

MOCNESS Tow Sheet (NBP02-02)

St. Station No.: $\emptyset$ Test	Tow No.: 1
Date: 4/13/02	
Filename (raw): MOC-01.raw	Filename (processed): MOC-01.pro

Net Information

Net Size: 1 m ²	Net Condition: Net $\emptyset$ spotty
Net Mesh: 333	1 wiebe net

Start

End

Location (Lat/Lon): 64 6.288/69 18.3		Location (Lat/Lon): 64 5.0211, 69 20.077	
Time (Local) 1554	Time (GMT) 1954	Time (Local) 1648	Time (GMT) 2048
MOCNESS Battery Voltage: 19.8		MOCNESS Battery Voltage: OK	

Environmental Parameters

Wind (Speed/Direction): 81 50	Sea State: calm
Water Depth (m): 3362	Light and Clouds: low, cloudy
Air Temperature: 0.10C	SST: -0.113

Net Tow Information

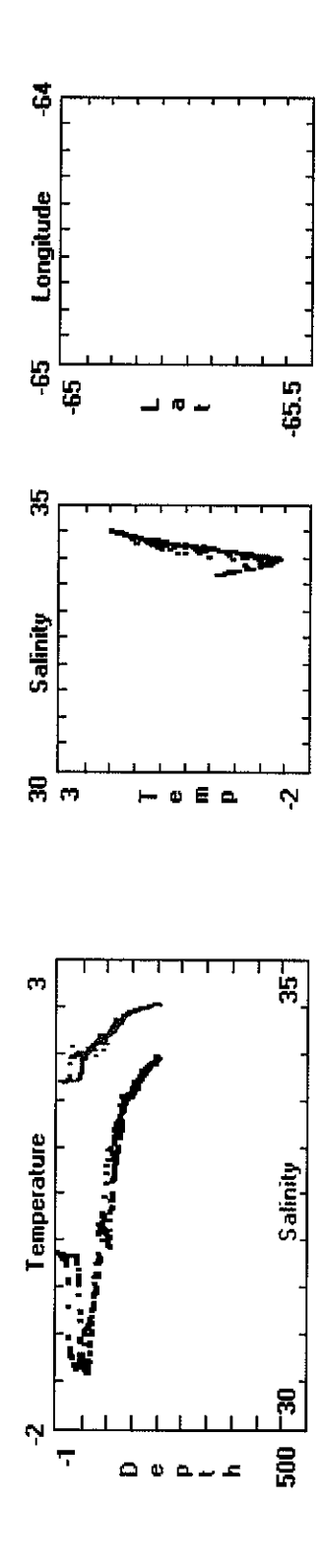
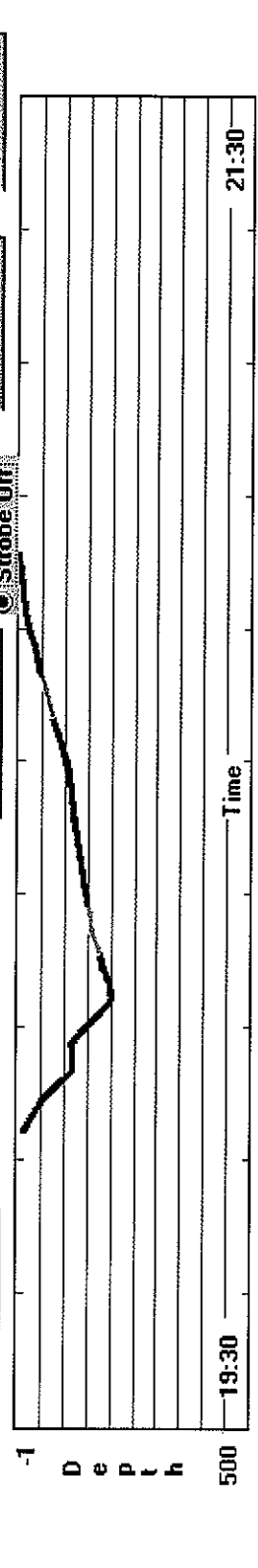
Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-200	0	1954	200	20:09		NO NR
1	200-175	200	2009	174	20:12	177.3	NO NR
2	175-150	174	2017	149	2017	200	NO NR
3	150-125	149	2017	125	2023	314	NO NR
4	125-100	125	2023	98	2030	360	NO NR
5	100-75	98	2030	74	2033	185	NO NR
6	75-50	74	2033	48	2037	195	NO NR
7	50-25	48	2037	25	2041	189	NO NR
8	25-0	25	2041	0	2048		NO NR

Net # 1 No NR, also accidentally hit increment net # so didn't re-do it. Net # 1 has bad volume

Skate on @ recovery

pressure sensor is reading "0" @ surface

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	20:48:47	Net_Num	9	Latitude	64S 5.059°	Reset	
Pressure	0.7 m	OpenTime	0.5 min	Longitude	69W 20.02	Baud Rate	2400
Temp	-0.13 C	Vol_Filtered	28.5 m3	Net_Dist	20.3 m	Sample Rate	4.0 sec
Salinity	27.02 o/oo	Angle	42 deg	Total_Dist	2720.9 m	Printer	Off
Density	21.669	Flow_Counts	5	Processed File Name	C:\MOCNESS\NBPD0202\MOC01_PRO		
Oxygen		Hor_Vel	1.4 kts	Raw File Name	C:\MOCNESS\NBPD0202\MOC01.raw		
Fluoresc.	0.2798 V	Vert_Vel	-0.6 m/min				
LightXmis	-0.0055 /m	Battery	19.6 V				
				##MN-08 00 42 0573 02323 0296 856213 335622 19611-1			
				\$GPGLL,6405.0590,S,06920.0279,W,204835.00,			



MOCNESS TOW #: ~~8~~ /

NBP02 02 - MC 1

Date:

Region:

People Processing Sample:

NET DEPTH

Taxonomic Composition

0	Salps (many) amphipods
1	Salps amphipods
2	Salps copepods
3	salps copepods
4	salps, chaetognaths, copepods
5	krill furcilia, chaetognaths
6	* furcilia, copepods
7	furcilia, copepods
8	copepods

MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 4	Tow No.: 02
Date: 4/14/02	
Filename (raw): MOC02.raw	Filename (processed): MOC02.PRO

Net Information

Net Size: 333 1m	Net Condition: good
Net Mesh: 333	

Start

End

Location (Lat/Lon): 66 11.104 69 8.120	Location (Lat/Lon): 66° 08' 1 / 69° 06' 6
Time (Local)	Time (GMT) 0620
	Time (Local) 0358
	Time (GMT) 0758
MOCNESS Battery Voltage: 19.6	MOCNESS Battery Voltage: 19.5

Environmental Parameters

Wind (Speed/Direction): 20°	Sea State: 12'
Water Depth (m): 14	Light and Clouds: clear
Air Temperature: -0.4°C	SST: -0.535

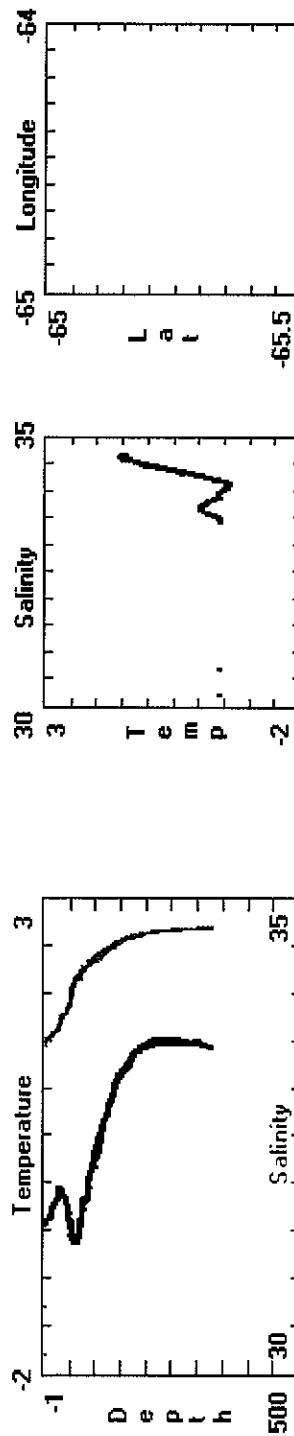
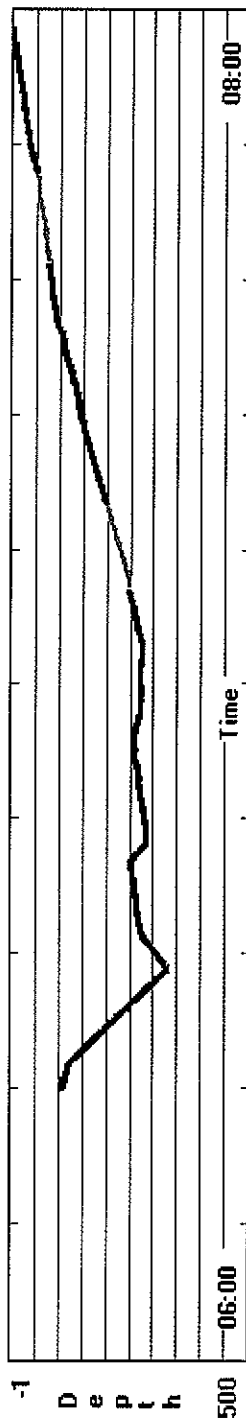
Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-325	0		325	0635	503	NO NR
1	325-250	325	0635	248	0708	1512	NO NR, & NR
2	250-200	248	0708	200	0716	340	NO N.R.
3	200-150	200	0716	150	0723	350	NO N.R. BUT ANGLE
4	150-100	150	0723	100	0731	409	NO N.R.
5	100-75	100	0731	76	0737	290	NO N.R. BUT ANGLE
6	75-50	76	0737	50	0745	338	
7	50-25	50	0745	25	0750	223	NO NR, NO MOCNESS
8	25-0	25	0750	0	0757	216	60% NR!

Had to pay out wire during up cast of net 1 to fix level wind
long delay to fix level wind along net 1, resumed coming up @ 705

Environmental Parameters Net Operation Net - Ship Position Program Settings

Time	07:58:21	Net_Num	9	Latitude	66S 8.4452'	Reset
Pressure	0.5 m	OpenTime	1.0 min	Longitude	69W 6.631	Baud Rate
Temp	-0.42 C	Vol_Filtered	46.7 m3	Net_Dist	52.0 m	Sample Rate
Salinity	33.49 o/oo	Angle	31.1 deg	Total_Dist	5263.2 m	Printer
Density	26.91	Flow_Counts	8	Processed File Name	C:\MOCNESS\MOCDATA\NBPO202\MOC02.PRO	
Oxygen		Hor_Vel	1.4 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBPO202\MOC02.raw	
Fluoresc.	0.2238 V	Vert_Vel	-2.4 m/min	Acquisition Ended. tries = 0		
LightXmis	0.1487 /m	Battery	100.5 V			



MOCNESS TOW #: 2

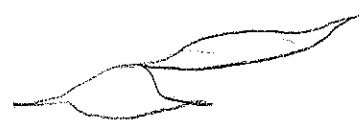
Date: 4/14/02

Region: mid-shelf, northern most line

People Processing Sample: P. Alatalo

NET DEPTH

Taxonomic Composition

0	0-325	Krill, Copepods
1	325-250	Krill, Cops, Strophomena , Amphipod Salpa thomasi(?) - 'sea urchin'
2	250-200	Krill - 2 sp.
3	200-150	Krill - 2 spp, Cope's
4	150-100	Krill, Large Salpa, Cope's → not a worm 
5	100-75	Copepods, Krill fecillize, Diatoms
6	75-50	DIATOMS, Cope's,
7	50-25	Large Gelatinous Org, DIATOMS, Cop's
8	25-0	AMPHIPODS, DIATOMS

MOCNESS Tow Sheet (NBP02-02)

Sam

St. Station No.: <i>11</i>	Tow No.: <i>03</i>
Date: <i>4/16/2002 local</i>	<i>4/17/2002 Z</i>
Filename (raw): <i>MOC-03.raw</i>	Filename (processed): <i>MOC-03.prd</i>

Net Information

Net Size: <i>1m</i>	Net Condition: <i>Good</i>
Net Mesh: <i>335 μm</i>	

Start

End

Location (Lat/Lon): <i>66 06.719 -70 55.135</i>	Location (Lat/Lon): <i>66 6.26 71 10.54</i>
Time (Local) <i>429²⁸²⁹</i>	Time (GMT) <i>0329</i>
Time (Local) <i>0240</i>	Time (GMT) <i>0642</i>
MOCNESS Battery Voltage: <i>19.6</i>	MOCNESS Battery Voltage: <i>19.4</i>

Environmental Parameters

Wind (Speed/Direction): <i>~ 2 Kts</i>	Sea State: <i>~ calm</i>
Water Depth (m): <i>~ 2000</i>	Light and Clouds: <i>Cloudy Dark/night</i>
Air Temperature: <i>-3.1 C</i>	SST: <i>-0.629 C</i>

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-1000	0	329	998	0447	3207	NONR <i>down 20m/min</i>
1	1000-800	998	0447	800	0505	996	<i>up 20m/min</i> NO NR
2	800-600	800	0505	597	0523	1009	<i>20m/min</i> NO NR
3	600-400	597	0523	400	0541	980	<i>20m/min</i> NO NR
4	400-200	400	0541	200	0601	1165	<i>20m/min</i> NO N.R.
5	200-100	200	0601	105	0621	1086	<i>10m/min</i> NO N.R.
6	100-50	100	0621	49	0630	533	<i>10m/min</i> NO NR
7	50-25	49	0630	25	0636	212	<i>5m/min</i> NO NR
8	25-0	25	0636	4	0642	328	<i>5m/min</i>

Scattering layer @ 200-300m
on ADCP + EK60
Stroke on @ surface
recovery

05:40 LOST GPS (NET 03)
05:42 GPS BACK (NET 04)
05:52 LOST GPS (NET 04)
05:56 GPS BACK

FLUOR SO LOW AND SAL SO CONSTANT AT DEPTH
THAT TUBES CAP/TUBES WERE ON!

MUCNESS - [Data Acquisition and Control System]

Acquisition Setup Hardware Setup Runtime Options Plot Setup Capture Screen About

Environmental Parameters

Time 06:42:53
Pressure 2.9 m
Temp -0.8 C
Salinity 33.71 o/oo
Density 27.104
Oxygen
Fluoresc. 0.4774 V
LightXmis 0.2059 /m

Net Operation

Net_Num 9
OpenTime 016 min
Vol_Filtered 32.0 m3
Angle 39 deg
Flow_Counts 7
Hor_Vel 1.7 kts
Vert_Vel 2.3 m/min
Battery 19.4 V

Net - Ship Position

Latitude 66S 6.126'
Longitude 71W 10.54
Net_Dist 35.1 m
Total_Dist 11499.0 m

Program Settings

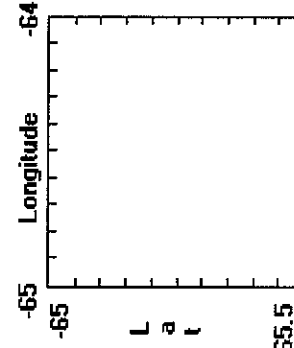
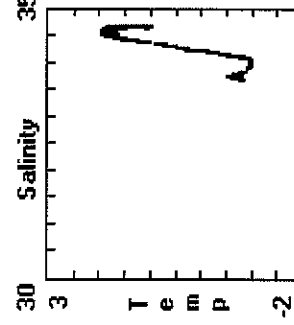
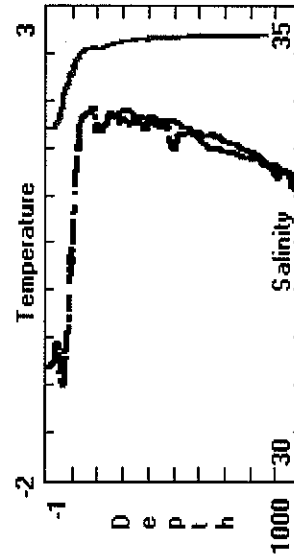
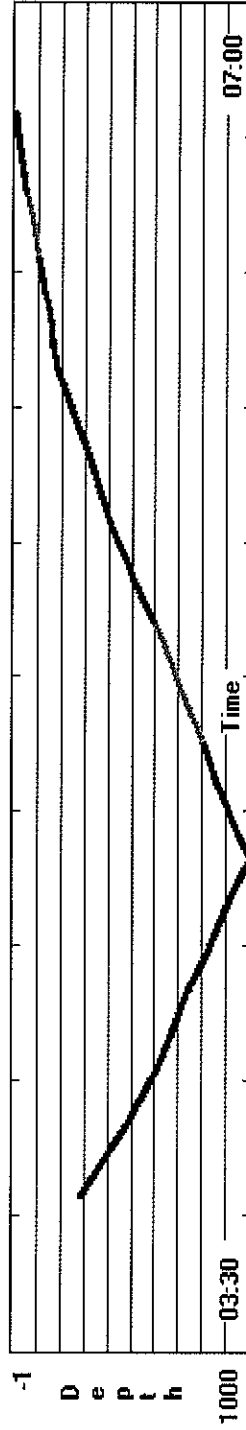
Reset
Baud Rate 2400
Sample Rate 4.0 sec
Printer Off
Processed File Name C:\MOCNESS\MOCDATA\MBP0202\MOC03.PRO
Raw File Name C:\MOCNESS\MOCDATA\MBP0202\MOC03.raw
Acquisition Ended. trys = 0

Step 5 IBD Net

Increment Net#

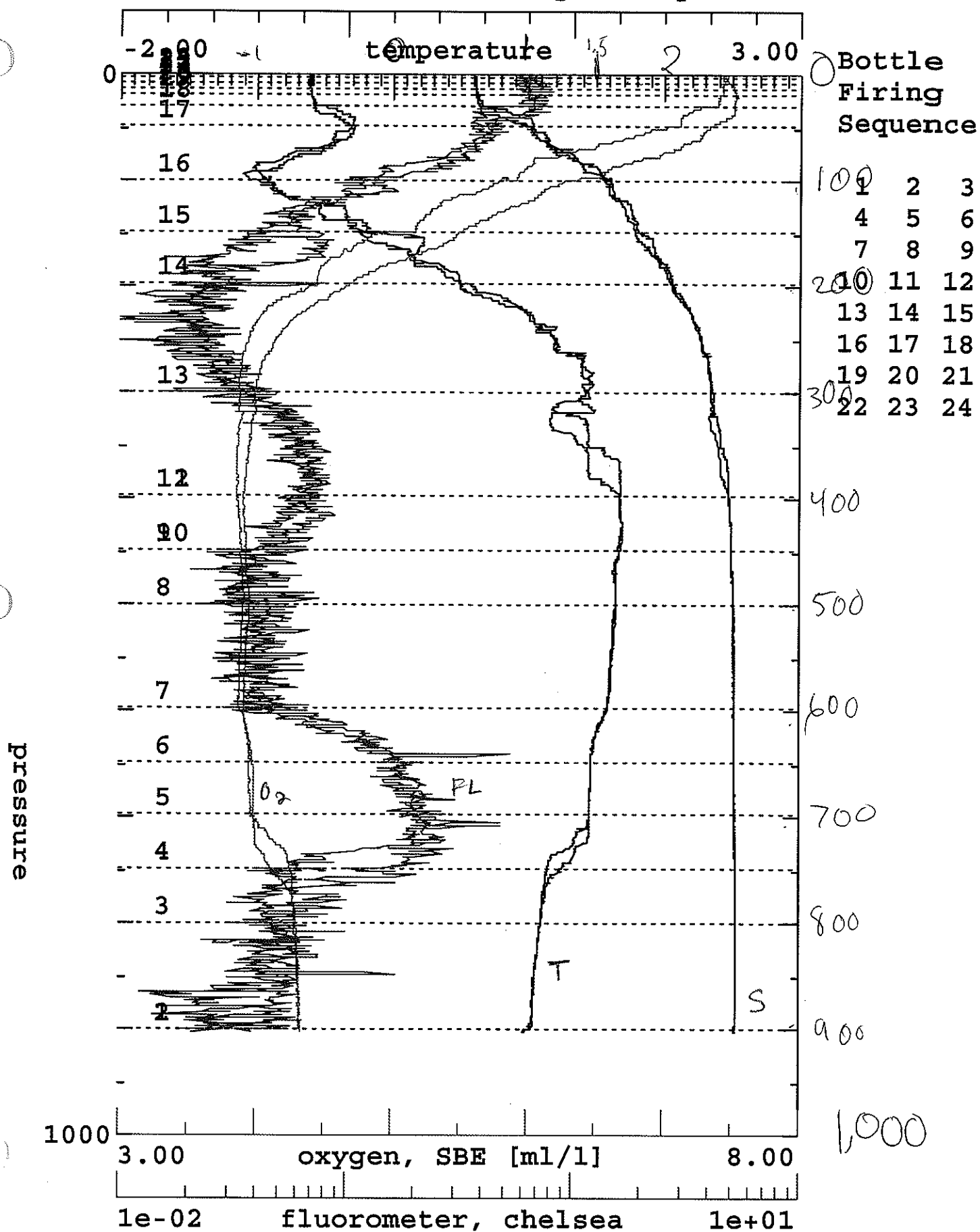
Pause Acqui

End Acqui



p202013.dat: NBP0202 CTD #13

32a00nity, PSS-78 [PSU], pri T, pr35C00



MOCNESS TOW #: 3

Date: 4-17-02

Region: offshore, Transect 2

People Processing Sample: CSA, AK, PM

NET DEPTH

Taxonomic Composition

0	0-1000	Copepods, euphs, fish w/ his eye, small thin fish, purple medusa, amphipod
2X	800-600 600-800	couple euphs, large chaets, copepods, red worm, medusae (clear) not much stuff for vol.
1X	1000-800 800-600	copepods, large chaets, red shrimp, fish, large euphrase w/ dark inside
3	600-400	few krill, copepods, fish (1), very sparse
4	400-200	copepods, chaetognaths, few krill, amphipod, fish
5	200-100	krill, (not E. Smeev?) copepods larvilia (few)
6	100-50	Primarily copepods, 2 krill, 1 amphipod 1 euphrase or some soft
7	50-25	phyto (lots): 2 jars hard to see much else
8	25-0	phytoplankton (5 jars)

MOCNESS Tow Sheet (NBP02-02)

300-500 m³

20 m/min down

30 m @ ~10 m

Up 20 to 18 or 5

St. Station No.: <i>15</i>	Tow No.: <i>Tow 04</i>
Date: <i>4-18-02 (local)</i>	
Filename (raw): <i>MOC 04. raw</i>	Filename (processed): <i>MOC 04. pro</i>

Net Information

Net Size: <i>1 m</i>	Net Condition: <i>✓</i>
Net Mesh: <i>333μ</i>	

Start

End

Location (Lat/Lon): <i>66° 46.0170° 10.419</i>		Location (Lat/Lon): <i>66 49.10 70 10.35 10.35</i>	
Time (Local) <i>4:00</i>	Time (GMT) <i>8:58</i>	Time (Local) <i>10:35</i>	Time (GMT) <i>14:35</i>
MOCNESS Battery Voltage: <i>19.7</i>		MOCNESS Battery Voltage: <i>19.4</i>	

*Ship's speed
~2 kt.*

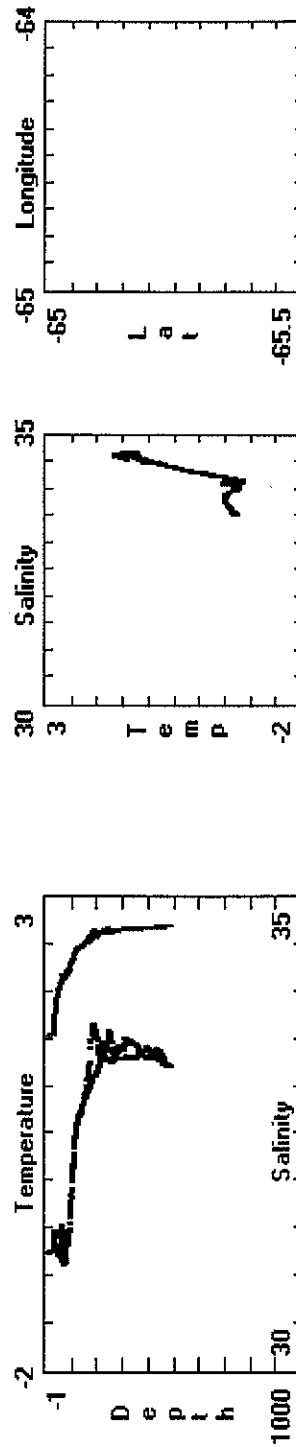
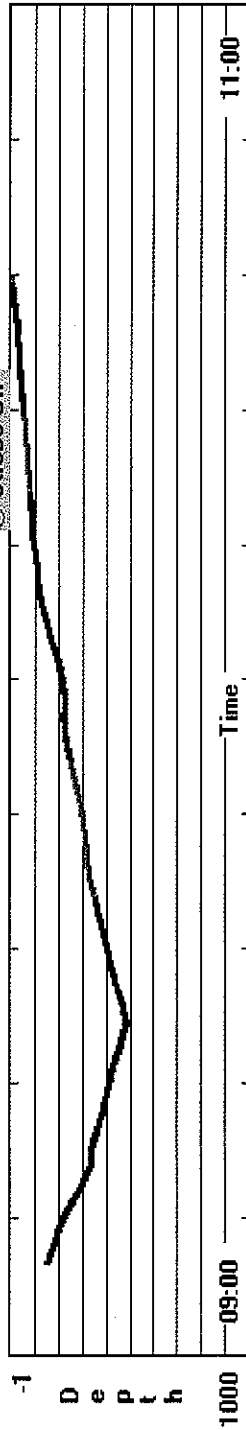
Environmental Parameters

Wind (Speed/Direction): <i>15 kt / 50°</i>	Sea State: <i>Moderate to heavy swell</i>
Water Depth (m): <i>535 m</i>	Light and Clouds: <i>Dark</i>
Air Temperature: <i>-0.2 C</i>	SST: <i>0.84° C</i>

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	<i>0-500</i>	<i>0</i>	<i>08:58</i>	<i>479</i>	<i>09:30</i>	<i>1321</i>	<i>Bottom @ 490 m.</i>
1	<i>500-350</i>	<i>479</i>	<i>09:30</i>	<i>350</i>	<i>09:40</i>	<i>537</i>	<i>20 m/min.</i>
2	<i>350-200</i>	<i>350</i>	<i>09:40</i>	<i>250</i>	<i>9:53</i>	<i>632</i>	<i>15 m/min. Δ 20 m/min.</i>
3	<i>200-150</i>	<i>250</i>	<i>9:53</i>	<i>150</i>	<i>10:05</i>	<i>642</i>	
4	<i>150-100</i>	<i>150</i>	<i>10:05</i>	<i>101</i>	<i>10:11</i>	<i>309</i>	<i>15 $\rightarrow$ 10 m/min.</i>
5	<i>100-75</i>	<i>100</i>	<i>10:11</i>	<i>75</i>	<i>10:16</i>	<i>304</i>	<i>10 m/min.</i>
6	<i>75-50</i>	<i>75</i>	<i>10:17</i>	<i>51</i>	<i>10:23</i>	<i>303</i>	<i>5 m/min.</i>
7	<i>50-25</i>	<i>50</i>	<i>10:23</i>	<i>25</i>	<i>10:30</i>	<i>340</i>	<i>"</i>
8	<i>25-0</i>	<i>25</i>	<i>10:30</i>	<i>0</i>	<i>10:35</i>	<i>245</i>	<i>19/m</i>

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	10:35:55	Net_Num	10	Latitude	66S 43.022	Reset	
Pressure	26 m	OpenTime	0.2 min	Longitude	70W 10.35	Baud Rate	2400
Temp	-0.75 C	Vol_Filtered	16.0 mS	Net_Dist	17.6 m	Sample Rate	4.0 sec
Salinity	33.54 o/oo	Angle	35 deg	Total_Dist	5809.5 m	Printer	Off
Density	26.962	Flow_Counts	4	Processed File Name	C:\MOCNESS\MOCDATA\INBP0202\MOC04.PRO		
Oxygen		Hor_Vel	2.0 kts	Raw File Name	C:\MOCNESS\MOCDATA\INBP0202\MOC04.raw		
Fluoresc.	0.2260 V	Vert_Vel	-3.7 m/min	##MN-18 00 35 0957 02352 0220 868098 310901 194H:1			
LightXmis	0.2072 /m	Battery	13.7 V	\$GPGLL,6643.0227,S,07010.3582,W,103513.00,			
Step STBD Net		Increment Net#		Strobe On		Pause Acqui	
				Strobe Off		End Acqui	



MOCNESS TOW #: 4

Date: 4-18-02

Region: Northern Sector, STA. 15

People Processing Sample: PHIL and JULIAN

NET DEPTH

Taxonomic Composition

0	479 0- 500	Copepods, Krill, large Mysophid Fish.
1	479 500 - 350	Copep, Chaetognaths, Krill, Amphipods large
2	350- 250	Salps, Chaetognaths - large, Copep's
3	251 250 - 150	Mysophid fish, Copep, small - acellae
4	150-100	Copep, Fe cellae
5	100 - 75	Salp big, Copep, Krill-fucellae
6	76 - 51	Copepods, fucellae, Algae
7	52 - 25	Large salp, Copep, Algae
8	25-0	<u>AMPHIPODS</u> , Krill

MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 17 <i>Adelaide Island</i>	Tow No.: 5
Date: 4/18/02	
Filename (raw): mocos.raw	Filename (processed): MOCOS.PRO

Net Information

Net Size: 2 m	Net Condition: good
Net Mesh: 333	

Start

End

Location (Lat/Lon): 67° 3.433' 69° 10.86' W		Location (Lat/Lon): 67° 1.98' / 69 15.18'	
Time (Local) 1547	Time (GMT) 1947	Time (Local) 17:02	Time (GMT) 21:02
MOCNESS Battery Voltage: 19.7		MOCNESS Battery Voltage: 19.3	

Environmental Parameters

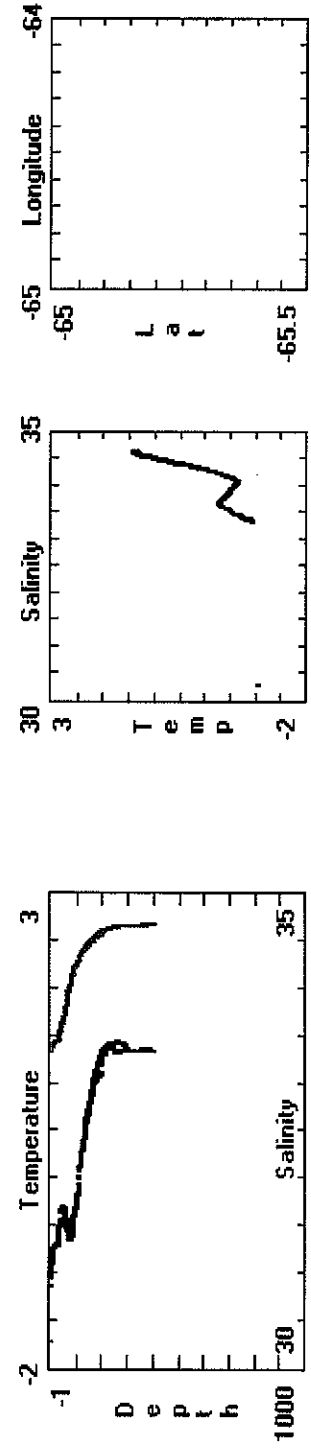
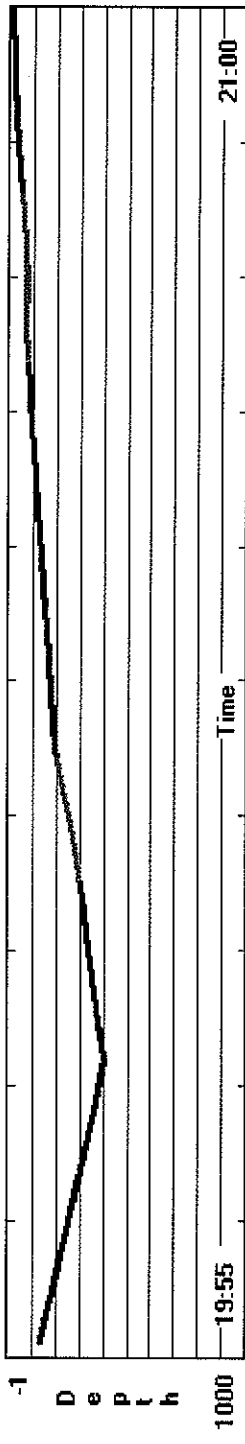
Wind (Speed/Direction): 5kt / 40°	Sea State: calm
Water Depth (m): 491 @ launch	Light and Clouds: day light, some clouds but sunny
Air Temperature: -0.6°C	SST: -0.7°C

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0 -	0	~19:36	402	20:09	825	Net Response Indicator changed + not working.
1	400-300	80	20:09	300	20:17	386	15 m/min
2	300-200	296	20:18	200	20:23	291	15 → 10 m/min Ship fed 2.2 kt
3	200-150	291	20:23	150	20:30	389	10 m/min
4	150-100	150	20:30	100	20:38	416	
5	100-75	100	20:38	75	20:42	247	
6	75-50	75	20:42	50	20:50	461	10 m/min
7	50-25	50	20:50	25	20:54	205	
8	25-0	25	20:54	0	21:02	368	

proc 5
2/1/17

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	21:02:37	Net_Num	9	Latitude	67S 1.9817"	Reset	
Pressure	0.7 m	OpenTime	0:05 min	Longitude	69W 15.88	Baud Rate	2400
Temp	-1.11 C	Vol_Filtered	16.5 m3	Net_Dist	47.5 m	Sample Rate	4.0 sec
Salinity	20.59 o/oo	Angle	80 deg	Total_Dist	5061.2 m	Printer	Off
Density	16.484	Flow_Counts	4	Processed File Name	C:\MOCNESS\MOCDATA\NBP0202\MOC05.PRO		
Oxygen		Hor_Vel	0.3 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBP0202\MOC05.raw		
Fluoresc.	0.1742 V	Vert_Vel	1.0 m/min	Acquisition Ended. trys = 0			
LightXmis	0.3032 /m	Battery	15.5 V				



MOCNESS TOW #: 5 @ Station 17

Date: 4/18/02

Region: near Adelaide Island

People Processing Sample: Phil & Julian

NET DEPTH

Taxonomic Composition

0	0-400	Cope's, Amphipods, Chaetognaths Chaetognaths
1	400-300	Cope's, Krill, Chaetognaths - large
2	300-200	Cope's, Chaetog., Krill
3	200-150	Cope's, Krill - lucilliae
4	150-100	Cope's, Goo "grab", Krill - lucilliae
5	100-75	As above
6	75-50	As above
7	50-25	Cope's, Krill - lucilliae, Amphipods
8	25-0	Cope's, Fish larvae, Amphipods

MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 21	Tow No.: 06
Date: 4-19-02	
Filename (raw): MOC06.raw	Filename (processed): MOC06.pro

Net Information

Net Size: 1 m ²	Net Condition: good
Net Mesh: 333 _μ	

Start

End

Location (Lat/Lon): -66° 50.07 -71° 23.89		Location (Lat/Lon): 66 48.264/71 34.12	
Time (Local) 19:02	Time (GMT) 23:02	Time (Local) 20:42	Time (GMT) 00:42
MOCNESS Battery Voltage: 19.6 V		MOCNESS Battery Voltage: 19.3	

Environmental Parameters

Wind (Speed/Direction): 10 kt @ 285°	Sea State: low swells
Water Depth (m): 471	Light and Clouds: DARK
Air Temperature: -0.1 °C	SST: 0.8

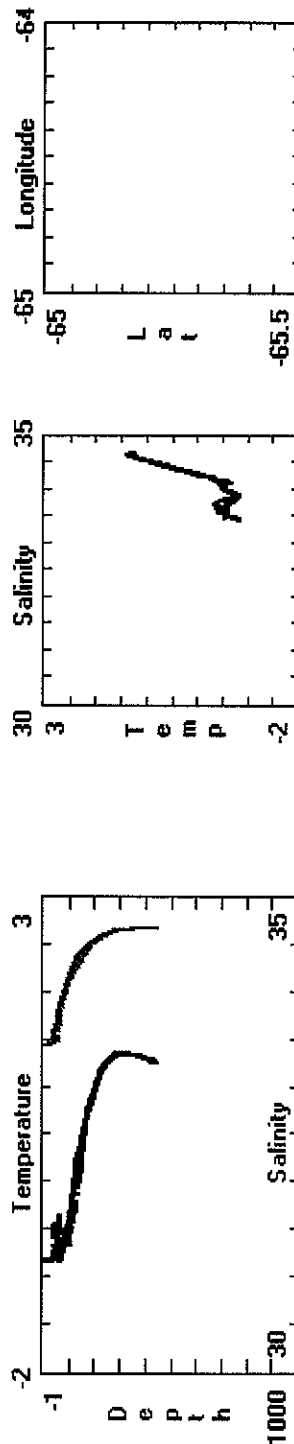
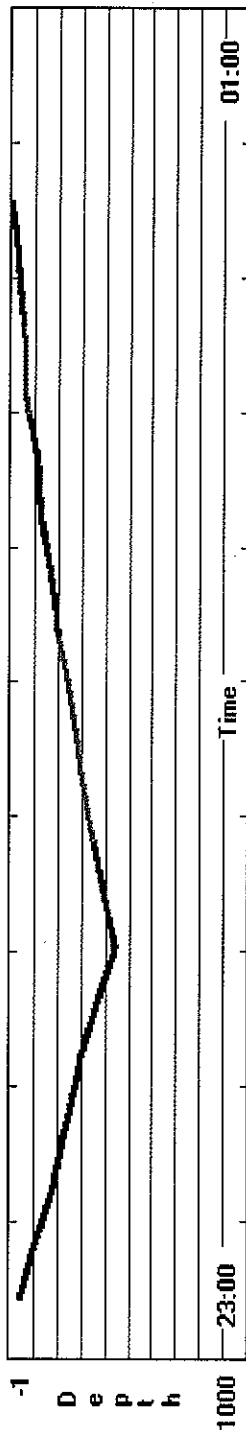
Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	NET RESPONSE Comments not responding!
0	0-440	0	23:00	440	23:30	1348 m ³	20 m/min ↓ Ship=1.8
1	450-350	440	23:30	350	23:45	466 m ³	15 m/min ↑
2	350-200	350	23:45	200	00:04	940 m ³	11
3	200-150	200	00:04	150	11:50	387	
4	150-100	150	11:50	100	20:56	421	
5	100-75	100	20:56	75	23:49	138	Ship spd. 2 kt.
6	75-50	74	23:49	50	00:31	408	
7	50-25	50	00:31	25	00:37	321	
8	25-0	25	00:37	0	00:42	267	

Note - Strobe was flashing weakly and more slowly when @ surface upon retrieval.

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	00:42:49	Net_Num	9	Latitude	66S 48.264	Reset	
Pressure	0.7 m	OpenTime	0.4 min	Longitude	71W 34.12	Baud Rate	2400
Temp	-0.83 C	Vol_Filtered	2000 ms	Net_Dist	27.3 m	Sample Rate	4.0 sec
Salinity	33.46 o/oo	Angle	59 deg	Total_Dist	5687.2 m	Printer	Off
Density	26.897	Flow_Counts	6	Processed File Name	C:\MOCNESS\MOCDATA\NBP0202\MOC06.PRO		
Oxygen		Hor_Vel	2.3 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBP0202\MOC06.raw		
Fluoresc.	0.1994 V	Vert_Vel	0.8 m/min				
LightXmis	0.3916 /m	Battery	100%	Acquisition Ended. trys = 0			

Step STD Net ☐ Increment Net ☐ Pause Acqui End Acqui



NBP0202
C60706
4/19/02

NBP0202

MOCNESS TOW #: 06

Date: 4-19-02

Region: NORTH SECTOR

People Processing Sample: (PR) (PW)

NET DEPTH

Taxonomic Composition

0	440-0	Copep, Myctophid, Jellyfish! ^{Huge!}
1	440-350	Copepods, Euphausiids, "Jellies"
2	350-200	Euphausiids, Gelatinous organisms, <u>Copepods</u>
3	200-150	<u>Euphausiids</u> , Shrimp, Krill fecilliae(?)
4	150-100	Euphausiids, Shrimp, Amphipod
5	100-75	Small Copep, Mung.
6	75-50	Copepods, Green Mung, Amphipod Fish larvae
7	50-25	Copepods, Eup;
8	25-0	Copepods, <u>AMPHIPODS</u> - <u>Black</u> .

MOCNESS Tow Sheet (NBP02-02)

St. Station No.: <u>723</u>	Tow No.: <u>7</u>
Date: <u>4-20-02</u>	
Filename (raw): <u>MOC07.raw</u>	Filename (processed): <u>MOC07.pro</u>

Net Information

Net Size: <u>1 m²</u>	Net Condition: <u>good</u>
Net Mesh: <u>333 μm</u>	

Start

End

Location (Lat/Lon): <u>66° 41.685 / 73° 20.819</u>		Location (Lat/Lon): <u>66° 38.544 / 73° 15.17</u>	
Time (Local) <u>17:41</u>	Time (GMT) <u>21:41</u>	Time (Local) <u>20:45</u>	Time (GMT) <u>00:45</u>
MOCNESS Battery Voltage: <u>19.4</u>		MOCNESS Battery Voltage: <u>19.0</u>	

Environmental Parameters

Wind (Speed/Direction): <u>15 kt. / 20°</u>	Sea State: <u>low swell</u>
Water Depth (m): <u>3614</u>	Light and Clouds: <u>Clear day / dark</u>
Air Temperature: <u>-0.3</u>	SST: <u>0.3 °C</u>

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-1000	0	21:41	1000m	22:47	2315	Down @ 30m/min. 1800 m g with out
1	1000-800	1000	22:47	800m	23:06	967	NO NET REPP.
2	800-600	800	23:06	600	23:24	996	N.N.R.
3	600-400	596	23:24	400	23:42	983m ³	N.N.R.
4	400-200	400	23:42	200	00:02	1124	N.N.R.
5	200-100	200	00:02	100	00:11:59	504.8	N.N.R.
6	100-50	100	00:11:59	50	00:19:12	390.6	N.N.R.
7	50-25	50	00:19:12	25	00:24:05	255.8	N.N.R.
8	25-0	25	00:24:05	0	00:30:15	319.0	N.N.R.

Strobe light flashing brightly so suggest it was as last net approached the surface

MOCNESS TOW #: 07

Date: 4-20-02

Region: off shore

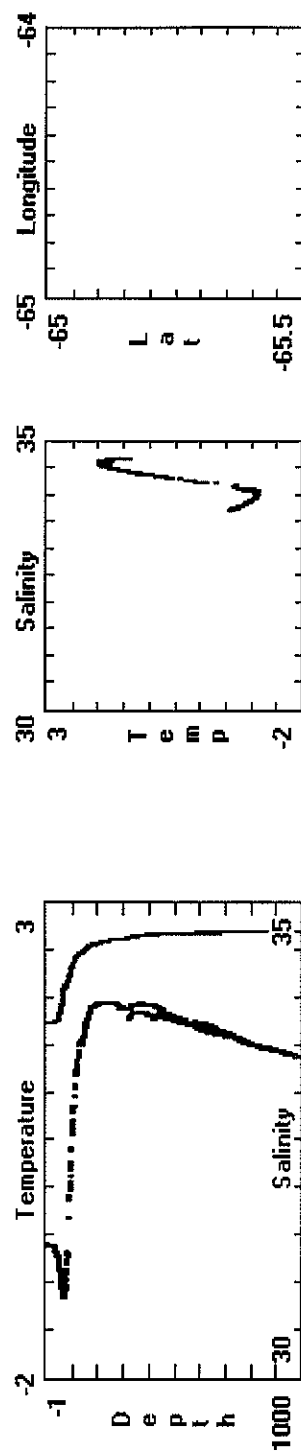
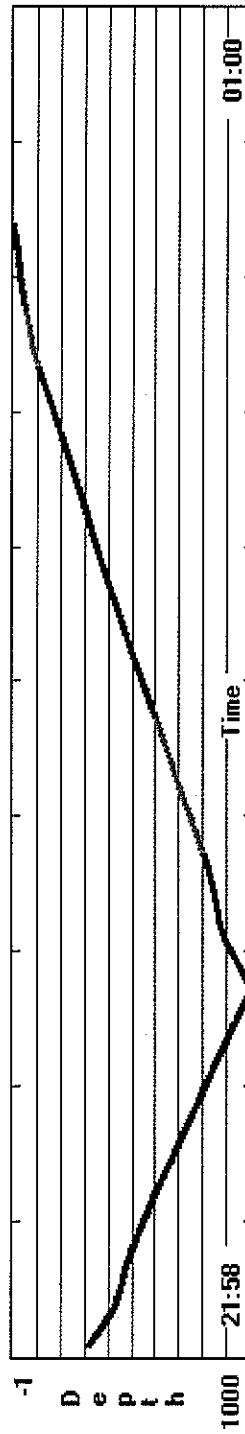
People Processing Sample: PA and Julian

NET DEPTH

Taxonomic Composition

0	0-1000	Jellyfish, Krill, Amph Mysidophid Fish
1	1000- 800	Chaetognaths, Krill, ceps - very low biomass!
2	800-600	Very large Mysidophid; Other fish, Ceps
3	600-400	Chaetognaths, Krill, Mysidophid
4	400-200	Krill, Chaetognaths Mysidophid Fish
5	200-100	Krill, Ceps Amph. P: 0.5
6	100-50	Algae, ceps, "Sargassum"
7	50-25	ALGAE
8	25-0	Algae, Sargassum - few Amphipod

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	01:18:52	Net_Num	9	Latitude	66S 38.544	Reset	
Pressure	0.5 m	OpenTime	40.8 min	Longitude	73W 15.17	Baud Rate	2400
Temp	50.0 C	Vol_Filtered	356.2 m3	Net_Dist	4706.3 m	Sample Rate	4.0 sec
Salinity	50.0 o/oo	Angle	55 deg	Total_Dist	16001.1 m	Printer	Off
Density	24.678	Flow_Counts	93	Processed File Name	C:\MOCNESS\MOCDATA\NBP0202\MOC07.PRO		
Oxygen		Hor_Vel	25.7 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBP0202\MOC07.raw		
Fluoresc.	0.0760 V	Vert_Vel	1.3 m/min	Acquisition Ended. trys = 0			
LightXmis	0.5389 /m	Battery	100.0 V				
				Increment Net#	End Acquir		
				Step 5 TBD Net			



MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 28	Tow No.: 8
Date: 4/22/02	
Filename (raw): moc08.raw	Filename (processed): moc08.no

Net Information

Net Size: 1m	Net Condition: Row net ϕ post dipping MOC 080 at stand
Net Mesh: 333	

Start

End

Location (Lat/Lon): 67 45.87, 69 47.00	Location (Lat/Lon): 67 44.18, 69 43.34
Time (Local) 0306	Time (GMT) 0706
Time (Local) 0429	Time (GMT) 0829
MOCNESS Battery Voltage: 19.2	MOCNESS Battery Voltage: ---

Environmental Parameters

Wind (Speed/Direction): 19kt, 32°	Sea State: 10'
Water Depth (m): 319	Light and Clouds: clear, cloudy
Air Temperature: -1.6	SST: -1.806

Net Tow Information

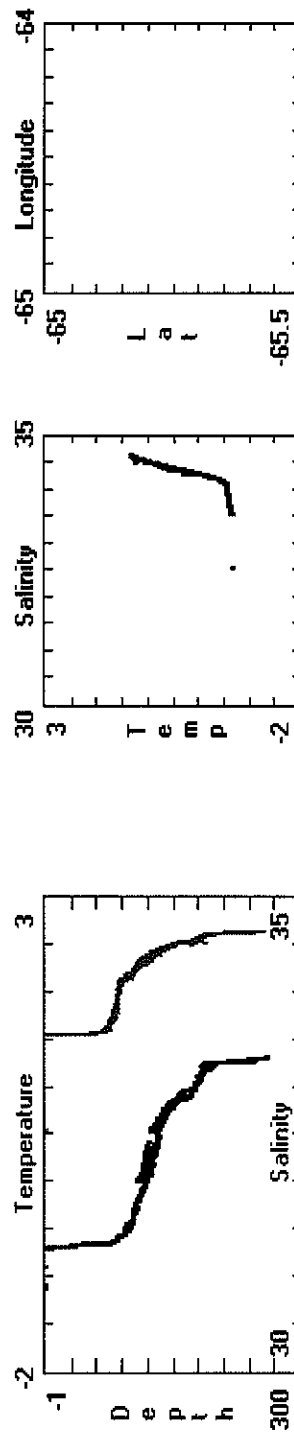
Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-260	0	0706	260	0727	648	no NR
1	250-200	260	0727	200	0736	359	no NR
2	200-150	200	0736	147	0742	220	no NR
3	150-125	147	0742	124	753	459	Send out 4 m again for volume
4	125-100	124	753	100	0800	364	N.N.R.
5	100-75	100	0800	75	08107	335	"
6	75-50	75	08107	49	0815	384	"
7	50-25	49	0815	25	08122	356	"
8	25-0	25	08122	0	08128	283	"

Net angle a all over the place. difficultly in keeping ship @ 1.8 kts
due to bias/shoals/wind

Scatter at 75m in MOC, hard to tell on ground, state very coarse

*Net 2: tried to fish more w/in depth interval, which didn't quite
get it so came too shallow (115) before pulling out

 MOCNESS - [Data Acquisition and Control System]



NB00202, TOW 8 @ STATION 28, April 22, 2002

MOCNESS TOW #: 8

Date: 4/22/02

Region: just SW of Adelaide Island

People Processing Sample: Phil Aratalo

NET DEPTH

Taxonomic Composition

0	0-200	Copepods, Krill, ^{juveniles(?)} Amphipods
1	250-200	Copepods; 1 large krill - Thysanus... (?) Amphip. - not much
2	200-150	Very few Copes, Krill furc, amphipods
3	150-125	Krill furcillae Algae
4	125-100	Krill furcillae
5	100-75	Krill furcillae ^{large} _{small} Copepods _{algae}
6	75-50	As above, but more Krill furc., Cops, Algae
7	50-25	'Lots' of young krill furcillae, Copepods
8	25-0	MOTHERLOAD of KRILL ~ 2-3cm long ~ 1 pint

MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 34	Tow No.: 9
Date: 4/23/02	
Filename (raw): MOC09.psd	Filename (processed): MOC09.raw

Net Information

Net Size: 1 m	Net Condition: good
Net Mesh: 333	

Start

End

Location (Lat/Lon): 67°55.26, 68°30.130		Location (Lat/Lon): 67°55.03, 68°18.26	
Time (Local) 0035	Time (GMT) 0435	Time (Local) 0212	Time (GMT) 0642
MOCNESS Battery Voltage: 19.2		MOCNESS Battery Voltage:	

Environmental Parameters

Wind (Speed/Direction): 8-9, 30°	Sea State: very low swell
Water Depth (m): 654	Light and Clouds: dark w/ moon stars
Air Temperature: -1.6°C	SST: -1.153

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-800	0	0435	800	0521	848 + 15 ³	NO NR
1	800-1600	800	0521	595	0531	501	NO NR 10m/min
2	1600-400	595	0531	396	0546	755	NO NR 20m/min
3	400-200	396	0546	198	0603	975	NO NR 20m/min
4	200-100	198	0603	99	0626	1238	NO NR 10m/min
5	100-75	99	0626	74	0632	293	NO NR, 5m/min
6	75-50	74	0632	42	0636	197	NO NR, 5m/min
7	50-25	42	0636	25.6	0642	328	NO NR, 5m/min
8	25-0	25.6	0642	0	0650	514	NO NR 5m/min

Reset system in middle of net #, need to make file for volume filtered
 Store in @ recovery

MOCNESS TOW #: 9

Date: 4/23/02

Region: La Brea

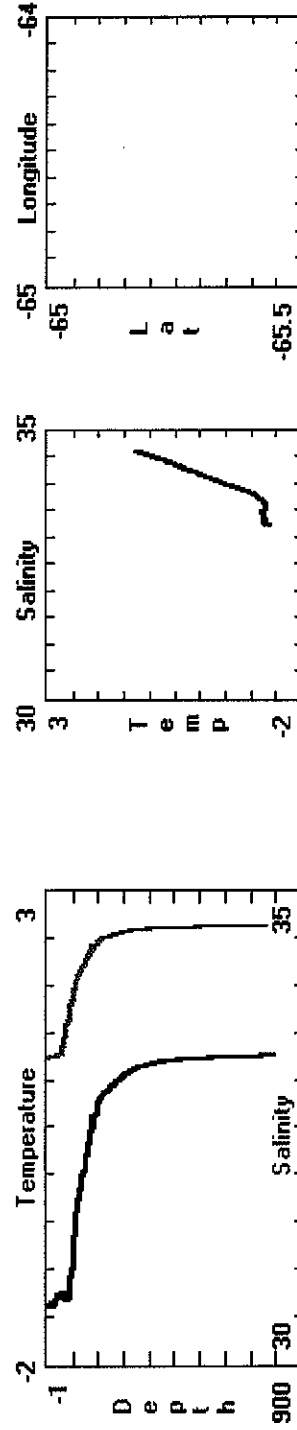
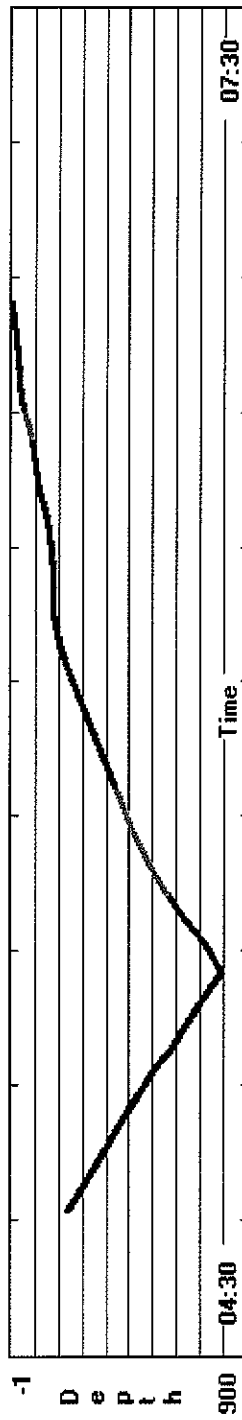
People Processing Sample: CDA, AK

NET DEPTH

Taxonomic Composition

0	0-800	Copepods, Krill, large fish, jellies huge krill
1	800-600	Euphausiids (pregnant), copepods 2 red medusae
2	600-400	Krill, ctenophores, copepods, fucellia
3	400-200	large amphipods, ctenophores, copepods, large Krill
4	200-100	Huge Amphipod, large amphipod, yellow amphipods w/ orange eyes Copepods, some krill.
5	100-75	Krill, copepods (many), amphipods w/ orange eyes
6	75-50	Juv. Krill (few), white amphipods w/ yellow ^{orange} eyes, Copepods, 1 small jelly
7	50-25	large ctenophore, Juvenile Krill, Krill fucellia, (small)
8	25-0	Krill (larvae) Amphipods, Jelly (ctenophore)

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	06:50:50	Net_Num	9	Latitude	67S 55.035	Reset	
Pressure	10 m	OpenTime	0.1 min	Longitude	68W 18.34	Baud Rate	2400
Temp	-1.37 C	Vol_Filtered	4.9 m3	Net_Dist	11.2 m	Sample Rate	4.0 sec
Salinity	33.26 o/oo	Angle	43 deg	Total_Dist	7658.6 m	Printer	Off
Density	26.752	Flow_Counts	2	Processed File Name	C:\MDCNESS\MOCDATA\NBPO202\MOC09.PRO		
Oxygen		Hor_Vel	2.6 kts	Raw File Name	C:\MDCNESS\MOCDATA\NBPO202\MOC09.raw		
Fluoresc.	0.1050 V	Vert_Vel	-1.4 m/min	Acquisition Ended. ttps = 0			
LightXmis	0.2641 /m	Battery	16.7 V				



MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 40 - S.M Bay	Tow No.: 10
Date: 4/24/02	
Filename (raw): moc10.raw	Filename (processed): moc10.pro

Net Information

Net Size: 1 m	Net Condition:
Net Mesh: 333	good, no flots (Optimus box put on bottom gear)

Start

End

Location (Lat/Lon): 68 288, 68 47.2	Location (Lat/Lon): 68 3035 68 327
Time (Local) 1340	Time (GMT) 1740
Time (Local) 1543	Time (GMT) 1943
MOCNESS Battery Voltage: 19.4 V	MOCNESS Battery Voltage: 18.8

Environmental Parameters

Wind (Speed/Direction): 10 kt, 30°	Sea State: ice
Water Depth (m): 650	Light and Clouds: daylight, overcast
Air Temperature: 0.3°C	SST: -1.7°C

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-580	0	1740	580	1818	1608	NO NR, YES
1	580-350	580	1818	347	1841	1183	NO NR, YES
2	350-200	347	1841	199	1854	705	NO NR, YES
3	200-150	199	1854	147	1902	383	NO NR
4	150-100	147	1902	100	1909	387	NO NR
5	100-75	100	1909	72	1919	343	NO NR, YES
6	75-50	72	1919	49	1927	408	NO NR, YES
7	50-25	49	1927	25	1934	394	NO NR, YES
8	25-0	25	1934	0	1942	416	NO NR

Net 3 went deeper than 200m because it dropped after opening, perhaps because the ship slowed a little

Net 5 depth varies w/in interval, Δing ship speed?

Strobe NOT firing on recovery. The 'strobe on' button WAS 'ON'

MOCNESS TOW #: 16 @ Station 40

Date: 4/24/02

Region: Southern MBAY

People Processing Sample: CJA, AK

Some of
these

Euphausiids
are

Mysids

NET DEPTH

Taxonomic Composition

0	0-580	Adult Krill, Copepods, Amphipods MYSIDs
1	580-350	Celastropoda (?) , Krill, Amphipods SIPHONOPHORE pieces
2	350-200	Set pieces(?) as above, Krill, Cope's Siphonophore
3	200-150	Amphipods, Krill, Jellyfish ~ medium size
4	150-100	Krill, Cope, Ctenophores (3) - large
5	100-75	SALP PIECES (?) COPEPODS ① Med. Jellyfish ② Fish (~ <u>Micropodius micropodius</u>)
6	75-50	② more Fish, More Salp pieces, Copepods.
7	50-25	③ Med-large Jellyfish few copep
8	25-0	① Adult + larval fish Copepods

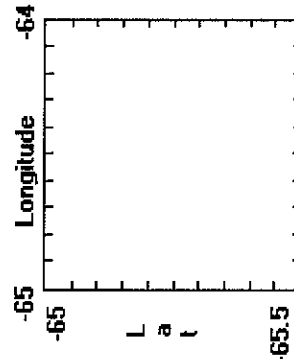
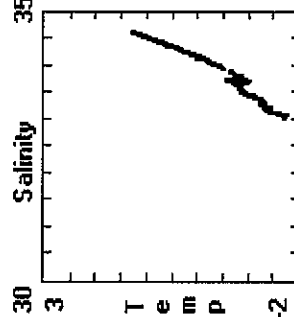
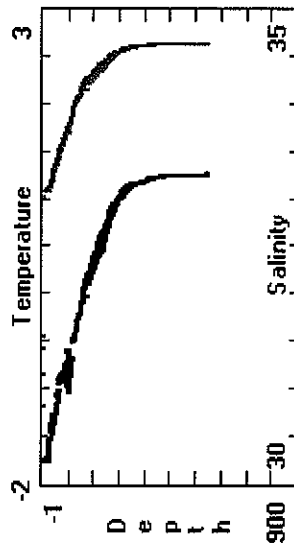
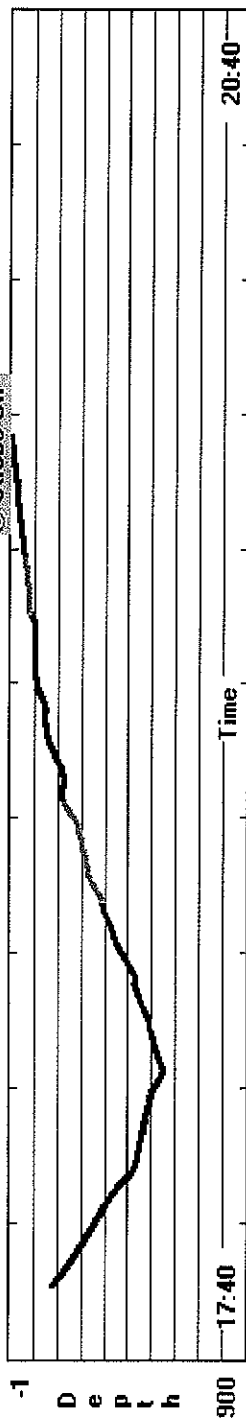
Environmental Parameters Net Operation Net - Ship Position Program Settings

Time	19:43:23	Net_Num	9	Latitude	68S 30.353	Reset
Pressure	0.9 m	OpenTime	0.9 min	Longitude	68W 37.72	Baud Rate
Temp	-0.44 C	Vol_Filtered	36.0 m3	Net_Dist	64.5 m	Sample Rate
Salinity	0.36 o/oo	Angle	0 deg	Total_Dist	8138.6 m	Printer
Density	0.111	Flow_Counts	6	Processed File Name	C:\MOCNES\MOCDATA\NBP0202\MOC10.PRO	
Oxygen		Hor_Vel	0.6 kts	Raw File Name	C:\MOCNES\MOCDATA\NBP0202\MOC10.raw	
Fluoresc.		Vert_Vel	0.6 m/min			
LightXmis		Battery	10.8 V			

Please wait ... closing system down

\$6PGLL_6830.3536.5,06837.7290.W,194239.00.

Step STBD Net ☐ Increment Net# ☐ Strobe On ☒ Strobe Off ☐ Pause Acqui End/Acqui



MOCNESS Tow Sheet (NBP02-02)

Time = +4

St. Station No.: 43	Tow No.: 11
Date: 25 April 2002	
Filename (raw): MOC11.Raw	Filename (processed): MOC11.Pro

Net Information

Net Size: 1 m	Net Condition: no flots
Net Mesh: 335 μ m	Good

Start

End

Location (Lat/Lon): 67 50.430 -71 67.817	Location (Lat/Lon): 67 47.48, 71 9.644
Time (Local) 1145	Time (GMT) 1545
	Time (Local) 1326
	Time (GMT) 1726
MOCNESS Battery Voltage: 20.3	MOCNESS Battery Voltage: 20

Environmental Parameters

Wind (Speed/Direction): 15-20 kts	Sea State: Moderate Winds
Water Depth (m): 409 419	Light and Clouds: Day - Broken clouds
Air Temperature: -0.9 C	SST: -1.205

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0 - 400	0	1545	400	1618	1048	Going down at 20/min then 30/min. NO NR
1	400 - 300	400	1618	300	1627	418	10w/min NO NR
2	300 - 200	300	1627	193	1641	646	NO NR
3	200 - 150	193	1641	151	1652	561	NO NR
4	150 - 100	151	1652	99	1659	356	NO NR
5	100 - 75	99	1659	71	1707	396	NO NR
6	75 - 50	71	1707	49	1711	257	NO NR
7	50 - 25	49	1711	25	1719	354	NO NR
8	25 - 0	25	1719	0	1726	324	NO NR

Net 4 dropped below 150m after opening

Net 5 dropped below 100m after opening

Net 7: dropped below 50 after opening (ship speed)

Net 8: angle very low ($>20^\circ$), wire very short, nothing I can do about it - back by towed net

Sober on at retrieval

MOCNESS TOW #: 11

Date: 4/25/02

Region: Transect 6, Shelf (mid)

People Processing Sample:

NET DEPTH

Taxonomic Composition

0	0-400	sand, one fish,
1	400-300	AMPHIP., SIPHONOPHORES, COPEPODS
2	300-200	Copes, Chaetognaths, SALP
3	200-150	Copes
4	150-100	② FISH, ③ KRILL COPEP very little BIOMASS
5	100-75	① FISH, COPEPODS very little
6	75-50	COPEPOD MC polychaeta very little
7	50-25	COPEPODS, Green Stuff
8	25-0	Copepods, SALP, Amphipods, Green Cops

MOCNESS - (Data Acquisition and Control System)

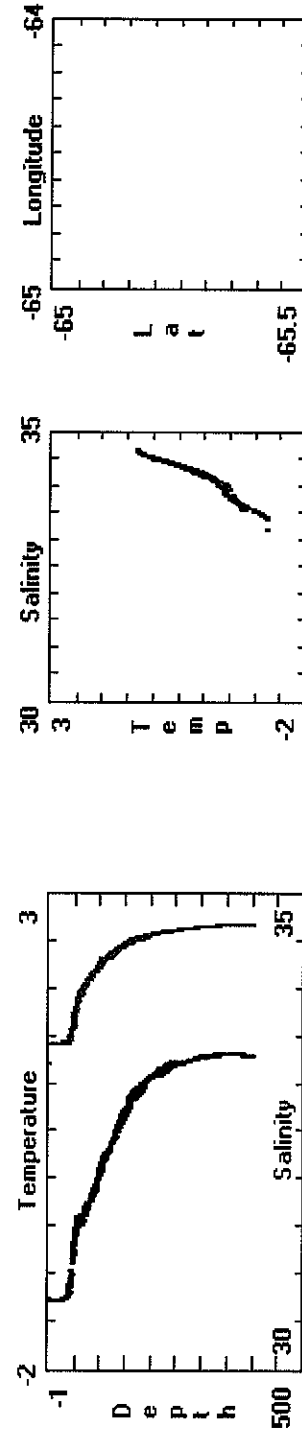
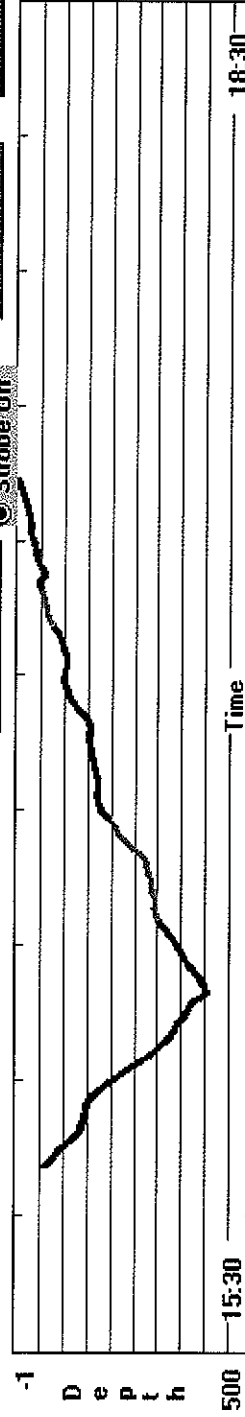
Acquisition Setup Hardware Setup Runtime Options Plot Setup Capture Screen About

Environmental Parameters Net Operation Net - Ship Position Program Settings

Time	17:26:25	Net_Num	9	Latitude	67S 47.481°	Reset
Pressure	0.6 m	OpenTime	0.2 min	Longitude	71W 9.644	
Temp	-1.25 C	Vol_Filtered	4.9 m3	Net_Dist	16.8 m	Baud Rate
Salinity	33.42 o/oo	Angle	0.6 deg	Total_Dist	5517.4 m	Sample Rate
Density	26.883	Flow_Counts	1			Printer
Oxygen		Hor_Vel	0.9 kts	Processed File Name	C:\MOCNESS\MOCDATA\NBP0202\MOC11.PRO	
Fluoresc.		Vert_Vel	3.1 m/min	Raw File Name	C:\MOCNESS\MOCDATA\NBP0202\MOC11.raw	
LightXmis		Battery	20.0 V	Please wait ... closing system down		

\$GPGLL_6747.4810,S,07109.6449,W,172535.00.

Step STBD Net ☐ Increment Net# ☐ Strobe On ☒ Strobe Off ☐ Pause Acqui End Acqui



MOCNESS Tow Sheet (NBP02-02)

T = 2299
L = 1798
P = 146

5mm
2000-2080
0800-2000

St. Station No.: 47	Tow No.: 12
Date: 26 April 2002 - 27 April 2002 (Local)	
Filename (raw): MOC12.Raw	Filename (processed): MOC12.PRO

27 April
9mt

Net Information

Net Size: 1-m ²	Net Condition: Good
Net Mesh: 335µm	no filter

Start

End

Location (Lat/Lon): 067 14.300 074 31.626	Location (Lat/Lon): 67 1207, 74 20.55
Time (Local) 2133	Time (GMT) 0133
MOCNESS Battery Voltage: 20.0V	MOCNESS Battery Voltage: 19.7

Environmental Parameters

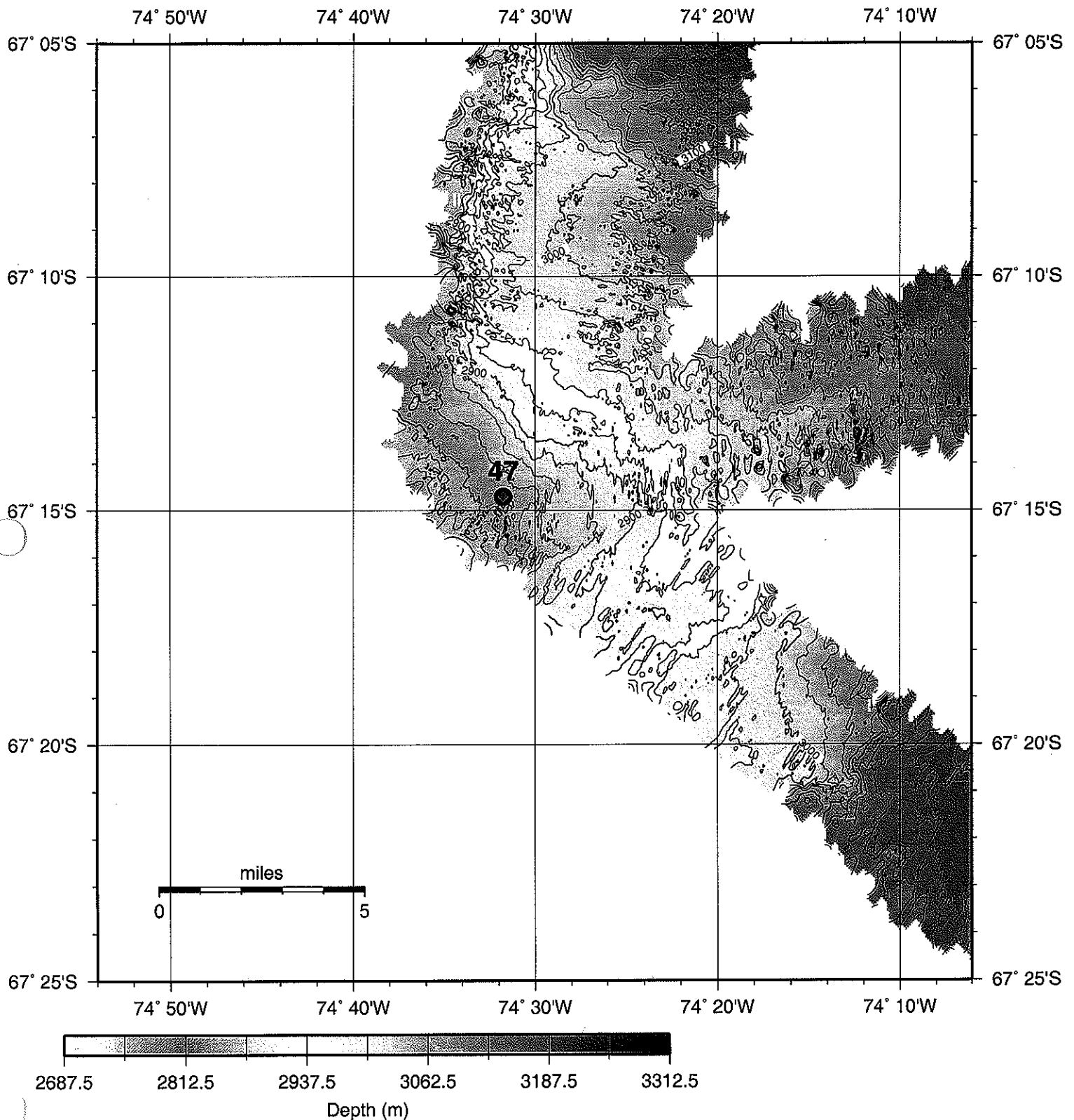
Wind (Speed/Direction): 10 - 13 Kts	Sea State: mod swell + chop
Water Depth (m): 2850 m	Light and Clouds: Night + cloudy
Air Temperature: -2.4C	SST: -0.712C sal = 33.685 psu

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-1000	0	0133	994	02:41:18	2625	NO NR
1	1000-800	994	02:41:18	793	03:04:27	1169.4	NO NR
2	800-600	793	03:04:27	600	03:20:39	821.3	NO NR
3	600-400	595	03:20:39	400	03:39:31	998.7	NO NR
4	400-200	400	03:39:31	197	03:58:55	991.6	NO NR
5	200-100	197	03:58:55	94	0412	689	NO NR
6	100-50	94	0412	46	0419	384	NO NR
7	50-25	46	0419	25	0425	265.3	NO NR
8	25-0	25	0425	6	0431	300	NR!!!

(1) Scattering layer on Suroad between 200 + 300 m only on 38KHz
Stow on @ surface rpm retrieval

NB Palmer SeaBeam Data - GLOBEC Station 47



- GLOBEC Station Includes data from 2001-2002
 - GLOBEC Mooring Contour Interval=25m, Dark=100m
 - ◆ Mocness Tow Grid Cell Size=80m X 80m (432X465)
- Minimum Speed=1.0 knots
 Clip dimension=5 cells; Grid Mode=1
 Ping Averaging = 1
 Grid Created on 04/26/02/17:10:03/GMT

MOCNESS - [Data Acquisition and Control System]

Acquisition Setup Hardware Setup Runtime Options Plot Setup Capture Screen About

Environmental Parameters

Net Operation

Net - Ship Position

Program Settings

Time 04:31:26
 Pressure 115 m
 Temp -1.07 C
 Salinity 33.72 o/oo
 Density 27.121
 Oxygen
 Fluoresc.
 LightXmis

Net_Num 9
 OpenTime 02 min
 Vol_Filtered 10.7 m3
 Angle 88 deg
 Flow_Counts 2
 Hor_Vel 1.1 kts
 Vert_Vel 1.2 m/min
 Battery 10.7 V

Latitude 67S 11.207
 Longitude 74W 20.55
 Net_Dist 9.1 m
 Total_Dist 9986.0 m

Baud Rate 2400
 Sample Rate 4.0 sec
 Printer Off

Processed File Name C:\MOCNESS\MOCDATA\NBP0202\MOC12.PRO
 Raw File Name C:\MOCNESS\MOCDATA\NBP0202\MOC12.raw
 Name ##MN-23 00 33 1803 02340 0158 874332 311539 197M-I
 \$GPGLL,6711.2073,S,07420.5567,W,043026.00,

Step STBD Net

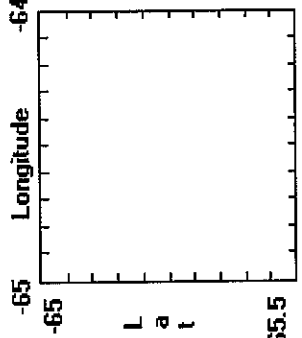
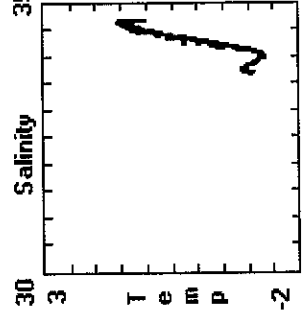
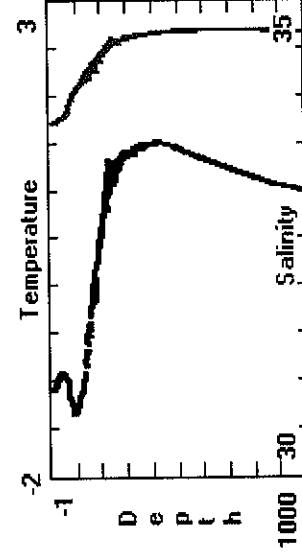
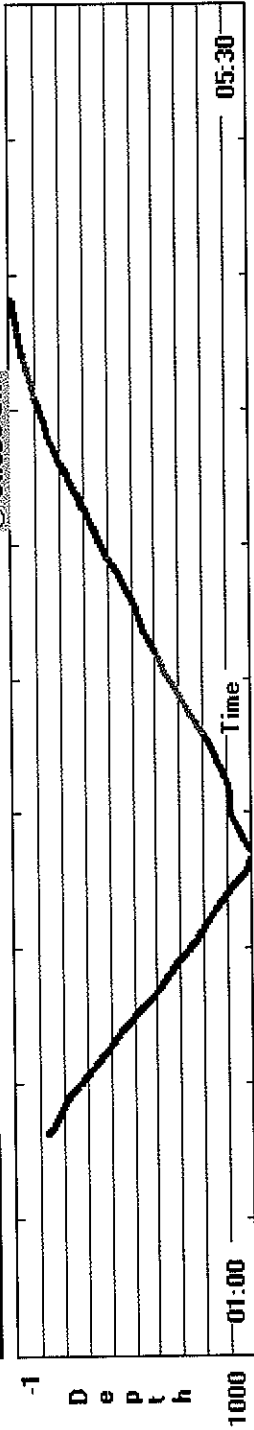
Step 3

Increment Net#

☒ Strobe On
☐ Strobe Off

Pause Acqui

End Acqui



MOCNESS TOW #: 12

Date: 4/27/02

Region: Offshore at end of Transit 7

People Processing Sample: Carin + Julian

NET DEPTH

Taxonomic Composition

0	0-1000	copepods, myctophids (1 large), medusa medusa near end in formalin in separate jar
1	1000-800	chaetognaths, small fish, euphausiids (small & 1 big) overall low abundance
2	800-600	copepods, chaetognaths - overall low abundance
3	600-400	myctophid (1), copepods, fish
4	400-200	copepods, couple small euphs, chaetognaths very low ab.
5	200-100	copepods, small fish 2 myctophids low ab.
6	100-50	copepods, phytoplankton medium abundance
7	50-25	phytoplankton, copepods
8	25-0	phytoplankton

MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 50	Tow No.: 13
Date: 4-27-02	
Filename (raw): MOC13.12u1	Filename (processed): moc13.pro

Net Information

Net Size: 7 m ²	Net Condition: #9 slight rip - 10-50mm net
Net Mesh: 333	

Start

End

Location (Lat/Lon): 67° 53.93' N 72° 27.61' W	Location (Lat/Lon): 67° 51.19' N 72° 25.75' W
Time (Local) 18:46	Time (GMT) 22:46
Time (Local) 20:26	Time (GMT) 00:26
MOCNESS Battery Voltage: 19.9	MOCNESS Battery Voltage: 19.7

Environmental Parameters

Wind (Speed/Direction): 18 kt	Sea State: Med. Swell
Water Depth (m): 386 m	Light and Clouds: DARK, CLOUDY
Air Temperature: -0.3	SST: -0.3

Net Tow Information

STROBE FLASHED ONCE UNDERWATER @ DEPLOYMENT, ...

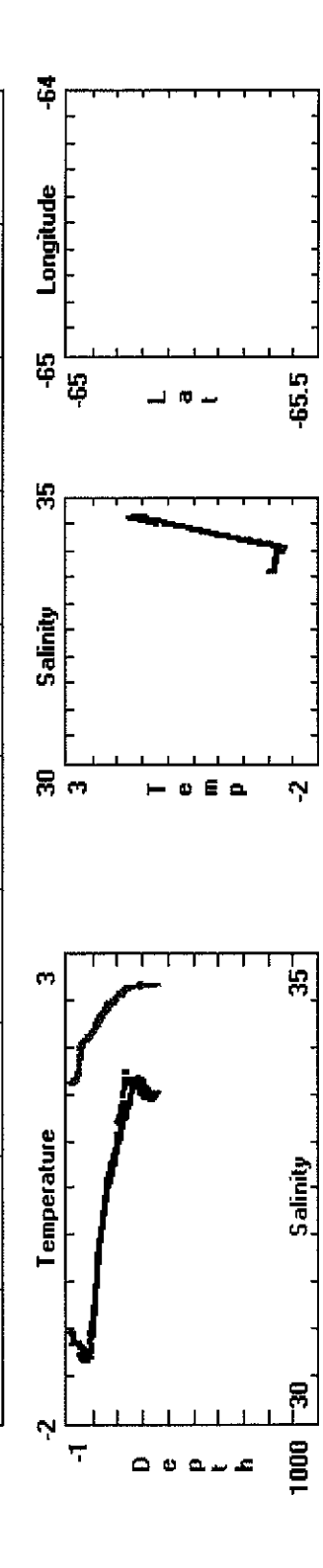
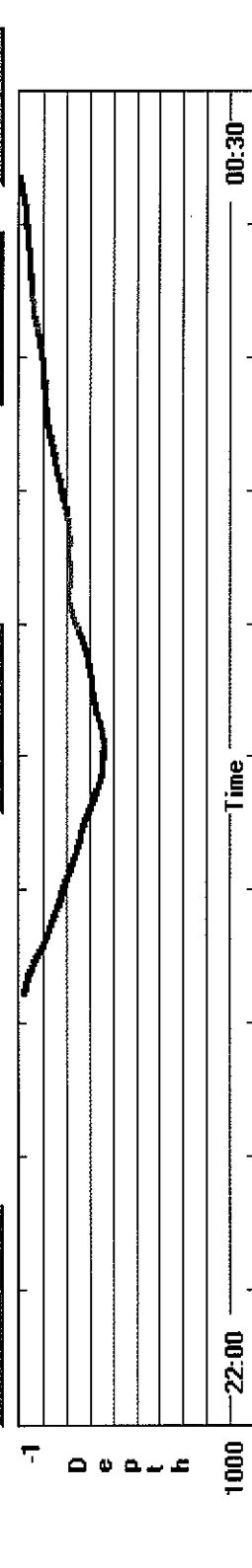
Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-300	0	22:48	360	23:16	1292 m ³	20 m/min down Ship U = 2.3 kt/25°
1	360-250	360	23:16	250	23:29	631	10 m/min. ↑
2	250-200	250	23:29	200	23:42	612	10-5 m/min
3	200-150	200	23:42	150	23:48	287	10 m/min
4	150-100	150	23:48	100	23:57	444	5/
5	100-75	100	23:57	75	00:03	303	10/
6	75-50	75	00:03	50	00:07	214	
7	50-25	50	00:07	25	00:15	431	
8	25-0	25	00:15	0	00:15	227	

NO NET RESPONSE

UW.

STROBE NOT FLASHING
UW RETRIEVAL

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	00:20:36	Net_Num	9	Latitude	67S 51.187	Reset	
Pressure	1.1 m	OpenTime	0.4 min	Longitude	72W 25.75	Baud Rate	2400
Temp	-1.01 C	Vol_Filtered	16.6 m3	Net_Dist	22.3 m	Sample Rate	4.0 sec
Salinity	33.64 o/oo	Angle	36 deg	Total_Dist	5628.4 m	Printer	Off
Density	27.05	Flow_Counts	6	Processed File Name	C:\MOCNESS\MOCDATA\NBPO202\MOC13.PRO		
Oxygen		Hor_Vel	2.3 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBPO202\MOC13.raw		
Fluoresc.		Vert_Vel	0.6 m/min	Acquisition Ended. trys = 0			
LightXmis		Battery	19.7 V				



MOCNESS TOW #: 13

Date: 4-27-02

Region: Leg # 7, on shelf

People Processing Sample: Phil + ~~John~~ Gaelin

NET DEPTH

Taxonomic Composition

0	0-360m	AMPHIPODS, COPEES, KRILL furcill
1	360-250	COPEES, KRILL, ① FISH, OSTRACODS
2	250-200	KRILL, FURCILLAE, COPEES,
3	200-150	KRILL, FURCILLAE, COPEES
4	150-100	KRILL FURCILLAE + COPEES
5	100-75	KRILL, COPEES, + FURCILLAE
6	75-50	COPEPODS, AMPHIPODS
7	50-25	diatoms, copepods
8	25-0	amphipods!, copepods

MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 54	Tow No.: 14
Date: 28 April 2002 local 29 April 2002 gmt	
Filename (raw): Moc14. raw	Filename (processed): Moc14. pro

Net Information

Net Size: 1 m ²	Net Condition: no fl as tr
Net Mesh: 333	

Start

End

Location (Lat/Lon): 068 31.592 070 00.331		Location (Lat/Lon): 68 25.8, 703.5	
Time (Local) 2120	Time (GMT) 0120	Time (Local) 0018	Time (GMT) 0418
MOCNESS Battery Voltage: 19.9 V		MOCNESS Battery Voltage: 19.6	

Environmental Parameters

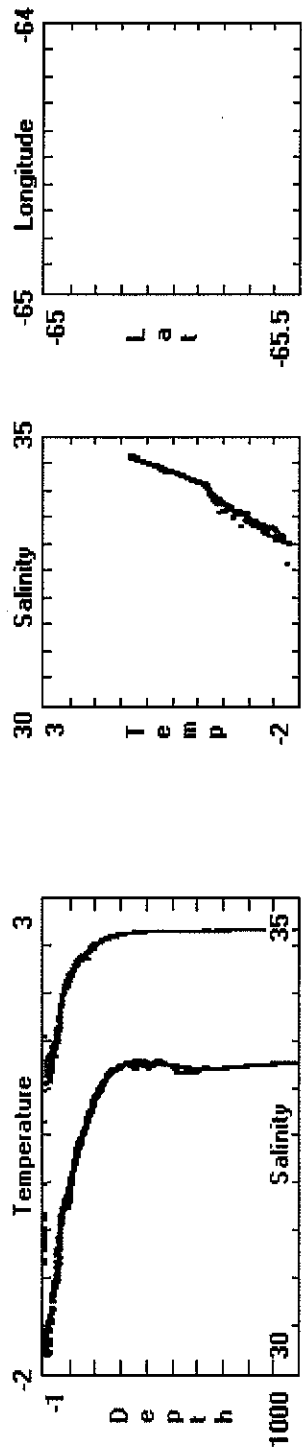
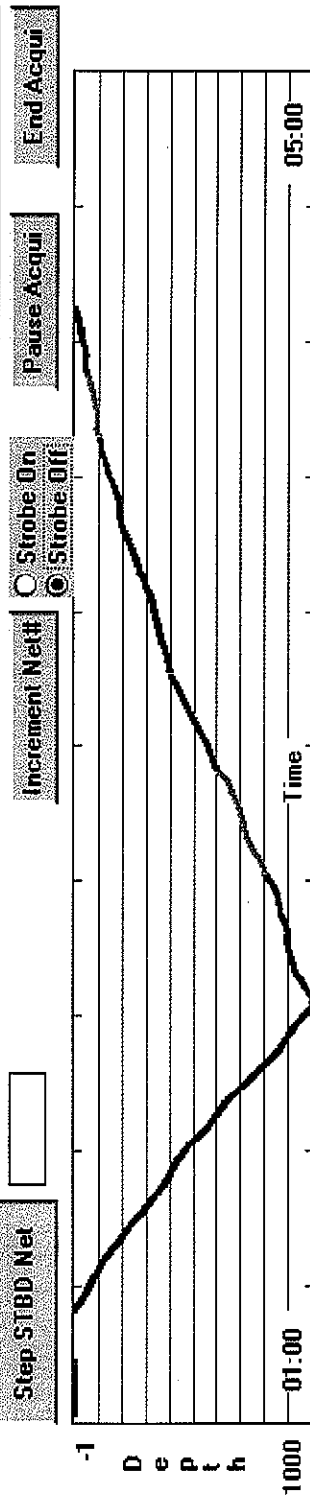
Wind (Speed/Direction): 17-20 kn 038	Sea State: Med. Swell
Water Depth (m): 1209	Light and Clouds: Night, Cloudy, Snow
Air Temperature: -0.2 °C	SST: -0.4 °C

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-1000	0	01:20:04	999	02:14:56	1789	NO NR
1	1000-800	998	02:14:56	798	02:37:56	1080.2	NO NR
2	800-600	798	02:37:56	598	02:56:25	885.7	NO NR
3	600-400	598	02:56:25	402	03:13:37	847.2	NO NR
4	400-200	398	03:13:37	201.7	03:39:10	1311.7	NO NR
5	200-100	200	03:39:10	95.7	03:55:34	769.5	NO NR
6	100-50	95.7	03:55:34	48	04:06	518	NO NR
7	50-25	48	04:06	23	04:12	300	NO NR
8	25-0	23	04:12	0	04:18	265	

- Scattered patches t/o water column on Simrad
 during 25-50m interval, ~~not~~ hauled up black in wire
 stroke on @ surface after tow

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	04:18:15	Net_Num	9	Latitude	68S 25.771°	Reset	
Pressure	10.7 m	OpenTime	0.2 min	Longitude	70W 3.514	Baud Rate	2400
Temp	-1.69 C	Vol_Filtered	12.0 m3	Net_Dist	12.3 m	Sample Rate	4.0 sec
Salinity	33.14 o/oo	Angle	50 deg	Total_Dist	11154.0 m	Printer	Off
Density	26.664	Flow_Counts	4	Processed File Name	C:\MOCNESS\MOCDATA\INBP0202\MOC14.PRO		
Oxygen		Hor_Vel	2.6 kts	Raw File Name	C:\MOCNESS\MOCDATA\INBP0202\MOC14.raw		
Fluoresc.		Vert_Vel	0.6 m/min				
LightXmis		Battery	100%				
				##MN*14 00 56 1532 02320 0199 886718 316293 196II:1			
				\$GPGLL,6825.7710,S,07003.5147,W,041700.00,			



MOCNESS TOW #: 14

Date: 4/28/02

Region: Montreal M Bay

People Processing Sample: Gaelin, Carin, Renee, & Julia

NET DEPTH

Taxonomic Composition

0	0-1000	2 mysidaphids, amphipods, copepods
1	1000-800	many small medusa (5cm) copepods, a few cepus
2	800-600	Chaetognaths, amphipods, copepods
3	600-400	amphipods, copepods, a few medusae (white w/ yellow eyes) chaetognath
4	400-200	cteno, large amphipod, ostracods tons of copepods
5	200-100	big pink amphipod, ostracod amphipods, copepods ctenophore, small numerous furcilia
6	100-50	many furcilia, couple of salps, few white amphipods w/ orange eyes (TONS OF TEEMING KRILL BABIES)
7	50-25	juvenile / adult krill!! about 1/4 of sieve full E. supaba, copepods (not numerous) some furcilia
8	25-0	big ctenophore, krill, furcilia

MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 57-58	Tow No.: 15
Date: 30 April 02 local	
Filename (raw): MOC15.raw	Filename (processed): MOC15-PRO

Net Information

Net Size: 1m ²	Net Condition: no float
Net Mesh: 333	

Start

End

Location (Lat/Lon): 68 55.18, 69 30.25	Location (Lat/Lon): 68 54.15 69 35.22
Time (Local) 1231	Time (GMT) 1631
Time (Local) 1335	Time (GMT) 1735
MOCNESS Battery Voltage: 19.8	MOCNESS Battery Voltage: 17.5

Environmental Parameters

Wind (Speed/Direction): 6.6k, 151°	Sea State: 1/2
Water Depth (m): ~496	Light and Clouds: cloudy & snow
Air Temperature: -1.8°C	SST: -1.8°C

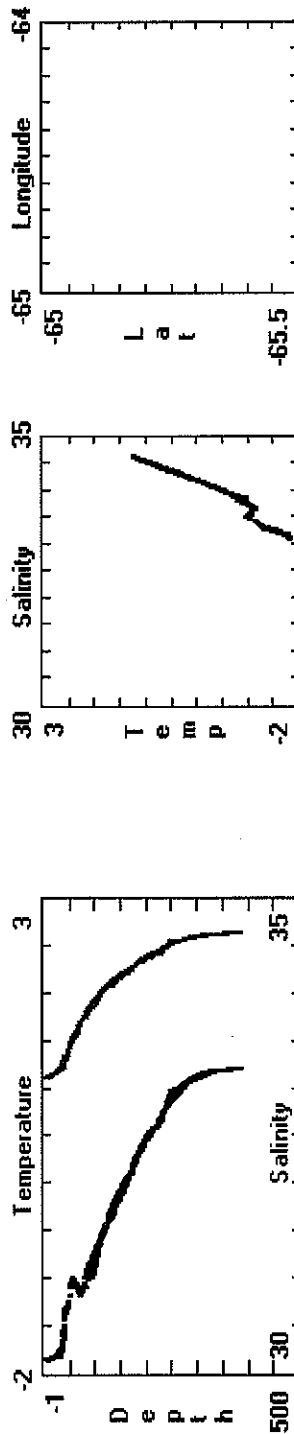
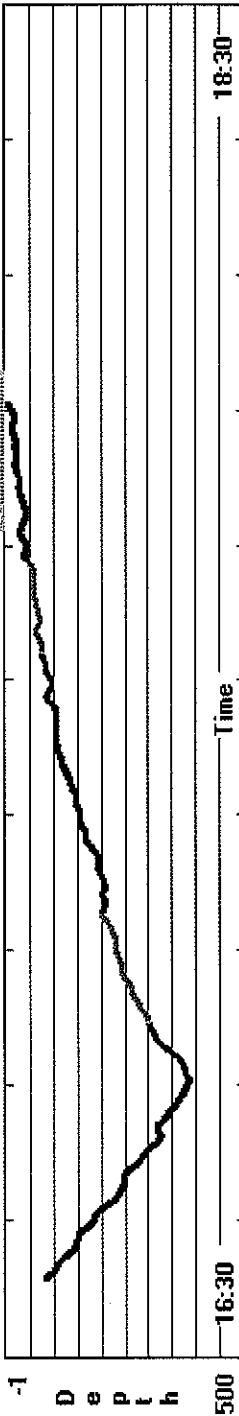
Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-378	0	1631	378	1654	619	NO NR
1	378-300	378	1654	299	1659	251	NO NR
2	300-200	299	1659	200	1709	458	NO NR, &
3	200-150	200/209	1709	147	1719	480	NO NR &
4	150-100	147	1719	87!!	1728	476	NO NR &
5	100-75	87/96	1728	74	1732	223	NO NR &
6	75-50	74	1732	45	1740	428	NO NR
7	50-25	45/52	1740	21	1748	398	NO NR
8	25-10	21	1748	13	1751	235	NO NR

- let out 474 m of wire, bottom is @ 515 m, net @ 2320 m
- turned after ship went 0.6-0.8 kt for a few minutes
- Net 3: ship speed slowed right after turning, net dropped to 209
- Net 4: sudden turn ship speed brought net up through 88-100-85 m interval really quickly, stopped which so net dropped into 90s
- Did not fair with B, ice in H2O NO STROBE @ RECOVER

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	17:54:42	Net_Num	8	Latitude	68S 54.153	Reset	
Pressure	07 m	OpenTime	60 min	Longitude	69W 35.21	Baud Rate	2400
Temp	-1.84 C	Vol_Filtered	250.5 m3	Net_Dist	292.4 m	Sample Rate	4.0 sec
Salinity	33.12 o/oo	Angle	0 deg	Total_Dist	4717.1 m	Printer	Off
Density	26.655	Flow_Counts	49	Processed File Name	C:\MOCNESS\MOCDATA\NBPO202\MOC15.PRO		
Oxygen		Hor_Vel	0.6 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBPO202\MOC15.raw		
Fluoresc.		Vert_Vel	18.2 m/min				
LightXmis		Battery	10.6 V				
				##MN-09 00 00 0689 02330 0055 889697 316972 196H-I			
				\$GPGLL,6854.1539,S,06935.2192,W,175318.00,			

Step 3 Step STBD Net Increment Net# Strobe On Strobe Off Pause Acqui End Acqui



NBP0202

MOCNESS TOW #: 15

Date: 4/30/02

Region: George VI - mouth of sand

People Processing Sample: (PA), Gaelin, Julian

NET DEPTH

Taxonomic Composition

0	0-378	KRILL, Ctenophores, Jellyfish, Copepods
1	378-300	Copepods
2	300-200	Ctenophores, Krill, Copepods, Salp
3	200-150	Krill, Copepods, Ctenos, amphipods
4	150-100	Krill, Ostracods, Copepods, amphipods
5	100-75	Ctenophores, KRILL
6	75-50	Ctenos, krill
7	50-25	Ctenos, krill, copepods
8	25-0	Copepods, krill (1 fish larva)

MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 62	Tow No.: 16
Date: 01 May 02 Local 02 May 02 GMT	
Filename (raw): MOC16.raw	Filename (processed): MOC16.pro

Net Information

Net Size: 1 m ²	Net Condition: good
Net Mesh: 333	

Start

End

Location (Lat/Lon): 068 24.229 072 18.239	Location (Lat/Lon): 68 25.951 72 10.35
Time (Local) 2200	Time (GMT) 0200
MOCNESS Battery Voltage: 19.7 V	MOCNESS Battery Voltage: 19.4

Environmental Parameters

Wind (Speed/Direction): 20-23 080	Sea State: Mod Swell
Water Depth (m): 440	Light and Clouds: Night, Light Mist/snow
Air Temperature: -1.7°C	SST:

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-400	0	0205	401.9	024059	1825.4	NO NR
1	400-350	399	024059	351.8	024725	309.1	NO NR
2	350-200	350	024725	201.8	030508	902.1	NO NR
3	200-150	200	030548	152.2	031110	314.0	NO NR
4	150-100	150	031110	102	032000	460.8	NO NR
5	100-75	100	032000	76.6	032729	400.6	NO NR
6	75-50	75	032729	51.1	033435	386.3	NO NR
7	50-25	51.1	033435	26.0	034232	(A2A) 2	NO NR
8	25-0	26.0	034232		034926	377.3	

problem w/ cable going to port, fixed & continuing down

MOCNESS TOW #: 16

Date: 5-1-02

Region: STA 62

People Processing Sample: Gaelin

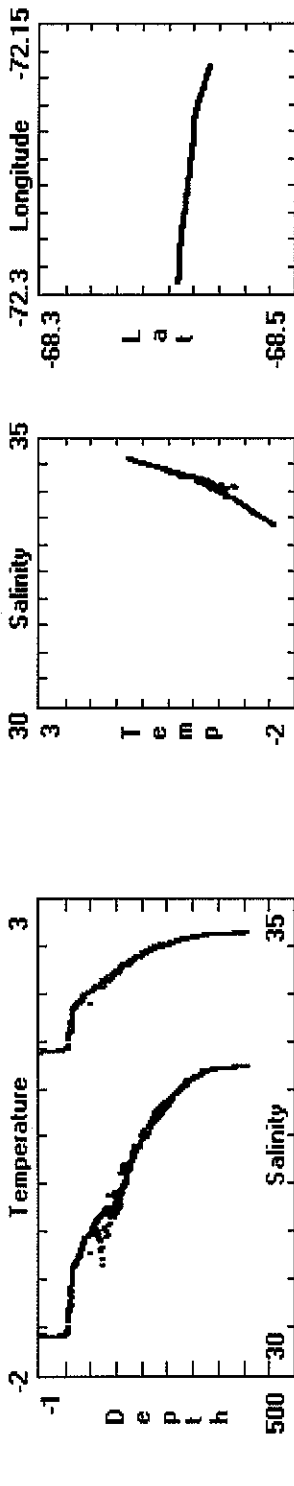
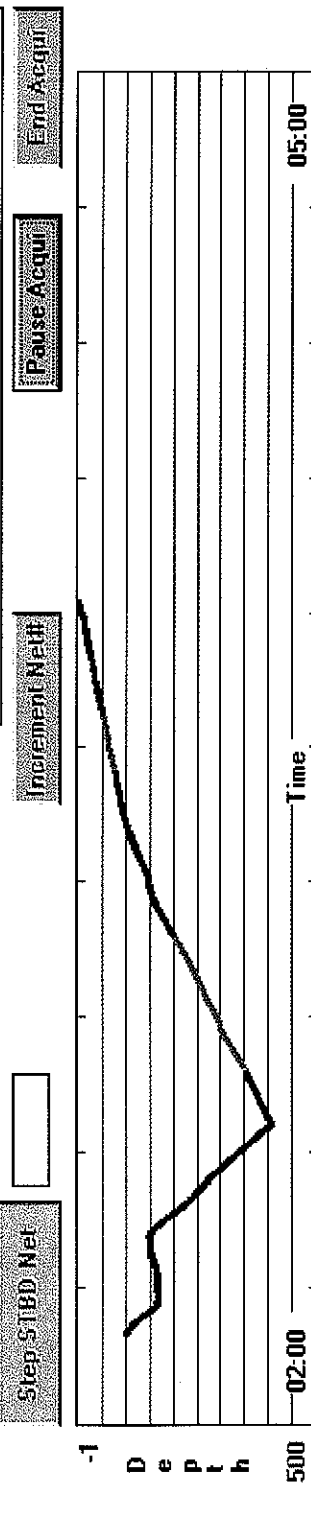
NET DEPTH

Taxonomic Composition

0	0-400	krill, cops, amphipods
1	400-350	copepods, jelly, krill
2	350-200	Copepods, krill (babies), ostracods ctenoids
3	200-150	Copepods & krill babies
4	100-150	krill & cops
5	75-100	Cops & krill
6	50-75	may have spilled a bit Cops, amphipods
7	25-50	krill, fish, cops
8	0-25	krill, amphipods, fish

Environmental Parameters Net Operation Net - Ship Position Program Settings

Time	03:49:50	Net_Num	9	Latitude	69S 25.951	Reset
Pressure	0.4 m	OpenTime	0.5 min	Longitude	72W 10.35	Baud Rate
Temp	-1.57 C	Vol_Filtered	200 mV	Net_Dist	30.6 m	Sample Rate
Salinity	33.4 o/oo	Angle	51 deg	Total_Dist	6512.5 m	Printer
Density	26.871	Flow_Counts	8	Processed File Name	C:\MOCNESS\MOCDATA\NBP0202\MOC16.PRO	
Oxygen		Hor_Vel	2.3 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBP0202\MOC16.raw	
Fluoresc.		Vert_Vel	0.4 m/min	Acquisition Ended. tsys = 0		
LightXmis		Battery	100%			



MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 71	Tow No.: 17
Date: 5-3-02 local 5-4-02 GMT	
Filename (raw): MOC17.raw	Filename (processed): MOC17.PR6

Net Information

Net Size: 1m ²	Net Condition: good
Net Mesh: 333	

Start

End

Location (Lat/Lon): 068 06.260 074 49.105		Location (Lat/Lon): 068 09.072 074 58.654	
Time (Local) 2130	Time (GMT) 0130	Time (Local) 2349	Time (GMT) 0349
MOCNESS Battery Voltage: 19.6 V		MOCNESS Battery Voltage: 19.4 V	

Environmental Parameters

Wind (Speed/Direction): 18-23 200	Sea State: Moderate to Choppy
Water Depth (m): 443	Light and Clouds: Night
Air Temperature: -6.4 °C	SST: -1.6 °C

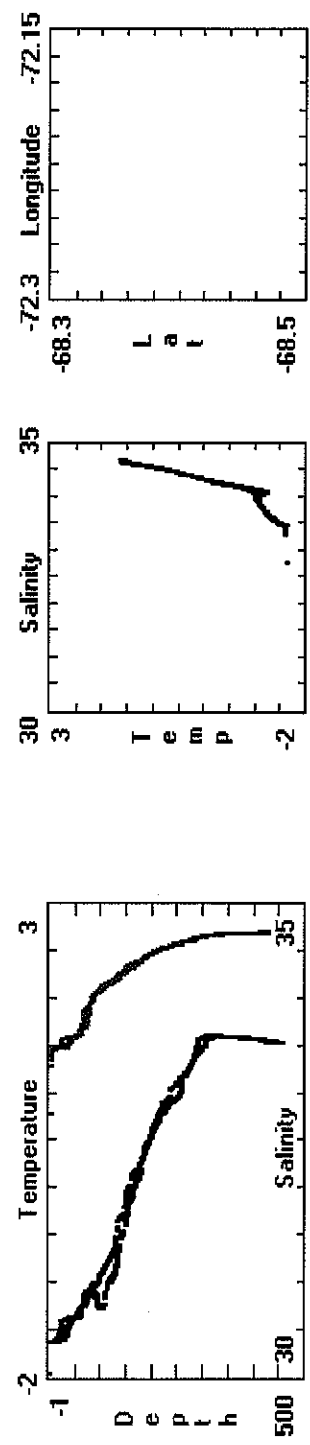
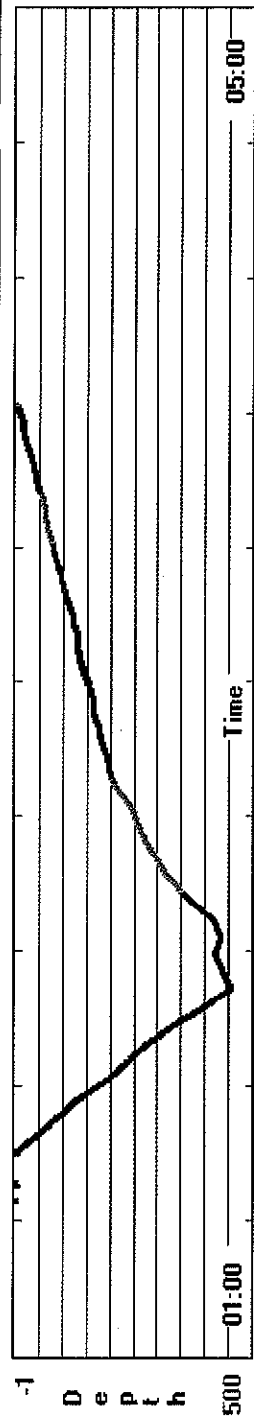
Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-450	0	0130	450.4	020646	1243.1	NO NR
1	450-350	450	020646	351.3	0223	797.2	NO NR
2	350-200	350	0223	201.2	024330	1111.4	NO NR
3	200-150	200	0243	151.5	030033	956.3	NO NR
4	150-100	150	0300	101.8	031645	868.9	NO NR
5	100-75	101	0316	76.4	032515	464.3	NO NR
6	75-50	75	0325	51.7	033400	474.4	NO NR
7	50-25	50	0334	26	034146	398.2	NO NR
8	25-0	25	0341	0	0349		

Environmental Parameters Net Operation Net - Ship Position Program Settings

Time	03:49:44	Net_Num	10	Latitude	68S 9.1491°	Reset
Pressure	0.1 m	OpenTime	0.2 min	Longitude	74W 58.64	Baud Rate
Temp	-1.62 C	Vol_Filtered	14.3 m3	Net_Dist	13.4 m	Sample Rate
Salinity	33.47 o/oo	Angle	13 deg	Total_Dist	8700.4 m	Printer
Density	26.93	Flow_Counts	3	Processed File Name	C:\MOCNESS\MOCDATA\NBP0202\MDC17.PRO	
Oxygen		Hor_Vel	2.0 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBP0202\MDC17.raw	
Fluoresc.		Vert_Vel	1.0 m/min	Acquisition Ended. tsys = 0		
LightXmis		Battery	19.4 V			

Step 5 TSD Net Increment Net# Pause Acqui End Acqui



MOCNESS TOW #: 17

Date: 5-3-02

Region: STA 71

People Processing Sample: Gaelin & Amy

NET DEPTH

Taxonomic Composition

0	0-450	Copepods, amphipods
1	450-350	Krill, Chaetognaths
2	350-200	Fish-mycetophids, Krill 4 fish removed - Julian
3	200-150	Krill, Copepods
4	150-100	fish larvae, tiny amphipod
5	100-75	fish, cop, krill
6	75-50	Krill, copepods, fish larvae
7	50-25	Copepods
8	25-0	amphipods, krill, cops

MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 73	Tow No.: 18
Date: 5-4-02	
Filename (raw): Moc18.raw	Filename (processed): Moc18.pro

Net Information

Net Size: 31 m²	Net Condition: good
Net Mesh: 333	

Start

End

Location (Lat/Lon): 068 27.492 073 40.658		Location (Lat/Lon): 68 29.58 73 52H	
Time (Local) 1000	Time (GMT) 1400	Time (Local) 1215	Time (GMT) 1615
MOCNESS Battery Voltage: 19.4 ✓		MOCNESS Battery Voltage: 19.3	

Environmental Parameters

Wind (Speed/Direction): 19-21 207	Sea State: Moderate
Water Depth (m): 535 m	Light and Clouds: Cloudy + 75+ light
Air Temperature: -5.4 °C	SST: -1.7 °C

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-525	0	1400	527	14:44:01	1624.6	NO NR
1	525-350	525	1444	351.6	15:06:54	1174.1	NO NR
2	350-250	350	1506	251.4	15:19:41	674.2	NO NR
3	250-150	250	1519	151.7	15:33:14	745.5	NO NR
4	150-100	150	1533	101.8	15:46:07	709.0	NO NR
5	100-75	100	1546	76.4	15:54:48	469.0	NO NR
6	75-50	75	1554	49	1601	364	NO NR
7	50-25	49	1601	25	1609	443	NO NR
8	25-0	25	1609	0	1615	301	NO NR

Strobe on @ recovery

MOCNESS TOW #: 18

Date: 5/4/02

Region: Mid Shelf, Line 9

People Processing Sample: Carin, Gaelin, Amy

NET DEPTH

Taxonomic Composition

0	0-525	big jelly, copepods, chaetos
1	525-350	copepods, chaetos, krill babies, amphipods 1 big krill
2	350-250	copepods, chaetos, krill babies, amphipods
3	250-150	copepods, chaetos, krill babies (less than nets 1+2)
4	150-100	copepods, metridia
5	100-75	metridia, copepods
6	75-50	metridia, copepods
7	50-25	metridia, cops, - krill babies
8	25-0	krill babies, 3 fish, 1 orange amphipod

MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 76	Tow No.: 19
Date: 5/5/02	
Filename (raw):	Filename (processed):

Net Information

Net Size: 1 m	Net Condition: no flow tr
Net Mesh: 333	

Start

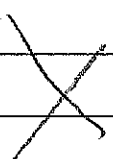
End

Location (Lat/Lon): 69 9.91 72 44.59		Location (Lat/Lon): 69 8.8, 72 41.15	
Time (Local) 1303	Time (GMT) 1703	Time (Local) 1352	Time (GMT) 1752
MOCNESS Battery Voltage: 19.5		MOCNESS Battery Voltage: 19.3	

Environmental Parameters

Wind (Speed/Direction): 13 kt, 210°	Sea State: 1c
Water Depth (m): ~150-180m	Light and Clouds: partly sunny
Air Temperature: -5.7°C	SST: -1.74

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-126	0	1703	126	1714	524.5	NO NR 402151
1	126-92	126	1714	92	1720	271	NO NR
2	92-75	92	1720	70?	1728	418	NO NR
3	75-50	70?	1728	51	1735	383	NO NR
4	50-25	51	1735	24	1743	378	NO NR
5	25-0	24	1743	0	1751	382	NO NR
6							
7							
8							

Net #4 dropped below 51m because of ship speed

Strobe intermittent & recovery

MOCNESS - [Data Acquisition and Control System]

Acquisition Setup Hardware Setup Runtime Options Plot Setup Capture Screen About

Environmental Parameters

Time 17:52:08
 Pressure 0.3 m
 Temp 50.0 C
 Salinity 0.06 o/oo
 Density -11.892
 Oxygen
 Fluoresc.
 LightXmis

Net Operation

Net_Num 6
 OpenTime 0.9 min
 Vol_Filtered 0.49 m3
 Angle 0 deg
 Flow_Counts 2
 Hor_Vel 0.0 kts
 Vert_Vel 0.4 m/min
 Battery 18.3V

Net - Ship Position

Latitude 69S 8.8341°
 Longitude 72W 41.15
 Net_Dist 55.4 m
 Total_Dist 3398.1 m

Baud Rate 2400
 Sample Rate 4.0 sec
 Printer Off

Program Settings

Processed File Name C:\MOCNESS\MOCDATA\NBP0202\MOC19.PRO
 Raw File Name C:\MOCNESS\MOCDATA\NBP0202\MOC19.raw
 Name
 ##MMN-06 00 00 0455 02321 8063 981575 841511 19311-I
 \$GPGLL,6908.8341,S,07241.1594,W,175012.00,

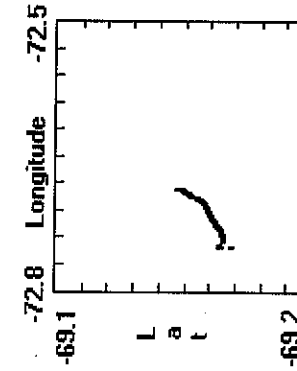
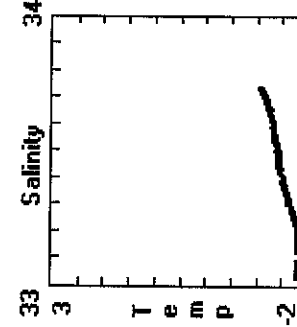
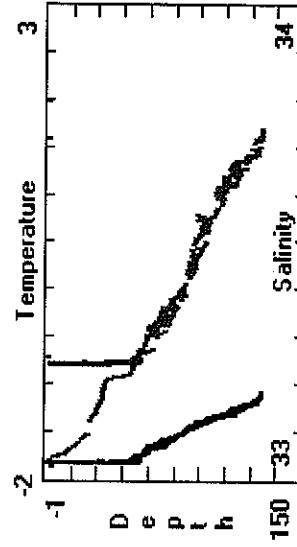
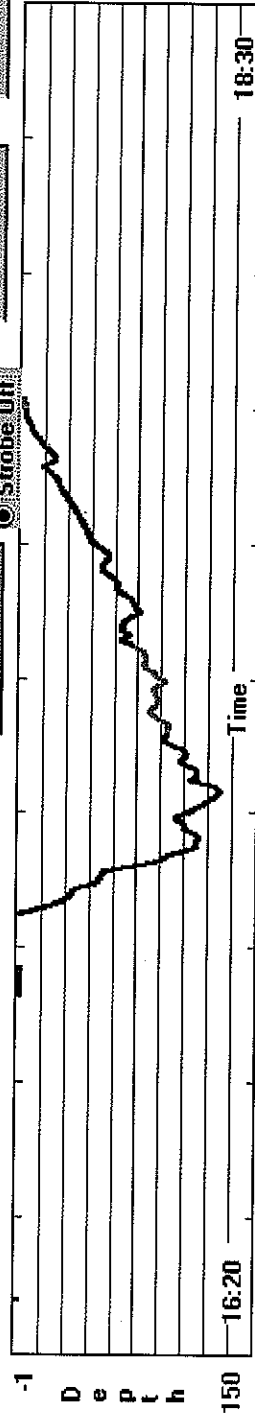
Step STBD Net

Increment Net#

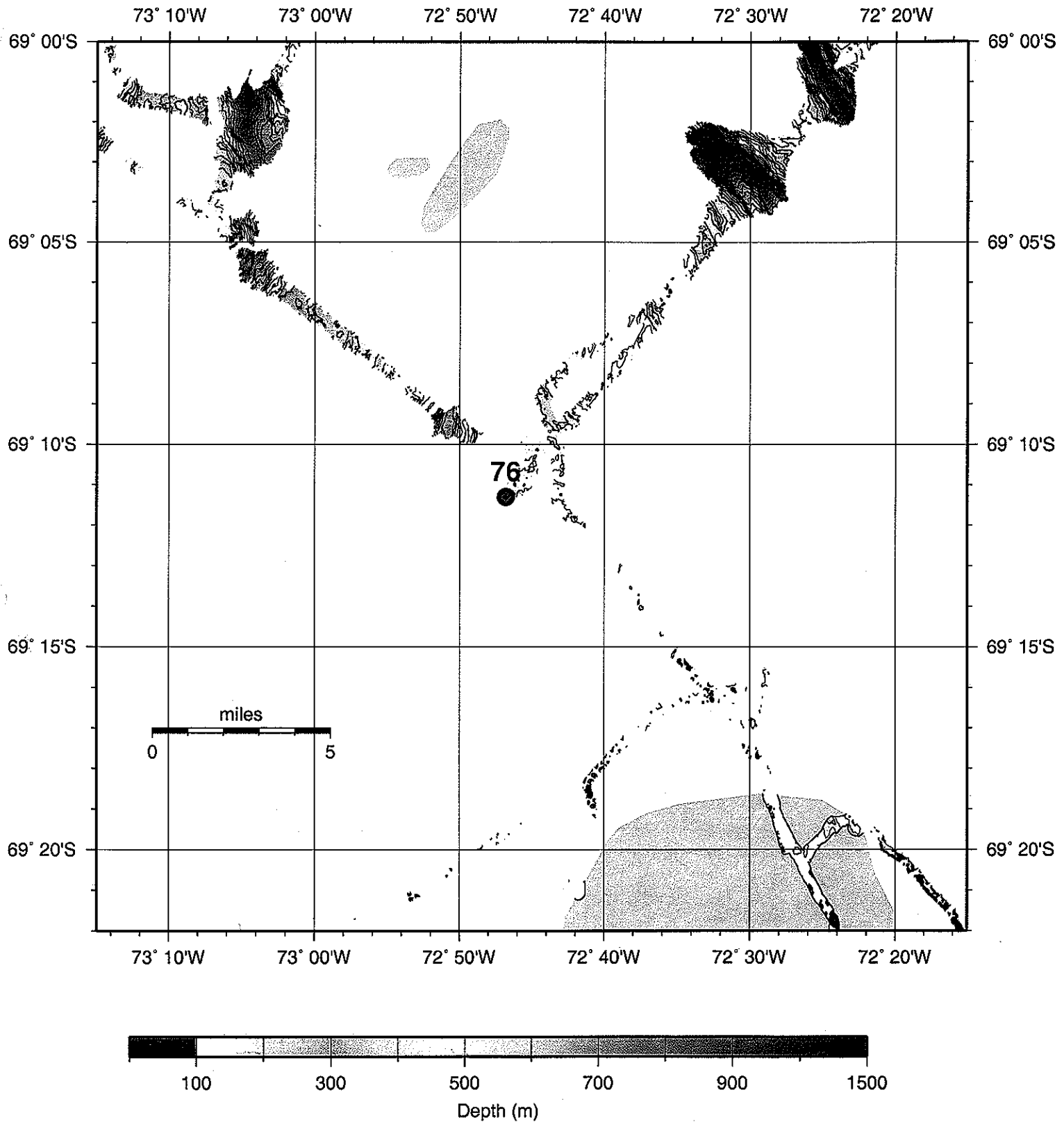
☐ Strobe On
☒ Strobe Off

Pause Acqui

End Acqui



NB Palmer SeaBeam Data - GLOBEC Station 76



- GLOBEC Station Includes data from 2001-2002
- GLOBEC Mooring Contour Interval=50m, Dark=200m
- ◆ Mocness Tow Grid Cell Size=15m X 15m (2646X2727)
- Minimum Speed=1.0 knots
- Clip dimension=5 cells; Grid Mode=1
- Pings averaged = across track mode
- Grid Created on 05/04/02/20:59:26/GMT

MOCNESS TOW #: 19

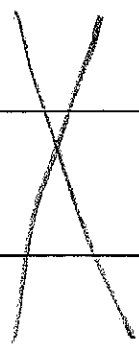
Date: 5/5/02

Region: Off of Alexander Island, Station #76

People Processing Sample:

NET DEPTH

Taxonomic Composition

0	0-126	② Ctenophores Rest of Krill ~ 100
1	126-100	1 Krill; Copepods? ① tablespoon fill!
2	100-75	① FISH ② large Chaetognaths few krill
3	75-50	① Amphipod - small
4	50-25	Krill, Furcillae, ① Amphipod
5	25-0	① Copepod, ① Krill, ① Amphipod
6		
7		
8		

MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 83	Tow No.: 20
Date: 5/7/02	
Filename (raw): MOC20.raw	Filename (processed): MOC20.pio

Net Information

Net Size: 1 m	Net Condition: no flots
Net Mesh: 333	

Start

End

Location (Lat/Lon): 69°0.307, 74°56.1	Location (Lat/Lon): 69°01.16, 75°01.60
Time (Local) 1246	Time (GMT) 1640
Time (Local) 1418	Time (GMT) 1818
MOCNESS Battery Voltage: 19.4	MOCNESS Battery Voltage: 19.3

Environmental Parameters

Wind (Speed/Direction): 22 kt, 235°	Sea State: flat + ice
Water Depth (m): 365	Light and Clouds: cloudy, daylight
Air Temperature: -3.0	SST: -1.8°C

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	6-329	0	1640	329	1700	1126	NO NR
1	329-250	329	1700	248	1707	336	NO NR, NO X
2	250-200	248	1707	199	1719	555	NO NR
3	200-150	199	1719	150	1732	650	NO NR, NO X
4	150-100	150	1732	100	1740	422	NO NR, NO X?
5	100-75	100	1740	75	1748	395	NO NR, NO X
6	75-50	75	1748	50	1759	542	NO NR
7	50-25	50	1759	25	1807	414	NO NR BUT L
8	25-0	25	1807	0	1817	487	NO NR BIG SIGNAL

Strobe appeared to be firing sporadically at launch w/ 'strobe off'
WENT BACK DOWN FROM ~52m TO 65 then UP AGAIN TO GET GOOD VOLUME ON #6.
5

MOCNESS TOW #: 20

Date: 5/8/02

Region: St. 83, mid shelf transect # 11

People Processing Sample: PA + Julian

NET DEPTH

Taxonomic Composition

0	0-329m	Copepods, ctanous, not much stuff
1	329-250	1 medusa, copepods, ctanous
2	250-200	Krill furcilia, Copepods
3	200-150	① Large chaetognath furcilia - lots
4	150-100	furcilia
5	100-75	① large Chaetognath furcilia metridia
6	75-50	Metridia, chaetognath - Most Metridia that we have ever seen
7	50-25	Very few copepods
8	25-0	Few juvenile krill, furcilia, copepods. - very light Bianchi

Environmental Parameters

Time 18:18:06
 Pressure 0.2 m
 Temp -1.84 C
 Salinity 33.4 o/oo
 Density 26.884
 Oxygen
 Fluoresc.
 LightXmis

Net Operation

Net_Num 9
 OpenTime 0.5 min
 Vol_Filtered 60.8 m/s
 Angle 46 deg
 Flow_Counts 13
 Hor_Vel 2.3 kts
 Vert_Vel 0.6 m/min
 Battery 19.2 V

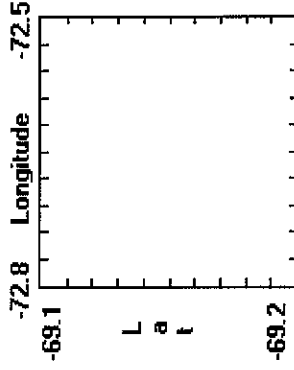
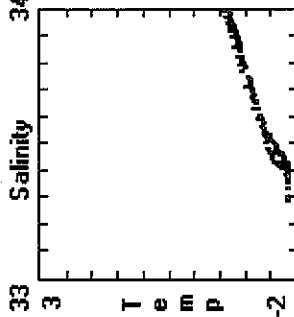
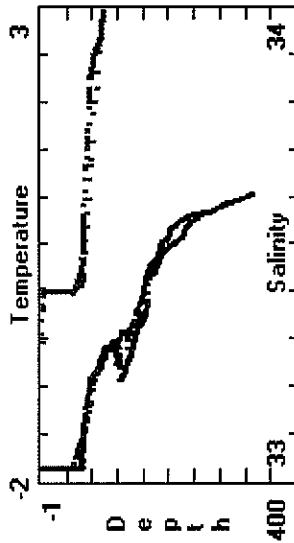
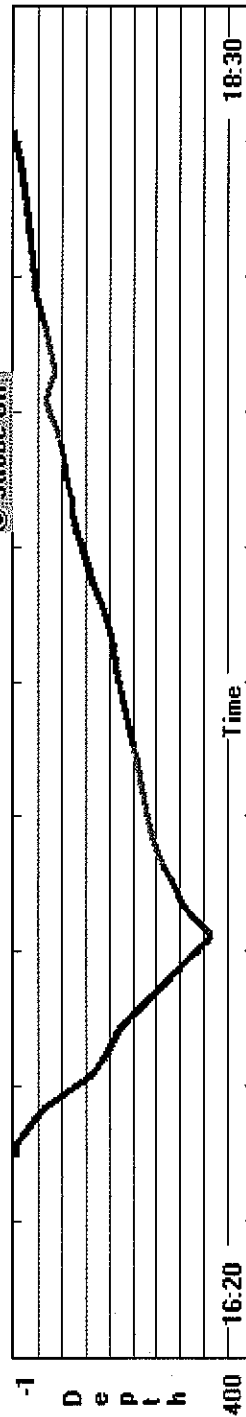
Net - Ship Position

Latitude 69S 1.1534'
 Longitude 75W 4.495
 Net_Dist 53.8 m
 Total_Dist 5950.6 m

Program Settings

Baud Rate 2400
 Sample Rate 4.0 sec
 Printer Off
 Processed File Name C:\MOCNESS\MOCDATA\NBP0202\MOC20.PRO
 Raw File Name C:\MOCNESS\MOCDATA\NBP0202\MOC20.raw
 ##MN-09 00 46 0942 02323 8155 889582 315897 192II-I
 \$GPGLL,6901.1534,S,07504.4956,W,181557.00,

Step STBD Net ☐ Increment Net# ☐ Strobe On ☒ Strobe Off ☐ Pause Acqui ☐ End Acqui



MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 89	Tow No.: 21
Date: 5/9/02	
Filename (raw): moc21.raw	Filename (processed): moc21.pro

Net Information

Net Size: 1 m	Net Condition: no fl, tr
Net Mesh: 333	Strobe frozen, not used

Start

End

Location (Lat/Lon): 68 48.43, 76 58.5		Location (Lat/Lon): 68 50.76 77 49.0	
Time (Local) 1237	Time (GMT) 1637	Time (Local) 1413	Time (GMT) 1813
MOCNESS Battery Voltage: 19.4		MOCNESS Battery Voltage: 19.2	

Environmental Parameters

Wind (Speed/Direction): 28 kt. 218	Sea State: ill (curd)
Water Depth (m): 417	Light and Clouds: sunny + clear
Air Temperature: -12. X	SST: -1.8

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-390	0	1637	390	1701	NA	NR ✓
1	390-300	390	1701	298	1709		NR ✓
2	300-200	298	1709	200	1723	709.8	NR ✓
3	200-150	200	1723	149	1735	655.7	NR ✓
4	150-100	149	1735	99	1742	392.7	NR ✓
5	100-75	99	1742	74.5	1753	607.3	NR ✓
6	75-50	74.5	1753	48	1802	476.3	NR ✓
7	50-25	48	1802	24	1808	384.1	NR ✓
8	25-10	24	1808	9.2	1811	293.5	NR ✓

MOCNESS TOW #: 21 @ STA. 89

Date: 5-9-02

Region: End of Transect 12, near shelf/slope

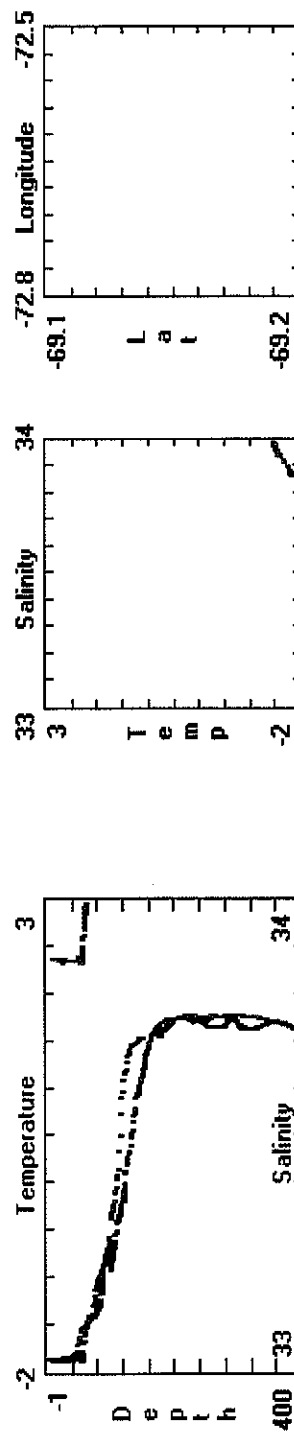
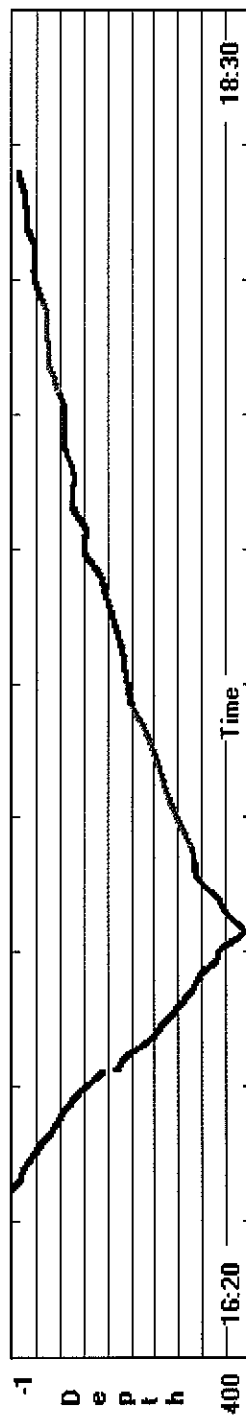
People Processing Sample: PA + JA

NET DEPTH

Taxonomic Composition

0	0-390	Mostly copepods. - very few!
1	390-300	~ Tablespoon copepods, 1 small ^{very} larva.
2	300-200	Copep, Larval krill; 1 sm. chaetognath.
3	200-150	Large copep Small chaet's gelatinous something...
4	150-100	copep chaet's Amphipods } - some Metridia all low #'s
5	100-75	Beautiful blue - <u>Metridia</u> Chaet's - small 1 large Amphipod
6	75-50	LOTS of copepods - lots of green 1 large ctenophore
7	50-25	Diatoms(?) - <u>metridia</u> 2 large ctenophores
8	25-0	Copepods, Diatoms, Juvenile Krill (few)

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	18:14:27	Net_Num	9	Latitude	68S 50.719	Reset	
Pressure	10.4 m	OpenTime	0.2 min	Longitude	77W 4.820	Baud Rate	2400
Temp	-1.87 C	Vol_Filtered	2.05 m/s	Net_Dist	23.8 m	Sample Rate	4.0 sec
Salinity	33.87 o/oo	Angle	30 deg	Total_Dist	6170.7 m	Printer	Off
Density	27.267	Flow_Counts	5	Processed File Name	C:\MDCNESS\MDCDATA\NBPO202\MDC21.PRO		
Oxygen		Hor_Vel	2.3 kts	Raw File Name	C:\MDCNESS\MDCDATA\NBPO202\MDC21.raw		
Fluoresc.		Vert_Vel	-0.2 m/min	##MN-14 00 39 1288 02422 0022 890376 314312 192II-I			
LightXmis		Battery	100%	\$GPGLL,6850.7198,S,07704.8202,W,181204.00,			
Step STBD Net		Increment Net#		Pause Acqui		End Acqui	



MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 92	Tow No.: 22
Date: 5/10/02	
Filename (raw):	Filename (processed):

Net Information

Net Size: 1m	Net Condition: no floor tr
Net Mesh: 333	

Start

End

Location (Lat/Lon): 69 31.988, 76 17.25		Location (Lat/Lon): 69 34.3, 76 19.3	
Time (Local) 1254	Time (GMT) 1654	Time (Local) 1415	Time (GMT) 1815
MOCNESS Battery Voltage: 19.1		MOCNESS Battery Voltage: 19.1	

Environmental Parameters

Wind (Speed/Direction): 17 kt, 200°	Sea State: ice covered
Water Depth (m): 403	Light and Clouds: clear sunny
Air Temperature: -12.2°C	SST: -1.7556

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-282	0	1654	282	1715	906	NO NR, station on
1	282-200	282	1715	195	1721	365	NO NR
2	200-150	195	1721	149	1732	558	NO NR
3	150-125	149	1732	126	1739	334	NO NR
4	125-100	126	1739	100	1748	419	NO NR
5	100-75	100	1748	74.6	1756	381	NO NR
6	75-50	74.6	1756	46	1803	443	NO NR
7	50-25	46	1803	25	1811	283	NO NR *
8	25-10	25	1811	0	1815	203	NO NR *

Pressure sensor frozen @ deployment

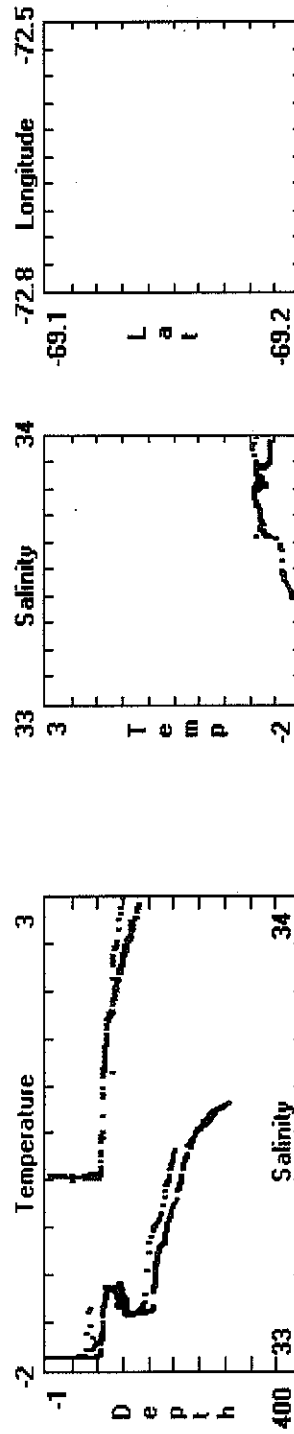
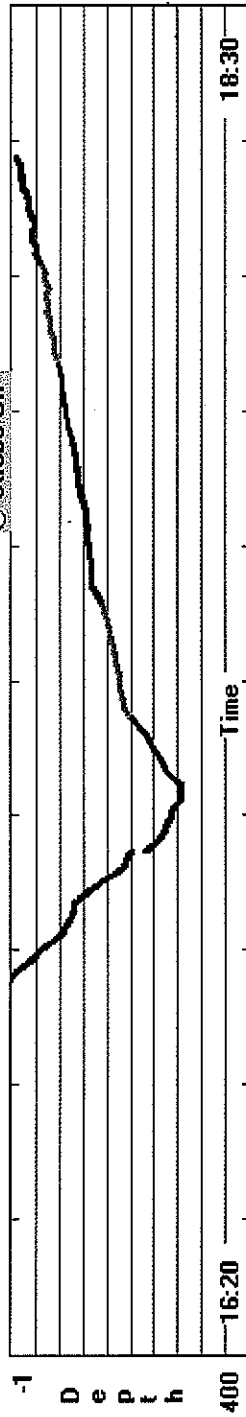
Salinity very low @ deployment / frozen?

Salinity too high, > 34, a trim correct? - perhaps scale wrong for 5‰ plot

Strong data dropout partway through tow

XX LAST 2 net bars hung up on net response. net 8 - 1/2 circumference
net 7. failed full 100% 1/2 area

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	18:15:36	Net_Num	9	Latitude	69S 34.308	Reset	
Pressure		OpenTime	10 min	Longitude	76W 19.33	Baud Rate	2400
Temp	-1.85 C	Vol_Filtered	120 mV	Net_Dist	23.8 m	Sample Rate	4.0 sec
Salinity	33.41 o/oo	Angle	95 deg	Total_Dist	5208.1 m	Printer	Off
Density	26.892	Flow_Counts	4	Processed File Name	C:\MOCNESS\MOCDATA\NBPD0202\MOC22.PRO		
Oxygen		Hor_Vel	1.4 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBPD0202\MOC22.raw		
Fluoresc.		Vert_Vel	5.7 m/min	###MN*01 00 33 0779 02372 8094 889926 315922 191IE-I			
LightXmis		Battery		\$GPGLL,6934.3089,S,07619.3393,W,181306.00,			



MOCNESS TOW #: 22

Date: 8/10/02

Region: off Alexander Island, southernmost station in grid (#92)

People Processing Sample:

NET DEPTH

Taxonomic Composition

0	0-282	krill, cheetognaths, metridia, amphipod (1)
1	282-200	—
2	200-150	copepods, metridia
3	150-125	copepods, metridia
4	125-100	copepods, metridia
5	100-75	cheetognaths, copepods, metridia
6	75-50	krill (babies & Amy), copepods, metridia.
7	50-25	copepods & metridia
8	25-0	copepods, metridia & fish

MOCNESS Tow Sheet (NBP02-02)

St. Station No.: 28	Tow No.: 23
Date: MAY 13, 02	
Filename (raw): MOC23.raw	Filename (processed): MOC 23

Net Information

Net Size: 1 m ²	Net Condition: good
Net Mesh: 333	

Start

End

Location (Lat/Lon): 067 20.617/71.13045		Location (Lat/Lon): 067 22.173 71 24.23	
Time (Local) 07:41	Time (GMT) 11:41	Time (Local) 0924	Time (GMT) 1324
MOCNESS Battery Voltage: 19.4		MOCNESS Battery Voltage: 19.2 V	

Environmental Parameters

Wind (Speed/Direction): 23kt @ 240	Sea State: CONSOLIDATED PANCAKE
Water Depth (m): 467 m	Light and Clouds: DARK
Air Temperature: -6.7	SST: -1.5°C

Net Tow Information

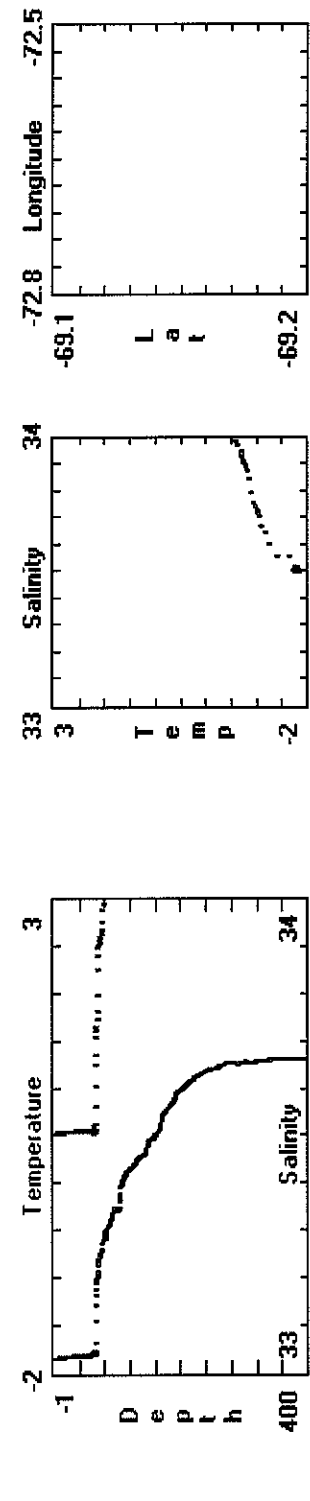
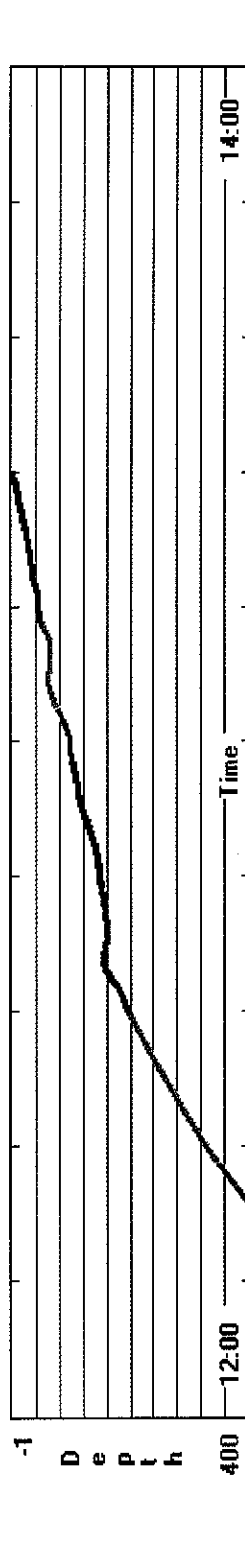
Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-447	0	11:41	447	12:16	~1,000 +	missed vol. filtered.
1	447-350	447	12:16	350	12:22	400	NO NR
2	350-200	350	12:22	201	12:36	819.8	NO NR
3	200-150	200	12:36	151	12:47	670.6	NO NR
4	150-100	150	12:47	101	12:58	659.2	NO NR
5	100-75	100	12:58	76	13:03	276.7	NO NR
6	75-50	75	13:03	51	13:10	452.6	NO NR
7	50-25	50	13:10	26	13:17	433.4	NO NR
8	25-0	25	13:17	0	13:24	390.4	NO NR

net 6 ship speed slowed so ↑ vol filtered significantly. vert veloc ↓

MOCNESS - [Data Acquisition and Control System]

Acquisition Setup Hardware Setup Runtime Options Plot Setup Capture Screen About

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	13:24:00	Net_Num	8	Latitude	67S 22.171	Reset	
Pressure	0.4 m	OpenTime	5.4 min	Longitude	71W 24.23	Baud Rate	2400
Temp	-1.83 C	Vol_Filtered	240.4 mV	Net_Dist	401.0 m	Sample Rate	4.0 sec
Salinity	33.51 o/oo	Angle	48 deg	Total_Dist	6671.4 m	Printer	Off
Density	26.968	Flow_Counts	72	Processed File Name	C:\MOCNESS\MOCDATA\NBP0202\MOC23.PRO		
Oxygen		Hor_Vel	2.3 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBP0202\MOC23.raw		
Fluoresc.		Vert_Vel	2.9 m/min	Acquisition Ended. tsys = 0			
LightXmis		Battery	19.2 V				



MOCNESS TOW #: 23 STA. 26

Date: 5.13.02

Region:

People Processing Sample: (PA), Gaelin

NET DEPTH

Taxonomic Composition

0	0-450	COPEPODS, CTENOPHORES, SALP, (AMPHIPODS)
1	450-350	COPEPODS
2	350-200	Krill, Copepods, Amphipods, Chaetognaths, furcilia
3	200-150	(Krill) Copepods, Siphonophores, furcilia
4	150-100	Copepods, Chaetognaths
5	100-75	Copepods, Krill furcilia, Krill, ThySantopoda adults/juveniles
6	75-50	Copepods, furcilia
7	50-25	Copepods, (1) Clione, Diatoms, Furcilia
8	25-0	Furcilia, Diatoms, (2) FISH

08:11 - Shoaling occurring - krill patch showing
Just missed huge krill patch @ 100m!

MOCNESS Tow Sheet (NBP02-02)

St. Station No.: Crystal Sound	Tow No.: #04
Date: 5/15/02	
Filename (raw):	Filename (processed):

Net Information

Net Size: 1m	Net Condition: no fl or trans m.
Net Mesh: 333	Strobe installed

Start

End

Location (Lat/Lon): 66°31.29/67°38.50		Location (Lat/Lon): 66°30.932/67°43.882	
Time (Local) 04:25	Time (GMT) 08:25	Time (Local) 5:28	Time (GMT) 9:28
MOCNESS Battery Voltage: 19.3		MOCNESS Battery Voltage: 19.2	

Environmental Parameters

Wind (Speed/Direction): 12kt, 225	Sea State: calm w/ ice floes
Water Depth (m): 242m	Light and Clouds: dark
Air Temperature: -8.4	SST: -1.37

Net Tow Information

Ship Spd 2.0 kt

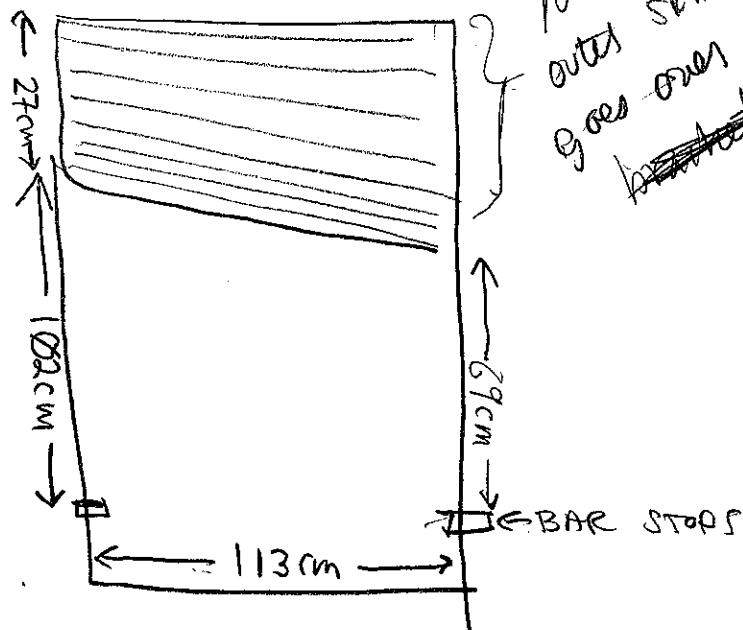
Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-200	0	08:25	200	8:37	647 m ³	N.W. RESPONSE
1	200-175	200	08:37	168	8:44	410	
2	175-150	168	08:44	152	8:52	503.7	BACK IN NEW PATCH!
3	150-125	152	08:52	125	8:59	495	
4	125-100	125	08:59	103	09:09	616	THICKER LAYER!
5	100-75	102	09:09	75	09:16	412	
6	75-50	75	09:16	50	09:20	243	
7	50-25	50	09:20	25	09:23	169	
8	25-0	25	09:23	0	09:27	199	STROBE NOT CONFIRMED

66°30.932
67°43.882

NOTE BARS not all the way down!

Volume is now less

See back



Nets hung up on
outer skirt where it
goes over net-bar preventer
~~brackets~~ flaps.

NBP0202 2002 broad-scale

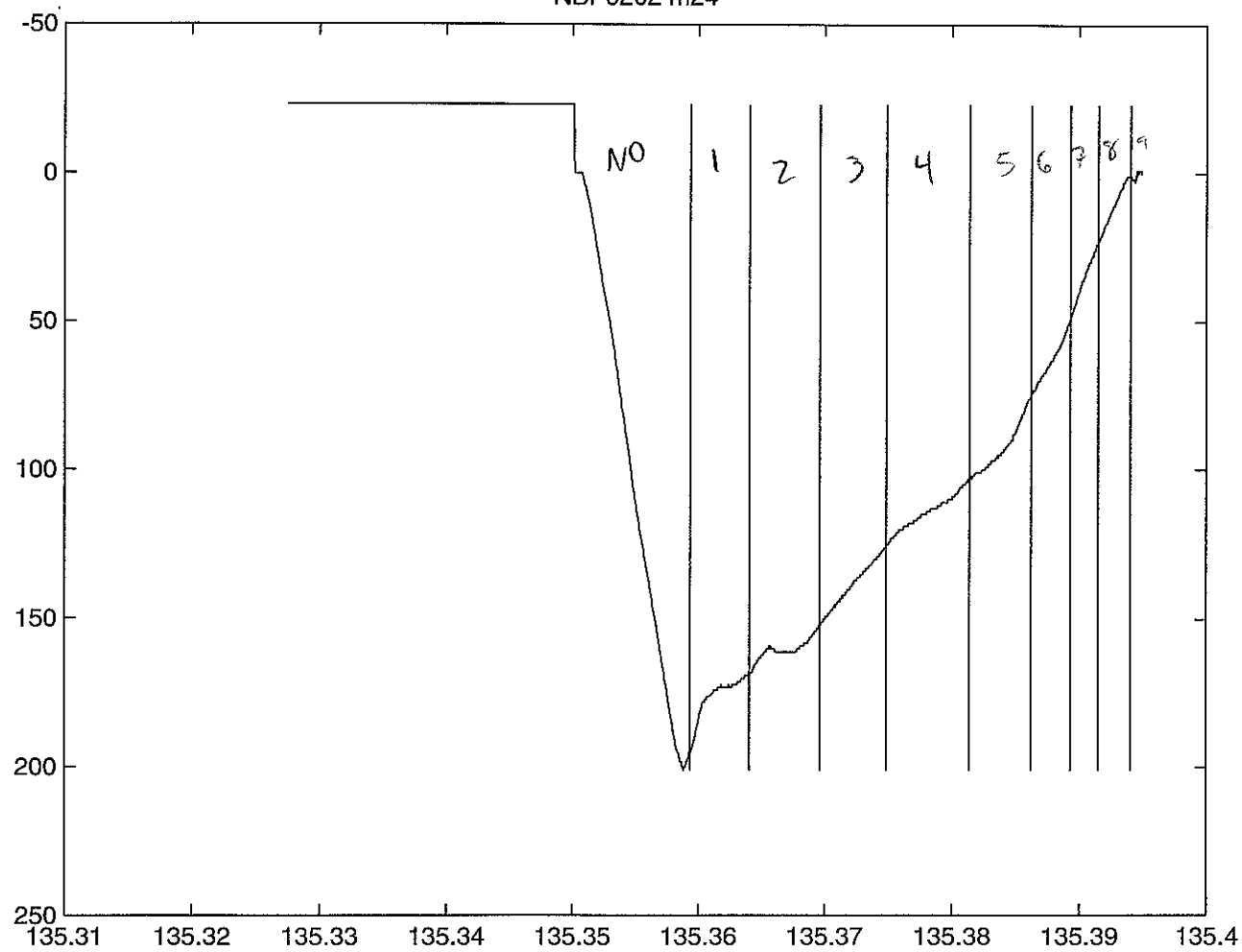
tow	day_gmt	month_gmt	station	station_std				
24	15	5	nd	nd				
net	yrday_gmt	time_gmt	press	minpress	maxpress	avgpress	temp	theta
0	135.3594	837.5	195				0.799	0.79
1	135.3641	844.233	168	168	195	175.45	0.647	0.64
2	135.3696	852.25	152	152	169	160.28	0.503	0.497
3	135.3749	859.817	125	125	152	138.46	0.151	0.147
4	135.3814	909.251	103	103	125	114.21	-0.076	-0.079
5	135.3863	916.2	75	75	103	92.53	-1.245	-1.247
6	135.3893	920.616	49	49	74	63.06	-1.238	-1.239
7	135.3915	923.767	23	23	49	35.02	-1.228	-1.228
8	135.394	927.383	1	1	23	10.56	-1.605	-1.605
9	135.3949	928.701	0				50	50

net	sal	sigma	angle	flow	hzvel	vtvel	vol
0	34.477	27.639	26	90	1.4	8.39	653.3
1	34.418	27.6	32	74	1.7	2.86	410.4 ¹
2	34.358	27.561	34	95	1.7	3.99	503.7 ²
3	34.179	27.436	36	96	2	4.74	494.9 ³
4	34.047	27.341	32	117	2	2.37	616.6 ⁴
5	33.59	27.019	27	72	1.4	7.05	412.3 ⁵
6	33.562	26.996	20	41	1.1	8.8	242.6 ⁶
7	33.527	26.967	23	29	1.4	7.04	168.6 ⁷
8	33.389	26.866	22	34	1.7	1.36	198.7 ⁸
9	0.092	-11.867	0	5	0	-0.41	29.5

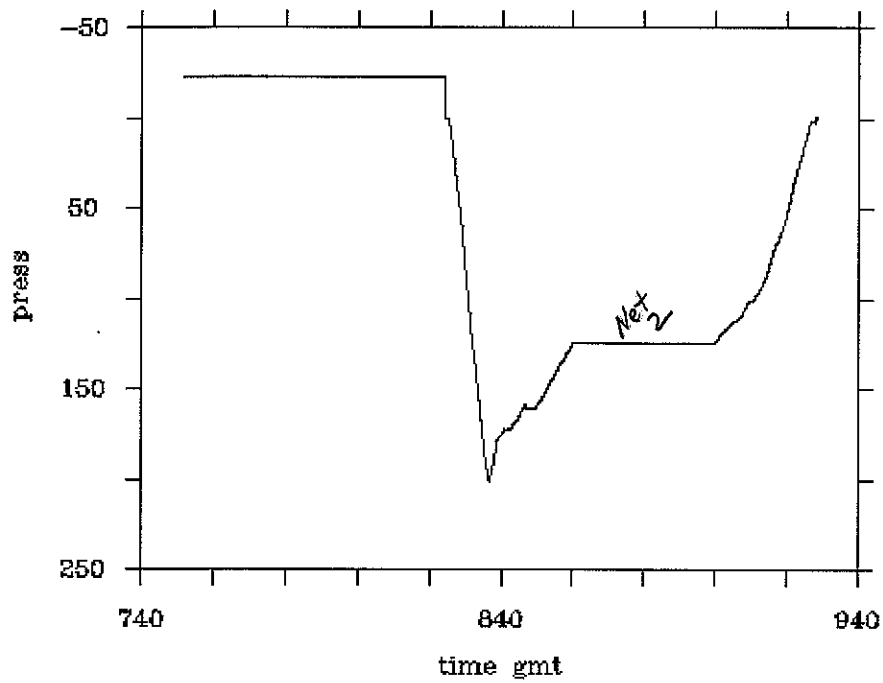
*Note - net bars not
all the way down so
volumes are less
than these.

net	lat	lon
0	-66.5205	-67.6628
1	-66.5198	-67.6721
2	-66.5189	-67.6831
3	-66.5181	-67.6936
4	-66.5169	-67.7063
5	-66.516	-67.7153
6	-66.5159	-67.7204
7	-66.5157	-67.7245
8	-66.5156	-67.7298
9	-66.5155	-67.7318

NBP0202 m24



du/globec/soglobec/mocness ctd(datatype%20eq%20MOCN



NEP0202
MOC24

MOCNESS TOW #: 24

Date: 5.15

Region: Crystal Sound

People Processing Sample: Phil

NET DEPTH

Taxonomic Composition

0	0-200	KRILL!!!
1	200-175	Teaspoon of furcilia + cop's
2	175 150	Krill, large jellyfish, Copepods
3	150 125	Krill + Copepods
4	125 100	Krill - <u>lots</u> ! + ① AMPHIPOD
5	100 75	Krill - many + ② AMPHIPODS ① Decapod Shrimp (?)
6	75 50	v. Few krill, Copepods, algae
7	50 25	teaspoon furcilia + diatoms
8	25 0	③ Adult Krill <u>Metridia</u> copepods; DIATOMS

WOCNESS - [Data Acquisition and Control System]

Acquisition Setup Hardware Setup Runtime Options Plot Setup Capture Screen About

The graph displays a single data series representing depth over time. The y-axis, labeled 'Depth', has major tick marks at -1, -400, and -800. The x-axis, labeled 'Time', has major tick marks at 08:00, 09:00, 10:00, and 11:00. The data points are connected by a solid line, showing a consistent downward trend.

Time	Depth (m)
08:00	-100
08:30	-150
09:00	-200
09:30	-250
10:00	-300
10:30	-350
11:00	-380

