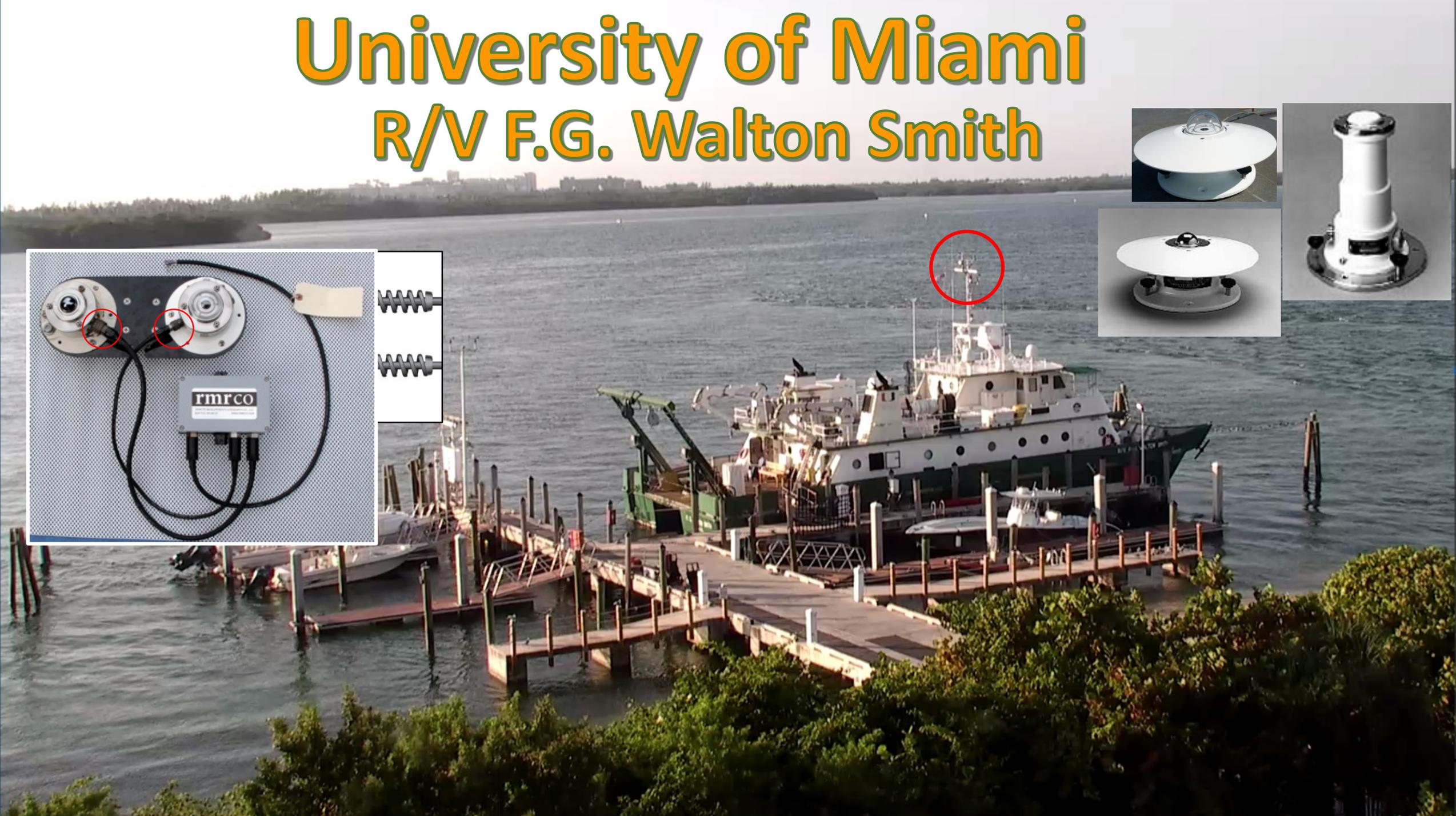
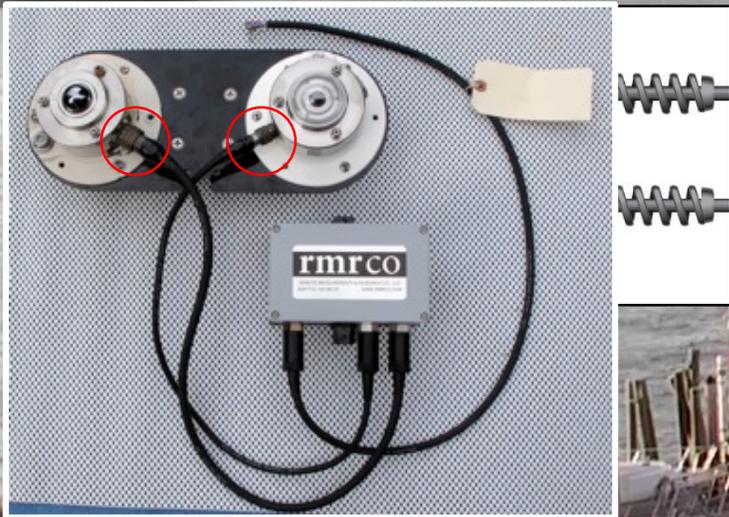


R/V Endeavor's
MOCNESS
Upgrade

Gabe Matthias

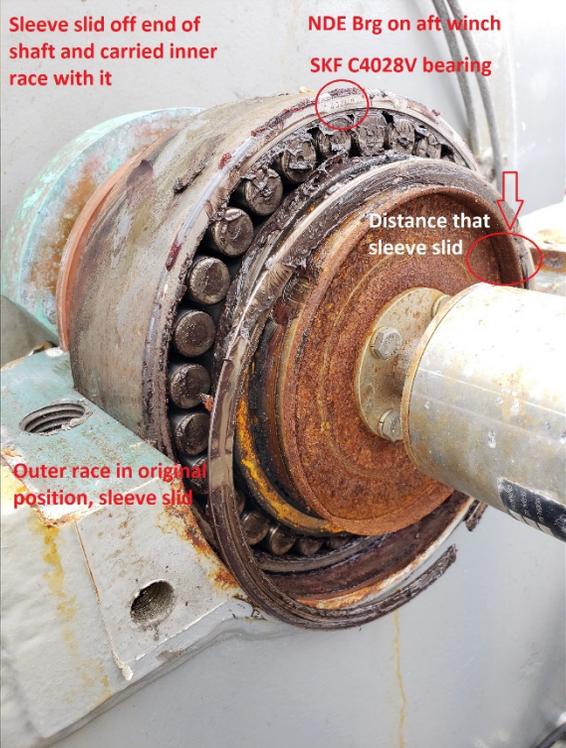
University of Miami

R/V F.G. Walton Smith



R/V Thomas G Thompson

- Mystery of the modulo errors
- Theoretical source identified very quickly after standard (and non standard) troubleshooting
- Combination of factors contributed to a lengthy resolution process
- Zero modulo errors after a mechanical failure in the winch was discovered and repaired



R/V Rachel Carson



New Trolley Deployment System

2019 Status so far

23 Cruises

106 Sea Days

21 Shipyard Days

Present

- Integrated SCS acquisition
- Trolley Deployment system
- Temporary ADCP setup
- Temporary TSG setup

Future

- Fully integrated TSG/SSW system
- Permanent ADCP installation
- Multibeam installation
- Data Integration with R2R
- Implementation of LCI90s

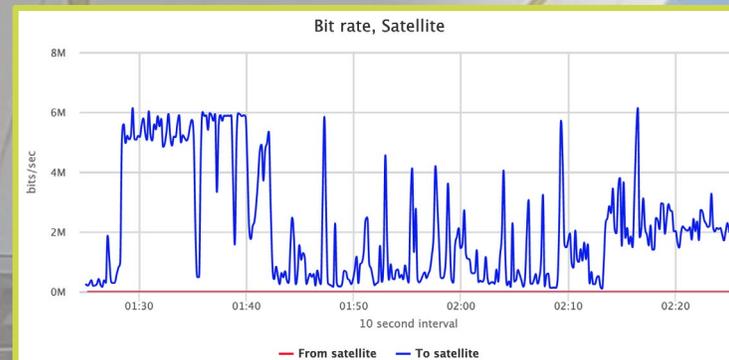
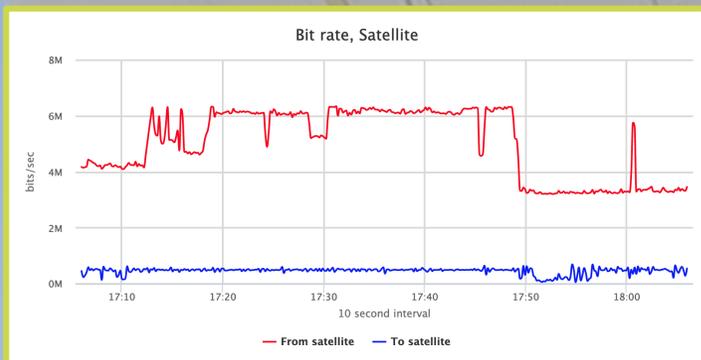
Notable Achievements

- USGS cruise – 36 days of sailing off the coast of Oregon
- Box coring off Columbia River

R/V Atlantis

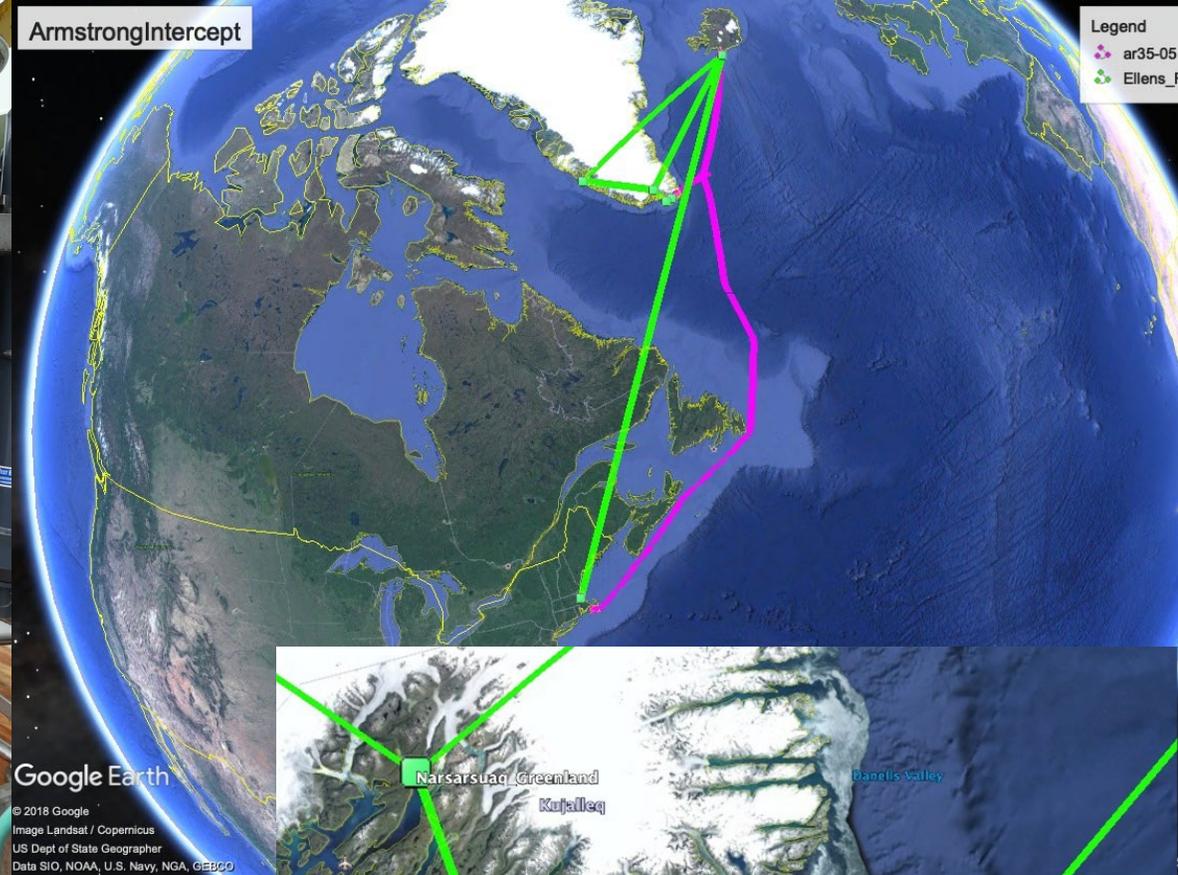
5

THE RADOME RELOCATION EXTRAVAGANZA AND THAT MAGICAL TIME WE HAD 6.5MB TO SHORE.

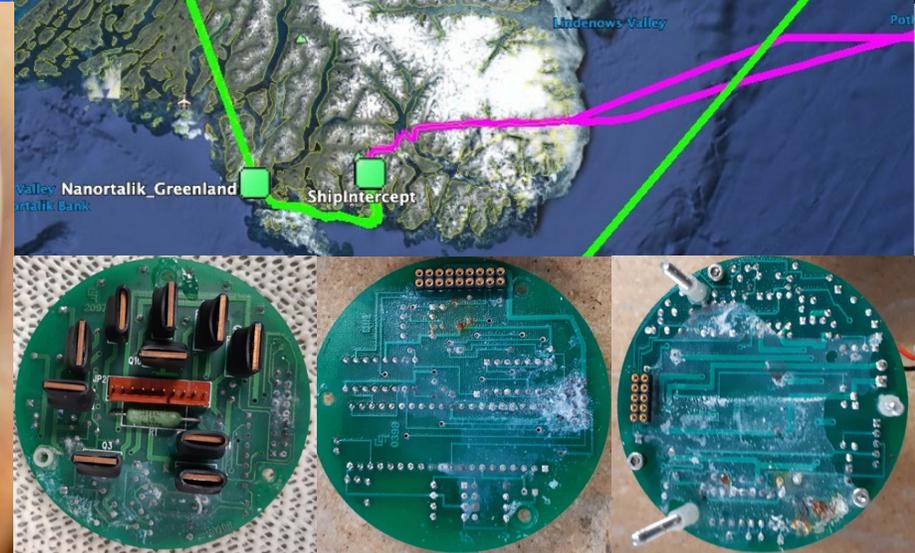


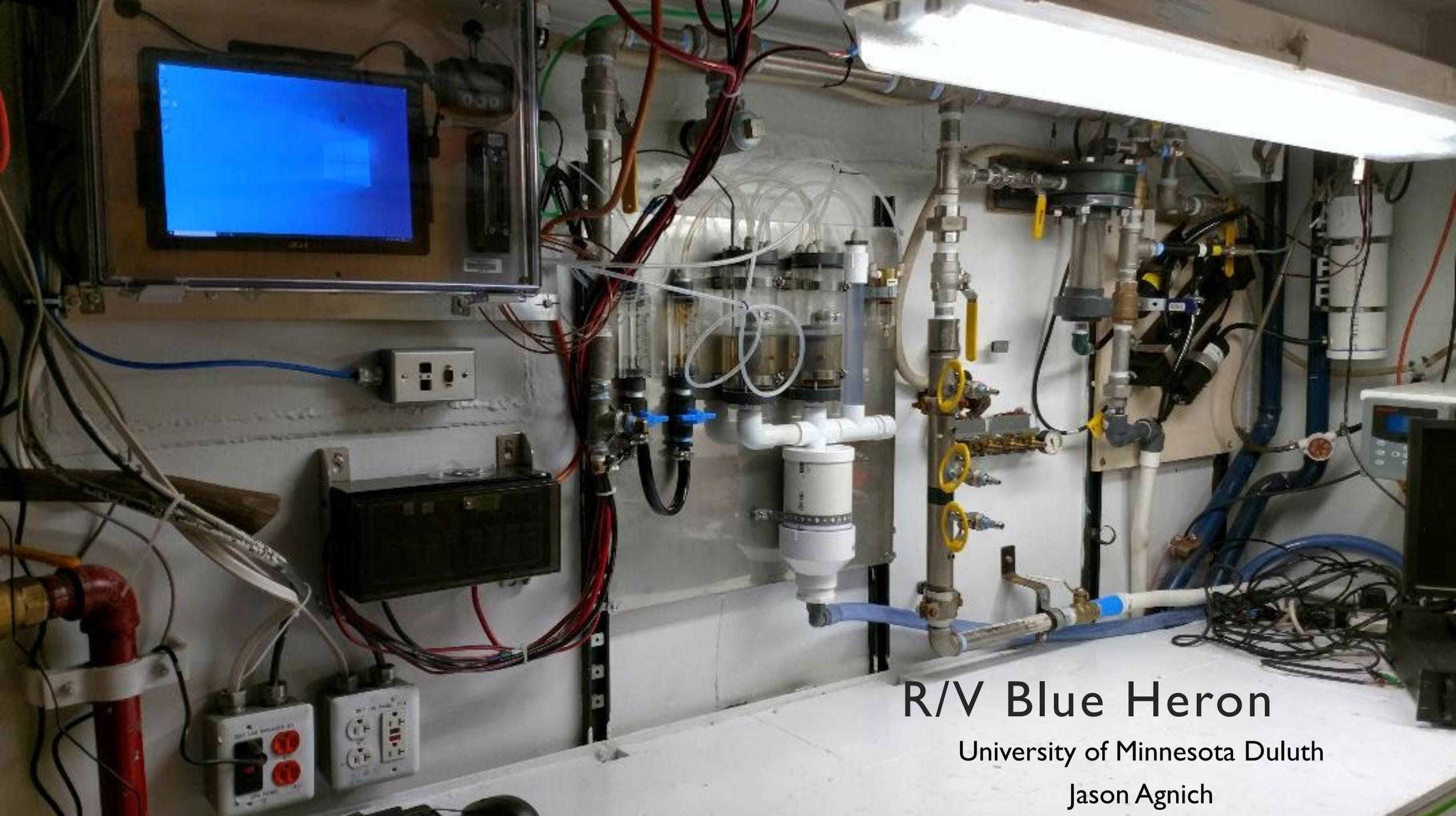
R/V Neil Armstrong

- SBE32 pylon compromised via water intrusion; lost communication with the fish
- MacGyver techniques
- Planes, trains, automobiles, heli, and ferries....



Photos from: WHOI, Amy Simoneau, OOI, Hilary Palevsky





R/V Blue Heron

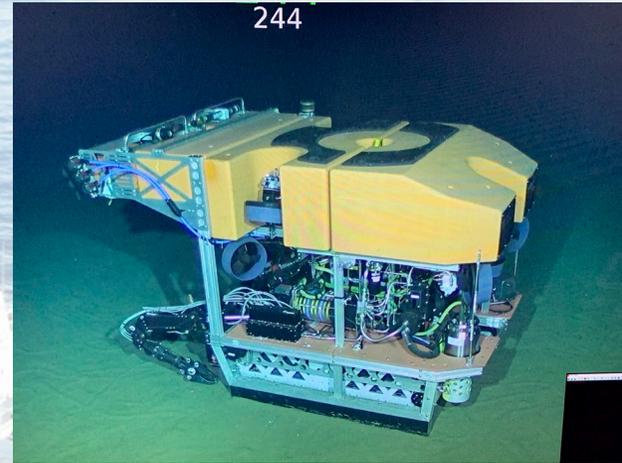
University of Minnesota Duluth

Jason Agnich

University of Hawaii Kilo Moana



ROV Lu'ukai





RV SAVANNAH



Current Projects:

- Alarm Notifications
 - Raspberry Pi
 - Programmed to send SMS messages when any alarm goes off

- Sub-bottom Profiler
 - Knudsen Chirp Model 3260
 - 3.5 kHz Transducers



BREAK



Habcam



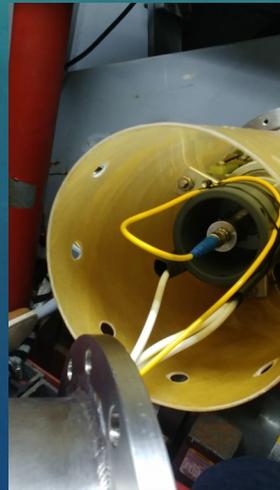
Dry Lab J-Box



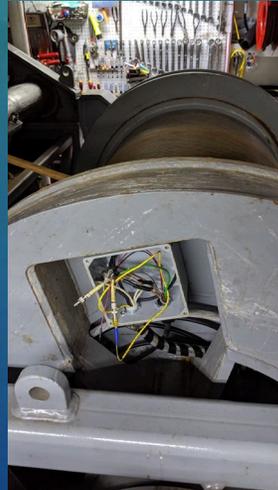
OTDR



Slip Ring



Inside Slip Ring



Port Trawl Winch

CHRISTIAN KERNISAN UNIVERSITY OF DELAWARE R/V HUGH R. SHARP

- NOAA- Habcam (towed vehicle)
- Single Mode Fiber in .680 cable
- ST Connectors
- Issues with power/data retrieval
- OTDR (Optical Time Domain Reflectometer)
- Laser- Check the continuity
- Cleaned ST connectors
- Hot Melt to terminate new connector

In the near future:

- Re-fitting the ship with new fiber optic cables
- New slip ring
- New junction boxes

R/V Roger Revelle

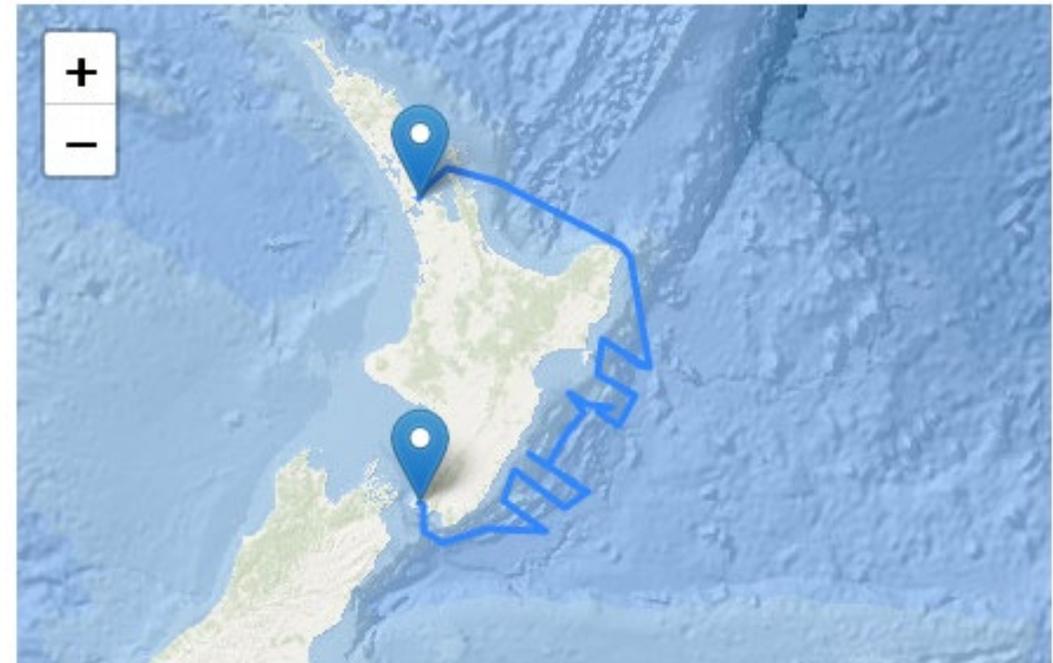


- 4 science cruises in 2019
 - New Zealand
- Mid-life Refit
 - Tear down during two transits
 - Vigor (Portland)
 - April 2019 - April 2020
 - 1st Drydock phase complete



Cruise ID: RR1903
2/28/2019, 1:41:00 PM
Thu, 28 Feb 2019 21:41:00 GMT

Data points interval: 5 minutes



R/V Sally Ride



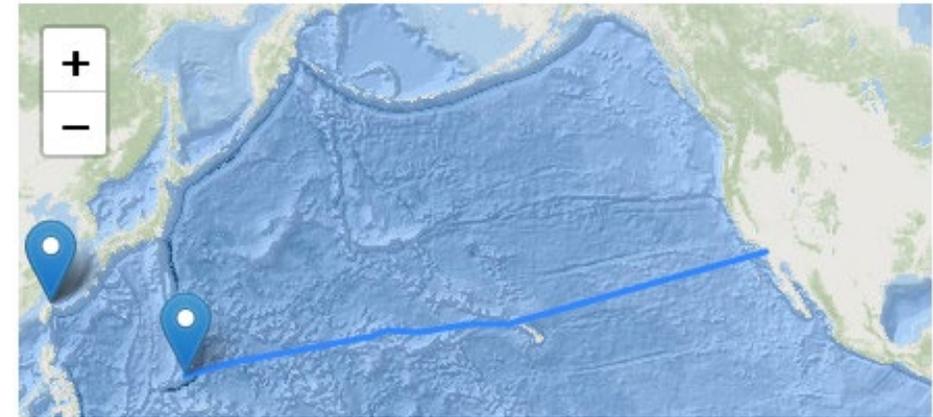
- 14 science cruises in 2019
 - 1st crossing of the Pacific Ocean
 - Operating in Western Pacific & Indian Oceans since April 2019



Cruise ID: SR1906
4/13/2019, 3:47:59 PM
Sat, 13 Apr 2019 22:47:59 GMT

Data points interval: 1 minutes

- Benefits of Enterprise Storage
 - Spares & drive failure while at sea
 - Replacement drive delivered to port agent in Taipei (August 2019)
 - Previously failed drive Seattle (July 2018)



HDD	21	HDD	22	HDD	23	HDD	24			
HDD	17	HDD	18	HDD	19	HDD	20			
HDD	13	HDD	14	HDD	15	HDD	16			
HDD	9	HDD	10	HDD	11	HDD	12			
HDD	5	HDD	6	HDD	7	HDD	8			
SSD	EMPTY	1 B	SSD	EMPTY	2 B	SSD	EMPTY	3 B	HDD	4
		1 A			2 A			3 A		

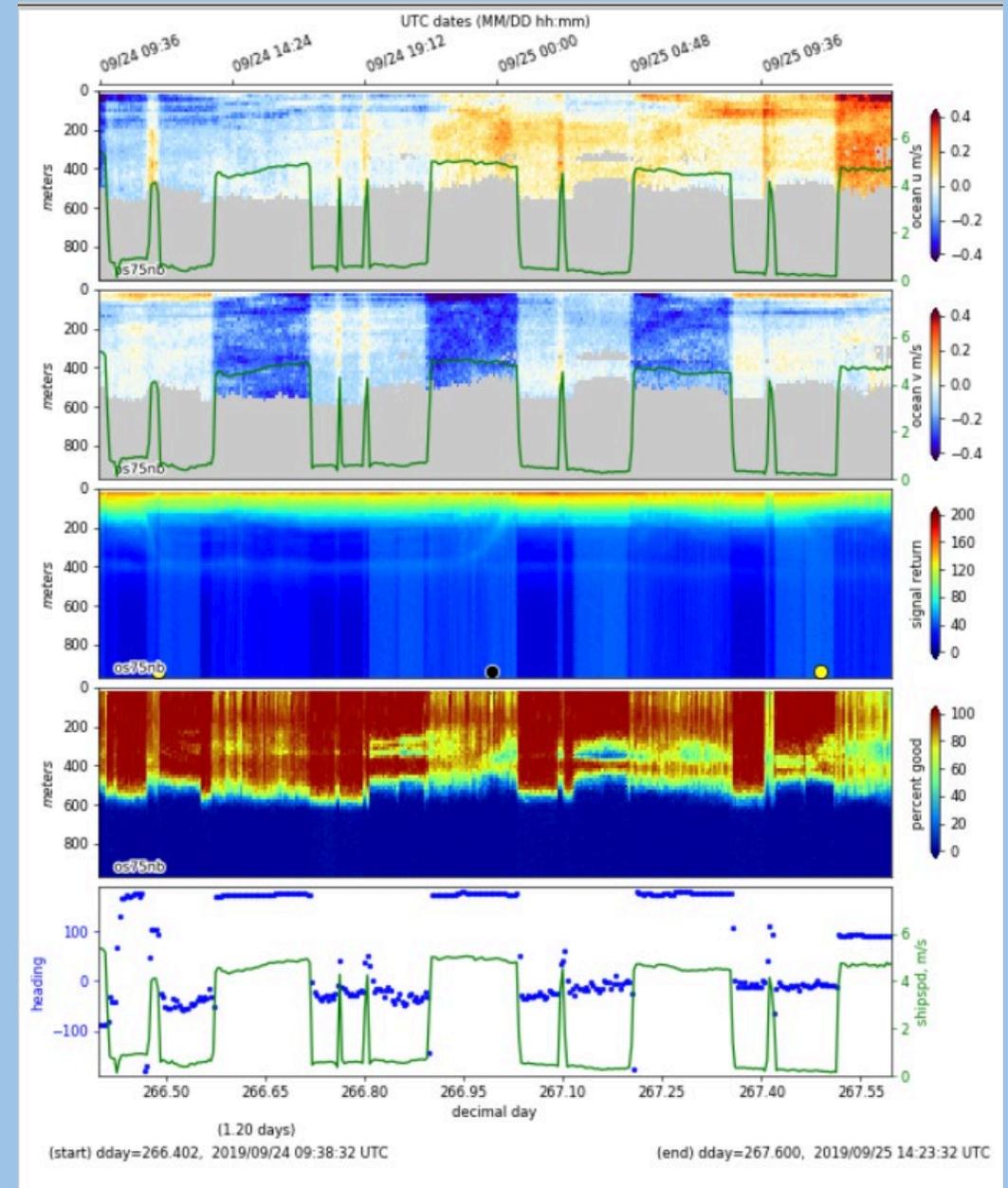
R/V Robert Gordon Sproul



- 20 science cruises in 2019
 - Majority 1-4 day cruises off San Diego coast
 - 8-Day cruise in September near vessel's operational limits.
- Significant shipyard period
 - Completed in Jan 2019
- Replacement Instrument Van
 - Currently under construction
 - Electrical outfitting underway
 - Installation target Jan 2020

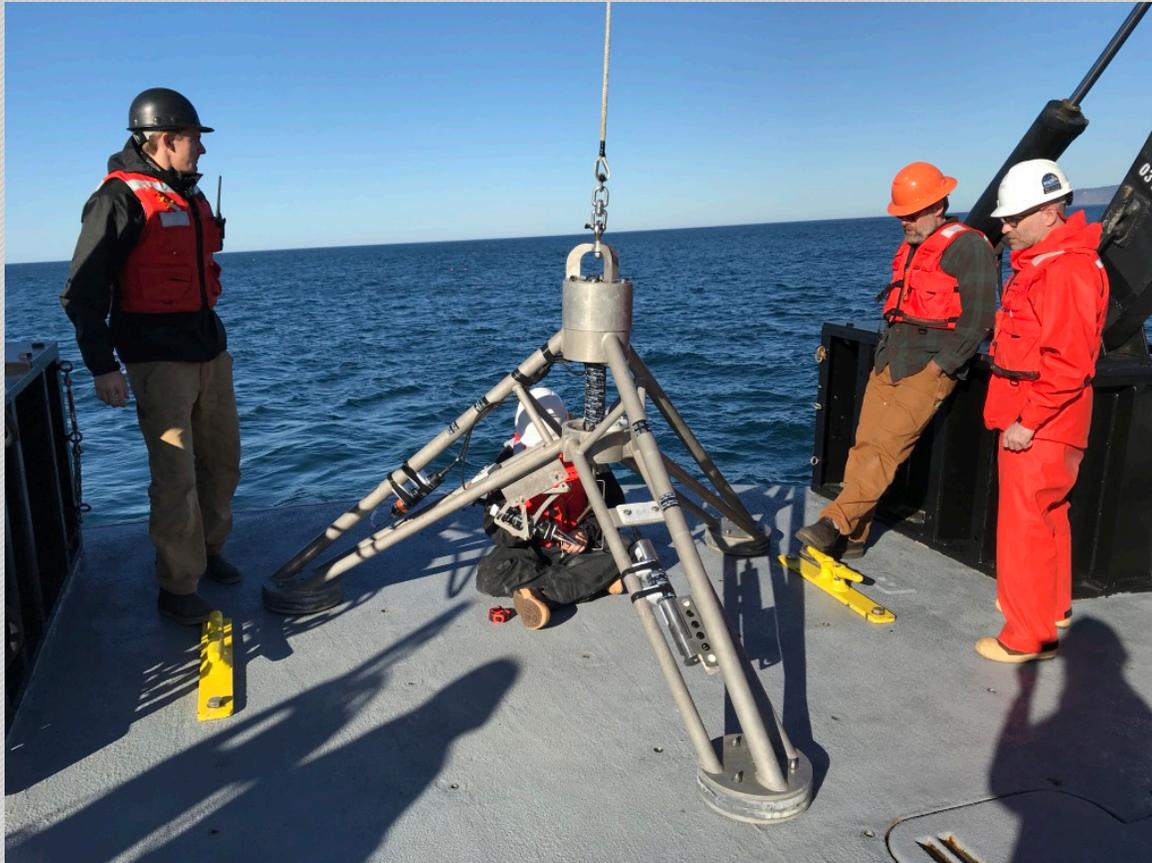


R/V *Pelican*, LUMCON



R/V Oceanus

Kate Kouba



Oregon State University
Team



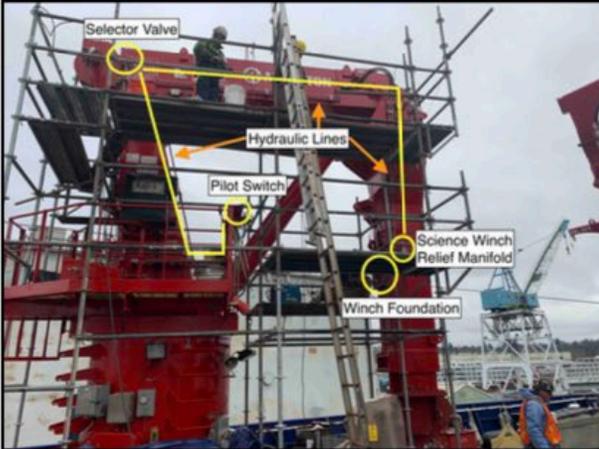
Andrew
Woogen

Kristin
Beem



Brandon
D'Andrea





R/V Sikuliaq
at 5 years
Winches
Sonars
Antennas

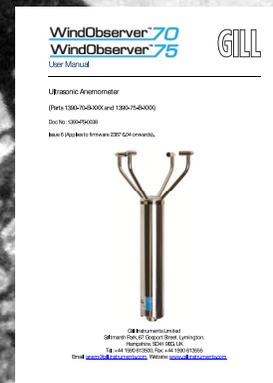


RM Young 85004 – Heated Ultrasonic

- More problematic this season than in past – environmental?
- 24 VDC, 60W max (2.5 amps)

Troubleshooting:

- Verify heater voltage and power supply
- Put on warm clothes and climbing gear
- Warm up and Repeat



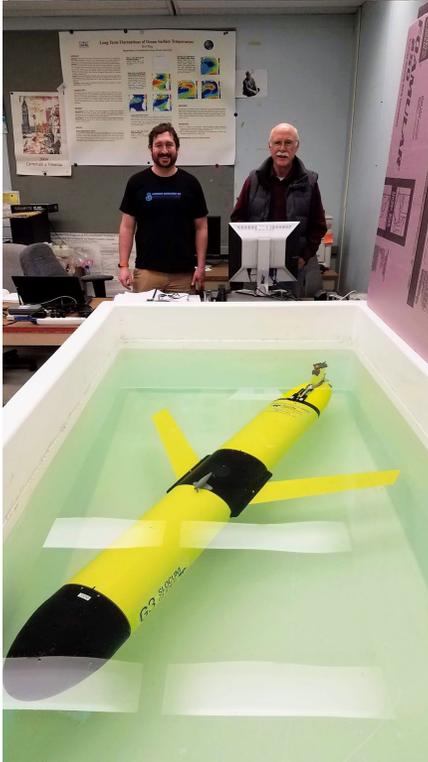
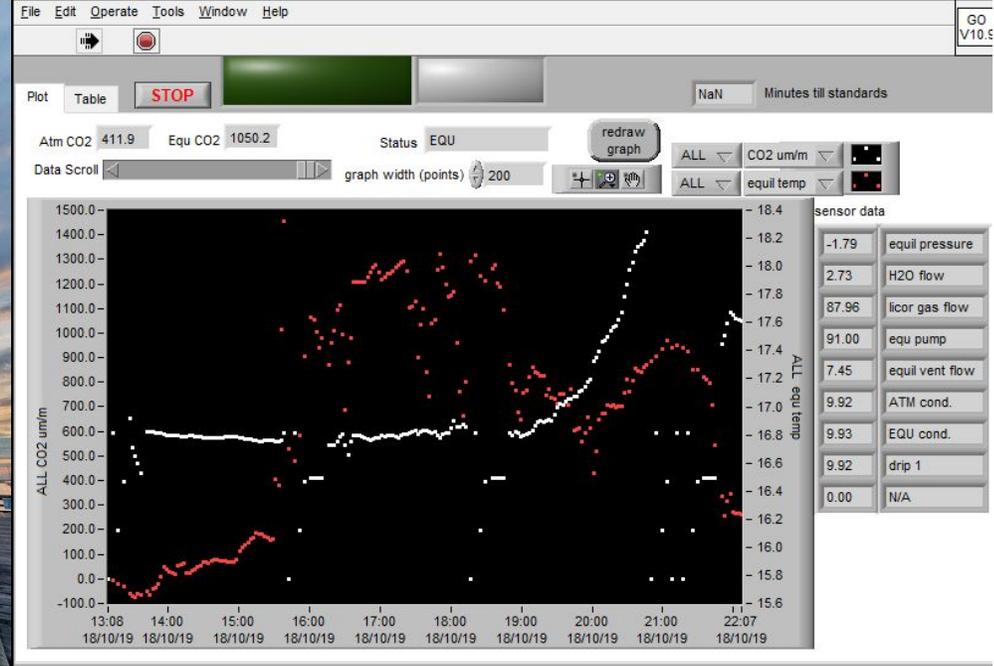
Lessons Learned:

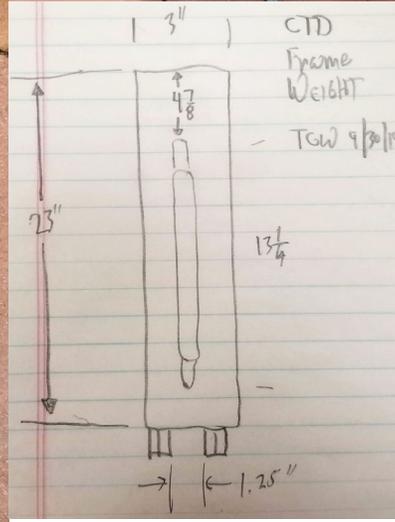
- Bird deterrents = ice aggregators
- Dust brooms are good for clearing ice
- Plastic paint scrapers ok too



Stony Brook University School of Marine and Atmospheric Sciences

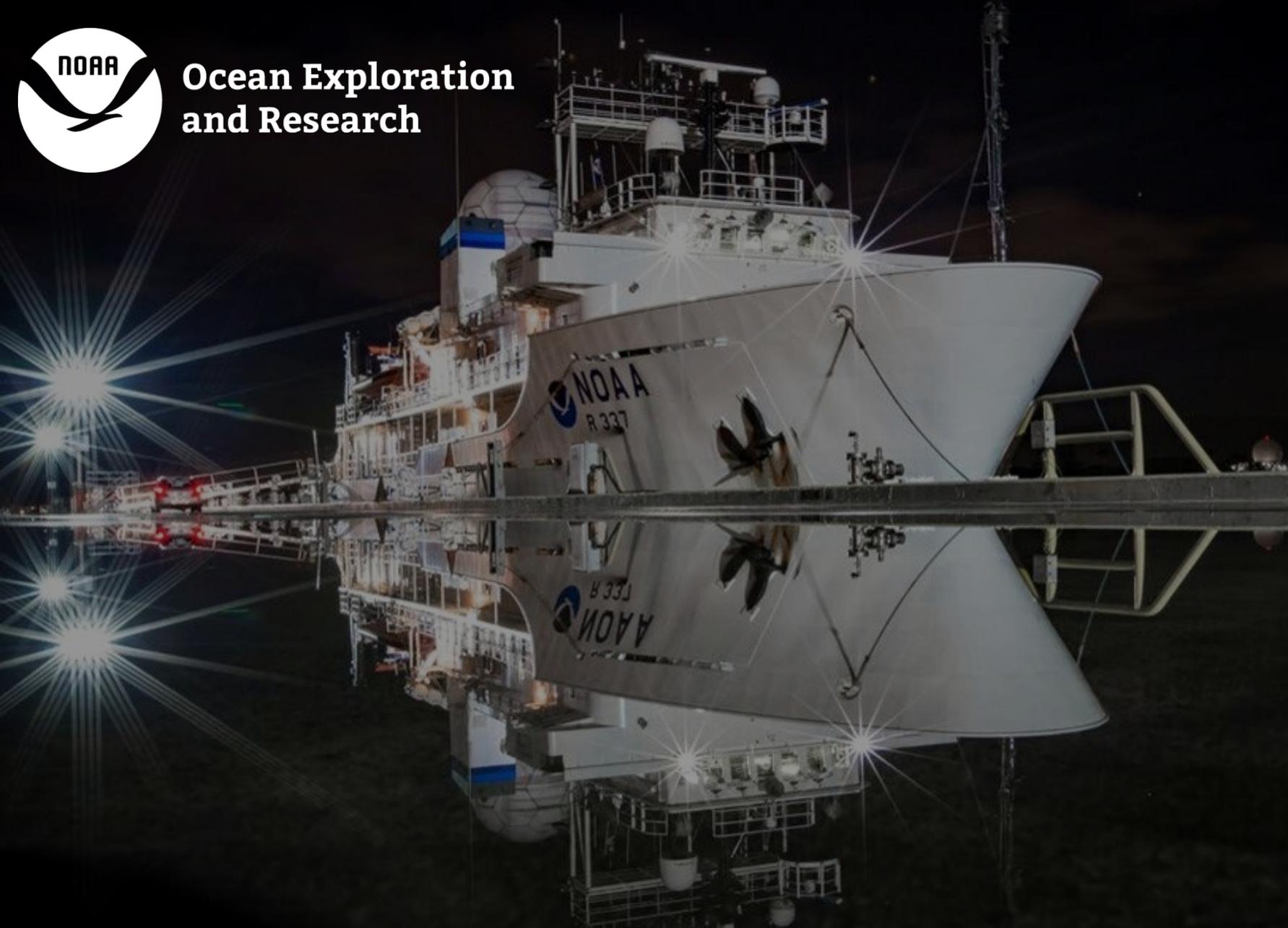
RVTEC 2019 Fairbanks







**Ocean Exploration
and Research**



Technical Issue:

- Positioning 'drop outs' observed after POS MV V5 10.0 Firmware update
- Number of Satellites instantly drops from ~30 to ~6
- Occur for exactly 26 minutes a day, 4 minutes earlier each day
- Observed in generally the same area with different headings

Fix:

- Contact Applanix and Marinestar, subscription information "reset"

NOAA SHIP *Okeanos Explorer*

