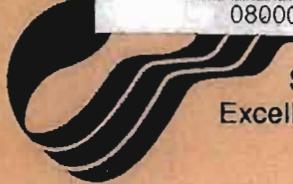




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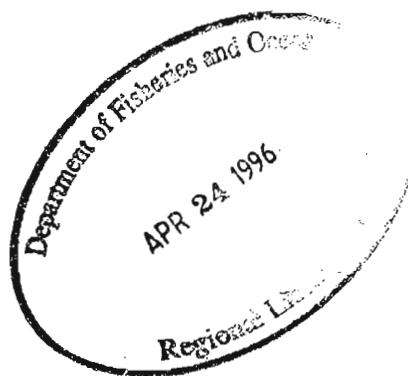
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R/V W.E. RICKER Assemblage Survey of Hecate Strait, May 23 - June 9, 1995

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and V. Haist

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Science Branch, Pacific Region
Pacific Biological Station
Nanaimo, British Columbia
V9R 5K6

1996



Canadian Data Report of Fisheries and Aquatic Sciences 974



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MAY 23 - JUNE 9, 1995

by

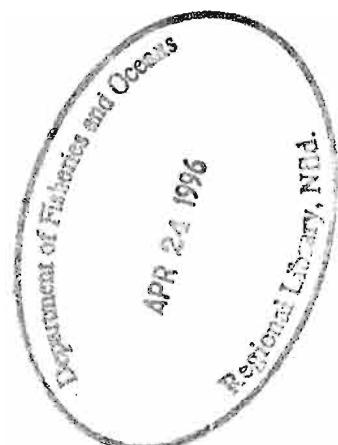
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ABSTRACT

Workman, G.D., J. Fargo, B. Beall, K.L. Yamanaka and V. Haist. 1996. R/V W.E. RICKER assemblage survey of Hecate Strait, May 23 - June 9, 1995. Can. Data Rep. Fish. Aquat. Sci. 974: 94 p.

During the period May 23 to June 9, 1995, the F/V W.E. RICKER was used to conduct a synoptic trawl survey of the ground fish species in Hecate Strait. Previous surveys have been conducted in May-June 1984, February 1986, May-June 1987, May-June 1989, June 1991, and May-June 1993. The purpose of these surveys is to collect catch composition data for demersal species occupying the shelf area (10 - 80 fm) of Hecate Strait. These data will be used for stock assessment of major commercial species in the region. A total of 106 tows were completed. Twenty six of the tow locations were new sites not fished on previous surveys. Four of the 106 tows were deemed unusable due to gear loss or damage. The catch of 30,582 kg was composed of 55 species. Flatfish accounted for 66 % of the catch, selachii 17 %, roundfish 10.5 %, rockfish 6 % and invertebrates 0.5 %. Length frequency data was collected for 6461 english sole, 4412 rock sole, 1625 dover sole, 933 Pacific cod and 303 Pacific ocean perch. In addition 106 CTD casts and 3 oblique bongo plankton tows were completed during the survey. This report summarizes the bridge log, catch, biological and oceanographic data collected.

RÉSUMÉ

Workman, G.D., J. Fargo, B. Beall, K.L. Yamanaka and V. Haist. 1996. R/V W.E. RICKER assemblage survey of Hecate Strait, May 23 - June 9, 1995. Can. Data Rep. Fish. Aquat. Sci. 974: 94 p.

Au cours de la période comprise entre le 23 mai et le 9 juin 1995, une campagne d'évaluation synoptique a été effectuée à bord du chalutier F/V W.E. RICKER, dans les pêcheries de poissons de fond du détroit d'Hecate. Des campagnes d'évaluation avaient déjà été effectuées aux mois de mai-juin 1984, février 1986, mai-juin 1987, mai-juin 1989, juin 1991 et mai-juin 1993. L'objet de ces opérations était de recueillir des données sur la composition des espèces démersales capturées sur la plate-forme continentale (10-80 brasses) du détroit d'Hecate. Ces données serviront à établir l'effectif des principales espèces commerciales de la région. Au total, 106 traits de chalut ont été effectués. Vingt-six des sites de prélèvement n'avaient pas été investigués lors des campagnes précédentes. Quatre des 106 prélèvements n'ont pas pu être retenus parce que les engins avaient été soit perdus, soit endommagés. La biomasse capturée a totalisé 30 582 kg et était composée de 55 espèces. Les poissons plats représentaient 66 % du total, les sélaciens 17 %, les poissons ronds 10,5 %, les sébastes 6 % et les invertébrés 0,5 %. Des données sur les fréquences de tailles ont été compilées à partir de 6 461 carlottins anglais, 4 412 fausses-limandes, 1 625 limandes-soles, 933 morues du Pacifique, et 303 sébastes à longue mâchoire. De plus, on a effectué 106 sondages CTD et 3 prélèvements de plancton avec un chalut bongo en oblique. Ce rapport donne aussi un état des données du journal de bord, des données de capture, et des données biologiques et océanographiques.

INTRODUCTION

This survey is the seventh in a series of biennial surveys initiated in the summer of 1984 as part of the Pacific Biological Station's Hecate Strait Program. The initial goal of the Hecate Strait Program was to develop an ecological basis for multispecies stock assessment by 1) examining inter-annual and inter-seasonal changes in abundance and distribution of marine fish species 2) collecting environmental data and incorporating the effects of salinity, temperature and sediment type into the abundance indices 3) investigating the trophic interactions among and within the assemblages identified. Due to limitations in funding and personnel, objective three is no longer a consideration. Previous summer surveys were conducted in: 1984, 1987, 1989, 1991 and 1993 (Fargo et al. 1984, Westrheim et al. 1984, Fargo et al. 1988, Antonsen et al. 1990, Wilson et al. 1991, and Hand et al. 1994). One winter survey was conducted in 1986 to investigate seasonal changes in species distribution and abundance(Fargo and Davenport 1986, Foucher et al. 1988). Results of analysis of these data have been presented by Fargo et al.(1990), Tyler (1989), Fargo and Tyler (1991) and Fargo and Tyler (1992).

The current report will present the results of the 1995 Hecate Strait assemblage survey.

METHODS

FISHING VESSEL

The R/V W.E. Ricker, a 2500 hp, 57.3 m steel stern trawler was used for the survey. The vessel layout includes three net drums and two main winches with approximately 600 fathoms of 26.5 mm. warp cable. The vessel is equipped with a wide range of modern electronics including GPS.

FISHING GEAR

The net used for this survey was a Yankee 36 research trawl of heavy construction (Fig. 1). The net was constructed of 4 mm poly web, with 89 mm mesh. Four mm double web was used in the bottom of the wings and at the front of the belly. The headline, constructed of 22 mm corkline, was 18.3 m long with 40 20-cm diameter plastic floats. The 24.4 m footrope was constructed of 9 mm longlink chain and 22 mm poly rope. The codend was built of the same web as the rest of the net with a 25 mm knotless braided nylon web liner. The groundline was built of 16 mm cable with 100 mm and 150 mm rubber disks. The net was rigged with 18.3 m sweep wires connected

to 18.3 m ground warps. The trawl doors for this survey were 1135 kg, USA Jet (Model P) combination doors. These doors are larger and heavier than those employed for the 1991 and 1993 surveys. The change was deemed necessary to keep the net on the bottom in rough weather. Measurements of net spread and opening of the old and new net and door combinations were made using a Simarad FS3300 net transducer.

SURVEY DESIGN

The survey design has been previously described in Westrheim et. al. (1984) and Fargo et al. (1984). Briefly, the survey area encompasses Hecate Strait and part of Dixon entrance, from $52^{\circ} 30' N$ to $54^{\circ} 30'$ and from $130^{\circ} 5' W$ to $131^{\circ} 45' W$. It covers a depth range of 10 to 80 fm (Fig 2). The area was divided into 10 by 10 nautical mile cells within which each 10 fathom depth interval constituted a sampling strata (Fig 3). The cells are designated 1 to 6 west to east and A to L north to south. Sampling strata are indicated by combining the area and the depth. For example station A206 would indicate the 60 to 69 fm strata in cell A2. Most sample sites are repeated year to year. When sample sites within a sampling strata were new it was left up to the fishing master to locate a suitable trawl site based on knowledge of the grounds and soundings. One objective of this years survey was to increase the number of tows in order to try and reduce the variance of the catch rate indices. Replicate tows were performed to examine catch rate variance within sites. New sites were added to address industry concerns over survey coverage.

FISHING OPERATIONS

Fishing commenced at 0800 each morning and continued until 1700 or 1800 each evening. Tows were standardized at 30 minutes in duration measured from the time the warp drums were locked to the time the retrieval of the net began. In some cases tow time was shortened because of encountering hard bottom.

CATCH PROCESSING

Once the net was retrieved the codend was dumped into a hopper below deck accessed through a midship hatch. The catch then moved along a conveyer system and was sorted by species into plastic baskets of approximately 50 kg capacity. Once the catch was sorted the baskets were weighed to the nearest kilogram using a MAREL 2200 digital scale with a 60 kg load cell. During all previous surveys the total catch of all species were measured to the nearest centimetre, unless the species catch was very large, in which case subsampling was performed. During this survey only rock

sole, English sole, Dover sole and Pacific cod were measured. This was necessary in order to increase the number of tows processed each day and complete the survey with fewer personnel than in previous years.

OCEANOGRAPHIC SAMPLING

Following each tow a CTD cast was performed using a Guildline CTD, series 8770, model 87107. At each station the CTD was lowered to within 10 - 15 m of the bottom before being retrieved. The CTD recorded the temperature and conductivity at 0.1 m increments during the decent of the probe. Cast procedures are summarized by Shaw (1994). The raw data was processed by Equisoft consulting. The data was smoothed to one meter intervals. These data were used for the plots in this report.

RESULTS

FISHING OPERATIONS

A total of 106 tows were completed during the survey of which 102 were usable (Fig 3) this includes 26 new trawl sites. Tows 26, 27, 104 and 105, of which 26 was the only previously fished site, were deemed unusable as a result of gear loss or net damage. Station F201 was visited four times, station C301, E402 and I302 were visited three times and sites B103, B306, D303, D404, E201, F303, H201, H304, I301, I405, J402, and K406 were replicated (Table 1). One site in strata D302, tow 74 during the 1993 survey, was abandoned due to the presence of large quantities of crab gear.

Comparisons between the old and new net/door configurations revealed that the two nets performed similarly with each set of doors. Using the smaller V-doors both nets spread approximately 9 m. With the heavier combination doors the net spread was approx. 12 m. The height of the vertical opening was similar between the two nets ranging from 3 to 4 m depending on the towing speed. The new net had slightly more vertical opening than the old net, possibly due to buoyancy of the poly material used to build the net.

CATCH

A total of 30,582 kg comprising 55 species was caught during the survey (Table 2). Flatfish accounted for 20,173 kg (66%), roundfish, demersal and pelagic, for

3,196 kg (10.5%), rockfish, 1834 kg (6%), selachii, 5235 kg (17%) and invertebrates 144 kg (0.5%). The dominant species by weight were arrowtooth flounder, English sole, rex sole, spiny dogfish, spotted ratfish and rock sole. These 6 species accounted for 19,685 kg or 64% of the total. Complete records of catch by haul are presented, along with bridge log location information in Appendix Table 1.

BIOSAMPLING

A total of 13,761 fish were measured for length (Table 3). In addition, length/sex/otolith samples were collected from 100 Dover sole and 89 English sole. Otoliths were stored in a 50:50 glycerin/water solution containing thymol. The focus of this year's survey was to collect length data for the major commercial species. These include English sole, rock sole, Dover sole, and Pacific cod. Length frequencies were taken for the total catch of these species except when a) there were very large tows, these were subsampled following Westrheim (1967) or b) there were extremely small catches and the size composition would not be meaningful. Length frequency data was also collected for two samples of Pacific ocean perch. The total number of fish for subsampled tows was calculated (Table 4) using the same procedures as Hand *et al.* (1994).

Mean, median and modal lengths of fish measured during the survey are summarized in Table 5. Length frequency histograms are presented in Figures 4 and 5.

OCEANOGRAPHIC RESULTS

A total of 106 CTD casts were completed during the survey. Several problems arose in processing the raw data. Cast 14 had to be regenerated from a print file, casts 1 to 32 had to be corrected for a 3 meter surface offset, casts 71 to 87 showed erroneous conductivity data which was removed and replaced with linearly interpolated data. The erroneous conductivity data may be a result of fouling of the probe or air being trapped inside the probe. Vertical profiles of each cast are presented in Appendix 9. Profiles were generated using the CTD processing software IOS SHELL (Linguanti *et al.* 1994). The data is archived at the Institute of Ocean Sciences in the IOS CTD data archive, reference number 9518.

As part of the ongoing COPRA (Cooperative Plankton Research Monitoring Program) program at the Biological Station three oblique bongo tows were performed at COPRA station, CPF1, CPF2 and CPE1. CTD casts 1 to 3 correspond to these stations.

PERSONNEL

Jeff Fargo	Pacific Biological Station	May 23 - June 9
Greg Workman	"	May 23 - June 9
Ben Beall	"	May 23 - June 9
Vivian Haist	"	May 23 - June 3
Lynne Yamanaka	"	June 3 - June 9

ACKNOWLEDGEMENTS

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Table 1: Summary of stations occupied during the 1995 Hecate Strait assemblage survey May 23 - June 9, 1995.

Block	Haul	Block	Haul
Depth	nos.	Depth	nos.
A206	81	F407	51
A207	80	G201	102
A303	83	G301	44
A304	84	G303	43
A306	82	G304	42 ¹
B102	78 ¹	G405	41
B103	74, 77	G407	40
B104	79 ¹	H201	103 ¹ , 104 ^{1,2}
B105	75	H301	37
B106	76	H302	38 ¹
B202	71	H303	36
B204	70	H304	35, 39 ¹
B205	72	H405	34
B207	73	H406	33
B301	90	H407	32
B302	89	I201	25
B303	88	I301	23, 105 ^{1,2}
B305	85 ¹	I302	21, 22, 28
B306	86 ¹ , 87 ¹	I303	29
C301	91 ¹ , 92, 93	I401	19
C302	67 ¹	I403	20
C303	69 ¹	I404	30
C304	68	I405	15, 16
D301	95 ¹	I407	31
D302	94	I506	13
D303	64, 66 ¹	I507	12
D304	65	J201	26 ²
D404	61, 63 ¹	J202	27 ^{1,2}
D405	62 ¹	J301	24
E201	97, 98 ¹	J402	17, 18
E302	96	J404	14
E303	60	J503	11
E402	55, 56, 57 ¹	J504	10
E405	58	J505	8
E504	59 ¹	J506	9
E505	49	K404	6
F201	45, 99 ¹ , 100 ¹ , 101 ¹	K405	5
F302	46	K406	4, 106
F303	47 ¹ , 48	K506	7
F403	53	L406	2
F404	52	L407	1
F405	50	L507	3
F406	54		

¹ new haul location

² unusable haul

Table 2: Catch by species for all species captured during the 1995 Hecate Strait Assemblage survey, May 23 - June 9, 1995.

Species		Number of occurrences.	Total catch (Kg)
Common Name	Scientific name		
Flatfish			
Arrowtooth flounder	<i>Atheresthes stomias</i>	76	8015
English sole	<i>Pleuronectes vetulus</i>	90	3384
Rex sole	<i>Errex zachirus</i>	69	2682
Rock sole	<i>Plueronectes bilineatus</i>	67	1580
Pacific halibut	<i>Hippoglossus stenolepis</i>	73	1430
Pacific sanddab	<i>Citharichthys sordidus</i>	63	1126
Dover sole	<i>Microstomus pacificus</i>	56	978
Flathead sole	<i>Hippoglossoides elassodon</i>	38	405
Sand sole	<i>Psettichtys melanostictus</i>	34	198
Butter sole	<i>Plueronectes isolepis</i>	31	165
Starry flounder	<i>Platichthys stellatus</i>	6	53
Slender sole	<i>Eopsetta exilis</i>	25	47
Speckled sanddab	<i>Citharichthys stigmaeus</i>	3	46
Petrale sole	<i>Eopsetta jordani</i>	28	42
Curlfin sole	<i>Plueronichthys decurrens</i>	20	22
Total Flatfish			20173
Roundfish			
Pacific cod	<i>Gadus macrocephalus</i>	62	1807
Walleye pollock	<i>Theragra chalcogramma</i>	44	593
Lingcod	<i>Ophiodon elongatus</i>	33	276
Sablefish	<i>Anoplopoma fimbria</i>	43	178
Pacific herring	<i>Clupea pallasi</i>	47	136
Pacific tomcod	<i>Microgadus proximus</i>	24	90
Chinook salmon	<i>Oncorhynchus tshawytscha</i>	3	45
Kelp greenlings	<i>Hexagrammos decagrammus</i>	6	23
Eulachon	<i>Thaleichthys pacificus</i>	16	21
Pacific Sandlance	<i>Ammodytes hexapterus</i>	27	8
Eelpouts	<i>Zoarcidae spp.</i>	22	6
Sculpins	<i>Cottidae spp.</i>	6	6
Ammerican shad	<i>Alosa sapidissima</i>	4	5
Shiner perch	<i>Cymatogaster aggregata</i>	6	1
Poachers	<i>Agonidae spp.</i>	32	1
Pacific Snake prickleback	<i>Lumpenus sagitta</i>	6	Trace
Pacific hake	<i>Merluccius productus</i>	1	Trace
Irish lord	<i>Hemilepidotus spp.</i>	2	Trace
Total Roundfish			3196

Table 2: (continued)

Species		Number of occurrences.	Total catch (Kg)
Common Name	Scientific name		
<u>Rockfish</u>			
Yellowtail rockfish	<i>Sebastes flavidus</i>	15	1156
Pacific ocean perch	<i>Sebastes alutus</i>	13	226
Silvergray rockfish	<i>Sebastes brevispinis</i>	7	94
Copper rockfish	<i>Sebastes carinus</i>	3	89
Redbanded rockfish	<i>Sebastes babcocki</i>	4	61
Quillback rockfish	<i>Sebastes maliger</i>	13	60
Yelloweye rockfish	<i>Sebastes ruberrimus</i>	3	42
Canary rockfish	<i>Sebastes pinniger</i>	5	39
Bocaccio	<i>Sebastes paucispinis</i>	7	35
Shortbelly rockfish	<i>Sebastes jordani</i>	2	16
Redstripe rockfish	<i>Sebastes proriger</i>	1	6
Shortraker rockfish	<i>Sebastes borealis</i>	1	5
Greenstriped rockfish	<i>Sebastes elongatus</i>	2	2
Widow rockfish	<i>Sebastes entomelas</i>	1	2
Black rockfish	<i>Sebastes melanops</i>	1	1
Harlequin rockfish	<i>Sebastes variegatus</i>	1	Trace
Total Rockfish			1834
<u>Selachii</u>			
Spiny dogfish	<i>Squalus acanthias</i>	70	2282
Spotted ratfish	<i>Hydrolagus colliei</i>	71	1742
Big skate	<i>Raja binoculata</i>	40	1184
Longnose skate	<i>Raja rhina</i>	2	10
Brown catshark	<i>Apristurus brunneus</i>	1	9
Sandpaper skate	<i>Bathyraja interrupta</i>	3	8
Total Selachii			5235
<u>Invertebrates</u>¹			
Total Catch all Species		21	144
			30582

¹ Invertebrates include Crabs and Shrimps. Urchins, starfish, sea cucumber and anemones were not weighed.

Table 3: Summary of biological samples collected, total weight and number of fish caught and weight and number of fish measured during the 1995 Hecate Strait assemblage survey. Numbers in parentheses correspond to the Appendix Table containing the data.

Species	Weight Caught	Weight Sampled	Number Caught	Number Sampled	Otoliths Taken
English sole	3384	1214	18009	6461(2)	89(7)
Rock sole	1580	1379	5055	4412(3)	
Dover sole	978	525	3027	1625(4)	100(8)
Pacific cod	1807	807	2089	933(5)	
Pacific ocean perch	226	62	1202	303(6)	

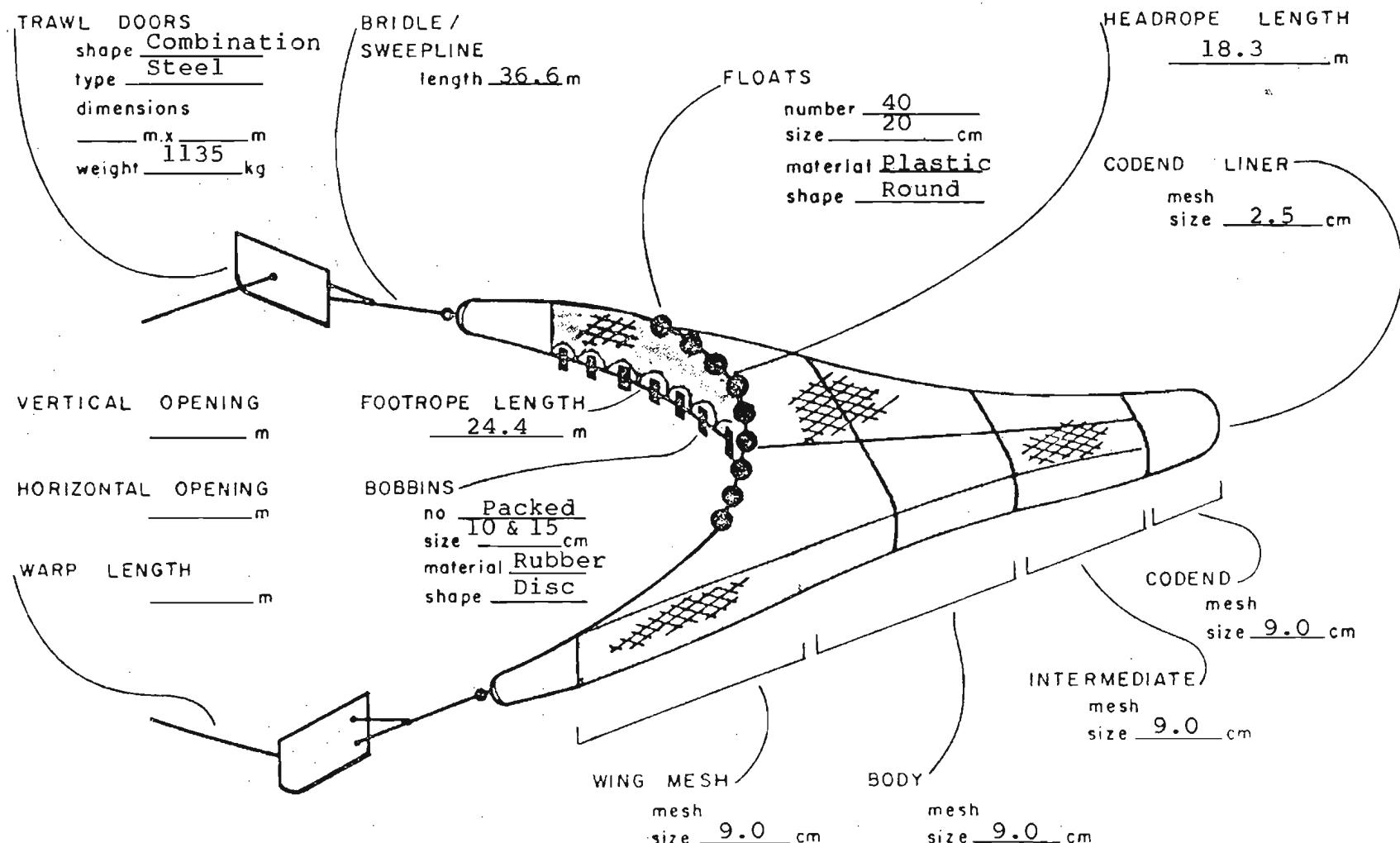
Table 4: Calculated number by species for hauls which were subsampled for length.

Species	Haul no.	Weight (kg)		Numbers	
		Sample	Total	Sample	Total
English sole	14	71	86	333	403
	66	40	74	223	412
	67	22	131	198	1189
	70	36	107	129	378
	72	39	263	129	870
	73	15	100	37	242
	81	11	44	20	76
	82	28	74	85	224
	83	37	66	198	353
	84	23	243	105	1098
	85	35	715	113	2336
	86	12	49	35	141
Rock sole	89	40	266	334	2212
	14	29	37	190	240
	17	22	29	98	123
	91	38	143	150	568
Dover sole	54	48	84	154	269
	85	45	107	135	321
	86	32	67	91	189
	87	45	147	125	409
Pacific cod	47	155	175	180	202
	67	164	816	282	1400
Pacific ocean perch	12	36	99	217	595
	40	27	88	113	363

Table 5: Summary of length data, in cm, collected during the 1995 Hecate Strait assemblage survey, May 23 - June 9, 1995.

Species	Mean	Standard Deviation	Median	Mode
English sole	26.1	7.2	26	28
Rock sole	26.6	8.3	25	23
Dover sole	30.2	7.2	26	28
Pacific cod	38.6	13.4	33	28
Pacific ocean perch	23.8	2.9	24	26

NET DIMENSIONS AND CHARACTERISTICS FOR BOTTOM TRAWL

VESSEL W. E. RICKER NET Yankee 36OBSERVATION PERIOD May 23 - June 9, 1995

- 13 -

Fig. 1. Net dimensions and characteristics for the Yankee 36 trawl net used by R/V W. E. RICKER ON SPECIES ASSEMBLAGE SURVEY May 23-June 9, 1995.

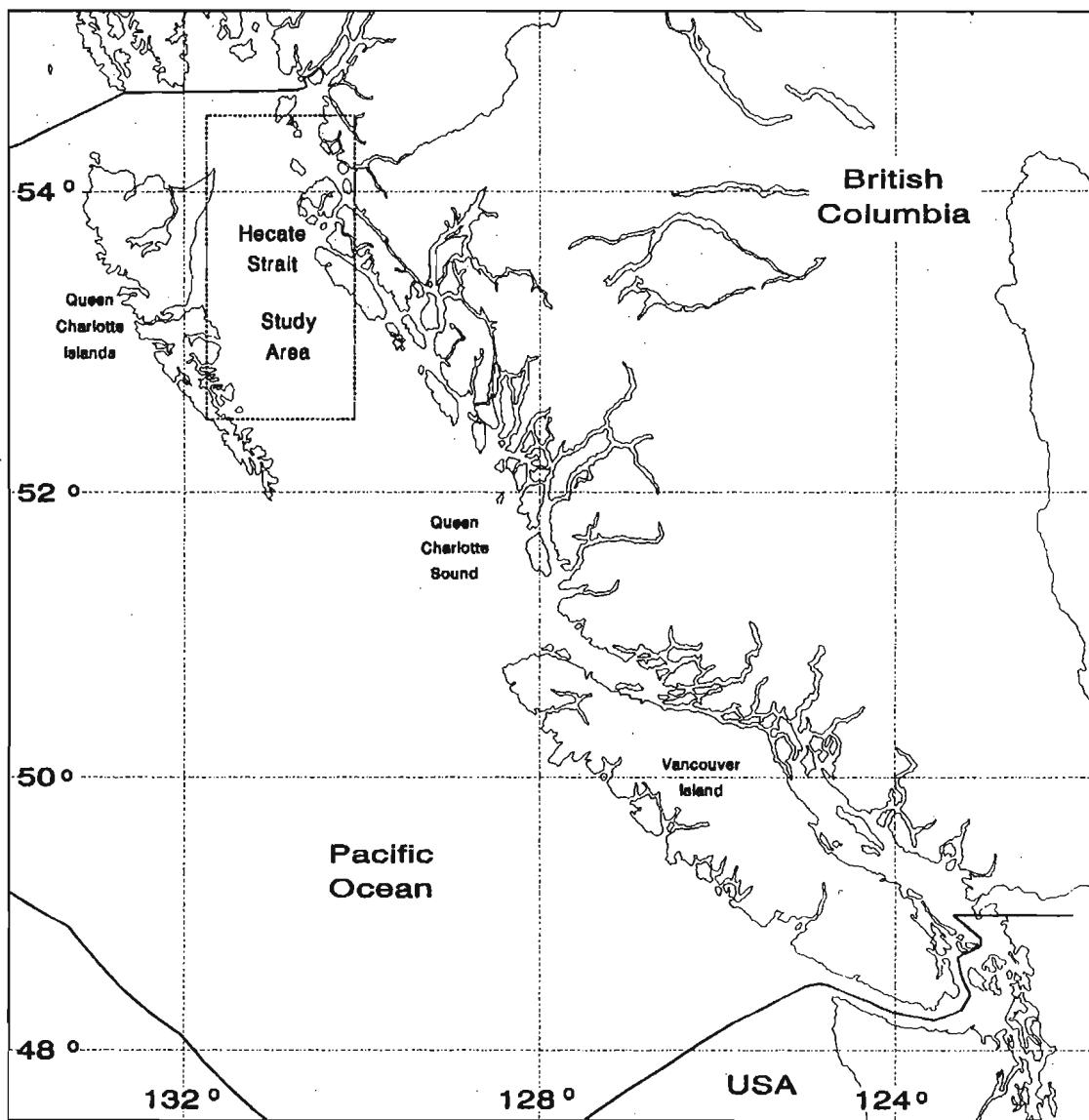


Figure 2: An overview of the survey area , showing the location of Hecate Strait in relation to other area of Canada's west coast.

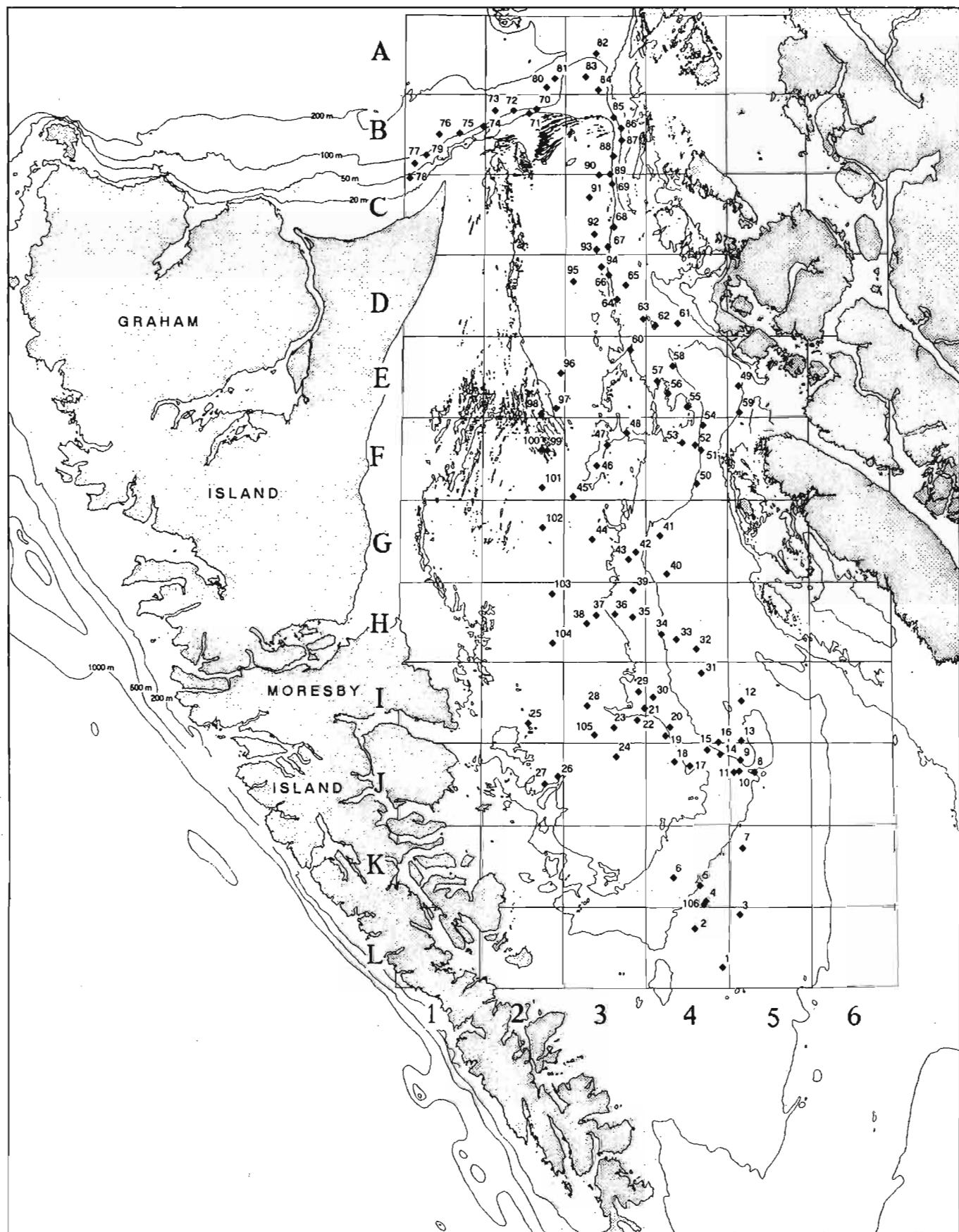
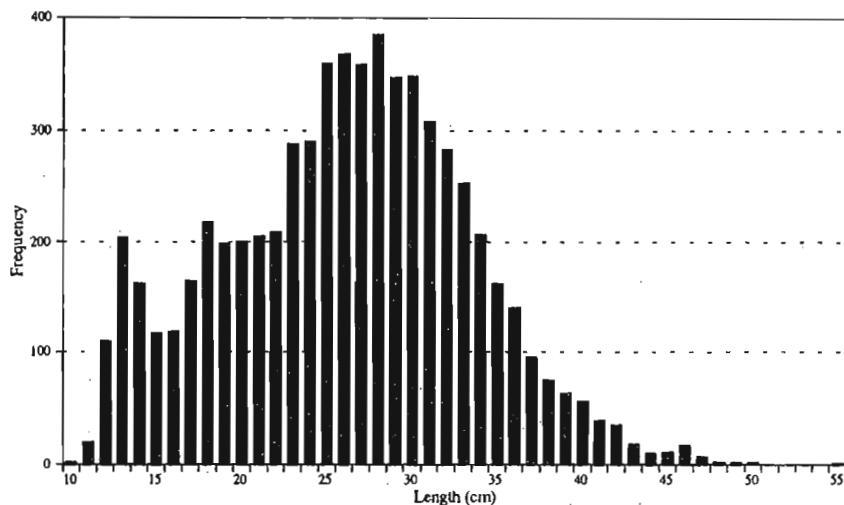
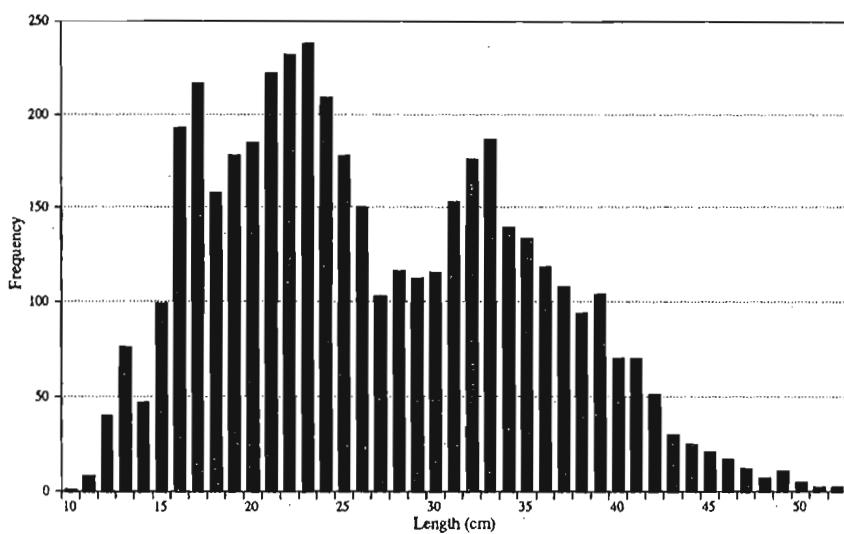


Figure 3: Tow locations during the Hecate Strait assemblage survey May 23 - June 9, 1995.
Depth contours are in meters.

English sole



Rock sole



Dover sole

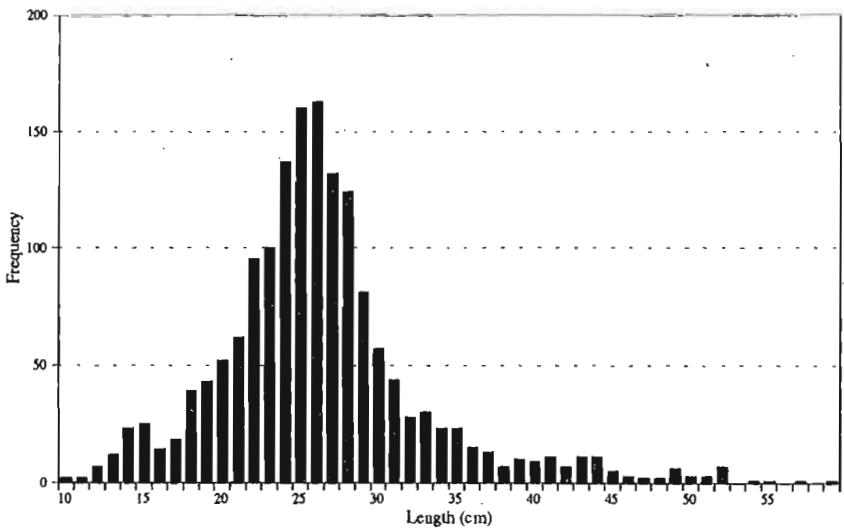
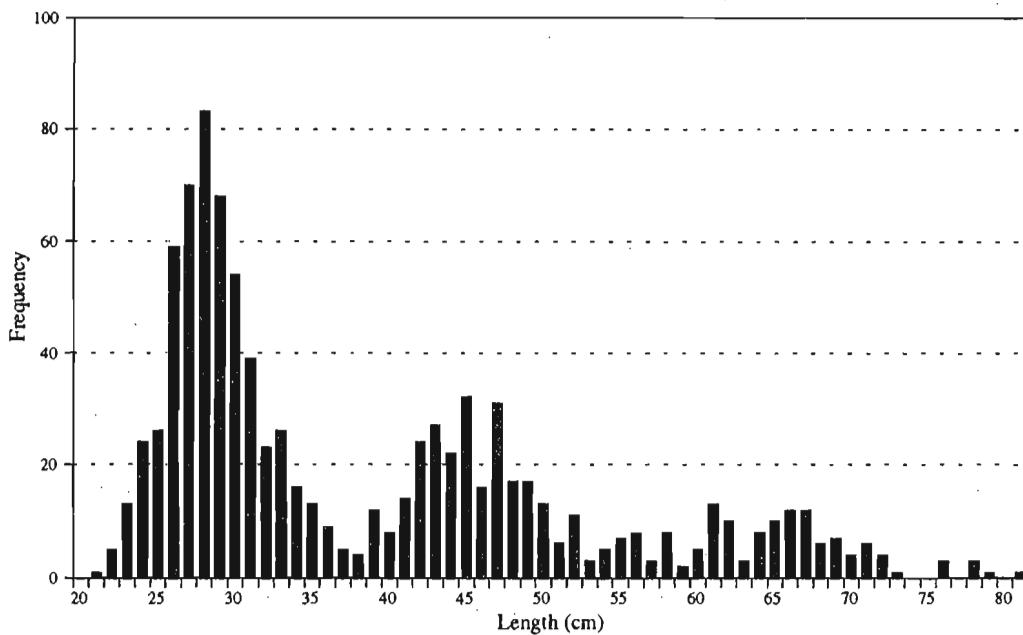


Figure 4: Length frequency histograms for flatfish measured during the Hecate Strait assemblage survey May 23 - June 9, 1995.

Pacific cod



Pacific ocean perch

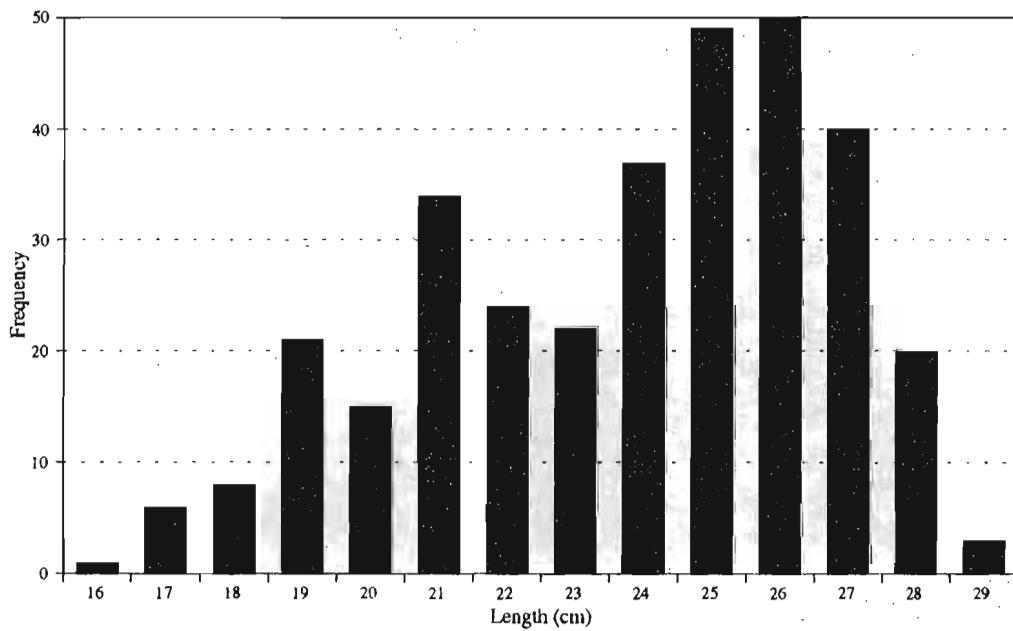


Figure 5: Length frequency histograms for Pacific cod and Pacific ocean perch measured during the Hecate Strait assemblage survey May 23 - June 9, 1995.

APPENDIX TABLE 1: Bridge log and catch data for the R/V W.E. Ricker, Hecate strait assemblage survey, May 23 - June 9, 1995.

HAUL NO.	1 L407 MAY 25	2 L406 MAY 25	3 L507 MAY 25			
DURATION (H)	0.47	0.50	0.50			
DIRECTION (DEG. TRUE)	203	19	295			
TIME (PDT)	START 8:13	STOP 8:41	START 10:03	STOP 10:33	START 12:05	STOP 12:35
LAT. (DEG, MIN)	52 33.2	52 31.9	52 36.7	52 38.3	52 39.3	52 39.1
LONG. (DEG, MIN)	130 41.2	130 42.3	130 47.9	130 47.2	130 37.2	130 39.4
DEPTH (FM)	68	73	62	60	73	73
SPECIES CATCH(KG.)						
Arrowtooth flounder	-	2	TRACE			
Butter sole	-	-	-			
C-O sole	-	-	-			
Curlfin sole	-	-	-			
Dover sole	-	-	-			
English sole	-	4	-			
Flathead sole	-	-	TRACE			
Pacific halibut	-	5	-			
Pacific sanddab	-	2	TRACE			
Petrale sole	-	TRACE	-			
Rex sole	TRACE	2	TRACE			
Rock sole	-	1	-			
Sand sole	-	-	-			
Slender sole	-	-	-			
Speckled sanddab	-	-	-			
Starry flounder	-	-	-			
Black rockfish	-	-	-			
Bocaccio	-	-	-			
Canary rockfish	-	-	-			
Copper rockfish	-	-	-			
Greenstriped rockfish	-	-	-			
Harlequin rockfish	-	-	-			
Pacific ocean perch	-	TRACE	-			
Quillback rockfish	-	-	-			
Redbanded rockfish	-	-	-			
Redstripe rockfish	-	-	-			
Shortbelly rockfish	-	-	-			
Shortraker rockfish	-	-	-			
Silvergray rockfish	45	-	14			
Widow rockfish	-	-	-			
Yelloweye rockfish	-	-	-			
Yellowtail rockfish	-	-	-			
Eelpouts	-	-	-			
Eulachon	-	-	-			
Greenlings	-	-	-			
Irish lord	-	-	-			
Lingcod	-	-	-			
Pacific cod	-	-	-			
Pacific hake	-	-	-			
Pacific herring	-	-	-			
Pacific tomcod	-	TRACE	-			
Poachers	-	-	-			
Sablefish	-	-	-			
Salmon	-	-	-			
Sandlance	-	-	-			
Scorpions	-	-	-			
Shad	-	-	-			
Shiner perch	-	-	-			
Unknown fish	-	-	-			
Walleye pollock	-	-	-			
Big skate	-	-	-			
Brown catshark	-	-	-			
Longnose skate	-	-	-			
Sandpaper skate	-	-	-			
Spiny dogfish	TRACE	4	-			
Spotted ratfish	-	TRACE	-			
Invertebrates	-	TRACE	-			
TOTAL CATCH (KG.)	45	20	14			
REMARKS	USABLE	USABLE	USABLE			

Appendix Table 1: Continued

HAUL NO.	4 BLOCK DATE (1995)	K406 MAY 25	5 K405 MAY 25	6 K404 MAY 25
DURATION (H)	0.50		0.50	0.50
DIRECTION (DEG. TRUE)	228		57	225
TIME (PDT)	START 13:55	STOP 14:25	START 15:13	STOP 15:43
LAT. (DEG, MIN)	52 41.5	52 40.2	52 42.4	52 43.1
LONG. (DEG, MIN)	130 44.3	130 46.1	130 47.3	130 45.5
DEPTH (FM)	58	59	54	54
SPECIES CATCH(KG.)				
Arrowtooth flounder	TRACE		2	1
Butter sole	-		-	-
C-O sole	-		-	-
Curlfin sole	-		-	2
Dover sole	-		1	1
English sole	-		6	8
Flathead sole	-		-	-
Pacific halibut	5		-	38
Pacific sanddab	TRACE		2	9
Petrale sole	-		2	TRACE
Rex sole	TRACE		4	5
Rock sole	-		2	19
Sand sole	-		-	-
Slender sole	-	TRACE	-	-
Speckled sanddab	-		-	-
Starry flounder	-		-	-
Black rockfish	-		-	-
Bocaccio	-		-	-
Canary rockfish	-		-	-
Copper rockfish	-		-	-
Greenstriped rockfish	-		-	-
Harlequin rockfish	-		-	-
Pacific ocean perch	-		-	-
Quillback rockfish	-		-	-
Redbanded rockfish	-		-	-
Redstripe rockfish	-		-	-
Shortbelly rockfish	-		-	-
Shortraker rockfish	-		-	-
Silvergray rockfish	-		-	-
Widow rockfish	-		-	-
Yelloweye rockfish	-		-	-
Yellowtail rockfish	-		-	-
Eelpouts	-		-	-
Eulachon	-		-	-
Greenlings	-		-	-
Irish lord	-		-	-
Lingcod	17		8	-
Pacific cod	-		-	-
Pacific hake	-		-	-
Pacific herring	10		2	TRACE
Pacific tomcod	-	TRACE	-	-
Poachers	-	TRACE	-	-
Sablefish	-	TRACE	-	-
Salmon	-		-	-
Sandlance	-		-	-
Scorpins	-		-	-
Shad	-		-	TRACE
Shiner perch	-		-	-
Unknown fish	-		-	-
Walleye pollock	-		-	-
Big skate	-		-	11
Brown catshark	-		-	-
Longnose skate	-		-	-
Sandpaper skate	-		-	-
Spiny dogfish	-		-	11
Spotted ratfish	TRACE		3	1
Invertebrates	-		-	-
TOTAL CATCH (KG.)	32		32	106
REMARKS	USABLE		USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	7 K506 MAY 25	8 J505 MAY 26	9 J506 MAY 26
DURATION (H)	0.50	0.50	0.50
DIRECTION (DEG. TRUE)	45	345	302
TIME (PDT)	18:21	18:51	8:05 9:35
LAT. (DEG, MIN)	52 46.7	52 48.0	52 55.7 52 57.3
LONG. (DEG, MIN)	130 38.4	130 37.0	130 34.8 130 35.4
DEPTH (FM)	60	62	53 50 61 62
SPECIES CATCH (KG.)			
Arrowtooth flounder	1	TRACE	14
Butter sole	-	-	-
C-O sole	-	-	-
Curlfin sole	-	-	-
Dover sole	TRACE	TRACE	1
English sole	12	3	TRACE
Flathead sole	TRACE	-	-
Pacific halibut	-	6	9
Pacific sanddab	TRACE	-	TRACE
Petrale sole	2	TRACE	9
Rex sole	7	5	2
Rock sole	1	-	-
Sand sole	-	-	-
Slender sole	TRACE	TRACE	-
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	-	-
Canary rockfish	1	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	-	-
Quillback rockfish	-	1	TRACE
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	-	-	-
Kelpouts	TRACE	-	-
Eulachon	-	-	-
Greenlings	-	1	-
Irish lord	-	-	-
Lingcod	10	18	5
Pacific cod	-	-	-
Pacific hake	-	-	-
Pacific herring	-	-	1
Pacific tomcod	TRACE	1	TRACE
Poachers	-	-	TRACE
Sablefish	-	-	5
Salmon	-	15	-
Sandlance	-	-	TRACE
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	-	-	-
Big skate	-	6	32
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	99	19	31
Spotted ratfish	2	4	38
Invertebrates	-	-	-
TOTAL CATCH (KG.)	135	79	147
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	10	11	12
BLOCK	J504	J503	I507
DATE (1995)	MAY 26	MAY 26	MAY 26
DURATION (H)	0.50	0.50	0.50
DIRECTION (DEG. TRUE)	170	4	99
TIME (PDT)	10:05	10:35	12:43
LAT. (DEG, MIN)	52 57.3	52 55.9	53 05.3
LONG. (DEG, MIN)	130 38.6	130 38	130 37.8
DEPTH (FM)	48	43	72
SPECIES CATCH (KG.)			
Arrowtooth flounder	1	TRACE	175
Butter sole	-	-	-
C-O sole	-	-	-
Curlfin sole	TRACE	-	-
Dover sole	-	-	34
English sole	9	1	5
Flathead sole	-	-	2
Pacific halibut	-	4	-
Pacific sanddab	6	TRACE	TRACE
Petrale sole	2	-	3
Rex sole	6	TRACE	84
Rock sole	39	35	3
Sand sole	-	-	-
Slender sole	-	-	TRACE
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	-	99
Quillback rockfish	-	-	-
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	3
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	-	-	TRACE
Eelpouts	-	-	-
Eulachon	-	-	-
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	9	-	-
Pacific cod	-	-	2
Pacific hake	-	-	-
Pacific herring	5	-	TRACE
Pacific tomcod	TRACE	-	-
Poachers	TRACE	-	-
Sablefish	-	-	TRACE
Salmon	-	11	-
Sandlance	TRACE	TRACE	TRACE
Sculpins	-	-	-
Shad	-	-	1
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	-	-	4
Big skate	-	-	-
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	4	-	93
Spotted ratfish	4	1	14
Invertebrates	-	3	-
TOTAL CATCH (KG.)	85	55	522
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	13	14	15	
BLOCK	I506	J404	I405	
DATE (1995)	MAY 26	MAY 26	MAY 26	
DURATION (H)	0.50	0.50	0.50	
DIRECTION (DEG. TRUE)	130	265	310	
TIME (PDT)	START 14:05	STOP 14:35	START 15:17	STOP 15:47
LAT. (DEG, MIN)	53 00.8	52 59.9	52 58.7	52 58.6
LONG. (DEG, MIN)	130 38.7	130 36.9	130 41.2	130 43.2
DEPTH (FM)	66	64	52	44
SPECIES CATCH (KG.)				
Arrowtooth flounder	47	117	15	
Butter sole	-	3	-	
C-O sole	-	-	-	
Curlfin sole	-	-	-	
Dover sole	4	6	18	
English sole	12	86	46	
Flathead sole	13	1	TRACE	
Pacific halibut	-	9	5	
Pacific sanddab	-	41	TRACE	
Petrale sole	-	4	TRACE	
Rex sole	48	40	172	
Rock sole	-	37	-	
Sand sole	-	-	-	
Slender sole	3	-	-	
Speckled sanddab	-	-	-	
Starry flounder	-	-	-	
Black rockfish	-	-	-	
Bocaccio	-	5	-	
Canary rockfish	-	-	-	
Copper rockfish	-	-	-	
Greenstriped rockfish	-	-	-	
Harlequin rockfish	-	-	-	
Pacific ocean perch	-	-	-	
Quillback rockfish	-	-	-	
Redbanded rockfish	-	-	-	
Redstripe rockfish	-	-	-	
Shortbelly rockfish	-	-	-	
Shortraker rockfish	-	-	-	
Silvergray rockfish	-	-	-	
Widow rockfish	-	-	-	
Yelloweye rockfish	-	-	-	
Yellowtail rockfish	-	-	-	
Eelpouts	TRACE	-	TRACE	
Eulachon	-	-	-	
Greenlings	-	-	-	
Irish lord	-	-	-	
Lingcod	3	7	-	
Pacific cod	7	8	1	
Pacific hake	-	-	-	
Pacific herring	2	12	1	
Pacific tomcod	-	-	-	
Poachers	-	-	TRACE	
Sablefish	-	2	4	
Salmon	-	-	-	
Sandlance	TRACE	TRACE	-	
Scorpions	-	-	-	
Shad	-	-	-	
Shiner perch	-	-	-	
Unknown fish	-	-	-	
Walleye pollock	TRACE	-	TRACE	
Big skate	-	28	15	
Brown catshark	-	-	-	
Longnose skate	-	-	-	
Sandpaper skate	-	-	-	
Spiny dogfish	19	46	35	
Spotted ratfish	TRACE	34	TRACE	
Invertebrates	-	-	-	
TOTAL CATCH (KG.)	158	486	312	
REMARKS	USABLE	USABLE	USABLE	

Appendix Table 1: Continued

HAUL NO.	16	17	18
BLOCK	I405	J402	J402
DATE (1995)	MAY 26	MAY 27	MAY 27
DURATION (H)	0.50	0.50	0.50
DIRECTION (DEG. TRUE)	134	275	355
TIME (PDT)	17:50	18:20	8:02
LAT. (DEG,MIN)	53 00.7	52 59.7	52 57.2
LONG. (DEG,MIN)	130 43.4	130 41.8	130 47.3
DEPTH (FM)	58	67	24
START	STOP	START	STOP
Arrowtooth flounder	19	TRACE	-
Butter sole	-	-	-
C-O sole	-	-	-
Curlfin sole	-	-	TRACE
Dover sole	3	-	-
English sole	7	TRACE	TRACE
Flathead sole	-	-	-
Pacific halibut	-	4	23
Pacific sanddab	-	2	1
Petrale sole	TRACE	-	-
Rex sole	91	-	-
Rock sole	-	29	15
Sand sole	-	-	2
Slender sole	1	-	-
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	-	-
Canary rockfish	22	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	-	-
Quillback rockfish	-	-	-
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	51	-	-
Eelpouts	-	-	-
Eulachon	-	-	-
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	-	10	-
Pacific cod	3	TRACE	-
Pacific hake	-	-	-
Pacific herring	-	TRACE	-
Pacific tomcod	TRACE	-	-
Poachers	-	TRACE	TRACE
Sablefish	TRACE	-	-
Salmon	-	-	-
Sandlance	-	-	-
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	-	-	-
Big skate	-	29	3
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	133	-	2
Spotted ratfish	10	-	-
Invertebrates	-	-	-
TOTAL CATCH (KG.)	340	74	46
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	19	20	21
BLOCK	I401	I403	I302
DATE (1995)	MAY 27	MAY 27	MAY 27
DURATION (H)	0.50	0.50	0.50
DIRECTION (DEG. TRUE)	325	165	305
TIME (PDT)	9:55	10:25	10:50
LAT. (DEG,MIN)	53 00.3	53 01.6	53 02.7
LONG. (DEG,MIN)	130 52.9	130 54.0	130 53
DEPTH (FM)	15	15	31
START		STOP	
STOP		START	
		STOP	
		START	
		STOP	

SPECIES CATCH(KG.)

Arrowtooth flounder	-	TRACE	-
Butter sole	-	-	-
C-O sole	-	-	-
Curlfin sole	TRACE	2	2
Dover sole	-	-	-
English sole	TRACE	17	2
Flathead sole	-	-	-
Pacific halibut	4	11	8
Pacific sanddab	1	7	7
Petrale sole	-	-	-
Rex sole	-	-	-
Rock sole	10	5	1
Sand sole	2	-	-
Slender sole	-	-	-
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	-	-
Quillback rockfish	-	10	-
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	4	-
Yellowtail rockfish	-	41	-
Eelpouts	-	-	-
Eulachon	-	-	-
Greenlings	-	2	TRACE
Irish lord	-	TRACE	-
Lingcod	-	2	-
Pacific cod	-	TRACE	-
Pacific hake	-	-	-
Pacific herring	TRACE	TRACE	-
Pacific tomcod	-	-	-
Poachers	-	TRACE	TRACE
Sablefish	-	-	-
Salmon	-	19	-
Sandlance	-	-	-
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	TRACE	-
Unknown fish	-	-	-
Walleye pollock	-	-	-
Big skate	3	18	48
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	3	7	13
Spotted ratfish	-	49	5
Invertebrates	-	-	-
TOTAL CATCH (KG.)	23	194	86
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	22	23	24	
BLOCK	I302	I301	J301	
DATE (1995)	MAY 27	MAY 27	MAY 27	
DURATION (H)	0.50	0.50	0.50	
DIRECTION (DEG. TRUE)	261	252	269	
TIME (PDT)	START 13:12	STOP 13:42	START 14:08	STOP 14:38
LAT. (DEG,MIN)	53 03	53 02.8	53 02.2	53 01.8
LONG. (DEG,MIN)	130 58.2	131 00.4	131 03.1	131 05.2
DEPTH (FM)	24	22	19	17
SPECIES CATCH (KG.)				
Arrowtooth flounder	-	-	-	
Butter sole	TRACE	-	-	
C-O sole	-	-	-	
Curlfin sole	1	TRACE	-	
Dover sole	-	-	-	
English sole	4	-	TRACE	
Flathead sole	-	-	-	
Pacific halibut	10	10	7	
Pacific sanddab	1	-	TRACE	
Petrale sole	-	-	-	
Rex sole	-	-	-	
Rock sole	6	19	8	
Sand sole	-	1	TRACE	
Slender sole	-	-	-	
Speckled sanddab	-	-	-	
Starry flounder	-	-	-	
Black rockfish	-	-	-	
Bocaccio	-	-	-	
Canary rockfish	-	-	-	
Copper rockfish	-	-	-	
Greenstriped rockfish	-	-	-	
Harlequin rockfish	-	-	-	
Pacific ocean perch	-	-	-	
Quillback rockfish	-	-	-	
Redbanded rockfish	-	-	-	
Redstripe rockfish	-	-	-	
Shortbelly rockfish	-	-	-	
Shortraker rockfish	-	-	-	
Silvergray rockfish	-	-	-	
Widow rockfish	-	-	-	
Yelloweye rockfish	-	-	-	
Yellowtail rockfish	-	-	-	
Hoplolutes	-	-	-	
Eulachon	-	-	-	
Greenlings	-	-	-	
Irish lord	-	-	-	
Lingcod	-	8	-	
Pacific cod	-	-	-	
Pacific hake	-	-	-	
Pacific herring	-	-	-	
Pacific tomcod	-	-	-	
Poachers	-	-	-	
Sablefish	-	-	-	
Salmon	-	-	-	
Sandlance	-	-	-	
Sculpins	-	-	-	
Shad	-	-	-	
Shiner perch	-	-	-	
Unknown fish	-	-	-	
Walleye pollock	-	-	-	
Big skate	56	-	4	
Brown catshark	-	-	-	
Longnose skate	-	-	-	
Sandpaper skate	-	-	-	
Spiny dogfish	4	17	4	
Spotted ratfish	-	-	-	
Invertebrates	TRACE	-	-	
TOTAL CATCH (KG.)	82	55	23	
REMARKS	USABLE	USABLE	USABLE	

Appendix Table 1: Continued

HAUL NO.	25 I201	26 J201	27 J202
BLOCK	MAY 27	MAY 28	MAY 28
DATE (1995)			
DURATION (H)	0.50	0.50	0.12
DIRECTION (DEG. TRUE)	86	215	0
TIME (PDT)	17:36	18:06	8:06
LAT. (DEG, MIN)	53 02.3	53 02.7	52 56.5
LONG. (DEG, MIN)	131 22.8	131 20.7	131 15.1
DEPTH (FM)	14	17	11
START		STOP	START
STOP		START	STOP
TIME (PDT)	18:06	8:06	8:36
LAT. (DEG, MIN)			
LONG. (DEG, MIN)			
DEPTH (FM)			
SPECIES CATCH (KG.)			
Arrowtooth flounder	-	-	-
Butter sole	-	-	-
C-O sole	TRACE	-	-
Curlfin sole	2	-	-
Dover sole	-	-	-
English sole	-	-	-
Flathead sole	-	-	-
Pacific halibut	-	-	-
Pacific sanddab	TRACE	-	-
Petrale sole	-	-	-
Rex sole	-	-	-
Rock sole	23	-	-
Sand sole	4	-	-
Slender sole	-	-	-
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	-	-
Quillback rockfish	-	-	-
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	-	-	-
Eelpouts	-	-	-
Eulachon	-	-	-
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	-	-	-
Pacific cod	1	-	-
Pacific hake	-	-	-
Pacific herring	-	-	-
Pacific tomcod	-	-	-
Poachers	-	-	-
Sablefish	-	-	-
Salmon	-	-	-
Sandlance	-	-	-
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	-	-	-
Big skate	-	-	-
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	1	-	-
Spotted ratfish	4	-	-
Invertebrates	-	-	-
TOTAL CATCH (KG.)	35	0	0
REMARKS	USABLE	UNUSABLE	UNUSABLE

Appendix Table 1: Continued

HAUL NO.	28	29	30
BLOCK	I302	I303	I404
DATE (1995)	MAY 28	MAY 28	MAY 28
DURATION (H)	0.28	0.50	0.50
DIRECTION (DEG. TRUE)	337	180	120
TIME (PDT)	14:40	14:57	15:02
LAT. (DEG, MIN)	53 04.3	53 05	53 07.1
LONG. (DEG, MIN)	131 09.4	131 09.8	130 58.9
DEPTH (FM)	20	19	33
START			
STOP			
TIME (PDT)	14:57	15:02	15:32
LAT. (DEG, MIN)	53 04.3	53 05	53 05.7
LONG. (DEG, MIN)	131 09.4	131 09.8	130 58.9
DEPTH (FM)	19	33	32
START			
STOP			
TIME (PDT)	16:07	16:37	16:37
LAT. (DEG, MIN)	53 06.7	53 06.0	53 06.0
LONG. (DEG, MIN)	130 55.5	130 53.7	130 53.7
DEPTH (FM)	44	42	42
SPECIES CATCH (KG.)			
Arrowtooth flounder	-	TRACE	2
Butter sole	-	-	-
C-O sole	-	-	-
Curlfin sole	TRACE	1	-
Dover sole	-	-	TRACE
English sole	-	1	50
Flathead sole	-	-	-
Pacific halibut	-	4	14
Pacific sanddab	TRACE	3	115
Petrale sole	-	-	-
Rex sole	-	TRACE	2
Rock sole	69	TRACE	2
Sand sole	2	-	-
Slender sole	-	-	-
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	-	-
Quillback rockfish	-	-	-
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	-	-	-
Eelpouts	-	-	-
Eulachon	-	-	-
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	-	-	19
Pacific cod	TRACE	TRACE	1
Pacific hake	-	-	-
Pacific herring	-	-	TRACE
Pacific tomcod	-	-	1
Poachers	TRACE	TRACE	TRACE
Sablefish	-	-	-
Salmon	-	-	-
Sandlance	TRACE	-	TRACE
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	1	-
Unknown fish	-	-	-
Walleye pollock	-	-	-
Big skate	-	-	-
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	12	20	27
Spotted ratfish	-	-	-
Invertebrates	-	-	-
TOTAL CATCH (KG.)	83	30	233
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	31	32	33
BLOCK	I407	H407	H406
DATE (1995)	MAY 28	MAY 29	MAY 29
DURATION (H)	0.50	0.37	0.50
DIRECTION (DEG. TRUE)	342	160	345
TIME (PDT)	17:30	18:00	8:05
LAT. (DEG,MIN)	53 08.1	53 09.3	53 12.3
LONG. (DEG,MIN)	130 45.8	130 46.2	130 47.3
DEPTH (FM)	69	72	73
START	STOP	START	STOP
Arrowtooth flounder	8	15	8
Butter sole	-	-	-
C-O sole	-	-	-
Curlfin sole	-	-	-
Dover sole	5	79	13
English sole	TRACE	28	-
Flathead sole	20	17	7
Pacific halibut	-	2	6
Pacific sanddab	3	-	-
Petrale sole	-	-	2
Rex sole	54	262	27
Rock sole	-	-	-
Sand sole	-	-	-
Slender sole	TRACE	5	1
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	2	2
Canary rockfish	-	13	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	37	2	TRACE
Quillback rockfish	-	-	-
Redbanded rockfish	25	31	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	22	4	TRACE
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	23	790	3
Eelpouts	TRACE	TRACE	-
Eulachon	1	TRACE	11
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	-	-	-
Pacific cod	8	4	5
Pacific hake	TRACE	-	-
Pacific herring	-	2	-
Pacific tomcod	-	-	-
Poachers	-	-	-
Sablefish	-	2	-
Salmon	-	-	-
Sandlance	-	-	-
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	5	8	3
Big skate	-	-	-
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	70	29	52
Spotted ratfish	1	-	7
Invertebrates	-	-	-
TOTAL CATCH (KG.)	282	1295	147
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	34	35	36
BLOCK	H405	H304	H303
DATE (1995)	MAY 29	MAY 29	MAY 29
DURATION (H)	0.50	0.50	0.50
DIRECTION (DEG. TRUE)	10	0	195
TIME (PDT)	10:15	10:45	12:03
LAT. (DEG,MIN)	53 12.9	53 14.3	53 15.2
LONG. (DEG,MIN)	130 54.4	130 54.2	131 00.2
DEPTH (FM)	50	52	40
START	STOP	START	STOP
Arrowtooth flounder	5	2	TRACE
Butter sole	-	-	TRACE
C-O sole	-	-	-
Curlfin sole	-	TRACE	TRACE
Dover sole	-	1	-
English sole	22	41	15
Flathead sole	TRACE	-	-
Pacific halibut	-	-	33
Pacific sanddab	-	44	6
Petrale sole	TRACE	-	-
Rex sole	51	17	TRACE
Rock sole	-	2	TRACE
Sand sole	-	-	-
Slender sole	-	-	-
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	5	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	-	-
Quillback rockfish	-	-	-
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	-	-	-
Eelpouts	TRACE	-	-
Eulachon	TRACE	-	-
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	-	TRACE	21
Pacific cod	37	2	-
Pacific hake	-	-	-
Pacific herring	1	TRACE	1
Pacific tomcod	-	-	-
Poachers	TRACE	1	TRACE
Sablefish	TRACE	TRACE	TRACE
Salmon	-	-	-
Sandlance	-	-	3
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	-	TRACE
Unknown fish	-	-	-
Walleye pollock	21	3	-
Big skate	-	-	34
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	13	44	17
Spotted ratfish	TRACE	31	TRACE
Invertebrates	TRACE	-	-
Soupfin shark	20	-	-
TOTAL CATCH (KG.)	175	188	130
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	37	38	39
BLOCK	H301	H302	H304
DATE (1995)	MAY 29	MAY 29	MAY 29
DURATION (H)	0.50	0.50	0.50
DIRECTION (DEG. TRUE)	315	159	10
TIME (PDT)	13:51	14:21	16:06
LAT. (DEG,MIN)	53 15.6	53 16.4	53 18.5
LONG. (DEG,MIN)	131 07	131 08.5	131 00.3
DEPTH (FM)	28	19	41
SPECIES CATCH (KG.)			
Arrowtooth flounder	TRACE	-	4
Butter sole	-	-	-
C-O sole	-	-	-
Curlfin sole	-	TRACE	-
Dover sole	-	-	TRACE
English sole	1	1	26
Flathead sole	-	-	-
Pacific halibut	5	14	6
Pacific sanddab	2	2	29
Petrale sole	-	-	-
Rex sole	-	-	25
Rock sole	12	9	-
Sand sole	5	2	TRACE
Slender sole	-	-	-
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	-	-
Quillback rockfish	-	-	-
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	-	-	-
Eelpouts	-	-	TRACE
Eulachon	-	-	-
Greenlings	-	1	-
Irish lord	-	-	-
Lingcod	-	2	-
Pacific cod	-	26	-
Pacific hake	-	-	-
Pacific herring	TRACE	TRACE	7
Pacific tomcod	-	-	-
Poachers	TRACE	-	TRACE
Sablefish	-	-	4
Salmon	-	-	-
Sandlance	1	TRACE	-
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	TRACE	TRACE	-
Unknown fish	TRACE	-	-
Walleye pollock	-	-	13
Big skate	47	-	-
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	-	15	30
Spotted ratfish	-	-	TRACE
Invertebrates	-	-	-
TOTAL CATCH (KG.)	73	72	144
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	40	41	42
BLOCK	G407	G405	G304
DATE (1995)	MAY 29	MAY 30	MAY 30
DURATION (H)	0.50	0.50	0.50
DIRECTION (DEG. TRUE)	172	225	205
TIME (PDT)	17:30	18:00	8:03
LAT. (DEG,MIN)	53 21.8	53 20.4	53 26.2
LONG. (DEG,MIN)	130 53.4	130 52.8	130 53.8
DEPTH (FM)	72	74	57
SPECIES CATCH(KG.)			
Arrowtooth flounder	58	49	8
Butter sole	-	-	-
C-O sole	-	-	-
Curlfin sole	-	-	-
Dover sole	38	21	23
English sole	1	10	7
Flathead sole	39	4	7
Pacific halibut	-	-	-
Pacific sanddab	1	-	-
Petrale sole	-	-	1
Rex sole	130	84	204
Rock sole	-	-	-
Sand sole	-	-	-
Slender sole	TRACE	9	4
Speckled sanddab	-	TRACE	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	88	TRACE	-
Quillback rockfish	-	-	-
Redbanded rockfish	4	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	1	-	-
Eelpouts	TRACE	3	3
Eulachon	2	TRACE	-
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	-	-	-
Pacific cod	6	TRACE	43
Pacific hake	-	-	-
Pacific herring	TRACE	1	7
Pacific tomcod	-	-	-
Poachers	-	TRACE	TRACE
Sablefish	2	TRACE	5
Salmon	-	-	-
Sandlance	-	TRACE	TRACE
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	2	1	16
Big skate	-	-	-
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	6	3	19
Spotted ratfish	3	2	5
Invertebrates	TRACE	-	-
TOTAL CATCH (KG.)	381	187	352
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	43	44	45			
BLOCK	G303	G301	F201			
DATE (1995)	MAY 30	MAY 30	MAY 30			
DURATION (H)	0.50	0.50	0.50			
DIRECTION (DEG. TRUE)	350	310	335			
TIME (PDT)	START 10:08	STOP 10:38	START 11:15	STOP 11:45	START 12:27	STOP 12:57
LAT. (DEG,MIN)	53 22.3	53 23.4	53 25	53 25.7	53 29.9	53 31.2
LONG. (DEG,MIN)	131 00.9	131 01.2	131 07.7	131 09.5	131 12.1	131 13
DEPTH (FM)	40	37	17	16	17	16
SPECIES CATCH (KG.)						
Arrowtooth flounder	2	TRACE				
Butter sole	TRACE	-	-	-	-	-
C-O sole	-	-	-	-	-	-
Curlfin sole	-	-	-	-	-	-
Dover sole	24	TRACE				
English sole	35	TRACE				
Flathead sole	-	-	-	-	-	-
Pacific halibut	-	4			34	
Pacific sanddab	39	4			1	
Petrale sole	TRACE	-	-	-	-	-
Rex sole	17	TRACE				
Rock sole	-	34			68	
Sand sole	-	1			5	
Slender sole	TRACE	-	-	-	-	-
Speckled sanddab	-	-	-	-	-	-
Starry flounder	-	-	-	-	-	-
Black rockfish	-	-	-	-	-	-
Bocaccio	-	-	-	-	-	-
Canary rockfish	-	-	-	-	-	-
Copper rockfish	-	-	-	-	-	-
Greenstriped rockfish	-	-	-	-	-	-
Harlequin rockfish	-	-	-	-	-	-
Pacific ocean perch	-	-	-	-	-	-
Quillback rockfish	-	-	-	-	-	-
Redbanded rockfish	-	-	-	-	-	-
Redstripe rockfish	-	-	-	-	-	-
Shortbelly rockfish	-	-	-	-	-	-
Shortraker rockfish	-	-	-	-	-	-
Silvergray rockfish	-	-	-	-	-	-
Widow rockfish	-	-	-	-	-	-
Yelloweye rockfish	-	-	-	-	-	-
Yellowtail rockfish	-	-	-	-	-	-
Eelpouts	TRACE	TRACE	TRACE			
Eulachon	TRACE	-	-	-	-	-
Greenlings	-	-	-	-	-	-
Irish lord	-	-	-	-	-	-
Lingcod	-	-	-	-	-	-
Pacific cod	11	-	-		1	
Pacific hake	-	-	-	-	-	-
Pacific herring	2	-	-		3	
Pacific tomcod	TRACE	-	-	-	-	-
Poachers	TRACE	-	-	TRACE		
Sablefish	TRACE	-	-	-	-	-
Salmon	-	-	-	-	-	-
Sandlance	-	2			1	
Sculpins	-	-	-	TRACE		
Shad	-	-	-	-	-	-
Shiner perch	-	-	-	-	-	-
Unknown fish	-	-	-	-	-	-
Walleye pollock	2	-	-	-	-	-
Big skate	-	-	-	-	25	
Brown catshark	-	-	-	-	-	-
Longnose skate	-	-	-	-	-	-
Sandpaper skate	-	-	-	-	-	-
Spiny dogfish	2	-	-	-	-	-
Spotted ratfish	16	112	-	-	2	-
Invertebrates	-	-	-	-	-	-
TOTAL CATCH (KG.)	150		157		140	
REMARKS	USABLE		USABLE		USABLE	

Appendix Table 1: Continued

HAUL NO.	46	47	48	
BLOCK	F302	F303	F303	
DATE (1995)	MAY 30	MAY 30	MAY 30	
DURATION (H)	0.50	0.50	0.47	
DIRECTION (DEG. TRUE)	330	43	43	
TIME (PDT)	START 13:50	STOP 14:20	START 14:49	STOP 15:19
LAT. (DEG,MIN)	53 33.7	53 34.9	53 36.2	53 37.3
LONG. (DEG,MIN)	131 07	131 08.2	131 06.3	131 04.7
DEPTH (FM)	29	34	32	31
SPECIES CATCH(KG.)				
Arrowtooth flounder	TRACE	-	TRACE	
Butter sole	3	TRACE	TRACE	
C-O sole	-	-	-	
Curlfin sole	2	TRACE	1	
Dover sole	TRACE	-	TRACE	
English sole	22	5	TRACE	
Flathead sole	-	-	-	
Pacific halibut	13	11	28	
Pacific sanddab	5	TRACE	TRACE	
Petrale sole	-	-	-	
Rex sole	-	-	TRACE	
Rock sole	22	37	41	
Sand sole	15	TRACE	-	
Slender sole	-	-	-	
Speckled sanddab	3	-	-	
Starry flounder	-	-	-	
Black rockfish	-	-	-	
Bocaccio	-	-	-	
Canary rockfish	-	-	-	
Copper rockfish	-	-	-	
Greenstriped rockfish	-	-	-	
Harlequin rockfish	-	-	-	
Pacific ocean perch	-	-	-	
Quillback rockfish	-	-	13	
Redbanded rockfish	-	-	-	
Redstripe rockfish	-	-	-	
Shortbelly rockfish	-	-	-	
Shortraker rockfish	-	-	-	
Silvergray rockfish	-	-	-	
Widow rockfish	-	-	-	
Yelloweye rockfish	-	-	-	
Yellowtail rockfish	-	-	TRACE	
Eelpouts	-	TRACE	TRACE	
Eulachon	-	-	-	
Greenlings	-	-	16	
Irish lord	-	-	-	
Lingcod	-	15	8	
Pacific cod	1	175	30	
Pacific hake	-	-	-	
Pacific herring	5	TRACE	-	
Pacific tomcod	-	-	-	
Poachers	TRACE	TRACE	-	
Sablefish	27	3	-	
Salmon	-	-	-	
Sandlance	-	-	-	
Sculpins	TRACE	TRACE	-	
Shad	-	-	-	
Shiner perch	-	-	-	
Unknown fish	-	-	-	
Walleye pollock	-	-	-	
Big skate	31	-	139	
Brown catshark	-	-	-	
Longnose skate	-	-	-	
Sandpaper skate	-	-	-	
Spiny dogfish	-	-	-	
Spotted ratfish	-	-	3	
Invertebrates	TRACE	-	-	
TOTAL CATCH (KG.)	149	246	279	
REMARKS	USABLE	USABLE	USABLE	

Appendix Table 1: Continued

HAUL NO.	49	50	51
BLOCK	E505	F405	F407
DATE (1995)	MAY 30	MAY 31	MAY 31
DURATION (H)	0.33	0.50	0.50
DIRECTION (DEG. TRUE)	202	30	5
TIME (PDT)	18:04	18:24	8:04
LAT. (DEG,MIN)	53 44.4	53 43.5	53 32.0
LONG. (DEG,MIN)	130 37.8	130 38.3	130 47.3
DEPTH (FM)	56	60	52
START		STOP	START
STOP		8:04	9:06
		8:34	9:36
			53 35.4
			53 36.9
			130 46
			130 46
			71
			71
SPECIES CATCH(KG.)			
Arrowtooth flounder	31	15	117
Butter sole	-	-	-
C-O sole	-	-	-
Curlfin sole	-	-	-
Dover sole	TRACE	1	23
English sole	TRACE	9	11
Flathead sole	3	1	4
Pacific halibut	-	2	-
Pacific sanddab	-	-	-
Petrale sole	-	-	2
Rex sole	2	23	195
Rock sole	1	-	TRACE
Sand sole	-	-	-
Slender sole	TRACE	TRACE	1
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	-	6
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	1	1	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	-	TRACE
Quillback rockfish	-	-	-
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	5
Silvergray rockfish	6	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	12	-	-
Yellowtail rockfish	-	-	96
Eelpouts	TRACE	-	-
Eulachon	TRACE	-	-
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	-	-	-
Pacific cod	-	-	7
Pacific hake	-	-	-
Pacific herring	-	TRACE	-
Pacific tomcod	-	-	-
Poachers	-	-	-
Sablefish	-	-	TRACE
Salmon	-	-	-
Sandlance	TRACE	-	-
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	4	TRACE	48
Big skate	-	-	-
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	-	-	2
Spotted ratfish	5	TRACE	3
Invertebrates	-	-	-
TOTAL CATCH (KG.)	65	52	520
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	52	53	54			
BLOCK	F404	F403	F406			
DATE (1995)	MAY 31	MAY 31	MAY 31			
DURATION (H)	0.50	0.18	0.50			
DIRECTION (DEG. TRUE)	200	5	193			
TIME (PDT)	START 10:03	STOP 10:33	START 10:59	STOP 11:10	START 12:01	STOP 12:31
LAT. (DEG,MIN)	53 37.3	53 36.2	53 36.5	53 37.6	53 39.7	53 38.5
LONG. (DEG,MIN)	130 46.9	130 47.6	130 50.2	130 49.7	130 45.3	130 45.8
DEPTH (FM)	44	42	33	27	67	68
SPECIES CATCH (KG.)						
Arrowtooth flounder	138	TRACE			226	
Butter sole	-	-			-	
C-O sole	-	-			-	
Curlfin sole	-	1			-	
Dover sole	7	-			84	
English sole	37	15			3	
Flathead sole	10	-			4	
Pacific halibut	-	16			-	
Pacific sanddab	-	7			-	
Petrale sole	1	-			TRACE	
Rex sole	68	TRACE			163	
Rock sole	-	TRACE			TRACE	
Sand sole	-	-			-	
Slender sole	TRACE	-			7	
Speckled sanddab	-	-			-	
Starry flounder	-	-			-	
Black rockfish	-	-			-	
Bocaccio	9	-			-	
Canary rockfish	-	-			-	
Copper rockfish	-	-			-	
Greenstriped rockfish	-	-			-	
Harlequin rockfish	-	-			-	
Pacific ocean perch	-	-			-	
Quillback rockfish	-	2			1	
Redbanded rockfish	-	-			-	
Redstripe rockfish	-	-			-	
Shortbelly rockfish	-	-			-	
Shortraker rockfish	-	-			-	
Silvergray rockfish	-	-			-	
Widow rockfish	-	-			-	
Yelloweye rockfish	-	-			-	
Yellowtail rockfish	-	-			1	
Eelpouts	TRACE	-			TRACE	
Eulachon	-	-			4	
Greenlings	-	-			-	
Irish lord	-	-			-	
Lingcod	8	-			-	
Pacific cod	-	-			10	
Pacific hake	-	-			-	
Pacific herring	-	-			-	
Pacific tomcod	-	-			-	
Poachers	TRACE	-			-	
Sablefish	3	-			-	
Salmon	-	-			-	
Sandlance	-	-			-	
Sculpins	-	-			-	
Shad	2	-			-	
Shiner perch	-	-			-	
Unknown fish	-	-			-	
Walleye pollock	21	TRACE			4	
Big skate	-	-			-	
Brown catshark	-	-			-	
Longnose skate	-	-			-	
Sandpaper skate	-	-			-	
Spiny dogfish	-	-			2	
Spotted ratfish	4	-			7	
Invertebrates	-	-			-	
TOTAL CATCH (KG.)	308	41			516	
REMARKS	USABLE	USABLE			USABLE	

Appendix Table 1: Continued

HAUL NO.	55	56	57	
BLOCK	E402	E402	E402	
DATE (1995)	MAY 31	MAY 31	MAY 31	
DURATION (H)	0.50	0.50	0.43	
DIRECTION (DEG. TRUE)	313	330	16	
TIME (PDT)	START 13:06	STOP 13:36	START 14:03	STOP 14:33
LAT. (DEG,MIN)	53 40.9	53 41.9	53 42.4	53 43.6
LONG. (DEG,MIN)	130 48	130 49.9	130 52.3	130 53.5
DEPTH (FM)	26	26	28	27
SPECIES CATCH (KG.)				
Arrowtooth flounder	1	-	3	
Butter sole	2	-	6	
C-O sole	-	-	-	
Curlfin sole	-	-	1	
Dover sole	-	-	-	
English sole	1	1	25	
Flathead sole	-	-	-	
Pacific halibut	23	29	37	
Pacific sanddab	-	TRACE	3	
Petrale sole	-	-	-	
Rex sole	-	-	-	
Rock sole	77	39	16	
Sand sole	4	-	5	
Slender sole	-	-	-	
Speckled sanddab	-	-	-	
Starry flounder	-	-	-	
Black rockfish	-	-	-	
Bocaccio	-	-	-	
Canary rockfish	-	-	-	
Copper rockfish	-	-	33	
Greenstriped rockfish	-	-	-	
Harlequin rockfish	-	-	-	
Pacific ocean perch	-	-	-	
Quillback rockfish	-	-	-	
Redbanded rockfish	-	-	-	
Redstripe rockfish	-	-	6	
Shortbelly rockfish	-	-	15	
Shortraker rockfish	-	-	-	
Silvergray rockfish	-	-	-	
Widow rockfish	-	-	2	
Yelloweye rockfish	-	-	-	
Yellowtail rockfish	-	-	141	
Eelpouts	-	-	-	
Eulachon	-	-	-	
Greenlings	-	-	-	
Irish lord	-	-	-	
Lingcod	-	-	-	
Pacific cod	-	1	48	
Pacific hake	-	-	-	
Pacific herring	-	-	-	
Pacific tomcod	-	-	2	
Poachers	-	TRACE	-	
Sablefish	-	-	-	
Salmon	-	-	-	
Sandlance	-	1	-	
Sculpins	-	-	-	
Shad	-	-	-	
Shiner perch	-	-	-	
Unknown fish	-	-	-	
Walleye pollock	-	-	10	
Big skate	68	85	16	
Brown catshark	-	-	-	
Longnose skate	-	-	-	
Sandpaper skate	-	-	-	
Spiny dogfish	-	-	-	
Spotted ratfish	164	18	4	
Invertebrates	-	-	-	
TOTAL CATCH (KG.)	340	174	373	
REMARKS	USABLE	USABLE	USABLE	

Appendix Table 1: Continued

HAUL NO.	58	59	60
BLOCK	E405	E504	E302
DATE (1995)	MAY 31	MAY 31	JUNE 01
DURATION (H)	0.33	0.50	0.50
DIRECTION (DEG. TRUE)	53	29	329
TIME (PDT)	15:57	16:17	17:55
LAT. (DEG,MIN)	53 46.2	53 46.6	53 40
LONG. (DEG,MIN)	130 52.6	130 51.3	130 38.3
DEPTH (FM)	51	56	48
START	STOP	START	STOP
Arrowtooth flounder	93	90	TRACE
Butter sole	-	-	-
C-O sole	-	-	-
Curlfin sole	-	-	-
Dover sole	38	6	-
English sole	6	6	TRACE
Flathead sole	83	2	-
Pacific halibut	-	4	3
Pacific sanddab	-	-	-
Petrale sole	TRACE	-	-
Rex sole	92	22	1
Rock sole	-	TRACE	45
Sand sole	-	-	-
Slender sole	5	8	1
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	TRACE	-
Quillback rockfish	-	-	-
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	1	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	-	-	-
Eelpouts	-	TRACE	TRACE
Eulachon	-	TRACE	-
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	-	-	-
Pacific cod	8	-	2
Pacific hake	-	-	-
Pacific herring	-	-	-
Pacific tomcod	-	-	TRACE
Poachers	-	TRACE	-
Sablefish	2	2	-
Salmon	-	-	-
Sandlance	-	-	TRACE
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	30	8	-
Big skate	-	-	21
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	-	-	-
Spotted ratfish	3	2	16
Invertebrates	-	-	TRACE
TOTAL CATCH (KG.)	361	150	89
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	61	62	63			
BLOCK	D404	D405	D404			
DATE (1995)	JUNE 01	JUNE 01	JUNE 01			
DURATION (H)	0.33	0.33	0.33			
DIRECTION (DEG. TRUE)	300	310	330			
TIME (PDT)	START 9:34	STOP 9:54	START 10:22	STOP 10:42	START 11:07	STOP 11:27
LAT. (DEG, MIN)	53 51.5	53 51.9	53 51.6	53 51.3	53 51.9	53 52.6
LONG. (DEG, MIN)	130 50.2	130 51.6	130 54.9	130 56.1	130 57.7	130 58.5
DEPTH (FM)	51	44	47	54	47	44
SPECIES CATCH (KG.)						
Arrowtooth flounder	16		59		269	
Butter sole	1		-		-	
C-O sole	-		-		-	
Curlfin sole	-		-		-	
Dover sole	1		17		1	
English sole	11		10		13	
Flathead sole	8		26		10	
Pacific halibut	4		13		-	
Pacific sanddab	2		-		TRACE	
Petrale sole	-		-		-	
Rex sole	19		39		13	
Rock sole	TRACE		-		1	
Sand sole	-		-		-	
Slender sole	TRACE		2		TRACE	
Speckled sanddab	-		-		-	
Starry flounder	-		-		-	
Black rockfish	-		-		-	
Bocaccio	-		-		-	
Canary rockfish	-		-		-	
Copper rockfish	-		-		-	
Greenstriped rockfish	-		-		-	
Harlequin rockfish	-		TRACE		-	
Pacific ocean perch	-		TRACE		-	
Quillback rockfish	-		1		-	
Redbanded rockfish	-		-		-	
Redstripe rockfish	-		-		-	
Shortbelly rockfish	-		-		-	
Shortraker rockfish	-		-		-	
Silvergray rockfish	-		-		-	
Widow rockfish	-		-		-	
Yelloweye rockfish	-		-		-	
Yellowtail rockfish	-		8		TRACE	
Eelpouts	-		TRACE		TRACE	
Eulachon	TRACE		-		-	
Greenlings	-		-		-	
Irish lord	-		-		-	
Lingcod	-		-		-	
Pacific cod	-		5		29	
Pacific hake	-		-		-	
Pacific herring	TRACE		-		TRACE	
Pacific tomcod	-		-		-	
Poachers	-		-		TRACE	
Sablefish	-		TRACE		1	
Salmon	-		-		-	
Sandlance	TRACE		TRACE		-	
Sculpins	-		-		-	
Shad	-		-		-	
Shiner perch	-		-		-	
Unknown fish	-		-		-	
Walleye pollock	4		23		109	
Big skate	-		-		-	
Brown catshark	-		-		-	
Longnose skate	-		-		-	
Sandpaper skate	-		-		-	
Spiny dogfish	-		-		1	
Spotted ratfish	2		8		3	
Invertebrates	-		-		-	
TOTAL CATCH (KG.)	68		211		450	
REMARKS	USABLE		USABLE		USABLE	

Appendix Table 1: Continued

HAUL NO.	64	65	66
BLOCK	D303	D304	D303
DATE (1995)	JUNE 01	JUNE 01	JUNE 01
DURATION (H)	0.33	0.50	0.50
DIRECTION (DEG. TRUE)	342	321	332
TIME (PDT)	8:07	8:27	12:58
LAT. (DEG,MIN)	53 54.2	53 55.1	53 55.9
LONG. (DEG,MIN)	131 03.3	131 03.8	131 01
DEPTH (FM)	32	32	42
START	STOP	START	STOP
Arrowtooth flounder	111	241	28
Butter sole	TRACE	TRACE	2
C-O sole	-	-	-
Curlfin sole	-	-	-
Dover sole	2	2	2
English sole	45	21	74
Flathead sole	-	10	-
Pacific halibut	13	-	40
Pacific sanddab	140	2	81
Petrale sole	4	-	1
Rex sole	9	21	11
Rock sole	16	192	31
Sand sole	TRACE	-	30
Slender sole	-	TRACE	-
Speckled sanddab	-	-	43
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	-	-
Quillback rockfish	-	10	-
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	-	TRACE	-
Eelpouts	TRACE	-	-
Eulachon	-	-	-
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	3	-	13
Pacific cod	52	13	71
Pacific hake	-	-	-
Pacific herring	TRACE	-	1
Pacific tomcod	TRACE	TRACE	5
Poachers	-	-	-
Sablefish	1	2	4
Salmon	-	-	-
Sandlance	-	-	-
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	15	75	4
Big skate	-	-	-
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	3	7	TRACE
Spotted ratfish	4	1	2
Invertebrates	-	-	TRACE
TOTAL CATCH (KG.)	418	597	443
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	67	68	69			
BLOCK	C302	C304	C303			
DATE (1995)	JUNE 01	JUNE 01	JUNE 01			
DURATION (H)	0.50	0.33	0.33			
DIRECTION (DEG. TRUE)	3	332	352			
TIME (PDT)	START 14:58	STOP 15:28	START 15:55	STOP 16:15	START 17:04	STOP 17:24
LAT. (DEG, MIN)	54 00.4	54 01.7	54 02.9	54 03.9	54 08.3	54 09.4
LONG. (DEG, MIN)	131 05.6	131 05.5	131 04.3	131 04.2	131 04.5	131 04.7
DEPTH (FM)	29	28	43	46	38	38

SPECIES CATCH (KG.)

Arrowtooth flounder	28	36	99
Butter sole	23	TRACE	-
C-O sole	-	-	-
Curlfin sole	-	-	-
Dover sole	TRACE	12	9
English sole	131	87	119
Flathead sole	-	89	2
Pacific halibut	51	-	25
Pacific sanddab	493	8	-
Petrale sole	-	-	-
Rex sole	TRACE	85	87
Rock sole	50	2	11
Sand sole	13	TRACE	5
Slender sole	-	-	-
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	-	-
Quillback rockfish	-	-	-
Redbanded rockfish	-	1	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	-	-	-
Eelpouts	-	-	-
Eulachon	-	-	-
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	15	-	-
Pacific cod	816	62	36
Pacific hake	-	-	-
Pacific herring	TRACE	TRACE	-
Pacific tomcod	-	16	42
Poachers	-	-	-
Sablefish	32	2	31
Salmon	-	-	-
Sandlance	-	TRACE	-
Sculpins	-	-	-
Shad	-	-	2
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	-	12	23
Big skate	17	-	8
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	-	7	8
Spotted ratfish	-	-	-
Invertebrates	74	-	-
TOTAL CATCH (KG.)	1743	419	507
REMARKS	USABLE	USABLE	USABLE

TOTAL CATCH (KG.)
REMARKS

Appendix Table 1: Continued

HAUL NO.	70	71	72	
BLOCK	B204	B202	B205	
DATE (1995)	JUNE 02	JUNE 02	JUNE 02	
DURATION (H)	0.33	0.33	0.33	
DIRECTION (DEG. TRUE)	280	255	260	
TIME (PDT)	START 8:03	STOP 8:23	START 8:51	STOP 9:11
LAT. (DEG,MIN)	54 18.2	54 18.2	54 17.7	54 17.6
LONG. (DEG,MIN)	131 19.8	131 21.4	131 21.4	131 22.9
DEPTH (FM)	42	45	20	22
SPECIES CATCH (KG.)				
Arrowtooth flounder	1003	-	837	
Butter sole	5	25	3	
C-O sole	-	-	-	
Curlfin sole	-	-	-	
Dover sole	2	-	1	
English sole	107	TRACE	263	
Flathead sole	-	-	-	
Pacific halibut	48	8	12	
Pacific sanddab	-	-	-	
Petrale sole	-	-	2	
Rex sole	30	TRACE	16	
Rock sole	-	-	-	
Sand sole	-	-	-	
Slender sole	-	-	-	
Speckled sanddab	-	-	-	
Starry flounder	-	-	-	
Black rockfish	-	-	-	
Bocaccio	-	-	-	
Canary rockfish	-	-	-	
Copper rockfish	-	-	-	
Greenstriped rockfish	-	-	-	
Harlequin rockfish	-	-	-	
Pacific ocean perch	-	-	-	
Quillback rockfish	-	-	-	
Redbanded rockfish	-	-	-	
Redstripe rockfish	-	-	-	
Shortbelly rockfish	-	-	-	
Shortraker rockfish	-	-	-	
Silvergray rockfish	-	-	-	
Widow rockfish	-	-	-	
Yelloweye rockfish	-	-	-	
Yellowtail rockfish	-	-	1	
Eelpouts	-	-	-	
Eulachon	-	-	-	
Greenlings	-	-	-	
Irish lord	-	-	-	
Lingcod	13	8	-	
Pacific cod	27	-	1	
Pacific hake	-	-	-	
Pacific herring	-	-	2	
Pacific tomcod	-	-	-	
Poachers	-	-	-	
Sablefish	TRACE	-	-	
Salmon	-	-	-	
Sandlance	-	-	-	
Sculpins	-	-	-	
Shad	-	-	-	
Shiner perch	-	-	-	
Unknown fish	-	-	-	
Walleye pollock	-	-	1	
Big skate	95	-	-	
Brown catshark	-	-	-	
Longnose skate	-	-	-	
Sandpaper skate	5	-	2	
Spiny dogfish	197	-	466	
Spotted ratfish	-	-	-	
Invertebrates	-	-	-	
TOTAL CATCH (KG.)	1532	41	1607	
REMARKS	USABLE	USABLE	USABLE	

Appendix Table 1: Continued

HAUL NO.	73	74	75
BLOCK	B207	B103	B105
DATE (1995)	JUNE 02	JUNE 02	JUNE 02
DURATION (H)	0.33	0.33	0.33
DIRECTION (DEG. TRUE)	260	285	242
TIME (PDT)	10:23	10:43	11:11
LAT. (DEG,MIN)	54 18.2	54 17.8	54 16.2
LONG. (DEG,MIN)	131 28.6	131 30.1	131 31.2
DEPTH (FM)	73	72	37
START	STOP	START	STOP
10:23	10:43	11:11	11:31
54 18.2	54 17.8	54 16.2	54 15.8
131 28.6	131 30.1	131 31.2	131 32.6
73	72	37	38
STOP	START	STOP	START
13:13	13:33	13:31	13:13
54 15.3	54 14.9	54 15.8	54 14.9
131 36.2	131 37.5	131 32.6	131 37.5
50	58	38	58
SPECIES CATCH (KG.)			
Arrowtooth flounder	23	117	19
Butter sole	TRACE	32	-
C-O sole	-	-	-
Curlfin sole	-	-	-
Dover sole	43	-	6
English sole	100	67	8
Flathead sole	-	-	TRACE
Pacific halibut	4	3	3
Pacific sanddab	-	-	-
Petrale sole	TRACE	-	1
Rex sole	2	-	12
Rock sole	-	-	-
Sand sole	-	-	-
Slender sole	-	-	-
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	TRACE	-	-
Quillback rockfish	-	-	-
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shorthraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	-	-	-
Eelpouts	-	-	-
Eulachon	-	-	-
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	-	20	2
Pacific cod	TRACE	11	5
Pacific hake	-	-	-
Pacific herring	-	TRACE	-
Pacific tomcod	-	TRACE	-
Poachers	-	-	-
Sablefish	2	-	-
Salmon	-	-	-
Sandlance	-	-	-
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	2	23	1
Big skate	-	-	-
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	104	133	39
Spotted ratfish	158	3	30
Invertebrates	-	-	-
TOTAL CATCH (KG.)	438	409	126
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	76	77	78
BLOCK	B106	B103	B102
DATE (1995)	JUNE 02	JUNE 02	JUNE 02
DURATION (H)	0.33	0.33	0.33
DIRECTION (DEG. TRUE)	232	258	218
TIME (PDT)	13:05	13:25	14:10
LAT. (DEG, MIN)	54 15.3	54 14.7	54 11.5
LONG. (DEG, MIN)	131 40.5	131 41.8	131 45.6
DEPTH (FM)	67	63	36
START	STOP	START	STOP
		14:10	14:30
		54 11.5	54 11.2
		131 45.6	131 47.2
		36	38
			22
			20
SPECIES CATCH (KG.)			
Arrowtooth flounder	39	40	-
Butter sole	-	-	TRACE
C-O sole	-	-	-
Curlfin sole	-	-	-
Dover sole	TRACE	-	-
English sole	-	22	TRACE
Flathead sole	1	-	-
Pacific halibut	-	-	67
Pacific sanddab	-	24	2
Petrale sole	-	-	-
Rex sole	1	1	-
Rock sole	-	-	TRACE
Sand sole	-	-	-
Slender sole	-	-	-
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	6	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	-	-
Quillback rockfish	-	-	-
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	-	-	-
Eelpouts	-	-	-
Eulachon	-	-	-
Greenlings	-	-	-
Irish lord	-	-	10
Lingcod	-	-	-
Pacific cod	TRACE	-	-
Pacific hake	-	-	-
Pacific herring	-	-	-
Pacific tomcod	-	-	-
Poachers	-	-	-
Sablefish	-	-	-
Salmon	-	-	-
Sandlance	-	-	-
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	TRACE	-	-
Big skate	-	-	-
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	87	-	1
Spotted ratfish	12	-	-
Invertebrates	-	-	-
TOTAL CATCH (KG.)	146	87	80
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	79	80	81			
BLOCK	B104	A207	A206			
DATE (1995)	JUNE 02	JUNE 02	JUNE 02			
DURATION (H)	0.33	0.33	0.38			
DIRECTION (DEG. TRUE)	38	40	10			
TIME (PDT)	START 15:54	STOP 16:14	START 18:05	STOP 18:25	START 18:56	STOP 19:19
LAT. (DEG, MIN)	54 12.1	54 12.7	54 20.6	54 21.4	54 21.6	54 22.6
LONG. (DEG, MIN)	131 44.4	131 43.3	131 18.9	131 17.9	131 16.9	131 16.5
DEPTH (FM)	43	51	78	73	64	63
SPECIES CATCH(KG.)						
Arrowtooth flounder	69		145		2413	
Butter sole	-		-		-	
C-O sole	-		-		-	
Curlfin sole	-		-		-	
Dover sole	3		9		23	
English sole	25		-		44	
Flathead sole	1		TRACE		-	
Pacific halibut	-		-		20	
Pacific sanddab	12		-		-	
Petrale sole	TRACE		-		5	
Rex sole	6		1		11	
Rock sole	-		-		-	
Sand sole	-		-		-	
Slender sole	-		-		-	
Speckled sanddab	-		-		-	
Starry flounder	-		-		-	
Black rockfish	-		-		-	
Bocaccio	-		-		-	
Canary rockfish	-		3		TRACE	
Copper rockfish	-		-		-	
Greenstriped rockfish	-		-		-	
Harlequin rockfish	-		-		-	
Pacific ocean perch	-		-		-	
Quillback rockfish	-		-		-	
Redbanded rockfish	-		-		-	
Redstripe rockfish	-		-		-	
Shortbelly rockfish	-		-		-	
Shortraker rockfish	-		-		-	
Silvergray rockfish	-		-		-	
Widow rockfish	-		-		-	
Yelloweye rockfish	-		-		-	
Yellowtail rockfish	-		-		-	
Helpouts	-		-		-	
Eulachon	-		2		-	
Greenlings	-		-		-	
Irish lord	-		-		-	
Lingcod	-		-		-	
Pacific cod	13		-		-	
Pacific hake	-		-		-	
Pacific herring	-		-		-	
Pacific tomcod	TRACE		-		-	
Poachers	-		-		-	
Sablefish	-		1		-	
Salmon	-		-		-	
Sandlance	-		-		-	
Sculpins	-		-		-	
Shad	-		-		-	
Shiner perch	-		-		-	
Unknown fish	-		-		-	
Walleye pollock	3		TRACE		-	
Big skate	-		-		-	
Brown catshark	-		-		-	
Longnose skate	-		2		-	
Sandpaper skate	-		-		-	
Spiny dogfish	43		28		89	
Spotted ratfish	TRACE		21		8	
Invertebrates	-		5		-	
TOTAL CATCH (KG.)	175		217		2613	
REMARKS	USABLE		USABLE		USABLE	

Appendix Table 1: Continued

	82 A306 JUNE 02	83 A303 JUNE 02	84 A304 JUNE 02
DURATION (H)	0.33	0.30	0.33
DIRECTION (DEG. TRUE)	100	185	155
TIME (PDT)	20:12	20:32	21:54
LAT. (DEG,MIN)	54 25.3	54 25.3	54 21.1
LONG. (DEG,MIN)	131 08.8	131 07.2	131 07.8
DEPTH (FM)	62	67	42
SPECIES CATCH(KG.)			
Arrowtooth flounder	347	60	70
Butter sole	-	-	-
C-O sole	-	-	-
Curlfin sole	-	-	-
Dover sole	62	-	20
English sole	74	66	243
Flathead sole	7	TRACE	30
Pacific halibut	2	3	19
Pacific sanddab	-	TRACE	-
Petrale sole	1	-	-
Rex sole	32	9	36
Rock sole	TRACE	-	-
Sand sole	-	-	-
Slender sole	-	-	-
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	-	-
Quillback rockfish	-	-	TRACE
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	26
Yellowtail rockfish	-	-	-
Kelpouts	-	-	-
Eulachon	-	-	-
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	-	-	-
Pacific cod	2	4	16
Pacific hake	-	-	-
Pacific herring	-	-	-
Pacific tomcod	-	-	-
Poachers	-	-	-
Sablefish	2	-	-
Salmon	-	-	-
Sandlance	-	-	-
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	4	-	TRACE
Big skate	29	-	-
Brown catshark	-	-	-
Longnose skate	-	-	8
Sandpaper skate	1	-	-
Spiny dogfish	21	1	5
Spotted ratfish	8	73	368
Invertebrates	14	-	-
TOTAL CATCH (KG.)	606	216	841
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	85	86	87
BLOCK	B305	B306	B306
DATE (1995)	JUNE 04	JUNE 04	JUNE 04
DURATION (H)	0.33	0.25	0.32
DIRECTION (DEG. TRUE)	155	130	180
TIME (PDT)	9:32	9:52	10:21
LAT. (DEG,MIN)	54 17.5	54 16.8	54 16
LONG. (DEG,MIN)	131 04.6	131 03.9	131 03
DEPTH (FM)	54	46	64
START			
STOP			
SPECIES CATCH(KG.)			
Arrowtooth flounder	240	84	249
Butter sole	TRACE	-	-
C-O sole	-	-	-
Curlfin sole	-	-	-
Dover sole	107	67	147
English sole	715	49	69
Flathead sole	3	1	1
Pacific halibut	26	30	102
Pacific sanddab	-	-	-
Petrale sole	TRACE	-	-
Rex sole	102	45	150
Rock sole	13	5	2
Sand sole	-	-	-
Slender sole	-	-	-
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	-
Bocaccio	-	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	TRACE	-	TRACE
Quillback rockfish	-	-	-
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	-	-	-
Eelpouts	-	-	-
Eulachon	TRACE	1	-
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	-	-	17
Pacific cod	91	16	19
Pacific hake	-	-	-
Pacific herring	-	-	-
Pacific tomcod	TRACE	-	-
Poachers	-	-	-
Sablefish	2	-	TRACE
Salmon	-	-	-
Sandlance	-	-	-
Sculpins	-	-	6
Shad	-	-	-
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	64	12	15
Big skate	98	-	-
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	27	17	36
Spotted ratfish	4	24	92
Invertebrates	TRACE	-	-
TOTAL CATCH (KG.)	1492	351	905
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	88	89	90	
BLOCK	B303	B302	B301	
DATE (1995)	JUNE 04	JUNE 04	JUNE 04	
DURATION (H)	0.33	0.50	0.50	
DIRECTION (DEG. TRUE)	198	187	341	
TIME (PDT)	START 12:15	STOP 12:35	START 13:02	STOP 13:32
LAT. (DEG,MIN)	54 12.8	54 11.9	54 10.8	54 09.4
LONG. (DEG,MIN)	131 04.1	131 04.6	131 04.9	131 05.2
DEPTH (FM)	41	36	32	13
START 13:55	STOP 14:25			
54 09.4	54 10.6			
131 06.9	131 07.8			
16	17			
SPECIES CATCH(KG.)				
Arrowtooth flounder	53	51	-	
Butter sole	-	47	1	
C-O sole	-	-	-	
Curlfin sole	-	-	-	
Dover sole	5	6	-	
English sole	19	266	6	
Flathead sole	1	-	-	
Pacific halibut	6	38	60	
Pacific sanddab	-	10	TRACE	
Petrale sole	-	-	-	
Rex sole	16	23	-	
Rock sole	10	35	38	
Sand sole	-	21	3	
Slender sole	-	-	-	
Speckled sanddab	-	-	-	
Starry flounder	-	-	-	
Black rockfish	-	-	-	
Bocaccio	-	-	-	
Canary rockfish	-	-	-	
Copper rockfish	-	-	-	
Greenstriped rockfish	-	-	-	
Harlequin rockfish	-	-	-	
Pacific ocean perch	-	-	-	
Quillback rockfish	-	-	-	
Redbanded rockfish	-	-	-	
Redstripe rockfish	-	-	-	
Shortbelly rockfish	-	-	-	
Shortraker rockfish	-	-	-	
Silvergray rockfish	-	-	-	
Widow rockfish	-	-	-	
Yelloweye rockfish	-	-	-	
Yellowtail rockfish	-	-	-	
Eelpouts	-	-	-	
Eulachon	-	-	-	
Greenlings	-	-	-	
Irish lord	-	-	-	
Lingcod	-	3	TRACE	
Pacific cod	25	10	TRACE	
Pacific hake	-	-	-	
Pacific herring	TRACE	1	23	
Pacific tomcod	TRACE	21	TRACE	
Poachers	-	-	TRACE	
Sablefish	TRACE	15	-	
Salmon	-	-	-	
Sandlance	-	-	-	
Sculpins	-	-	-	
Shad	-	-	-	
Shiner perch	-	-	-	
Unknown fish	-	-	-	
Walleye pollock	-	TRACE	-	
Big skate	-	24	5	
Brown catshark	-	9	-	
Longnose skate	-	-	-	
Sandpaper skate	-	-	-	
Spiny dogfish	3	-	5	
Spotted ratfish	TRACE	14	-	
Invertebrates	-	9	TRACE	
TOTAL CATCH (KG.)	138	603	141	
REMARKS	USABLE	USABLE	USABLE	

Appendix Table 1: Continued

HAUL NO.	91	92	93
BLOCK	C301	C301	C301
DATE (1995)	JUNE 04	JUNE 04	JUNE 05
DURATION (H)	0.50	0.50	0.50
DIRECTION (DEG. TRUE)	185	180	165
TIME (PDT)	15:03	15:33	8:02
LAT. (DEG,MIN)	54 07.8	54 06.5	54 01.4
LONG. (DEG,MIN)	131 09.3	131 09.5	54 00.0
DEPTH (FM)	16	17	131 08.1
	22	20	131 07.6
SPECIES CATCH (KG.)			
Arrowtooth flounder	TRACE	-	TRACE
Butter sole	5	4	1
C-O sole	-	-	-
Curlfin sole	-	-	-
Dover sole	-	TRACE	-
English sole	15	43	3
Flathead sole	-	-	TRACE
Pacific halibut	65	42	26
Pacific sanddab	TRACE	1	TRACE
Petrale sole	-	-	-
Rex sole	-	-	-
Rock sole	143	15	17
Sand sole	3	9	3
Slender sole	-	-	-
Speckled sanddab	-	-	-
Starry flounder	-	-	-
Black rockfish	-	-	1
Bocaccio	-	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	-	-
Quillback rockfish	3	-	-
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	-	-	-
Eelpouts	-	-	-
Eulachon	TRACE	-	-
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	-	-	TRACE
Pacific cod	2	7	TRACE
Pacific hake	-	-	-
Pacific herring	24	9	4
Pacific tomcod	-	2	TRACE
Poachers	TRACE	-	-
Sablefish	1	2	TRACE
Salmon	-	-	-
Sandlance	-	-	-
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	-	-	-
Big skate	16	16	17
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	TRACE	-	-
Spotted ratfish	16	1	-
Invertebrates	13	1	4
TOTAL CATCH (KG.)	306	152	76
REMARKS	USABLE	USABLE	USABLE

Appendix Table 1: Continued

HAUL NO.	94	95	96			
BLOCK	D302	E301	E302			
DATE (1995)	JUNE 05	JUNE 05	JUNE 05			
DURATION (H)	0.50	0.50	0.48			
DIRECTION (DEG. TRUE)	170	270	172			
TIME (PDT)	START 8:51	STOP 9:21	START 10:00	STOP 10:30	START 12:05	STOP 12:34
LAT. (DEG, MIN)	53 59.3	53 57.9	53 56.7	53 56.9	53 46.2	53 44.9
LONG. (DEG, MIN)	131 06.9	131 06.7	131 11.6	131 13.7	131 15.4	131 15.2
DEPTH (FM)	20	22	17	16	22	23
SPECIES CATCH(KG.)						
Arrowtooth flounder	-	-	TRACE			
Butter sole	-	-	-			
C-O sole	-	-	-			
Curlfin sole	-	-	-			
Dover sole	-	-	TRACE			
English sole	TRACE	TRACE	39			
Flathead sole	-	-	-			
Pacific halibut	44	11	64			
Pacific sanddab	2	TRACE	4			
Petrale sole	-	-	-			
Rex sole	-	-	-			
Rock sole	20	19	72			
Sand sole	3	-	10			
Slender sole	-	-	-			
Speckled sanddab	-	-	-			
Starry flounder	-	-	-			
Black rockfish	-	-	-			
Bocaccio	-	-	-			
Canary rockfish	-	-	-			
Copper rockfish	-	6	-			
Greenstriped rockfish	-	-	-			
Harlequin rockfish	-	-	-			
Pacific ocean perch	-	-	-			
Quillback rockfish	-	12	4			
Redbanded rockfish	-	-	-			
Redstripe rockfish	-	-	-			
Shortbelly rockfish	-	-	-			
Shortraker rockfish	-	-	-			
Silvergray rockfish	-	-	-			
Widow rockfish	-	-	-			
Yelloweye rockfish	-	-	-			
Yellowtail rockfish	-	-	-			
Eelpouts	-	-	-			
Eulachon	-	-	-			
Greenlings	-	3	-			
Irish lord	-	-	-			
Lingcod	-	3	2			
Pacific cod	1	1	24			
Pacific hake	-	-	-			
Pacific herring	4	6	-			
Pacific tomcod	-	-	-			
Poachers	-	TRACE	TRACE			
Sablefish	19	TRACE	TRACE			
Salmon	-	-	-			
Sandlance	TRACE	TRACE	-			
Sculpins	-	-	TRACE			
Shad	-	-	-			
Shiner perch	TRACE	-	-			
Unknown fish	-	-	-			
Walleye pollock	-	-	-			
Big skate	25	10	-			
Brown catshark	-	-	-			
Longnose skate	-	-	-			
Sandpaper skate	-	-	-			
Spiny dogfish	-	-	7			
Spotted ratfish	-	76	205			
Invertebrates	1	-	-			
TOTAL CATCH (KG.)	119	147	431			
REMARKS	USABLE	USABLE	USABLE			

Appendix Table 1: Continued

HAUL NO.	97	98	99
BLOCK	E201	E201	F201
DATE (1995)	JUNE 05	JUNE 05	JUNE 05
DURATION (H)	0.48	0.50	0.50
DIRECTION (DEG. TRUE)	166	144	217
TIME (PDT)	13:12	13:41	14:16
LAT. (DEG,MIN)	53 41.8	53 40.6	53 41
LONG. (DEG,MIN)	131 16.5	131 16	131 19.9
DEPTH (FM)	10	16	11
SPECIES CATCH(KG.)			
Arrowtooth flounder	-	-	-
Butter sole	TRACE	TRACE	-
C-O sole	-	-	-
Curlfin sole	-	-	-
Dover sole	-	-	-
English sole	19	7	1
Flathead sole	-	-	-
Pacific halibut	37	29	21
Pacific sanddab	2	TRACE	-
Petrale sole	-	-	-
Rex sole	-	-	-
Rock sole	17	20	26
Sand sole	21	6	1
Slender sole	-	-	-
Speckled sanddab	-	-	-
Starry flounder	4	11	19
Black rockfish	-	-	-
Bocaccio	-	-	-
Canary rockfish	-	-	-
Copper rockfish	-	-	-
Greenstriped rockfish	-	-	-
Harlequin rockfish	-	-	-
Pacific ocean perch	-	-	-
Quillback rockfish	-	-	-
Redbanded rockfish	-	-	-
Redstripe rockfish	-	-	-
Shortbelly rockfish	-	-	-
Shortraker rockfish	-	-	-
Silvergray rockfish	-	-	-
Widow rockfish	-	-	-
Yelloweye rockfish	-	-	-
Yellowtail rockfish	-	-	-
Eelpouts	-	-	-
Eulachon	-	-	-
Greenlings	-	-	-
Irish lord	-	-	-
Lingcod	-	-	-
Pacific cod	-	-	-
Pacific hake	-	-	-
Pacific herring	-	-	TRACE
Pacific tomcod	-	-	-
Poachers	-	-	-
Sablefish	-	-	-
Salmon	-	-	-
Sandlance	-	-	-
Sculpins	-	-	-
Shad	-	-	-
Shiner perch	-	-	-
Unknown fish	-	-	-
Walleye pollock	-	-	-
Big skate	6	8	13
Brown catshark	-	-	-
Longnose skate	-	-	-
Sandpaper skate	-	-	-
Spiny dogfish	6	8	4
Spotted ratfish	10	2	3
Invertebrates	-	11	4
TOTAL CATCH (KG.)	122	102	92
REMARKS	USABLE	USABLE	USABLE

Appendix table 2. Length-frequency (nos. measured), by haul, of English sole collected during R/V W.E.Ricker assemblage survey, Hecate Strait, May 23-June 8, 1995.

Fork Length (cm)	Haul no.																			
2	5	6	7	10	14	20	22	29	30	34	35	36	37	39	41	42	46	47	50	
10	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	
11	-	-	1	-	-	-	1	2	-	-	-	-	15	-	-	-	-	-	-	
12	-	-	0	-	-	-	2	28	1	-	-	-	62	-	2	-	-	-	-	
13	-	-	3	-	-	1	5	44	3	7	-	-	91	3	2	-	-	-	1	
14	-	-	7	-	-	3	11	15	1	13	-	-	66	2	2	-	-	0	-	
15	-	-	3	-	-	1	6	2	7	29	-	-	31	2	3	-	-	0	-	
16	-	-	3	-	-	3	7	0	5	26	-	-	16	4	1	-	-	0	-	
17	1	-	4	-	1	8	20	1	3	29	-	1	16	3	2	-	-	0	-	
18	1	3	5	-	0	17	17	1	2	42	-	2	20	0	6	-	1	-	0	
19	2	5	5	-	4	25	17	-	1	26	-	4	16	2	10	-	0	-	1	
20	4	3	5	1	5	22	16	-	4	32	-	6	11	4	3	-	0	-	2	
21	3	6	2	1	5	16	4	-	0	18	-	10	8	5	11	-	1	-	3	
22	1	7	1	2	1	18	4	-	0	14	-	10	6	5	12	-	0	-	6	
23	3	4	6	9	4	13	2	-	0	23	-	12	3	4	17	-	1	-	6	
24	3	4	1	10	5	13	1	-	0	23	1	19	2	2	7	-	0	1	4	
25	1	3	3	15	3	12	9	-	0	25	6	22	5	1	6	-	0	0	6	
26	1	2	3	12	3	13	8	-	2	18	2	10	1	1	17	-	1	2	5	
27	1	2	2	5	5	7	4	-	-	12	5	16	4	1	13	-	3	3	3	
28	1	1	0	8	1	20	7	-	-	8	4	16	0	0	9	1	1	3	0	
29	0	2	2	3	0	10	5	-	-	9	12	10	0	2	2	2	2	1	4	
30	0	0	2	7	0	11	2	-	-	14	12	6	1	0	7	2	3	1	7	
31	0	1	1	2	0	12	4	-	-	8	8	13	2	0	4	3	2	9	1	
32	0	0	1	0	0	12	0	-	-	5	7	5	2	0	8	6	3	11	1	
33	0	0	1	0	4	18	2	-	-	6	10	7	-	0	7	2	0	13	0	
34	0	0	0	0	1	20	1	-	-	10	2	3	-	1	1	6	3	7	1	
35	1	0	0	0	0	10	1	-	-	6	5	5	-	0	3	5	2	3	0	
36	1	1	2	1	0	7	0	-	-	6	4	2	-	2	1	1	14	-	0	
37	1	1	0	-	1	15	2	-	-	3	1	3	-	1	1	2	1	1	1	
38	-	-	1	-	1	5	0	-	-	1	1	5	-	1	2	1	1	6	-	
39	-	-	0	-	1	7	1	-	-	3	0	2	-	0	2	-	-	1	1	
40	-	-	0	-	2	3	0	-	-	0	0	3	-	1	1	-	-	5	-	
41	-	-	0	-	-	2	1	-	-	2	0	2	-	0	1	-	-	5	-	
42	-	-	1	-	-	1	1	-	-	0	1	1	-	2	-	-	-	3	-	
43	-	-	1	-	-	2	-	-	-	0	-	1	-	1	-	-	-	2	-	
44	-	-	-	-	-	1	-	-	-	0	-	-	-	-	-	-	-	1	-	
45	-	-	-	-	-	2	-	-	-	1	-	-	-	-	-	-	-	4	-	
46	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	5	-	
47	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	3	-	
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	
49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	
51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	
52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	
53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	
54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	
55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	
Total	25	45	66	76	47	333	161	93	29	419	81	196	380	50	163	30	26	112	40	33

Appendix table 2 (cont'd)

Species : English sole

Fork Length (cm)	Haul no.																			
	51	52	53	57	58	59	61	62	63	64	65	66	67	71	72	73	74	75	77	79
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	1	0	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
17	-	-	1	0	-	-	-	-	-	1	1	-	1	5	-	-	-	-	0	-
18	-	-	2	2	-	-	-	-	-	1	0	2	1	12	-	-	-	-	3	-
19	-	-	4	1	-	-	-	-	0	1	1	2	13	-	-	-	-	1	-	-
20	-	-	1	2	-	-	-	-	0	1	0	1	21	-	-	-	-	3	1	1
21	-	2	2	5	-	-	-	-	1	2	5	2	4	23	-	-	-	2	0	0
22	-	1	5	6	-	-	-	1	2	0	7	3	12	13	-	-	-	6	0	0
23	-	3	4	6	-	1	-	3	0	6	7	9	18	21	-	-	-	4	0	0
24	-	7	6	2	0	0	-	1	0	4	8	6	22	29	-	-	-	5	1	0
25	-	19	3	17	3	-	4	0	5	14	4	21	19	3	1	-	9	5	0	0
26	-	25	9	9	0	-	3	1	7	16	4	17	16	2	1	-	14	1	4	1
27	-	33	7	11	2	1	2	1	11	21	10	25	5	5	2	-	24	0	16	1
28	-	23	7	8	5	2	3	4	12	28	8	25	4	13	5	-	33	2	13	5
29	1	20	2	10	5	2	3	3	25	7	20	3	19	16	2	-	20	1	7	4
30	2	18	6	5	6	5	6	3	2	19	4	18	4	14	14	-	28	1	12	14
31	2	13	5	10	4	3	2	2	2	18	6	9	1	12	16	2	27	5	4	10
32	4	12	6	7	3	4	4	2	4	11	7	8	5	12	17	3	18	1	4	15
33	3	5	2	9	5	1	4	5	6	13	6	4	0	13	12	5	18	1	4	9
34	5	2	2	4	5	2	1	1	1	8	3	7	1	9	13	4	8	2	4	7
35	4	3	1	6	5	0	1	3	0	3	4	4	0	7	11	4	6	0	3	5
36	5	0	0	2	4	0	0	1	1	3	5	2	1	8	5	7	9	1	3	1
37	5	0	1	1	0	0	1	3	-	1	4	0	-	4	9	0	6	1	2	1
38	3	0	-	1	3	0	0	1	-	3	0	1	-	5	2	2	5	2	1	1
39	2	0	-	1	-	1	1	1	-	1	2	1	-	0	2	1	2	1	0	0
40	0	0	-	-	-	-	-	1	0	-	0	-	-	2	-	1	1	6	2	0
41	0	0	-	-	-	-	-	0	1	-	2	-	-	-	-	3	1	0	-	1
42	1	0	-	-	-	-	-	1	-	-	-	-	-	-	-	1	2	1	-	-
43	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-	-
44	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-
45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-
46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	38	187	79	128	51	21	42	36	68	217	97	223	198	129	129	37	243	23	107	80

Appendix table 2 (cont'd)

Species : English sole

Fork Length (cm)	Haul no.													Total Number Measured	
	81	82	83	84	85	86	87	88	89	91	92	96	97		
10	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
11	-	-	-	-	-	-	-	-	-	-	-	-	1	20	
12	-	-	-	-	-	-	-	-	-	-	-	12	3	110	
13	-	-	-	-	-	-	-	-	1	2	1	27	11	204	
14	-	-	-	-	-	-	-	-	3	2	0	21	14	163	
15	-	-	-	-	-	-	-	-	4	4	3	16	5	117	
16	-	-	-	-	-	-	-	-	16	1	0	24	9	119	
17	-	-	-	-	-	-	-	-	23	2	3	32	7	165	
18	-	-	-	-	-	-	-	-	28	5	4	33	8	218	
19	-	-	-	-	-	-	-	-	3	22	5	3	19	6	199
20	-	-	1	-	1	-	-	1	11	8	8	13	9	200	
21	-	-	2	-	0	-	-	3	24	10	10	10	5	205	
22	-	-	7	1	0	-	-	7	17	11	9	9	5	209	
23	-	-	10	0	0	-	-	9	25	18	19	10	6	288	
24	-	-	11	4	1	1	-	4	26	7	20	15	9	290	
25	-	-	26	6	0	0	-	7	25	14	16	11	8	359	
26	-	1	30	14	5	2	-	8	25	11	18	17	1	367	
27	-	3	27	6	5	0	-	6	17	4	16	9	5	358	
28	-	2	14	15	3	2	-	13	17	6	18	10	2	385	
29	-	1	19	10	9	5	3	3	18	2	20	16	3	347	
30	-	9	15	14	8	1	1	10	6	5	10	12	1	348	
31	-	6	10	10	22	1	1	6	6	1	9	10	1	308	
32	-	10	8	10	8	4	2	5	8	1	6	7	4	283	
33	-	7	7	7	6	3	3	3	4	0	8	5	1	253	
34	-	14	4	4	12	4	3	0	2	0	7	9	3	207	
35	-	13	3	2	10	1	5	3	2	1	3	4	4	163	
36	-	9	1	1	8	2	3	3	3	1	4	0	0	141	
37	1	5	1	0	3	2	4	-	1	0	0	1	1	95	
38	2	1	1	0	4	1	4	-	-	1	0	1	4	75	
39	6	2	0	0	2	1	11	-	-	-	1	1	0	63	
40	5	2	1	0	5	0	11	-	-	-	-	1	1	56	
41	2	-	-	1	1	2	11	-	-	-	-	-	1	39	
42	2	-	-	-	-	1	14	-	-	-	-	-	0	35	
43	0	-	-	-	-	1	8	-	-	-	-	-	1	18	
44	0	-	-	-	-	1	6	-	-	-	-	-	0	10	
45	2	-	-	-	-	-	1	-	-	-	-	-	1	11	
46	-	-	-	-	-	-	7	-	-	-	-	-	1	17	
47	-	-	-	-	-	-	3	-	-	-	-	-	-	7	
48	-	-	-	-	-	-	2	-	-	-	-	-	-	2	
49	-	-	-	-	-	-	2	-	-	-	-	-	-	2	
50	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
51	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
52	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
53	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
54	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
55	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Total	20	85	198	105	113	35	105	94	334	122	216	355	141	6461	

Appendix table 3. Length-frequency (nos. measured), by haul, of rock sole collected during R/V W.E.Ricker assemblage survey, Hecate Strait, May 23-June 8, 1995.

Species : Rock sole

Fork	Haul no.																			
Length (cm)	6	10	11	14	17	18	19	22	23	24	25	28	38	44	45	46	47	48	55	56
10	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	1	-	1	-	-	-	-	-	-	-	1	-	-	-	-	3	1
12	-	-	1	5	3	0	1	-	-	-	-	-	-	0	-	2	-	-	7	4
13	-	-	1	5	4	0	0	-	-	-	-	1	2	1	-	0	-	-	15	6
14	-	-	0	3	6	0	0	1	-	-	-	1	3	1	-	2	0	1	4	3
15	-	-	0	13	4	2	0	2	-	-	-	0	2	0	3	10	3	13	5	
16	1	-	0	14	2	5	0	1	1	-	-	0	2	1	1	30	5	4	37	17
17	0	-	2	11	9	5	1	6	0	-	-	1	3	4	8	36	10	2	17	14
18	0	1	1	3	5	3	0	5	0	-	-	2	2	2	8	20	8	6	18	7
19	0	2	1	16	6	3	1	4	1	-	-	2	1	0	3	6	9	8	24	17
20	1	2	1	9	5	6	1	3	0	-	-	1	2	2	5	6	6	4	31	13
21	0	1	1	20	3	8	0	4	1	-	-	0	0	0	3	9	13	10	5	28
22	0	1	0	13	3	9	1	4	0	-	-	0	0	0	8	11	8	5	45	21
23	0	0	1	4	2	1	0	3	1	-	-	1	2	2	2	16	6	9	39	18
24	1	0	0	15	4	6	0	6	0	-	-	0	2	2	29	5	9	4	38	14
25	1	0	2	14	7	1	2	1	0	-	-	0	2	3	24	4	4	2	37	12
26	0	2	1	13	3	1	2	0	1	-	-	0	2	3	10	3	4	5	21	14
27	0	0	0	5	3	1	3	1	0	-	-	0	1	1	8	0	2	2	10	8
28	0	1	2	6	4	2	1	0	1	-	-	1	4	0	2	10	2	2	17	6
29	3	1	4	3	2	1	0	0	0	-	-	1	5	0	0	7	1	1	11	3
30	0	3	3	1	3	0	3	0	0	-	-	0	11	0	9	9	2	2	7	6
31	3	0	1	4	1	1	1	1	0	-	-	2	12	0	14	16	2	2	8	5
32	3	3	0	2	0	0	1	0	3	-	-	4	20	1	3	9	3	3	3	3
33	0	4	2	1	3	1	0	0	1	-	-	4	17	0	5	4	4	8	4	1
34	2	3	1	1	0	2	0	0	0	-	-	2	8	0	2	2	2	7	7	1
35	0	3	0	0	2	3	1	0	0	-	-	2	7	0	5	5	3	3	3	2
36	0	6	0	0	0	3	0	1	0	-	-	4	8	0	1	1	1	5	2	2
37	2	1	5	0	1	3	1	0	0	-	-	1	3	0	2	3	3	1	4	2
38	0	1	0	1	0	1	1	1	1	-	-	2	1	2	0	0	2	2	1	1
39	3	3	1	1	0	3	1	1	1	-	-	2	7	1	0	3	1	2	2	0
40	1	2	2	2	0	1	1	1	0	-	-	2	3	5	2	0	1	0	0	0
41	0	1	1	1	0	0	1	1	0	-	-	4	5	0	2	0	0	1	3	0
42	3	1	1	1	1	0	0	1	0	-	-	2	3	0	0	0	0	2	0	2
43	1	0	4	0	2	0	0	0	0	-	-	1	1	1	0	0	0	0	0	0
44	3	0	0	0	0	1	1	0	0	-	-	1	3	1	0	0	0	0	0	0
45	0	1	1	1	1	1	-	1	0	-	-	1	1	1	1	0	0	0	0	0
46	1	3	3	1	1	-	-	0	1	-	-	1	1	1	1	0	0	0	1	1
47	1	1	1	-	-	-	-	1	0	-	-	1	0	0	0	0	0	0	2	1
48	-	4	0	-	-	-	-	-	0	-	-	0	-	-	0	0	0	0	0	1
49	-	2	3	-	-	-	-	-	0	-	-	0	-	-	0	0	0	0	0	1
50	-	-	2	-	-	-	-	-	-	-	-	-	-	-	1	0	0	0	1	-
51	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	-	2	-	-
52	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-

Appendix table 3 (cont'd)

Species : Rock sole

Fork Length (cm)	Haul no.																			
	57	60	64	65	66	67	85	89	90	91	92	93	94	95	96	97	98	99	100	101
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
12	1	9	-	-	-	-	-	-	-	-	-	-	4	-	3	-	-	0	-	-
13	4	10	-	-	-	-	-	2	-	1	4	4	4	-	9	1	-	0	-	-
14	0	5	-	-	-	-	-	0	3	0	3	1	1	-	9	0	-	0	-	-
15	4	10	-	-	-	-	-	1	2	2	4	2	5	1	6	2	-	0	-	-
16	10	19	-	-	1	3	-	3	5	0	4	2	6	3	15	0	-	1	-	-
17	9	14	-	1	0	1	-	4	5	3	5	10	10	4	20	1	-	0	-	-
18	3	15	-	3	0	4	-	4	3	6	11	3	6	1	7	0	-	0	1	-
19	3	17	-	1	1	1	-	2	1	6	8	6	8	6	10	1	-	0	1	1
20	5	14	1	0	1	10	-	4	6	1	7	11	14	2	5	9	-	3	1	0
21	3	9	1	1	1	7	-	10	12	10	11	6	9	2	2	9	-	3	1	2
22	7	9	1	1	0	13	-	4	12	6	5	8	9	4	12	0	-	3	2	0
23	6	13	4	0	0	13	-	4	7	13	12	6	9	6	13	2	-	5	3	1
24	3	5	2	1	1	5	-	1	4	10	3	4	5	4	9	2	-	7	0	3
25	4	5	1	1	1	1	-	1	4	10	4	6	5	1	3	0	-	4	5	2
26	3	2	4	0	1	2	-	2	7	10	4	4	3	2	4	2	-	8	1	1
27	0	4	5	1	0	1	-	1	7	7	1	4	4	1	1	1	-	2	2	1
28	4	2	3	0	0	0	-	1	4	11	2	2	2	1	2	1	-	4	5	1
29	2	3	1	1	1	2	-	1	4	12	1	1	3	1	10	2	-	2	4	2
30	1	2	0	3	1	4	-	1	3	5	1	4	2	1	1	8	1	3	2	1
31	1	7	4	9	2	5	0	1	5	10	2	0	0	3	7	0	1	2	2	2
32	1	3	4	32	7	3	4	4	4	7	1	2	5	1	8	1	4	4	5	6
33	0	1	5	29	4	5	1	4	9	8	5	2	5	6	18	1	4	4	4	1
34	0	3	2	16	3	4	2	8	5	6	5	2	3	5	14	0	2	1	2	1
35	1	3	3	26	7	5	2	3	2	5	2	0	1	6	10	0	5	3	0	1
36	0	4	2	26	2	1	1	5	2	5	-	0	0	2	7	2	5	3	3	3
37	2	1	1	24	4	3	1	4	4	4	-	-	2	0	13	1	1	1	2	2
38	0	3	2	26	2	2	2	2	3	0	-	-	0	1	8	0	3	4	1	1
39	2	3	-	24	1	8	0	5	1	-	-	2	2	1	1	1	1	0	1	1
40	0	0	-	19	1	6	4	3	3	-	-	1	1	0	0	1	2	0	1	1
41	0	0	-	21	3	2	0	3	4	-	-	0	0	1	1	2	-	1	-	1
42	0	1	-	12	2	5	1	0	-	-	-	0	1	1	1	-	-	-	-	1
43	1	3	-	5	2	0	-	0	-	-	-	0	-	-	1	-	-	-	-	1
44	0	1	-	1	1	1	-	0	-	-	-	0	-	-	1	0	-	-	-	1
45	1	3	-	3	0	0	-	1	-	-	-	0	-	-	1	-	-	-	-	-
46	1	0	-	1	0	0	-	-	-	-	-	0	-	-	-	1	-	-	-	-
47	-	1	-	1	1	0	-	-	-	-	-	1	-	-	-	-	-	-	-	-
48	-	0	-	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	82	205	46	290	52	118	19	92	130	150	108	94	123	67	249	34	43	79	49	38

Appendix table 3 (cont'd)

Species : Rock sole

Fork Haul no.	Total	Number	
Length (cm)	102	103	Measured
10	-	-	1
11	-	-	8
12	-	-	40
13	1	-	76
14	0	-	47
15	0	-	99
16	0	-	193
17	0	-	217
18	0	-	158
19	0	-	178
20	1	-	185
21	1	-	222
22	2	-	232
23	3	-	238
24	1	-	209
25	1	2	178
26	2	2	150
27	3	0	103
28	2	0	116
29	4	1	112
30	3	2	115
31	5	3	153
32	3	2	176
33	8	1	187
34	2	1	139
35	1	1	133
36	2	2	118
37	1	3	108
38	1	3	94
39	3	3	104
40	2	1	70
41	3	0	70
42	1	3	51
43	3	1	30
44	0	3	25
45	2	1	21
46	2	2	17
47	-	0	12
48	-	0	7
49	-	2	11
50	-	-	5
51	-	-	2
52	-	-	2
Total	63	39	4412

Appendix table 4. Length-frequency (nos. measured), by haul, of Dover sole collected during R/V W.E.Ricker assemblage survey, Hecate Strait, May 23-June 8, 1995.

Species : Dover sole

Fork Length (cm)	Haul no.																	Total Number Measured
	12	40	41	42	43	52	54	58	62	73	81	82	84	85	86	87		
14	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	2
15	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	2
16	-	-	-	-	-	5	-	-	-	2	-	-	-	-	-	-	-	7
17	-	-	-	-	-	11	-	-	-	1	-	-	-	-	-	-	-	12
18	-	-	-	-	-	23	-	-	-	0	-	-	-	-	-	-	-	23
19	-	-	-	-	-	1	23	-	-	1	0	-	-	-	-	-	-	25
20	-	-	-	-	-	0	12	-	-	1	1	-	-	-	-	-	-	14
21	-	-	-	-	-	4	10	-	-	0	4	-	-	-	-	-	-	18
22	-	-	-	-	-	6	27	3	-	0	3	-	-	-	-	-	-	39
23	1	-	-	-	-	5	28	0	-	0	9	-	-	-	-	-	-	43
24	1	-	5	5	28	2	-	1	8	-	-	-	-	-	-	-	-	52
25	2	1	7	13	18	4	3	3	9	11	-	-	-	1	-	0	1	62
26	4	1	14	20	23	2	3	9	11	-	-	-	-	0	1	5	2	95
27	6	4	11	15	9	4	7	21	8	-	-	-	1	2	2	7	3	100
28	12	2	15	15	5	4	12	22	10	-	-	1	0	8	11	10	10	137
29	10	7	21	11	0	3	23	29	10	-	-	1	1	4	15	14	11	160
30	9	8	9	7	2	7	27	31	6	-	-	1	3	8	11	17	17	163
31	6	10	3	3	2	1	24	22	5	-	-	1	5	2	25	9	14	132
32	6	6	5	8	1	0	24	15	1	-	3	10	8	18	6	13	124	
33	9	7	0	5	1	1	6	5	1	-	0	2	8	18	5	12	81	
34	3	1	2	1	-	0	6	0	1	-	4	1	2	17	6	12	57	
35	4	3	1	1	-	0	5	2	0	-	0	2	8	4	6	1	7	44
36	3	0	0	0	-	0	2	0	1	-	2	0	7	3	5	0	5	28
37	2	1	1	2	-	2	4	1	0	-	1	1	5	0	2	2	6	30
38	0	3	1	1	1	-	0	2	1	0	3	2	4	1	1	1	3	23
39	3	1	0	-	-	1	4	0	0	0	1	3	2	2	1	0	5	23
40	4	2	0	-	-	-	0	0	0	1	2	2	2	0	1	1	2	15
41	3	1	0	-	-	-	1	1	0	0	2	2	2	1	0	1	1	13
42	0	4	0	-	-	-	0	-	0	0	0	0	3	0	0	0	0	7
43	3	3	0	-	-	-	0	-	0	0	0	1	1	1	1	0	0	10
44	2	4	0	-	-	-	0	-	0	1	0	0	3	0	0	0	0	9
45	2	4	0	-	-	-	1	-	0	1	0	0	2	0	0	0	0	11
46	0	4	0	-	-	-	-	-	0	1	0	0	2	0	0	0	0	7
47	2	2	0	-	-	-	-	-	0	3	2	2	0	0	0	0	0	11
48	1	-	1	-	-	-	-	-	0	4	2	3	0	-	0	0	0	11
49	-	-	-	-	-	-	-	-	0	1	3	1	0	-	0	0	5	
50	-	-	-	-	-	-	-	-	0	1	0	2	0	-	0	0	3	
51	-	-	-	-	-	-	-	-	0	1	0	1	0	-	0	0	2	
52	-	-	-	-	-	-	-	-	0	0	1	0	0	-	1	0	2	
53	-	-	-	-	-	-	-	-	1	2	1	0	0	1	1	0	6	
54	-	-	-	-	-	-	-	-	-	1	1	0	-	-	0	1	3	
55	-	-	-	-	-	-	-	-	-	2	-	1	-	-	0	1	3	
56	-	-	-	-	-	-	-	-	-	5	-	1	-	-	1	-	7	
57	-	-	-	-	-	-	-	-	0	-	-	-	-	-	0	-	0	
58	-	-	-	-	-	-	-	-	1	-	-	-	-	-	0	-	1	
59	-	-	-	-	-	-	-	-	1	-	-	-	-	-	0	-	1	
60	-	-	-	-	-	-	-	-	0	-	-	-	-	-	0	-	0	
61	-	-	-	-	-	-	-	-	1	-	-	-	-	-	0	-	1	
62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	
63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	

Total 98 79 96 123 232 34 154 165 92 36 34 74 57 135 91 125 1625

Appendix table 5. Length-frequency (nos. measured), by haul, of Pacific cod collected during R/V W.E.Ricker assemblage survey, Hecate Strait, May 23-June 8, 1995.

Species : Pacific cod

Fork Length (cm)	Haul no.													Total Number Measured	
	38	42	43	47	48	57	63	64	65	66	67	68	85	96	
21	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
22	1	-	-	-	-	-	-	-	-	-	3	-	-	1	5
23	2	-	-	1	1	-	-	-	-	-	6	-	-	3	13
24	6	-	-	2	0	1	-	-	-	1	10	-	-	4	24
25	6	-	-	2	0	0	-	-	-	0	12	-	-	6	26
26	10	-	-	7	4	0	-	-	-	0	25	-	-	13	59
27	13	-	-	5	4	3	-	-	-	2	22	-	-	21	70
28	17	-	1	10	6	0	-	-	-	0	28	-	-	21	83
29	13	1	2	4	5	0	-	-	1	2	27	-	-	13	68
30	8	0	0	14	4	0	-	-	0	1	16	-	-	11	54
31	13	0	1	8	1	0	-	-	0	0	9	-	-	7	39
32	5	0	0	6	5	0	-	-	0	0	3	-	-	4	23
33	2	0	0	9	5	0	-	-	0	0	6	-	-	3	26
34	6	0	0	6	2	0	-	-	0	0	1	-	-	1	16
35	-	0	0	6	3	1	-	-	0	0	3	-	-	0	13
36	-	1	1	3	2	0	-	-	0	0	2	-	-	0	9
37	-	0	2	2	0	0	-	-	0	0	1	-	-	0	5
38	-	1	0	1	0	0	-	-	1	0	1	-	-	0	4
39	-	0	0	4	1	0	-	-	1	0	5	-	-	1	12
40	-	3	0	1	0	0	-	-	0	1	3	-	-	0	8
41	-	1	0	4	0	2	-	-	0	2	4	-	-	1	14
42	-	2	2	7	2	0	-	-	1	0	2	8	-	0	24
43	-	2	2	5	2	0	-	-	2	0	2	12	-	0	27
44	-	0	1	6	0	2	-	-	2	0	1	10	-	0	22
45	-	2	1	7	1	0	-	-	0	3	3	14	-	0	32
46	-	0	0	4	0	0	-	1	0	0	5	6	-	0	16
47	-	0	0	13	0	1	1	0	0	0	3	11	0	2	31
48	-	1	0	6	1	1	0	2	0	1	2	0	0	3	17
49	-	0	0	5	0	0	1	0	2	0	7	0	2	0	17
50	-	2	1	5	0	0	0	0	0	0	1	4	0	0	13
51	-	1	0	1	0	1	0	0	0	0	1	1	0	1	6
52	-	1	0	3	0	1	0	0	0	0	2	2	1	1	11
53	-	0	0	0	0	0	0	0	0	0	3	0	0	0	3
54	-	0	0	2	1	0	0	0	0	0	0	1	0	1	5
55	-	1	0	2	1	1	0	0	0	0	0	2	0	0	7
56	-	1	0	3	0	1	0	1	0	1	1	0	0	0	8
57	-	0	0	1	0	0	0	0	1	0	0	1	0	0	3
58	-	0	0	2	0	0	0	0	3	0	1	1	0	0	8
59	-	0	0	0	0	0	0	0	0	1	0	1	0	0	2
60	-	0	0	0	0	0	0	0	2	0	1	1	0	1	5
61	-	0	1	1	0	1	1	1	1	0	3	4	1	0	13
62	-	1	-	3	0	2	0	0	0	1	2	0	1	0	10
63	-	0	-	0	0	1	0	1	0	0	0	0	0	1	3
64	-	1	-	2	0	1	1	2	0	0	0	1	0	0	8
65	-	0	-	1	0	1	1	2	0	0	0	0	3	2	10
66	-	1	-	1	1	1	0	2	1	3	0	2	0	0	12
67	-	2	-	1	1	0	1	1	0	2	1	2	1	0	12
68	-	1	-	2	-	1	1	0	0	0	1	0	0	0	6
69	-	0	-	0	-	1	0	0	0	2	1	1	2	0	7
70	-	0	-	1	-	1	0	0	0	0	-	2	0	0	4
71	-	1	-	1	-	0	0	1	1	-	-	0	2	0	6
72	-	-	-	-	-	1	0	-	-	-	-	0	3	-	4

Appendix table 5 (cont'd)

Species : Pacific cod

Fork Length (cm)	Haul no.													Total Number Measured	
	38	42	43	47	48	57	63	64	65	66	67	68	85	96	
73	-	-	-	-	-	-	1	-	-	-	-	0	0	-	1
74	-	-	-	-	-	-	0	-	-	-	-	0	0	-	0
75	-	-	-	-	-	-	0	-	-	-	-	0	0	-	0
76	-	-	-	-	-	-	0	-	-	-	-	0	3	-	3
77	-	-	-	-	-	-	0	-	-	-	-	0	0	-	0
78	-	-	-	-	-	-	1	-	-	-	-	1	1	-	3
79	-	-	-	-	-	-	-	-	-	-	-	1	0	-	1
80	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
81	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Total	102	27	15	180	53	26	10	25	9	48	282	17	31	108	933

Appendix table 6. Length-frequency (nos. measured), by haul, of Pacific ocean perch collected during R/V W.E.Ricker assemblage survey, Hecate Strait, May 23-June 8, 1995.

Species : *Sebastes alutus*

Length (cm)	Fork Haul no.		Total Number Measured
	12	40	
16	1	-	1
17	6	-	6
18	8	-	8
19	21	-	21
20	14	1	15
21	32	2	34
22	22	2	24
23	17	5	22
24	30	7	37
25	28	21	49
26	18	32	50
27	13	27	40
28	6	14	20
29	1	2	3
Total	217	113	330

Appendix table 7. Length-sex-otolith (nos. measured), for haul 85, of English sole collected during R/V W.E.Ricker assemblage survey, Hecate Strait, May 23-June 8, 1995.

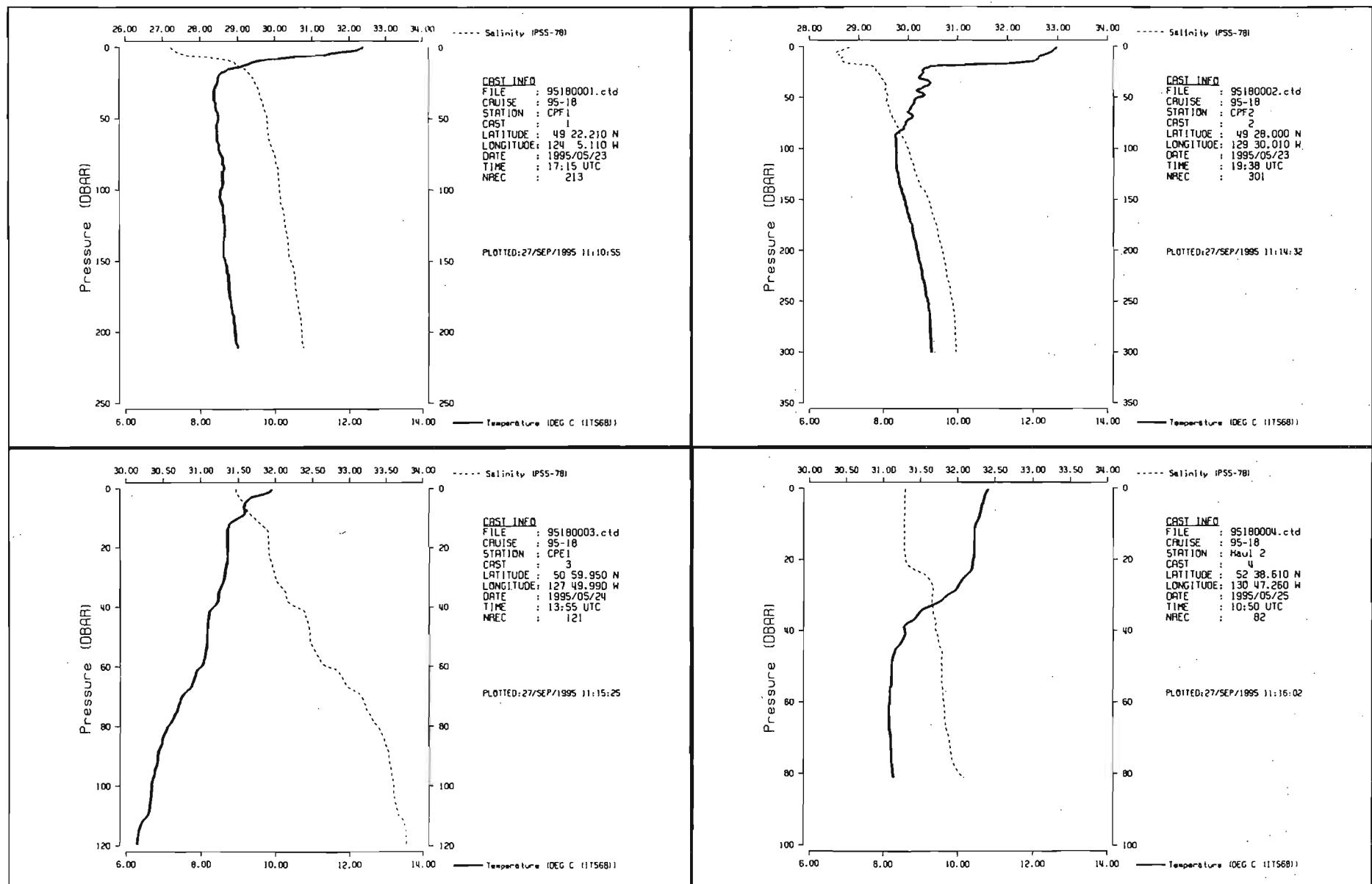
Species: English sole
Haul: 85

Sex	M	F	Total
Length			
26	-	2	2
27	-	1	1
28	2	7	9
29	4	3	7
30	4	2	6
31	5	4	9
32	4	7	11
33	3	6	9
34	1	8	9
35	1	3	4
36	2	5	7
37	-	5	5
38	-	3	3
39	1	1	2
40	-	3	3
41	-	1	1
43	-	1	1
Total	27	62	89

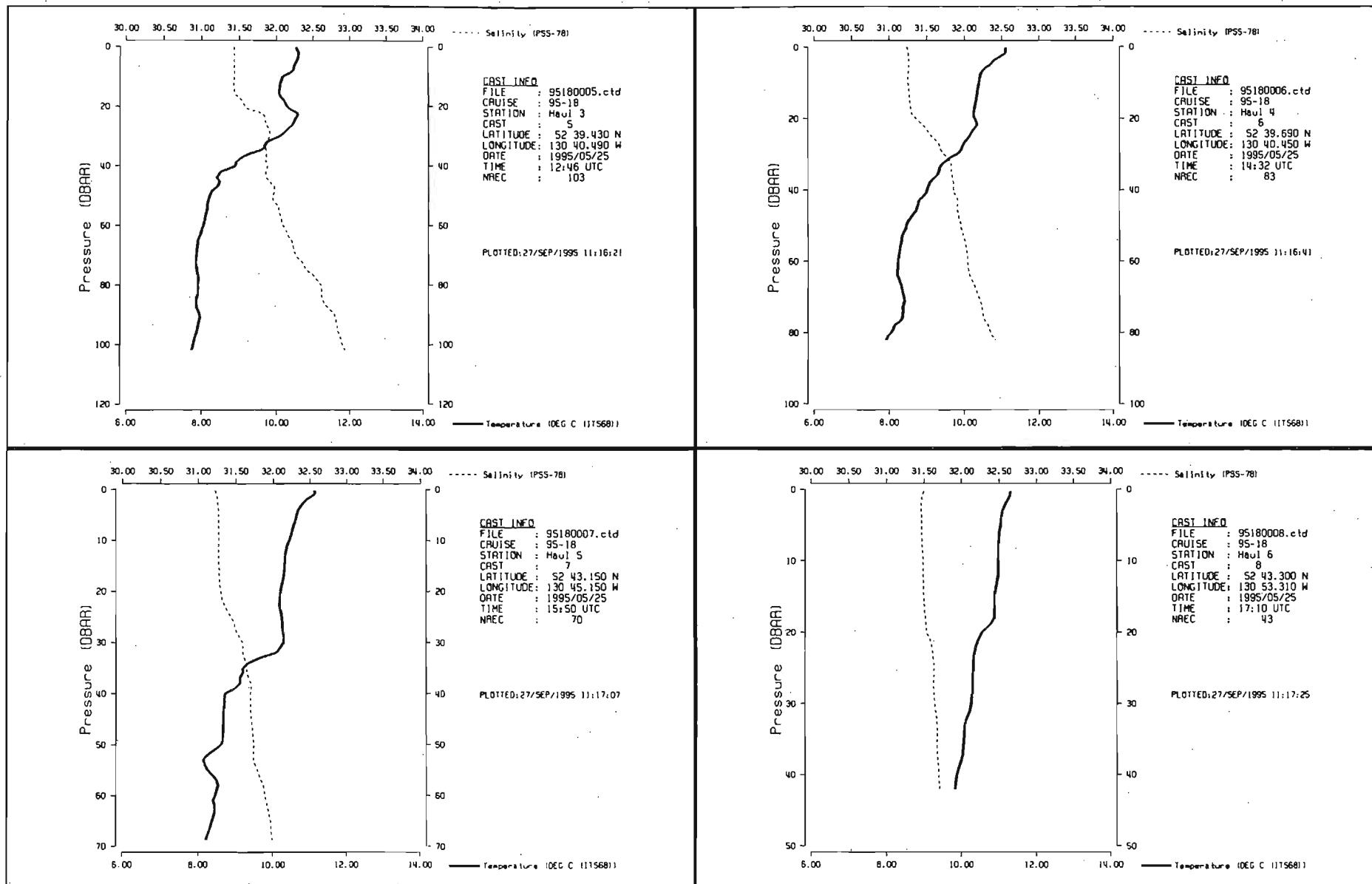
Appendix table 8. Length-sex-maturity-otolith (nos. measured), for haul 87, of Dover sole collected during R/V W.E.Ricker assemblage survey, Hecate Strait, May 23-June 8, 1995.

Species: Dover sole
Haul: 87

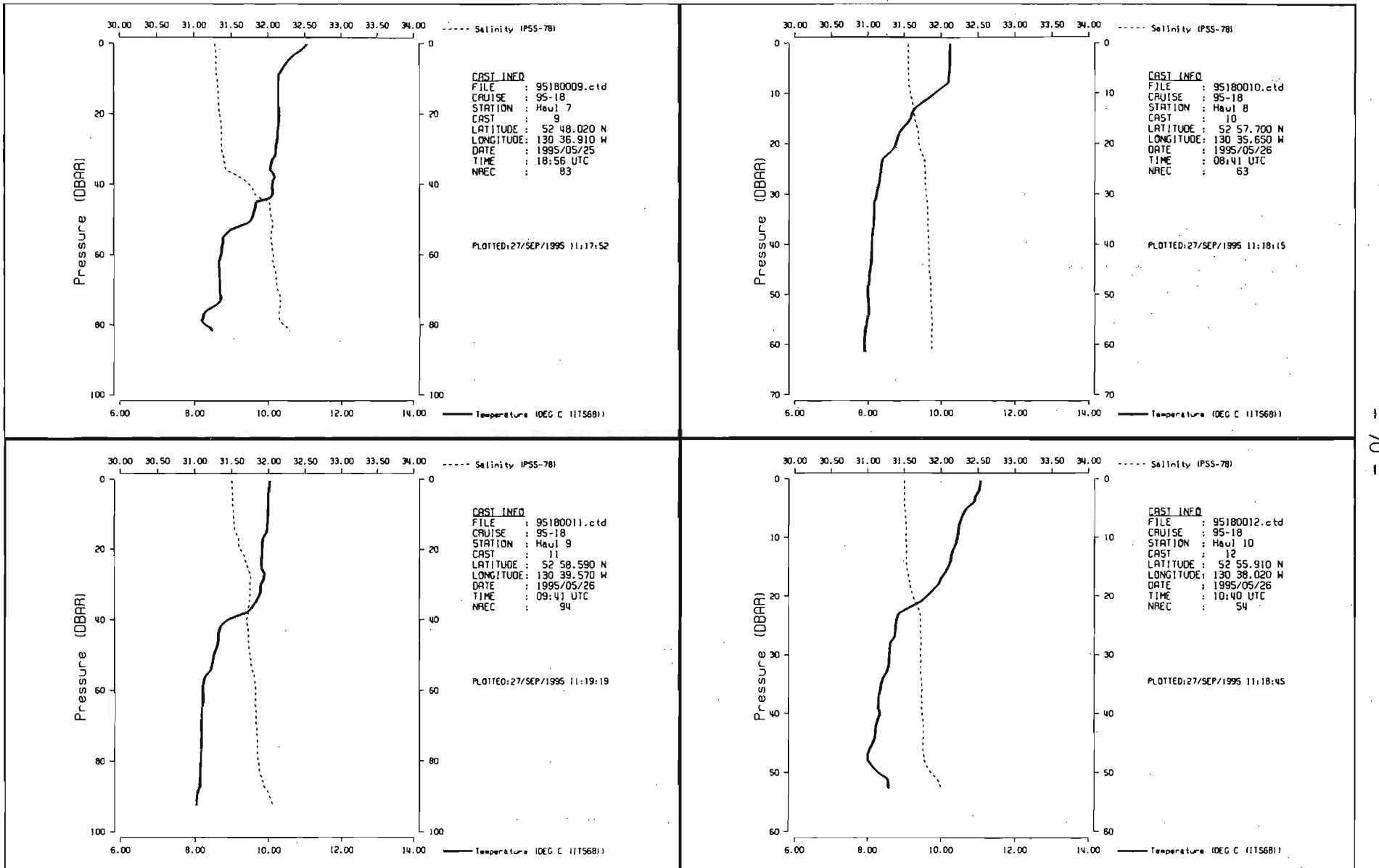
Sex	M						F					Total
	1	2	5	6	7	9	1	2	5	7		
Maturity												
Length												
26	-	-	-	-	-	-	2	-	-	-	-	2
27	2	-	-	-	1	-	1	-	-	-	-	4
28	1	-	-	1	-	-	1	-	-	-	-	3
29	-	-	-	2	-	1	2	2	-	-	-	7
30	-	1	2	-	5	-	2	5	1	-	-	16
31	1	-	2	1	1	-	3	3	-	-	-	11
32	-	-	1	1	3	-	4	5	-	-	-	14
33	-	-	-	2	2	-	3	5	-	1	-	13
34	-	-	-	1	-	-	1	2	-	1	-	5
35	-	-	1	-	-	-	1	4	-	-	-	6
36	-	-	-	-	-	-	2	3	-	-	-	5
37	-	-	-	-	1	-	-	3	-	-	-	4
38	-	-	-	-	-	-	-	3	-	1	-	4
39	-	-	-	1	-	-	-	1	-	1	-	3
41	-	-	-	-	-	-	-	-	-	1	-	1
43	-	-	-	-	-	-	-	1	-	-	-	1
58	-	-	-	-	-	-	-	-	-	1	-	1
Total	4	1	6	9	13	1	22	37	1	6	100	



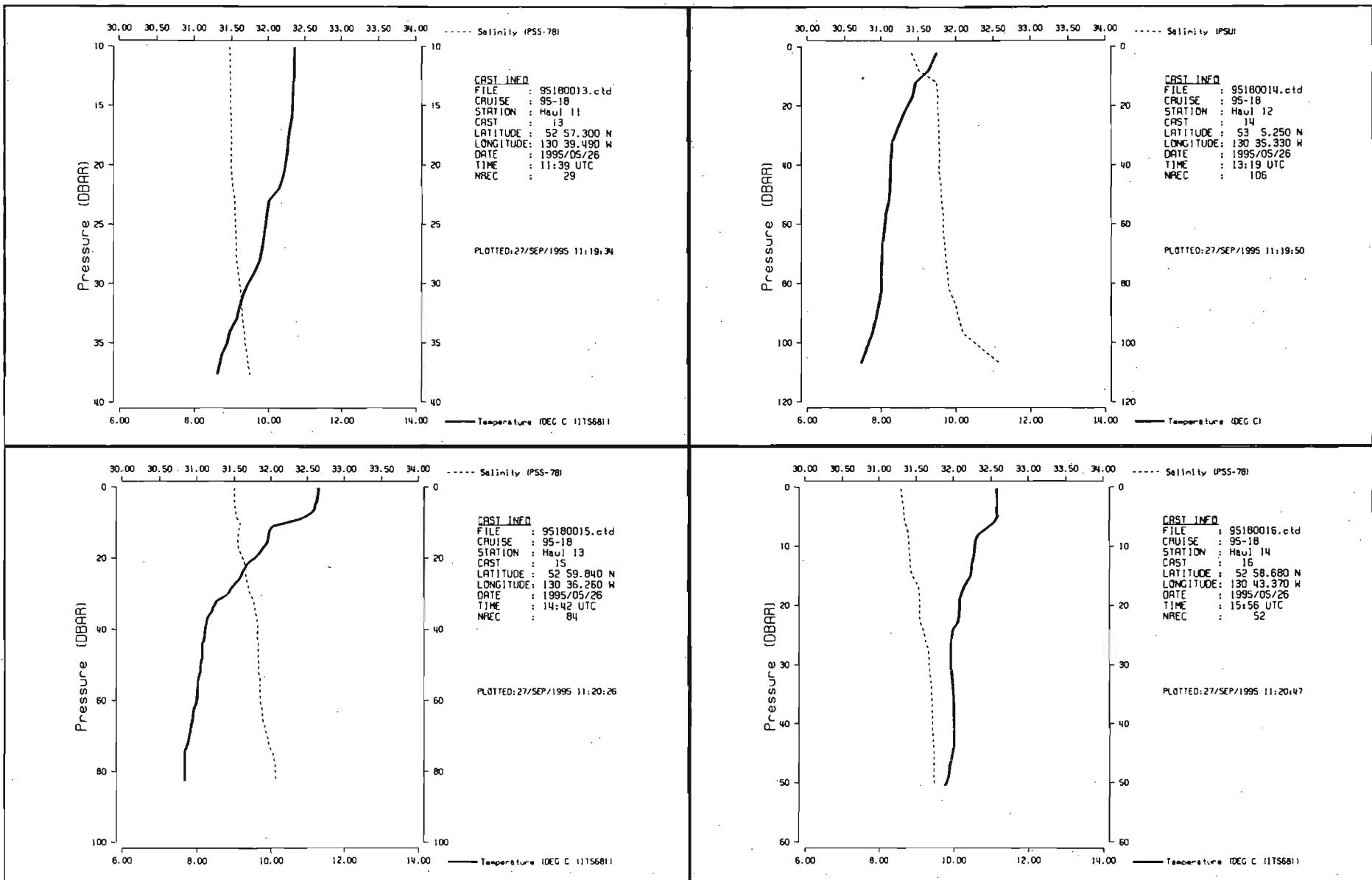
Appendix 9: Temperature and salinity profiles for CTD casts performed during the Hecate Strait assemblage survey May 23 - June 9, 1995.



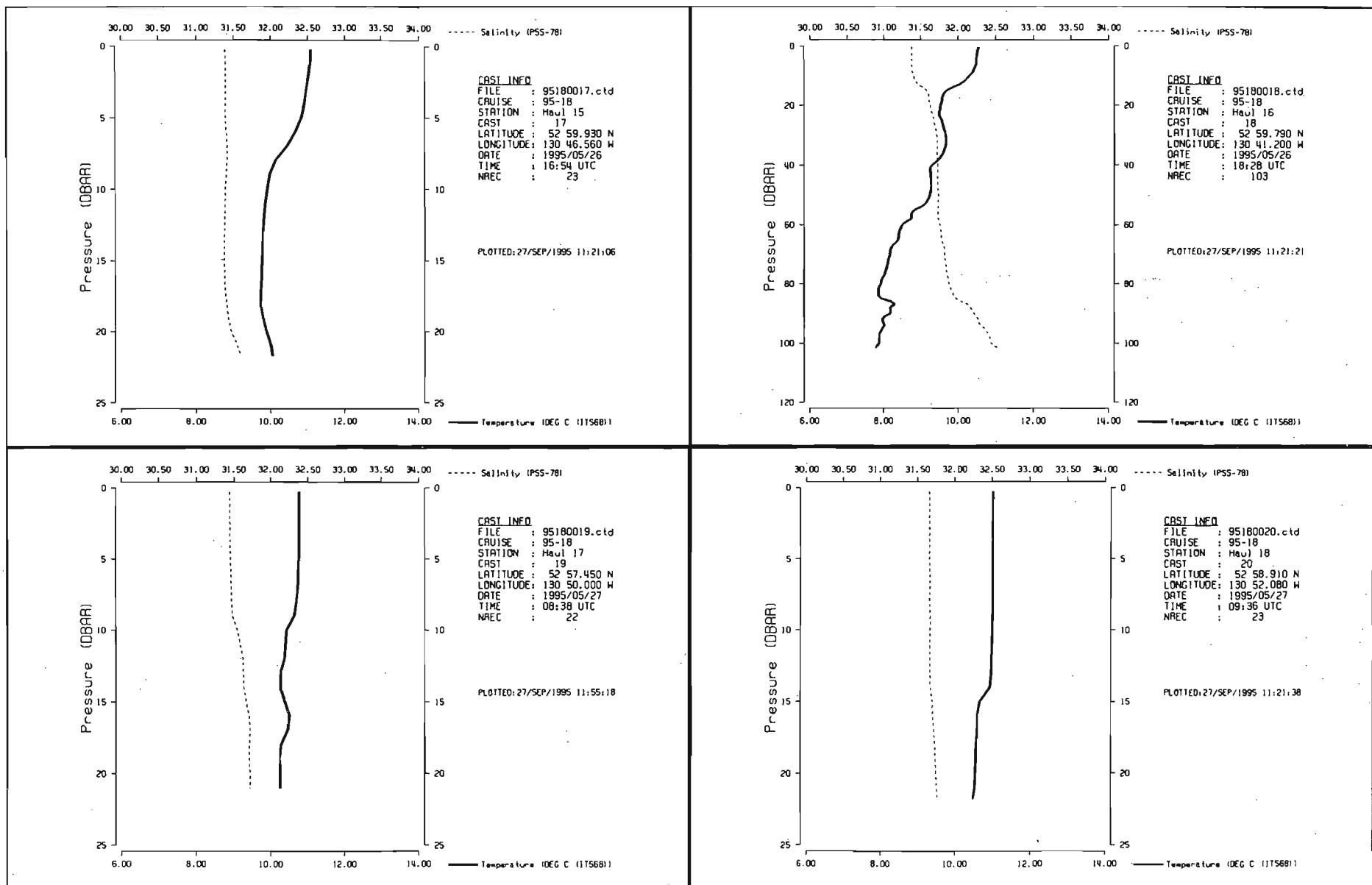
Appendix 9: Temperature and salinity profiles for CTD casts performed during the Hecate Strait assemblage survey May 23 - June 9, 1995.



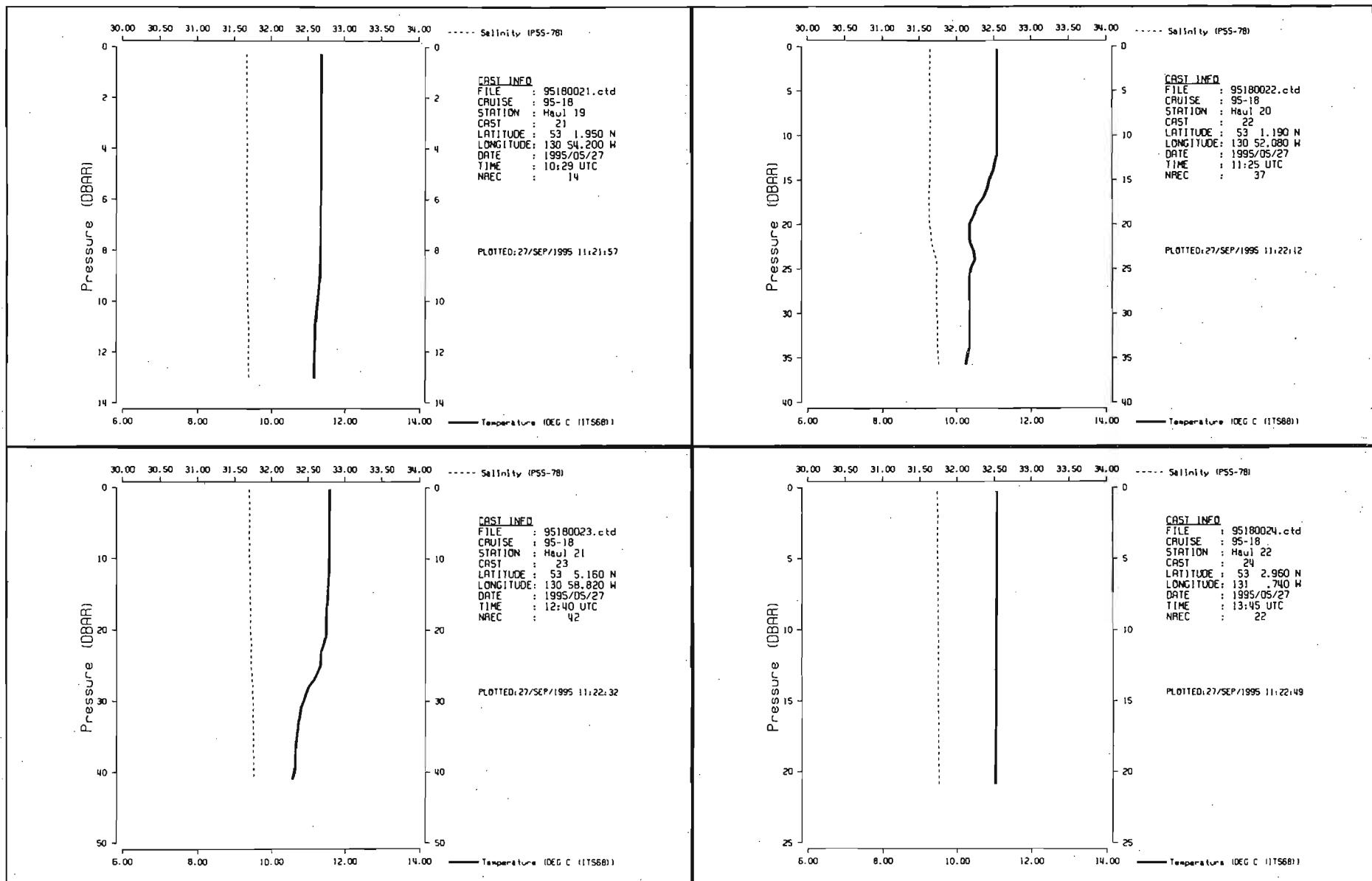
Appendix 9: Temperature and salinity profiles for CTD casts performed during the Hecate Strait assemblage survey May 23 - June 9, 1995.



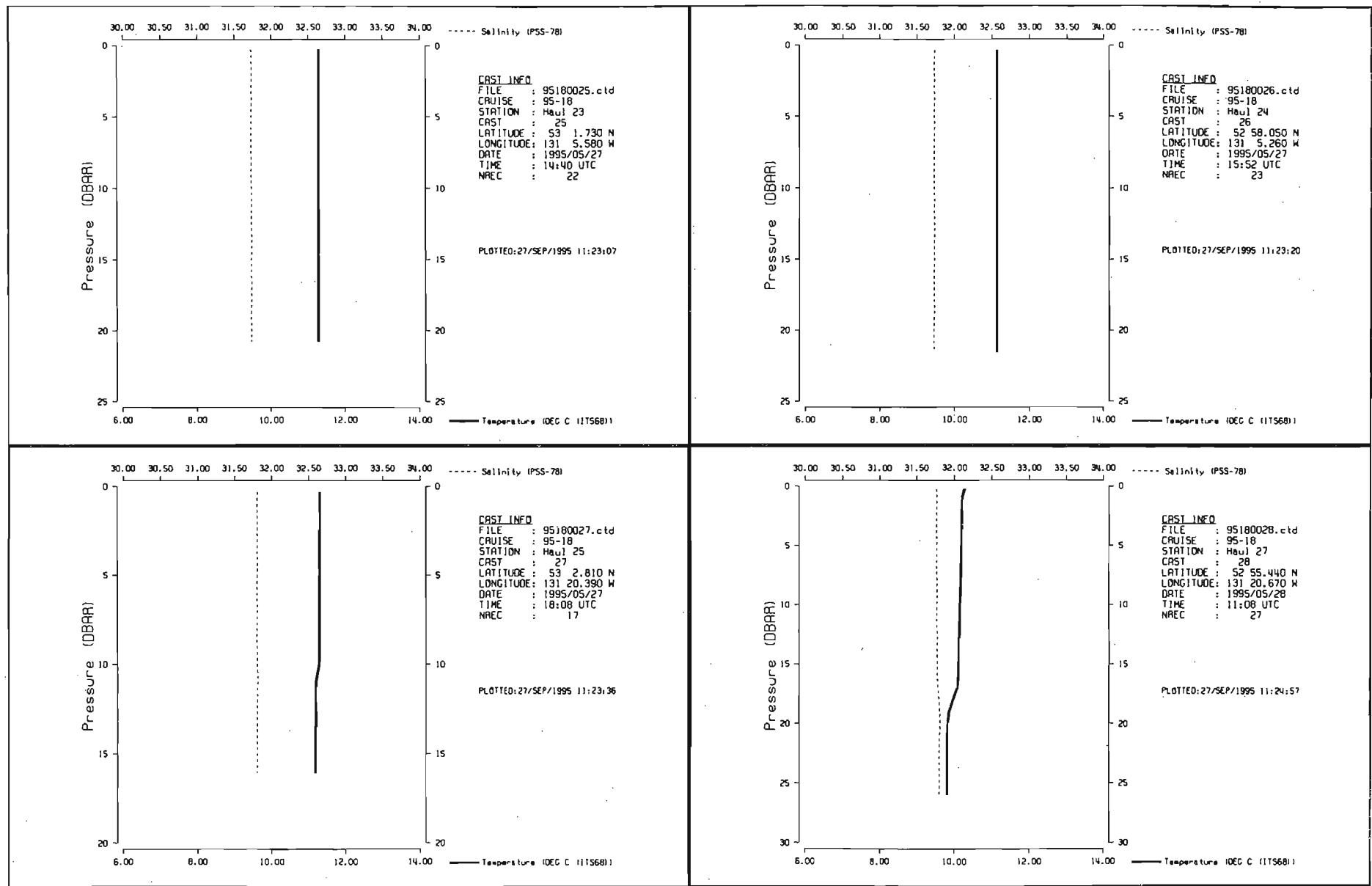
Appendix 9: Temperature and salinity profiles for CTD casts performed during the Hecate Strait assemblage survey May 23 - June 9, 1995.



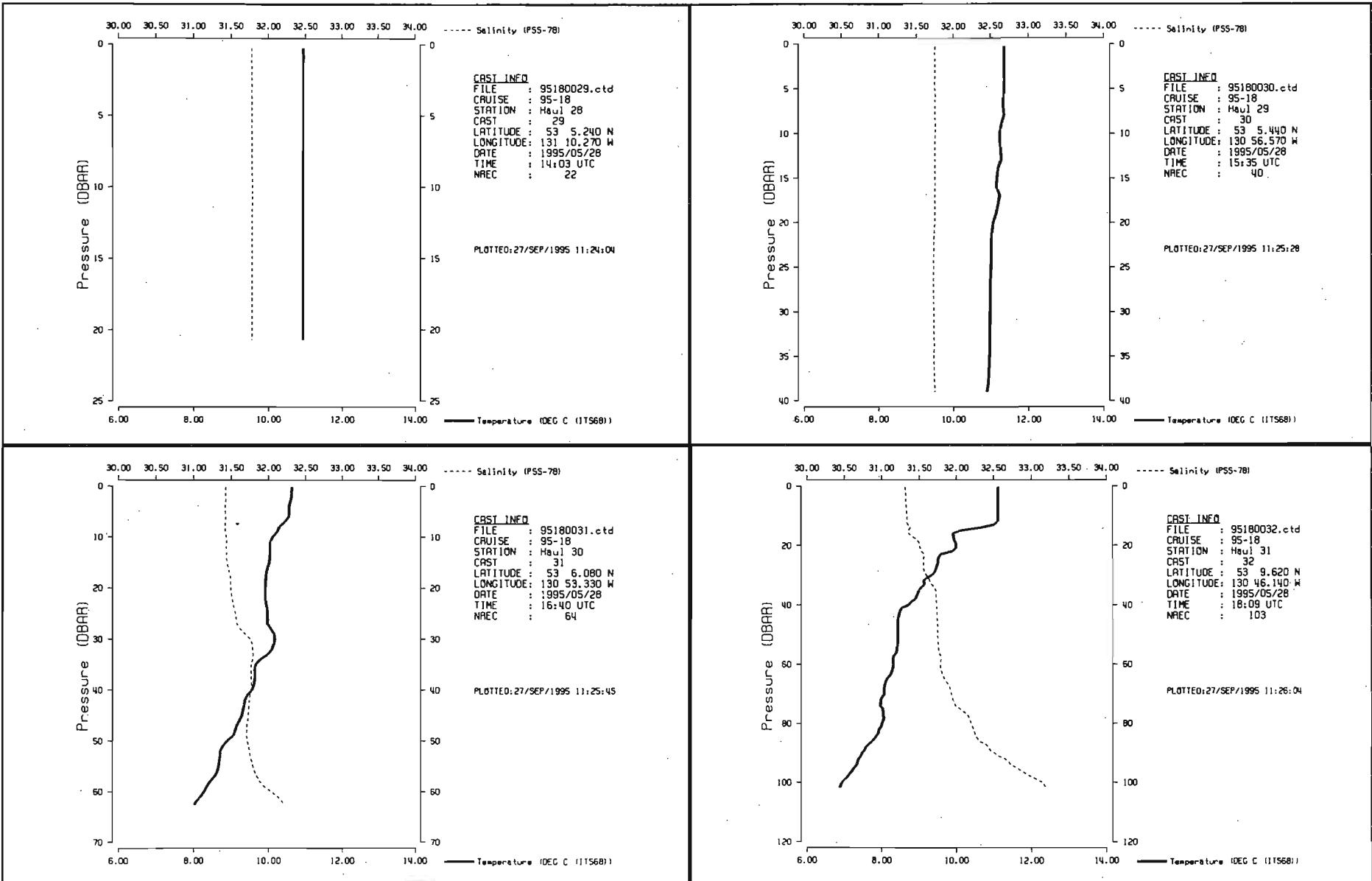
Appendix 9: Temperature and salinity profiles for CTD casts performed during the Hecate Strait assemblage survey May 23 - June 9, 1995.



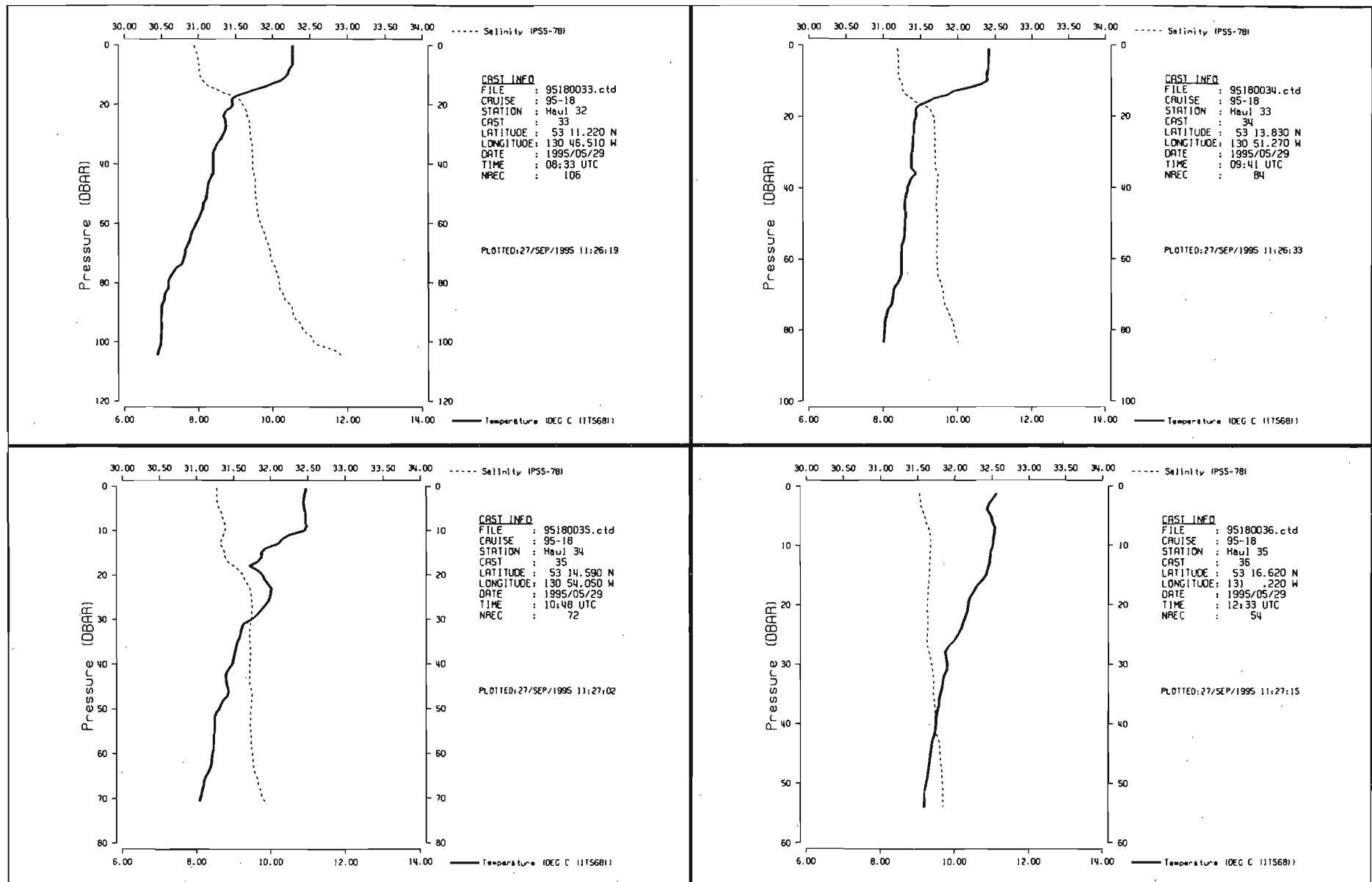
Appendix 9: Temperature and salinity profiles for CTD casts performed during the Hecate Strait assemblage survey May 23 - June 9, 1995.



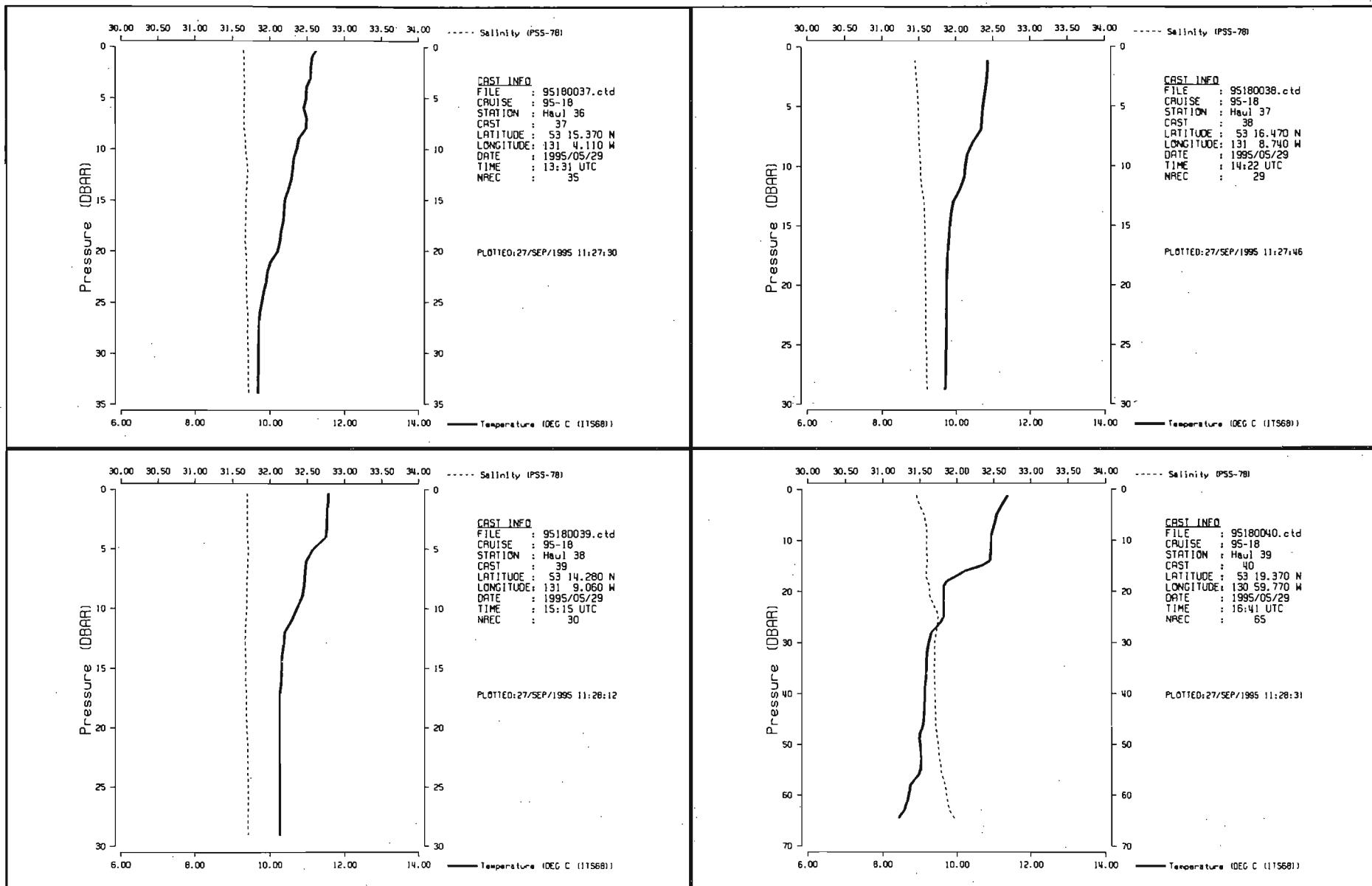
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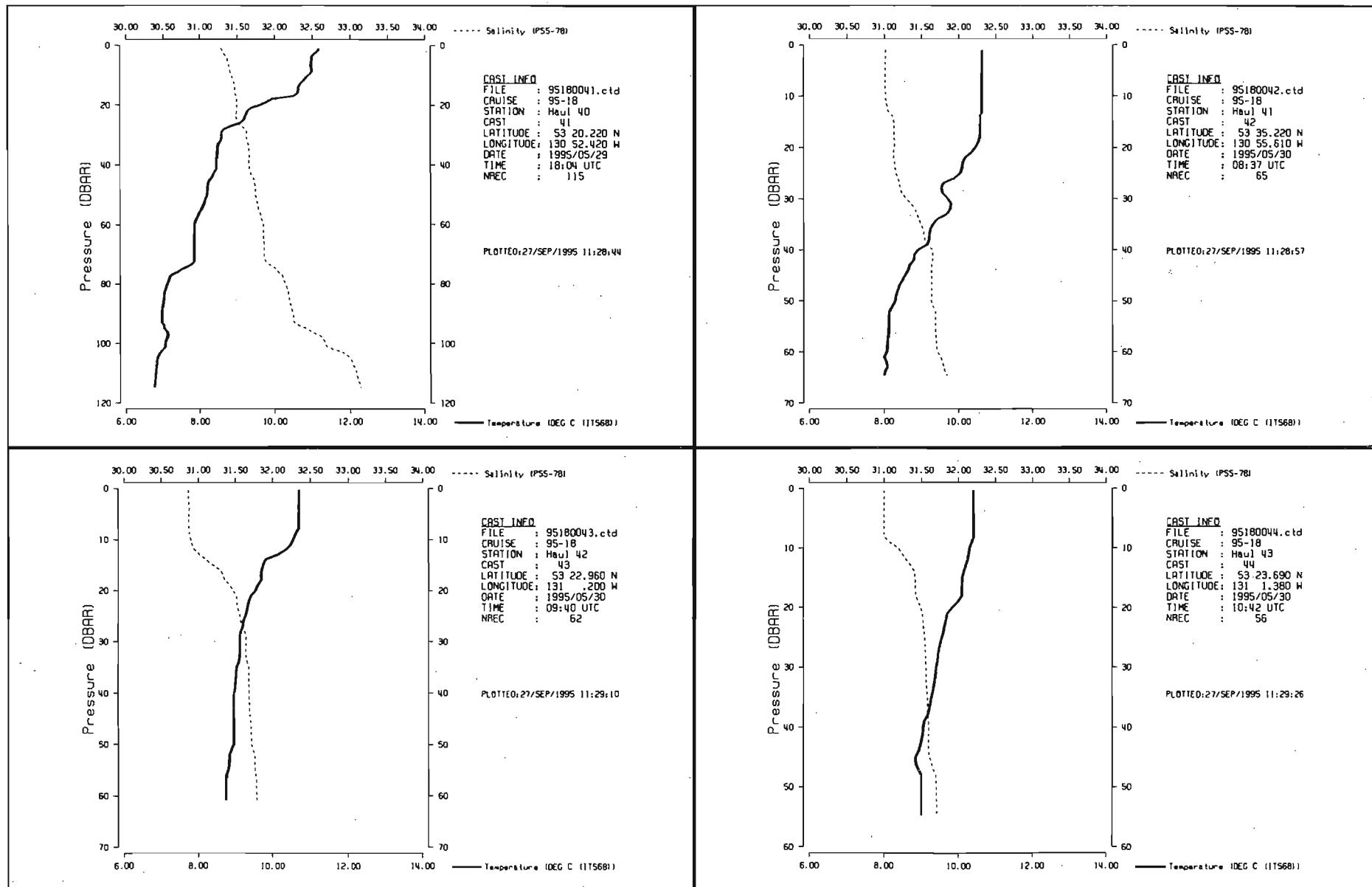
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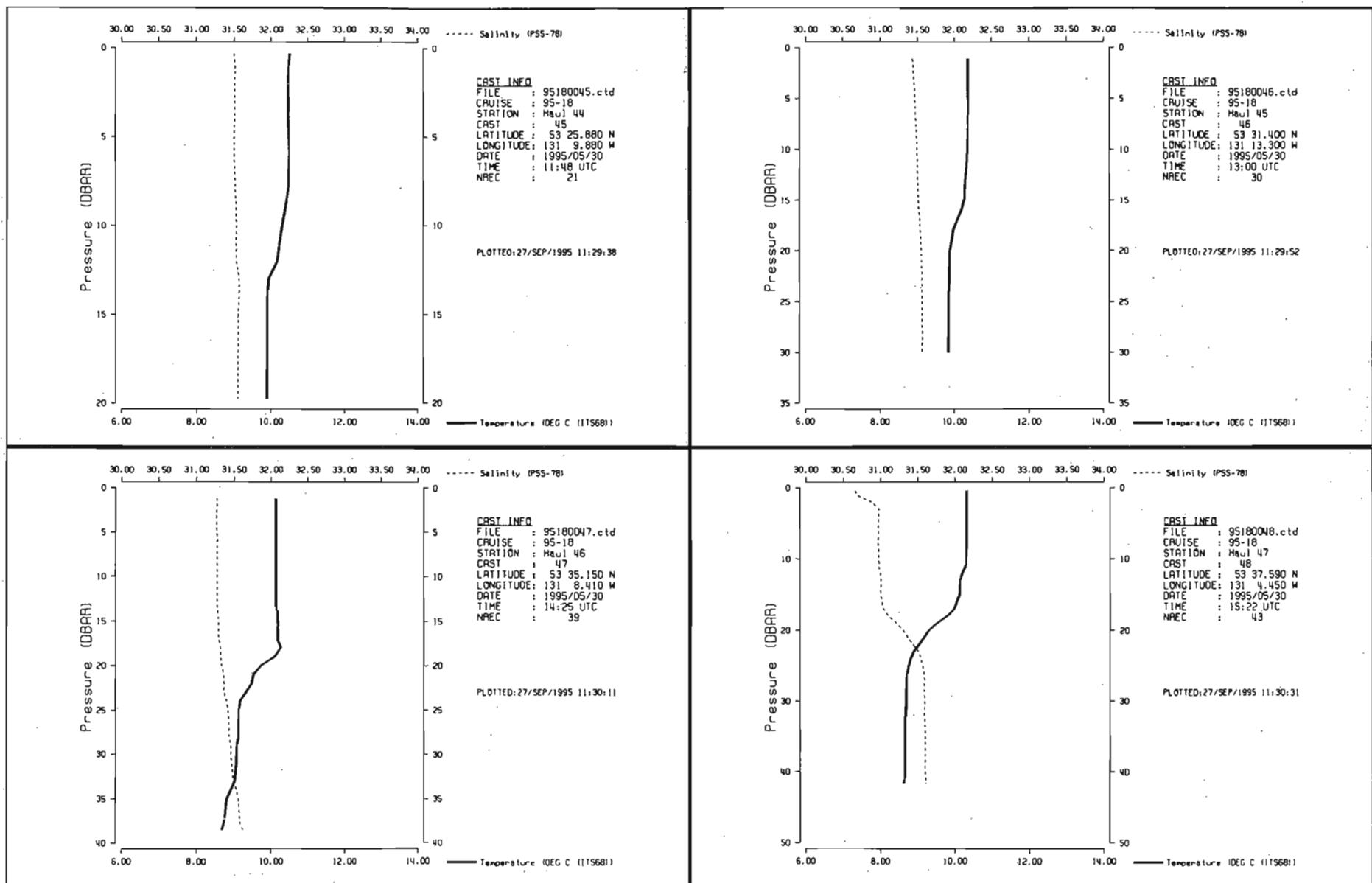
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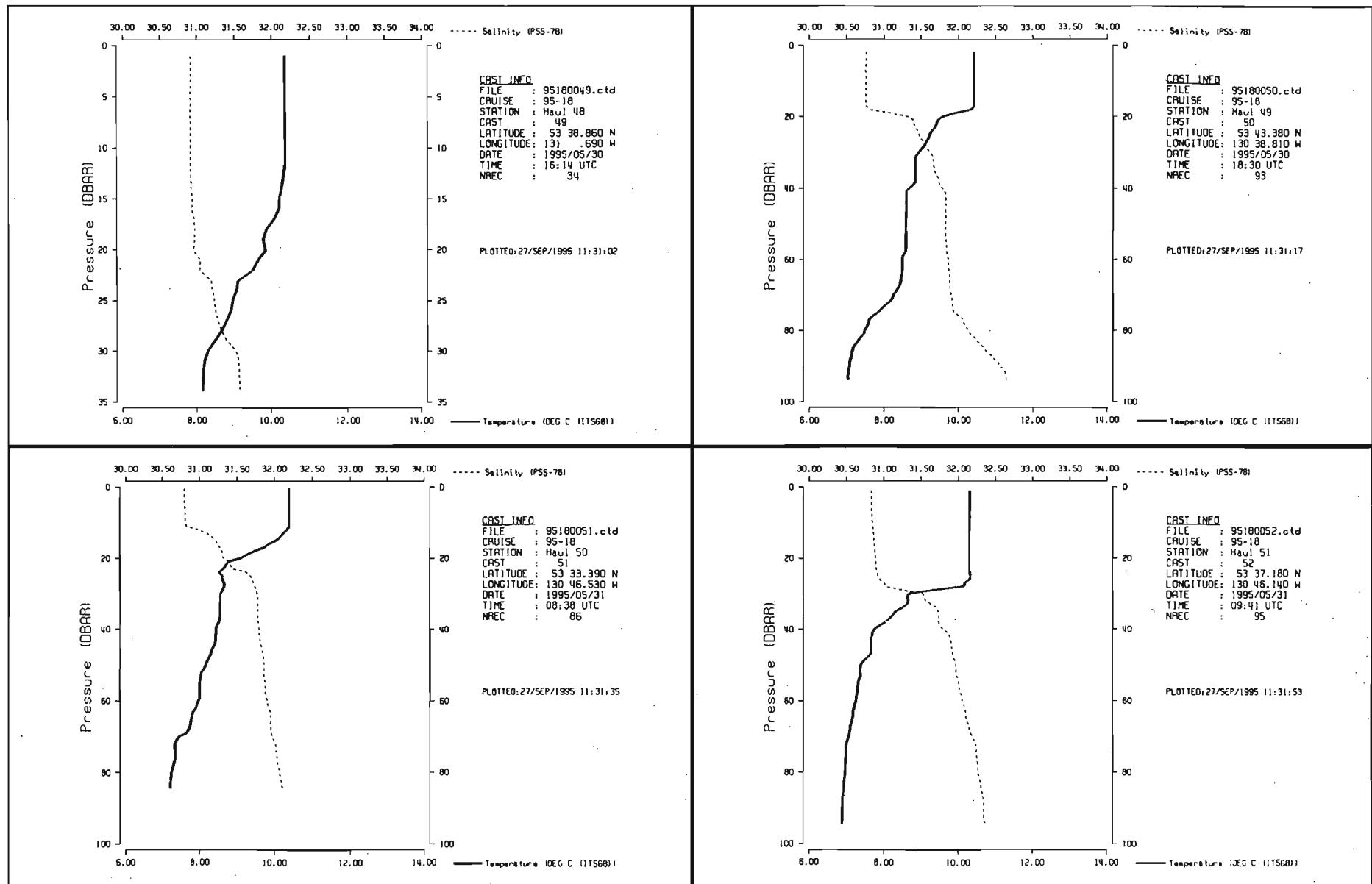
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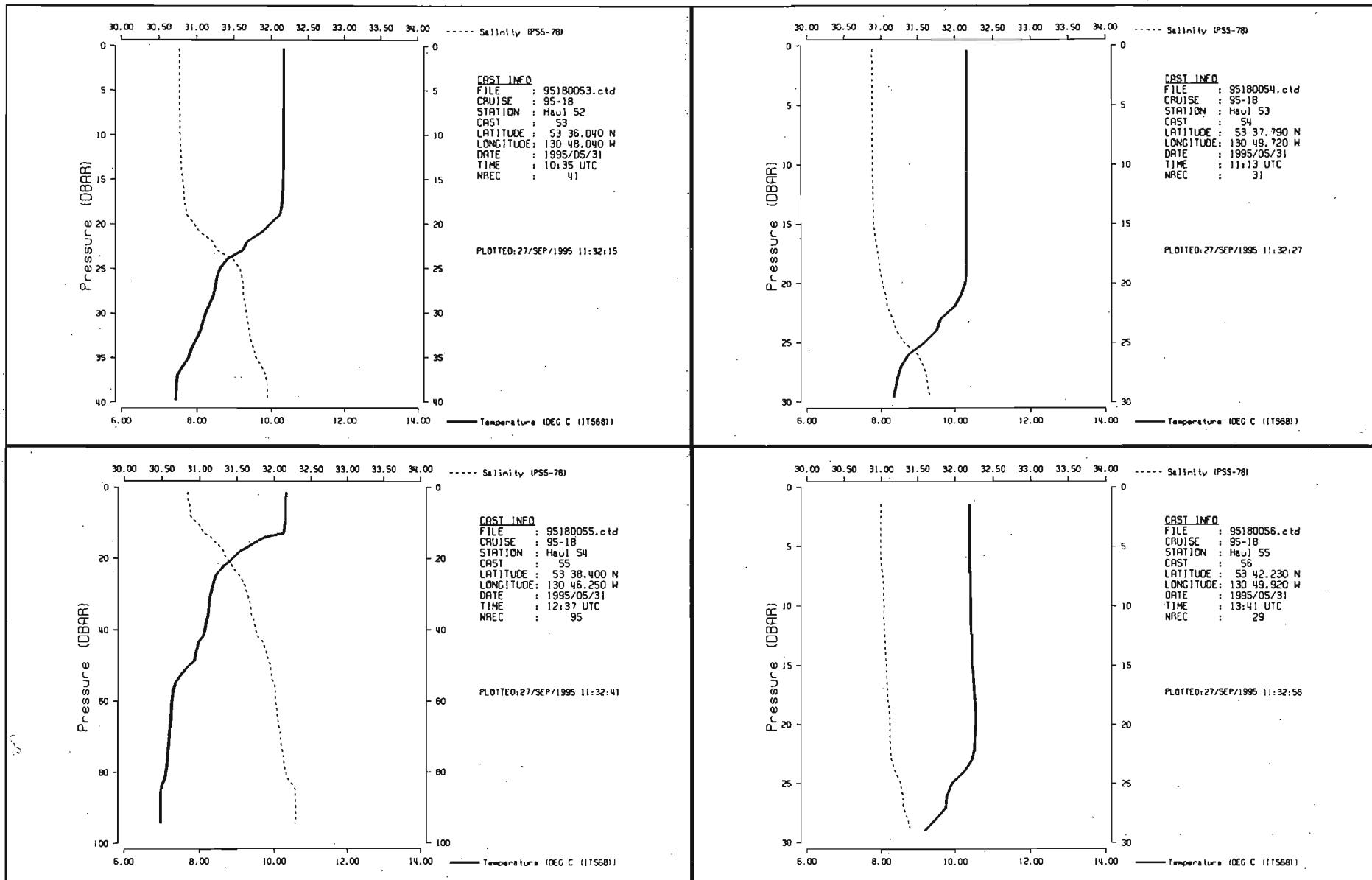
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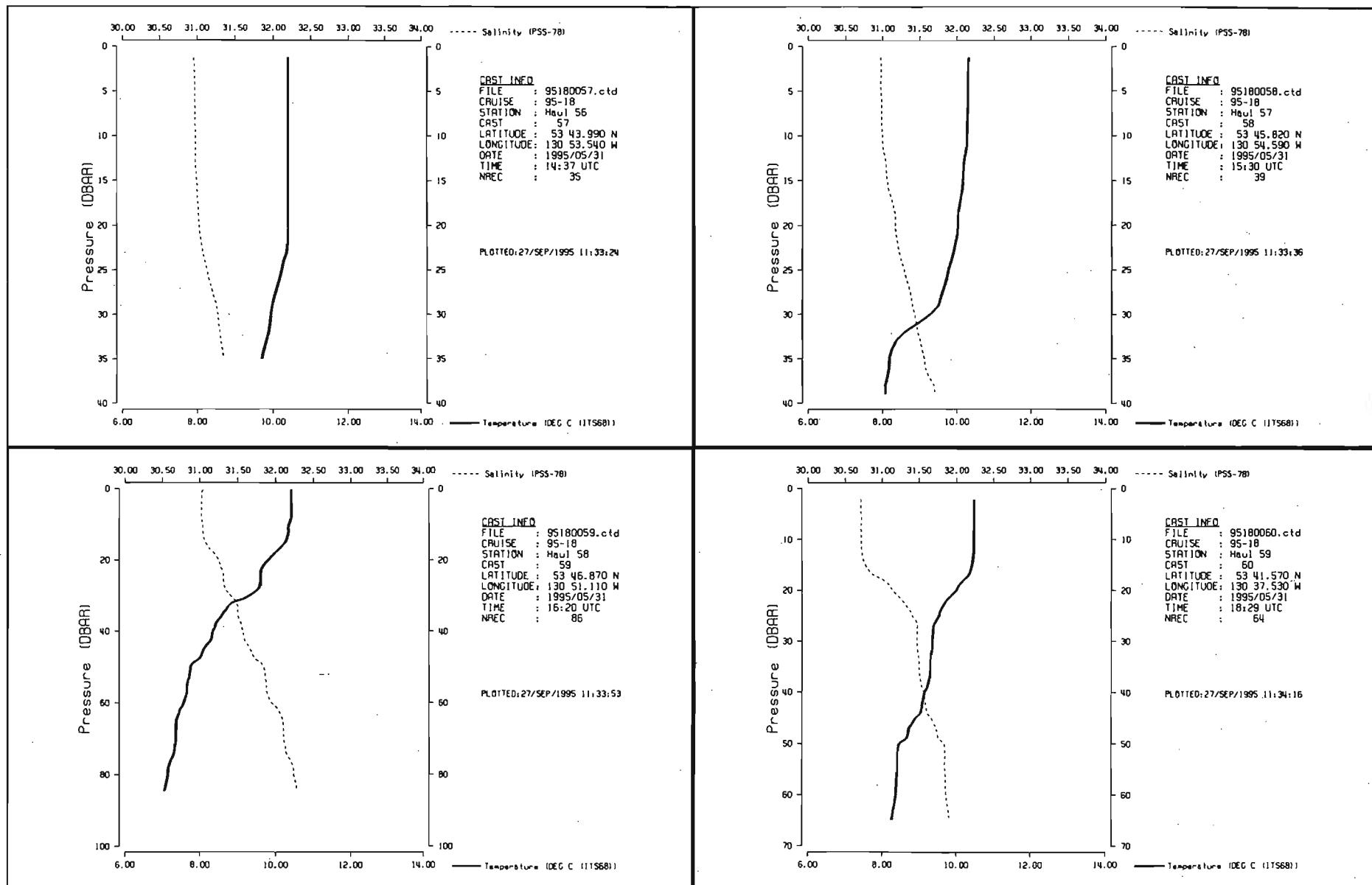
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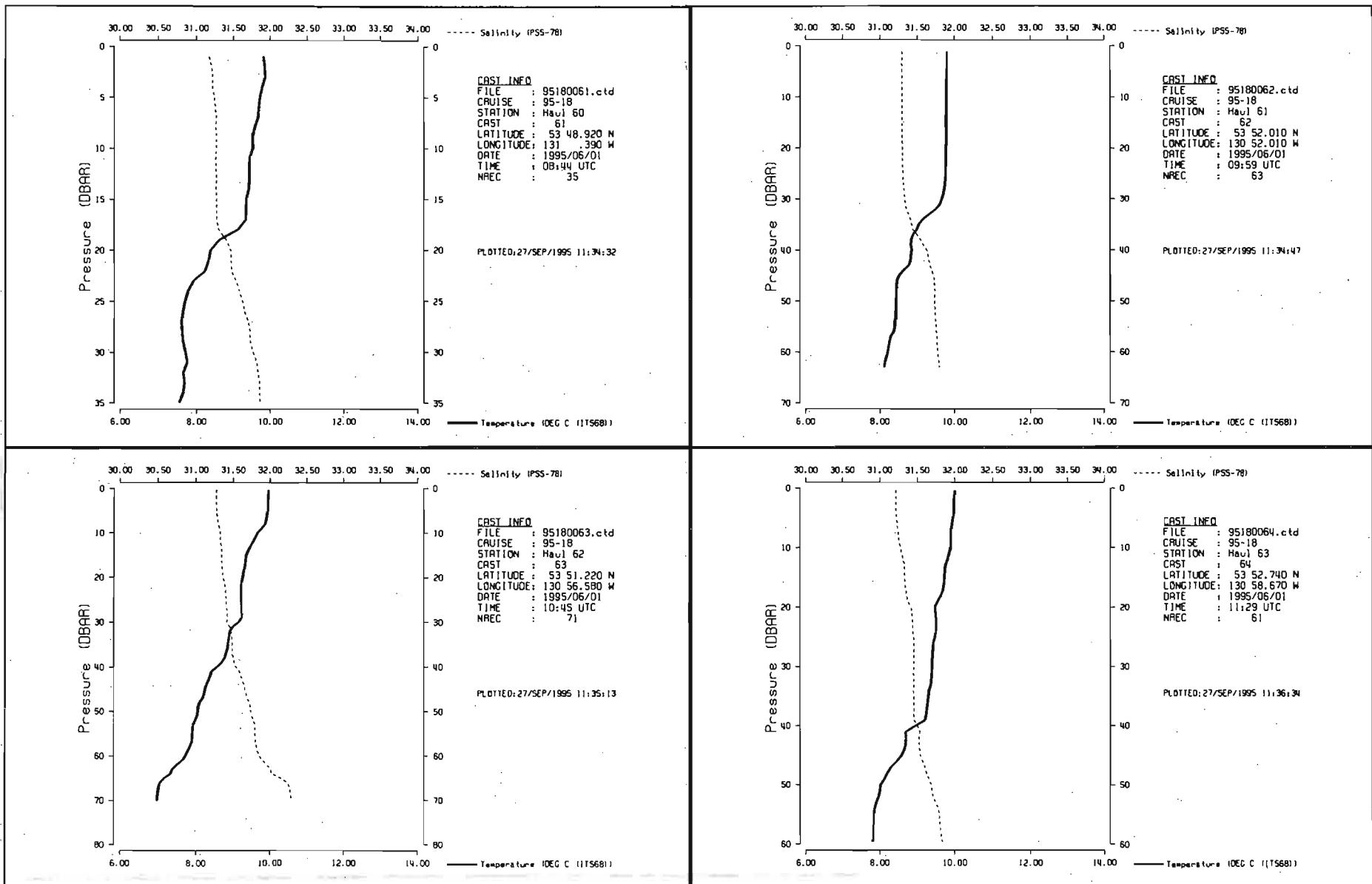
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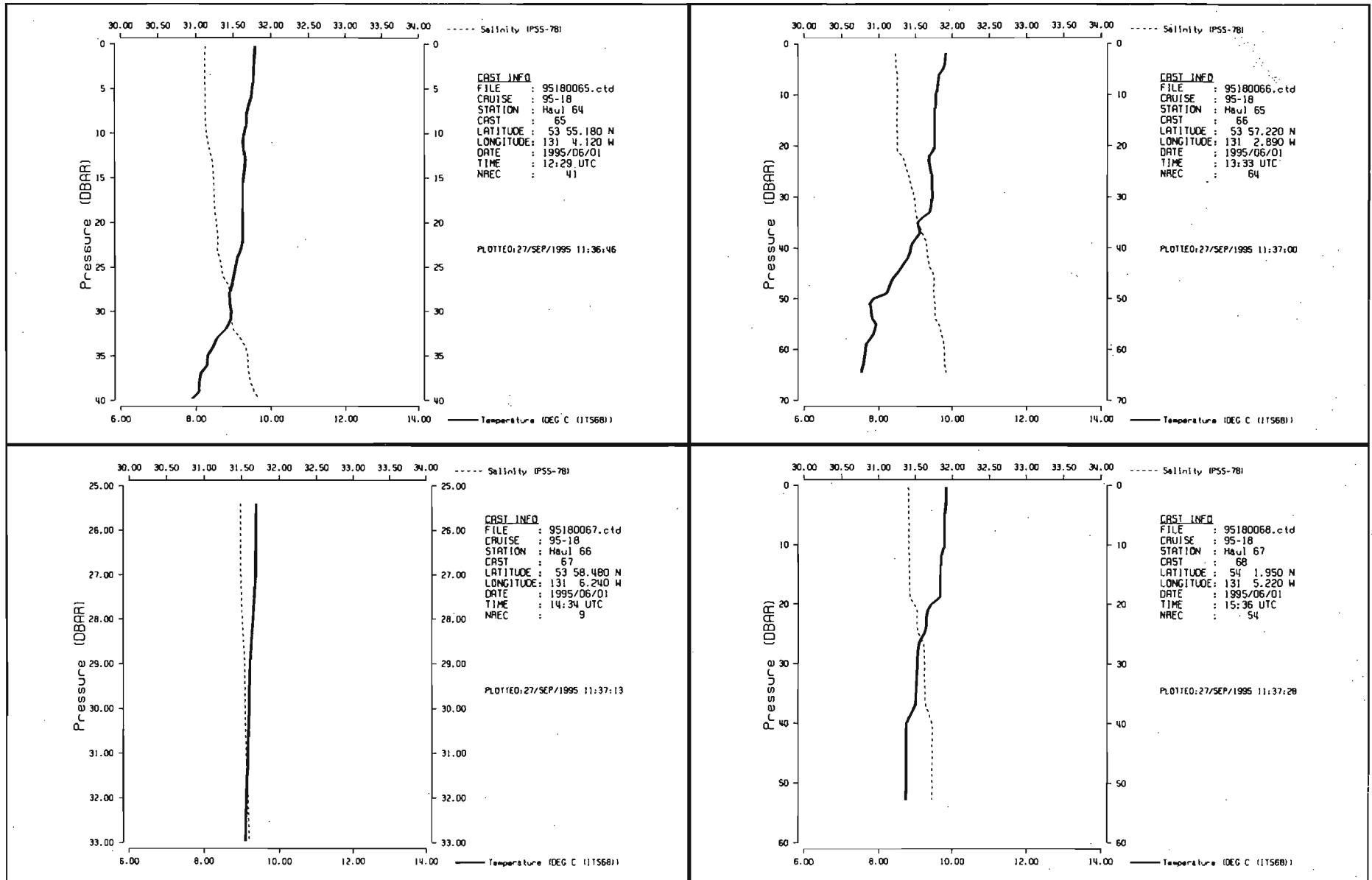
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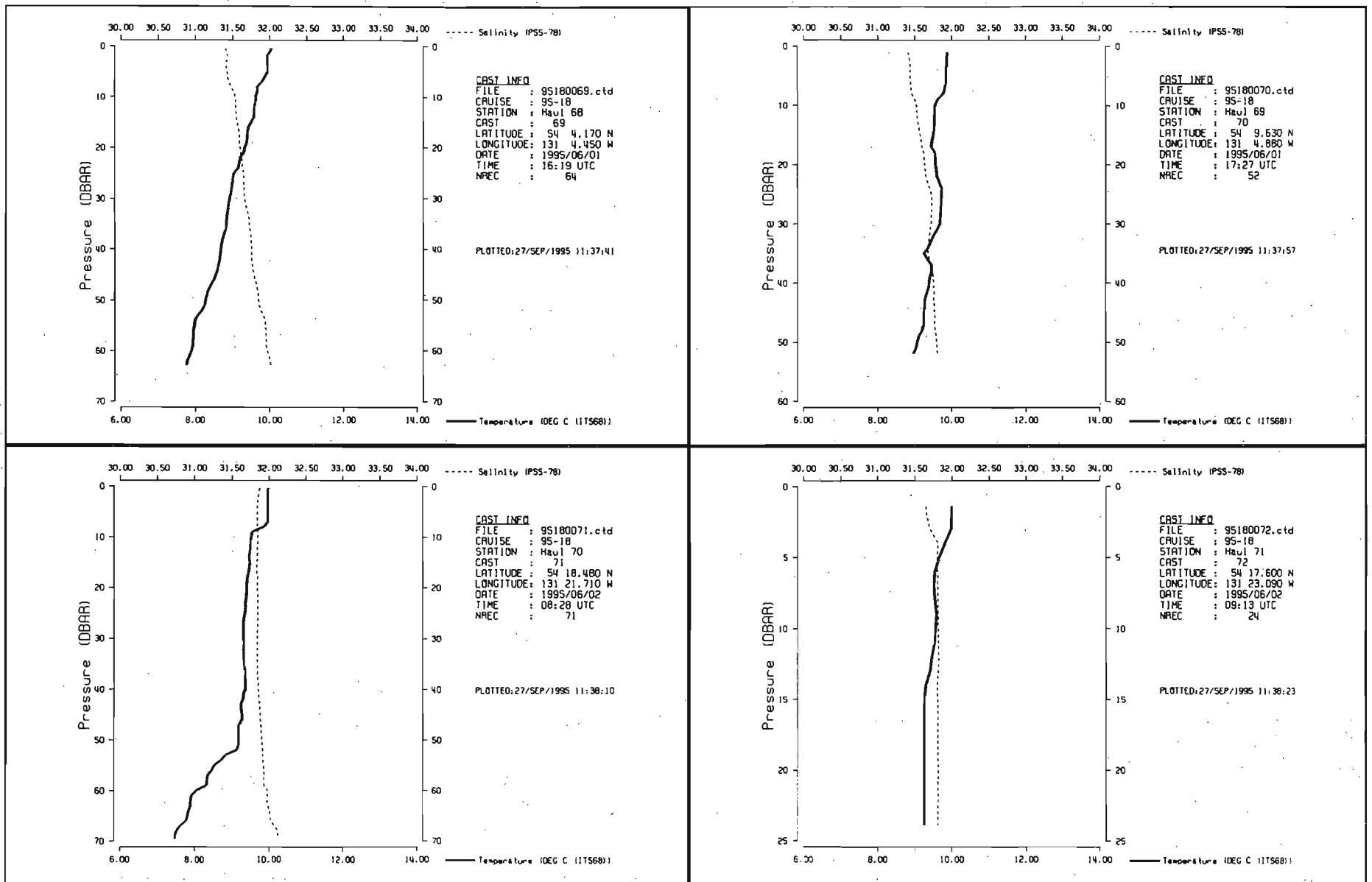
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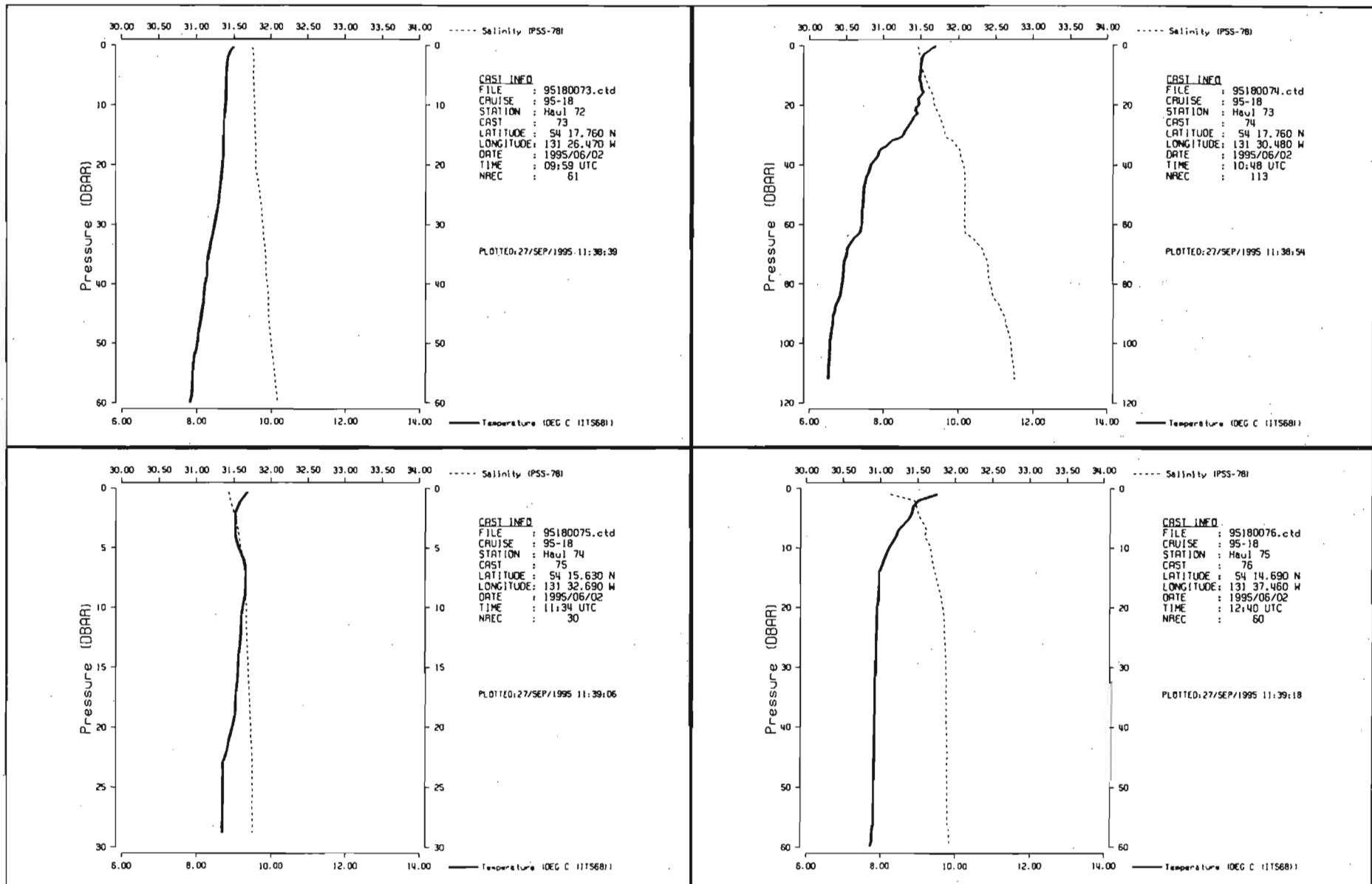
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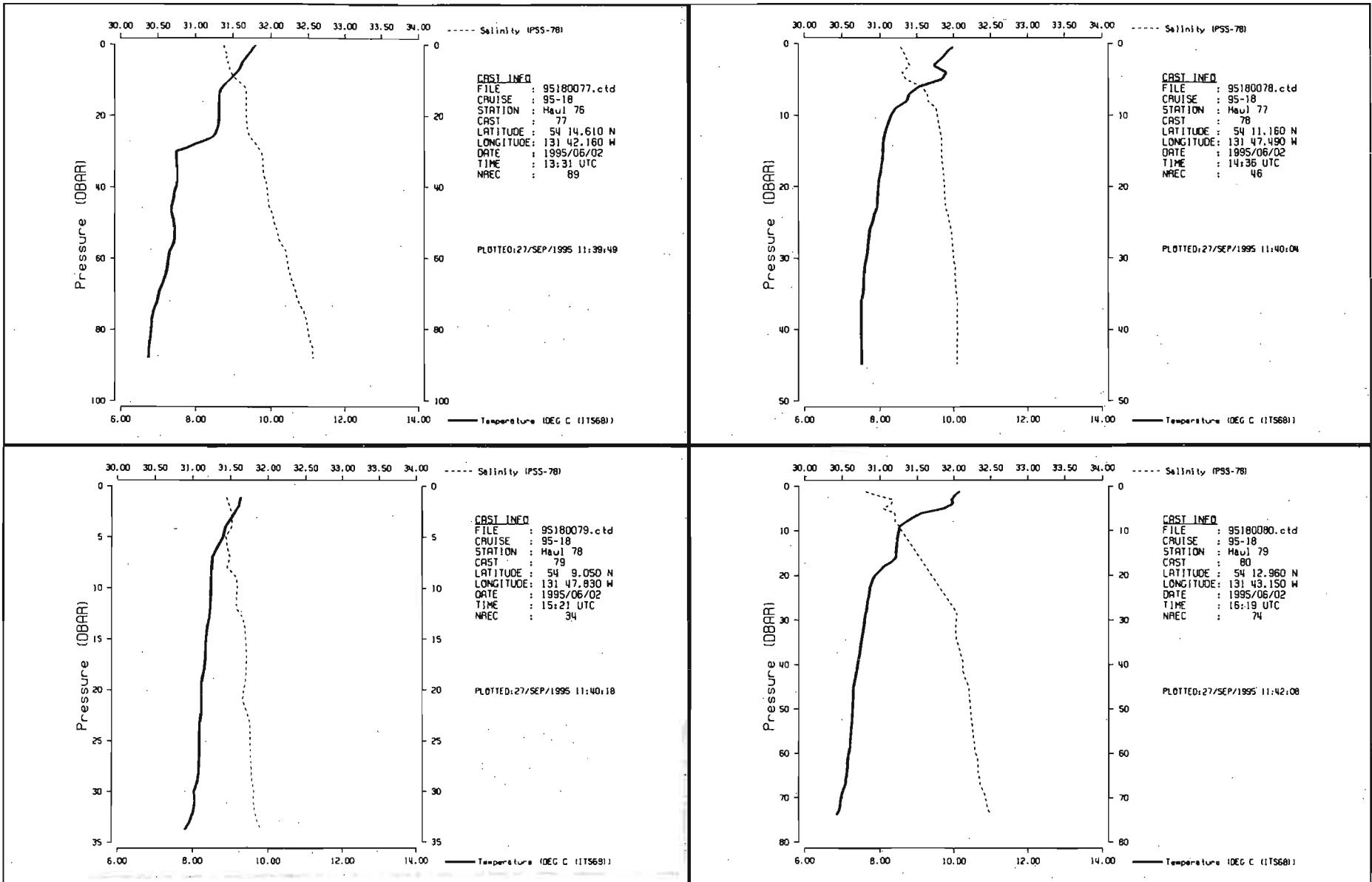
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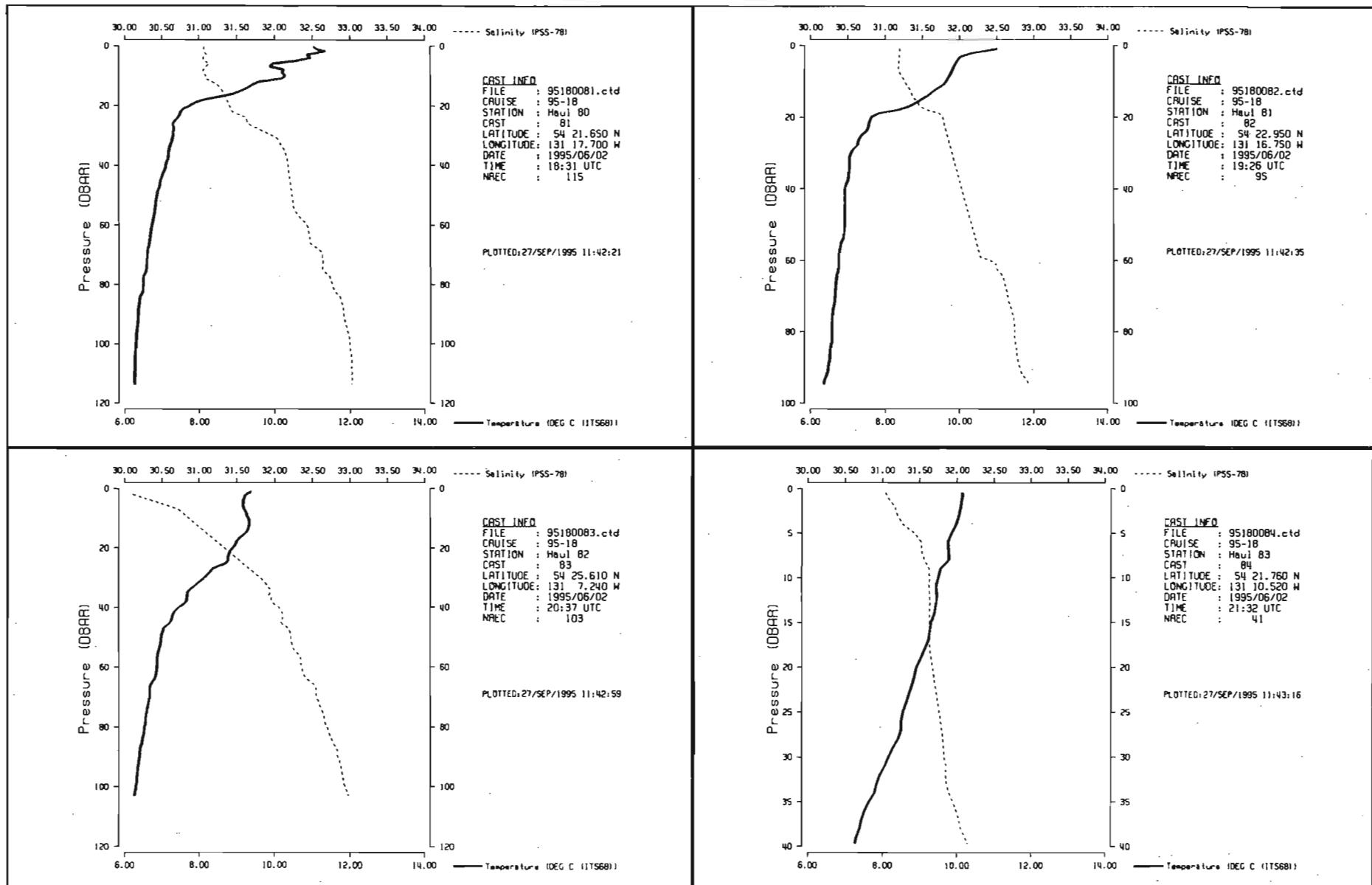
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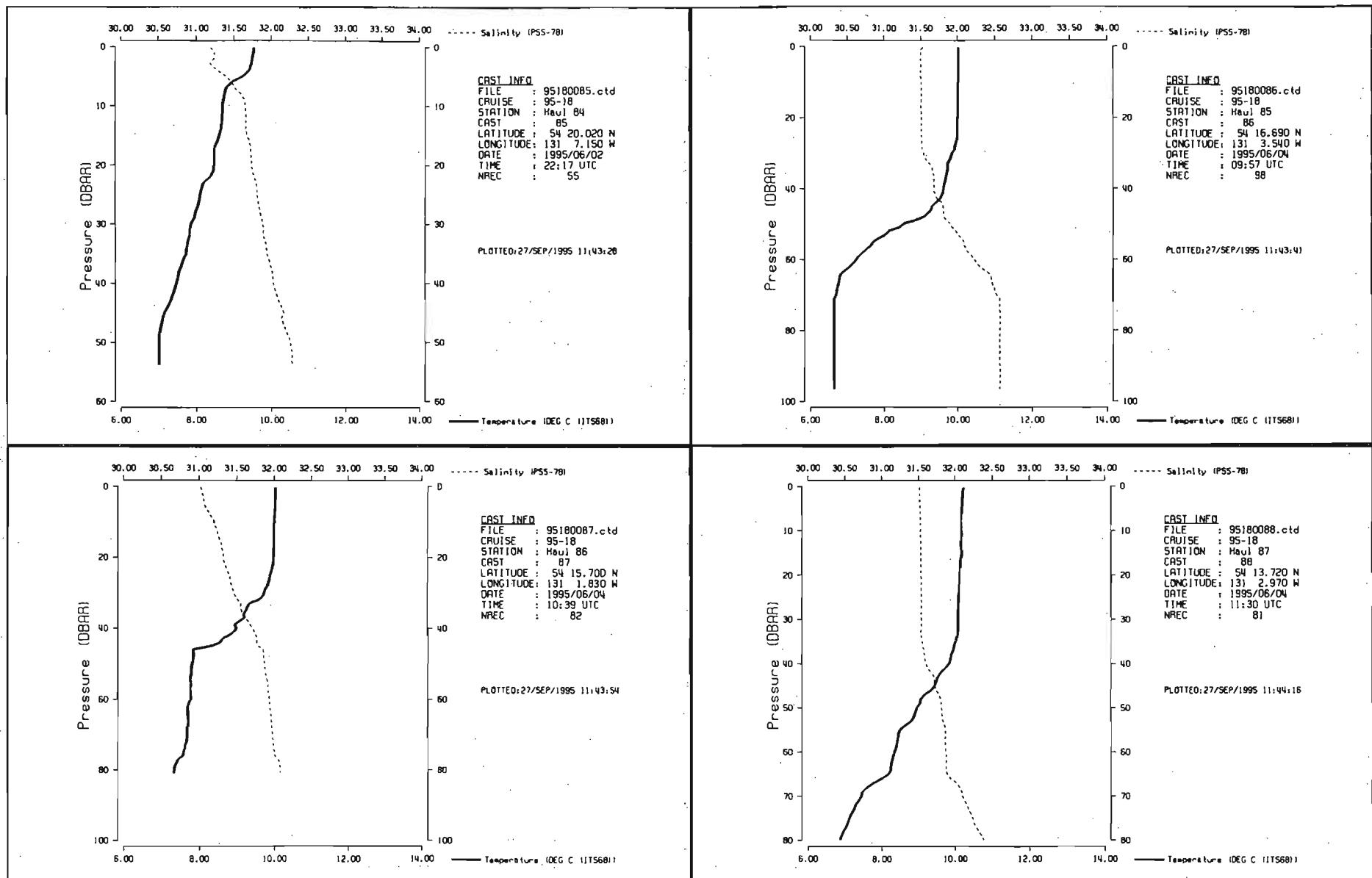
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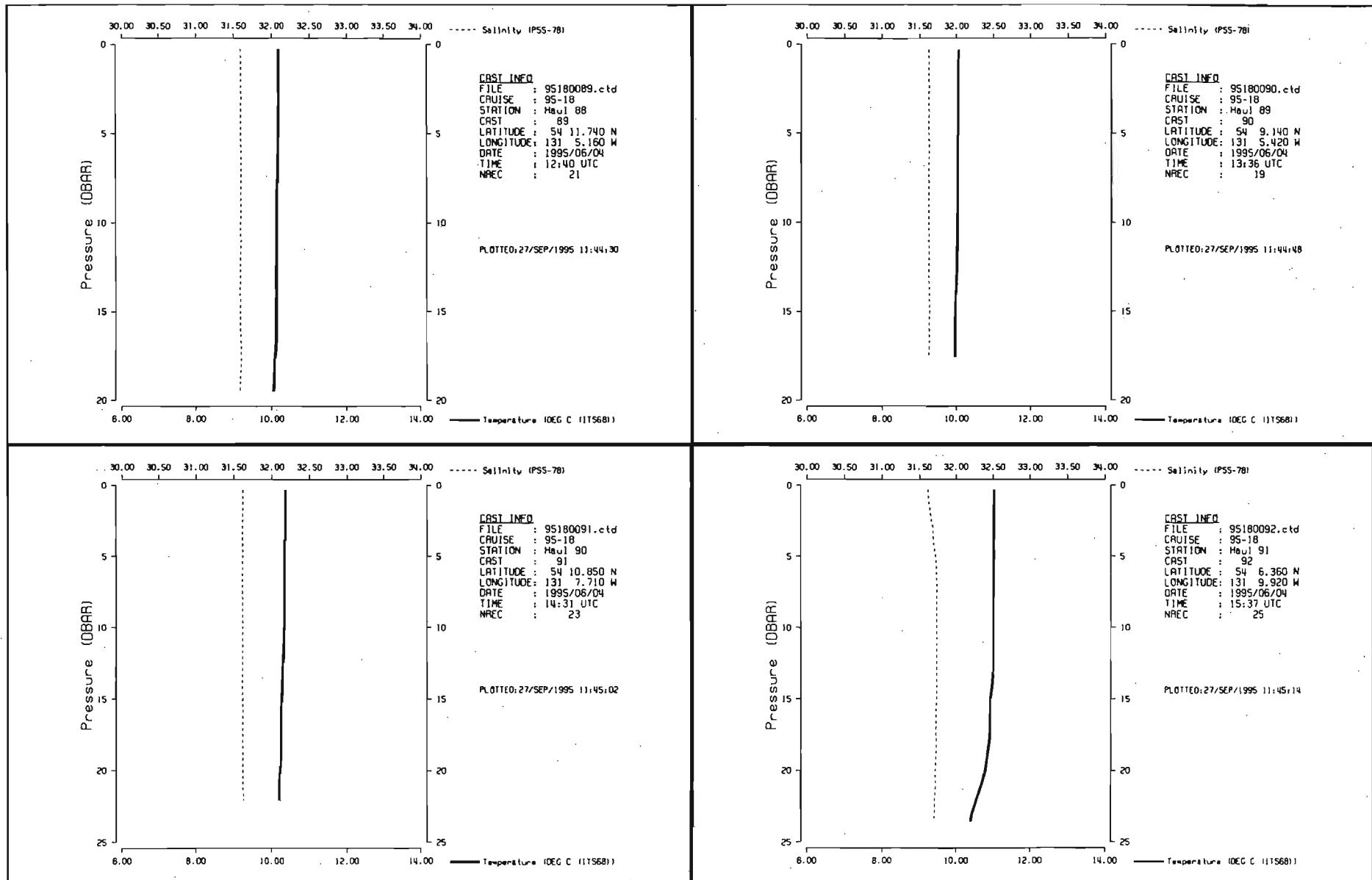
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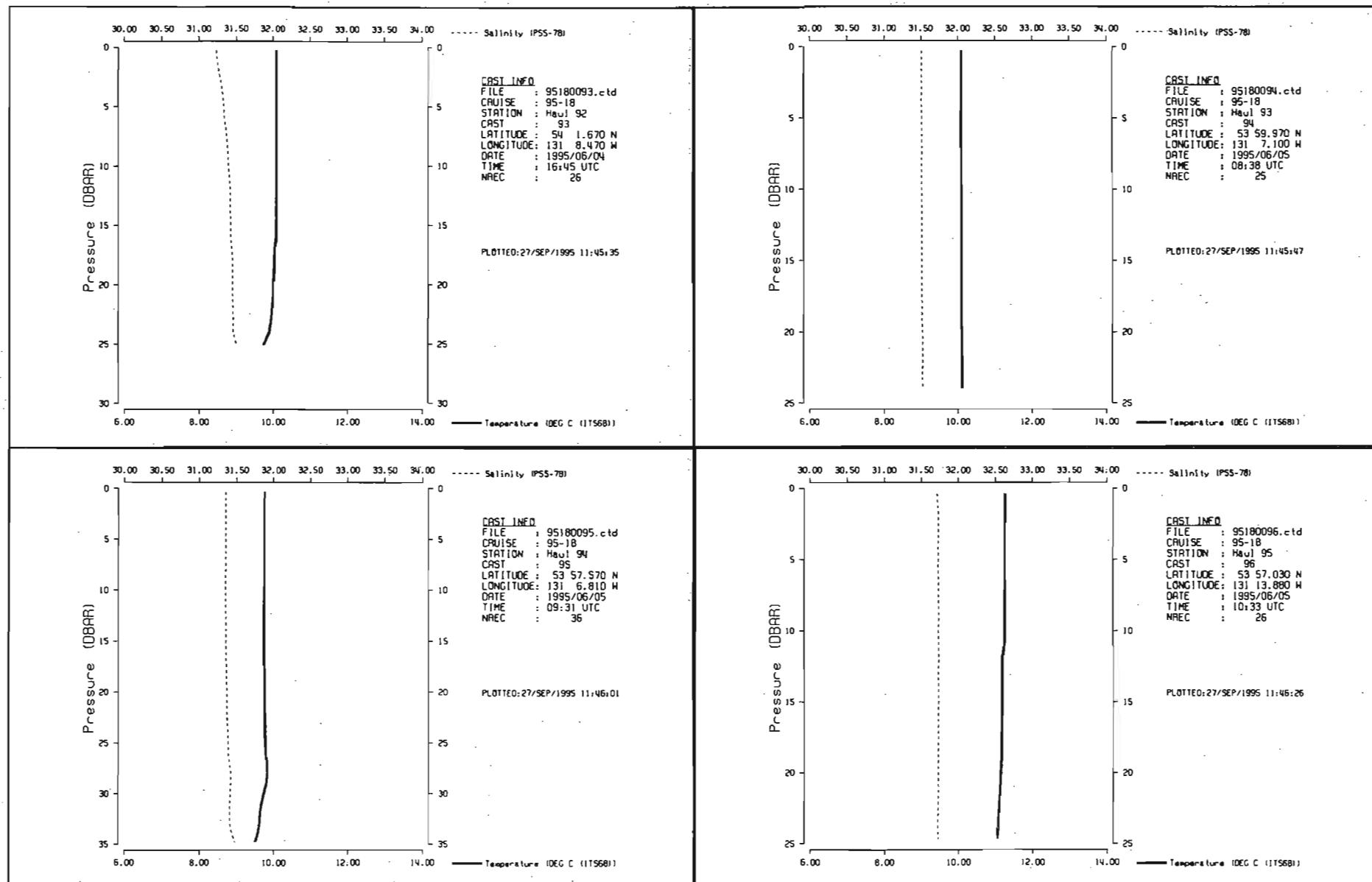
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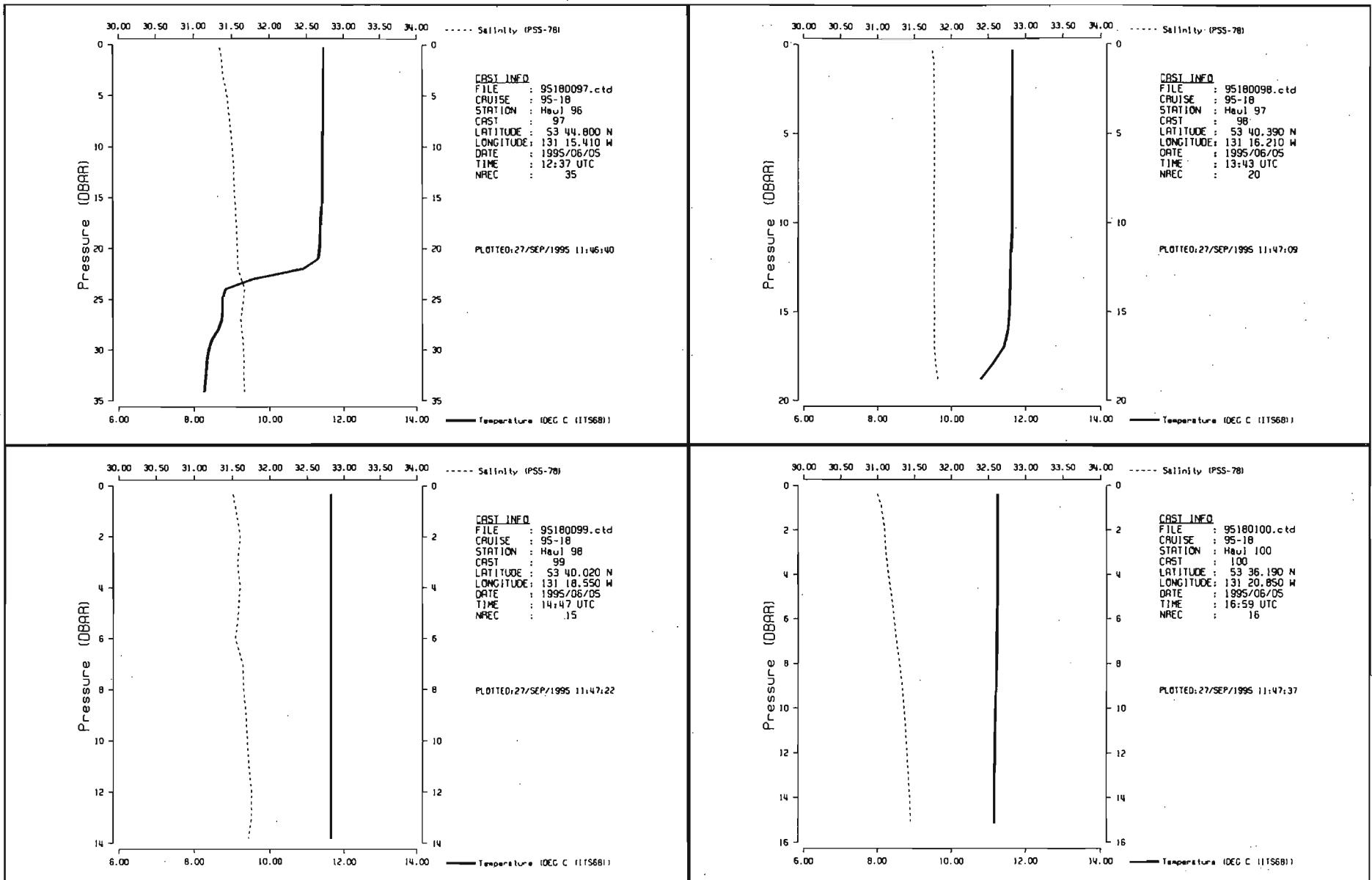
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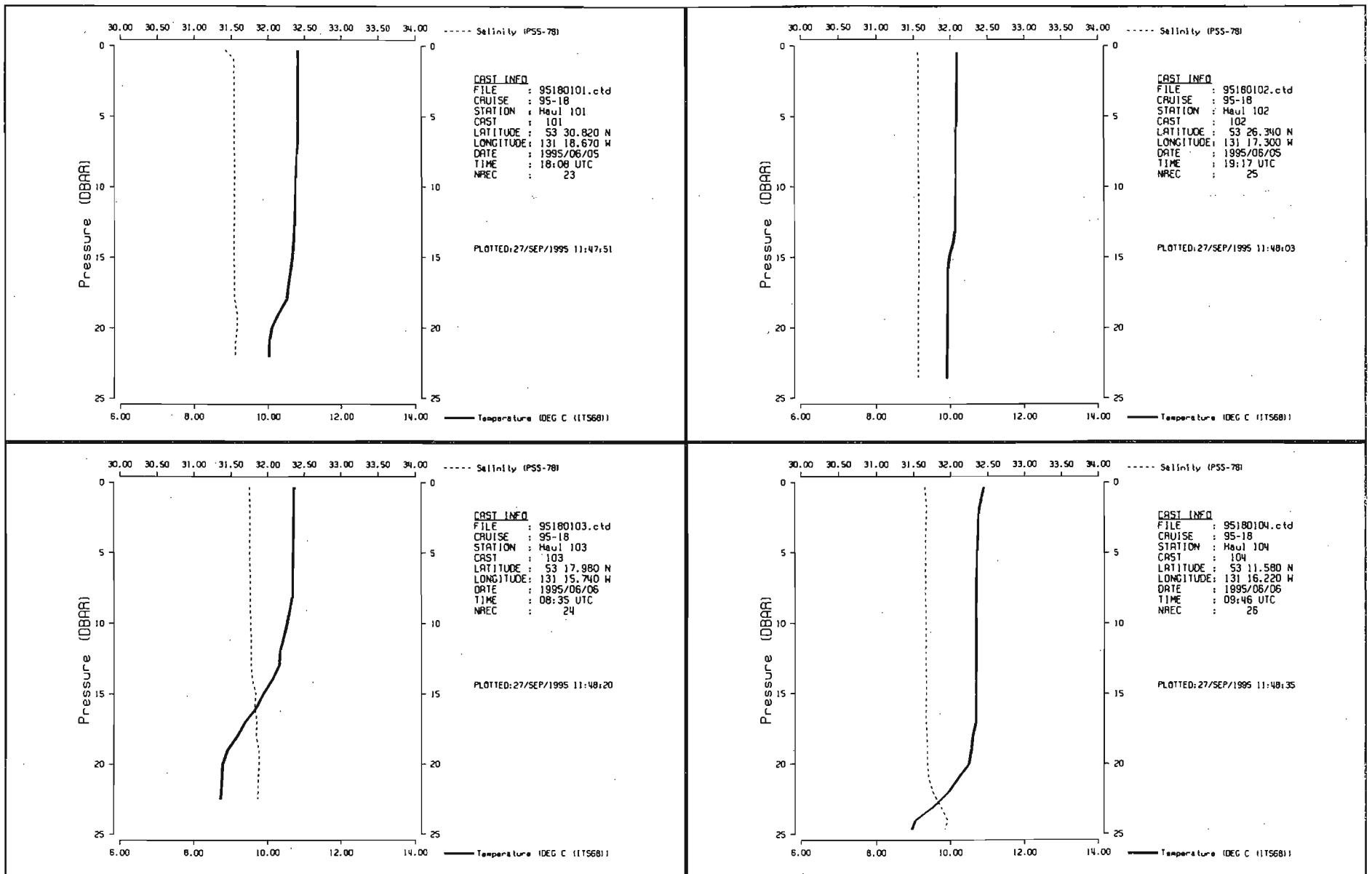
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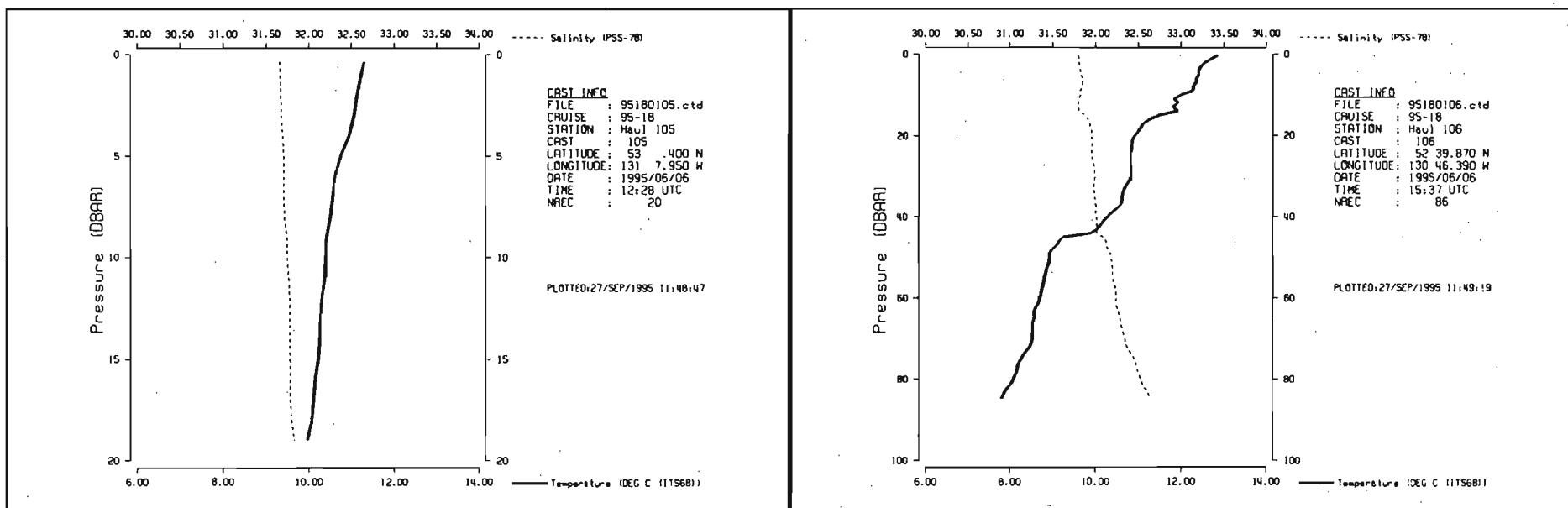
Appendix 9: Temperature and salinity profiles for CTD casts performed during the Hecate Strait assemblage survey May 23 - June 9, 1995.



Appendix 9: Temperature and salinity profiles for CTD casts performed during the Hecate Strait assemblage survey May 23 - June 9, 1995.



Appendix 9: Temperature and salinity profiles for CTD casts performed during the Hecate Strait assemblage survey May 23 - June 9, 1995.



Appendix 9: Temperature and salinity profiles for CTD casts performed during the Hecate Strait assemblage survey May 23 - June 9, 1995.