Mike McCann Sorted By Project

200109 - Core Mooring Data - MDUC

- Created mooring-ssds repo and am working on its first Issue (Week 10)
- Put some finishing touches on the Admin in mooring-ssds for editing ssds_metadata (Week 11)
- Implemented the REST API for the SSDS_Metadata tables in mooring-ssds (Week 11)
- Configuring mooring-ssds.shore.mbari.org with MBARI SSO (Week 11)
- Deployed read-only “Explorer” functionality to https://mooring-ssds.shore.mbari.org/ (Week 12)
- Working on translating old Perl mooring processing code to Python (Week 12)
- Stood up a duplicate docker stack on dods-internal2 to provide load balancing for nginx (Week 13)
- Working on translating DStoNetCDF.pl to Python in mooring-ssds (Week 13)
- Working with IS to tune dods.mbari.org/data for better load balancing (Week 14)
- Making decent progress on using the REST API from mooring-ssds.shore.mbari.org (Week 14)
- Working on the ds_to_netcdf.py management command to replace a key Perl script (Week 14)
- Working on replacing perl mooring data processing scripts running on elvis (Week 16)
- Continuing to work on Perl script replacements in mooring-ssds (Week 17)
- Turned off nightly drop/reload of SSDS_Metadata database on foggy for more testing (Week 17)
- Continuing to work on Perl script replacements in mooring-ssds (Week 18)
- Debugged problem with the M1’s download info virtual instrument data stream containing garbled data following thalassa move, we think (Week 18)
- QC’ed data for M1 - July 2024 added to the combined hourly and dailyAveraged NetCDF (Week 19)
- Making more progress on replacing Perl mooring data processing pipeline (Week 19)
- Documented how to record data set in SSDS - a good first step for good metadata (Week 19)
- Trying to resolve permission problems for thalassa shares from mooring-ssds (Week 20)
- Worked on dynamic current mooring deployment data plots comparing legacy with new (Week 20)
- Had a snafu with the postgres database being removed with a docker engine change (Week 21)

- Trying to get back on this project, but still dealing with LRAUV plotting fixes (Week 21)
- Working on Phase 2 of replacing Perl scripts in mooring-ssds (Week 22)
- Looking at writing PROV-O compatible provenance metadata for the new .nc files (Week 22)
- Making progress on replacing perl scripts with python django management commands (Week 23)
- Continuing to work on replacing perl data processing scripts – working on the plots now (Week 24)
- Finished work on replacing Perl/Ferret Mooring data processing with Python (Week 25)
- The broken contour.tstring plots have now been replaced by the new software (Week 25)
- Finding bugs while using new software to process past deployments managed in SSDS (Week 25)
- Starting work on replacing Perl/Ferret delayed-mode data processing (Week 25)
- Trying to fix the Anubis challenge for external access to the M1 contour.tstring images (Week 29)

901101 - Seafloor Mapping

- Wrapped up the refine mbgrd2gltf C++ code Issue that the CSUMB capstone team worked on (Week 2)
- More cleanup of the mbgrd2gltf code following years of capstone team contributions (Week 2)
- Considering 3DTiles 1.1 work in MB-System now that Cesium grant is in place for X3DOM (Week 3)
- Opened new “mbmesh” Issue for MB-System for 2 capstone teams to work on this semester (Week 4)
- Added computation of area mapped for each mission in SMDB (Week 4)
- Reloaded SMDB to test new area results added to the web site and *_survey_tally.csv files (Week 4)
- Reviewing Pull Request for SMDB UI improvements (Week 5)
- Meeting with capstone teams on Friday – CSUMB is going all in on teaching AI tools (Week 5)
- Learning MB-System tools (mbgrdviz, etc.) so that I can advise students working on mbmesh (Week 6)
- Reviewing Pull Request for SMDB UI improvements (Week 6)
- Approved Pull Request for SMDB UI improvements (Week 8)
- Reviewed 8 project proposals from each of the capstone students (Week 8)
- Added --geoorigin and --html options to MB-System’s mbgrd2gltf and testing in X3DOM (Week 8)
- Met with Capstone students who are making good progress on #1559 (Week 9)
- Reviewed SMDB PR (Week 9)
- Advising capstone students on the mbmesh development (Week 10)

- Chaired first meeting of Web 3D Consortium's Geospatial Working Group in many years (Week 10)
- smdb.shore.mbari.org OS Upgrade to Ubuntu 24 scheduled for Thursday morning (Week 13)
- Advising capstone students – they're doing good work figuring out mbmesh and 3D Tiles (Week 13)
- Met with capstone students – planning for an MBARI tour next month (Week 14)
- Advising capstone students on reaching a good milestone to wrap up their project (Week 16)
- Writing a new mbmesh Issue for the summer term capstone team (Week 16)
- Writing abstract with Prof. Su from CSUMB for an Oceans poster submission (Week 16)
- Reloaded SMDB's production database mid-week to test Karen's new filtering additions (Week 17)
- Setup hourly emails for M1 sound speed profile for current Packard mapping cruise (Week 17)
- Wrapping up capstone project with meeting on Saturday and MBARI tour on 8 May (Week 18)
- Debugging why recent R/V Sonne missions aren't loading into SMDB (Week 19)
- Tested and approved for merging the Pull Request from the capstone team for mbmesh (Week 20)
- Had first meeting with the summer semester capstone team (Week 20)
- Debugged a mission track not being computed from a set of .inf files (Week 21)
- Meeting with new capstone team on next steps for mbmesh (Week 22)
- Fixed bug in SMDB's load script that caused some mission tracks to not be computed (Week 23)
- Writing Independent Contractor Agreement for x3dom 3D Tiles work by Earthstruct, LLC (Week 23)
- Gave some input for next year's proposal (Week 24)
- Initial pull request for the mbmesh addition to MB-System has been merged into master (Week 24)
- Independent Contractor Agreement is in place for getting mbmesh to work with X3DOM (Week 24)
- Meeting with capstone students working on actual mesh generation for the 3D Tiles work (Week 29)

901221 - Midwater Time Series

- Talked to Rob about ROVCTD oxygen calibration in comparison to i2map O2 data (Week 13)
- Recent i2MAP deployment had config for only one CTD, working with Rob to fix that (Week 22)
- Working with ASO to get required SerialNumber info into seabird25p.cfg for O2 cals (Week 23)

- Reprocessed i2MAP mission 2026.138.02 to confirm proper O2 calibrations applied (Week 23)
- Reprocessed May's i2MAP mission with corrected seabird25p.cfg file (Week 24)

901910 - Plankton Taxonomic Groups from AUVs

- Reprocessed/reloaded stoqs_all_dorado data using a better fluo_bl_threshold value (Week 2)
- Created a set of Jupyter Notebooks useful for evaluating problems with LRAUV data processing (Week 3)
- Solved Issue of Inconsistent incorrect LRAUV processing to final _1S.nc file (Week 3)
- Running auv-python processing for all LRAUV deployments in 2025 and finding more issues (Week 3)
- Reloaded all 2025 LRAUV STOQS databases on tethysviz with auv-python processed data (Week 4)
- Updated Docker configuration of STOQS servers for automated SSL certificate renewal (Week 5)
- Talking with Fred about the Planktivore data processing pipeline (Week 8)
- Reprocessed and reloaded all 2025 LRAUV data with corrections for wetlabsubat data (Week 9)
- Added biolume plot generation to the standard LRAUV data processing in auv-python (Week 12)
- Fixing issues Monique is finding in auv-python's proxy calculations (Week 12)
- Helped Marguerite by generating ODV-formatted Sipper data for LRAUV daphne (Week 13)
- Instrumenting auv-python with --update_ssds_provenance to use mooring-ssds (Week 14)
- Wrapping up provenance tracking recording in mooring-ssds (Week 16)
- Creating LRAUV full deployment Quick Look Plots and email notification (Week 16)
- auv-python's LRAUV deployment plots now being sent to the lrauv-data Slack channel (Week 17)
- More quick look plot and web page improvements designed for Slack channel sharing (Week 18)
- Processed Dorado/Gulper mission 2026.113.00 - no more Matlab, it's all auv-python now (Week 18)
- Wrote some STOQS user documentation, starting with a FAQ page (Week 19)
- Improved LRAUV plot labels & composing an allhands about lrauv-data Slack channel (Week 19)
- Fielding responses from allhands announcement of new LRAUV deployment plot pages (Week 20)
- Wrote plotting code for realtime sbd data similar to the LRAUV deployment plots (Week 21)
- Made special cbit_amphousused realtime plot for the pyxis trip to Bermuda (Week 21)

- Fixups for pyxis realtime energy consumption plots (Week 24)

Out of Office

- 5-19 January: Remote work
- 20-23 January: ESIP Winter Meeting - remote attendance
- 2-5 March: OGC 134th Member Meeting - remote attendance
- 19 June - 17 July: Vacation
- 23-24 February: Out sick
- 19 April: Serving as a judge for a CSUMB hackathon
- 19 June - 10 July: Vacation
- 18-24 July: SIGGRAPH in LA
- 21-24 September: Oceans Conference
- 15 May: Giving keynote speech at CSUMB SCD Capstone festival
- Half time schedule: Generally away Mondays, Fridays, and alternate Thursdays

Overhead

- Attending ESIP Winter Meeting (Week 4)
- Performance review preparation (Week 5)
- Finally starting on fixing the elvis2 reverse proxy Issue (Week 5)
- Migrated stoqs.mbari.org to new VM running in the DMZ (Week 6)
- Redeployed the dods and search services to new VMs in the DMZ, closing Issue 22 (Week 6)
- “Attending” OGC 134th Member Meeting (Week 10)
- Asking IS to help configure High Availability for the dods-internal services (Week 10)
- Gave presentation at Metadata Standards Forum about X3D Geospatial and 3D Tiles (Week 11)
- Moved the expd_mapping repo to GitHub from BitBucket & set up auto-renewing certs (Week 13)
- Worked with Peter on upgrading the OSs for emdb and stoqs to Ubuntu 24 (Week 13)
- Dealing with impact of shares moving from atlas to thalassa (Week 14)
- Served as a judge for CSUMB’s “Kelp Your Neighbor” Hackathon – lots of creativity! (Week 17)
- Tech talk about Planktivore data processing (Week 17)
- Attended & Gave keynote speech at CSUMB SCD Capstone festival last Friday (Week 21)
- Set up routine processing of lrauv sbd data quick look plots, and a special one for pyxis (Week 22)
- Writing letter of recommendation for student on the last capstone team (Week 23)
- Some 2027 proposal input (Week 23)
- Wrote a reference letter for one of last semester’s capstone students (Week 24)

- Updated several https servers to use the new IS labels method for deploying certificates (Week 25)
- Finished my reviews of 3 posters and 2 papers for the Oceans 2026 conference (Week 25)
- Figuring out my work schedule now that I'm half time – away at SIGGRAPH next week (Week 29)