



# Specialized Technologies for Ports

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# Specialized Technologies for Ports

- **Map Analyst** – A GIS Solution for Ports
- **Beneficial Use of Dredged Material (BUDM)**
- **Advanced Technologies**



Client Focused. Technology Driven.





# MAP ANALYST

GIS SOLUTION | DATA MANAGEMENT AND VISUALIZATION







# BENEFICIAL USE OF DREDGED MATERIAL (BUDM)



Through collaboration, dredged material can be used in an environmentally sound manner.

- Coastal restoration
- Nourishment of beaches
- Rebuilding of wetland habitats







BUDM	Acres
1	417.4
2	143.7
3	168.4
4	221
5	361.9
6	53.9
7	351.5
8	824.7
9	1829.8
10	771.7
Driftwood LNG Facility	791.6
<b>TOTAL ACRES</b>	<b>5829.2</b>

Pipeline route depicted is the proposed primary dredge pipeline route. Particle size variances of the dredge material may result in the use of flex dredge pipe at each terminal end inside of each BUDM. In order to meet site specifications, flex dredge pipe may be used throughout the BUDM to manipulate the dredge spoil placement.



## Legend

- BUDM Area Boundary
- Dredge P/L Route

## Driftwood LNG Facility STREAM WETLAND SERVICES

PROPOSED DRIFTWOOD LNG FACILITY  
BENEFICIAL USE OF DREDGE MATERIAL  
AND MITIGATION  
CALCASIEU PARISH, LOUISIANA

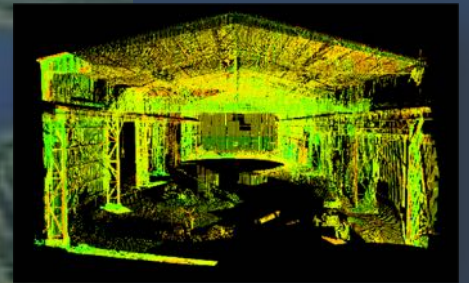
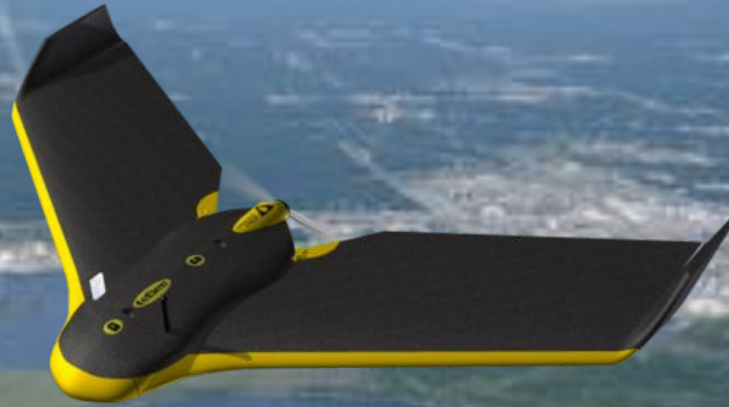
Sheet 15 of 63





# ADVANCED TECHNOLOGIES

Tools to take your projects to the next level.



GPS/ROBOTIC TOTAL STATION | HIGH DEFINITION LASER SCANNING | UNMANNED AERIAL VEHICLES (UAVs)

UNDERWATER ACOUSTICS | DIMENSIONAL CONTROL | SUBSURFACE UTILITY INVESTIGATION



# Rockefeller Refuge | 107-Acre Mitigation

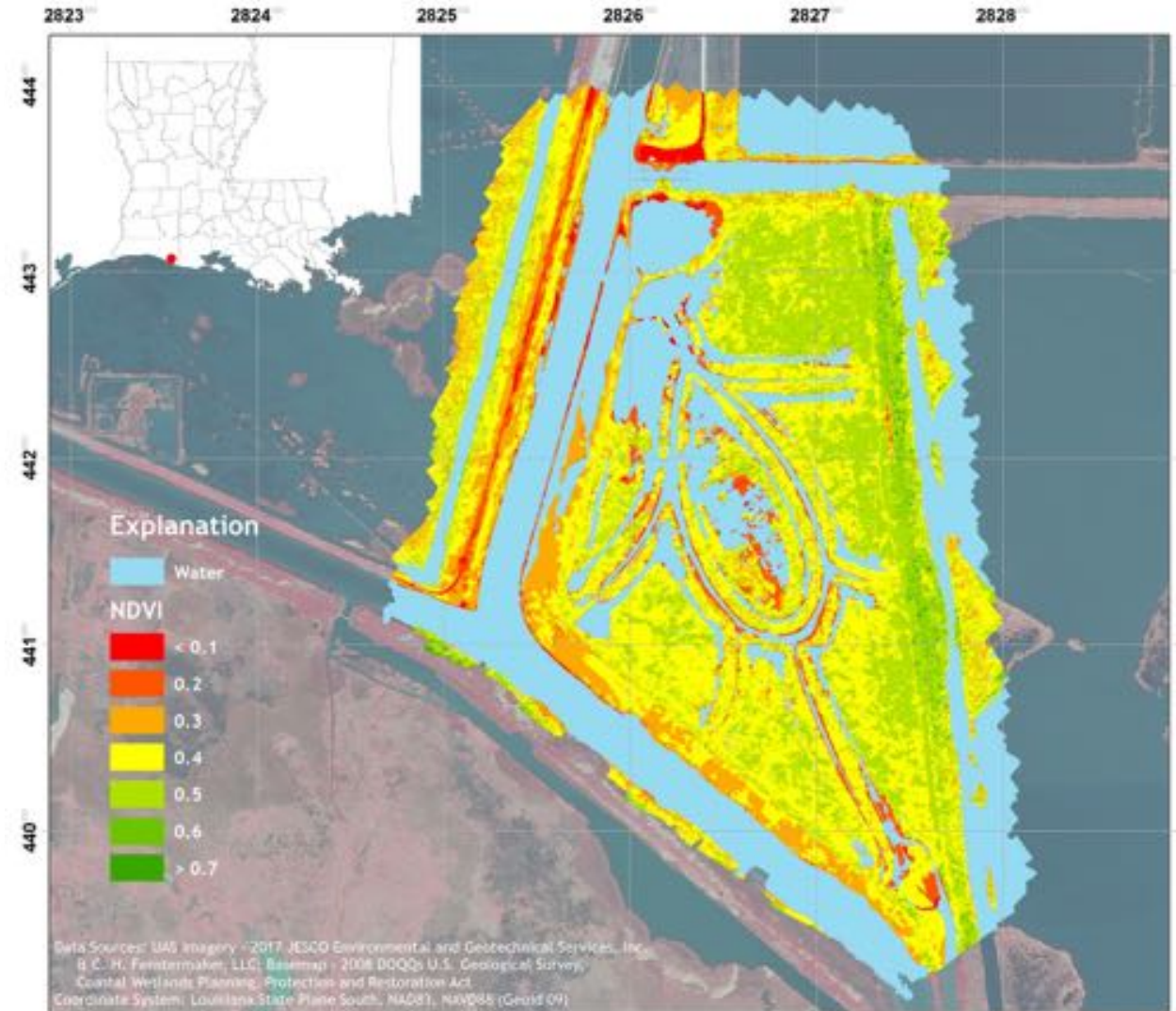
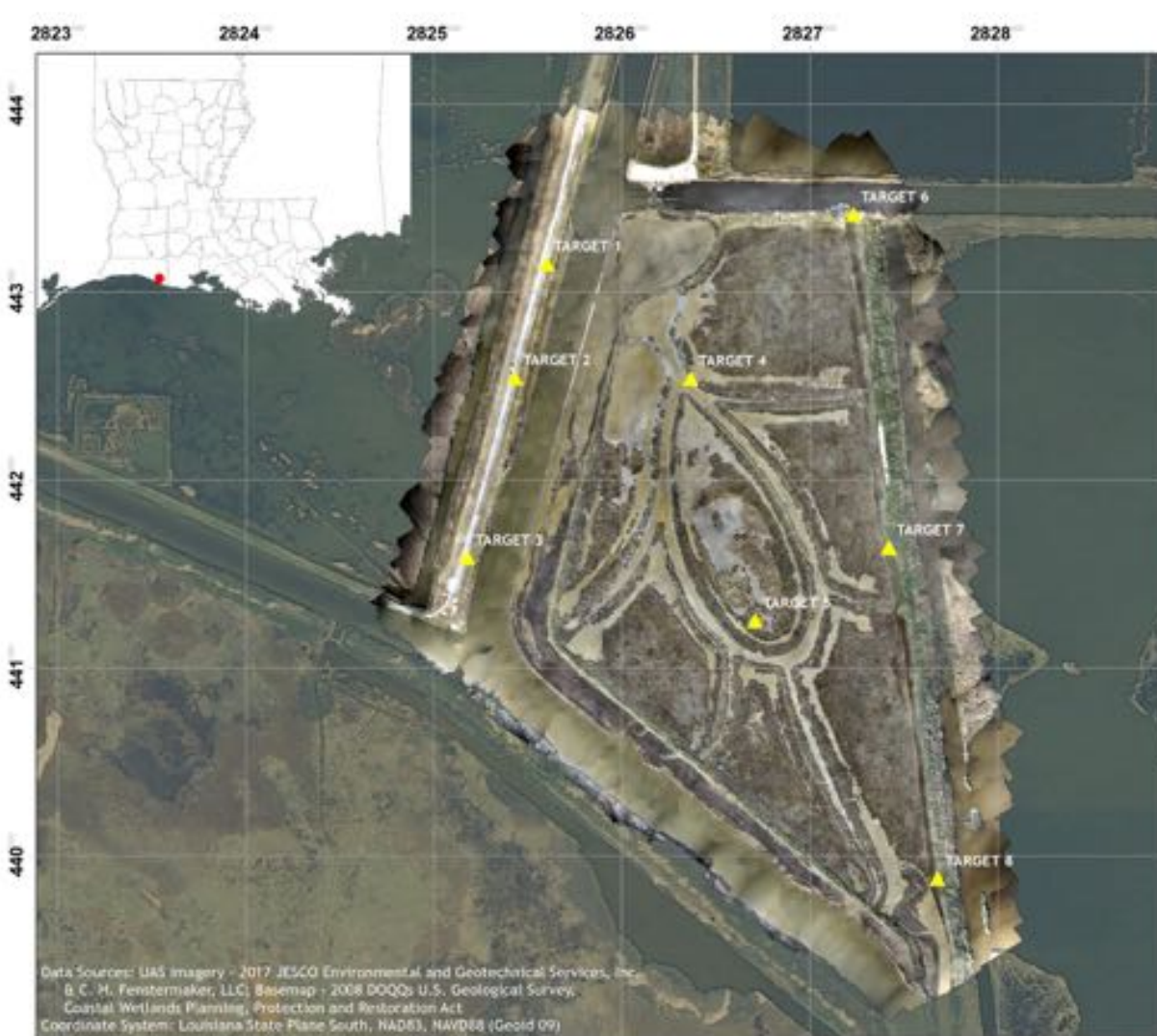








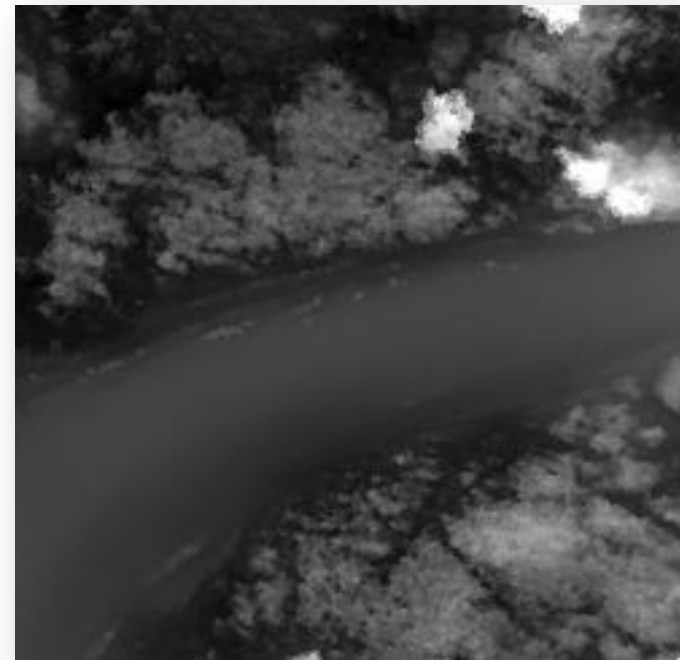
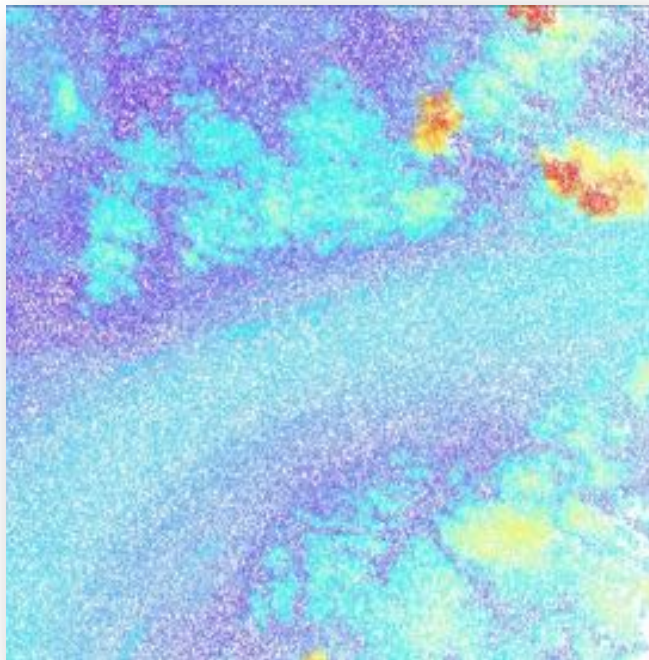
# Multispectral Vegetative Analysis





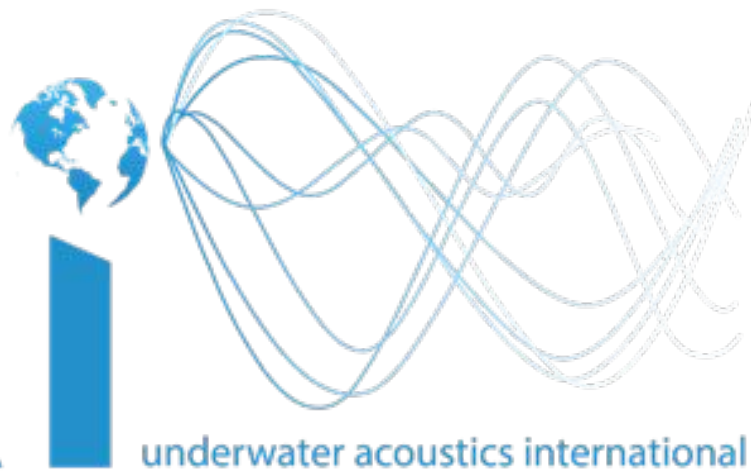
# UAV Image Processing Photogrammetry

Through photogrammetry, digital terrain models can be created for volumetric analysis and verification.

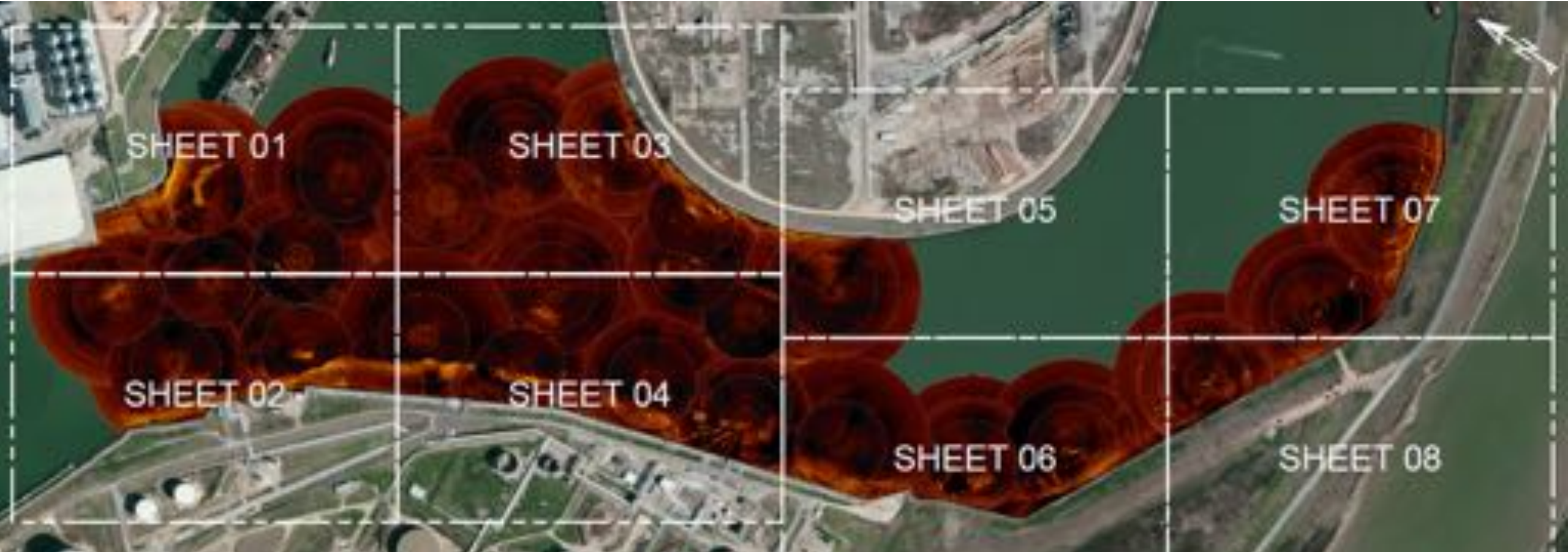




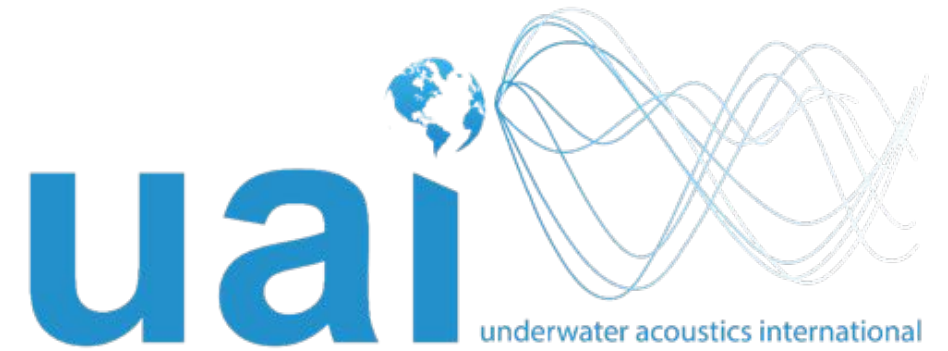
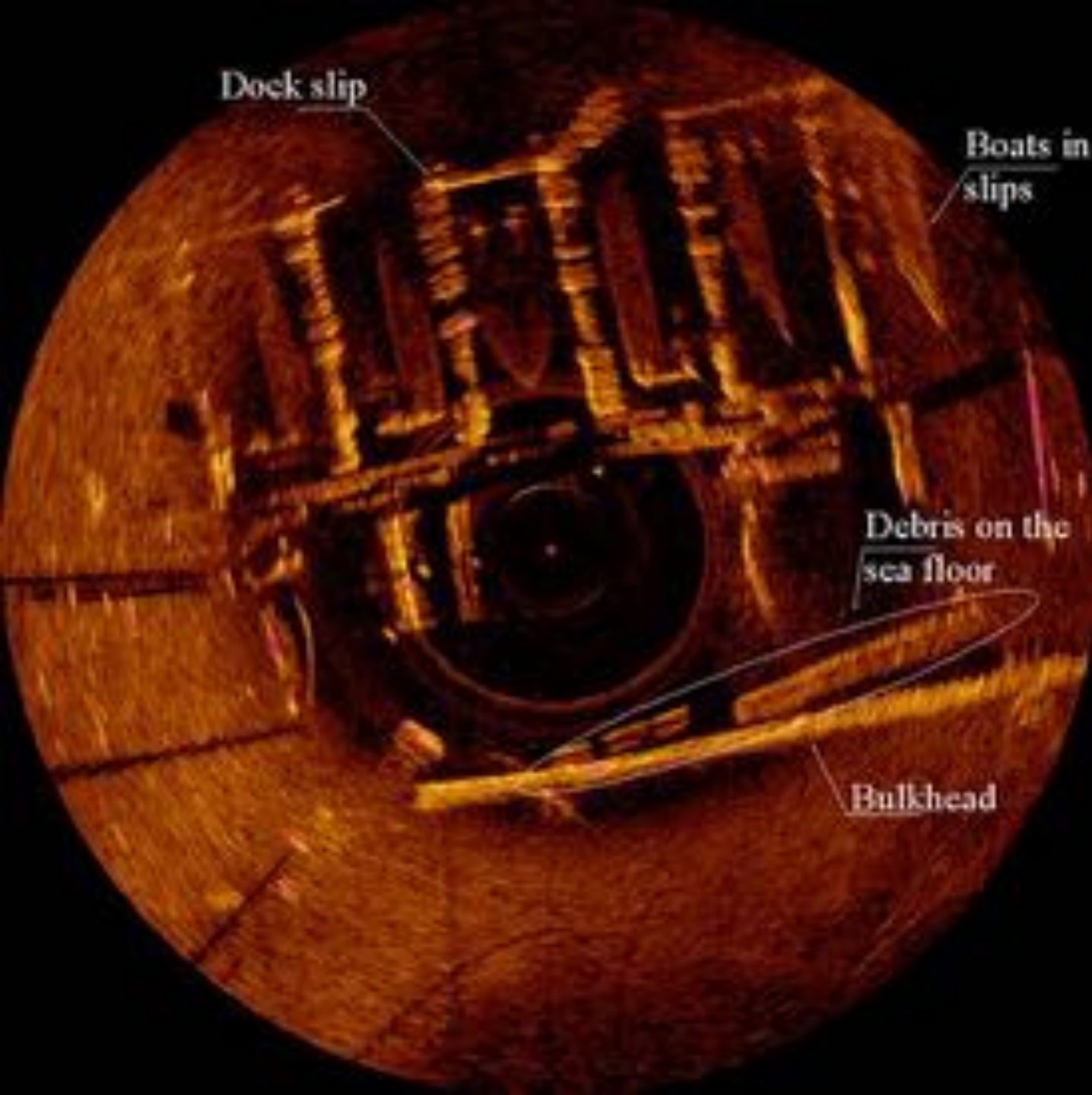
uai



underwater acoustics international







- **Wharf & Piling Inspection**
- **Scour Investigation**
- **Water Bottom Inspection**



# Port of Montes del Plata Uruguay

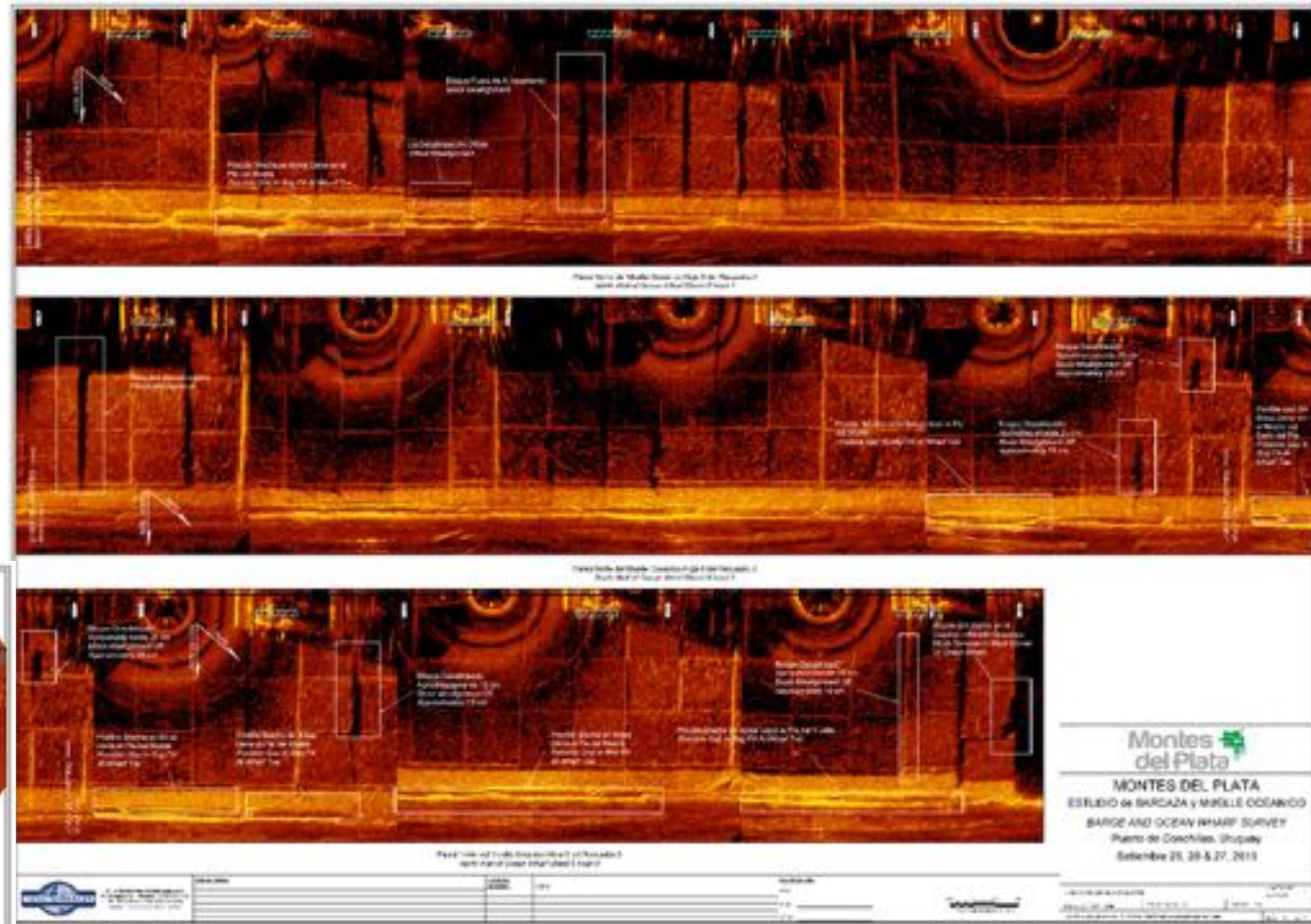
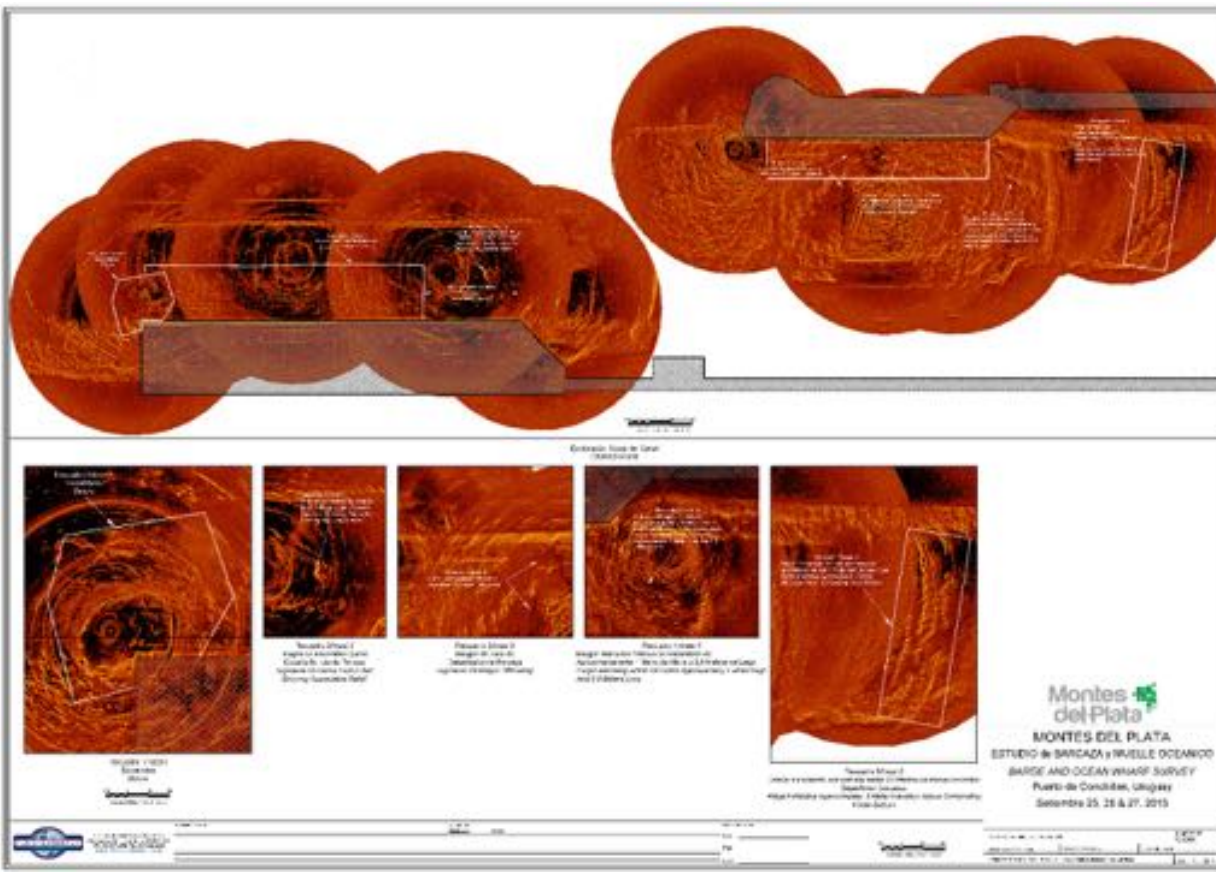




# Port of Montes del Plata

## Uruguay

Examine and document new Port at Pulp Mill to determine if built to specifications



Inspect approach and egress to dock to establish a baseline for future reference





**Port of New Orleans**  
**Poland Avenue Wharf**

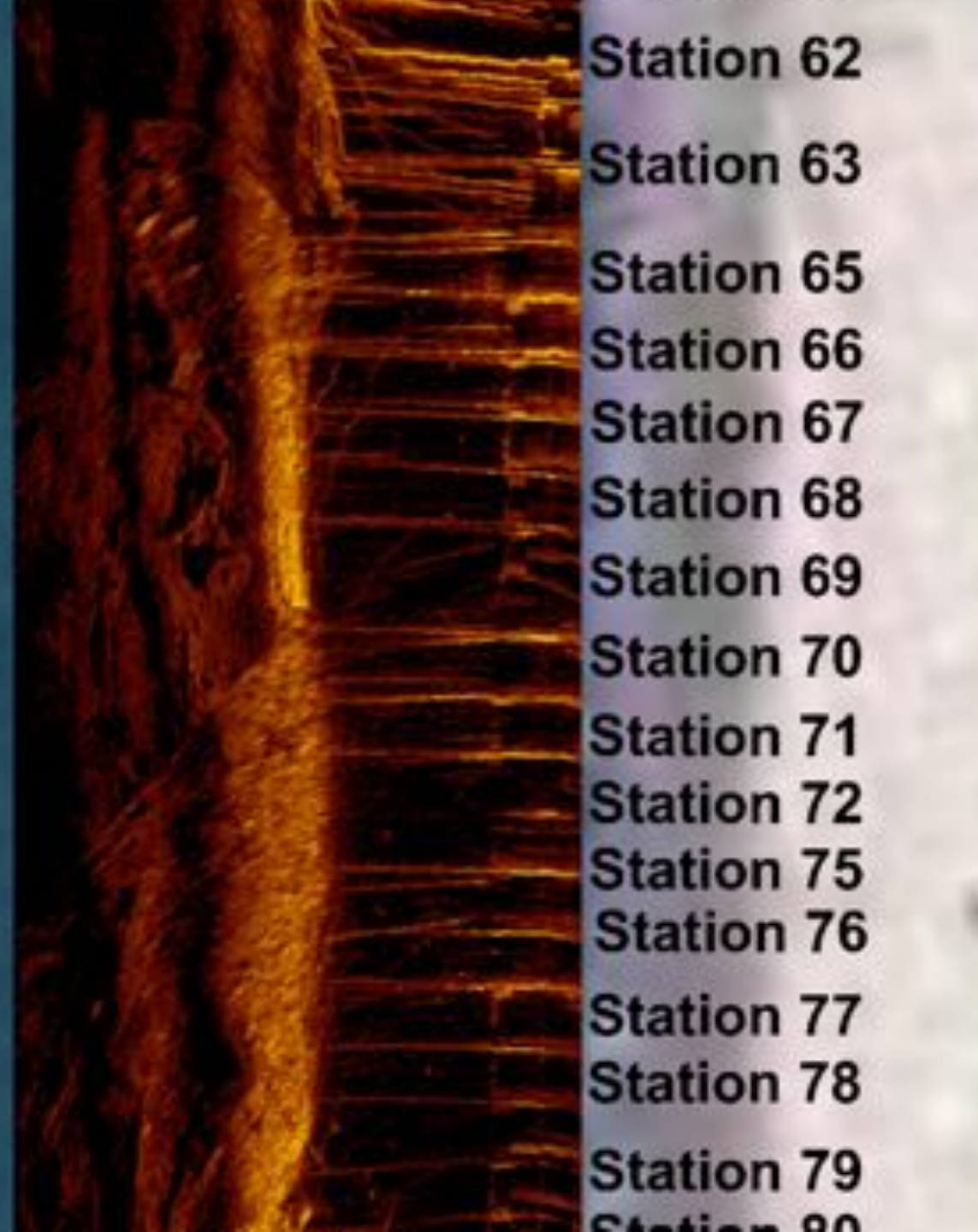
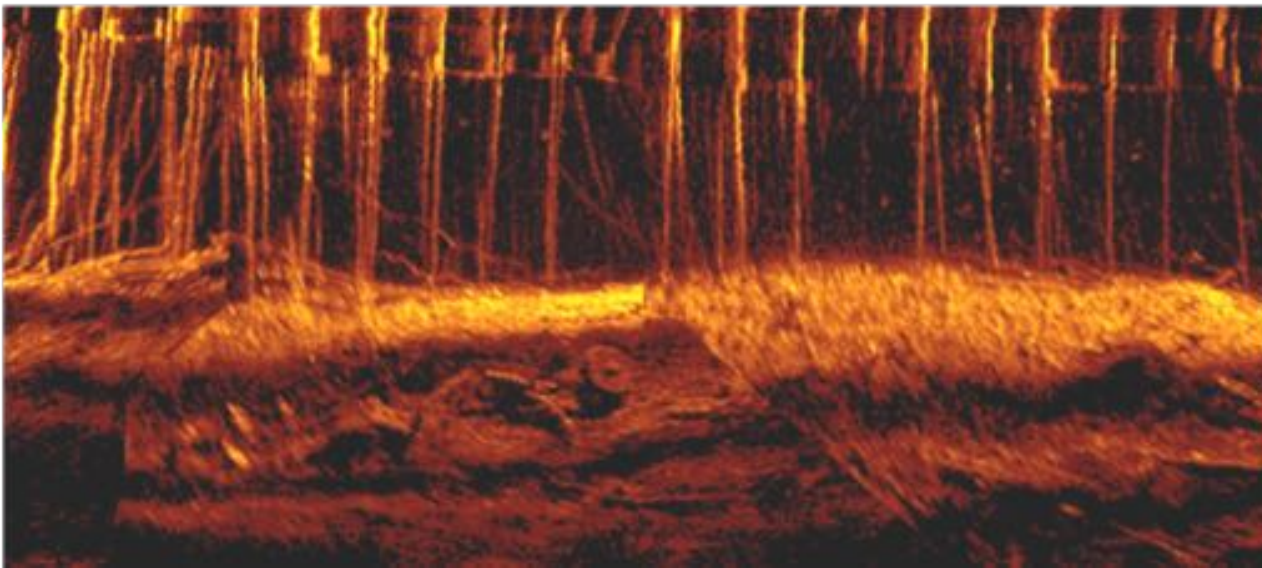




# Port of New Orleans

## Poland Avenue Wharf

- ✓ Underwater inspection of Poland Avenue Wharf
- ✓ Due diligence to examine 100+ year old structure
- ✓ Investigation of potential river bank slide confirmed need for further geotechnical investigation



Station 62

Station 63

Station 65

Station 66

Station 67

Station 68

Station 69

Station 70

Station 71

Station 72

Station 75

Station 76

Station 77

Station 78

Station 79

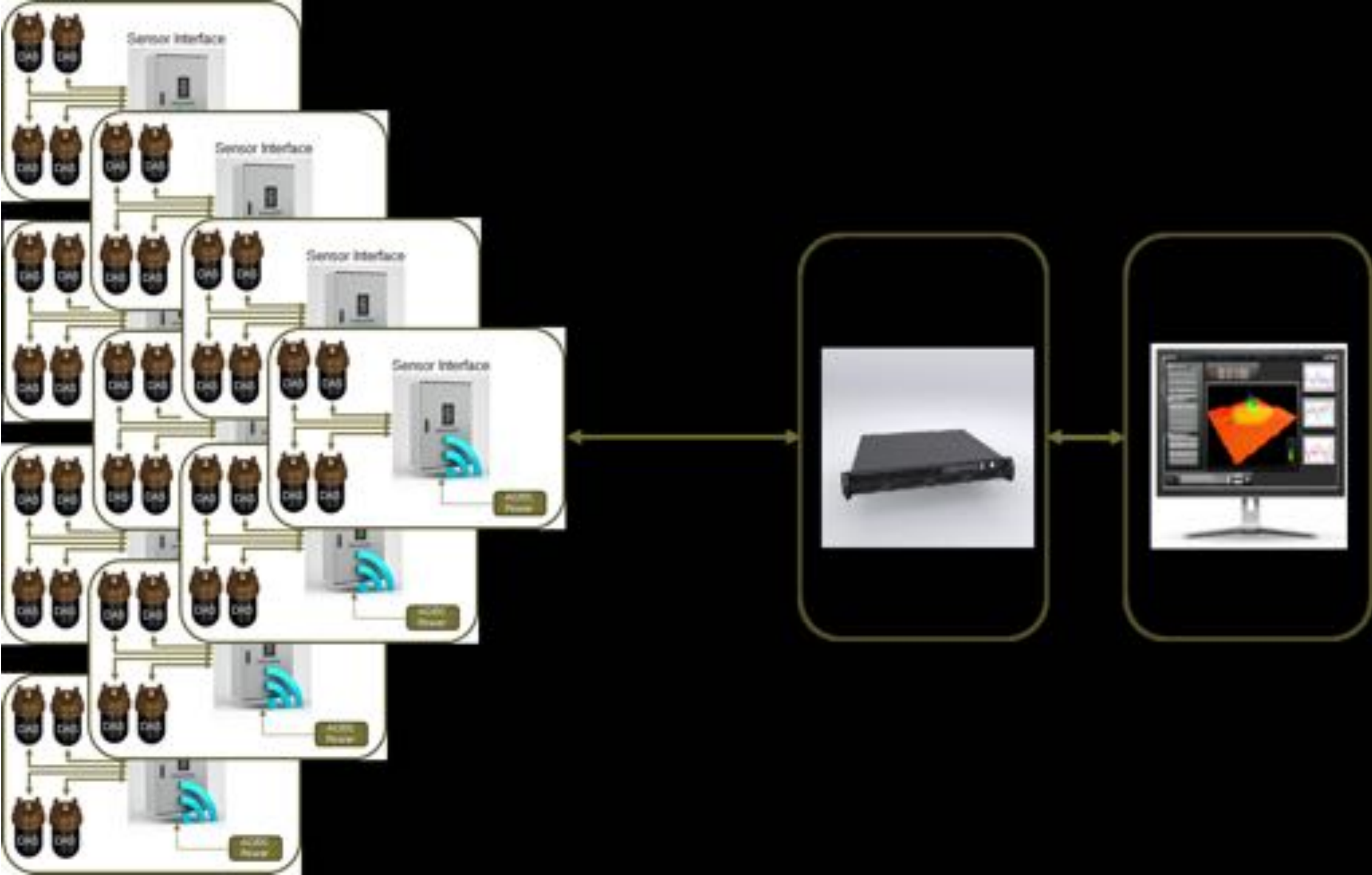
Station 80



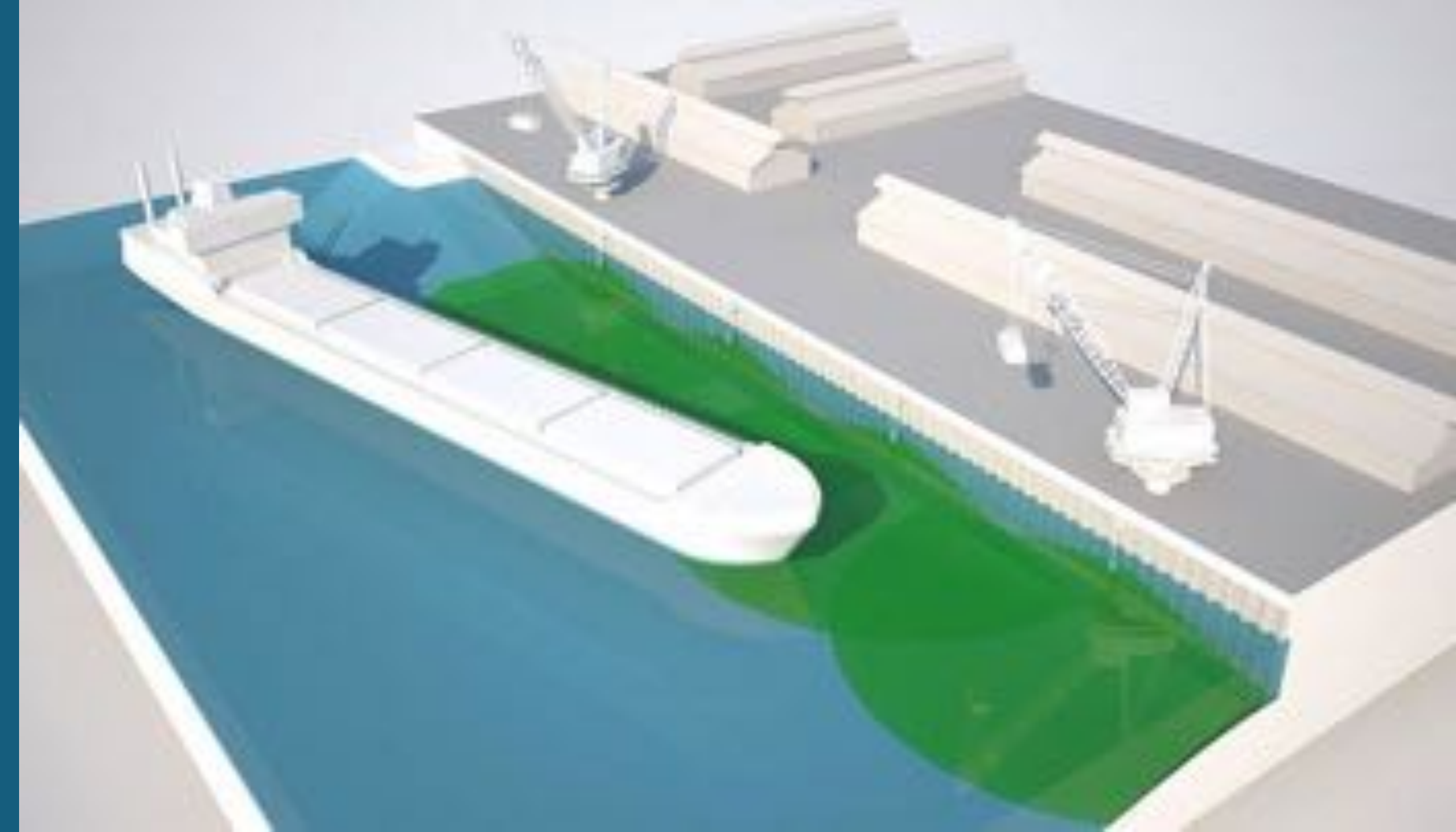
# BERTH DEPTH MONITORING AND REPORTING SYSTEM











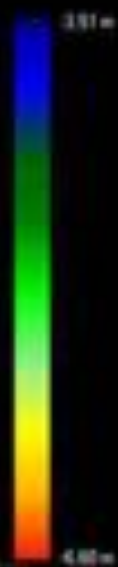
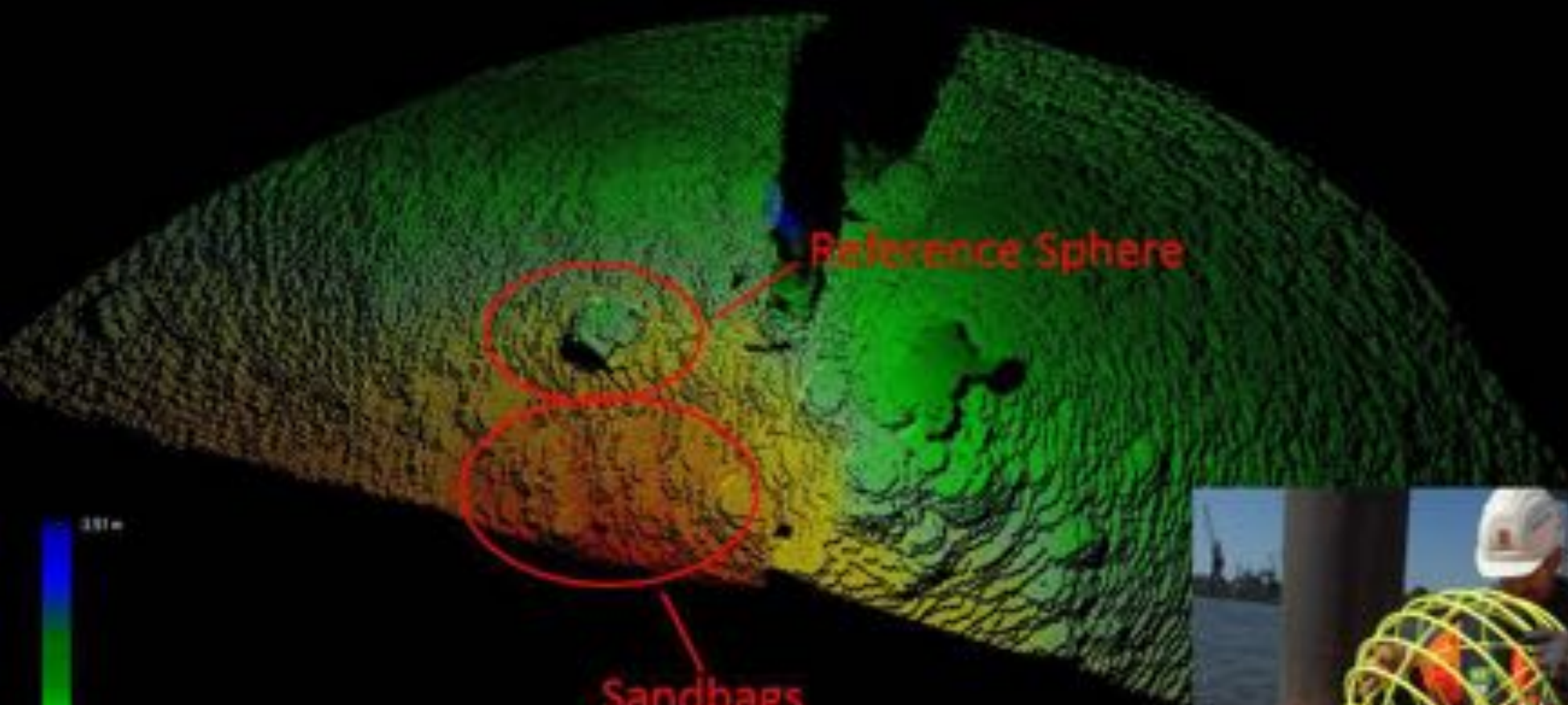








KONGSBERG







# Questions?



Client Focused. Technology Driven.