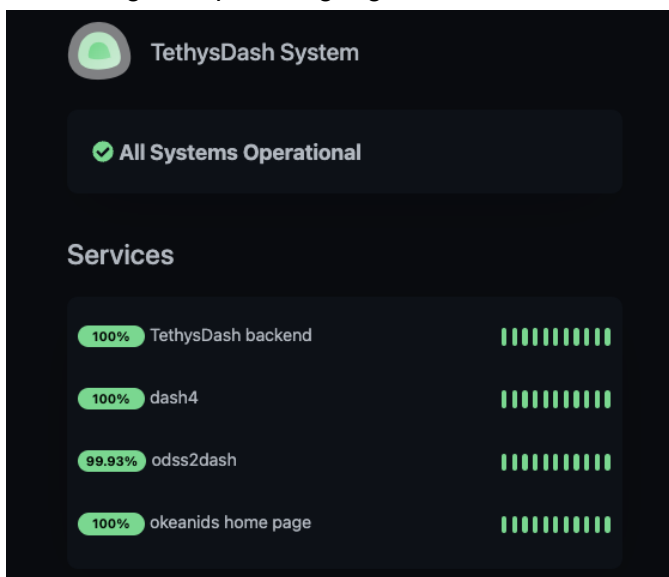


902101 - LRAUV Technology Development and Fleet Operations

Week 51

1. Carlos Rueda
 - a. Addressing some recently reported issues, reviewing and cleaning up code.
 - b. Set up an uptime-kuma instance for [monitoring TethysDash related services](#). Really straightforward, thanks Kevin Bernard for the quick guidance. As noted to the team on Slack: “worth keeping in mind that IS might be providing a general service monitoring solution in the future.”



2. Karen Salamy
 - a. Nearly finished with the new Measurement App for the LRAUV Dash5. This process has been a steep learning curve toward understanding React 18.2.

Week 50

1. Brian Kieft
 - a. More docking all the time!
 - b. Met with Elecia to firm up MMP testing. Fix is in, gotta test now.
2. Karen Salamy
 - a. Making headway on various map applications for the LRAUV team.

Week 49

1. Brian Kieft
 - a. Supporting UAV coordinated mission but it got scrubbed due to ceiling.
 - b. Looking into slowYo testing
 - c. Preparing for more docking tests.
2. Carlos Rueda
 - a. TethysL is now [3.7.3](#). Along with couple of previous versions, new features include:
 - i. New “express migration” VSCode command (thanks Quinn for the great suggestion)
 - ii. Dispatch of semantic tokens, and expanded “Outline” section in VSCode
 - iii. Some bug fixes, and lots of code cleanup.
 - iv. I’m also quickly revisiting some previous exercises to do the direct loading of tethysl missions in the LRAUV to estimate effort for this goal next year.

3. Karen Salamy
 - a. Dash5 work.

Week 48

1. Brian Kieft
 - a. Docking data analysis
 - b. Helping with host sim support for docking
2. Karen Salamy
 - a. Continue working on Measurement control in Dash5

Week 46

1. Brent Jones
 - a. Looking at timeservers on LRAUV. Building LCM on windoze
2. Brian Kieft
 - a. Lots of docking work! Charging is working and we're honing docking and attempting data transfer.
3. Carlos Rueda
 - a. Dash 4.55.2 with more adjustments/fixes related with the handling of changed/unchanged mission boolean parameters. Thanks Quinn S. for reporting.
 - b. Sent email to a number of LRAUV mission authors kindly asking for their review of tethys language documentation updates, recently contributed by Mike Godin:
 - i. <https://docs.mbari.org/lrauvmissions/tethys/>
 - ii. <https://docs.mbari.org/lrauvmissions/behaviors/>
 - c. Submitted [TETHYS-704](#), a proposal for an adjustment in the LRAUV, intended to make TethysDash handling of missions more robust.
 - d. Some exchanges with WHOI re Steve's widgets. Steve has now incorporated mission parameter defaults as provided by TethysDash API.
4. Karen Salamy
 - a. Spun back up to the Dash5 GUI work after a month in jury duty.

Week 45

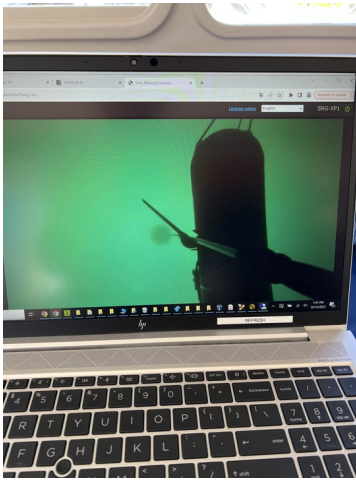
1. Carlos Rueda
 - a. TethysL is now [3.6.0](#).
 - b. TethysDash backend now [4.55.0](#), including adjustment for WHOI as requested.

Week 43

1. Carlos Rueda
 - a. TethysL is now [3.5.2](#).
 - b. Provided feedback to Yanwu re his PAM mission (based on diagnostics provided by TethysL).
 - c. TethysDash backend is now [4.54.4](#).
 - d. WHOI has upgraded to the latest dash frontend and backend versions.

Week 42

1. Brian Kieft



- a.
 - b. Docking runs on Tethys tuning up the horizontal control. Tethys has now officially charged on an underwater dock for the first time!
 - c. Fixed RDI pathfinder and Rowe simulation issues
 - d. SlowYo meeting to go over mass only vertical control progress
 - e. Made a modification to the sci2 mission to terminate a downward yoyo based on light for the ongoing planktivore deployment.
2. Carlos Rueda
 - a. TethysL is now [3.5.1](#).

Week 40

1. Denis Klimov
 - a. Helped debugging a compass on Thetys which experienced some sort of intermittent fault causing burning out a U14 on the Compass control card. Two cards were damaged. Upon inspecting / removing the damaged component it was found that pin 2 of damaged IC was fused to the pad on both boards, indicative of a high current. This line was then traced through the vehicle and front end-bell for possible parasitic connections and one was indeed found; battery voltage from one of the components which only activated occasionally, was shorted to the suspected compass communication line.
2. Brent Roman
 - a. TethysDash backend now [4.54.0](#)
 - b. Dash4 frontend now [4.54.2](#)
 - c. TethysL: significant additions in TethysL [3.2.3](#)!

Week 39

1. Denis Klimov
 - a. PAR sensor debugging on AHI, turned out it was the control analog card, not the sensor. Once the board was configured, the PAR channel started working. We might have to look at calibrating this unit once the vehicle is back.
2. Brent Roman
 - a. [TethysL](#) significant updates (now [v3.0.3](#)). Very productive session with Yanwu, including a complete migration exercise going over the main steps in general. Thank you, Yanwu!
 - b. TethysDash/dash4 updates as usual. Trying to revisit the modernization goal and see what could be advanced this year.
 - c. Some assistance to Karen re Dash5.

Week 38

1. Jon Erickson
 - a. EK-80: Almost have a solution for cable interference. Think I have 3/8 " offset on the xducer cables.

2. Denis Klimov
 - a. We had the issue with one operating a PAR sensor on Ahi, with debugging, turned out it was an incorrectly configured controller card, not the sensor itself
3. Rob McEwen
 - a. Ran B&T step tests in the tank to test the damping of the moving mass control
 - b. It was overdamped. Thus the underdamped response previously seen requires the vehicle to be in flight.
 - c. The simulator presented a similar underdamped response.
 - d. I was able to obtain a well-damped response in the simulator by adjusting the deadband and gains.
 - e. I'm hoping to try this at sea soon.

Week 36

1. Jon Erickson
 - a. New radio bracket assembly for the new cradlepoint radio.
2. Brent Jones
 - a. Processing navigation data trying to figure out why packets are being dropped
3. Brian Kieft
 - a. Diagnosing issues with acoustics data on Triton. Shutdown command, critical restarts, hwinfologging, wireshark logging
 - b. Fixed logging messages and stop timing in backseat component
4. Carlos Rueda
 - a. TethysL is now [2.9.93](#). Since 2.9.0, significant release for users with no access to the Irauv-application codebase but still needing the latest information (from master or other relevant branch/git reference) for mission validation.
 - b. TethysDash system is now [4.53.0](#).

Week 35

1. Brent Jones
 - a. Processing GL data. Still gaps in LCM data flow
2. Carlos Rueda
 - a. Addressing various requests. Dash4 is now [4.52.6](#).
 - b. As noted on the Irauv-operations slack channel: "fyi I just signed off several of you as PIC or On-Call associated with Brizo/Galene/Makai. As a reminder, it is now expected that operators explicitly sign off while entering an estimate of actual time spent during the watch-standing. My manual signing-off above is to facilitate the "transition" to the new protocol"

Week 34

1. Jon Erickson
 - a. Working on a new version radio bracket to fit a new Cradle point radio.
2. Brian Kieft
 - a. Met with mgmt to discuss funding for UX development outside services for first 3 mo of Q4.
 - b. DVL parsing fix was investigated and determined to be dropping bytes. Baud rate reduction seems to have solved the issue system wide
 - c. Configured planktivore networking and tested on Ahi for upcoming deployment.
 - d. Troubleshoot issue with shutdown command hanging the system over serial console
3. Karen Salamy
 - a. Continue to check off requested functionality for Dash5 working with Jim Jeffers. We have now implemented:
 - i. Elevation on maps
 - ii. Measurement Tool

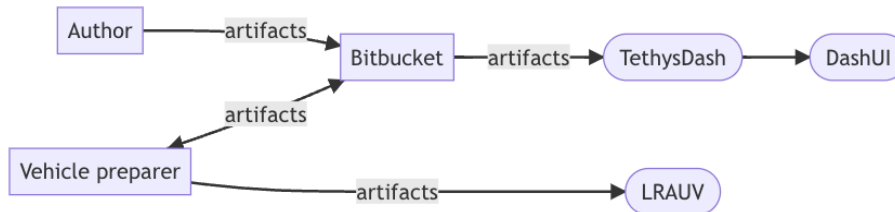
- iii. Geometry Toolbar
- iv. Split-Pane control

Week 33

1. Karen Salamy
 - a. Worked with Jim J. to finally get the GoogleMapsApiKey to work smoothly in Dash5
 - b. Now have elevation working
 - c. Now have split-view pane between map and vehicle control working
 - d. Currently working on react-leaflet-measure code refactoring

Week 30

1. Brian Kieft
 - a.
2. Carlos Rueda
 - a. Exchanges with WHOI regarding git-related issues affecting their operations (apparently they made direct changes to the lrauv-config clone, which is only to be managed by TethysDash). Added email notification to the admins in case of failure at TethysDash init time, and added and pointed them to a new section in the documentation: <https://docs.mbari.org/tethysdash/git/> (thanks Brian K. for reviewing).



3. Karen Salamy
 - a. Working on main Dash5 requests and issues with SUMO Creations in React.

Week 29

1. Brian Kieft
 - a. Working with WHOI to support their upcoming cruise. New missions and work on the strobe/camera system

Week 28

1. Brian Kieft
 - a. Met with BioAcc team to discuss plans. Working on reviewing data from great lakes.
 - b. Supporting WHOI deployment for scallop survey and CDOM work
2. Karen Salamy
 - a. Focused on building various map components for Dash5 with Jim Jeffers (@Sumo) including elevation with coordinates, splitpane control and scaleControl. Still battling GoogleAPIkey error issues.

Week 26

1. Brent Jones
 - a. Reviewing performance in field for BioAcoustics LCM traffic
2. Karen Salamy
 - a. Working with Jim Jeffers to add Dash5 map improvements including elevation (depth), split pane, and scale/measurement.

Week 25

1. Brent Jones
 - a. Looking at increasing LCM logging for Great Lakes op
2. Carlos Rueda
 - a. LRAUV/TethysL: revisiting ModuleToXsd.py toward determining possible strategies for either its replacement (with proper mechanism in TethysL itself) or retargeting it to generate JSON instead of XSD.

Week 24

1. Carlos Rueda
 - a. Work sessions with Rob M. and Quinn regarding assistance for new elements in the lineCaptureHoming mission.
 - b. TethysL: With Quinn, delineated a next set of migrations, which will be basically in a bottom-up fashion: migrate common “inserts” (eg, Insert/Science.xml, etc.), then other missions.
 - c. Provided assistance/guidance regarding Dash4’s use of Google APIs.
2. Karen Salamy
 - a. Working with Jim Jeffers at Sumo Creations to get various Dash5 map requests working for the LRAUV team including elevation, scaling, and split panes.

Week 23

1. Rob McEwen
 - a. Able now to specify ocean currents directly in Simulation.cfg.
 - b. Simulating docking events with ocean current.
 - c. Working on adding an auxiliary waypoint to lineCaptureHoming.xml for missed-dock events.
2. Carlos Rueda
 - a. TethysL is now [2.9.2](#), especially toward further facilitating [migrations from xml](#).
 - b. Assisting Karen with issues related with the Google Elevation API.
3. Karen Salamy
 - a. Working with Jim J. and Carlos R. to edits some important team requests for the dash5.

Week 22

1. Carlos Rueda
 - a. WHOI has installed the new [separate-image-per-component](#) release scheme of the TethysDash system! This is great as we now have a single release scheme to maintain moving forward.
 - b. TethysL: lots of work here culminating in a significant [2.9.1 release](#). Coordinating with Quinn toward resuming migrations, reviewing documentation, delineating assistance to users, etc.

Week 21

1. Rob McEwen
 - a. Debugging water current simulation in the LR simulator.
2. Carlos Rueda
 - a. TethysDash: code adjustments/fixes (both backend and dash4 frontend).
 - b. TethysL: revisiting the “operator associativity/precedence” aspect in the traditional XML schema and corresponding evaluation logic on the LRAUV, where this is done in very peculiar way, so we need to properly do translation to TethysL to preserve the intended semantics to the extent that is practical. Mike Godin has provided some input regarding the LRAUV logic, but I’m still unsure as to his actual availability moving forward.
3. Karen Salamy

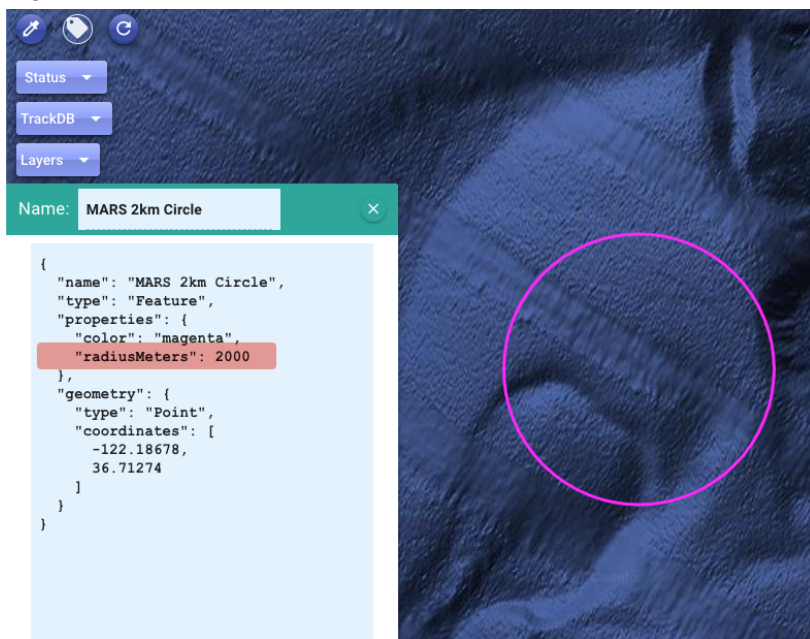
- a. Working to get various UI functionality working with the new dash5 ahead of DOEST

Week 20

1. Karen Salamy
 - a. Working with map updates for the team.
 - b. Brian wants to show the new Dash5 to the Board for the DOEST in June. Lots to do beforehand to try and get ready.
 - c. Have requested to have a meeting with Brian K. sometime this week or next to go over Dash5 and expectations from both Sumo Creations as well as myself.

Week 19

1. Brian Kieft
 - a. Working on dock network a bit
 - b. Investigating RDI issues
 - c. Planning to deprecate tracking behavior and stick with track_acoustic_contact
2. Rob McEwen
 - a. Working with QS on lineCaptureHoming.xml to remove premature dock attempts.
 - b. Working on docking test plan. Getting a better idea of which knobs to turn.
3. Carlos Rueda
 - a. Renewed TethysDash API Keys for the odss2dash service.
 - b. Dash4: users can now define circles for the map using the “stations” feature. 99% of the needed support was already there; just needed to introduce some special property (radiusMeters) to display a regular Circle, and not a marker as with a more standard “station”.



4. Karen Salamy
 - a. Working to upgrade requested map components for the team
 - b. Spoke with Jim Jeffers. He has some time left and is going to try and help with more critical Front End issues and bugs as he is most familiar with those components.

Week 18

1. Brian Kieft
 - a. Met with Steve Rock to discuss next steps in TRN
2. Carlos Rueda
 - a. TethysDash system:

- i. Fixed bugs (some discovered while exercising WHOI instance), and implemented dash4 enhancements suggested by users.
 - ii. New multi-image release/deployment scheme now in place for us (MBARI instance), and [documentation](#) being put together describing the new scheme for WHOI (thanks to Ryan G., for the feedback) and any other instances out there in the future.
 - b. ESPComponent: discussion with Quinn re issue noted during Brizo deployment.
3. Karen Salamy
- a. Working on 3rd party applications to upgrade them to work with React 18+. Many of the 3rd party apps that Carlos used for dash4 have not been upgraded in 4+ years and require updates to get them to work with the new dash5.

Week 17

- 1. Karen Salamy
 - a. Working on bugs, issues and UI requests for the project.
 - b. Ordered various books on React JS on how to build third-party plugins to apply to React-Leaflet.

Week 16

- 1. Carlos Rueda
 - a. TethysDash system: New release/CD scheme in place, with the customized backend component for MBARI being the only pending one.
 - b. LRAUV UX: slack exchanges.

Week 15

- 1. Carlos Rueda
 - a. TethysDash system: Changing build/release workflow so each component (backend, frontend, okeanids homepage) gets packaged in its own docker image. This new scheme offers a more flexible and streamlined release workflow (e.g., sometimes only one component, say, the UI, is updated, so no need to also rebuild/repackage the backend component along with it). Moving repos to GitHub toward a more uniform setup mechanism as with several of my other applications. Also, enabling continuous deployment for TethysDash (using [watchtower](#) as with the MXM system, but even more efficiently, that is, via explicit API request from the GitHub actions workflow, instead of by polling for updates from the server – see overhead bullet below).
 - b. Bug fix in the backend. (Issue noted on Dash4 – thanks Yanwu for reporting).
 - c. Dash4: By “popular demand,” new LRAUV coloring feature so users can override the color reported from the tracking database:
 - d. LRAUV UX: some slack/github exchanges.
- 2. Karen Salamy
 - a. I have been focusing mainly this week on addressing implementation of tools and bug fixes on the LRAUV dash5.
 - b. Cleaned up the tethysadmin's home directory of unneeded dash5 development folders for Carlos.

Week 14

- 1. Karen Salamy
 - a. EcoHAB week. Working diligently to get issues and bugs resolved ASAP for the LRAUV team. This project is taking up most of my time this week.

Week 13

- 1. Brian Kieft

- a. Lots of offshore testing last week. Recovered everything Friday.
- b. Debugging satcomms issue on Makai. It's involved.
- c. Debugging range closing docking issue with Rob. Solved and ready for test at sea
- 2. Denis Klimov
 - a. Two amplified PAR sensors assembly underway
- 3. Rob McEwen
 - a. Verified rangeClosing fix in simulation.
- 4. Carlos Rueda
 - a. New dash ui (aka dash5): Regenerated Google Key API for TethysDash due to public exposure in dash5 code. Implemented a dash5 [fix](#). Slack exchanges. Assistance to Karen.
- 5. Karen Salamy
 - a. Spent a lot of time this week familiarizing myself with the Dash5 code. I have been addressing multiple issues on the new Dash5 in an effort to get the most critical issue resolved prior to the team's ECOHab deployments in April.
 - b. Worked with Jim Jeffers to move the newUI to the mbari-org/dash5 Github repository.
 - c. I built-up the GitHub issue tracker section of the mbari-org/dash5 with all of the prior bug issues, feature requests from the team's [Google Docs spreadsheet](#). Brian will plan to delete this spreadsheet in the near future and shift completely to the GitHub issue tracker.

Week 12

- 1. Rob McEwen
 - a. Added a fix for the rangeClosing() problem where it doesn't detect a miss.
 - b. Pushed it onto a new branch feature/rangeClosing-fix-rob
 - c. Will now test it in simulation.
- 2. Carlos Rueda
 - a. TethysDash: For Tom's "h2dash" application, /api/hotspot is now the API endpoint, which now has initial support for digesting SBDs, among other various changes. Some style adjustments in Dash4 for the display of events associated with this new endpoint.
 - b. New Dash UI: set up a tethydash2 service and apache proxy for launching this new UI. Updated landing page <https://oceanids.mbari.org/> to include a link to it. Assisted Karen with dev env.
- 3. Karen Salamy
 - a. Spent time creating a fork from the Sumo Creations Github repository. Yesterday I was able to add the GMRT WMS map to the LayerControl method.
 - b. Helped Carlos move the new-Dash5 repo to oceanids.mbari.org (new Dash5 button on the) site now. The LRAUV team is already trying to work with the new UI. They are finding a lot of issues that appear to now currently work (sending commands to vehicles, responsive view for mobile phones, etc not working).
 - c. I will be trying to compile all of these issues along with those from the LRAUV team into a bug system..
 - d. Speaking with Jim Jeffers about transfer of the SumoCreations new-Dash5 repo to the MBARI Github repository.

Week 11

- 1. Brian Kieft
 - a. Testing MMP mode for Benthos modems
 - b. Fixed minor issue in Triton backseat mission

Week 10

- 1. Rob McEwen
 - a. Recommended fixing the unplanned dock by just drifting for 15 minutes immediately after undocking. It's an easy fix.

- b. Discovered why sometimes the vehicle doesn't know it missed the dock. It's because the DAT validity checks ignore hits that don't have all good data, principally bearing. Then, the rangeClosing function ceases to get sufficient data to determine the range is increasing because the DAT doesn't get good bearings when the transponder has passed behind the vehicle. However, it is still getting good ranges. So we need to adjust the code so that rangeClosing() just looks at ranges irrespective of whether the bearing is valid.
- 2. Tom O'Reilly
 - a. Working with Kieft and Rueda to connect acoustic messages retrieved by Wave Glider hotspot with the LRAUV 'dash' user interface. This will enable dash users to monitor acoustic modem message exchanges between LRAUV and Wave Glider, as well as LRAUV-to-LRAUV . We expect this capability to be quite useful for the upcoming EcoHab campaign.

Week 9

- 1. Brian Kieft
 - a. Debugging tethys oil leak, water ingress, and LCB reset
- 2. Rob McEwen
 - a. Worked through proportional navigation algorithm
 - b. Reviewing docking runs from December.
 - c. Looking for clues on how to reduce homing error.
 - d. Discovered that vehicle does an unplanned short-range dock attempt after every undock.
- 3. Carlos Rueda
 - a. TethysL [work](#).
 - b. Some more discussion and progress with Tom, re Brian's request to somehow reflect acoustic communications on the dash, but still some pending unclear aspects.
- 4. Karen Salamy
 - a. Spinning up on taking over Dash UI responsibilities from SUMO creations.
 - b. Held a ZOOM meeting with Jim J. on initial steps to do
 - c. Steps include building the UI from scratch from the Github site, hash out any install issues and fix them, and integrate the dash on a local server (oceanids?) for hosting and set up a JIRA bug tracking site for the project team.
 - d. I have also spent time getting acquainted with the current dash to best understand users' needs with the UI. In addition, I set up transects for the upcoming EcoHAB missions for the team, updated the team using the Slack channel and pinned it for future referral.

Week 8

- 1. Brian Kieft
 - a. Closed Triton with Quinn and deployed for bioacc testing and CANON coordinated mission testing.
 - b. Happy to report no critical failures for the entire last week of deployment with across 3 vehicles.
 - c. Lots of work documenting issues with the new UI.
 - d. Met with team to discuss upcoming docking work
 - e. Started looking into battery component issues on Makai
 - f. Met with Karen to get rolling on UI work
- 2. Carlos Rueda
 - a. TethysDash: Implemented a new /data/<variableName> endpoint. This is not simply like the usual /data endpoint restricted to the particular given variable, but it will inspect as many dataProcessed events as needed to gather the data points for the specified time frame. Steve has started using it for the depth sparkline he recently added to the widget. ("That will eliminate like 100 lines of really convoluted code :^").) I presume the new UI implementation will also be using this new endpoint.
 - b. Exchanges with Tom and Brian re acoustic comm and how to reflect it on the Dash. Also asking Mike G. for assistance.

- c. Some exchanges with Yanwu and Mike G. regarding certain mission constructs as used (or misused?) in circle_sample.xml.
 - d. TethysL is now [2.7.4](#) (with fixes in the vscode extension regarding the automatic installation of its own requirements, including java).
3. Karen Salamy
- a. Met with Brian K. yesterday. Began spinning up on the LRAUV project by viewing a video on controlling LRAUVs via the existing UI. We discussed the project and I have a list of issues I will be addressing over the next few weeks including a new GIRA bug list, installing the SUMO UI on a local server and setting up missions for an upcoming field operation.

Week 7

- 1. Brian Kieft
 - a. Fixed Joystick control on Galene and made a local (mbari) repo for further development
 - b. Reconfigured and pushed Galene cradlepoint config to IS repo.
 - c. Selected various missions to either delete, deprecate, or transition to TethysL (i.e. housecleaning)
 - d. Added B&T and compass cal documentation to deployment plan template. Updated B&T mission with more lenient default values for convergence.
 - e. Working with Benthos/Elecia to develop lat/lon/depth data return with range. MMP component testing will commence soon.
 - f. Set up backseat computer (BSC) on sim rig in lab. Will integrate LCM data flow to mimic a real vehicle/BSC.
- 2. Rob McEwen
 - a. Reviewing Docking runs from last December.
 - b. Making block diagram of the homing and control loops.
- 3. Tom O'Reilly
 - a. Working with Kieft and Rueda to make LRAUV acoustic messages relayed by Wave Glider Hotspot visible in the LRAUV 'dash'
- 4. Carlos Rueda
 - a. Various exchanges in the lrauv-ux channel re new UI implementation, in particular, I have emphasized the need for a more "formal spec" of the logic to provide various vehicle status information pieces in terms of the required support from LRAUV/TethysDash for the associated API for the new UI.
 - b. Did some testing of the new UI while updating the google [doc](#) accordingly.
 - c. Enabled a functional, but preliminary [TethysDash Slack App](#). Thanks Steve for the testing and great feedback. WHOI also interested. Awaiting reactions from LRAUV folks.
 - d. Dash System is now [4.30.1](#). (Per exchanges with WHOI, it includes more relaxed requirements for "dlist" generation, only requiring the startEvent for the deployment.)
 - e. TethysL: Updated the "[Other editors](#)" section in the documentation. In short, besides VSCode (which remains the primary target for powerful features), there is also basic syntax highlighting support for all JetBrains IDEs (including Fleet), TextMate, Vim, Emacs, Bat, and Sublime.

Week 6

- 1. Brian Kieft
 - a. Integrated new Waterlinked DVL on Galene
 - b. Ran sea trial on Galene to test DVL and new mission
 - c. Bringing up Ahi/Aku
 - d. Troubleshooting battery issues on Ahi/Makai
 - e. Assisting with testing of repaired actuators
 - f. New release underway for winter sea trials
- 2. Carlos Rueda

- a. TethysL system is now [2.6.21](#). Also, the [TethysL VSCode Extension page](#) has been updated to reflect all the recent improvements. Quinn Shemet and I had a very productive first introductory session, including a quick overview of the xml-to-tl migration process.
- b. Brief meeting with Karen re new dash ui implementation.

Week 5

1. Tom O'Reilly
 - a. Assisted in beach recovery of vehicle
2. Carlos Rueda
 - a. TethysL VScode extension now with ability to auto install its requirements, java and tethysl, if not found on the target machine. (but windows continue to be tricky, what a surprise! ;).

Week 4

1. Brian Kieft
 - a. Went over UX feedback for alpha test deployment
 - b. Integrating Waterlinked DVL into Galene. Testing offshore later this week
 - c. Simulated mass only mission for bioacoustic deployment
 - d. Ahi battery configs
 - e. Delivered new modem and RX card to Elecia for binary mode testing between the modems.
2. Carlos Rueda
 - a. Lots of TethysL work, with various fixes, adjustments, and additional features mainly intended to facilitate [migration of XML scripts to TethysL](#). (hopefully to be resumed soon with the help of XML authors and the new LRAUV member joining at the end of this month).
 - b. Some exchanges with Jim J., and input to the google doc re bugs and possible additional (or missing?) features in the new dash UI implementation.
3. Karen Salamy
 - a. Working on building LRAUV Dash from updated code on Github. Working through dependency build issues.
 - b. Spent some time working with React JS from online courses on Pluralsight.

Week 3

1. Karen Salamy
 - a. Began building the new updated LRAUV Dash for testing.

Week 2

1. Brian Kieft
 - a. Waterlink DVL initial bringup and wiring
 - b. Discretionary funds request for subcontractor working on Benthos MMP integration
 - c. Delivering new MF modem to Elecia for testing. Old one has a broken RX card. Will see if it can be repaired.
2. Karen Salamy
 - a. Building up Dash with the newest code to test.