

Belows
April

Research Cruise Ocean Acidification
R/V Belows

25th
April 25th, 2012

826 departing

- No Aft system because flowing water isn't allowed in the lab
- Sonde is in a cooler on deck with the sea water hose
- H₂O turned on @ 830

833 Sand logging started

918 ^{RBHMOZ} Surface Sample WFS04-001
Temp 22.04 Sal 31.51

* all ^{surface} samples put through a Pall Acro Pak 1000 Super Membrane 0.8/0.2 μ m filter
→ otherwise the flow is really bubbly

943 ODT: in Sonde might/probably wrong; sonde bucket very bubbly

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957 Surface Sample WFS04-002
22.18 Temp Sal 30.68

1051 ^{RBHMOZ} Surface Sample WFS04-003
Temp 22.47 Sal 33.47

1151 ^{RBHMOZ} Surface Sample WFS04-004
Temp 23.27 Sal 34.37

Station ST03

CTD in 1317 Surf Temp 24.25
CTD up 1331 Sal 34.82

RBHMOZ	Bottle	Area	depth
WFS04-005	8	Top	15
006	5	Mid	10
007	1	Bot	2

* Rosette CTD's Salinity not working.

1522 ^{RBHMOZ} Surface Sample WFS04-008
Temp 25.31 Sal 35.47

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Station ST06

CTD in 1727

CTD up 1735

1740

12BHMO2-009

010

011

Bot	Area	depth
11	Top	2m
5	Mid	15m
1	Bot	32m

1917

12BHMO2-012 surface

Temp 25.24

Sal 35.35

2013

12BHMO2-013 surface

Temp 24.37

Sal 35.48

Station ST12

CTD up 2330 Temp 23.66 Sal 34.04

2341

12BHMO2-014

015

016

016 dup

Bot	Area	depth
11	Top	2m
7	Mid	20m
1	Bot	56m
1	Bot	56m

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106 Surface Sample 12BHMO2-017
Temp 23.61 Sal 29.58

Station ST18

730 Surface Sample 12BHMO2-018
bottle 11, Top, ~~5m~~ 5m

913 surface sample 12BHMO2-019
Temp 23.28 Sal 29.67

1204 Surface Sample 12BHMO2-020
Temp 23.52 Sal 35.85

1308 surface sample 12BHMO2-021
Temp 23.79 Sal 33.27

Station ST24

1610 Cast 1 processed

12BHMO2-	Bot	Area	depth
22 C ₂	11	Top	2
C ₁ 23	5	Mid	400
C ₁ 24	1	Bot	800
C ₁ 24 dup	1	Bot	800m

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Station ST24 Continued

Cast 2: 1600 CTD in 1735

	bottle	Area	depth
12BHMOZ-25	C2	5	C ^{TOP} 30
26	C2	3	C ^{MAX} 56
27	C2	1	C ^{BOT} 150

1930 Surface Sample 12BHMOZ-28
Temp 26.57 Sal 35.86

2003 Surface Sample 12BHMOZ-29
Temp 26.44 Sal 35.86

2342 Surface Sample 12BHMOZ-30
Temp 26.30 Sal 35.90

Friday, April 27th, 2012

640 Surface Sample 12BHMOZ-31
Temp 25.16 Sal 36.02

747

747 Surface Sample 12BHMOZ-32
Temp 24.98 Sal 36.00

80

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Station N107

Cast 1: in 834 up 920
Cast 2: in 950 up 1005

	cast	Bottle	Area	depth
12BHMOZ-33	2	12	TOP	2
34	1	5	Mid	400
35	1	1	Bot	450
36	2	2	C ^{TOP}	50
37	1	11	C ^{MAX}	80
38	1	9	C ^{BOT}	100

1017 surf. Temp 25.01 Sal 36.14

1103 Surface Sample 12BHMOZ-39
Temp 25.22 Sal 36.17

1239 Surface Sample 12BHMOZ-40
Temp 25.20 Sal 36.23

1248 Stopped sonde logging
→ Changing batteries in ^{sonde} logger

1307 Sonde logging started

1332 Surface Sample 12BHMOZ-41
Temp 25.25 Sal 36.12

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1506 Surface Sample 12BHM02-42
Temp 25.22 Sal 36.15

1640 Surface Sample 12BHM02-43
Temp 25.27 Sal 36.30

1752 Surface Sample 12BHM02-44
Temp 25.24 Sal 36.39

Station NT13

Cast 1 in 1850 out 1910

Cast 2 in

	Cast	Bottle	Area	Depth
12BHM02-45	1	12	Top	2
46	1	4	Mid/Bot	75
47	1	1	Bot	150
48	1	6	CTD	50
49	1	5	Cmax	63
50			Bot	
49 dup	1	5	Cmax	63

1730 surf Temp 24.68 36.32 Sal

2101 Surface Sample 12BHM02-50
Temp 24.70 Sal 36.40

82

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Saturday, April 28th, 2012

Station NT19

CTD in 0235

CTD up:

	Bottle	Area	Depth
0258 12BHM02-51	12	Top	2
52	6	Mid	20
53	2	Bot	42
Surf Temp: 22.61	Sal 36.41	Cmax	+100

405 12BHM02-54 Surface
Temp 22.58 Sal 36.41

748 surface sample 12BHM02-55
Temp 22.72 Sal 36.36

Station NT25

CTD in 908 out 913

	Bottle	Area	Depth
12BHM02-56	10	Top	2
57	8	Mid	10
58	2	Bot	20
Surf Temp 22.77	Sal 36.35		83

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1016 Surface Sample 12BHM02-54
Temp 22.95 Sal 36.38

1133 Surface Sample 12BHM02-60
Temp 23.44 Sal 36.28

1243 Surface Sample 12BHM02-61
Temp 23.74 Sal 36.00

1412 Surface Sample 12BHM02-62
Temp 24.45 Sal 35.54

Station NT31

	Bottom	depth
12BHM02- 63	63 12 Top	2
64	64 8 Mid	5
65	65 2 Bot	12
66	top 656p	

1521 Surf Temp: 25.55 Sal 35.52

* Trichodesmium slick on surface

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1600 headed back to ST03 to resample
since the CTD's Salinity wasn't
good.

1702 Surface Sample 12BHM02-66
Temp ~~25.24~~ 25.24 Sal 35.61

1848 Surface Sample 12BHM02-67
Temp 24.54 Sal 35.83

2000 Surface Sample 12BHM02-68
Temp 24.16 Sal ~~35.92~~
35

2106 Surface Sample 12BHM02-68
Temp 24.16 Sal 35.98

Sunday, April 29th, 2012

0013 Surface Sample 12BHM02-70
Temp 24.10 Sal 35.9

0313 surface Sample 12BHM02-71
Temp 24.00°C Sal 35.73

Rollins
April 2012

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0606 Surface sample 12BHM02-72
Temp 24.13 Sal 35.81

Station ST03B

CTD in 837 Out 848

	Bottle	Area	depth
12BHM02-73	2	Top	2
74	8	Mid	10
75	12	Bot	14

848 Surf Temp 24.23 Sal 36.14

953 Surface Sample 12BHM02-76
Temp 24.11 Sal 35.75

1056 Surface Sample 12BHM02-77
Temp 24.41 Sal 35.39

1210 Surface Sample 12BHM02-78
Temp 24.63 Sal 34.32

1302 Surface Sample 12BHM02-79
Temp 24.97 Sal 31.66

1311 Stopping Sonde logging