

NSSH data from surveys

Surveys by quarter

1st quarter

Juveniles from winter survey in Barents Sea	1995-2013
SSB from acoustic survey on the spawning grounds	1995-2008, not all years
SSB from wintering survey	1995-1999
SSB from larval survey	1995-2013

2nd quarter

Larvae from survey in April	1995-2013
Juveniles from survey in May in BS (IESNS)	1995-2013
SSB from survey in May in NS (IESNS)	1996-2013

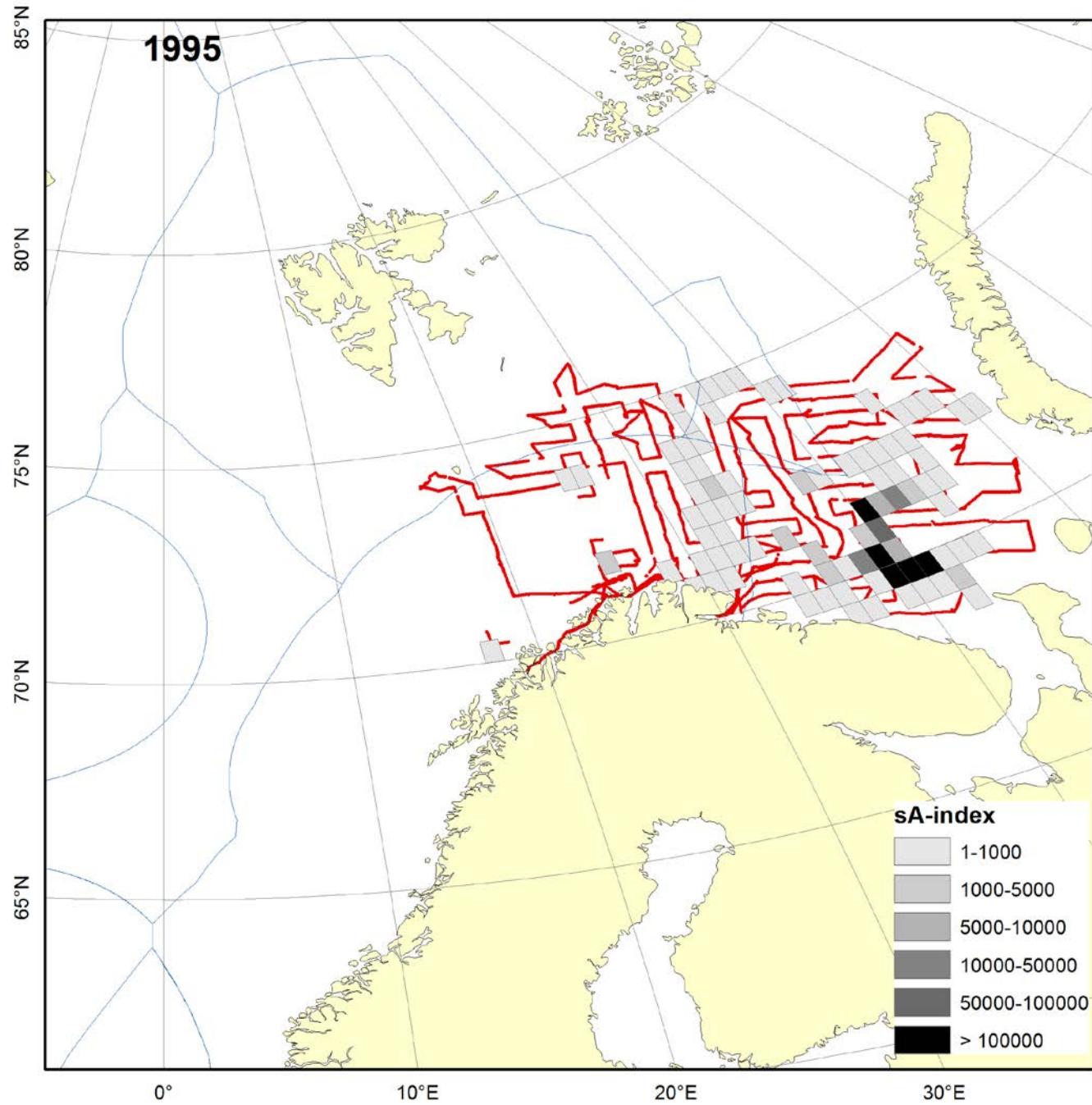
3rd quarter

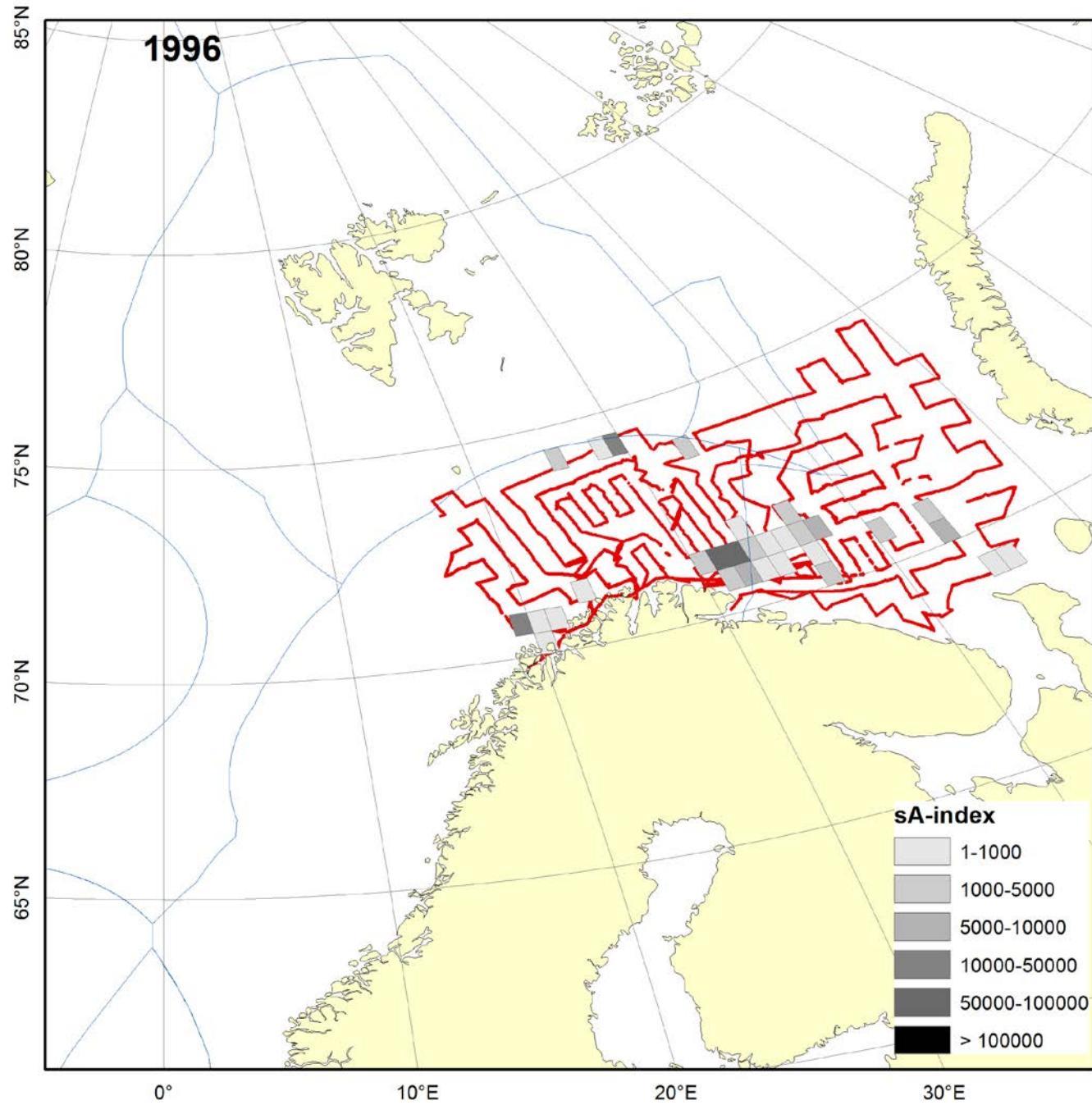
0-group from ecosystem survey in BS	1995-2013
Juveniles from ecosystem survey in BS	2004-2013
SSB from survey in July in NS (IESSNS)	2009-2013

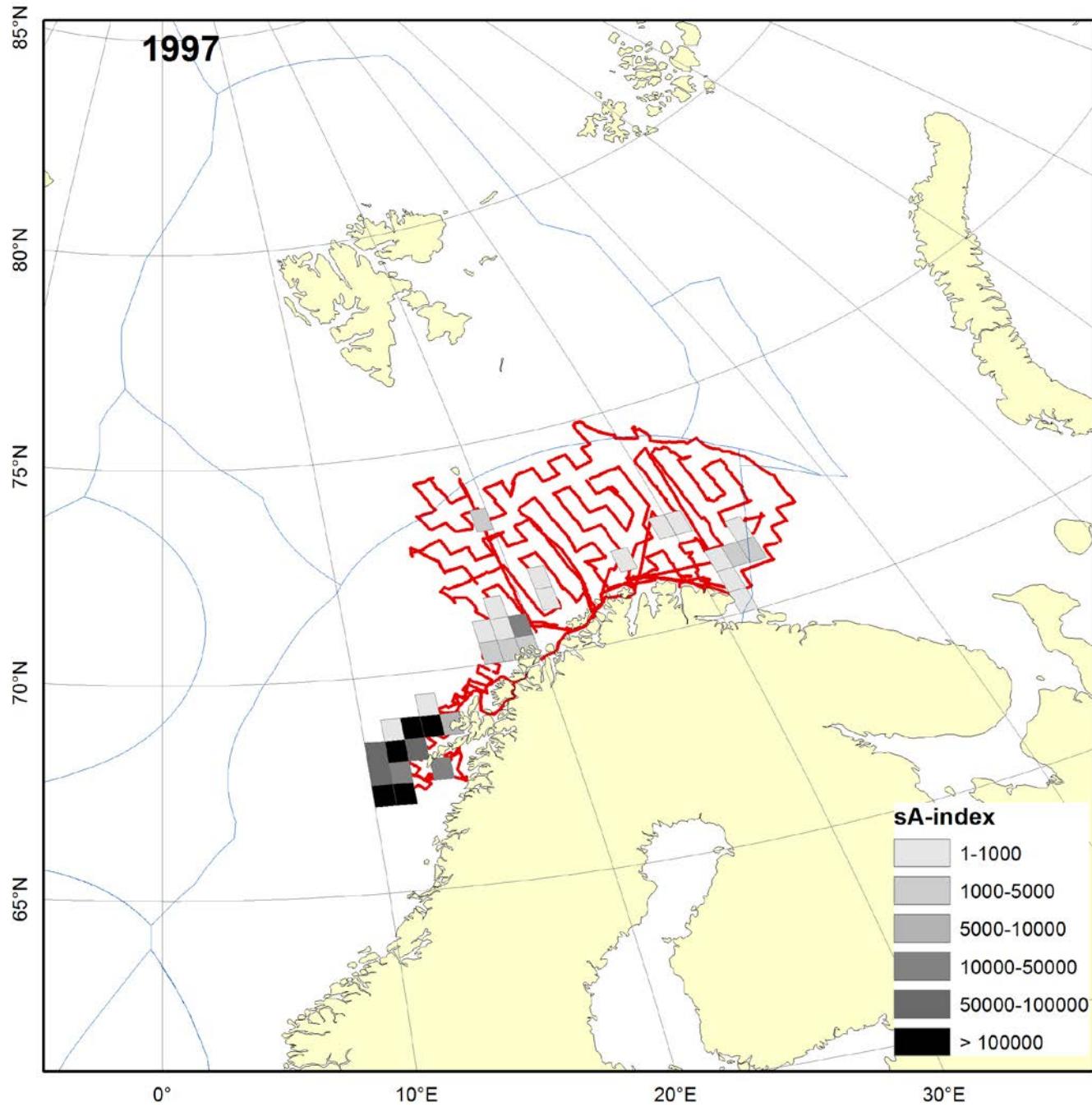
4th quarter

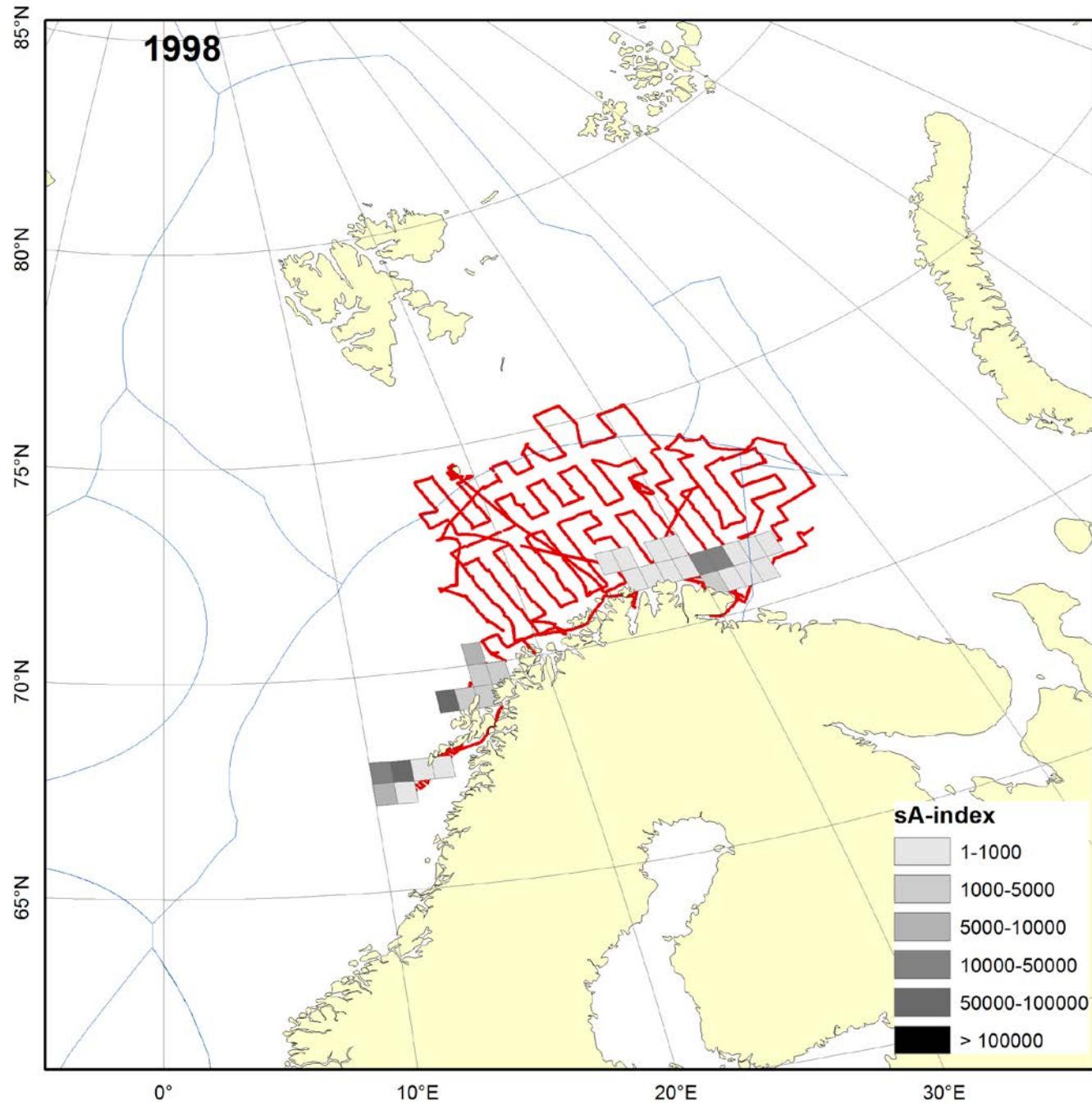
SSB from wintering survey	1995-2007
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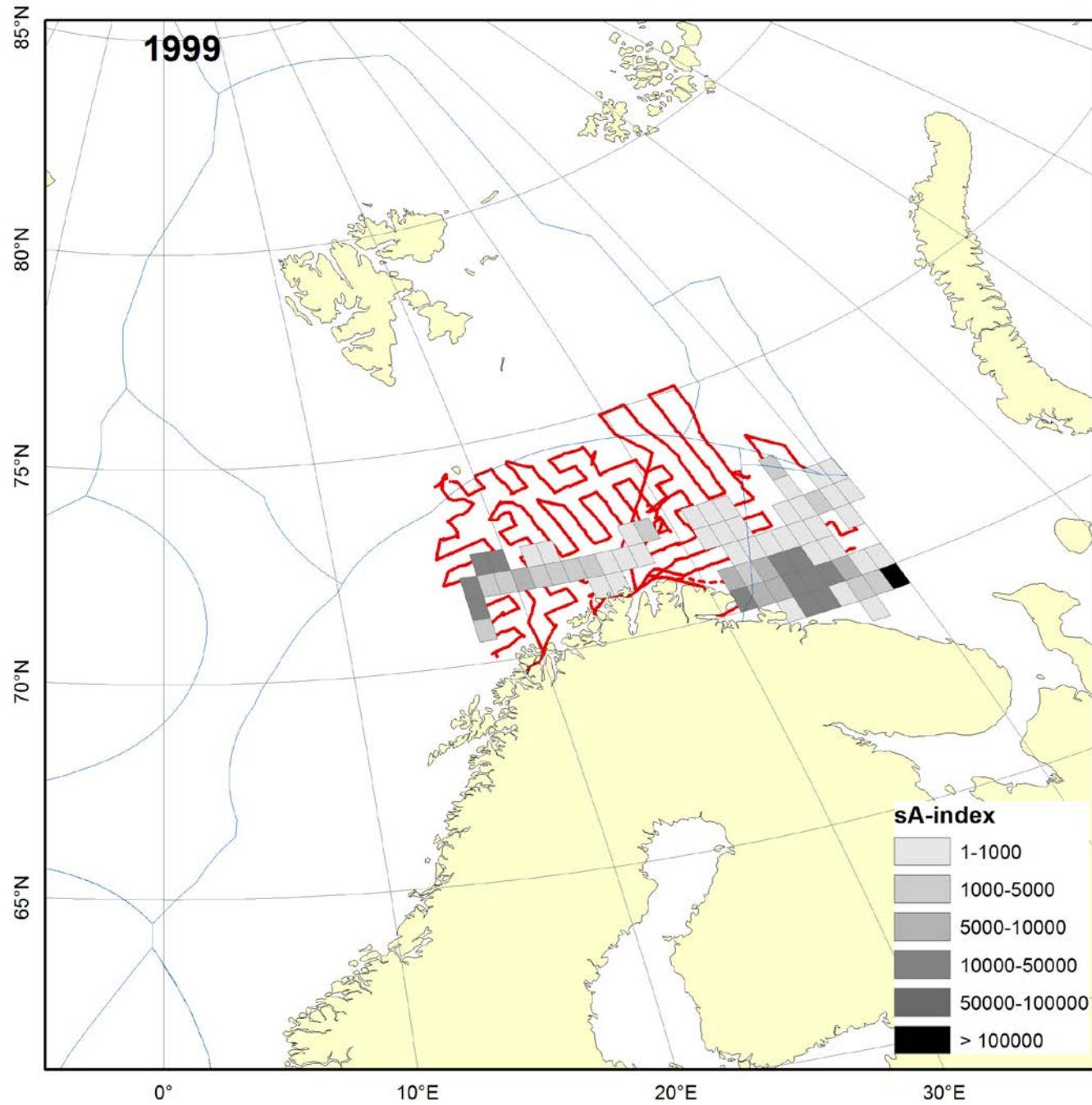
Juveniles from winter survey 1995-2013 acoustic

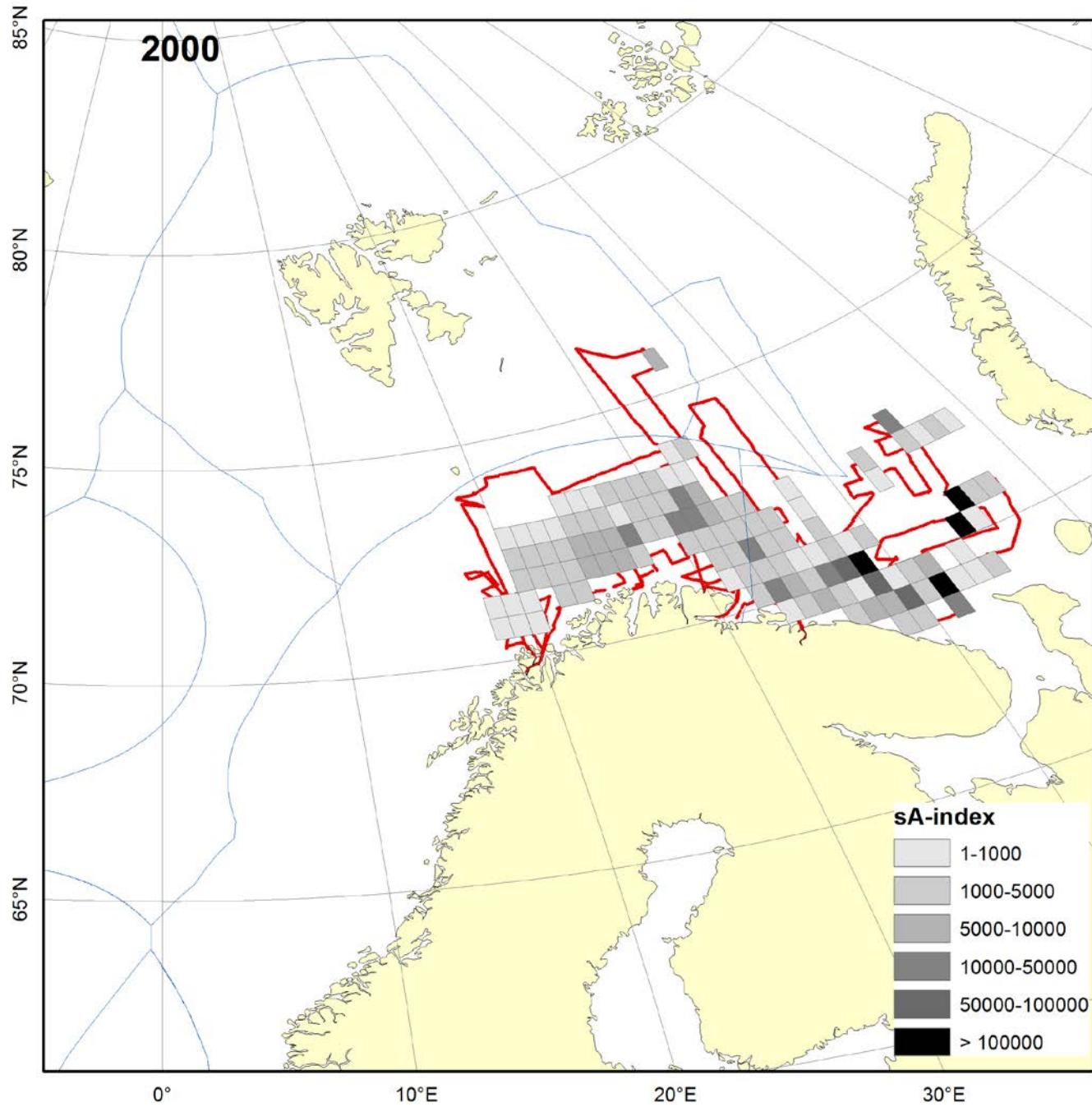


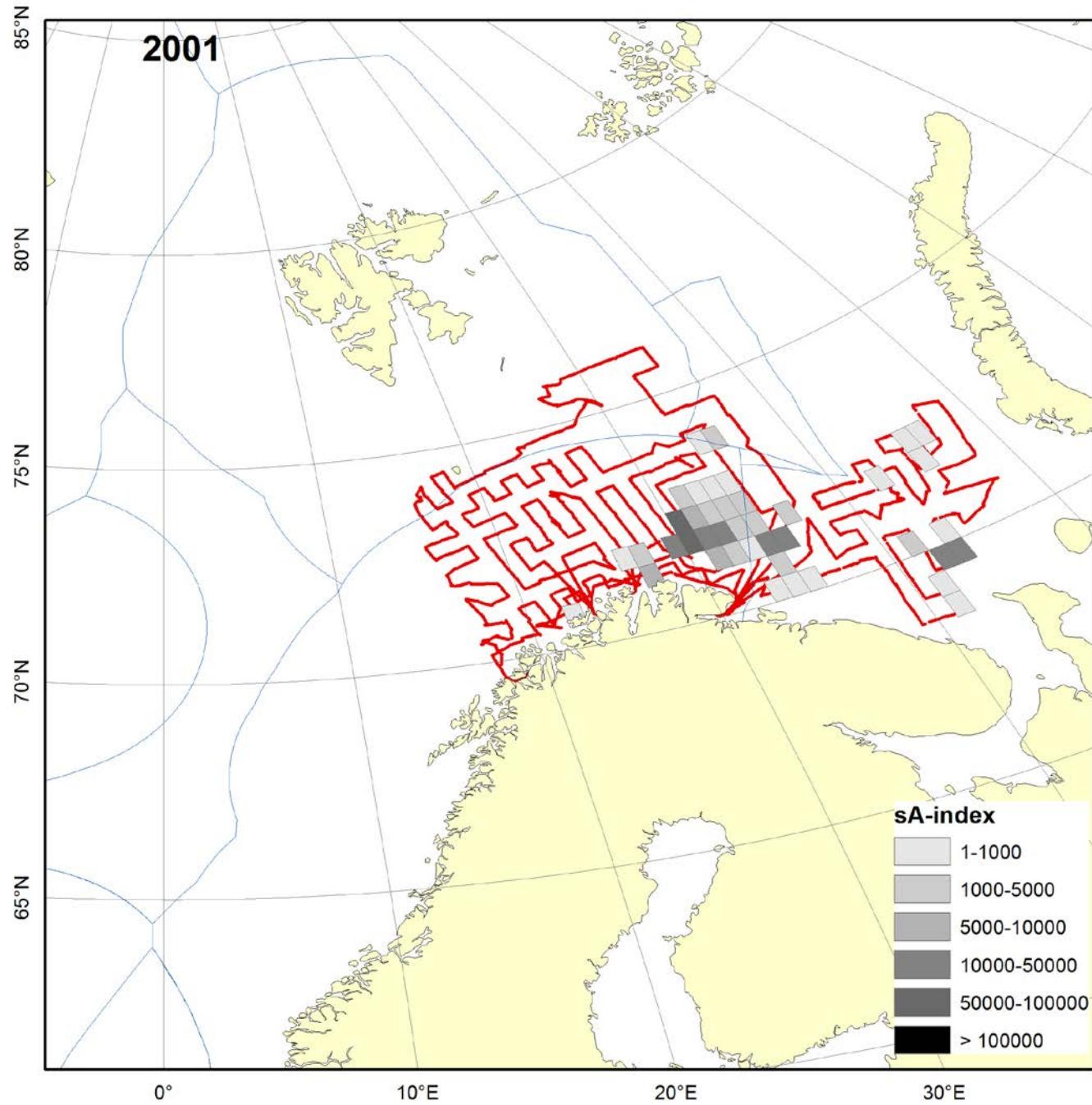


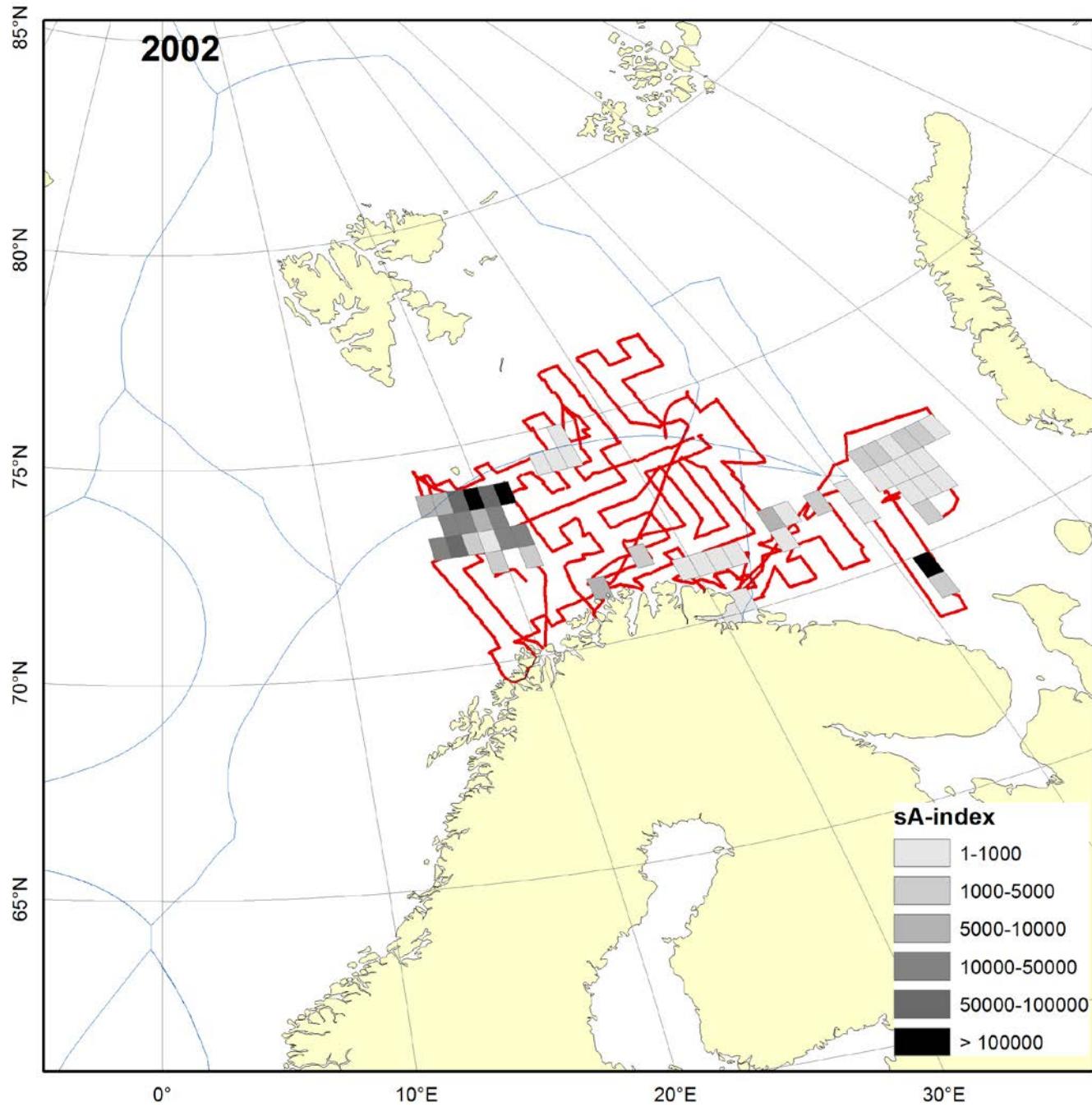


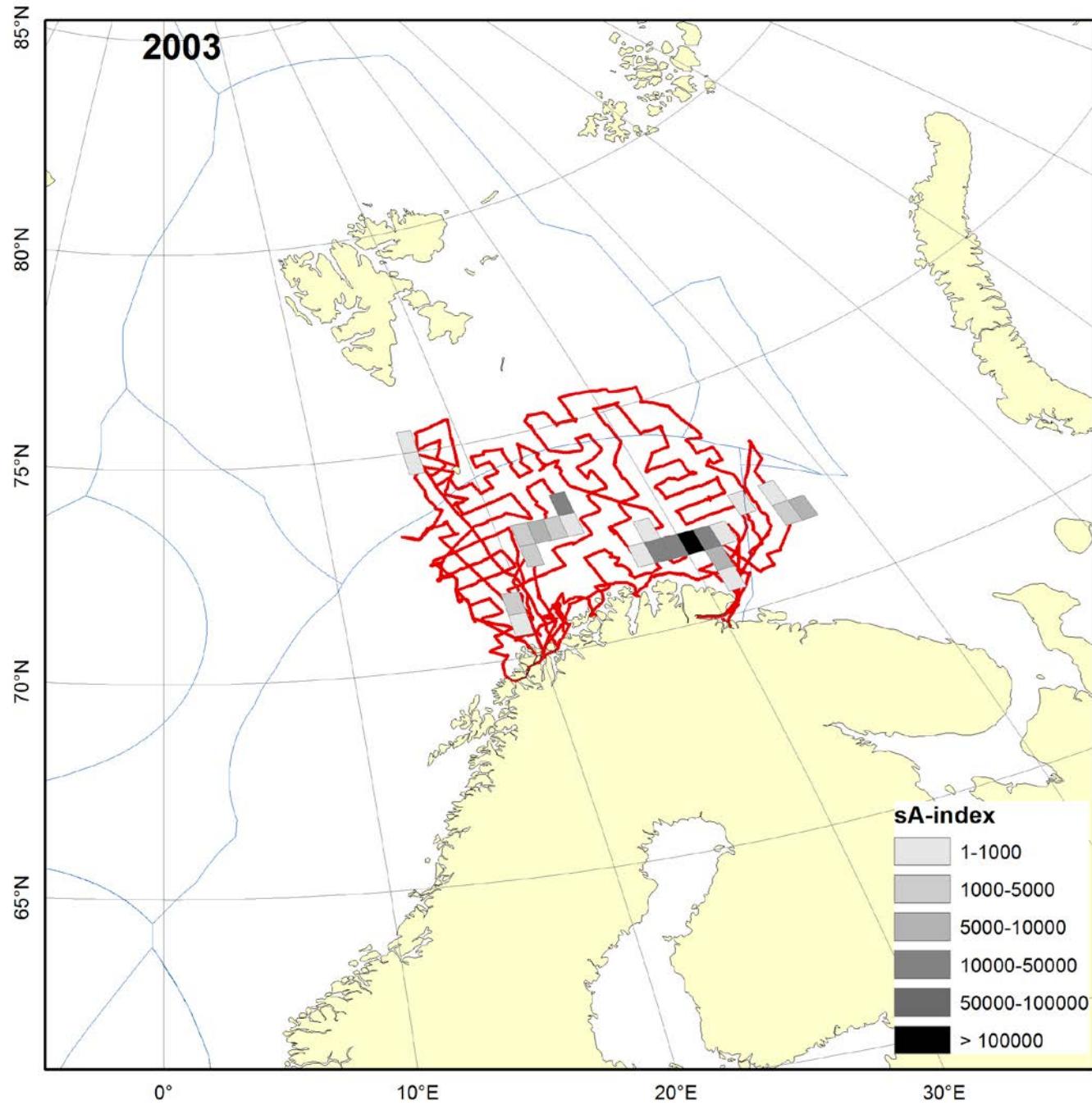


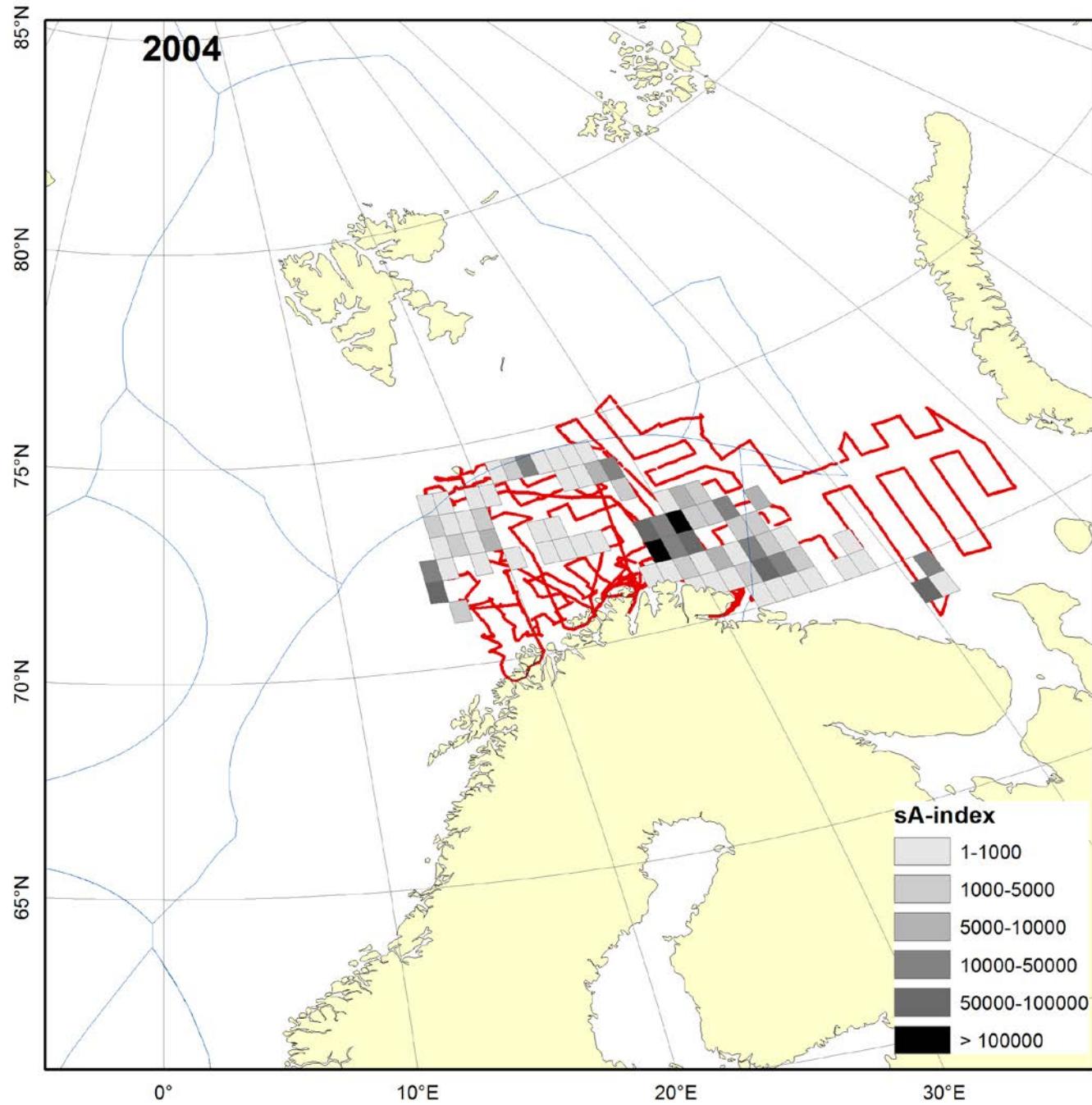


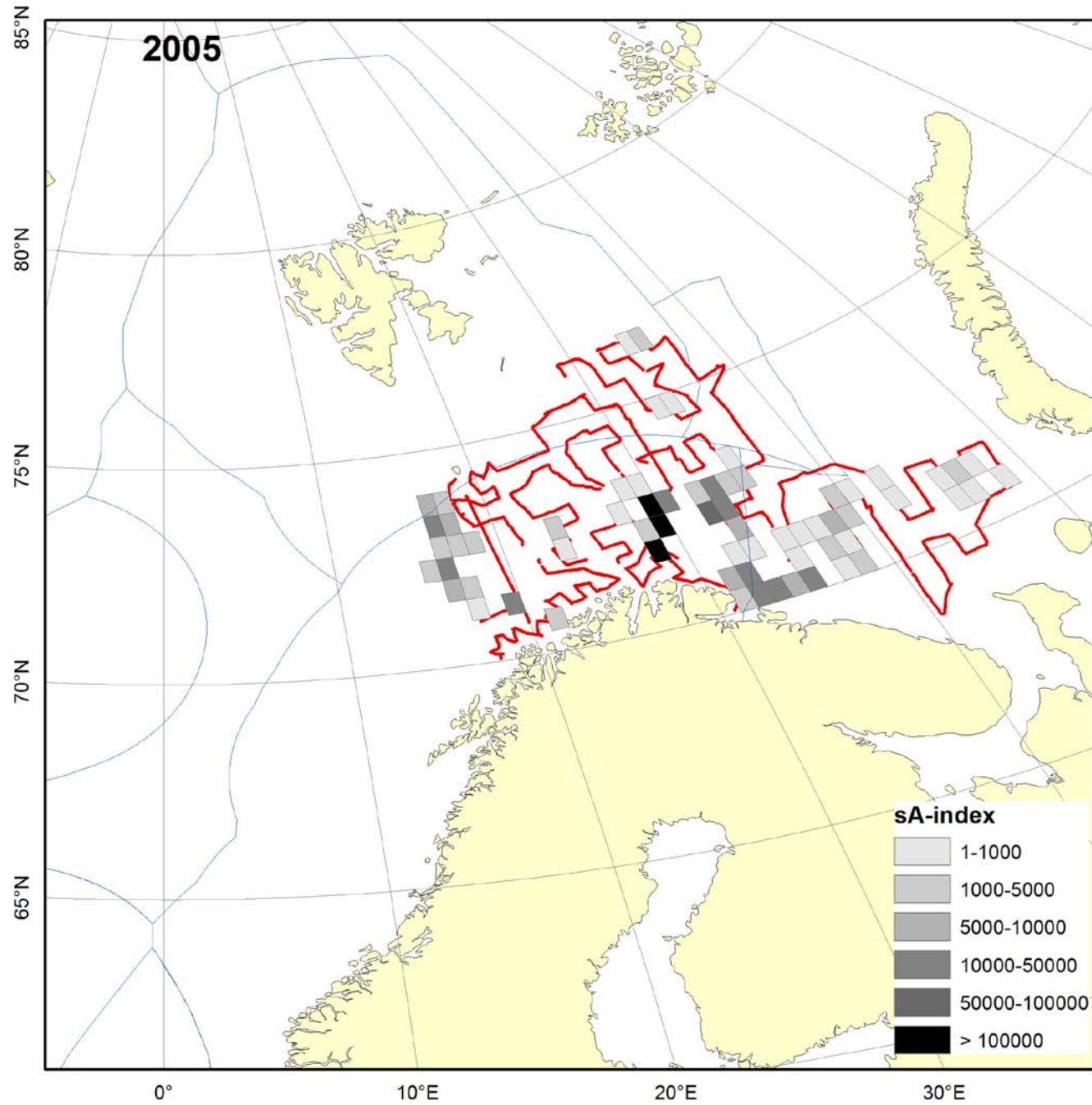


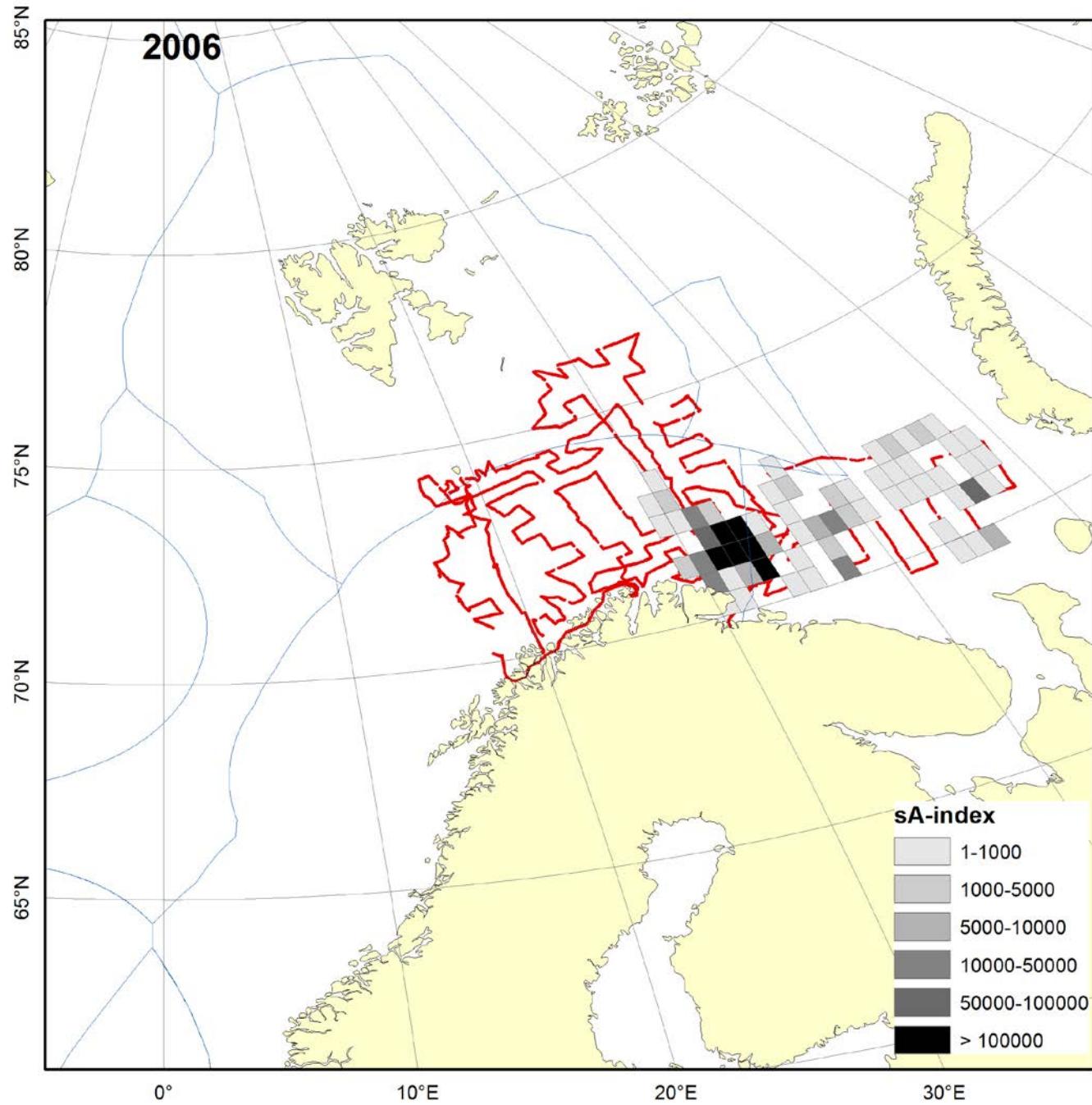


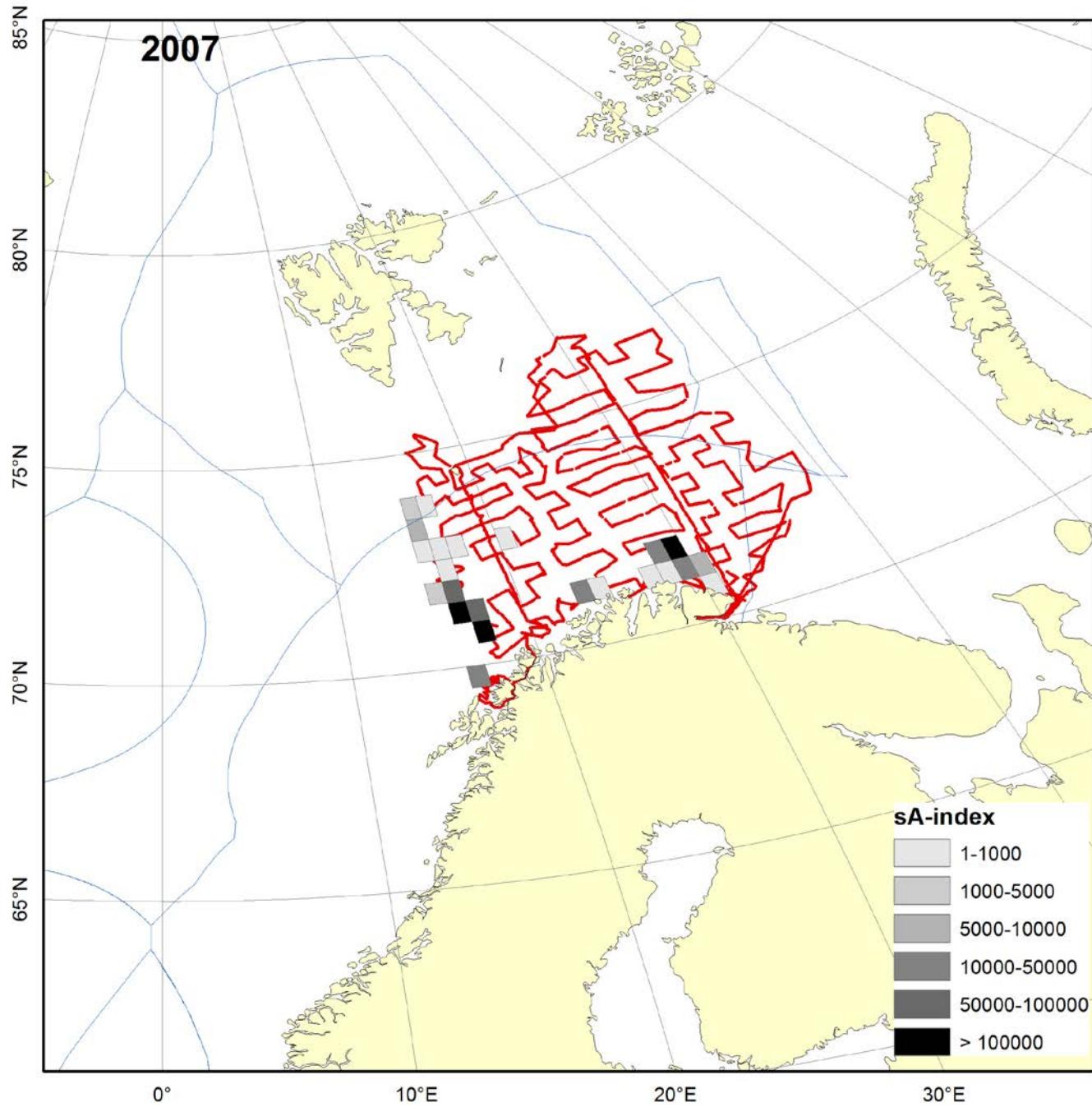


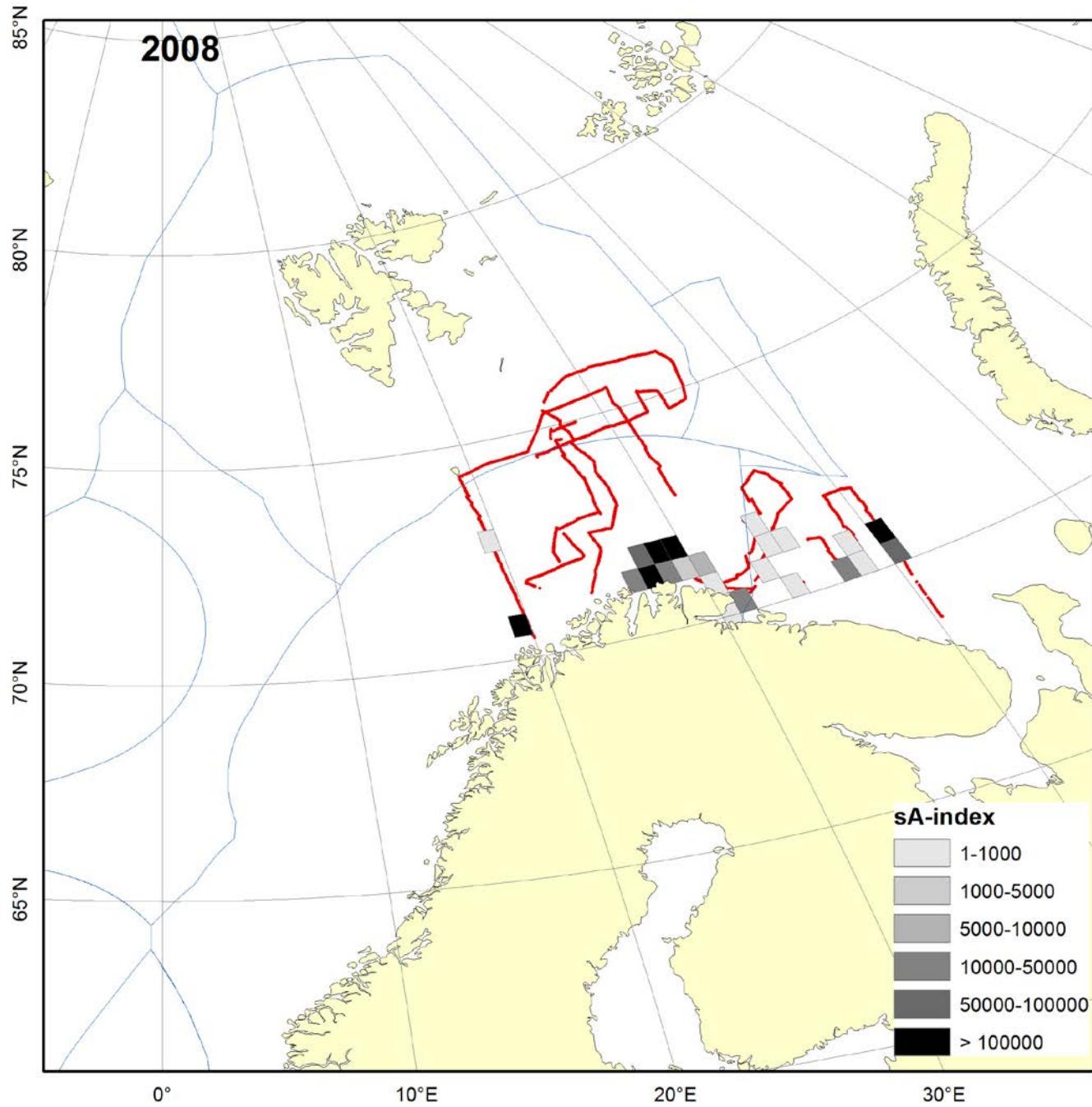


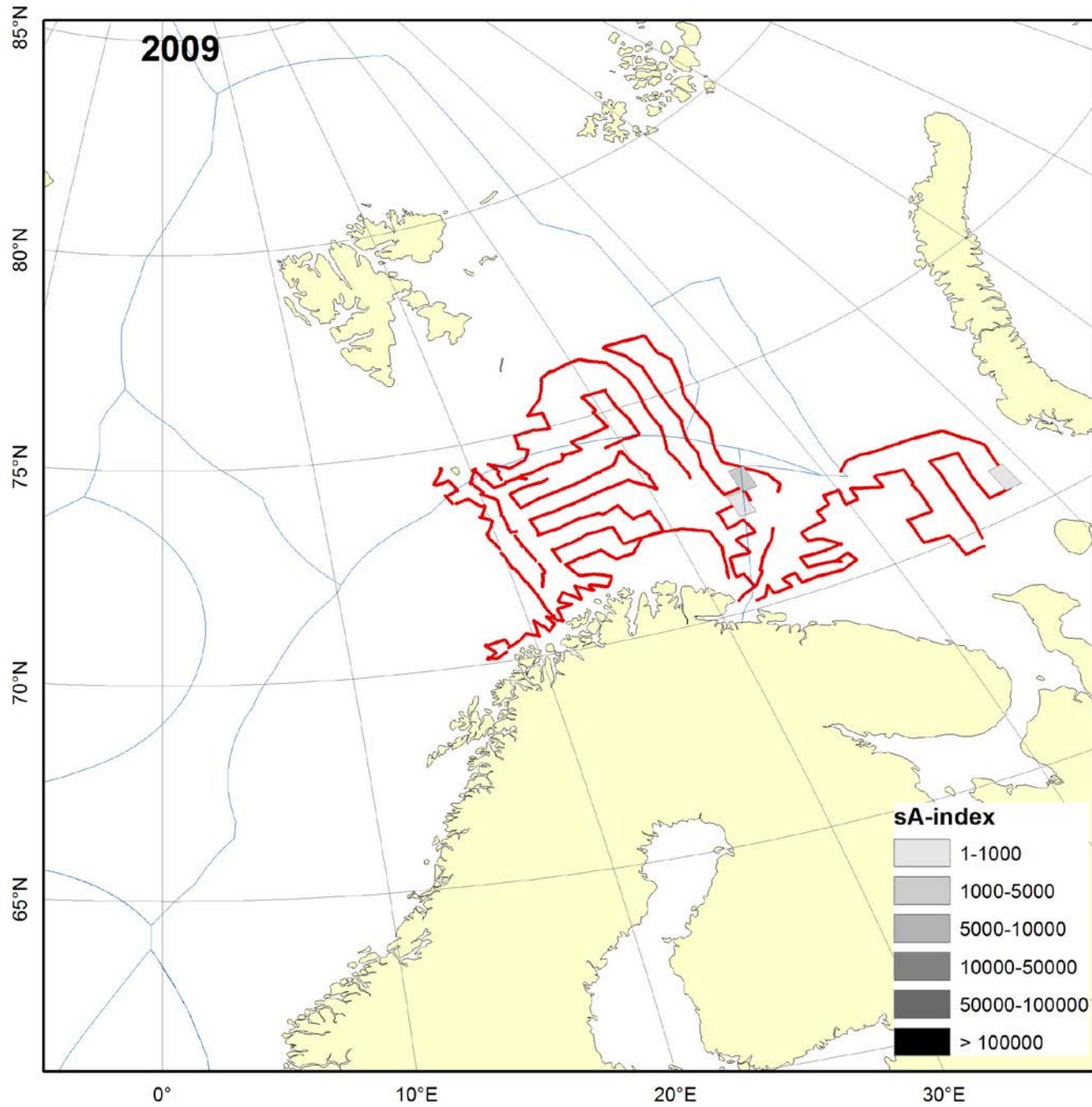


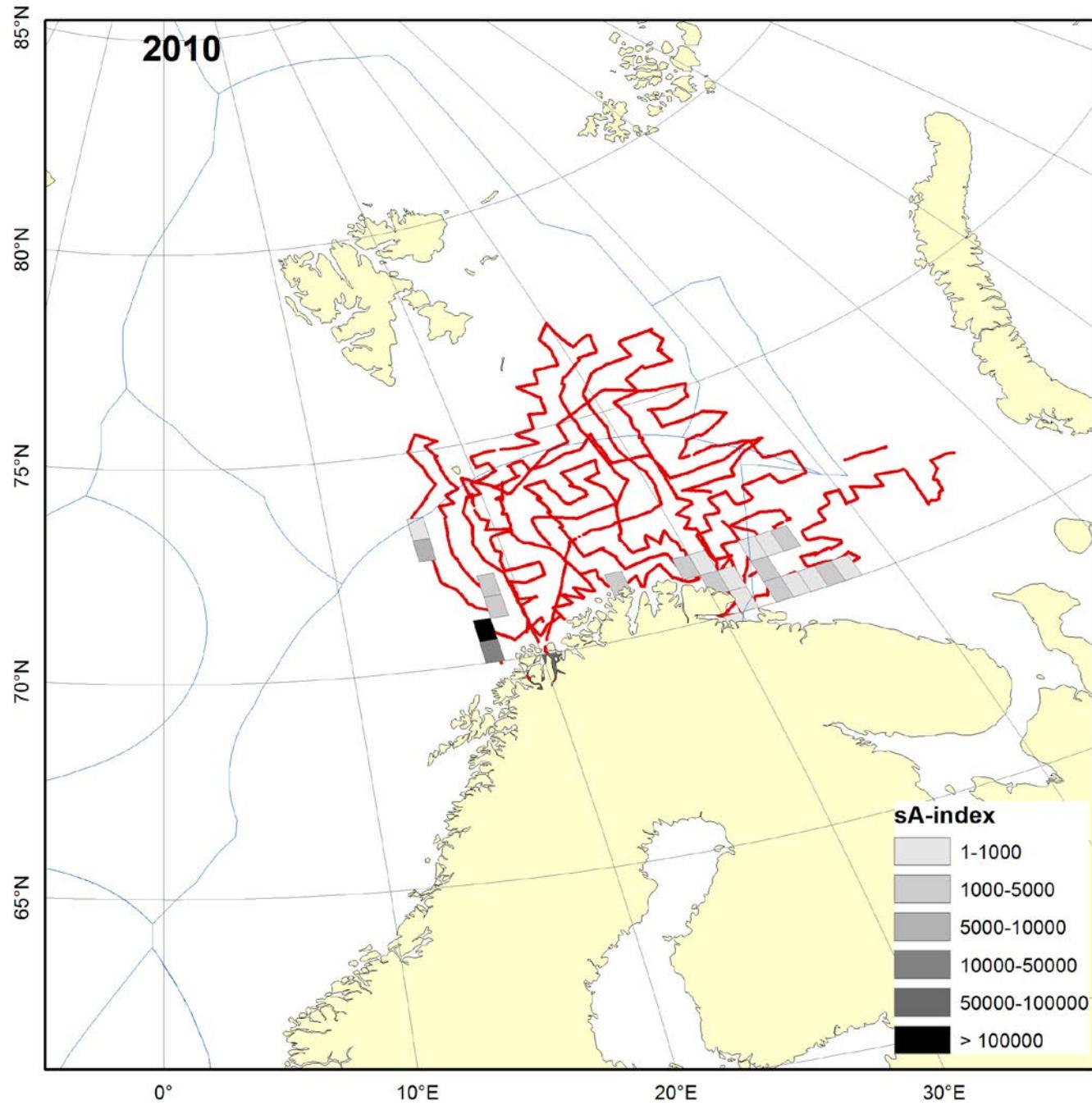


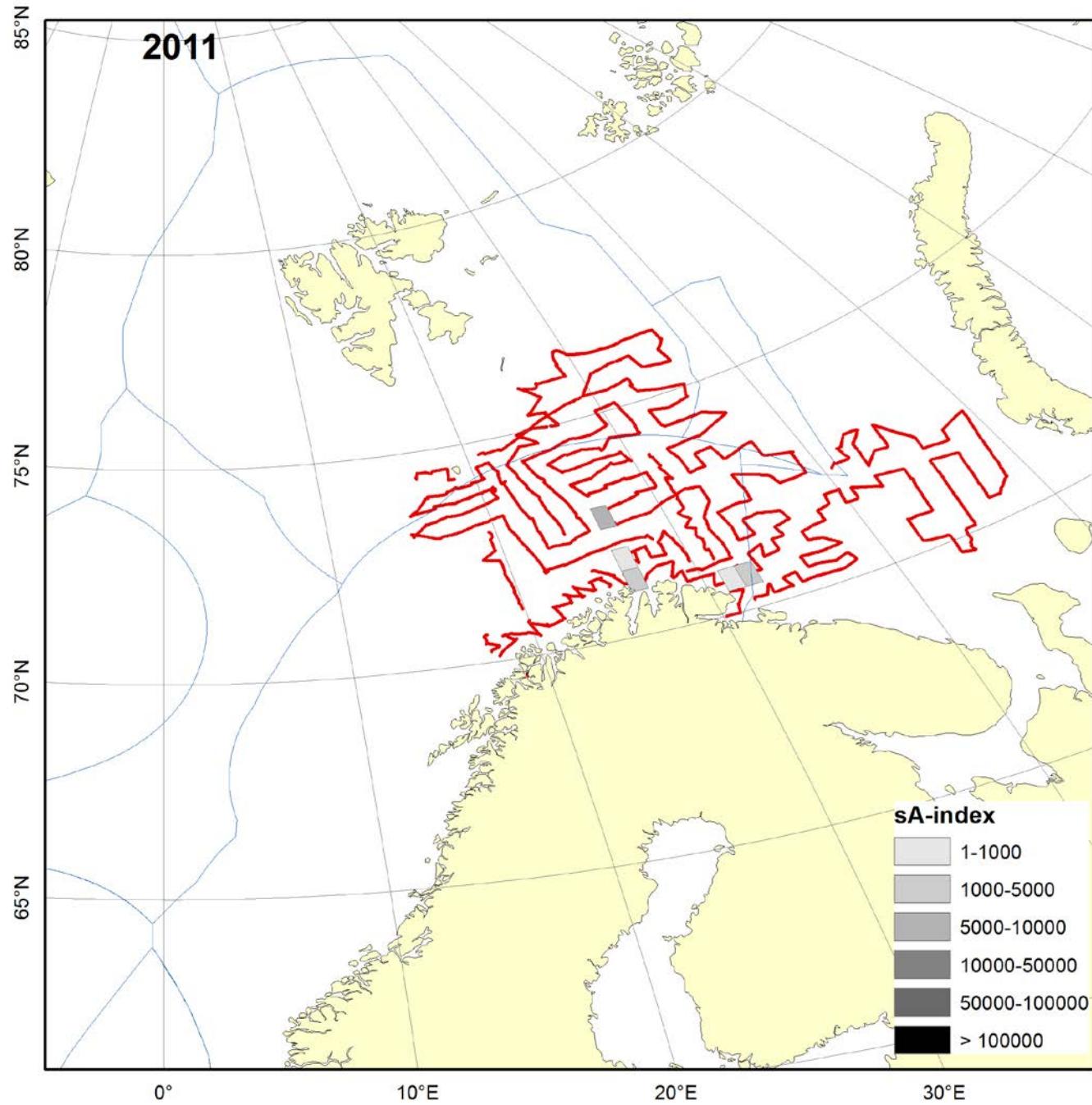


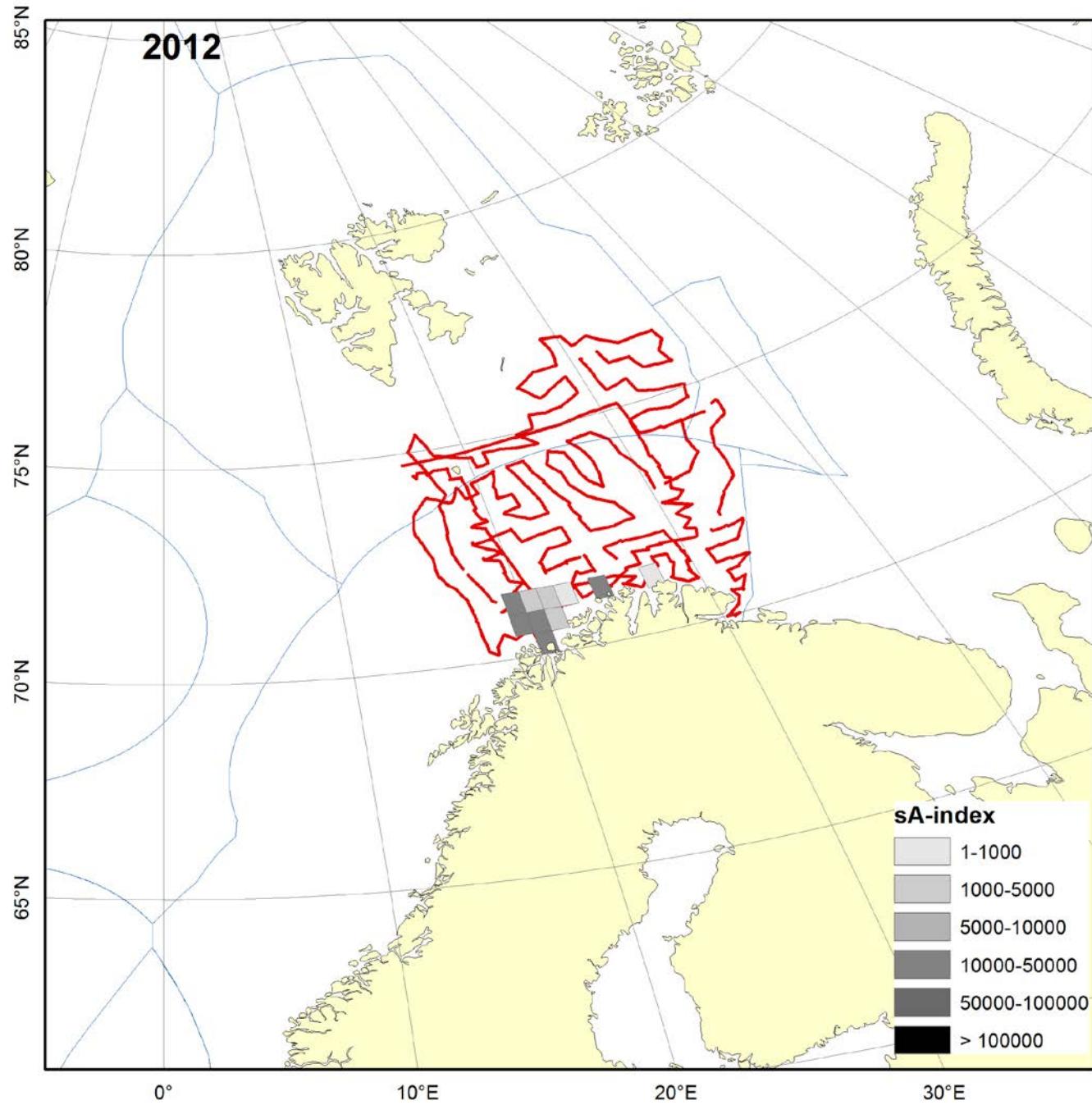


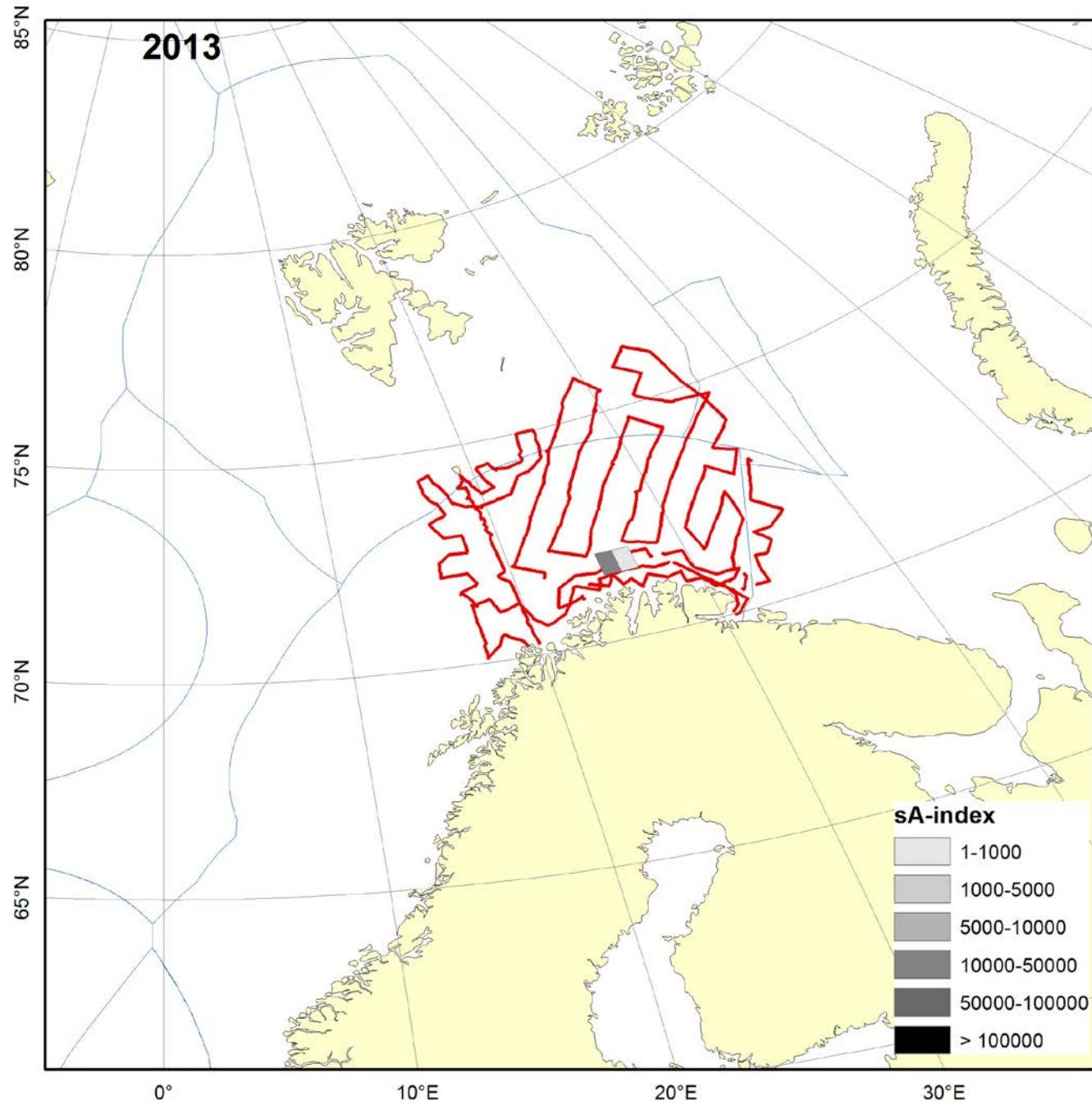












Year	cruise	EU	Norway	Iceland	Svalbard	JanMayen	Faeroes	InterBarSea	InterNorwSea	Russia	SpecialAreaBar	Total
1995			0.3		0.0			0.0		99.7	0.0	100
1996			84.2		1.0			0.0		14.8	0.0	100
1997			99.9		0.0			0.0		0.1	0.0	100
1998			99.8		0.0			0.0		0.2	0.0	100
1999			24.9		0.0			0.1		74.6	0.3	100
2000			15.9		0.4			0.0		83.6	0.0	100
2001			65.8		0.0			0.4		33.9	0.0	100
2002			77.1		1.6			0.0		21.3	0.0	100
2003			96.5		0.3			0.0		3.2	0.0	100
2004			91.5		0.1			0.0		8.4	0.0	100
2005			87.1		0.6			0.0		12.3	0.0	100
2006			66.4		0.0			0.0		33.6	0.0	100
2007			99.8		0.2			0.0		0.0	0.0	100
2008			79.3		0.0			0.0		20.7	0.0	100
2009			43.1		0.0			0.0		56.9	0.0	100
2010			96.9		0.0			0.0		3.1	0.0	100
2011			94.3		0.0			0.0		5.7	0.0	100
2012			100.0		0.0			0.0		0.0	0.0	100
2013			100.0		0.0			0.0		0.0	0.0	100
Average			74.9		0.2			0.0		24.8	0.0	100
Average 2013 - 2009			86.9		0.0			0.0		13.1	0.0	100
Average 2013 - 2004			85.9		0.1			0.0		14.1	0.0	100
Average 2013 - 1999			75.9		0.2			0.0		23.8	0.0	100

SSB from survey on spawning
grounds 1995-2008, acoustic

1996

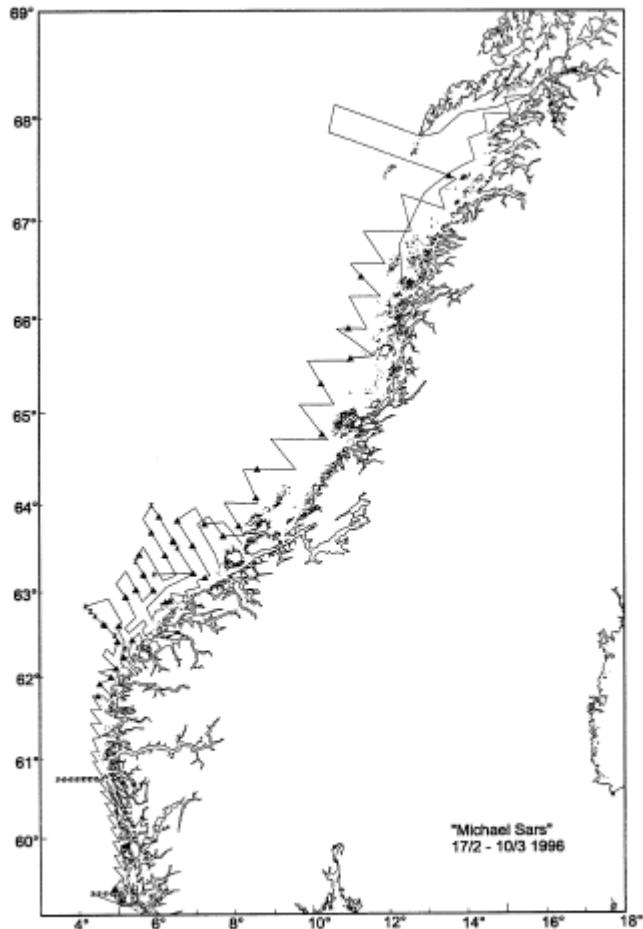


Fig. 1. Kurser og stasjoner.

- Z - CTD sonde.
- ▲ - Pelagisk trål.
- - Bunentrål.

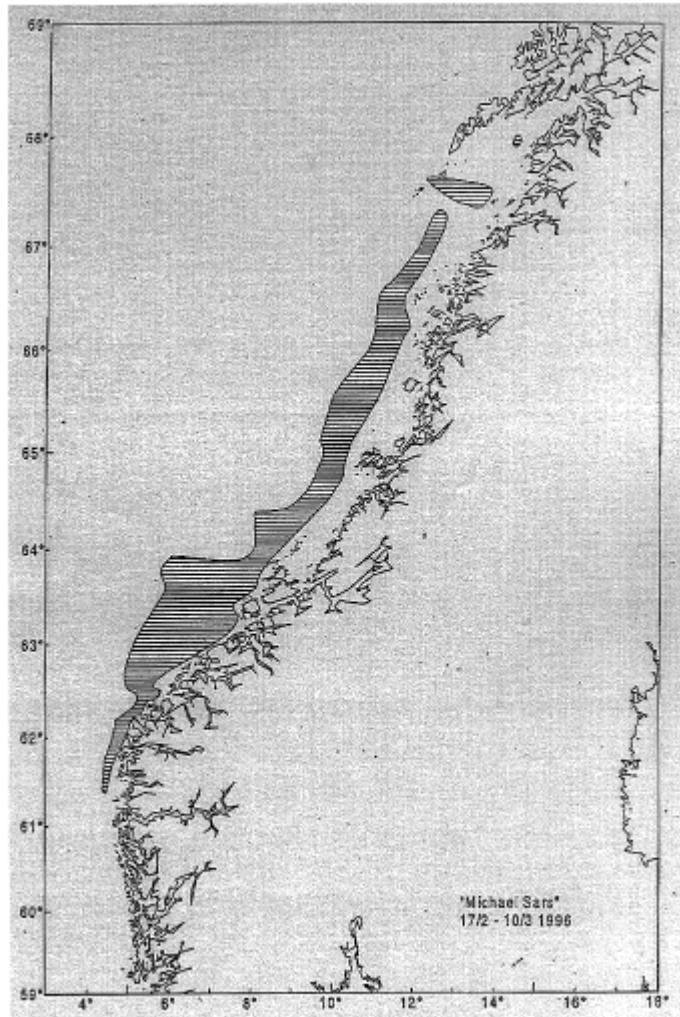


Fig. 3. Utbredelse av sild, tokets første del.

1996

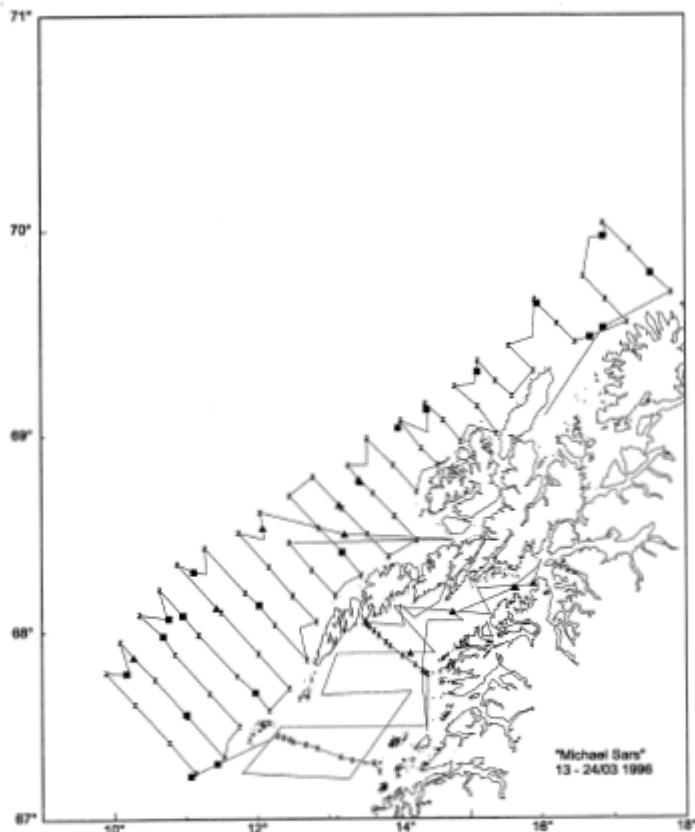


Fig. 2. Kurser og stasjoner.

Z - CTD sonde.

▲ - Pelagisk trål.

■ - Bunentrål.

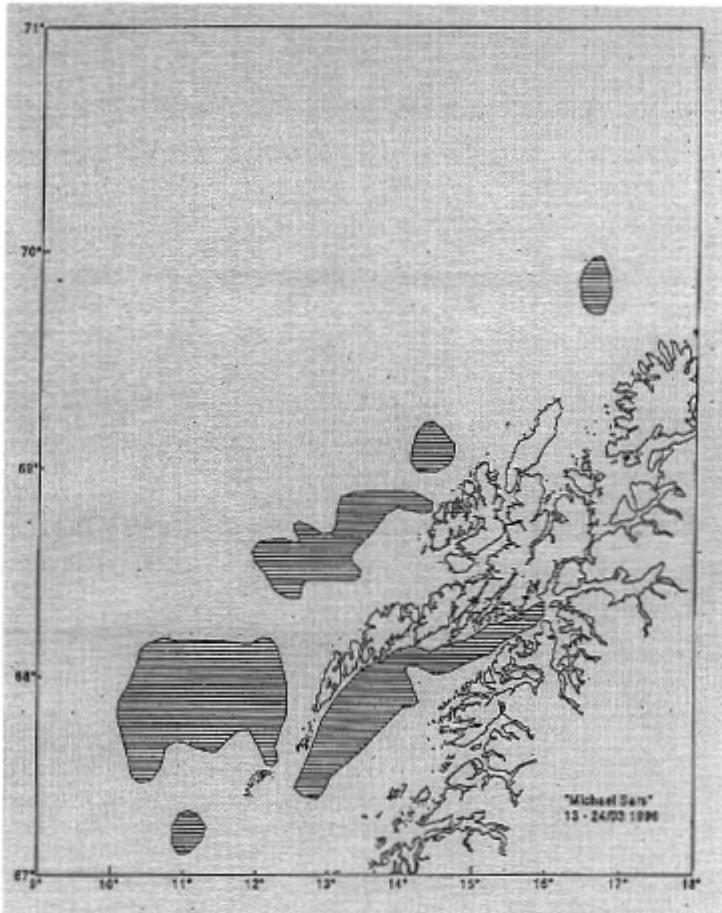


Fig. 4. Utbredelse av sild, toktets annen del.

1998

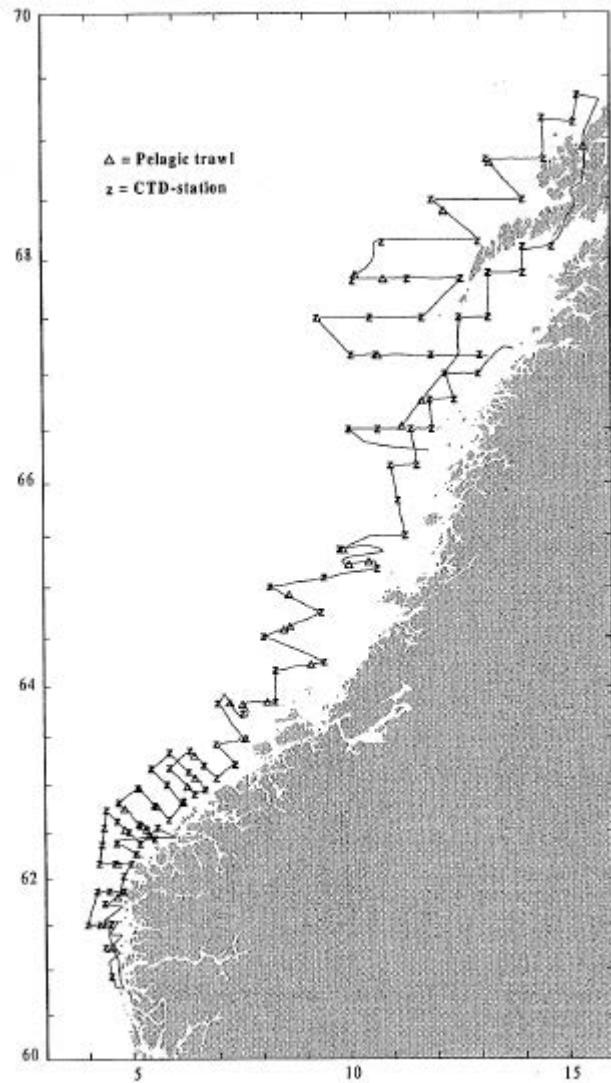


Fig. 1. Cruise tracks, CTD stations and trawl stations during an acoustical survey with RV Michael Sars 17.02.-09.03.98

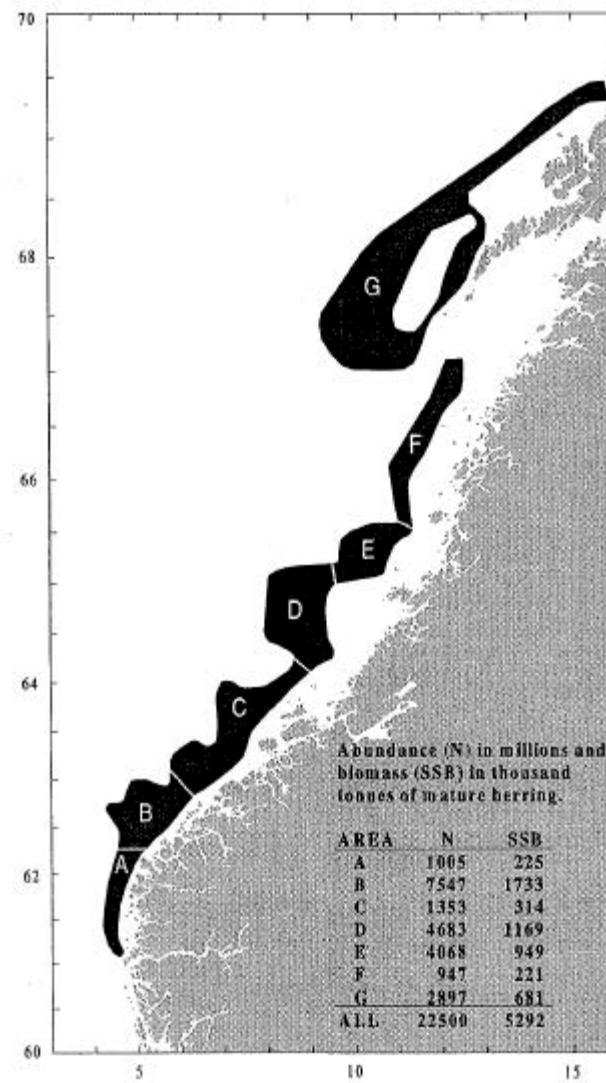


Fig. 2. Distribution areas, abundance and biomass of Norwegian spring spawning herring during an acoustical survey with RV Michael Sars 17.02.-09.03.98

1999

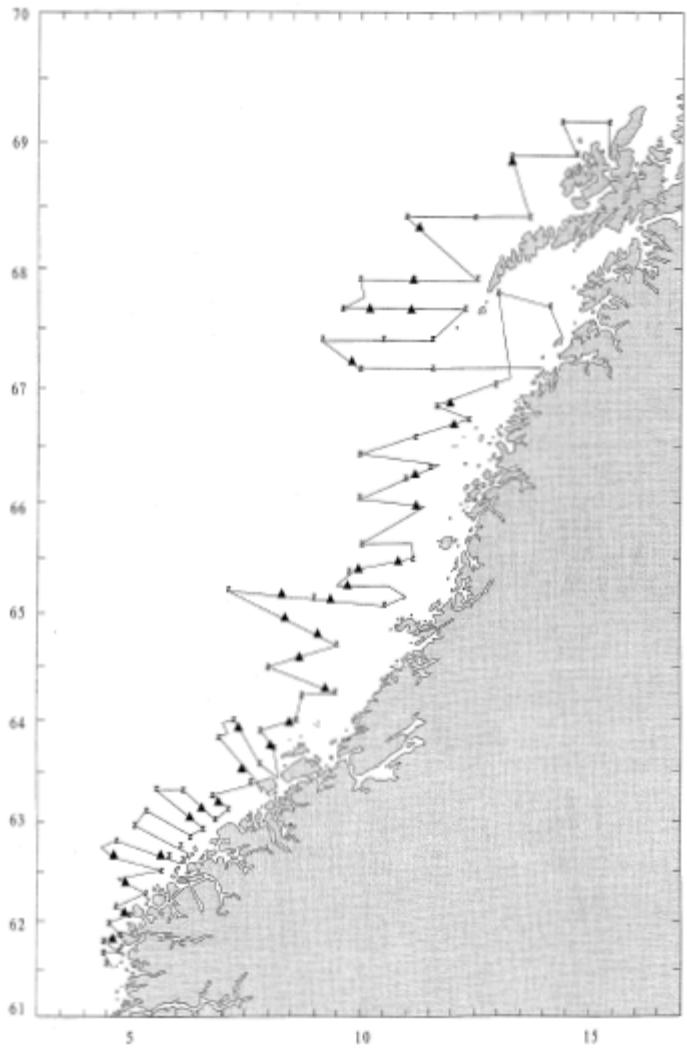


Fig. 1. Cruise tracks, CTD-stations (x) and pelagic trawl stations (filled triangles) during an acoustical survey with RV Michael Sars 17.02.-04.03.99.

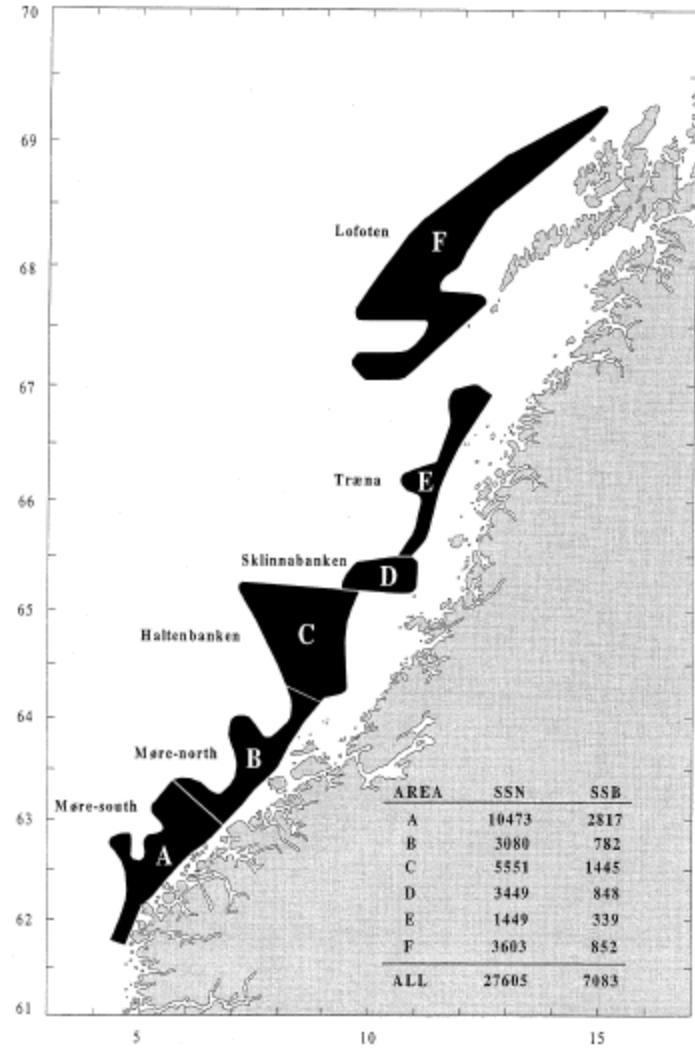
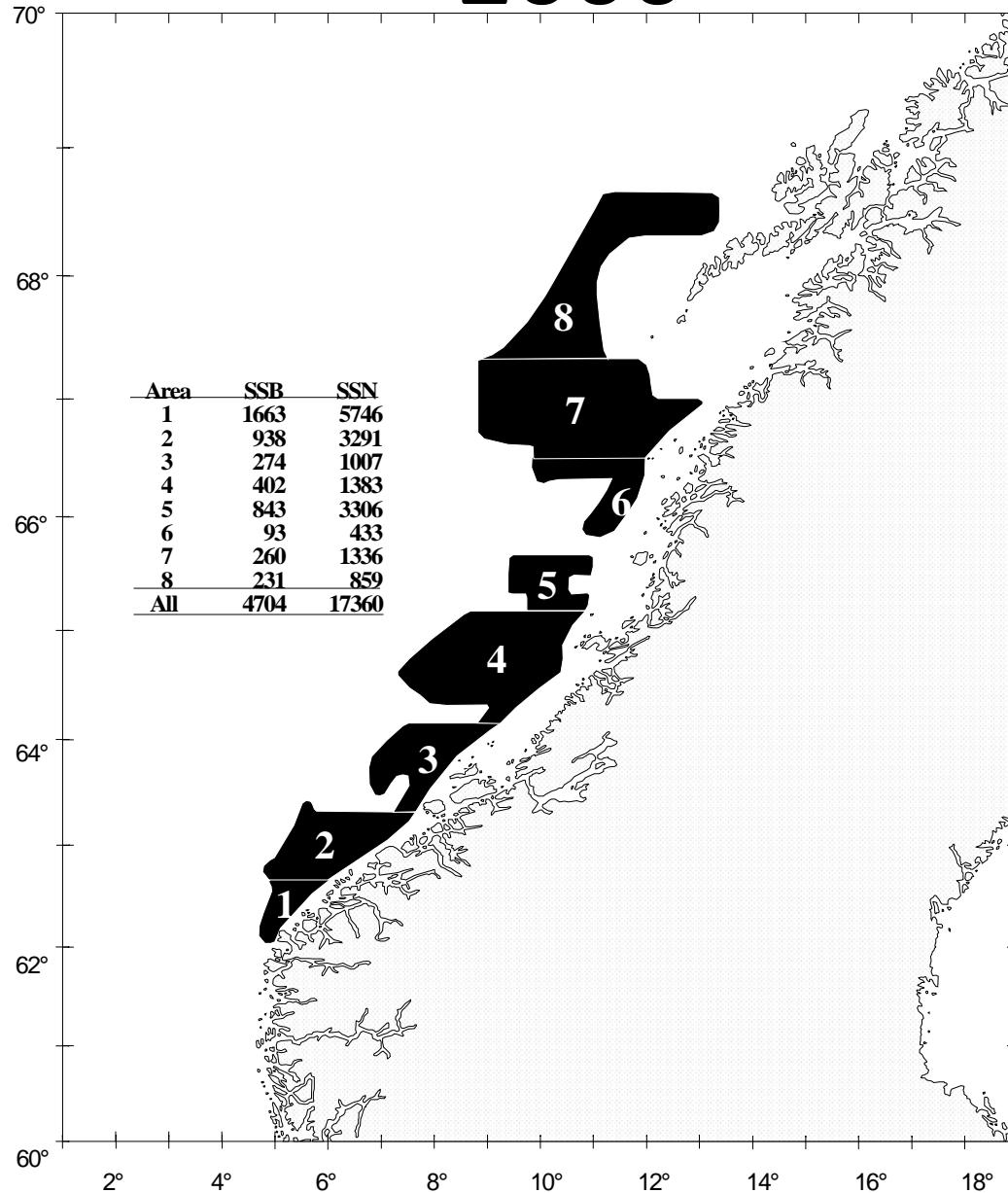
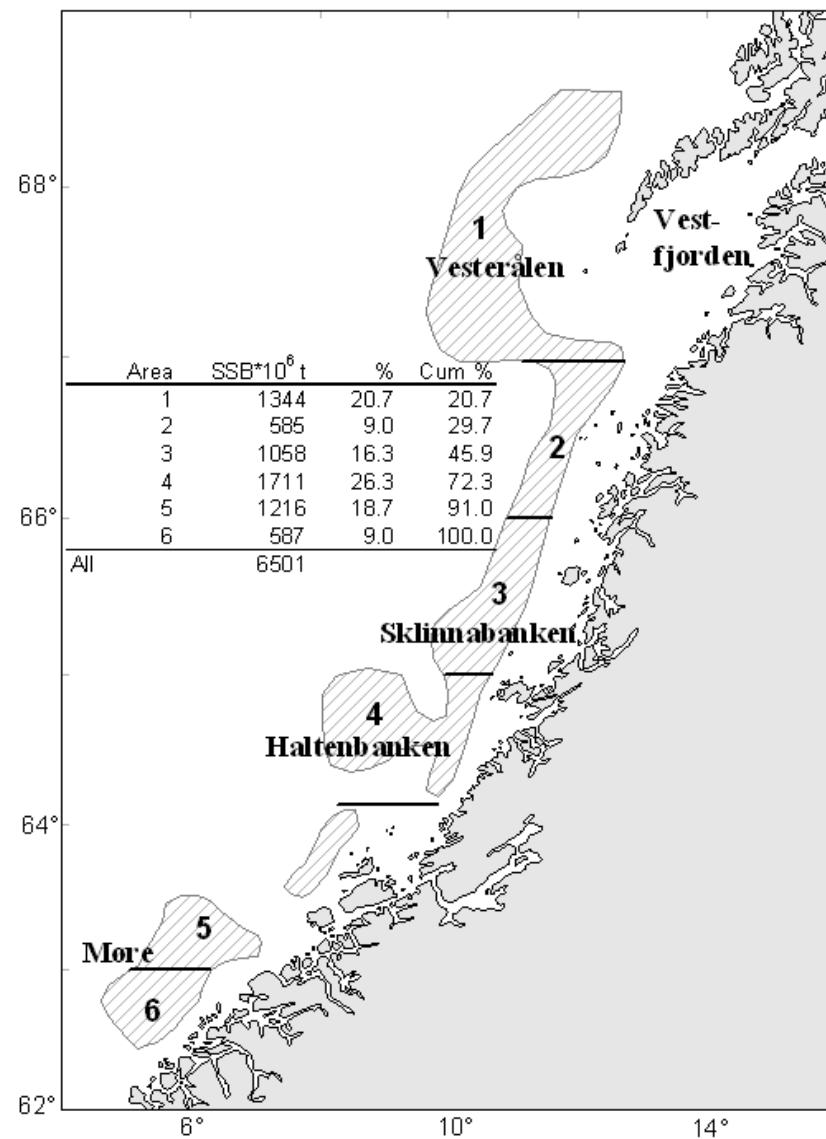


Fig. 2. Distribution areas, abundance (SSN) in millions and biomass (SSB) in thousand tonnes of mature Norwegian spring spawning herring as estimated during an acoustical survey with RV Michael Sars 17.02.-04.03.99.

2000



2005



2006

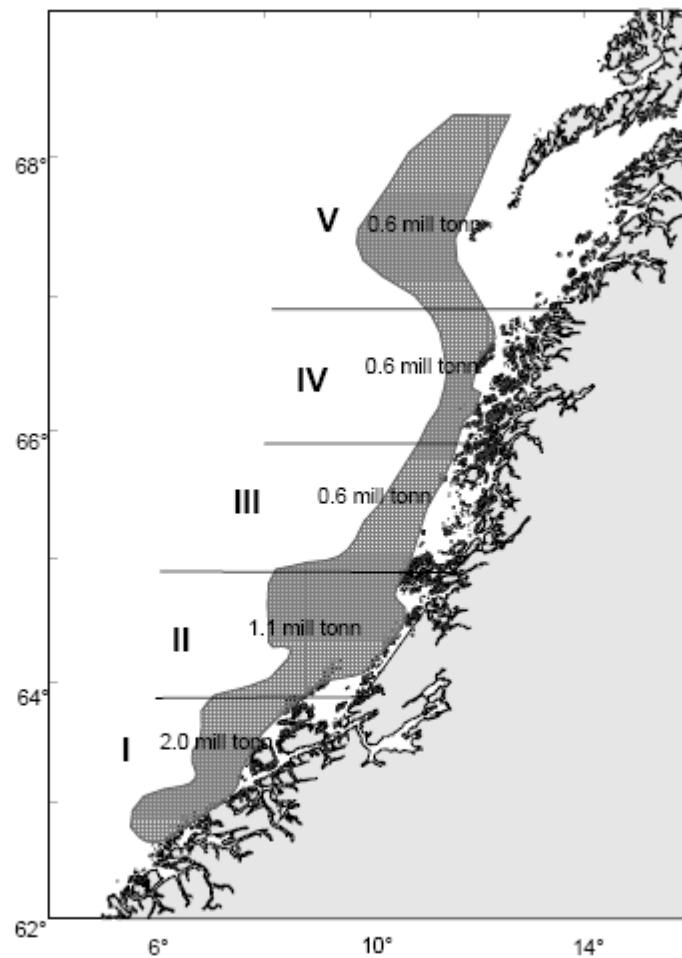
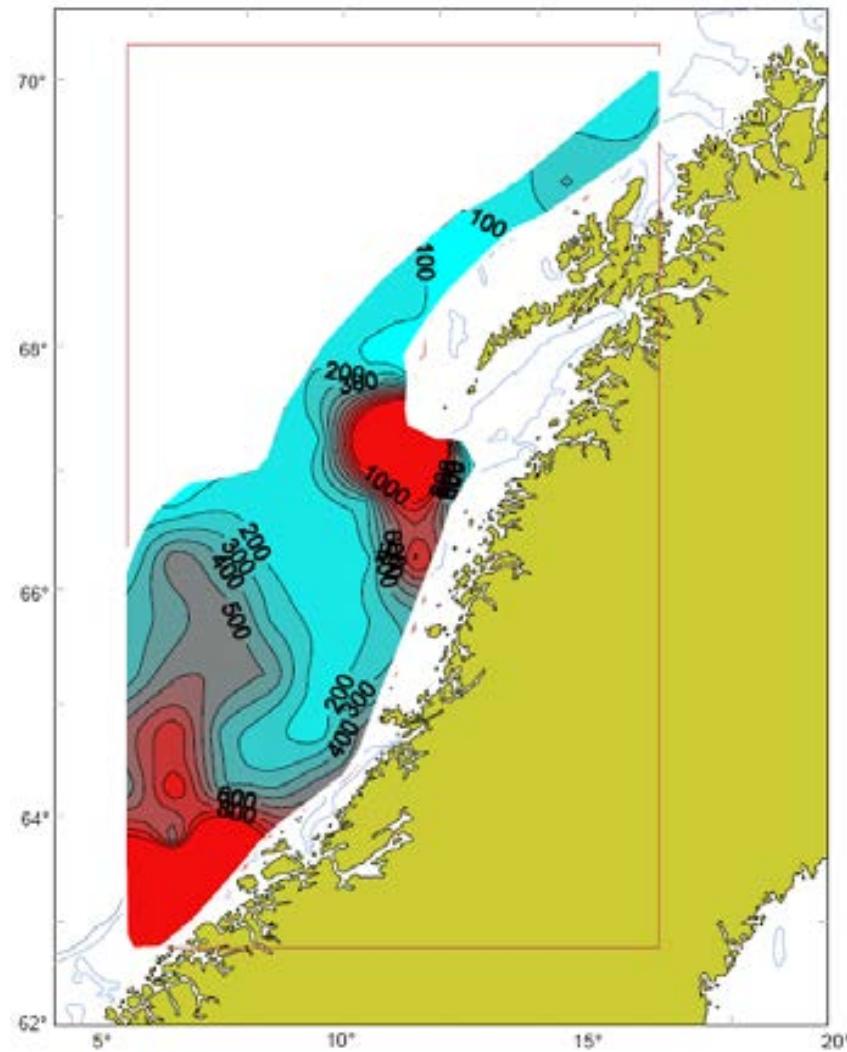
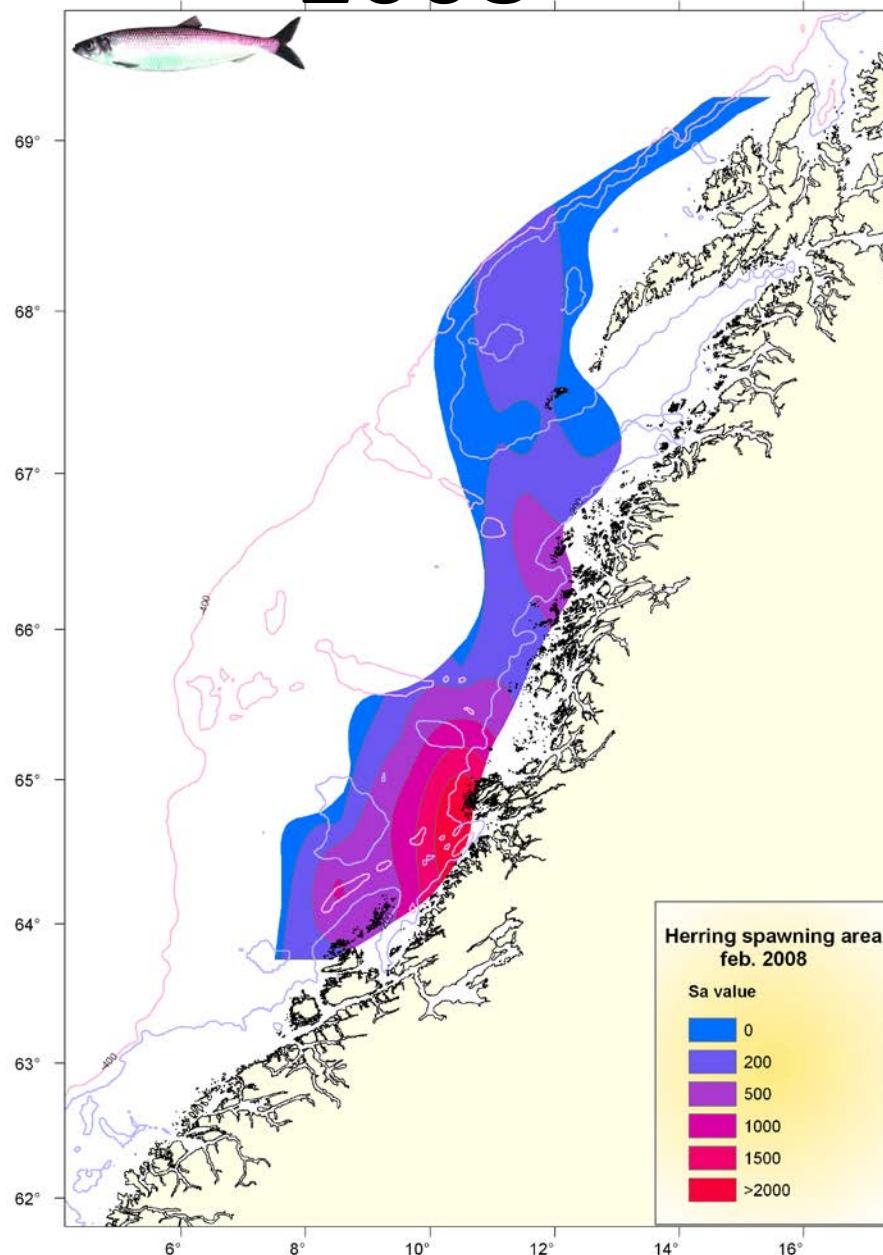


Fig. 3. Spawning distribution and spawning stock biomass (SSB) of Norwegian spring spawning herring estimated by areas with RV "Håkon Mosby" 16-24th of February 2006.

2007



2008



SSB from survey in the wintering
area in January, 1995-1999,
acoustic

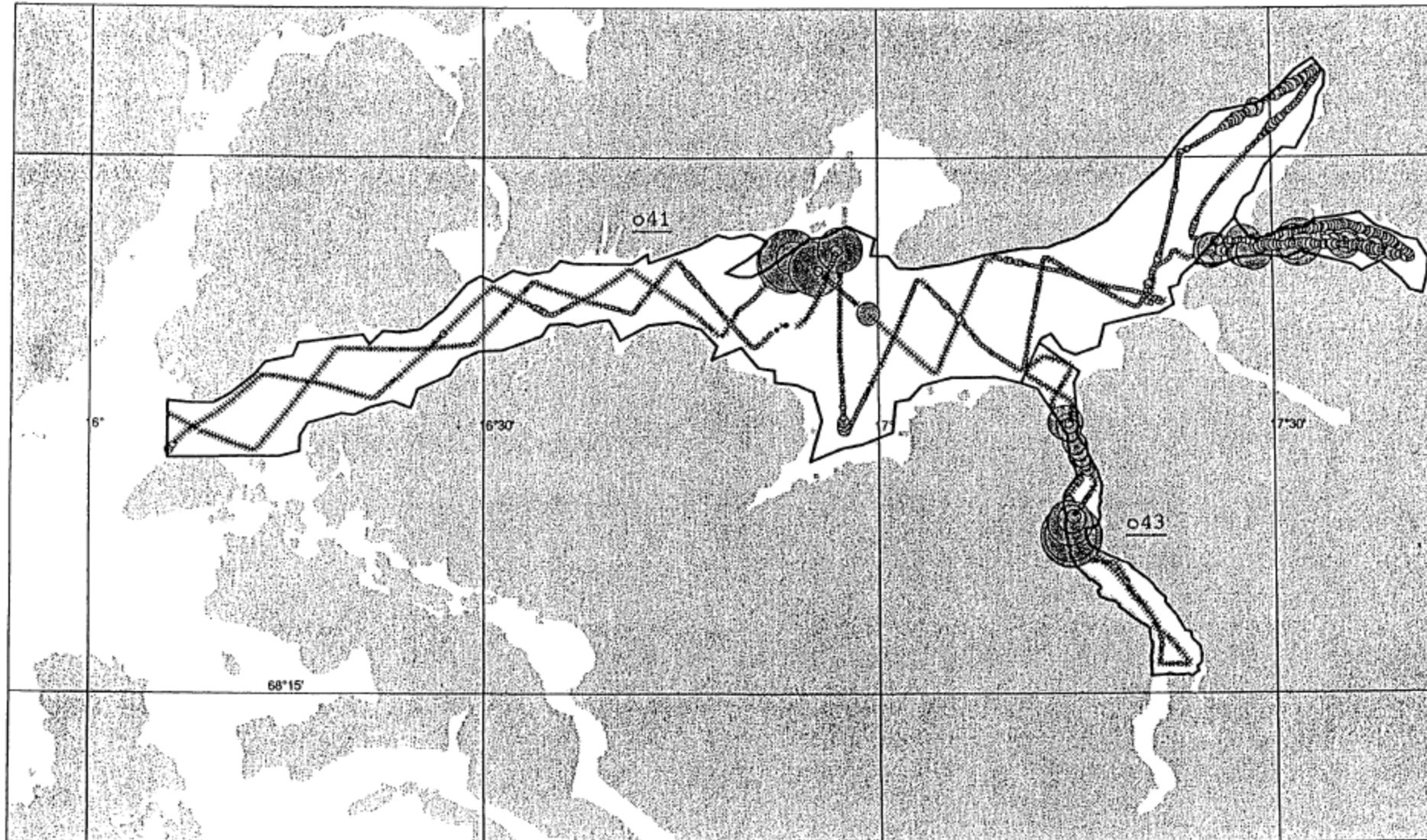


Fig. 5. Distribution of herring in Ofotfjord in January 1996. The radius of a circle is proportional to the square root of the extinction-adjusted s_A -value. The maximum s_A -value shown here is $0.8338 \cdot 10^6 \text{ m}^2/\text{NM}^2$.

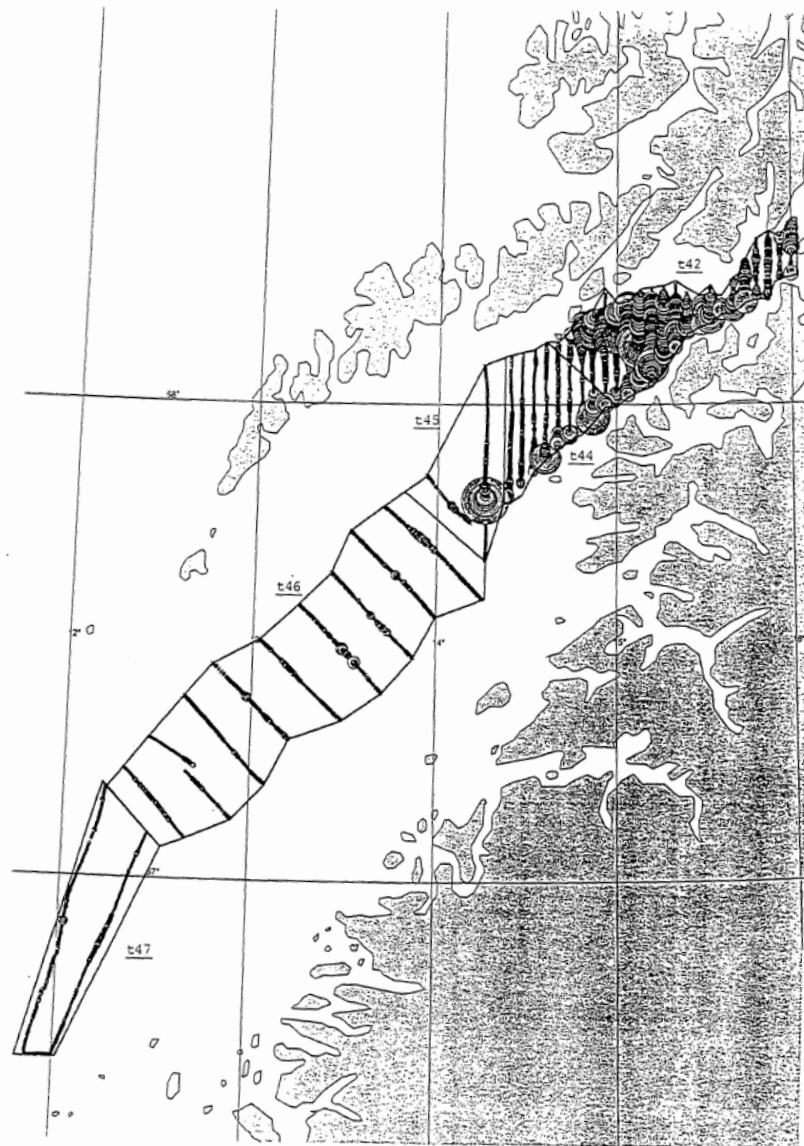
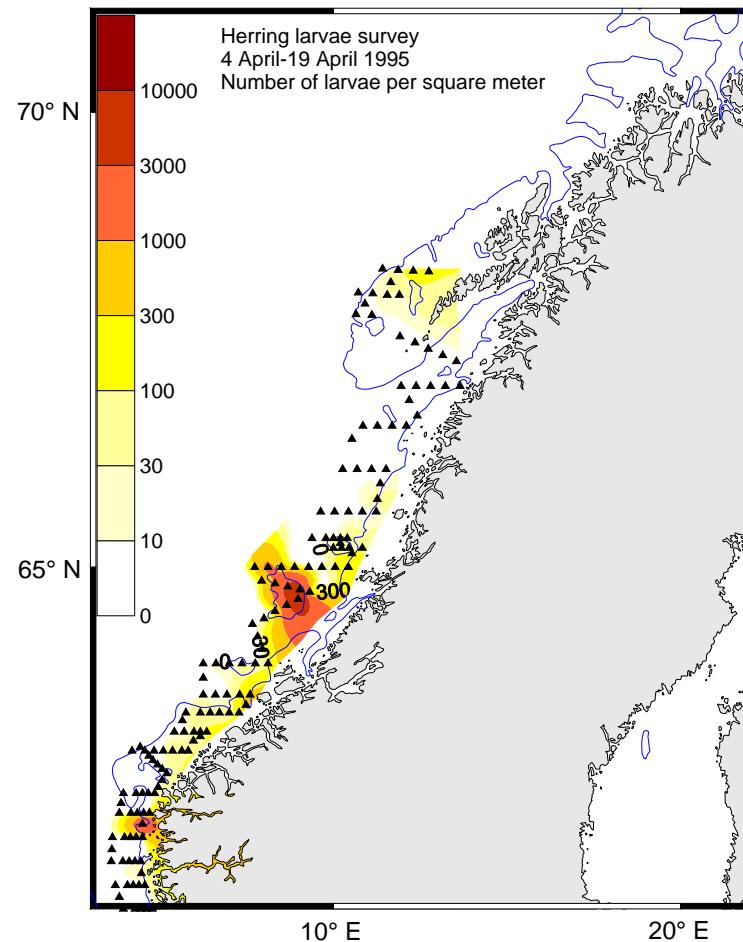
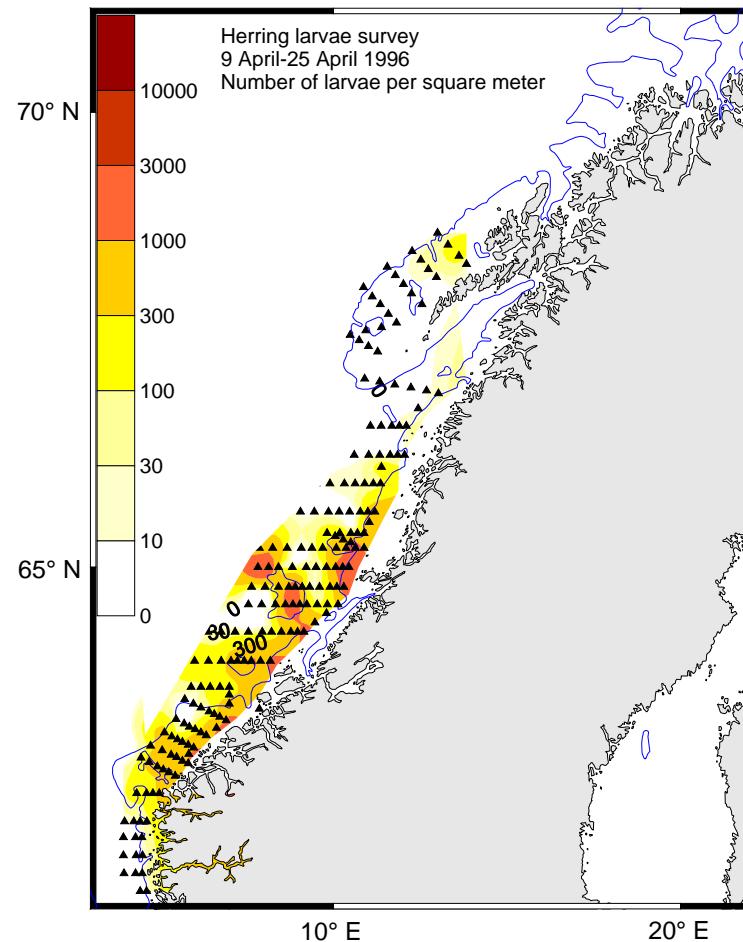
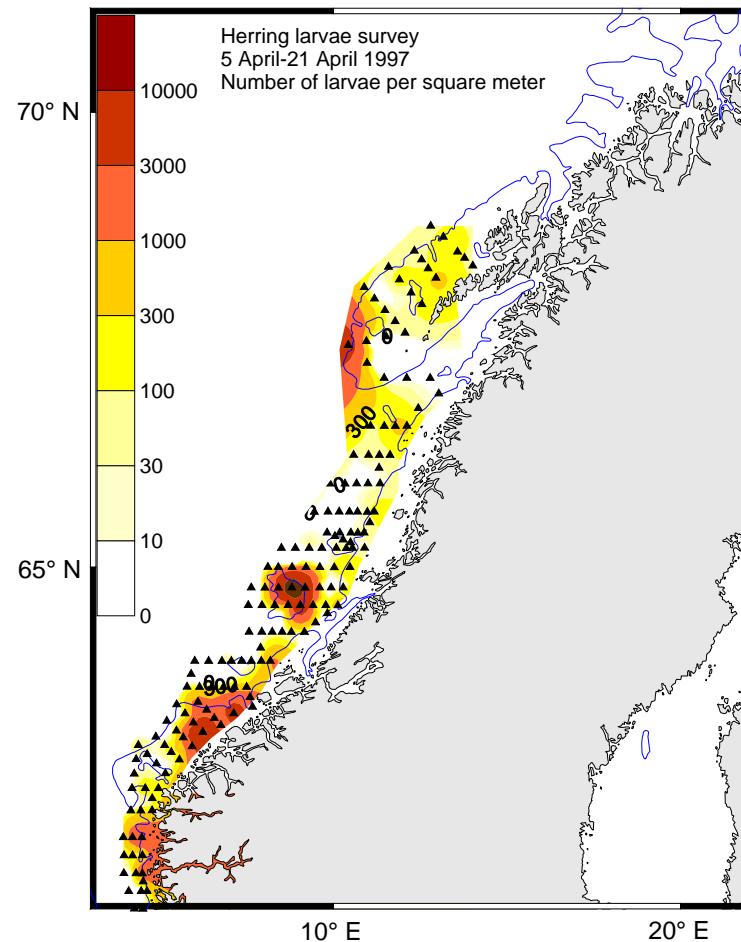


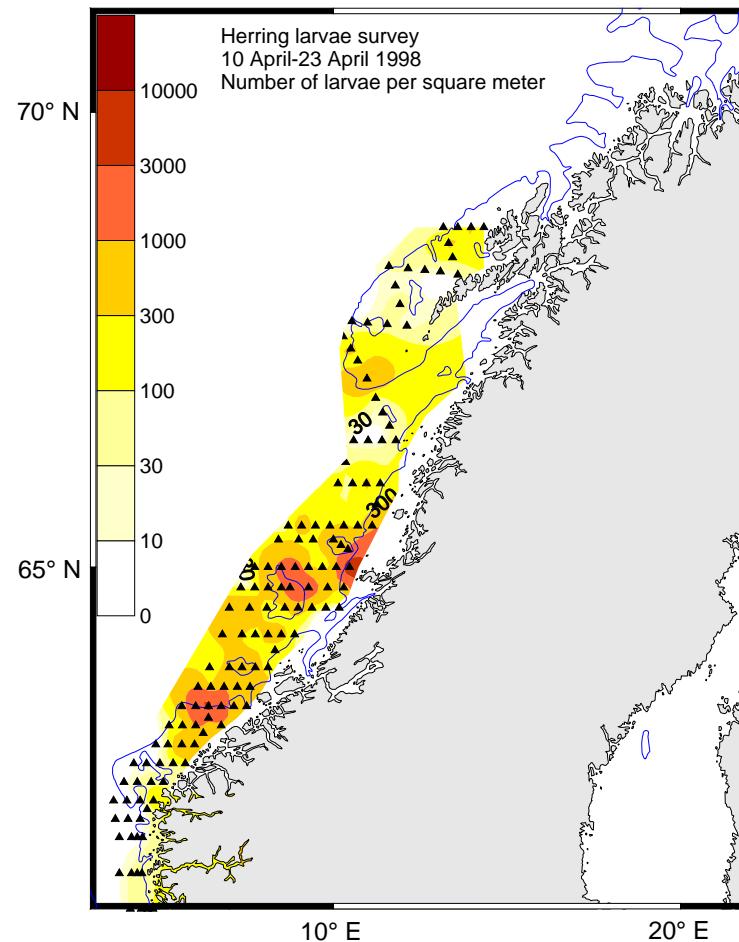
Fig. 7. Distribution of herring in Vestfjord in January 1996. The radius of a circle is proportional to the square root of the extinction-corrected s_A -value. The maximum s_A -value is $1.122 \cdot 10^6 \text{ m}^2/\text{NM}^2$.

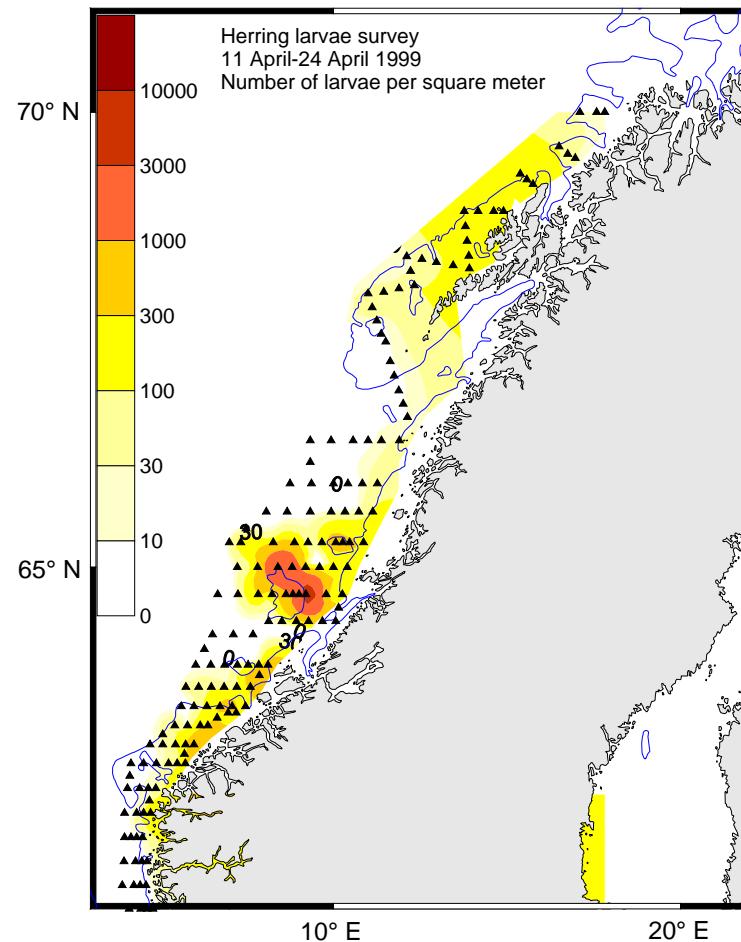
Larval survey 1995-2013, larval index

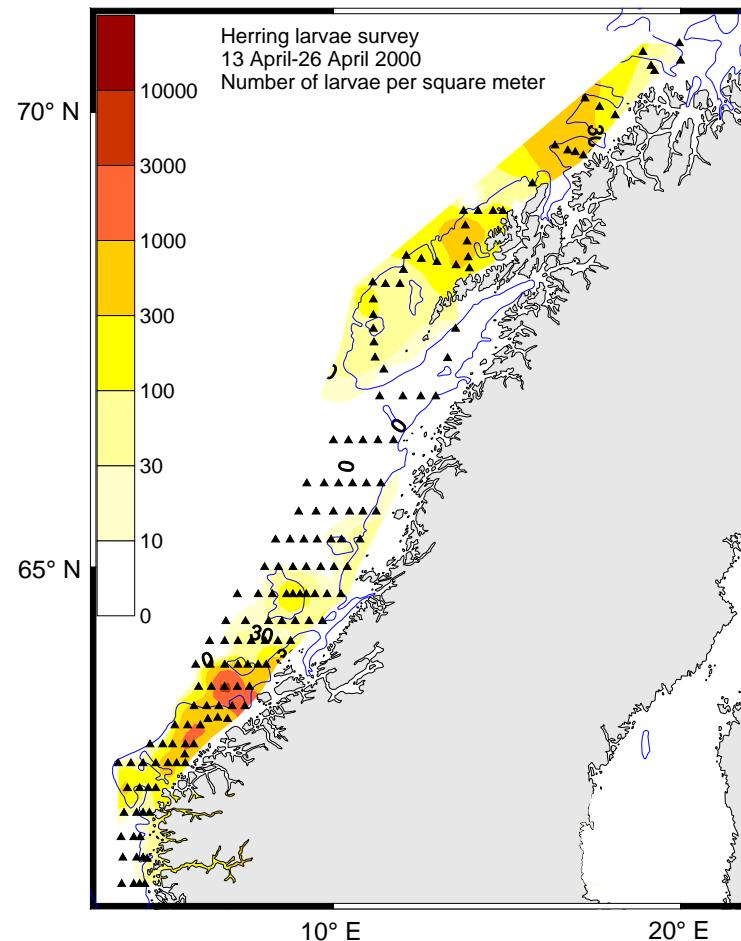


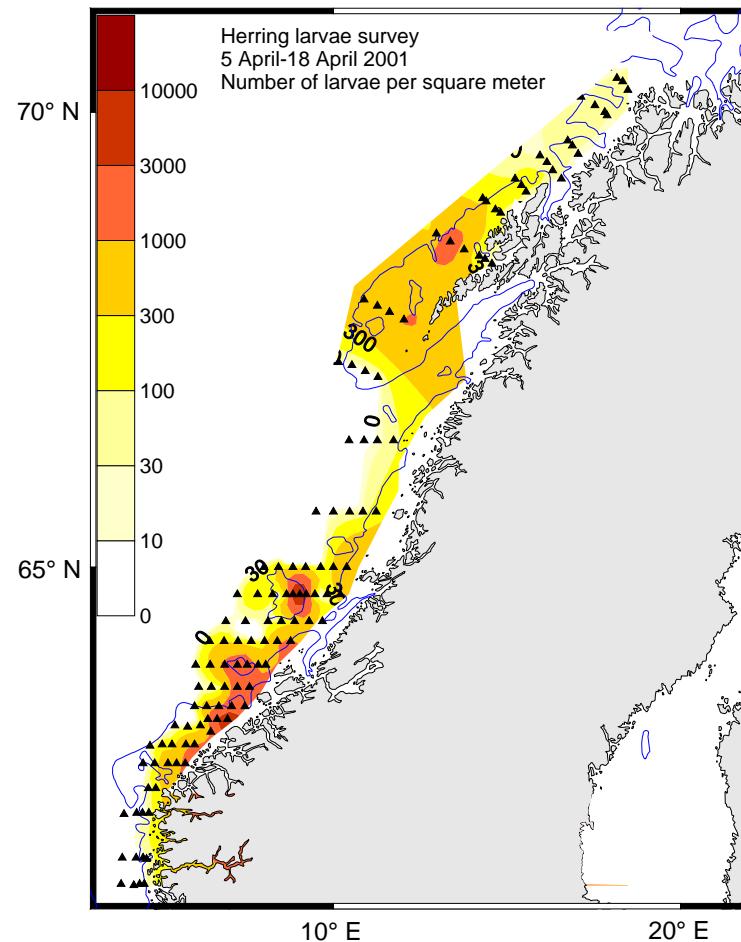


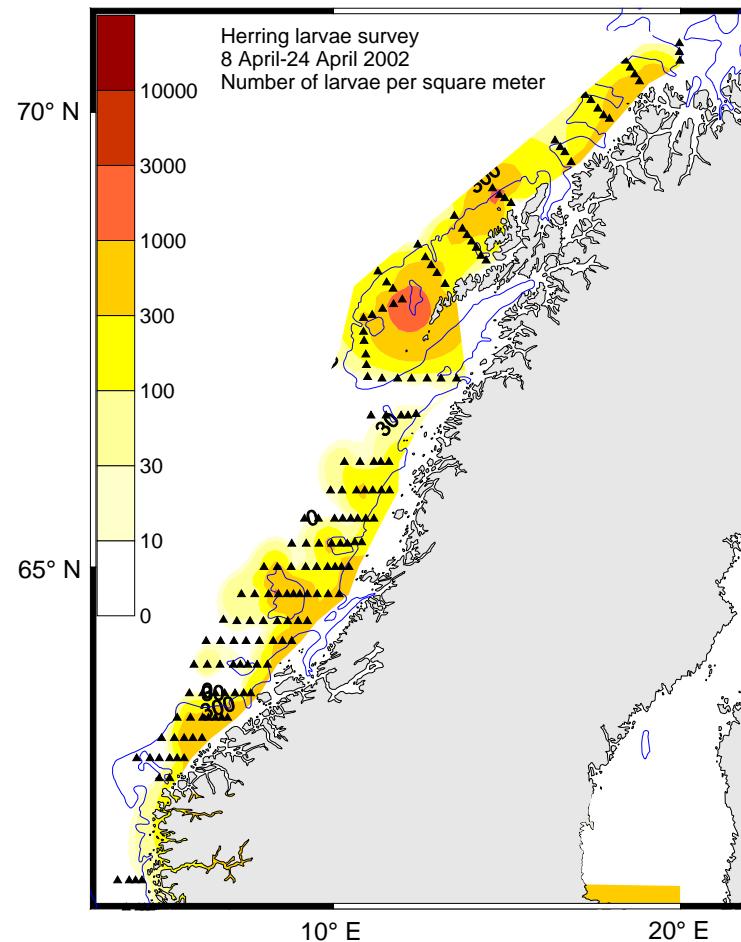


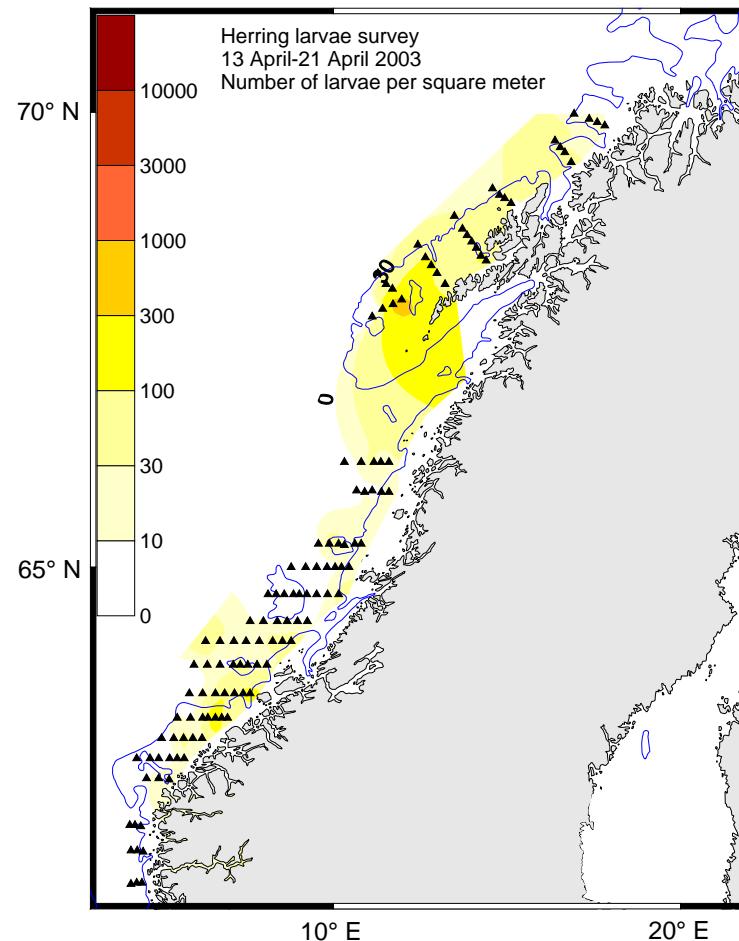


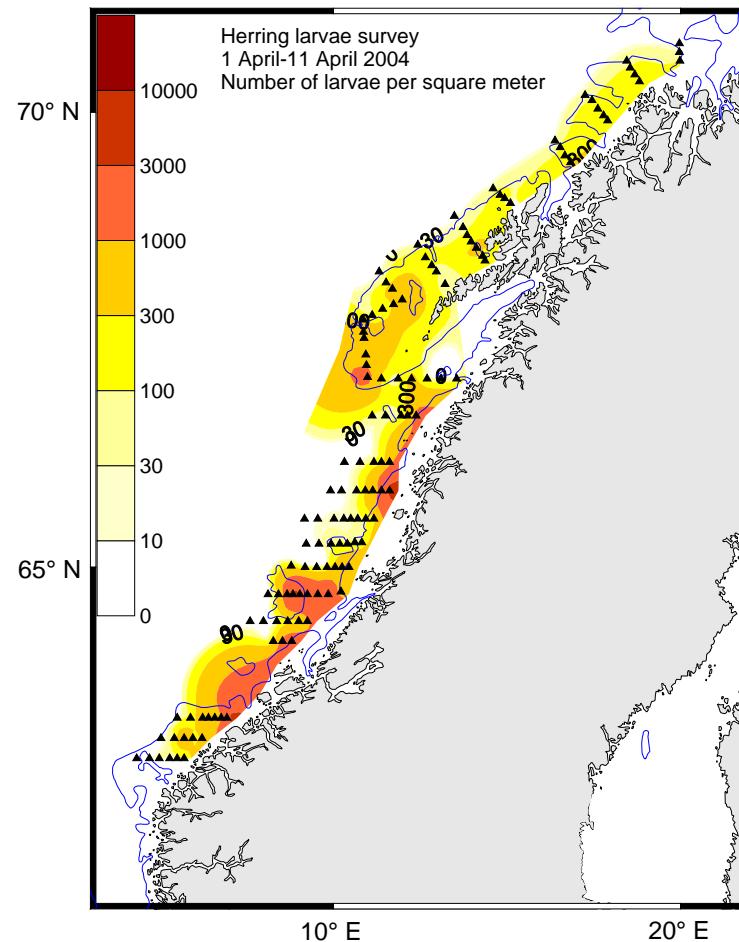


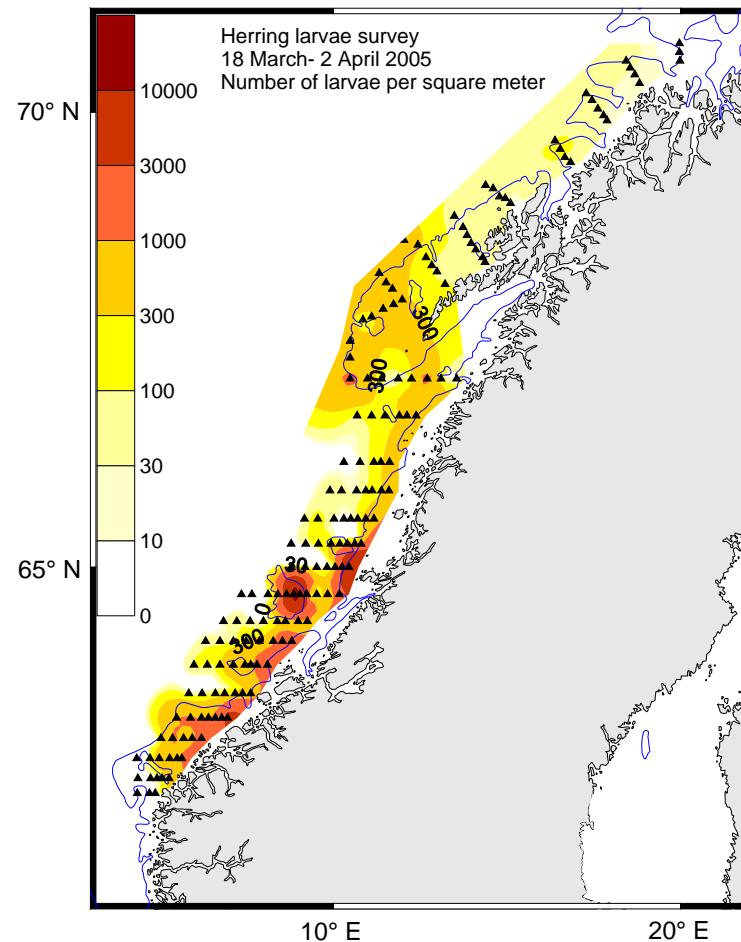


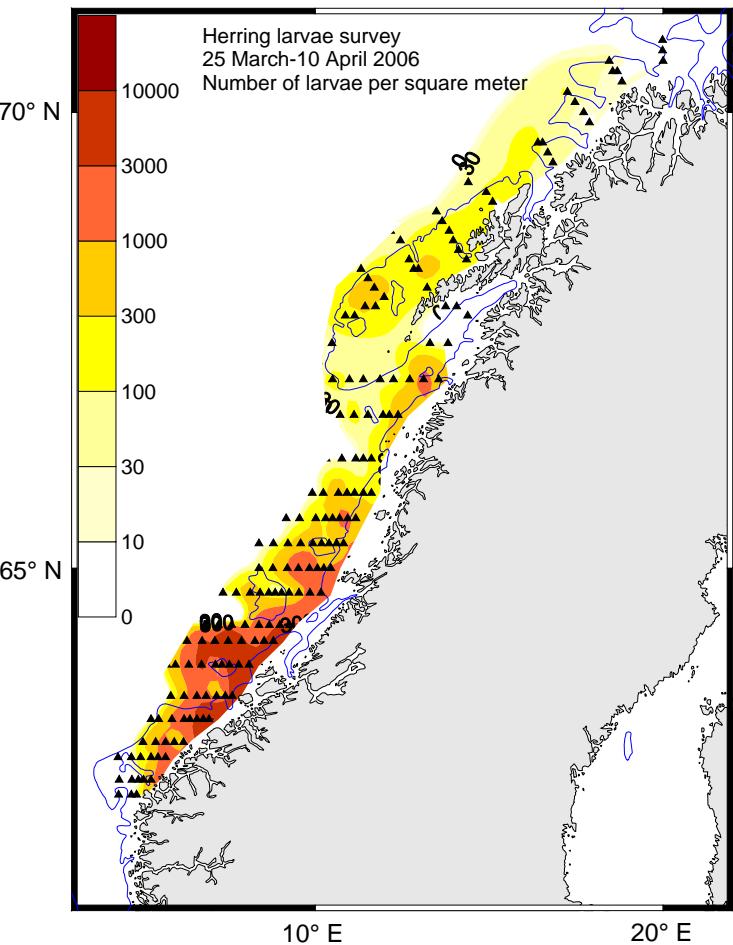


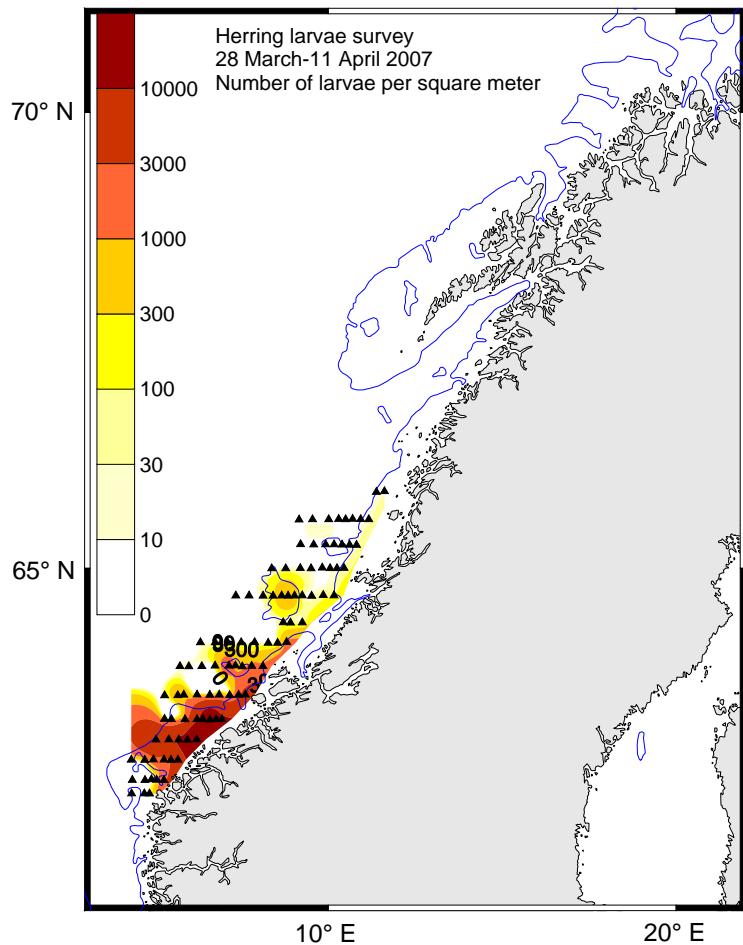


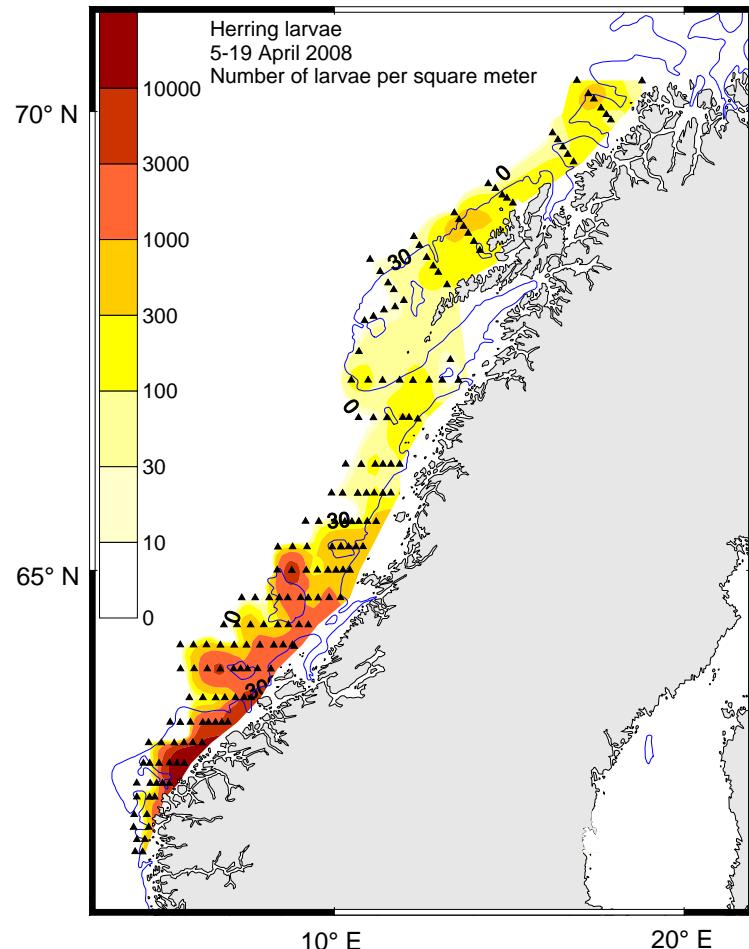


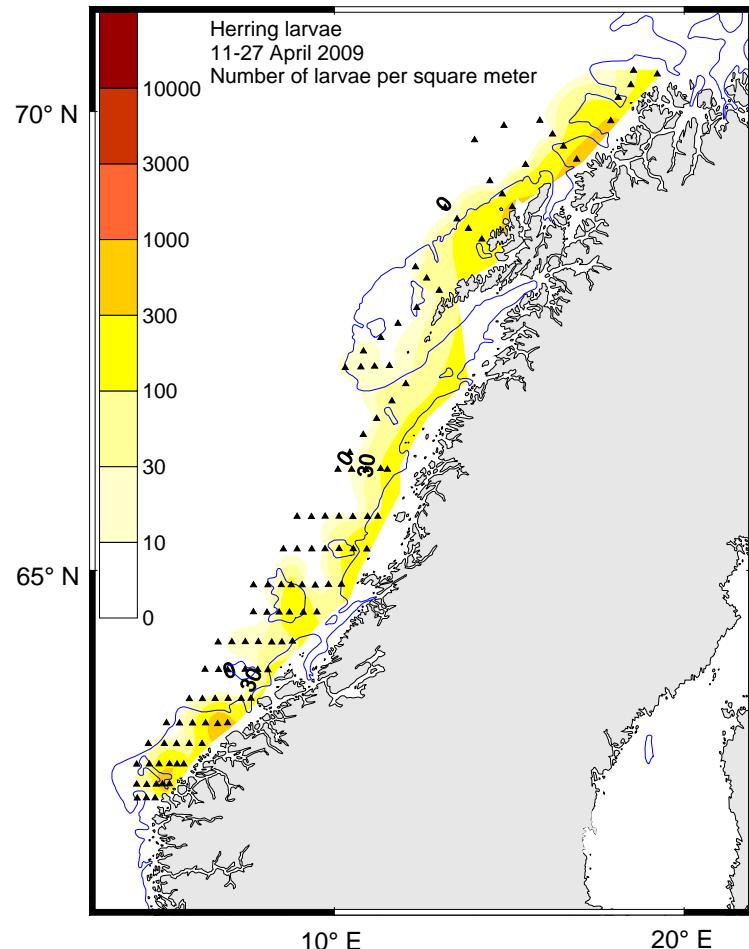


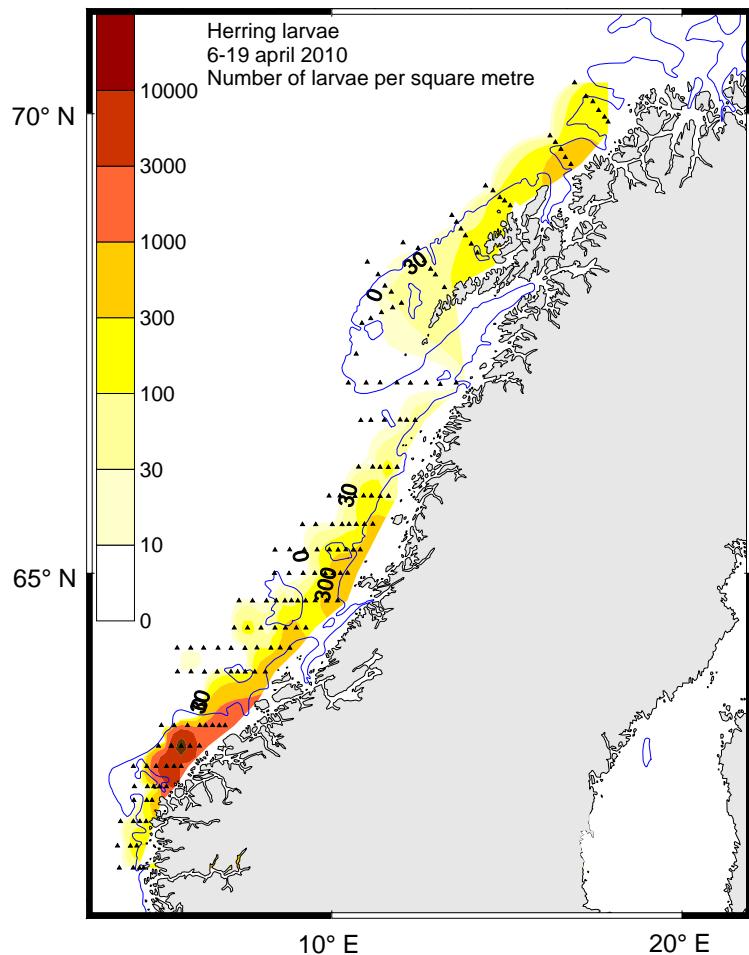


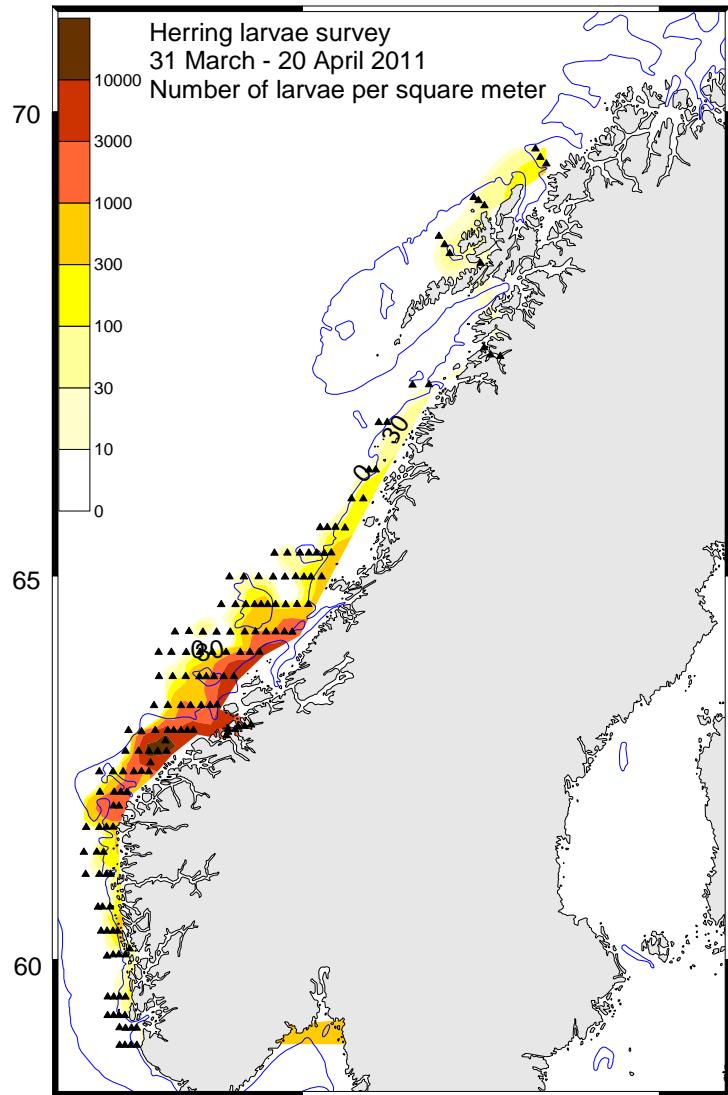


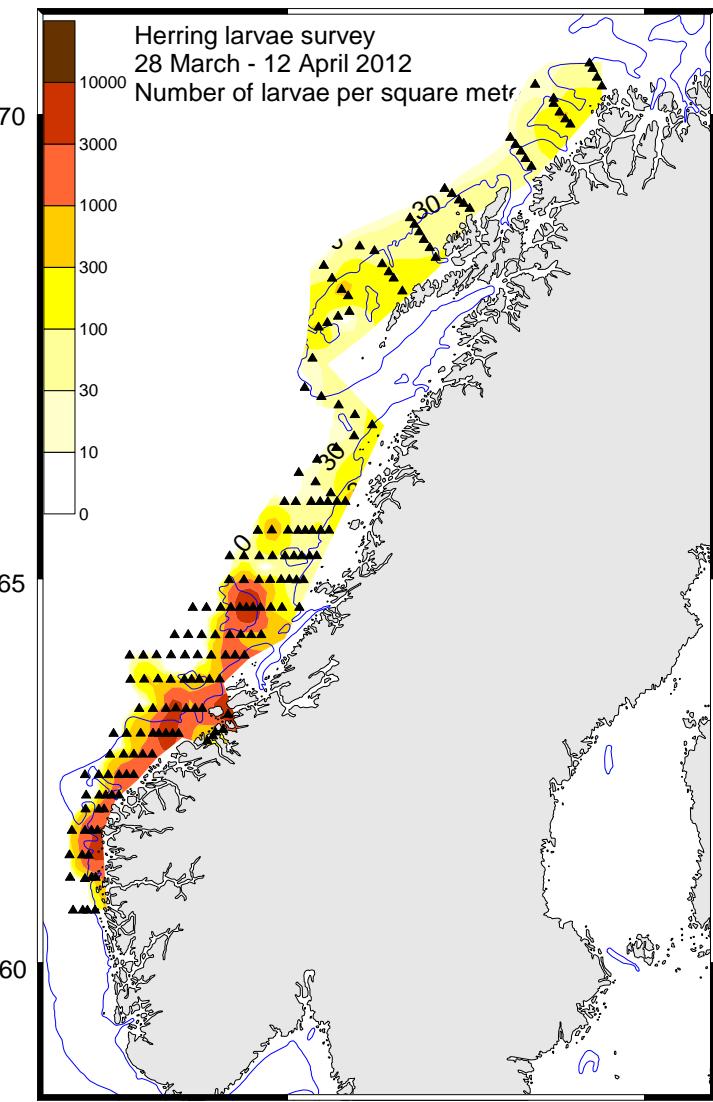


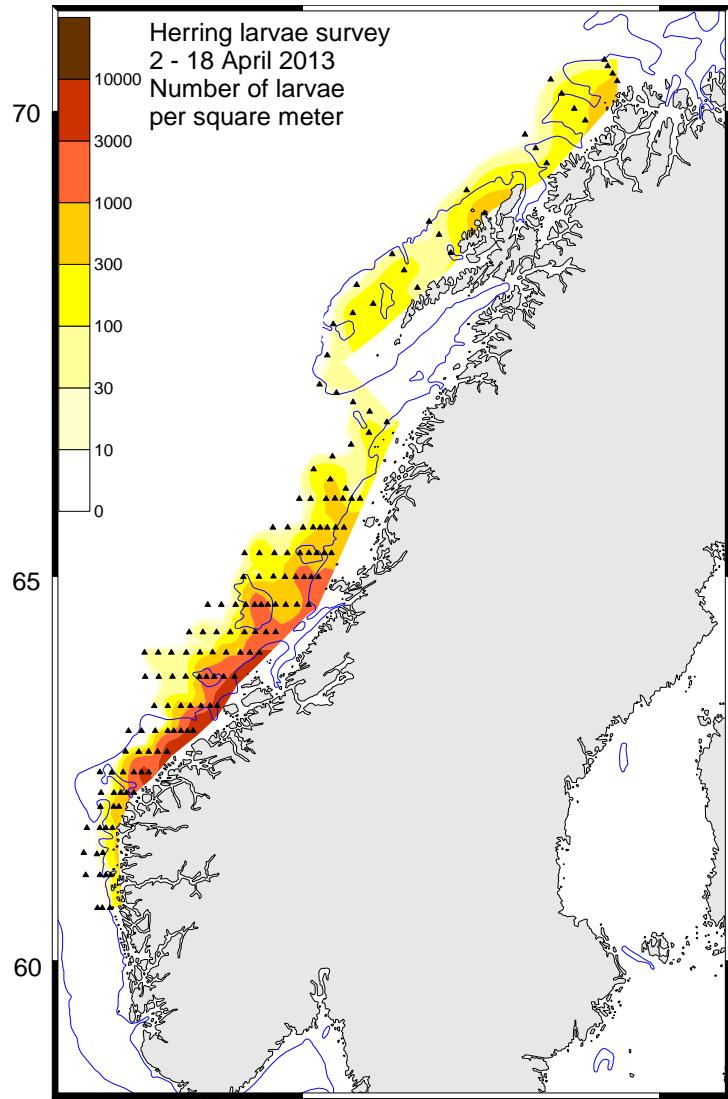




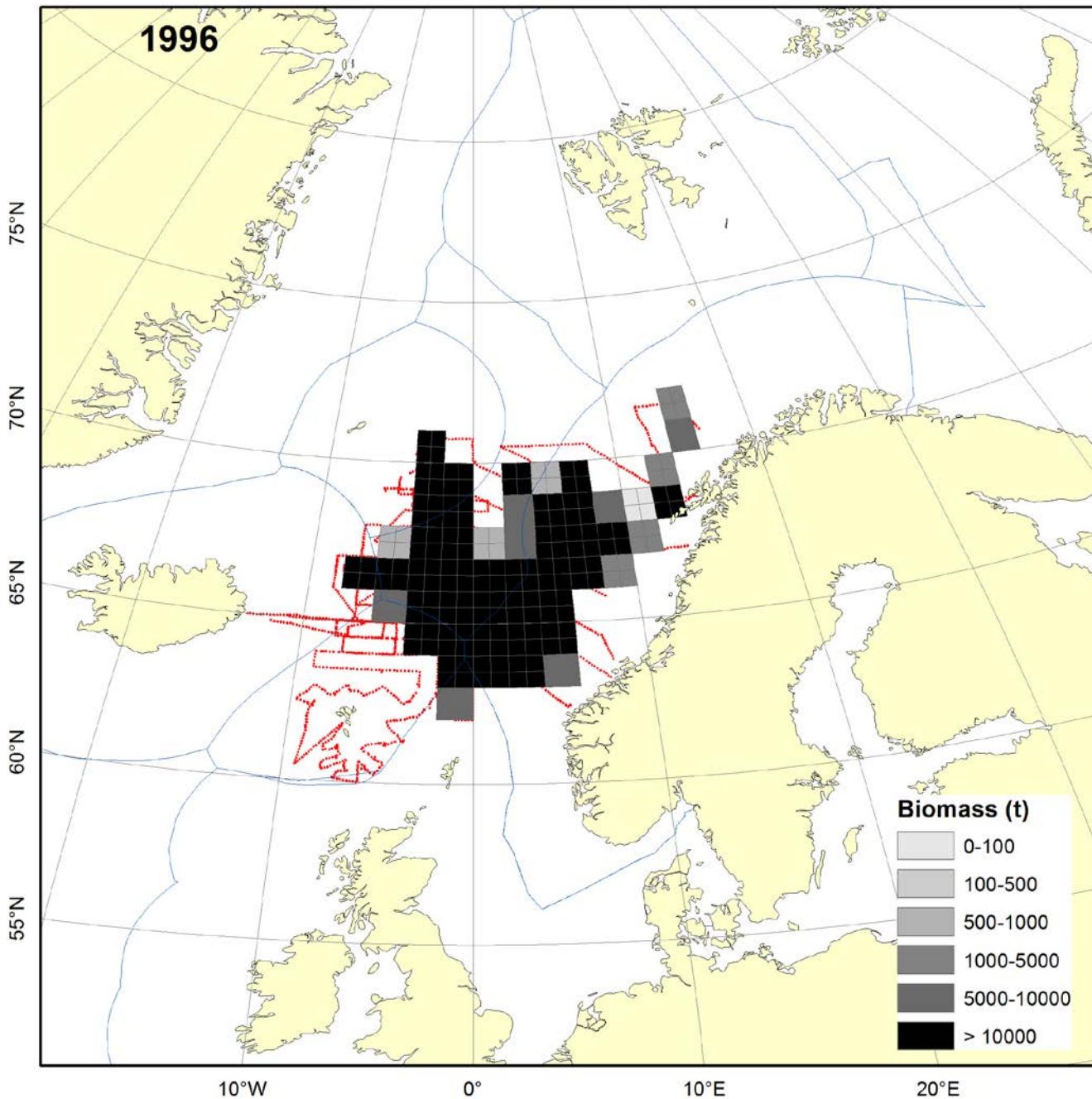


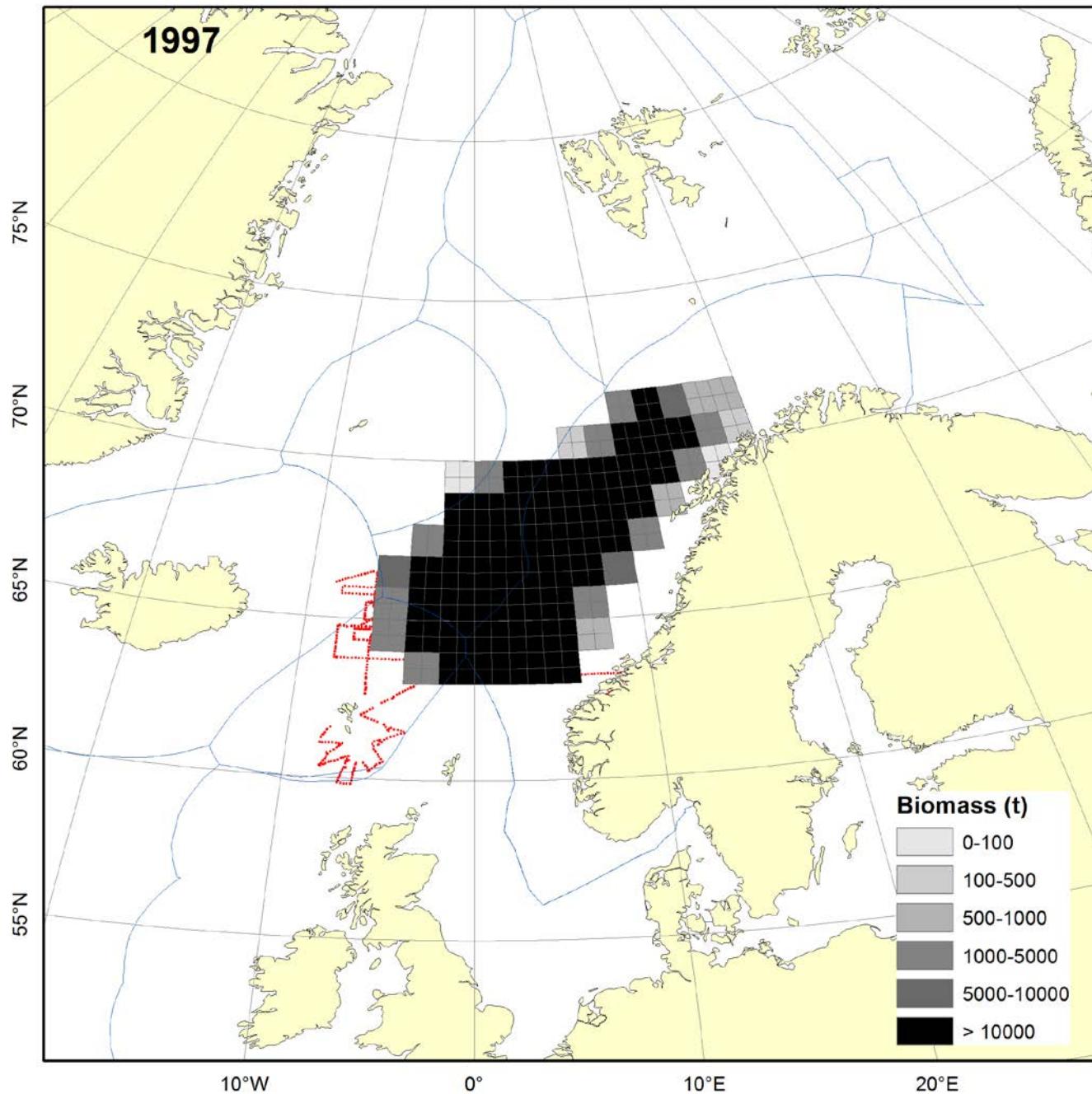


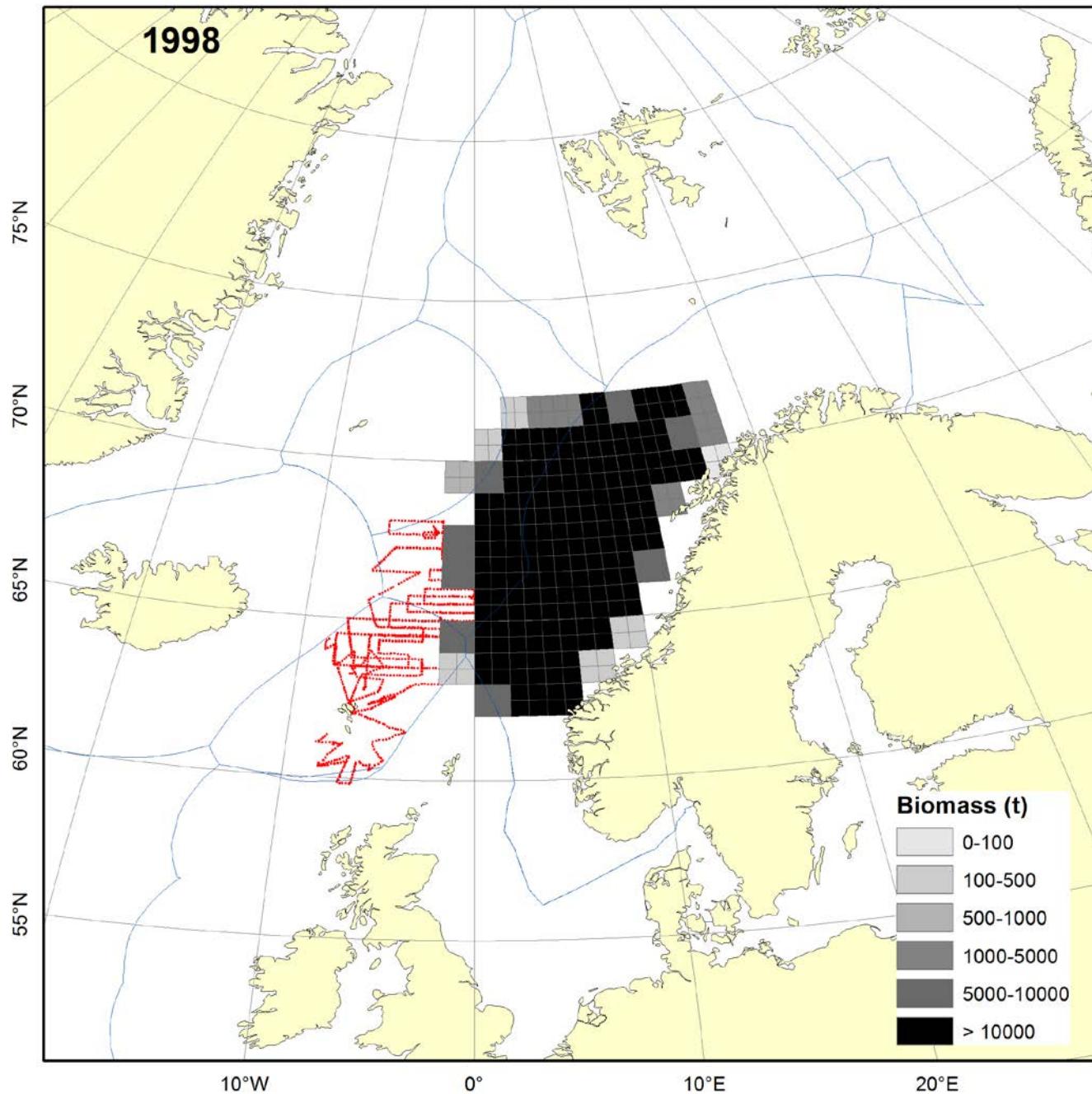


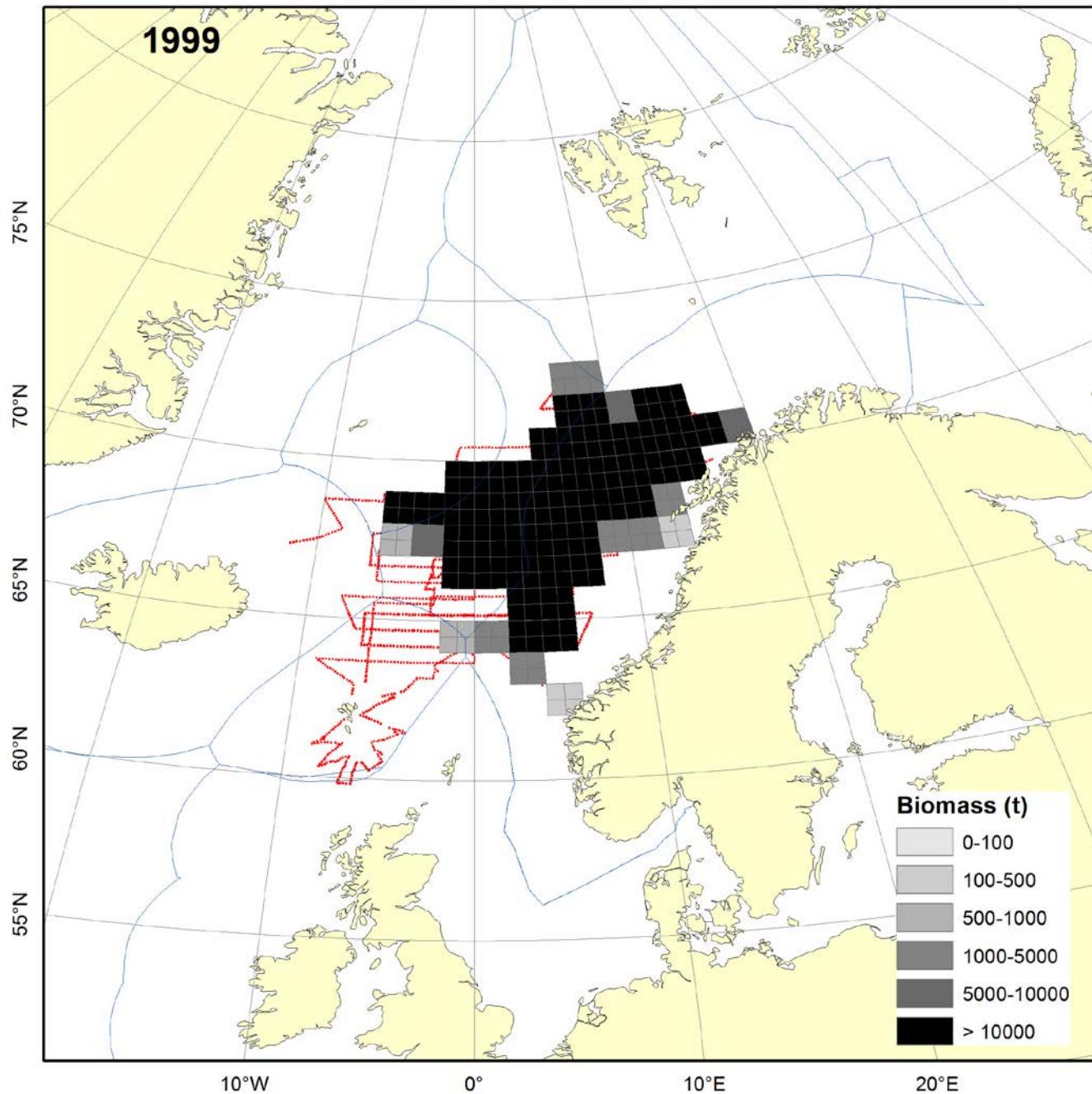


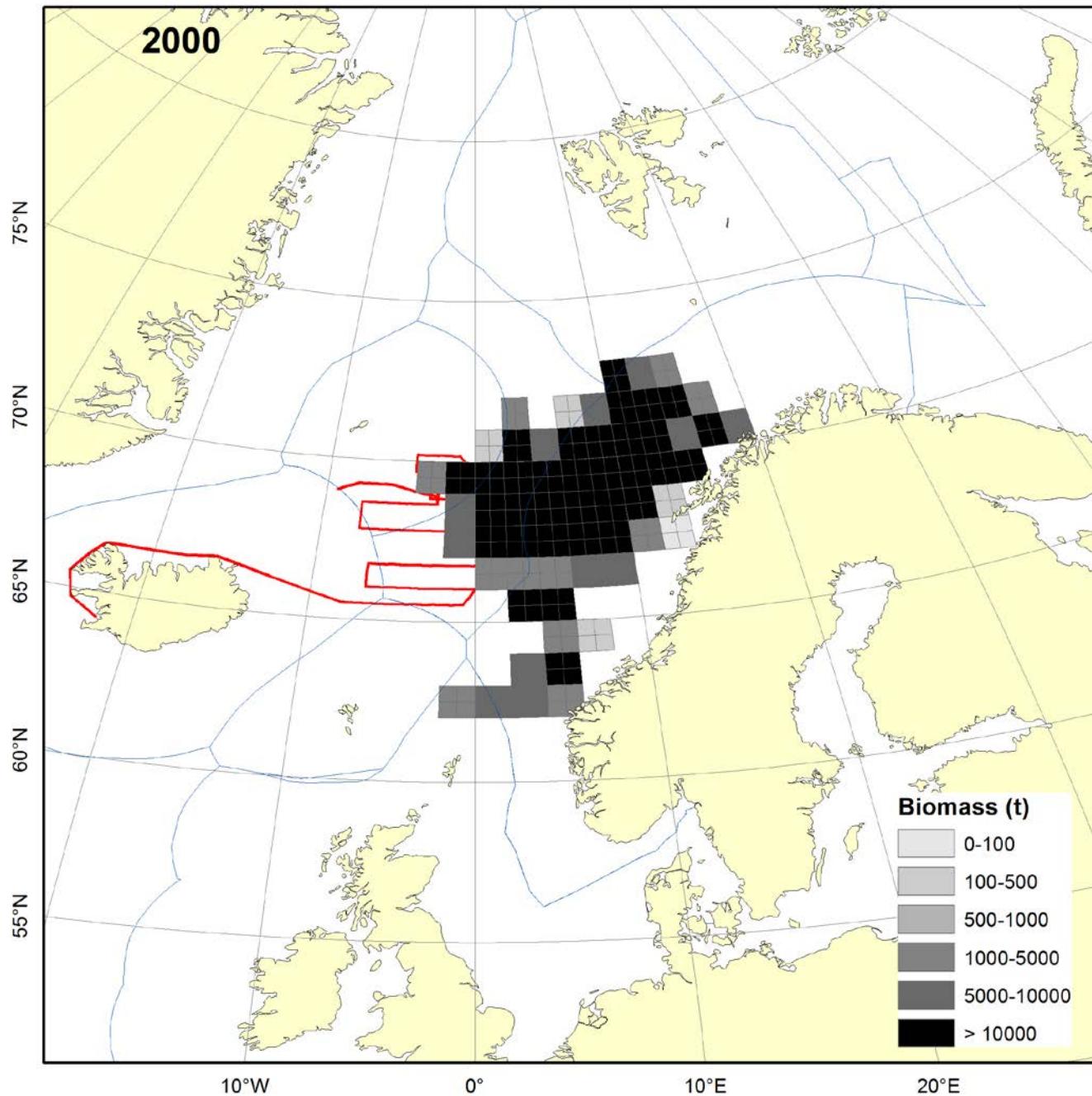
IESNS, 1996-2013, acoustic

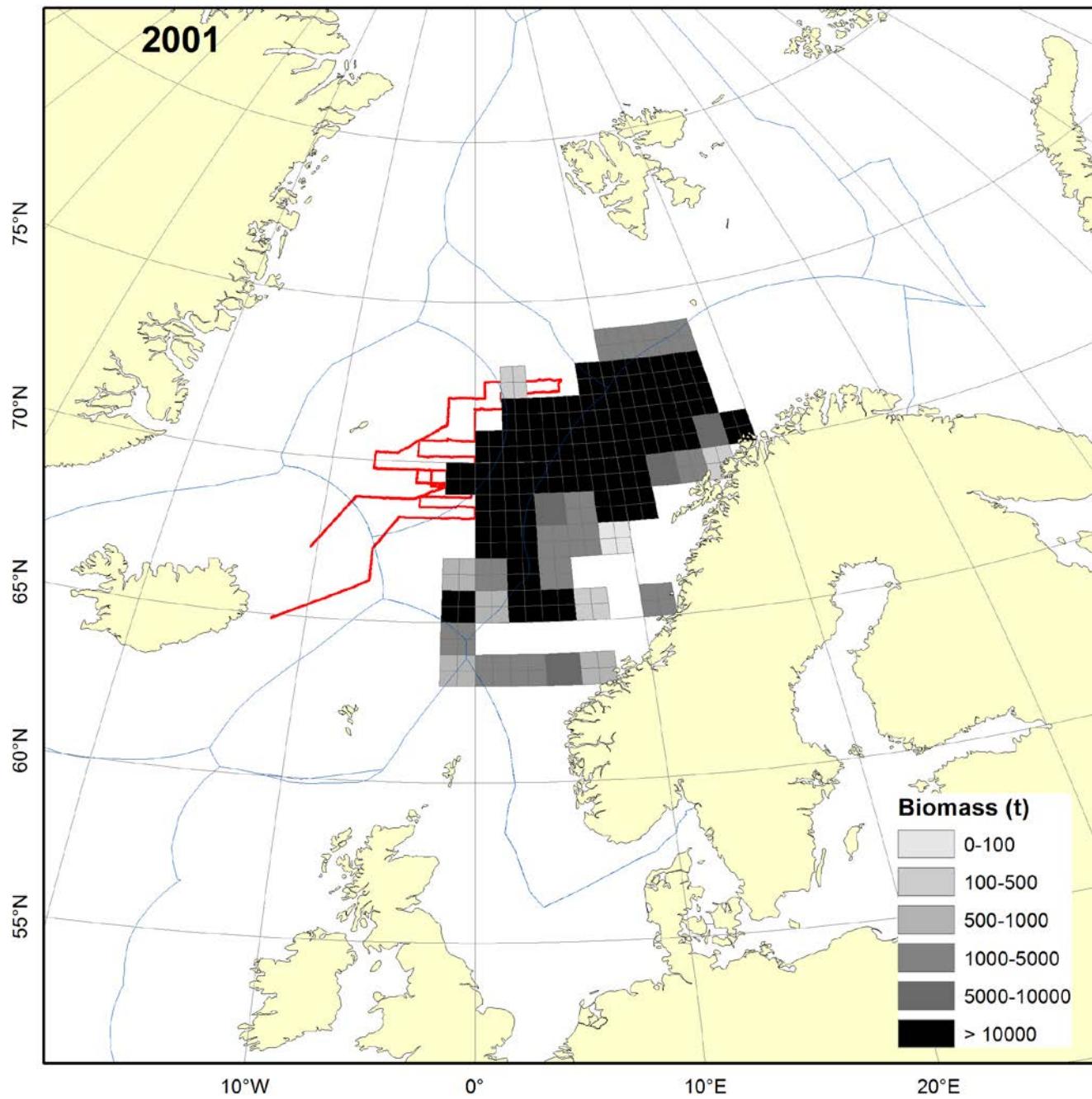


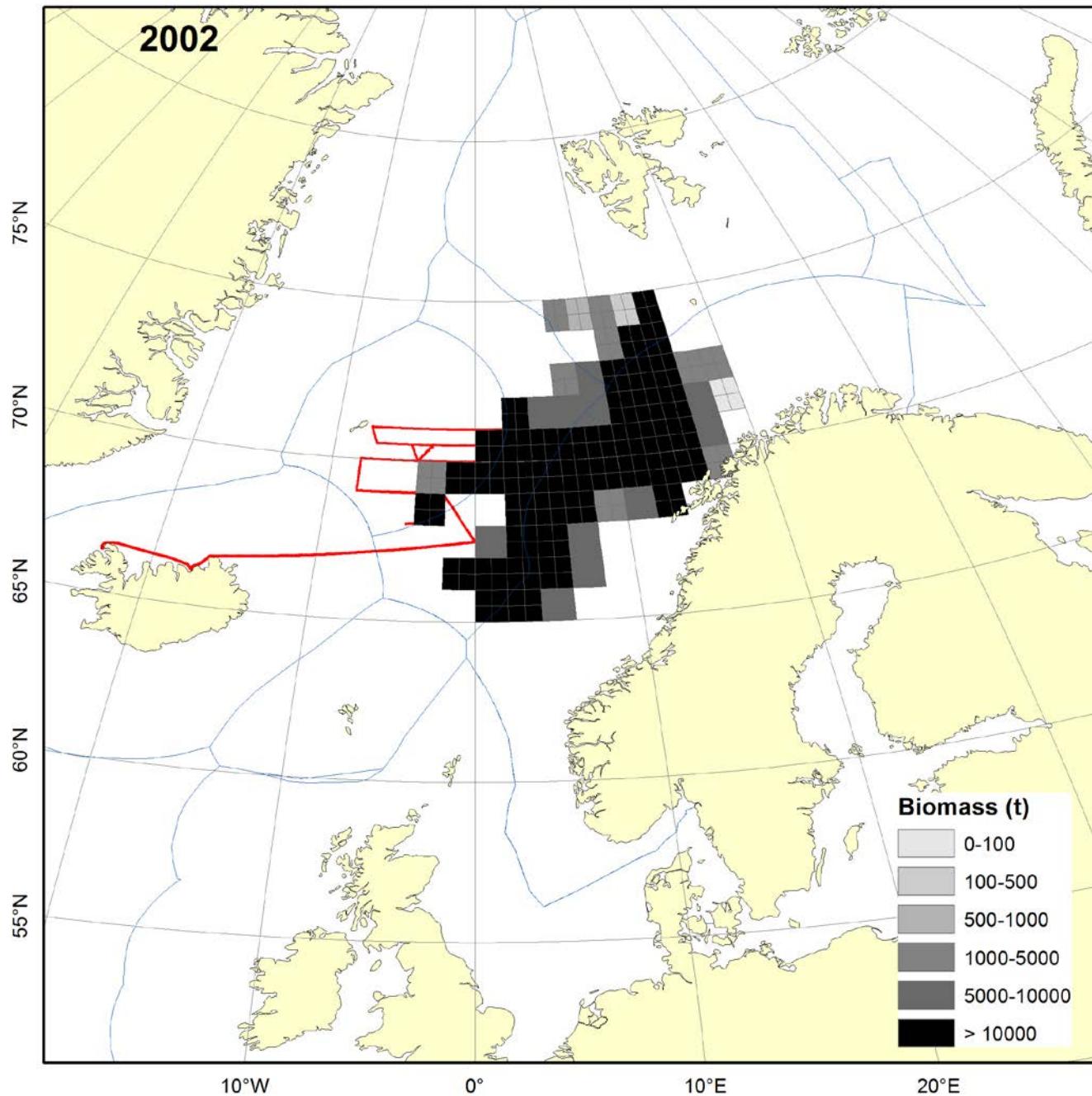


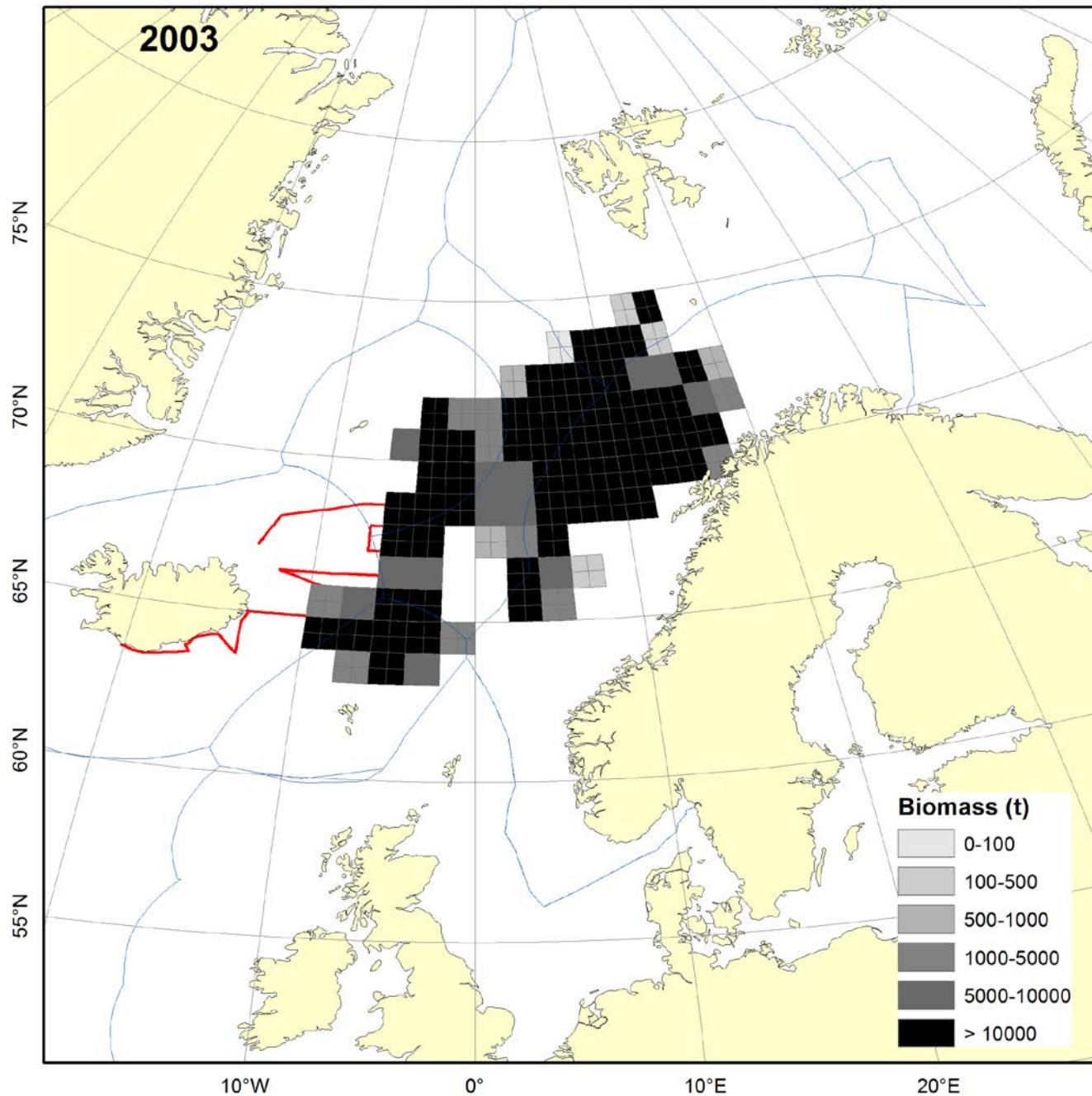


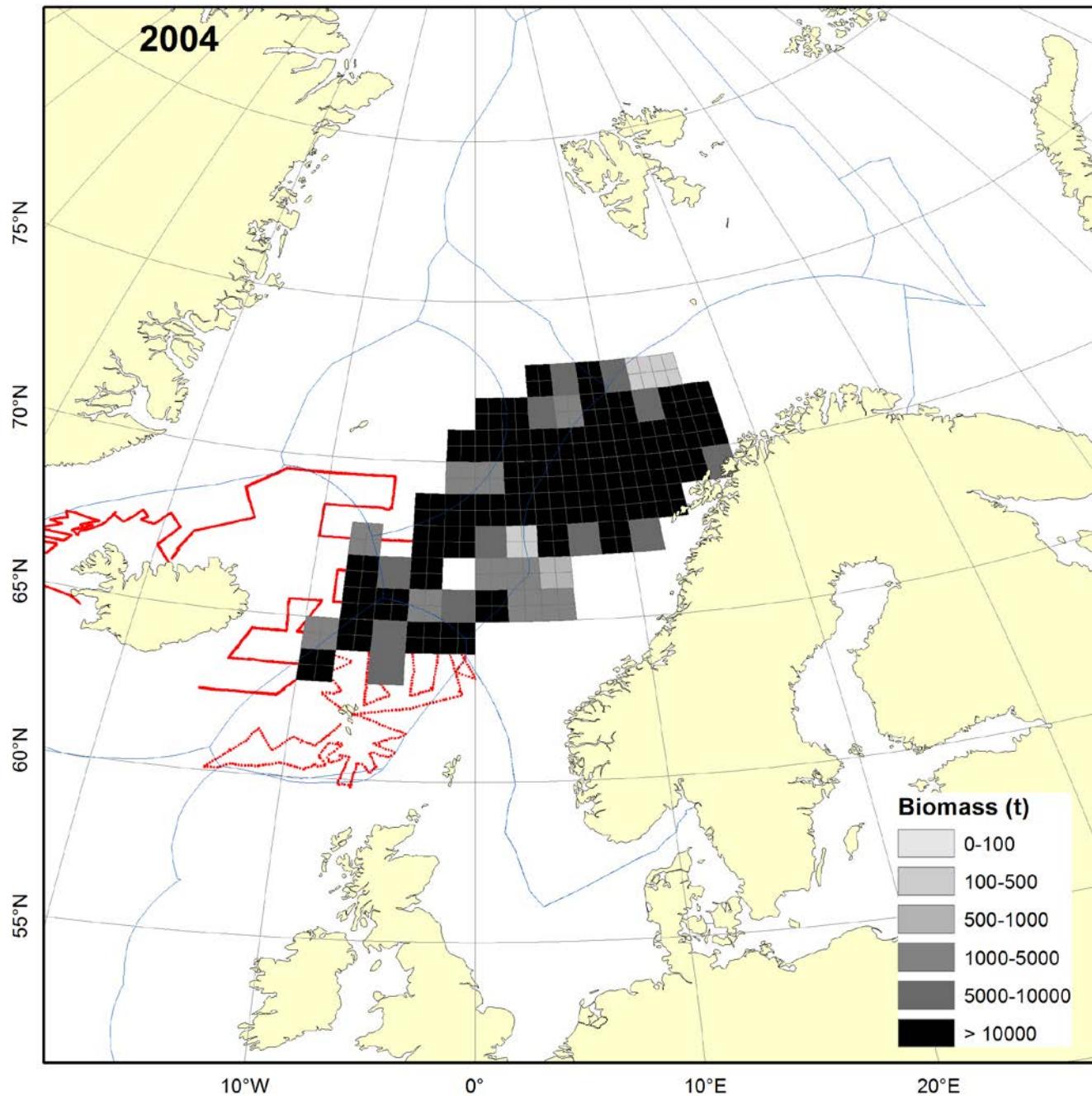


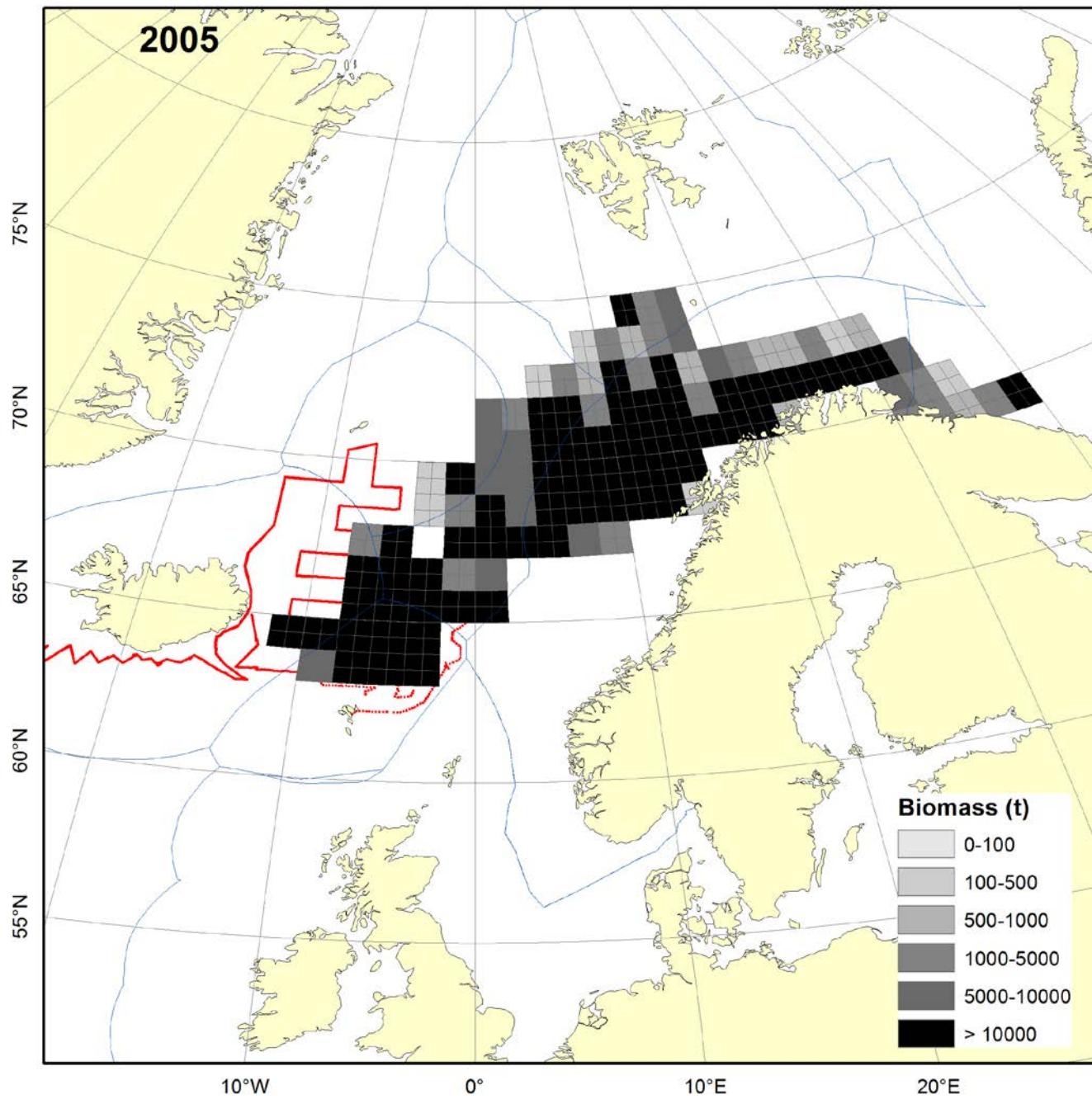


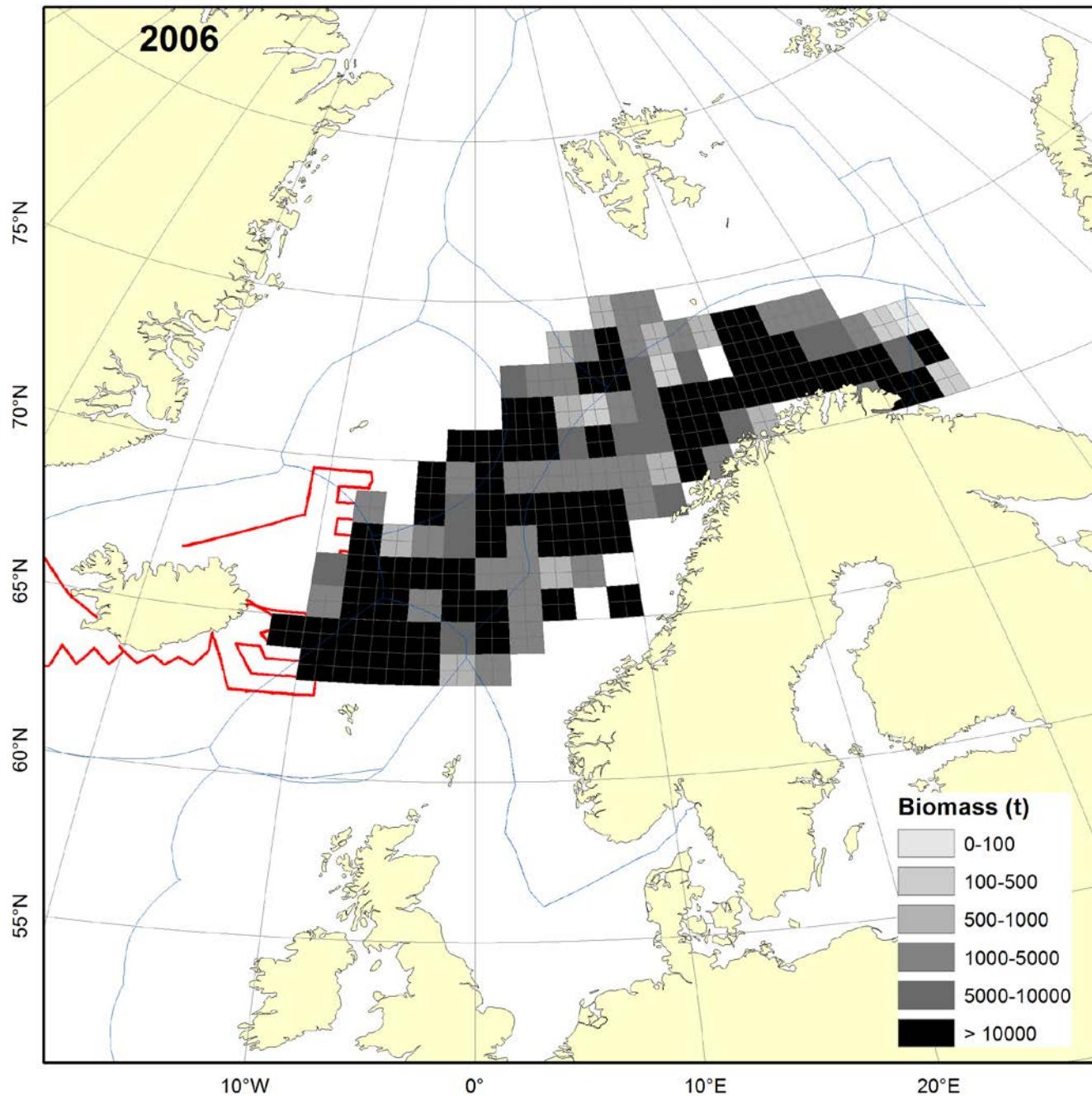


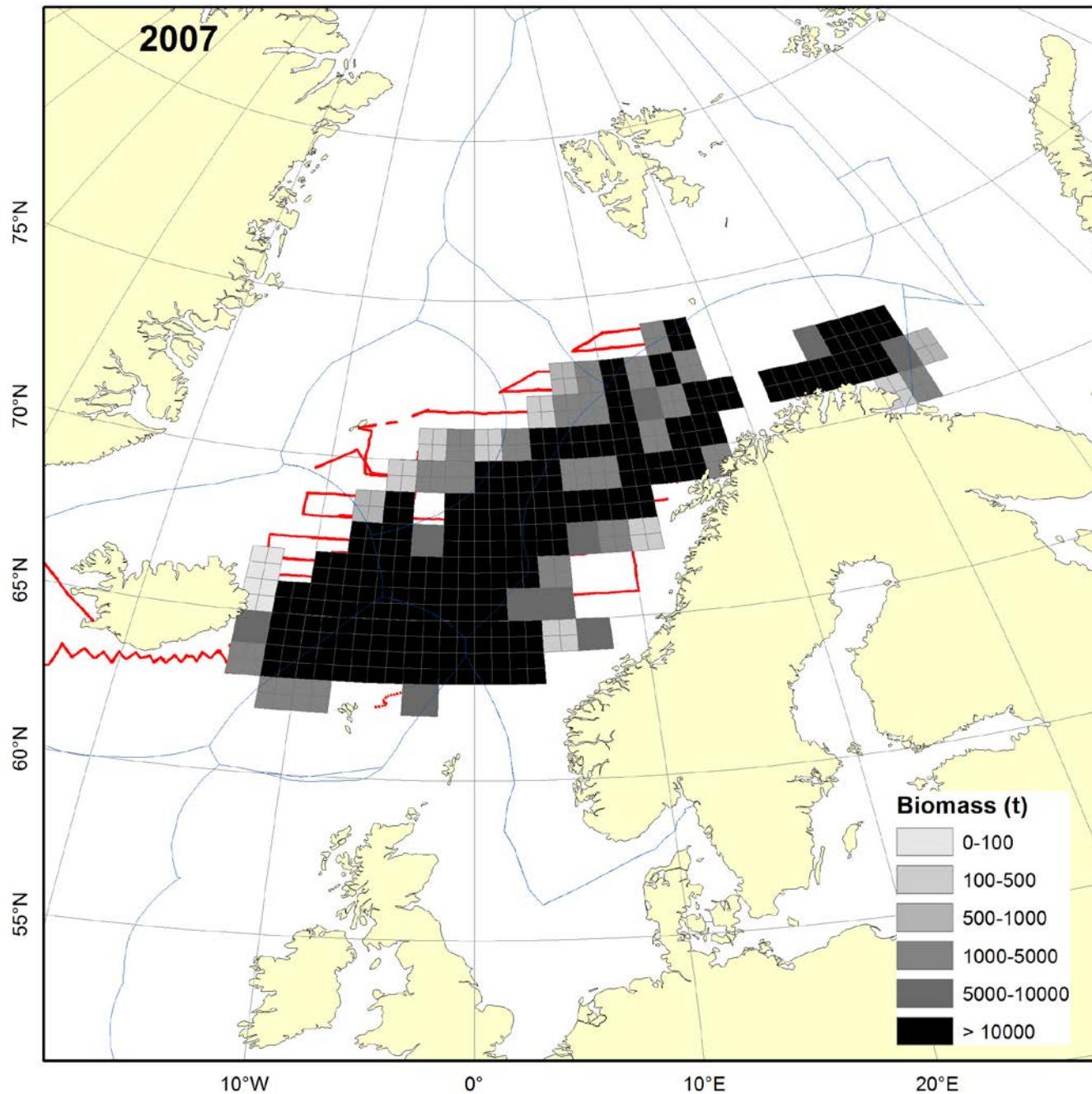


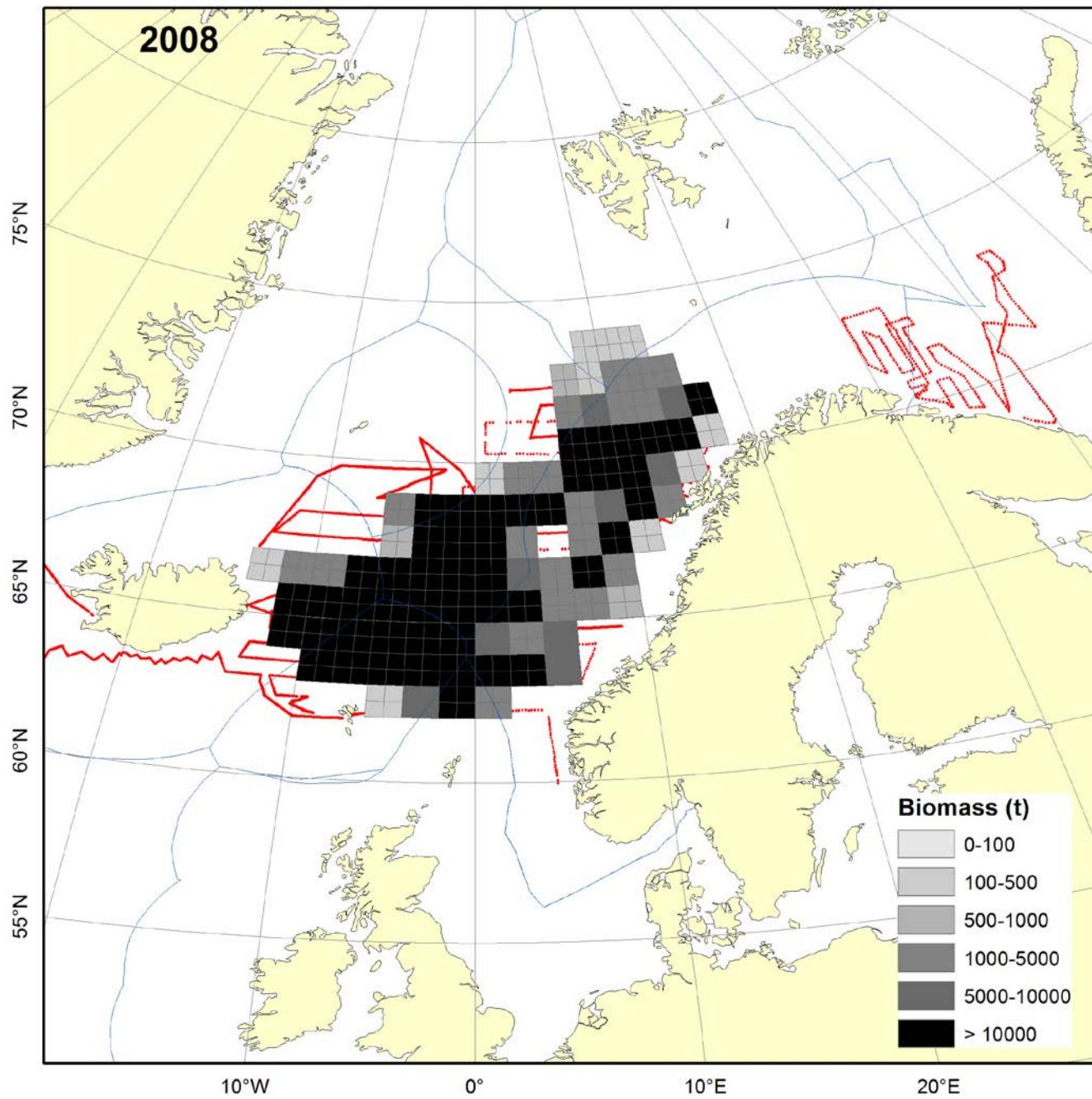


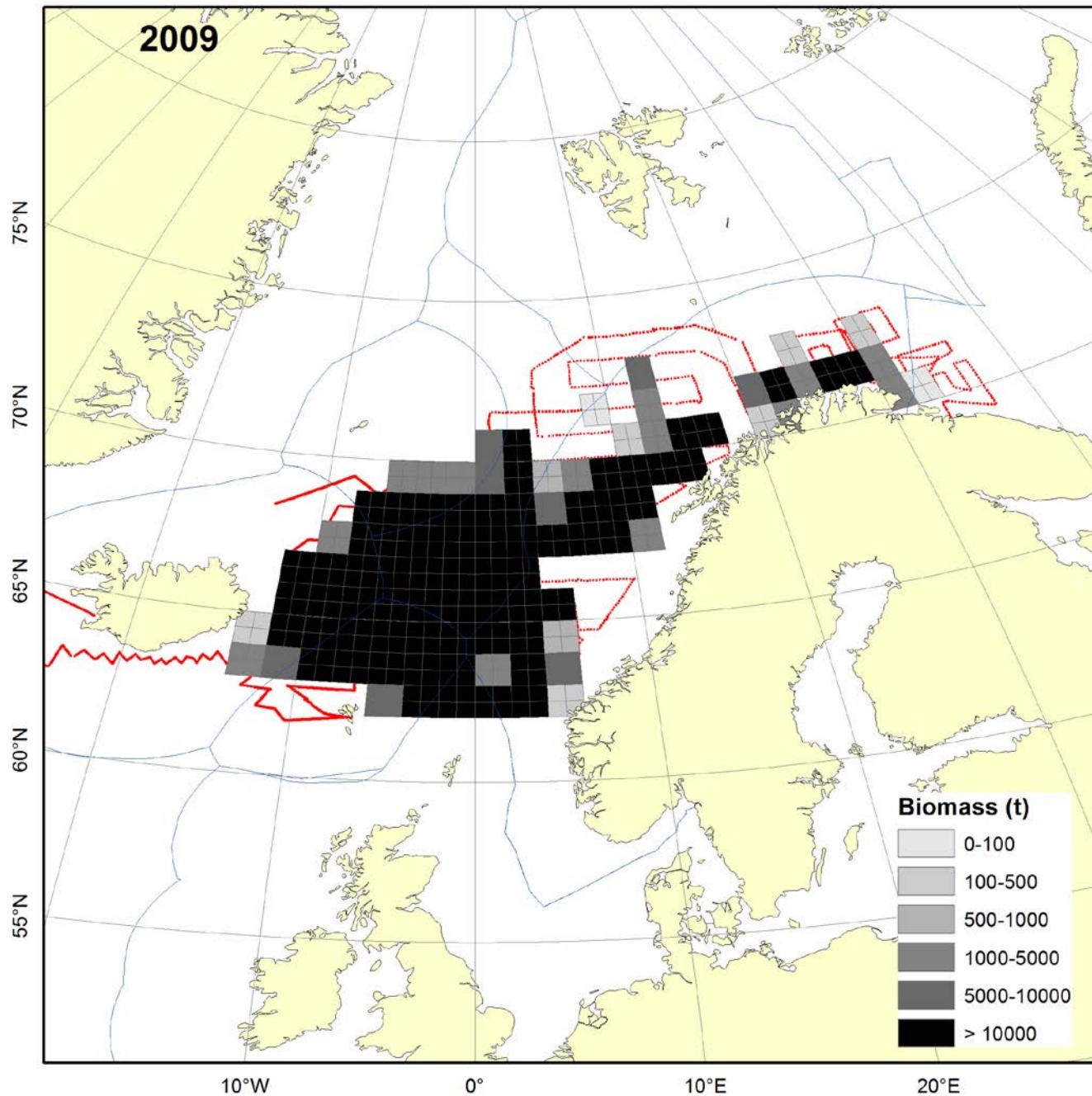


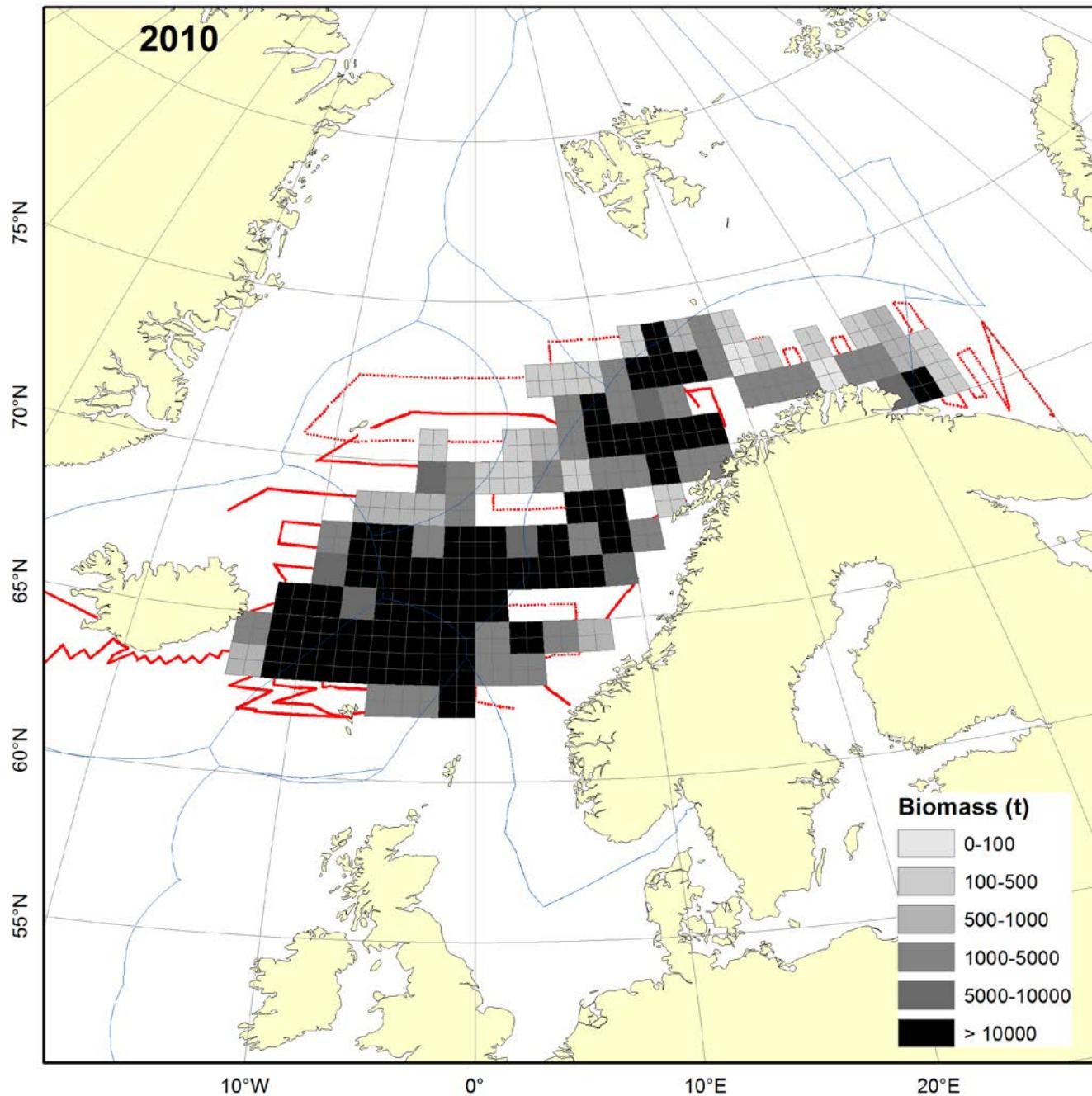


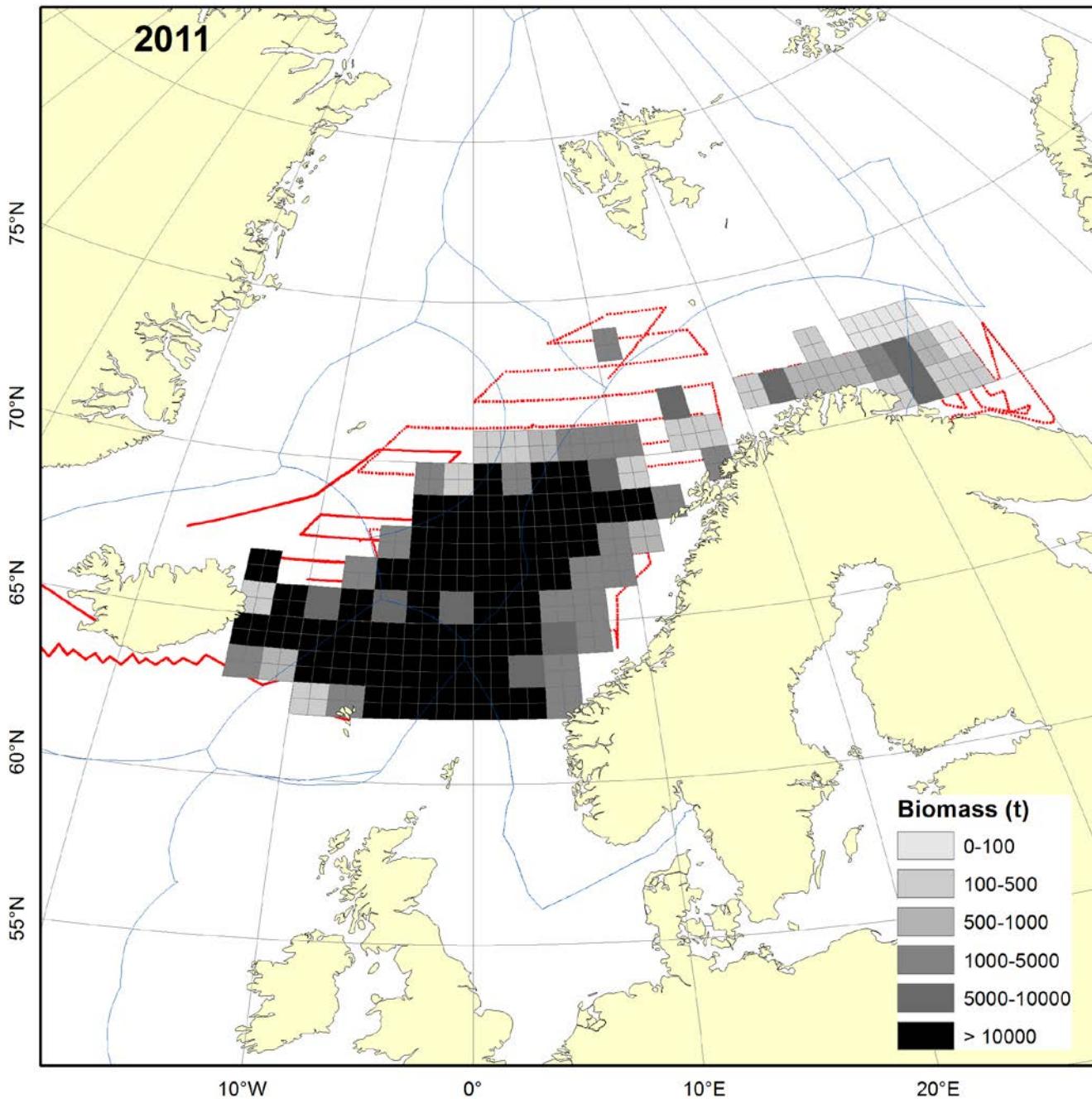


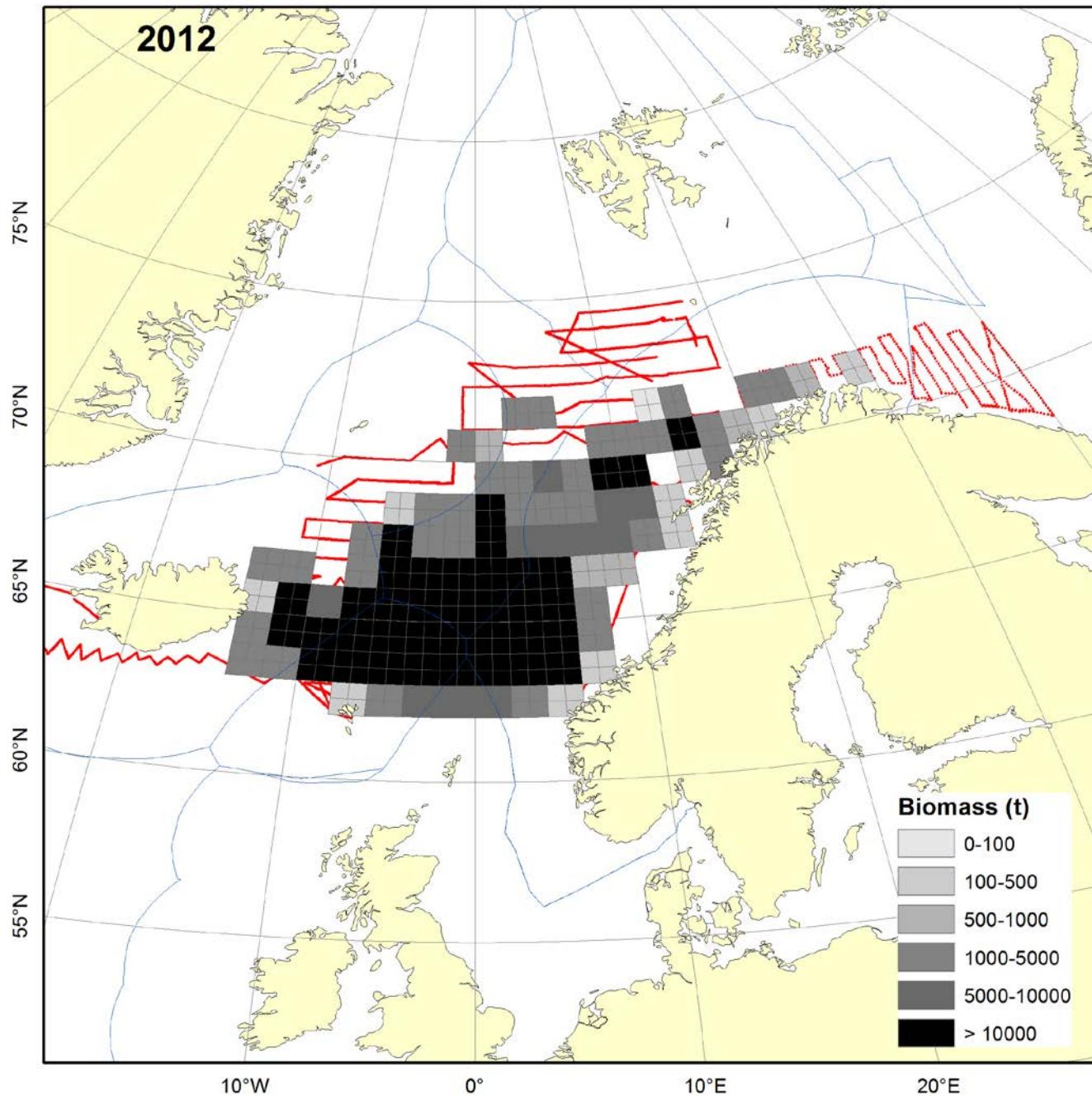


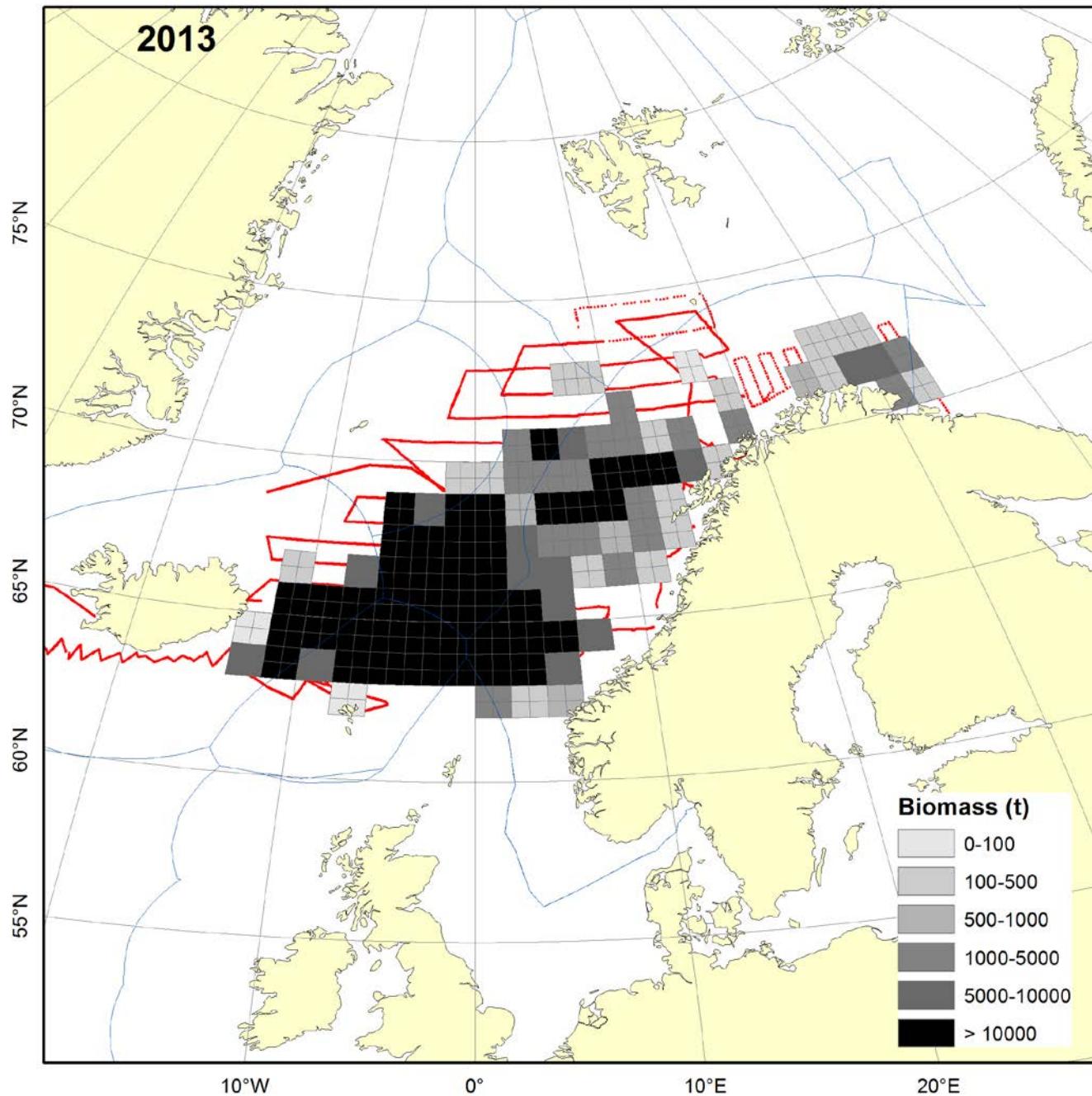






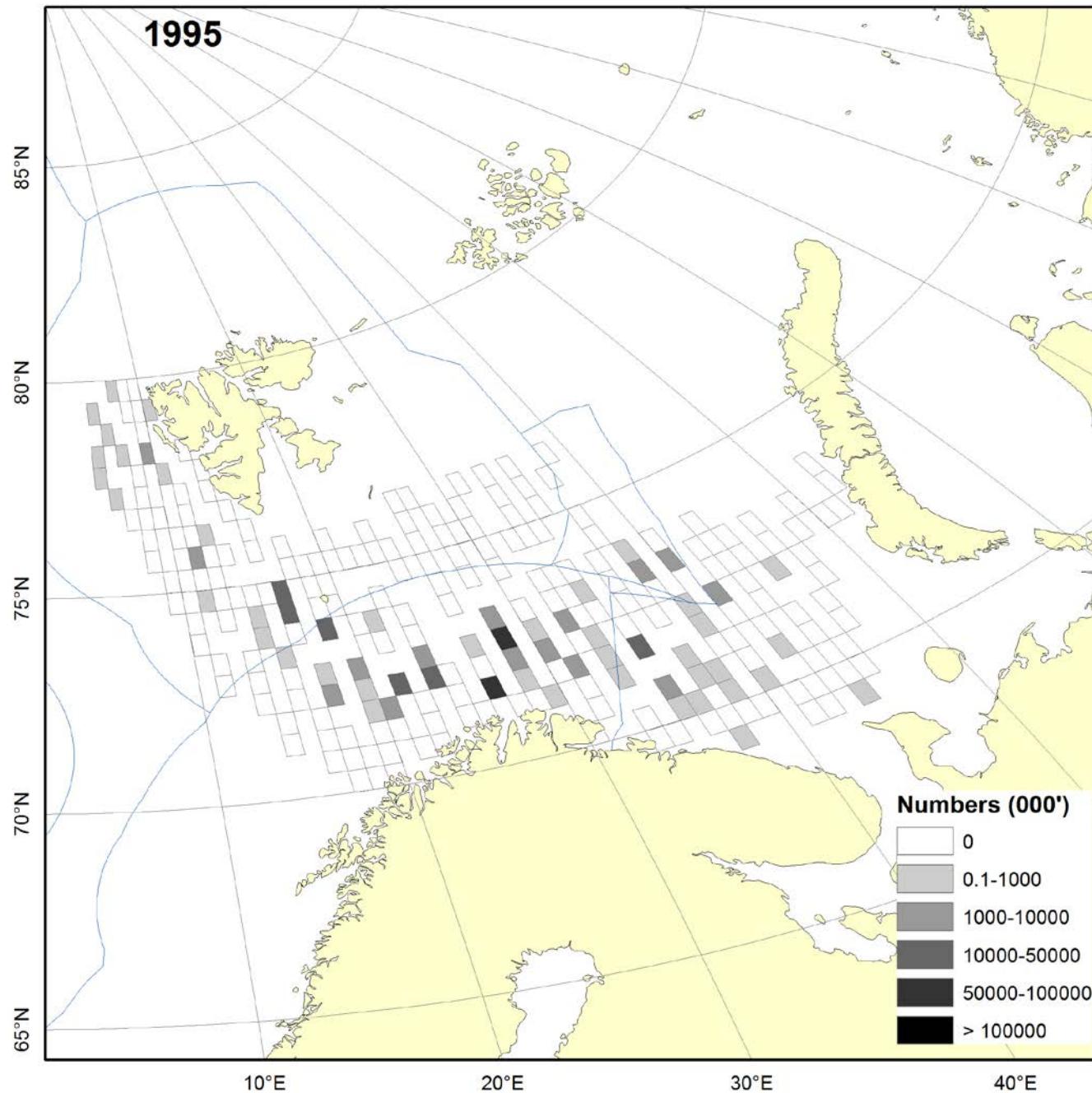


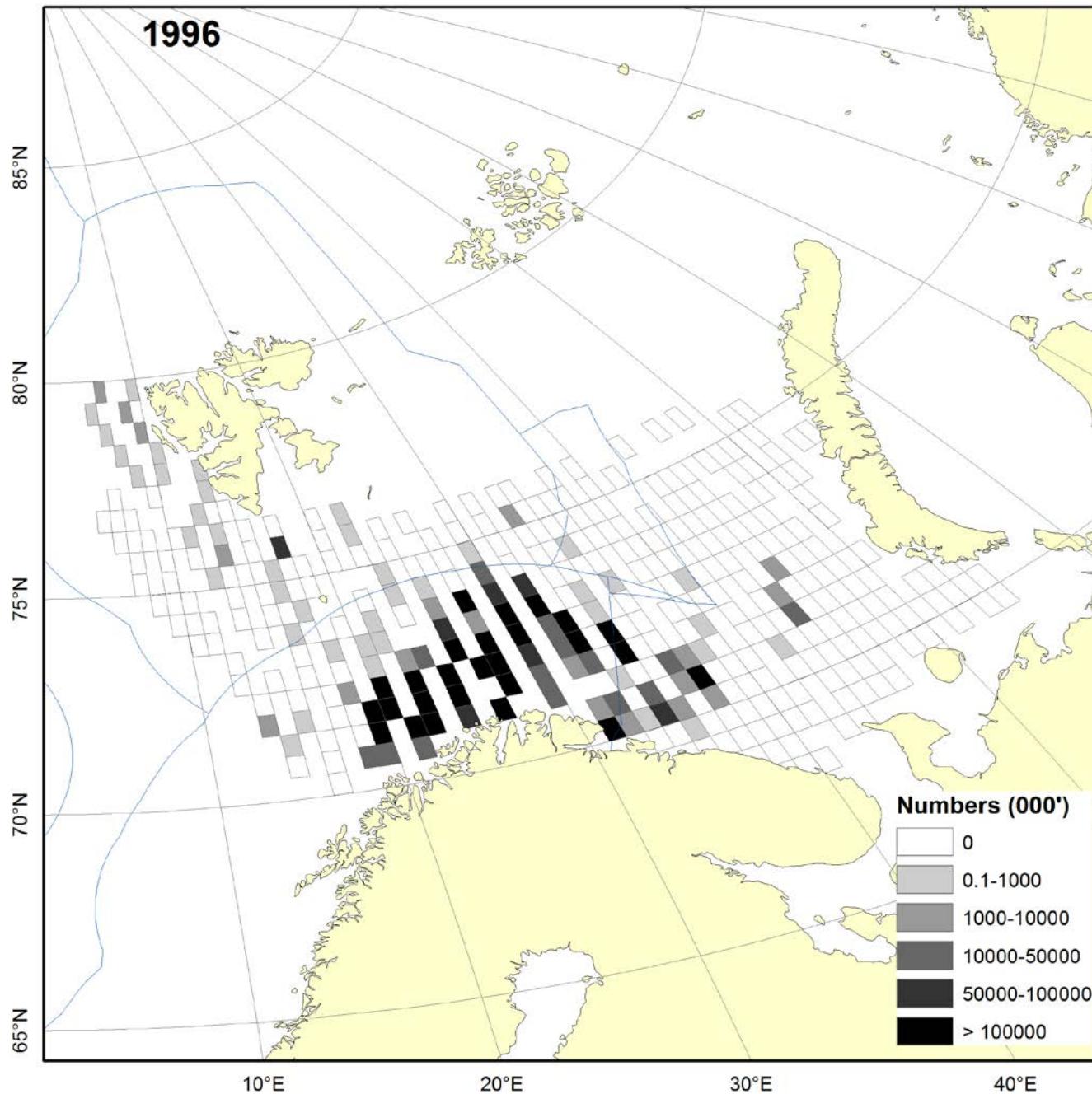


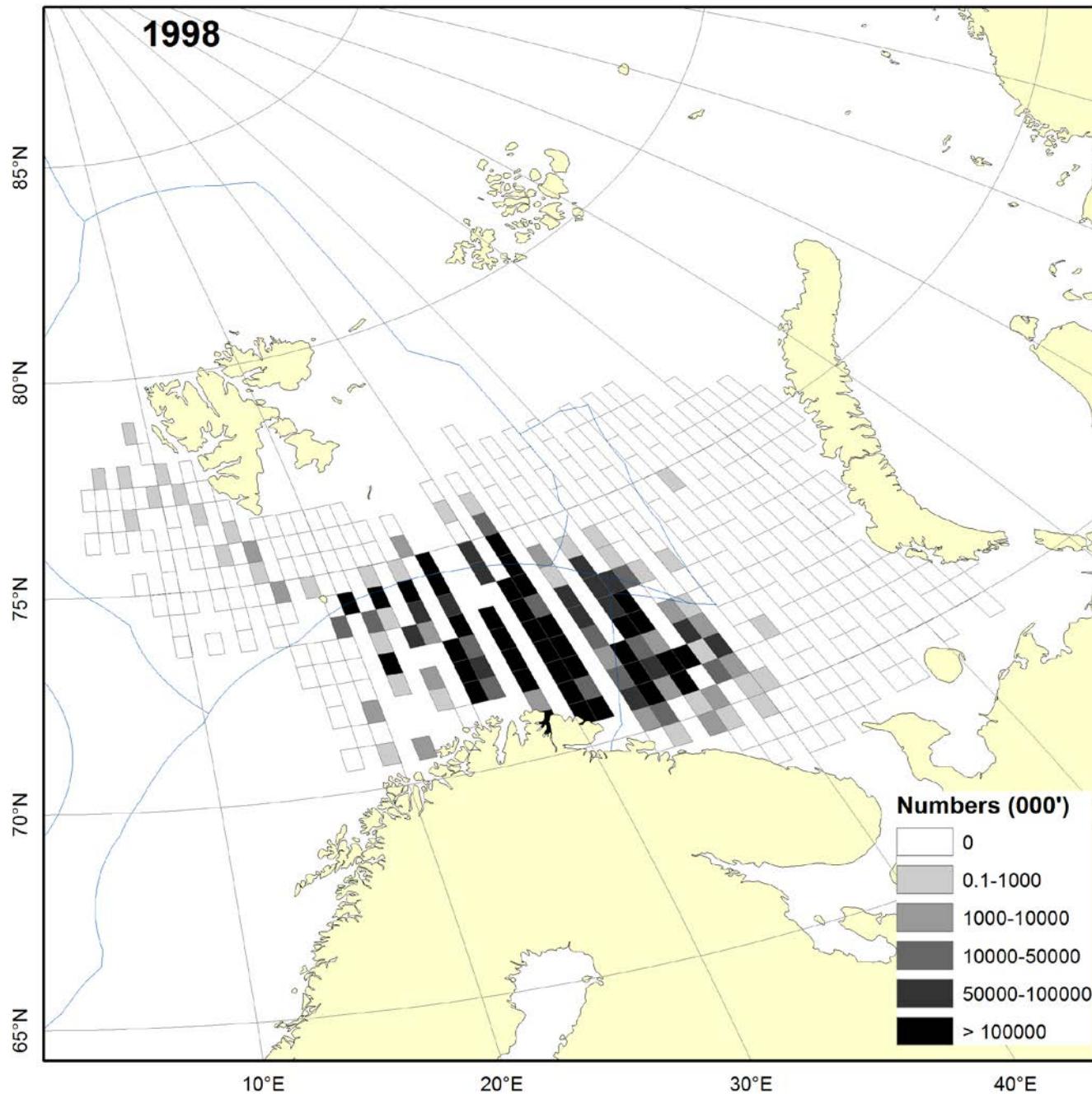


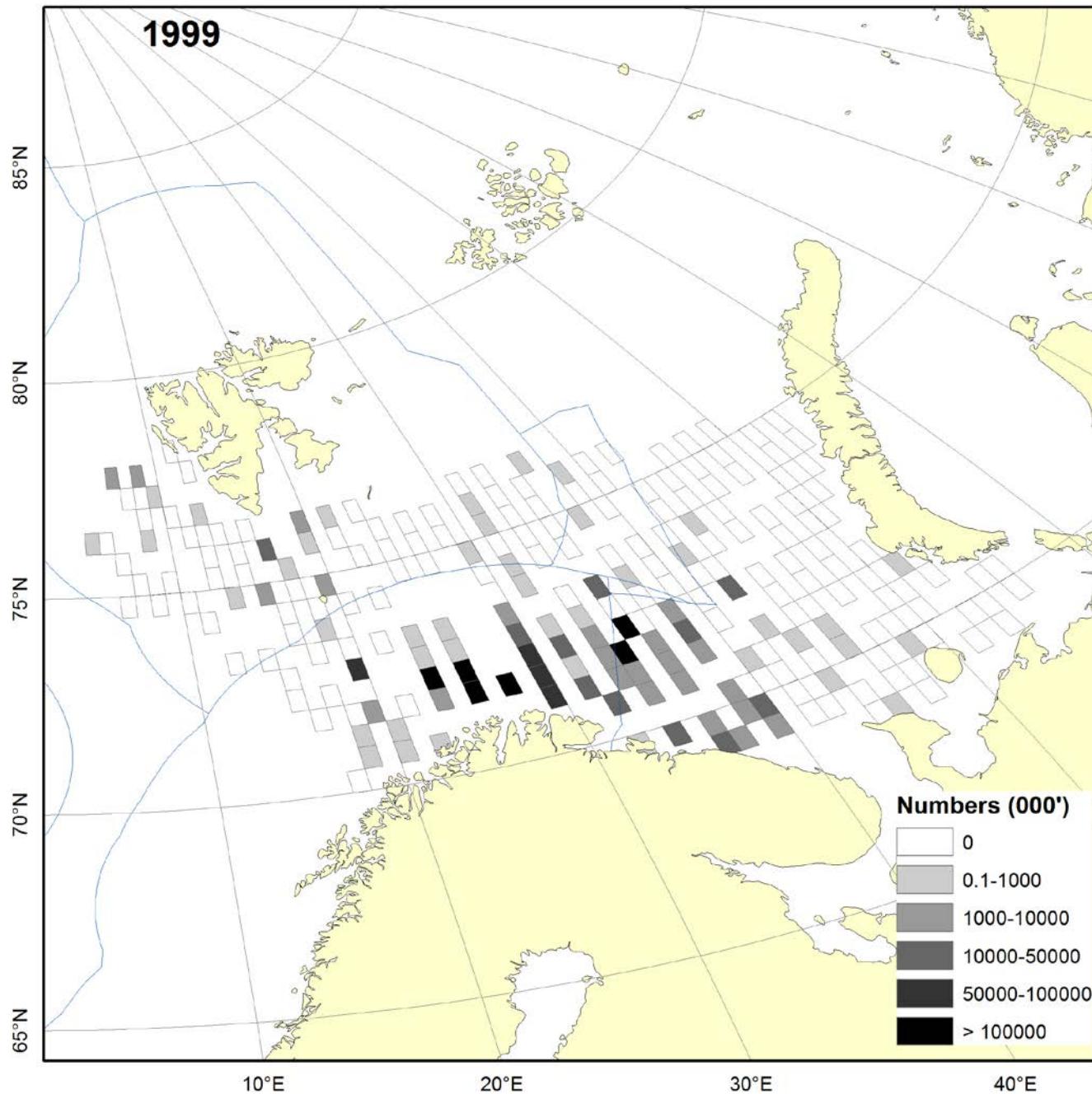
Year	cruise	EU	Norway	Iceland	Svalbard	JanMayen	Faeroes	InterBarSea	InterNorwSea	Russia	SpecialAreaBar	Total
1996		0.8	33.8	1.9	0.0	8.3	3.0	0.0	52.3	0.0	0.0	100
1997		0.8	42.8	0.0	0.0	0.3	3.4	0.0	52.6	0.0	0.0	100
1998		0.4	80.6	0.0	0.0	0.2	0.3	0.0	18.6	0.0	0.0	100
1999		0.0	44.9	0.0	0.0	7.7	0.0	0.0	47.3	0.0	0.0	100
2000		0.3	65.4	0.0	1.3	3.7	0.0	0.0	29.3	0.0	0.0	100
2001		0.0	56.5	0.0	2.8	5.3	0.2	0.0	35.2	0.0	0.0	100
2002		0.0	62.2	0.0	6.1	7.5	0.0	0.0	24.2	0.0	0.0	100
2003		0.0	49.9	1.2	10.8	11.8	5.1	0.0	21.3	0.0	0.0	100
2004		0.0	49.0	2.3	0.6	15.1	5.0	0.0	28.0	0.0	0.0	100
2005		0.0	52.8	6.7	1.9	2.3	13.4	0.0	21.0	1.8	0.0	100
2006		0.0	37.5	16.6	2.5	3.8	19.9	0.0	17.2	2.5	0.0	100
2007		0.4	39.2	18.0	0.7	1.8	14.3	0.0	25.5	0.1	0.0	100
2008		1.3	19.9	15.0	0.1	3.0	18.4	0.0	42.3	0.0	0.0	100
2009		2.2	28.6	15.3	0.0	6.6	10.6	0.0	36.7	0.0	0.0	100
2010		2.8	35.2	14.5	0.7	1.4	20.5	0.0	24.2	0.7	0.0	100
2011		3.0	31.6	8.8	0.2	2.4	19.3	0.0	34.3	0.4	0.0	100
2012		2.7	36.8	10.0	0.0	0.8	21.3	0.0	28.5	0.0	0.0	100
2013		1.2	31.5	9.7	0.0	3.0	23.1	0.0	31.4	0.1	0.0	100
Average		0.9	44.3	6.7	1.5	4.7	9.9	0.0	31.7	0.3	0.0	
Last 5 yr		2.4	32.7	11.6	0.2	2.8	19.0	0.0	31.0	0.2	0.0	
Last 10 yr		1.4	36.2	11.7	0.7	4.0	16.6	0.0	28.9	0.6	0.0	
Last 15 yr		0.9	42.7	7.9	1.8	5.1	11.4	0.0	29.8	0.4	0.0	

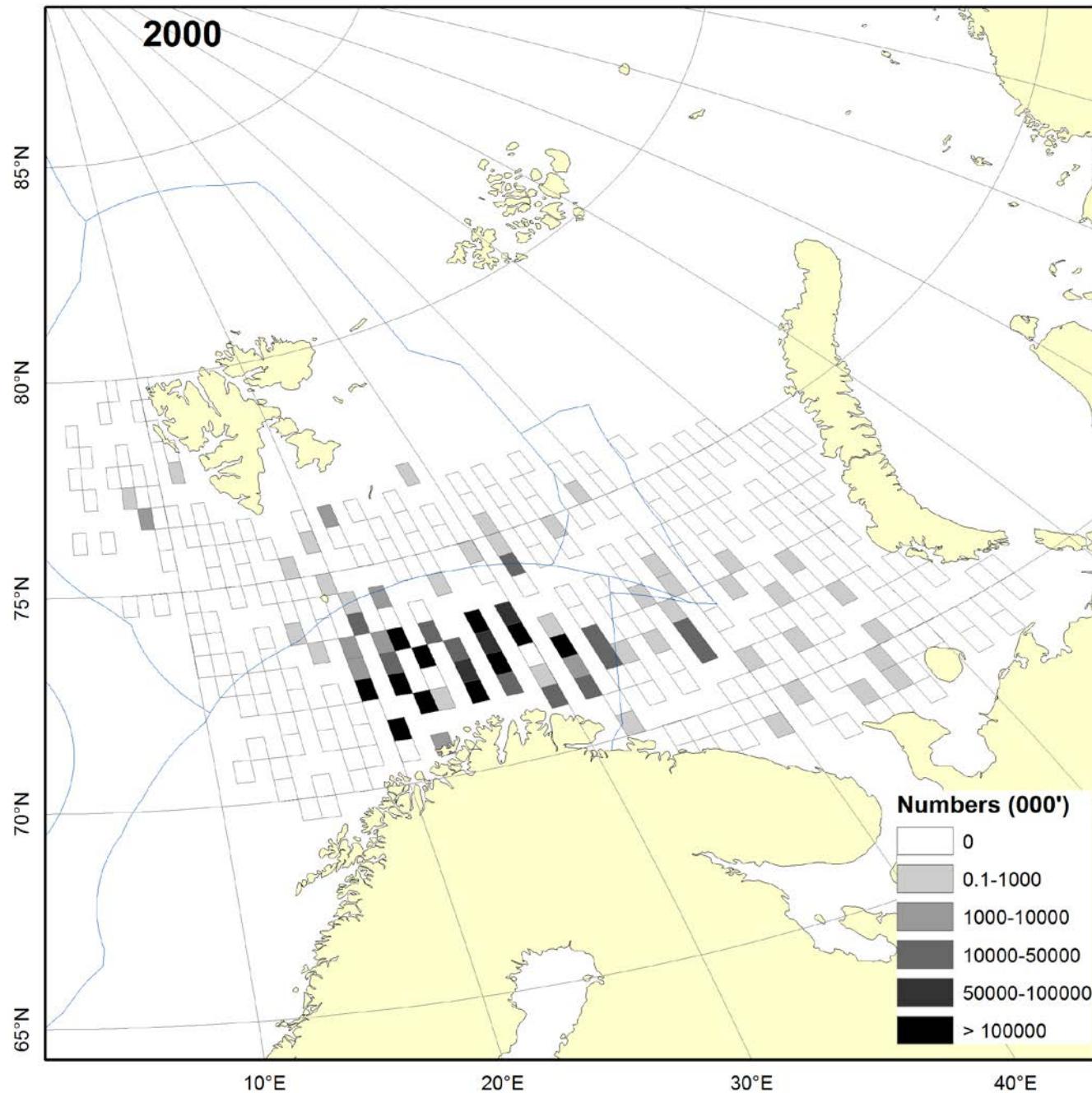
0-group survey, 1995-2013, trawl survey

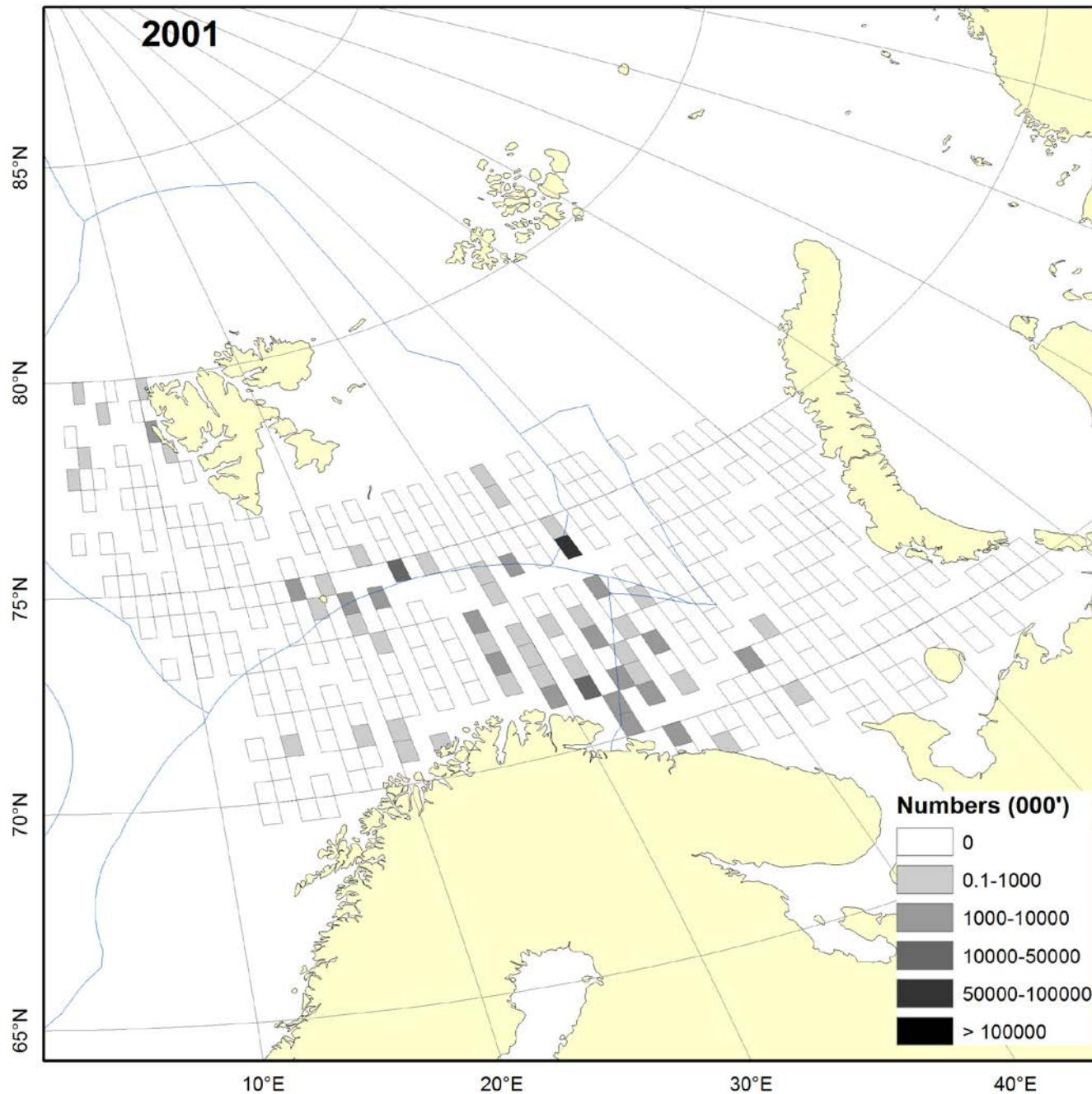


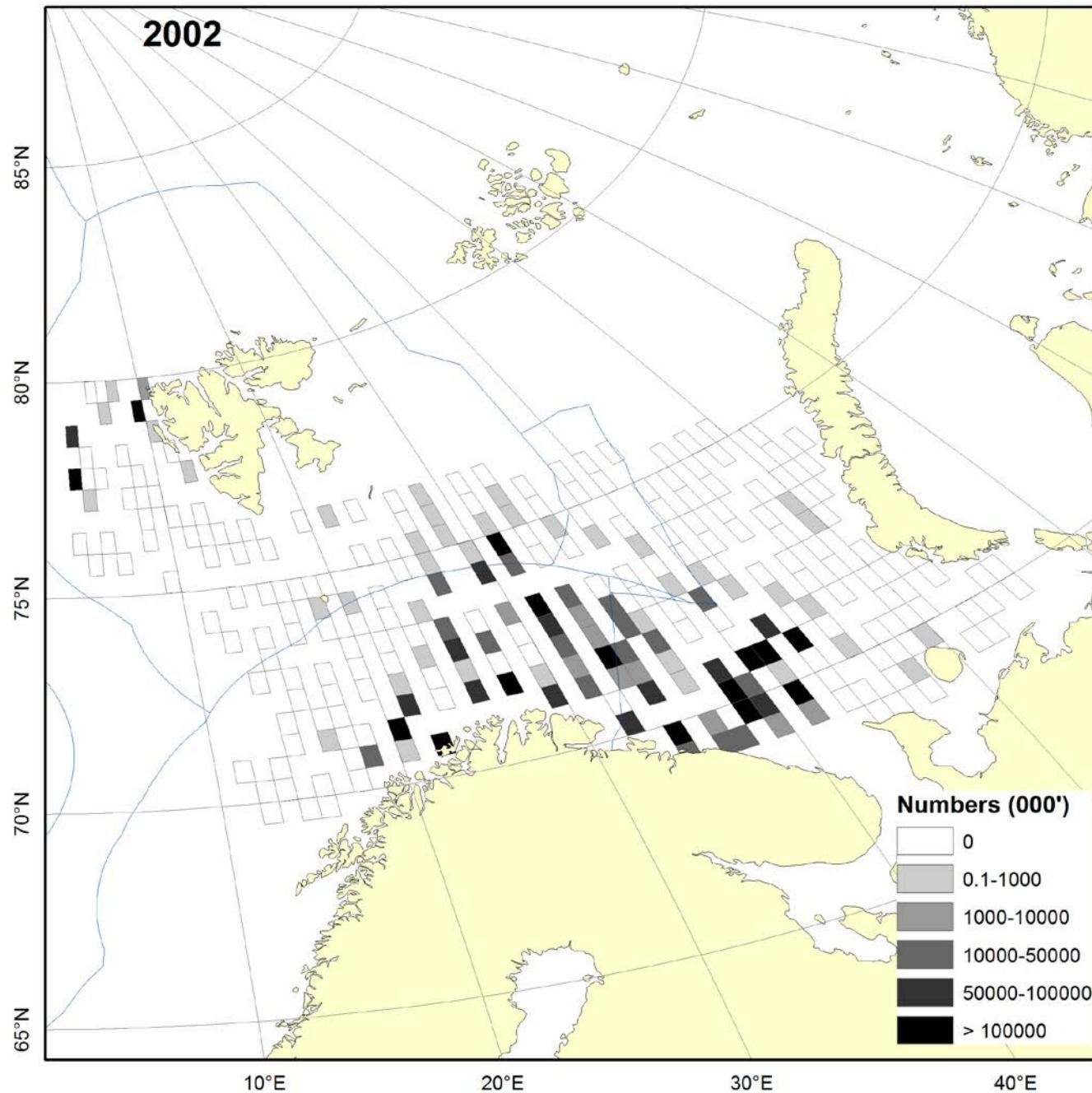


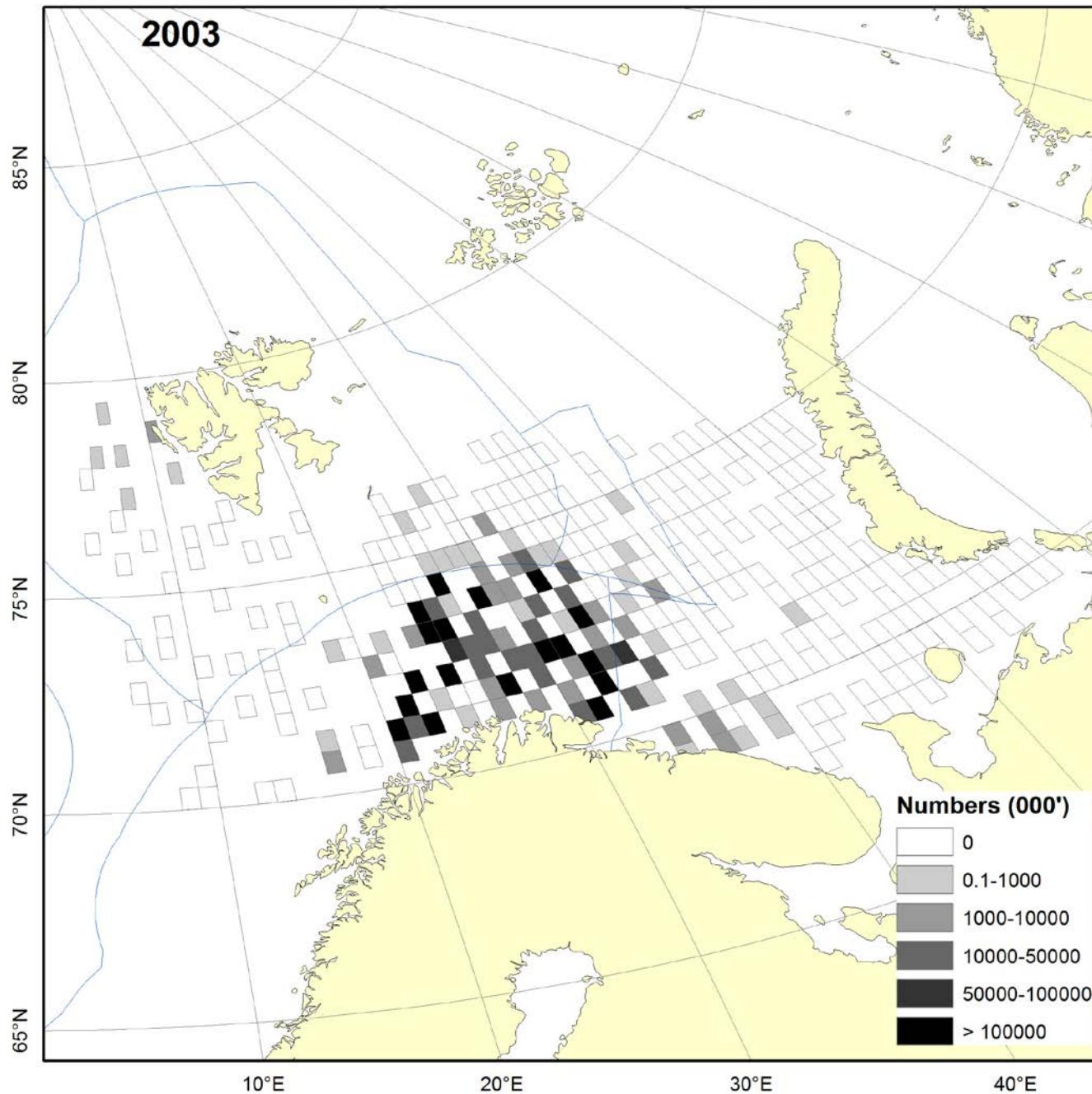


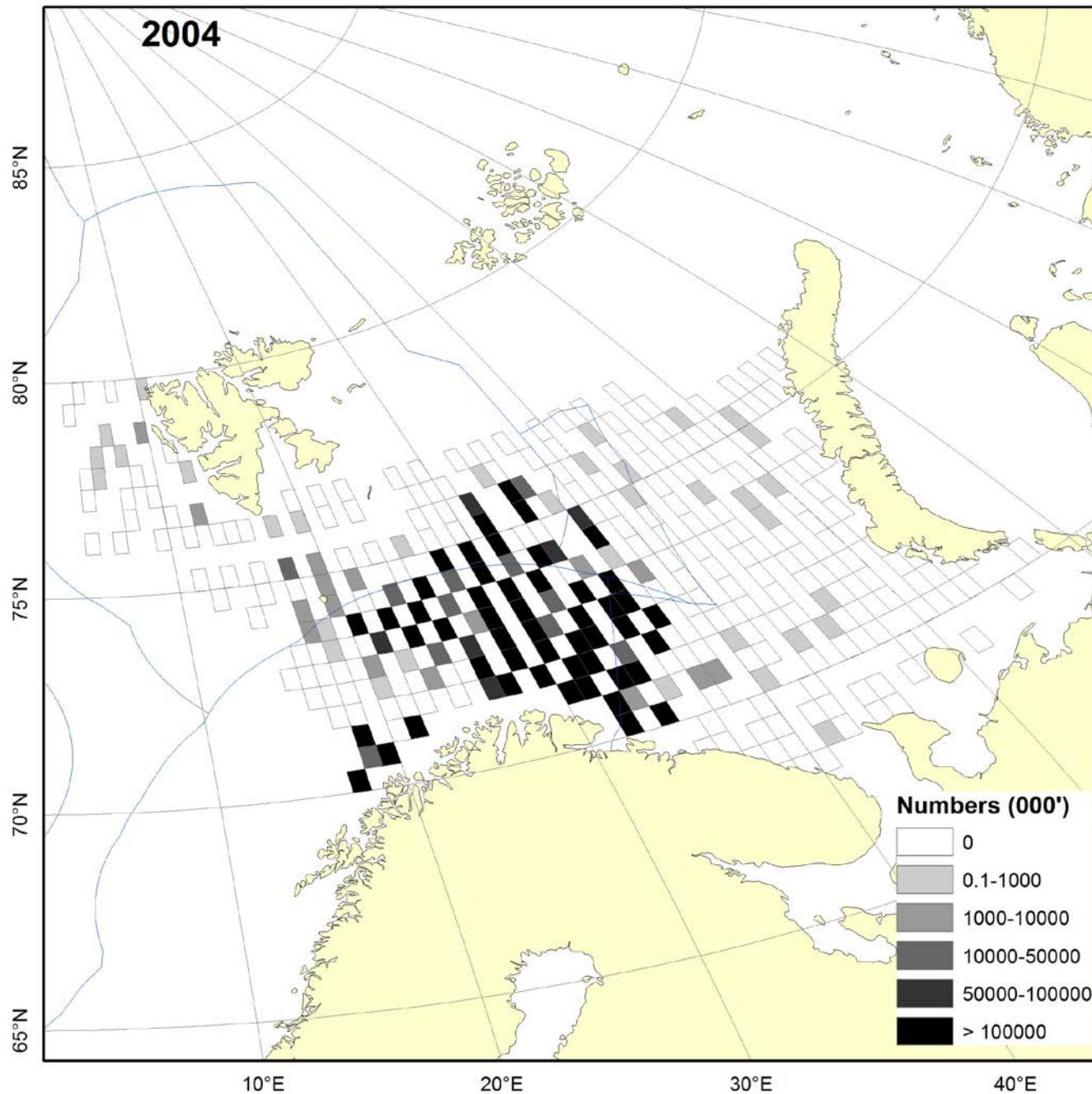


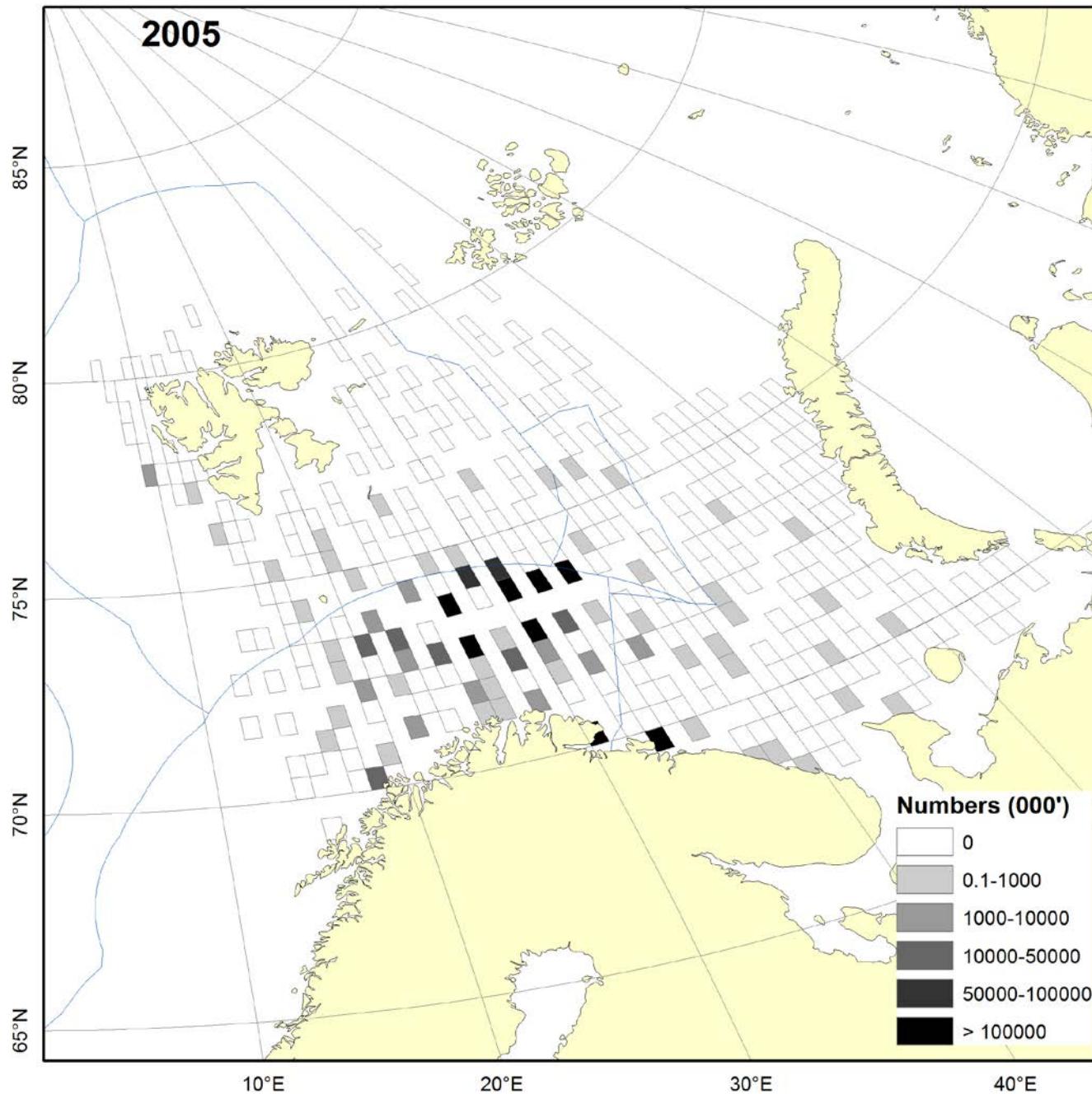


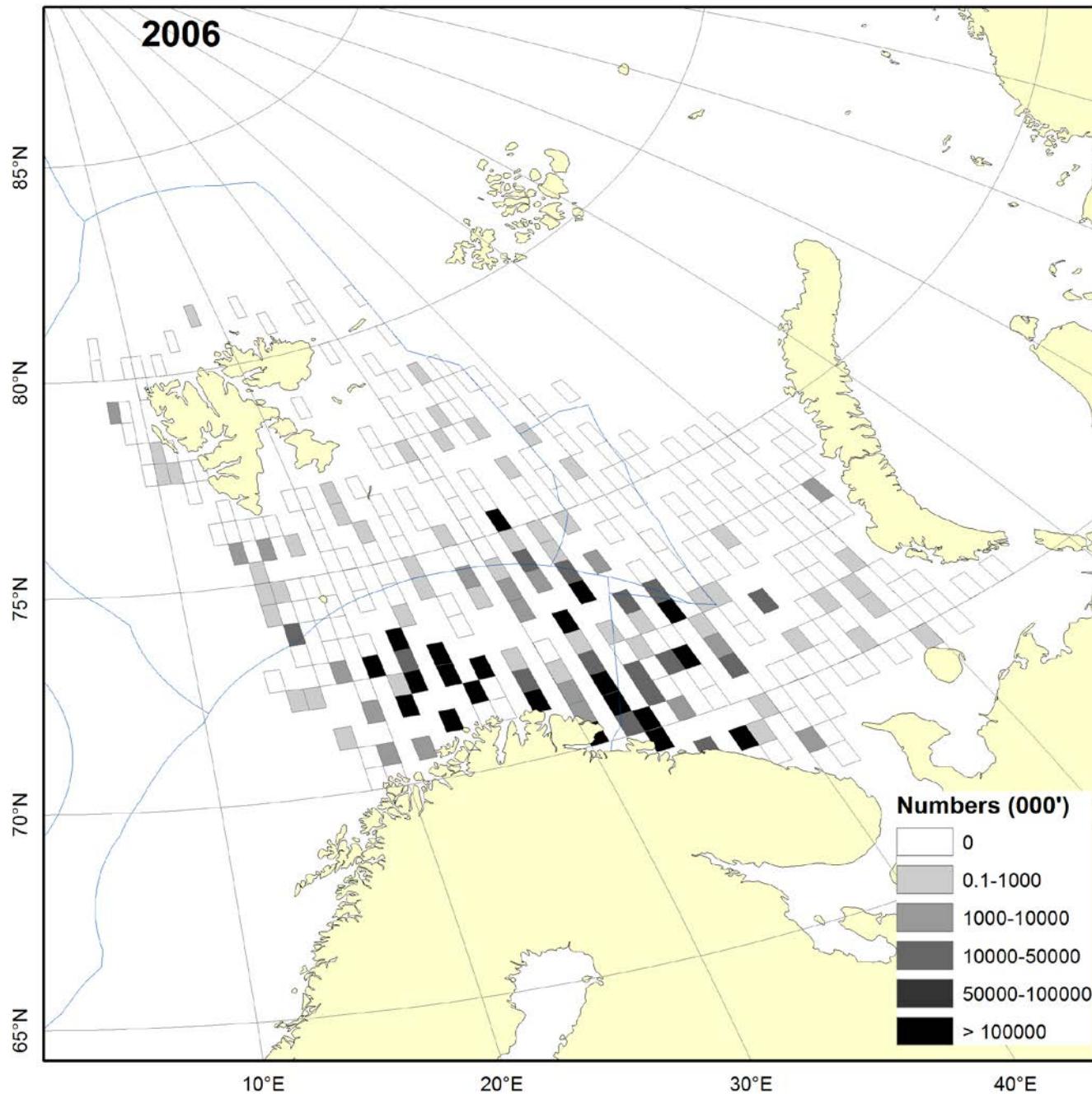


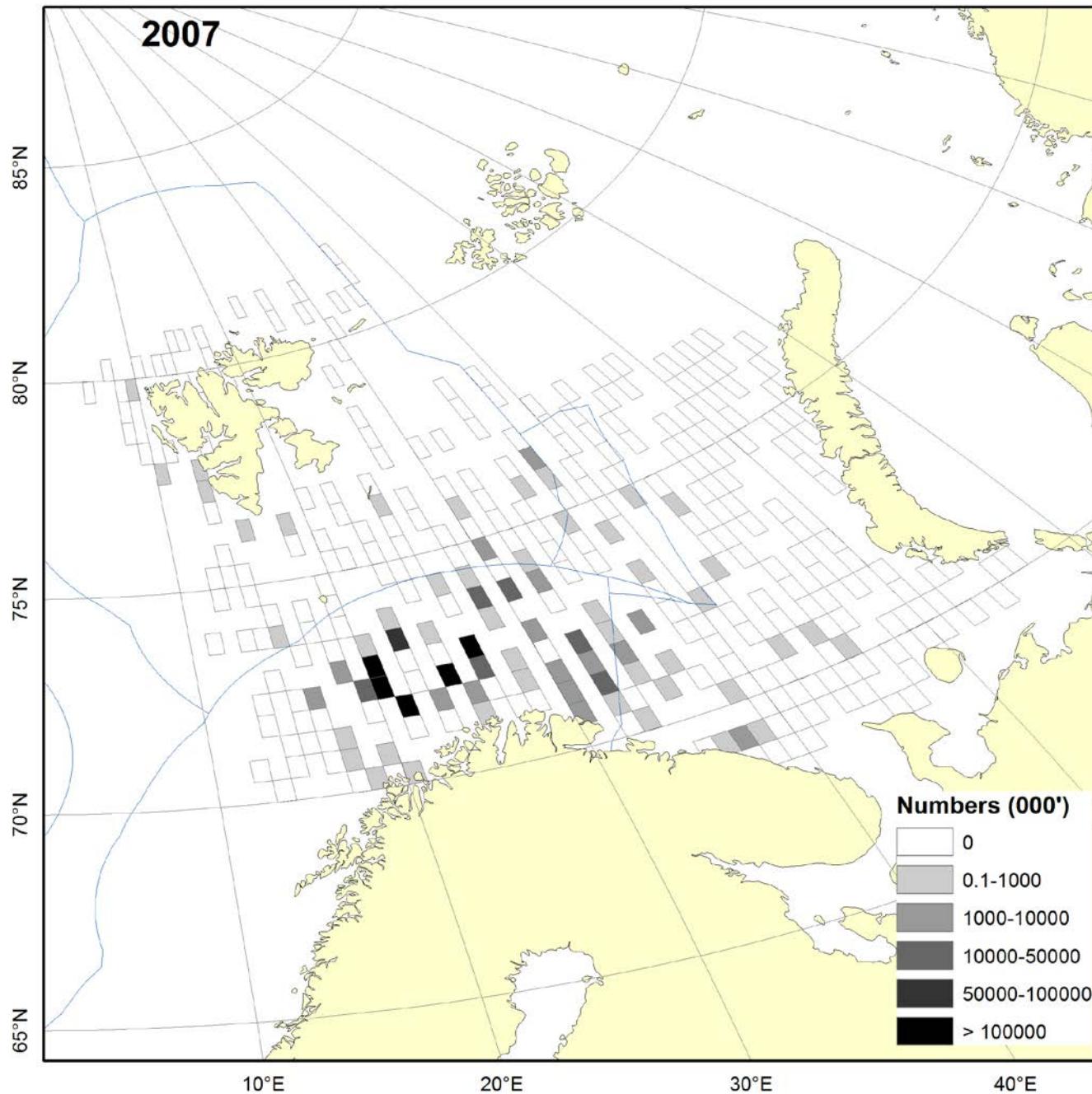


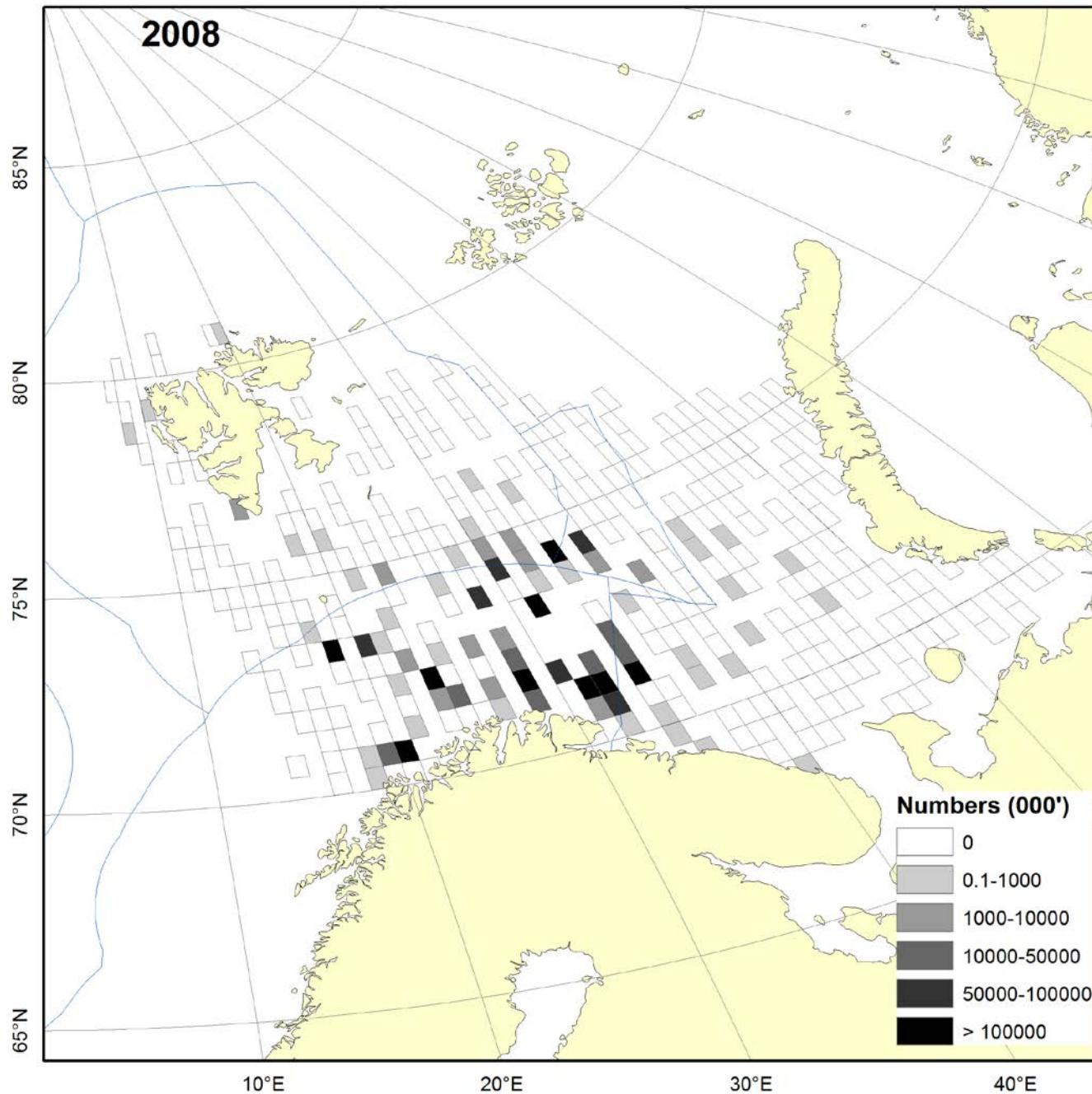


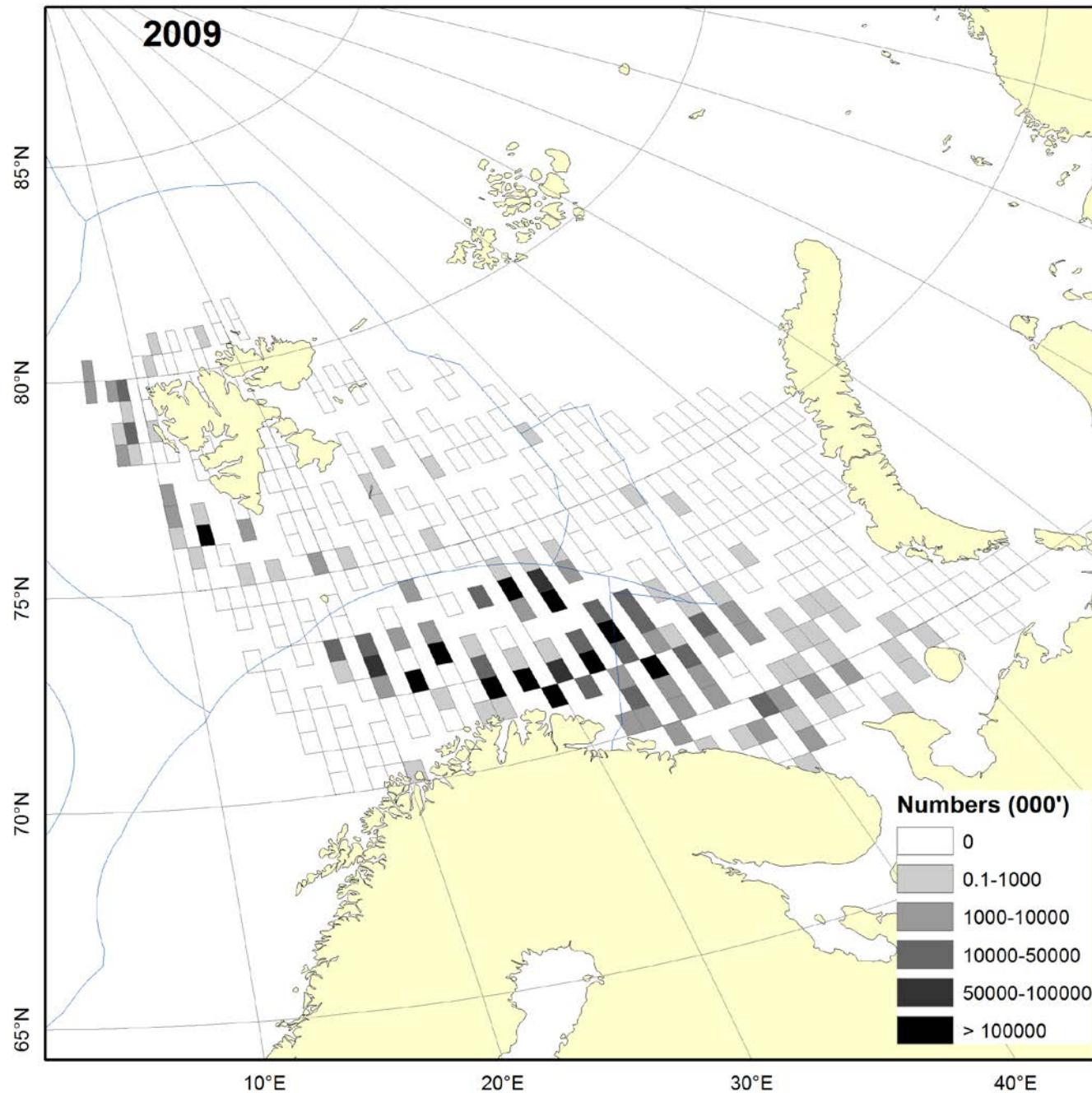


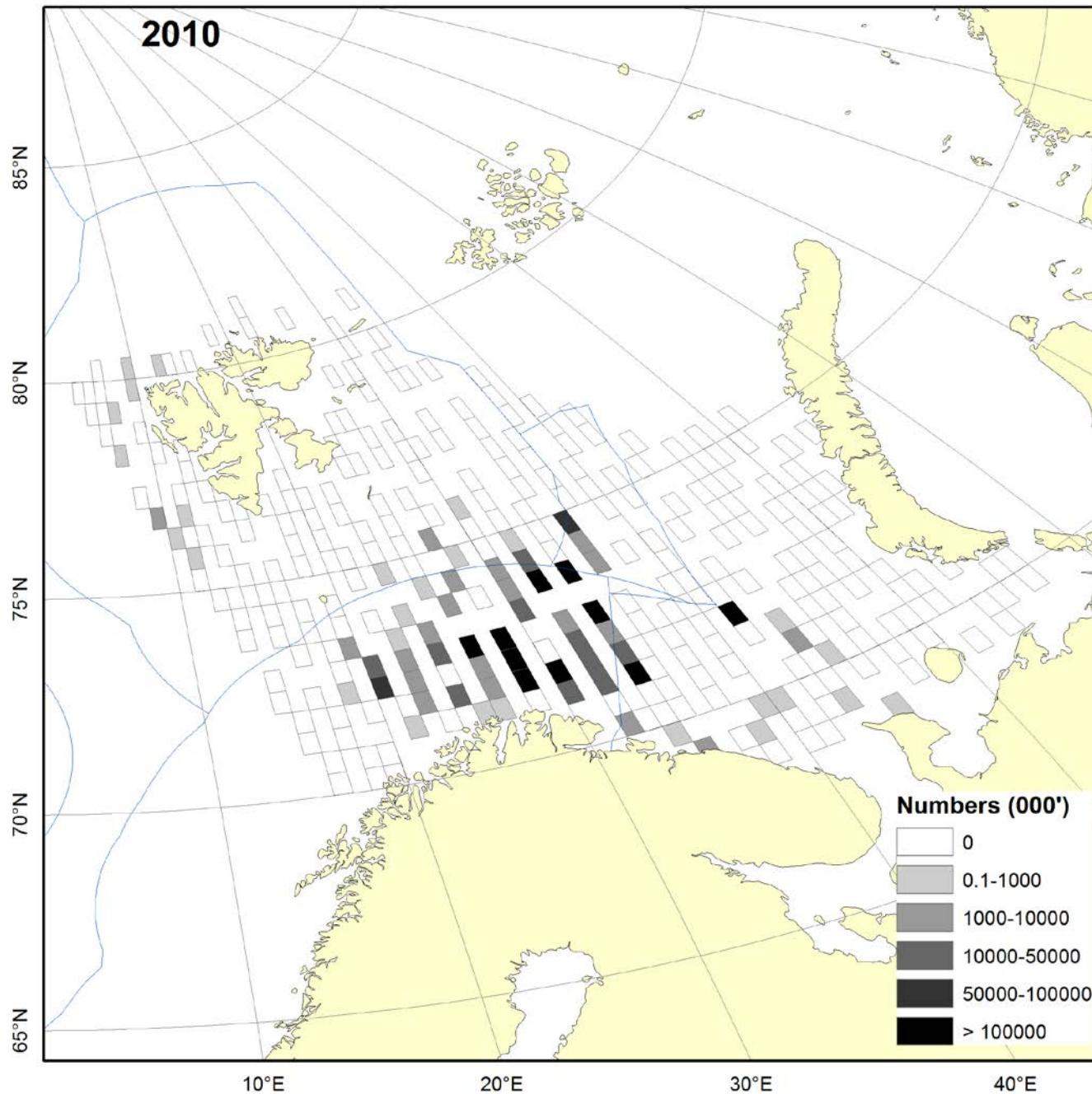


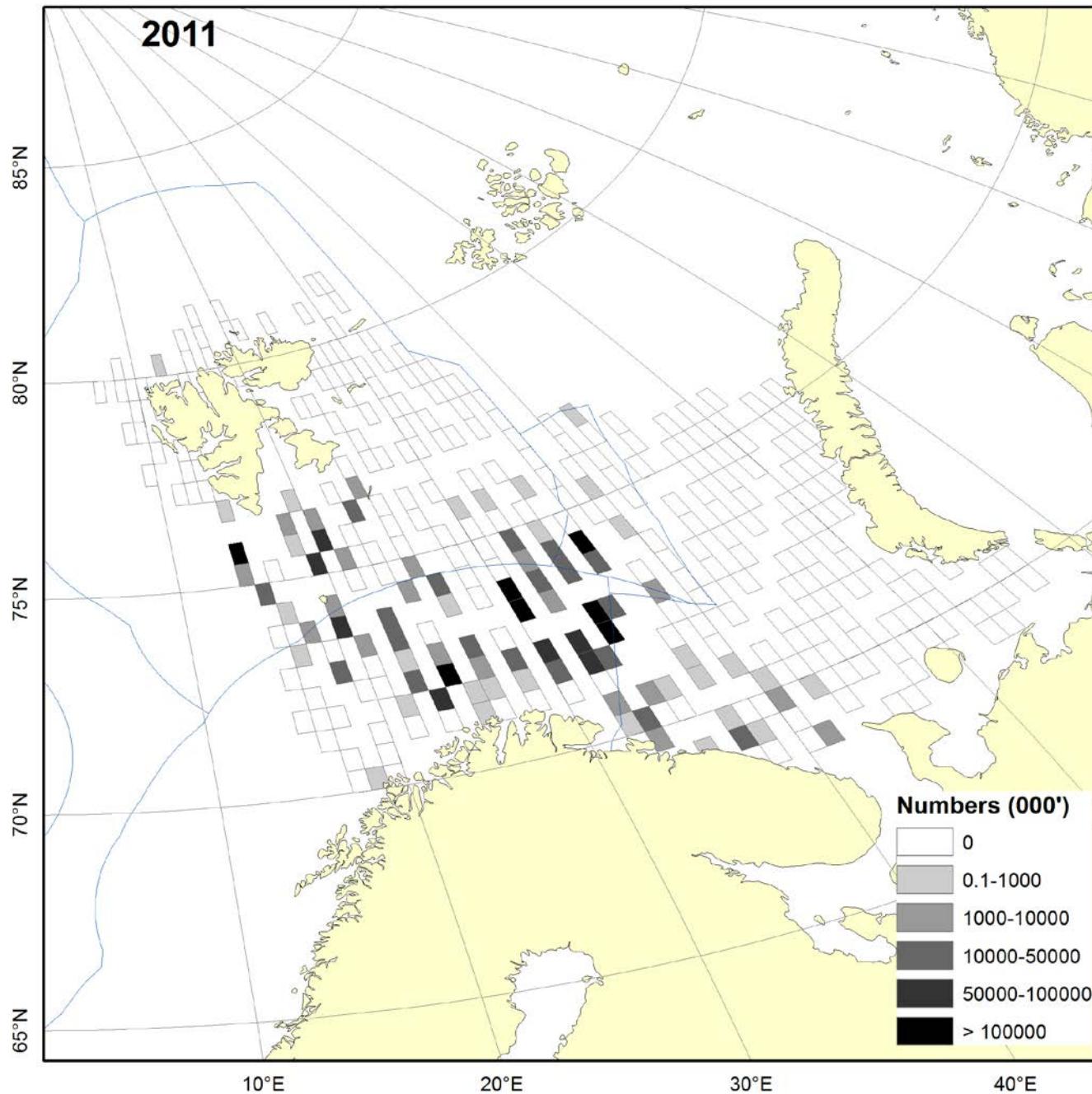


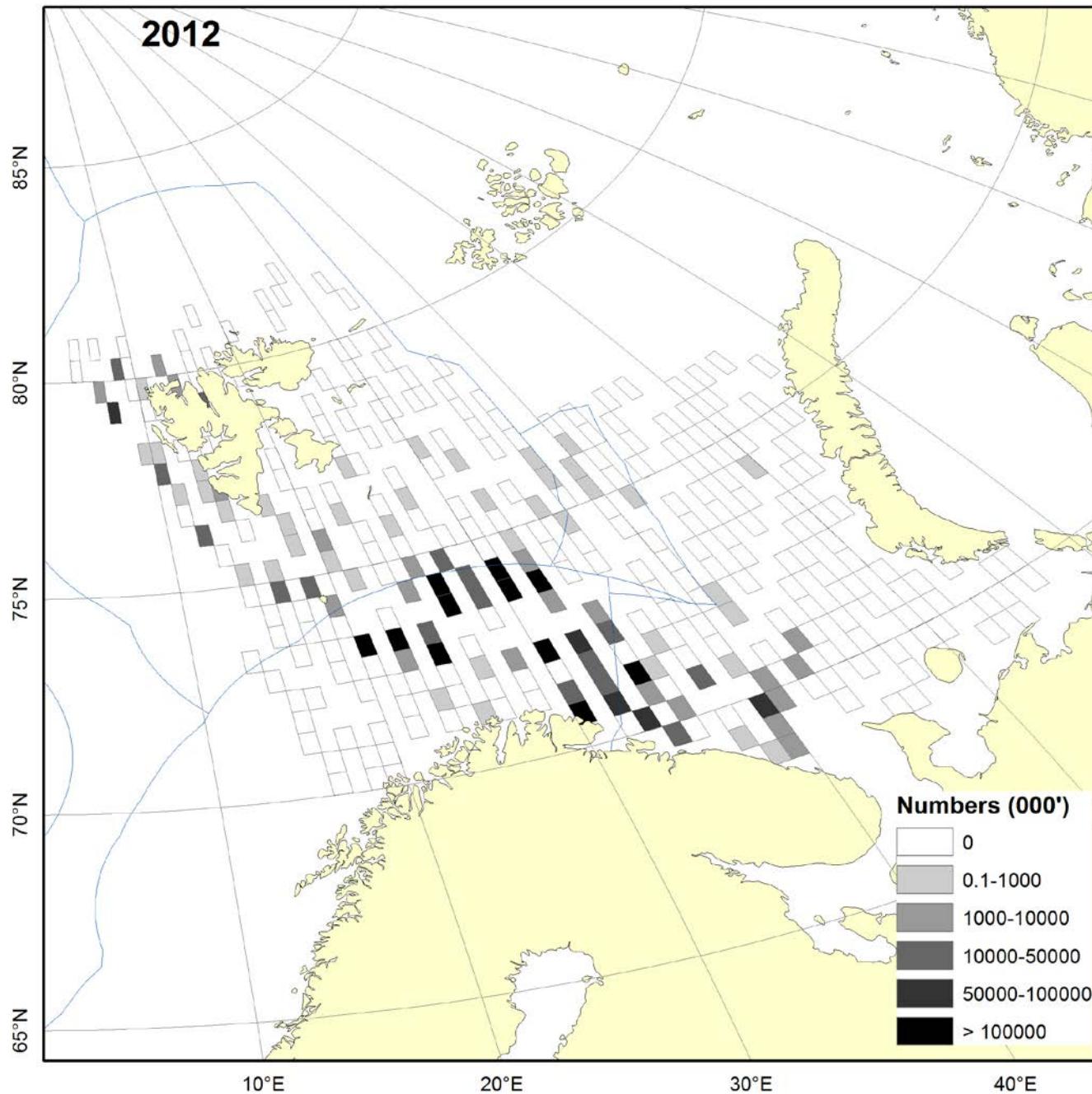


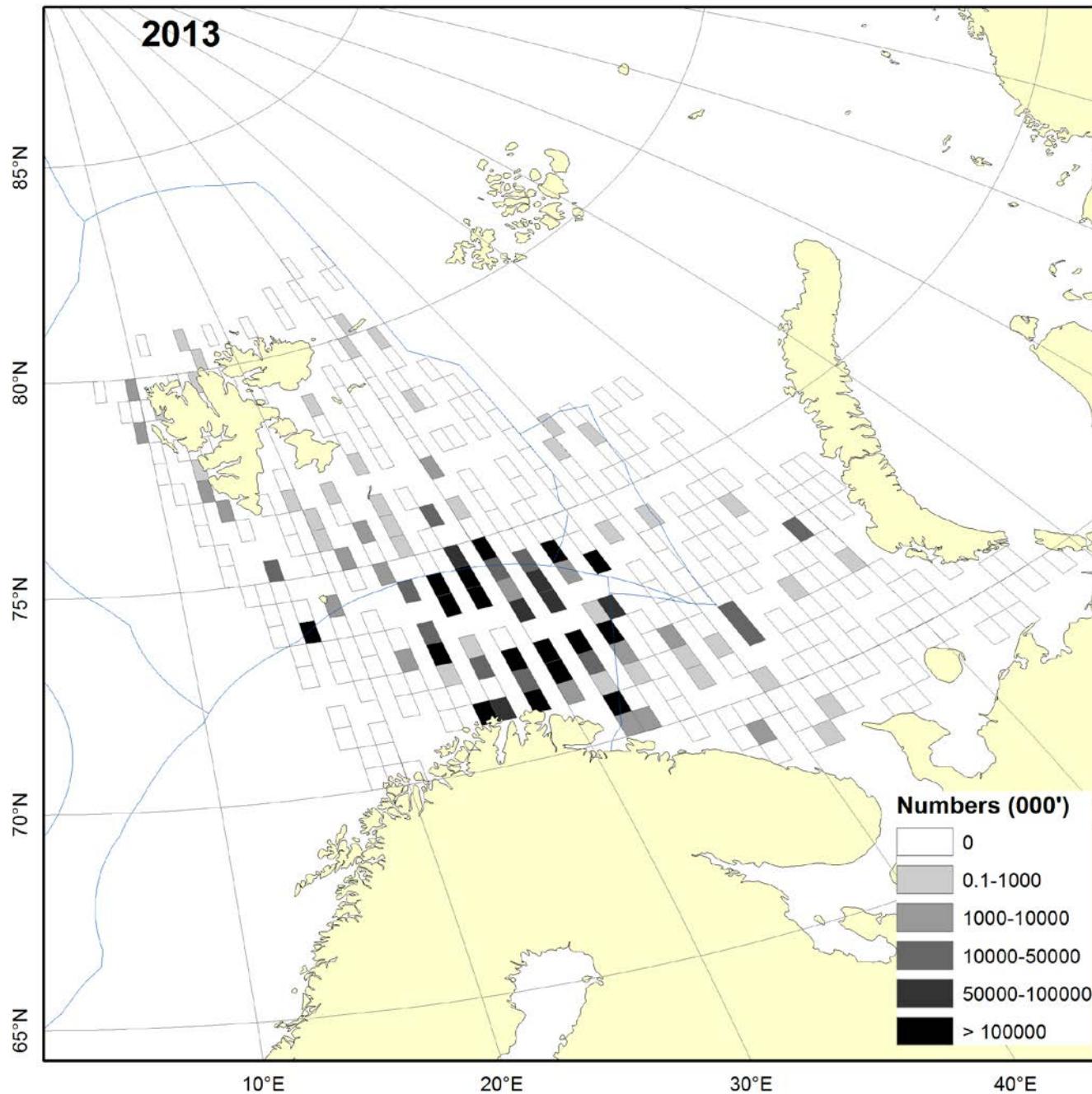






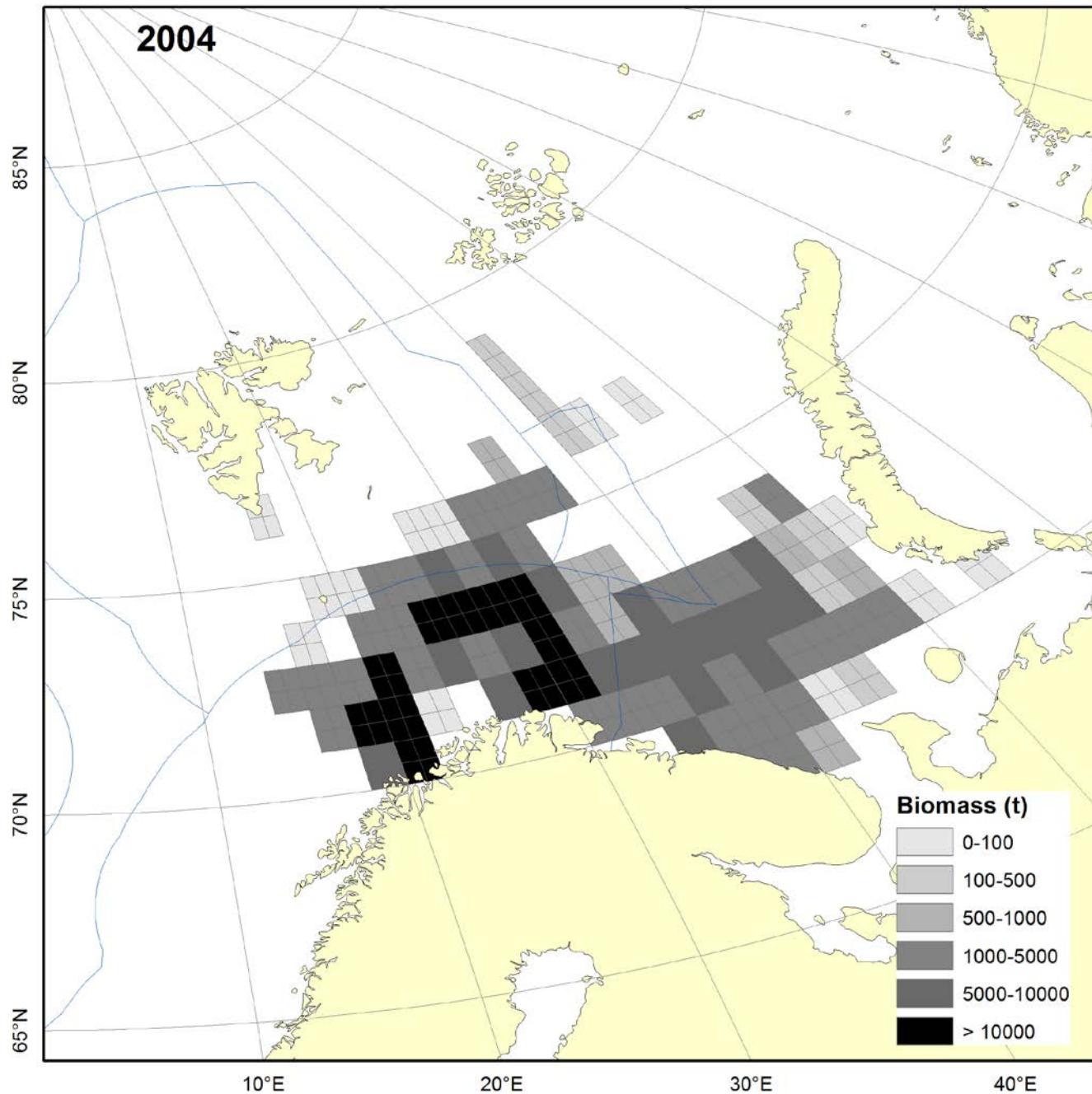


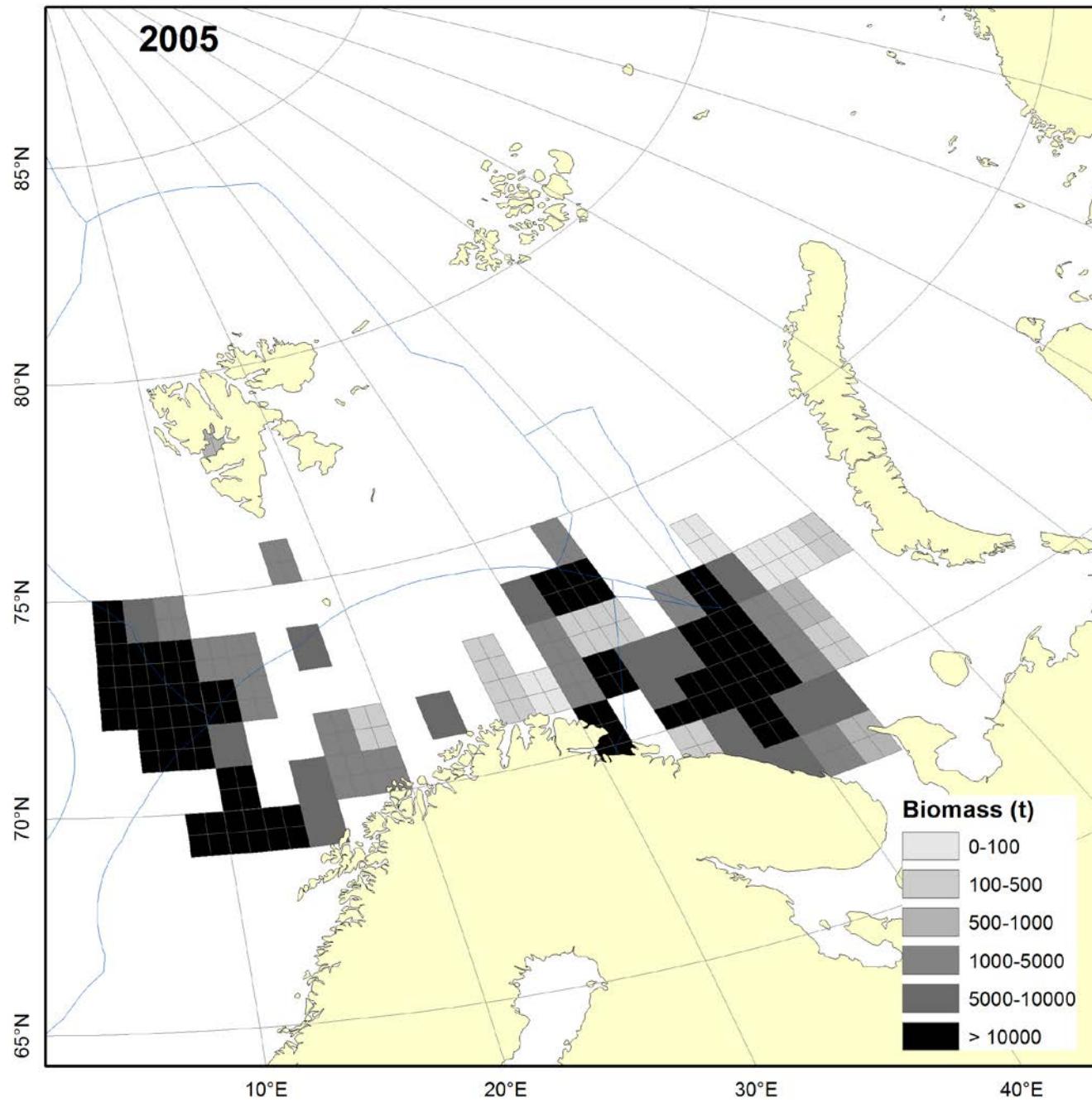


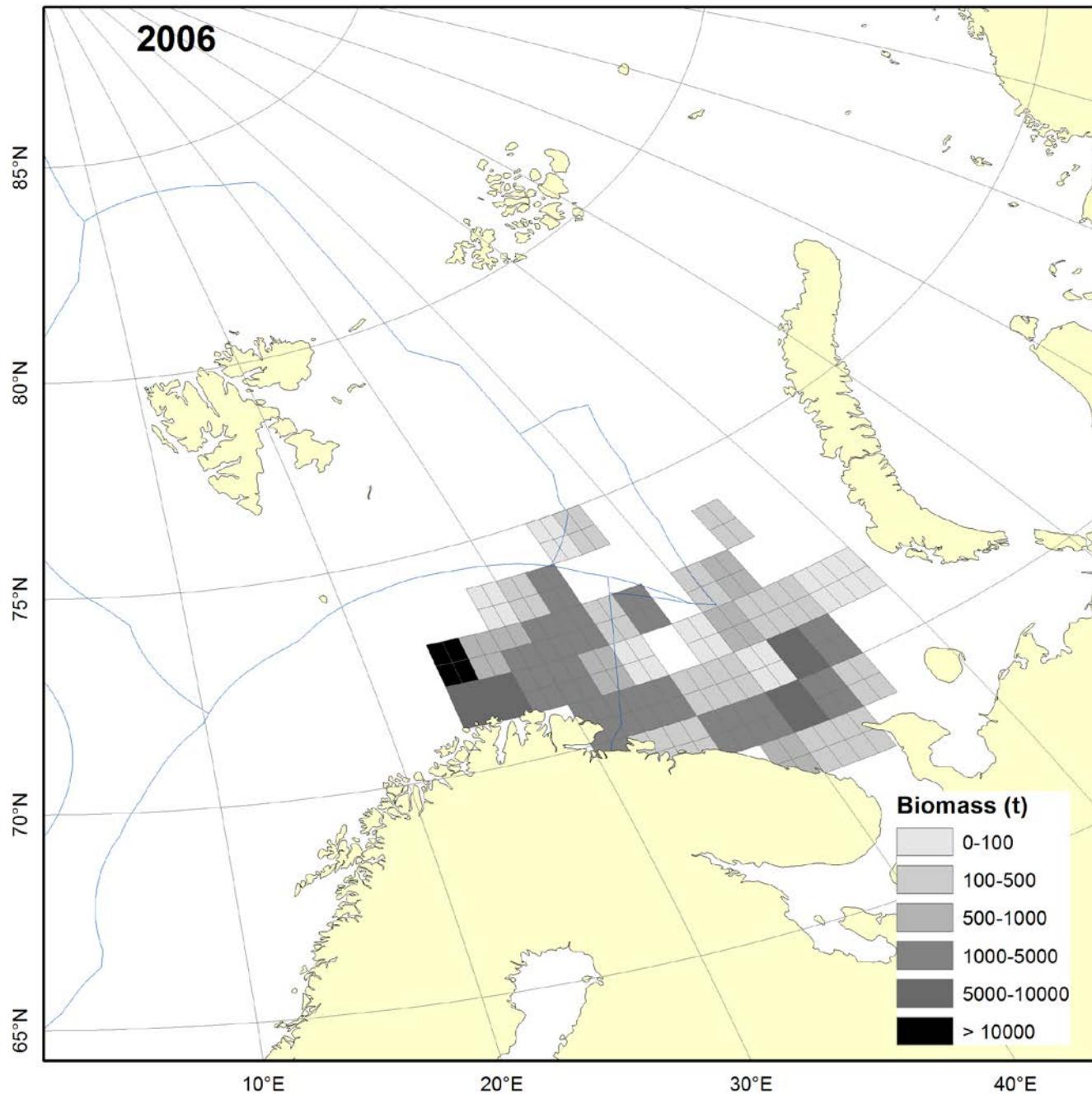


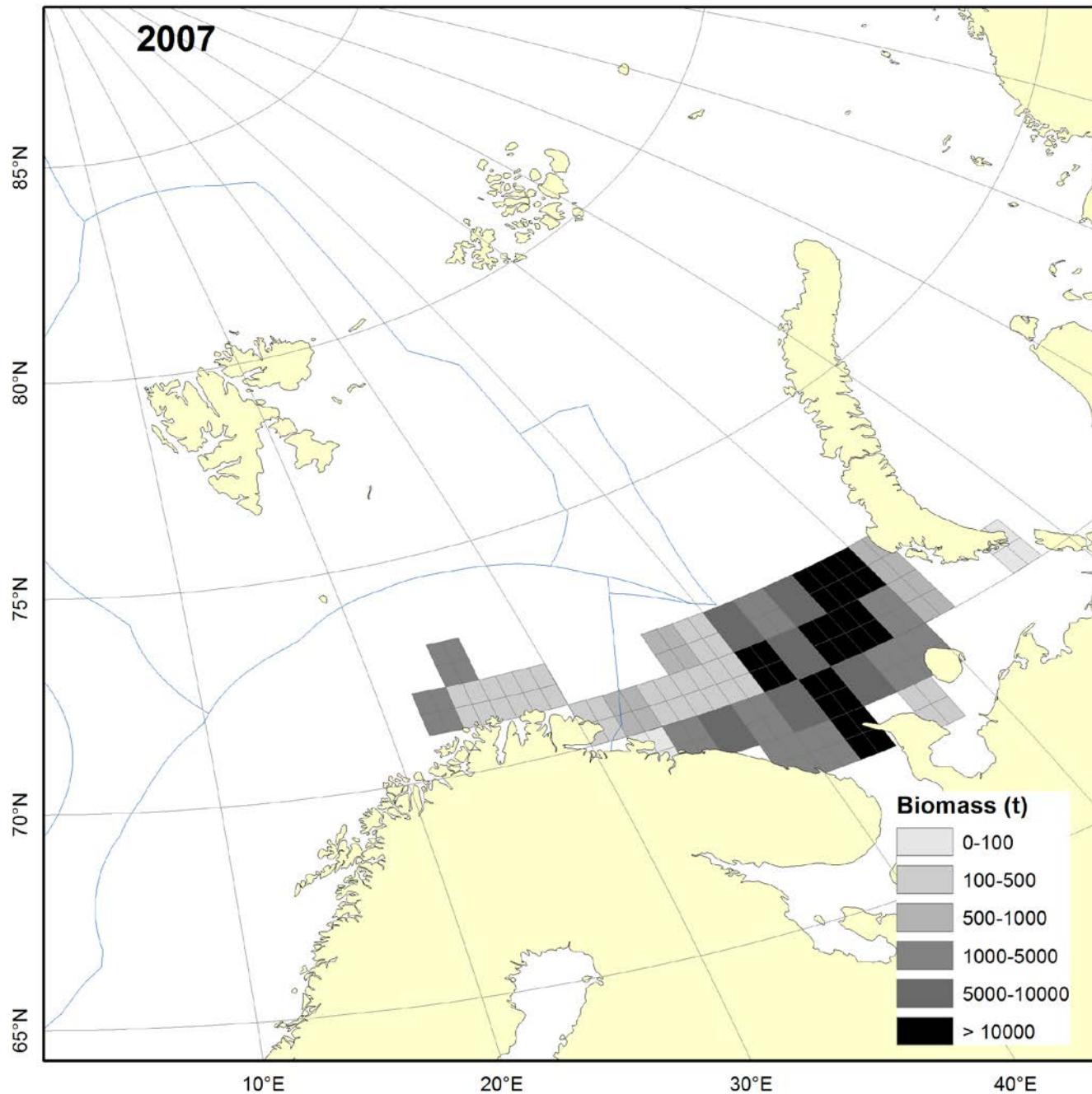
Year	cruise	EU	Norway	Iceland	Svalbard	JanMayen	Faeroes	InterBarSe	SeaterNorwSe	Russia	SpecialAreaE	Total
1995		0.0	72.1	0.0	18.5	0.0	0.0	3.4	0.0	6.0	0.0	100
1996		0.0	93.7	0.0	0.6	0.0	0.0	0.0	0.0	5.7	0.0	100
1998		0.0	68.2	0.0	4.3	0.0	0.0	0.4	0.0	26.8	0.4	100
1999		0.0	83.1	0.0	2.0	0.0	0.0	0.0	0.0	14.9	0.0	100
2000		0.0	99.6	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.0	100
2001		0.0	24.2	0.0	32.8	0.0	0.0	29.7	0.0	13.3	0.0	100
2002		0.0	42.9	0.0	17.6	0.0	0.0	0.2	0.0	39.3	0.0	100
2003		0.0	97.9	0.0	0.4	0.0	0.0	0.2	0.0	1.5	0.0	100
2004		0.0	78.1	0.0	7.3	0.0	0.0	1.0	0.0	12.8	0.9	100
2005		0.0	88.2	0.0	0.6	0.0	0.0	3.7	0.0	7.5	0.0	100
2006		0.0	74.4	0.0	1.4	0.0	0.0	0.3	0.0	23.8	0.2	100
2007		0.0	99.5	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.0	100
2008		0.0	78.0	0.0	5.1	0.0	0.0	3.9	0.0	13.1	0.0	100
2009		0.0	79.5	0.0	8.0	0.0	0.0	0.0	0.0	12.4	0.1	100
2010		0.0	80.3	0.0	1.4	0.0	0.0	4.3	0.0	14.0	0.0	100
2011		0.0	68.4	0.0	19.0	0.0	0.0	6.1	0.0	6.4	0.1	100
2012		0.0	96.8	0.0	1.5	0.0	0.0	0.0	0.0	1.7	0.0	100
2013		0.0	71.7	0.0	21.2	0.0	0.0	5.1	0.0	2.0	0.0	100
Average 95-13		0.0	77.6	0.0	7.9	0.0	0.0	3.2	0.0	11.2	0.1	100

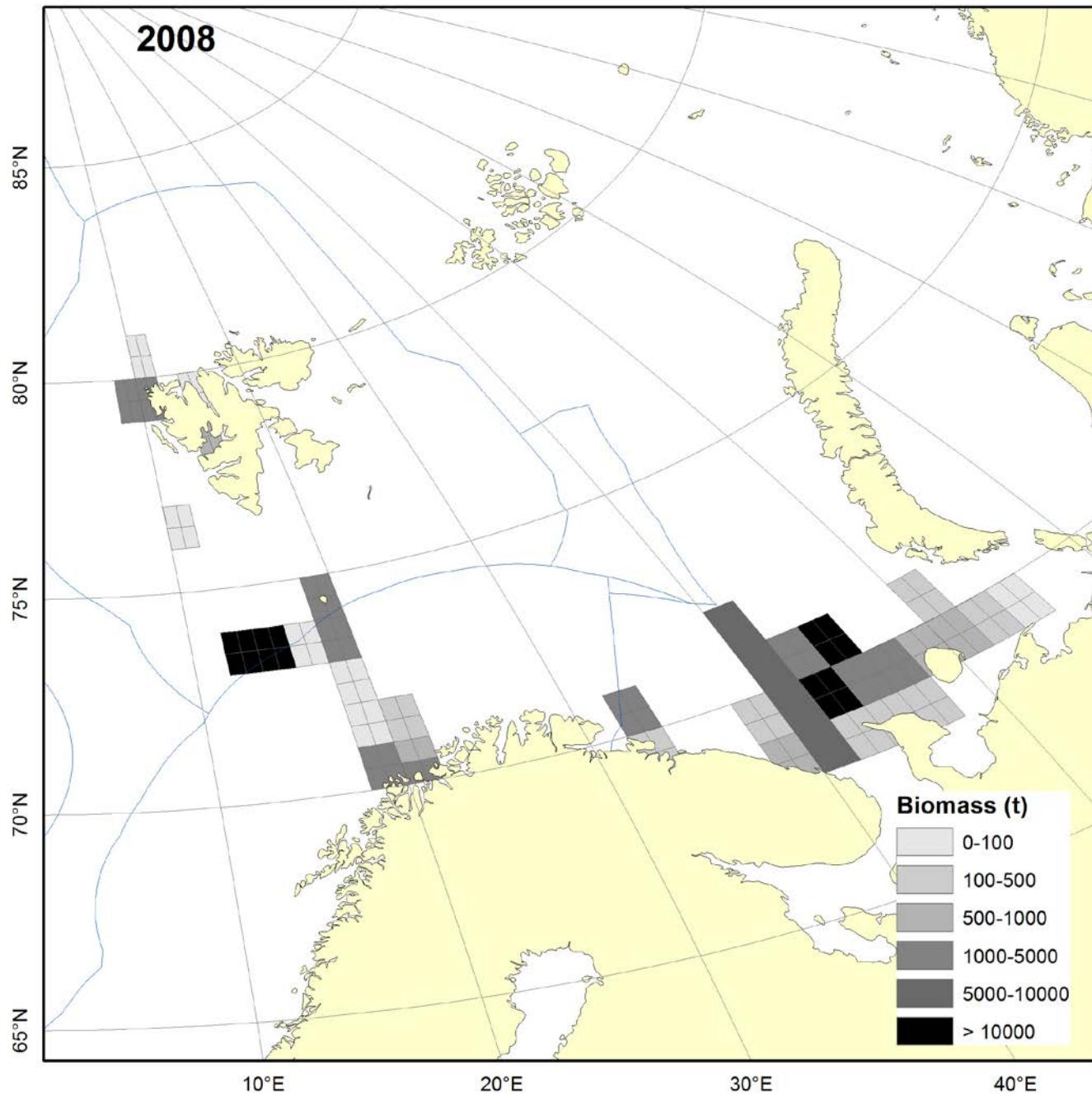
Juveniles from autumn survey in BS, 2004-2013, acoustic

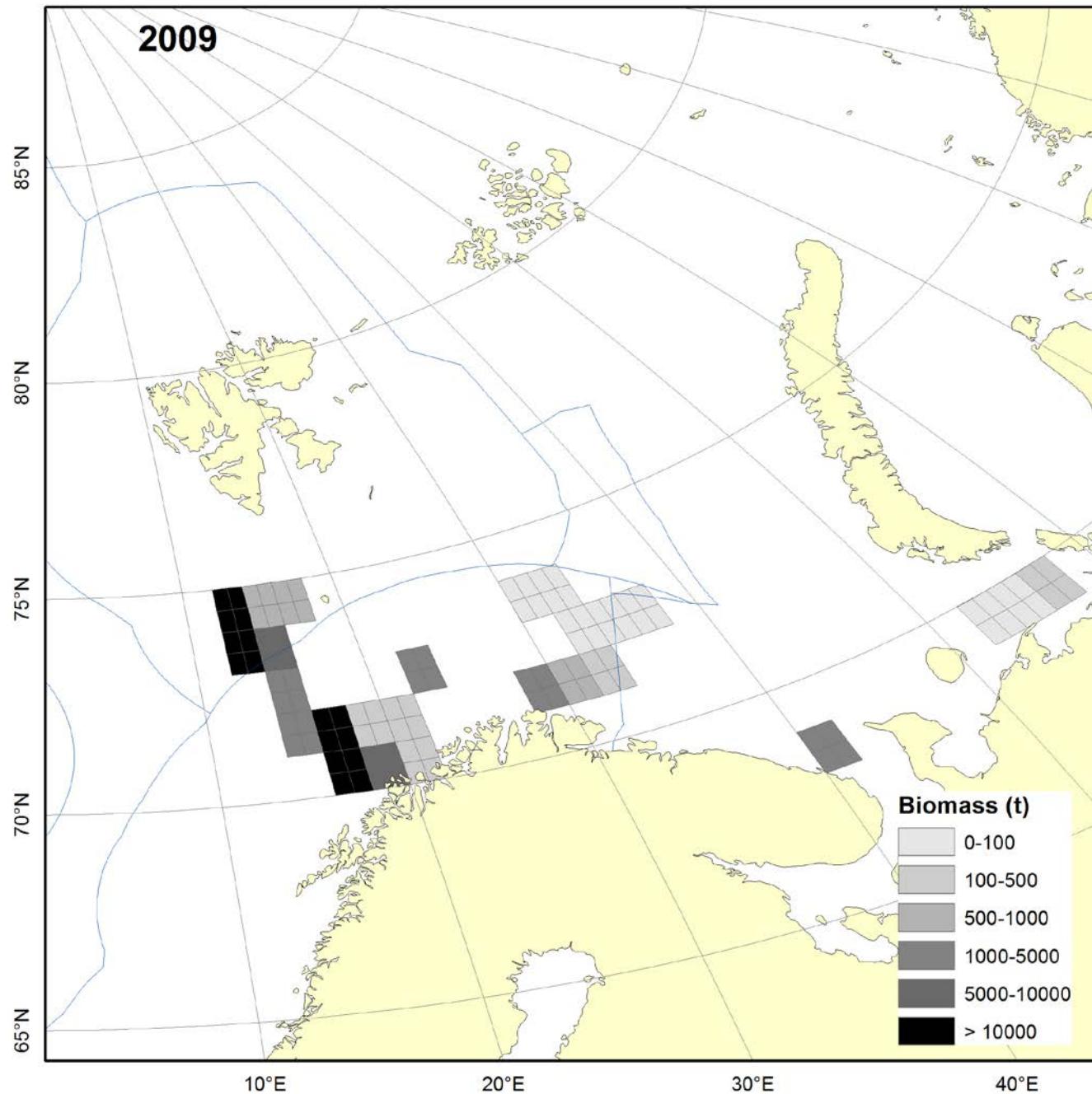


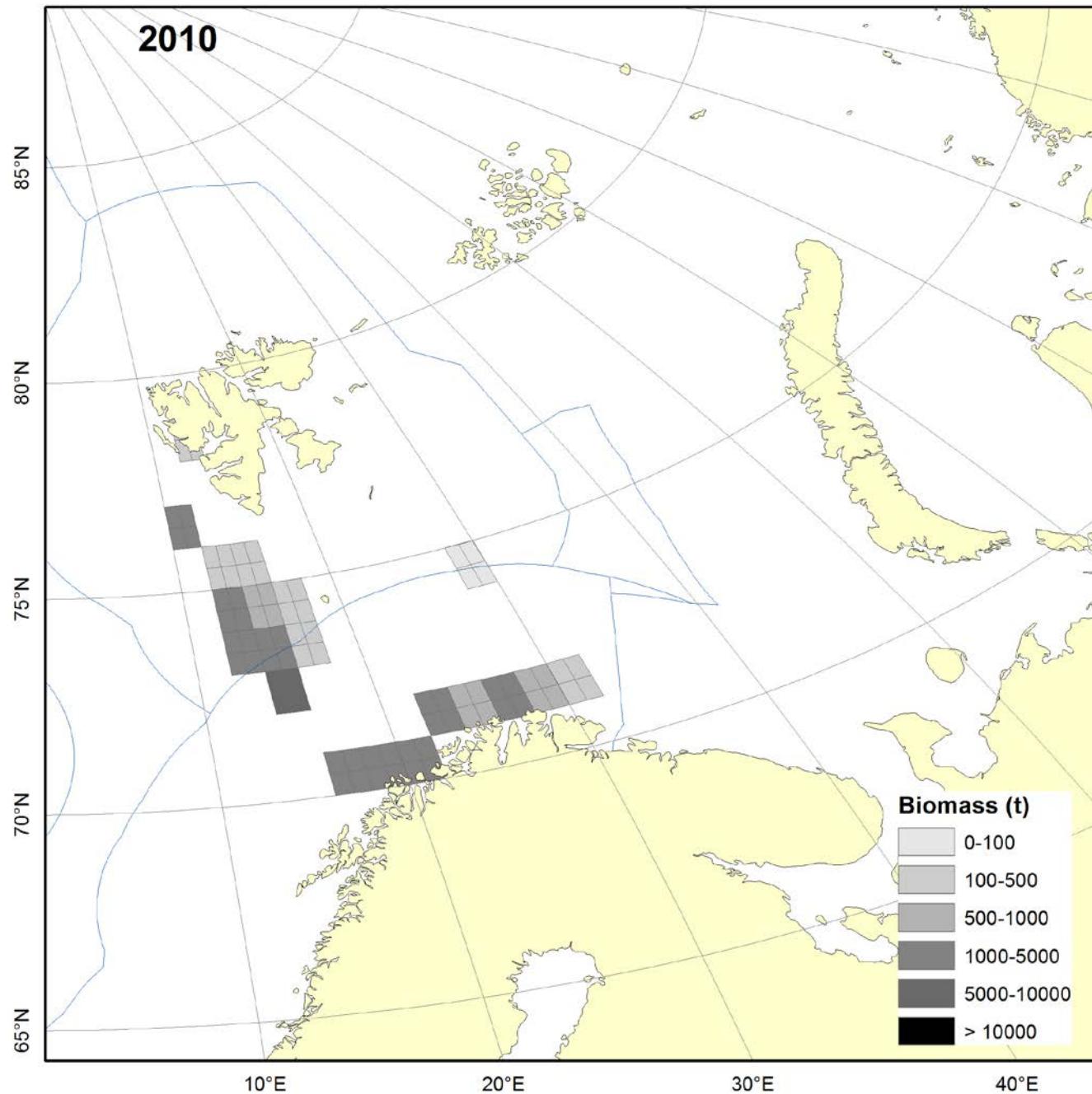


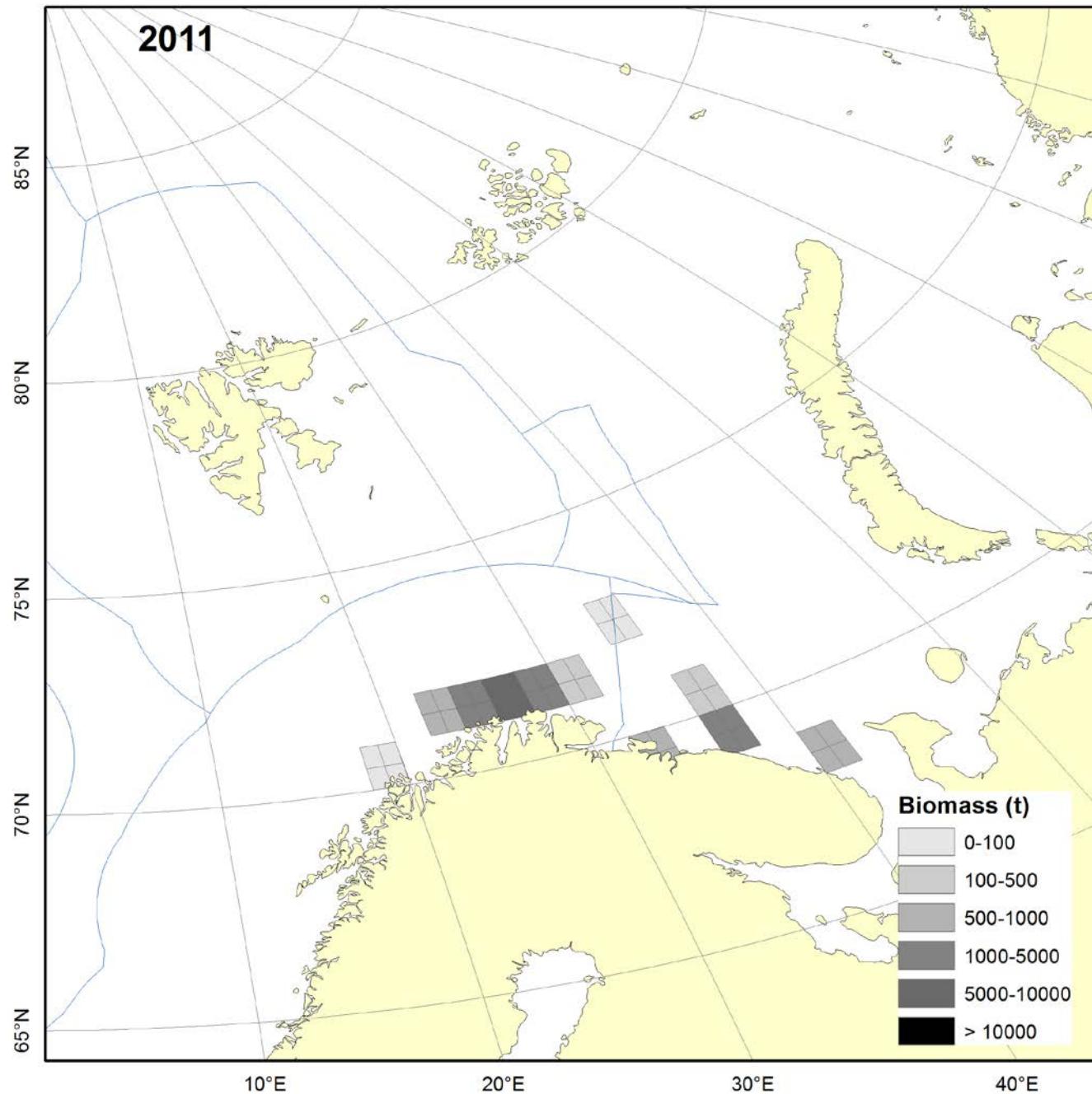


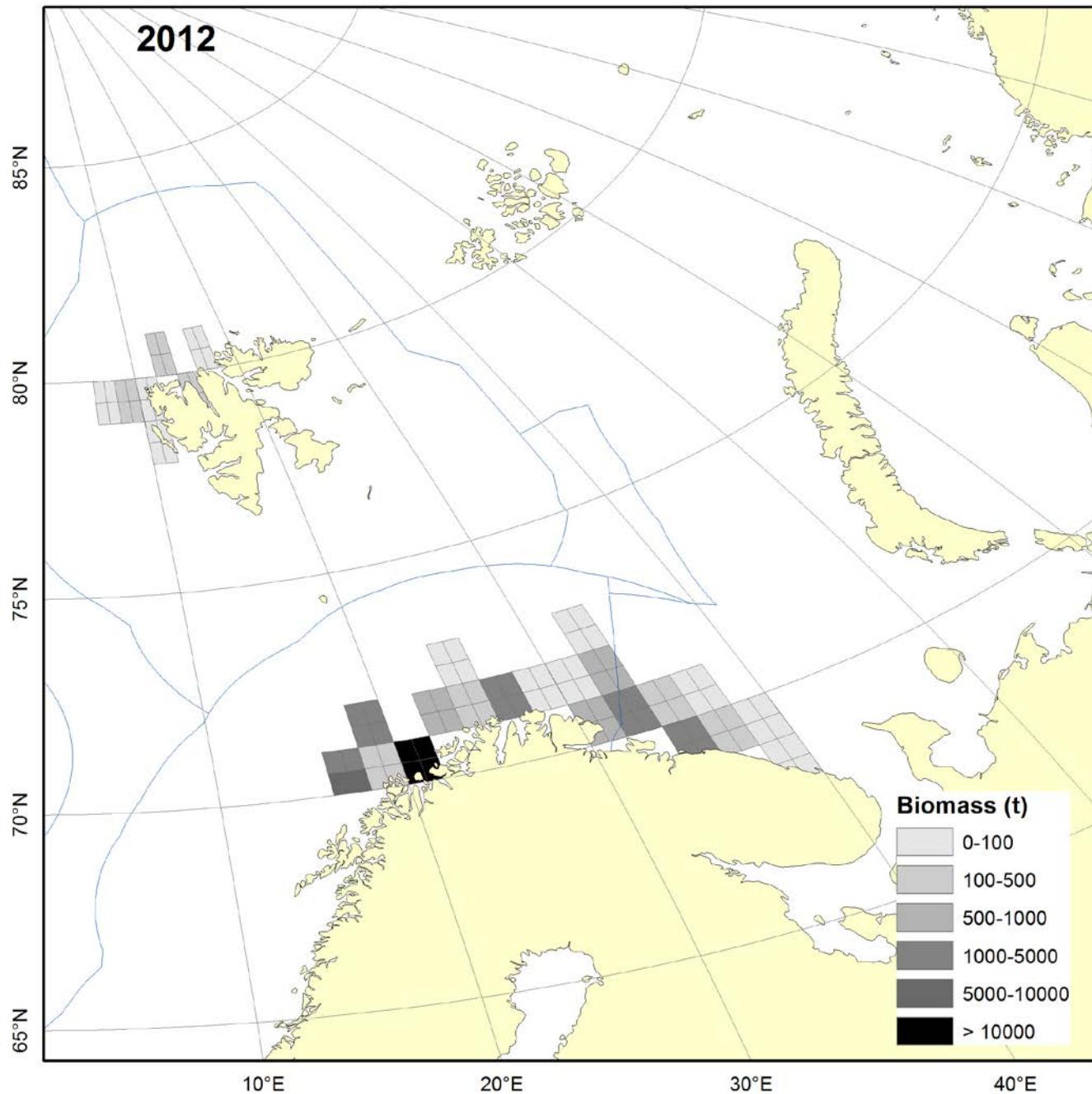


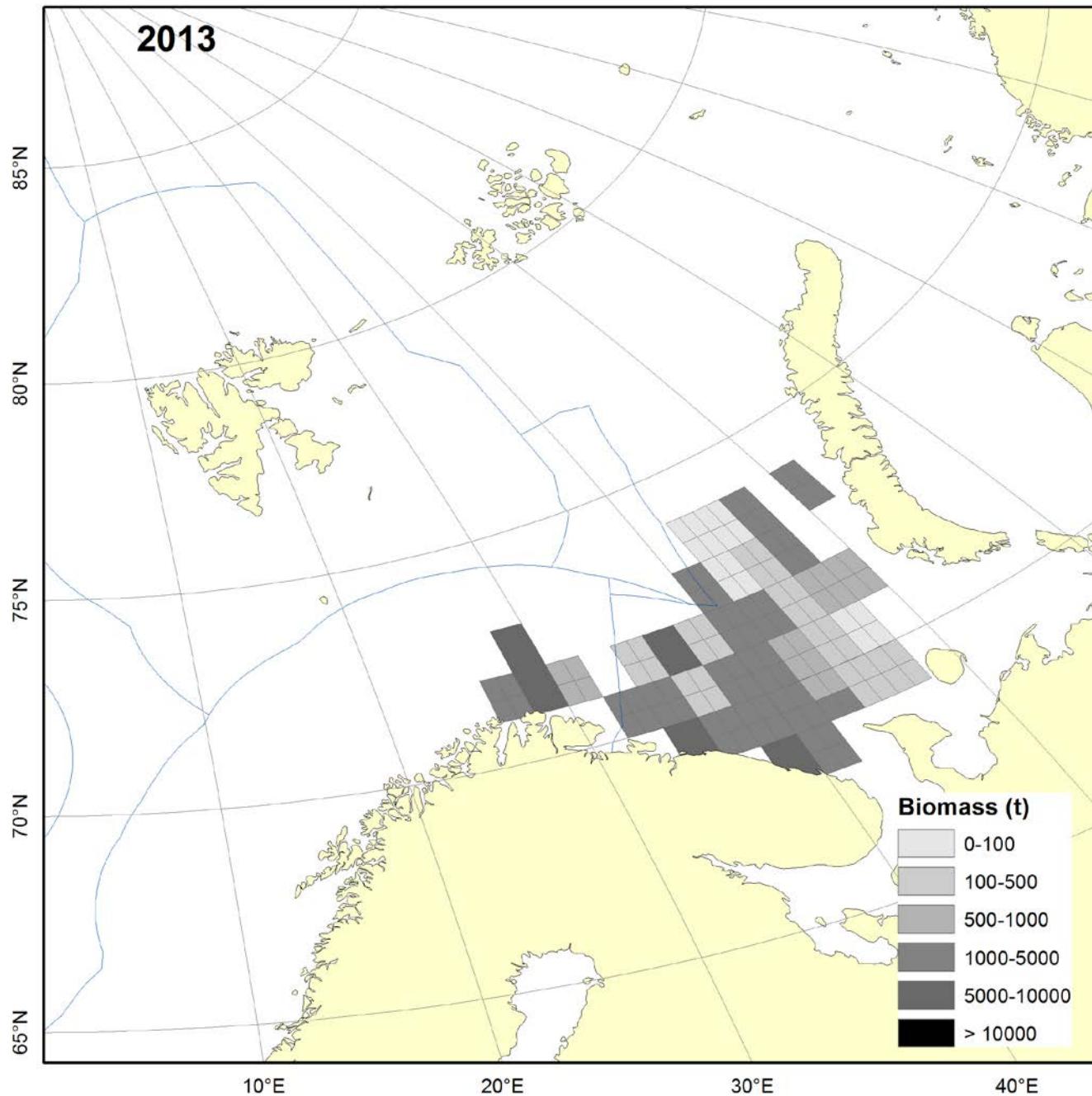






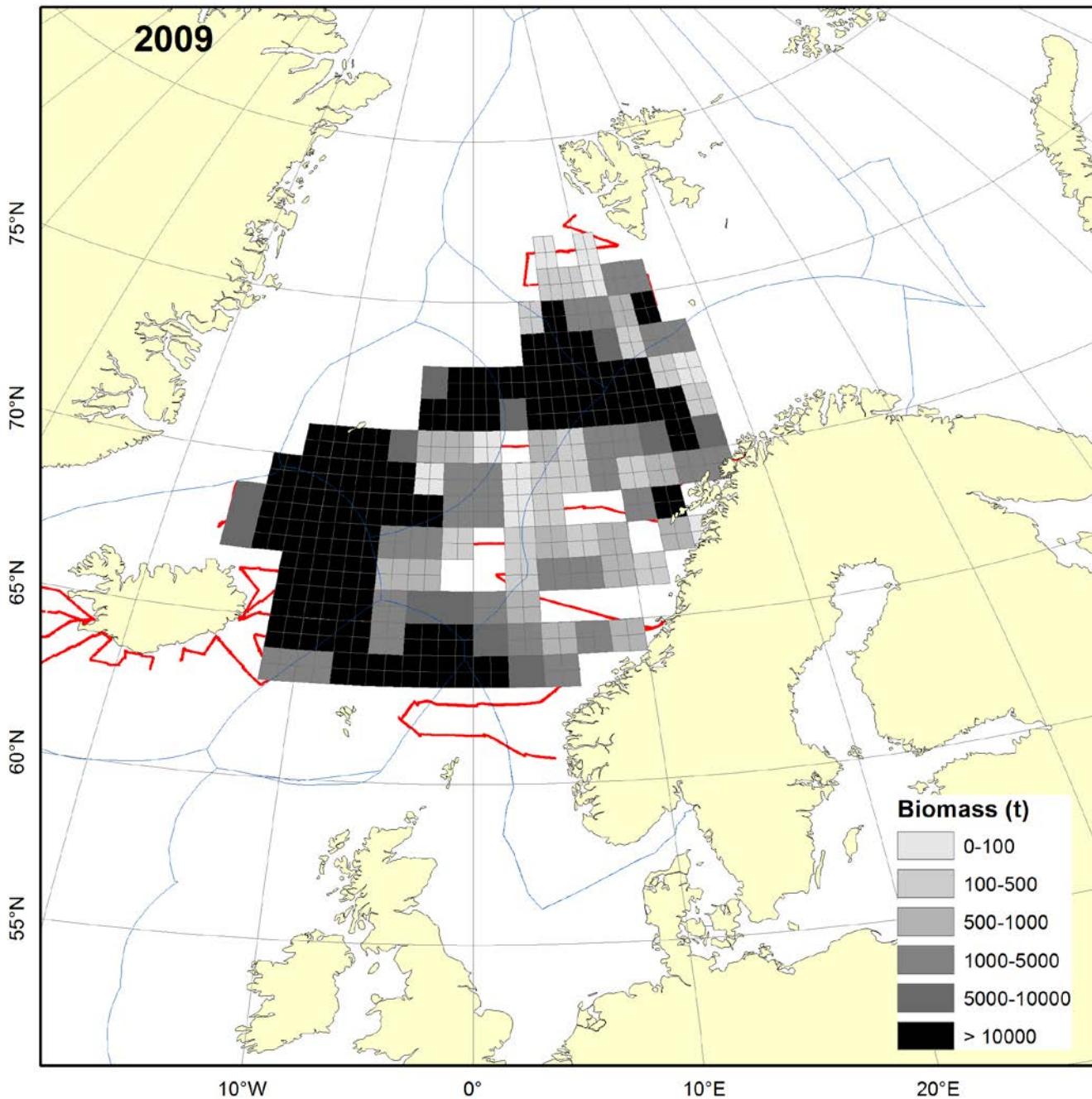


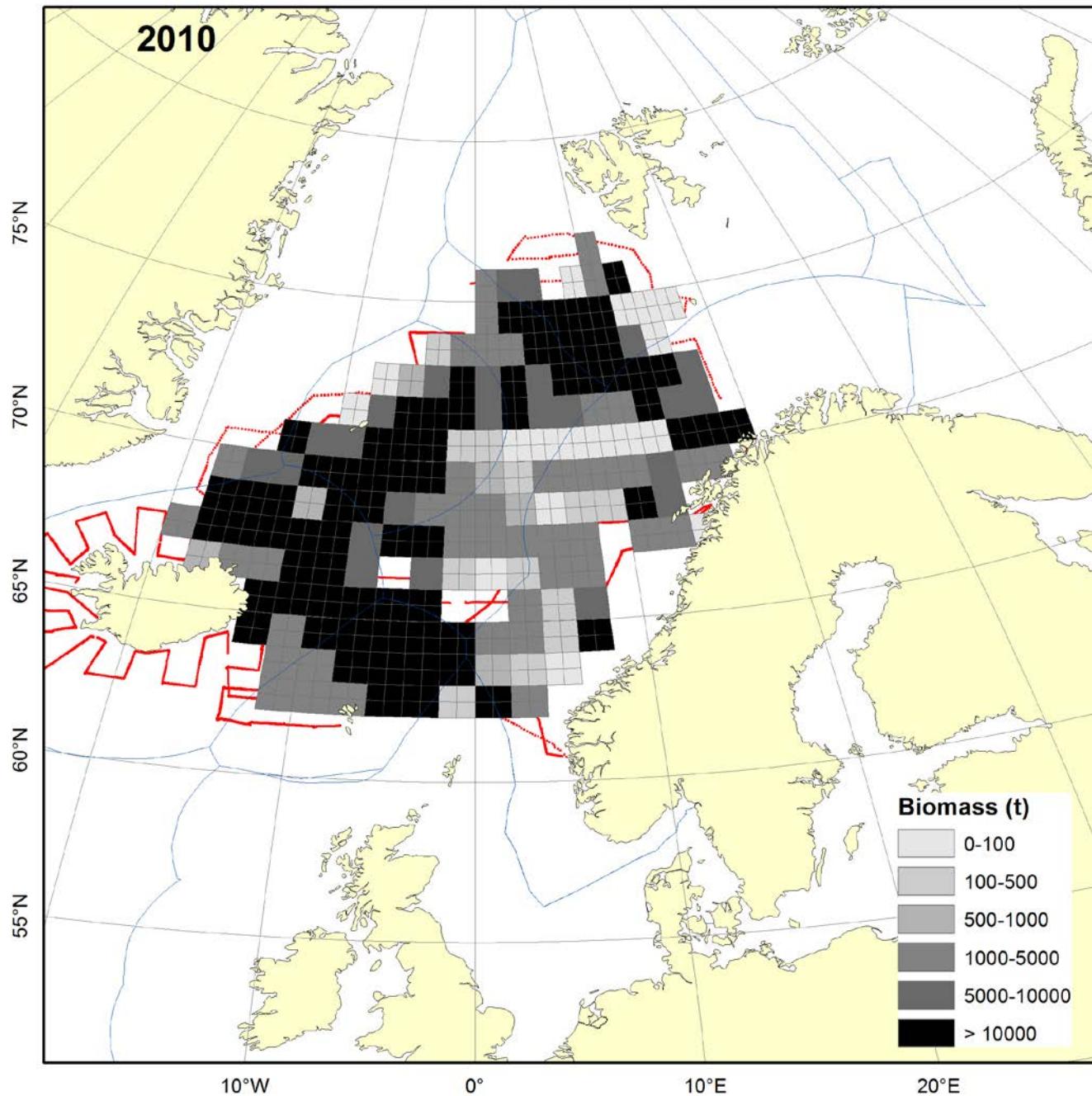


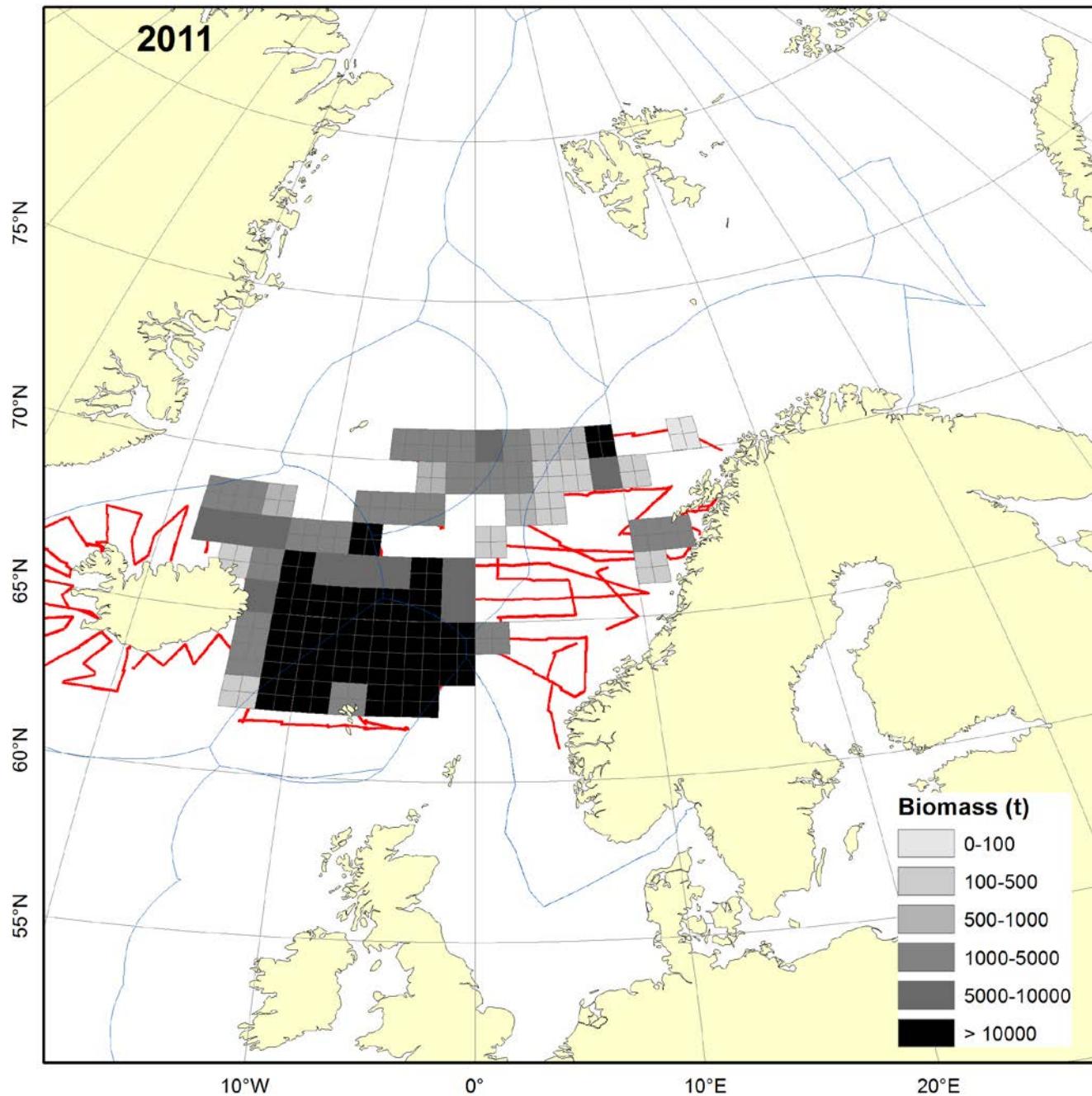


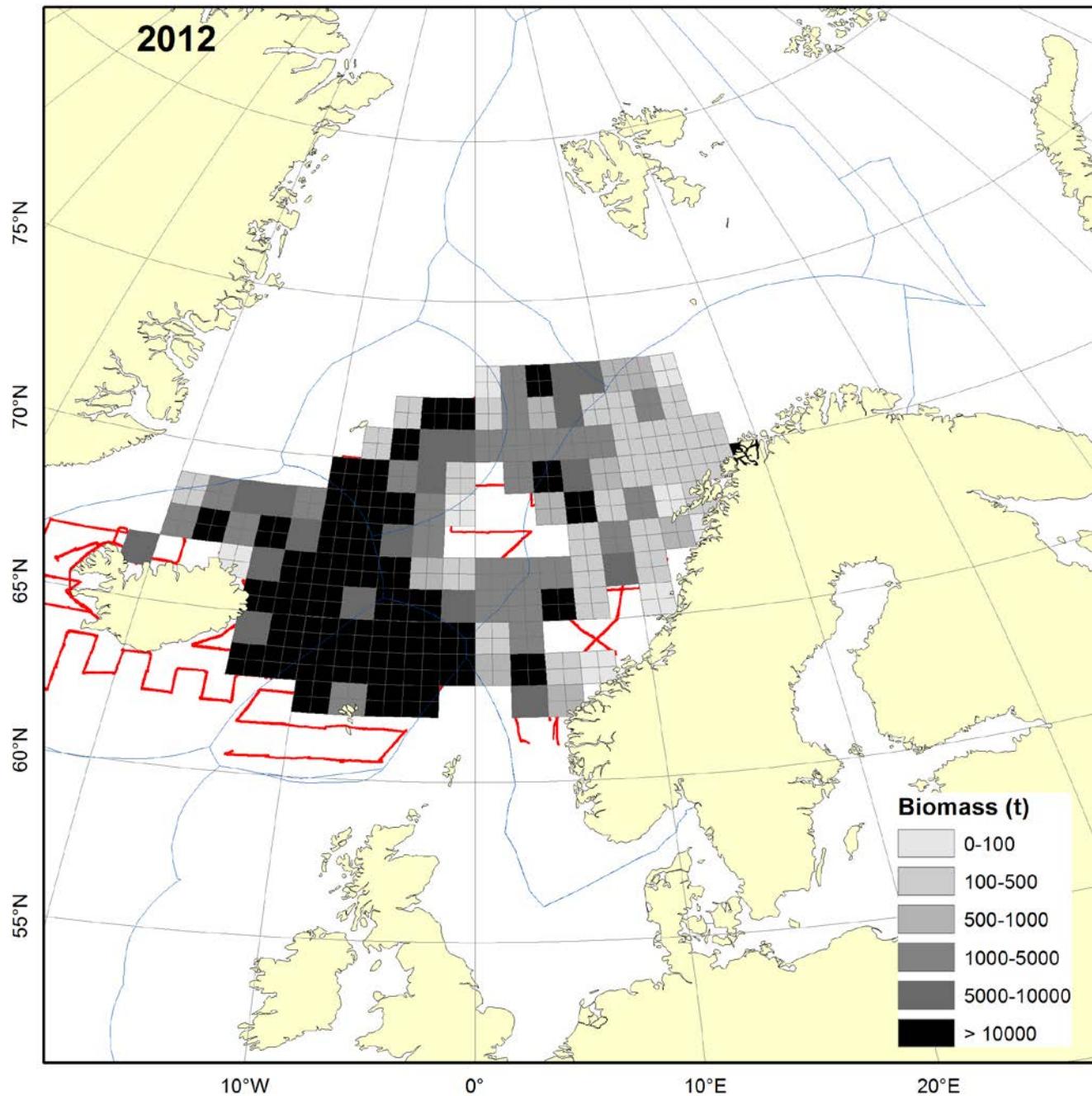
Year	cruise	EU	Norway	Iceland	Svalbard	JanMayen	Faeroes	InterBarSea	InterNorwSea	Russia	SpecialAreaBar	Total
2004		0.0	63.4	0.0	5.1	0.0	0.0	0.7	0.0	30.5	0.3	100
2005		0.0	37.2	0.0	11.7	0.0	0.0	2.7	20.7	27.7	0.1	100
2006		0.0	50.9	0.0	0.1	0.0	0.0	0.4	0.0	48.0	0.6	100
2007		0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	97.0	0.0	100
2008		0.0	10.0	0.0	29.3	0.0	0.0	0.0	0.0	60.7	0.0	100
2009		0.0	54.3	0.0	43.7	0.0	0.0	0.0	0.0	2.0	0.0	100
2010		0.0	63.7	0.0	36.3	0.0	0.0	0.0	0.0	0.0	0.0	100
2011		0.0	71.3	0.0	0.0	0.0	0.0	0.0	0.0	28.7	0.0	100
2012		0.0	79.5	0.0	2.6	0.0	0.0	0.0	0.0	17.9	0.0	100
2013		0.0	21.4	0.0	0.0	0.0	0.0	0.9	0.0	77.7	0.0	100
Average		0.0	45.5	0.0	12.9	0.0	0.0	0.5	2.1	39.0	0.1	

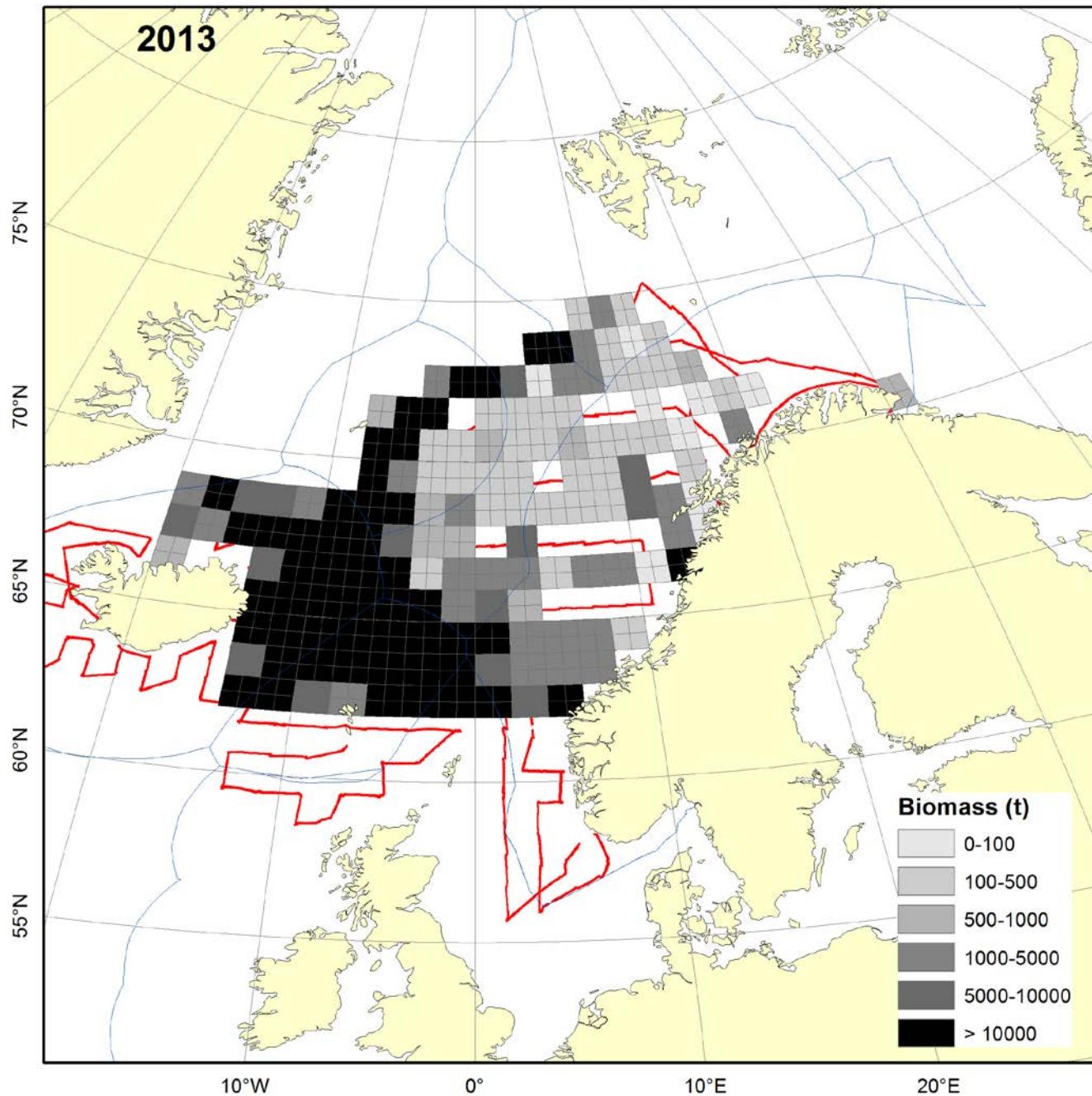
IESSNS, 2009-2013, acoustic











Year	cruise	EU	Norway	Iceland	Svalbard	JanMayen	Greenland	Faeroes	InterBarSe	InterNorwSe	Russia	cialAreaE	Total
2009		0.2	25.9	23.5	4.1	21.7	0.2	9.7	0.0	14.8	0.0	0.0	100.0
2010		1.3	22.1	20.8	12.5	16.7	0.7	16.5	0.0	9.4	0.0	0.0	100.0
2011		2.9	2.9	24.5	0.0	2.9	0.0	60.6	0.0	6.2	0.0	0.0	100.0
2012		3.8	7.0	35.3	0.1	10.5	0.0	36.6	0.0	6.6	0.0	0.0	100.0
2013		2.7	5.5	43.8	0.6	8.8	0.1	32.2	0.0	6.3	0.0	0.0	100.0
Average		2.2	12.7	29.6	3.5	12.1	0.2	31.1	0.0	8.6	0.0	0.0	

Wintering survey in the autumn, 1995-2007, acoustic

