

300057 - Mooring Maintenance

Week 51

1. Karen Salamy
 - a. Worked with Jules and Chris W. to verify that OA2 (ANO) maintenance worked. All is looking good. The next maintenance will be with OA1 which is no longer providing downloads. The battery may have died on the mooring.

Week 50

1. Karen Salamy
 - a. Spoke with Chris Wahl and Jules regarding the continued issues with the OA1 mooring downloads over the last 6-8 weeks. They are planning another mooring maintenance check in the upcoming weeks to see if the intermittent downloads are related to a cable or a radio malfunction.

Week 49

1. Karen Salamy
 - a. Have performed weekly checks and have been in contact with Francisco regarding the long data download failures for both of OA1 and OA2. I have not heard from Jules as to whether he was able to determine what the issues were. The downloads have been less often of late.

Week 48

1. Karen Salamy
 - a. Checking in with some of the download failures with M1, OA1 and OA2. The two latter moorings appear to go through intermittent connection losses but re-establish after 10-12 attempts.

Week 46

1. Karen Salamy
 - a. Looked into the status of the M1, OA1, and OA2 moorings.

Week 43

1. Kevin Gomes
 - a. Some support tasks while Karen is on jury duty.

Week 40

1. Karen Salamy
 - a. Waiting on Francisco's group to finalize OA1 maintenance as to why it has stopped downloading data.

Week 39

1. Karen Salamy
 - a. Still working with Francisco and his group to try and get OA1 back on line.

Week 38

1. Karen Salamy

- a. I spent quite a bit of time working to help Francisco and his team with their deployment and data download issues for OA2 over the last week. In addition, OA1 has stopped downloading data (could not acquire TNC port). I am working with Francisco on trying to bring that back up and online this week.

Week 36

1. Karen Salamy
 - a. Weekly data download checks and maintenance

Week 35

1. Karen Salamy
 - a. Weekly checks and maintenance.

Week 34

1. Karen Salamy
 - a. Weekly checkin and maintenance as needed.

Week 33

1. Kevin Gomes
 - a. Some attention needed over the weekend as the server elvis stopped responding which interrupted downloads
2. Karen Salamy
 - a. Weekly maintenance and operational checks

Week 30

1. Karen Salamy
 - a. Weekly monitoring of system status. There has been an issue with one of the CTDs sending/SSDS downloading data from M1 recently.

Week 28

1. Kent Headley
 - a. Checked data and noted metsys wind errors; turns out sonic is not currently installed.
 - b. Met w/ Jared re options for changing time on metsys cr10x data logger
2. Karen Salamy
 - a. Check daily downloads
 - b. Updated various emails with Francisco's help for the special1_process_hourly scripts. Several recipients have recently changed institutions.

Week 26

1. Kevin Gomes
 - a. Performed M1 turn
 - b. Some clean up from mooring turn
2. Karen Salamy
 - a. Was on-call Friday for the M1 turn. Was not needed in the end. :-)

Week 25

1. Kevin Gomes

- a. Starting SSDS configuration for M1 turn
- b. Met with Karen to get handoff of information related to download portion of mooring turn

Week 24

1. Kevin Gomes
 - a. Preparation underway for mooring turn coming up soon
2. Kent Headley
 - a. working with Jared to understand download failures for 2023M1 (now in test on the dock)
3. Karen Salamy
 - a. Working with Jared F. to get the system downloading data properly prior to the deployment, currently scheduled for June 23, 2023. Currently we are having some serious issues with the radio for the new deployment. We are actively working to find out what the main problem with data downloading is.

Week 23

1. Kent Headley
 - a. Investigated system init issue; believe that compact flash card may have some bad media.
2. Karen Salamy
 - a. Working with Jared to prepare for the upcoming M1 deployment Jun 23, 2023

Week 22

1. Kent Headley
 - a. Wrapped up changes to metsys and gps clock
 - b. Checked in updates to CVS and git
 - c. Added sonic wind sensor firmware source to repo
 - d. Migrated O3 build environment to windows 10

Week 21

1. Kent Headley
 - a. Monitoring 2023M1 output from gps, gpsclock and metsys driver updates. All looking good.
2. Karen Salamy
 - a. Helping with upcoming Mooring Deployment.

Week 20

1. Kent Headley
 - a. Figured out why gpsclock driver stopped working: a reset reverted back to a retry configuration value that doesn't work; updated the default config
 - b. Worked with Karen to restore downloads on 2023M1 test system
 - c. Now metsys, gps and gps clock are all working on 2023M1
2. Karen Salamy
 - a. Helped Kent restore downloads to the 2023 M1 test deployment directory on coredata
 - b. Updated T-String information for the 2023 M1 test directory for Jared

Week 19

1. Karen Salamy
 - a. Weekly maintenance and observation

Week 18

1. Kent Headley
 - a. found root cause of metsys issues. There were two factors causing it not to sample: first, the new wind sensor takes longer to produce a sample, breaking some brittle logic in the sampler firmware. Second, the new wind sensor has a longer power up delay, causing sampling errors. I modified the sampler firmware, and am working with Jared
2. Karen Salamy
 - a. Continue to monitor the CTD issues on M1.

Week 17

1. Kent Headley
 - a. Finally found the root cause(s) of sampling issues with the new sonic wind sensor. We weren't able to get samples at 1Hz, and the instrument seems to have a longer start delay. The sampling firmware also had some brittle logic; in combination with the slow data return, it was failing to travel a critical branch. The long startup time was also causing sampling errors.
2. Karen Salamy
 - a. Awaiting updates with regard to the CTD download issues from Jared.

Week 16

1. Kent Headley
 - a. Working w/ James and Jared on OASIS metsys wind sensor issues.

Week 15

1. Karen Salamy
 - a. Monitoring the issues with the M1 microcat CTD data.

Week 14

1. Kent Headley
 - a. Testing fix for GPS, GPSClock drivers; looking good
 - b. Working w/ Dave and Jared on troubleshooting metsys
2. Karen Salamy
 - a. Monitoring the CTD cable issues on M1

Week 13

1. Kevin Gomes
 - a. Some troubleshooting of the inductive CTD string.
2. Kent Headley
 - a. after bench testing GPS driver mods, tagged a release and installed on Jared's test setup.
 - b. Working w/ Dave French to troubleshoot metsys wind sensor issues
3. Karen Salamy
 - a. Monitoring the CTD cable issues on M1.

Week 12

1. Kent Headley
 - a. testing software fix for interference between gps and gpsClock drivers, that also addresses possible warm-up time violation for garmin 19xHVS

- b. Working with Dave French to troubleshoot issue with new Vaisala wind sensor for OASIS metsys. The metsys uses an old Campbell data logger, which has an arcane programming language that is poorly documented.
 - c. Created git repo for oasis3, and plan to reach out to stakeholders about migrating to git. For now, continuing to work in CVS
- 2. Karen Salamy
 - a. Weekly data checks for mooring data.

Week 10

- 1. Kent Headley
 - a. Jared and I are closing in on the root cause of a couple of OASIS GPS issues: a possible warm-up time violation for newer GPS models and a conflict between the gpsclock and gps drivers. Good news is that we've been able to get a new GPS working w/o software changes (but w/o gpsclock driver)
 - b. Resurrected the OASIS3 tool chain and was able to build and program O3 persistors

Week 9

- 1. Karen Salamy
 - a. Checked data downloads and integrity.

Week 8

- 1. Kent Headley
 - a. Working w/ Jared and Dave F on metsys, gps debugging

Week 7

- 1. Kevin Gomes
 - a. After linux patches applied, found lock file was preventing mooring downloads. Cleared lock file and data looking good again.

Week 6

- 1. Kent Headley
 - a. Working with Dave French on OASIS metsys using new model Vaisala wind sensor. The metsys uses a Campbell Scientific data logger to interrogate the wind sensor using SDI-12 serial protocol. Recent wind sensors haven't been working with OASIS, and Dave is checking configuration options to see if that may be the root cause.

Week 4

- 1. Kent Headley
 - a. helping DMO (French) with metsys/vaisala issue: latest vaisala wind sensor not working with metsys. The metsys uses a campbell scientific CR10X data logger (c. 1993) to collect data from the sensors. The CR10X has a very arcane programming language: numbers that encode instructions and parameters, much like raw machine code. I took a quick look last year, and didn't have time to figure out CR10X programming. I recently found the original manual, and a trial version of a modern software tool that "disassembles" the program to describe the instructions. After looking at the code, I think that the CR10X communicates via SDI-12 bus, but the Vaisala may be configured to use RS232. Dave has ordered a cable needed to reconfigure the Vaisala; we'll test that hypothesis, and hopefully resolve the issue.
- 2. Karen Salamy
 - a. Performed weekly checks on data downloads and scripts.

Week 3

1. Kevin Gomes
 - a. A small bit of maintenance on monitoring scripts
 - b. New-ssds machine crashed late last week, but no cause found
2. Karen Salamy
 - a. Checking in on data downloads and to monitor issues with the ADCP now currently working on the mooring.

Week 2

1. Karen Salamy
 - a. Checking in on the Mooring - lost the ADCP data downloads last week. Staying tuned to being of help in any way possible to get the ADCP back online and data downloads working again.