Evaluation of a Real-Time Storm Surge Guidance Ensemble

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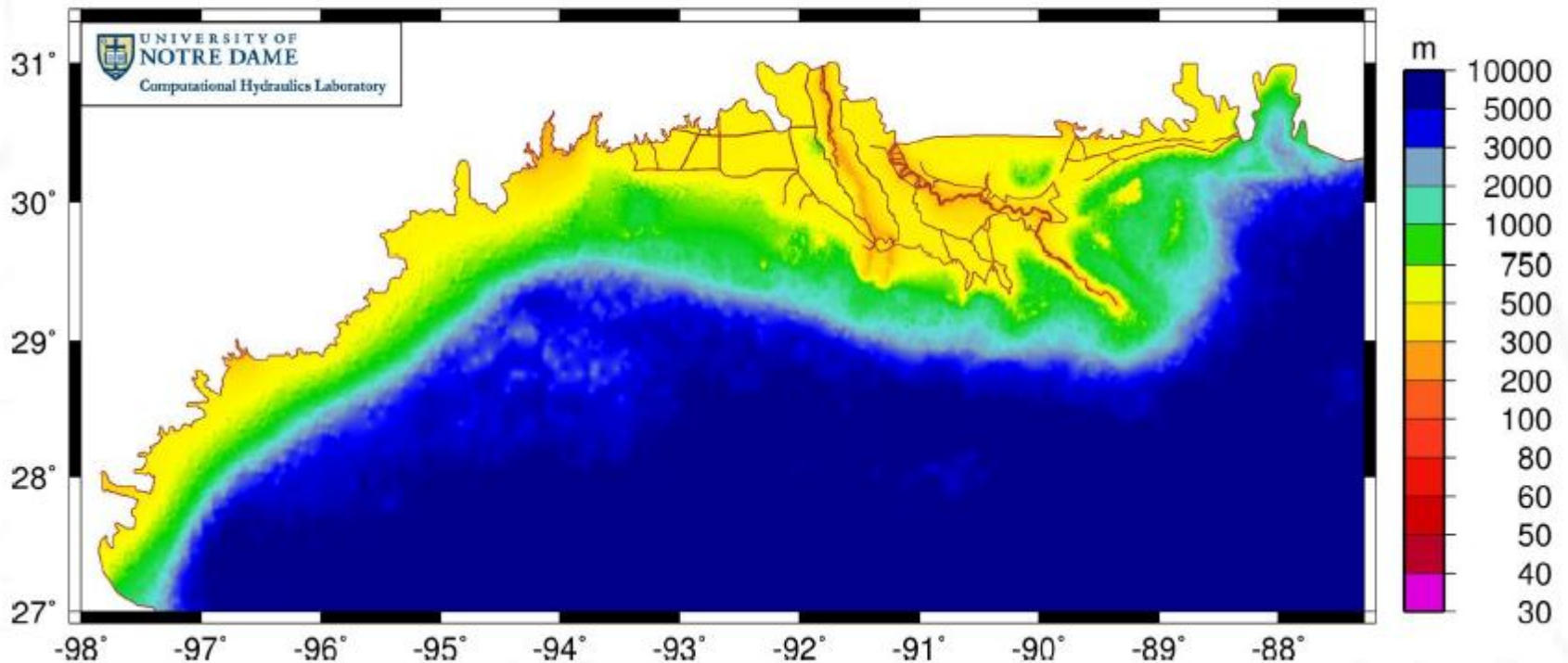
ADCIRC Surge Guidance System

- ADCIRC Surge Guidance System (ASGS) is a software system for generating storm surge, tide, and wave guidance from ADCIRC + SWAN in real time on high resolution grids

- Components have been in development over the last 5+ years via various projects for RENCI, USACE, DHS S&T, FEMA

- Demonstrated capability in ongoing IOOS Coastal Modeling Testbed

2012 Evaluation Plan

- Will evaluate real-time 4-5 member ensemble for use by operations
  - Parametric wind/pressure model driven by NHC Forecast Advisories
  - Initial coverage of Gulf of Mexico coastline
  - Coastal resolution of ~500 m
  - Estimated 2 hr run time on 2000 CPUs
  - Output will be accessible by NHC/SSU

Typical Grid Resolution

- From Westerink et al., 2012 AMS Conference session on IOOS Coastal Modeling Testbed