

Irene Hu

Week 30

- 901101 - Seafloor Mapping
 - A few minor tasks like getting the solid model of the board. Meeting with Sharon next week.
- 901217 - Chemical Sensors
 - Ordered parts for LED excitation system for Wastewater ISUS.
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity
 - Chip that exhibited excellent behavior suddenly went bad and looked open circuit. After various tests and taking it apart (done by Luke), it seems the anode to pad connection has been broken.
 - Nanofet
 - Started incorporating the tester circuit into nanofet rD
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Reviewed draft of paper with KBB
- Overhead
 - Rec com meeting; planning bike to work
- Out of Office
 - Took July 16-17 off

Week 29

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
 - Picked parts for an LED excitation system for wastewater ISUS
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity
 - After many discussions with Claude about Pt delamination, the observed delamination seems to have to do with too-high voltage at the anode (as well as other "bad behavior" like reversing current, possibly coupled with some fab choices like encapsulation window being larger than anode). Some of the observed voltage is from electrolysis of water, but tens of kilohms of observed resistance (which causes the high voltages) remains unaccounted for.
 - After running various tests on a new chip (eg R/X with AC excitation using LCR meter) to determine source of resistance, no

issues can be found- the new chip is showing better behavior than any other previously observed. Hypothesis is that previous chips might have been damaged early on by overvoltage, coupled with some fab inconsistencies.

- Currently exploring circuit solutions to limiting anode overvoltage. Previous circuit fix on the Howland pump op amp seems to be working.
- Nanofet
 - Completed current measurements on a tester circuit for disabling bias battery power. The extra current consumption is $<1 \text{ uA}$ and there is no impact on voltage.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead
 - Open House
- Out of Office

Week 28

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
 - Wastewater ISUS opening meeting
 - Evaluated some LED and lens options for wastewater ISUS prototyping
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity
 - After experimenting with built-up TApHl 002, was able to get some repeatable titrations with two inflection points. Need to use higher current ($\sim 50 \text{ uA}$) and flushing with a pump in the big tub seems to work better than stirring in a beaker.
 - Alk setup suddenly stopped working; current was railed and stuck on. Behavior matches open circuit anode, and visual inspection shows that the Pt anode deposited on isfet seems to be coming off (similar to observed before). Circuit latching is a separate issue not previously observed before, and after some troubleshooting and help from Claude, the best hypothesis is that railing the op amp inputs from the open circuit load has damaged the op amp. New part selected and ordered.
 - Nanofet
 - Continuing power draw tests for bias battery disabling circuit
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Helped Tom with a flight
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead

- Out of Office
 - July 8: WFH

Week 27

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Nanofet
 - Finished assembling tester circuit for turning off bias battery. Initial tests with Yokogawa showed some unexpected extra transient current draw, traced to sagging voltage on latch's data input pin as GPIO power is cut or left floating. Added pulldowns and has some implications for code.
 - Tester circuit is currently undergoing long term power consumption tests but so far seems promising
 - Alkalinity
 - Alkalinity chip from Lionix with measured lower anode resistance built into TApHl 002 sensor by Luke. Made connectors and set up for alkalinity titration. Spent a day troubleshooting non-working pH and anode, it started working at some point during tests and best hypothesis is a bubble
 - Initial titrations of TApHl 002 show some working behavior but titrations don't seem to fully hit two inflection points or are inconsistent. Currently experimenting.
 - Updated code to be able to toggle between Vrse and Vrsi
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Cataloged and sorted metadata for images and data from last cruise. Assembled multipage tiffs of the images we took for easier viewing and handover.
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead
- Out of Office

Week 26

- 901101 - Seafloor Mapping
 - Made some cables for RBR turbidity sensor and communicated with instrument
- 901217 - Chemical Sensors
 - Looked into some LEDs for wastewater ISUS
- 901805 - Coastal Biogeochemical Sensing Program
 - Measured signals and found a code bug for Thom's contractor, NAND flash now communicates

- Finished Nanofet bias battery power toggling board in KiCAD and sent off for fab and assembly
 - Some discussions and sent some emails about deploying eddy covariance next year
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Fixed up some of the camera interface code, but having troubles getting camera to connect to Harlequin
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead
 - DOEST tour preparations
- Out of Office

Week 25

- 901101 - Seafloor Mapping
 - ORP board sent out for prototyping. Made a cable for turbidity sensor
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Made a small board to test turning off Nanofet's bias battery on command. Board is laid out, waiting for parts to finalize layout
 - Looked into alternative isfet manufacturers
 - Measured some signals and looked into code to help Thom's contractor with Nanofet rC new NAND flash issues
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Continuing to work on some camera code
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead
- Out of Office

Week 24

- 901101 - Seafloor Mapping
 - Review of first layout of ORP board
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Coral hugger deployment went well, imaged many corals. Ground fault is back
 - Working on code to interface with camera directly instead of using Vimba Viewer
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead

- Out of Office
 - May be periodically out of office due to back pain

Week 23

- 901101 - Seafloor Mapping
 - First draft of code for ORP board including ADC code adapted from MOSOS and translated to C++
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity
 - Tried polishing electrode and rerunning titration. No noticeable improvement.
 - Finally received a response from LionIX and they have recreated the problem with alkalinity chips
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Looked into cameras for fluorocam, found one or two I think is good
- Overhead
- Out of Office
 - June 9: Carson
 - May be periodically out of office in next few days due to crippling back pain.

Week 22

- 901101 - Seafloor Mapping
 - Finished ORP board rA, ready for layout
 - Look over commands for RBR turbidity sensor
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Data inventory for corals imaged in last deployment
 - Looked through images and processed some for compilation and correction. Need to redo blanks for proper corrections. System is dropping frames which makes compilation difficult
 - Updated code for new default values based on last deployment
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Looked into Rover's fluorometer with Alana and got box of spare parts
- Overhead
 - Rec com budget review meeting
- Out of Office
 - June 1: WFH

- June 2: out of office

Week 21

- 901101 - Seafloor Mapping
 - Continue updating ORP board schematic following suggestions from design review
- 901217 - Chemical Sensors
 - Minor scare on “malfunctioning” float ISUS was resolved as water droplet reflections
- 901805 - Coastal Biogeochemical Sensing Program
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Sat in on a meeting
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Troubleshooting the coral hugger for comms issues when in water. Found a ground fault in backlight between insufficiently sealed debug connector, and circuit ground accidentally connected to chassis
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Took a look at some schematics for ROVER
- Overhead
 - Rec com budget planning meeting and follow up
 - Computer is having lots of issues. Back and forth with IS, now reinstalled Windows and setting up computer again
 - Hiring committee lunches for EEtech
- Out of Office

Week 20

- 901101 - Seafloor Mapping
 - Design review for ORP board and subsequent modifications to board
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity
 - Brent is now designing the flow cell for floating anode (taking over from Joe). Handed over materials.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Carson cruise on Monday. System worked well enough but various comms issues involving back light and motor, possibly a ground loop
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead
 - Rec com preparations for budget meeting
- Out of Office

Week 19

- 901101 - Seafloor Mapping
 - Procured command set manual for RBR turbidity sensor
 - Adding a power switch to circuit
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Mini ISUS
 - Troubleshooting for serial comms errors. Missing bits seems solved by choice of RS232-USB convertor, although also seems sensitive to various factors (eg going through bulkhead/cable) and Saleae trace looks fine
 - Cross talk on Rx/Tx happens on longer cable, Rx is already pulled to GND by receiver. As per Thom, can be improved by twisting each signal with GND.
 - Troubleshooting some lioncaps from Indtec. ADC is upside down.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Tests in tub for focus of different LEDs, field of view, depth of field, absorbance vs distance for two LEDs
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead
 - Rec com meeting
 - Proposal abstract presentation
- Out of Office

Week 18

- 901101 - Seafloor Mapping
 - Updated ORP board for new choice of microprocessor. Using uP directly instead of a module requires more attention
 - Packaged materials for design review and wrote a readme
 - Ordered turbidity sensor
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Mini ISUS
 - Looking into some serial comms errors that seem specific to mini ISUS (intermittent junk characters upon wakeup). Seems to be a timing thing, playing with crystal capacitance. Some cables also seem to cause issues, may need a pulldown.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Made an alternate version of GUI code with previous motor control structure, as using potentiometer as encoder seems to slow it down a lot
- 902305 - Event Detection Using the Sedimentation Event Sensor

- Overhead
 - Proposal abstract
- Out of Office

Week 17

- 901101 - Seafloor Mapping
 - Working draft of main ORP board completed
- 901217 - Chemical Sensors
 - Looked into some LEDs for wastewater ISUS
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity
 - Ordered some electrode polish
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Revisited motor controller manual and did a bunch of tests and calculations to figure out how it works. Two point calibration reduced to single point calibration and implemented into GUI
 - Slightly reworked structure of motor controller driver in GUI to clean things up, implemented position polling while motor is moving
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead
 - Some work on project proposal abstract
- Out of Office

Week 16

- 901101 - Seafloor Mapping
 - Reviewed schematics and materials for ORP sensor to start mapping out requirements and boards
 - Discussion w/ Dave and Dorado crew about requirements and where sensor would live
 - Began schematic for ORP main board
- 901217 - Chemical Sensors
 - A bit of exploration re: lighting sources for wastewater ISUS
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity
 - Measured a couple more chips and sent package to Lionix with explanatory email
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Test with Ventana went well
 - Working on actuators. Fixed a bug causing comms delay, trying to implement new feature to goto position. This requires a series of

commands and a two-point calibration that will be difficult to automate with the GUI. Need to discuss

- Modified electronics in backlight to improve LED performance. Reassembled chassis with great effort.
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead
- Out of Office

Week 15

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity
 - Continued long tests on self-titrating behavior. Latest hypothesis is a large cloud of acid that lingers in the area
 - Picking out and probing some more chips to send back to Lionix
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Weekly meeting; checks on Harlequin for testing
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - In tank tests, SES modem flooded (pinched Oring?). Replaced with old SES modem (directional), with some older batteries installed. Overnight mission triggering TT seemed to work.
 - Calibrated pH sensors
- Overhead
- Out of Office

Week 14

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity:
 - Ran several more experiments to look into apparent “self titration” of system where it continues to titrate after current stops. Seems to continue for around 15 minutes
 - Trying to investigate the weird precipitate on anode, no results
 - Next flowcell with better spacing control outsourced to Joe, wrote design requirements document
 - Yui has emailed Lionix about the chips; ongoing conversation
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Chassis wiring for longer housing is finally finished, need to test
- 902305 - Event Detection Using the Sedimentation Event Sensor

- Battery sphere conversion for standalone mode
- Changed batteries for modem. TT's modem somehow drained its batteries again, needs investigation
- Helping Crissy with O2 sensors
- Overhead
- Out of Office

Week 13

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity
 - Various tests with floating anode. Generated rough graph of titration time vs distance or current, data is messy. System seems to be titrating itself after titration ends. Experiments with better flushing or reversing current (firmware change). Latest results point to flushing as the main issue
 - Weird precipitate shows up on anode, investigating
 - Probed TA-alk Lionix chips using fuzz button jig. Inconsistent and confusing results. Compiled data into a ppt so Yui can email Lionix.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Planned out spacing for chassis rewiring, ordered and printed some parts
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Weekly meetings; prepping for deployment in April
- Overhead
- Out of Office

Week 12

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Mini ISUS:
 - Inventory sleuthing
 - Troubleshooting some random comms issues. On Saleae, the mini ISUS behavior looks fine.
 - Luke observed some freakout in mini ISUS 002 spectra that went away. Plotted data and brainstorming ideas.
 - Alkalinity:
 - Designed and printed, then worked with Roman to fab, small jigs to hold ISFET chips and probe via fuzz buttons (won't scratch like probe tips). Anode still seems disconnected from its pad.

Measured diode drop between S/D and substrate, and leakage resistance in other direction

- Looking at fab files from Lionix via CleWin6, the anode pad seems to be missing a contact hole
- Modifications to floating anode setup, forgoing the lid (and pumping) in favor of better alignment between anode and isfet. Printed new electrode holder.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Trying to figure out connector orders
- Overhead
 - Rec com pi(e) day celebration
- Out of Office

Week 11

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity:
 - Floating anode titrations, not as good as expected but did finally get double inflection point curves (required too-high current and distance didn't seem to make much difference, some weird behavior)
 - Behavior from TApHl anode seems to resemble NC. Probed anode on two alkalinity isfet chips and can't get connection to pad. Resistance to itself varies, the one used in solution seems to have grown a layer. Will talk to Lionix.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Parts for chassis modification for longer house: iterations on fan holder and motor driver mounts
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Sent our incorrectly received oxygen logger back to Pyroscience
- Overhead
 - Rec com weekly meeting
- Out of Office

Week 10

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity

- Starting again on floating anode measurements
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead
- Out of Office
 - 2/19/26 - 3/2/26: OSM
 - Rec com: LNY cookie break

Week 9

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead
- Out of Office
 - 2/19/26 - 3/2/26: OSM

Week 8

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity:
 - Continue tests on TApHI unit. Results confusing, still unclear what is going on
 - Floating anode flowcell was completed by Yamir, started setting up experiment. Micrometer mount needs some modifications, new version printed.
 - ISUS:
 - OSM poster - finished and printed
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Looked at chassis wiring with Paul for new longer housing. Did some unwiring and some planning
 - Drafted and printed new parts to hold fan and motor controllers
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Found the wrong model Aquaphox logger w/ Crissy, working on getting it exchanged
- Overhead
- Out of Office
 - 2/19/26 - 3/2/26: OSM

Week 7

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity:
 - Set up lab tests with new TApH unit. Weird results. Updated connectors, still weird results. There seems to be some high resistance related to the anode that goes away after current is applied for some time but comes back after awhile, accompanied by strange pH results
 - ISUS:
 - OSM poster
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead
 - Rec com project update
- Out of Office
 - 2/11/26: out with severe back pain.

Week 6

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Tests to understand substrate leakage in DSL continue
 - Alkalinity:
 - Assemble a low-pressure alkalinity unit with Luke, currently setting up for lab tests
 - ISUS:
 - Discuss new lamp with Gene, mock fit in Solidworks. Arrange a call with Excelitas for more info
 - OSM poster, had to learn all about calibration protocol
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Motor interface board received; attempted to hook up and found some issue with connectors, fixed
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead
- Out of Office
 - 2/9/26: WFH / dr appointments

Week 5

- 901101 - Seafloor Mapping
 - Discussions with Erik on how to proceed. Started looking at circuit diagrams for existing MAPR
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity:
 - Finished design for flowcell and other parts for floating anode setup, printed some mockups. Made drawings and sent to MEtechs to make out of acrylic
 - Made some solutions, wire harnesses, and other setup to test the alkalinity DSL in lab
 - Various tests to try to understand substrate leakage in DSL
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead
 - Performance review writeup / form
- Out of Office
 - 1/330/26: WFH / dr appointment

Week 4

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
 - Updated sampfast code for ISUS fast sampling to match a better format for MSC3; incorporated into main code
- 901805 - Coastal Biogeochemical Sensing Program
 - Alkalinity: Massive redesign of floating anode flowcell, lid, and mounts. To be made out of clear acrylic. 3D printed a mockup, needs some more modifications
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
- 902305 - Event Detection Using the Sedimentation Event Sensor
- Overhead
- Out of Office
 - 1/20/26: Photonics West

Week 3

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - After various iterations of flowcell and electrode holder for alkalinity floating anode experiment, finally tested it... massive leakage, needs further redesign

- Some project coordination for mini ISUS
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Revised motor interface board for two motors + minor fixes. New version ordered
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Tested batteries for next deployment. Drawdown under load is higher than expected, but after some convos w/ Paul M and Alana, think it's within reason considering losses through measurement setup
- Overhead
- Out of Office

Week 2

- 901101 - Seafloor Mapping
- 901217 - Chemical Sensors
- 901805 - Coastal Biogeochemical Sensing Program
 - Revised version of floating anode electrode holder to move it more towards center of flowcell. Started on a little lid.
- 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
- 901904 - Deep-Sea Coral-Sponge Community Observatory
 - Image correction for reflectance images, assembled RGB versions
- 902305 - Event Detection Using the Sedimentation Event Sensor
 - Meeting; measuring some battery voltages
- Overhead
 - Reccom 2026 budget
- Out of Office