

CRUISE
NUMBER

9611

DAILY LOG
INSTITUTE OF OCEAN SCIENCES
OCEAN PHYSICS

DATE

Jun 17-21 1996

VESSEL

CSS Vector

PROJECT

Georgia Strait.

Captain: Leonard First Officer: Shane
Second Officer: Jordan Third Officer: _____
Cruise Participants / Agencies: OSAP Div. Wilson Div.
Scientific Personnel: Party Chief: Tom Juhász std. side sci. cabin

Name	Watch	Cabin	Name	Watch	Cabin
Mary O'Brien	0800-1800	} female sci. cabin			
Melanie Quenneville	1000-2000				
Doug Anderson	1800-0400	} chieft sci. cabin			
John Love	1800-0400				
Joe Linguanti	0800-1800	} port side sci. cabin			
Dave Spear	0800-1800				

Second leg of cruise: Party Chief: _____ Watch Cabin _____

Data logging system: Unit no.: P17 S/N 127x5

Program Name: 1.0.5 Shell / CTD Acc.

CTD deck unit make:	Guildline	model:	87167	serial no.:	58995
Computer make:	Dell	model:	433DE	serial no.:	

1st CTD make: Guideline model: 8715 serial no.: # 53501

Temperature sensor model: _____ serial no.: _____
coefficients: slope: _____ offset: _____

Conductivity sensor model: _____ serial no.: _____

coefficients: slope: _____ offset: _____

Pressure sensor range: _____ psi serial no.: _____

coefficients: FSP: _____ dB offset: _____

Transmissometer model: 2000 m serial no.: 254

coefficients: slope: offset:

Comments:

Spare only not used to log data during 9611

2nd CTD make: Guildline model: 8707 serial no.: 43825

Temperature sensor model: serial no.:
coefficients: slope: offset:

Conductivity sensor model: serial no.:
coefficients: slope: offset:

Pressure sensor range: psi serial no.:
coefficients: FSP: dB offset:

Transmissometer model: serial no.:
coefficients: slope: offset:

Winches:

1. make: Swann model: 410 serial no.: 1433 use: CTD

2. make: Swann model: 310 serial no.: 1083 use: Mooring

3. make: Swann model: 305 serial no.: Vector 3/8" use: Work/Dray

4. make: serial no.: use:

5. make: serial no.: use:

6. make: serial no.: use:

7. make: serial no.: use:

Salinometer: make: Guildline model: 8410 serial no.: 58879

SAIL System:

Program version: N/A Time zone:

Sampling interval: sec

CTF module no.: serial no.:

Remote temperature model: serial no.:

Flow sensor model: serial no.:

Other sensors: (special for this cruise)

Name: module ID: serial no.:

Name: module ID: serial no.:

Name: module ID: serial no.:

Comments:

ADCP Setup: N/A

Program version: number of depth bins:

Time zone: bin length (2x):

Sampling interval: sec pulse length:

Blank beyond transmit: pings per ensemble:

Pulse cycle time:

% pings good threshold:

Comments:

<u>Date</u>	<u>Time</u>	<u>PDT</u>
96. Jun. 17	1120	- depart I.O.S. after final loading, setup and 1 false start.

CTD Calibration

.HYD files 96110005 have SALINITY: Bottle
0009
0023
0042
0044

Date

Time PDT

June 17 @ 1:00 PDT - having wind problems at up east. Stopped logging

- Jun 17 1613 - on station GSCM1.
1617 - stopped on station send transpond - without reply.
- send XPD On CDF command
- 237 m, 246 m, 222 m, 215 m, 211 m
1621 - send ACDF - received positive response. range 183 m.
1622 - on surface

1639 - all on board heading for GSCM3
#6101 rotor fouled by sea algae
- head for GSCM3 for recovery

1925 - on station GSCM3 - manoeuvring.
1931 - stopped on station.
- sent XPD - no response.
- sent XPD ON - CDF.
- range 426 m 426 m 438 m
1935 - sent ADEH release received positive response, received double ping for hook away.
1938 - sighted on surface.
2025 - all on board - heading for VI05

DAILY LOG

OCEAN PHYSICS

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YEAR		MONTH			SHIP		CRUISE					PAGE		OF	
1996		Jun			CSS Vector		9611					1		1	
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
17	D08A	CTD	19:53	BE	2	48 42.18	123 15.25		350					down	
"	D08A	CTD	20:10	EW	2	48 42.16	123 15.37							up - tripping all bottles at 310 m.	
"	D07A	ROS	21:07	BE	4	48 44.08	123 08.55		160					down	
"	D07A	ROS	21:11	BO	4/5	48 44.05	123 08.60							up bottom	
"	D07A	ROS	21:22	EW	5	48 44.23	123 08.78				1-10	10		up Salinity data	
"	D06A	CTD	22:31	BE	6	48 46.04	123 02.31		225	204				down	
"	D06A	CTD	22:39	EW	7	48 46.16	123 2.08							up	
18	VI05	ROS	04:26	BE	8	49 11.54	123 17.81		56					down	
"	VI05	ROS	04:28	BO	8/9	49 11.53	123 17.82								
"	VI05	ROS	04:32	EW	9	49 11.51	123 17.77				11-15	5		up Salinity data	
	VI04	ROS	05:24	BE	10	49 08 76	123 23 43		184					down	
	VI04	ROS	05:27	BO	10/11	49 08 75	123 23 43								
	VI04	ROS	05:38	EW	11	49 08 75	123 23 38				16-26	11		up	
	VI03	ROS	06:51	BE	12	49 07 08	123 26 94							down 1 bottle tripped on the down cast at bottom 328 m	
	VI03	ROS	06:57	BO	12/13	49 07 08	123 26 94			328.9				GPS Not working	
	VI03	ROS	07:13	EW	14	49 07 08	123 26 94				27-40	14		up GPS not working	

CAST TYPE -

BOT -

bottle cast
CTD -
MOR - mooring

ROS -

rosette
NET -
DRF - net haul
drifter

USW -

sea water loop

TIME CODE -

BE -

BO -

EN -

beginning time of cast

bottom time of cast

end of cast

DE -

MR -

RE -

deployment time
messenger release
recover mooring

POSITION CODE -

RAD -

GPS -

LOR -

RADAR
GLOBAL
LORAN

GPS not providing data.

This was the computer com port not the GPS

Re boot corrected the GPS string for correct format OK for $\sqrt{I\phi}$

Note Station
V103 and V102

Doug Anderson did not know that Nuts had to be 2 glass and two plastic tubes
V103 may have a mixed bag of plastic and glass
V102 are all plastic.
J Love.

Date	Time	
Jun. 18	0800	- on station GSCM4 manoeuvring.
	0803	- stopped. - sent XPD - no reply
	0805	- sent CDF for XPD on.
	0806	- sent XPD range = 603 614 612 626
	0809	- sent BDFH - received positive 'response' with double ping hook away. - sighted on surface
	0840	- all on board + cleaning up to launch GSCM4-B. preparing GSCM4-B + Melling WASP mooring addition for deployment.
1246	RDT	- launched GSCM4-B + WASP at $49^{\circ}15.99'$ $123^{\circ}46.478'$ in 407.6m water (not corrected depth)
1250		- proceed to NIO1 for completion of NI live.

DAILY LOG

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YEAR 96			MONTH June			SHIP Vector			CRUISE 9611				PAGE OF	
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
18	VI02	ROS	0828	BE	14	49 04 461	123 32 293	GPS						down
18	VI02	ROS	0831	BO	14/15	49 04 456	123 32 258	GPS						
18	VI02	ROS	0843	EN	15	49 04 426	123 32 151	GPS	247	230	41-52	12		up
18	VI01	ROS	1002	BE	16	49 02 85	123 35 41	GPS						down GPS OK NOW
18	VI01	ROS	1004	BO	16/17	49 02 87	123 35 47	GPS						
18	VI01	ROS	10:11	EN	17	49 02 90	123 35 47	GPS		98	53-59	7		up
18	NI01	ROS	20:24	BE	18	49 13 33	123 51 36		112					down Lots of winch problems. Very jerky.
"	NI01	ROS	20:28	BO	18/19	49 13 35	123 51 30							
"	NI01	ROS	20:35	EN	19	49 13 38	123 51 31			101	60-66	7		up. screwed up logging on some parts of up cast.
"	NI02	ROS	21:44	BE	20	49 14 68	123 48 76		330					down Jerky winch
"	NI02	ROS	21:52	BO	20/21	49 14 73	123 48 77			338				
"	NI02	ROS	22:06	EN	21	49 14 81	123 48 83				67-79	13		up
"	NI03	ROS	22:57	BE	22	49 16 08	123 45 98		408					down. Jerky winch
"	NI03	ROS	23:07	BO	22/23	49 16 03	123 45 98			400				
"	NI03	ROS	23:27	EN	23	49 16 19	123 46 27				80-93	14		up Salinity Inta
19	NI04	ROS	00:54	BE	24	49 17 75	123 42 33		290					down. Jerky winch at start and up.
19	NI04	ROS	01:01	BO	24/25	49 17 89	123 42 28			273				
19	NI04	ROS	01:17	EN	25	49 18 03	123 42 14				94-106	13		up repaired winch by adjusting pilot pressure

CAST TYPE - BOT - bottle cast
CTD - ctd
MOR - mooring
ROS - rosette
NET - net haul
DRF - drifter
USW - sea water loop

TIME CODE - BE - beginning time of cast
BO - bottom time of cast
EN - end of cast

DE - deployment time
MR - messenger release
RE - recover mooring

POSITION CODE - RAD - RADAR
GPS - GLOBAL
LOR - LORAN

<u>Date</u>	<u>Time</u>	<u>PDT</u>
Sun 19	0800	- on station GSCM3 for deployment - preparations on deck
	1038	- launched mooring GSCM3-B at $49^{\circ}05.989'$ $123^{\circ}29.474'$ in 348 m water. uncorrected.
		- proceed to complete Rosettes at MIO3 + SIO3
		- checked with Ricker to confirm their ADCP calibration was complete.
		- this was confirmed - O.K. to recover.
	1425	- on station GSCM2A for recovery
		- sent XPD - no response.
		- sent CDF of Enable.
	1429	- sent XPD range 401 m, 399 m, 408
	1430	- Sent Release - Positive Response
	1432	- Surfaced
	1455	- all on board. - cleaning up.
		- head for MIO1 CTD station to complete Thomson CTD transects MI Line + SI Line.
	1030	- completed CTD transect lines
		- head for bottom survey of GSCM2-A site to confirm depth of mooring - confirmed mooring launched into 209-210 m water.

Ship anchors off Browning Harbour overnight

- sample analysis catchup work
- data processing.

Date Time

Jun. 20 0800 - depart anchor for GSCM2 for deployment - mooring prepared underway.

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YEAR		MONTH				SHIP				CRUISE				PAGE		OF	
96		June				Vector				96-11							
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE		LONGITUDE		POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
19	WIOS	ROS	0208	BE	26	49 19 493	123 38 836				257m					removed 100 lbs from Rosette. down	
"	WIOS	ROS	0216	BO	26/27	49 19 58	123 38 76										
"	WIOS	ROS	0230	EN	27	49 19 645	123 38 662						107-118	12		up	
19	WIO6	ROS	0315	BE	28	49 21 403	123 35 048				167					down	
"	WIO6	ROS	0319	BO	28/29	49 21 42	123 35 07						119-128	10			
"	WIO6	ROS	0330	EN	29	49 21 528	123 35 127									up	
	WIO7	ROS	0416	BE	30	49 22 557	123 32 847				48					down	
	WIO7	ROS	0418	BO	30/31	49 22 52	123 32 86						129-133	5			
	WIO7	ROS	0424	EN	32	49 22 598	123 32 885				45.75					up	
	GIO4	ROS	0545	BE	33	49 12 789	123 40 560				388					down	
	GIO4	ROS	0552	BO	33/34	49 12 00	123 40 55										
	GIO4	ROS	0607	EN	34	49 12 760	123 40 392						134-147	14			
	GIO3	ROS	0726	BE	35	49 10 201	123 33 553				377					down	
	GIO3	ROS	0733	BO	35/36	49 10 26	123 33 55						148-161	14			
	GIO3	ROS	0747	EN	36	49 10 21	123 33 30						162-173	12			
	GIO2	ROS	0856	BE	37	49 02 602	123 23 443				254					down	
	GIO2	ROS	0900	BO	37/38	49 02 51	123 23 39										
	GIO2	ROS	0912	EN	38	49 02 423	123 23 315										
CAST TYPE - BOT - bottle cast ROS - rosette USW - sea water sampler TWC - towed water column																	

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drifter

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DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
19	GI01	ROS	10:14	BE	39	48 58 553	123 16 539	GPS	163					down	
19	GI01	ROS	10:16	BO	39/40	48 58 54	123 16 54	GPS			174 - 183	10			
19	GI01	ROS	10:25	EN	40	48 58 473	123 16 500	GPS						up	
19	MI03	ROS	19:16	BE	41	48 55.16	123 10.82		125					down	
"	MI03	ROS	19:19	BO	41/42	48 55.15	123 10.78							Salinity data	
"	MI03	ROS	19:27	EN	42	48 55.19	123 10.82				184 - 191	8		Acoustic program banded in upper 10 meters. up	
"	SI03	ROS	20:09	BE	43	48 51.93	123 05.11		154					down	
"	SI03	ROS	20:14	BO	43/44	48 51.98	123 05.03							Salinity data	
"	SI03	ROS	20:23	EN	44	48 51.97	123 04.76				192 - 200	9		up	
"	MI01	CTD	23:27	BE	45	48 52.38	123 14.70		127					down	
"	MI01	CTD	23:33	EN	46	48 52.38	123 14.67							up	
"	MI02	CTD	23:56	BE	47	48 53.79	123 12.71		140	135					
20	MI02	CTD	00:00	EN	48	48 53.82	123 12.74								
20	MI03	CTD	00:27	BE	49	48 55 219	123 10 822								
20	MI03	CTD	00:31	EN	50	48 55 224	123 10 820								
20	MI04	CTD	00:40	BE	51	48 56 179	123 09 641								
20	MI04	CTD	00:45	EN	52	48 56 202	123 09 603			117					

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YEAR			MONTH			SHIP			CRUISE					PAGE	OF
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
20	M105	CTD	0058	BE	53	48 57 031	123 08 220		110						
20	M105	CTD	0101	EN	54	48 57 038	123 08 221								
20	M106	CTD	0111	BE	55	48 58 014	123 07 141								
20	M106	CTD	0117	EN	56	48 58 041	123 07 146			123					
20	M107	CTD	0135	BE	57	48 58 847	123 05 927								
20	M107	CTD	0138	EN	58	48 58 833	123 05 902			50					
20	S108	CTD	0216	BE	59	48 56 460	122 58 974								
20	S108	CTD	0218	EN	60	48 56 563	122 59 015			42					
20	S107	CTD	0230	BE	61	48 55 534	123 00 333								
20	S107	CTD	0235	EN	62	48 55	123 00			130					
20	S106	CTD	0246	BE	63	48 54 474	123 01 570								
20	S106	CTD	0251	EN	64	48 54 476	123 01 590			150					
20	S105	CTD	0302	BE	65	48 53 693	123 02 716								
20	S105	CTD	0308	EN	66	48 02 695	123 02 664			160					
20	S104	CTD	0318	BE	67	48 52 741	123 03 975								
20	S104	CTD	0324	EN	68	48 52 719	123 04 011			154					
20	S103	CTD	0336	BE	69	48 51 801	123 05 222								
20	S103	CTD	0341	EN	70	48 51 744	123 05 272			159					

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MOR -

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ctd

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POSITION CODE -

RAD -

GPS -

LOR -

RADAR

GLOBAL

LORAN

<u>Date</u>	<u>Time</u> PDT	
Jun 20	1044	- launched mooring GSCM2-B in 207 (lab.) 210 (bridge) meters of water at position $48^{\circ}50.825'$ $123^{\circ}07.124'$ - NB. - water depths are 230-240 m app. $\frac{1}{2}$ mile south and west of mooring site i.e. at <u>nominal mooring</u> location $48^{\circ}50.50'$ $123^{\circ}07.30'$ - this is not shown on the charts. - in future use $48^{\circ}50.825'$ $123^{\circ}07.124'$ as the mooring location where 210 m water depth can be found. - depart for mooring GSCM1 - preparations for mooring completed underway.
	1319	- launched GSCM1-B in 147 m at $48^{\circ}44.468'$ $123^{\circ}08.455'$ - depart for D8A station to complete a test CTD cast using probe #43825 to make sure CTD system is working for the next group.
	1349.	- depart for I.O.S. - pack for offloading.
	1515	- arrive I.O.S. + tie up - offloading Fri. Jun 21

