

Engineering Weekly Report 2/26/2026 - 3/5/2026

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

Executive Council Notes

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Individual Activities

- Michael Anderson
- Kevin Barnard
- Francois Cazenave
- Danelle Cline
 - 901502 - Ocean Soundscape
 - CSUMB student weekly meeting. Good progress so far. Gabriel demonstrated Athena queries on PBP generated metadata and presented a general system workflow.
 - Upgrades to Shoutcast stream and fixes to email notifications of recording failures
 - 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - VO assistance. Some issues with the camera so we had to cancel the flight.
 - 902111 - Carbon Flux Ecology
 - SINKER deployment support; adding new physical GPU-enabled machine snowfall to workflow, switched MARS IP address, some optimization and cleaning of the ansible deployment scripts.
 - Debugging issues with embeddings failures in vector database service VSS. New VM [cortex](#) up and running; more planned for this but working well as proxy gateway for now.
- Duane Edgington
 - 901502 - Ocean Soundscape
 - Reading “Perch 2.0 transfers ‘whale’ to underwater tasks” Dec 2025 – supervised bioacoustics foundation model applied to marine mammal (orca) audio after few-shot transfer learning. Plan to test against MBARI MARS audio data
 - 901902 - Unoccupied Aerial Vehicles for Science, Operations and Outreach
 - Finishing “threshold” parameter sweep of UAVS RF-DETR detection model with benchmark dataset
 - New RF-DETR release; will need to retrain model to pick up new weights and configuration
 - Overhead
 - Virtual presentation poster and reading posters and presentations from Ocean Sciences Meeting 2026.
 - Out of Office
 - Medical AM Thurs March 5 2026
- Kevin Gomes
- Andy Hamilton
- Kent Headley
- Rich Henthorn
 - Out of Office
 - Feb 25 - WFH (appointments)

- March 4 - SINKER deployment on Carson
 - March 23 to 27 - WFH and time mostly 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
 - Starting again on floating anode measurements
 - Out of Office
 - 2/19/26 - 3/2/26: OSM
 - Rec com: LNY cookie break
- Scott Jensen
 - Out of Office
 - March 23-31 (estimate)
 - May 11-24 (vacation)
 - June 29-July 7 (vacation)
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- Brent Jones
- Chad Key
 - 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
 - Out of Office
 - Vacation last week 2/17-2/19
- Thom Maughan
 - Out of Office
 - Vacation Feb 16 to 20
 - OSM Feb 19 to 23
- Mike McCann
 - 200109 - Core Mooring Data - MDUC
 - Created mooring-ssds repo and am working on its [first Issue](#)
 - 901101 - Seafloor Mapping
 - Advising capstone students on the mbmesh development
 - Chaired first meeting of Web 3D Consortium's Geospatial Working Group in many years
 - Overhead
 - "Attending" OGC 134th Member Meeting
 - Asking IS to help configure High Availability for the dods-internal services
 - 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
 - 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
 - 708184 - ESP Monitoring PNW
 - Helping to diagnose likely USB cabling problems
 - 901205 - ESP SURF Center
 - Prepared ESPaway router with USB cell modem that should work in Brazil
 - 902204 - Scalable Robotics
 - Completed port of the driver/daemon from DepthAlv2 to DepthAlv3
 - 902304 - Piscivore Cam
 - Worked with George Stern to bring up CV28 SOM and IMX 662 camera module
- Carlos Rueda
 - Out of Office
 - Feb 24 morning: family business
- Karen Salamy
 - 300057 - Mooring Maintenance
 - Aided IS with determining if the shift over to StarLink for Data Downloads was successful. I have been monitoring the downloads for the team and have been pleased that few download failures have occurred since the transition.
 - 901101 - Seafloor Mapping
 - Spent time this week trying to wrap up the SMDB Dash. I am aware my time to give to this project will be limited throughout the rest of the year and wanted to address it now.
 - 902101 - LRAUV Technology Development
 - The last two weeks I have set up the [Dash5 production](#) server for the LRAUV team and established the [dash5-staging url link](#) as a development-only server for the software to be thoroughly tested through prior to being deployed to the production server.
 - I attended the Friday meeting with the team
 - I send out a Slack message to all of the #lrauv-operations group to ensure that all lrauv pilots only use the new Dash5 production server.
 - I will be refreshing my lrauv pilot training this week and will take the test asap.
 - 902111 - Carbon Flux Ecology
 - Preparing for the next SINKER deployment this week.
 - Out of Office
 - Vacation: Mar 20 - 24, 2026.
 - On-campus 3 days/week (**T, W, TH**). New OFFICE - G106.
- Brian Schlining
 - 500055 - VARS, M3/RS, DSG

- Updates to the VARS_KB database and [Oni](#) to support the [new Knowledgebase editor](#) app. Added additional [accepted taxa-levels](#) to Oni
- Fixed issues ([#295](#), [#296](#)) with Media in the VARS_KB database.
- Added Annotated images pages to the new Deep-sea Guide. Users can toggle between “select” images and random images in the upper-right corner.
<https://gehenna.shore.mbari.org/dsg/#/annotated/images/concept/Pandalus%20platyceros>
- Added the “Browse Taxonomy” feature to the new Deep-sea Guide:
<https://gehenna.shore.mbari.org/dsg/#/browsetree/concept/object>
- [Beholder](#) is a service for grabbing images from videos on demand. It gets hammered by some apps like [vars-gridview](#). Made improvements to the [cache](#) to remove potential performance issues.
- VARS Query now allows users to add a concept hierarchy to each annotation in the search results when they are saved. ([#13](#))
- The recent update to [search.mbari.org](#) introduced another issue with framegrabs for the video lab that was addressed ([#299](#)).
- Working on adding support to [vars-quickstart-public](#) to generate Let’s Encrypt SSL certificates.
- The latest macOS (Tahoe 26.3) introduced changes to Apple’s code signing requirements. Updated builds of [vars-annotation](#), [jsharktopoda](#), and [mondrian](#) to the latest requirements.
- 902111 - Carbon Flux Ecology
 - Investigating timeouts when doing very large bulk inserts into annosaurus on the production database. (They work fine on our testing database). Switched annosaurus and vampire-squid from random UUIDv4 to the new-ish UUIDv7 for primary keys to reduce index fragmentation. Rebuilt database indices. Made optimizations to annosaurus’ bulk inserts (See [AnnotationController.scala](#) and [ImagedMomentController.scala](#)).
- Overhead
 - Updated the Marine Imaging Workshop 2026 web site. <https://miw2026.org/>
 - Worked with DARC to migrate their VARS orchestration code to [vars-quickstart-darc](#)
- Out of Office
 - 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
- Justin Tucker
 - 901405 - Wave-Energy Conversion for Oceanographic Applications
 - Wave climate data processing
 - Battery Housing endcap design
 - 902101 - LRAUV Technology Development
 - Carbon test tube bond prep
 - Out of Office
 - Fridays through March 2026
- Johann Voigtlander
 - 902208 - Mini ROV Operations

- Mobilized MiniROV on DP
- 902312 - Seafloor Processes
 - Sent out paperwork to get the CSEM shipment back from Punta Arenas to MBARI