

Ocean Acidification Research Cruise
February 15-24th, 2012 WBI

1105 departure

1321 Sonde recording

1340 Aft pH running } check in an hour

1344 Aft CO₂ started

1357 surface sample WBOZ-001
Lab GPS down
Temp: 18.16 Sal 34.16

1500 surface sample WBOZ-002
Temp 18.50 Sal 35.00

1508 ~~Aft pH~~ Aft CO₂ - no data
- Changed settings; check system in hour
restarted pH & CO₂
→ Exported data files have
some data, but blanks at end

1615 surface sample WBOZ-003
Temp 18.91 Sal 35.27

WB02
Feb 12

1717 Surface Sample WB02-004
Temp 19.41 Sal 35.47

1811 Surface Sample WB02-005
Temp 19.16 Sal 35.7

1822 PH & CO₂ Att Systems still
don't display any data when
selecting Real Time data

- Some data for CO₂ then a bunch
of Hand Shake on estoms rows
w/o CO₂ data
→ restart & leave for the night to
see if its a cycle

1924 Surface Sample WB02-006
Temp 19.71 Sal 35.93

2053 Surface Sample WB02-007
Temp 20.06 Sal 36.06

2200 Surface Sample WB02-008
Temp 20.32 Sal 36.08

56

WB02
Feb 12

Thursday, February 16th, 2012

0001 Surface sample JB WB02-009
Temp 20.30 Sal 36.10

0100 surface sample JB WB02-010
Temp 20.40 Sal 36.08

0110 Heard a clicking noise. Autosampler
collecting data (??)

0201 surface sample JB WB02-011
Temp 20.44 Sal 36.06

0301 surface sample JB WB02-012
Temp 20.30 Sal 36.06

0400 surface sample JB WB02-013
Temp 20.37 Sal 35.99

0514 Surface Sample WB02-014 & dup
Temp 20.58 Sal 35.96

615 Surface Sample WB02-015
Temp 20.58 Sal 35.74

57

WBI
Feb 12

0801 Surface sample WB02-16
Temp 20.68 Sal 35.85

808 • CO₂ Aft system still not displaying real time data
→ Exported data; it has values & Handshake again
Check in a few days; looks like real time doesn't work, but machine functioning

• pH Aft (didn't stop & download last night)
- looks like handshake goes in cycles,
- no real time output - but machine functioning
→ Check again in a few days.

902 Surface Sample WB02-17
Temp 20.56 Sal 35.92

1034 Surface Sample WB02-018
Temp 20.14 Sal 35.72

58

WBI
Feb 12

1124 Surface Sample WB02-19
Temp 20.07 Sal 35.06

1243 Surface Sample WB02-20
Temp 20.20 Sal 35.57

1419 Surface Sample WB02-21 not
Temp 21.07 Sal 35.69 spiked

1512 Surface Sample WB02-22
Temp 21.16 Sal 36.01

Station PCBOS

CTD in 1729 (Flowmeter not working) / 1816
CTD up 1843

	Bottle	Area	Depth
WB02-23	12	Top	2
24 & dup	3	Mid	200
25	1	Bot	400
26	5	CTD Min	90

No Chlorophyll
max, just sharp decrease @ 90m
Weather & lightning
→ delayed till after dinner

Jan 12
WBI

59

WBTH
Feb 12

2046 replaced Sonde & Logger batteries

Friday, February 17th, 2012

0210 Started Sonde logging (forgot)

0213 Surface Sample WB02-27
Temp 21.0°C Sal 35.88
↑
↓

0807 Surface Sample WB02-28
Temp 19.68 Sal 35.2

flow through nozzle clogged?

it's not but putting much

→ flow through shutdown at 818

828 flow through fixed

837 Water flow seems balanced w. the instrument

1114 PCB03 Surface Sample
WB02-29 Bottle 9

1307 Surface Sample WB02-30
Temp 20.53 Sal 35.74

60

WBTH
Feb 12

1641 PCB02 surface Sample
WB02-31 Bottle 10 2m

1755 Surface Sample
WB02-32
Temp Sal

Not Spiked
ignore Sample

1813 Surface Sample WB02-33
Temp 19.64 Sal 35.65

1820 CO₂ Real-time still not displaying
Exporting data for both
→ Both have data; CO₂ is
somewhat rocky - large spikes
possibly from flow through
going down
~~flow through~~

41
2011 Surface Sample WB02-34
Temp 18.83 Sal 35.64

61

WBTH
Feb 12

PCB01 Station

2134

WB02-35

1 #

Area ^{30r}

Depth

~~21.18~~ 18

WB02-36

5

M:2

10

WB02-37

9 #

~~Area~~

~~21.28~~

TOP

Saturday, February 18th, 2012

749 Surface Sample WB02-38

Temp 17.97 Sal 35.39

807 Shutdown Sonde & logger
Shutdown Aft systems &
download data

Staying in Panama City for the
weekend due to weather

62

WBTH
Feb 12

Monday, February 20th, 2012

839 Turning on flow-through system

845 Aft system running & sonde
logging

853 surface sample WB02-39
Temp 16.15 Sal 34.82



Leak in lab; crew patching it,
experiments fine

1222 surface sample WB02-40
Temp 18.97 Sal 35.81

1317 surface sample WB02-41
Temp 19.68 Sal 35.89

1455 surface sample WB02-42
Temp 19.71 Sal 35.76

1604 surface sample WB02-43 & dup
Temp 20.44 Sal 35.98

1800 surface sample WB02-44
Temp 21.03 Sal 36.18

63

WBIF
Feb 12

2139 PCB06 surface Sample WBOZ-45
* Bottle ~~11~~ 11
Depth ~~10m~~ 10m

2254 surface Sample WBOZ-46
Temp 21.05 Sal 36.01

Tuesday, February 21st, 2012

0630 PCB11 Station 2 casts

	cast	Bottle	Area	depth
WBOZ-47	2	11	Top	2m
48	1	5	Mid	750m
49	1	2	Bot	1200

* No chlorophyll Max
Cast 1 7:39am
Cast 2 8:35

~~1035~~

1035 surface Sample WBOZ-50
Temp 21.06 Sal 36.13

1235 surface Sample WBOZ-51
Temp 21.32 Sal 36.14

1345 surface Sample WBOZ-52
Temp 21.39 Sal 36.13

64

WBIF
Feb 12

1647 surface Sample WBOZ-53
Temp 21.30 Sal 36.25

Station DSH 09

Cast 1 up^o

Cast 2 up^o 2058

WBOZ-54

55

56

57

58

59

NO Chloro
max

Cast	Bottle	Area	Depth
2	11	Top	2m
1	7	Mid	1000
1	1	Bot	2117
		C Top	
		C Max	
		C Bot	

Wednesday, February 22nd, 2012

0030 surface sample TB WBOZ-57
Temp 21.31⁺ Sal 36.13

Deepwater Horizon Wellhead Station

	Cast	Bottle	Area	Depth
752 WBOZ-58	1	3	Bot	1463
801	1	6	Mid	1000m
911	2	11	Top	2m

no chlorophyll Max

65

WBII
Feb 12

1108 Surface Sample WB02-61
Temp 21.84 Sal 36.26

1234 Surface Sample WB02-62
Temp 21.84 Sal 36.27

1349 Surface Sample WB02-63
Temp 21.79 Sal 36.29

1537 Surface Sample WB02-64
Temp 21.45 Sal 36.23

1710 Surface Sample WB02-65
Temp 21.33 Sal 36.12

2006 DSH10 Station Cut Bot Area depth
WB02-66 2 11 TOP 2m

2052 Surface Sample WB02-67
Temp 21.02 Sal 35.91

2204 flowthrough system turned off
- Waves too intense, system sucking
in air

66 ⇒ Shutting down aft & sonde
flushing Aft system with D.I. water
8min

WBII
Feb 12

DSH08 Station

	Botte	Area	depth
WB02-68	12	TOP	2
69	3	MID	500
70 & dup	1	BOT	1000
71	11	C TOP	10
72	10	C Max	25
73	9	C Bot	50

Thursday, February 23rd, 2012

DSH01 Station

	Botte	Area	depth
0600 WB02-74	11	TOP	2m
75	3	MID	30m
76	1	BOT	75

0848 Flowthrough system on
turned on Sonde & Aft systems

926 Sonde froze; rebooted

932 Surface Sample WB02-77
Temp 20.46 Sal 35.94

en route to Pensacola, FL

67

WB02
Feb 12

1042 Surface Sample WB02-78
Temp 19.72 Sal 35.40

1151 Surface Sample WB02-79
Temp 18.79 Sal 35.03

1304 Surface Sample WB02-80
Temp 18.49 Sal 34.83

1421 Surface Sample WB02-81
Temp 18.23 Sal 34.45

1508 Surface Sample WB02-82
Temp 17.87 Sal 33.39

1519 Shutting down sonde & Aft
Systems
Flushing Afts w/ DF water

Aft pH had some shells-frag/
Sand that came out after rinsing