

Broadband OBS recovery record

OBS S/N S01 Cruise Site ID C04

2. Debrief

Q330 tag # 2017 IP 192.168.200.118

Flasher

Radio

Start debrief obstern.py

- record date/time 2015-04-01 12:42
- turn off "shore power" at wallbox
- record OBS connection: cable 75' subconn from wallbox no. 111 COM port 69
- connect shore cable to OBS
- SAIL light on at wallbox (Y/N)
- action if SAIL light not on -
- In a command window in the recovery directory for the current experiment, start obstern (obstern.py -sm -px, where x is the COM port and nm is instrument S/N) accept default port and log file name

Recovered status obstern

- check status via AC (##acxxsd^C or ^a a), record status bits (check that they are 1)
 - Strings (ss) 1 - TB/Q330 (tq) 1 - sw (sp) 1
 - record Q330 current (~60 or ~500) IQ330 47
- record AC values
temp 17.6 volts 13.73 volts 5.02 press 10.41 Boyle 3582
- record VA (##vaxxsd^C or ^a v) from BB1
volts 14.09 volts 14.08 volts 14.02 press 10.79 temp 17.6 Boyle 3713
- record VB (##vbxxsd^C or ^a 2) from BB2
volts 14.02 volts 14.10 volts 14.09 press 10.30 temp 20.2 Boyle 3512
- record VC (##vcxxsd^C or ^a c) from sensor package
volts 13.40 volts 3.31 press 9.45 temp 12.8 Boyle 3306

Check Guralp controller obstern

- request p1, p2, p3, p4, p5; values will be stored in capture file (##guxxp1^C, ##guxxp2^C, etc or ^a k 1, ^a k 2, etc)

Disable acoustics 8011x

- send pings to BB1 release, confirm that the release replies
- send disable to BB1 release, confirm that the release acknowledges
- send pings to BB1 release, confirm that the release does not reply
- if BB2 was used, send pings to BB2 release, confirm that the release replies _____
- send disable to BB2 release, confirm that the release acknowledges _____
- send pings to BB2 release, confirm that the release does not reply _____
- Give go ahead to remove and dummy transducers _____

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Start Willard, capture Baler

Willard and SAIL devices

- turn on shore power if not already on
- check power drains via AC (##acxxsd^C or ^a a)
 - record Q330 current (~150 or ~650) 119
 - record Vmain 15.54
- start Willard (register then ping until reply received then register again)
- select status for GPS, misc analog, data ports, quickview
- change Baler to continuous power via Willard configuration|interfaces|ethernet|advanced|continuously powered|apply

Check sensors

Willard and SAIL devices

- check if Guralp sensor is locked:
 - Booms < -30, < -30, > +40 avg < -3e6, < -3e6, > +3e6 rms < 50
- if not, issue lock (##guxxgl,1^C), time lock issued
- record following values just before disconnecting Guralp:

- Booms ch1 <u>35M - 34</u>	ch2 <u>-35</u>	ch3 <u>+45</u>
- rms vel ch1 <u>18</u>	ch2 <u>15</u>	ch3 <u>15</u>
- avg vel ch1 <u>-3.5M</u>	ch2 <u>-3.5M</u>	ch3 <u>+3.6M</u>
- assessment: Guralp locked , not locked
- Confirm that DPG signal (ch4) looks good ?,
 - record: rms 34 avg 74 window 14k
- Give go-ahead for sensor package removal
- Record date/time 12:47

Check clocks using external GPS

obsterm

- Connect RJ-45 end of Rev 2 Clock check cable to RJ-45 coupler from wallbox
- Connect Rev 2 Clock Check Cable Event BNC to Event cable from GPS clocks
- Confirm GPS configured for check -
 - "b3" mode for Arbiter, "f110 tiet event <enter>" mode for XL-GPS
- Confirm OBS configured for check - "##acnnee,0^c" (or ^a e 0)
- Perform external clock check with Arbiter and XL-GPS, (^g, enter Arbiter and XL-GPS comm port numbers), **repeat several times and check for consistency**
- Record raw values and offsets for any clocks available

Seascan time = 361: 12:48:11

Arb_x	XL	uB	<u>04/01/2015 12:48:10.5573419</u>	OBS-GPS =	<u>0.442658</u>
Arb	XL	uB_x	<u>12:48:10.557341914</u>	OBS-GPS =	<u>0.442658</u>
Arb	XL	uB		OBS-GPS =	

- Disconnect Rev 2 Clock check cable and reconnect cable from Ethernet switch to the coupler
- Set OBS to normal Ethernet mode - "##acnnee,1^c" or (^a e 1)

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Check clock via internal GPS

- change Q330 to Internal GPS, configuration|GPS|Internal GPS|apply
record time when GPS configuration applied 12:51
when GPS acquires satellites (clock goes to 80%, then 90%)
record phase -442675 and time 12:51
- save to eeprom via Willard
commands|system and GPS control|save to EEPROM|apply
- wait for Data Port 4 packet buffer to reach 0%
- shut off baler to capture offset to disk (Commands|Baler Control|Turn Off Baler)

Capture Q330 configuration

Willard and Beyond compare

- in Willard select: Configuration|Configuration Cloning|Save
 - save to *R:\Experiments\ENAM_Passive\Recovery\XML*
 - use file name *recover_xxxx.xml* where xxxx is Q330 tag number
 - locate file just saved, right click, select *left side to compare*
 - locate reference file, right click, select *compare to (file name)* (x is either A or B sensor)
Q:\other\templates\config_XML_files\ENAM_v1x-sensor.xml
 - select *view comparison*, note significant differences None
-
- select *File | File differences report*, then print differences to pdf, filename
Snn_xml_differences.pdf

Check Baler data

Browser

- access Baler with browser ([http://192.168.200.\(Q330 IP+1\):5380](http://192.168.200.(Q330 IP+1):5380))
 - from Baler Information - Percent of 1177 files in use 68.9
 - from Data Retrieval
 - enter Starting Time "2014/04"
 - all Baler files to be saved in *R:\Experiments\ENAM_Passive\Recovery\Downloads*
 - retrieve Messages; save page as *Sxx_messages.txt*
 - retrieve Timing; save page as *Sxx_timing.txt*
 - enter Seed Names "*B?? H??*"
 - select List Data Avail; save page as *Sxx_data_avail.txt*
- Note any gaps in data availability None

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Disconnecting shore to move instrument

- change baler to power cycled via Willard
 - configuration|interfaces|ethernet|advanced|power cycled|apply
 - If data download has not been performed, do not save to EEPROM. Baler will be continuously powered when turned on for downloading.
 - Wait for readback message in Willard
- confirm that IQ330 < 200mA with ##acnmsd (or ^a a)
- turn Q330 power off (##acxxsp,0 ^C or ^a p 0)
- switch off shore power at wallbox
- close obsterm
- print obsterm log file to pdf in obsterm log directory
- Notes from debrief: _____

Give go-ahead to disconnect shore cable frame
Record date/time 13:00

3. Frame check and breakdown

After go-ahead for sensor package removal

- **first** disconnect sensor cable at sensor package
 - silicon spray, install dust covers, note condition of both connectors _____
- **second** disconnect sensor cable at Jbox
 - silicon spray, install dust covers, note condition of both connectors _____
- move sensor package and sensor cable to lab
- condition of Jbox _____
- service connectors on DPG and DPG cable
- do not remove other connectors

Notes from disassembly:
