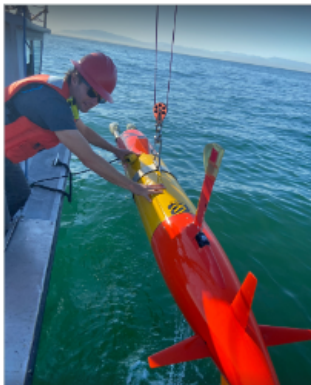
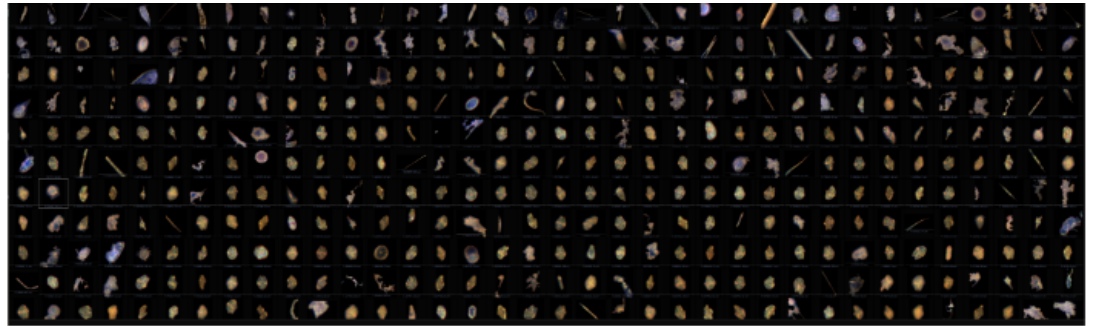


Engineering Weekly Report 10/5/2023 - 10/12/2023

<https://docs.mbari.org/internal/projects/Engineering/Weeklies/2023/>

Executive Council Notes

- Milestone: First deployment of Planktivore V2 on LRAUV Ahi. The team worked through some integration problems and then we had a clean 12 hour mission running C1 to M1 resulting in 1+ Million plankton images. Many thanks to Hobson, Shemet and Kieft for the Ahi rebuild and integration support. Big thanks to Schnittger and Wahl for the seemingly endless ballast and trim for our unique payload. [Roberts, Maughan, Jones, Schnittger, Klimov, Erickson]



Individual Activities

- Michael Anderson
- Kevin Barnard
 - Out of Office
 - CSIRO: Oct 20, 2023 – Nov 5, 2023
- Francois Cazenave
- Danelle Cline
 - Out of Office
 - SoundCoop Workshop, Boulder, CO October 24-25 2023
- Duane Edgington
 - 500055 - VARS, M3/RS, DSG
 - Continued work on VARS-ML-SE tasks. Working on deepsea-ai docker service on Doris VM. Testing on digits dev box.
 - Out of Office

- Oct 11-13 2023. [virtual conference on Generative AI](#). EDT (UTC-4)
 - Oct 16-18 2023. [Pytorch conference](#). SFO (in person). PDT (UTC-7)
- Jon Erickson
- Kevin Gomes
- Andy Hamilton
- Kent Headley
- Rich Henthorn
 - 300078 - DMO Divisional Support - AUV
 - Review PR from ET
 - Research Simulator implementation
 - 902305 - Event Detection using the Sedimentation Event Sensor
 - Rotate logs and restart mission
 - Recover SES scheduled for Oct 26
 - 902306 - SINKER
 - Flipping switches on camera controller
 - Writing camera controller app beginning with test and BIT program
 - Out of Office
 - Oct 16 - 19: Remote work, PDT
 - Oct 26: Rachel Carson to MARS for SES
 - Nov 2: Out
 - Dec 18 - 28: Holidays
- Brett Hobson
- Irene Hu
- Scott Jensen
 - Out of Office
 - Family leave
- Brent Jones
 - Out of Office
 - Jury duty
- Chad Keczy
 - Out of Office
 - Out of office on Fridays
- Brian Kieft
 - Out of Office
 - 09/18-09/21 (EDT)
 - 09/25 - 09/29 (EDT)
- Denis Klimov
- Eric Martin
- Thom Maughan
 - 901009 - CANON
 - Discussions with bioinformatics users
 - Setup deepedna2 as base ubuntu 22 with sudo privs for users, many thanks to Peter for the support.
 - 901805 - Coastal Biogeochemical Sensing Program
 - Final touches on ymodem import of pressure-temperature coefficients.
 - Working on m2m protocol for lab automation.
 - 902004 - Planktivore
 - Milestone: deployment of Planktivore on LRAUV Ahi. Ironed out a few wrinkles and then had a clean 12 hour mission with 1+ Million plankton images!!! Many thanks to the LRAUV team for the support and guidance,

- Out of Office
 - Vacation Sep 27 - Oct 2 Ohio.
 - Oct 11 Jury/sick
 - Vacation Oct 12 - 18 Nevada Eclipse (maybe not)
 - Jan 9 - 12 CES
 - Feb 18 - 23 OSM24
- Mike McCann
 - Out of Office
 - 9-13 October: Web3D 2023 Conference
- Rob McEwen
- Paul McGill
 - 300070 - DMO Divisional Support - Ventana
 - Did some data modeling in Mathematica to verify that new ground-fault sampling scheme will work
 - 701147 - MARS O&M IV
 - Did extensive search for 4PDT relays for serial splitter board
 - 901700 - Acoustical Ocean Ecology
 - Finished PCB design for new BMA456 sensor for AOS PIC24
 - 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Working on antenna-aiming servo platform to improve connectivity with UAV during flights
 - 901904 - Deep-Sea Coral Community Observatory
 - Did some macro camera pixel size calculations for Steve L
- Enoch Nicholson
 - 706008 - READI-net
 - Second Sampler build
 - OMICS Meeting
 - 902306 - SINKER
 - December deployment frame design
 - 901205 - ESP SURF Center
 - 3G Cartridge Heater calibration fixture
- Tom O'Reilly
 - 901902 - Unoccupied Aerial Vehicles for Science, Operations, and Outreach
 - Conducted aerial surveys recently in north Monterey Bay over the "upwelling shadow", at Terrace Point (near UC Santa Cruz Seymour Center) and Davenport Landing beach. Imaged feeding sea birds, many moon jellies (*aurelia*), biofilm slicks and more from 60 meters altitude.







- Mike Risi
 - Out of Office
 - Out of office on Fridays
 - May 30 - June 6
 - August 21
 - September 5 - September 7
- Paul Roberts
 - 901809 - Deep Sea Bioinspiration
 - Multicamera acquisition software
 - 901904.99 - Corral Camera System
 - Design review prep
 - 902204 - Scalable Robotics
 - HSI camera assembly
 - Wide-angle laser assembly
- Brent Roman
 - 901205 - ESP SURF Center
 - Continuing to investigate ESP 3G pump pulsations
 - 901913 - Wet Wifi
 - Implemented systemd services for recording the Optim camera on Galene
 - And simultaneously streaming (lower resolution) video
 - DQ2210 - READI-net
 - Attended Ready-Net meeting at MBARI
- Carlos Rueda
 - Out of Office

- Oct 16-19: 1-2 days working remotely (school break)
 - Nov 15: (virtual) Generative AI (AI Barcelona)
 - Nov 20–22: vacation
- Karen Salamy
 - I continue to work on fine-tuning various functionality of the LRAUV Dash5 UI for the team.
 - Out of Office
 - On-campus 3 days/week (**T, W, TH**).
 - I *may* have to serve on jury duty (final jury selection will be next Monday). If chosen, I will be asked to serve ~8 weeks..... NOT kidding.....
- Brian Schlining
 - 500055 - VARS, M3/RS, DSG
 - Investigating bulk edit/update performance issues with annosaurus. Starting heavy lift from eclipselink to hibernate. Will also be adding hibernate envers for history change tracking.
 - Started prototype to aggregate i2MAP master and mezzanine files which are offset by 1 second.
 - 902308 - M3/VARS for the Masses
 - Adding integration tests to vampire-squid, video asset manager
 - Out of Office
 - Sep 20 - Oct 10 - Working remotely
 - Oct 11 - 13 - Out of office traveling
- Alana Sherman
 - 902208 - MiniROV Support
 - Preparing for Fulmar cruise series
 - Worked out some issues with GPS connections to Sonardyne/Winfrog/GUI
 - Overhead
 - Preparing for new hire Johann Voigtlander
 - Out of Office
 - Vacation day Monday 10/9
- George Stern