

report on oceanographic cruises and data stations

1977

HARALD KISMUL

Guidelines:

- X Classical oceanogr. stations
- Z Vertical profiles (STD/CTD)
- Y Bathythermograph (BT)
- △ Moored buoy station
- △ Pelagic Trawl station
- Bottom Trawl station
- ◇ Plankton station
- Clarke
- Taggings

fiskeridirektoratets
havforskningsinstitutt

Bergen - Norge

ICES Annual Report on Oceanographic Cruises and Data Stations.

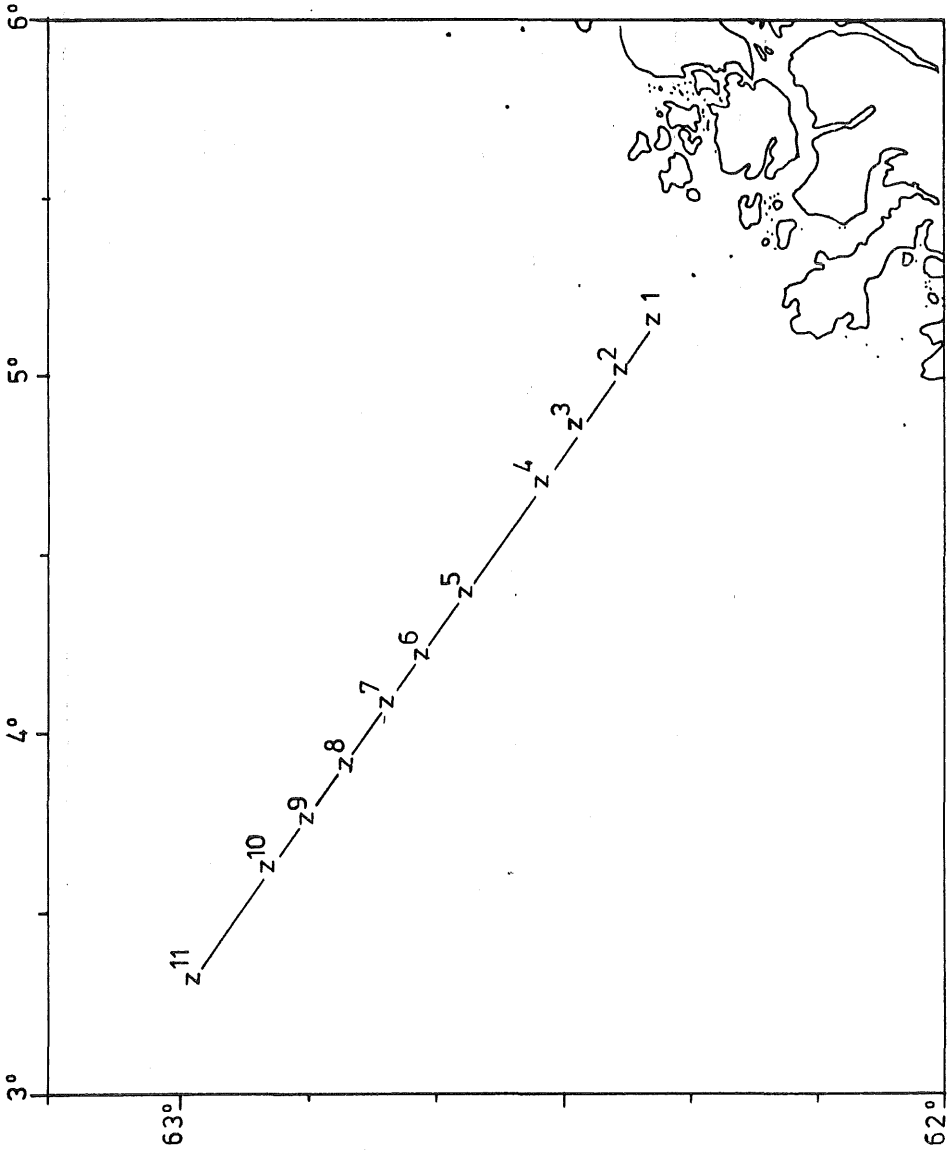
Country: NORWAY

Year: 1977

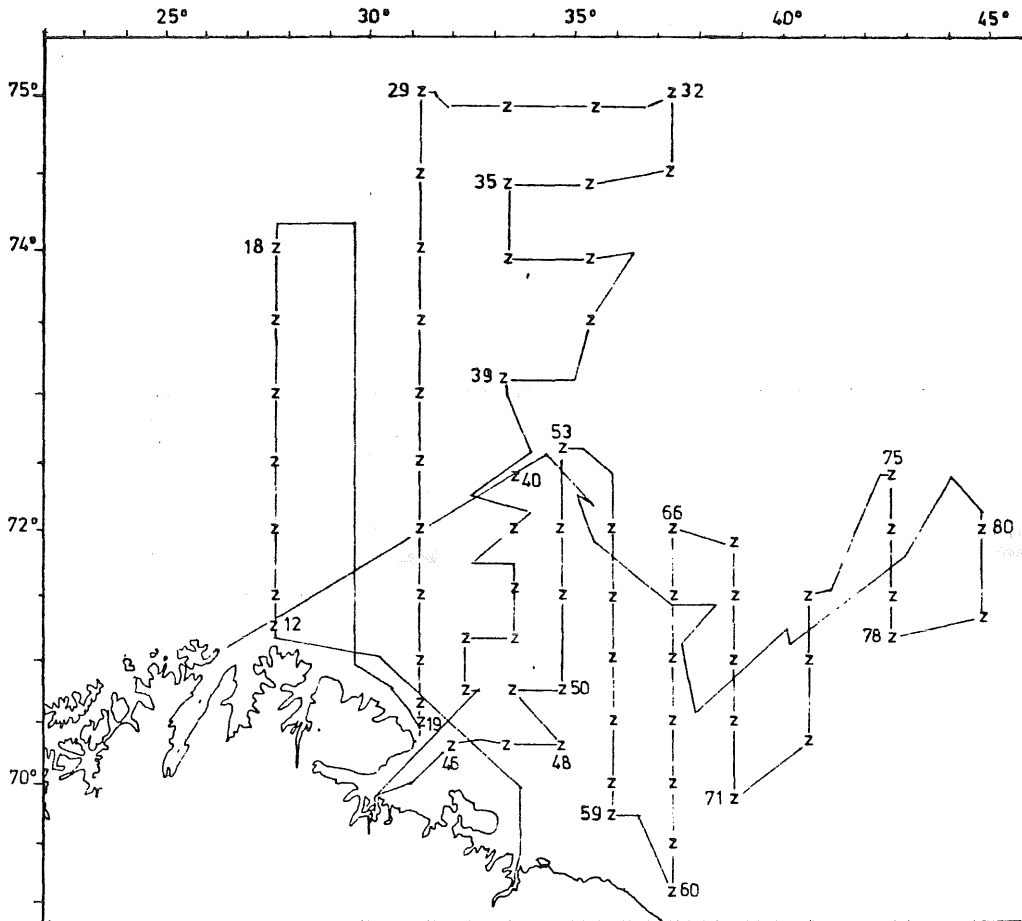
Ship: "Johan Hjort"

Cruise and ship number.	Period of cruises	Number of Stations														Continual observations						Page of track chart				
		Classical oceanogr. stations	Vertical profiles (STD/CTD)	Bathymograph (BT)	Moored Buoy	Oxygen	Nutrients	Oil Hydrocarbons	Petroleum residues	Metals	Primary org. prod.	Petroplank. pigment con.	Sediment samples	Pelagic Trawl	Bottom Trawl	Pelagic eggs and larvae	Taggings	Zooplankton	Phytoplankton	Surface temperature	Transparency		Organic matter (extract.)	Part. matter (filtration)	NO ₂ + NO ₃ (auto-analyzer)	Echo sounding
1/12	7/1 - 3/2		75										10	15					x	x				x	x	24
2/12	9/2 - 3/3		44				12							48	39		39		x	x				x	x	25-26
3/12	8/3 -31/3		213				12						2	9		97	97	x	x				x	x	27-28	
4/12	12/4 -27/4		18										3		146		146	x	x				x	x	29-30	
5/12	27/4 - 4/5	47				x	21			x			13	8		47	47	x	x				x	x	31	
6/12	31/5 -17/6		221			221	39						12			146	52	x	x				x	x	32-33-34	
7/12	19/6 - 3/7		42										42	3		33	33	x	x				x	x	35	
8/12	11/7 -29/7		147				31	63					51	6		63	63	x	x				x	x	36	
9/12	8/8 -14/8	51	51													62	62	x	x				x	x	37	
10/12	20/8 -12/9		138				29	29					102					x	x				x	x	38	
11/12	16/9 - 4/10		39										43					x	x				x	x	39	
12/12	12/10-24/10		21				12								129			x	x				x	x	40	
13/12	4/11-15/12	131					12						71				67	x	x				x	x	41-42-43-44	

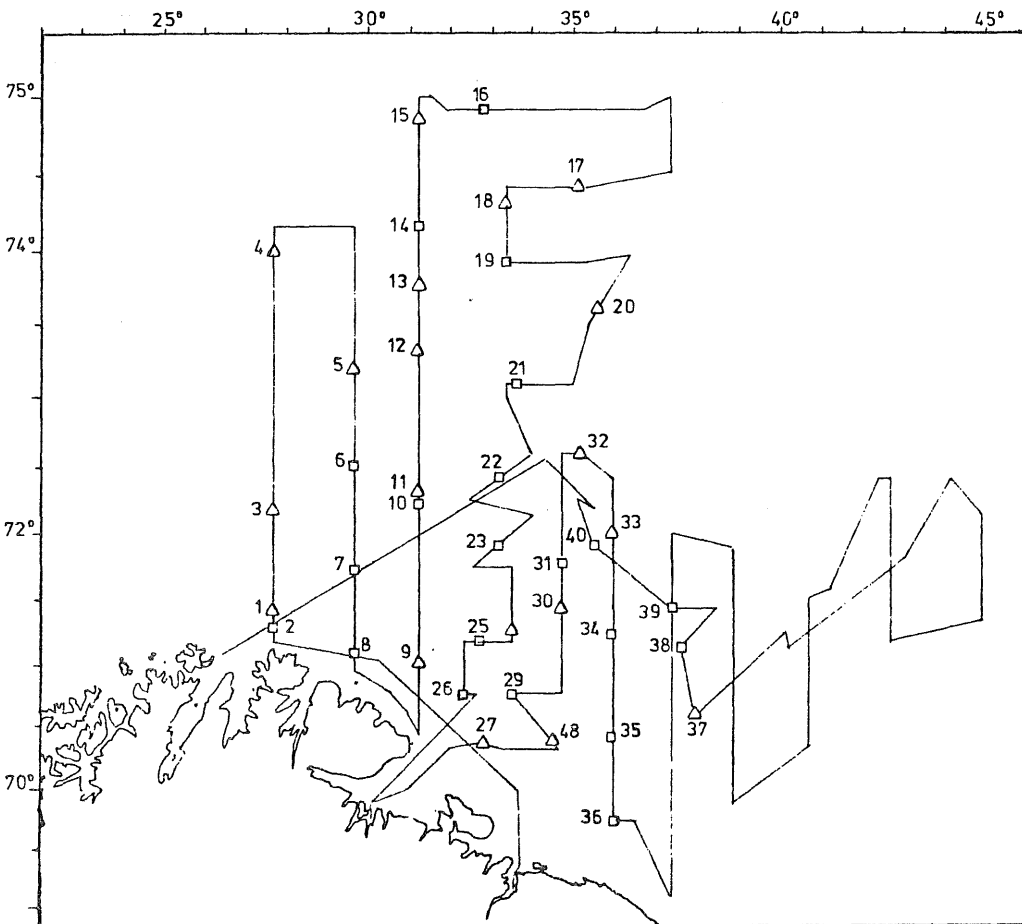




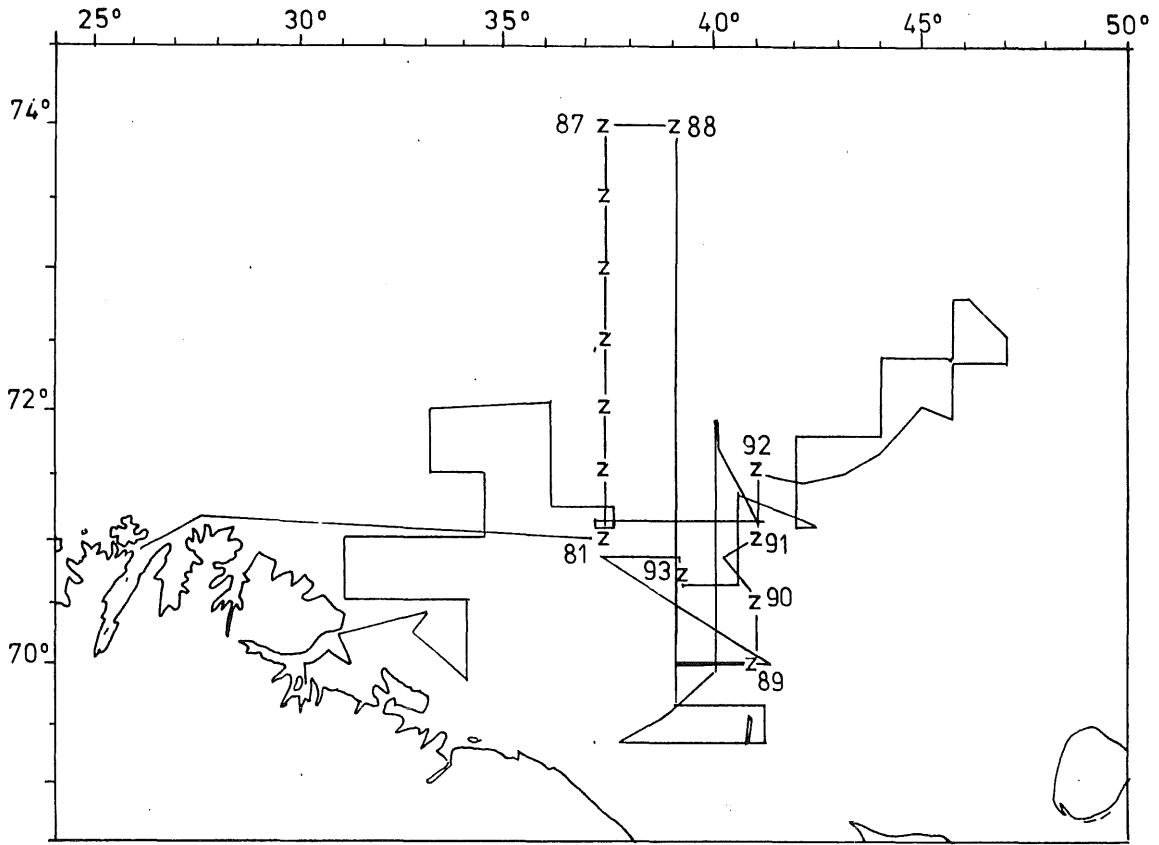
7-8 JAN. 1977 ST. NO. 1-11 "G.O.SARS"



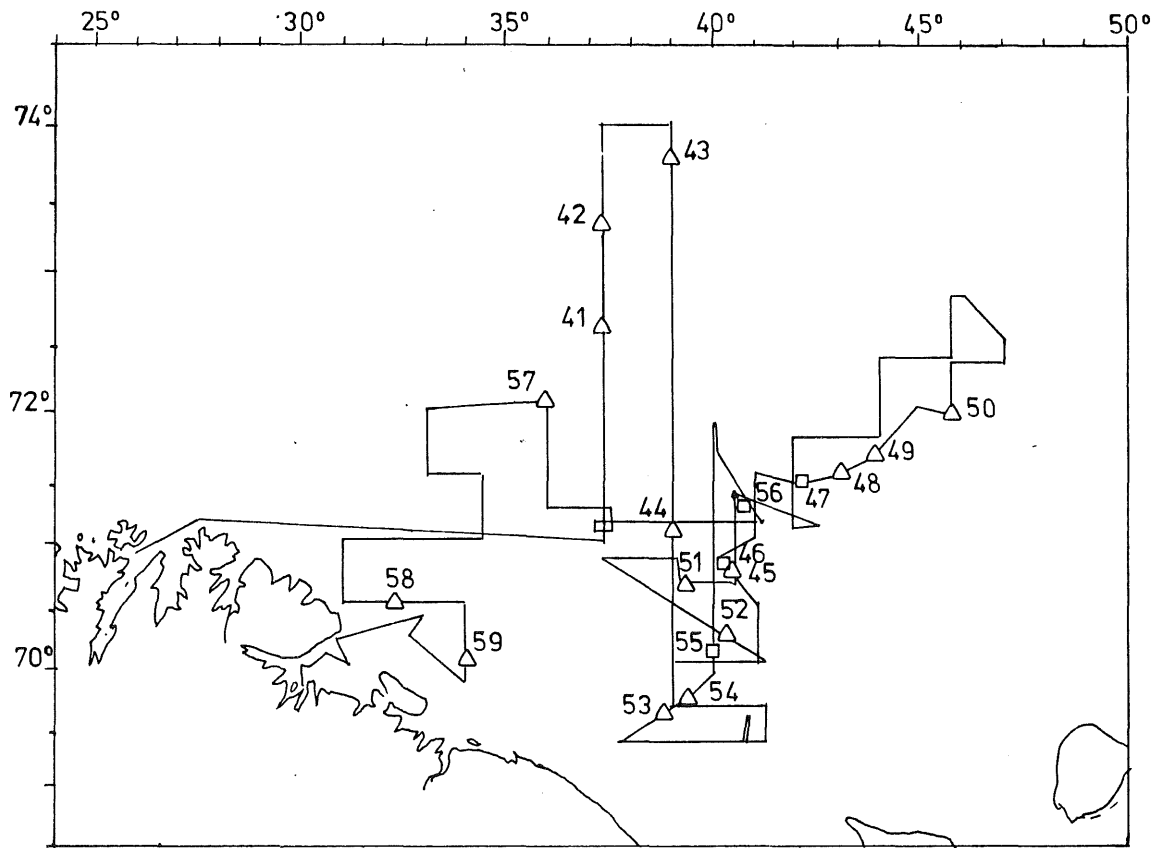
8 JAN. - 4 FEB. 1977 ST.NO. 12-80 „G.O. SARS“



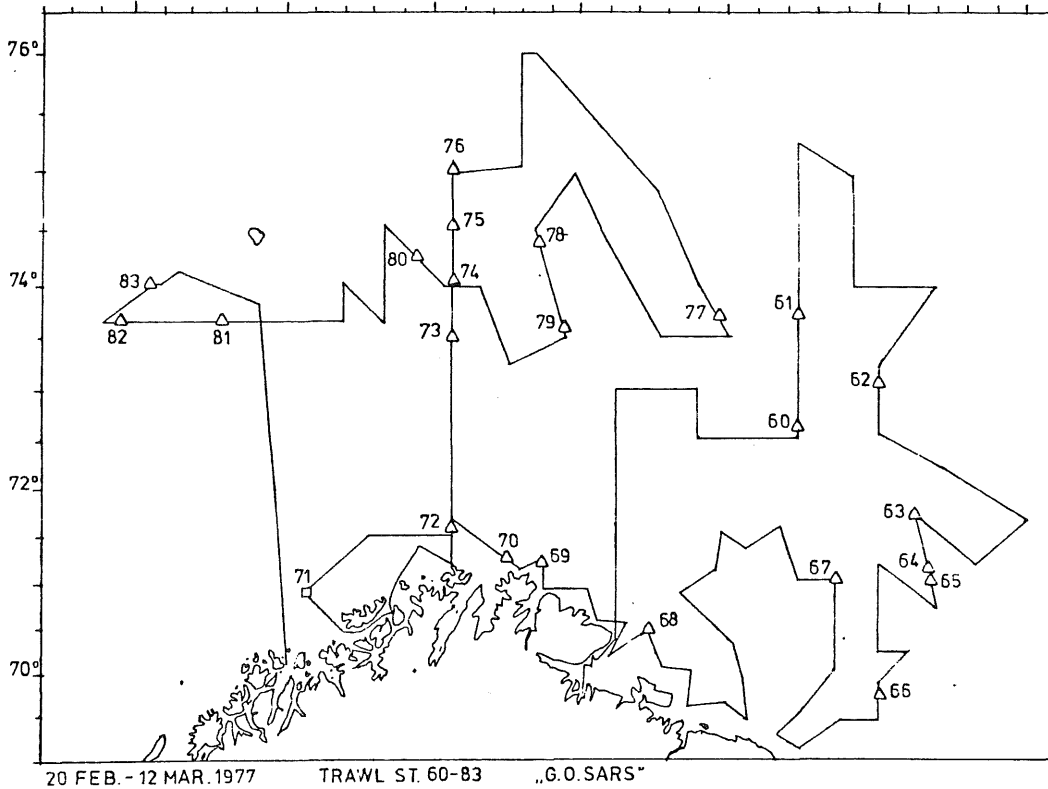
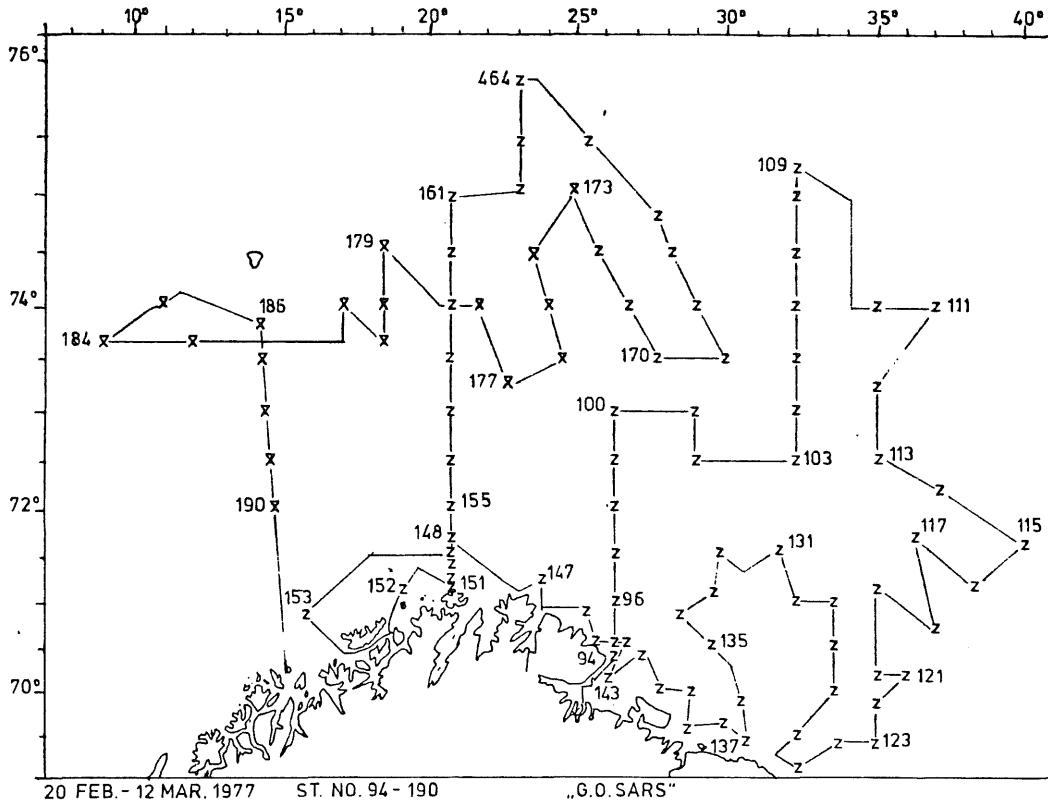
8 JAN. - 4 FEB. 1977 TRAWL ST. 1-40 „G.O. SARS“

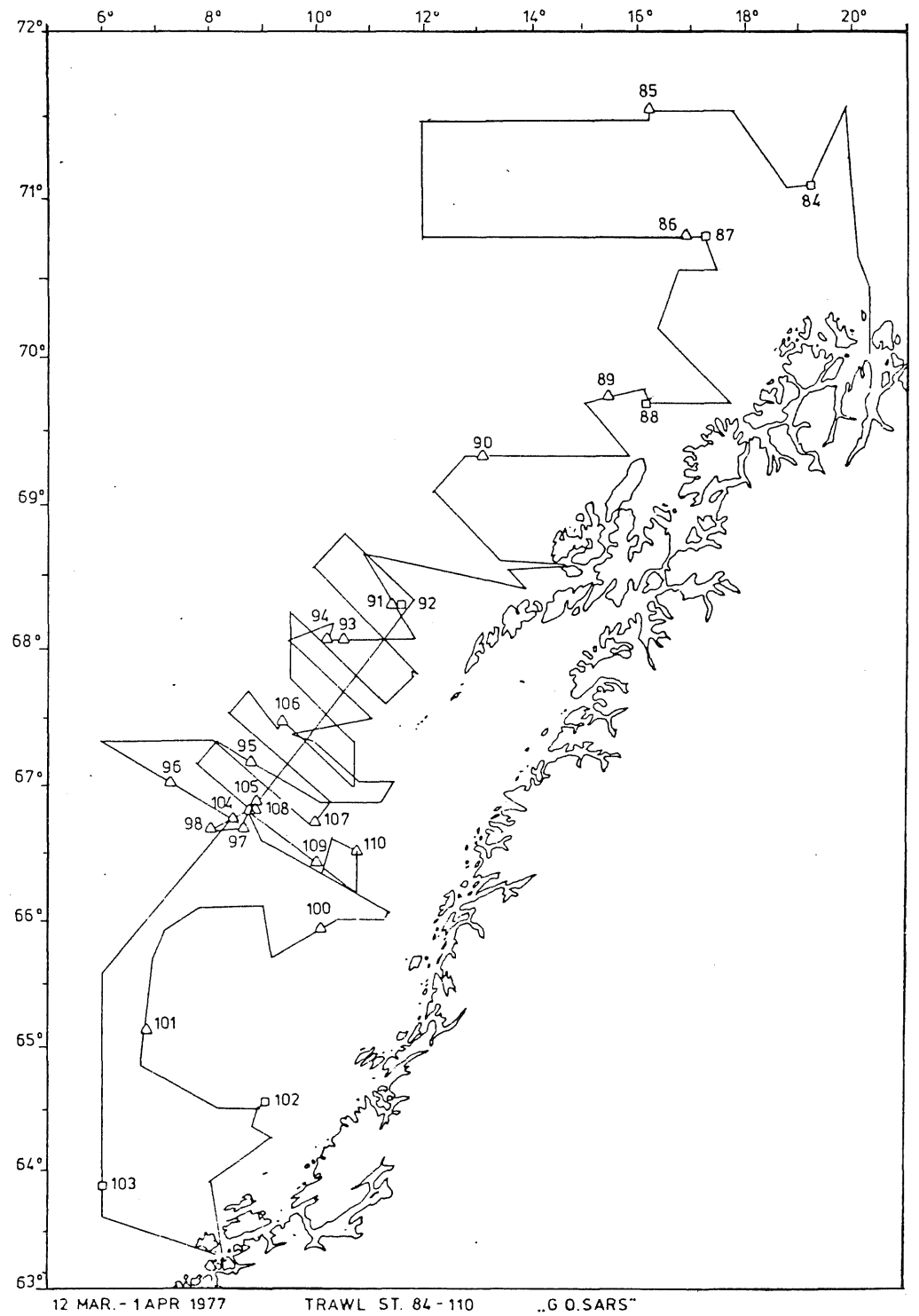
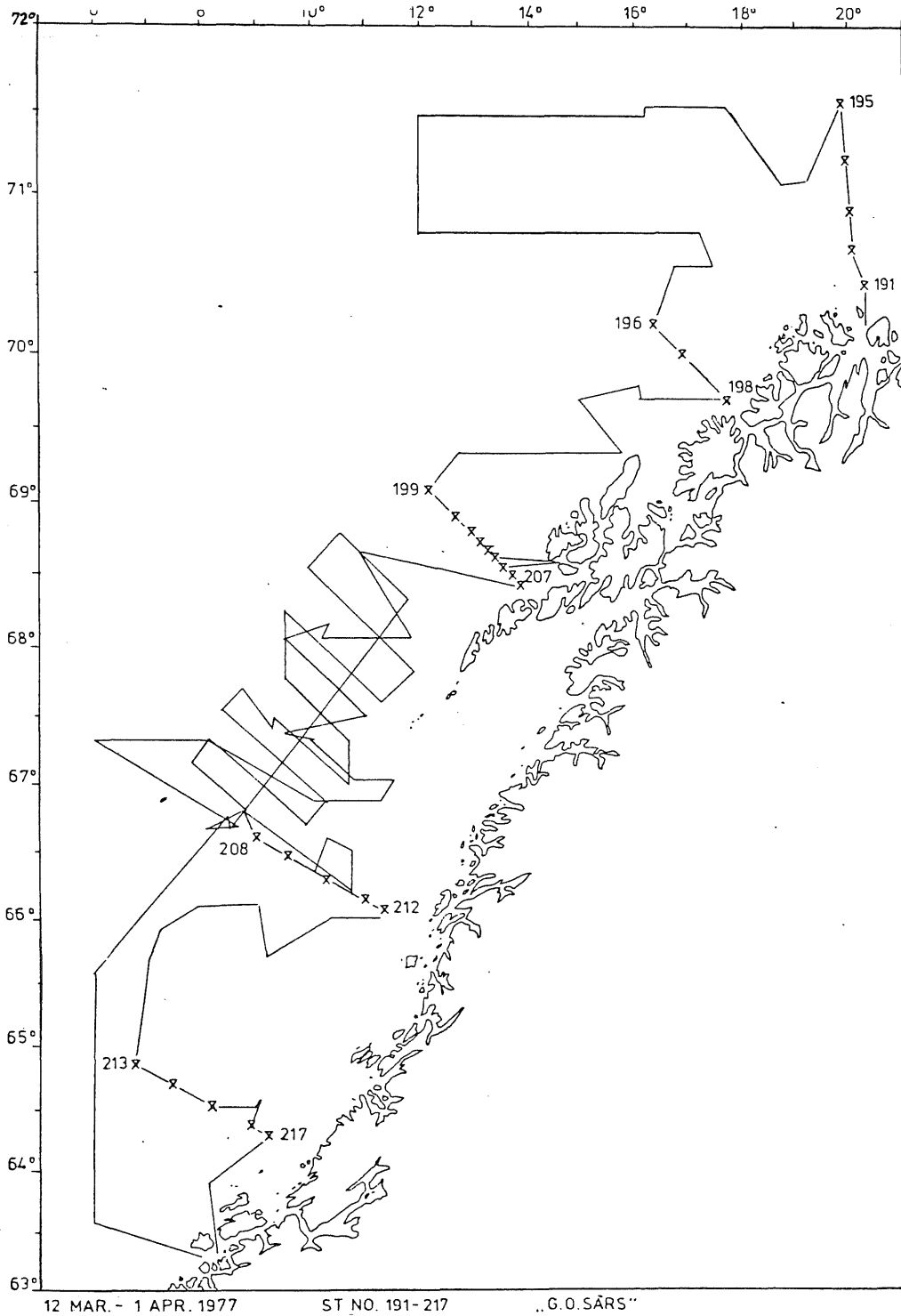


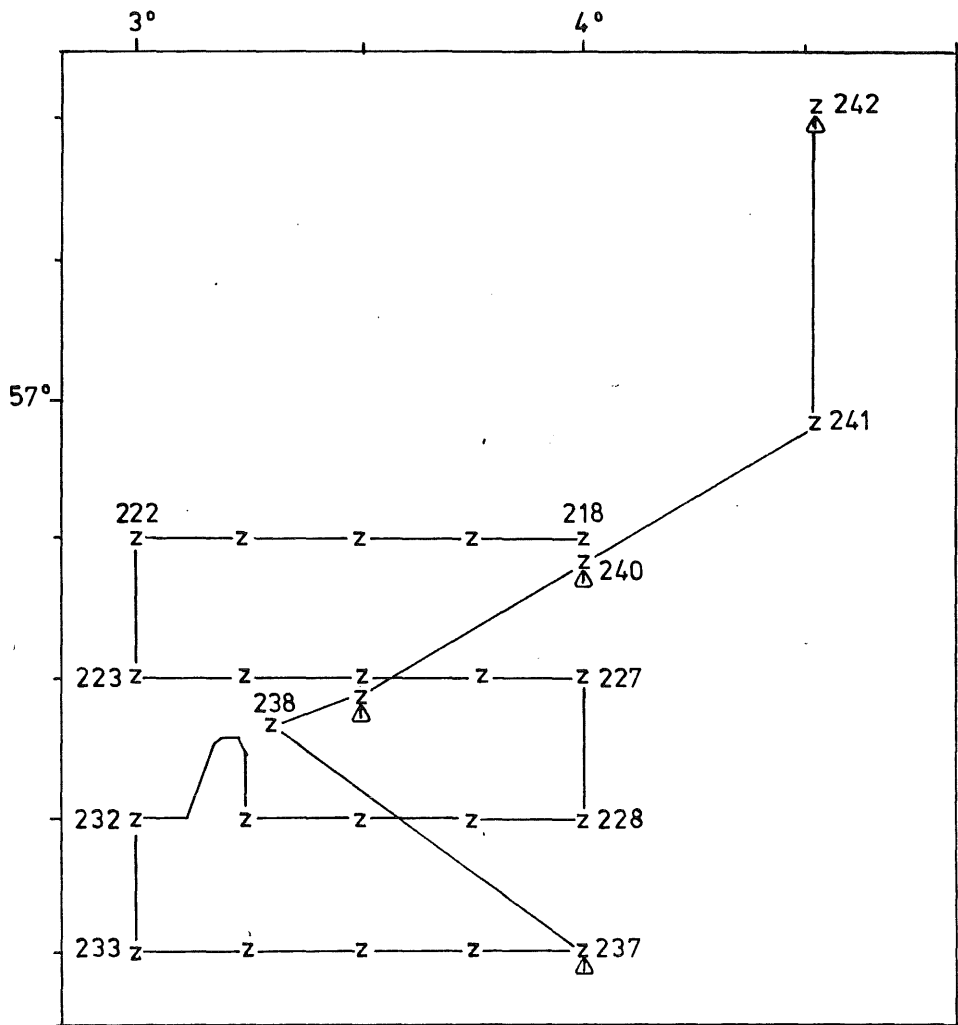
6-19 FEB. 1977 ST. NO. 81-93 „G.O. SARS“



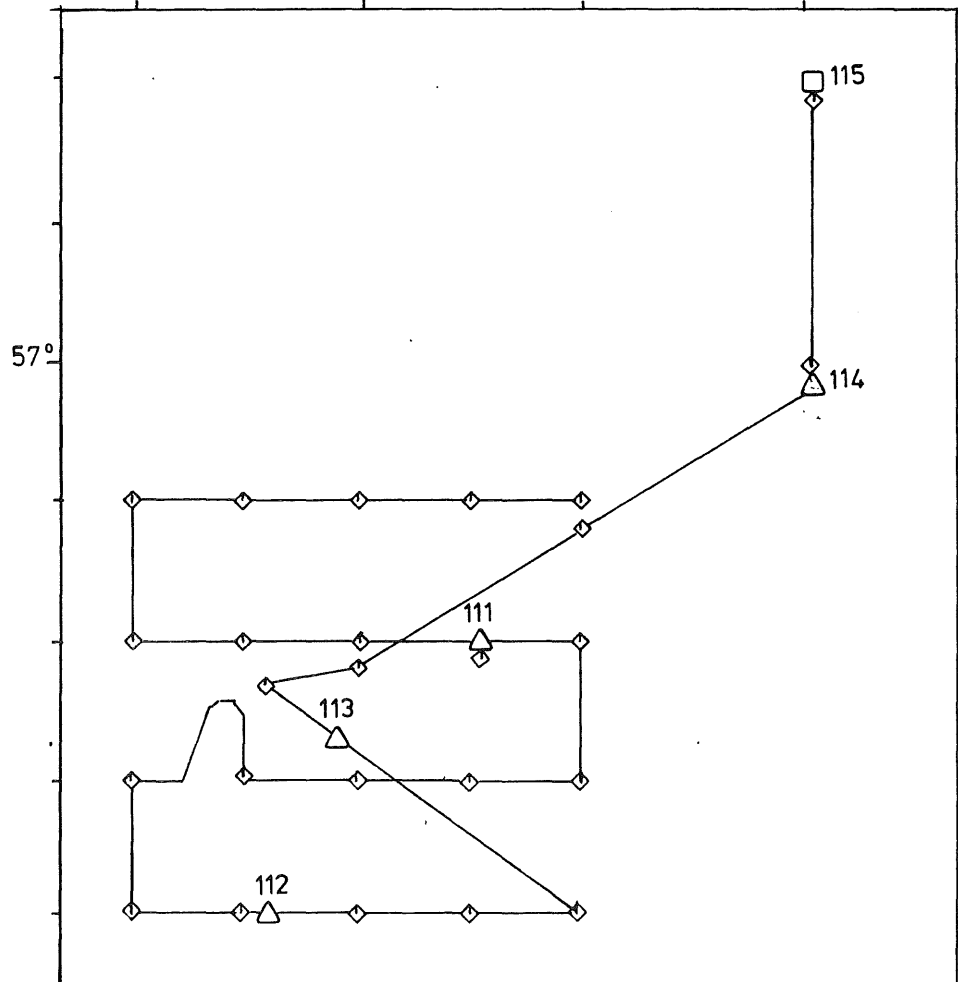
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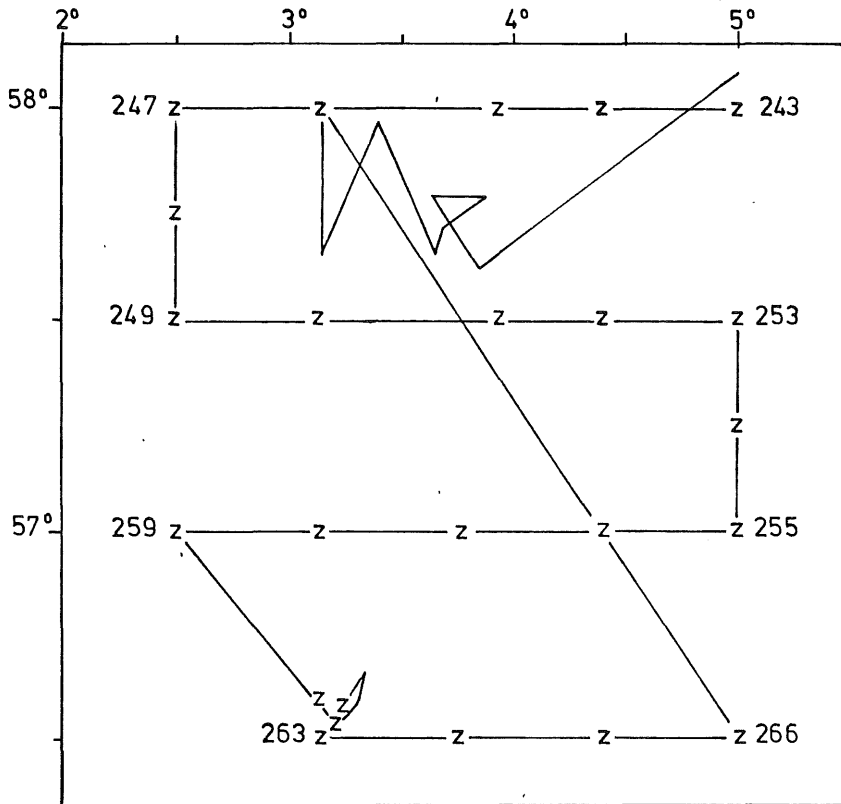




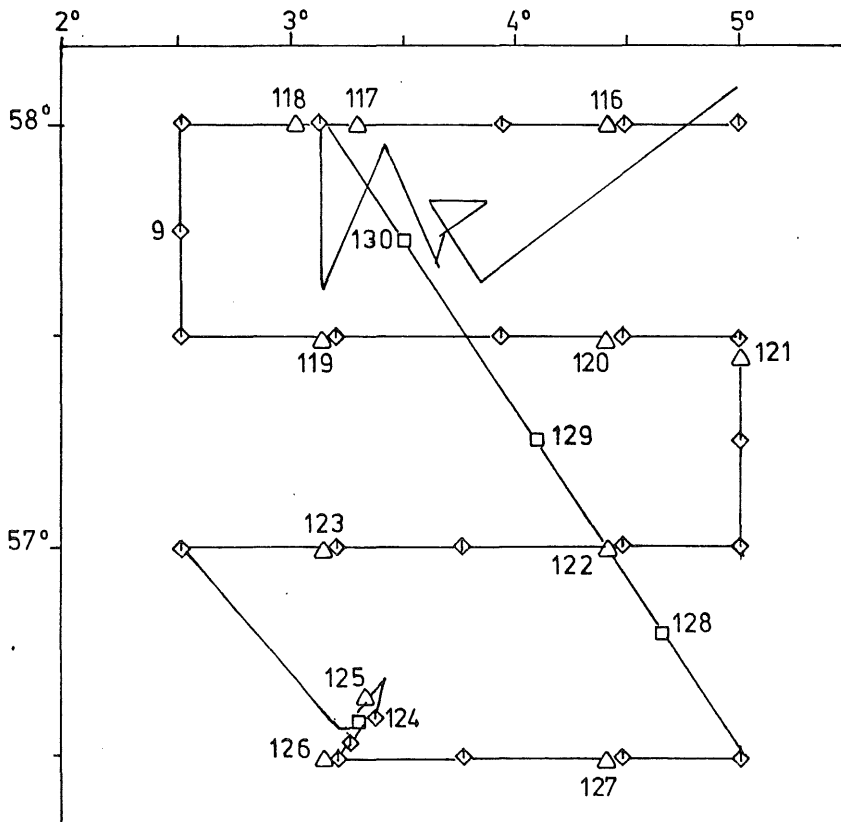
27 APR.-1 MAY 1977 ST.NO. 218-242 Δ CURRENT METER MOORING



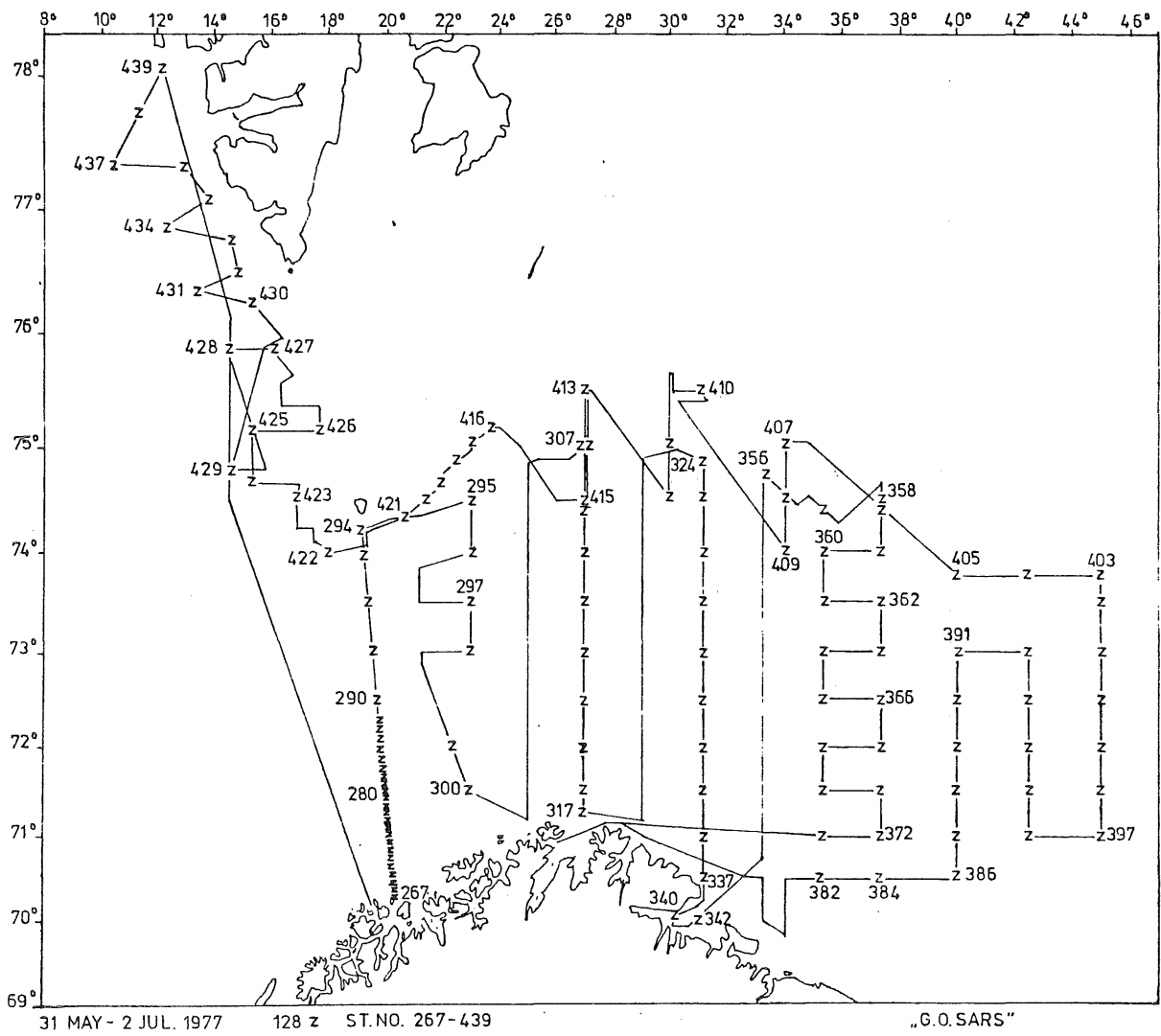
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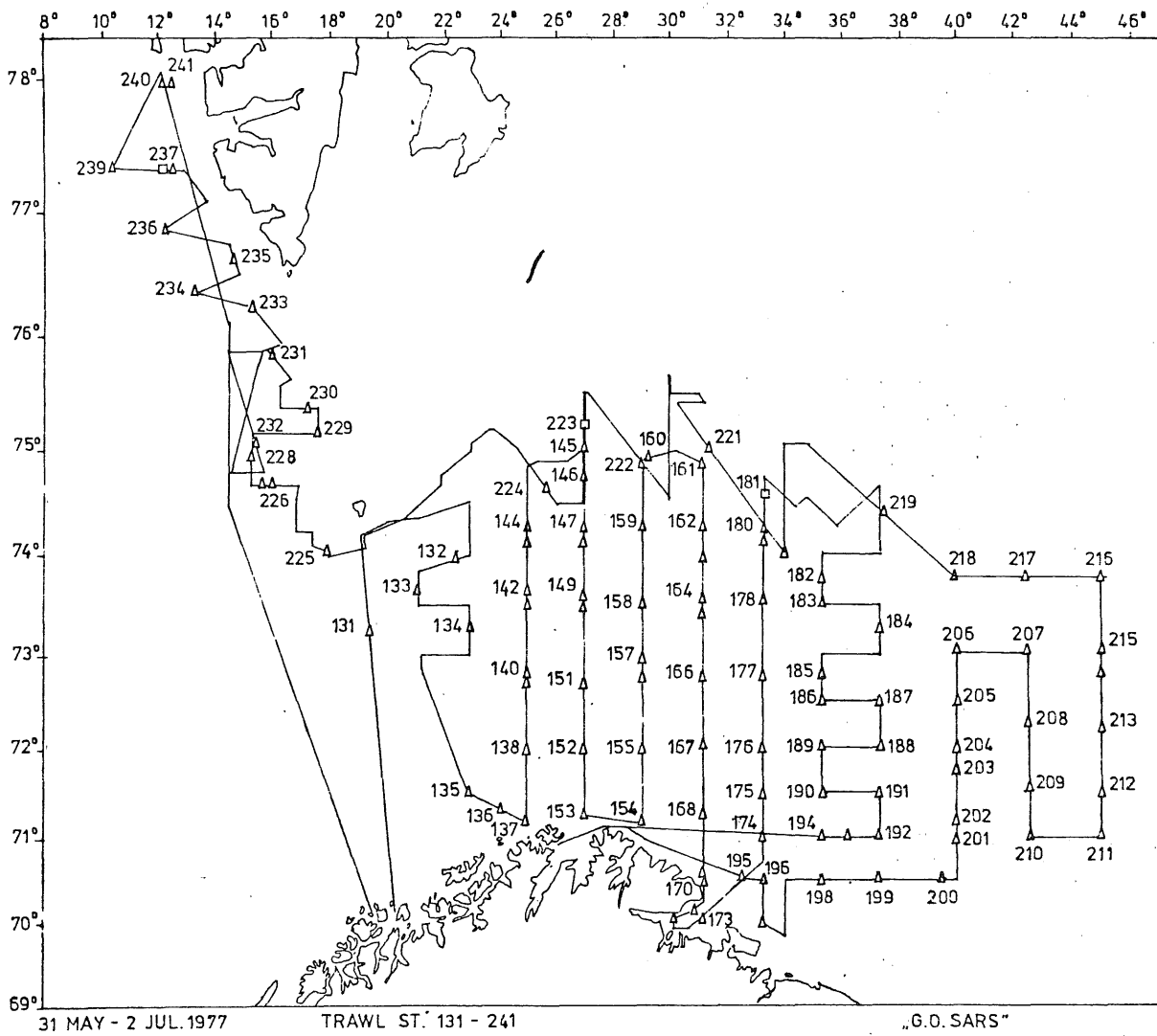


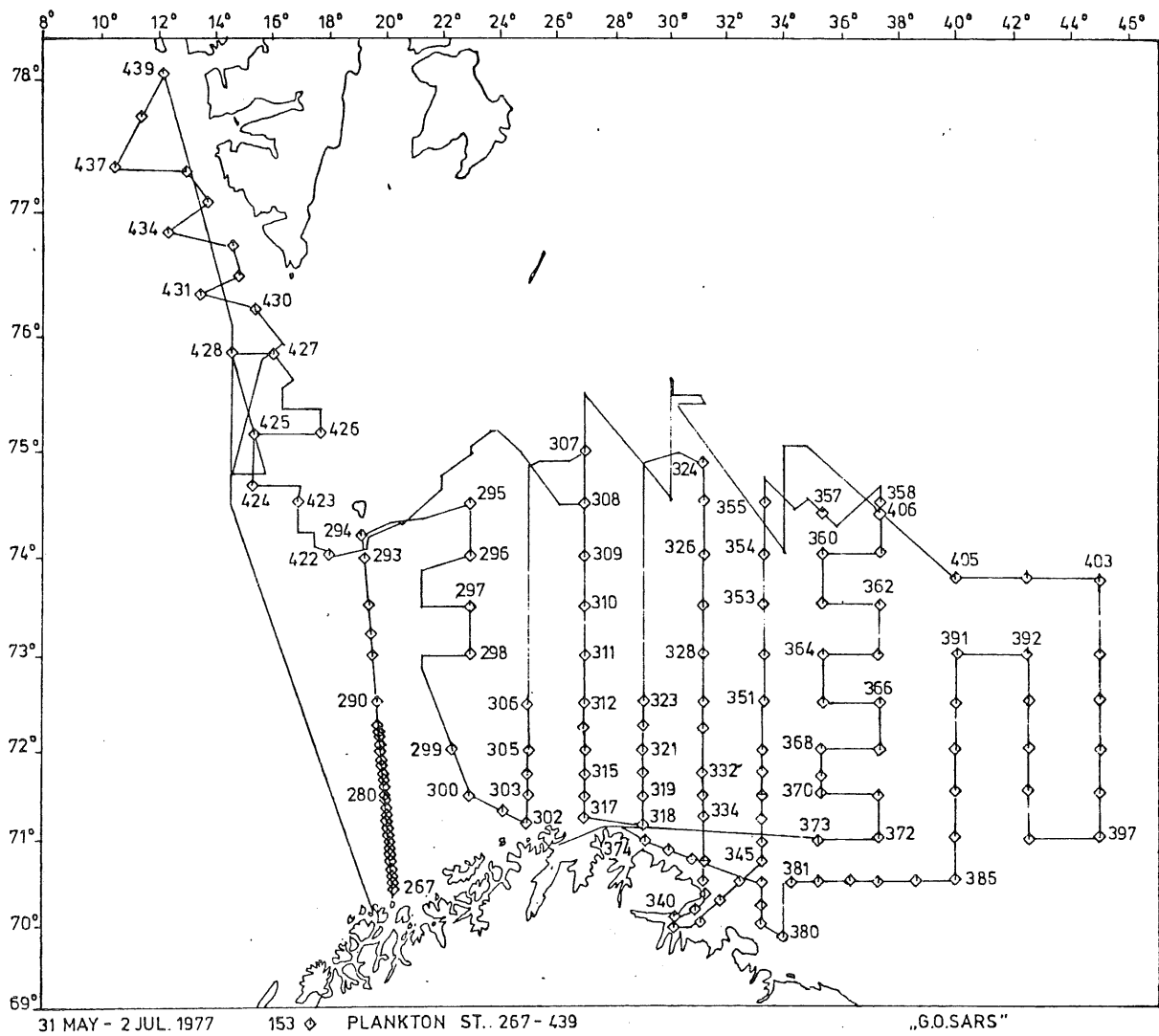
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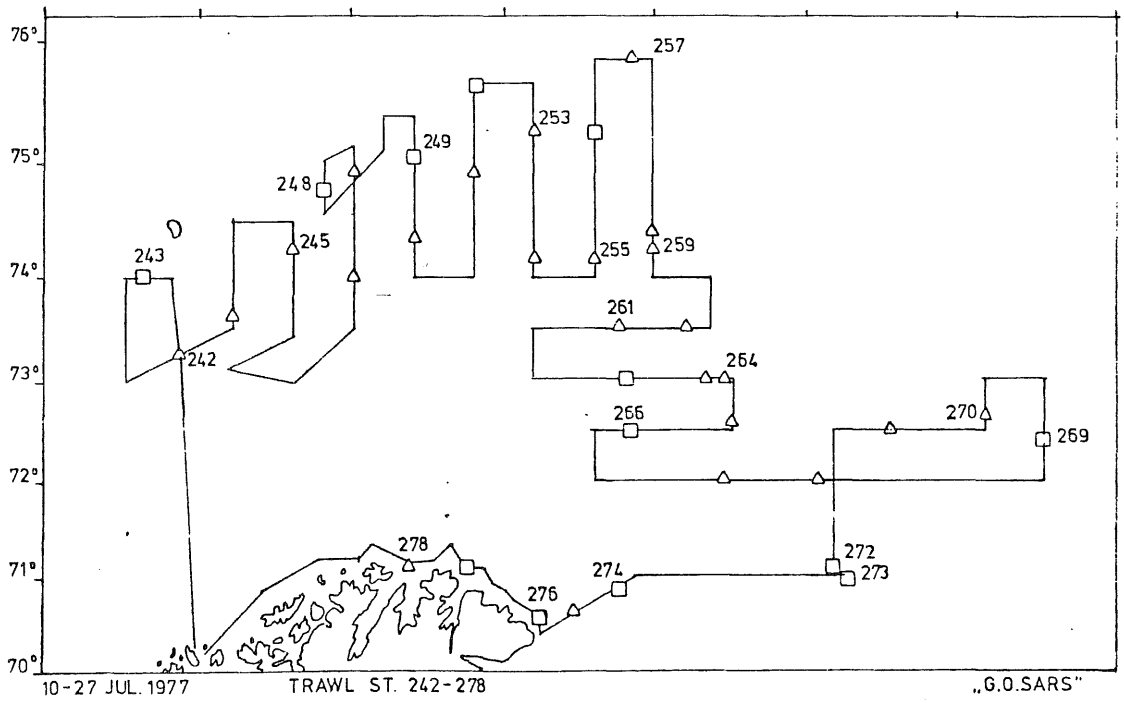
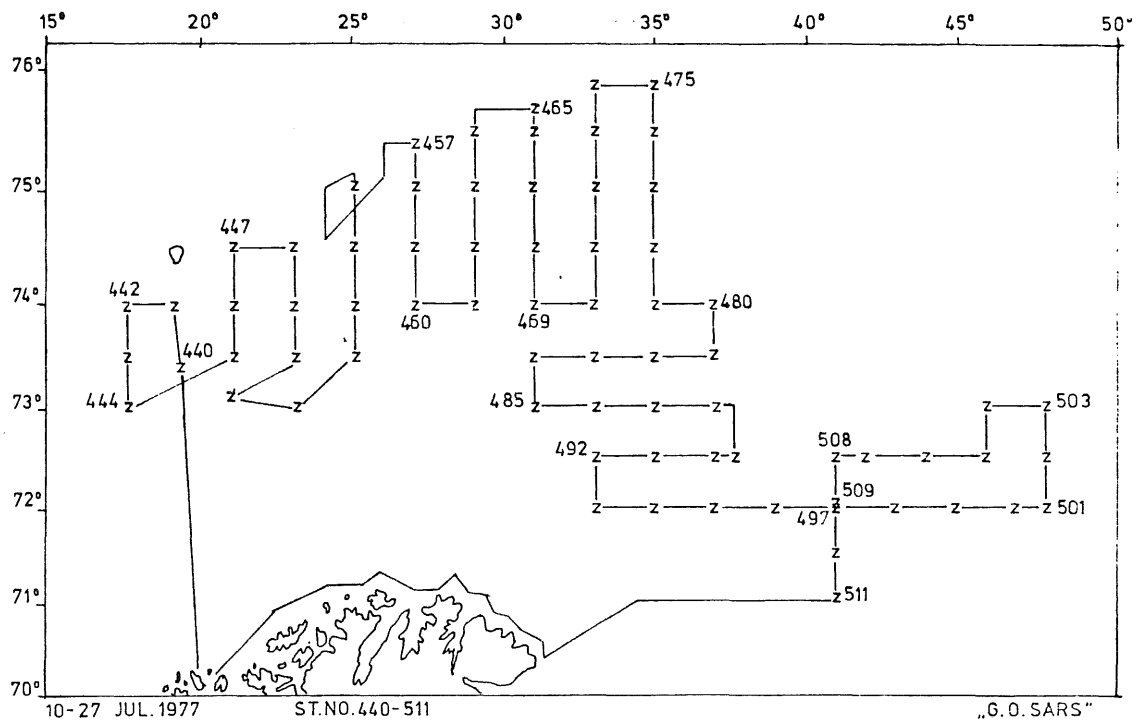


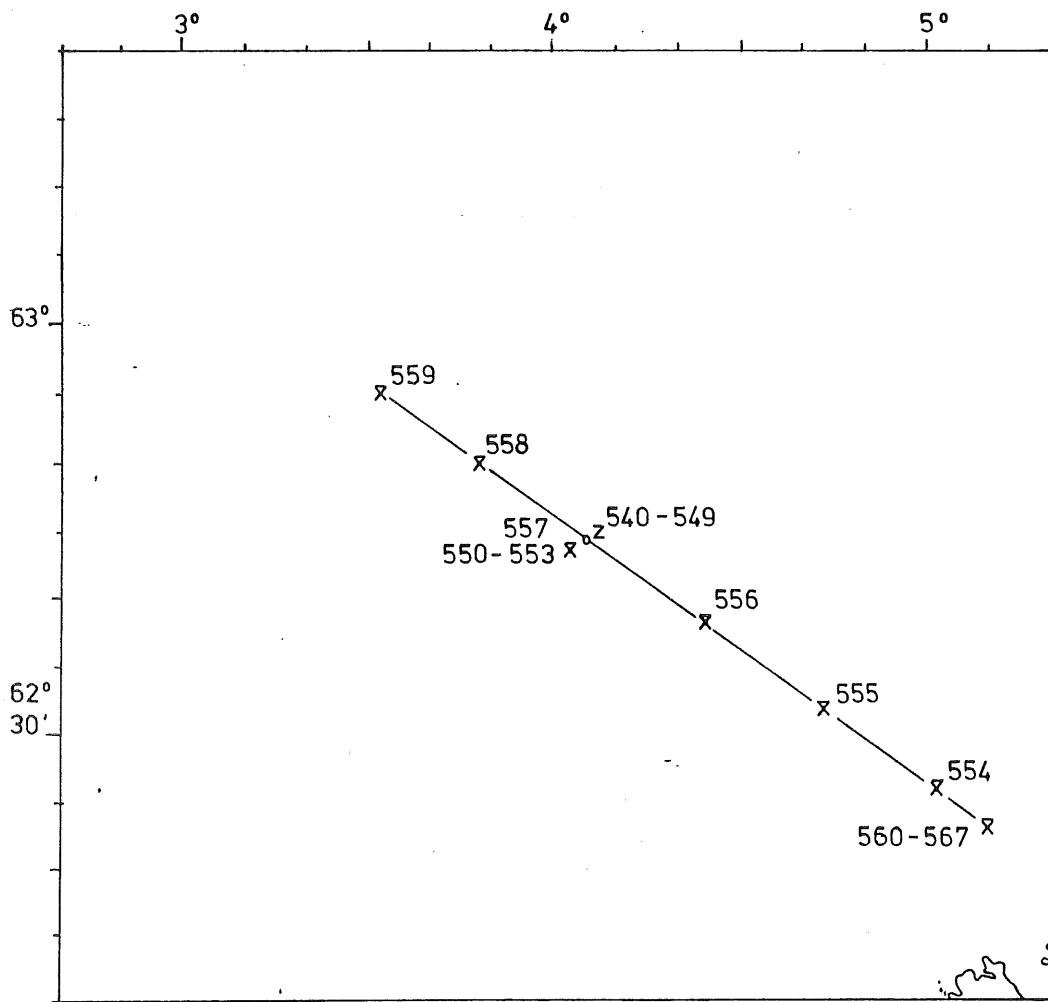
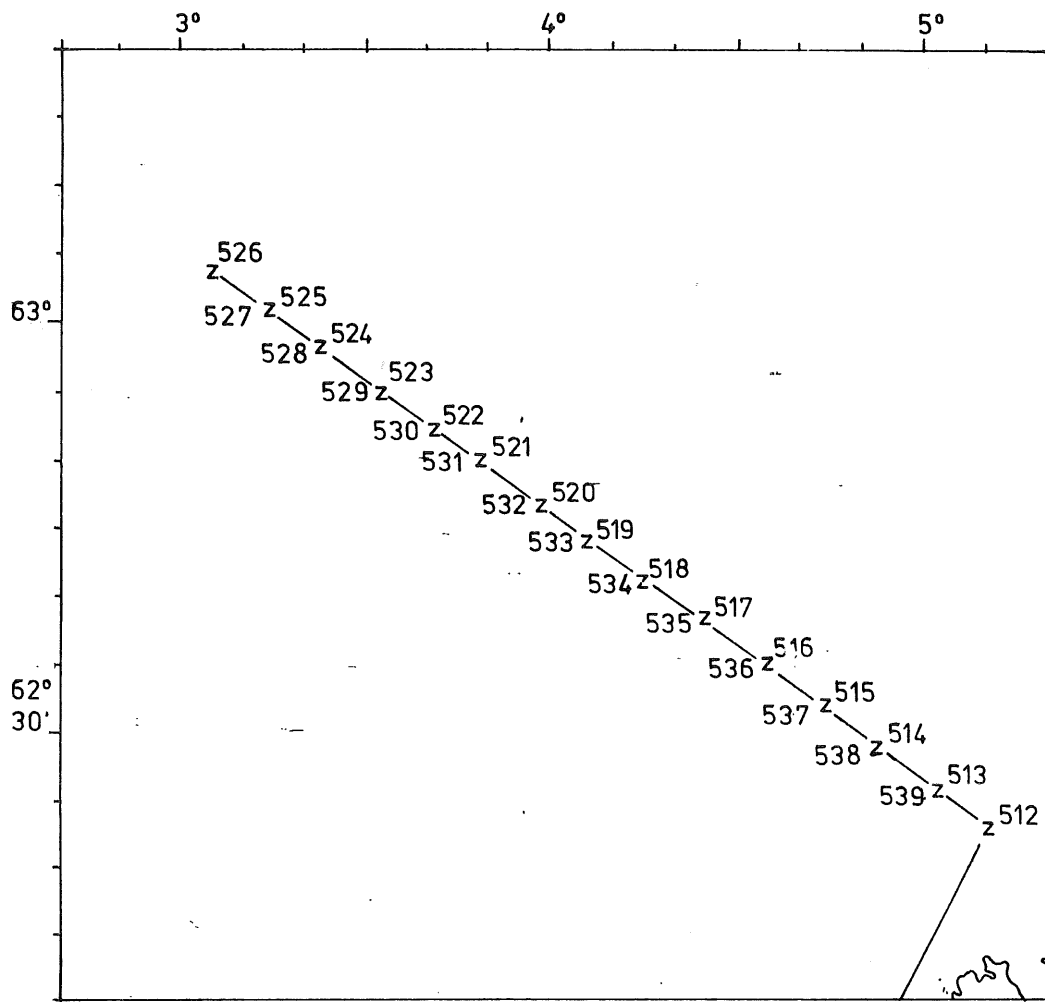
10-16 MAY 1977 TRAWL ST. 116-130 23 PLANKTON ST.







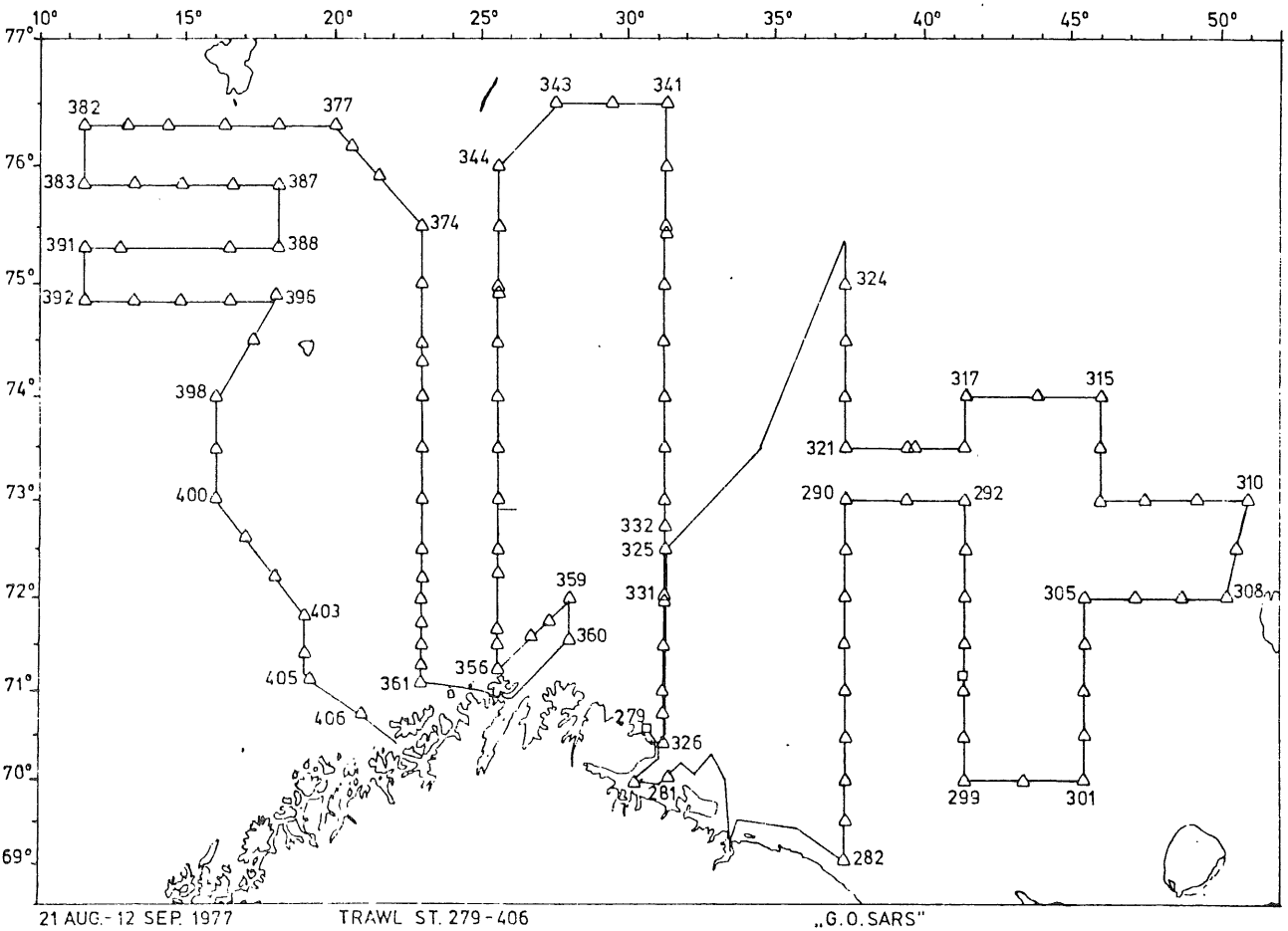
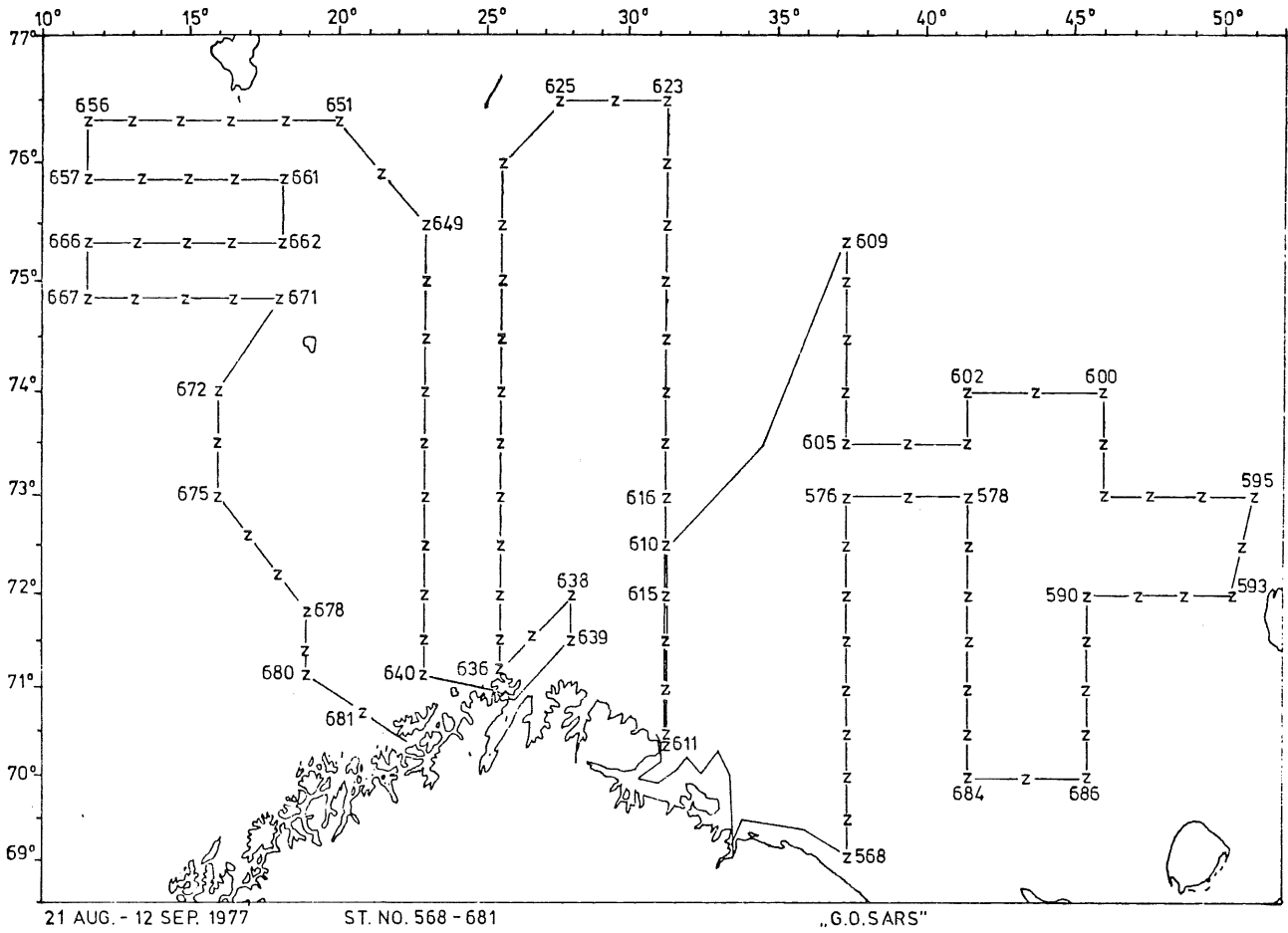


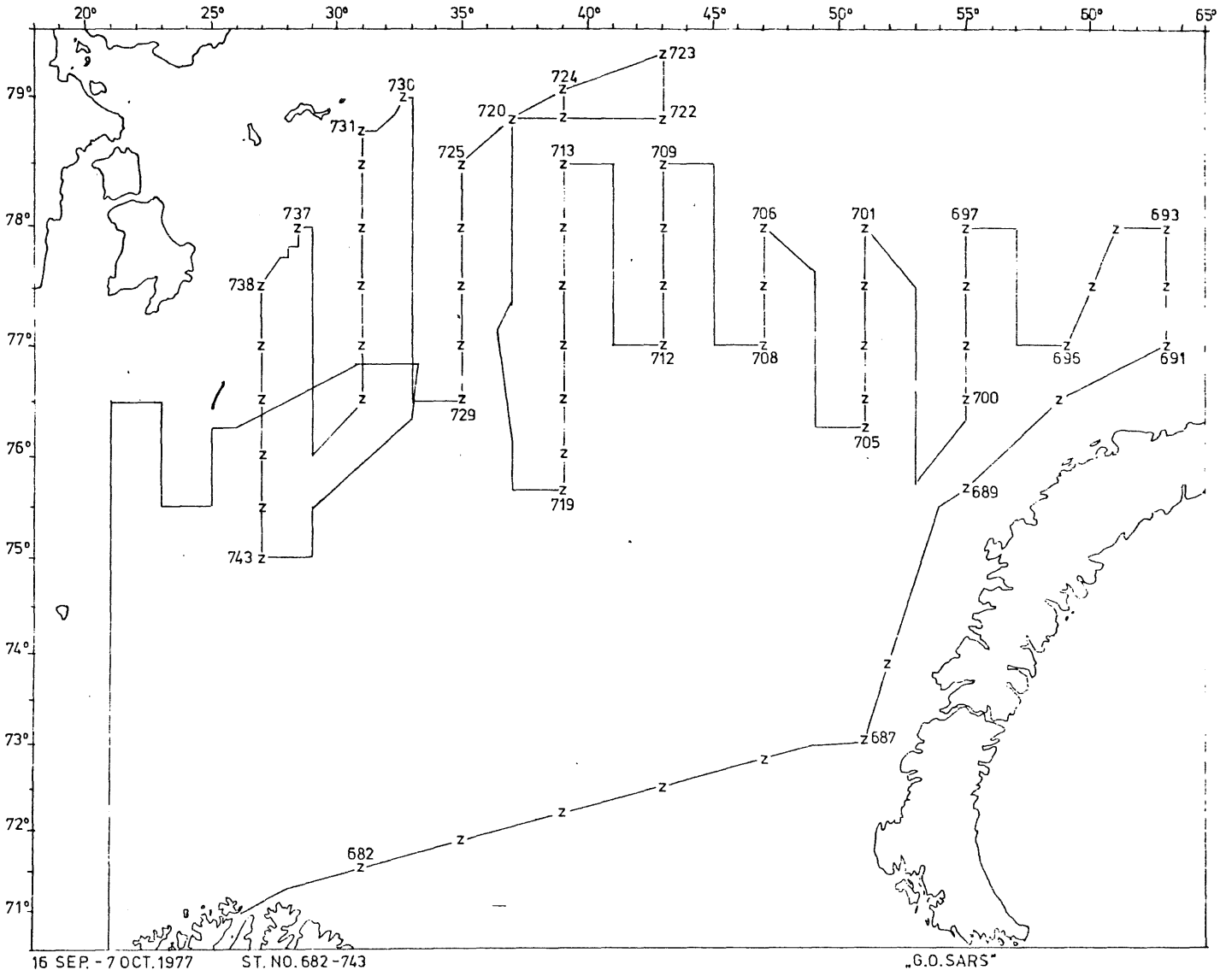


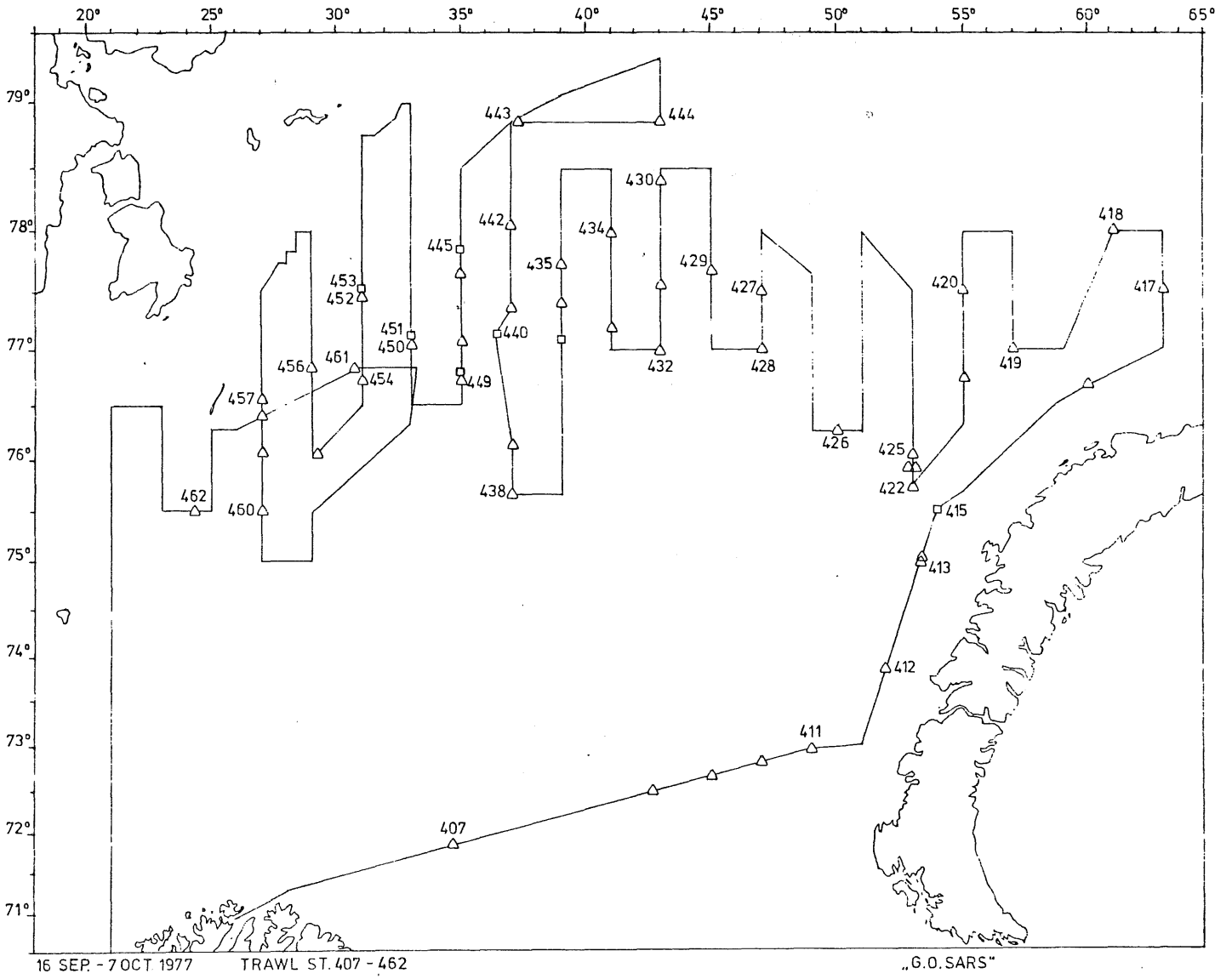
8-15 AUG. 1977

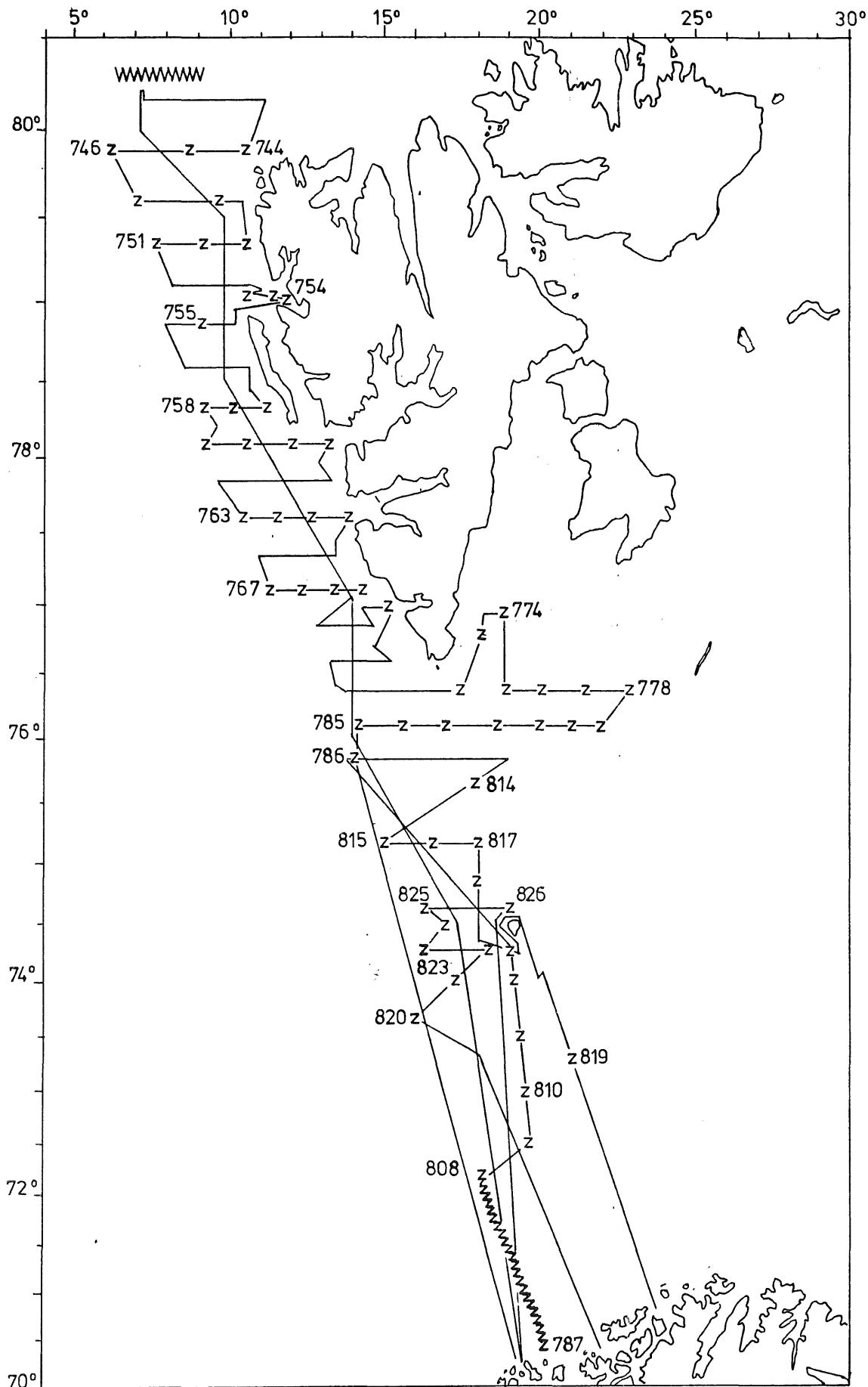
ST. NO. 512-567

„G.O.SARS“



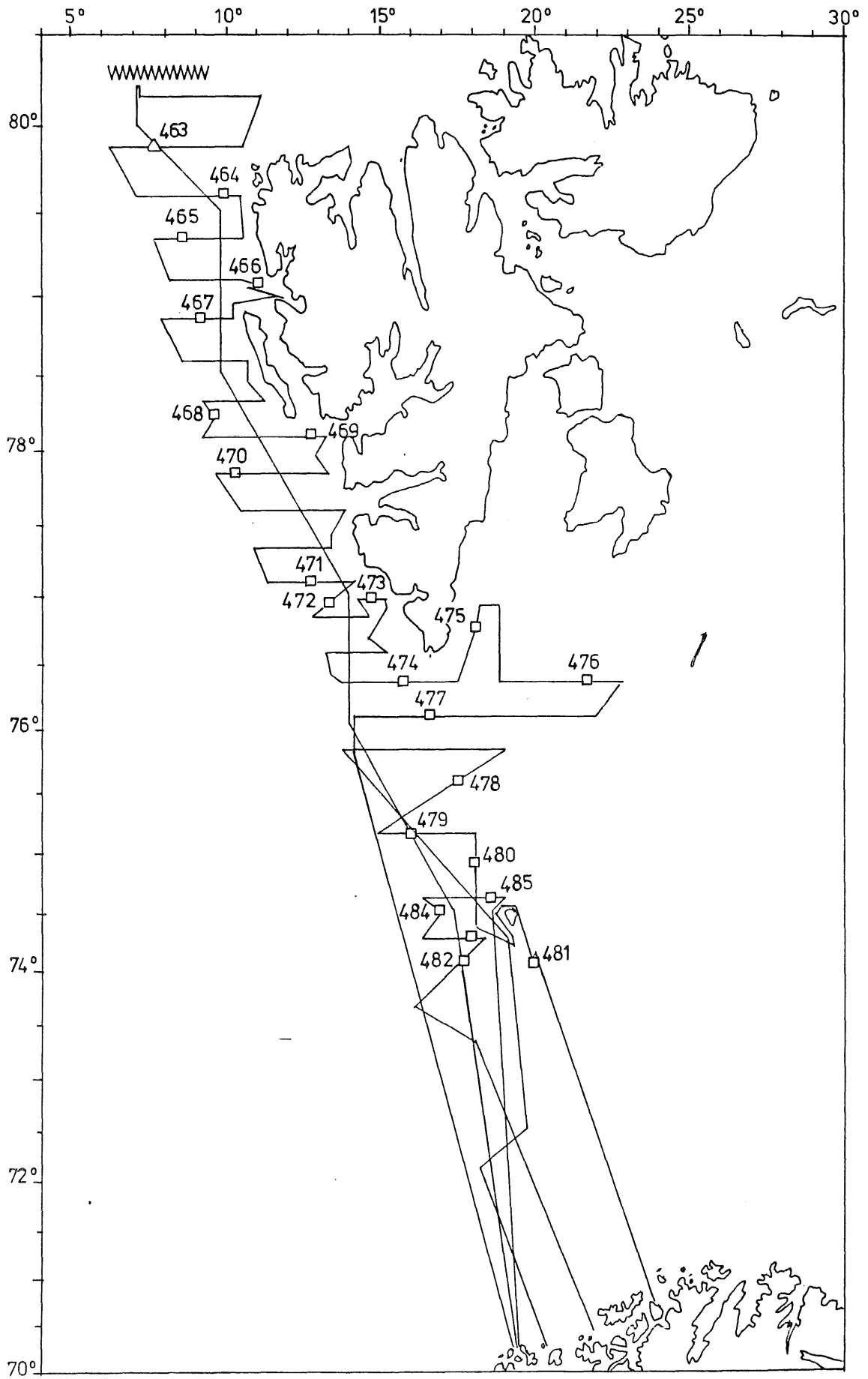






10 OCT.- 5 NOV. 1977 ST. NO. 744 - 826

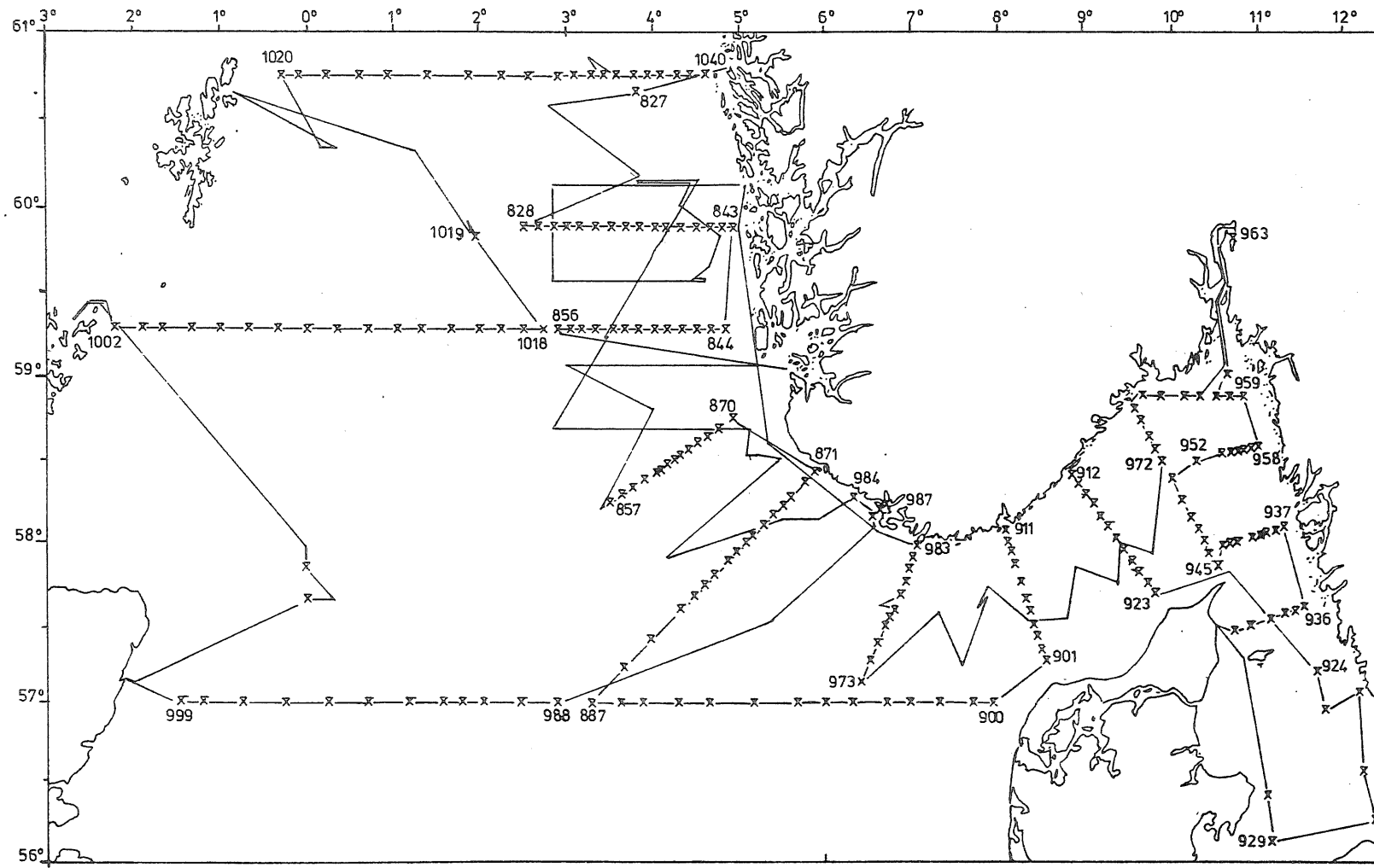
„G.O.SARS“



10 OCT. - 5 NOV. 1977

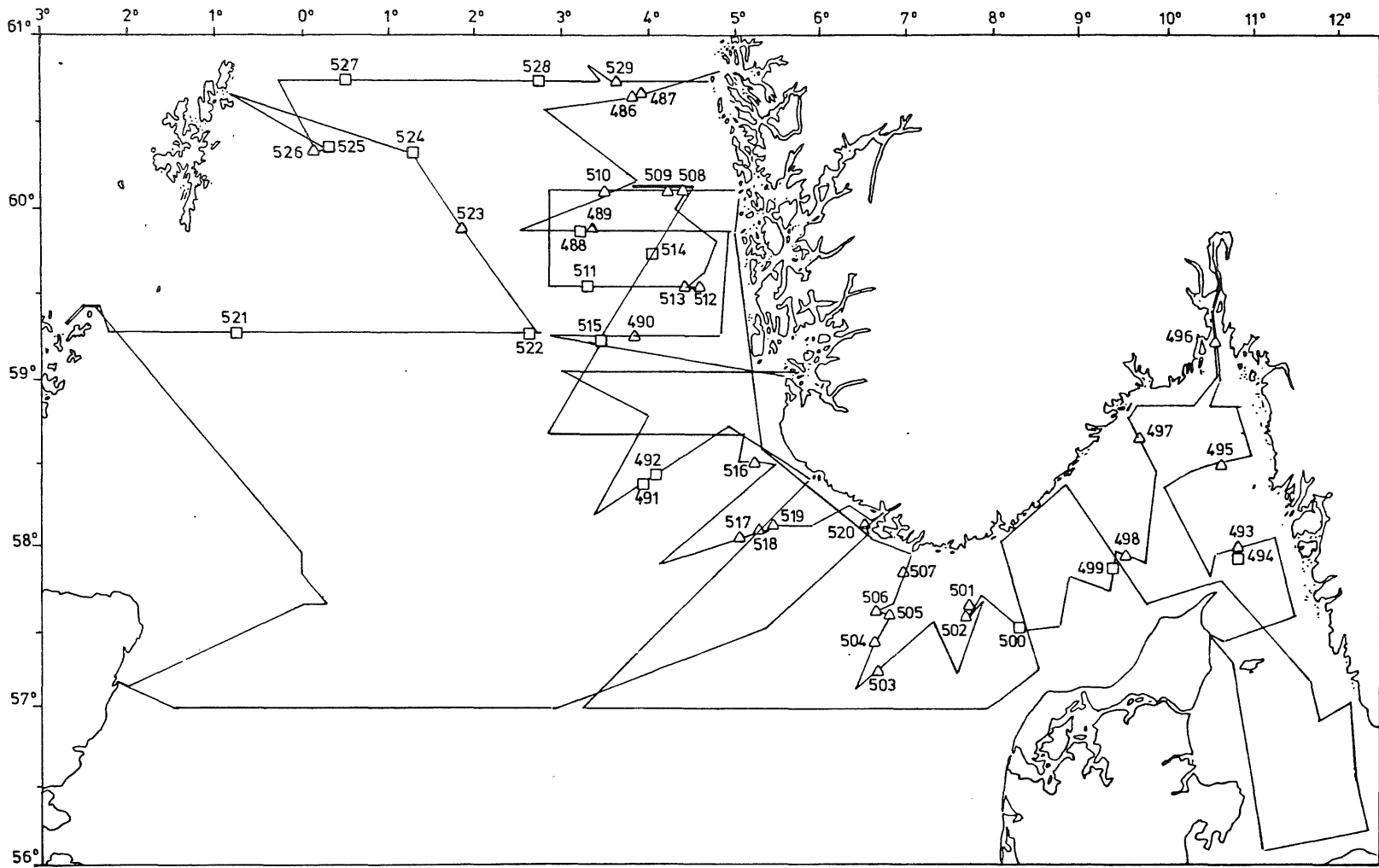
TRAWL ST. 463-485

„G.O.SARS“



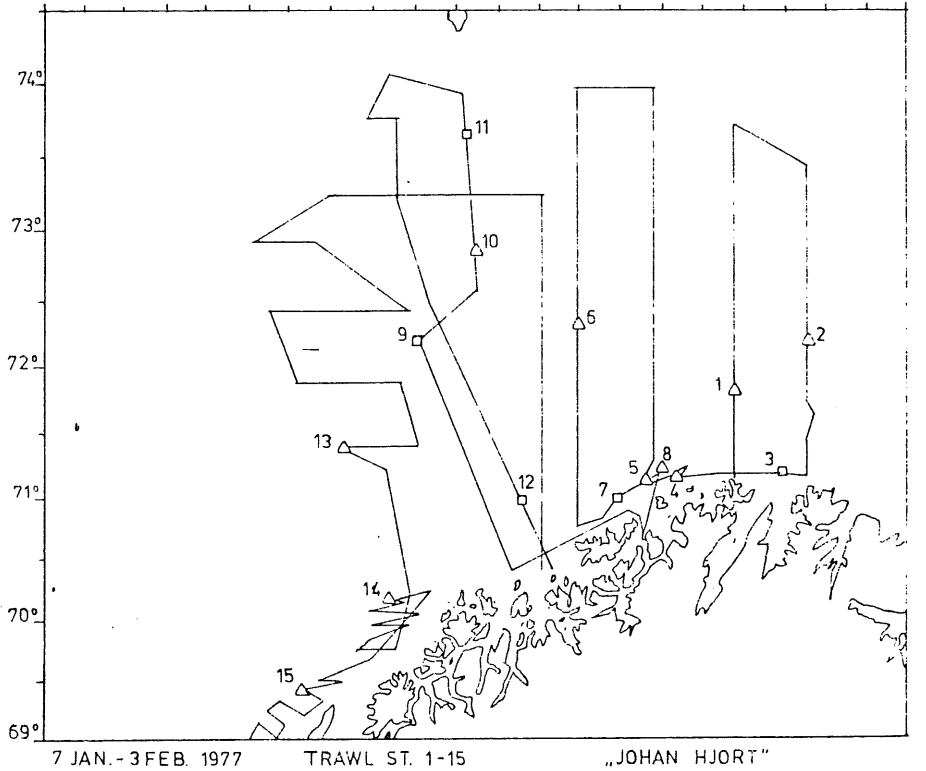
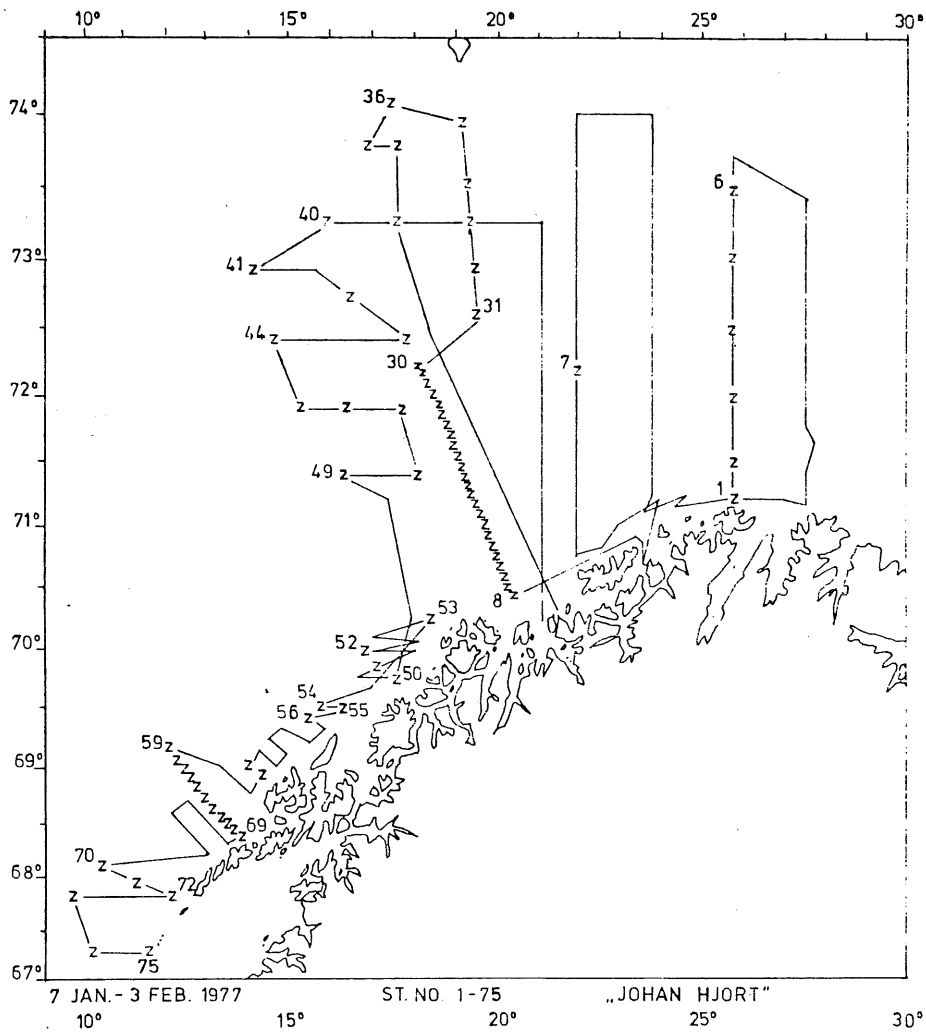
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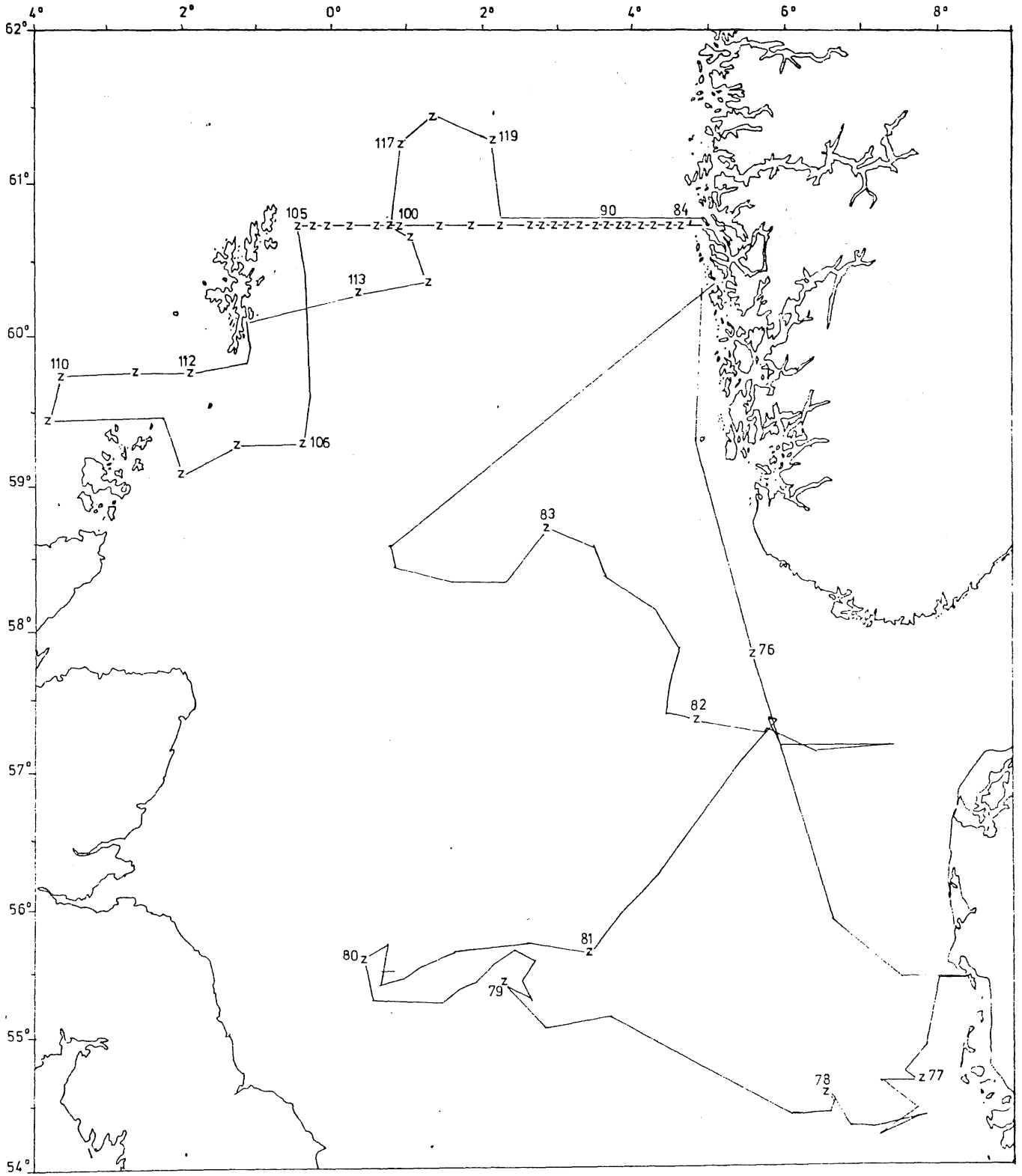
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14. NOV. - 16 DEC. 1977 TRAWL ST. 486 - 528

„G.O.SARS“

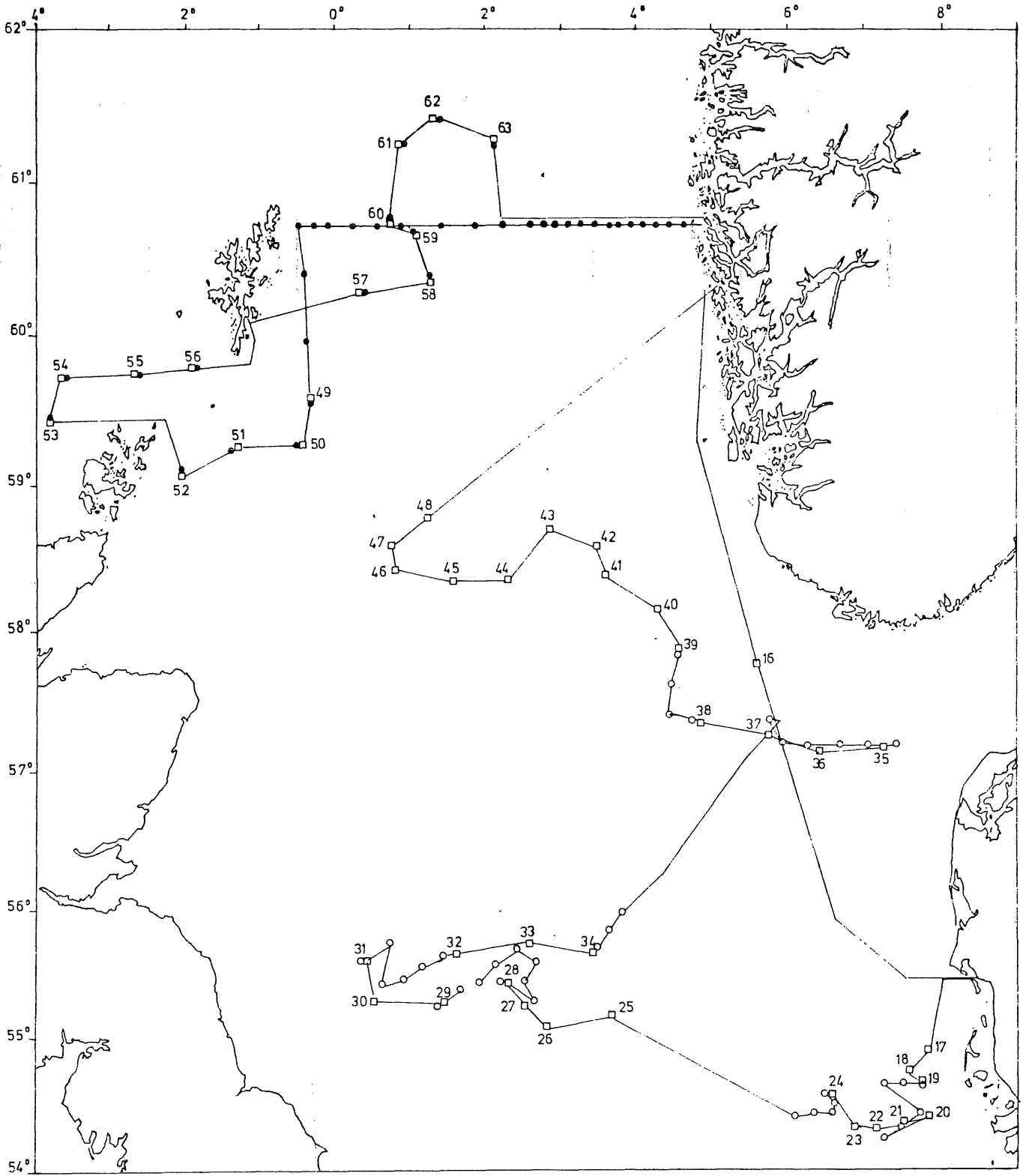




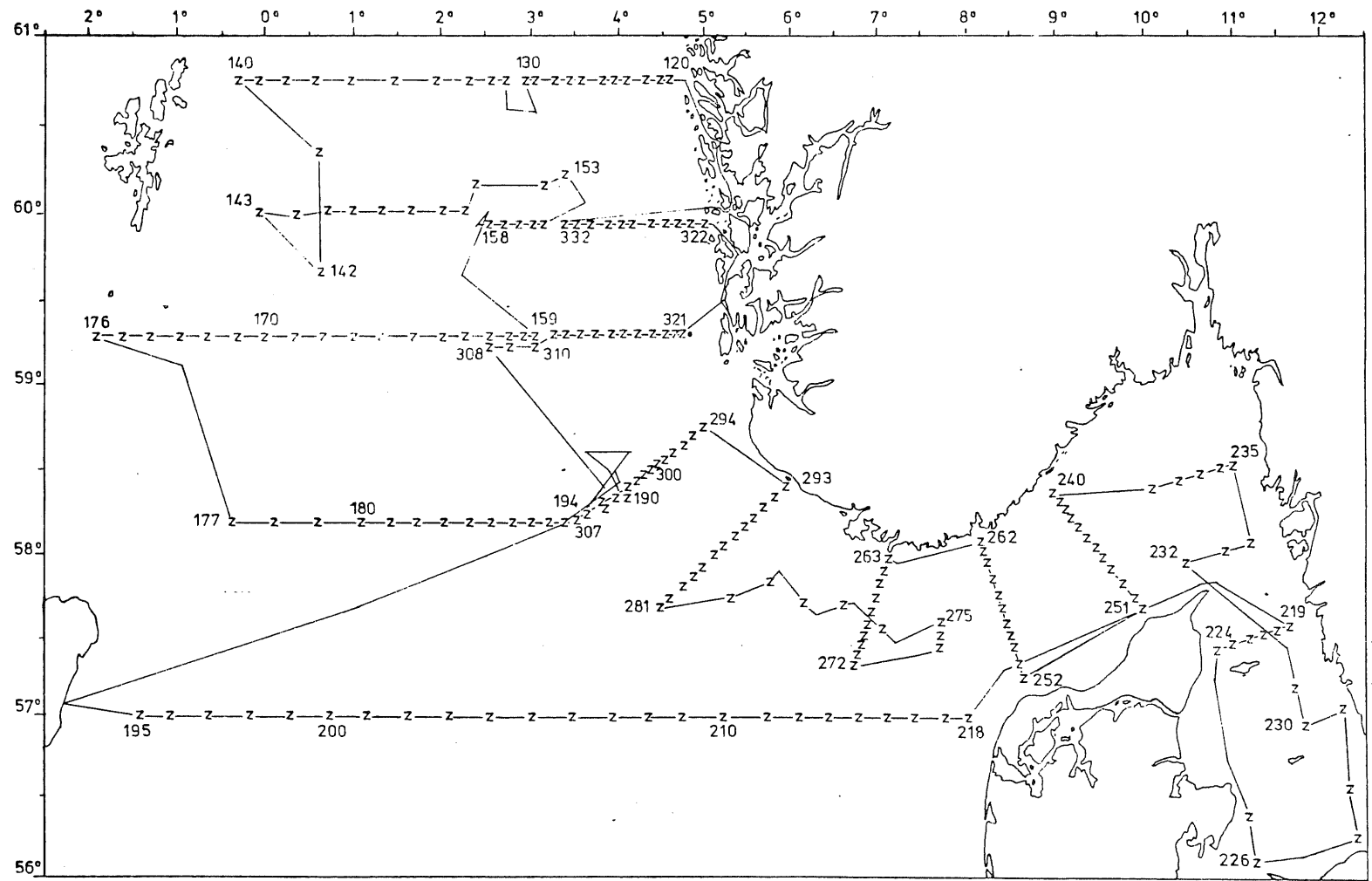
9 FEB. - 3 MAR 1977

ST. NO 76 - 119

„JOHAN HJORT“

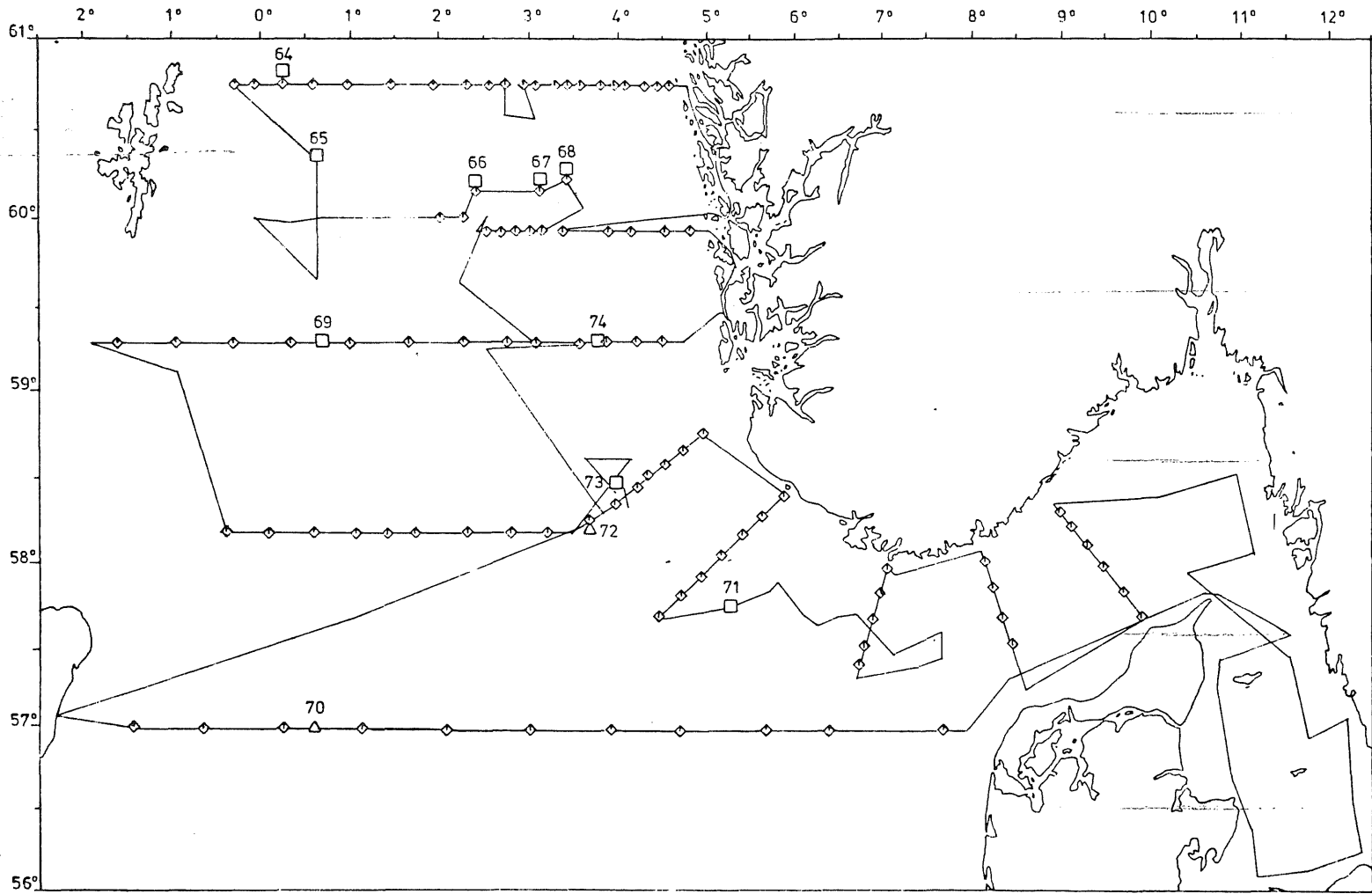


9 FEB - 3 MAR. 1977 TRAWL ST. 16 - 63 ○ ISAC CID TRAWL 39 ● JUDAY HÅV 39 „JÖHAN HJORT”

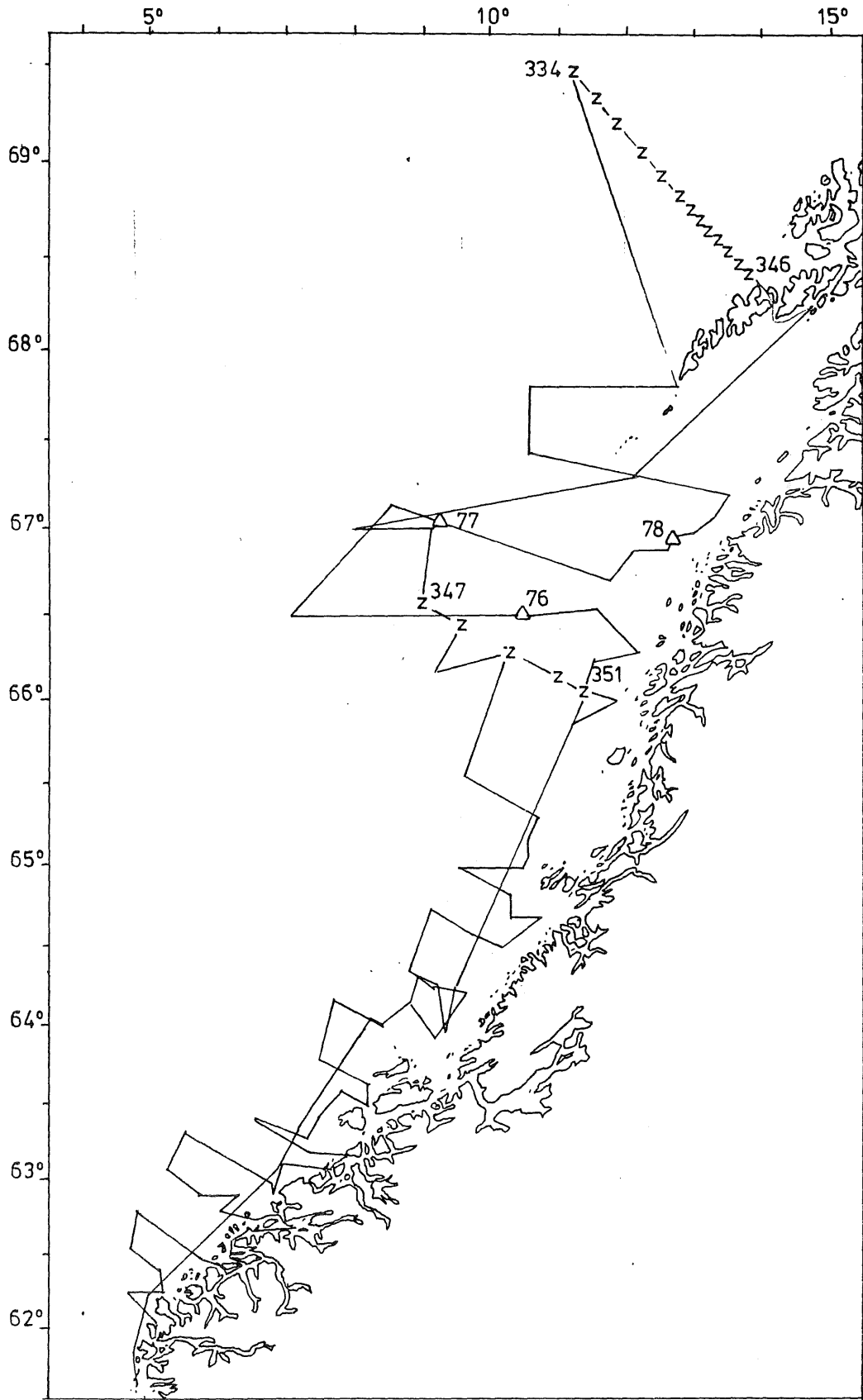


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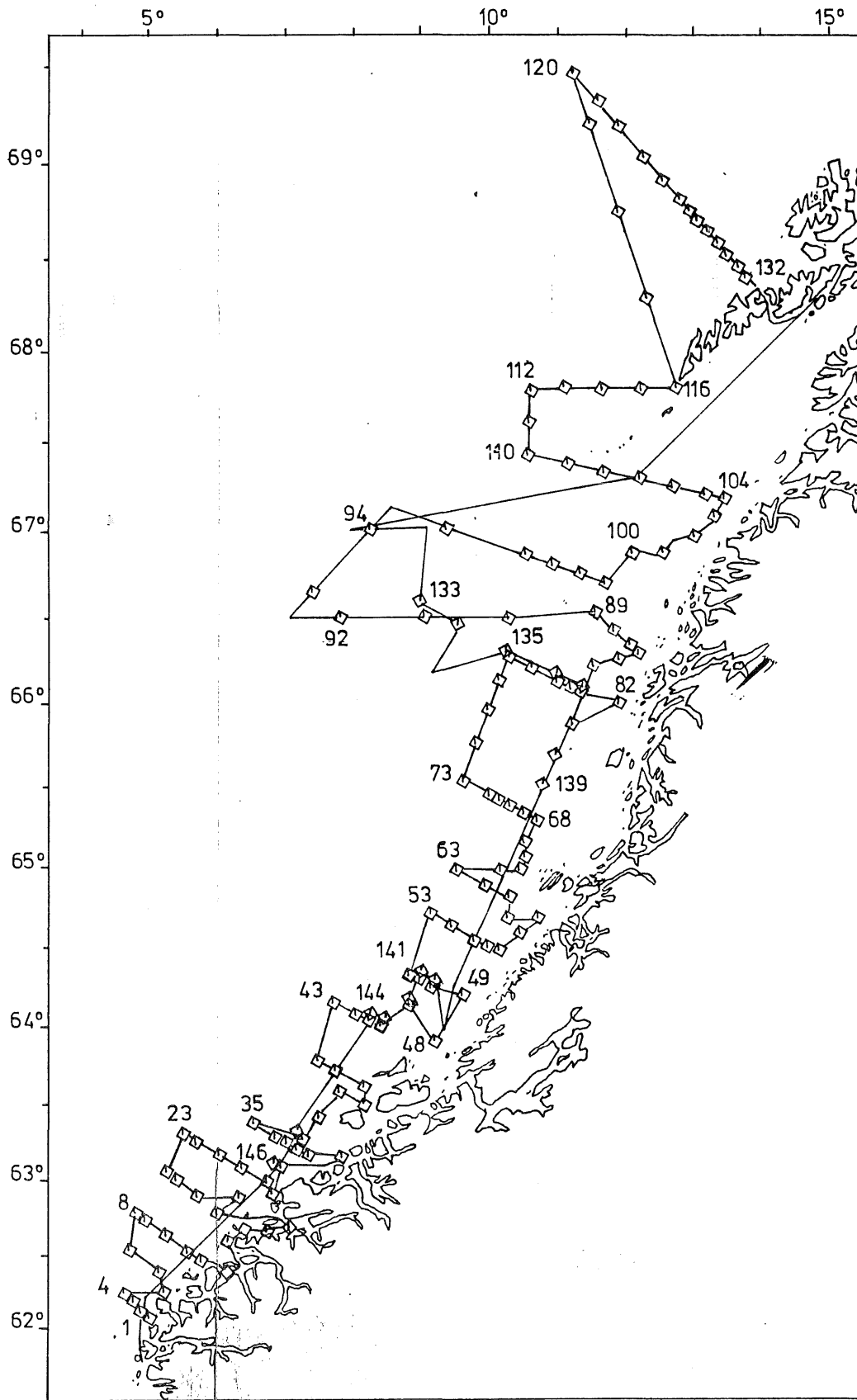
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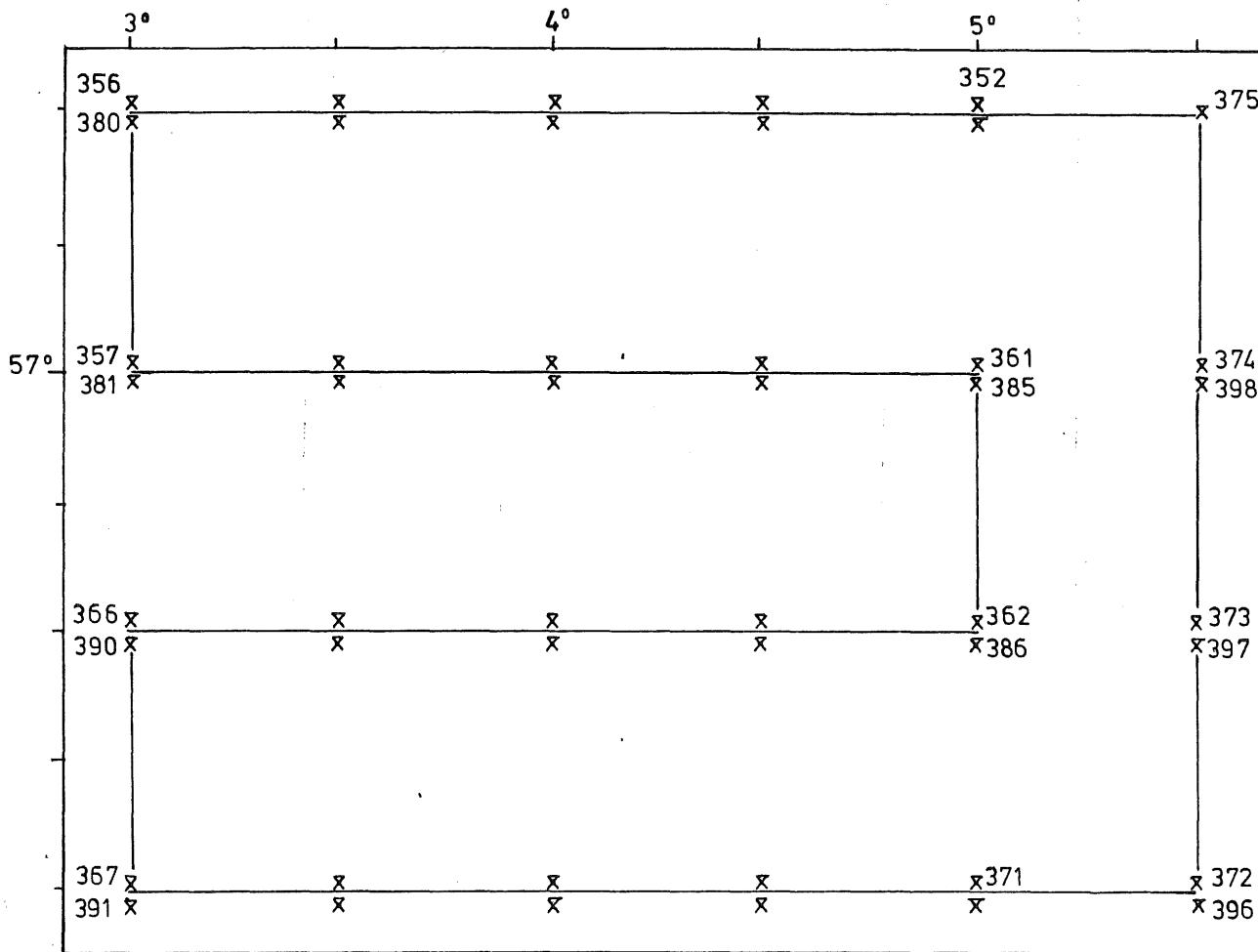
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12-27 APR.1977 ST.NO.334-351 TRAWL ST. 76-78 „JOHAN HJORT”



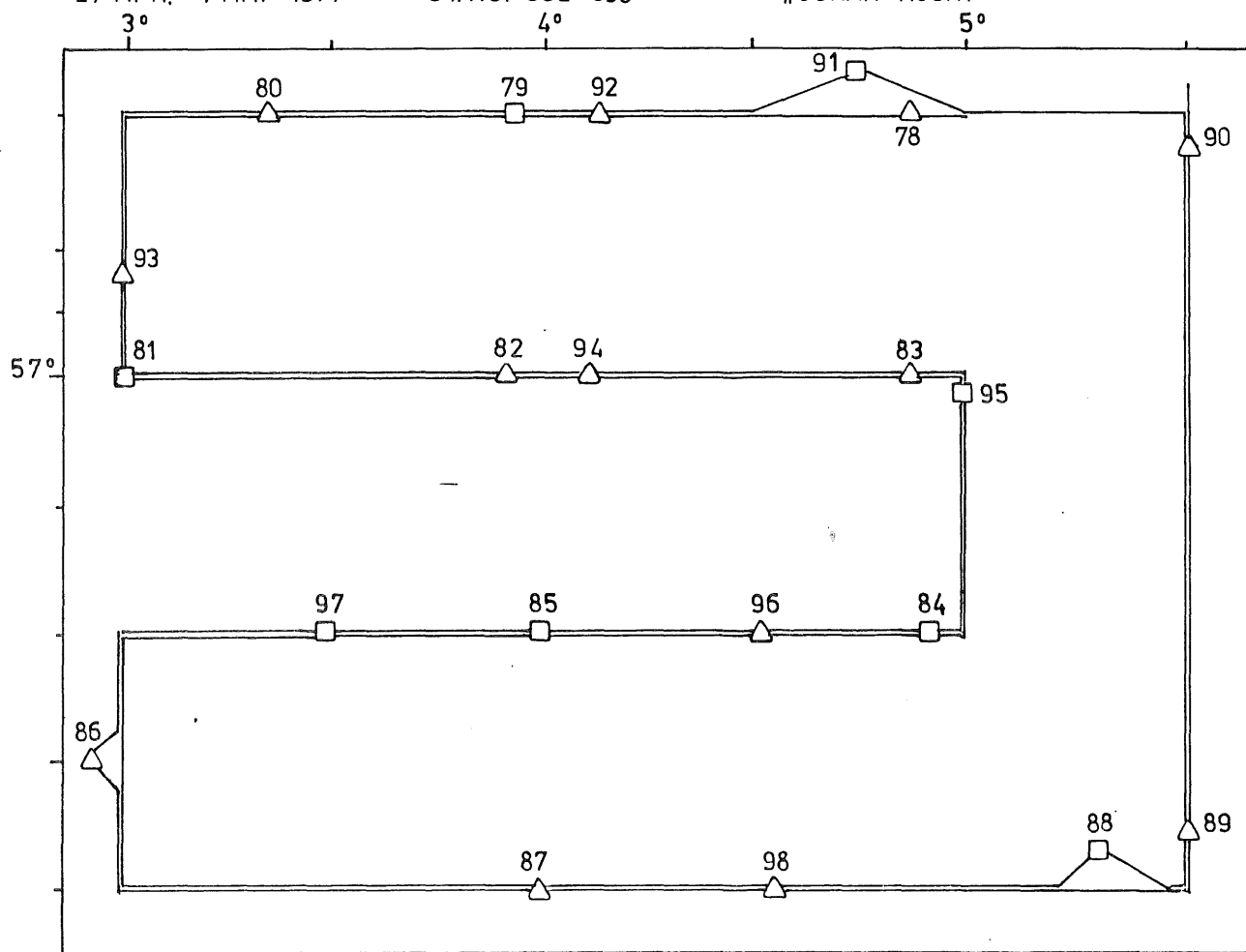
12-27 APR 1977 PLANKTON ST. 1-146 „JOHAN HJORT”



27 APR. - 4 MAY 1977

ST. NO. 352-398

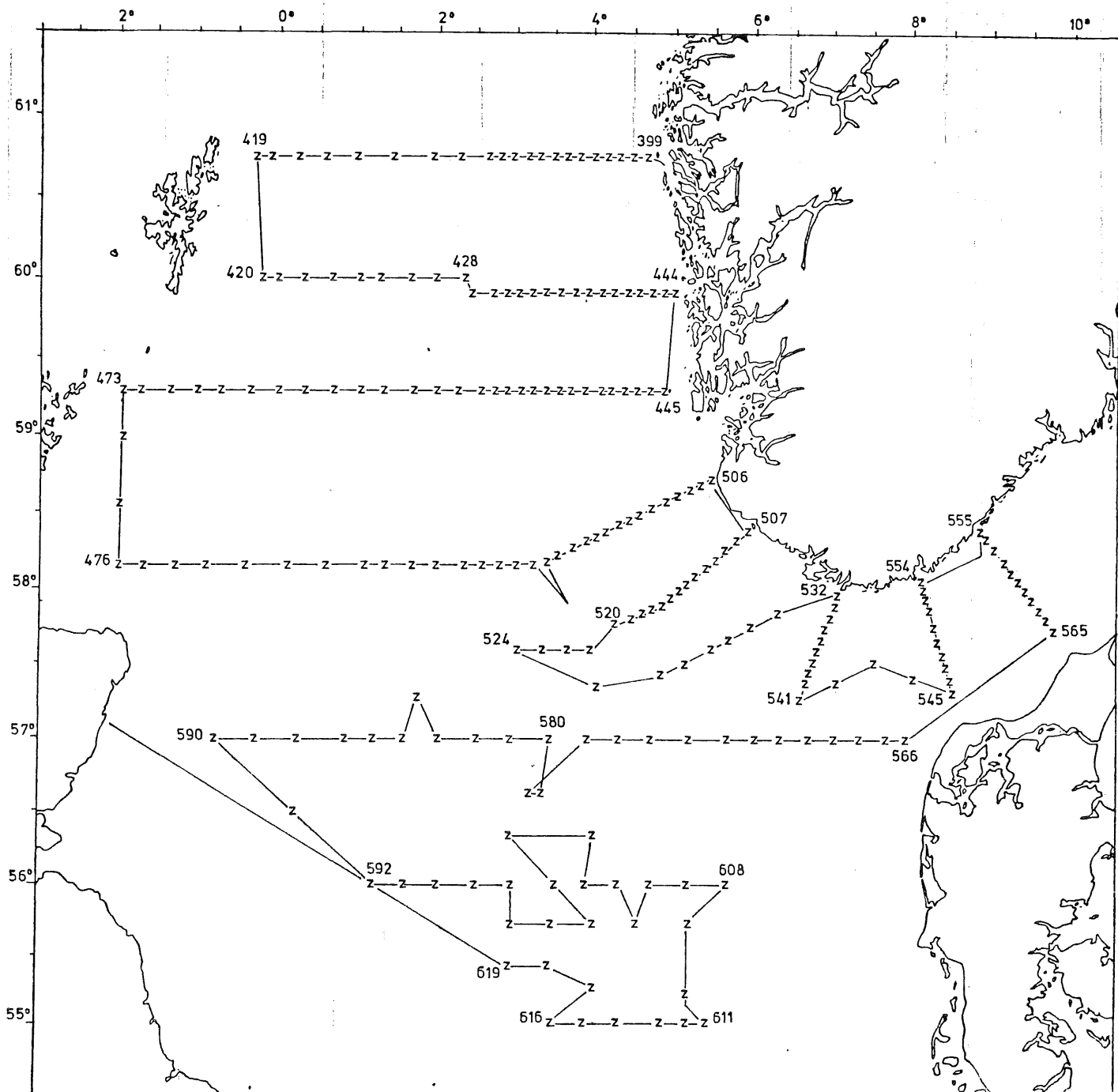
„JOHAN HJORT“



27 APR. - 4 MAY 1977

TRAWL ST. 78-98

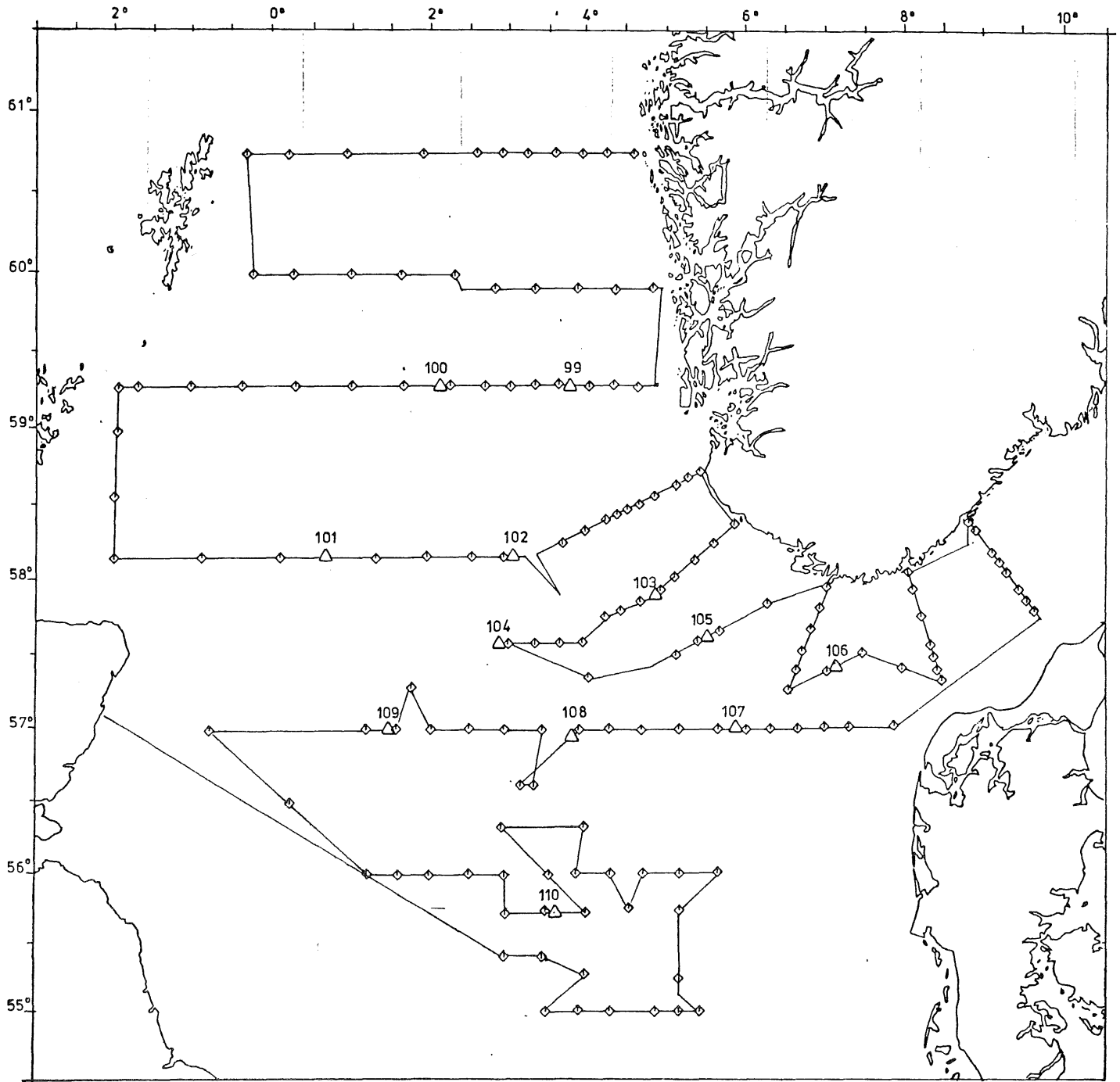
„JOHAN HJORT“



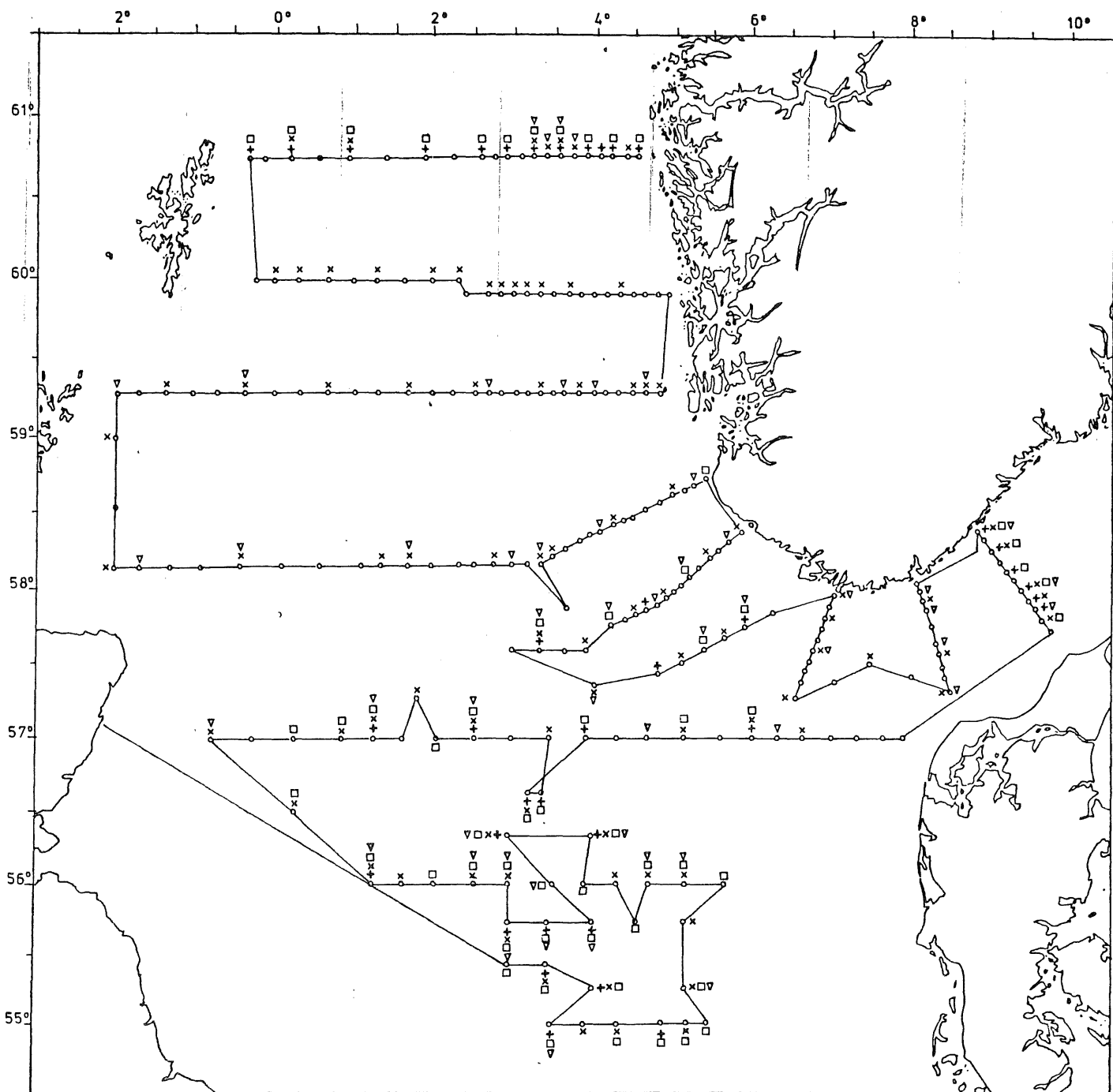
31 MAY - 17 JUN. 1977

ST. NO. 399-619

„JOHAN HJORT“

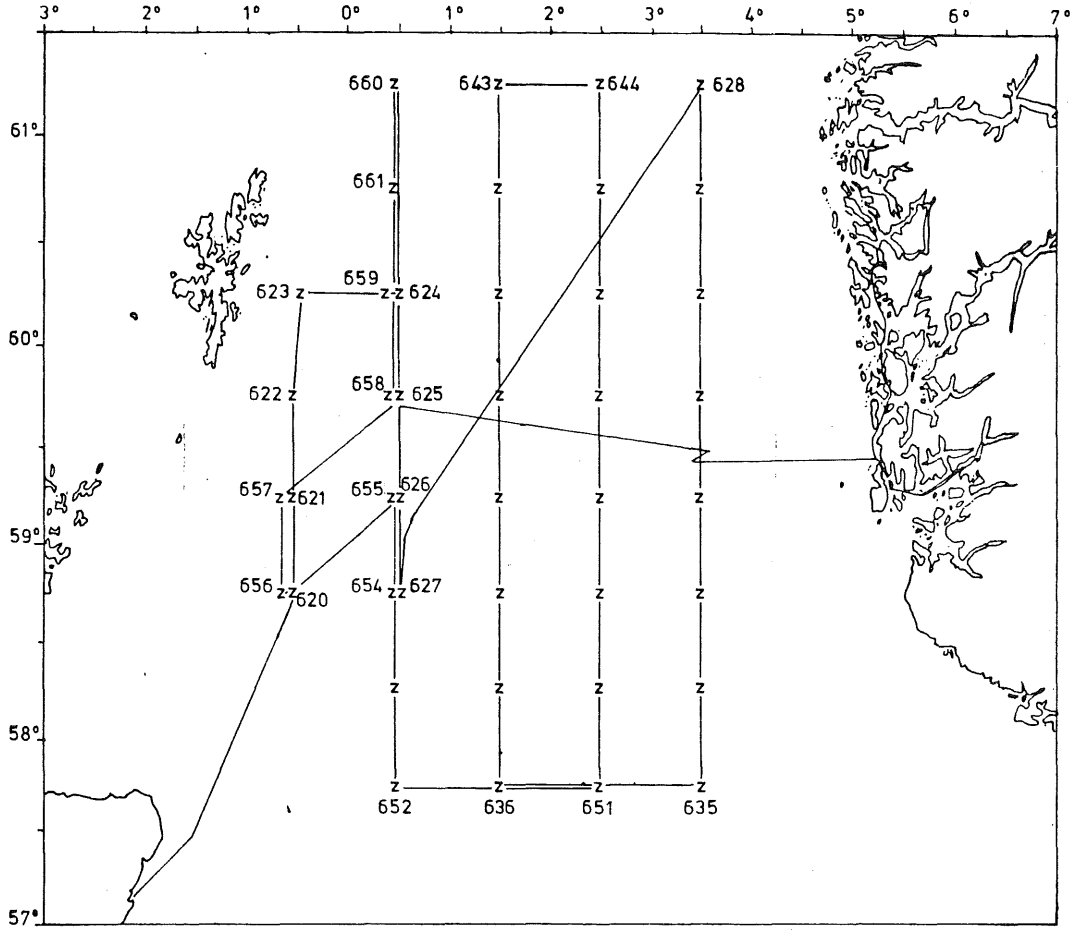


31 MAY - 17 JUN. 1977 TRAWL ST. 99-110 ♦ 146 PLANKTON ST. „JOHAN HJORT“



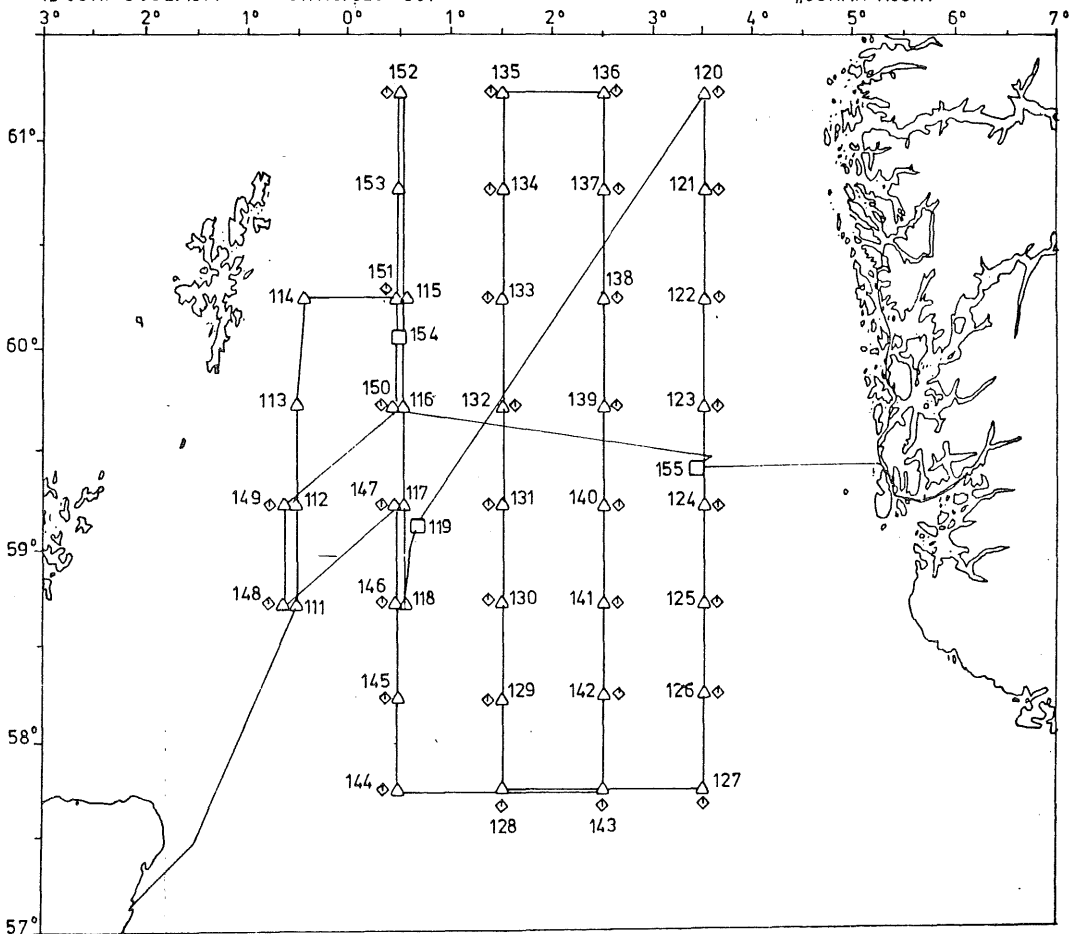
31 MAY - 17 JUN. 1977 ○ 221 NUTRIENTS ST. 5M DEPTH + 39 OIL HYDROCARBONS ST * 89. CHLOROPHYLL ST.
 ▼ 52 PHYTOPLANKTON ST. □ 56 OTTER SURFACE SAMPLER ST.

„JOHAN HJORT“



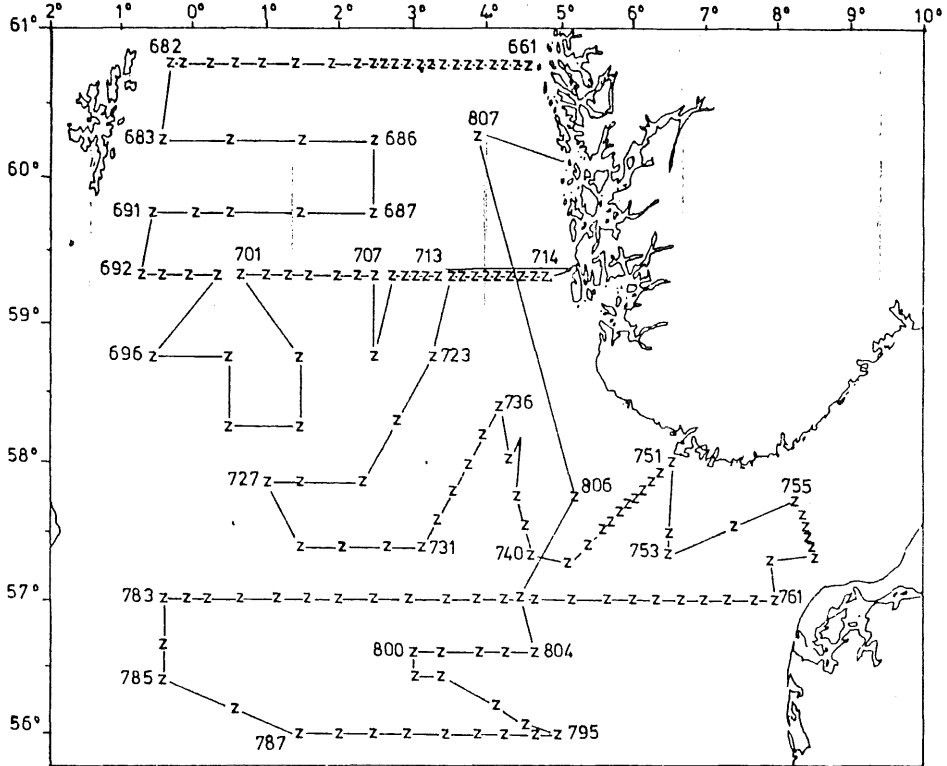
19 JUN. - 3 JUL. 1977 ST. NO. 620 - 661

"JOHAN HJORT"



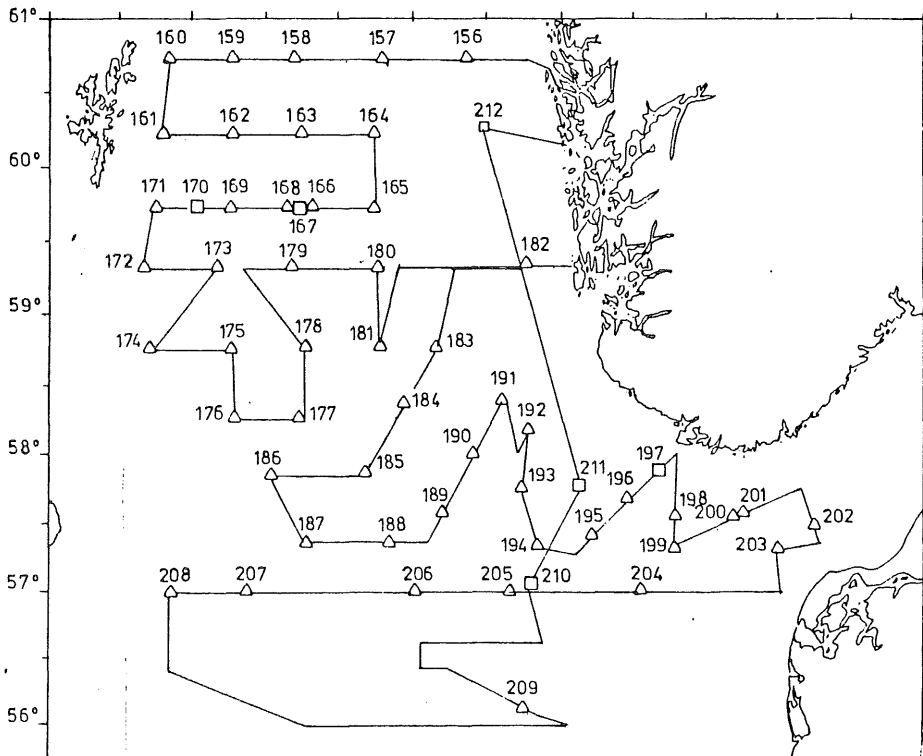
19 JUN. - 3 JUL. 1977 TRAWL ST. 111 - 155 ◊ 33 PLANKTON ST.

"JOHAN HJORT"



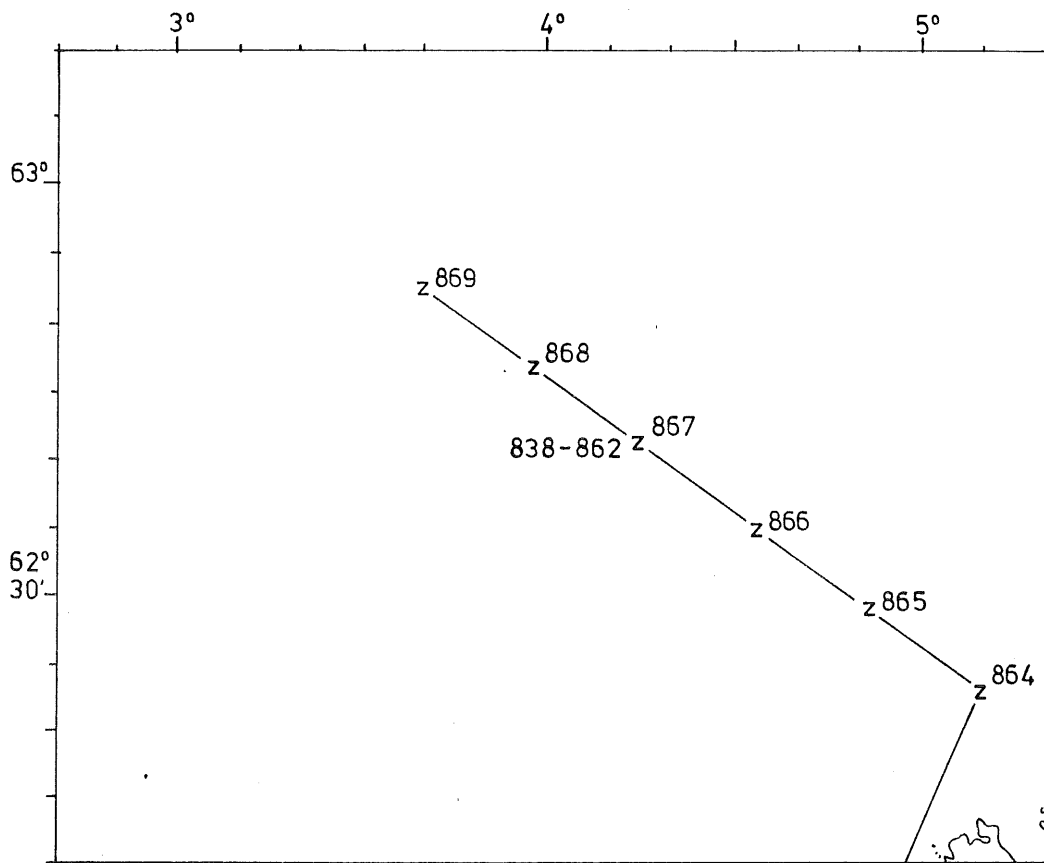
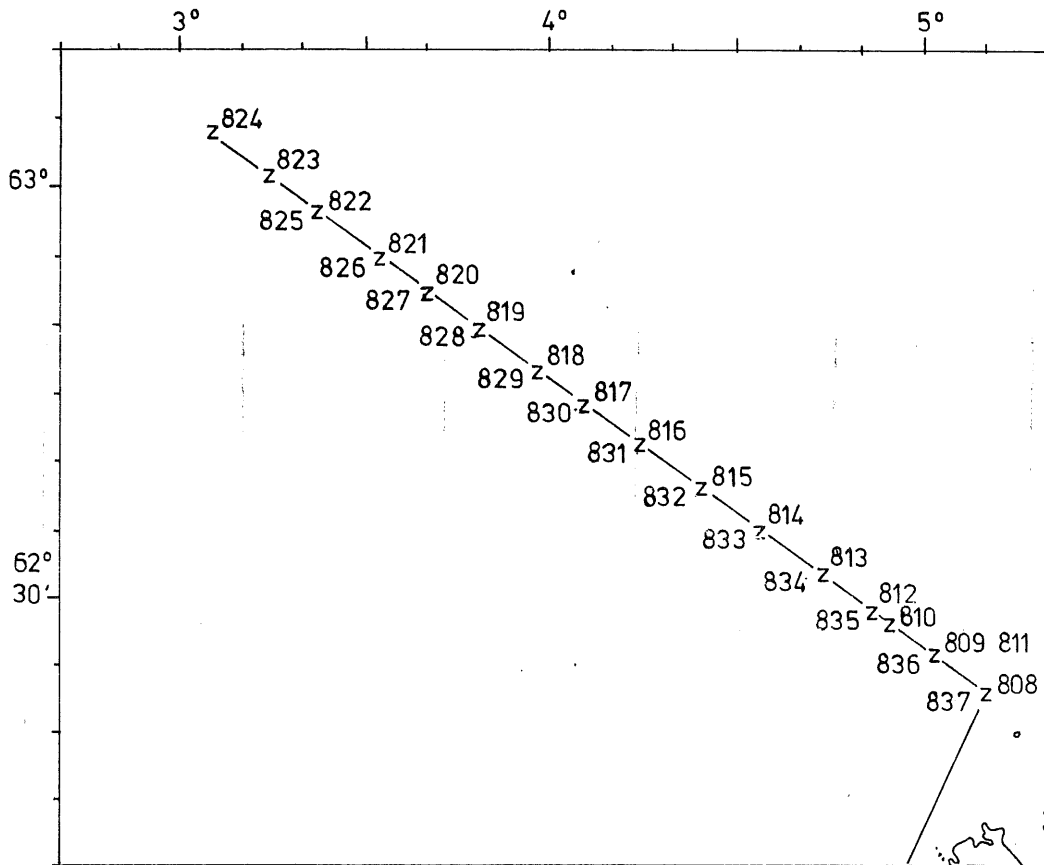
11-29 JUL.1977 ST.NO.661-807

„JOHAN HJORT“



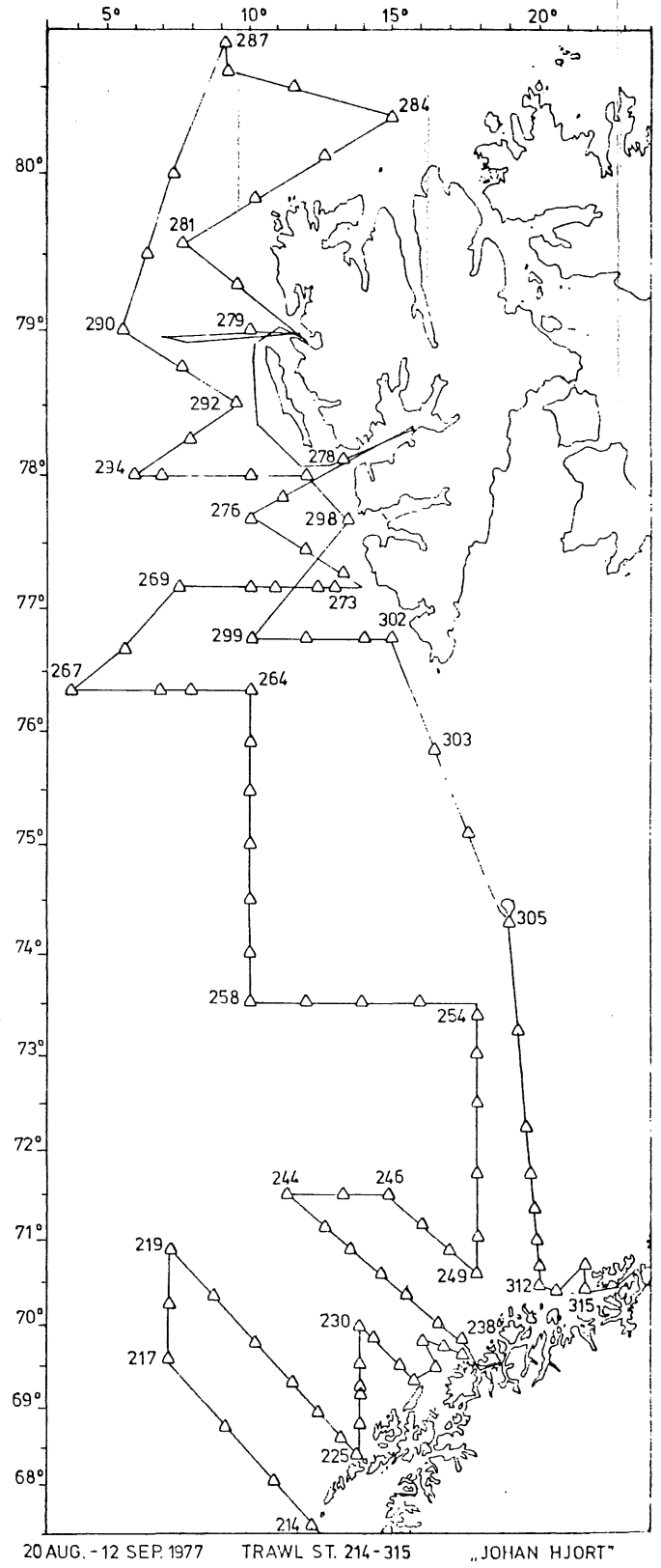
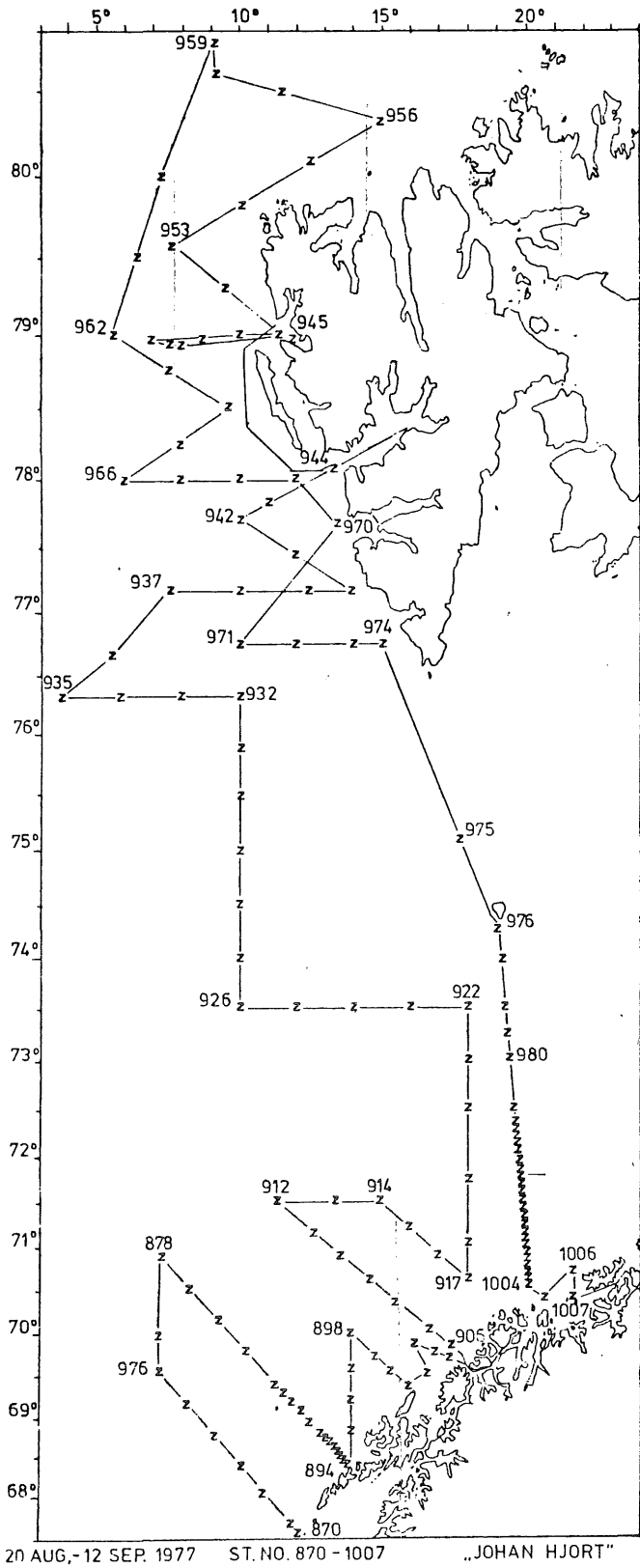
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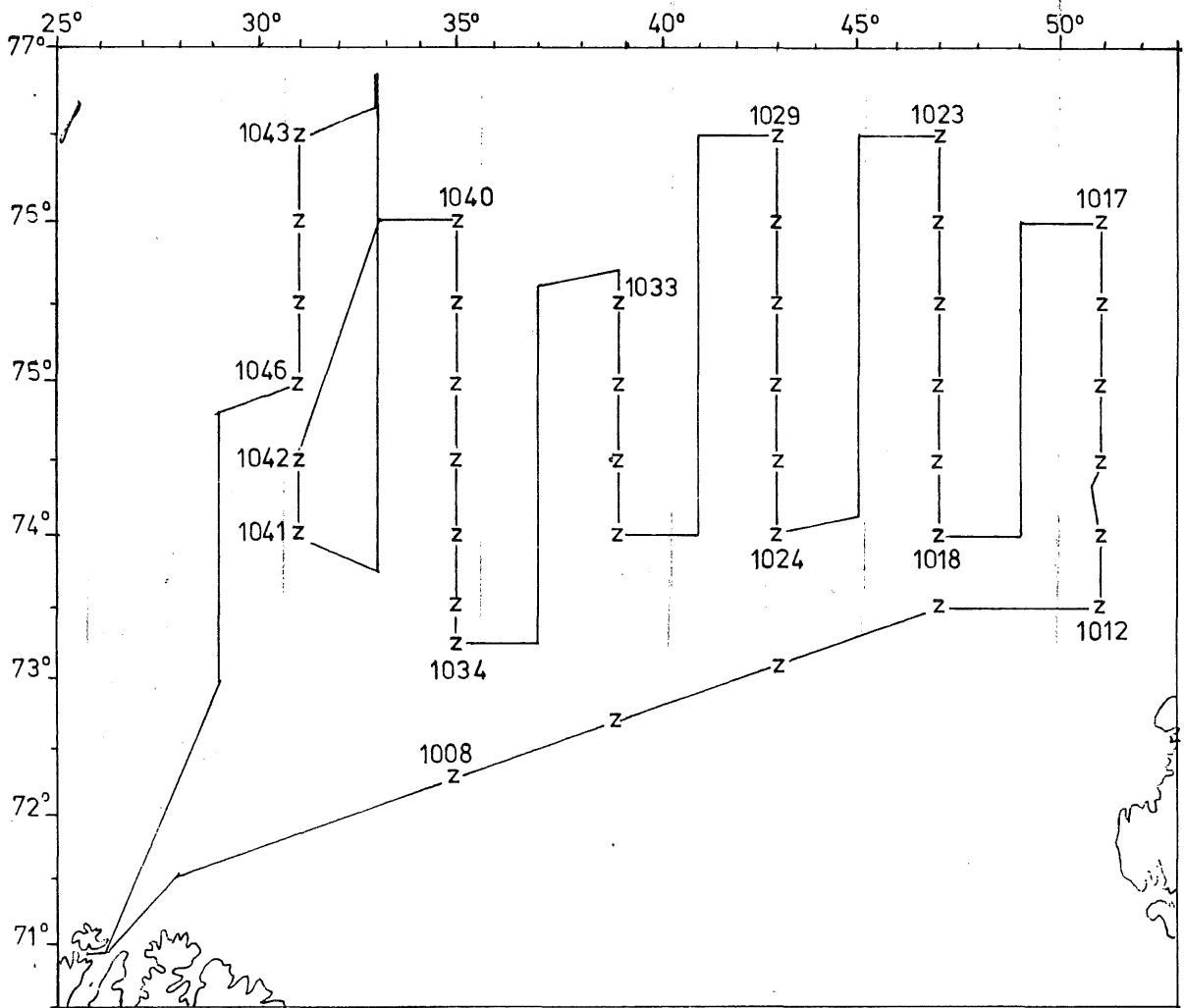
„JOHAN HJORT“



8 - 14 AUG. 1977 ST. NO. 808 - 869

„JOHAN HJORT“

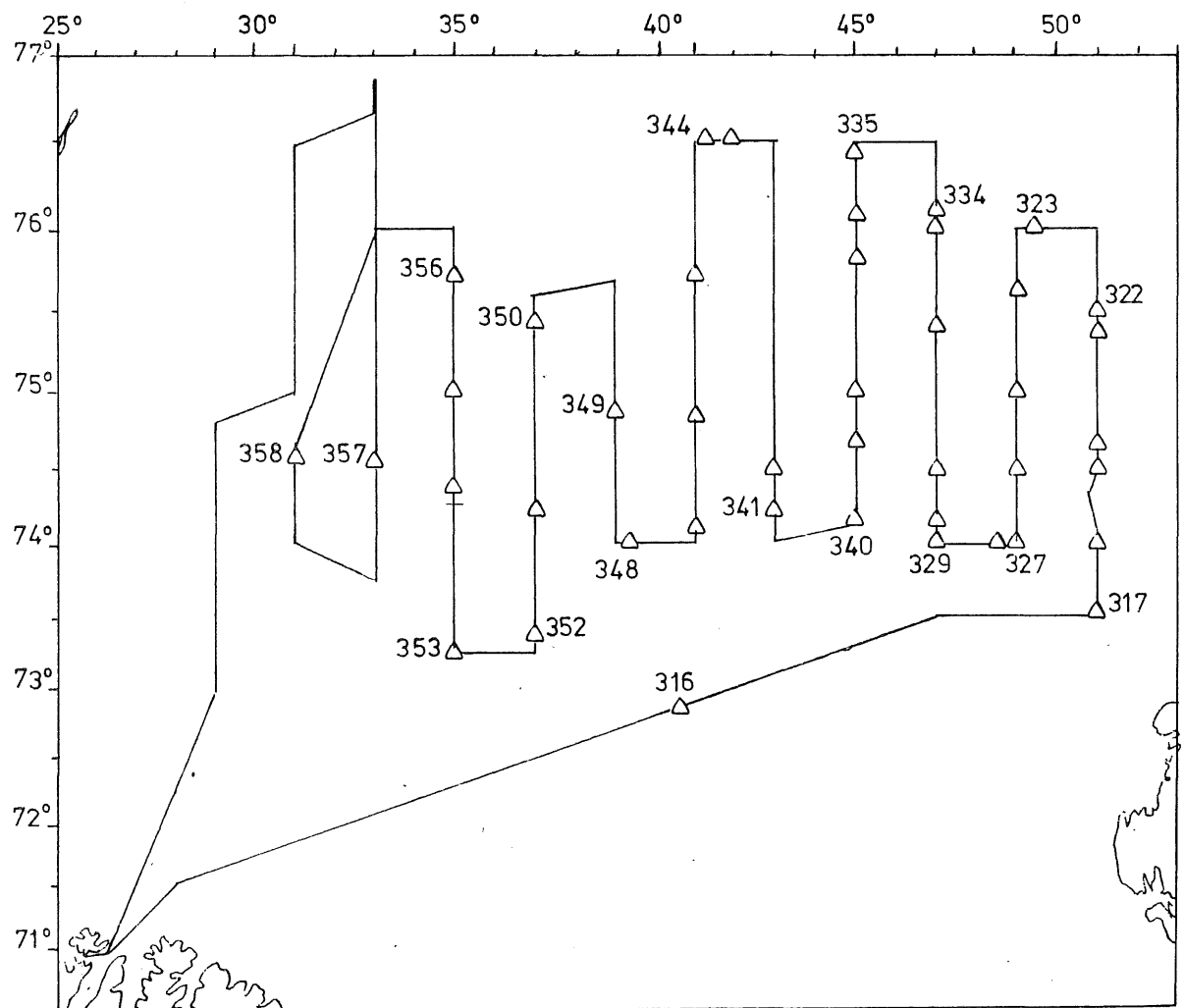




16 SEP. - 4 OCT. 1977

ST. NO. 1008-1046

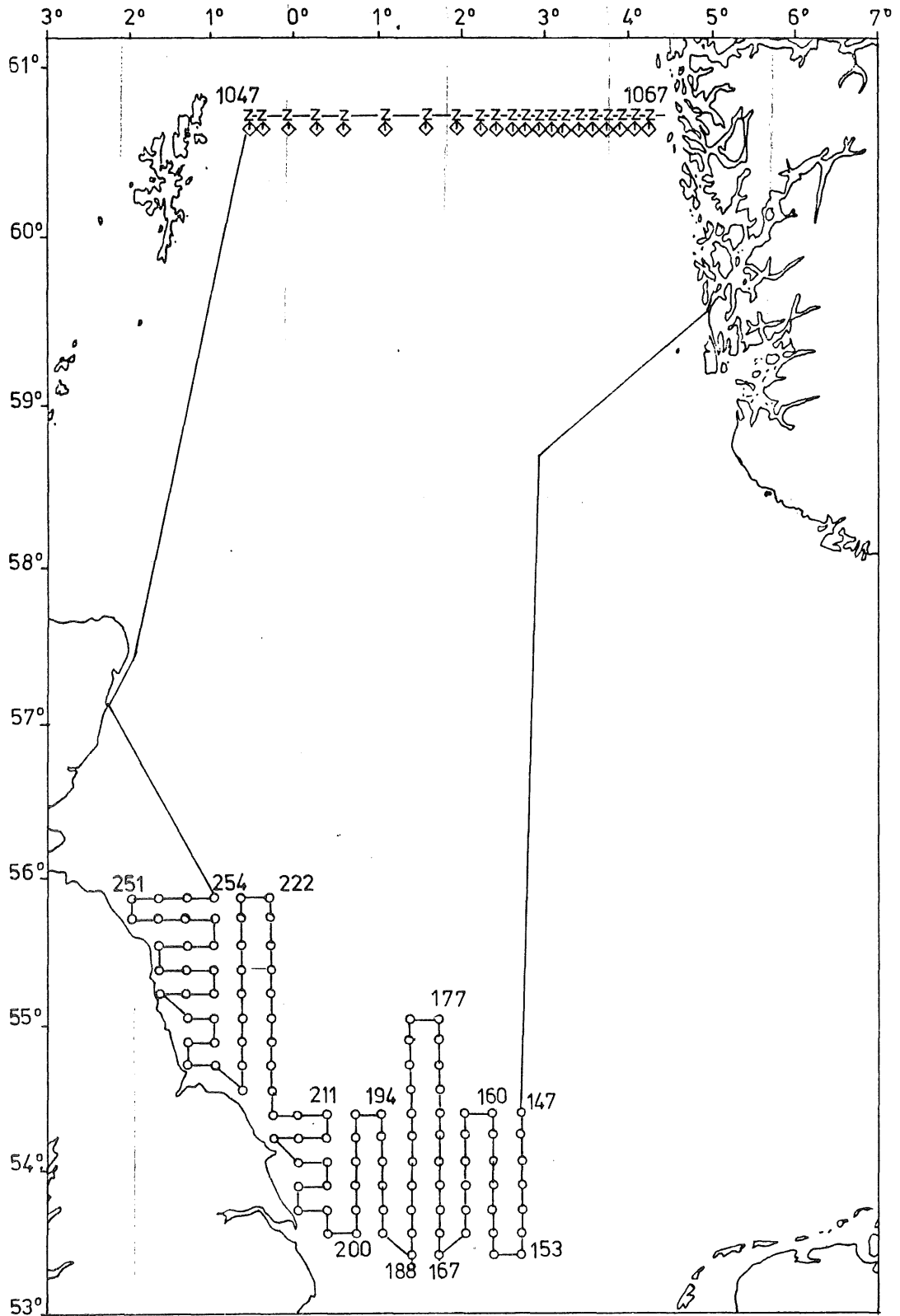
„JOHAN HJORT”

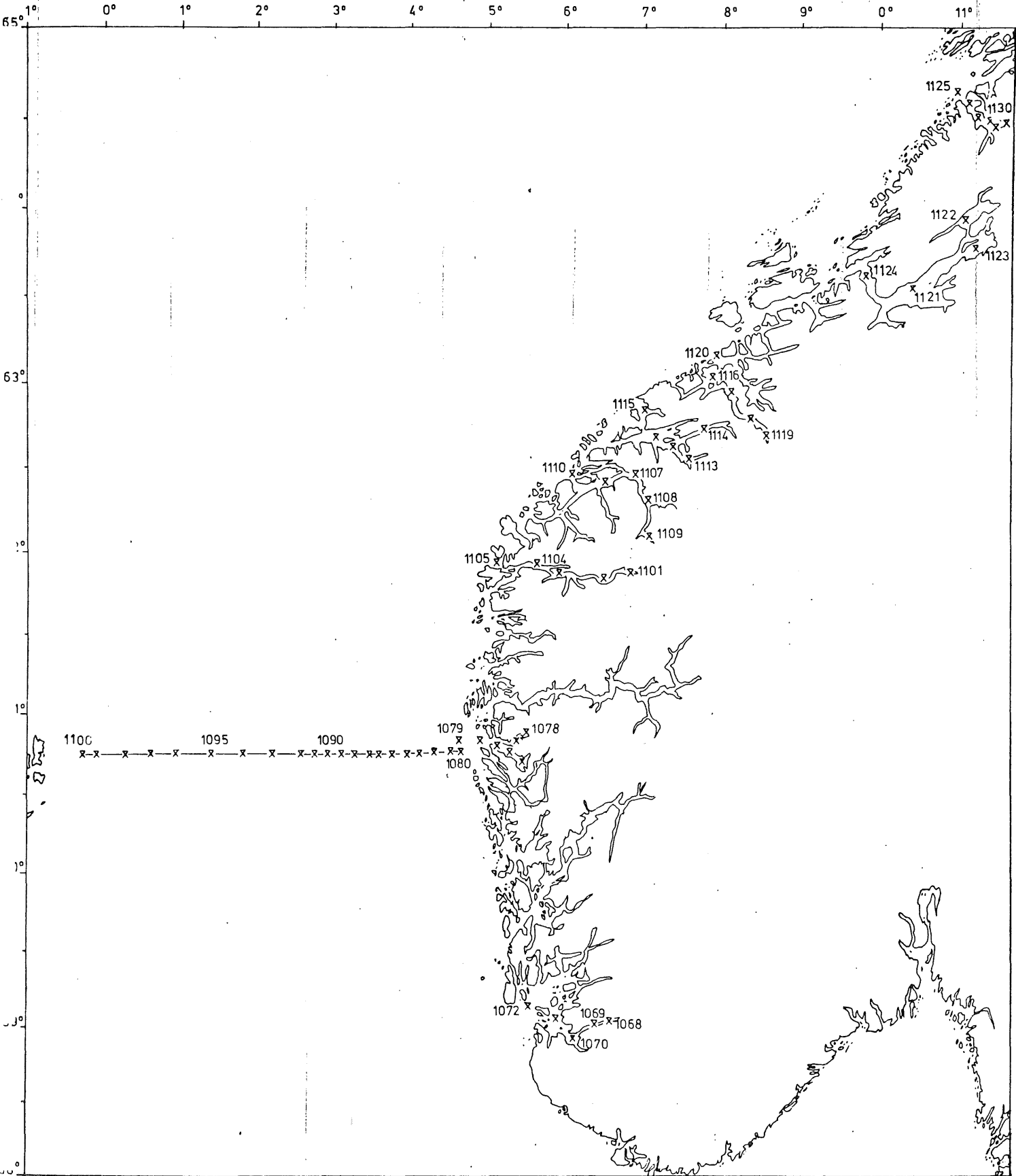


16 SEP. - 4 OCT. 1977

TRAWL ST. 316-357

„JOHAN HJORT”

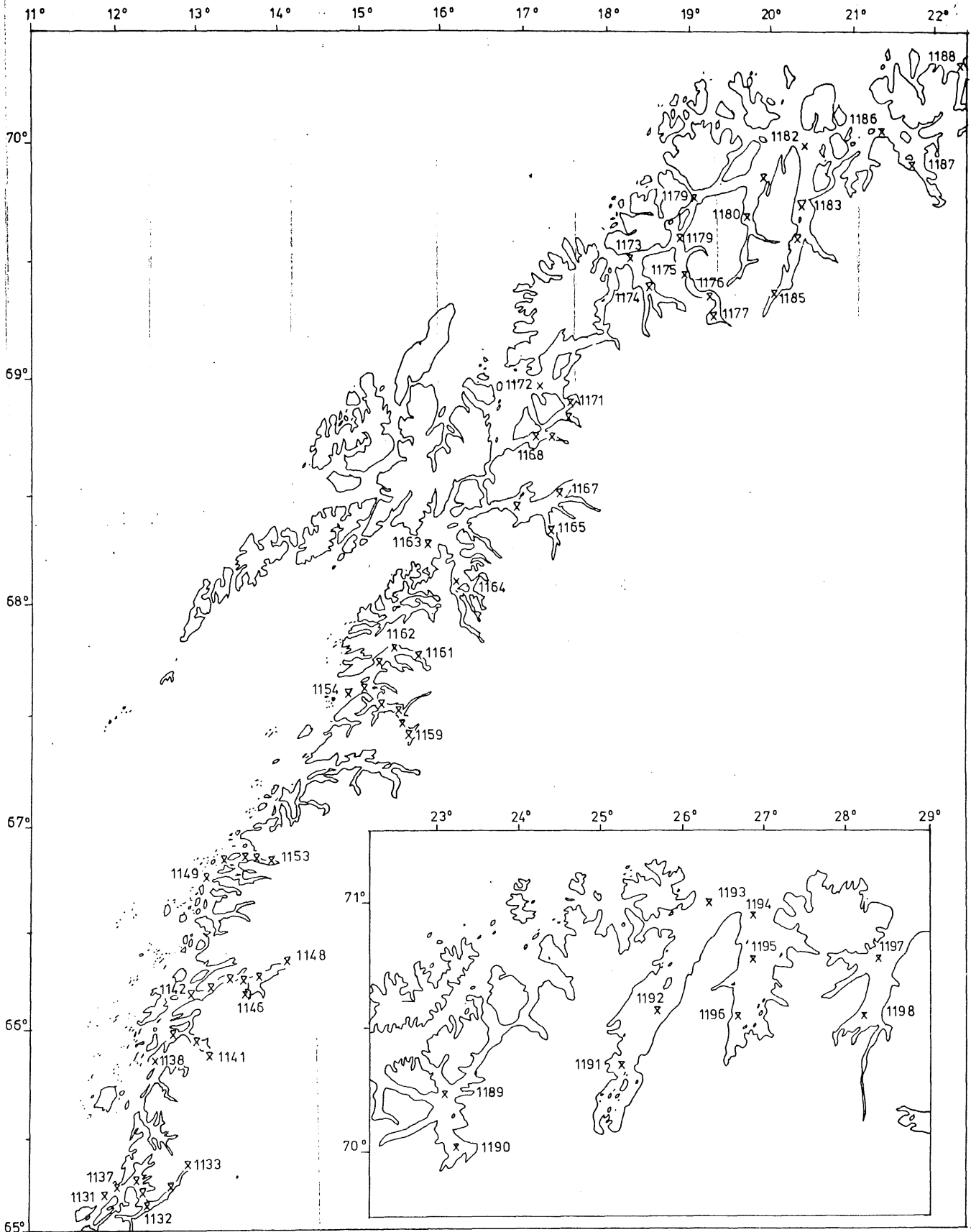




4 NOV. - 15 DEC. 1977

ST. NO. 1068 - 1130

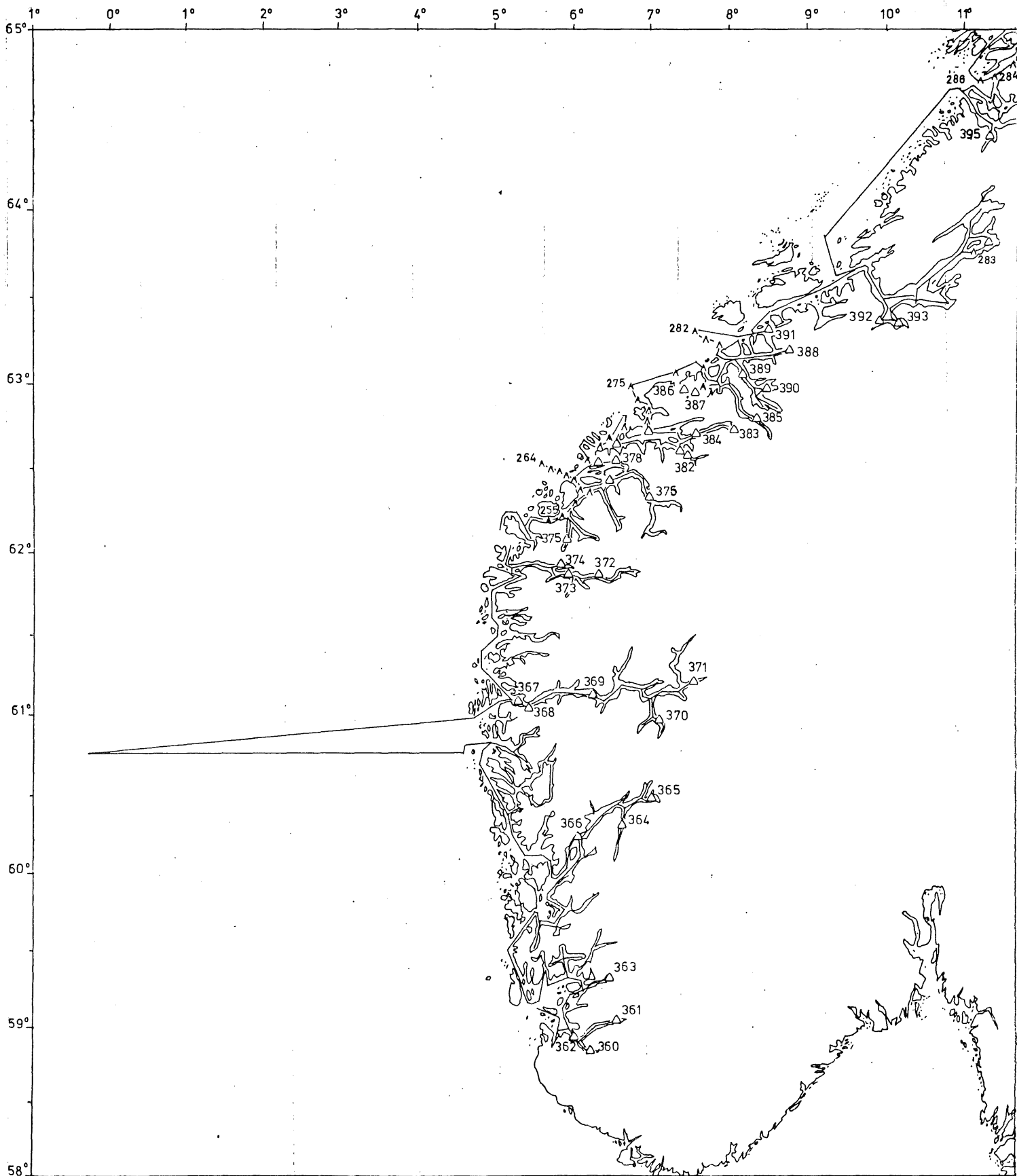
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ST. NO. 1131 - 1198

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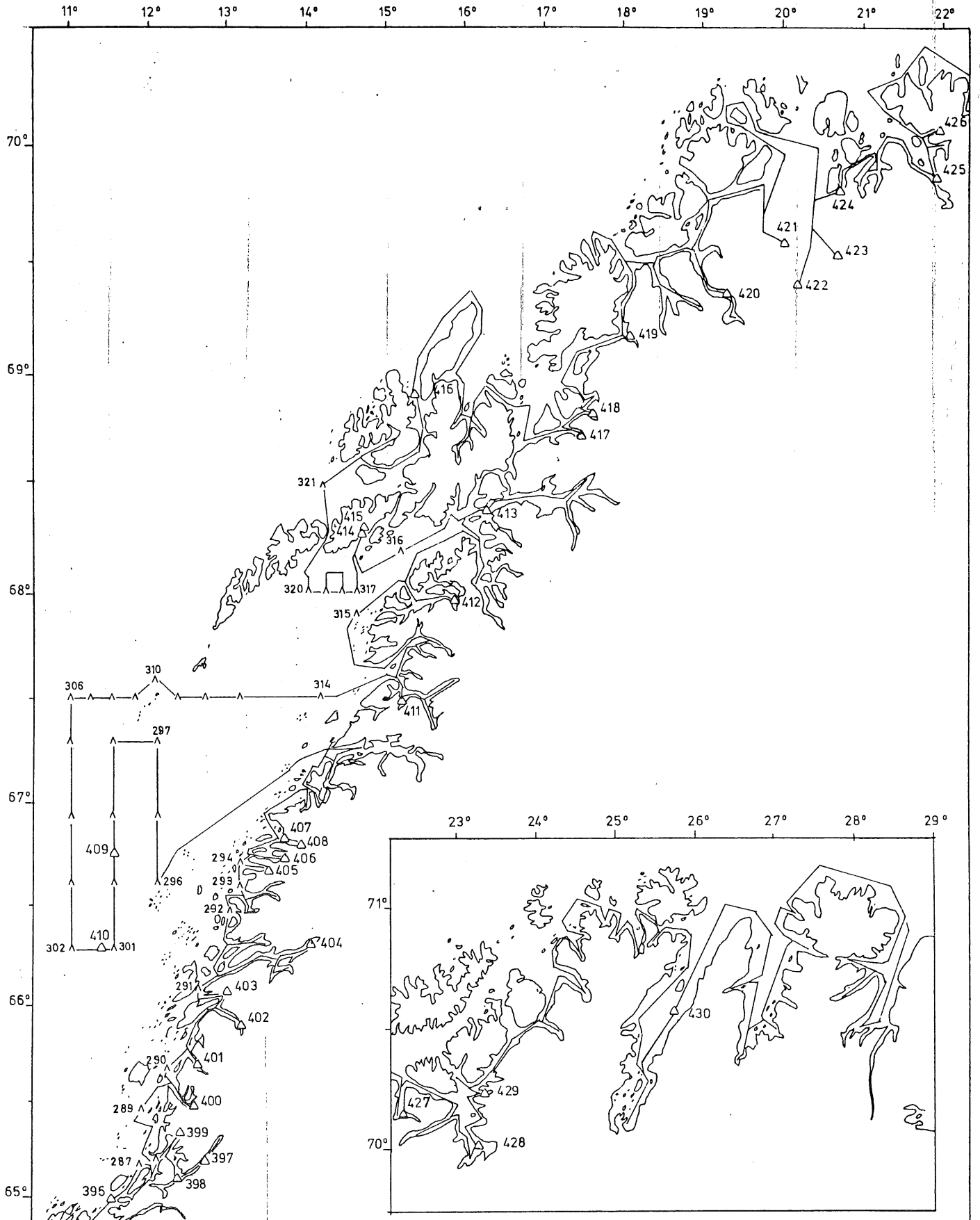


4 NOV. - 15 DEC. 1977

TRAWL ST. 360 - 395

GULF ST. 255 - 286

„JOHAN HJORT“

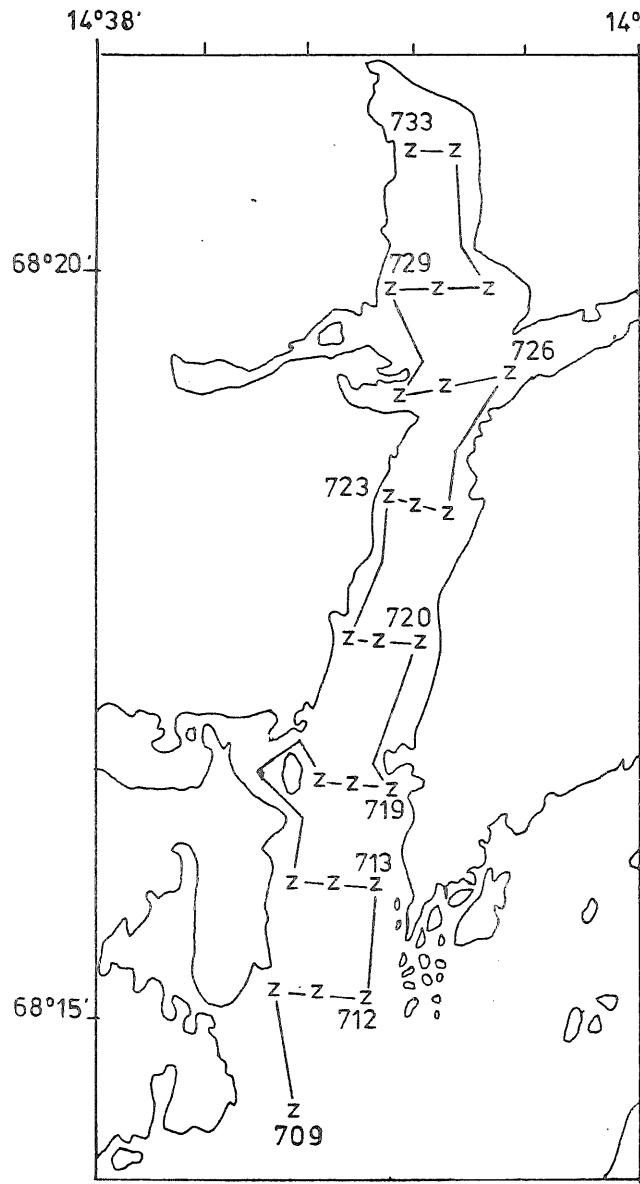


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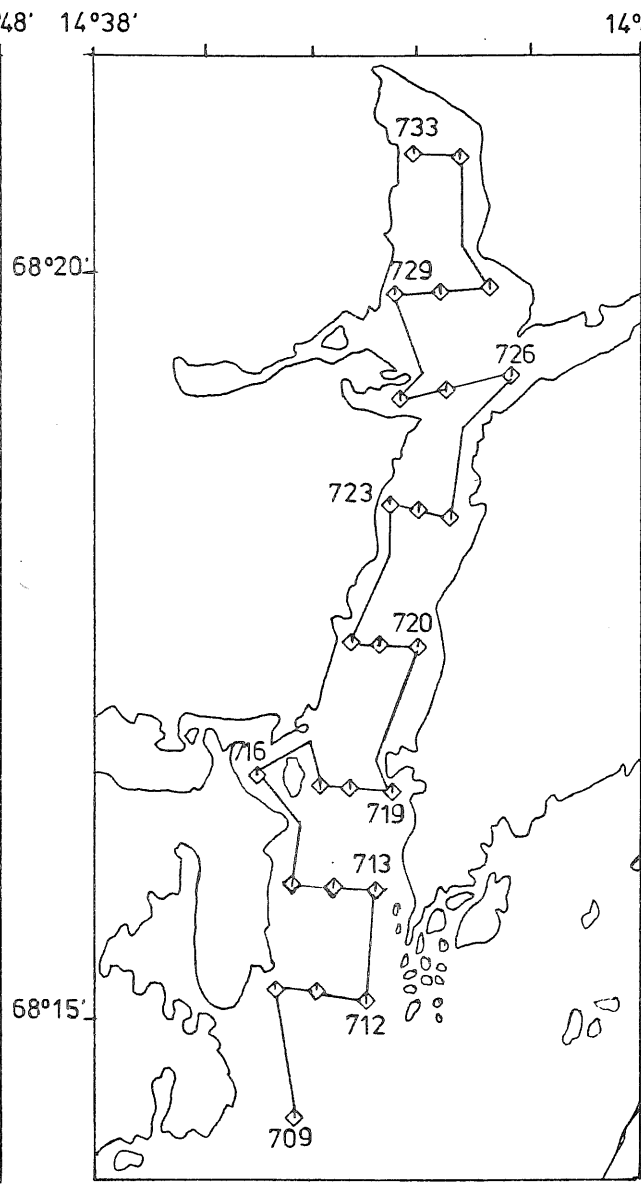
TRAWL ST. 396 - 430

GULF ST. 287 - 321

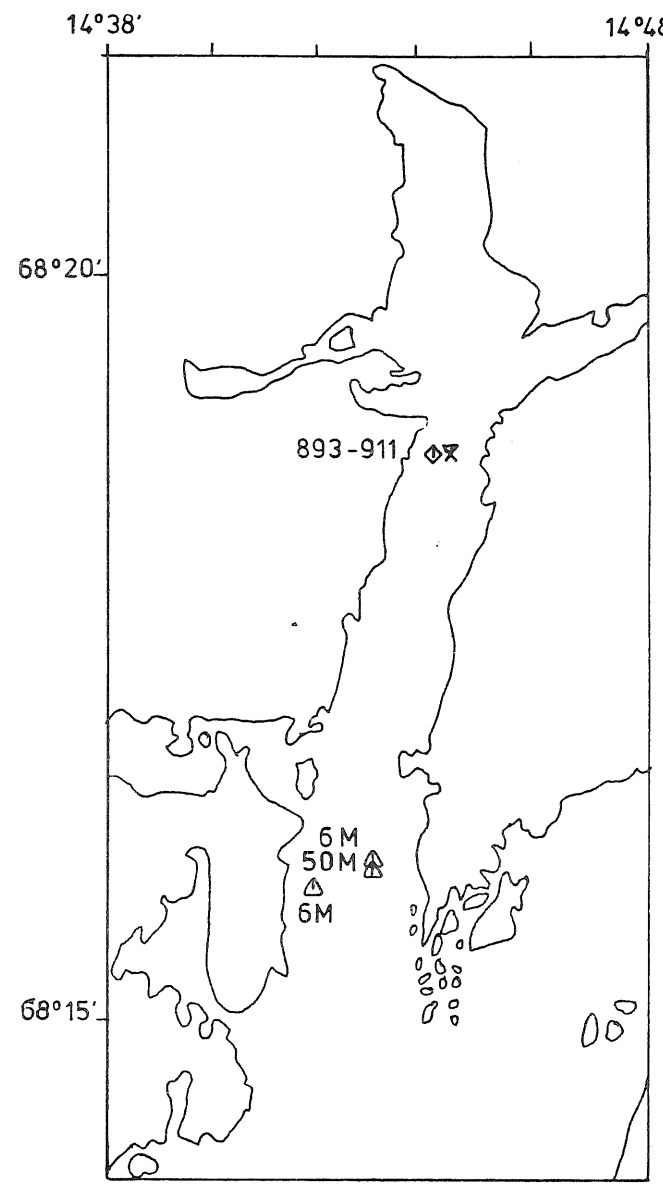
„JOHAN HJORT“



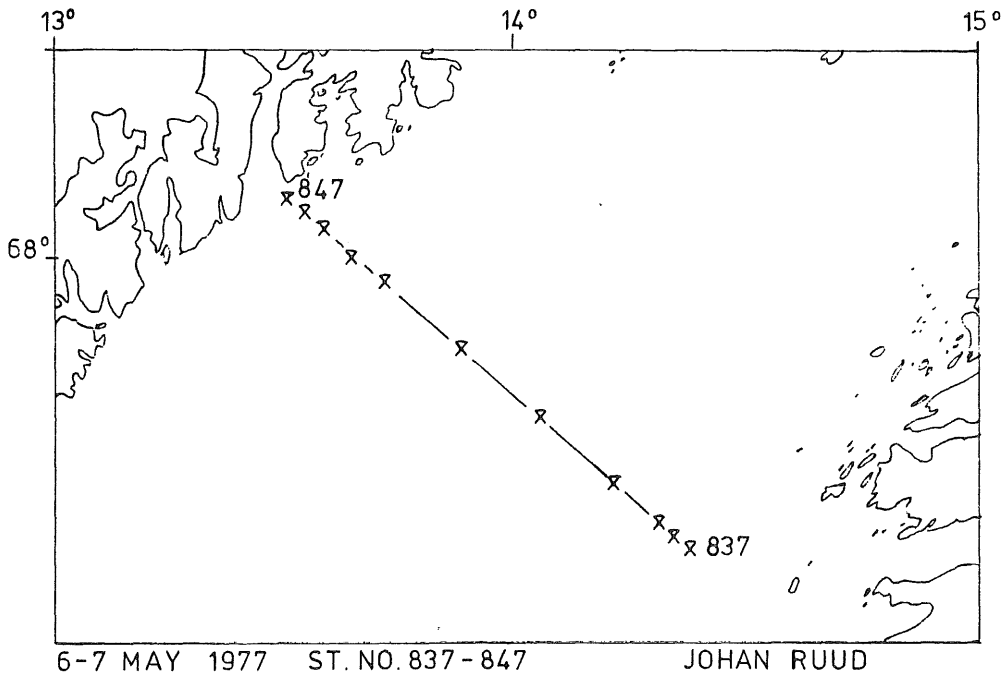
3 MAY 1977 ST. NO. 709-733

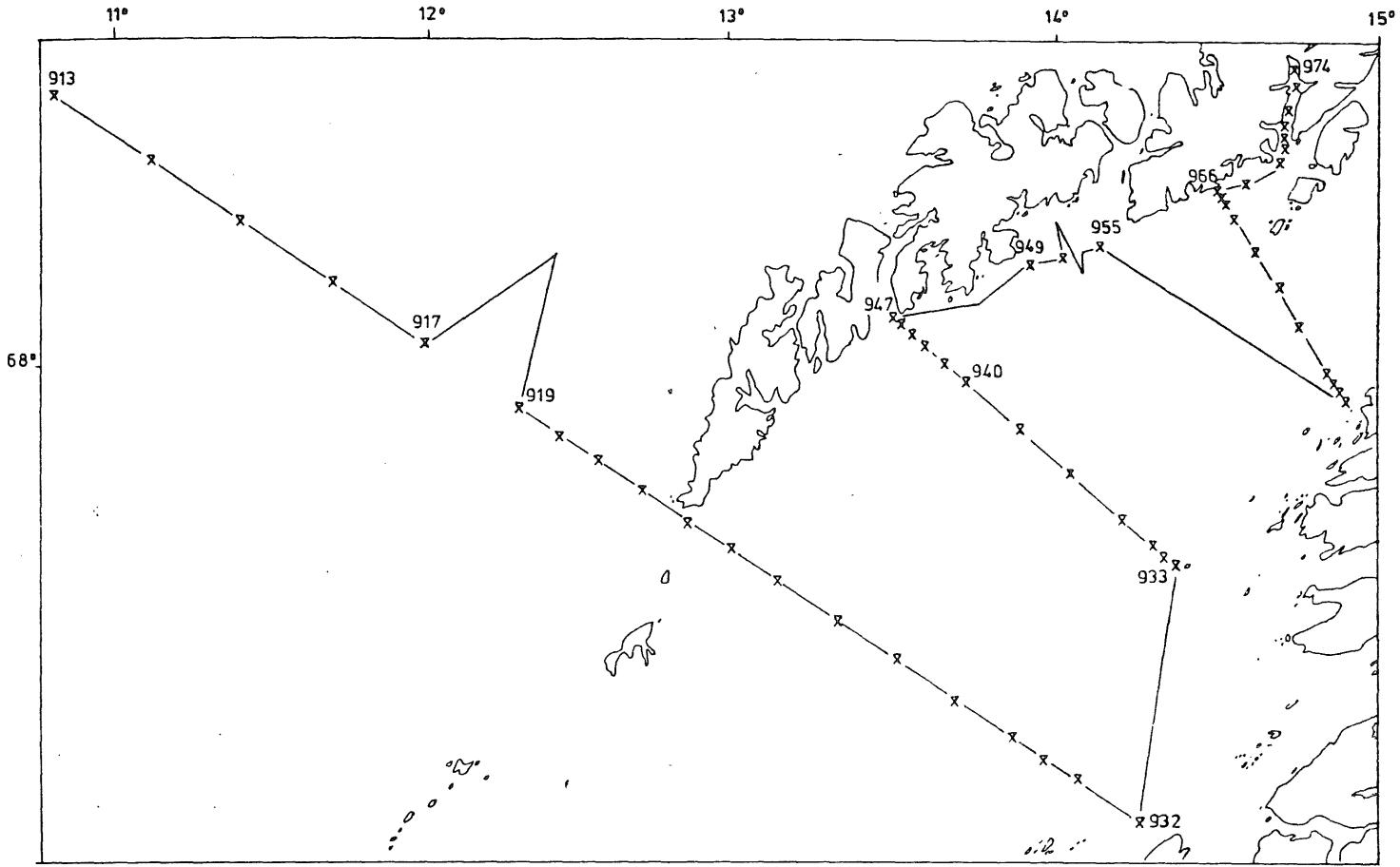


PLANKTON ST. 709-733 JOHAN RUUD



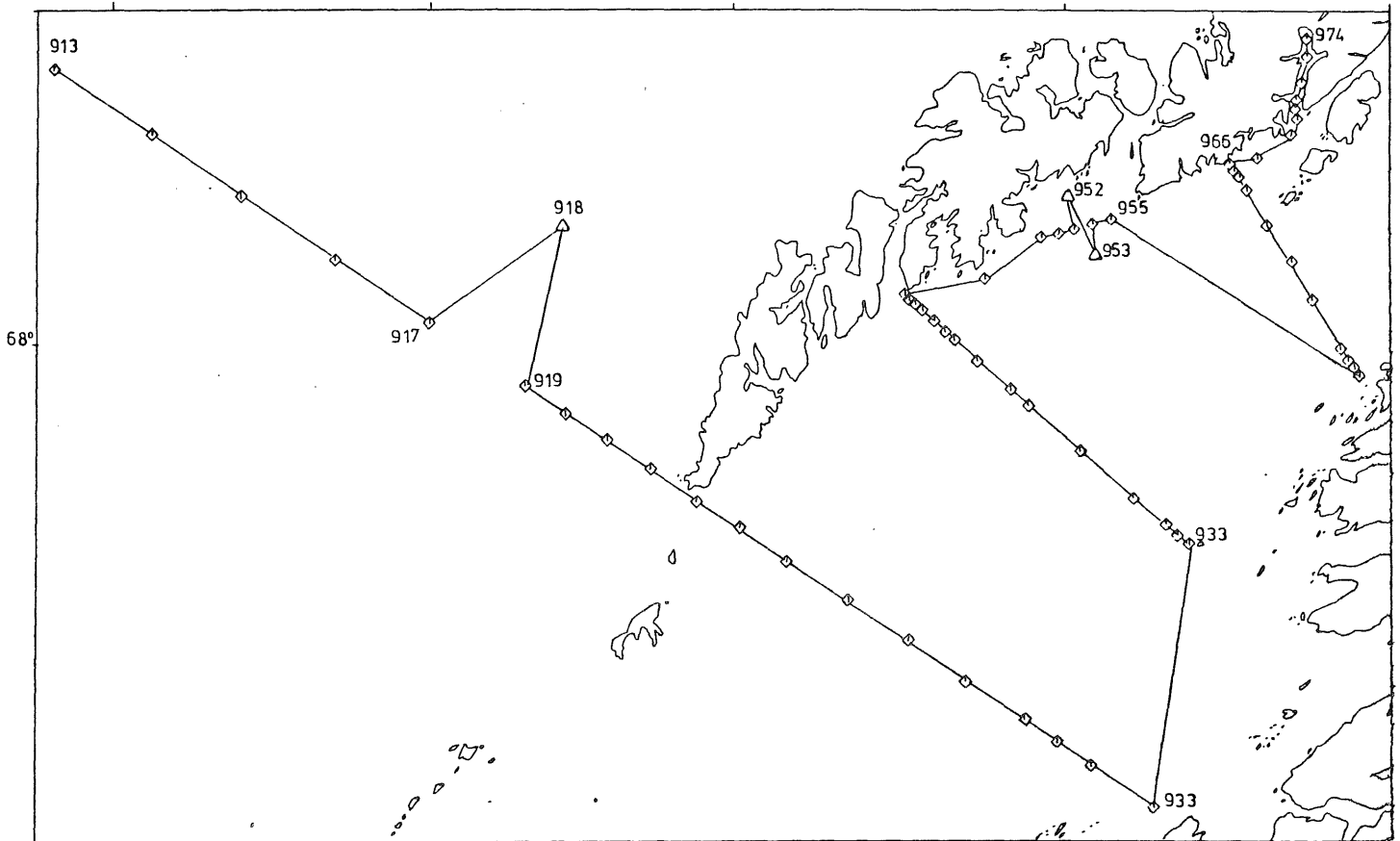
MOORED BUOY ST. 20 APR.-12 MAY 1977
ST. NO. 893-911 10-11 MAY 1977





12-14 MAY 1977 ST. NO. 913-974

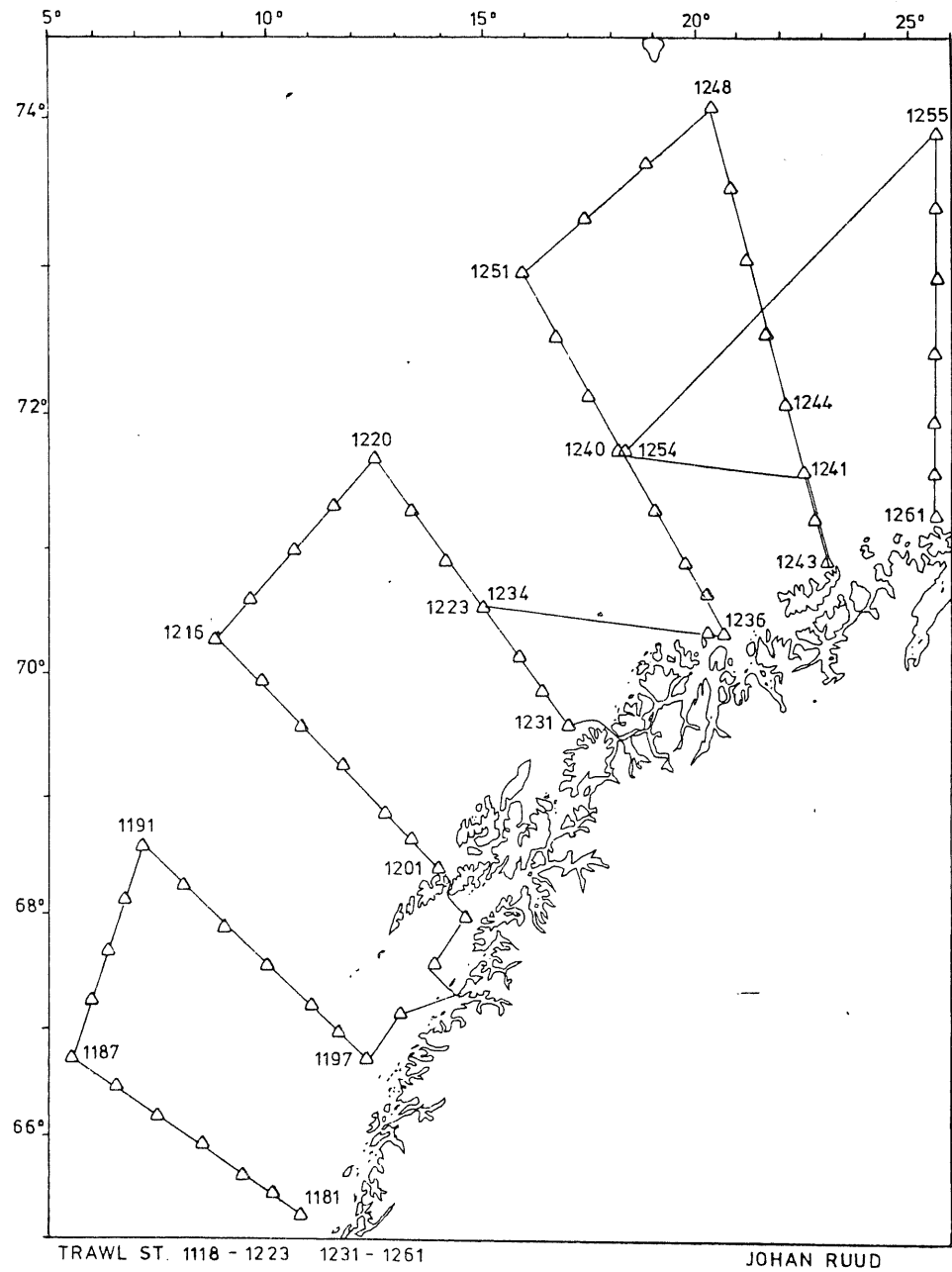
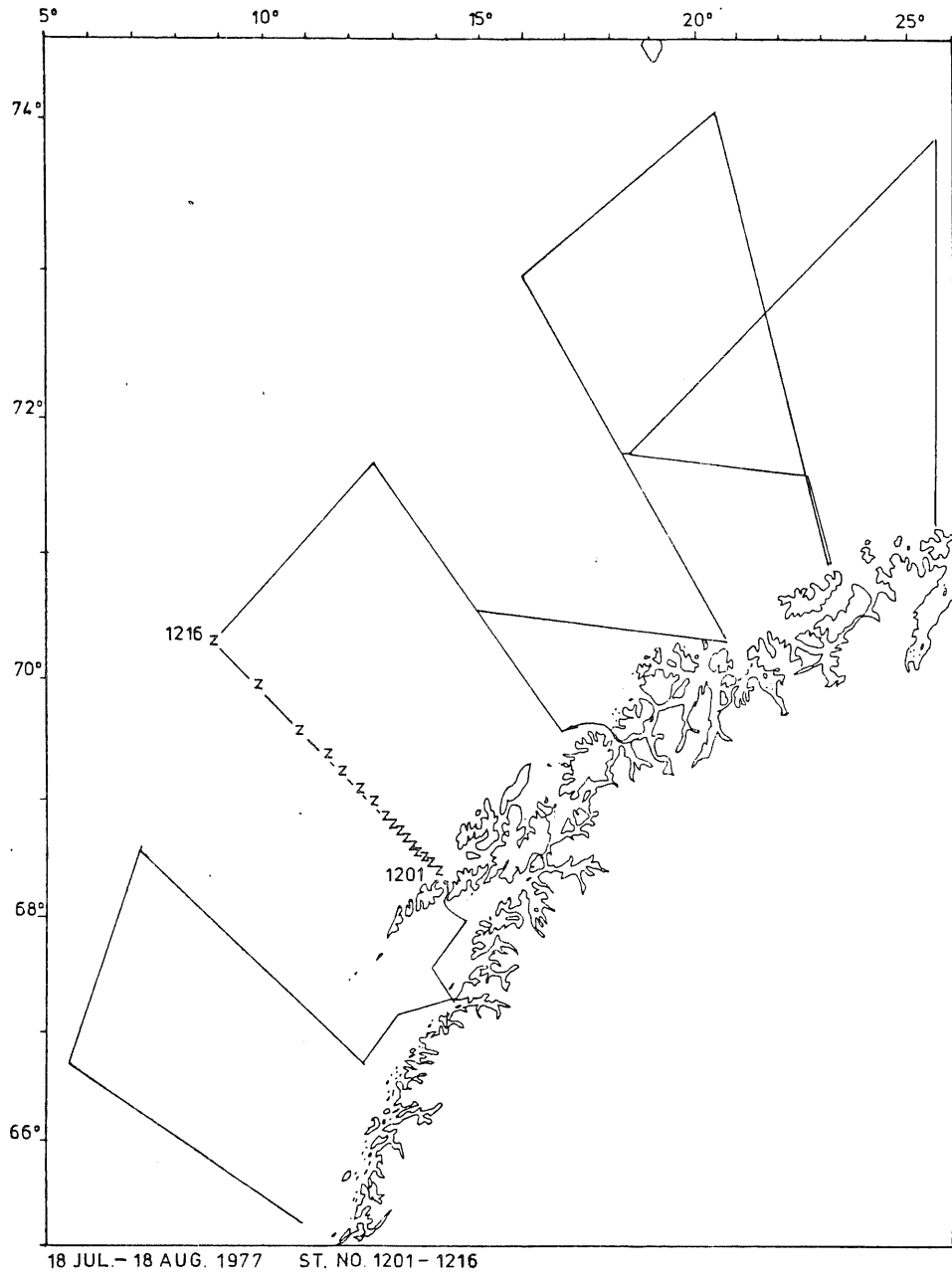
JOHAN RUUD

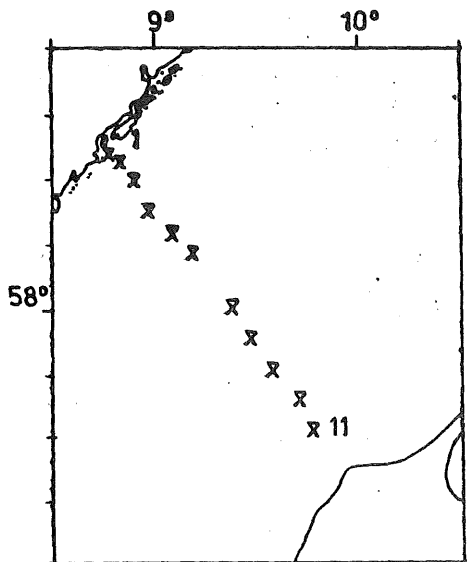


12-14 MAY 1977 PLANKTON ST. 913-974

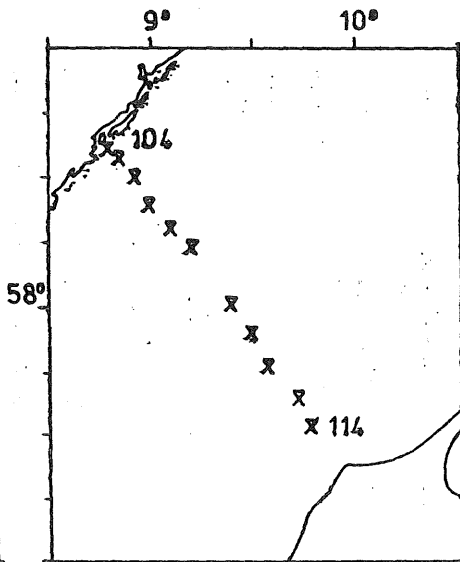
TRAWL ST. 918, 952, 953

JOHAN RUUD

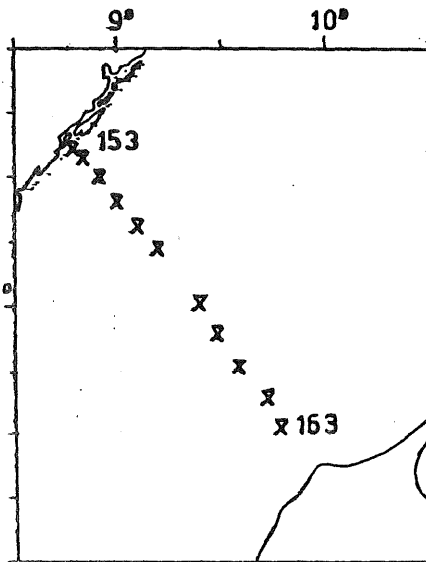




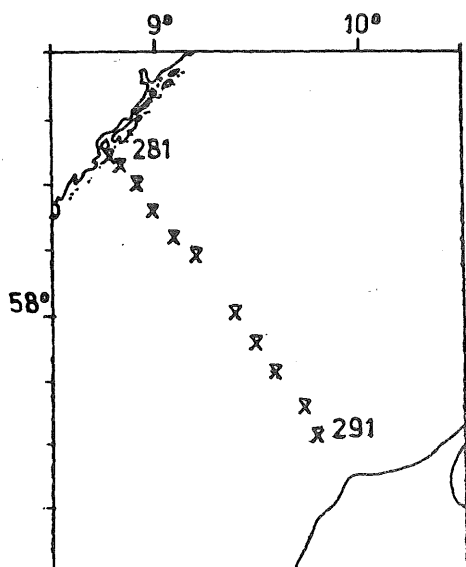
4 JAN. ST. NO. 1-11



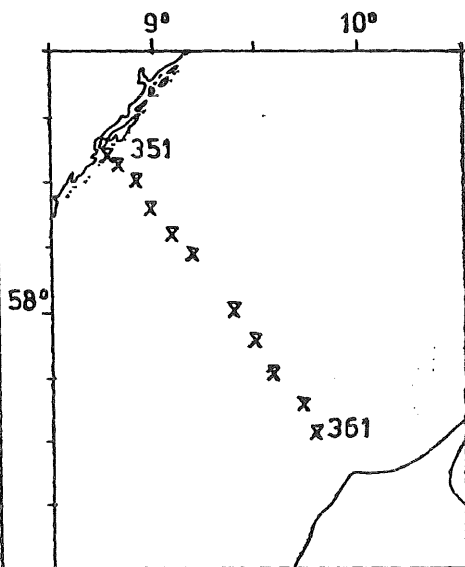
22 MAR. ST. NO. 104-114



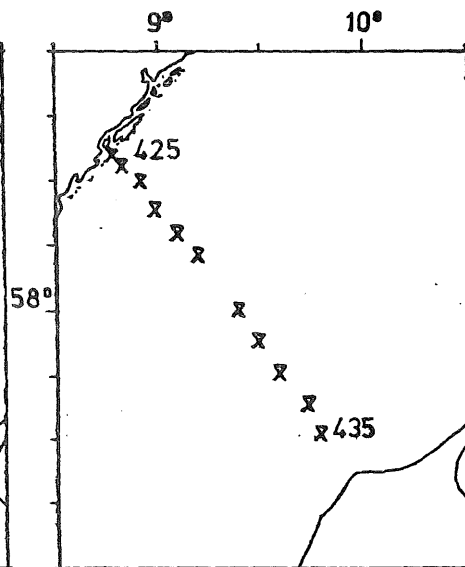
21 APR. ST. NO. 153-163



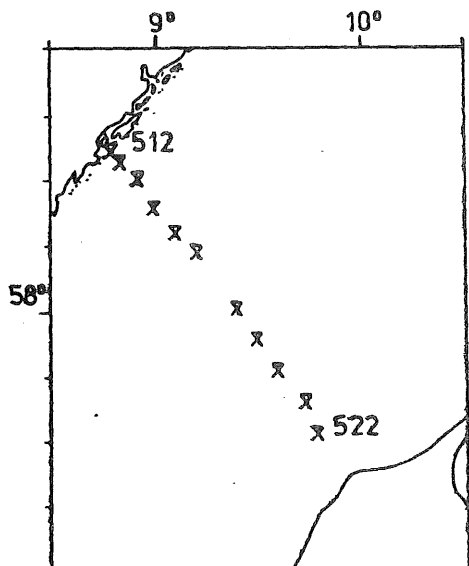
4 AUG. ST. NO. 281-291



1 SEP. ST. NO. 351-361

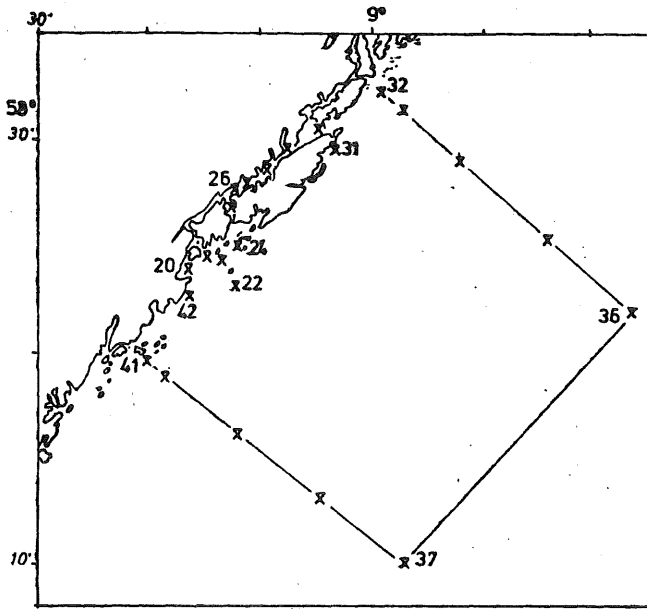


10 OCT. ST. NO. 425-435

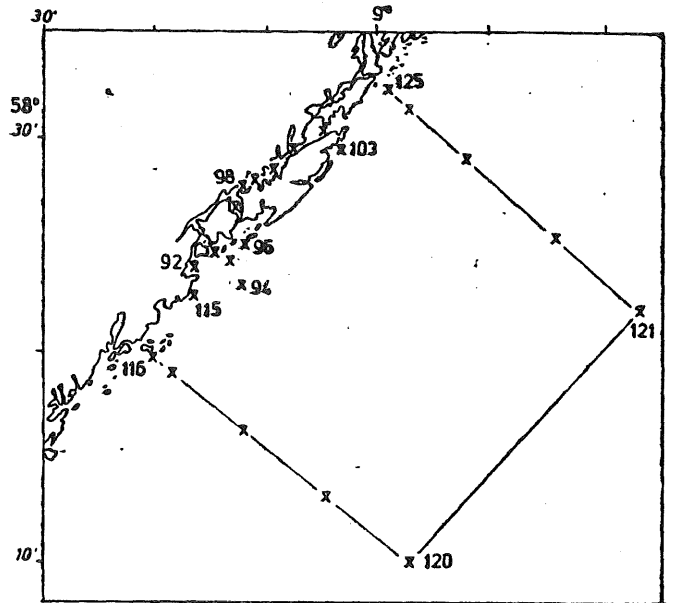


5 DEC. ST. NO. 512-522

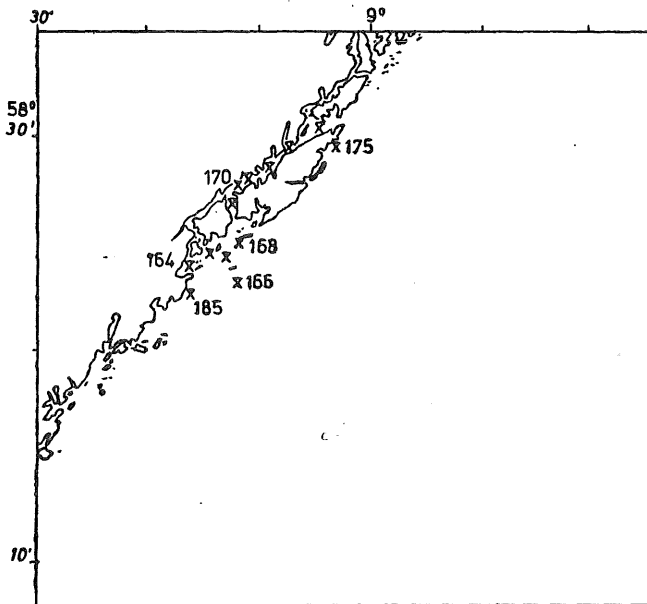
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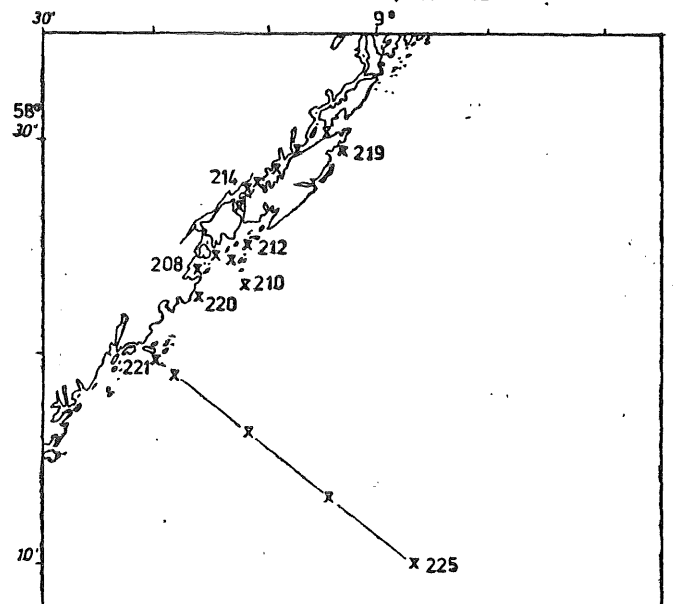
18 - 19 JAN. 1977 ST. NO. 20 - 42



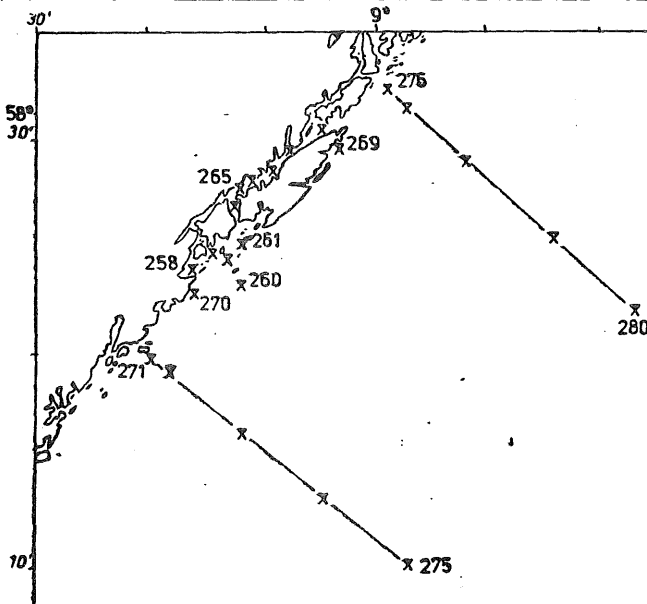
21 - 24 MAR. 1977 ST. NO. 92 - 103, 115 - 125



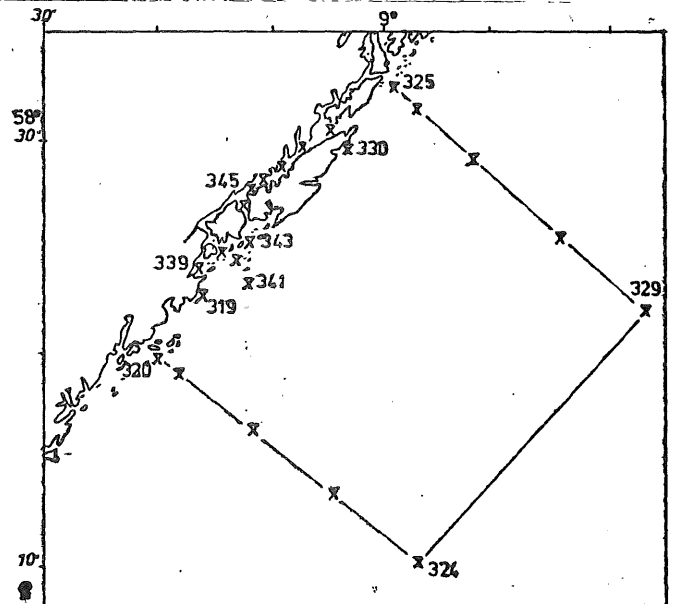
26 - 29 APR. 1977 ST. NO. 164 - 175, 185



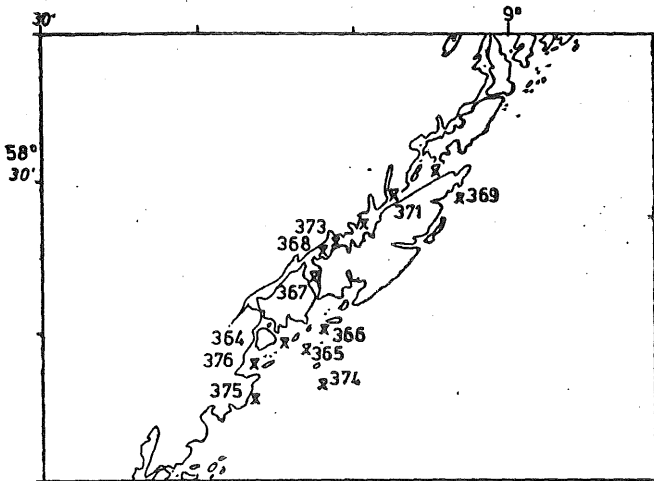
25 - 26 MAY 1977 ST. NO. 208 - 225



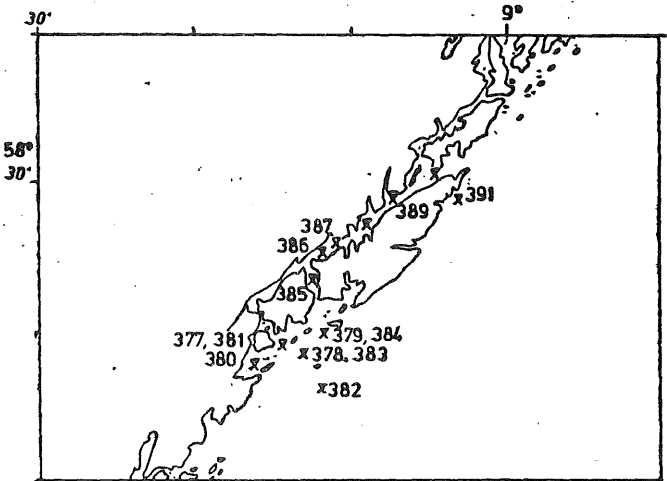
23 - 27 JUN. 1977 ST. NO. 258 - 280



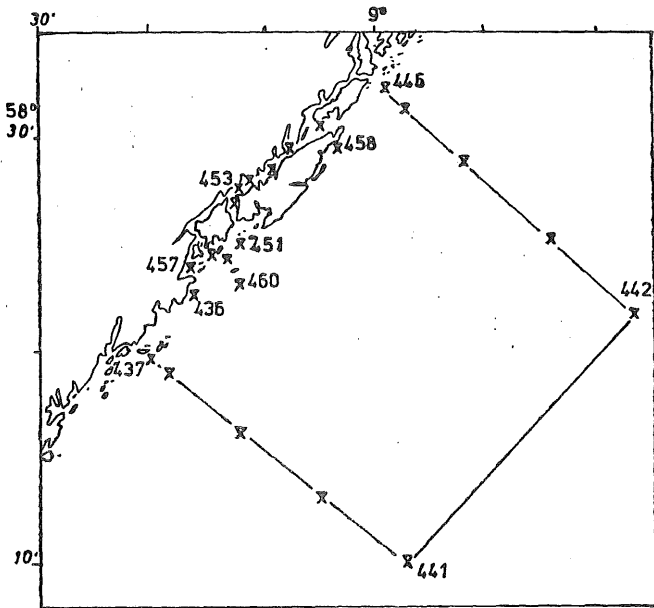
23 - 26 AUG. 1977 ST. NO. 319 - 329, 339 - 350



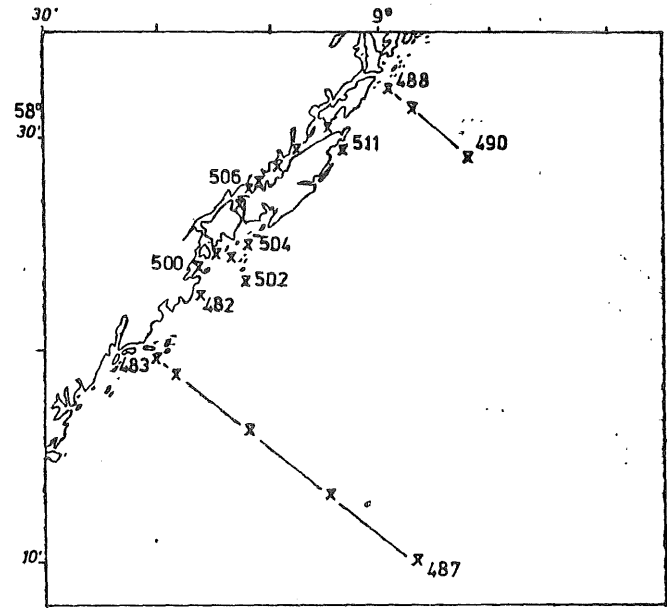
6 SEP. 1977 ST. NO. 364 - 376



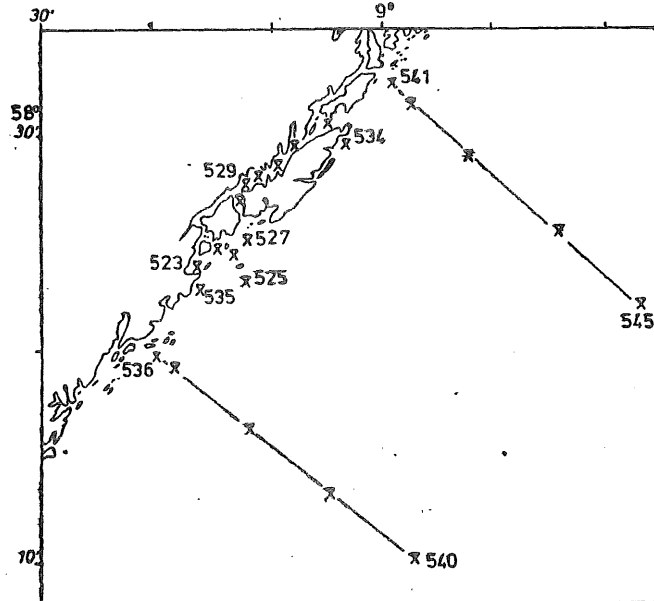
7-8 SEP 1977 ST. NO. 377-391



17 - 21 OCT. 1977 ST. NO. 436-460

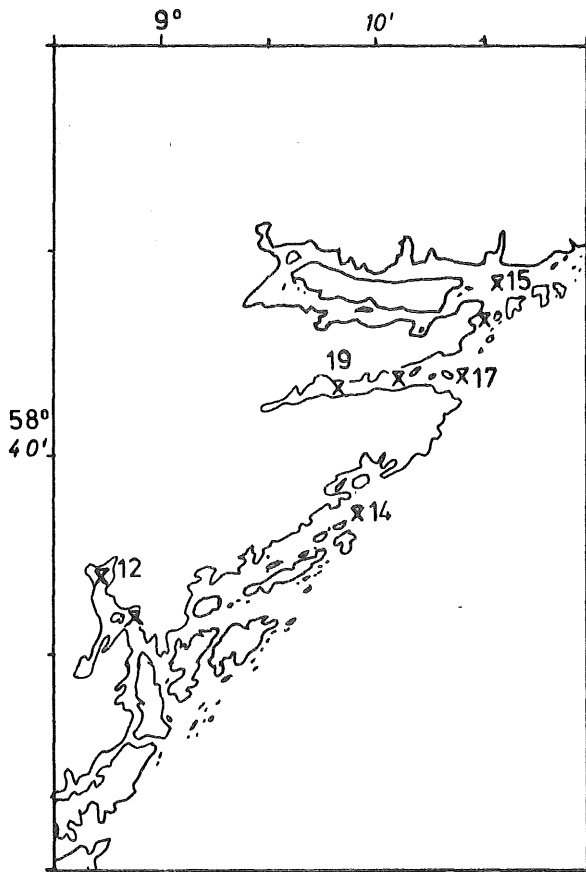


21 - 24 NOV. 1977 ST. NO. 482-511

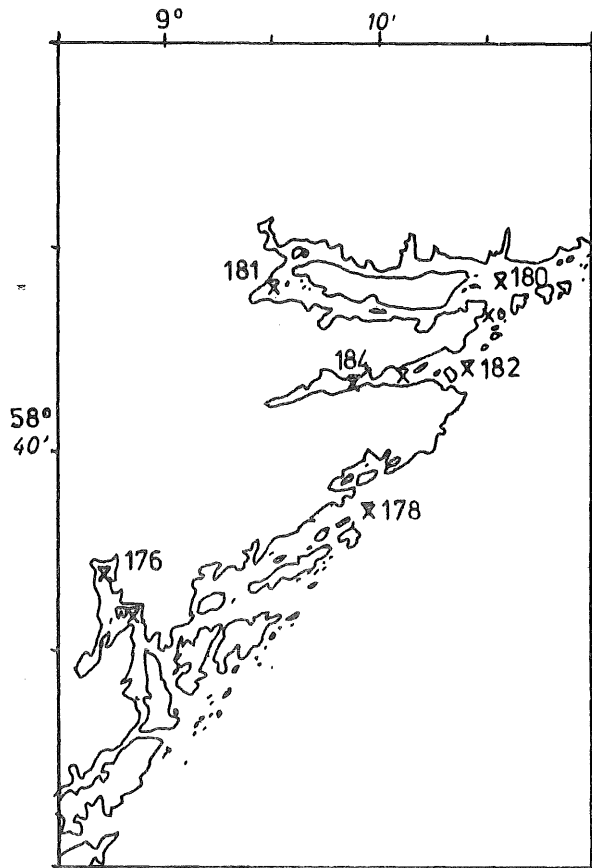


12 - 14 DEC. 1977 ST. NO. 523 - 545

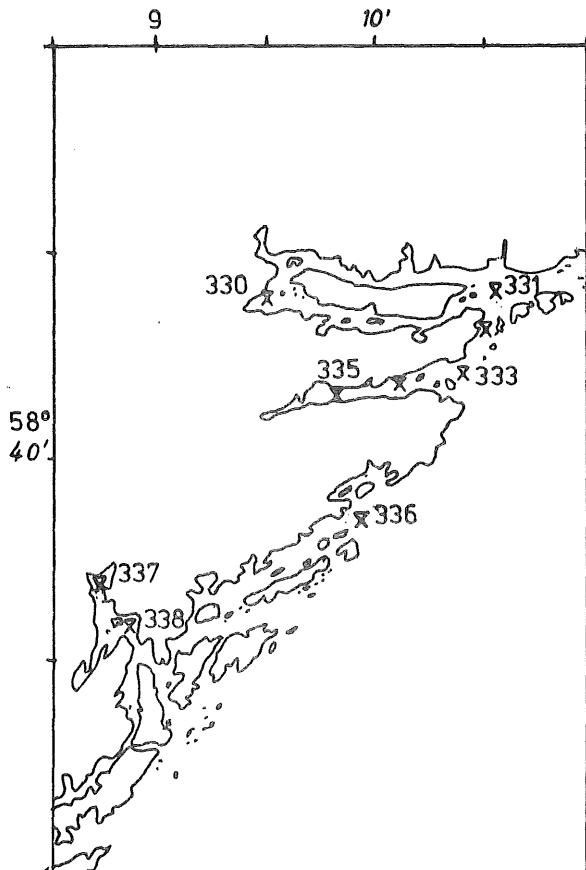
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"G.M. DANNEVIG" 1977



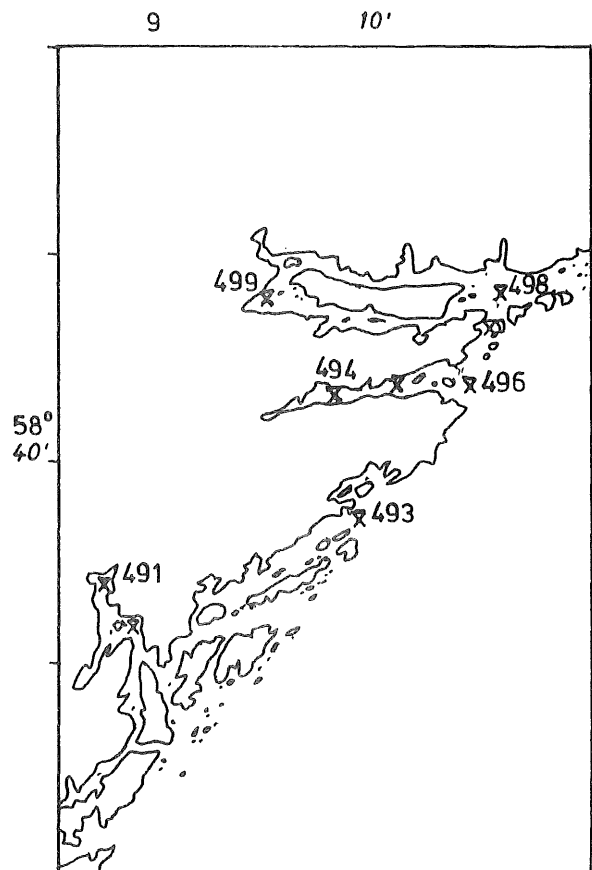
13 JAN. 1977 ST. NO. 12 - 19



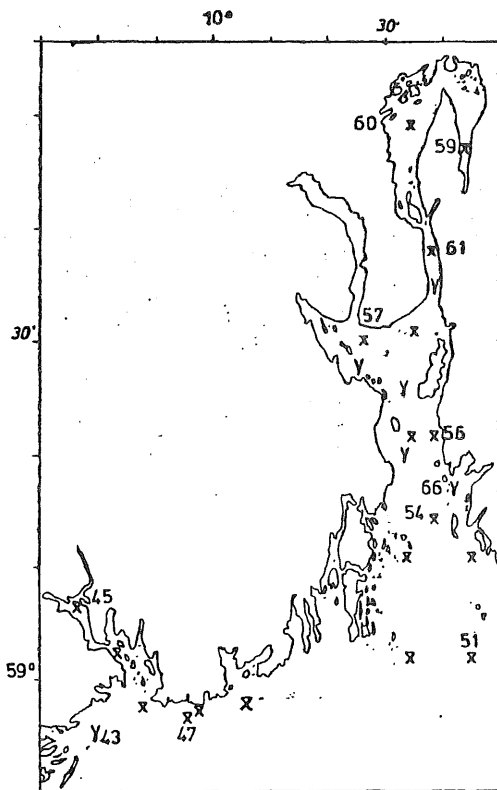
27 APR. 1977 176 - 184



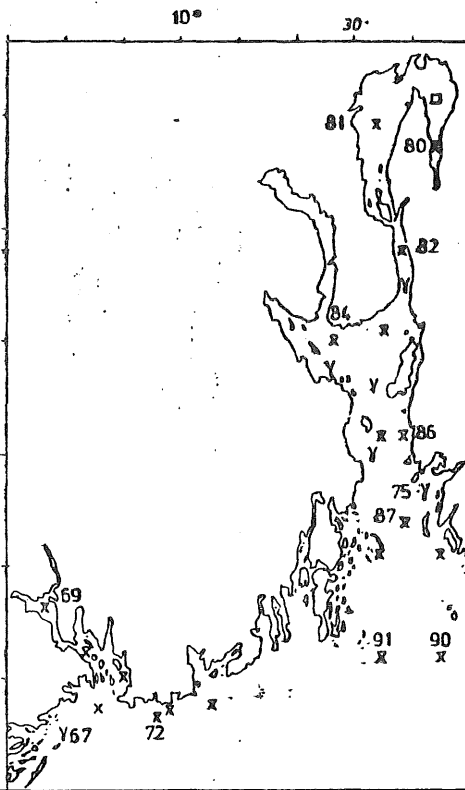
25 AUG. 1977 ST. NO. 330 - 338
"G. M. DANNEVIG"



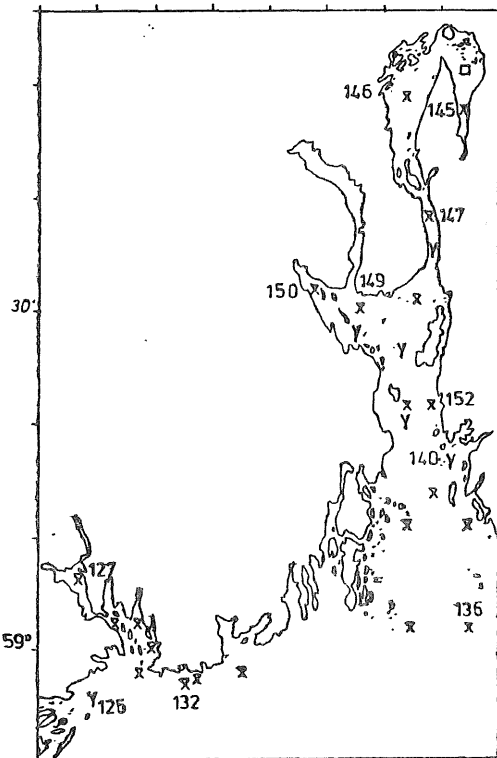
23 NOV. 1977 ST. NO. 491 - 499



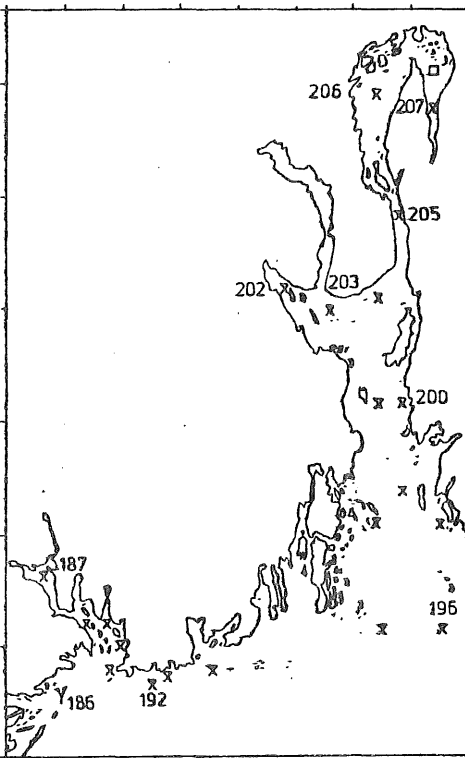
9-16 FEB. 1977 ST. NO. 44-65



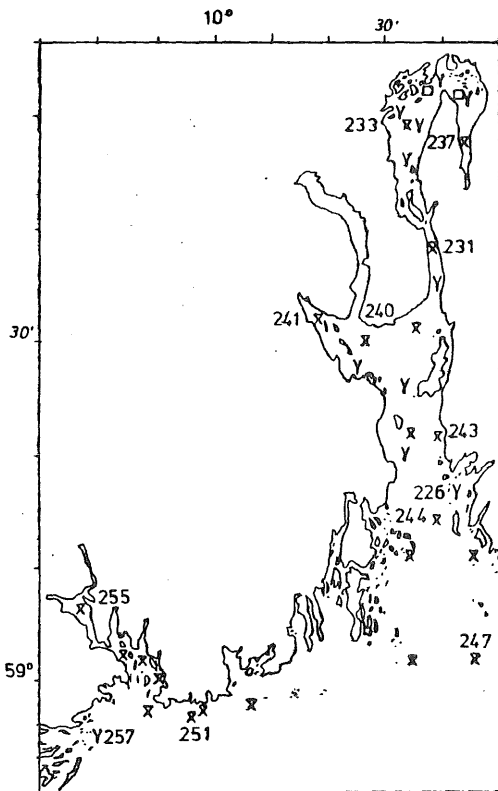
8-16 MAR. 1977 ST. NO 67-91



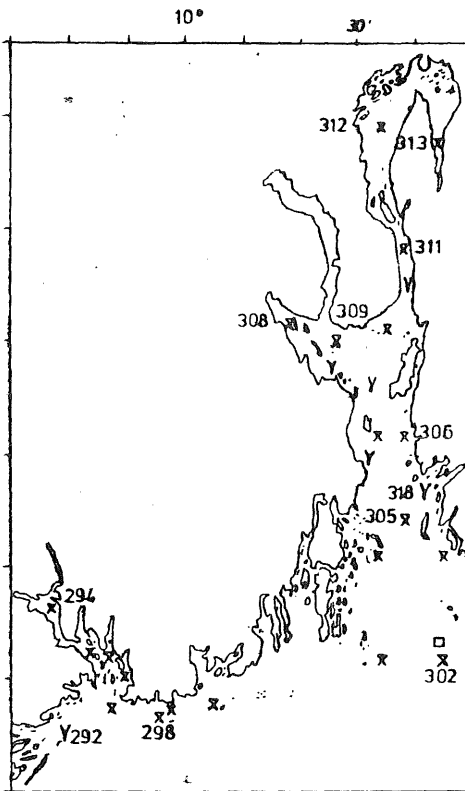
12-20 APR. 1977 ST. NO. 126-152



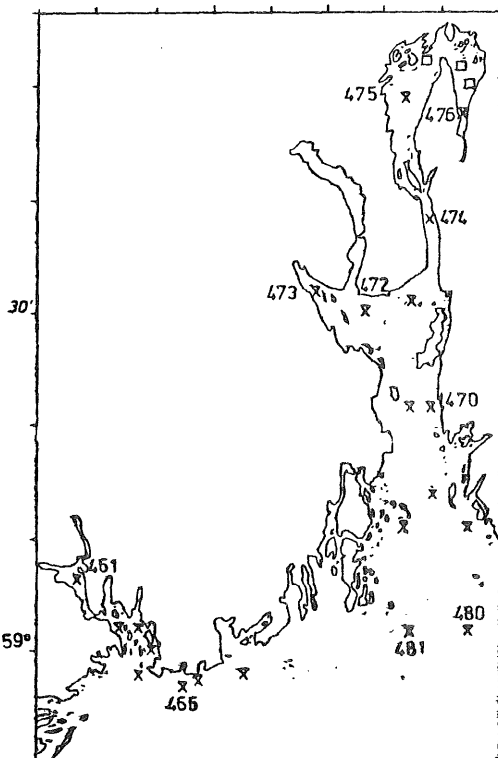
2-10 MAY 1977 ST. NO. 186-207



14-22 JUN. 1977 ST. NO. 226-257

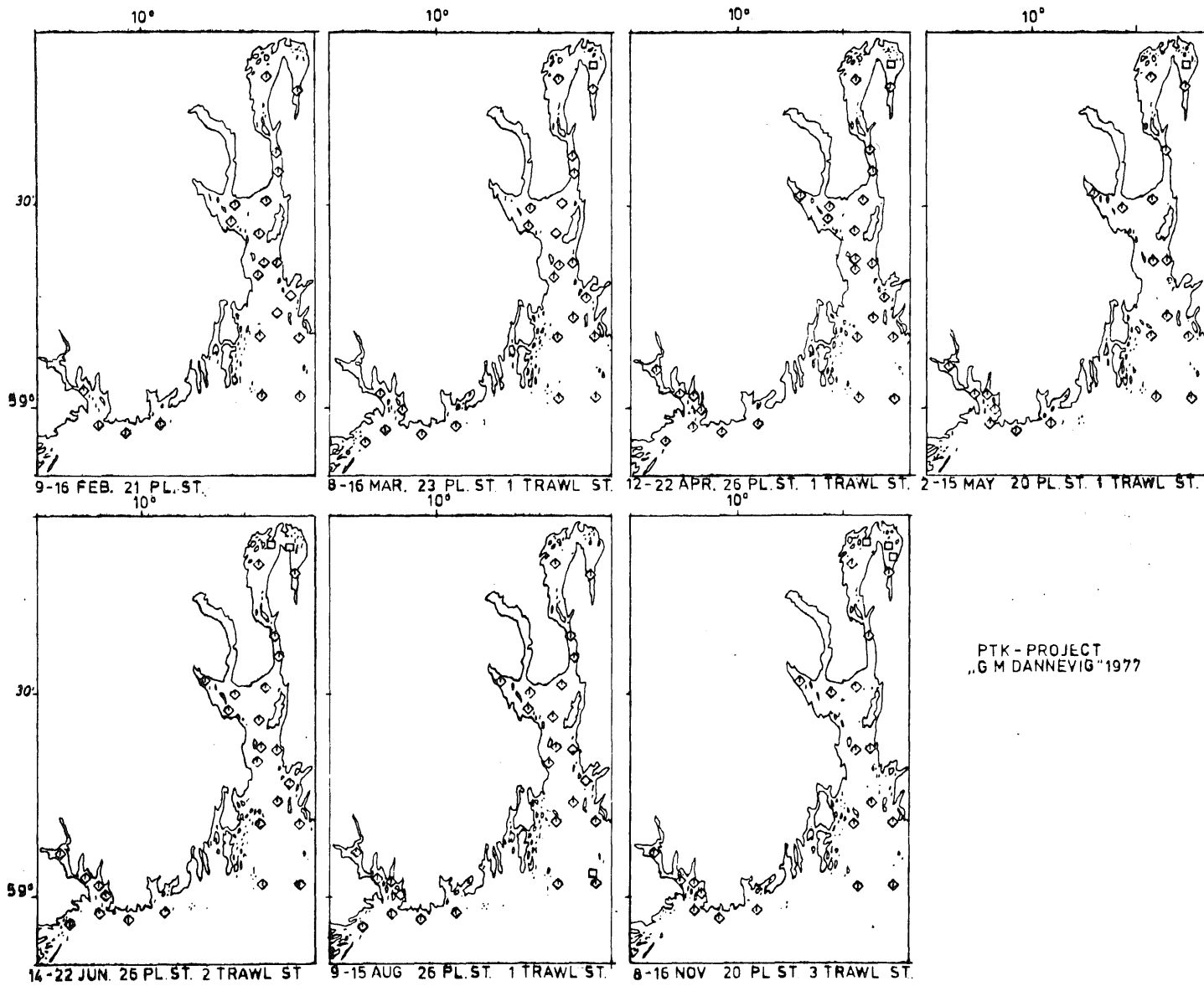


9-15 AUG. 1977 ST. NO. 292-318



8-16 NOV. 1977 ST. NO. 461-481

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