

Michael Anderson Sorted By Project

705102 - Open Wave-Energy Control System Development

- Meeting with SNL (Week 7)
- Reviewed Sandia paper before publication (Week 13)
- Resurrected script to parse wave spotter buoy logs (Week 13)

901405 - Wave-Energy Conversion for Oceanographic Applications

- Getting v1.1.0 release ready (automatic release scripts / testing) (Week 7)
- Enable nightly testing (Week 7)
- Update documentation (Week 7)

901513 - Targeted Sampling by AUVs

901910 - Plankton Taxonomic Groups from AUVs

- Package up python package dependencies for offline install (Week 7)
- Work toward installing python processing on alternate vehicle (Week 7)
- Processed ML predictions for plankton proxies on LRAUV data in STOQS (Week 7)
- Updated plankton biolum proxies Irauv backseat (Week 13)
 - Fixed issue with some proxies being 0 when others are NaN (Week 13)
 - Finished packaging for offline install for other vehicles (Week 13)
 - Enabled replay of past data (lead to bugfix for Blob type data in LRAUV codebase: see Irauv section below) (Week 13)
- Updated plankton ML proxies Irauv backseat (Week 13)
 - Finished packaging for offline install for other vehicles (Week 13)
 - Updated to use new particulate backscatter variables (see Irauv section below) (Week 13)
 - Enabled replay of past data (Week 13)
- Updated plankton ML proxies STOQS processing (Week 13)
 - Trained new models using new threshold on biolum proxies (Week 13)
 - Using transfer function to convert Irauv sensor data to look like Dorado sensor data to use Dorado ML model on Irauv data (Week 13)
- Reprocessing all past Irauv logs to include particulate backscatter variables (Week 13)

902101 - LRAUV Technology Development

- Learning how to get multiple vehicles in gz sim (Week 7)

- Fixed long-standing issue with unserializing Blob type variables in netCDF4 format (typos in bitsizes for converting data) which resulted in alternating zeros and real data in output (but missing half the data) (Week 13)
 - Reprocessed all netCDF4 Irauv logs (Week 13)
- Added particulate-only backscattering variables for realtime and logged data. The only scattering variables in Irauv logs and slate to date were volume and combined particulate+water backscatter (Week 13)
- Resurrected multi-vehicle simulation in gazebo sim (Week 13)
- Added intervehicle acommms data in gazebo sim (Week 13)
- Added / tuned mass-only control for Slow-Yo missions (Week 13)
 - Mass-only control was able to salvage a recent mission (transects at depth) unrelated to slowyo when elevator broke (Week 13)

902204 - Scalable Robotics

- Consolidated docker images to run with docker compose (Week 7)
- Wrote various helper scripts (Week 7)
- Managed data rates of all sensors to meet bandwidth requirements to run full system (Week 7)
- Enabled recording of full system (Week 7)
- Got all sensor drivers running in ros2 (Week 7)
 - Enabled raw lidar_packet data output in ros2 (Week 7)
 - Enabled output of all scan rings from lidar (including static transform publishers for display) (Week 7)
 - Enabled RTK mode on GPS (Week 7)
 - Enabled RGBStereo mode (output all three cameras of camera system) (Week 7)
- Meeting with GIM (sub-contractor) (Week 7)

902404 - 5th Marine Imaging Workshop

902405 - Precision Control Technologies

- Finished writing TRN data bridge (put data from TRN backseat on LRAUV slate) (Week 7)
- Meeting with Steve Rock for status and next steps (ingesting TRN and CoNav) (Week 7)
- Enabled multi-vehicle sim to recreate Portuguese Ledge circling (Week 13)
 - 3 vehicles circling at 120 degrees apart (Week 13)
 - Two vehicles pinging third with DAT and sending that ping data + TRN data to the third vehicle via acommms (Week 13)

Out of Office

Overhead