

EXPLANATION

DEPTH, IN METERS



— TIME DOMAIN BOUNDARY

→ FLOW VELOCITY VECTOR—Velocities in wetland areas average 0.01 m/s (meter per second). Vectors representing flow greater than 0.06 m/s are plotted at 10 percent of the original length.

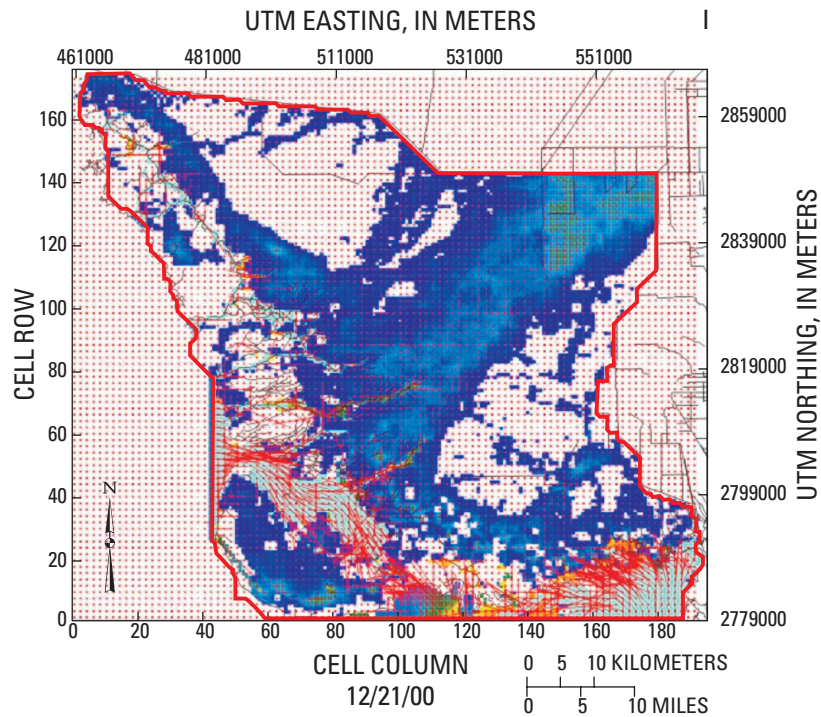


Figure 21H-I. Spatial and temporal distribution of surface-water depth and velocity in the TIME area.—Continued

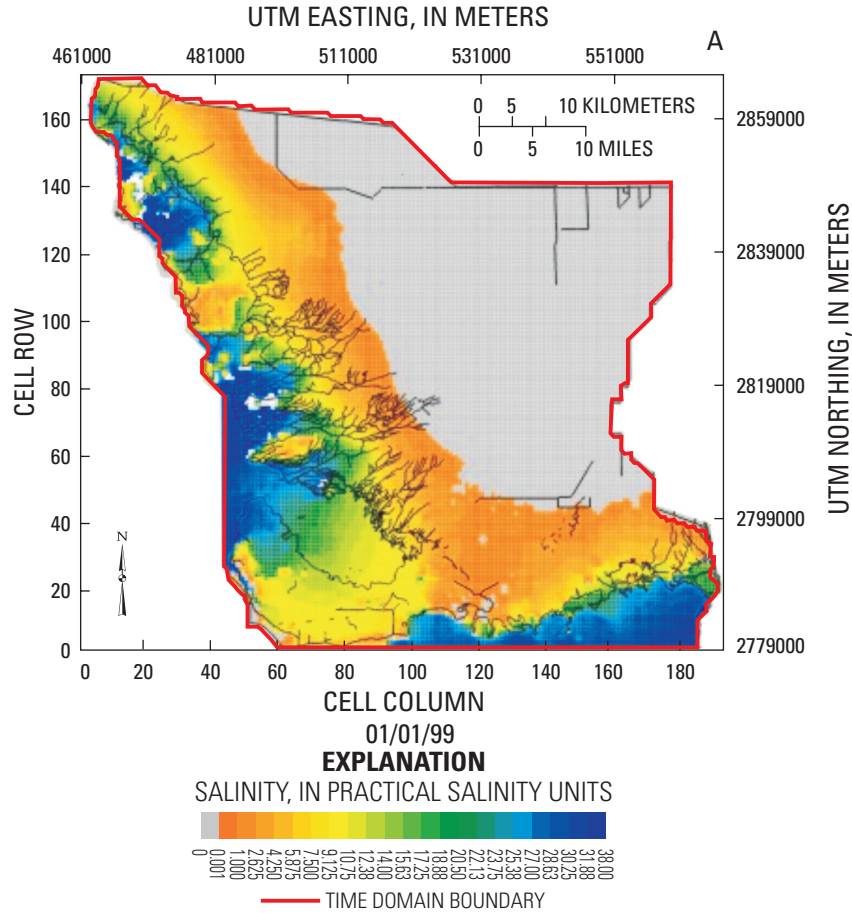


Figure 22A. Spatial and temporal distribution of surface-water salinity in the TIME area. TIME is Tides and Inflows in the Mangroves of the Everglades.

There are no known surface-water flow measurements within Everglades National Park and Big Cypress National Preserve that are suitable for model comparison during the SDP. As a result, the surface-water velocity fields shown in figure 21 are based on model results. Each velocity value is plotted as a vector from the point where the velocity applies. For clarity, only every other vector is shown, and vectors representing flows greater than 0.06 m/s are reduced to 10 percent of their original length. Velocities typically average about 0.01 m/s within the wetlands, and substantially more in tidally influenced areas near the coast.

A series of surface-water salinity maps are presented in figure 22A-I to illustrate model performance. It seems reasonable to assume that salinities during the wet season are too high because the open boundary condition is fixed at 36 psu. This may also affect dry-season salinities because salt can be trapped in isolated surface-water bodies and in the top layer of ground water. Evapotranspiration (ET) then can further concentrate the salt in the remaining water.