

UCTD LOG BOOK

SN PA-0129

SN: 702-0323

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UCTD Fast Facts!

Max depth of probes: 2000m

Records data at: 16Hz

Free Fall drop rate: 4m/sec

Full Battery: 4.2V

Winding Spool Clutch is in SLIP

Deploying CTD " " OFF

Recovery CTD " " FULL

Always stop using BRAKE (red handle) not the clutch

Red line: First 50m, Last 25m

Jul 2018 SWL:

1370m of 500lb-test line on winch

Max amt of 500lb line that can be loaded on spool is 550m

But at SWL's 12knt: wind 435m (stop at shackle end) and drop for 100sec = 400m

OR 2min to get 435m (photos ^{includes some} slow unspooling slowness by using 2min)

Wait 5 sec btw pulling magnet and deploying probe.

(3) For SWL C30 (2018-63) Program:

1 July 2018 pre-cruise
Charged UCTD ~2 hrs
Connected to HP2015-01 "SWL UCTD"
Bluetooth Blue-Solei came ^{laptop}
up with COMB. At First UCast1.2
software did not have this as an
option - Restarted computer and
then it did.

PROBE 70200129

Set "Change stop seconds" to 0
So now this should allow probe to
record unlimited # of seconds of
data.

I tried to change the "Min Depth"
to 0 but it kept resetting to 1.0m
however the probe did record <1.0m
just fine.

PROBE 70200129

At sea only used for 16 casts -
From 10-13 July
Max depth ~500m.
Hit side of ship once on recovery.
Tried to recover ~~probe~~ UCTD once w/ J
the brake locked in place (then quickly
revised problem)

(4)

The end of the 800 # splice started peeking out of the outer spectral line but I didn't re-splice as exactly the outer line seemed in good shape.

The ship was sometimes running at 13.5 knots but all went fine.

Operating by both Simh Ann Quesad & Simh Zimmerman

Downloaded / computer connecting were fine. Rebooting computers always helped if UCast lost the computer assigned by Blue Salei. SZ did all the downloading of data.

13 July 2018 - SZ

Rinsed CTD in fresh water, wiped winch / spools / Davit w/ fresh water and packed.

(5)

2019
24 June 2019 Tane E + Simh Z
set up system on SWL

① need to add sticky label to base swivel plate to NOT add washers in the holes - there are enough stuck in there already. The bolts are getting too short!

② Please replace multi-hex tool_A it bit too rusty now.
in spires OCTO-1 plastic box

③ Put riser plate btw reinder holder plate + swivel plate to give more room for swivel plate release knob + bolts.

Mike / engine staff cleaned up telescoping pole w/ steel wool + lubricant.

so far so good!

28 June 2019

Using probe SN0323. This is mistakenly listed as SN 289 in inventory sheet w/ box and on box lid.

Had to power up for a while ~10 min but was then able to connect w/ laptop + blue salei (UD100 SEWA Red USB Bluetooth key).
Established COM6 for communication.
Opened + connected w/ UCast 1.2
Updated PC clocks then updated probe w/

6

"synchronise to GMT" and
"change stop seconds to 0s"
Battery @ 3.59V

Collected benchmark data for ~ 2 min
@ 22:23 June 28 UTC looks good.

SHEESH! Remember to ~~exit~~ move window up
so you can see download bar.

Pulled out + checked splicing needles.

A little rusty but latch works well.

I will resplice... but not until we are
underway.

Pack away until cruise day - will need to
charge battery before deployment.

Backup probe SW129

charged a bit; now @ 3.73V

connected, updated time

Ran bench-test-cast @ 2355 June 28
all good.

7

4 July - 1st cast @ 2104 UTC

wound 490m onto bobbin

Deployed for 2 min

Data looks good.

Max depth is 487 dbar

Scan #
244-6
2427

3
2427

- 244

2183 scan

136 seconds

16 2183

583

480

103

96

Finished charging battery
afterwards → now at 4.1V
(max 4.2V)

spool

Dummy plugs originally on SN 323 bobbin
were too long for connecting to recorder.

I swapped the plugs from SW129 +

now it fits on ~~forward~~ bobbin/spool

Line spire tutorial

① Start needle length about line

② Go one needle length in, catch loop pull the

③ Start 1/2" beyond tail length

④ Grab last 3/8" inch of tail + pull

back through

5 July After UCTO 3, event 12
2200 UTC

Remade loop splice as old one had some missing / worn / cut / frayed bands of spectra, and the tail was working its way out. Looks good...

SPICE NEEDLES
Many of the splicing needles are / super rusty, some latches don't move freely. If still available would be nice to have multiple "dry packs" of just one of each gauge, so only a few are exposed to salt during a splice.

8 July 1734 UTC after UCTO 8
(event #35)

charged UCTO - probably just fine
95 is but now topped up.
vols ~ 3.85V Now

9 July 2130 UTC after UCTO 11

Had to remake splice before casts. Don't know why it lasted such a short time but it had broken strands - very frayed at loop end where it attaches to fish.

This was last underway cast, but UCTO ~~then~~ used once more / attached to Rosette for comparison.

At sea only used 702-0323
For 11 UCTO casts and 1 tied to Rosette cast
From 4-10 July 2019

Started regularly spooling on 550m and deployed for 2 mth. Ship's speed ranged from 10 to 12.5 knt.

Did not hit probe on any recovery.
Downloaded data after every cast. Plots of data look fine but have not plotted all-together yet.

All data downloaded w/ UCast1.2
set up on laptop "HP2015-01" using Blue Soleil and UD100 SENA Bluetooth Adapter. (always connecting as COM6)

Data: all casts Dec 2017 (P,T,C)

#	Serial #	UCTD Cast and depth
1	489	}
2	480	
3	478	
4	468	
5	471	
6	476	
7	487	
8	503	
9	528	
10	503	
11	488	
12	1000 (!)	

Note! I see why the probe has been confused. In SN 289. The probe has TWO labels. One says 323, the other says 289. The bluetooth connection identifies the UCTD as #323.

All packed up & wiped down w/ Fresh water.

STOP WATCH NOT PACKED.
 kept w/ CTD gear.

