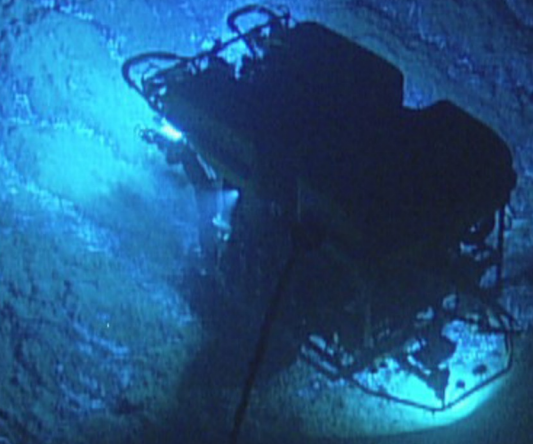
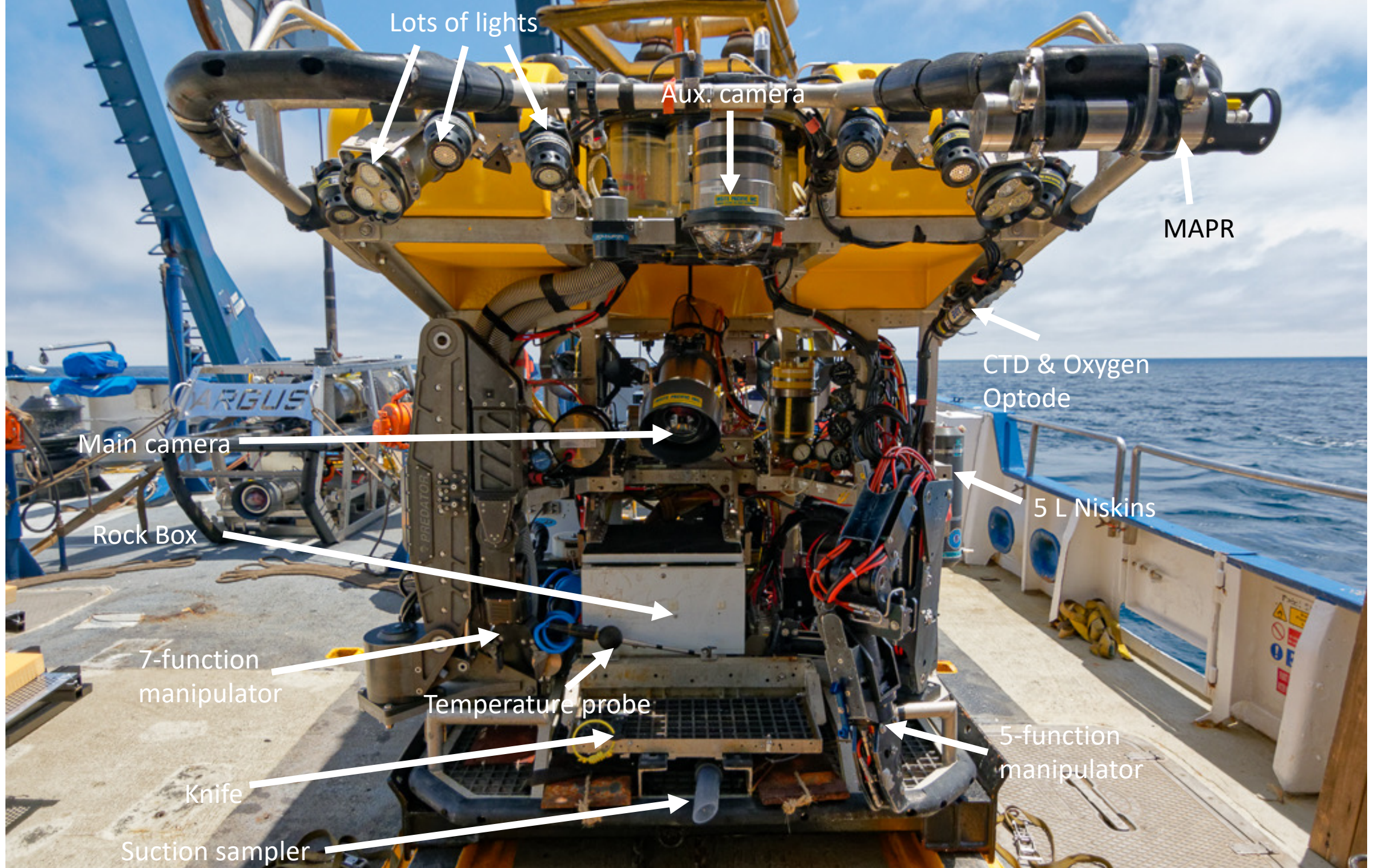


Deep Submergence Science Committee: New User Meeting

Nicole Raineault





Lots of lights

Aux. camera

MAPR

CTD & Oxygen
Optode

Main camera

5 L Niskins

Rock Box

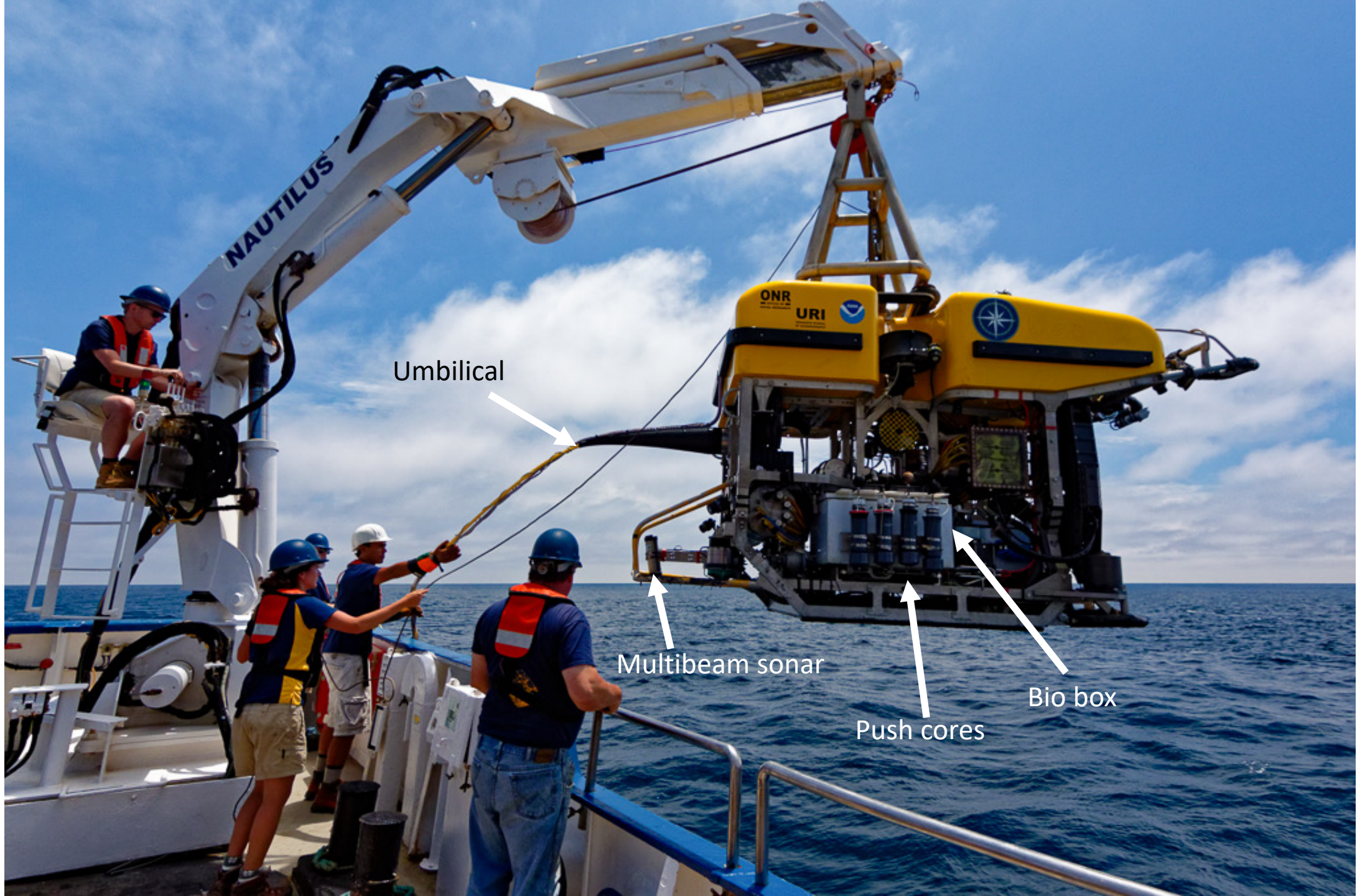
7-function
manipulator

Temperature probe

5-function
manipulator

Knife

Suction sampler

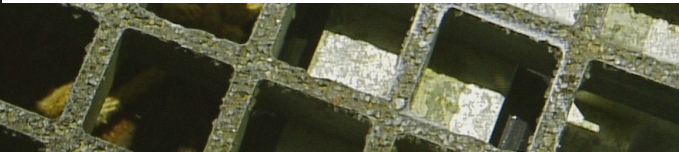
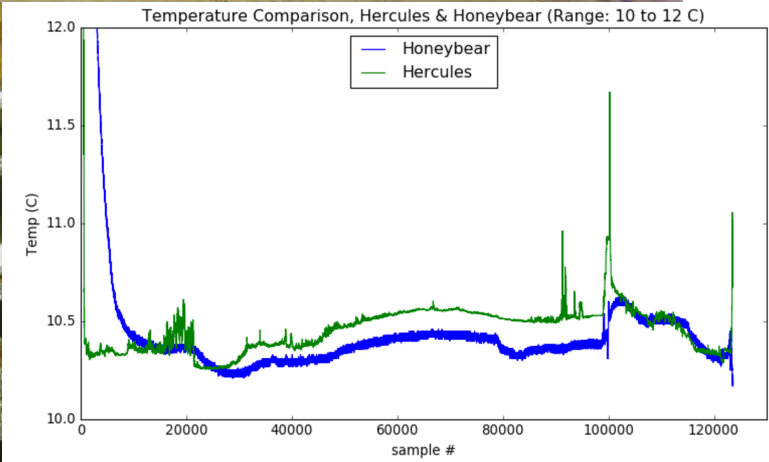
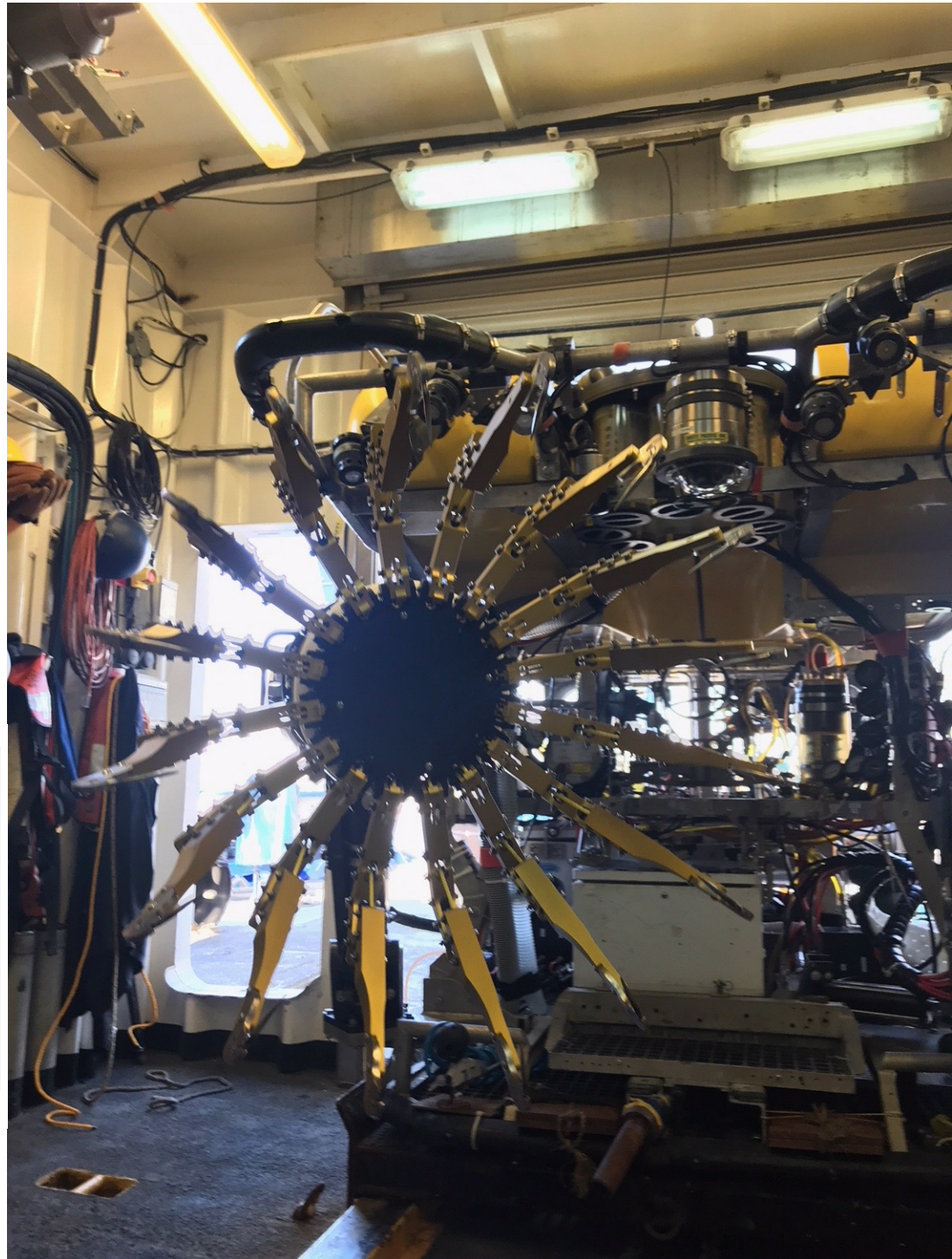
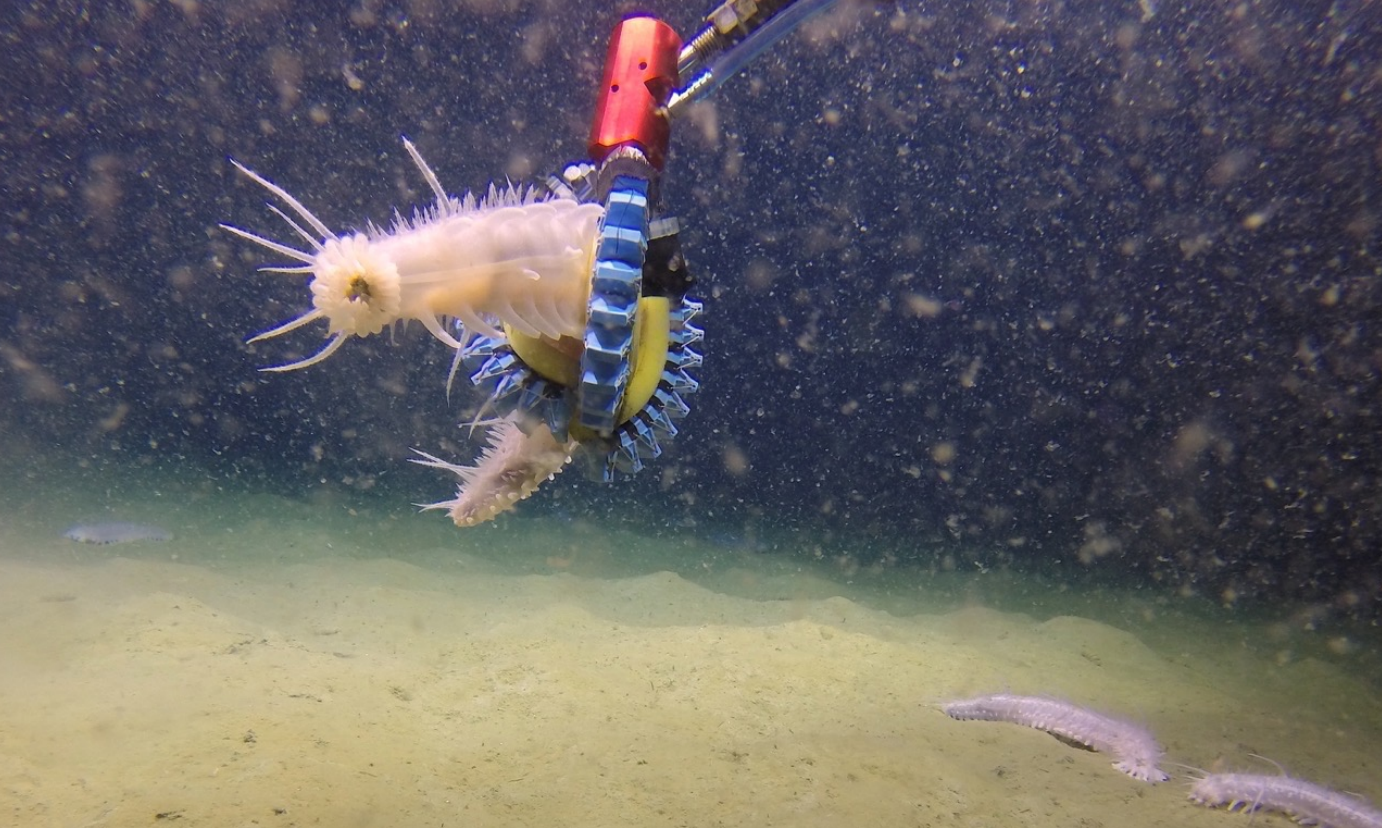


Umbilical

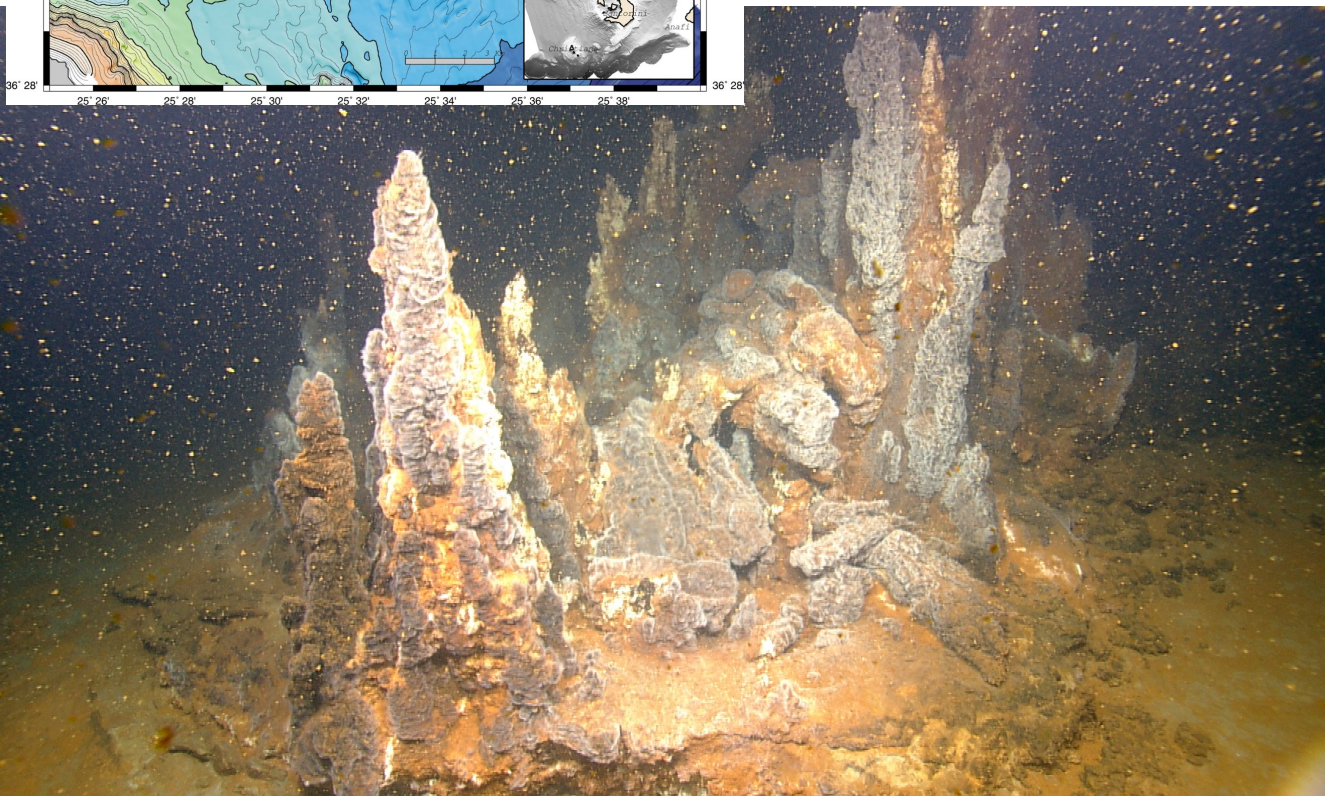
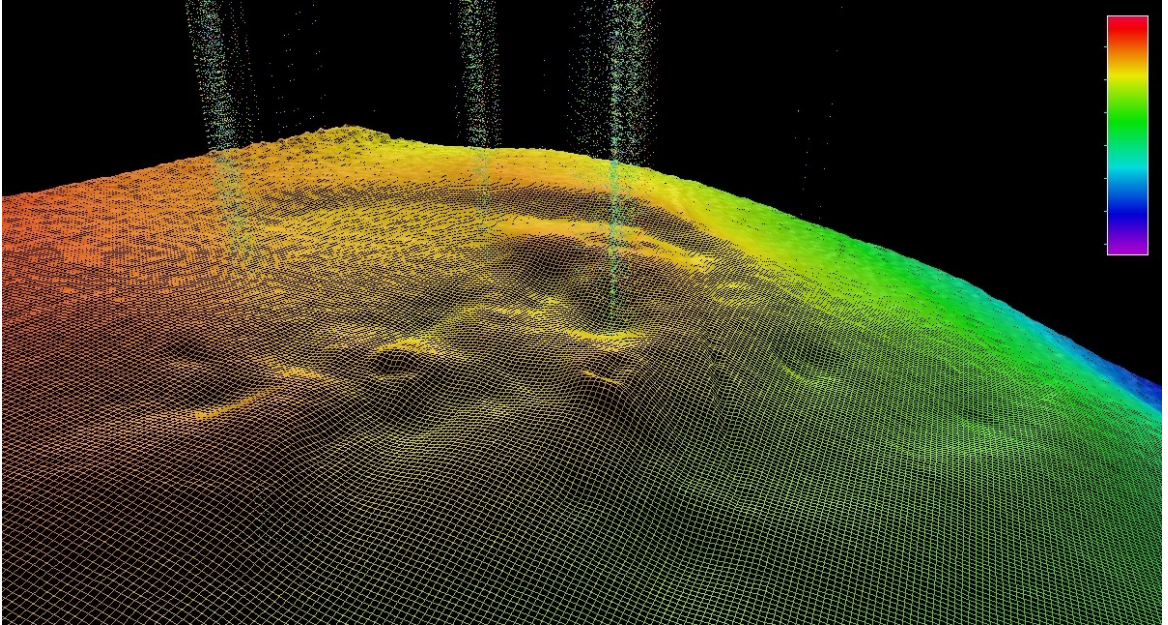
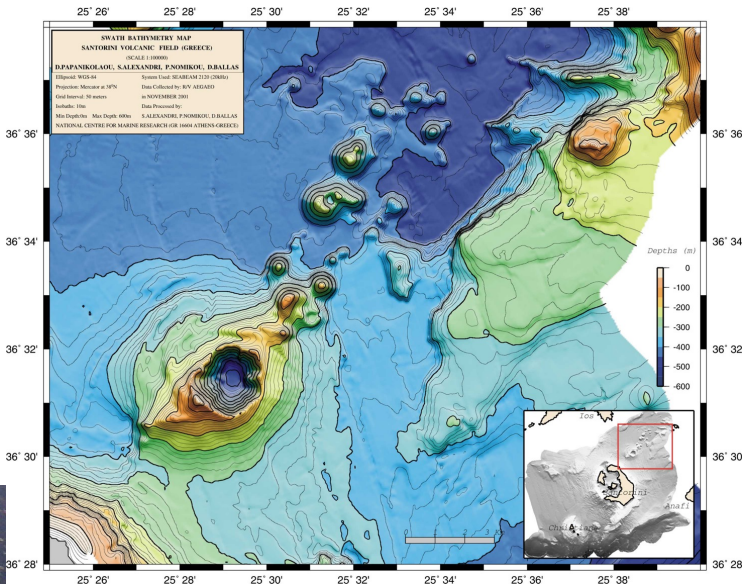
Multibeam sonar

Push cores

Bio box



It's always helpful to have a map...



And help from a few “friends”

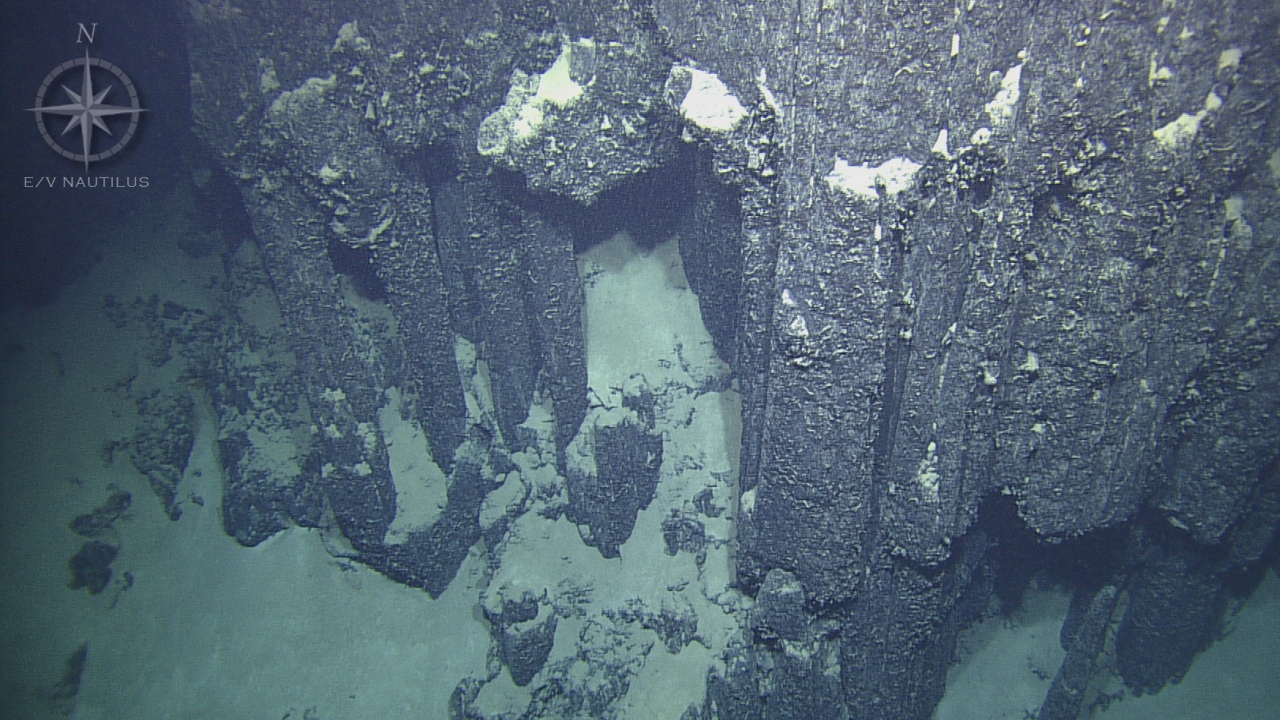


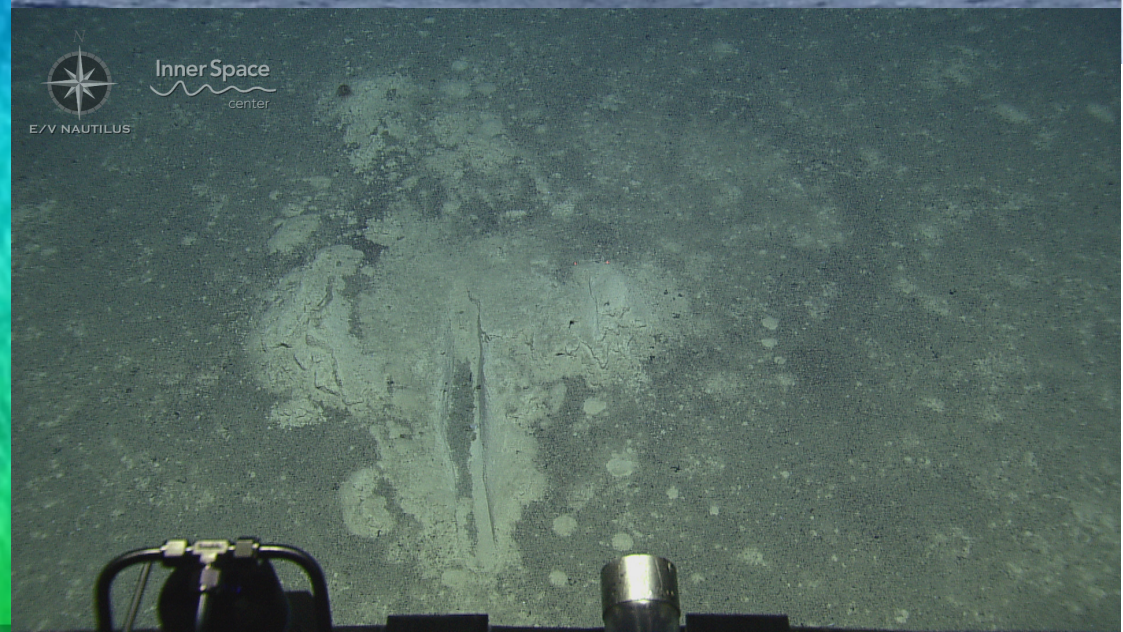
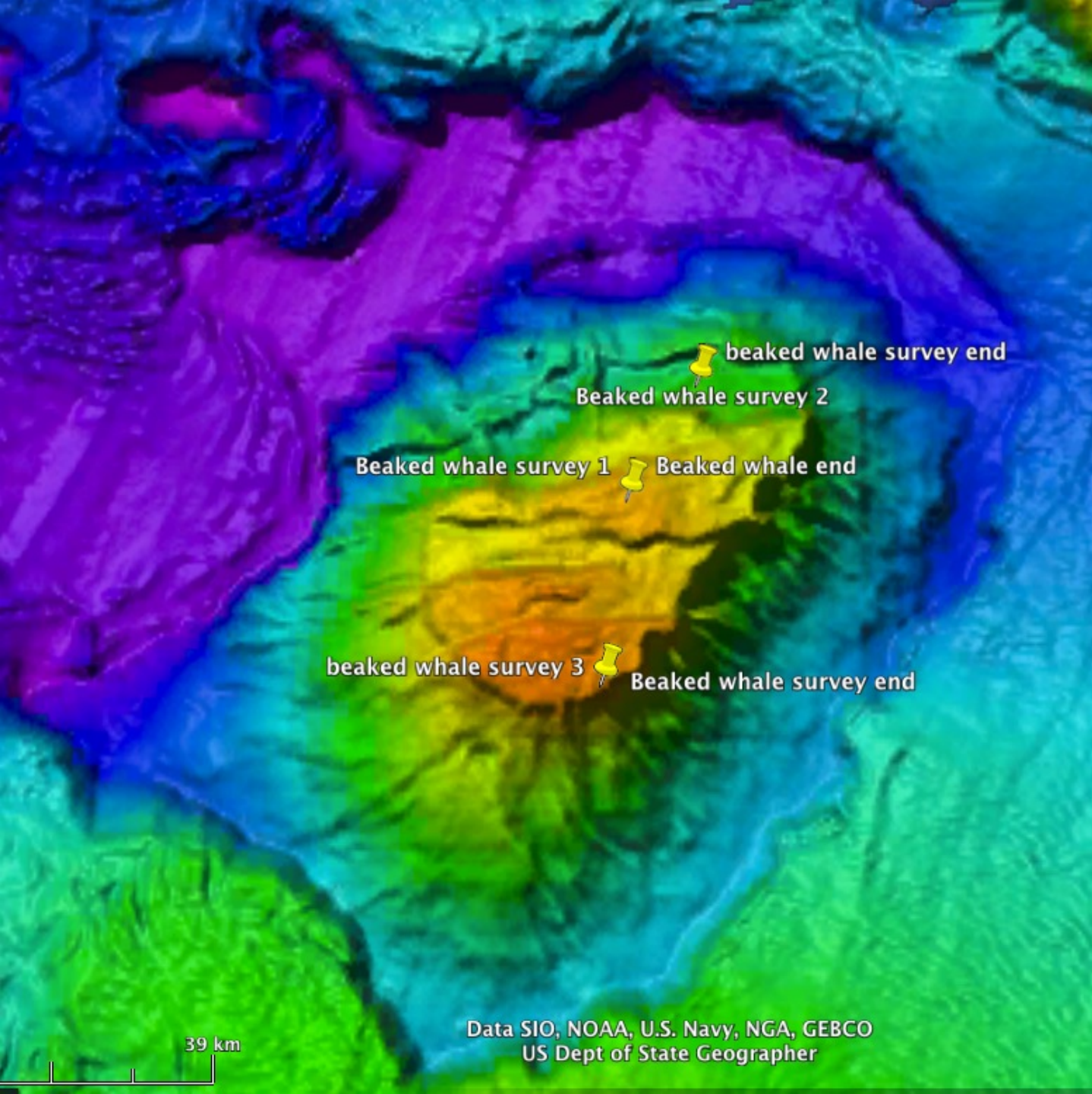
Telepresence science

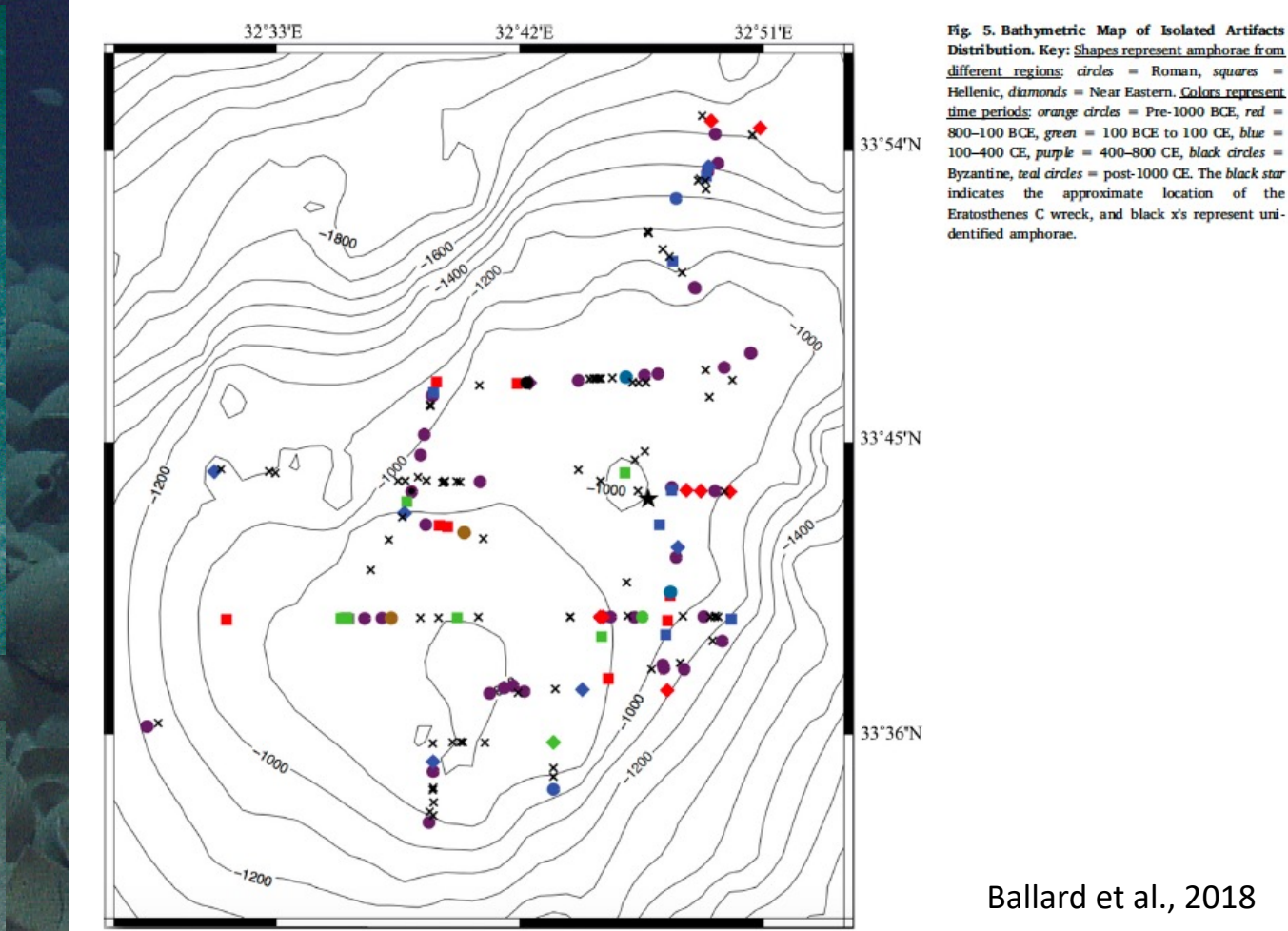
- Large network of scientists opportunistically participating in expeditions

Remote science

- Science leadership from shore throughout an expedition process







Ballard et al., 2018



219 isolated amphorae & 3 ancient shipwrecks

Acknowledgements

Videos & photos: Ocean Exploration Trust

Participation: Florida Institute of Oceanography

