

RE: DO calibration

Lockhart, Steve

Sent: Tuesday, July 21, 2015 6:09 PM**To:** Charles Robertson [Charles.Robertson@skio.uga.edu]

Thanks, Charles. That looks like what I need for now.

From: Charles Robertson [Charles.Robertson@skio.uga.edu]**Sent:** Tuesday, July 21, 2015 6:00 PM**To:** Lockhart, Steve**Subject:** RE: DO calibration

Hi, Steve. My original notebook is filled with running timestamps, % sat, μM , and Winkler bottle numbers. For the 4/24/12 trials, there are the following entries:

11:04: cond = 4.0525; temp = 16.7688

11:14: cond = 4.0538 (4.0555.4 written above); temp = 16.7826

11:16: cond = 4.0561; temp = 16.7878

11:59: cond = 4.0690; temp = 16.8700

Times are in EDT. These notes do not exist for the cals done in January. In fact, it is rare to have the time to write it down given the need to keep one's attention on collecting water DO samples and marking down the glider's DO readouts and times so they can be matched. It is a wet two person job, and data is constantly changing and streaming in spite of very controlled test conditions. These may have been copied off of the glider's laptop as the data streamed, I assume off of the thermometer associated with conductivity.

During a very early trial attempt I monitored the water with a separate YSI sonde so I could approximate O₂ levels in YSI's "discrete sampling" mode. I didn't record, though. I assume you have extracted all of the data that was saved on the files that Catherine uncovered? My guess is that all of the important channels were not selected to be recorded. We have an upcoming trial scheduled for Modena in August. I was hoping we could take wire snips and simply cut the tie wrap that holds the excess lead to the optode so that we could do our testing in a 5 gallon bucket in the lab. Now it looks like the tank is needed, full immersion, with all of the variables recorded. On the Winkler end (a method that dates back to 1888), my hands are full and wet.

Hope this helps.

CYR

From: Lockhart, Steve [mailto:stephen_lockhart@med.unc.edu]**Sent:** Tuesday, July 21, 2015 5:31 PM**To:** Charles Robertson**Subject:** DO calibration

Charles,

I hope all's well with you. Harvey has copied me on some but not all of the e-mails going back and forth. I think he's on vacation now. I'm trying to unwind the cal and see what it would have been without the offset of the internal temperature sensor. The one piece of information I'm missing is the temperature of the water during calibration. If

8/6/2015

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you have that (per glider cal), could you send it to me? I appreciate it.

Steve