

CRUISE REPORT SS 08/97

October 3 – November 3, 1997

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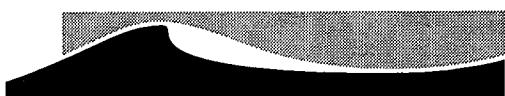
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M A R I N E R E S E A R C H

ITINERARY

Leg 1

Departed: Darwin 1615 h Friday, 3 October 1997
Arrived: Alyangula 0545 h Saturday, 18 October 1997

Leg 2

Departed: Alyangula 1030 h Saturday, 18 October 1997
Arrived: Weipa 0930 h Monday, 3 November 1997

AREA OF OPERATION

Nine areas within the Torres Straits prawn grounds and the Northern Prawn Fishery (NPF) from Weipa to Melville Island north of Darwin (see Figure 1).

CRUISE OBJECTIVES

PRIMARY OBJECTIVE: SAMPLING FOR BYCATCH SUSTAINABILITY PROJECT (28 days)

Description of Bycatch

1. To identify all vertebrate and invertebrate bycatch species in prawn trawls in the NPF and Torres Strait.
2. To collect Roxann and EK500 acoustic data to help discriminate bottom environments; complimented with at least one dredge tow and abiotic data from each area.

Monitoring Methods for Bycatch

3. To sort one total catch ("box the lot") from all nine areas.

Sustainability and Impact on Biodiversity

4. To sample inside and outside prawn closures north west of Groote Eylandt.
5. To test survival of sea snakes caught in prawn trawls.

SECONDARY OBJECTIVE (1 day)

6. To attempt to chemically mark otoliths in live leiognathids (J. Staunton Smith).

RESULTS

Description of Bycatch

- 1 Vertebrates and invertebrate bycatch species were identified, counted, weighed and measured from all 468 prawn trawls. Unidentified species were frozen for later identification in Cleveland.
- 2 Roxann and EK500 acoustic data were collected throughout the cruise; minimal data was lost due to failures of the EK500 or loss of GPS data.

Monitoring Methods ✓

- 3 Box the lot catchers were fully sorted from 7 trawls in all areas except the Vanderlin Islands and Torres Strait.

Sustainability and Impact on Biodiversity

- 4 Four days and nights were dedicated to prawn trawls and 4 dredges and abiotic sampling inside and outside prawn closures south west of Groote Eylandt.
5. Twenty-one sea snakes were tested for post-trawl survival.

SECONDARY OBJECTIVE (1 day)

6. Two leiognathids were chemically treated for otolith marking during Leg 2.

CRUISE NARRATIVE ✓

✓ *1615* *Southern Surveyor* departed Darwin at 1800 h on 3 October 1997. At a cruise debriefing soon after departure, Leg 1 objectives were explained, shifts allocated and first time participants informed of ship safety and day to day house-keeping procedures. The Master, Ian Taylor, advised of a Muster the next day at 1030 h; this drill was successfully completed.

Sampling

Each day, three 6 n m x 6 n m grids, used in commercial licence logbooks, were selected for trawling day and night. Up to four night time trawls per grid were planned, i.e. a total of 12 night trawls and three day time trawls per grid for a maximum of 21 trawls per day. Only the most intensively fished grids reported during the 1995 prawn season were sampled. A 15 minute Church dredge trawl and a "box the lot" 2 – 3 hour prawn trawl was carried out at each site, except for the Vanderlins (due to towing the FV *Markwell Enterprise*) and Torres Strait (catches were too small). The number of trawls per day varied due to steaming time to a new site, longer "box the lot" trawls or Church dredge stations at new sites.

Description and Monitoring

After arriving at the prawn trawl grounds north west of Bathurst Island at 0300 h preparations for trawling a single, 14 fathom Florida Flyer prawn net were completed and station 1 began at 0500 h. Initial trawl catches were very slow to process and only after the second day was the intended number of trawls per grid achieved.

- ✓ After 34 prawn trawls off Bathurst and Melville Islands, the last station was a *three hour* "box the lot" trawl which produced 14 boxes of total catch. All these boxes were sequentially processed like normal subsamples from catches in an experiment to test how representative subsampling is of trawl catches both in 30 minute research cruises and *3 hour* or more commercial vessel trawls. The trawl started at 0130 h and ended at 0430 h; 13 of the boxes were finished by change of shift at 1230 h and stations 36 and 37 were needed to enter all the boxes as only 9 boxes (subsamples) can be entered on the computer database per station. Soon after the catch had been boxed, a 15 minute dredge trawl (station 38) was towed over the same trawl track before *Southern Surveyor* headed for the next sampling site north of Groote Eylandt. This pattern of sampling was followed in the other eight sites and slightly modified for the inside and outside prawn trawl closure site south west of Groote Eylandt and is summarised below.

Closed versus Open

During the last four days of Leg 1, an abiotic SDL station per day was included for grids inside and outside the prawn trawl closure areas south west of Groote Eylandt. Alternate days were spent on selected grids inside and outside the closure. A summary of the day to day operations and movements of *Southern Surveyor* are presented below (Table 1) and in Figure 1.

CRUISE SCHEDULE

Table 1. Details of the cruise schedule and progress during SS897.

Site	Operation
START LEG 1	Departed Darwin, 1615 h, Friday 3 October 1997
Darwin	11 h steam to Bathurst Is arrived 0300 h, 4 October
Bathurst Island	2 day/nights trawling, departed 0600 h, 6 October 40 h steam to north Groote, one dredge trawl at Melville Island grounds
Nth Groote	3 day/nights, arrived 2100 h, 7 October, departed 0530 h, 10 October 8 h steam to SW Groote, arrived 1300 h, 10 October
Sth Groote	2 days and nights work, departed 0530 h, 13 October ✓
SW Groote Closure	4 day/nights trawling inside and outside closure Unscheduled visit to Alyangula (medical attention for Alec Moore) 15 October (8 h turnaround) 2 h steam to Alyangula
END LEG 1	At anchor 0530–1030 h Milner Bay, Groote Eylandt, Saturday 18 October
START LEG 2	9 h steam to Vanderlins grounds, arrived 2100 h, 18 October
Vanderlins	3 days and nights work, departed 0730 h, 21 October Trawler FV <i>Markwell Enterprise</i> taken undertow to west Mornington Island 24 h tow to west Mornington Island, arrived 1000 h after towing FV <i>Markwell Enterprise</i> inshore
West Mornington	2 days and nights work, departed 0600 h, 24 October 4 h steam to north Mornington Island, delayed trawling until all 26 boxes from station # 352 “box the lot” sorted and entered on the database
North Mornington	1.5 day and nights work, departed 0600 h, 26 October 6 hr steam to east Mornington Island
East Mornington	2 days and nights work, departed 0600 h, 28 October 24 h steam to Weipa
Weipa	2 days and nights work, departed 0530 h, 31 October 16 h steam to Torres Strait
Torres Strait	2 days and nights work, departed for Weipa 1430 h, 2 November 15 h steam to Weipa
END LEG 2	End Cruise SS897 in Weipa 0930 h, Monday 3 November

Underway experiments

Live sea snakes were kept in 200 l tanks to observe post trawling survival over four days. Snakes were then frozen and returned to Cleveland for identification and biological examination.

ITALICS ✓ Leiognathids were opportunistically kept alive from the codend cover but few survived more than a day. Two fish (one Leiognathus splendens and one Gazza minuta) survived long enough for a 10 day otolith marking experiment and these fish were frozen at the end of the experiment and returned to Cleveland.

GENERAL NARRATIVE

Throughout the cruise, there were few mechanical problems with the trawling gear and consequently little time was lost due to mechanical problems with trawl related equipment. "Box the lot" trawls were conducted just prior to leaving a site and sorting of these governed the time trawling at the next site commenced. The data entry system operated very well during Leg 1 but started to significantly slow down during Leg 2. At one stage, Lindsay MacDonald had to reboot the Oracle database software when the computer system failed. During this time, data was recorded on paper and entered later when the computer was available again.

ITALICS ✓ On 15th October, Alec Moore received lacerations from a live black tip shark he was returning to the sea. First aid was administered by second mate John Boyes who, after consulting the Cruise Leader, recommended the stitches be administered by more experienced hospital staff on Groote Eylandt. All trawling stopped and *Southern Surveyor* headed to Alyangula, 3 hours away, for medical attention. An incident report was faxed to Clive Liron in Hobart and both Alec Moore and Fleur Oliver remained on Groote Eylandt to fly out to Darwin that same night. Eight hours later, trawling resumed where the accident happened and David Milton changed his shift roster to compensate for the alternate shift's loss of both Alec and Fleur, leaving five scientists per shift until the end of Leg 1 on the morning of 18th October.

ITALICS ✓ **EVI.** Scientific crew were exchanged in Alyangula and Leg 2 commenced as planned. Sea conditions deteriorated during the last day in the Vanderlins with winds in excess of 25 knots. During the last night there, *Southern Surveyor* responded to a call for assistance from the commercial trawler Markwell Enterprise, which had lost all steering. The 30 minute trawl was completed and no "box the lot" trawl was possible because of the two hours involved in preparing to tow the Markwell Enterprise, in difficult sea conditions. The 10 hour steam to East Mornington extended to 24 hours under tow. Approximately 2 days were spent in each of the three Mornington sites; the difficulty of processing trawl catches increased due to higher numbers of invertebrates and benthos in the bycatch. This area also produced the most sea snakes in the same time during the cruise with about 15 snakes or a third of the total. Four-day sea snake survival experiments could not be continued for some of these snakes as all available tanks were occupied; excess snakes were recorded and frozen for identification and biological examination in Cleveland.

Weipa produced the highest average weight of bycatch for all sites while Torres Strait produced the lowest (Table 2). This confirmed the wet season results from the first Bycatch Sustainability Project cruise in February/March 1997. No 'box the lot' trawl was attempted in Torres Strait because of the low catch rates and time limitations.

Table 2. Summary of station operations per site sampled during SS897. Cobourg Peninsula was sampled with the Church Dredge on behalf of Steve Cook of the Queensland Museum, but no other operations were carried out there. BTL = "Box the lot".

Site	No. Trawls	No. BTL	No. BTL Boxes	No. Dredges	Average Bycatch WT kg
Melville	34	1	14	1	58.4
Cobourg	0	0	0	1	0
North Groote	46	1	9	1	46.2
South Groote	39	1	17	0	40.8
Inside/Outside	106	0	0	11	71.0
Vanderlin	51	0	0	0	51.4
West Mornington	42	1	27	1	68.2
North Mornington	32	1	9	1	40.8
East Mornington	41	1	8	1	98.2
Weipa	41	1	16	1	112.1
Torres Strait	36	0	0	1	25.1

At the end of sampling, all the biological data were copied to a cassette tape for down loading to the Cleveland SUN Sparc station; Roxann data were copied onto disks.

SUMMARY

The nine prawn trawl areas in the NPF and Torres Strait were successfully sampled and all objectives achieved with no sampling lost due to weather or mechanical problems. This cruise achieved the highest number of demersal trawls so far in any *Southern Surveyor* cruises in north Australia and will provide a robust database on which the final project cruise can be planned.

Reporting of results

The results will be analysed and reported in the scientific literature where appropriate. All the collected data resides on the Oracle database at the CSIRO Marine Laboratories in Cleveland.



PERSONNEL

(Note: unless otherwise stated, all personnel are staff of the CSIRO Division of Marine Research)

Leg 1: 3–18 October 1997 (Darwin–Groote)

Leg 2: 18 October – 3 November 1997 (Groote–Weipa)

John Salini	Cruise Leader
Dave Brewer	Alternate Cruise Leader
Don Heales	
Ilona Stobutzki	Project Leader
Margaret Farmer	
Joanne Langstreh	JCU grad.
Quinton Dell	Australian Maritime College grad.
David Milton	(Leg 1)
Steve Cook	(Leg 1) QM
Matt Sherlock	(Leg 1) Electronics
Alec Moore	(Leg 1) UK, University of Liverpool grad.
Fleur Oliver	(Leg 1) UK, University of Liverpool grad.
Young Park	(Leg 2) University of Qld. PhD
Janet Bishop	(Leg 2)
Lindsay MacDonald	(Leg 2) Electronics
Erwin Coronado	(Leg 2) Australian Maritime College student
Craig Noell	(Leg 2) Australian Maritime College student

Ship's Crew

Ian Taylor	Master
Roger Pepper	First Mate
John Boyes	Second Mate
Bob Agoni	Chief Engineer
Mike Barber	First Engineer
John Hinchliffe	Electrical Engineer
Len Darling	Bosun
Alan Brownlie	A. B.
Tony Hearne	A. B.
Norman Irvine	Greaser
Malcolm McDougall	A. B.
Graham McDougall	A. B.
Lou Jacomos	A. B.
Gordon Davie	A. B.
Henry Solley	Chief Steward
Don Collins	Chief Cook
Wayne Hatton	Second Cook

ACKNOWLEDGMENTS

We thank the Master, Ian Taylor; the Fishing Masters, Roger Pepper and John Boyes, and the crew of *Southern Surveyor* for their skills during the cruise. The crew's cooperation by sailing short-handed for the last three days of Leg 2 is especially appreciated.

John Salini
Cruise Leader

Dr Nan Bray
Chief, Division of Marine Research

Date

CONTACTS

For further information about this cruise contact:

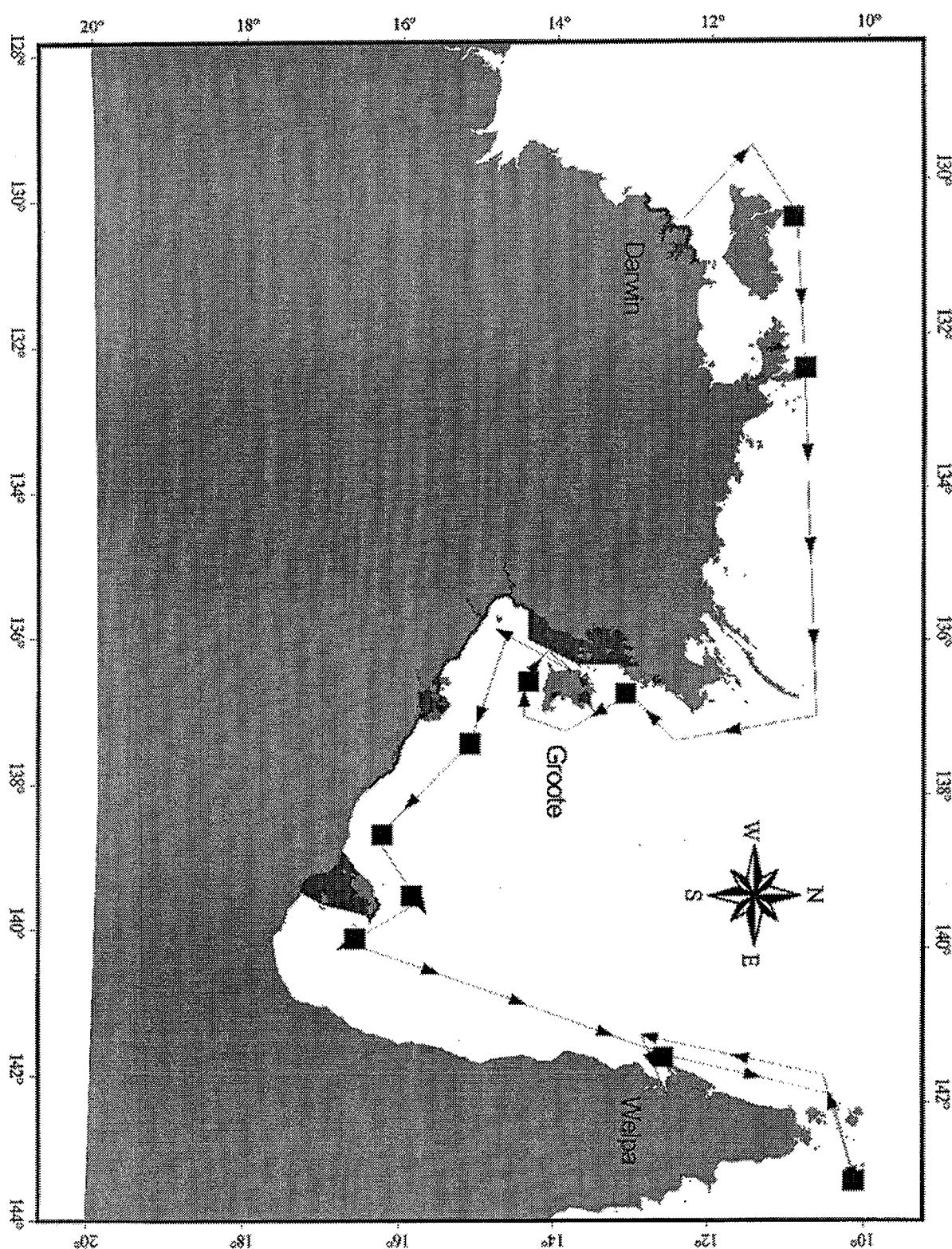
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Distribution – normal circulation and cruise participants.

Figure 1. Cruise track followed by *Southern Surveyor* in 9 areas within the Northern Prawn Fishery. Approximate chronological sequence is described in Table 1.



Appendix 1

Stations occupied by *Southern Surveyor* during Cruise SS895.

STIME: start time; ETIME: end time; SLAT: start latitude; SLON: start longitude; ELAT: end latitudde; ELON: end longitude; Depth: depth in metres; * refers to "box the lot" stations which occupy upto three station numbers.

STN No.	DATE	STIME	ETIME	SLAT	SLON	ELAT	ELON	DEPTH	GEAR
1	4-Oct-97	5:00	5:40	-10.945	130.245	-10.9733	130.21	59.2	Florida Flyer
3	4-Oct-97	8:30	9:00	-10.9417	130.2517	-10.9367	130.2817	57.6	Florida Flyer
4	4-Oct-97	9:22	9:52	-10.9333	130.3083	-10.9317	130.3383	56.1	Florida Flyer
5	4-Oct-97	11:31	12:01	-10.9283	130.3733	-10.935	130.3483	53.2	Florida Flyer
6	4-Oct-97	12:42	13:09	-10.9633	130.3033	-10.9783	130.2817	51.2	Florida Flyer
7	4-Oct-97	13:57	14:23	-10.9867	130.2933	-10.9817	130.3083	45.2	Florida Flyer
8	4-Oct-97	14:38	15:08	-10.9767	130.3217	-10.9717	130.3417	49.7	Florida Flyer
9	4-Oct-97	15:49	16:18	-10.98	130.3617	-10.9983	130.3383	49.2	Florida Flyer
10	4-Oct-97	19:13	19:44	-10.98	130.355	-10.965	130.375	48.8	Florida Flyer
11	4-Oct-97	20:22	20:55	-10.9367	130.3567	-10.945	130.33	54.4	Florida Flyer
12	4-Oct-97	21:23	21:56	-10.9567	130.34	-10.9733	130.32	51.6	Florida Flyer
13	4-Oct-97	22:28	23:00	-10.98	130.2833	-10.9817	130.26	48.4	Florida Flyer
14	4-Oct-97	23:24	23:56	-10.9817	130.235	-10.9883	130.21	52.8	Florida Flyer
15	5-Oct-97	3:25	3:56	-11.0633	130.1917	-11.0467	130.2067	38.5	Florida Flyer
16	5-Oct-97	4:19	4:51	-11.0317	130.2183	-11.015	130.24	41.2	Florida Flyer
17	5-Oct-97	5:16	5:46	-11.0083	130.2583	-10.9983	130.2833	40.4	Florida Flyer
18	5-Oct-97	7:49	8:17	-11.0067	130.4383	-11.0133	130.4633	43.6	Florida Flyer
19	5-Oct-97	8:39	9:09	-11.0117	130.4917	-11.01	130.5183	42.9	Florida Flyer
20	5-Oct-97	9:34	10:05	-11.03	130.5317	-11.0317	130.5583	40.9	Florida Flyer
21	5-Oct-97	10:28	10:59	-11.0233	130.57	-11.0317	130.595	41.2	Florida Flyer
22	5-Oct-97	11:30	12:00	-11.035	130.6283	-11.025	130.65	40	Florida Flyer
23	5-Oct-97	12:45	13:15	-11.0533	130.6767	-11.07	130.6533	37.2	Florida Flyer
24	5-Oct-97	13:35	14:03	-11.0767	130.63	-11.0733	130.605	36.4	Florida Flyer
25	5-Oct-97	14:32	15:03	-11.06	130.5783	-11.0533	130.5483	38.4	Florida Flyer
26	5-Oct-97	15:46	16:15	-11.0133	130.4833	-11.015	130.455	44.1	Florida Flyer
27	5-Oct-97	18:23	18:52	-11.0267	130.6667	-11.04	130.645	40.4	Florida Flyer
28	5-Oct-97	19:13	19:42	-11.0383	130.6283	-11.035	130.6033	41.2	Florida Flyer
29	5-Oct-97	20:13	20:42	-11.02	130.63	-11.02	130.605	42.4	Florida Flyer
30	5-Oct-97	21:08	21:38	-11.0417	130.59	-11.04	130.5633	40.6	Florida Flyer
31	5-Oct-97	21:56	22:26	-11.0483	130.5483	-11.0567	130.5234	39.2	Florida Flyer
32	5-Oct-97	22:53	23:23	-11.055	130.4967	-11.0417	130.4733	37.9	Florida Flyer
33	5-Oct-97	23:43	0:15	-11.0233	130.46	-11.0117	130.4333	41.2	Florida Flyer
34	6-Oct-97	0:36	1:06	-11.0083	130.41	-11.0067	130.3833	42.4	Florida Flyer
35* (14)	6-Oct-97	1:30	4:31	-11.01	130.3917	-11.02	130.5533	42.3	Florida Flyer
36* (14)				0		0			Florida Flyer
37* (14)				0		0			Florida Flyer
38	6-Oct-97	5:45	6:00	-11.0183	130.515	-11.02	130.53	42	Benthic Sled
39	6-Oct-97	14:42	15:00	-10.94	132.2367	-10.9417	132.2483	27.6	Benthic Sled
40	7-Oct-97	21:28	21:48	-12.5733	136.92	-12.59	136.9083	43.2	Benthic Sled
41	7-Oct-97	22:37	23:07	-12.61	136.8783	-12.6367	136.8683	40.8	Florida Flyer
42	7-Oct-97	23:27	23:57	-12.6467	136.8733	-12.625	136.8867	39.7	Florida Flyer
43	8-Oct-97	0:23	0:56	-12.6383	136.8883	-12.6683	136.8833	41.6	Florida Flyer
44	8-Oct-97	1:28	1:58	-12.7083	136.865	-12.7333	136.8567	38.7	Florida Flyer

STN No.	DATE	STIME	ETIME	SLAT	SLON	ELAT	ELON	DEPTH	GEAR
45	8-Oct-97	3:42	4:16	-12.7	136.8917	-12.73	136.8917	42.4	Florida Flyer
46	8-Oct-97	4:36	5:06	-12.755	136.8917	-12.7817	136.8933	44.8	Florida Flyer
47	8-Oct-97	5:26	5:58	-12.7833	136.885	-12.7567	136.8817	45.4	Florida Flyer
48	8-Oct-97	9:51	10:21	-12.645	136.8383	-12.67	136.8283	32.8	Florida Flyer
49	8-Oct-97	10:43	11:13	-12.67	136.8217	-12.645	136.8317	30.8	Florida Flyer
50	8-Oct-97	11:51	12:20	-12.64	136.8833	-12.6167	136.8917	40.8	Florida Flyer
51	8-Oct-97	13:29	13:57	-12.7067	136.8767	-12.7383	136.87	40	Florida Flyer
52	8-Oct-97	14:28	15:04	-12.7783	136.865	-12.8	136.8833	39.2	Florida Flyer
53	8-Oct-97	16:54	17:23	-12.8083	136.8933	-12.84	136.8917	46.4	Florida Flyer
54	8-Oct-97	18:15	18:47	-12.8833	136.8667	-12.8617	136.865	46.9	Florida Flyer
55	8-Oct-97	19:04	19:36	-12.845	136.865	-12.82	136.865	47.1	Florida Flyer
56	8-Oct-97	20:00	20:32	-12.8333	136.8617	-12.8633	136.8583	43.6	Florida Flyer
57	8-Oct-97	21:08	21:38	-12.8967	136.8417	-12.8783	136.855	45.2	Florida Flyer
58	8-Oct-97	21:59	22:31	-12.87	136.865	-12.9	136.8633	47.2	Florida Flyer
59	8-Oct-97	23:11	23:41	-12.9383	136.84	-12.9583	136.8233	48	Florida Flyer
60	9-Oct-97	0:12	0:42	-12.9733	136.8067	-12.9517	136.8217	43.2	Florida Flyer
61	9-Oct-97	1:20	1:50	-12.9733	136.8017	-13.0033	136.8017	42.4	Florida Flyer
62	9-Oct-97	2:07	2:37	-13.005	136.8017	-13.0217	136.7783	43.2	Florida Flyer
63	9-Oct-97	2:52	3:22	-13.04	136.7734	-13.07	136.7734	42.8	Florida Flyer
64	9-Oct-97	3:42	4:12	-13.0683	136.775	-13.0467	136.7917	40	Florida Flyer
65	9-Oct-97	4:33	5:03	-13.0433	136.8017	-13.07	136.79	40.8	Florida Flyer
66	9-Oct-97	5:25	5:55	-13.075	136.7967	-13.05	136.81	38.4	Florida Flyer
67	9-Oct-97	6:24	6:53	-13.0483	136.8217	-13.0733	136.8117	40	Florida Flyer
68	9-Oct-97	8:14	8:42	-13.0983	136.79	-13.075	136.805	36.8	Florida Flyer
69	9-Oct-97	9:31	10:02	-12.9883	136.8133	-12.96	136.8317	42.4	Florida Flyer
70	9-Oct-97	10:21	10:53	-12.9517	136.8433	-12.9767	136.845	45.8	Florida Flyer
71	9-Oct-97	11:11	11:41	-12.9717	136.8483	-12.9433	136.85	44	Florida Flyer
72	9-Oct-97	13:36	14:03	-13.1233	136.7783	-13.1483	136.77	36	Florida Flyer
73	9-Oct-97	14:20	14:52	-13.1667	136.76	-13.195	136.7417	34	Florida Flyer
74	9-Oct-97	15:12	15:42	-13.22	136.7367	-13.2517	136.7367	31.2	Florida Flyer
75	9-Oct-97	16:04	16:33	-13.2817	136.7367	-13.3117	136.735	31.2	Florida Flyer
76	9-Oct-97	16:47	17:16	-13.3283	136.735	-13.3617	136.7333	30	Florida Flyer
77	9-Oct-97	18:16	18:45	-13.4067	136.7567	-13.3917	136.7817	29.2	Florida Flyer
78	9-Oct-97	19:02	19:31	-13.38	136.7883	-13.3583	136.7883	31.2	Florida Flyer
79	9-Oct-97	19:48	20:18	-13.3433	136.7917	-13.32	136.78	31.6	Florida Flyer
80	9-Oct-97	20:34	21:03	-13.3117	136.7667	-13.2917	136.75	30.8	Florida Flyer
81	9-Oct-97	21:18	21:49	-13.2817	136.7383	-13.2583	136.7217	29.6	Florida Flyer
82	9-Oct-97	22:09	22:36	-13.2383	136.725	-13.215	136.7333	30.8	Florida Flyer
83	9-Oct-97	23:07	23:35	-13.2183	136.7433	-13.1917	136.7483	32.5	Florida Flyer
84	9-Oct-97	23:48	0:22	-13.18	136.7517	-13.1483	136.7467	33.2	Florida Flyer
85	10-Oct-97	0:40	1:12	-13.1433	136.76	-13.1367	136.785	34.8	Florida Flyer
86	10-Oct-97	1:30	2:01	-13.1217	136.7883	-13.0967	136.7917	35.6	Florida Flyer
87*(9)	10-Oct-97	2:18	5:21	-13.1017	136.7867	-13.26	136.7383	37.2	Florida Flyer
88	10-Oct-97	13:37	14:07	-14.5983	136.9167	-14.6083	136.89	37.7	Florida Flyer
89	10-Oct-97	14:28	14:58	-14.615	136.8667	-14.625	136.84	36.4	Florida Flyer
90	10-Oct-97	15:19	15:50	-14.6383	136.8267	-14.6667	136.8117	34.8	Florida Flyer
91	10-Oct-97	16:05	16:34	-14.675	136.7967	-14.675	136.7667	34.4	Florida Flyer
92	10-Oct-97	16:49	17:19	-14.665	136.7583	-14.6417	136.7583	33.2	Florida Flyer
93	10-Oct-97	18:18	18:46	-14.6367	136.81	-14.6417	136.8317	34.4	Florida Flyer
94	10-Oct-97	19:04	19:36	-14.6517	136.845	-14.6767	136.855	35.8	Florida Flyer
95	10-Oct-97	19:53	20:26	-14.675	136.8633	-14.6533	136.87	36	Florida Flyer

STN No.	DATE	STIME	ETIME	SLAT	SLON	ELAT	ELON	DEPTH	GEAR
96	10-Oct-97	20:42	21:18	-14.64	136.865	-14.615	136.8417	36.4	Florida Flyer
97	10-Oct-97	21:31	22:02	-14.6133	136.8283	-14.6267	136.8	35.8	Florida Flyer
98	10-Oct-97	22:34	23:06	-14.6467	136.7633	-14.6583	136.7383	34.1	Florida Flyer
99	10-Oct-97	23:22	23:53	-14.655	136.7283	-14.63	136.7267	34	Florida Flyer
100	11-Oct-97	0:10	0:01	-14.6183	136.7333	-14.6217	136.725	34.1	Florida Flyer
101	11-Oct-97	1:20	1:49	-14.6117	136.7817	-14.6017	136.755	35.2	Florida Flyer
102	11-Oct-97	2:06	2:37	-14.5933	136.7383	-14.58	136.7083	34.2	Florida Flyer
103	11-Oct-97	3:07	3:37	-14.57	136.72	-14.5717	136.7483	34.4	Florida Flyer
104	11-Oct-97	3:56	4:31	-14.565	136.7667	-14.5483	136.795	34.4	Florida Flyer
105	11-Oct-97	4:48	5:23	-14.5417	136.7883	-14.5333	136.7533	32.8	Florida Flyer
106	11-Oct-97	5:41	6:11	-14.5267	136.7333	-14.5133	136.7083	35.6	Florida Flyer
107	11-Oct-97	6:29	7:00	-14.515	136.7083	-14.515	136.7367	34.8	Florida Flyer
108	11-Oct-97	8:05	8:35	-14.525	136.7817	-14.54	136.7617	36.8	Florida Flyer
109	11-Oct-97	8:59	9:27	-14.56	136.755	-14.5833	136.7583	35.2	Florida Flyer
110	11-Oct-97	9:41	10:11	-14.6033	136.76	-14.6283	136.765	34.7	Florida Flyer
111	11-Oct-97	10:33	11:01	-14.6283	136.7533	-14.6133	136.7367	34.4	Florida Flyer
112	11-Oct-97	12:52	13:25	-14.4967	136.5033	-14.4833	136.485	28.4	Florida Flyer
113	11-Oct-97	13:44	14:14	-14.4633	136.4833	-14.44	136.49	28.1	Florida Flyer
114	11-Oct-97	14:28	14:58	-14.4317	136.4833	-14.435	136.4617	28.8	Florida Flyer
115	11-Oct-97	15:16	15:45	-14.44	136.445	-14.45	136.425	27.2	Florida Flyer
116	11-Oct-97	15:57	16:28	-14.455	136.41	-14.4533	136.385	26	Florida Flyer
117	11-Oct-97	16:42	17:12	-14.4517	136.37	-14.4383	136.345	26	Florida Flyer
118	11-Oct-97	18:30	18:57	-14.4183	136.3117	-14.425	136.335	24.2	Florida Flyer
119	11-Oct-97	19:34	20:02	-14.4467	136.3467	-14.4467	136.3183	24.4	Florida Flyer
120	11-Oct-97	20:17	20:46	-14.4567	136.315	-14.4717	136.3367	24	Florida Flyer
121	11-Oct-97	21:04	21:35	-14.4817	136.3383	-14.485	136.305	25.3	Florida Flyer
122	11-Oct-97	21:49	22:19	-14.48	136.295	-14.4567	136.2817	23.6	Florida Flyer
123	11-Oct-97	22:35	23:05	-14.4417	136.2767	-14.4183	136.265	24	Florida Flyer
124	11-Oct-97	23:20	23:50	-14.4217	136.2533	-14.445	136.24	23.6	Florida Flyer
125	12-Oct-97	1:13	1:45	-14.4483	136.4217	-14.455	136.4467	26.4	Florida Flyer
126	12-Oct-97	2:02	2:34	-14.4583	136.4667	-14.465	136.4917	28.4	Florida Flyer
127* (17)	12-Oct-97	2:51	5:31	-14.4533	136.495	-14.4633	136.48	29.6	Florida Flyer
128* (17)									Florida Flyer
129	12-Oct-97	12:37	13:07	-14.4917	136.215	-14.4917	136.245	21.6	Florida Flyer
130	12-Oct-97	13:30	14:00	-14.4817	136.2483	-14.4617	136.2333	22.4	Florida Flyer
131	12-Oct-97	14:48	15:03	-14.4533	136.2383	-14.4467	136.2333	22.5	Benthic Sled
132	12-Oct-97	15:45	16:05	-14.4833	136.2183	-14.5017	136.2117	21.6	Benthic Sled
133	12-Oct-97	18:24	18:39	-14.4367	135.995	-14.455	135.985	21.2	Benthic Sled
134	12-Oct-97	18:52		-14.4633	135.9833			21.2	SDL
135	12-Oct-97	19:36	20:06	-14.4917	135.9333	-14.475	135.9417	19.5	Florida Flyer
136	12-Oct-97	20:30	21:00	-14.4567	135.9533	-14.4417	135.9633	19.6	Florida Flyer
137	12-Oct-97	21:15	21:46	-14.4317	135.97	-14.415	135.9817	20.8	Florida Flyer
138	12-Oct-97	22:40	23:09	-14.415	136.0333	-14.4383	136.0183	21.2	Florida Flyer
139	12-Oct-97	23:20	23:50	-14.4483	136.0133	-14.4733	135.9983	22	Florida Flyer
140	13-Oct-97	0:13	0:44	-14.47	136	-14.4933	135.9833	21.6	Florida Flyer
141	13-Oct-97	1:08	1:38	-14.4967	135.9567	-14.4733	135.9717	21.6	Florida Flyer
142	13-Oct-97	1:55	2:25	-14.4583	135.98	-14.4333	135.9967	22	Florida Flyer
143	13-Oct-97	3:02	3:30	-14.42	136	-14.3983	136.0167	21.6	Florida Flyer
144	13-Oct-97	3:59	4:30	-14.4	136.0234	-14.4233	136.0083	22.6	Florida Flyer
145	13-Oct-97	5:06	5:40	-14.4583	135.9883	-14.485	135.9733	21.8	Florida Flyer
146	13-Oct-97	7:42	8:13	-14.4917	135.935	-14.47	135.9483	20.4	Florida Flyer

STN No.	DATE	STIME	ETIME	SLAT	SLON	ELAT	ELON	DEPTH	GEAR
147	13-Oct-97	8:27	8:57	-14.455	135.955	-14.435	135.9667	20.6	Florida Flyer
148	13-Oct-97	9:14	9:45	-14.4183	135.975	-14.3967	135.99	20.3	Florida Flyer
149	13-Oct-97	10:13	10:43	-14.3867	136.025	-14.4083	136.0117	22.6	Florida Flyer
150	13-Oct-97	10:58	11:30	-14.4217	136.0017	-14.4417	135.9817	22.4	Florida Flyer
151	13-Oct-97	11:45	12:16	-14.4583	135.9783	-14.4817	135.9683	23.2	Florida Flyer
152	13-Oct-97	12:59	13:31	-14.505	135.9733	-14.4783	135.99	20.4	Florida Flyer
153	13-Oct-97	13:46	14:15	-14.4617	136.0017	-14.4367	136.0167	21.2	Florida Flyer
154	13-Oct-97	14:55	15:09	-14.43	135.995	-14.4433	135.99	21.6	Benthic Sled
155	13-Oct-97	15:23		-14.4517	135.99			21.6	SDL
156	13-Oct-97	16:45	17:05	-14.3483	136.1133	-14.33	136.12	20	Benthic Sled
157	13-Oct-97	17:24		-14.3267	136.1233			20	SDL
158	13-Oct-97	18:41	19:11	-14.2983	136.1333	-14.3267	136.12	20	Florida Flyer
159	13-Oct-97	19:28	19:58	-14.3383	136.1133	-14.3683	136.1017	20	Florida Flyer
160	13-Oct-97	20:16	20:46	-14.3767	136.095	-14.4067	136.0883	20	Florida Flyer
161	13-Oct-97	21:13	21:45	-14.4033	136.125	-14.38	136.135	20.3	Florida Flyer
162	13-Oct-97	22:12	22:42	-14.36	136.1433	-14.3367	136.1533	21.2	Florida Flyer
163	13-Oct-97	23:01	23:35	-14.325	136.1567	-14.2983	136.1667	21.2	Florida Flyer
164	14-Oct-97	0:05	0:39	-14.3017	136.195	-14.3317	136.1833	21.6	Florida Flyer
165	14-Oct-97	0:53	1:27	-14.3483	136.1767	-14.3783	136.165	22	Florida Flyer
166	14-Oct-97	1:40	2:11	-14.3933	136.1617	-14.42	136.1567	21.9	Florida Flyer
167	14-Oct-97	2:28	3:01	-14.415	136.145	-14.3883	136.1517	21.6	Florida Flyer
168	14-Oct-97	3:18	3:50	-14.37	136.16	-14.3417	136.17	21.9	Florida Flyer
168	14-Oct-97	3:18	3:50	-14.37	136.16	-14.3417	136.17	21.9	Florida Flyer
169	14-Oct-97	4:07	4:40	-14.3233	136.1733	-14.295	136.1867	21.6	Florida Flyer
172	14-Oct-97	7:36	8:09	-14.2967	136.1983	-14.325	136.1883	21.5	Florida Flyer
173	14-Oct-97	8:24	8:53	-14.34	136.1833	-14.3667	136.175	22	Florida Flyer
174	14-Oct-97	9:11	9:44	-14.3817	136.17	-14.4117	136.1617	22	Florida Flyer
175	14-Oct-97	10:16	10:46	-14.4017	136.125	-14.38	136.135	21.2	Florida Flyer
176	14-Oct-97	11:03	11:32	-14.3617	136.1417	-14.3433	136.15	21.6	Florida Flyer
177	14-Oct-97	11:49	12:18	-14.3267	136.155	-14.3033	136.165	21.6	Florida Flyer
178	14-Oct-97	13:29	13:59	-14.3867	136.0967	-14.3617	136.1083	20.8	Florida Flyer
179	14-Oct-97	14:15	14:48	-14.345	136.1183	-14.3167	136.1317	21	Florida Flyer
180	14-Oct-97	15:53	15:55	-14.3467	136.1233			20	SDL
181	14-Oct-97	16:14	16:30	-14.3333	136.1217	-14.315	136.1233	20.4	Benthic Sled
182	14-Oct-97	17:13	17:27	-14.3367	136.0583	-14.3467	136.0467	19.6	Benthic Sled
183	14-Oct-97	17:37	17:37	-14.3533	136.04			21.1	SDL
184	14-Oct-97	19:17	19:47	-14.2883	136.0833	-14.3167	136.07	19.2	Florida Flyer
185	14-Oct-97	20:06	20:36	-14.3183	136.0683	-14.3467	136.0567	20	Florida Flyer
186	14-Oct-97	20:52	21:28	-14.3433	136.055	-14.325	136.065	19.6	Florida Flyer
187	14-Oct-97	22:14	22:46	-14.3667	136.015	-14.3483	136.025	20.6	Florida Flyer
188	14-Oct-97	23:00	23:31	-14.3367	136.0283	-14.32	136.035	19.6	Florida Flyer
189	15-Oct-97	0:00	0:31	-14.335	136.0267	-14.3133	136.035	20	Florida Flyer
190	15-Oct-97	0:57	1:26	-14.2983	136.0234	-14.32	136.01	20.4	Florida Flyer
191	15-Oct-97	1:44	2:14	-14.3367	136.0033	-14.3583	135.9917	20.2	Florida Flyer
192	15-Oct-97	2:44	3:13	-14.375	135.995	-14.3517	136.0017	20.8	Florida Flyer
193	15-Oct-97	3:31	4:00	-14.335	136.0117	-14.3133	136.0267	20.7	Florida Flyer
194	15-Oct-97	4:29	5:02	-14.2983	136.0567	-14.3217	136.0483	20.3	Florida Flyer
195	15-Oct-97	5:18	5:48	-14.3333	136.0433	-14.355	136.0367	19.9	Florida Flyer
196	15-Oct-97	7:44	8:14	-14.3	136.0867	-14.3233	136.075	20.4	Florida Flyer
197	15-Oct-97	8:40	9:07	-14.3217	136.075	-14.3467	136.065	20.7	Florida Flyer
198	15-Oct-97	9:28	10:01	-14.3417	136.0583	-14.3183	136.0683	20.2	Florida Flyer

STN No.	DATE	STIME	ETIME	SLAT	SLON	ELAT	ELON	DEPTH	GEAR
199	15-Oct-97	10:27	10:59	-14.3033	136.0467	-14.33	136.0317	20.4	Florida Flyer
200	15-Oct-97	11:22	11:52	-14.335	136.03	-14.36	136.0183	20.4	Florida Flyer
201	15-Oct-97	12:07	12:37	-14.365	136.0133	-14.34	136.0234	21.2	Florida Flyer
203	15-Oct-97	21:25	21:55	-14.2967	136.1683	-14.275	136.1767	20.4	Florida Flyer
204	15-Oct-97	22:10	22:42	-14.27	136.18	-14.25	136.19	20.4	Florida Flyer
205	15-Oct-97	22:58	23:28	-14.24	136.1933	-14.22	136.2017	20.2	Florida Flyer
206	15-Oct-97	23:57	0:32	-14.21	136.175	-14.2417	136.1533	20.2	Florida Flyer
207	16-Oct-97	0:48	1:23	-14.2633	136.145	-14.2967	136.1317	20.5	Florida Flyer
208	16-Oct-97	1:39	2:22	-14.2983	136.1333	-14.27	136.1433	20.8	Florida Flyer
209	16-Oct-97	2:59	3:31	-14.29	136.1017	-14.2667	136.1167	20.9	Florida Flyer
210	16-Oct-97	3:50	4:22	-14.217	136.142	-14.22	136.14	15	Florida Flyer
211	16-Oct-97	4:48	5:21	-14.2217	136.1383	-14.1917	136.155	19.6	Florida Flyer
212	16-Oct-97	7:38	8:08	-14.2933	136.1633	-14.27	136.1767	20.4	Florida Flyer
213	16-Oct-97	8:22	8:52	-14.258	136.185	-14.237	136.198	14.8	Florida Flyer
214	16-Oct-97	9:07	9:37	-14.23	136.1983	-14.2083	136.1983	20.8	Florida Flyer
215	16-Oct-97	9:54	10:24	-14.2017	136.18	-14.2267	136.1633	20.3	Florida Flyer
216	16-Oct-97	10:40	11:09	-14.245	136.1567	-14.2733	136.145	20.1	Florida Flyer
217	16-Oct-97	11:24	11:53	-14.2883	136.1383	-14.3033	136.1233	20.8	Florida Flyer
218	16-Oct-97	12:38	13:07	-14.285	136.1017	-14.2683	136.115	20.8	Florida Flyer
219	16-Oct-97	13:31	14:00	-14.25	136.125	-14.2317	136.1367	20.3	Florida Flyer
220	16-Oct-97	14:15	14:44	-14.22	136.1433	-14.1967	136.155	20	Florida Flyer
221	16-Oct-97	15:13		-14.2133	136.1617			20.4	SDL
222	16-Oct-97	15:45	16:08	-14.2183	136.155	-14.225	136.1333	20.3	Benthic Sled
223	16-Oct-97	16:40	16:54	-14.2467	136.08	-14.2567	136.0733	20.4	Benthic Sled
224	16-Oct-97	17:04		-14.2633	136.0733			20.2	SDL
225	16-Oct-97	18:54	19:26	-14.1883	136.135	-14.21	136.125	19.6	Florida Flyer
226	16-Oct-97	19:39	20:10	-14.2233	136.1183	-14.245	136.1067	17.6	Florida Flyer
227	16-Oct-97	20:27	21:00	-14.2633	136.0967	-14.29	136.08	18	Florida Flyer
228	16-Oct-97	21:25	21:58	-14.2967	136.05	-14.275	136.0617	19.6	Florida Flyer
229	16-Oct-97	22:10	22:41	-14.2633	136.0683	-14.2467	136.0783	19.2	Florida Flyer
230	16-Oct-97	22:54	23:27	-14.2367	136.0833	-14.2183	136.0933	20	Florida Flyer
231	16-Oct-97	23:48	0:17	-14.2117	136.07	-14.24	136.0533	20.4	Florida Flyer
232	17-Oct-97	0:33	1:02	-14.2517	136.0467	-14.28	136.0333	20	Florida Flyer
233	17-Oct-97	1:26	1:56	-14.2783	136.035	-14.3017	136.02	20.2	Florida Flyer
234	17-Oct-97	2:13	2:47	-14.3	136.03	-14.2783	136.0483	20.2	Florida Flyer
235	17-Oct-97	3:08	3:36	-14.2583	136.0583	-14.2333	136.0717	20.4	Florida Flyer
236	17-Oct-97	4:00	4:30	-14.2333	136.095	-14.2567	136.0867	15.1	Florida Flyer
237	17-Oct-97	7:41	8:11	-14.1883	136.1333	-14.21	136.125	19.7	Florida Flyer
238	17-Oct-97	8:43	9:15	-14.2467	136.1083	-14.27	136.095	19.7	Florida Flyer
239	17-Oct-97	9:35	10:05	-14.265	136.0967	-14.2917	136.0817	20	Florida Flyer
240	17-Oct-97	10:23	10:57	-14.2933	136.06	-14.2733	136.0633	19.6	Florida Flyer
241	17-Oct-97	11:25	11:50	-14.2533	136.075	-14.24	136.0833	20	Florida Flyer
242	17-Oct-97	12:42	13:11	-14.2317	136.0883	-14.26	136.0717	20	Florida Flyer
243	17-Oct-97	13:50	14:19	-14.2817	136.03	-14.265	136.0417	20.4	Florida Flyer
244	17-Oct-97	14:35	15:07	-14.2517	136.0483	-14.23	136.0633	20.8	Florida Flyer
245	17-Oct-97	15:33	15:34	-14.2183	136.0783	-14.2183	136.0783	20.7	SDL
246	17-Oct-97	15:47	16:06	-14.215	136.0833	-14.215	136.105	20.8	Benthic Sled
247	17-Oct-97	16:52	17:07	-14.17	136.2017	-14.1583	136.2117	21.2	Benthic Sled
248	17-Oct-97	17:16		-14.1517	136.2167			21.6	SDL
249	17-Oct-97	18:48	19:19	-14.1083	136.25	-14.1283	136.24	20	Florida Flyer
250	17-Oct-97	19:37	20:07	-14.14	136.235	-14.1617	136.225	21.6	Florida Flyer

STN No.	DATE	STIME	ETIME	SLAT	SLON	ELAT	ELON	DEPTH	GEAR
251	17-Oct-97	20:32	21:02	-14.1683	136.22	-14.1933	136.2117	22.3	Florida Flyer
252	17-Oct-97	21:33	22:04	-14.1883	136.1833	-14.165	136.1917	20.2	Florida Flyer
253	17-Oct-97	22:20	22:49	-14.1533	136.1967	-14.1317	136.2067	20.6	Florida Flyer
254	17-Oct-97	23:19	23:49	-14.13	136.21	-14.11	136.2167	20.8	Florida Flyer
255	18-Oct-97	0:07	0:39	-14.1133	136.2183	-14.1483	136.2033	20.4	Florida Flyer
256	18-Oct-97	0:55	1:25	-14.17	136.195	-14.2017	136.1817	20	Florida Flyer
257	18-Oct-97	1:42	2:15	-14.2083	136.1667	-14.1867	136.1633	19.2	Florida Flyer
258	18-Oct-97	2:33	3:07	-14.1667	136.1683	-14.1433	136.1817	21.2	Florida Flyer
259	18-Oct-97	19:38	20:11	-15.015	136.7033	-15.0183	136.735	30	Florida Flyer
260	18-Oct-97	20:44	21:15	-15.0167	136.7717	-15.005	136.7983	31.6	Florida Flyer
261	18-Oct-97	21:37	22:09	-15.0183	136.7983	-15.0433	136.7883	30.8	Florida Flyer
262	18-Oct-97	22:48	23:20	-15.05	136.8317	-15.0517	136.8583	32.3	Florida Flyer
263	18-Oct-97	23:35	0:05	-15.0433	136.8583	-15.0217	136.8433	33.2	Florida Flyer
264	19-Oct-97	0:20	0:52	-15.0167	136.8483	-15.02	136.8733	33.6	Florida Flyer
265	19-Oct-97	1:12	1:44	-15.0233	136.895	-15.03	136.9183	34.9	Florida Flyer
266	19-Oct-97	2:02	2:32	-15.0317	136.9383	-15.0383	136.9617	35.6	Florida Flyer
267	19-Oct-97	2:52	3:22	-15.055	136.9683	-15.0833	136.9633	36	Florida Flyer
268	19-Oct-97	3:40	4:10	-15.09	136.95	-15.0867	136.9217	34.4	Florida Flyer
269	19-Oct-97	4:33	5:03	-15.0817	136.8883	-15.0767	136.8617	33.1	Florida Flyer
270	19-Oct-97	5:45	6:16	-15.0867	136.79	-15.0933	136.765	30.8	Florida Flyer
271	19-Oct-97	6:30	6:58	-15.1017	136.7567	-15.1017	136.7367	29.6	Florida Flyer
272	19-Oct-97	8:10	8:43	-15.0817	136.7067	-15.0567	136.725	28.4	Florida Flyer
273	19-Oct-97	9:20	9:49	-15.0117	136.7383	-15.015	136.77	30.4	Florida Flyer
274	19-Oct-97	10:05	10:38	-15.0217	136.7883	-15.05	136.805	30.8	Florida Flyer
275	19-Oct-97	10:55	11:25	-15.0567	136.8217	-15.06	136.85	30.9	Florida Flyer
276	19-Oct-97	11:42	12:09	-15.0567	136.8633	-15.0383	136.8533	32.4	Florida Flyer
277	19-Oct-97	12:58	13:32	-15.0183	136.8417	-15.025	136.8683	32.8	Florida Flyer
278	19-Oct-97	13:46	14:16	-15.0233	136.8867	-15.0217	136.9083	33.9	Florida Flyer
279	19-Oct-97	14:30	14:55	-15.02	136.925	-15.025	136.945	35.6	Florida Flyer
280	19-Oct-97	19:14	19:45	-15.22	137.5683	-15.22	137.5967	45.4	Florida Flyer
281	19-Oct-97	20:03	20:32	-15.2267	137.6067	-15.2517	137.5983	44.8	Florida Flyer
282	19-Oct-97	20:51	21:21	-15.2583	137.5833	-15.255	137.555	43.9	Florida Flyer
283	19-Oct-97	21:55	22:26	-15.2767	137.5367	-15.3	137.5183	34	Florida Flyer
284	19-Oct-97	22:42	23:14	-15.3083	137.5033	-15.3167	137.4717	41.2	Florida Flyer
285	19-Oct-97	23:37	0:10	-15.33	137.4617	-15.36	137.4583	38	Florida Flyer
286	20-Oct-97	0:43	1:16	-15.365	137.4783	-15.3633	137.445	39.9	Florida Flyer
287	20-Oct-97	1:32	2:01	-15.36	137.4467	-15.365	137.4683	38.4	Florida Flyer
288	20-Oct-97	2:23	2:56	-15.3683	137.5	-15.3717	137.525	40.1	Florida Flyer
289	20-Oct-97	3:55	4:26	-15.3317	137.565	-15.3483	137.545	42.8	Florida Flyer
290	20-Oct-97	4:41	5:11	-15.3617	137.54	-15.3867	137.5383	40.7	Florida Flyer
291	20-Oct-97	5:29	5:59	-15.385	137.5467	-15.3633	137.5633	39.2	Florida Flyer
292	20-Oct-97	7:36	8:06	-15.2217	137.5767	-15.2433	137.5867	44.8	Florida Flyer
293	20-Oct-97	8:32	9:04	-15.2667	137.5933	-15.28	137.5717	42.8	Florida Flyer
294	20-Oct-97	9:40	10:10	-15.295	137.5383	-15.27	137.5267	41.2	Florida Flyer
295	20-Oct-97	10:54	11:24	-15.3117	137.4967	-15.33	137.4767	40	Florida Flyer
296	20-Oct-97	11:44	12:18	-15.3467	137.47	-15.38	137.4683	39.2	Florida Flyer
297	20-Oct-97	13:00	13:33	-15.3817	137.44	-15.3583	137.4483	38.4	Florida Flyer
298	20-Oct-97	14:20	14:53	-15.3583	137.505	-15.3617	137.5283	40	Florida Flyer
299	20-Oct-97	15:27	16:00	-15.3617	137.555	-15.3617	137.5817	41.6	Florida Flyer
300	20-Oct-97	17:05	17:34	-15.3683	137.5317	-15.395	137.5317	39.6	Florida Flyer
301	20-Oct-97	19:02	19:32	-15.425	137.575	-15.4167	137.5467	41.2	Florida Flyer

STN No.	DATE	STIME	ETIME	SLAT	SLON	ELAT	ELON	DEPTH	GEAR
302	20-Oct-97	19:49	20:22	-15.4217	137.5367	-15.4283	137.56	39.4	Florida Flyer
303	20-Oct-97	20:47	21:22	-15.4333	137.59	-15.445	137.6167	40.8	Florida Flyer
304	20-Oct-97	21:40	22:12	-15.4483	137.635	-15.4583	137.66	42.3	Florida Flyer
305	20-Oct-97	23:01	23:32	-15.41	137.65	-15.4367	137.6517	44.4	Florida Flyer
306	20-Oct-97	23:51	0:24	-15.4517	137.66	-15.4533	137.685	40	Florida Flyer
307	21-Oct-97	0:47	1:20	-15.4483	137.7067	-15.4383	137.7333	44.4	Florida Flyer
308	21-Oct-97	1:38	2:10	-15.4283	137.7467	-15.4267	137.7734	46	Florida Flyer
309	21-Oct-97	2:28	2:59	-15.4283	137.79	-15.4083	137.79	46.8	Florida Flyer
310	21-Oct-97	3:18	5:25	-15.4	137.7717	-15.4133	137.6583	47.2	Florida Flyer
311	22-Oct-97	10:18	10:18	-16.385	138.5083	-16.373	138.483	23.6	Florida Flyer
312	22-Oct-97	11:04	11:41	-16.3667	138.4667	-16.3567	138.4367	23.7	Florida Flyer
313	22-Oct-97	12:00	12:30	-16.355	138.4083	-16.3467	138.38	22.8	Florida Flyer
314	22-Oct-97	12:45	13:14	-16.3567	138.3683	-16.3767	138.35	21.6	Florida Flyer
315	22-Oct-97	13:37	14:05	-16.3767	138.3083	-16.3683	138.2817	19.3	Florida Flyer
316	22-Oct-97	14:19	14:49	-16.3633	138.2667	-16.3567	138.2383	19.4	Florida Flyer
317	22-Oct-97	15:01	15:30	-16.35	138.235	-16.3333	138.25	19.6	Florida Flyer
318	22-Oct-97	15:48	16:19	-16.3283	138.2633	-16.3367	138.29	21.6	Florida Flyer
319	22-Oct-97	16:33	17:05	-16.335	138.3067	-16.3317	138.3333	22.8	Florida Flyer
320	22-Oct-97	18:13	18:46	-16.3333	138.2917	-16.365	138.285	22.7	Florida Flyer
321	22-Oct-97	19:00	19:31	-16.3683	138.285	-16.3583	138.2583	21.2	Florida Flyer
322	22-Oct-97	19:44	20:16	-16.3483	138.2533	-16.3217	138.2567	21.2	Florida Flyer
323	22-Oct-97	20:29	21:01	-16.3183	138.2633	-16.3333	138.285	22	Florida Flyer
324	22-Oct-97	21:50	22:21	-16.3567	138.3283	-16.3717	138.35	22	Florida Flyer
325	22-Oct-97	22:35	23:05	-16.365	138.3567	-16.34	138.36	22.4	Florida Flyer
326	22-Oct-97	23:51	0:20	-16.34	138.37	-16.3533	138.3883	24	Florida Flyer
327	23-Oct-97	0:51	1:21	-16.3417	138.4133	-16.3283	138.4333	25.1	Florida Flyer
328	23-Oct-97	1:47	2:17	-16.3233	138.3984	-16.3167	138.3717	25.6	Florida Flyer
329	23-Oct-97	2:41	3:12	-16.3117	138.4	-16.3133	138.425	25.7	Florida Flyer
330	23-Oct-97	3:27	3:57	-16.3133	138.4417	-16.3133	138.465	26	Florida Flyer
331	23-Oct-97	4:20	4:50	-16.33	138.4867	-16.3483	138.5017	27.4	Florida Flyer
332	23-Oct-97	5:08	5:38	-16.3583	138.4883	-16.36	138.46	24.4	Florida Flyer
333	23-Oct-97	7:47	8:17	-16.3683	138.705	-16.3733	138.73	26.8	Florida Flyer
334	23-Oct-97	8:33	9:09	-16.365	138.74	-16.335	138.75	26.8	Florida Flyer
335	23-Oct-97	9:25	9:58	-16.33	138.7667	-16.3333	138.795	26.8	Florida Flyer
336	23-Oct-97	10:13	10:47	-16.3417	138.81	-16.3617	138.83	26.4	Florida Flyer
337	23-Oct-97	11:00	11:30	-16.36	138.84	-16.3417	138.855	25.6	Florida Flyer
338	23-Oct-97	11:48	12:18	-16.335	138.8683	-16.34	138.8917	26	Florida Flyer
339	23-Oct-97	12:58	13:30	-16.34	138.9233	-16.3417	138.9517	25.6	Florida Flyer
340	23-Oct-97	13:44	14:16	-16.335	138.9633	-16.3167	138.98	24.8	Florida Flyer
341	23-Oct-97	14:29	15:01	-16.3117	138.9783	-16.3133	138.9483	24.8	Florida Flyer
342	23-Oct-97	15:58	16:29	-16.3233	138.8783	-16.3283	138.85	26.3	Florida Flyer
343	23-Oct-97	18:49	19:19	-16.315	138.6983	-16.315	138.7233	27.6	Florida Flyer
344	23-Oct-97	19:35	20:05	-16.315	138.7417	-16.3133	138.7667	26.4	Florida Flyer
345	23-Oct-97	20:19	20:48	-16.3117	138.78	-16.31	138.805	28.4	Florida Flyer
346	23-Oct-97	21:05	21:36	-16.3183	138.8067	-16.3367	138.7867	27.2	Florida Flyer
347	23-Oct-97	22:06	22:36	-16.34	138.8083	-16.3433	138.835	27.5	Florida Flyer
348	23-Oct-97	23:14	23:44	-16.3433	138.8367	-16.33	138.8583	26.6	Florida Flyer
349	24-Oct-97	0:34	1:04	-16.3283	138.8717	-16.3283	138.8967	26.9	Florida Flyer
350	24-Oct-97	1:21	1:51	-16.3283	138.9167	-16.33	138.9417	26.9	Florida Flyer
351	24-Oct-97	2:10	2:40	-16.3233	138.96	-16.3117	138.9817	27.3	Florida Flyer
352	24-Oct-97	2:56	3:27	-16.3083	138.975	-16.31	138.945	26.4	Florida Flyer

STN No.	DATE	STIME	ETIME	SLAT	SLON	ELAT	ELON	DEPTH	GEAR
353* (26)	24-Oct-97	3:58	5:41	-16.3283	138.8933	-16.325	138.8483	28	Florida Flyer
354* (26)									Florida Flyer
355* (26)									Florida Flyer
356	24-Oct-97	6:20	6:35	-16.312	138.88	nd	nd	21	Benthic sled
357	24-Oct-97	11:43	11:58	-16.035	138.325	nd	nd	34.2	Benthic sled
358	24-Oct-97	18:33	19:03	-16.0117	139.3817	-16.0183	139.355	42	Florida Flyer
359	24-Oct-97	19:18	19:52	-16.015	139.3533	-16.0233	139.385	41.6	Florida Flyer
360	24-Oct-97	20:09	20:40	-16.015	139.39	-15.9967	139.3917	42.8	Florida Flyer
361	24-Oct-97	21:09	21:41	-15.9983	139.3733	-16.0167	139.3533	42.6	Florida Flyer
362	24-Oct-97	22:17	22:47	-16	139.325	-16.0033	139.3017	41.8	Florida Flyer
363	25-Oct-97	1:12	1:42	-15.9833	139.3317	-15.957	139.34	40.4	Florida Flyer
364	25-Oct-97	2:04	2:34	-15.9433	139.35	-15.9467	139.375	42.4	Florida Flyer
365	25-Oct-97	2:52	3:22	-15.9567	139.385	-15.9817	139.39	41.6	Florida Flyer
366	25-Oct-97	3:41	4:11	-15.9883	139.405	-15.9867	139.43	42	Florida Flyer
367	25-Oct-97	4:26	4:55	-15.975	139.4383	-15.9483	139.4433	41.8	Florida Flyer
368	25-Oct-97	5:10	5:40	-15.94	139.455	-15.94	139.48	39.2	Florida Flyer
369	25-Oct-97	5:58	6:27	-15.9433	139.4767	-15.9433	139.4483	39.2	Florida Flyer
370	25-Oct-97	7:52	8:23	-15.98	139.4933	-15.98	139.5183	41.2	Florida Flyer
371	25-Oct-97	8:43	9:15	-15.965	139.5333	-15.9417	139.55	41.6	Florida Flyer
372	25-Oct-97	9:30	10:00	-15.9283	139.56	-15.9233	139.5833	41.2	Florida Flyer
373	25-Oct-97	10:17	10:49	-15.9233	139.6	-15.925	139.6267	40.8	Florida Flyer
374	25-Oct-97	11:10	11:42	-15.9317	139.6467	-15.9483	139.6667	40	Florida Flyer
375	25-Oct-97	12:39	13:09	-15.9783	139.6383	-15.9933	139.6583	40.4	Florida Flyer
376	25-Oct-97	13:30	14:02	-16.0067	139.65	-16.02	139.6217	40.4	Florida Flyer
377	25-Oct-97	14:20	14:51	-16.0317	139.625	-16.0467	139.6467	40	Florida Flyer
378	25-Oct-97	15:43	16:16	-16.0283	139.675	-16.0017	139.665	38.6	Florida Flyer
379	25-Oct-97	16:31	17:01	-15.9883	139.6617	-15.9667	139.665	40	Florida Flyer
380	25-Oct-97	18:41	19:09	-15.905	139.675	-15.9333	139.6767	40.4	Florida Flyer
381	25-Oct-97	19:39	20:09	-15.9617	139.6733	-15.9667	139.6484	40	Florida Flyer
382	25-Oct-97	20:26	20:55	-15.975	139.655	-15.9867	139.6833	40	Florida Flyer
383	25-Oct-97	21:40	22:09	-15.97	139.6983	-15.9983	139.7	39.2	Florida Flyer
384	25-Oct-97	22:24	22:56	-16.0133	139.695	-16.0417	139.6883	40.4	Florida Flyer
385	25-Oct-97	23:11	23:40	-16.045	139.6783	-16.035	139.6567	40	Florida Flyer
386	25-Oct-97	23:59	0:32	-16.025	139.64	-16.01	139.6217	40.4	Florida Flyer
387	26-Oct-97	0:57	1:30	-15.9883	139.5917	-15.9717	139.57	40.8	Florida Flyer
388	26-Oct-97	1:47	2:17	-15.96	139.555	-15.9433	139.5367	41.9	Florida Flyer
389	26-Oct-97	2:35	3:06	-15.9333	139.53	-15.9383	139.555	42	Florida Flyer
390* (10)	26-Oct-97	3:27	5:40	-15.9517	139.5483	-16.015	139.63	42	Florida Flyer
391* (10)									Florida Flyer
392	26-Oct-97	11:45	12:15	-16.53	140.057	-16.548	140.038	22.4	Florida Flyer
393	26-Oct-97	12:50	13:20	-16.538	140.048	-16.563	140.052	24	Florida Flyer
394	26-Oct-97	13:34	14:04	-16.577	140.048	-16.6	140.043	23.2	Florida Flyer
395	26-Oct-97	14:16	14:46	-16.613	140.042	-16.638	140.037	23	Florida Flyer
396	26-Oct-97	15:30	16:00	-16.667	140.035	-16.637	140.03	20.6	Florida Flyer
397	26-Oct-97	16:15	16:45	-16.633	140.038	-16.6283	140.0667	21	Florida Flyer
398	26-Oct-97	18:39	19:12	-16.5367	140.0817	-16.5717	140.0817	31.2	Florida Flyer
399	26-Oct-97	19:25	19:55	-16.575	140.0783	-16.5583	140.0667	29.2	Florida Flyer
400	26-Oct-97	20:10	20:42	-16.5483	140.06	-16.5317	140.05	28.3	Florida Flyer
401	26-Oct-97	21:19	21:50	-16.5717	140.0467	-16.6067	140.0467	28.8	Florida Flyer
402	26-Oct-97	22:05	22:35	-16.6117	140.0367	-16.605	140.015	29.2	Florida Flyer
403	26-Oct-97	22:49	23:22	-16.6133	140.0033	-16.6467	139.9883	29.2	Florida Flyer

STN No.	DATE	STIME	ETIME	SLAT	SLON	ELAT	ELON	DEPTH	GEAR
404	26-Oct-97	23:35	0:07	-16.6617	139.98	-16.6933	139.9617	30	Florida Flyer
405	27-Oct-97	0:22	0:55	-16.6933	139.955	-16.67	139.9567	30.4	Florida Flyer
406	27-Oct-97	1:12	1:42	-16.6567	139.9533	-16.6317	139.9567	33	Florida Flyer
407	27-Oct-97	2:11	2:41	-16.6383	139.9983	-16.6483	140.0234	24.4	Florida Flyer
408	27-Oct-97	2:54	3:24	-16.6517	140.0367	-16.66	140.0633	22.4	Florida Flyer
409	27-Oct-97	3:53	4:22	-16.685	140.0683	-16.7067	140.0683	20.7	Florida Flyer
410	27-Oct-97	4:37	5:07	-16.7067	140.06	-16.6833	140.045	19.8	Florida Flyer
411	27-Oct-97	5:48	6:00	-16.69	140.0183	-16.6817	140.0083	20.1	Florida Flyer
412	27-Oct-97	7:52	8:22	-16.743	139.922	-16.733	139.955	22.3	Florida Flyer
413	27-Oct-97	8:40	9:10	-16.735	139.968	-16.743	139.993	19	Florida Flyer
414	27-Oct-97	9:25	9:55	-16.747	139.997	-16.715	139.99	17	Florida Flyer
415	27-Oct-97	10:15	10:45	-16.708	140.012	-16.717	140.03	18	Florida Flyer
416	27-Oct-97	11:10	11:40	-16.728	140.05	-16.75	140.07	18	Florida Flyer
417	27-Oct-97	12:40	13:10	-16.782	140.045	-16.758	140.117	16	Florida Flyer
418	27-Oct-97	13:20	13:50	-16.763	140.07	-16.788	140.07	17	Florida Flyer
419	27-Oct-97	14:05	14:35	-16.807	140.072	-16.837	140.07	18	Florida Flyer
420	27-Oct-97	14:55	15:25	-16.852	140.07	-16.885	140.07	15	Florida Flyer
421	27-Oct-97	15:40	16:10	-16.783	140.077	-16.857	140.102	14	Florida Flyer
422	27-Oct-97	16:40	17:10	-16.847	140.038	-16.815	140.1	16	Florida Flyer
423	27-Oct-97	18:50	19:20	-16.775	140.1017	-16.775	140.102	23.6	Florida Flyer
424	27-Oct-97	19:32	20:01	-16.8167	140.1017	-16.845	140.1	22.2	Florida Flyer
425	27-Oct-97	20:16	20:46	-16.8567	140.09	-16.86	140.0633	20.4	Florida Flyer
426	27-Oct-97	21:02	21:31	-16.845	140.0567	-16.825	140.0567	21.6	Florida Flyer
427	27-Oct-97	21:57	22:26	-16.7983	140.0567	-16.775	140.0567	22.8	Florida Flyer
428	27-Oct-97	22:44	23:16	-16.7617	140.05	-16.7433	140.0367	22.8	Florida Flyer
429	27-Oct-97	23:31	0:00	-16.7383	140.025	-16.7583	140.005	23.2	Florida Flyer
430	28-Oct-97	0:12	0:42	-16.7617	139.9933	-16.7583	139.9667	22.4	Florida Flyer
431	28-Oct-97	0:56	1:27	-16.755	139.95	-16.75	139.925	22.8	Florida Flyer
432	28-Oct-97	1:42	2:18	-16.7433	139.9267	-16.7333	139.9533	28	Florida Flyer
433* (8)	28-Oct-97	2:50	5:42	-16.76	139.9667	-16.755	139.965	23	Florida Flyer
434	28-Oct-97	6:10	6:25	-16.743	139.958			18	Benthic sled
435	29-Oct-97	5:06	5:21	-12.793	141.407			26	Benthic sled
436	29-Oct-97	5:39	6:09	-12.7567	141.4183	-12.7317	141.4267	31.2	Florida Flyer
437	29-Oct-97	6:24	6:54	-12.72	141.435	-12.705	141.4567	29.8	Florida Flyer
438	29-Oct-97	8:07	8:40	-12.745	141.4917	-12.7717	141.4867	22.8	Florida Flyer
439	29-Oct-97	10:57	11:27	-12.715	141.5583	-12.7383	141.5533	16.8	Florida Flyer
440	29-Oct-97	11:49	12:22	-12.7617	141.5483	-12.7883	141.5433	18.4	Florida Flyer
441	29-Oct-97	12:50	13:21	-12.7767	141.5217	-12.755	141.505	21.2	Florida Flyer
442	29-Oct-97	13:44	14:15	-12.7717	141.5033	-12.7967	141.51	22.8	Florida Flyer
443	29-Oct-97	14:33	15:07	-12.8167	141.5183	-12.8417	141.53	23.4	Florida Flyer
444	29-Oct-97	15:20	15:52	-12.8483	141.5433	-12.8583	141.5717	22	Florida Flyer
445	29-Oct-97	18:46	19:16	-12.8767	141.5733	-12.853	141.577	22.8	Florida Flyer
446	29-Oct-97	19:38	20:08	-12.845	141.57	-12.83	141.5483	22.2	Florida Flyer
447	29-Oct-97	20:27	20:57	-12.8183	141.535	-12.7967	141.52	22	Florida Flyer
448	29-Oct-97	21:13	21:46	-12.8	141.515	-12.8267	141.5183	22.4	Florida Flyer
449	29-Oct-97	22:16	22:47	-12.8267	141.525	-12.8	141.5167	18.4	Florida Flyer
450	29-Oct-97	23:02	23:32	-12.7867	141.5117	-12.76	141.5083	21.6	Florida Flyer
451	30-Oct-97	0:13	0:46	-12.7317	141.535	-12.7017	141.535	18	Florida Flyer
452	30-Oct-97	1:06	1:38	-12.6983	141.52	-12.7233	141.5167	19.2	Florida Flyer
453	30-Oct-97	1:57	2:37	-12.7367	141.5117	-12.6983	141.505	21.2	Florida Flyer
454	30-Oct-97	3:03	3:36	-12.7033	141.48	-12.715	141.455	24	Florida Flyer

STN No.	DATE	STIME	ETIME	SLAT	SLON	ELAT	ELON	DEPTH	GEAR
455	30-Oct-97	3:55	4:27	-12.7317	141.445	-12.755	141.4367	28.9	Florida Flyer
456	30-Oct-97	4:42	5:16	-12.7617	141.445	-12.7633	141.4733	29.2	Florida Flyer
457	30-Oct-97	5:35	6:06	-12.7467	141.4833	-12.72	141.4883	24	Florida Flyer
458	30-Oct-97	7:37	8:09	-12.585	141.5	-12.555	141.5033	22.8	Florida Flyer
459	30-Oct-97	8:23	8:53	-12.5417	141.5083	-12.5217	141.525	23	Florida Flyer
460	30-Oct-97	9:06	9:35	-12.5117	141.5267	-12.5067	141.5033	21.5	Florida Flyer
461	30-Oct-97	9:57	10:27	-12.5233	141.4917	-12.5417	141.4767	26.8	Florida Flyer
462	30-Oct-97	10:55	11:24	-12.565	141.4767	-12.5383	141.485	27.6	Florida Flyer
463	30-Oct-97	11:43	12:12	-12.5233	141.4767	-12.5	141.4917	28	Florida Flyer
464	30-Oct-97	13:09	13:38	-12.4867	141.5333	-12.4617	141.5467	22.4	Florida Flyer
465	30-Oct-97	13:56	14:23	-12.4433	141.5533	-12.42	141.56	22.4	Florida Flyer
466	30-Oct-97	14:42	15:12	-12.4133	141.5533	-12.4317	141.54	23.2	Florida Flyer
467	30-Oct-97	15:38	16:11	-12.46	141.5283	-12.4833	141.52	24.4	Florida Flyer
468	30-Oct-97	16:31	17:02	-12.5083	141.5117	-12.5333	141.5	25.6	Florida Flyer
469	30-Oct-97	18:55	19:27	-12.4317	141.5183	-12.46	141.5183	24.9	Florida Flyer
470	30-Oct-97	19:43	20:17	-12.4533	141.52	-12.4267	141.5333	24.5	Florida Flyer
471	30-Oct-97	20:32	21:06	-12.425	141.5383	-12.4517	141.5317	23.4	Florida Flyer
472	30-Oct-97	21:19	21:51	-12.465	141.5267	-12.4917	141.52	23.6	Florida Flyer
473	30-Oct-97	22:19	22:52	-12.52	141.5167	-12.5417	141.5117	22.5	Florida Flyer
474	30-Oct-97	23:05	23:37	-12.555	141.5083	-12.5767	141.4983	21.6	Florida Flyer
475	31-Oct-97	0:05	0:34	-12.565	141.5	-12.5367	141.505	22.8	Florida Flyer
476	31-Oct-97	0:50	1:20	-12.5317	141.4983	-12.5517	141.4917	25.6	Florida Flyer
477*(16)	31-Oct-97	2:20	4:59	-12.485	141.5167	-12.4683	141.5234	24	Florida Flyer
478*(16)									Florida Flyer
479	31-Oct-97	21:32	22:02	-10.19	143.045	-10.2017	143.0617	26.5	Florida Flyer
480	31-Oct-97	22:19	22:49	-10.1967	143.0667	-10.1767	143.045	26.8	Florida Flyer
481	31-Oct-97	23:09	23:39	-10.1567	143.0467	-10.168	143.067	26.8	Florida Flyer
482	1-Nov-97	0:09	0:41	-10.1733	143.105	-10.1917	143.1267	26	Florida Flyer
483	1-Nov-97	0:55	1:29	-10.1833	143.1317	-10.155	143.1317	27.6	Florida Flyer
484	1-Nov-97	1:43	2:19	-10.14	143.1283	-10.1117	143.1217	25.6	Florida Flyer
485	1-Nov-97	2:36	3:12	-10.095	143.125	-10.0633	143.1383	23.7	Florida Flyer
486	1-Nov-97	3:31	4:02	-10.0383	143.15	-10.01	143.1683	23.6	Florida Flyer
487	1-Nov-97	4:15	4:48	-10.0017	143.1667	-10.0117	143.145	27.6	Florida Flyer
488	1-Nov-97	5:05	5:36	-10.02	143.14	-10.0217	143.1683	25.6	Florida Flyer
489	1-Nov-97	10:02	10:36	-10.2117	143.1383	-10.2183	143.1617	28.2	Florida Flyer
490	1-Nov-97	10:57	11:27	-10.2333	143.1633	-10.2283	143.1333	29.6	Florida Flyer
491	1-Nov-97	11:44	12:17	-10.24	143.1333	-10.2483	143.1567	27.8	Florida Flyer
492	1-Nov-97	13:11	13:38	-10.3167	143.16	-10.325	143.1833	29.6	Florida Flyer
493	1-Nov-97	14:56	15:23	-10.3767	143.135	-10.3783	143.16	26.6	Florida Flyer
494	1-Nov-97	15:41	16:18	-10.3717	143.1717	-10.3483	143.1517	28.9	Florida Flyer
495	1-Nov-97	18:33	19:02	-10.2317	143.0667	-10.2567	143.0617	24.4	Florida Flyer
496	1-Nov-97	19:17	19:48	-10.2567	143.05	-10.2283	143.0467	23.6	Florida Flyer
497	1-Nov-97	20:15	20:47	-10.22	143.0333	-10.2217	143.055	22.8	Florida Flyer
498	1-Nov-97	21:02	21:34	-10.215	143.0517	-10.1933	143.0234	24.2	Florida Flyer
499	1-Nov-97	21:47	22:19	-10.1933	143.0217	-10.2	143.0417	26.4	Florida Flyer
500	1-Nov-97	22:55	23:29	-10.2133	143.0967	-10.2167	143.1133	24.8	Florida Flyer
501	1-Nov-97	23:42	0:15	-10.2183	143.125	-10.225	143.1467	27.5	Florida Flyer
502	2-Nov-97	0:46	1:16	-10.265	143.1533	-10.275	143.177	28.8	Florida Flyer
503	2-Nov-97	1:36	2:14	-10.2917	143.175	-10.2883	143.145	31.6	Florida Flyer
504	2-Nov-97	2:42	3:12	-10.3167	143.1467	-10.3183	143.1233	25	Florida Flyer
505	2-Nov-97	3:26	3:56	-10.3283	143.1233	-10.3467	143.1433	26.8	Florida Flyer

STN No.	DATE	STIME	ETIME	SLAT	SLON	ELAT	ELON	DEPTH	GEAR
506	2-Nov-97	4:09	4:39	-10.355	143.155	-10.37	143.1733	28.7	Florida Flyer
507	2-Nov-97	4:55	5:30	-10.3783	143.1717	-10.3683	143.145	25.6	Florida Flyer
508	2-Nov-97	7:51	8:21	-10.1333	143.1433	-10.1333	143.1133	23.9	Florida Flyer
509	2-Nov-97	8:37	9:09	-10.1367	143.1117	-10.1417	143.1317	25.6	Florida Flyer
510	2-Nov-97	9:23	9:57	-10.1517	143.1283	-10.17	143.0983	25.7	Florida Flyer
511	2-Nov-97	10:11	10:42	-10.1767	143.1	-10.1767	143.12	28	Florida Flyer
512	2-Nov-97	10:55	11:27	-10.1667	143.1233	-10.1417	143.115	28.8	Florida Flyer
513	2-Nov-97	11:39	12:10	-10.14	143.1067	-10.1617	143.0817	26.7	Florida Flyer
514	2-Nov-97	12:59	13:37	-10.1967	143.055	-10.1667	143.045	31.8	Florida Flyer
515	2-Nov-97	14:01	14:14	-10.175	143.0283	-10.185	143.0183	25.2	Benthic Sled

SS897 Cruise Track

