

901513 - Targeted Sampling by Autonomous Underwater Vehicles

Week 50

1. Brian Kieft
 - a. Worked with Yanwu to bring up simulator. Now working and testing missions
2. Carlos Rueda
 - a. Tom is using neptus@tsauv for rsync-based transfer of log files from the SMC-2 to shore.

Week 49

1. Brian Kieft
 - a. Working with Yanwu on a passive acoustic monitoring mission and will test next week in coordination with wet wifi testing.
2. Carlos Rueda
 - a. A window opened for further testing on the SMC2 with actual config for when deploying at sea later on (thanks Chris W., also Tom O.). All tests completed satisfactory, in particular regarding data access, which was pending from the previous set of tests a couple of weeks ago. Further adjustments in the code per Tom's changes on the board so commands can be issued directly on the SMC2 (not necessarily via "sudo" to the "smc" account).

Week 48

1. Carlos Rueda
 - a. Code adjustments per testing exercises done a couple weeks ago and in preparation for further testing happening today and tomorrow. CI back to using ubuntu-20.04 (due to issues with 18.04)

Week 46

1. Tom O'Reilly
 - a. Worked with Rueda and Wahl to test autonomous front-tracking application on our new SMC-2 Wave Glider computer, integrated with Wave Glider 'Tiny' on the MBARI dock; verified that the application is able to issue navigation commands and alarm messages to Tiny's CCU, and that messages are propagated through the Wave Glider network and displayed on WGMS.
2. Carlos Rueda
 - a. Possibly one more chance for testing on the SMC2 by the end of the month. Thanks Chris W.

Week 44

1. Carlos Rueda
 - a. A very productive set of tests -mainly involving commanding- on the SMC-2 on an actual wave glider was performed. Did several code adjustments to accommodate idiosyncrasies when issuing such commands onboard (as opposed to being issued from shore or directly on WGMS). Many thanks to Tom for his insights. Data access was the only key operation that we could not test due to lack of appropriate configuration. Hoping to test this next time (around thanksgiving?), if possible also along with overall exercising of the tracking algorithms.

Week 42

1. Brian Kieft
 - a. Wrapped up some CANON mission changes with Yanwu
2. Carlos Rueda
 - a. Preparing for onshore testing.

Week 41

1. Brian Kieft
 - a. Working with Yanwu on CANON related missions

Week 39

1. Carlos Rueda
 - a. Thanks Tom for the update regarding the need to run ServerExec via sudo on the SMC-2.

Week 37

1. Carlos Rueda
 - a. Awaiting a functional ServerExec to proceed with testing/tuning up wave glider commanding.

Week 35

1. Carlos Rueda
 - a. Awaiting a functional ServerExec to proceed with testing/tuning up wave glider commanding for the front tracking software onboard. Some adjustments in MXM provider API here.

Week 34

1. Brian Kieft
 - a. Troubleshooting basic host sim issues with Yanwu

Week 33

1. Brian Kieft
 - a. Assisting with host sim issue for Yanwu
2. Carlos Rueda
 - a. Now, with access to ServerExec on the smc-2 (thanks Tom), I'll continue with commanding related additions and testing for the frontracking software.

Week 32

1. Carlos Rueda
 - a. Awaiting access to the ServerExec executable on the SMC-2 to be able to run commands.

Week 31

1. Carlos Rueda
 - a. More preparations to run tracking software on the SMC-2. Added unit tests for data fetching (actual data retrieval) and basic tracking, which are passing OK on the SMC-2. Awaiting access to the ServerExec executable to be able to run commands.

Week 30

1. Carlos Rueda
 - a. Advancing preparations for data access and commanding on the SMC-2, including tests for the former, still pending for the latter. Working on alerts and a main program.

Week 28

1. Brian Kieft
 - a. Met for proposal discussions

Week 24

1. Brian Kieft
 - a. Various support for ongoing missions being run offshore

Week 22

1. Carlos Rueda
 - a. Resuming some work here to facilitate use of the core software on the wave glider.

Week 17

1. Brian Kieft
 - a. Working with Yanwu on patch mapping mission tests

Week 16

1. Brian Kieft
 - a. Assisted with Tethys deployment testing mapPatch mission last week.
 - b. Debugged issue with acoustic retry first noted in 2021 EcoHAB. Fix is in current release and will be tested this coming week.
2. Carlos Rueda
 - a. Adding wave glider front detection implementation for the SMC2, initially only with data access.
 - b. Tom has set up the SMC2 with a proper name and stable IP address.

Week 15

1. Brian Kieft
 - a. Working with Yanwu on his new patch mapping mission.
 - b. Supporting Tethys deployment this week to test the oil patch and figure out how to visualize the data properly.

Week 14

1. Brian Kieft
 - a. Working with Yanwu on polygon bounding of LRAUVs. Reviewed mission results.
 - b. Will run oil and polygon testing over the weekend in preparation for Santa Barbara and Barrow deployments.
2. Carlos Rueda
 - a. Met with Tom and Yanwu. Making some progress.

Week 13

1. Brian Kieft

- a. Working with Yanwu to test new mapPatch mission.
 - b. Publication review and chl offset characterization
2. Carlos Rueda
 - a. Based on commands provided by Tom, incorporating functions for commanding wave glider and sending out alerts.

Week 12

1. Brian Kieft
 - a. Working with Yanwu on L. Erie paper and chlorophyll scaling factors post sampling.

Week 11

1. Brian Kieft
 - a. Working with Yanwu on oil spill breadth mission

Week 10

1. Brian Kieft
 - a. Reviewing issues with chl measurements from last summer

Week 9

1. Brian Kieft
 - a. Debugging an issue with sending acomms data to multiple modems
2. Carlos Rueda
 - a. Good progress toward running tracking code on the vehicle. Still some TBDs are being discussed with the team. Putting together extension code with pieces provided by Tom.

Week 8

1. Ben Raanan
 - a. PR review

Week 7

1. Ben Raanan
 - a. Pull request review and sea trail prep
2. Carlos Rueda
 - a. Via Github Actions, the front tracking software tests [pass on python 3.6.8](#), the version available on the SMC-2.
 - b. More exchanges with Tom & LR re pip issues on the SMC-2, and various installs as needed by the front tracking software.

Week 6

1. Carlos Rueda
 - a. Some exchanges with Tom O. regarding issues to set up python pip on the SMC.

Week 4

1. Brian Kieft
 - a. Reviewed L. Erie paper

Week 2

1. Carlos Rueda

- a. Tom's still looking into LR's hints to possibly solve issues with pip on the SMC.
- b. Completing modernization of the Gpdviz tool: backend in scala, frontend now on Vue3/Quasar2/Typescript. (This is in part an overhead task).