

901513 - Targeted Sampling by AUVs

Week 49

1. Brian Kieft
 - a. Met to discuss ESP sampling strategy for Brizo deployment.
2. Paul Roberts
 - a. Review of krill detection deployment
 - b. Planning for EPS target sampling deployment

Week 47

1. Brian Kieft
 - a. Supported test deployment of intravehicle ESP simulated sampling
2. Paul Roberts
 - a. Triton 48 Krill detection deployment

Week 46

1. Paul Roberts
 - a. Integration of VL krill model into Triton Camera

Week 45

1. Brian Kieft
 - a. Tested Yanwu's new ROI informed sampling mission between two vehicles with Tiny as a gateway. Worked well!

Week 42

1. Carlos Rueda
 - a. (overhead) Some exchanges with the team about possible next window for a tracking exercise and about wave glider capabilities for algorithm adjustments.

Week 40

1. Carlos Rueda
 - a. (overhead) With Yanwu, more reviewing of past chlorophyll patch tracking exercise and adjusting some parameters for future exercises. I've proposed improvements to the algorithm.

Week 39

1. Carlos Rueda
 - a. (overhead) With Yanwu, reviewing the past June patch tracking exercise data and implementation.

Week 29

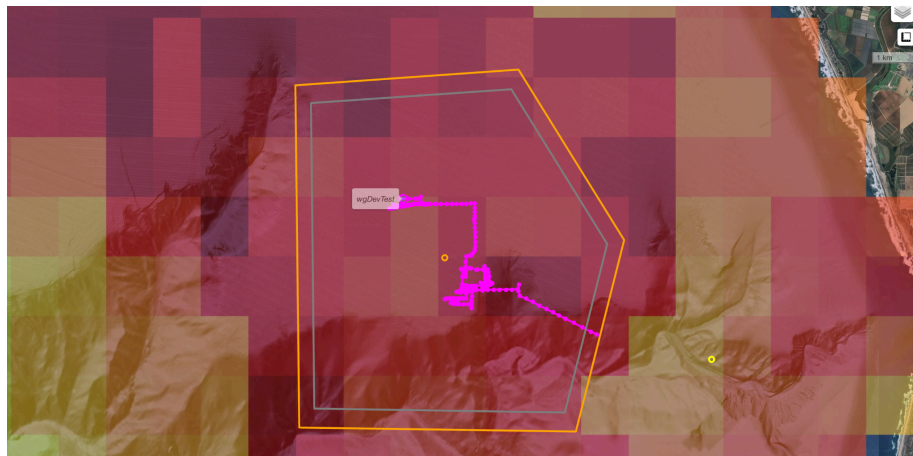
1. Brian Kieft
 - a. Supporting work on ESP/CANON missions

Week 25

1. Carlos Rueda
 - a. Some code cleanup after the successful tracking exercise.

Week 24

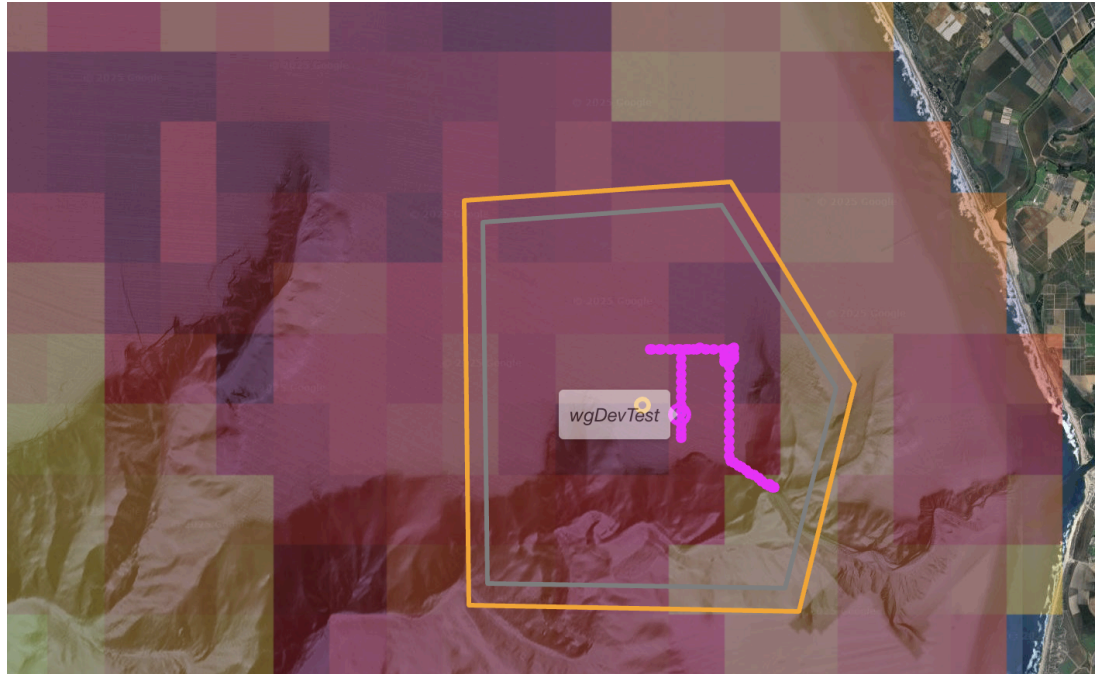
1. Carlos Rueda
 - a. Very successful first run of new chlorophyll patch tracking exercise using the development wave glider. Thanks much to Chris W. for the assistance. The tracking logic per se behaved as designed. I'm now working on refining the logic for handling boundary conditions (i.e., for when the vehicle gets inside/outside boundary polygon) while also improving simulation and visualization.



Week 23

1. Carlos Rueda
 - a. Completed various pending code preparations for chlorophyll patch tracking using a wave glider. Now being exercised in the field for the first time! Looks like the attached as seen in Dash4: a boundary polygon for operations; wave glider trajectory, and the current Chlorophyll-a, MODIS 3-day Composite tile layer for

context.



Week 20

1. Carlos Rueda
 - a. Basic testing of tracking software on the waveglider (smc-2) in preparation for deployment (tentatively, early June). Some ssh connection issues, though.
 - b. LR's looking into issues I'm facing when trying to sign in in WGMS (related to MFA).

Week 19

1. Paul Roberts
 - a. Review of ROIs from adaptive yoyo missions

Week 14

1. Brian Kieft
 - a. Mission reviews for Yanwu's tests this week.

Week 13

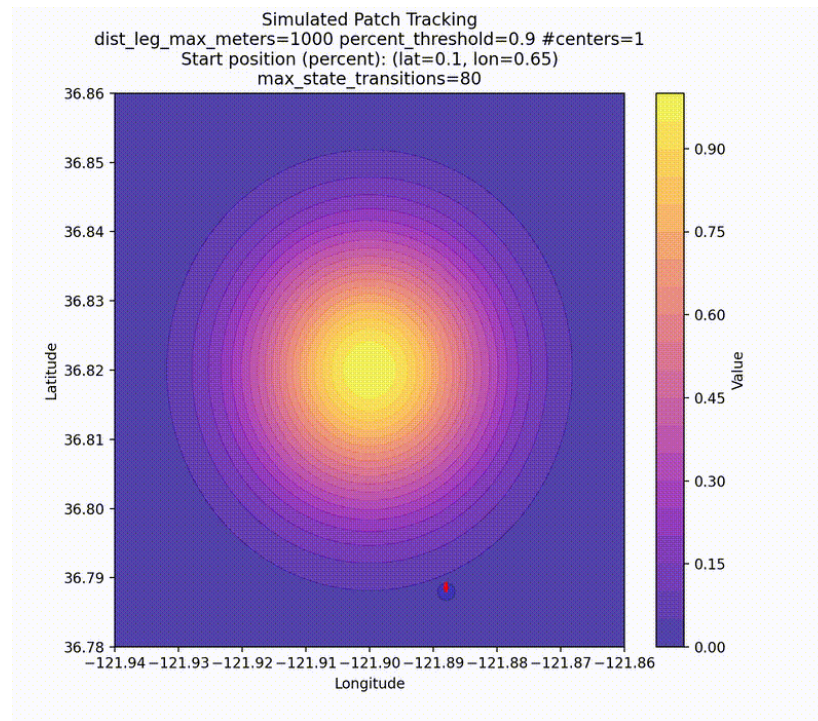
1. Paul Roberts
 - a. Planning for adaptive yoyo testing
2. Carlos Rueda
 - a. Various tests over the last few days, including data access with file `ecosamples.txt` on the smc-1 (from smc-2) as indicated by Chris. I think we are close to being ready for an actual patch tracking exercise in the field.

Week 12

1. Paul Roberts
 - a. Planning for Ahi deployment Mar 24, 2025
2. Carlos Rueda
 - a. Exchanges with the team regarding chlorophyll data access on the SMC-2. Data file, format, and formula have been determined. Thanks Chris and Tom.

Week 10

1. Carlos Rueda
 - a. Though still needing adjustments, the [patch tracking implementation](#) for the wave glider seems to be now in pretty good shape. As part of this I've implemented a waveglider simulator, which has been super useful.



Week 8

1. Carlos Rueda
 - a. Advancing patch tracking implementation

Week 7

1. Brian Kieft
 - a. Working with Yanwu on edge detection behavior concepts
2. Carlos Rueda
 - a. Still deciding on a practical approach to incorporate new patch tracking.

Week 6

1. Brian Kieft
 - a. Working with Yanwu on edge detect missions and behavior to keep vehicle in a feature of interest.
 - b. Also fixing various sim issues related to his work.
2. Carlos Rueda
 - a. Modularizing tracking codebase toward incorporating a new implementation for patch tracking.

Week 5

1. Brian Kieft
 - a. Reviewing some minor changes with Yanwu wrt transit back to station for PAM missions.

Week 4

1. Brian Kieft
 - a. Supporting PAM mission testing on Pontus