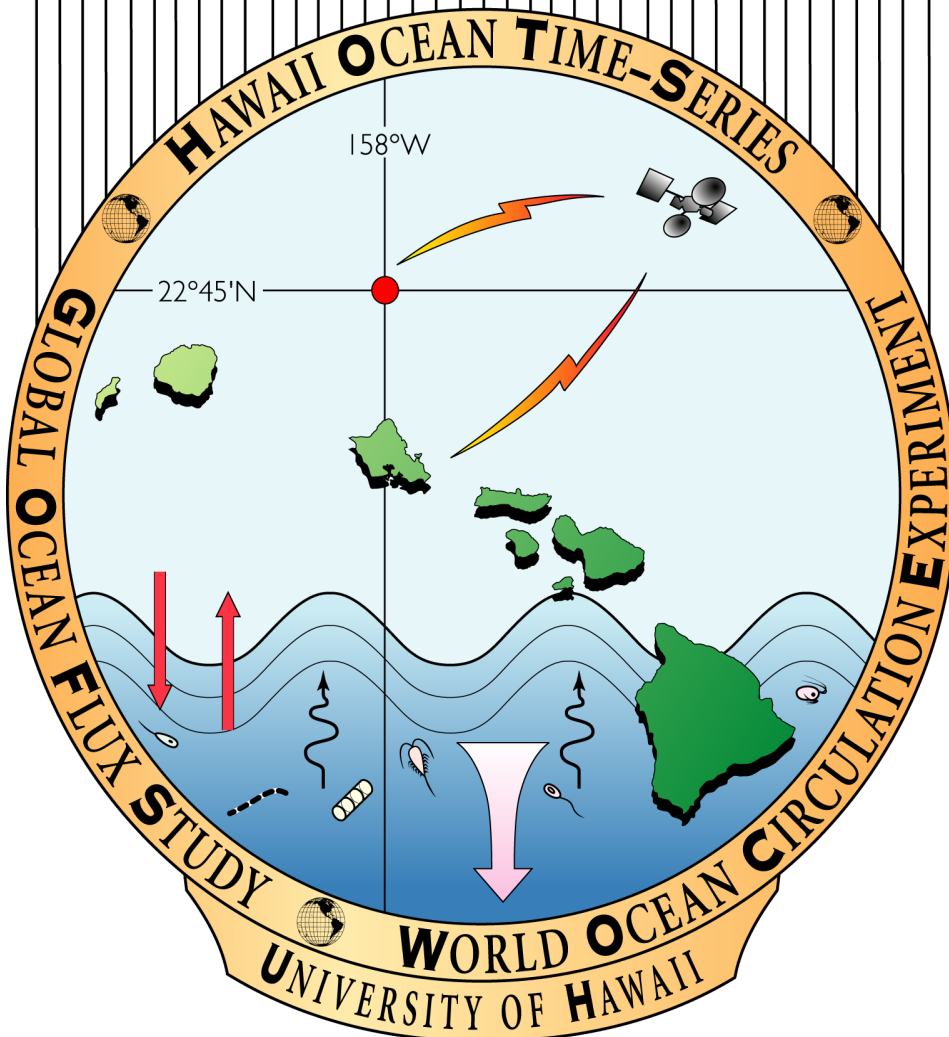


Hawaii Ocean Time-series Program

HOT-165



HOT-165

KOK

11/22/04	INITIAL SENSOR Configuration		190
T1	2700	11/11/04	190
C1	2725	11/11/04	2528.563
Pressure	51412	8/2/01	2602.715
T2	2454	11/11/04	210
C2	2541	7/29/04	
F1	2440	12/11/01	
O1	43325	9/26/04	
O2	43134	3/15/04	
Alt	958		211
P1	52459		
P2	53219		
Deck by	111361		
Crossal			

Cruise Participants

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M. Church	M. Valenciano	
T. Clemente		223
Rachel Foster, Scientist, UCSC/BEACH		
L. Fujieki		225
E. Grabowski	D. Fitzgerald - STAG	
M. Grabowski	D. Gravatt - STAG	231
T. Gregory		
P. Lethaby		
David Nichols volunteer/BEACH		2322
Andrea Rivera Undergrad. UH/PO		
Damion Rosbrogh UH/PO Undergrad		232
Carolyn Wells, Undergrad UH/PO		
Alejandro Sanchez		233
Fernando S-Mandujano - Chief Scientist		

HOT-165 Nov 26, 2009

- 1900 Depart from Snug.
- 1930 Fire and abandon ship drills.
Science meeting.
- 2100 D. Fitzgerald is replacing thermal sensor SN 1392 with SN 2045. Sensor 1392 had problems during last cruise.
- 2115 Thermal system ready. Data stream contains SN 1392 data followed by SN 2045 data.
- TSG Conductivity trace seems noisy after one hour of operation. Maybe still bubbles in the system.
- 2205 Weight cast to 500 m.
- 2230 PRR cast
- 2259 Stn 1 cast 1 Start
- 2315 Thermal CTD trace is much better
- 2322-40 Panel the cast - and coefficients stopped at 160 dbar.
- 2325 Cast stopped in water @ 10 dbm
- 2335 Aborted cast and raised package to 10 m while correcting C-coeff.

4/20/04 Reconnected CTD cables 7,748 meters remain on
the drum

engrave bottle # 603.

004

1000

1010

103

105

114

12

13

HOT-165 26-Nov, 2004

One coefficient for primary C-tensor
was entered incorrectly and had
to be corrected. Restarted cast
w/ CTD at 10 dbar, rised to near
surface

27-Nov-2004

0048 End of cast. 29 Marks OK

Transit to ALOHA Sta.

Bottle #15 leaking from seat/bottle interface
due to torn tape. Replaced tape.

1000 Arrive Station ALOHA

1010 Stn 2 cast 1 Start

1024 Started VCR

1033 Deployed to 1020 dbar - Cast max depth
was 700 dbar. No sample (bottle not fixed)
at 1020. Rosette brought up to 700 dbar.

1058 Stn 2 cast 1 End. 23 marks OK.

Bottle #18, 22 leaking slightly, Rechecked -

1145 Underway to Sediment trap deployment site 3NM N of ALOHA.

1240 deployed Sediment trap. underway to ALOHA.

1300 Arrived to ALOHA Sta.

HOT-165 27 Nov 2004

1305 Start Sta 2 cast 2
GPS Kaena config 6-5000 display

1311 Had to restart cast at 10 dbar.
GPS Kaena config. file still had
wrong C-coeff.

Significant intrusions at the 5-m
level. High S, σ_t variability

1442 8 m off the bottom.
22°45.4 N, 157°59.6 W

1633 End of cast, 29 marks OK
Bottle 29 leaking on recovery
Bottle #3 did not have much water
although it wasn't reported as a leaker(?)

1825 Start Sta 2 cast 3

1932 End of cast. 29 marks OK

2059 Start Sta 2 cast 4

2155 End of cast. 20 marks OK

2356 Start Sta 2 cast 5

28 Nov, 2004

0057 End of cast, 18 marks OK.
Bottles 8, 10, 17 leaking on
recovery.

HOT-165 28 Nov, 2004

4150 processing errors, mostly
in conductivity differences.

0251 Stn 2 Cast 6 start.

0401 Stn 2 cast 6 end. 23 mths ok.

Bottle #683 (Sample #21) broke during
sampling. Replaced ^{broken} bottle with a new one.

0555 Stn 2 Cast 7 start

1020bar mthd twice. Pressure did not show
up on the line when the bottle was fired.

0657 Stn 2 Cast 7 End. 25 mths Ok.

Net tow scheduled for 2200 moved to Midnight
after Stn 2 Cast 8, - HAC processing conflicts with net tow time.

0857 Stn 2 Cast 8

Salt intrusions in Salinity minima ~ 500m, > than normal
difference in upcast

0959 Stn 2 Cast 8 End. 24 mths Ok.

Bottle # 22 ^{loaked slightly} ^{Pres. OK}
23 ^{chance of power during} ^{Spigot locked} - Not ^{closed} ^{re-acted}

1205 Station 2 Cast 9 start.

1233 Raining on station.

HOT-165 28 Nov, 2009

1451 End of cast, 24 marks OK.

1457 Start Sta 2 cast 10

1544 End of cast, 3 marks OK

Organic material attached to the
 Langard and rosette frame. Removed
 it and washed CTD and affected
 bottles with fresh water

1652 Deployed PP array about 1.8 nm
 north from the center of ALOHA Sta.

Depth recorder has been off on
 request of the ship's ET. It has
 been giving problems when left on
 all the time. It will be turned
 on when requested by us.

1901 Landed on Bottle 1 got caught, bottle didn't
 close.

1850 End of cast, 71 marks OK

1754 → Begin Sta 2 cast 11

Bottle 18 leaking on recovery

Thermosalinograph shows conductivity
 glitches between 1600 and 1700,
 probably during transit to deploy
 PP array.

HOT 165 28 Nov 2004

2000 Glitches in thermal conductivity during the past hour, ship is moving following off array. Wind and sea increasing

Bucket with T-sensor 18141 is cracked, replaced with bucket with sensor 77100. Sensor 18141 seems to give lower values than sensor 77100 by 0.1 - 0.2 °C. Need to compare both in the lab.

2055 Start STD cast 12

2155 End of cast. 24 marks OK
Bottles 10, 18, 20, 21, 23 leaking on recovery.

2230 AC9 / FRRF cast.

2330 Net tow

29 Nov 2004

0005 Start STD cast 13

0103 End of cast. 20 marks OK

Over 4600 ^{processing} errors. Mainly in cons. difference apparently due to increasing ship roll

HOT 165 29 Nov, 2004

0223 Stn 2 Cast 14 Start

0320 Stn 2 Cast 14 End 5 marks Ok.

Organic material washed off prior to cast.

0602 Stn 2 Cast 15 Start

0654 Stn 2 Cast 15 End 11 marks Ok.

Bottle #10 leaking slightly upon recovery. Rechecked.
 Change #10 spring ~~for~~ with a weaker one

0901 Stn 2 Cast 16 Start.

Pinger not switched on (TD recovered) Bm.

Pinger turned on.

0910 Re-primed pumps @ 10 dbar - Continued the cast.
PDR Paper ran out.

1044 10m of bottom.

22° 45.413N 157° 59.2317 W

1211 Stn 2 Cast 16 End 8 marks Ok.

1400 Ac 9 / F12RF cast

1415 Transit to sed. traps array

1600 Glitches in thermal conductivity
during transit.1722 Recovering sediment traps.
Traps drifted 10 m NE from
the center.

HOT-165 29 Nov 2004

1745 Transit to Sta 50

1926 Start Sta 50 cast 1

A double salinity maximum developed during Sta 15 and Sta 16 and it is also present at Sta 50
S-Max at 60 and 100 dbar

1949 End of cast. 6 marks OK

2100 PRR cast
A-9 / FRR casts

2345 Transit to Kaena Sta.

30 Nov 2004

0647 Sta 6 Cast 1 start.
20 meters from the bottom.
21 51.0121°N 158 21.4365°W

0833 Sta 6 Cast 1 End Mark 1 not recorded 13/14 marks OK.
@ 2465

0840 Transit to Spang harbour

Hawaiian Ocean Time-Series

HOT-165

KAHE Station Data Sheet

Station # 1
 Cast # 1
 Operator(s): TC,KB,DN

Date: 11/26/04 (HST)
 Time: 1330 (HST)

Rosette Position	Desired Depth	Oxygen	Sample Temp.	Nuts	DIC/Alk	pH	DOC	LLN/LLP	Chl <i>a</i>	FCM
1	1000	1	8.2	1						
2	900	2	8.2	2						
3	800	3	9.6	3						
4	750	4,5,6	9.5	4A-B						
5	700	7	9.1	5						
6	600	8	9.2	6						
7	500	9	10.2	7			7			
8	400	10	10.7	8						
9	350	11	12.2	9A-B			9			
10	300	12	13.9	10						
11	250	14	15.7	11						
12	225	15	17.5	12						
13	200	16	19.0	13			13			
14	175	17	20.3	14			14		14	14A-B
15	150	18	22.5	15			15	15	15	15A-B
16	125	19	24.0	16A-B			16		16	16A-B
17	115	20	24.3	17						
18	100	21,22,23	26.2	18			18	18	18A-B	18A-B
19	75	24	26.2	19			19		19	19A-B
20	60	25	26.3	20						
21	45	26	26.3	21	21	21	21	21	21	21A-B
22	25	27	26.4	22	22	22	22		22A-B	22A-B
23	5	28	26.4	23	23	23	23	23	23	23A-B
24	5	QC	26.4							

Notes:

BOTTLES 15, 21, 23, 24 LEAKING UPON RETRIEVAL.

Hawaii Ocean Time-Series CONSOLE LOG

HOT- 165

Cast type	Bottle type	SST	Operator
G-1000	1 L	26.40	FJ-M

- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Station: 1	Cast: 1
Latitude	Longitude
start: 21 20.42	start: 158 16.24
end: 21 20.29	end: 158 15.92
Depth of water: 1109 meters	Date (GMT): 11 126 109
Pressure on Deck	Time:
Begin: 0.	Start Log: 23:32:00
End: 0.11	In Water: 23:32
	Out of Water: 00 48

Trip/ Niskin	Time	Confirm	Pressure	Target Depth	Comments
	stopped	tripped			
1	235435	235505	1020	10+0	
2	235919	236000	899	900	
3	000315	000345	801	800	
4	000615	000630	749	750	
5	000843	000910	700	700	
6	001213	001230	600	600	
7	001521	001535	500	500	
8	001840	001900	400	400	
9	002050	002115	350	350	
10	002322	002335	300	300	
11	002522	002610	250	250	
12	002815	002835	224	2+5	
13	002952	003015	199	200	
14	003135	003200	175	175	
15	003320	003345	150	150	
16	003510	003535	125	1+5	
17	003635	003700	115	115	
18	003805	003825	100	100	
19	003950	004010	74	75	
20	004110	004125	60	60	
21	004240	004300	45	45	
22		4435	25	25	
23		4600	5	5	
24		4610	5	5	

Hawaiian Ocean Time-series

HOT- 165

Mixing Experiment Data Sheet

Station # 2
 Cast # 1
 Operator(s): KB, TC, DN

Date: 12/27/2004 (HST)
 Time: 0000 (HST)

Rosette Position	Desired Depth	KB					
1	700						
2	700						
3	700						
4	30						
5	30						
6	30						
7	30						
8	30						
9	30						
10	30						
11	30						
12	30						
13	30						
14	30						
15	30						
16	30						
17	30						
18	30						
19	30						
20	30						
21	30						
22	30						
23	30						
24							

Notes:

Hawaii Ocean Time-Series CONSOLE LOG

HOT-165

Cast type 4-1000	Bottle type 12L	SST 26.35	Operator PJS
---------------------	--------------------	--------------	-----------------

- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Station: 2	Cast: 1
Latitude start: 22 45.034 end: 22 45.246	Longitude start: 157 59.970 end: 157 59.763
Depth of water: 4723 meters	Date (GMT): 11 / 27 / 04
Pressure on Deck	Time:
Begin: 0.109	Start Log: 100530
End: -0.018	In Water: 10:10:03
	Out of Water: 105814

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1	10 3845	10 39 15	699	700	
2	10 3845	10 39 35	699	700	
3	10 3845	10 39 55	699	700	
4	10 51 20	10 51 50	30	30	
5		51 10	30	30	
6		51 20		30	
7		51 30		30	
8		51 40		30	
9		51 50		30	
10		52 00		30	
11		52 10		30	
12		52 20		30	
13		52 30		30	
14		52 40		30	
15		52 50		30	
16		53 00		30	
17		53 10		30	
18		53 20		30	
19		53 30		30	
20		53 40		30	
21		53 50		30	
22		54 00	✓	30	
23	✓	54 10	30	30	
24					

Hawaiian Ocean Time-series

HOT-165

WOCE Deep Data Sheet

Station # 2
 Cast # 2
 Operator(s): EG, TG, LF

Date: 11/27/2004 (HST)
 Time: 0310 (HST)

Rosette Position	Desired Depth	Oxygen	Sample Temp.	Nutrient	Refridg. Si	DOC	DIC/Alk	pH
1	4800	30	3.3	1	1			
2	4600	31	3.3	2	2			
3	4500	32,33, 34	3.7	3A-B	3A-B	3A-B	3A-B	3A-B
4	4400	35	3.3	4	4			
5	4200	36	3.3	5	5			
6	4000	37,38 39	4.2	6A-B	6A-B	6A-B		
7	3800	40	3.8	7	7			
8	3600	41	3.6	8	8			
9	3400	42	3.8	9	9			
10	3200	43	3.7	10	10			
11	3000	44,45 46	4.1	11A-B	11A-B	11A-B	11	11
12	2800	47	4.2	12	12			
13	2600	48	4.1	13	13			
14	2400	49	4.8	14	14			
15	2200	50	4.3	15	15			
16	2000	51,52 53	5.7	16A-B	16A-B	16A-B	16	16
17	1800	54	4.6	17	17			
18	1600	55	5.0	18	18			
19	1400	56	5.3	19	19			
20	1200	57	5.8	20	20			
21	1000	58	6.3	21				
22	750	59	7.0	22				
23	500	60	8.7	23				
24	5	61	25.6	24				

Notes: BOTTLE #24 LEAKING UPON RECOVERY; DIDN'T TAKE NUT 3B- NOT ENOUGH WATER—DID TAKE 3A&3B DOC IF NEEDED

Hawaii Ocean Time-Series CONSOLE LOG

HOT-165

Cast type	Bottle type	SST	Operator
G-1000	1 & L	26.50	FS-M

- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Station: 2	Cast: 2
Latitude start: 22 45.05 end: 22 45.87	Longitude start: 158 0.10 end: 157 58.59
Depth of water: 4737 meters	Date (GMT): 11 127 104
Pressure on Deck	Time:
Begin: 0.14	Start Log: 13:11
End: 0.06	In Water: 13:11
	Out of Water: 16:33

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1		14:42	4806	4800	
2	14:47:00	14:47:35	4599	4600	
3	14:50:00	14:50:40	4501	4500	
4	14:53:30	14:54:10	4400	4400	
5	14:58:39	14:59:10	4200	4200	
6	15:03:4	15:04:10	4000	4000	
7	15:08:30	15:08:60	3799	3800	
8	15:12:57	15:13:20	3599	3600	
9	15:17:30	15:17:50	3398	3400	
10	15:22:00	15:22:10	3200	3200	
11	15:26:30	15:26:40	2998	3000	
12	15:30:50	15:30:60	2800	2800	
13	15:35:07	15:30:30	2597	2600	
14	15:39:30	15:39:60	2499	2500	
15	15:44:09	15:44:30	2200	2200	
16	15:48:43	15:49:10	1198	2000	
17	52:25	54:00	1800	1800	
18	58:10	58:40	1600	1600	
19	16:02:35	03:10	1400	1400	
20	07:00	7:30	1202	1200	
21	11:30	12:00	1000	1000	
22	17:15	17:45	750	750	
23	16:23:00	23:30	502	500	
24	33:35	33:00	5	5	

Hawaiian Ocean Time-series

HOT-165

WOCE Shallow Data Sheet

Station # 2
 Cast # 3
 Operator(s): TG,LF,EG

Date: 11/27/04 (HST)
 Time: 0830 (HST)

Rosette Position	Desired Depth	Oxygen	Sample Temp.	Nutrient	DIC/Alk	pH	DOC	
1	1018	62,63, 64	7.2	1A-B	1	X	1	
2	997	65	6.6	2				
3	935	66	6.7	3				
4	894	67	6.9	4				
5	852	68	7.0	5				
6	805	69,70, 71	8.1	6				
7	758	72	7.6	7	7	21	7	
8	714	73	7.8	8				
9	669	94	7.7	9				
10	619	95	8.1	10	10		10	
11	556	76	8.7	11A-B				
12	505	77	9.5	12	12	2	12	
13	453	78,79, 80	10.6	13				
14	391	81	11.1	14				
15	332	82	12.6	15	15A-B	34	15	
16	297	83	13.8	16				
17	264	84	14.7	17	17	3	17	
18	231	85,86, 87	17.3	18				
19	191	88	19.0	19				
20	150	89	20.5	20A-B				
21	98	90	22.3	21				
22	80	91	23.7	22				
23	70	92	24.4	23				
24	25	93	26.3	24				

Notes: SAMPLED OXYGEN #94 & 95 AFTER TEMP. WAS TAKEN

Hawaii Ocean Time-Series CONSOLE LOG

HOT-165

Cast type	Bottle type	SST	Operator
6-1000	1+L	26.35	F S-M

- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Station: 2	Cast: 3
Latitude start: 22 44.97 end: 22 45.35	Longitude start: 157 59.78 end: 157 59.11
Depth of water: 4732 meters	Date (GMT): 11/27/04
Pressure on Deck	Time:
Begin: 0.15 End: -0.08	Start Log: 18:25 In Water: 18:31 Out of Water: 19:32

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1	18 55 26	18 55 60	1019	1018	
2	18 57 15	18 57 30	995	997	
3	18 59 00	18 59 30	933	935	
4	19 00 35	19 01 00	893	894	
5	19 02 10	19 02 30	851	852	
6	19 03 35	19 04 00	804	805	
7	19 05 10	19 05 30	758	758	
8	19 06 40	19 07 00	714	714	
9	19 08 10	19 08 30	669	669	
10	19 09 40	19 10 00	619	619	
11	19 11 20	19 11 50	555	556	
12	19 13 07	19 13 30	505	505	
13	19 14 50	19 15 10	453	453	
14	19 16 40	19 17 10	391	391	
15	19 18 30	19 19 00	332	332	
16	19 19 53	19 20 30	295	297	
17	19 21 25	19 21 50	264	264	
18	19 22 32	19 23 00	250	231	
19	19 24 00	19 24 30	193	191	
20	19 25 30	19 26 00	150	150	
21	19 27 18	19 27 40	98	98	
22	19 28 10	19 28 40	80	80	
23	19 29 10	19 29 40	71	70	
24	29:50	30:25	29	25	

Hawaiian Ocean Time-series

HOT- 165

MIT Data Sheet

Station # 2
 Cast # 4
 Operator(s): EG,LF,TG

Date: 11/27/04 (HST)
 Time: 1100 (HST)

Rosette Position	Desired Depth	Sample #				
1	1000					
2	Sal min					
3	200	3				
4	175	4		Matt C		
5	150	5		Matt C		
6	125	6		Matt C		
7	125				MG	
8	115	8				
9	100	9		Matt C		
10	100				MG	
11	85	11				
12	75	12		Matt C		
13	75				MG	
14	60	14				
15	45	15		Matt C		
16	45				MG	
17	25	17		Matt C		
18	25				MG	
19	5	19		Matt C		
20	5				MG	
21						
22						
23						
24						

Notes: BOTTLE #18 LEAKING UPON RECOVERY

Hawaii Ocean Time-Series CONSOLE LOG

HOT- 165

Cast type	Bottle type	SST	Operator
E-1000	1+L	26.50	FS-M

- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Station: 2	Cast: 4
Latitude start: 22 45.21 end: 22 45.20	Longitude start: 157 58.61 end: 157 58.10
Depth of water: 4711 meters	Date (GMT): 11 127 104
Pressure on Deck	Time:
Begin: 0.20	Start Log: 20:59
End: .050	In Water: 21:01
	Out of Water: 21:55

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1	212253	212315	1018	1020	
2	213315	213350	450	450	
3	38:50	39:15	203	200	
4	40:30	41:00	173	175	
5	41:50	42:15	151	150	
6	43:05	43:35	125	125]
7		43:45	125	125	
8	44:20	44:45	115	115	
9	45:25	45:00	100	100]
10		46:10	100	100	
11	2146:50	2147:10	85	85	
12	2147:47	2148:10	75	75]
13		2148:20	75	75	
14	2148:50	2149:10	60	60	
15	2149:50	2150:10	45	45]
16		2150:20	45	45	
17	2151:05	2151:35	25	25]
18		2151:45	26	25	
19	2152:32	2153:00	5	5]
20		2153:50	5	5	
21					
22					
23					
24					

Hawaiian Ocean Time-series

HOT- 165

ATP Data Sheet

Station # 2 Date: 11/27/04 (HST)
 Cast # 5 Time: 1400 (HST)
 Operator(s): TC,KB,DN Pre-screen mesh size: 202um
 Blank #'s **28, 29, 30**

Rosette Position	Desired Depth	ATP Tube #'s	Volume Filtered	Carboy #	
1	1000				
2	Sal min				
3	350	1 - 3	3x2	1	
4	250	4 - 6	3x2	2	
5	150	7 - 9	3x1	7	
6	125	10 - 12	3x1	8	
7	100	13 - 15	3x1	9	
8	100				RF
9	85				RF
10	85				RF
11	75	16 - 18	3x1	10	
12	45	19 - 21	3x1	11	
13	25	22 - 24	3x1	12	
14	25				RF
15	25				RF
16	5	25 - 27	3x1	13	
17	5				RF
18	5				RF
19					
20					
21					
22					
23					
24					

Notes:

BOTTLES 8, 10, 17 LEAKING UPON RECOVERY. ATP SAMPLE TUBE # 5 SPILLED DURING PROCESSING.

Hawaii Ocean Time-Series CONSOLE LOG

HOT- 165

Cast type	Bottle type	SST	Operator
G-1000	12L	26.50	FS-M

Station: 2	Cast: 5
Latitude start: 22 44.83 end: 22 45.04N	Longitude start: 157 59.95 end: 157 59.04
Depth of water: meters	Date (GMT): 11 12 71 04
Pressure on Deck	Time:
Begin: 0.17	Start Log: 23:56
End: 0.08	In Water: 23:59
	Out of Water: 00:57

- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1	00:20:30	00:21:05	1020	1020	
2	33:00	00:33:20	450	450	
3	36:10	36:40	349	350	
4	39:20	39:50	251	250	
5	42:40	43:10	150	150	
6	44:27	44:55	125	125	
7	46:50	47:10	100	100]
8		47:20	100	100	
9	48:25	48:45	85	85]
10		49:00	85	85	
11	50:03	50:30	75	75	
12	52:10	52:40	44	45	
13	53:30	54:00	25	25]
14		54:10	25	25	
15		54:20	25	25]
16	55:40	56:10	5	5	
17		56:20	5	5	
18		56:30	5	5	
19					
20					
21					
22					
23					
24					

Hawaiian Ocean Time-series

HOT-165

Phycoerythrin Data Sheet

Station # 2 Date: 11/27/2004 (HST)
 Cast # 6 Time: 1700 (HST)
 Operator(s): KB, TC, DN Pre-screen mesh size: None

Rosette Position	Desired Depth	Carboy #	Total Volume	10um	5um	.4um	
1	1000						
2	Sal min						
3	175	1	10	1	2	3	
4	175						Matt C
5	150	2	10	4	5	6	
6	150						Matt C
7	125	3	10	7	8	9	
8	125						Matt C
9	100	4	10	10	11	12	
10	100						Matt C
11	100						RF
12	75	5	10	13	14	15	
13	75						Matt C
14	60	6	10	16	17	18	
15	45	7	10	19	20	21	
16	45						Matt C
17	35	8	10	22	23	24	
18	35	9	10	25	26	27	
19	25	10	9.5	28	29	30	
20	25						Matt C
21	15	11	9.5	31	32	33	
22	5	12	10	34	35	36	
23	5						Matt C
24							
Blanks				37	38	39	

Notes:

BOTTLE # 20 LEAKING UPON RECOVERY

Hawaii Ocean Time-Series CONSOLE LOG

HOT- 165

Cast type	Bottle type	SST	Operator
C-1000	12L	26.51	PSL

- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Station: 2	Cast: 6
Latitude start: 22 44.936 end: 22 44.993	Longitude start: 158 0.283 end: 158 0.111
Depth of water: meters	Date (GMT): 11 / 28 / 2009
Pressure on Deck	Time:
Begin: 0.144	Start Log: 02 51
End: 6.11	In Water: 03 02 11
	Out of Water: 03 56 42

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1	03:23:15	03:23:45	1021	1020	
2	03:33:15	03:34:15	422	420	Salinity Minimum
3	03:39:00	03:39:30	174	175	
4		03:40:00	174	175	
5	03:41:00	03:41:30	150	150	
6		03:41:45	150	150	
7	03:42:30	03:43:00	125	125	
8		03:43:15	125	125	
9	03:44:01	03:44:30	100	100	
10		03:44:45	100	100	
11		03:45:00	100	100	
12	03:46:00	03:46:30	75	75	
13	03:46:15	03:46:45	75	75	
14	03:47:30	03:48:00	60	60	
15	03:48:45	03:49:15	45	45	
16		03:49:30	45	45	
17	03:50:15	03:50:45	35	35	
18		03:51:00	34	35	
19	03:51:45	03:52:15	24	25	
20		03:52:30	24	25	
21	03:53:00	03:53:30	14	15	
22	03:54:15	03:54:45	4	5	
23		03:55:00	4	5	
24					

Hawaiian Ocean Time-series

HOT-165

HPLC & Chl *a.* Bottle Data Sheet

Station # 2
 Cast # 7
 Operator(s): KB, DN, TC

Date: 11/27/2004 (HST)
 Time: 2000 (HST)

Rosette Position	Desired Depth	Carboy #	Total Volume	HPLC	Chl <i>a.</i>		
1	1000						
2	Sal min						
3	175	1	9.5	3	3		
4	175						MS
5	150	2	8.5	5	5		
6	150						MS
7	135	7	4	7	7A-B		
8	125	8	4,4	8	8		
9	125	9		9			MS
10	115	10	4	10	10		
11	100	11	4	11	11		
12	100						MS
13	100					RF	
14	85	12	4	14	14		
15	75	13	4	15	15		
16	75						MS
17	60	14	4	17	17A-B		
18	45	15,16	4,4	18A-B	18		
19	45						MS
20	25	3	10	20	20		
21	25						MS
22	5	4	9	22	22		
23	5						MS
24							

**Notes: DO NOT PRE-SCREEN
 BOTTLE # 20 LEAKING UPON RECOVERY.
 HPLC SAMPLES 14 & 15 FILTERS BUSTED.**

Hawaii Ocean Time-Series CONSOLE LOG

HOT- 165

Cast type	Bottle type	SST	Operator
G-1000	12L	26.40	PJL

- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Station: 2	Cast: 7
Latitude start: 22 44.976 end: 22 45.2147	Longitude start: 158 0.176 end: 157 69.7997
Depth of water: meters	Date (GMT): 11 / 28 / 2004
Pressure on Deck	Time:
Begin: 0.159	Start Log: 0555
End: 0.115	In Water: 06 01 29
	Out of Water: 06 56 54

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1	06:22:30	06:23:00	1020	1020	MARKED TWICE
2	06:33:20	06:33:50	419	420	Salinity minimum
3	06:38:15	06:38:45	174	175	
4		06:39:00	174	175	
5	06:40:05	06:40:35	150	150	
6		06:40:45	150	150	
7	06:41:30	06:42:00	134	135	
8	06:42:35	06:43:05	125	125	
9		06:43:15	125	125	
10	06:44:00	06:44:30	115	115	
11	06:45:15	06:45:45	100	100	
12		06:46:15	100	100	
13		06:46:45	99	100	
14	06:47:30	06:48:00	85	85	
15	06:48:30	06:49:00	75	75	
16		06:49:10	75	75	
17	06:50:00	06:50:30	60	60	
18	06:51:10	06:51:40	45	45	
19		06:51:50	45	45	
20	06:52:40	06:53:10	25	25	
21		06:53:20	25	25	
22	06:54:15	06:54:45	5	5	
23		06:54:55	6	5	
24		06:55:05	5	5	

Hawaiian Ocean Time-series

HOT-165

BEACH Shallow Data Sheet

Station # 2
 Cast # 8
 Operator(s): KB, TC, DN

Date: 11/27/2004 (HST)
 Time: 2300 (HST)

Rosette Position	Desired Depth	Oxygen	Sample Temp.	Nutrient	DOC	LLN	LLP	
1	1000	96	10.1					
2	750	97	10.3					
3	430	98	12.1					
4	200	99	18.6	4	4			
5	175	100	19.3	5	5	5	5	
6	165	101	19.7					
7	150	102	20.7	7	7	7A-B	7	
8	125	103	21.5	8A-B	8	8	8	
9	115	104	21.7			9	9	
10	100	105, 106, 107	22.3	10	10	10A-B	10	
11	100							RF
12	85	108	22.6					
13	85							RF
14	75	109	23.0	14	14	14	14	
15	60			15	15			
16	45			16A-B	16	16	16	
17	35			17	17			
18	25	110	25.8	18	18	18	18	
19	25							
20	25							RF
21	15			21	21			
22	5	111	25.8	22	22	22A-B	22	
23	5							
24	5							RF

Notes:

BOTTLE # 24 LEAKING UPON RECOVERY, BOTTLE # 23 SPIGOT LEAKING UPON RECOVERY.

Hawaiian Ocean Time-series

HOT-165

BEACH Carbon Data Sheet

Station # 2
 Cast # 8
 Operator(s): KB, TC, DN

Date: 11/27/2004 (HST)
 Time: 2300 (HST)

Rosette Position	Desired Depth	DIC/ALK	pH	Quay DIC	Keeling DIC		pH cell	
1	1000							
2	750							
3	430							
4	200	4	4					
5	175							
6	165							
7	150	7	7					
8	125							
9	115							
10	100	10	10				X	
11	100					RF		
12	85							
13	85					RF		
14	75	14	14				21	
15	60							
16	45	16	16				2	
17	35							
18	25	18	18				34	
19	25			19	19A-B			
20	25					RF		
21	15							
22	5	22A-B	22A-B				3	
23	5			23	23A-B			
24	5					RF		

Notes:

BOTTLE # 24 LEAKING UPON RECOVERY, BOTTLE # 23 SPIGOT LEAKING UPON RECOVERY.

Hawaii Ocean Time-Series CONSOLE LOG

HOT- 165

Cast type G-1000	Bottle type 12L	SST 26.39	Operator PTL
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- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Station: 2	Cast: 8
Latitude start: 22 45.056 end: 22 45.021	Longitude start: 158 01.190 end: 158 01.077
Depth of water: meters	Date (GMT): 11 / 28 / 2004
Pressure on Deck	Time:
Begin: 0.20	Start Log: 0854
End: 0.13	In Water: 0859.20
	Out of Water: 0959.46

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1	09 20 50	09 21:20	1018	1020	
2	26 40	27:10	745	750	O2 minimum
3	32 45	33 15	432	430	Sal minimum
4	37 50	38 20	200	200	
5	39 30	40 00	174	175	
6	40 40	41 10	164	165	
7	42 00	42 30	148	150	
8	43 30	44 00	126	125	
9	44 45	45 15	114	115	
10	46 05	46 35	99	100	
11		46 45	99	100	
12	47 35	48 05	84	85	
13		48 15	84	85	
14	49 00	49 30	74	75	
15	50 30	51 00	59	60	
16	51 55	52 25	44	45	
17	53 10	53 40	34	35	
18	54 20	54 50	25	25	
19		55 00	25	25	
20		55 10	25	25	
21	56 00	56 30	15	15	
22	57 40	58 10	4	5	
23		58 20	4	5	
24		58 30	4	5	

Hawaiian Ocean Time-series

HOT-165

Primary Production Data Sheet

Station # 2
 Cast # 9
 Operator(s): TG, EG, LF

Date: 11/28/2004 (HST)
 Time: 0200 (HST)

Rosette Position	Desired Depth	Light Bottle	Chl <i>a</i>	FCM	Size fractionated Chl <i>a</i>	Size fractionated 14C-PP	PvE
1	1000						
2	Sal min						
3	175		3A-B	3A-B	1		
4	150		4A-B	4A-B	2		
5	125	3-1	5	5	3	3T=0/3L1	
6	125	3-2	6	6		3L2	
7	125	3-3	7	7		3L3	X
8	100	4-1	8	8	4	4T=0/4L1	
9	100	4-2	9	9		4L2	
10	100	4-3	10	10		4L3	
11	100						RF
12	75	5-1	12	12	5	5T=0/5L1	
13	75	5-2	13	13		5L2	
14	75	5-3	14	14		5L3	X
15	45	6-1	15	15	6	6T=0/6L1	
16	45	6-2	16	16		6L2	
17	45	6-3	17	17		6L3	
18	25	7-1	18	18	7	7T=0/7L1	
19	25	7-2	19	19		7L2	
20	25	7-3	20	20		7L3	X
21	25						RF
22	5	8-1	22	22	8	8T=0/8L1	
23	5	8-2	23	23		8L2	
24	5	8-3	24	24		8L3	

Notes: COLLECT 1 L SAMPLE FOR SIZE FRACTIONATED Chl *a*;

Hawaii Ocean Time-Series CONSOLE LOG

HOT-165

Cast type G-1000	Bottle type 12L	SST 26.45	Operator PKL
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- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Station: 2	Cast: 9
Latitude start: 22 45.144 end: 22 45.548	Longitude start: 157 59.876 end: 157 59.233
Depth of water: meters	Date (GMT): 11 / 28 / 2004
Pressure on Deck	Time:
Begin: 0.16	Start Log: 11 55
End: 0.09	In Water: 12 05 11
	Out of Water: 12 59

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
2	38 30	39 00	428	425	Salinity minimum
3	43 40	44 10	175	175	
4	45 40	46 10	150	150	
5	47 20	47 50	124	125	
6		48 00	124	125	
7		48 10	124	125	
8	49 10	49 40	99	100	
9		49 50	99	100	
10		50 00	99	100	
11		50 10	99	100	
12	51 15	51 45	75	75	
13		51 55	75	75	
14		52 05	75	75	
15	53 15	53 45	45	45	
16		53 55	45	45	
17		54 05	45	45	
18	54 50	54 20	24	25	
19		54 30	24	25	
20		54 40	24	25	
21		54 50	24	25	
22	12 56 50	57 20	5	5	
23		57 30	5	5	
24		57 40	5	5	

Hawaiian Ocean Time-series

HOT- 165

OPEN CAST Data Sheet

Station # 2
 Cast # 10
 Operator(s): EG,LF,TG

Date: 11/28/04 (HST)
 Time: 0500 (HST)

Rosette Position	Desired Depth						
1	1000						
2	sal min						
3	sal max						
4	5						
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Notes:

Hawaii Ocean Time-Series CONSOLE LOG

HOT- 165

Cast type	Bottle type	SST	Operator
E-1500	1+L	26.40	FS-M

Station: 2	Cast: 10
Latitude start: 22 45.01 end: 22 45.18	Longitude start: 158 3.2 end: 158 3.13
Depth of water: meters	Date (GMT): 11 12 8 104
Pressure on Deck	Time:
Begin: 0.14 End: -0.04	Start Log: 14:57 In Water: 14:59 Out of Water: 15:44

- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1	15:21:20	21:45	1020	1020	
2	30:35	31:00	525	525	
3	40:30	41:00	5	5	
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

Hawaiian Ocean Time-series

HOT- 165

Particulate Silica Data Sheet

Station # 2 Date: 11/28/04 (HST)
 Cast # 11 Time: 0800 (HST)
 Operator(s): EG,TG,LF Pre-screen mesh size: None
 Blank # **B1,B2,B3**

Rosette Position	Desired Depth	Carboy #	Total Volume	Sample #			
1	1000						
2	Sal min						
3	175	7	4	3			
4	175				<i>Matt C</i>		
5	150	8	4	5			
6	150				<i>Matt C</i>		
7	125	9,10	4,4	7A-B			
8	125				<i>Matt C</i>		
9	100	11	4	9			
10	100				<i>Matt C</i>		
11	100					RF	
12	75	12	4	12			
13	50					RF	
14	50					RF	
15	45	13	4	15			
16	25	14,15	4,4	16A-B			
17	25					RF	
18	25					RF	
19	5	16	4	19			
20	5					RF	
21	5					RF	
22							
23							
24							

Notes: BOTTLE # 10 & 20 LEAKING UPON RECOVERY

Hawaii Ocean Time-Series CONSOLE LOG

HOT- 165

Cast type 6-1000	Bottle type J2 L	SST 26.45	Operator F.S.M
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ASB

- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Station: 2	Cast: 11
Latitude start: 22 47.10 end: 22 47.46	Longitude start: 157 39.9 end: 157 58.08
Depth of water: 4704 meters	Date (GMT): 11/28/04
Pressure on Deck	Time:
Begin: 0.15 End: 0.02	Start Log: 17:54 In Water: 17:58 Out of Water: 18:50

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1	18:11:10	18:22:00	1022	1020	
2	18:26:20	18:26:40	801	800	
3	18:37:09	18:37:40	179	175	}
4		18:37:50	179	175	
5	18:38:50	18:39:20	150	150	}
6		18:39:30	151	150	
7	18:40:19	18:40:50	125	125	}
8		18:41:00	125	125	
9	18:41:55	18:42:10	100	100	}
10		18:42:20	100	100	
11		18:42:30	100	100	}
12	18:43:20	18:43:50	76	75	
13	18:44:39	18:45:10	49	50	}
14		18:45:20	50	50	
15	18:45:50	18:46:10	45	45	}
16	18:46:50	18:47:10	25	25	
17		18:47:20	25	25	}
18		18:47:30	25	25	
19	18:48:20	18:48:50	5	5	}
20		18:49:00	5	5	
21		18:49:10	5	5	}
22					
23					
24					

Hawaiian Ocean Time-series

HOT- 165

PC/PN Data Sheet

Station # 2 Date: 11/28/04 (HST)
 Cast # 12 Time: 1100 (HST)
 Operator(s): EG,TG,LF Pre-screen mesh size: 202 um
 Blank #'s B1 B2 B3

Rosette Position	Desired Depth	Carboy #	Total Volume	Sample #			
1	1000						
2	Sal min						
3	350	1	10	3			
4	350	2	10	4			
5	250	3	10	5			
6	200	4	10	6			
7	175	5	10	7			
8	150	6	10	8			
9	125	7,8	4,4	9A-B			
10	100	9	4	10			
11	75	10	4	11			
12	75				<i>Matt C</i>		
13	45	11	4	13			
14	45				<i>Matt C</i>		
15	25	12,13	4,4	15A-B			
16	25				<i>Matt C</i>		
17	5	14	4	17			
18	5				<i>Matt C</i>		
19	5					<i>MG</i>	
20	5					<i>MG</i>	
21	5					<i>MG</i>	
22	5					<i>MG</i>	
23	5					<i>MG</i>	
24	5				<i>Matt C</i>		

Notes: BOTTLE # 10,18,20,21,23; FILTER RIPPED SAMPLE #15A DURING FILTERING

Hawaii Ocean Time-Series CONSOLE LOG

HOT- 165

Cast type	Bottle type	SST	Operator
G-1000	12 L	26.75	FS-M

- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Station: 2	Cast: 12
Latitude start: 22 48.54 end: 22 49.05	Longitude start: 157 58.26 end: 157 57.69
Depth of water: 4703 meters	Date (GMT): 11 128 104
Pressure on Deck	Time:
Begin: 0.18	Start Log: 20:55
End: 0.03	In Water: 20:59
	Out of Water: 21:55

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1	212340	212730	1020	1020	
2	215000	213030	550	550	salinity min.
3	213720	213800	352	350	
4	"	213825	352	350	
5	214000	214030	250	250	
6	43:00	43:30	201	200	
7	44:15	44:45	176	175	
8	45:30	46:00	152	150	
9	46:40	47:10	125	125	
10	48:00	48:30	100	100	
11	49:20	49:50	75	75	
12		50:00	75	75	
13	50:50	51:20	45	45	
14		51:30	45	45	
15	52:10	52:40	25	25	
16		50	25	25	
17	53:40	54:10	5	5	
18	50	20	5	5	
19		30	5	5	
20		40	5	5	
21		50	5	5	
22		00	5	5	
23		10	5	5	
24		20	5	5	

Hawaiian Ocean Time-series

HOT- 165

Particulate Phosphorus Data Sheet

Station # 2 Date: 11/28/2004 (HST)
 Cast # 13 Time: 1400 (HST)
 Operator(s): LF, EG, KB Pre-screen mesh size: 202 um
 Blank #'s B1 B2 B3

Rosette Position	Desired Depth	Carboy #	Total Volume	Sample #			
1	1000						
2	Sal min						
3	350	1	10	3			
4	350	2	10	4			
5	250	3	10	5			
6	200	4	10	6			
7	175	5	10	7			
8	150	6	10	8			
9	125	7,8	4,4	9A-B			
10	100	9	4	10			
11	100				RF		
12	75	10	4	12			
13	45	11	4	13			
14	25	12,13	4,4	14A-B			
15	25					MC	
16	25					MC	
17	25					MC	
18	25					MC	
19	25					MC	
20	5	14	4	20			
21							
22							
23							
24							

Notes:
BOTTLE # 19 LEAKING UPON RECOVERY.

Hawaii Ocean Time-Series CONSOLE LOG

HOT-165

Cast type	Bottle type	SST	Operator
6-1000	12 L	26.90	FS-m

- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Station: 2	Cast: 13
Latitude start: 21 49.00 end: 22 49.07	Longitude start: 157 55.75 end: 157 55.39
Depth of water: 4670 meters	Date (GMT): 11 12 9 109
Pressure on Deck	Time:
Begin: 0.25	Start Log: 00:03
End: 0.37	In Water: 00:05
	Out of Water: 2:03

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1	00:27:45	28:15	1019	1020	
2	35:25	35:55	650	650	
3	42:30	43:00	349	350	}
4		43:10	351	350	
5	46:00	46:30	261	250	
6	48:17	48:50	199	200	
7	50:00	50:30	175	175	
8	51:45	52:10	151	150	
9	53:14	53:40	125	125	
10	54:40	55:10	99	100	}
11		55:20	99	100	
12	56:32	57:00	74	75	
13	58:18	58:40	45	45	
14	59:35	1:00:00	24	25	}
15		1:00:10	25	25	
16		1:00:20	25	25	
17		1:00:30	25	25	
18		1:00:40	24	25	
19		1:00:50	25	25	
20	1:02:00	1:02:10	5	5	
21					
22					
23					
24					

Hawaii Ocean Time-Series CONSOLE LOG

HOT-165

Cast type G-1000	Bottle type 12L	SST 26.75	Operator PSL
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Station: 2	Cast: 14
Latitude start: 22 48.984 end: 22 49.135	Longitude start: 157 59.530 end: 157 59.460
Depth of water: meters	Date (GMT): 11 / 29 / 2004
Pressure on Deck	Time:
Begin: 0.19	Start Log: 02 23
End: -0.02	In Water: 02 32.06
	Out of Water: 03 20 30

- YSI Oxygen
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- PAR
- STAG Seapoint Fluorometer
-

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1	02 54 30	02 55 00	1020	1020	
2	03 00 45	03 01 15	750	750	02 min
3	07 40	08 10	455	450	Salinity minimum
4	15 45	16 15	91	90	Salinity + O2 max.
5	19 20	19 50	5	5	
6					
7					
8					
9					
10					
11					
12					
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21					
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23					
24					

Hawaiian Ocean Time-series

HOT- 165

OPEN CAST Data Sheet

Station # 2
 Cast # 15
 Operator(s): KB, DN, TC

Date: 11/28/2004 (HST)
 Time: 2000 (HST)

Rosette Position	Desired Depth						
1	1000						
2	sal min						
3	sal max						
4	100		RF				
5	50		RF				
6	50		RF				
7	25		RF				
8	25		RF				
9	5						
10	5		RF				
11	5		RF				
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Notes:

Hawaii Ocean Time-Series CONSOLE LOG

HOT-165

Cast type G-1000	Bottle type 12L	SST 26.00	Operator PSL
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Station: 2	Cast: 15
Latitude start: 22 45.064 end: 22 45 124	Longitude start: 158 0.198 end: 157 59.478
Depth of water: meters	Date (GMT): 11 / 29 / 2004
Pressure on Deck	Time:
Begin: 0.18	Start Log: 0554
End: 0.06	In Water: 0602.30
	Out of Water: 0651.36

- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Trip/ Niskin	Time	Confirm	Pressure	Target Depth	Comments
	stopped	tripped			
1	06 25 00	06 25 30	1022	1020	
2	33 40	34 10	548	550	Sal minimum
3	42 00	42 30	123	120	Sal maximum
4	43 25	43 55	100	100	
5	45 25	45 55	49	50	}
6	↓	46 05	49	50	
7	47 15	47 45	25	25	
8	↓	47 55	25	25	
9	49 05	49 35	5	5	
10	↓	49 45	5	5	
11	↓	49 55	5	5	
12					
13					
14					
15					
16					
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19					
20					
21					
22					
23					
24					

Hawaiian Ocean Time-series

HOT-165

WOCE Deep 2 Data Sheet

Station # 2
 Cast # 16
 Operator(s): KB, DN, TC

Date: 11/28/2004 (HST)
 Time: 2300 (HST)

Rosette Position	Desired Depth	Oxygen	Sample Temp.					
1	4800	112	3.0					
2	4000	113	2.9					
3	3000	114	3.0					
4	2000	115	3.3					
5	O2 min	116	6.0					
6	Sal min	117	7.3					
7	O2 max	118	21.7					
8	5	119	25.2					
9								
10								
11								
12								
13								
14								
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16								
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23								
24								

Notes:

Hawaii Ocean Time-Series CONSOLE LOG

HOT- 165

Cast type	Bottle type	SST	Operator
G-5000	12L	25 99	PSL

Station: 2	Cast: 16
Latitude 438 start: 22 44.959 end: 22 45.953	Longitude 858 start: 157 59.868 end: 157 58.446
Depth of water: 4725 meters	Date (GMT): 11 / 29 / 2004
Pressure on Deck	Time:
Begin: 0.18	Start Log: 0854 13
End: 0.02	In Water: 0901 0910
	Out of Water: 1211

- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
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- PAR
- STAG Seapoint Fluorometer
-

Trip/ Niskin	Time	Confirm	Pressure	Target Depth	Comments
	stopped	tripped			
1	10 44 40	10 44 45	4801	4800	
2	57 15	57 45	4000	4000	
3	11 14 30	11 15 00	3003	3000	
4	31 25	31 55	2005	2000	
5	51 55	52 25	773	770	O2 min
6	57 35	58 05	520	520	Sal min
7	12 05 40	12 06 10	102	100	O2 max
8	12 08 40	08 10	5	5	
9					
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21					
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23					
24					

Hawaiian Ocean Time-series

HOT- 165

STATION 50 Data Sheet

Station # 50
 Cast # 1
 Operator(s): EG,LF,TG

Date: 11/29/04 (HST)
 Time: 0930 (HST)

Rosette Position	Desired Depth						
1	5	MG					
2	5	MG					
3	5	MG					
4	5	MG					
5	5	MG					
6	5	MG					
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

Notes:

Hawaii Ocean Time-Series CONSOLE LOG

HOT-165

Cast type	Bottle type	SST	Operator
G-1000	12L	26.45	FJ-M

Station: 50	Cast: 1
Latitude start: 22 47.7 end: 22 48.07	Longitude start: 157 53.98 end: 157 53.9
Depth of water: meters	Date (GMT): 11 / 29 / 04
Pressure on Deck	Time:
Begin: 0.16 End: 0.14	Start Log: 19:26 In Water: 19:29 Out of Water: 19:49

- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Trip/ Niskin	Time stopped	Confirm tripped	Pressure	Target Depth	Comments
1		19:17:15	6	5	
2		25	6	5	
3		35	6	5	
4		45	6	5	
5		55	6	5	
6		48:05	6	5	
7					
8					
9					
10					
11					
12					
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19					
20					
21					
22					
23					
24					

Hawaiian Ocean Time-series

HOT-165

KAENA Data Sheet

Station # 6
 Cast # 1
 Operator(s): TC,KB,DN

Date: 11/29/04 (HST)
 Time: 2045 (HST)

Rosette Position	Desired Depth	Chl <i>a.</i>						
1	2500							
2	2000							
3	1500							
4	1000							
5	500							
6	175	6						
7	150	7						
8	125	8						
9	100	9						
10	75	10						
11	45	11						
12	25	12						
13	5	13						
14	5		RF					
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

Notes:

Hawaii Ocean Time-Series CONSOLE LOG

HOT-165

Cast type KAENN	Bottle type 12L	SST 26.25	Operator PSL
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- YSI Oxygen
- SBE 43 Oxygen
- Pinger
- Altimeter
- Transmissometer
- JGOFS Sea Tech Fluorometer
- PAR
- STAG Seapoint Fluorometer
-

Station: 6	Cast: 1
Latitude start: 21 50.834 end: 21 51.392	Longitude start: 158 21.804 end: 158 20.857
Depth of water: 2443 meters	Date (GMT): 11 / 30 / 2004
Pressure on Deck	Time:
Begin: 0.17	Start Log: 0640
End: -0.068	In Water: 0647
	Out of Water: 0833

Trip/ Niskin	Time	Confirm	Pressure	Target Depth	Comments
	stopped	tripped			
1	07 38 00	07 38 30	2465	2500	
2	46 45	47 15	1995	2000	
3	55 50	56 20	1499	1500	
4	08 05 20	08 05 50	1004	1000	
5	15 25	15 55	479	480	Salinity minimum
6	22 00	22 30	176	175	
7	23 35	24 05	149	150	
8	24 55	25 25	124	125	Salinity maximum
9	26 25	26 55	101	100	
10	28 00	28 50	74	75	
11	29 30	30 00	45	45	
12	31 00	31 30	24	25	
13	32 15	32 45	4	5	
14	?	32 55	4	5	
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					