Sampling practice for noon-midnight team

PRISM CTD Cast Sheet

Station Number: Test station
Start date, time (UTC): 12/31/11 20:37 UTC

CTD cast number: 1
End date, time (UTC): 12/31/11 21:07 UTC

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	200	502									
2	200										
3	200										
4	200										
5	200										
6	200										
7	200										
8	200		A		✓						
9	100	507	E		✓	✓9			✓9		
10	90		H								
11	80		J	✓6	✓	✓8			✓8		
12	70 fluo			✓5	✓1						
13	70		I								
14	60		G	✓4	✓8	✓7			✓7		
15	50	506	F		✓	✓6	✓6		✓6		
16	40 trans			✓3							
17	40		E		✓	✓5	✓5	✓2	✓5		
18	30		D		✓	✓4	✓4		✓4		
19	20			✓2	✓	✓3	✓3		✓3		
20	20		C								
21	10	505			✓	✓2	✓2	✓1	✓2		
22	10		B								
23	1				✓	✓1	✓1		✓1		
24	1		A	✓1							
Sampler											

*Fluo max

*Transm. max

505
506
507
502

(30) fluo max = 70m
(40) trans max = 40m

Second sampling of cast number 1 (midnight-noon team)

PRISM CTD Cast Sheet

Station Number: Test station #
Start date, time (UTC): 12/31/11

CTD cast number: # 1
End date, time (UTC): 12/31/11
~~3:57 3:20~~

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	200	502									A19
2	200										
3	200										
4	200										
5	200										
6	200										
7	200										
8	200		Y		12						
9	100	507	X		11	9			9		A20
10	90		W		10						
11	80		V		9	8			8		
12	70							B			
13	70		U		8	7ε		2ε			
14	60		T		7				7		
15	50	506	S		6	6ε	6ε		6ε		
16	40										
17	40		R		5	5	5		5		
18	30		Q		4	4ε	4ε		4ε		
19	20				3	3	3		3		
20	20		P								
21	10	505			2	2	2		2		
22	10		O								
23	1				1	1ε	1ε	1ε	1ε		
24	1		N								
Sampler											

10 max

leak

Trans max

PRISM CTD Cast Sheet

Station Number: 1
Start date, time (UTC): 1/6/12 22:32

CTD cast number: 2
End date, time (UTC): 1/7/12 00:00

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	700	496	18								A1
2	600		17								A2
3	500		16								A3
4	400										A4
5	400		15								
6	300		14								A5
7 MCW	280	497	13								
8	200		12								A10
9	150		11					✓	✓		
10	100	*498	10								
11	80		9								
12	70		8	6	6				6		
13	60										
14 Tmin	60		7								
15	50			5	5			✓	5	~~2~~	
16 fmax	50		6	~~5~~	~~5~~				~~5~~ 6	2	
17	40		5	4	4				4		
18	30		4								
19	20		3								
20	20			3	3				3		
21	10		2								
22	10	499		2	2			1	2		
23	1		1							1	
24	1			1	1				1		
Sampler		MP	PSL								MP/PSL

O_2 bottles: 196, 497, 498, 499
S bottles: A1, A2, A3, A4, A5, A10*
Nutr. bottles: 1-20
→ *2nd L. HCe for O_2 had some problems.

fmax ~50m
Tmin ~60m
Tmeta 280

Omin 280

Tmeta 23:45 1/7

PRISM CTD Cast Sheet

Station Number: 2
Start date, time (UTC): 1/7 19:01

CTD cast number: 3
End date, time (UTC): 1/7 11:30

	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	700	503	22								A7
	2	600		23								A8
	3	500		24								A9
	4	400		25								A11
FSW	5	400										
	6	300		26								A12
Tmax	7	280	502	27								
	8	200		28								A18
	9	150		29								
	10	100		30								
	11	80			6	6			1	6		
Flmax	12	80	501	31							2	
	13	70		32								
	14	60		33	5	5				5		
	15	50		34								
	16	40		35								
Trmin	17	40			4	4				4		
	18	30		36								
	19	20		37								
	20	20			3	3				3		
	21	10	500	38								
	22	10			2	2				2		
	23	1		39							1	
	24	1			1	1				1		
	Sampler		JC	JK/SS								JK/SS

Flmax = 80 | max at 40 Sur Par: 742, 1% = 7.1 (
Tr min 40m
O_2 min = 280
Tmax = 280

Nut 22-39
Sal 7 8 9 11 12 18
O_2 500 501 502 503

PRISM CTD Cast Sheet

* acquisition at depth 700 m

Station Number: 003
Start date, time (UTC): 16:53
1/8/12

CTD cast number: 4
End date, time (UTC): 17:52
1/8/12

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	700	507	41								A6
2	600		42								A13
3	550	506	43								
4	500		44								A14
5	400		45								A15
6	300		46								A16
7	200	505	47		12				9		A17
8	150		48		11	9			9		
9	100		49		10	8			8		
10	80		50		9						
11	70		51	7	8	7			7		
12	60		52		7						
13	50		53	6	6	6	6		6		
14	40		54								
15	40										
16	40			5	5	5	5		5	2	
17	30		55	4	4	4	4	2	4		
18	20		56								
19	20			3	3	3	3		3		
20	10	504	57								
21	10										
22	10			2	2	2	2	1	2		
23	1		58								
24	1			1	1	1	1		1	1	
Sampler		JK	JK/SS								JK/SS

CDW – leaking → Flmax → 10x3

O_2 bottles: 504-507
5 bottles: A6, A13-17
N bottles: 41-58

1% light = 50 m

Bottle 5 leaks
Told Amy (JK)

PRISM CTD Cast Sheet

Station Number: 4
Start date, time (UTC): 13:21
1/9/2012

CTD cast number: 5
End date, time (UTC): 14:00
1/9/2012

O_2 pike → 315

570

MC
T_{max}
T_r m
fl m

fl → 10
tr → 10
+2 10

no ISW ↓ 400

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	560	513	80								A19
2	500		79								A20
3	400		78								A21
4	300		77								A22
5 MCDW	250	512	76								A23
6	200		75		13						A24
7	150		74		12	9			9		
8	100		73		11	8			8		
9	80	511	72		10						
10	70		71		9						
11	60		70		8	7					
12	50		69	7	7	7			7		
13	40		68	6	6	6	6		6		
14	30		67	5	5	5	5		5		
15	25		66		4	4	4	2	4		
16 Tommy	25			4	4					4	
17	20		65								
18	20			3	3	3	3		3		
19	10	510	64	2	2	2	2	1	2		
20 Anne	10										
21	10										
22	10										
23	1		63		1	1	1		1		
24 Tommy	1			1						1	
Sampler											

Salt 19-24
O_2 510-513
Nut 63-

T_{max} (MCDW) 300
T_{min} (ISW) 400

500m
F/m-2

PRISM CTD Cast Sheet

Station Number: 5
Start date, time (UTC): 18:44
1/9/2012

CTD cast number: 6
End date, time (UTC): 19:18
1/9/2012

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	500	517	99								
2	500		98								
3	400		97								
4	400										
5	300	516	96								
6	~~300~~										
7	~~300~~										
8	200		95		12						
9	150		94		11	9			9		
10	100	515	93		10	~~8~~			8		
11	80		92		9						
12	70		91		8	7			7		
13	60		90	7	7						
14	50		89*	6	6	6	6		6		
15	40		88								
16	40			5	5	5	5		5		
17	30		87								
18	30			4	4	4	4		4		
19	20		86							2	
20	20			3	3	3	3	2	3		
21	10	514	85								
22	10			2	2	2	2	1	2		
23	1		84		1					1	
24	1			1	1	1	1		1		
Sampler											

Flrmax →

300
Tmax MCDW
Tmin ISW 400

Nut 84-101
O_2 514-517

Flm
Trm

PRISM CTD Cast Sheet

1% @ 7.5m

Station Number: 6
Start date, time (UTC): 1/10/12 05:05

CTD cast number: 7
End date, time (UTC): 1/10/12 05:45

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	557										
2	500	499	100								
3	500										
ISW 4	400		101								
5	400		102								
6	300		103								
MCDW 7	270	498	104								
8	200		105								
9	150		106		12	9			9		
10	100		107		11	8			8		
11	80		108		10						
12	70		109		9	7			7		
13	60		110		8						
14	50	497	111	7	7	6	6		6		
15	40		112	6	6	5	5		5		
16	30		113	5	5	4	4		4		
Fluo max 17	25		114							2	
18	25			4	4			2			
19	20		115	3	3	3	3		3		
Trans min 20	15		116								
21	10		117								
22	10	496		2	2	2	2	1	2		
23	1		118							1	
24	1			1	1	1	1		1		
Sampler		MP	PS/MP								

O_2 Flasks: 496-499

Fluo max = 25m
Trans. min = 15m
MCDW (S_{min}) = 200m
ISW (T_{min}) = [redacted]

Niskin 5 leaking

PRISM CTD Cast Sheet

Station Number: 7
CTD cast number: 8
Start date, time (UTC): 1/13/12 06:20
End date, time (UTC): 1/13/12 07:15

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	808	499	140								19
2	700		141								20
3 (O_2 min)	620	498	142								21
4	600		143								22
5	500		144								23
6	400										
7 (no ISW)	400		145								24
8	300		146								
9	200		147		12						
10	150		148		11	9			9		
11	100	497	149		10	8			8		
12	80		150		9						
13	70		151		8	7			7		
14	60		152	7	7	7					
15	50		153	6	6	6	6		6		
16	40		154	5	5	5	5		5		
17	30		155	4	4	4	4		4		
18	20		156								
19	20			3	3	3	3	2	3		
20 (Fluo max)	10			2						2	
21 (Trans min)	10				2	2	2	1	2		
22	10	496	157								
23	1			1	1	1	1		1	1	
24	1		158								
Sampler		MP	PSL/MP								PSL/MP

O_2 Flasks: 496-499
Salt Flasks: 19-24
Nutrient Flasks: 140-158
Depth 1% light = 8.5m

Fluo max = 10m
Trans min = 10m
ISW (T_{min}) = 400m
MCDW (O_2 min or T_{min}) = 800m

PRISM CTD Cast Sheet

Bottle 5 leaks

Station Number: 8
Start date, time (UTC): 16:35
1/13/2012

CTD cast number: 9
End date, time (UTC): 17:20
1/13/2012

Bottle	Target Depth	O_2 ↑	Nuts ↓	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts /
1	680	500	162								1
2	600		163								
3	600										
4	500		164								
5	400		165								
6	400										
7	300		166								5
8	300										
9	200	501	167		12						16
10	150		168		11	9			9		
11	100		169		10	8			8		1
12	80		170		9						
13	70		171		8	7			7		
14	60		172	7	7						
15	50		173	6	6	6	6	3	6		
16	40	502	174	5	5	5	5		5		
17	30		175	4	4	4	4		4		
18	20		176								
19	20			3	3	3	3		3		
20	10	503	177								
21	10	5			2	2	2	1	2		
22	10			2			2			2	
23	1		178		1	1	1		1		
24	1			1			1			1	
Sampler											

O_2 : 500-503
Salt: 13-18
Nut: 162-

1% light: 12m

fluo max 10 50m ← secchi dep
trans min 10 55m
400 ISW (Tmin)
300 MCDW (O_2/Tmax)

PRISM CTD Cast Sheet

Niskin 5 has been repaired

Station Number: 9 (low biomass) LB1

CTD cast number: 10 → it was NOT leaking during cast

Start date, time (UTC): 1/14/2012 01:25

End date, time (UTC): 1/14/2012 02:07

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	435	507	179								B18
2	400		180								B17
3	400										
4	400										
5	300		181								B16
6	200		182		12						B15
7	190	506	183								B14
8	150		184		11	9			9		B13
9	100		185		10	8			8		
10	80		186		9						
11	70		187	7	8	7			7		
12	60		188		7						
13	50		189	6	6	6	6		6		
14	40			5						2	
15	40				5	5	5	2	5		
16	40	505	190								
17	30		191	4	4	4	4		4		
18	20			3	3	3	3		3		
19	20		192								
20	10										
21	10		193								
22	10	504		2	2	2	2	1	2		
23	1		194								
24	1			1	1	1	1		1	1	
Sampler		MP								PSL/MP	PSL/MP

no ISW

subsurface Tmax

fluo max

Trans min

Dedicated bottle → @ 10 m for w.s.

O_2 flasks: 504-507

Salt flasks: B13-B18

Nut. flasks: 179-194

Fluo max = 40 m

Trans. min = 40 m

ISW (T_{min}) = 400 m

MCDW (O_2 min / T_{max}) = 190 m

1% light = 52 m

Downcast and upcast differ significantly for fluorescence

PRISM CTD Cast Sheet

Station Number: Station 10
Start date, time (UTC): 1/15/2012 05:45

CTD cast number: 11
End date, time (UTC): 1/15/2012 06:30

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	725	511	202								B12
2	715		203								B8
3	700		204								B9
4	600		205								B10
5	500		206								B11
6	400		207								B12
7	300		208								
8	200		209								
9	150	510	210		B12	C9			A9		
10	100		211		B11	C8			A8		
11	80		212		B10						
12	70		213		B9	C7			A7		
13	60		214	7	B8						
14	50		215		B7	C6	6	2	A6		
15	40		216	6	B6	C5	5		A5		
16	30	509	217		B5	C4	4		A4		
17	20		218	5	B4	C3	3	1	A3		
18	15			4							
19	15		219								
20	10			3						2	
21	10	508	220		B3	C2	2	1	A2		
22	5		221	2	B2						
23	1		222		B1	C1	1		A1		
24	1			1						1	
Sampler		MP	PS/MP								PS/MP

Pete
Pete

Tommy
Fluo max

Trans. min

O_2: B508 - B511
Salts: B7 - B12
Nutr: 202-222

Fluo max = 15m
Trans. min = 5m
ISW (T_{min}) = ~~none~~
MCDW (O_2 min / T_{max}) = ~~none~~

1% light = 11m

PRISM CTD Cast Sheet

Station Number: 11
Start date, time (UTC): 1/15/2012 09:50

CTD cast number: 12
End date, time (UTC): 1/15/2012 10:35

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	700		224								
2	600		225								
3	500		226								
4	400		227								
5	400										
6	300		228								
7	300										
8	200		229		12						
9	150		230		11	9			9		
10	100		231		10	8			8		
11	80		232		9						
12	70		233		8	7			7		
13	60		234	7	7						
14	50		235	6	6	6	6		6		
15	40		236	5	5	5	5		5		
16	30		237	4	4	4	4	4	4		
17	25		238								
18	25			3							
19	20		239								
20	20				3	3	3		3		
21	10		240								
22	10			2	2	2	2		2		
23	1		241								
24	1			1	1	1	1	1	1		
Sampler			PSL/MP								

no isw

no mcdw

Fluo max
trans min

No O_2 (suggested by Walker)
Nutr. flasks: 224-241

1% light = 30m

Fluo max = 25 m
Trans. min = 25 m
ISW(T_{min}) = none
MCDW(O_2 min / T_{max}) = no deep

Cloudy

11

PRISM CTD Cast Sheet

Station Number: 12 (W2)
Start date, time (UTC): 1/15/2012 11:19

CTD cast number: 13
End date, time (UTC): 1/15/2012 12:05

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	736		259								
2	700		258								
3	600		257								
4	500		256								
5	400		255								
6	400										
7	300		254								
8	200		253		12						
9	150		252		11	9			9		
10	100		251		10	8			8		
11	80		250		9						
12	70		249		8	7			7		
13	60		248	7	7						
14	50		247*	6	6	6	6		6		
15 (Tr max →)	40		246								
16	40			5	5	5	5		5		
17 (Flu max →)	30		245		4	4	4	2	4		
18	30			4				2		2	
19	20		244								
20	20			3	3	3	3		3		
21	10		243								
22	10			2	2	2	2	1	2		
23	1		242		1	1	1		1		
24	1			1						1	
Sampler											

Nutr. Flasks: 242-

1% light = 14m.

Fluor. max = 30
Trans. min = 40
Trans min MCDW = 306
Trans min ISW = 406

snow shower

PRISM CTD Cast Sheet

Station Number: 13
Start date, time (UTC): 15:43
1/15/2012

CTD cast number: 14
End date, time (UTC): 16:23
1/15/2012

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	694		277								
2	600		276								
3	500		275								
4	400		274								
5	400										
6	300		273								
7	300										
8	200		272		13						
9	150		271		12	9			9		
10	100		270		11	8			8		
11	80		269		10						
12	70		268		9						
13	60		267	7	8						
14	50		266	6	7	7	6	2	7		
Trmax → 15	40		265								
16	40			5	6	6	4		6		
17	30		264		5	5	5		5		
18	20		263								
19	20		?	4	4	4	4		4		
flmax → 20	15		262*	3	3	3	3	1	3		
21	10		261								
22	10			2	2	2	2		2		
23	1		260								
24	1			1	1	1	1		1 ✓		
Sampler											

Nuts: 260→

1% light ~ 9M

flmax ≈ 15
Trmax = 40
MCDW > 300 (not 400)
ISW = 400

Station EZ

PRISM CTD Cast Sheet

Station Number: 14
Start date, time (UTC): 17:05
1/15/2012

CTD cast number: 15
End date, time (UTC): 17:45
1/15/2012

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	681		294								
2	600		293								
3	500		292								
4	400		291								
5	400										
6	300		290								
7	300										
8	200		289		12						
9	150		288		11	9			9		
10	100		287		10	8			8		
11	80		286		9						
12	70		285	7	8	7			7		
13	60		284		7						
14	50		283	6	6	6	6		6		
15	40		282	5	5	5	5		5		
16	30		281 *	4	4	4	4		4		
17	20		280								
18	20										
19	20				3	3	3	2	3		
20	20			3						2	
21	10		279								
22	10			2	2	2	2	1	2		
23	1		278		1	1	1		1		
24	1			1						1	
Sampler											

fl_{max} → 4 Trmin

Nut: 278 → 294

1% light ~ 15 m

fl_{max}: 20
Trmin: 20
MCDW: 3x20L no
ISW: 4x20L

stn 12, 13
1% light
near

PRISM CTD Cast Sheet

Station Number: 15 (S2)
Start date, time (UTC): 21:30
1/15/2012

CTD cast number: 16
End date, time (UTC): 22:14
1/15/2012

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	700		312								
2	600		311								
3	500		310								
4	400		309								
5	400										
6	300		308								
7	300										
8	200		307		13						
9	150		306		12	9			9		
10	100		305		11	8			8		
11	80		304	8	10						
12	70		303		9						
13	60		302	7	8	7	7	2	7		
14	50		301	6	7		7				
15	45		300	5	6	6	6		6		
16	40		299		5	5	5		5		
17	30		298								
18	30			4	4	4	4	1	4		
19	20		297								
20	20			3	3	3	3		3		
21	10		296								
22	10			2	2	2	2		2		
23	1		295								
24	1			1	1	1	1		1.		
Sampler											

Tr_{mn} →

fl_{max} → down cast

fl_{max} → up cast

Nutr. bt. 295 * $fl_{max} \cong 20$ m ↑ up cast

1% light = 27 m

$fl^*_{max} \cong 30$ ← down cast
$Tr_{mn} \cong 45$
MCM = 200
ISM = 400

PRISM CTD Cast Sheet

Station Number: 16 (S1)
Start date, time (UTC): 1/15/2012 23:50

CTD cast number: 17
End date, time (UTC): 1/16/2012 00:31

	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	700		313								
	2	600		314								
	3	500		315								
no isw	4	400		316								
	5	400										
no mcdw	6	300		317								
	7	300										
	8	200		318		12						
	9	150		319		11	9			9		
	10	100		320		10	8			8		
	11	80		321		9						
	12	70		322	8	8	7			7		
	13	60		323		7						
	14	50		324	7	6	6	6		6		
	15	40		325	6	5	5	5		5		
	16	30		326	5	4	4	4	2	4		
	17	20		327								
	18	20			4	3	3	3		3		
Fluo max	19	10										
	20	10			3	2	2	2	1	2		
	21	10		328								
Trans min	22	5		329	2							
	23	1			1	1	1	1		1		
	24	1		330								
	Sampler			PSL/MP								

Fluo max = 10 m
Trans. min = 5 m
MCDW = no clear
ISW = min/max
1% light = 14 m

PRISM CTD Cast Sheet

Station Number: 17 (N1)
Start date, time (UTC): 1/16/2012 01:40

CTD cast number: 18
End date, time (UTC): 1/16/2012 02:30

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	695		331								
2	600		332								
3	500		333								
4	400		334								
5	400										
6	300		335								
7	300										
8	200		336								
9	150		337		12	9			9		
10	100		338		11	8			8		
11	80		339		10						
12	70		340		9	7			7		
13	60		341	6	8						
14	50		342	7	7	6	6		6		
15	40		343	6	6	5	5	0	5		
16	30		344	5	5	4	4		4		
17	20		345								
18	20			4	4	3	3		3		
19	10		346								
20	10			3	3	2	2	1	2		
21	5		347								
22	5			2	2						
23	1		348								
24	1			1	1	1	1		1		
Sampler			PSL/MP								

no isw

no mcdw

Fluo max
trans min

Fluo max= 5 m
Trans. min= 5m
MCDW = no clear
ISW = signal
1% light = 14 m

PRISM CTD Cast Sheet

Station Number: 18 (N2)
Start date, time (UTC): 1/16/2012 03:10

CTD cast number: 19
End date, time (UTC): 1/16/2012 03:50

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	693		349								
2	600		350								
3	500		351								
4	400		352								
5	400										
6	300		353								
7	300										
8	200		354		12						
9	150		355		11	9			9		
10	100		356		10	8			8		
11	80		357		9	7			7		
12	70		358								
13	60		359	7	8				7		
14	50		360	6	7	6	6		6		
15	40		361	5	6	5	5	2	5		
16	30		362	4	5	4	4		4		
17	20		363								
18	20			3	4	3	3	1	3		
19 (Fluo max)	15		364								
20	10		365								
21	10			2	3	2	2	1	2		
22 (Trans min)	5		366		2						
23	1		367								
24	1			1	1	1	1		1		
Sampler			PSL/MP								

Fluo max = 15 m
Trans min = 5 m
MCDW = no clear
ISW = signal
1% light = 14 m

590

PRISM CTD Cast Sheet

Station Number: 19
Start date, time (UTC): 1/16/2012 11:58

CTD cast number: 20
End date, time (UTC): 1/16/2012 12:30

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	580	496	394								
2	500		393								
3	400	497	392								
4	400										
5	300		391								
6	300										
7	290		390		13						
8	150	498	389		12	9			9		
9	100		388		11	8			8		
10	80		387	8	10						
11	70		386		9	7			7		
12	60		385	7	8						
13	50		384	6	7	6	6		6		
14 (flmax & Trmin)	42		383		6	5	5	2	5		
15 (flmax & Trmin)	42			5						2	
16	40		382		5						
17	30		381*	4	4	4	4		4		
18	20		380		1						
19	20			3	3	3	3		3		
20	10	499	379								
21 (Anna→)	10										
22	10			2	2	2	2	1	2		
23	1		378		1	1	1		1		
24	1			1						1	
Sampler											

Nuts: 368 → 384
O_2: 496 - 499

* 1 more (10) extra

1% light = 88 m

	down	up
flmax ≈	42 m	30 m
Trmin ≈	42 m	
MCW =	300 m	
ISW =	400 m	

PRISM CTD Cast Sheet

Station Number: 20
Start date, time (UTC): 15:42
1/16/2012

CTD cast number: 21
End date, time (UTC): 16:18
1/16/2012

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	618		412								B1
2	600		411								B2
3	500		410								B3
4	400		409								B4
5	400										
6	300		408								B5
7	300		-								
8	200		407		13						B6
9	150		406		12	9			9		
10	100		405		11	8			8		
11	80		404		10						
12	70		403		9	7			7		
13	60		402	8	8						
14	50		401	7	7						
15	40		400	6	6	6	6		6		
16	30		399*	5	5	5	5		5		
17	20		398								
18	20			4	4	4	4		4		
19	15		397*		3	3	3	2	3		
20	15			3						2	
21	10		396								
22	10			2	2	2	2	1	2		
23	1		395*		1	1	1		1		
24	1			1			1			1	
Sampler											

fl max →
Tr min →

Salt B1-B6
Nut. 395-412

1% light = 30m

fl max = 15 m
Tr min = 10 m
MCDW =
ISW =

PRISM CTD Cast Sheet

Station Number: 21
Start date, time (UTC): 19:48
1/16/2012

CTD cast number: 22
End date, time (UTC): 20:23.
1/16/2012

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	621		430								
2	600		429								
3	500		428								
4	400		427								
5	400										
6	300		426*								
7	300										
8	200		425		13						
9	150		424		12	9			9		
10	100		423		11	8			8		
11	80		422		10						
12	70		421*	8	9	7			7		
13	60		420	7	8						
14	50		419	6	7	6	6	2	6		
15	40		418								
16	40			5	6				6		
17	30		417		5	5	5		5		
18	20		416								
19	20			4	4	4	4		4		
20	15		415	3	3	3	3		3		
21	10		414		2	2	2	1	2		
22	10			2						2	
23	1		413		1	1	1		1		
24	1			1						1	
Sampler											

Flmax →

Nut Bd. 693-430

Light = 15m

Flmax = 15
40 Trmin = —
MLDW = —
ISW = —

PRISM CTD Cast Sheet

Station Number: 22
Start date, time (UTC): 1/17/2012 09:15

CTD cast number: 23
End date, time (UTC): 1/17/2012 09:50

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	496		431								
2	400		432								
3	400										
4	300		433								
5	200		434								
6	200				12						
7	150		435		11	9			9		
8	100		436		10	8			8		
9	80		437		9						
10	70		438		8	7			7		
11	60		439	7	7						
12	50		440	6	6	6	6		6		
13	40										
14	40			5	5	5	5	2	5		
15	40		441								
16	30		442	4	4	4	4		4		
17	20		443								
18	20			3	3	3	3		3		
19	10		444								
20	10										
21	10										
22	10			2	2	2	2		2		
23	1		445								
24	1			1	1	1	1	1	1		
Sampler			PSL/MP								

no isw

Tmax

Fluo max

Trans min

W.S.

W.S.

W.S.

Fluo max = 40 m
Trans. min = 40 m
ISW = no clear Tmin
MCDW = 200m
1% light = 30 m

2 extra @ 10m (W.S.)

PRISM CTD Cast Sheet

Station Number: 23
Start date, time (UTC): 1/17/2012 11:13

CTD cast number: 24
End date, time (UTC): 1/17/2012 11:44

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	461		446								
2	400		447								
3	400										
4	400										
5	400										
6	300		448								
7	230		449								
8	200		450		12						
9	150		451		11	9			9		
10	100		452		10	8			8		
11	80		453		9						
12	70		454	8	8	7			7		
13	60		455	7	7				7		
14	50		456	6	6	6	6		6		
15	40		457	5	5	5	5		5		
16	30		458								
17	30			4	4	4	4	2	4		
18	30										
19	20		459								
20	20			3	3	3	3		3		
21	10		460								
22	10			2	2	2	2	1	2		
23	1		461								
24	1			1	1	1	1		1		
Sampler			PSL/MP								

no isw

MCDW

Fluo max

Trans. min

Fluo max = 30m
Trans. min = 30m
MCDW = 230m
ISW = no clear signal
1% light = 29m

PRISM CTD Cast Sheet

Station Number: 24
Start date, time (UTC): 12:58
1/17/2012

CTD cast number: 25
End date, time (UTC): 13:22
1/17/2012

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	434	500'	477'								C19
2	400		476'								C20
3	400		"								
4	400										
5	300		475'								C21
6	300										
7	250	501'	474'								C22
8	200		473'		12						C23
9	150		472'		11	9			9		C24
10	100	502'	471'		10	8			8		
11	80		470'		9						
12	70		469'	7	8	7			7		
13	60		468'		7						
14	50		467'	6	6	6	6		6		
15	40		466'								
16	40									2	
17	40			5	5	5	5	2	5		
18	30		465'	4	4	4	4		4		
19	20		464'								
20	20			3	3	3	3		3		
21	10	503'	463'								
22	10			2	2	2	2	1	2		
23	1		462'		1	1	1		1		
24	1			1						1	
Sampler											

Nut 62-477
O_2 400-503
C19-C24
1% light = 24 m

Flmax 40
Trmin 40
MCDW 250
TOW

PRISM CTD Cast Sheet

Station Number: 25
Start date, time (UTC): 1/17/2012 15:32

CTD cast number: 26
End date, time (UTC): 1/17/2012 16:00

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	406		495								
2	400		494								
3	400										
4	400										
5	300		493								
6	200		492								
7	200				12						
8	170		491								
9	150		490		11	9			9		
10	100		489		10	8			8		
11	80		488		9						
12	70		487	8	8	7			7		
13	60		486	7	7						
14	50		485*	6	6	6	6		6		
15	40		484								
16	40			5	5	5	5		5		
17	30		483								
18	28		482*	4	4	4	4	2	4		
19	20		481								
20	20			3	3	3	3		3		
21	10		480								
22	10			2	2	2	2	1	2		
23	1		479								
24	1			1	1	1	1		1		
Sampler											

$O_{2\ min}$ →

T_{max} →

fl_{max} →

Nut 479 -

1% light = 26 m

fl_{max} - 28

T_{min} -

MCDW =

ISW =

PRISM CTD Cast Sheet

Station Number: 26
Start date, time (UTC): 1/17/2012 16:54

CTD cast number: 27
End date, time (UTC): 1/17/2012 17:20

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	394		511								
2	350		510								
3	300		509								
4	300										
5	300										
6	300										
7	300										
8	200		508		13						
9	150		507		12	9			9		
10	100		506		11	8			8		
11	80		505		10						
12	70		504		9						
13	60		503	8	8						
14	50		502	7	7	7			7		
15	40		501	6	6	6	6		6		
16	30		500	5	5	5	5		5		
17	25		499								
18	25			4	4	4	4	2	4		
19	20		498								
20	20			3	3	3	3		3		
21	10		497								
22	10			2	2	2	2	1	2		
23	1		496								
24	1			1	1	1	1		1		
Sampler											

flmax & Trmin

Nut 496

1% light : 26 m

flmax = 25
Trmin = 25
MCDW = —
ISW = —

PRISM CTD Cast Sheet

Station Number: 27
Start date, time (UTC): 1/18/2012 06:35

CTD cast number: 28
End date, time (UTC): 1/18/2012 07:16

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	700		512								
2	600		513								
3	500		514								
4	400		515								
5	400										
6	300		516								
7	300										
8	200		517		12						
9	150		518		11	9			9		
10	100		519		10	8			8		
11	80		520		9						
12	70		521		8	7			7		
13	60		522	7	7						
14	50		523	6	6	6	6		6		
15	40		524	5	5	5	5		5		
16	30										
17	30			4	4	4	4	2	4		
18	30		525								
19	20			3	3	3	3		3		
20	20		526								
21	10			2	2	2	2	1	2		
22	10		527								
23	1			1	1	1	1		1		
24	1		528								
Sampler			PSL/MP								

no isw

no mcdw

Fluo max

Trans. min

Fluo max = 30m
Trans. min = 30m
MCDW = no clear
ISW = signal
1% light = 15 m

PRISM CTD Cast Sheet

Station Number: 28
Start date, time (UTC): 1/18/2012 08:37

CTD cast number: 29
End date, time (UTC): 1/18/2012 09:17

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	700		529								
2	600		530								
3	500		531								
4	400		532								
5	400										
6	300		533								
7	300										
8	200		534		12						
9	150		535		11	9			9		
10	100		536		10	8			8		
11	80		537		9						
12	70		538		8	7			7		
13	60		539	7	7						
14	50		540	6	6	6	6		6		
15	40		541	5	5	5	5		5		
16	30		542	4	4	4	4		4	2	
17	20			3	3	3	3		3		
18	20		543								
19	10										
20	10										
21	10			2	2	2	✓		2	1	
22	10		544								
23	1			1	1	1	1		1		
24	1		545								
Sampler			PSL/MP								

no isw

no mcdw

Fluo max

Trans. min

Fluo max = 10m
Trans. min = 10m
MCDW = no clear
ISW = signal
1% light = 13m

Oxygen sample 509 is compromised. Following a last minute request, nutrients were sampled before O_2 for Niskin 1. All other samples are fine.

PRISM CTD Cast Sheet

Station Number: 29
Start date, time (UTC): 1/18/2012 10:13

CTD cast number: 30
End date, time (UTC): 1/18/2012 10:55

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	700	509	546								C13
2	600		547								C14
3	500		548								C15
4	400		549								C16
5	300		550								C17
6	200	508	551		12						C18
7	150		552		11	9			9		
8	100		553		10	8			8		
9	80		554		9						
10	70		555	8	8	7			7		
11	60		556	7	7						
12	50		557	6	6	6	6	2	6		
13	40	507	558							2	
14	40			5	5	5	5		5		
15	30			4	4	4	4		4		
16	30		559								
17	20			3	3	3	3		3		
18	20		560								
19	10										
20	10										
21	10			2	2	2	2	1	2		
22	10	506	561								
23	1		562		1		1		1	1	
24	1		[illegible]	1	1	1	1		1	1	
Sampler		MP	PSL/MP								PSL/MP

Fluo max
Trans. min

Fluo max = 10m
Trans. min = 10m
MCDW = no clear
ISW = signal
1% light = 7m

O_2 Flasks = 506-509
S Flasks = C13-C18

PRISM CTD Cast Sheet

Station Number: 30
Start date, time (UTC): 13:43
1/18/2012

CTD cast number: 31
End date, time (UTC): 11:25
1/18/2012

Cast depth 709

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	700		581								
2	600		580								
3	500		579								
4	400		578								
5	400										
6	300		577								
7	300		5								
8	200		576		13						
9	150		575		12	9			9		
10	100		574		11	8			8		
11	80		573		10						
12	70		572		9						
13	60		571	8	8						
14	50		570	7	7	7			7		
15	40		569								
16	40			6	6	6	6		6		
17	30		568	5	5	5	5		5		
18	20		567								
19	20			4	4	4	4		4		
20 (flmax →)	15		566*	3	3	3	3	2	3		
21	10		565								
22	10			2	2	2	2	1	2		
23	1		564								
24	1			1	1	1	1		1		
Sampler											

Nit. 564–581

1% light = 10m fl_{max} = 15m T_{rmin} — MCDW — ISW —

Calm

PRISM CTD Cast Sheet

Station Number: 31
Start date, time (UTC): 15:15
1/18/2012

CTD cast number: 32
End date, time (UTC): 15:51
1/18/2012

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	681		598								
2	600		597								
3	500		596								
4	400		595								
5	400										
6	300		594								
7	300										
8	~~200~~		593		12						
9	150		592		11	9			9		
10	100		591		10	8			8		
11	80		590		9						
12	70		589	8	8	7			7		
13	60		588	7	7						
14	50		587*	6	6	6	6		6		
15	40		586								
16	40			5	5	5	5		5		
17	30		585*	4	4	4	4	2	4		
18	20		584								
19	20			3	3	3	3		3		
20	10		583								
21	10										
22	10			2	2	2	2		2		
23	1		582								
24	1			1	1	1	1	1	1		
Sampler											

flu$_{max}$ →

1% light = 16m

flu$_{max}$ = 10m MCDW. –

T$_{max}$ = – ISW = –

snow shower

cast depth 747 m

PRISM CTD Cast Sheet

Station Number: 32
Start date, time (UTC): 18:03
1/18/2012

CTD cast number: 33
End date, time (UTC): 18:43
1/18/2012

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	700		616								
2	600		615								
3	500		614								
4	400		613								
5	400										
6	300		612								
7	300										
8	200		611		13						
9	150		610		12	9			9		
10	100		609		11	8			8		
11	80		608	8	10						
12	70		607		9	7			7		
13	60		606	7	8						
14	50		605		7						
15/	40		604*	6	6	6	6		6		
16	30		603							2	
17	30			5	5	5	5	2	5		
18/	20		602*	4	4	4	4		4		
19	10		601								
20	10			3	3	3	3		3		
21	5		600								
22	5			2	2	2	2	1	2		
23	1		599							1	
24	1			1	1	1	1	1	1		
Sampler											

another peak → of fl max

fl max & Trmin

1% light 20 m

fl max 5 m MCDW –
Trmm 5 m ISW –

76 40.84 170 2.303

PRISM CTD Cast Sheet

Station Number: 33
Start date, time (UTC): 22:50
1/18/2012

CTD cast number: 34
End date, time (UTC): 23:30
1/18/2012

Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
1	700		634								
2	600		633								
3	500		632								
4	400		631								
5	400										
6	300		630								
7	300										
8	200		629		13						
9	150		628		12		9		9		
10	100		627		11		8		8		
11	80		626		10						
12	70		625		9		7		7		
13	60		624	8	8						
14	50		623								
15	50			7	7	6	6	2	6		
16	40		622	6	6						
17	30		621	5	5	5	5		5		
18	20		620	4	4	4	4		4		
19	10		619								
20	10			3	3	3	3		3		
21	5		618								
22	5			2	2	2	2	1	2		
23	1		617								
24	1			1	1	1	1		1		
Sampler											

fl_{max} = 5m MDCW —

1% light = 16m. $T_{r\,min}$ — ISW —

PRISM CTD Cast Sheet

Station Number: 34
CTD cast number: 35
Initials: PSL

Start date, time (UTC): 1/19/2012 01:50
End date, time (UTC): 1/19/2012 02:35

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	693		635								
	2	600		636								
	3	500		637								
	4	400		638								
	5	300		639								
	6	200		640		12						
	7	150		641		11	9			9		
	8	100		642		10	8			8		
	9	80		643		9						
	10	70		644		8	7			7		
	11	60		645	8	7						
	12	50		646	7	6	6	6		6		
	13	40			6	5	5	5	2	5		
	14	40		647								
	15	30			5	4	4	4		4		
	16	30		648								
	17	20			4	3	3	3	1	3		
	18	20		649								
Fluo max	19	15			3							
	20	15		650								
Trans. min	21	10			2	2	2	2	1	2		
	22	10		651								
	23	1		652								
	24	1			1	1	1	1		1		
	Sampler			PSL/MP								

Fluo max = 15m
Trans. min = 10m
MCDW = no clear
ISW = signal
1% light = 15m

PRISM CTD Cast Sheet

Station Number: 35
Start date, time (UTC): 1/19/2012 03:20

CTD cast number: 36
End date, time (UTC): 1/19/2012 04:00

Initials: PSL

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	688		653								
	2	600		654								
	3	500		655								
	4	400		656								
	5	300		657								
	6	200		658		12						
	7	150		659		11	9			9		
	8	100		660		10	8			8		
	9	80		661		9						
	10	70		662		8	7			7		
	11	60		663	7	7						
	12	50			6	6	6	6		6		
	13	50		664								
	14	40			5	5	5	5		5		
	15	40		665							2	
	16	30			4	4	4	4		4		
	17	30		666								
	18	20			3	3	3	3		3		
	19	20		667								
Fluo max	20	10										
Trans. min	21	10			2	2	2	2		2		
	22	10		668								
	23	1		669							1	
	24	1			1	1	1	1		1		
	Sampler											

Fluo max = 10m
Trans. min = 10m
MCDW = no clear
ISW = signal
1% light = 14m

(RBSE2)

PRISM CTD Cast Sheet

Station Number: 36 Start date, time (UTC): 12:06 1/19/2012

CTD cast number: 37 End date, time (UTC): 18:45 1/19/2012

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	661	499	687								C7
	2	600		686								C8
	3	500		685								C9
	4	400		684								C10
ISW	5	365	498	683								C11
	6	300										C12
	7	300		682								
	8	200		681		12						
	9	150		680		11	9			9		
	10	100	497	679		10	8			8		
	11	80		678		9						
	12	70		677	8	8	7			7		
	13	60		676	7	7						
	14	50		675	6	6	6	6		6		
	15	40			5	5	5	5		5		
	16	40		674								
	17	30		673*	4	4	4	4		4		
Flumax	18	20				3	3	3	2	3		
	19	20			3						2	
	20	20		672								
	21	10			2	2	2	2	1	2		
	22	10	496	671								
	23	1			1	1	1	1		1		
	24	1		670*							1	
	Sampler											

Nut. 670-

O_2 496 - 499

Salt C~~8~~ - C~~12~~

1% light = 23

Flumax = 20

Trmin = —

MCDW = —

ISW 365

PRISM CTD Cast Sheet (RBSE1)

Station Number: 37
Start date, time (UTC): 15:43
1/19/2012

CTD cast number: 38
End date, time (UTC): 16:17
1/19/2012

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	551		705								
	2	500										
	3	500		704								
	4	400		703								
ISW	5	370		702								
	6	300		701								
MCDW	7	280		700								
	8	200		699		12						
	9	150		698		11	9			9		
	10	100		697		10	8			8		
	11	80		696		9						
	12	70		695	8	8	7			7		
	13	60		694	7	7						
	14	50	*	693	6	6	6	6		6		
	15	40		692	5	5	5	5		5		
	16	30	*	691	4	4	4	4		4		
flu max	17	20										
	18	26			3	3	3	3	2	3		
	19	20		690								
→ Anna	20	10										
	21	10			2	2	2	2	1	2		
	22	10		689								
	23	1			1	1	1	1		1		
	24	1		688								
	Sampler											

688 1% light ~ 26

1 Bottle at Max for Anna
flu max 20 MCDW ~ 280
Tmin — ISW ~ 370

PRISM CTD Cast Sheet RB

Station Number: 38
Start date, time (UTC): 1747 1/19/2012

CTD cast number: 39
End date, time (UTC): 1802 1/19/2012

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	161		717		12						
	2	150				11	9			9		
	3	150		716								
	4	100				10	8			8		
	5	100		715								
	6	80			8	9	?			?		
	7	80		714								
	8	70				8	7			7		
—	9	70		713	7							
	10	60				7						
—	11	60		712	6							
	12	50				6	6	6		6		
	13	50		711								
	14	40			5	5	5	5		5		
	15	40		710								
Flmax	16	30									2	
	17	30			4	4	4	4	2	4		
	18	30		709								
	19	20			3	3	3	3		3		
	20	20		708								
	21	10			2	2	2	2	1	2		
	22	10		707		1		1	1			
	23	1			1						1	
	24	1		706		1	1	1		1		
	Sampler											

Nut. 706 1% light = 27m Flmax 30m MPRW —

Tmax - ISW —

PRISM CTD Cast Sheet (RBNW1)

Station Number: 39
Start date, time (UTC): 20:20
1/19/2012

CTD cast number: 40
End date, time (UTC): 20:42
1/19/2012

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	270		730								
	2	200										
	3	200										
	4	200										
	5	200										
	6	200		729		12						
	7	150		728		11	9			9		
	8	100				10	8			8		
	9	100		727								
	10	80		726	8	9						
	11	70		725		8	7			7		
	12	60		724	7	7						
	13	50		723	6	6	6	6		6		
	14	40			5	5	5	5		5		
	15	40		722								
Flmax	16	30										
	17	30			4	4	4	4	2	4		
	18	30		721								
	19	20			3	3	3	3		3		
	20	20		720								
	21	10			2	2	2	2	1	2		
	22	10		719								
	23	1			1	1	1	1	1	1		
	24	1		718								
	Sampler											

1% light = 32 m

Fl_{max} = 30 McDW –

Tr_{max} – ISW –

PRISM CTD Cast Sheet (RBNW2)

Station Number: 40
Start date, time (UTC): 21:48
1/19/2012

CTD cast number: 41 (19)
End date, time (UTC): 22:10
1/19/2012

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	290		745								
	2	200										
	3	200										
	4	200										
	5	200										
	6	200										
	7	200				12						
	8	200		744								
	9	150		743		11	9	7		9		
	10	100		742		10	8			8		
	11	80		741		9						
	12	70		740		8	7			7		
	13	60		739	8	7				7		
	14	50		738	7	6	6	6		6		
x	Flu max 15	45		737	6					2	2	
	16	40			5	5	5	5	2	5		
	17	40		736								
+	18	30		735	4	4	4	4	4	4		
	19	20			3	3	3	3		3		
	20	20		733								
	21	10			2	2	2	2	1	2		
	22	10		732								
	23	1			1	1	1	1	1	1		
+	24	1		731						1	1	
	Sampler											

1x light 23 m

Flu max 45 MCDW —
Tr min — ISW —

76 39.6 S
179 15.2 E

PRISM CTD Cast Sheet

Station Number: Sea Horse mooring CTD cast number: 42 Initials: PSL

Start date, time (UTC): 1/21/2012 03:00 End date, time (UTC): 1/21/2012

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	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											

no bottles CTD cast for calibration of Sea Horse mooring.

PRISM CTD Cast Sheet RBNW 3

Station Number: 41
Start date, time (UTC): 1/21/2012 05:58

CTD cast number: 43
End date, time (UTC): 1/21/2012 06:15

Initials: PSL

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	359		746								
	2	300		747								
	3	200		748		12						
	4	150		749		11	9			9		
	5	100		750		10	8			8		
	6	80		751		9						
	7	70		752								
	8	70			8	8	7			7		
	9	60		753								
	10	60				7						
	11	50		754								
	12	50			7	6	6	6		6		
	13	40		755								
	14	40			6	5	5	5		5		
Fluo max	15	30			5	4	4	4	2	4		
	16	30		756								
Trans. min	17	25			4							
	18	25		757								
	19	20		758								
	20	20			3	3	3	3		3		
	21	10		759								
	22	10			2	2	2	2	1	2		
	23	1		760								
	24	1			1	1	1	1		1		
	Sampler			PSL/MP								

Fluo max = 30m
Trans. min = 25m
MCDW = no clear
ISW = signal
1% light = 26m

PRISM CTD Cast Sheet

Station Number: 42
CTD cast number: 44
Initials: PSL

Start date, time (UTC): 1/21/2012 07:30
End date, time (UTC): 1/21/2012 08:00

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	392	509	761								C1
	2	300		762								C2
MCDW	3	250	508	763								C3
	4	200		764		12						C4
	5	150		765		11	9			9		C5
	6	100		766		10	8			8		C6
	7	80		767		9						
	8	70		768								
	9	70				8	7			7		
	10	60		769								
	11	60			7	7						
	12	50		770								
	13	50			6	6	6	6		6		
	14	40	507	771								
	15	40			5	5	5	5		5		
Fluo max	16	30										
Trans min	17	30			4	4	4	4		4	~	
	18	30		772								
	19	20		773								
	20	20			3	3	3	3		3		
	21	10	506	774								
	22	10			2	~	~	✓		~	1	
	23	1		775								
	24	1			1	1	1	.1		1		
	Sampler		MP	PSL/MP								PSL/MP

Fluo max = 30m
Trans. min = 30m
MCDW = 250m
ISW = no clear signal
1% light = 30m

Sats: C1 – C6
O_2: 506 – 50

PRISM CTD Cast Sheet

Station Number: 43 CTD cast number: 45 Initials: PSL

Start date, time (UTC): 1/21/2012 11:20

End date, time (UTC): 1/21/2012 11:45

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	300		776								
	2	200		777		12						
	3	150		778								
	4	150				11	9			9		
	5	100		779								
	6	100				10	8			8		
	7	80		780								
	8	80				9						
	9	70		781								
	10	70			8	8	7			7		
	11	60		782								
	12	60			7	7						
	13	50		783								
	14	50			6	6	6	6		6		
	15	40		784								
	16	40			5	5	5	5	2	5		
	17	30		785								
	18	30			4	4	4	4		4		
	19	20		786								
	20	20			3	3	3	3		3		
	21	10		787								
	22	10			2	2	2	2	1	2		
	23	1		788								
	24	1			1	1	1	1		1		
	Sampler			PSL/MP								

Fluo max = 40m
Trans. min = 30m
MCDW = no clear
ISW = signal
1% light = 35m

PRISM CTD Cast Sheet PSVE

Station Number: 44
Start date, time (UTC): 1/20/2012 12:09

CTD cast number: 46
End date, time (UTC): 1/20/2012 13:10

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	287		801,								
	2	200		800,		12						
	3	150		799,		11	9			9		
	4	100				10	8			8		
	5	100		798,								
	6	80				9				7		
	7	80		797,								
	8	70			8	8	7			7		
802	9	70		796,	Bottle Broke			use 802				
	10	60			7	7				7		
	11	60		795,								
	12	50			6	6	6	6		6		
	13	50		794,								
Flu max	14	40									2	
	15	40			5	5	5	5	2	5		
	16	40		793,								
	17	30			4	4	4	4		4		
	18	30		792,								
	19	20			3	3	3	3		3		
	20	20		791,								
	21	10			2	2	2	2	1	2		
	22	10		790,								
	23	1			1	1	1	1		1		
	24	1		789,							1	
	Sampler											

Bright 37 m

Flu_{max} ≤ 40 m MCDW —

Trmin — ISW —

PRISM CTD Cast Sheet RBN1

Station Number: 45
Start date, time (UTC): 15:37
1/20/2012

CTD cast number: 47
End date, time (UTC): 15:58
1/20/2012

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	252		813								
	2	200		812		13						
	3	150		811		12	9			9		
	4	100		810		11	8			8		
	5	80				10						
	6	80		809								
	7	~~70~~ 70				9	7			7		
	8	~~70~~		808								
	9	60			8	8						
	10	60		807								
	11	50			7	7				7		
	12	50		806								
	13	40			6	6	6	6		6		
	14	40		805								
Flumax	15	35			5	5	5	5	2	5		
	16	35		804								
	17	~~30~~ 30			4	4	4	4		4		
	18	30		803								
Trmin	19	20			3	3	3	3		3		
	20	20		~~802~~								
	21	10			2	2	2	2	1	2		
	22	10		~~801~~ 805								
	23	1			1	1	1	1		1		
	24	1		~~800~~ 804								
	Sampler											

1% light 29 m

Flu max ~35 MCDW

Tr min ~20 ISW

PRISM CTD Cast Sheet Ross Bank

Station Number: 46
Start date, time (UTC): 17:37
1/21/2012

CTD cast number: 48
End date, time (UTC): 17:53
1/21/2012

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	159		828		12						
	2	150				11	9			9		
	3	150		827								
	4	100				10	8			8		
	5	100		826								
	6	80				9						
	7	80		825								
	8	70			8	8	7			7		
	9	70		824								
	10	60			7	7						
	11	60		823								
	12	50			6	6	6	6		6		
	13	50		822								
	14	40			5	5	5	5		5		
	15	40		821								
Flmax	16	30										
Trmin	17	30			4	4	4	4	2	4		
	18	30		820								
	19	20			3	3	3	3		3		
	20	20		819								
	21	10			2	2	2	2	1	2		
	22	10		818								
	23	1			1	1	1	1		1		
	24	1		817								
	Sampler											

1% light = 27m

Flu_{max} = 30 MCDW –

Tr_{min} = 30 ISW

PRISM CTD Cast Sheet RBS1

Station Number: 4.7
CTD cast number: 29
Initials: SS

Start date, time (UTC): 1/21/2012 19:00
End date, time (UTC): 1/21/2012

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	513		844								
	2	500		843								
	3	400										
	4	400		842								
	5	300										
	6	300		841								
	7	200		840		12						
	8	150		839		11	9			9		
	9	100		838		10	8			8		
	10	80		837		9						
	11	70		836	8	8	7			7		
	12	60		835	7	7						
	13	50			6	6	6	6		6		
	14	50		834								
Fl max	15	45			5	5	5	5	2	5		
	16	45		833								
	17	30			4	4	4	4		4		
	18	30		832								
Tr min	19	20			3	3	3	3		3		
	20	20		831								
	21	10			2	2	2	2	1	2		
	22	10		830								
	23	1			1	1	1	1		1		
	24	1		829								
	Sampler											

1% light ≥ 8m

Fl$_{max}$ 45m MCDW —
Tr$_{min}$ ~20m ISW —

PRISM CTD Cast Sheet RBS2

Station Number: 48
Start date, time (UTC): 20:58
1/21/2012

CTD cast number: 50
End date, time (UTC): 21:32
1/21/2012

Initials: SS

	Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
		1	583		862								
		2	500		861								
Tmin	ISW	3	430		860								
		4	400		859								
		5	300		858								
		6	200		857		13						
Tmax	MCDW	7	160		856		12						
		8	150		855		11	9			9		
		9	100		854		10	8			8		
		10	80		853		9						
		11	70		852		8	7			7		
		12	60		851	7	7						
		13	50			6	6	6	6		6		
		14	50		850								
		15	40			5	5	5	5		5		
		16	40		849								
Flumax		17	30			4	4	4	4	2	4		
—		18	30		848							2	
Trmin		19	20			3	3	3	3		3		
		20	20		847								
		21	10			2	2	2	2	1	2		
		22	10		846								
		23	1			1	1	1	1		1		
→		24	1		845							1	
		Sampler											

1% light 25m

Flumax ~ 30 MCDW 160

Trmin ~ 20 ISW 430

For this specific cast, the CTD makes use of the VPR's oxygen sensor. See CTD file header for details.

PRISM CTD Cast Sheet

Station Number: 49 (RBE2) CTD cast number: 51 Initials: PSL

Start date, time (UTC): 1/22/2012 01:30 End date, time (UTC): 1/22/2012 02:15

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	612	500	864								
	2	500		865								
	3	400		866								
	4	300	501	867								
	5	200		868		12						
	6	150		869		111	9			9		
	7	100		870	7	10	8			8		
	8	80		871		9						
	9	70			6	8	7			7		
	10	70	502	872								
	11	60				7						
	12	60		873								
	13	50			5	6	6	6		6		
	14	50		874								
Fluo max	15	40			4	5	5	5	25			
	16	40		875								
	17	30			3	4	4	4		4		
	18	30	503	876								
	19	20				3	3	3		3		
	20	20		877								
Trans. min.	21	10			2	2	2	2		2		
	22	10		878								
	23	1		879								
	24	1			1	1	1	1	1	1		
	Sampler		MP	PSL/MP								

Fluo max = 40m
Trans. min = 10m
MCDW = no clear
ISW = signal
1% light = 26m

O_2 Flasks: 500
-503

PRISM CTD Cast Sheet

Station Number: 50 (RBE1) CTD cast number: 52 Initials: PSL

Start date, time (UTC): 1/22/2012 03:20 End date, time (UTC): 1/22/2012 03:55

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	539		880								
	2	500		881								
	3	400		882								
	4	300		883								
	5	200		884		12						
	6	150		885		11						
	7	100		886		10						
	8	80		887		9						
	9	70				8						
	10	70		888								
	11	60				7						
	12	60		889								
	13	50				6						
	14	50		890								
	15	40				5						
	16	40		891								
	17	30				4						
	18	30		892								
Fluo max	19	20				3						
	20	20		893								
Trans. min	21	10				2						
	22	10		894								
	23	1		895								
	24	1				1						
	Sampler			PSL/MP								

Fluo max = 20m
Trans. min = 10m
MCDW = no clear
ISW = signal
1% light = 20m

PRISM CTD Cast Sheet

Station Number: 51 (Ross Bank) CTD cast number: 53 Initials: PSL

Start date, time (UTC): 1/22/2012 05:10 End date, time (UTC): 1/22/2012 06:15

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	158		896								
	2	158				12						
	3	150		897								
	4	150				11	9			9		
	5	100		898								
	6	100				10	8			8		
	7	80		899								
	8	80				9						
	9	70		900								
	10	70				8	7			7		
	11	60		901								
	12	60			7	7						
	13	50		902								
	14	50			6	6	6	6		6		
	15	40		903								
	16	40			5	5	5	5		5		
Fluo max	17	30			4	4	4	4	2	4		
	18	30		904								
	19	20		905								
	20	20			3	3	3	3		3		
	21	10		906								
	22	10			2	2	2	2		2		
	23	1		907								
Trans. min	24	1			1	1	1	1	1	1		
	Sampler			PSL/MP								

Max fluo = 30m
Trans. min = 1m
MCDW = no clear
ISW = signal
1% light = 32m

PRISM CTD Cast Sheet

Station Number: 52 (RBW1) CTD cast number: 54 Initials: PSL

Start date, time (UTC): 1/22/2012 07:20 End date, time (UTC): 1/22/2012 07:40

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF ~~Chl~~	~~Chl~~	BSi	HPLC	Micro	C/N	Protein	Salts
	1	231		908								
	2	200		909	12							
	3	150		910	11							
	4	100		911								
	5	100			10							
	6	80		912								
	7	80			9							
	8	70		913								
	9	70			8							
	10	60		914								
	11	60			7							
	12	50		915								
	13	50			6							
Trans. min	14	40			5							
	15	40		916								
Fluo max	16	30			4							
	17	30		917								
	18	20		918								
	19	20			3							
Anna	20	10										
	21	10		919								
	22	10			2							
	23	1		920								
	24	1			1							
	Sampler			PSL/MP								

Fluo max = 30m
Trans. min = 40m
MCDW = no clear
ISW = signal
1% light = 25m

10m for Anna

PRISM CTD Cast Sheet

Station Number: 53 (RBW2) CTD cast number: 55 Initials: PSL

Start date, time (UTC): 1/22/2012 08:45 End date, time (UTC): 1/22/2012 09:10

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	270		921								
	2	200		922		12						
	3	150		923		11	9			9		
	4	100		924		10	8			8		
	5	80		925								
	6	80				9						
	7	70		926								
	8	70			8	8	7			7		
	9	60		927								
	10	60			7	7						
	11	50		928								
	12	50			6	6	6	6		6		
	13	40		929								
	14	40			5	5	5	5		5		
	15	30		930								
	16	30			4	4	4	4	2	4		
	17	25		931								
Fluo max	18	25										
Trans min	19	20			3	3	3	3		3		
	20	20		932								
	21	10		933								
	22	10			2	2	2	2		2		
	23	1		934								
	24	1	1		1	1	1	1	1	1		
	Sampler			PSL/MP								

Fluo max = 25m
Trans. min = 20m
MCDW = no clear
ISW = signal
1% light = 17m

PRISM CTD Cast Sheet

Station Number: 54 (RBW3) CTD cast number: 56 Initials: PSL

Start date, time (UTC): 1/22/2012 10:17

End date, time (UTC): 1/22/2012 10:40

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	283		935								
mcdw	2	200		936		12						
	3	150		937		11						
	4	100		938		10						
	5	80		939		9						
	6	80										
	7	70		940								
	8	70				8						
	9	60		941								
	10	60				7						
	11	50		942								
	12	50				6						
	13	40		943								
	14	40				5						
	15	30		944								
	16	30				4						
Fluo max	17	25										
	18	25		945								
Trans min	19	20				3						
	20	20		946								
	21	10		947								
	22	10				2						
	23	1		948								
	24	1				1						
	Sampler			PSL/MP								

Fluo max = 25m
Trans. min = 20m
MCDW = 200m
ISW = no signal
1% light = 24m

PRISM CTD Cast Sheet RBW4

Station Number: 55
Start date, time (UTC): 11:50 1/22/2012

CTD cast number: 57 Initials:
End date, time (UTC): 12:13 1/22/2012

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	296		963								
MCDW	2	210		962								
	3	200		961		13						
	4	150		960		12	9			9		
	5	100		959		11	8			8		
	6	80		958		10						
	7	70				9	7			7		
	8	70		957								
	9	60			8	8				1		
	10	60		956								
	11	50			7	7	6	6		6		
	12	50		955								
	13	40			6	6		6				
	14	40		954								
	15	30			5	5	5	5		5		
	16	30		953								
FLuo	17	25			4	4	4	4	2	4		
	18	25		952								
	19	20			3	3	3	3		3		
	20	20		951								
	21	10			2	2	2	2	1	2		
	22	10		950								
	23	1			1	1	1	1		1		
	24	1		949								
	Sampler											

1% light 25 m

Flumax 25 MCDW 210

Trmin – ISW –

PRISM CTD Cast Sheet

Station Number: 56 (RISN2) CTD cast number: 58 Initials: PSL

Start date, time (UTC): 1/24/2012 03:40

End date, time (UTC): 1/24/2012 04:15

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	614		980								
ISW	2	480		981								
	3	400		982								
	4	300		983								
MCDW	5	270		984								
	6	200		985		12						
	7	150		986		11	9			9		
	8	100		987	8	10	8			8		
	9	80		988		9						
	10	70		989		8	7			7		
	11	60		990								
	12	60			7	7						
	13	50		991								
	14	50			6	6	6	6		6		
	15	40		992								
	16	40			5	5	5	5		5		
Fluo max	17	30		993							2	
Trans. min	18	30			4	4	4	4	2	4		
	19	20		994								
	20	20			3	3	3	3		3		
	21	10		995								
	22	10			2	2	2	2		2		
	23	1		996							1	
	24	1			1	1	1	1	1	1		
	Sampler			PSL/MP								

Fluo max = 30m

Trans. min = 30m and weak

MCDW = broad signal between 250m and ~320m.

ISW = broad signal between 400m and ~520m.

1% light = 21m

PRISM CTD Cast Sheet

Station Number: 57 (RISN 1) CTD cast number: 59 Initials: PSL

Start date, time (UTC): 1/24/2012 07:25

End date, time (UTC): 1/24/2012 08:05

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	690		998								
	2	600		999								
ISW	3	500		1000								
	4	400		1001								
MCDW	5	340		1002								
	6	300		1003								
	7	200		1004		12						
	8	150		1005		11	9			9		
	9	100		1006		10	8			8		
	10	80		1007	7	9						
	11	70		1008	6	8	7			7		
	12	60		1009	5	7						
	13	50		1010								
	14	50			4	6	6	6		6		
	15	40		1011								
	16	40				5	5	5		5		
Fluo max	17	30		1012								
Trans. min	18	30			3	4	4	4		4		
	19	20		1013								
	20	20				3	3	3		3		
	21	10		1014								
	22	10			2	2	2	2		2		
	23	1		1015								
	24	1			1	1	1	1		1		
	Sampler											

Fluo max = 30m
Trans. min = 30m
MCDW = 340m
ISW = 500m
1% light = 21m

* vial 1026 was sampled from carbu after the bottle was drained by a different group.

PRISM CTD Cast Sheet

Station Number: 58 (RIS1) CTD cast number: 60 Initials: PSL

Start date, time (UTC): 1/24/2012 10:00 End date, time (UTC): 1/24/2012 10:40

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	677	500	1026*								~~C13~~
	2	600		1027								C14
	3	500		1028								C15
ISW	4	400		1029								C16
	5	300		1030								C17
mcdw	6	250	501	1031								C18
	7	200		1032		12						C13
	8	150		1033		11	9			9		
	9	100		1034	8	10	8			8		
	10	80		1035		9						
	11	70		1036	7	8	7			7	2	
Fluo max	12	60	502	1037	2						2	
Trans. min	13	60				7						
	14	50		1038	6	6	6	6		6		
	15	40		1039								
	16	40			5	5	5	5		5		
	17	30		1040								
	18	30			4	4	4	4	0	4		
	19	20		1041								
	20	20			3	3	3	3		3		
	21	10	503	1042								
	22	10			2	2	2	2	1	2		
	23	1		1043							1	
	24	1			1	1	1	1		1		
	Sampler		MP	PSL/MP								PSL/MP

Fluo max = 60m
Trans. min = 60m
MCDW = Faint Tmax @ 250m, no clear O_2 signal
ISW = 400m
1% light = 20m

O_2: 500-503
Salts: C13-C18

PRISM CTD Cast Sheet

Station Number: 59(RIS2)
Start date, time (UTC): 13:32
1/24/2012

CTD cast number: 61
End date, time (UTC): 14:11
1/24/2012

Initials: JS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	645		1062								
	2	600		1061								
	3	500		1060								
ISW	4	440		1059								
	5	400		1058								
	6	300		1057								
MCDW	7	270		1056								
	8	200		1055		12						
	9	150		1054		11	9			9		
	10	100		1053	8	10	8			8		
Flu_{max}	11	80			7	9	7		2	7		
Tr_{min}	12	80		1052								
	13	70		1051		8						
	14	60		1050	6	7						
	15	50		1049		6	6	6		6		
	16	40		1048	5	5	5	3		5		
	17	30			4	4	4	4		4		
	18	30		1047								
	19	20			3	3	3	3		3		
	20	20		1046								
	21	10			2	2	2	2	1	2		
	22	10		1045								
	23	1			1	1	1	1		1		
	24	1		1044				1				
	Sampler											

1% light = 24 m

Flu_{max} ~ 80

Tr_{min} ~ 80

MCDW 270

ISW 440

PRISM CTD Cast Sheet

Station Number: 60 (SR83) = 53 CTD cast number: 62 Initials: SS

Start date, time (UTC): 1/24/2012 14:27 End date, time (UTC): 1/24/2012 16:04

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	622		1082								
	2	600		1081								
	3	500		1080								
ISW	4	450		1079								
	5	400		1078								
	6	360		1077								
	7	300		1076								
	8	200		1075		13						
	9	150		1074	8	12	9	7		9		
	10	100		1073	7	11	8			8		
	11	80		1072	6	10						
	12	70		1071		9	7			7		
	13	60		1070	5	8						
	14	50		1069		7						
Fluma	15	45			4	6	6	6	2	6		
Trmin	16	45		1068							2	
	17	40		1067		5	5	5		5		
	18	30		1066		4	4	4		4		
	19	20		1065	3	3	3	3		3		
Arma	20	10										
	21	10			2	2	2	2	1	2		
	22	10		1064								
	23	1			1	1	1	1	1	1		
	24	1		1063							1	
	Sampler											

450

Fl. light 24m

Fluor ~45 MCDW -

Trum ~45 ISW ~360, 45

PRISM CTD Cast Sheet

Station Number: 61 (RIS4) CTD cast number: 63 Initials: SS

Start date, time (UTC): 20:31 End date, time (UTC): 21:12

1/24/2012 1/24/2012 Mar 718

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	700		1103								
	2	600		1102								
ISW	3	530		1101								
	4	500		1100								
	5	400		1099								
	6	300		1098								
MCDW	7	260		1097								
	8	200		1096		13						
	9	150		1095		12	9			9		
	10	100		1094		11	8			8		
	11	80		1093	8	10						
	12	70		1092	7	9	7			7		
	13	60		1091		8						
Flumax	14	55			6	7	6	6	2	6		
Trmin	15	55		1090								
	16	50		1089		6						
	17	40		1088	5	5	5	5		5		
	18	30		1087	4	4	4	4		4		
	19	20		1086	3	3	3	3		3		
Amp	20	10										
	21	10			2	2	2	2	1	2		
	22	10		1085								
	23	1			1	1	1	1		1		
	24	1		1084		1		1		1		
	Sampler											

1% light = 93 m

Fl_{max} 55 MCDW ~260

Tr_{min} 55 ISW ~530

PRISM CTD Cast Sheet

Station Number: 62 (RIS5) CTD cast number: 64 Initials: SS

Start date, time (UTC): 23:13 1/24/2012 End date, time (UTC): 1/24/2012

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	740	499	1121								C19
	2	600		1120								C20
	3	500		1119								C21
	4	400		1118								C22
ISW	5	340	498	1117								C23
	6	300										C24
	7	300	497	1116								
	8	200	~~495~~	1115		12						
	9	150		1114		11	9			9		
	10	100		1113		10	8			8		
	11	80		1112		9						
	12	70		1111	7	8	7			7		
	13	60		1110	6	7			2			
Flu max	14	55		1109								
Trmin	15	50				6	6	6		6		
	16	50		1108	5						2	
	17	40		1107	4	5	5	5		5		
	18	30		1106		4	4	4		4		
	19	20			3	3	3	3		3		
	20	20		1105								
	21	10			2	2	2	2	1	2		
	22	10	496	1104								
	23	1			1	1	1	1		1		
	24	1		1083							1	
	Sampler											

Nut 1083, 1104 – 1% light 24m Flu max 55 MCDW –
O_2 496 - 499
Salt C19-C24 Trmin 50 IOM 240

PRISM CTD Cast Sheet

Station Number: 63
Start date, time (UTC): 1/25/2012 08:15

CTD cast number: 65
End date, time (UTC): 1/25/2012 08:55

Initials: PSL

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	685		1122								
	2	600		1123								
isw	3	500		1124								
	4	400		1125								
	5	300		1126								
mcdw	6	270		1127								
	7	200		1128		12						
	8	150		1129		11				3		
	9	100		1130	7	10		6				
	10	80		1131		9		5				
	11	70		1132	6	8		4		2		
	12	60		1133		7		3				
	13	50		1134								
	14	50			5	6		2				
	15	40		1135								
	16	40				5						
Fluo max	17	30		1136								
trans min	18	30			4	4						
	19	20		1137								
	20	20			3	3						
	21	10		1138								
	22	10			2	2		1	1	1		
	23	1		1139								
	24	1			1	1						
	Sampler			PSL/MP								

Fluo max = broad max centered at 30m.
Trans. min = " min " " 30m.
MCDW = 270m
ISW = 500m
1% light = 21 m

The CTD file was closed before the last two bottles could be closed. No samples were collected from those Niskins (23 and 24, depth = 1 meter).

PRISM CTD Cast Sheet

Station Number: 64 CTD cast number: 66 Initials: PSL

Start date, time (UTC): 1/25/2012 09:28 End date, time (UTC): 1/25/2012 10:10

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	682		1140								
	2	600		1141								
isw	3	500		1142								
	4	400		1143								
	5	300		1144								
mcdw	6	280		1145								
	7	200		1146		12						
	8	150		1147		11		6				
	9	100		1148		10		5		3		
	10	80		1149		9		4				
	11	70		1150		8		3		2		
	12	60		1151		7		2				
	13	50		1152								
	14	50				6						
Fluo max	15	40		1153								
Trans min	16	40				5						
	17	30		1154								
	18	30				4						
	19	20		1155								
	20	20				3						
	21	10		1156								
	22	10				2		1		1		
	~~23~~			~~1157~~								
	~~24~~											
	Sampler			PSL/MP								

Fluo max = Broad max centered at 40m

Trans. min = " min at 40m

MCDW = 280m

ISW = Broad signal centered at 500m

1% light = 23m

PRISM CTD Cast Sheet

Station Number: 65 CTD cast number: 67 Initials: PSL

Start date, time (UTC): 1/25/2012 10:40 End date, time (UTC): 1/25/2012 11:20

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	713		1157								
	2	600		1158								
isw	3	500		1159								
	4	400		1160								
mcdw	5	300		1161								
	6	200		1162		12						
	7	150		1163		11		4		3		
	8	100		1164		10		3				
	9	80		1165		9		2		2		
	10	70		1166	8	8						
	11	60		1167								
	12	60			7	7						
Fluo max	13	50		1168							2	
Trans min	14	50			6	6						
	15	40		1169								
	16	40			5	5						
	17	30		1170								
	18	30			4	4						
	19	20		1171								
	20	20			3	3		1	1	1		
	21	10		1172								
	22	10			2	2						
	23	1		1173							1	
	24	1			1	1						
	Sampler											

Fluo max = Broad max centered around 50m.
Trans. min = " min " " 50m.
MCDW = O_2 min @ 300m
ISW = 500m
1% light = 23m

PRISM CTD Cast Sheet

Station Number: 66
CTD cast number: 68
Initials: SS

Start date, time (UTC): 1/25/2012 14:44
End date, time (UTC): 1/25/2012 15:26

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	700		1174								
	2	600		1175								
	3	500		1176								
ISW	4	440		1177								
	5	400		1178								
	6	300		1179								
MCDW	7	260		1180								
	8	200		1181		12						
	9	150		1182		11		4		3		
	10	100		1183		10		3		2		
	11	80		1184		9		4				
	12	70		1185	8	8		4				
	13	60		1186	7	7		2				
	14	50		1187	6	6						
Flumax	15	40			5	5						
Trmin	16	40		1188								
	17	30			4	4						
	18	30		1189								
	19	20			3	3		1	1	1		
	20	20		1190								
	21	10			2	2		1		1		
	22	10		1191								
	23	4			1	1						
	24	4		1192								
	Sampler											

1% light 24M

Flu_{max} ~40 MCDW ~260
Tr_{min} ~40 ISW ~440

max depth ~ 700

PRISM CTD Cast Sheet

Station Number: 67
Start date, time (UTC): 15:20
1/25/2012

CTD cast number: 69
End date, time (UTC): 17:02
1/25/2012

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	700		1194								
	2	600		1195								
	3	500		1196								
	4	400		1197								
ISW	5	395		1198								
MCDW?	6	310		1199								
	7	300		1200								
	8	200		1201								
MCDW?	9	160		1202								
	10	150		1203		12						
	11	100		1204		11		4		3		
	12	80		1205		10						
	13	70		1206		9						
	14	60		1207	8	8						
	15	50		1208	7	7						
	16	40		1209	6	6		3				
FLmax	17	35			5	5		2	1	2		
Trmin	18	35		1210							2	
	19	30		1211	4	4						
	20	20		1212	3	3			1			
	21	10			2	2						
	22	10		1213								
	23	2			1	1		1		1		
	24	2		1214							1	
	Sampler											

1% light ~ 26m

FLmax ~ 35 MCDW 310 ? 160

Trmin ~ 35 ISW 395

430
500

PRISM CTD Cast Sheet

Station Number: 68 CTD cast number: 70 Initials: SS

Start date, time (UTC): 20:02 1/25/2012 End date, time (UTC): 20:41 1/25/2012

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	700		1215								
	2	600		1216								
	3	500		1217								
ISW	4	430		1218								
	5	400		1219								
O_{2min} MCDW?	6	300		1220								
	7	200		1221		12						
T_{max} MCDW?	8	190		1222								
	9	150		1223		11				3		
	10	100		1224		10		4				
	11	80		1225		9						
	12	70		1226		8		3		2		
	13	60		1227		7						
	14	50		1228		6						
Fl_{max}	15	40				5						
T_{rmax}	16	40		1229								
	17	30				4		2				
	18	30		1230								
	19	20				3						
	20	20		1231								
	21	10				2		1		1		
	22	10		1232								
	23	4				1						
	24	4		1233								
	Sampler											

Twilight ~23m

Fl_{max} 40

Ff_{min} 40

MCDW 9

FSW 430, 500

Max 721

-77 39.338
178 43.110

PRISM CTD Cast Sheet

Station Number: 69
CTD cast number: 71
Initials: SS

Start date, time (UTC): 1/25/2012 22:06
End date, time (UTC): 1/25/2012 22:44

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	700		1234								
	2	600		1235								
	3	500		1236								
ISW	4	490		1237								
	5	400		1238								
MCDW	6	310		1239								
	7	300		1240								
	8	200		1241		6						
	9	150		1242		5						
	10	100		1243		4						
	11	80		1244								
	12	90		1245		3						
	13	60		1246								
	14	50		1247								
	15	40										
	16	40		1248								
	17	30										
	18	30		1249								
	19	20				2						
	20	20		1250								
	21	10										
	22	10		1251								
	23	3				1						
	24	3		1252								
	Sampler											

1% light 28 m
Sd-depth 72 m

Flumax ? 30
Trmax ? 40

MCDW 310
ISW 490

PRISM CTD Cast Sheet

Station Number: 70
CTD cast number: 72
Initials: PSL

Start date, time (UTC): 1/25/2012 23:50
End date, time (UTC): 1/26/2012 00:30

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	718		1253*								
	2	600		1264								
	3	500		1265								
ISW	4	450		1266								
	5	400		1267								
	6	300		1268								
	7	200		1269		8						
	8	150		1270		7						
	9	100		1271		6						
	10	80		1272		5						
	11	70		1273		4						
	12	60		1274		3						
	13	50		1275								
	14	50				2						
	15	40		1276								
	16	40										
Fluo max	17	30		1277								
Trans. min	18	30										
	19	20		1278								
	20	20										
	21	10		1279								
	22	10				1						
	23	1		1280								
	24	1										
	Sampler			PSL/MP								

*This is really 1253 → not typo

Fluo max = 30m
Trans min. = 30m
MCDW = no clear signal
ISW = 450m
1% light = 23m

* bottles 1, 21 and 23 were not closed properly during deployment

PRISM CTD Cast Sheet

Station Number: 71
Start date, time (UTC): 1/26/2012 01:12

CTD cast number: 73
End date, time (UTC): 1/26/2012 01:54

Initials: PSL

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
*	1	718	504	1281								D1
	2	600		1282								D2
ISW	3	500		1283								D3
	4	400		1284								D4
	5	300		1285								D5
mcdw	6	270	505	1286								D6
	7	200		1287		10						
	8	150		1288		9						
	9	100		1289		8				4		
	10	80		1290		7						
	11	70		1291		6		4				
	12	60		1292		5		3		3		
	13	50	506	1293								
	14	50				4		2		2		
	15	40		1294								
	16	40				3						
Fluo max	17	30		1295								
Trans min	18	30										
	19	20		1296								
	20	20										
*	21	10	507	1297								
*	22	10				2		1		1		
	23	1		1298								
	24	1				1						
	Sampler		MP	PSL/MP								PSL/MP

Fluo max = 30m
Trans. min = 30m
MCDW = 270m
ISW = 500m
10% light = 76m

O_2 : 504-507
S: D1-6

PRISM CTD Cast Sheet

Station Number: 72 (RBSE2) CTD cast number: 74 Initials: PSL

Start date, time (UTC): 1/26/2012 06:05 End date, time (UTC): 1/26/2012 06:40

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	662		1309								
	2	600		1310								
ISW	3	500		1311								
	4	400		1312								
	5	300		1313								
MCDW	6	270		1314								
	7	200		1315		10						
	8	150		1316		9	7			7		
	9	100		1317		8	6			6		
	10	80		1318	7	7						
	11	70		1319	6	6	5	5		5		
	12	60		1320	5	5						
	13	50		1321								
	14	50			4	4	4	4		4		
	15	40		1322								
	16	40			3	3	3	3	1	3		
Fluo max	17	30		1323								
Trans. min	18	30										
	19	20		1324								
	20	20			2	2	2	2		2		
	21	10		1325								
	22	10										
	23	1		1326								
	24	1			1	1	1	1		1		
	Sampler			PSL/MP								

Fluo max = 30 m
Trans. min = 30 m
MCDW = 270 m
ISW = 500 m
1% light = 23 m

PRISM CTD Cast Sheet

Station Number: 73 (RBSE1) CTD cast number: 75 Initials: PSL

Start date, time (UTC): 1/26/2012 08:35 End date, time (UTC): 1/26/2012 09:10

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	554		1327								
	2	500		1328								
	3	400		1329								
	4	300		1330								
	5	200		1331		10						
	6	150		1332	~~8~~	9				9		
	7	100		1333	~~7~~	8				8		
	8	80		1334		7						
	9	70		1335						7		
	10	70			6	6		6		6		
	11	60		1336								
	12	60			-	5		5		5		
	13	50		1337								
	14	50			4	4		4		4		
	15	40		1338								
	16	40			3	3		3		3		
	17	30		1339								
	18	30										
Fluo max	19	20		1340								
Trans. min	20	20			2	2		2	1	2		
	21	10		1341								
	22	10										
	23	1		1342								
	24	1			1	1		1		1		
	Sampler			PSL/MP								

Fluo max = 20m
Trans. min = 20m
MCDW = no clear
ISW = signal
1% light = 33m

PRISM CTD Cast Sheet

Station Number: 74 (Ross Bank) CTD cast number: 76 Initials: PSL

Start date, time (UTC): 1/26/2012 10:19

End date, time (UTC): 1/26/2012 10:45

Floater ID	Bottle	Target Depth	O_2	Nuts	~~PRKF~~ CHL	~~CH~~ FLNE	BSi	HPLC	Micro	C/N	Protein	Salts
	1	161		1343								
	2	150		1344								
	3	150										
	4	150										
	5	150										
	6	150			8					5		
	7	100		1345	7					4		
	8	80		1346	6	7		3		3		
	9	70		1347								
	10	70			5	6						
	11	60		1348								
	12	60			4	5						
	13	50		1349								
	14	50			3	4		2		2		
	15	40		1350								
	16	40										
Fluo max	17	30		1351								
Trans min	18	30			2	3					2	
	19	20		1352								
	20	20										
	21	10		1353								
	22	10			1	2		1		1	1	
	23	5		1354								
	24	5				1					1	
	Sampler			PSL/MP								

Fluo max = broad max centered @ ~30m
Trans. min = " min " 30m
MCDW = no clear
ISW = signal
1% light = 37m

PRISM CTD Cast Sheet

Station Number: 75 (RBNW1) CTD cast number: 77 Initials: SS

Start date, time (UTC): 1/26/2012 12:35 End date, time (UTC): 1/26/2012 12:54

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	270		1367								
	2	200		1366		10						
	3	150				9				5		
	4	150		1365								
	5	100				8						
	6	100		1364						4		
	7	80				7						
	8	80		1363								
	9	70				6						
	10	70		1362								
	11	60				5		3		3		
	12	60		1361								
	13	50				4						
	14	50		1360								
	15	40				3		2		2		
	16	40		1359								
	17	30										
	18	30		1358								
	19	20				2		1		1		
	20	20		1357								
	21	10				1		1		1		
	22	10		1356								
	23	1										
	24	1		1355								
	Sampler											

1% light 45 m

$T_{U\,max}$ - MCDW -

$T_{U\,min}$ - JSW -

PRISM CTD Cast Sheet

RBNW2

Station Number: 76
Start date, time (UTC): 1/26/2012 14:00

CTD cast number: 78
End date, time (UTC): 1/26/2012 14:20

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	292		1381								
	2	200		1380		6				4		
	3	150				5						
	4	150		1379								
	5	100				4		3		3		
	6	100		1378								
	7	80			6	3		2		2		
	8	80		1377								
	9	70										
	10	70		1376								
	11	60			5							
	12	60		1375								
	13	50										
	14	50		1374								
	15	40			4	2			1			
	16	40		1373								
	17	30										
	18	30		1372								
	19	20			3							
	20	20		1371								
	21	10			2	1		1		1		
	22	10		1370								
	23	3			1							
	24	3		1369								
	Sampler											

1% light 47m

Fl_{max} – / MCDW

Tr_{min} – ISW

RBNW3 1, 24 did not close

PRISM CTD Cast Sheet

Station Number: ~~77~~

CTD cast number: 79 Initials: SS

Start date, time (UTC): 1/26/2012 15:31

End date, time (UTC): 1/26/2012 15:57

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	360		~~1396~~								
	2	300		1395								
	3	200		1394		7						
	4	150		1393		6				4		
	5	~~125~~		1392						4		
	6	100		1391		5				3		
	7	80										
	8	80		1390								
	9	70										
	10	70		1389								
	11	60				4		3	2			
	12	60		1388								
	13	50										
	14	50		1387								
	15	40				3		2	1	2		
	16	40		1386								
	17	30										
	18	30		1385								
	19	20				2						
	20	20		1384								
	21	10										
	22	10		1383								
	23	3		1382		1		1		1		
	24	3		~~1382~~								
	Sampler											

1% light 52m

Flmax –

Trmm –

MOAS –

DOC –

RBNW4

PRISM CTD Cast Sheet

Station Number: 78 CTD cast number: 80 Initials: SS

Start date, time (UTC): 1/26/2012 17:04 End date, time (UTC): 1/26/2012 17:29

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	392		1410								
	2	300		1409								
MCDW	3	220		1408								
	4	200		1407		9						
	5	150		1406		8				5		
	6	100		1405		7				4		
	7	80				6		3	2			
	8	80		1404								
	9	70										
	10	70		1403								
	11	60			5	5				3		
	12	60		1402								
	13	50										
	14	50		1401								
	15	40			4	4		2		2		
	16	40		1400'								
	17	30										
	18	30		1399								
	19	20			3	3						
	20	80		1398								
	21	10			2	2		1	1	1		
	22	10		1397								
	23	4			1	1						
	24	4		1396								
	Sampler											

1/ CTZM

$H_{U_{max}}$ - MCDW 220

$T_{r_{min}}$ -

Niskin 1 (250meters) did not close.

PRISM CTD Cast Sheet

Station Number: 79
Start date, time (UTC): 1/28/2012 10:25

CTD cast number: 81
End date, time (UTC): 1/28/2012 10:50

Initials: PSL

MBC ~260

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	~~250~~		~~1419~~								
	2	200		1420		12						
	3	150		1421		11						
mcdw	4	130		1422	8		8			8		
Fluo max	5	100		1423							2	
	6	100			7	10	7		2	7		
Trans min	7	80		1424	6	9						
	8	70		1425	5	8	6			6		
	9	60		1426								
	10	60				7						
	11	50		1427								
	12	50			4	6	5	5		5		
	13	40		1428								
	14	40				5	4	4		4		
	15	30		1429								
	16	30			3	4	3	3		3		
	17	20		1430								
	18	20				3	2	2		2		
Anna	19	10										
Anna	20	10										
	21	10		1431								
	22	10			2	2			1			
	23	5		1432							1	
	24	5			1	1	1	1		1		
	Sampler											

Fluo max = 100m
Trans. min = 80m
MCDW = 130m
ISW = no signal
1% light = 88m

→ 2 bottles @ 10m for Anna

→ Don't dump Niskins before Tom tells you to do so

PRISM CTD Cast Sheet

Station Number: 80
Start date, time (UTC): 1/28/2012 14:46

CTD cast number: 82
End date, time (UTC): 1/28/2012 15:07

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
Tmax, O_2 min	1	285		1445								
	2	200		1444		8						
	3	150		1443		7						
	4	100			6	6						
	5	100		1442								
	6	80			5	5						
	7	80		1441								
	8	70										
	9	70		1440								
	10	60										
	11	60		1439								
	12	50			4	4						
	13	50		1438								
	14	40										
	15	40		1437								
	16	30			3	3						
	17	30		1436								
	18	20										
	19	20		1435								
Anna	20	10										
	21	10			2	2				1		
	22	10		1434								
	23	6			1	1						
	24	6		1419								
	Sampler											

Anna 10

1% light 89 m.

fl_{max} – MCDW –

T_{min} – ISW –

-123 46.061
172 39.325 4122

PRISM CTD Cast Sheet

Station Number: 81
Start date, time (UTC): 1/28/2012 17:14

CTD cast number: 83
End date, time (UTC): 1/28/2012 19:43

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	411		1463								
	2	400		1462								
	3	350		1461								
	4	300		1460								
MCDW	5	220		1459								
	6	200		1458								
	7	150		1457		12	9			9		
	8	100		1456		11	8			8		
	9	80		1455	8	10						
	10	70		1454		9	7	6		7		
	11	60		1453	7	8						
	12	55			6	7	6	5	2	6		
FLmax	13	55		1452								
	14	50		1451		6						
	15	40			5	5	5	4		5		
	16	40		1450								
	17	30			4	4	4			4		
	18	30		1449								
	19	20			3	3	3	3		3		
	20	20		1448								
	21	10			2	2	2	2	1	2		
	22	10		1447								
	23	3			1	1	1	1		1		
	24	3		1446								
	Sampler											

1% light 69.5 m Fl_{max} ~55 MCDW 220

Tr_{min} - [redacted] -

73 30.077
176 58.667 567

PRISM CTD Cast Sheet

Station Number: 82
CTD cast number: 84
Initials: ES

Start date, time (UTC): 1/28/2012 19:41
End date, time (UTC): 1/28/2012 20:16

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	559	504	1482								D7
	2	500		1481								D8
	3	400		1480								D9
	4	300	505	1479								D10
	5	210		1478								D11
	6	200		1477		12						D12
	7	150		1476		11	9			9		
MCDW	8	120	506	1475								
	9	100		1474		10	8			8		
Elise	10	90		1473								
	11	80		1472	8	9				6		
	12	70		1471		8	7			7		
	13	60		1470	7	7	6	6	-	6		
	14	50		1469	6	6		5				
Flumax	15	40			5	5	5	4	2	5		
Trmax	16	40		1468							2	
	17	30			4	4	4	3		4		
	18	30		1467								
	19	20			3	3	3	2		3		
	20	20		1466								
	21	10			2	2	2	1	1	2		
	22	10	507	1465								
	23	3			1	1	1			1		
	24	3		1464							1	
	Sampler											

120
210

504 - 507
Salt D7 - D12

1% light 58 m

Flu max 40

MCDW 120

Tr max 40

Nutrients were sampled before O_2 on Niskin 10 (70 meters).
Niskin 1 did not close.
"Surface" is 5meters because of sea state.

PRISM CTD Cast Sheet

Station Number: 83
CTD cast number: 85
Initials: PSL
Start date, time (UTC): 1/28/2012 23:45
End date, time (UTC): 1/29/2012 00:20

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	438		1483								
	2	400	496	1484								
	3	300		1485								
	4	200		1486		11						
mcdw	5	180	497	1487								
	6	150		1488		10	7			8		
	7	100		1489	7	9	6			7		
	8	80		1490	6	8	5		2	6		
Fluo max	9	70			5							
	10	70	498	1491		7				5		
	11	60		1492								
	12	60			4	6	4	4		4		
	13	50		1493								
	14	50				5	3	3		3		
	15	40		1494								
	16	40			3	4						
	17	30		1495								
	18	30				3	2	2		2		
	19	20		1496								
	20	20			2	2						
	21	10	499	1497								
	22	10				1	1	1	1	1		
	23	5		1498								
	24	5			1							
	Sampler		MP	PSL/MP								

Fluo max = 70m
Trans. min = no clear min between 0-50m.
MCDW = 180m
ISW = no signal
1% light = 74m

O_2 flasks: 496-499

"Surface" is 5meters because of sea state.

PRISM CTD Cast Sheet

Station Number: 84
CTD cast number: 86
Initials: PSL

Start date, time (UTC): 1/29/2012 02:17
End date, time (UTC): 1/29/2012 02:55

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	378	500	1483								
	2	300		1499								
	3	200		1500		12						
MCDW	4	160	501	1501								
	5	150		1502		11						
	6	100		1503	7	10						
Elise	7	90		1504								
	8	80		1505	6	9						
	9	70	502	1506								
	10	70				8						
	11	60		1507								
Fluo max	12	60			5	7						
	13	50		1508								
	14	50				6						
	15	40		1509								
	16	40			4	5				2		
	17	30		1510								
	18	30				4						
	19	20		1511								
	20	20			3	3						
	21	10	503	1512								
Trans. min	22	10			2	2				1		
	23	5		1513								
	24	5			1	1						
	Sampler		MP	PSL/MP								

Fluo max = 60m
Trans. min = 20m
MCDW = 160m
ISW = no signal
1% light = 72m

O_2 Flasks: 500 - 503

1 bottle @ 90m (Elise)

"Surface" is 2 meters because of sea state.

PRISM CTD Cast Sheet

Station Number: 85
CTD cast number: 87
Initials: PSL

Start date, time (UTC): 1/29/2012 04:48
End date, time (UTC): 1/29/2012 05:11

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	344	508	1514								
	2	300		1515								
mcdw	3	250	509	1516								
	4	200		1517		12						
	5	150		1518		11	9			9		
Fluo max	6	100	510	1519								
	7	100			7	10	8		2	8		
	8	80		1520	6	9	8					
	9	70		1521								
	10	70				8	7			7		
	11	60		1522							2	
	12	60			5	7	6			6		
	13	50		1523								
	14	50				6	5	5		5		
	15	40		1524								
	16	40			4	5	4	4		4		
	17	30		1525								
	18	30				4	3	3		3		
	19	20		1526								
	20	20			3	3	2	2		2		
	21	10	511	1527								
	22	10			2	2	1	1	1	1		
	23	2		1528								
	24	2			1	1					1	
	Sampler		MP	PSL/MP								

Fluo max = 100m
Trans. min = Constant from surface to 85m.
MCDW = Broad signal from 160m to bottom ⇒ 250m
ISW = No signal
1% light = 64m

O_2 flasks: 508 -511

MBE289

PRISM CTD Cast Sheet

Station Number: 86
CTD cast number: 88
Initials: PSL

Start date, time (UTC): 1/29/2012 11:00
End date, time (UTC): 1/29/2012 :

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	280	500	1529								
	2	200		1530		12						
	3	150		1531		11	9			9		
mcdw	4	145	502	1532								
	5	100		1533								
	6	100				10	8			8		
	7	80		1534								
	8	80			8	9						
	9	70		1535								
	10	70				8						
	11	60	503	1536				6				
	12	60			7	7	7			7		
	13	50		1537								
	14	50			6	6	6	5	2	4		
	15	40		1538								
	16	40			5	5	5	4		5		
	17	30		1539							2	
Fluo max	18	30			4	4	4	3		4		
	19	20		1540								
Trans min	20	20			3	3	3	2		3		
	21	10	505	1541								
	22	10			2	2	2	1	1	2		
	23	1		1542							1	
	24	1			1	1	1			1		
	Sampler		jk	SS/jk								

Fluo max = 30 m
Trans. min = 20 m
MCDW = 145 m
ISW = no signal
1% light = 66 m

PRISM CTD Cast Sheet

Station Number: 87
CTD cast number: 89
Initials: SS

Start date, time (UTC): 1/29/2012 14:45
End date, time (UTC): 1/29/2012 15:11

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	346	496	1558								
	2	300		1557								
	3	200	497	1556								
	4	150		1555		12						
MCDW	5	130	498	1554								
	6	100		1553		11						
HISW	7	90		1552		10						
	8	80		1551	6	9						
	9	70				8						
	10	70		1550								
FLUmax	11	60			5	7						
	12	60		1549								
90 Else	13	50				6						
	14	50		1548								
	15	40			4	5						
	16	40		1547								
	17	30				4						
	18	30		1546								
	19	20			3	3						
	20	20		1545								
	21	10			2	2						
	22	10	499	1544								
	23	2			1	1						
	24	2		1543								
	Sampler											

496 - 499 ~light 61 m FLUmax 60m MCDW ~130

Trmin – ISW –

-73 50.260 531
174 49.146

PRISM CTD Cast Sheet

Station Number: 88
CTD cast number: 90
Initials: SS

Start date, time (UTC): 1/29/2012 17:10
End date, time (UTC): 1/29/2012 17:41

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	521	508	1575								
	2	500		1574								
	3	400		1573								
	4	300	509	1572								
	5	200		1571		12						
	6	150	510	1570		11	9			9		
	7	100		1569		10	8			8		
Elise	8	90		1568								
	9	80		1567	6	9						
	10	70		1566		8	7			7		
	11	60			5	7						
	12	60		1565								
90. Fluma	13	50				6	6	6	2	6		
	14	50		1564								
	15	40			4	5	5	5		5		
	16	40		1563								
	17	30				4	4	4		4		
	18	30		1562								
	19	20			3	3	3	3		3		
	20	20		1561								
	21	10			2	2	2	2	1	2		
	22	10	511	1560								
	23	1			1	1	1	1		1		
	24	1		1559								
	Sampler											

508-511

1% light 45m

Fluo max ~50m

MCDW –

Tr min –

ISW –

516-519
913-919

PRISM CTD Cast Sheet

Station Number: 89
CTD cast number: 91
Initials: SS

Start date, time (UTC): 1/29/2012 19:34
End date, time (UTC): 1/29/2012 20:07

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	566	516	1604								D13
	2	500		1603								D14
	3	400		1602								D15
	4	300		1601								D16
MCDW	5	230	517	1600								D17
	6	200		1599		12						D18
	7	150		1598		11	9			9		
MCDW	8	110		1597								
	9	100	518	1596		10	8			8		
Elise	10	90		1595								
	11	80		1594	8	9						
Flmax	12	70			7	8	7	6	2	7		
	13	70		1593							2	
	14	60		1592	6	7						
	15	50		1591		6	6	5		6		
	16	40		1590	5	5	5			5		
	17	30			4	4	4	4		4		
	18	30		1589								
	19	20			3	3	3	3		3		
	20	20		1588								
	21	10			2	2	2	2	1	2		
	22	10	519	1587								
	23	5			1	1	1	1		1		
	24	3		1586							1	
	Sampler											

Salt D13-D18
Cry 516-519

1% light ~ 74m

Flmax 70m MCDW

Tγmin – ISW

Niskin 24 did not close.

PRISM CTD Cast Sheet

Station Number: 90
Start date, time (UTC): 1/29/2012 23:46

CTD cast number: 92
End date, time (UTC): 1/30/2012 00:18

Initials: PSL

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	479	501	1605								
	2	400		1606								
	3	300		1607								
	4	200		1608		12						
mcdw	5	160	504	1609								
	6	150		1610	7	11	7			7		
	7	100		1611								
Fluo max	8	100			6	10	6			6		
Elise	9	90		1612								
	10	80		1613		9	5			5		
	11	70		1614	5	8	4	4		4		
	12	60		1615		7	3	3		3		
	13	50	506	1616								
Trans. min	14	50			4	6						
	15	40		1617								
	16	40				5						
	17	30		1618								
	18	30			3	4	2	2	1	2		
	19	20		1619								
	20	20				3						
	21	10	507	1620								
	22	10			2	2	1	1		1		
	23	1		1621								
	24	1			1	1						
	Sampler		MP	PSL/MP								

Fluo max = 100m
Trans. min = 50m
MCDW = 160m
ISW = no signal
1% light = 70m

1 bottle @ 90m
1 bottle @ 110m if pos
(Elise)

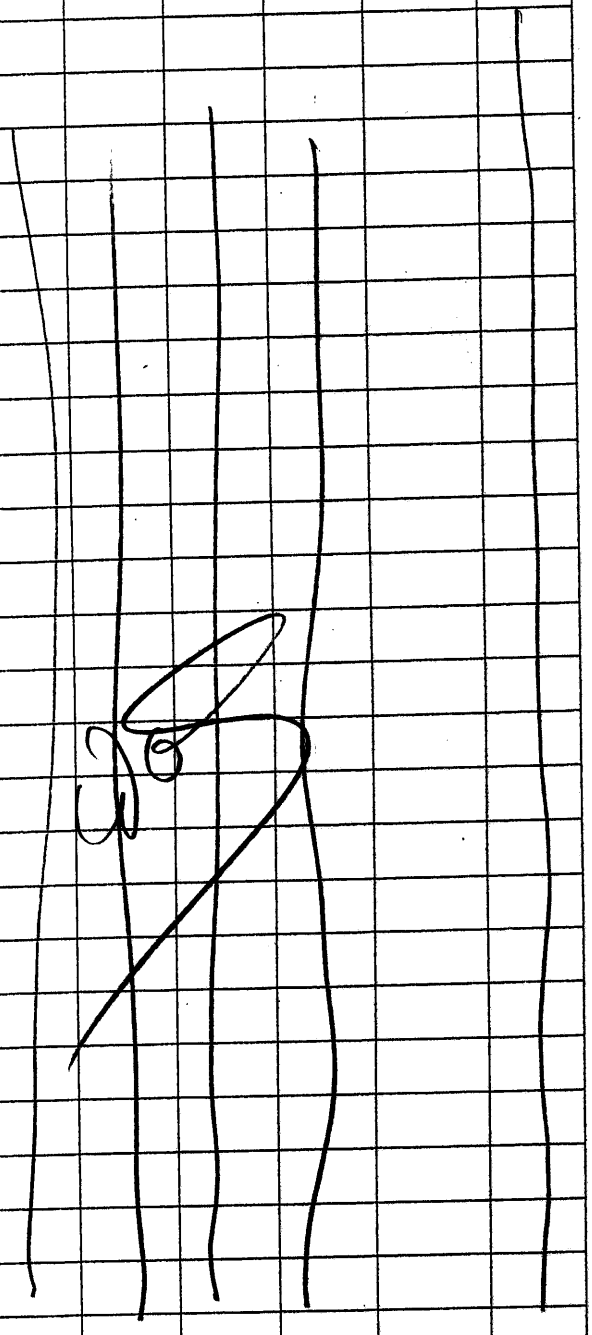
PRISM CTD Cast Sheet

Station Number: 91
Start date, time (UTC): 1/30/2012 02:18

CTD cast number: 93
End date, time (UTC): 1/30/2012 02:45

Initials: PSL

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	260	512	1622								
mcdw	2	250		1623								
	3	200		1624		12						
	4	150		1625		11						
mcdw	5	130	513	1626								
	6	100		1627	7	10						
	7	80		1628								
	8	80			6	9						
	9	70		1629								
	10	70				8						
Trans min	11	60	514	1630								
Fluo max	12	60			5	7						
	13	50		1631								
	14	50			4	6						
	15	40		1632								
	16	40				5						
	17	30		1633								
	18	30			3	4						
	19	20		1634								
	20	20				3						
	21	10	515	1635								
	22	10			2	2						
	23	1		1636								
	24	1			1	1						
	Sampler		MP	PSL/MP								



Fluo max = 60 m
Trans. min = 60m
MCDW = 130 m and 250m
ISW = no signal
1% light = 75m

O_2 flasks: 512-515

PRISM CTD Cast Sheet

Station Number: 92
CTD cast number: 94
Initials: PSL

Start date, time (UTC): 1/30/2012 04:46
End date, time (UTC): 1/30/2012 05:06

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	264	412	1637								
	2	200		1638		12						
mcdw	3	170	413	1639								
	4	150		1640		11						
	5	100		1641								
	6	100				10						
	7	80	414	1642								
	8	80				9	5	5		5		
	9	70		1643								
	10	70				8						
	11	60		1644								
	12	60			7	7	4	4		4		
	13	50		1645								
	14	50			6	6	3	3		3		
	15	40		1646								
	16	40			5	5	2	2		2		
	17	30		1647							2	
Fluo max	18	30			4	4						
	19	20		1648								
trans min	20	20			3	3						
	21	10	415	1649								
	22	10			2	2	1	1		1		
	23	1		1650								
	24	1			1	1					1	
	Sampler		MP	PSL/MP								

Fluo max = 30m
Trans. min = 20m
MCDW = 170m
ISW = no signal
1% light = 18m

O_2 Flasks: 412-415

PRISM CTD Cast Sheet

Station Number: 93
Start date, time (UTC): 1/31/2012 04:57

CTD cast number: 95
End date, time (UTC): 1/31/2012 05:25

Initials: PSL

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	431	412	1665								
	2	400		1666								
mcdw	3	300	413	1667								
	4	200		1668		12						
	5	150		1669		11	9			9		
	6	100		1670		10	8			8		
	7	80		1671	7	9						
	8	70		1672		8	7			7		
	9	60	414	1673								
	10	60			6	7						
	11	50		1674								
	12	50				6	6	6		6		
	13	40		1675								
	14	40			5	5	5	5		5		
	15	30		1676							2	
	16	30			4	4	4	4	1	4		
	17	25		1677								
Fluo max	18	25										
	19	20		1678								
Trans min	20	20			3	3	3	3		3		
	21	10	415	1679								
	22	10			2	2	2	2		2		
	23	1		1680							1	
	24	1			1	1	1	1		1		
	Sampler		MP	PSL/MP								

Fluo max = 25m
Trans. min = 20m
MCDW = 300m
ISW = no clear signal
1% light = 43m

O_2 Flasks: 412-415

PRISM CTD Cast Sheet

Station Number: 94 (HB1) CTD cast number: 96 Initials: SS

Start date, time (UTC): 1/31/2012 12:09

End date, time (UTC): 1/31/2012 12:46

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	678	496	1698								
	2	600		1697								
	3	500	497	1696								
	4	400		1695								
	5	300		1694								
	6	200		1693		12						
	7	150	498	1692		11	9			9		
	8	100		1691		10	8			8		
Fluor	9	90		1690								
	10	80		1689		9						
	11	70		1688	7	8	7			7		
	12	60		1687		7						
90m	13	50			6	6	6	6		6		
	14	50		1686								
	15	40			5	5	5	5		5		
	16	40		1685								
Flu	17	30			4	4	4	4	2	4		
	18	30		1684								
Fr	19	20			3	3	3	3		3		
	20	20		1683							2	
	21	10			2	2	2	2	1	2		
	22	10	499	1682								
	23	1			1	1	1	1	1	1		
	24	1		1681							1	
	Sampler											

1% light 24 m Fluor 30 MCDW

Trn ~20 ISW

O_2 flasks: 496-499

795

PRISM CTD Cast Sheet

Station Number: 95 — 100 Edge
CTD cast number: 97
Initials: SS

Start date, time (UTC): 1/31/2012 20:14
End date, time (UTC): 1/31/2012 20:55

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	(1)	784	504	1718								D19
	2	700		1716								D20
	3	600		1715								D21
	(4)	500	505	1714								D22
	5	400		1713								D23
	6	300		1712								D24
	(7)	200	506	1711								
	8	150		1710		12	9			9		
	9	100		1709		11	8			8		
	10	80		1708		10						
	11	70				9	7			7		
Fluo	12	70		1707								
	13	60		1706	8	8						
	14	50		1705	7	7						
	15	40		1704	6	6	6	6		6		
	16	30		1703	5	5	5	5		5		
	17	20			4	4	4	4	2	4		
	18	20		1702								
Flu	19	15			3	3	3	3		3		
Tr	20	15		1701							2	
	21	10			2	2	2	2	1	2		
	(22)	10	507	1700							1	
	23	/			1	1	1	1		1		
	24	/		1699							1	
	Sampler											

504-507

1% light 26 m

Flu_{MX} ~ 15

Tr_{MIN} ~ 15

MCDN

28d

(016-414, 07-32

MBc~825

PRISM CTD Cast Sheet

Station Number: 96

CTD cast number: 98

Initials: PSL

Start date, time (UTC): 2/1/2012 10:08

End date, time (UTC): 2/1/2012 :

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	814	504	1720								D1
	2	700		1721								D2
	3	600		1722								D3
	4	500		1723								D4
	5	400		1724								D5
	6	300	505	1725								D6
	7	200		1726		12	–					
	8	150		1727		11	9			9		
Elise	9	120		1728		–	–	–		–		
	10	100		1729		10	8	–		8		
	11	80		1730		9	7	–		7		
	12	70		1731	7	8				–		
	13	60		1732		7				–		
	14	50		1733	6	6	6	6		6		
	15	40	506	1734								
	16	40			5	5	5	5		5		
	17	30		1735								
	18	30			4	4	4	4		4		
	19	20		1736							2	
Fluo max	20	20			3	3	3	3		3		
	21	10	507	1737								
	22	10			2	2	2	2		2		
	23	1		1738							1	
Trans min	24	1			1	1	1	1	✓	1		
	Sampler		MP	PSL/MP								PSL/MP

Fluo max = 20m
Trans. min = 1m
MCDW = no clear
ISW = signal
1% light = 19m

O_2: 504 - 50

Salts: D1 – D6

Elise

< 76 45.996
169 26.171

Bot. 9 doesn't close

PRISM CTD Cast Sheet

Station Number: 97
Start date, time (UTC): 2/1/2012 13:27

CTD cast number: 99
End date, time (UTC): 4/1/2012 14:10

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	(1)	800	496	1757		>						
	2	700		1756								
	3	600		1755								
	4	500		1754								
	(5)	400	497	1753								
	6	300		1752								
	7	200		1751		12						
T_{max}	8	150		1750		11						
	9	100		1749		10						
	10	80		1748	8	9						
	11	70		1747		8						
	(12)	60	498	1746	7	7						
	13	50			6	6						
	14	50		1745								
	15	40			5	5						
	16	40		1744								
	17	30			4	4						
	18	30		1743								
Fl_{max}	19	20			3	3						
	20	20		1742								
	21	10			2	2				1		
	(22)	10	499	1741								
	23	1			1	1						
	24	1		1740								
	Sampler											

Oxy 496-499
17.1 light 21m

Fl_{max} ~20
T_{min} -

MCDW ~150 (T_{max})
ISW

414, 415, 417, 418.

PRISM CTD Cast Sheet

Station Number: 98
Start date, time (UTC): 2/1/2012 15:16

CTD cast number: 100
End date, time (UTC): 2/1/2012 16:03

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	(1)	845	414	1779								
	2	800		1778								
	3	700		1777								
	4	600		1776								
	5	500		1775								
	(6)	400	415	1774								
	7	300		1773								
	8	200		1772		14						
	9	150		1771		13						
Flise	10	120		1770								
	11	100		1769		12						
	12	90		1768		11						
	(13)	80	417	1767	8	10						
	14	70		1766		9						
	15	60		1765	7	8						
	16	50		1764		7						
	17	40		1763	6	6						
	18	30		1762	5	5						
	19	20		1761	4	4						
Fluma	20	15		1760	3	3						
	21	10			2	2				1		
	(22)	10	418	1759								
	23	1			1	1						
	24	1		1758								
	Sampler											

120

V light 15 m

22

Fluma 15

Meow -

Trmin -

190 -

512-515 , D7-D12

DE6

PRISM CTD Cast Sheet

Station Number: 99

CTD cast number: 101

Initials: SS

Start date, time (UTC): 2/1/2012 17:13

End date, time (UTC): 2/1/2012 17:54

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	(1)	837	512	1798								
	2	800		1797								
	3	700		1796								
	4	600		1795								
	5	500		1794								
	6	400		1793								
	7	300		1792								
	(8)	200	513	1791		12						
	9	150		1790		11						
	10	100		1789		10						
	11	80		1788	8	9						
	12	70		1787		8						
	(13)	60	514	1786	7	7						
	14	50		1785	6	6						
	15	40			5	5						
	16	40		1784								
	17	30			4	4						
	18	30		1783								
	19	20			3	3						
	20	20		1782								
	21	10			2	2						
	(22)	10	515	1781								
	23	1			1	1						
	24	1		1780								
	Sampler											

-76 51.988
108 59.921

1% light ~12m

Flumax ~10

Trans ~59

MCDW

JSW

PRISM CTD Cast Sheet

Station Number: 100
Start date, time (UTC): 2/1/2012 19:03

CTD cast number: 102
End date, time (UTC): 2/1/2012 19:52

Initials: SP

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	795	419	1816								D7
	2	700		1815								D8
	3	600		1814								D9
	4	500		1813								D10
	5	400	420	1812								D11
	6	300		1811								D12
	7	200		1810		12						
	8	150		1809		11						
	9	100		1808		10						
	10	80		1807	8	9						
	11	70		1806		8						
	12	60	421	1805	7	7						
	13	50		[illegible]	6	6						
	14	50		1804								
	15	40			5	5						
	16	40		1803								
	17	30			4	4						
	18	30		1802								
	19	20			3	3						
	20	20		1801								
	21	10			2	2						
	22	10	422	1800								
	23	2			1	1						
	24	2		A99								
	Sampler											

1% light is 18 m

Flu max ~20m (10 &)

Tr min

MCDW

LSW

PRISM CTD Cast Sheet

Station Number: 101 (Franklin Vent) CTD cast number: 103 Initials: PSL

Start date, time (UTC): 2/2/2012 02:03 End date, time (UTC): 2/2/2012 02:20

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	116	500	1817								
	2	110		1818								
	3	100		1819								
	4	100				6						
	5	90	501	1820								
	6	90										
	7	80		1821								
	8	80				5						
	9	70		1822								
	10	70										
	11	60		1823								
	12	60			7	4						
	13	50	502	1824								
	14	50			6							
	15	40		1825								
	16	40			5	3						
	17	30		1826								
	18	30			4	-						
	19	20		1827								
Fluo max	20	20			3	2					2	
	21	10	503	1828								
	22	10			2	1				1		
	23	1		1829							1	
Trans. min	24	1			1							
	Sampler		MP	PSL/MP								

Fluo max = 20m
Trans. min = 1m
MCDW = no
ISW = signal
1% light = 34m

O_2 Flasks:
500-503

Niskin #1 (581m) did not close. MBc ~594m

PRISM CTD Cast Sheet

Station Number: 102
Start date, time (UTC): 2/2/2012 05:55

CTD cast number: 104
End date, time (UTC): 2/2/2012 06:30

Initials: PSL

deadstire

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	581		1832								
	2	500	508	1833								
	3	400		1834								
	4	300	509	1835								
	5	200		1836		12						
	6	150		1837		11	8			8		
	7	100		1838		10	7			7		
	8	80		1839		9						
	9	70	510	1840								
	10	70				8						
	11	60		1841								
	12	60			7	7						
	13	50		1842								
	14	50			6	6	6			6		
	15	40		1843								
	16	40			5	5	5	5		5		
	17	30		1844								
	18	30			4	4	4	4		4		
	19	20		1845								
	20	20			3	3	3	3		3		
Trans min	21	10	511	1846							2	
Fluo max	22	10			2	2	2	2		2	1	
	23	1		1847							1	
	24	1			1	1	1	1		1		
	Sampler		MP	PSL/MP								

Fluo max = 10m
Trans. min = 10m
MCDW = no
ISW = signal
1% light = 38m

O_2 flasks: 508-511

MBc ~655m

PRISM CTD Cast Sheet

Station Number: 103
Start date, time (UTC): 2/2/2012 09:02

CTD cast number: 105
End date, time (UTC): 2/2/2012 09:40

Initials: PSL

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	643	516	1832								
	2	600		1849								
	3	500		1850								
	4	400		1851								
	5	300	517	1852								
	6	200		1853								
	7	150		1854								
	8	100		1855		8						
	9	80		1856		7						
	10	70		1857								
	11	60	518	1858								
	12	60				6						
	13	50		1859								
	14	50				5						
	15	40		1860								
	16	40				4						
	17	30		1861								
	18	30				3						
	19	20		1862								
Fluo max	20	20				2						
	21	10	519	1863								
Trans min	22	10				1						
	23	1		1864								
	24	1										
	Sampler		MP	PSL/MP								

Fluo max = 20m
Trans. min = 10m
MCDW = no
ISW = signal
lgt light = 26 m

O_2 flasks: 516-519

MBc n705

PRISM CTD Cast Sheet

Station Number: 104
Start date, time (UTC): 2/2/2012 10:30

CTD cast number: 106
End date, time (UTC): 2/2/2012 11:10

Initials: PSL

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	694	496	1865								
	2	600		1866								
	3	500		1867								
	4	400		1868								
	5	300	497	1869								
	6	200		1870								
	7	150		1871		8						
	8	100		1872		9						
	9	80		1873								
	10	70		1874								
	11	60	498	1875								
	12	60			7	6						
	13	50		1876								
	14	50			6							
	15	40		1877								
	16	40			5	5						
	17	30		1878								
	18	30			4	4						
	19	20		1879								
Fluo max	20	20			3	3						
	21	10	499	1880								
Trans. min	22	10			2	2						
	23	1		1881								
	24	1			1	1						
	Sampler		jk	PSL/jk								

Fluo max = 20m
Trans. min = 10m
MCDW = no, clear
ISW = signal
1% light = 26 m

O_2 Flasks: 496–499

16 & 59.912
- 76 34.004

PRISM CTD Cast Sheet

Station Number: 105
CTD cast number: 107
Initials: SS

Start date, time (UTC): 2/2/2012 12:03
End date, time (UTC): 2/2/2012 12:43

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	(1)	760	412	1901								
	2	700		1900								
	3	600		1899								
	4	500		1898								
	(5)	400	413	1897								
	6	300		1896								
	7	200		1895		12						
	8	150		1894		11						
Elise	9	120		1893								
	10	100		1892		10						
	(11)	80	414	1891		9						
	12	70		1890		8						
	13	60		1889		7						
	14	50		1888		6						
	15	40				5						
	16	40		1887								
Flmax	17	30				4						
	18	30		1886								
	19	20				3						
	20	20		1885								
	21	10				2						
	(22)	10	415	1884								
	23	1			1	1						
	24	1		1883								
	Sampler											

Elise 10m

1% light 26 m

Flmax 30m

MCDW -

Trmin - -

IDW -

PRISM CTD Cast Sheet

Station Number: 106
Start date, time (UTC): 2/2/2012 16:41

CTD cast number: 108
End date, time (UTC): 2/2/2012 17:28

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	(1)	866	512	1926								
	2	800		1919								
	3	700		1918								
	4	600		1917								
	5	500		1916								
	(6)	400	513	1915								
	7	300		1914								
	8	200		1913		12						
	9	150		1912		11						
	10	100		1911		10						
	(11)	80	514	1910		9						
	12	70		1909		8						
	13	60		1908	7	7						
	14	50		1907	6	6						
	15	40			5	5						
	16	40		1906								
Flu max	17	30			4	4						
	18	30		1905								
	19	20			3	3						
	20	20		1904								
	21	10			2	2						
	(22)	10	515	1903								
	23	1			1	1						
	24	1		1902								
	Sampler											

1% light 23 m

Flu max 30m MLDM -

Trmm - DW -

-77 9.081
69. 0.163

PRISM CTD Cast Sheet

Station Number: 107
CTD cast number: 109
Initials: SS
Start date, time (UTC): 2/2/2012 18:29
End date, time (UTC): 2/2/2012 19:20

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	(1)	908	418	1940								
	2	900		1939								
	3	800		1938								
	4	700		1937								
	(5)	600	419	1936								
	6	500		1935								
	7	400		1934								
	8	300		1933								
	9	200		1932		12						
	10	150		1931		11						
	11	100		1930		10						
	(12)	(80)	420	1929		9						
	13	70		1928		8						
	14	60		1927		7						
	15	50		1926		6						
	16	40		1925		5						
Flume	17	30				4						
	18	30		1924								
	19	20				3						
	20	20		1923								
	21	10				2						
	(22)	(0)	421	1922								
	23	1				1						
	24	1		1921								
	Sampler											

1% light 22

Fl_{max} = 30

PRISM CTD Cast Sheet

Station Number: 108
Start date, time (UTC): 2/2/2012 20:23

CTD cast number: 110
End date, time (UTC): 2/2/2012 21:11

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	(1)	930	516	1961								D13
	2	900		1960								D14
	3	800		1959								D15
	4	700		1958								D16
	5	600		1957								D17
	6	500		1956								D18
	(7)	400	517	1955								
	8	300		1954								
	9	200		1953		12						
	10	150		1952		11	9			9		
	11	100		1951		10	8			8		
	(12)	80	518	1950	8	9						
	13	70		1949		8	7			7		
	14	60		1948	7	7						
	15	50		1947	6	6	6	6		6		
	16	40		1946	5	5	5	5		5		
Flu.	17	30			4	4	4	4	2	4		
	18	30		1945							2	
	19	20			3	3	3	3		3		
	20	20		1944								
	21	10			2	2	2	2	1	2		
	(22)	10	519	1943					1			
	23	3			1	1	1	1		1		
	24	3		1942							1	
	Sampler											

1% light 16m

flu - 30m

MBc ~ 905m

PRISM CTD Cast Sheet

Station Number: 109 (Jacobs Gulch)
CTD cast number: 111
Initials: PSL
Start date, time (UTC): 2/3/2012 00:08
End date, time (UTC): 2/3/2012 00:52

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	894	504	1962								C1
	2	800		1963								C2
	3	700		1964								C3
	4	600		1965								C4
	5	500		1966								C5
	6	400		1967								C6
	7	300	505	1968								
	8	200		1969								
	9	150		1970								
	10	100		1971								
	11	80		1972								
	12	70		1973								
	13	60		1974								
	14	50		1975								
	15	40	506	1976								
	16	40										
	17	30		1977								
	18	30										
	19	20		1978								
Fluo max	20	20										
	21	10	507	1979								
Trans. min	22	10										
	23	1		1980								
	24	1										
	Sampler		MP	PSL/MP								

Fluo max = 20m
Trans. min = 10m
MCDW = no clear
ISW = signal
1% light = 15m

O_2 = 504 - 507

MBc ~ 839 m

PRISM CTD Cast Sheet

Station Number: 110
Start date, time (UTC): 2/3/2012 09:40

CTD cast number: 112
End date, time (UTC): 2/3/2012 10:30

Initials: PSL

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	827	496	1981								
	2	700		1982								
	3	600		1983								
	4	500		1984								
	5	400		1985								
	6	300		1986								
MCDW ?	7	231	423	1987								
	8	200		1988		7						
	9	150		1989		6	4			4		
	10	100		1990	7	5	3		2	3		
	11	80		1991	6	4	2	2		2		
	12	70		1992								
	13	60		1993	5	3						
Trans min	14	50	512	1994								
Fluo max	15	50			4							
	16	40		1995	3	2					2	
	17	30		1996								
	18	30										
	19	20		1997								
	20	20										
	21	10	499	1998								
	22	10			2	1	1	1	1	1		
	23	1		1999							1	
	24	1			1							
	Sampler		MP	PSL/MP								

Fluo max = Broad max from 0 to 100m.
Trans. min = " min " " " "
MCDW = Possibly a faint signal @ 230m.
ISW = No clear signal.
1% light = 28m

O_2: 496-499

516-519

PRISM CTD Cast Sheet

Station Number: 111 (LB3)
Start date, time (UTC): 2/3/2012 13:13

CTD cast number: 113
End date, time (UTC): 2/3/2012 13:56

Initials: SS

~~didn't fire~~ didn't fire → (bottle 1)

169 59.7 52
77 2.018
814

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	~~1~~ (circled)	800	~~516~~	2020								
	2 (circled)	700	516	2019								
	3	600		2018								
Tmin	4 (circled)	500	517	2017								
	5	400		2016								
	6	300		2015								
Tmax	7	240		2014								
	8	200		2013		12						
	9	150		2012		11						
	10	100		2011		10						
	11 (circled)	80	518	2010	7	9						
	12	70		2009		8						
	13	60		2008	6	7						
	14	50		2007		6						
	15	40			5	5						
	16	40		2006								
Flumax	17	30			4	4						
	18	30		2005								
	19	20			3	3						
	20	20		2004								
	21	10			2	2						
	22 (circled)	10	519	2003								
	23	1			1	1						
	24	1		2002								
	Sampler											

1% light 20 m

Flumax ~30

Trmax

MCDW

28W

412-415

PRISM CTD Cast Sheet

Station Number: 112 (LBD)
Start date, time (UTC): 2/3/2012 14:51

CTD cast number: 114
End date, time (UTC): 2/3/2012 15:31

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	(1)	770	412	2038								
	2	700		2037								
	3	600		2036								
	4	500		2035								
	(5)	400	413	2034								
Tmin	6	350		2033								
	7	300		2032								
	8	200		2031		12						
* Zmin	(9)	170	414	2030								
	10	150		2029		11						
	11	100		2028		10						
	12	80		2027	7	9						
	13	70		2026		8						
	14	60		2025	6	7						
	15	50		2024		6						
Flmax	16	40			5	5						
	17	40		2023								
	18	30		2022	4	4						
	19	20			3	3						
	20	20		2021								
	21	10			2	2						
	(22)	10	415	2020								
	23	2			1	1						
	24	2		2000								
	Sampler											

1% light 34 m

Flmax 40 m

MBc ~ 821m

PRISM CTD Cast Sheet

Station Number: 113
Start date, time (UTC): 2/4/2012 04:12

CTD cast number: 115
End date, time (UTC): 2/4/2012 04:55

Initials: PSL

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	700	500	2039								
	2	500		2040								
	3	400		2041								
	4	300	501	2042								
Elise	5	250		2043								
Elise	6	200		2044		12						
Elise	7	150		2045		11	6			6		
Elise	8	130		2046								
Elise	9	120		2047								
Elise	10	110		2048								
Elise	11	100		2049		10	5	4	2	5		
	12	80		2050	7	9	4			4		
	13	70		2051	6	8						
	14	60		2052	5	7	3	3		3		
	15	50	502	2053								
Trans min	16	50				6						
	17	40		2054							2	
Fluo max	18	40			4	5	2	2	1	2		
	19	30		2055		4						
	20	20		2056	3	3						
	21	10	503	2057								
	22	10			2	2	1	1		1		
	23			2058							1	
	24				1	1						
	Sampler		MP	PSC/MP								

Fluo max = 40m
Trans. min = Broad min between 0 and 100m. O_2: 500-50
MC DW = no clear
ISW = signal
1% light = 18m

C13
505-5
2070

cast

34.4 , 200 ~ 34.6

PRISM CTD Cast Sheet

705

Station Number: 114
Start date, time (UTC): 2/4/2012 14:21

CTD cast number: 116
End date, time (UTC): 2/4/2012 15:01

Initials: SS

C7-C12

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	700	419	2077								C7
	2	600		2076								
	3	500		2075								C8
	4	400		2074								
	5	300	420	2073								C9
	6	200	"	2072								C10
	7	150		2071		12						
	8	100	421	2070		11						
	9	80		2069		10						C11
	10	70		2068		9						
	11	60		2067		8						
	12	50		2066	7	7						
	13	40			6	6						
	14	40		2065								
	15	30			5	5						
	16	30		2064								
	17	20			4	4						
	18	20		2063								C12
Flu max	19	15			3	3						
	20	15		2062							2	
	21	10			2	2						
	22	10	422	2061								
	23	1			1	1						
	24	1		2060							1	
	Sampler											

-76 45 203
166 45 7.2

1% light 16 m

Flu_{max} 15 m

PRISM CTD Cast Sheet

Station Number: 115
Start date, time (UTC): 2/4/2012 19:29

CTD cast number: 117
End date, time (UTC): 2/4/2012 20:06

Initials: SS

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	(1)	590	508	2095								
	2	500		2094								
	3	400		2093								
	(4)	300	509	2092								
	5	200		2091		12						
	6	150		2090		11						
	7	100		2089		10						
	(8)	80	510	2088		1						
	9	70		2087		9						
	10	60		2086		8						
	11	50			7	7						
	12	50		2085								
	13	40			6	6						
	14	40		2084								
	15	30			5	5						
	16	30		2083								
	17	20			4	4						
	18	20		2082								
Fluo max	19	15			3	3						
	20	15		2081								
	21	10			2	2						
	(22)	10	519	2080								
	23	1			1	1						
	24	1		2079								
	Sampler											

1 - 1 + 1 - 1

1% light 33 m

$Fluo_{max}$ ~ 15 m

MBc ~ 579m

PRISM CTD Cast Sheet

Station Number: 116
CTD cast number: 118
Initials: PSL

Start date, time (UTC): 2/5/2012 00:22
End date, time (UTC): 2/5/2012 00:57

Floater ID	Bottle	Target Depth	O_2	Nuts	FRRF	Chl	BSi	HPLC	Micro	C/N	Protein	Salts
	1	569	513	2096								C13
	2	500		2097								C14
	3	400		2098								C15
	4	300	514	2099								C16
	5	200		2100		12						C17
	6	150		2101		11						C18
	7	100		2102		10						
	8	80		2103		9						
	9	70	515	2104								
	10	70				8						
	11	60		2105								
	12	60			7	7						
	13	50		2106								
	14	50			6	6						
	15	40		2107								
	16	40			5	5						
	17	30		2108								
	18	30			4	4						
	19	20		2109							2	
Fluo max	20	20			3	3						
	21	10	516	2110								
Trans. min	22	10			2	2						
	23	1		2111							1	
	24	1			1	1						
	Sampler		MP	PSL/MP								PSL/MP

Fluo max = 20m
Trans min = 10m
MCDW = no signal
ISW = " "
1% light = 21m