SCI-WMS: Python Web Mapping Service for Visualizing Geospatial Data

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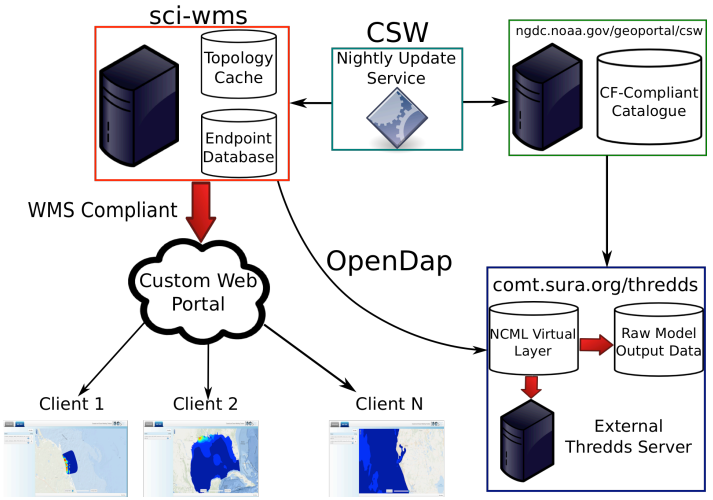
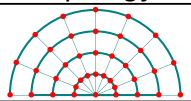
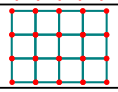
- Web Mapping Service (WMS)
  - Deliver rasterized visualizations in response to http requests for views of geo-registered data
- IOOS COMT-Testbed
  - Project to accelerate the turn around from research to production quality systems
  - SCI-WMS deployed within the IOOS COMT framework for qualitative model forecasting assessment, algorithmic/parameter selection
- Supports any CF-Compliant dataset
  - ADCIRC, SELFE, SLOSH, FVCOM, WW3
- Currently querying datasets from NGDC catalog for data hosted at multiple institutions
  - USF, UND, MDL, UMASS, VIMS, DAL,…

http://testbedwww.sura.org/explorer/



RPS asa

Topology	OpenDap Endpoint
	http:// • • •
	http:// • • •
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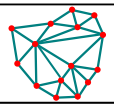
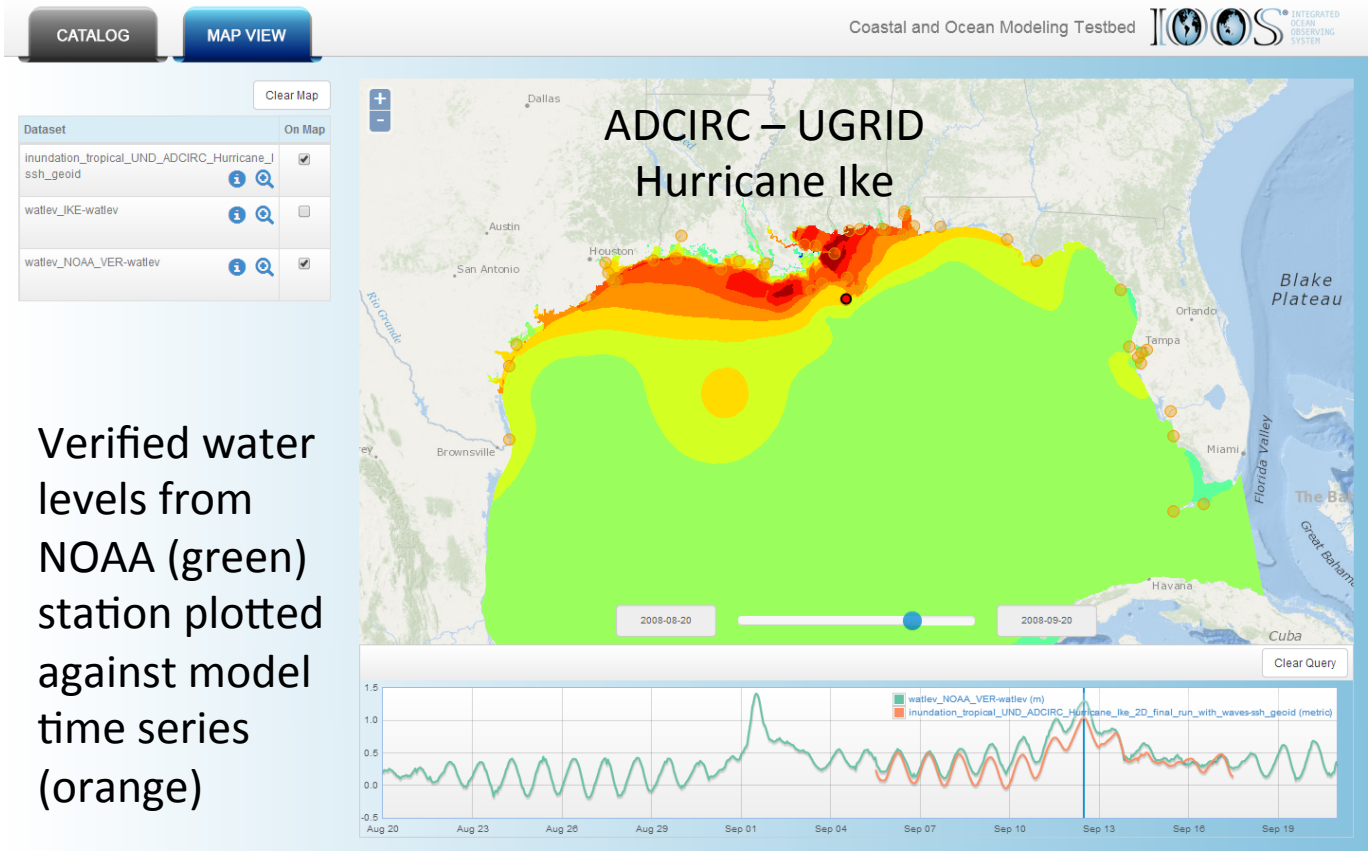
	http:// • • •

- Don’t replicate and host data
- Store a local copy of topologies
- Use spatial oriented data structures to compute subset of data to downloaded from remote servers per request



Verified water levels from NOAA (green) station plotted against model time series (orange)

RPS asa