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USGS Monitoring of Overland Storm-Tide: An Update

NOAA Brown Bag
July 31, 2014
Silver Spring, Maryland

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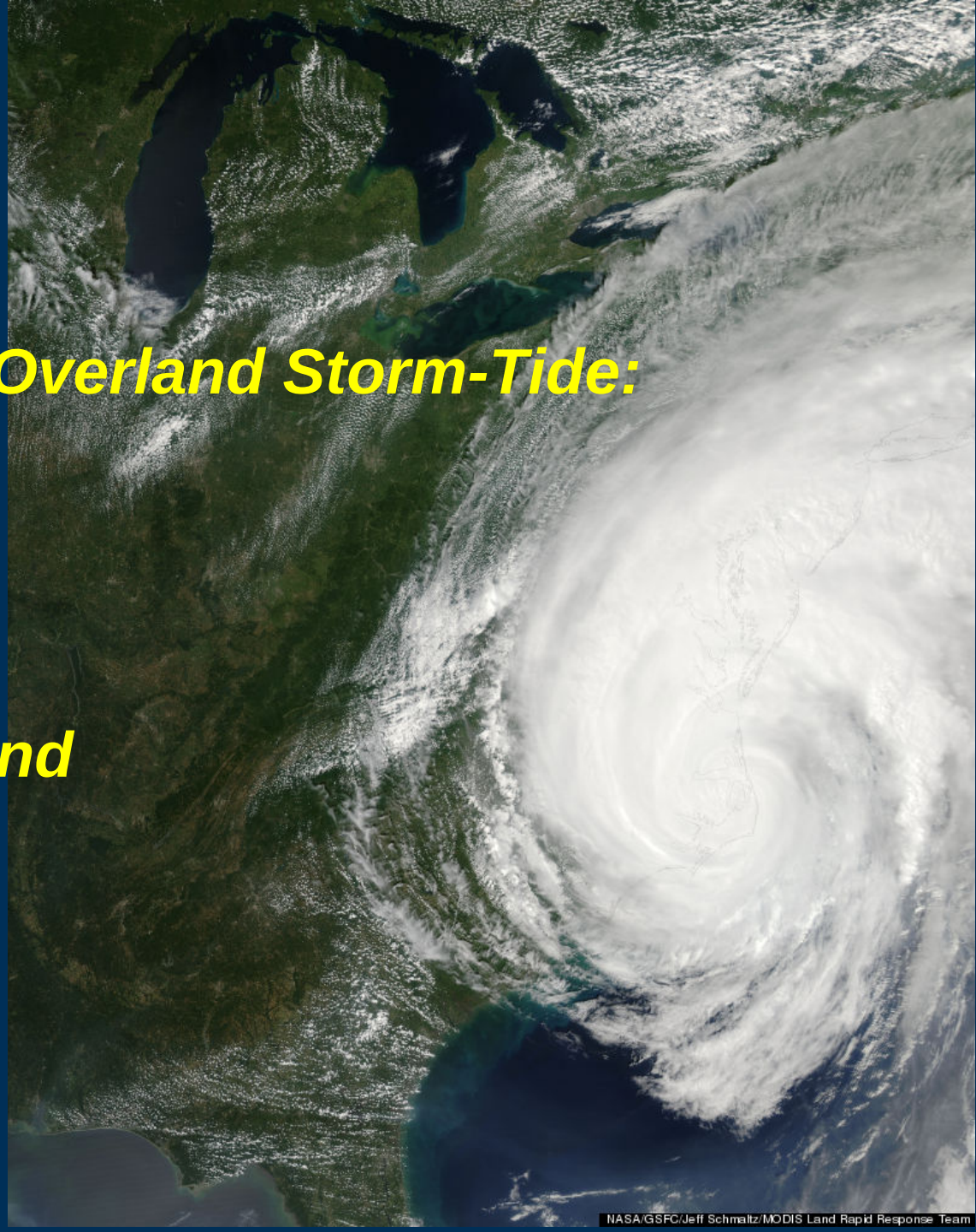
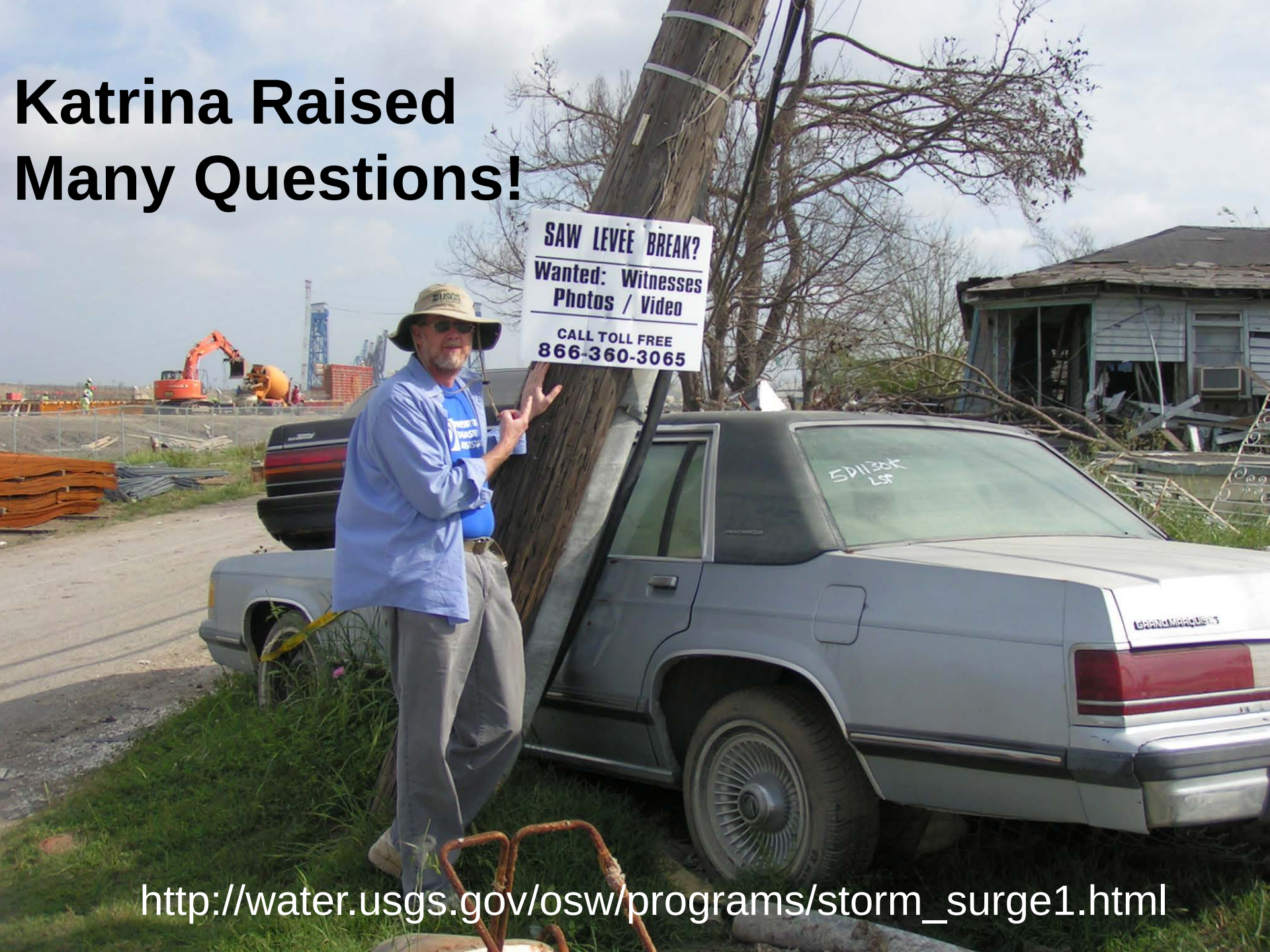
U.S. Geological Survey

U.S. Department of the Interior
U.S. Geological Survey



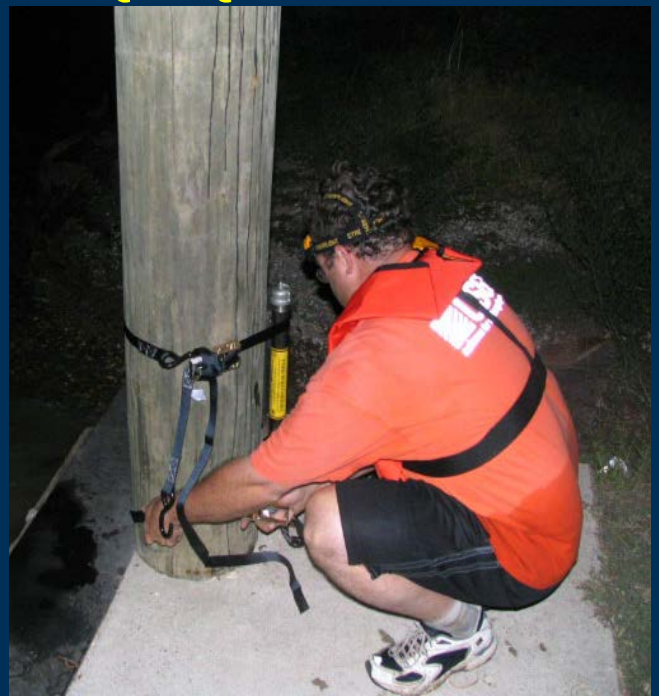
Katrina Raised Many Questions!



http://water.usgs.gov/osw/programs/storm_surge1.html

USGS Storm-Tide Deployment

- Use new water-level sensor technology
- Mobile networks
- Rapid, opportunistic deployments
- Post-storm recovery and processing and QA/QC



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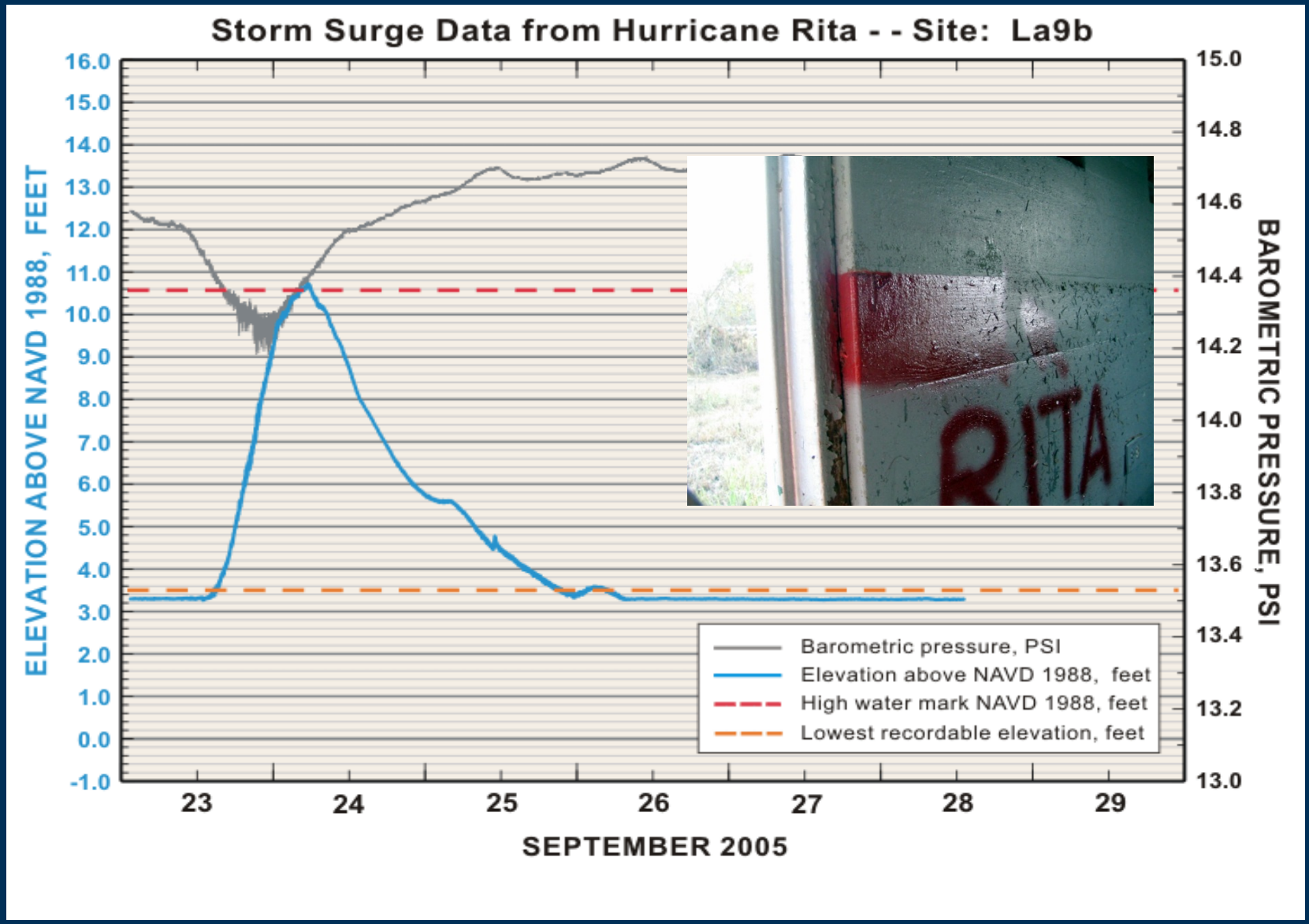

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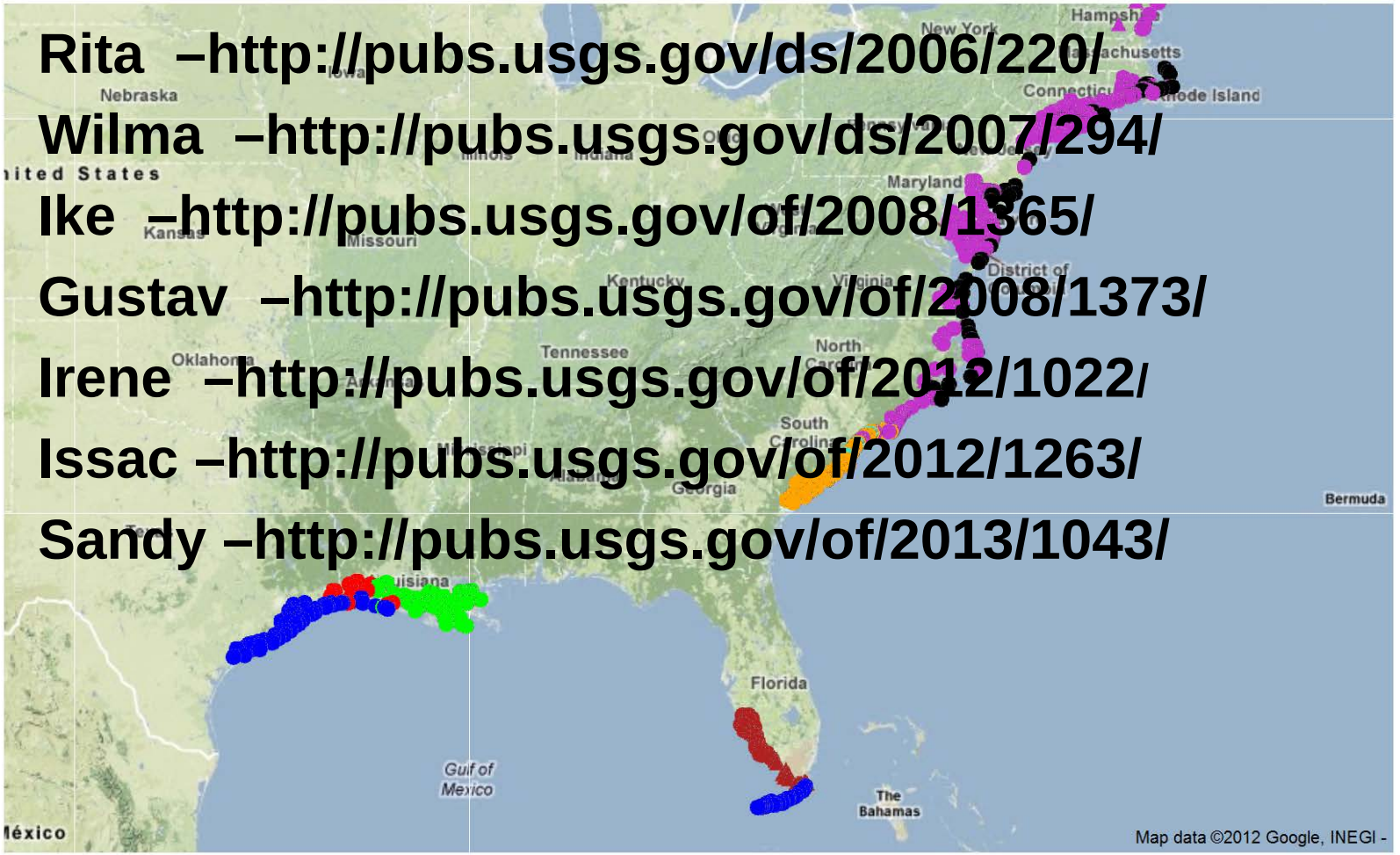
http://pubs.water.usgs.gov/ds220/.

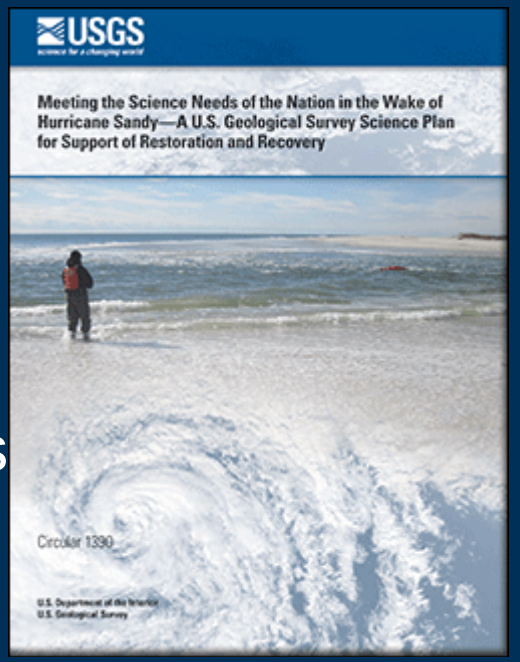
Hurricane Storm-Tide Network Coverages



Explanation							
● ▲	● ▲	● ▲	● ▲	● ▲	● ▲	● ▲	● ▲
Rita(2005)	Wilma(2005)	Ernesto(2006)	Gustav(2008)	Hanna(2008)	Ike(2008)	Earl(2010)	Irene(2011)
● -- Temporary storm tide sensor, ▲ -- USGS real-time streamgage							

USGS Hurricane Sandy Science Plan

1. Coastal topographic and bathymetric data to support hurricane impact assessment & response.
2. Impacts to coastal beaches and barriers.
3. Impacts of storm surge, including disturbed estuarine and bay hydrology.
4. Impacts on environmental quality, including exposure to chemical and microbial contaminants.
5. Impacts to coastal ecosystems, habitats, and fish & wildlife, particularly for DOI lands and trust resources.



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http://pubs.usg