

LANDSAT
Aug 31, 2011

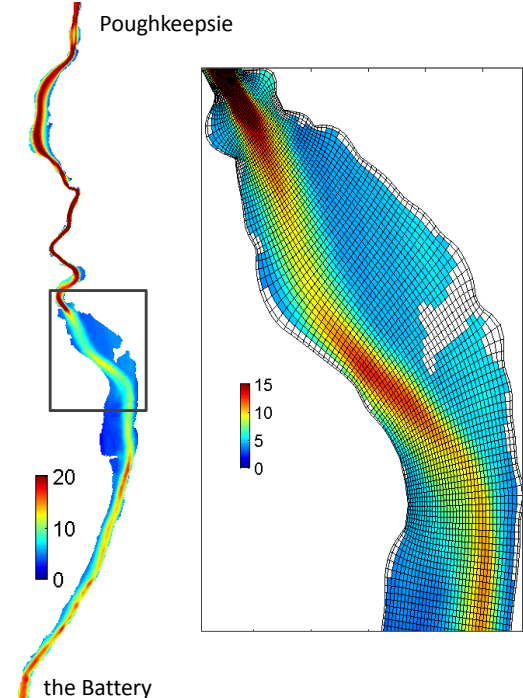


Hydrodynamics and sediment transport model

Goal: simulate salinity, velocity, and sediment at tidal to seasonal time scales and high spatial resolution

Development:

- observations of water level, salinity, and velocity at multiple stations
- detailed sediment observations in Haverstraw Bay

Rocky Geyer, David Ralston, and John Warner



Poughkeepsie

the Battery

Bathymetry and grid

ROMS + CSTMS + SWAN
Regional Ocean Modeling System
Community Sediment Transport Modeling System
Simulating WAVes Nearshore

Grid spacing 50 to 200 m,
16 sigma-levels

Output fields

- water level
- velocity: u,v,w
- salinity(temperature)
- suspended sediment
- bed composition
- turbulence intensity, bed stress

Output in NetCDF files

