



JALBTCX

Welcome to the
Joint Airborne Lidar Bathymetry
Technical Center of Expertise

17th Annual
Airborne Coast Mapping and Charting Workshop

Opening Remarks
by
Rear Admiral (select) Shepard Smith

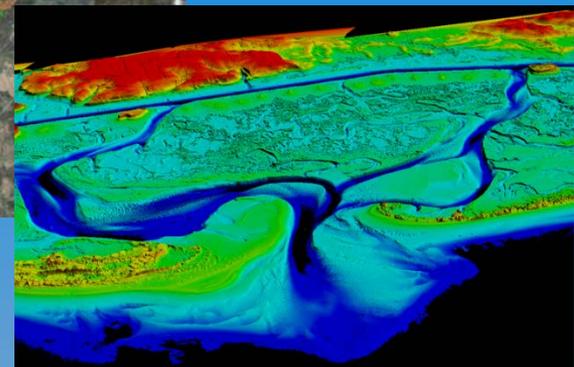
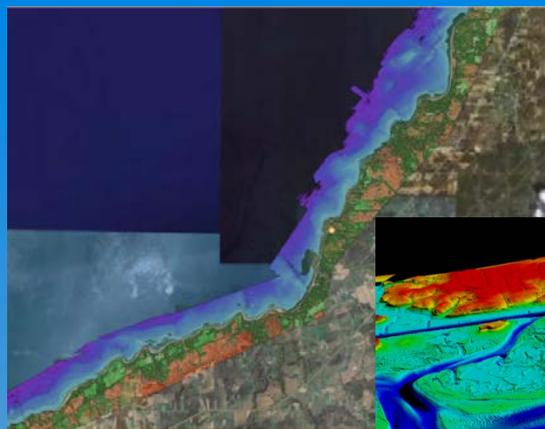




JALBTC X

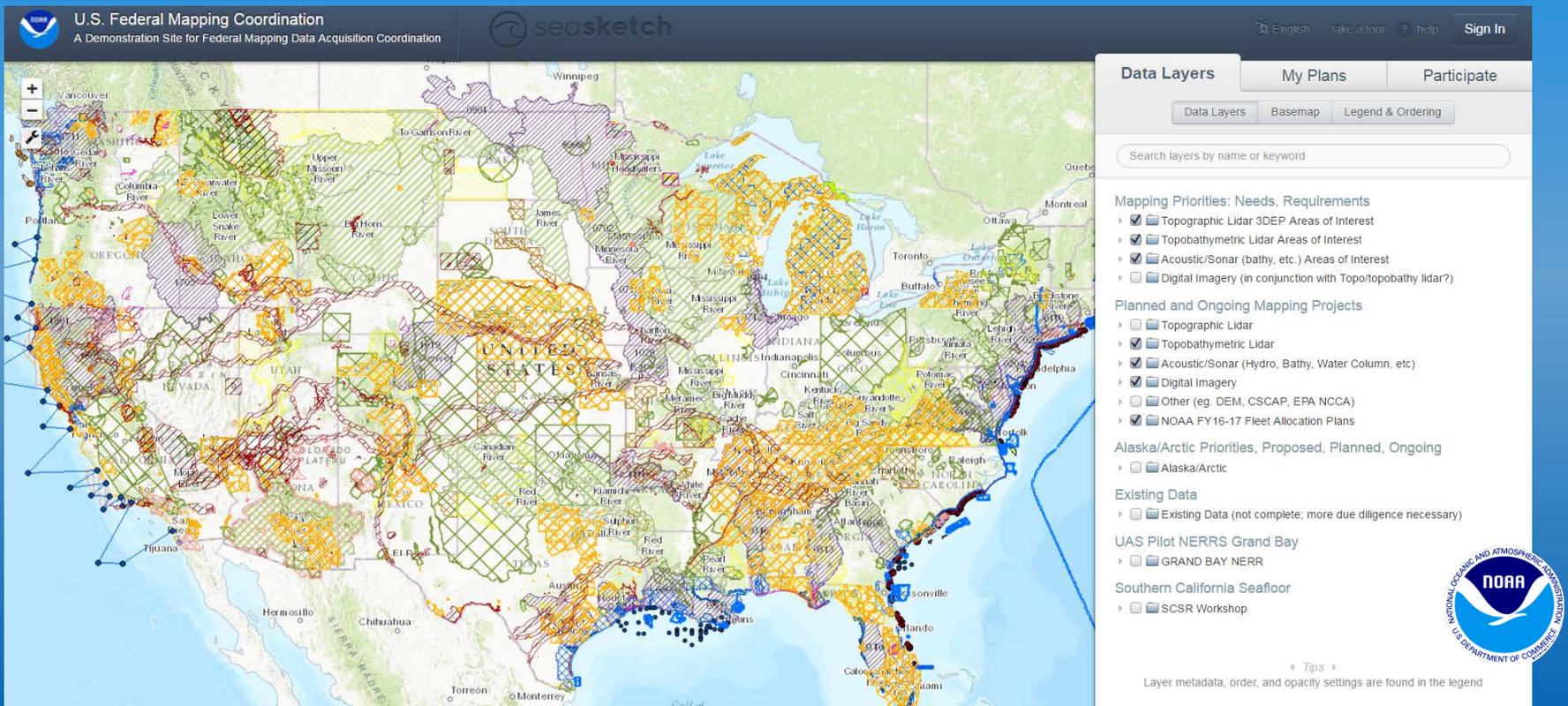


Establishing the Joint Airborne Lidar Bathymetry Technical Center of Expertise



National mapping coordination

- Coordination site as visualization tool for understanding requirements and plans
- NOAA/USGS/USACE and partners worked to maximize Sandy topobathy lidar data collects
- For example, USACE worked with USGS and WA stakeholders to discuss overlap requirements, modify plans for best outcome



U.S. Federal Mapping Coordination
A Demonstration Site for Federal Mapping Data Acquisition Coordination

seasketch

English take a tour ? help Sign In

Data Layers My Plans Participate

Data Layers Basemap Legend & Ordering

Search layers by name or keyword

Mapping Priorities: Needs, Requirements

- Topographic Lidar 3DEP Areas of Interest
- Topobathymetric Lidar Areas of Interest
- Acoustic/Sonar (bathy, etc.) Areas of Interest
- Digital Imagery (in conjunction with Topo/topobathy lidar?)

Planned and Ongoing Mapping Projects

- Topographic Lidar
- Topobathymetric Lidar
- Acoustic/Sonar (Hydro, Bathy, Water Column, etc)
- Digital Imagery
- Other (eg. DEM, CSCAP, EPA NCCA)
- NOAA FY16-17 Fleet Allocation Plans

Alaska/Arctic Priorities, Proposed, Planned, Ongoing

- Alaska/Arctic

Existing Data

- Existing Data (not complete; more due diligence necessary)

UAS Pilot NERRS Grand Bay

- GRAND BAY NERR

Southern California Seafloor

- SCSR Workshop

Layer metadata, order, and opacity settings are found in the legend

NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

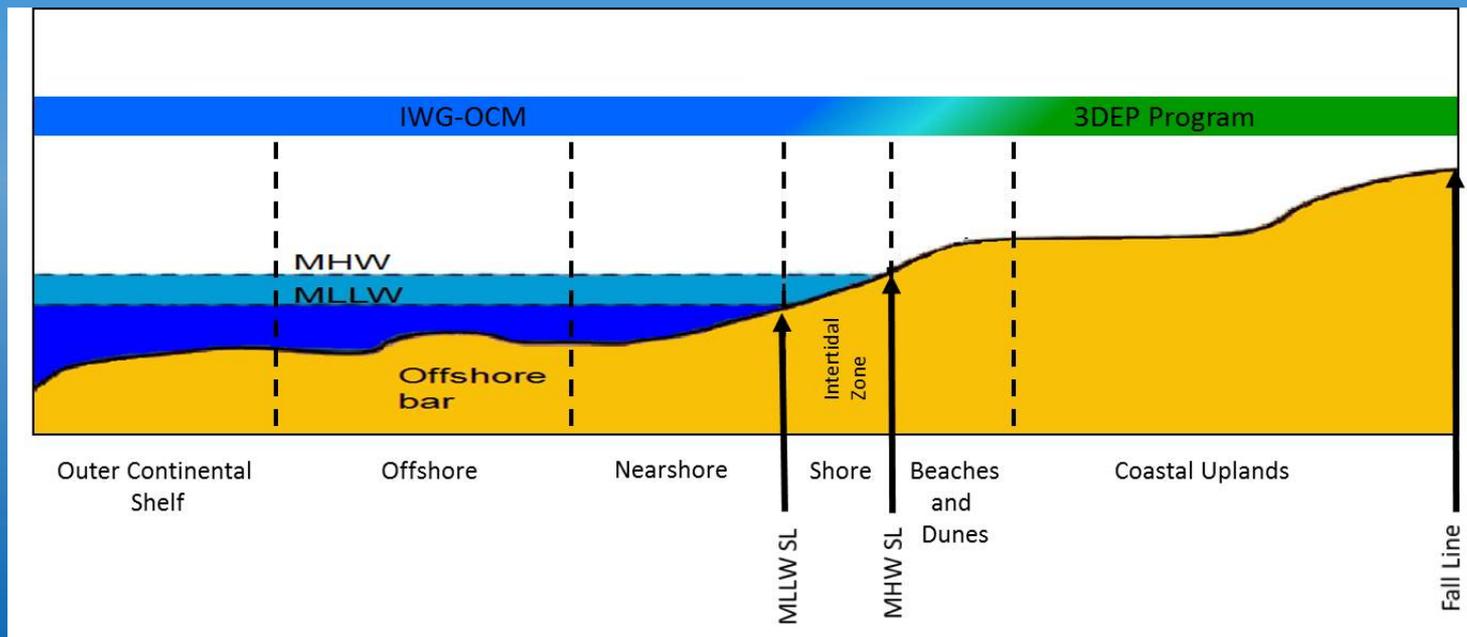
National Coastal Mapping Strategy 1.0

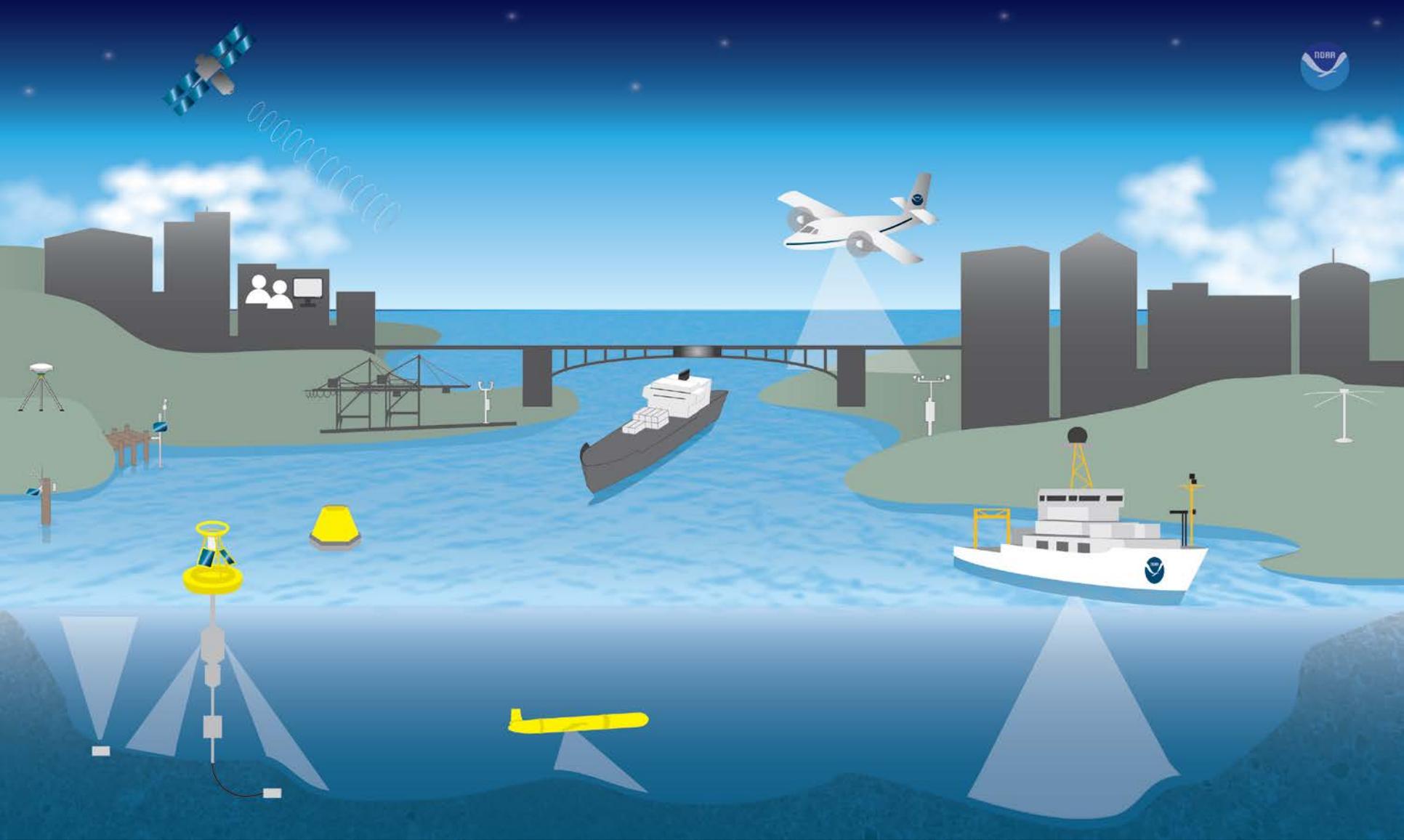
Coastal lidar elevation for a 3D nation

Aug
8!

Four components:

- Annual regional coastal mapping summits for coordination
- Common standards - bathy quality levels
- Whole life cycle approach to data
- R&D on new tools and techniques for data collection and use



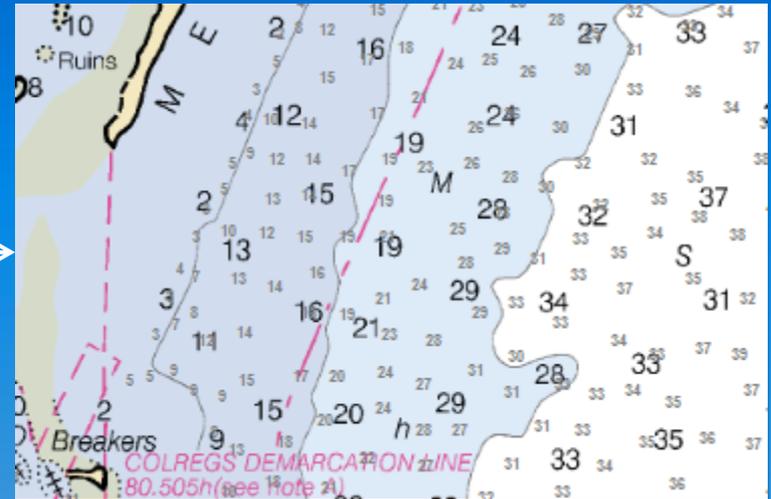
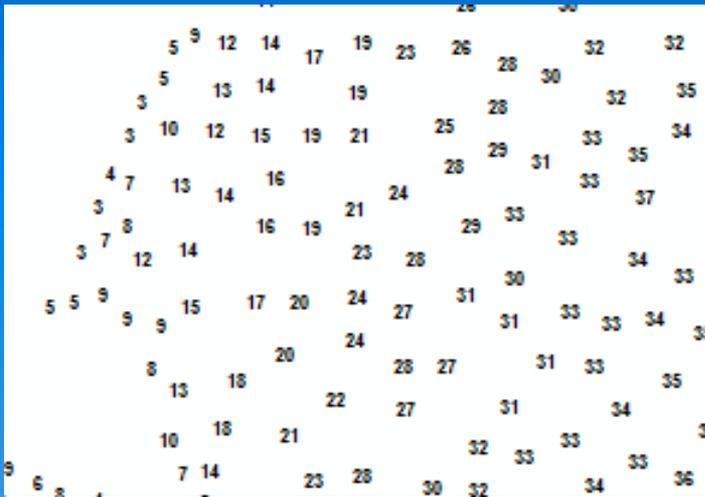


*All hands on deck
for coastal intelligence*

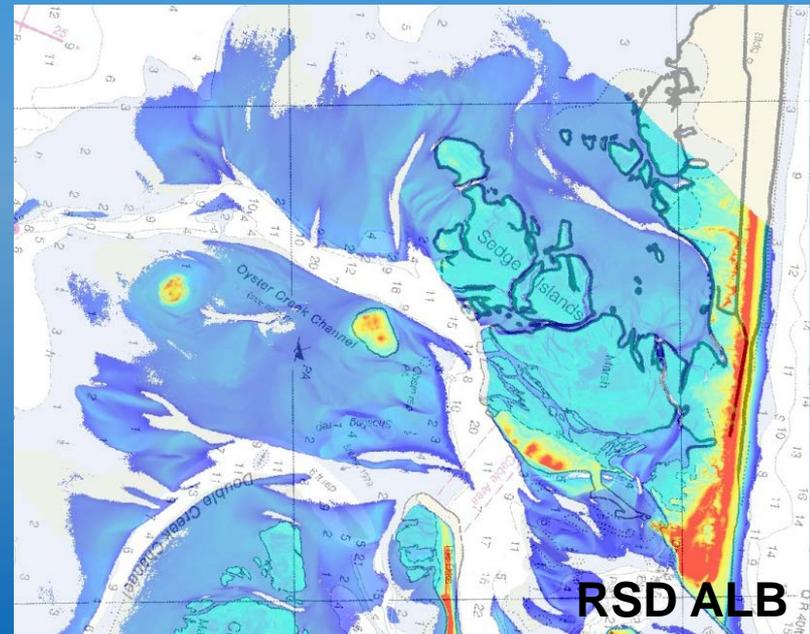
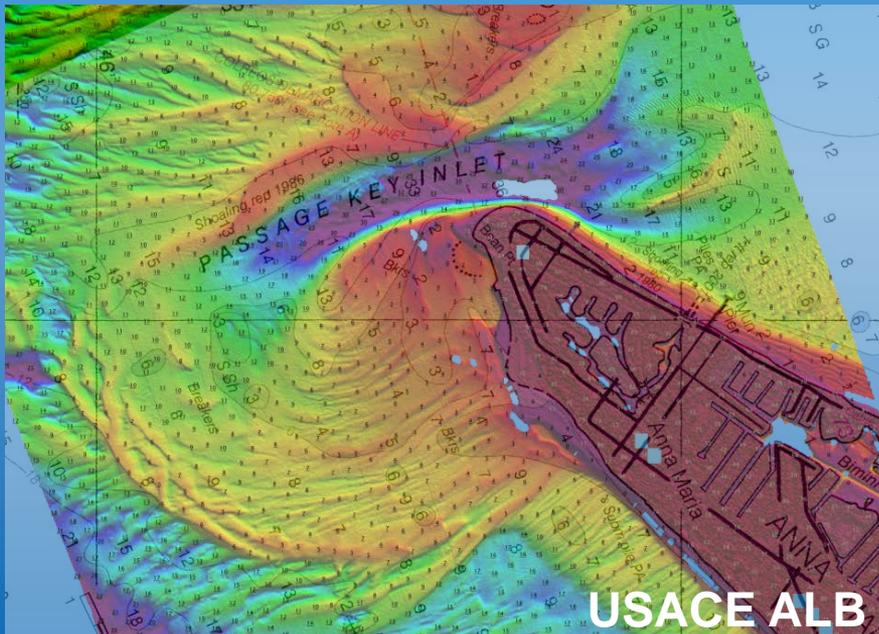


Paradigm shift in nautical charting

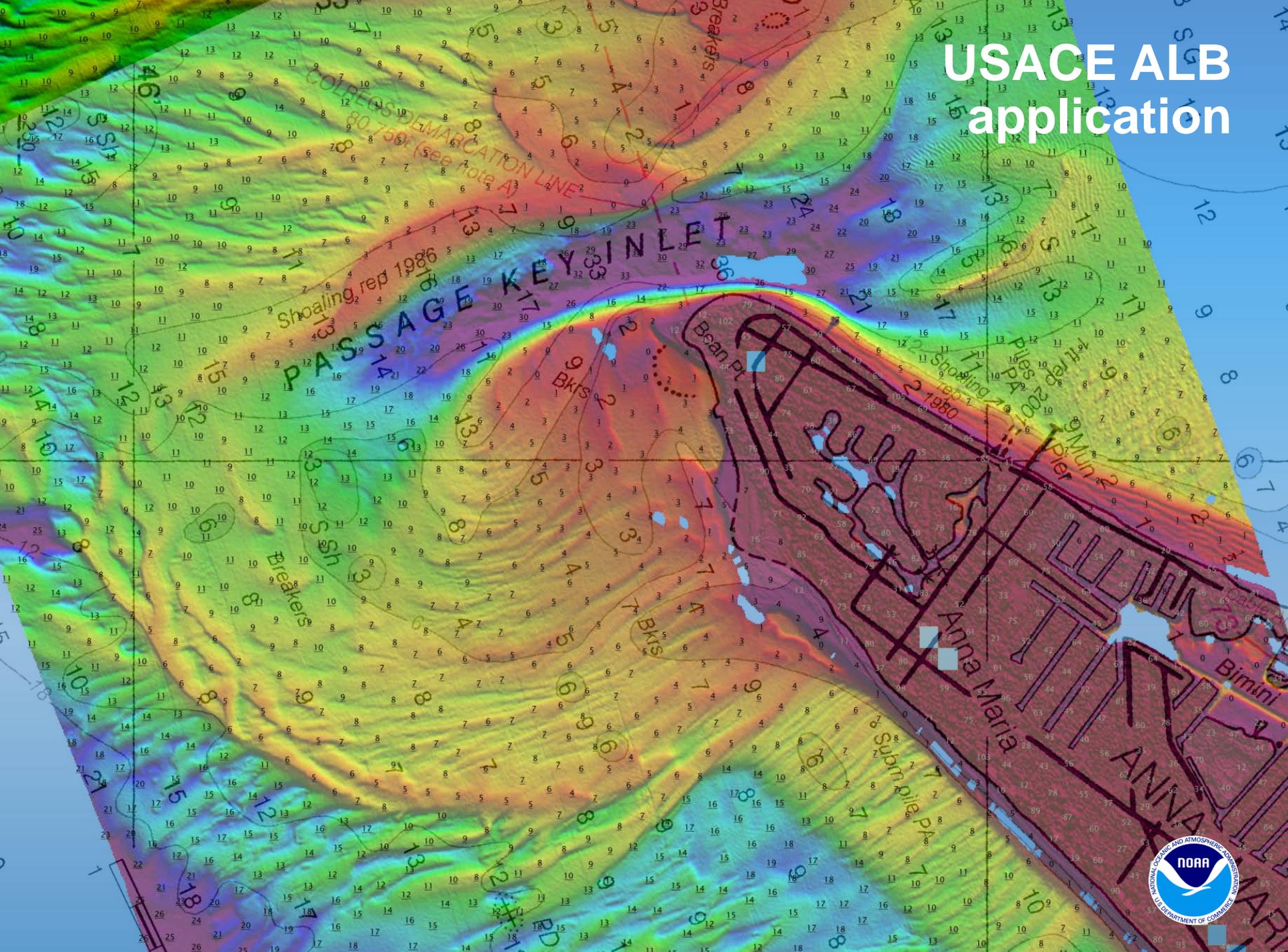
Yesterday

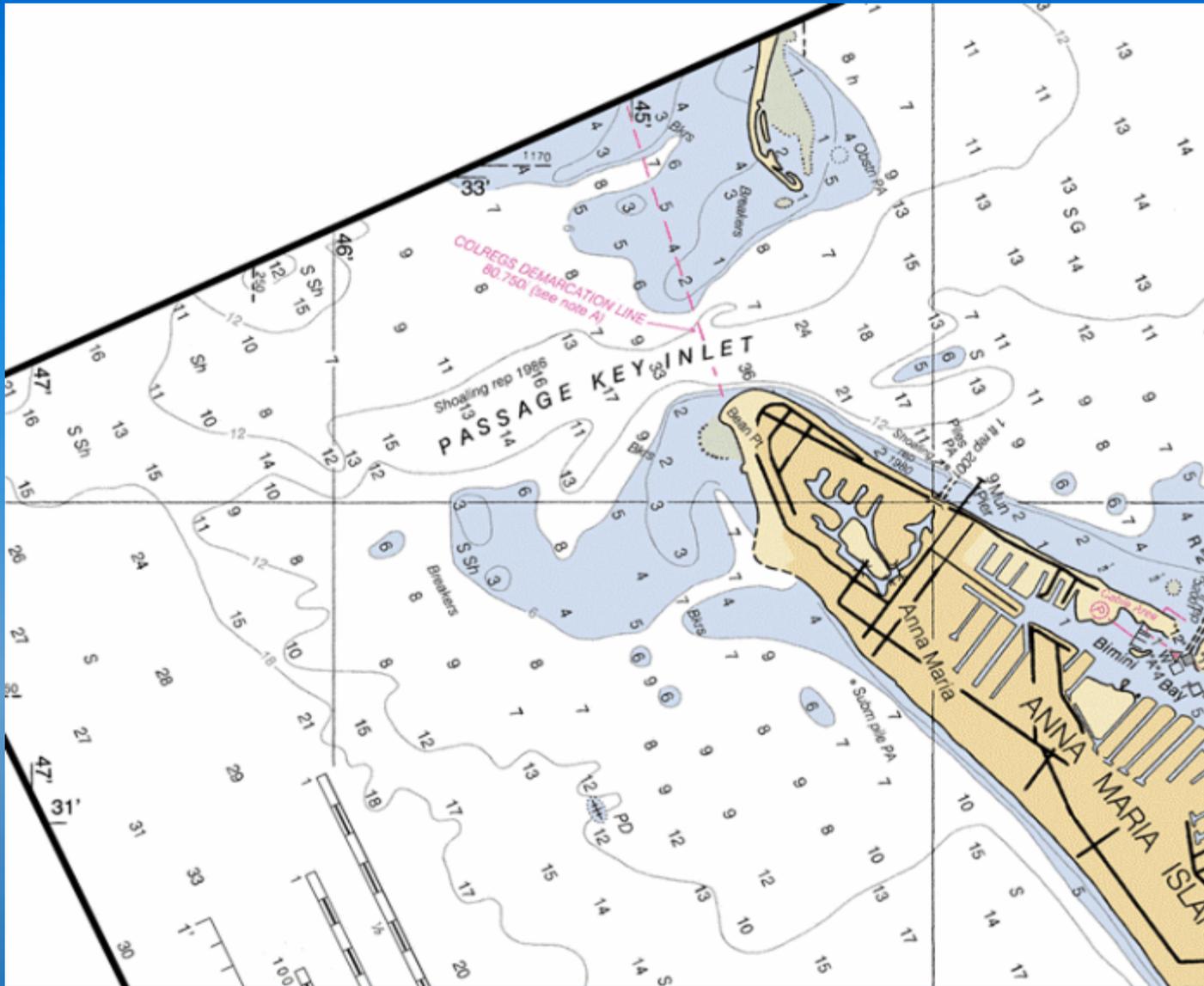


Today



USACE ALB application





Approaches to Tampa Bay (NOAA Chart 11415)

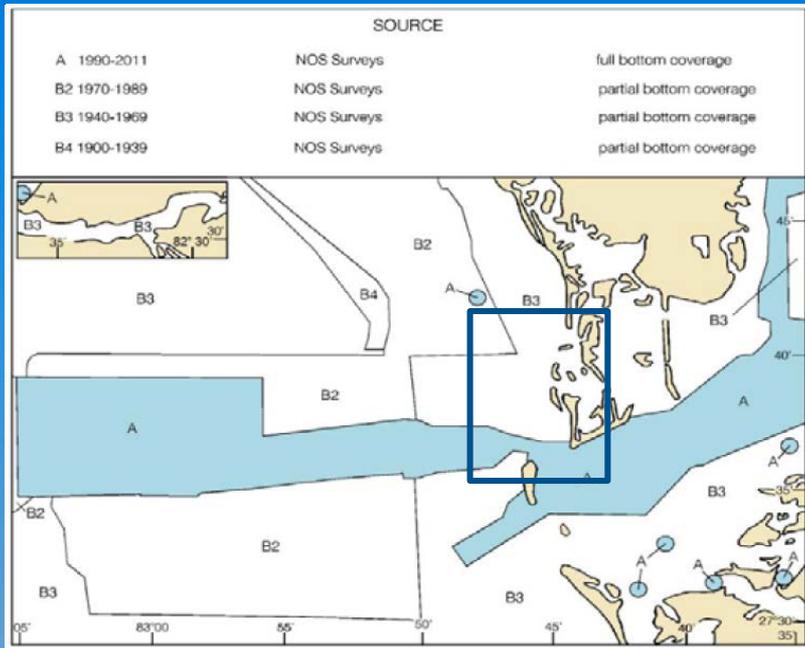
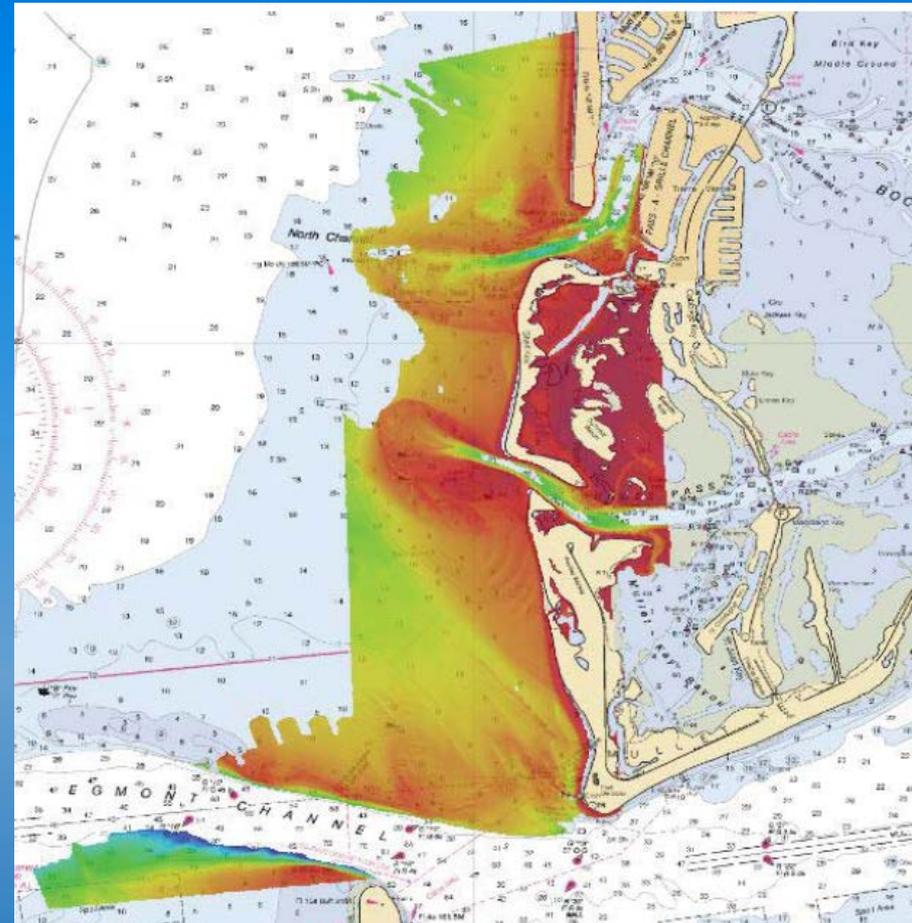


Chart 11415 source diagram

- Most of the survey coverage is located within the B3 source area (partial bottom coverage 1940-1969).
- The remainder of the survey coverage is located within the A source area (full bottom coverage 1990-2011).



USACE lidar



Chincogeague Inlet

Launch-based Sonar

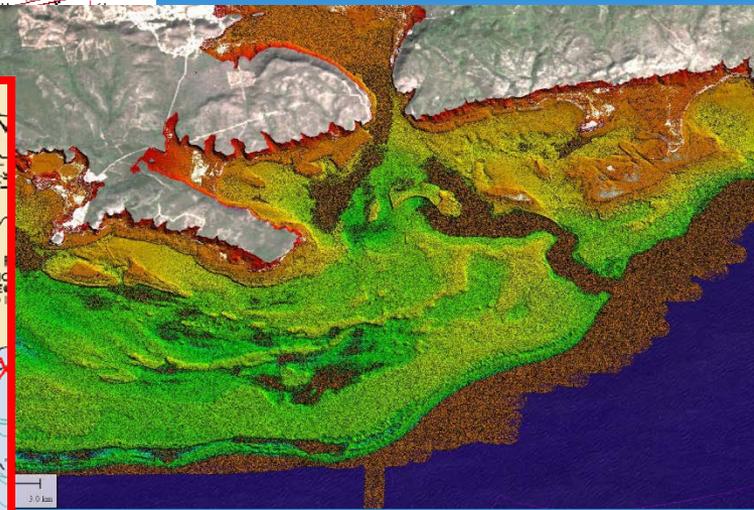
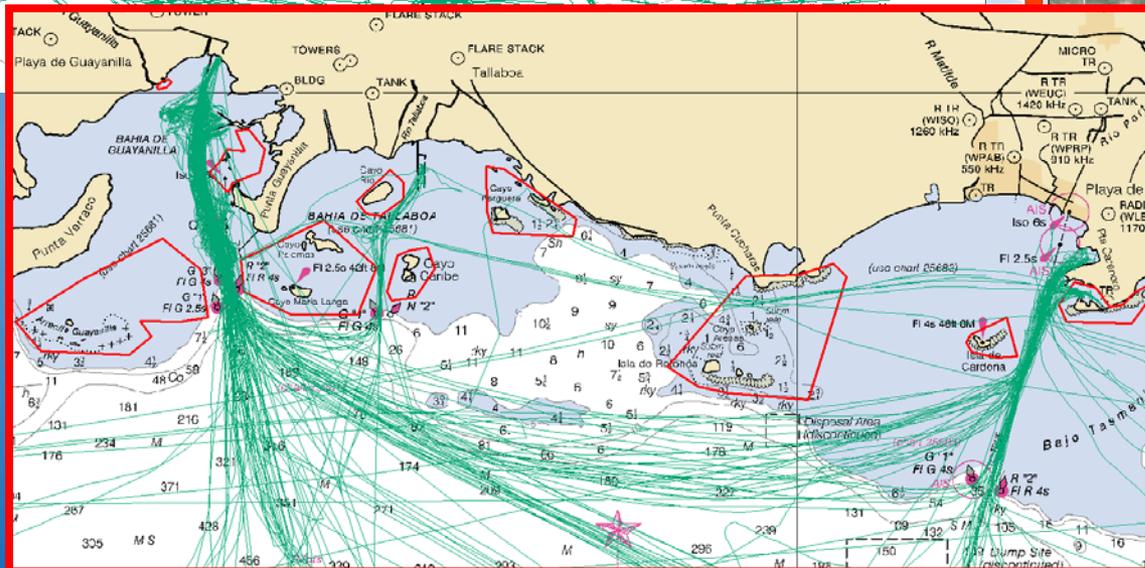
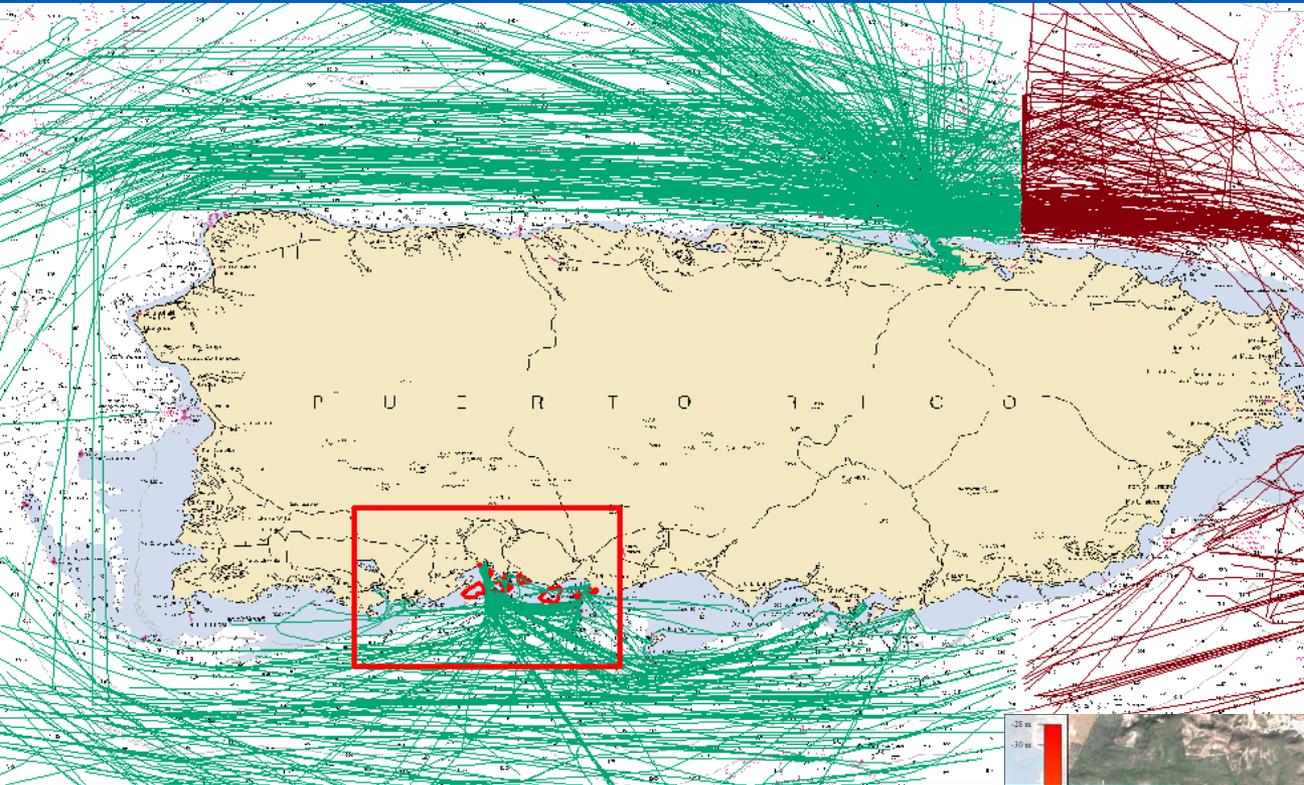
Topo-Bathy Lidar

Submerged
Obstructions

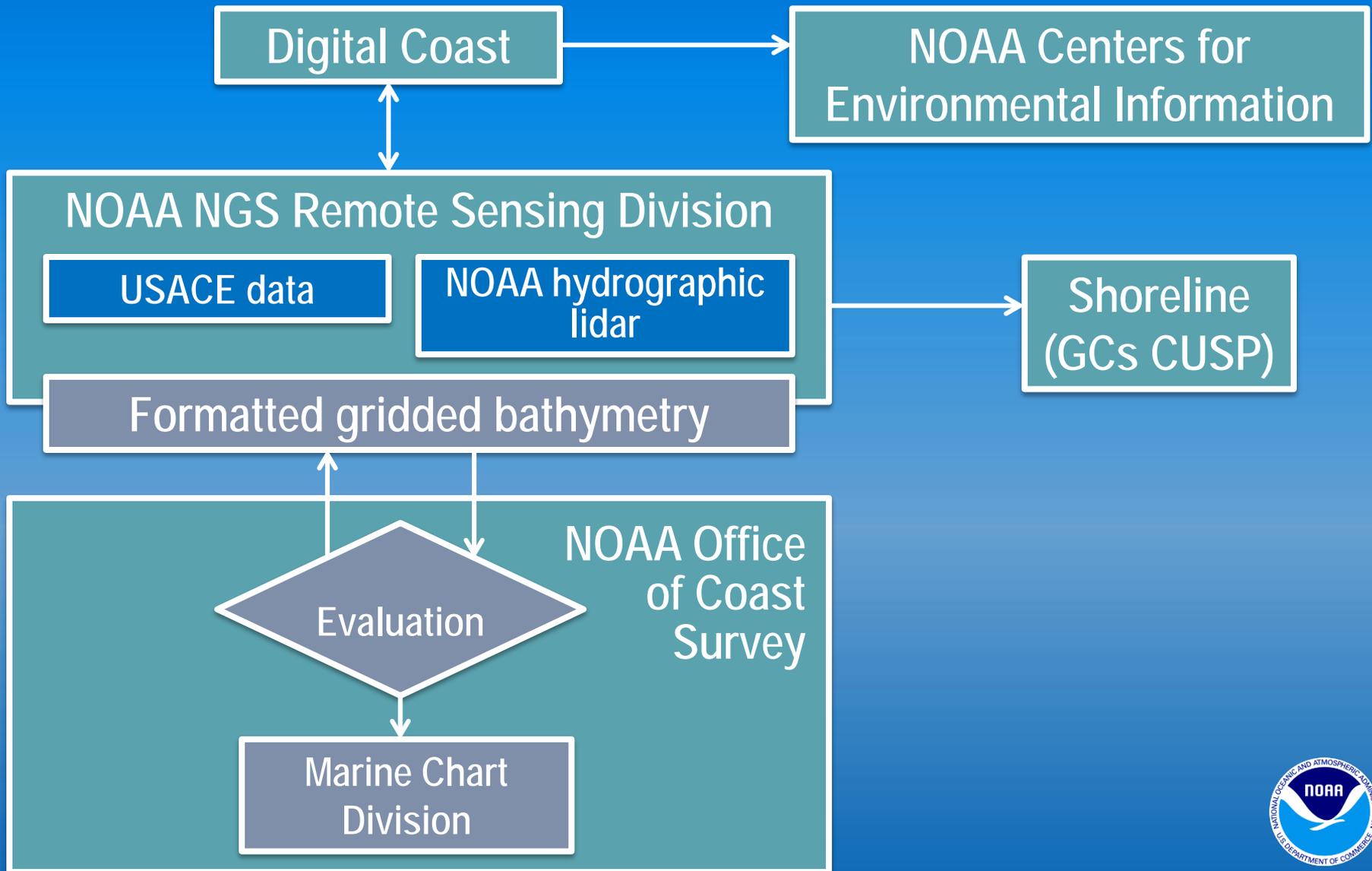
Shallow, turbid
water



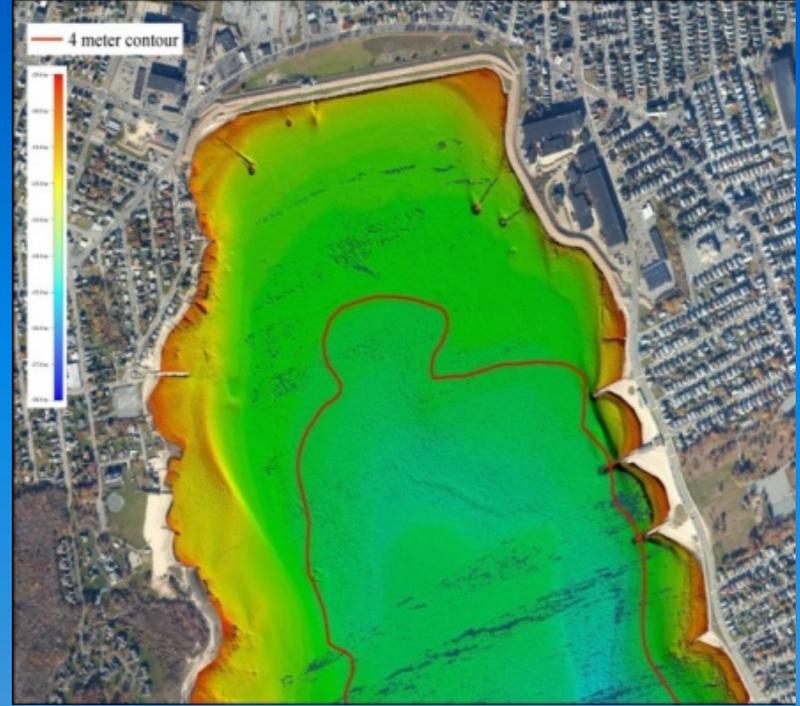
Using AIS data to determine RSD ALB priorities for navigation products



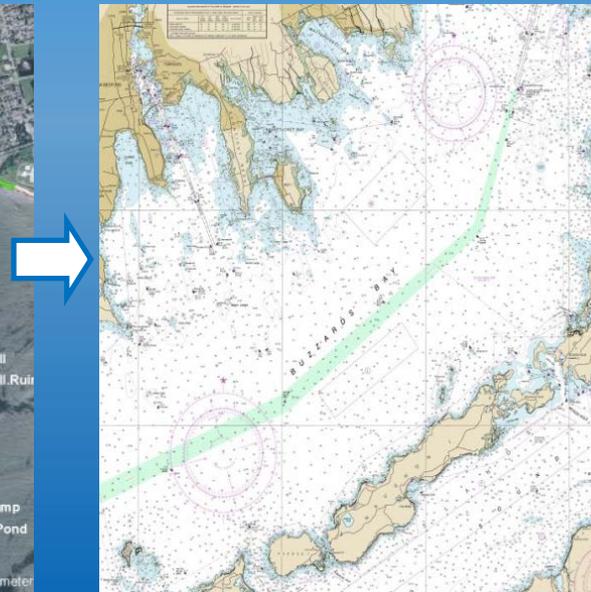
Planned Coast Survey and RSD workflow



Survey planning: Buzzards Bay



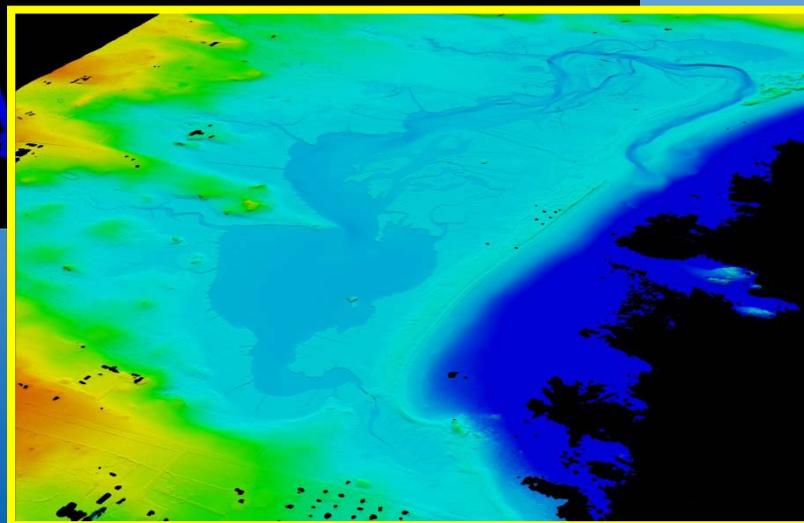
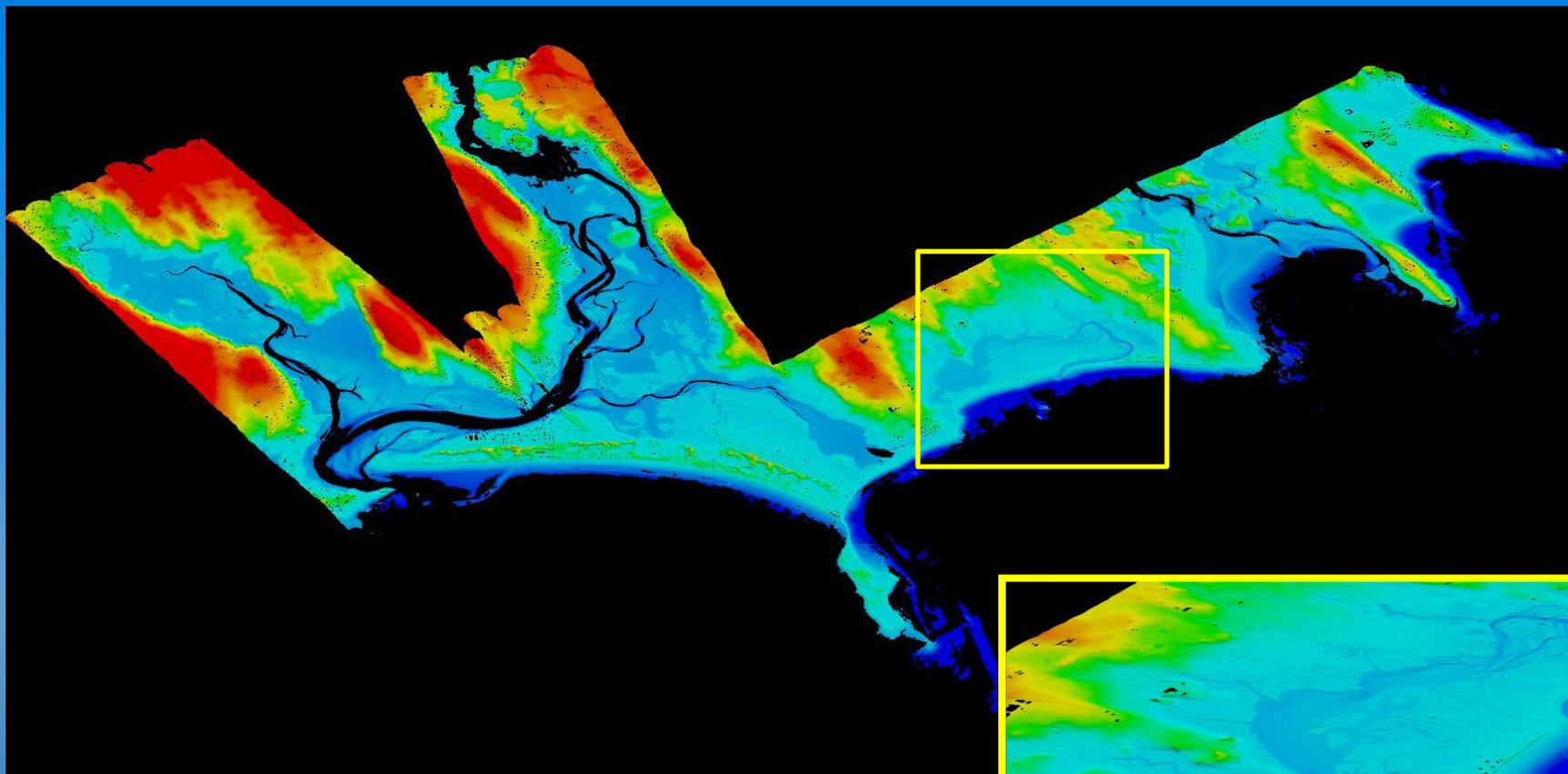
Nearshore
topobathy
lidar
acquisition
coordinated
with
hydrographic
ship data
collection

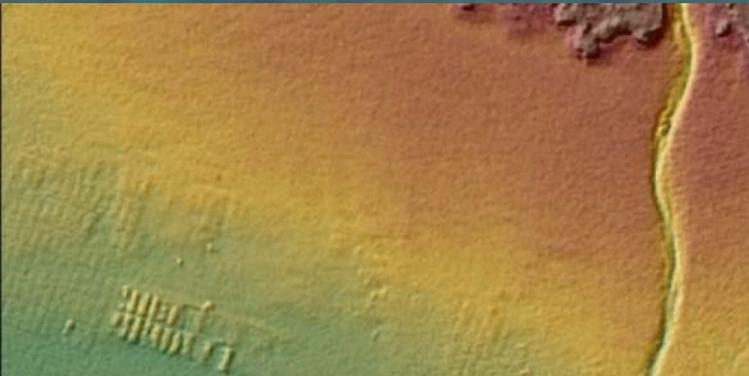
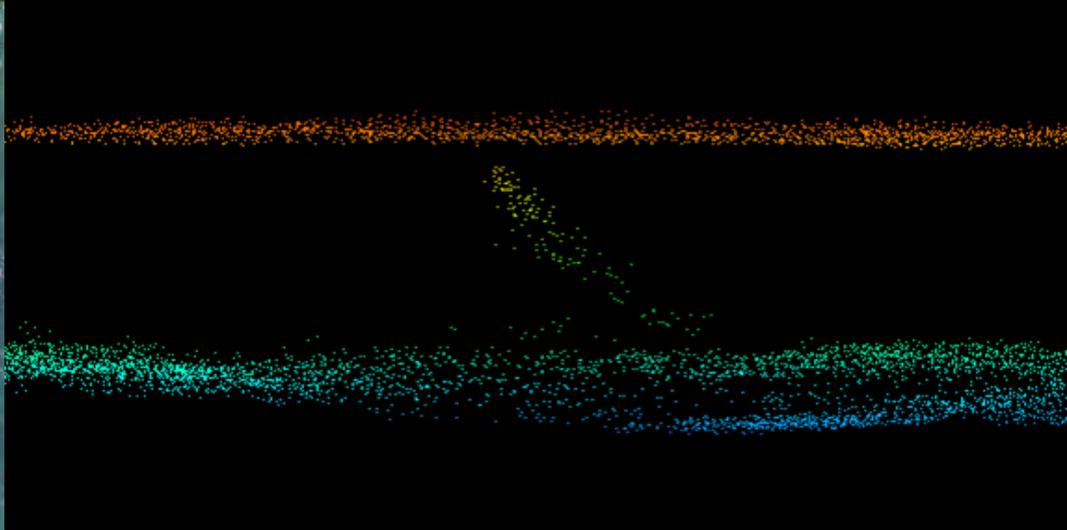
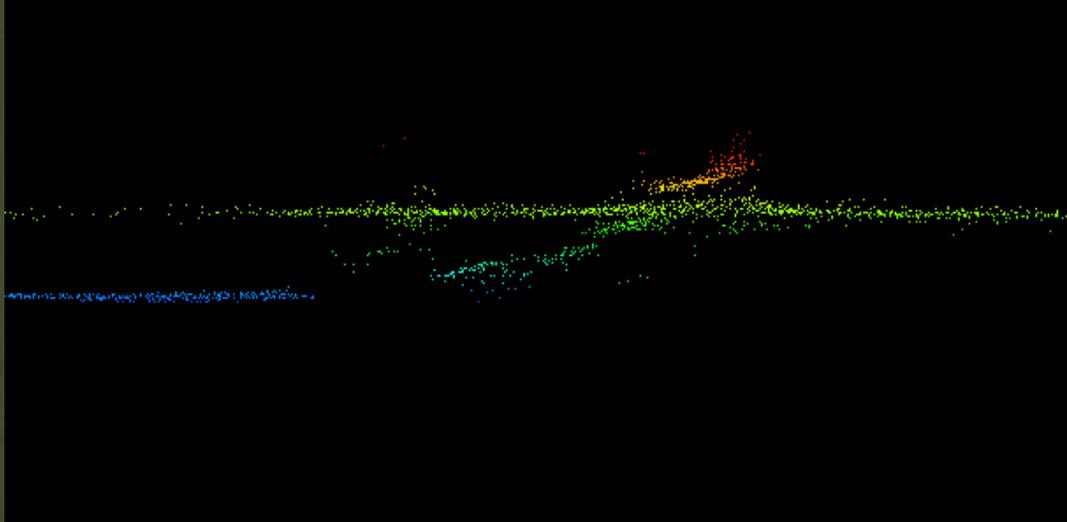


RSD
topobathy
lidar
improves
TJ
efficiency



Buzzards Bay



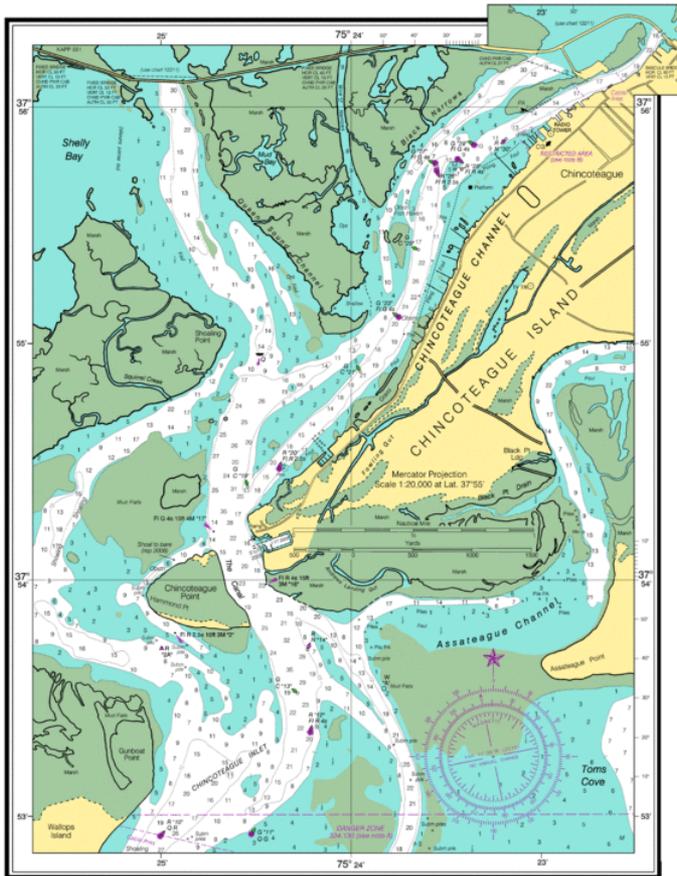


Feature/object detection



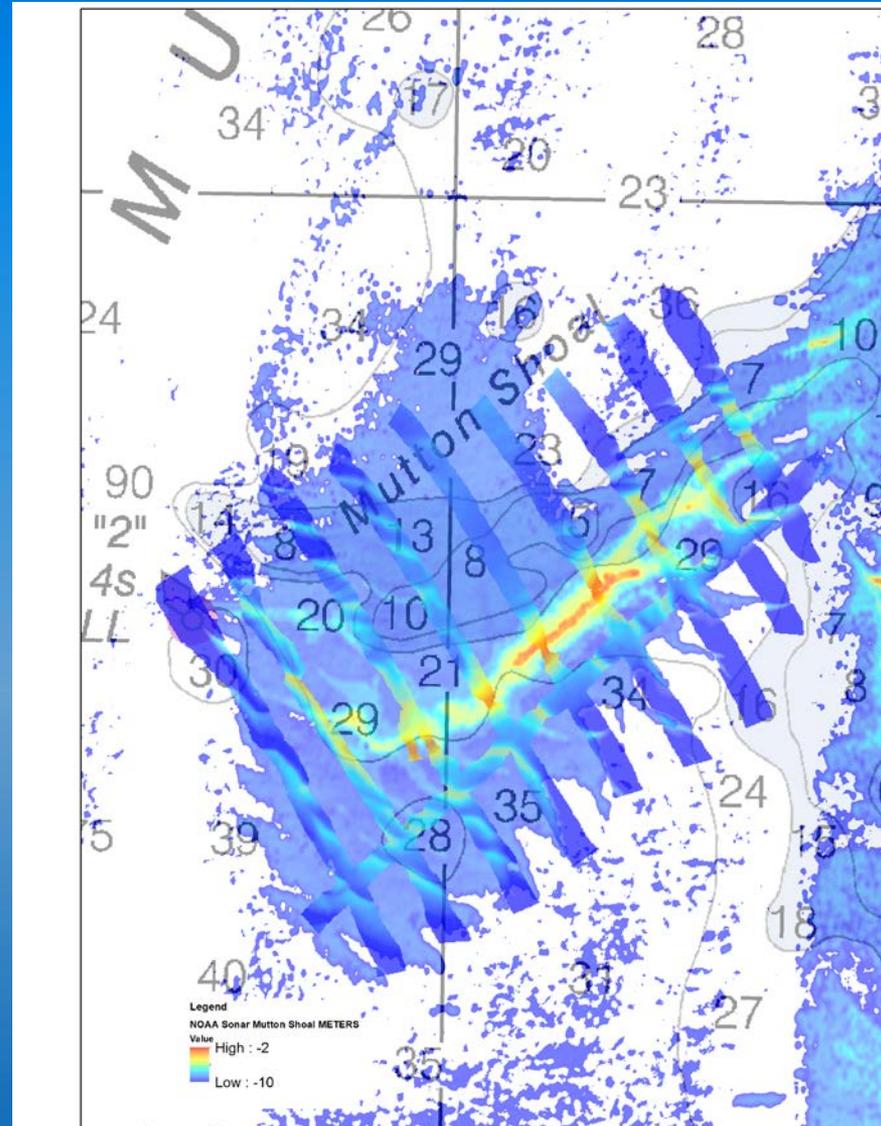
IN THE FUTURE...





Application of acoustic and topobathy data

Satellite Imagery-derived Bathymetry



Satellite Imagery-derived Bathymetry

