

Kevin Gomes Sorted By Project

300057 - Mooring Maint

- A little troubleshooting when mooring stopped reporting, seemed to fix itself (probably a reboot of a component) (Week 13)
- Chased down some bad metadata for the 225m CTD and corrected. End products (NetCDF) now being created are correctly aligned with metadata. (Week 15)
- Starting to gathering information and files for M1 Mooring turn (Week 28)
- Reviewing SSDS related items and starting work (Week 29)
- Starting to prep the SSDS side of things for the upcoming mooring turn (Week 33)
- Troubleshooting Mt. Toro issues (Week 34)
- Enabled OA2 deployment downloads (Week 34)
- Trying to figure out mooring turn plans given Toro might be down past the mooring turn (Week 34)
- Switched location beacon processing for M1 turn (Week 35)
- Working on SSDS processing set up for M1 turn (mooring was deployed blind since no Mt. Toro) (Week 35)
- Set up SSDS data processing pipeline for M1 turn (Week 36)
- Troubleshooting M1 data flows and Mt. Toro went down again, Craig thinks it's the UPS and will replace next week. (Week 36)
- Mt. Toro came back online so checking all the SSDS data pipelines and tidying up metadata (Week 37)
- Finished all the metadata plumbing to get data QC processes running again (Week 38)
- Some SSDS metadata maintenance (Week 41)
- Small amount of troubleshooting for M1 CTD (Week 43)

901009 - CANON

- Overhauling the WaveGlider data extraction to get Jupyter foundation locations in the ODSS. The overhaul is so that I can add in data extraction at the same time since their data interfaces are in flux and the old SOAP interface to WGMS seems to be pretty stable. (sigh) (Week 10)
- Working on new data extraction stack of software for pulling WaveGlider data from Liquid Robotics's WGMS system (Week 12)
- Data catalog stack of software (Week 13)
- Data catalog work, mostly focused on elasticsearch piece (Week 14)
- Wave glider data extraction/portal (Week 14)
- More work on WaveGlider data portal. (Week 15)
- WaveGlider portal (Week 16)
- Data catalog work, digging into connections to ERDDAP and GeoServer (Week 17)
- Data catalog (Week 18)
- For data catalog, looking at image tags to support data management of UAV data (Week 21)
- Overhauling the ODSS build and deployment to move to Docker/Podman to make things easier (Week 25)
- Took the opportunity to clean out old dead code and make things more efficient (Week 25)
- Big overhaul of the ODSS. Move to Leaflet, bug fixes, new functionality. Although look has not changed much, bugs and functionality has. (Week 26)
- Deployed to test and production (Week 26)
- More work on the cleanup and overhaul of the ODSS. Way easier to work with the codebase and deployment now and this will facilitate trying to move to a continuous deployment model and with the migration of the ODSS off the old servers. Much more cleanup to do in the codebase, but making great progress (Week 28)
- Proposal writing (Week 29)
- ODSS preparation, map creation, support for Summer CANON campaign (Week 29)

- Experiment support (Week 30)
- Support for CANON experiment (Week 31)
- Some cleanup support and restart work on data catalog (Week 33)
- Improving the tracking database to TimeZero data flow on the Rachel Carson (Week 33)
- Working ODSS related issues (comms issues with Carson really). (Week 34)
- Starting up data catalog work again (Week 36)
- Some support for ODSS (Week 36)
- A little prep for CANON experiment coming in October (Week 38)
- Starting on a VueJS based ODSS interface as a client for data catalog (Week 39)
- Some prep for deployments and CANON experiment (Week 40)
- ODSS development (new version) (Week 40)
- Support for experiment (Week 41)
- ODSS development (Week 41)
- Experiment support (Week 42)
- Slack support (Week 42)
- Working on ODSS migrations from CentOS 6 to 8 (odss-test, normandy, malibu and zuma) (Week 44)
- CentOS6 to CentOS 8 Migration (Week 45)
- Working on migrations from CentOS 6 to CentOS 8 for all four ODSS servers (Week 46)
- Shutdown canonfishvm (Week 46)
- Still trying to get the CentOS migrations complete. (Week 47)
- Working on migration of ODSS server from CentOS 6 to CentOS 8 (Week 48)
- Working on the ODSS upgrades off CentOS 6 which have been a nightmare, but finally having some breakthroughs with lots of help from IS (Week 49)
- Migrated the /trackingdb API to the new container as I forgot to add it (Week 51)
- Still chasing down very strange PostgreSQL queries that should be running fast, but are not (Week 51)

901205 - ESP SURF Center

- Working on new log parsing to include parsing or real.out file to support GOM deployment coming up (Week 5)
- Working on code to parse .out files in addition to .log files for Gulf of Mexico deployment. This is more work than I thought it would be because of some choices I made based on the idea the .log file was the sole source of information. (Week 6)
- Enabled Waldo in the ESP portal (Week 6)
- Disabled Gordon parsing in the portal (Week 6)
- Making quite a few changes to the log and out file parsing for the Gulf of Mexico ESP deployment (Week 7)
- Deployed portal code updates to work with data from Gulf Of Mexico ESP deployment (Week 8)
- Fixed bug from said changes :(. (Week 8)
- Working on code to work with native CNV files that come from the CTDs (Week 10)
- Supporting ESP deployment in Gulf of Mexico (Week 10)
- Code changes to do both bug fixes and enhancements for GOM deployment support (Week 12)
- Some small support of ESP portal (Week 13)
- Working on migrating the ESP web portal to the esp-portal.mbari.org machine to facilitate the upgrade of services.mbari.org to CentOS 8 (Week 20)
- Moving ESP code to containers to support CI/CD (Week 21)
- Porting ESP portal to the esp-portal.mbari.org machine with new container structure (Week 21)
- Moving the ESP web portal to containers (Week 22)
- In order to upgrade services.mbari.org, need to migrate the ESP portal to CentOS 8 which is running on esp-portal.mbari.org (Week 22)
- Overhauled build process to move ESP web portal to Docker image (Week 23)
- Configuring ESP services to run on esp-portal.mbari.org as replacement for services.mbari.org (Week 23)
- Starting data migration for ESP missions from services to esp-portal (Week 23)

- With Pat and Joe's help, moved the ESP web portal to shiny new CentOS 8 server that is dedicated to ESP web portal stuff and has a much better URL: <https://esp-portal.mbari.org/web/> (Week 24)
- Will be spending a little bit of time each day to port data from the old system to the new re-running the imports so log parsing catches any missed data from previous bugs. (Week 24)
- Fixing some bugs found during data migration (Week 24)
- Still migrating data from old portal to new (Week 25)
- More data migration from old to new server (Week 26)
- Migrating more data from services to esp-portal, getting close to being done (Week 28)
- More migration from services to esp-portal in an effort to migrate off CentOS 6 (Week 33)
- More migrations of data and pretty much done. The MARS 2013 data set is giving some issues, but that is the last one. (Week 34)
- Troubleshooting some portal issues (Week 35)
- Helping with some requests for the ESP portal (Week 36)
- Setup and configuration for helping with WHOI ESP deployments and the ESP portal (Week 40)
- Some small support for WHOI deployments (Week 41)
- Migrated services.mbari.org and cut over to esp-portal (Week 46)

901502 - Passive Acoustic Sensing

- Starting to scope the migration of the backend Alexa skill code from NodeJS 8 to 10 as AWS is deprecating NodeJS 8 very soon. (Week 6)
- Short debugging session when audio stream went down (Week 12)
- Created an AWS account and AWS connected the account to their data sharing organization where they will pay to host the Soundscape data for public consumption. (Week 35)
- Created an AWS account for the public data sharing, registered it with Amazon's Organization, created user and set up security policies to limit to S3 activities only. (Week 36)
- Created S3 buckets using CloudFormation templates provided by the AWS data sharing team (Week 36)
- Meeting to discuss AWS plans (Week 38)
- Some meetings and small amount of AWS stuff (Week 39)
- Moved LTSA web site to S3 and am evaluating performance and looking to enable SSL, Route53 DNS entry and enabling CloudFront, then testing performance again. (Week 40)
- Working on data sharing (Week 41)
- Helping with AWS related stuff (Week 42)
- Some AWS support for Cal Poly students (Week 43)

901602 - Data TAG: Addrss Eng Chng

- Abstract submission (Week 23)
- Abstract reviews (Week 24)
- Proposal writing (Week 28)
- Proposal writing (Week 29)
- Lots and lots and lots of proposal reading (Week 30)

901809 - Deep Sea Bioinspiration

901915 - Improving MBARI Data Impa

- Preparing for kickoff meeting on Thursday (Week 5)
- Held project meeting to look over LRAUV data structures and how that maps to the data models used by TimescaleDB. We are evaluating TimescaleDB's applicability to very large time series data. (Week 6)
- Looking into the possibility of uploading individual STOQS databases into single TimescaleDB as test. (Week 6)

- Working on data catalog stack (Week 12)
- Working through ideas from last meeting (Week 12)
- Working on architecture concepts for layered approach to data infrastructure (Week 13)
- Working on architecture for integration layer (Week 14)
- API design for integration to FAIR services (Week 14)
- Built prototype of connections between TimescaleDB and ERDDAP, Grafana, Tableau, etc. (Week 14)
- Group meeting to talk about architecture and design ideas (Week 14)
- Working on mbari-data-model project to create model that can integrate metadata from other legacy data systems (SSDS, ODSS, BOG, EXPDB, SamplesDB, VARS, etc.) and combine with STOQS model and with external efforts like W3C PROV and CSW to support data catalog efforts that can track provenance as well as data set integration. (Week 15)
- Catalog research and design (Week 16)
- More design work on integration layer and data models (Week 17)
- Reviewing LOTS of documentation on the various data models for RDF, Schema.org, OGC, etc., etc. (Week 17)
- Taking course on CI/CD and Jenkins (Week 17)
- Data catalog (Week 18)
- Looking into AWS Continuous Integration/Deployment for the data catalog work (Week 19)
- Looking at deployment scenarios for on premises and AWS testing (Week 20)
- Working on structure data catalog work into containers more amenable to CI/CD (Week 21)
- Small amount of catalog work (Week 22)
- Abstract submission (Week 23)
- Starting up work again on catalog and requirements writeup (Week 24)
- Structuring the ODSS to align better with the catalog work for this project (Week 25)
- Proposal writing (Week 28)
- Proposal writing (Week 29)
- Working on data catalog portion to test how well it will hold up to support image data management for UAV project. (Week 33)
- Working on data catalog capabilities to support UAV data catalog, query and registration in GeoServer. Working to support Tom's PDR which is tomorrow. (Week 34)
- Finally getting back to catalog work in earnest. Was able to update extraction code to capture XMP tags from images from UAV for search in Elasticsearch. (Week 35)
- Spinning up on GraphQL and looking to migrate catalog API (Week 35)
- Working on authentication requirements and decision doc to get security decision done to start applying to catalog. (Week 35)
- Converting the API for data catalog to GraphQL and starting on VueJS app to facilitate API development. (Week 36)
- Data catalog work (Week 37)
- Working on VueJS, Firebase, Apollo and GraphQL to start on the UI side of the data catalog (Week 38)
- Data catalog work (API, Apollo/GraphQL, etc.) (Week 39)
- Catalog API work and enabling Firebase auth for APIs (Week 40)
- Working on data catalog (VueJS, GraphQL, etc.) (Week 41)
- Resurrected code that does metadata extraction from multiple system for model development around Activity concept (Week 42)
- Data catalog API/GraphQL (Week 42)
- Trying to come up with generic way to store time series data from LRAUV, Dorado, etc. into a TimescaleDB that can be then connected to ERDDAP/THREDDS. (Week 43)
- Data Catalog extraction from various legacy systems. (Week 43)
- Catalog work (Week 46)

Out of Office

- May 6-7: Vacation
- Feb 18-20: Out sick
- Mar 16, 17, 20: Vacation
- May 28: Leave
- June 2: Leave
- Jun 25-26: Vacation
- Jul 2-3: Vacation
- Jul 29-31: Vacation
- Jun 26: Vacation
- Jul 1-3: Vacation
- Aug 3-5: Vacation
- Oct 8-9: Vacation
- Was on vacation last two days of last week (Oct 8/9)
- Nov 23-25: Vacation

Overhead

- Performance Reviews (Week 5)
- Working on External Review Presentation incorporating comments from walkthrough last week (Week 5)
- Working on new script for consolidating weekly reports for engineering (Week 5)
- Finishing up performance reviews (Week 6)
- Slide changes and practicing for external review (Week 6)
- Held lunchtime brown bag where we watched some talks on AWS CloudWatch logging and monitoring. Could be useful for centralized logging and monitoring. (Week 6)
- Hosted brown bag session on ELK stack as possible centralized logging and monitoring system (Week 7)
- Making changes to ER presentation after getting word from ER committee that we need to short presentations. (Week 7)
- Helped host cookie break (Week 7)
- Working on slide changes and practice for ER (Week 8)
- All External Review all the time :) (Week 9)
- Worked with Rich on documenting shipboard systems (Week 10)
- Some IS related tasks like machine clean up and server reboots (Week 10)
- Facilitating lunch time learning on Kafka and CQRS (Week 10)
- Starting work on aircraft engine presentation and reports (Week 10)
- Starting coordination of the annual MAOS tour group from Monterey High School (Week 10)
- Still work on review related stuff (Week 10)
- Group/Corona stuff (Week 12)
- Working on Markdown based internal and external documentation that is being hosted at <https://docs.mbari.org> (Week 12)
- Slack support (Week 12)
- Watched a couple GTC conference presentations (Week 13)
- Taking GTC course on accelerated data science using RAPIDS framework on GPUs (Week 13)
- Design discussions with group (Week 14)
- Started Udacity course on AI/ML for managers (Week 14)
- Helping IS with troubleshooting NFS/Atlas issues that were affecting pismo greatly. Managing fallout from that from a data processing perspective (seemed to affect my home directory the most for some reason). (Week 15)
- Lots of planning and organization. Doing some things that I've wanted to get cleaned up for some time now. (Week 16)
- Battling some strange computer issues and think I have them resolved (Week 16)

- Reworking weekly report scripting to fix bug and change functionality (Week 17)
- Taking course on Machine Learning for Managers (Week 17)
- Helping folks with AWS tasks (Week 17)
- Various overhead meetings (Week 17)
- Lot of time in AWS stuff, working with IS and Danelle to look at ways to connect MBARI AD to Auth0/AWS (Week 18)
- Helping Francisco, Nate and Thom get an AWS server configured for their virtual interns (Week 19)
- Several online courses for AWS related material (Week 19)
- Authentication work (with the help of Joe in IS) to test out the differences in Auth0 vs. AWS Cognito for managing web application authentication. (Week 19)
- Several different video conferences (Week 19)
- Some small level of AWS support for Francisco's interns (Week 20)
- Created a detailed list of all SE IE related IS supported servers for planning and migration purposes. (Week 20)
- Working on migration to CentOS 8 for several machines (Week 20)
- Overhauling the weekly report generation scripts to fix bugs and structure so it's easier to make individual and group reports (coming soon) (Week 21)
- Spending time cleaning up our AWS account (EC2, S3, IAM, CloudFormation). Will work on Security Groups and IAM roles next. (Week 21)
- Digging into ECS which is AWS's container service (Week 21)
- Spending a lot of time learning podman and system services. Podman is RedHat/CentOS's version of Docker. (Week 22)
- Abstract review (Week 23)
- Working on quick slides to present to SOI as an overview of MBARI data management practices to begin a conversation. (Week 23)
- Working with IS and Atlassian, was able to finally transfer the license from auth.mbari.org to oceana.mbari.org so I am not running our Crowd instance on a temporary license and we can now shutdown auth.mbari.org ... yay! (Week 24)
- Abstract and budgets (Week 25)
- Starting to think about proposals (I have two) (Week 25)
- More AWS help for Nate Truelove and Francisco (Week 25)
- Review panel (Week 26)
- Starting on budget stuff (Week 26)
- Assisting with Telepresence proposal scoping/writing (Week 28)
- Assisting with other proposals (Week 28)
- Group Budget fun (Week 28)
- Management overhead (Week 28)
- Sat in on NOAA STEM Proposal discussion (Week 28)
- Budgets and proposals (Week 29)
- All proposal, all the time (Week 31)
- Proposal review and resource balancing (Week 32)
- Had an unauthorized access (and use by bitcoin miners) of our AWS infrastructure. Working with AWS to clean up and implement policies and procedures to lessen the chance of it happening again. (Week 33)
- More work on weekly reports setting up list server to use to distribute reports. (Week 33)
- Some overhead both in AWS and Slack for closing up items for interns (Week 33)
- Working to move an effort along to finally choose an authentication provider (Week 33)
- Reviewing IEEE paper: "Decomposition of Monolithic Applications into Context-Aware Systems: A Systematic Mapping Study" (Week 33)
- A little more proposal related overhead (hours scenarios) (Week 33)
- Still working on AWS breach issue (fiscal and security) (Week 34)
- Working on implementing recommendations from AWS for breach prevention in the future (Week 34)
- Working on many things for AWS to ensure we are doing things in the most secure way. (Week 35)

- Phase 2 Resource Leveling and Review (Week 36)
- Helping Jenny with a request for some data extractions from Samples DB for the rock samples that went to the Smithsonian. (Week 36)
- Weekly sync meeting with Todd R. (Week 36)
- Restarting services due to IS restart of Dione and server patching. (Week 36)
- Working on authentication research to try and close in on decision (Week 37)
- Some proposal/budget work (Week 37)
- Other overhead (Week 37)
- IS Sync meeting (Week 38)
- Worked on converting Apache OpenIDC module conversion from Auth0 to Firebase (just Google accounts actually) (Week 38)
- Some IS related work (docker, CentOS versions, system restarts/upgrades) (Week 39)
- More AWS work on alerts and security (Week 39)
- Requested quota increase (granted) on SageMaker related AWS resources (Week 39)
- Working with Rich on transition plans, docs and process/projects (Week 39)
- Group Meeting (Week 39)
- Working with Todd on external security audit (Week 40)
- Attending and preparing for assistance with another run at web site overhaul (Week 40)
- Some AWS attention, quota changes, event bridge modifications, etc. (Week 40)
- Wrapping up 2021 proposal stuff (Week 40)
- Meetings for web site re-do (Week 41)
- Various meetings on security issues, audits, etc. (Week 41)
- Support on AWS on various fronts (Week 41)
- Working on gaining familiarity with the Ship/ROV data processing (Week 42)
- Migration of ODSS servers because IS is retiring CentOS 6 and we have to move to CentOS 8 and spending all my time on this. Progress is VERY slow. (Week 43)
- Working to transition some of Rich's work to me. (Week 43)
- Teleconference with Threespot who is working to construct an RFP for future work to revamp our digital presence (social media, web site, etc.) (Week 43)
- Slide preparation for Board Meeting (project updates) (Week 43)
- Migration of services.mbari.org from CentOS 6 to 8 (moved ESP Portal to esp-portal.mbari.org) (Week 44)
- Group Budget (Week 45)
- AWS billing and management (Week 46)
- SSDS hand holding to get AUV data processing through (Week 46)
- Succession planning (Week 46)
- Budget stuff (Week 46)
- Revisiting docs.mbari.org/mkdocs for succession planning documentation (Week 46)
- Group lead type overhead (Week 47)
- Working on webhook to automate mkdocs generation on docs.mbari.org (Week 47)
- AWS support (Week 47)
- Working on Group Lead overhead issues (Week 48)
- Group lead overhead (Week 49)
- Group Lead overhead (Week 51)
- Met with ThreePoint contractor for their presentation on our digital/web strategy moving forward (Week 51)
- Hiring committee (Week 51)