

# **XII PINRO/IMR Symposium**

21-22 August 2007

Polar Environmental Center, Tromsø

## **Spatial migration pattern of deep-sea redfish (*Sebastes mentella* Travin) in the Barents Sea as inferred from long-term research survey series.**



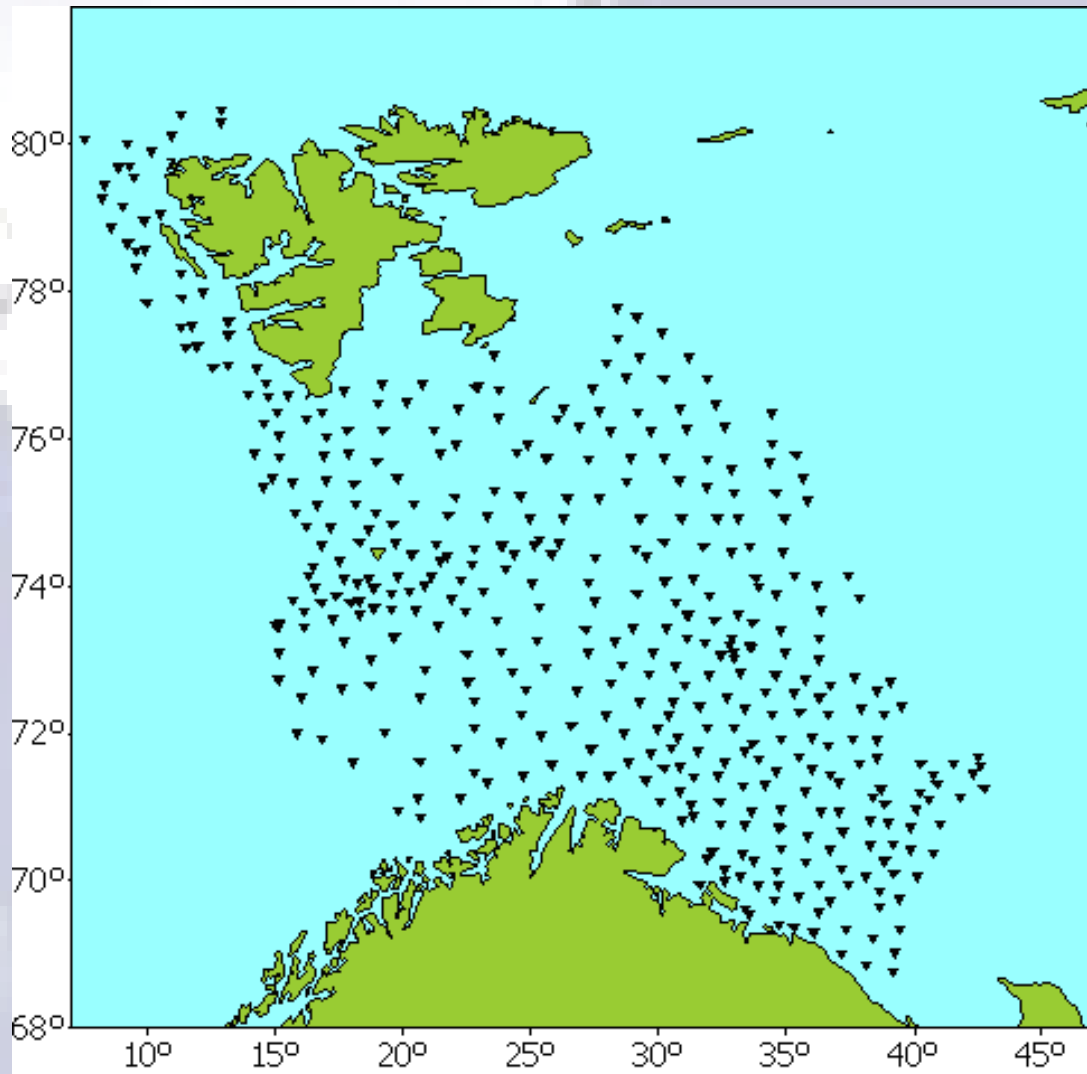
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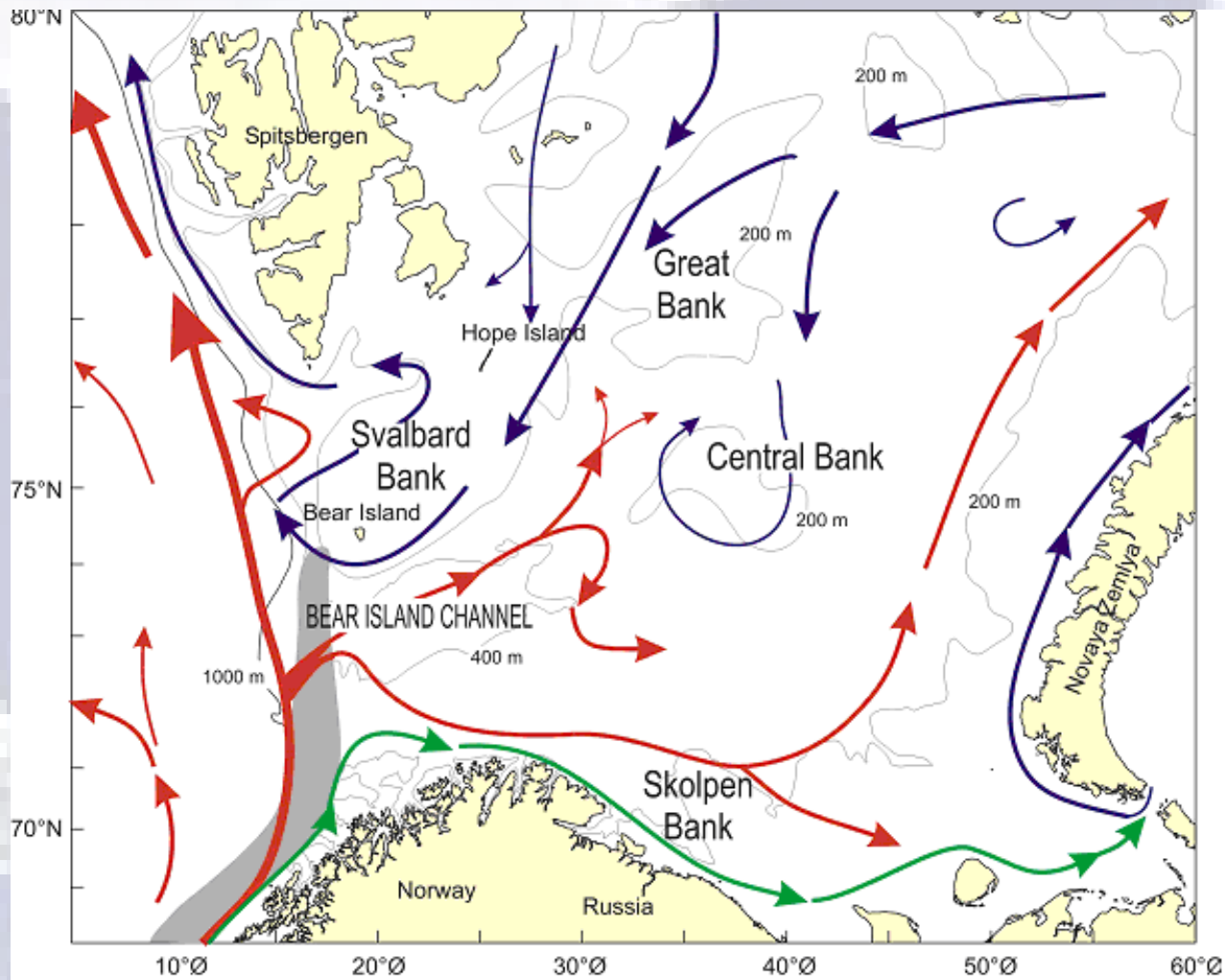


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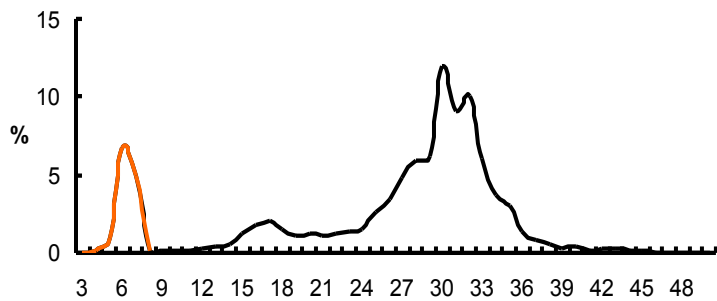


Positions of trawl stations during the annual Russian and Norwegian trawl surveys in autumn.

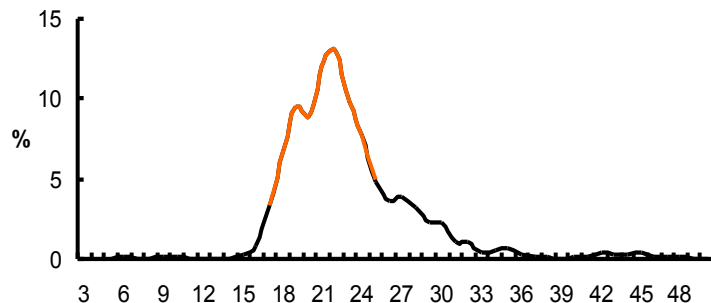


Dominating prevalent current systems in Norwegian Sea/Barents Sea. Red (Atlantic water) and green arrows (coastal water) – warm, dark blue – cold currents. Spawning area of *Sebastes mentella* has been emphasized (grey area).

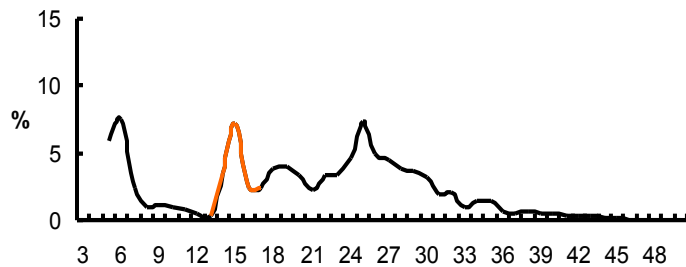
1982



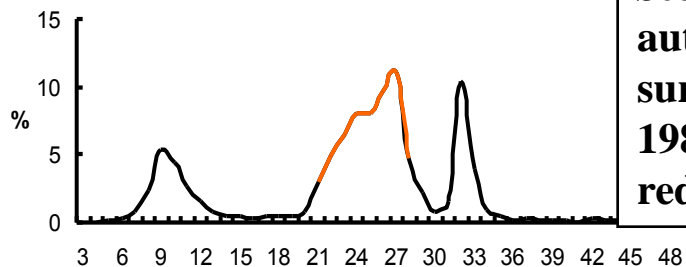
1987



1985



1989



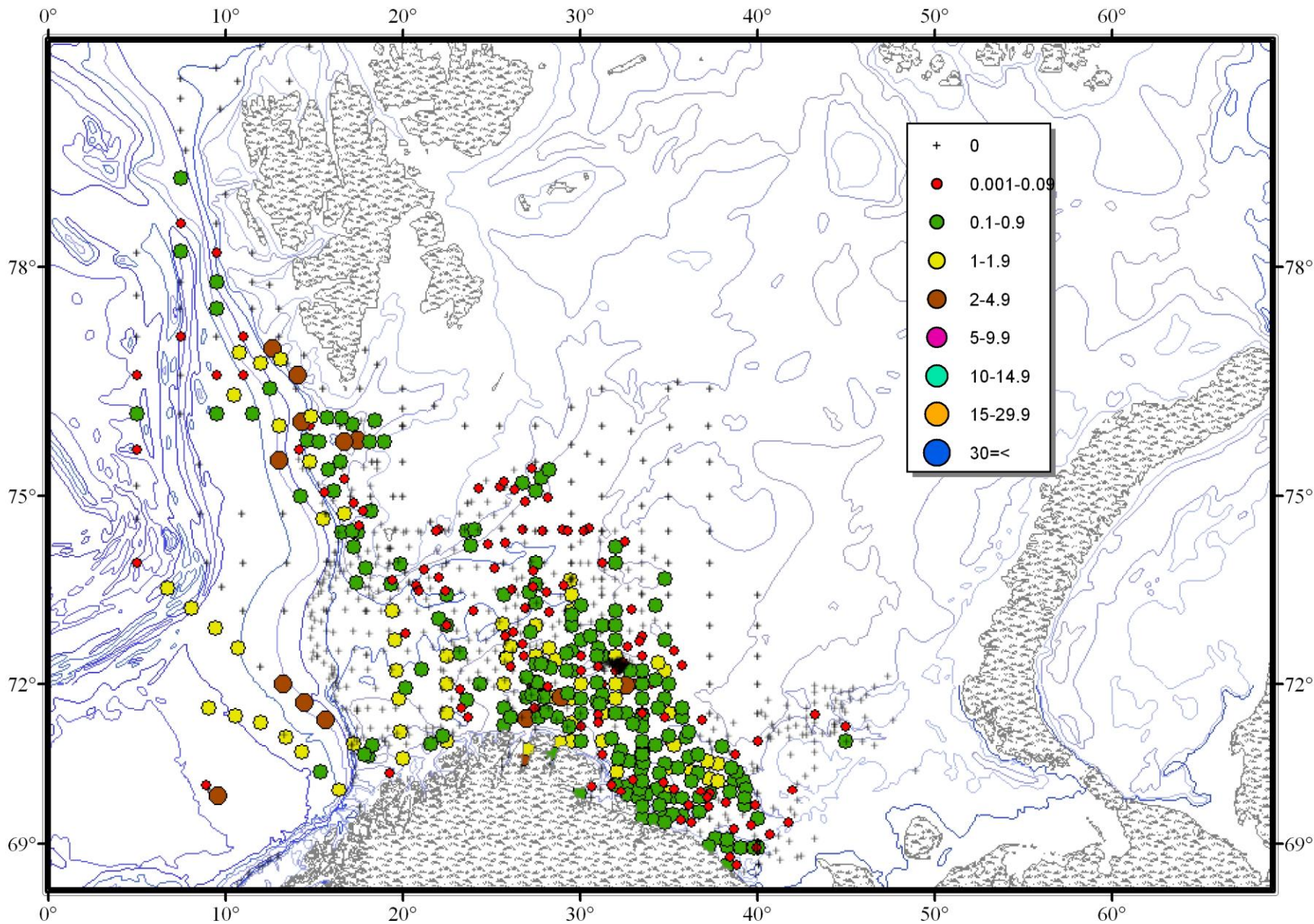
**Length composition of *Sebastes mentella* in autumn (Russian trawl survey) 1982-1989, the 1982 yearclass is shown in red.**

Length, cm

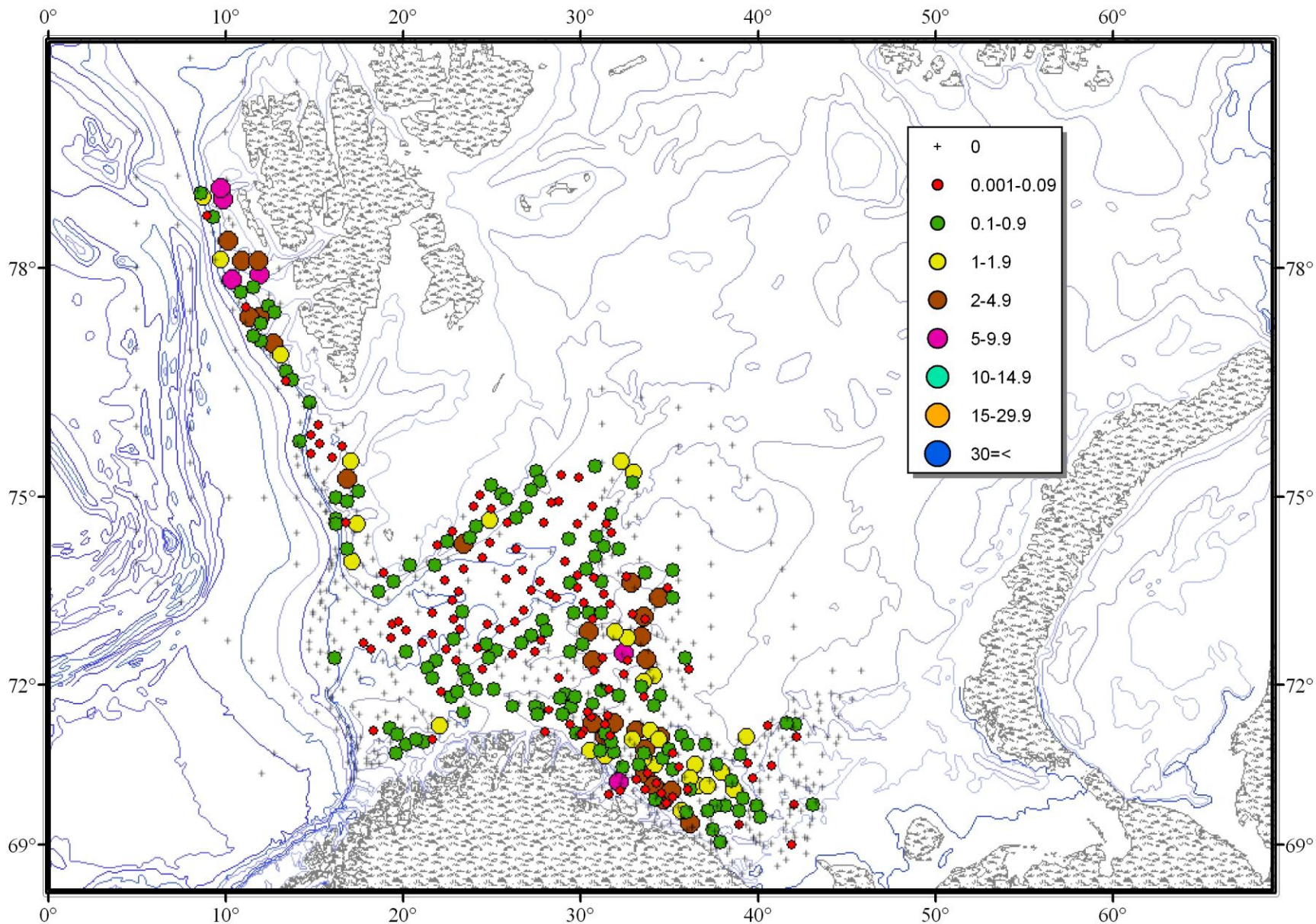
Length, cm

**Size range of the 1982 and 1988 yearclasses by age. (Using the length frequency method – the Petersen method).**

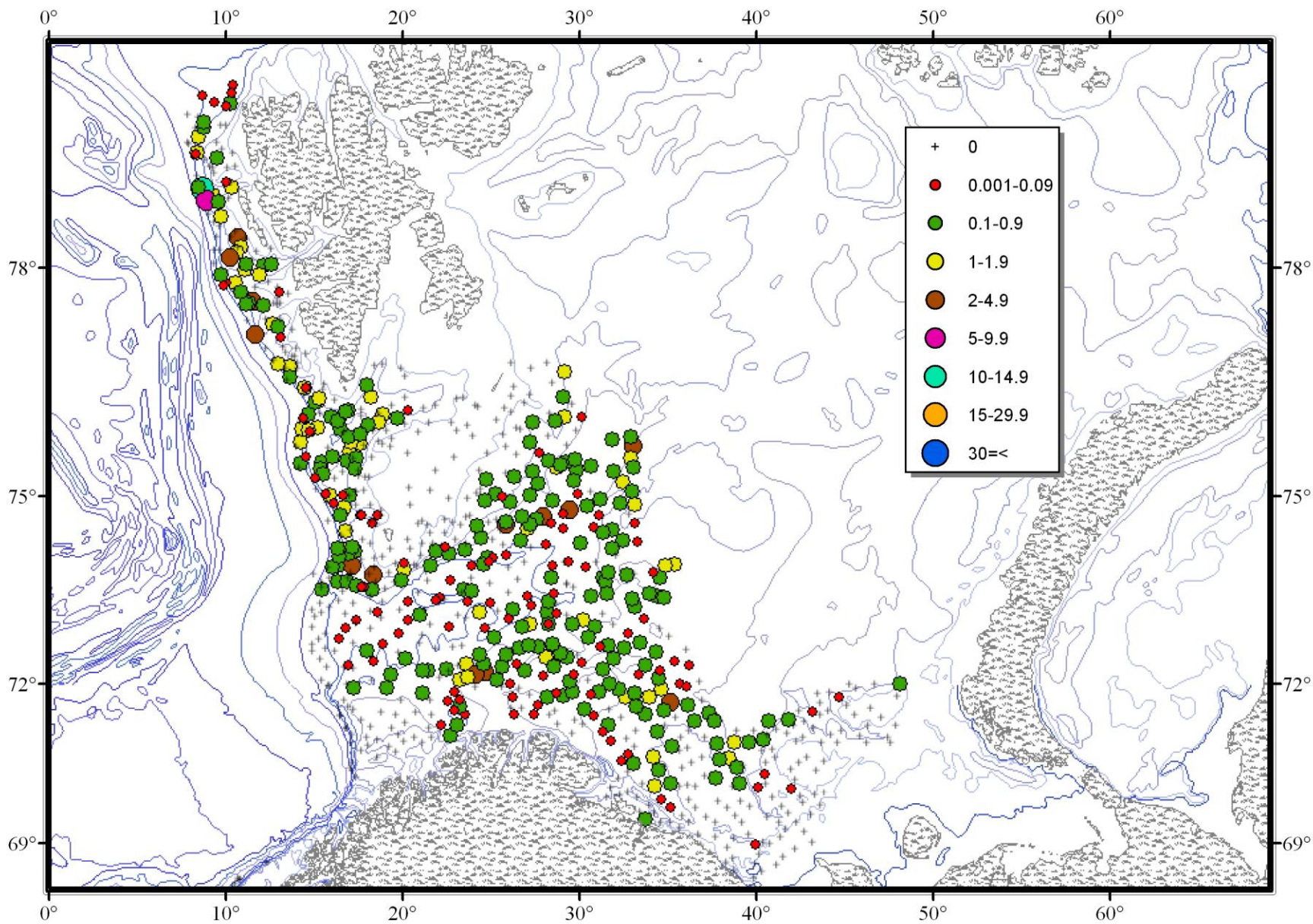
Age	Length, cm	
	Yearclass 1982	Yearclass 1988
0	4-8	5-8
1	8-12	7-13
2	10-16	11-15
3	13-17	12-18
4	14-20	15-20
5	17-25	18-23
6	19-26	20-26
7	21-28	21-28



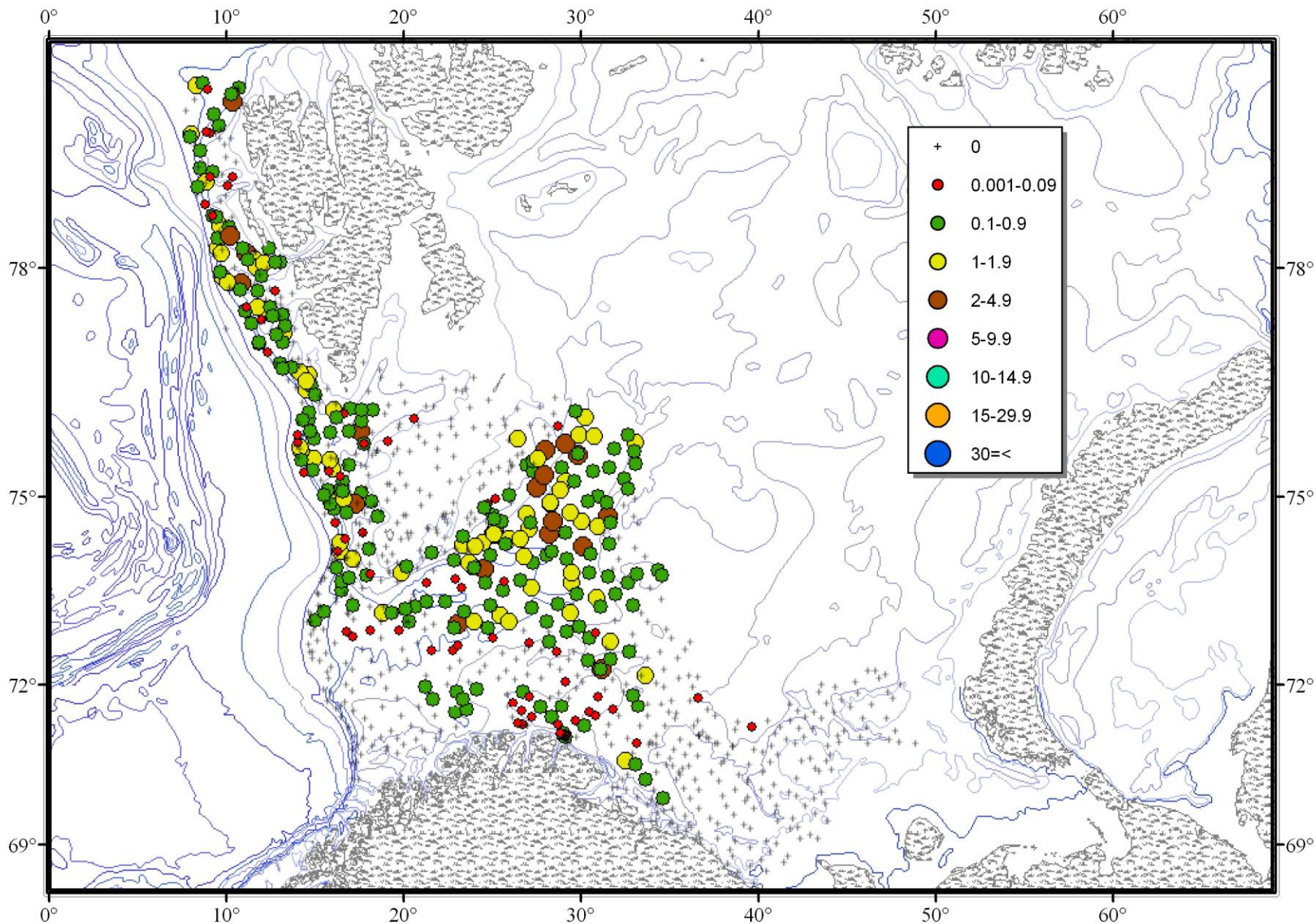
**Distribution of *S.mentella* at age 0 (yearclass 1982) in 1982. (Circles represent position of tows; their diameter corresponds to percentage of yearclass caught in a given position of its total catch during the survey)**



Distribution of *S. mentella* at age 1 (yearclass 1982) in 1983.

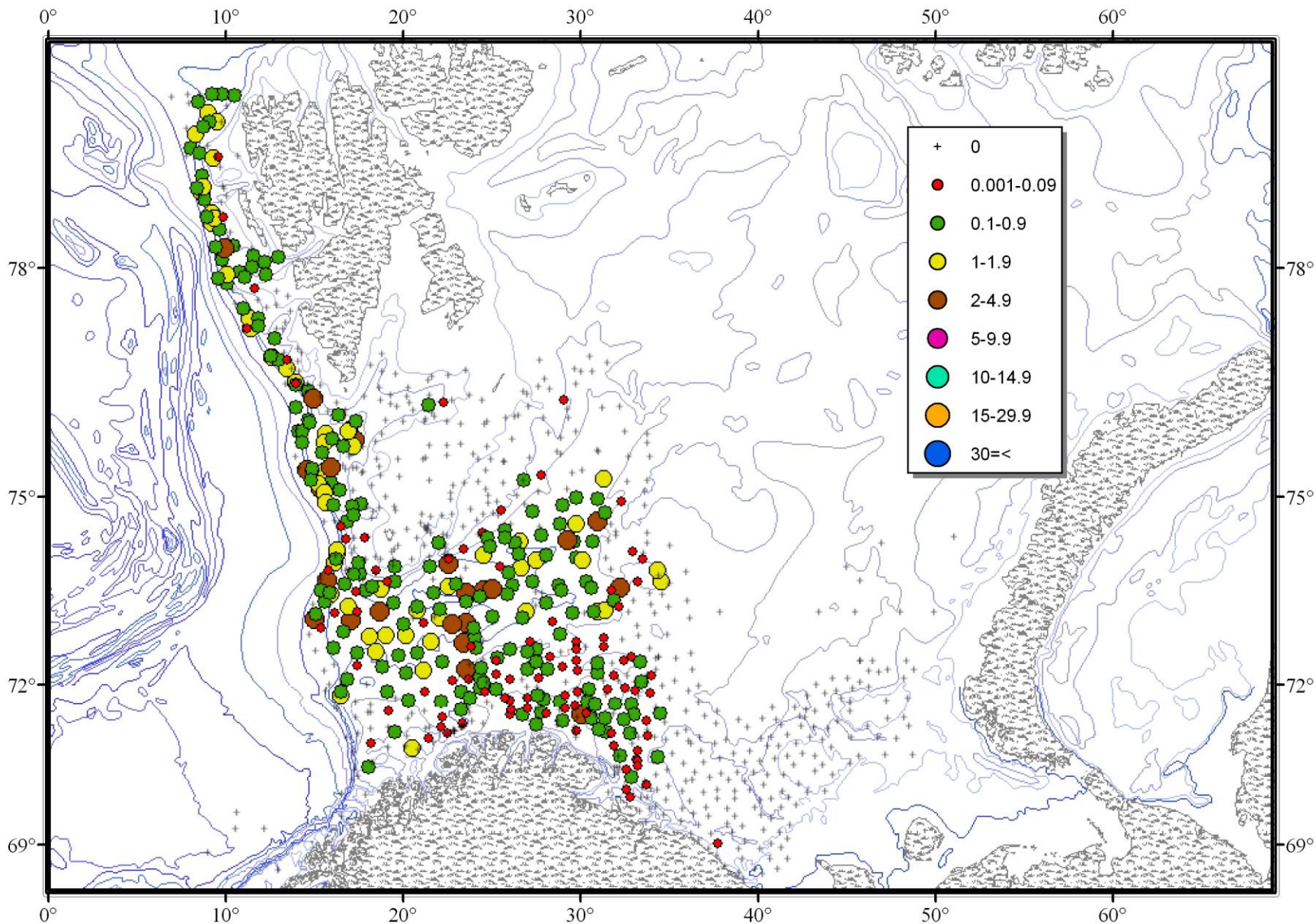


Distribution of *S.mentella* at age 2 (yearclass 1982) in 1984.

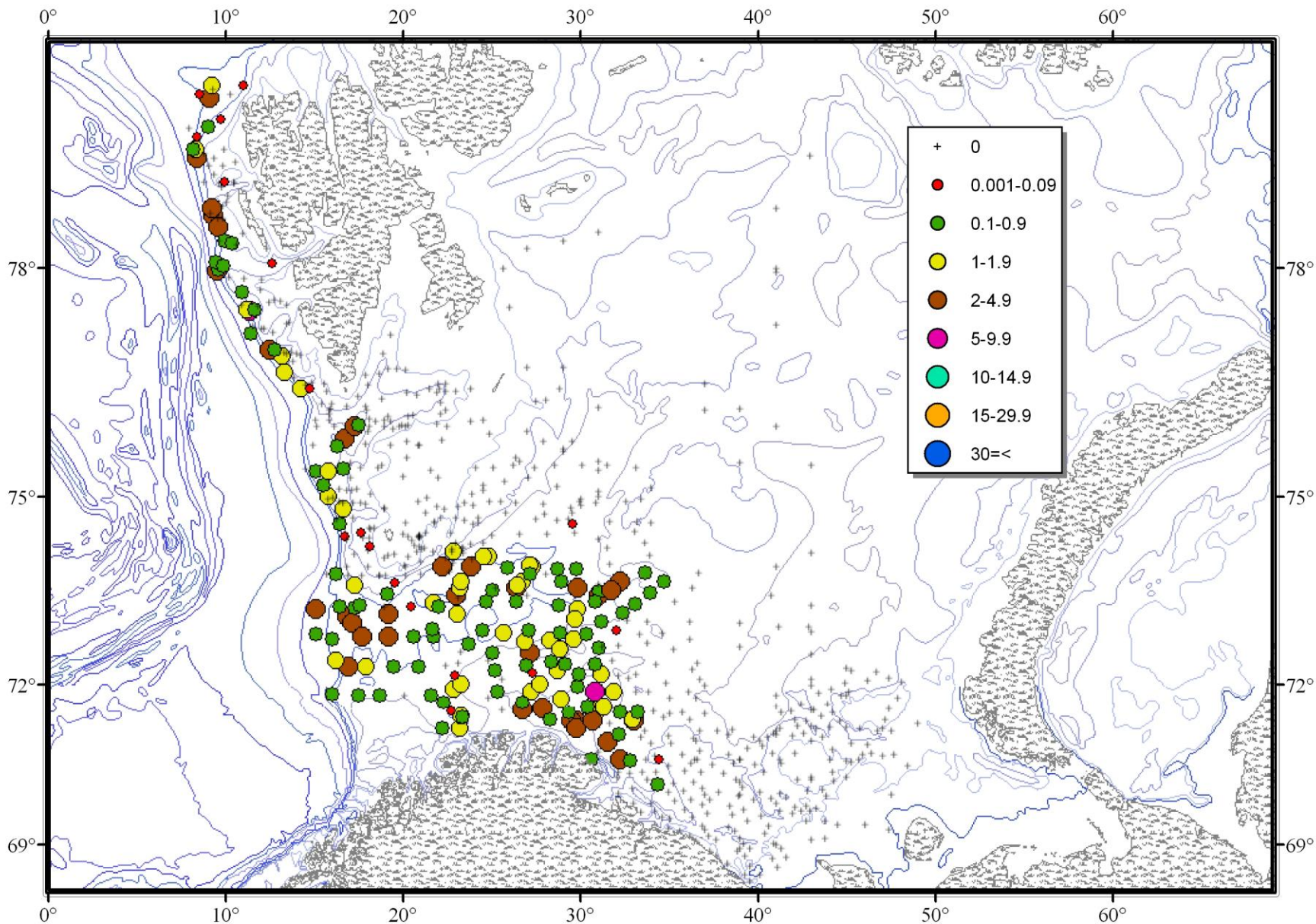


Distribution of *S.mentella* at age 3 (yearclass 1982) in 1985.

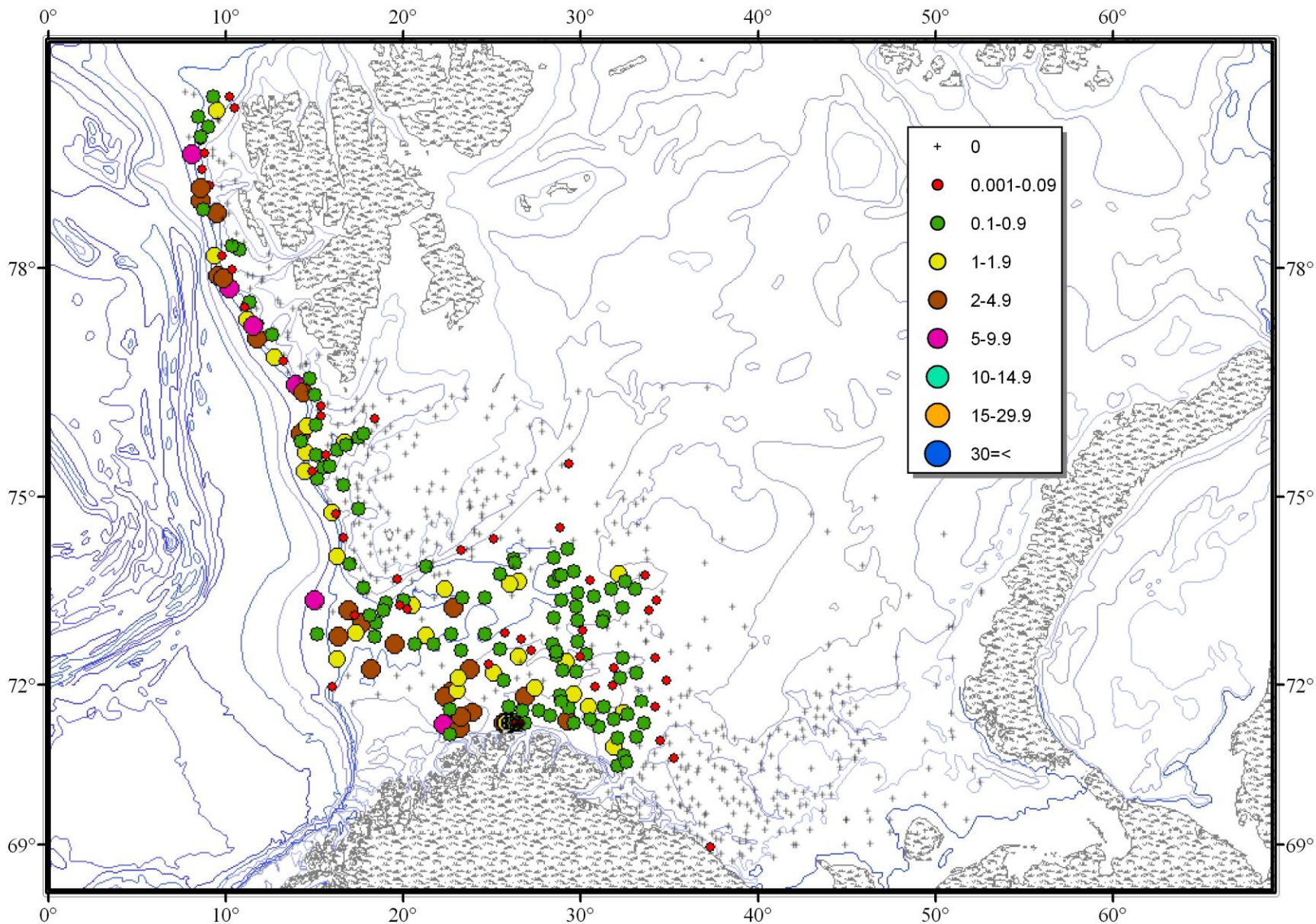




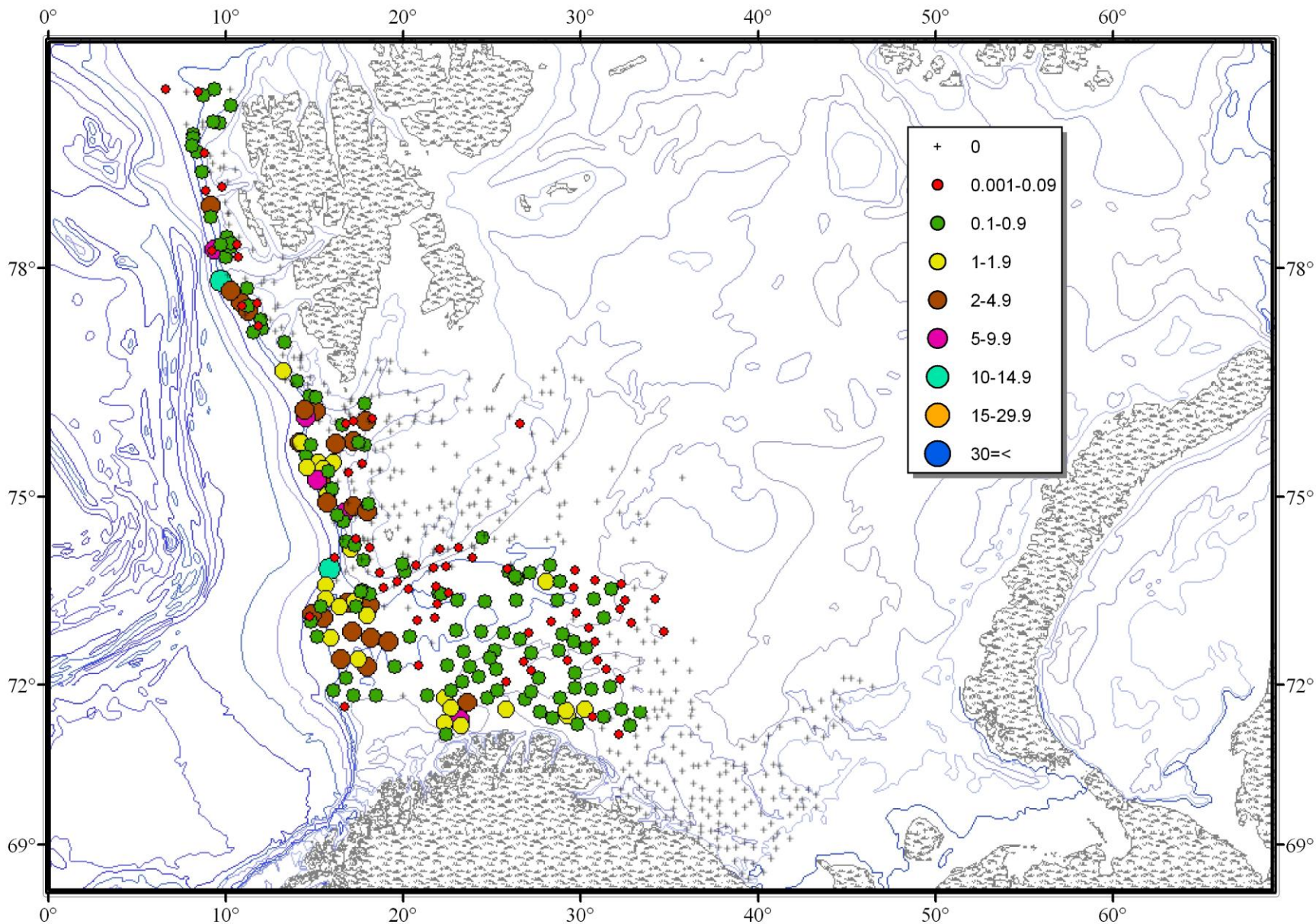
Distribution of *S.mentella* at age 4 (yearclass 1982) in 1986.



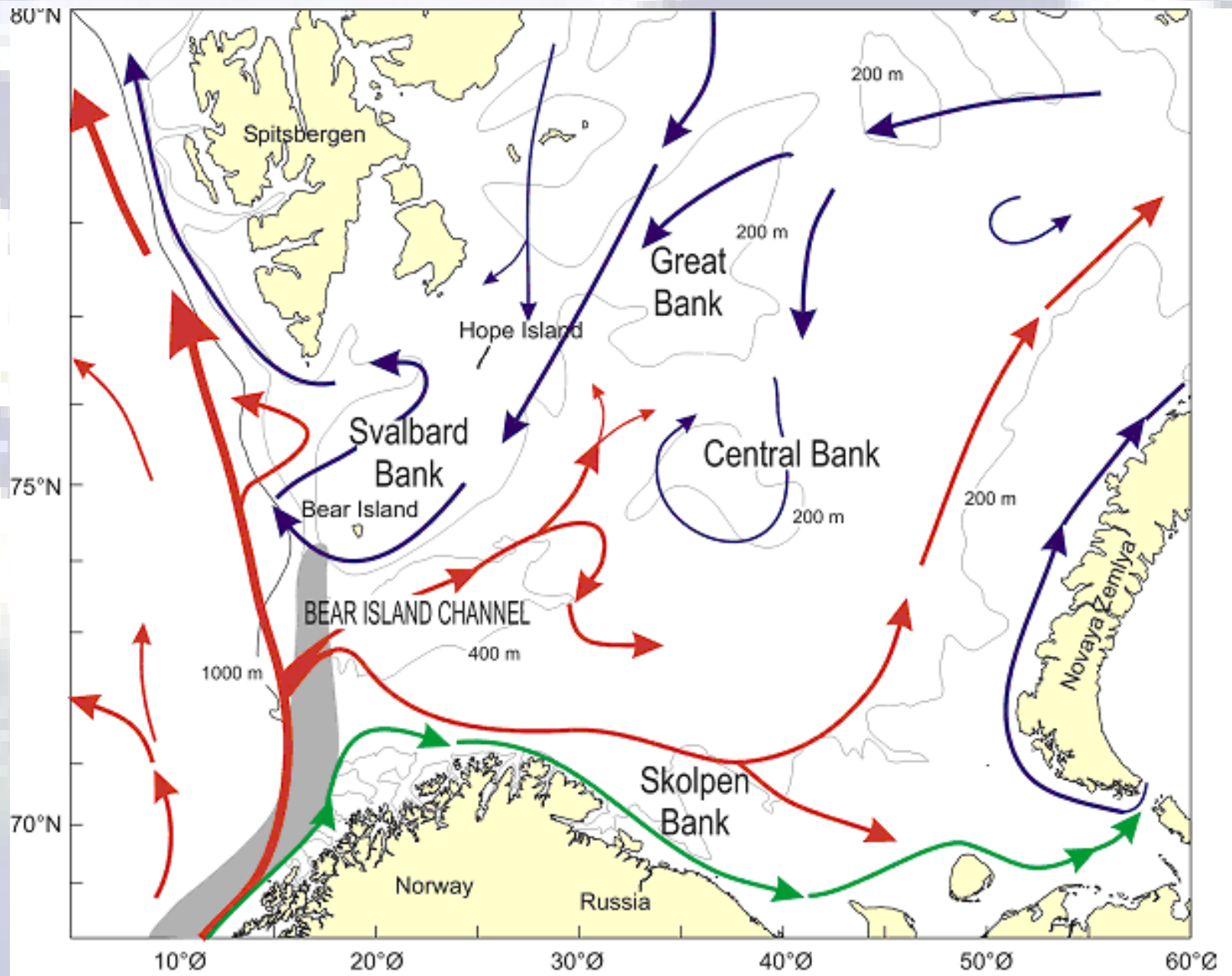
Distribution of *S.mentella* at age 5 (yearclass 1982) in 1987.



Distribution of *S.mentella* at age 6 (yearclass 1982) in 1988.



Distribution of *S.mentella* at age 7 (yearclass 1982) in 1989.



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