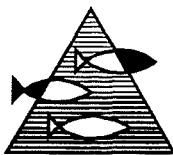


# PROSJEKTRAPPORT

ISSN 0071-5638



## HAVFORSKNINGSINSTITUTTET

MILJØ - RESSURS - HAVBRUK

Nordnesparken 2 Postboks 1870 5024 Bergen

Tlf.: 55 23 85 00 Fax: 55 23 85 31

Forskningsstasjonen

Flødevigen

4817 His

Tlf.: 37 01 05 80

Fax: 37 01 05 15

Austevoll

Havbruksstasjon

5392 Storebø

Tlf.: 56 18 03 42

Fax: 56 18 03 98

Matre

Havbruksstasjon

5198 Matredal

Tlf.: 56 36 60 40

Fax: 56 36 61 43

Distribusjon:

ÅPEN

HI-prosjektnr.:

Oppdragsgiver(e):

Oppdragsgivers referanse:

Rapport:

FISKEN OG HAVET

NR. 2 - 1996

Tittel:

REPORT ON OCEANOGRAPHIC CRUISES  
AND DATA STATIONS 1995

Senter:

Marint miljø

Seksjon: Fysisk oseanografi  
og akustikk

Forfatter(e):

Karen Gjertsen

Antall sider, vedlegg inkl.:

86

Dato:

30.01.1996

Sammendrag:

Rapporten gir en oversikt over toktene til Havforskningsinstituttets forskningsfartøy "G.O. Sars", "Johan Hjort", "Michael Sars" og "G.M. Dannevig" i 1995. Figurene viser kurslinjene fra hvert tokt og posisjonene til de forskjellige typer stasjoner som er tatt. Tabellen på sidene 5 og 6 viser toktnummer og tiden for hvert tokt, mens påfølgende figur gir en oversikt over faste hydrografiske snitt og faste stasjoner. De to neste tabellene viser når de faste snittene er tatt og antall observasjoner pr. måned fra de faste stasjonene.

Disse oversiktene er også innrapportert til Det internasjonale råd for havforskning (ICES) sammen med Roscop-skjema.

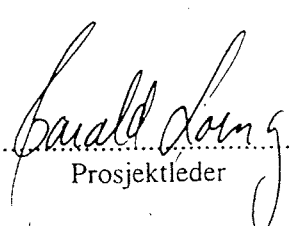
Data fra toktene er tilgjengelig fra Havforskningsinstituttet. Rapporten kan brukes til å identifisere båt og stasjonsnummer man ønsker data for.


Emneord - norsk:

1. Kurskart
2. Stasjonskart
- 3.

Emneord - engelsk:

1. Course track map
2. Stations map
- 3.

  
Prosjektleder

  
Seksjonsleder

1968/h 3021

**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 1995.

The tables on page 5 and 6 show the cruise number and the periods for each cruise. The symbols used to identify the different stations are shown at the bottom of page 6.

The next page shows the standard sections worked out by the Institute of Marine Research and the position of the fixed stations in the coastal water. The following tables indicate when the standard sections are worked out, while the next page shows 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 oceanographic stations and sections	1
STANDARD sections	2
STANDARD stations	3

### "G. O. SARS" 1995

(Ship no 15)

Cruise no	Period of cruises	Page of track chart
1995001	16 Jan - 17 Jan	
1995002	18 Jan - 25 Jan	4
1995901	27 Jan - 28 Feb	5
1995004	1 Mar - 21 Mar	6,7
1995005	22 Mar - 9 Apr	8
1995005	10 Apr - 16 Apr	
1995006	18 Apr - 27 Apr	9
1995007	28 Apr - 11 May	10,11,12
1995008	12 May - 24 May	13
1995009	26 May - 22 Jun	14,15
1995010	24 Jun - 16 Jul	16
1995012	25 Jul - 27 Jul	17
1995013	29 Jul - 15 Aug	18,19
1995902	16 Aug - 10 Sep	20,21
1995904	13 Sep - 1 Oct	22,23
1995905	17 Oct - 16 Nov	24,25
1995017	22 Nov - 15 Dec	26

### "JOHAN HJORT" 1995

(Ship no 12)

Cruise no	Period of cruises	Page of track chart
1995201	5 Jan - 28 Jan	27,28
1995901	1 Feb - 2 Mar	29
1995203	4 Mar - 19 Mar	30
1995204	21 Mar - 25 Apr	31,32,33
1995205	27 Apr - 24 May	34,35
1995206	29 May - 4 Jul	36,37
1995207	7 Jul - 2 Aug	38,39
1995903	4 Aug - 23 Aug	40
1995902	25 Aug - 10 Sep	41,42
1995904	12 Sep - 9 Oct	43,44
1995211	11 Oct - 6 Nov	45,46
1995212	8 Nov - 26 Nov	47
1995905	29 Nov - 15 Dec	48

### "MICHAEL SARS" 1995

(Ship no 11)

Cruise no	Period of cruises	Page of track chart
1995101	3 Jan	
1995102	5 Jan - 11 Feb	49,50
1995103	15 Feb - 31 Mar	51,52,53,54
1995104	3 Apr - 19 Apr	55
1995105	21 Apr - 15 May	56
1995106	19 May - 29 May	
1995107	31 May - 27 Jun	57
1995108	17 Jul - 24 Jul	58
1995903	28 Jul - 19 Aug	59
1995902	22 Aug - 9 Sep	60

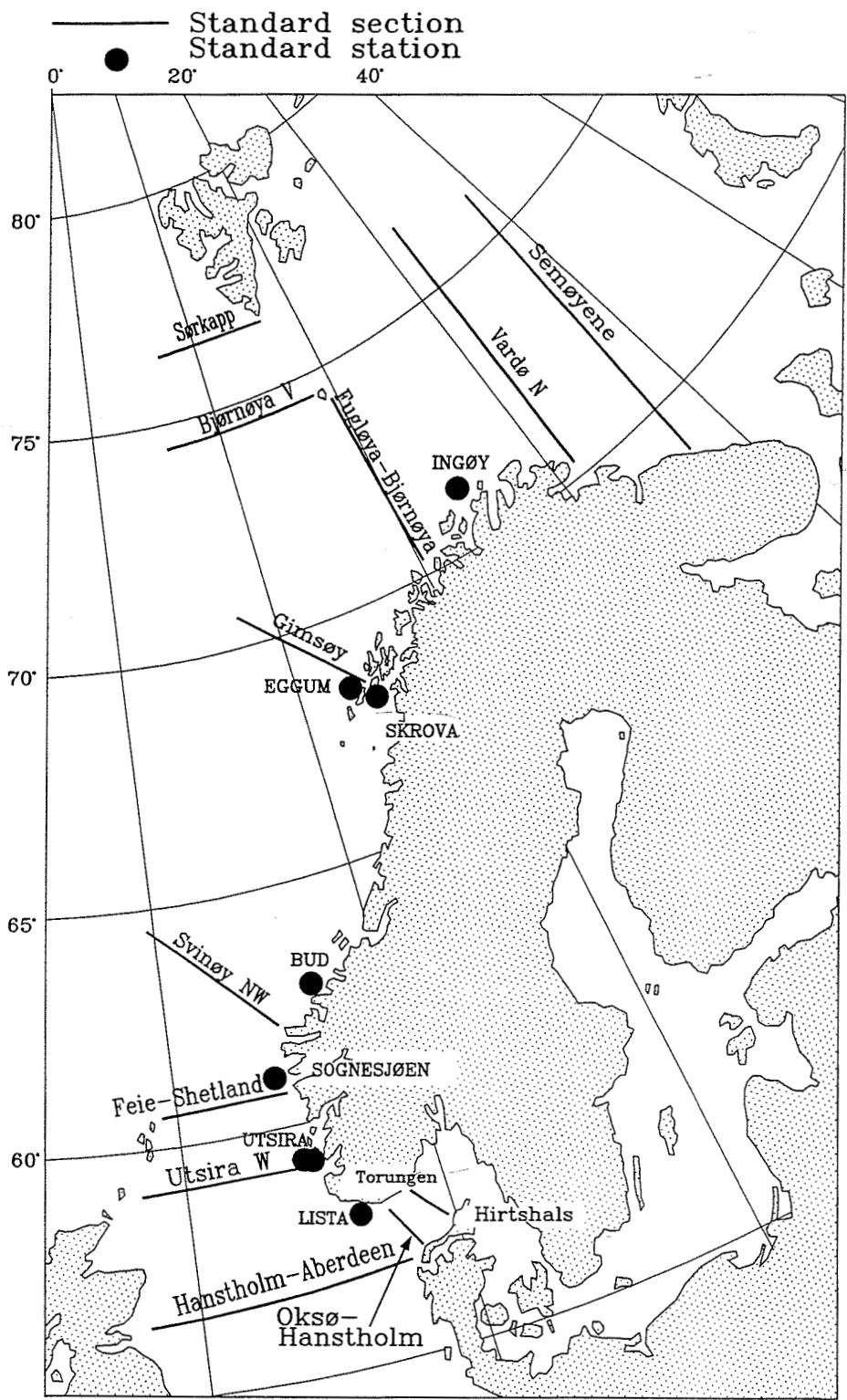
1995111	Norw.Inst.of Fish.and Aquaculture, Tromsø:	
	12 Sep - 12 Oct	61
1995112	13 Oct - 30 Oct	62
1995906	1 Nov - 9 Dec	63,64

### "G. M. DANNEVIG" 1995

(Ship no 16) Cruise no	Period of cruises	Page of track chart
	Torungen-Hirtshals	65
	St Arendal 2 and 3	66
1995301	10 Feb - 11 Feb	65
1995302	13 Feb - 2 Mar	67
1995303	7 Mar - 8 Mar	65
1995304	21 Mar - 1 Apr	68
1995305306	18 Apr - 5 May	65,69
1995307	9 May - 14 May	70
1995308	15 May - 16 May	65
1995309	18 May - 24 May	71
1995311	7 Jun - 12 Jun	72
1995310	19 Jun - 27 Jun	
1995313	28 Jun - 29 Jun	65
1995315	25 Jul - 26 Jul	65
1995316	31 Jul - 6 Aug	
1995317	9 Aug - 10 Aug	65
1995318	14 Aug - 18 Aug	73
1995320	4 Sep - 9 Sep	74,75
1995321	12 Sep - 13 Sep	65
1995322	14 Sep - 2 Oct	76
1995312	30 Oct - 3 Nov	77,78,79
1995323	10 Oct - 11 Oct	65
1995906	27 Nov - 30 Nov	
1995326	4 Dec - 5 Dec	65
	7 Dec - 9 Dec	80
1995324	11 Dec - 15 Dec	81
Extra cruises	(as freshwater outflow, algae blooming)	
1	1 May	
2	8 Jun	
3	13 Jun - 17 Jun	82
4	5 Jul - 9 Jul	83
5	23 Aug - 25 Aug	84
6	3 Oct - 5 Oct	85
7	7 Nov - 9 Nov	86
8	13 Nov	65

#### Guidelines:

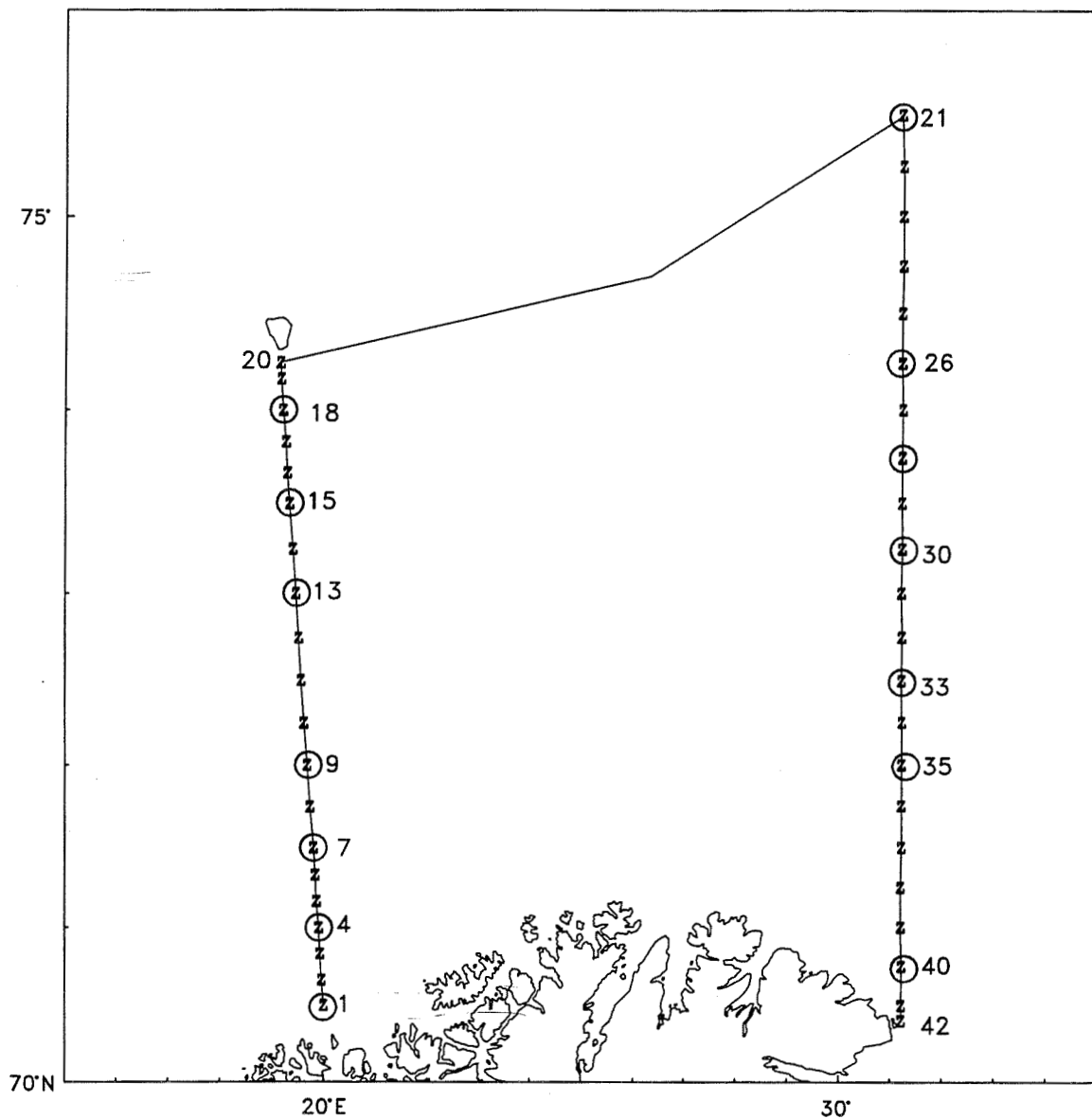
- z Vertical Oceanogr. st., CTD ST.
- △ Pelagic trawl station
- Bottom trawl station
- ⊙ CTD and PLANKTON st
- Grab station
- ◇ Plankton station
- M Mocness



**STANDARD 1995  
SECTIONS**
**Cruise no/ship**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
(Date/Ship) →	<b>G.M. Dannevig :</b>											
Torungen - Hirtshals	<b>Dato:</b>	10-11.2	7-8.3.	18.4.	15-16.5.	28-29.6.	15-26.7.	9-18.8.	12.13.9.	10-11.10	13.11	4-5.12.
Oksø - Hanstholm	1995.102MS											1995.905JH
Hanstholm - Aberdeen	1995.102MS										1995.905GOS	1995.905JH
Utsira West	1995.102MS			1995.105MS			1995.010GOS				1995.905GOS	
Feie - Shetland		1995.102MS		1995.204JH			1995.010GOS				1995.905GOS	
Svinøy - North/West			1995.203JH 1995004GOS	1995.204JH 1995.204JH	1995.205JH	1995.107MS	1995207.JH	1995.13GOS				
Gimsøy - North/West			1995.203JH 1995.004GOS		1995.007GOS		1995207.JH	1995.13GOS				
Sørkapp								1995.902GOS				
Fugløya - Bear Island	1995.002GOS		1995.203JH		1995.205JH	1995.107MS		1995.902GOS		1995.904JH		
Bear Island - West			1995.203JH		1995.205JH			1995.902GOS		1995.904JH		
Vardø - North	1995.002GOS		1995.203JH			1995.107MS			1995.902GOS			
Sem. Island - North		1995.901JH						1995.902MS	1995.904GOS			

STANDARD STATIONS	1995												TOTAL
	No of observations												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
<b>LISTA</b> N58 01 E06 32	2	3	3	3	3	3	3	3	3	4	3	3	36
<b>UTSIRA Y</b> N59 19 E04 44	3	3	3	3	3	4	2	3	4	3	4	3	38
<b>UTSIRA I</b> N59 19 E04 59	3	3	3	3	3	4	2	3	4	3	4	3	38
<b>SOGNESJØEN</b> N61 01 E04 50	4	4	2	4	4	4	2	2	3	3	3	1	36
<b>BUD</b> N62 56 E 06 47	2	1	3	2	2	2	2	2	2	2	2	2	24
<b>SKROVA</b> N68 07 E14 39	3	4	5	3	5	4	4	4	4	4	4	4	48
<b>EGGUM</b> N 68 23 E13 38	3	3	4	3	4	3	4	3	3	4	3	3	40
<b>INGØY</b> N71 08 E 24 01	5	2	3	2	4	4	2	5	4	3	2	4	40



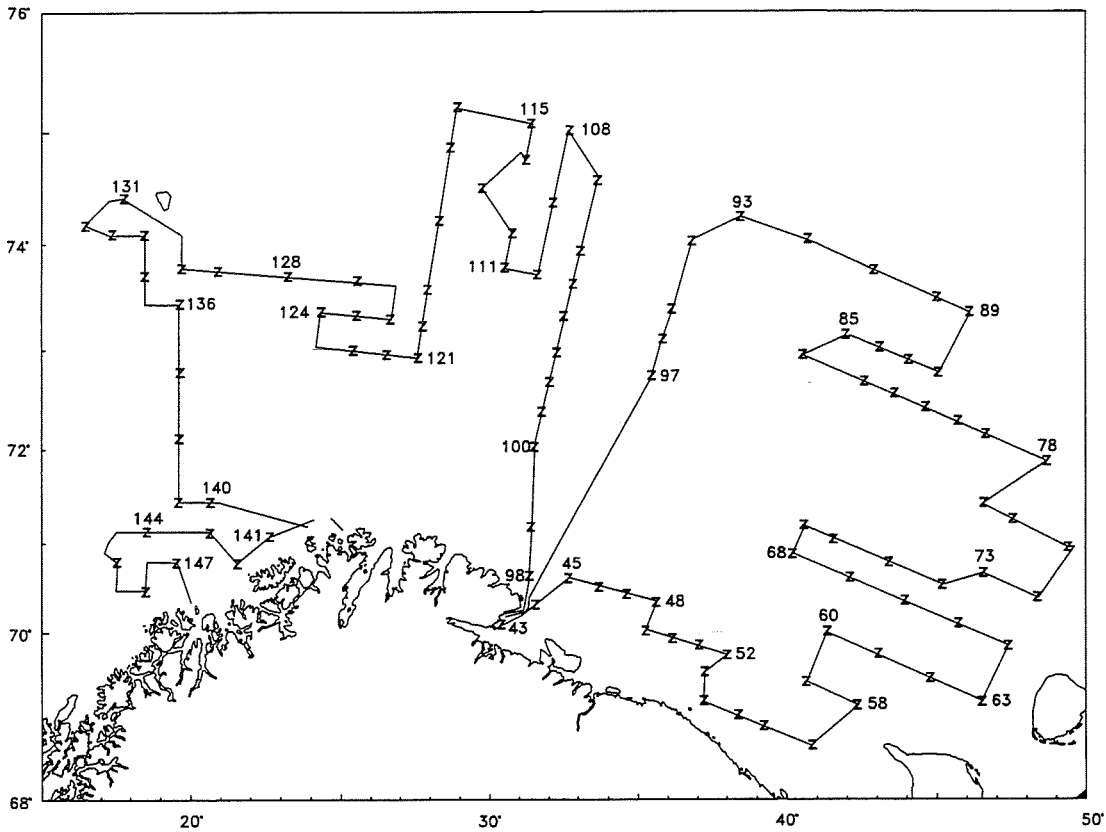
18 - 25 Jan 1995  
 Cruise no 1995 002

z CTD st.no 1-42  
 (z) CTD and PLANKTON st.

"G.O. Sars"

Standard section Fugløya - Bear Island: CTD st.no 1-20  
 " " Vardø N: Ctd st.no 21-42



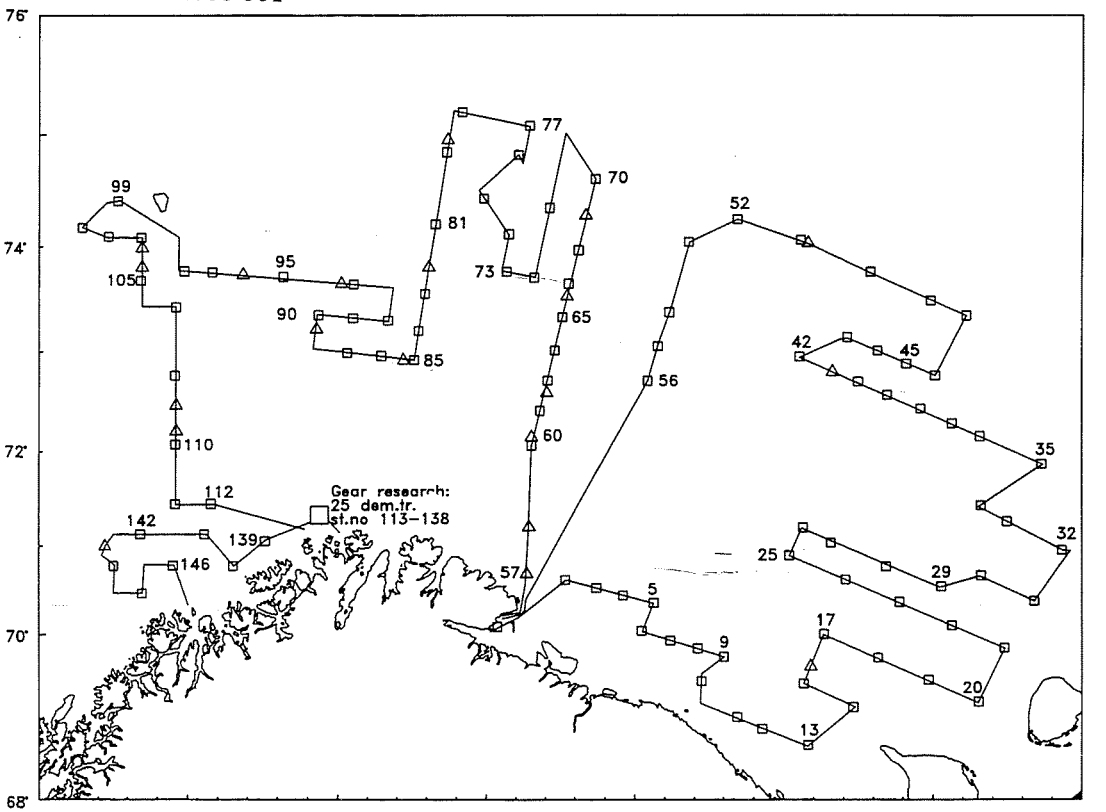


27 Jan - 28 Feb 1995

z CTD St.no 43-147

"G.O. Sars"

Cruise no 1995 901



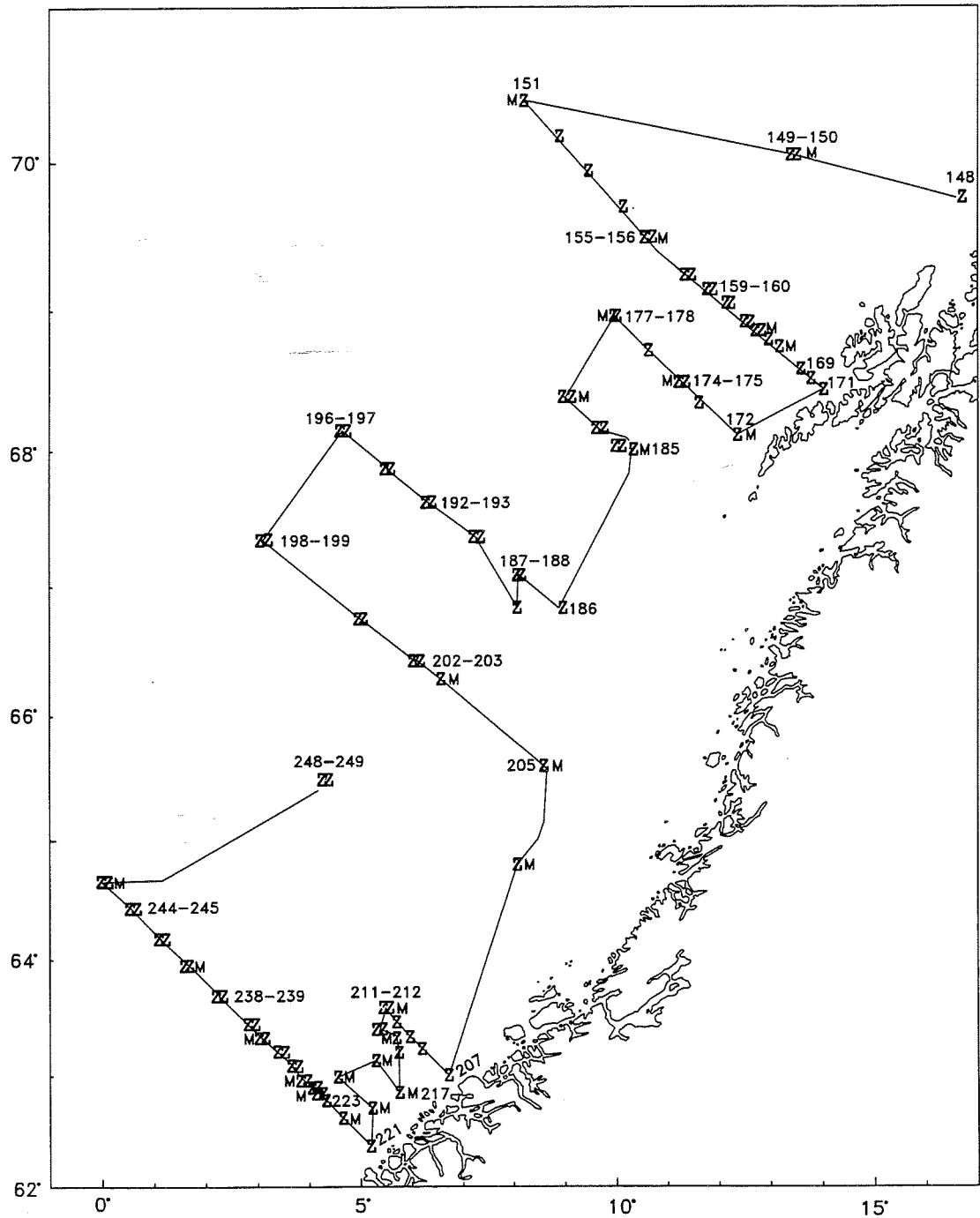
27 Jan - 28 Feb 1995

□△ TRAWL St.no 1-146

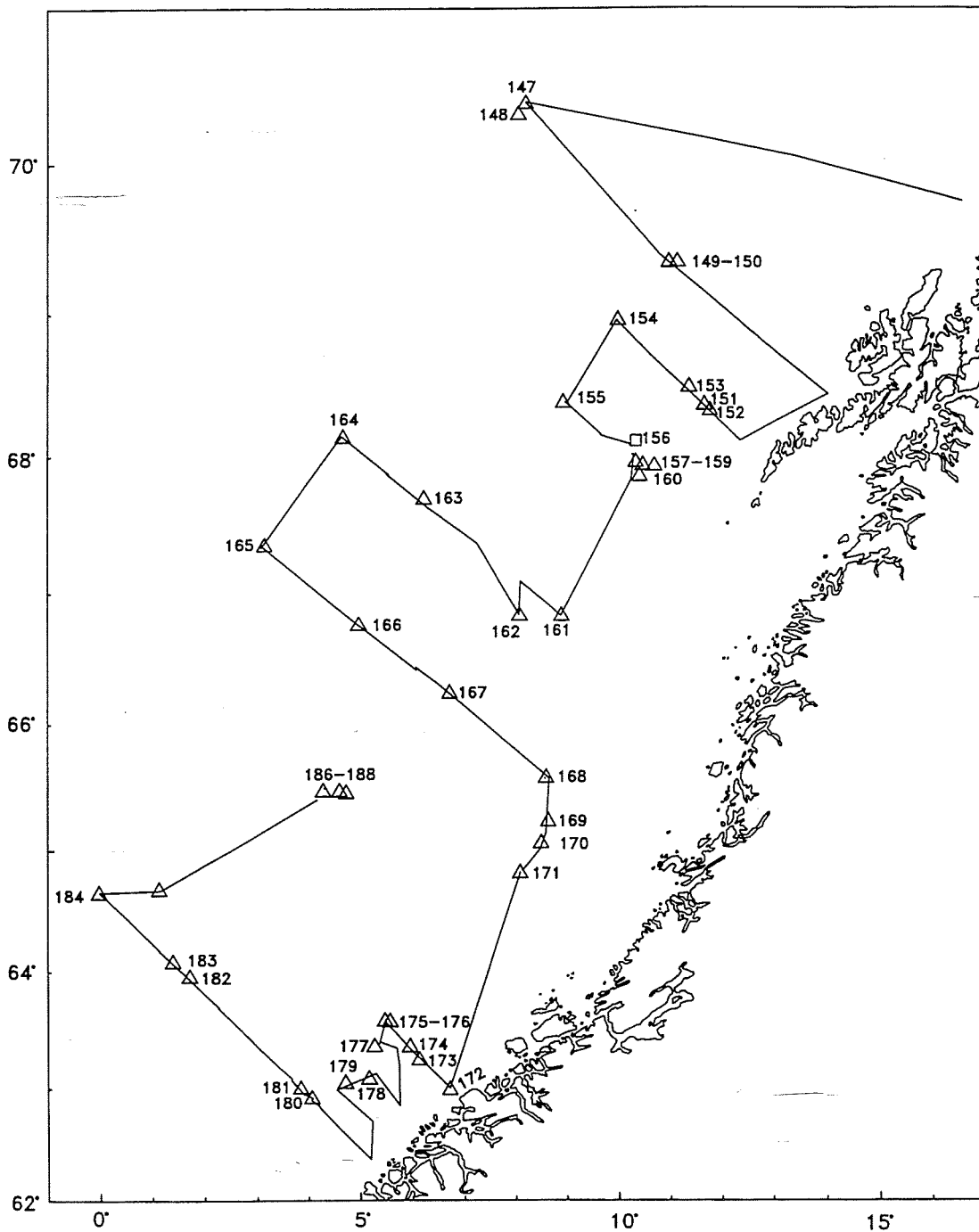
△ Pel. tr.

□ Bottom tr.

"G.O. Sars"



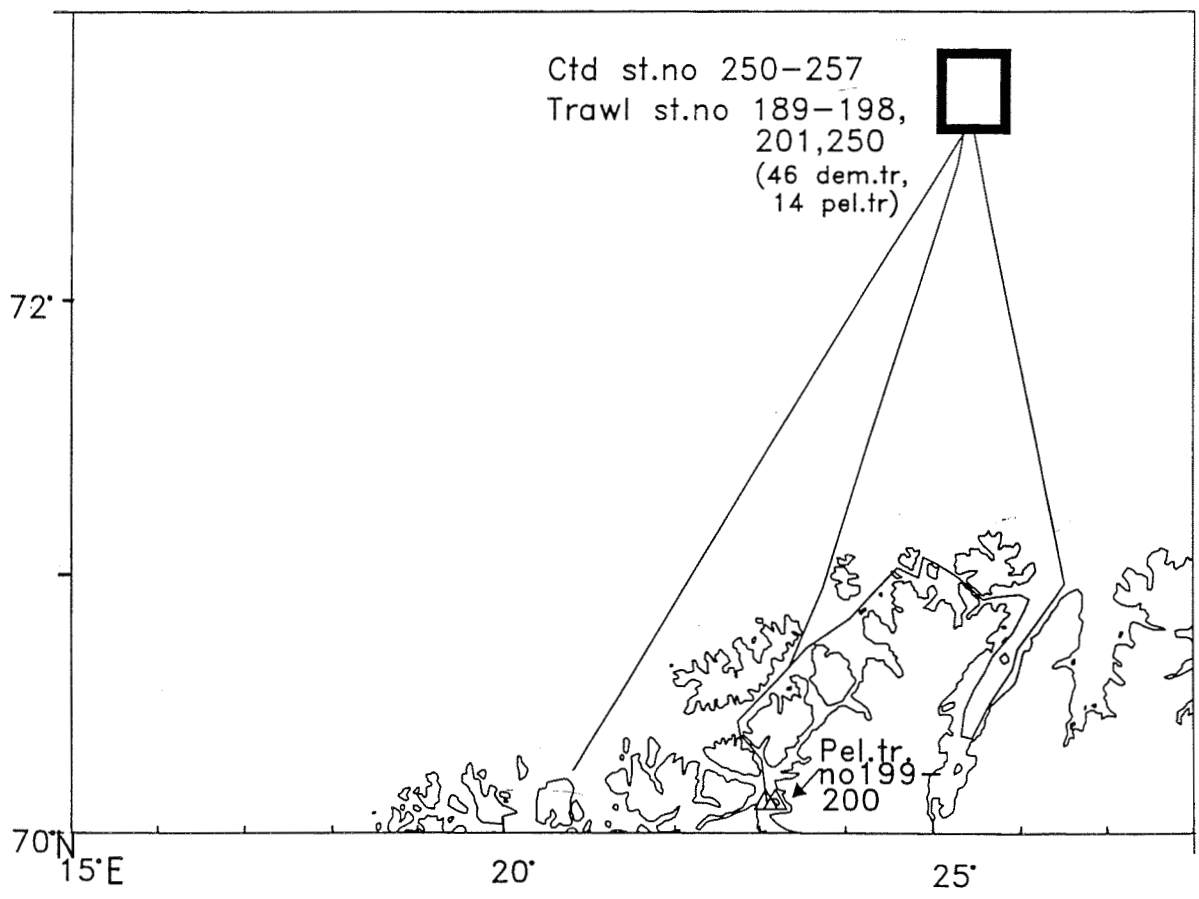
Cruise no 1995.004 z CTD and PLANKTON st.no 148-249 "G.O. Sars"  
 1 - 21 Mar 1995 m PLANKTON st. (mocness)  
 Standard section Svinøy NW: st.no-221-247  
 " " Gimsøy NW: st.no 171-151



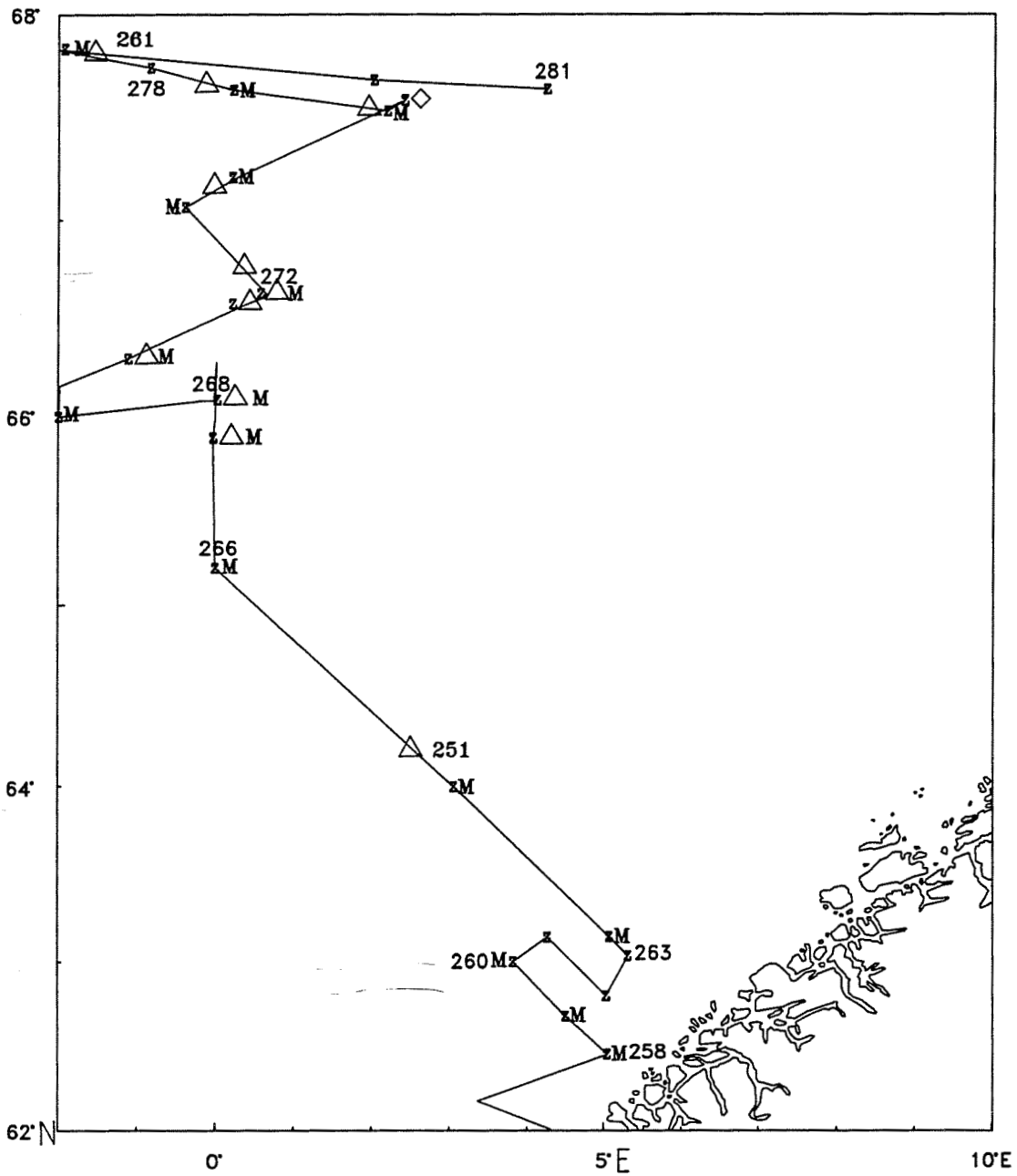
Cruise no 1995.004  
1 - 21 Mar 1995

△ □ TRAWL st.no 147-188  
△ Pel tr.  
□ Dem tr.

"G.O. Sars"



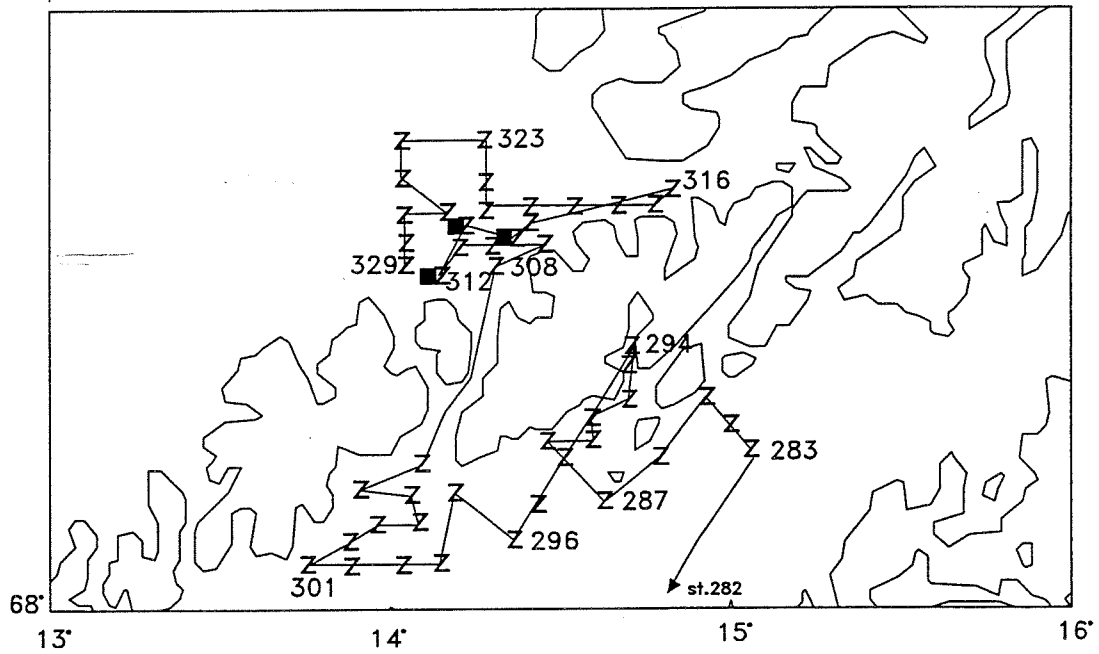
22 Mar - 9 Apr 1995 z CTD st.no 250-257 "G.O. Sars  
 Cruise no 1995 005 □△ TRAWL st. no 189-250



Cruise no 1995006  
18-27 Apr 1995

z CTD st.no 258-281  
△ Pel. trawl st.no 251-261  
M PLANKTON st. (Mocness)  
◇ PLANKTON st. (WP II net)

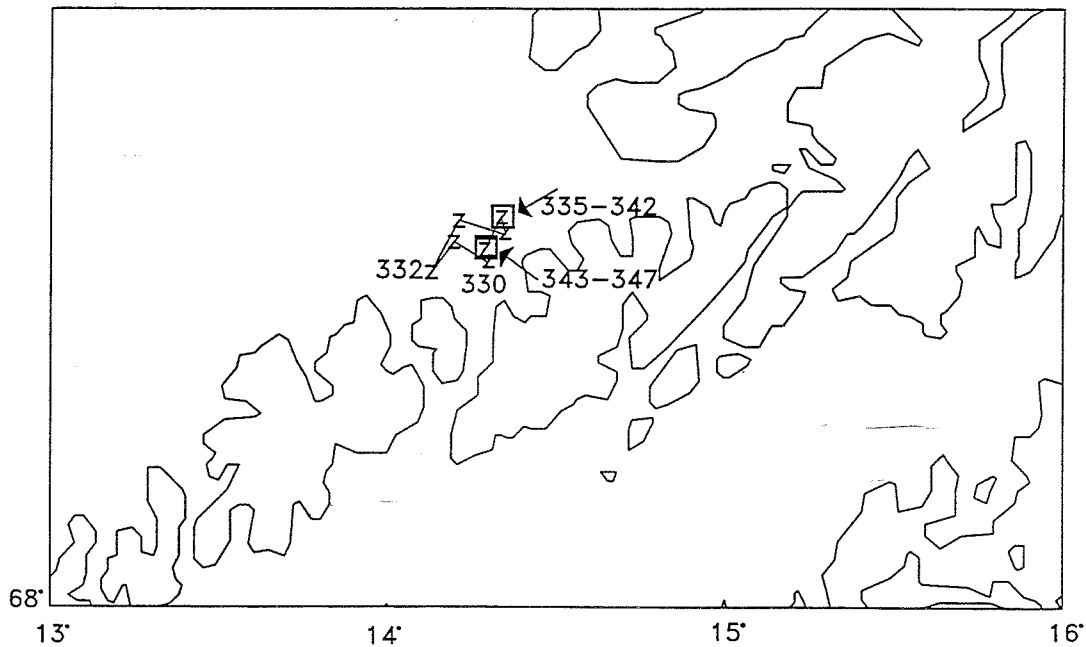
"G.O. Sars"



Cruise no 1995007

"G.O.Sars"

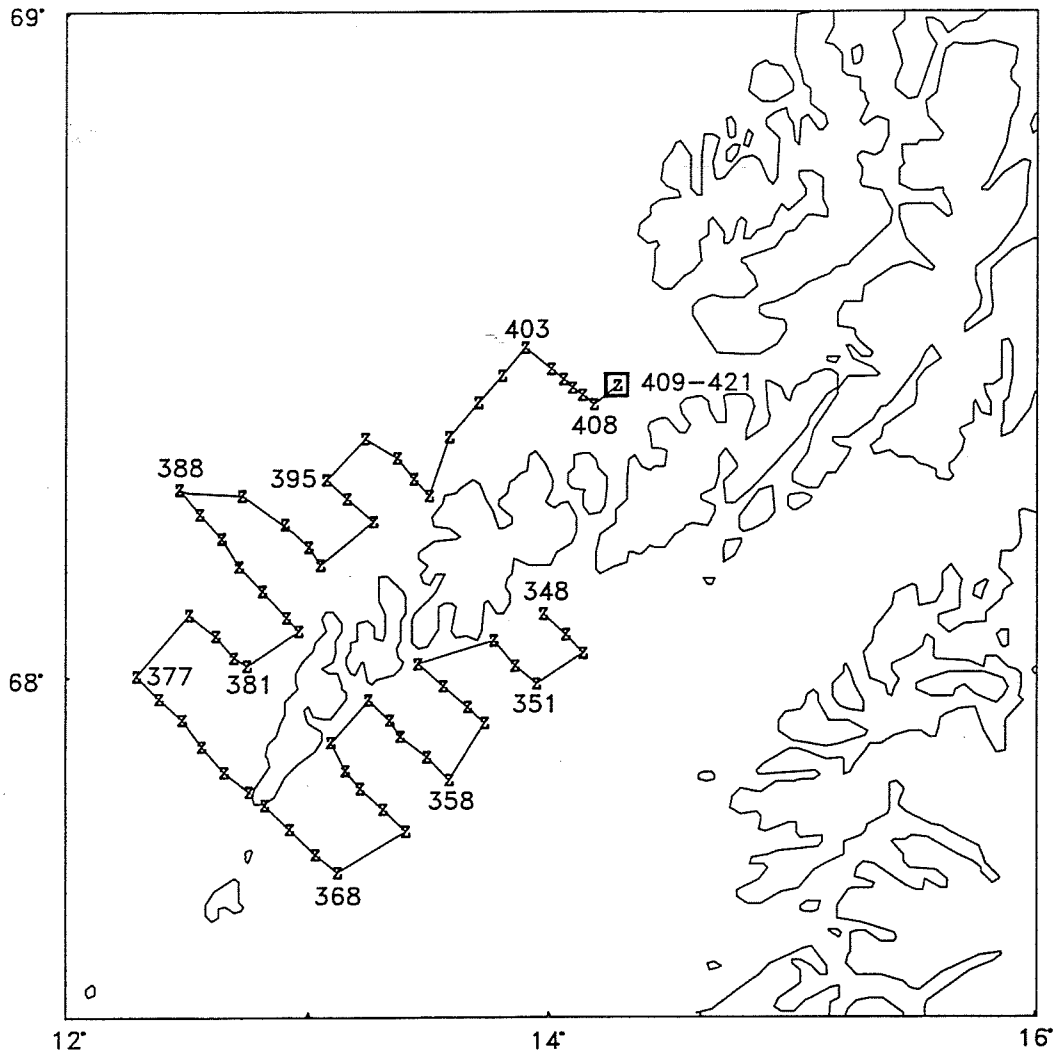
PART I, 28.4.-30.4.95: z CTD and PLANKTON net:st.no283-329  
 z CTD st.no 282: 67°17'N,12°26'E  
 ■ Current meter



Cruise no 1995007

"G.O.Sars"

PART II, 30.4-2.5.95: z CTD and PLANKTON net st.no 330-347  
 □ ANCHORSTATION:  
 Ctd  
 Zooplankton pump profiler  
 Ichtyoplankton " "  
 Plankton net  
 Current measurement

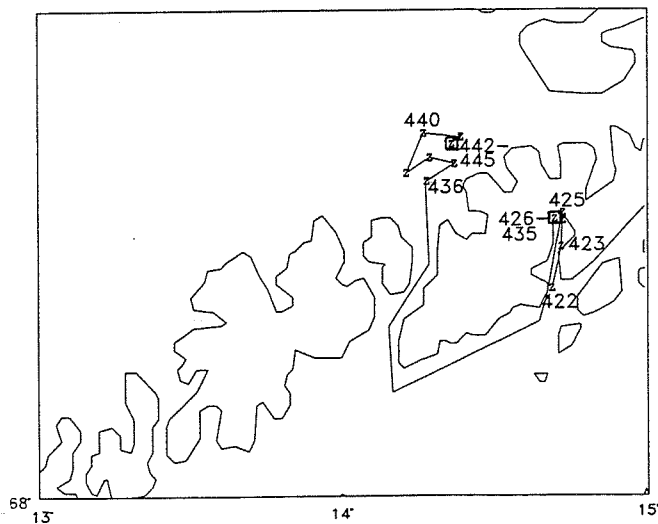


"G.O.Sars"

Cruise no 1995007 PART III, 2-6.5.95: z CTD and plankton net st.no 348-421

ANCHORSTATION:

- Ctd
- Zooplankton pump profiler
- Ichtyplankton " "
- Plankton net
- Current measurement

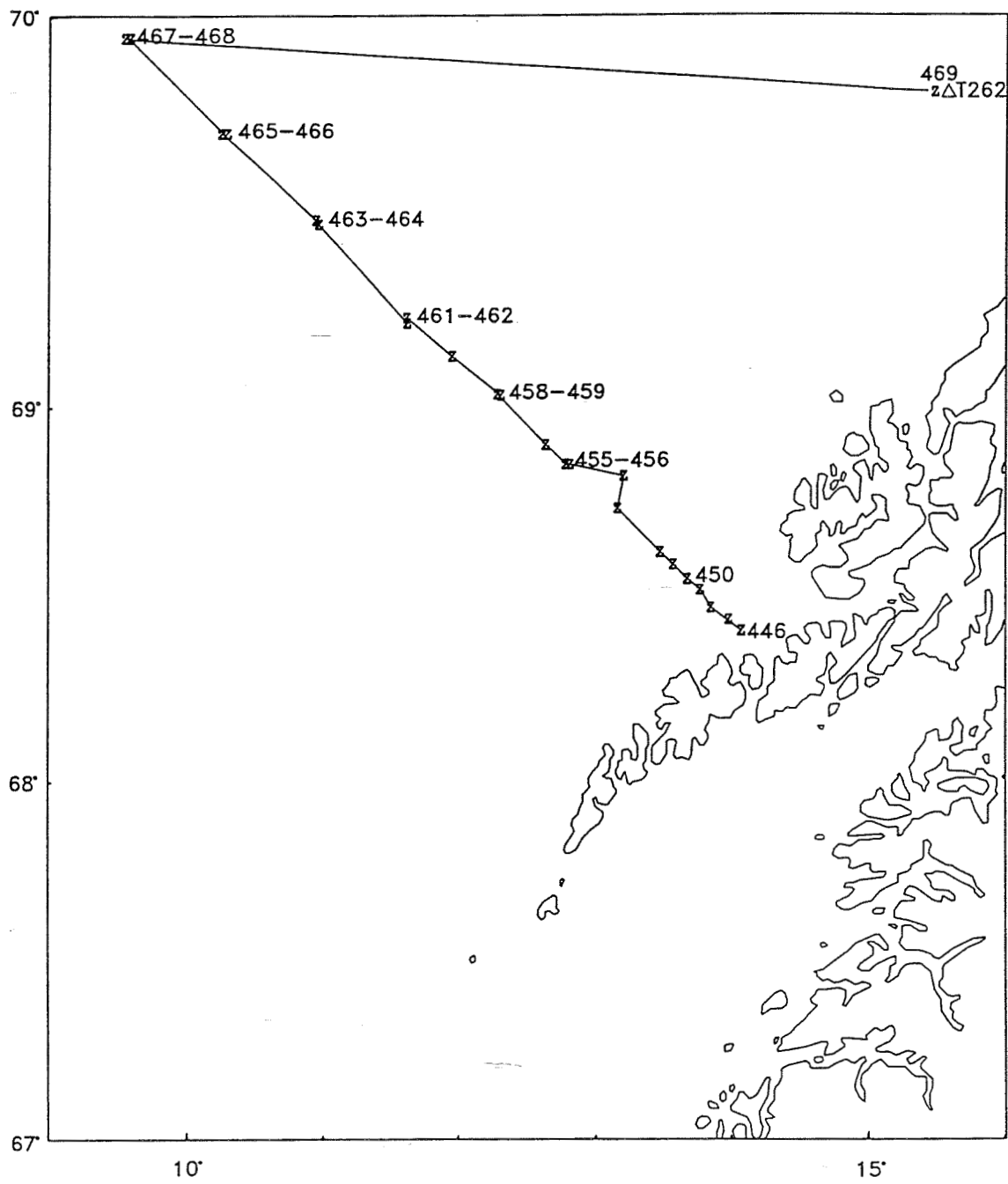


"G.O.Sars"

Cruise no 1995007 PART IV, 6-8.5.95: Z CTD and PLANKTON net st.no 422-445

ANCHORSTATION:

- Ctd
- Zooplankton pump profiler
- Ichtyplankton " "
- Plankton net
- Current measurement

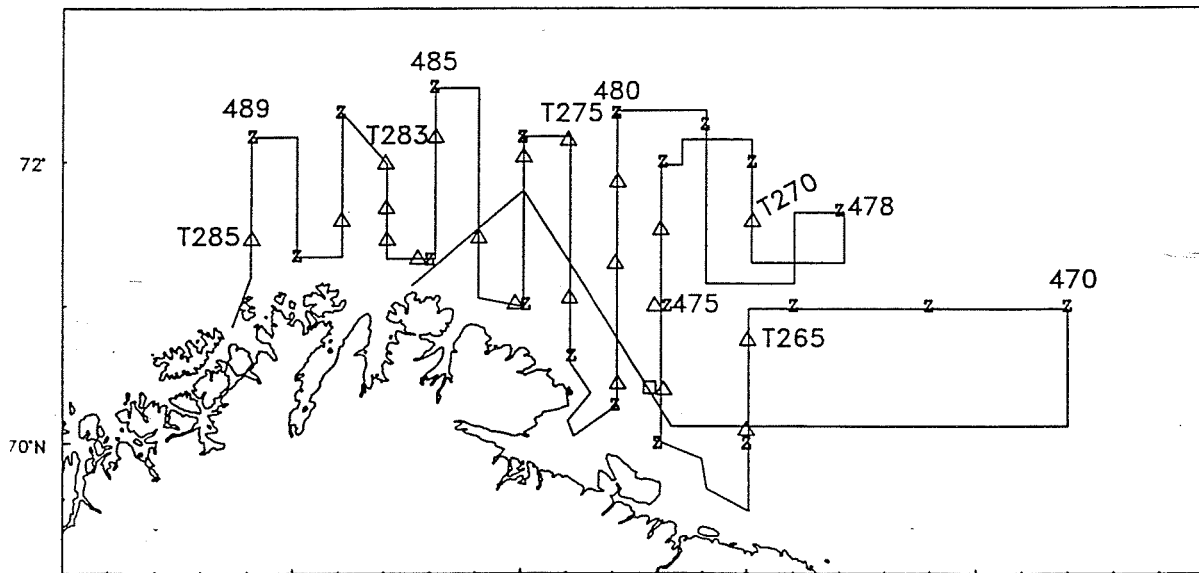


"G.O.Sars"

Cruise no 1995007 PART V, 9-11.5.95: z CTD and PLANKTON net st.no 446-469  
 z CTD st.no 467-469  
 Δ TRAWL (pel.) st.no 262

Standard section Gimsøy: CTD st.no 446-468





20°E

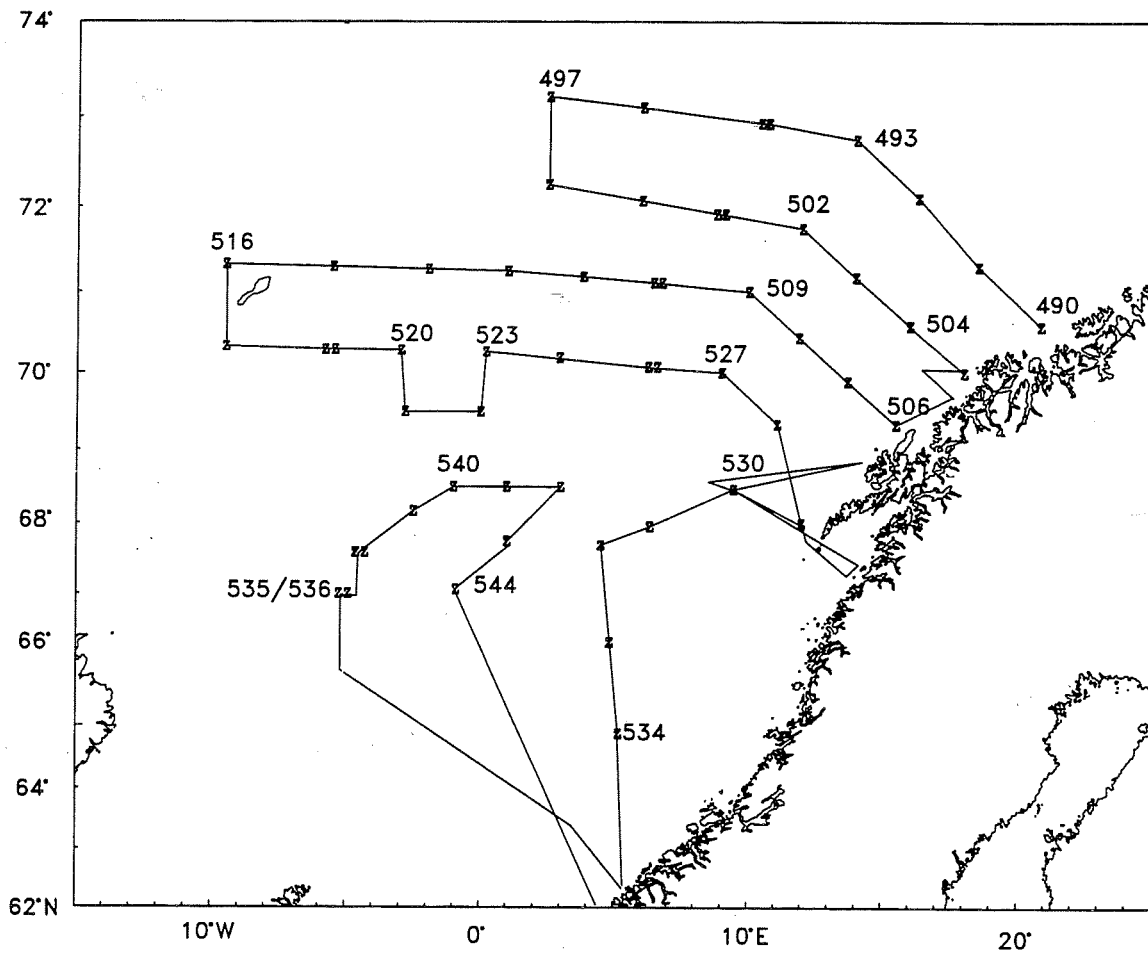
12 - 24 May 1995  
Cruise no 1995.008

z CTD st.no 470-489  
 □△ TRAWL St.no 264-285  
 △ Pel .tr.  
 □ Dem.tr.

30°

40°

"G.O.Sars"



26 May - 22 Jun 1995  
 Cruise no 1995 009

z CTD st.no 490-544

"G.O.Sars"

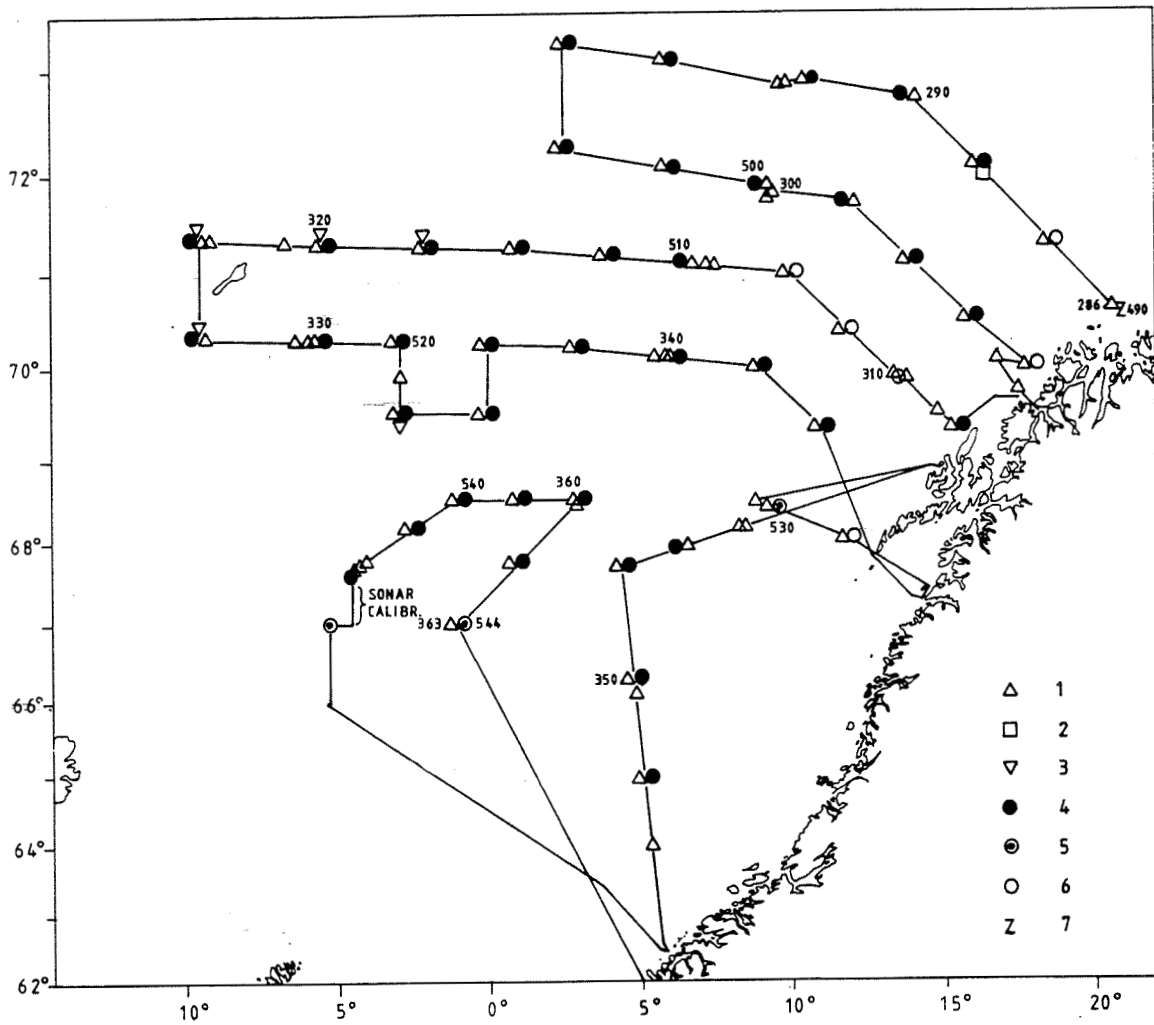
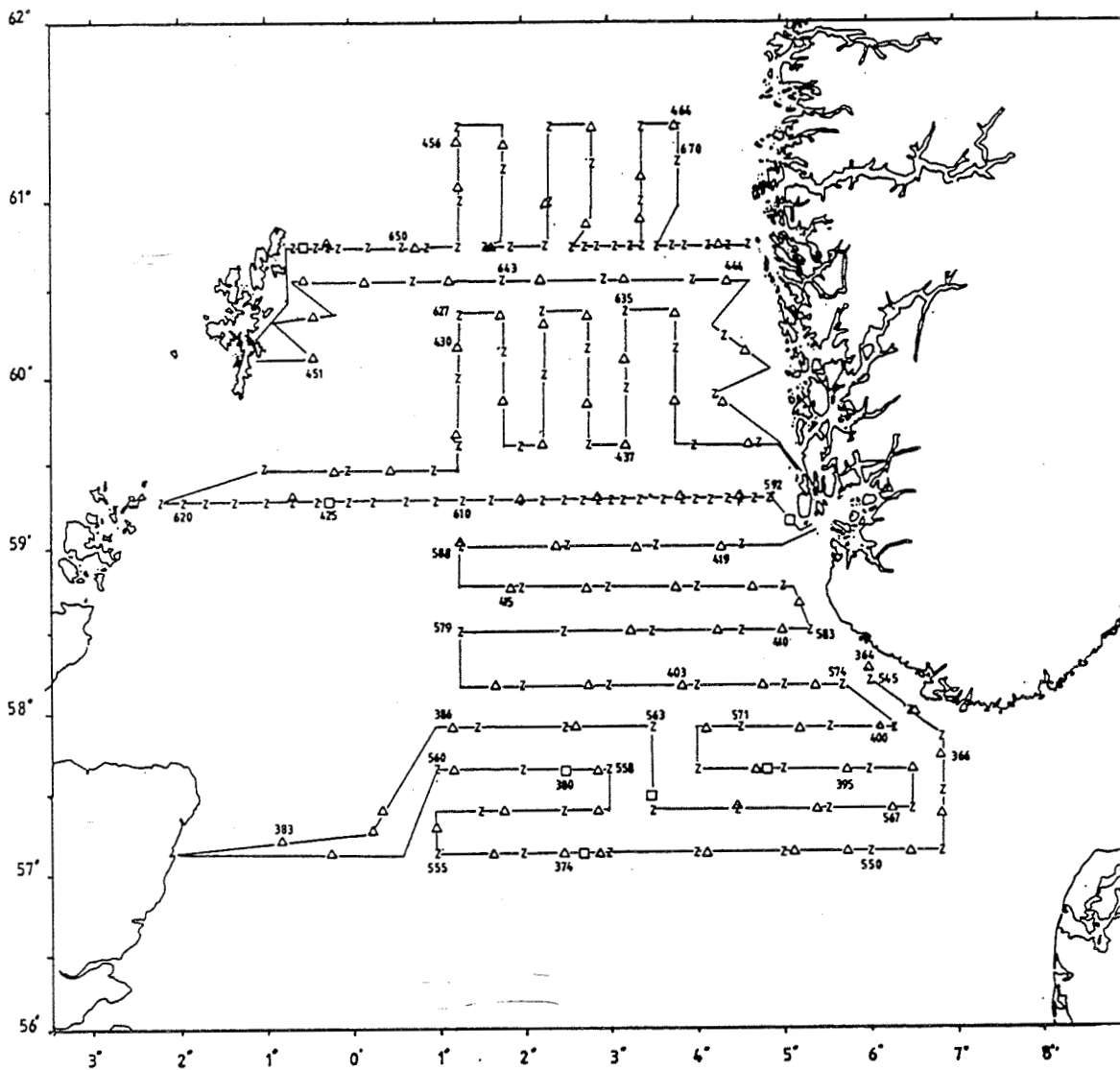


Figure 1. Survey tracks and sampling stations during cruise no. 9 by R/V "G.O. Sars" 26/5 - 22/6 1995. Symbols: 1) Pelagic trawl, 2) Bottom trawl, 3) Surface long line, 4) MOCNESS + CTD, 5) MOCNESS + CTD, 6) CTD with water sampling, 7) CTD.

Cruise no 1995.009

Trawl st.no 286-363



24 Jun - 16 Jul 1995

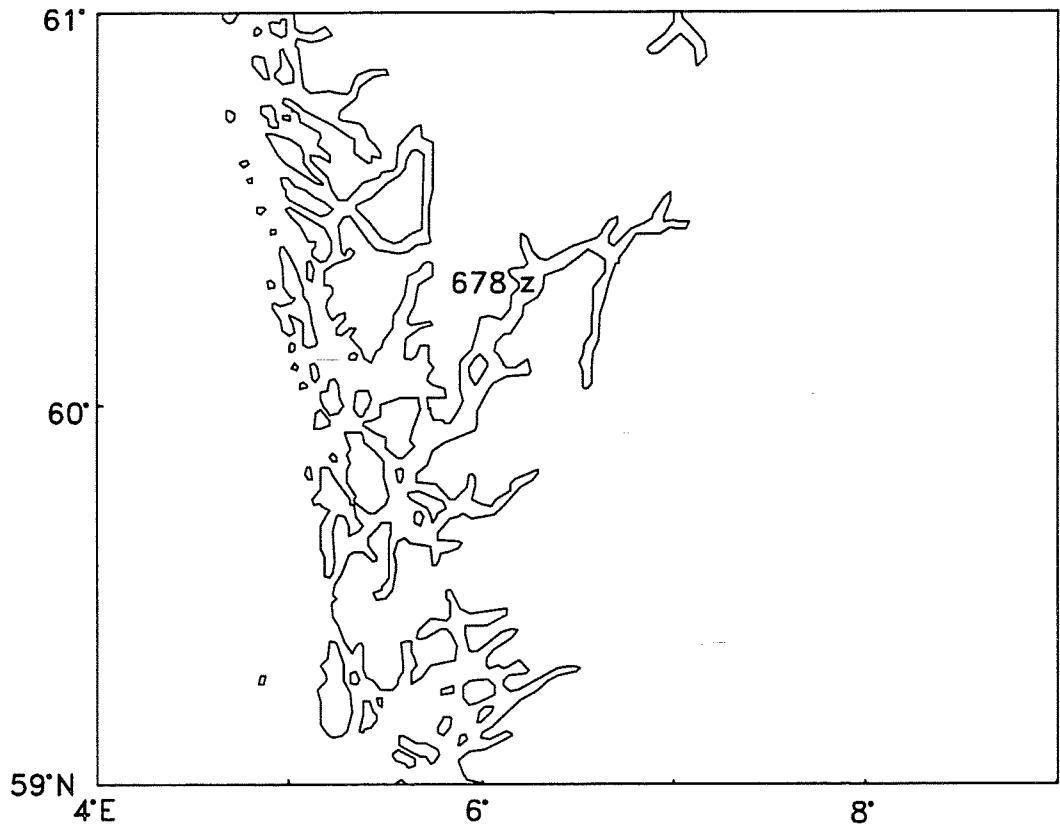
z CTD st.no 545-677  
 □ Δ TRAWL St.no 364-467  
 (Δ Pel.tr, □ Bottom tr.)

"G.O.Sars"

Cruise no 1995 010

Standard section Utsira: st.no 592-621

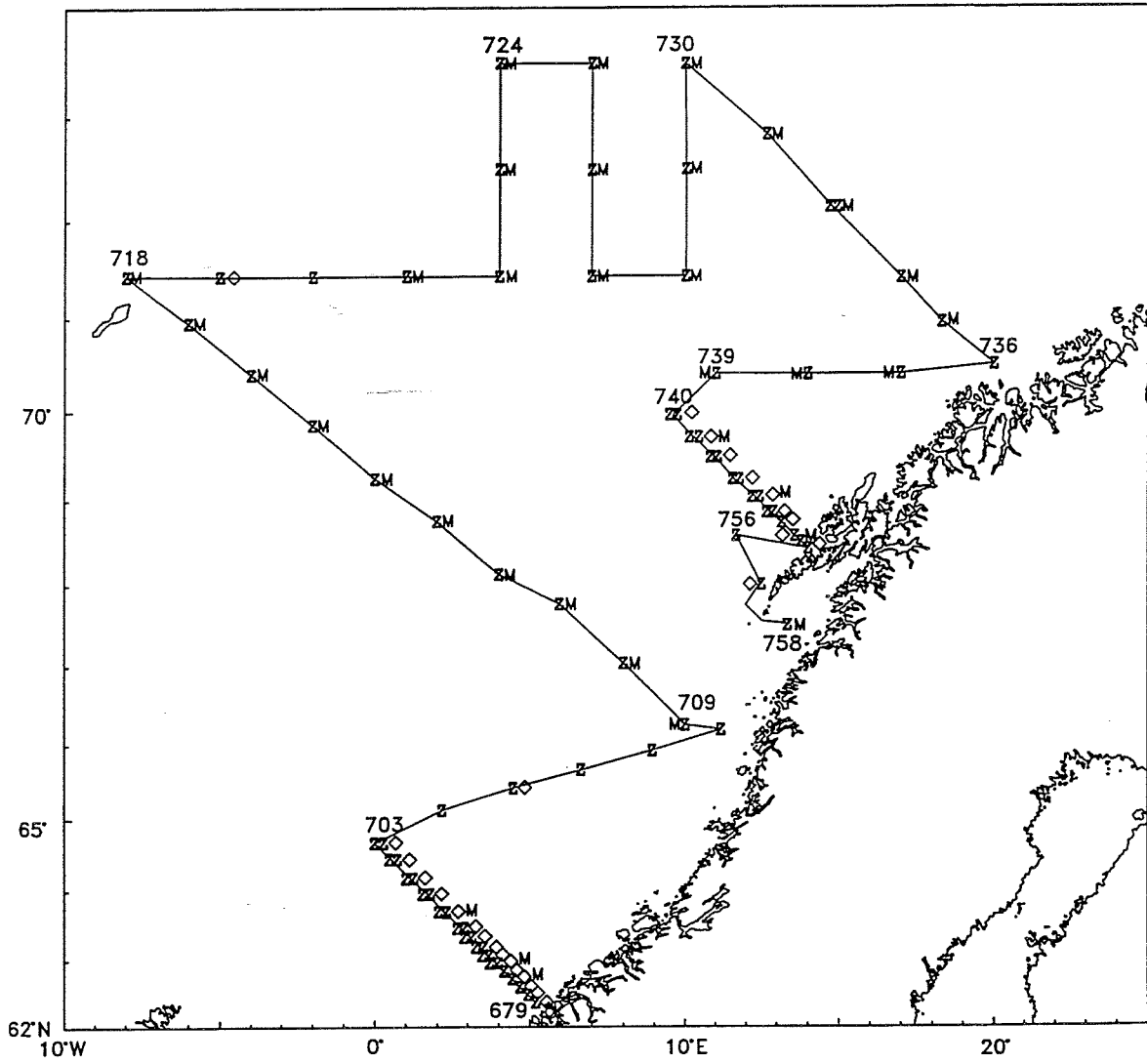
Feie-Shetland: st.no 645-652  
 656-658  
 662-667  
 671-677



25 - 27 July 1995  
Cruise no 1995 012

z CTD st.no 678

"G.O.Sars"



29 Jul - 15 Aug 1995

Cruise no 1995.13

z CTD st.no 679 - 758

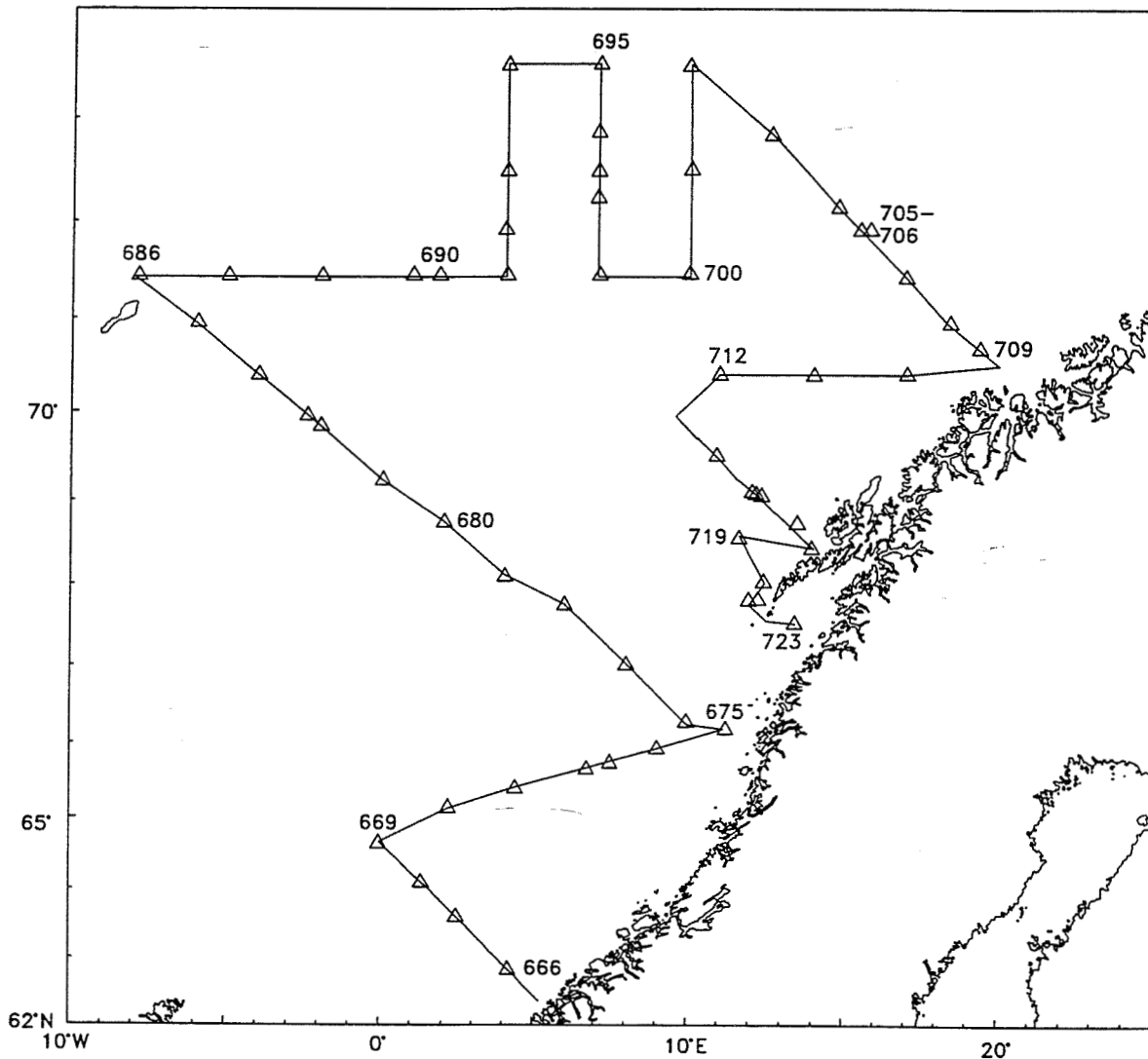
M PLANKTON st. (Mocness st.)

◇ PLANKTON st. (WP II net)

"G.O. Sars"

Standard section Svinøy nw st.no 679-703

" " Gimsøy nw st.no 740-755

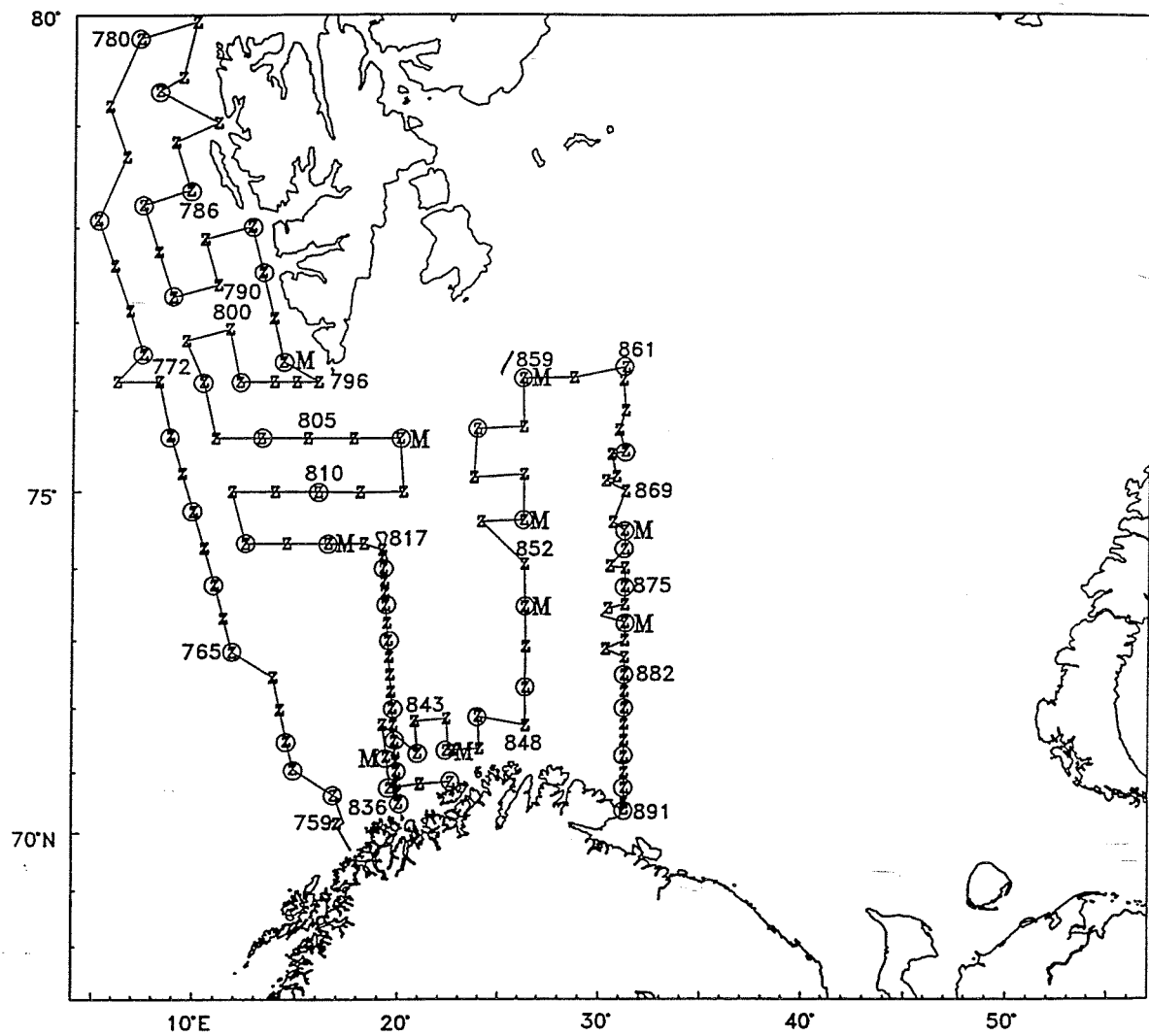


29 Jul - 15 Aug 1995

△ Pel. TRAWL st.no 666-723

"G.O. Sars"

Cruise no 1995.13

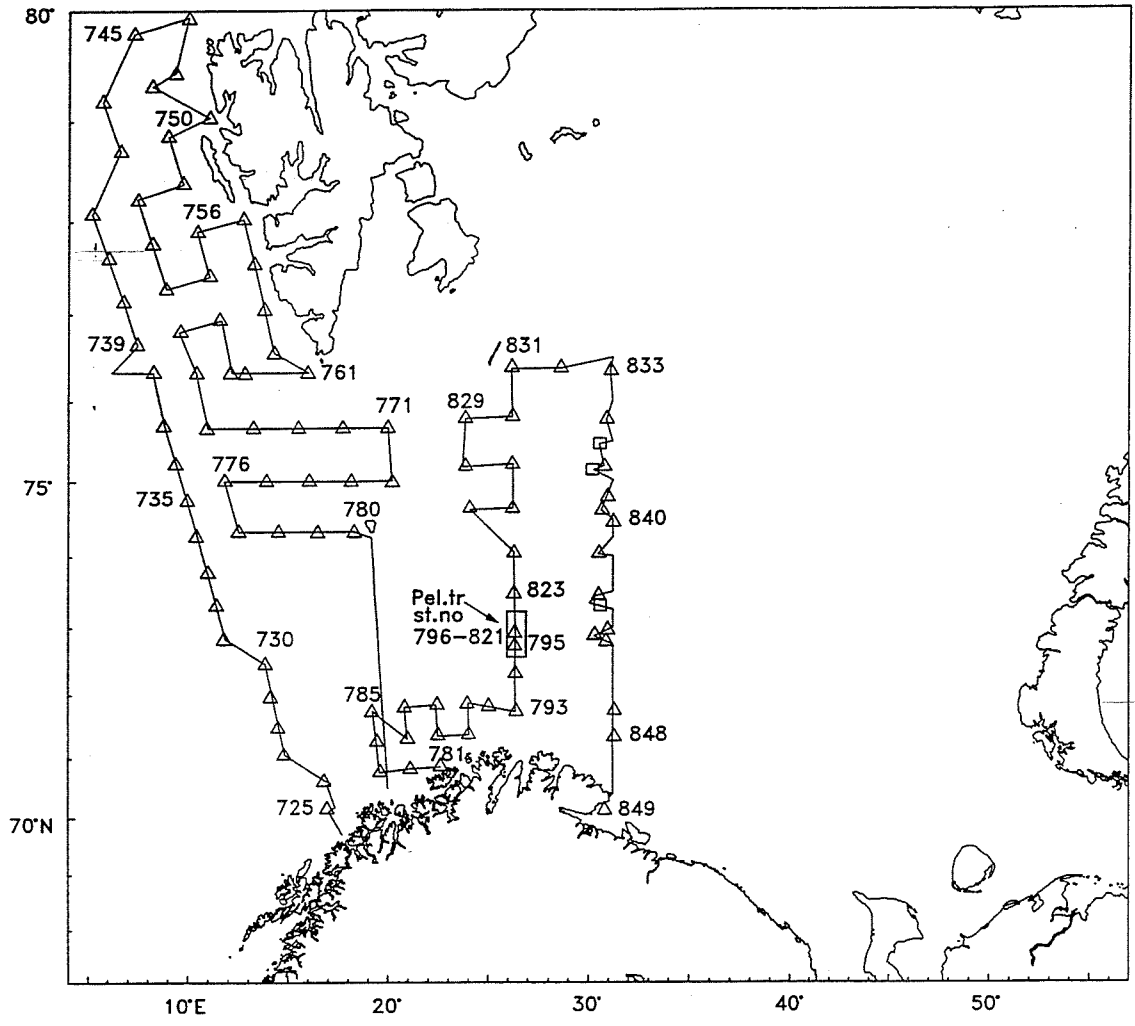


16 Aug - 10 Sep 1995  
 Cruise no 1995 902

z CTD st.no 759-891 "G. O. Sars"  
 ⊙ CTD and PLANKTON st. (WP-2net)  
 M Mocness st.

Standard sections Fugløya Bear Isl.: st.no 817-836  
 Vardø N: st.no 861-891  
 Bear Island W: st.no 813-816  
 Sørkapp: st.no 796-799,802,772-773

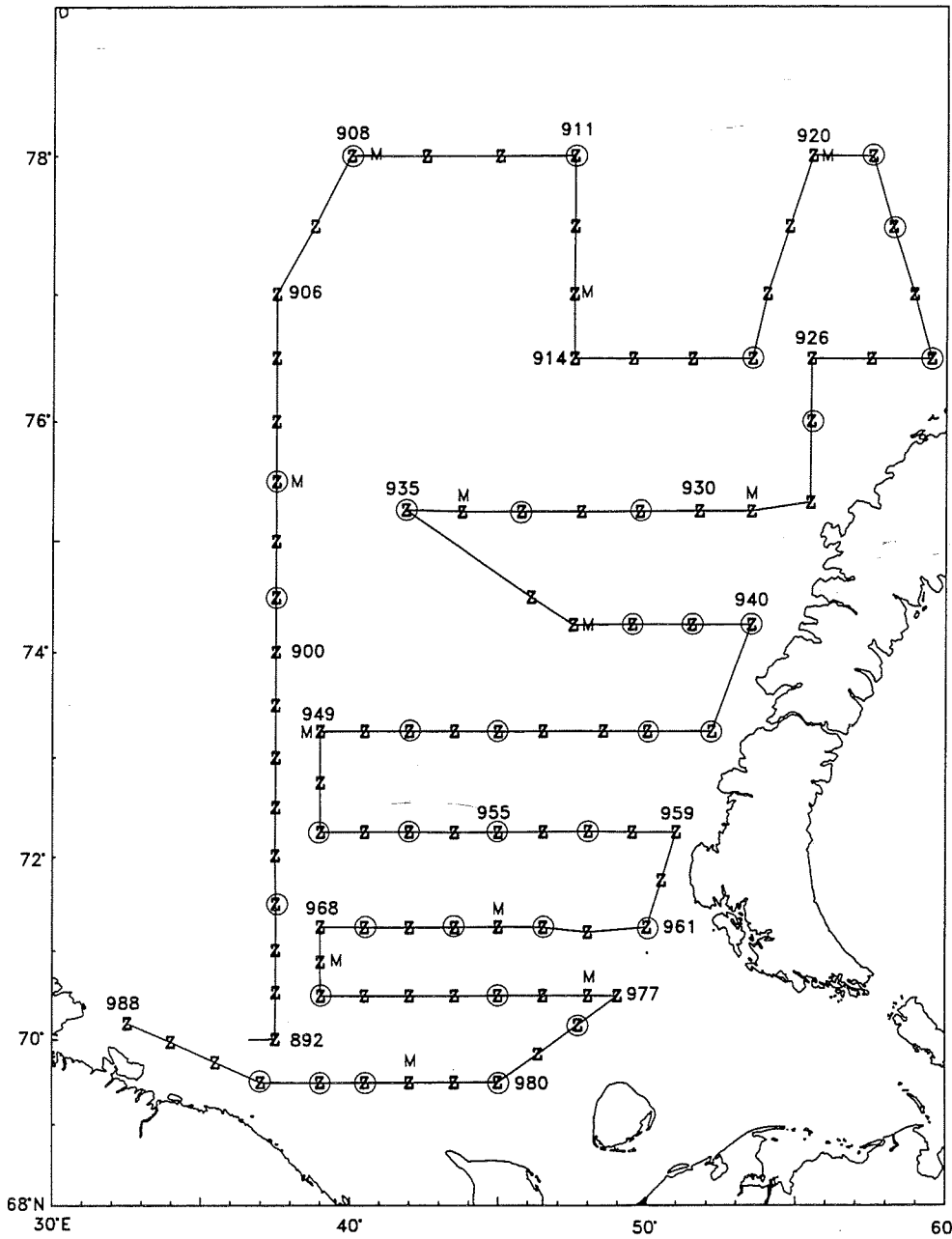




16 Aug - 10 Sep 1995  
 Cruise no 1995.902

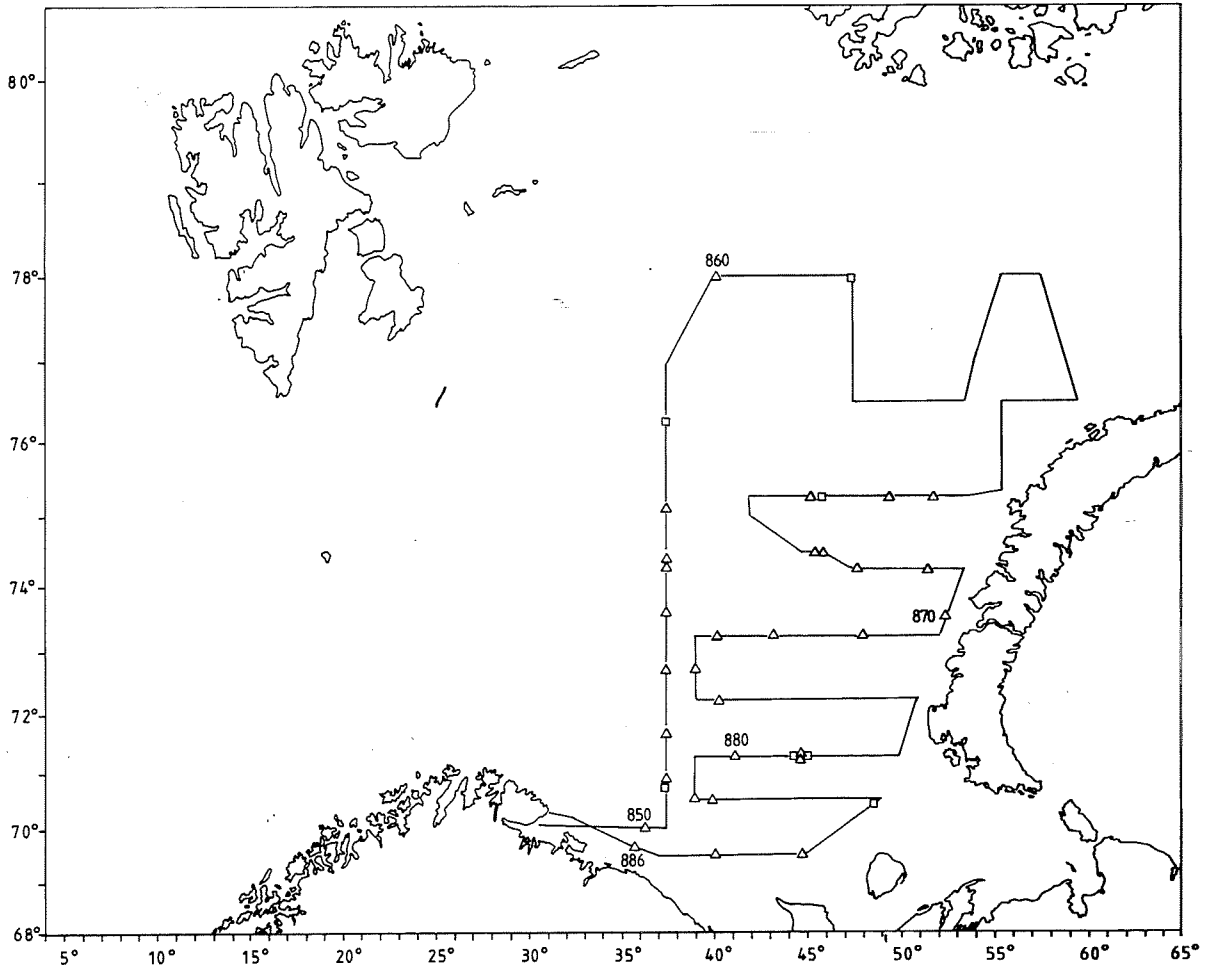
□ Δ TRAWL st.no 725 -849  
 (Δ Pel.tr., □ Bottom tr.)

"G. O. Sars"

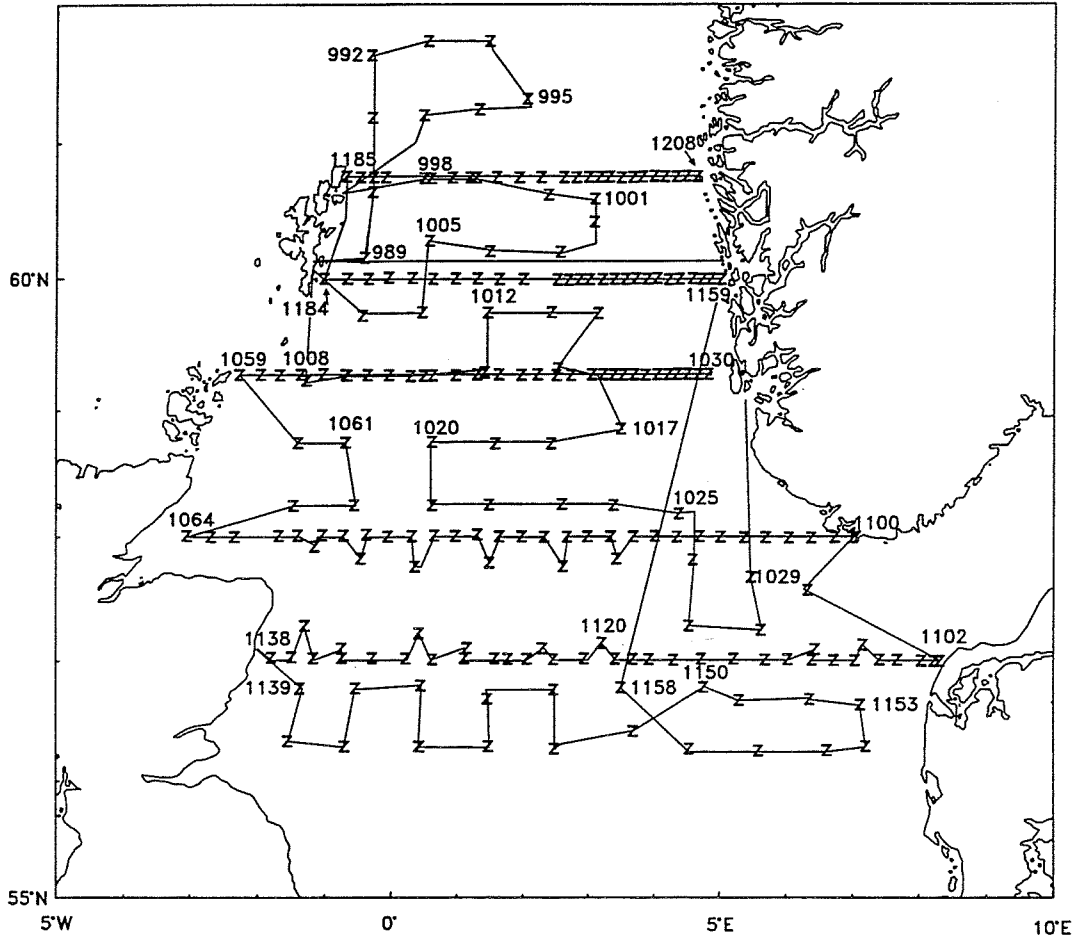


13 Sep - 1 Oct 1995 z CTD St.no 892-988 "G.O. Sars"  
 Cruise no 1995 904 ⊗ CTD and PLANKTON St. (WP-II net)  
 M Mocness st.

Standard section Semøyene N:st.no 892-906



13 Sep - 1 Oct 1995    △ □ TRAWL St.no 850-886    "G.O. Sars"  
 Cruise no 1995 904    (△Pel.tr, □bottom tr.)



17 Oct - 16 Nov 1995

z CTD st.no 989-1208

"G.O. Sars"

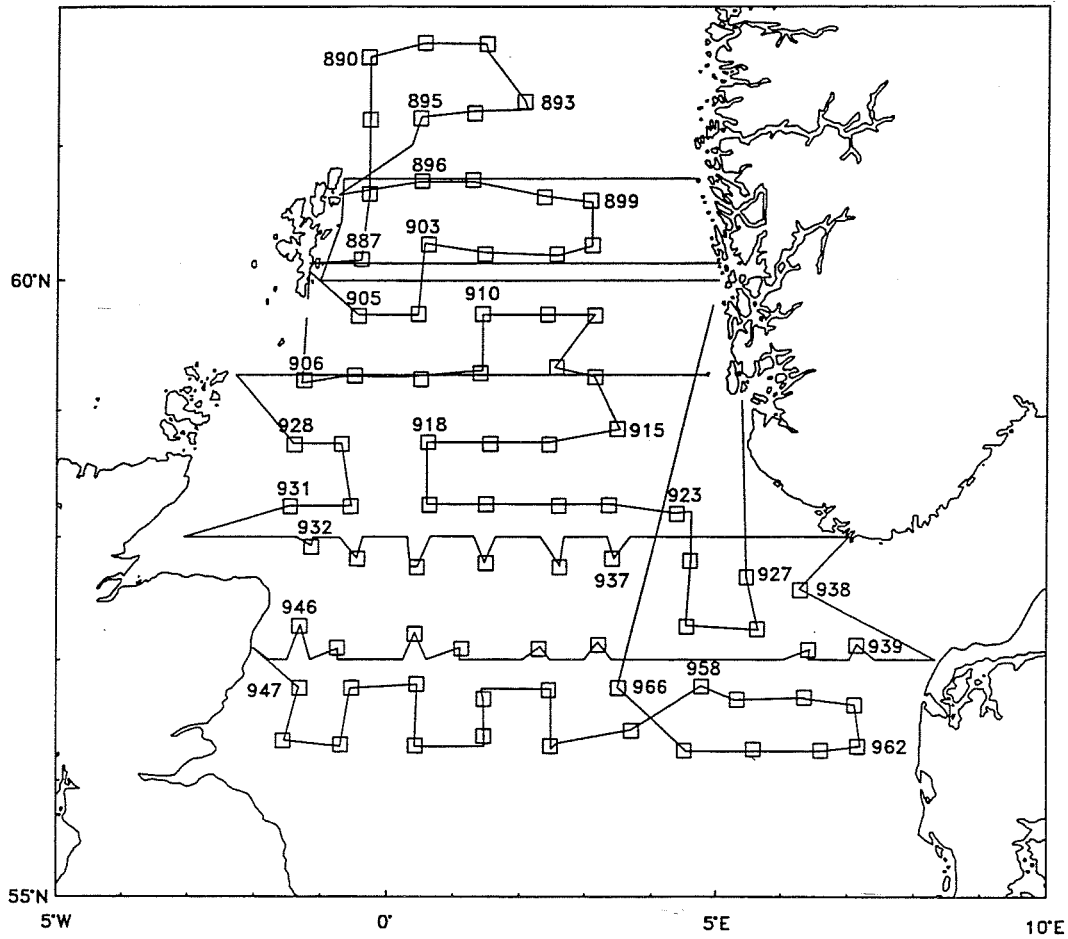
Cruise no 1995 905

Standard sections Feie - Shetland: st.no 1185-1208

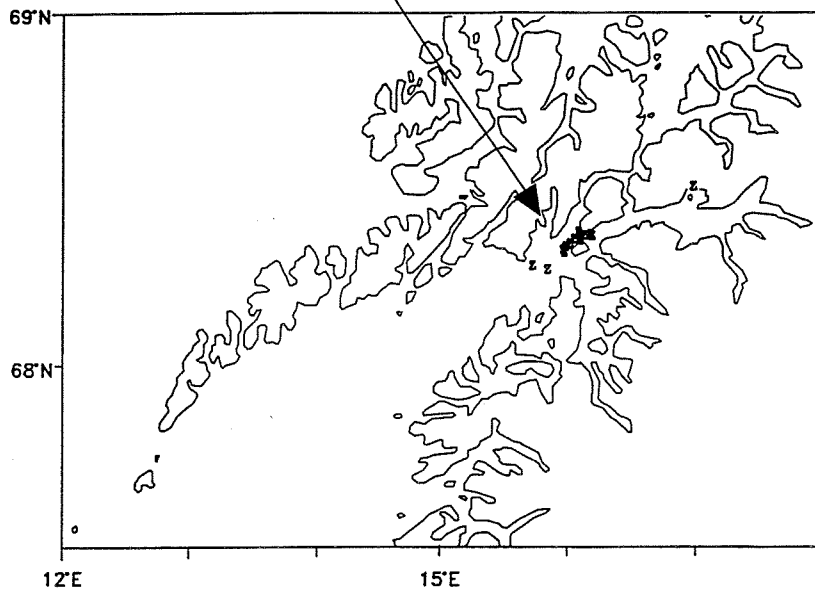
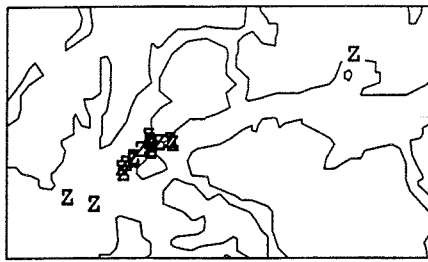
Slotterøy W: st.no 1159-1184

Utsira West: st.no 1030-1059

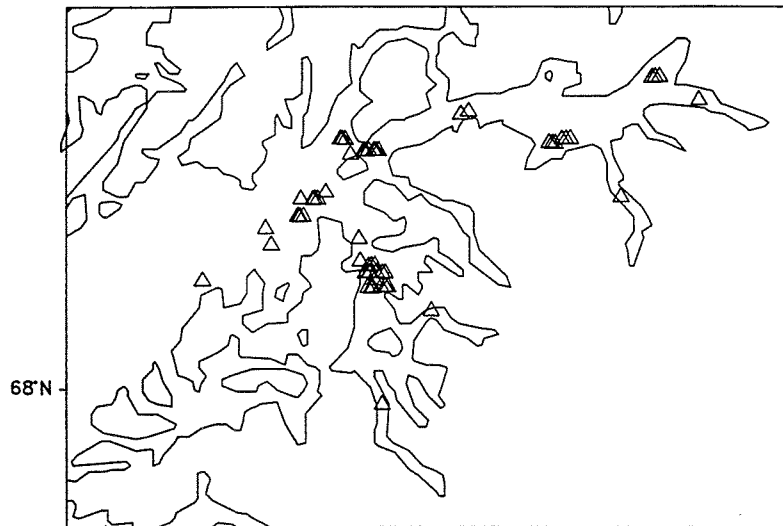
Hanstholm-Aberdeen: st.no 1102-1106, 1108-1110  
 1112-1119, 1121-1122  
 1124-1127, 1129,  
 1131-1133, 1135,  
 1137-1138



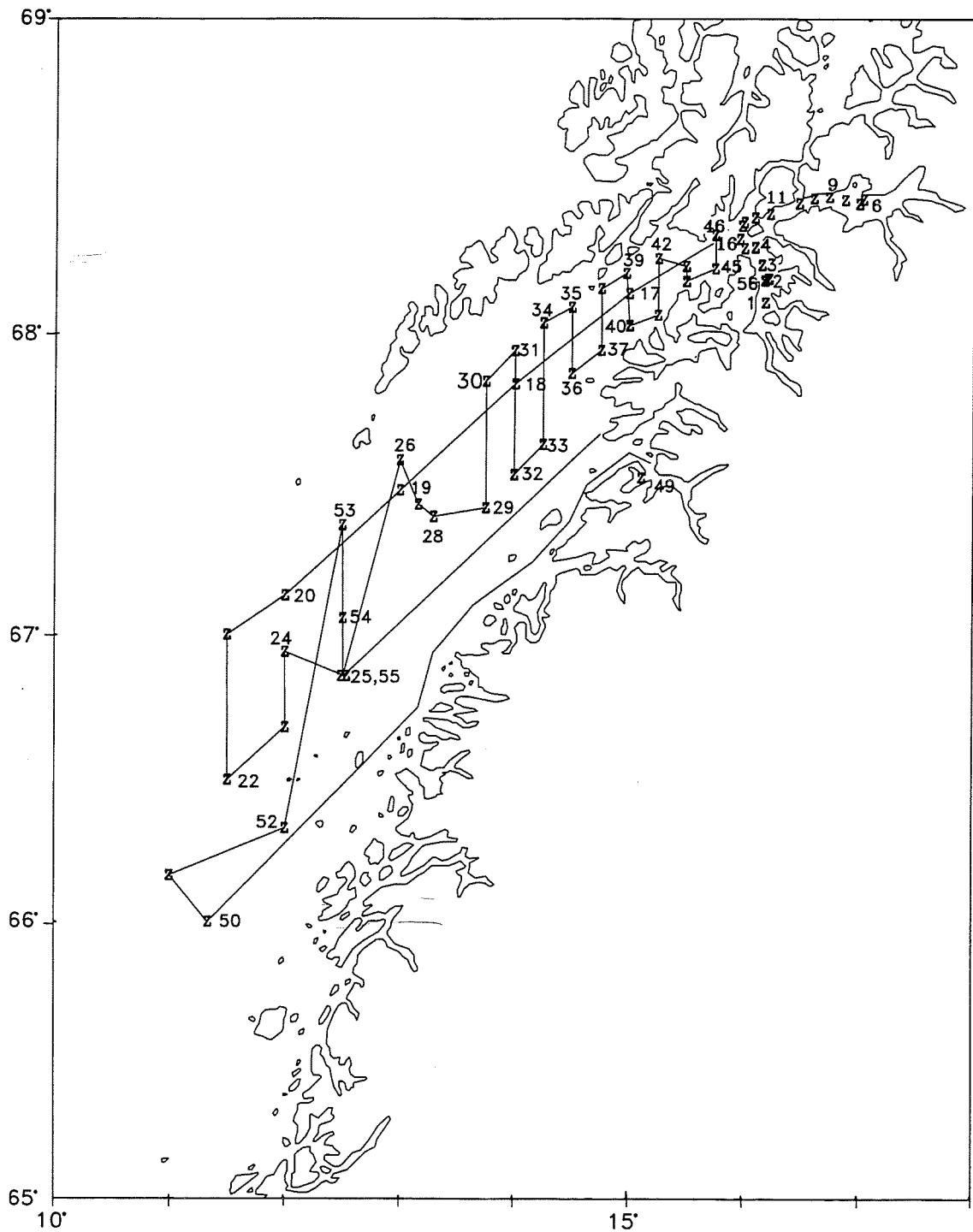
17 Oct - 16 Nov 1995 □ TRAWL st.no 887-966 (bottom tr.) "G.O. Sars"  
 Cruise no 1995.905



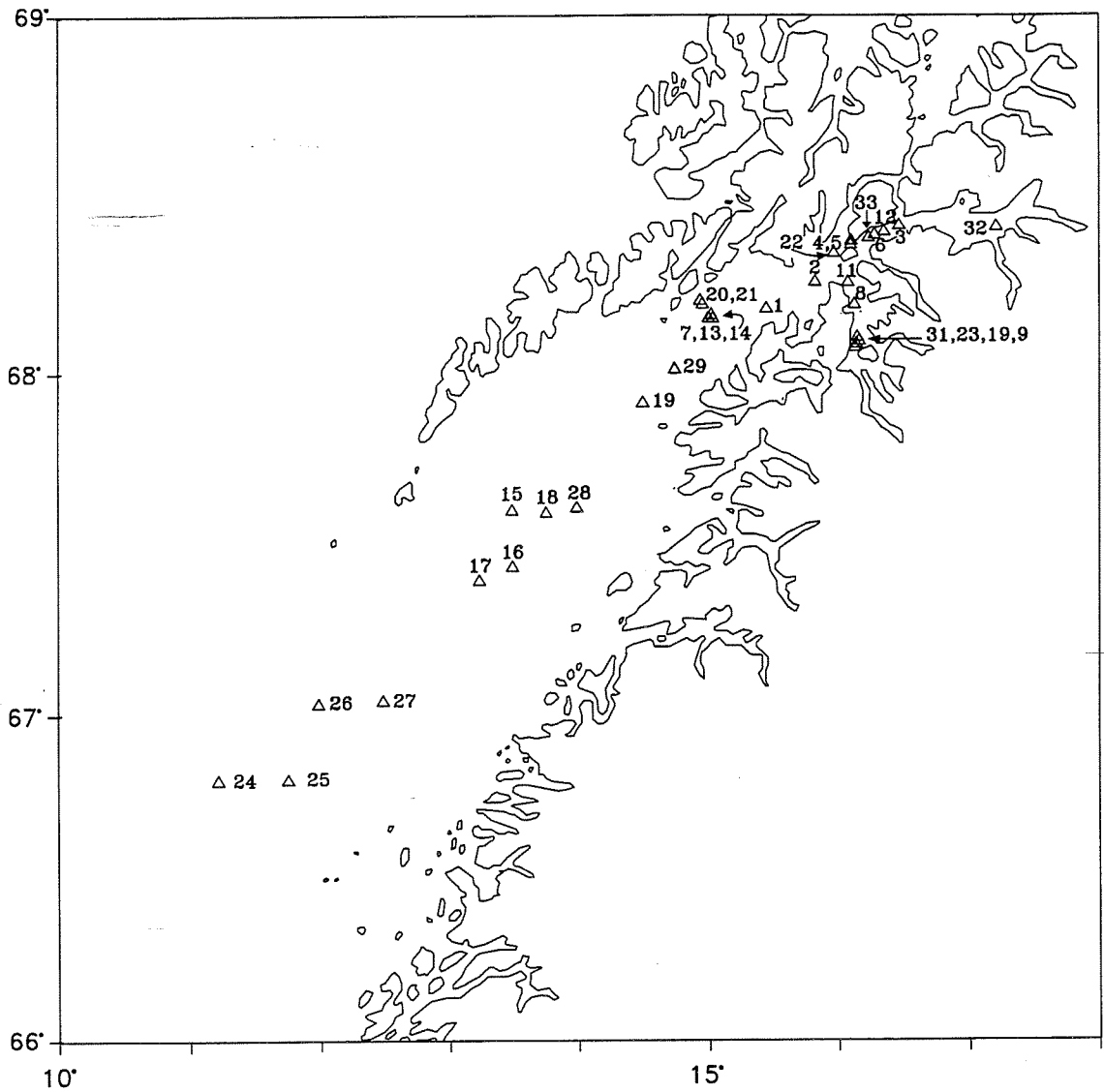
22 Nov - 15 Dec 1995 z CTD st.no 1209-1226 "G.O.Sars"  
Cruise no 1995017



15°E  
22 Nov - 15 Dec 1995 Δ Pel.trawl st.no 967-1025 "G.O.Sars"  
Cruise no 1995017

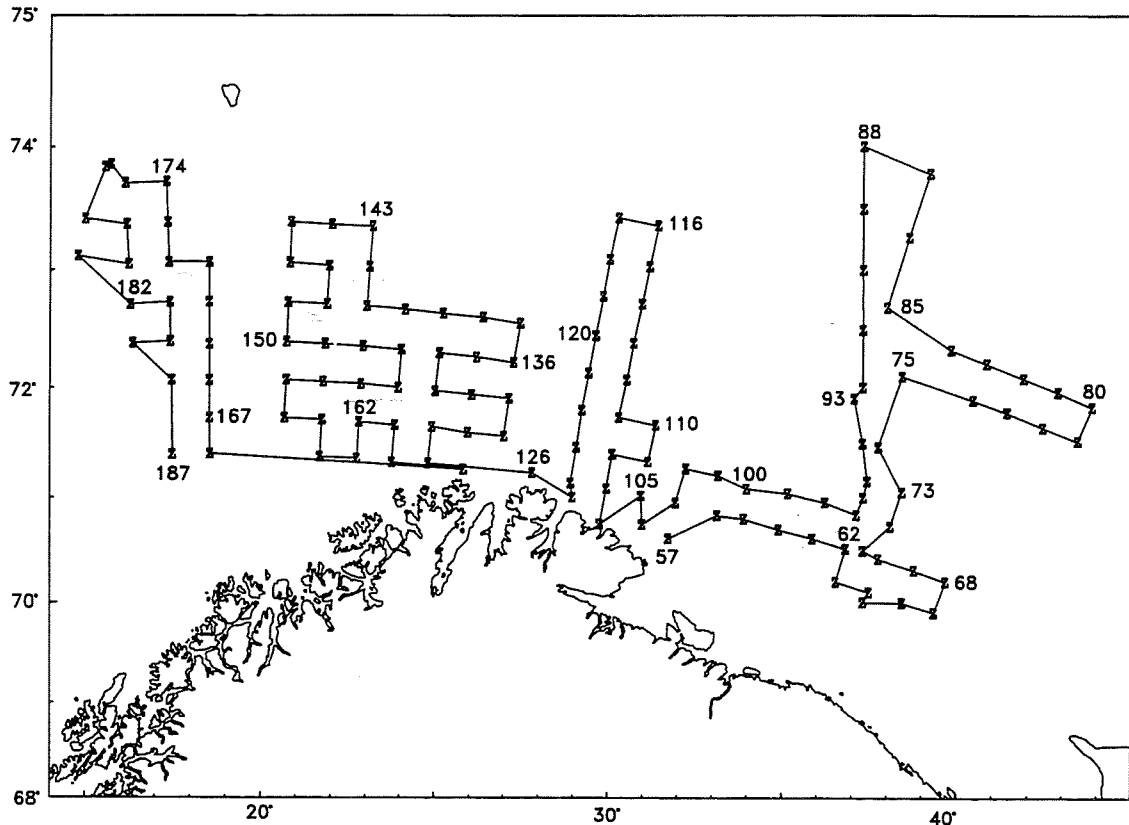


5-28 Jan 1995 z CTD st.no 1-56 "Johan Hjort"  
 Cruise no 1995 201



5-28 Jan 1995      △ TRAWL st.no 1-32      "Johan Hjort"  
 Cruise no 1995 201

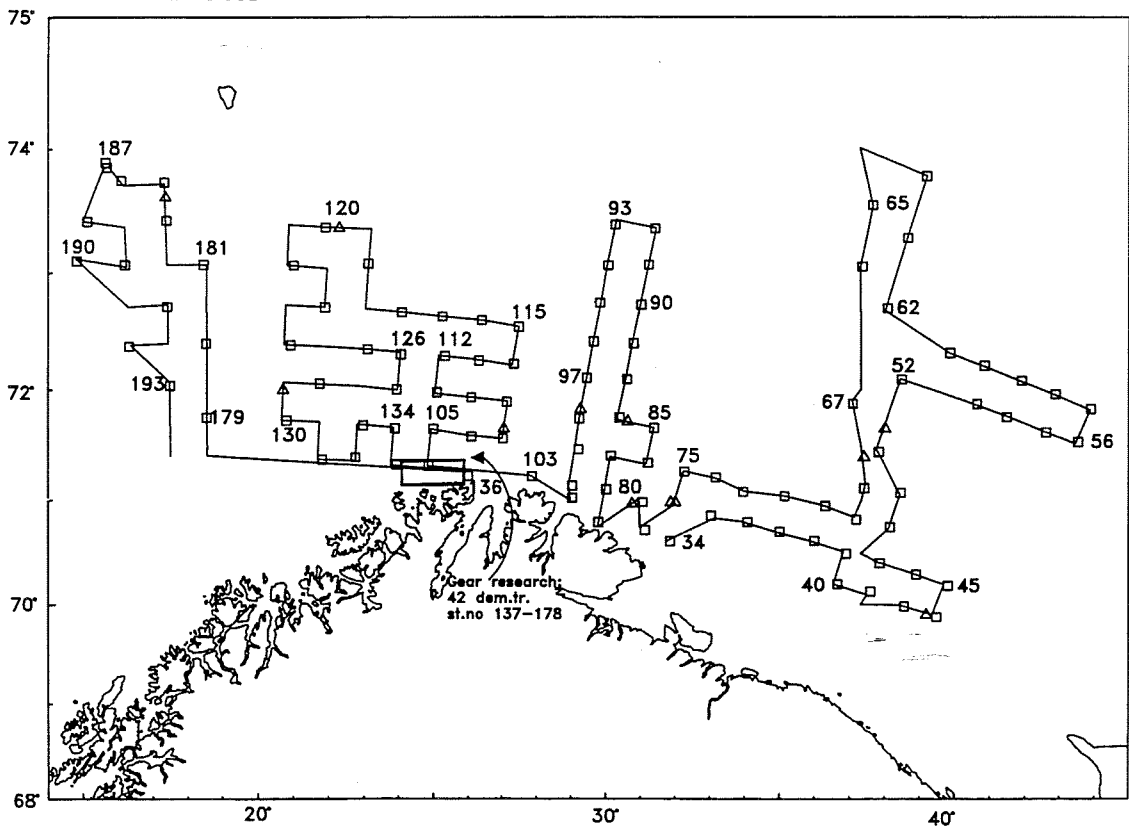




1 Feb - 2 Mar 1995  
Cruise no 1995 901

z CTD st.no 57 -187

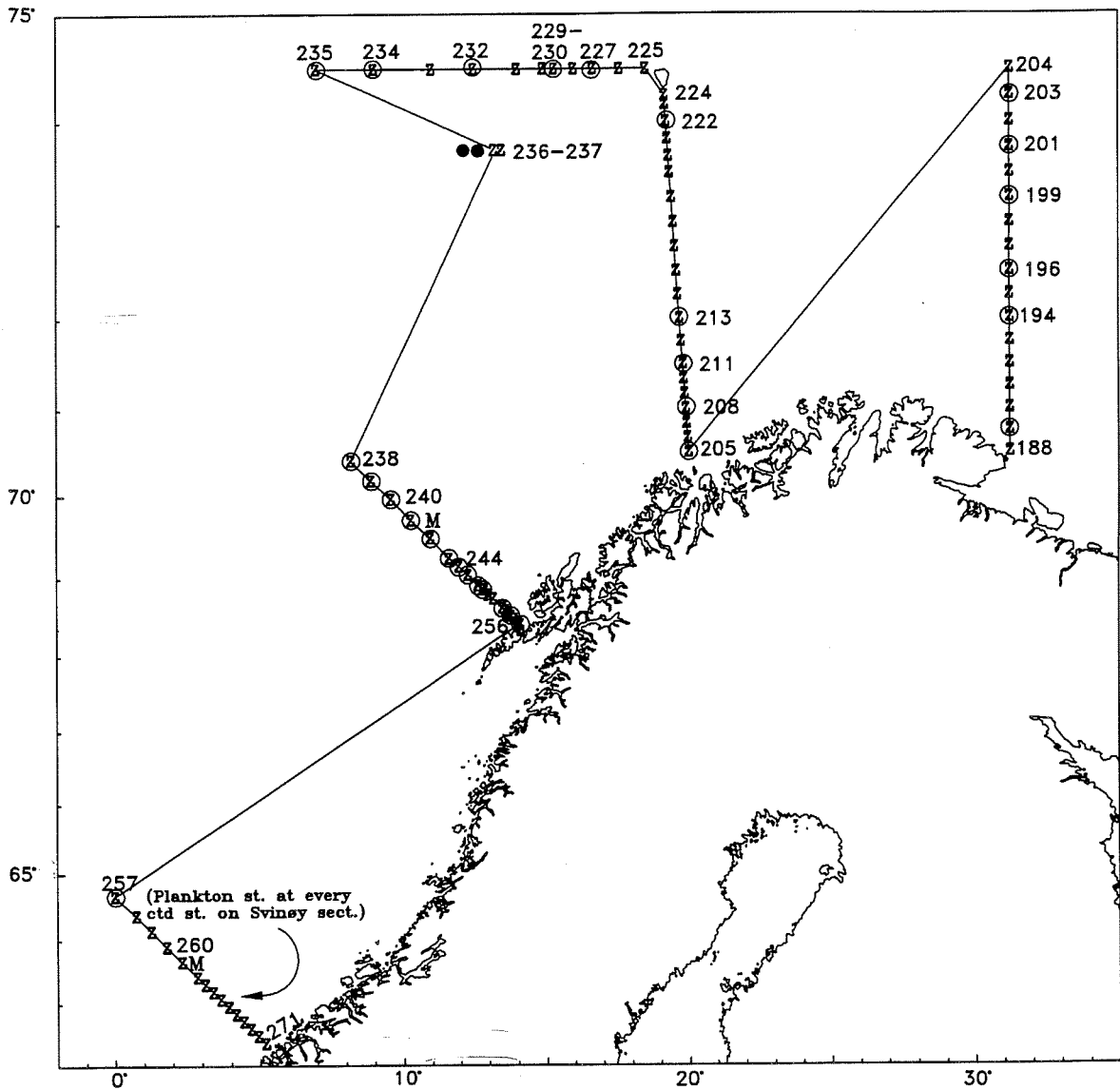
"Johan Hjort"



1 Feb - 2 Mar 1995  
Cruise no 1995 901

□ Dem.tr., △ Pel.tr.

"Johan Hjort"

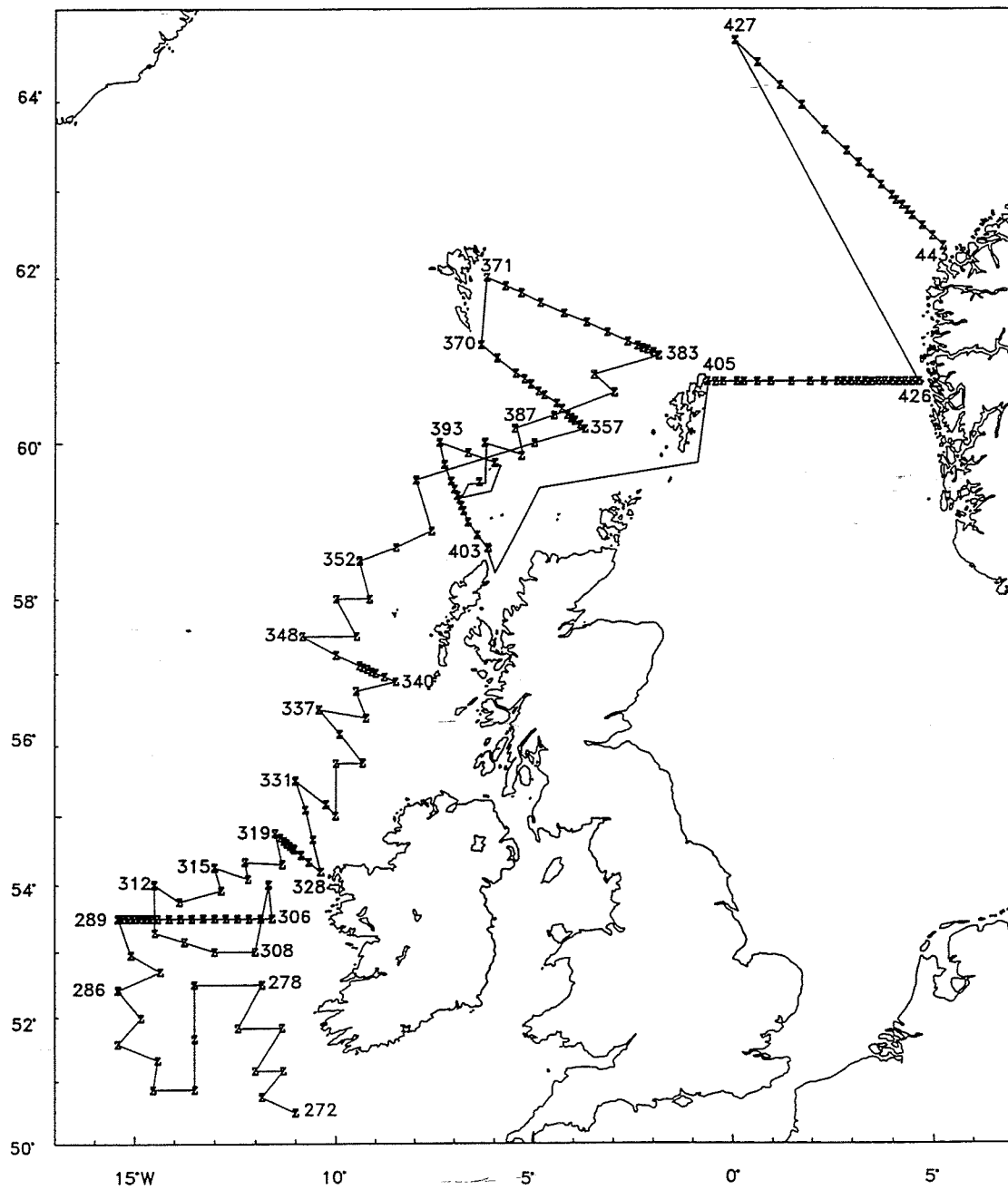


4 - 19 Mar 1995  
Cruise no 1995 203

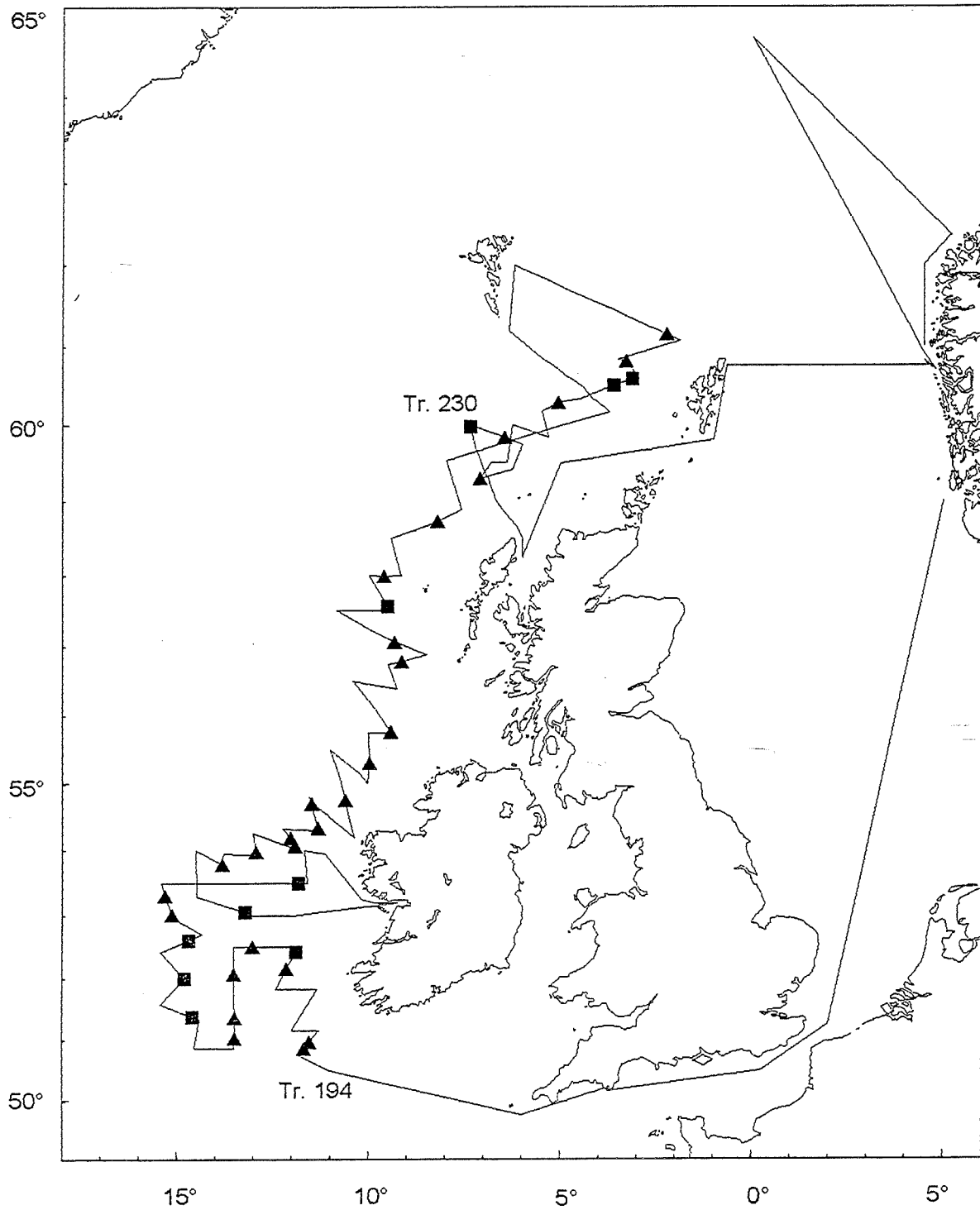
- z CTD st.no 188-271
- ⓪ CTD and PLANKTON st. (wp-2 net)
- M Mocness st.
- Grab st. (Sediment)

"Johan Hjort"

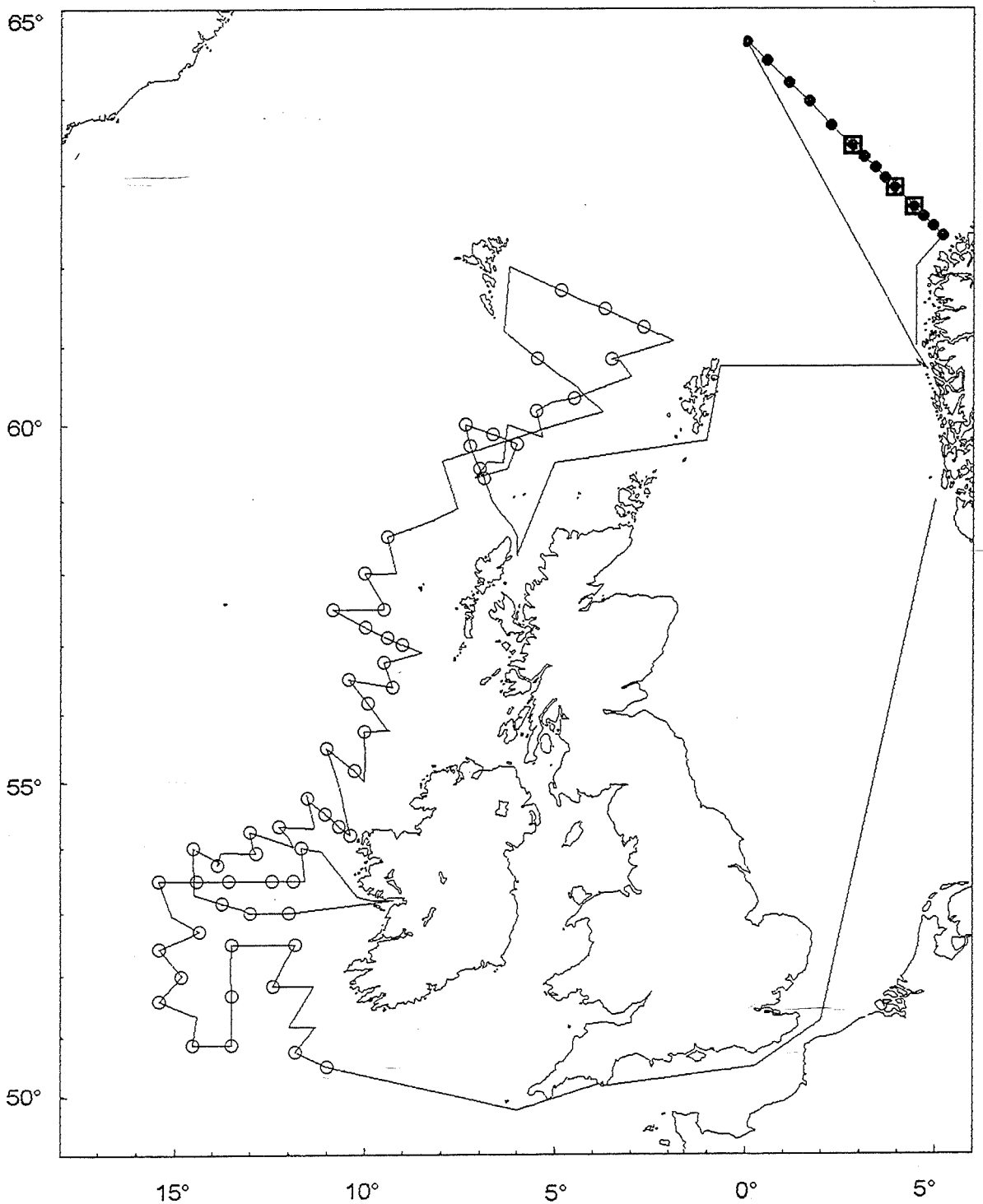
Standard section: Vardø N: st.no 188-204  
 Fugløya-Bear Island: st.no 205-224  
 Bear Island W: st.no 225-235  
 Gimøy NW: st.no 238-256  
 Svinøy NW: st.no 257-271



21 Mar - 25 Apr 1995 z CTD st.no 272-443 "Johan Hjort"  
 Cruise no 1995 204 Standard section Svinøy: st.no 427-443  
 " " Feie-Shetland: st.no 405-426



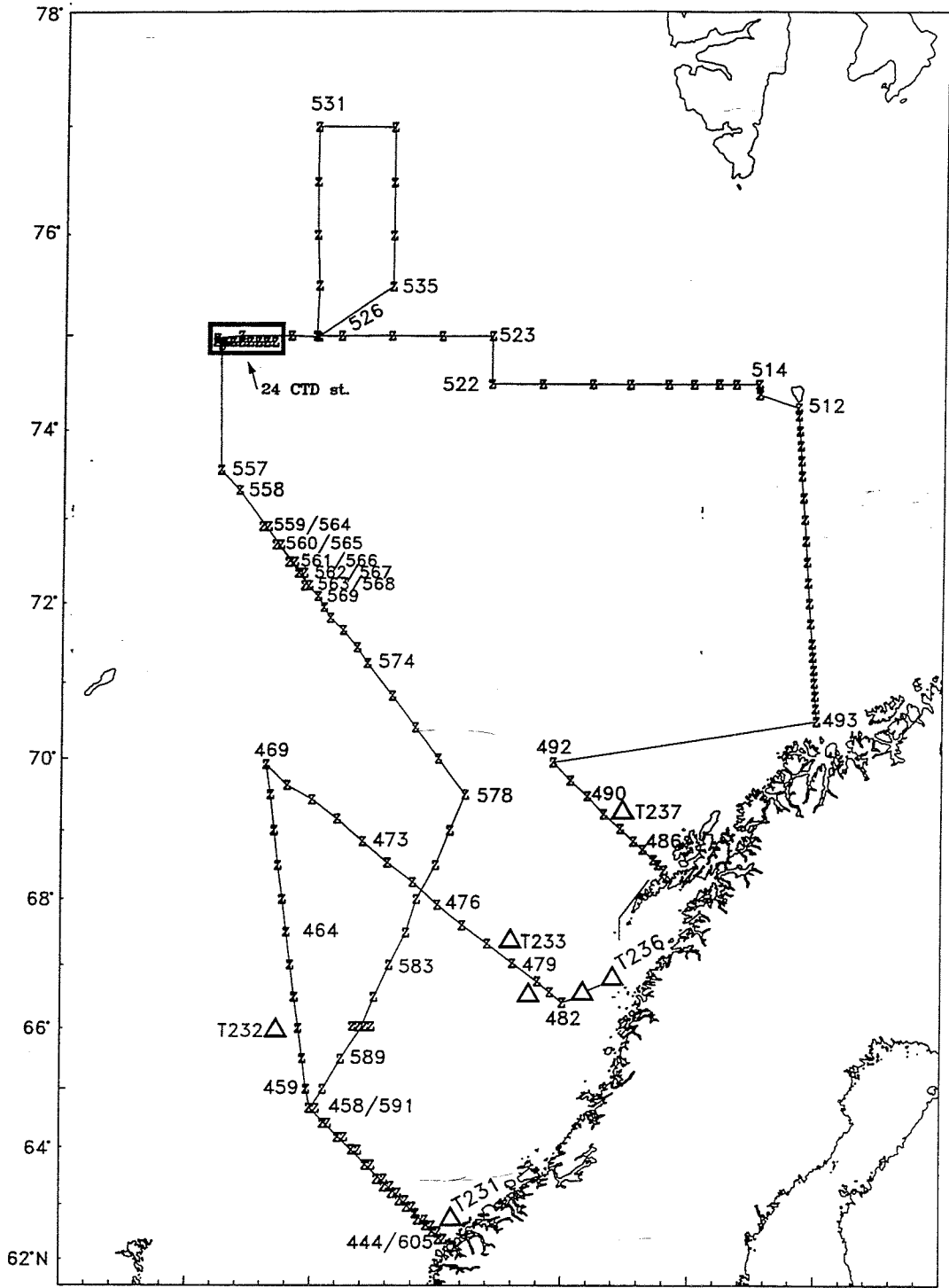
21 Mar - 25 Apr 1995  $\triangle$   $\square$  TRAWL st.no 194-230 "Johan Hjort"  
 Cruise no 1995204  $\triangle$  Pel.tr.  
 $\square$  Dem.tr.



21 Mar - 25 Apr 1995  
 Cruise no 1995204

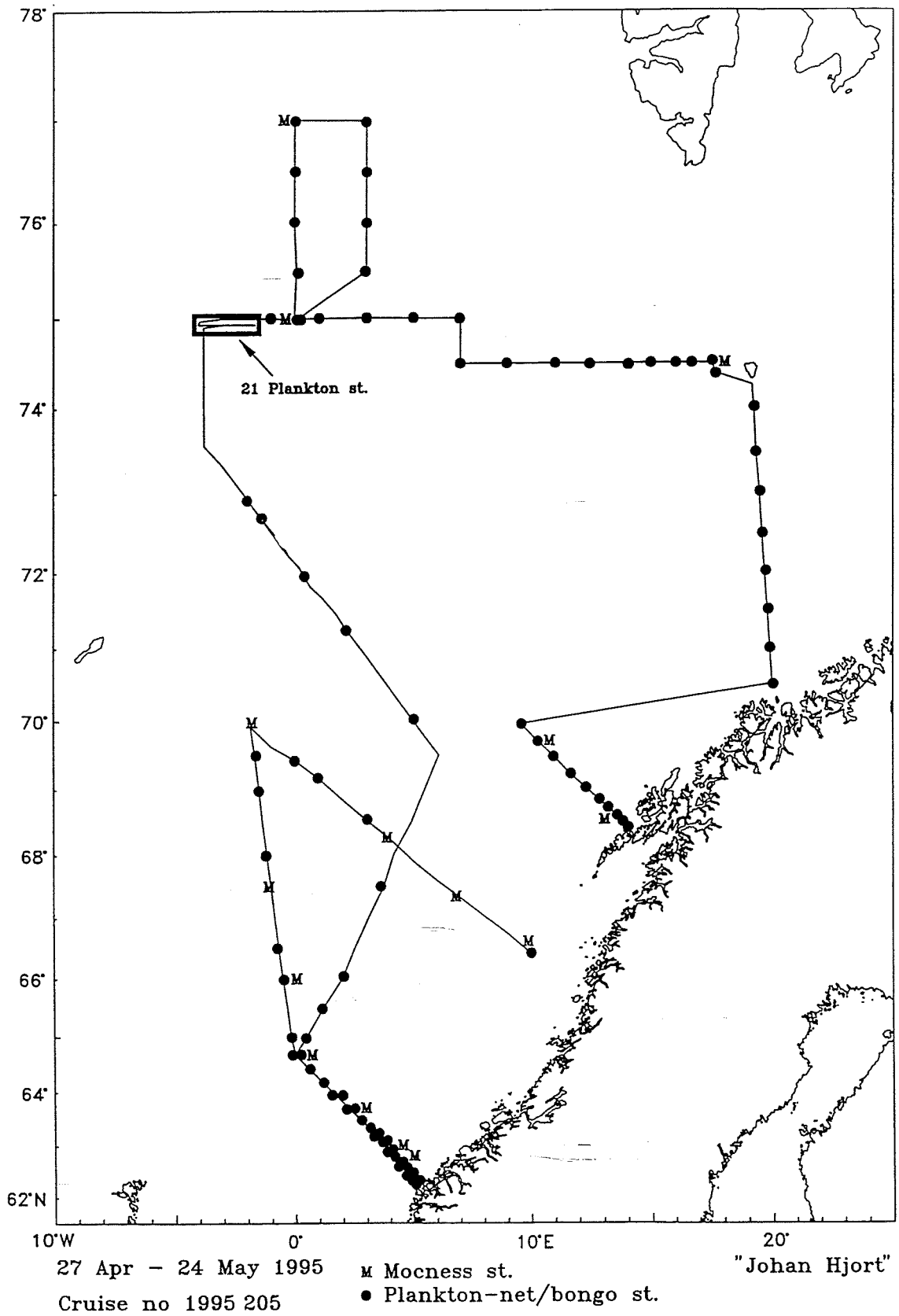
- Bongo
- Mocness
- WP-2 net

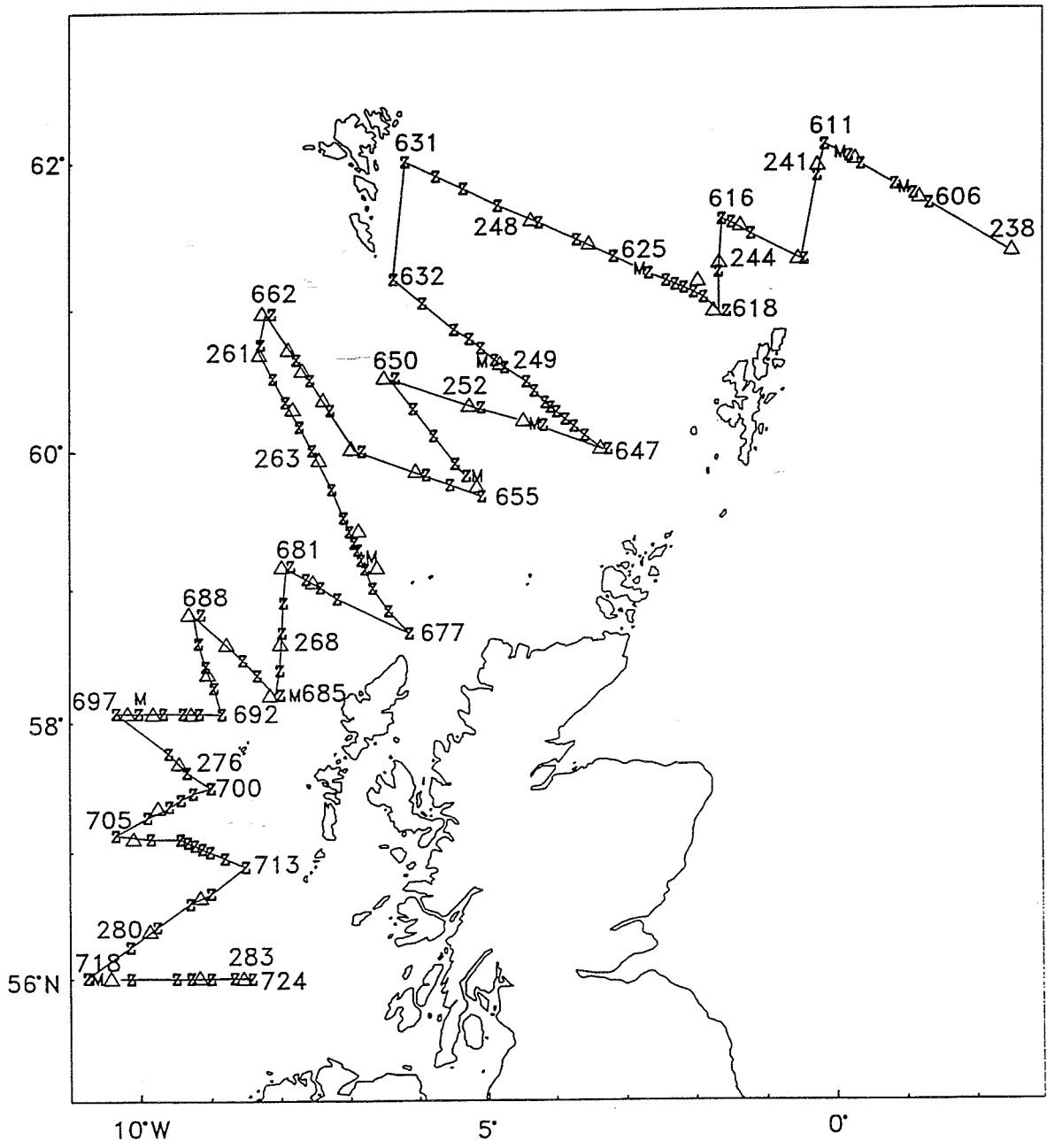
"Johan Hjort"



27 Apr - 24 May 1995 z CTD st.no 444-605 "Johan Hjort"  
 Cruise no 1995205 Δ TRAWL st.no 231-237 (Pel.tr)

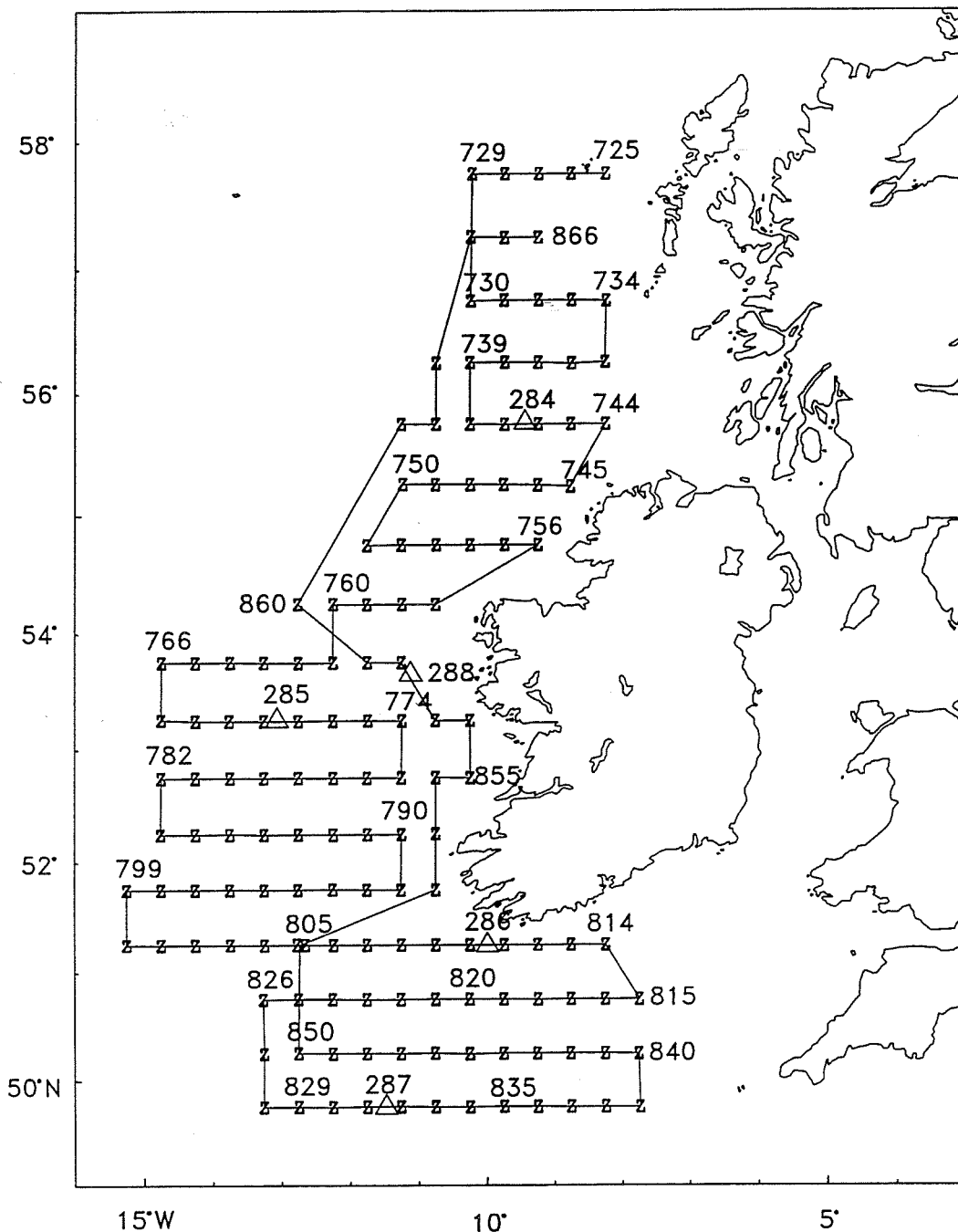
Standard section Svinøy NW: st.no 444-458 and 591-605  
 Fugløya Bear Island: st.no 493-512





29 May - 12 Jun 1995      z CTD st.no 606-724      "Johan Hjort"  
 Cruise no 1995 206 (I part)    Δ Pel.TRAWL st.no 238-283  
    M PLANKTON st. (Mocness)





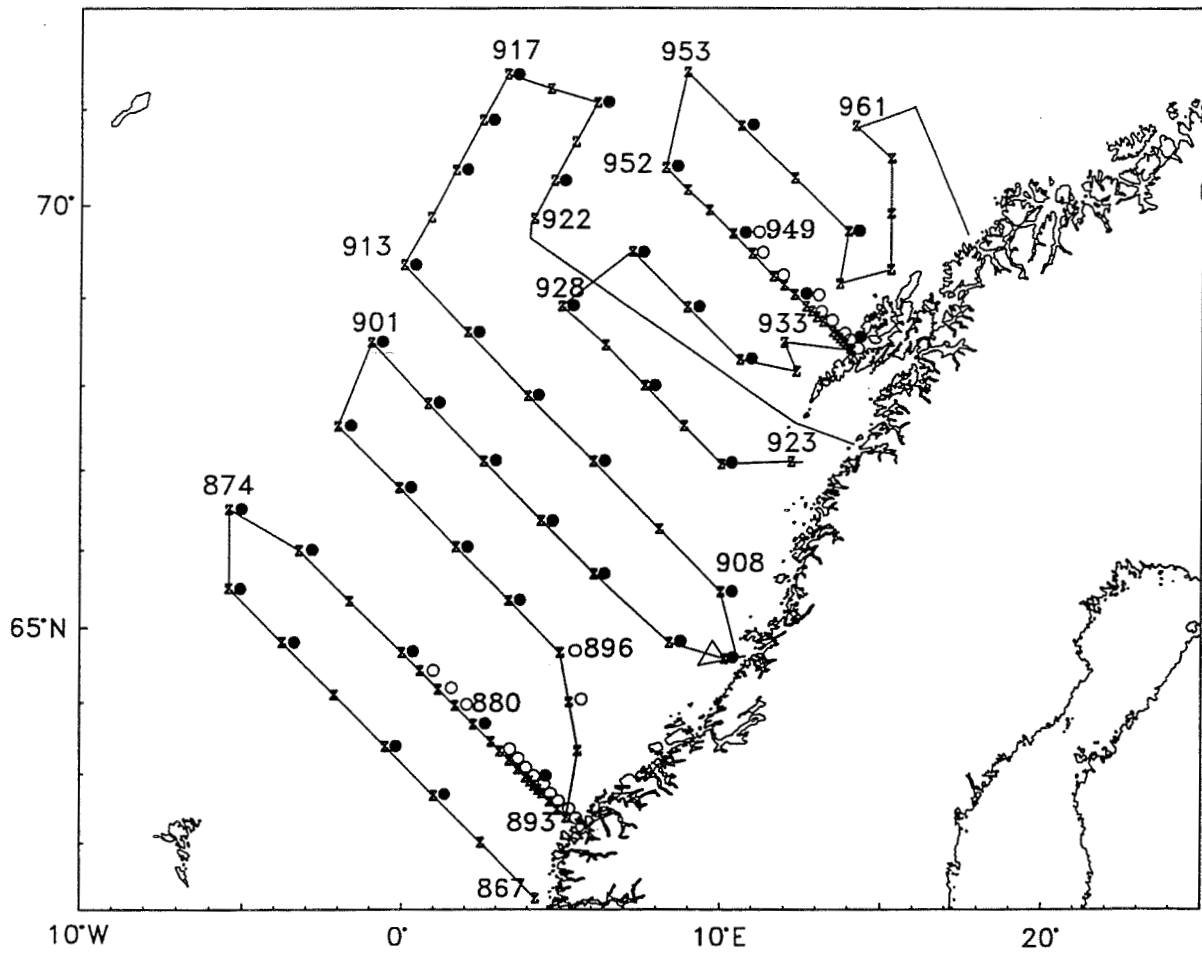
Cruise no 1995 206 (part II)

"Johan Hjort"

13 Jun - 4 Jul 1995 z CTD and Gulf III st.no 725-866

Gulf III taken at every ctd.st. except for st 851.

△ Pel. TRAWL st.no 284-288



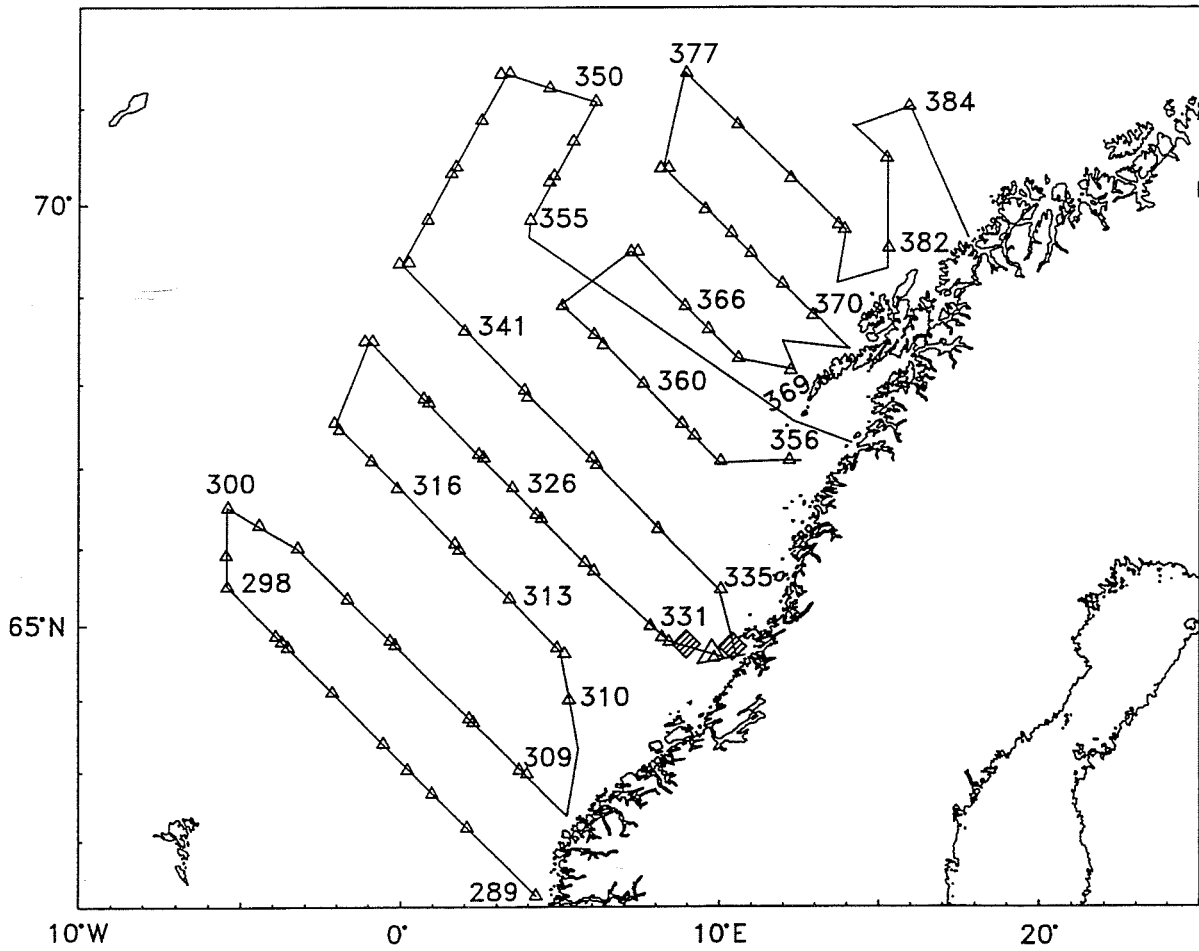
7 Jul - 2 Aug 1995  
 Cruise no 1995.207

z CTD st.no 867-961

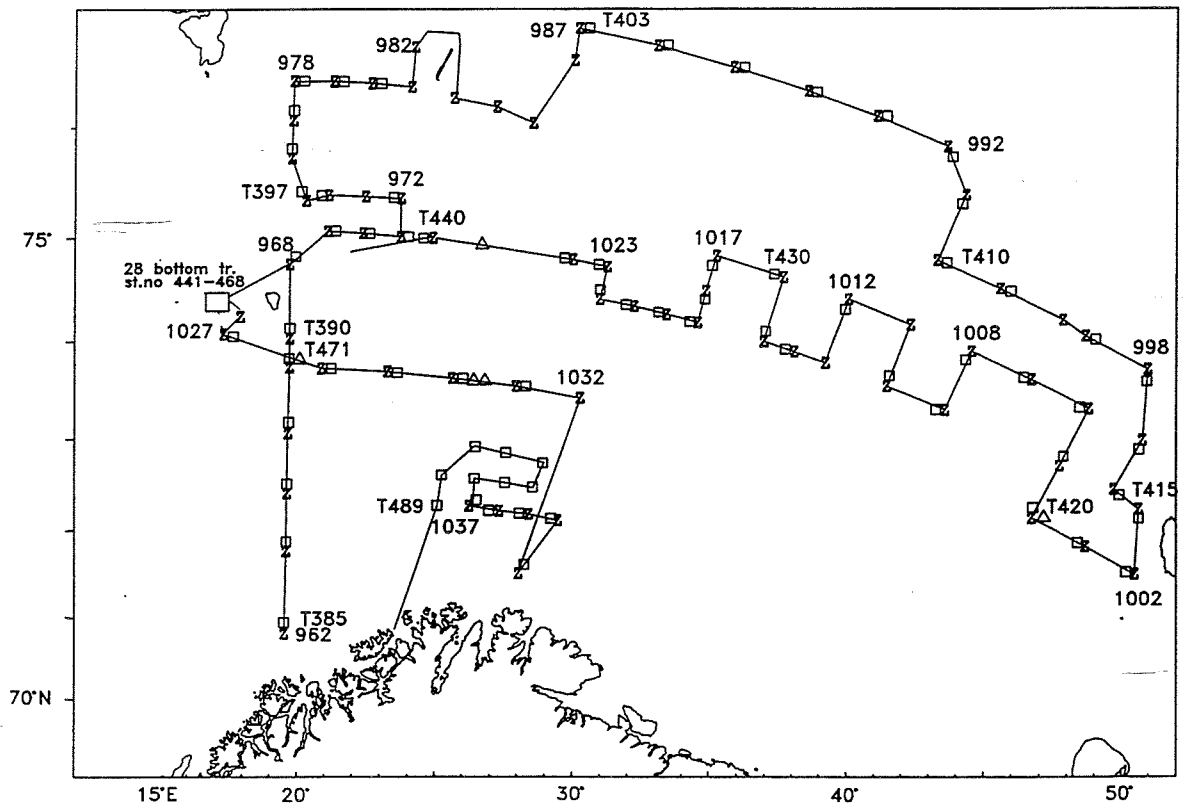
"Johan Hjort"

● Mocness st.  
 ○ WP-2 net

Standard section Svinøy NW: st.no 875-893  
 " " Gimsøy NW: st.no 934-952



7 Jul - 2 Aug 1995     $\triangle$  Pel TRAWL st.no 289-384    "Johan Hjort"  
 Cruise no 1995 207     $\square$  Long line



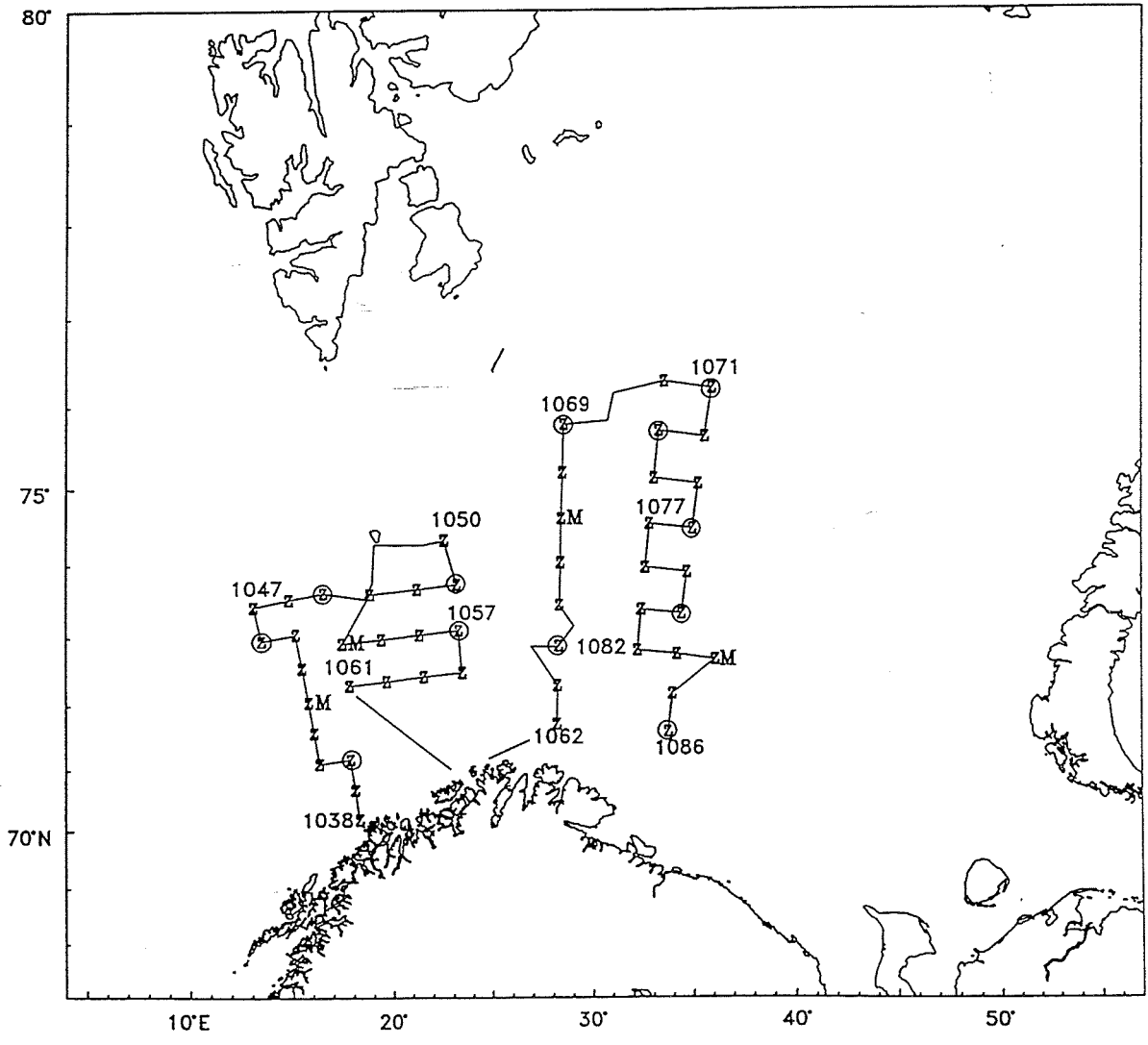
4 - 23 Aug 1995

z CTD st.no 962 -1037

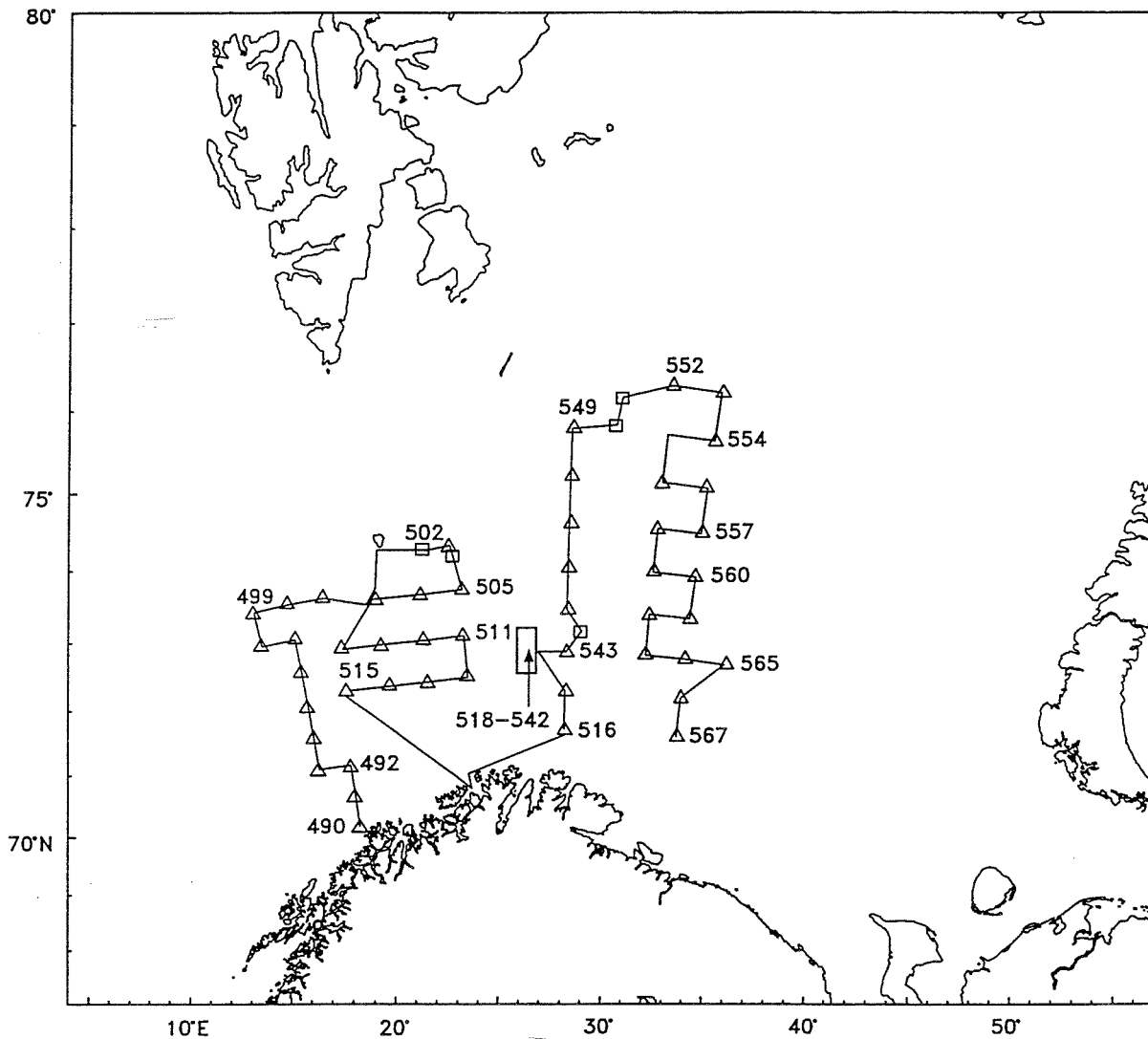
"Johan Hjort"

Cruise no 1995 903

□△TRAWL ST.no. 385-489 (□Bottom tr. △ Pel tr.)



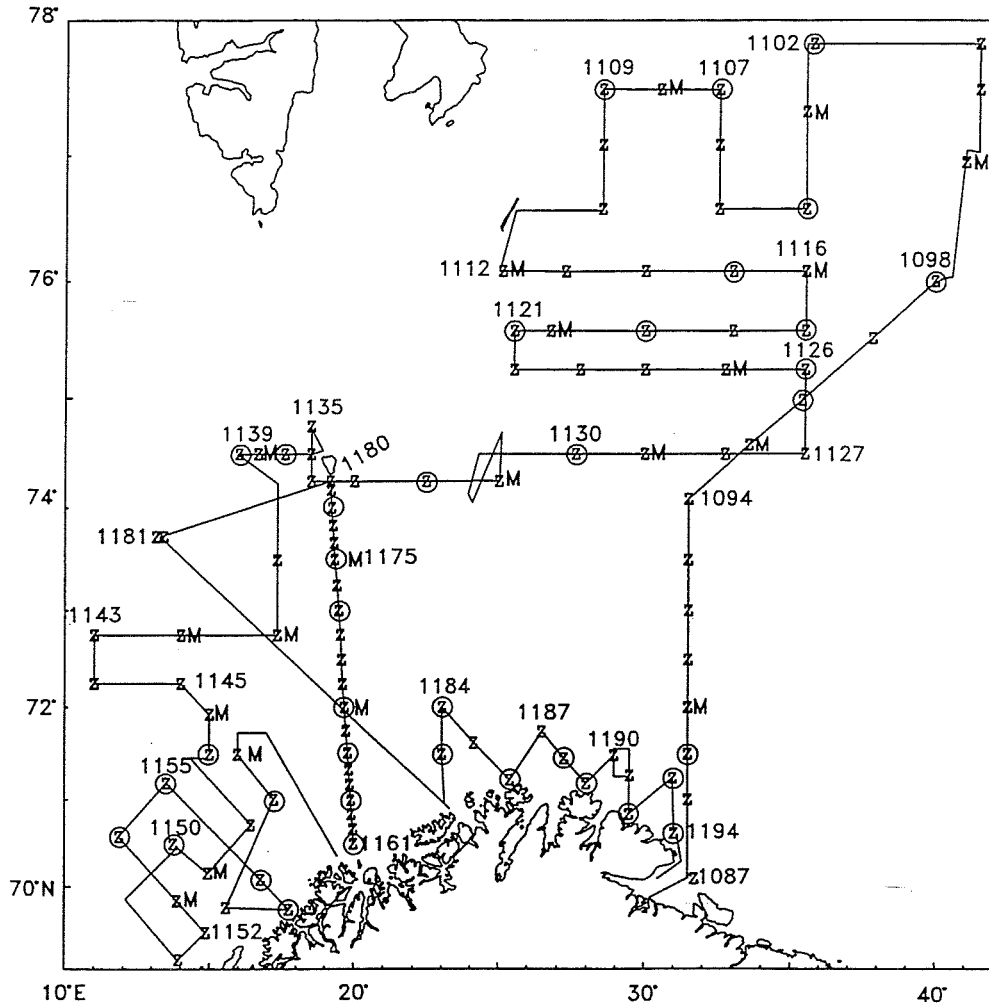
25 Aug - 10 Sep 1995 z CTD st.no 1038-1086 "Johan Hjort"  
 ⊗ CTD and PLANKTON st. (WP2-net)  
 Cruise no 1995 902 M MOCNESS st.



25 Aug - 10 Sep 1995  
 Cruise no 1995 902

△□ TRAWL St.no 490-567  
 (△ Pel.tr, □ Bottom tr.)

"Johan Hjort"



12 Sep - 9 Oct 1995 z CTD st.no 1087-1194 "J. Hjort"

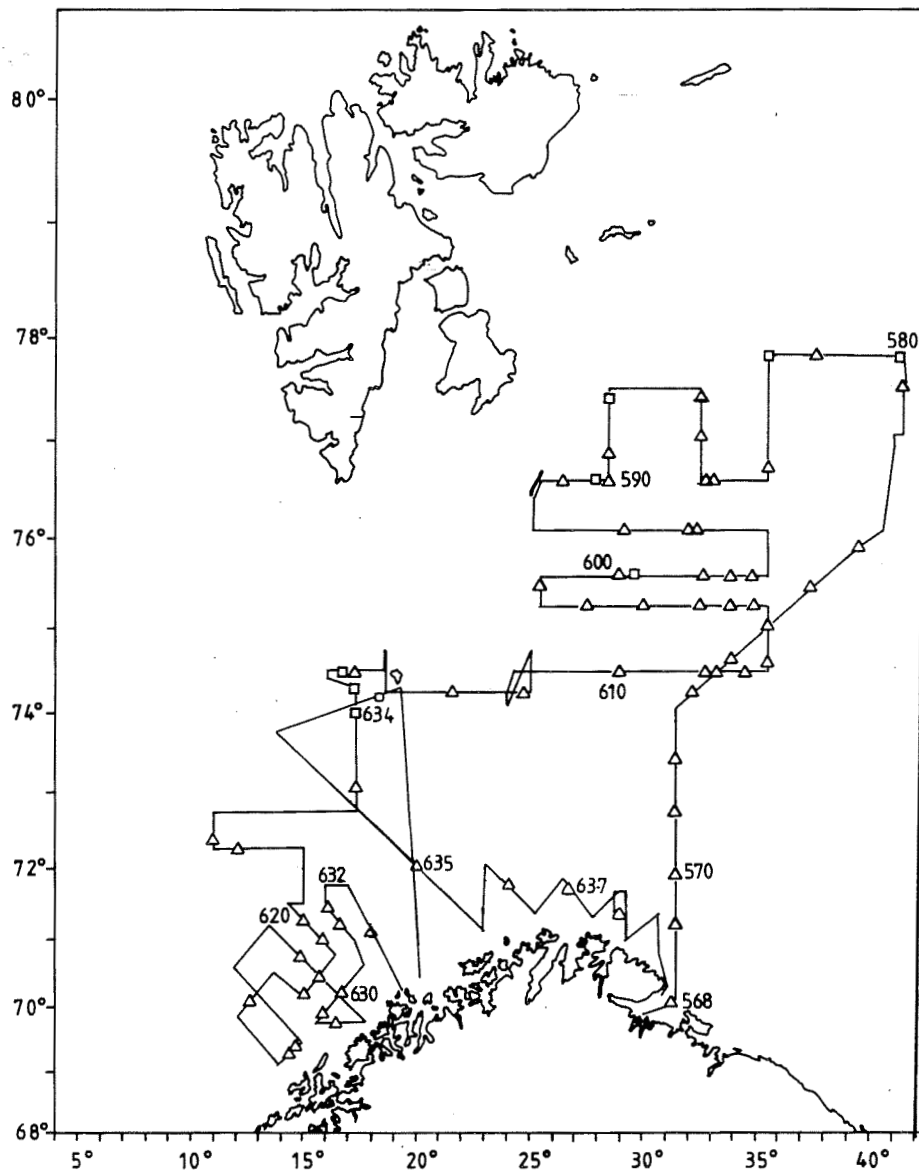
Cruise no 1995 904

⊙ CTD and PLANKTON st.

M Mocness st.

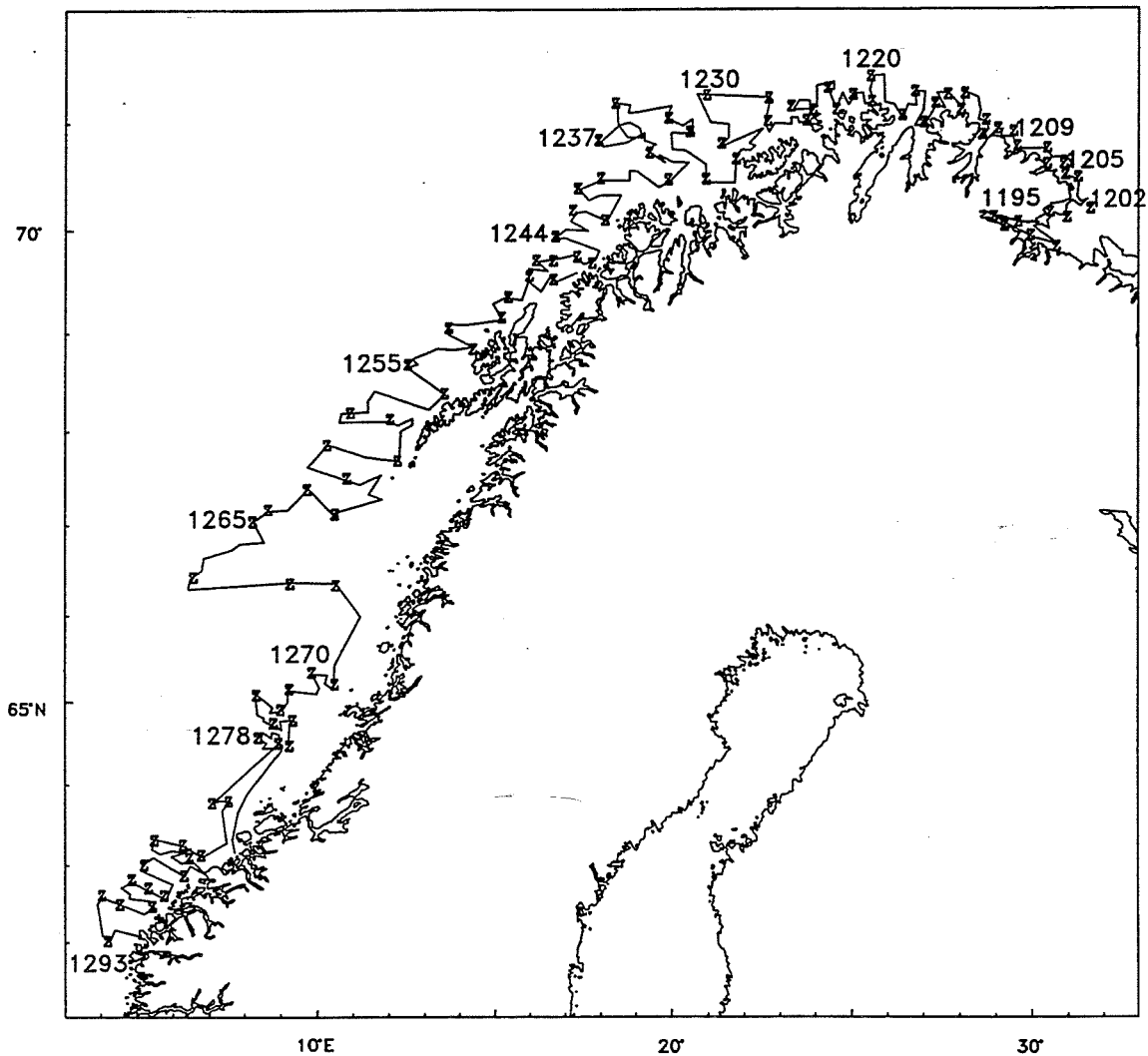
Standard section Fugløya-Bear Island st.no 1161-1180

Bear Island W st.no 1136-1139



12 Sep - 9 Oct 1995  $\Delta$   $\square$  TRAWL st.no 568-638 "J. Hjort"  
 (  $\Delta$  Pel tr.,  $\square$  Bottom tr.)  
 Cruise no 1995 904



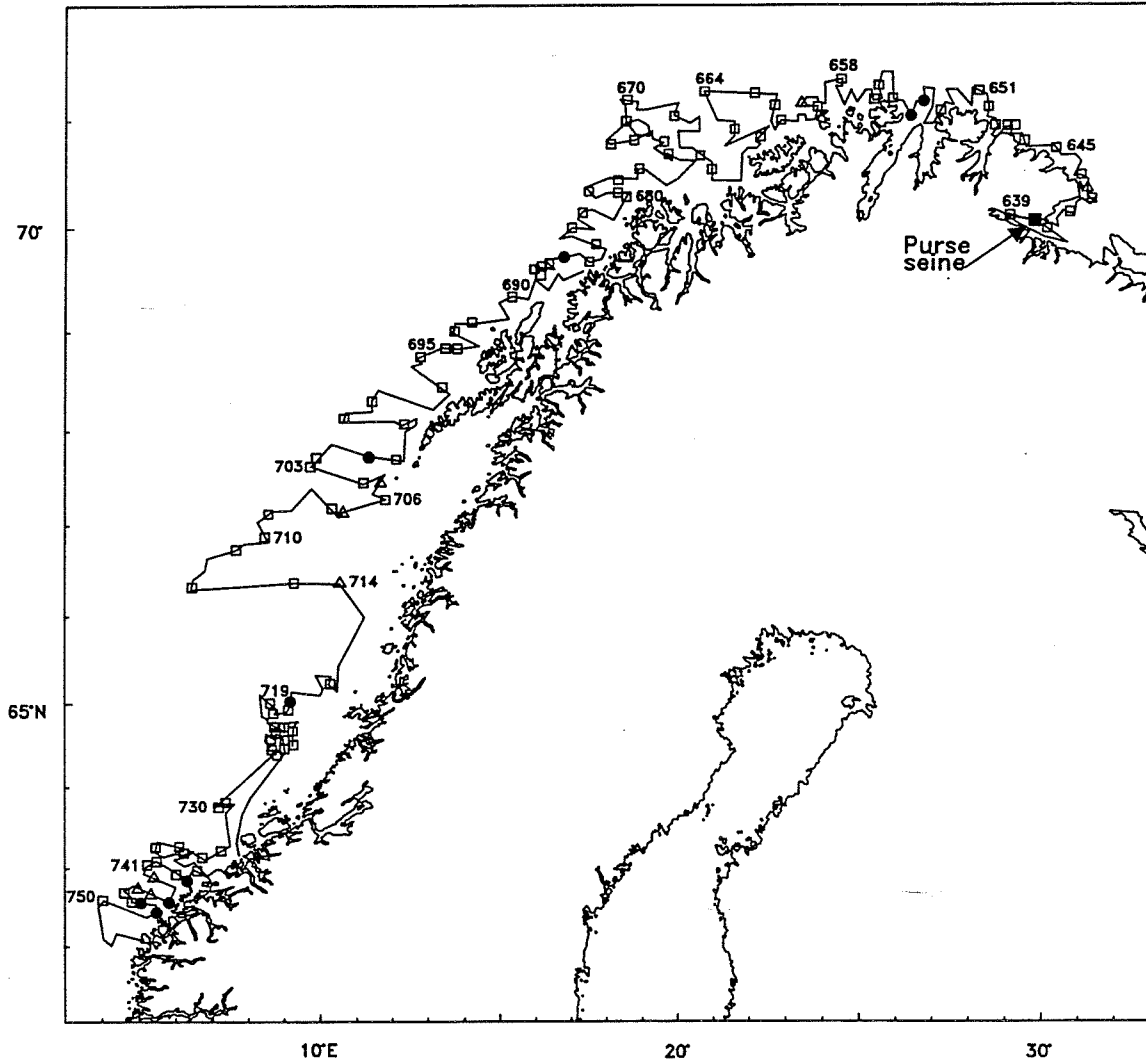


11 Oct - 6 Nov 1995

z CTD st.no 1195-1293

"J. Hjort"

Cruise no 1995 211



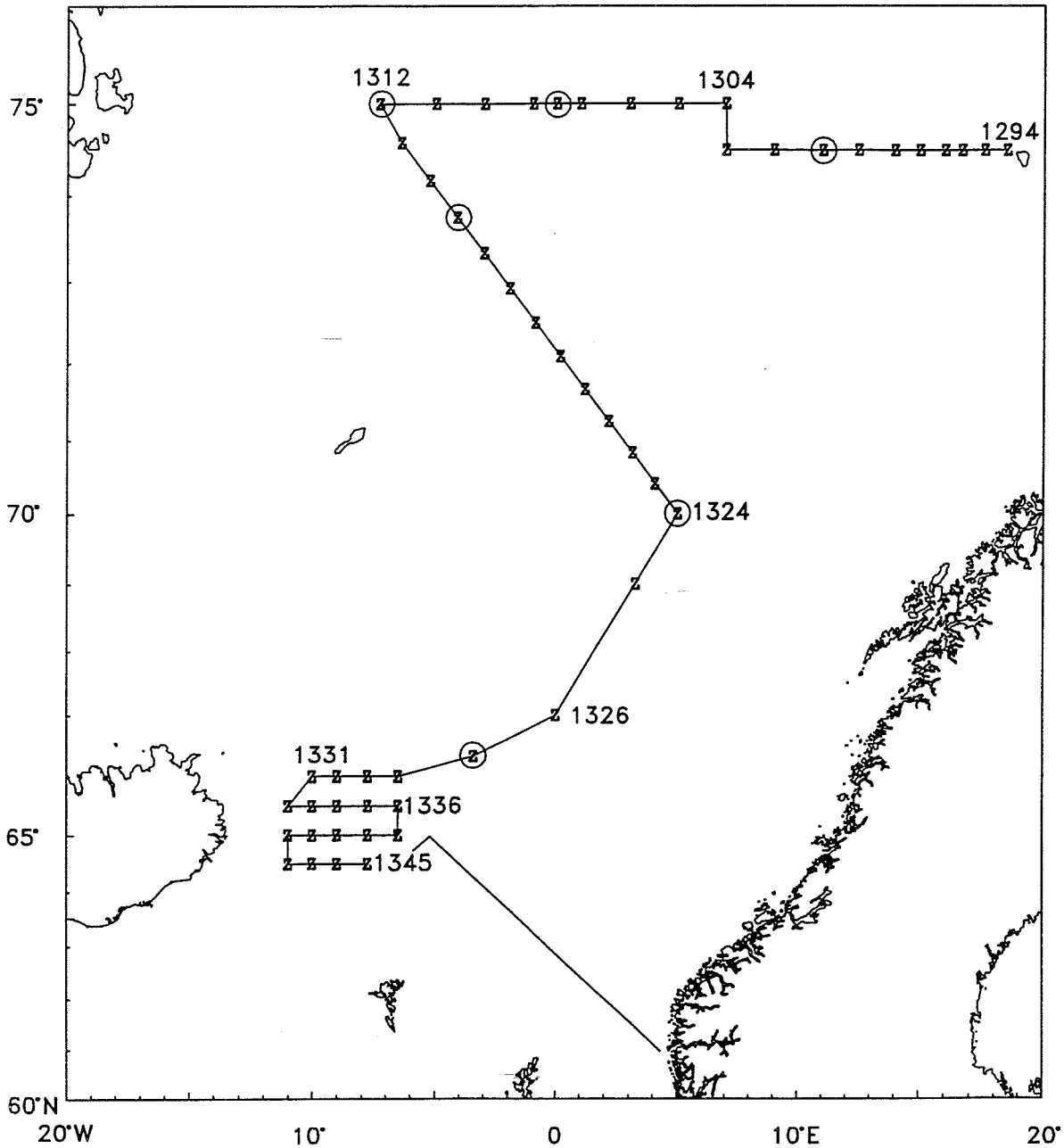
11 Oct - 6 Nov 1995

TRAWL St.no 639-750

"J. Hjort"

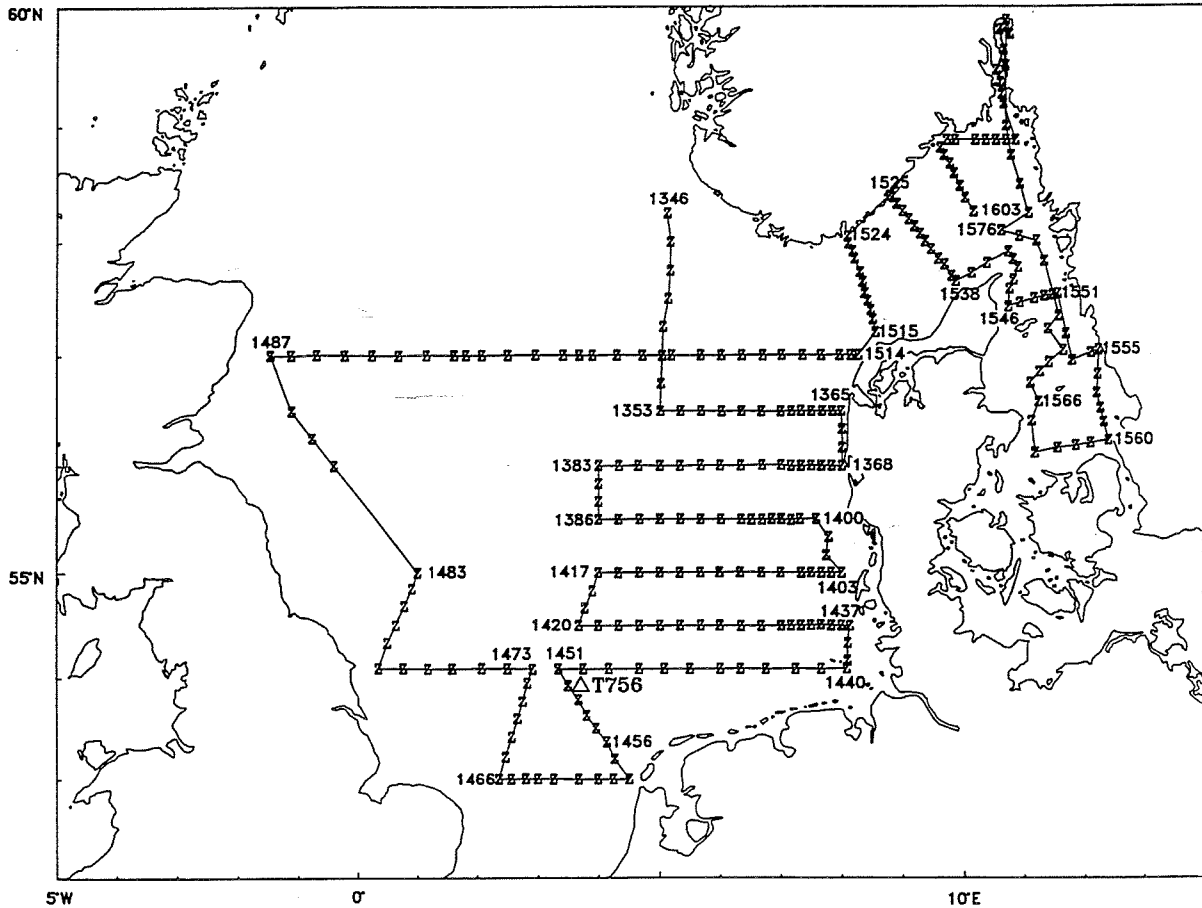
Cruise no 1995.211

- Bottom tr.
- △ Pel. tr.
- Handline
- Purse seine



8 - 26 Nov 1995 z CTD st.no 1294-1345  
 Cruise no 1995.212 (z) CTD and PLANKTON st.

"J. Hjort"



29 Nov - 15 Dec 1995

z CTD st.no 1346-1603

"J. Hjort"

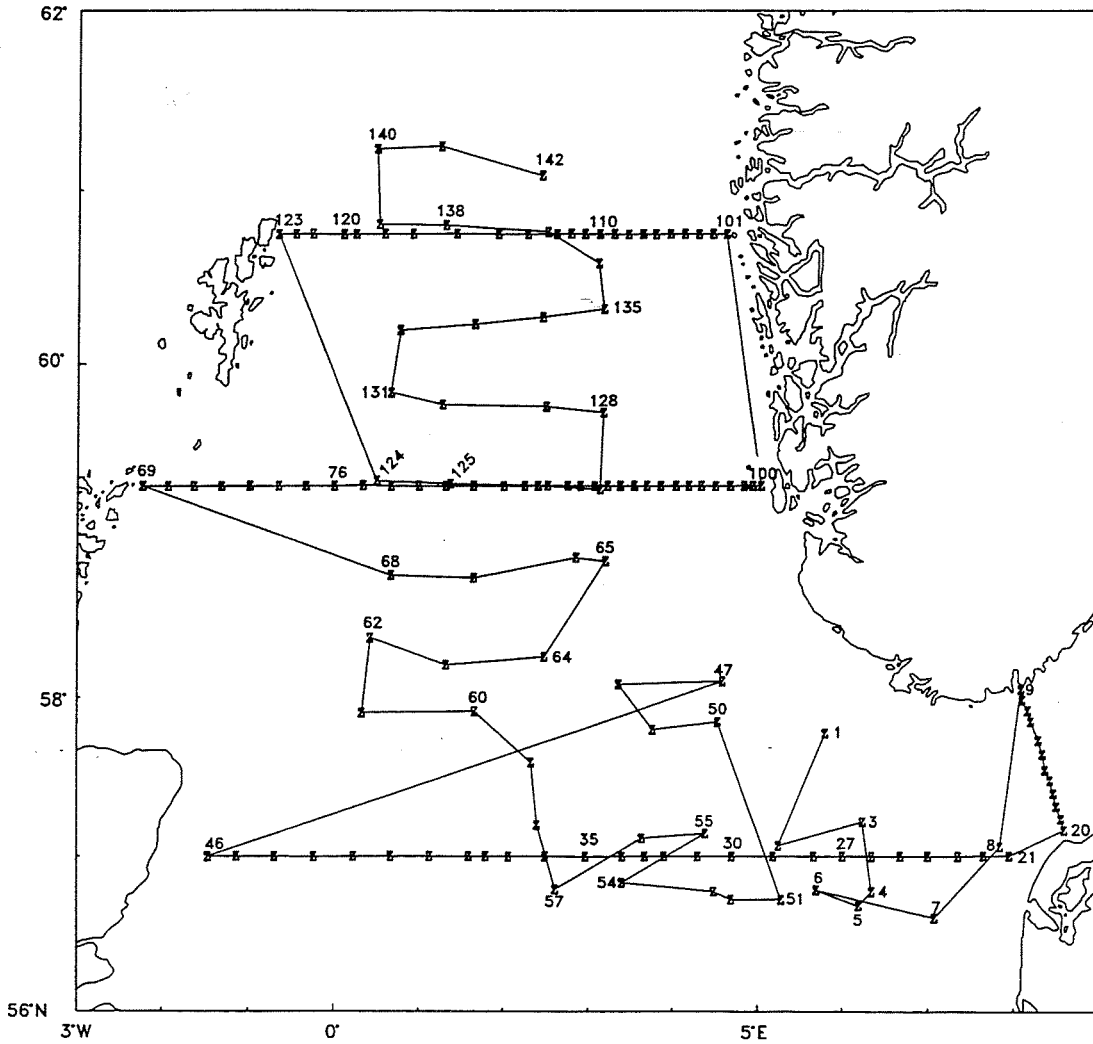
Cruise no 1995 905

△ TRAWL st.no 756

Standard section Hanstholm - Aberdeen st.no 1487-1514

Oskø - Hanstholm st.no 1515-1524

Torungen - Hirtshals st.no 1525 - 1538

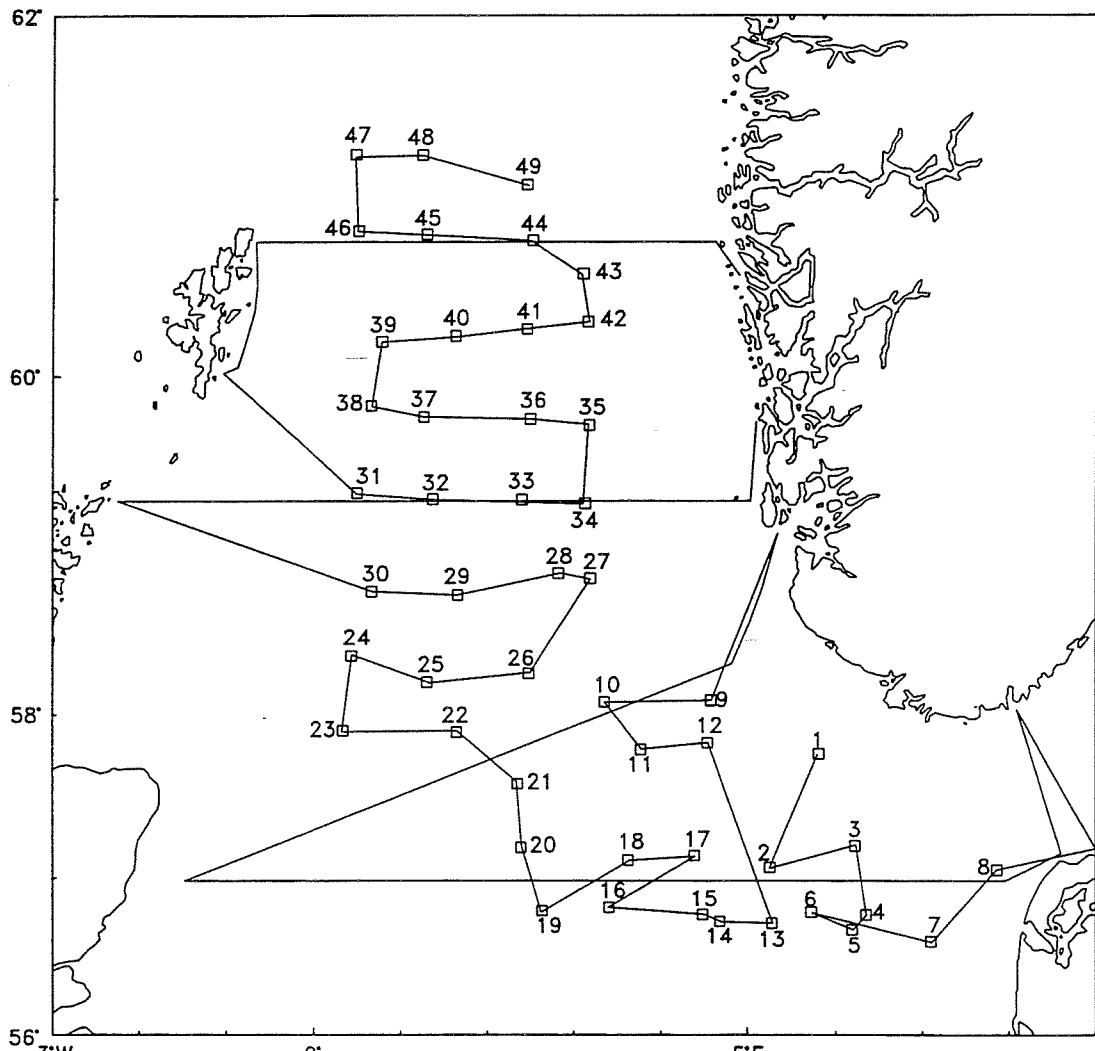


5 Jan - 11 Feb 1995  
 Cruise no 1995 102

CTD st.no 1-142

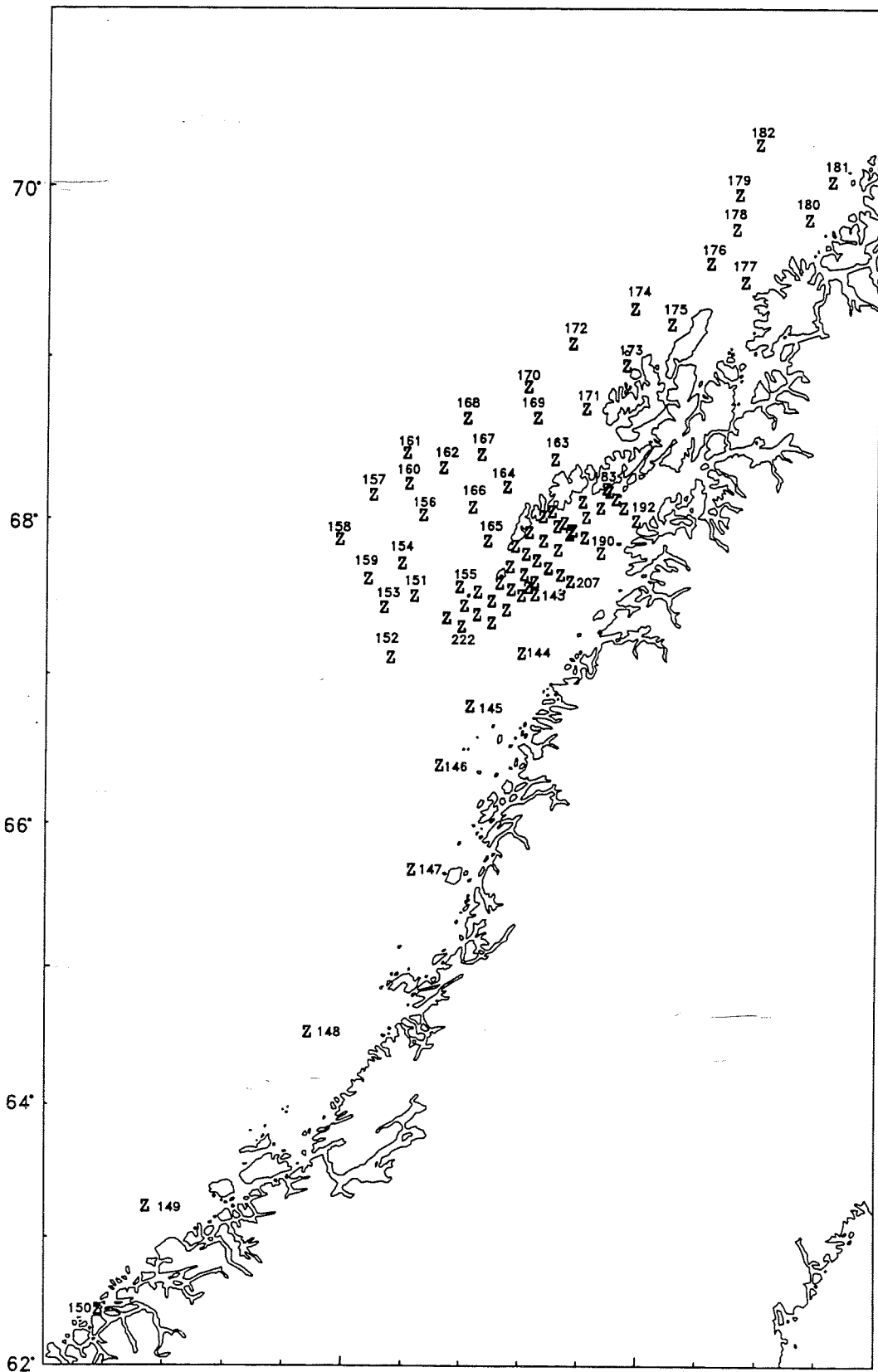
"Michael Sars"

Standard sections: Feie-Shetland st.no 101-123  
 Utsira W st.no 69-100  
 Hanstholm-Aberdeen st.no 21-46  
 Okse-Hanstholm st.no 9-20



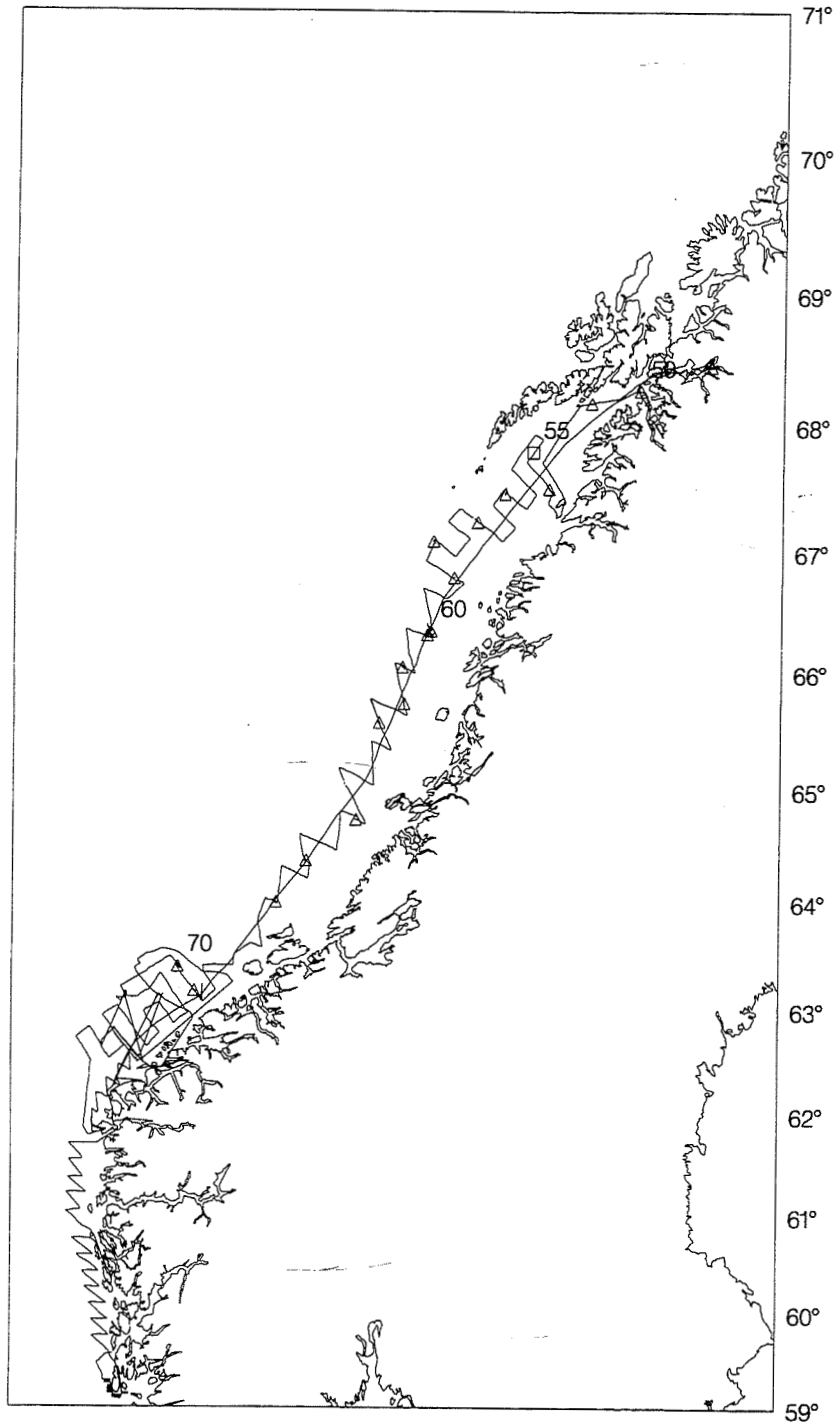
5 Jan - 11 Feb 1995      □ TRAWL (dem.) St.no 1-49      "Michael Sars"

Cruise no 1995 102



5° Cruise no 1995 103 10° 15°  
 15 Feb - 31 Mar 1995 z CTD st.no 143-222 "Michael Sars"

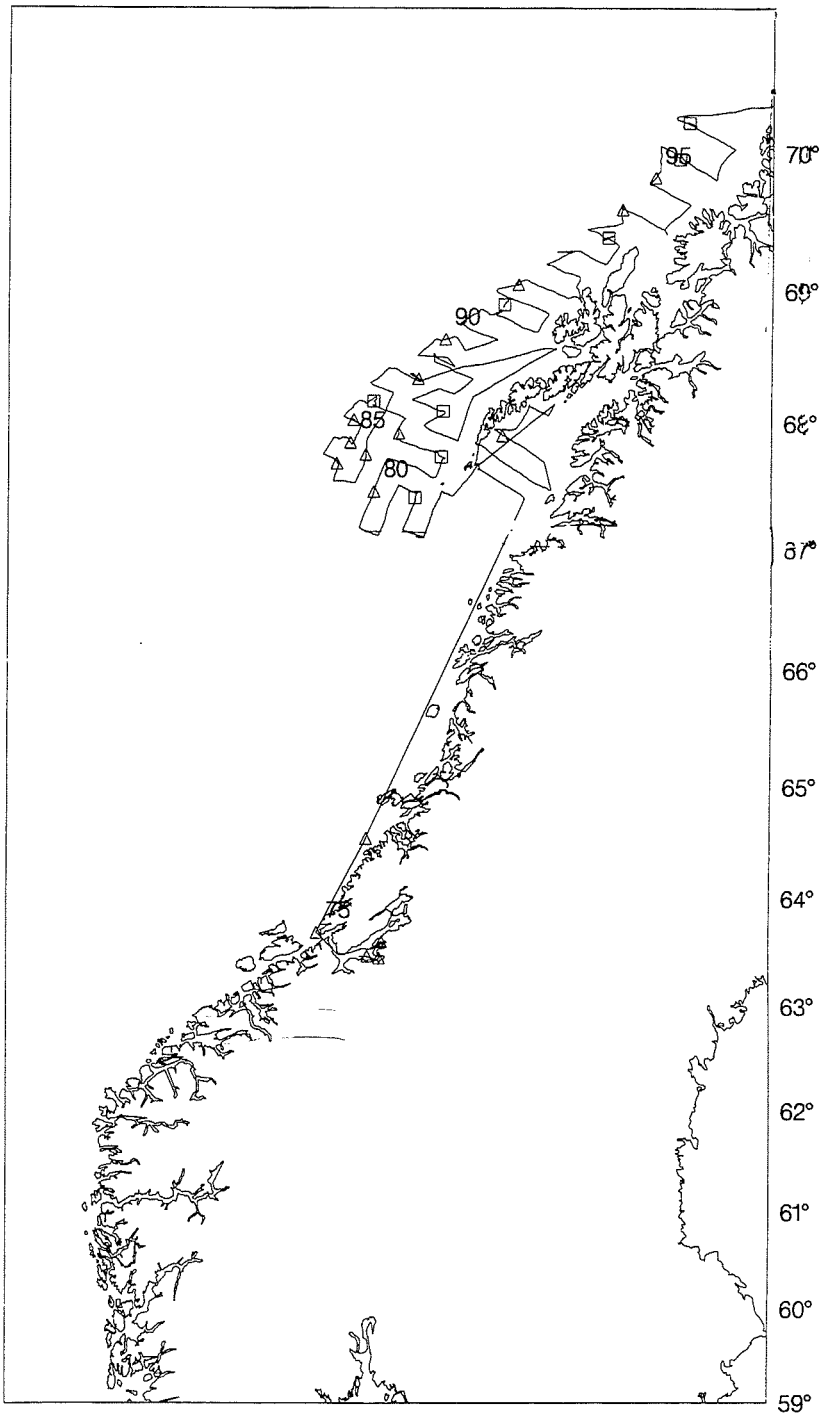
3° 4° 5° 6° 7° 8° 9° 10° 11° 12° 13° 14° 15° 16° 17° 18° 19°



15 Feb-11 Mar 1995 PART I: TRAWL st.no 50-74 "Michael Sars"  
Cruise no 1995.103

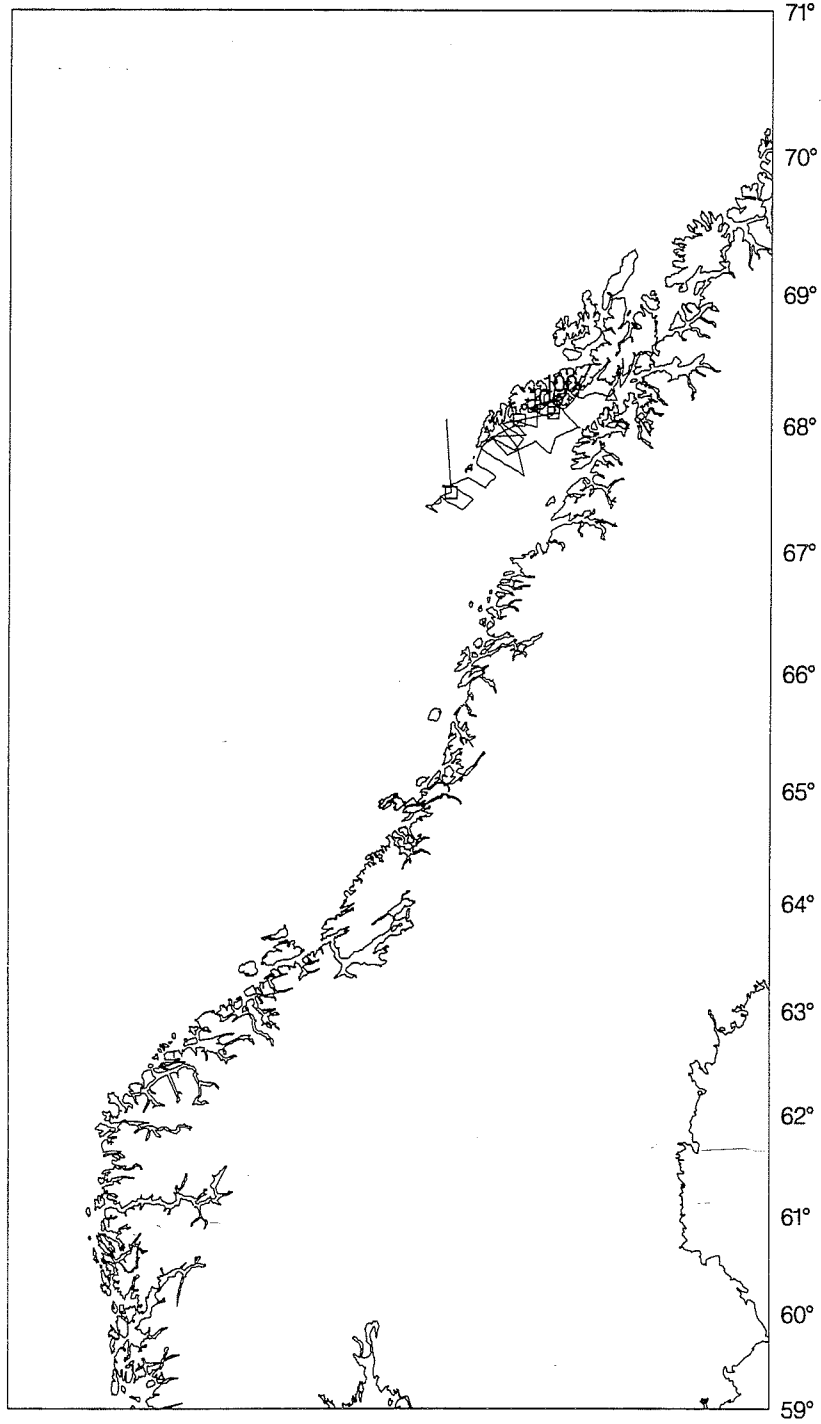


3° 4° 5° 6° 7° 8° 9° 10° 11° 12° 13° 14° 15° 16° 17° 18° 19°

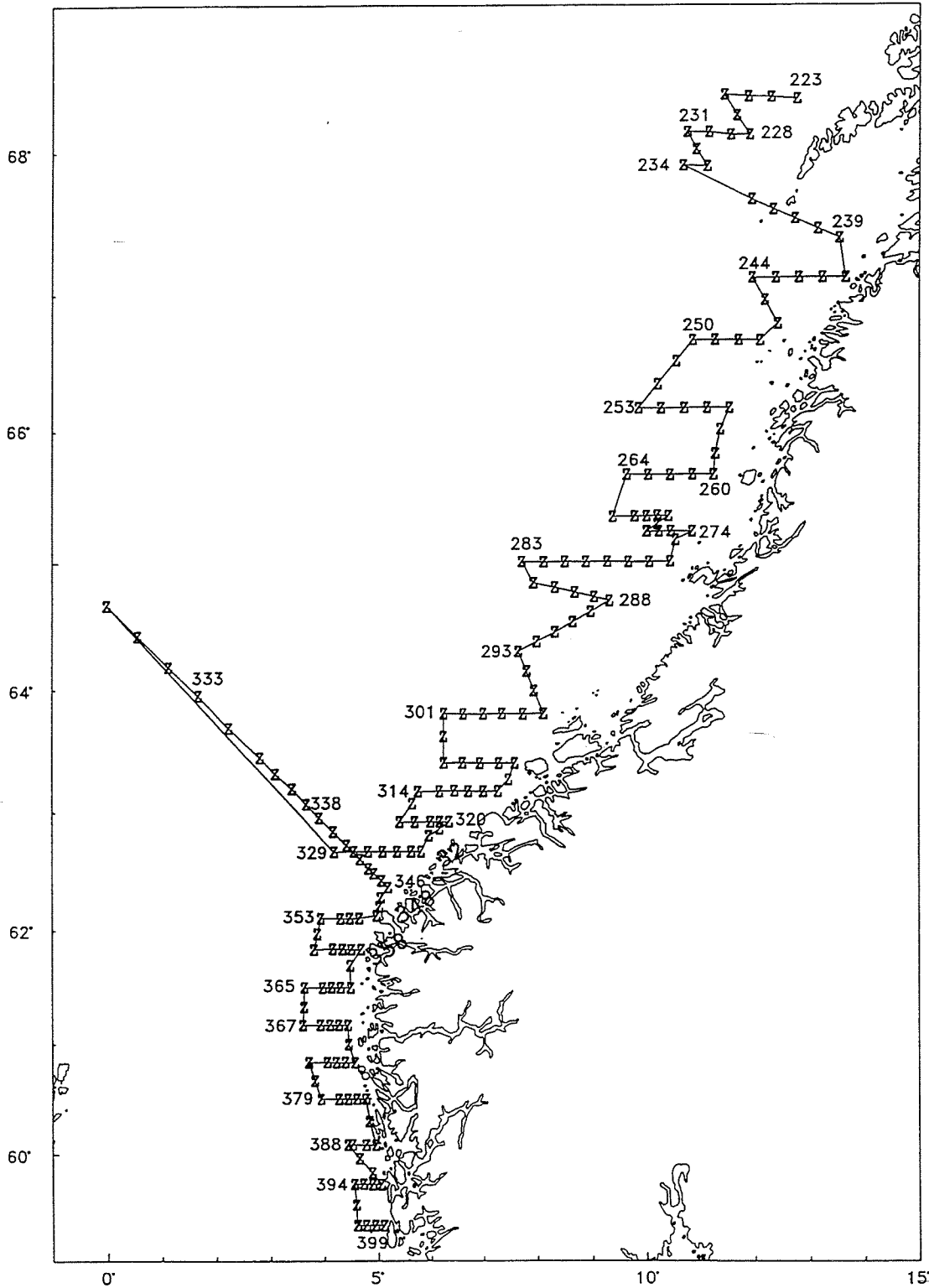


12 - 25 Mar 1995 PART II: TRAWL st.no 75-96 "Michael Sars"  
Cruise no 1995 103

3° 4° 5° 6° 7° 8° 9° 10° 11° 12° 13° 14° 15° 16° 17° 18° 19°

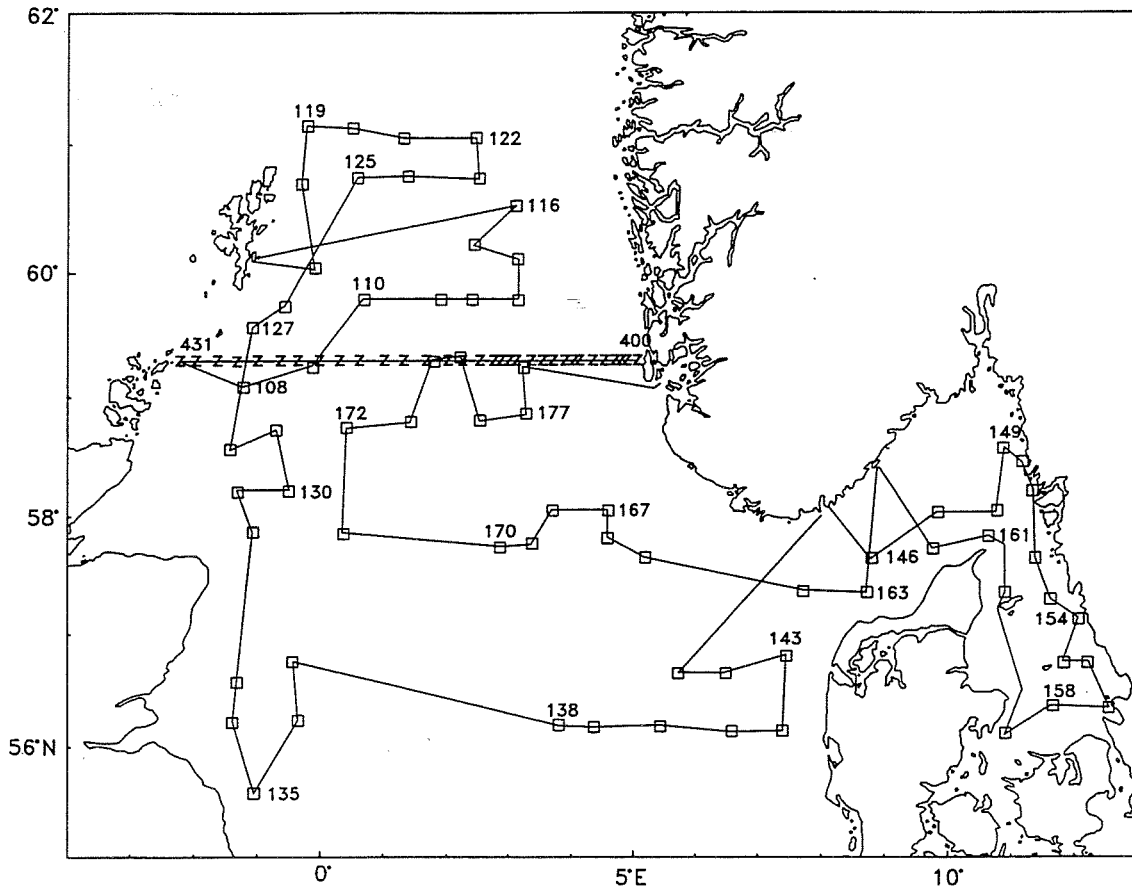


26-30 Mar 1995      PART III: TRAWL st.no 97-107 "Michael Sars"  
Cruise no 1995 103



3 - 19 Apr 1995  
Cruise no. 1995104

z CTD and PLANKTON st.no 223-399 "Michael Sars"  
Standard section Svinøy: st.no 330-347

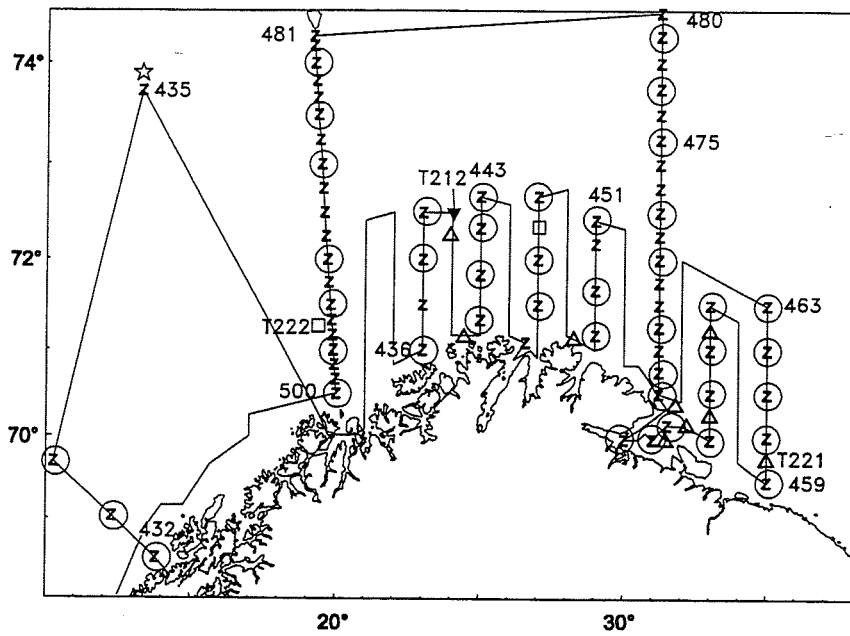


21 Apr - 15 May 1995  
Cruise no 1995 105

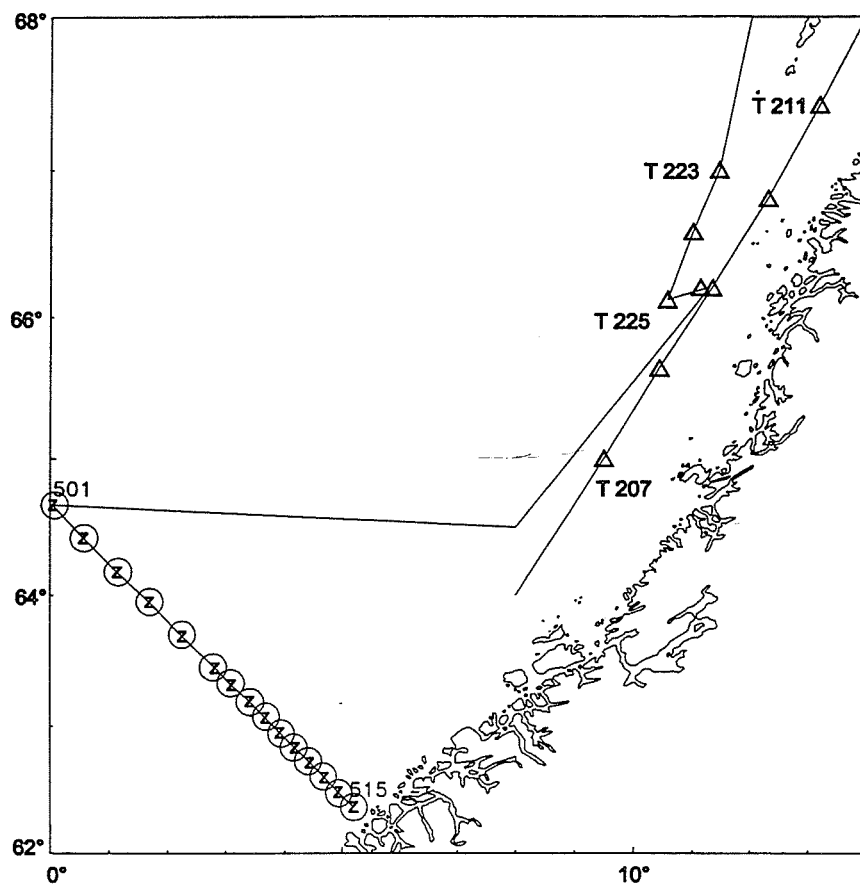
z CTD st. no 400-431  
□ TRAWL st. no (dem.tr.) 108-178

"Michael Sars"

Standard section Utsira W: st.no 400-431

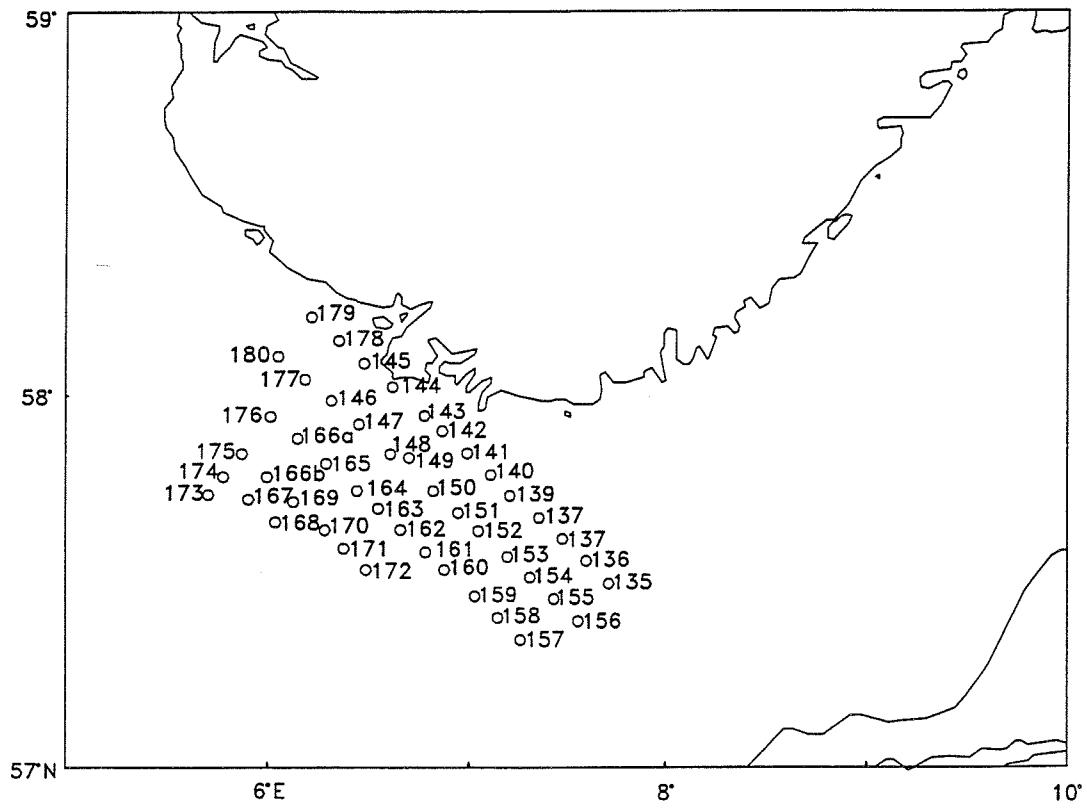


31 May - 21 Jun 1995 (I part) z CTD st.no 432-500 "Michael Sars"  
 Cruise no 1995 107 (I part) (z) CTD and PLANKTON st.  
 Δ□ TRAWL st.no 212-222 (ΔPel.tr.□ Bottom.tr)  
 ☆ Sediment.station  
 Standard sections: Fugløya Bjørnøya st.no 481-500  
 Vardø N st.no 464-480



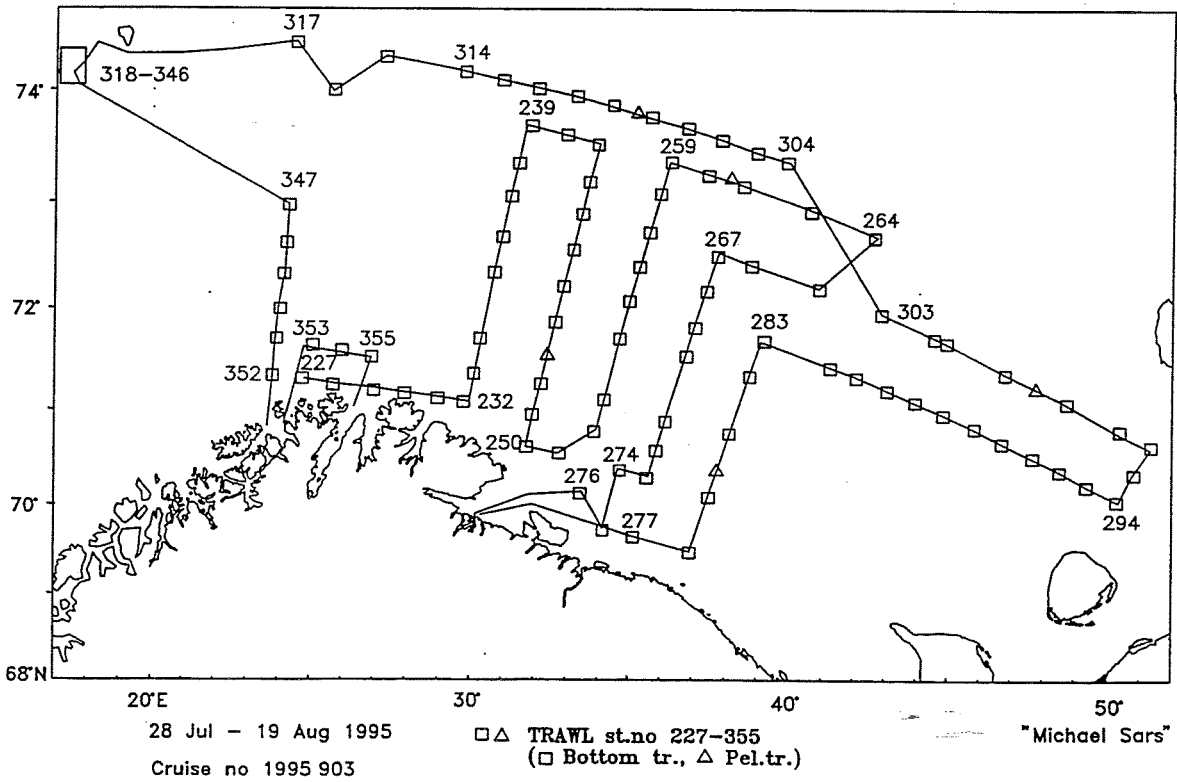
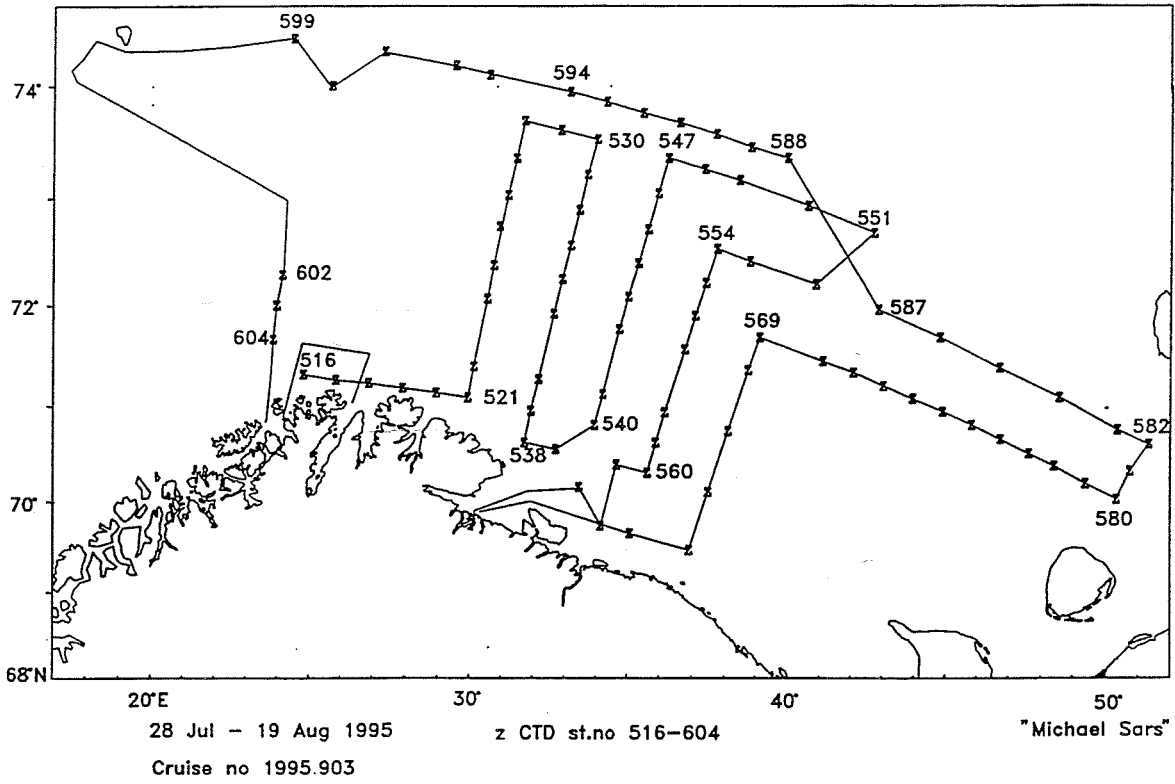
22 - 27 Jun 1995 (Part II) (z) CTD and PLANKTON st.no 501-515 "Michael Sars"  
 Cruise no 1995 107 (Part II) Δ Pel. TRAWL st.no 207-211 (Part I) and  
 st.no 223-225 (Part II)

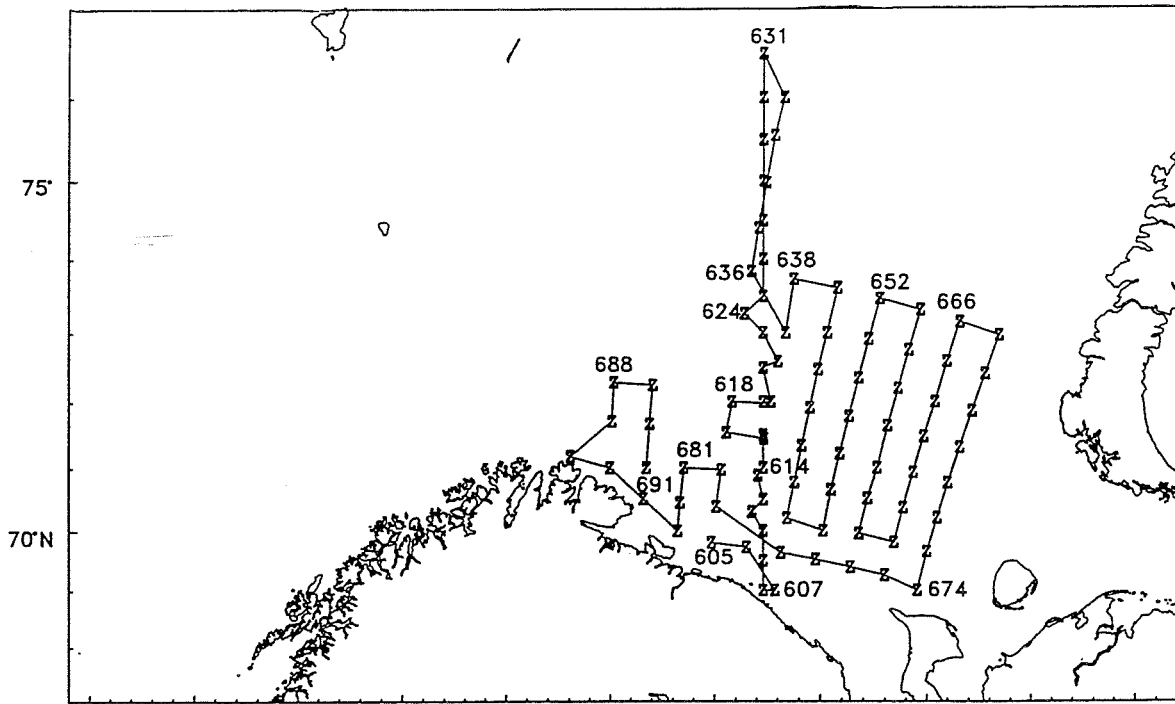
Standard section Svinøy NW st.no 501-515



17 - 24 July 1995    ○ GRAB st. 135-180    "M. Sars

Cruise no 1995 108

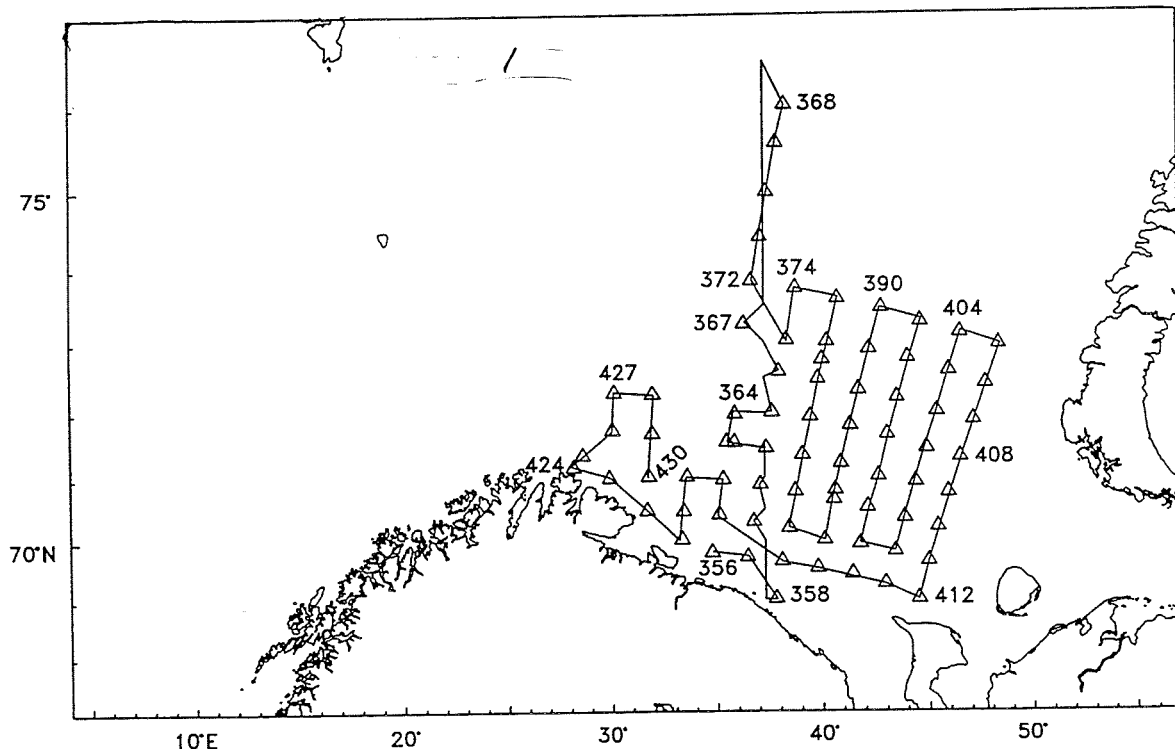




22 Aug - 9 Sep 1995 z CTD st.no 605-691 "M. Sars"

Cruise no 1995.902

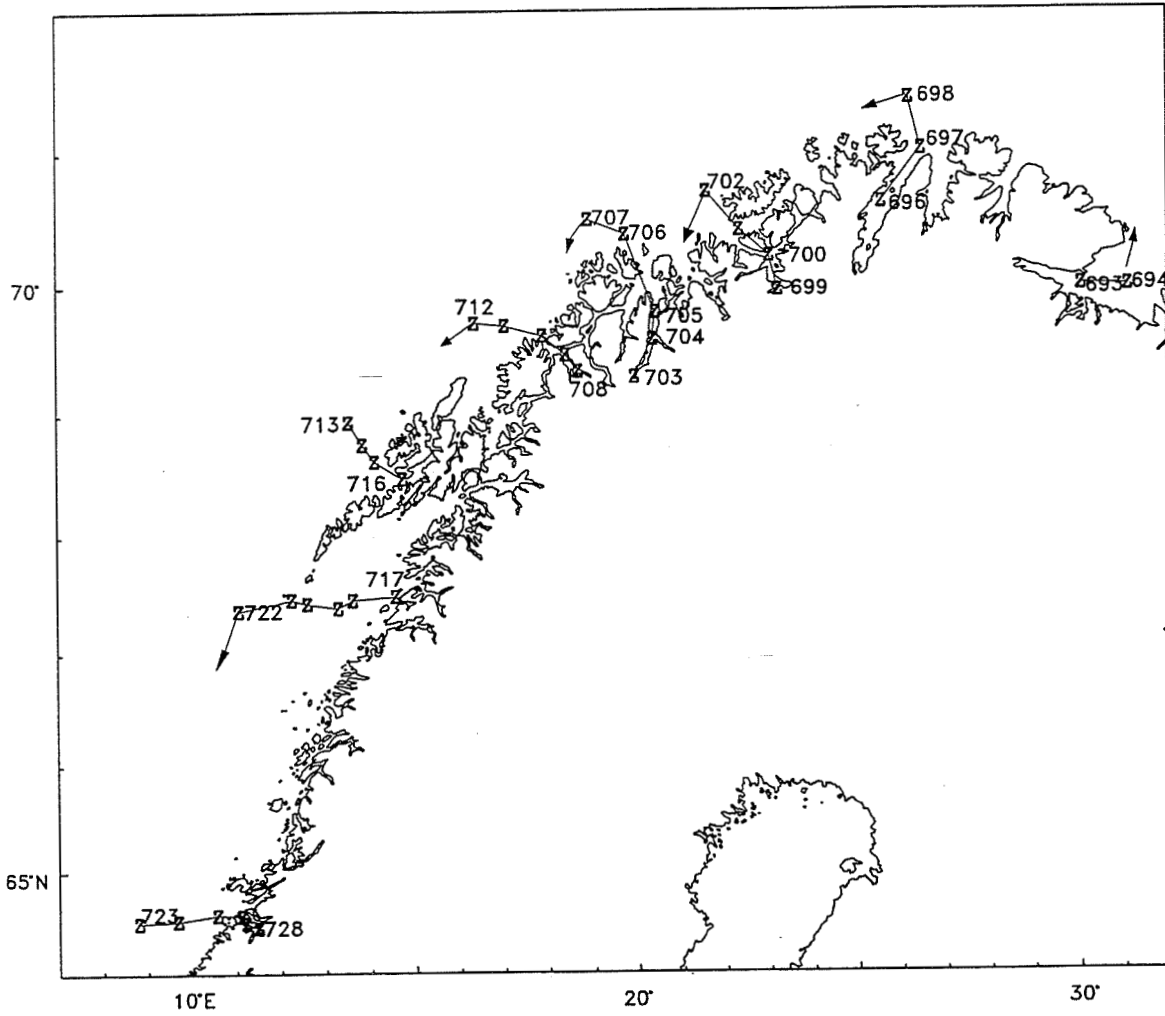
Standard section Sem.Island N: st.no 608-610  
 612,614-616,619,  
 621,623,625-631



22 Aug - 9 Sep 1995 Δ Pel. TRAWL st.no 356-430 "M. Sars"

Cruise no 1995 902



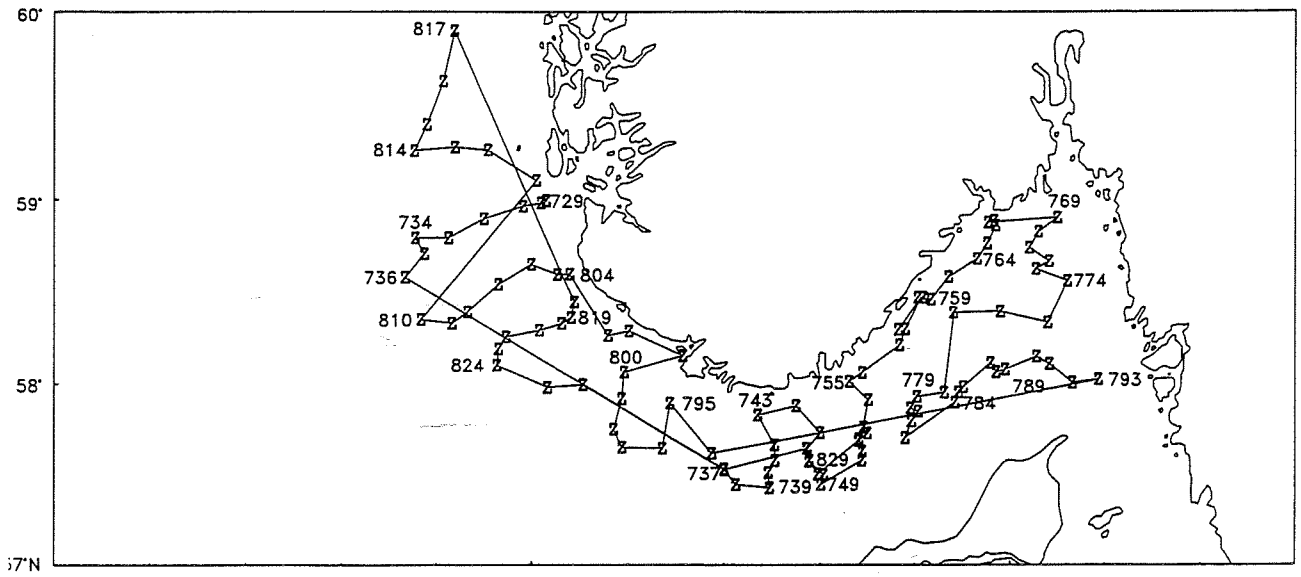


12 Sep - 12 Oct 1995

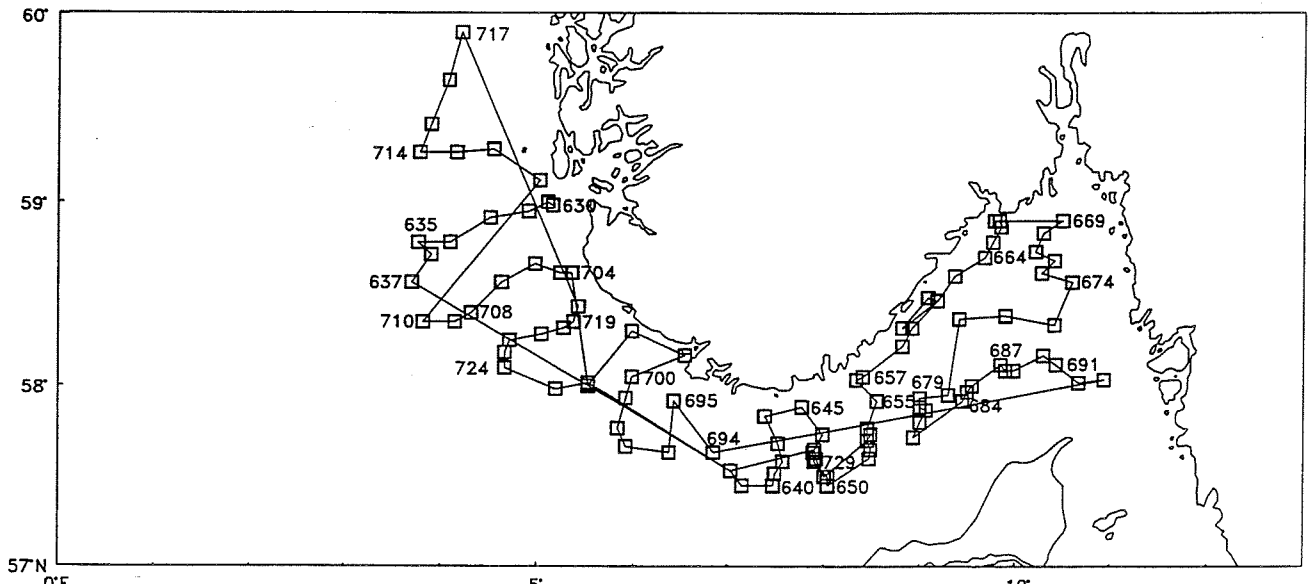
z CTD st.no 692-728

"M. Sars"

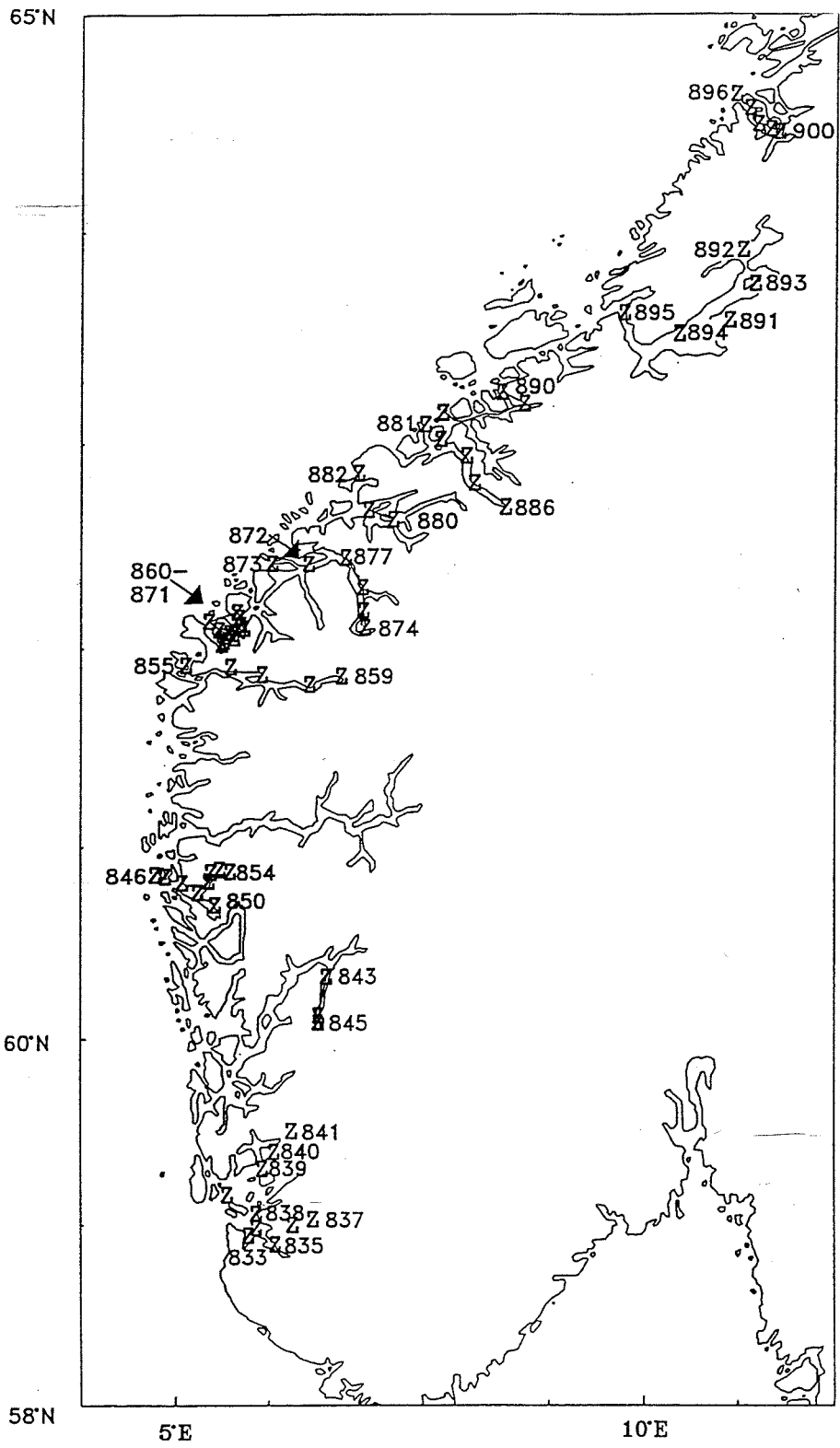
Cruise no 1995 111



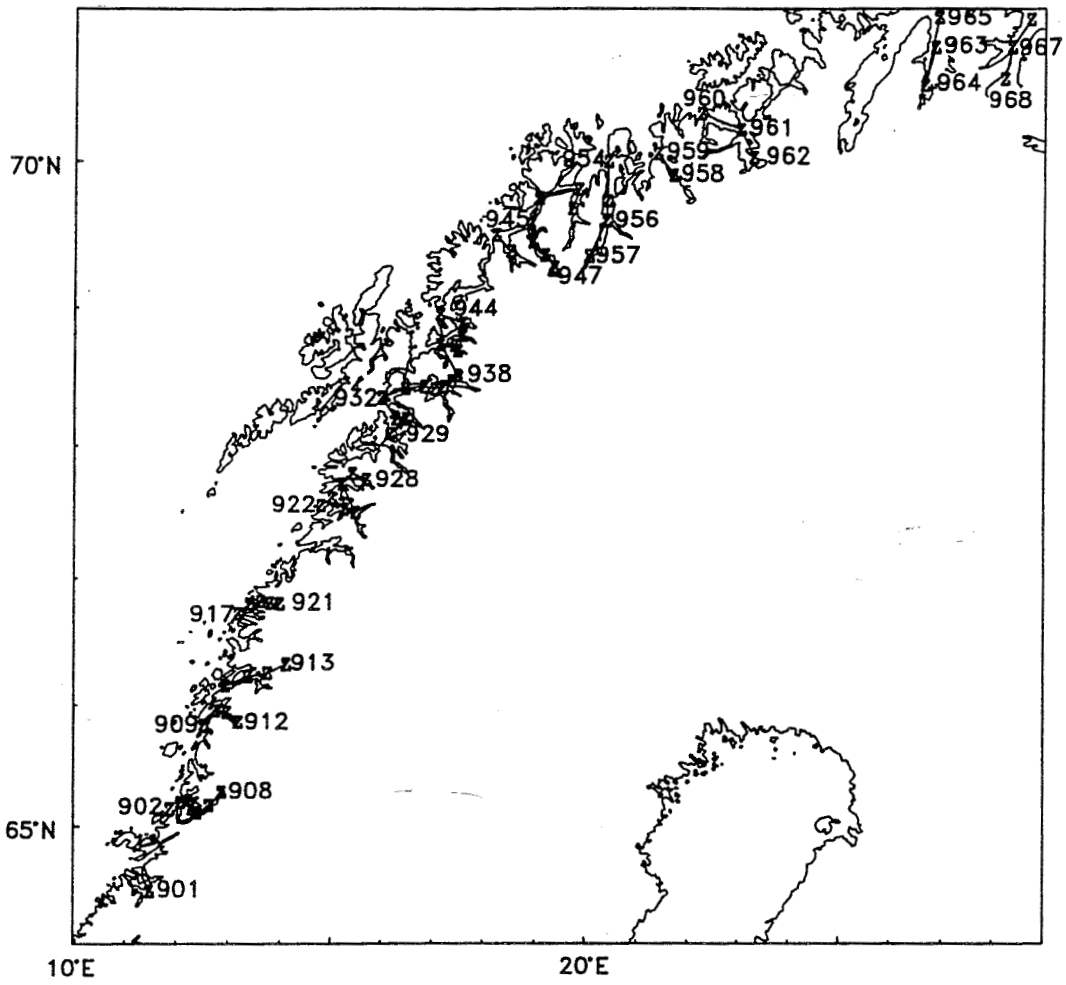
0°E 5° 10° "M.Sars"  
 13 - 30 Oct 1995 z CTD st.no 729-832  
 Cruise no 1995 112



0°E 5° 10° "M. Sars"  
 13 - 30 Oct 1995 □ Bottom TRAWL st.no 630-732  
 Cruise no 1995 112



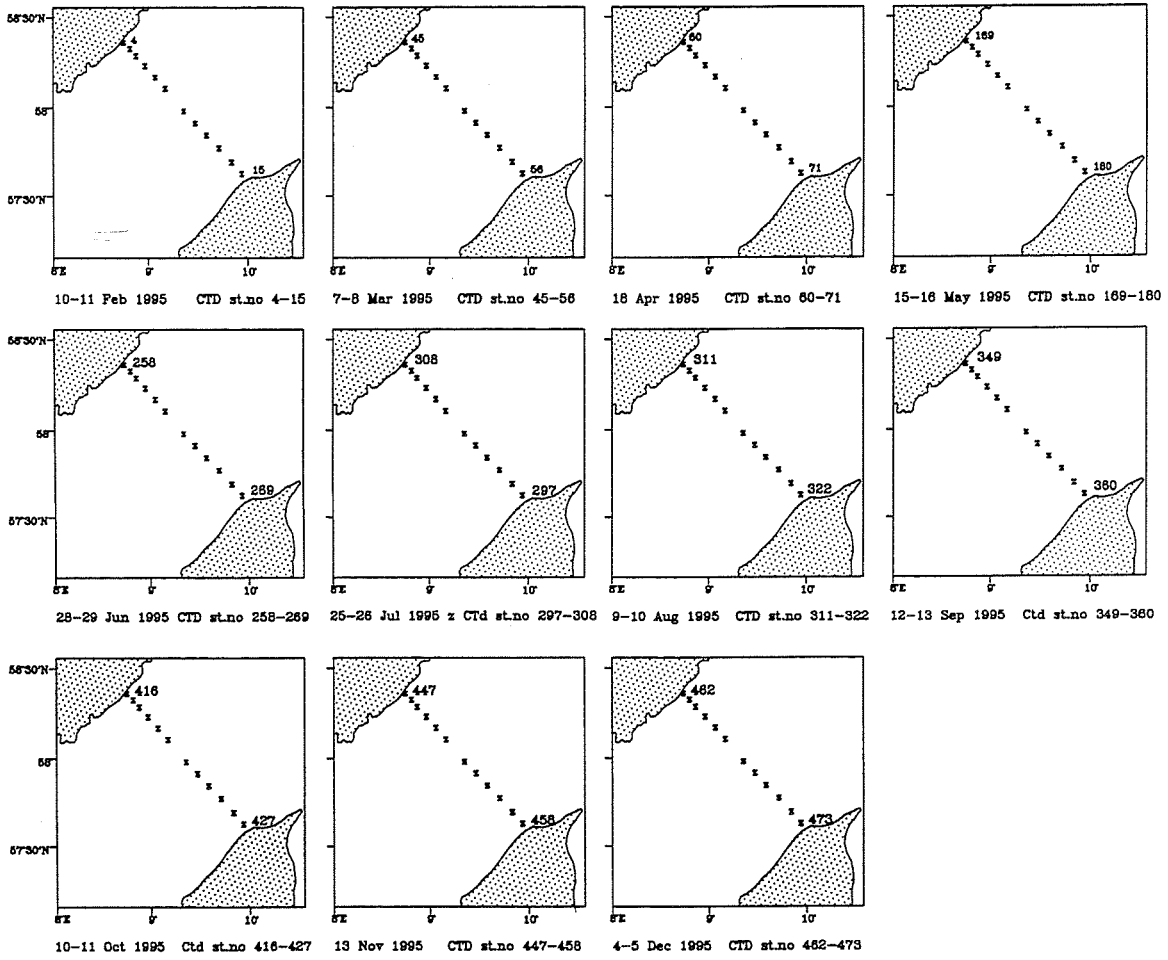
I PART: 1-25.11.1995 z CTD st.no 833-900 "Michael Sars"  
 Cruise no 1995 906



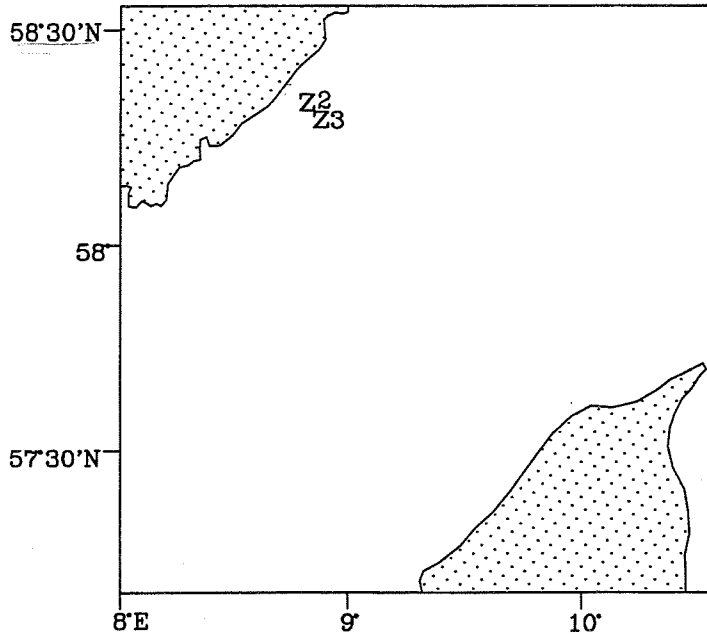
PART II 25.11.-8.12.1995 z CTD st.no 901-968 "Michael Sars"

Cruise no 1995.906

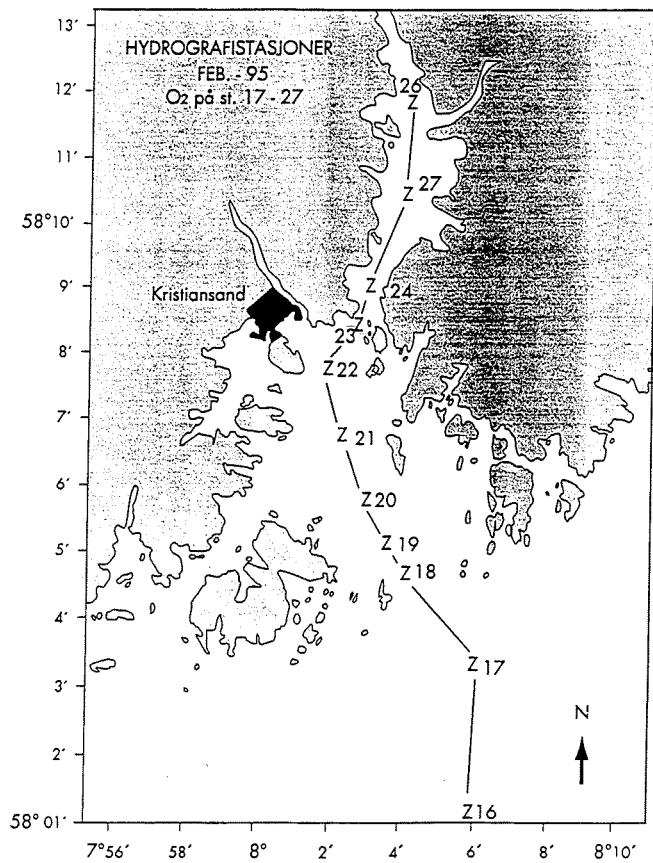
TORUNGEN - HIRTSHALS



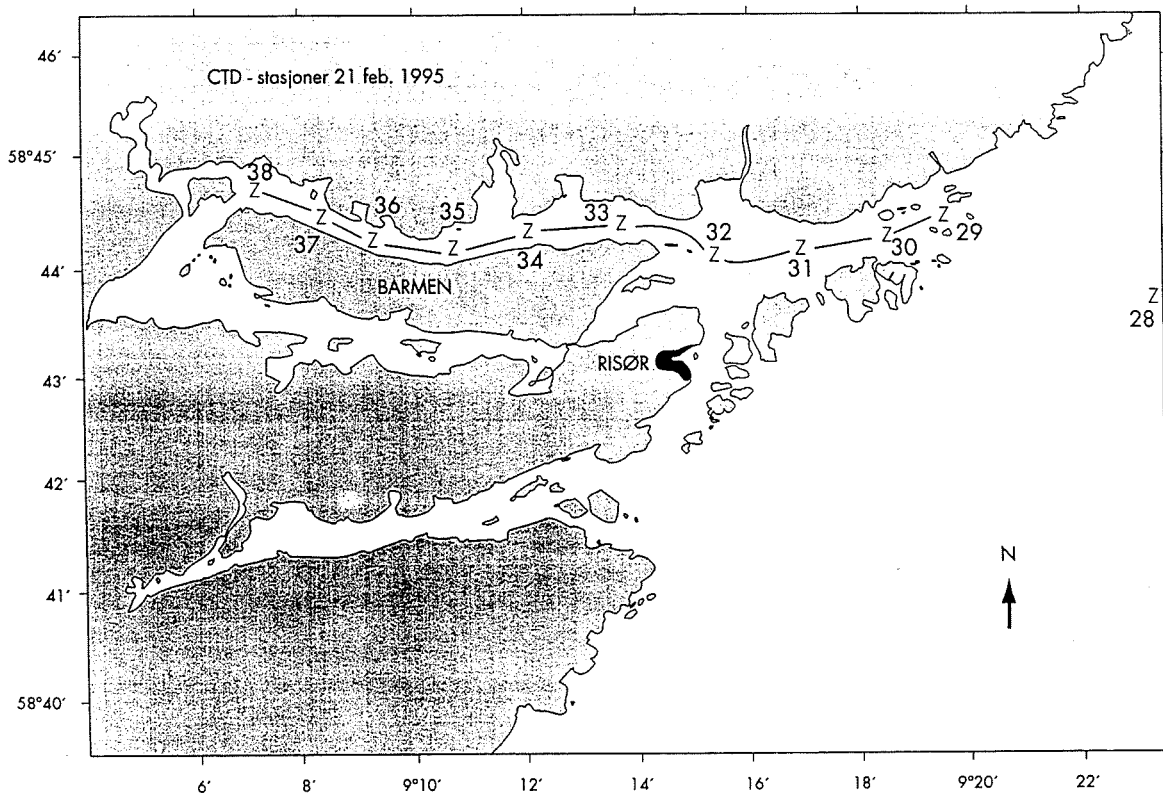
# St. 2 and 3 at Torungen-Hirtshals section



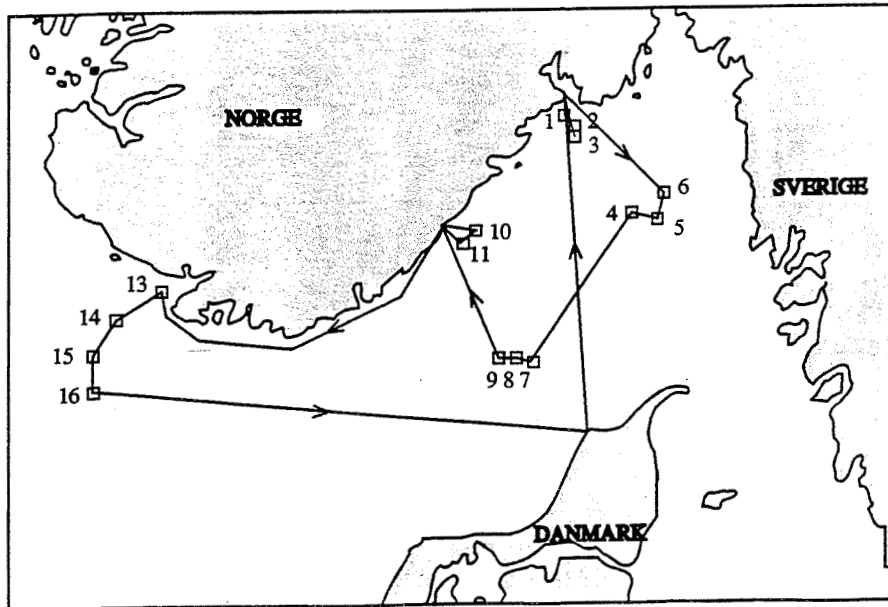
	Arendal 2	Arendal 3
Date	CTD st no	CTD st no
19.1.95	1	2
7.2.95	3	
6.3.95	43	44
20.3.95	57	
3.4.95	58	59
18.4.95	60	
8.5.95	167	168
15.5.95	169	
6.6.95	206	207
28.6.95	259	
10.7.95	295	296
26.7.95	309	
8.8.95	310	
21.8.95	331	332
11.9.95	348	
18.9.95	370	371
9.10.95	415	
23.10.95	430	431
6.11.95	437	
20.11.95	459	460
1.12.95	461	
18.12.95	483	484



Cruise no 1995 302 13 Feb - 2 Mar 1995 z CTD st.no 16-27 "G.M. Dannevig"

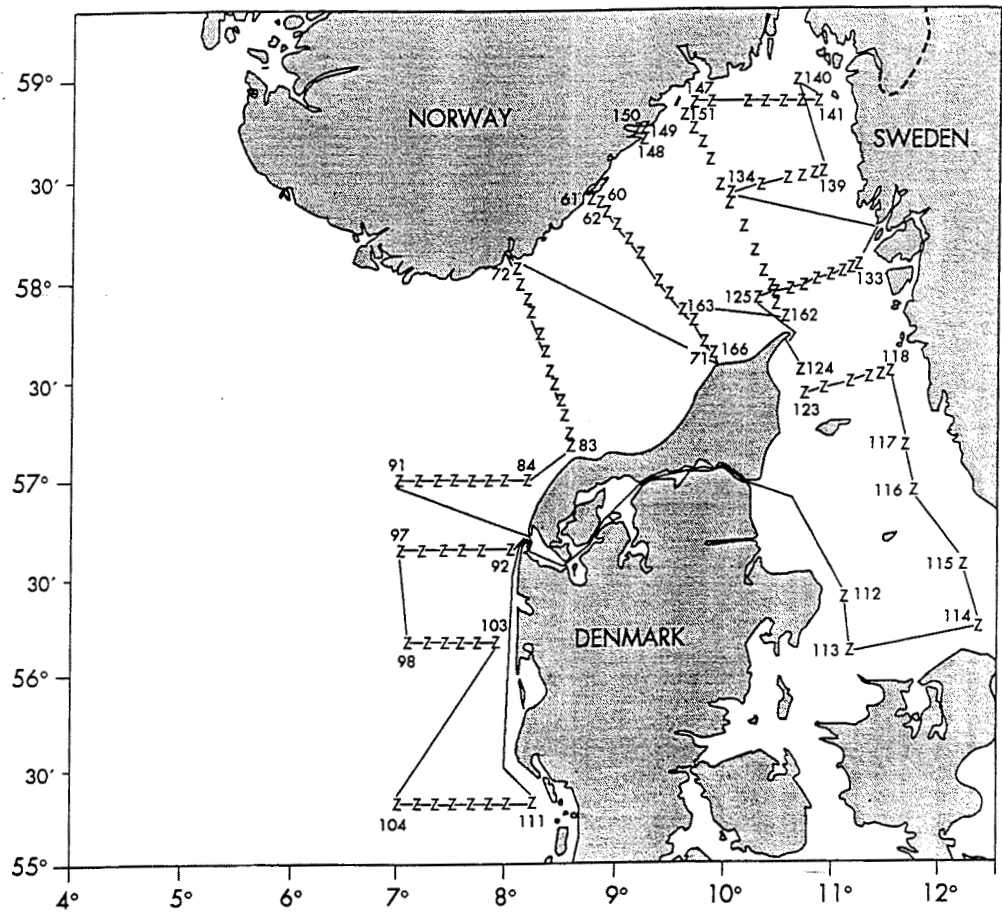


13 Feb - 2 Mar 1995 z CTD st.no 29-38 "G.M. Dannevig"



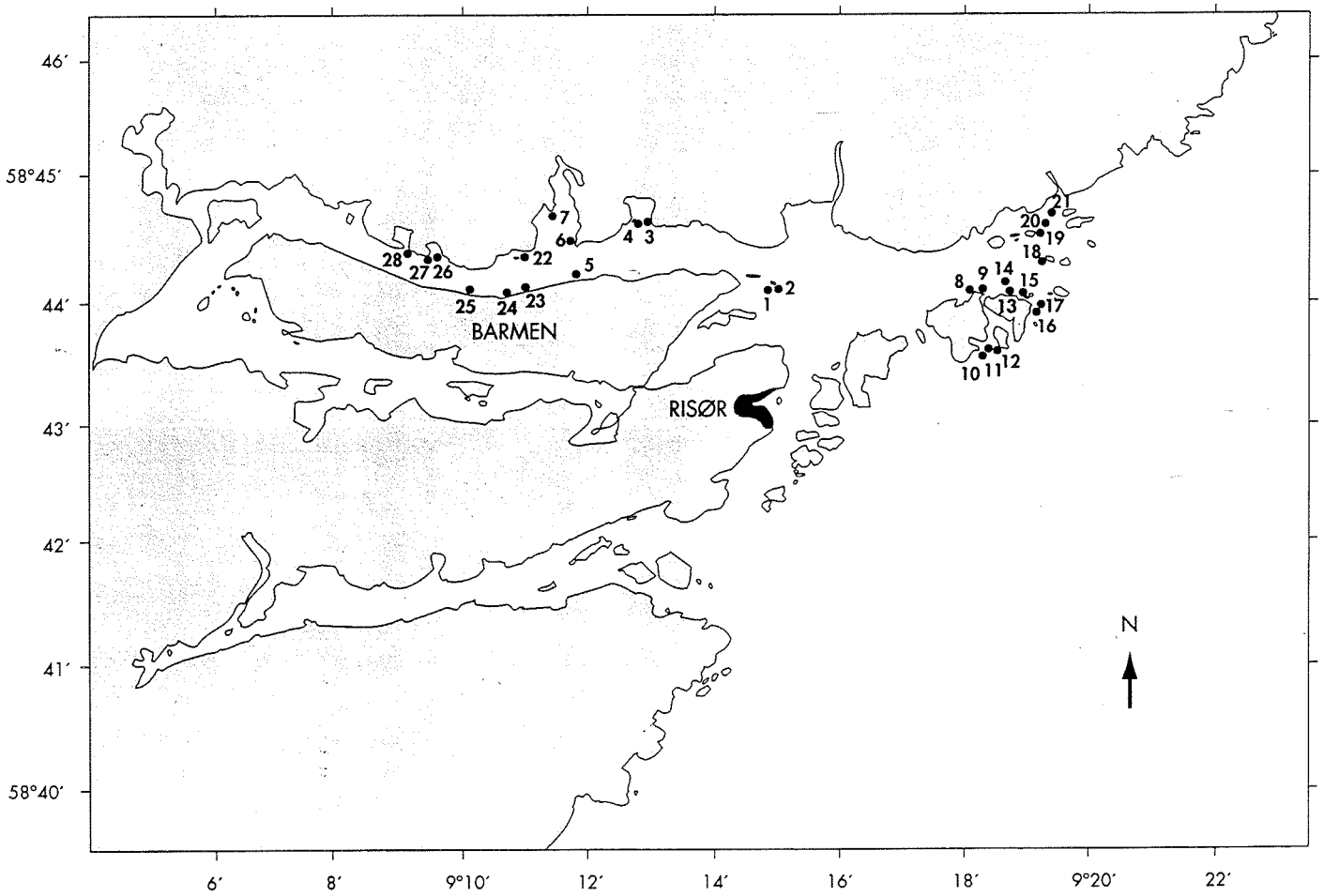
Cruise no 1995 304  
 21 Mar - 1 Apr 1995 TRAWL St.no 1-16 "G.M. Dannevig"





18 Apr - 5 May 1995 z CTD st.no 60-166 "G.M. Dannevig"

Cruise no 1995.305,306

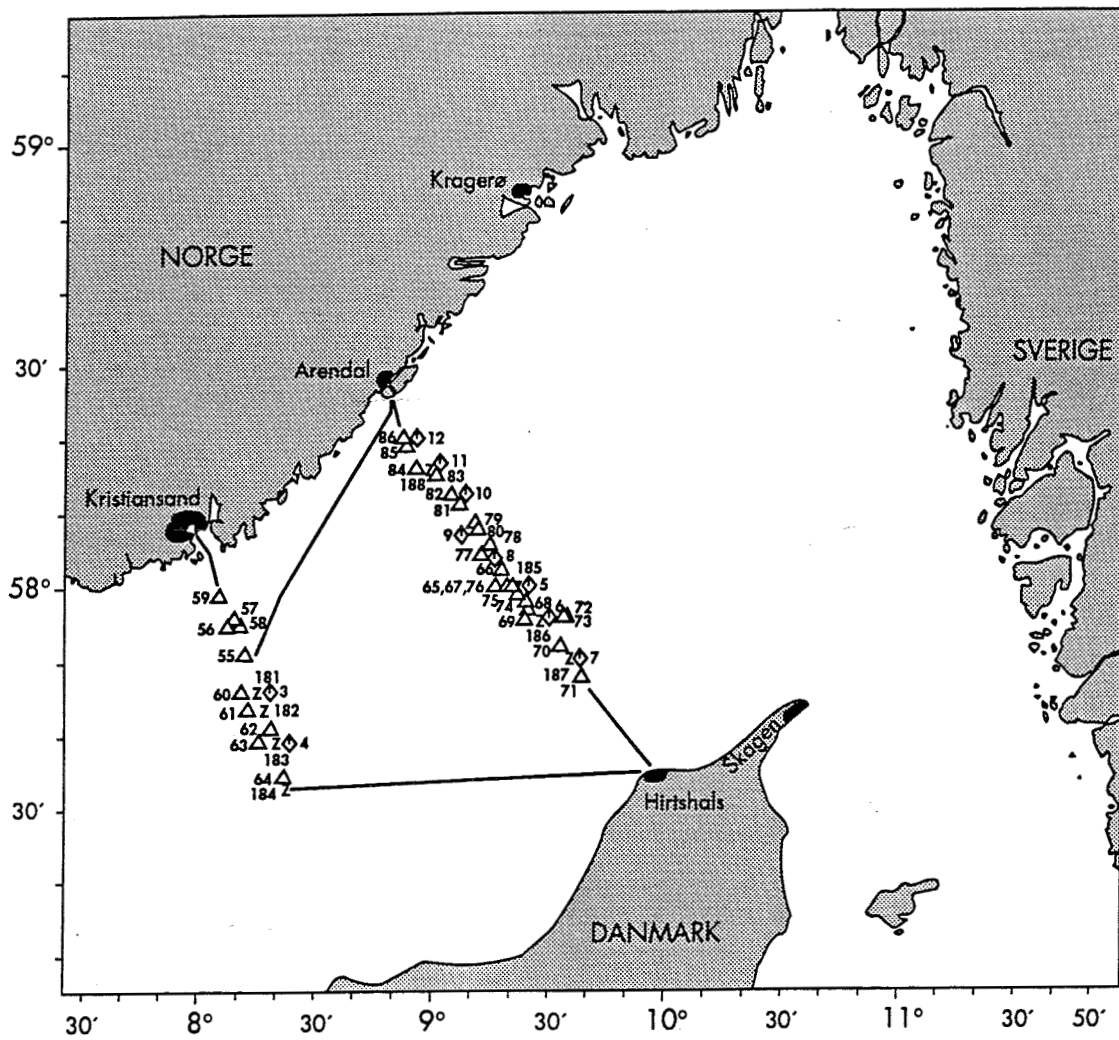


9-14 May 1995

Net stations

"G.M. Dannevig"

Cruise no 1995 307

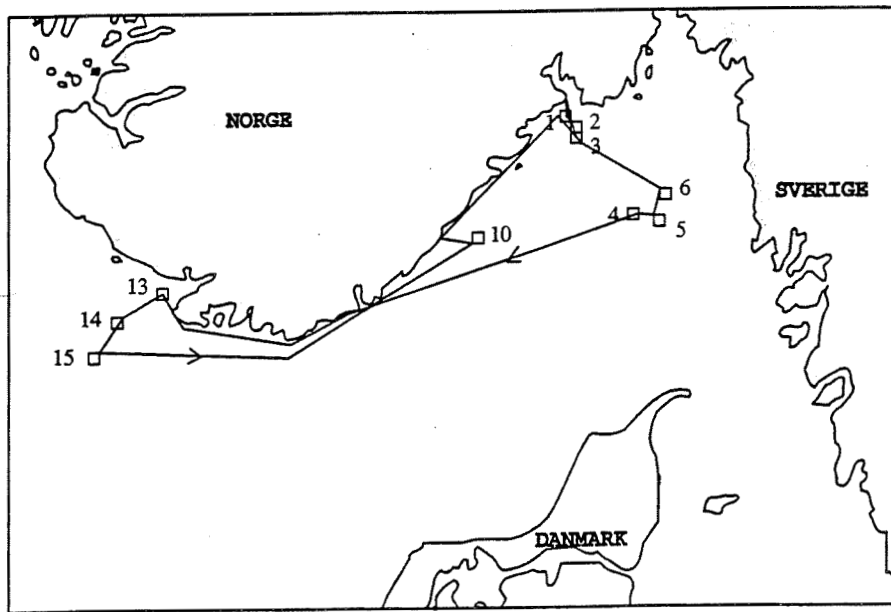


18-24 May 1995

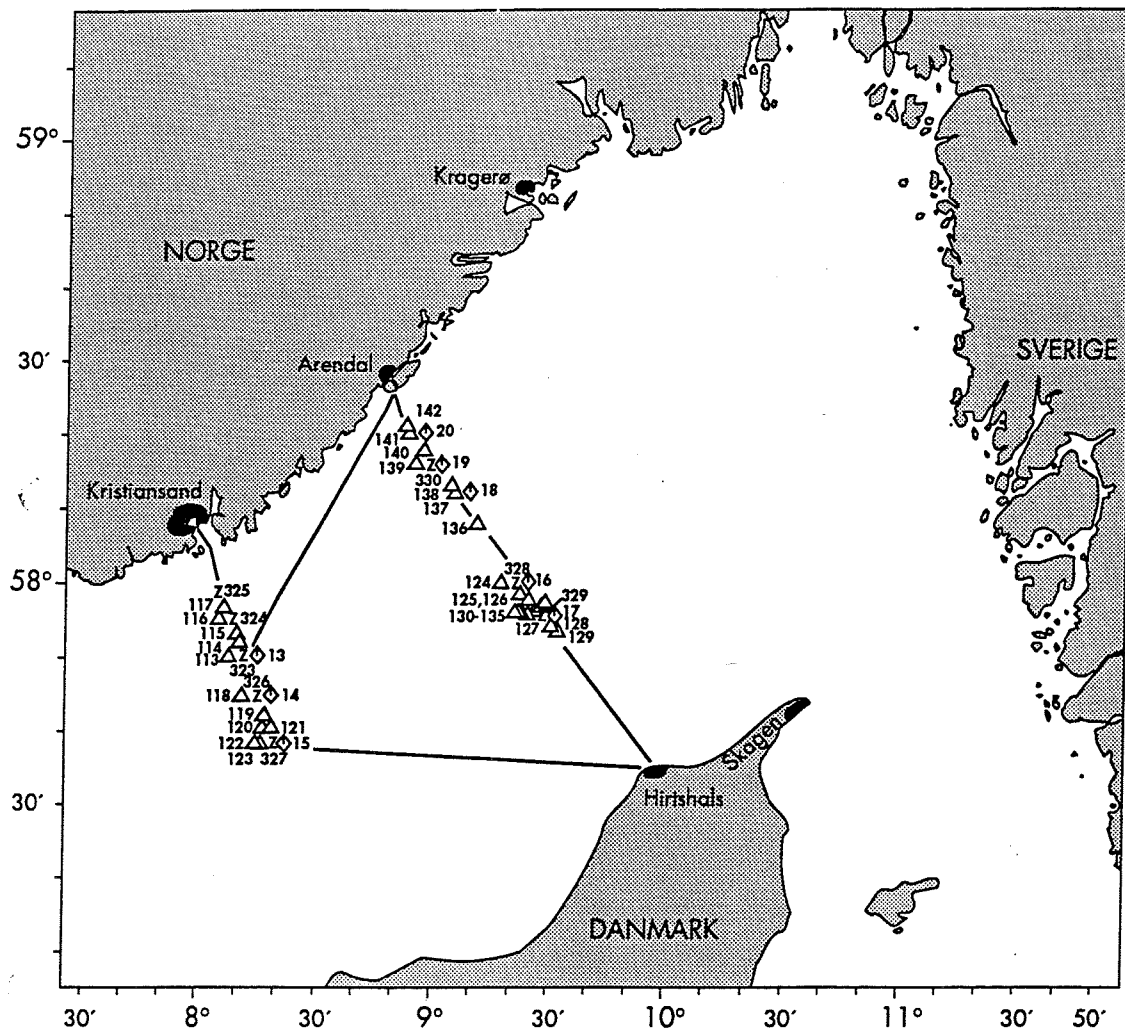
TRAWL, PLANKTON and  
CTD st.

"G.M. Dannevig"

Cruise no 1995 309



7-12 June 1995    TRAWL st.no 1-15    "G.M. Dannevig"  
Cruise no 1995 311

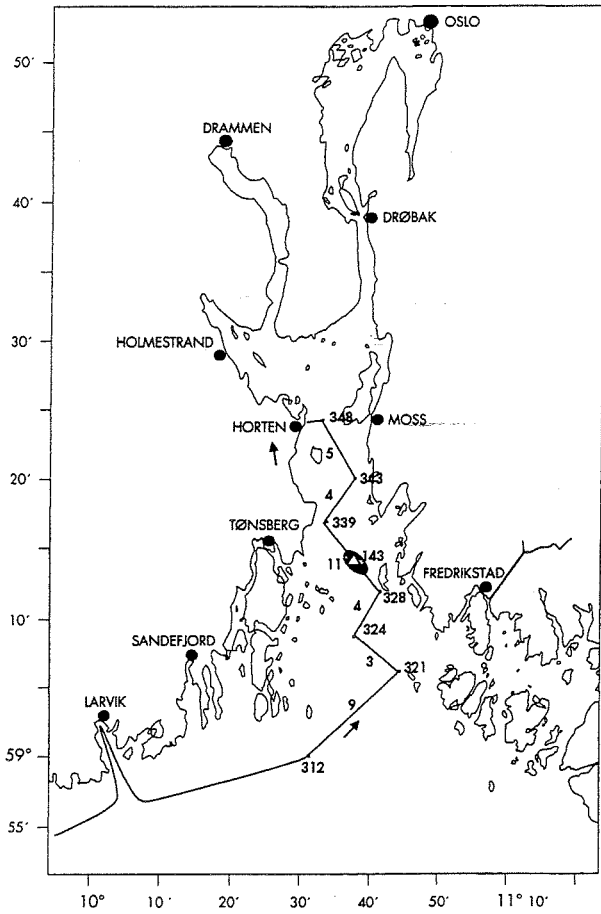


14-18 Aug 1995

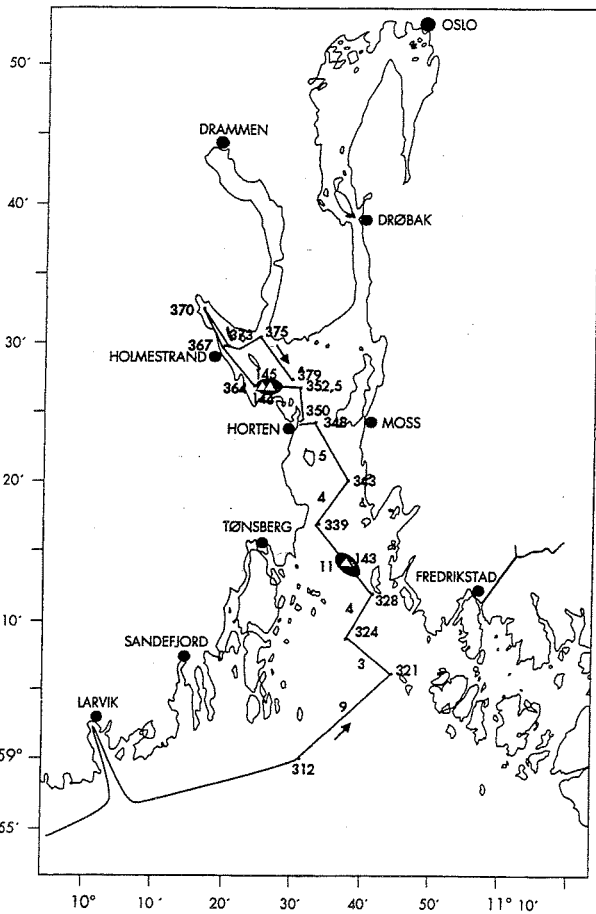
TRAWL, PLANKTON and CTD st.

"G.M. Dannevig"

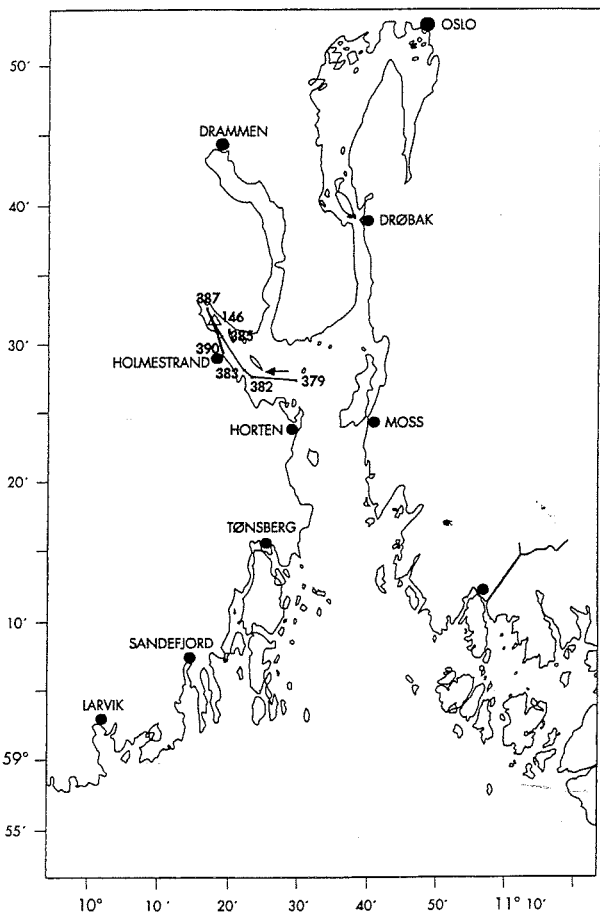
Cruise no 1995.318



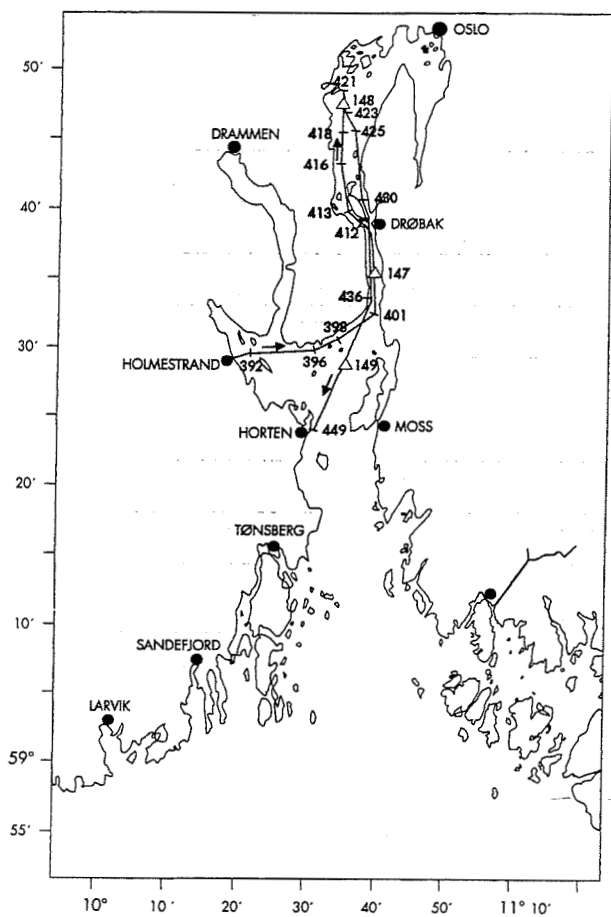
Cruise no 1995 320 4 Sep 1995 "G.M. Dannevig"



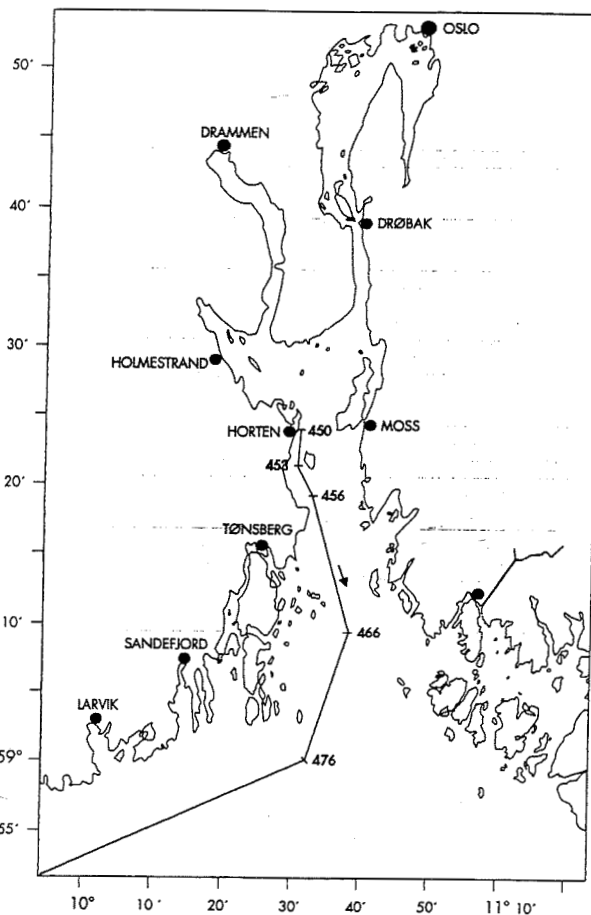
Cruise no 1995.320 4-5 Sep 1995



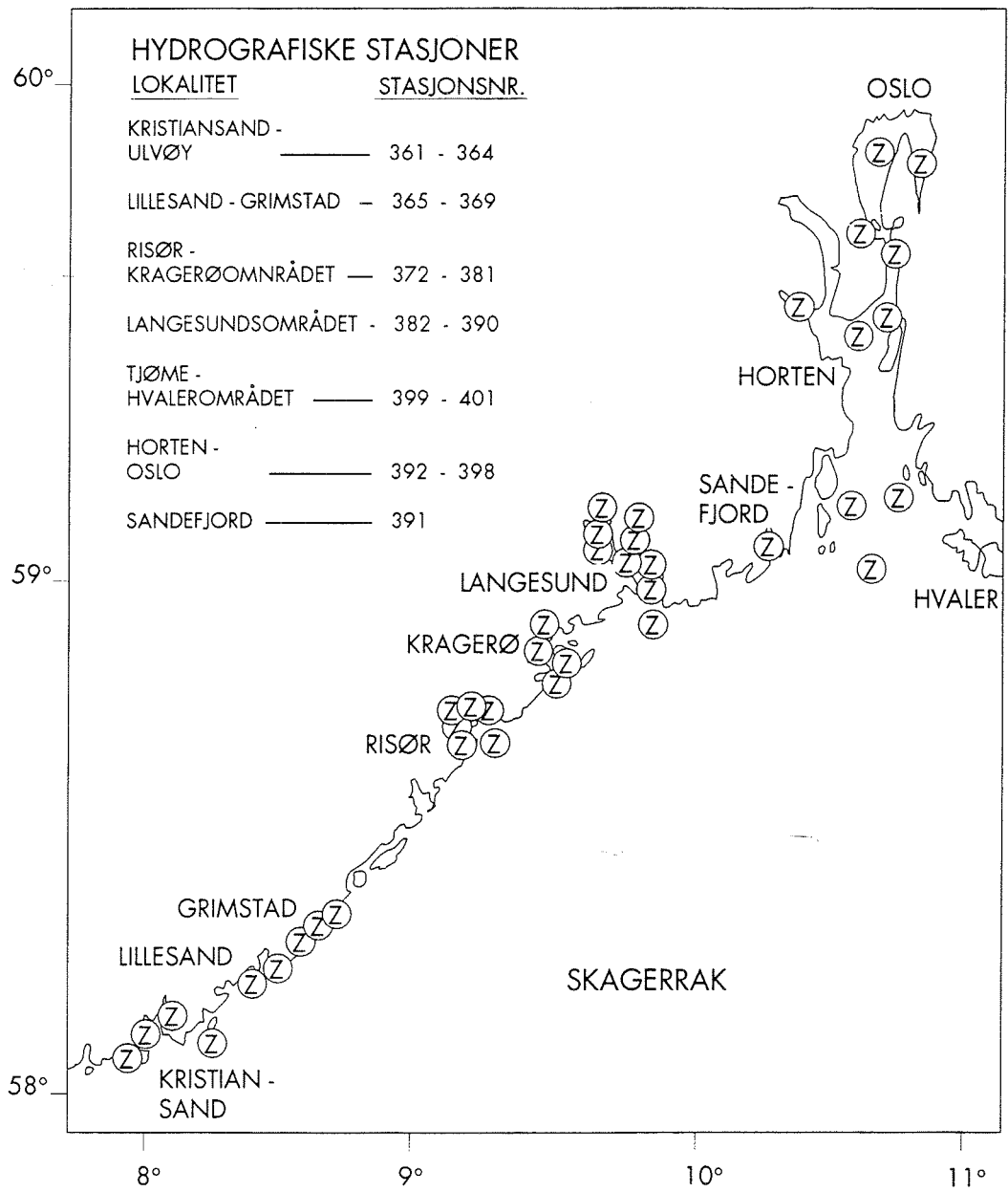
Cruise no 1995 320 5 Sep 1995



Cruise no 1995.320 6 Sep 1995 "G.M. Dannevig"



Cruise no 1995.320 7 Sep 1995

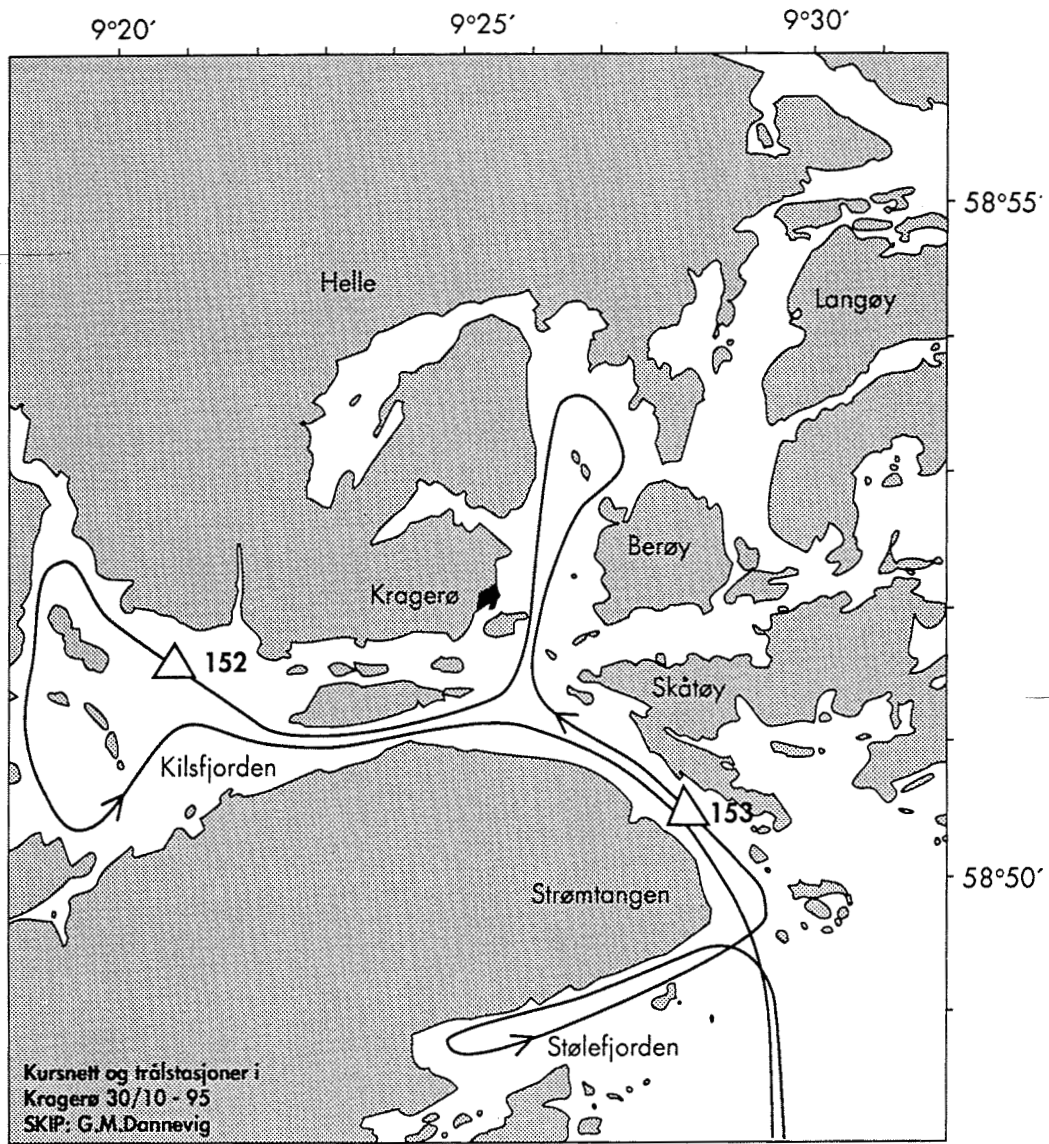


14 Sep-1 Oct 1995  
Cruise no 1995.322

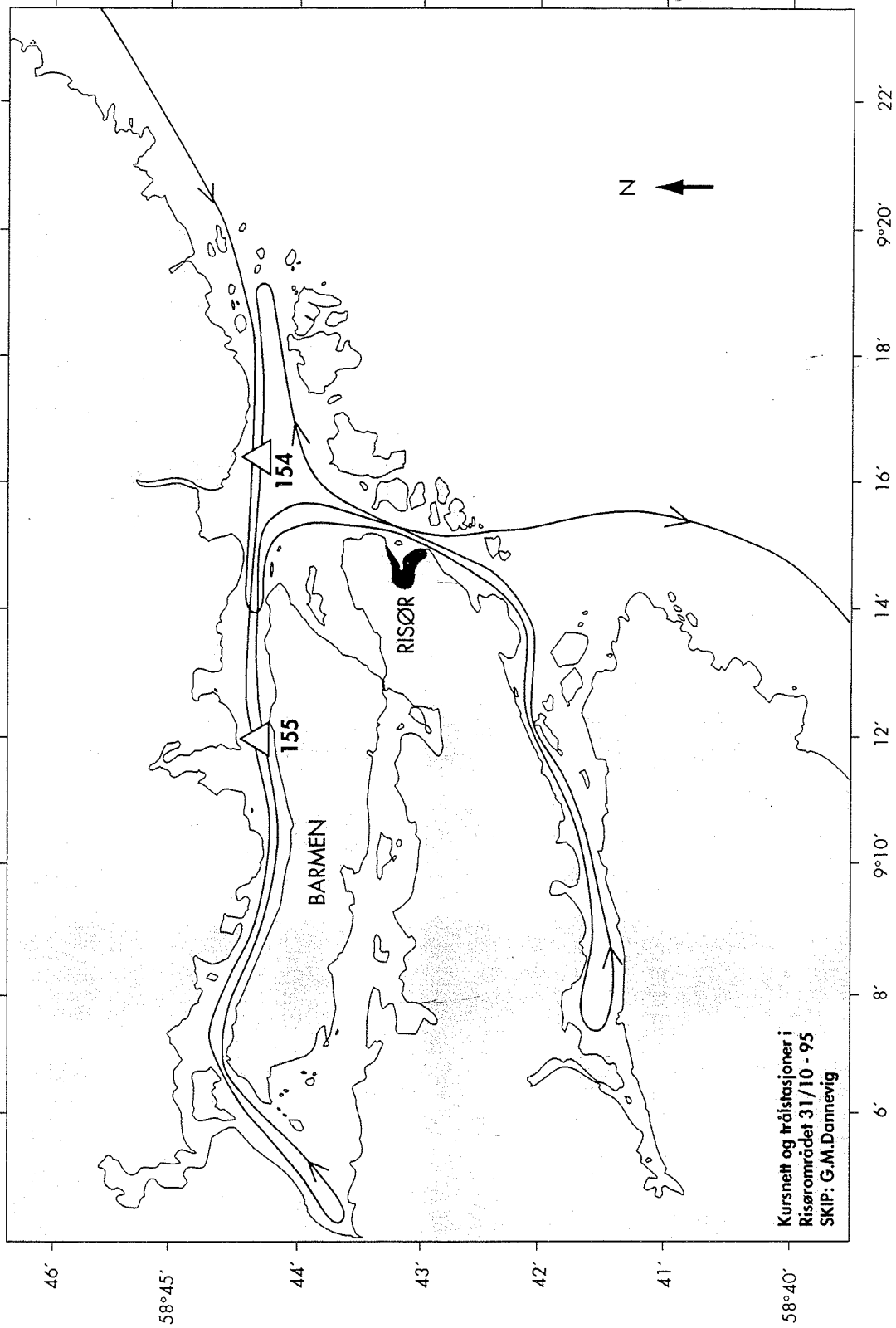
z CTD st.no 361-391

"G.M. Dannevig"



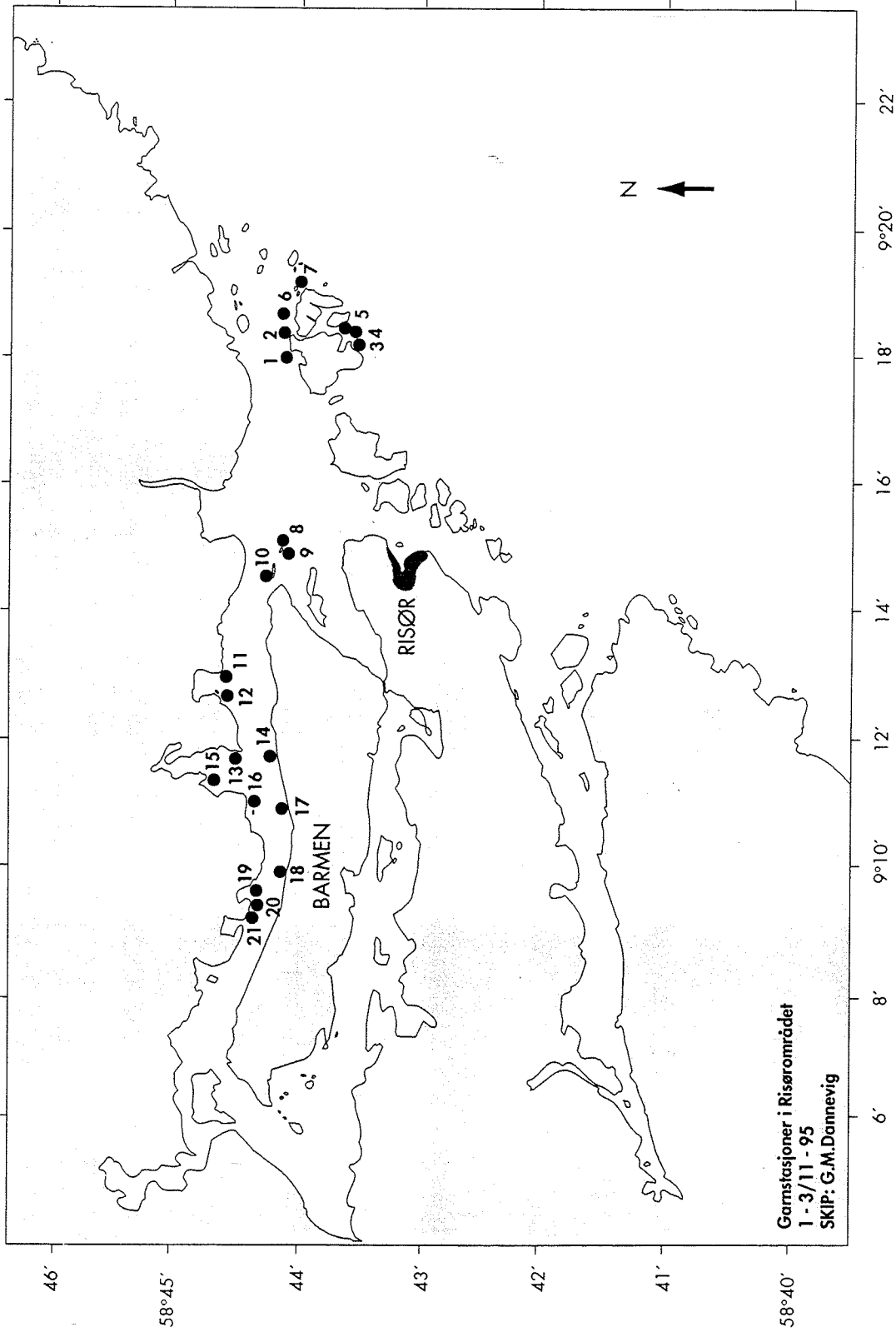


Cruise no 1995 312 30 Oct 1995 Trawl.st. "G.M. Dannevig"

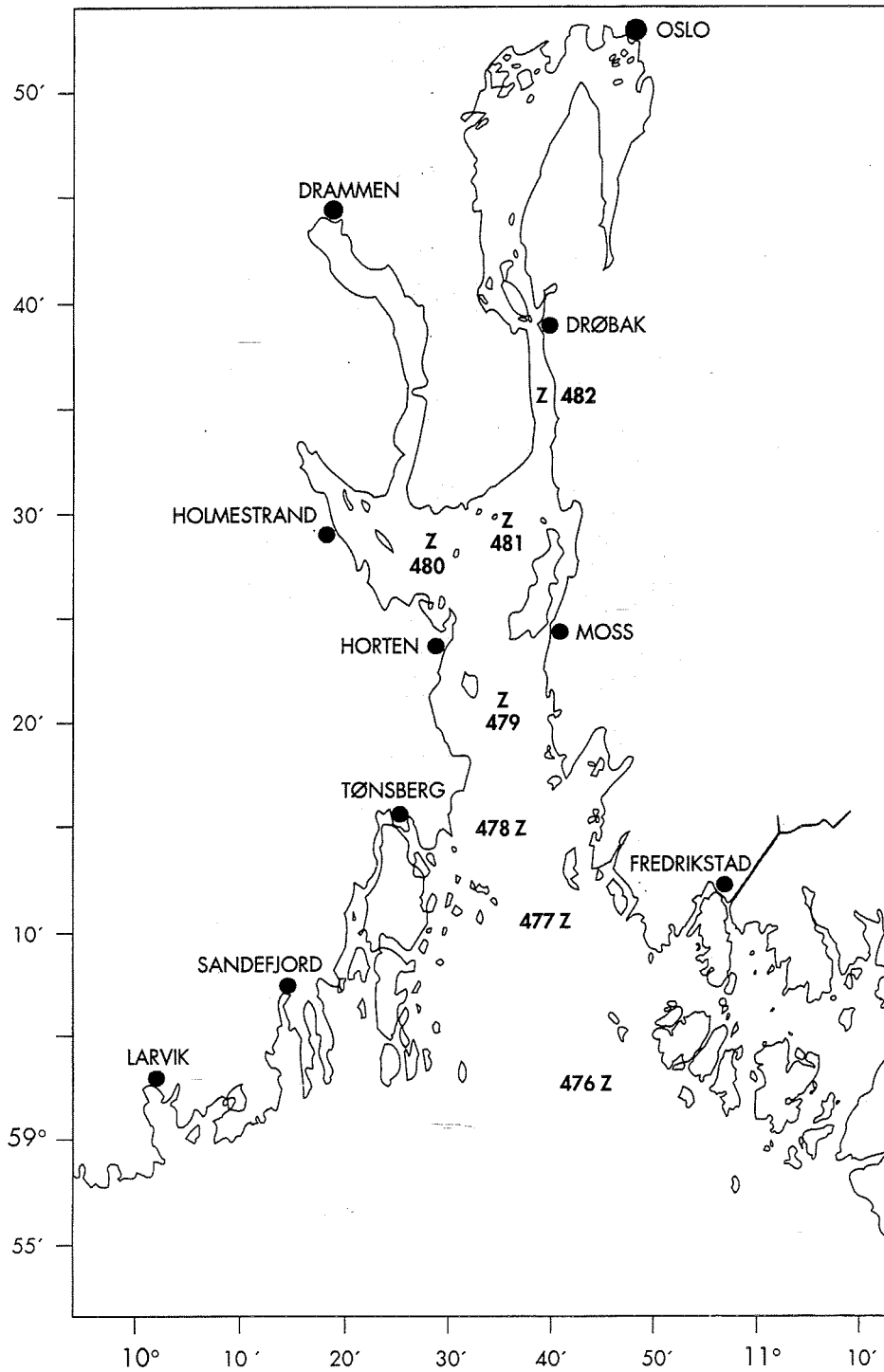


Kursnett og trålstasjoner i  
Risørområdet 31/10 - 95  
SKIP: G.M.Dannevig

Cruise no 1995 312 31 Oct 1995 Trawl.st. "G.M. Dannevig"

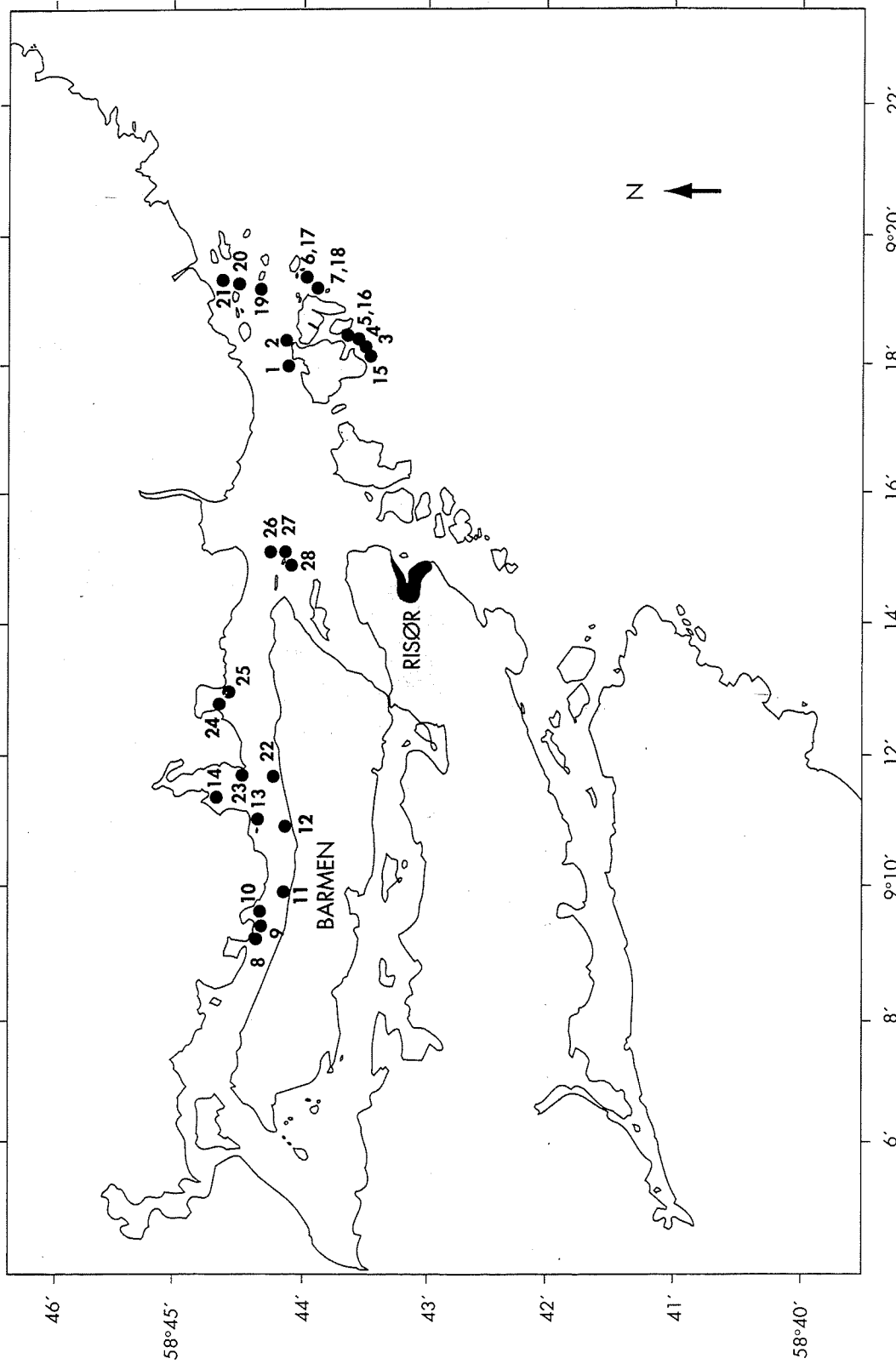


Cruise no 1995 312 1-3 Nov 1995 Net-stations "G.M. Dannevig"



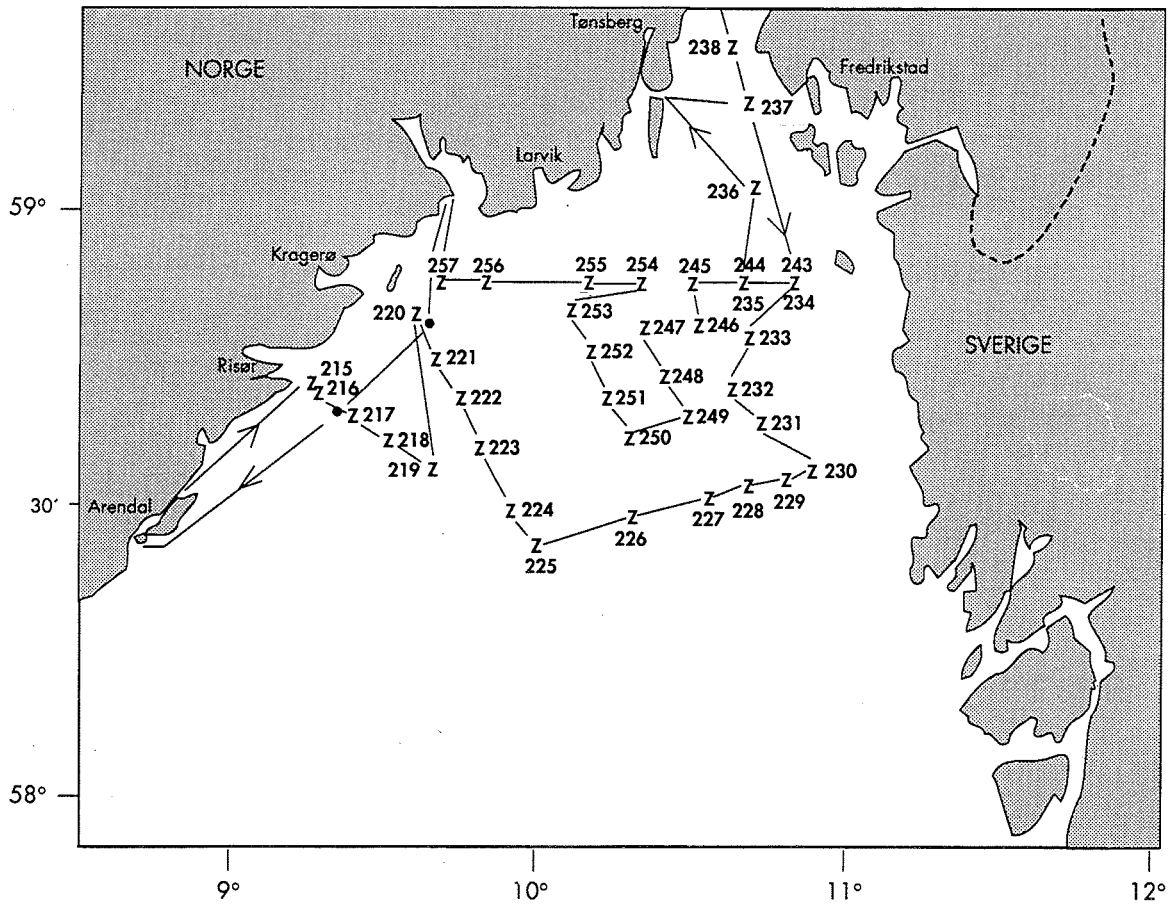
7-9 Dec 1995

z CTD st.no 474-482 "G.M. Dannevig"  
 (st.no 474-475 in Risørarea not shown)



"G.M. Dannevig"

11-12 Dec 1995 Net stations  
Cruise no 1995 324

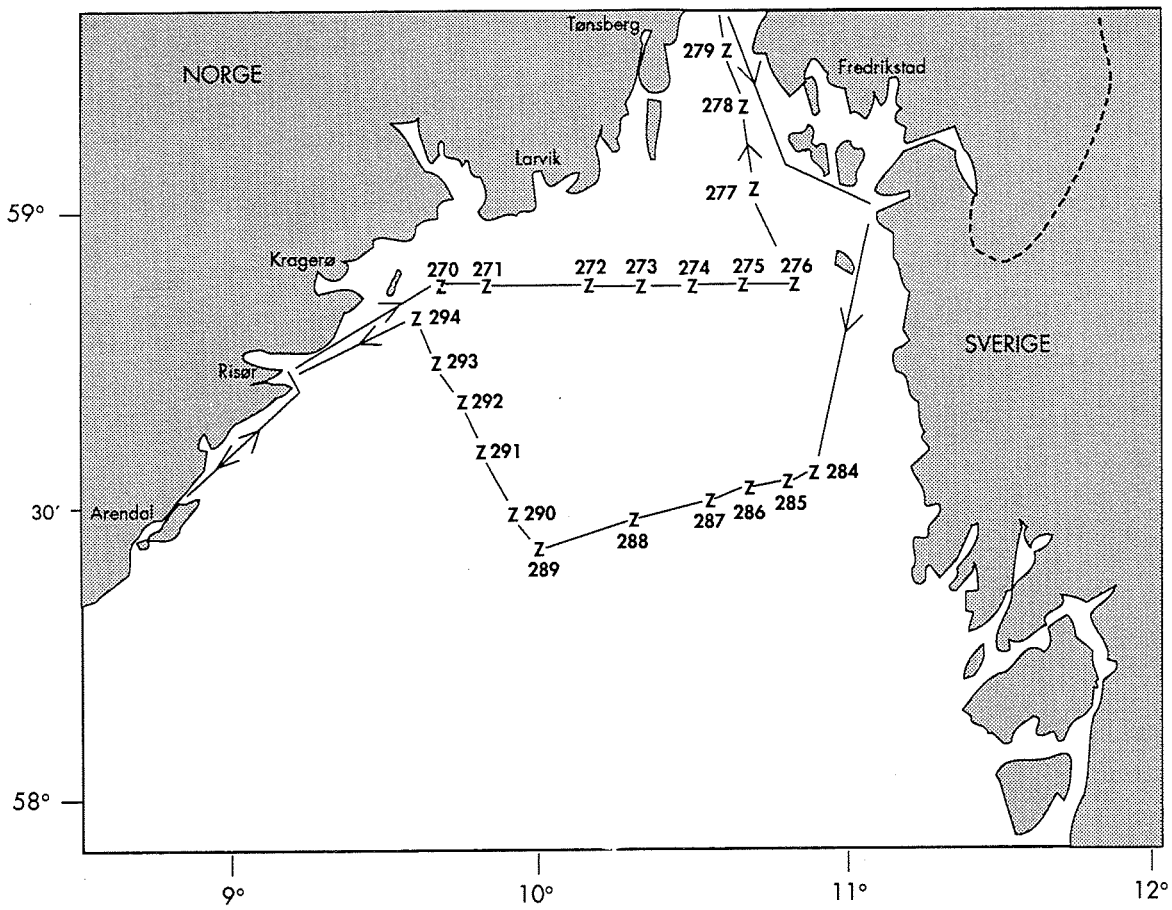


13 - 17 June 1995

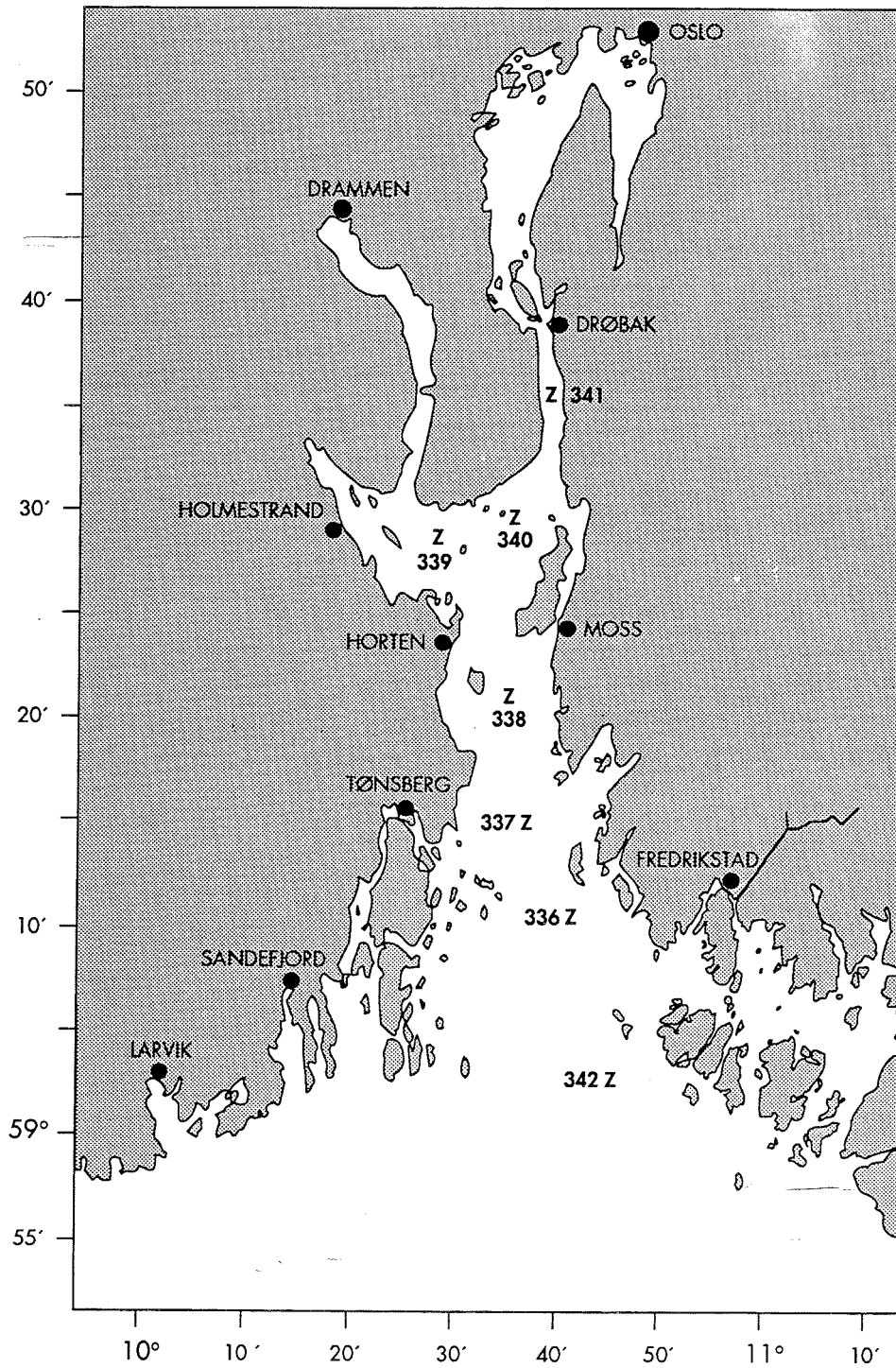
z CTD st.no 215-257

"G.M. Dannevig"

(st.no 239 - 242 in Oslofjorden not shown)

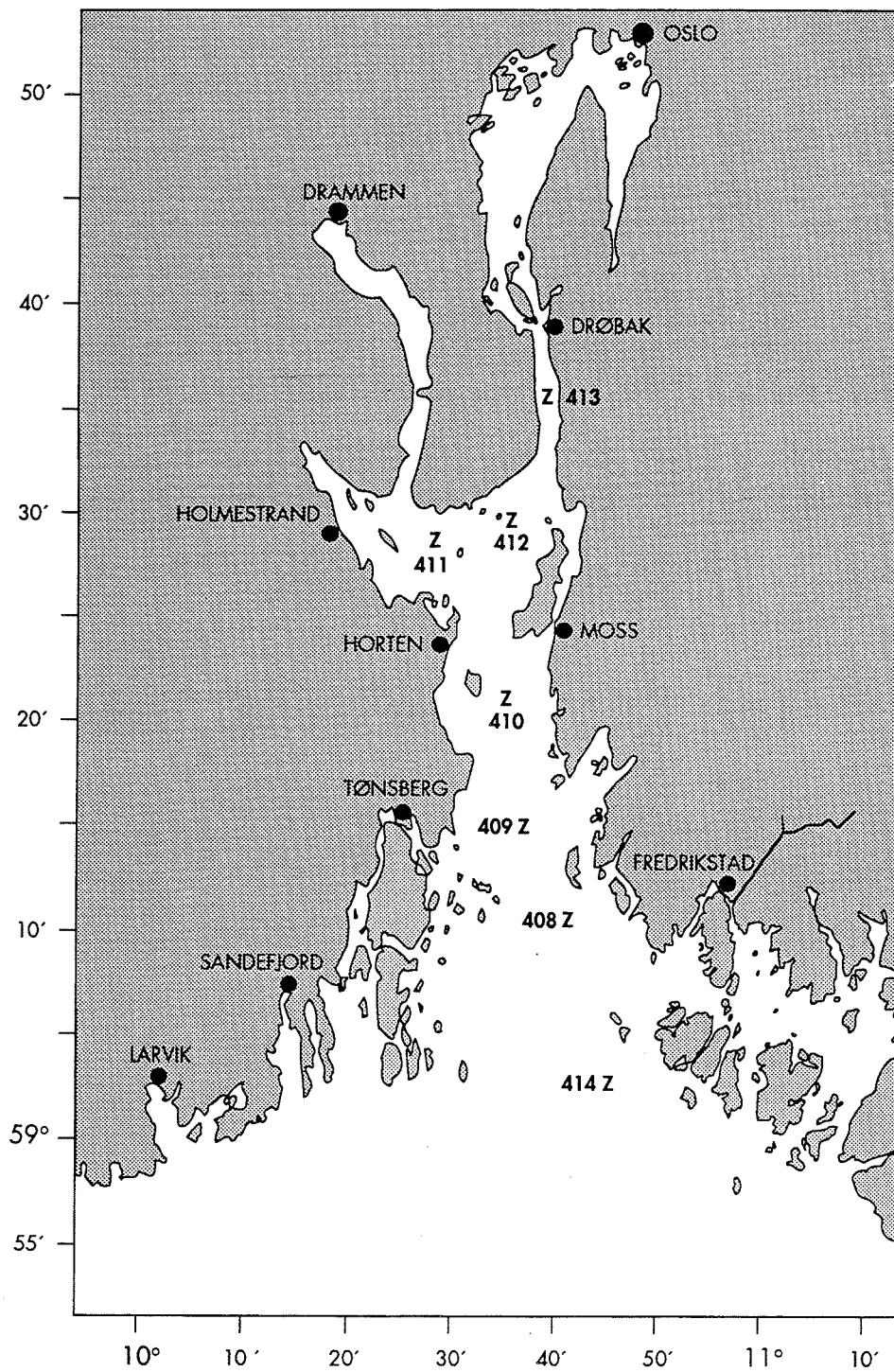


5 - 9 July 1995      z CTD st.no 270-294      "G.M. Dannevig"  
 (st.no 280-283 in Oslofjorden not shown)

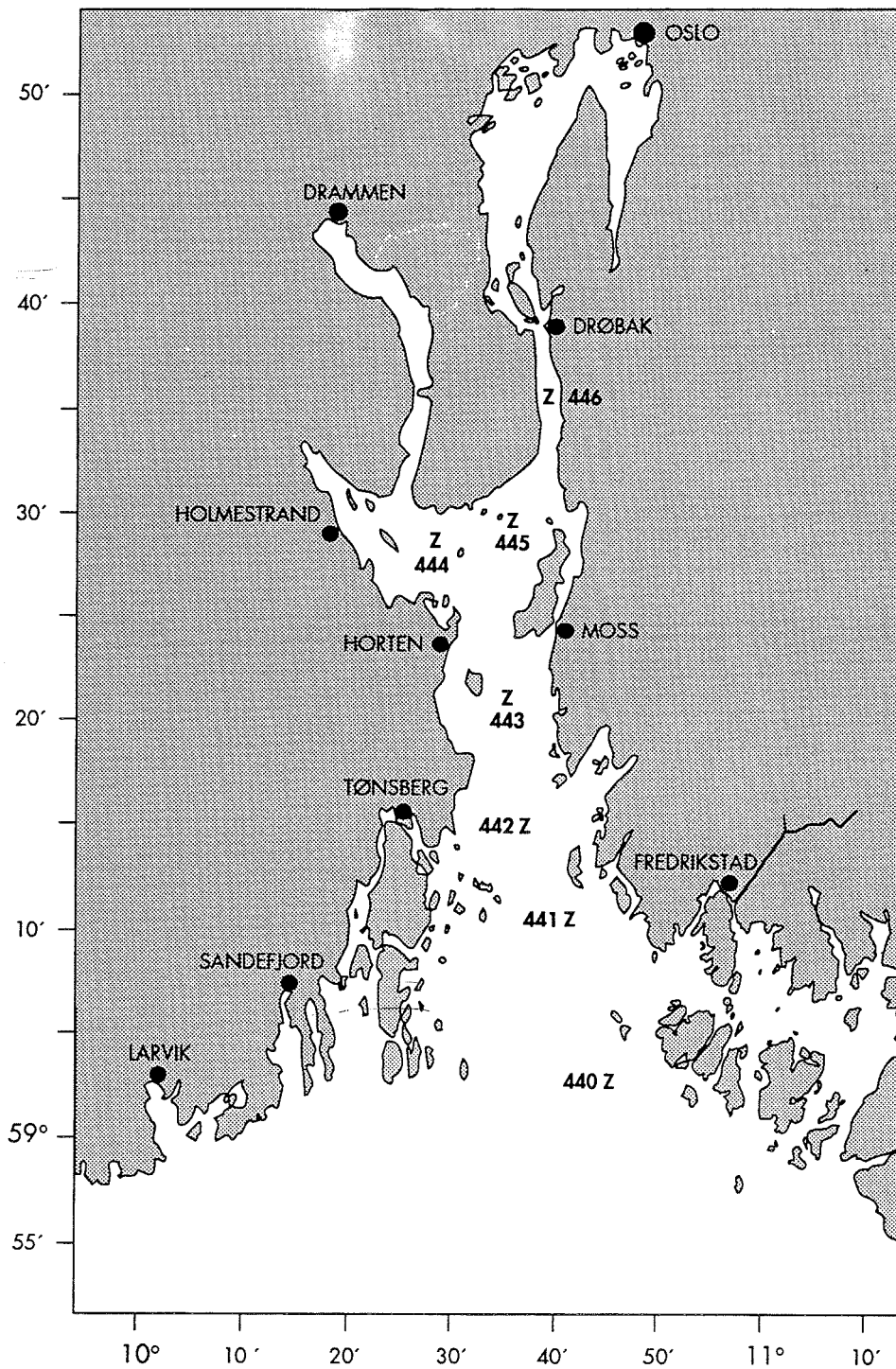


23 - 25 August 1995    z CTD st.no 333-342    "G.M. Dannevig"  
 (st.no 333-334 in Risørarea not shown)





3 - 5 October 1995 z CTD st.no 406-414 "G.M.- Dannevig"  
 (st.no 406-407 in Risørarea not shown)



7 - 9 November 1995 z CTD st.no 438-446 "G.M. Dannevig"  
 (st.no 438-439 in Risørarea not shown)