

Engineering Weekly Report 2/12/2026 - 2/19/2026

<https://docs.mbari.org/internal/projects/Engineering/Weeklies/2026/>

Executive Council Notes

-

Individual Activities

- Michael Anderson
- Kevin Barnard
- Francois Cazenave
- Danelle Cline
 - 901221 - Midwater Time Series
 - Added embedding output endpoint to vector database service [VSS](#); creating Voxel51 sync service for integration with Tator. This will allow one to quickly search, filter, and visualize visual data in an integrated way with the metadata, e.g. depth, temperature, etc. with a central database. See [demo of Voxel51 on i2MAP training data embeddings](#).
 - 901502 - Ocean Soundscape
 - CSUMB student, Gabriel Meyers, planning for service learning project on AWS
 - Fixed issue in the [syncing of backlogged data](#) and revised the wav file size check per the latest recorder. Many thanks to Carlos Rueda for flagging problems with downstream 16K audio processing.
 - 902111 - Carbon Flux Ecology
 - CenCOOS/Planktivore meeting. Issues with authentication support to be bumped to Voxel51. Will revisit after OSM when team is back
 - Fernanda will be presenting our work at OSM, Thursday, Feb 26th 3 PM GMT/ 7AM PST ME43A-07: Simultaneous, automated classification of abundant marine snow particles and rare zooplankton from imagery
- Duane Edgington
 - 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Adding supervision sliced inference to RF-detr detector pipeline. Should be ready for testing at the end of this week.
 - Overhead
 - 2/17/2026 Compensation presentation
 - Performance review
 - Out of Office
 - Medical Weds Feb 18 2026
- Kevin Gomes
- Andy Hamilton
- Kent Headley
 - 701147 - MARS O&M
 - Worked on a fan monitor app, now ~80% complete (developed as personal interest) to enable a secondary fan in the event of primary fan failure (overtemp). The underlying foundations are of general use: MARS message pub/sub test tools, and a driver library for the ethernet IO modules that control the fans.

It's not certain whether we'll need it, as passive cooling measures are proving very effective; if so, it's in a state that could be completed fairly quickly.

- Overhead
 - studying MB-System processing pipeline as it relates to Tom O'Reilly's work and Scalable Robotics.
 - Attended compensation review presentation
 - Went on paragon AUV recovery
 - misc admin
- Rich Henthorn
 - 902111 - Carbon Flux Ecology
 - Prep for upcoming deployment on March 4
 - Deployment checklist and rehearsal
 - 902305 - Event Detection Using the Sedimentation Event Sensor
 - Documentation project
 - Out of Office
 - March 4 - SINKER deployment on Carson
 - March 30 to April 2 - WFH and time off
 - Apr 9 to 13 - Durkin Packard Cruise
 - May 18 to 28 - Vacation
 - June 29 to July 6 - Vacation
- Akshay Hinduja
 - Out of Office
 - Feb 9 -March 9 parental leave
- Brett Hobson
- Irene Hu
 - 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
 - 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
 - Out of Office
 - 2/19/26 - 3/2/26: OSM
- Scott Jensen
 - 901205 - ESP SURF Center
 - Code clean up due to many legacy files still remaining
 - Testing of mechanism in hot and cold
 - Vacuum pump leak and adding a valve to deal with
 - Packing and preparations for Brazil
 - Support of preparation for Brazil
 - 902106 - Niobicon-Based AUV Docking Development
 - Trying to settle upon a EMC cable for the WEC to Dock
 - Out of Office

- March 23-31 (estimate)
 - May 11-24 (vacation)
 - June 29-July 7 (vacation)
 -
- Brent Jones
- Chad Keczy
 - Out of Office
 - Out of office on Fridays
- Brian Kieft
 - Out of Office
 - 03/16-18 (MST - wfh Mon/Tue .5 day)
- Denis Klimov
- Eric Martin
- Thom Maughan
 - Out of Office
 - Vacation Feb 16 to 20
 - OSM Feb 19 to 23
- Mike McCann
 - 901101 - Seafloor Mapping
 - Approved Pull Request for SMDB UI improvements
 - Reviewed 8 project proposals from each of the capstone students
 - Added --georigin and --html options to MB-System's mbgrd2gltf and testing in X3DOM
 - 901910 - Plankton Taxonomic Groups from AUVs
 - Talking with Fred about the Planktivore data processing pipeline
 - Out of Office
 - 2-5 March: OGC 134th Member Meeting - remote attendance
 - 19 June - 17 July: Vacation
- Enoch Nicholson
 - Out of Office
 - Sick
- Tom O'Reilly
- Mike Risi
 - 300062 - DMO Support - Doc Ricketts
 - Developed some logging code for LARS testing
 - 901101 - Seafloor Mapping
 - Working on LASS control system refactoring
 - 902606 - Low Altitude Survey AUV
 - Reviewed LASS code with Brian K.
 - Out of Office
 - Offsite on Tuesday and Friday
 - January 2, 2026 - vacation
 - January 19, 2026 - January 30, 2026 - vacation
 - March 4-5, 2026 - vacation
- Paul Roberts
 - Out of Office
 - Feb 21 - Feb 27: OSM 2026, Glasgow
 - Feb 28 - Mar 8: Vacation, Scotland
 - Mar 9 - Mar 13: OI 2026, London
 - June 13 - June 20, 2026 MidSEC, Sweeden
- Brent Roman

- Carlos Rueda
 - 901502 - Ocean Soundscape
 - A certain cronjob failing for the last couple days has revealed a more general issue.
 - 902101 - LRAUV Technology Development
 - Troubleshooted LRAUV-TehysDash http comms issues, which ended up caused by some apache misconfig of my own making!
 - TethysDash [backend modernization](#): 8 more endpoints migrated to Quarkus JAX-RS.
 - Saab: Weekly meeting (Terry Ward, Tim Powel). Terry is still working on setting up an Amazon EC2 instance.
 - The recent [tethysdash2](#) OS patch (which seems to have also involved a docker update), triggered the need to update the Watchtower service (used for continuous deployment of several TethysDash related containers).
 - 902504 - Scalable Semantic Mapping
 - CoMPAS expedition past Friday went well, including Dial use (I'm told).
 - Meetings; new Dial feature requests.
 - Overhead
 - Compensation presentation
 - Out of Office
 - Feb 24 morning: family business
- Karen Salamy
 - Out of Office
 - On-campus 3 days/week (**T, W, TH**). New OFFICE - G106.
- Brian Schlining
 - 500055 - VARS, M3/RS, DSG
 - A number of [VARS Annotation releases](#) were published. [This was a major overhaul under-the-hood](#) as well as to the build system. As such, there were a few follow ups to address newly introduced bugs. This also [addresses a long-standing issue when moving large numbers of annotations](#) to different dives or media.
 - Updates to the [vars knowledgebase editor](#) deployed
 - Setting up scheduled [task to convert 4k/HEVC videos to HD/H264 proxies](#) (to support web viewing of 4k videos across different browsers)
 - Added [docs for support tasks](#) that are run using vars-cli
 - New release of [Sharktopoda](#) to address issues on Mac Tahoe
 - New maintenance release of [jsharkopoda](#)
 - Updates to panoptes and nginx configuration to handle 4k framegrabs. The latest framegrabs can weigh in at 40MB.
 - Worked with IS to address issues with migration of framegrabs from atlas to thalassa.
 - Added new support functions to vars-cli for managing media
 - 901809 - Deep Sea Bioinspiration
 - Investigated some quirks with the FathomNet-NCEI pipeline.
 - Out of Office
 - Feb 13: Vacation
 - April 6 - April 24: Vacation
 - Jun 13 - Jun 19: Midwater Science and Engineering Community Conference, Sweden.
- Quinn Shemet
 - Out of Office
 - Feb 17th - Feb 19th - Vacation
 - Feb 23rd - Feb 28th - OSM, Glasgow
- Alana Sherman
- George Stern

- 701147 - MARS O&M IV
 - Finished verifying another fan and fan controller can be added
 - Updated documentation and looked through new solid models we received
- 902204 - Scalable Robotics
 - Began working on fixes for the broken HSI light; need optocouplers with fast edges that won't add to the jitter margin...
- 902304 - Piscivore Cam
 - Continued working on housing fixturing for Gen4
- Justin Tucker
 - Out of Office
 - Fridays through March 2026
- Johann Voigtlander
 - 902204 - Scalable Robotics
 - Gave Pushyami and Javiera a tutorial on how to use the Event Camera for their Ventana deployment
 - Uninstalled equipment from the Ventana sled to be installed on the MiniROV
 - 902208 - Mini ROV Operations
 - Installed MiniROV equipment in the 10-foot control van.
 - Debugging ground faults