

AR29 CTD Cast Sheet

Station Number: **A13**

Start date, time (UTC): **2018-04-19 10:40**

CTD cast number: **29**

End date, time (UTC): **11:00**

Initials: **WZ**

Floater ID	Bottle	Target Depth	TOI	Nuis	FC	Chl a vol	Chl b vol	BSI	HPLC ID	HPLC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
	1	300		✓											
	2	250		✓											
	3	200		✓											
	4	150		✓											
	5	120		✓											
	6	100		✓											
WS	7	75		✓	✓	290	290	✓				✓	✓		
WS	8	50		✓	✓	290	290	✓				✓	✓		
	9	40		✓											
WS	10	33		✓	✓	290	290	✓				✓	✓		
WS	11	21		✓	✓	290	290	✓				✓	✓		
WS	12	15		✓	✓	288	287	✓				✓	✓		
WS	13	8		✓	✓	283	283	✓	84	1060		✓	✓	✓	
JT	14	8													
<del>WS</del>	15	Sfc		✓											
WS	16	Sfc			✓	290	290	✓	85	1057		✓	✓	✓	
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	Sam pler														

SPUR  
8  
15  
21  
33  
50  
75

Sampling depths - Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300

Floating: Chl max, 10mab

SPUR: 20

AR29 CTD Cast Sheet

Station Number: **A13** CTD cast number: **30** Initials: **WZ**  
 Start date, time (UTC): **2018-04-19 11:45** End date, time (UTC): **11:50**

Floater ID	Bottle	Target Depth	TOI	Nuts	H <sub>2</sub> C	Chl a vol	Chl b vol	BSI	HP/LC ID	HP/LC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
JT	1	8													
JT	2	8													
JT	3	8													
JT	4	8													
JT	5	8													
JT	6	8													
JT	7	8													
JT	8	8													
JT	9	8													
JT	10	8													
JT	11	8													
	12														
	13														
	14														
	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	Sam pler														

Sampling depths – Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300  
 Floating: Chl max, 10mab

AR29 CTD Cast Sheet

Station Number: **A14**

Start date, time (UTC): **2018-04-19 12:25**

CTD cast number: **31**

End date, time (UTC): **12:55**

Initials: **WZ**

Float ID	Bottle	Target Depth	TOI	Nuis	TC	Chl a vol	Chl b vol	BSI	HP/LC ID	HP/LC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
1	308			✓											
2	250			✓											
3	260			✓											
4	150			✓											
5	120			✓											
6	100			✓											
7	80			✓		290	290	✓				✓	✓		
8	60			✓		290	290	✓				✓	✓		
9	40			✓		283	283	✓	86	1060		✓	✓	✓	
10	30			✓		290	290	✓				✓	✓		
11	20			✓		290	290	✓				✓	✓		
12	10			✓		287	288	✓				✓	✓		
13	Sfc					290	290	✓	87	1057		✓	✓	✓	
14	Sfc			✓											
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
Sampler															

Sampling depths – Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300

Floating: Chl max, 10mab

AR29 CTD Cast Sheet

Station Number: **A15**  
 Start date, time (UTC): **2018-04-19 13:30**  
 CTD cast number: **32**  
 End date, time (UTC): **1352**  
 Initials: **W2**

Floater ID	Bottle	Target Depth	TCM	Nuts	1/2 C	Chl a vol	Chl b vol	BSI	HPLC ID	HPLC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
	1	300		✓											
	2	250		✓											
	3	200		✓											
	4	150		✓											
	5	120		✓											
	6	100		✓				✓				✓			
	7	80		✓		290	290	✓				✓	✓		
	8	60		✓		290	290	✓				✓	✓		
	9	40		✓		283	283	✓	88	1060		✓	✓	✓	
	10	30		✓											
	11	20		✓		287	288	✓				✓	✓		
	12	10		✓				✓				✓	✓		
	13	SFC				290	290	✓	89	1057		✓	✓		
	14	SFC		✓											
	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	Sampler														

Sampling depths – Fixed: SFC, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300  
 Floating: Chl max, 10mab

AR29 CTD Cast Sheet

Station Number: A12

CTD cast number: 33

Initials: WJZ

Start date, time (UTC): 2018-04-19 15:20

End date, time (UTC): 1546

Floater ID	Bottle	Target Depth	TOI	Nuis	H <sub>c</sub>	Chl a vol	Chl b vol	BSI	HP/LC ID	HP/LC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
102mab	1	267		✓											
	2	200		✓											
	3	150		✓											
	4	120		✓											
	5	100		✓	✓	290	290	✓				✓	✓		
	6	80		✓		290	290						✓		
WS	7	68		✓	✓	290	290	✓				✓	✓		
WS	8	45		✓	✓	290	290	✓				✓	✓		
WS	9	29		✓	✓	283	283	✓	90	1060		✓	✓	✓	
WS	10	19		✓	✓	290	290	✓				✓	✓		
WS	11	14		✓	✓	290	290	✓				✓	✓		
WS	12	7		✓	✓	288	287	✓				✓	✓		
WS	13				✓	290	290	✓	91	1057		✓	✓	✓	
	14	sfc		✓											
	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	Sam pler														

Surf  
59  
13  
20  
30  
45  
Surf  
7  
14  
19  
29  
45  
68

Sampling depths - Fixed: Sfc, 7, 14, 19, 29, 45, 68, 80, 100, 120, 150, 200, 250, 300

Floating: Chl max, 10mab

SPAR: 380

AR29 CTD Cast Sheet

Station Number: A11

CTD cast number: 34

Initials: C.Z.

Start date, time (UTC):

End date, time (UTC):

2018 Apr 19 16:56:10

2018 Apr 19 17:08:58

Floater ID	Bottle	Target Depth	TOI	Nuis	T <sub>c</sub>	Chl a vol	Chl b vol	BSI	HP LC ID	HP LC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
1	140			✓											
2	120			✓											
3	100			✓		290	290	✓					✓		
4	80			✓		290	290	✓	92	1060			✓	✓	
5	60			✓		290	290	✓					✓		
6	40			✓		290	290	✓					✓		
7	30			✓		290	290						✓		
8	20			✓		290	290	✓					✓		
9	10			✓		287	288	✓					✓		
10	SWF			✓		290	290	✓	93	1057			✓	✓	
11	SWF														
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
Sampler															

Sampling depths - Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300

Floating: Chl max, 10mab

✓ 140

water depth 150 m

AR29 CTD Cast Sheet

Station Number: A10

CTD cast number: 35

Initials: C.Z.

Start date, time (UTC): 2018 Apr 19 17:56:05

End date, time (UTC): 2018 Apr 19 18:10:16

Floater ID	Bottle	Target Depth	TOI	Nuts	TC	Chl a vol	Chl b vol	BSI	HPLC ID	HPLC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
10 mab	1	125		✓											
	2	100		✓		296	290	✓					✓		
	3	80		✓		290	290	✓					✓		
	4	60		✓		290	290	✓					✓		
	5	40		✓		290	290	✓	94	1060			✓	✓	
	6	30		✓		290	290						✓		
	7	20		✓		290	290	✓					✓		
	8	10		✓		287	288	✓					✓		
ZOC	9	surf		✓		290	290	✓	95	1057			✓	✓	
	10	surf													
	11														
	12														
	13														
	14														
	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	Sampler														

Sampling depths - Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300

Floating: Chl max, 10ftab ✓ ✓ ✓ ✓ ✓ ✓ ✓ 125 ✓

-2

Water depth = 135 m





AR29 CTD Cast Sheet

Station Number: **A8**

Start date, time (UTC):

2018 Apr 19 20:02:47

CTD cast number: **37**

End date, time (UTC):

2018 Apr 19 20:16:35

Initials: **C.Z.**

Flower ID	Bottle	Target Depth	TOI	Nuts	<sup>12</sup> C	Chl a vol	Chl b vol	BSI	HPLC ID	HPLC vol	CO <sub>2</sub>	C/N	FCM	FCB	FCB S
10 mod	1	110		✓											
	2	100		✓				✓							
	3	80		✓		290	290	✓					✓		
	4	60		✓		290	290	✓					✓		
	5	40		✓		290	290	✓	48	1060			✓	✓	
	6	30		✓		290	290						✓		
	7	20		✓		290	290	✓					✓		
	8	10		✓		287	288	✓					✓		
	9	sfc		✓		290	290	✓	99	1057			✓	✓	
	10	sfc													
	11														
	12														
	13														
	14														
	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	Sam pler														

Sampling depths - Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300

Floating: Chl max, T<sub>max</sub> ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ 110 m

VPR on  
water depth 120 m  
~2

AR29 CTD Cast Sheet

Station Number: **A7**

CTD cast number: **38**

Initials: **C.Z.**

Start date, time (UTC):

End date, time (UTC):

**2018 Apr 19 20:55:55**

**2018 Apr 19 20:13:35**

Floater ID	Bottle	Target Depth	TOI	Nuis	<sup>14</sup> C	Chl a vol	Chl b vol	BSI	HP/LC ID	HP/LC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
10 mab	1	90		✓		-	-	✓				✓			
	2	80		✓				✓				✓			
	3	60		✓		290	290	✓				✓			
	4	40		✓		290	290	✓	100	1060		✓			
	5	30		✓		290	290						✓		
	6	20		✓		290	290	✓				✓			
	7	10		✓		288	287	✓				✓			
	8	sfc		✓		290	290	✓	101	1057		✓			
	9	sfc													
	10														
	11														
	12														
	13														
	14														
	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	Sam pler														

Sampling depths - Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300 -

Floating: Chl max, 10 min ✓

90 ✓

-2

water depth 100 m

AR29 CTD Cast Sheet

Station Number: A6

CTD cast number: 39

Initials: C.Z.

Start date, time (UTC):

End date, time (UTC):

2018 Apr 19 21:50:55

2018 Apr 19 22:05:26

Floater ID	Bottle	Target Depth	TOI	Nuis	T <sub>c</sub>	Chl a vol	Chl b vol	BSI	HPLC ID	HPLC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
10 mab	1	78		✓		290	290	✓				✓	✓		
	2	60		✓		290	290	✓				✓	✓		
	3	40		✓		290	290	✓				✓	✓		
	4	30		✓		290	1057	✓	102	1060		✓	✓	✓	
	5	20		✓		290	290	✓				✓	✓		
	6	10		✓		287	288	✓				✓	✓		
	7	sfc		✓		290	290	✓	103	1057		✓	✓	✓	
	8	sfc.													
	9														
	10														
	11														
	12														
	13														
	14														
	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	Sampler														

Sampling depths - Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300-

Floating: Chl max, T<sub>max</sub> ✓ ✓ ✓ ✓ ✓

[-2]

Water depth: 88

AR29 CTD Cast Sheet

Station Number: A5

CTD cast number: 40

Initials: C.Z.

Start date, time (UTC): 2018 Apr 19 22:41:48

End date, time (UTC): 2018 Apr 19 22:55:57

Floater ID	Bottle	Target Depth	TOI	Nuts	T <sub>C</sub>	Chl a vol	Chl b vol	BSI	HPLC ID	HPLC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
10 mab	1	71		✓		290	290	✓			✓	✓	✓		
	2	60		✓		290	290	✓			✓	✓	✓		
JF	3	60									✓				
	4	40		✓		290	290	✓	104	1060	✓	✓	✓	✓	
JF	5	40									✓				
	6	30		✓		290	290	✓			✓	✓	✓		
JF	7	30									✓				
	8	20		✓		290	290	✓			✓	✓	✓		
JF	9	20									✓				
	10	10		✓		287	288	✓			✓	✓	✓		
JF	11	10									✓				
Zoe	12	sfc													
JF	13	sfc									✓				
	14	sfc		✓		290	290	✓	105	1057		✓	✓		
	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	Sam pler														

Sampling depths - Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300

Floating: Chl max, ~~10 mab~~, ~~71~~, ~~71~~, ~~71~~, ~~71~~, ~~71~~, ~~71~~, ~~71~~

-2

depth = 81 m

AR29 CTD Cast Sheet

Station Number: **AS**

Start date, time (UTC): **10:40**

CTD cast number: **41**

End date, time (UTC): **10:52**

Initials: **WJZ**

**2018-04-20**

Floater ID	Bottle	Target Depth	TOI	Nuis	H <sub>c</sub>	Chl a vol	Chl b vol	BSI	HP/LC ID	HP/LC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
10mab	1	72													
WS	2	60													
	3	60	-												
WS	4	40													
WS	5	26													
WS	6	17													
WS	7	12													
WS	8	6													
WS	9	Sfc													
WS	10	Sfc	/												
	11														
	12														
	13														
	14														
	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	Sampler														

Surf  
6  
12  
17  
26  
40  
60

Sampling depths - Fixed: <sup>6, 12, 17, 26</sup> Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300  
Floating: Chl max, 10mab

SPAR: 60

AR29 CTD Cast Sheet

Station Number: A14

CTD cast number: 42

Initials: C.Z.

Start date, time (UTC): 2018 Apr. 20 18:40.

End date, time (UTC): 2018 Apr 20 18:59:40

Fluorocarbon ID	Bottle	Target Depth	TOI	Nuis	T <sub>c</sub>	chl a vol	chl b vol	BSI	HP/LC ID	HP/LC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
JF	1	300									✓				
	2	300													
	3	250													
	4	200													
JF	5	200									✓				
	6	150													
JF	7	120									✓				
	8	120													
	9	100													
zoe	10	80													
JF	11	80													
	12	80													
	13	60													
	14	40													
JF	15	40													
JT	16	26													
	17	26													
	18	18													
✓	19	18													
	20	11													
	21	5													
	22	sfc													
Zoe	23	sfc													
JF	24	sfc													
	Sampler														

SRF: 5, 11, 18, 26

Sampling depths - Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300

Floating: Chl max, ~~chl a~~ 18, 26

SPAR: surf: 2000  
 1%: 20 → 17.8m  
 water depth: 700m

5

AR29 CTD Cast Sheet

Station Number: **A14**

Start date, time (UTC): **2018 Apr 20 19:50**

CTD cast number: **43**

End date, time (UTC): **19:58:16**

Initials: **C, Z,**

Flower ID	Bottle	Target Depth	TOI	Nuts	T <sub>C</sub>	Chl a vol	Chl b vol	BSI	HP/LC ID	HP/LC vol	CD <sub>1</sub>	C/N	FCM	IFCB	IFCB S
JT	1	26													
JT	2	26													
JT	3	26													
JT	4	26													
JT	5	26													
JT	6	26													
JT	7	26													
JT	8	26													
JT	9	26													
JT	10	26													
	11														
	12														
	13														
	14														
	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	Sampler														

Sampling depths – Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300

Floating: Chl max, 10mab **26**

AR29 CTD Cast Sheet

Station Number: **A15**

Start date, time (UTC):

**2018 Apr 20 20:48:24**

CTD cast number: **44**

End date, time (UTC):

**21:09:35**

Initials: **C.Z.**

Flower ID	Bottle	Target Depth	TOI	Nuts	T <sub>C</sub>	Chl a vol	Chl b vol	BSI	HPLC ID	HPLC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
	1	300													
	2	250													
	3														
	4														
	5														
	6														
	7														
	8														
	9														
	10														
	11														
	12														
	13														
	14														
	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	Sampler														

Sampling depths – Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300

Floating: Chl max, 10mab

✓



AR29 CTD Cast Sheet

Station Number: A16

Start date, time (UTC):

2018 Apr 20 21:45

CTD cast number: 45

End date, time (UTC):

22:

Initials: C.Z.

Floater ID	Bottle	Target Depth	TOI	Nuis	T <sub>IC</sub>	Chl a vol	Chl b vol	BSI	HPLC ID	HPLC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
	1														
	2														
	3														
	4														
	5														
	6														
	7														
	8														
	9														
	10														
	11														
	12														
	13														
	14														
	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	Sampler														

Sampling depths – Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300

Floating: Chl max, 10mab

VPR ON

AR29 CTD Cast Sheet

Station Number: **A13**

Start date, time (UTC): **2018 Apr 20 23:30:20**

End date, time (UTC): **23:54:47**

CTD cast number: **46**

Initials: **C.Z.**

Fluor ID	Bottle	Target Depth	TOI	Nuis	°C	chl a vol	chl b vol	BSI	HP/LC ID	HP/LC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
Sampler															

Density inversion near surface  
likely caused by clogged gas escape pipe  
O<sub>2</sub> concentration is not reasonable

Sampling depths – Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300

Floating: Chl max, 10mab

VPR on -

water depth = 485 m

AR29 CTD Cast Sheet

Station Number: A12

Start date, time (UTC): 2018 Apr 21 00:38:45

CTD cast number: 47

End date, time (UTC):

Initials: C.Z.

Fluor ID	Bottle	Target Depth	TOI	Nuts	T <sub>c</sub>	chl a vol	chl b vol	BSI	HP/LC ID	HP/LC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
1															
2															
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19															
20															
21															
22															
23															
24															
	Sam pler														

Density Inversion near surface  
O<sub>2</sub> concentration is not reasonable

Sampling depths - Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, ~~300~~

Floating: Chl max, 10mab

VPR on

water depth: 275m

AR29 CTD Cast Sheet

Station Number: A11

CTD cast number: 48

Initials: C, Z,

Start date, time (UTC): 2018 Apr 21 01:30:17

End date, time (UTC): 01:47:07

Flower ID	Bottle	Target Depth	TOI	Nuis	IC	chl a vol	chl b vol	BSI	HP/LC ID	HP/LC vol	CO <sub>2</sub>	C/N	FCM	FCB	FCB S
1															
2															
3															
4															
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19															
20															
21															
22															
23															
24															
Sampler															

Density inversion near surface  
~~O<sub>2</sub> concentration is not reasonable~~

Sampling depths - Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300

Floating: Chl max, 10mab 140

VPR on.

water depth = 150

AR29 CTD Cast Sheet

Station Number: A10

Start date, time (UTC):

2018 Apr 21 02:21:35

CTD cast number: 49

End date, time (UTC):

02:35:01

Initials:

C.Z.

Floater ID	Bottle	Target Depth	TOI	Nuts	T <sub>c</sub>	Chl a vol	Chl b vol	BSI	HPLC ID	HPLC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
1															
2															
3															
4															
5															
6															
7															
8															
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17															
18															
19															
20															
21															
22															
23															
24															
Sampler															

Density inversion near surface  
O<sub>2</sub> concentration is not reasonable

Sampling depths – Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300–

Floating: Chl max, 10mab

VPR on.

water depth. 135 m

AR29 CTD Cast Sheet

Station Number: **A9**

CTD cast number: **50**

Initials: **C.Z.**

Start date, time (UTC): **2018 Apr 21. 03:10:00**

End date, time (UTC):

**03:27:04**

Floater ID	Bottle	Target Depth	TOI	Nuts	T <sub>C</sub>	Chl a vol	Chl b vol	BSI	HPLC ID	HPLC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
1															
2															
3															
4															
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18															
19															
20															
21															
22															
23															
24															
Sam pler															

Density inversion near surface  
~~O<sub>2</sub> concentration~~ is not reasonable

Sampling depths – Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300

Floating: Chl max, 10mab  
 117

water depth: 128m

AR29 CTD Cast Sheet

Station Number: **A8** CTD cast number: **51** Initials: **CZ**  
 Start date, time (UTC): **2018 Apr 21. 04:00** End date, time (UTC): **04:13:12**

Floater ID	Bottle	Target Depth	TOI	Nuts	T <sub>c</sub>	chl a vol	chl b vol	BSI	HP/LC ID	HP/LC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
	1														
	2														
	3														
	4														
	5														
	6														
	7														
	8														
	9														
	10														
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	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														
	Sampler														

Density inversion near surface  
 O<sub>2</sub> concentration is not reasonable

Sampling depths – Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, ~~120, 150, 200, 250, 300~~  
 Floating: Chl max, 10max 110

VPR 0A  
 Water depth = 120

AR29 CTD Cast Sheet

Station Number: **A7**

Start date, time (UTC): **04:50**

CTD cast number: **52**

End date, time (UTC): **04:59**

Initials: **WZ**

**2018-04-21**

Floater ID	Bottle	Target Depth	TOT	Nuis	<sup>1</sup> C	Chl a vol	Chl b vol	BSI	HP/PC ID	HP/PC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
1															
2															
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4															
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7															
8															
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17															
18															
19															
20															
21															
22															
23															
24															
Sampler															

Bad data (low salinity at the beginning of the downcast)

likely caused by pump not being on at the beginning of the cast

The upcast show well-mixed surface

layer of ~35m, which is inconsistent with the downcast

Both conductivity sensors have the problem

The recast (53) show reasonable profile of salinity.

Sampling depths – Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300  
 Floating: Chl max, 10mab



AR29 CTD Cast Sheet

Station Number: **A7**

Start date, time (UTC): **0459**

**2018-04-21**

CTD cast number: **53**

End date, time (UTC): **05**

Initials: **W2**

Floater ID	Botle	Target Depth	TOI	Nuts	T <sub>c</sub>	Chl a vol	Chl b vol	BSI	HP/LC ID	HP/LC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
1															
2															
3															
4															
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20															
21															
22															
23															
24															
Sampler															

Recast off 52  
Data look good!

Sampling depths – Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300  
Floating: Chl max, 10mab

AR29 CTD Cast Sheet

Station Number: *A6*

Start date, time (UTC): *0540*

CTD cast number: *54549*

End date, time (UTC): *0549*

Initials: *W2*

*2018-04-21*

Floater ID	Bottle	Target Depth	TOI	Nuis	T <sub>c</sub>	chl a vol	chl b vol	BSI	HPLC ID	HPLC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
1															
2															
3															
4															
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23															
24															
Sampler															

*Bad Salinity data at the beginning of the downcast again!*

*It might be something related to the pumps.*

*Chris is going to check on the pumps.*

*The recast (SS) show reasonable data again.*

Sampling depths – Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300

Floating: Chl max, 10max

AR29 CTD Cast Sheet

Station Number: *A6*

Start date, time (UTC): *0550*

CTD cast number: *55*

End date, time (UTC): *0555*

Initials: *WZ*

*2018-04-21*

Flower ID	Bottle	Target Depth	TOI	Nuis	<sup>14</sup> C	chl a vol	chl b vol	BSI	HPLC ID	HPLC vol	CO <sub>2</sub>	C/N	FCM	IFCB	IFCB S
1															
2															
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4															
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23															
24															
Sampler															

*Recast of 54*

*The salinity data look reasonable with a surface mixed layer of ~ 35 m*

Sampling depths – Fixed: Sfc, 10, 20, 30, 40, 60, 80, 100, 120, 150, 200, 250, 300  
 Floating: Chl max, 10mab