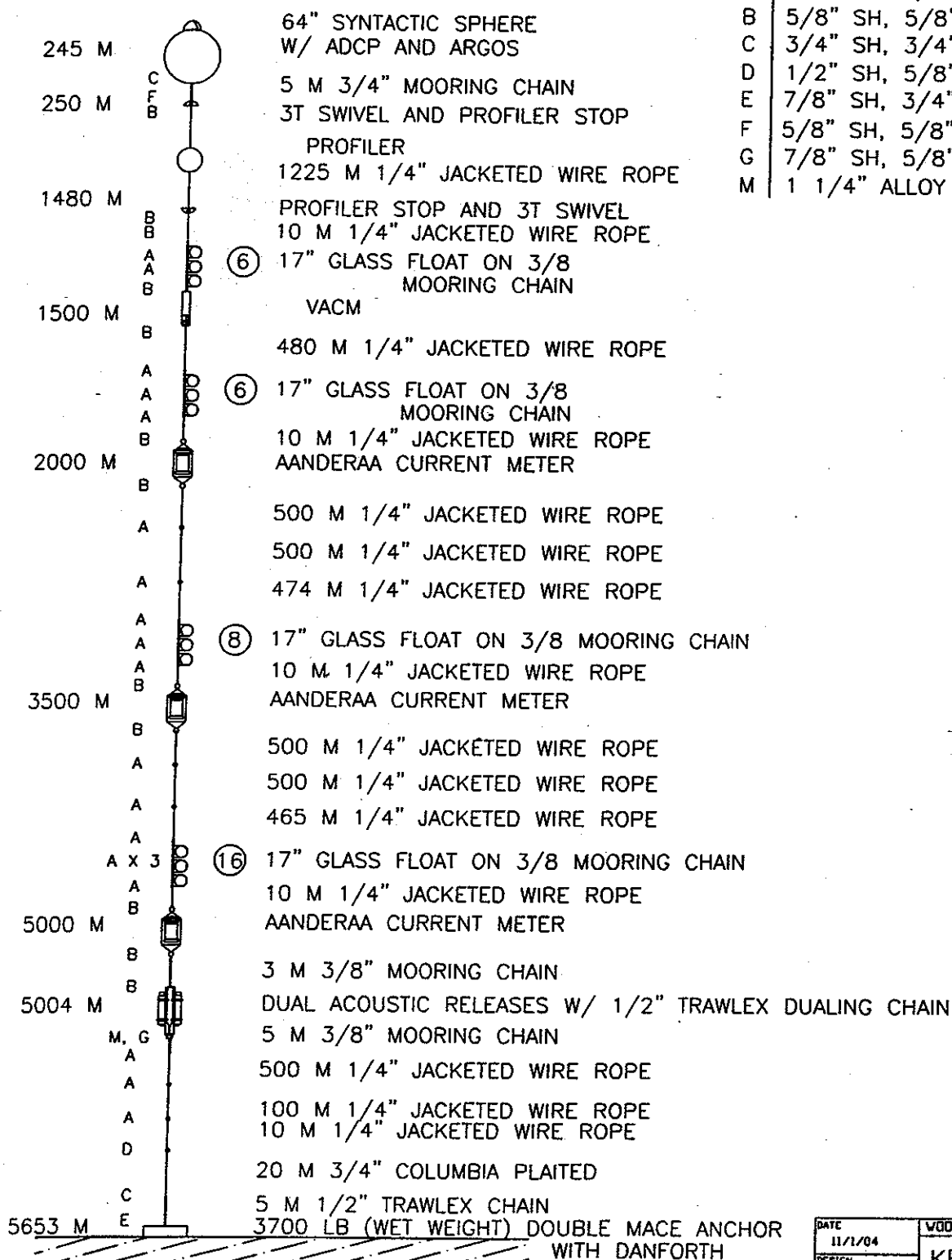


SHACKLE TABLE

A	1/2" SH, 5/8" SL, 1/2" SH
B	5/8" SH, 5/8" SL, 1/2" SH
C	3/4" SH, 3/4" SL, 5/8" SH
D	1/2" SH, 5/8" SL, 3/4" SH
E	7/8" SH, 3/4" SL, 5/8" SH
F	5/8" SH, 5/8" SL, 5/8" SH
G	7/8" SH, 5/8" SL, 1/2" SH
M	1 1/4" ALLOY MASTER LINK



DATE	11/1/04	WOODS HOLE OCEANOGRAPHIC INSTITUTION
DESIGN	S. WORRILOV	KESS 1 2005
DRAFT	C. MARQUETTE	
		ACAD FILE:KESS1

Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 1 MOORED STATION NO. 1136

Launch (anchor over)

Date (day-mon-yr) 07-06-2004 Time 05:04 UTC
Latitude (N/S, deg-min) 37°04.01N Longitude (E/W, deg-min) 147°22.87E
Deployed by Nelson Hogg, Willie Ostrom Recorder/Observer Stephanie Waterman
Ship and Cruise No. R/V Thompson 168-a Intended Duration 1 year
Depth Recorder Reading 5625 m Correction Source Echo-Sounding Correction Tables
Depth Correction 28 m
Corrected Water Depth 5653 m Magnetic Variation (E/W) 7° W
Argos Platform ID No. 27331 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position

Lat (N/S) 37° 4.18643 N Long. (E/W) 147° 22.7157 E

Acoustic Release Model 8242 XS

Release No. SN 26353: 343175 Tested to 3000 m
SN 28289: 353605

Receiver No. _____ Release Command _____

Enable SN 26353 Ch.A: 341406 Ch.B: 341425 SN 26353: 341440
SN 28289: Ch.A: 374630 Ch.B: 374655 Disable SN 28289: 374676

Interrogate Freq. SN 26353: Ch.A 11 kHz Ch.B: 9 kHz SN 26353 Ch.A 12 kHz Ch.B: 11 kHz
SN 28289: Ch.A 11 kHz Ch.B: 9 kHz Reply Freq. SN 28289: Ch.A 12 kHz Ch.B: 11 kHz

Recovery (release fired)

Date (day-mon-yr) _____ Time _____ UTC

Latitude (N/S, deg-min) _____ Longitude (E/W, deg-min) _____

Recovered by _____ Recorder/Observer _____

Ship and Cruise No. _____ Actual duration _____ days

Distance from actual waterline to buoy deck _____ m

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Syntactic Sphere	SN - oil	00:26	buoyancy foam: 2551 LB. strobe light: SN 1032 Flashrate 15			11-06-2004 19:46	
2		ADCP	SN 5091	00:26				19:46	
3		ARGOS	Platform ID 27331	00:26	magnetic tape removed: 23:56 06-06-04			19:46	
4	5	3/4" Proof Chain		00:26				19:46	
5		3T Swivel		00:26				20:11	
6		Profiler Stop		00:26				20:11	
7		PROFILER	116	00:47				20:45	
8	1225	1/4" Jacketed Wire Rope		00:26				20:18	
9		Profiler Stop		01:19				20:45	
10		3T Swivel		01:19				20:45	
11	10	1/4" Jacketed Wire Rope		01:19				20:51	
12		6 17" Glass Float		01:23	on 3/8 Trawllex Chain			20:52	
13		VACM	V-0109	01:28	foam blocks removed: 01:25			20:52	blocked @ 20:55
14	25	1/4" Jacketed Wire Rope		01:28				20:55	
15	430	1/4" Jacketed Wire Rope		01:30				20:59	
16	25	1/4" Jacketed Wire Rope		01:41				21:13	
17		6 17" Glass Float		01:45	on 3/8 Trawllex Chain			21:14	
18	10	1/4" Jacketed Wire Rope		01:49				21:17	
19		Anderoga Current Meter	SN 367	01:49	6 channel model w/ tilt and backscatter			21:18	dry inside (there was concern over potential leakage) - data retrieved
20	25	1/4" Jacketed Wire Rope		01:49				21:18	card erased - 11-06-2004
21	500	1/4" Jacketed Wire Rope		01:52				21:23	
22	500	1/4" Jacketed Wire Rope		02:06				21:36	21:43 - bitter end of snapped shot retrieved on board. break occurred 450120 m from top shot wire #4009H.

Item No.	Item (m)	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	424		02:20					
24	25		02:32					
25			02:35	on 3/8 Trawllex chain				
26	10		02:36					
27		SN 151	02:40	- 4 channel model (no tilt/backscatter)				
28	25		02:40					
29	500		02:42					
30	500		02:56					
31	415		03:11					
32	25		03:25					
33			03:29	on 3/8 Trawllex chain				
34	10		03:32					
35		SN 163	03:36	- 4 channel model (no tilt/backscatter)				
36	3		03:36					
37		SN 26353 SN 28289	03:41	- 3/4" shackle on top - 7/8" shackle on bottom				
38	5		03:41					
39	500		03:42					
40	105		04:16	3 sheets of lengths: 50, 50 and 5 m. 5m sheet attached first				
41	20		04:52					
42	5		04:57					
43	5		05:04					
44			05:04	w/ 5/8" shackle				
45								

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
91									
92									
93									
94									
95									
96									
97									
98									
99									
Date/Time		Comments							
07-06-2004	04:10	black bag/float observed drifting ~100m from cable - appears no lines are dragging - however concern for potential fouling							
04-06-2004	04:00	RCM-11s (Aanderra Current Meters) turned on							
06-06-2004		Profiler set: scheduled startup: 07 JUN 2004 1500 GMT; Reference date and time: 08 JUN 2004 0000 GMT							
11-06-2004		sphere reported on the surface							
10-06-2004	19:46	- sphere recovered on board							
11-06-2004	21:42	- bitter end of snapped 500 m shot of wire recovered on board - break occurred at ~120m from top; wire # 4009-15							

Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 2 MOORED STATION NO. 1137

Launch (anchor over)

Date (day-mon-yr) 08-06-2004 Time 03:20 UTC

Latitude (N/S, deg-min) 36° 18.1354 N Longitude (E/W, deg-min) 146° 53.5603 E

Deployed by Nelson Hogg, Willie Ostrom Recorder/Observer Stephanie Waterman

Ship and Cruise No. R/V Thompson 168-2 Intended Duration 1 year

Depth Recorder Reading 5605 m Correction Source Echo Sounding

Depth Correction 27 m Correction Tables

Corrected Water Depth 5632 m Magnetic Variation (E/W) ~~55° 15' 21" E~~ 6° W
7° W 6° W

Argos Platform ID No. 5627 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position

Lat (N/S) 36° 18.3538 N Long. (E/W) 146° 53.6257 E

Acoustic Release Model 8242 XS

Release No. SN 28039: 347710 Tested to 3000 m
SN 30288: 253013

Receiver No. Release Command

Enable SN 28039: 366475 (Ch.A) 366504 (Ch.B) SN 28039: 366527
SN 30288: 256454 (Ch.A) - (Ch.B) Disable SN 30288: 256477

Interrogate Freq. SN 28039: 11 kHz (Ch.A) 9 kHz (Ch.B) SN 28039: 12 kHz (Ch.A) 11 kHz (Ch.B)
SN 30288: 11 kHz (Ch.A) - (Ch.B) Reply Freq. SN 30288: 12 kHz (Ch.A) - (Ch.B)

Recovery (release fired)

Date (day-mon-yr) _____ Time _____ UTC

Latitude (N/S, deg-min) _____ Longitude (E/W, deg-min) _____

Recovered by _____ Recorder/Observer _____

Ship and Cruise No. _____ Actual duration _____ days

Distance from actual waterline to buoy deck _____ m

Moored Station Number 1137

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Syntactic Sphere	SN - 009	07-06-04 23:15	Buoyancy of foam: 225 l strobe light: SN 6425 Flashote 45				
2		ADCP	SN 1635	23:15					
3		AR 605	Platform ID 5627	23:15	magnet removed: 23:04				
4	5	3/4" Proof Chain		23:15					
5		3T Swivel		23:15					
6		Profiler Stop		23:15					
7		PROFILER	119	23:37					
8	1225	1/4" Jacketed Wire Rope		23:15					
9		Profiler Stop		08-06-04 00:05					
10		3T Swivel		00:05					
11	10	1/4" Jacketed Wire Rope		00:05					
12		6 17" Glass Float		00:08	on 3/8 Trawllex chain				
13		VACM	V0163-P	00:12	foam blocks removed: 00:08				
14	25	1/4" Jacketed Wire Rope		00:12					
15	430	1/4" Jacketed Wire Rope		00:14					
16	25	1/4" Jacketed Wire Rope		00:25					
17		6 17" Glass Float		00:28	on 3/8 Trawllex chain				
18	10	1/4" Jacketed Wire Rope		00:31					
19		Aanderaa Current Meter	SN 370	00:31	6 channel model w/ tilt and backscatter				
20	25	1/4" Jacketed Wire Rope		00:32					
21	500	1/4" Jacketed Wire Rope		00:33					
22	500	1/4" Jacketed Wire Rope		00:45					

Item No.	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	424 1/4" Jacketed Wire Rope	0058	00:58					
24	25 1/4" Jacketed Wire Rope	0109	01:09					
25	8 17" Glass Float	0113	01:13	- on 3/8 Trawllex chain				
26	10 1/4" Jacketed Wire Rope	0113	01:13					
27	Aanderaa Current Meter	SN 154	01:16	-4 channel model (no tilt or backscatter)				
28	25 1/4" Jacketed Wire Rope		01:16					
29	500 1/4" Jacketed Wire Rope		01:18					
30	415 1/4" Jacketed Wire Rope		01:32					
31	25 1/4" Jacketed Wire Rope		01:47					
32	16 17" Glass Floats		02:00					
33	10 1/4" Jacketed Wire Rope		02:03					
34	Aanderaa Current Meter	SN 148	02:14	-4 channel model (no tilt or backscatter)				
35	3 3/8" Trawllex Chain		02:14					
36	Dual Acoustic Releases	SN 28039 SN 30288	02:14	- 3/4" shackle on top - 7/8" shackle on bottom				
37	5 3/8" Trawllex Chain		02:14					
38	500 1/4" Jacketed Wire Rope		02:14					
39	85 Adjustable Shot 1/4" Jacketed Wire Rope		02:37	3 shots of 25m, 1 shot 10m				
40	20 3/4" Columbia Pigited		03:15					
41	5 1/4" Jacketed Wire Rope		03:20					
42	5 1/2" Trawllex Chain		03:20					
43	4500 LB (wet) anchor w/ Danforth		03:20	- 5/8" shackle				
44								
45								

Moored Station Number

11387

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
91									
92									
93									
94									
95									
96									
97									
98									
99									

Date/Time	Comments
04-06-2004 04:00	RCM-11s (Aanderra Current Meters) turned on
04-06-2004	
07-06-2004	Profiler set: scheduled startup: 08 JUN 2004 1000 GMT ; Reference date and time: 08 JUN 2004 1500 GMT

Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 3 MOORED STATION NO. 1138

Launch (anchor over)

Date (day-mon-yr) 09-06-2004 Time 03:20 UTC

Latitude (N/S, deg-min) 35° 32.7035 N Longitude (E/W, deg-min) 146° 25.2839

Deployed by Nelson Hogg; Willie Ostrom Recorder/Observer Stephanie Waterman

Ship and Cruise No. R/V Thompson 168-2 Intended Duration 1 year

Depth Recorder Reading 5890 m Correction Source Echo Sounding

Depth Correction 37 m Correction Tables

Corrected Water Depth 5927 m Magnetic Variation (E/W) 6° W

Argos Platform ID No. 23668 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position

Lat (N/S) 35° 32.8362' N Long. (E/W) 146° 25.6193' E

Acoustic Release Model 8242 XS

Release No. SN 26356: 343251 Tested to 3000 m
SN 26358: 343303

Receiver No. _____ Release Command _____

Enable SN 26356: Ch.A-341701 Ch.B-341722 SN 26356: 341747
SN 26358: Ch.A-355044 Ch.B-355067 Disable SN 26358: 355116
355067

Interrogate Freq. Ch.A-11 kHz; Ch.B-9 kHz Reply Freq. Ch.A-12 kHz; Ch.B-11 kHz

Recovery (release fired)

Date (day-mon-yr) _____ Time _____ UTC

Latitude (N/S, deg-min) _____ Longitude (E/W, deg-min) _____

Recovered by _____ Recorder/Observer _____

Ship and Cruise No. _____ Actual duration _____ days

Distance from actual waterline to buoy deck _____ m

Moored Station Number 1138

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Syntactic Spherc	SN-015	08-06-04 23:03	buoyancy of foam: 2585 LB strobe light: SN 1296 Flashrate 3s				
2		ADCP	SN 1594	23:03					
3		ARGOS	Platform ID: 23668	23:03	magnet removed: 08-06-04 22:50				
4		3/4" Prof chain		23:03					
5		3T Swivel		23:03					
6		Profiler Stop		23:03					
7		PROFILER	117	23:33					
8	1225	1/4" Jacketed Wire Rope		23:03					
9		Profiler Stop		23:59					
10		3T Swivel		23:59					
11	10	1/4" Jacketed Wire Rope		23:59					
12		6 17" Glass Floats		09-06-04 00:02	on 3/8 Trawlax Chain				
13		VACM	V-0204	00:06	foam blocks removed: 09-06-04 00:03				
14	25	1/4" Jacketed Wire Rope		00:06					
15	430	1/4" Jacketed Wire Rope		00:08					
16	25	1/4" Jacketed Wire Rope		00:21					
17		6 17" Glass Floats		00:25	on 3/8 Trawlax chain				
18	10	1/4" Jacketed Wire Rope		00:25					
19		Aanderra Current Metr	SN 366	00:27	6 channel model w/tilt and backscatter				
20	25	1/4" Jacketed Wire Rope		00:27					
21	500	1/4" Jacketed Wire Rope		00:29					
22	500	1/4" Jacketed Wire Rope		00:41					

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	424	1/4" Jacketed Wire Rope		00:54					
24	25	1/4" Jacketed Wire Rope		01:05					
25		8 17" Glass Floats		01:09	-on 3/8 Trawllex Chain				
26	10	1/4" Jacketed Wire Rope		01:12					
27		Anderreg Wire Rope	SN 149	01:12	-4 channel model (no tilt or backscatter)				
28	25	1/4" Jacketed Wire Rope		01:12					
29	500	1/4" Jacketed Wire Rope		01:13					
30	500	1/4" Jacketed Wire Rope		01:27					
31	415	1/4" Jacketed Wire Rope		01:42					
32	25	1/4" Jacketed Wire Rope		01:55					
33		16 17" Glass Floats		01:59	-on 3/8 Trawllex chain				
34	10	1/4" Jacketed Wire Rope		02:05					
35		Anderreg Current Meter	SN 147	02:05	-4 channel model (no tilt or backscatter)				
36	3	3/8" Trawllex Chain		02:05					
37		Dual Acoustic Releases	SN 26356 SN 26358	02:11	3/4" shackles used on top 1/8" shackle used on bottom				
38	5	3/8" Trawllex Chain		02:11					
39	500	1/4" Jacketed Wire Rope		02:11	shots of lengths: 200m, 100m, 50m, 25m, 15m				
40	370 360	Adjustable Shot 1/4" Jacketed Wire Rope		02:55	↓ 10m, 10m,				
41	20	3/4" Columbia Plaited		03:13					
42	5	1/4" Jacketed Wire Rope		03:14					
43	5	1/2" Trawllex Chain		03:20					
44		4500 LB (wet) anchor w/ Danforth		03:20	5/8" shackle used				
45									

Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 4 MOORED STATION NO. 1139

Launch (anchor over)

Date (day-mon-yr) 10-06-2004 Time 09:33 UTC
Latitude (N/S, deg-min) 34°47.105 N Longitude (E/W, deg-min) 145°54.4778
Deployed by Nelson Hogg, Willie Ostrom Recorder/Observer Stephanie Waterman
Ship and Cruise No. R/V Thompson 168-2 Intended Duration 1 year
Depth Recorder Reading 5895
5914 m Correction Source Echo Sounding
Depth Correction 49
5914 50 m Correction Tables (Table 52)
Corrected Water Depth 5944
5964 m Magnetic Variation (E/W) 5.5° W
Argos Platform ID No. 5662 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position

Lat (N/S) 34° 46.8583' N Long. (E/W) 145° 55.1504' E

Acoustic Release Model 8242 XS

Release No. SN 26338: 342600
SN 26355: 343234 Tested to 3000 m

Receiver No. _____ Release Command _____
SN 26338: Ch. A: 337510; Ch. B: 337533 SN 26338: 337556
Enable SN 26355: Ch. A: 341615; Ch. B: 341636 Disable SN 26355: 341653

Interrogate Freq. Ch. A: 11 kHz; Ch. B: 9 kHz Reply Freq. Ch. A: 12 kHz; Ch. B: 11 kHz

Recovery (release fired)

Date (day-mon-yr) _____ Time _____ UTC
Latitude (N/S, deg-min) _____ Longitude (E/W, deg-min) _____
Recovered by _____ Recorder/Observer _____
Ship and Cruise No. _____ Actual duration _____ days
Distance from actual waterline to buoy deck _____ m

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Synthetic Sphere	SN - 014	01:55	buoyancy of foam: 3605 LB strobe light: SN: 1813 Flashrate 45			10:06:2004 23:41	
2		ADCP	SN 1622	01:55				23:41	
3		ARGOS	Platform ID 5662	01:55	magnet removed: 01:50			23:41	
4		3/4" Proof Chain		01:55				23:41	
5		3T Swivel		01:52				11-06-2004 00:00	
6		VACM Profiler Stop	0141-7	01:52	unblocked @ 01:49			00:00	blocked @ 00:04
7		PROFILER	107	02:27				00:00	
8	1225	1/4" Jacketed Wire Rope		01:55				00:05	
9		Profiler Stop		02:45				00:42	
10		3T Swivel		02:48				00:42	
11	10	1/4" Jacketed Wire Rope		02:48				00:43	
12		6 17" Glass Floats		02:51	-on 3/8 Trawllex Chain			00:46	
13		VACM	V-118	02:55	-foam blocks removed: 02:53			00:48	blocked @ 00:50
14	25	1/4" Jacketed Wire Rope		02:55				00:51	
15	430	1/4" Jacketed Wire Rope		02:57				00:52	01:09 - bitter end retrieved appears to be straight - port for slowing the water sensor
16	25	1/4" Jacketed Wire Rope		03:08					# 4009 - 53, length of recover shot: ~ 424m.
17		6 17" Glass Floats		03:14	-on 3/8 Trawllex Chain				
18	10	1/4" Jacketed Wire Rope		03:14					
19		Aanderra Current Meter	SN 371	03:18	6 channel model w/ tilt and backscatter				
20	25	1/4" Jacketed Wire Rope		03:18					
21	500	1/4" Jacketed Wire Rope		03:21					
22	500	1/4" Jacketed Wire Rope		03:38					

Item No.	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	1/4" Jacketed Wire Rope		03:56					
24	1/4" Jacketed Wire Rope		04:12					
25	8 17" Glass Floats		04:15	on 3/8 Trawllex Chain				
26	1/4" Jacketed Wire Rope		04:15					
27	Aanderra Current Meter	SN 153	04:18	4 channel model (no tilt or backscatter)				
28	1/4" Jacketed Wire Rope		04:18					
29	1/4" Jacketed Wire Rope		04:19					
30	1/4" Jacketed Wire Rope		04:33					
31	1/4" Jacketed Wire Rope		04:48					
32	1/4" Jacketed Wire Rope		05:01					
33	16 17" Glass Floats		05:05	on 3/8 Trawllex Chain				
34	1/4" Jacketed Wire Rope		05:06					
35	Aanderra Current Meter	SN 161	05:10	4 channel model (no tilt or backscatter)				
36	3/8" Trawllex Chain		05:15					
37	Dual Acoustic Releases	SN 26338 SN 26355	05:15	3/4" shackle on top, 1/8" shackle on bottom				
38	3/8" Trawllex Chain		05:15	3/4"				
39	1/4" Jacketed Wire Rope		05:15					
40	Adjustable Shot 1/4" Jacketed Wire Rope		05:57	shots of 200 m; 200 m 10 m; 5 m				
41	3/4" Columbia Plaited		09:23					
42	1/4" Jacketed Wire Rope		09:25					
43	1/2" Trawllex Chain		09:33					
44	4500 LB (wst) anchor w/ Danforth		09:33	5/8" shackle				
45								

Moored Station Number 1139

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
91									
92									
93									
94									
95									
96									
97									
98									
99									

Date/Time

Comments

04-06-2004	04:00	RCM-11s (Bandera current Meters) turned on							
09-06-2004		Profiler set: scheduled startup: 10 JUN 2004 1500 GMT							
		Reference date and time: 11 JUN 2004: 2100 GMT							
10-06-2004		RCMs-11s to be deployed tested w/ volcanizing tape sealing							
		the pressure case seam - no further problems w/ leakage							
		data recording							
10-06-2004		as the sphere was dep launched - A frame gauge several large jerks (concerned about current meter underneath)							
10-06-2004	09:20	~ 3.5 hr tow after adjustable shot was deployed to allow ship to drift back to intended position (position was overshoot due to the strong current)							
10-06-2004		-final anchor drop 4900m W of the intended position							
		← sphere reported a drift at							
10-06-2004	23:41	- sphere recovered on deck							
10-06-2004	00:52	- bitter end of failed shot of wire retrieved on deck: clear cut failure perhaps cut by shackle under tension; failure occurred at ~ 424m of 430m shot #4009-5;							

Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 4(2) MOORED STATION NO. 1140

Launch (anchor over)

Date (day-mon-yr) 12-06-2004 Time 21:12 UTC

Latitude (N/S, deg-min) 35° 10.7125 N Longitude (E/W, deg-min) 146° 12.716 E

Deployed by Nelson Hogg, Willie Ostrom Recorder/Observer Stephanie Waterman

Ship and Cruise No. R/V Thompson 168-2 Intended Duration 1 year

Depth Recorder Reading 5901 m Correction Source Echo Sounding

Depth Correction 49 m Correction Tables (Table 5²)

Corrected Water Depth 5950 m Magnetic Variation (E/W) 5³/₄° W

Argos Platform ID No. 5662 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position

Lat (N/S) 35° 10.7195' Long. (E/W) 146° 12.6898'

Acoustic Release Model 8242 XS

Release No. SN 26467: 344041
SN 28038: 347661 Tested to 3000 m

Receiver No. Ch A Release Command

Enable SN 26467: 356242 Ch B: 356261
SN 28038: Ch A: 366377 Ch B: 366410 Disable SN 26467: 356310
SN 28038: 366433

Interrogate Freq. Ch A: 11 kHz; Ch B: 9 kHz Reply Freq. Ch A: 12 kHz; Ch B: 11 kHz

Recovery (release fired)

Date (day-mon-yr) _____ Time _____ UTC

Latitude (N/S, deg-min) _____ Longitude (E/W, deg-min) _____

Recovered by _____ Recorder/Observer _____

Ship and Cruise No. _____ Actual duration _____ days

Distance from actual waterline to buoy deck _____ m

Moored Station Number

1140

Item No.	Length (m)	Item	Inst. No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		6 1/4" Syntactic Sphere	SN-014	16:45	buoyancy of foam: 2605 lbs strobe light: SN: 1813 flashlight: 45				
2		ADCP	SN 1622	16:45					
3		ARGOS	Platform ID 5662	16:45	magnet removed at 14:40				
4		3/4" Proofchain		16:41					
5		3T Swivel		16:41					
6		VACM	V-0141P	16:41	- foam blocks removed: 1637 - added to original design to make sphere float upright				
7		Profiler Stop		16:41					
8		PROFILER	107	17:15					
9	1225	1/4" Jacketed Wire Rope		17:41	- shackles taped at bottom of VACM; top of 1225 m shot				
10		Profiler Stop		17:39	- before MP deployment: ship speed (thru H2O): 1.5 kts; payout speed: 1.5 kts				
11		3T Swivel		17:39	- for dump deployment: ship speed 15 kts; wire stopped; after MP deployment				
12	10	1/4" Jacketed Wire Rope		17:39	- on 9/8 - Trawl Chain ship speed 15 kts; 17:42 (7:18) - ship slowed to 1.5 kts at 17:42				
13		5 17" Glass Floats		17:45	- sub: vel / 1225 m wire spinning rapidly as deployed - high frequency wire? - ship turned to port 100 - heading 17:46; VACM banged against				
14		VACM	V-118	17:50	- foam blocks removed: streaming NE				
15	25	1/4" Jacketed Wire Rope		17:50	- the trawl on V-118				
16	430	1/4" Jacketed Wire Rope		17:53	- termination on (attachment V-118) 17:53 - fire hose + electrical tape 17:55 - ship speed 2 kts (TW) - payout speed: 1.5 kts - top termination (attachment w/ 430 m) wiped w/ fire hose + tape				
17	25	1/4" Jacketed Wire Rope		18:06					
18		5 17" Glass Floats		18:10	- on 3/8 Trawl Chain - 18:08 ship slowed to 1.5 kts				
19	10	1/4" Jacketed Wire Rope		18:11					
20		Rodent Ruler	SN 367	18:14	- 6 channel model w/ tilt and backscatter (instrument)				
21	25	1/4" Jacketed Wire Rope		18:14	- recovered from mooring J) - 18:15 ship speed increased to 2 kts				
22	500	1/4" Jacketed Wire Rops		18:16	- bottom termination of 500 m (attached to 500 m) taped and taped - 18:18 payout speed 1.5 kts - ship speed: 2 kts (thru H2O)				

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	500	1/4" Jacketed Wire Rope		18:28					
24	424	1/4" Jacketed Wire Rope		18:41	18:44 ship speed 1.8 kts (1.8 kt) payout speed 1.2 kts				
25	25	1/4" Jacketed Wire Rope		18:52	18:52 ship's heading altered (070°) for moving to stream front of ship ship speed slowed to 1.5 kts, wire stopped on 3/8 Trawllex Chain -decreased by 2 from original design				
26		6 17" Glass Floats		18:59					
27	10	1/4" Jacketed Wire Rope		18:59					
28		Randeraq Current Meter	SN 152	19:02	4 channel model (no tilt or backscatter)				
29	25	1/4" Jacketed Wire Rope		19:02	Pattern termination wrapped				
30	500	1/4" Jacketed Wire Rope		19:04	19:02 ship speed increased to 2 kts				
31	500	1/4" Jacketed Wire Rope		19:18	19:15 ship speed reduced to 1.5 kts payout speed 1 kt				
32	415	1/4" Jacketed Wire Rope		19:32	19:19 ship speed slowed to 1.2 kts - buoy visible from pilot house at 2450 True - 19:20 19:35 change of course from 090°T to 070°T to reduce wire - top termination wrapped and taped				
33	25	1/4" Jacketed Wire Rope		19:47	on 3/8 Trawllex Chain - increased by 4 from original design				
34		30 17" Glass Floats		19:52	on 3/8 Trawllex Chain - increased by 4 from original design				
35	10	1/4" Jacketed Wire Rope		19:54	19:57 ship's course				
36		Aanderaq Current Meter	SN 155	20:00	4 channel model (no tilt or backscatter)				
37	3	3/8" Trawllex Chain		20:05	taken from Danforth anchor lashing chain now to be used on Danforth				
38		Dual Proustic Releases	SN 26767 SN 28098	20:05	3/4" shackle on top 20:07 ship's course adjusted to 090°T, 20:12 ship's course altered to 095°T				
39	5	3/8" Trawllex Chain		20:05	20:14 ship's course altered to 095°T				
40	500	1/4" Jacketed Wire Rope		20:06	course altered to 095°T				
41	400	Adjustable Shot 1/4" Jacketed Wire Rope		20:47	20:22 wire stopped to wind adjustable shot - ship speed 1 kt 20:25 final course adjustment to 070°T				
42	20	3/4" Columbio Platted		21:09	016° payout resumed @ 20:54 @ 20:42 2nd sho + deployed @ 20:54 - new addition to original design				
43	5	1/4" Jacketed Wire Rope	SN 171 Glass Floats	21:08					
44	5	1/2" Trawllex Chain		21:12					
45		4500 LB (w/ft) anchor w/ Danforth		21:12	5/8" shackle Danforth attached w/ lashing				

chain (3/8" Trawllex Chain) used for 3 m shot
course adjusted to 070°T to straighten wire angle of shot
course adjusted to 070°T, ship speed 1 kt

Moored Station Number 1140

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
91									
92									
93									
94									
95									
96									
97									
98									
99									

Date/Time (GMT)

Comments

04-06-2004	0400	RCM-11s (Aanderra Current Meters) turned ON - see note 12-06-2004							
12-06-2004		RCM-11s recoiled by cleaning/regreasing o-ring and self-volcanizing tape to prevent potential leakage							
12-06-2004		Profiler Set: Reference date and time: 13 JUN 2004 0300 Reference date and time: 13 JUN 2004 1500							
12-06-2004		-original mooring design altered to redistribute buoyancy in attempts to slow anchor in its descent and prevent wire failure due to excessive tensile loads. -4 glass balls moved from strings higher up on the mooring to lower-most string) 5 m shot of 1/4" Jacketed wire rope below the Columbia plaited removed							
		-also deployment will be done w/ ship steaming downstream (w/ the current) as opposed to stemming the current upstream as in previous KESS 4 deployment)							
		potentially reduce initial loads on the wire when the anchor is dropped in addition to terminalizations between 25 m and longer shots of wire wrapped with five nose end taped w/ electrical tape to prevent longer shots of wire potentially being cut by the end							
12-06-2004	18:40	6 channel RCM-11 reset after its recovery from Mooring J: exact time on time unknown; approximately 0300 GMT 12-06-2004							
12-06-2004		-strong wind and current during deployment: 26-25 kts wind NW up to 5 kts current at times; high tension on wire during deployment esp. near the end; wind + current resulted in mooring line being set to stbd. behind the ship							

Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 5 MOORED STATION NO. 1141
~~1140~~

Launch (anchor over)

Date (day-mon-yr) 13-06-2004 Time 15:40 UTC
Latitude (N/S, deg-min) 34° 02.014 N Longitude (E/W, deg-min) 145° 31.100 E
Deployed by Nelson Hogg, Willie Ostrom Recorder/Observer Stephanie Waterman
Ship and Cruise No. R/V Thompson 168-2 Intended Duration 1 year
Depth Recorder Reading 5787 m Correction Source Echo Sounding
Depth Correction 58-44 m Correction Tables (Table 52)
Corrected Water Depth 5831 m Magnetic Variation (E/W) 5.5° W
Argos Platform ID No. 5661 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position - not available
- see note p. 8.

Lat (N/S) _____ Long. (E/W) _____

Acoustic Release Model 8242 XS SN 23844

Release No. 634750 Tested to 3000 m

Receiver No. _____ Release Command _____

Enable Ch. A: 657302 Ch. B: 657321 Disable 657344

Interrogate Freq. Ch. A: 11 kHz; Ch. B: 9 kHz Reply Freq. Ch. A: 12 kHz; Ch. B: 11 kHz

Recovery (release fired)

Date (day-mon-yr) _____ Time _____ UTC

Latitude (N/S, deg-min) _____ Longitude (E/W, deg-min) _____

Recovered by _____ Recorder/Observer _____

Ship and Cruise No. _____ Actual duration _____ days

Distance from actual waterline to buoy deck _____ m

Item No.	Length (m)	Item	Inst. No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Syntactic Sphere	SN 012	09:56	09:50 - ship speed 1/2 kt. drn 000 N + buoyancy of foam: 2545 LB strobe light SN 64 31 Flashlight 45				
2		ADCP	1619 see note p 8	09:56					
3		ARGOS	Platform ID 5661	09:56	- magnet removed ~ 0900				
4		3/4" Proof chain		09:50					
5		3T Swivel		09:50					
6		VACM	V-0109	09:50	- foam blocks removed: 09:40 addition to original design for mdt's sphere float upright 0959: speed thru H2O: 1.5 kts over ground 1.2 kts				
7		Profiler Stop		09:50					
8		PROFILER	109	10:22	10:04: payout speed: 1 kt 10:06: ship speed 1.75 kts (thru H2O) payout speed 1.2 kts				
9	1225	1/4" Jacketed Wire Rope		09:50	10:22: 3.4 soft bumps of MP on deck while deployed 10:23 ship speed 1.75 kts (thru H2O) 1.5 kts over ground				
10		Profiler Stop		10:51					
11		3T Swivel		10:51					
12	10	1/4" Jacketed Wire Rope		10:51					
13		5 17" Glass Flats on Trawlex chain		10:53	# of floats reduced by J from original design				
14		VACM	V-107	10:56	- foam blocks removed: 10:55				
15	25	1/4" Jacketed Wire Rope		10:56	- lower termination (w/ 430m) wrapped w/ fire hose and taped				
16	430	1/4" Jacketed Wire Rope		11:18	- wrong shot of wire used (500m for 430m) - 11:00 ship speed slowed to 1 kt				
17	25	1/4" Jacketed Wire Rope	top termin on wire taped and topped	11:32	1 kt white 500m shot removed and 430m shot wound payout resumed 11:18. 11:31 2.5m wire removed				
18		5 17" Glass Flats on 3/8" Trawlex chain		11:38	# of floats reduced by J from original design				
19	10	1/4" Jacketed Wire Rope		11:39	11:31: ship speed slowed to 1 kt thru H2O				
20		Randerr's Current Meter	SN 339	11:43	echannel model w/ tilt and backscatter				
21	25	1/4" Jacketed Wire Rope		11:43	- both om termination connection w/ socm shot wrapped and topped				
22	500	1/4" Jacketed Wire Rope		11:45					

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	500	1/4" Jacketed Wire Rope		11:58	12:00 ship speed 1.75 kts payload speed 1.4 kts				
24	424	1/4" Jacketed Wire Rope		12:11					
25	25	1/4" Jacketed Wire Rope		12:27					
26		6 17" Glass Fibers on 3/8" Trawl chain		12:31	decreased by 2 from original design				
27	10	1/4" Jacketed Wire Rope		12:31					
28		Randero Current Meter	SN 158	12:35	4 channel model (no filter backscatter)				
29	25	1/4" Jacketed Wire Rope		12:37	lower termination latched to 500m shot wrapped and lapped				
30	500	1/4" Jacketed Wire Rope		12:51	13:08 500 to 415 m shot terminations				
31	500	1/4" Jacketed Wire Rope		13:26	13:08 500 to 415 m shot terminations shackled for				
32	415	1/4" Jacketed Wire Rope		13:43	2 shots of 500m have been				
33	25	1/4" Jacketed top termination Wire Rope		13:57	deployed - 501st 500m shot returned to check and 500m shot pay out resumed 13:27				
34		2017" Glass Fibers on 3/8" Trawl chain		14:01	* increased by 4 from original design				
35	10	1/4" Jacketed Wire Rope		14:06	14:05 - ship's course altered to 005, heading paid out 245 or channel model w/ no tilt or backscatter				
36	1.5	Randero Current Meter SN 157		14:14					
37		3/8" Trawl chain		14:18	1.5 m of 1/2" Trawl chain used above the release instead of 3m 3/8" chain due to shortage				
38		SINGLE Acoustic Release	SN 23844	14:18	3/8" Shackles on bottom				
39	5	3/8" Trawl chain		14:18					
40	500	1/4" Jacketed Wire Rope		14:18	14:19 ship speed reduced to 1kt. Wind increasing.				
41	275	Adjustable Shot 1/4" Jacketed Wire Rope		14:53	200m, 50m, 25m shot 14:53 ship speed increased to 1.5 kts from 0.5 kts.				
42		5 17" Glass Fibers on 3/8" Trawl chain			removed from revised design (design after mooring failure). not enough balls available.				
43	20	3/4" Columbia Plaited		15:33	15:04 tow commenced for 1/2 nm to drop location, ship speed 1.5 kts.				
44	5	1/2" Trawl chain		15:40					
45		4500 LB (w/c) anchor w/ Danforth		15:40	5/8" shackles lashing chain to secure Danforth				



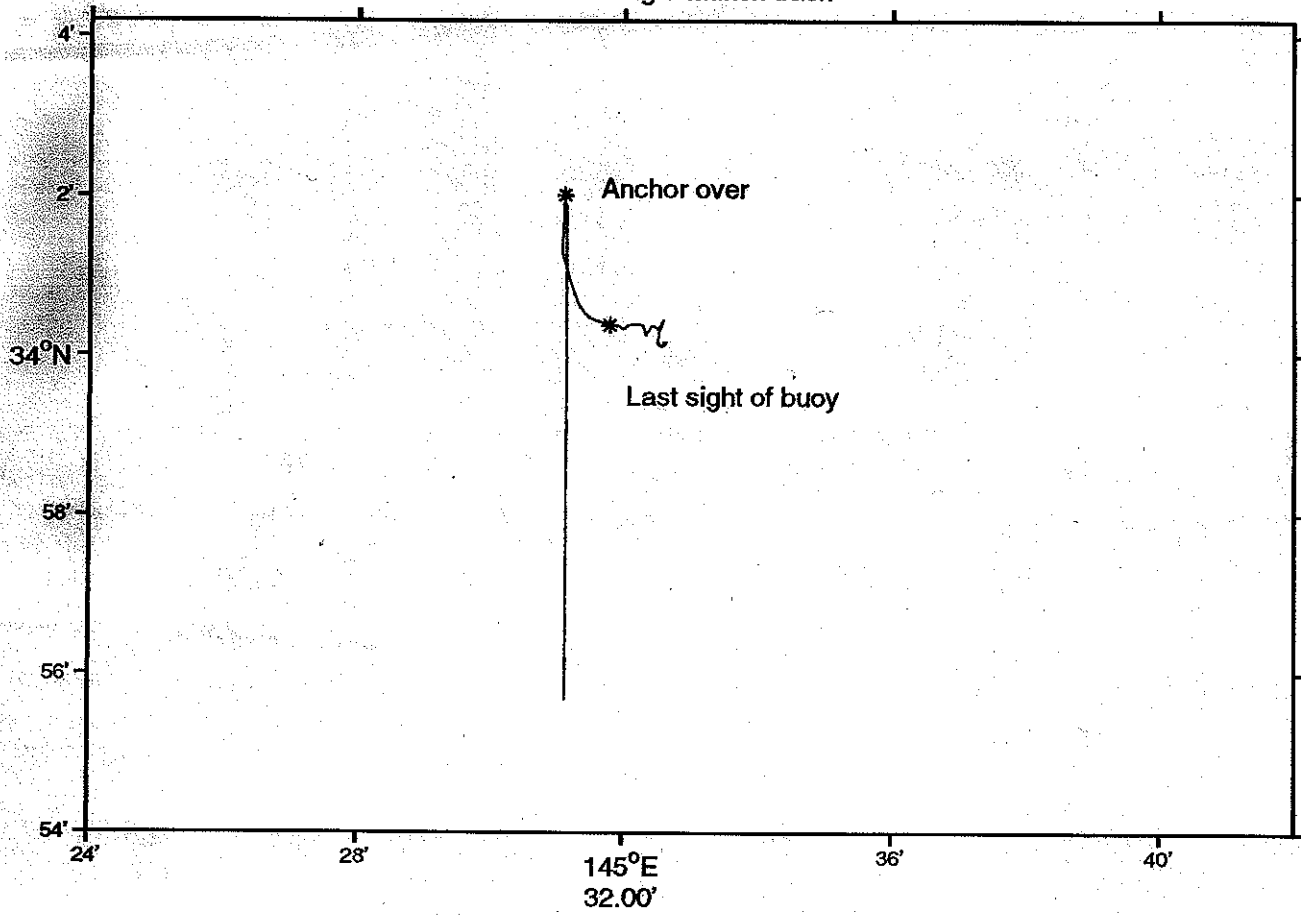
Moored Station Number 1141

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
91									
92									
93									
94									
95									
96									
97									
98									
99									

Date/Time (GMT) Comments

04-06-2004 04:00	RCM IIs (Aanderra Current Meters) turned on									
13-06-2004 09:00	RCM IIs rescaled by cleaning/regreasing the o-ring and scaling w/self-volcanizing tops to prevent potential leakage									
13-06-2004 09:00	Puffler set: scheduled start-up: JUN 14 2004 0600GMT reference date and time: JUN 14 2004 0600 GMT									
12-06-2004	- original mooring design altered after failure of moorings KESS 1, KESS 4(2) & glass balls moved from strings higher up in the mooring and added to lower most string; additional 5 moor glass balls added above the columbio played in KESS 4(2) NOT added this time due to a shortage of glass balls; - terminations of 25 m shots with longer shots wrapped and taped as in KESS 4(2) - single acoustic release used in this deployment to conserve remaining acoustic releases (currently 4 abandoned on the bottom) and to reduce the weight of the anchor end of the mooring									
13-06-2004 17:00	- difficulty talking to the single acoustic release believed because of the acoustic properties of the H ₂ O release enabled and then disabled but survey of anchor position not possible									
14-06-2004 10:00	- SN of ADCP unknown; inferred from ADCPs already deployed and Gint's record of the SNs of the loaned Japanese ADCPs that SN = 1619									

Mooring 5 launch track



Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 6 MOORED STATION NO. 1142

Launch (anchor over)

Date (day-mon-yr) 14-06-2004 Time 08:05 UTC

Latitude (N/S, deg-min) 33° 14.8187' N Longitude (E/W, deg-min) 145° 01.8984' E

Deployed by Nelson Hogg, Willie Ostrom Recorder/Observer Stephanie Waterman

Ship and Cruise No. R/V Thompson 168-2 Intended Duration 1 year

Depth Recorder Reading 5730 m Correction Source Echo Sounding

Depth Correction 42 m Correction Tables (Table 52)

Corrected Water Depth 5772 m Magnetic Variation (E/W) 5.25° W

Argos Platform ID No. 5628 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position

Lat (N/S) 33° 14.4913' N Long. (E/W) 145° 2.01614' E

Acoustic Release Model 8242 XS

Release No. SN 28086: 347775 Tested to 3000 m
SN 28089: 350040

Receiver No. _____ Release Command _____

Enable SN 28086: Ch.A: 366772; Ch.B: 367007 SN 28086: 367024
SN 28089: Ch.A: 367271; Ch.B: 367300 Disable SN 28089: 367323

Interrogate Freq. Ch.A: 11 kHz; Ch.B 9 kHz Reply Freq. Ch.A: 12 kHz; Ch.B: 11 kHz

Recovery (release fired)

Date (day-mon-yr) _____ Time _____ UTC

Latitude (N/S, deg-min) _____ Longitude (E/W, deg-min) _____

Recovered by _____ Recorder/Observer _____

Ship and Cruise No. _____ Actual duration _____ days

Distance from actual waterline to buoy deck _____ m

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Syntactic Sphere	SN-010	04:03	buoyancy of foam: 2251 LB strobe light: SN 20; Flashrate 3s				
2		ADCP	SN 5091	04:03	magnet removed @ 0300				
3		ARGOS	Platform ID 5628	04:03					
4		3/4" Proof Chain		04:03	4:09: ship speed 1.5 Kts (flw H&O) course: 001.6 T				
5		3T Swivel		04:03	4:10: ship speed increased to 1.75 kts; payout speed 1.25 kts				
6		Profiler Stop		04:03					
7		PROFILER	118	04:34	04:30: payout stopped to deploy MP; 04:34 payout resumed				
8	1225	1/4" Jacketed Wire Rope		04:03					
9		Profiler Stop		04:58					
10		3T Swivel		04:58					
11	10	1/4" Jacketed Wire Rope		04:58					
12		5 17" Glass Floats on 3/8" Trawllex Chain		05:01	decreased from 6 in original design				
13		VACM	118 V-8178	05:05	foam blocks removed @ 05:02 - several hard bangs while being deployed - bottom termination wrapped and taped				
14	25	1/4" Jacketed Wire Rope		05:05					
15	430	1/4" Jacketed Wire Rope		05:09					
16	25	1/4" Jacketed Wire Rope		05:23	- top termination taped/ wrapped				
17		5 17" Glass Floats on 3/8" Trawllex Chain		05:25	decreased from 6 in original design				
18	10	1/4" Jacketed Wire Rope		05:26					
19	→	Aanderra current meter	SN 343	05:31	6 channel model w/ tilt and backscatter				
20	25	1/4" Jacketed Wire Rope		05:31	05:32: ship course altered to 035.8 T; ship speed 1.75 kts				
21	500	1/4" Jacketed Wire Rope		05:33	- bottom termination of 25m shot - wrapped and taped				
22	500	1/4" Jacketed Wire Rope		05:47					

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	424	1/4" Jacketed Wire Rope		06:00					
24	25	1/4" Jacketed Wire Rope		06:13	- upper termination wrapped and taped				
25		6 17" Glass Floats on 3/8" Trawllex chain		06:16	- decreased from 8 in original design				
26	10	1/4" Jacketed Wire Rope		06:16					
27		Aanderra Current Meter	SN 162	06:19	:4 channel model (no tilt or backscatter)				
28	25	1/4" Jacketed Wire Rope		06:19	- bottom termination wrapped and taped				
29	500	1/4" Jacketed Wire Rope		06:21					
30	500	1/4" Jacketed Wire Rope		06:35	06:38 - ship speed slowed to 1.3 kts				
31	415	1/4" Jacketed Wire Rope		06:50	06:53 - ship's course altered to 0050T, 06:57 ship's speed slowed to 1kt				
32	25	1/4" Jacketed Wire Rope		07:03	- top termination wrapped and taped				
33		19 17" Glass Floats on 3/8 Trawllex chain		07:07	- increased from 16 in previous design, less than in Kess (12) and Kess 5, due to ball shortage				
34	10	1/4" Jacketed Wire Rope		07:09	07:05 ship's course altered to 000 to straighten wire; speed 1kt				
35		Aanderra Current Meter	SN 150	07:14	:4 channel model (no tilt or backscatter)				
36	1.5	1/2" Trawllex Chain		07:15	- length of chain reduced from 3m 3/8" chain to 1.5m due to shortage				
37		Dual Acoustic Releases	SN 28086 SN 28089	07:23					
38	5	3/8" Trawllex Chain		07:23	- attached w/ 3/4" shackles pinned not welded, top and bottom				
39	500	1/4" Jacketed Wire Rope		07:24	1.5m 1/2" Trawllex chain above ring of releases				
40	250	Adjustable Shot 1/4" Jacketed Wire Rope		07:40	- 2.0m shot; 5m shot; 2.5m shot; 5m shot				
41	20	3/4" Columbia Plaited		07:56	- buoy spotted at 1725T from bridge				
42	5	1/2" Trawllex Chain		08:05	07:51 - course altered 10° to 000 to straighten wire; course 3450T				
43		4500 LB (wet) anchor w/ Danforth		08:05	- 5/8" shackle, lashing chain used to attach sh Danforth				
44									
45									

Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 7 MOORED STATION NO. 1143

Launch (anchor over)

Date 15-06-2004 Time 07:47 UTC
day-mon-year

Latitude 32° 23.9809 N or S Longitude 144° 33.7545 E or W
deg-min deg-min

Position Source: GPS LORAN, SAT. NAV., OTHER GPS

Deployed by: Nelson Hogg; Willie Ostrom Recorder/Observer: Stephanie Waterman

Ship and Cruise No R/V Thompson 168-2 Intended duration: 365 days

Depth Recorder Reading 5725 m Correction Source: Echo Sounding

Depth Correction 46 m Correction Tables (Table 53)

Corrected Water Depth 5771 m Magnetic Variation: 5.1° E or W

^{Surveyed} Anchor Position: Lat. 33° 23.982' N or S Long. 144° 33.2007' E or W

Argos Platform ID No. 10432 Additional Argos Info may be found on pages 2 and 3.

Acoustic Release Information Model: 8202 BACS SN: 17961

Release No. 623341 Tested to 3000 meters

Enable Command: 601201 Disable Command: 601163
Receiver No. 601201 Release Command 601163

Interrogate Freq. Ch. A: 11 kHz Reply Freq. Ch. A: 12 kHz
NB. Channel B Transponder Disabled

Recovery (release fired)

Date _____ Time _____ UTC
day-mon-year

Latitude _____ N or S Longitude _____ E or W
deg-min deg-min

Position Source: GPS, LORAN, SAT. NAV., OTHER _____

Recovered by: _____ Recorder/Observer: _____

Ship and Cruise No. _____ Actual duration: _____ days

Distance from actual waterline to buoy deck _____ meters

MOORED STATION NUMBER

1143

Item No.	Lgth [m]	Item	Inst No.	Time Over	Notes	Data No.	Calc Dpth	Time Back	Notes
1		64" Syntactic Sphere	SN-011	03:25	buoyancy of foam 2551 LB				
2		ARGOS	Platform ID: 10432	03:25	magnet removed 03:22				
3		strobe light	SN 1032	03:25	Flashrate: 2 s				
4	25	1/4" Jacketed Wire Rope		03:25	-see Comment ① below				
5	255	1/4" Jacketed Wire Rope		03:37					
6		ADCP	SN 461	03:37	See Comment ② below				
7		BT Swivel		03:25	-placed below the 5m chain above the 25m shot of wire				
8		Profiler Stop		03:37					
9		PROFILER	116	04:03	Scheduled Startup/Reference date/time see comments p. 10				
10	1225	1/4" Jacketed Wire Rope		03:37					
11		Profiler Stop		04:31					
12		BT Swivel		04:34					
13	10	1/4" Jacketed Wire Rope		04:34					
14		5 17" Glass Floats on 3/8" Trawllex chain		04:37	-decreased by 1 from original mooring design				
15		VACM	V-325	04:40	-foam blocks removed: 04:37				
16	10	1/4" Jacketed Wire Rope		04:40	-See comment ③ below				
17	430	1/4" Jacketed Wire Rope		04:42	-terminated on w/ 10m top + bottom wrapped and taped				
18	10	1/4" Jacketed Wire Rope		04:58					
19		5 17" Glass Floats on 3/8" Trawllex chain		05:01	-decreased by 1 from original mooring design				
20	10	1/4" Jacketed Wire Rope		05:06					

3m
of
chain
me-
ter:
1:25

Date/Time (GMT)

Comments

- ① JUN 15 2004 0056 30m of wire added below sphere to original design as ADCP used for this deployment hangs below the sphere and requires distance between the instrument and the sphere to avoid sphere interference
- ② JUN 15 2004 0100 -ADCP from NOAA: RD ADCP SN 461; hangs independently from sphere in a cage 30m below sphere; Specs 150 kHz; heads at 30°; mounted w/ temperature and pressure sensor TP 11156 w/ sample rate: 10 min to allow verification of head depth after recovery; internal and external battery pack: new battery 3-8-04
- ③ JUN 15 2004 0110 -25m shots above and below 430m shot in original mooring design replaced by 10m shots to compensate for 30m extra wire shot below sphere (above ADCP)

MOORED STATION NUMBER

1143

Item No.	Lgth [m]	Item	Inst No.	Time Over	Notes	Data No.	Calc Dpth	Time Back	Notes
21		Aanderra Current Meter	SN 369	05:06	-6 channel model w/ tilt and backscatter				
22	25	1/4" Jacketed Wire Rope		05:06	-bottom termination taped and wrapped				
23	100	1/4" Jacketed Wire Rope		05:08					
24	1225	1/4" Jacketed Wire Rope		05:11	See Comment ① below				
25	100	1/4" Jacketed Wire Rope		05:51					
26	25	1/4" Jacketed Wire Rope		05:55	-top termination wrapped and taped				
27		6 17" Glass Floats on 3/8" Trawlax Chain		05:58	decreased by 2 from original design				
28	10	1/4" Jacketed Wire Rope		05:58					
29		Nortek Current Meter	SN/Head # A6L-1207	06:00	See Comment ② below; comment				
30	25	1/4" Jacketed Wire Rope		06:00	④ p. 10, 3/8" shackle top + bottom				
31	500	1/4" Jacketed Wire Rope		06:03	-bottom termination wrapped and taped ④ p. 15 - small nic in wire jacket				
32	500	1/4" Jacketed Wire Rope		06:16					
33	415	1/4" Jacketed Wire Rope		06:31					
34	25	1/4" Jacketed Wire Rope		06:45	-top termination wrapped and taped				
35		30 17" Glass Floats on 3/8" Trawlax chain		06:49	increased by 4 from original mooring design				
36	10	1/4" Jacketed Wire Rope		06:53					
37		Aanderra current Meter	SN 345	06:56	See Comment ③ below				
38	5	3/8" Trawlax Chain w/ 1/2" shackles		06:58	-modified from original design w/ wire availability				
39		SINGLE Acoustic Release	SN 17961	06:59	See Comment ④ on p. 6				
40	5	1/2" 3/8" Trawlax chain		06:59	-modified from original design w/ wire availability				

Date/Time	100m, 100m	Comments
① JUN 15 2004 0125		122.5 m shots recovered from failed mooring KESS 1 used in place of 500m, 500m, 424 m shots in original mooring design due to wire shortage; 1225 m shot used with 2 shots of 100m for a total length of 1425m
② JUN 15 2004 0130		-Nortek current meter on board for testing purposes replaces Aanderra current meter in original design due to Aanderra current meter shortage (due to the failure of moorings 1, 4(2)). Specs of current meter: Model: Nortek Aquadopp 6000m Long Symmetric Current Meter; SN/Head # A6L-1207; Head ID: Hardware ID AQD 1395; Frequency: 2 MHz; Firmware Ver. 1.
③ JUN 15 2004 0140		-RCM II SN 345 used is test Aanderra current meter used in 3 tests prior to this deployment; Problems with leakage in the first 2 of 3 tests; DSU reset and instrument switched on at 0000 GMT JUN 15 2004; 6 channel model w/ tilt and backscatter

MOORED STATION NUMBER

1143

Item No.	Lgth [m]	Item	Inst No.	Time Over	Notes	Data No.	Calc Dpth	Time Back	Notes
41	500	1/4" Jacketed Wire Rope		07:01					
42	225	Adjustable Shot 1/4" Jacketed Wire Rope		07:16	shots of 100m, 50m, 25m, 50m				
43		2 17" Glass Floats on 3/8" Trawlax Chain		07:40	-addition to original mooring design				
44	20	3/4" Columbia Plaited		07:40	-attached w/ 3/4" shackles				
45	5	1/2" Trawlax chain		07:47	as 3/8" shackles have all been used				
46		4500 LB (wet) anchor w/ Danforth		07:47	3/8" shackle; lashing chain used to attach Danforth				
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									
57									
58									
59									
60									

Date/Time	Comments
④ JUN 15 2004 0145	-single large (Model B202 BACS) Acoustic Release used in place of a dual acoustic release as in Mooring design due to shortage of acoustic releases; Note: ch. B transponder disabled

MOORED STATION NUMBER

1143

Date/Time (GMT)	Comments
① 04 JUN 2004 0400 15	top most RCM II _s (Aanderra Current Meter) SN 369 (Item 21) turned on
② 04 JUN 2004 0000	bottom RCM II (Aanderra Current Meter) SN 345 (Item 37) turned on
③ 15 JUN 2004 0000	2 Aanderra Current Meters rescaled by cleaning and regreasing the o-rings; sealing seam w/ self-vulcanizing rubber tape
④ 14 JUN 2004 11:49:24	Nortek current meter turned on; note log file/instrument configuration info recorded by Nelson Hogg; dep ID: KESS71
⑤ 15 JUN 2004	Profiler set: Scheduled startup: (Profile ϕ): 15 JUN 2004 1500; Reference date and time (Profile 1): 16 JUN 2004 0300;
⑥ 15 JUN 2004 0000	ADCP measures surface current of 1 kt W in the region of deployment
⑦ 15 JUN 2004	Mooring design altered by Steve Jayne both to redistribute buoyancy to prevent mooring failure (as was done for moorings 4(2), 5 and 6) and due to due to shortage of equipment: changes are: ① ADCP mounted 30m below sphere and attached w/ 30m of ^{1/4" jacketed} wire rope; ② 2 uppermost strings of glass balls reduced from 6 floats to 5 floats each; 3rd string of glass balls reduced from 8 floats to 6 floats; lowermost string increased from 16 floats to 20; and extra string of glass floats added above the 20m 3/4" Columbia plaited ③ 500m, 500m, 424 m wire shots between 2000 m and 3500 m depth replaced with shots of 100m, 1225m, 100m with the 1225 m shot that recovered from failed mooring KESS1 due to wire shortage ④ 2 25 m shots above and below 430m shot between 1500 m and 2000m depth replaced by 2 10 m shots to compensate for the additional 30m of wire added between the sphere and the ADCP

MOORED STATION NUMBER

1143

Date/Time	Comments
15 JUN 03:24	-ship speed 0.5 kts -current: 1 kt. W
03:37	-after ADCP deployment: wire recovered until ADCP came to the surface; payout resumed at 03:40
03:40	-ship speed increased to 1 kt
03:46	-ship speed increased to 1.5 kts; course 084°T; course made good 090°T; payout speed: 0.5 kt
03:49	-ship speed: 1.5 kt -payout speed: 1.5 kt
04:00	-payout halted to mount MP
04:03	-payout resumed; payout speed 1.2 kts.
04:44	-ship speed: 1.5 kts; distance to go: 7000m
05:12	-ship speed 1.5 kts; payout speed 1.1-1.25 kts
06:34	-ship speed: 1.5 kts (in H ₂ O); 1.0 kts. (overground); 4225 m to go to intended drop point
	-sphere spotted visually at 171°T - slightly to port of dead astern from the bridge
07:24	-payout halted to wind 50m. of additional adjustable shot
07:32	-payout resumed
07:40	-ship's course altered from 084°T to 090°T to straighten wire; speed reduced to 1 kt

5 m to site; E1 0900

Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 1 - 2005 MOORED STATION NO. 1157

Launch (anchor over)

Date (day-mon-yr) 06 - JUNE - 2005 Time 1646 UTC

Latitude (N/S, deg-min) 37° 04.2195 Longitude (E/W, deg-min) 147° 22.7482

Deployed by WORRILOW Recorder/Observer M. Strick

Ship and Cruise No. REVELLE ZHNGOZRR Intended Duration 1 YR

Depth Recorder Reading _____ m Correction Source _____

Depth Correction _____ m

Corrected Water Depth 5643 m Magnetic Variation (E/W) _____

Argos Platform ID No. 5662 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position

Lat (N/S) _____ Long. (E/W) _____

Acoustic Release Model 8242 X5

Release No. 28038 / 26467 Tested to ~~300~~ TA / TA m

Receiver No. _____ Release Command 347661 / 344041

Enable 366377 / 356242 Disable 366433 / 356310

Interrogate Freq. 11 Reply Freq. 12

Recovery (release fired)

Date (day-mon-yr) 19 MAY 05 Time 2058 UTC

Latitude (N/S, deg-min) 37 04.57 N Longitude (E/W, deg-min) 147 22.86 E

Recovered by WORRILOW Recorder/Observer S Waterman

Ship and Cruise No. Melville MGLN03 Actual duration 347 days

Distance from actual waterline to buoy deck _____ m

Moored Station Number KESS 1 - 2005 - 2006

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		6111 Spine Spine	SV 14	11:48	Stroke SV 3137			22:32	2605 lbs buoyancy 2 broken balls
2		ADC P	SV 5091	11:48				22:32	
3		ARGOS	PT 5662	11:48	Magnet OFF			22:32	
4	5	3/4" Chain		11:48				22:32	
5		3T Swivel		11:48				22:32	Recovery: MP 21
6		Profile Stop		11:48				22:32	bottom end cap off and hanging; connections exposed
7		Profile	117	12:33				23:51	
8	125	1/4" W.R.	4143-2	13:14				22:48	
9		Profile Stop		13:14				23:51	
10		3T Swivel		13:19				23:51	
11	10	1/4" W.R.	4143-83	13:22				23:58	
12		6171 Glass floats		13:22				23:58	
13		1/4" W.R.							
14	480	1/4" W.R.	4143-33	13:42				0004	
15	25	1/4" W.R.							on recovery:
16		6171 Glass		13:44				0024	wire leading to 16 glass balls snagged on
17	10	1/8" W.R.	4143-45	13:44				0082	top glass ball in this chain
18		Academich	SD 309	13:51				0086	wire angle in vertical high tension
19	500	1/4" W.R.	4143-18	14:12				0044	
20	500	1/4" W.R.	4143-26	14:13	ONS SIDE 4143-26 ON SW SIDE 4143-27			0058	
21	474	1/4" W.R.	4143-44	14:54				0111	
22	8	17" Glass floats		14:54				0125	on recovery: again wire leading to 16 glass balls snagged on glass balls in this chain

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	40	1/4" WR	DELETED	room	measure				
24	500	1/4" WR	4143.27	15:12				0135	snag of wire above de-fouled
25	500	1/4" WR	4143.23	15:32				0148	
26	465	1/4" WR	4143.46	15:56				0200	
27		1/2" Glass		15:56				0212	3 imploded glass balls on this chain noted on recovery
28	10	1/4" WR	4143.32	16:04	4143.93			0216	
29		Bendera CA	50 348	16:05				0216	
30	3	3/8" chain		16:05				0218	
31		Back Release	50 28038 50 20407	16:08				—	
32	5	3/8" chain		16:08				—	
33	500	1/4" WR	4143.30	16:28				—	
34	100	1/4" WR	4143.106	16:39				—	
35	20	3/4" WR		16:42				—	
36	5M	FRANTEX CANN		16:46				—	
37		DOUBLE SMALL ANCHOR		16:46	W/DRAW FORTH - 3900 lbs.				
38									
39									
40									
41									
42									
43									
44									
45									

2
5
8

Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KEYS 2-05 MOORED STATION NO. 1156

Launch (anchor over)

Date (day-mon-yr) 5-JUNE-2005 Time 04:55 UTC

Latitude (N/S, deg-min) 36° 21.696 Longitude (E/W, deg-min) 146° 51.057

Deployed by Worrilow/Duan Recorder/Observer M. STRICK

Ship and Cruise No. RV Revelle ZHN607RR Intended Duration 1 yr

Depth Recorder Reading _____ m Correction Source _____

Depth Correction _____ m

Corrected Water Depth 5645 m Magnetic Variation (E/W) _____

Argos Platform ID No. 5627 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position

Lat (N/S) _____ Long. (E/W) _____

Acoustic Release Model 8242 XS

Release No. SN 28039:347710
SN 30288:253013 Tested to ~~30~~ turned around m

Receiver No. _____ Release Command _____

SN 28039:366475 (ChA) 366504 (ChB) SN 28039:366527
Enable SN 30288:256454 (ChA) - (ChB) Disable SN 30288:256477

SN 28039:11 kHz (ChA) 9 kHz (ChB) SN 28039:12 kHz (ChA) 11 kHz (ChB)
Interrogate Freq. SN 30288:11 kHz (ChA) - (ChB) Reply Freq. SN 30288:12 kHz (ChB) - (ChB)

Recovery (release fired)

Date (day-mon-yr) 20 MAY 06 Time 19 58 UTC

Latitude (N/S, deg-min) 36 21.60 Longitude (E/W, deg-min) 146 51.458

Recovered by S. Worrilow Recorder/Observer S. Waterman

Ship and Cruise No. Melville MGLN03 Actual duration 349 days

Distance from actual waterline to buoy deck _____ m

Moored Station Number KESS 2 - 2005 - 2006

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" Synthetic Sponges		JUNE 7, 2005 2340 2320	SEE NOTES RE: BAD tagline bailer.			2142	
2		Access & STRAP	5627	2340	magnate out 2332			2142	
3	5m	3/4" mooring chain		2340 2320				2142	
4	25m	1/4" WR	4483	2341				2210	
5	10m	1/4" WR	4143-100	2350				2216	
6	2m	ADCP (PMEL) IN CAGE	SN 461 TR 11156	2350	loaner from PMEL (KESS 7 during 2004)			2219	
7		3T Swivel		2350				2222	
8		Profiler Stop		2350				2324	
9		Profiler	119	JUNE 5, 2005 0029				2324	
10	1225	1/4" WR	4009-6	0055				2230	
11		Profiler Stop		0055				2324	
12		3T Swivel		0055				2324	
13	10m	1/4" WR	4143-122	0105				2332	
14	6	17" G-Balls on 3/8" chain		0105				2332	
15		VACM	163	0105	0103 SPONGES OUT 2340 SPONGES IN			2334	2340 SPONGES IN
16	415m	1/4" WR	4009-67	0135				2340	
17	25m	1/4" WR	4009-142	0135				2352	
18	6	17" G-Balls 3/8" chain		0140				2356	
19	10m	1/4" WR	4143-102	0140				0003	
20		Axanderack Current Meter	370	0140				0005	
21	500m	1/4" WR	4143-22	0200	2 layers in mooring			0009	
22	500m	1/4" WR	4143-24	0225				0022	

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	4.77	1/4" WR	4143-43	02:48	2005			0037	
24	8	17" Glass Ball 3/8" Chain		02:50				0053	
25	10m	1/4" WR	4143-88	02:52				0054	
26		Anderson Current Meter	154	02:55				0056	loop of wire from furter down snagged
27	500	1/4" WR	4143-17	03:15				0103	on glass ball chain wire + loop holed in together
28	500	1/4" WR	4143-25	03:35				0112	
29	465	1/4" WR	4143-49	04:00				0107	termination @ 500m + 465 m on board
30	16	17" Glass Ball 3/8" Chain		04:00				0127	before termination @ 500m + 500m d/t loop in wire
31	10m	1/4" WR	4143-76	04:00				0127	loop on board @ 0115
32		Anderson Current Meter	148	04:10				0127	1 glass ball imploded
33	3m	3/8" Mooring Chain		04:10				0127	
34		Dual Acoustic Release	30288 28029	04:10	1 1/2" Trawllex ducting Chain			0127	
35	5m	3/8" Mooring Chain		04:10				—	
36	500m	1/4" WR	4143-14	04:40				—	
37	79m	1/4" WR	4143-56	04:49				—	
38	10m	1/4" WR	4143-86	04:55				—	
39	20m	3/4" Columbia Plate		04:55				—	
40	5m	1/2" Trawllex Chain		04:55				—	
41		Double Haul Anchor w/ Dumbbells	3700 165	04:55				—	
42									
43									
44									
45									

Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. K3 MOORED STATION NO. 1155
(KESS 3 2004-2005)

Launch (anchor over)

Date (day-mon-yr) 4-JUNE-2005 Time 0351 UTC

Latitude (N/S, deg-min) 35 32.755 N Longitude (E/W, deg-min) 146 24.787

Deployed by Scott WorriLOW / James DUNN Recorder/Observer MEGHAN CRONIN

Ship and Cruise No. RV Reville ZHNG07RR Intended Duration _____

Depth Recorder Reading _____ m Correction Source _____

Depth Correction _____ m

Corrected Water Depth 5885 m Magnetic Variation (E/W) _____

Argos Platform ID No. 23668 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position Sphere under @
35 33.45
146 27.55

Lat (N/S) _____ Long. (E/W) _____

Acoustic Release Model

Release No. SN 26356:343251 Tested to 7A / 7A m
SN 26358:343303 26356 343251

Receiver No. _____ Release Command 26358: 343303

Enable SN 26356 CHA:341701 CHB:341722 Disable SN 26356: 341747
SN 26358: CHA-355044 CHB:355067 SN 26358: 355116

Interrogate Freq. CHA-11 kHz CHB-9 kHz Reply Freq. CHA-12 kHz CHB 11 kHz

Recovery (release fired)

Date (day-mon-yr) 21 MAY / 06 Time 1857 UTC

Latitude (N/S, deg-min) 35 32 23 Longitude (E/W, deg-min) 146 24.71

Recovered by S. WorriLOW Recorder/Observer S. Waterman

Ship and Cruise No. Melville MGLN03 Actual duration 351 days

Distance from actual waterline to buoy deck _____ m

Moored Station Number

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		6 1/4" Synthetic SINEPE	015	JUNE 3, 2005 2130				2017	
2		AOCF	1594	2130	RTT-23668			2017	same growth on ADCP transducer
3		ARGOS	PTT 23668					2017	
4		3/4" Press Gun		2130				2017	
5		3T Swivel		2130				2025	
6		Profiler Stop		2130				2106	
7		Profiler	116	2206				2106	motor spring broken
8	1225	1/4" Jacobs Tool 1/4" wire rope		2206	REUSED FROM RECOVERED KISS			2027	
9		Profiler Stop		2230				2106	
10		3T Swivel		2235				2106	
11	10	1/4" Wire Rope	4009-195	2235				2111	
12		6 17" Glass balls		2246	LAYSAN ALBATROSS			2113	
13		VACM	204	2246	2243. ROTORS UNBLOCKED			2116	2117 Rotors blocked.
14	25	1/4" Wire Rope						---	
15	180	1/4" Wire Rope	4009.039	2246				2119	
16	25	1/4" Wire Rope						---	
17		6 17" Glass balls		2325				2134	
18	16	1/4" Wire Rope	4143-75	2325				2139	
19		Anderson C.M.	366	2325				2139	
20	25	1/4" Wire Rope						---	
21	500	1/4" wire rope	4009-19	2347				2142	
22	500	1/4" wire rope	4143-31	JUNE 4, 2005 0015				2155	

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	474	1/4" W.R. Rope	4143-42	JUNE 4, 2005 0040				2209	
24		8 17" Glass Balls		0040				2230	
25	10	1/4" W.R. Rope	4143-113	0043				2232	
26		Pendulum C.M.	149	0043				2232	
27	500	1/4" W.R.	4143-107	0105				2232	Current meter recovered upside down as 10m wire
28	500	1/4" W.R.	4009-35 ✓	0125				2233	wrapped around 500m termination
29	465	1/4" W.R.	4143-45	0200				2245	- fouled wires (10m w/ 474 m above + 500 m below) wrapped on winch together
30		16 17" Glass Balls		0200				2313	
31	10	1/4" W.R.	4143-101 4009-46	0205				2318	
32		Pendulum C.M.	147	0205				2319	
33	3	3/8" Chain		0205				2319	
34		Dual Glasses		0205					
35	5	3/8" Chain		0205	STOP FOR LUNCH				
36	500	1/4" W.R.	4143-47 X	0320					
37	219	1/4" W.R.	4143-53	0330	Adjusted from original 225m account for depth gauge. (219.50 ± 0.50)				
38	25m	1/4" W.R.	4009-151 ✓	0342	ADJUSTED from original 10m to account for depth gauge.				
39	20	3/8" Colored Plastic		0351					
40	5	1/2" Twisted Chain		0351					
41		300lb Anchor		0351					
42									
43	50m	1/4" W.R.	4143-59	0385	inserted				
44	50m	1/4" W.R.	4143-58	0388	inserted				
45									

Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KY 2005 MOORED STATION NO. 1158
(KES 4 2004-2005)

Launch (anchor over)

Date (day-mon-yr) 07-JUNE-2005 Time 1632 UTC

Latitude (N/S, deg-min) 34° 50.9162' Longitude (E/W, deg-min) 146° 00.9594'

Deployed by WORRILLOW Recorder/Observer M. Cronin

Ship and Cruise No. REVELLE ZHNG07RR Intended Duration 1 yr

Depth Recorder Reading _____ m Correction Source _____

Depth Correction _____ m

Corrected Water Depth ^{5963?} 5653 m Magnetic Variation (E/W) _____

Argos Platform ID No. 27331 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position

Lat (N/S) _____ Long. (E/W) _____

Acoustic Release Model

Release No. 28288 / 28093 Tested to 3000 / 3000 m

Receiver No. _____ Release Command 353567 / 350154

Enable 374514 / 367674 Disable 374552 / 367726

Interrogate Freq. // Reply Freq. 12

Recovery (release fired)

Date (day-mon-yr) 27 MAY 06 Time 0420 UTC

Latitude (N/S, deg-min) 34 51.04 Longitude (E/W, deg-min) 145 59.91

Recovered by S. WorriLOW Recorder/Observer S. Waterman

Ship and Cruise No. RV Melville MGLN03 Actual duration 349 days

Distance from actual waterline to buoy deck _____ m

Moored Station Number KESS 4 2005-2006

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		6 1/4" SPHERE	016	10:54	STRUBB # 078 NOVATECH			06:06	3500 2566 lbs buoyancy
2		AOC P	1468	10:54				0606	
3		ARGOS	27331	10:54				0606	
4	5	3/4 C HAM		10:54				0606	
5		BT SWIRL		10:54				0615	
6		PROFILING STOP		10:54				0701	
7	1225	1/4" WR		12:12				0619	4143-4
8		PROFILOR	101	11:36				0701	
9		PROFILING STOP		12:09				0701	
10		BT SWIRL		12:12				0704	
11	10	1/4" WR		12:15				0708	4143-96
12	6	17" GB		12:20				0708	
13	1.8	VACUM	118	12:20				0710	sponge out 12:17 sponges in 0716
14	480	1/4" WR		12:52				0716	4143-34
15	6	17" GB		12:52				0731	LOAN 4143-94
16	500	1/4" WR	367	12:56				0736	5000 4143-28
17	500	1/4" WR		13:21				0737	4143-19
18	500	1/4" WR		13:43				0753	4009-60
19	50	1/4" WR		14:13				0806	upon recover
20	8	17" GB		14:15				0818	4143-64 wire from bk
21	10	1/4" WR		14:19				0822	snagged on 50 in wire terminal
22	5	AAOEEAA	152	14:19				0828	4143-85 wires hepled together

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	500	1/4 WR		14:43				0832	4143-12
24	500	1/4 WR		15:02				0841	4143-32
25	415	1/4 WR		15:21				0836	4009 - 65 on recovery termination ↔
26	50	1/4 WR		15:32				0848	4143 - 57 on board be
27	16	17" GG		15:38				0854	that ↔ 500 + 500 diff wire sndg
28	10	1/4 WR		15:43				0855	4143 - 70 on board
29	1	1/4 WR 1/4 WR	155	15:43				0856	
30	3	3/8 C HAWK		15:48				0856	
31	5	DUAL RELEASE	28093 28288	15:48				0856	
32	5	3/8 CHAND		15:49				—	
33	500	1/4 WR		16:07				—	4143-7
34	424	1/4 WR		16:23				—	4009-57
35	20	nylon		16:32				—	
36	5M	chain		16:32				—	
37	3700 lb	Anchor		16:32				—	
38									
39									
40									
41									
42									
43									
44									
45									

Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. K5-2005 MOORED STATION NO. 1159
(KESSE 2005-2006)

Launch (anchor over)

Date (day-mon-yr) 9 JUNE 2005 Time 0902 UTC
Latitude (N/S, deg-min) 34° 01.9505' Longitude (E/W, deg-min) 145° 30.327'
Deployed by SCOTT WORRILLOW Recorder/Observer SCOTT WORRILLOW
Ship and Cruise No. REVELLE ZHANG 07RR Intended Duration 1 YR
Depth Recorder Reading _____ m Correction Source _____
Depth Correction _____ m
Corrected Water Depth 5836 m Magnetic Variation (E/W) _____
Argos Platform ID No. 5661 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position

Lat (N/S) _____ Long. (E/W) _____

Acoustic Release Model

Release No. 17961 / 23846 Tested to TA / 3000 m
Receiver No. _____ Release Command 623341 / 635006
Enable 601206 / 657514 Disable 601163 / 657571
Interrogate Freq. 11 Reply Freq. 12

Recovery (release fired)

Date (day-mon-yr) 23 MAY Time 0515 UTC
Latitude (N/S, deg-min) 34° 02.504' Longitude (E/W, deg-min) 145° 30.062'
Recovered by S. Worrillow Recorder/Observer S. Waterman
Ship and Cruise No. RV Melville MGL NØ3 Actual duration 348 days
Distance from actual waterline to buoy deck _____ m

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		6411.5 Jumbo Sphere	SW 012	3:30				06:34	2575 lbs of buoyancy upon recovery. Ball on sphere rusted and weak (pulled off by hand)
2		AUDCA	SW 012 1035	3:30				06:34	
3		Argos	OTT 5601	3:30				06:34	
4	5	3/4" chain		3:30				06:34	
5		Profiler Stop		3:30				06:36	
6		Profiler Stop	# 102	4:13				07:24	Profiler initially at top stop; slipped down wire as hauled in 4143-5
7	12.5	1/4" WR		4:34				07:24	
8		Profiler Stop		4:34				07:24	
9		3T Swivel		4:34				07:28	
10	10	1/4" WR		4:38				07:28	4143-98
11		6 1" Glass balls		4:42				07:30	
12		VACM	# 141	4:42				07:33	sponge out 4:40 sponge in 4:43
13	4.80	1/4" WR		5:06				07:38	4143-35
14		6 1" Glass balls		5:06				07:53	
15	10	1/4" WR		5:10				07:58	4143-91
16		Anderrocum #	339	5:10				07:58	
17	500	1/4" WR		5:29				08:01	4143-16
18	500	1/4" WR		5:48				08:15	4143-24
19	4.74	1/4" WR	424	6:02				08:28	4009-61
20		8 1" Glass balls	50	6:13				08:40	upon recovery - 116 50m + 10m wire terminations wrapped around chain of glass balls
21	10	1/4" WR		6:16				08:47	4143-77
22		Anderrocum #	197	6:20				08:43	- upon recovery, wires tangled; CM recovered before glass balls

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	500	1/4" WR		6:38				0852	4143-15
24	500	1/4" WR		6:57				0903	4143-20
25	465	1/4" WR	415 50	7:13 7:23				0915	4009-64 4143-15
26		16 17" Glass balls		7:27				0925	2 glass balls imploded
27	10	1/4" WR		7:31				0932	4143-79
28		Antenna cable # 163		7:31				0932	
29	3	3/8" Chain		7:31				0932	
30		Equal releases # 17961 # 23846		7:37				0932	
31	5	3/8" Chain		7:37				—	
32	500	1/4" WR		7:55				—	4143-111
33	277	1/4" WR		8:56				—	4143-52
34	10	1/4" WR		8:57				—	4143-81
35	20m	Nylon		9:01				—	
36	2100lb	5m 1/2" Fastlink Chain Anchor		9:02				—	
37									
38									
39									
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41									
42									
43									
44									
45									

Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KES5-6 MOORED STATION NO. 1154
(2005-2006)

Launch (anchor over)

Date (day-mon-yr) 31 MAY 2005 Time 0339 UTC
Latitude (N/S, deg-min) 33° 17.3391' Longitude (E/W, deg-min) 145° 02.6137'
Deployed by WORRILOW Recorder/Observer Moan (PMEH)
Ship and Cruise No. REVELLE ZHNG 02RR Intended Duration 1 yr
Depth Recorder Reading 5722 m Correction Source tech
Depth Correction tech depth = 5 m
Corrected Water Depth 5727 m Magnetic Variation (E/W) _____
Argos Platform ID No. 5628 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position

Lat (N/S) _____ Long. (E/W) _____

Acoustic Release Model

Release No. 28086 / 28089 Tested to TA / TA m
Receiver No. _____ Release Command 347775 / 350040 ✓
Enable 366772 / 367271 Disable 367024 / 367323
Interrogate Freq. 11 Reply Freq. 12

Recovery (release fired)

Date (day-mon-yr) 23 MAY 06 Time 2357 UTC
Latitude (N/S, deg-min) 33 17.17 Longitude (E/W, deg-min) 145 03.53
Recovered by S. Worriow Recorder/Observer S. Waterman
Ship and Cruise No. RV Melville MGLN03 Actual duration 357 days
Distance from actual waterline to buoy deck _____ m

5/30 ~ 5/31

Moored Station Number KESS 6 2005-2006

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" SPHERE	010	21:56	Buoyancy 2251			01:52	No light
2		AOC P	1969	21:56				01:52	
3		AR60	5628	21:56				01:52	
4	5	3/4 CHAIN		21:56				01:52	
5		3T Swivel		21:56				01:58	
6		Profilem stop		21:56				02:02	
7	1225	1/4 WR		23:20				02:03	4143-3 Albatross
8		Profilem	103	22:55				02:38	(profiler)
9	10	1/4 WR		23:20				02:42	(swivel)
10	6	17" GB		23:25				02:43	(stepper) 4143-90
11	1.8	UACM	V178	23:34				02:46	
12	480	1/4 WR		23:59				02:48	sponge out 21:28 sponges in 02:54
13	6	GB's (17")		00:00				02:54	4143-36
14	10	1/4 WR		00:04				03:15	
15	.5	AANDERAA cm	947	00:04				03:18	4143-121
16	500	1/4 WR		00:22				03:18	
17	500	1/4 WR		00:45				03:22	4143-13
18	474	1/4 WR		01:07				03:34	4143-11
19	8	17" GB's		01:09				03:46	4143-41
20	10	1/4 WR		01:14				03:58	
21	.5	AANDERAA	150	01:14				04:03	4143-89
22	500	1/4 WR		01:37				04:03	
								04:05	4143-110

3T Swivel
o
stopper

Item No.	Depth (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	500	1/4 WR		01:58				04:17	4143-108
24	465	1/4 WR		02:21				04:28	4143-47
25	16	17" GR'S		02:27				04:38	
26	10	1/4 WR		02:36				04:42	4143-72
27	.5	MANDELAN	162	02:36				04:42	
28	3	3/8 CHAIN		02:37				04:42	
29	.5	PUL Releaser	28086 28089	02:37				04:42	
30	5	3/8 CHAIN		02:37					
31	500	1/4 WR		03:00					4143-109
32	50	1/4 WR		03:05	50m 1/4" WR substituted for 2.19m for depth adjustment				414362 (50m)
33	10	1/4 WR		03:10	50m 1/4" WR inserted for depth Adj.				4143-61
34	50m	1/4 WR		03:25	50m 1/4" WR inserted for depth Adj.				4143-60
35	25m	1/4 WR		03:29	25m 1/4" WR inserted				4009-118 reused from 2004
36	10m	1/4 WR		03:30	10m 1/4" WR inserted				4143-69
37	20m	Nylon		3:39					
38	5m	1/2" Trawllex Decative		3:39					
39	3700	Anchor w/ Demforce		3:39					
40									
41									
42									
43									
44									
45									

Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESS 7-05 MOORED STATION NO. 1153
(2005-2006)

Launch (anchor over)

Date (day-mon-yr) 29 MAY 2005 Time 1319 UTC

Latitude (N/S, deg-min) 32° 24.3384 Longitude (E/W, deg-min) 144° 35.5789

Deployed by WORRILOW Recorder/Observer _____

Ship and Cruise No. R/V Melville MELNØR Intended Duration 1 yr

Depth Recorder Reading _____ m Correction Source _____

Depth Correction _____ m _____

Corrected Water Depth _____ m Magnetic Variation (E/W) _____

Argos Platform ID No. 10432 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position

Lat (N/S) _____ Long. (E/W) _____

Acoustic Release Model 8242

Release No. ~~17967~~ / ~~23846~~ / 28037 / 26377 (26337) Tested to FA / 3000 m

Receiver No. _____ Release Command 347642 / 342562

Enable 366240 / 337404 Disable 366312 / 337442

Interrogate Freq. 11 Reply Freq. 12

Recovery (release fired)

Date (day-mon-yr) 24 MAY 06 Time 2054 UTC

Latitude (N/S, deg-min) 32 23.87 Longitude (E/W, deg-min) 144 35.95

Recovered by S. WorriLOW Recorder/Observer S. Waterman

Ship and Cruise No. RV Melville MELNØR Actual duration 360 days

Distance from actual waterline to buoy deck _____ m

Moored Station Number 1153

May 29

118

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		6" SYMMETRIC SPHERES	011	7:26	Buoymancy 2551			MAY 24 2254	
2		AR 90S STROBE	10432	7:26				2254	
3	5	3/4 MOORING CHAIN		✓				2254	
4	30	1/4" WR		✓				2306	4143-65
5	2	ADCP	ADCP SN 542	7:00	ADCP c TO loaner from PMEL in cage (PMEL)			2309	
6		3T SWIVEL	TESEN 11145					2312	
7		Pneumatic star		7:28				2314	
8		PROFILER	108	8:28				2356	meter spring broken on recovery
9	1225	1/4" WR		8:55				2314	4143-1
10		PROFILER STOP		8:55				2359	
11		3T SWIVEL		8:55				2359	
12	10	1/4" WR		9:00				MAY 25 0003	4143-118
13	6	17" GB 5 on 3/8 CHAIN		9:04				0003	
14	1.8	VACUM	325	9:04	2 sponges out			0006	sponges in @ 0009
15	448	1/4" WR		9:37				0010	(409) 4143-40
16	6	17" GB 5 on 3/8 CHAIN		9:37				0049	being passed to adjust ships position to improve wire angle
17	10	1/4" WR		9:42				0052	4143-92
18		ANODIZED CM	379 374	9:42				0052	
19	500	1/4" WR		10:10				0056	4143-8
20	500	1/4" WR		10:36				0111	4143-29
21	474 463	1/4" WR		11:05				0124	4143-112
22	8	17" GB 5 on 3/8 CHAIN		11:06				0137	

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	10	1/4" WR		11:10				0142	4143-119
24		ANDERSON CM	128	11:10				0142	
25	500	1/4" WR		11:35				0145	4143-6
26	500	1/4" WR		11:55				0157	4143-10 number on end only
27	465	1/4" WR		12:20				0209	4143-48
28	16	17" GB'S ON CHAIN		12:23				0222	
29	10	1/4" WR		12:30				0226	4143-99 3 glass balls imploded
30		ANDERSON 143		12:30				0226	
31	3	3/8" MONROE CHAIN		12:30				0226	
32	1	DUAL RELEASE 3/8" MONROE CHAIN		12:36	w/ 1/2" MONROE CHAIN			0226	
33	5	3/8" MC		12:36				---	
34	500	1/4" WR		12:45				---	4143-4
35	218	1/4" WR		13:11				---	4143-54
36	20m	Nylon		13:14				---	
37	5m	1/2" chain		13:20				---	
38	3700	Anchor		13:20				---	
39									
40									
41									
42									
43									
44									
45									

807
1355

Moored Station Log

(fill out log with black ball point pen only)

ARRAY NAME AND NO. KESs #8 MOORED STATION NO. 1160
(2005-2006)

Launch (anchor over)

Date (day-mon-yr) 12-JUNE-2005 Time 0939 UTC

Latitude (N/S, deg-min) 34° 49.8033' Longitude (E/W, deg-min) 144° 59.9502'

Deployed by Worrilow/Hogg Recorder/Observer Sookan Moon

Ship and Cruise No. REvelle ZHNG 07RR Intended Duration 1 yr

Depth Recorder Reading _____ m Correction Source _____

Depth Correction _____ m

Corrected Water Depth 5830 m Magnetic Variation (E/W) _____

Argos Platform ID No. 27330 Additional Argos Info on pages 2 and 3

Surveyed Anchor Position

Lat (N/S) _____ Long. (E/W) _____

Acoustic Release Model

Release No. 26354 / 28085 Tested to 3000 m

Receiver No. _____ Release Command 343/217 / 347756

Enable 341512 / 366666 Disable 341554 / 366734

Interrogate Freq. 11 Reply Freq. 12

Recovery (release fired)

Date (day-mon-yr) 22 MAY 06 Time 1900 UTC

Latitude (N/S, deg-min) 34 50.21 Longitude (E/W, deg-min) 144 59.60

Recovered by S. Worrilow Recorder/Observer S. Waterman

Ship and Cruise No. RV Melville MGLN03 Actual duration 344 days

Distance from actual waterline to buoy deck _____ m

Moored Station Number KESS 8 2005-2006

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
1		64" SPHERE		3:57				2021	2276 lbs battery
2		ARGOS	27330	3:57				2021	
3	5	3/4 CAMM		3:57				2021	
4		NORTECH	1395	3:57				2029	
5		3T Swivel		3:57				2029	
6		Profiler		3:57				2118	
7		Profiler	109	4:34				2118	
8	1225	1/4 WR		5:07				2037	4009-3
9		Profiler		5:02				2118	
10		3T Swivel		5:07				2118	
11	10	1/4 WR		5:12				2125	4143- 80 73
12	6	17" GB		5:18				2125	
13	1.8	VACM	107	5:18				2127	sponge out sponges in 2131
14	10	1/4 "WR		5:25				2132	4143-80
15	.5	AANDERMA	161	5:25				2132	
16	424	1/4 WR		5:40				2136	4009-58
17	50	1/4 WR		5:52				2148	4143-114
18	6	17" GB		5:54				2152	
19	10	1/4 WR		5:58				2156	4143-67
20	.5	AANDERMA	371	5:58				2156	
21	500	1/4 WR		6:15				2159	4009-36
22	500	1/4 WR		6:34				2214	4009-37

Item No.	Length (m)	Item	Inst No.	Time Over	Notes	Data No.	Depth (m)	Time Back	Notes
23	373	1/4 WR		6:48				2226	4143-51
24	100	1/4 WR		7:02				2237	4009-86
25	8	17" GB		7:02				2240	
26	10	1/4" WR		7:02				2245	4009-82
27	.5	AANDERMAN	153	7:07				2245	
28	500	1/4 WR		7:35				2247	4009-33
29	500	1/4 WR		7:46				2258	4009-34 REUSE FROM MESSINS BOOT PUSHED UP
30	390	1/4 WR		8:01				2311	4113-50
31	50	1/4 WR		8:12				2323	4143-113
32	25	1/4 WR		8:17				2324	4009-107
33	16	17" GB		8:17				2326	1 ball imploded noted on recovery
34	10	1/4 WR		8:25				2321	4009-107 4009-84
35	.5	AANDERMAN	158	8:33				2331	4009-84
36	3	3/8 CHAIN		8:33				2331	
37	.5	PURAC Releasers	20354 23085	8:34				2331	
38	5	1/2 CHAIN		8:34				—	
39	500	1/4 WR		8:55				—	4009-10
40	200	1/4 WR		9:05				—	4113-55
41	50	1/4" WR		9:16				—	4143-63
42	25	1/4" WR		9:19				—	4143-117
43	10	1/4" WR		9:27				—	4143-66
44	20M	nylon		9:38				—	
45	5m	chain		9:38				—	

3700lb Anchor