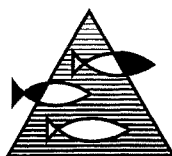


# PROSJEKTRAPPORT

ISSN 0071-5638



## HAVFORSKNINGSINSTITUTTET

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Faks: 56 18 22 22

Matre

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Rapport:

FISKEN OG HAVET

NR. 2 - 2002

Tittel:

REPORT ON OCEANOGRAPHIC CRUISES  
AND DATA STATIONS 2001

Sender:

Marint miljø

Seksjon:

Norsk Marint Datasenter

Forfatter(e):

Karen Gjertsen

Antall sider, vedlegg inkl.:

81

Dato:

26.02.2002

Sammendrag:

Rapporten gir en oversikt over toktene til Havforskningsinstituttets forskningsfartøy "G.O. Sars", "Johan Hjort", "Michael Sars" og "G.M. Dannevig" i 2001. Figurene viser hovedsakelig CTD og trålstasjoner.

Først vises oversikt over tidsrom for tokt og toktnummer. For de fleste toktene vises kurs- og stasjonskart. Tabellene på side 2 og 3 viser når de faste snittene er tatt og antall observasjoner pr måned for de faste stasjonene.

Disse oversiktene er også innrapportert til Det internasjonale råd for havforskning (ICES) sammen med "Cruise Summary Report".

Data fra toktene er tilgjengelig fra Havforskningsinstituttet, Norsk Marint Datasenter. Rapporten kan brukes til å identifisere båt og stasjonsnummer man ønsker data for. Digitale versjoner av toktene er tilgjengelig via Havforskningsinstituttets intranett.

Emneord - norsk:

1. Kurskart
2. Stasjonskart

Emneord - engelsk:

1. Cruise track chart
2. Stations chart

.....  
Prosjektleder

.....  
Seksjonsleder

## Summary:

The present report shows the course tracks and stations occupied by the research vessels "G.O. Sars", "Johan Hjort", "Michael Sars" and "G.M. Dannevig" during 2001.

The first tables shows the cruise number and the periods for each cruise. The next page shows the standard sections worked out by the Institute of Marine Research and the position of the fixed stations in the coast water. The following tables (page 2 and 3) indicate when the standard sections are worked out, and show the number of observations per month of each of the fixed stations.

The data is available on request. This report may be used to identify ship and station numbers.

	Page
CHART - stations and sections	1
STANDARD sections	2
STANDARD stations	3

### "G. O. SARS" 2001

(Ship no 15)			Page of track chart
Cruise no	Period of cruises	CTD no	
2001001	15 Jan - 25 Jan	1	4
2001002	27 Jan - 7 Mar	2 - 186	5-6
2001003	12 Mar - 19 Mar	187 - 190	7
2001004	21 Mar - 8 Apr	191 - 442	8-9
2001005	9 Apr - 23 Apr	443 - 464	10
2001006	1 May - 7 May		
2001007	8 May - 22 May	465 - 547	11-12
2001008	23 May - 14 June	548 - 672	13-14
2001009	15 Jun - 11 Jul	673 - 687	15
2001010	19 Jul - 12 Aug	688 - 771	16
2001011	16 Aug - 8 Sep	772 - 861	17-18
2001012	10 Sep - 5 Oct	862 - 993	19-20
2001013	8 Oct - 24 Oct	994 - 1022	21-22
2001014	25 Oct - 8 Nov	1023 - 1049	23
2001015	15 Nov - 19 Dec	1050 - 1502	24-25

### "JOHAN HJORT" 2001

(Ship no 12)			Page of track chart
Cruise no	Period of cruises		
2001201	6 Jan - 27 Jan	1 - 65	26-27
2001202	30 Jan - 28 Feb	66 - 205	28-29
2001203	2 Mar - 18 Mar	206 - 279	30
2001204	21 Mar - 23 Apr	280 - 383	31-32
2001205	24 Apr - 2 May	384 - 390	33-34
2001206	3 May - 28 May	391 - 460	35-37
2001207	28 May - 17 Jun	461 - 557	38-39
2001208	7 Jul - 17 Jul		
2001209	21 Jul - 19 Aug	558 - 619	40-41
2001210	20 Aug - 9 Sep	620 - 710	42-43
2001211	10 Sep - 5 Oct	711 - 795	44-45
2001212	9 Oct - 13 Oct		
2001213	14 Oct - 10 Nov	796 - 904	46-47
2001214	14 Nov - 20 Nov	905 - 915	48
2001215	21 Nov - 8 Dec	916 - 920	49

### "MICHAEL SARS" 2001

(Ship no 11)			Page of track chart
Cruise no	Period of cruises		
2001101	12 Jan - 13 Feb	1 - 118	50-52
2001102	14 Feb - 20 Mar	119 - 203	53-54
2001115	20 Mar - 21 Mar	204 - 217	55
2001103	23 Mar - 1 Apr	218 - 242	56
2001104	4 Apr - 19 Apr	243 - 390	57
2001105	23 Apr - 6 May	391 - 473	58-59

2001106			
2001107	11 May - 3 Jun	474 - 784	60-61
2001108	4 Jun - 25 Jun	785 - 859	62
2001109	29 Jun - 23 Jul	860 - 1002	63-64
2001110	27 Jul - 23 Aug	1003 - 1094	65-66
2001111	1 Sep - 24 Sep	1095 - 1148	67-68
2001112	26 Sep - 10 Oct		69
2001113	12 Oct - 31 Oct	1149 - 1200	70
2001114	2 Nov - 15 Dec	1201 - 1353	71-72

### "G. M. DANNEVIG" 2001

(Ship no 16)

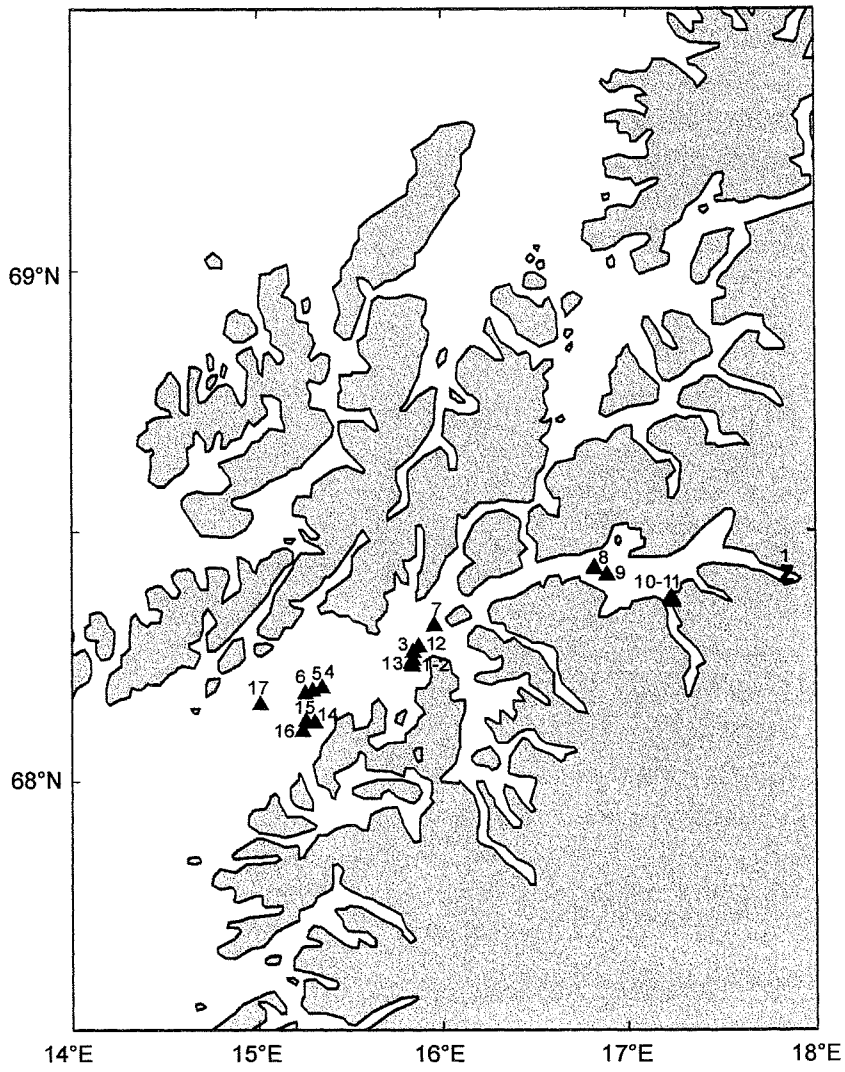
2001301	2 Jan	1	
2001302	16 Jan - 17 Jan	2 - 13	73
2001303	Canceled		
2001304	20 Jan - 27 Jan	14 - 19	
	27 Jan	20	
2001305	19 Feb - 20 Feb	21 - 32	73
2001306	21 Feb - 23 Feb	33 - 38	74
2001307	12 Mar - 13 Mar	39 - 50	73
2001308	14 Mar - 16 Mar	51 - 56	75
2001309	17 Mar - 20 Mar		
	26 Mar - 30 Mar	57 - 75	
2001310	30 Mar	76 - 77	
2001311	9 Apr - 11 Apr	79 - 90	76
2001312	12 Apr - 28 Apr	91 - 186	77
	28 Apr	187	
2001313	14 May - 15 May	188 - 193	78
2001314	16 May - 17 May	194 - 205	73
2001315	19 May - 26 May	206 - 211	
2001317	26 May	212	
2001318	1 Jun - 10 Jun	213 - 222	
2001319	11 Jun - 14 Jun		
2001320	15 Jun - 16 Jun	223 - 234	73
2001321	17 Jun - 24 Jun		
2001322	27 Jun - 28 Jun	235 - 240	79
2001323	2 Jul - 3 Jul	241 - 252	73
2001324	21 Aug - 23 Aug	253 - 258	80
2001325	24 Aug - 25 Aug	259 - 271	73
2001326	27 Aug - 30 Aug		
2001327	26 Aug - 2 Sep	272 - 273	
2001328	8 Sep - 10 Sep	274 - 286	
2001330	15 Sep - 3 Oct	287 - 325	
2001331	6 Oct - 7 Oct	326 - 338	73
2001332	9 Oct - 12 Oct	339 - 347	81
2001333	15 Oct - 17 Oct		
2001334	7 Nov - 9 Nov	348 - 360	73
2001335	Canceled		
2001336	13 Dec	368 - 379	73
2001337	Canceled		



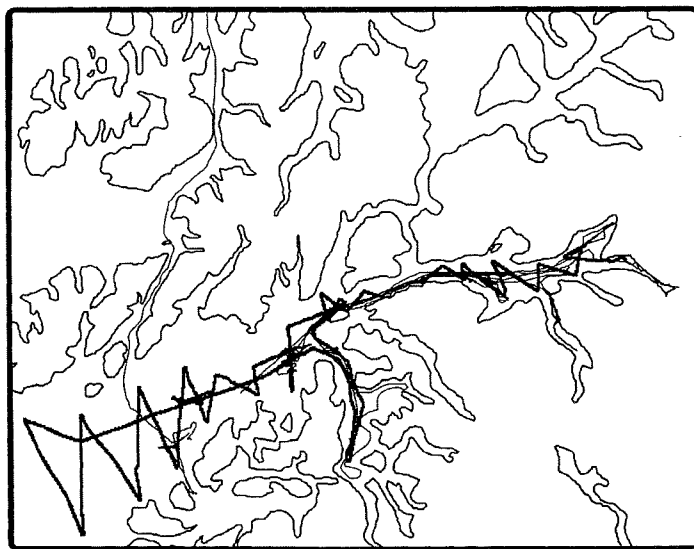
No of observations in 2001

**STANDARD**

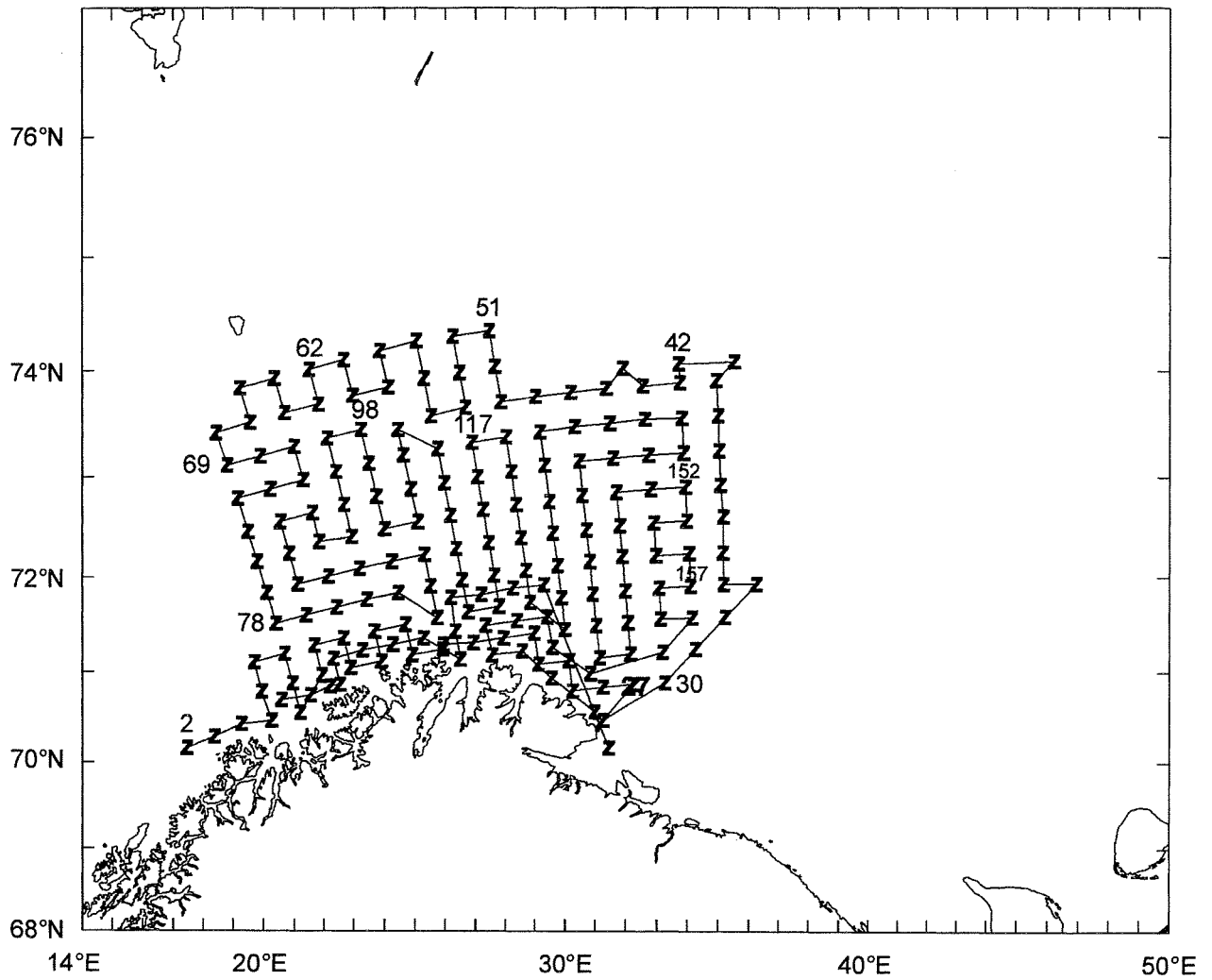
<b>STATIONS</b>	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	<b>OCT</b>	<b>NOV</b>	<b>DEC</b>	<b>TOTAL</b>
<b>LISTA</b> N58° 05.1' E06° 32.5'	3	3	3	3	3	4	3	3	2	3	2	4	36
<b>UTSIRA Y</b> N59° 19' E04° 44'	3	3	3	3	3	3	3	3	3	3	2	3	35
<b>UTSIRA I</b> N59° 19' E04° 59'	3	3	3	3	3	3	3	3	3	3	1	3	34
<b>SOGNESJØEN</b> N61° 01' E04° 50'	1	2	3	3	3	2	2	3	3	3	2	2	29
<b>BUD</b> N62° 56' E 06° 47'	3	0	3	3	3	2	2	3	2	3	1	1	26
<b>SKROVA</b> N68° 07' E14° 39'	5	4	4	5	4	4	4	5	4	5	4	3	51
<b>EGGUM</b> N 68° 23' E13° 38'	2	3	2	3	3	2	3	2	3	2	3	2	30
<b>INGØY</b> N71° 08' E 24° 01'	4	3	4	3	3	3	3	3	4				30



15 - 25 January 2001    Z CTD st.no 1    "G.O. Sars"  
 Cruise no 2001001    ▲ Pel. trawl st.no 1-17



Cruise track



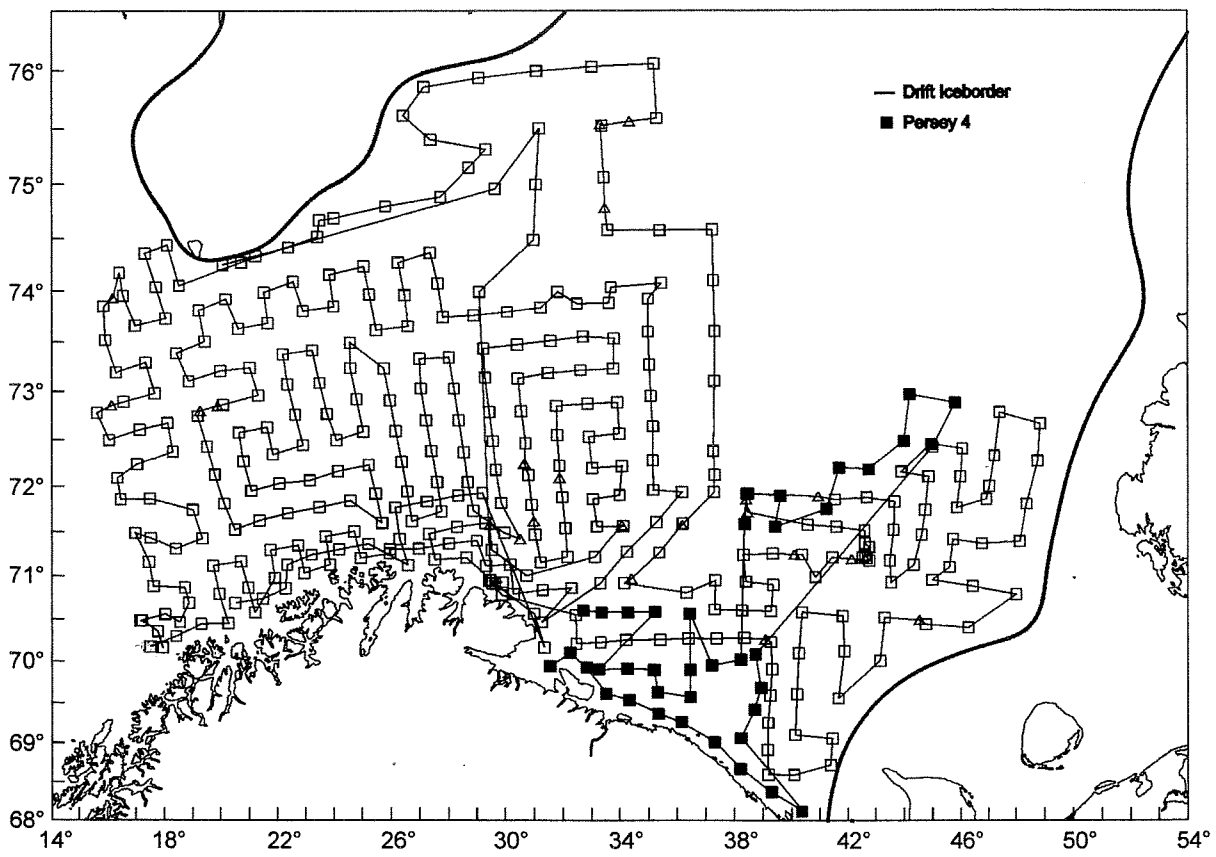
27 Jan - 7 Mar 2001

z CTD st.no 2-186

"G.O. Sars"

Cruise no 2001002



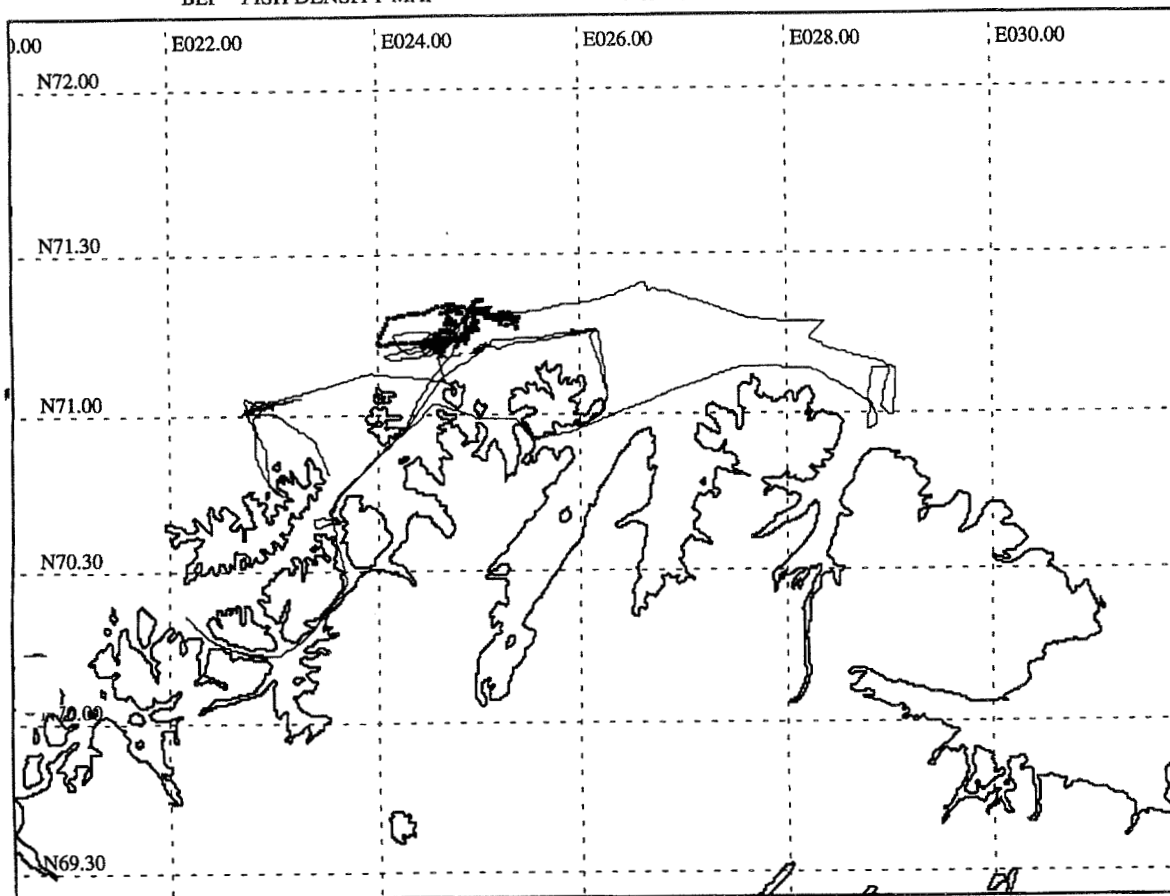


27 Jan - 7 Mar 2001

Trawl stations ("J.Hjort", "G.O.Sars" and "Persey 4")

BEI FISH DENSITY MAP

N058-S015-S2001003-F037879-T02-####

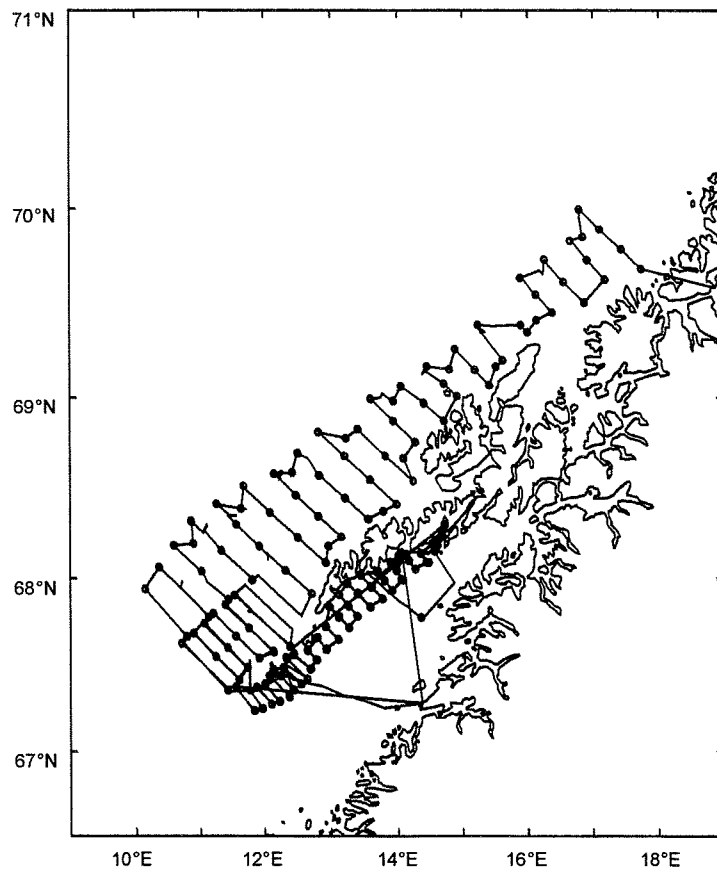
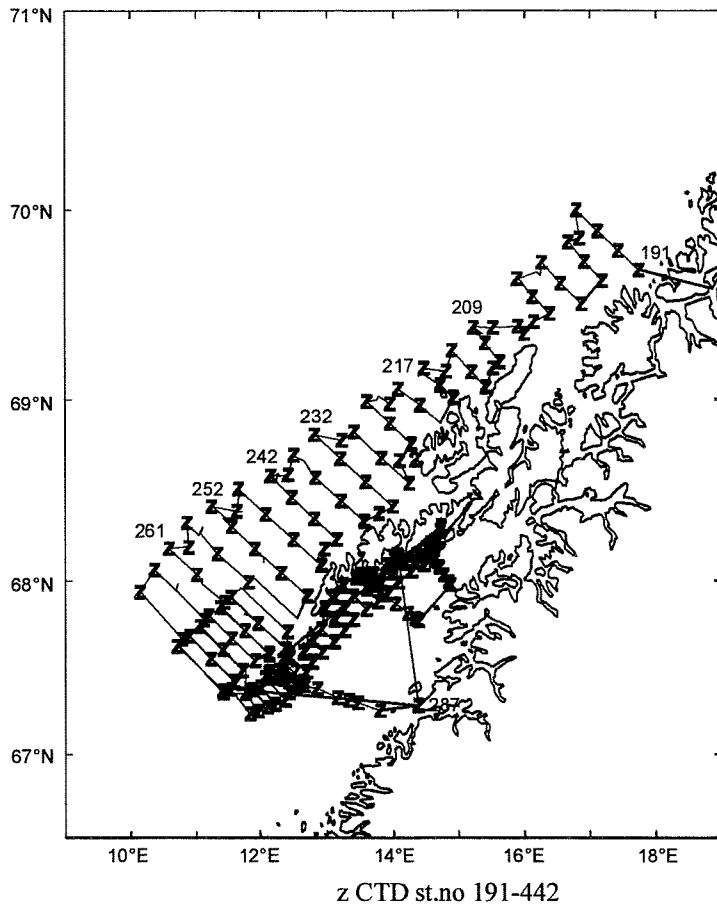


12 - 19 Mar 2001

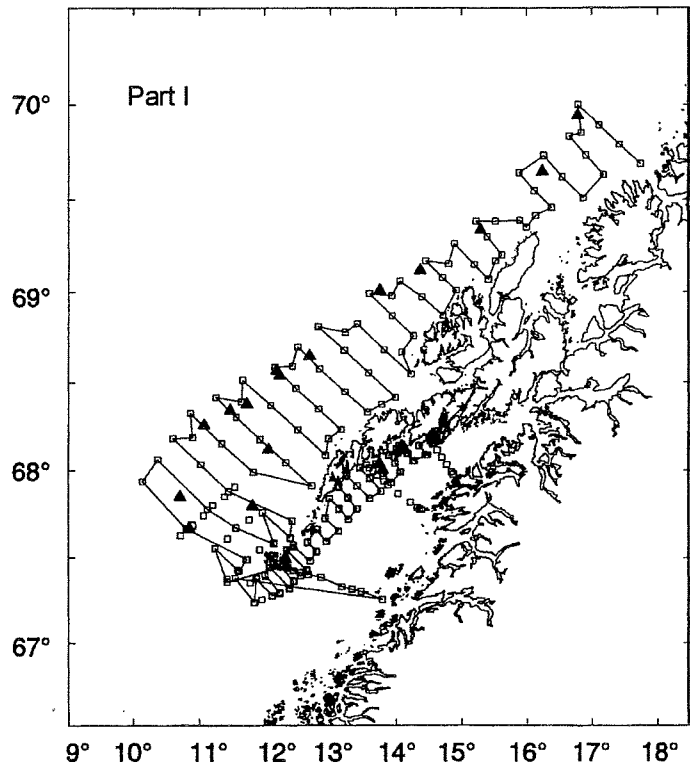
Cruise no 2001003

CTD st.no 187 - 190

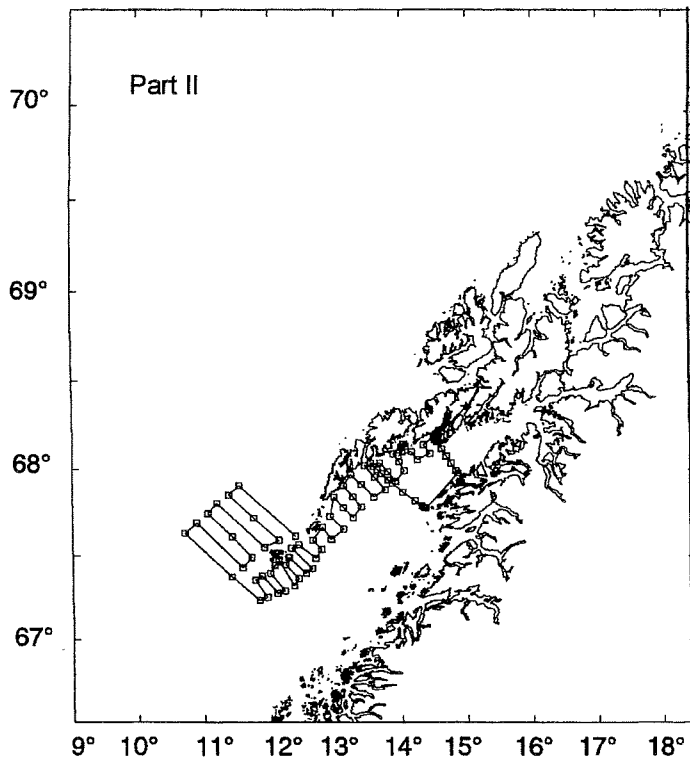
"G. O. Sars"

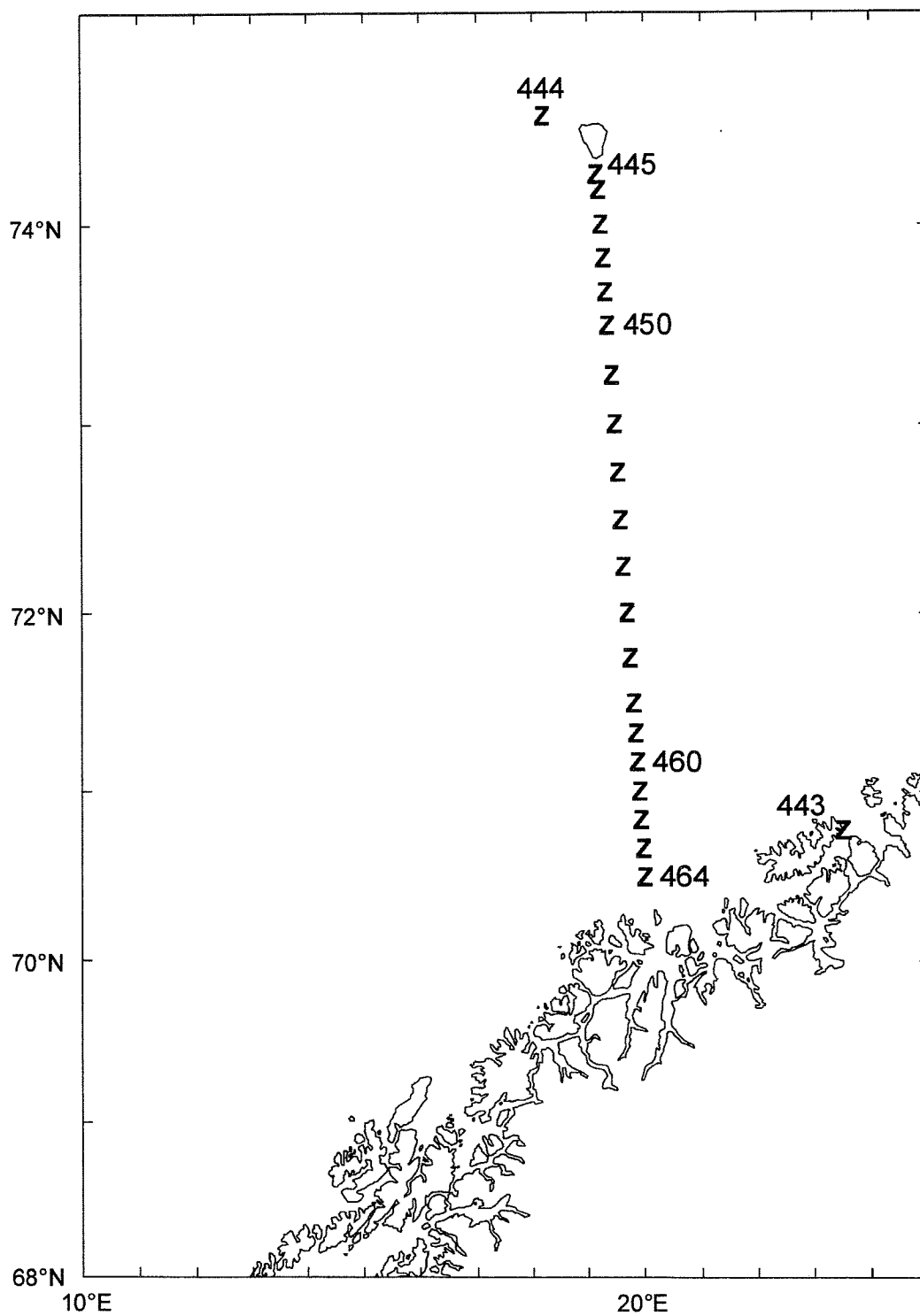


21 Mar - 8 Apr 2001    ○ Plankton st.    "G.O. Sars"  
 Cruise no 2001004    WP-2 net



21 Mar - 8 Apr 2001    □ Bottom trawl    "G.O. Sars"  
 Cruise no 2001004    ▲ Pelagic trawl

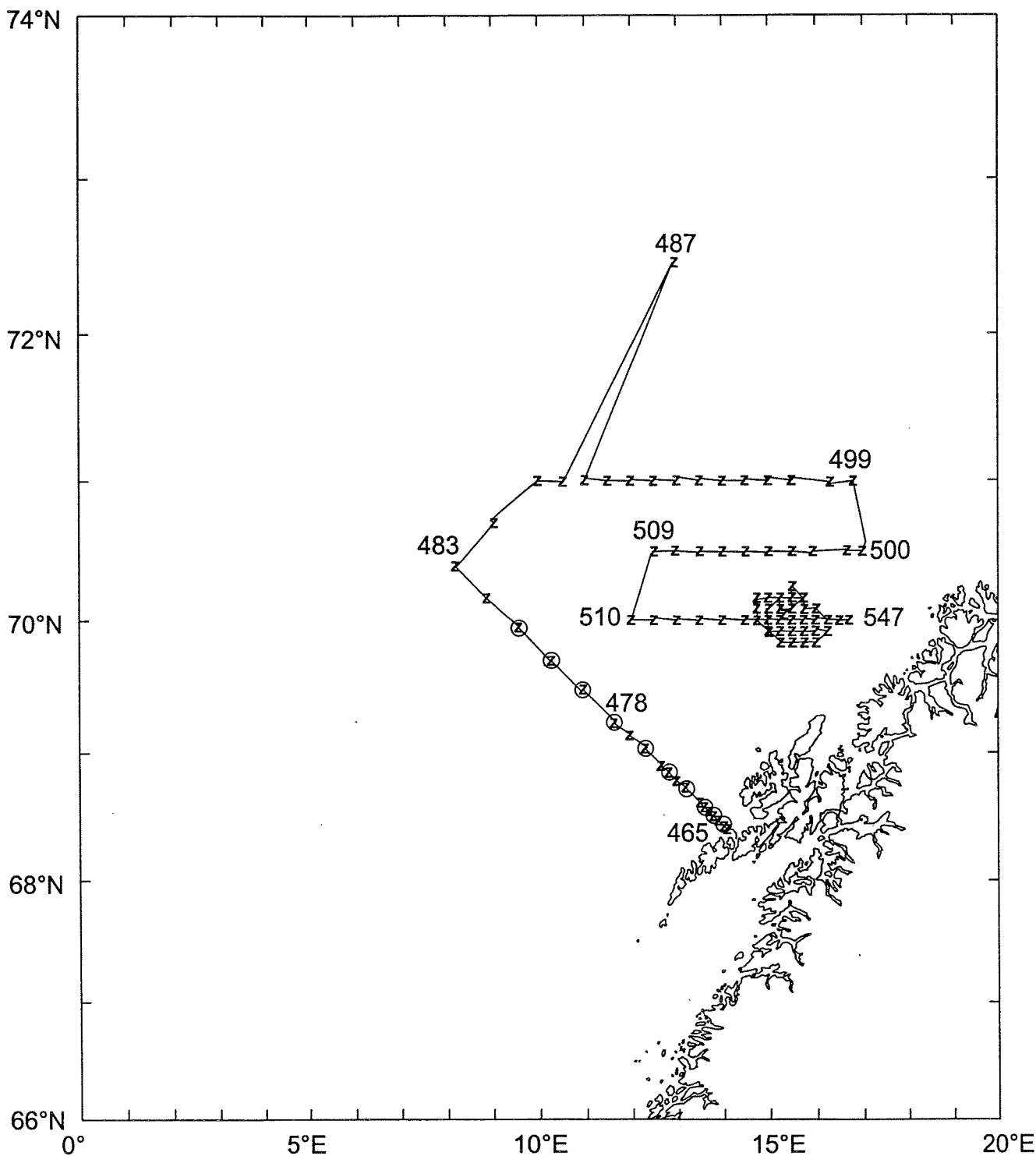




9 - 23 April 2001  
Cruise no 2001005

z CTD st.no 443-464  
Standard section Fugløya -Bjørnøya st.no 445-464

"G.O.Sars"



8 - 22 May 2001

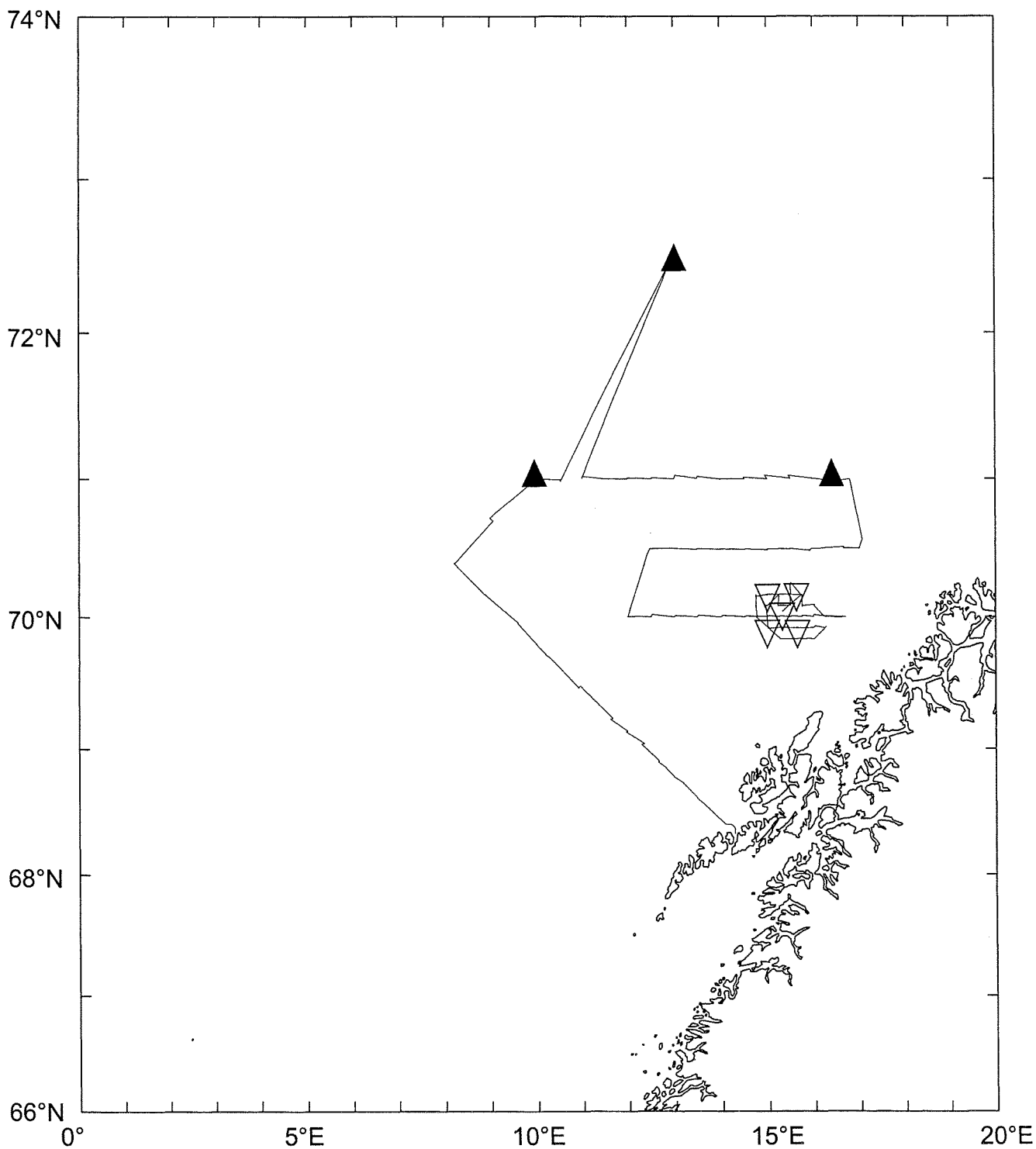
z CTD st. no 465 - 547

"G.O.Sars"

Cruise no 2001007

⓪ CTD and plankton st. (WP-II)

Standard section Gimsøy NW: st.no 465-483

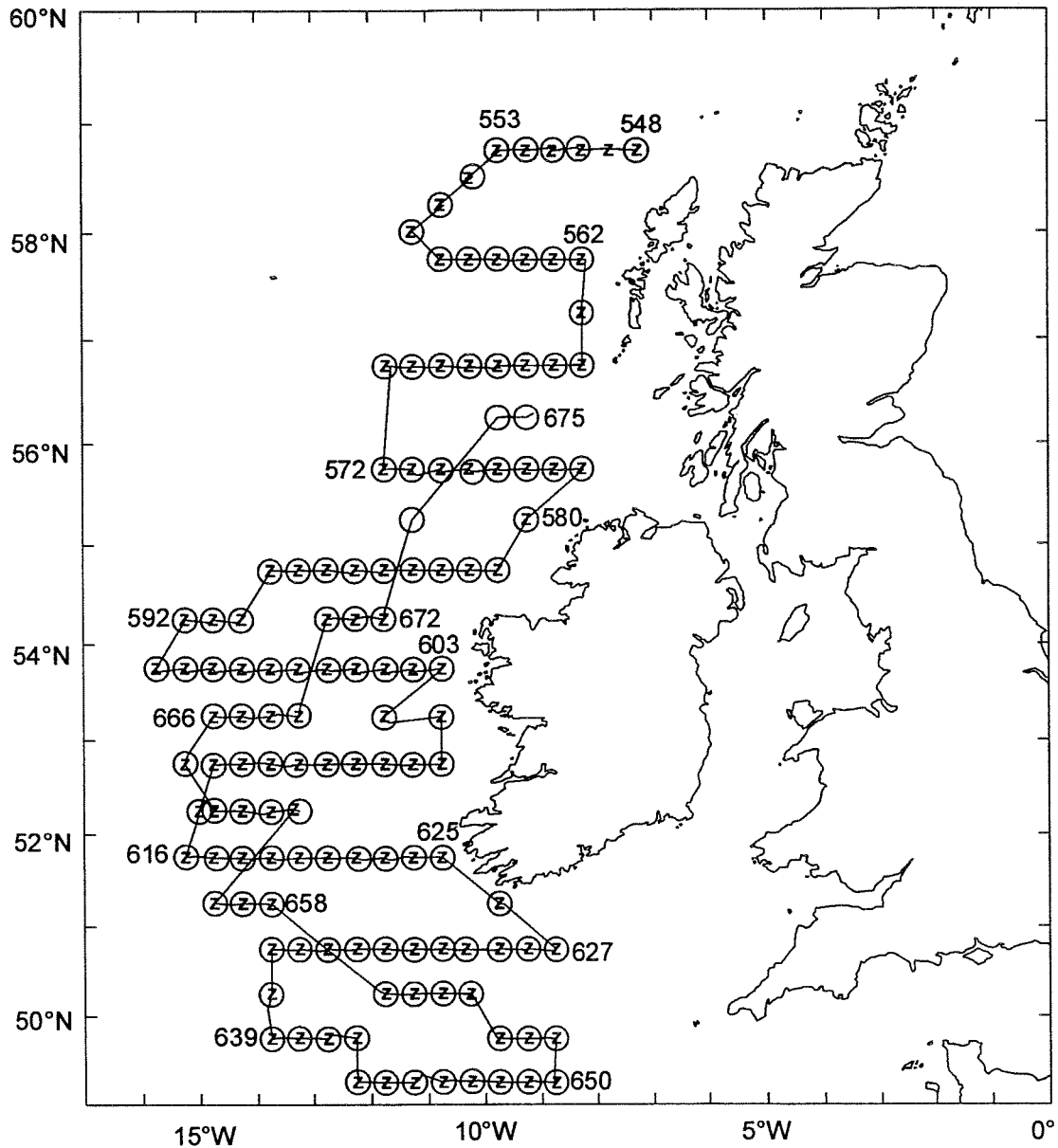


8 - 22 May 2001

Cruise no 2001007

▲ Moorings deployed  
▼ Drifters deployed

“G.O.Sars”

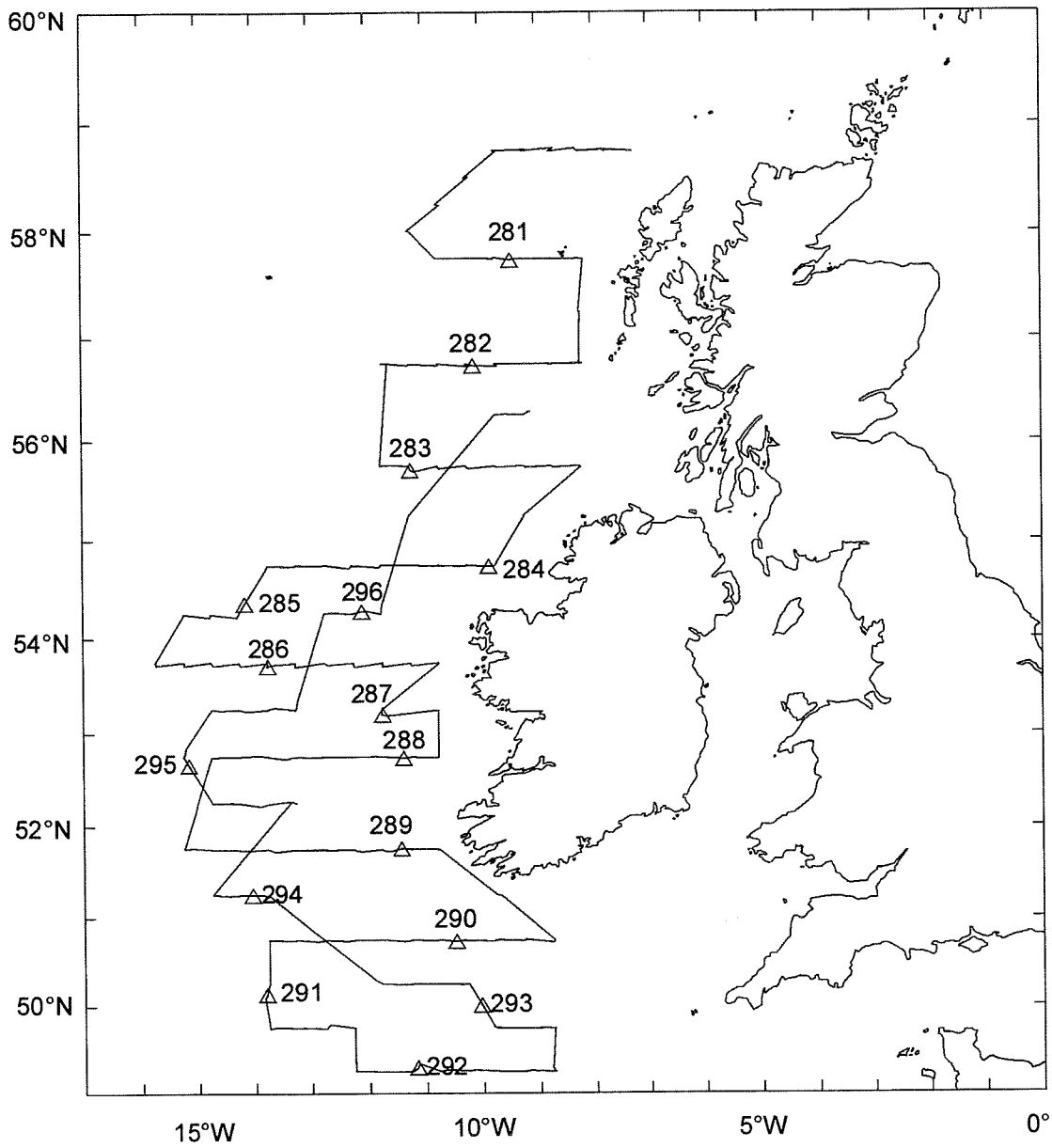


23 May - 14 June 2001  
 Cruise no 2001008

- z CTD st.no 548-672
- ⓪ Collecting fish eggs/larvae and CTD st.
- Gulf st.no 673-675
  - 1. part: Bongo (548-605)
  - 2. part Gulf (606-675)

"G.O. Sars"

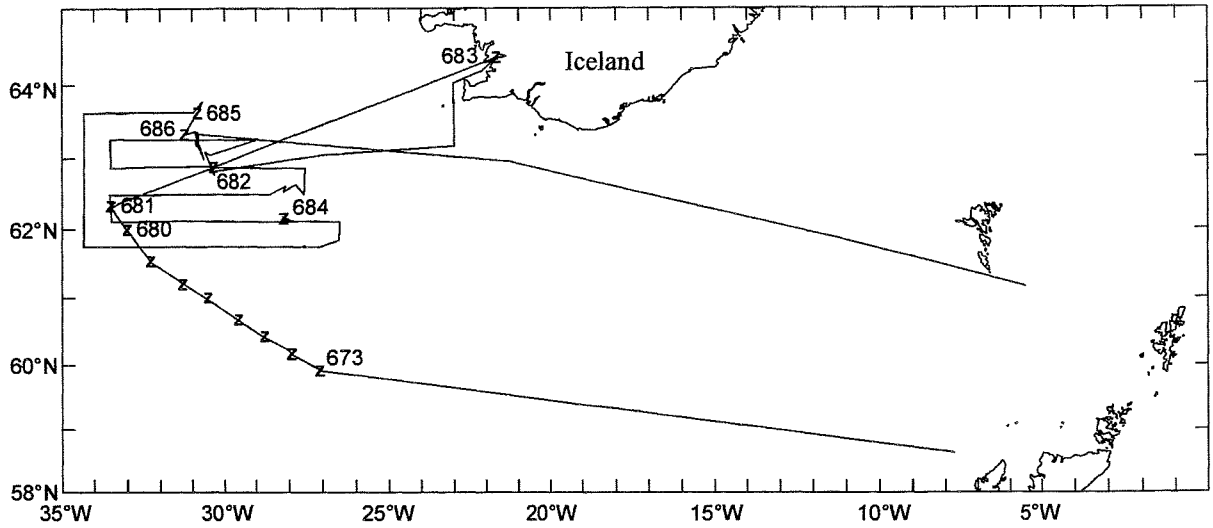




23 May - 14 June 2001    △ Pel. trawl st.no 281 - 296

"G.O. Sars"

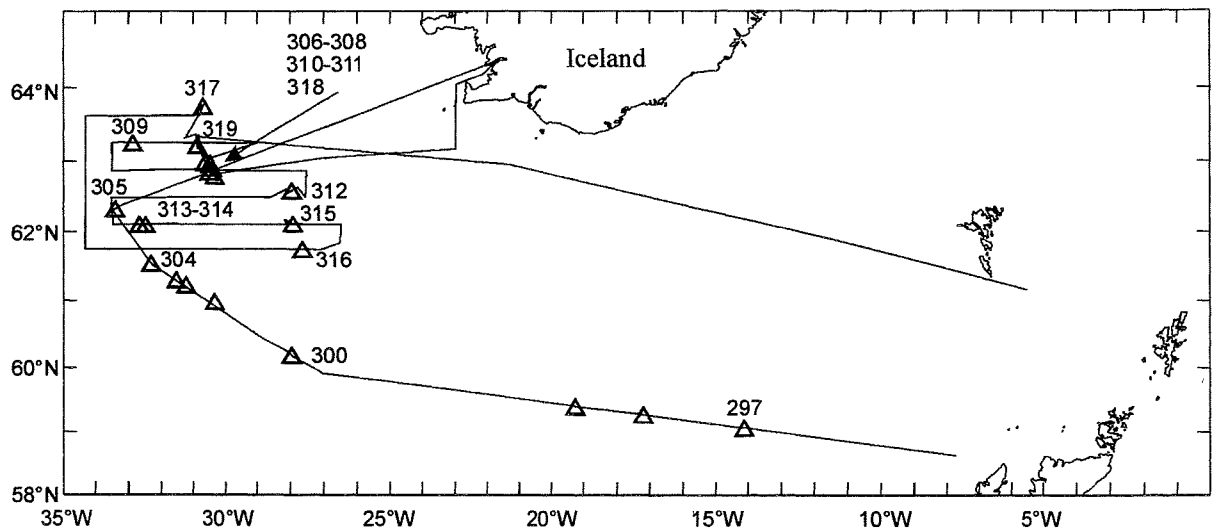
Cruise no 2001008



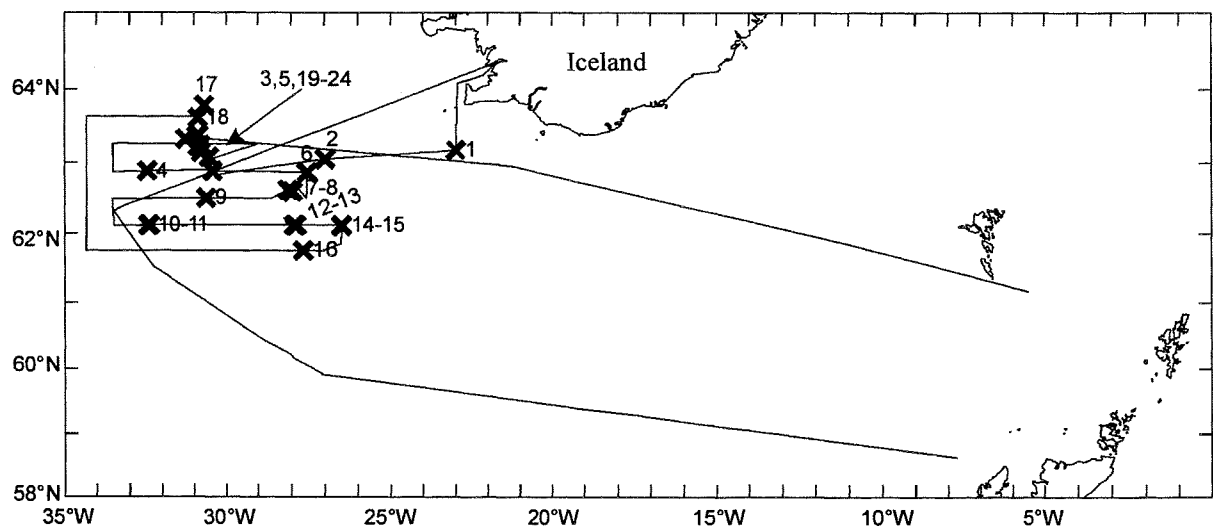
15 June - 11 July 2001  
Cruise no 2001009

z CTD st.no 673-687 (st.no 687 not shown)

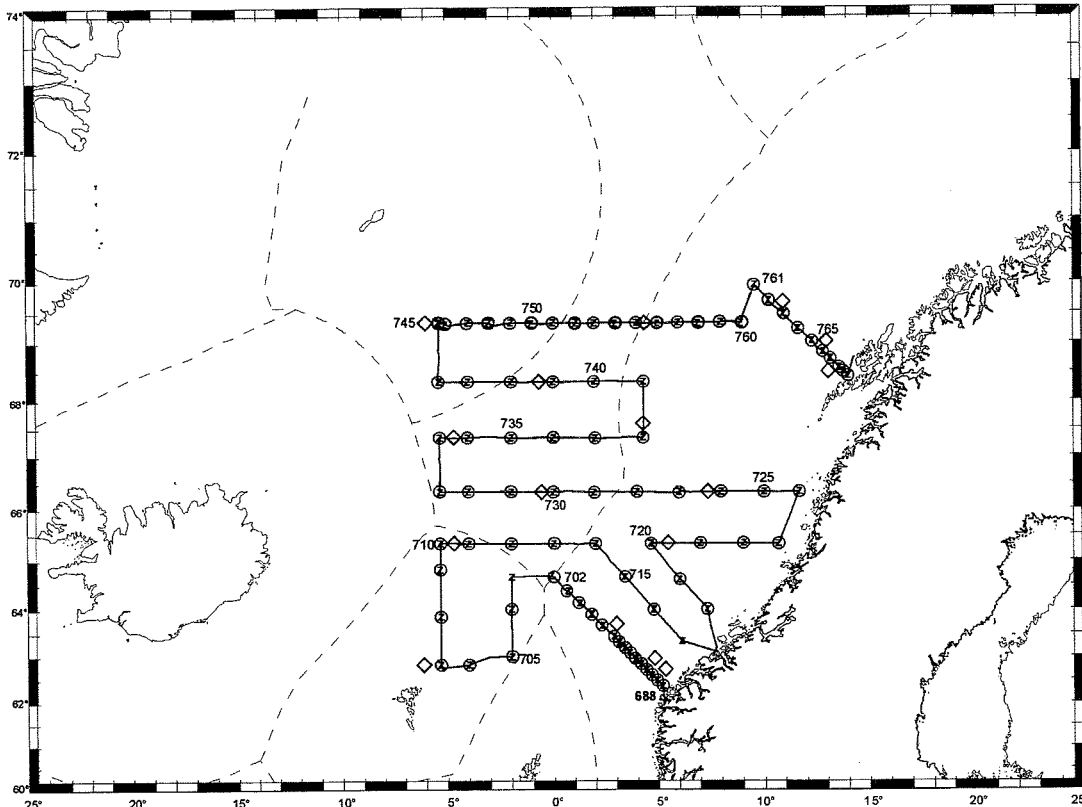
"G. O. Sars"



△ Pel.trawl st.no 297-319



× Acoustic



19 July - 12 August 2001

Cruise no 2001010

z CTD st.no 688-771

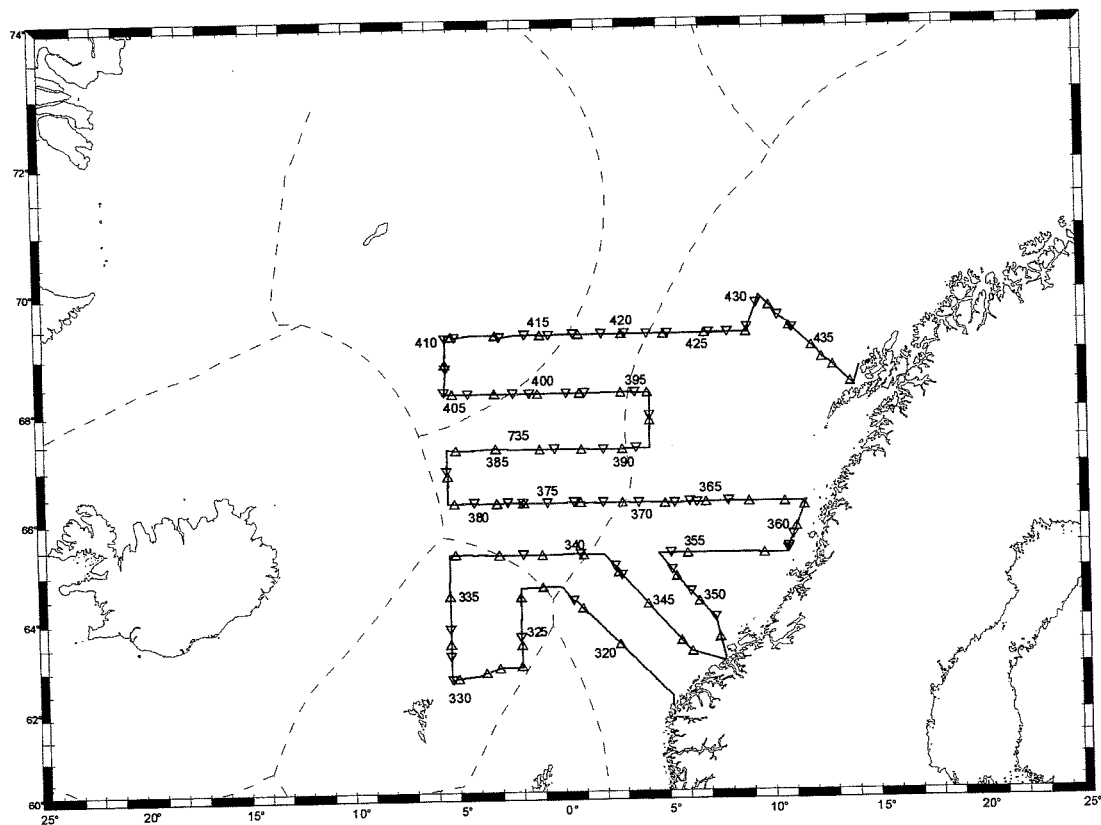
⊙ CTD and WP-II net.

◇ Mocness st.

Standard section Svinøya NW: st.no 688-702

Gimsøya NW: st.no 761-771

" G.O.Sars "

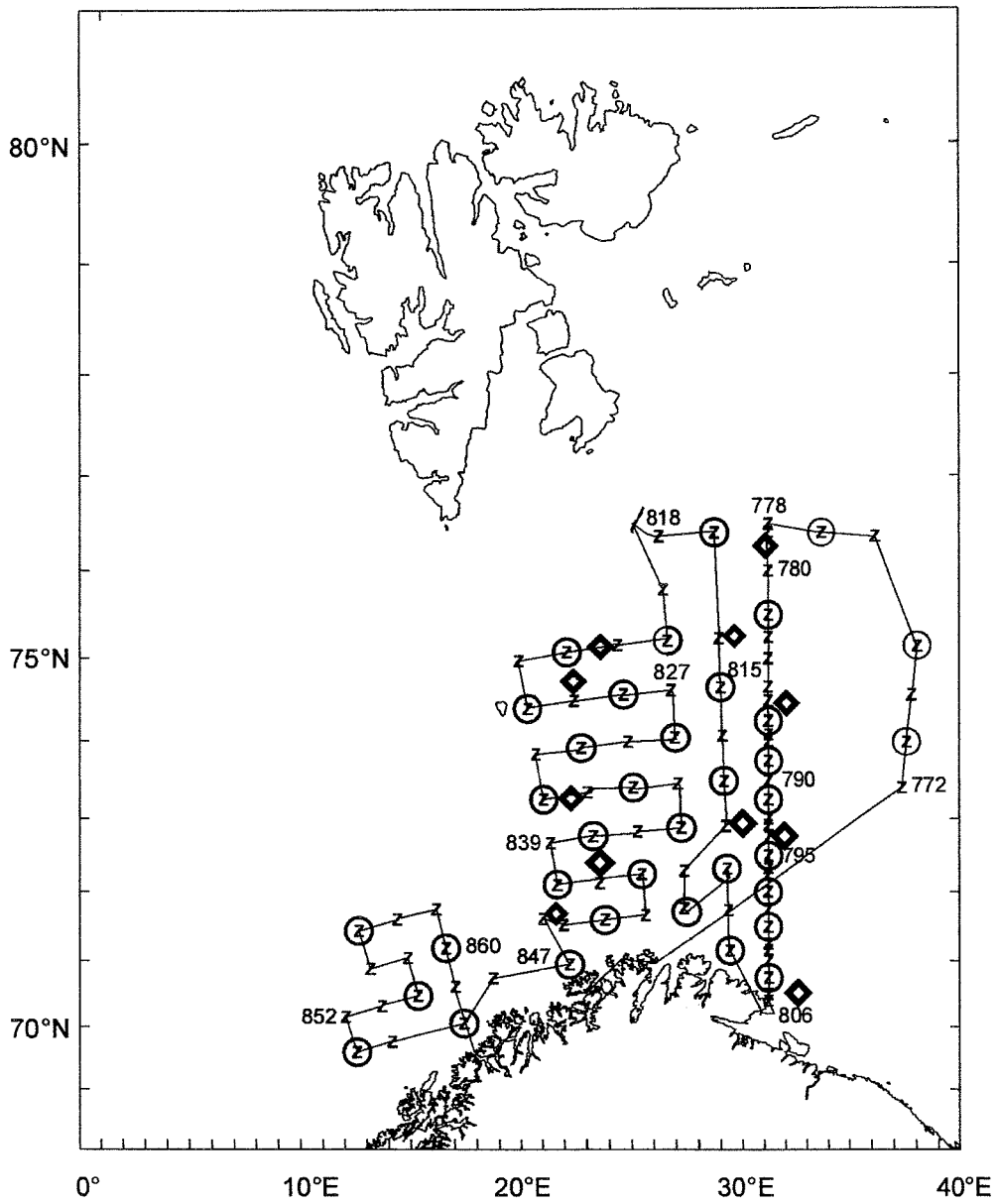


19 July - 12 August 2001

Cruise no 2001010

△ Pelagic trawl st.no 320-438

" G.O.Sars "



16 Aug - 8 Sep 2001

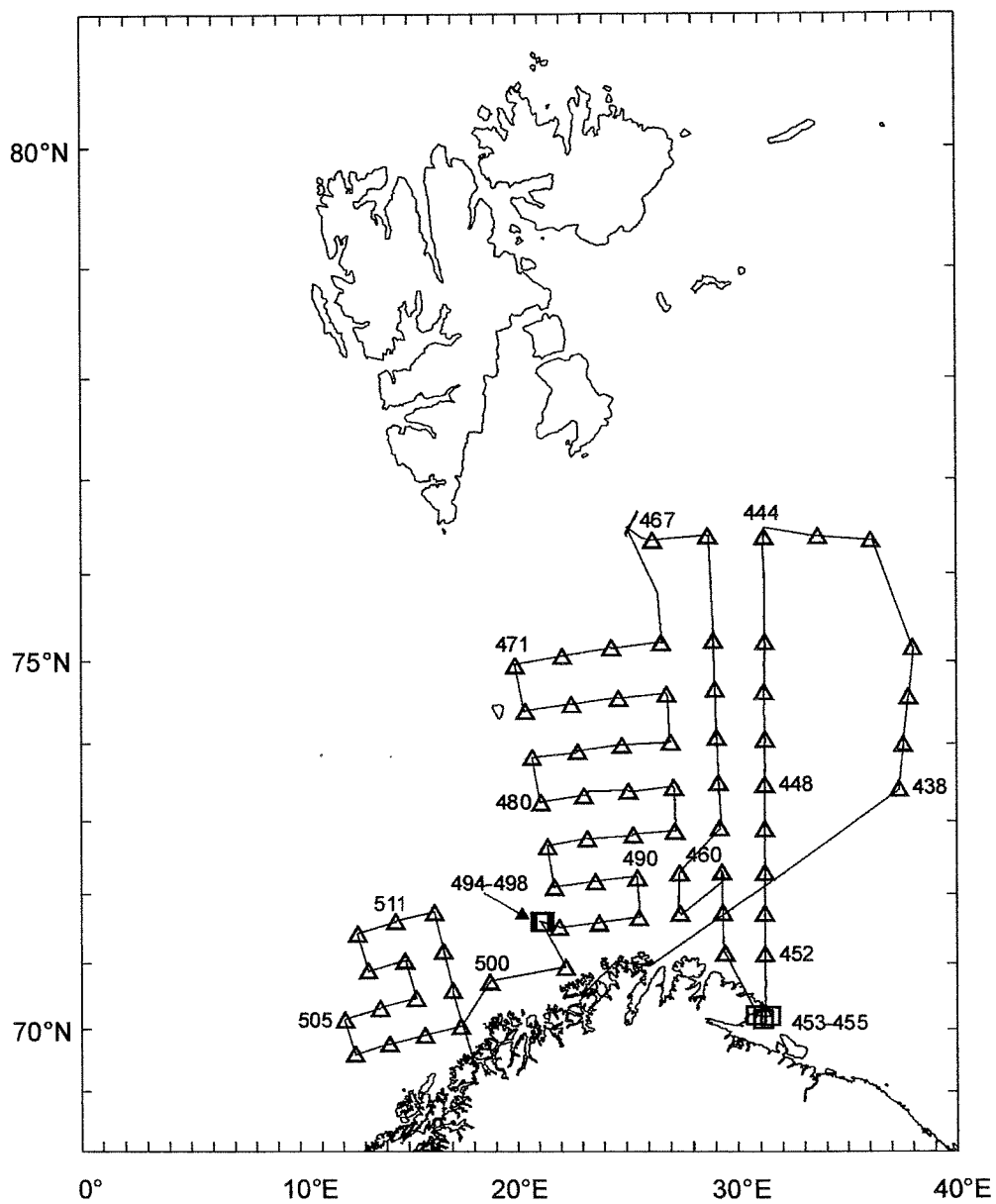
Cruise no 2001011

z CTD st.no 772 - 861 "G.O. Sars"

⓪ CTD and plankton st. (WP-II net)

◆ Mocness st.

Standard section Vardø N: st.no 778 - 806



16 Aug - 8 Sep 2001

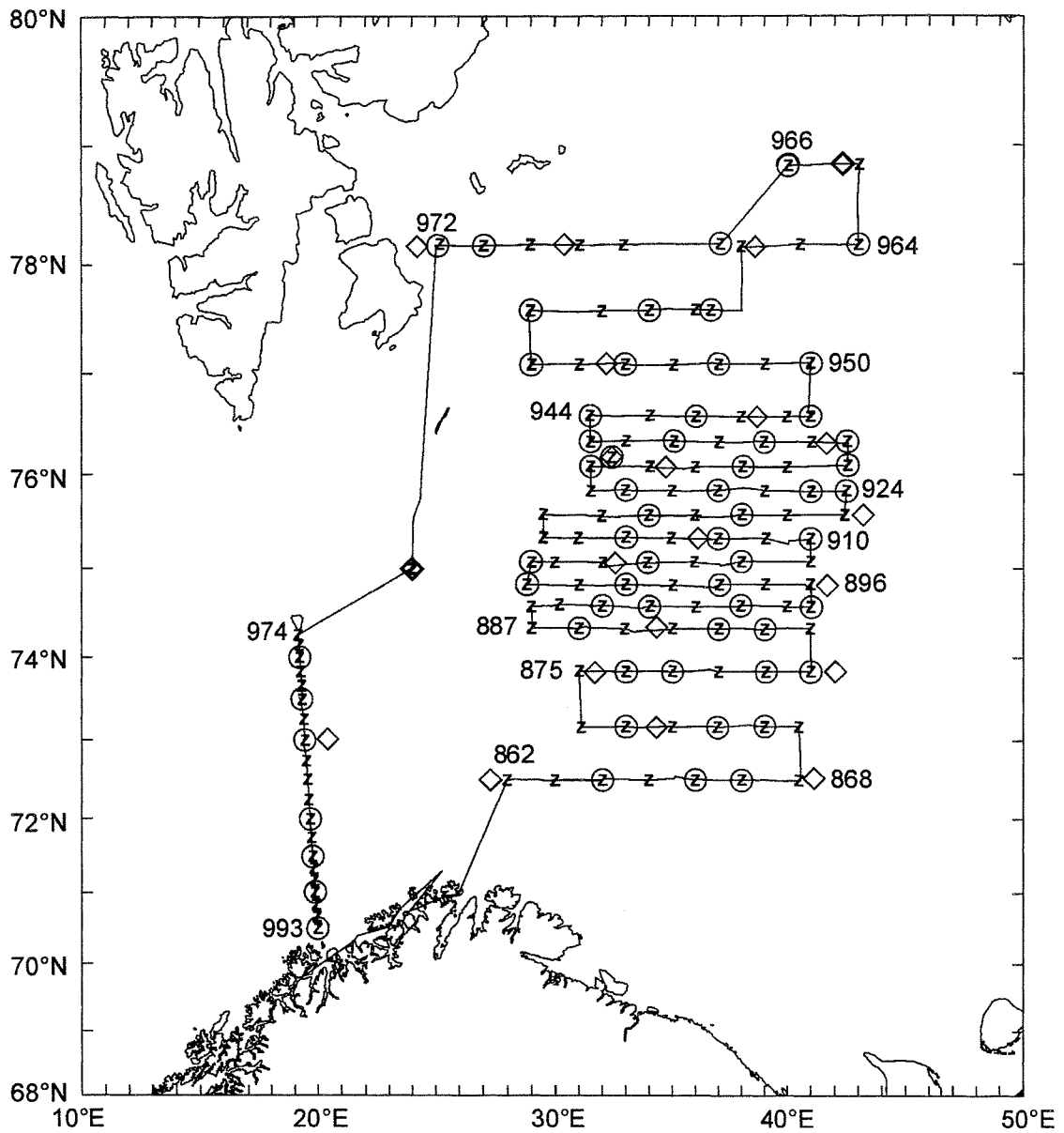
Cruise no 2001011

Trawl st. no 438-514

△ Pelagic tr.

□ Bottom tr.

"G.O. Sars"



10 Sep - 5 Oct 2001

Cruise no 2001012

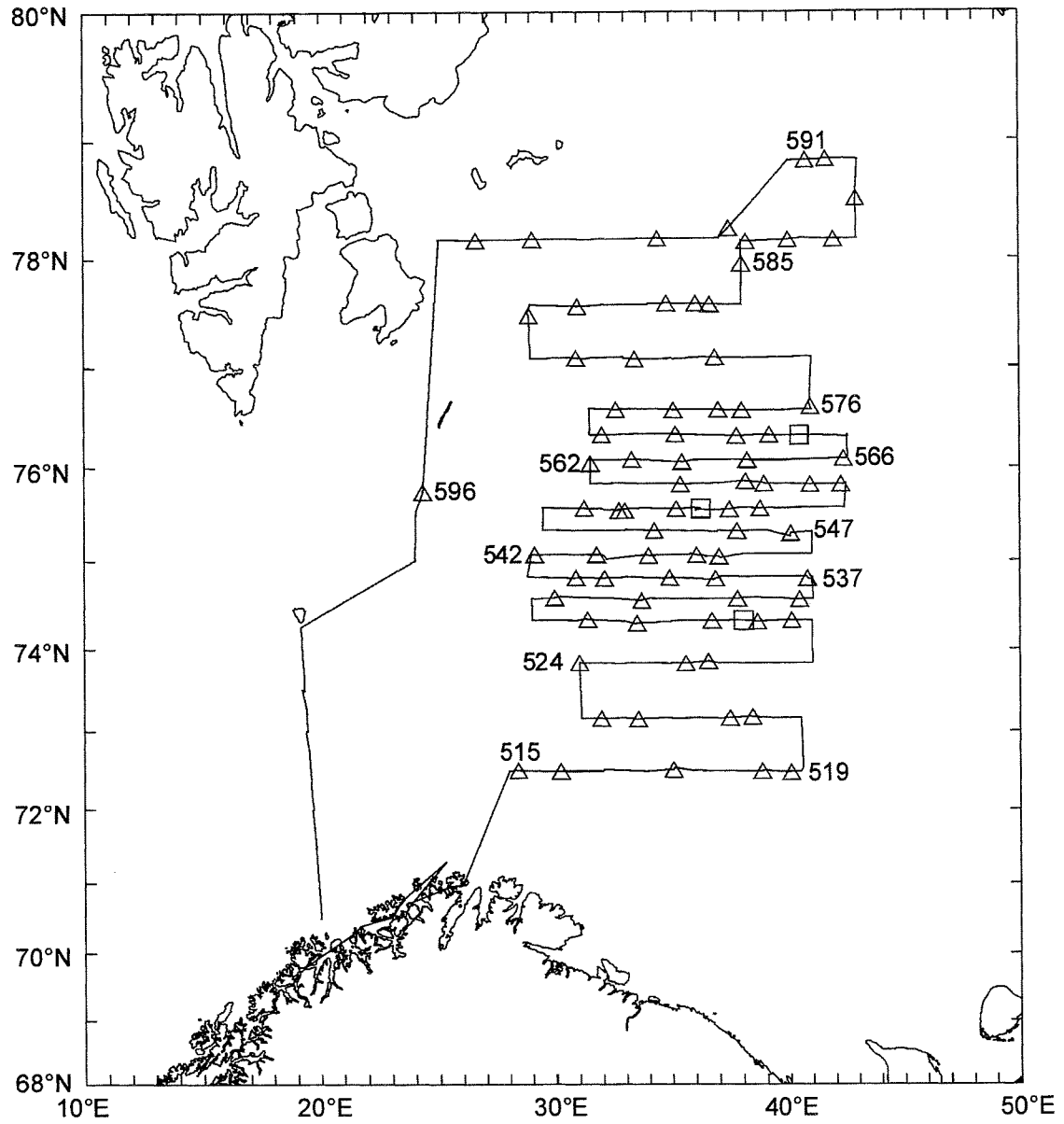
z CTD st.no 862-993

⊙ CTD and plankton st. (WP-II-net)

◇ Mocness st.

"G..O. Sars"

Standard section Fugløya-Bjørnøya st.no 974-993



10 Sep - 5 Oct 2001

Trawl st.no 515-596

"G.O. Sars"

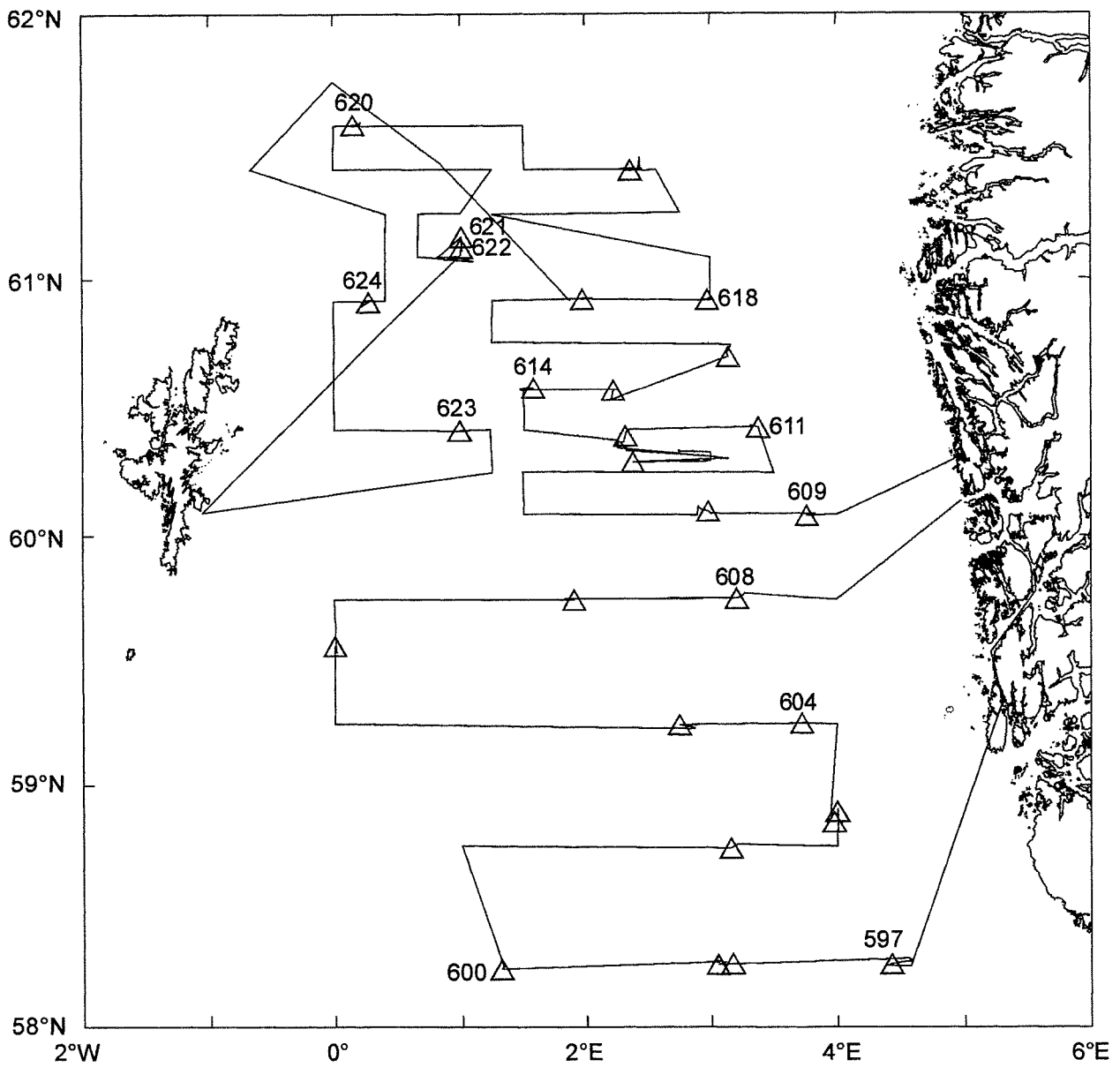
Cruise no 2001012

△ Pelagic tr.

□ Tottom tr-



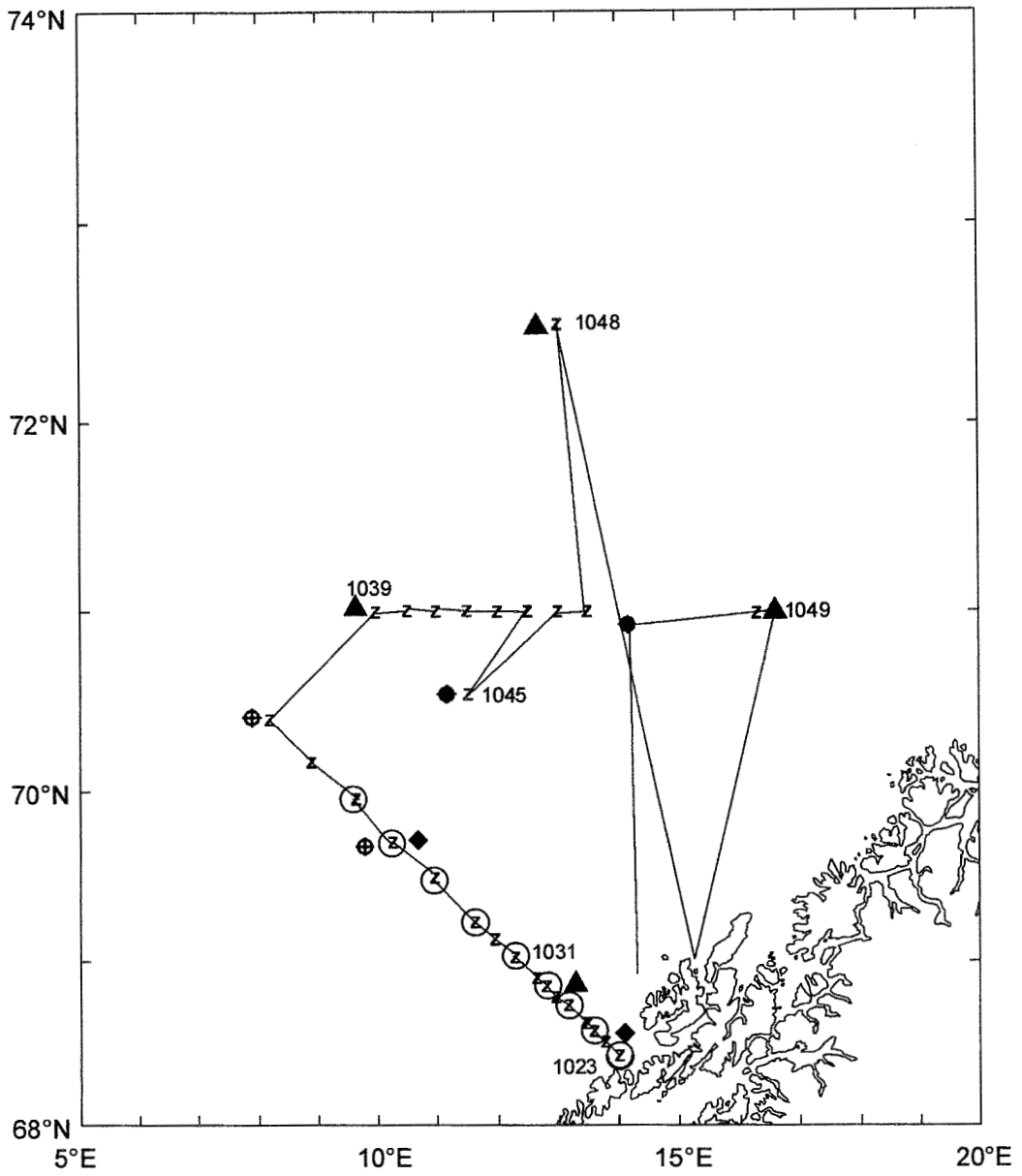




8 - 24 October 2001  
 Cruise no 2001013

△ Pelagic trawl st.no 597-625

"G. O. Sars"

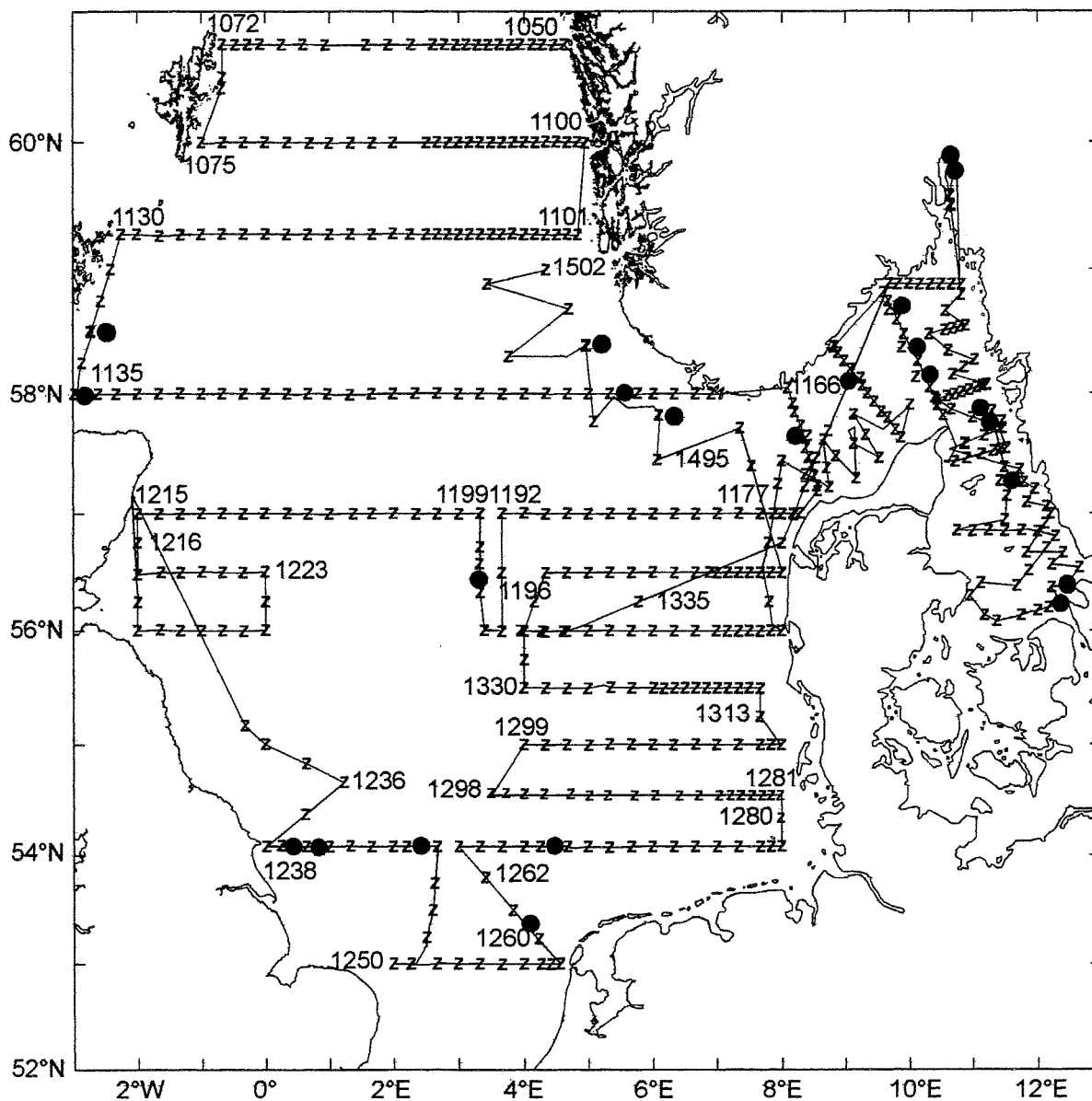


25 Oct - 8 Nov 2001  
Cruise no 2001014

- z CTD st.no 1023-1049
- ⓪ CTD and plankton st (WP-II-Net)
- ◆ MOCNESS st.
- ▲ Recovered mooring
- ⊕ Deployed float
- Recovered float

"GO. Sars"

Standard section Gimsøy NW: st.no 1023-1038



15 Nov - 19 Dec 2001

Cruise no 2001015

z CTD st.no 1050 -1502

● Sediment samples (grab)

Standard section:

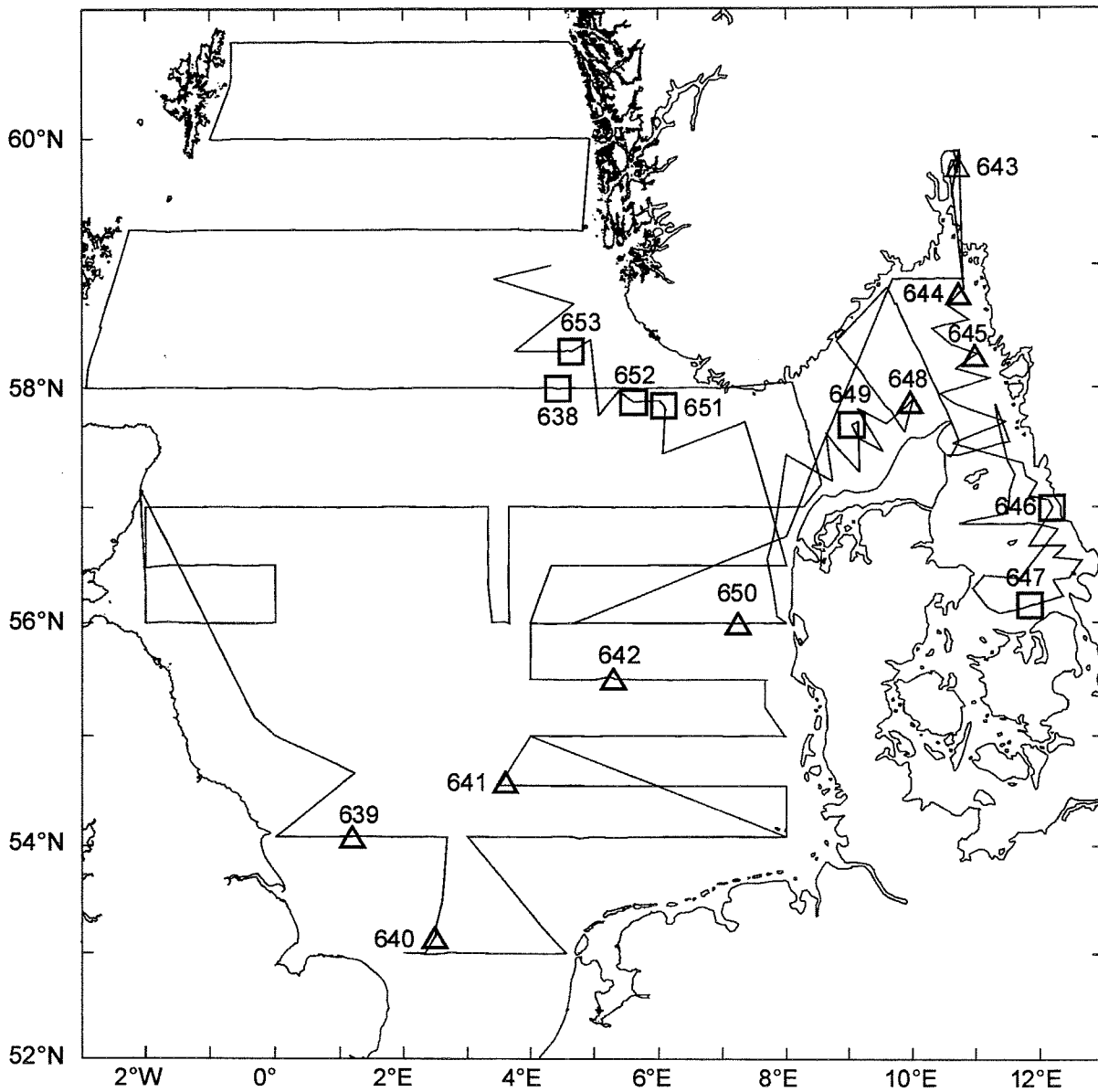
Feie - Shetland W st.no 1050-1072

Slotterøy st.no 1075-1101

Utsira W st.no 1101-1130

Hanstholmen-Aberdeen st.no 1177-1192, 1199-1215

"G.O. Sars"



15 Nov - 19 Dec 2001

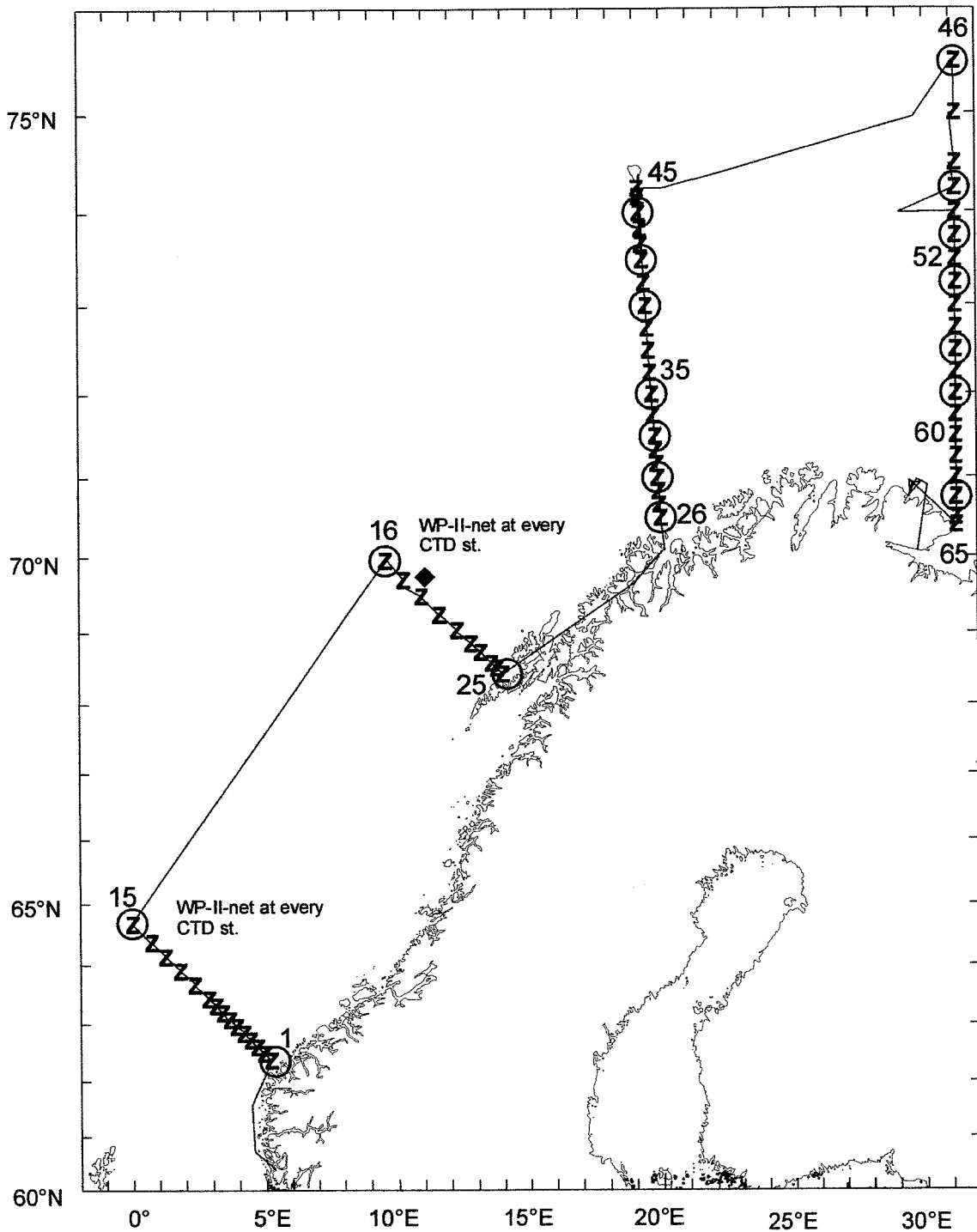
Cruise no 2001015

Trawl st.no 638-653

△ Pelagic trawl

□ Bottom trawl

"G.O. Sars"

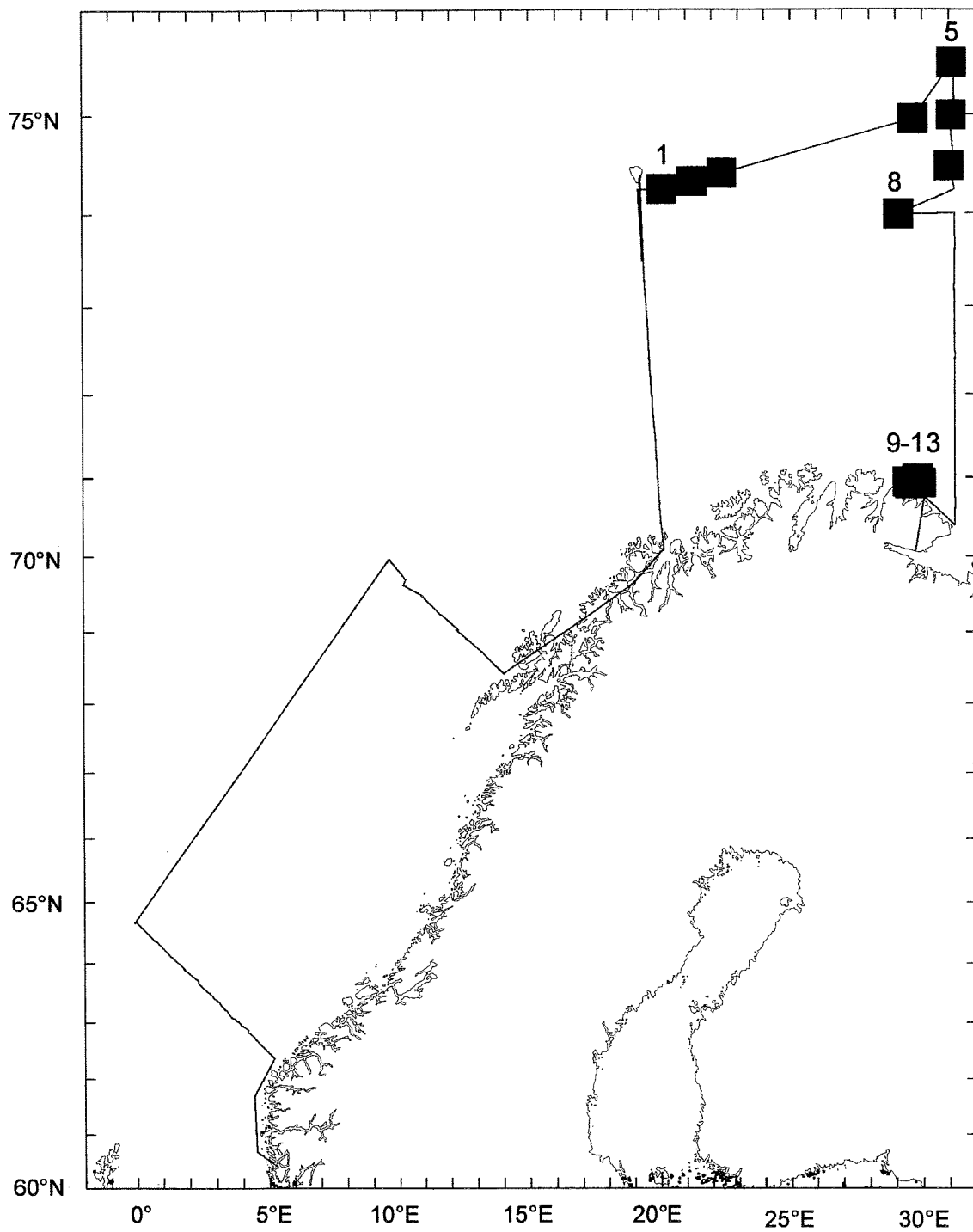


6 - 27 Jan 2001  
 Cruise no 2001204

**Z** CTD st.no 1-65  
**Z** CTD and plankton st. (WP-II-net)  
 ◆ Mocness st.

"Johan Hjort"

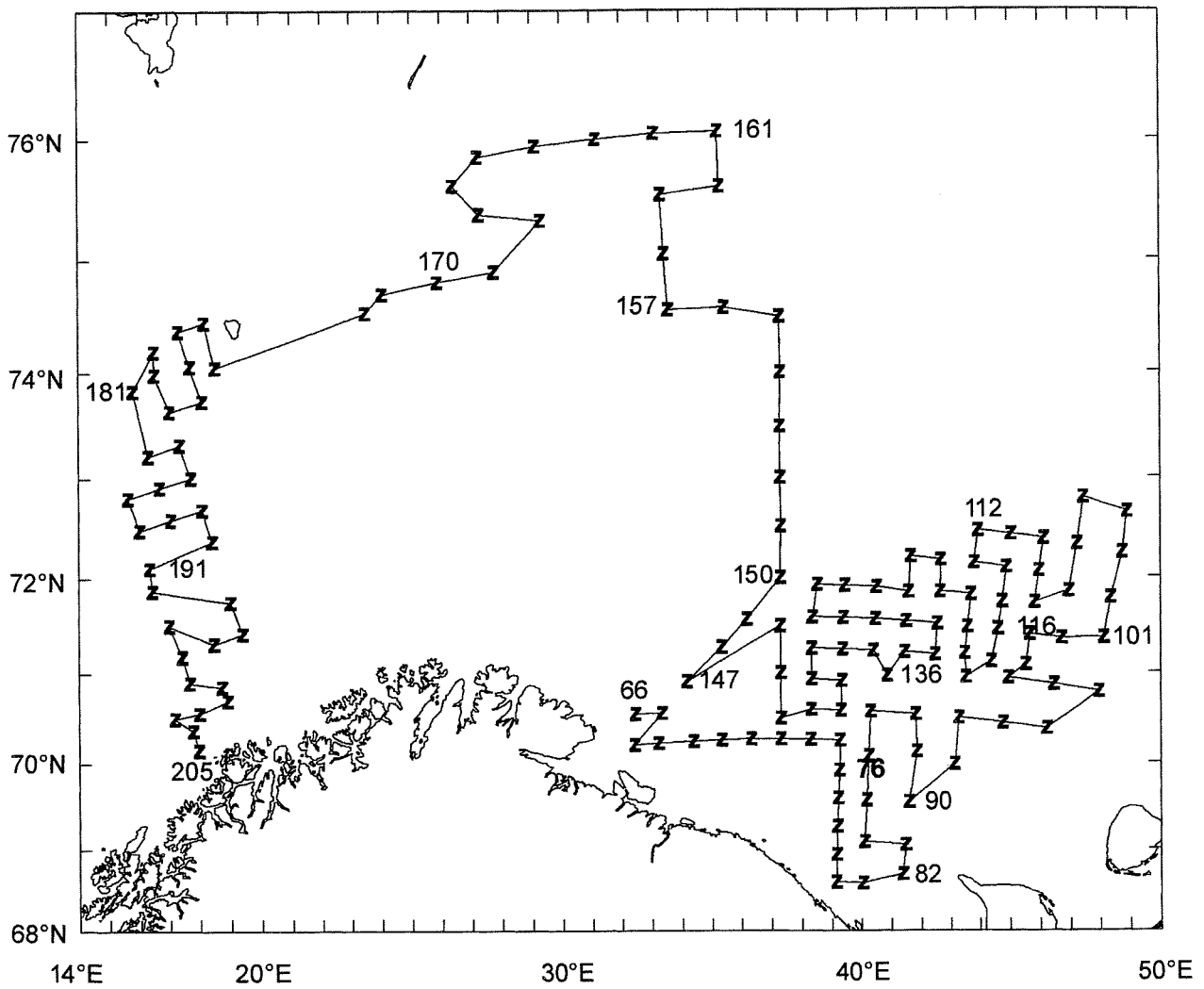
Standard section Svinøy NW:	st.1-15
Gimsøy NW:	st. 16-25
Fugløya - Bjørnøya:	st.no 26-45
Vardø N:	st.no 46-65



6 - 27 Jan 2001  
Cruise no 2001201

■ Bottom trawl st.no 1-13

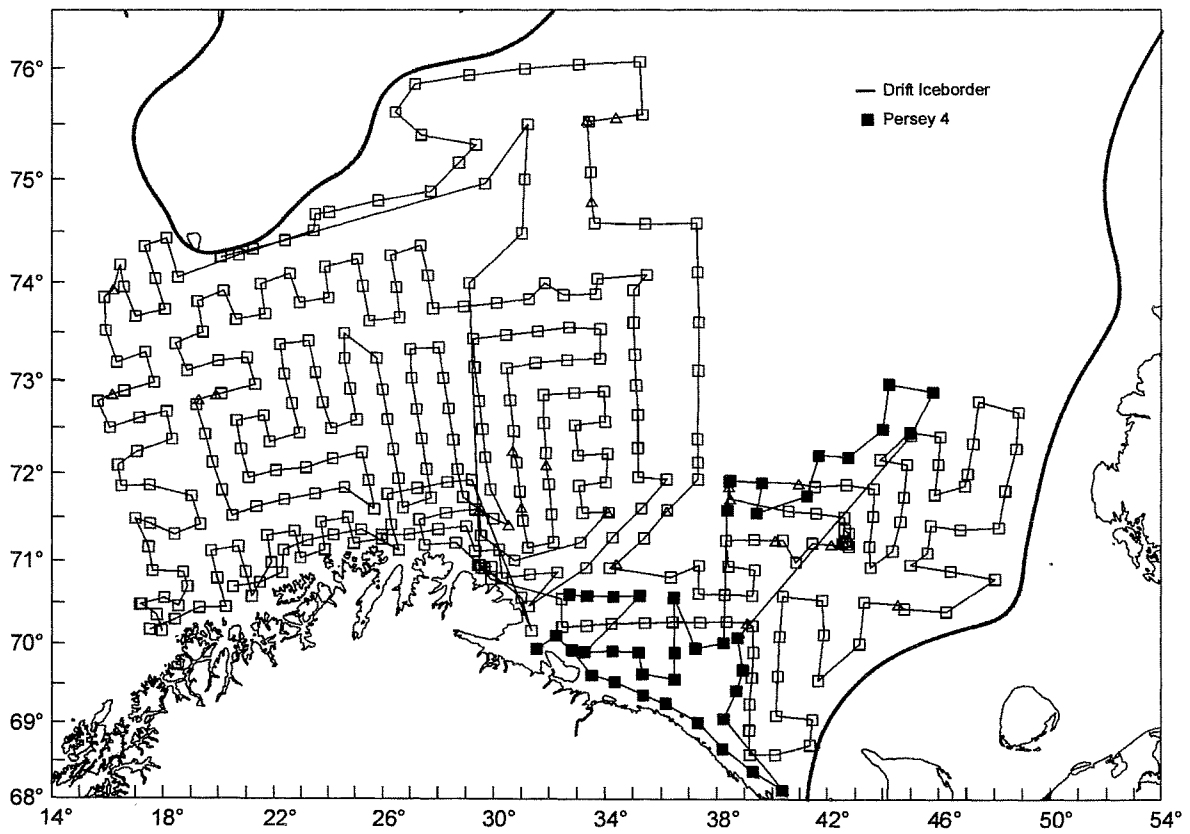
"Johan Hjort"



30 Jan - 28 Feb 2001  
Cruise no 2001202

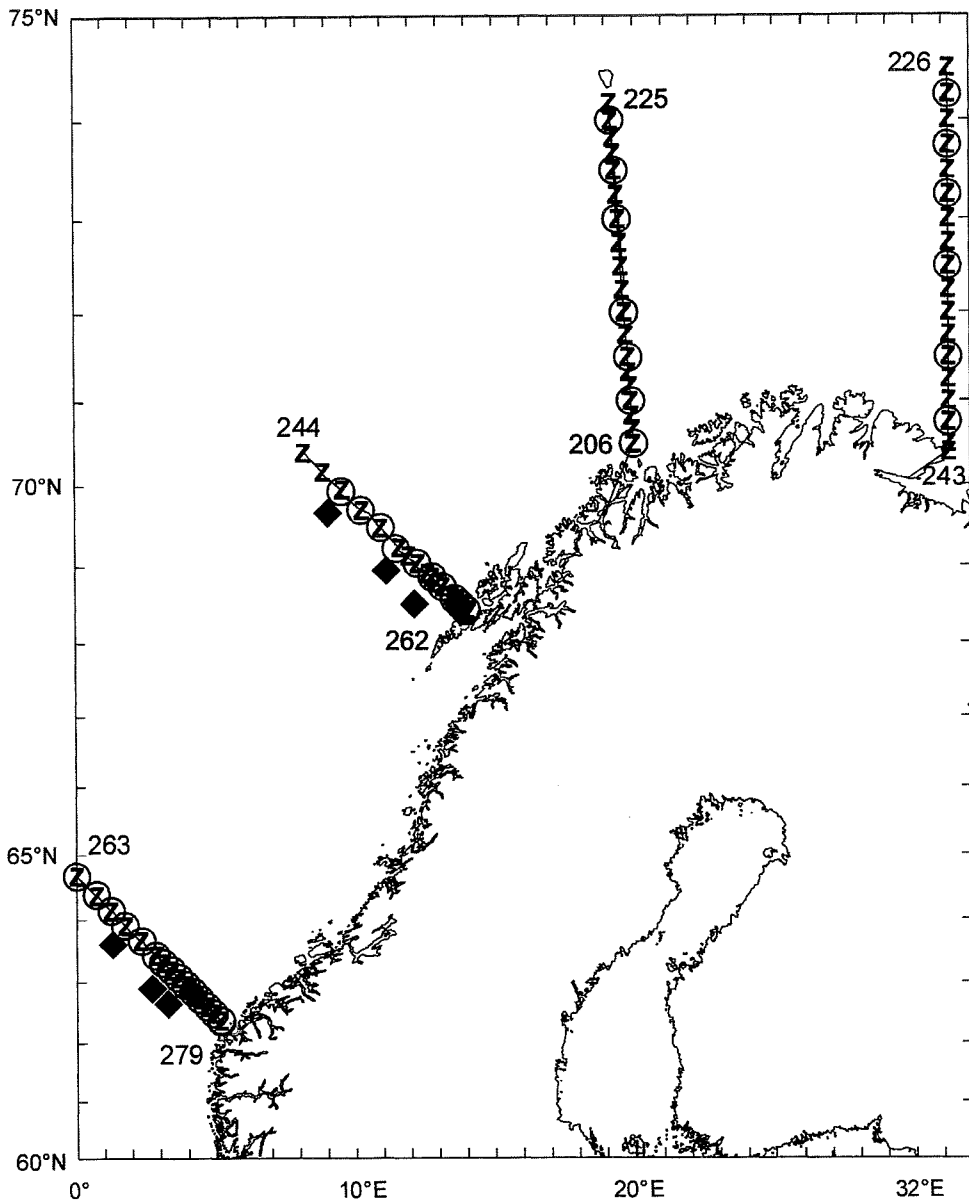
z CTD st.no 66- 205

"Johan Hjort"



27 Jan -7 Mar 2001 Trawl stations ("J.Hjort", "G.O.Sars" and Persey 4")



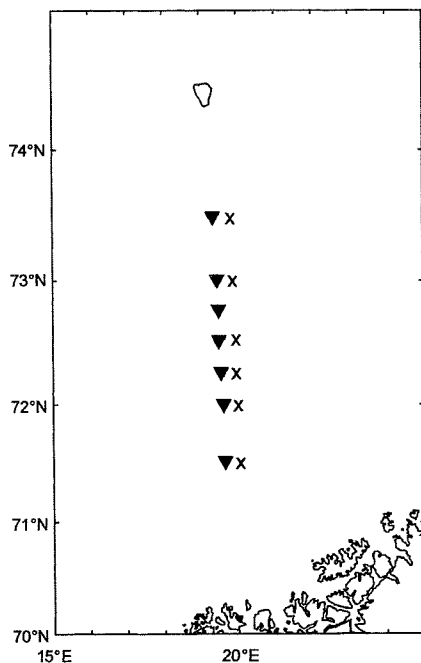


2 - 18 March 2001  
Cruise no 2001203

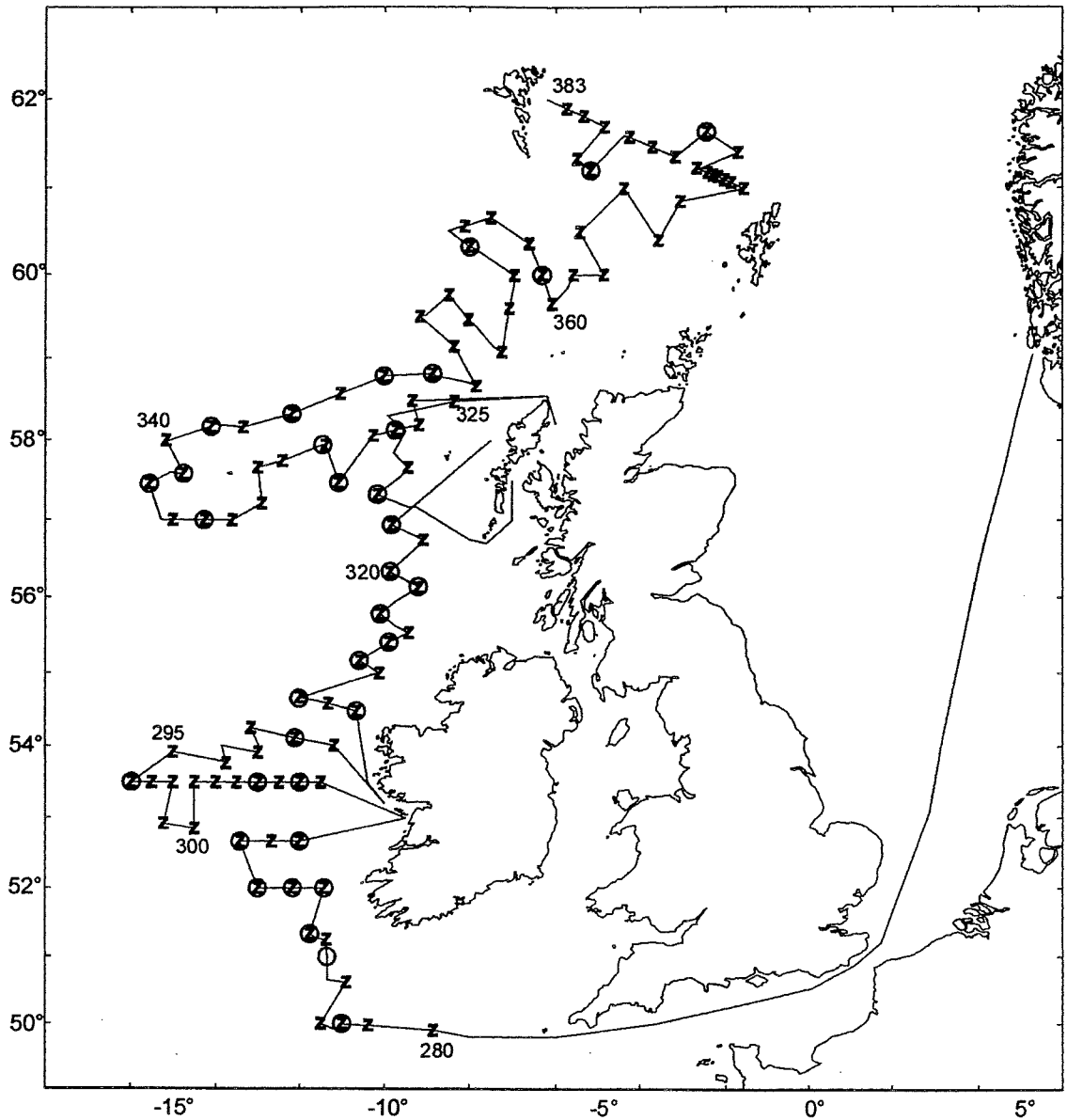
"Johan Hjort"

z CTD st.no 206 - 279  
 ⊙ ctd and plankton st. (WP-II-net)  
 ◆ Mocness st.

Standard sections: Vardø N st.no 226-243  
 Fugløya-Bjørnøya st.no 206-225  
 Gimøy NW st.no 244-262  
 Svinøy NW st.no 263-279



▲ Deployed mooring Maia current meters  
 x Recovered mooring Maia current meters



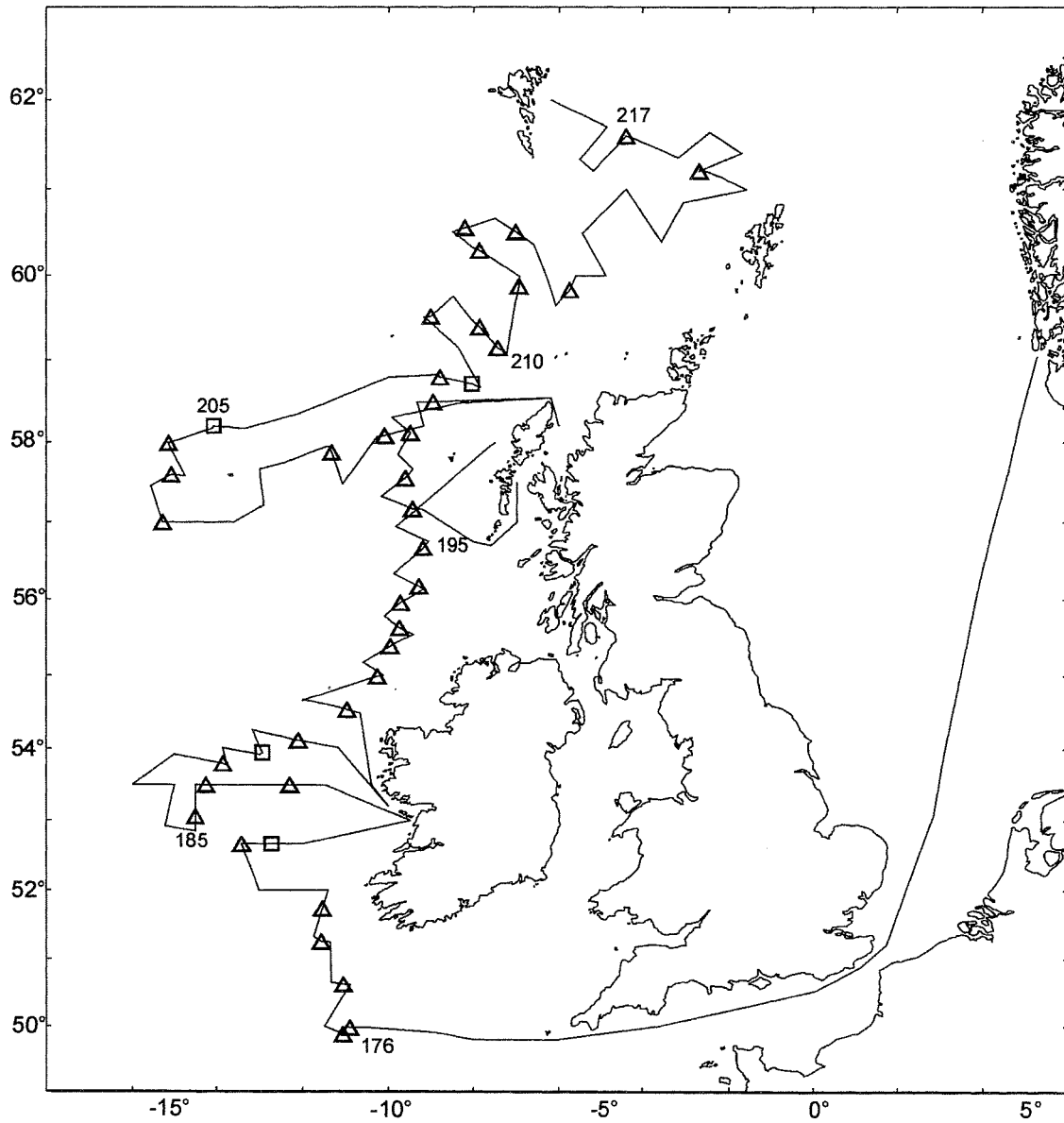
21 Mar - 23 Apr 2001

z CTD st.no 280 -383

"Johan Hjort"

Cruise no 2001204

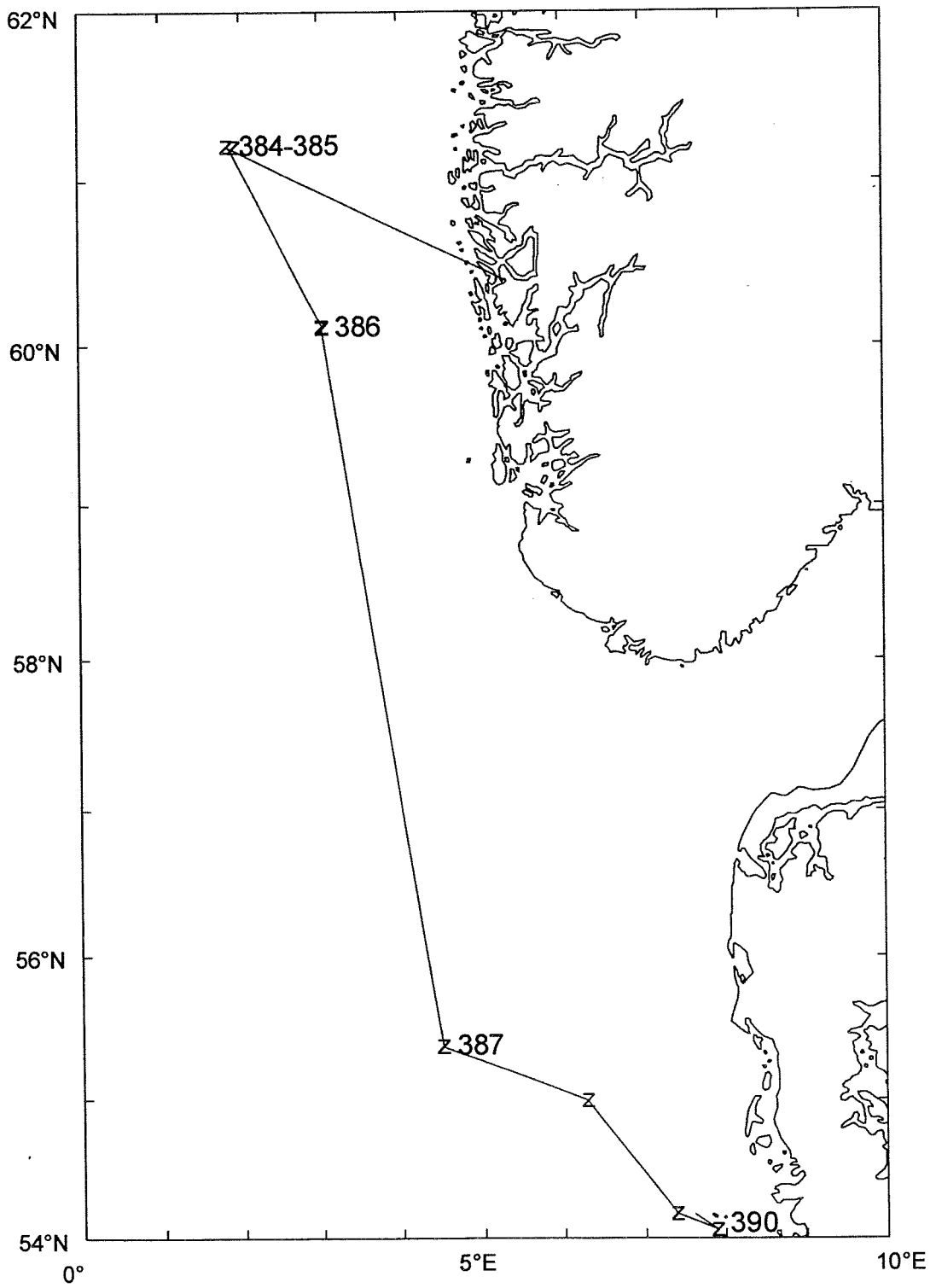
⓪ Dipnet (80 cm)



21 Mar - 23 Apr 2001  
 Cruise no 2001204

z Trawl st.no 176 - 217  
 △ Pelagic tr.  
 □ Bottom tr.

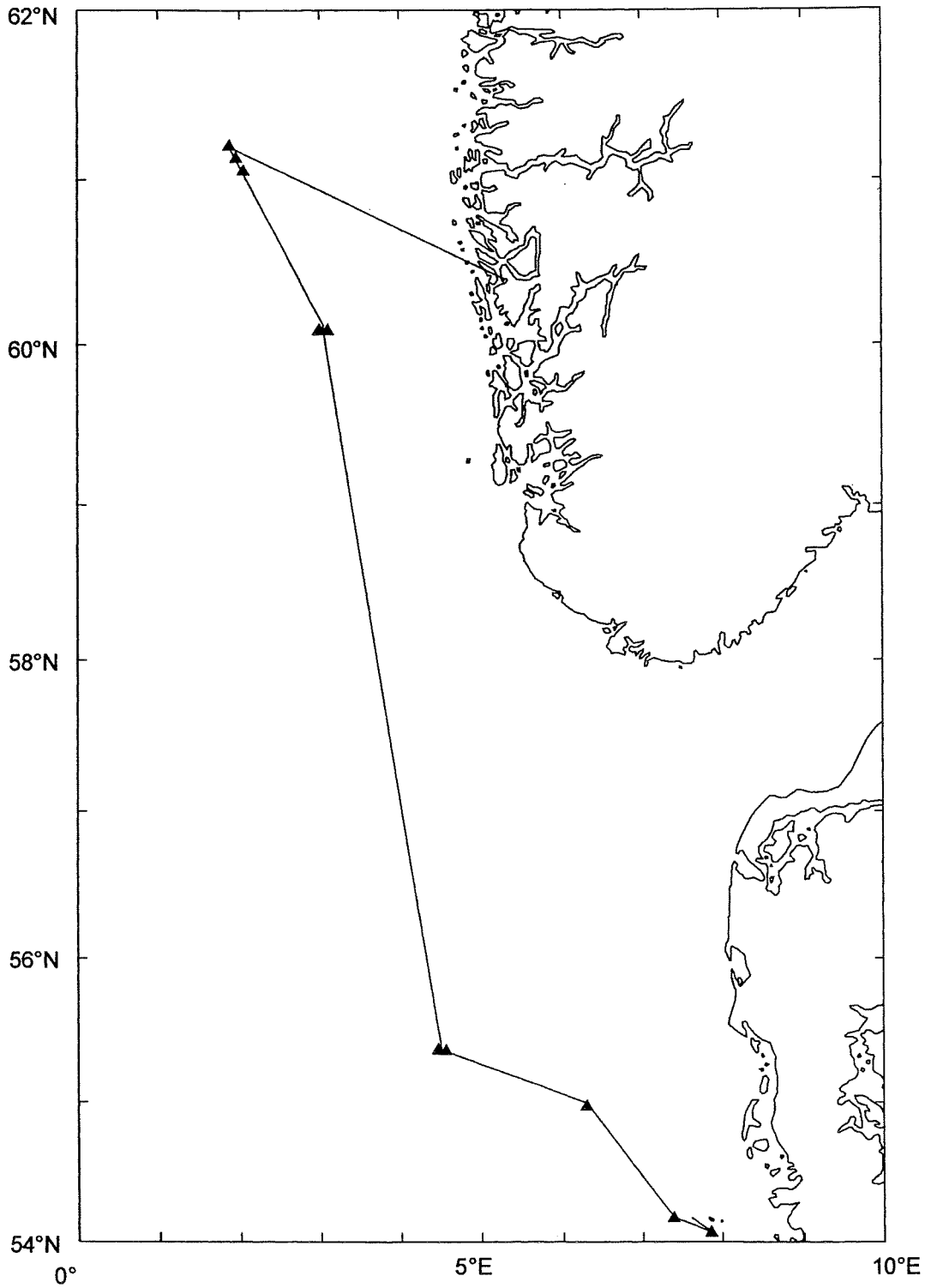
"Johan Hjort"



24 Apr - 2 May 2001  
Cruise no 2001205

z CTD st.no 384 -390

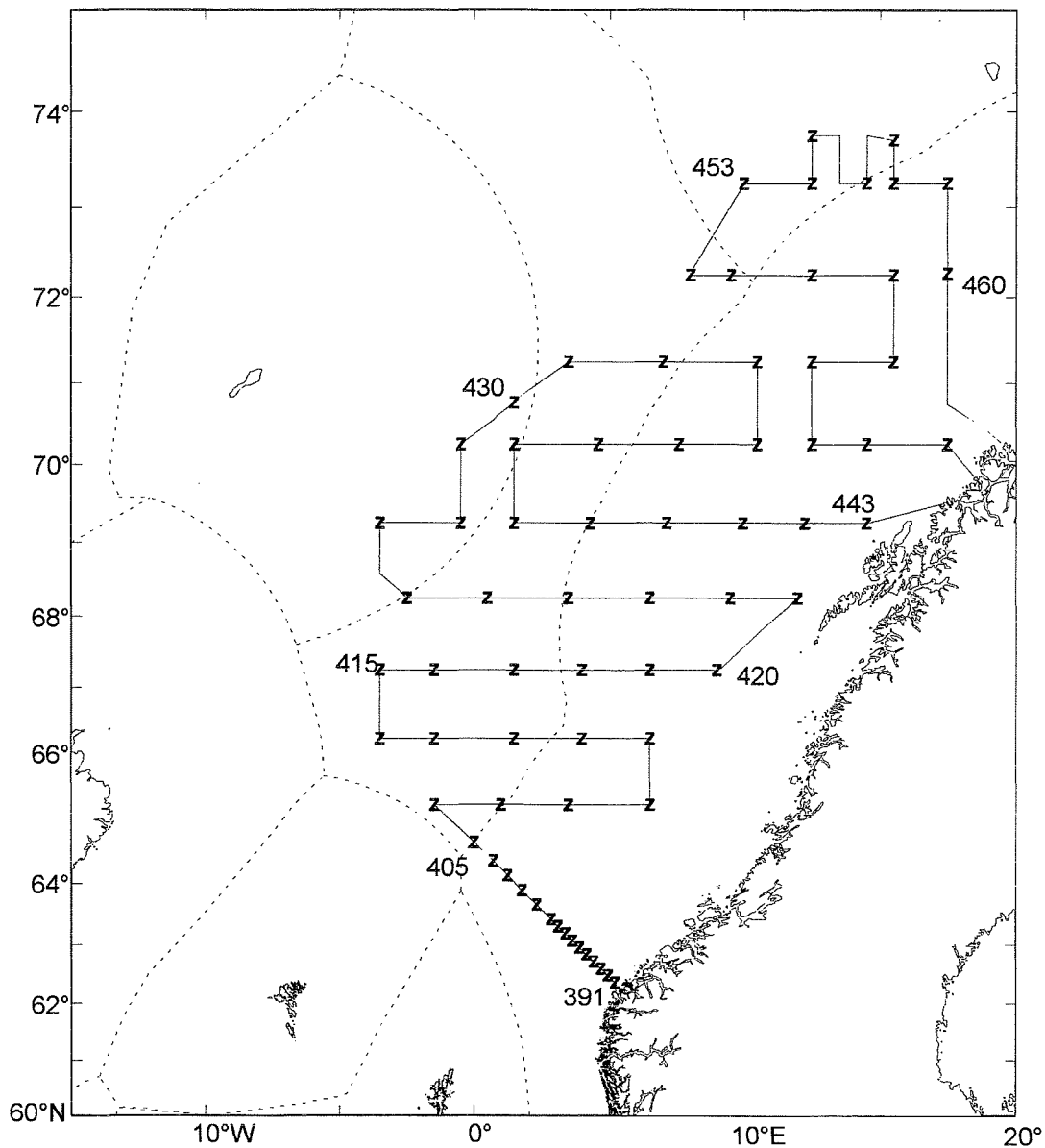
"Johan Hjort"



24 Apr - 2 May 2001  
Cruise no 2001205

▲ Deployment of 10 moorings

"Johan Hjort"

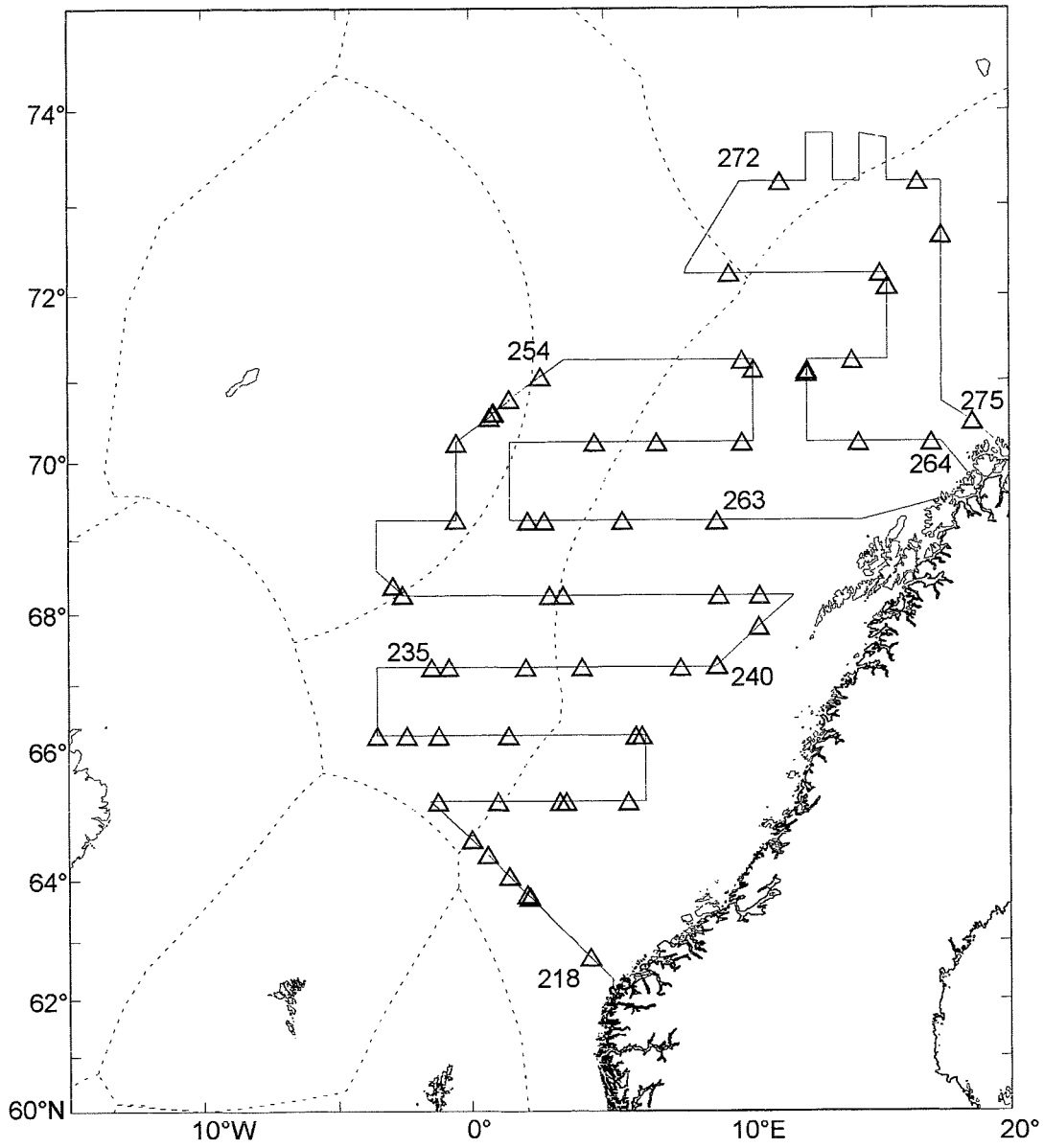


3 - 28 May 2001  
Cruise no 2001206

z CTD stno 391 - 460

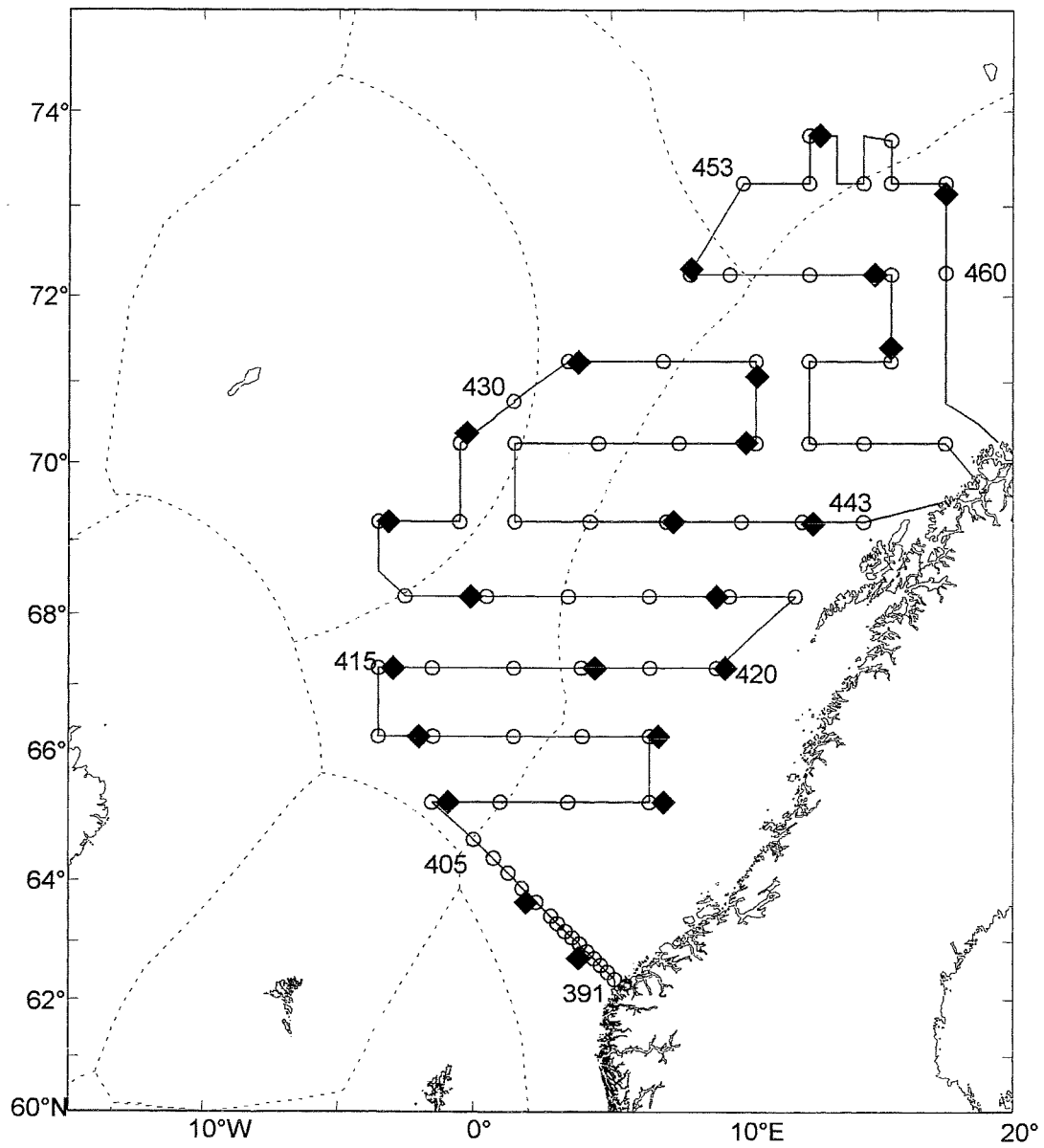
"Johan Hjort"

Standard section Svinøy NW: st.no 391-407



3 - 28 May 2001     $\Delta$  Pelagic trawl st.no 218-275  
 Cruise no 2001206

"Johan Hjort"



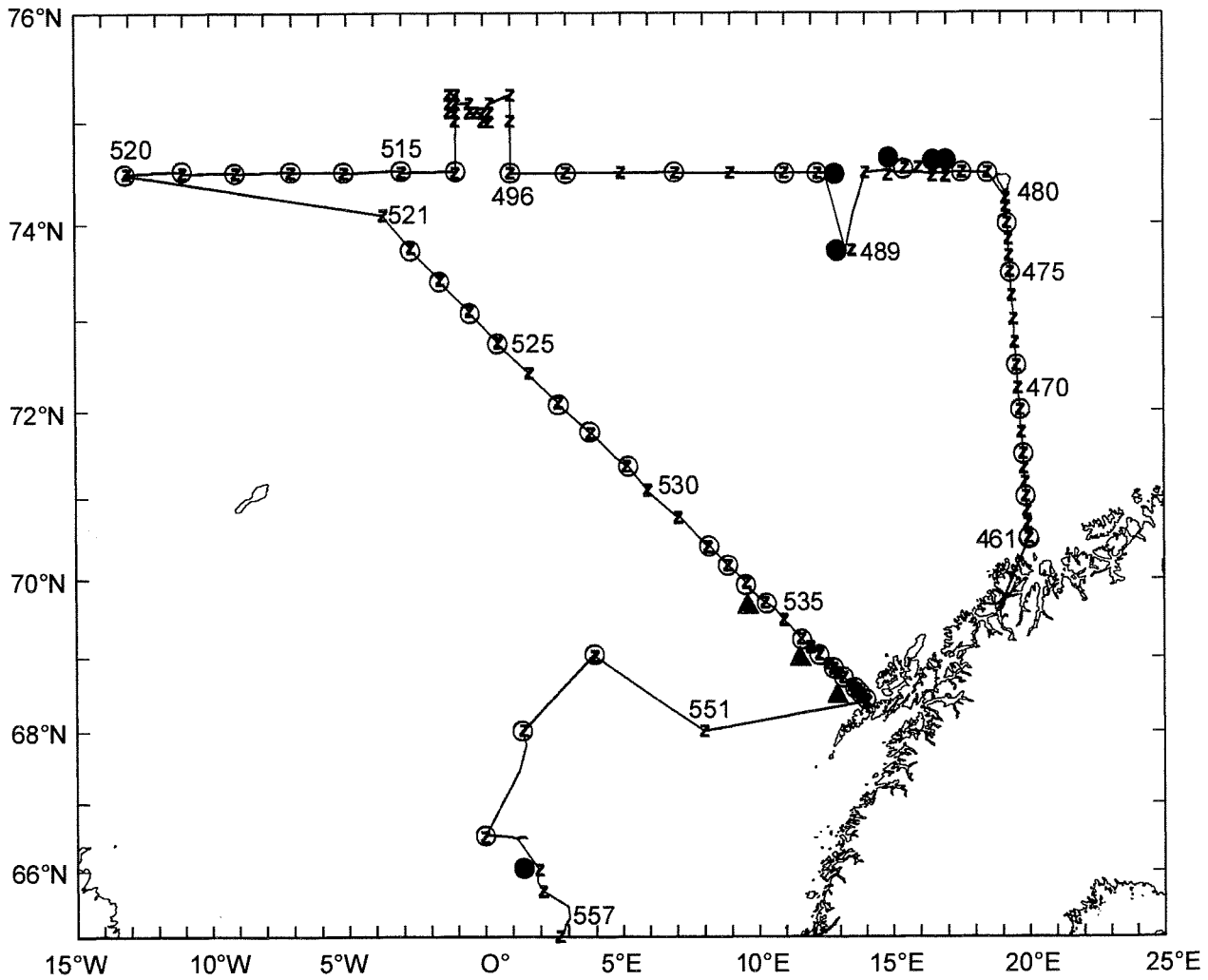
3 - 28 May 2001

Cruise no 2001206

"Johan Hjort"

Plankton st.  
 ○ WP-2-net  
 ◆ Mocness





28 May - 17 Jun 2001

Cruise no 2001207

z CTD st.no 461 - 557

⊙ CTD and plankton st. (WP-2-net)

▲ Mocness st.

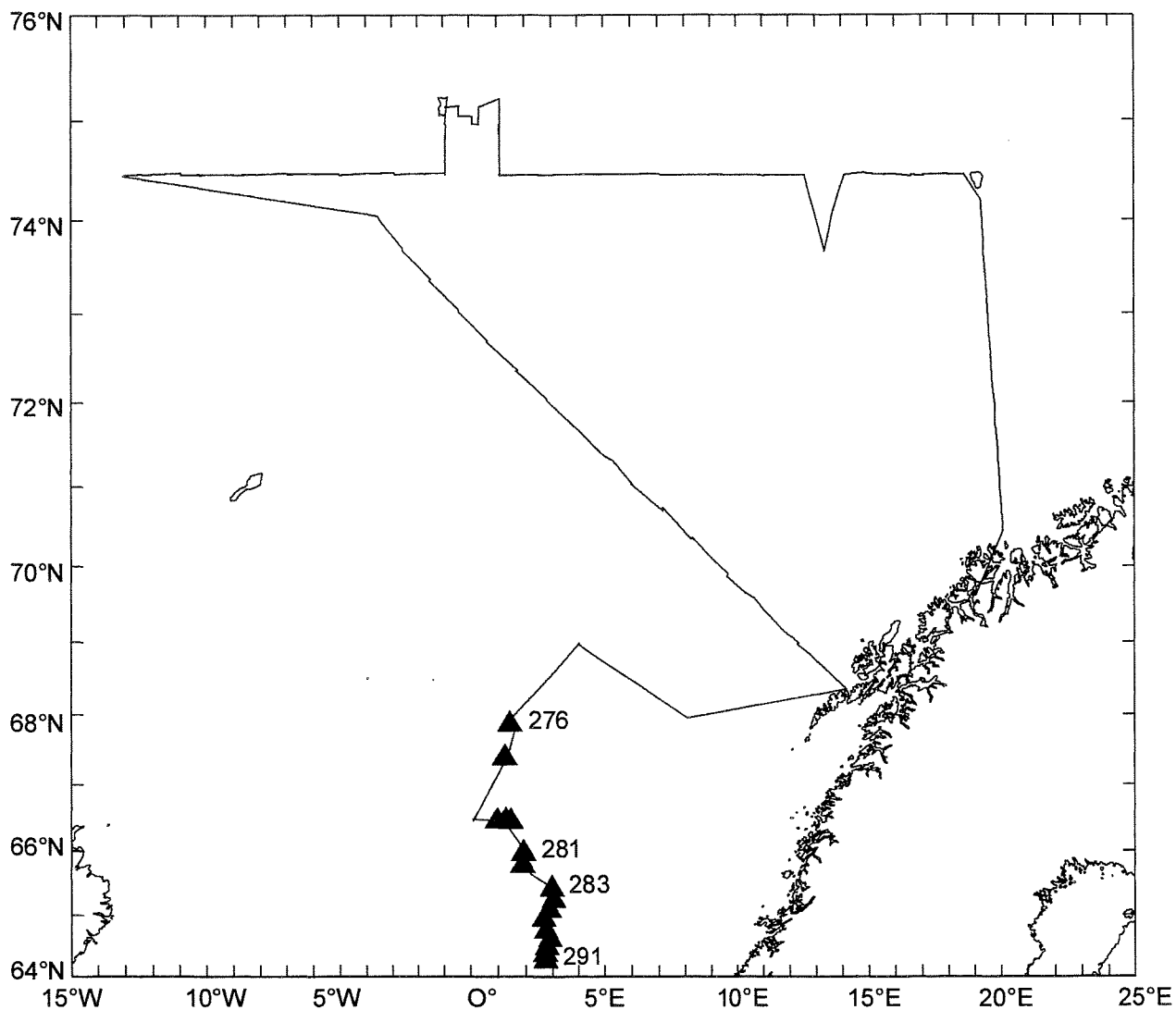
● Grab st.

Standard section Gimsøy NW: st.no 521-550

Fugløya - Bjørnøya: st.no 461-480

Bjørnøya W: st.no 481 - 520

"Johan Hjort"



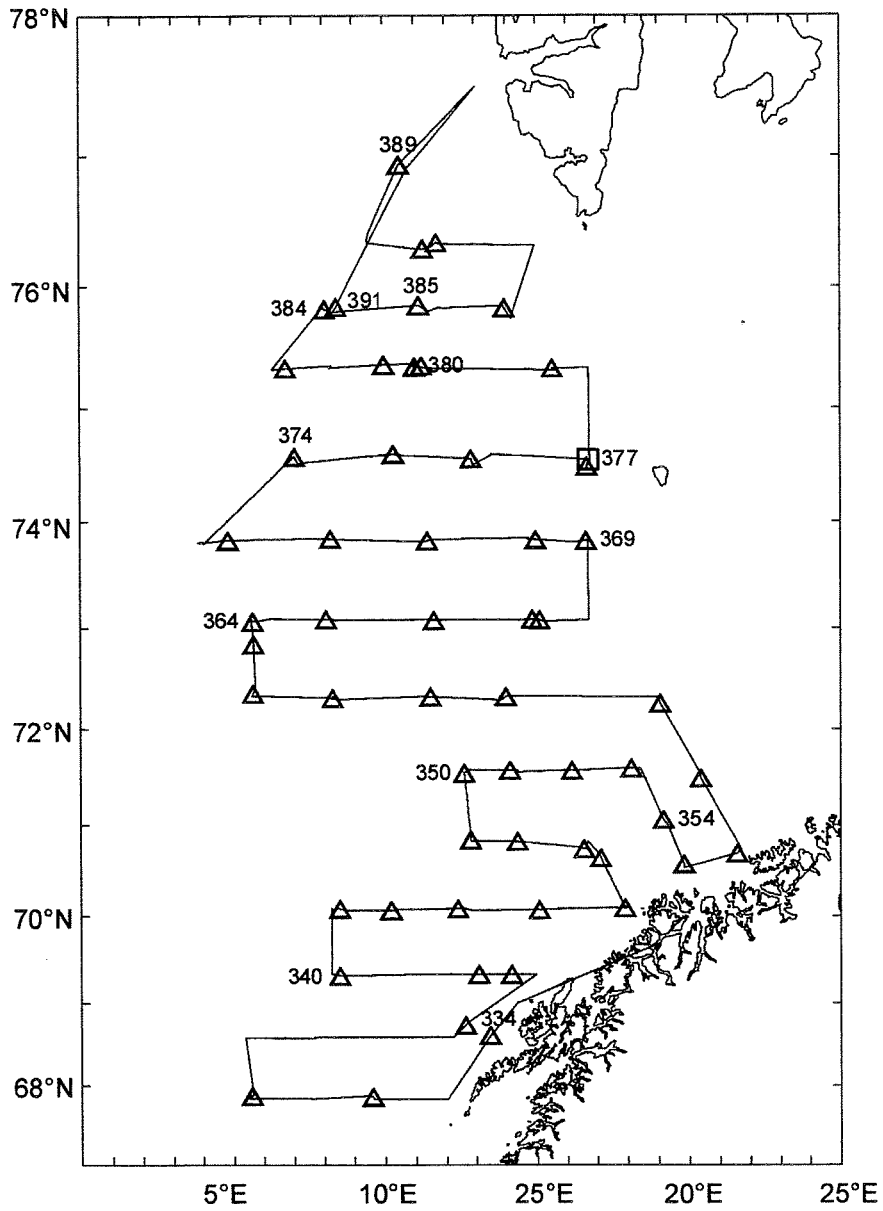
28 May - 17 Jun 2001

▲ Pel. trawl st.no 276 -291

"Johan Hjort"

Cruise no 2001207

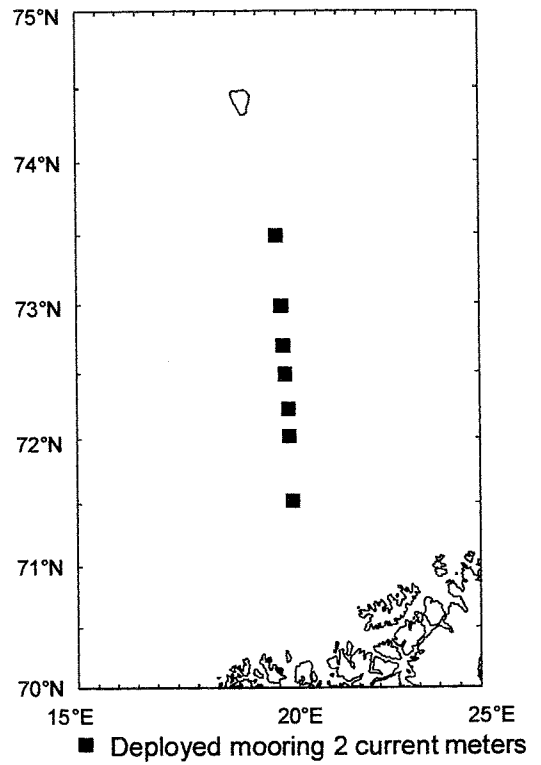
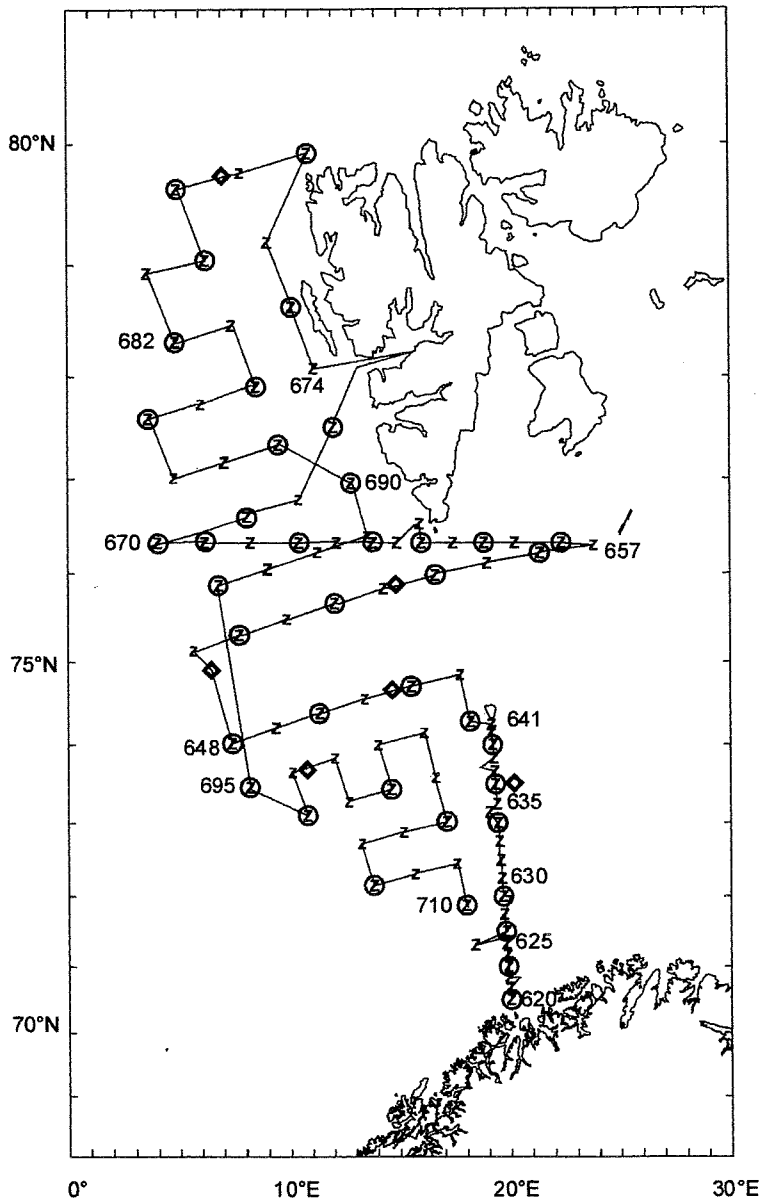




21 Jul - 19 Aug 2001  
Cruise no 2001209

Trawl st.no 334-391  
 ▲ Pel.tr.  
 □ Bottom tr.  
 (st.390 not shown)

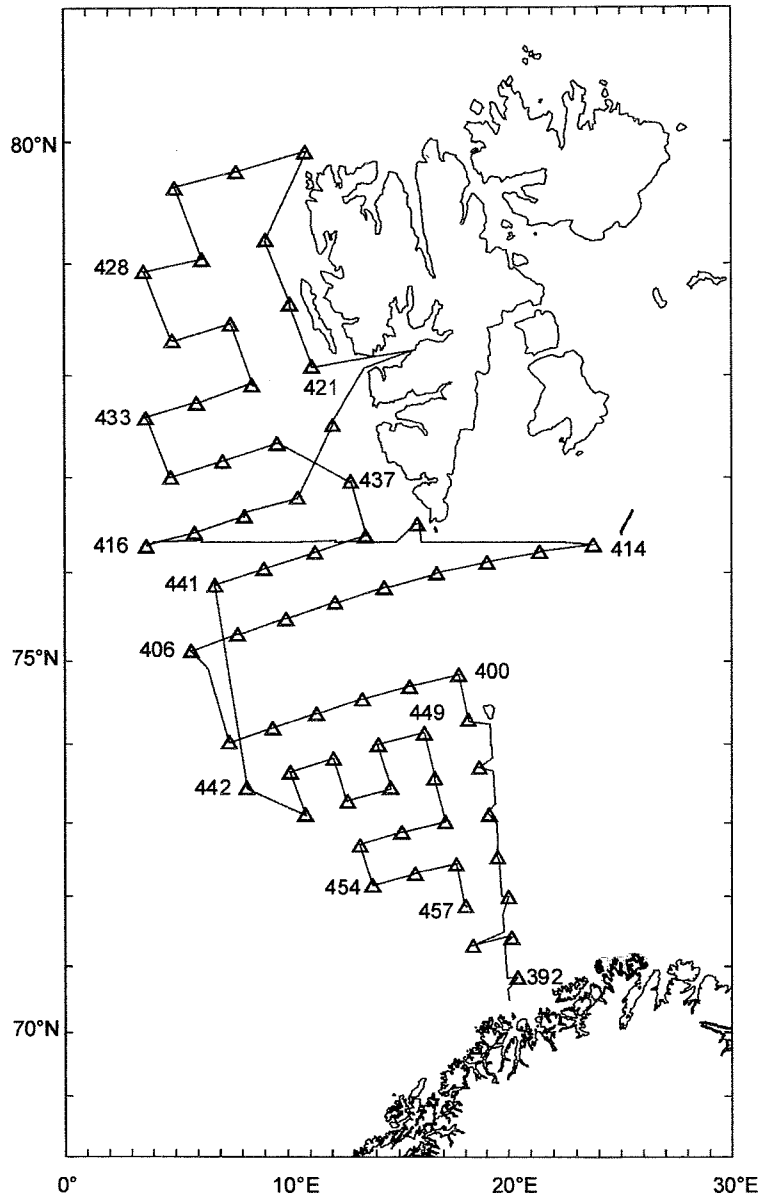
"Johan Hjort"



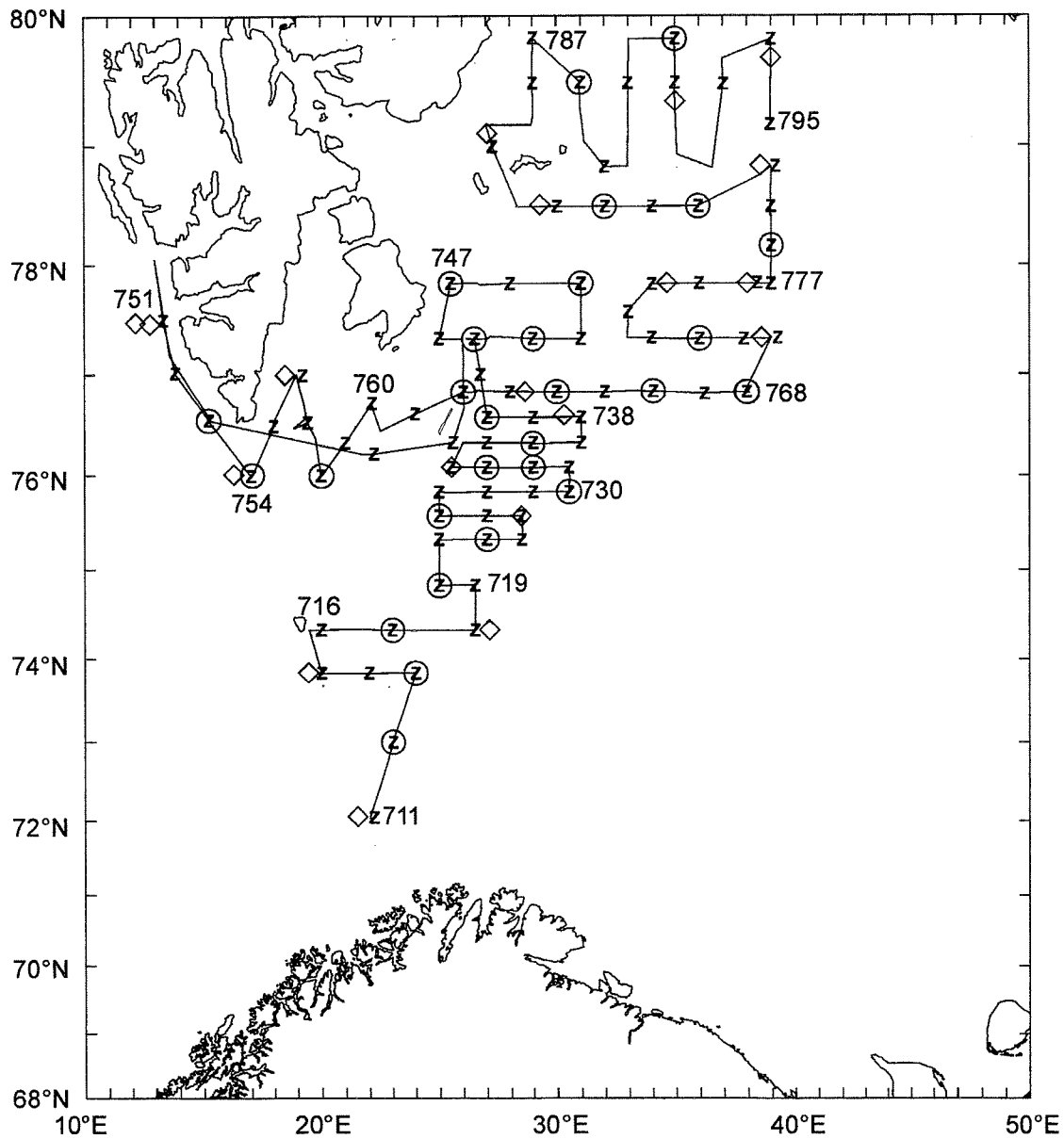
20 August - 9 September 2001 z CTD st.no 620 - 710 "Johan Hjort"  
 Cruise no 2001210

- ⓪ CTD and plankton st. (WPII-net)
- ◆ Plankton st. (Mocness)

Standard sections Fugløya - Bjørnøya: st.no 620 - 641  
 Sørkapp st.no 657 - 670



20 August - 9 September 2001  $\Delta$  Pelagic trawl no 392 - 457 "Johan Hjort"  
 Cruise no 2001210



10 Sep - 5 Oct 2001

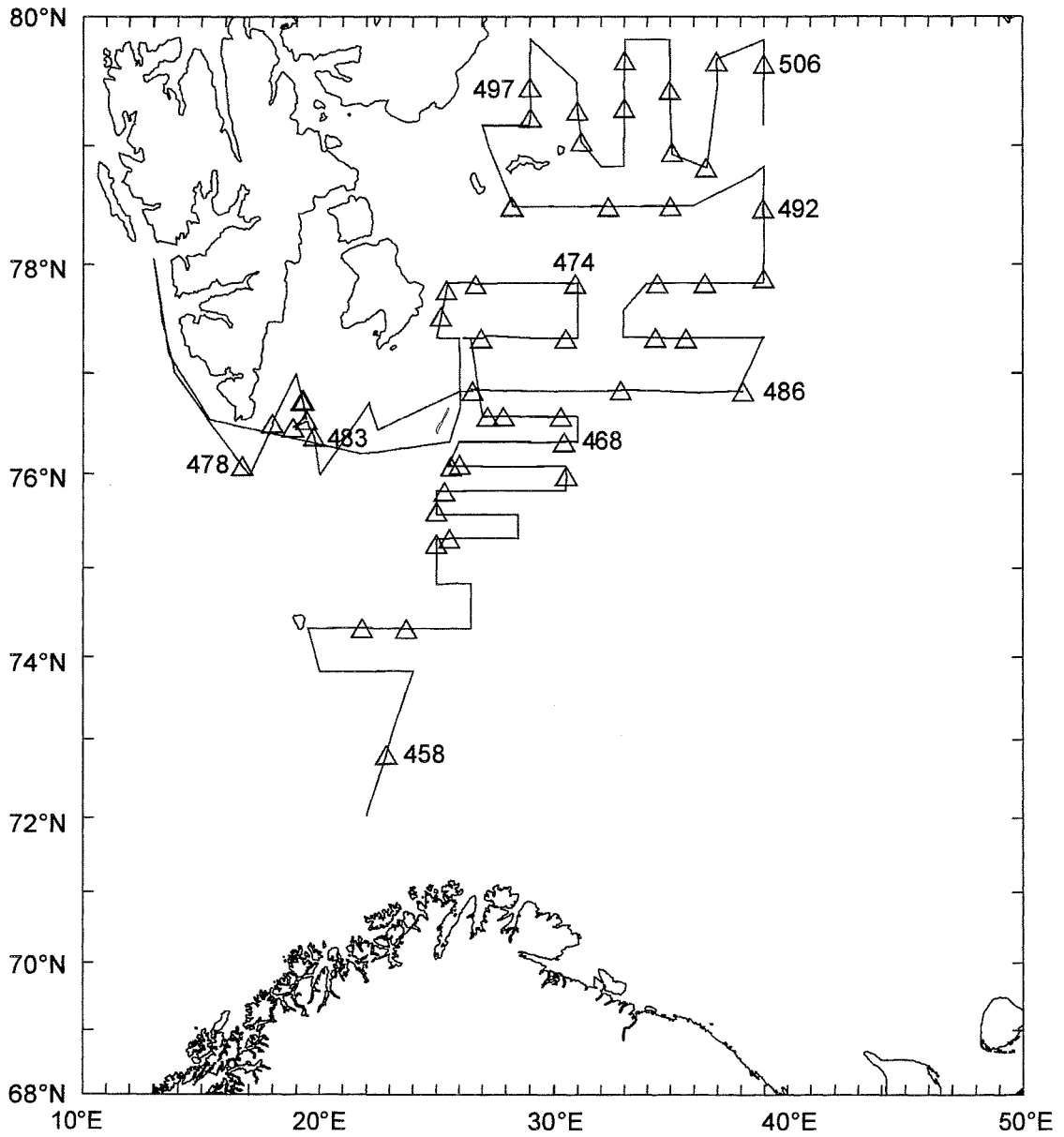
Cruise no 2001211

z CTD st.no 711-795

⊙ CTD and plankton st. (WP-II-net)

◇ Mocness st.

"Johan Hjort"

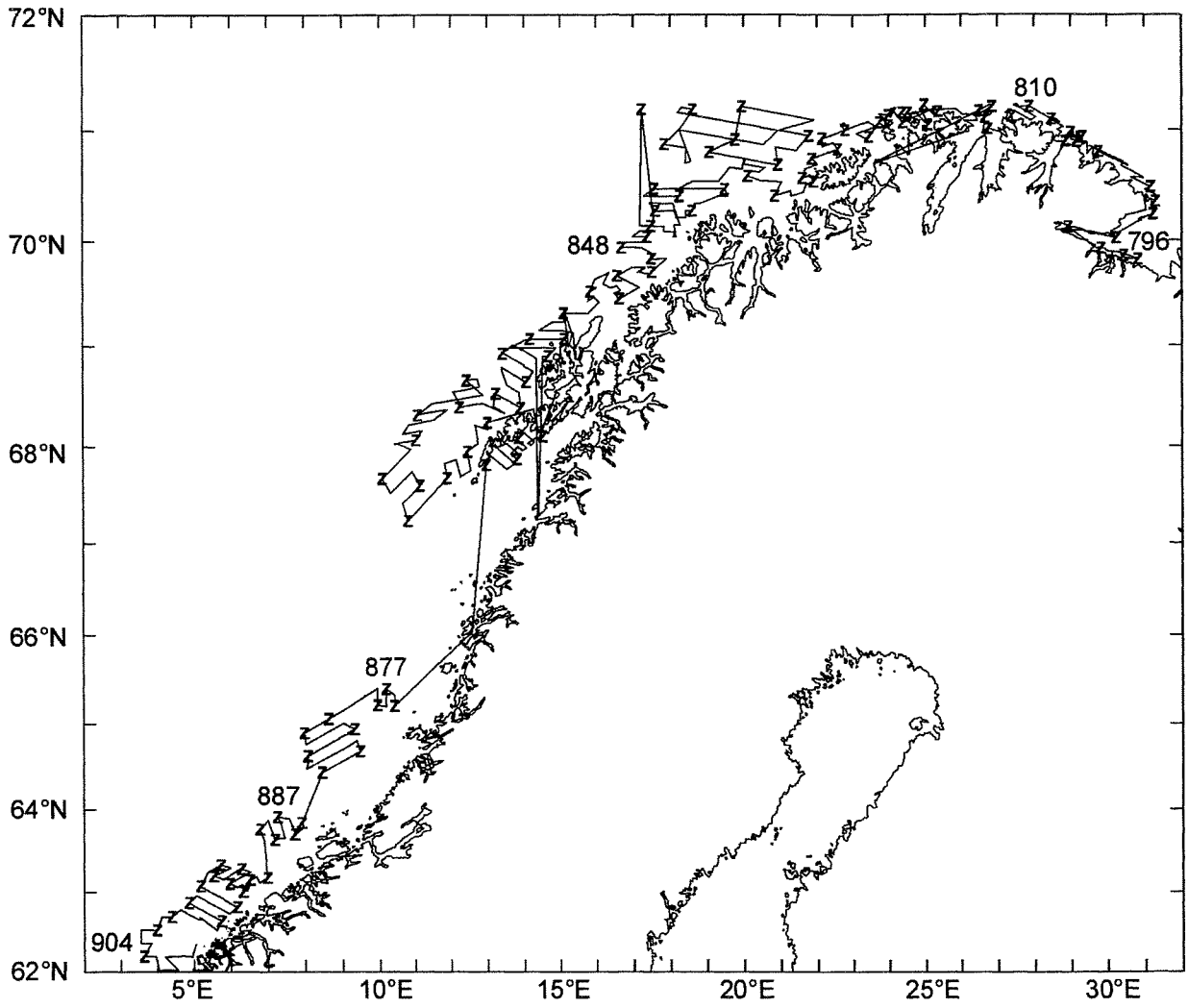


10 Sep - 5 Oct 2001  
Cruise no 2001211

△ Pelagic trawl st.no 458-506

"Johan Hjort"



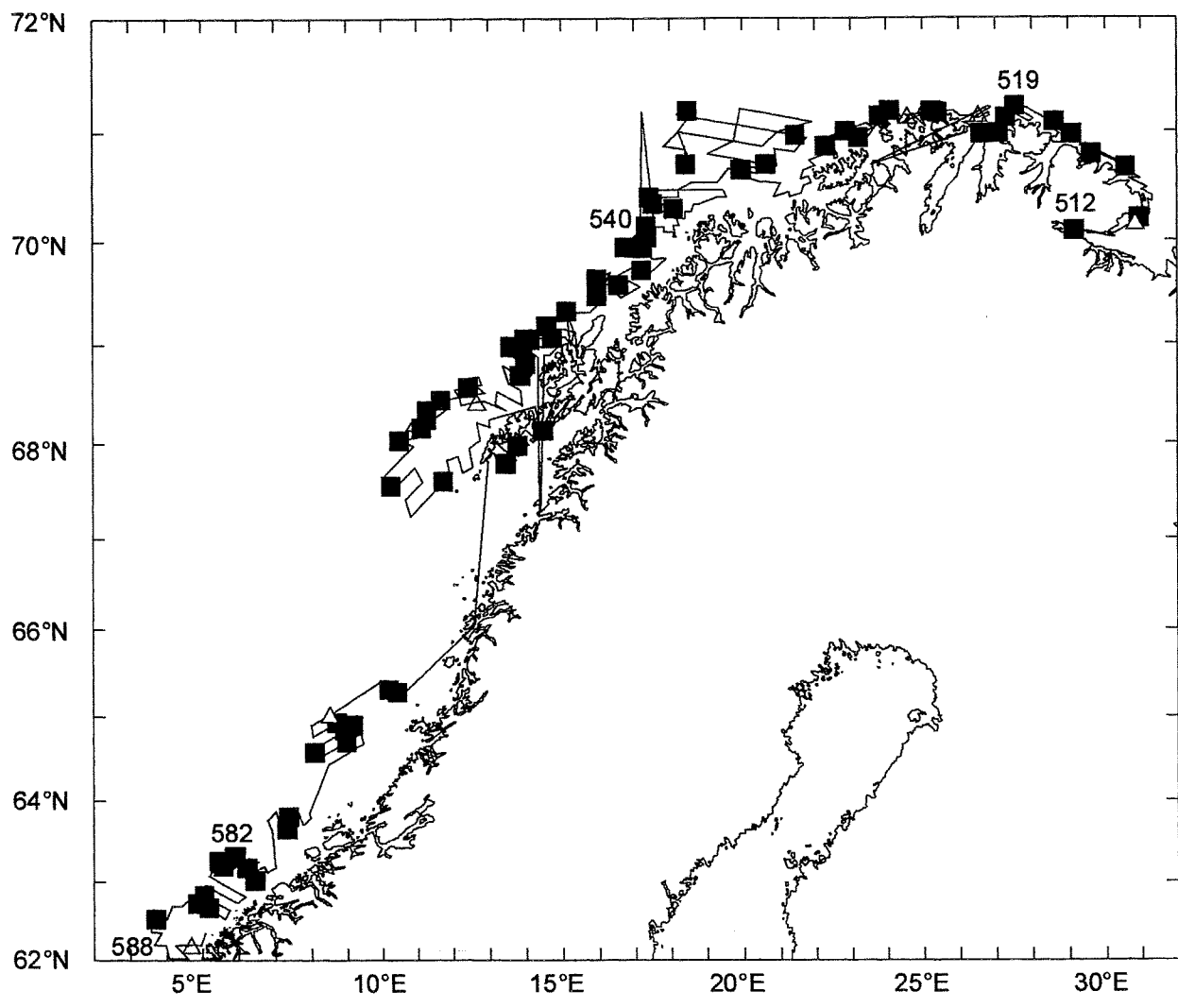


14 Oct - 10 Nov 2001

z CTD st.no 796-904

"Johan Hjort"

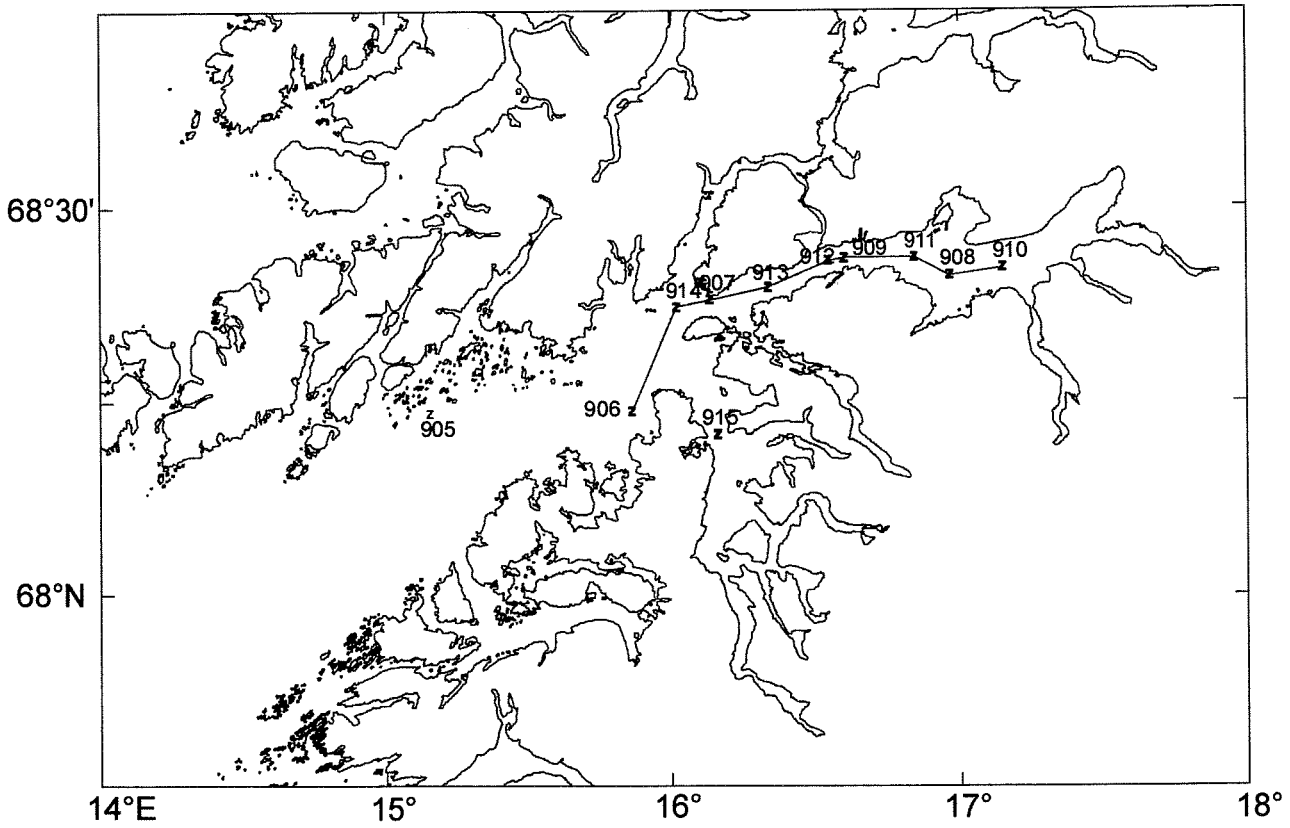
Cruise no 2001213



14 Oct - 10 Nov 2001  
Cruise no 2001213

Trawl st.no 512 - 588  
■ Bottom trawl  
△ Pelagic trawl

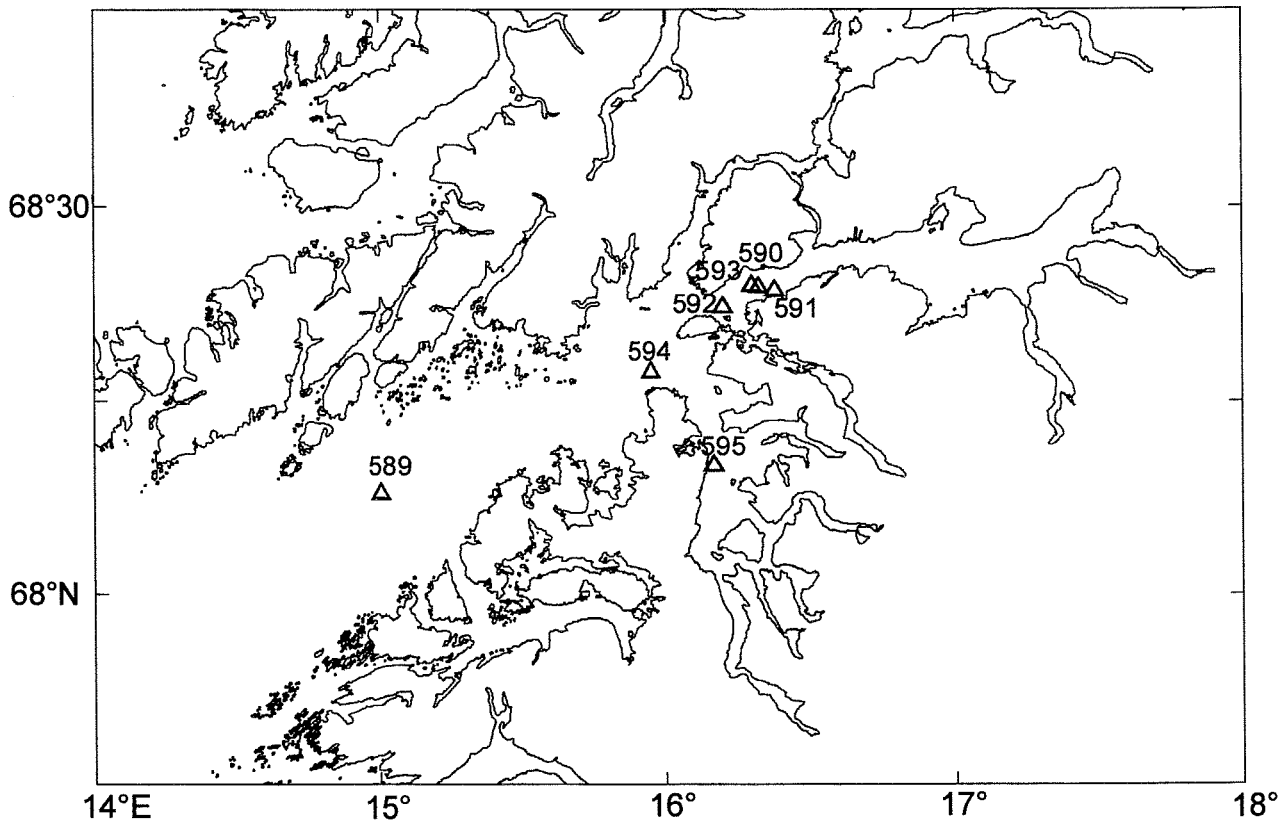
"Johan Hjort"



14 - 20 Nov 2001  
Cruise no 2001214

z CTD st.no 905 -915

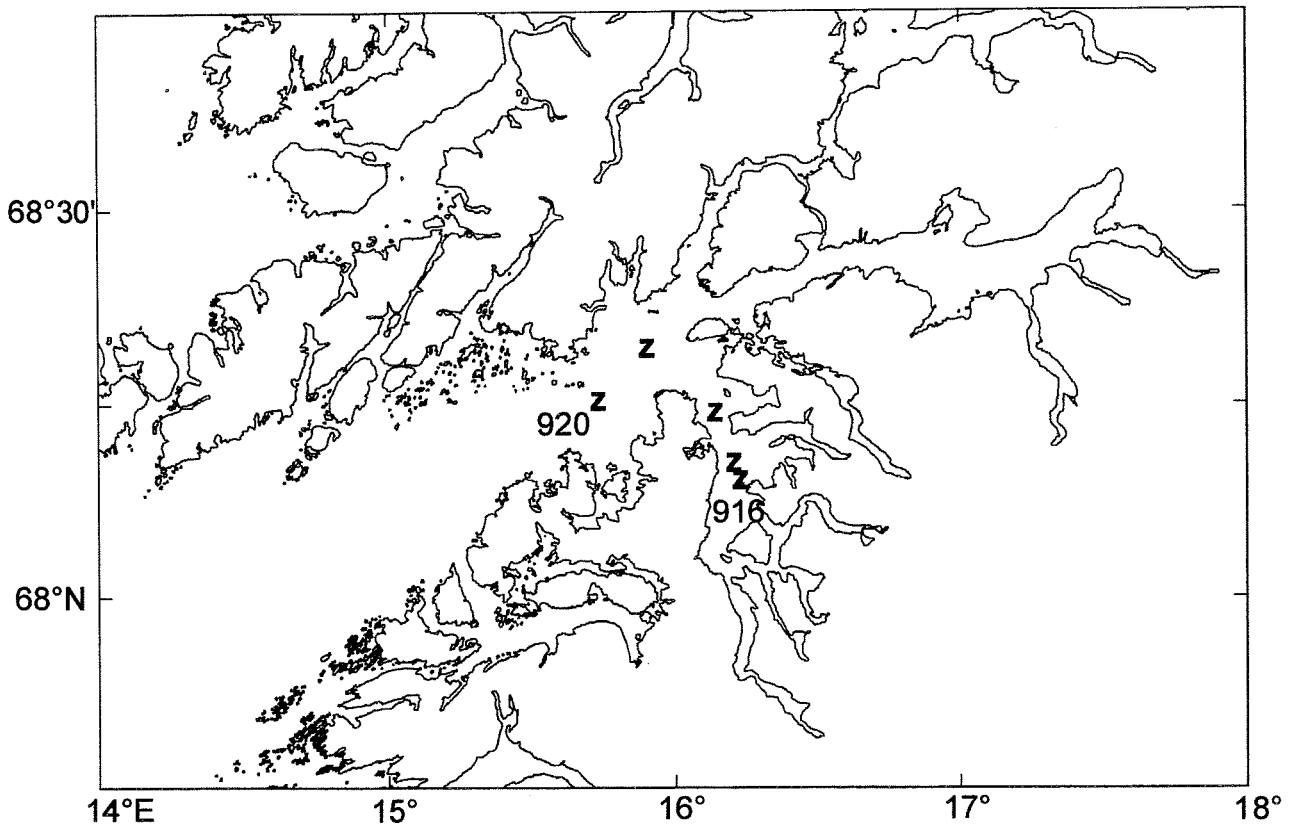
"Johan Hjort"



14 - 20 Nov 2001  
Cruise no 2001214

△ Pel. trawl st.no 589-595

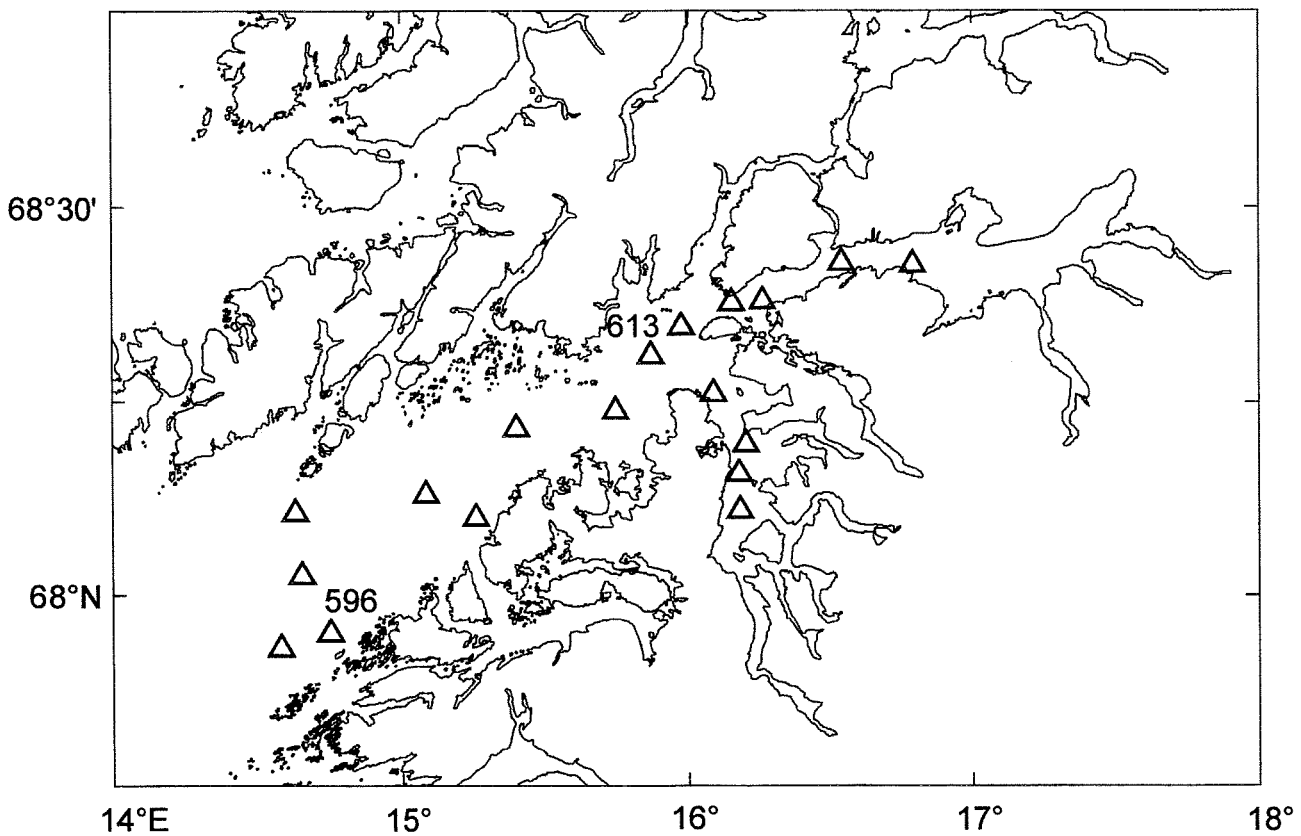
"Johan Hjort"



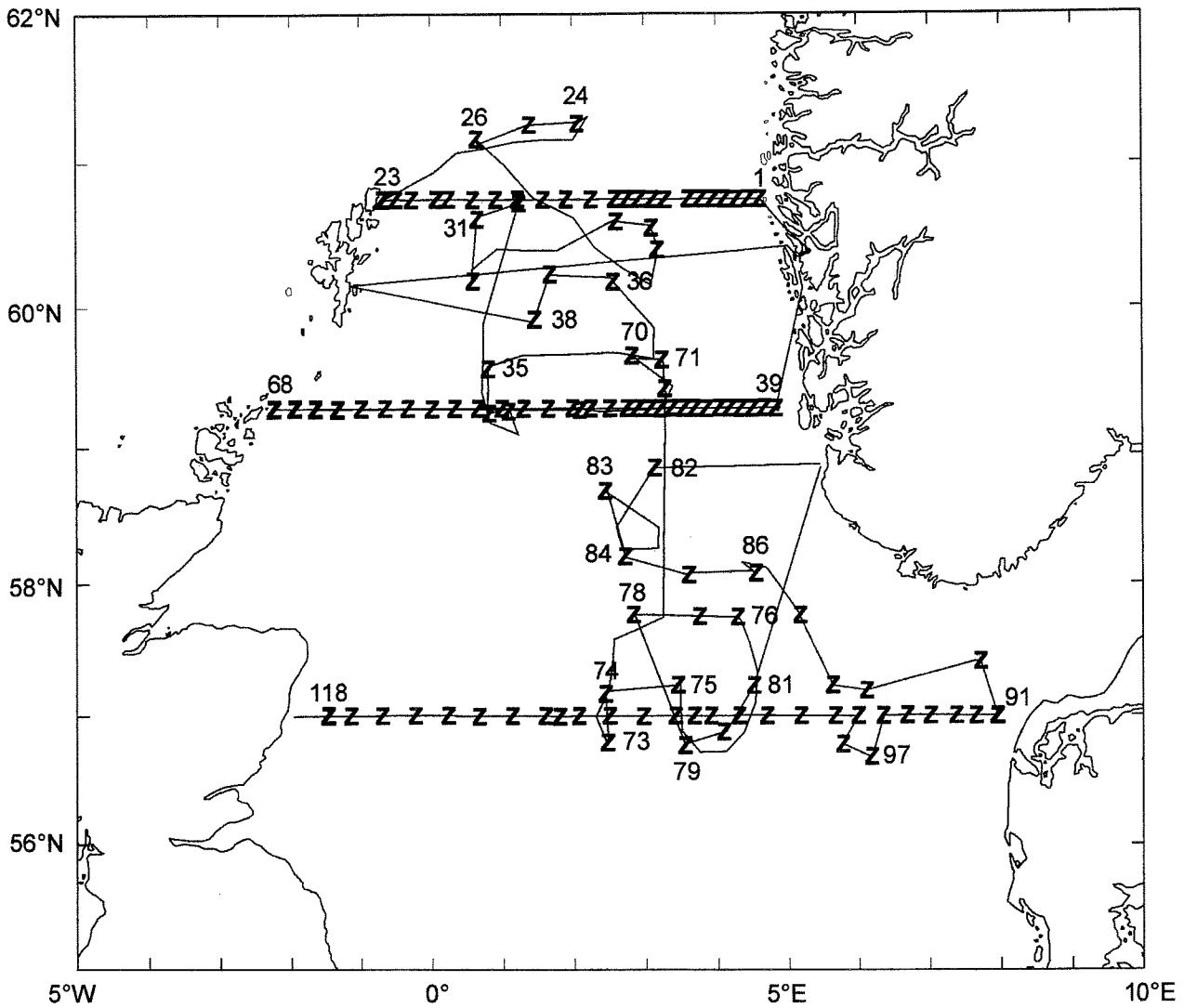
21 Nov - 8 Dec 2001  
Cruise no 2001215

z CTD st.no 916-920

"Johan Hjort"



△ Pelagic trawl stations



12 Jan - 13 Feb 2001

Cruise no 2001101

z CTD st.no 1 - 118

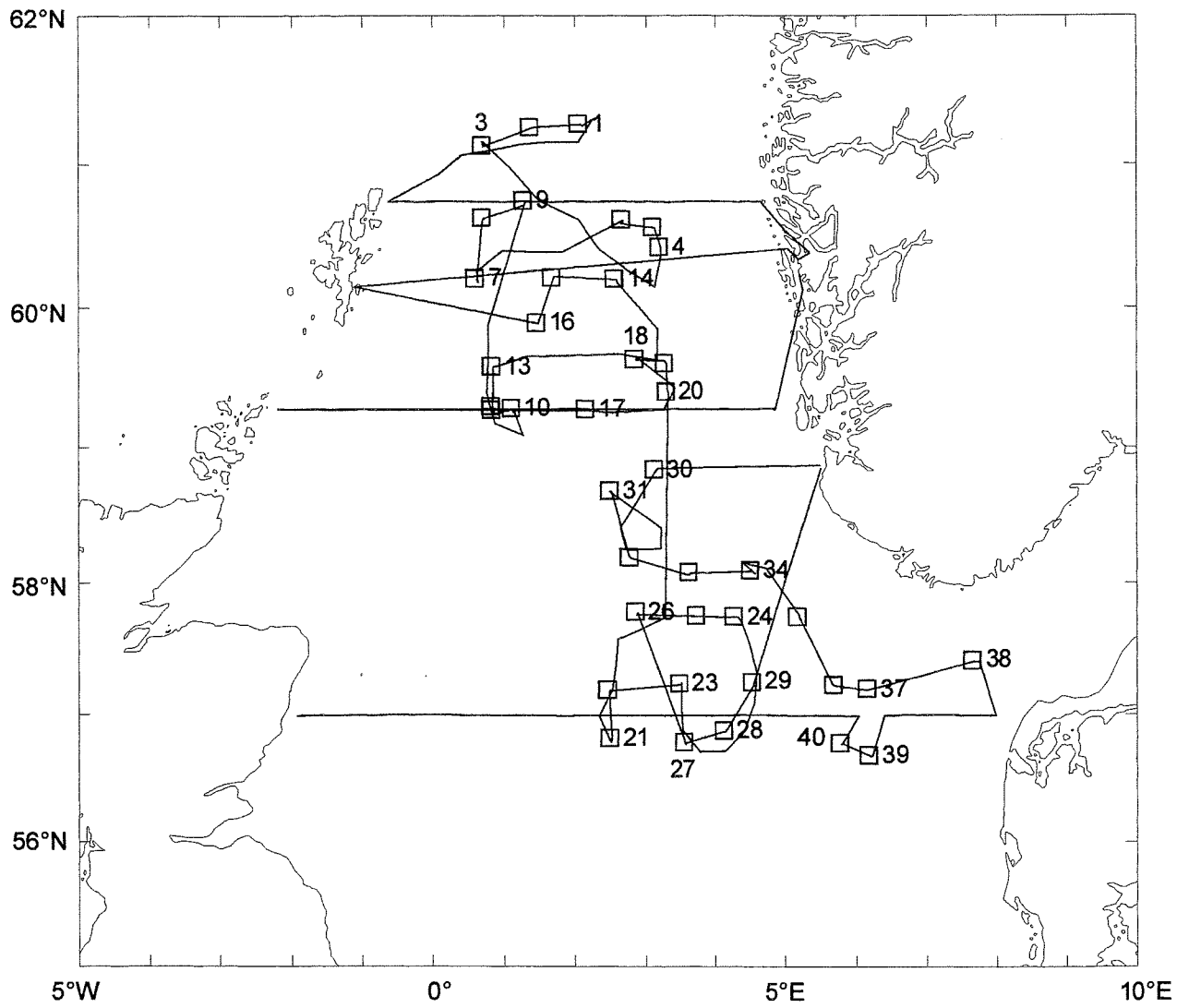
Standard sections:

Feie-Shetland st.no 1-23

Utsira W st.no 39-68

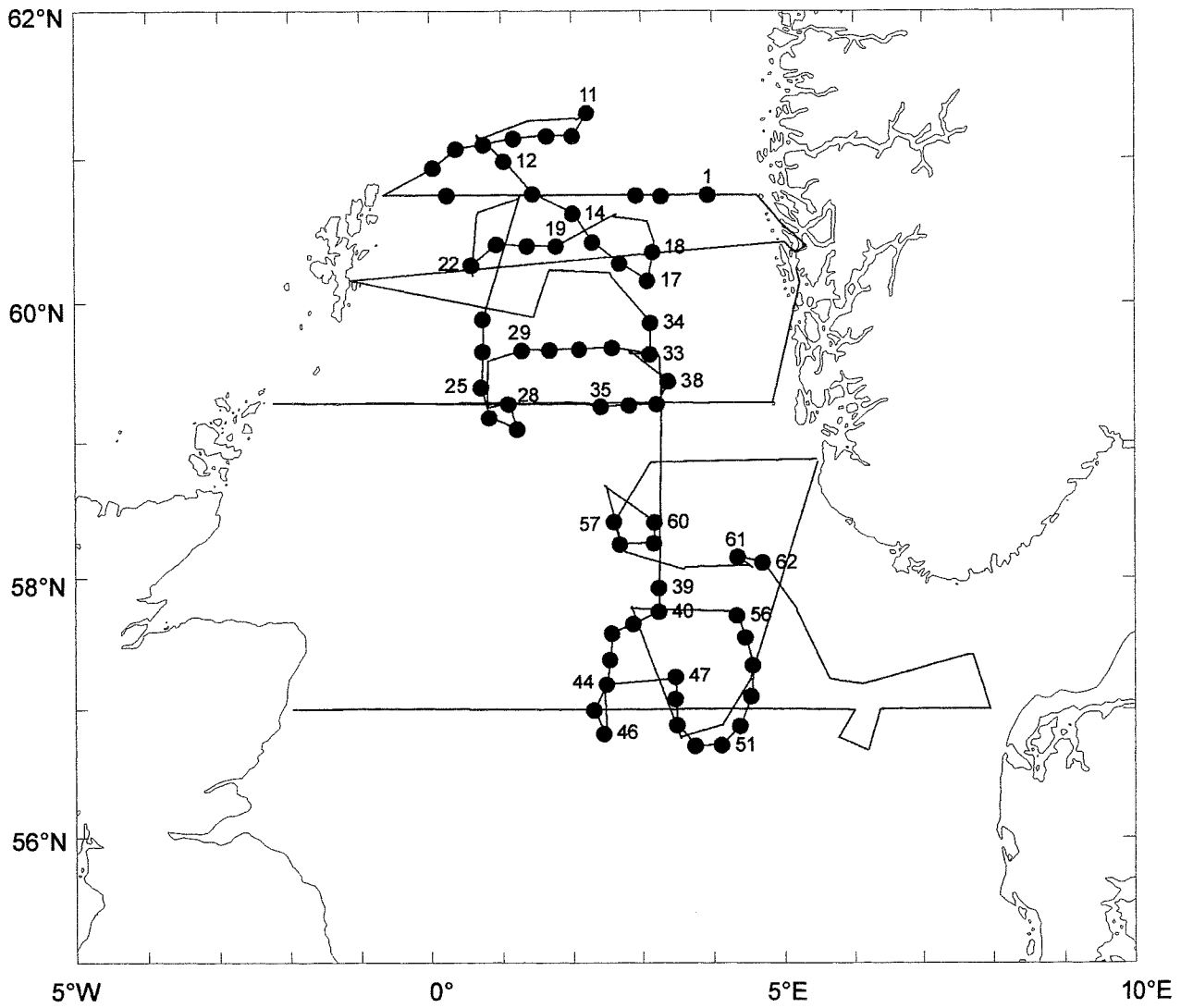
Hanstholm-Aberdeen 91-118

"Michael Sars"



12 Jan - 13 Feb 2001    □ Bottom trawl st.no 1-40  
 Cruise no 2001101

"Michael Sars"

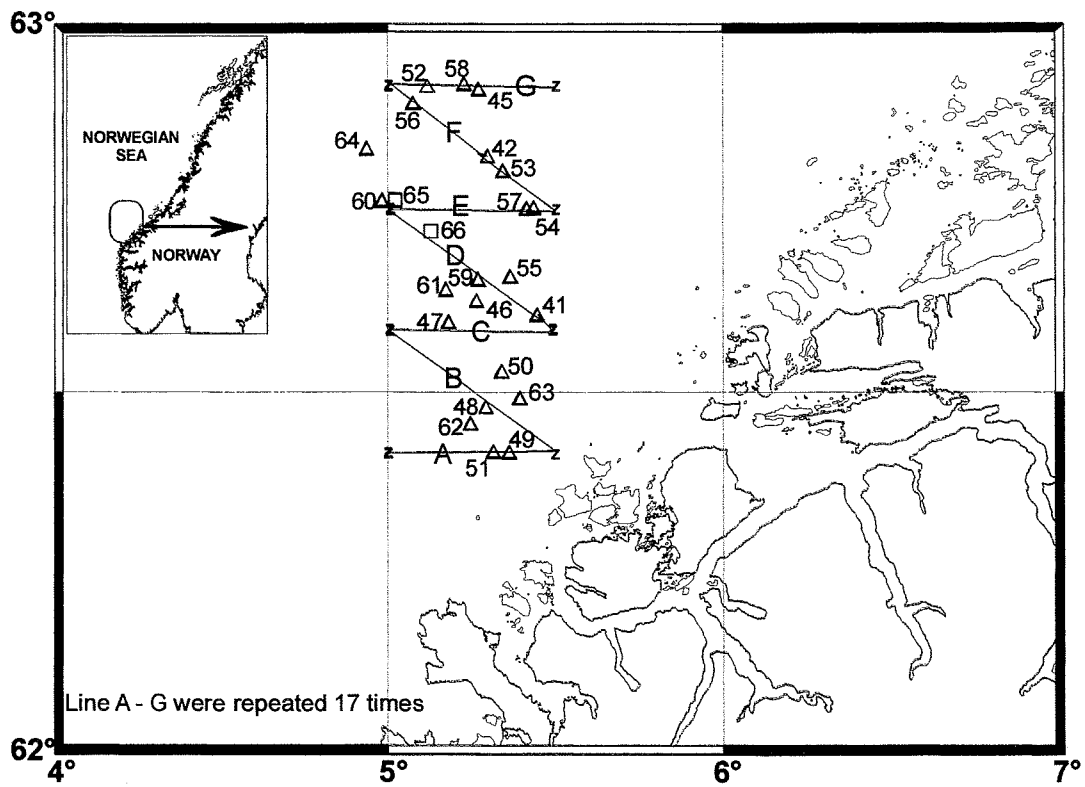


12 Jan - 13 Feb 2001

● MIK st 1- 63

"Michael Sars"

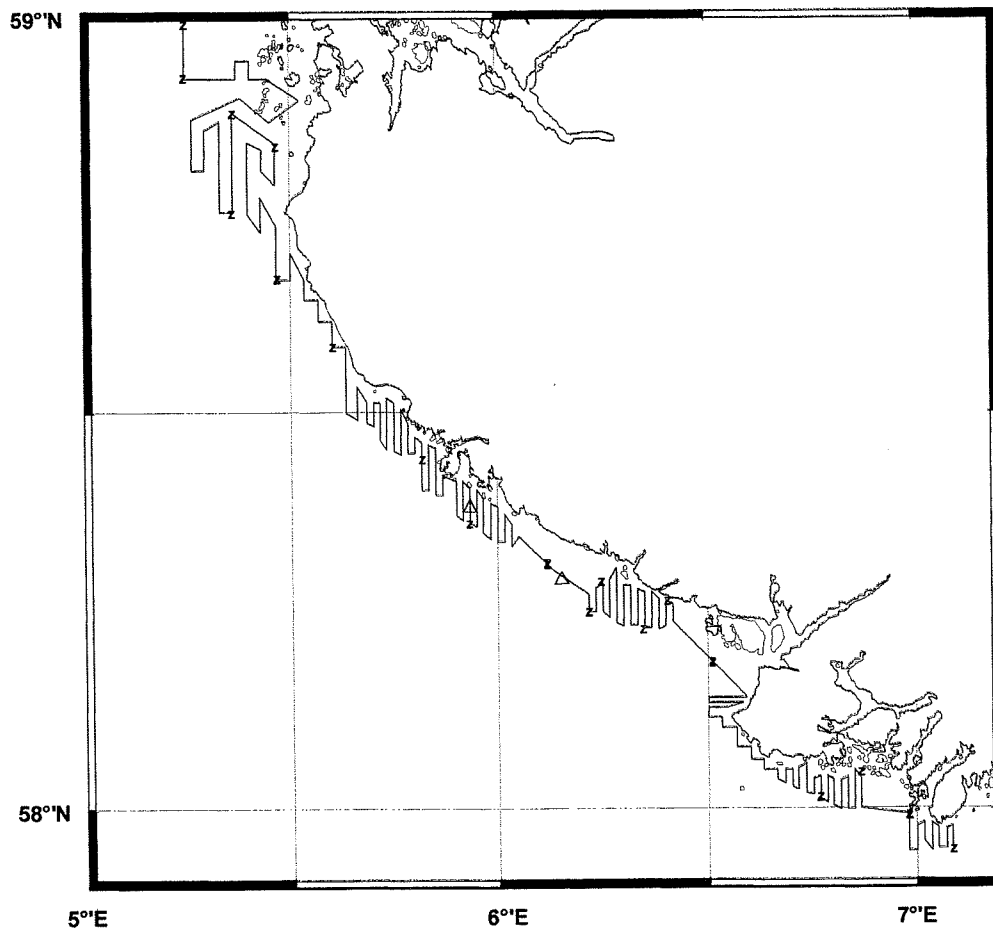
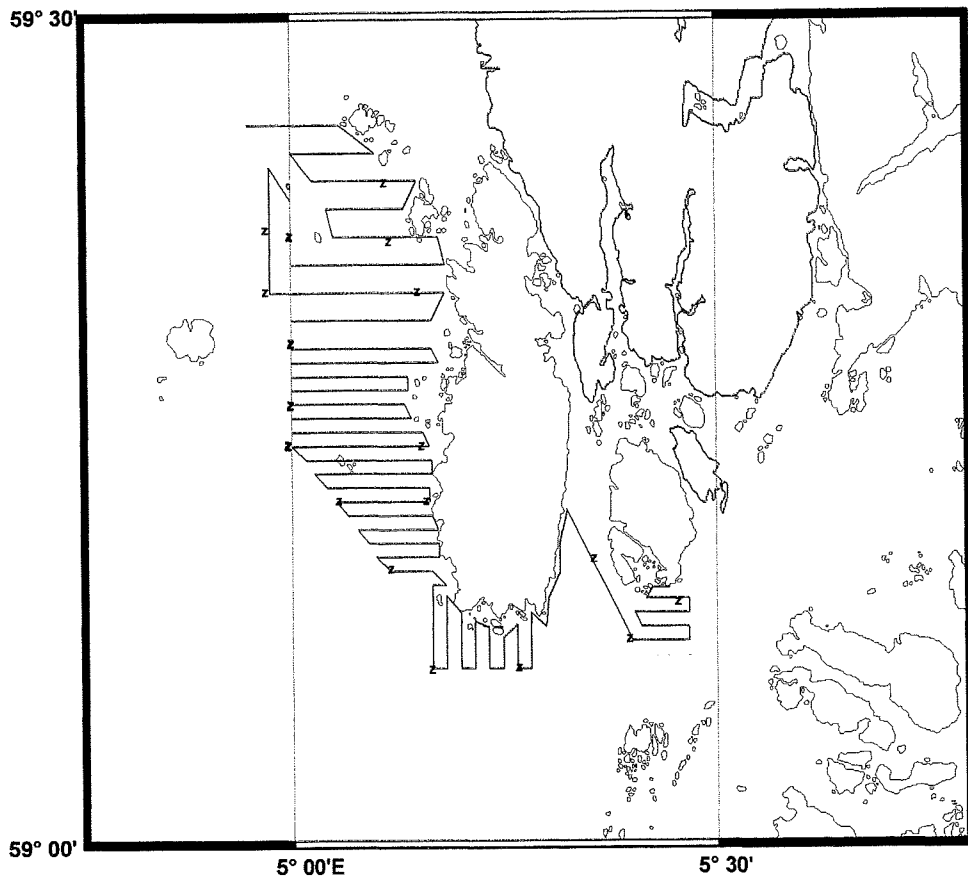
Cruise no 2001101

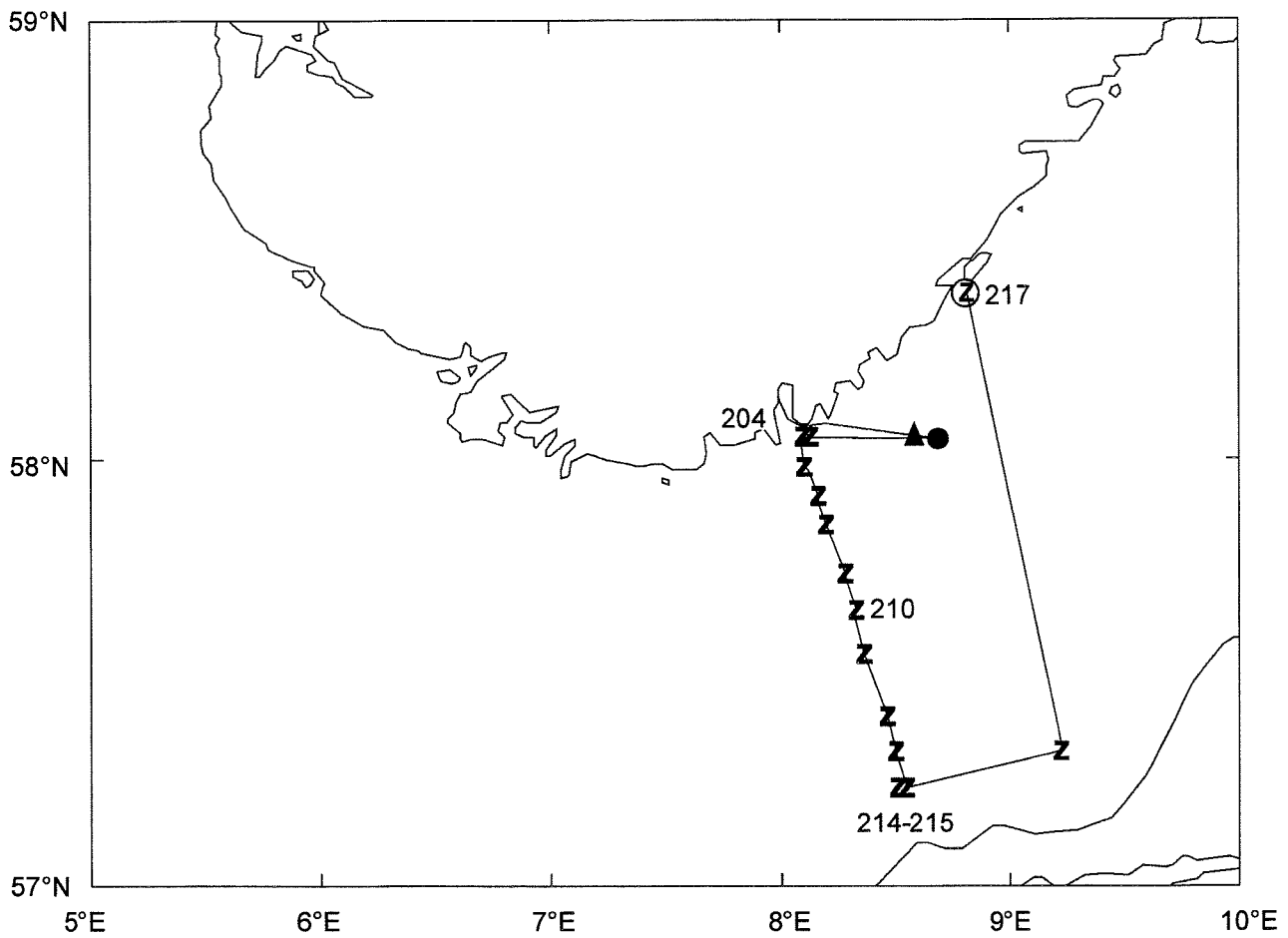


14 Feb - 20 Mar 2001  
 Cruise no 2001102

"Michael Sars"







20 - 21 March 2001 z CTD st.no 204 - 217

"Michael Sars"

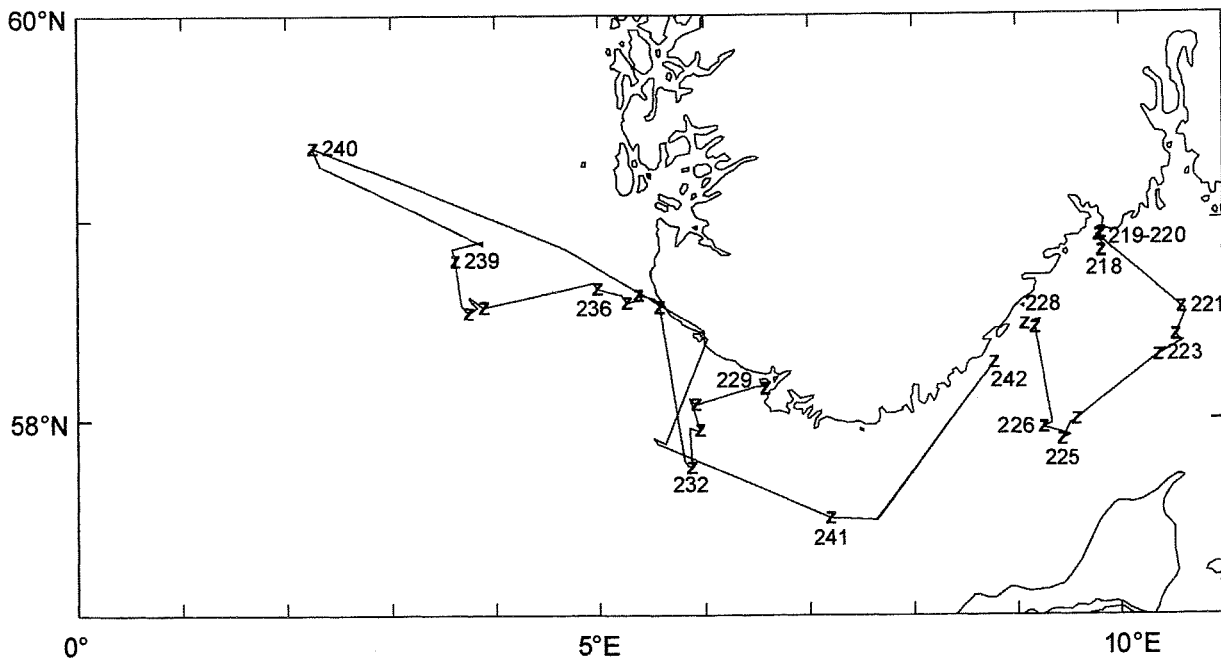
Cruise no 2001115

⓪ CTD and plankton st.

▲ Recovered sediment-trap/current meter mooring

● Grab stations

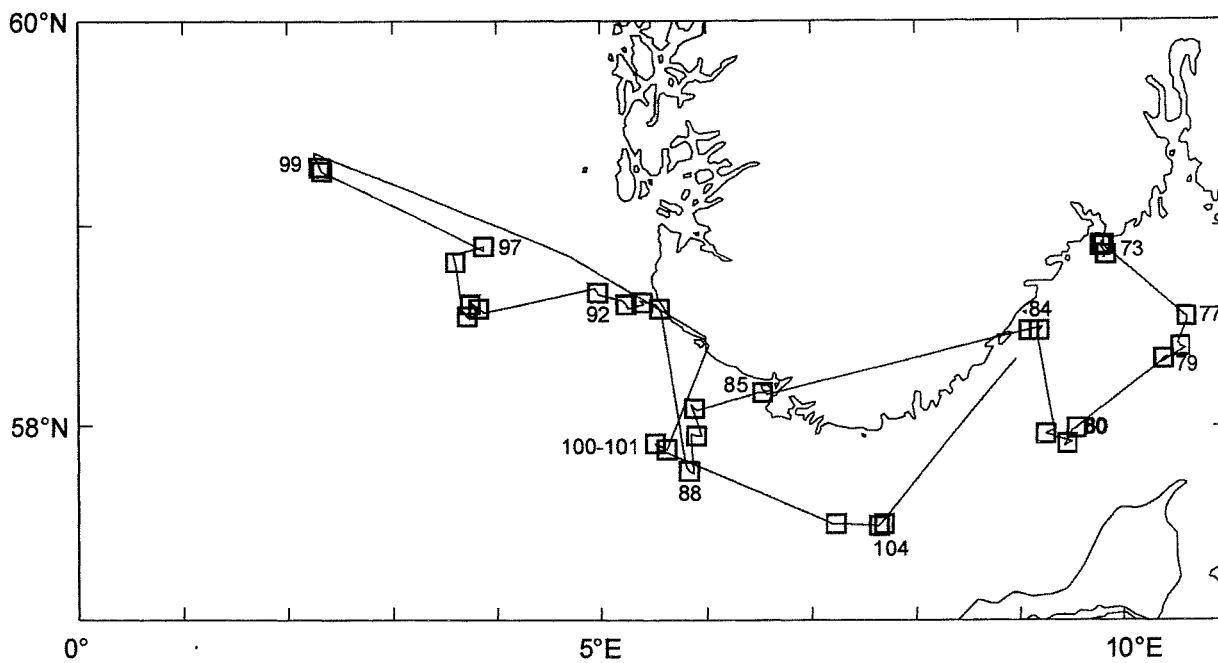
Standard section Oksø - Hanstholm stno 204-215



23 Mar - 1 Apr 2001 z CTD st.no 218 - 242

"Michael Sars"

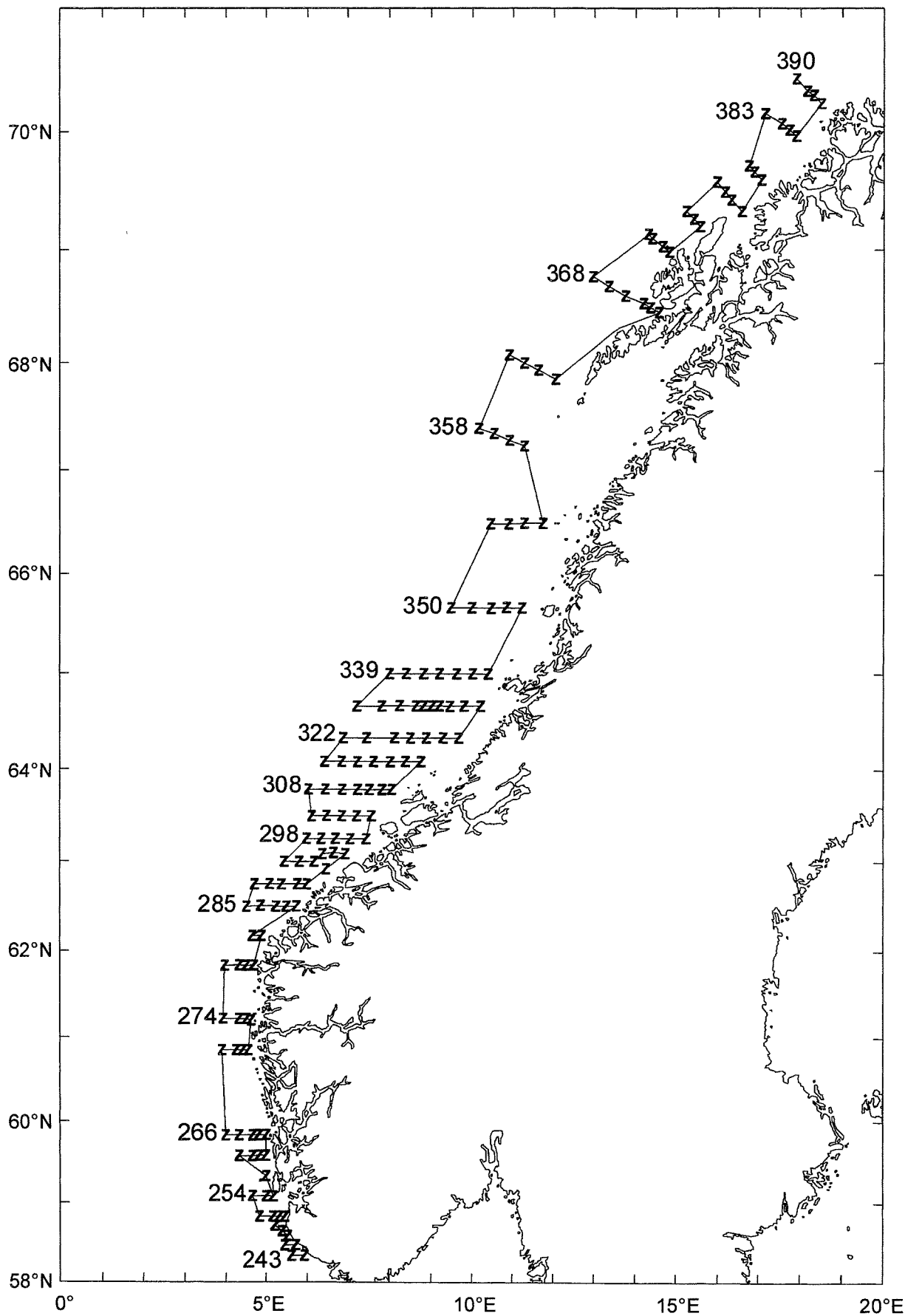
Cruise no 2001103



23 Mar - 1 Apr 2001 Bottom trawl st.no 73 - 104

"Michael Sars"

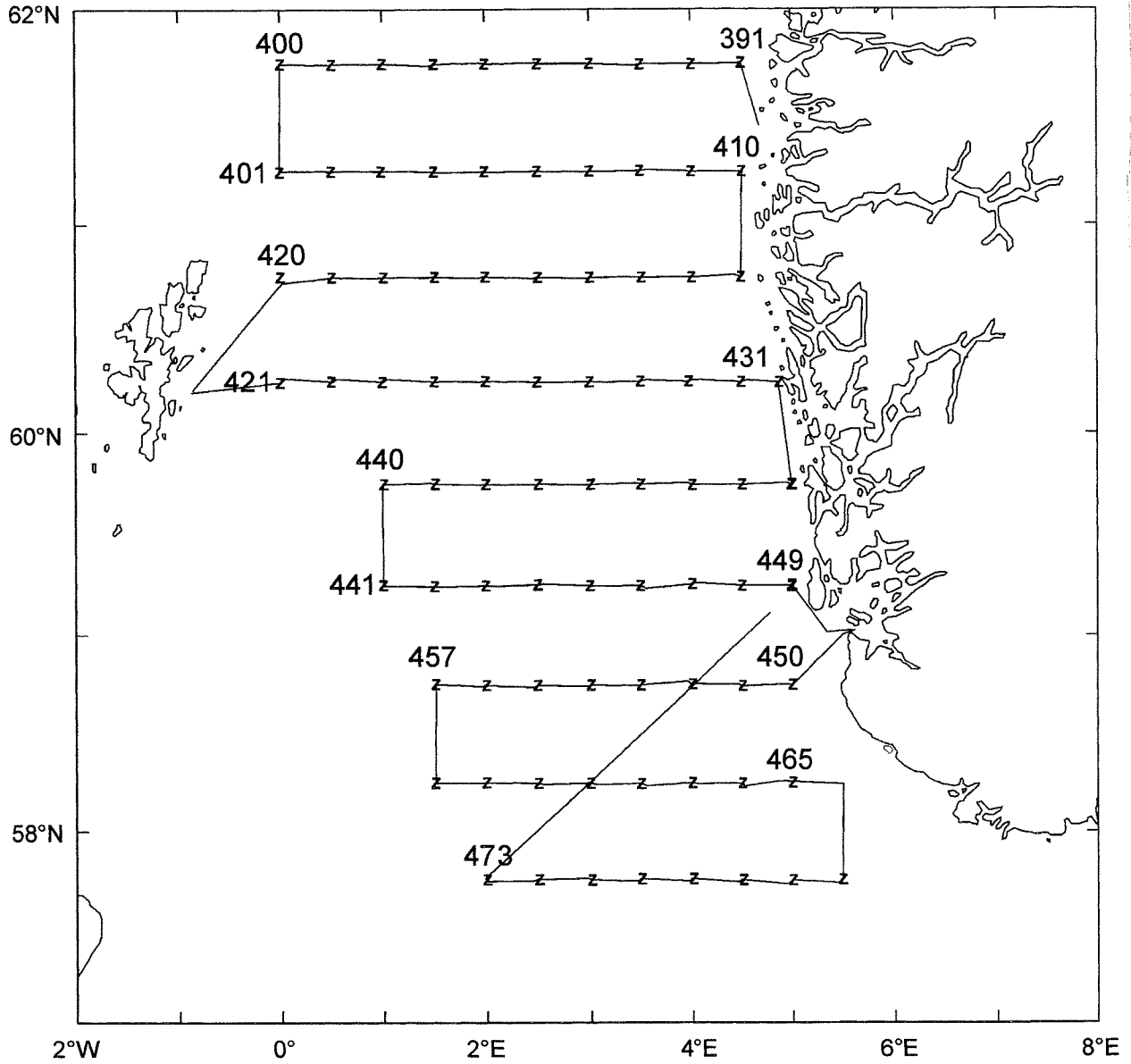
Cruise no 2001103



4 - 19 April 2001  
Cruise no 200104

z CTD st.no 243 - 390  
Plankton sampling performed on all stations

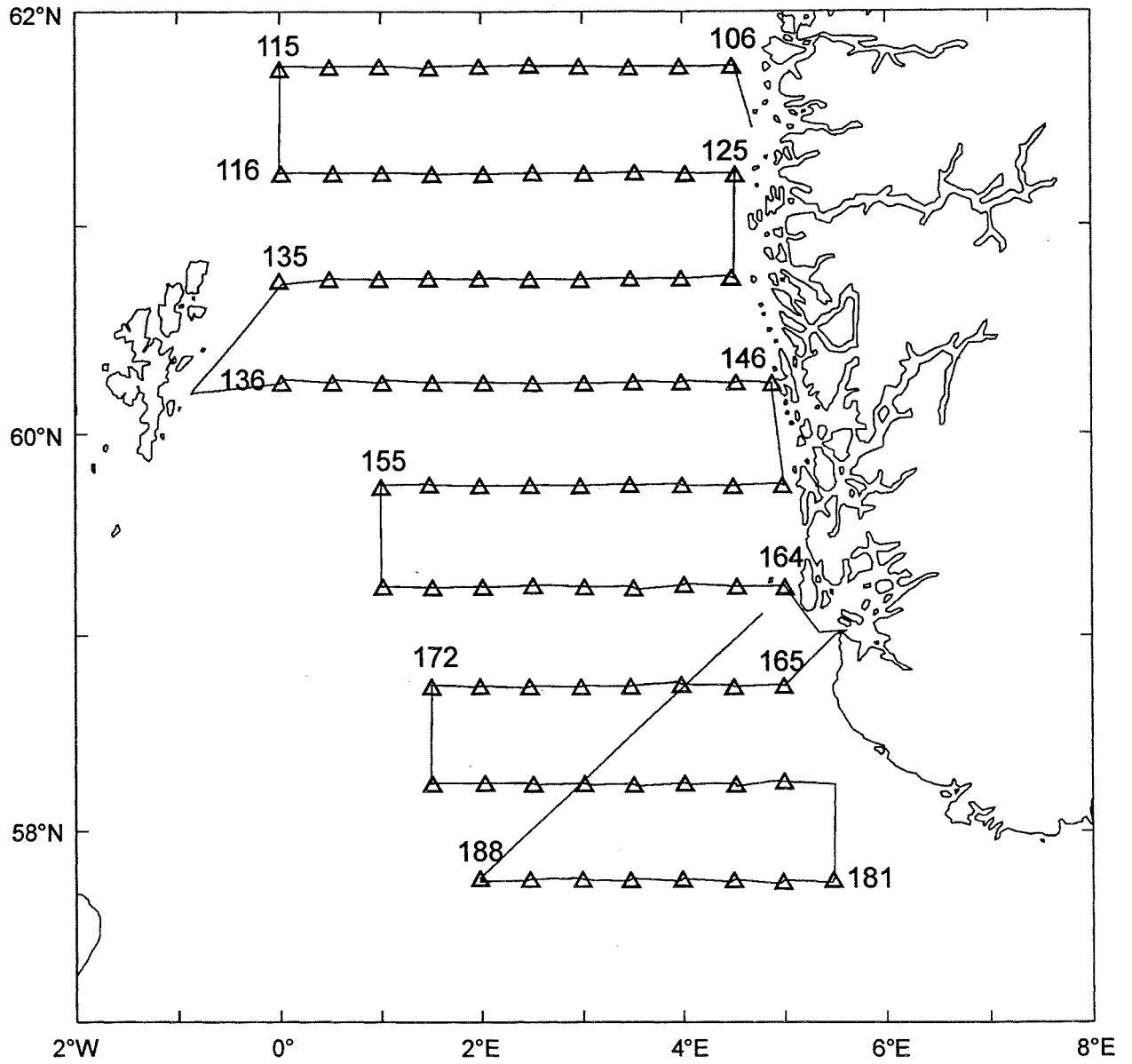
"Michael Sars"



23 Apr - 6 May 2001  
 Cruise no 2001105

z CTD st.no 391 - 473

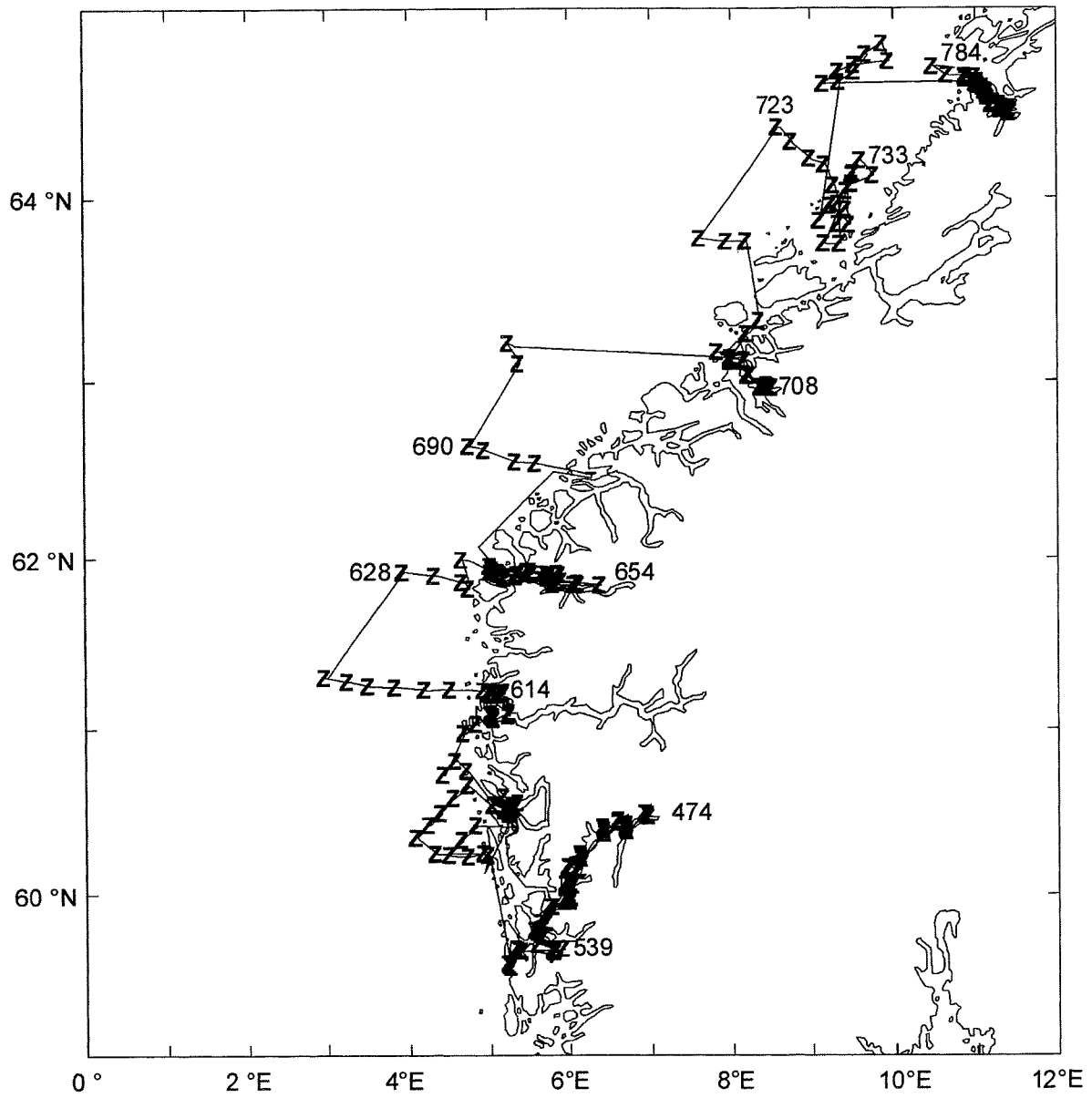
"Michael Sars"



23 Apr - 6 May 2001  
 Cruise no 2001105

△ Pel. trawl st.no 106 - 188

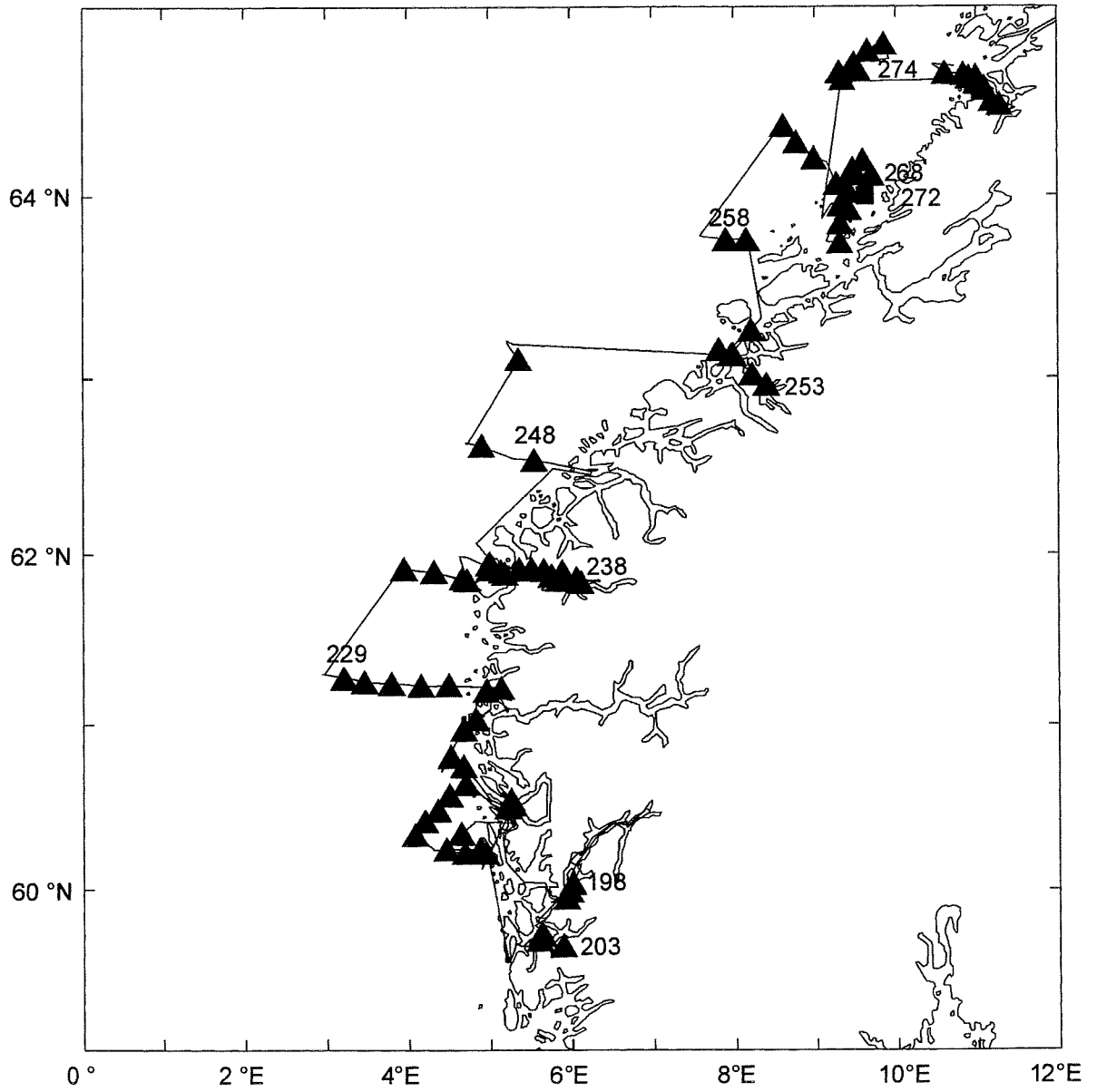
"Michael Sars"



11 May - 3 June 2001  
Cruise no 2001107

z CTD st.no 474 - 784

"Michael Sars"

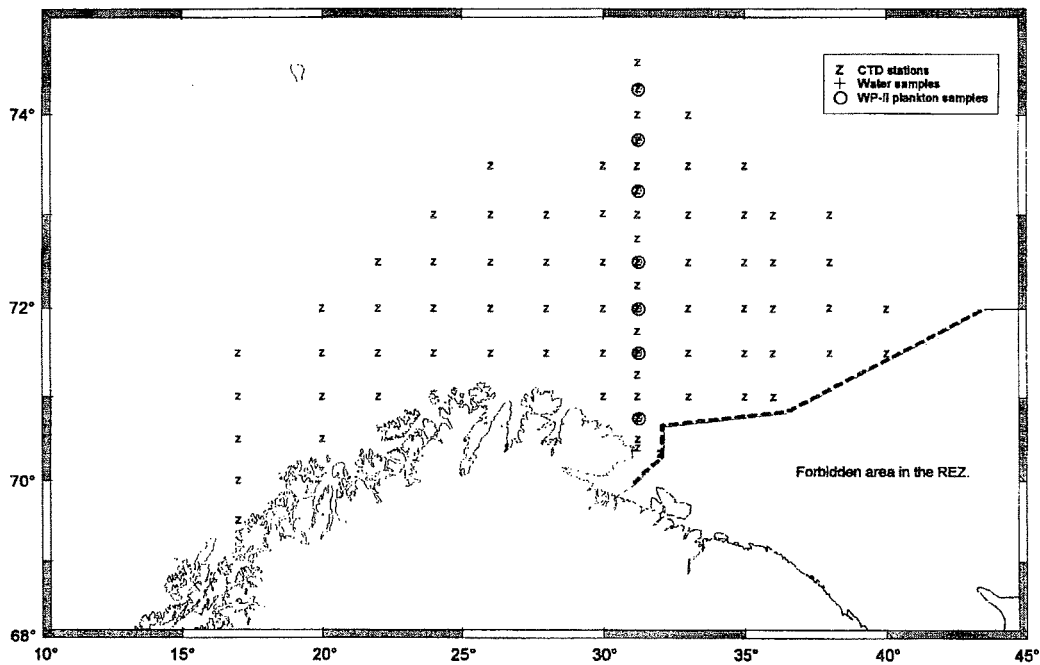
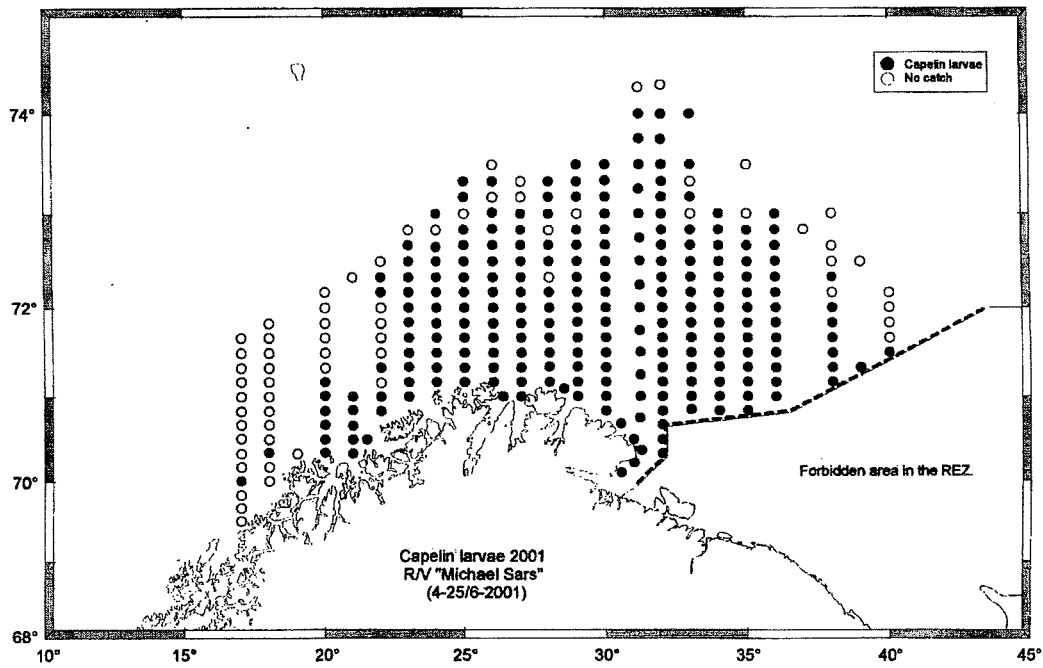


11 May - 3 June 2001  
 Cruise no 2001107

▲ Pel. trawl st.no 198 - 288  
 ■ Bottom trawl st.no 272

"Michael Sars"

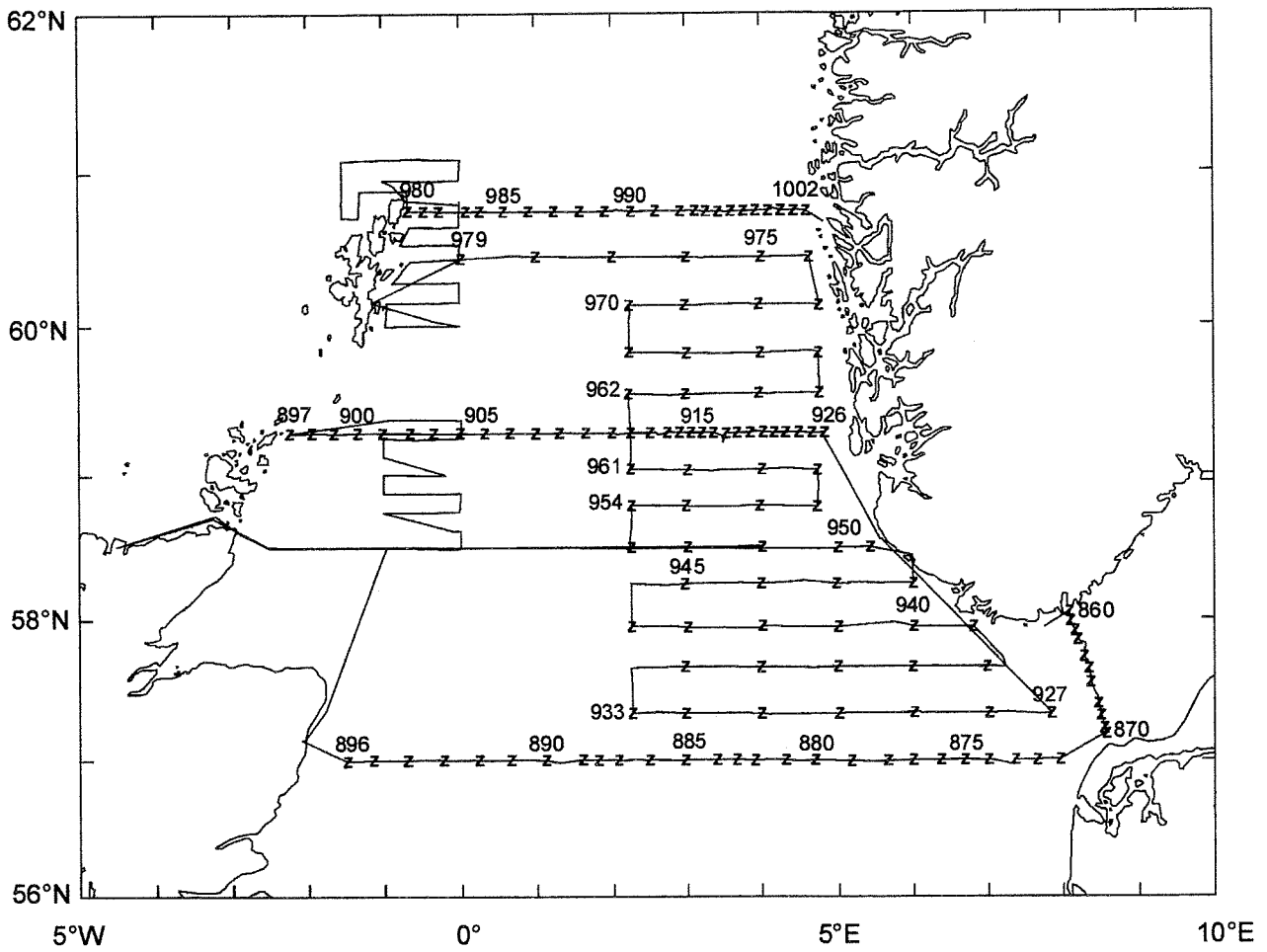




4 - 25 June 2001  
Cruise no 2001108

z CTD st.no 785 - 859  
Standard section Vardø N

"Michael Sars"



29 June - 23 July 2001

z CTD st.no 860 -1002

"Michael Sars"

Cruise no 2001109

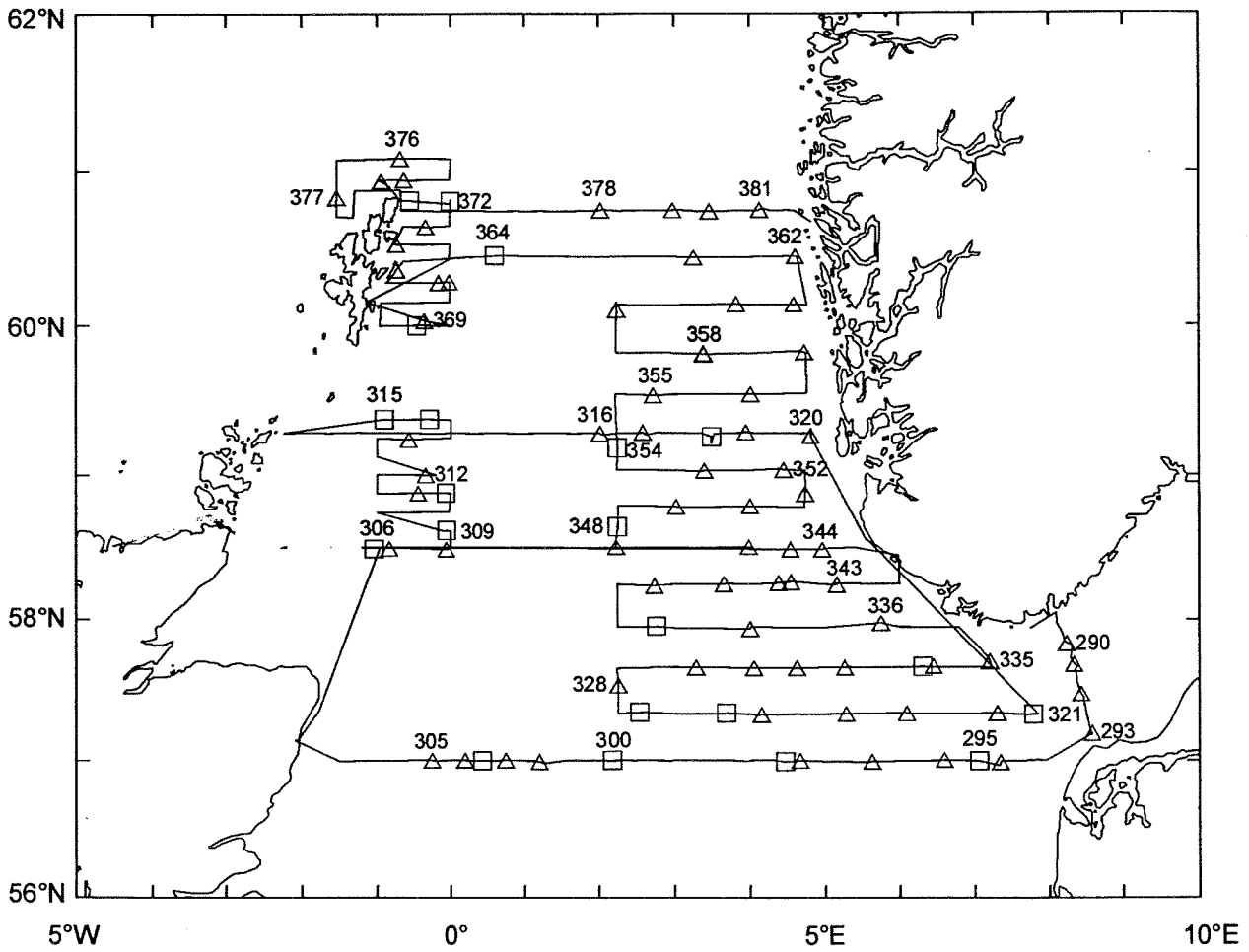
Standard sections:

Feie-Shetland st.no 980-1002

Utsira W st.no 897-926

Hanstholm-Aberdeen 871-896

Oksø-Hanstholm st.no 860-870



29 June - 23 July 2001

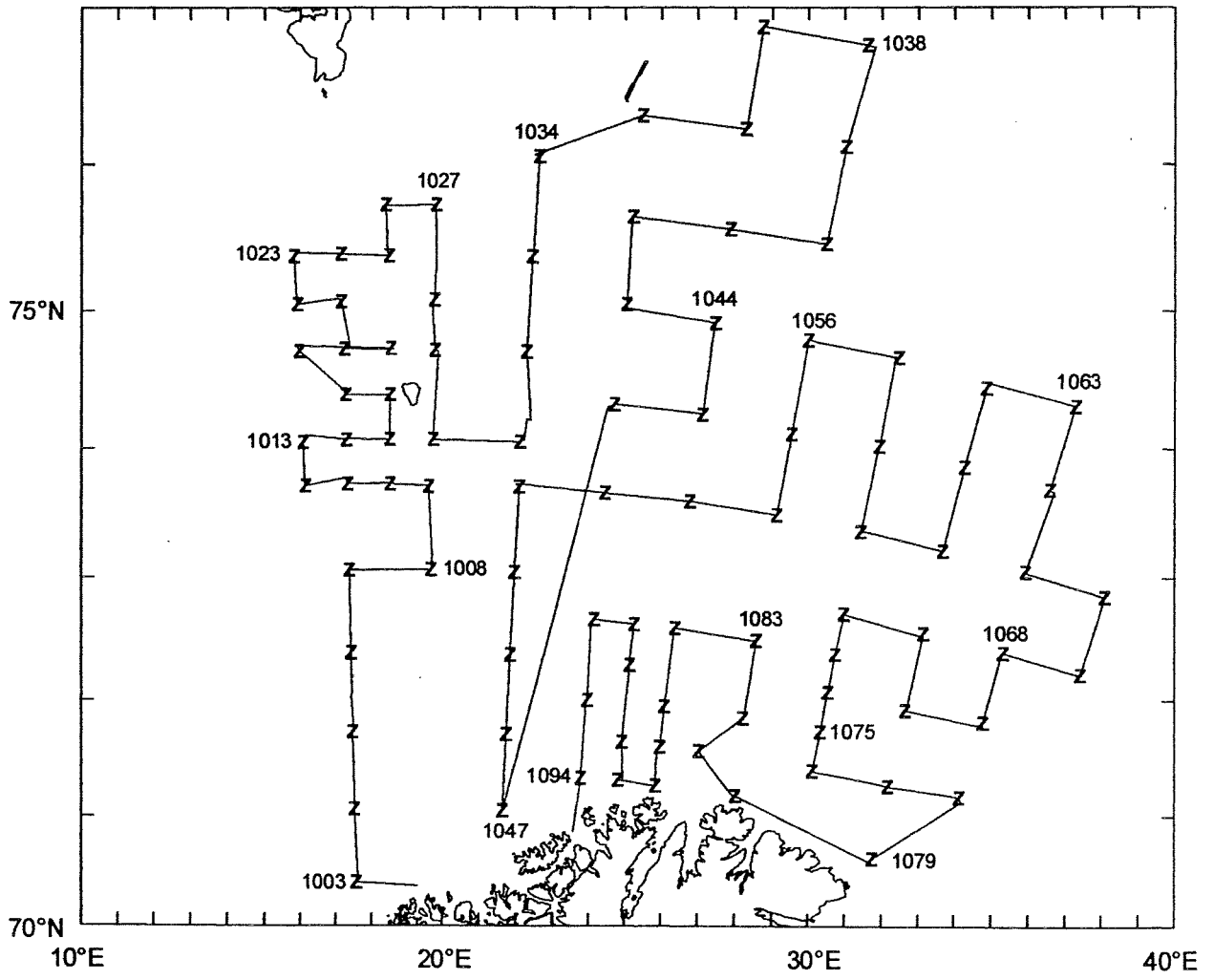
Cruise no 2001109

Trawl st.no 290 - 381

△ Pel.tr.

□ Bottom tr.

"Michael Sars"

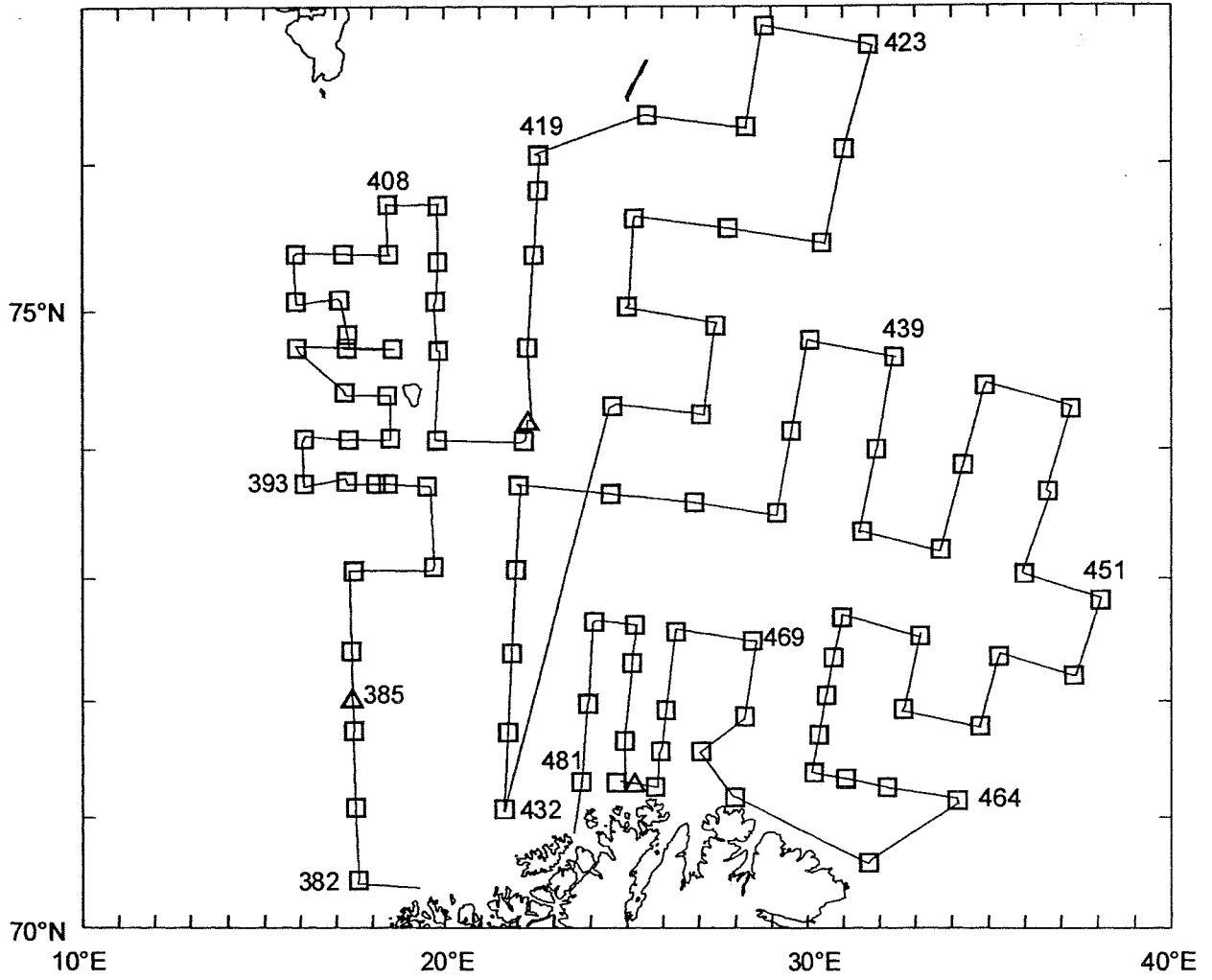


27 July - 23 August 2001

z CTD st.no 1003 - 1094

"Michael Sars"

Cruise no 2001110



27 July - 23 August 2001

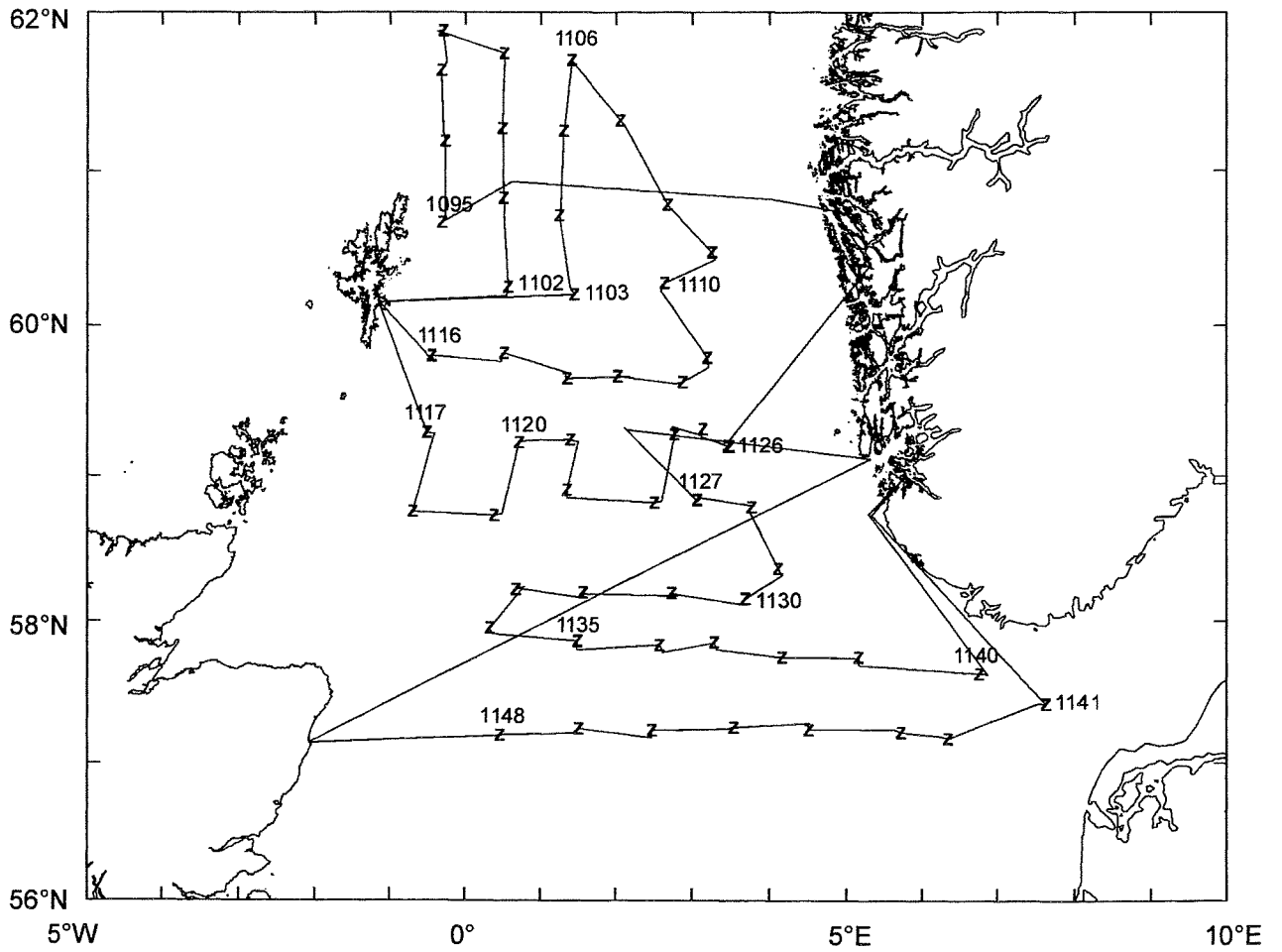
Cruise no 2001110

Trawl st.no 382-481

□ Bottom tr.

△ Pelagic tr.

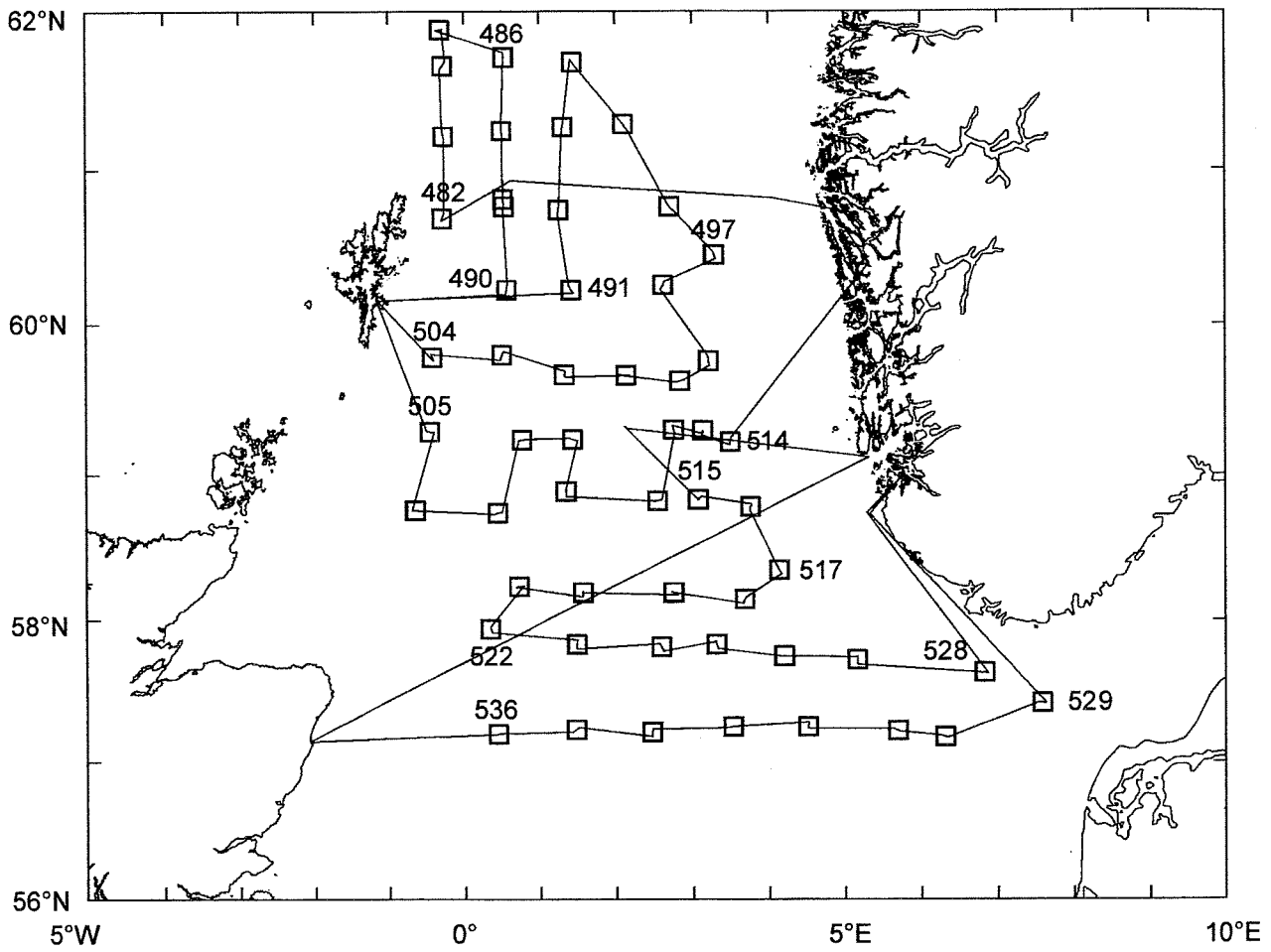
"Michael Sars"



1 - 24 September 2001  
Cruise no 2001111

z CTD st. 1095 -1148

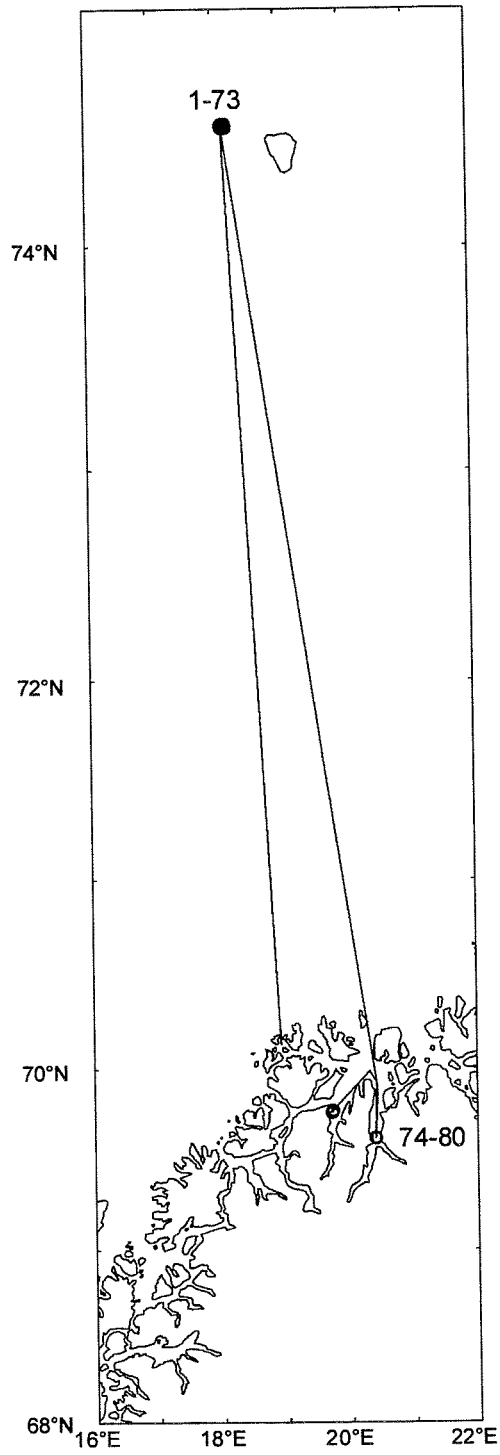
"Michael Sars"



1 - 24 September 2001  
Cruise no 2001111

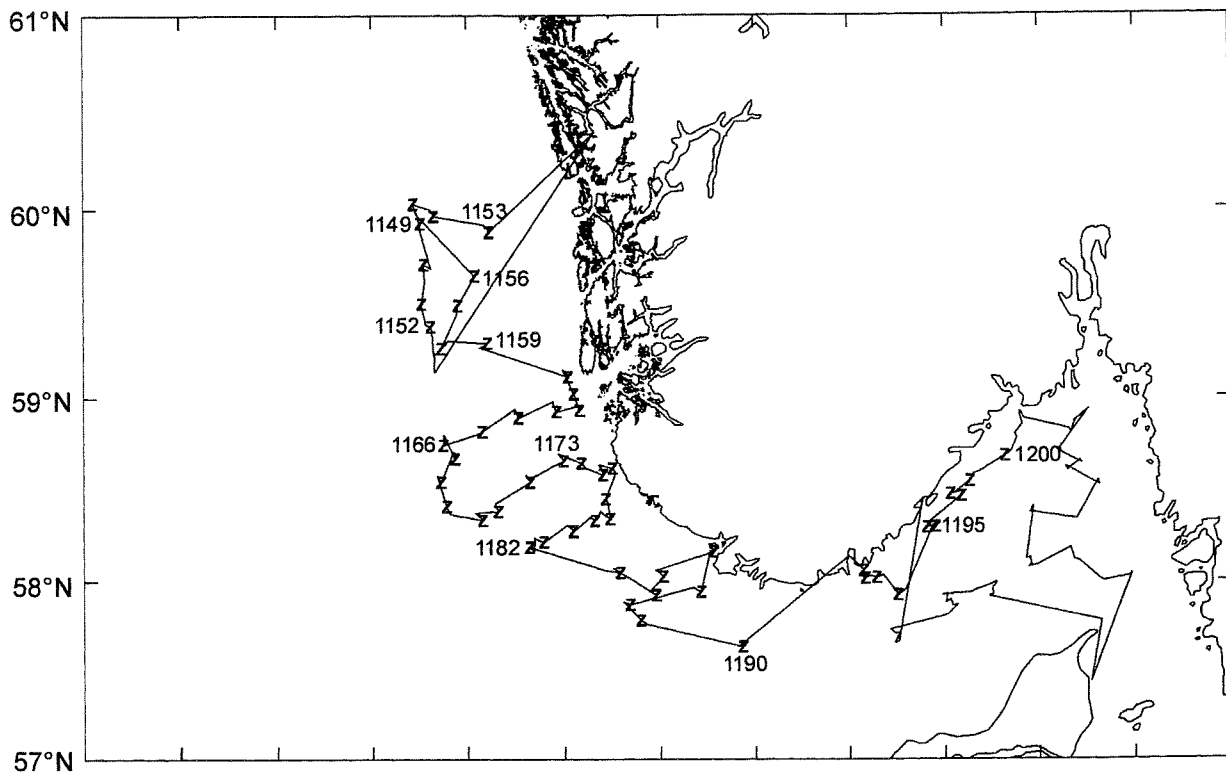
□ Bottom tr.st.no 482 -536

"Michael Sars"



26 Sep - 10 Oct 2001 ○ Benthic samples "Michael Sars"  
Cruise no 2001112

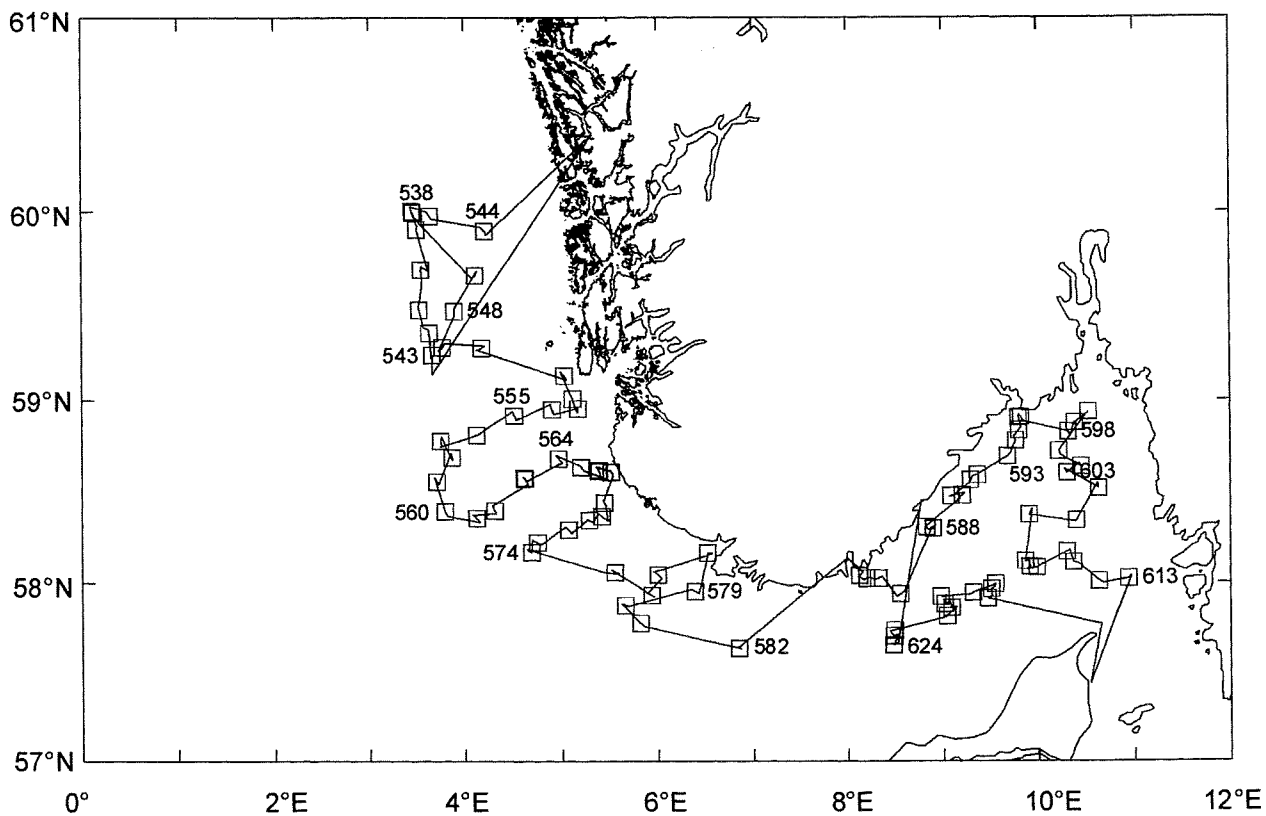




12 - 31 October 2001  
Cruise no 2001113

z CTD st.no 1149-1200

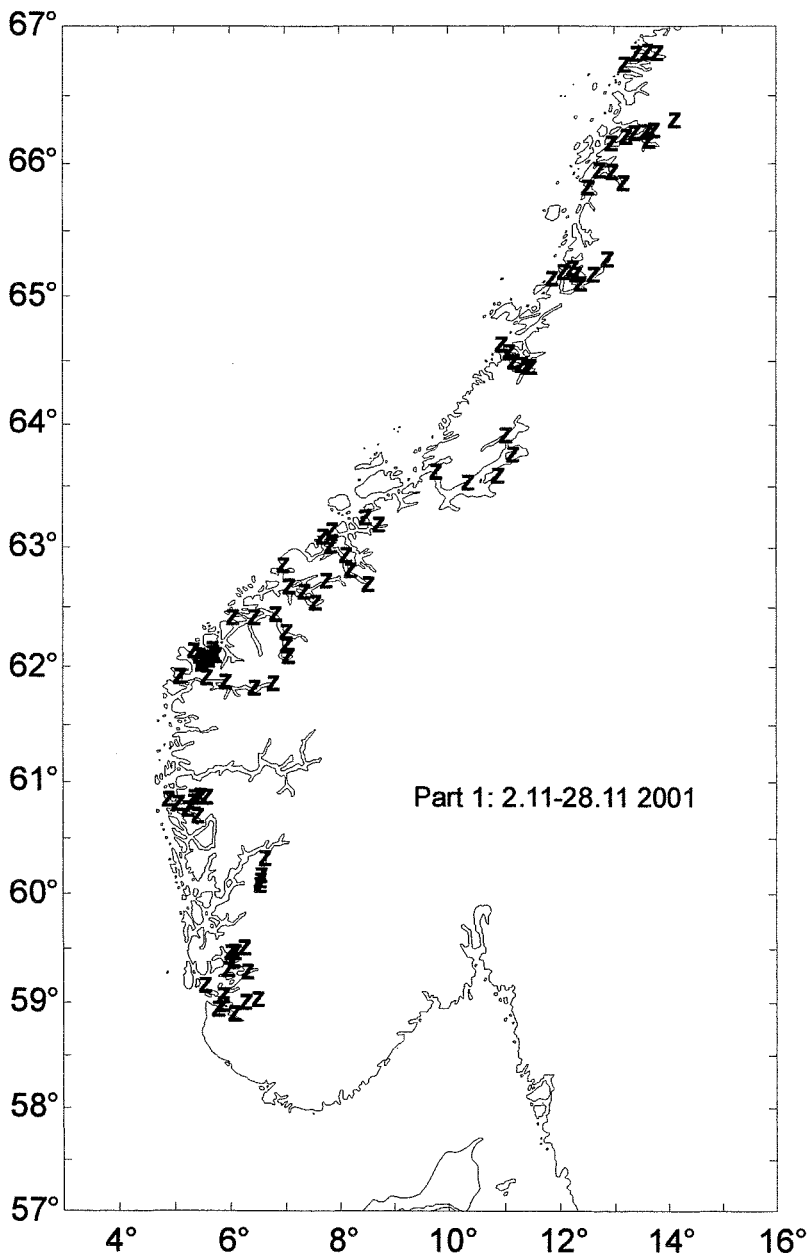
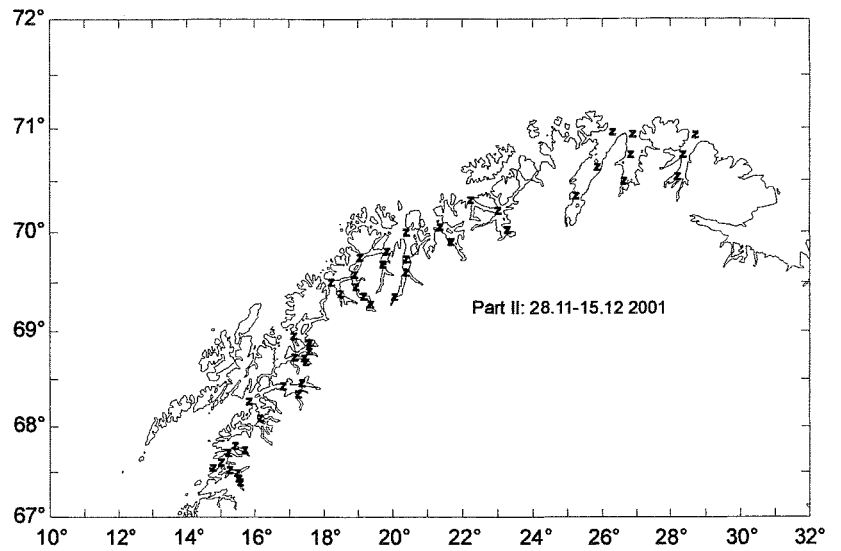
"Michael Sars"



Trawl st.no 538 - 624

"Michael Sars"  
2 Nov - 15 Dec 2001  
Cruise no 2001114

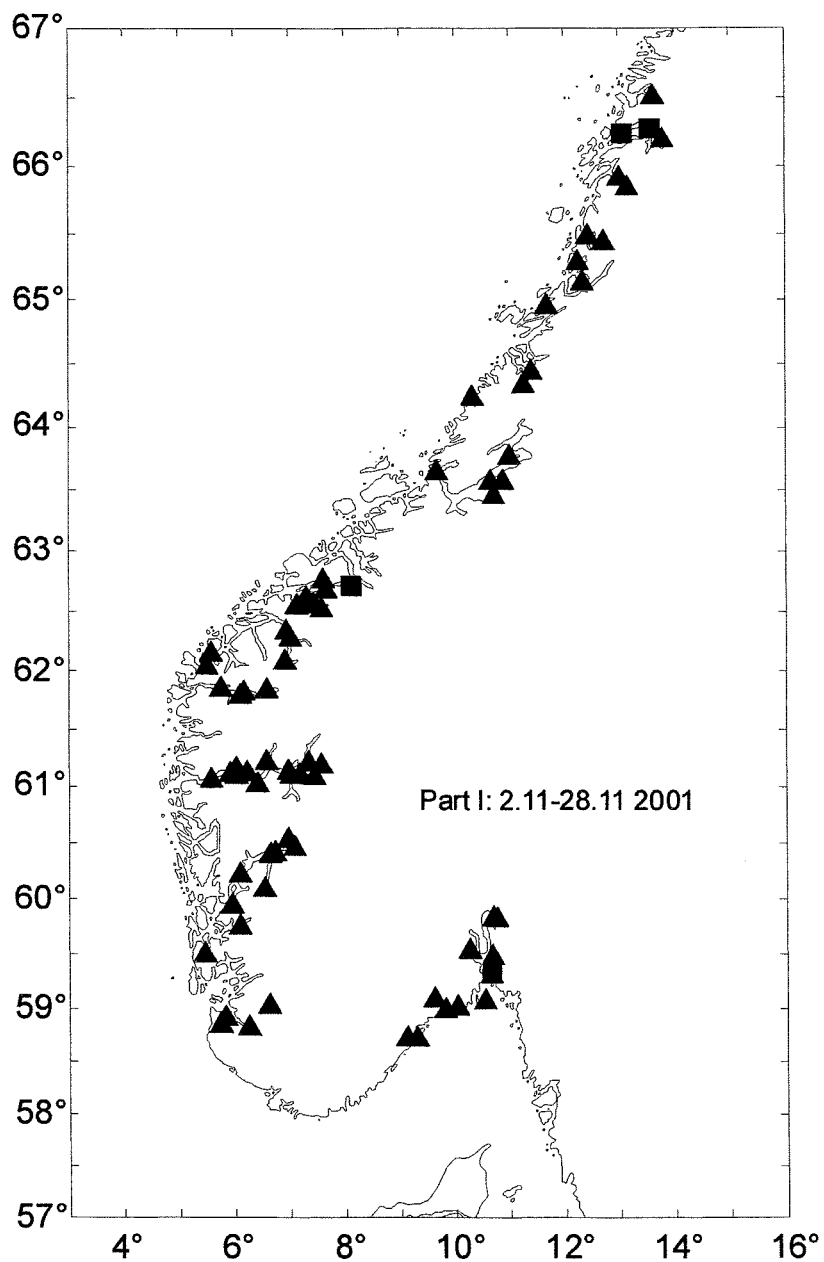
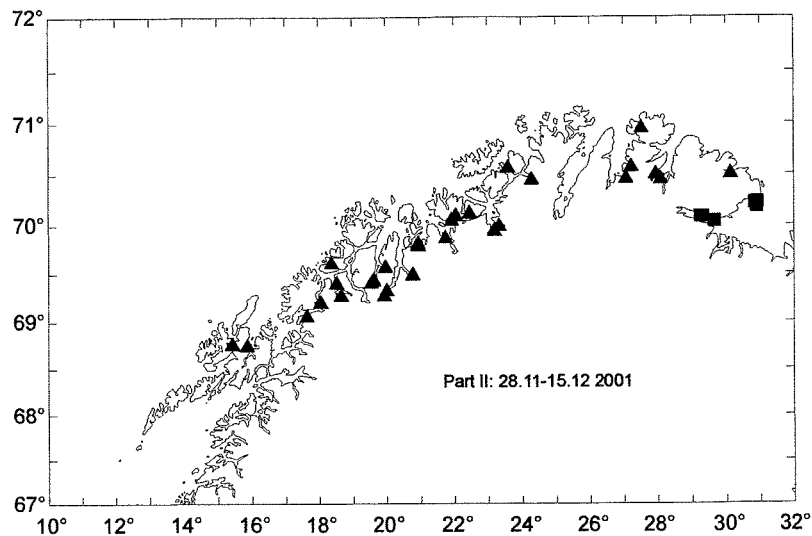
z CTD st.no 1201 - 1353



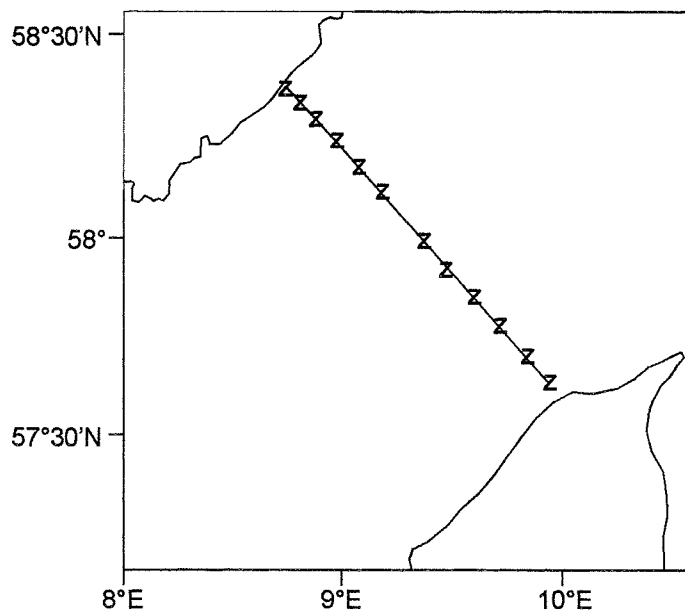
"Michael Sars"  
2 Nov - 15 Dec 2001

Cruise no 2001114

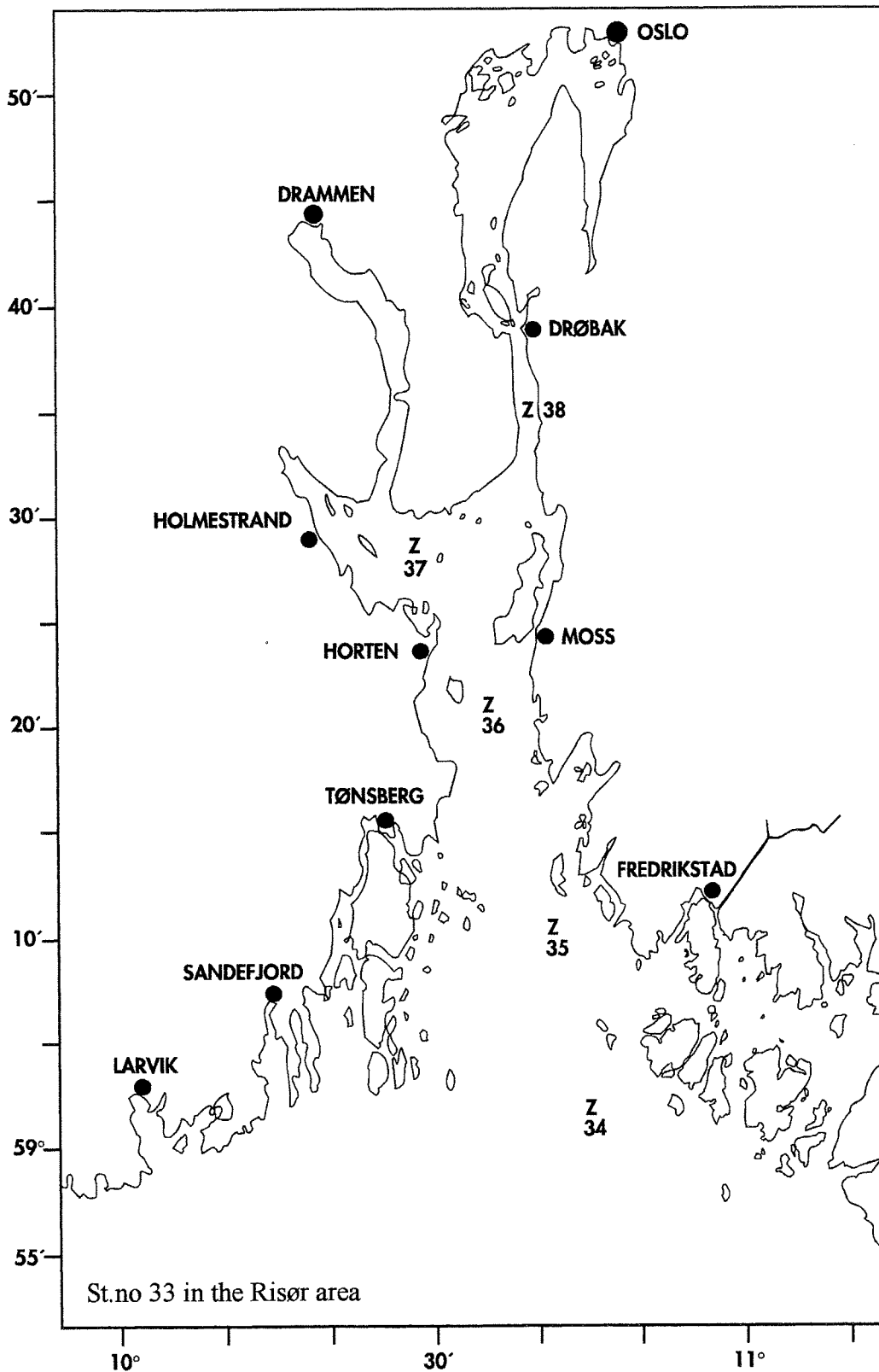
- ▲ Pelagic trawl
- Bottom trawl



# TORUNGEN - HIRTSHALS - 2001

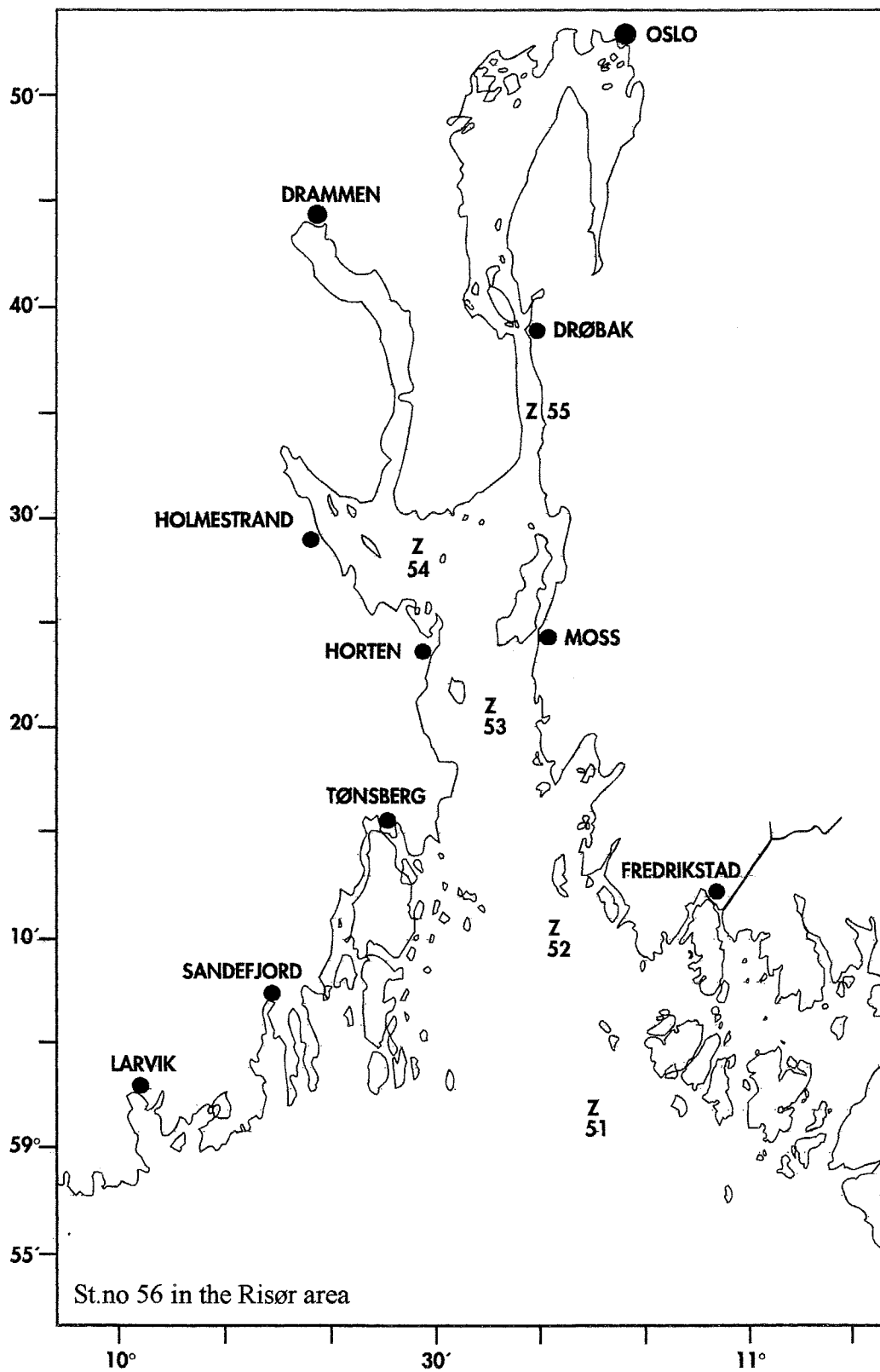


	CTD st.no
January	2 - 13
February	21 - 32
March	39 - 50
April	91 - 102
May	194 - 205
June	223 - 234
July	241 - 252
August	259 - 270
September	275 - 286
October	327 - 338
November	349 - 360
December	368 - 379



21 - 23 February 2001 z CTD st.no 33 - 38  
 Cruise no 2001306

"G. M. Dannevig"

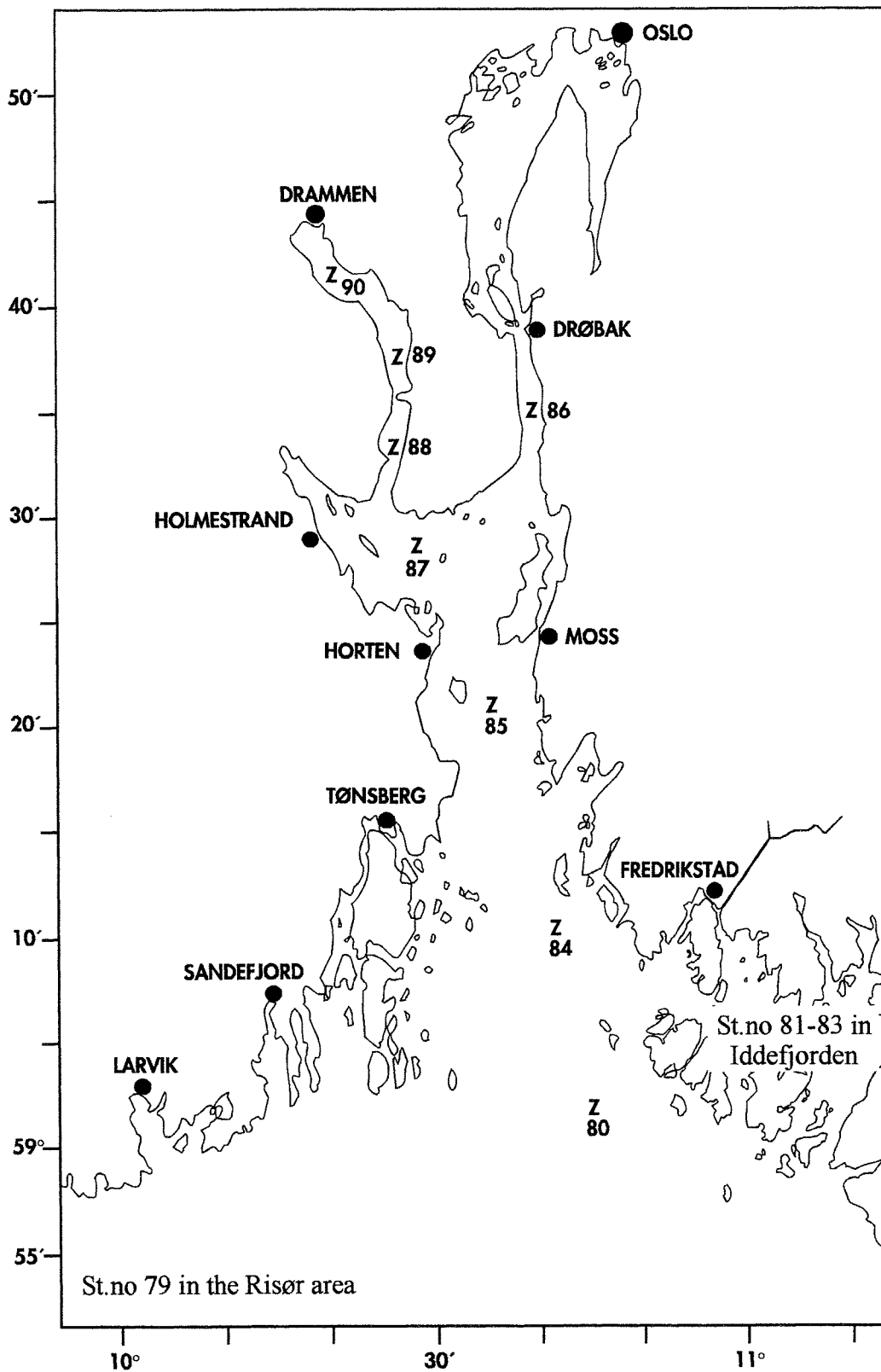


14 - 16 March 2001

z CTD st.no 51 - 56

"G. M. Dannevig"

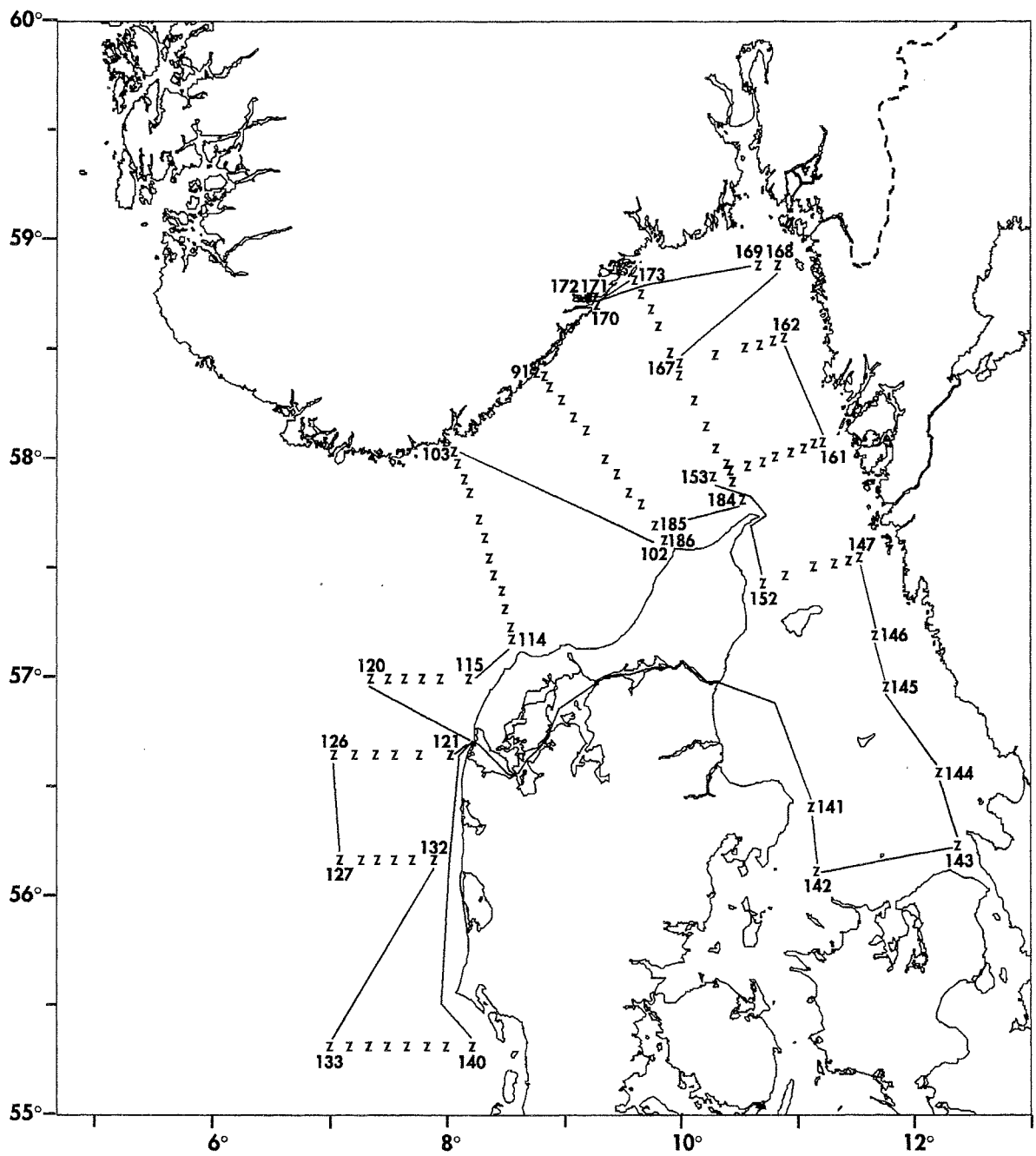
Cruise no 2001308



9 - 11 April 2001  
Cruise no 2001311

z CTD st.no 79 - 90

"G. M. Dannevig"

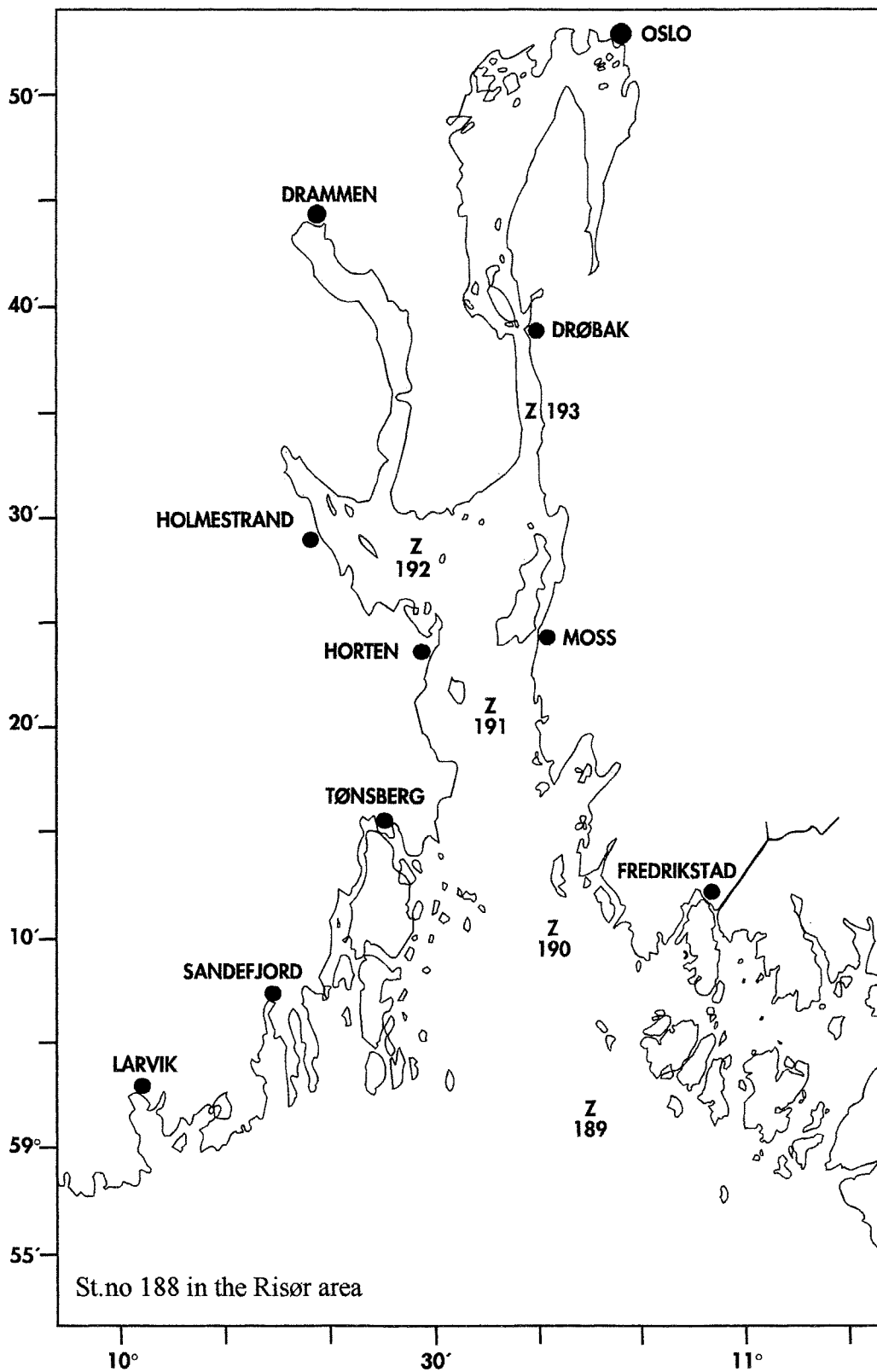


12 - 28 April 2001  
 Cruise no 2001312

z CTD st.no 91 - 186

"G. M. Dannevig"

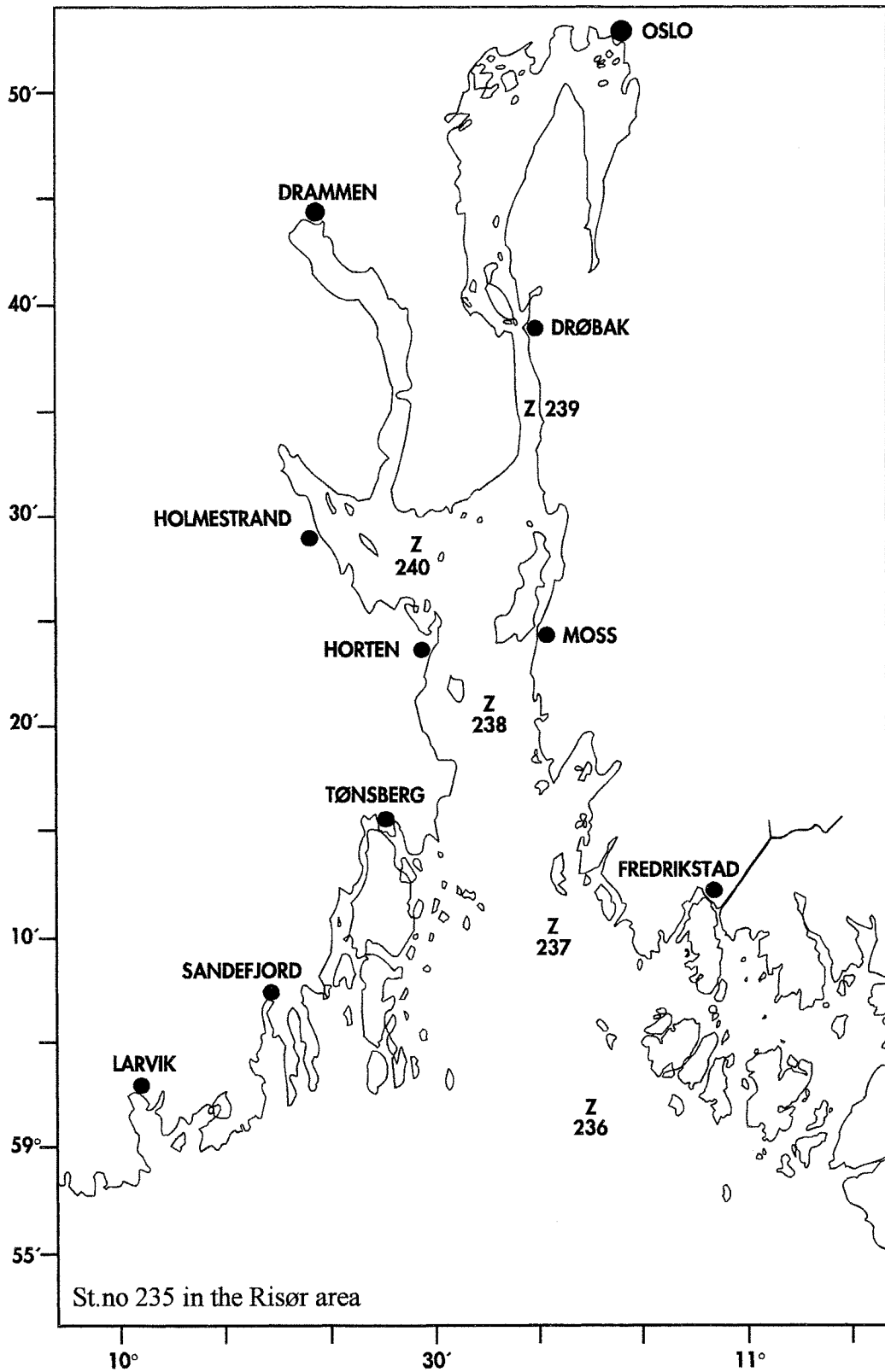




14 - 15 May 2001  
Cruise no 2001313

z CTD st.no 188 - 193

"G. M. Dannevig"

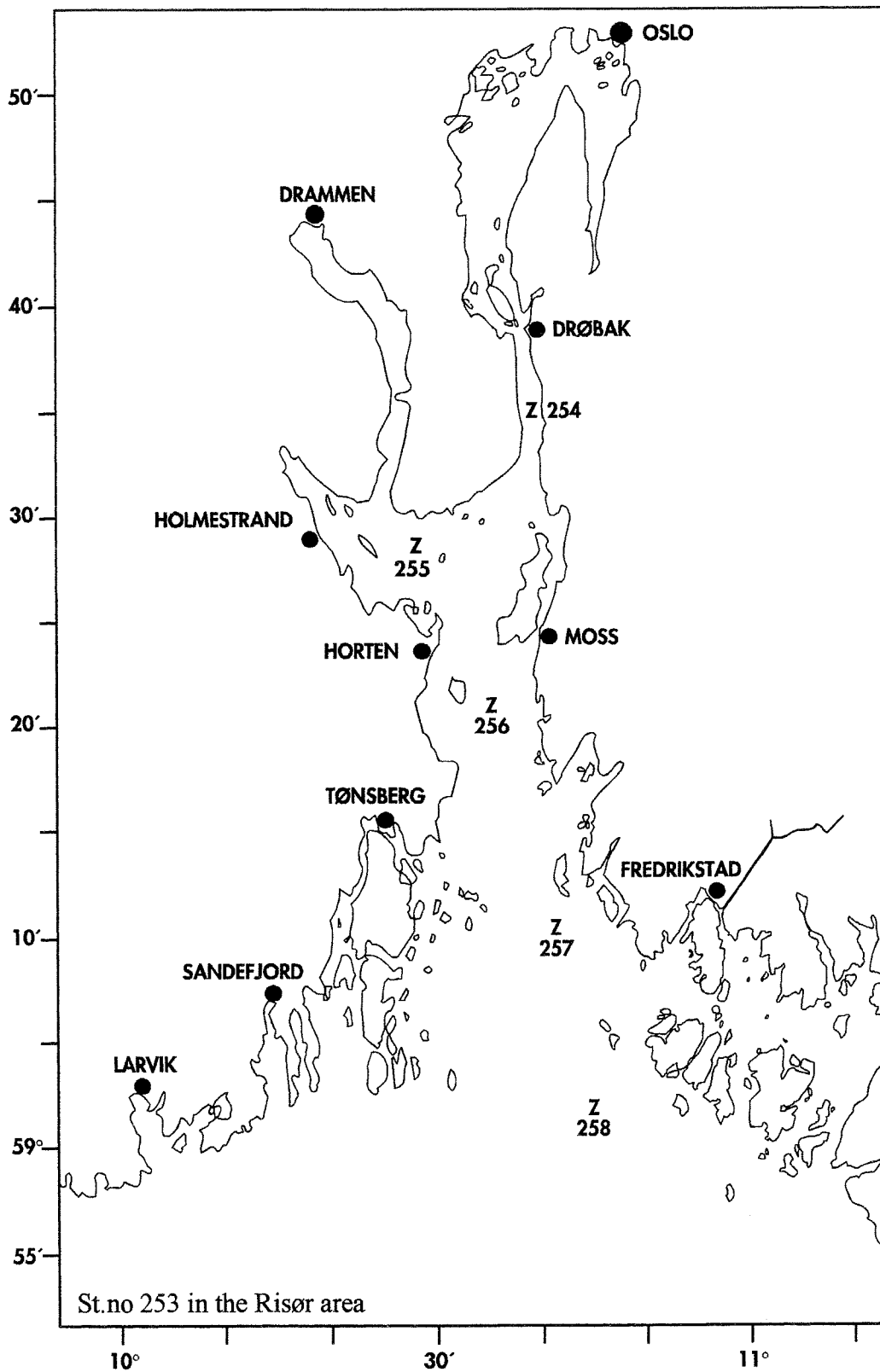


27 - 28 June 2001

z CTD st.no 235-240

"G. M. Dannevig"

Cruise no 2001322

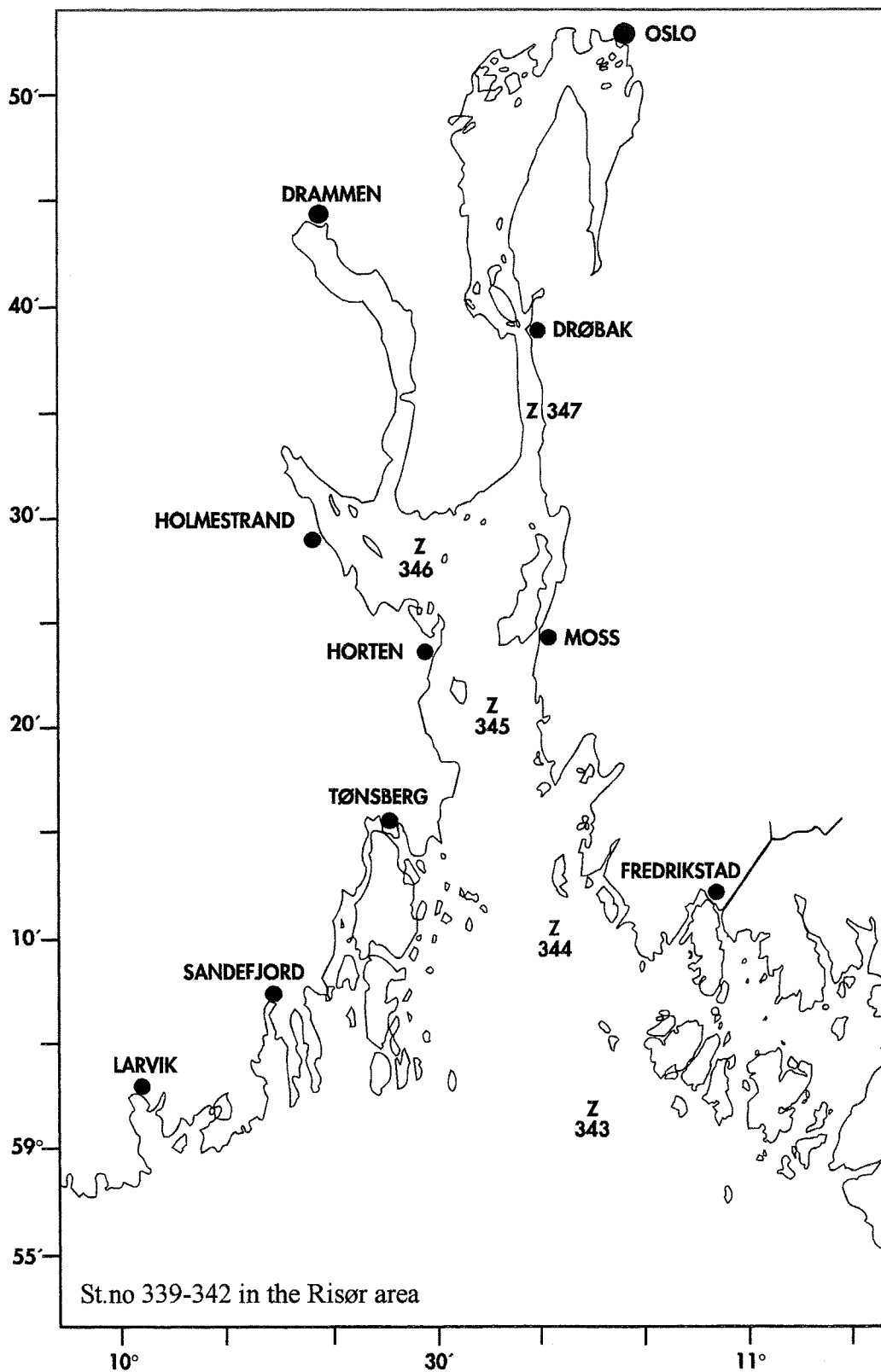


21 - 23 August 2001

z CTD st.no 253-258

"G. M. Dannevig"

Cruise no 2001324



9 - 12 October 2001

z CTD st.no 339-347

"G. M. Dannevig"

Cruise no 2001332