

## Annex 5: Maps of species distribution in 2014

Table A.5.1. Species for which distribution maps have been produced, with length split for pre-recruit (0-group) and post-recruit (1+ group) where appropriate. The maps cover all the area encompassed by surveys coordinated within the IBTSWG (North Sea and North-eastern Atlantic Areas).

Scientific	Common	Code	Fig No	Length Split (<cm)
<i>Clupea harengus</i>	Herring	HER	6-7	17.5
<i>Gadus morhua</i>	Atlantic Cod	COD	2-3	23
<i>Galeorhinus galeus</i>	Tope Shark	GAG	32	
<i>Lepidorhombus boscii</i>	Four-Spotted Megrin	LBI	16-17	19
<i>Galeus melastomus</i>	Blackmouthed dogfish	DBM	40	
<i>Lepidorhombus whiffiagonis</i>	Megrin	MEG	14-15	21
<i>Leucoraja naevus</i>	Cuckoo Ray	CUR	30	
<i>Lophius budegassa</i>	Black-bellied Anglerfish	WAF	20-21	20
<i>Lophius piscatorius</i>	Anglerfish (Monk)	MON	18-19	20
<i>Merlangius merlangius</i>	Whiting	WHG	24-25	20
<i>Melanogrammus aeglefinus</i>	Haddock	HAD	4-5	20
<i>Merluccius merluccius</i>	European hake	HKE	8-9	20
<i>Micromesistius poutassou</i>	Blue whiting	WHB	26-27	19
<i>Mustelus asterias</i>	Starry Smooth Hound	SDS	33	
<i>Mustelus mustelus</i>	Smooth Hound	SMH	34	
<i>Nephrops norvegicus</i>	Norway Lobster	NEP	28	
<i>Pleuronectes platessa</i>	European Plaice	PLE	22-23	12
<i>Raja clavata</i>	Thornback ray (Roker)	THR	35	
<i>Raja microocellata</i>	Painted/Small Eyed Ray	PTR	36	
<i>Raja montagui</i>	Spotted Ray	SDR	37	
<i>Raja undulata</i>	Undulate Ray	UNR	38	
<i>Scomber scombrus</i>	European Mackerel	MAC	12-13	24
<i>Scyliorhinus canicula</i>	Lesser Spotted Dogfish	LSD	29	
<i>Scyliorhinus stellaris</i>	Nurse Hound	DGN	39	
<i>Sprattus sprattus</i>	European sprat	SPR	41	
<i>Squalus acanthias</i>	Spurdog	DGS	31	
<i>Trachurus picturatus</i>	Blue Jack Mackerel	JAA	43	
<i>Trachurus trachurus</i>	Horse Mackerel (Scad)	HOM	10-11	15
<i>Trisopterus smarkii</i>	Norway pout	NPO	42	

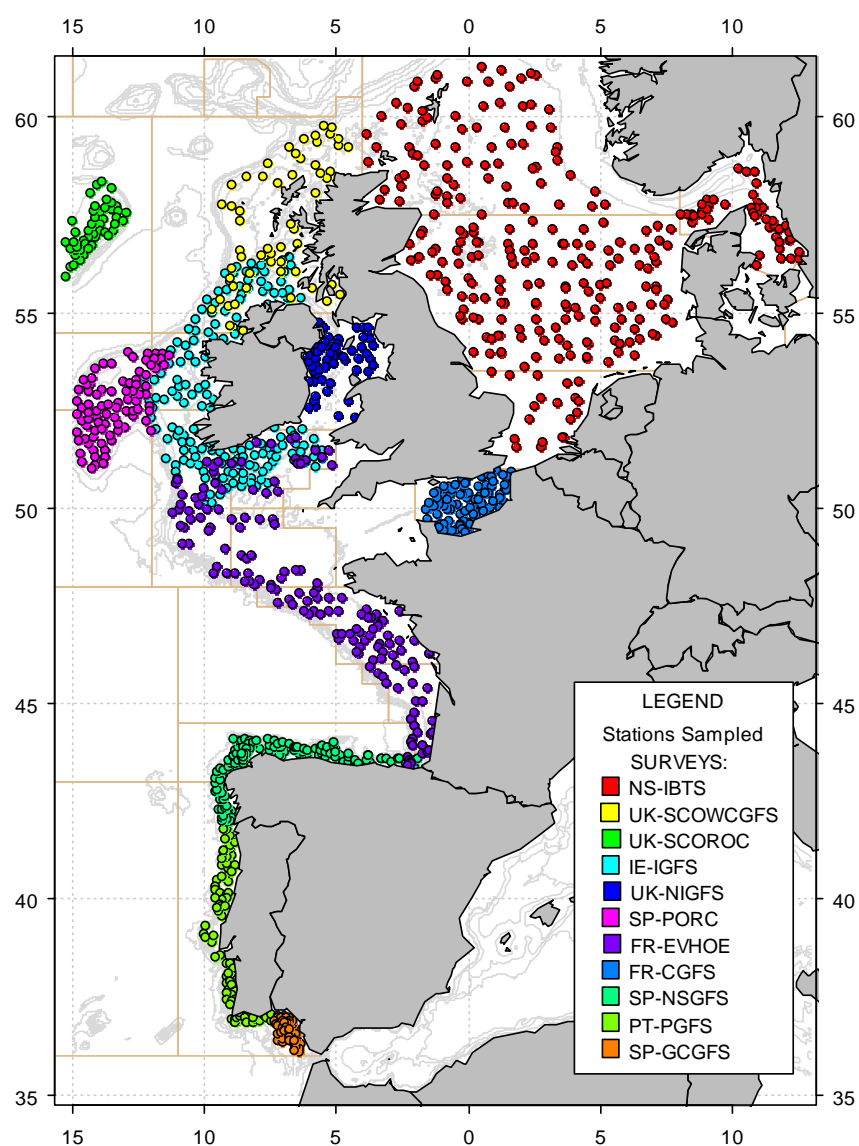


Figure A.5.1. Station positions for the IBTSurveys carried out in the North Eastern Atlantic and North Sea area in summer/autumn of 2014. Quarters 3 and 4

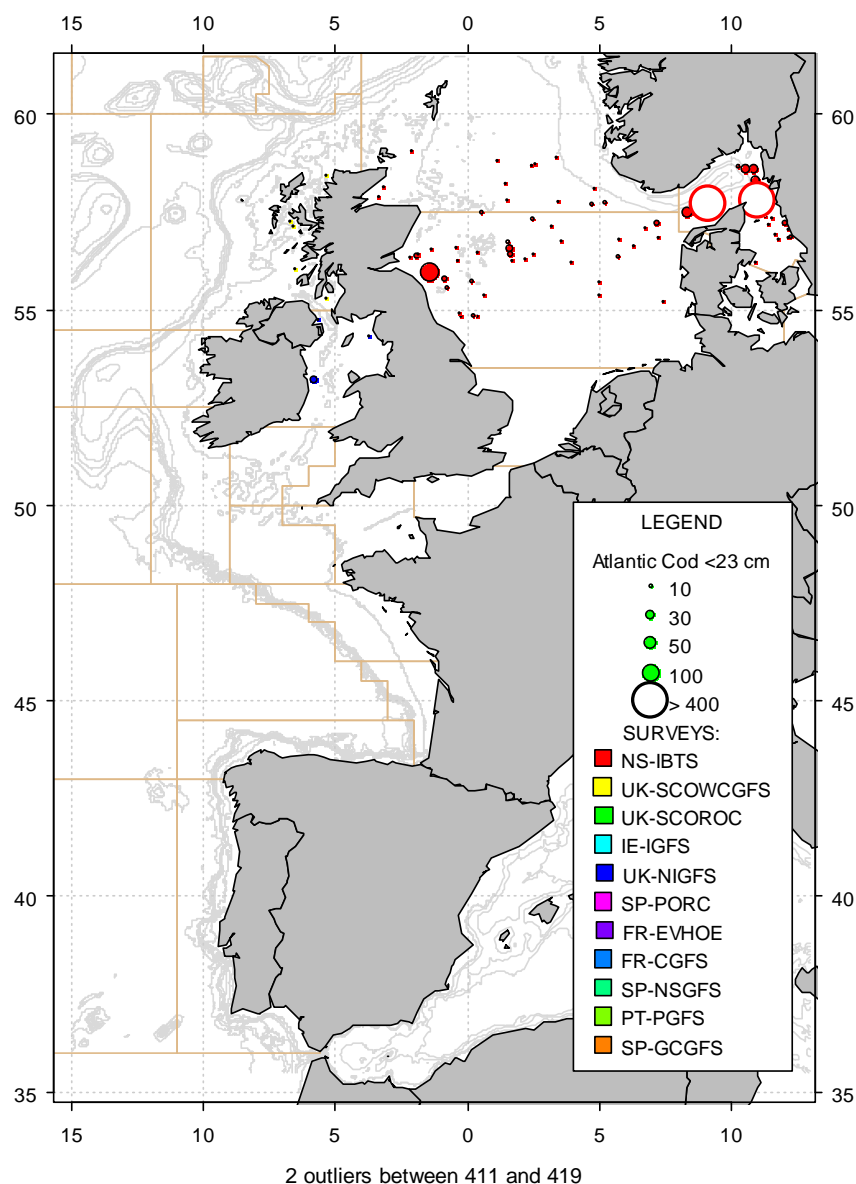


Figure A.5.2. Catches in numbers per hour of 0-group Cod, *Gadus morhua* (<23cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

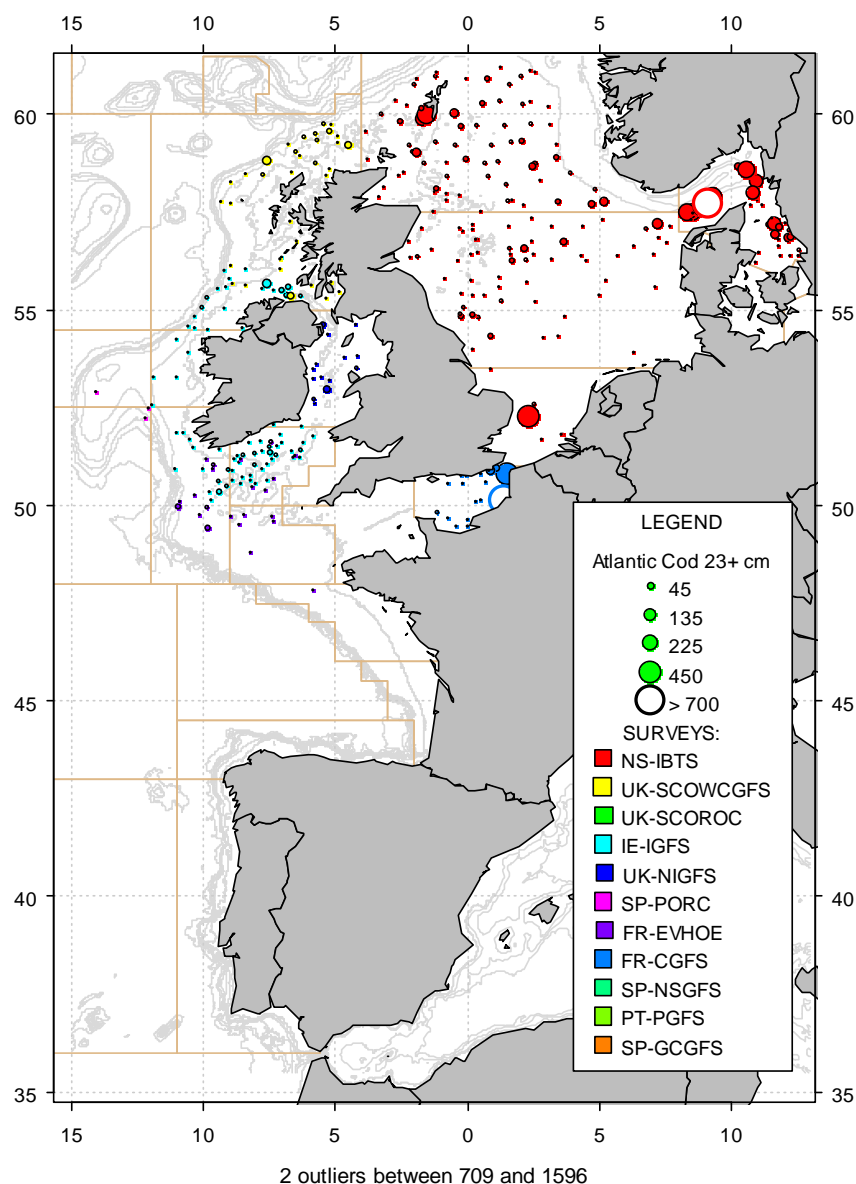


Figure A.5.3. Catches in numbers per hour of 1+ cod, *Gadus morhua* ( $\geq 23$ cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.



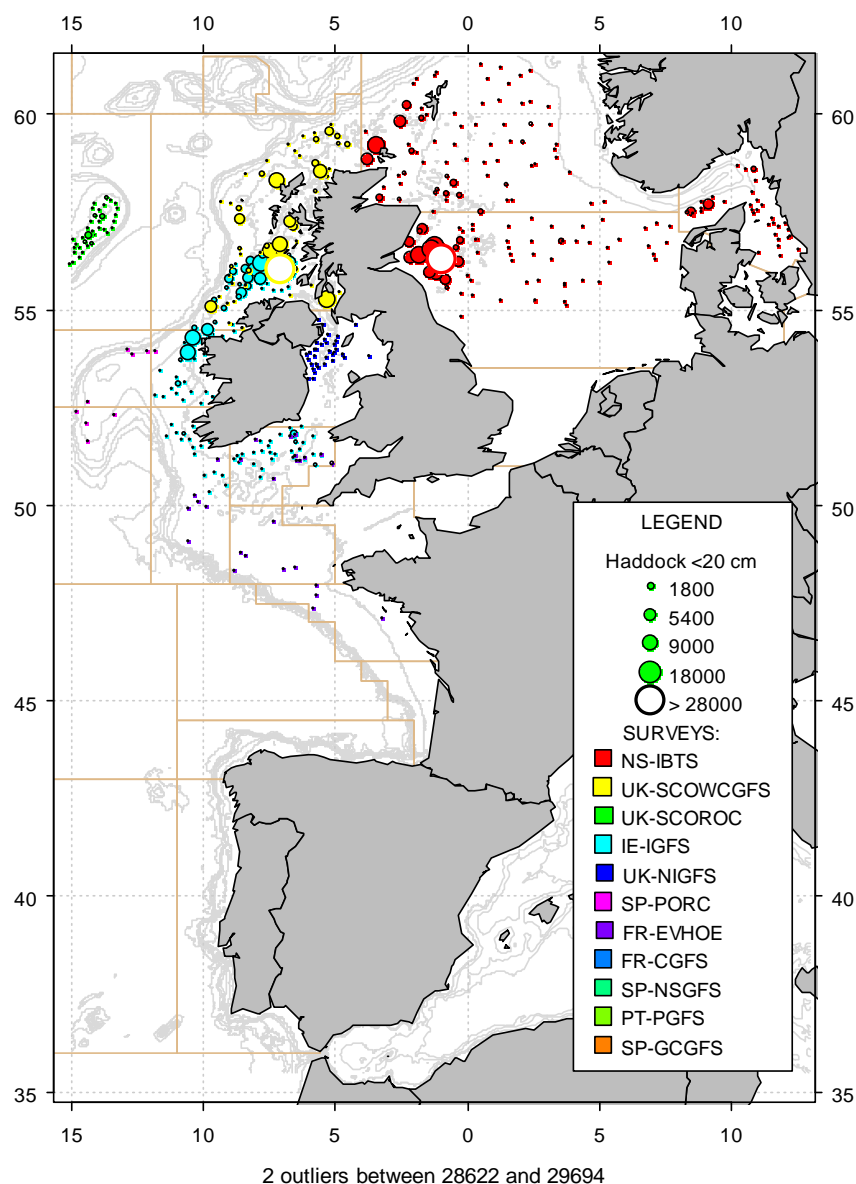


Figure A.5.4. Catches in numbers per hour of 0-group haddock, *Melanogrammus aeglefinus* (<20cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

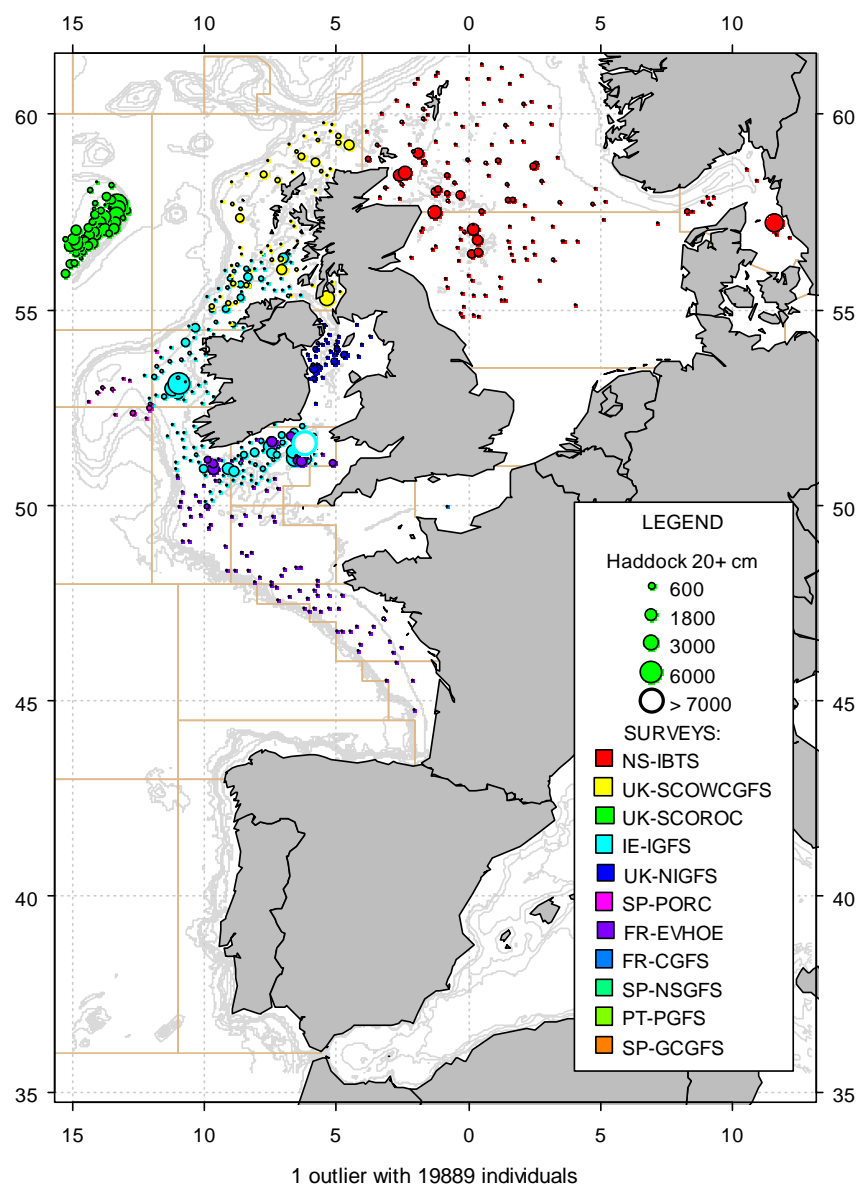


Figure A.5.5. Catches in numbers per hour of 1+ group haddock, *Melanogrammus aeglefinus* ( $\geq 20$ cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

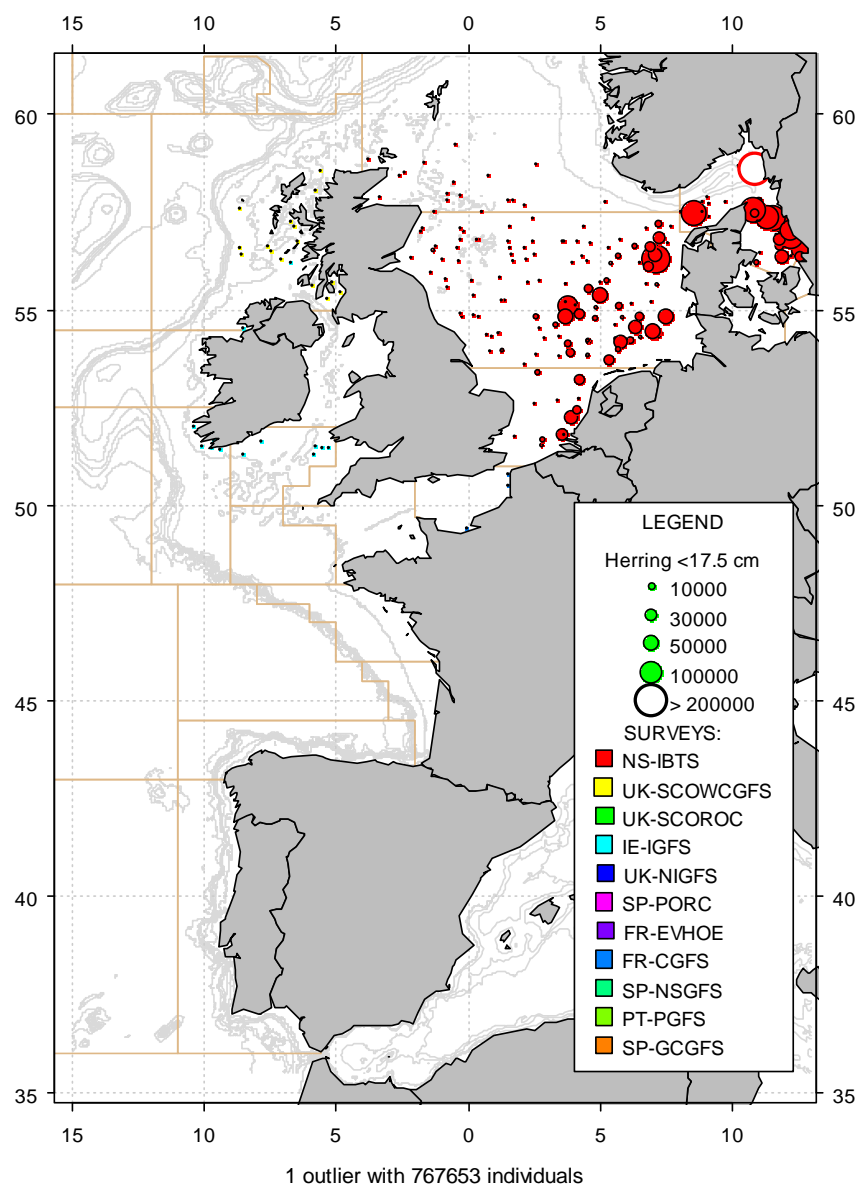


Figure A.5.6. Catches in numbers per hour of 0-group herring, *Clupea harengus* (<17.5 cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

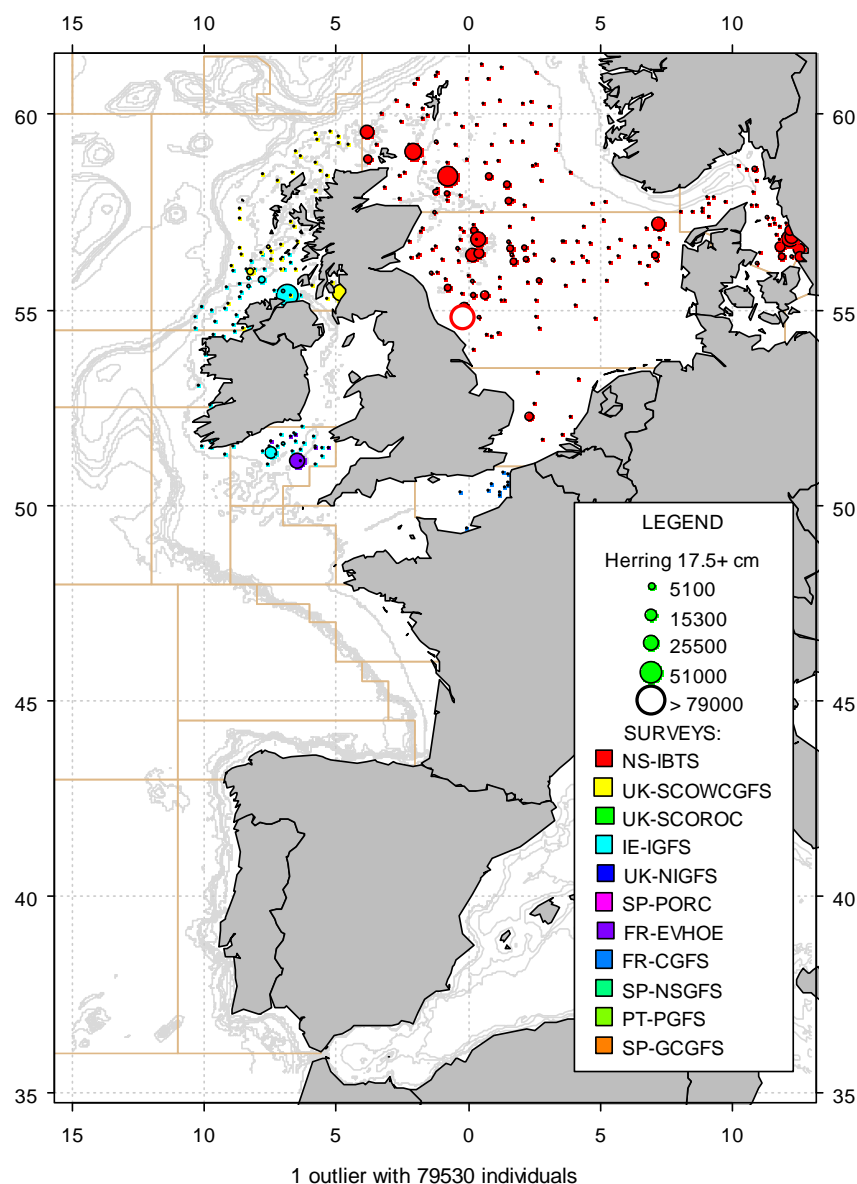


Figure A.5.7. Catches in numbers per hour of 1+ group herring, *Clupea harengus* ( $\geq 17.5$  cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore the map does not reflect proportional abundance in all the areas but within each survey.

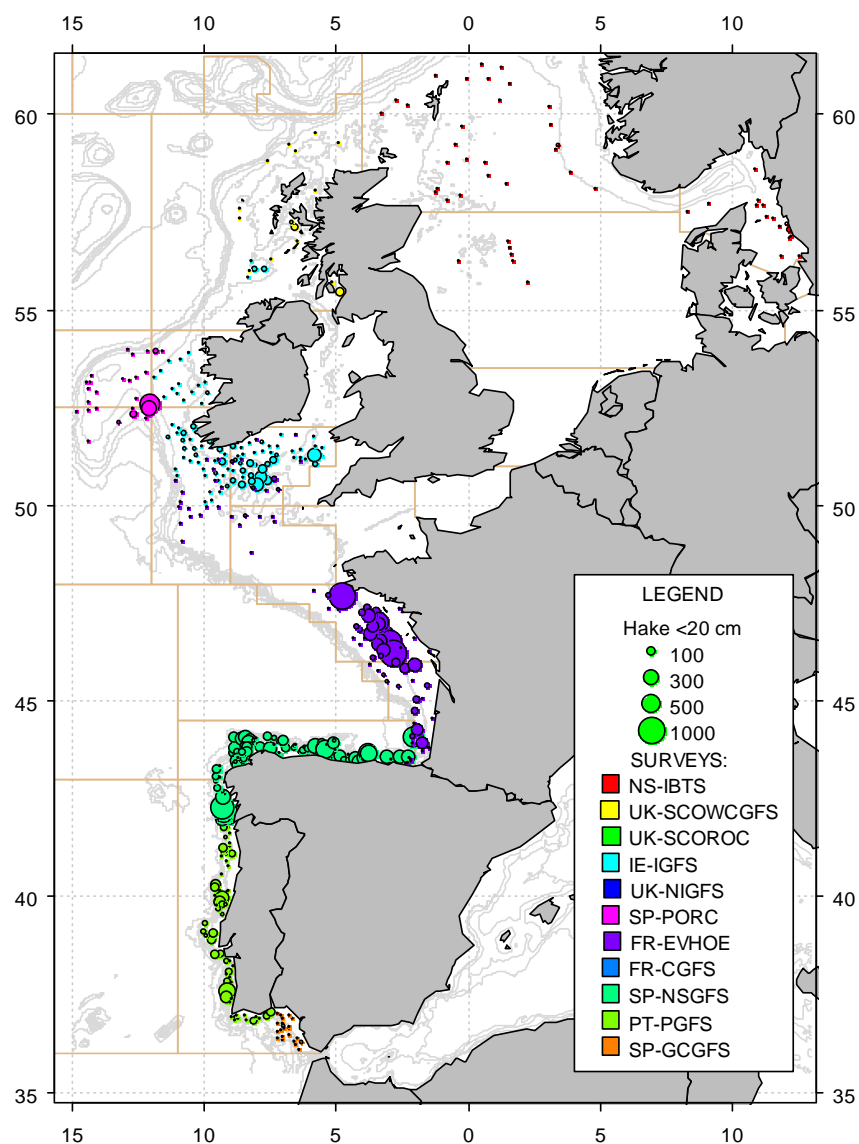


Figure A.5.8. Catches in numbers per hour of 0-group European hake, *Merluccius merluccius* (<20cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

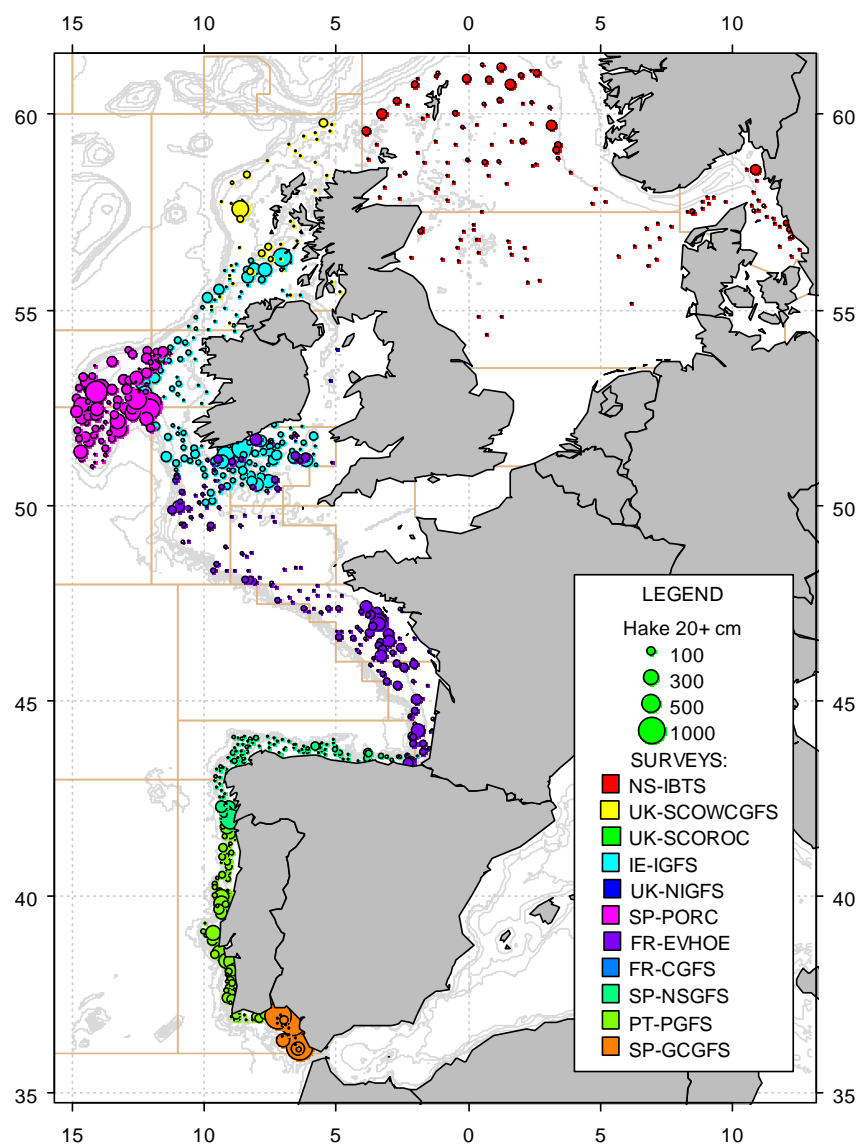


Figure A.5.9. Catches in numbers per hour of 1+ group hake, *Merluccius merluccius* ( $\geq 20\text{cm}$ ), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

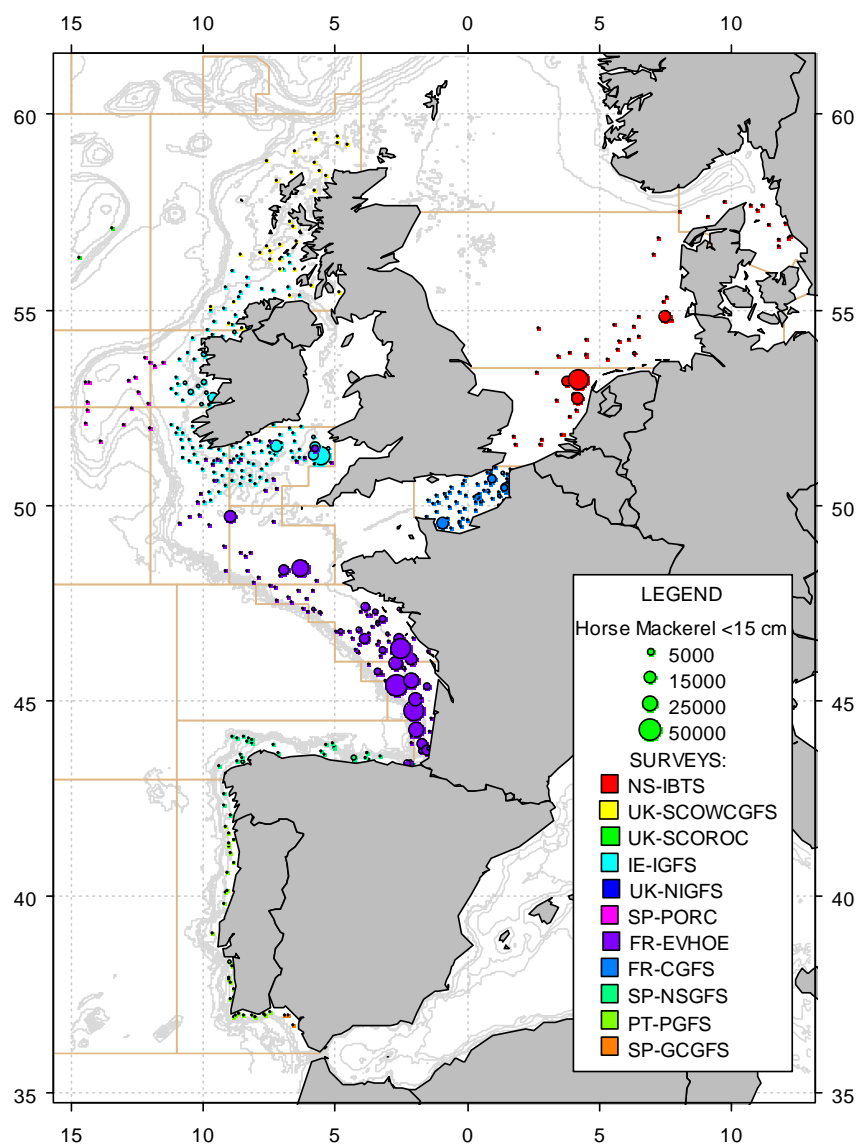


Figure A.5.10. Catches in numbers per hour of 0-group horse mackerel, *Trachurus trachurus* (<15 cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

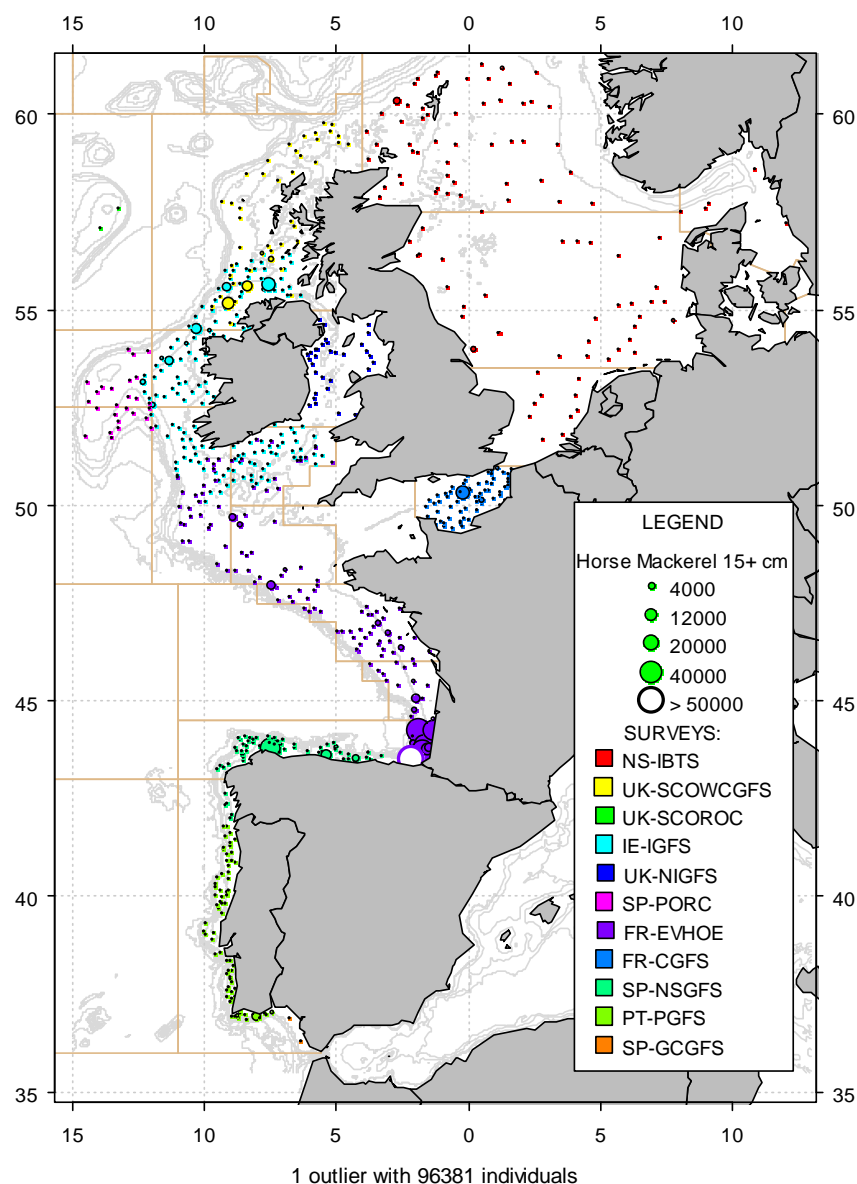


Figure A.5.11. Catches in numbers per hour of 1+ group horse mackerel, *Trachurus trachurus* ( $\geq 15$  cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.



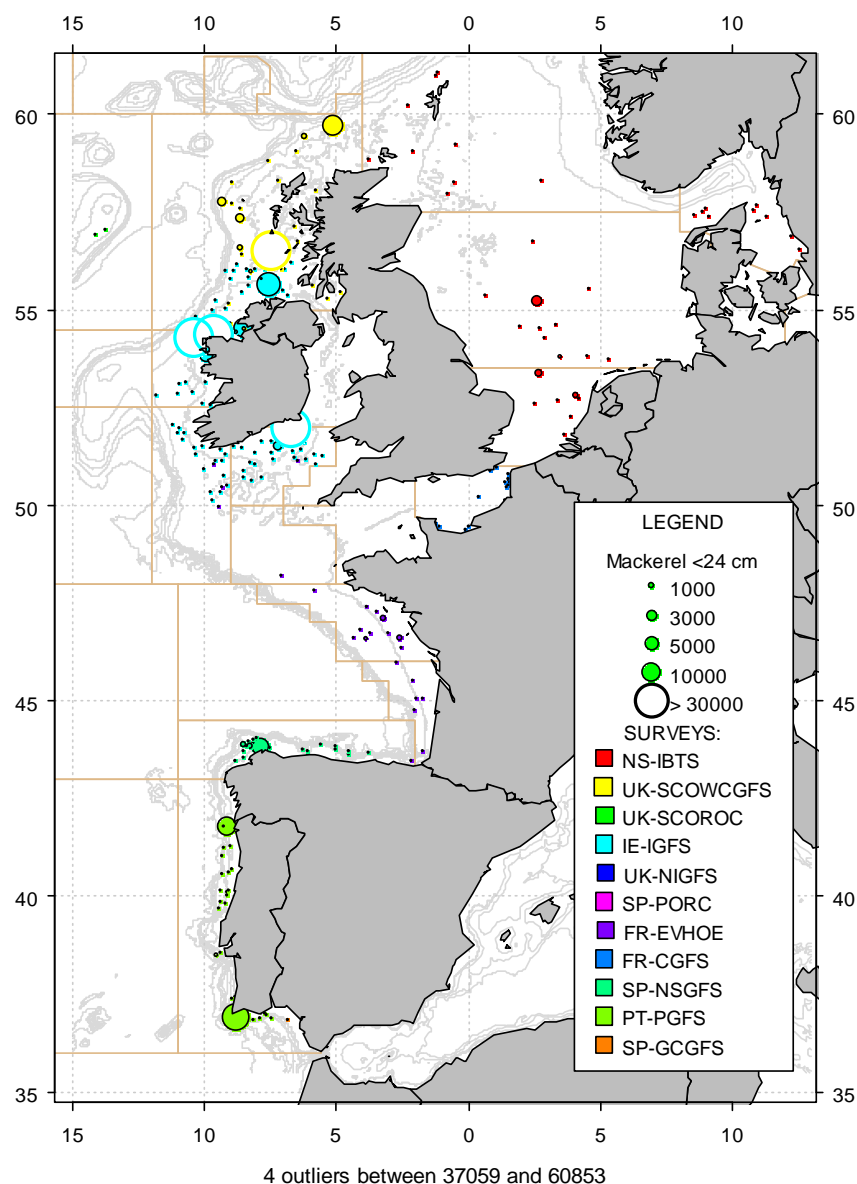


Figure A.5.12. Catches in numbers per hour of 0-group mackerel, *Scomber scombrus* (<24 cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

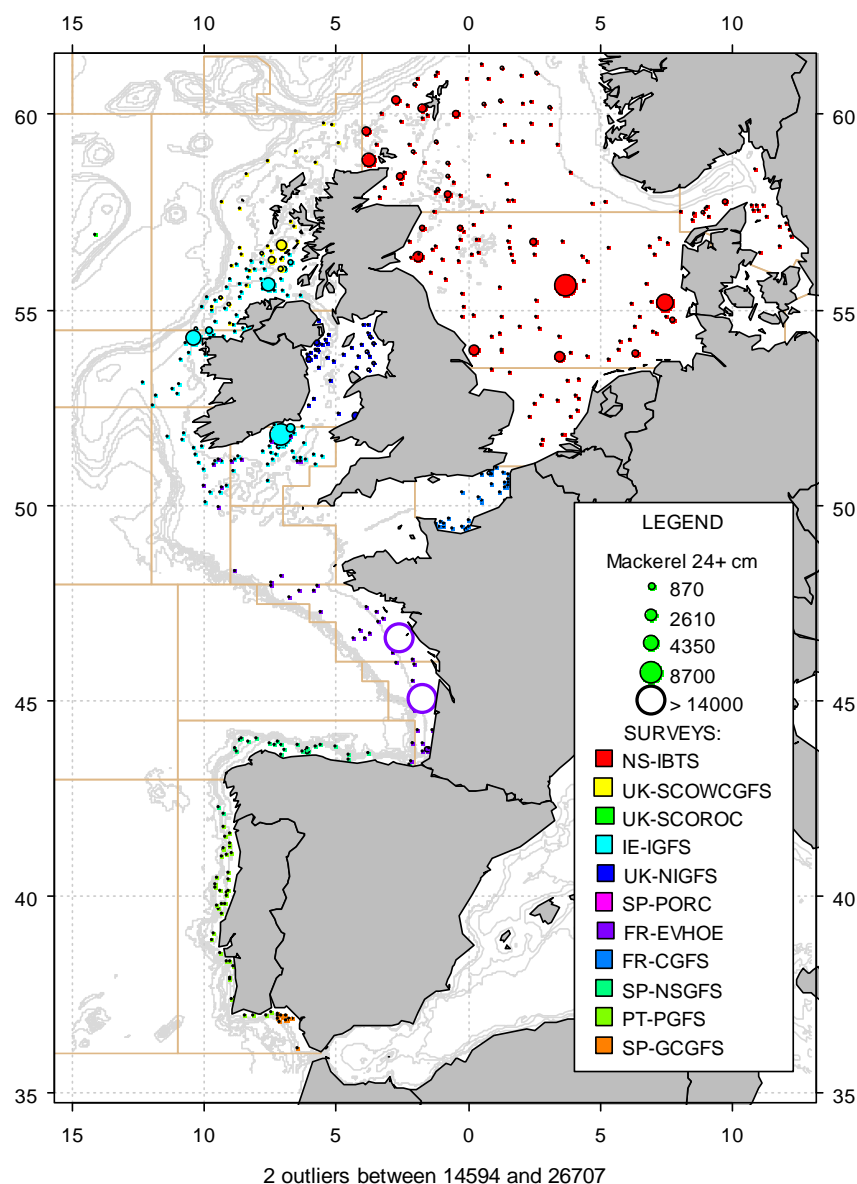


Figure A.5.13. Catches in numbers per hour of 1+ group mackerel, *Scomber scomrus* ( $\geq 24$  cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

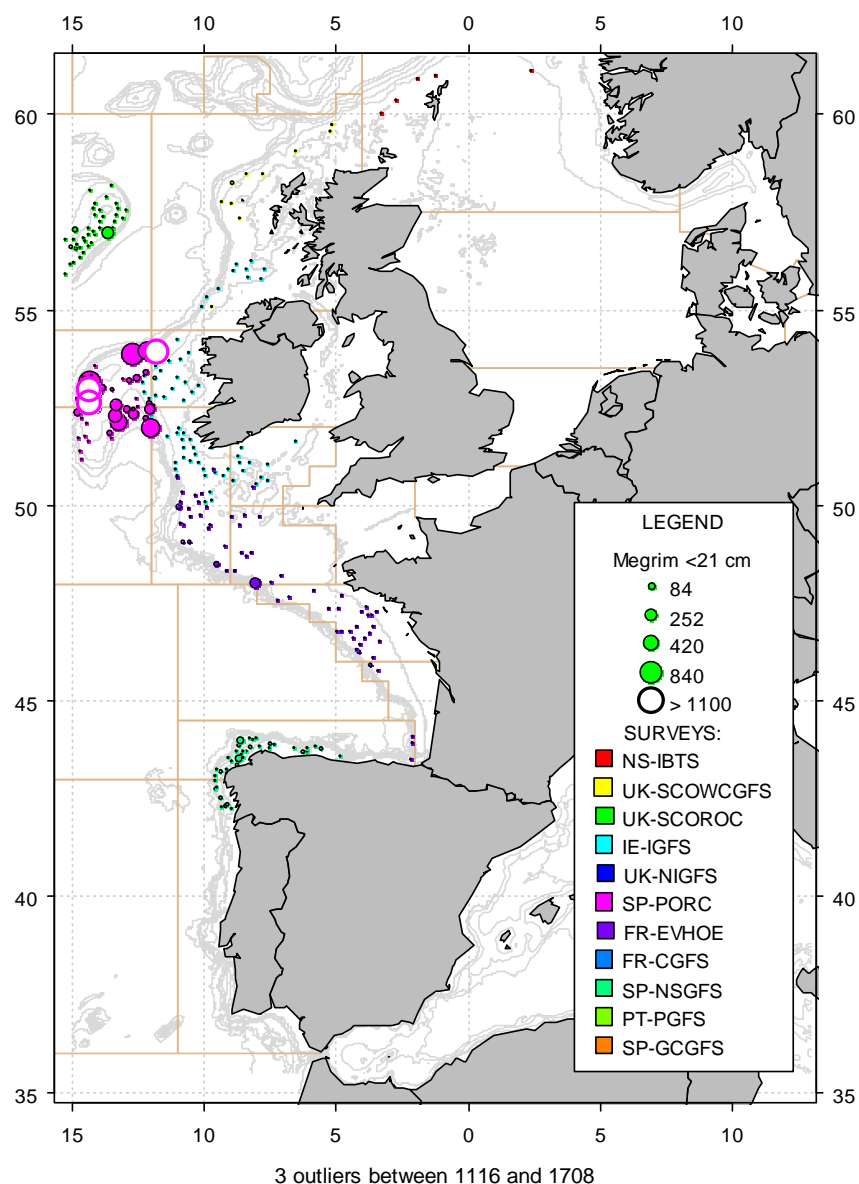


Figure A.5.14. Catches in numbers per hour of megrim recruits, *Lepidorhombus whiffiagonis* (<21 cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

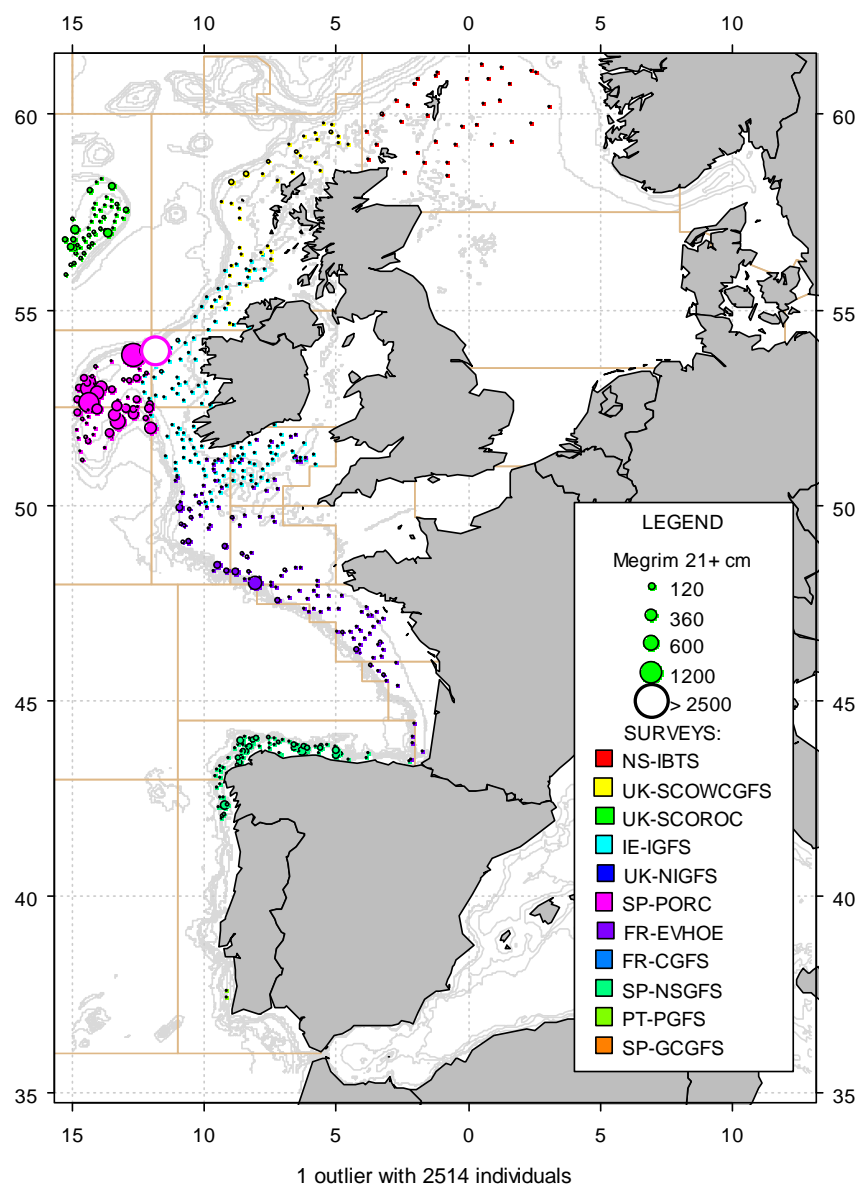


Figure A.5.15. Catches in numbers per hour of 2+ group megrim, *Lepidorhombus whiffiagonis* ( $\geq 21$ cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

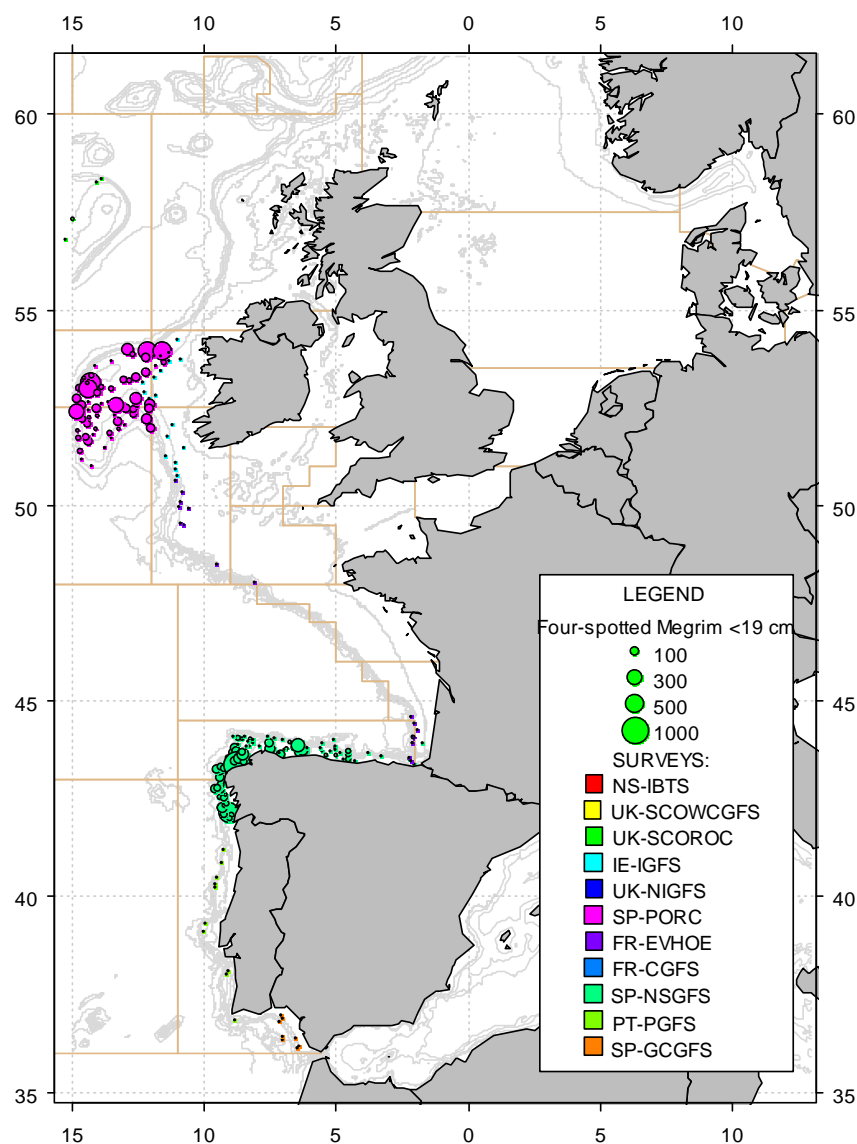


Figure A.5.16. Catches in numbers per hour of recruits of four-spotted megrim, *Lepidorhombus boscii* (<19 cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

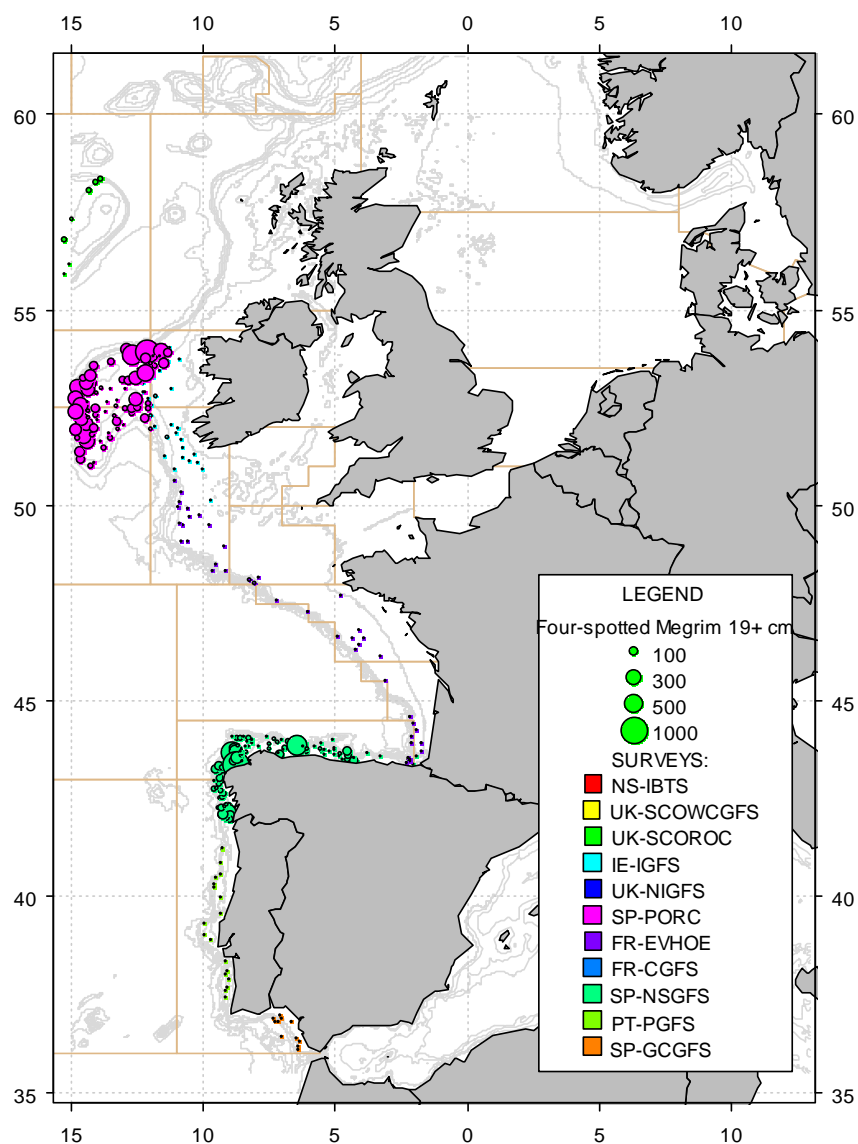


Figure A.5.17. Catches in numbers per hour of 2+ group four-spotted megrim, *Lepidorhombus boscii* ( $\geq 19$  cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

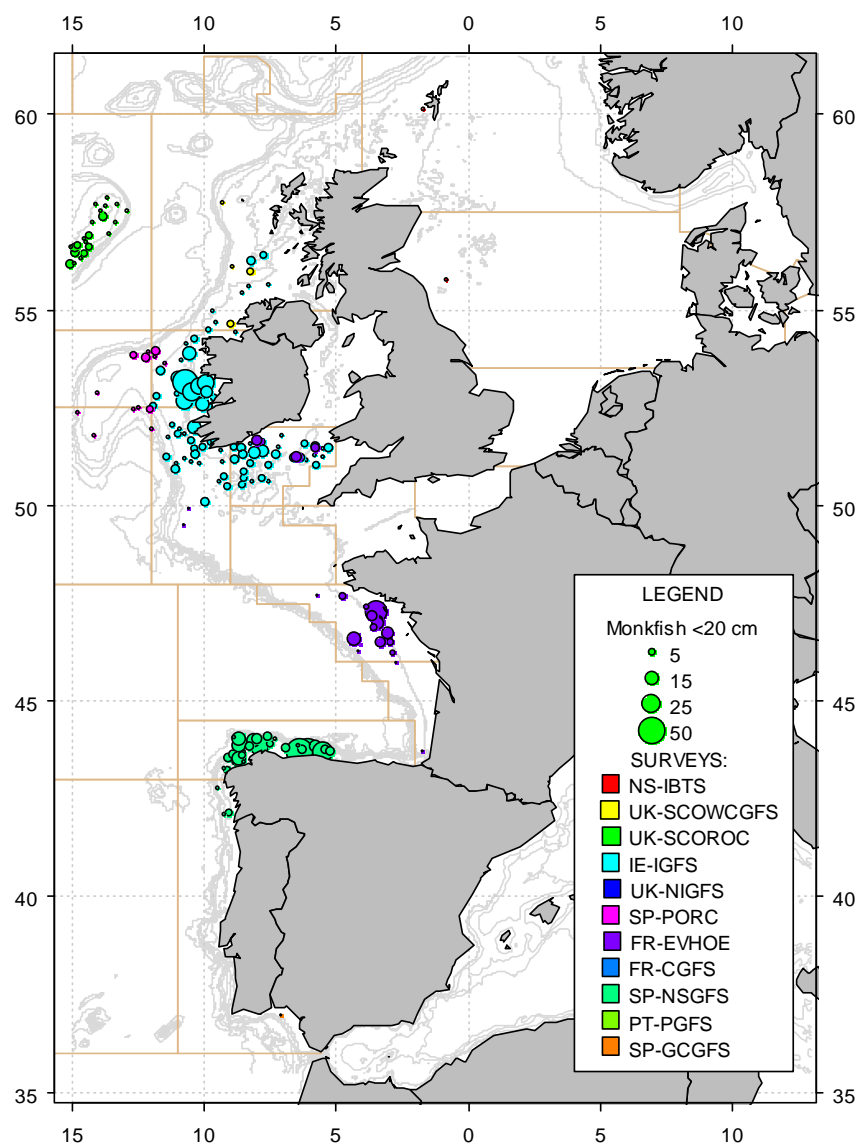


Figure A.5.18. Catches in numbers per hour of 0-group monkfish, *Lophius piscatorius* (<20 cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

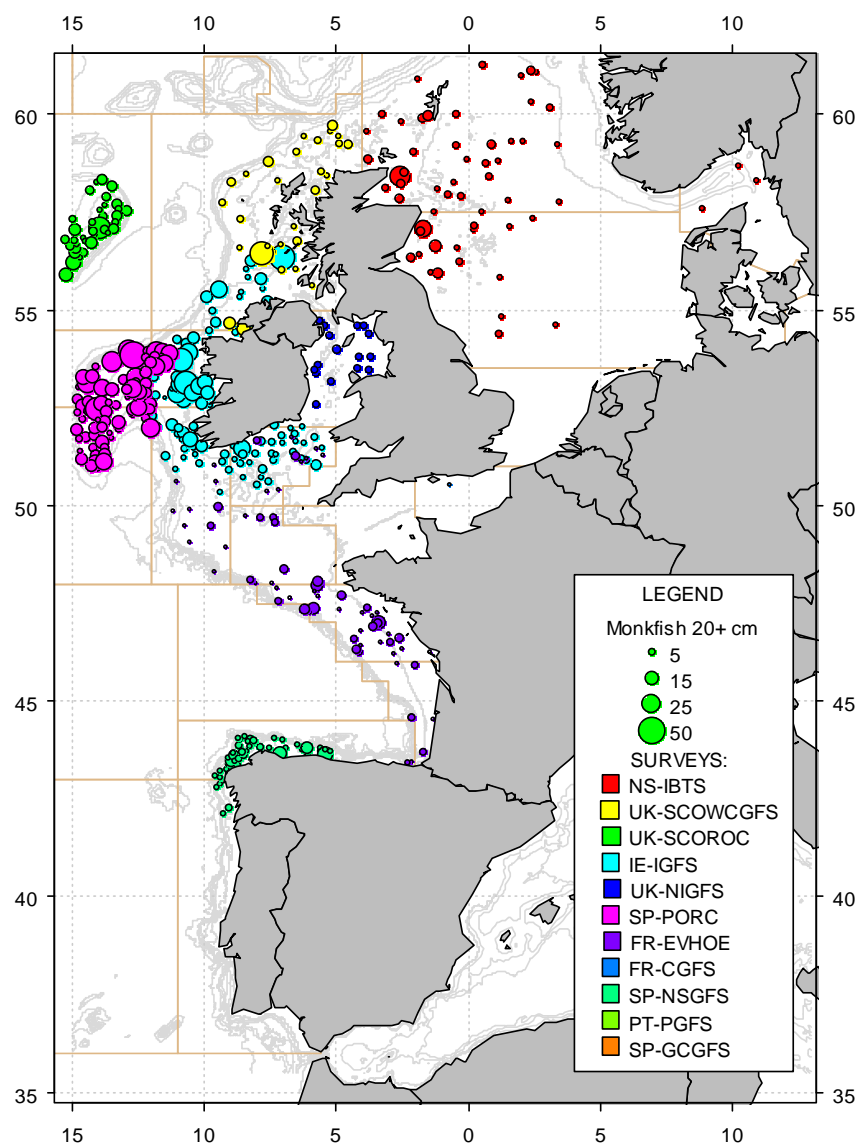


Figure A.5.19. Catches in numbers per hour of 1+ group monkfish, *Lophius piscatorius* ( $\geq 20$  cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.



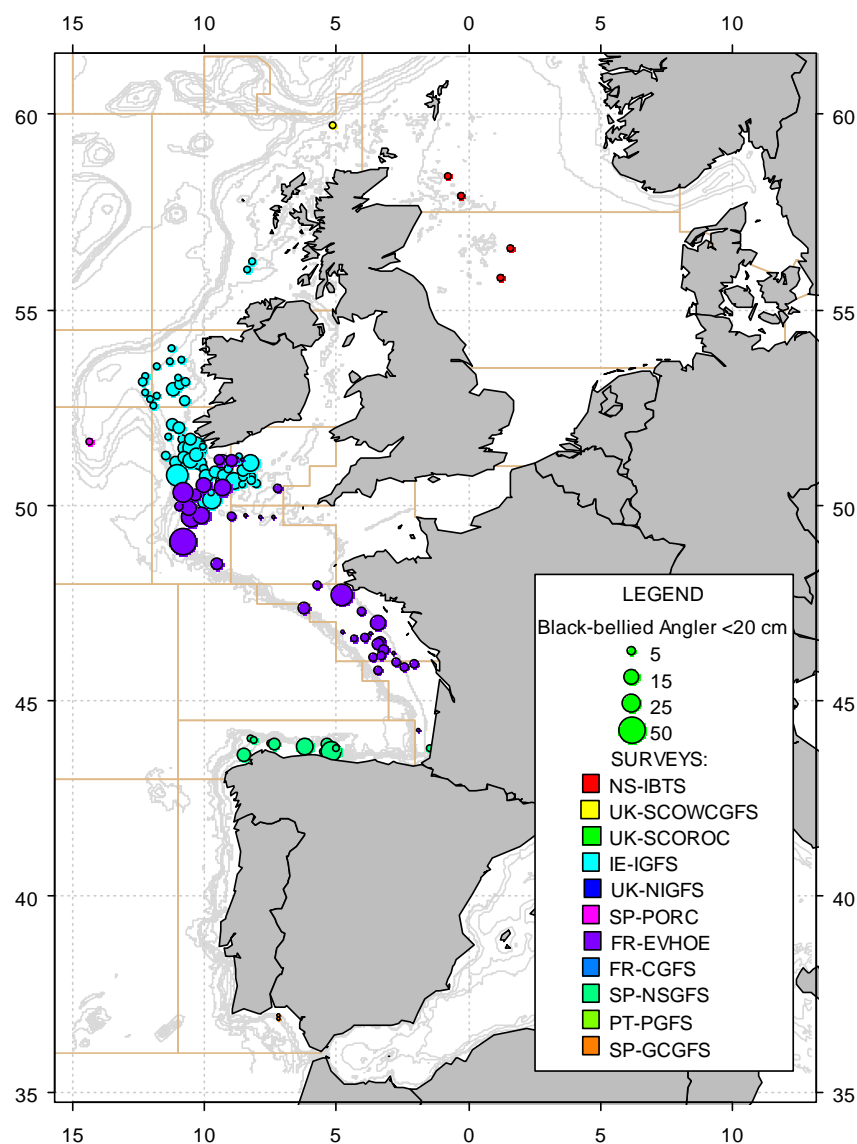


Figure A.5.20. Catches in numbers per hour of 0-group black-bellied anglerfish, *Lophius budegassa* (<20 cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

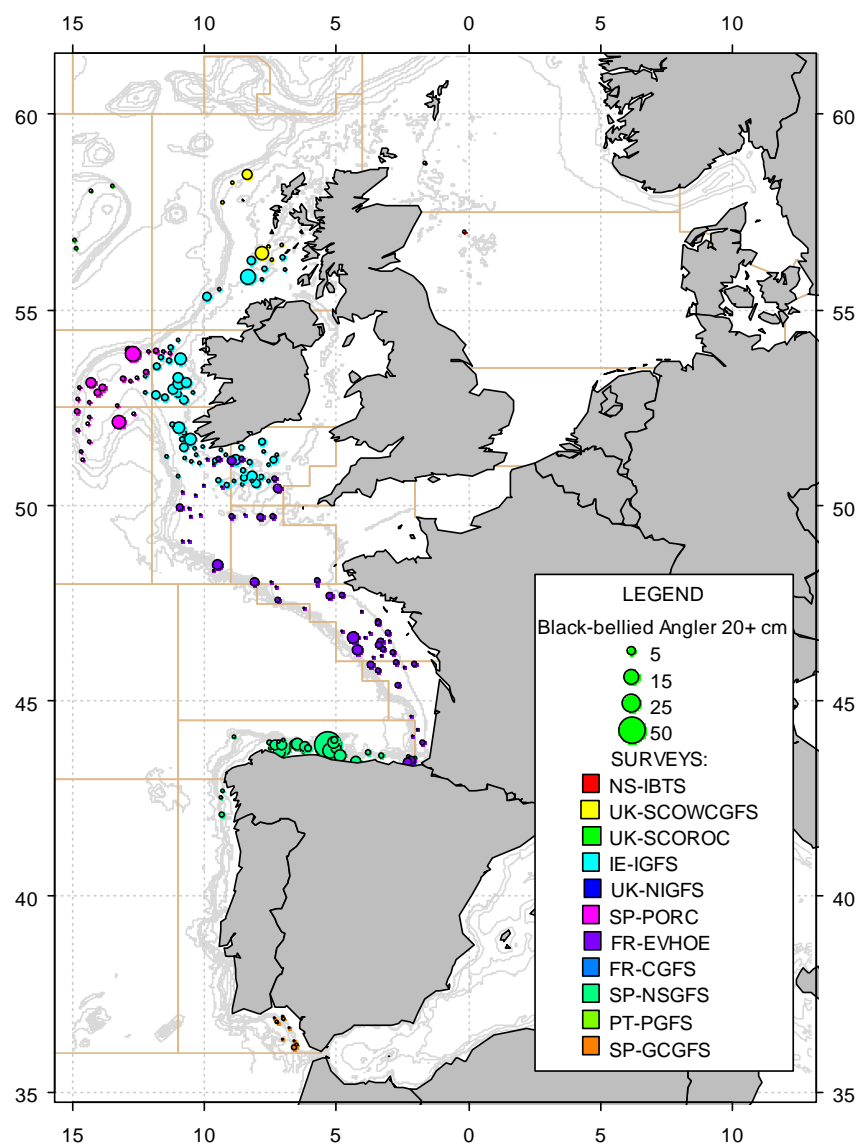


Figure A.5.21. Catches in numbers per hour of 1+ group black-bellied anglerfish, *Lophius budegassa* ( $\geq 20$  cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

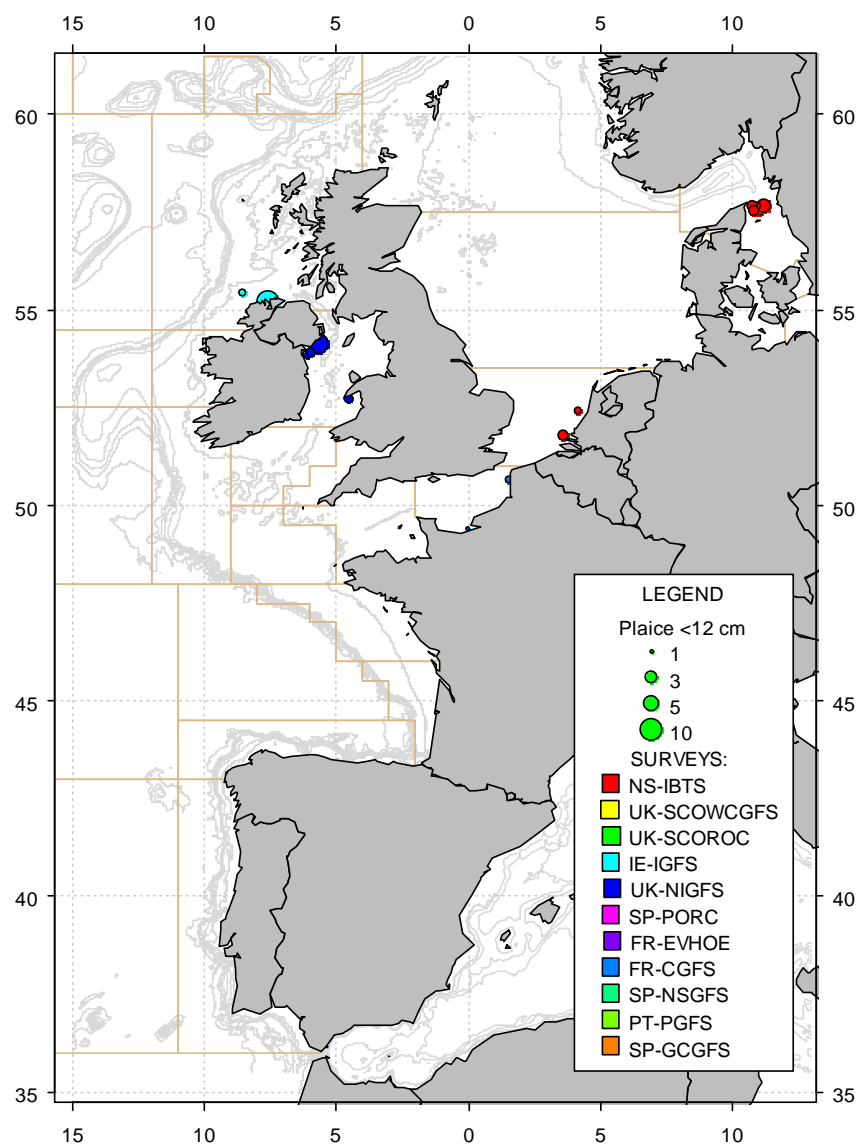


Figure A.5.22. Catches in numbers per hour of 0-group plaice, *Pleuronectes platessa* (<12 cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

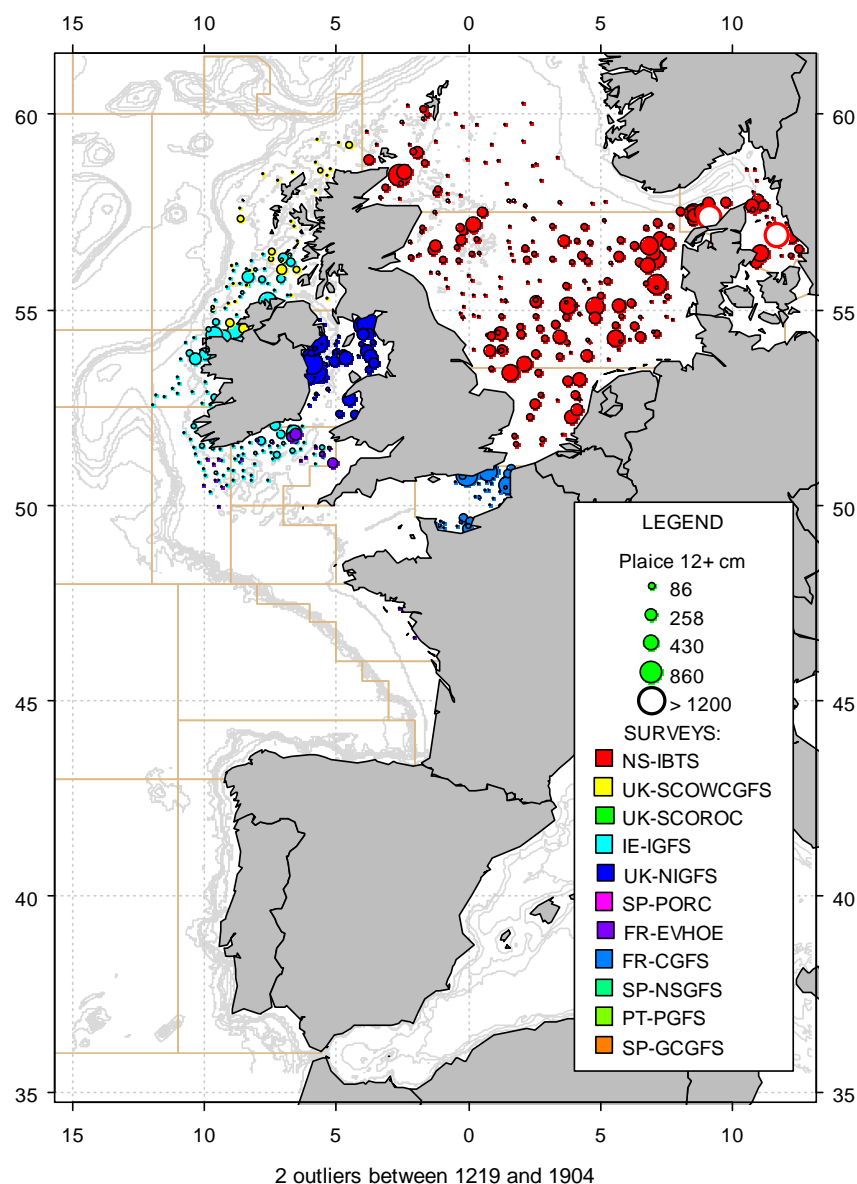


Figure A.5.23. Catches in numbers per hour of 1+ group plaice, *Pleuronectes platessa* ( $\geq 12$  cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

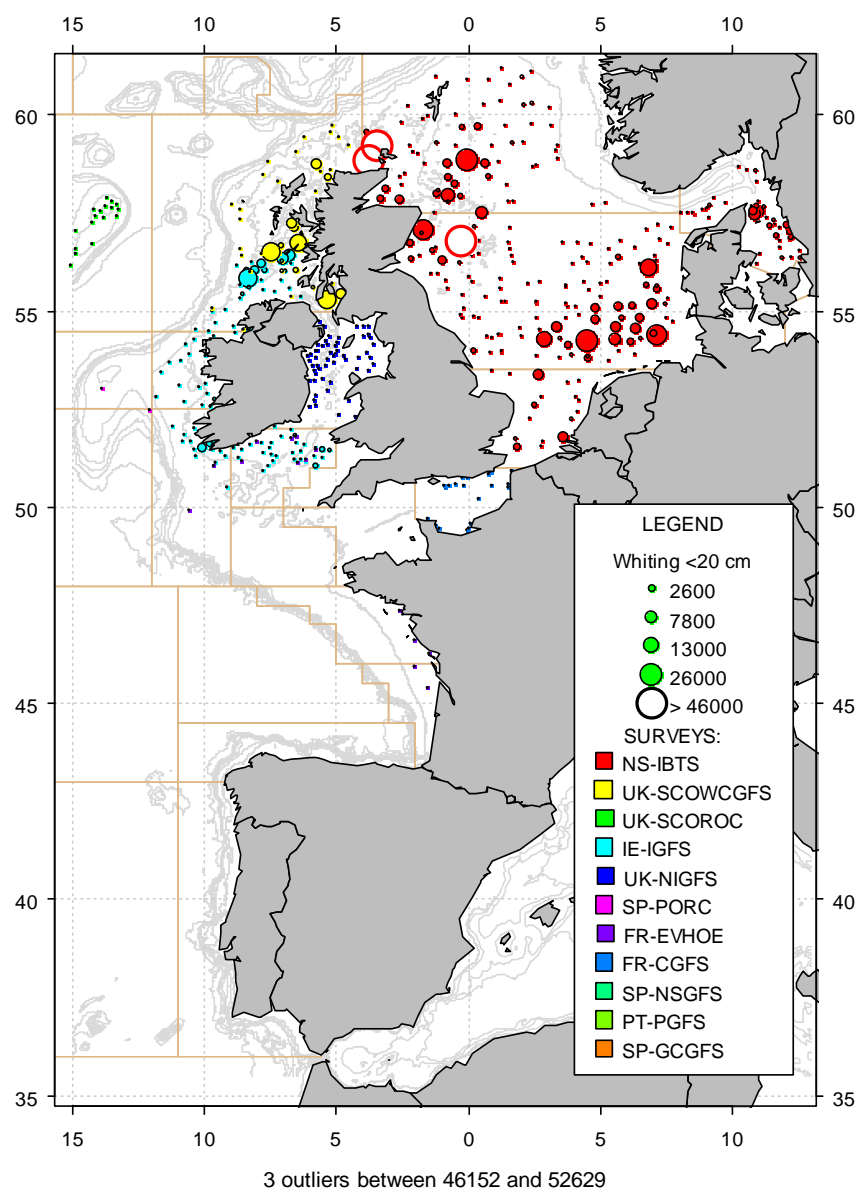


Figure A.5.24. Catches in numbers per hour of 0-group whiting, *Merlangius merlangus* (<20 cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

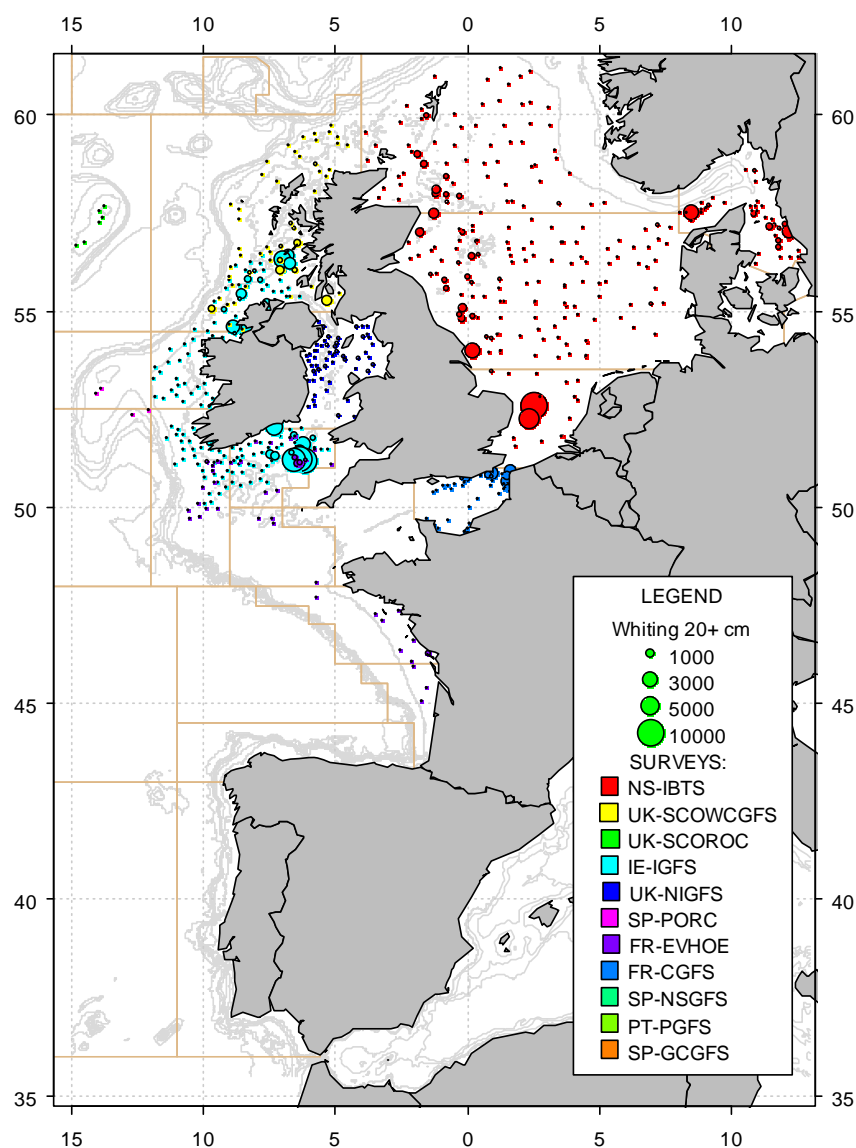


Figure A.5.25. Catches in numbers per hour of 1+ group whiting, *Merlangius merlangus* ( $\geq 20$  cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

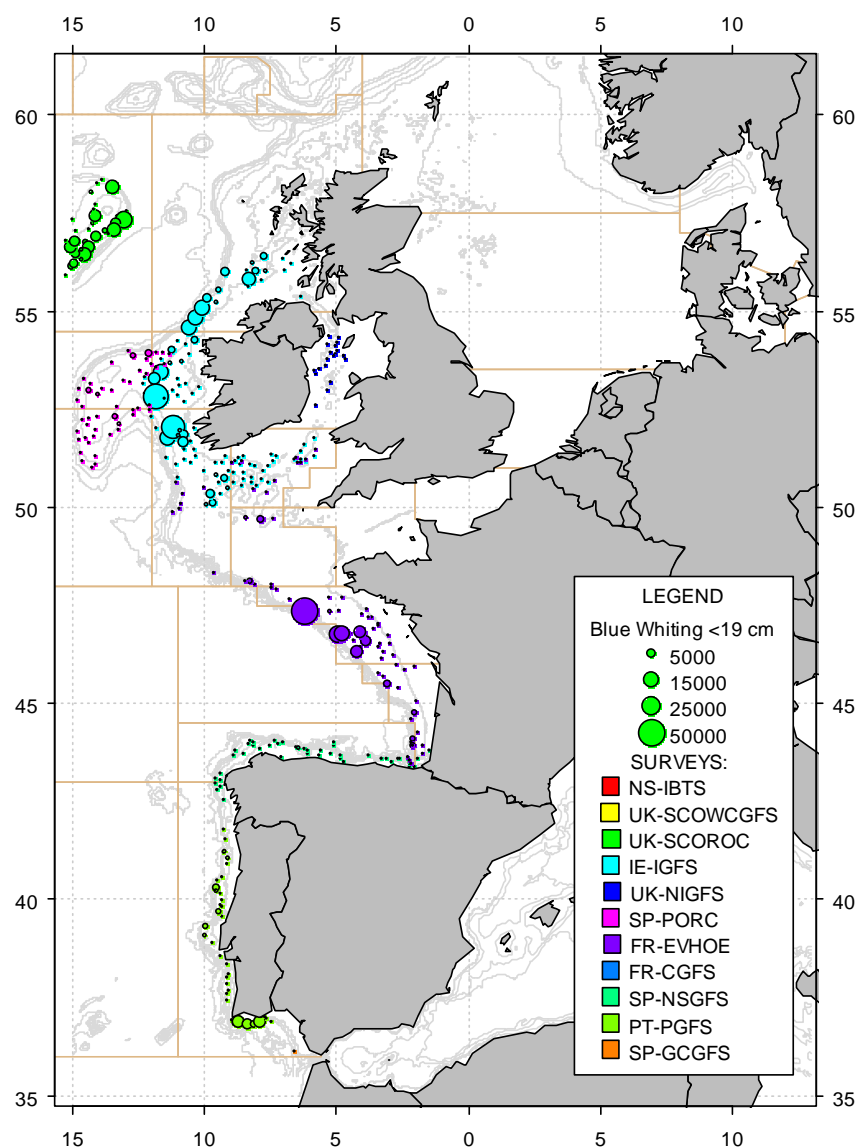


Figure A.5.26. Catches in numbers per hour of 0-group blue whiting, *Micromesistius poutassou* (<19 cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

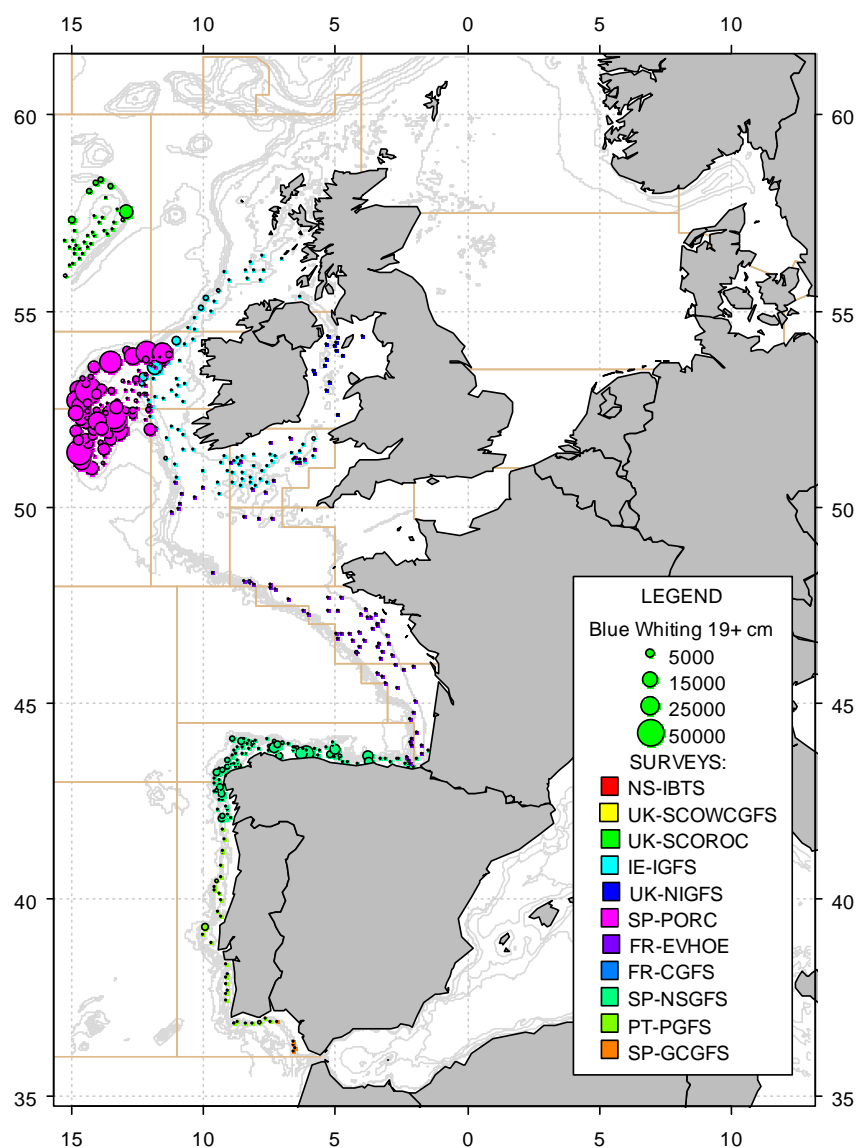


Figure A.5.27. Catches in numbers per hour of 1+ group blue whiting, *Micromesistius poutassou* ( $\geq 19$  cm), in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.



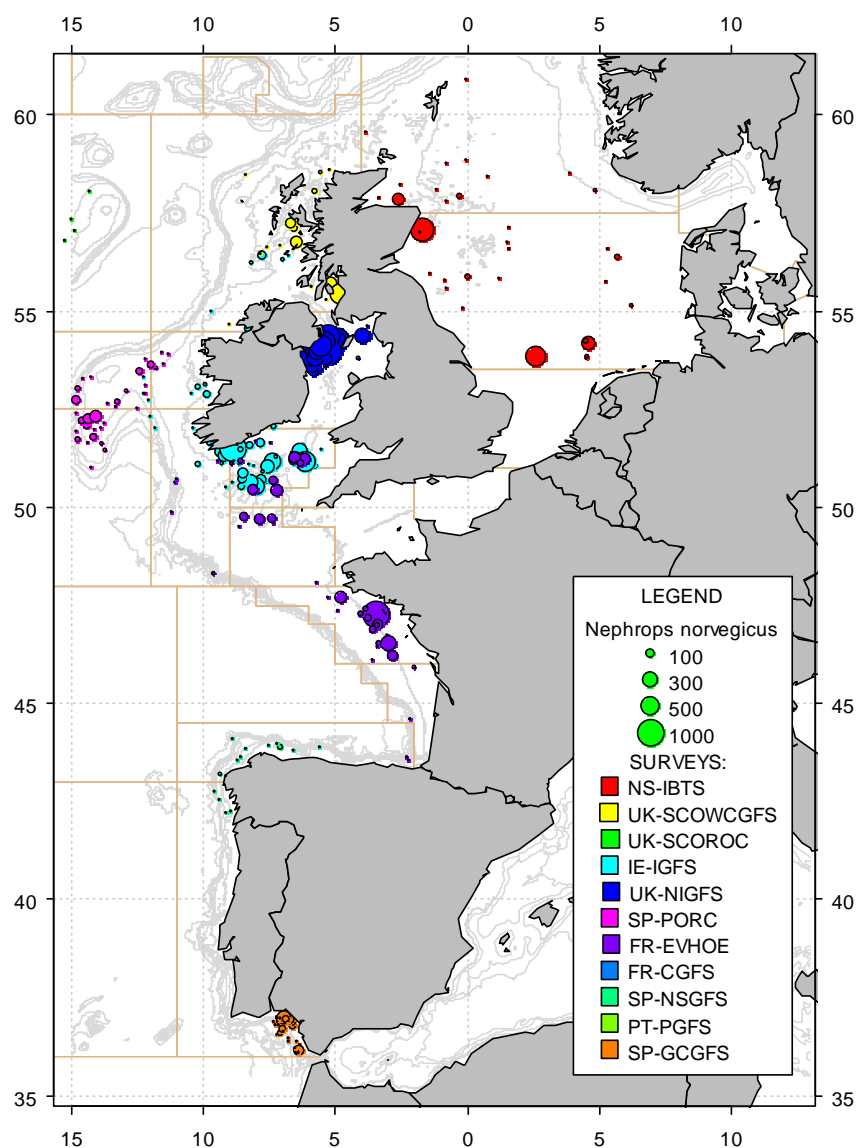


Figure A.5.28. Catches in numbers per hour of Norway lobster, *Nephrops norvegicus*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

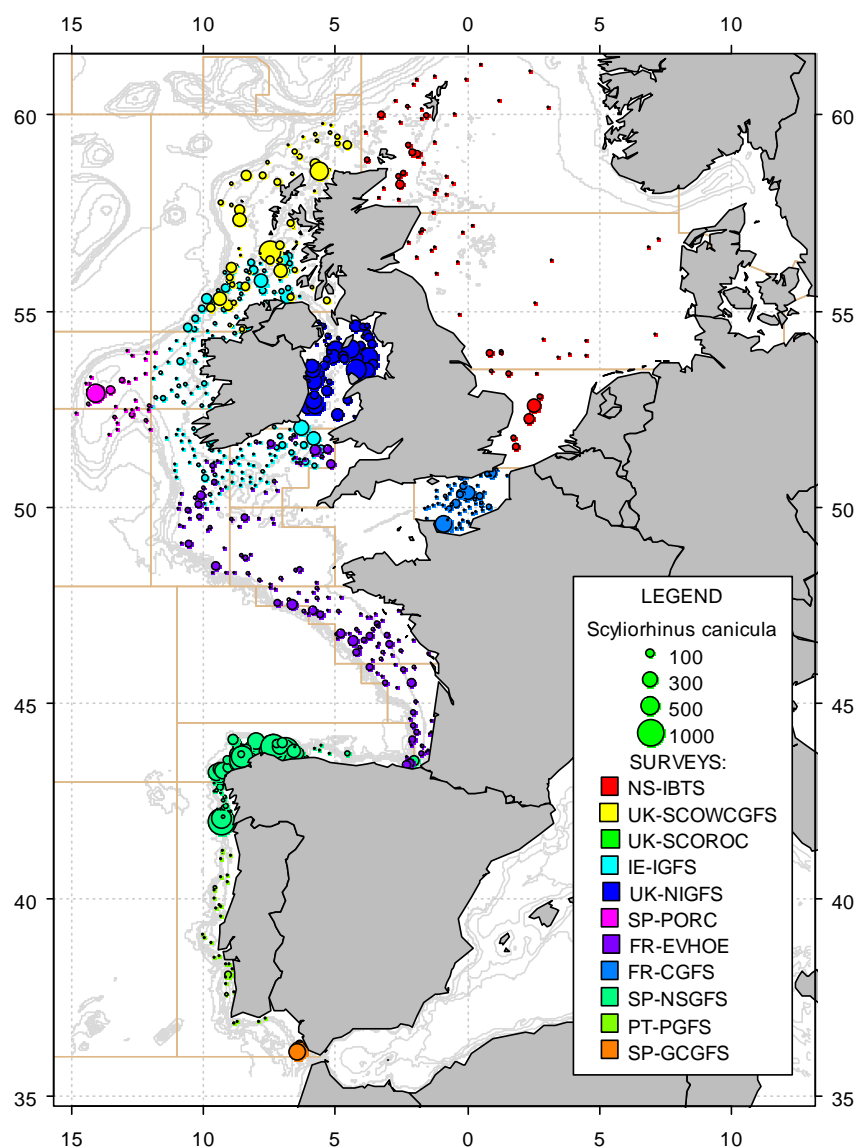


Figure A.5.29. Catches in numbers per hour of lesser spotted dogfish, *Scyliorhinus canicula*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

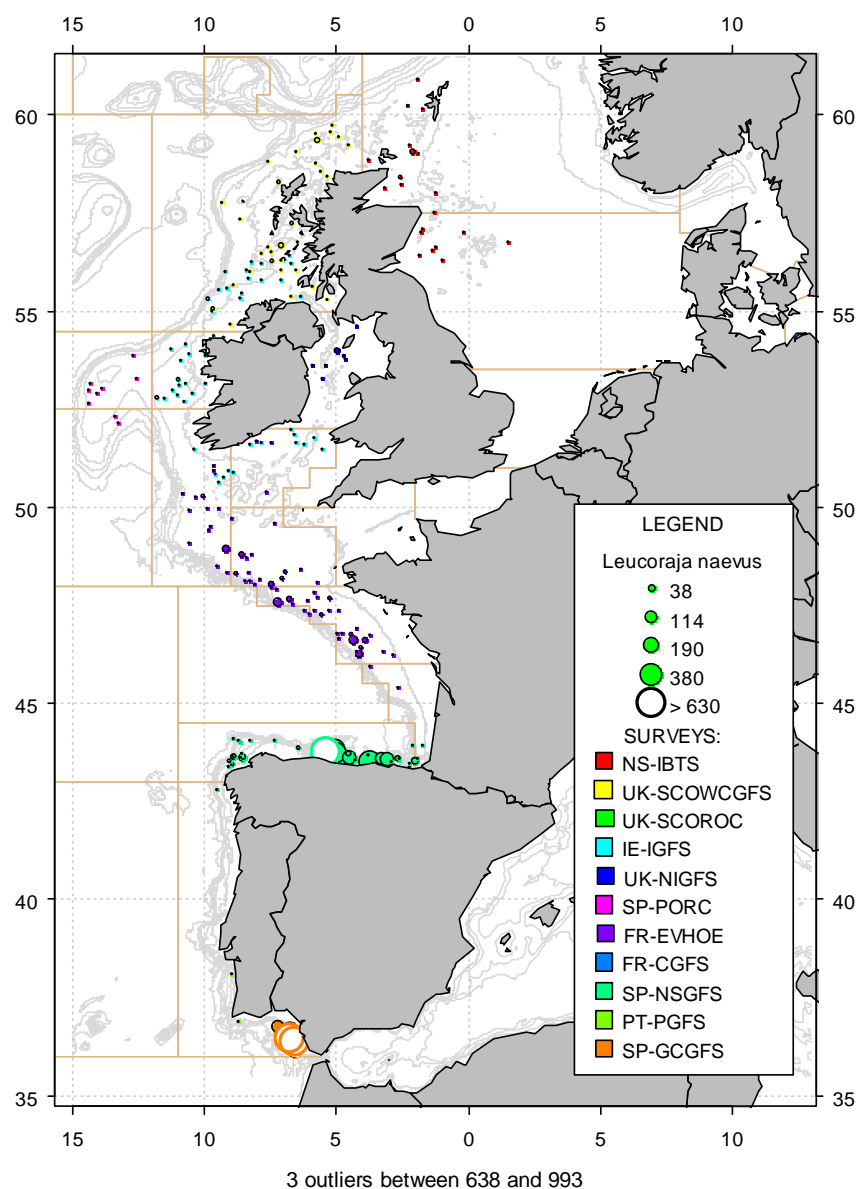


Figure A.5.30. Catches in numbers per hour of cuckoo ray, *Leucoraja naevus*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

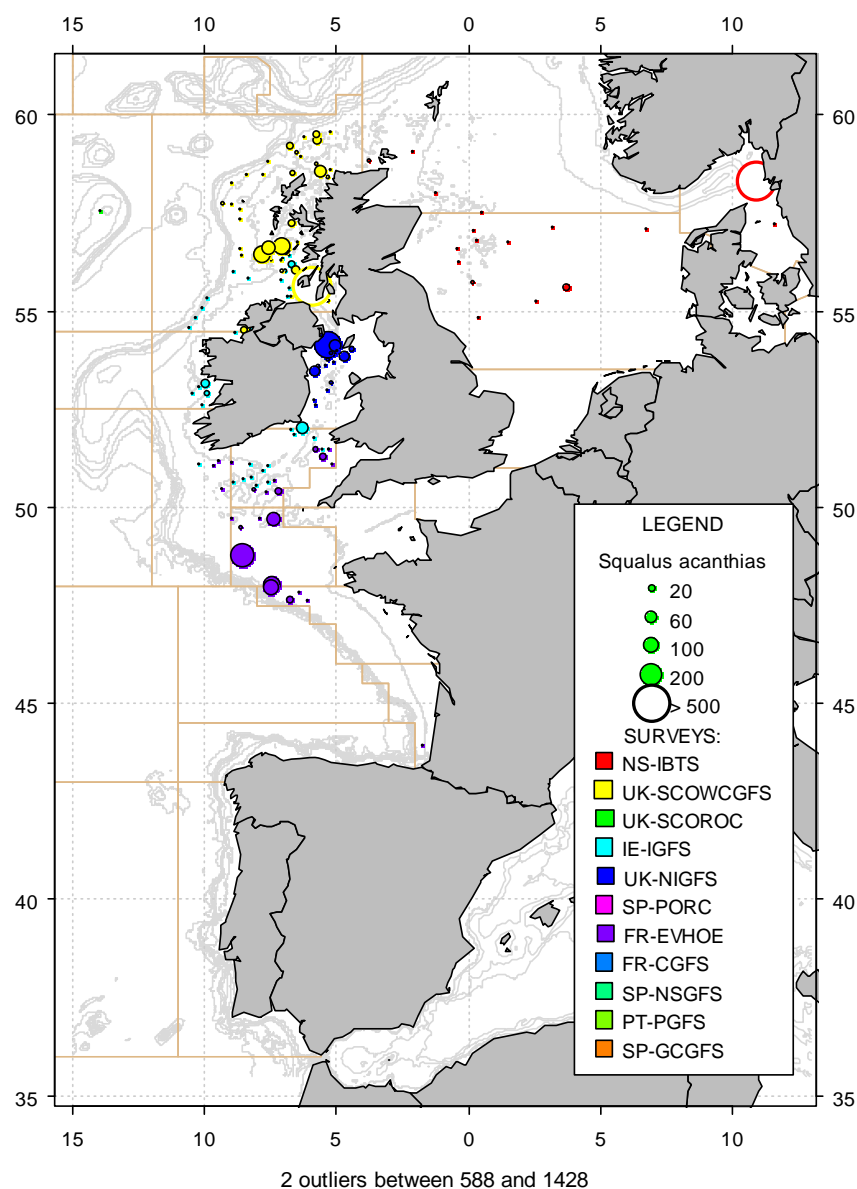


Figure A.5.31. Catches in numbers per hour per hour of spurdog, *Squalus acanthias*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

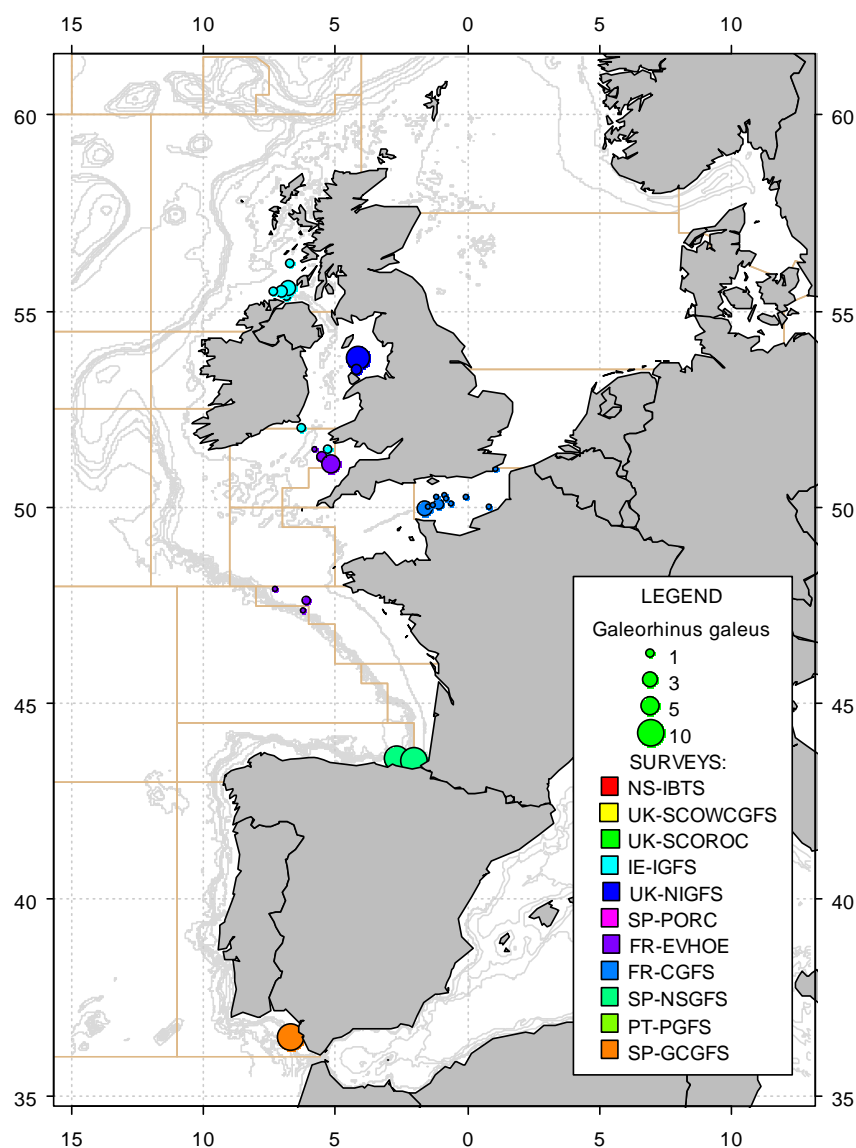


Figure A.5.32. Catches in numbers per hour per hour of tope, *Galeorhinus galeus*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

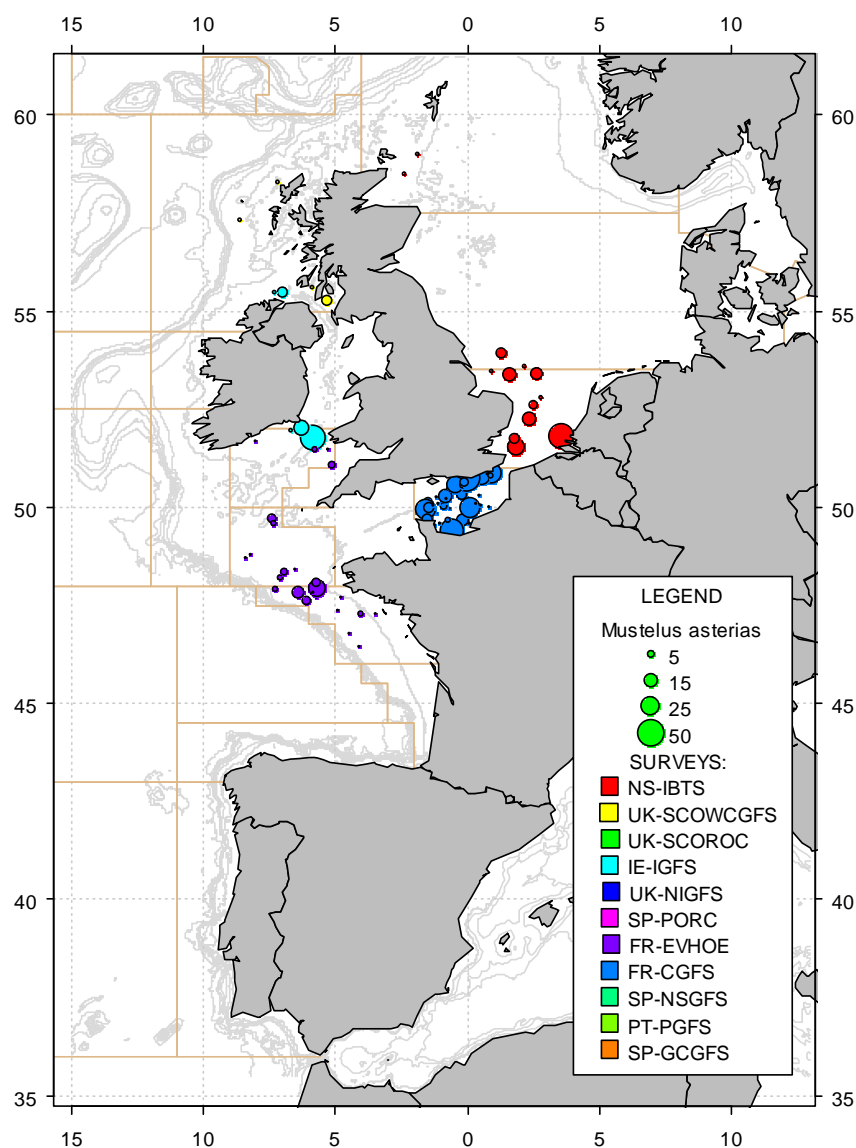


Figure A.5.33. Catches in numbers per hour per hour of smooth hound, *Mustelus asterias*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

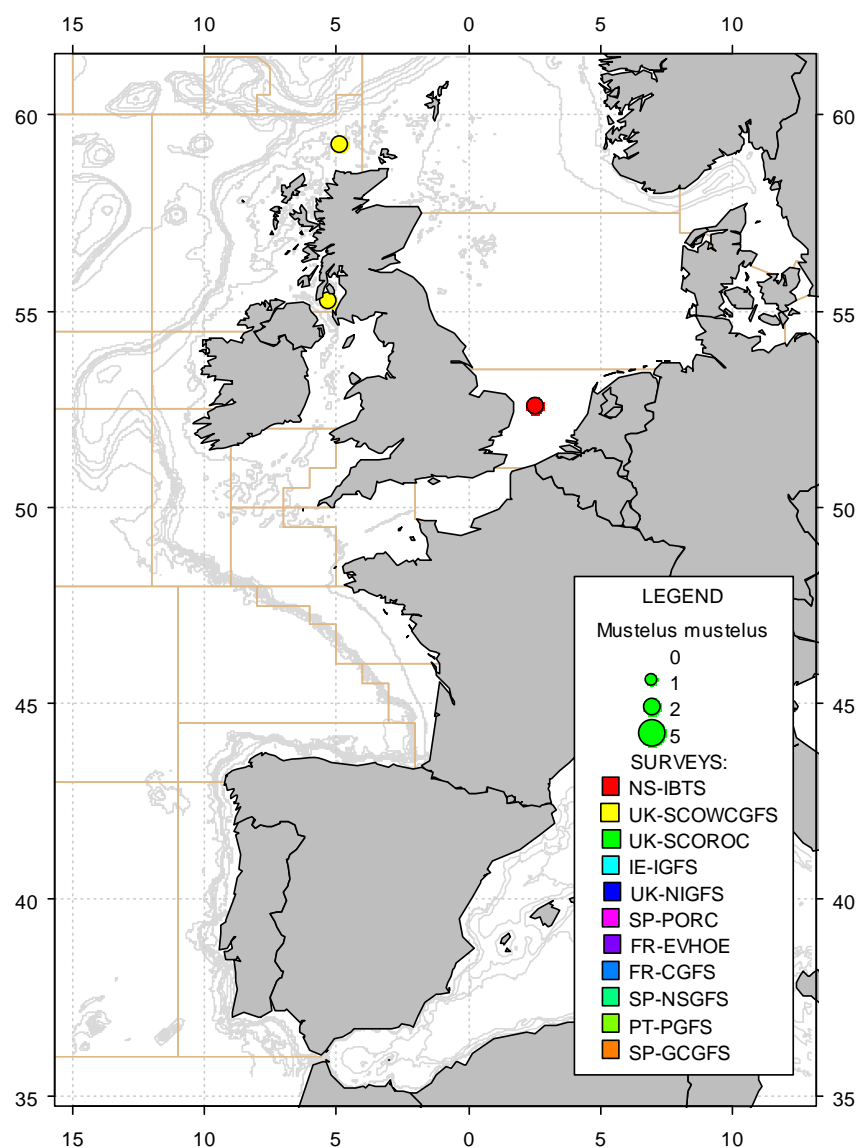


Figure A.5.34. Catches in numbers per hour per hour of smooth hound, *Mustelus mustelus*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

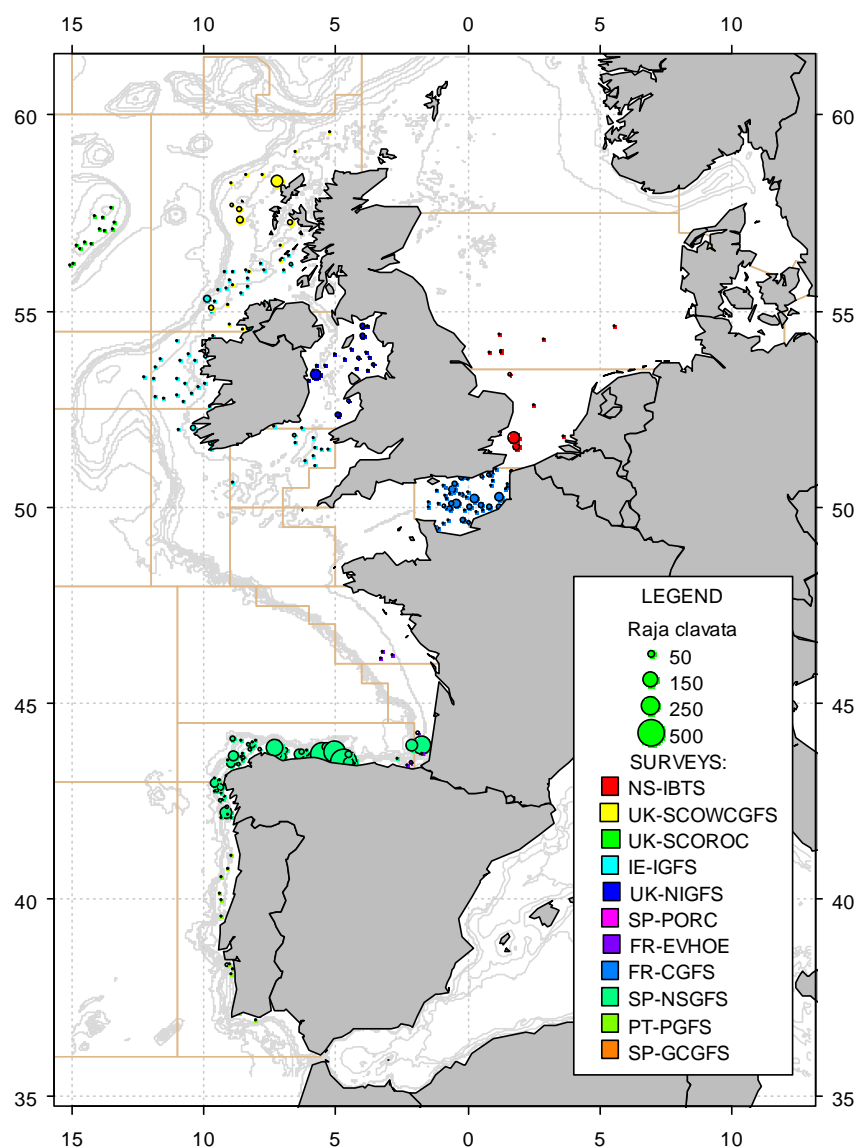


Figure A.5.35. Catches in numbers per hour per hour of thornback ray, *Raja clavata*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.



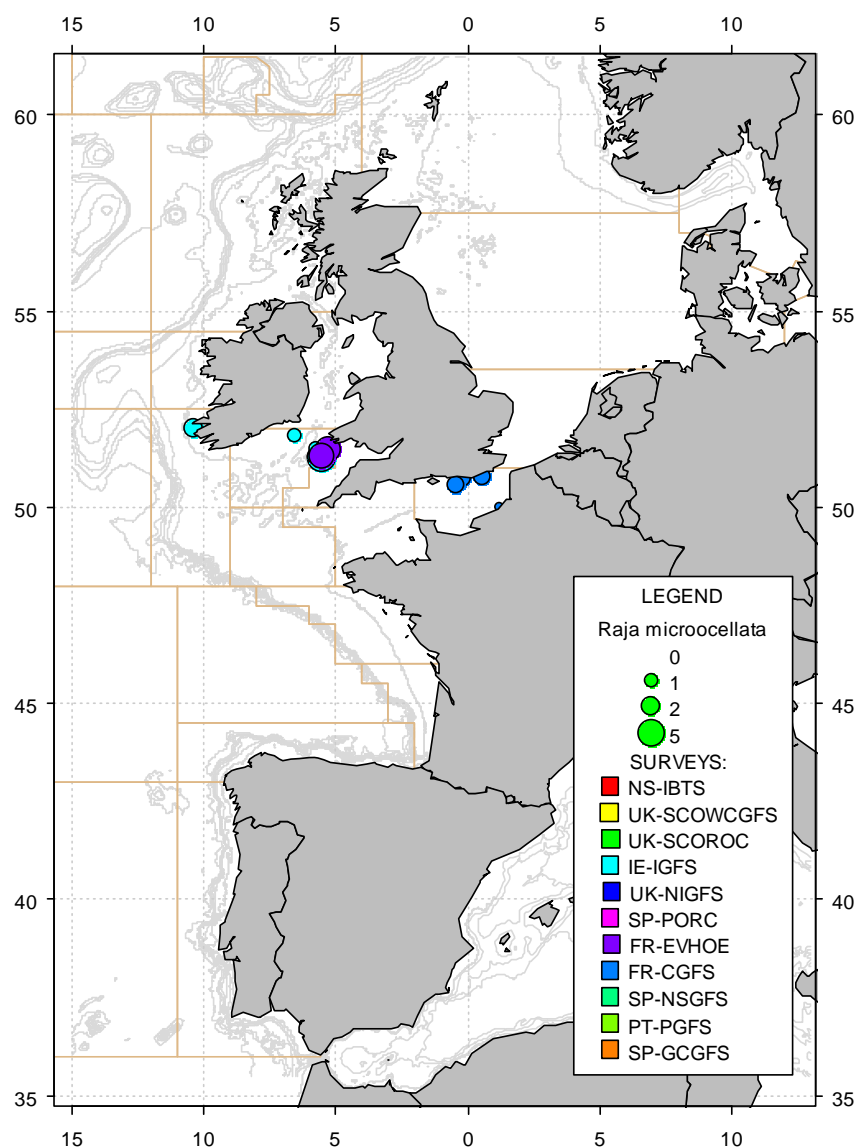


Figure A.5.36. Catches in numbers per hour per hour of small-eyed ray, *Raja microocellata*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

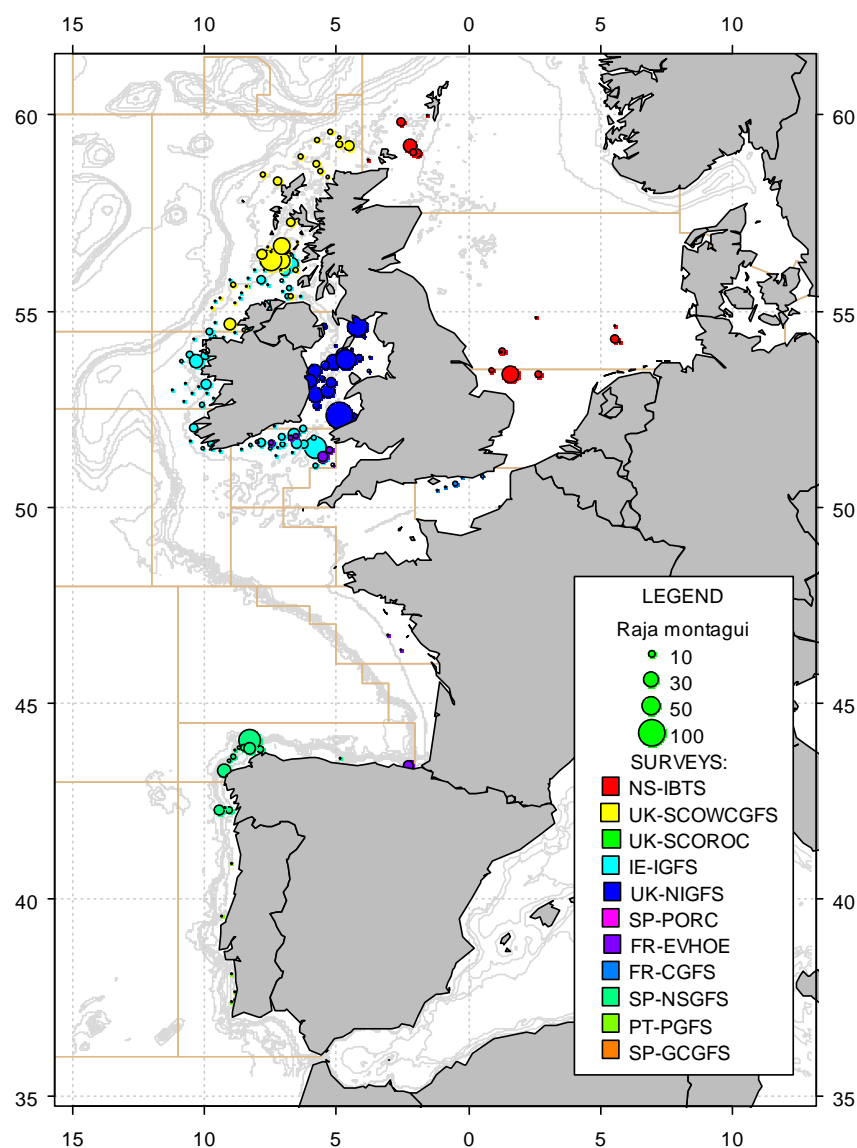


Figure A.5.37. Catches in numbers per hour per hour of spotted ray, *Raja montagui*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

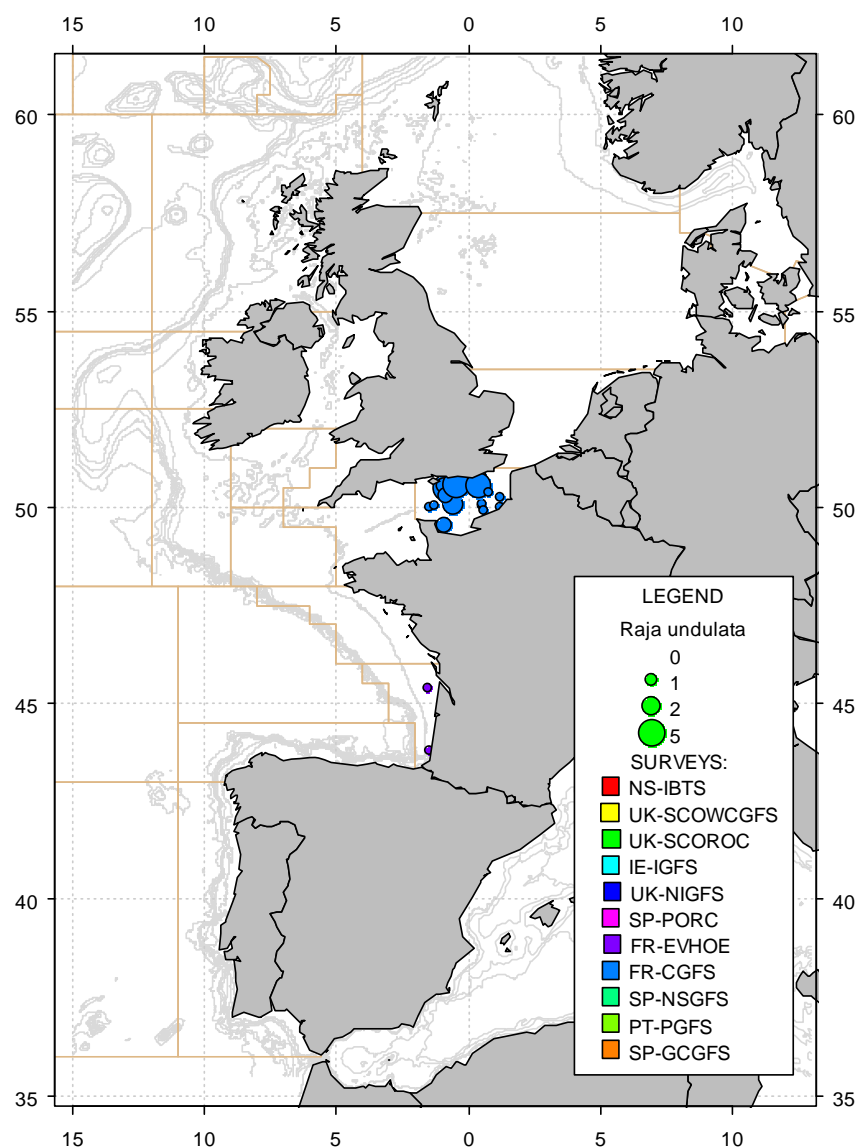


Figure A.5.38. Catches in numbers per hour per hour of undulate ray, *Raja undulata*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

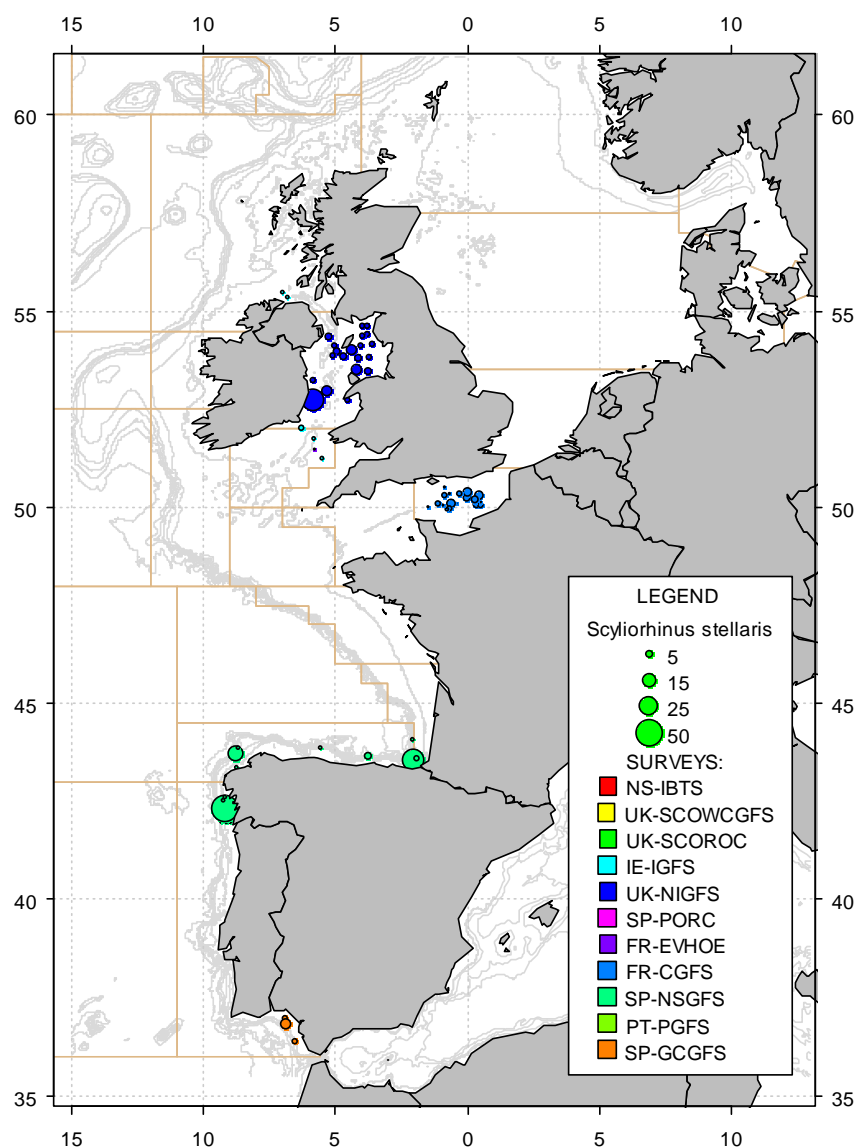


Figure A.5.39. Catches in numbers per hour per hour of nurse hound, *Scyliorhinus stellaris*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

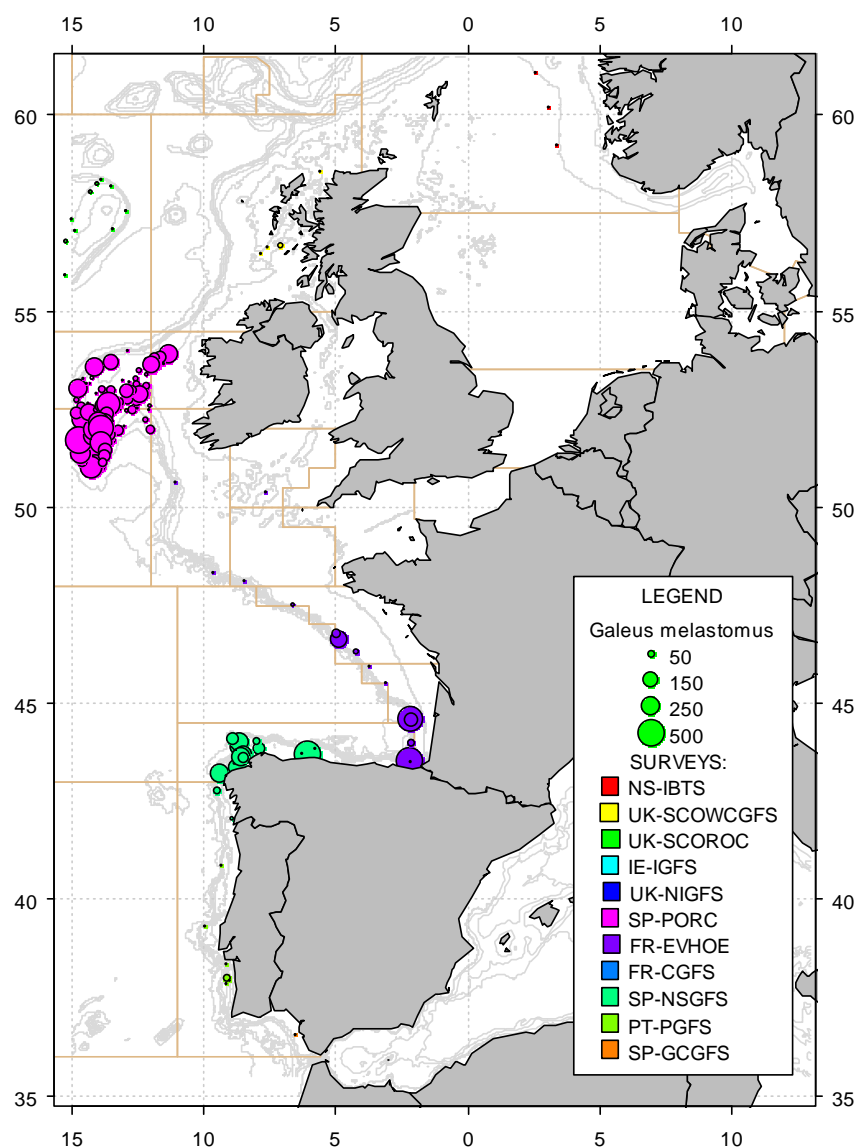


Figure A.5.40. Catches in numbers per hour per hour of Blackmouthed dogfish, *Galeus melastomus*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

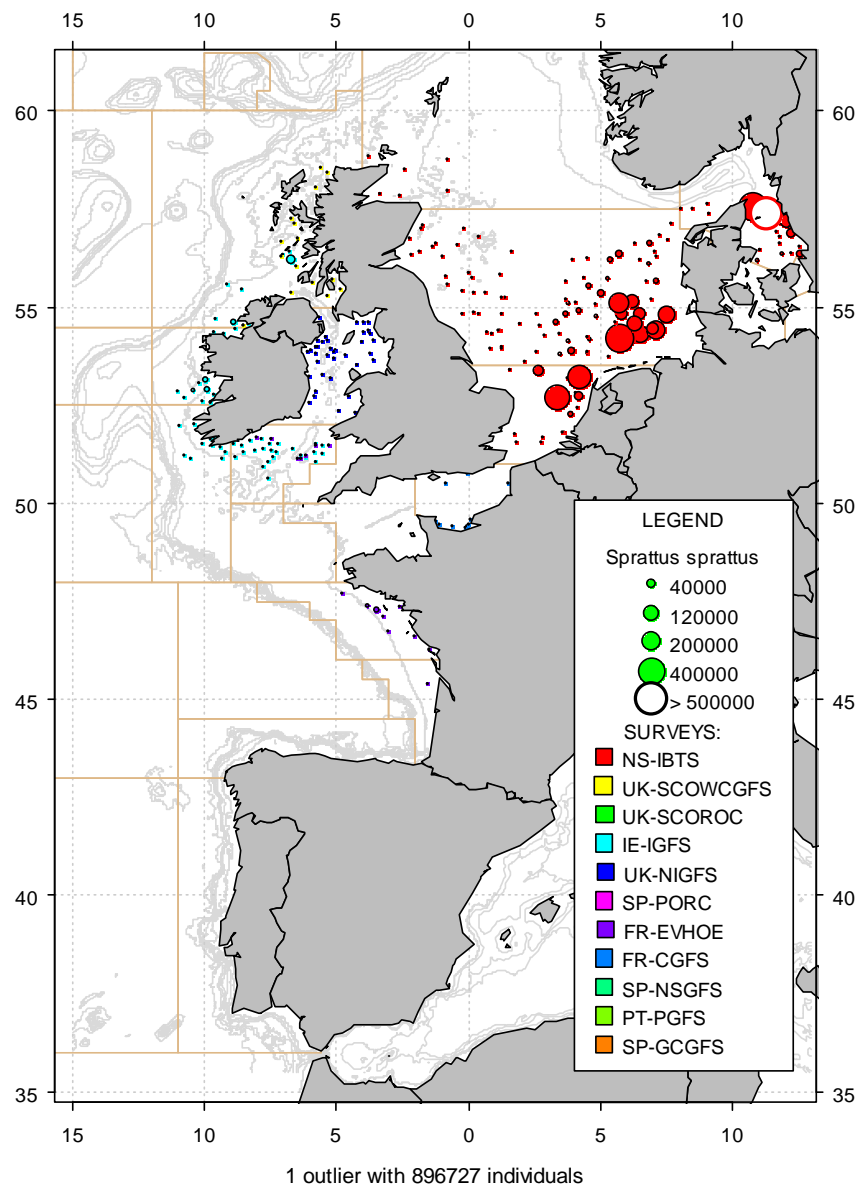


Figure A.5.41. Catches in numbers per hour per hour of European sprat, *Sprattus sprattus*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

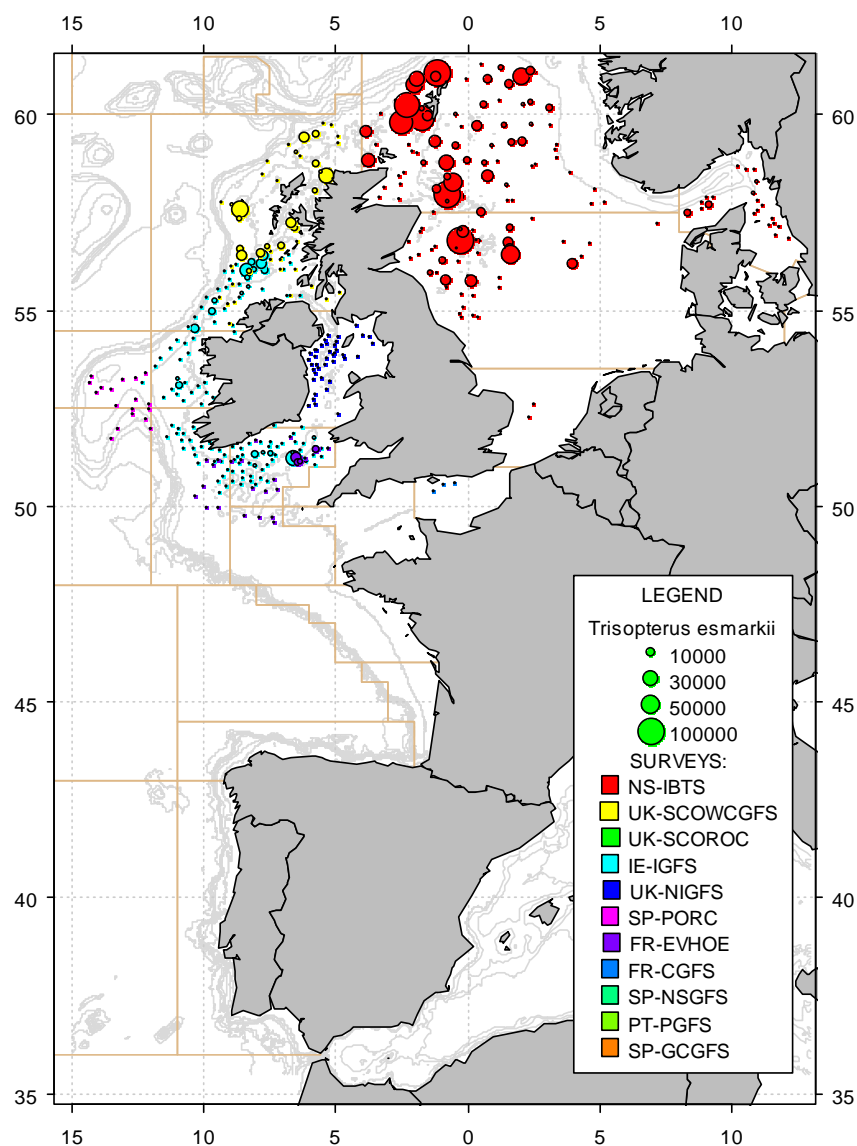


Figure A.5.42. Catches in numbers per hour per hour of Norway pout, *Trisopterus esmarkii*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.

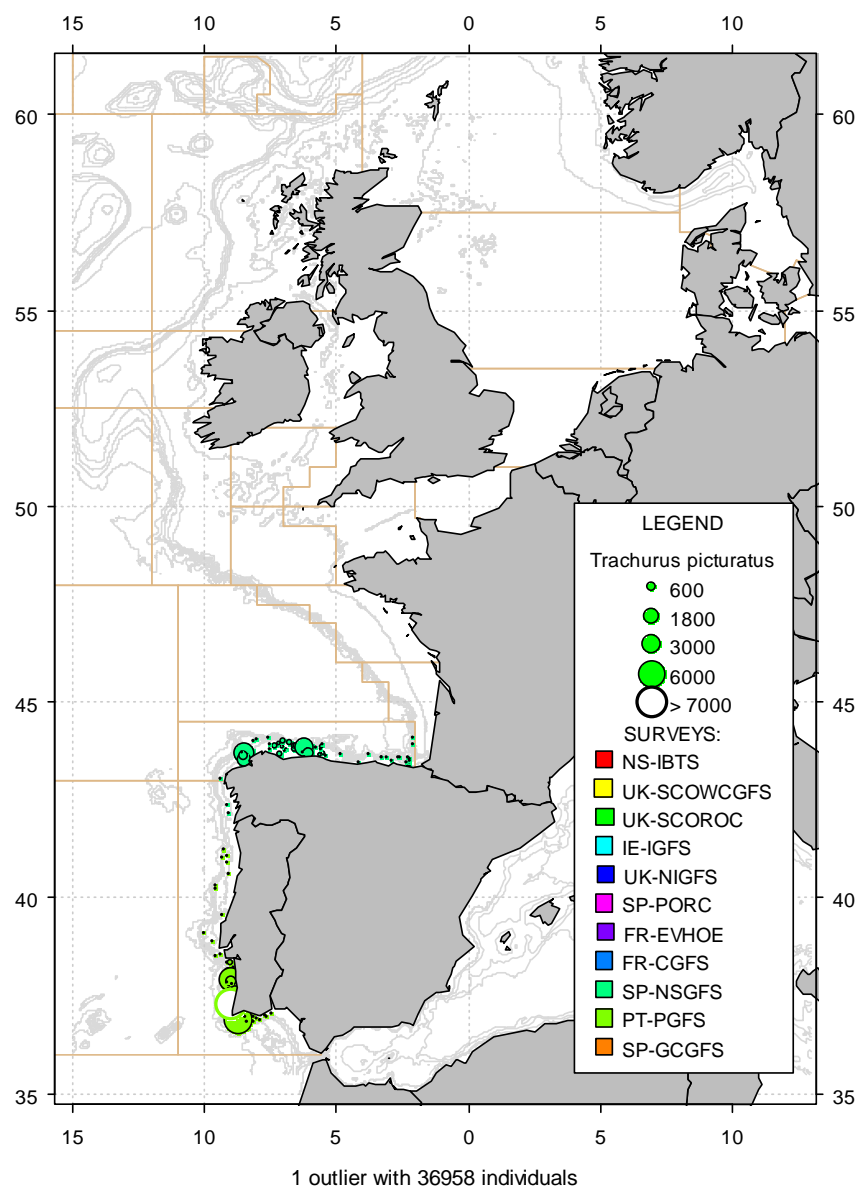


Figure A.5.43. Catches in numbers per hour per hour of blue jack mackerel, *Trachurus picturatus*, in summer/autumn 2014 IBTSurveys. The catchability of the different gears used in the NeAtl surveys is not constant; therefore, the map does not reflect proportional abundance in all the areas but within each survey.