# RL2501 Metanotes (CST Mazzella 1200-0000, ST Dahl 0000-1200)

**Friday, January 3, 2025**

* 1000 SCS-B database server crashed. Hard reset of shutting down computer, unplugging both UPS plugs on the back for 30 seconds, plugging back in and works.
* 1100 Sea and anchor detail
* 1200 Pump #1 Turned ON
* 1214 CB put into Intermediate position
* 1430 Drills
* ~1600 during Manta SCS Server crashed
* 1630 during Bongo it crashed again
* Altimeter stopped working after one CTD cast.
* Restarted computer and everything up, walked back into Dry Lab and server crashed again
* 1730 did patch updates on both SCS-A and B…still crashed
* Did station without SCS running, 2 hour transit to next station so I shutdown both computers and unplugged both UPS’s to both and let sit for an hour. Restarted computers and now have a new server error.
* Bottle #3 Luke and CST Mazzella put bottom O-ring back in and is holding water
* Bottle #19 O-ring is dangling
* SCS is currently down, using SIO’s data acquisition system in the interim.
* Barometer sensor is not operating; chief ET is working on it.

**Saturday, January 4, 2025**

* Bottle #1 cracked. ST Dahl replaced it.
* Repaired O ring on bottle 19.
* -80 freezer is taking a long time to come back down to temperature after samples go in. Engineers said to put something heavy on it help w/ the seal, said tomorrow he may try to repair the seal if the issue continues.
* Spoke with Sandy Chang, she is going to take a look into SCS
* Replaces o-rings on niskin valve #14

**Sunday, January 5th, 2025**

* SCS is back!!
* Send message for CUFES stopped going to their software, I disabled and reenabled and it’s sending the message
* The SCS GIS Trigger Manager and the SCS Quality Control (QAQC) was not running so went into the SCS computer to start them in Services.

**Monday January 6th, 2025**

* Repair cracked bottle #1 with epoxy.
* SCS is gone! At 1455, 1524..both services are not running and restarted both times.
* Crashed at 1542 and restarted without restarting the 2 services and it crashed again at 1608
* SCS is currently working as of 1745
* Response from Sandy mentions that she disabled both services to reduce the burden
* Niskin Bottle #5 fell off the carousel and now lives at sea during CTD cast 90.0 120.

**Tuesday January 7th, 2025**

* SCS crashed at ~0200am, then immediately crashed again after reloading. Reloaded again and it stayed up but no true wind or lat/long coming in or going to SCS or CUFES; did a hard reboot of SCS A & B. SCS B did a “Windows memory Test/Diagnostic” that took over 4 hours to complete. Then SCS worked again at about 0730. I re-enabled the CUFES message and everything was happy. It’s been working ever since … Kim says he’s talking to Sandy about it.
* Bottle #1 (now #5 that was repaired with epoxy held for a CTD cast!)

**Wednesday January 8th, 2025**

* Very Smokey day, ash in manta
* Repaired 2 bottles (line and valve).

**Thursday January 9th, 2025**

* Altimeter went out. Tried new y-cable and it began working again with a bucket test. Put old cable back on, still worked. Believe the termination went bad on the non-wetpulggable cable that connect the altimeter via termination to a wetpluggable cable that connects into the y-cable. connecting the and touching it just perfectly realigned it. Sent it to depth and it continued working but only started reading 30m off the bottom.

**Friday January 10th, 2025**

* The CTD wire got pulled on during a manta tow when winch operator used winch controller for the CTD accidently. I did a deck test and fires all the bottles and it was fine and then it works fine for the next two stations since then. I checked the wiring and there’s no fraying.
* Kim reterminated the altimeter and works!
* EK80 wasn’t recording and all the output settings were on the CPS cruise, Jackie updated everything and set it to CalCOFI configuration and resumed recording
* ADCP gyro 1 dropped out, stopped and restarted recording and it’s going back in.
* SCS has crashed multiple times.
* Bottle #17 has the TEENIEST hole where the handle was, removed it, Bret to added some epoxy.

**Saturday January 11th, 2025**

* Bottle 17 (epoxy fix) worked great.
* Bottle 15 lost it’s handle during retrieval process.
* Skipped manta starting on station 86.7 80 and continued to 86.7 100.0 due to high winds.
* Bottle 24 is in hanging by the HPU drying; science asked Brett to fix the handle (leaking hole) on that as well w/ epoxy.

**Sunday January 12th, 2025**

* Skipped Manta on stations 86.7 110 & 83.3 100 due to high winds/seas.
* Deck fixed an 85+m rats nest on the cables of winch one.
* ET Kim & Jackie took apart SCS computer to try to repair it from crashing further

**Monday January 13th, 2025**

* SCS crashed multiple times.
* Mystery black material appeared in one of the CUFES samples that mucked up their equipment briefly (ash maybe??) Was unable to figure out exactly what it was and where it came from.

**Tuesday January 14th, 2025**

* POSMV crashed, so ADCP wasn’t working, and EK80 crashed. A hard reboot finally fixed POS. All is working now, was down about 1 hour.
* Bottle 19 spring broke, replaced it.

**Wednesday January 15th, 2025**

* We scooped up tar in the Bongo. Ruined a flowmeter
* SCS crashed a few times, had to do a hard reboot to get lat/long and weed back.

**Thursday January 16th, 2025**

* Successful Torpedo launch at the morning proto station!

**Friday January 17th, 2025**

* Drills!

**Saturday January 18th, 2025**

* SCS down and chief ET Kim running a memory diagnostic @ 09:30
* Centerboard interim (flush) @ 10:05
* Crew changed scientists at 12:00
* New barometer arrived & spare niskin bottles & parts.
* CST Mazzella replace petcocks on numerous niskin bottles.

**Sunday January 19th, 2025**

* Completed 6 stations for “fire sampling”
* Affixed a camera to the CTD; remove bottle 15 & 16 to do this.
* Chief Bosun, Bret Miller, created a pole for trace metal sampling at the surface of the water.
* CST Mazzella experienced a back injury during side station operations.
* Chief ET Kim removed a RAM pair from SCS computers to solve crashing issue.

**Monday January 20th, 2025**

* Steamed back to transect lines.
* Began extra stations in Morro Bay Wind Farm area “express sampling.”
* CST Mazzella on bed rest for injury; science, deck, & bridge assisted in survey operations.
* POSMV dropped out briefly, “data port not available.”

**Tuesday January 21th, 2025**

* Continued sampling extra stations in Morro Bay Wind Farm area and CalCOFI stations. Now only using 14 bottles for CalCOFI northern stations.
* SCS has not crashed since removing the RAM pair from the system.

**Wednesday January 22th, 2025**

* St Dahl & Chief ET Kim Troubleshot the barometer. Data briefly coming into SCS. Kim found a bad solder. NMEA data coming out of barometer. Tested cords all functioning; however, weak light going into SCS. The mystery continues.

**Thursday January 23th, 2025**

* At ~0130, we began an 11 hour steam offshore to tackle offshore stations in an effort to beat imminent weather and complete those stations before the weather that is coming offshore in the coming days.

**Friday January 24th, 2025**

* Drills @ 1210
* SCS crashed again at 1715.

**Saturday January 25th, 2025**

* Added 4 more wind farm area stations, B1, B2, B3, B4

**Sunday January 26th, 2025**

* Slowed down before station 66.7 50 and had to wait 30 min for lighting to pass that was on station. Waited 30 min for a strike to be more than 10mi off station.
* Changed the o rings on the petcock for bottle 2 & 10 at scientists request

**Monday January 27th, 2025**

* Redid bongo on station 63.3 80 due to wrapped net
* Replaced bottom o-ring on niskin bottle #3.

**Tuesday January 28th, 2025**

* Added line 56.7 and 4 more stations (51, 60, 70, &80)

**Wednesday January 29th, 2025**

* Stations 56.7 51 & 60 don’t have TSG data associated with them (SCS lost connect with TSG at that period of time)
* Finished last station at 1522

**Thursday January 30th, 2025**

* Sea and anchor detail at 0940
* Pump #1 Turned OFF at 0940
* CB put into retracted position at 0900
* At dry dock pier in Alameda around 1300