



R/V Parke Snavelly

A Lot of Science with a Little Boat

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Then...



R/V S.P. Lee



R/V Kelez



R/V Sea Sounder

Then...

- 24,000 sq. ft. shop
- Acre of yard space
- Deepwater port facility in Redwood City, CA
- 50 people on staff



Now...

- Fleet of small boats
- Marine Facility in Santa Cruz
- 9 Technicians

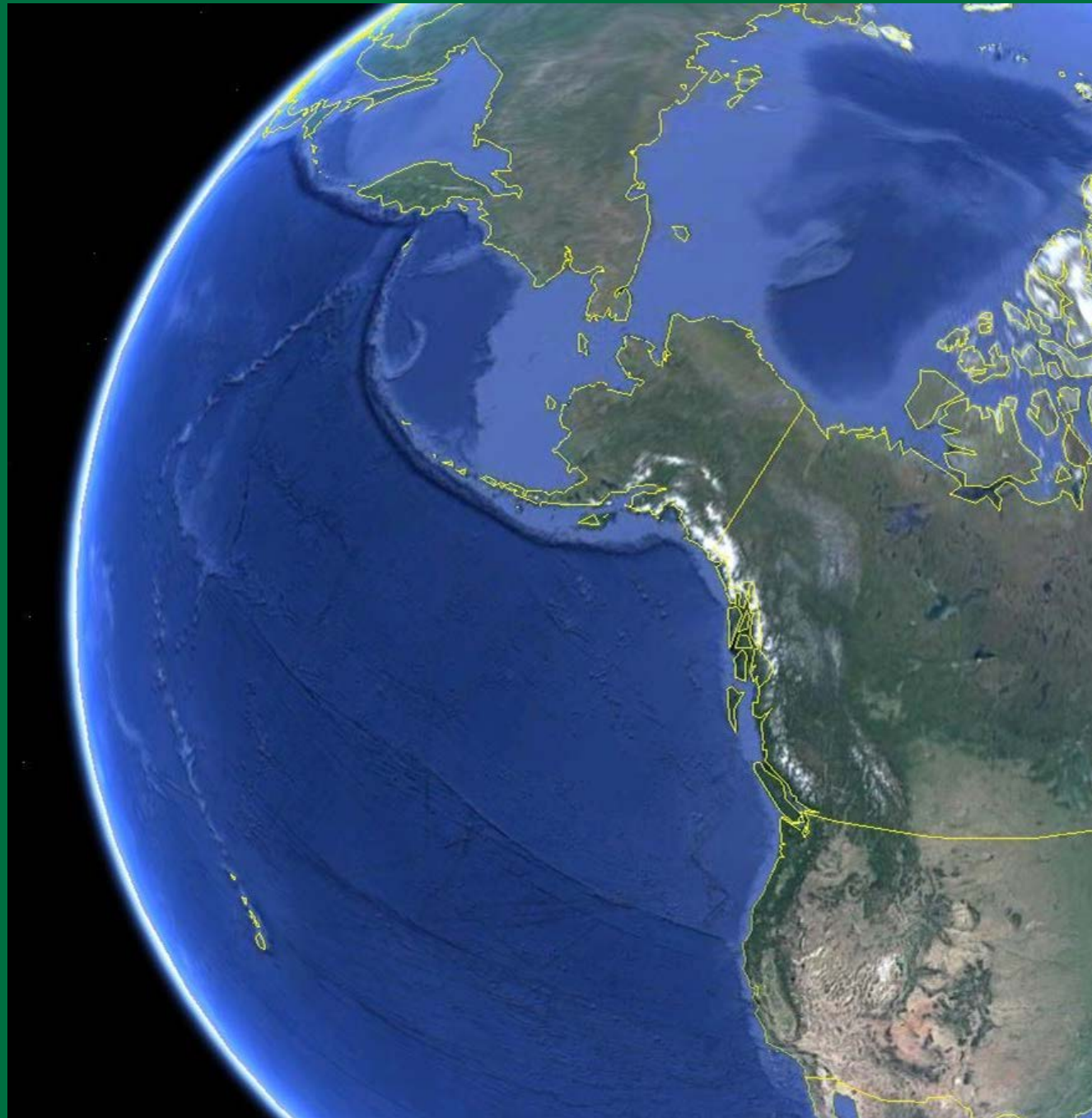


Coastal and Marine Geology Science Centers



Pacific Region:

- Arctic
- Alaska
- Pacific Islands
- Washington
- Oregon
- California



R/V Parke Snavely



Specs

- 36'x10'6" trailerable aluminum catamaran with 3' draft
- twin Volvo 310hp inboard/outdrive
- 200 mile endurance @ 20kts
- 750 mile endurance @ survey speed
- max speed 30kts



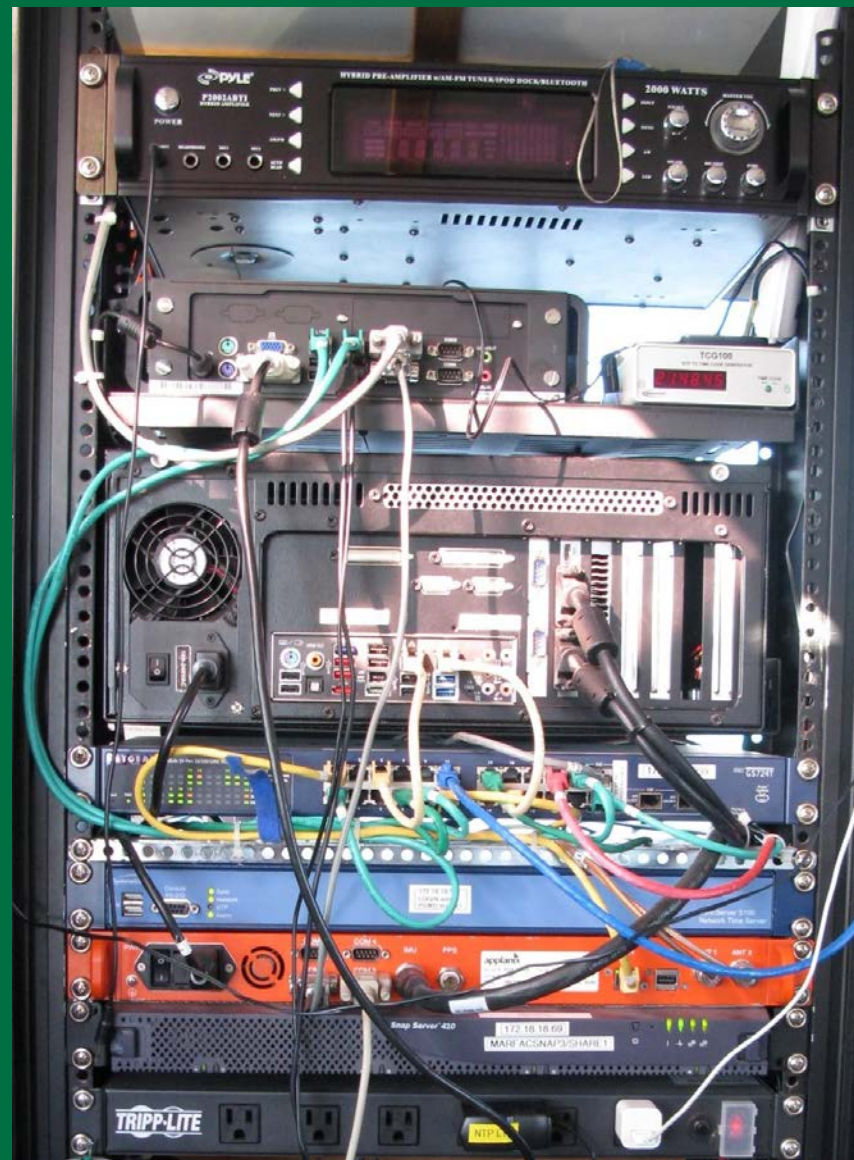
Specs

- 11' A-frame, SWL 2000lbs
- 6' davit, SWL 800lbs
- 90 sq. ft. deck space
- 10gpm hydraulic pump
- 12kW, 120/240V genset
- 5000W inverter
- 4 science positions
- 6ft acquisition bench
- sette workstation
- 3ft wet-work/food prep
- standup head



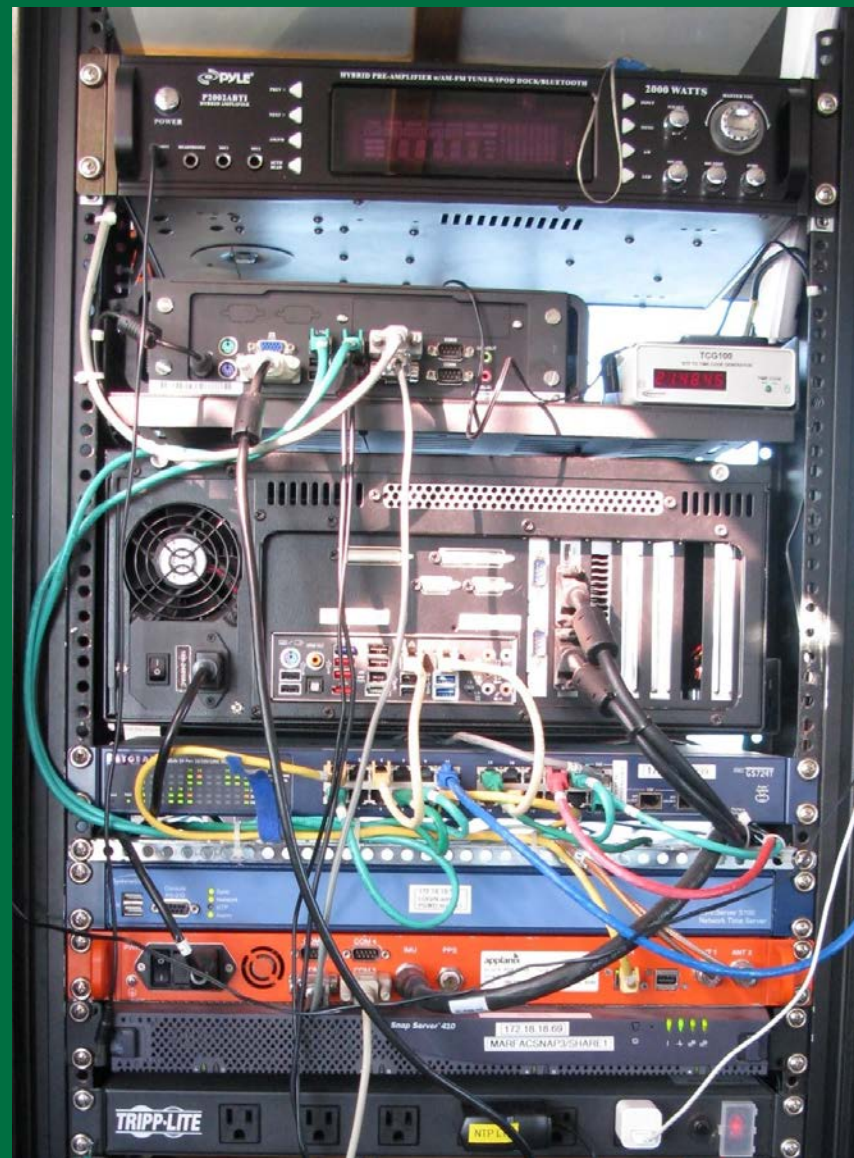
Science Electronics & Equipment Suite

- Rack mounted PCs for helmsman navigation, scientific equipment control, survey planning & management .
- Gigabit Ethernet separated in two virtual subnetworks, one for time critical data acquisition applications only and the other for data transfer, at-sea processing.
- Wireless Internet connection (when in cell phone range) which is isolated by switch to limited machines



Science Electronics & Equipment Suite

- GPS based Network Time Protocol (NTP) time server.
- Applanix POS MV 320 Inertial Motion Sensor (Position & Attitude @ 200Hz)
- Network attached storage for data backup and software archive.
- We found mounting with backside facing out to be best for our small space.



Mission Specific Accommodations

- KevLok tie-down shelving.
- 10" stuffing tube for cable runs to outside or over-the-side equipment
- Space for three work stations, one at the settee and two at the main table.



Mission Specific Accommodations

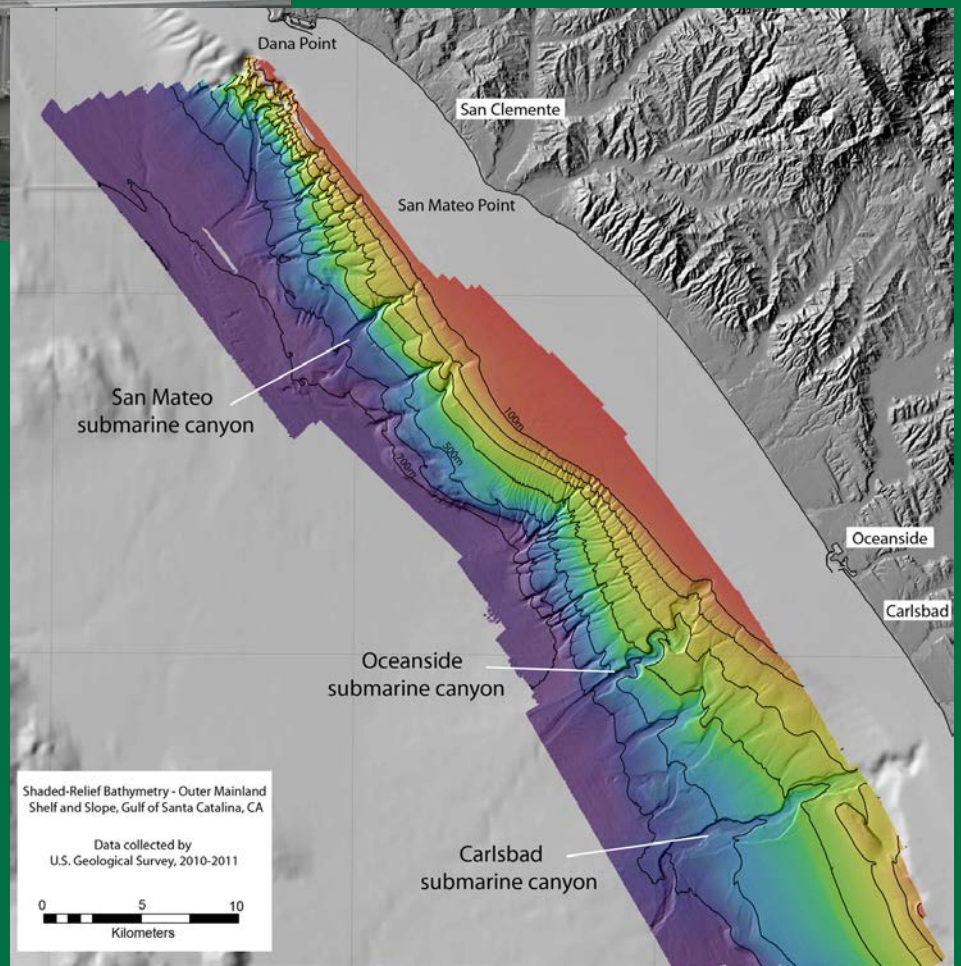
- Network access to ship computers, time server, navigation and data storage.
- GPS Navigation data via network, RS232 NMEA or NMEA200 in multiple formats.



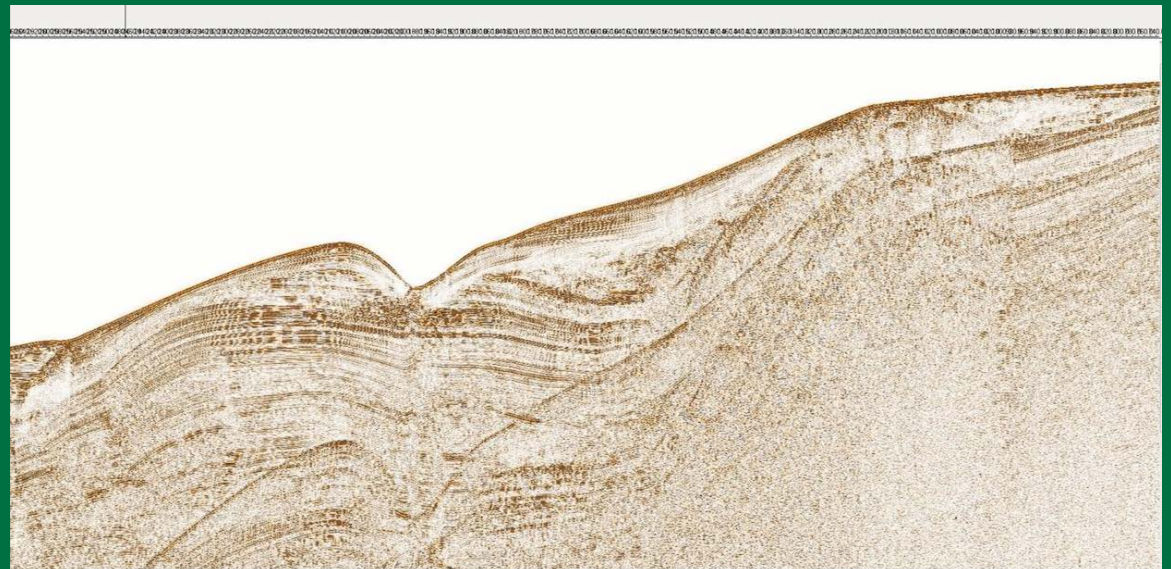
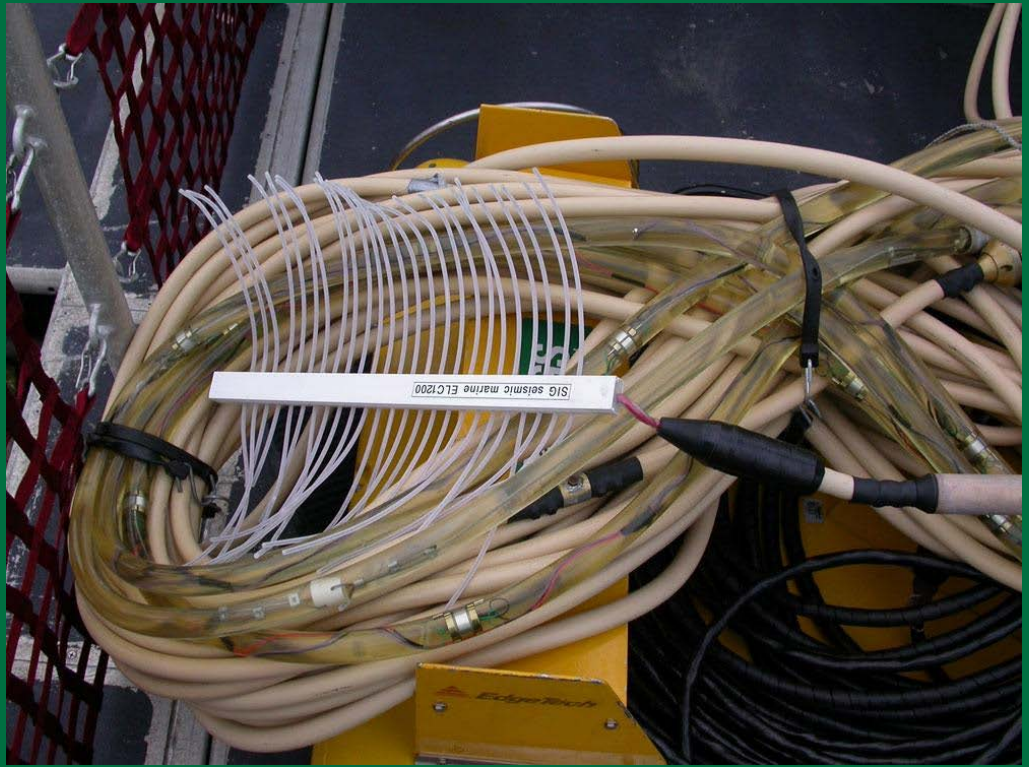
Seafloor Mapping



SwathPlus



Seismic



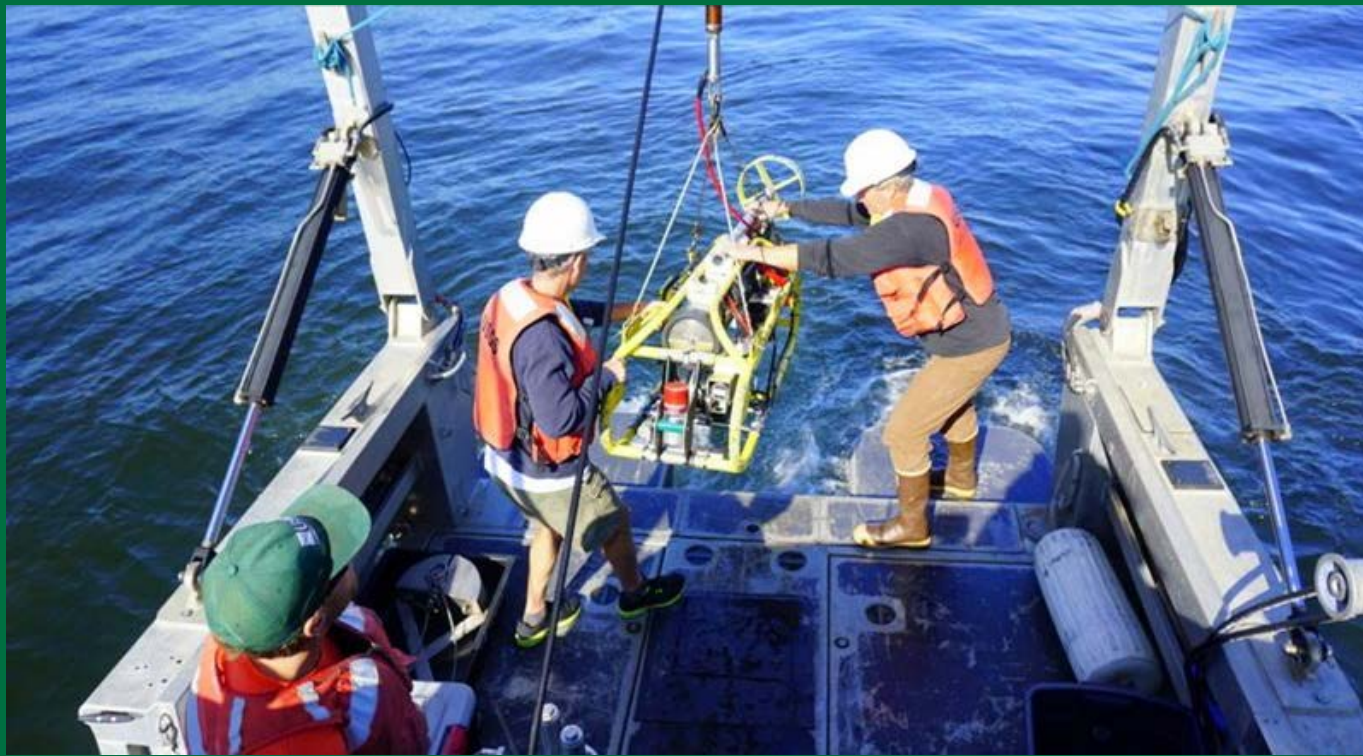


Sediment Sampling



Moorings





Camera



Versatility

- Collect data in water depths 1-800m
- Up to 40nm offshore
- Inland lakes, rivers, and reservoirs
- Trailer
- Crew of 2 people



The Numbers

- \$453K to build
- \$30K annual operating budget
- \$750 day rate (internal)
- 117 operational days annually



Questions ?

