

Engineering Weekly Report 10/20/2022 - 10/27/2022

Executive Council Notes

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Individual Activities

- Michael Anderson
- Kevin Barnard
 - 200103 - Core CTD Data - MDUC
 - Investigating issues with CTD load/processing (only affecting a couple dives)
 - Caught up on O2 QC
 - Preparing transition to Karen Salamy
 - 701139 - ML Tracking
 - Submitted manuscript to Science Robotics for special issue on “autonomous robots for exploration & beyond”
 - 902002 - FathomNet
 - Implemented sort by central region average hue and depth in vars-gridview
 - 902005 - VARS Annotation Assistance
 - Wrote API spec for CVision AI FastAPI object detection model server
 - Wrote StrongSort to custom visual event conversion script
 - Looking into setting up model server proxy service
 - Out of Office
 - Vacation 10/31-11/1
- Francois Cazenave
 - 901405 - Wave-Energy Conversion for Oceanographic Applications
 - Monitoring buoy
 - 902106 - Niobicon-Based AUV Docking Development
 - Designing and ordering materials for new buoy and housing.
- Danelle Cline
 - 901502 - Soundscape Research and Education
 - Investigated live stream interruption and submitted a help ticket with details. IS has resolved this issue by updating a web certificate on the streaming server shoutcast.mbari.org.
 - Assisting collaborator, Karl Watkins on potential export of [Google Humpback model](#) to his embedded platform
 - Assisting collaborator, Kanoe Makalii on blue whale D call exploration; installed and test drove the MorphoCluster tool on some sound spectrograms. We are looking for ways to help organize calls faster for her training experiments.
 - 901915 - Improving the Impact of MBARI's Data
 - Working on FathomNet web page for new web design
 - 902005 - VARS Annotation Assistance
 - Mostly testing in new AWS subaccount (using MBARI login) which gives us better cost reporting and control of our production environment:

- Tested setup and training command in [DeepSeaAI](#) pip module in our new AWS subaccount; data prepared and uploaded, but waiting on quota increase to try full training run on all of the training data (315K localizations) on an 8 GPU instance.
 - CDK object detection and StrongSort tracking pipeline stack deploys ok in new AWS subaccount; added support for more flexible stack config through environment variables.
- Duane Edgington
 - Out of Office
 - Out sick Oct 19 - Oct 28.
- Jon Erickson
- Kevin Gomes
 - 901009 - CANON
 - More work on migration of ODSS on Zuma to Zuma U. It's a heavy lift as I'm doing some upgrades at the same time.
 - Met with Carlos about MXM and ODSS integration.
 - 901602 - Data TAG
 - More work on the strategic roadmap (preparation for implementation work)
 - 902202 - MBARI Cloud Integration Exploration
 - With Adriana's help, got the AWS SSO and Active Directory connection working so we now can use our MBARI logins to log into AWS.
 - Out of Office
 - 11/21-11/23: Vacation
 - 12/19-12/23: Vacation
- Andy Hamilton
- Kent Headley
- Rich Henthorn
 - Out of Office
 - Oct 24 - 28, WFH
- Brett Hobson
- Scott Jensen
 - Out of Office
 - On leave 10/20-25
- Brent Jones
- Chad Keczy
- Brian Kieft
 - Out of Office
 - 10/24 - 10/28 (PDT)
 - 11/21 - 11/25 (MST)
- Denis Klimov
- Eric Martin
- Thom Maughan
 - Out of Office
 - A week or so in November, exact date tbd
- Mike McCann
 - 901910 - Plankton Taxonomic Groups from AUVs
 - Good news: Can reprocess entire Dorado archive in a weekend with auv-python
 - Not so good news: There are several *ad hoc* Matlab code QC fixes I need to generalize
 - I now have a long TODO list now following meeting with Monique
 - Overhead
 - Helped diagnose problem (wedged draco) with data loads into the Expedition Database

- Will be meeting with Linda and Lonny to go over using emdb to help with ROV nav QC
- Rob McEwen
- Paul McGill
 - 901618 - Pelagic-Benthic Coupling and the Carbon Cycle
 - Troubleshoot near-field camera on Dual Camera Tripod to see why it stopped working halfway through the deployment. It was a problem with the Canon camera.
 - Made movies from Camera Tripod, Macro Camera, and Rover images.
 - Recharged battery for Smith Macro Cam.
 - Overhead
 - So much email to catch up on...
 - Out of Office
 - Was on sick leave until Mon, Oct 24.
- Tom O'Reilly
- Doug Pargett
 - Out of Office
 - August vacation
- Mike Risi
 - Out of Office
 - May 5 - vacation
 - May 9-10 - vacation
 - June 2-8 - OI cruise
 - June 10-14 - vacation
 - June 20-22 - vacation
 - July 19-20 - vacation
 - August 8-9 - out of office
 - Out of office most Fridays
- Paul Roberts
 - Out of Office
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- Brent Roman
- Carlos Rueda
 - Out of Office
 - Oct 18 - sick
 - Nov 11–14, 23–28, Dec 8–9: vacation
- Karen Salamy
 - Out of Office
 - Vacation: October 19-20, 2022
 - Vacation: November 8-11, 2022
- Brian Schlining
- Alana Sherman
 - Out of Office
 - Out for dentist appt