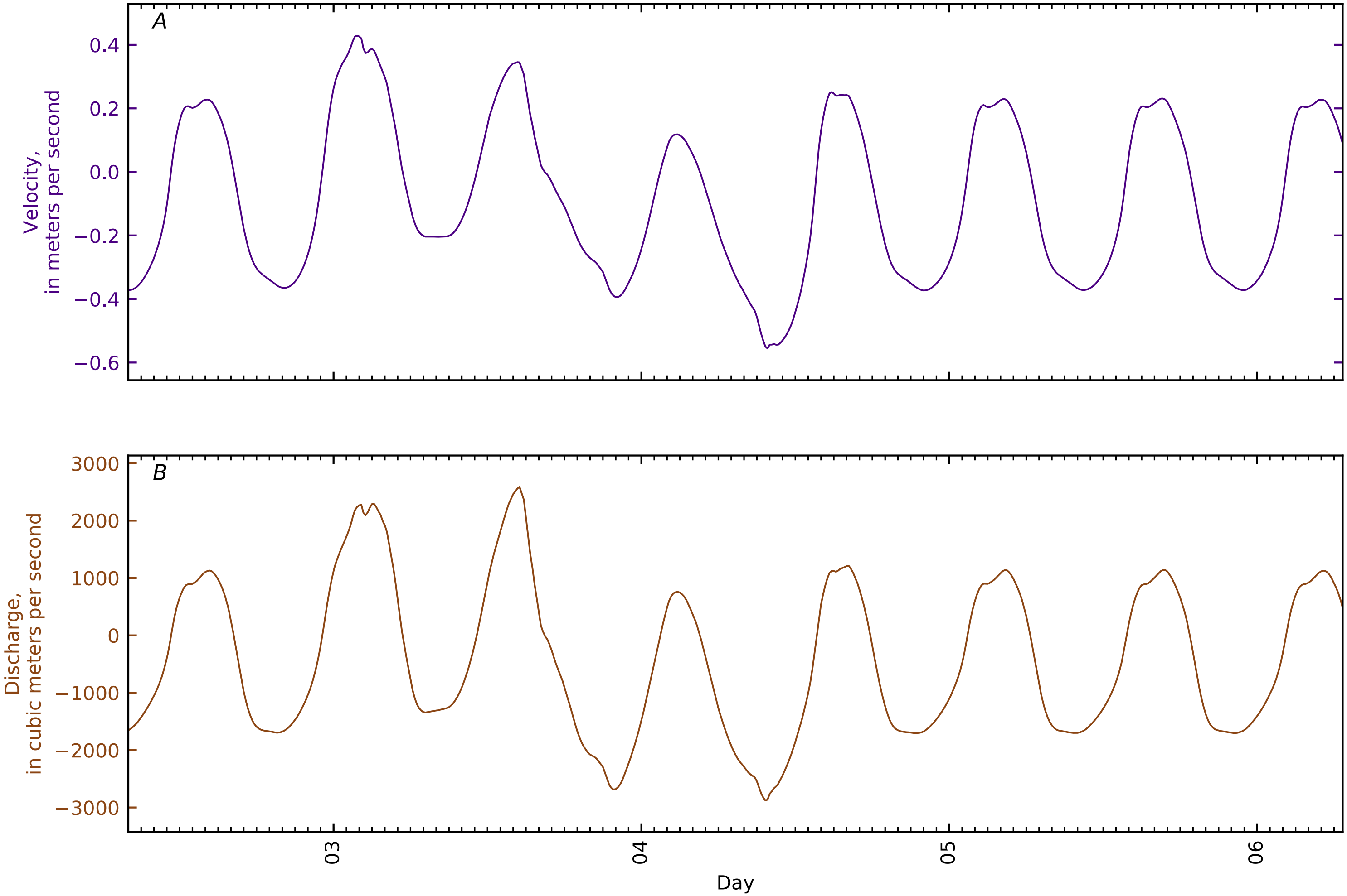

Figure B5-341. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 20, Penob Riv KM27.2 South Orrington. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

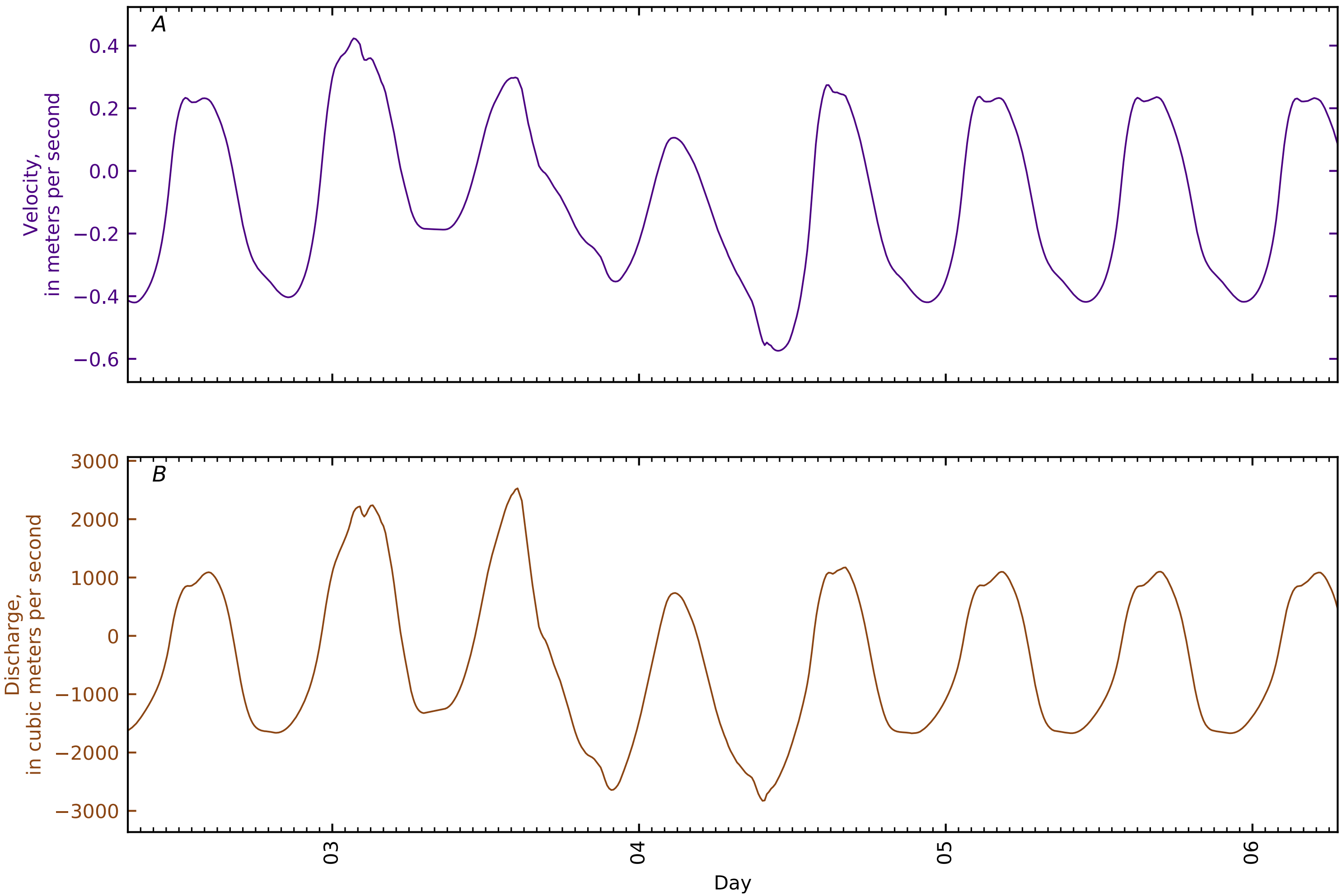

Figure B5-342. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 21, Penob Riv KM27.6 South Orrington u/s bend. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

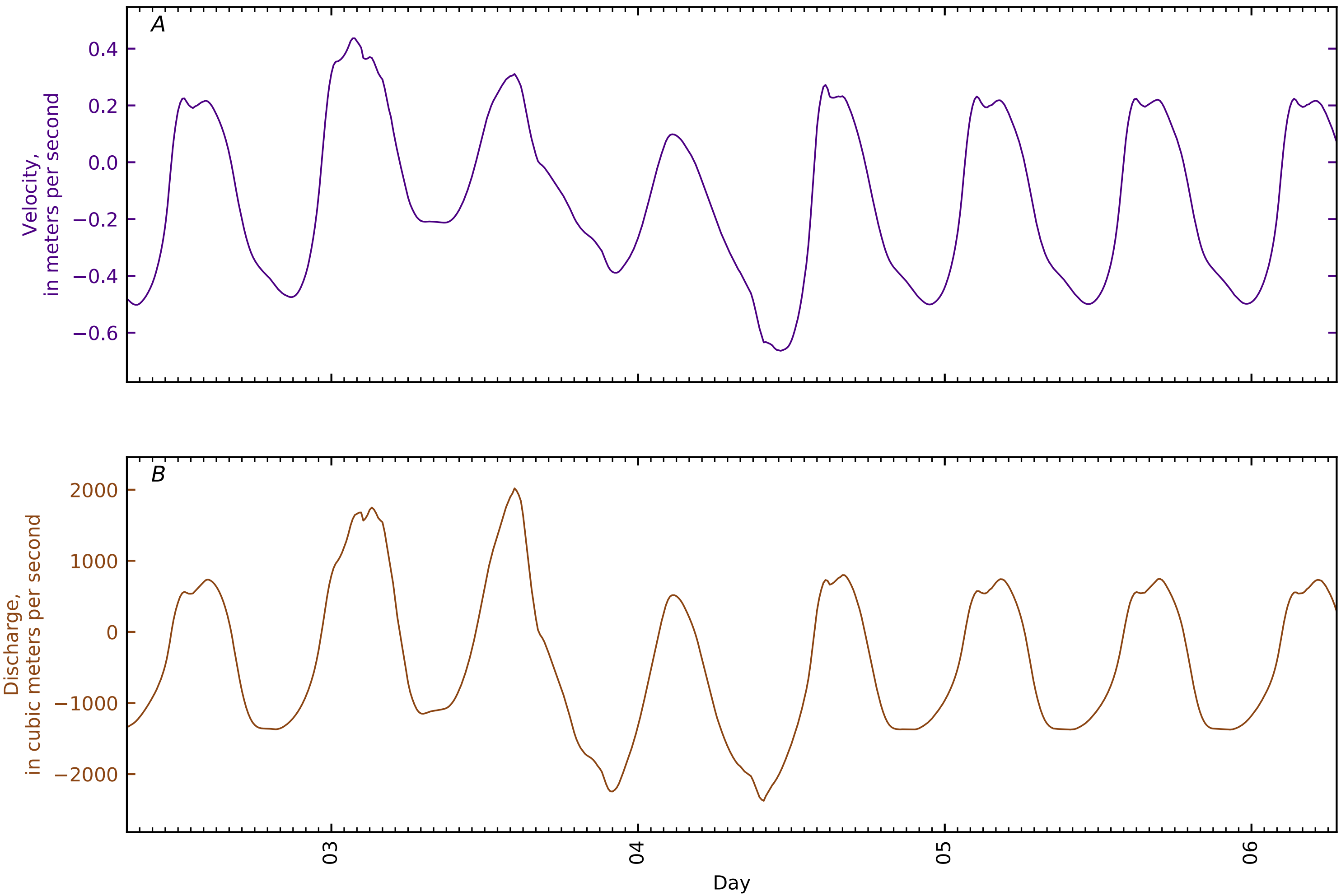

Figure B5-343. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 22, Penob Riv KM30 nr Bald Hill d/s bend. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

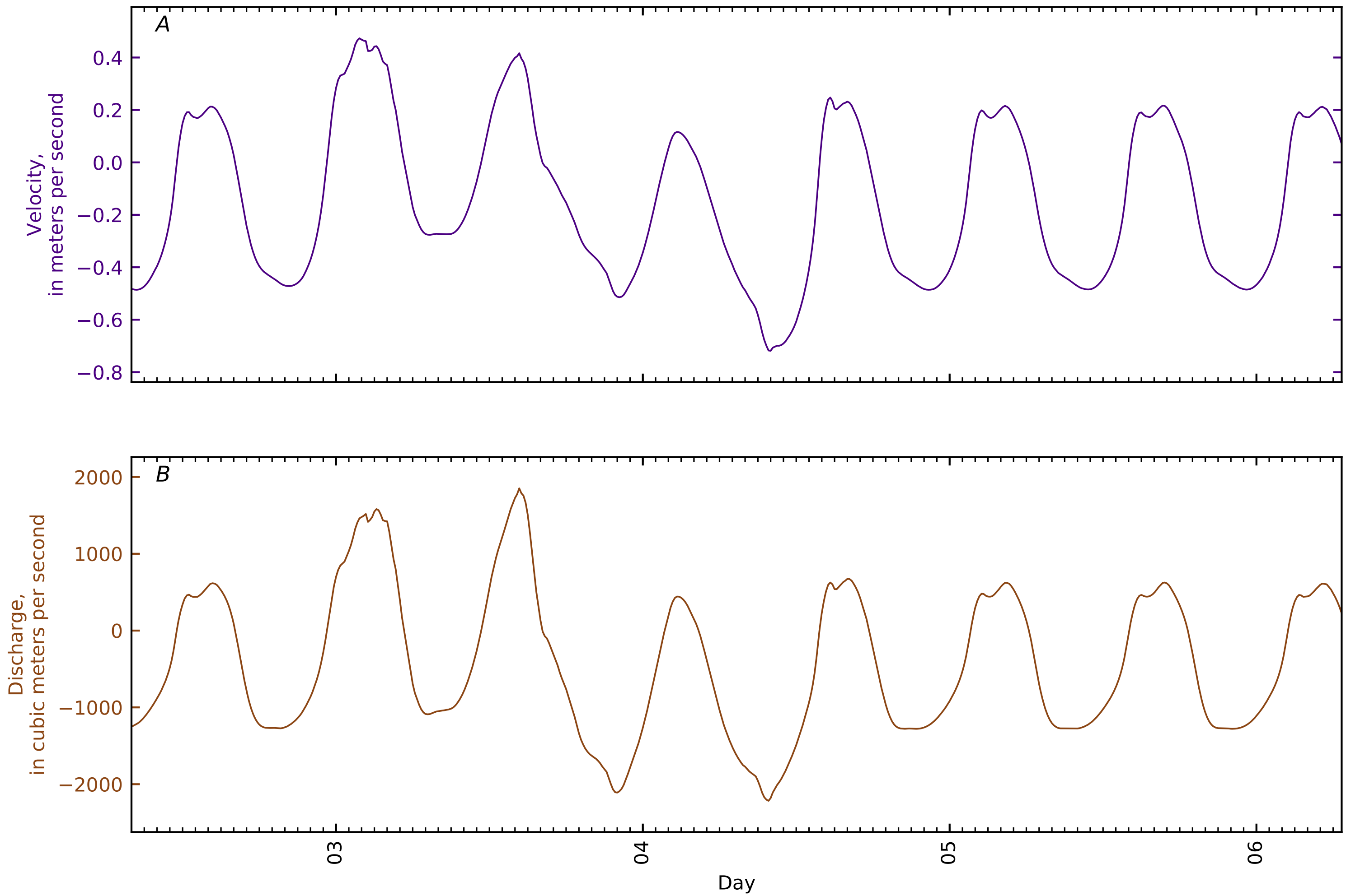

Figure B5-344. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 23, Penob Riv KM31 narrows. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

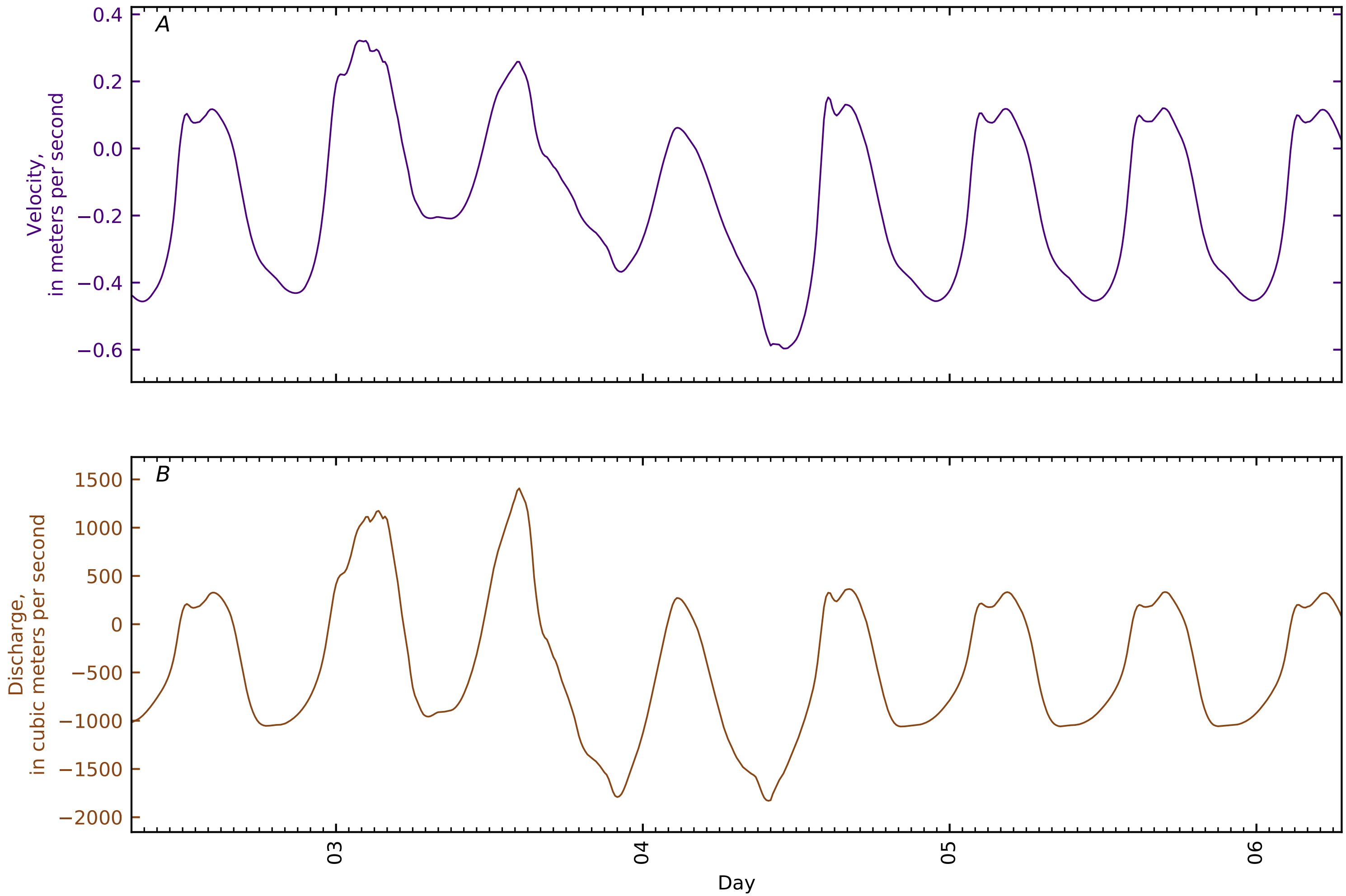

Figure B5-345. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 24, Penob Riv KM34 d/s Orrington. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

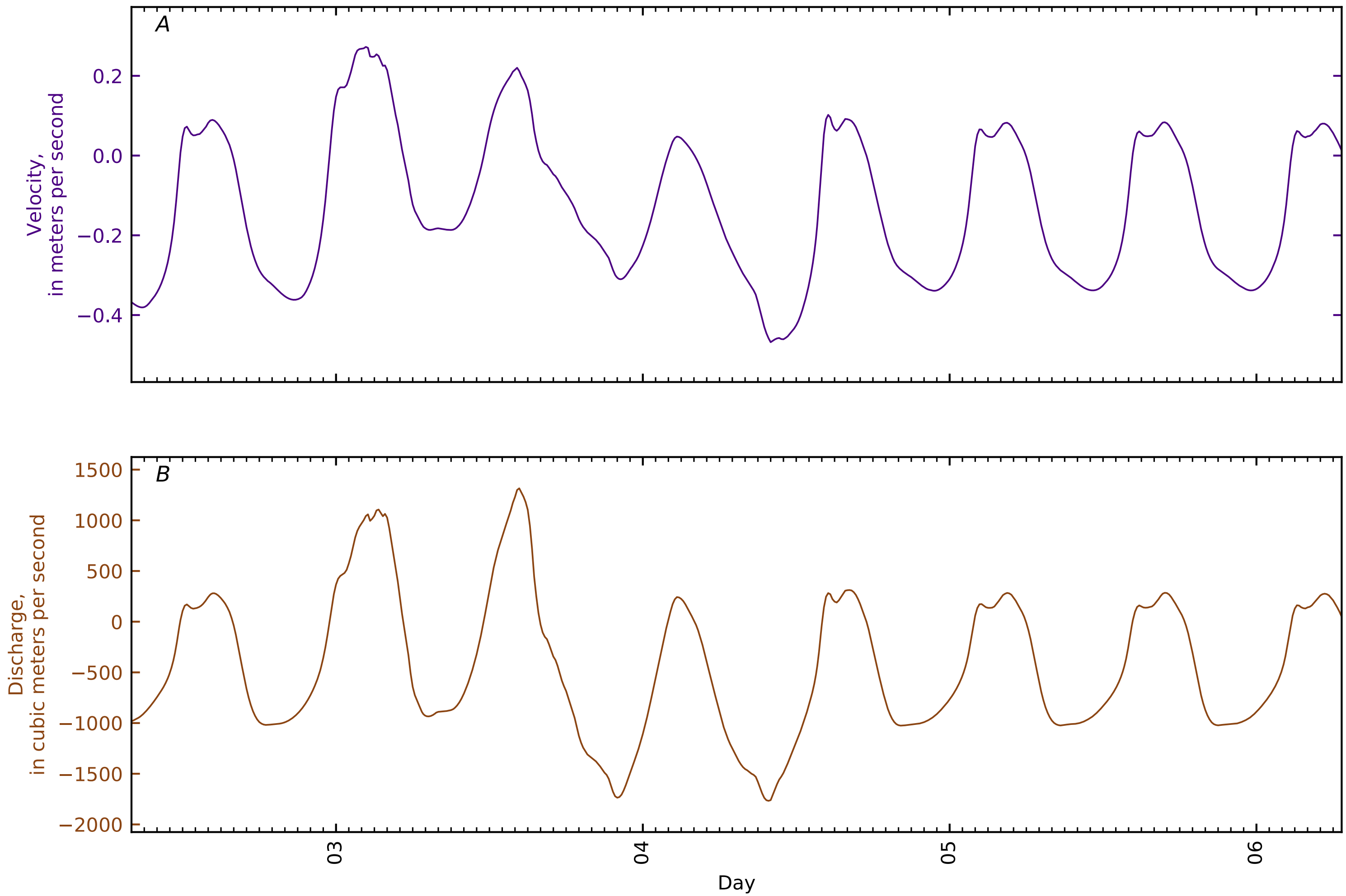

Figure B5-346. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 25, Penob Riv KM34.6 Southern Cove Orrington. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

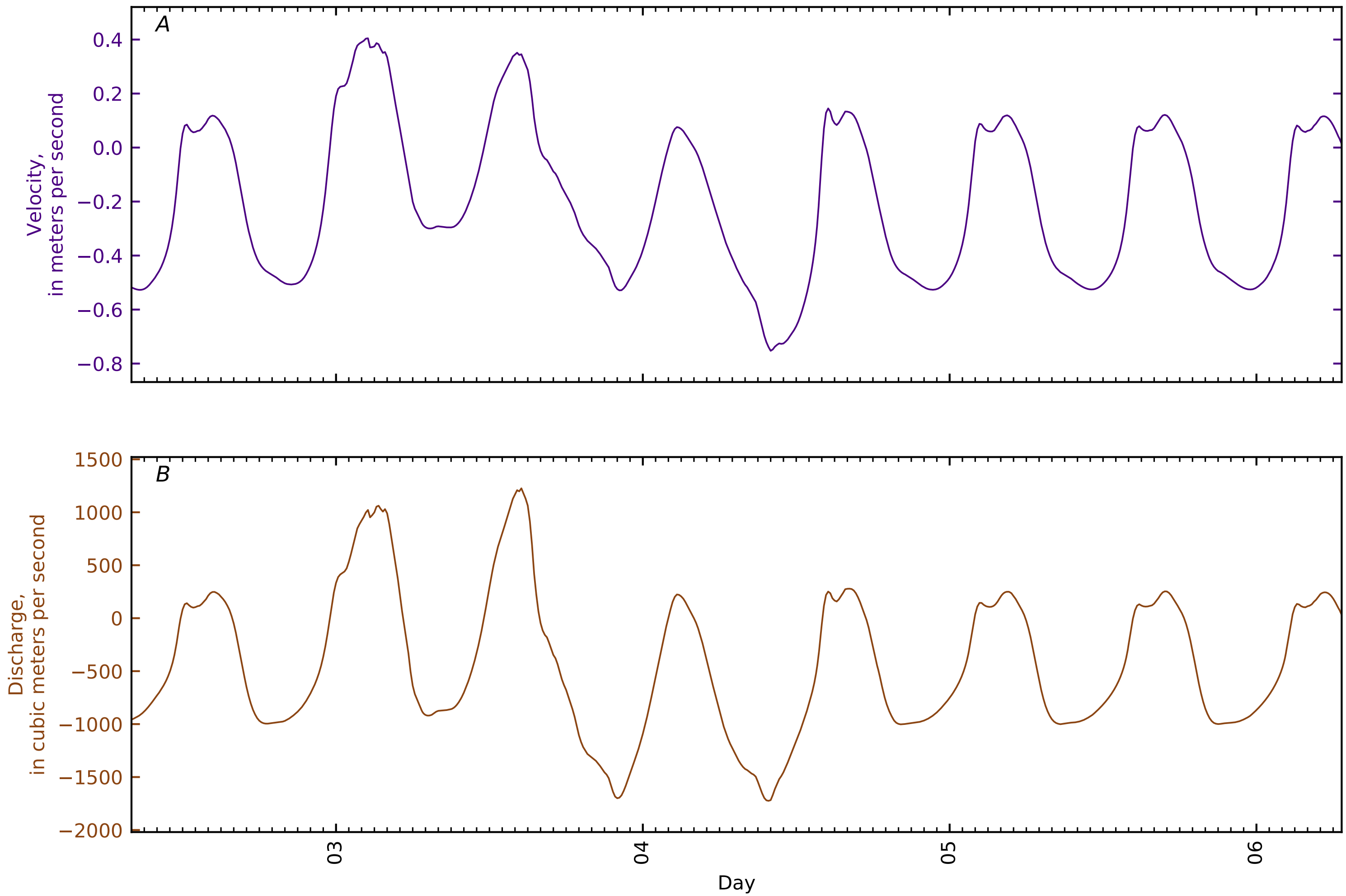

Figure B5-347. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 26, Penob Riv KM35 Orrington d/s Souadabscook Str Hampden. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

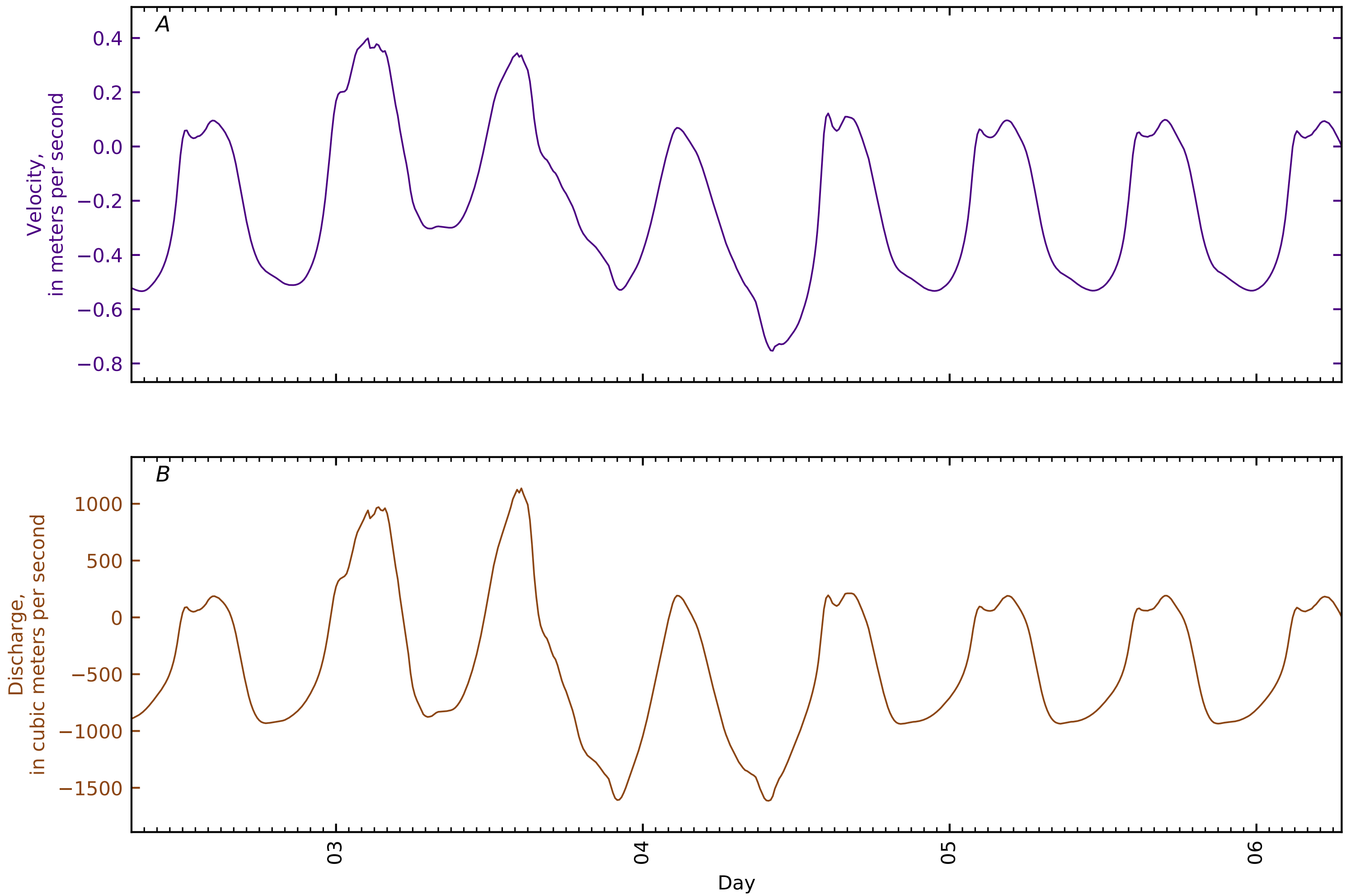

Figure B5-348. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 27, Penob Riv KM36 u/s Souadabscook Str Hampden. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

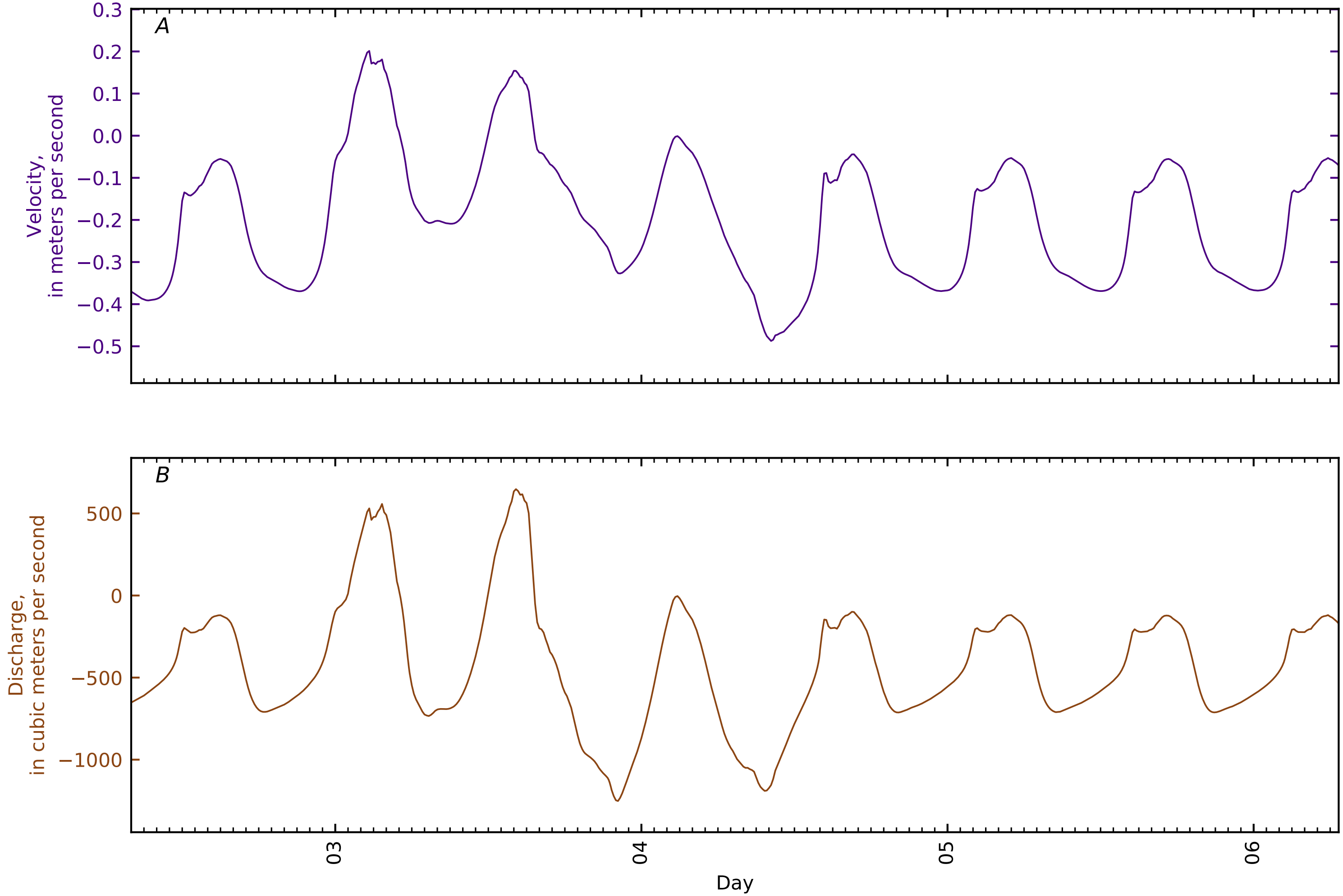

Figure B5-349. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 28, Penob Riv KM40 South Brewer. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

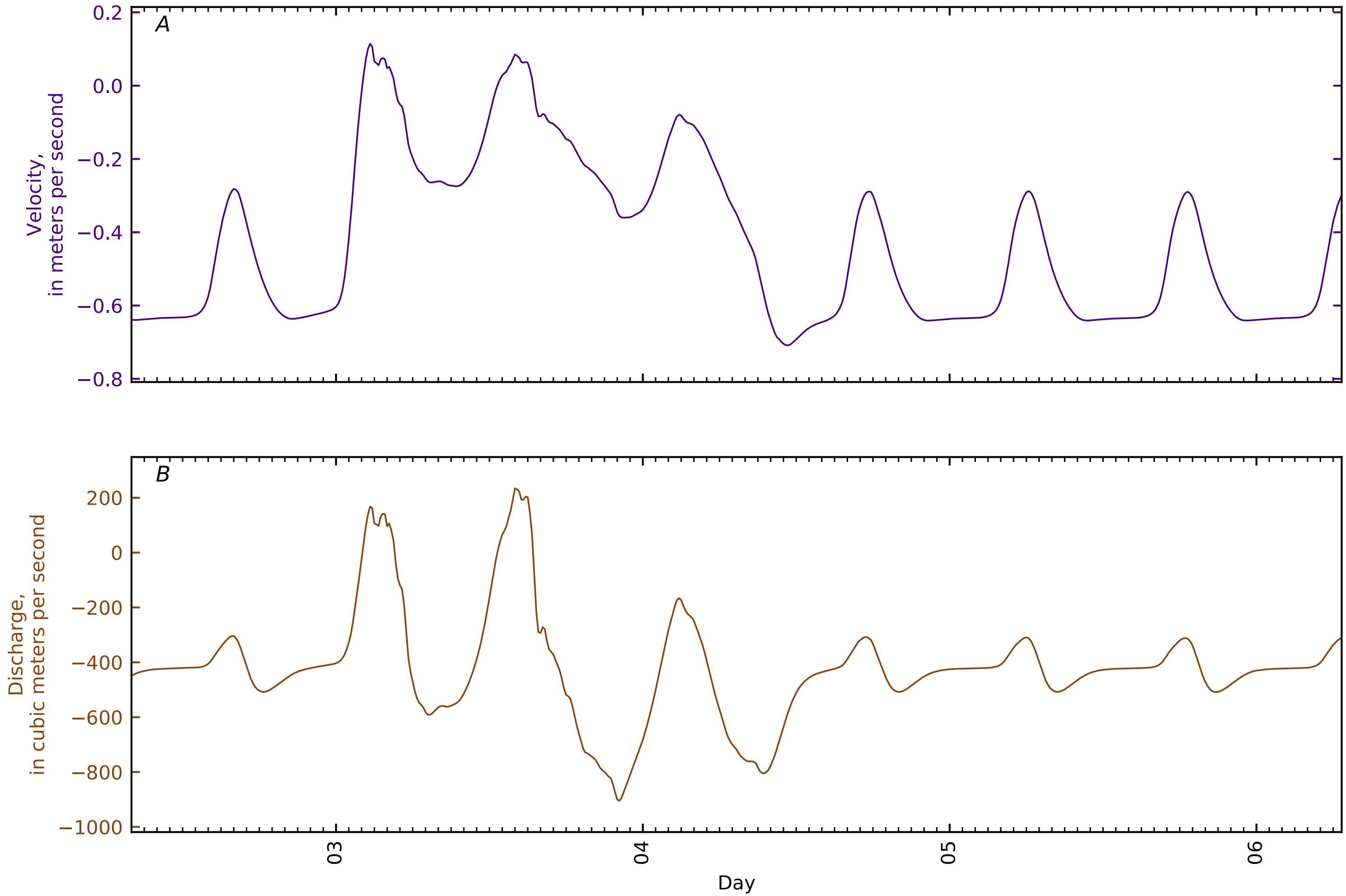

Figure B5-350. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 29, Penob Riv KM43 u/s Kenduskeag Str Bangor. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

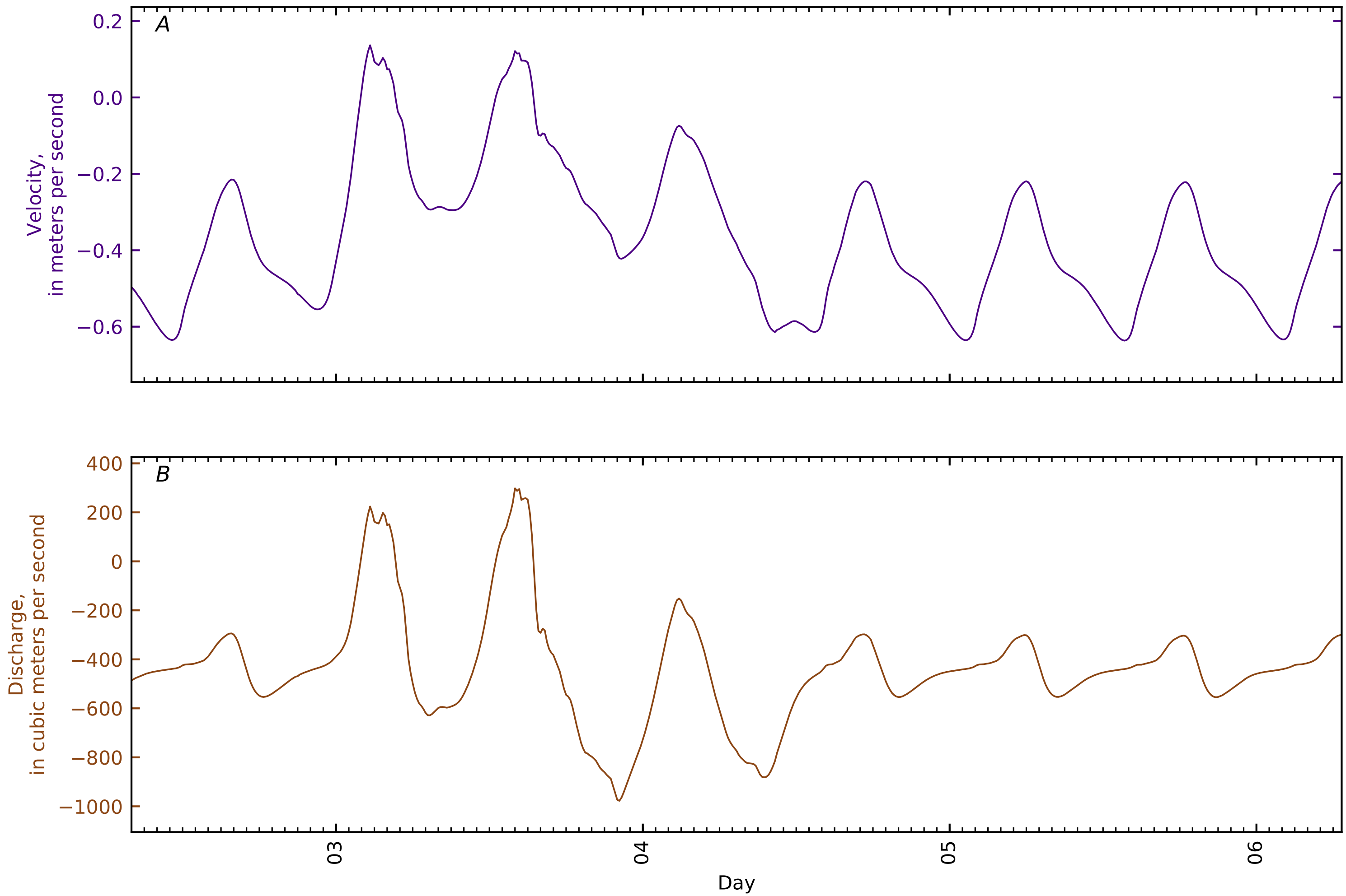

Figure B5-351. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 30, Penob Riv KM43.2 GS 01037050 at Bangor d/s Kenduskeag Str. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

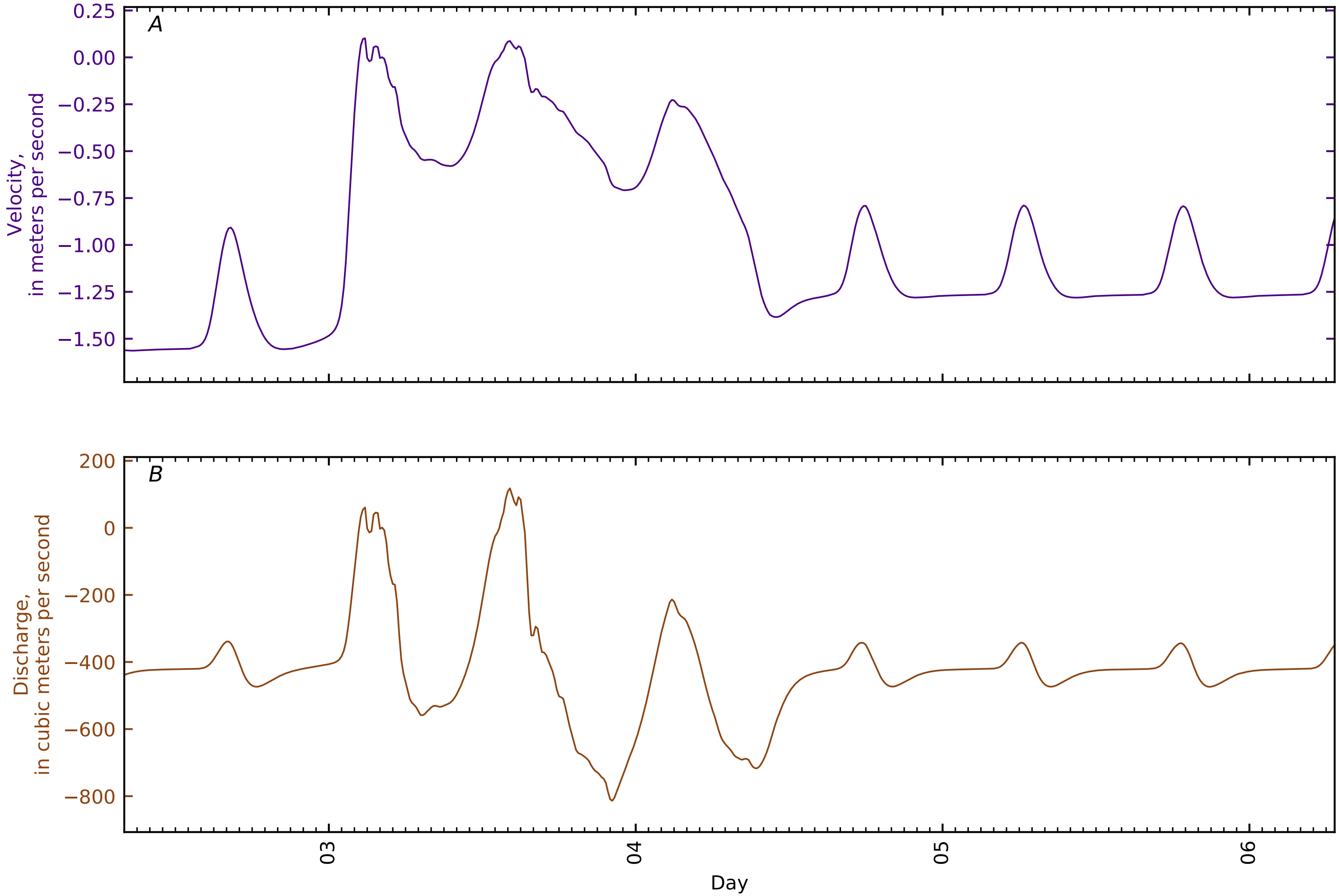

Figure B5-352. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 31, Penob Riv KM45.3 Bangor. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

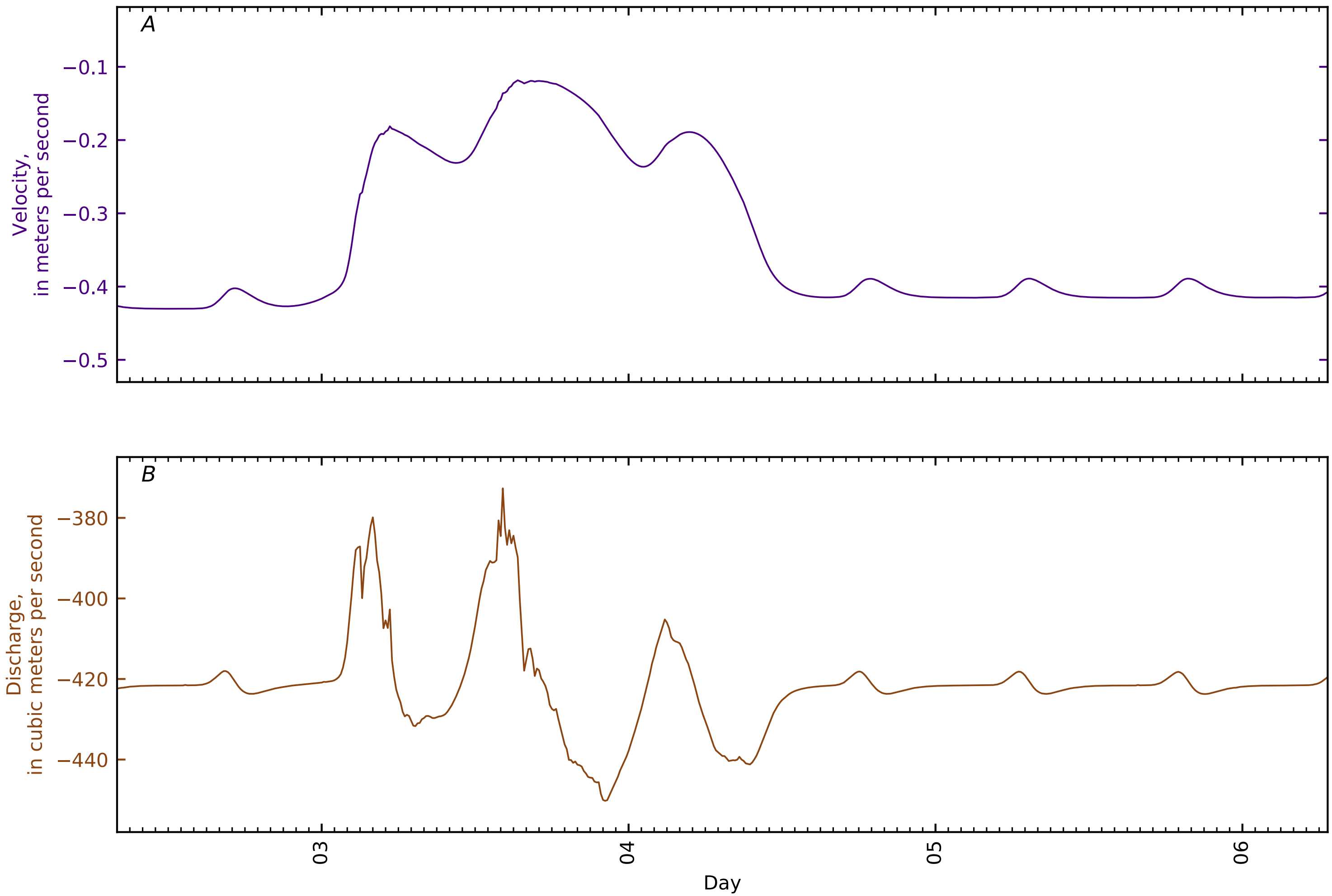

Figure B5-353. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 32, Penob Riv KM50 Eddington. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

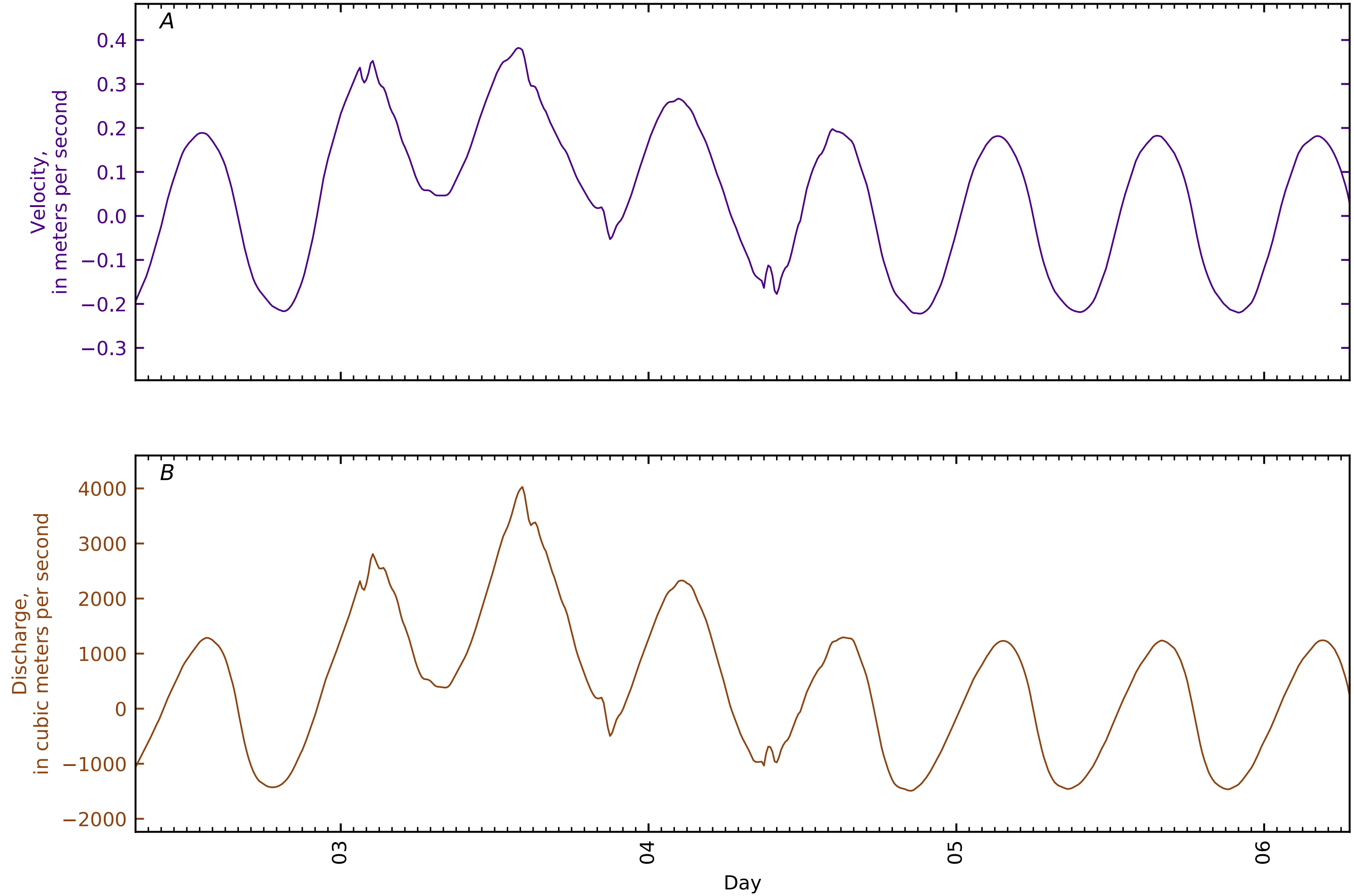

Figure B5-354. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 33, East Ch KM0 at Verona jct at GS Trnsct4. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

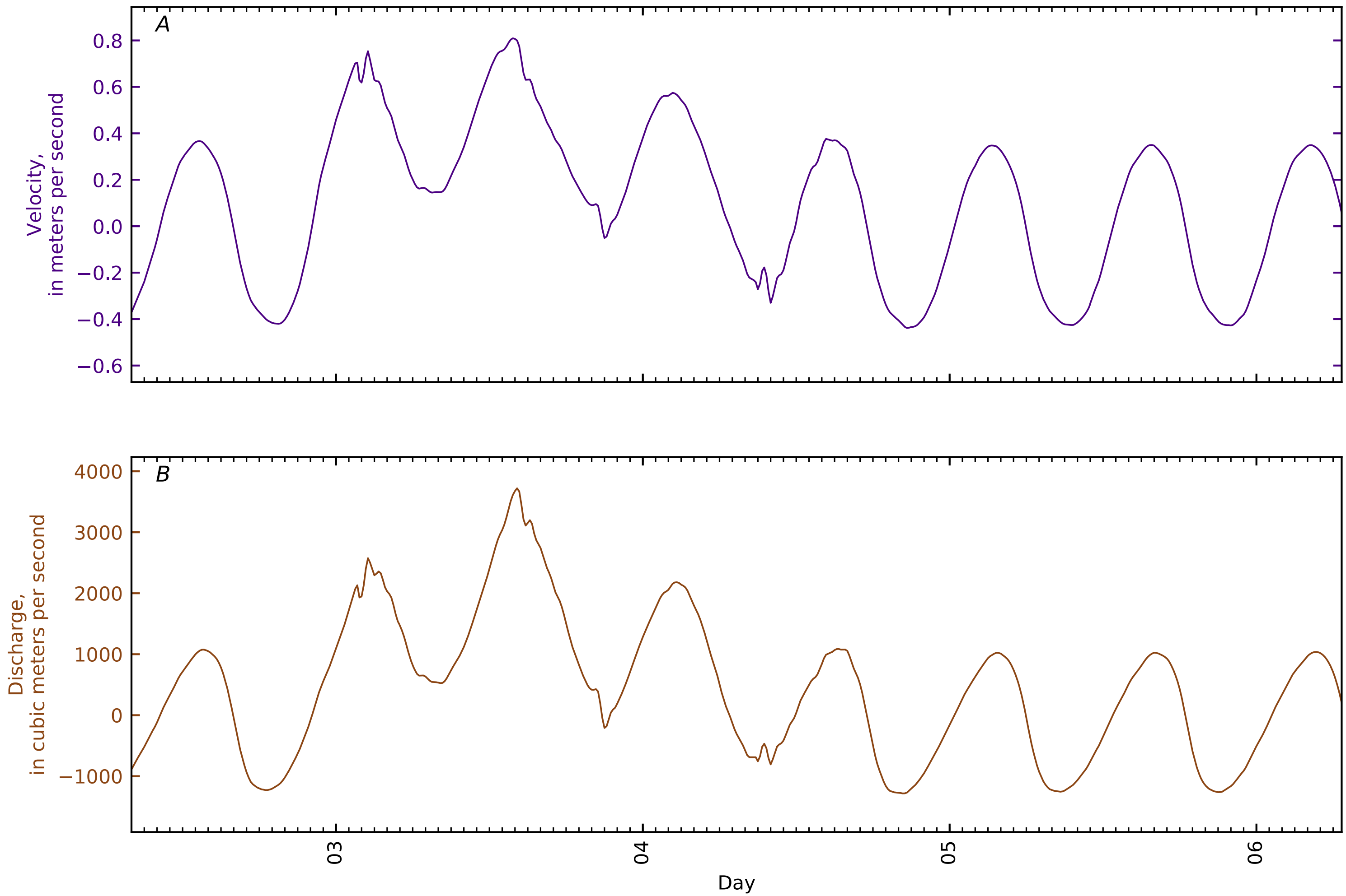

Figure B5-355. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 34, East Ch KM2 d/s Orland Riv. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

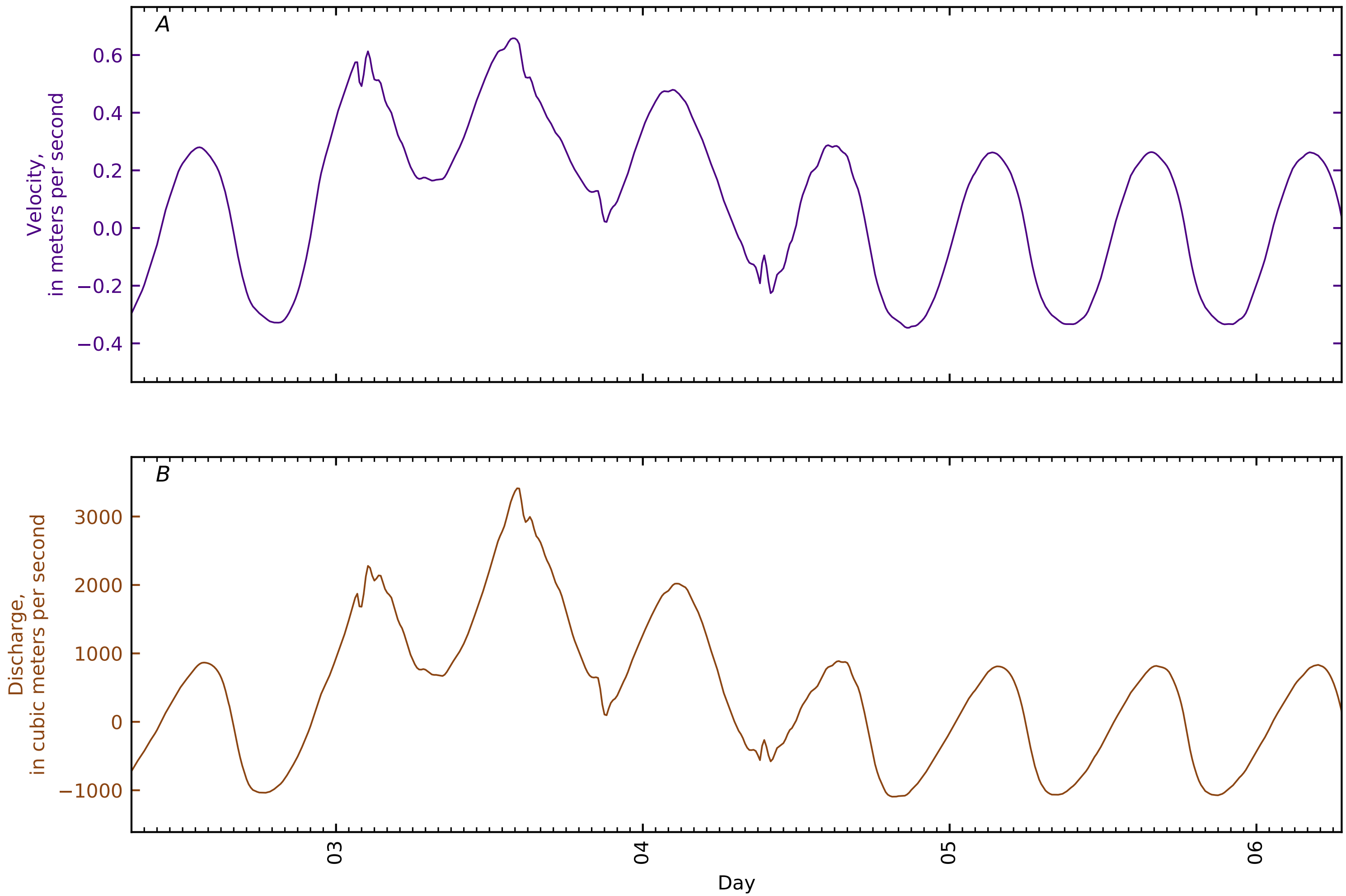

Figure B5-356. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 35, East Ch KM4 d/s Orland Riv. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

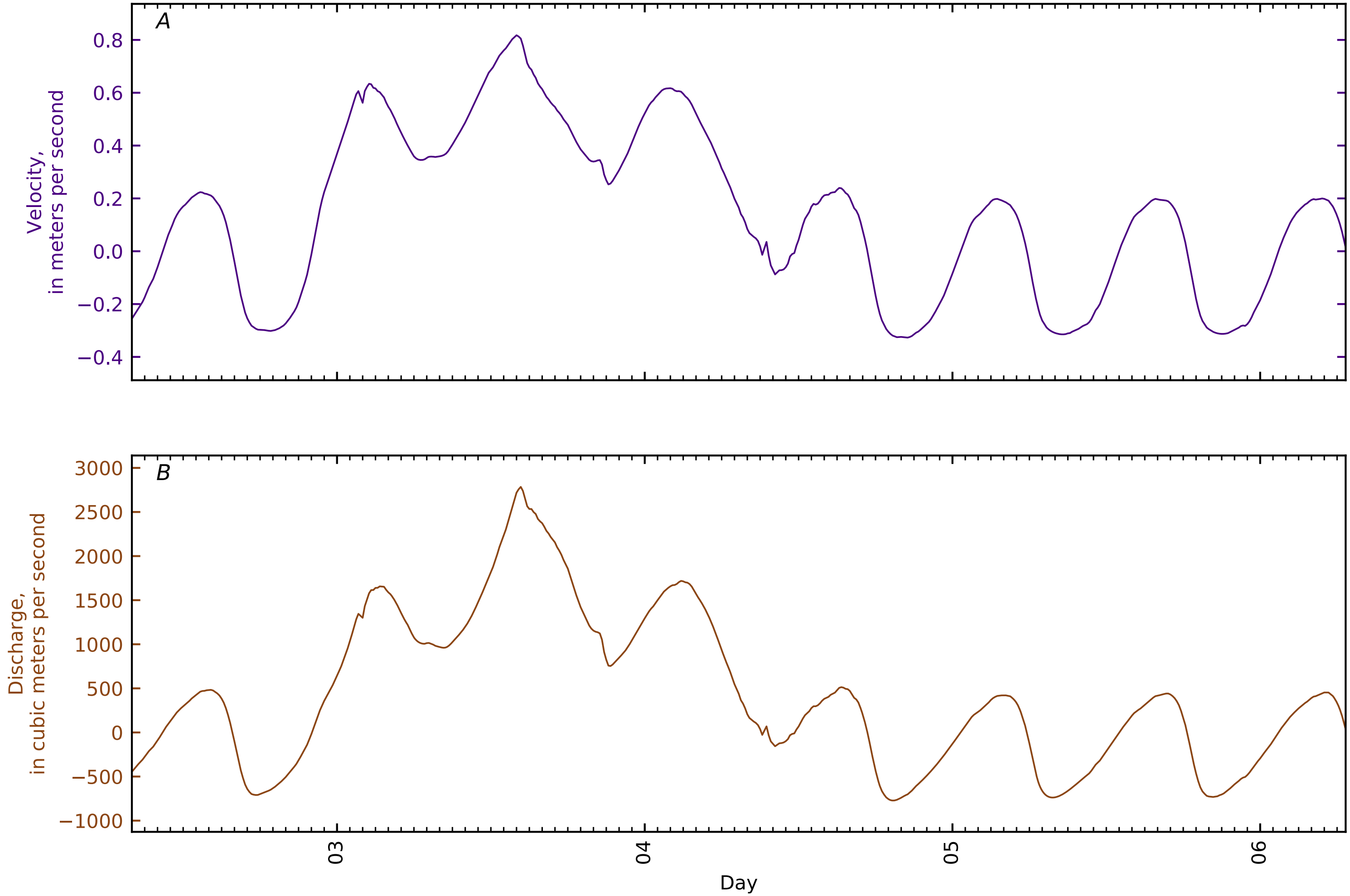

Figure B5-357. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 36, East Ch KM5 u/s Orland Riv. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

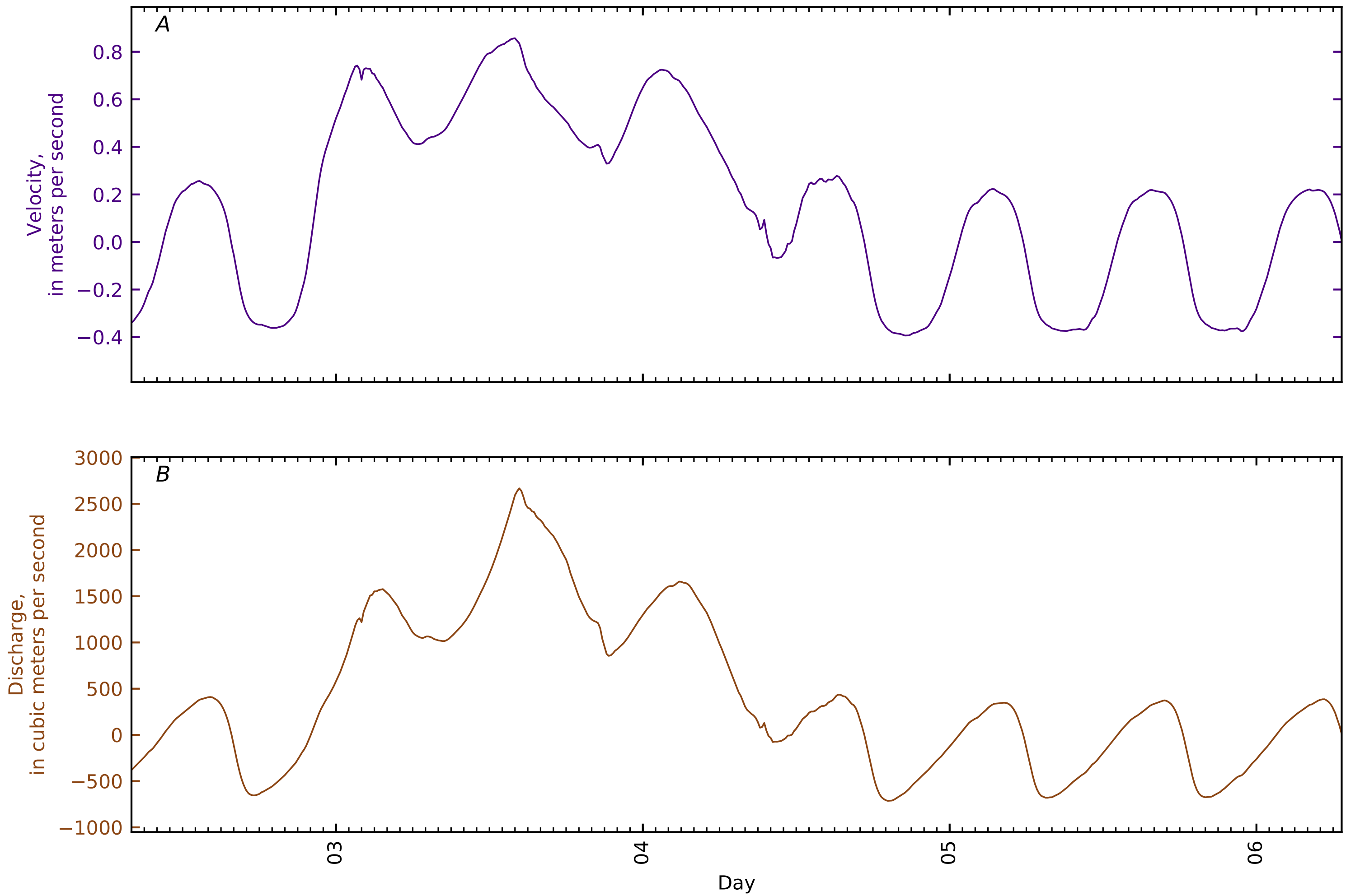

Figure B5-358. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 37, East Ch KM6 u/s Orland Riv d/s flats. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

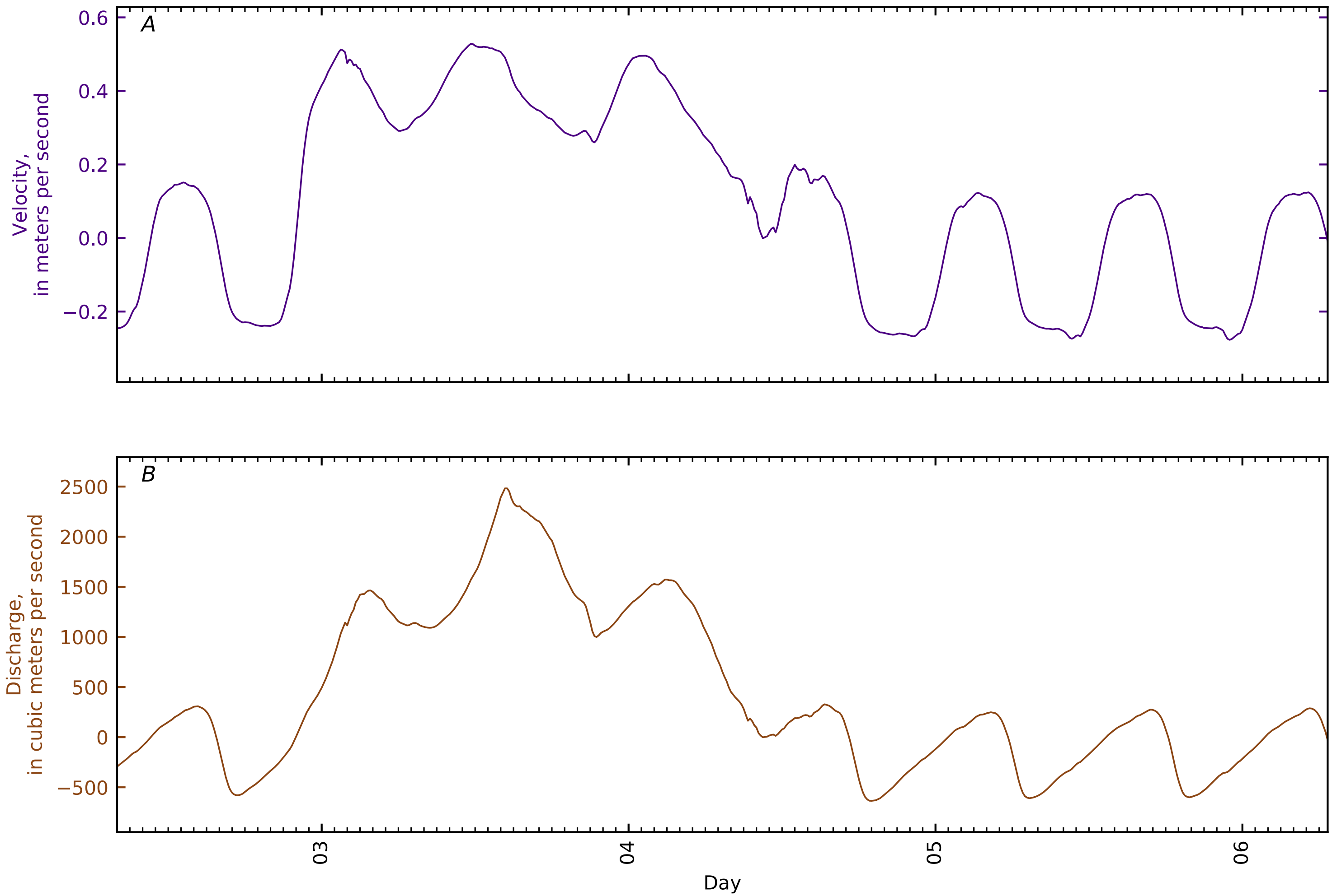

Figure B5-359. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 38, East Ch KM7 d/s Porcupine Is at flats. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

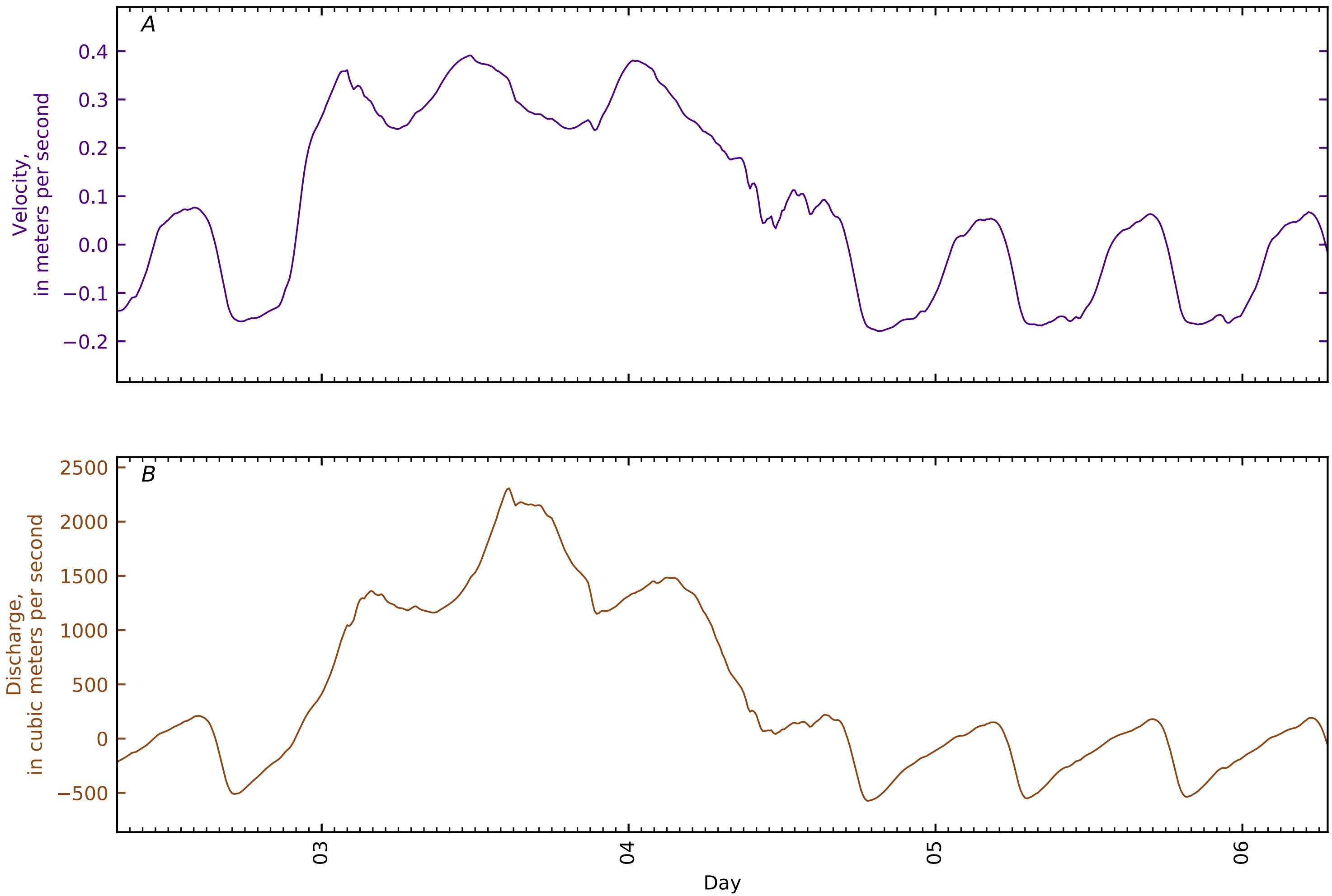

Figure B5-360. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 39, East Ch KM8 u/s flats. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

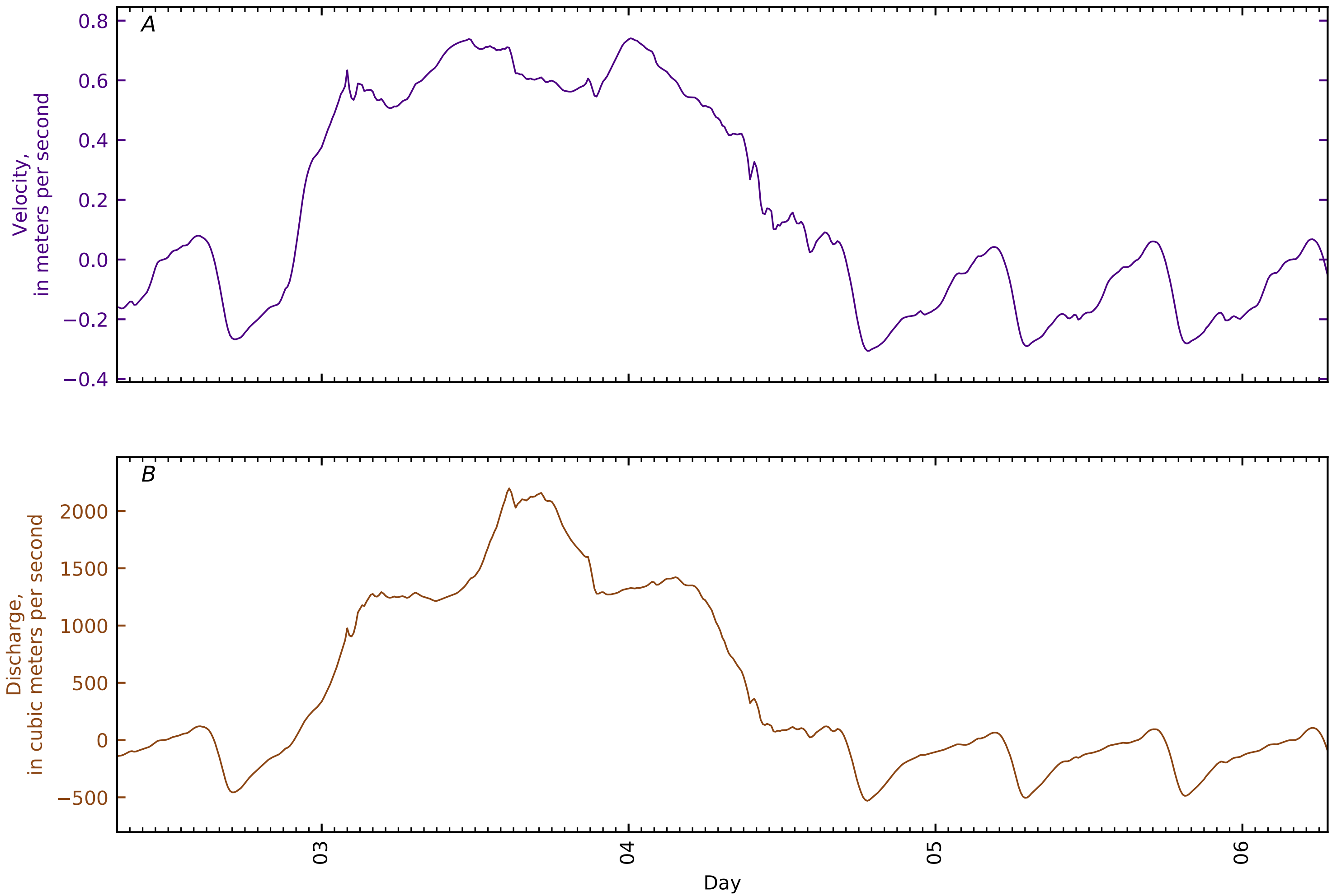

Figure B5-361. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 40, East Ch KM9 north part. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

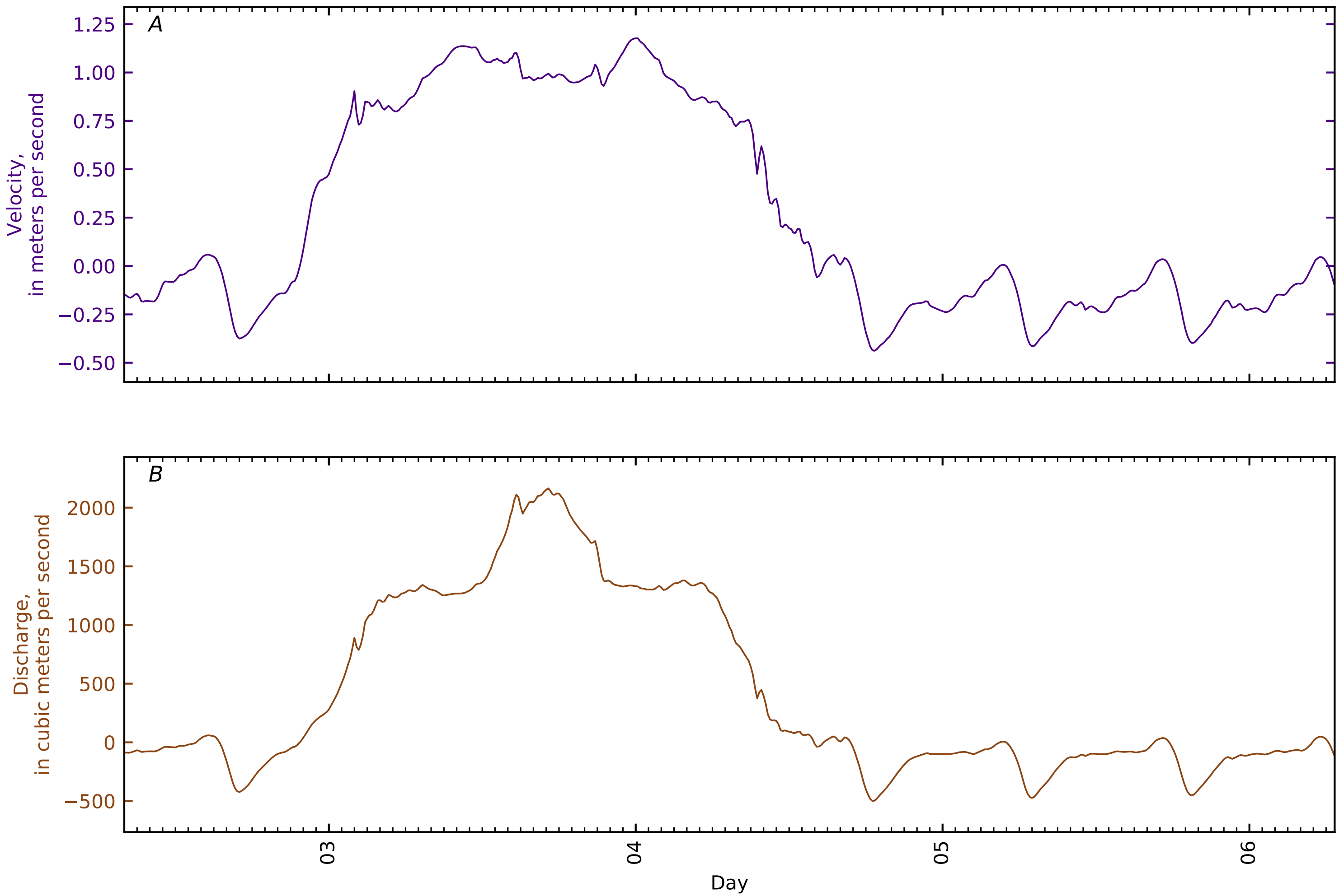

Figure B5-362. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 41, East Channel KM10 GS 443409068471801 at Bucksport d/s conf Silv. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

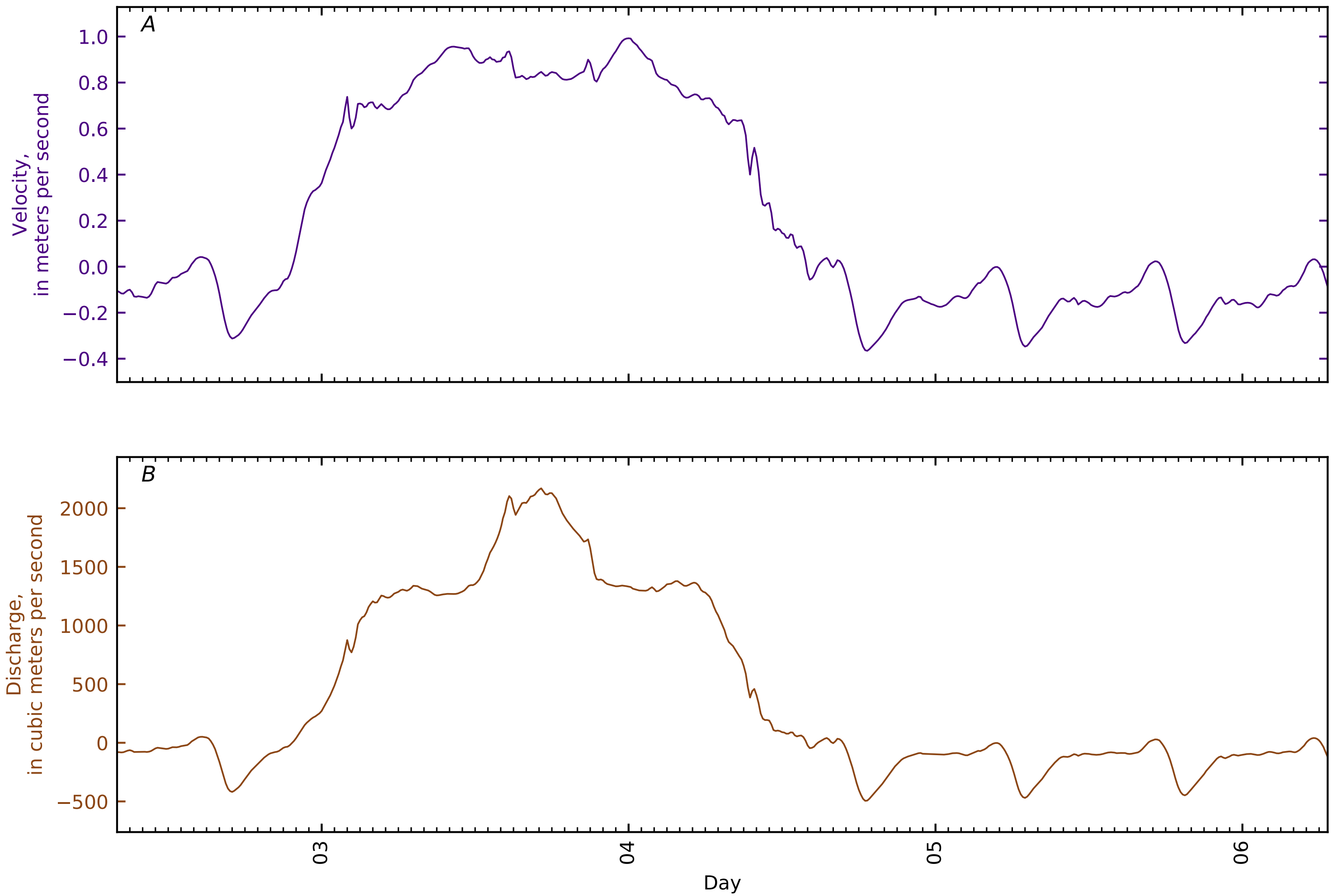

Figure B5-363. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 42, East Ch KM10.2 Bucksport u/s conf Silver Lake discharge. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

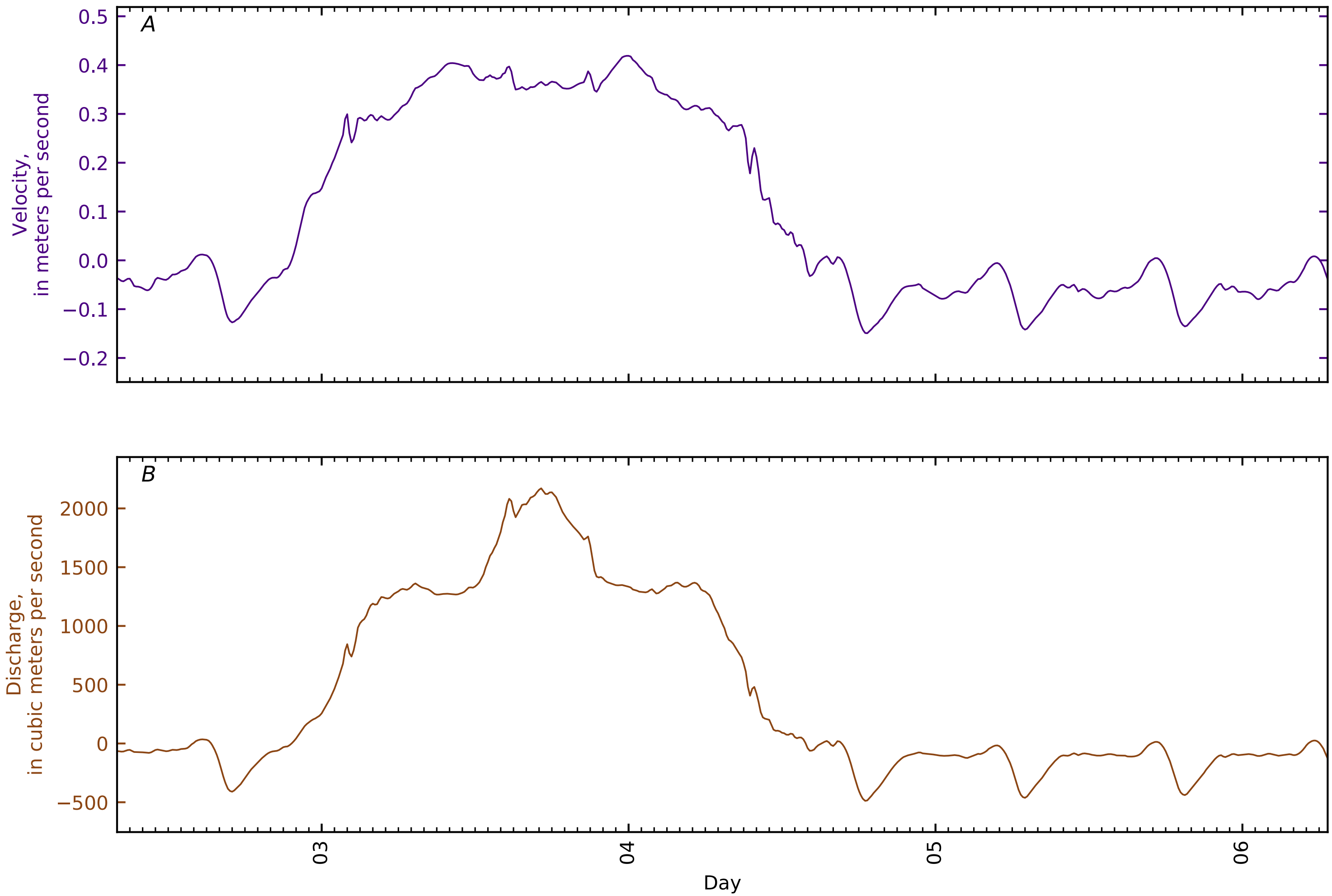

Figure B5-364. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 43, East Ch KM10.5 at Penob River split. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

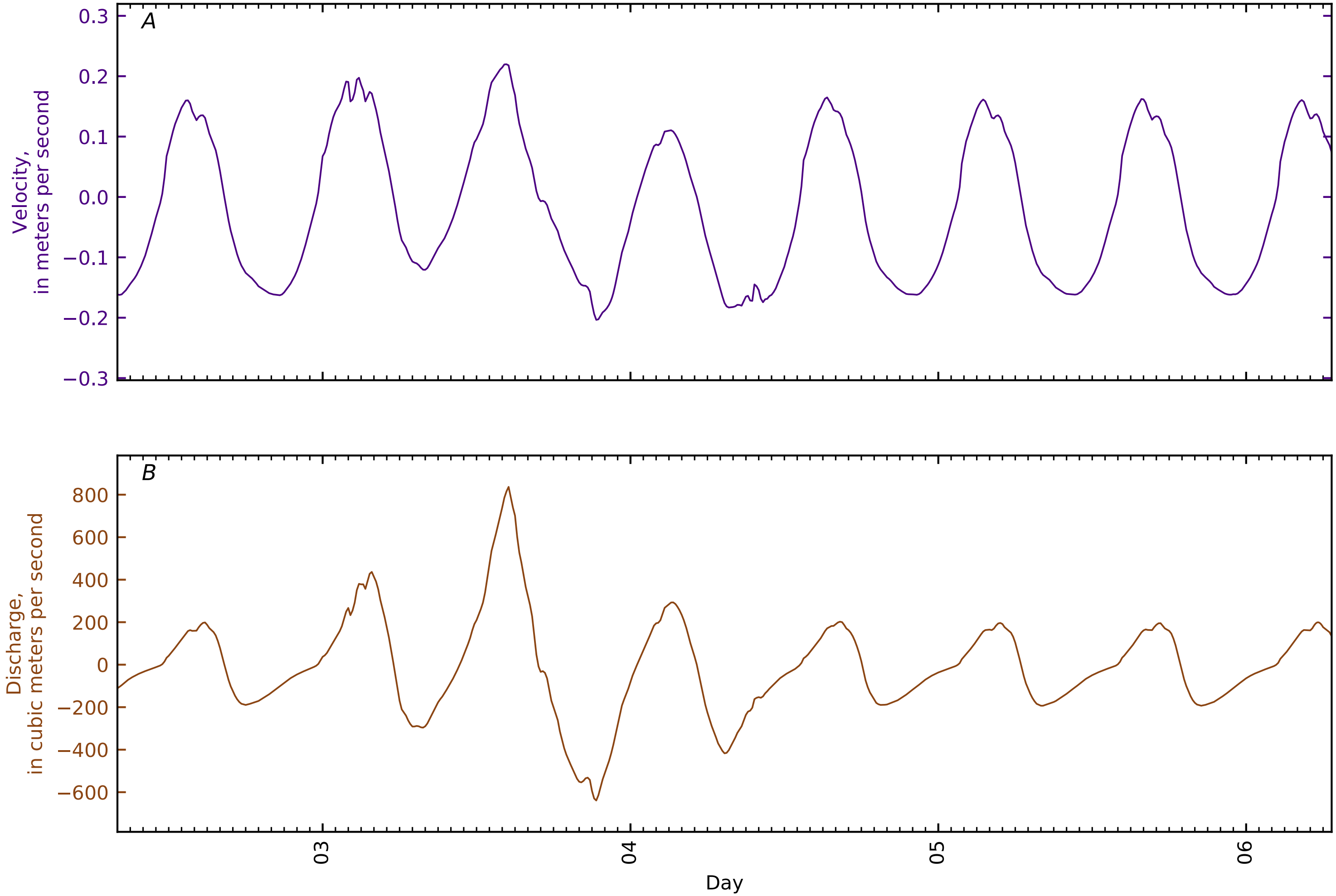

Figure B5-365. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 44, Mendall Marsh KM0.4 at Penob Riv KM17.3 GS Trnsct2. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

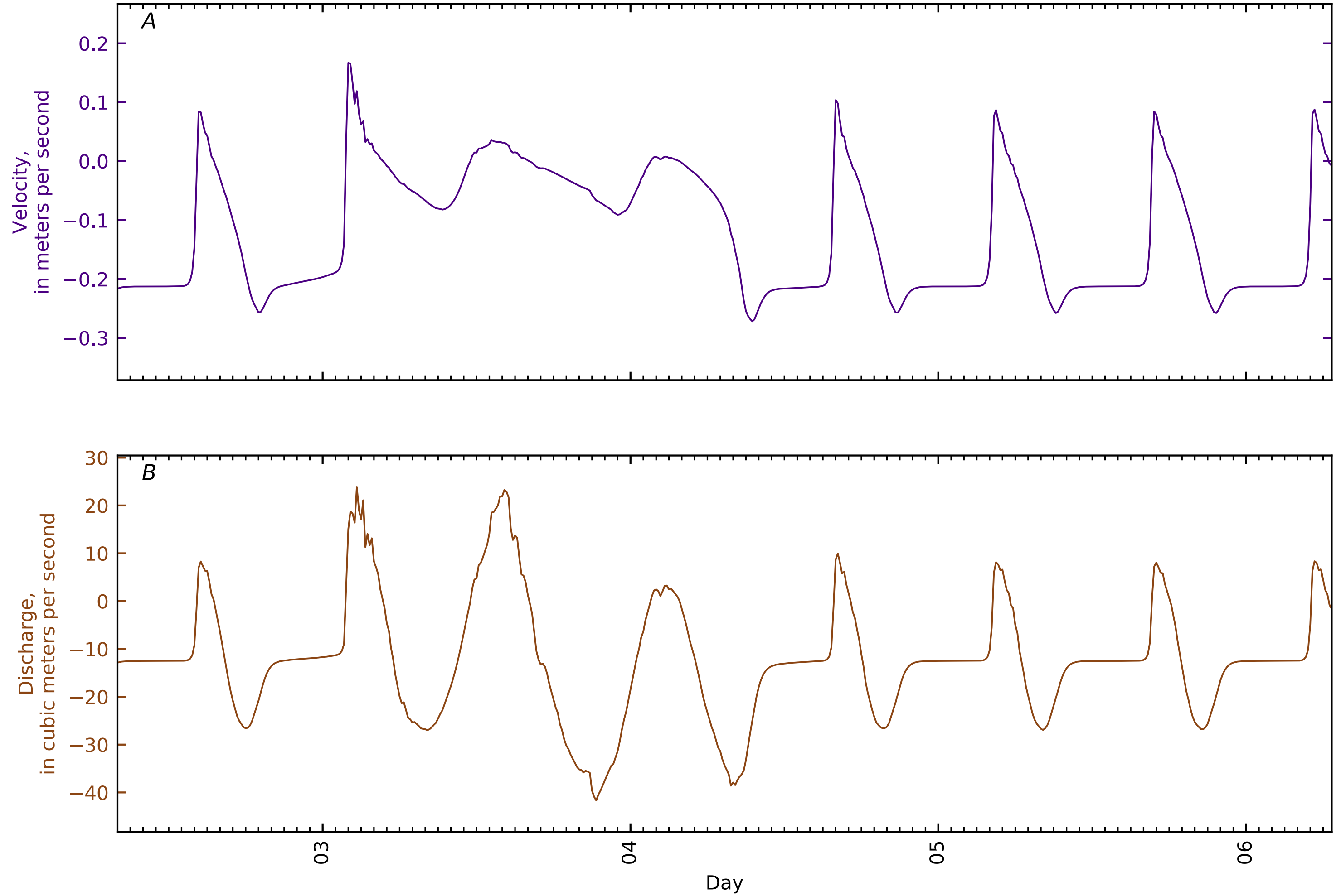

Figure B5-366. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 45, Mendall Marsh KM1 conf North Branch Marsh Riv. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

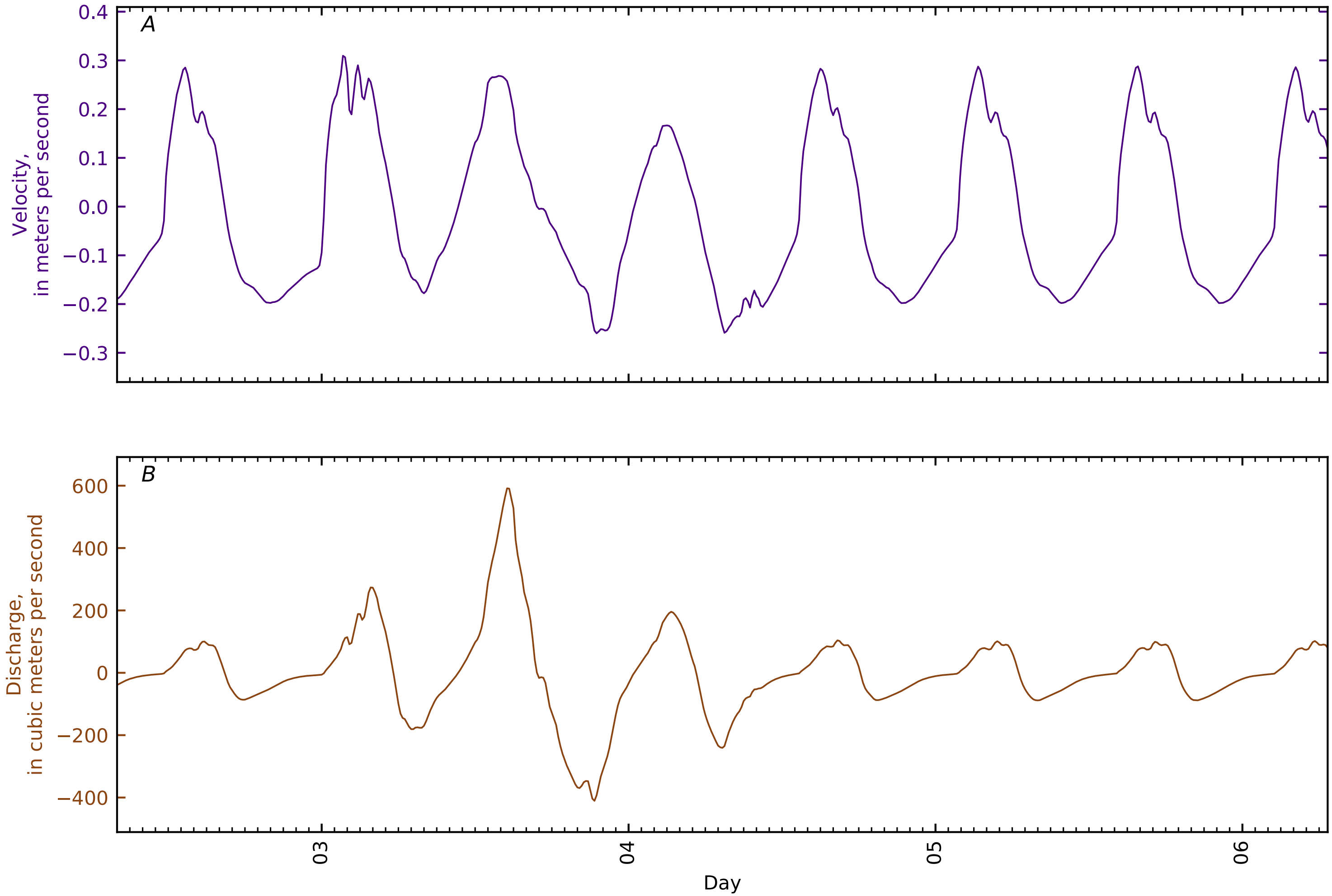

Figure B5-367. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 46, Mendall Marsh KM1.7 at boat launch. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

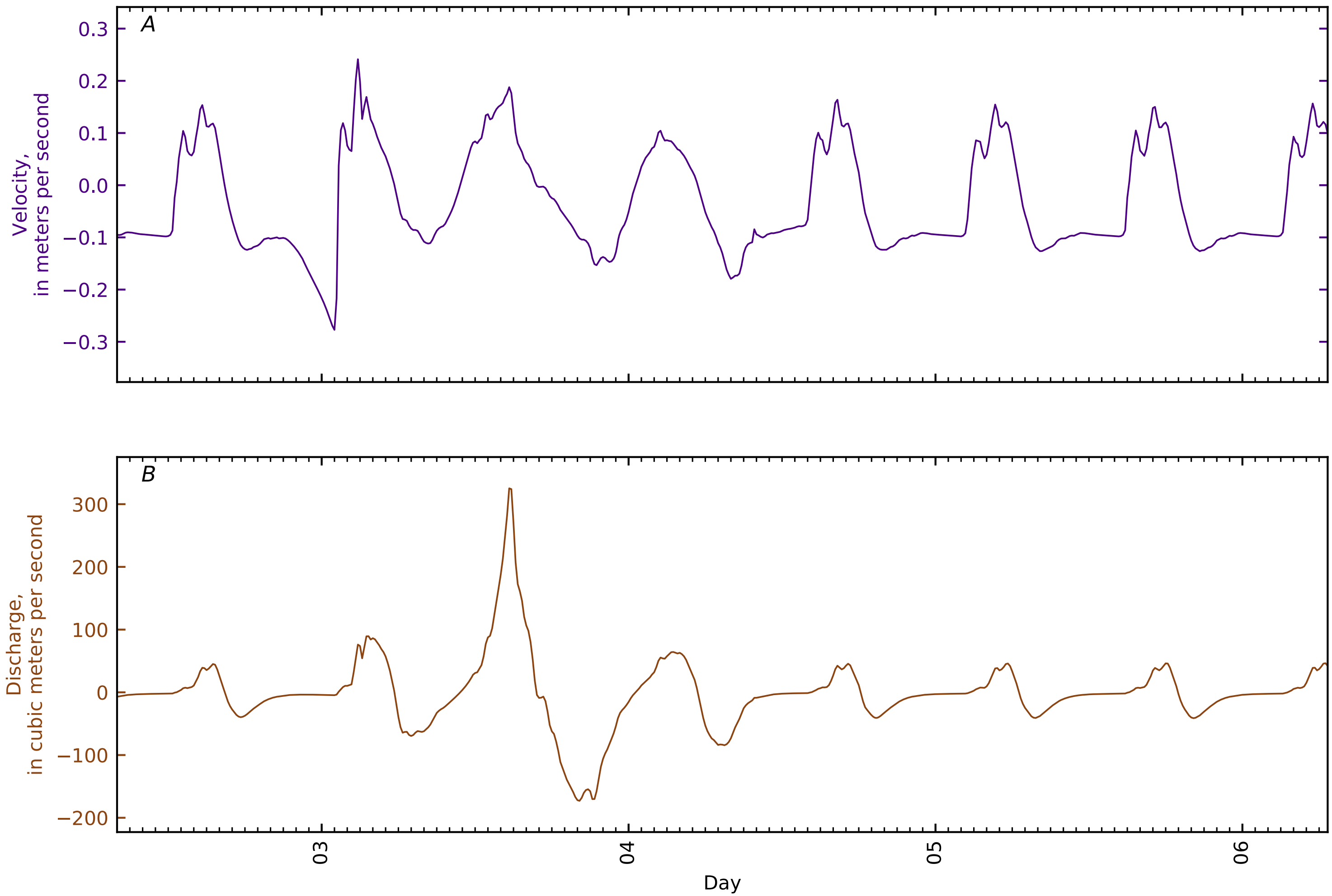

Figure B5-368. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 47, Mendall Marsh KM3 nr Misquito Mtn. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

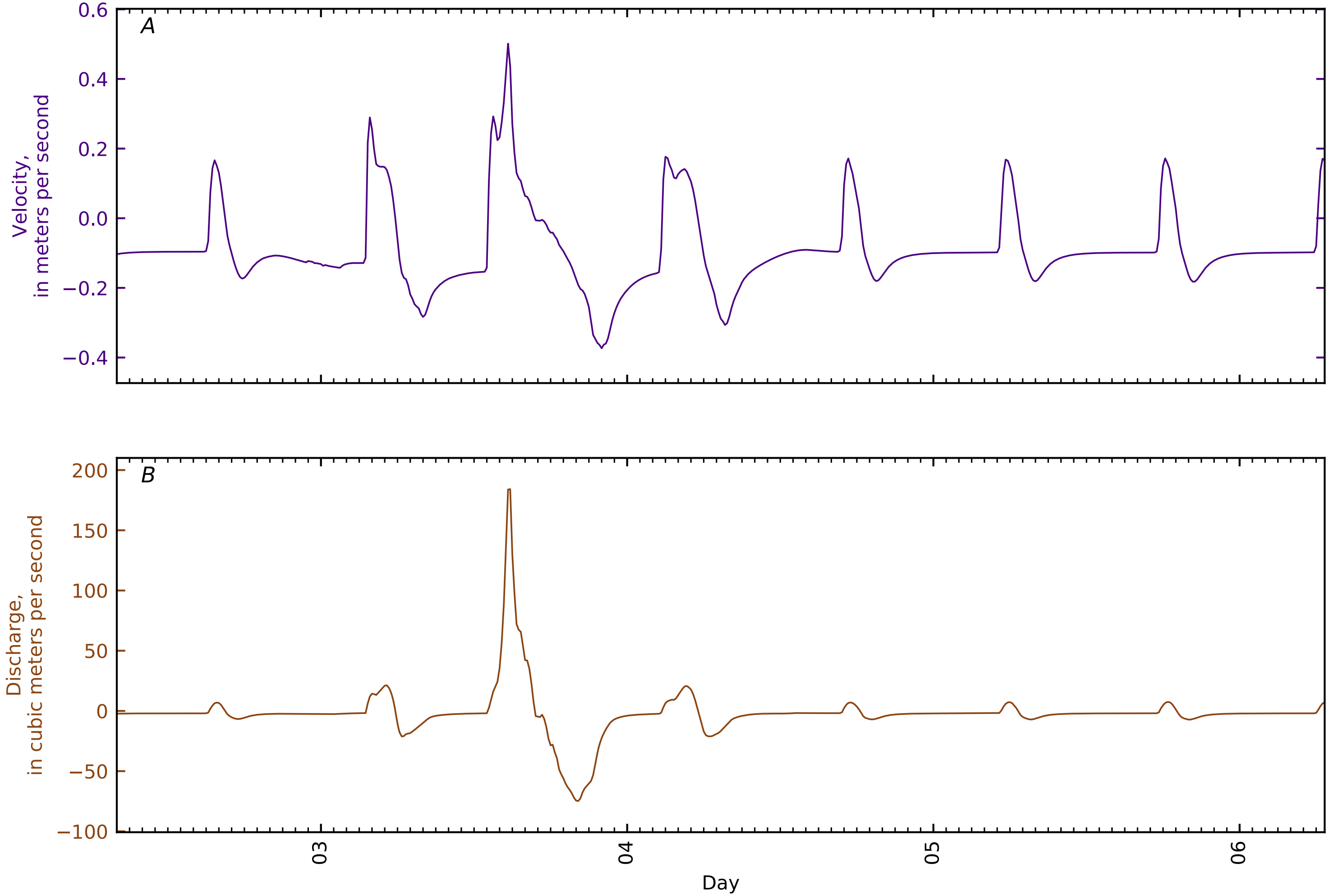

Figure B5-369. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 48, Mendall Marsh KM4.6. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

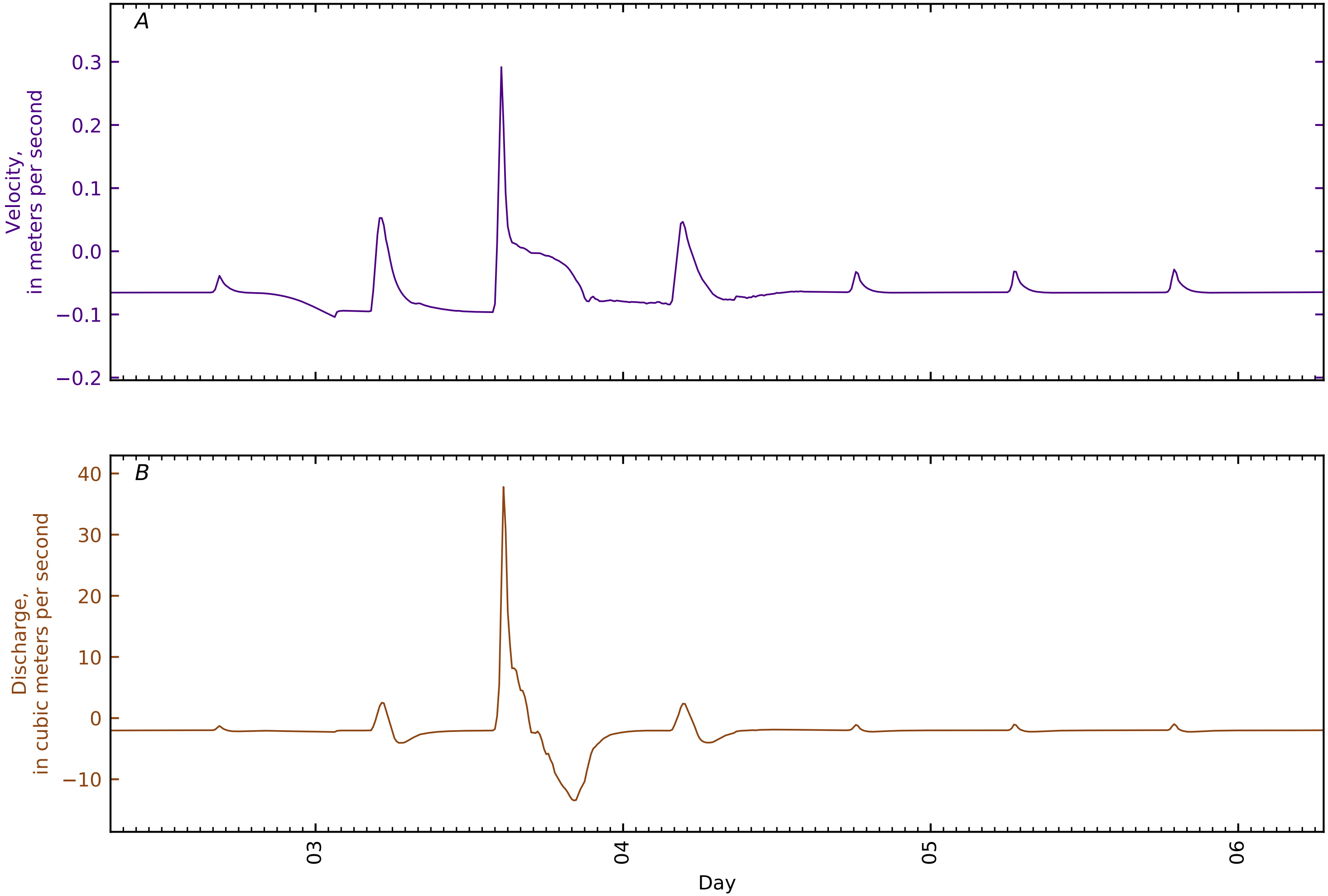

Figure B5-370. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 49, Mendall Marsh KM5.7 nr conf Colson Str. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

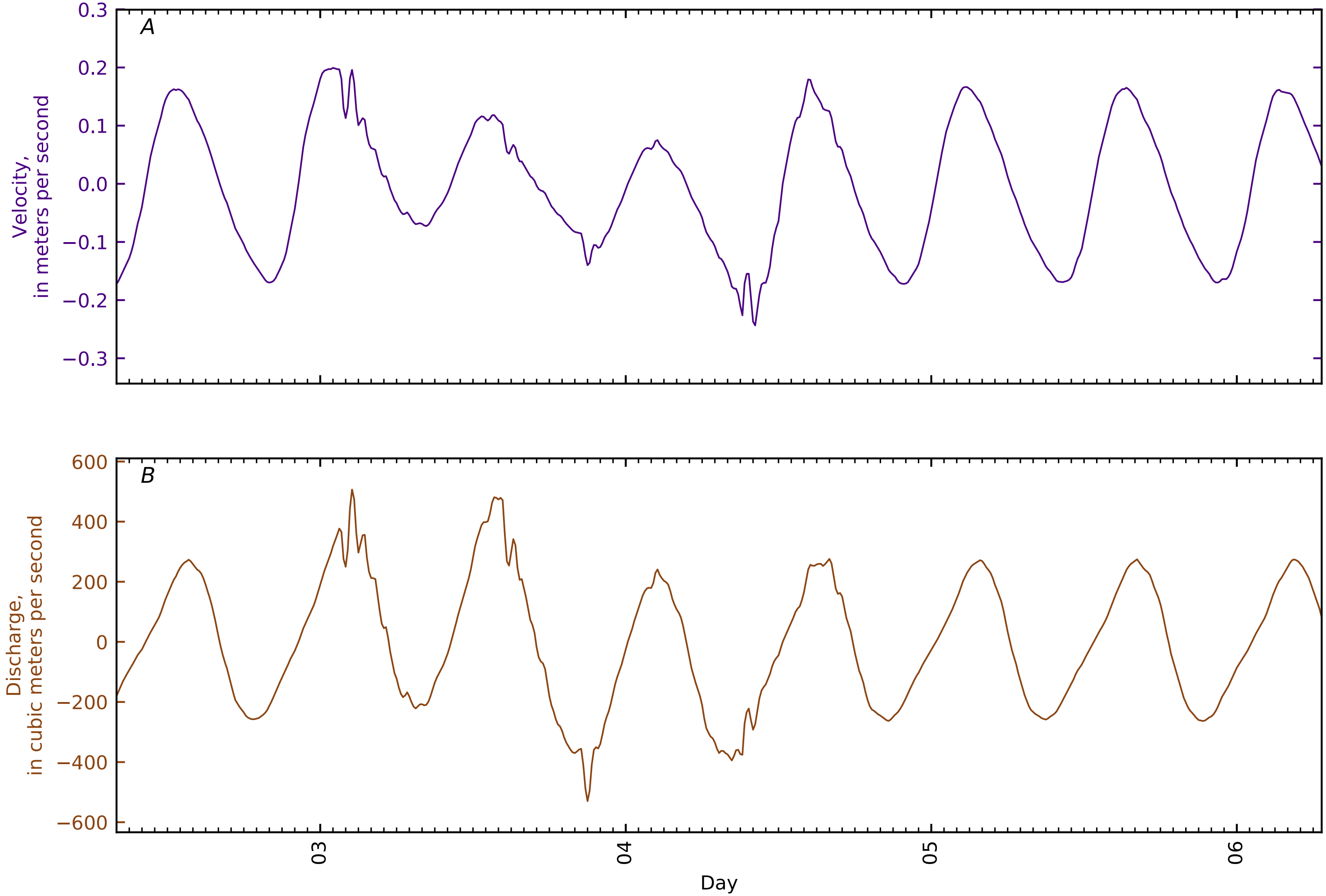

Figure B5-371. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 50, Orland Riv KM0 conf East Ch. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

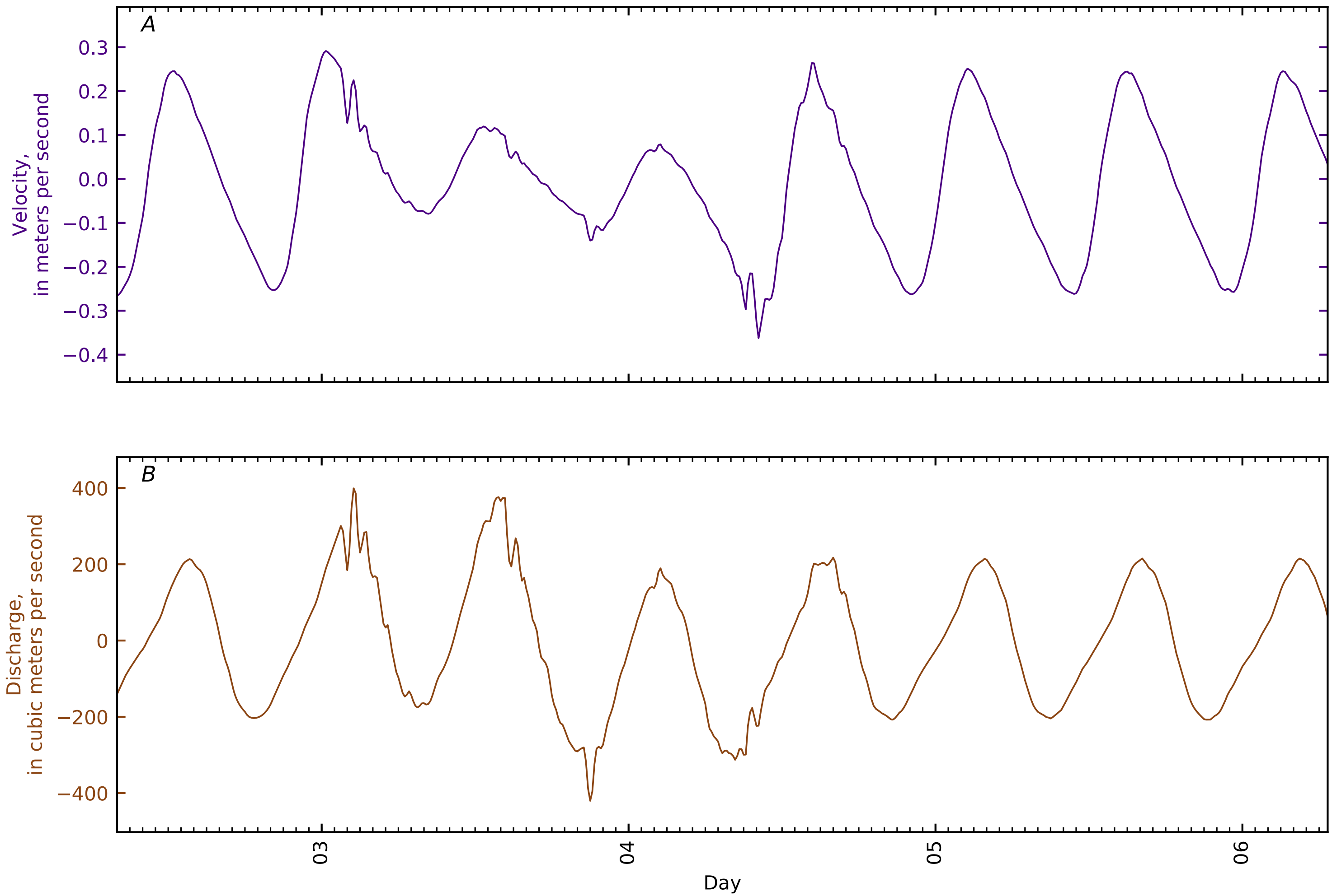

Figure B5-372. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 51, Orland Riv KM0.5. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

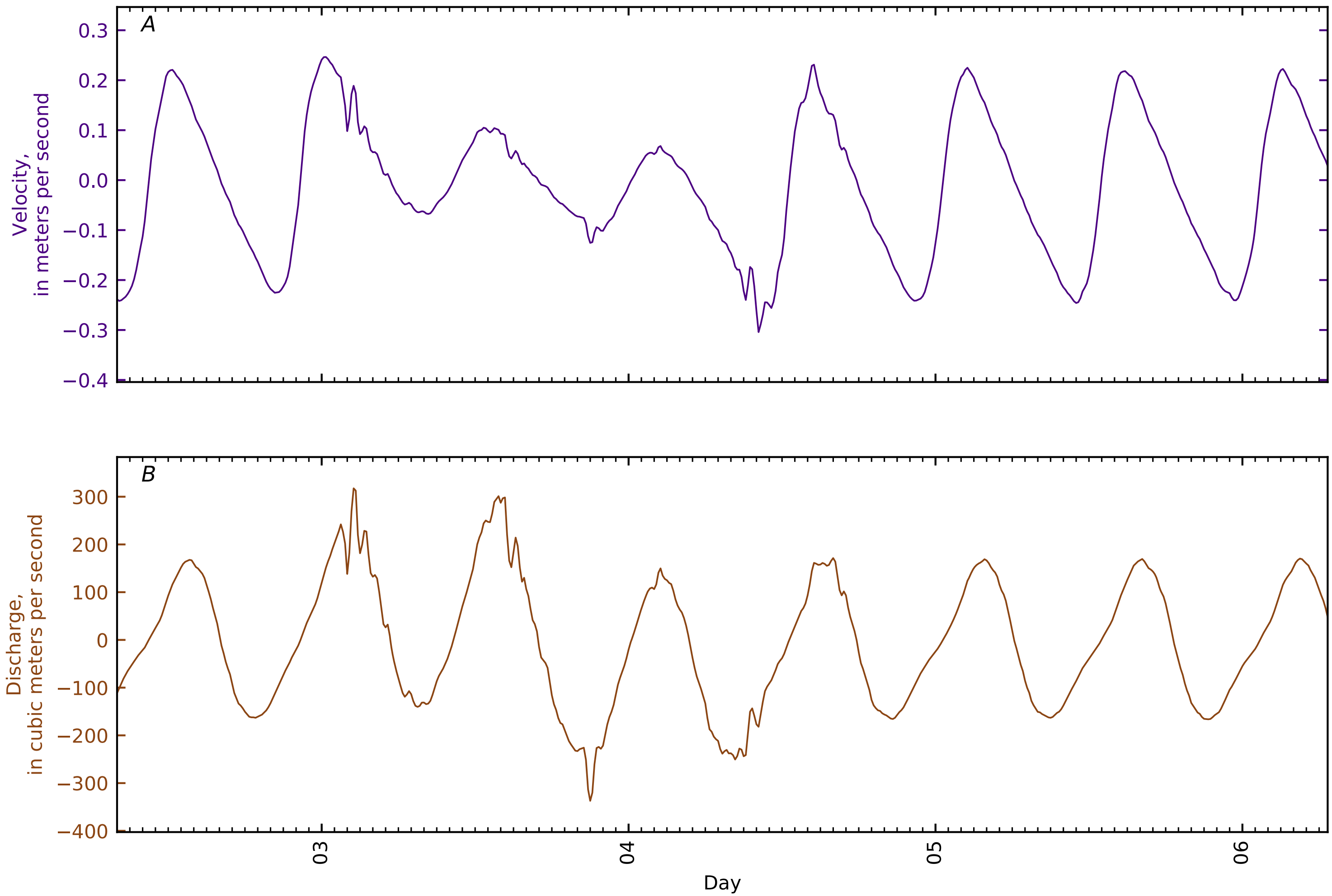

Figure B5-373. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 52, Orland Riv KM1. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

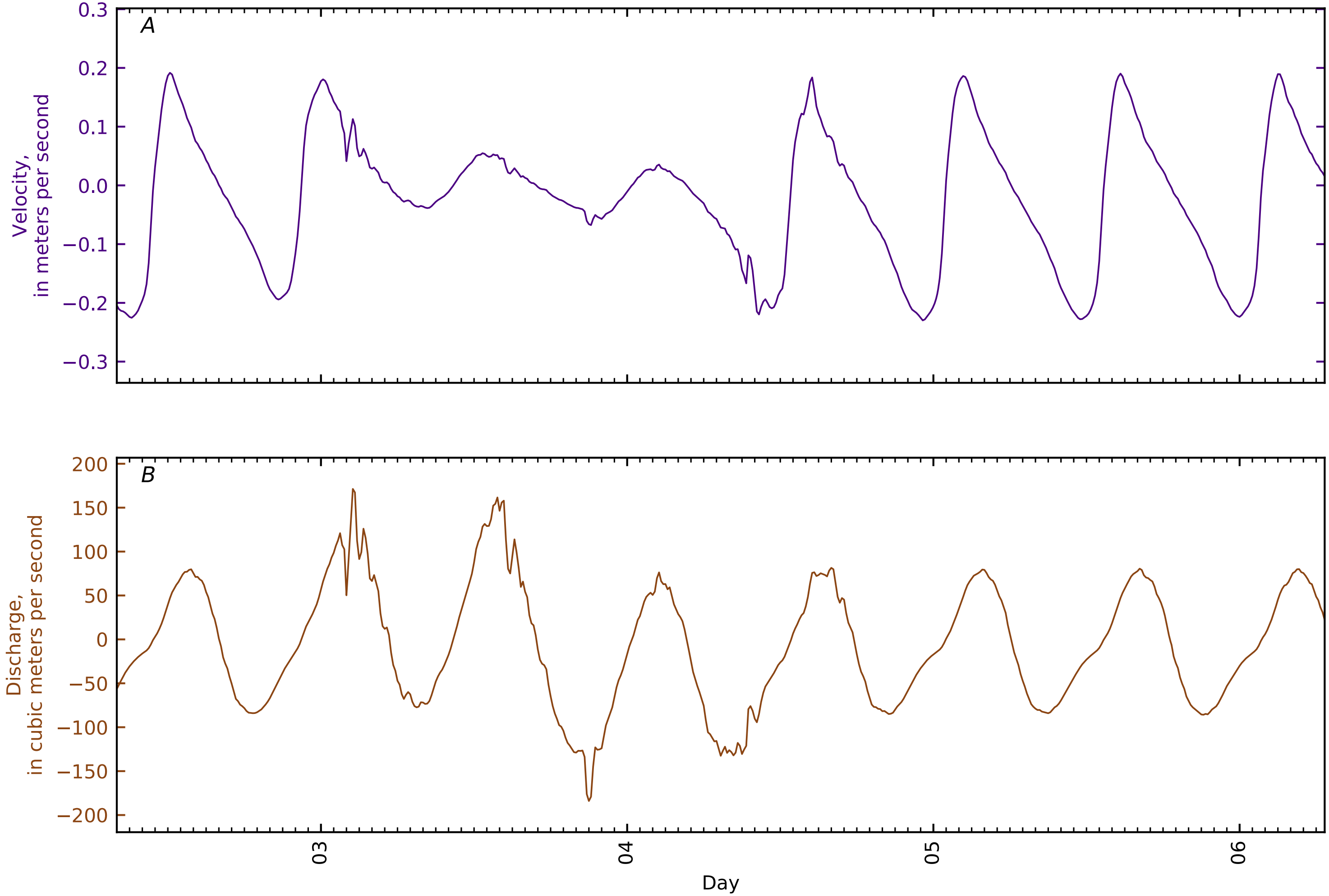

Figure B5-374. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 53, Orland Riv KM2. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

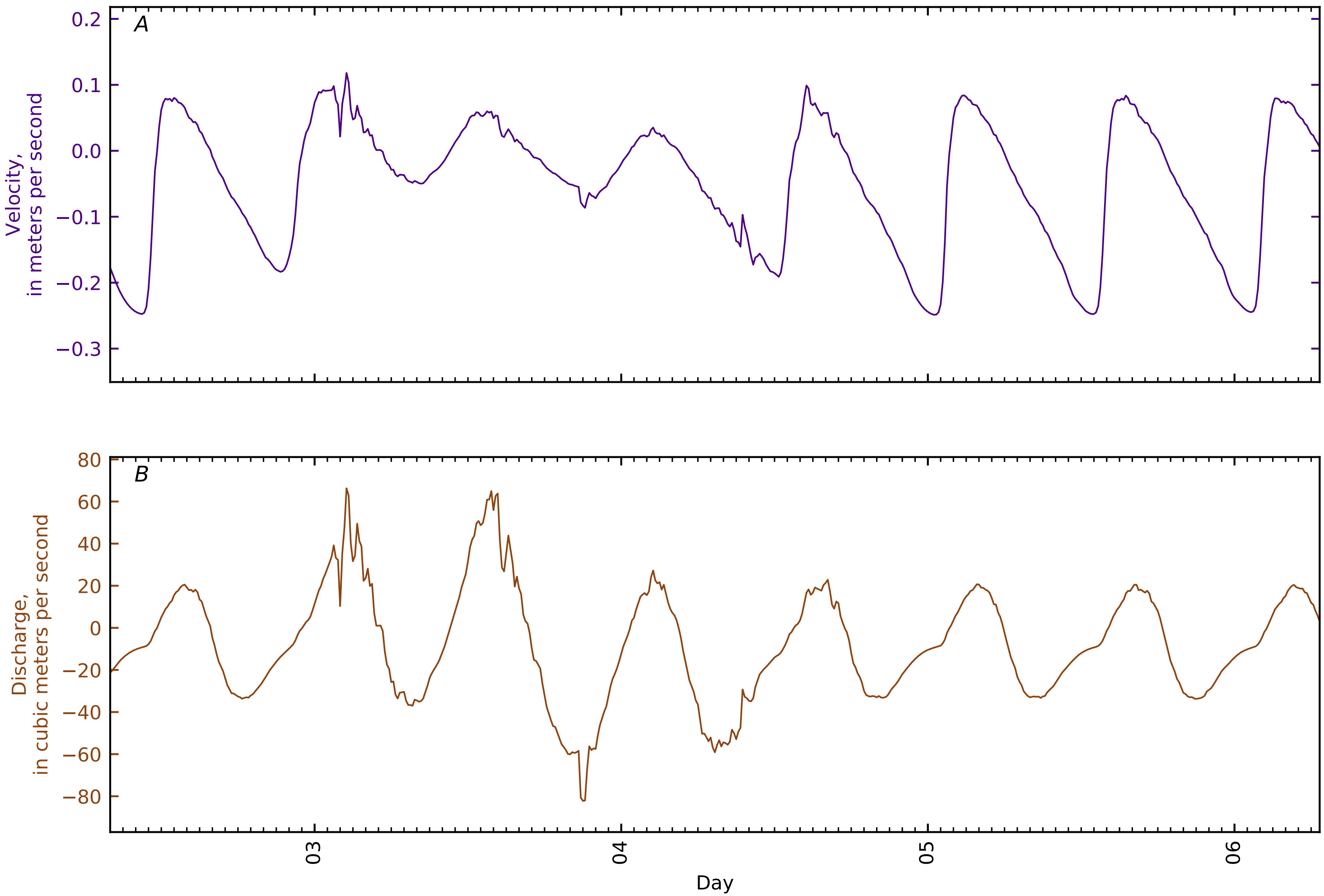

Figure B5-375. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 54, Orland Riv KM3. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

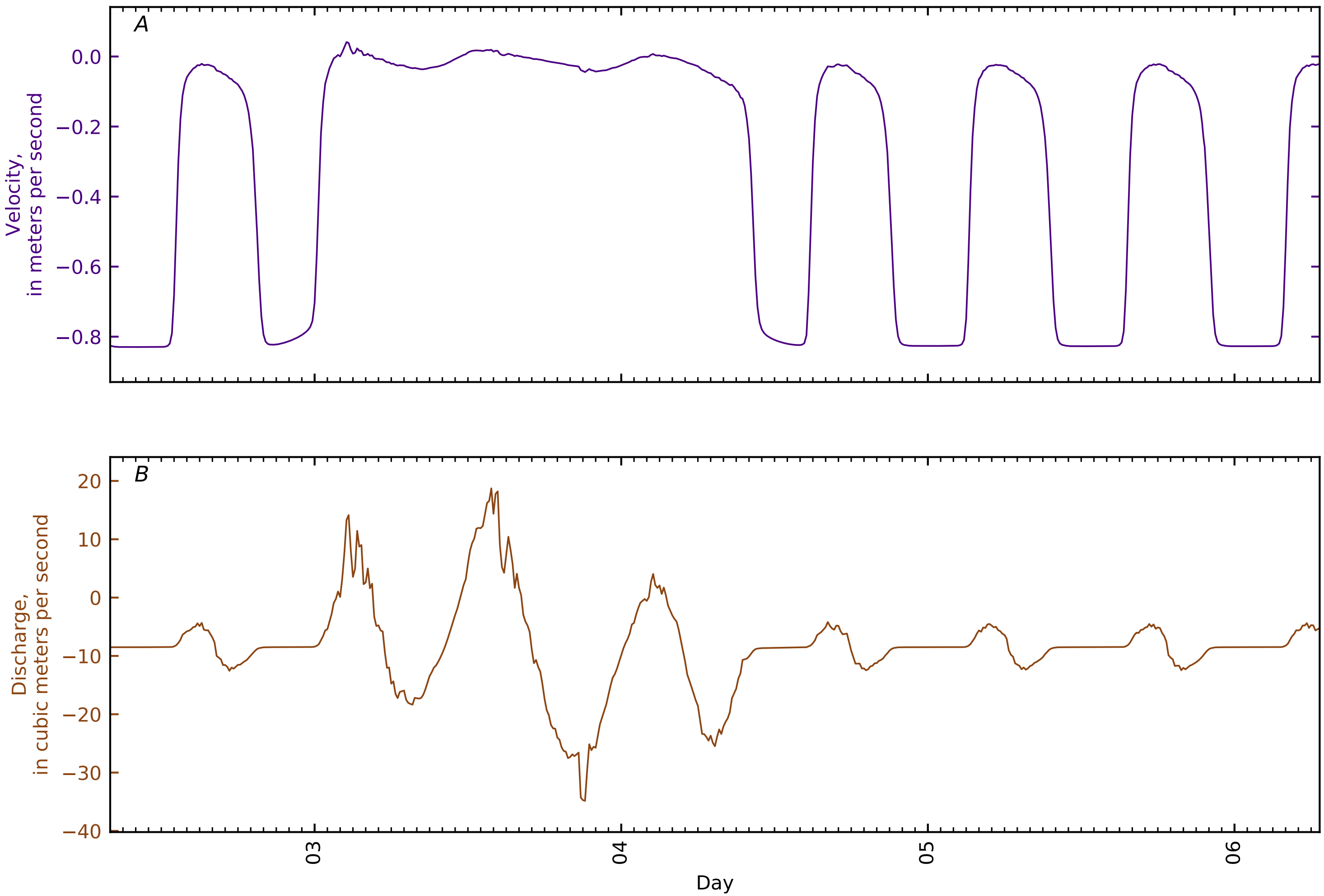

Figure B5-376. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 55, Orland Riv KM3.7 d/s Orland Dam. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

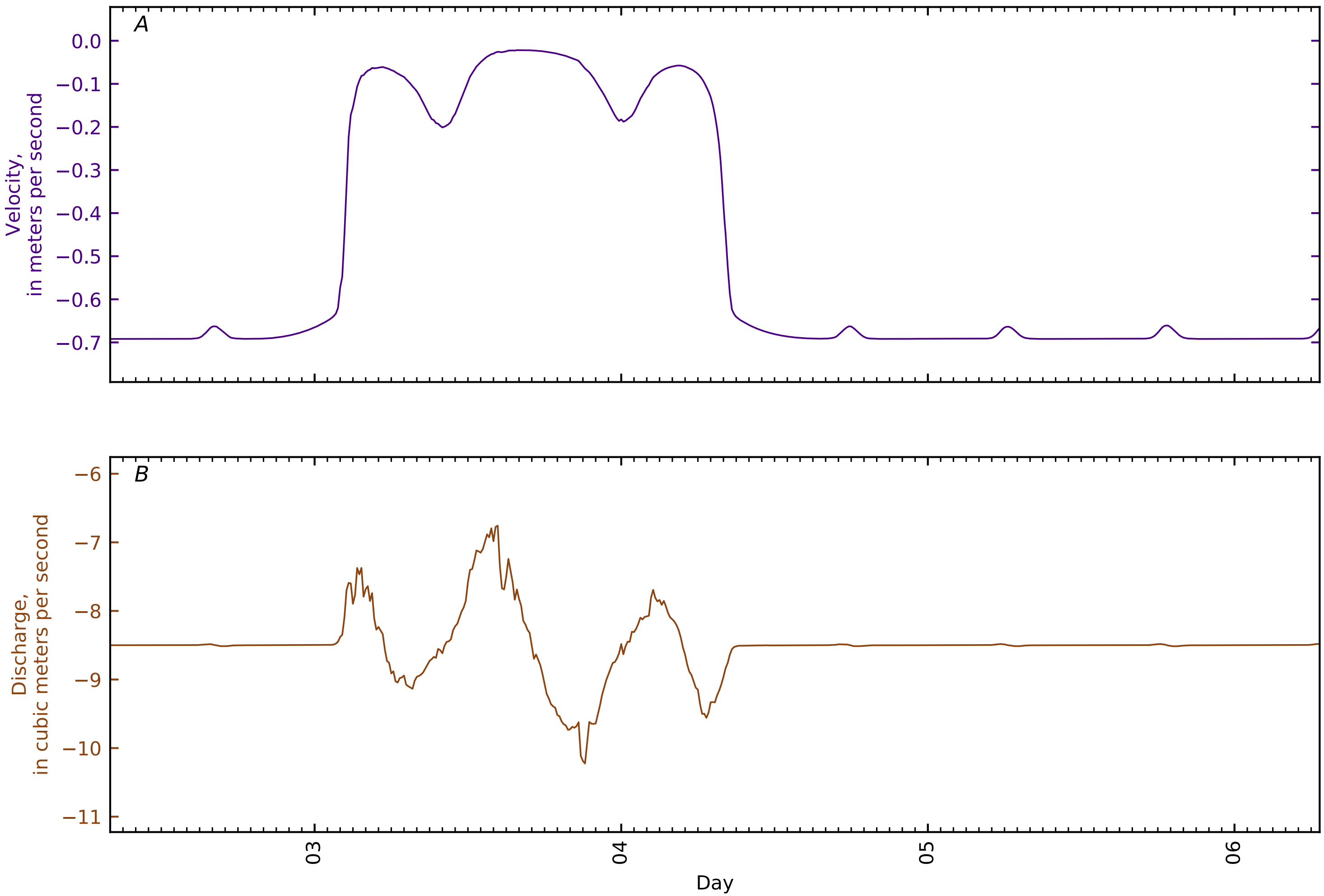

Figure B5-377. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 56, Orland Riv KM3.9 at Orland Dam. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

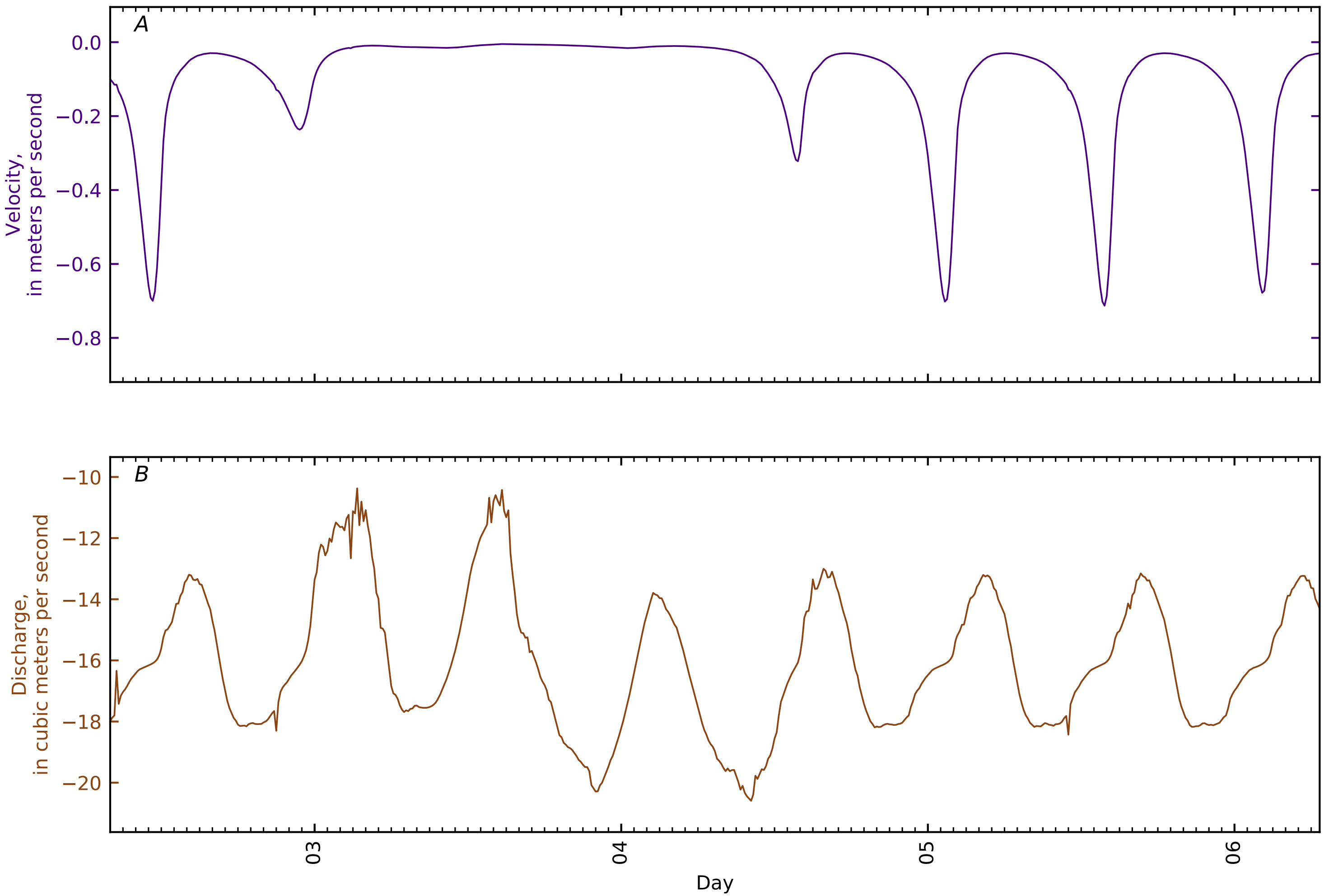

Figure B5-378. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 57, Kenduskeag Str conf Penob Riv KM43.3 Bangor. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.

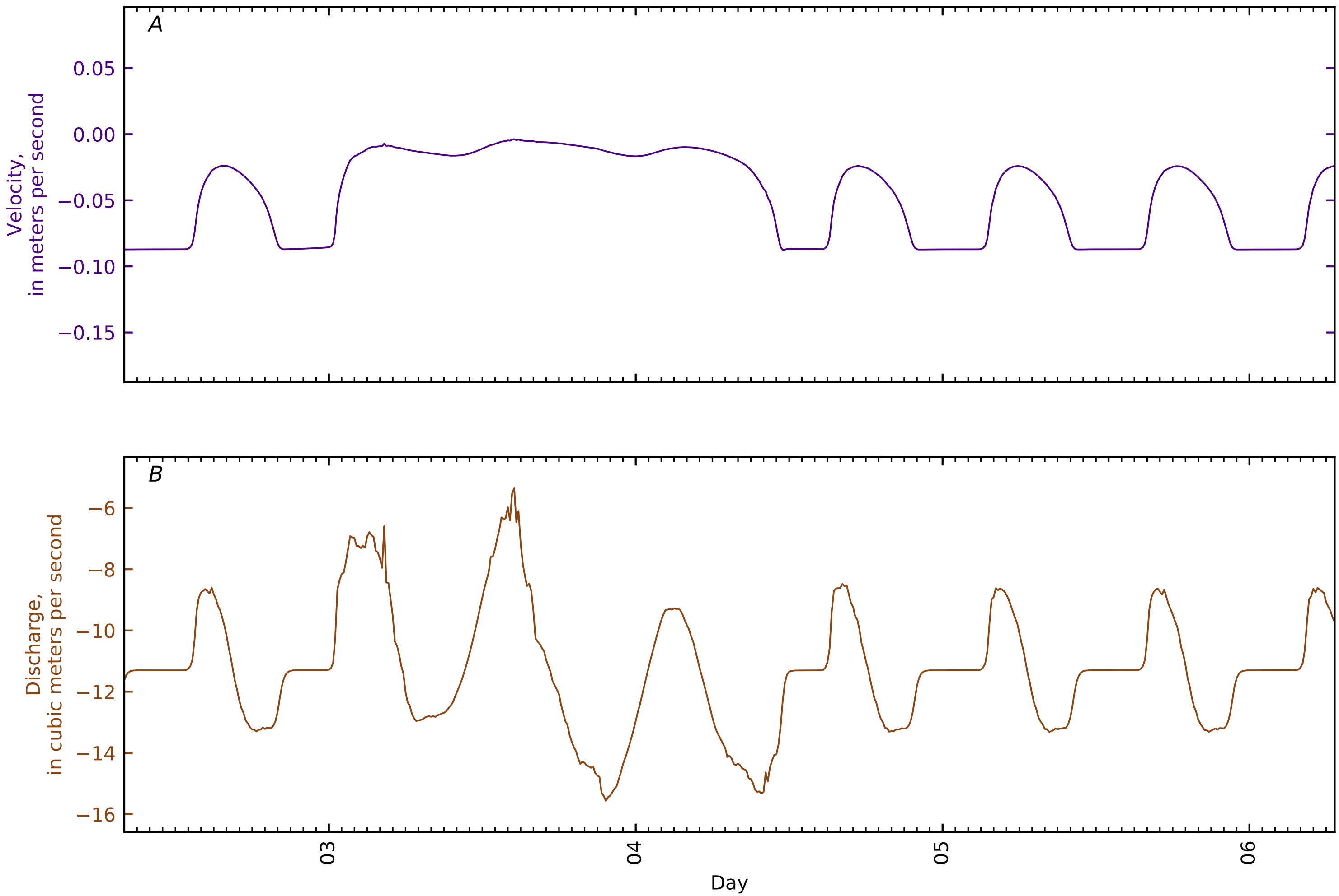

Figure B5-379. Time series for simulated *A*, flow velocity; and *B*, flow rate at cross section 58, Souadabscook Str conf Penob Riv KM35.3 Hampden. Flow forced by a two-percent annual-exceedance-probability storm surge from the Atlantic Ocean.