

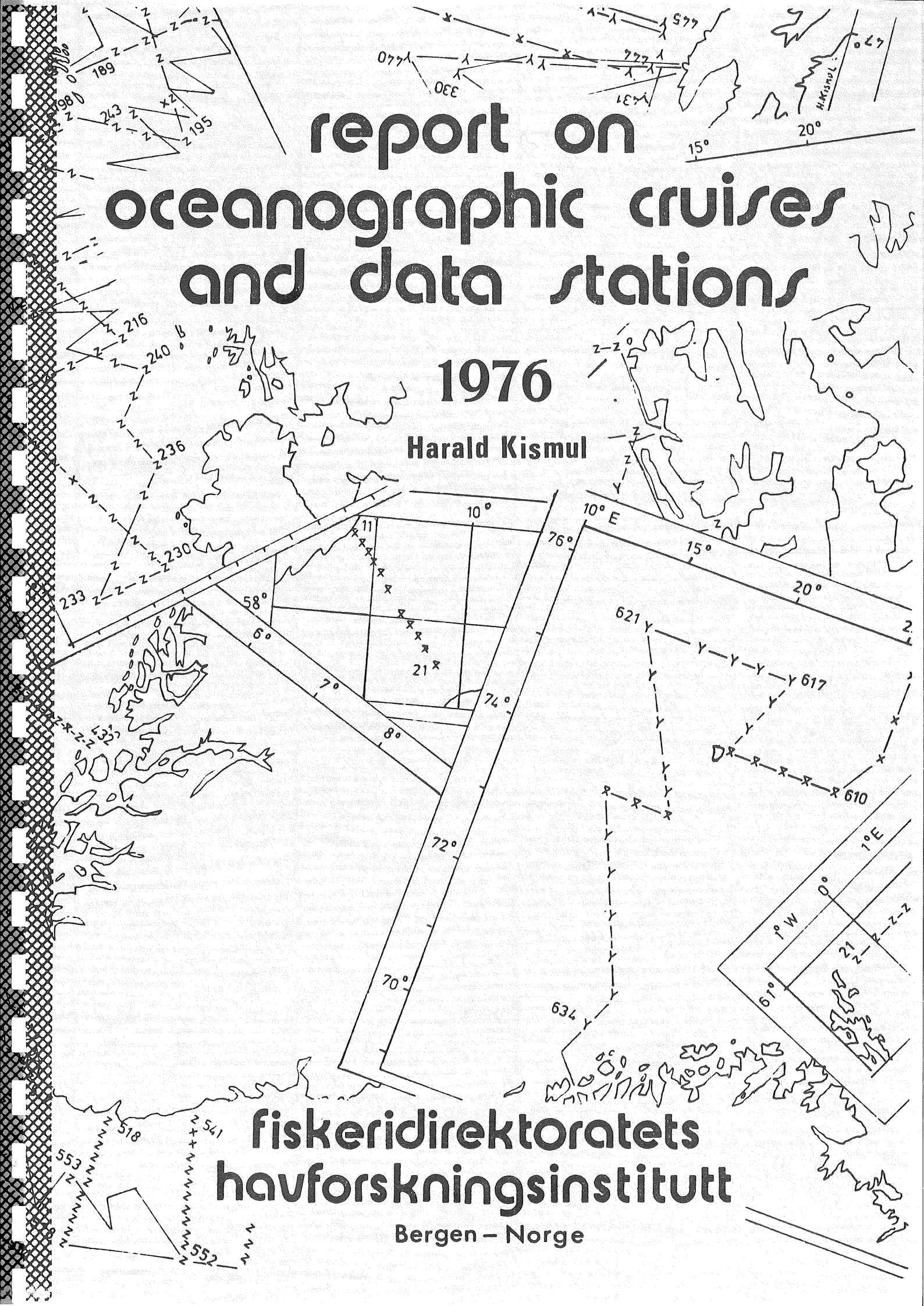
# report on oceanographic cruises and data stations

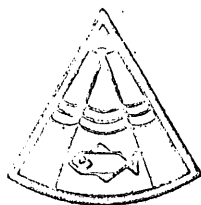
1976

Harald Kismul

fiskeridirektoratets  
havforskningsinstitutt

Bergen - Norge





# report on oceanographic cruises and data stations

1976

HARALD KISMUL

## Guidelines:

- λ Classical oceanogr. stations
- Z Vertical profiles (STD/CTD)
- Y Bathythermograph (BT)
- Δ Moored buoy station
- △ Pelagic Trawl station
- Bottom Trawl station
- ◇ Plankton station
- Clarke
- Taggings
- Λ Surface observations t°C S<sup>o</sup>/oo

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ICES Annual Report on Oceanographic Cruises and Data Stations.

Country: NORWAY

Year: 1976

Ship: "Johan Hjort"

No. 12.

Cruise and ship number.	Period of cruises	Number of Stations													Continual observations					Page of track chart								
		Classical oceanogr. stations	Vertical profiles (STD/CTD)	Bathythermograph (BT)	Moored Buoy	Oxygen	Nutrients	Oil Hydrocarbons	Petroleum residues	Metals	Primary org. prod.	Petrop plank. 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 <sub>2</sub> + NO <sub>3</sub> (auto-analyzer)	Echo sounding	Echo integration	
1/12	12/1 - 31/1	3	35										26	4												x	x	5
2/12	10/1 - 5/3	3	78				12							56												x	x	6 - 7
3/12	12/3 - 10/4	13	10	1																						x	x	8
4/12	21/4 - 12/5	69														165										x	x	9
5/12	24/5 - 4/7	34	182	5			12						56	7	163											x	x	10 - 11
6/12	16/8 - 23/8	45				8								1												x	x	12
7/12	25/8 - 7/9	44												2												x	x	13
8/12	11/9 - 1/10	39																								x	x	14
9/12	4/10 - 12/10	35				17																				x	x	15
10/12	01/11 - 15/12	138																								x	x	16-17-18-19

## ICES Annual Report on Oceanographic Cruises and Data Stations.

Country: NORWAY

Year: 1976

Ship: "G.O. Sars"

No. 15.

Cruise and ship number.	Period of cruises	Number of Stations																Continual observations						Page of track chart			
		Classical oceanogr. stations	Vertical profiles (STD/CTD)	Bathythermograph (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 <sub>2</sub> + NO <sub>3</sub> (auto-analyzer)	Echo sounding	Echo integration
1/15	14/1 - 30/1	26		35									20	1					x	x					x	x	20
2/15	2/2 - 4/3	62		43									24	14					x	x					x	x	21 - 22
3/15	14/3 - 12/4	55											33	16					x	x					x	x	23 - 24
4/15	25/5 - 7/6	117																	x	x					x	x	25
5/15	9/6 - 9/7	3	84	1									74	1	103				x	x					x	x	26 - 27
6/15	11/7 - 11/8		162										35	8	4				x	x					x	x	28 - 29
7/15	25/8 - 8/9	9	52										64		9				x	x					x	x	30
8/15	11/9 - 1/10	54		11									45	1					x	x					x	x	31
9/15	4/10 - 8/11	17		95									13	48					x	x					x	x	32-33-34
10/15	16/11 - 12/12	4	156										20	3					x	x					x	x	35 - 36

ICES Annual Report on Oceanographic Cruises and Data Stations.

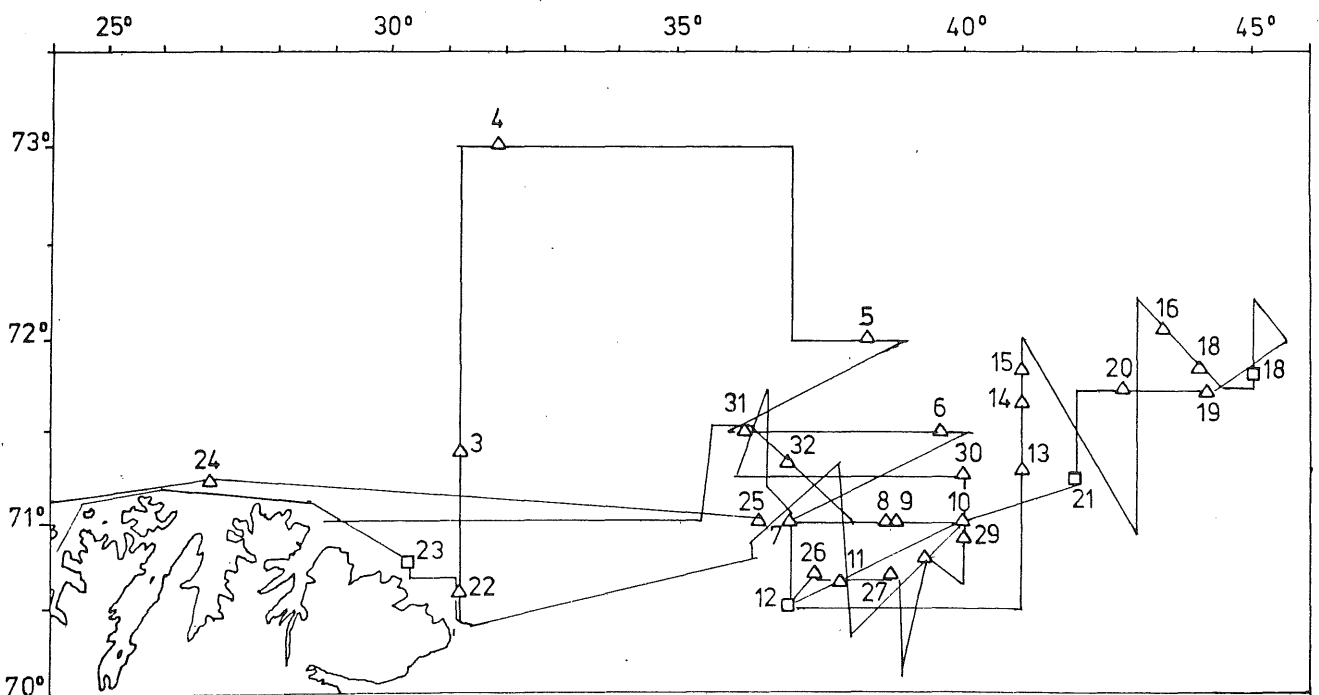
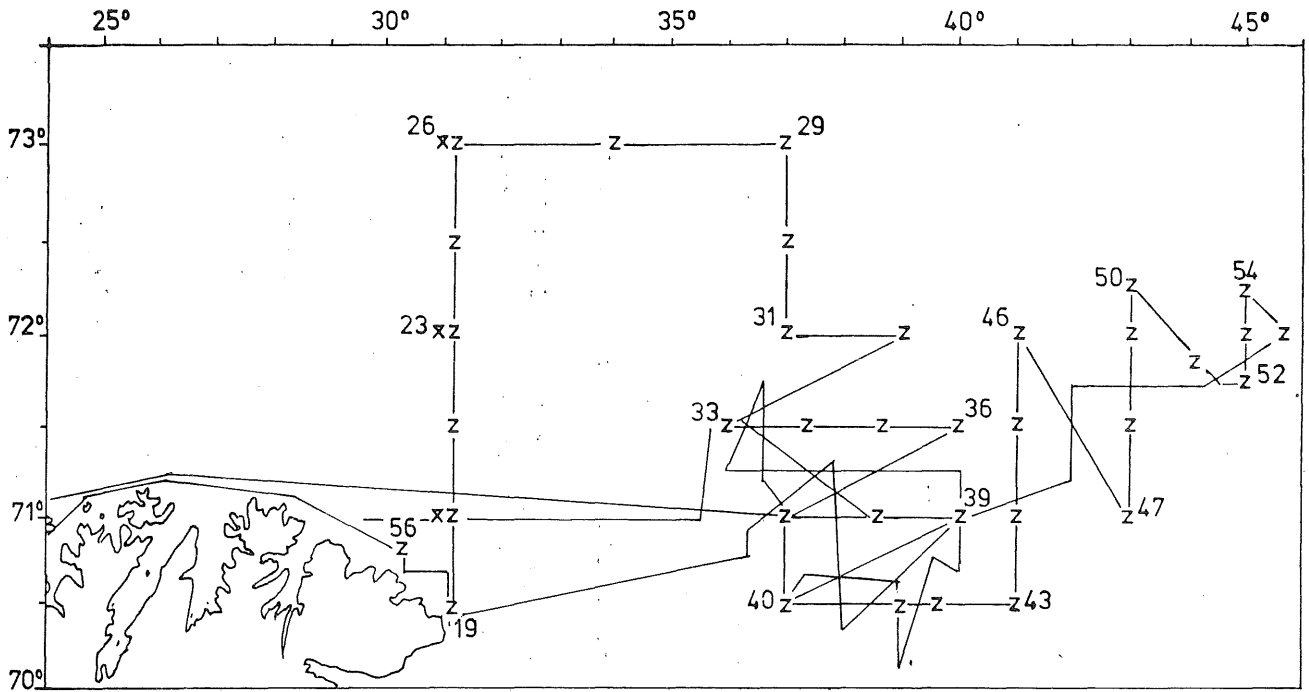
Country: NORWAY

Year: 1976

Ship: Peder Rønnestad No.14., G.M. Dannevig No.16, Havdrøn No.20.

Cruise and ship number.	Period of cruises	Number of Stations																Continual observations				Page of track chart					
		Classical oceanogr. stations	Vertical profiles (STD/CTD)	Bathythermograph (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 <sub>2</sub> + NO <sub>3</sub> (auto-analyzer)	Echo sounding	Echo integration
14	5/5 - 12/5	12		13													74		x								37
14	21/5 - 1/6	99															68		x								38
14	12/6 - 18/6	17		7													47		x								39
16	13/1 - 16/11	88				x													x								40
16	21/1 - 16/12	208				x													x								41
16	4/2 - 12/11	189				189											189	189	x								42
16	3/8 - 22/11	19																	x								43
16	13/9 - 29/10	41				x													x								44
20	19/10 - 25/10																74		x								45
20	25/11 - 16/2													4					x					x	x		46





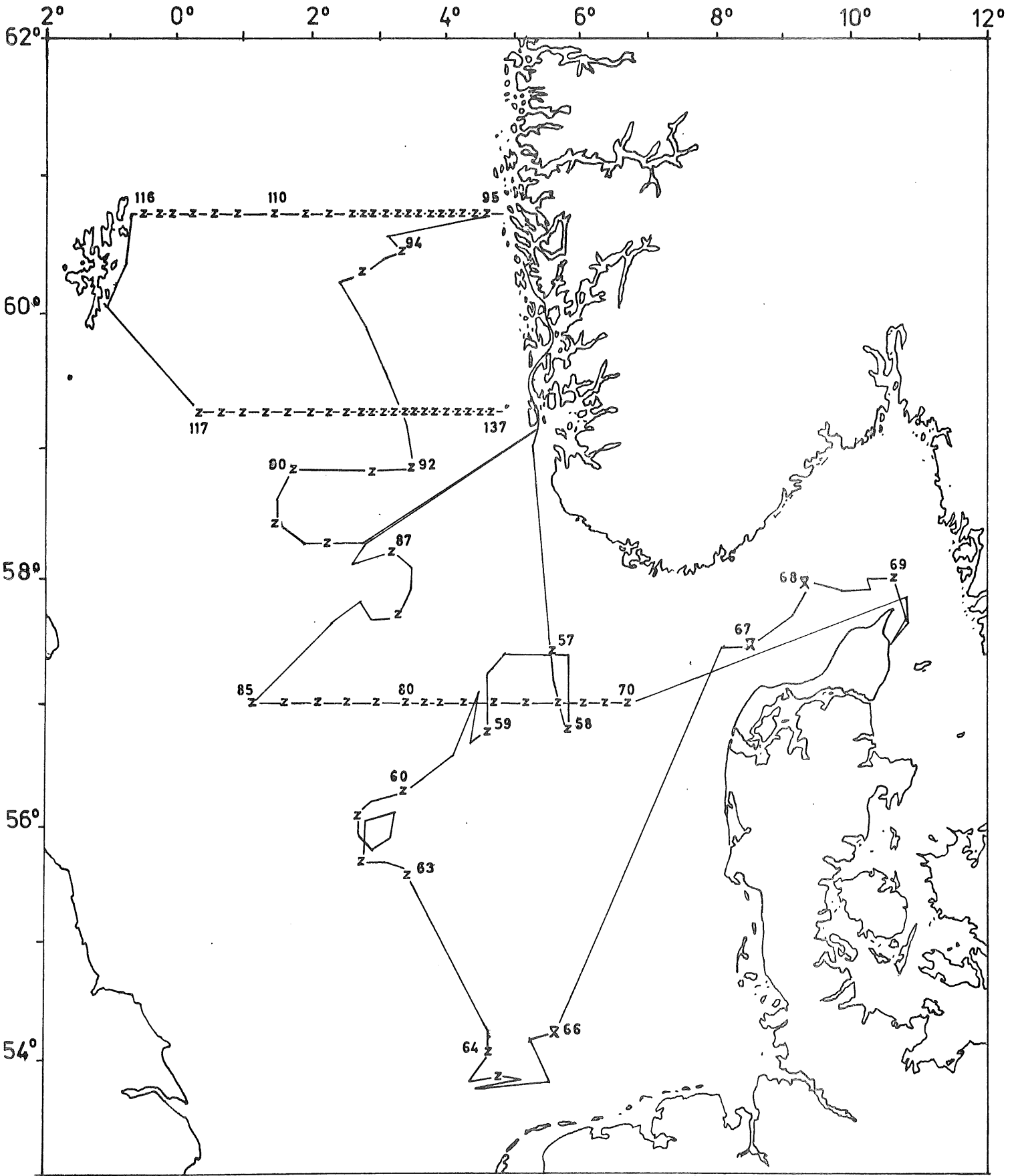
12-31 JAN. 1975

ST. NO. 19-56

TRAWL ST. 3-32

„JOHAN HJORT“

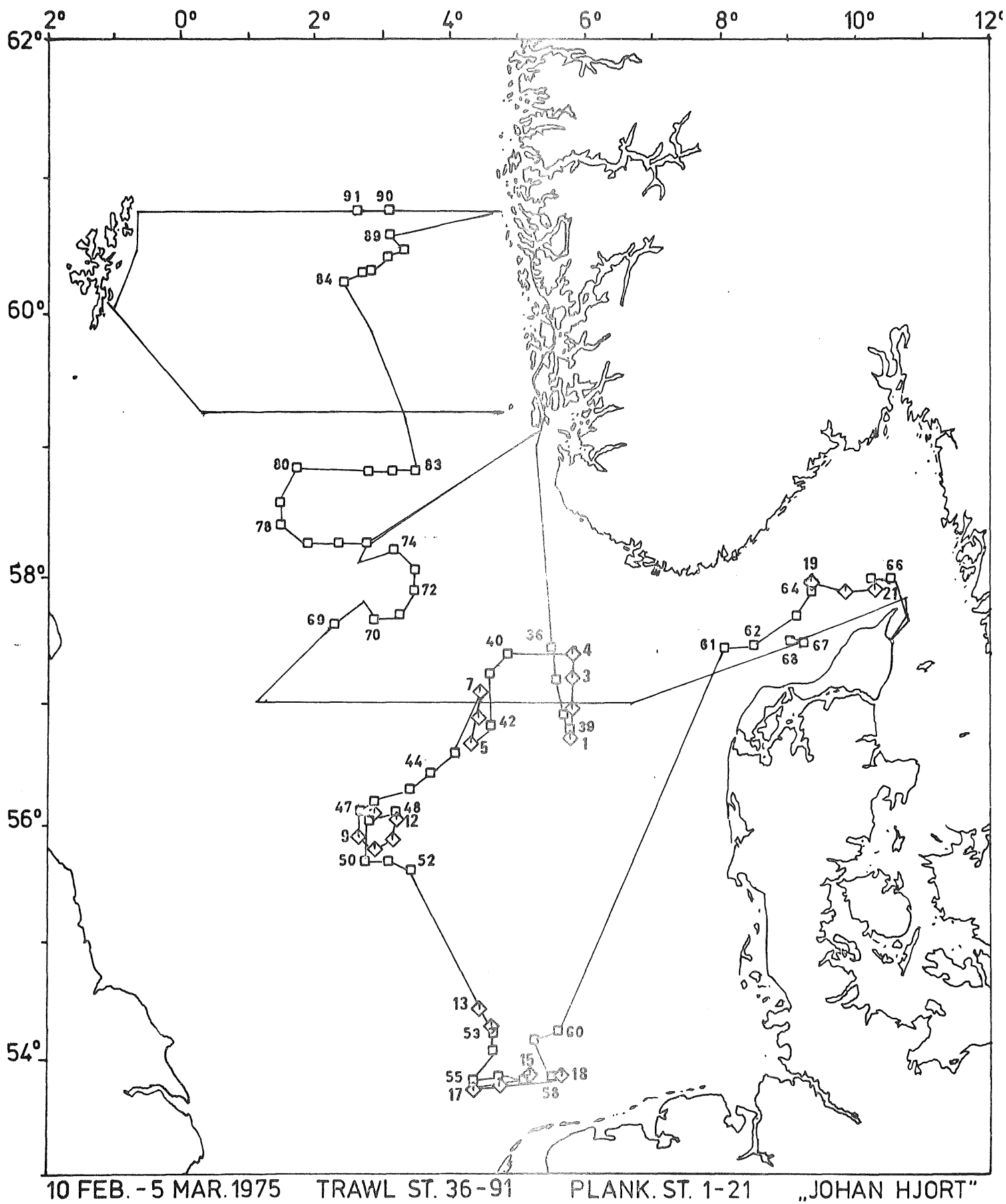


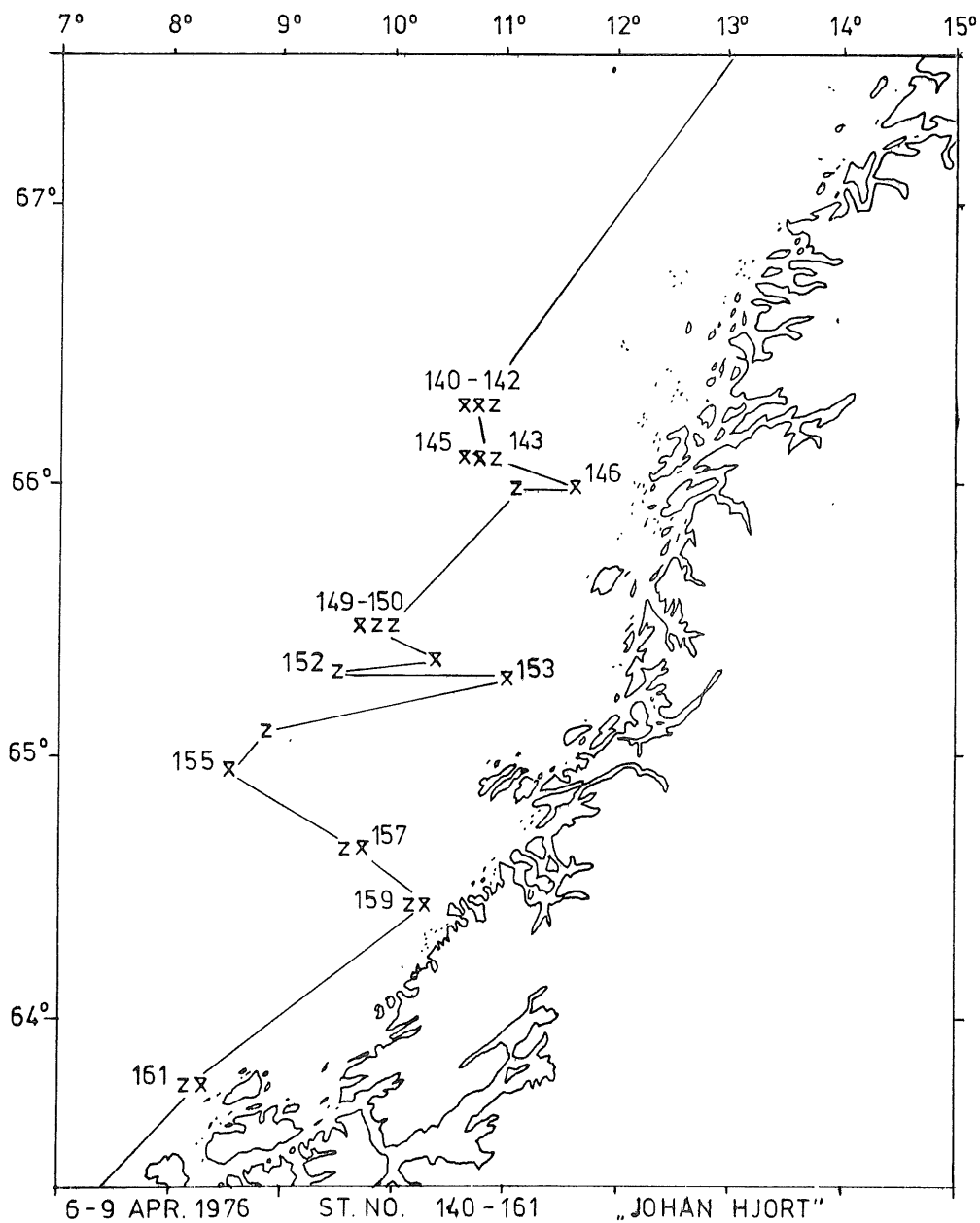
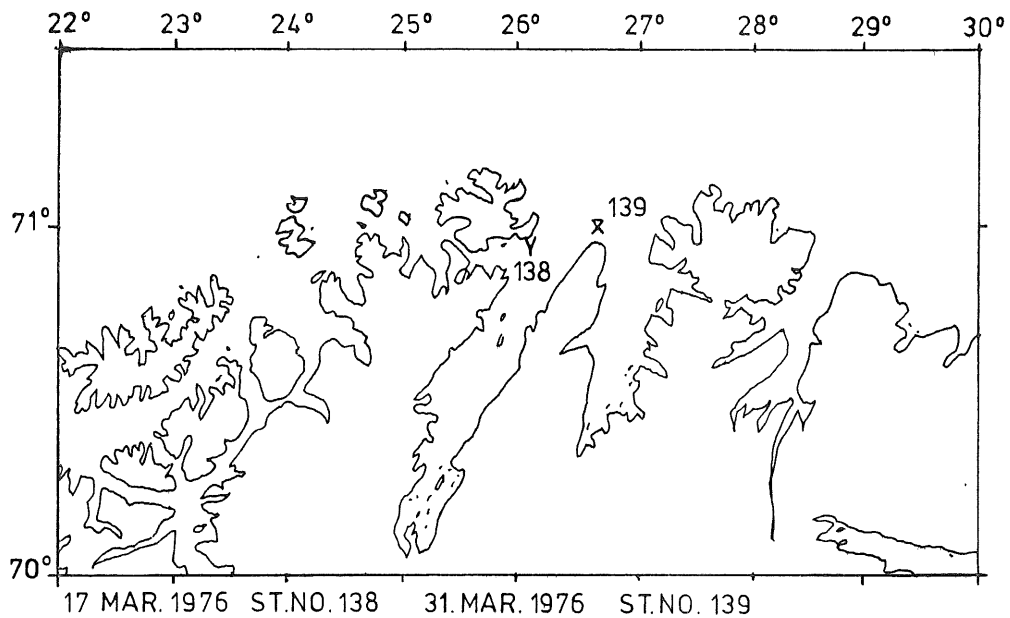


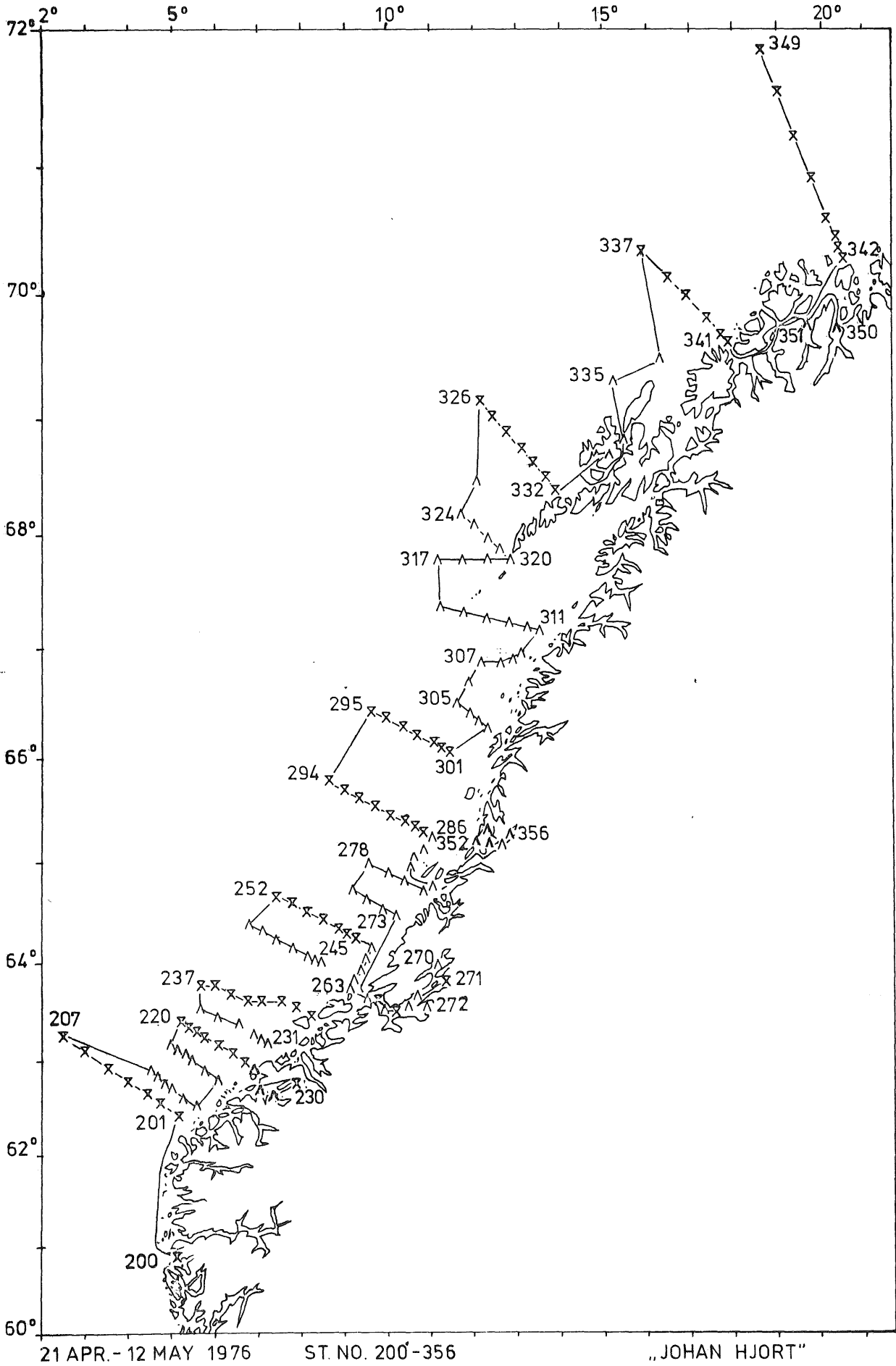
10 FEB.- 5 MAR. 1976

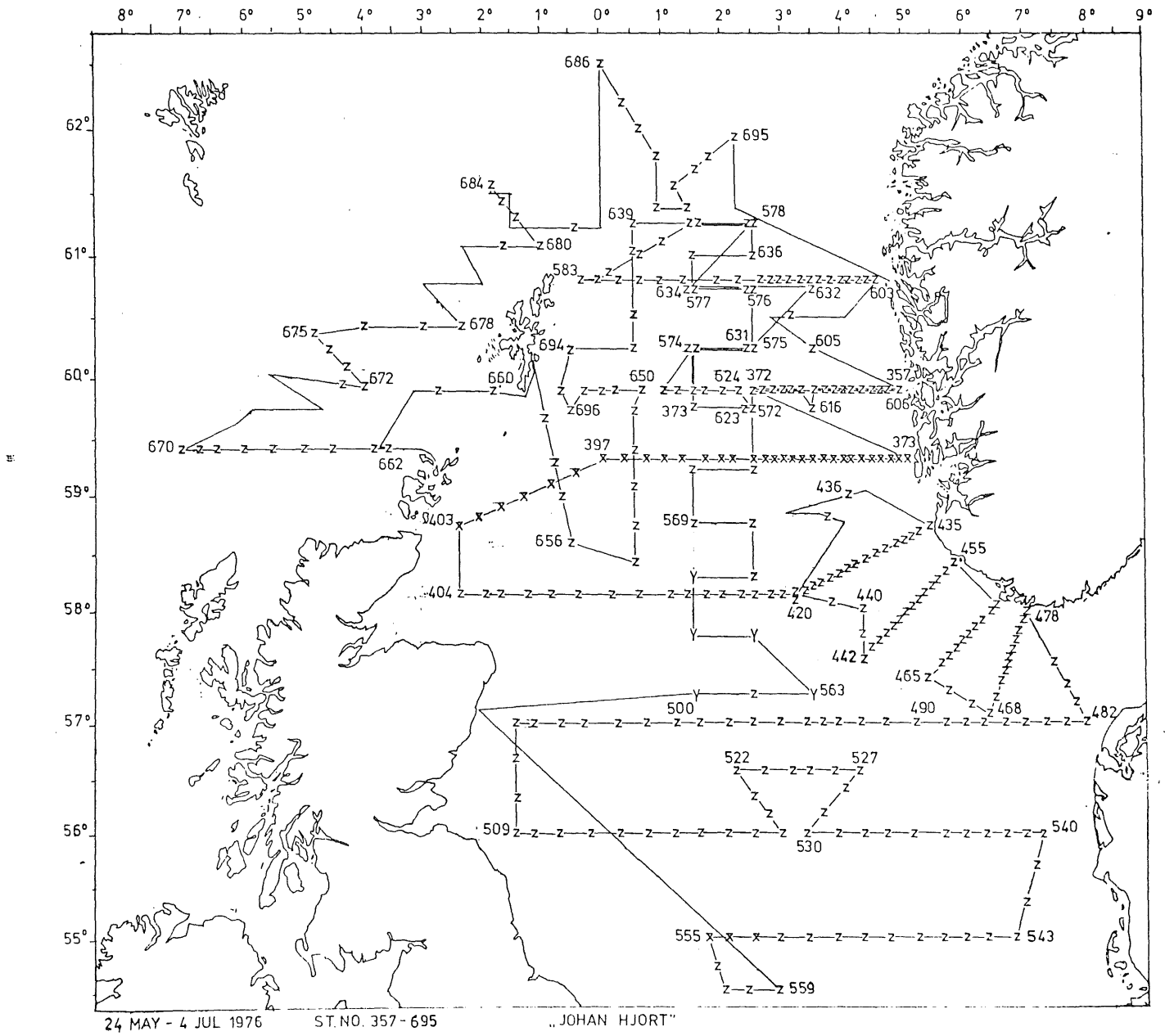
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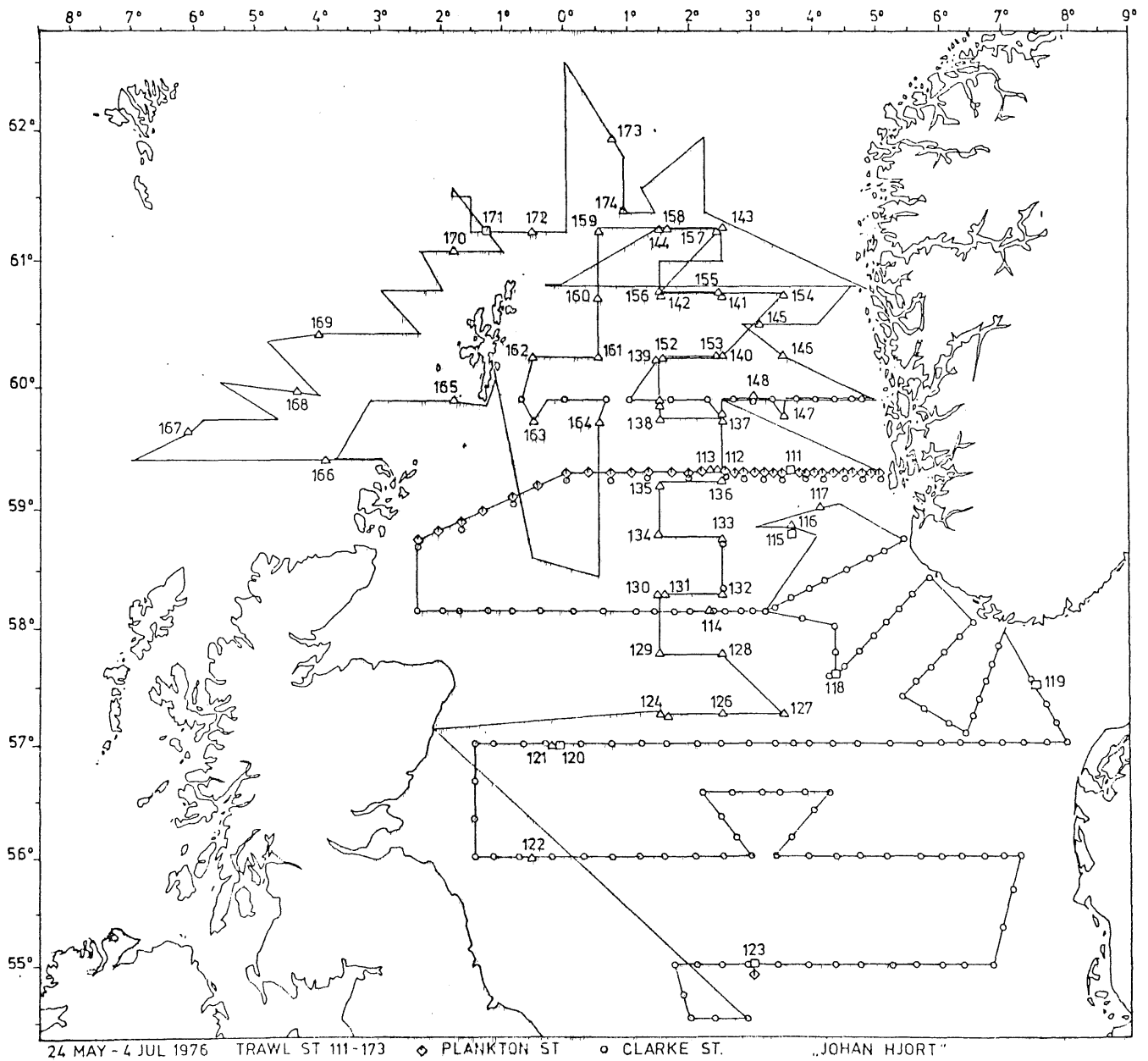
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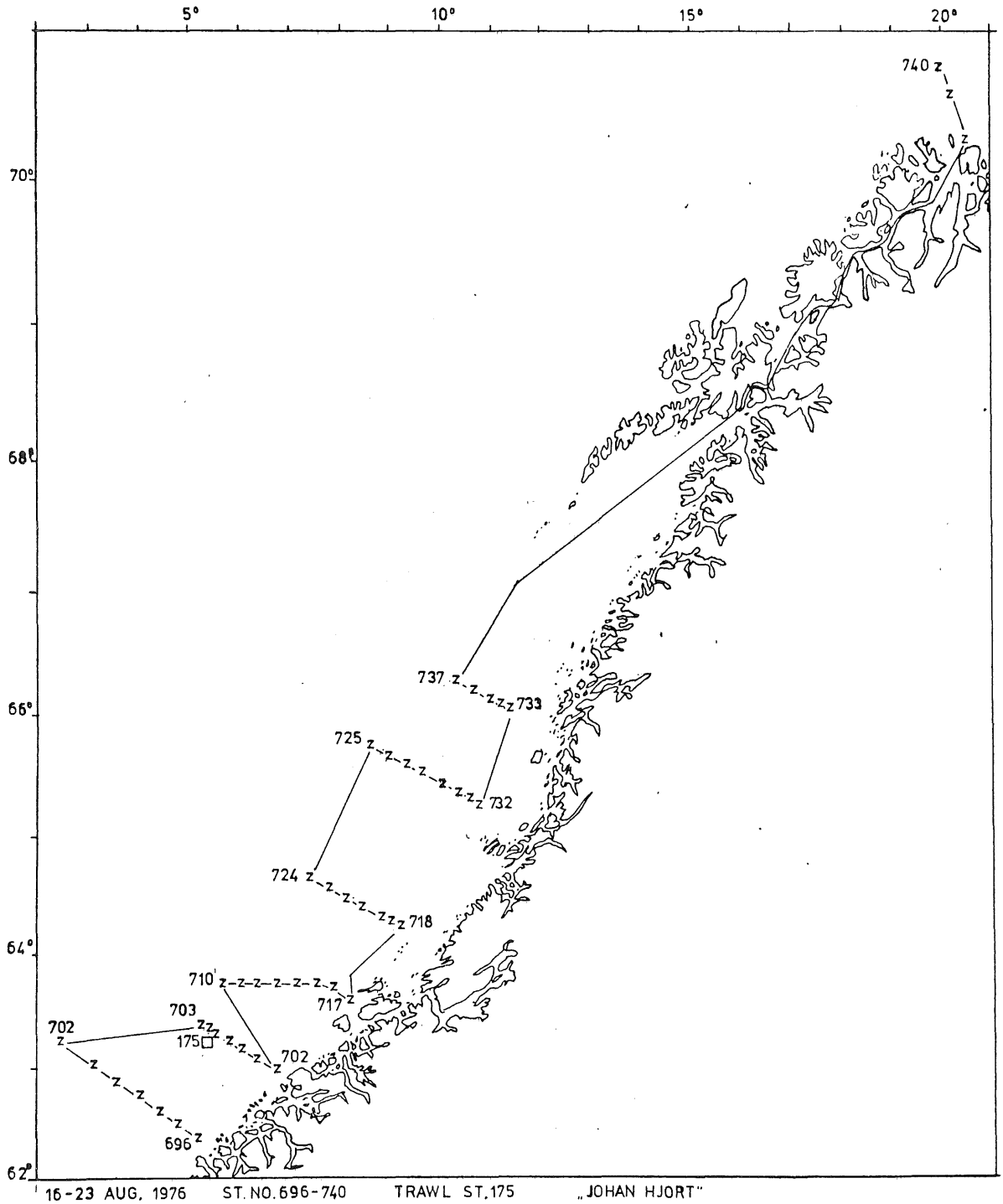


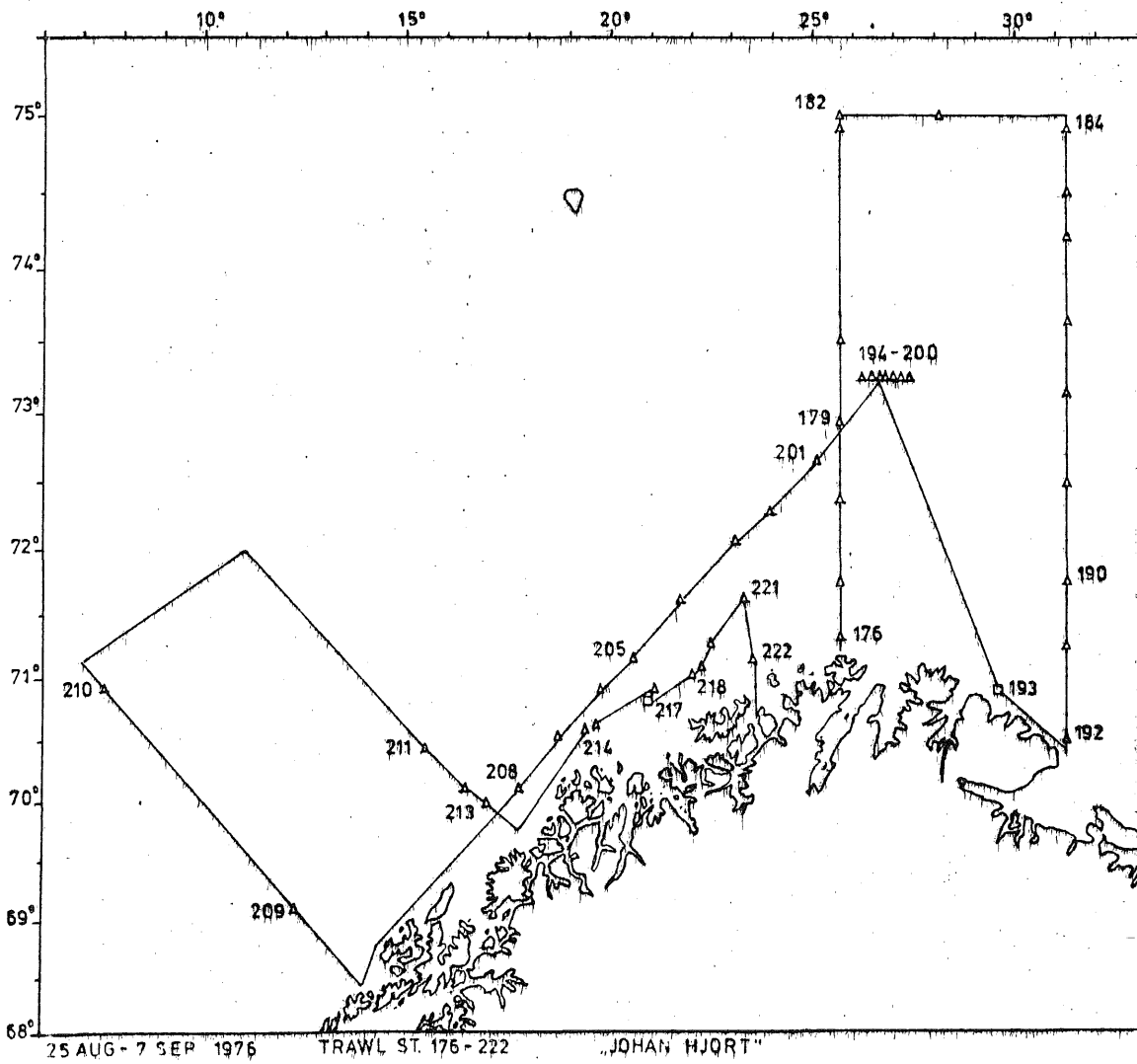
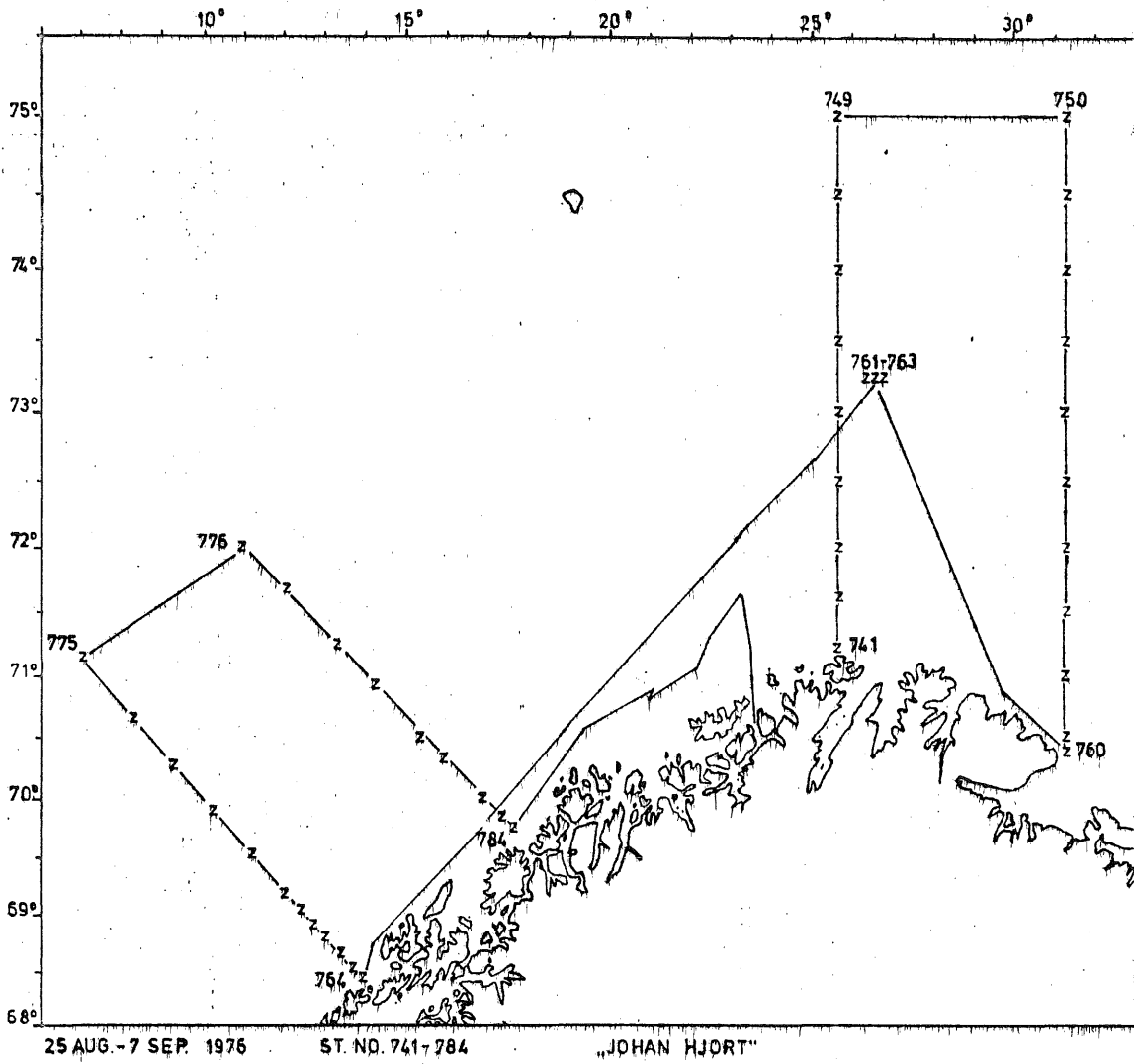




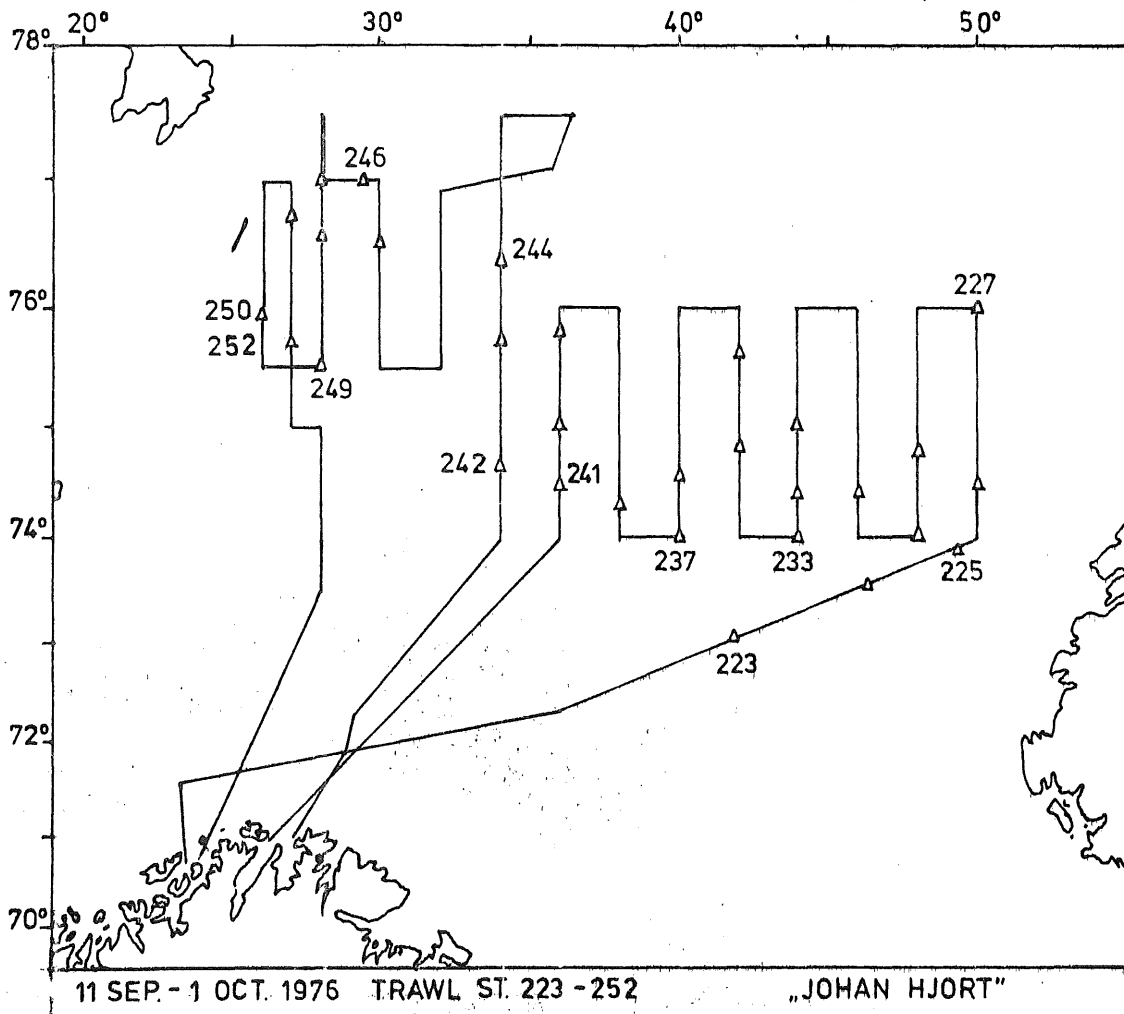
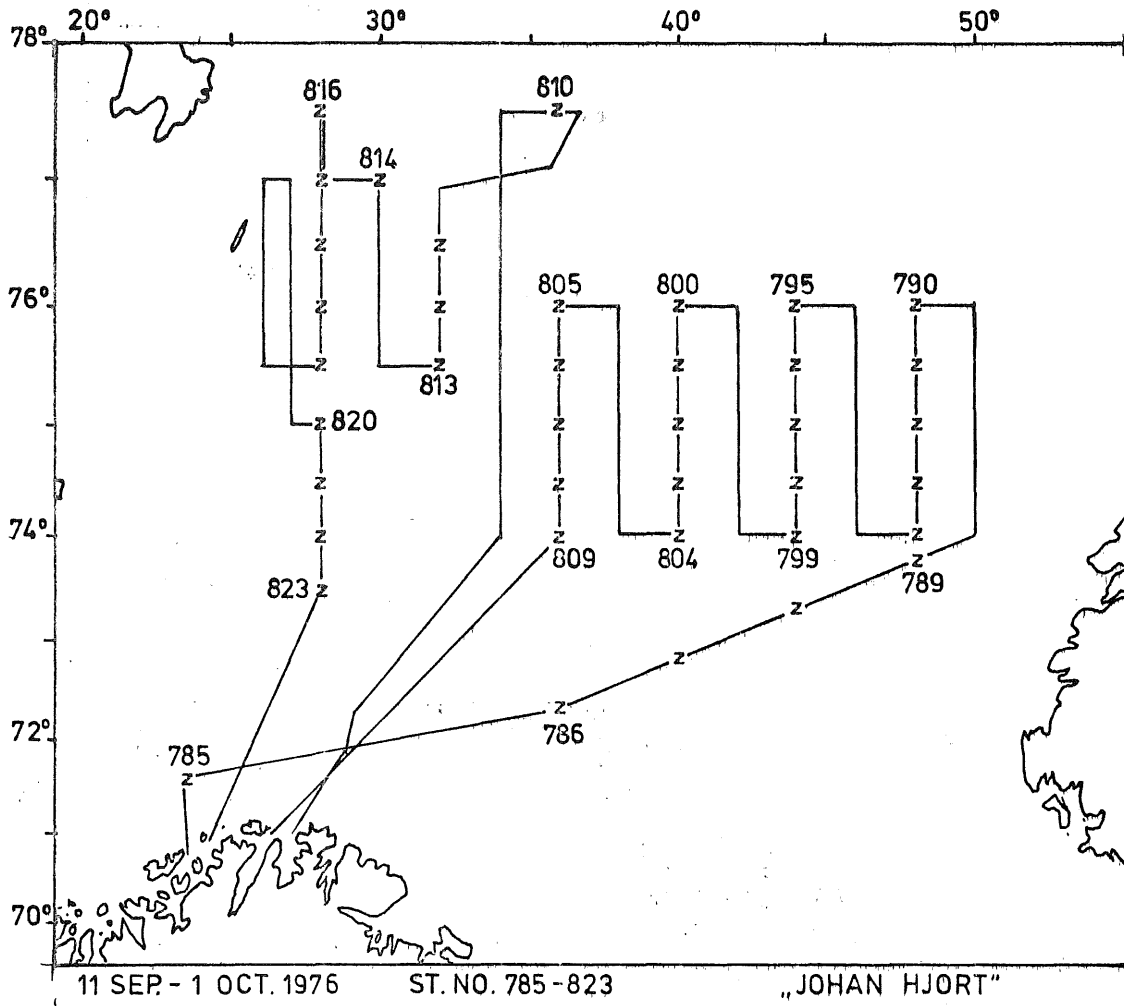


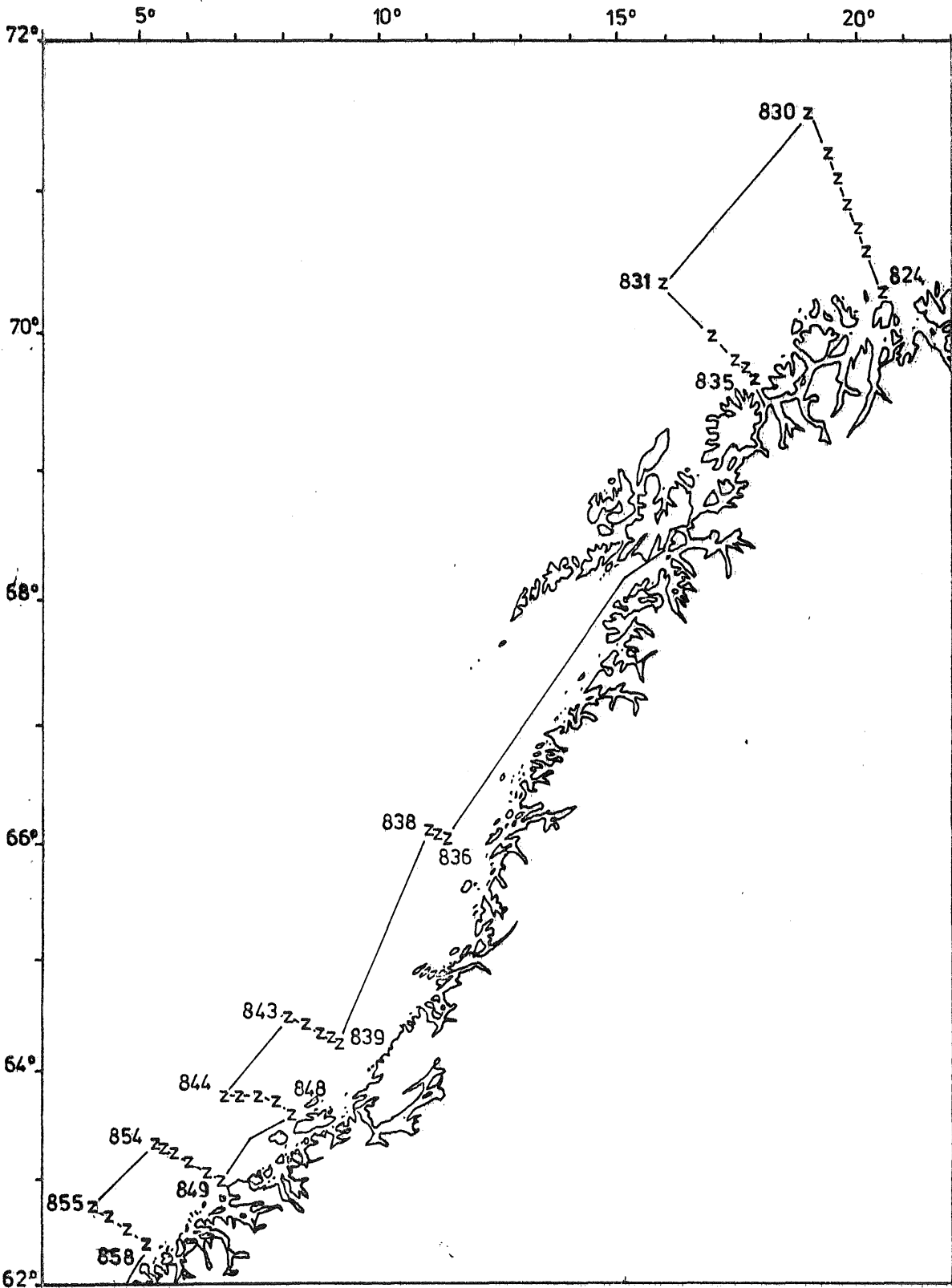








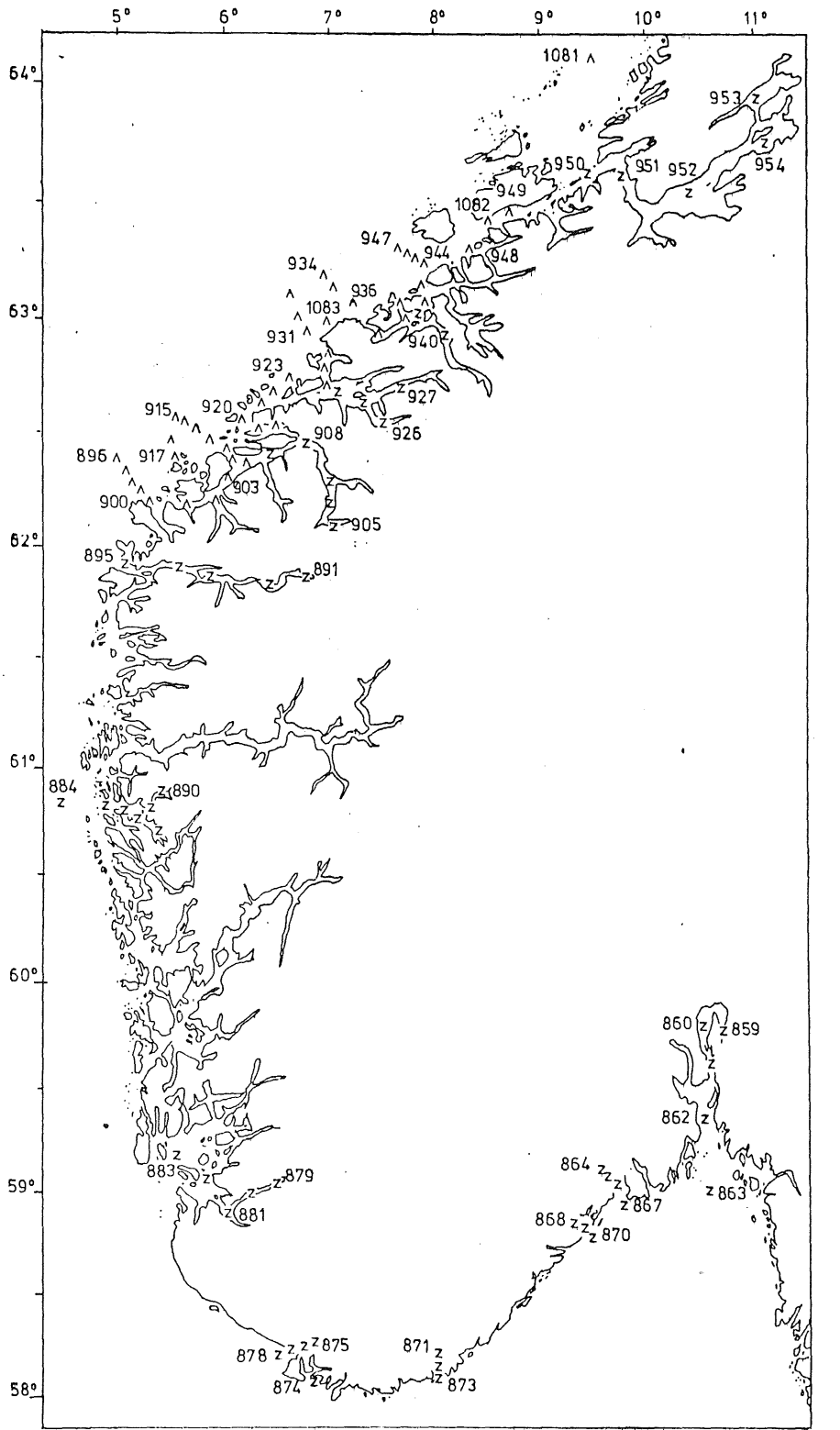


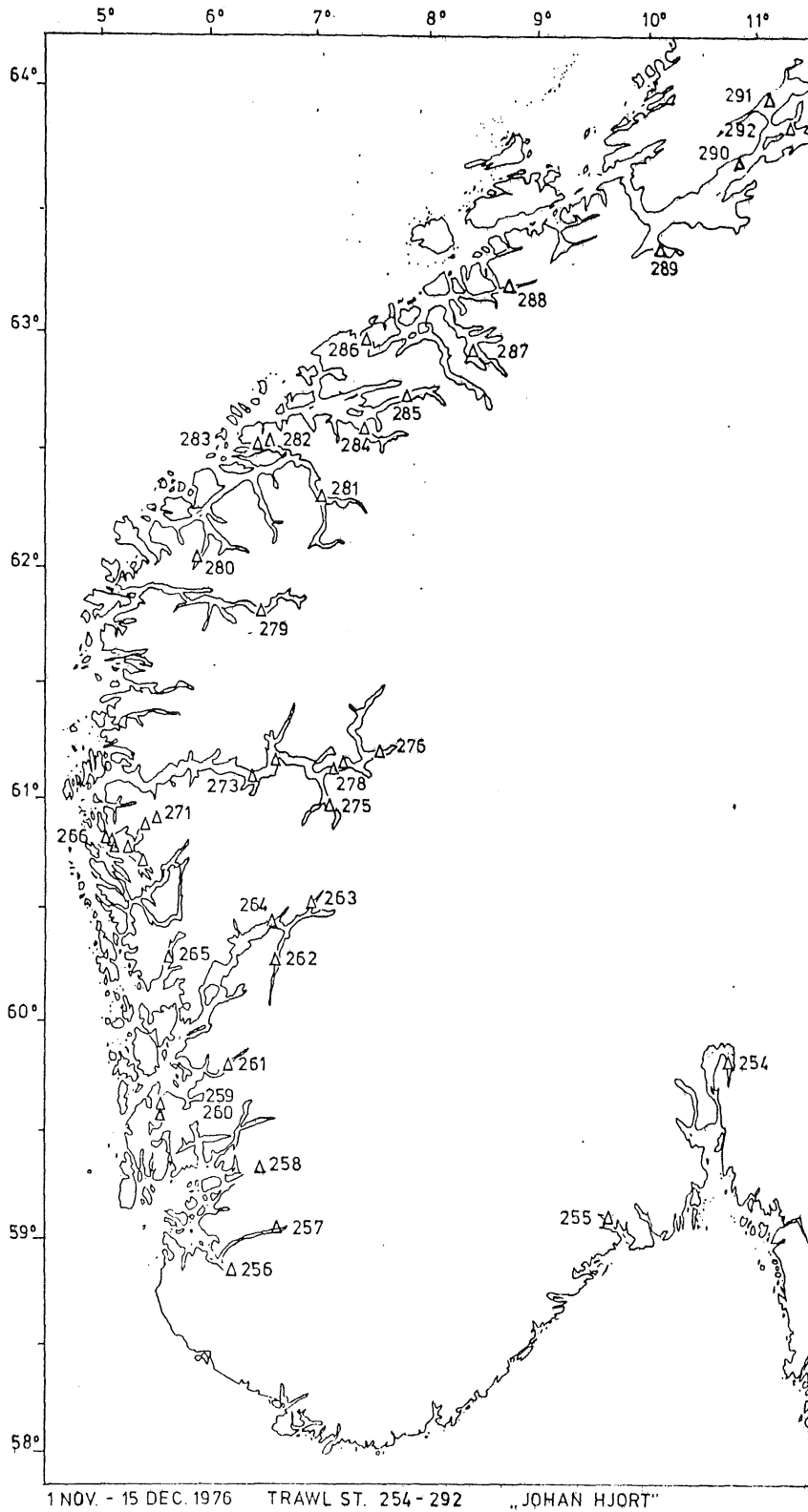


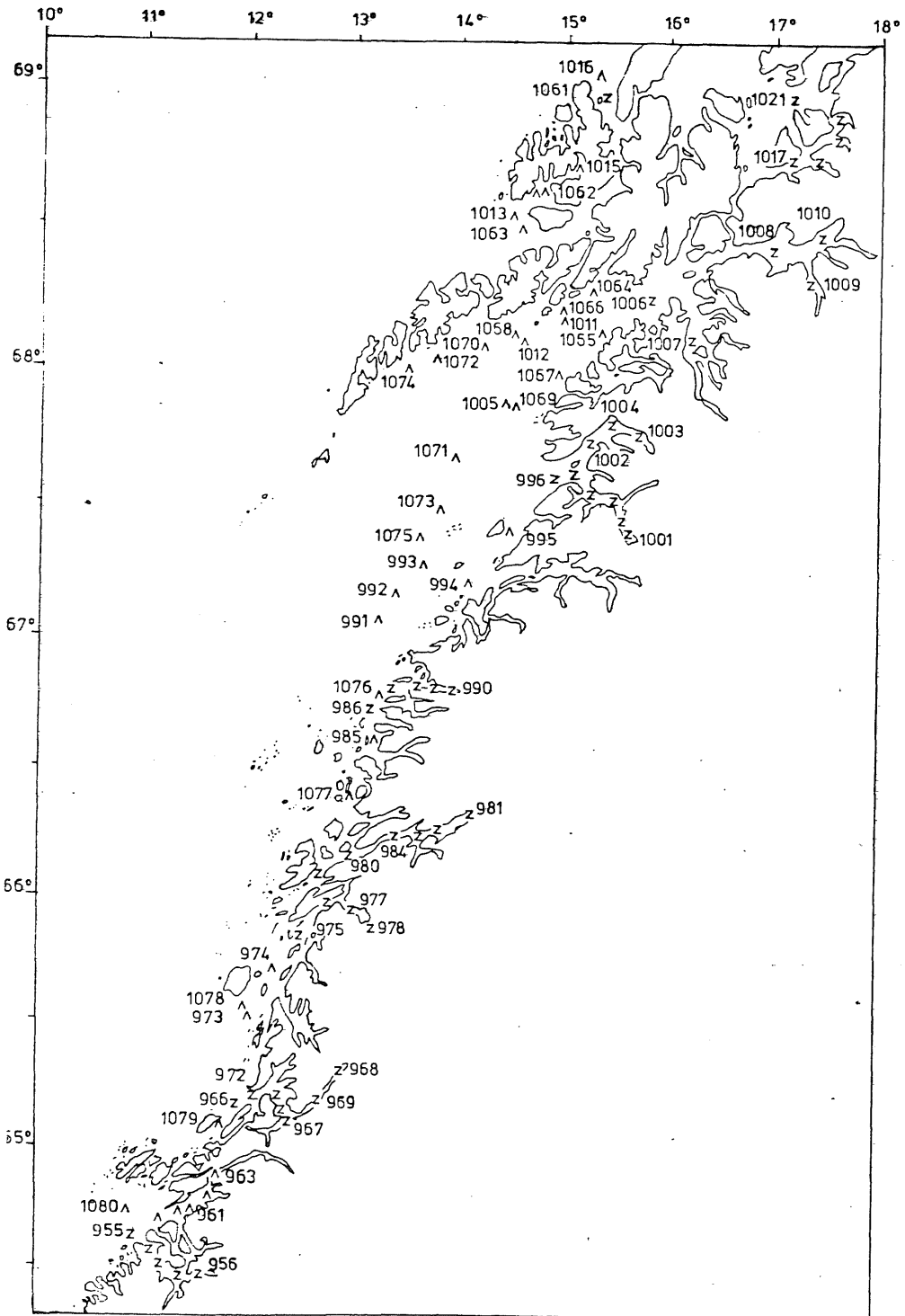
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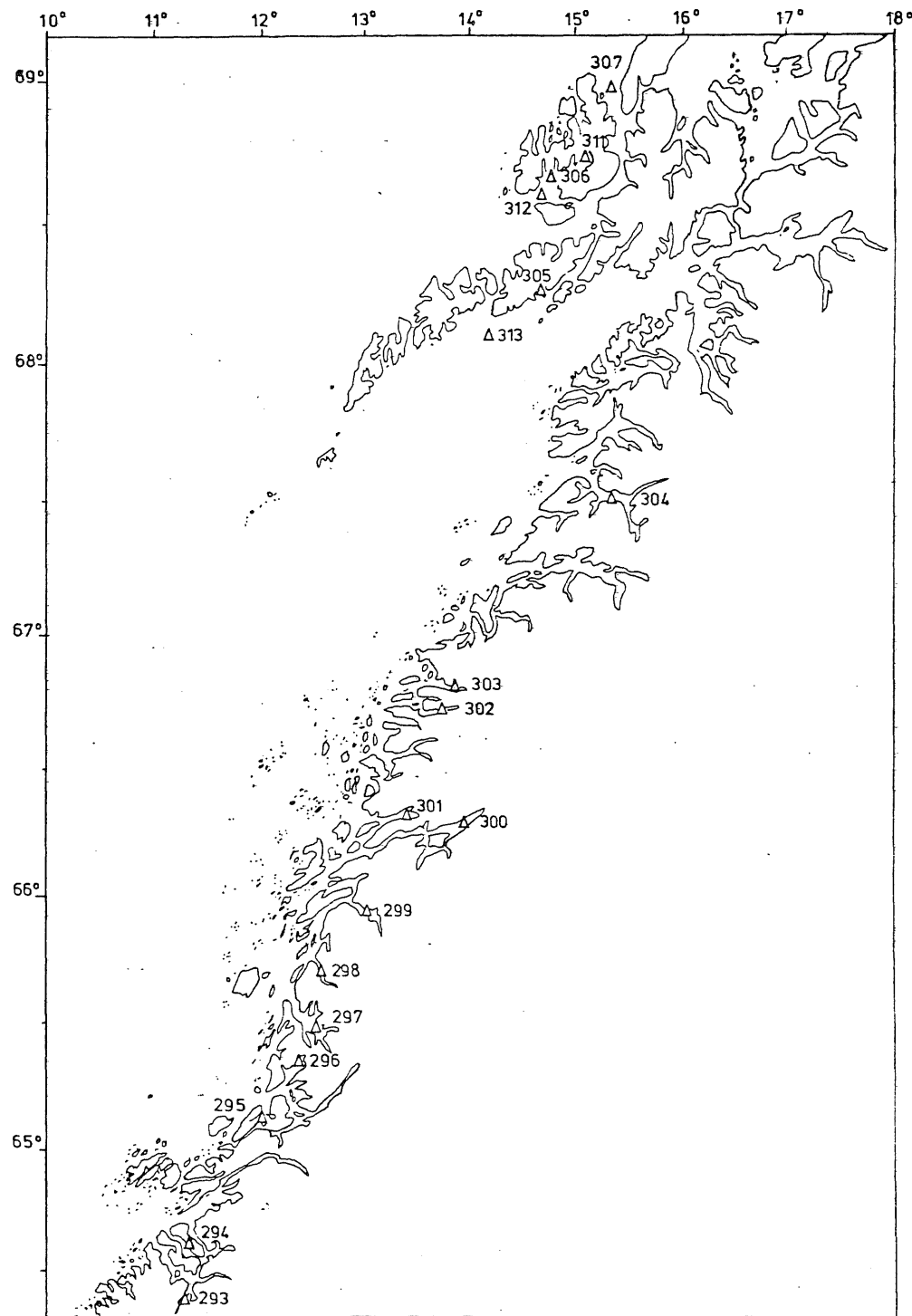
"JOHAN HJORT"



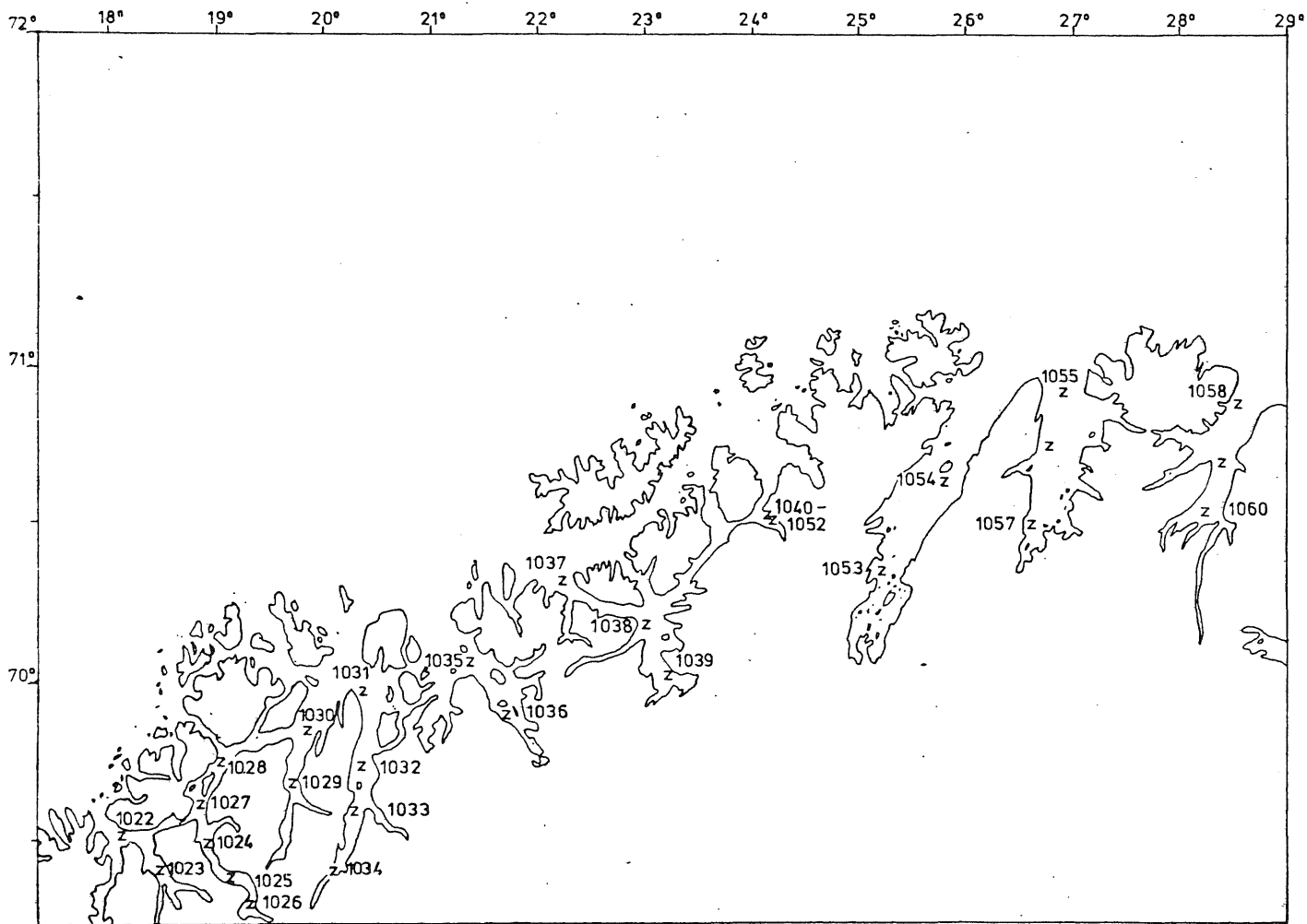




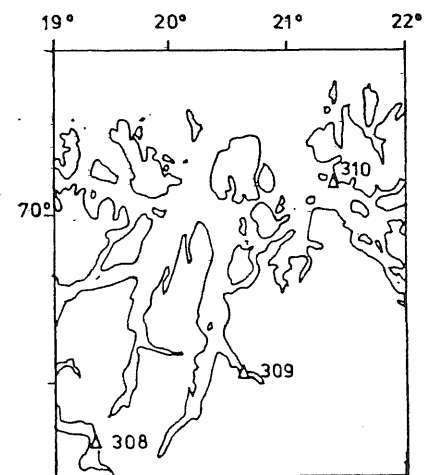
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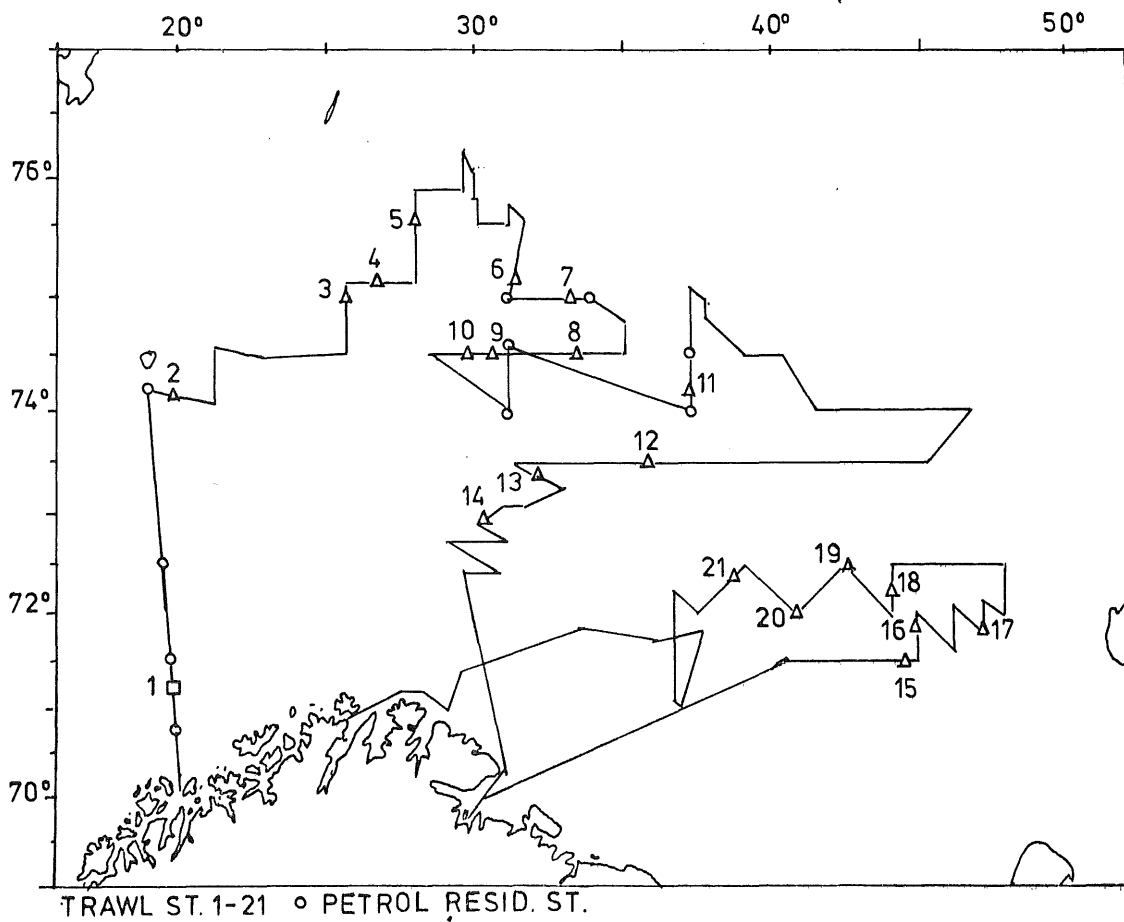
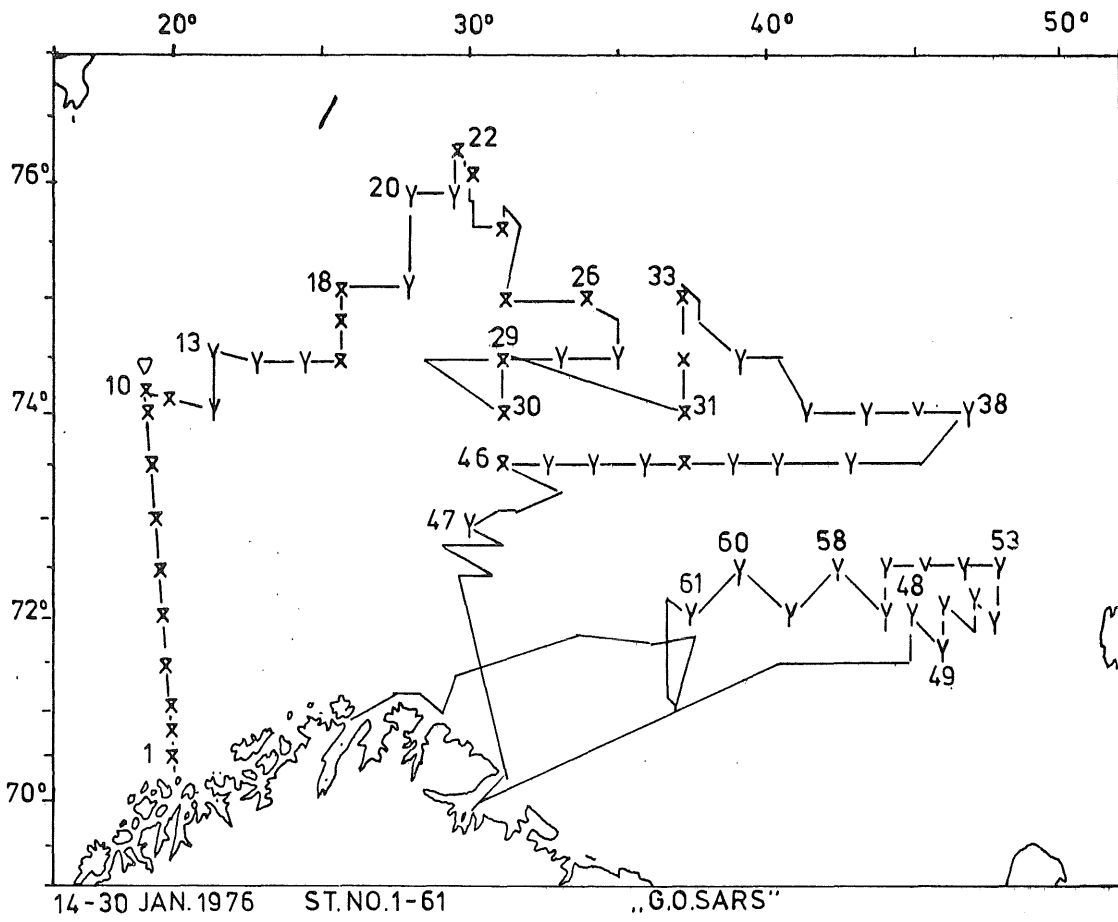
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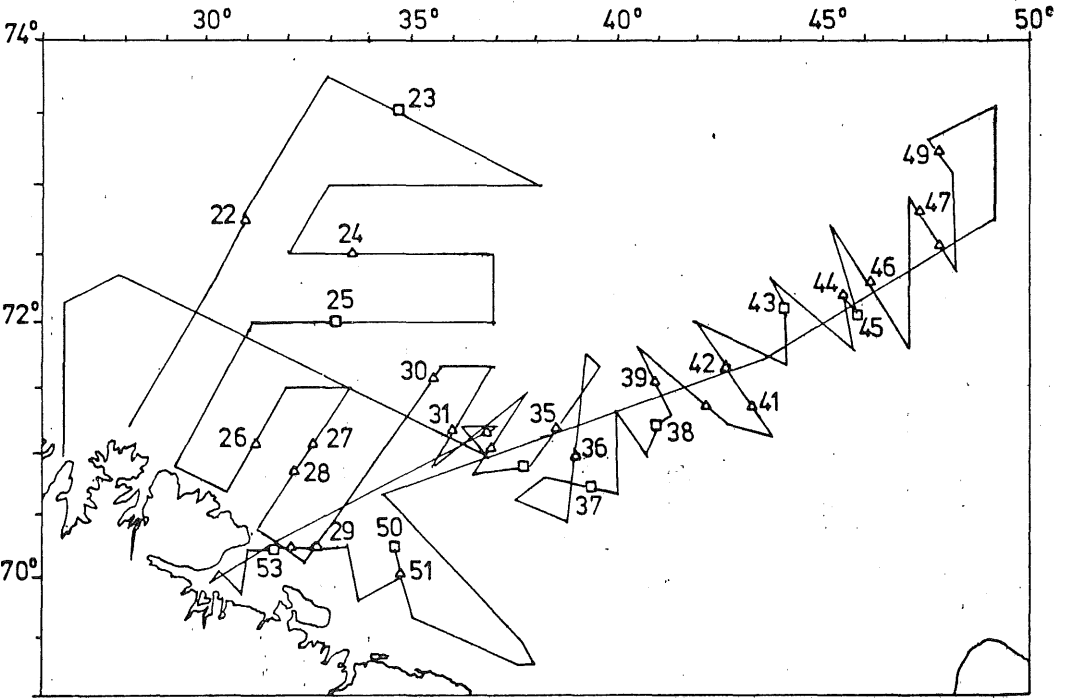
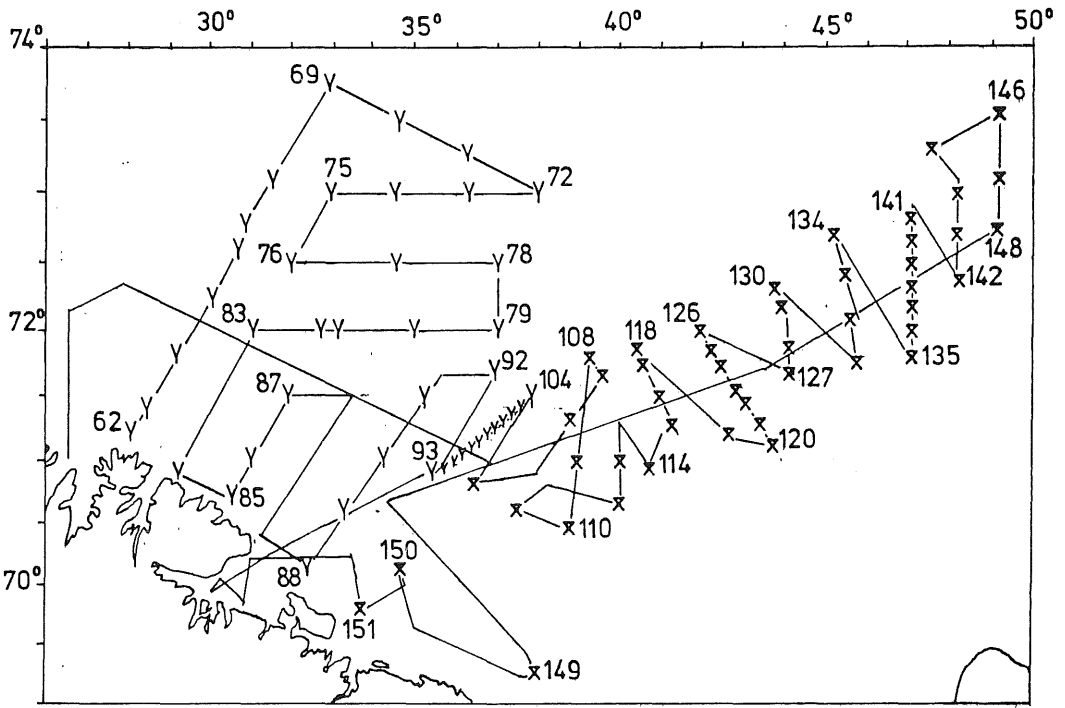


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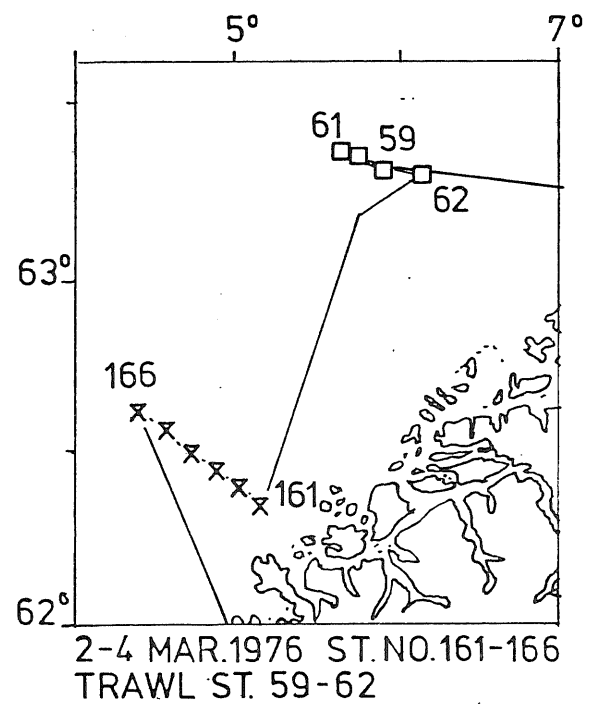
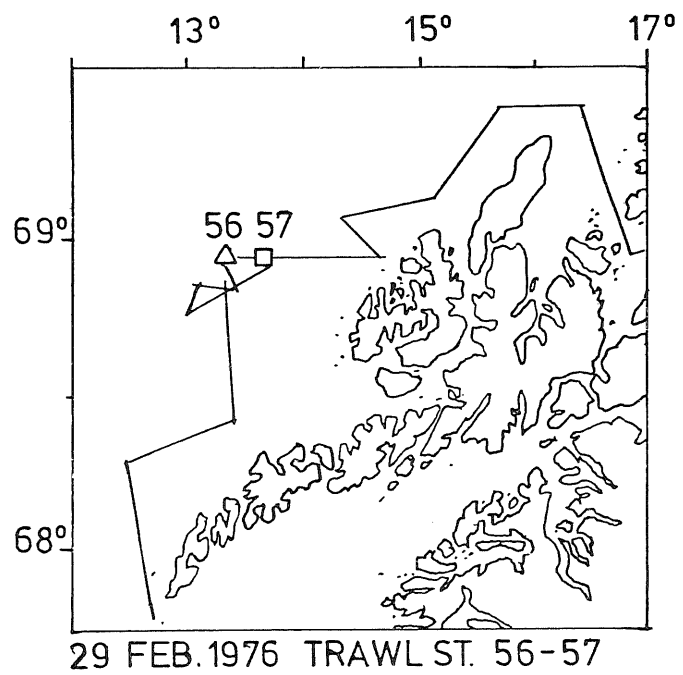
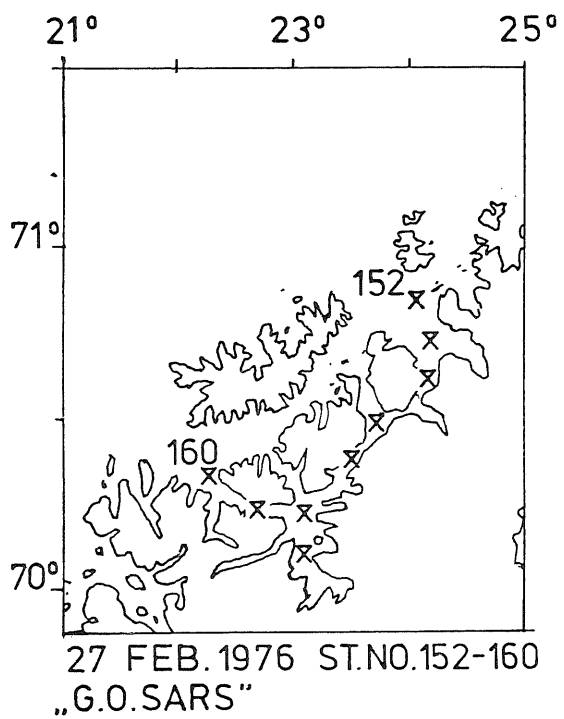
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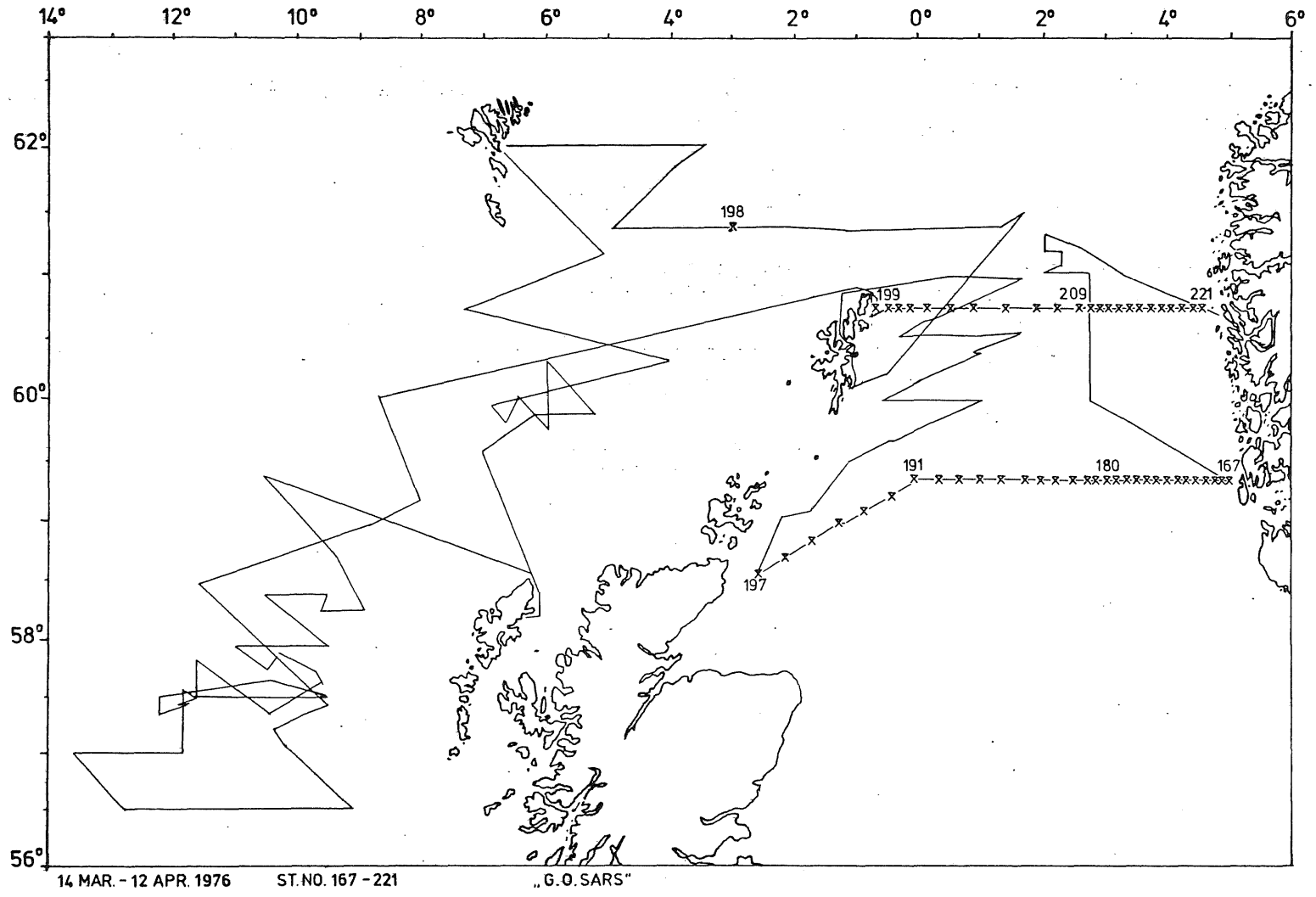


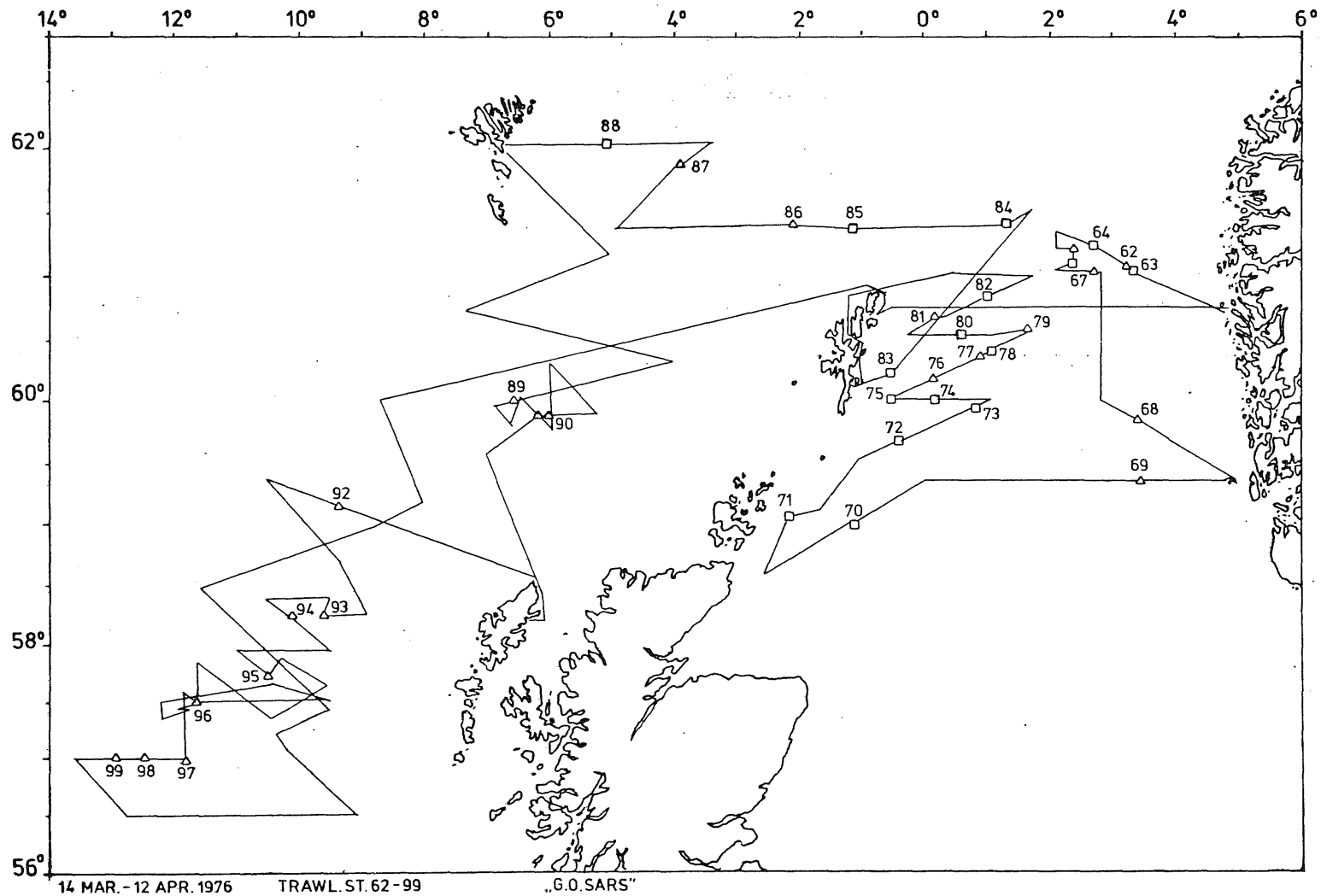


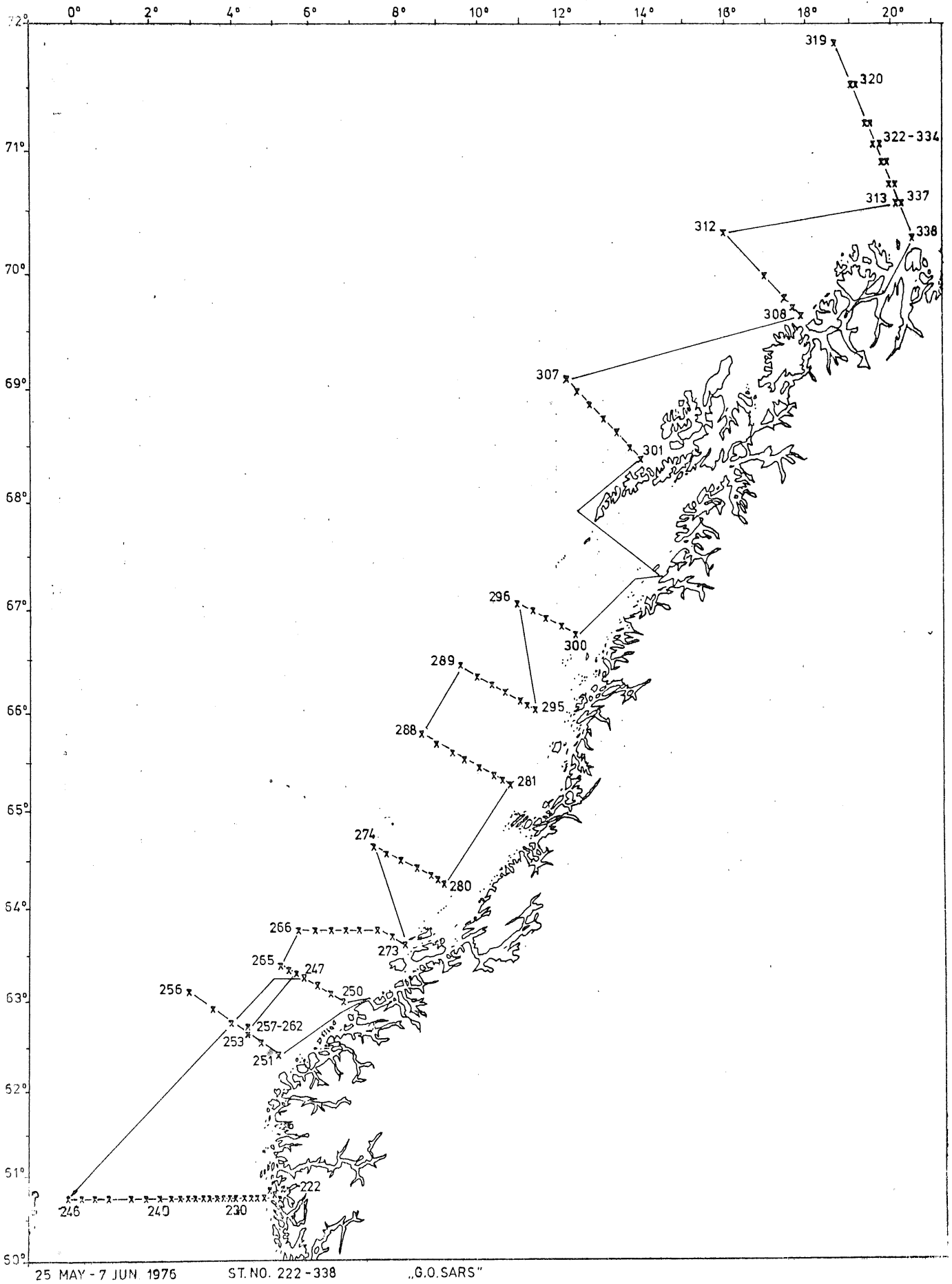
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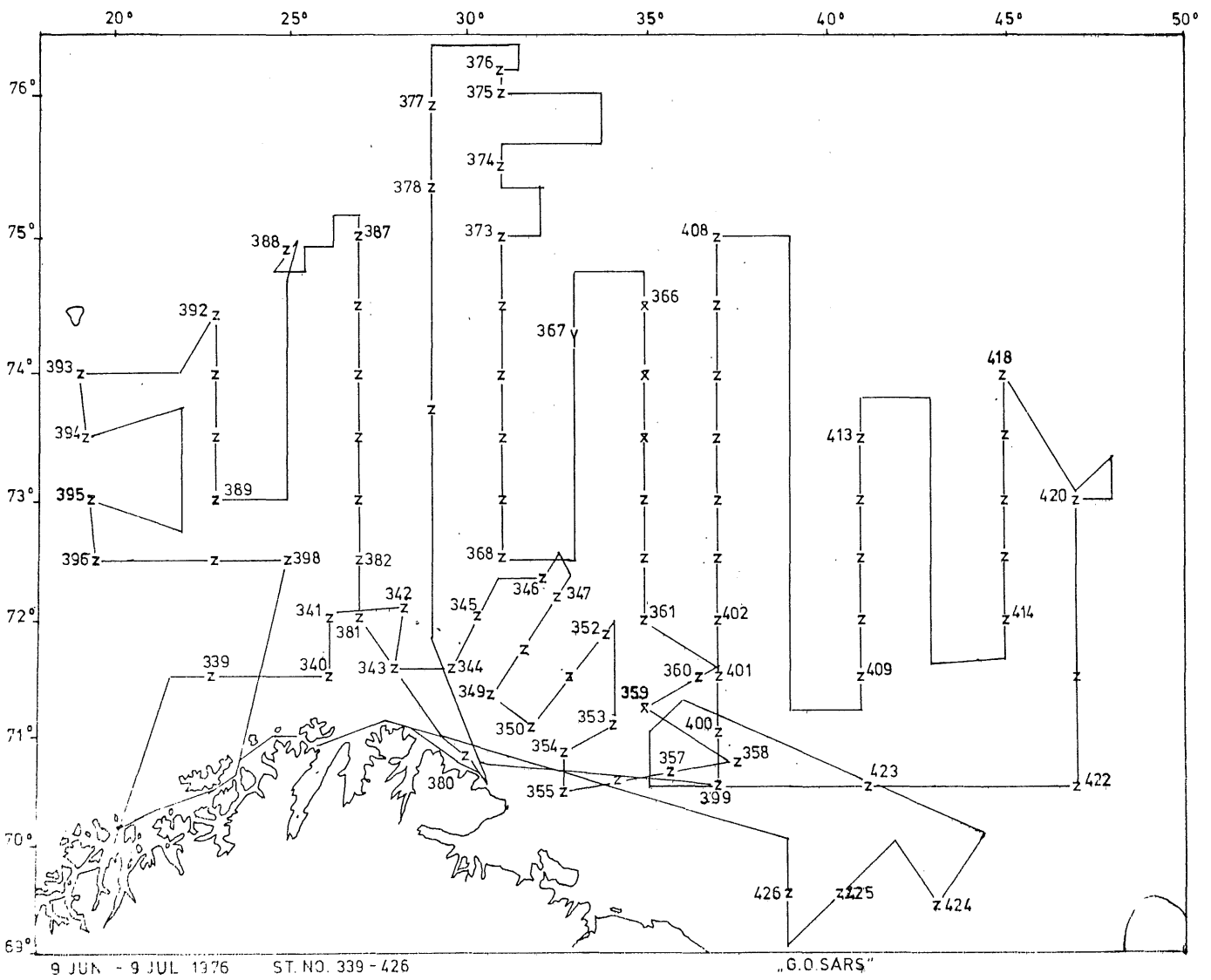


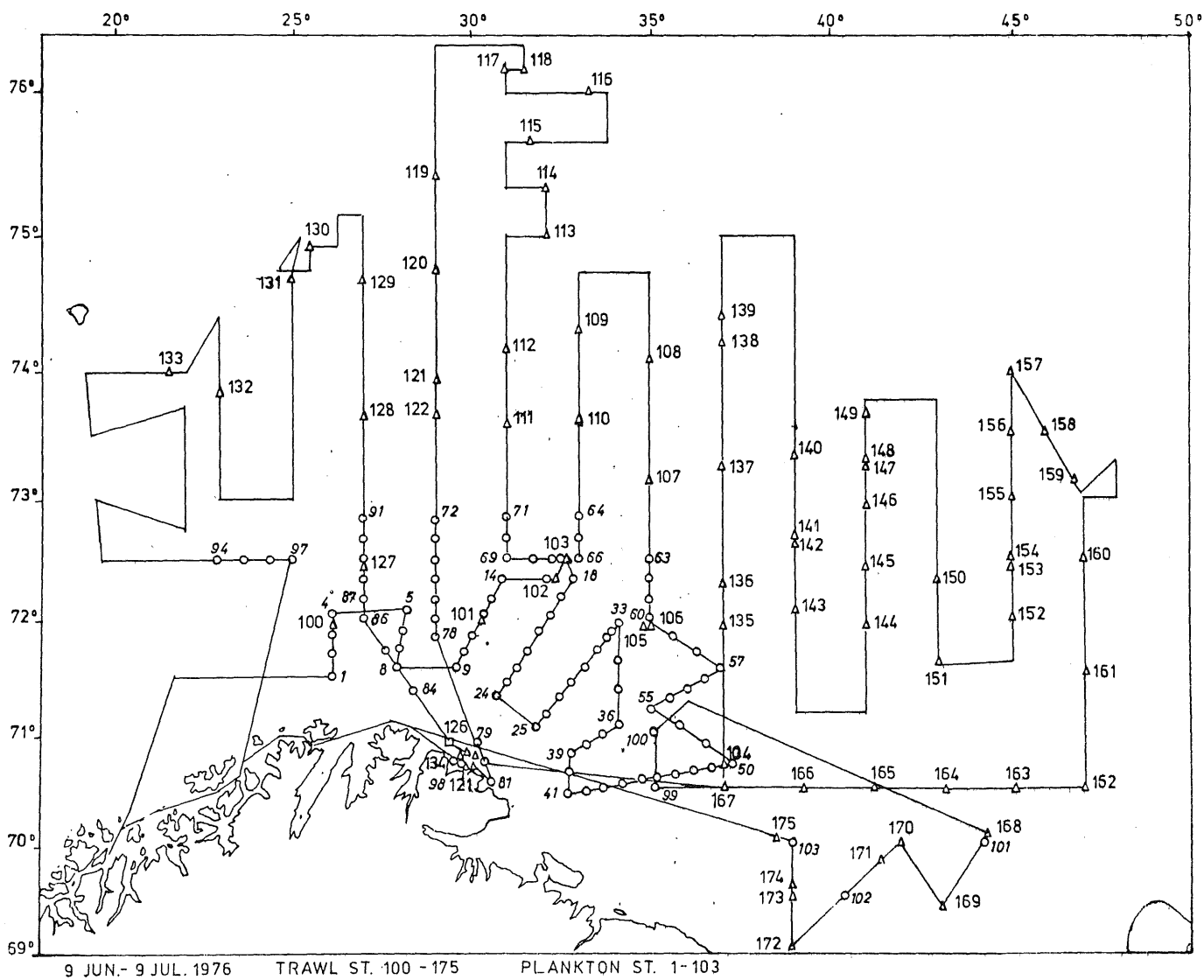


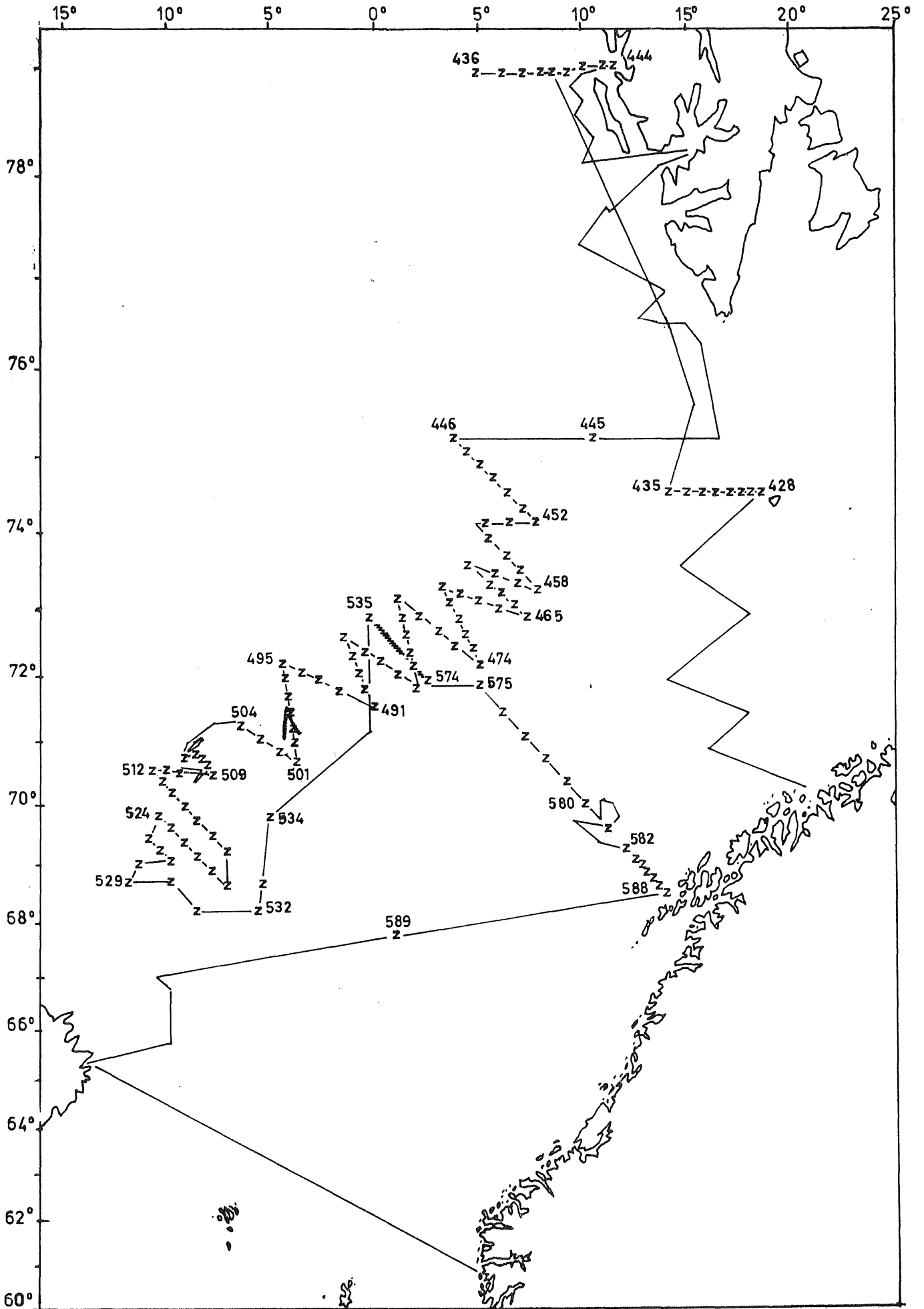


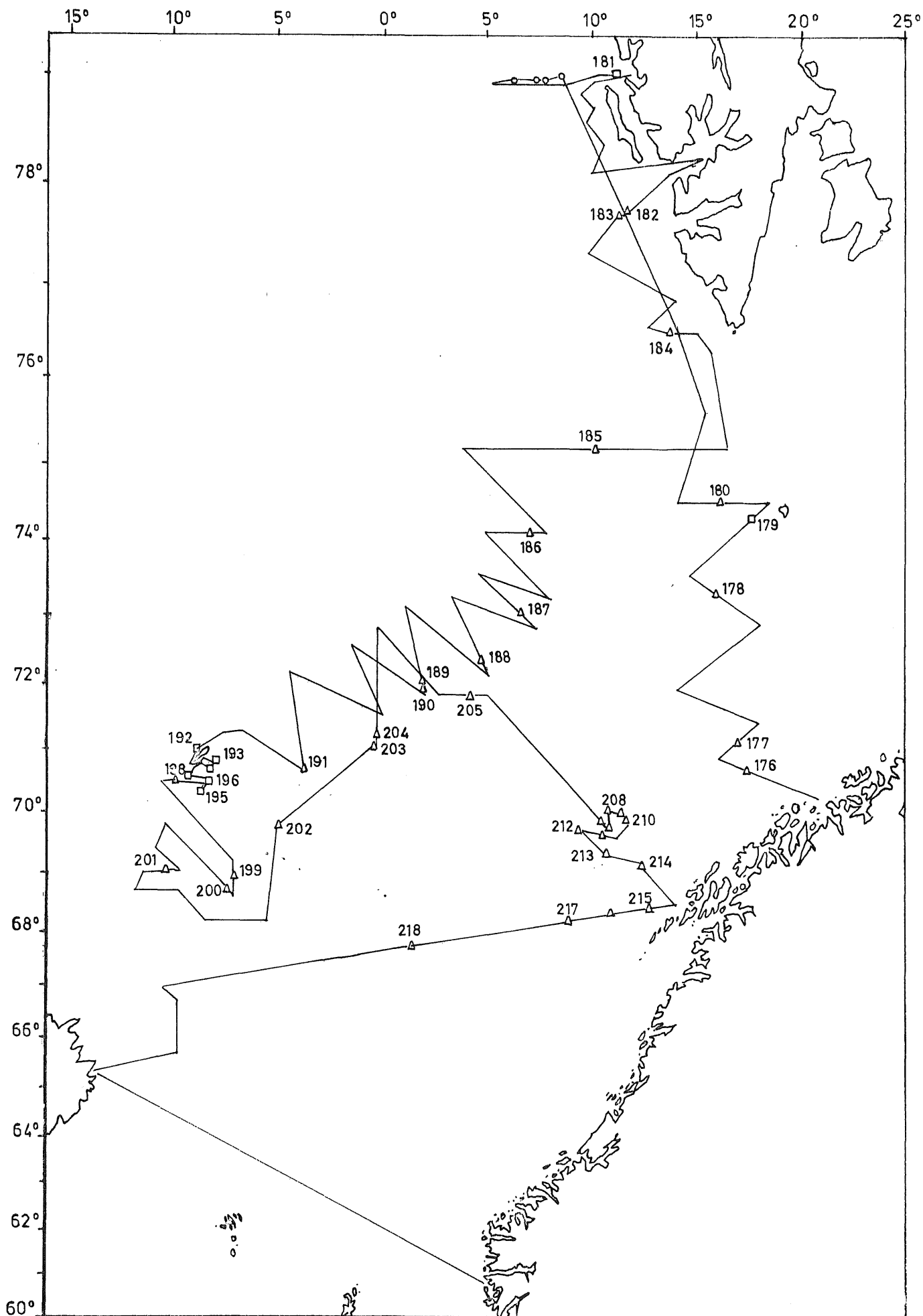






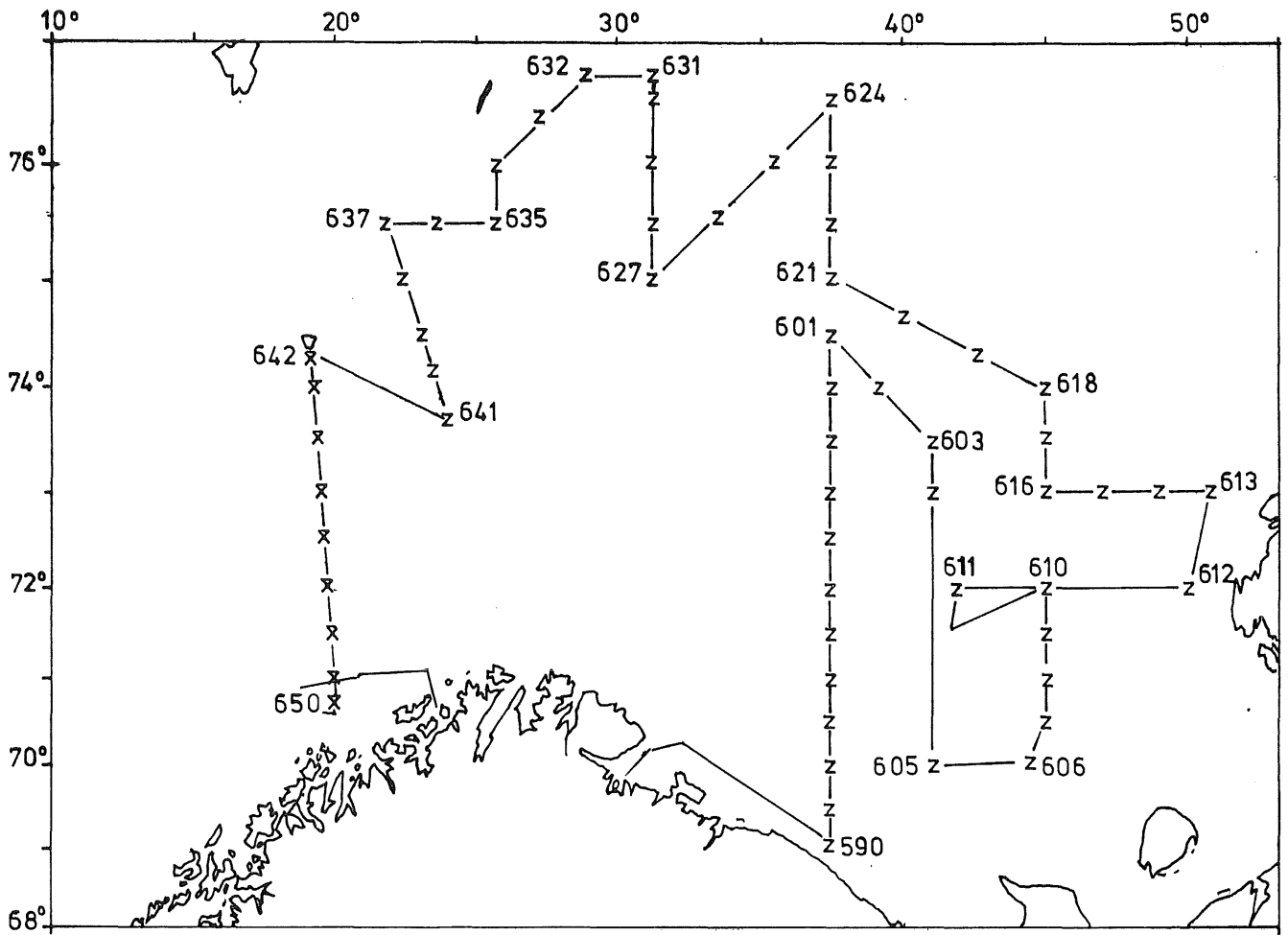






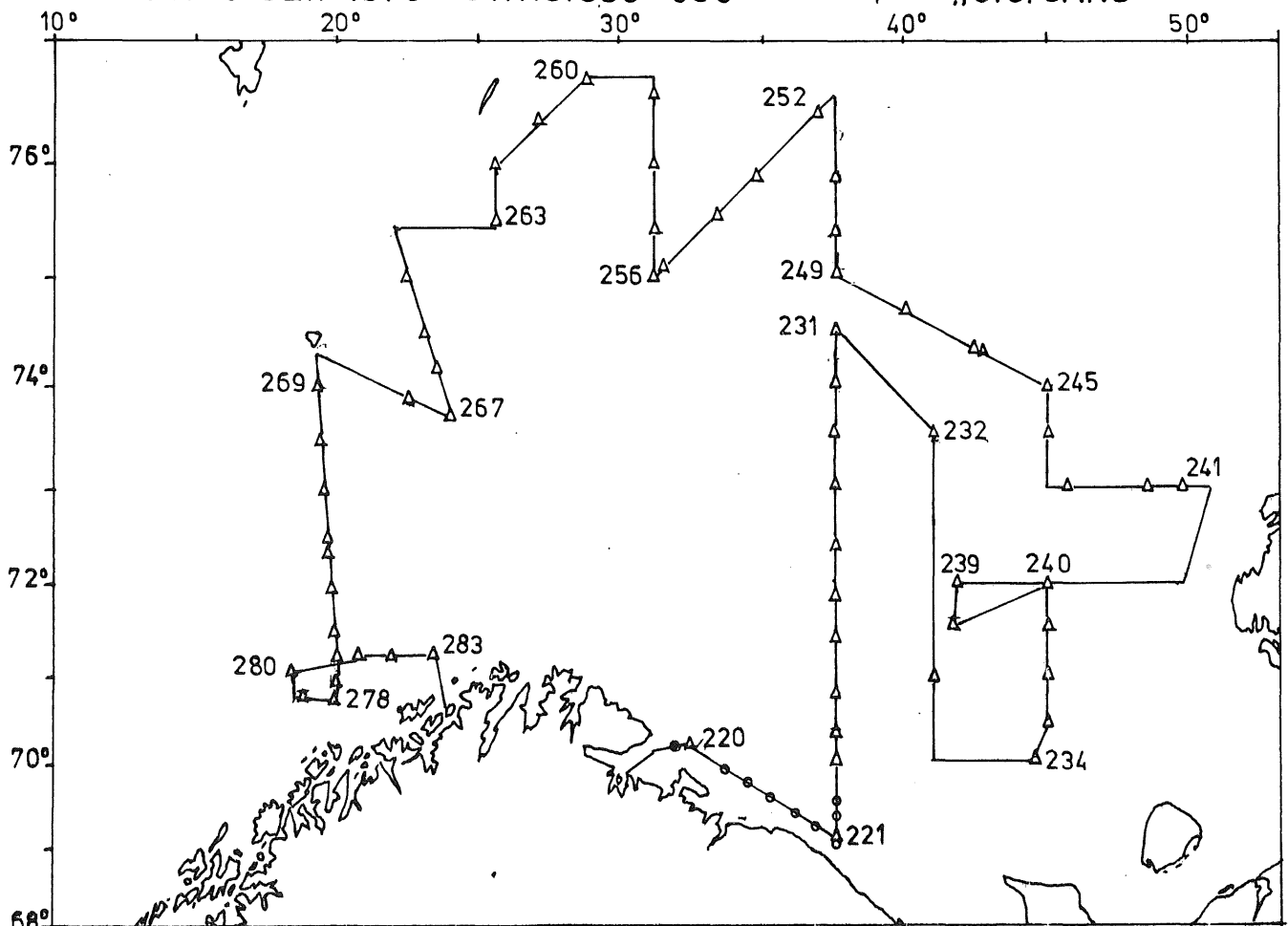
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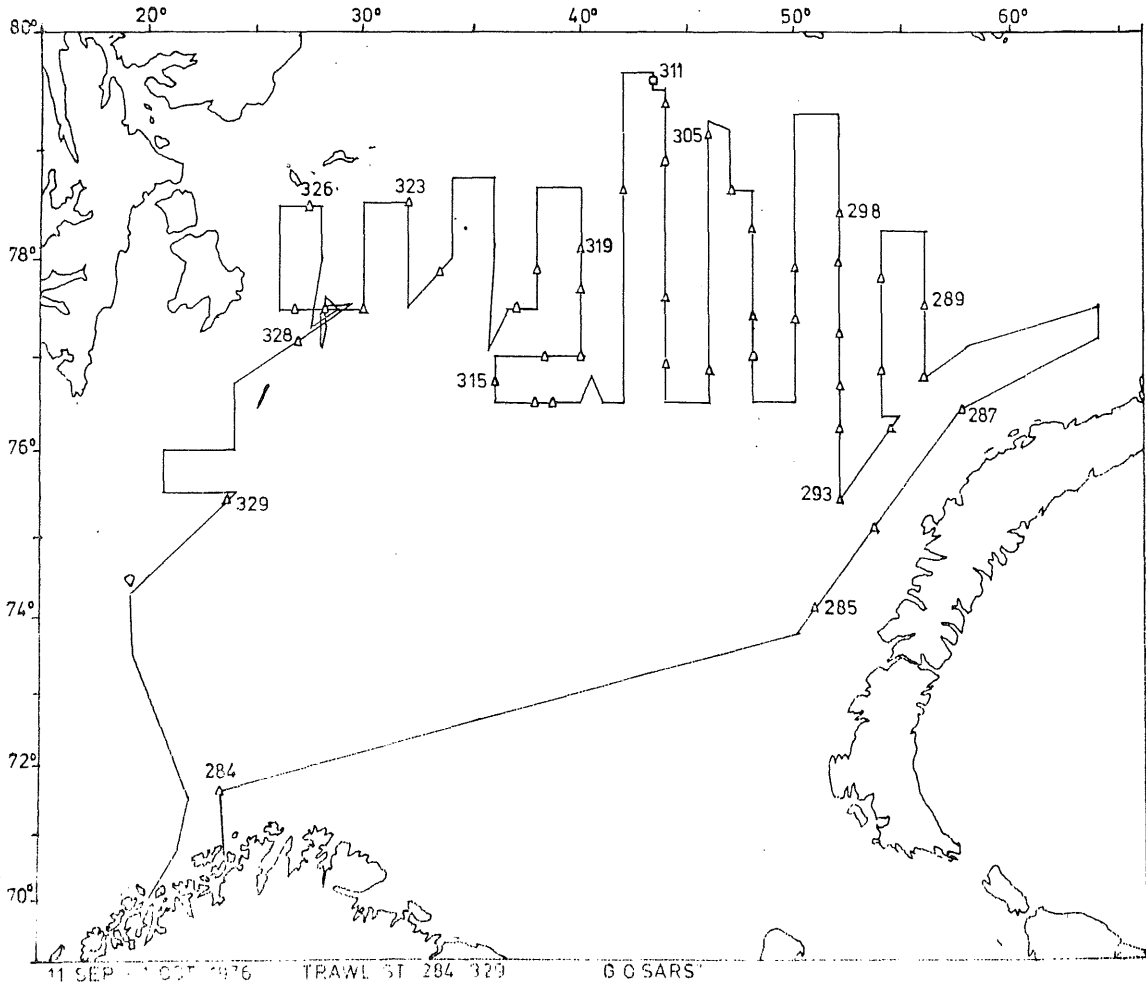
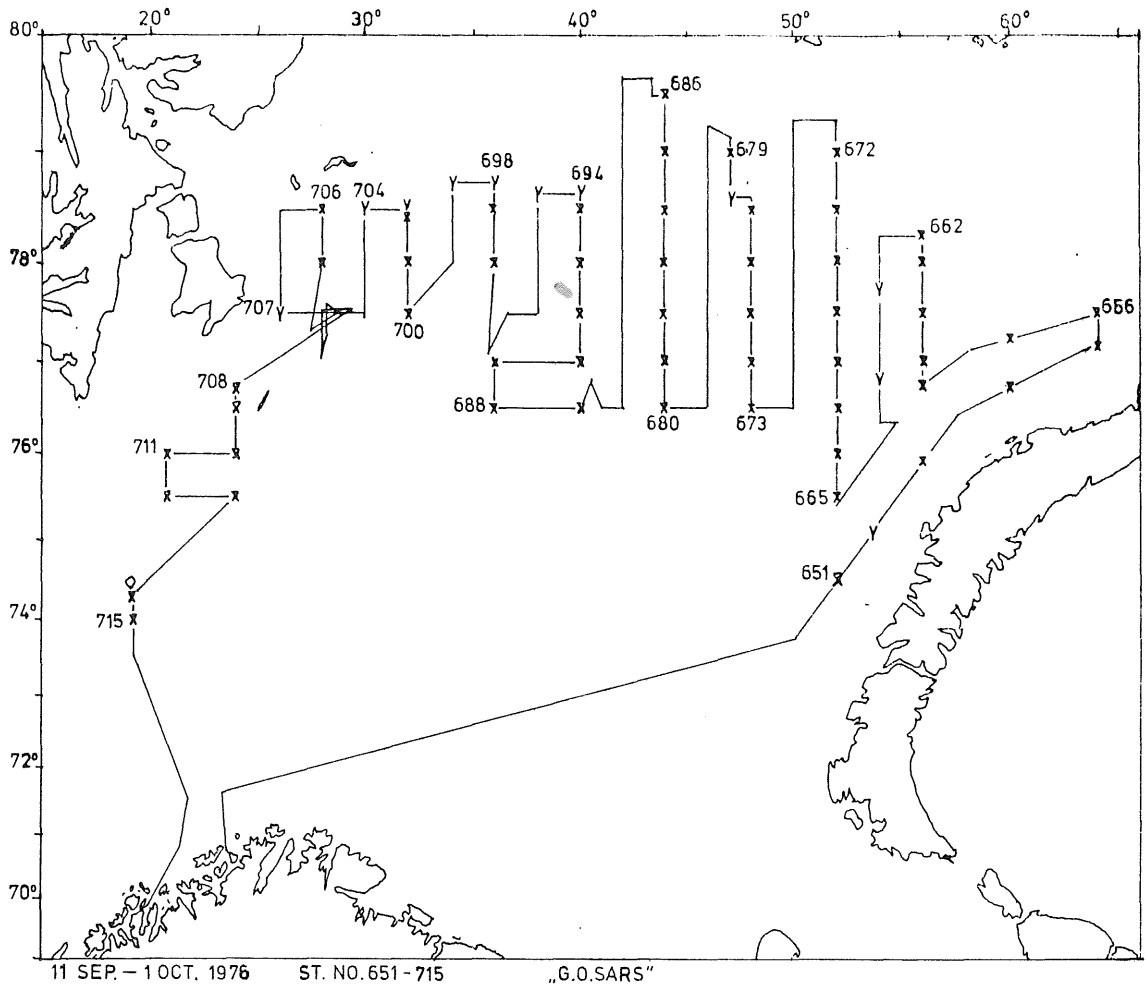
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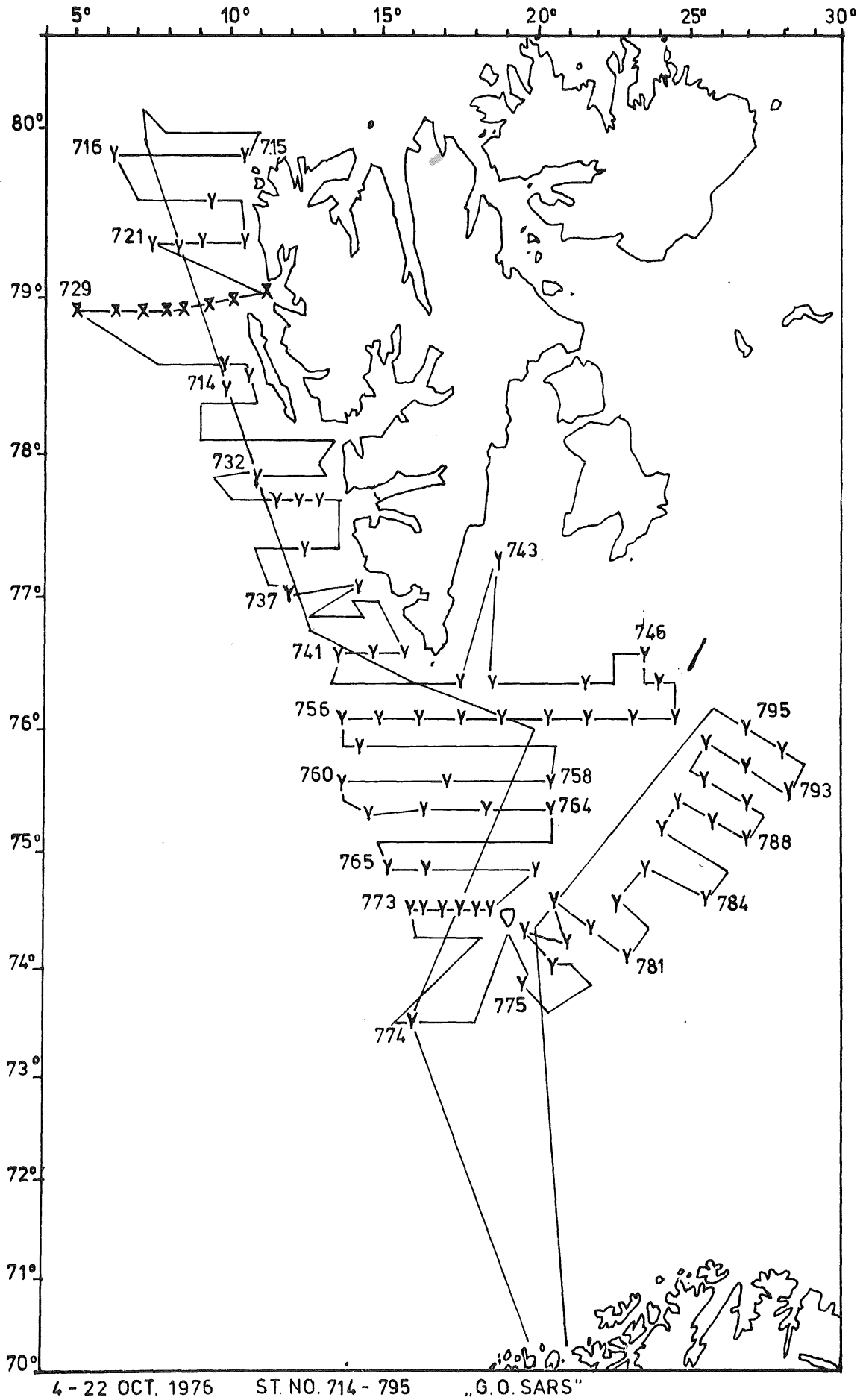
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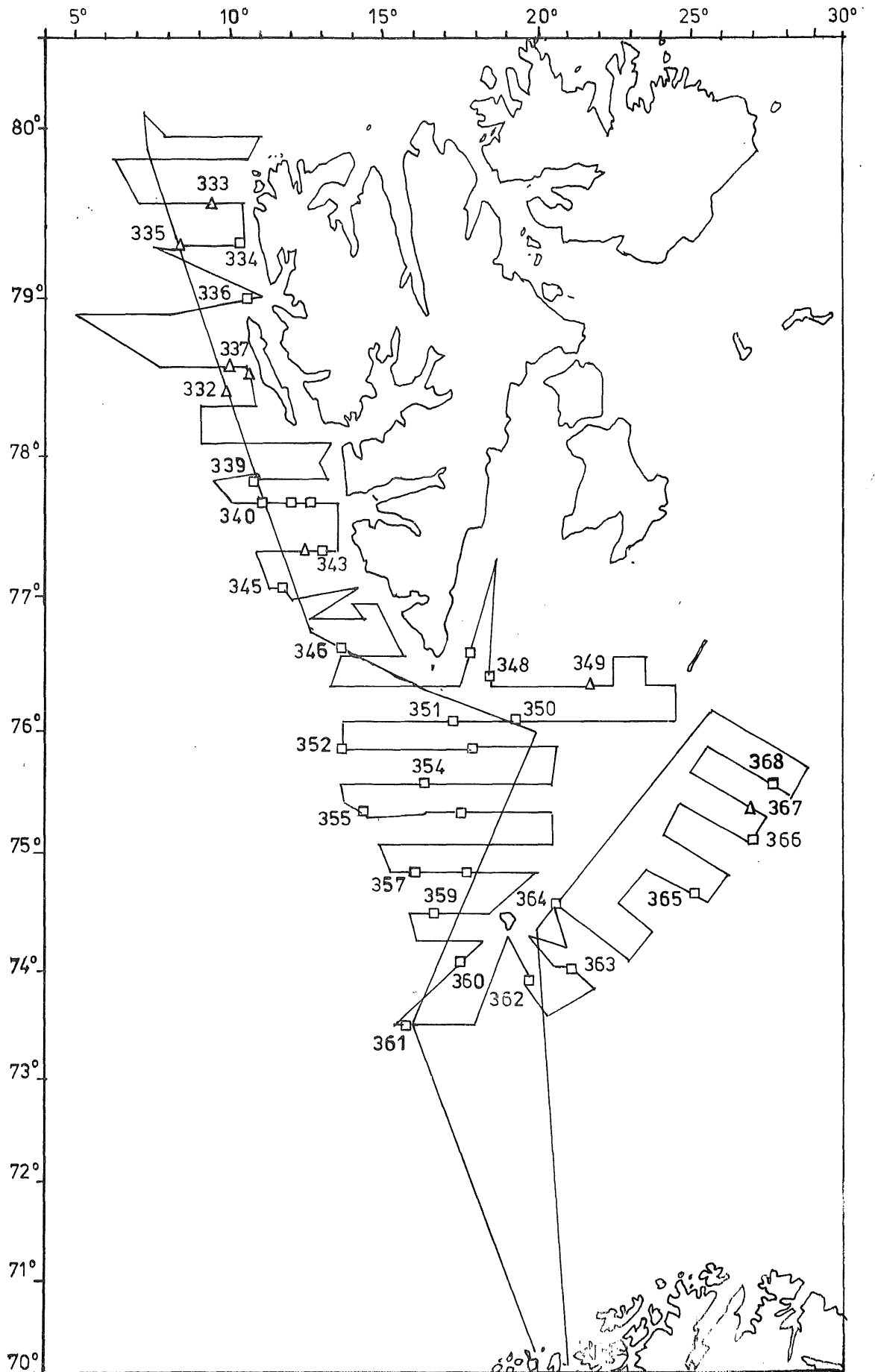


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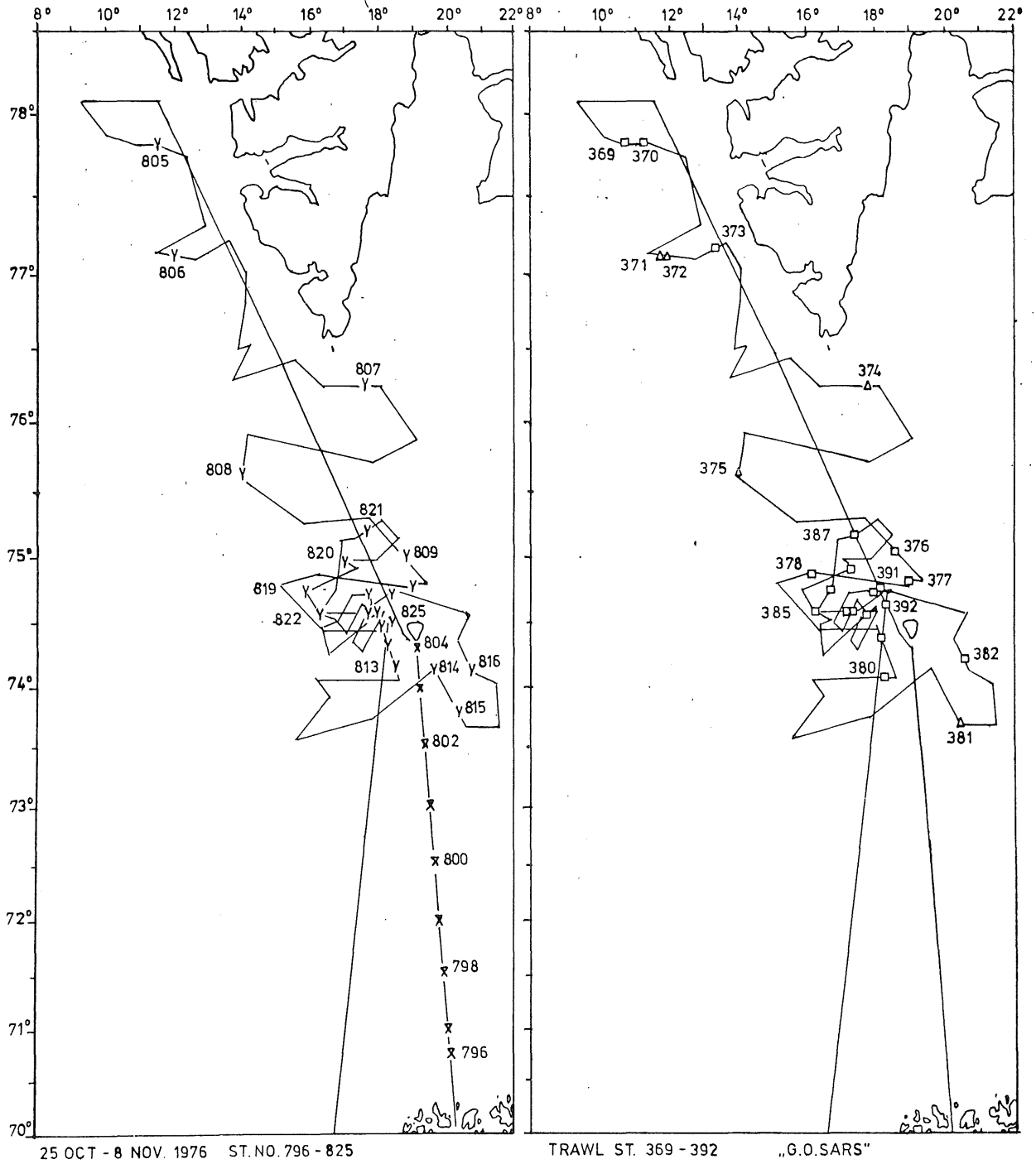
• 9 PLANKTON ST.

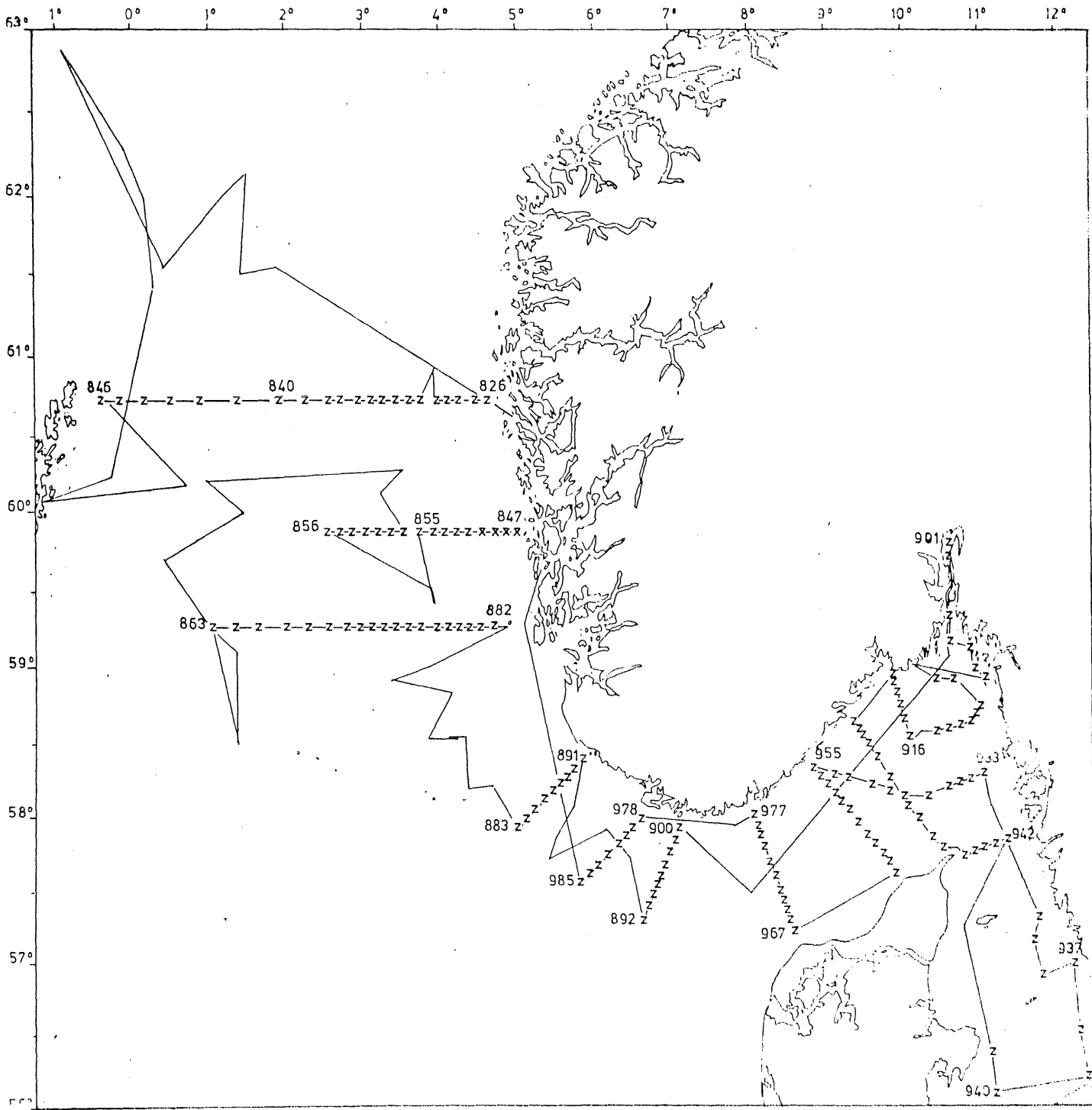






4-22 OCT. 1976 TRAWL. ST. 332 - 368 „G.O. SARS“

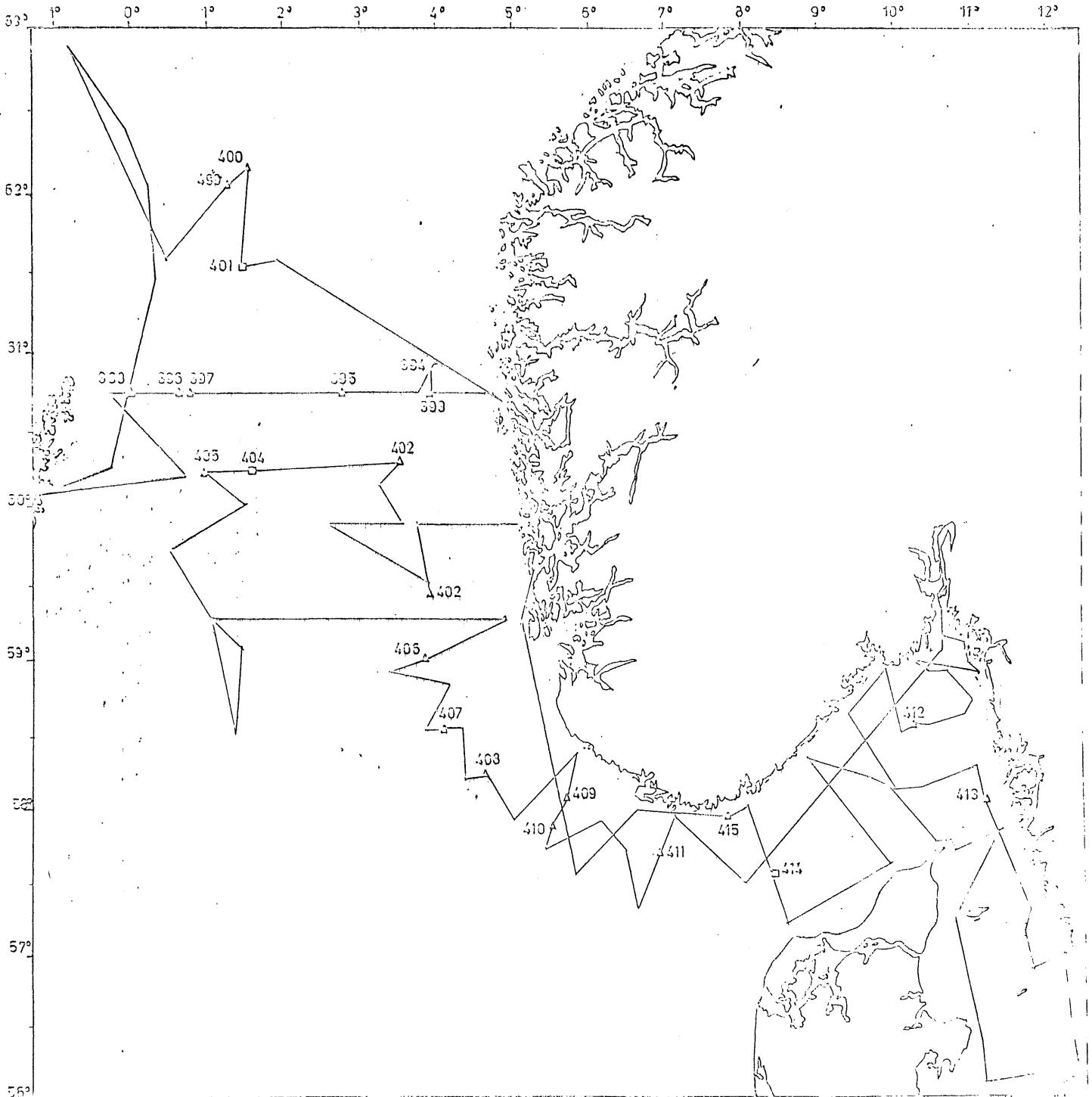




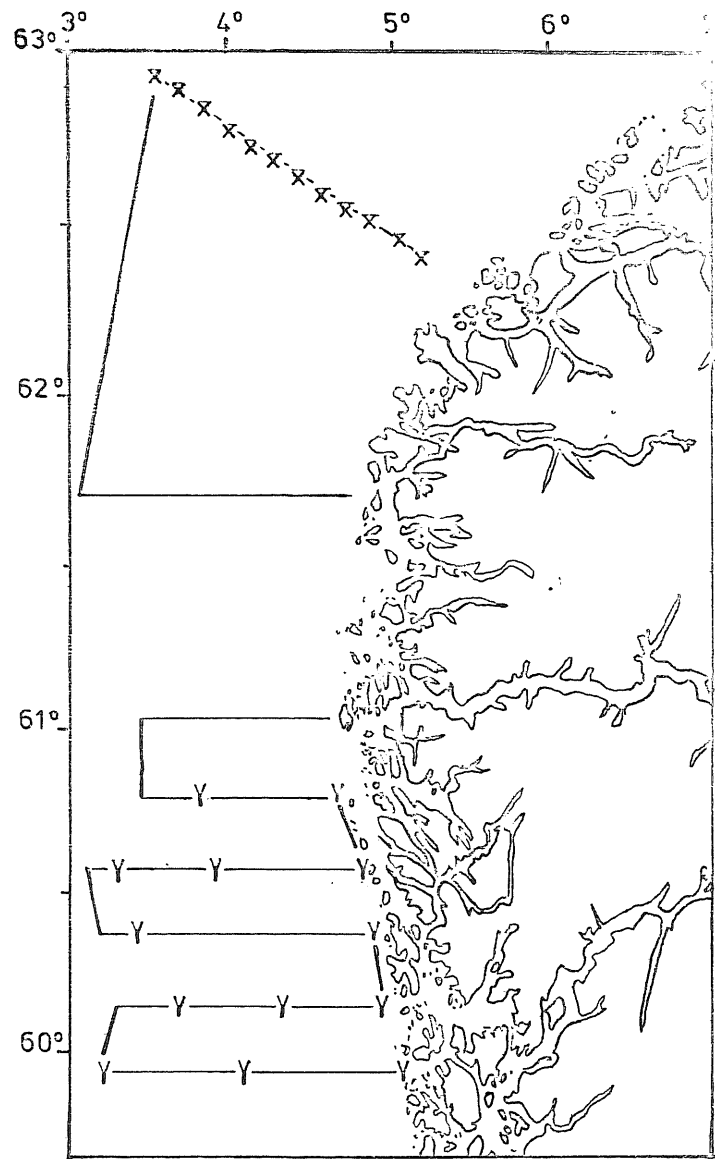
15 NOV. - 12 DEC. 1976

ST. NO 826-985

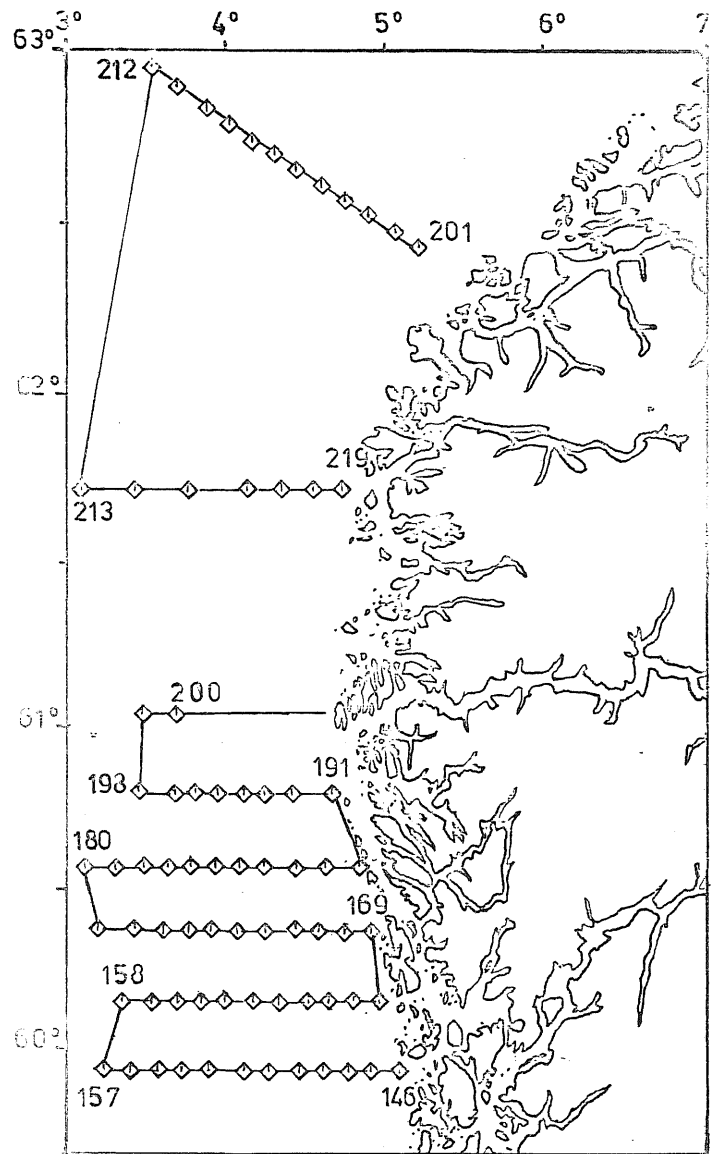
„G O SARS“



13 NOV. - 12 DEC. 1975 TRAWL ST. 399-415 "S.O.SARS"

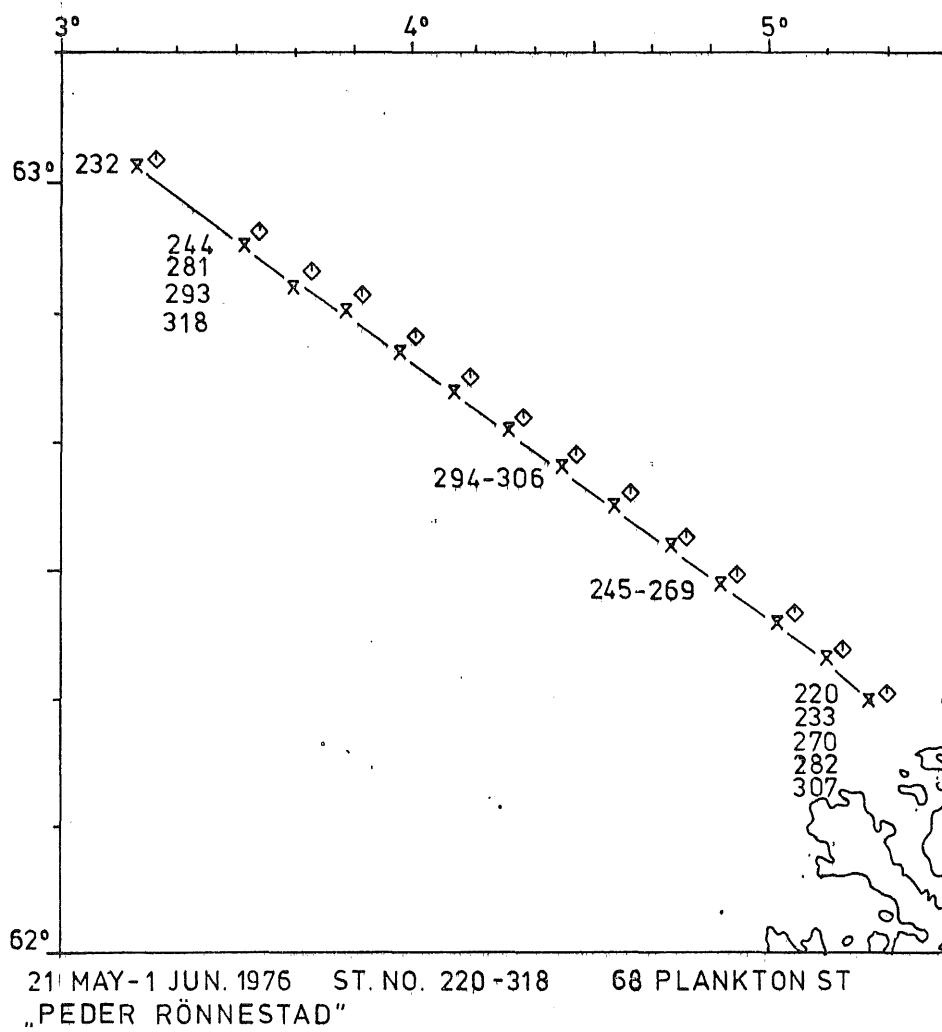


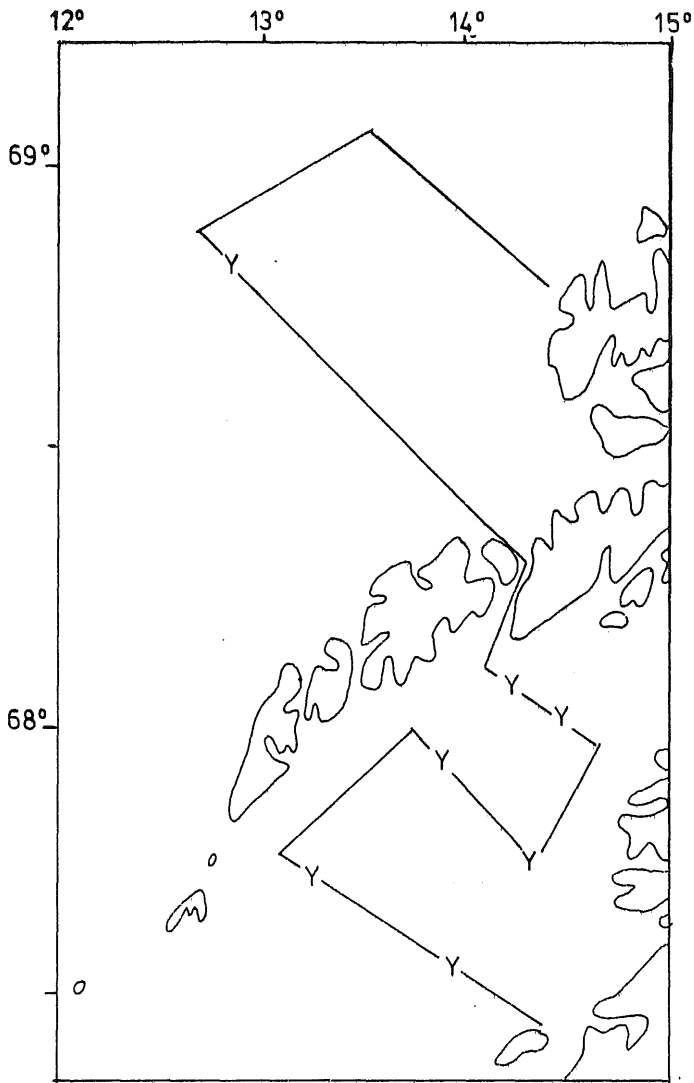
5-12 MAY 1976 12 C.O. ST 13 BT ST. PLANKTON ST. 145-219



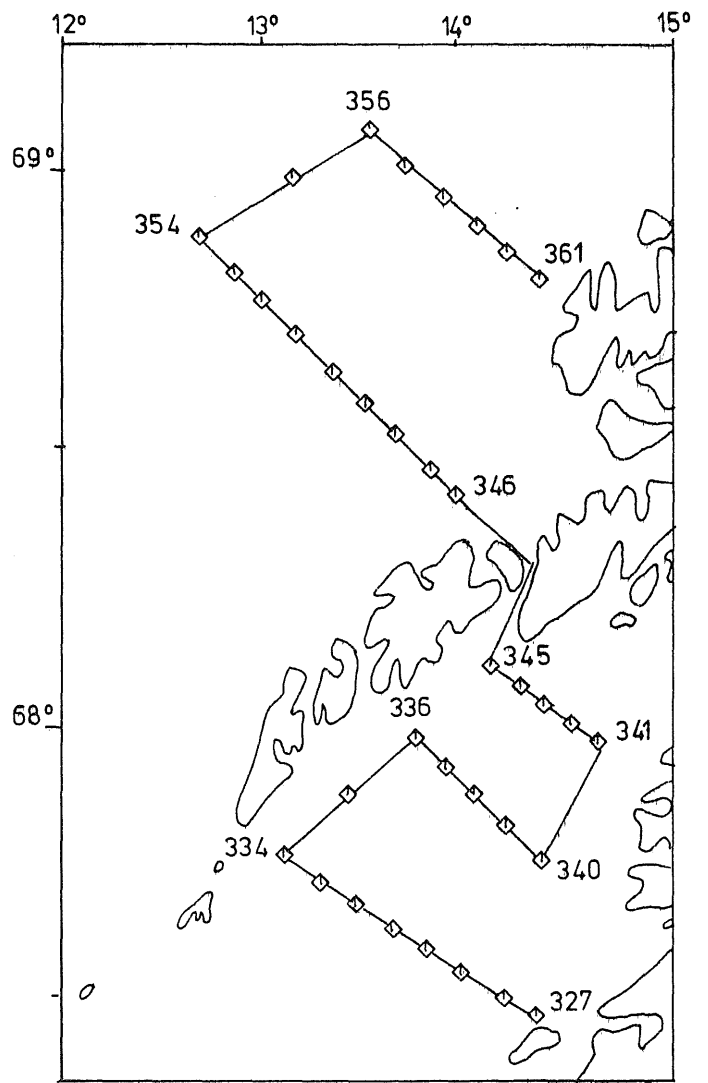
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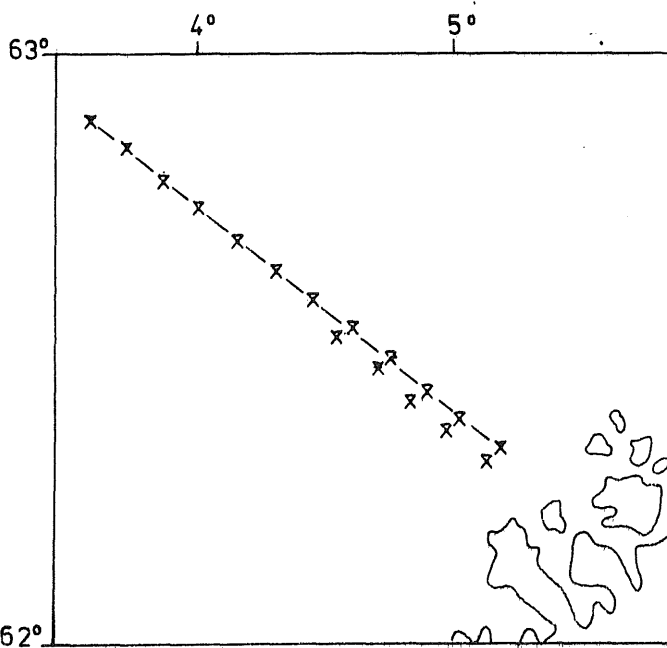




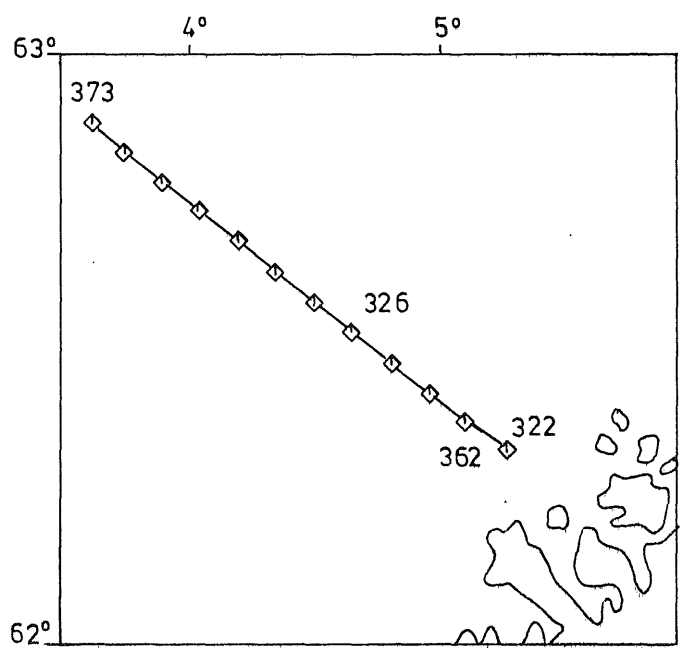
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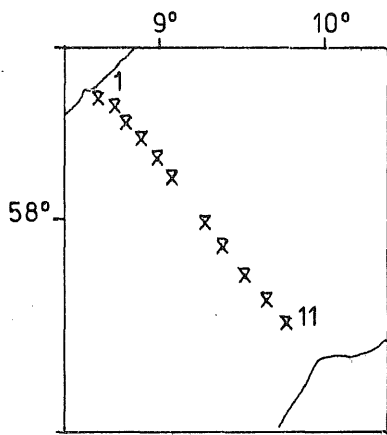
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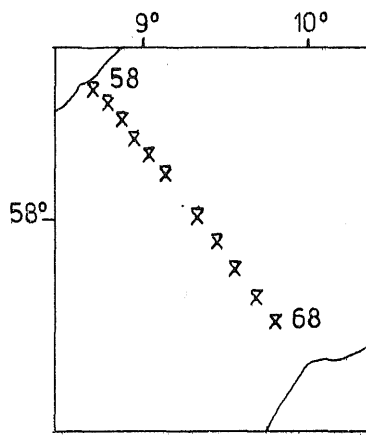
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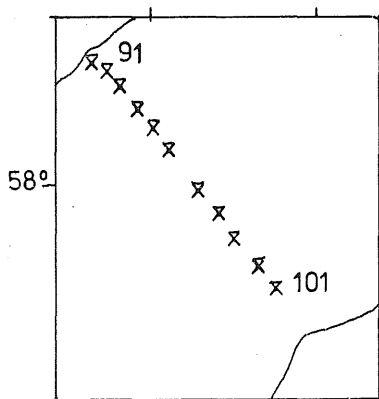
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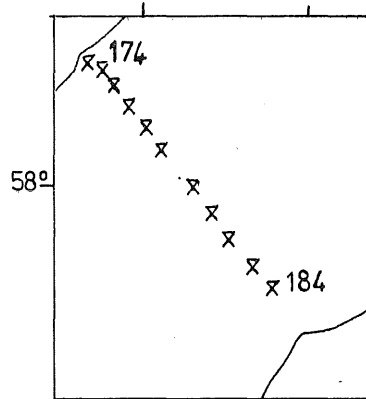
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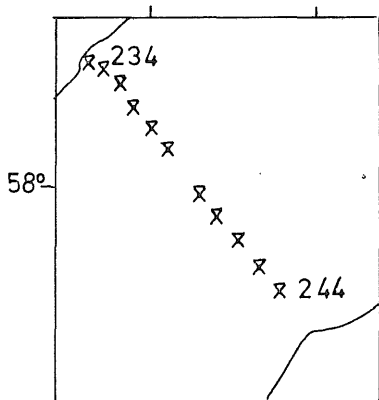
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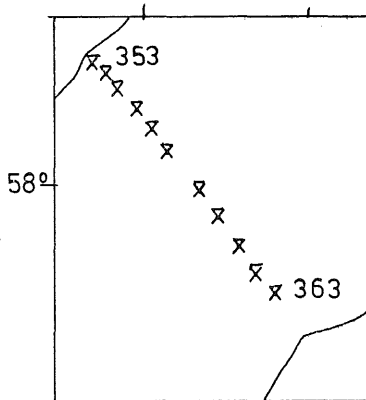
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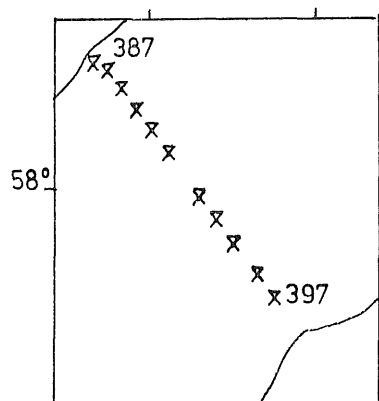
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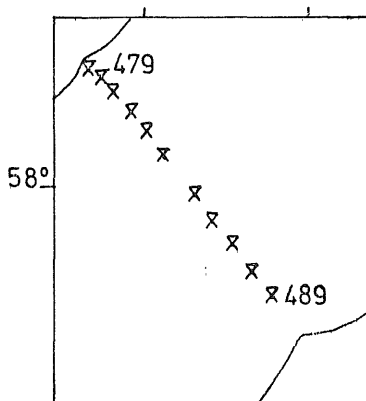
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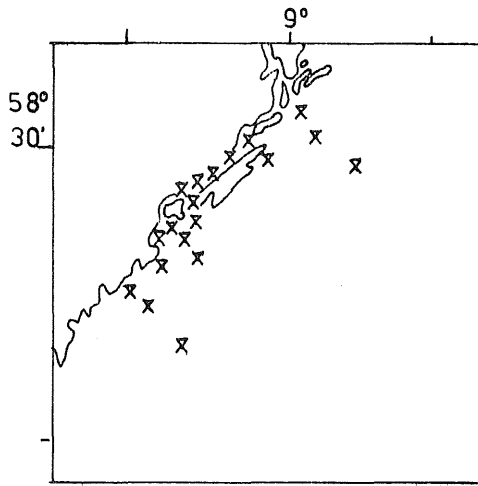
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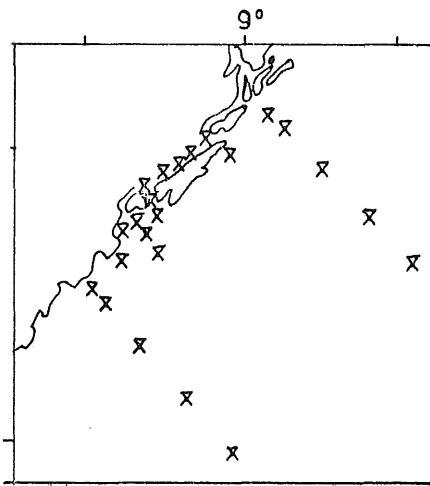
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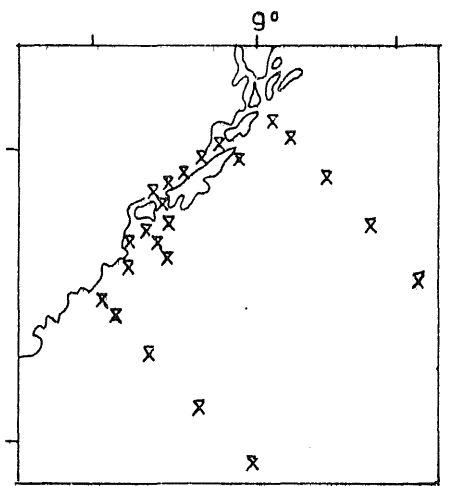
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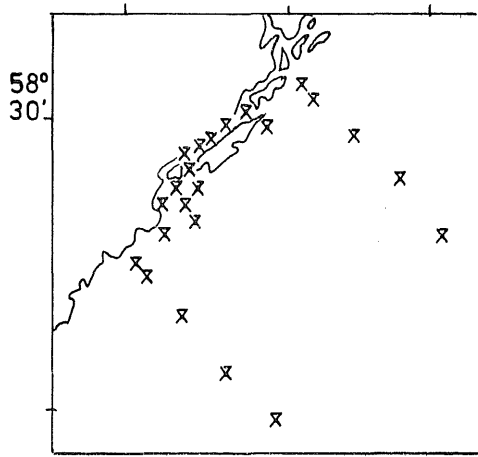
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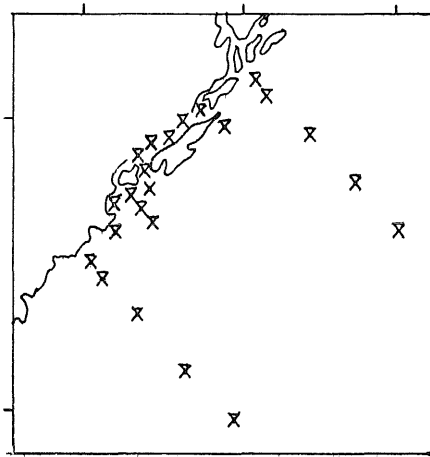
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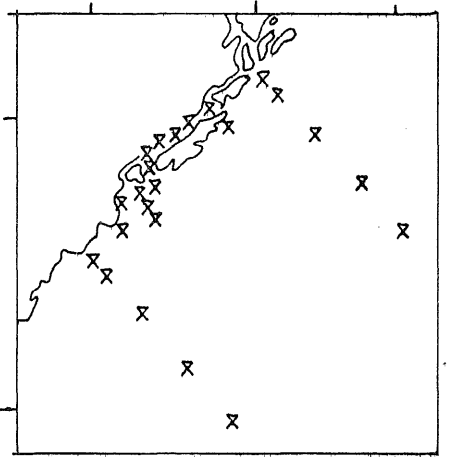
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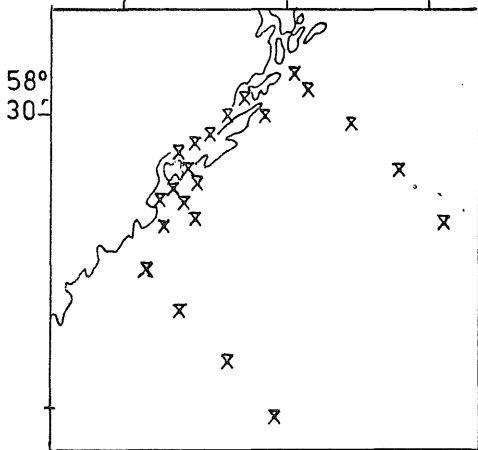
19-21 MAY 1976 ST.NO. 212-233



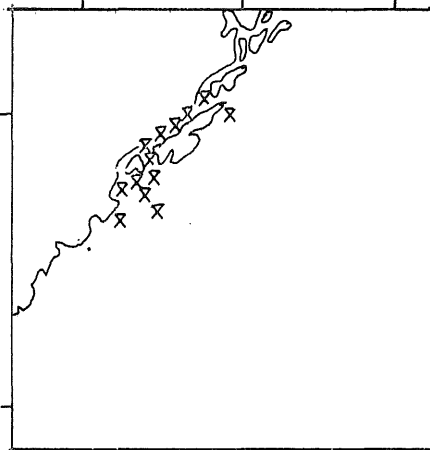
21-23 JUN.1976 ST.NO. 272-294



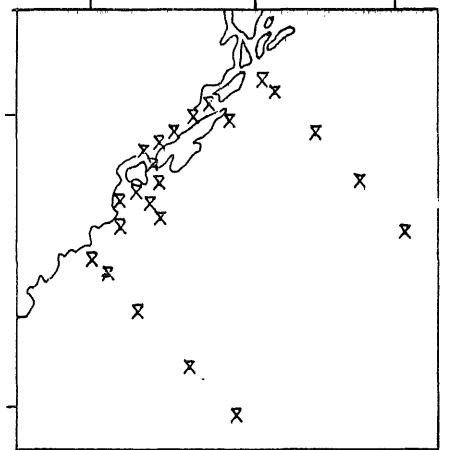
4-6 AUG. 1976 ST.NO. 303-325



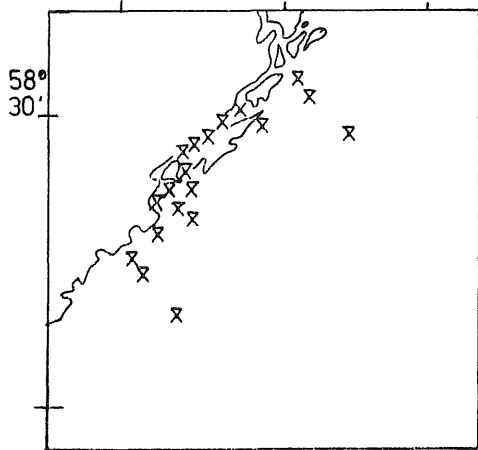
8-10 SEP. 1976 ST. NO. 364-386



11 OCT. 1976 ST.NO. 432-443

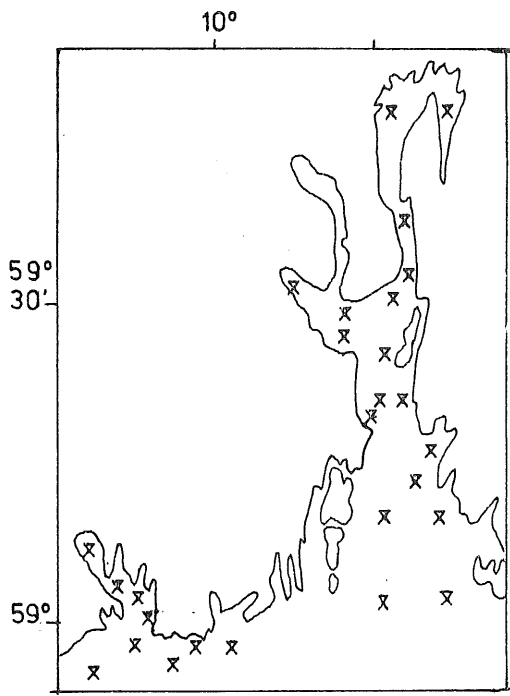


23-24 NOV.1976 ST.NO. 500-522

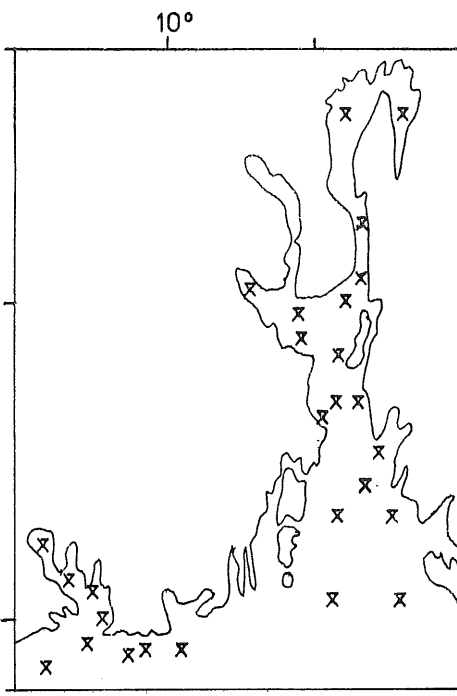


13-16 DEC.1976 ST.NO. 523-541

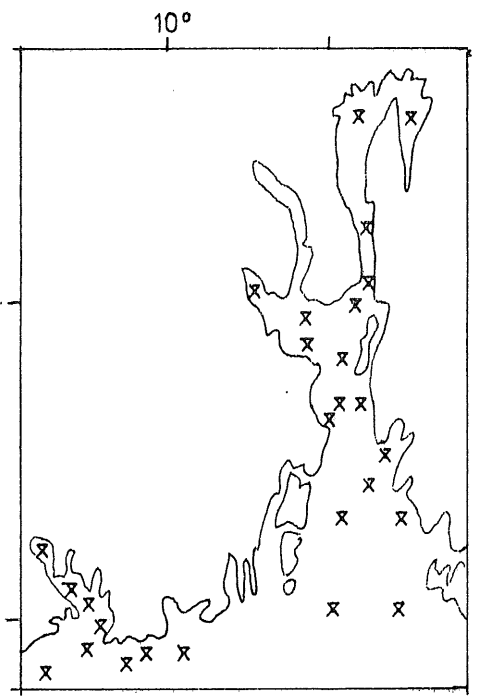
„G.M.DANNEVIG“



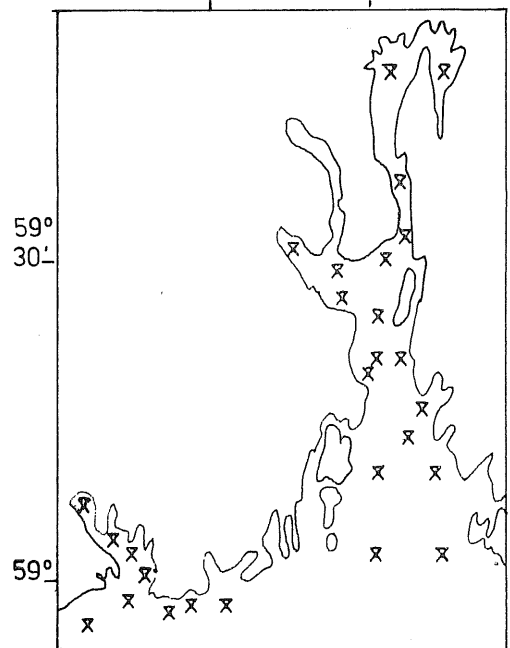
4-13 FEB. 1976 ST. NO. 31-51 + 6 ST.



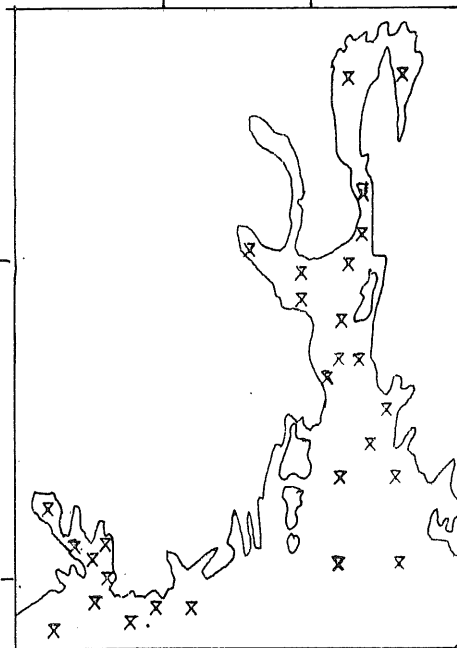
1-11 MAR. 1976 ST. NO. 65-85 + 6 ST.



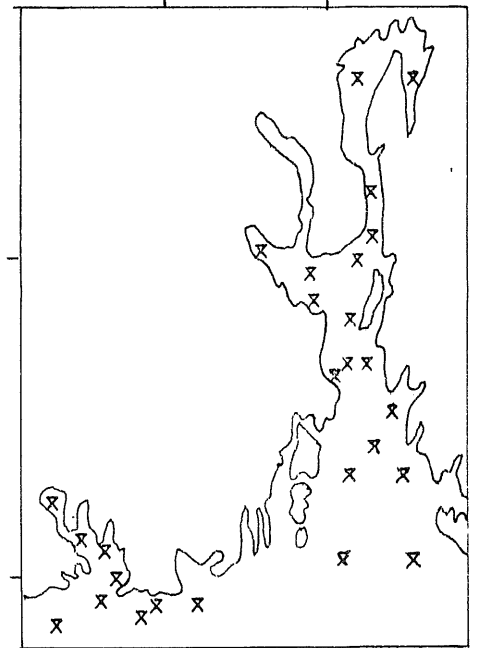
9 MAR-7 APR. ST. NO. 125-150 + 6 ST.



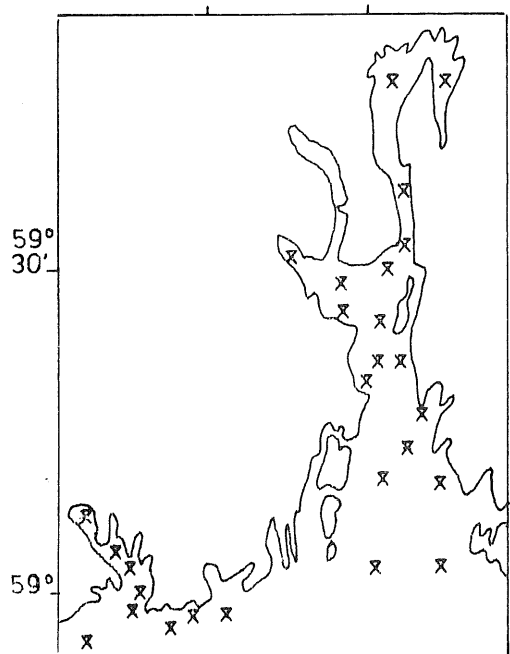
4-11 MAY 1976 ST. NO. 186-206 + 6 ST.



8-17 JUN. 1976 ST. NO. 246-269

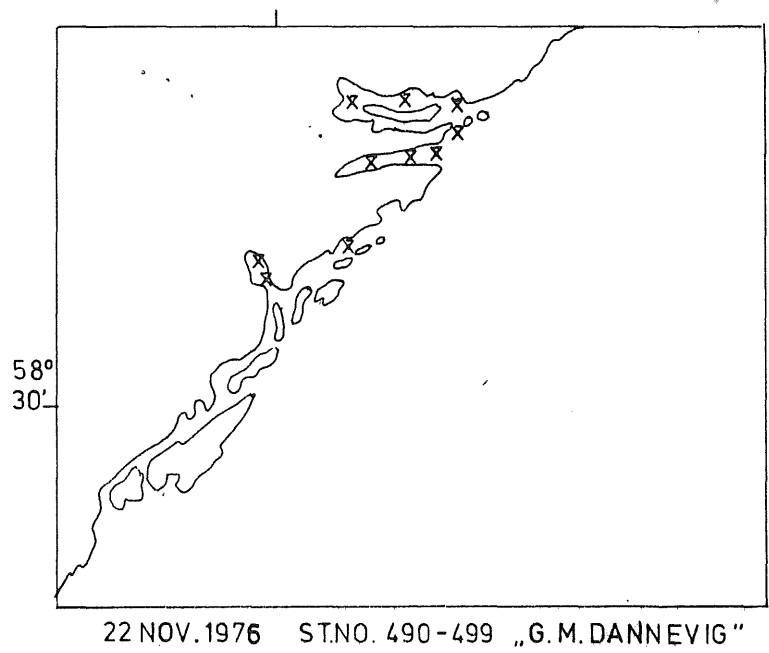
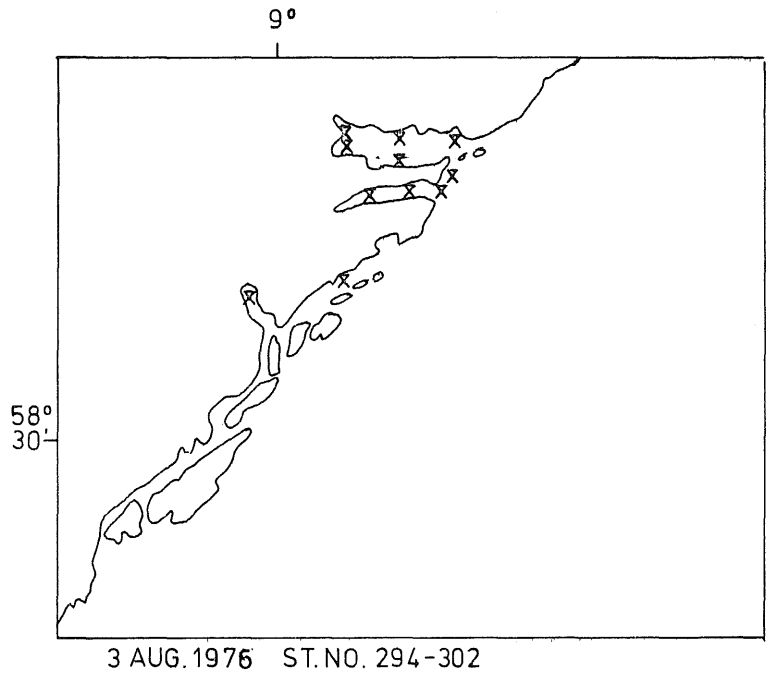


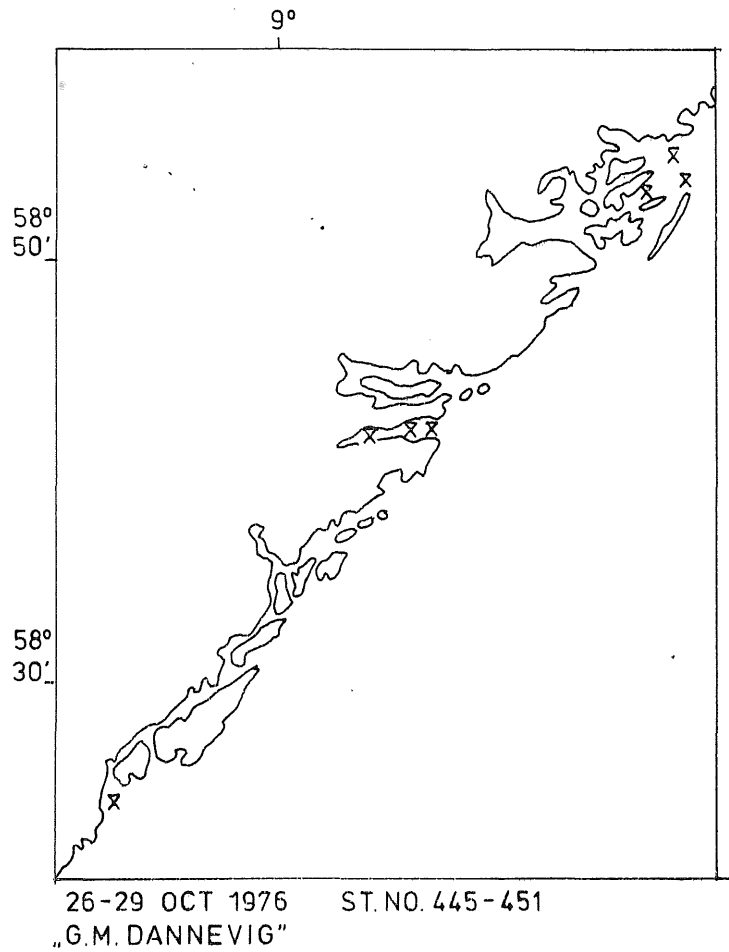
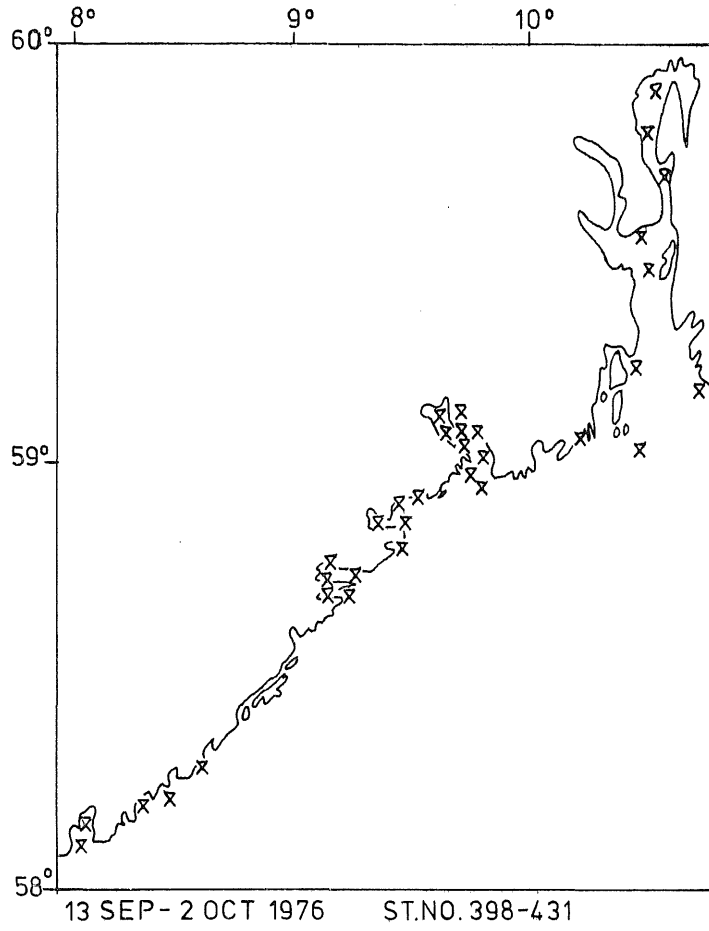
9-18 AUG. 1976 ST. NO. 327-347 + 6 ST.

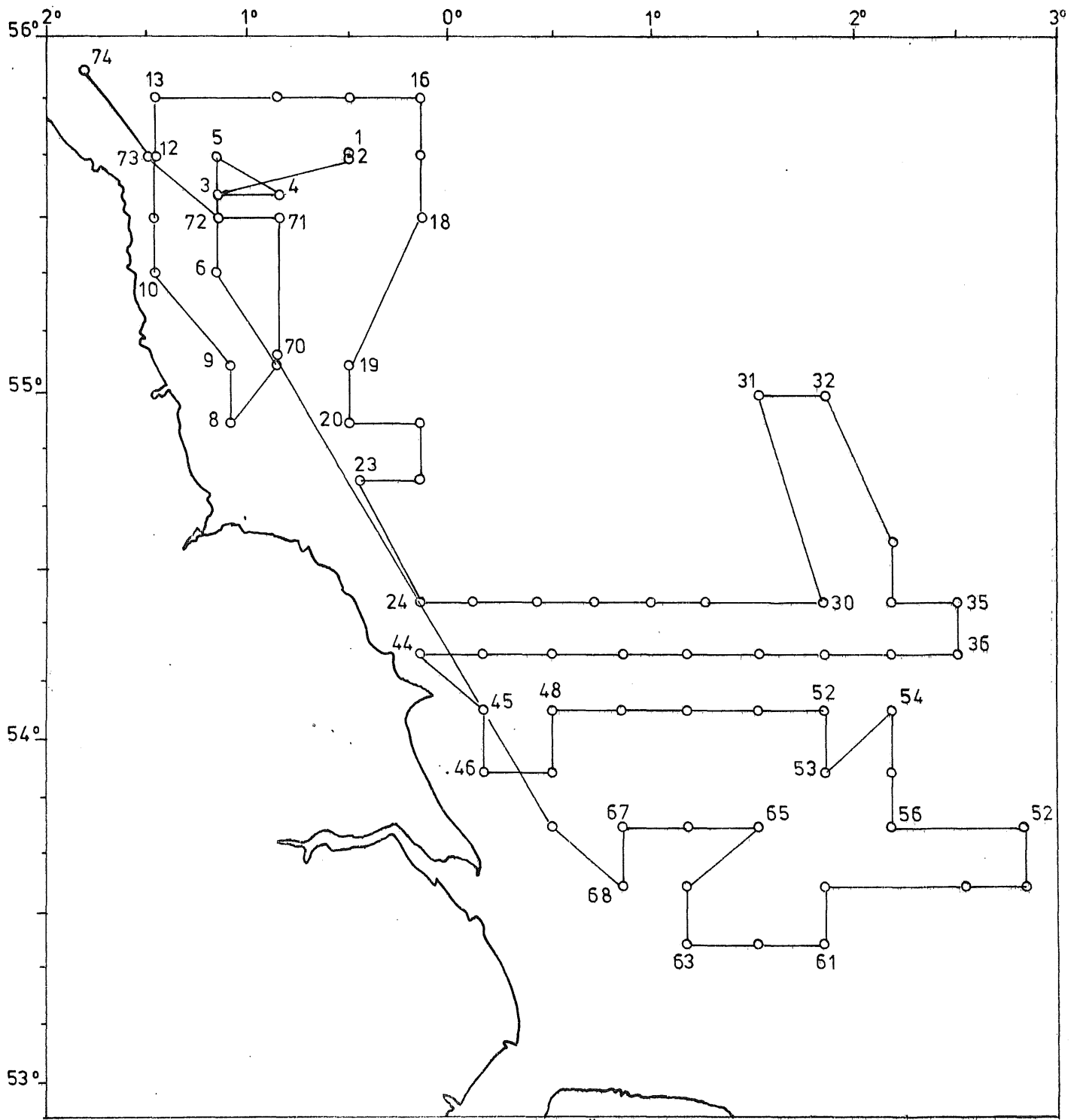


1-12 NOV. 1976 ST. NO. 456-477 + 6 ST.

„G. M. DANNEVIG.”

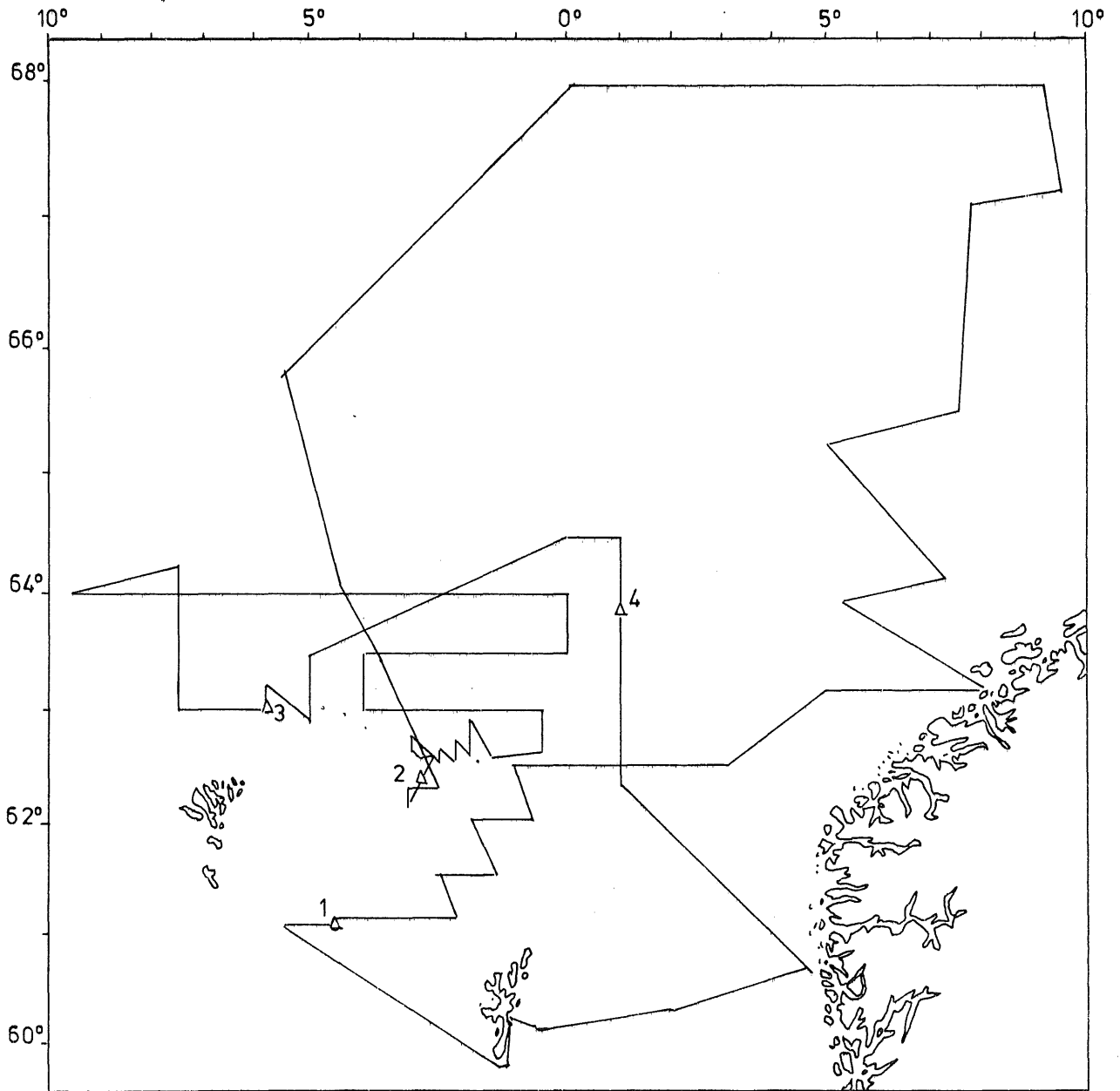






19-25 OCT. 1976 LARVAE ST. 1-74 „HAVDRÖN”





28 NOV.-16 DEC. 1976 TRAWL ST. 1-4 „HAVDRÖN“