

event log ✓

MOCNESS Tow Sheet (NBP0104)

St. Station No.: <i>Test Station</i>	Tow No.: <i>01</i>
Date: <i>07-26-01</i>	
Filename (raw): <i>M01-01.raw</i>	Filename (processed): <i>M01-01.pro</i>

Net Information

Net Size: <i>2 1m</i>	Net Condition: <i>Fine</i>
Net Mesh: <i>333</i>	<i>NI in 500mm mesh</i>

Start

End

Location (Lat/Lon): <i>44 39.79, 69 21.4</i>	Location (Lat/Lon): <i>44 41.295 69 25.76</i>
Time (Local) <i>1558</i>	Time (GMT) <i>1958</i>
Time (Local) <i>1716</i>	Time (GMT) <i>2113</i>
MOCNESS Battery Voltage: <i>19.4</i>	MOCNESS Battery Voltage: <i>19.3</i>

Environmental Parameters

Wind (Speed/Direction): <i>20 kt 220°</i>	Sea State: <i>1C</i>
Water Depth (m): <i>2700</i>	Light and Clouds: <i>overcast</i>
Air Temperature: <i>-9.9 °C</i>	SST: <i>-1.814</i>

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-250	0	1958	250	2014	1605	had to hit extra stop
1	200-250	200 ²⁴⁹	2014	200	2025	1623	leads net #2
2	150-200	150 ²⁰⁰	2025	1148	2032	365	leads net #3 ⁴⁰
3	125-150	148	2032	123.5	2035	140	no N.R.
4	100-125	123.5	2035	97.2	2043	458	yes N.R.
5	75-100	97.2	2043	75	2052	539	NR
6	50-75	75	2052	49	2059	388	NR ✓
7	25-50	49	2059	25	2106	373	NR ✓
8	0-25	25	2106	0	2113	383	NR ✓

Pressure sensor didn't work @ first, had to send it to 180m before it worked. Net 0 was 0+1 in file. net #2 is net #3 etc

net #8: had to stop to clean ice from
under wire

M-01-001
21 JULY 2001
RVIB NBP 01-04

MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
1	249.8	249.8	249.8	01.9	01.9	01.9	01.9	01.9	01.9	34.68	34.68	34.68
0	-10.9	250.4	79.3	-01.9	50.0	01.7	-01.9	50.0	01.7	00.49	34.68	16.83
2	198.6	251.1	236.0	01.8	01.9	01.8	01.7	01.9	01.8	34.55	34.68	34.63
4	124.5	141.1	132.3	-00.1	00.9	00.2	-00.2	00.9	00.2	34.37	34.91	34.65
0	-10.9	250.4	79.3	-01.9	50.0	01.7	-01.9	50.0	01.7	00.49	34.68	16.83
5	98.3	123.5	116.6	-01.7	-00.2	-00.6	-01.8	-00.2	-00.6	34.18	34.64	34.26
6	75.6	97.2	84.6	-01.9	-01.8	-01.8	-01.9	-01.8	-01.8	33.88	34.41	33.93
7	49.9	75.4	64.6	-01.9	-01.8	-01.9	-01.9	-01.8	-01.9	33.90	33.92	33.91
8	25.5	49.3	37.7	-01.9	-01.9	-01.9	-01.9	-01.9	-01.9	33.89	33.91	33.90
9	11.3	25.5	17.3	-01.9	50.0	-01.3	-01.9	50.0	-01.3	00.71	33.91	33.52

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
1	27.73	27.73	27.73	00.05	00.05	00.05	00.00	00.00	00.00	00.0	00.0	00.0
0	-11.58	27.73	13.01	00.00	17.03	00.17	00.00	00.00	00.00	00.0	00.0	00.0
2	27.63	27.73	27.69	00.05	00.11	00.05	00.00	00.00	00.00	00.0	00.0	00.0
4	27.61	27.99	27.81	00.05	00.06	00.06	00.00	00.00	00.00	00.0	00.0	00.0
0	-11.58	27.73	13.01	00.00	17.03	00.17	00.00	00.00	00.00	00.0	00.0	00.0
5	27.47	27.87	27.54	00.05	00.06	00.06	00.00	00.00	00.00	00.0	00.0	00.0
6	27.27	27.70	27.31	00.06	00.06	00.06	00.00	00.00	00.00	00.0	00.0	00.0
7	27.29	27.30	27.29	00.06	00.06	00.06	00.00	00.00	00.00	00.0	00.0	00.0
8	27.28	27.30	27.29	00.06	00.06	00.06	00.00	00.00	00.00	00.0	00.0	00.0
9	-11.41	27.29	26.86	00.06	00.69	00.08	00.00	00.00	00.00	00.0	00.0	00.0

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
1	29.0	33.0	31.0	01.1	01.7	01.4	00.0	00.6	00.3	00003	00017
0	16.0	68.0	40.5	00.0	04.0	01.0	-99.0	20.5	-06.3	00261	00622
2	31.0	45.0	37.6	01.1	02.3	01.8	-01.9	20.8	04.7	00157	00629
4	40.0	44.0	42.0	01.7	02.3	02.0	03.8	13.4	07.7	00037	00140
0	16.0	68.0	40.5	00.0	04.0	01.0	-99.0	20.5	-06.3	00261	00622
5	38.0	45.0	41.5	01.4	02.3	01.8	-02.3	11.6	03.0	00123	00462
6	42.0	46.0	44.3	01.7	02.3	01.9	00.0	10.6	02.6	00141	00539
7	37.0	42.0	41.0	01.7	05.4	02.1	00.6	08.6	04.3	00086	00388
8	36.0	44.0	40.8	01.4	02.3	01.8	-03.1	08.6	03.8	00099	00373
9	33.0	51.0	37.3	01.4	02.0	01.6	00.4	04.5	02.1	00098	00339

MOCNESS TOW #: 01

Date: 7/26/01

Region: Test

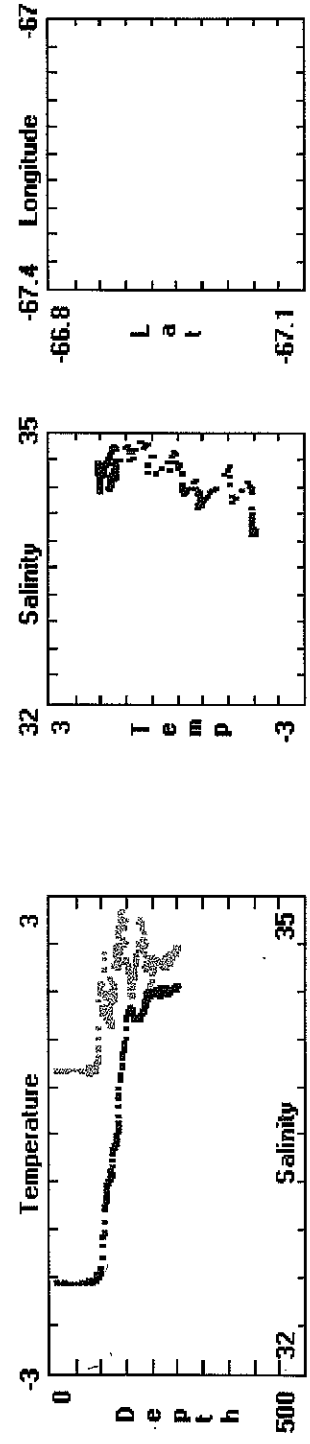
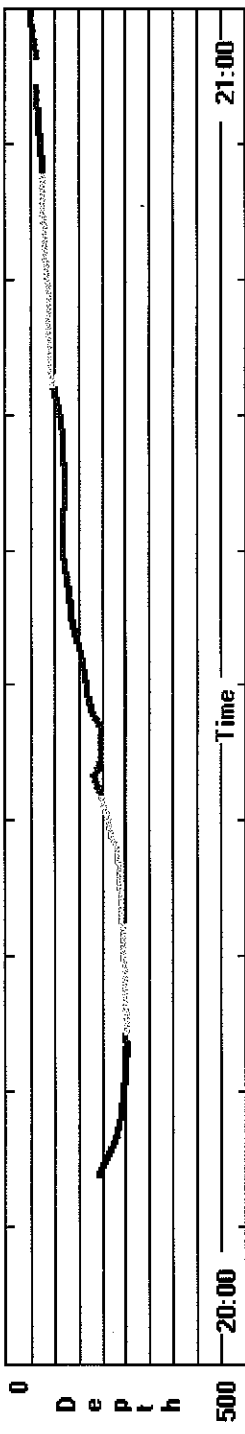
People Processing Sample: CJA, PA, JOP

NET #

Taxonomic Composition

0	ctenos larval krill	0-250
1	a few medium eupus small ctenos	250-200
2	front Cateia few cones Shrimpy thing	150-200
3	cteno Scant combed	125-150
4	salps chaets few low bio	100-125
5	2 salps amphipod cones very low abd.	75-100
6	1 cteno salps (10) larvae (will)	50-75
7	ctenophores (ca 20-20?) - big w/ purple combs larval krill	25-50
8	1 cteno 1 Krill juveniles	0-25

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	21:13:27	Net_Num	10	Latitude	64S 41.295	Reset	
Pressure	11.2 m	OpenTime	0.3 min	Longitude	69W 25.76	Baud Rate	2400
Temp	50.0 C	Vol_Filtered	0.0 m3	Net_Dist	15.9 m	Sample Rate	4.0 sec
Salinity	0.1 o/oo	Angle	29 deg	Total_Dist	4978.3 m	Printer	Off
Density	-11.861	Flow_Counts	0	Processed File Name	C:\MOCNESS\MOCDATA\MBP0104\M01_01.PRO		
Oxygen		Hor_Vel	0.3 kts	Raw File Name	C:\MOCNESS\MOCDATA\MBP0104\M01_01.raw		
Fluoresc.	0.0000 V	Vert_Vel	0.8 m/min	Acquisition Ended. tries = 0			
LightXmis	0.6149 /m	Battery	19.3 V				



lost com 66° 10.283
6606 m w/o 69° 8.951

event
lg ✓

MOCNESS Tow Sheet (NBP0104)

St. Station No.: 4	Tow No.: 2
Date: 7/28/01	
Filename (raw): M01-02.raw	Filename (processed): M01-02.pro

Net Information

Net Size: 1m	Net Condition: frozen pressure sensor + strobe at launch
Net Mesh: 333	5% also frozen, NO N. Reither (strong)

NI in
500m

Start

End

Location (Lat/Lon): 66 9.784 69 6.062	Location (Lat/Lon): 66 9.956 68 8.449
Time (Local) 0005	Time (GMT) 405
Time (Local) 0136	Time (GMT) 0530
MOCNESS Battery Voltage: 19.6	MOCNESS Battery Voltage:

Environmental Parameters

Wind (Speed/Direction): 19 / 233°	Sea State: ice
Water Depth (m): 340	Light and Clouds: dark + clear
Air Temperature: -12°C	SST: -1.8°C

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-300	0	0405	270	0439	17122	
1	300-250						
2	250-200						
3	200-150						
4	150-100						
5	100-75						
6	75-50						
7	50-25						
8	25-0						

0422 stepped paying out w/ 250 m w/o to see if P sensor starts to fn. T+S are fine now

P sensor came back @ 168 m
A is dead on on way down

start bringin net in @ 322 m
pressure sensor went from 270 to 323 d
so instantaneously

* @ 340

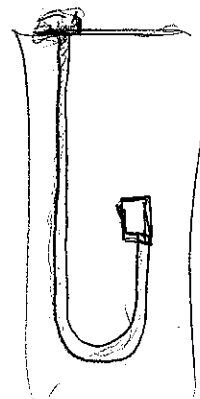
* lost option communication
when MOCNESS came out of the
water

- did not 'deselect', hit 'no'

- MOC re-established communication
@ 0445

66 10.235 } lost comms again
69 8.883 } battery went to 0.0 V

05:24 66 9.956 } tension is "0" on wire
69 8.449 }



M-01-002
28 JULY 2001
RVIB NBP 01-04

MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
1	-185.6	264.4	7660.6	-01.9	50.0	-53.3	-01.9	50.1	-53.5	33.77	50.00	
3821.04												
net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
1	24.65	29.60	3055.57	00.00	00.15	09.15	00.00	00.00	00.01	00.0	00.0	00.0
net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs		vol
1	00.0	28.0	999.0	-111.6	02.9	08.3	-21.7	99.0	4078.0	00111		00107

Environmental Parameters Net Operation Net - Ship Position Program Settings

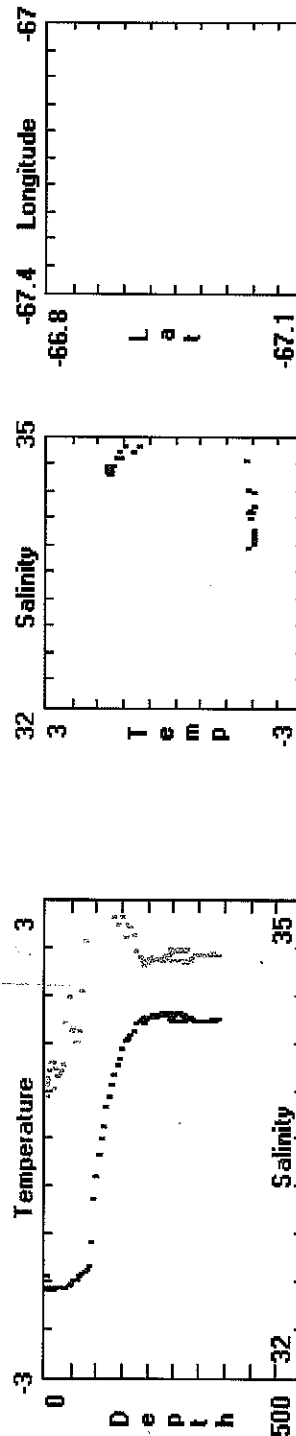
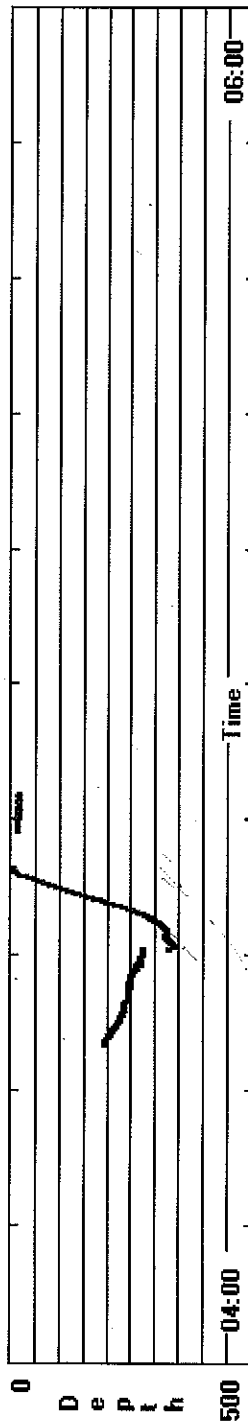
Time	04:50:24	Net_Num	1	Latitude	66S 10.235	Reset
Pressure	185.6 m	OpenTime	10.7 min	Longitude	69W 8.883	Baud Rate
Temp	50.0 C	Vol_Filtered	0.0 m3	Net_Dist	192.1 m	Sample Rate
Salinity	50.0 o/oo	Angle	0 deg	Total_Dist	2420.9 m	Printer
Density	24.646	Flow_Counts	0	Processed File Name	C:\MOCNESS\MOCDATA\NBPO104\M01_02.PRO	
Oxygen		Hor_Vel	-111.6 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBPO104\M01_02.raw	
Fluoresc.	0.0000 V	Vert_Vel	99.0 m/min	Acquisition Ended. tps = 3		
LightXmis	0.0000 /m	Battery				

Step-STBD Net

Increment Net

Pause Acqui

End Acqui



Using port trawl wire -
cast log

MOCNESS Tow Sheet (NBP0104)

St. Station No.: 11	Tow No.: 3
Date: 29 July 2008 / 7/30/01 gmt	
Filename (raw): M01-03.raw	Filename (processed): M01-03.pro

Net Information

Net Size: 1-m ²	Net Condition: OK
Net Mesh: 333 μ m	NI in 500m

Start

End

Location (Lat/Lon): -66° 06' 18" S - 70° 55' 06" W		Location (Lat/Lon): 66° 42' 47" N, 70° 47' 22" E	
Time (Local) 2328	Time (GMT) 0326	Time (Local) 0135	Time (GMT) 0535
MOCNESS Battery Voltage: 20.5		MOCNESS Battery Voltage: 20.2	

Environmental Parameters

Wind (Speed/Direction): 058-066	Sea State: 0 sea state - Ice covered
Water Depth (m): 950m	Light and Clouds: clear
Air Temperature: -10C	SST: -1.815

NOTE: 1st net fishing in ready net #1 in data

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0(1)	0 - ^{max depth}	0	2328	600	0414	1674	NO N.R.
1(2)	600-400	600	0414	393	0427	MISSED it	NO N.R.
2(3)	400-200	393	0427	194.4	0436	523	NO NR
3(4)	200-150	194.4	0436	149	0450	600?	NR! yahoo
4(5)	150-100	149	0450	95	5:00	487	NR!
5(6)	100-75	95	500	70	0508	363.5	NR
6(7)	75-50	70	0508	50	0512	214.6	messy net interval
7(8)	50-25	50	0512	24	0519	352	
8(9)	25-15	24	0519	15	0523	216	struck on @ surface

↑
what computer man
on this tow, we decided to not payout more wire than water depth in case the wire hung up on the ice + recovery involved stopping the ship.
TR @ 15m to avoid collecting ice

3
M-01-002
29 JULY 2001
RVIB NBP 01-04

MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
0	00.9	01.3	01.1	50.0	50.0	50.0	50.0	50.0	50.0	50.00	50.00	50.00
2 1	399.7	599.9	494.1	01.5	01.7	01.6	01.5	01.7	01.6	34.66	34.69	34.67
3 2	195.0	396.8	292.9	01.0	01.7	01.5	01.0	01.7	01.5	34.49	34.67	34.61
4 3	150.5	193.8	178.0	-00.1	01.0	00.7	-00.1	01.0	00.7	34.33	34.49	34.44
0	00.9	01.3	01.1	50.0	50.0	50.0	50.0	50.0	50.0	50.00	50.00	50.00
5 4	97.9	148.9	130.4	-01.3	-00.2	-00.6	-01.3	-00.2	-00.6	34.07	34.31	34.22
6 5	71.6	96.2	84.7	-01.9	-01.4	-01.7	-01.9	-01.4	-01.7	33.86	34.06	33.93
7 6	50.7	77.9	68.3	-01.9	-01.9	-01.9	-01.9	-01.9	-01.9	33.86	33.87	33.86
7 7 9 2 3 2	15.0	21.8	19.1	-01.9	-01.9	-01.9	-01.9	-01.9	-01.9	33.87	33.87	33.87
0	00.9	01.3	01.1	50.0	50.0	50.0	50.0	50.0	50.0	50.00	50.00	50.00

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
0	24.68	24.68	24.68	00.00	00.52	00.44	00.00	00.00	00.00	00.0	00.0	00.0
2	27.73	27.76	27.74	00.11	00.12	00.11	00.00	00.00	00.00	00.0	00.0	00.0
3	27.63	27.73	27.70	00.11	00.11	00.11	00.00	00.00	00.00	00.0	00.0	00.0
4	27.57	27.64	27.61	00.11	00.11	00.11	00.00	00.00	00.00	00.0	00.0	00.0
0	24.68	24.68	24.68	00.00	00.52	00.44	00.00	00.00	00.00	00.0	00.0	00.0
5	27.41	27.56	27.51	00.11	00.11	00.11	00.00	00.00	00.00	00.0	00.0	00.0
6	27.26	27.40	27.30	00.11	00.13	00.11	00.00	00.00	00.00	00.0	00.0	00.0
7	27.26	27.26	27.26	00.11	00.12	00.11	00.00	00.00	00.00	00.0	00.0	00.0
9	27.26	27.26	27.26	00.11	00.11	00.11	00.00	00.00	00.00	00.0	00.0	00.0
0	24.68	24.68	24.68	00.00	00.52	00.44	00.00	00.00	00.00	00.0	00.0	00.0

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
0	21.0	21.0	21.0	58.8	60.8	59.6	-02.5	-01.7	-02.0	00007	01433
2	24.0	32.0	28.6	00.9	02.0	01.5	-02.0	29.5	16.1	00183	00592
3	26.0	39.0	30.9	01.1	02.3	01.8	04.9	30.2	20.0	00153	00531
4	32.0	38.0	34.4	01.1	02.0	01.4	-08.4	16.7	03.5	00195	00627
0	21.0	21.0	21.0	58.8	60.8	59.6	-02.5	-01.7	-02.0	00007	01433
5	21.0	36.0	29.3	00.9	01.7	01.2	-05.9	22.8	05.1	00147	00439
6	26.0	34.0	31.8	00.9	01.7	01.3	-08.7	19.4	03.3	00118	00364
7	24.0	39.0	30.9	00.9	01.7	01.3	-09.0	17.8	04.6	00070	00215
9	37.0	46.0	42.1	01.4	02.3	01.8	-01.0	07.1	02.0	00059	00222
0	21.0	21.0	21.0	58.8	60.8	59.6	-02.5	-01.7	-02.0	00007	01433

MOCNESS - [Data Acquisition and Control System]

61 Acquisition Setup Hardware Setup Runtime Options Plot Setup Capture Screen About

Environmental Parameters

Time 05:26:17
 Pressure -0.9 m
 Temp 50.0 C
 Salinity 1.3 o/oo
 Density -10.974
 Oxygen
 Fluoresc. 0.0002 V
 LightXmis 0.3352 /m

Net Operation

Net_Num 10
 OpenTime 3.0 min
 Vol_Filtered 150.1 m3
 Angle 39 deg
 Flow_Counts 23
 Hor_Vel 1.4 kts
 Vert_Vel 23.7 m/min
 Battery 20.2 V

Net - Ship Position

Latitude 66S 4.2649'
 Longitude 70W 47.31
 Net_Dist 159.0 m
 Total_Dist 7009.2 m

Baud Rate
 Sample R
 Printer

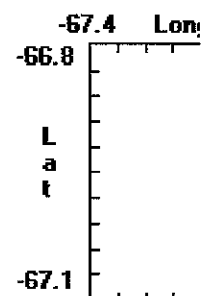
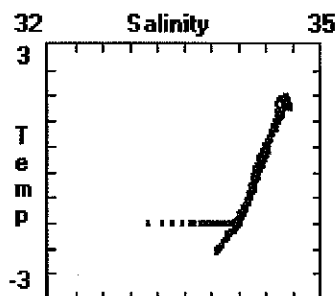
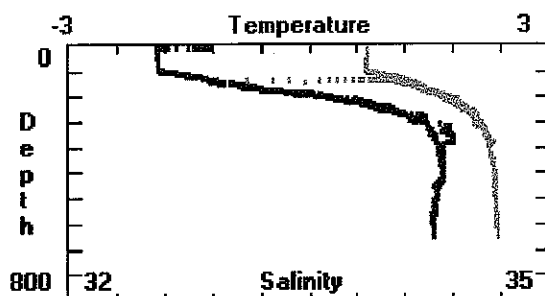
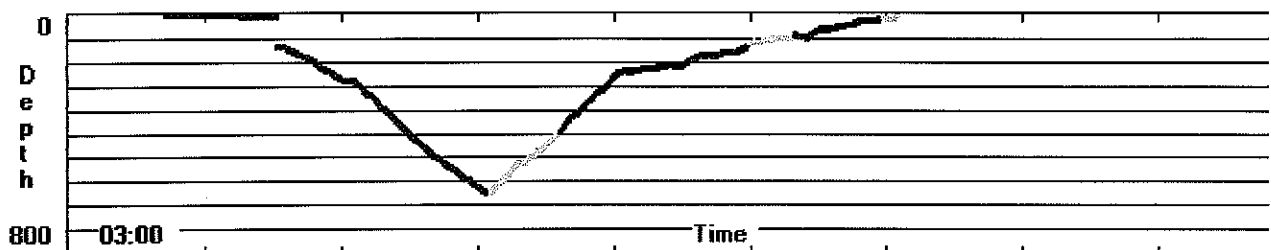
Processed File Name C:\MOCNESS\MOCDATA\NBPO
 Raw File Name C:\MOCNESS\MOCDATA\NBPO

Acquisition Ended. trys = 0

Step-STBD Net

Increment Net

Pause Acqui



Program Settings

Reset

2400

ate 4.0 sec

Off

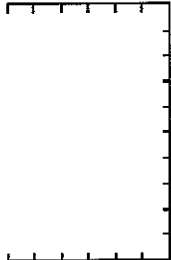
104\M01_03.PRO

104\M01_03.raw

End Acqui

07:00

gitude -67



MOCNESS TOW #: 3

Date: 7/29/01

Region: Station 11

People Processing Sample: Mari Butler

NET #

Taxonomic Composition

0	<i>E. superba</i> , chaetognaths, <i>Thysanoessa</i> , large copepods	600- 400
1	2 medusae, 2 ^{bright orange} amphipods, chaetognaths (tons), large copepods, <i>E. superba</i> & <i>Thysanoessa</i>	400 200
2	lots of chaetognaths, small medusae <i>E. superba</i> & <i>Thysanoessa</i> (LOW numbers) some large copepods	200 150
3	1 large myctophid <i>E. superba</i> + <i>Thysanoessa</i>	150 100
4	salps, ctenophores, large chaetognaths, few ostracods <i>Thysanoessa</i> , 1 g. copepod (euchaeta?), polychaetes?	100- 75
5	naked pteropod, <i>Thysanoessa</i> , chaetognaths, small fishes, copepods, polychaetes, amphipods, <i>E. superba</i> larvae, ctenophore?, calanus?	75- 50
6	ctenophore, fishes, polychaetes, small pteropods, <i>E. superba</i> larvae, <i>Thysanoessa</i> , amphipods, ostracods	50- 25
7	ctenophore? <i>E. superba</i> , <i>Thysanoessa</i> amphipods, salp, fish	25-15
8	pteropods, ctenophores, salp, fishes, chaetognaths, <i>E. superba</i> larvae, amphipods	2

went los ✓

MOCNESS Tow Sheet (NBP0104)

St. Station No.: 14 15 ^(NC 9105)	Tow No.: 4
Date: 1 July 2001	31 July 2001 CJA
Filename (raw): M-D-004.Raw	Filename (processed): M-D-004.Pro

Net Information

Net Size: 1-M ²	Net Condition: OK
Net Mesh: 335 μ m	NI in 500m

Start

End

Location (Lat/Lon): 45.825 ⁻⁶⁶ 09.636W ⁻⁷⁰	Location (Lat/Lon): 66 42.265 ⁻⁷⁰ 10.92W
Time (Local) 0949	Time (GMT) 1349
Time (Local) 1127	Time (GMT) 1527
MOCNESS Battery Voltage: 19.5	MOCNESS Battery Voltage: 19.4

Environmental Parameters

Wind (Speed/Direction): ~20Kts	Sea State: NONE
Water Depth (m): ~500 m	Light and Clouds: daylight. heavy cloud cover - Total
Air Temperature: -0.9 C	SST: -1.833

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-	0	0949	409	1419	1182.0	212.597188
1	400-300	409	1419	300	1437	492.8	212.606574
2	300-200	300	1433	200	1449	827.8	212.617546
3	200-150	200	1449	150	1456	371.7	212.622789
4	150-100	150	1456	100	1504	390.1	212.627813
5	100-75	100	1504	75	1510	313.0	212.631744
6	75-50	75	1510	50	1515	283.2	212.635521
7	50-25	50	1515	25	1520	278.0	212.639097 (1520)
8	25-0	25	1520	0	1524 closed	194.8	212.641840

- (1) Jay Peterson said new wiring setup for MOCNESS/OPC "Semi"
- (2) Max wire out 475 max wire out - Then glow ship to sink net to ~400m
Caught ice when MWD 469 - Back ship after all stop then forward
@ 1 kt. Net sank to 410
- (3) Strobe on from surface to depth & back to surface

- (4) started hauling wire in when net at ~268m - so first 1 1/2 nets were flown up by changing ship speed in leaving minis in idle mode @ 469mW00
- when started in - set winch speed at 10m/min
- (5) 1442 - increase wire in to 15m/min
- (6) Ice hangup at 1446 - cleared itself
- (7) Several more ice hangup at 1455.
- (8) Closed Net 8 at 10m depth to avoid catching ice
- (9) Strobe working when net came on board
net at transom at 1527 + coming over rail.
- (10) System off at 1527
- (11) did screen capture
file M0101004.BMP

Tow: **M-01-004 NBP0104**
Using data file /data12/sodata/nbp0104/moc/M-01-004.PRO
Date: 30 July 2001
Temperature Probe # 2438 Conductivity Probe # 2067
Pressure Probe # 148 Oxygen Probe # 1
Transmissi # 439 Fluoromet # 1

	net	yday_gmt	time_gmt	press	temp	theta	sal	sigma	angle
	0	212.5972	1419.951	410	1.377	1.356	34.692	27.774	22
	1	212.6066	1433.467	301	1.559	1.544	34.657	27.732	30
	2	212.6175	1449.266	200	0.917	0.908	34.539	27.681	34
	3	212.6228	1456.816	148	0.328	0.322	34.399	27.603	41
	4	212.6278	1504.051	100	-1.183	-1.185	34.012	27.36	40
	5	212.6319	1509.999	74	-1.863	-1.865	33.893	27.283	39
	6	212.6355	1515.15	47	-1.865	-1.866	33.892	27.281	40
	7	212.6391	1520.3	21	-1.87	-1.87	33.891	27.281	42
	8	212.6418	1524.25	11	-1.87	-1.87	33.891	27.281	32

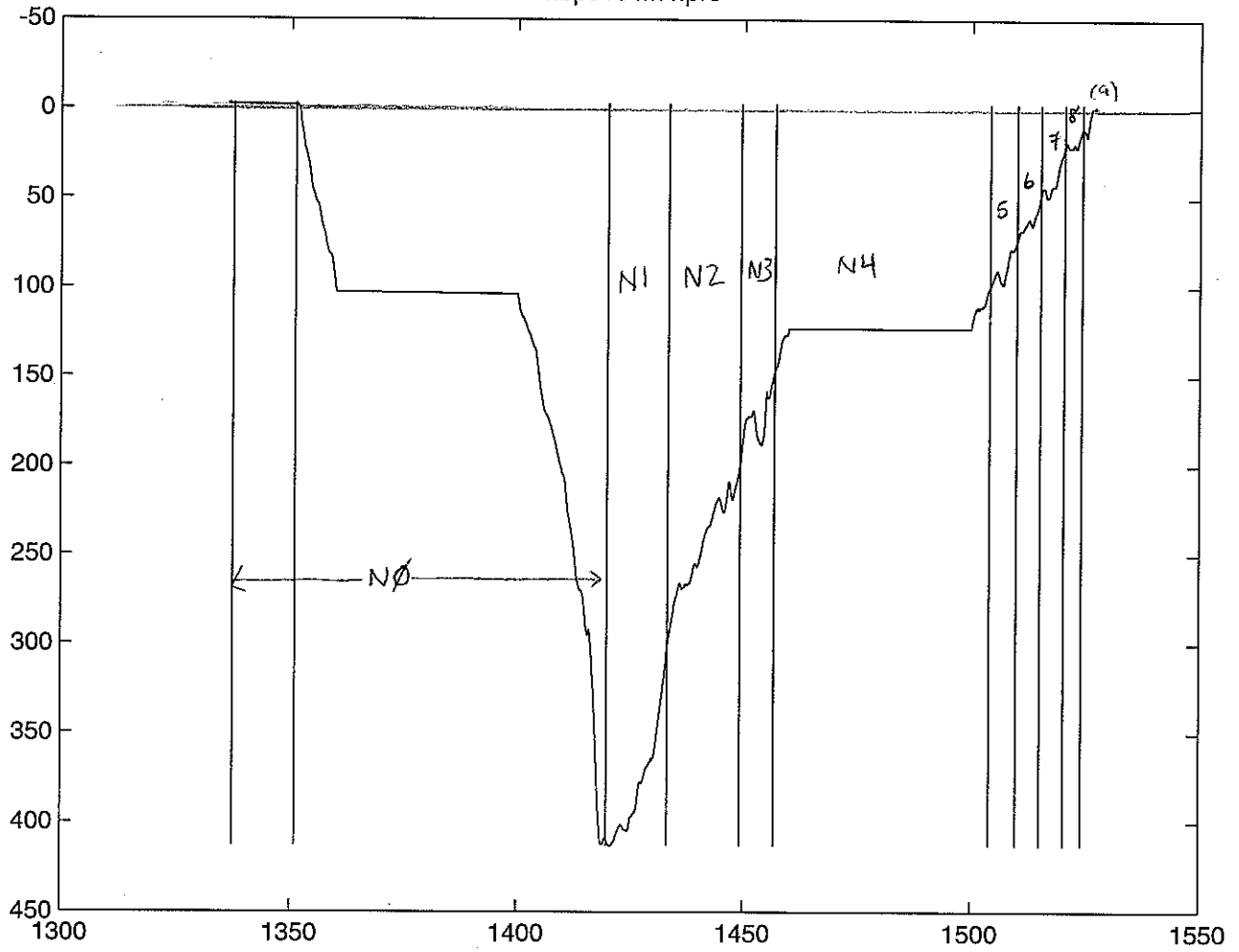
(closed net 8 at 11m to avoid ice)

	net	flow	hzvel	vtvel	vol	ptran	net	lat	lon
	0	205	0.6	1.59	1182	0.117	0	-66.7373	-70.1597
	1	84	1.7	22.98	492.8	0.119	1	-66.7315	-70.1617
	2	172	1.7	14.92	827.8	0.123	2	-66.7237	-70.1662
	3	78	2	10.21	371.7	0.126	3	-66.7199	-70.168
	4	83	1.4	5.69	390.1	0.126	4	-66.7164	-70.1713
	5	65	1.7	7.05	313	0.126	5	-66.7133	-70.1738
	6	61	2	12.55	283.2	0.127	6	-66.7106	-70.1765
	7	59	2.3	8.23	278	0.127	7	-66.7079	-70.1791
	8	38	1.1	5.88	194.8	0.126	8	-66.706	-70.1809

	net	avg.dep*	middep
	0	127.5353	205
	1	379.0594	355.5
	2	243.9661	250.5
	3	173.7699	174
	4	120.4537	124
	5	88.65169	87
	6	62.49351	60.5
	7	39.35065	34
	8	18.59322	16

* from all depth reading in .pro file

nbp0104m4.pro



time

M-01-004
1 Aug 2001 34704
RVIB NBP 01-04

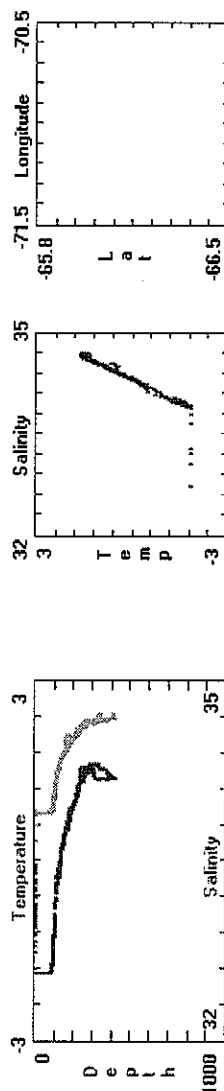
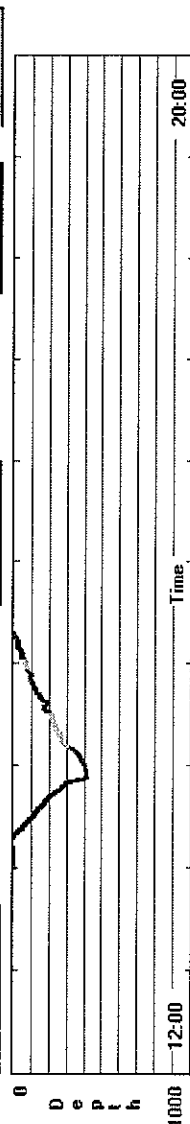
MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg	
1	-02.0	413.4	230.1	-01.2	01.6	00.8	-01.2	01.5	00.8	34.63	50.00	21.21	
1	-02.0	413.4	230.1	-01.2	01.6	00.8	-01.2	01.5	00.8	34.63	50.00	21.21	
2	200.3	298.2	243.8	00.9	01.6	01.4	00.9	01.6	01.3	34.54	34.68	34.61	
3	99.6	146.7	120.2	-01.2	00.3	-00.3	-01.2	00.3	-00.3	34.01	34.39	34.25	
5	73.5	99.2	88.5	-01.9	-01.2	-01.6	-01.9	-01.2	-01.6	33.89	34.04	33.95	
6	47.4	71.9	62.4	-01.9	-01.9	-01.9	-01.9	-01.9	-01.9	33.89	33.89	33.89	
7	21.3	49.3	39.3	-01.9	-01.9	-01.9	-01.9	-01.9	-01.9	33.89	33.89	33.89	
8	10.9	21.3	18.6	-01.9	-01.9	-01.9	-01.9	-01.9	-01.9	33.89	33.89	33.89	
9	0	-02.6	412.2	165.3	-01.9	01.6	00.0	-01.9	01.6	00.0	04.44	50.00	32.92

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
1	27.72	40.36	16.98	00.12	07.98	00.10	00.00	00.00	00.00	00.0	00.0	00.0
1	27.72	40.36	16.98	00.12	07.98	00.10	00.00	00.00	00.00	00.0	00.0	00.0
2	27.68	27.75	27.71	00.12	00.13	00.12	00.00	00.00	00.00	00.0	00.0	00.0
4	27.36	27.60	27.51	00.12	00.13	00.13	00.00	00.00	00.00	00.0	00.0	00.0
5	27.28	27.39	27.32	00.12	00.13	00.13	00.00	00.00	00.00	00.0	00.0	00.0
6	27.28	27.28	27.28	00.13	00.13	00.13	00.00	00.00	00.00	00.0	00.0	00.0
7	27.28	27.28	27.28	00.13	00.13	00.13	00.00	00.00	00.00	00.0	00.0	00.0
8	27.28	27.28	27.28	00.13	00.13	00.13	00.00	00.00	00.00	00.0	00.0	00.0
0	03.37	40.35	26.42	00.12	13.12	00.21	00.00	00.00	00.00	00.0	00.0	00.0

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
1	00.0	30.0	12.6	00.0	02.3	00.6	-05.9	23.6	04.7	00331	00493
1	00.0	30.0	12.6	00.0	02.3	00.6	-05.9	23.6	04.7	00331	00493
2	30.0	48.0	37.2	00.9	02.3	01.7	-16.1	21.4	06.4	00235	00828
4	36.0	42.0	38.6	01.4	02.3	01.8	-01.2	14.5	06.9	00107	00390
5	33.0	42.0	37.9	01.1	02.3	01.7	-08.8	16.3	04.3	00088	00313
6	36.0	44.0	40.1	01.4	02.0	01.8	-06.9	12.5	04.8	00076	00283
7	32.0	43.0	38.2	01.1	02.3	01.7	-09.0	16.7	05.2	00076	00278
8	26.0	45.0	36.0	01.1	02.0	01.5	-05.1	10.2	02.7	00058	00195
0	21.0	89.0	39.9	00.0	02.6	01.0	-60.4	04.9	-13.7	00450	01182

Salinity	50.0 o/oo	Angle	0 deg	Total_Dist	5269.4 m	Printer	0H
Density	40.339	Flow_Counts	23	Processed File Name	C:\MOCNESS\MOCDATA\INBP0104\M-01-004.PRO		
Oxygen		Hor_Vel	0.3 kts	Raw File Name	C:\MOCNESS\MOCDATA\INBP0104\M-01-004.raw		
Fluoresc.	0.0000 V	Vert_Vel	0.4 m/min	Acquisition Ended. hrs = 0			
LightXmis	2.6324 /m	Battery	19.4 V				



MOCNESS TOW #: 4

Date: July 31 2001

Region: NBP 0104 Station #15

People Processing Sample: Wiebe, Lawson, Peterson, Butler,
Daly

NET #

Taxonomic Composition

0	myctophid krill salps	chaetognaths pteropods	0-100
1	ostracod amphipod Thysanoessa	pteropod copepod (big)	400-300
2	euphausiids large copepods amphipod		300-200
3	polychaete copepod Thysanoessa	E. superba larvae amphipod siphonophore	200-150
4	ctenophores amphipod (1 big lots of small)		150-100
5	polychaete Thysanoessa (small)		100-75
6	naked pteropod shelled pteropods, lots ostracod	ctenophores	75-50
7	ctenophores fish larvae (Draconia)		50-25
8	almost empty		25-0

went log ✓

MOCNESS Tow Sheet (NBP0104)

St. Station No.: 17	Tow No.: 5
Date: 1 July - 1 Aug. 2001 gmt	
Filename (raw): M-01-005.RAW	Filename (processed): M-01-005.PRO

Net Information

Net Size: 1 m ²	Net Condition:
Net Mesh: 335 μ m	N1 on 500m OK

Start

End

Location (Lat/Lon): 67.708 69.756	Location (Lat/Lon): -67.7308 -69.13.38
Time (Local): 2215	Time (GMT): 0215
Time (Local): 2343	Time (GMT): 0343
MOCNESS Battery Voltage: 19.6	MOCNESS Battery Voltage: 19.4

Environmental Parameters

Wind (Speed/Direction): 18 Kts	Sea State: None - Ice for most part
Water Depth (m): ~393 m / 350 m / 100 m	Light and Clouds: Heavy clouds - Nighttime
Air Temperature: -2.3C	SST: -1.784

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0	0	0221	255	0249	1029.2	
1	250-200	255	0249	200	0300	421.5	No Response
2	200-150	200	0300	151	0309	417.8	No Response
3	250-125	151	0309	124	0317	354.5	No Response
4	125-100	124	0317	100	0322	268.4	Response
5	100-75	100	0322	75	0326	184.8	Response
6	75-50	75	0326	50	0332	255.7	Response
7	50-25	50	0332	25	0338	309.5	Response
8	25-0	25	0338		0343	217.7	No Response

- (1) Strobe on at surface
 (2) Max wire out 300m
 (3) sink net down 50m by lowering ship speed to ~1.2 Kts Got to 255m
 (4) with winch stopped - had ship speed up to 1.5-1.7 Kts after opening Net 1
 (5) winch started up at 5 m/min when net at 215m

No response closing last Net

(6) all nets closed when net came on station
and strobe working at surface

M-01-005
31 July 2001
RVIB NBP 01-04

MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
1	-02.1	259.7	221.1	-01.8	01.4	01.2	-01.8	01.4	01.2	34.56	50.00	32.68
2	151.6	198.1	176.0	00.5	01.3	01.0	00.5	01.2	01.0	34.43	34.56	34.52
3	124.9	151.5	136.3	-00.3	00.6	00.4	-00.3	00.6	00.4	34.27	34.46	34.39
0	-02.3	254.5	106.8	-01.9	50.0	00.5	-01.9	50.0	00.5	00.06	50.00	23.76
4	100.9	124.0	112.2	-00.6	-00.2	-00.4	-00.7	-00.3	-00.4	34.17	34.26	34.22
5	74.2	100.2	85.2	-01.8	-00.7	-01.5	-01.8	-00.7	-01.5	33.93	34.17	34.01
6	51.5	73.7	62.2	-01.9	-01.8	-01.8	-01.9	-01.8	-01.8	33.90	33.93	33.92
8	01.6	24.5	12.4	-01.8	-01.8	-01.8	-01.8	-01.8	-01.8	33.84	33.88	33.86
9	-01.4	02.3	25.2	-01.9	50.0	111.7	-01.9	50.0	111.7	00.14	33.84	708.79

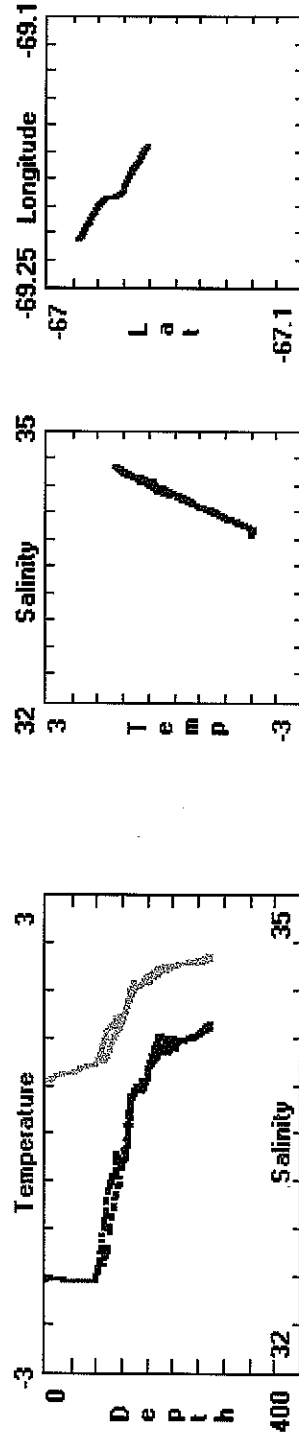
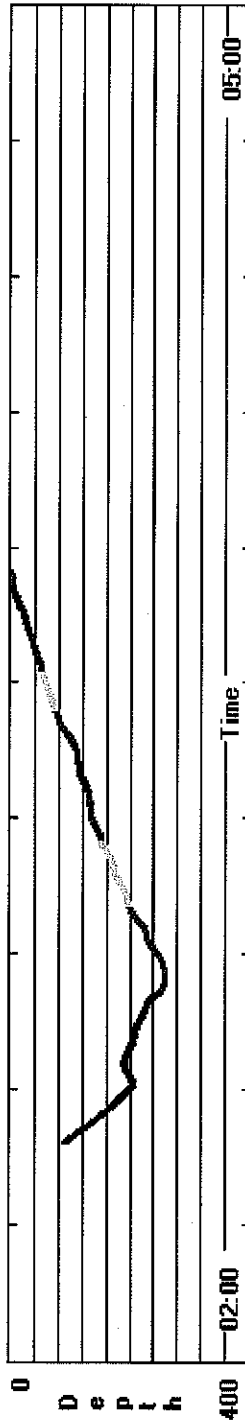
net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
1	27.68	40.41	26.17	00.12	00.31	00.12	00.00	00.00	00.00	00.0	00.0	00.0
2	27.62	27.68	27.66	00.11	00.12	00.12	00.00	00.00	00.00	00.0	00.0	00.0
3	27.53	27.64	27.59	00.12	00.12	00.12	00.00	00.00	00.00	00.0	00.0	00.0
0	-11.43	40.40	18.96	00.00	40.24	00.12	00.00	00.00	00.00	00.0	00.0	00.0
4	27.47	27.53	27.50	00.12	00.12	00.12	00.00	00.00	00.00	00.0	00.0	00.0
5	27.31	27.47	27.37	00.12	00.12	00.12	00.00	00.00	00.00	00.0	00.0	00.0
6	27.28	27.31	27.31	00.12	00.12	00.12	00.00	00.00	00.00	00.0	00.0	00.0
8	27.24	27.27	27.25	00.13	00.13	00.13	00.00	00.00	00.00	00.0	00.0	00.0
9	-11.83	27.24	534.64	00.13	01.11	06.11	00.00	00.00	00.00	00.0	00.0	00.0

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
1	00.0	34.0	23.0	00.0	01.4	00.9	-05.9	11.4	04.6	00173	00422
2	32.0	40.0	34.2	01.1	01.7	01.4	00.4	09.0	05.4	00132	00418
3	34.0	39.0	37.0	01.1	01.7	01.5	-00.2	08.2	03.6	00107	00354
0	00.0	79.0	24.6	00.0	02.0	00.7	-21.4	09.0	-06.6	00581	01029
4	29.0	34.0	31.7	01.1	01.7	01.3	00.8	07.1	03.9	00089	00268
5	28.0	35.0	31.7	01.1	01.4	01.3	03.5	09.4	06.8	00059	00185
6	33.0	36.0	34.5	01.1	01.7	01.4	03.3	05.7	04.4	00077	00256
8	18.0	33.0	29.4	00.6	01.4	01.2	01.0	06.9	04.7	00075	00218
9	02.0	16.0	261.0	00.3	00.6	09.4	-00.8	06.5	39.0	00024	00030

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	03:44:58	Net_Num	9	Latitude	67S 7308'	Reset	
Pressure	1.4 m	OpenTime	1.7 min	Longitude	69W 13.38	Baud Rate	2400
Temp	50.0 C	Vol_Filtered	30.4 m3	Net_Dist	74.2 m	Sample Rate	4.0 sec
Salinity	0.14 o/oo	Angle	2 deg	Total_Dist	4391.9 m	Printer	Off
Density	-11.834	Flow_Counts	4	Processed File Name	C:\MOCNESS\MOCDATA\NBP0104\M-01-005.PRO		
Oxygen		Hor_Vel	0.3 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBP0104\M-01-005.raw		
Fluoresc.	0.0000 V	Vert_Vel	4.9 m/min	Acquisition Ended. tries = 1			
LightXmis	1.0763 /m	Battery	19.4 V				



MOCNESS TOW #: 5

Date: 31 July 01

Region: STA. 17

People Processing Sample: CJA MBB JDP

NET #

Taxonomic Composition

0	LOTS		
1	EUCALPTA CHAETOGNATHS THYSANDESSA	1 PTEROP 1 CTENOPHORE	250-700
2	CHAETOGNATH CTENOPHORE COPEPODS MOLL		200-150
3	CTENOPHORES COPEPODS FURCILIA		150-125
4	CTENOPHORES FURCILIA COPEPODS	BIG SALP	125-100
5	VERY LITTLE	AMPHIPOD THYSANDESSA CHAETOGNATHS	100-75
6	CTENOPHORES THYSANDESSA FURCILIA PTEROPODS		75-50
7	CTENOPHORES MOLL COPEPODS		50-25
8	CTENOPHORES MOLL (FURCILIA) COPEPODS (SMALL)	E. SUPERBA PTEROPODS	25-0

Went log ✓

MOCNESS Tow Sheet (NBP0104)

St. Station No.: 21	Tow No.: 6
Date: Aug 2, 2001	
Filename (raw): M-01-006.raw	Filename (processed): M-01-006.pro

Net Information

Net Size: 1 m	Net Condition: NI in 500 m
Net Mesh: 333 μ m	good / OK mesh

Start

End

Location (Lat/Lon): 66 48.875 71 24.84	Location (Lat/Lon): 66 46.572, 71 20.66
Time (Local) 0218	Time (GMT) 0618
Time (Local) 0354	Time (GMT) 0754
MOCNESS Battery Voltage: 19.2	MOCNESS Battery Voltage: 19.3

Environmental Parameters

Wind (Speed/Direction): 4 kt	Sea State: 1 c
Water Depth (m): 472	Light and Clouds: dark
Air Temperature: -13.8°C	SST: -1.83

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-	0	618	333	648	920	NO N.R.
1	333-250	333	648	250	658	468	NO N.R.
2	250-200	250	658	195	0709	534	NO N.R.
3	200-150	195	0709	145	0722	629	NO N.R.
4	150-100	145	0722	101.4	0731	416	Net resumed!
5	100-75	101	0731	74	738	325	net R ✓
6	75-50	74	0738	50	0742	210	NR ✓
7	50-25	50	0742	23	0749	296	NO NR
8	25-0	23	0749	5	0753	170.2	NR ✓

no depth @ launch, strobe on @ surface when launched
 stopped winch w/ 421.7 m wlo, bottom Z = 473. then let out a few more
 436 m wlo. tr. med net # 0/1, max Z = 333

M-01-0006
1Aug 2001
RVIB NBP 01-04

MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
1	247.5	335.2	293.2	01.2	01.4	01.3	01.2	01.3	01.3	34.61	34.66	34.64
2	195.0	250.7	222.9	00.9	01.2	01.1	00.9	01.2	01.1	34.54	34.62	34.59
3	145.0	192.5	172.3	00.4	00.9	00.7	00.3	00.9	00.6	34.40	34.54	34.47
4	101.4	145.9	123.4	-00.8	00.4	00.0	-00.8	00.4	00.0	34.09	34.41	34.30
0	-10.9	334.1	75.5	-01.9	50.0	00.9	-01.9	50.0	00.9	01.14	50.00	31.31
5	74.2	101.3	89.4	-01.8	-00.9	-01.5	-01.8	-00.9	-01.5	33.94	34.08	33.99
6	50.0	73.7	65.7	-01.8	-01.7	-01.8	-01.8	-01.7	-01.8	33.90	33.94	33.92
8	04.4	23.5	15.6	-01.9	-01.9	-01.9	-01.9	-01.9	-01.9	33.83	33.83	33.83
0	-10.9	334.1	75.5	-01.9	50.0	00.9	-01.9	50.0	00.9	01.14	50.00	31.31

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
1	27.72	27.75	27.74	00.12	00.13	00.12	00.00	00.00	00.00	00.0	00.0	00.0
2	27.68	27.72	27.71	00.12	00.14	00.12	00.00	00.00	00.00	00.0	00.0	00.0
3	27.60	27.68	27.64	00.12	00.13	00.12	00.00	00.00	00.00	00.0	00.0	00.0
4	27.41	27.61	27.54	00.12	00.13	00.12	00.00	00.00	00.00	00.0	00.0	00.0
0	-11.10	27.86	24.95	00.12	16.02	01.88	00.00	00.00	00.00	00.0	00.0	00.0
5	27.32	27.41	27.35	00.12	00.13	00.12	00.00	00.00	00.00	00.0	00.0	00.0
6	27.28	27.32	27.31	00.12	00.13	00.12	00.00	00.00	00.00	00.0	00.0	00.0
8	27.23	27.23	27.23	00.13	00.13	00.13	00.00	00.00	00.00	00.0	00.0	00.0
0	-11.10	27.86	24.95	00.12	16.02	01.88	00.00	00.00	00.00	00.0	00.0	00.0

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
1	23.0	43.0	28.7	00.9	02.0	01.3	-08.0	18.9	08.1	00154	00473
2	35.0	40.0	38.1	01.1	02.0	01.6	-04.3	14.9	04.8	00157	00546
3	30.0	40.0	35.1	01.1	02.3	01.5	-08.4	18.5	03.8	00194	00629
4	29.0	39.0	32.6	01.1	01.7	01.3	-04.5	14.9	04.9	00134	00416
0	00.0	43.0	31.0	00.0	01.7	00.8	-99.0	20.1	-04.2	00447	00933
5	28.0	36.0	32.7	00.9	01.7	01.3	-04.9	10.4	03.7	00104	00325
6	25.0	33.0	29.7	01.1	01.7	01.3	-03.5	15.5	05.2	00069	00210
8	20.0	32.0	24.3	00.9	01.1	01.0	-01.8	07.1	04.3	00060	00170
0	00.0	43.0	31.0	00.0	01.7	00.8	-99.0	20.1	-04.2	00447	00933

Environmental Parameters Net Operation Net - Ship Position Program Settings

Time	07:54:10	Net_Num	9	Latitude	66S 46.578	Reset
Pressure	0.0 m	OpenTime	0.4 min	Longitude	71W 20.68	
Temp	-1.87 C	Vol_Filtered	32.3 m3	Net_Dist	27.7 m	Baud Rate
Salinity	33.83 o/oo	Angle	39 deg	Total_Dist	5270.6 m	Sample Rate
Density	27.231	Flow_Counts	6			Printer
Oxygen		Hor_Vel	2.0 kts	Processed File Name	C:\MOCNESS\MOCDATA\MBP0104\M-01-006.PRO	
Fluoresc.	0.0000 V	Vert_Vel	9.4 m/min	Raw File Name	C:\MOCNESS\MOCDATA\MBP0104\M-01-006.raw	
LightXmis	0.1555 /m	Battery	19.3 V	##MN-07 00 39 0743 01774 0095 9191 38 498265 193M-I		
				\$GPGLL,6646.5785,S,07120.6822,W,075456.746		

Step STBD Net

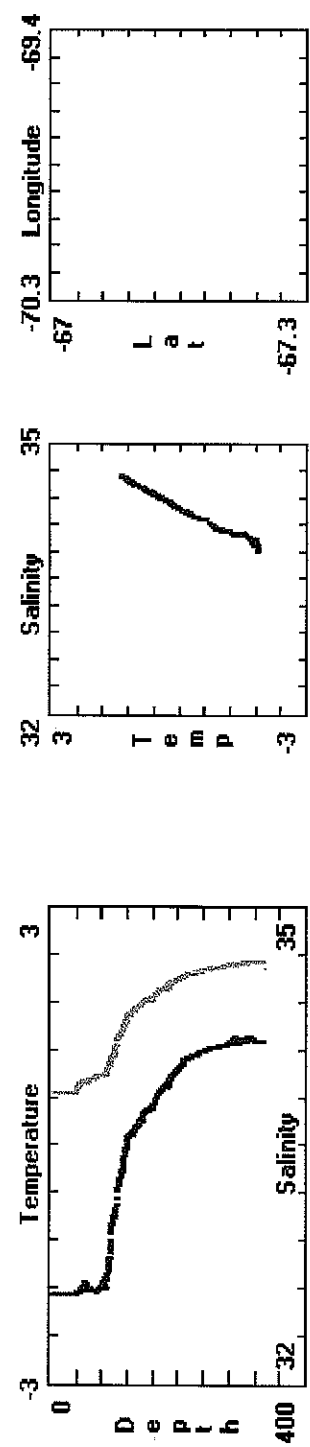
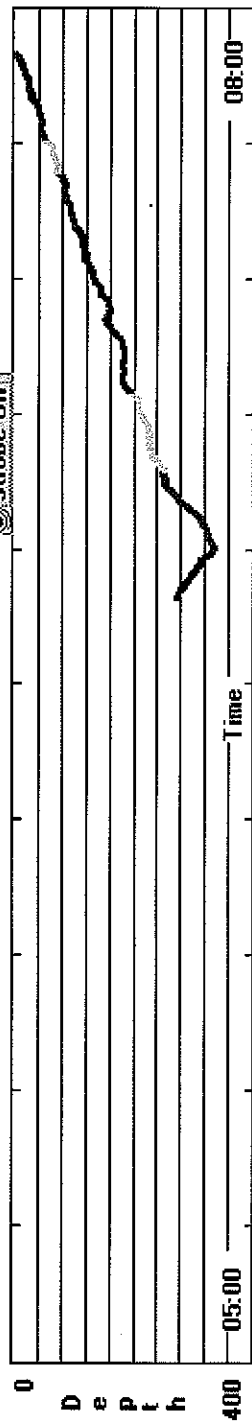
Increment Net#

Strobe On

Strobe Off

Pause Acqui

End Acqui



MOCNESS TOW #: 06

Date: 02 AUG 01

Region: STA #21

People Processing Sample: PA, Jap

NET #

Taxonomic Composition

0	krill copepods pteropods	amphipod some phosphorescent things	0-333
1	pteropods copepods, lots chaetognaths		333-250
2	→ scant catch pteropods copepods (diverse) amphipods		250-200
3	pteropods small krill 1 siphonophore (?) copepods	→ sparse catch	200-150
4	pteropods furcilia ctenophores present	→ sparse catch	150-100
5	pteropods (fewer) furcilia ctenophores (more)	Thysanoessa present → sparse catch	100-75
6	diverse catch: krill amphipods	→ even more scant catch	75-50
7	ostracods amphipods furcilia	→ sparse catch yet again	50-25
8	fish larvae small furcilia pteropods	→ sparse catch	25-0

1 jar creep cracked in transit to w.H.
some sample may have been lost

Want log ✓
poor tow

MOCNESS Tow Sheet (NBP0104)

St. Station No.: 23	Tow No.: 07
Date: 8-3-01	
Filename (raw): M-01-007	Filename (processed): M-01-007

Net Information

Net Size: 1m	Net Condition: NI in 500m
Net Mesh: 333 μ m	OK, APC attached

Start

End

Location (Lat/Lon): -66 41.442 73 12.897	Location (Lat/Lon): -66 39.401 73 25.01
Time (Local) 12:55	Time (GMT) 10:55
MOCNESS Battery Voltage: 19.6	MOCNESS Battery Voltage: 19.2

Environmental Parameters

Wind (Speed/Direction): 15.5 kn air 280	Sea State: Pancake ice
Water Depth (m): 3553m	Light and Clouds: Dark
Air Temperature: -1.9 C	SST: -1.89 C

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-1000	0	10:55	990m	11:41	500	No net response but angle changed 4°
1	800-1000	990m	11:41	790m	11:50	342	No net response angle changed 3°
2	600-800	789m	11:50	596m	12:07	861.6	No net response angle changed 3°
3	400-600	596m	12:07	397m	13:02	2188.7	No net response angle changed 3°
4	200-400	397m	13:02	194m	13:27	1278.4	No net response angle changed 3°
5	100-200	194m	13:27	97.4	13:44	884.8	No net response angle changed 4°
6	50-100	97.4	13:44	48	13:55	505.4	No net response angle changed 3°
7	25-50	48	13:55	23	14:02	364.5	
8	0-25	23	14:02	7	14:10	331.7	

Hung up on ice with 1298m of wire out at ~900m depth.
Net sank to 1027m.

Flow meter seems slow

Hung up on ice with nets at 500m, backed up ship + nets sank to 677m.

M-01-007
3Aug 2001
RVIB NBP 01-04

MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
1	-02.4	981.2	762.0	-00.9	01.5	01.3	-00.9	01.5	01.3	34.69	50.00	30.98
2	596.2	788.5	701.3	01.5	01.7	01.6	01.5	01.7	01.6	34.69	34.69	34.69
3	396.1	683.1	551.1	01.6	01.8	01.7	01.6	01.8	01.7	34.66	34.71	34.68
4	194.1	394.1	311.3	00.9	01.9	01.7	00.9	01.9	01.7	34.44	34.66	34.62
5	97.2	194.5	148.0	-01.9	00.9	-00.7	-01.9	00.9	-00.7	33.93	34.45	34.17
6	48.6	96.4	76.8	-01.9	-01.9	-01.9	-01.9	-01.9	-01.9	33.92	33.93	33.93
7	22.6	47.7	36.6	-01.9	-01.9	-01.9	-01.9	-01.9	-01.9	33.93	33.93	33.93
8	06.9	24.3	18.8	-01.9	-01.9	-01.9	-01.9	-01.9	-01.9	33.93	33.93	33.93
0	-03.3	1029.2	531.3	-01.9	04.5	01.0	-01.9	04.5	01.0	00.00	50.00	32.44

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
1	27.76	40.33	24.80	00.11	00.35	00.10	00.00	00.00	00.00	00.0	00.0	00.0
2	27.75	27.77	27.76	00.11	00.11	00.11	00.00	00.00	00.00	00.0	00.0	00.0
3	27.71	27.77	27.74	00.11	00.14	00.11	00.00	00.00	00.00	00.0	00.0	00.0
4	27.60	27.72	27.69	00.11	00.11	00.11	00.00	00.00	00.00	00.0	00.0	00.0
5	27.31	27.62	27.45	00.11	00.12	00.12	00.00	00.00	00.00	00.0	00.0	00.0
6	27.31	27.31	27.31	00.12	00.12	00.12	00.00	00.00	00.00	00.0	00.0	00.0
7	27.31	27.31	27.31	00.12	00.12	00.12	00.00	00.00	00.00	00.0	00.0	00.0
8	27.31	27.32	27.31	00.12	00.12	00.12	00.00	00.00	00.00	00.0	00.0	00.0
0	-00.02	40.34	25.98	00.00	00.45	00.11	00.00	00.00	00.00	00.0	00.0	00.0

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
1	19.0	33.0	19.5	00.0	02.3	01.2	-01.0	44.2	22.2	00136	00342
2	22.0	38.0	29.1	00.6	02.0	01.4	-02.5	19.4	10.5	00273	00862
3	06.0	47.0	26.5	00.0	02.3	01.1	-40.2	32.6	03.7	00811	02189
4	31.0	42.0	34.0	01.1	02.3	01.6	-07.7	21.4	08.1	00373	01278
5	30.0	41.0	36.2	01.1	02.3	01.6	-09.0	18.6	05.7	00255	00885
6	27.0	38.0	33.3	01.1	01.7	01.4	-03.0	13.9	04.8	00153	00505
7	28.0	37.0	33.4	01.1	01.7	01.4	-00.8	11.6	03.4	00111	00365
8	25.0	43.0	32.8	00.9	02.0	01.3	-06.3	09.2	02.3	00104	00332
0	15.0	89.0	24.6	00.0	02.9	00.2	-62.4	30.0	-20.4	00731	00500

MOCNESS TOW #: 7

Date: Aug. 3, 01

Region: station 23

People Processing Sample: mari Butler

Nets tied in knot

"Tow sucks!" says Jay
all contents looked liquified / riced

NET #

Taxonomic Composition

0-1,000	0	krill, ctenophores
800-1,000	1	not much - a few copepods
600-800	2	1 huge myctophid, gelatinous material, copepods
400-600	3	copepods, gelatinous material, chaetognaths
200-400	4	copepods, few krill (5), myctophid, chaetognaths
100-200	5	krill, chaetognaths, copepods ↳ Thyssanoessa
50-100	6	Thyssanoessa, copepods
25-50	7	copepods
0-50	8	very very small catch - a few copepods

* TOW VERY QUESTIONABLE.

NETS ALL KNOTTED NEAR COD-ENDS.

1 sample jar cap cracked in transit to W. H.
Some sample may have been lost.

went by ✓

MOCNESS Tow Sheet (NBP0104)

St. Station No.: 26	Tow No.: 08
Date: 8/4/01	
Filename (raw): M-01-008.raw	Filename (processed): M-01-008.p0

Net Information

Net Size: 1 m	Net Condition: good OPC must
Net Mesh: 333	NI in 500 m

Start

End

Location (Lat/Lon): 67 1933, 71 13.10	Location (Lat/Lon): 67 1681 71 172
Time (Local) 1730 6	Time (GMT) 1706
Time (Local) 1452	Time (GMT) 1852
MOCNESS Battery Voltage: 14.6	MOCNESS Battery Voltage: 19.2

Environmental Parameters

Wind (Speed/Direction): 20 kt, 354	Sea State: 1.6
Water Depth (m): 469	Light and Clouds: light / overcast
Air Temperature: 0.2 °C	SST:

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-382	0	1706	382	1726	445	yes NR
1	382-300	382	1726	291	1735	374	to 600 low
2	300-200	291	1735	193	1753	498	NR
3	200-150	193	1753	149	1809	557	NR
4	150-100	149	1809	100	1823	791	NR
5	100-75	100	1823	71	1831	434	NR
6	75-50	71	1831	52.1	1838	377	NR
7	50-25	52.1	1838	24.3	1844	306	NR
8	25-0	24.3	1844	13.1	1851	310	NR

Program stopped at 1750, couldn't query WNW
1750

lost comm at 1752
Stowed at 204 m

Shut OPC off eventually after it kept
stopping MOC data acquisition

M-01-08
3 Aug 2001
RVIB NBP 01-04

MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
0	194.9	204.4	201.4	01.1	02.9	01.2	01.1	02.9	01.2	32.74	34.58	34.46
1	149.3	192.7	166.6	00.4	01.1	00.8	00.4	01.1	00.8	34.40	34.57	34.49
2	101.4	148.4	122.9	-00.7	00.4	-00.1	-00.7	00.4	-00.1	34.14	34.40	34.28
3	72.4	100.0	87.3	-01.3	-00.7	-01.0	-01.3	-00.7	-01.0	34.01	34.14	34.06
4	51.6	74.1	63.9	-01.7	-01.3	-01.6	-01.7	-01.3	-01.6	33.94	34.03	33.97
5	24.7	52.4	40.4	-01.8	-01.7	-01.8	-01.8	-01.7	-01.8	33.88	33.95	33.92
6	-01.3	24.3	17.0	-01.8	-01.8	-01.8	-01.8	-01.8	-01.8	33.25	33.88	33.86

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
0	26.09	27.70	27.60	00.00	00.15	00.13	00.00	00.00	00.00	00.0	00.0	00.0
1	27.60	27.69	27.65	00.14	00.14	00.14	00.00	00.00	00.00	00.0	00.0	00.0
2	27.45	27.60	27.53	00.14	00.14	00.14	00.00	00.00	00.00	00.0	00.0	00.0
3	27.36	27.44	27.39	00.14	00.15	00.14	00.00	00.00	00.00	00.0	00.0	00.0
4	27.32	27.38	27.34	00.14	00.15	00.14	00.00	00.00	00.00	00.0	00.0	00.0
5	27.27	27.32	27.30	00.14	00.14	00.14	00.00	00.00	00.00	00.0	00.0	00.0
6	26.76	27.27	27.25	00.14	09.35	00.24	00.00	00.00	00.00	00.0	00.0	00.0

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
0	34.0	37.0	35.9	01.4	21.1	11.5	-99.0	15.1	-45.7	00016	00490
1	35.0	42.0	38.8	01.4	04.9	01.9	-06.3	21.4	05.0	00141	00557
2	36.0	45.0	41.5	01.1	02.3	01.8	-08.8	20.2	03.3	00211	00791
3	33.0	43.0	39.7	01.1	02.3	01.7	-08.8	12.9	03.4	00120	00434
4	31.0	44.0	37.3	01.1	02.3	01.6	-13.2	16.5	03.1	00109	00377
5	28.0	44.0	35.6	01.1	02.3	01.6	-15.3	14.9	04.3	00088	00306
6	15.0	64.0	31.6	00.6	02.0	01.3	-03.2	18.1	03.3	00098	00310

MOCNESS TOW #: 8

Date: Aug. 4, 01

Region: station 26

People Processing Sample: Mari & Jonette & Jay

NET #

Taxonomic Composition

0

1

2

3

4

5

6

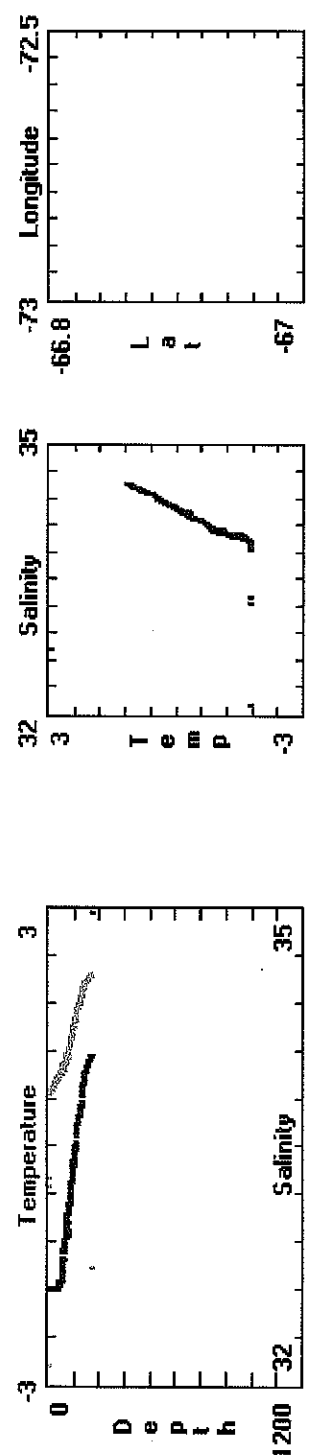
7

8

—	
Pteropods OSTRACODS COPEPODS	SOME FURCULA (10 TAKEN FOR MB, KD) 382-300
CHAETOGNATHS LOTS OF COPEPODS PTEROPODS	BIG "EYEBALL" JELLY 300-200
Pteropods CHAETOGNATHS COPEPODS	KRILL (LOOK OPAQUE) ← IN NET FROM LAST TIME? 200-150
PTEROPODS T. MACURA SIPHONOPHORES	150-100
T. MACURA SIPHONOPHORES OSTRACODS	COPEPODS SKIMPY CATCH 100-75
pteropods, chaetognaths - & cops - a few ctenos & amphipods	SKIMPY catch 75-50
pteropods - mixed w/ shells ostracods	1 cteno - a few E. cristalloplana (10 & KD) 50-25
FEW EUPHAUSIDS OSTRACODS COPEPODS	VERY FEW ITEMS 25-5

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	18:52:13	Net_Num	7	Latitude	67S 16.810	Reset	
Pressure	0.4 m	OpenTime	0.7 min	Longitude	71W 17.21	Baud Rate	2400
Temp	-1.78 C	Vol_Filtered	60.1 m3	Net_Dist	24.6 m	Sample Rate	4.0 sec
Salinity	33.85 o/oo	Angle	29 deg	Total_Dist	3464.4 m	Printer	Off
Density	27.247	Flow_Counts	10	Processed File Name	C:\MOCNESS\MOCDATA\NBPO104\M-01-008.PRO		
Oxygen		Hor_Vel	1.7 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBPO104\M-01-008.raw		
Fluoresc.	0.0000 V	Vert_Vel	-0.6 m/min	Acquisition Ended. tlys = 10			
LightXmis	0.2206 /m	Battery	19.2 V				

Depth
 0
 1200
 Time 17:00 19:00



MOCNESS Tow Sheet (NBP0104)

went log ✓

St. Station No.: 35	Tow No.: 9
Date: 8/8/01	
Filename (raw): M-01-009.raw	Filename (processed): M-01-009.p10

Net Information

Net Size: 1m	Net Condition: N/A 500m
Net Mesh: 333	Stromes, OPC, nearly cleaned battery

Start

End

Location (Lat/Lon): 67 53.736, 68 10.82		Location (Lat/Lon): 67 54.16, 68 19.03	
Time (Local) 0215	Time (GMT) 0615	Time (Local) 0346	Time (GMT) 746
MOCNESS Battery Voltage: 20.7		MOCNESS Battery Voltage: 20.5V	

Environmental Parameters

Wind (Speed/Direction): 14.6, 288	Sea State: 1C
Water Depth (m): 630	Light and Clouds: dark
Air Temperature: -17.0	SST: -1.795

Net Tow Information

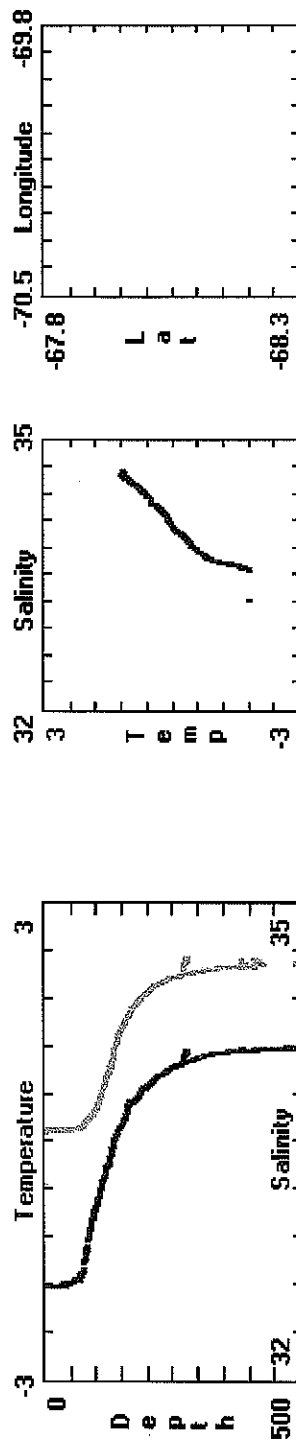
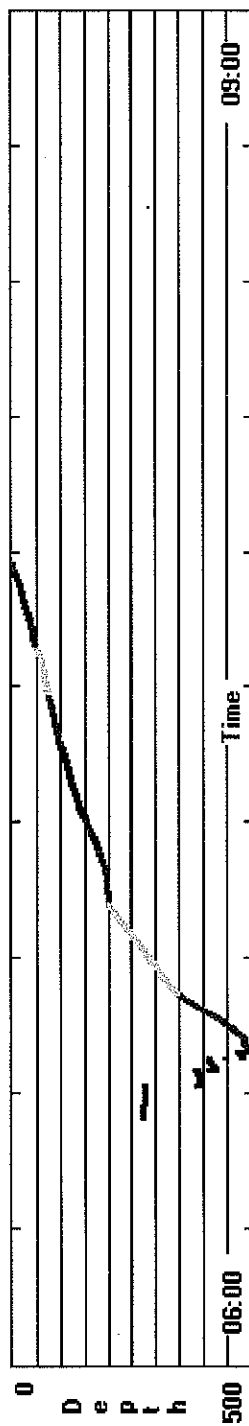
Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-500	0	0615	495	643		NO NR, did not
1	350-500	495	643	346	649	376	NO NR, &
2	200-350	346	649	200	0702	699	NO NR, no &
3	150-200	200	0702	150	0712	581	NR after step #1
4	100-150	150	0712	100	0722	528	NO NR
5	75-100	100	0722	74.7	0729	320	NO NR & response
6	50-75	74.7	0736	47	0735	310	NO NR & response
7	25-50	47	0735	24	0741	268	NO NR no &
8	5-25	24	0741	0	746		NR

no fluorescence for downcast

slight for upcast

All nets tripped upon recovery

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	07:46:40	Net_Num	9	Latitude	67S 54.161	Reset	
Pressure	1.1 m	OpenTime	0.8 min	Longitude	68W 19.03	Baud Rate	2400
Temp	50.0 C	Vol_Filtered	39.9 m3	Net_Dist	53.4 m	Sample Rate	4.0 sec
Salinity	0.22 o/oo	Angle	0 deg	Total_Dist	6383.6 m	Printer	Off
Density	-11.775	Flow_Counts	9	Processed File Name	C:\MOCNESS\MOCDATA\MBP0104\M-01-009.PRO		
Oxygen		Hor_Vel	1.1 kts	Raw File Name	C:\MOCNESS\MOCDATA\MBP0104\M-01-009.raw		
Fluoresc.	0.0000 V	Vert_Vel	0.6 m/min	Acquisition Ended. tsys = 7			
LightXmis	0.5422 /m	Battery	20.5 V				



M-01-09
5 Aug 2001
RVIB NBP 01-04

MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
1	346.7	488.0	428.2	01.1	01.2	01.2	01.1	01.2	01.1	34.59	34.62	34.61
2	200.4	344.6	268.9	00.7	01.1	01.0	00.7	01.1	00.9	34.44	34.59	34.54
3	151.3	200.4	183.1	00.2	00.7	00.6	00.2	00.7	00.6	34.22	34.44	34.38
0	-11.7	499.3	124.2	-01.8	50.0	08.5	-01.8	50.0	08.5	00.02	50.00	23.10
5	74.7	99.2	87.1	-01.6	-00.8	-01.2	-01.6	-00.8	-01.2	33.59	33.70	33.65
6	48.3	74.4	63.4	-01.8	-01.6	-01.7	-01.8	-01.6	-01.7	33.57	33.60	33.58
7	24.1	47.8	36.4	-01.8	-01.8	-01.8	-01.8	-01.8	-01.8	33.57	33.58	33.57
8	-00.9	23.5	13.1	-01.8	-01.8	-01.8	-01.8	-01.8	-01.8	33.57	33.58	33.58
0	-11.7	499.3	124.2	-01.8	50.0	08.5	-01.8	50.0	08.5	00.02	50.00	23.10

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
1	27.71	27.73	27.72	00.12	00.14	00.13	00.00	00.00	00.00	00.0	00.0	00.0
2	27.62	27.71	27.68	00.12	00.16	00.13	00.00	00.00	00.00	00.0	00.0	00.0
3	27.46	27.61	27.57	00.13	00.15	00.14	00.00	00.00	00.00	00.0	00.0	00.0
0	-11.92	27.77	16.47	00.00	24.36	02.95	00.00	00.00	00.00	00.0	00.0	00.0
5	27.03	27.10	27.07	00.14	00.17	00.15	00.00	00.00	00.00	00.0	00.0	00.0
6	27.02	27.04	27.03	00.15	00.16	00.15	00.00	00.00	00.00	00.0	00.0	00.0
7	27.02	27.03	27.02	00.14	00.15	00.15	00.00	00.00	00.00	00.0	00.0	00.0
8	27.02	27.03	27.02	00.14	00.17	00.15	00.00	00.00	00.00	00.0	00.0	00.0
0	-11.92	27.77	16.47	00.00	24.36	02.95	00.00	00.00	00.00	00.0	00.0	00.0

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
1	24.0	42.0	33.2	01.1	02.6	02.0	-03.5	30.7	21.0	00102	00388 1
2	38.0	42.0	39.8	01.7	02.3	02.1	04.3	15.5	12.1	00183	00709 2
3	38.0	42.0	39.5	01.4	02.0	01.7	00.2	08.3	04.4	00163	00581 3
0	00.0	44.0	32.7	00.0	03.4	00.6	-99.0	19.5	-07.2	00491	00725
5	34.0	41.0	35.8	01.4	01.7	01.5	01.8	05.7	03.8	00098	00324 5
6	31.0	38.0	33.2	01.1	01.7	01.4	01.6	07.1	03.9	00097	00316 6
7	30.0	34.0	32.5	01.1	01.4	01.4	01.0	06.5	04.4	00084	00269 7
8	26.0	41.0	31.4	01.1	01.7	01.3	03.3	10.0	05.4	00064	00199 8
0	00.0	44.0	32.7	00.0	03.4	00.6	-99.0	19.5	-07.2	00491	00725

4 151 - 100

533

MOCNESS TOW #: TOW #9

Date: 08 AUG 01

Region: STATION #35

People Processing Sample: LAWSON, BUTLER, LARIVIERE, PETERSON

NET #

Taxonomic Composition

500	0	GAMMARIDS LARGE COPEPODS	
500-350	1	BIG JELLIES [SIPHONOPHORE, MEDUSAE] LOTS OF COPEPODS - FEW ADULT KRILL	HIGH BIOMASS
350-200	2	LARGE MYSIDS [3 TAKEN FOR MB, KD] GAMMARID AMPHIPODS (LARGE & SMALL) LOTS OF COPEPODS	LOTS OF BIOMASS
200-150	3	EUPHAUSIA COPEPODS	
150-100	4	ADULT KRILL [5 TAKEN FOR MB, KD] GAMMARIDS - FEW HYPERIDS - FEW COPEPODS FURCILLIA - [5 TAKEN FOR MB, KD]	LOTS OF BIOMASS
100-75	5	ADULT KRILL [1 TAKEN] FURCILLIA [8 TAKEN BY MB, KD] COPEPODS 10	MEDIUM BIOMASS
75-50	6	AMPHIPODS (GAMMARID) CTENOPHORES FURCILLIA (W/ FULL GUTS) 10 Furcillia taken By KD	LOW BIOMASS
50-25	7	FURCILLIA [10 TAKEN BY MB, KD] FISH LARVAE FEW GAMMARIDS	LOW BIOMASS
25-0	8	COPS - 10TS 2 adult Krill Some Furcillia 10 Furcillia taken	

went log ✓

MOCNESS Tow Sheet (NBP0104)

St. Station No.: 43	Tow No.: 10
Date: 8-9-01	
Filename (raw): M-01-010	Filename (processed): M-01-010

Net Information

Net Size: 1 m	Net Condition: good OPC
Net Mesh: 333	Wt in 500m

Start

End

Location (Lat/Lon): 67 50.07 71 1.16	Location (Lat/Lon): 67 49.00 71 07.54
Time (Local) 1502	Time (GMT) 1902
Time (Local) 1703	Time (GMT) 2103
MOCNESS Battery Voltage: 20.5	MOCNESS Battery Voltage: 20.1

Environmental Parameters

Wind (Speed/Direction): 24 kt, 287°	Sea State: 1C
Water Depth (m): 462	Light and Clouds: day, cloudy
Air Temperature: -0.6°	SST: -1.76

Net Tow Information

Net #	Target Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-416	0	1902	416	1926	582	no NR
1	416-300	416	1926	296	1945	593.1	NR
2	200-300	296	1945	200	1954	419	NR
3	150-200	200	1954	149	2006	~429	NR-none
4	100-150	149	2006	96	2033	764.7	No NR
5	75-100	96	2033	73	2038	244	No NR
6	50-75	73	2038	48	2044	257	NO NR
7	25-50	48	2044	24	2053	463	NO NR
8	0-25	24	2053	16	2102	235	NO NR

P sensor working, strike on
Nets # 1-9 in data file
Ice snags a lot
Nets - lots of ice snags

Net #4 also snagged on ice
2016, Net #4, lost vol. filtered + angle

more comments
See back for actual

(1) ~~the~~ in data file

<u>Net #</u>	<u>Depth Range</u>
0(1)	0-419
1(2)	419-300
2(3)	300-202
3(4)	253-110
4(5)	240-95
5(6)	94-72
6(7)	71-46
7(8)	45-21
8(9)	21-6

actual
net #

in data file

redo this

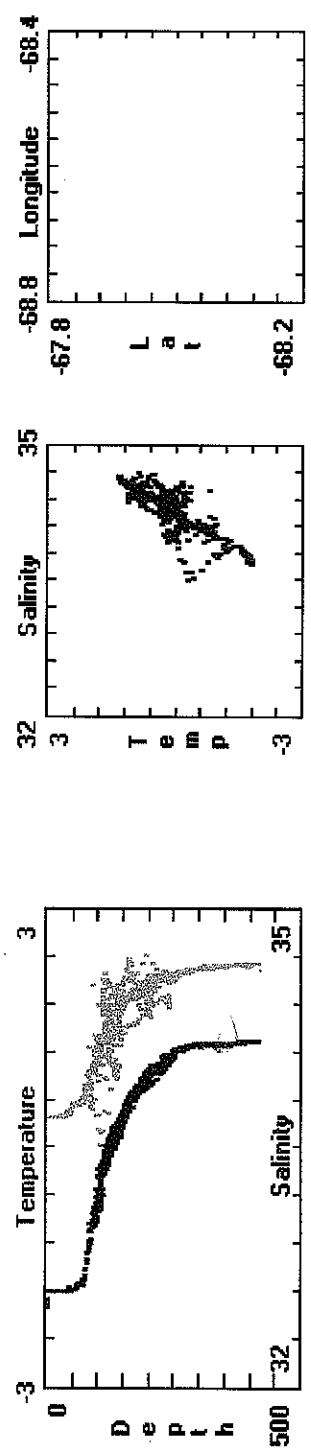
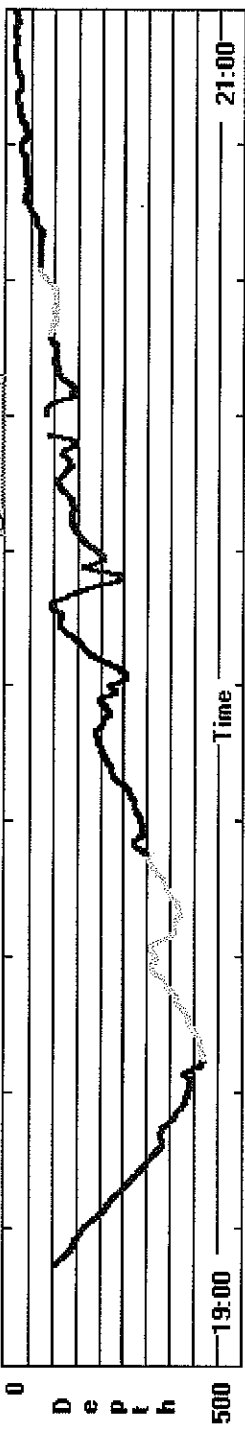
mean of

Net 3 was closed and 4 opened at ~150m depth but there was no net response + the manual net increment was not done until 110m. whoops. The depth ranges + volumes filtered for nets 3 + 4 will therefore be funny.

Environmental Parameters Net Operation Net - Ship Position Program Settings

Time	21:01:12	Net_Mum	10	Latitude	67S 49.001	Reset
Pressure	-1.4 m	OpenTime	0.7 min	Longitude	71W 7.553	Baud Rate
Temp	-1.95 C	Vol_Filtered	6.2 m3	Net_Dist	11.8 m	Sample Rate
Salinity	0.13 o/oo	Angle	4 deg	Total_Dist	5238.2 m	Printer
Density	-0.215	Flow_Counts	2	Processed File Name	C:\MOCNESS\MOCDATA\NBP0104\M-01-010.PRO	
Oxygen		Hor_Vel	0.3 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBP0104\M-01-010.raw	
Fluoresc.	0.0000 V	Vert_Vel	8.6 m/min	##MN-30 00 04 0725 01760 0069 920660 934962 2011E:1		
LightXmis	1.6384 /m	Battery	20.1 V	\$GPGLL,6749.0018,S,07107.5536,W,210304.837		

 ☐ Strobe On ☒ Strobe Off



M-01-10
8 Aug 2001
RVIB NBP 01-04

MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
0	-03.4	01.2	-01.2	-00.9	03.6	00.7	-00.9	03.6	00.7	00.01	50.00	49.69
2	299.7	419.1	353.6	01.3	01.3	01.3	01.3	01.3	01.3	34.62	34.66	34.65
0	-03.4	01.2	-01.2	-00.9	03.6	00.7	-00.9	03.6	00.7	00.01	50.00	49.69
3	202.2	297.0	258.0	01.0	01.3	01.2	01.0	01.3	01.2	34.54	34.63	34.60
5	82.4	241.4	136.9	-01.3	01.1	00.1	-01.3	01.1	00.1	33.51	34.71	34.27
6	71.3	106.0	95.7	-01.7	-00.5	-00.9	-01.7	-00.5	-00.9	33.79	34.10	34.02
7	46.2	73.8	66.1	-01.8	-01.6	-01.7	-01.8	-01.6	-01.7	33.72	33.81	33.78
8	22.3	45.0	35.9	-01.8	-01.7	-01.8	-01.8	-01.7	-01.8	33.70	33.74	33.71
9	07.7	30.4	20.9	-01.8	-01.8	-01.8	-01.8	-01.8	-01.8	33.69	33.70	33.70
10	-01.6	04.6	-36.3	-02.0	50.0	-11.3	-02.0	50.0	-11.3	00.01	33.70	142.17

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
0	-00.03	40.34	39.93	02.13	31.92	03.64	00.00	00.00	00.00	00.0	00.0	00.0
2	27.72	27.75	27.74	00.11	00.14	00.12	00.00	00.00	00.00	00.0	00.0	00.0
0	-00.03	40.34	39.93	02.13	31.92	03.64	00.00	00.00	00.00	00.0	00.0	00.0
3	27.68	27.73	27.71	00.11	00.13	00.12	00.00	00.00	00.00	00.0	00.0	00.0
5	26.92	27.82	27.51	00.00	27.53	01.95	00.00	00.00	00.00	00.0	00.0	00.0
6	27.19	27.41	27.35	00.12	00.13	00.12	00.00	00.00	00.00	00.0	00.0	00.0
7	27.14	27.21	27.19	00.13	00.13	00.13	00.00	00.00	00.00	00.0	00.0	00.0
8	27.12	27.15	27.13	00.13	20.25	00.28	00.00	00.00	00.00	00.0	00.0	00.0
9	27.12	27.13	27.12	00.13	00.14	00.13	00.00	00.00	00.00	00.0	00.0	00.0
10	-11.85	27.12	93.33	00.14	03.36	50.92	00.00	00.00	00.00	00.0	00.0	00.0

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
0	39.0	79.0	63.3	00.0	00.6	00.0	-03.6	06.4	00.0	00483	00025
2	05.0	61.0	18.6	00.0	01.7	00.8	-53.0	35.3	06.4	00271	00593
0	39.0	79.0	63.3	00.0	00.6	00.0	-03.6	06.4	00.0	00483	00025
3	22.0	36.0	28.7	00.3	02.3	01.4	-28.7	36.3	10.5	00138	00420
5	00.0	48.0	08.4	00.0	05.1	00.7	-96.0	99.0	00.5	00339	00635
6	03.0	42.0	24.2	00.6	01.7	01.0	-11.8	25.3	03.7	00092	00244
7	24.0	45.0	32.7	00.9	02.0	01.4	-07.5	21.6	04.5	00080	00257
8	18.0	46.0	37.2	00.6	02.3	01.6	-18.7	16.9	02.5	00135	00463
9	00.0	40.0	17.7	00.0	01.7	00.7	-15.5	19.4	01.4	00128	00235
10	00.0	42.0	143.0	00.0	00.9	16.6	-00.4	24.3	184.5	00035	00061

MOCNESS TOW #: 10

Date: 09 AUGUST 01

Region: STATION #43

People Processing Sample: CJA, MB, JOP

NET #

Taxonomic Composition

0	COPEPODS KRILL		0- 419
1	FISH [MYCTOPHID] MONSTER CHAETOGNATH LOTS OF COPEPODS	FEW OPAQUE KRILL MED-LOW BIOMASS	419 -300
2-	COPEPODS 1 large amphipod few KRILL	MED-LOW BIOMASS	300- 202
3	COPEPODS FEW LARGE KRILL SALP	MED-LOW BIOMASS	253 710
4	FURCILLIA COPEPODS	SPARSE	240 -95
5	OPAQUE KRILL COPEPODS FURCILLIA PTEROPODS	SPARSE CATCH	94- 72
6	Krill & Ctenophores - 1 large chaetognath furcillae	Low BIOMASS	71- 46
7	Large SALP + furcillae Small SALPS	Low BIOMASS	45-21
8	-10 Furcillia taken for KD -a few fish -salps, Krill Furcillia → 2 dominant ones		21-6

went log ✓

MOCNESS Tow Sheet (NBP0104)

St. Station No.: 47	Tow No.: M-01-011
Date: 8/11/01	
Filename (raw): M-01-011.Raw	Filename (processed): M-01-011.Pro

Net Information

Net Size: 21 m ²	Net Condition: OK
Net Mesh: 335 μ m	W1 is 500 mm

Start

End

Location (Lat/Lon): -67 -74 14.687 25.266	Location (Lat/Lon): -67 -74 12.336 34.242
Time (Local) 0918 Time (GMT) 1318	Time (Local) 1201 Time (GMT) 1601
MOCNESS Battery Voltage: 19+	MOCNESS Battery Voltage: 19.7

Environmental Parameters

Wind (Speed/Direction): 10 - 15	Sea State: 0 - 100 pack
Water Depth (m): 2917	Light and Clouds: Clouds 100% - snow
Air Temperature: -1.1 C	SST: -1.806 C

flurries
big flakes

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-1000	0	0918	989	1406	541	No response
1	1000-800	989	1406	797	1423	769.0	No response
2	800-600	797	1423	580.9	1445	1121.5	No response Too busy watching ice
3	600-400	580.9	1445	401.9	1511	1206.6	Response
(0) 4	400-200	401.9	1511	202.9	1531	593.7 837.4	Response (0 to 1)
(1) 5	200-100	202.9	1531	100	1541	551.5	No response (2)
(2) 6	100-50	100	1541	50.2	1551	437.6	Response (3)
(3) 7	50-25	50.2	1551	25.2	1556	239.3	No response (4)
(4) 8	25-0	25.2	1556	0.0	1601	216.4	Response (5)

you're too little

- Stop at 1400 MWD - open net - ship's spd jumped to 4.0 during start of net 1
- 1411 lost signal 1412 - reestablished connection & kept re-ascending
- 1451 Caught wire on ice - stop watch - back down - Net sank to 7670m
- 1504 - lost w/c - set itself to 1200 bend
- 1507 - lost options - resetting - 1507 reset to 600 bend

- 1510 - lost option - resetting - lost u/w - re-start in time to open net 4
- 1521 - lost signal - set back to 300 restart 1521
- 1523 - lost option case - set to 300
- 1523 - lost option - can't run at 300 - Jay turned off OPC
retry - default option
- 1528 - stopped program & checked @ terminal -
could talk to u/w - so restarted using
same data file name - but options
deslected - only doing main u/w
- 1531 - did net command for net at 200m - got a net response
so Net 300 finished net 4 of previous run
and net "1" = Net 5 open
- 1533 - OPC turned on & shut down MOC-AQUA -
reset back to 300 band
- Q: Does Strobe stay on even if MOC program stopped
& restarted if it is not turned off?
Strobe turned on at 1537 but seemed already to be on
- 1539 - lost u/w - back to 600 Band
- 1542 - lost u/w - back to 600 Band
- 1544 - lost u/w - back to 300 Band - OPC Off -
- Note ^{lost} Net closed at 5m depth - actually it was
much closer to the surface - ship speed up at
last minute
- 1602 - net came up with all nets closed

Tow: M-01-11 RVIB NBP 01-04

Date: 11 Aug 2001

Temperature Probe # 2438 Conductivity Probe # 2067

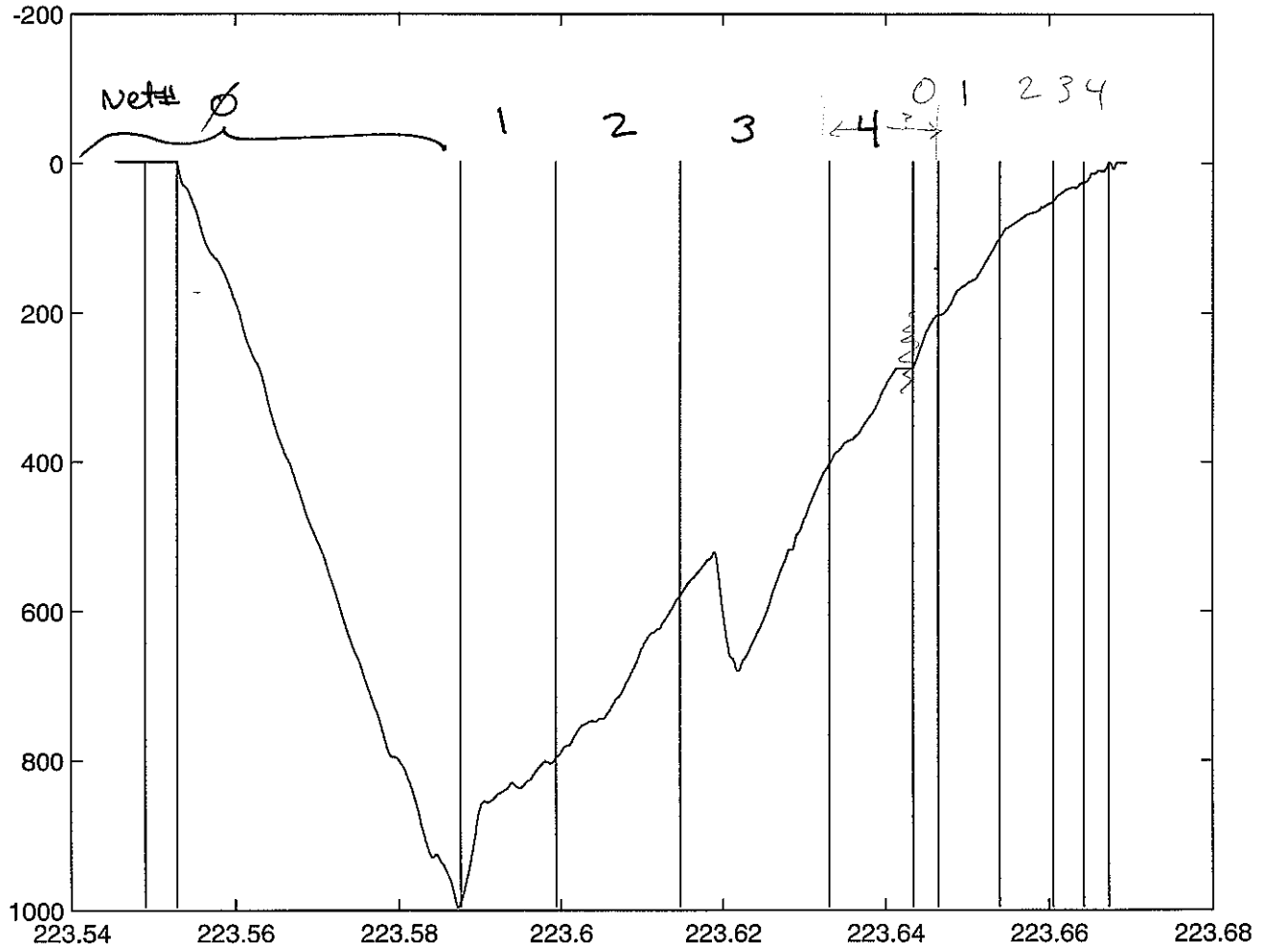
Pressure Probe # 148 Oxygen Probe # 1

Transmissometer # 439 Fluorometer # 1

time	pres	temp	angle	vol	net	lat	lon
223.5	-2	0.392	40	10.3	0	-67.2457	-74.4165
223.6	0	-1.86	34	77.8	1	-67.2451	-74.4205
223.6	988	1.219	17	541	0	-67.2363	-74.4717
223.6	796	1.384	33	769	1	-67.2323	-74.4937
223.6	579	1.548	37	1122	2	-67.2275	-74.5199
223.6	403	1.76	32	1207	3	-67.2234	-74.5441
223.6	274	1.736	35	593.7	4	-67.2206	-74.5566
<i>time</i> restart	<i>not</i>	<i>reset</i>					
223.6	225	1.77	35	697.8	0	-67.2191	-74.5621
223.6	203	1.63	40	<u>837.4</u>	4	-67.2185	-74.5645
223.7	100	-1.02	38	551.5	15	-67.215	-74.5745
223.7	51	-1.88	30	437.6	26	-67.2104	-74.5785
223.7	25	-1.88	32	239.3	34	-67.2077	-74.575
223.7	-1	-1.88	57	216.4	48	-67.2055	-74.5706
223.7	-1	-0.59	0	563.4	5	-67.2053	-74.569

11-28-01

nbp-0104 moc-11



wire caught
on ice.

11-28-01

M-01-11
11 Aug 2001
RVIB NBP 01-04

MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
1	99.9	203.1	157.4	-01.0	01.6	01.0	-01.0	01.6	01.0	34.19	34.58	34.47
2	51.2	98.2	69.2	-01.9	-01.1	-01.7	-01.9	-01.1	-01.7	33.82	34.19	33.92
3	25.2	49.7	35.3	-01.9	-01.9	-01.9	-01.9	-01.9	-01.9	33.82	33.82	33.82
4	-01.2	25.2	12.9	-01.9	-01.9	-01.9	-01.9	-01.9	-01.9	33.80	33.82	33.82
4	-01.2	25.2	12.9	-01.9	-01.9	-01.9	-01.9	-01.9	-01.9	33.80	33.82	33.82

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
1	27.50	27.66	27.62	00.10	00.10	00.10	00.00	00.00	00.00	00.0	00.0	00.0
2	27.22	27.50	27.30	00.10	00.10	00.10	00.00	00.00	00.00	00.0	00.0	00.0
3	27.22	27.23	27.22	00.10	00.10	00.10	00.00	00.00	00.00	00.0	00.0	00.0
4	27.21	27.23	27.22	00.10	00.10	00.10	00.00	00.00	00.00	00.0	00.0	00.0
4	27.21	27.23	27.22	00.10	00.10	00.10	00.00	00.00	00.00	00.0	00.0	00.0

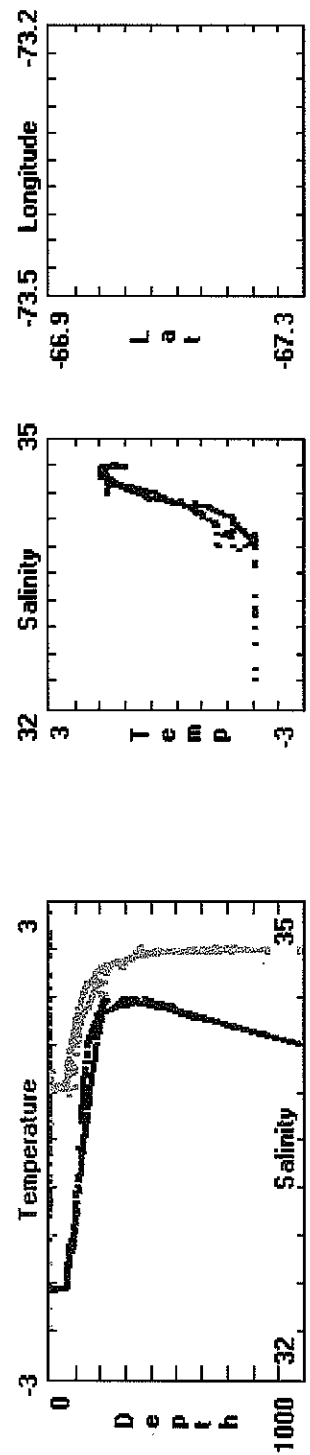
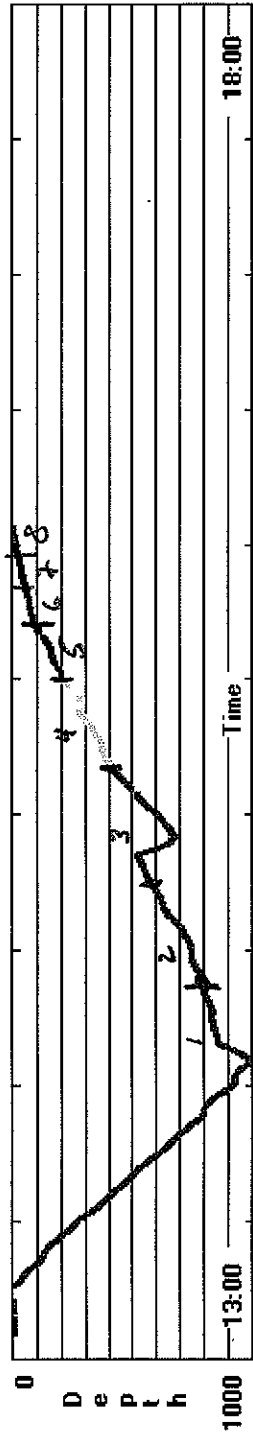
net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
1	32.0	44.0	34.8	01.4	03.7	01.8	00.0	30.4	10.5	00144	00551
2	26.0	39.0	35.0	01.1	03.4	01.7	00.8	13.3	06.1	00122	00438
3	25.0	35.0	31.3	00.9	01.4	01.3	-01.2	11.2	04.9	00079	00239
4	27.0	57.0	35.4	01.1	02.3	01.5	-03.4	16.1	05.3	00065	00216
4	27.0	57.0	35.4	01.1	02.3	01.5	-03.4	16.1	05.3	00065	00216

Replay of
original
data
PHW

Environmental Parameters Net Operation Net - Ship Position Program Settings

Time	16:4:6	Net_Num	5	Latitude	675 12.319	Reset
Pressure	1.3 m	OpenTime	3.1 min	Longitude	74W 34.13	Baud Rate
Temp	-0.59 C	Vol_Filtered	563.4 m3	Net_Dist	71.5 m	Sample Rate
Salinity	50.0 o/oo	Angle	0 deg	Total_Dist	9028.7 m	Printer
Density	40.308	Flow_Counts	67	Processed File Name	None	
Oxygen		Hor_Vel	6.6 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBP0104\M-01-011.RA	
Fluoresc.		Vert_Vel	0.2 m/min	Acquisition Ended	trys = 0	
LightXmis		Battery	19.7 V			

Step STBD Net Increment Net Pause Acqui End Acqui



MOCNESS TOW #: 11

Date: 8/11/01

Region: Transchi

People Processing Sample: Mari, Emily, JayP

NET #

Taxonomic Composition

0	- 2 large myctophids put in jar w/ Form + 1 cyclothone - krill, cops & several jellies in STOM	0 - 1000
1	- 3 cyclothone + 1 large myctophid - cops + chaetognaths	1000 - 800
2	- 2 large myctophids - cops - many dif. kinds - some HUGE & RED - ostracods & chaetognaths - lots of jelly - siphonophores or saeps? - mangled -	800 - 600
3	- Krill (Both Euphausia & Thysanoessa) - lots of jelly - maybe broken up siphonophore? - cops, chaetognaths, ostracods - a few	600 - 400
4	- chaetognaths - Electronia - jelly - copepods	400 - 200
5	- lots Thysanoessa - copepods - chaetognaths - ostracods - gelatinous stuff	200 - 100
6	- mostly euphausiids (T. mac?) & ostracods - a few cops & chaetognaths & amphipods pretty low biomass	100 - 50
7	very low biomass - a few cops & few amphipods - a little jelly? a fish larva	50 - 25
8	lots of ice and very little else. A few furcilia	25 - 1

Nets fished @ seeway, fished tow

MOCNESS Tow Sheet (NBP0104)

St. Station No.: 50	Tow No.: 12
Date: 8/12/01	
Filename (raw): M-01-0120.raw	Filename (processed): M-01-0120.pro

Net Information

Net Size: 1 m	Net Condition: good. Net 1 was 500mm for previous tows
Net Mesh: 333	NI is now 333m

Start

End

Location (Lat/Lon): 67 58.83, 72 26.32	Location (Lat/Lon): 67 50.44, 72 28.95
Time (Local) 1858	Time (GMT) 1858
Time (Local) 1623	Time (GMT) 1023
MOCNESS Battery Voltage: 19.6	MOCNESS Battery Voltage:

Environmental Parameters

Wind (Speed/Direction): 15 kt, 338°	Sea State: 1.8
Water Depth (m): 365	Light and Clouds: daylight, partly cloudy
Air Temperature: -8.7°C	SST: -1.8

Net Tow Information

Nets

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-290	0	1855	290	1920	50 !!	NO NR, NO X
0	290-250	290	1920	244	1925	NA	NO NR, NO X
2	250-200	244	1925	200	1932	NA	NO NR, NO X
3	200-150	200	1936	148	1947	NA	NO NR, NO X
4	150-100	148	1947	95	1952	NA	NO NR, NO X
5	100-75	95	1952	68	2006	NA	NO NR, NO X
6	75-50	68	2006	50	2011	NA	NO NR, NO X
7	50-25	50	2011	25?	2016	NA	NO NR, NO X
8	25-0	25?	2016	24.8	2022	NA	NO NR, NO X

Flow meter not fixing properly

Net hit bog on way in + fished, flow meter stuck on 6

Rise net after fished net #2. So N0 and N1 are both numbered N0

Depth close is OK, use that (can't fine)

N8 open - hit ice/cany up to 1.7 m, back down again

2
M-01-12
11 Aug 2001
RVIB NBP 01-04

MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
1	-02.4	-01.9	00.0	-00.9	50.0	00.7	-00.9	50.0	00.7	50.00	50.00	00.77
2	199.6	242.5	221.6	01.1	01.4	01.3	01.1	01.4	01.3	34.55	34.62	34.59
3	147.4	199.4	169.8	00.4	01.1	00.7	00.4	01.1	00.6	34.40	34.55	34.46
4	92.2	148.5	131.5	-00.8	00.4	00.1	-00.8	00.4	00.1	34.12	34.41	34.33
5	67.3	119.2	89.9	-01.8	-00.1	-00.9	-01.8	-00.1	-00.9	33.75	34.27	34.03
6	01.7	75.3	51.7	-01.9	-01.7	-01.8	-01.9	-01.7	-01.8	33.72	33.76	33.74
7	-01.3	26.3	1939.9	-01.9	-01.9	-174.9	-01.9	-01.9	-174.9	33.73	33.75	
3171.11												

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
1	24.68	40.33	00.40	02.00	07.05	00.07	00.00	00.00	00.00	00.0	00.0	00.0
2	27.68	27.71	27.70	00.07	00.08	00.07	00.00	00.00	00.00	00.0	00.0	00.0
3	27.60	27.68	27.64	00.07	00.08	00.07	00.00	00.00	00.00	00.0	00.0	00.0
4	27.43	27.61	27.56	00.07	00.08	00.07	00.00	00.00	00.00	00.0	00.0	00.0
5	27.17	27.52	27.36	00.07	00.08	00.08	00.00	00.00	00.00	00.0	00.0	00.0
6	27.14	27.17	27.16	00.07	22.56	00.30	00.00	00.00	00.00	00.0	00.0	00.0
7	27.15	27.16	2552.48	00.07	00.09	06.77	00.00	00.00	00.00	00.0	00.0	00.0

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
1	45.0	45.0	00.7	00.0	00.0	00.0	-00.6	00.6	00.0	00065	00000
2	31.0	42.0	35.3	00.0	00.0	00.0	-20.8	19.1	04.1	00161	00000
3	36.0	45.0	39.8	00.0	00.0	00.0	-09.0	18.9	04.6	00165	00000
4	28.0	40.0	35.5	00.0	00.0	00.0	-06.7	23.0	05.9	00131	00000
5	25.0	59.0	38.6	00.0	00.0	00.0	-26.3	28.7	02.7	00148	00000
6	00.0	50.0	33.7	00.0	00.9	00.1	-19.8	44.6	05.4	00160	00038
7	00.0	04.0	04.0	00.0	00.9	45.1	-10.0	37.5	63.3	00094	00171

MOCNESS TOW #: 12

Date: Aug 12, 01

Region: stat. 50

People Processing Sample: Jay Peterson / Mari Butler

NET #

Taxonomic Composition

0	a few cops -	VERY LOW BIOMASS
1	a few cops -	very low biomass
2	- cops - pteropods - polychaetes	
3	some krill ostracods cops	a little more biomass
4	cops fucellia chaetognaths	pretty low biomass
5	- ctenophores - cops (Euchaeta?) few fucellia	a little more biomass
6	- <10 krill fucellia - cops - ctenos	low biomass
7	ctenos a few fucellia a few ostracods	very low biomass
8	cops krill fucellia pantomps	like only 1 animal! in each group.

sample not
preserved

Tow Abort d MOCNESS Tow Sheet (NBP0104)

17:07 - redone
- see next page

St. Station No.: 52	Tow No.: 13
Date: 15 August 2001	
Filename (raw): M-01- 013 .raw	Filename (processed): M-01- 013 .PID

Net Information

Net Size: 1-m ²	Net Condition: OK UK, 500um
Net Mesh: 335um	net on Net ø

Start

End

Location (Lat/Lon): -68 -70 19.45 54.88		Location (Lat/Lon):	
Time (Local):	Time (GMT):	Time (Local):	Time (GMT):
MOCNESS Battery Voltage: 7. Reads 0 but has 21V		MOCNESS Battery Voltage:	

Environmental Parameters

Wind (Speed/Direction): 21 Kts 045	Sea State: 0 - ice pack
Water Depth (m): ~500 m	Light and Clouds: High clouds - good visibility
Air Temperature: -23.3 C	SST: -1.742 C

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-400	0					
1	400-350						
2	350-200						
3	200-150						
4	150-100						
5	100-75						
6	75-50						
7	50-25						
8	25-0						

This was a non-tow
it did not happen
No event #

- For some reason battery voltage is not been read properly although the battery has been measured at 21+ volts
- No Optims Cass (PI+TV). Not fix-ing

unt log ✓

MOCNESS Tow Sheet (NBP0104)

St. Station No.: 63	Tow No.: 13
Date: 8-17-01	
Filename (raw): M-01-013.raw	Filename (processed): M-01-013.prn

Net Information

Net Size: 1 m ²	Net Condition: OK, 500 µm on
Net Mesh: 335 µm	Net Ø

Start

End

Location (Lat/Lon): -68° 21' 22" N 56° 53' 00" W	Location (Lat/Lon): -68° 27' 6" N 03° 03' 1" W
Time (Local) 2117	Time (GMT) 0117
Time (Local) 1034	Time (GMT) 0234
MOCNESS Battery Voltage: 19.3	MOCNESS Battery Voltage: —No Reading

Bar = 958.0

Environmental Parameters

Wind (Speed/Direction): 10 kt 038	Sea State: Flat/0
Water Depth (m): 325 m	Light and Clouds: Night -
Air Temperature: -24.7	SST: 1.80

Water Depth
about 325 m

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	50-245	2117	222	0140	788.3	Net 1 (0)	
1	240-200	222	0140	200.3	0150	475.0	Net 2 (1)
2	200-150	200.3	0150	148	0157	300.7	Net 3 (2)
3	150-125	148	0157	124	0202	209.7	Net 4 (3)
4	125-100	124	0202	100	0211	389.6	Net 5 (4)
5	100-75	100	0211	74.5	0215	164.6	Net 6 (5)
6	75-50	74.5	0215	50	0224	408.3	Net 7 (6)
7	50-25	50	0224	25	0229	249.9	Net 8 (7)
8	25-0	25	0229	0	0234	224.6	Net 9 (8)

No
Shade

Shade on this net

- (1) lost Optois case + batt voltage dropped to zero
- (2) No reset at start (for 150s) so Net 3 zero reads Net 1 + Net 1 = Net 2
- (3) Good tow!

Net 10

M-01-013
17 Aug 2001
RVIB NBP 01-04

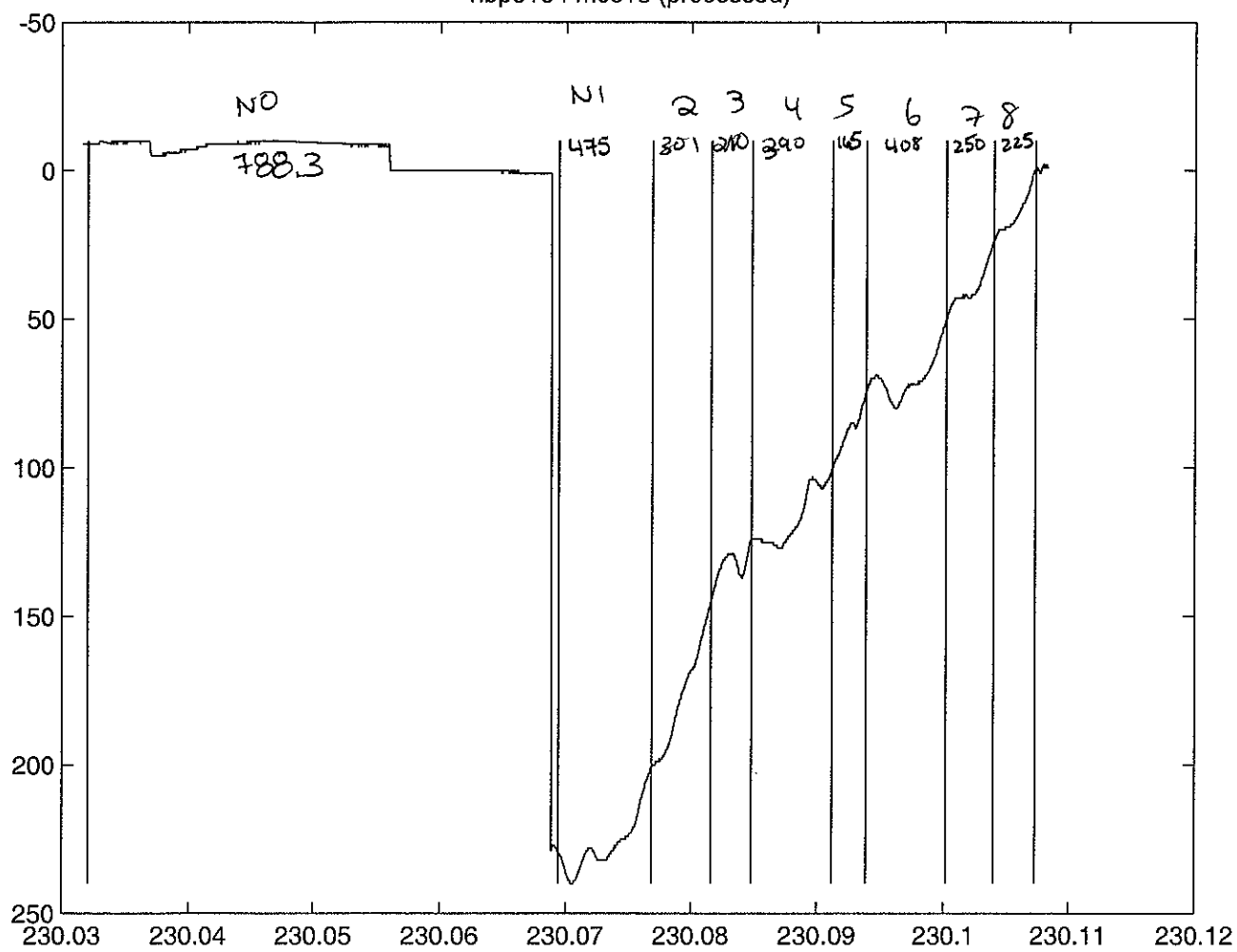
MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
0	-09.3	-08.9	-09.1	28.8	50.0	31.6	28.8	50.0	31.6	50.00	50.00	50.00
1	-10.0	229.6	-00.2	-01.9	50.0	14.1	-01.9	50.0	14.1	01.03	50.00	19.13
2	200.7	240.0	226.5	00.7	01.0	00.9	00.7	00.9	00.9	34.48	34.54	34.52
4	123.7	143.6	132.6	-00.7	-00.3	-00.5	-00.7	-00.3	-00.5	34.17	34.26	34.21
0	-09.3	-08.9	-09.1	28.8	50.0	31.6	28.8	50.0	31.6	50.00	50.00	50.00
5	100.4	126.9	117.0	-01.0	-00.6	-00.7	-01.0	-00.6	-00.8	34.06	34.18	34.15
6	74.5	99.4	87.5	-01.3	-00.9	-01.0	-01.3	-00.9	-01.0	33.88	34.06	33.98
7	50.4	80.4	69.9	-01.8	-01.3	-01.5	-01.8	-01.3	-01.5	33.70	33.88	33.80
9	-00.4	22.7	13.9	-01.9	-01.8	-01.9	-01.9	-01.8	-01.9	33.67	33.70	33.70
0	-09.3	-08.9	-09.1	28.8	50.0	31.6	28.8	50.0	31.6	50.00	50.00	50.00

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
0	24.68	33.46	32.35	00.00	00.26	00.24	00.00	00.55	00.42	00.0	00.0	00.0
1	-10.71	35.08	11.94	00.26	00.27	00.26	00.38	00.50	00.38	00.0	00.0	00.0
2	27.65	27.68	27.67	00.26	00.26	00.26	00.38	00.38	00.38	00.0	00.0	00.0
4	27.47	27.53	27.50	00.26	00.26	00.26	00.38	00.38	00.38	00.0	00.0	00.0
0	24.68	33.46	32.35	00.00	00.26	00.24	00.00	00.55	00.42	00.0	00.0	00.0
5	27.39	27.48	27.45	00.26	00.26	00.26	00.38	00.38	00.38	00.0	00.0	00.0
6	27.26	27.39	27.33	00.26	00.26	00.26	00.38	00.38	00.38	00.0	00.0	00.0
7	27.13	27.25	27.20	00.26	00.26	00.26	00.38	00.38	00.38	00.0	00.0	00.0
9	27.10	27.13	27.13	00.26	00.26	00.26	00.38	00.38	00.38	00.0	00.0	00.0
0	24.68	33.46	32.35	00.00	00.26	00.24	00.00	00.55	00.42	00.0	00.0	00.0

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
0	42.0	42.0	42.0	00.6	02.6	01.3	00.2	17.3	12.5	00011	00040
1	00.0	89.0	28.8	00.0	02.0	00.5	-99.0	02.0	-01.4	00658	00788
2	31.0	38.0	34.2	00.9	02.0	01.3	-09.8	12.8	02.5	00157	00475
4	30.0	37.0	33.4	00.9	01.7	01.3	-11.2	14.9	04.6	00069	00210
0	42.0	42.0	42.0	00.6	02.6	01.3	00.2	17.3	12.5	00011	00040
5	24.0	38.0	30.5	00.9	01.7	01.2	-03.9	14.3	02.6	00135	00390
6	26.0	35.0	29.1	00.9	01.7	01.2	-02.0	11.6	06.7	00056	00165
7	26.0	39.0	31.8	00.9	01.7	01.2	-07.7	10.6	02.6	00136	00408
9	24.0	56.0	32.8	00.9	02.6	01.4	00.4	11.2	05.1	00071	00225
0	42.0	42.0	42.0	00.6	02.6	01.3	00.2	17.3	12.5	00011	00040

nbp0104 moc13 (processed)



Tow: M-01-013 RVIB NBP 4-Jan
 Date: 17 Aug 2001
 Temperature Probe # 2438 Conductivity Probe # 2067
 Pressure Probe # 148 Oxygen Probe # 1
 Transmiss # 439 Fluorometer # 116

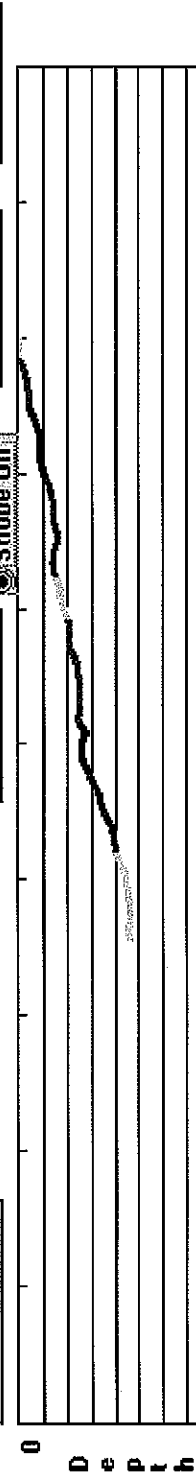
time	pres	temp	theta	sal	sigma	angle	flow	hzvel
230.0316	-9	30.582	30.584	50	32.817	42	2	0.6
230.0321	-9	28.855	28.858	50	33.432	42	0	2
230.0694	230	0.886	0.876	34.524	27.671	36	135	1.1
230.0769	201	0.659	0.651	34.477	27.647	33	89	1.4
230.0816	145	-0.271	-0.276	34.264	27.526	30	57	1.4
230.0848	124	-0.661	-0.665	34.17	27.468	37	41	1.7
230.0912	100	-1.012	-1.014	34.062	27.394	24	69	1.1
230.0938	74	-1.258	-1.26	33.884	27.258	35	30	1.7
230.1002	50	-1.83	-1.831	33.705	27.129	33	74	1.4
230.104	24	-1.849	-1.85	33.7	27.125	37	46	1.4
230.1073	0	-1.849	-1.849	33.669	27.1	56	45	2.6
230.1083	-1	-1.842	-1.842	33.663	27.095	25	20	1.7

net	vtvel	vol	fluor	ptran	lat	lon
0	17.17	8.7	0.4812	0.256	-68.2201	-72.9413 (start of tow)
1	0.35	0	0.348	0.262	-68.2201	-72.9416 (still going down)
1	-4.47	788.3	0.3766	0.262	-68.2151	-72.9842
2	7.49	475	0.3766	0.262	-68.2133	-72.9958
3	11.79	300.7	0.3766	0.262	-68.2123	-73.0028
4	11.79	209.7	0.3766	0.262	-68.2113	-73.0086
5	7.27	389.6	0.3766	0.262	-68.2099	-73.0184
6	10.8	164.6	0.3766	0.262	-68.2091	-73.0231
7	9.22	408.3	0.3766	0.262	-68.2072	-73.0339
8	8.63	249.9	0.3766	0.262	-68.2062	-73.0401
9	7.65	224.6	0.3766	0.262	-68.2053	-73.0457
ended 10	-0.4	89.5	0.3766	0.262	-68.205	-73.0476

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	02:35:57	Net_Num	10	Latitude	68S 12.298	Reset	
Pressure	-1.3 m	OpenTime	1.3 min	Longitude	73W 2.857	Baud Rate	2400
Temp	-1.84 C	Vol_Filtered	89.5 m3	Net_Dist	83.5 m	Sample Rate	4.0 sec
Salinity	33.66 o/oo	Angle	25 deg	Total_Dist	4712.3 m	Printer	Off
Density	27.095	Flow_Counts	20	Processed File Name			
Oxygen		Hor_Vel	1.7 kts	C:\MOCNESS\MOCDATA\MBP0104\M-01-013.PRO			
Fluoresc.		Vert_Vel	-0.4 m/min	Raw File Name			
LightXmis		Battery		C:\MOCNESS\MOCDATA\MBP0104\M-01-013.raw			
				###MN-10 00 25 0619 01761 0032 918519 498910 000HEI			
				\$GPGLL,6812.2985,S,07302.8574,W,023820.863			



MOCNESS TOW #: 13

Date: 17 AUG 01

Region: STATION # 63

People Processing Sample: PHW, JOP, KD

NET #

Taxonomic Composition

0-240	0	—
240-200	1	copepods - ostracods chaetognaths furcilia
200-150	2	copepods MED - LOW furcilia chaetognaths pteropods
150-125	3	FURCILIA (THYSANDESSA JUV.) PTEROPODS COPEPODS MED - LOW
-100	4	MEDUSAE POLYCHAETES E. SUPERBA (IMM) COPEPODS
-75	5	E. SUPERBA (IMM) FEW FISH LARVAE COPEPODS THYSANDESSA JUV.
-50	6	THYSANDESSA JUV. COPEPODS E. CRYSTALLINOPHILUS
-25	7	THYSANDESSA FISH LARVAE COPEPODS E. SUPERBA FURCILIA
-0	8	THYSANDESSA JUV. FISH LARVAE — TOO MUCH ICE TO SEE COPEPODS —

went log ✓

MOCNESS Tow Sheet (NBP0104)

St. Station No.: 78 87	Tow No.: 14
Date: 21 August 2001	
Filename (raw): M-01-014.Raw	Filename (processed): M-01-014.Pro

Net Information

Net Size: 1 m ²	Net Condition: OK Stowe in net
Net Mesh: 335 μ m	500 μ m in Net 0 net 2

Start 69 14.6 75 36.2

End

Location (Lat/Lon): 69 14.55 75 33.998 W	Location (Lat/Lon): 69 17 43 75 36.35
Time (Local) 1038 Time (GMT) 1438	Time (Local) 1326 Time (GMT) 1726
MOCNESS Battery Voltage: 21.1 1536	MOCNESS Battery Voltage: 20

Environmental Parameters

Wind (Speed/Direction): 25-30 kts North-east 050	Sea State: Ice Pack - 0
Water Depth (m): 2405 m	Light and Clouds: Skies bright Day - 0
Air Temperature: -12.2 C	SST: -1.685

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open start in	Depth Close	Time Close	Volume Filtered	Comments
0	0-309	0	1545	309	1612	1244.8	NR ✓
1	309-250	309	1612	250.8	1623	259.5	NR ✓
2	250-200	250.8	1623	196.8	1637	357	NO NR, $\theta > 60^\circ$
3	200-150	196.8	1637	147	1645	231.5	NR ✓
4	150-100	147	1645	94.4	1701	457.2	NR ✓
5	100-75	94.4	1701	69.5	1710	230	NR ✓
6	75-50	69.5	1710	34.4	1720	296.	NO NR $\theta = 0$
7	50-25	34.4	1720	24	1723	28	NO NR $\theta = 0$
8	25-0	24	1723	22.8	1724	24	NO NR

Note we are in a big lead that is about 4 miles long - we broke line through two to make one. - False start - engine thrust too soon & net got into ice - Had to retrieve & do check out again - Replaced flowmeter @ Wiebe's - other damaged. - In second time at 1545 - Pressure frozen at surface & while shooting net to depth. - Pressure came back at 1554

nothing - net was backwards
 ↳ Sample found but was essentially nothing - net was backwards

1643: Lead ran out, ship slowing to clear through
+ now speeding up

1650: caught in 2x

High χ , 2:1 wire to depth

1704 Lead has closed up

N5 trying to clear through ice
net deepened to 100m because
ship had to stop

Total w/o $\sim 350m$ at bottom? at 360m

Aborted tow @ N7 because lead closed

Strobe was on @ sight (19m?)

→ Pressure sensor reads 20 m @ surface ←

Checked χ w/ inclinometer on deck -

~~it is perfect~~ The χ reads 89° on

MOC program + the inclinometer

also reads ~~89~~ 80° . χ was 90°

greater during tow

Tow: M-01-014 NBP0104

Date: 21 Aug 2001

Temperature Probe # 2438 Conductivity Probe # 2067

Pressure Probe # 148 Oxygen Probe # 1

Transmissometer # 439 Fluorometer # 116

net#	yrday	gmt	time	gmt	press	dep.correct	temp	theta	sal	sigma	fluor
0	233.675		1612.451		308	290	0.987	0.972	34.566	27.698	0.0986
1	233.683		1623.683		251	233	0.795	0.784	34.505	27.662	0.0908
2	233.692		1637		198	180	0.47	0.462	34.41	27.604	0.0906
3	233.698		1645.434		147	129	0.076	0.071	34.26	27.505	0.0918
4	233.709		1701.566		96	78	-1.788	-1.79	33.71	27.132	0.0934
5	233.715		1710.249		70	52	-1.834	-1.835	33.686	27.114	0.07
6	233.722		1720.367		38	20	-1.848	-1.848	33.686	27.114	0.0888
nets 7&8 were backward - no catch											
7	233.725		1723.3		25	7	-1.857	-1.857	33.68	27.109	0.0728
8	233.726		1726.051		18	0	50	49.993	0.031	-11.91	0.0812

net#	angle	flow	hzvel	vtvel	vol	ptran	lat	lon
0	43	408	0.3	-11.94	1244.8	0.078	-69.2385	-75.6082
1	57	67	1.1	1.39	259.5	0.083	-69.2339	-75.6122
2	61	118	1.7	5.7	357	0.084	-69.2279	-75.6179
3	67	88	2	22.38	231.5	0.087	-69.2236	-75.6193
4	65	164	2	14.52	457.2	0.086	-69.2166	-75.609
5	64	92	1.7	8.23	230.2	0.085	-69.2124	-75.606
6	0	70	0.3	14.72	296.7	0.086	-69.2089	-75.6063
nets 7&8 were backward - no catch								
7	0	3	0	3.33	28.2	0.086	-69.2075	-75.6056
8	18	7	0	2.74	57.6	0.579	-69.2073	-75.606

M-01-014
21 Aug 2001
RVIB NBP 01-04

MOCNESS STATISTICAL SUMMARY

NetZ?
20meters
Net6?

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
0	-10.9	307.8	168.6	-01.8	01.0	00.3	-01.8	01.0	00.3	06.05	34.57	27.25
1	250.9	310.5	276.3	00.8	01.0	00.9	00.8	01.0	00.8	34.50	34.58	34.53
3	147.5	196.3	176.4	00.1	00.5	00.3	00.1	00.5	00.3	34.23	34.41	34.35
0	-10.9	307.8	168.6	-01.8	01.0	00.3	-01.8	01.0	00.3	06.05	34.57	27.25
4	96.3	154.3	128.6	-01.8	00.1	-00.5	-01.8	00.1	-00.5	33.71	34.38	34.06
5	69.5	103.8	85.0	-01.8	-01.6	-01.8	-01.8	-01.6	-01.8	33.68	33.75	33.70
7	24.7	36.1	30.6	-01.9	-01.8	-01.9	-01.9	-01.8	-01.9	33.68	33.69	33.69
8	17.7	24.4	860.7	-01.9	50.0	444.3	-01.9	50.0	444.2	00.03	50.00	
1064.80												

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
0	04.78	27.70	21.82	00.08	09.29	00.14	00.02	00.18	00.08	00.0	00.0	00.0
1	27.66	27.71	27.67	00.08	00.09	00.08	00.07	00.12	00.10	00.0	00.0	00.0
3	27.47	27.60	27.56	00.08	00.09	00.08	00.07	00.12	00.09	00.0	00.0	00.0
0	04.78	27.70	21.82	00.08	09.29	00.14	00.02	00.18	00.08	00.0	00.0	00.0
4	27.13	27.61	27.37	00.08	18.91	00.16	00.06	00.12	00.09	00.0	00.0	00.0
5	27.11	27.17	27.12	00.09	00.09	00.09	00.06	00.10	00.08	00.0	00.0	00.0
7	27.11	27.12	27.11	00.09	00.16	00.09	00.06	00.10	00.08	00.0	00.0	00.0
8	-11.91	27.11	733.79	00.09	25.69	34.31	00.01	00.25	03.46	00.0	00.0	00.0

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
0	42.0	70.0	55.6	00.0	71.1	02.0	-99.0	18.6	-04.8	00456	01245
1	40.0	58.0	49.4	00.3	01.4	00.9	-09.0	12.4	05.0	00167	00260
3	61.0	67.0	63.6	00.9	02.3	01.6	-13.9	22.6	05.7	00125	00232
0	42.0	70.0	55.6	00.0	71.1	02.0	-99.0	18.6	-04.8	00456	01245
4	49.0	89.0	63.7	00.9	02.6	01.6	-58.9	50.5	03.2	00240	00457
5	52.0	76.0	64.6	00.6	02.6	01.6	-32.8	32.8	03.3	00129	00230
7	00.0	00.0	00.0	00.0	00.6	00.2	-07.3	16.5	05.3	00043	00028
8	00.0	31.0	357.0	00.0	01.1	16.0	01.0	04.3	102.5	00040	00058

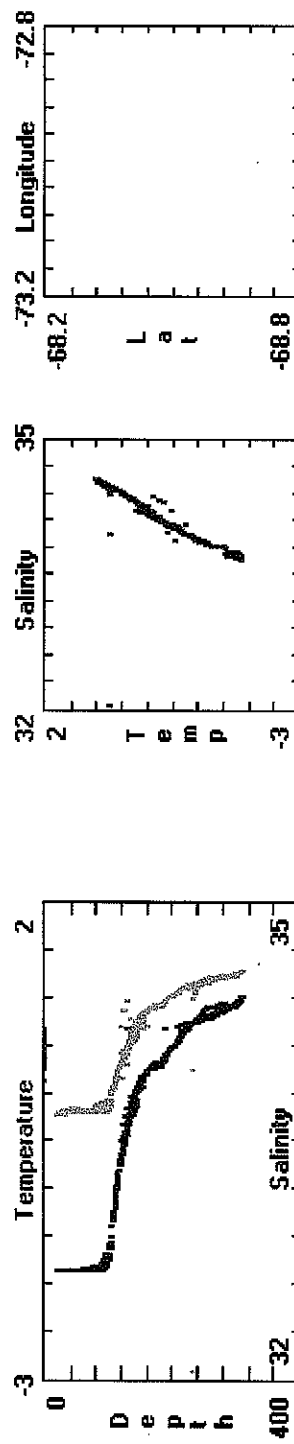
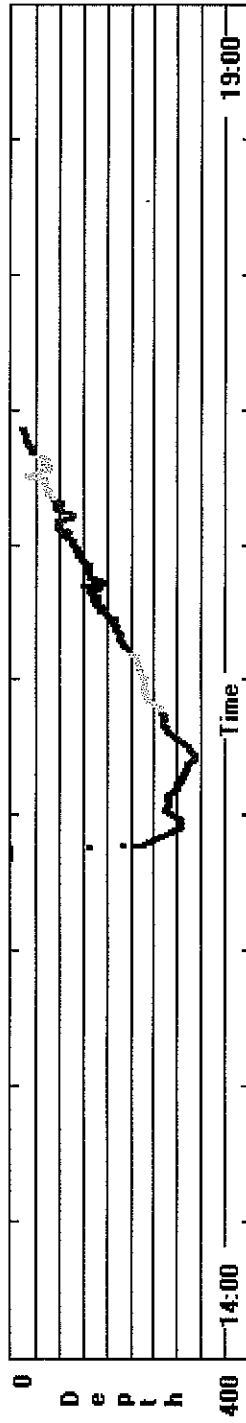
MOCNES - [Data Acquisition and Control System]

Acquisition Setup Hardware Setup Runtime Options Plot Setup Capture Screen About

Environmental Parameters Net Operation Net Ship Position Program Settings

Time	17:26:03	Net_Num	8	Latitude	69S 12.435	Reset
Pressure	17.7 m	OpenTime	2.7 min	Longitude	75W 36.35	Baud Rate
Temp	50.0 C	Vol_Filtered	57.6 m3	Net_Dist	29.8 m	Sample Rate
Salinity	0.03 o/oo	Angle	18 deg	Total_Dist	5001.9 m	Printer
Density	-11.91	Flow_Counts	7	Processed File Name	C:\MOCNES\MOCDATA\NBPO104\M-01-014.PRO	
Oxygen		Hor_Vel	0.0 kts	Raw File Name	C:\MOCNES\MOCDATA\NBPO104\M-01-014.raw	
Fluoresc.	0.0812 V	Vert_Vel	2.7 m/min	Acquisition Ended. tries = 0		
LightXmis	0.5794 /m	Battery	20.0 V			

Step STBD Met Increment Net End Acqui



MOCNESS TOW #: 14

Date: Aug. 21, 01

Region: station 87

People Processing Sample: ~~the whole world~~ Phil

NET #

Taxonomic Composition

0-309 0

Copep
Siphonophore ~~yes~~ Krill
Chaetognaths

309-250¹

copep mostly
Siphonophore
Thysanessa

250-200²

copepods - lots
Thysanessa larval

a few adult Krill

(13 furcillia removed KD)

200-150

3

Krill furcillia
Cops
Chaetognaths

dominant

a few amphipods

(20 furcillia removed KD)

150-100

4

copepods
Thysanessa
polychaetes

top 3

some planktons also present
some tiny ciliate larvae?

100-75

5

copepods - some big ones
Thysanessa larval

75-50

6

ctenophores
copep
Thysanessa larval

50-25

7

not Fished

25-0

8

not Fished

went 1g✓

MOCNESS Tow Sheet (NBP0104)

St. Station No.: 87	Tow No.: 15
Date: 8/22/01	
Filename (raw): M-01-015.raw	Filename (processed): M-01-015.p10

Net Information

Net Size: 1 m ²	Net Condition:
Net Mesh: 333	OPC on

Start

End

Location (Lat/Lon): 69 12.3 75 439		Location (Lat/Lon): 69 12.901; 75 45.21	
Time (Local) 0327	Time (GMT) 0727	Time (Local) 0354	Time (GMT) 0754
MOCNESS Battery Voltage: 20.1 V		MOCNESS Battery Voltage: 19.8 V	

Environmental Parameters

Wind (Speed/Direction): 14 kt, 230°	Sea State: 1/2
Water Depth (m): 378	Light and Clouds: dark, stars
Air Temperature: -15.4	SST: -1.201

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0							
1							
2							
3							
4							
5	0-100	0	0727	99 OPC	0735	158.1	NR✓
6	100-50	99	0735	50 MAC	0744	356.2	NR✓
7	50-10	50	0744	2.2 MAC	0753	347.4	NR✓
8	10-10	—	—	—	—	—	NR✓

Ran 3 nets only to get top of water column to augment Tow #14

Shore ops for W5, working on upcast
5900 looks wrong - became OK when press hit right @ 0737

280° 15N

Pressure reads 1.0 m @ surface

Tow: M-01-15 NBP0104
 # Date: 21-Aug-01
 # Temperature Probe #2438 Conductivity Probe #2067
 # Pressure Probe #148 Oxygen Probe #1
 # Transmissometer #439 Fluorometer #116

net	yday_gmt	time_gmt	press	temp	theta	sal	sigma	fluor
5	234.317	735.816	0 - 80	-1.765	-1.765	28.483	22.884	0.0984
6	234.322	744.316	91.88 - 50	-1.865	-1.866	33.681	27.11	0.092
7	234.329	753.684	50 - 2	-1.866	-1.866	33.681	27.11	0.0852

net	angle	flow	hzvel	vtvel	vol	ptran	lat	lon
5	20	20	0.9	-41.62	158.1	0.086	-69.2076	-75.7371
6	29	60	1.1	6.09	356.2	0.087	-69.2109	-75.7455
7	40	64	1.1	7.86	374.7	0.149	-69.2146	-75.753

pressure = 1m @ Surface

M-01-15
21 Aug 2001
RVIB NBP 01-04

MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
1	-01.3	-00.7	-00.4	50.0	50.0	24.5	50.0	50.0	24.5	50.00	50.00	24.48
2	-01.0	-01.0	-01.0	50.0	50.0	50.0	50.0	50.0	50.0	50.00	50.00	50.00
3	-01.0	-01.0	-01.0	50.0	50.0	50.0	50.0	50.0	50.0	50.00	50.00	50.00
4	-01.0	-01.0	-01.0	50.0	50.0	50.0	50.0	50.0	50.0	50.00	50.00	50.00
5	-01.4	80.3	04.8	-01.9	50.0	29.4	-01.9	50.0	29.4	04.30	50.00	39.99
6	-01.2	91.0	63.0	-01.9	50.0	-01.3	-01.9	50.0	-01.3	28.84	50.00	30.00
6	-01.2	91.0	63.0	-01.9	50.0	-01.3	-01.9	50.0	-01.3	28.84	50.00	30.00
7	-01.0	49.1	27.1	-01.9	50.0	-01.5	-01.9	50.0	-01.5	33.68	50.00	33.80
8	01.9	02.2	02.1	-01.9	-01.9	-01.9	-01.9	-01.9	-01.9	33.68	33.68	33.68

net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
1	24.68	24.68	12.08	00.35	00.35	00.17	00.06	00.12	00.04	00.0	00.0	00.0
2	24.68	24.68	24.68	00.35	00.35	00.35	00.09	00.09	00.09	00.0	00.0	00.0
3	24.68	24.68	24.68	00.35	00.35	00.35	00.09	00.09	00.09	00.0	00.0	00.0
4	24.68	24.68	24.68	00.35	00.35	00.35	00.08	00.08	00.08	00.0	00.0	00.0
5	-01.37	24.68	22.80	00.07	04.54	00.28	00.04	00.13	00.07	00.0	00.0	00.0
6	23.17	27.11	24.03	00.09	00.35	00.08	00.06	00.10	00.08	00.0	00.0	00.0
6	23.17	27.11	24.03	00.09	00.35	00.08	00.06	00.10	00.08	00.0	00.0	00.0
7	24.68	27.11	27.09	00.09	00.35	00.09	00.06	00.11	00.09	00.0	00.0	00.0
8	27.11	27.11	27.11	00.11	06.24	01.78	00.08	00.34	00.15	00.0	00.0	00.0

net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol
1	44.0	45.0	22.0	00.0	00.0	00.0	-00.4	00.4	00.0	00023	00000
2	45.0	45.0	45.0	00.0	00.0	00.0	00.0	00.0	00.0	00001	00000
3	45.0	45.0	45.0	00.0	00.0	00.0	00.6	00.6	00.6	00001	00000
4	45.0	45.0	45.0	00.0	00.0	00.0	-00.4	-00.4	-00.4	00001	00000
5	00.0	45.0	30.5	00.0	00.9	00.2	-43.8	01.0	-03.8	00288	00158
6	21.0	45.0	24.7	00.0	01.4	01.0	-37.9	08.3	02.4	00140	00356
6	21.0	45.0	24.7	00.0	01.4	01.0	-37.9	08.3	02.4	00140	00356
7	16.0	45.0	26.8	00.0	01.4	01.0	00.0	11.4	05.0	00140	00375
8	40.0	57.0	48.0	01.4	01.7	01.6	03.1	07.3	05.3	00004	00016

MOCNESS TOW #: 15

Date: 8.22.01 @ 03:30

Region: STA 87 - (remainder of Tow 14)

People Processing Sample: (PA)

NET #

Taxonomic Composition

0

1

2

3

4

5

CTENOPHORES
COPEPODS
FURCULA

- 95% E60H

6

COPEPODS
CHAETOGNATHS
THYSADESSA

1 E. SUPERBA (JUV.)

SPARSE

7

CTENOPHORES (MANY)
COPEPODS
FURCULA

1 FISH LARVAE

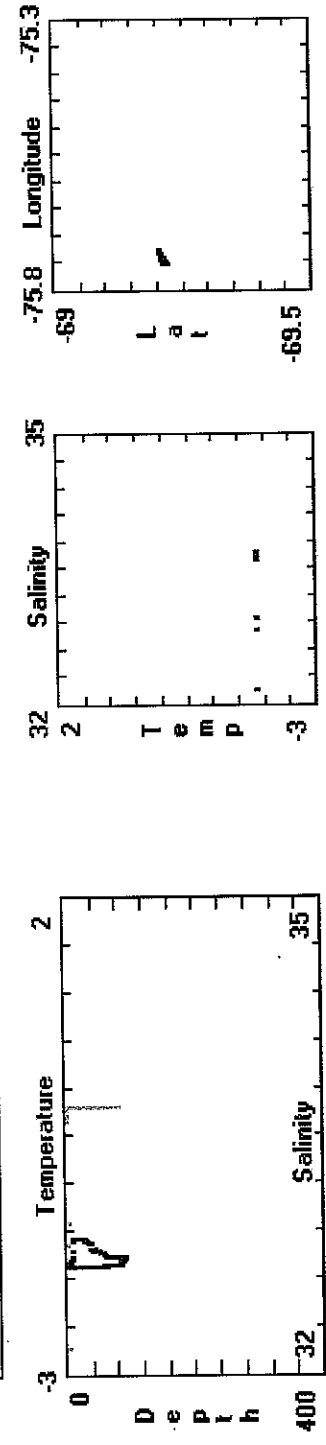
A LITTLE LESS
SPARSE

8

Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	07:54:57	Net_Num	9	Latitude	69S 12.901	Reset	
Pressure	0.5 m	OpenTime	0.9 min	Longitude	75W 45.21	Baud Rate	2400
Temp	50.0 C	Vol_Filtered	28.1 m3	Net_Dist	33.2 m	Sample Rate	4.0 sec
Salinity	0.25 o/oo	Angle	1 deg	Total_Dist	1919.1 m	Printer	Off
Density	-11.752	Flow_Counts	7	Processed File Name	C:\MOCNESS\MOCDATA\NBPO104\M-01-015.PRO		
Oxygen		Hor_Vel	0.3 kts	Raw File Name	C:\MOCNESS\MOCDATA\NBPO104\M-01-015.raw		
Fluoresc.	0.0932 V	Vert_Vel	1.0 m/min	Please wait ... closing system down			
LightXmis	0.5112 /m	Battery	9.8 V	\$GPGLL,6912.9013,S,07545.2194,W,075854.366			

☐ Strobe On
 ☒ Strobe Off

Depth vs Time plot. The y-axis is Depth (0 to 400) and the x-axis is Time (07:00 to 09:00). A sharp drop in depth is visible at 07:00.



went 19

MOCNESS Tow Sheet (NBP0104)

St. Station No.: 71	Tow No.: 16
Date: 8/23/01	
Filename (raw): M-01-016.raw	Filename (processed): M-01-016.pro

Net Information

Net Size: 21 m ²	Net Condition: 50um in net &
Net Mesh: 333	335 on all others, OPC

Start

End

Location (Lat/Lon): 68° 23' 8", 74° 43' 85"		Location (Lat/Lon): 68° 31', 74° 48'	
Time (Local) 0133	Time (GMT) 0533	Time (Local) 0300	Time (GMT) 0700
MOCNESS Battery Voltage: 19.6		MOCNESS Battery Voltage: NA	

Environmental Parameters

Wind (Speed/Direction): 21 kt, 230°	Sea State: ice
Water Depth (m): 880	Light and Clouds: dark + cloudy
Air Temperature: -14.7	SST: -1.85

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-650	0	0533	635	06:00	362	40mL & very low & res.
1	650-400	Tow	Aborted - no data + bad ice				
2	400-200		The ground cable had come disconnected				
3	200-150						
4	150-100						
5	100-75						
6	75-50						
7	50-25						
8	25-0						

697 m w/o, 537 m depth (OPC) and still no pressure reading from MOC
 No pressure sensor, depths from OPC. we are using a new
 OPC file for each net

lost connection to MOCNESS but not OPC @ ~ 550 m 750 m w/o

Bad night for MOC uses

- ground cable disconnected prior to launch
Romed put on a new spool
- flow meter not fixing, replaced
- at ~640m depth, stopped getting signals
from net, 'open wire', no data
- pressure sensor never worked
- got depth from APC
- ice conditions very dicey when net @
depth, became difficult to avoid
snagging cable on ice
- tow aborted due to no data + ice under
retrieved @ 80 m/min, minimal slip speed
net ok except for ground wire
- Sued net $\emptyset$ ETOH
net 1 formation

M-01-16
21 Aug 2001
RVIB NBP 01-04

MOCNESS STATISTICAL SUMMARY

net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
1	-10.6	106.8	6206.5	01.4	50.0	137.3	01.4	50.0	137.0	34.93	50.00	
2148.17												
net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
1	24.68	28.02	1704.04	00.13	00.19	08.95	00.02	00.12	06.39	00.0	00.0	00.0
net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol	
1	19.0	44.0	1466.1	00.0	02.0	90.4	-04.3	00.0	-59.3	00068	00267	

-66.174-69.1

went 19

MOCNESS Tow Sheet (NBP0104)

St. Station No.: 4	Tow No.: 17
Date: 8/26/01	
Filename (raw): M-01-017. raw	Filename (processed): M

Net Information

Net Size: 1 m ²	Net Condition:
Net Mesh: 333 (except 7)	NO 500µm

Start

End

Location (Lat/Lon): 66 11.131, 69 10.212		Location (Lat/Lon): 66 12.493 69 7.065	
Time (Local) 0306	Time (GMT) 0706	Time (Local) 0414	Time (GMT) 0814
MOCNESS Battery Voltage: 19.4		MOCNESS Battery Voltage: 19.3	

Environmental Parameters

Wind (Speed/Direction): 9 20°	Sea State: 1-2
Water Depth (m): 346	Light and Clouds: cloudy
Air Temperature: -6.5	SST: -1.7

Net Tow Information

Net #	Depth Interval	Depth Open	Time Open	Depth Close	Time Close	Volume Filtered	Comments
0	0-300	0	0706	304	0722	359	333 m w/o NO NR
1	300-200	304	0722	197	0733	391	NO NR, A
2	200-150	197	0733	148	0742	332	NO NR
3	150-125	148	0742	123	746	154.7	NR
4	125-100	123	746	100	750	165.2	NR
5	100-75	100	750	75	754	193	NR
6	75-50	75	754	45	0803	407	NR
7	50-25	45	0803	25	0809	266.9	NO NR
8	25-0	25	0809	7.2	0813	146.6	NR

All sensors working at launch
 Strobe working when not @ 67m
 Ship speed very low @ Nets

M-01-17
26 Aug 2001
RVIB NBP 01-04

MOCNESS STATISTICAL SUMMARY

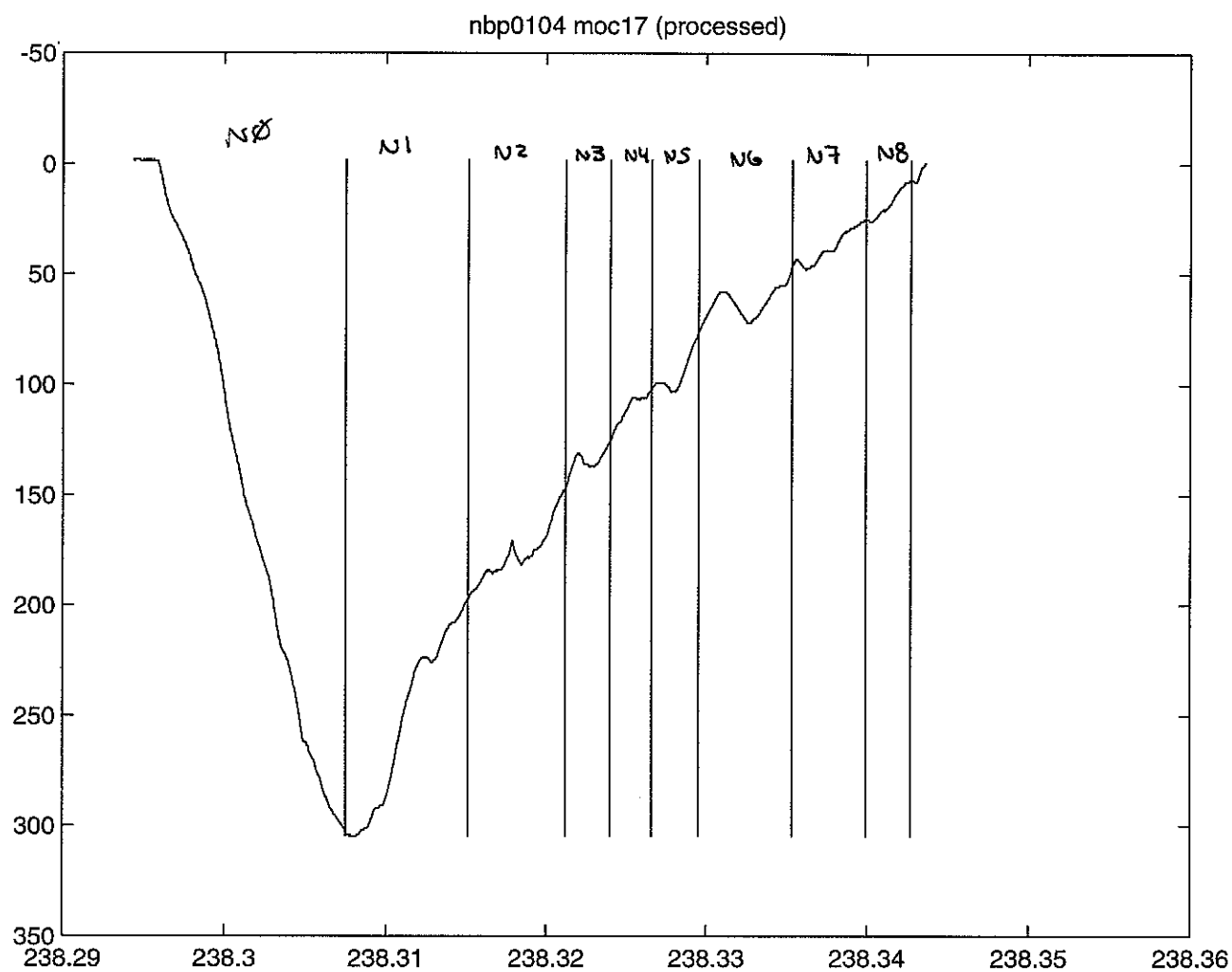
net#	pmin	pmax	pavg	tmin	tmax	tavg	thmin	thmax	thavg	smin	smax	savg
1	197 -01.4	305.0	243.4	01.6	50.0	01.9	01.6	50.0	01.9	34.65	50.00	33.73
2	147.0	195.8	176.5	01.4	01.7	01.6	01.4	01.7	01.6	34.59	34.65	34.63
3	125.2	145.1	134.4	01.2	01.4	01.3	01.2	01.4	01.3	34.54	34.59	34.56
0	-03.0	302.6	25.5	-02.0	50.0	06.6	-02.0	50.0	06.6	00.11	50.00	43.93
4	101.7	123.9 ²⁵	110.4	00.4	01.2	00.9	00.4	01.2	00.9	34.43	34.54	34.49
5	76.3	103.2 ¹⁰	94.9	-00.1	00.4	00.3	-00.1	00.4	00.3	34.32	34.42	34.39
6	46.0	74.5	62.7	-01.9	-00.2	-01.5	-01.9	-00.2	-01.5	33.95	34.33	34.03
8	07.1	25.7	17.1	-01.9	-01.9	-01.9	-01.9	-01.9	-01.9	33.95	33.95	33.95
0	-03.0	302.6	25.5	-02.0	50.0	06.6	-02.0	50.0	06.6	00.11	50.00	43.93
N7	25	45										
net#	simin	simax	siavg	cmin	cmax	cavg	fmin	fmax	favg	oxmin	oxmax	oxavg
1	24.68	27.75	26.89	00.12	00.61	00.15	00.09	00.14	00.11	00.0	00.0	00.0
2	27.69	27.71	27.71	00.10	00.91	00.14	00.10	00.13	00.11	00.0	00.0	00.0
3	27.66	27.69	27.67	00.17	00.21	00.20	00.10	00.13	00.11	00.0	00.0	00.0
0	-07.94	40.42	33.84	00.00	12.66	06.84	00.00	05.36	00.17	00.0	00.0	00.0
4	27.62	27.68	27.64	00.19	00.23	00.21	00.09	00.12	00.11	00.0	00.0	00.0
5	27.57	27.61	27.60	00.13	00.21	00.19	00.09	00.12	00.11	00.0	00.0	00.0
6	27.33	27.58	27.39	00.11	00.19	00.15	00.08	00.13	00.10	00.0	00.0	00.0
8	27.33	27.33	27.33	00.14	00.18	00.16	00.07	00.11	00.09	00.0	00.0	00.0
0	-07.94	40.42	33.84	00.00	12.66	06.84	00.00	05.36	00.17	00.0	00.0	00.0
net#	amin	amax	aavg	spmin	spmax	spavg	armin	armax	aravg	#obs	vol	
1	16.0	56.0	26.1	00.0	01.4	01.0	-09.2	27.3	09.0	00169	00392 1	
2	27.0	51.0	33.5	00.9	01.7	01.2	-16.5	17.7	05.8	00130	00348 2	
3	27.0	35.0	31.7	00.6	01.4	01.1	-08.4	18.1	05.3	00059	00155 3	
0	00.0	89.0	66.6	00.0	01.7	00.1	-35.2	05.6	-03.0	01486	00367	
4	35.0	42.0	38.9	01.1	01.7	01.5	-01.2	12.2	06.4	00055	00165 4	
5	36.0	42.0	39.5	01.1	02.0	01.5	-06.3	15.3	05.9	00062	00194 5	
6	34.0	53.0	43.2	01.1	02.3	01.7	-08.7	15.3	03.4	00124	00407 6	
8	25.0	39.0	31.2	00.9	01.4	01.1	-00.8	09.0	04.6	00059	00147 8	
0	00.0	89.0	66.6	00.0	01.7	00.1	-35.2	05.6	-03.0	01486	00367	

vol N7 = 267

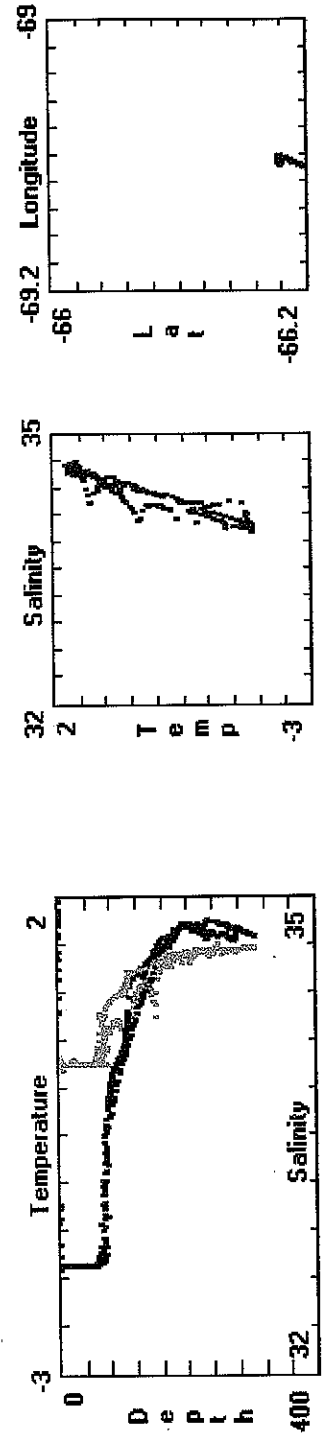
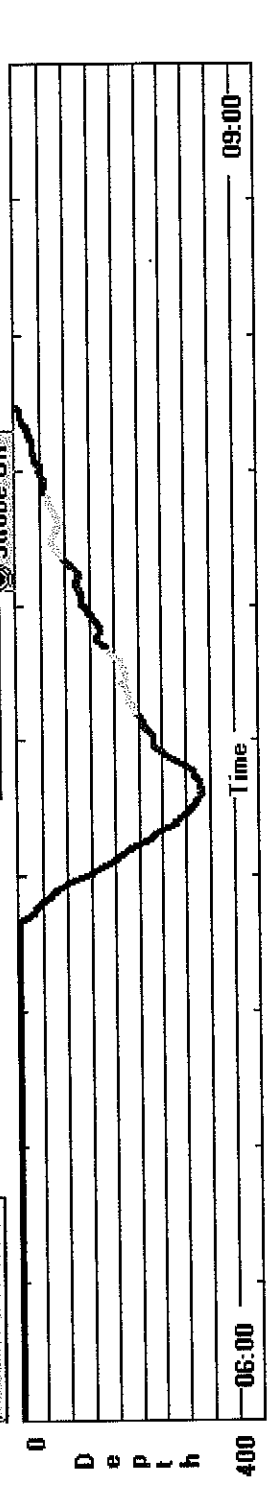
NBPalmer -01-04
MOC-01-17

net	time	pres	temp	theta	sal	sigma	angle	flow
0	238.3075	303	1.604	1.588	34.681	27.748	22	52
1	238.3076	304	1.601	1.585	34.681	27.748	22	0
1	238.3151	197	1.7	1.69	34.651	27.716	35	74
2	238.3152	197	1.701	1.691	34.649	27.715	35	1
2	238.3212	147	1.375	1.368	34.587	27.688	29	68
3	238.3213	146	1.375	1.368	34.586	27.687	28	0
3	238.324	125	1.2	1.194	34.537	27.66	35	29
4	238.3241	125	1.205	1.199	34.535	27.658	40	0
4	238.3266	102	0.4	0.396	34.426	27.621	40	35
5	238.3266	101	0.389	0.385	34.417	27.615	44	0
5	238.3295	76	-0.139	-0.142	34.322	27.566	42	42
6	238.3296	75	-0.185	-0.187	34.327	27.572	45	0
6	238.3353	46	-1.865	-1.865	33.948	27.327	38	91
7	238.3354	45	-1.864	-1.865	33.948	27.327	42	0
7	238.3399	25	-1.864	-1.865	33.946	27.326	37	51
8	238.34	25	-1.864	-1.865	33.946	27.326	35	1
8	238.3427	7	-1.867	-1.867	33.949	27.328	39	28
9	238.3428	7	-1.867	-1.867	33.949	27.328	42	0

net	hzvel	vtvel	vol	fluor	ptran	lat	lon
0	0.6	-8.05	366.6	0.107	0.132	-66.1917	-69.1063
1	0.3	-9.03	0	0.1142	0.122	-66.1917	-69.1063
1	1.1	10.6	<u>391.8</u>	0.11	0.128	-66.1971	-69.1081
2	1.4	10.21	0	0.1102	0.124	-66.1971	-69.1081
2	1.1	8.25	<u>347.6</u>	0.1144	0.187	-66.2005	-69.1096
3	1.1	8.44	0	0.1172	0.189	-66.2005	-69.1096
3	1.1	10.21	<u>154.7</u>	0.1052	0.186	-66.2024	-69.1105
4	1.4	9.62	0	0.1286	0.193	-66.2024	-69.1105
4	1.4	7.85	<u>165.2</u>	0.1062	0.197	-66.2045	-69.1118
5	1.7	8.44	0	0.1176	0.193	-66.2045	-69.1118
5	2	11.18	<u>194.3</u>	0.104	0.179	-66.2067	-69.1113
6	1.7	11.18	0	0.1164	0.18	-66.2068	-69.1113
6	1.7	15.29	<u>407.3</u>	0.098	0.18	-66.2112	-69.1156
7	1.7	15.68	0	0.103	0.179	-66.2112	-69.1156
7	1.1	1.94	<u>266.9</u>	0.0936	0.164	-66.2141	-69.1167
8	1.1	1.75	0	0.0958	0.165	-66.2142	-69.1167
8	1.1	2.34	<u>146.6</u>	0.096	0.169	-66.2159	-69.1174
9	1.4	1.95	0	0.087	0.149	-66.2159	-69.1174



Environmental Parameters		Net Operation		Net - Ship Position		Program Settings	
Time	08:14:48	Net_Num	9	Latitude	66S 12.993	Reset	
Pressure	1.1 m	OpenTime	1.2 min	Longitude	69W 7.065	Baud Rate	2400
Temp	-1.86 C	Vol_Filtered	67.9 m3	Net_Dist	76.6 m	Sample Rate	4.0 sec
Salinity	33.96 o/oo	Angle	50 deg	Total_Dist	14278.4 m	Printer	Off
Density	27.333	Flow_Counts	13	Processed File Name			
Oxygen		Hor_Vel	1.7 kts	C:\MOCNESS\MOCDATA\NBPD0104\M-01-017.PRO			
Fluoresc.	0.1062 V	Vert_Vel	9.6 m/min	Raw File			
LightXmis	12.4447 /m	Battery	19.3 V	C:\MOCNESS\MOCDATA\NBPD0104\M-01-017.raw			
Please wait ... closing system down							
\$5PGLL.6612.9936.S.06907.0657.W.081839.889							



MOCNESS TOW #: 17

Date: 8.26.01

Region: STA 4

People Processing Sample: (PA), JOP,

NET #

Taxonomic Composition

0	Fucilia, ctenis, chaetognaths	0-300
- 1	Fucilia Thysanoessa, copep, chaetognaths	300-200
= 2	Thysanoessa, cops, bigger chaetognaths	200-150
≡ 3	Thysanoessa, copepods, globby stuff	150-125
4	juvenile Thysanoessa, cops, globby stuff	125-100
5	Thysanoessa, pteropods, copepods	100-75
6	pteropods, copepods, fucilia, ostracods	75-50
7	Thysanoessa, copepods, a few ctenophores, fish larvae + pteropods	50-25
8	copepods, pteropods, Thysanoessa	25-0