

Atlas of Length-Weight Relationships of 93 fish and crustacean species from the North Sea and the North-East Atlantic

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Thünen Working Paper 12

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*List of accepted species names

Scientific name

listed in the Atlas

Aspitrigla cuculus
Gasterosteus aculeatus
Liparis liparis
Psetta maxima
Raja batis
Raja naevus
Raja radiata
Rhinonemus cimbrius
Sebastes marinus
Solea vulgaris
Trigla lucerna
Trisopterus esmarki

accepted in WoRMS

Chelidonichthys cuculus
Gasterosteus aculeatus aculeatus
Liparis liparis liparis
Scophthalmus maximus
Dipturus batis
Leucoraja naevus
Amblyraja radiata
Enchelyopus cimbrius
Sebastes norvegicus
Solea solea
Chelidonichthys lucerna
Trisopterus esmarkii

Abstract

This document presents an atlas of length-weight relationships of 93 different fish and crustacean species from the North Sea and the North-East Atlantic. The length and weight data are based on individual measurements from German fisheries research surveys and German commercial fishing vessels, conducted by members of the Thünen Institute of Sea Fisheries (and its predecessor institution).

With the first survey carried out in 1959 and the latest data entered in 2011, the compilation is based on a comprehensive data set collected over more than 50 years. An extensive overview on length weight relationships is given by geographical area, season and partly by sex, of the described species.

Users, who would prefer using relationships based on other time series or subunits, which are not represented in the Atlas, are invited to contact the author for the respective subsets of data.

Introduction

In fisheries research, data for individual species are often collected with measurements of body length, as this parameter is faster obtained than individual weights. Yet, many size-based analyses are dependent on weight data, for which the measured data need to be transformed with a reliable length-weight relationship.

Valid data on length-weight relationships are very important additional parameters for the biological description of marine species and essential for calculation of the biomass from length frequency.

In other cases, where individual fish weights are taken together with length in order to derive conclusions about the condition of the individuals investigated (e.g. Fulton's condition index), it is helpful to compare against a broad average value for this relationship.

This atlas presents an overview on length-weight parameters from fish and crustacean species in North European waters. In contrast to other publications on length-weight relationships (e.g. Coull et al. 1989) this atlas is based largely on current data and on a large data set collected on research and commercial vessels. This ensures that not only a wide geographical area is covered but also a large length range within the described species, because the samples were collected with different nets and mesh sizes on different vessels.

In addition, for each length-weight relationship, the geographical distribution of used data points is clearly represented in a map.

Because of the constant alterations of the naming due to ongoing research, some listed species were changed to other actual valid scientific names (e.g. *Raja radiata*), which are mentioned in an extra table ("List of accepted species names").

This work is not intended to be exhaustive and will be continually improved and supplemented.

Material and methods

All biometric data were collected on several German research vessels during routine surveys conducted by the Thünen Institute of Sea Fisheries (or its predecessor institution). Additionally, data were collected by scientific observers of the TI-SF on commercial fishing vessels. Most length and weight data were taken from freshly caught specimens, but in some cases - especially for herring, mackerel, horse mackerel and sprat - a subsample of the collected individuals was deep frozen aboard the ships and measured after defrosting in the home laboratory. As this fraction was only a small part of the whole data set which had no measurable influence on the analysis, for these species the length-weight-relationships are based on a combination of both fractions.

All length weight data are stored in a Microsoft Access database with currently over 800.000 records covering the years 1959 until 2011, which is continually updated with new entries. Therefore, new species will be added to this compilation in future or the existing database will be amended in order to enhance the analysis, particularly for rare species with fewer data points. If this is done, a new version of this report will be published to allow explicit reference to the length-weight relationship applied by the user.

For every existing entry the geographical position and the date of the observation are known, therefore it would be possible to conduct an analysis for subunits of the area covered and/or a specified time period, which is not currently represented in the atlas. However, this is beyond the scope of this document but if you are interested in such an analysis you are invited to contact:

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Calculation of length-weight relationships

The relation between length and weight can be described in the following formula (Le Cren, 1951)

$$Tw = a * L^b,$$

where “Tw” is the total weight and “L” the length of the species.

By a given weight the length can be calculated by transforming the equation:

$$L = \left(\frac{Tw}{a} \right)^{\frac{1}{b}}.$$

The coefficients “a” and “b” were estimated by the potential regression $y = a * x^b$ in Microsoft Excel.

For all described species the unit of total weight is gram (g). The units for length are centimeters (cm) in case of fish and millimeters (mm) in case of crustaceans. It can be distinguished between following methods of length measurements:

- a) Total length in cm for all fishes (measured from tip of snout to tip of caudal fin),
- b) Total length in mm for *Crangon* spec. (measured from begin of the head to tip of the telson),
- c) Carapace length in mm for *Nephrops norvegicus* and *Lithodes maja* (measured from begin of the rostrum to the end of carapace),
- d) Carapace width in mm for *Cancer pagurus* (measured at the point of its maximum width).

In cases where for very small fish the length data for calculation the biomass are in mm **instead of cm** (e.g. *Gobiidae*), the parameter “a” has to be recalculated with the formula

$$a_{[mm]} = \frac{a_{[cm]}}{10^b}$$

If the length data are given in cm **instead of mm** (e.g. *Crustacea*), the parameter “a” has to be recalculated with the formula

$$a_{[cm]} = a_{[mm]} * 10^b$$

The methods of measurement per type are always listed in the paper. In some small species different units of measurement were used (e.g. *Callionymus lyra*: cm below, mm below), to obtain more accurate data. For calculation the Regression all data were of course adjusted to the standard unit of length (see above), but inaccurate data was never brought to a better level.

For calculation of the coefficients, significant outliers were eliminated by visual inspection the raw data. For poorly manageable large data sets no data were considered where the deviation from the expected weight, compared to the measured weight, was more than 50%.

In general, the regressions consider the data of the last 10-15 years, but please note that the first reports were made already in 2007. Accordingly, regressions that were created later contain more recent data. If there were not enough data in the 15-year time period, also older or even all available entries were used.

At least one length-weight relationship is given for every listed species. In case of species, which are routinely separated into males and females during the onboard measurements (for example dab, elasmobranchs, crustaceans), sex-specific length-weight relationships are shown. For a few commercially important species like cod, haddock, whiting, saithe, etc. data are also presented on a quarterly or even monthly basis. However, different time periods were considered if a sufficiently large amount of data was available for each season. For each regression additional information is given in a specific section and the geographical

distribution of the used data is shown in a separate map. Depending on the species three different maps were used to show the distribution of the data:

- a) **The German Bight**
- b) **North Sea/ British Isles**
- c) **The complete ICES Area**

In order to get a better resolution for some widely distributed species, two different maps are shown in some sections. Due to technical reasons it might be possible that in a few cases (e.g. *Aspitrigla cuculus*) some data points are shown outside the map frame.

Structure of the Atlas (pdf)

The atlas is an interactive pdf document. The “**table of contents**” is linked to the individual sections of the document. By clicking on a desired species in the contents list, you will automatically reach the map with its geographical distribution. The second page for each species always contains the regression equation with further details, which can be reached by clicking on the map. In this way you can easily switch between the two pages.

The next major section is the “**overview**” of the alphabetically listed species with the most important data. By clicking on a scientific name, you get to the regression with all details.

Basically, you can always jump between the distribution and the regression with a simple click on the current page. The navigation can of course always be controlled via the bookmarks.

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Overview

Scientific Name	a	b	R ²	Length specification	Length class		N
					Min	Max	
<i>Agonus cataphractus</i>	0.0104	2.8669	0.9528	Total Length[cm]	2.75	18.5	458
<i>Alosa fallax</i>	0.0059	3.0778	0.9753	Total Length[cm]	5.5	53.5	491
<i>Ammodytes marinus</i>	0.001	3.4395	0.9867	Total Length[cm]	6.35	19.25	169
<i>Ammodytes tobianus</i>	0.0063	2.6927	0.9123	Total Length[cm]	7.75	24.25	50
<i>Anarhichas lupus</i>	0.0078	3.0468	0.9661	Total Length[cm]	4.5	105.5	675
<i>Anguilla anguilla</i>	0.0008	3.1851	0.9456	Total Length[cm]	6.5	80.5	609
<i>Argentina silus</i>	0.0025	3.3006	0.9812	Total Length[cm]	6.5	46.5	492
<i>Argentina sphyraena</i>	0.0021	3.346	0.9872	Total Length[cm]	5.5	45.5	748
<i>Arnoglossus laterna</i>	0.0063	3.084	0.9875	Total Length[cm]	1.65	16.5	1518
<i>Aspitrigla cuculus</i>	0.0061	3.1054	0.98	Total Length[cm]	12.5	36.5	130
<i>Belone belone</i>	0.0011	3.0368	0.9708	Total Length[cm]	8.5	82.5	60
<i>Brosme brosme</i>	0.0036	3.2609	0.963	Total Length[cm]	23.5	80.5	121
<i>Buglossidium luteum</i>	0.0079	3.1092	0.9818	Total Length[cm]	1.25	13.5	3082
<i>Callionymus lyra</i>	0.0204	2.5784	0.9568	Total Length[cm]	3.4	29.5	1234
<i>Callionymus maculatus</i>	0.0282	2.3129	0.9029	Total Length[cm]	4.5	16.5	196
<i>Callionymus reticulatus</i>	0.0159	2.5712	0.8438	Total Length[cm]	4.25	18.5	186
<i>Cancer pagurus</i>	0.00025	2.90285	0.95489	Carapace Width[mm]	16.5	222.5	419
<i>Cancer pagurus</i> - Female ♀	0.00028	2.87693	0.9569	Carapace Width[mm]	16.5	222.5	167
<i>Cancer pagurus</i> - Male ♂	0.00019	2.96327	0.95733	Carapace Width[mm]	45.5	208.5	218
<i>Capros aper</i>	0.0346	2.7595	0.9255	Total Length[cm]	8.5	16.5	242
<i>Ciliata mustela</i>	0.0052	3.169	0.9161	Total Length[cm]	7.5	23.5	307
<i>Clupea harengus</i>	0.0042	3.1775	0.9767	Total Length[cm]	3.75	39.25	27423
<i>Clupea harengus</i> - Female ♀	0.0036	3.2448	0.9603	Total Length[cm]	6.25	39.75	22081
<i>Clupea harengus</i> - Male ♂	0.0035	3.2585	0.9554	Total Length[cm]	6.25	39.75	22027
<i>Clupea harengus</i> - Quarter 1	0.0038	3.164	0.9858	Total Length[cm]	4.75	39.25	9854
<i>Clupea harengus</i> - January	0.0036	3.1839	0.9846	Total Length[cm]	4.75	34.75	4409
<i>Clupea harengus</i> - February	0.0029	3.253	0.9886	Total Length[cm]	7.25	39.75	5749
<i>Clupea harengus</i> - March	0.0046	3.0789	0.987	Total Length[cm]	9.25	39.25	631
<i>Clupea harengus</i> - Quarter 2	0.0043	3.1879	0.9832	Total Length[cm]	3.75	33.25	1761
<i>Clupea harengus</i> - April	0.0057	3.0391	0.9719	Total Length[cm]	5.25	33.25	156
<i>Clupea harengus</i> - May	0.0076	2.9252	0.9696	Total Length[cm]	3.75	28.75	91
<i>Clupea harengus</i> - June	0.0038	3.2383	0.9907	Total Length[cm]	4.75	31.25	1514
<i>Clupea harengus</i> - Quarter 3	0.0033	3.2912	0.9861	Total Length[cm]	4.75	34.25	11796
<i>Clupea harengus</i> - July	0.0032	3.3017	0.9869	Total Length[cm]	4.75	34.25	8655
<i>Clupea harengus</i> - August	0.0037	3.2582	0.9887	Total Length[cm]	6.75	32.75	2330
<i>Clupea harengus</i> - September	0.0027	3.338	0.9752	Total Length[cm]	4.75	31.75	811
<i>Clupea harengus</i> - Quarter 4	0.003	3.3231	0.9201	Total Length[cm]	6.25	33.75	4012
<i>Conger conger</i>	0.0001	3.7272	0.9806	Total Length[cm]	47.5	161.5	29
<i>Crangon allmanni</i>	0.0000016	3.3272115	0.8400151	Total Length[mm]	37.5	67.5	1102
<i>Crangon allmanni</i> - Female ♀	0.0000027	3.2114476	0.794664	Total Length[mm]	37.5	67.5	292
<i>Crangon allmanni</i> - Male ♂	0.0000192	2.6677417	0.8084237	Total Length[mm]	39.5	54.5	69
<i>Crangon crangon</i>	0.0000022	3.278553	0.9714365	Total Length[mm]	17.5	81.5	7917
<i>Crangon crangon</i> - Female ♀	0.0000021	3.2878593	0.9736858	Total Length[mm]	22.5	81.5	4000

Scientific Name	a	b	R ²	Length specification	Length class		N
					Min	Max	
<i>Crangon crangon</i> - Male ♂	0.0000049	3.0488185	0.9257512	Total Length[mm]	24.5	58.5	3108
<i>Cyclopterus lumpus</i>	0.063	2.9405	0.9799	Total Length[cm]	3.5	50.5	239
<i>Dicentrarchus labrax</i>	0.0258	2.7287	0.9462	Total Length[cm]	7.5	54.5	21
<i>Echiichthys vipera</i>	0.0115	2.9894	0.9019	Total Length[cm]	1.85	18.5	380
<i>Engraulis encrasicolus</i>	0.0041	3.147	0.9075	Total Length[cm]	3.75	21.25	616
<i>Entelurus aequoreus</i>	0.0003	2.7807	0.8178	Total Length[cm]	16.5	45.5	405
<i>Eutrigla gurnardus</i>	0.0112	2.8774	0.989	Total Length[cm]	1.95	38.5	722
<i>Gadiculus argenteus</i>	0.0154	2.7217	0.893	Total Length[cm]	5.75	15.25	102
<i>Gadus morhua</i>	0.0065	3.0982	0.9929	Total Length[cm]	3.5	120.5	16665
<i>Gadus morhua</i> - Female ♀	0.0061	3.1144	0.9935	Total Length[cm]	6.5	119.5	7370
<i>Gadus morhua</i> - Male ♂	0.0062	3.1113	0.9935	Total Length[cm]	8.5	118.5	7317
<i>Gadus morhua</i> - Quarter 1	0.005	3.1693	0.9941	Total Length[cm]	7.5	126.5	9355
<i>Gadus morhua</i> - January	0.0073	3.052	0.9945	Total Length[cm]	7.5	126.5	5346
<i>Gadus morhua</i> - February	0.006	3.111	0.9943	Total Length[cm]	10.5	119.5	3533
<i>Gadus morhua</i> - March	0.0053	3.1528	0.9888	Total Length[cm]	8.5	113.5	382
<i>Gadus morhua</i> - Quarter 2	0.0069	3.0855	0.9922	Total Length[cm]	3.5	119.5	2529
<i>Gadus morhua</i> - April	0.0053	3.1666	0.9949	Total Length[cm]	10.5	117.5	101
<i>Gadus morhua</i> - May	0.0067	3.0873	0.9923	Total Length[cm]	4.5	119.5	1386
<i>Gadus morhua</i> - June	0.0081	3.0489	0.992	Total Length[cm]	3.5	99.5	1042
<i>Gadus morhua</i> - Quarter 3	0.0072	3.0723	0.9892	Total Length[cm]	4.5	118.5	5714
<i>Gadus morhua</i> - July	0.0074	3.0693	0.9915	Total Length[cm]	4.5	118.5	2718
<i>Gadus morhua</i> - August	0.0075	3.0613	0.9876	Total Length[cm]	5.5	112.5	2351
<i>Gadus morhua</i> - September	0.0062	3.1121	0.9831	Total Length[cm]	9.5	111.5	645
<i>Gadus morhua</i> - Quarter 4	0.0076	3.0488	0.9954	Total Length[cm]	5.5	120.5	1737
<i>Gadus morhua</i> - October	0.008	3.0347	0.995	Total Length[cm]	5.5	120.5	1210
<i>Gadus morhua</i> - November	0.006	3.1119	0.9943	Total Length[cm]	7.5	101.5	445
<i>Gadus morhua</i> - December	0.0055	3.1707	0.9962	Total Length[cm]	10.5	114.5	300
<i>Gaidropsarus vulgaris</i>	0.0172	2.7135	0.9139	Total Length[cm]	6.5	41.5	49
<i>Galeorhinus galeus</i>	0.0049	2.9819	0.9794	Total Length[cm]	23.5	156.5	70
<i>Galeorhinus galeus</i> - Female ♀	0.0114	2.7697	0.9478	Total Length[cm]	23.5	156.5	24
<i>Galeorhinus galeus</i> - Male ♂	0.0043	3.0112	0.9917	Total Length[cm]	33.5	154.5	25
<i>Gasterosteus aculeatus</i>	0.0239	2.6111	0.7617	Total Length[cm]	3.75	8.5	122
<i>Glyptocephalus cynoglossus</i>	0.0032	3.1895	0.9747	Total Length[cm]	4.5	54.5	343
<i>Helicolenus dactylopterus</i>	0.0098	3.1616	0.9397	Total Length[cm]	5.25	46.5	127
<i>Hippoglossoides platessoides</i>	0.0034	3.2851	0.9938	Total Length[cm]	2.85	51.5	1452
<i>Hippoglossus hippoglossus</i>	0.0026	3.3322	0.9831	Total Length[cm]	25.5	167.5	120
<i>Hyperoplus lanceolatus</i>	0.0066	2.6967	0.9134	Total Length[cm]	6.5	34.5	782
<i>Lampetra fluviatilis</i>	0.0005	3.3567	0.9659	Total Length[cm]	9.25	38.75	178
<i>Lepidorhombus whiffiagonis</i>	0.0026	3.2967	0.9822	Total Length[cm]	15.5	52.5	247
<i>Limanda limanda</i>	0.0087	3.0226	0.9919	Total Length[cm]	1.35	33.5	743
<i>Limanda limanda</i> - Female ♀	0.0076	3.0584	0.9891	Total Length[cm]	4.5	33.5	90
<i>Limanda limanda</i> - Male ♂	0.0076	3.0587	0.9839	Total Length[cm]	5.5	25.5	92
<i>Liparis liparis</i>	0.0172	3.0359	0.9752	Total Length[cm]	3.5	16.5	134
<i>Liparis montagui</i>	0.0131	3.1228	0.9214	Total Length[cm]	6.5	15.5	29
<i>Lithodes maja</i>	0.00057	2.99662	0.9356	Carapace Length[mm]	18.5	132.5	220
<i>Lithodes maja</i> - Female ♀	0.00093	2.88717	0.90093	Carapace Length[mm]	34.5	130.5	123

Scientific Name	a	b	R ²	Length specification	Length class		N
					Min	Max	
<i>Lithodes maja</i> - Male ♂	0.00035	3.10704	0.97537	Carapace Length[mm]	18.5	122.5	65
<i>Lophius budegassa</i>	0.0203	2.9304	0.977	Total Length[cm]	13.5	81.5	31
<i>Lophius piscatorius</i>	0.0266	2.8568	0.9669	Total Length[cm]	7.5	120.5	1110
<i>Lumpenus lampretaeformis</i>	0.0063	2.4477	0.974	Total Length[cm]	5.35	35.5	76
<i>Melanogrammus aeglefinus</i>	0.005	3.1761	0.9869	Total Length[cm]	6.5	72.5	16770
<i>Melanogrammus aeglefinus</i> - Female ♀	0.0047	3.1937	0.9881	Total Length[cm]	10.5	72.5	8735
<i>Melanogrammus aeglefinus</i> - Male ♂	0.0053	3.1517	0.987	Total Length[cm]	10.5	69.5	8499
<i>Melanogrammus aeglefinus</i> - Quarter 1	0.0046	3.1932	0.9882	Total Length[cm]	7.5	72.5	11461
<i>Melanogrammus aeglefinus</i> - January	0.0047	3.1862	0.9887	Total Length[cm]	10.5	72.5	4907
<i>Melanogrammus aeglefinus</i> - February	0.0045	3.1955	0.9882	Total Length[cm]	7.5	69.5	6417
<i>Melanogrammus aeglefinus</i> - March	0.0034	3.3003	0.9816	Total Length[cm]	15.5	70.5	137
<i>Melanogrammus aeglefinus</i> - Quarter 2	0.0083	3.0284	0.9828	Total Length[cm]	7.5	70.5	161
<i>Melanogrammus aeglefinus</i> - April	0.0048	3.1779	0.9717	Total Length[cm]	17.5	70.5	55
<i>Melanogrammus aeglefinus</i> - May	0.0143	2.8509	0.9701	Total Length[cm]	14.5	58.5	61
<i>Melanogrammus aeglefinus</i> - June	0.0092	3.008	0.9874	Total Length[cm]	7.5	45.5	45
<i>Melanogrammus aeglefinus</i> - Quarter 3	0.0065	3.1083	0.9867	Total Length[cm]	6.5	66.5	5148
<i>Melanogrammus aeglefinus</i> - July	0.0063	3.1205	0.9872	Total Length[cm]	6.5	66.5	2439
<i>Melanogrammus aeglefinus</i> - August	0.0068	3.0956	0.9881	Total Length[cm]	6.5	54.5	2314
<i>Melanogrammus aeglefinus</i> - September	0.0065	3.0997	0.9596	Total Length[cm]	18.5	56.5	395
<i>Merlangius merlangus</i>	0.0061	3.0671	0.9846	Total Length[cm]	3.5	91.5	14880
<i>Merlangius merlangus</i> - Female ♀	0.0045	3.162	0.9863	Total Length[cm]	7.5	53.5	9435
<i>Merlangius merlangus</i> - Male ♂	0.0057	3.0863	0.9808	Total Length[cm]	7.5	47.5	9315
<i>Merlangius merlangus</i> - Quarter 1	0.0042	3.1775	0.9865	Total Length[cm]	6.5	53.5	8862
<i>Merlangius merlangus</i> - January	0.0049	3.1319	0.9881	Total Length[cm]	5.5	52.5	5199
<i>Merlangius merlangus</i> - February	0.0041	3.1868	0.9882	Total Length[cm]	6.5	53.5	4895
<i>Merlangius merlangus</i> - Quarter 2	0.0111	2.8596	0.9799	Total Length[cm]	3.5	36.5	412
<i>Merlangius merlangus</i> - Quarter 3	0.0085	2.9661	0.9857	Total Length[cm]	4.5	91.5	5473
<i>Merlangius merlangus</i> - July	0.008	2.9831	0.9912	Total Length[cm]	4.5	86.5	2480
<i>Merlangius merlangus</i> - August	0.0082	2.978	0.9885	Total Length[cm]	4.5	91.5	3669
<i>Merlangius merlangus</i> - September	0.0072	3.0222	0.9808	Total Length[cm]	7.5	36.5	600
<i>Merlangius merlangus</i> - Quarter 4	0.0084	2.9664	0.9657	Total Length[cm]	8.5	34.5	133
<i>Merluccius merluccius</i>	0.004	3.13	0.9944	Total Length[cm]	6.5	113.5	1682
<i>Merluccius merluccius</i> - Female ♀	0.0045	3.0912	0.9943	Total Length[cm]	12.5	93.5	284
<i>Merluccius merluccius</i> - Male ♂	0.0047	3.0774	0.9943	Total Length[cm]	7.5	70.5	374
<i>Microchirus variegatus</i>	0.011	2.9899	0.9409	Total Length[cm]	10.25	19.5	36
<i>Micromesistius poutassou</i>	0.0073	2.8926	0.8655	Total Length[cm]	10.5	55.5	17796
<i>Micromesistius poutassou</i> - Female ♀	0.0024	3.2288	0.8997	Total Length[cm]	14.5	42.5	3349
<i>Micromesistius poutassou</i> - Male ♂	0.0029	3.1651	0.8391	Total Length[cm]	14.5	43.5	3060
<i>Microstomus kitt</i>	0.0106	2.9904	0.9393	Total Length[cm]	3.25	45.5	2398
<i>Microstomus kitt</i> - Female ♀	0.0085	3.0626	0.9636	Total Length[cm]	13.5	40.5	889
<i>Microstomus kitt</i> - Male ♂	0.0107	2.9673	0.9604	Total Length[cm]	12.5	38.5	729
<i>Molva molva</i>	0.0031	3.1396	0.9841	Total Length[cm]	18.5	125.5	388
<i>Mullus surmuletus</i>	0.0149	2.9185	0.9695	Total Length[cm]	5.5	38.5	380
<i>Mustelus asterias</i>	0.0016	3.1753	0.9725	Total Length[cm]	42.5	100.5	178
<i>Mustelus asterias</i> - Female ♀	0.0011	3.2651	0.9679	Total Length[cm]	48.5	98.5	95
<i>Mustelus asterias</i> - Male ♂	0.0023	3.0919	0.9755	Total Length[cm]	42.5	100.5	75

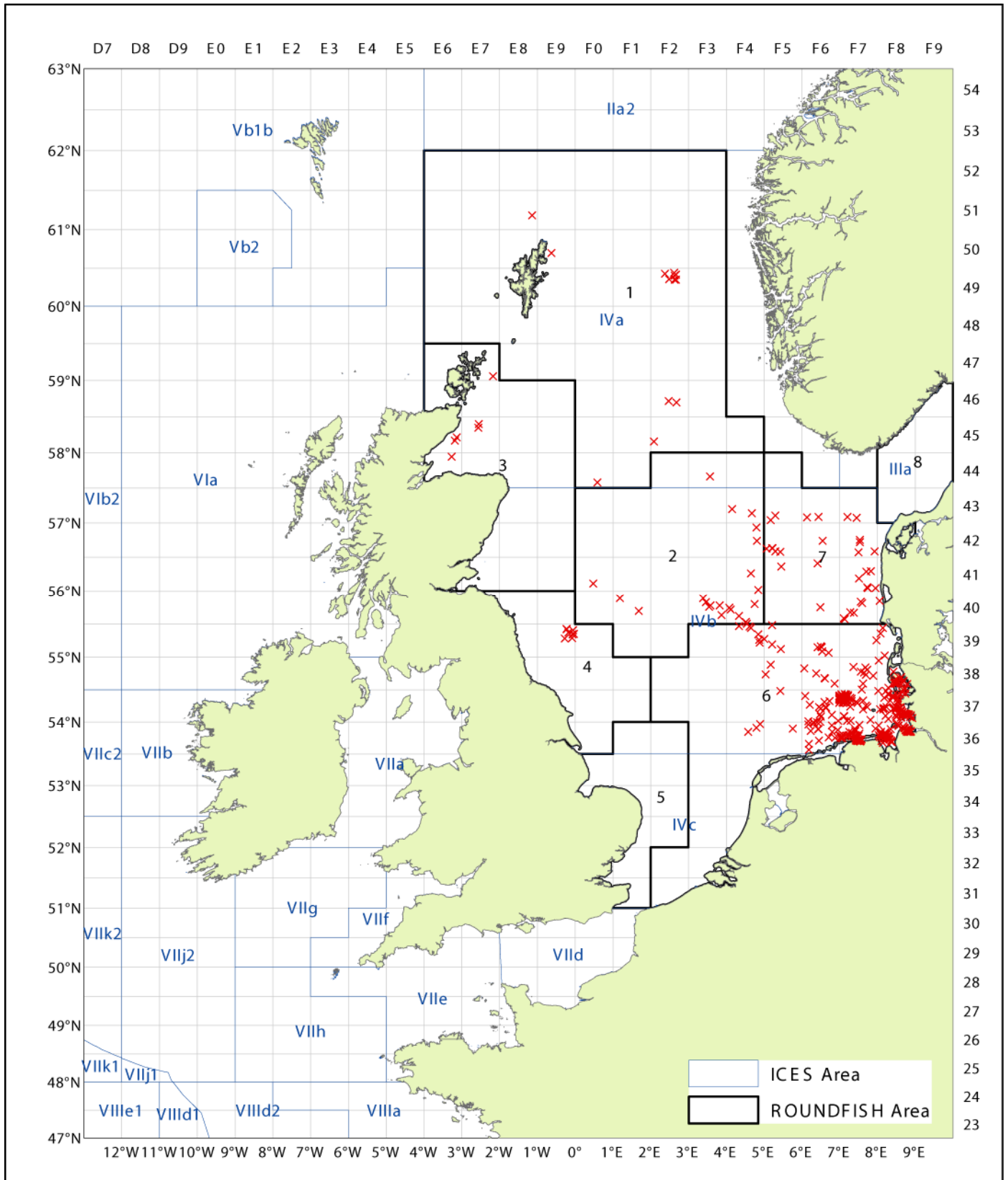
Scientific Name	a	b	R ²	Length specification	Length class		N
					Min	Max	
<i>Mustelus mustelus</i>	0.0033	3.0231	0.9876	Total Length[cm]	25.5	113.5	37
<i>Myoxocephalus scorpius</i>	0.0114	3.1036	0.971	Total Length[cm]	2.5	33.5	938
<i>Myxine glutinosa</i>	0.0022	2.8357	0.943	Total Length[cm]	8.5	41.5	128
<i>Nephrops norvegicus</i>	0.00042	3.11965	0.92553	Carapace Length[mm]	19.5	67.5	1334
<i>Nephrops norvegicus</i> - Female ♀	0.00083	2.93399	0.91843	Carapace Length[mm]	22.5	62.5	201
<i>Nephrops norvegicus</i> - Male ♂	0.00053	3.0791	0.94342	Carapace Length[mm]	20.5	67.5	239
<i>Osmerus eperlanus</i>	0.0094	2.8535	0.8983	Total Length[cm]	5.25	25.5	264
<i>Platichthys flesus</i>	0.0098	3.0235	0.9849	Total Length[cm]	6.5	42.5	755
<i>Pleuronectes platessa</i>	0.0103	2.9745	0.9823	Total Length[cm]	3.5	60.5	2970
<i>Pleuronectes platessa</i> - Female ♀	0.0059	3.1539	0.9768	Total Length[cm]	9.5	58.5	9656
<i>Pleuronectes platessa</i> - Male ♂	0.0077	3.0623	0.9713	Total Length[cm]	9.5	53.5	5417
<i>Pollachius pollachius</i>	0.0107	2.966	0.9756	Total Length[cm]	8.5	92.5	183
<i>Pollachius virens</i>	0.0055	3.1071	0.9752	Total Length[cm]	10.5	116.5	4677
<i>Pollachius virens</i> - Female ♀	0.0043	3.1692	0.9802	Total Length[cm]	23.5	116.5	2618
<i>Pollachius virens</i> - Male ♂	0.0049	3.1328	0.9829	Total Length[cm]	14.5	115.5	3156
<i>Pollachius virens</i> - Quarter 1	0.004	3.1853	0.9778	Total Length[cm]	10.5	116.5	3809
<i>Pollachius virens</i> - January	0.0032	3.2409	0.9765	Total Length[cm]	16.5	115.5	1628
<i>Pollachius virens</i> - February	0.0044	3.1573	0.9782	Total Length[cm]	10.5	116.5	2071
<i>Pollachius virens</i> - March	0.0065	3.0596	0.9865	Total Length[cm]	28.5	108.5	109
<i>Pollachius virens</i> - Quarter 2	0.0164	2.8586	0.9821	Total Length[cm]	21.5	106.5	215
<i>Pollachius virens</i> - May	0.0204	2.8079	0.9819	Total Length[cm]	28.5	106.5	187
<i>Pollachius virens</i> - Quarter 3	0.0103	2.9632	0.9813	Total Length[cm]	15.5	111.5	642
<i>Pollachius virens</i> - July	0.0107	2.9549	0.9817	Total Length[cm]	16.5	111.5	508
<i>Pollachius virens</i> - August	0.0105	2.9504	0.9801	Total Length[cm]	15.5	74.5	132
<i>Pollachius virens</i> - Quarter 4	0.0077	3.0455	0.9931	Total Length[cm]	16.5	113.5	1055
<i>Pollachius virens</i> - October	0.0106	2.9637	0.9914	Total Length[cm]	36.5	91.5	551
<i>Pollachius virens</i> - November	0.0054	3.1297	0.9922	Total Length[cm]	32.5	113.5	498
<i>Pomatoschistus minutus</i>	0.01	2.8976	0.9282	Total Length[cm]	2.5	9.5	615
<i>Psetta maxima</i>	0.0128	3.1267	0.9833	Total Length[cm]	4.5	72.5	944
<i>Psetta maxima</i> - Female ♀	0.0112	3.1702	0.966	Total Length[cm]	22.5	63.5	184
<i>Psetta maxima</i> - Male ♂	0.0138	3.0988	0.9518	Total Length[cm]	20.5	56.5	221
<i>Raja batis</i>	0.0074	2.9532	0.9842	Total Length[cm]	9.5	210.5	37
<i>Raja clavata</i>	0.0081	2.976	0.984	Total Length[cm]	9.5	95.5	73
<i>Raja montagui</i>	0.0029	3.2006	0.9903	Total Length[cm]	13.5	83.5	57
<i>Raja naevus</i>	0.0025	3.216	0.9878	Total Length[cm]	11.5	68.5	390
<i>Raja naevus</i> - Female ♀	0.0023	3.2423	0.9901	Total Length[cm]	12.5	67.5	225
<i>Raja naevus</i> - Male ♂	0.0032	3.1435	0.9838	Total Length[cm]	11.5	68.5	148
<i>Raja radiata</i>	0.0069	3.0343	0.987	Total Length[cm]	7.5	60.5	1156
<i>Raja radiata</i> - Female ♀	0.0073	3.0145	0.9871	Total Length[cm]	7.5	60.5	584
<i>Raja radiata</i> - Male ♂	0.0063	3.0574	0.9873	Total Length[cm]	8.5	53.5	528
<i>Rhinonemus cimbrius</i>	0.0032	3.1436	0.9492	Total Length[cm]	4.65	28.5	448
<i>Sardina pilchardus</i>	0.0034	3.2665	0.9764	Total Length[cm]	6.25	28.75	365
<i>Scomber scombrus</i>	0.004	3.1996	0.9477	Total Length[cm]	7.5	45.5	8600
<i>Scomber scombrus</i> - Female ♀	0.002	3.4011	0.9588	Total Length[cm]	15.5	47.5	9832
<i>Scomber scombrus</i> - Male ♂	0.002	3.4036	0.9535	Total Length[cm]	15.5	46.5	9328
<i>Scomber scombrus</i> - Quarter 1	0.0027	3.3022	0.9809	Total Length[cm]	10.5	43.5	3329

Scientific Name	a	b	R ²	Length specification	Length class		N
					Min	Max	
<i>Scomber scombrus</i> - January	0.0022	3.3809	0.987	Total Length[cm]	15.5	43.5	807
<i>Scomber scombrus</i> - February	0.0026	3.3148	0.981	Total Length[cm]	10.5	41.5	1223
<i>Scomber scombrus</i> - March	0.0017	3.4118	0.9825	Total Length[cm]	15.5	43.5	1209
<i>Scomber scombrus</i> - Quarter 2	0.0024	3.308	0.9459	Total Length[cm]	16.5	45.5	1828
<i>Scomber scombrus</i> - April	0.0024	3.2954	0.9522	Total Length[cm]	16.5	42.5	1696
<i>Scomber scombrus</i> - May	0.0028	3.2932	0.9344	Total Length[cm]	26.5	43.5	118
<i>Scomber scombrus</i> - Quarter 3	0.0043	3.2101	0.9614	Total Length[cm]	7.5	45.5	3509
<i>Scomber scombrus</i> - July	0.0043	3.2122	0.9569	Total Length[cm]	7.5	43.5	1781
<i>Scomber scombrus</i> - August	0.0046	3.1875	0.9647	Total Length[cm]	11.5	45.5	1478
<i>Scomber scombrus</i> - September	0.0029	3.335	0.9703	Total Length[cm]	13.5	40.5	250
<i>Scomber scombrus</i> - Quarter 4	0.0015	3.4916	0.9809	Total Length[cm]	16.5	45.5	1510
<i>Scomber scombrus</i> - October	0.003	3.2714	0.9832	Total Length[cm]	16.5	39.5	286
<i>Scomber scombrus</i> - November	0.0027	3.3083	0.9219	Total Length[cm]	20.5	35.5	498
<i>Scomber scombrus</i> - December	0.001	3.5993	0.9862	Total Length[cm]	16.5	45.5	724
<i>Scophthalmus rhombus</i>	0.0103	3.0937	0.9825	Total Length[cm]	4.5	56.5	528
<i>Scyliorhinus canicula</i>	0.0021	3.1276	0.9753	Total Length[cm]	16.5	79.5	683
<i>Scyliorhinus canicula</i> - Female ♀	0.0017	3.1946	0.9785	Total Length[cm]	16.5	79.5	316
<i>Scyliorhinus canicula</i> - Male ♂	0.0033	3.0097	0.9715	Total Length[cm]	19.5	78.5	277
<i>Sebastes marinus</i>	0.0065	3.2124	0.9745	Total Length[cm]	19.5	66.5	1073
<i>Sebastes mentella</i>	0.0127	2.9773	0.9609	Total Length[cm]	16.5	77.5	20030
<i>Sebastes viviparus</i>	0.0127	3.0797	0.956	Total Length[cm]	10.5	31.5	67
<i>Solea vulgaris</i>	0.0034	3.2974	0.983	Total Length[cm]	5.5	42.5	1792
<i>Solea vulgaris</i> - Female ♀	0.0032	3.3307	0.9573	Total Length[cm]	13.5	44.5	2819
<i>Solea vulgaris</i> - Male ♂	0.0047	3.1882	0.9352	Total Length[cm]	12.5	42.5	893
<i>Sprattus sprattus</i>	0.0052	3.1474	0.9358	Total Length[cm]	3.75	15.75	11479
<i>Sprattus sprattus</i> - Female ♀	0.0078	2.9851	0.9204	Total Length[cm]	5.75	16.25	7177
<i>Sprattus sprattus</i> - Male ♂	0.0069	3.0305	0.9135	Total Length[cm]	5.75	15.25	5750
<i>Sprattus sprattus</i> - Quarter 1	0.0038	3.2418	0.9584	Total Length[cm]	4.75	15.75	2663
<i>Sprattus sprattus</i> - January	0.0039	3.2324	0.9558	Total Length[cm]	4.75	14.75	1260
<i>Sprattus sprattus</i> - February	0.0033	3.2926	0.9614	Total Length[cm]	5.75	15.75	1254
<i>Sprattus sprattus</i> - March	0.0072	2.9707	0.97	Total Length[cm]	6.75	15.75	149
<i>Sprattus sprattus</i> - Quarter 2	0.0075	3.0174	0.9181	Total Length[cm]	5.75	14.75	1135
<i>Sprattus sprattus</i> - April	0.01	2.8771	0.937	Total Length[cm]	5.75	14.75	122
<i>Sprattus sprattus</i> - May	0.0049	3.2161	0.9055	Total Length[cm]	5.75	14.25	261
<i>Sprattus sprattus</i> - June	0.008	2.9889	0.9244	Total Length[cm]	6.75	14.75	752
<i>Sprattus sprattus</i> - Quarter 3	0.0073	3.0207	0.9344	Total Length[cm]	3.75	15.75	7656
<i>Sprattus sprattus</i> - July	0.0084	2.9566	0.9241	Total Length[cm]	3.75	15.75	5967
<i>Sprattus sprattus</i> - August	0.0055	3.1562	0.9619	Total Length[cm]	4.75	14.75	1341
<i>Sprattus sprattus</i> - September	0.0046	3.2214	0.946	Total Length[cm]	4.75	15.25	348
<i>Sprattus sprattus</i> - Quarter 4	0.007	3.0104	0.8812	Total Length[cm]	6.75	14.25	25
<i>Squalus acanthias</i>	0.0023	3.1289	0.9821	Total Length[cm]	24.5	115.5	273
<i>Squalus acanthias</i> - Female ♀	0.0015	3.2491	0.9916	Total Length[cm]	24.5	115.5	108
<i>Squalus acanthias</i> - Male ♂	0.0041	2.984	0.9824	Total Length[cm]	25.5	97.5	127
<i>Syngnathus rostellatus</i>	0.00015	3.40846	0.91674	Total Length[cm]	5.25	18.5	184
<i>Trachinus draco</i>	0.0061	3.0482	0.9853	Total Length[cm]	10.5	36.5	18
<i>Trachurus trachurus</i>	0.0112	2.8824	0.9787	Total Length[cm]	2.5	41.5	3815

Scientific Name	a	b	R ²	Length specification	Length class		N
					Min	Max	
<i>Trachurus trachurus</i> - Female ♀	0.0177	2.7566	0.8829	Total Length[cm]	15.5	42.5	5093
<i>Trachurus trachurus</i> - Male ♂	0.0166	2.7736	0.8948	Total Length[cm]	12.5	45.5	4711
<i>Trachurus trachurus</i> - Quarter 1	0.0072	3.0172	0.9774	Total Length[cm]	6.5	46.5	3388
<i>Trachurus trachurus</i> - January	0.0073	3.0281	0.9906	Total Length[cm]	6.5	38.5	330
<i>Trachurus trachurus</i> - February	0.0065	3.0504	0.9714	Total Length[cm]	10.5	46.5	2289
<i>Trachurus trachurus</i> - March	0.0073	2.9946	0.9334	Total Length[cm]	15.5	40.5	769
<i>Trachurus trachurus</i> - Quarter 2	0.0068	3.0168	0.9142	Total Length[cm]	12.5	40.5	2030
<i>Trachurus trachurus</i> - April	0.0082	2.9564	0.9201	Total Length[cm]	12.5	40.5	1981
<i>Trachurus trachurus</i> - May	0.0099	2.9721	0.9182	Total Length[cm]	21.5	39.5	37
<i>Trachurus trachurus</i> - June	0.0021	3.4271	0.9748	Total Length[cm]	21.5	39.5	14
<i>Trachurus trachurus</i> - Quarter 3	0.0125	2.9076	0.9878	Total Length[cm]	4.5	41.5	886
<i>Trachurus trachurus</i> - July	0.0165	2.8229	0.9616	Total Length[cm]	4.5	40.5	491
<i>Trachurus trachurus</i> - August	0.0118	2.9306	0.9925	Total Length[cm]	4.5	41.5	350
<i>Trachurus trachurus</i> - September	0.0112	2.9286	0.9913	Total Length[cm]	4.5	39.5	56
<i>Trachurus trachurus</i> - Quarter 4	0.0079	3.0199	0.9391	Total Length[cm]	7.5	40.5	4711
<i>Trachurus trachurus</i> - October	0.0067	3.0818	0.9385	Total Length[cm]	14.5	40.5	3447
<i>Trachurus trachurus</i> - November	0.0137	2.8256	0.948	Total Length[cm]	7.5	36.5	928
<i>Trachurus trachurus</i> - December	0.0086	2.9778	0.9732	Total Length[cm]	7.5	37.5	336
<i>Trigla lucerna</i>	0.0151	2.8814	0.9855	Total Length[cm]	4.5	50.5	505
<i>Trisopterus esmarki</i>	0.0045	3.1484	0.9657	Total Length[cm]	5.5	22.5	1051
<i>Trisopterus esmarki</i> - Female ♀	0.0039	3.2015	0.9694	Total Length[cm]	9.5	22.5	672
<i>Trisopterus esmarki</i> - Male ♂	0.0069	2.9786	0.956	Total Length[cm]	8.5	21.5	550
<i>Trisopterus esmarki</i> - Quarter 1	0.0047	3.1254	0.9644	Total Length[cm]	7.5	22.5	775
<i>Trisopterus esmarki</i> - January	0.0057	3.0558	0.9585	Total Length[cm]	8.5	22.5	423
<i>Trisopterus esmarki</i> - February	0.0039	3.1935	0.9693	Total Length[cm]	7.5	22.5	346
<i>Trisopterus esmarki</i> - Quarter 3	0.0048	3.1515	0.9751	Total Length[cm]	5.5	21.5	269
<i>Trisopterus esmarki</i> - July	0.0043	3.1932	0.9684	Total Length[cm]	5.5	21.5	136
<i>Trisopterus esmarki</i> - August	0.005	3.1365	0.977	Total Length[cm]	5.5	20.5	130
<i>Trisopterus luscus</i>	0.0102	3.0277	0.9728	Total Length[cm]	4.5	35.5	256
<i>Trisopterus minutus</i>	0.004	3.275	0.965	Total Length[cm]	8.5	24.5	697
<i>Trisopterus minutus</i> - Quarter 1	0.0032	3.3595	0.981	Total Length[cm]	8.5	24.5	385
<i>Trisopterus minutus</i> - January	0.0029	3.3963	0.9693	Total Length[cm]	9.25	23.75	111
<i>Trisopterus minutus</i> - February	0.0031	3.3628	0.9861	Total Length[cm]	8.5	24.5	260
<i>Trisopterus minutus</i> - Quarter 2	0.0082	3.0006	0.9432	Total Length[cm]	8.5	24.5	119
<i>Trisopterus minutus</i> - Quarter 3	0.0072	3.0566	0.9309	Total Length[cm]	8.5	21.5	166
<i>Zeus faber</i>	0.0134	3.0526	0.9832	Total Length[cm]	9.5	52.5	184
<i>Zoarces viviparus</i>	0.0047	3.0241	0.9522	Total Length[cm]	4.75	26.5	321

Agonus cataphractus

Geographical distribution of data used for calculating the length-weight relationship



Agonus cataphractus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0104

b = 2.8669

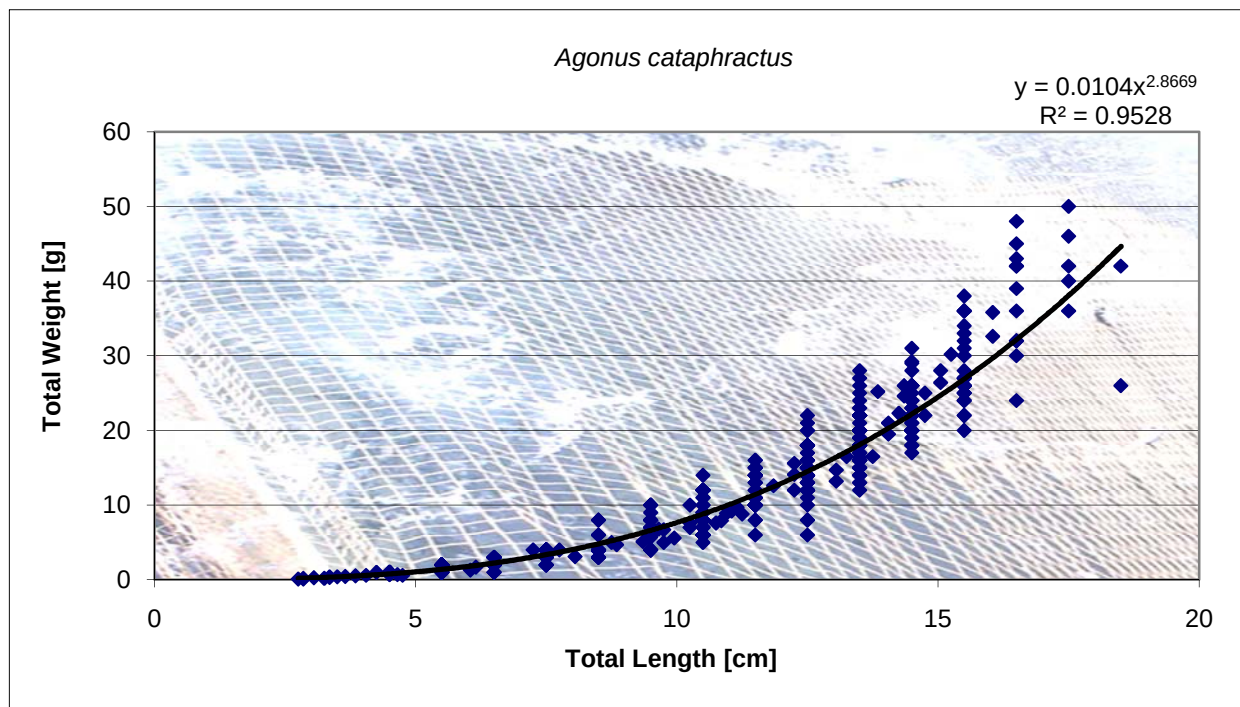
data collected

time period : 2001 - 2011

data source : research vessel

numbers of data:

Numbers of catch																				
Quarter																				
1	2	3	4																	
138	67	210	43																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
130	8	-	11	56	-	32	84	94	28	5	10									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	458	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	41	417	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
15	22	25	9	-	345	42	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below, 1/2 cm below, mm below
 - min length 2.75 [cm]
 - max length 18.5 [cm]

male -

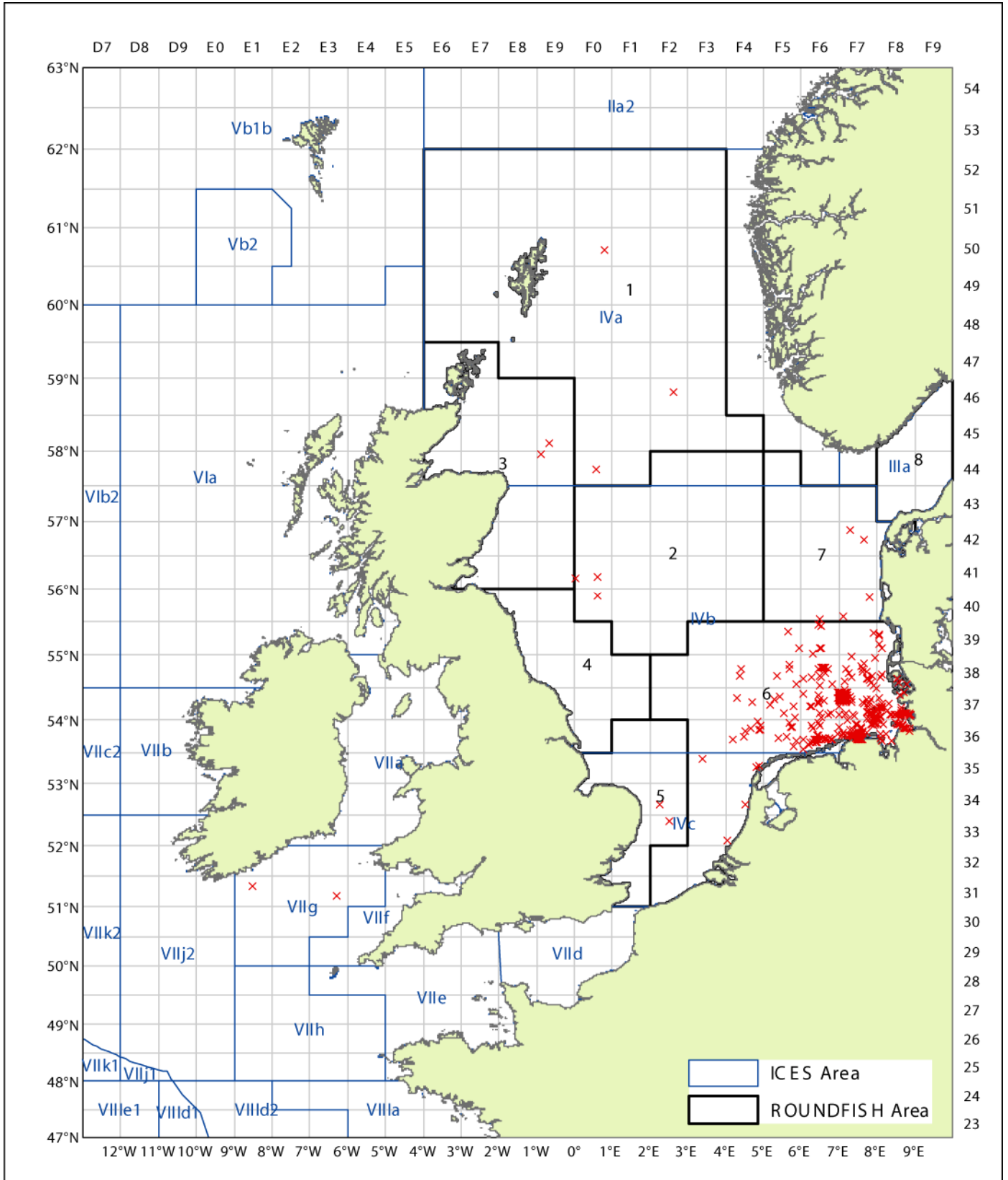
female -

undefined 458

total numbers of data 458

Alosa fallax

Geographical distribution of data used for calculating the length-weight relationship



Alosa fallax

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0059

b = 3.0778

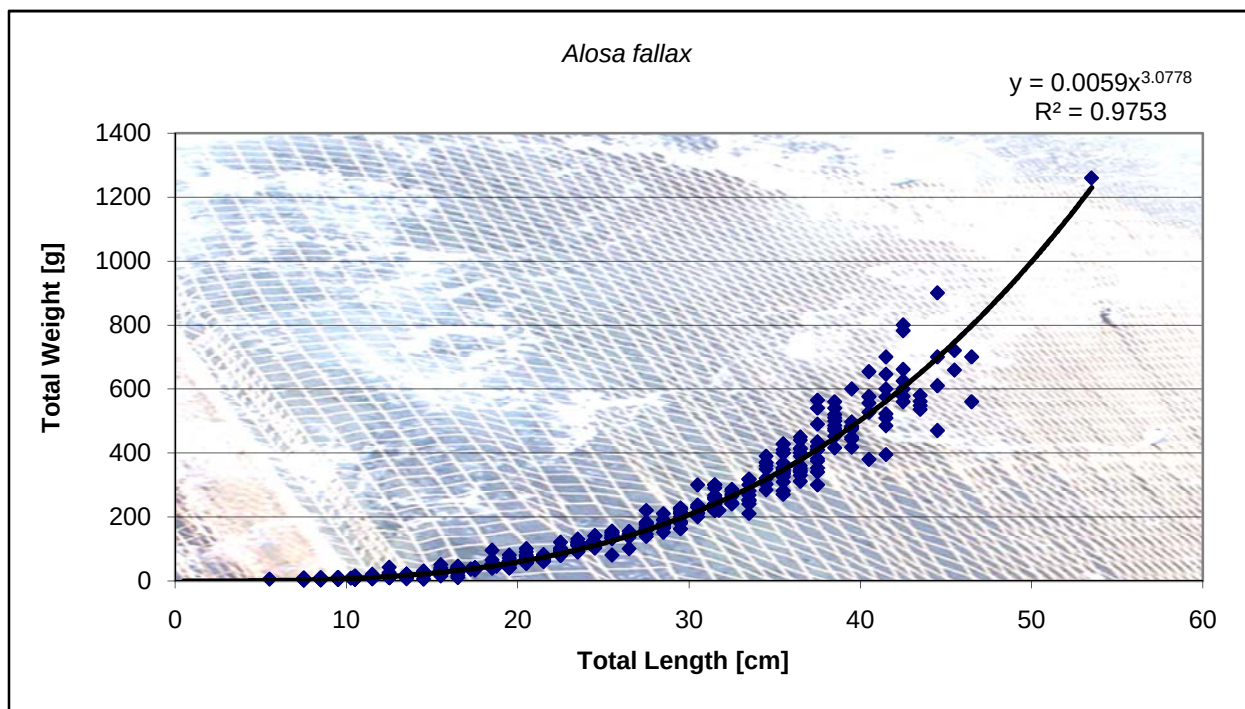
data collected

time period : 1975 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
178	32	192	89																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
138	38	2	13	13	6	24	129	39	21	36	32								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	489	-	-	2	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	5	480	4	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
2	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
3	4	2	-	2	474	2	-	-											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

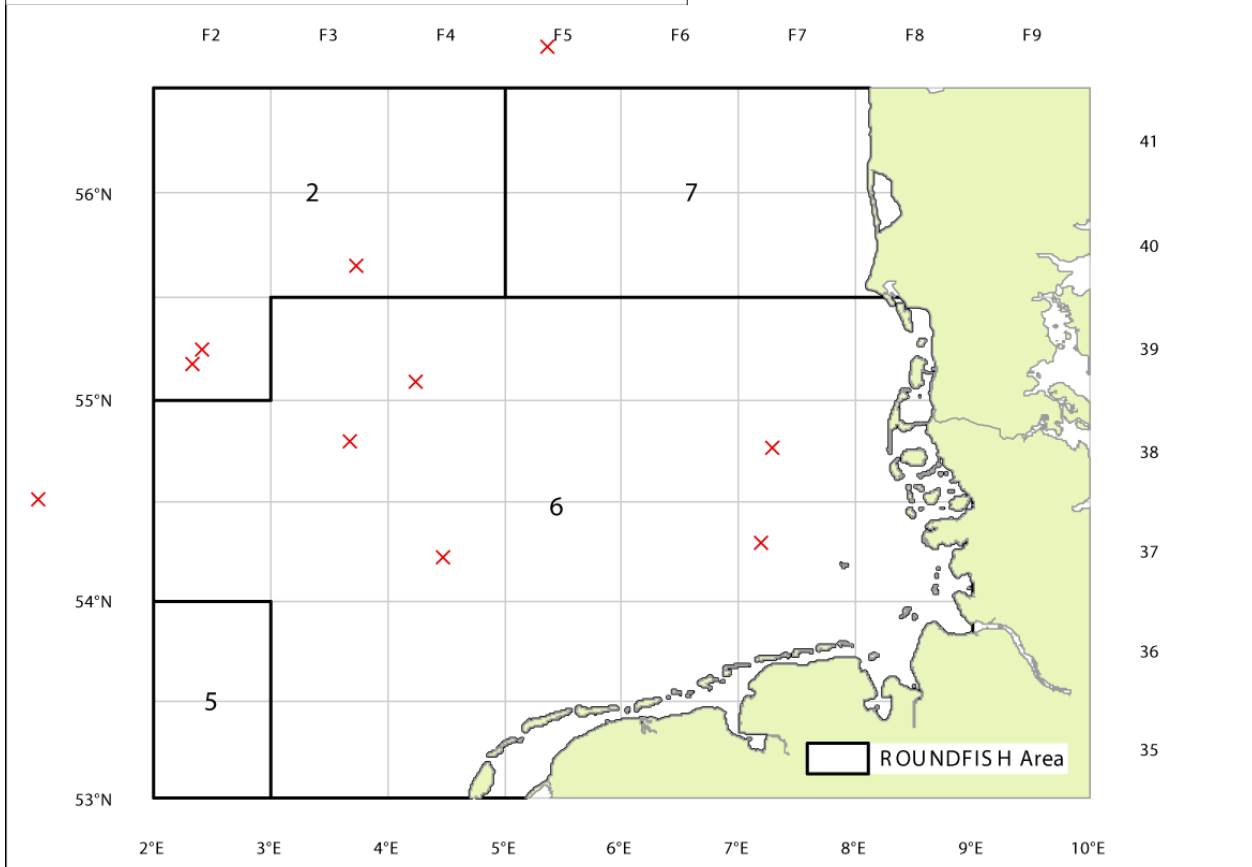
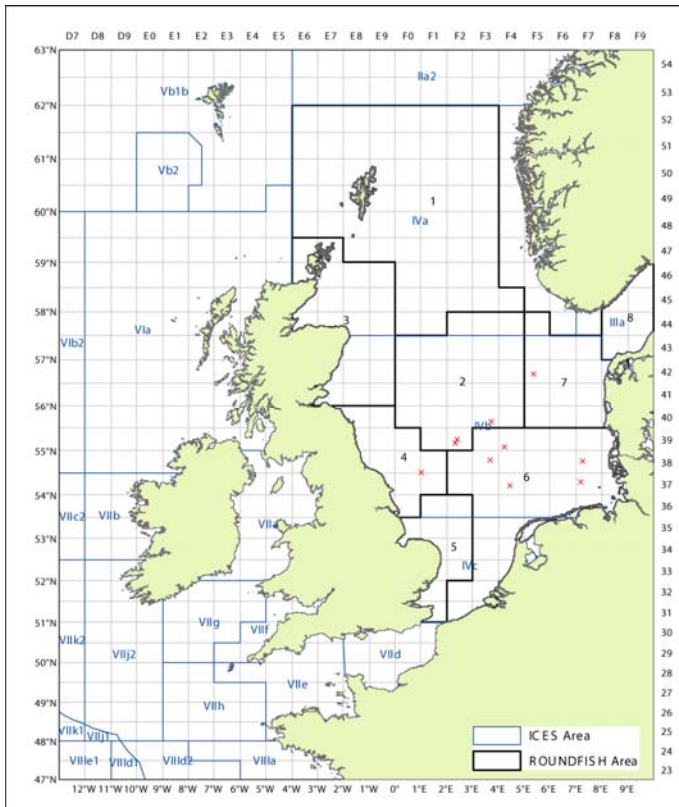
5.5 [cm]
53.5 [cm]

male -
female 2
undefined 489

total numbers of data 491

Ammodytes marinus

Geographical distribution of data used for calculating the length-weight relationship



Ammodytes marinus

Quarter: 2 ; 3

$$Tw [g] = a * L [cm]^b$$

a = 0.001

b = 3.4395

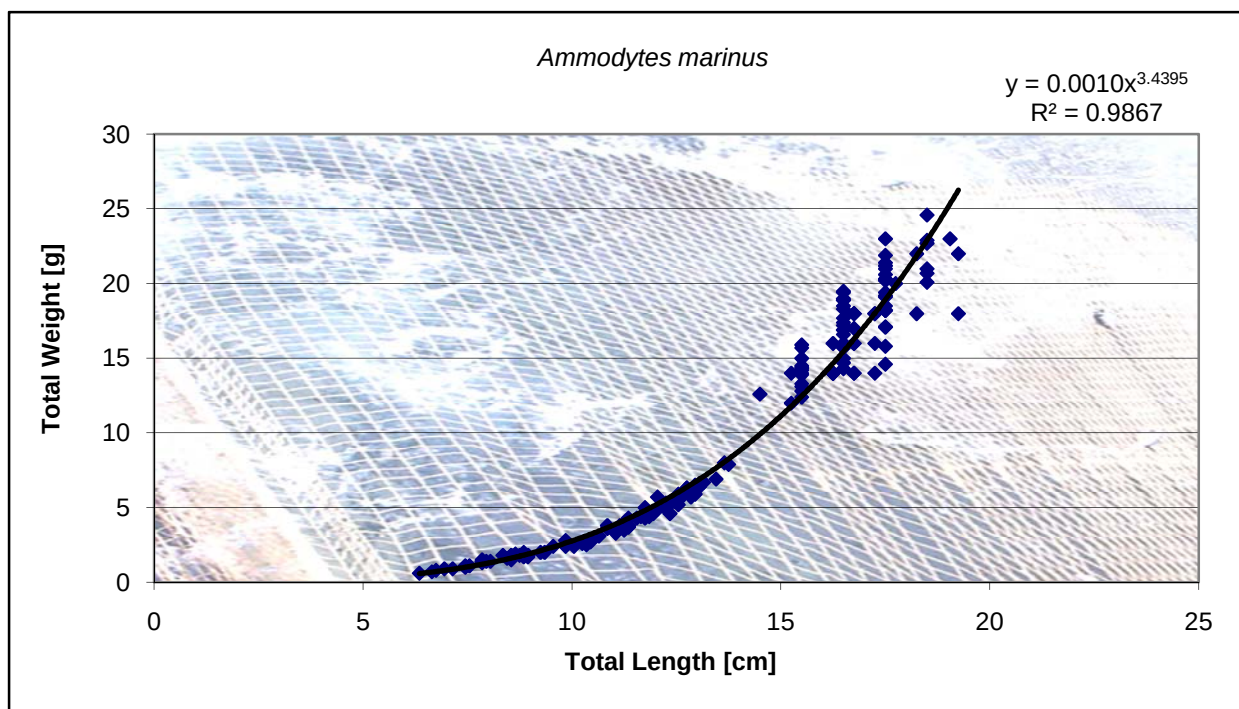
data collected

time period : 1995 - 2009

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
-	61	108	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	1	60	-	108	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	169	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	169	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
-	79	-	1	-	66	23	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

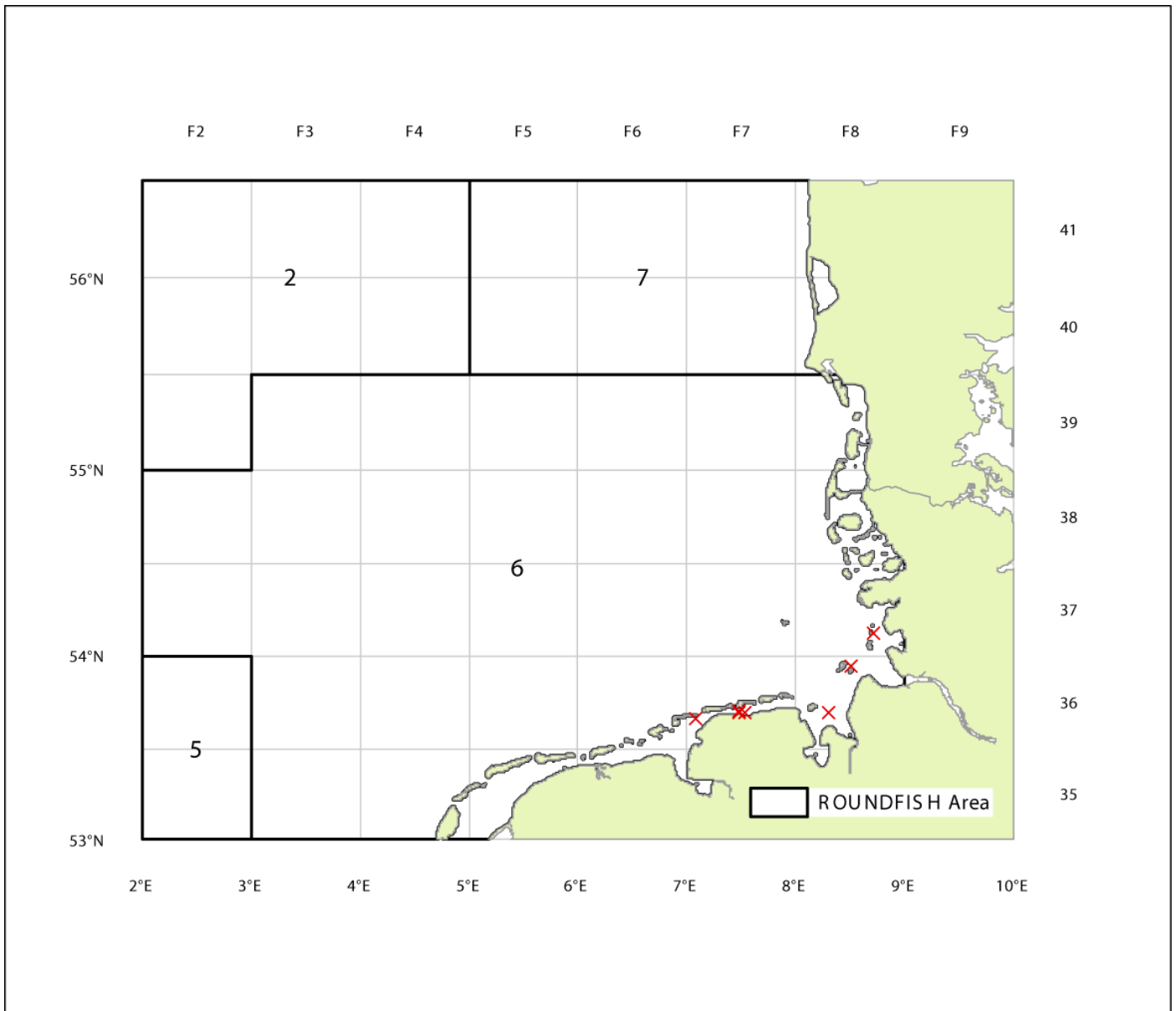
- Total length
- mm below, 1/2 cm below
- min length
- max length

6.35 [cm]
19.25 [cm]

male -
female -
undefined 169
total numbers of data 169

Ammodytes tobianus

Geographical distribution of data used for calculating the length-weight relationship



Ammodytes tobianus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0063

b = 2.6927

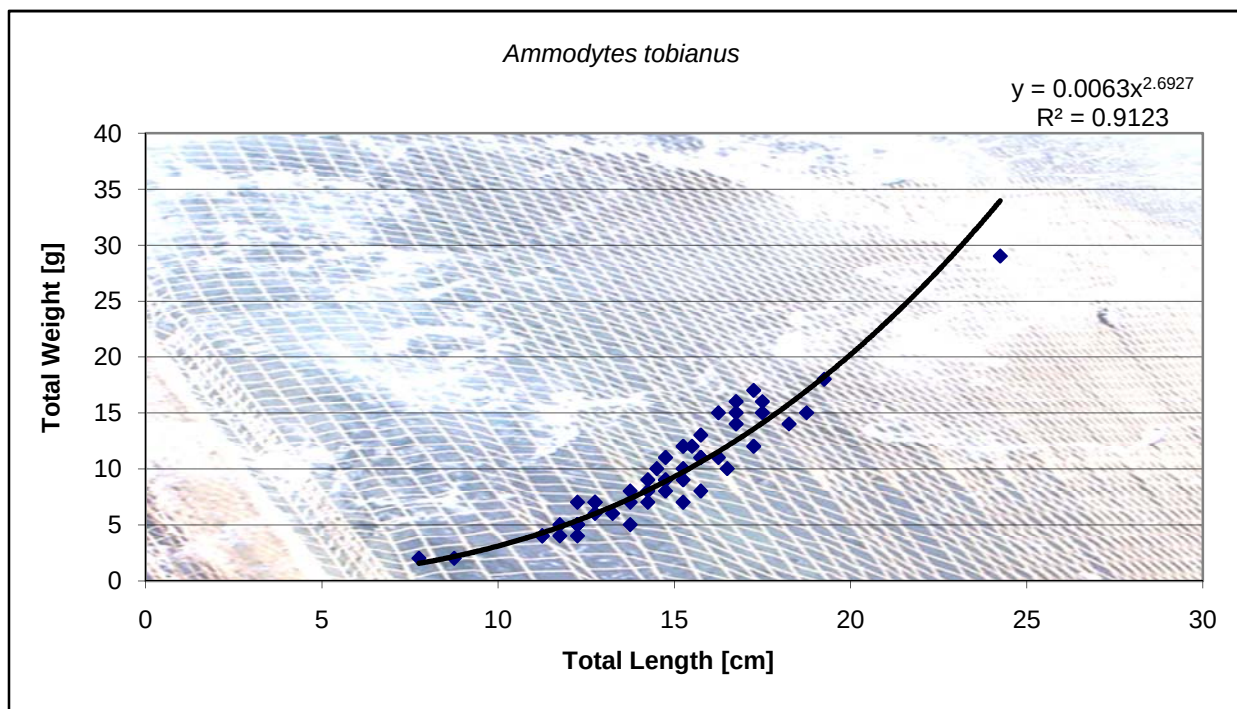
data collected

time period : 1958 - 2003

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
2	14	25	9																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	2	3	2	9	10	8	7	6	3	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	50	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	50	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	-	-	-	-	50	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- 1/2 cm below, cm below
- min length
- max length

7.75 [cm]

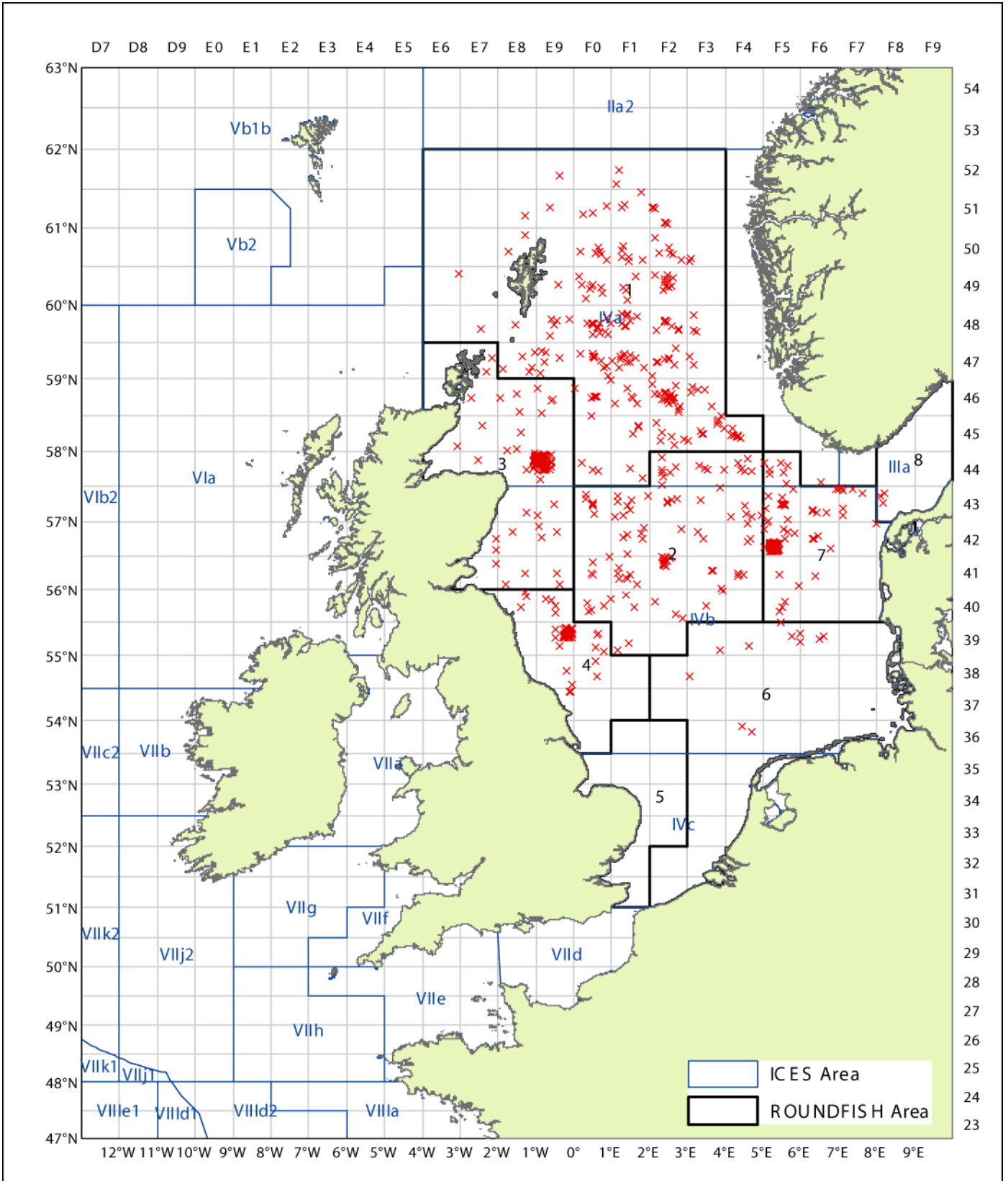
24.25 [cm]

male -
female -
undefined 50

total numbers of data 50

Anarhichas lupus

Geographical distribution of data used for calculating the length-weight relationship



Anarhichas lupus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0078

b = 3.0468

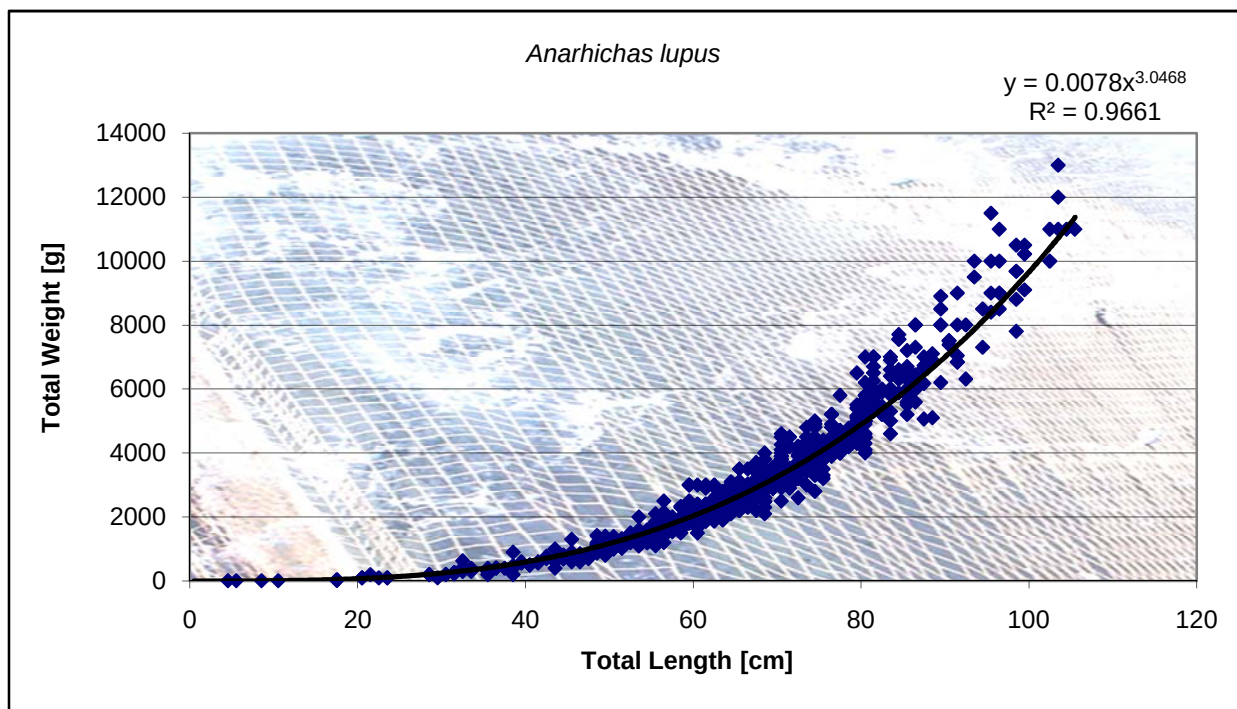
data collected

time period : 1959 - 2007

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
182	238	247	8																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
22	126	34	-	85	153	211	25	11	-	8	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	3	672	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	3	-	-	-	383	289	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
238	103	127	61	-	7	110	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

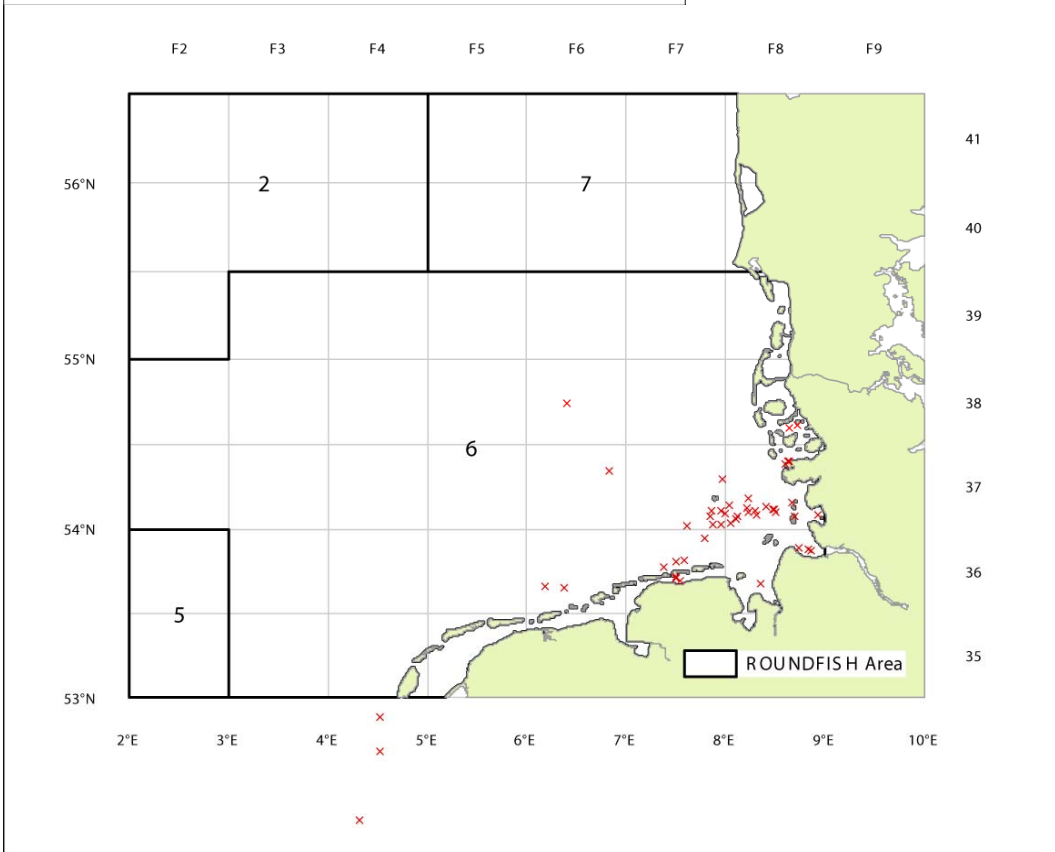
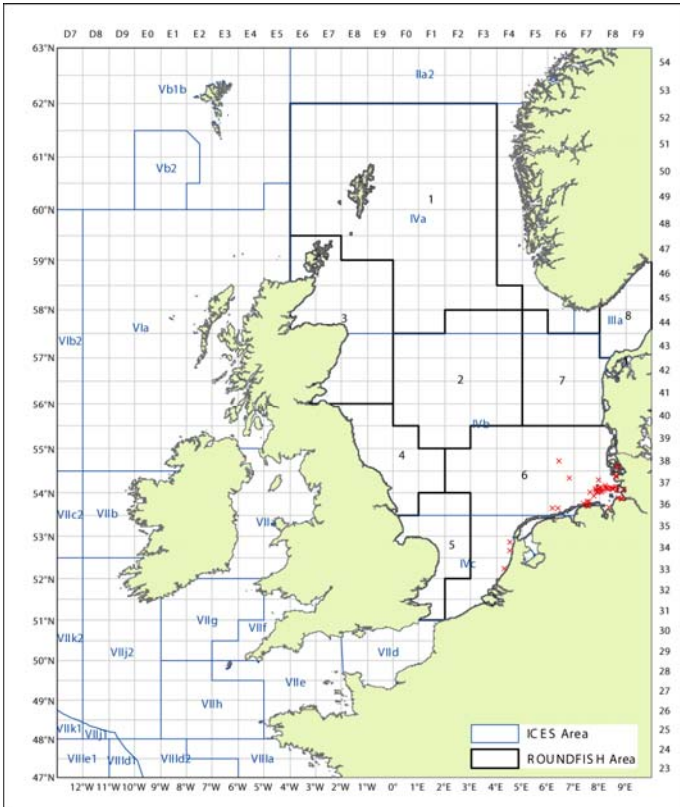
4.5 [cm]
105.5 [cm]

male 11
female 22
undefined 642

total numbers of data 675

Anguilla anguilla

Geographic distribution of data used for calculating the length-weight relationship



Anguilla anguilla

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0008

b = 3.1851

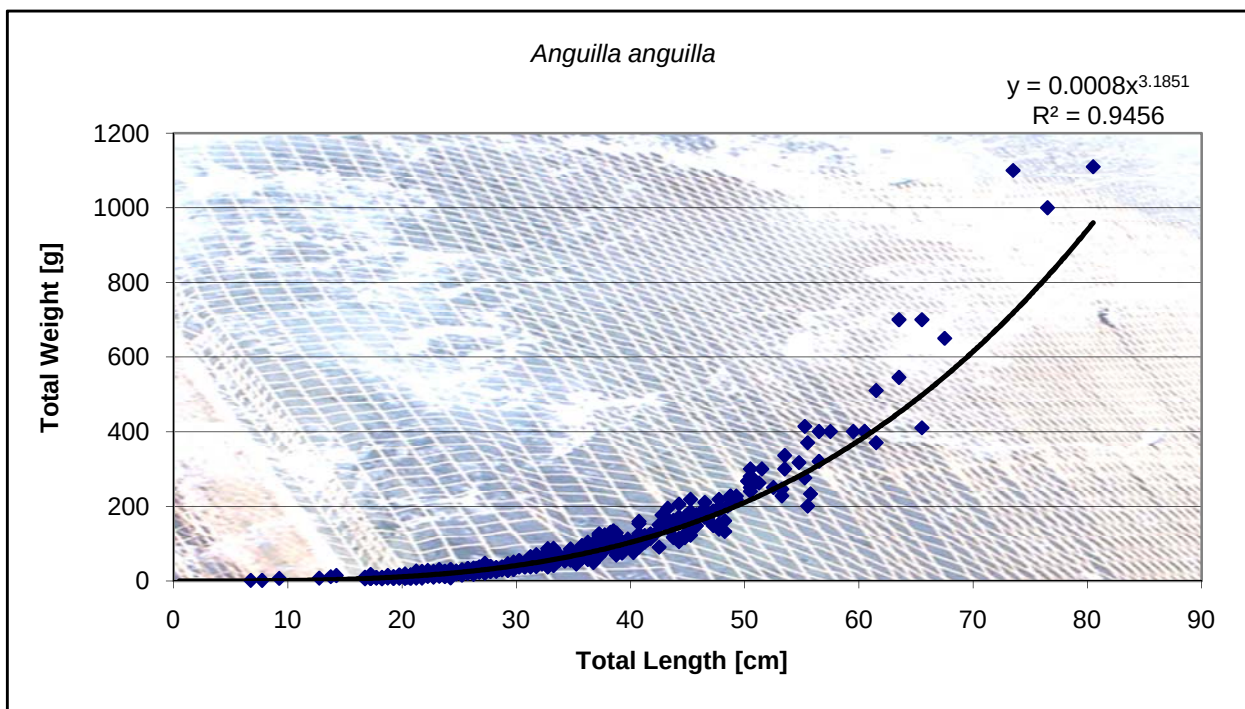
data collected

time period : 1955 - 2004

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
12	223	340	34																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
4	5	3	28	86	109	146	107	87	19	12	3								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	609	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	608	1	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	-	-	-	-	609	-	-	-		-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

6.5 [cm]
80.5 [cm]

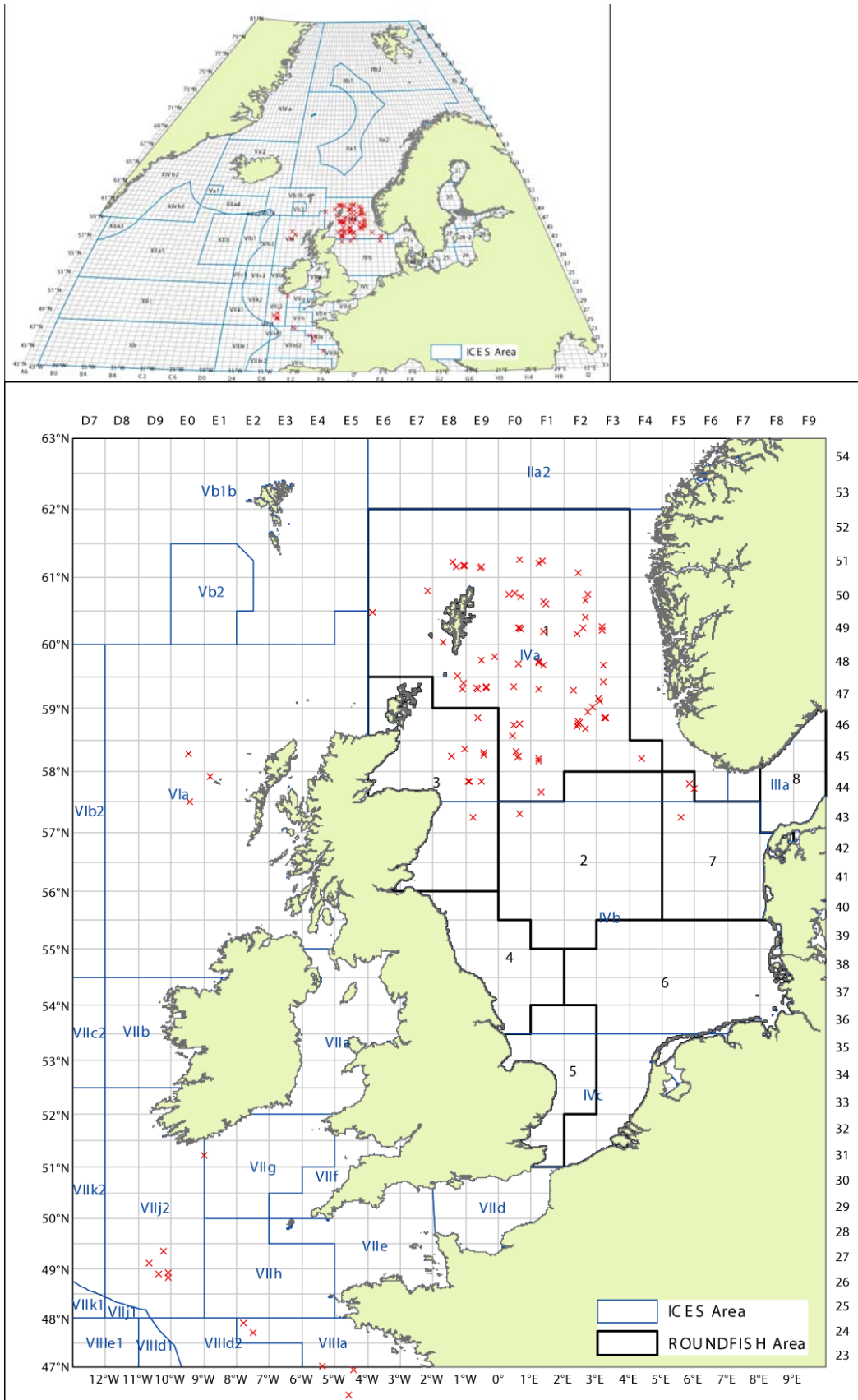
male
female
undefined

-
-
609

total numbers of data 609

Argentina silus

Geographical distribution of data used for calculating the length-weight relationship



Argentina silus

Quarter: 1 - 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0025

b = 3.3006

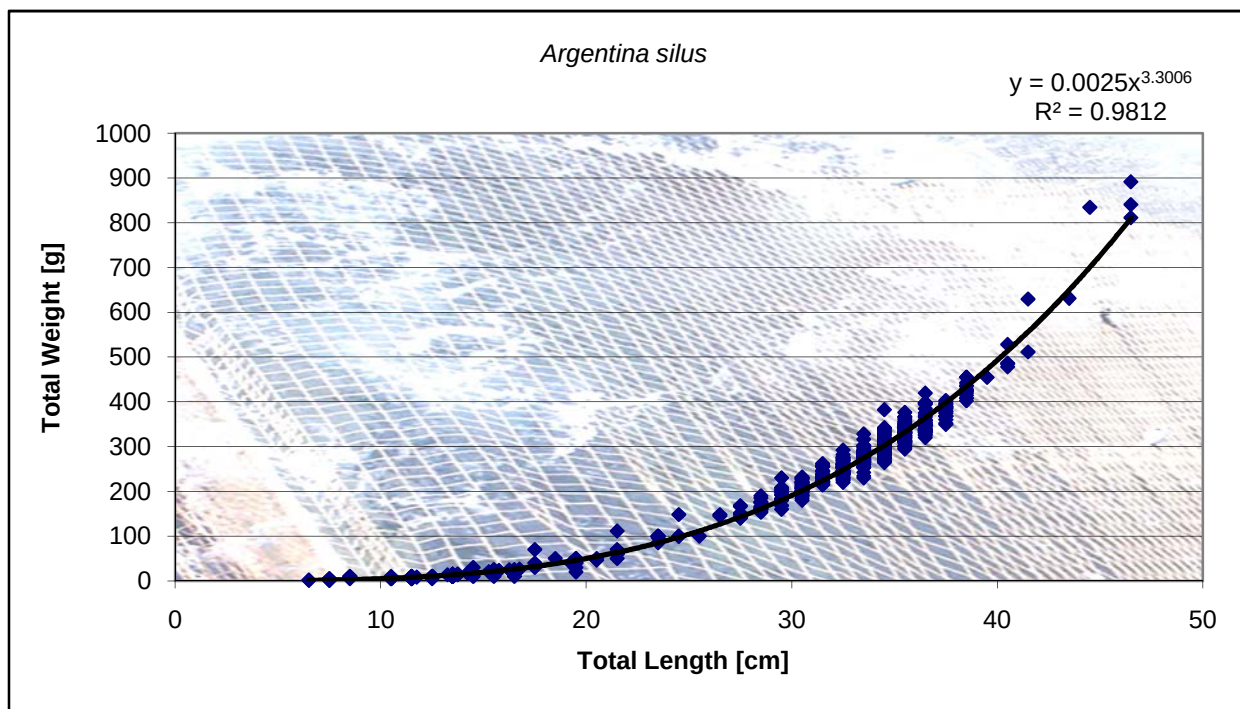
data collected

time period : 1983 - 2007

data source : research vessel

numbers of data:

Quarter																				
1	2	3	4																	
251	227	14	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
43	197	11	217	5	5	14	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	264	-	216	6	6	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	260	4	-	-	-	216	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
1	-	5	-	5	-	-	1	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9												
85	1	11	-	-	-	3	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J			
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			



Method of Measurement

- Total length
- cm below

min length
max length

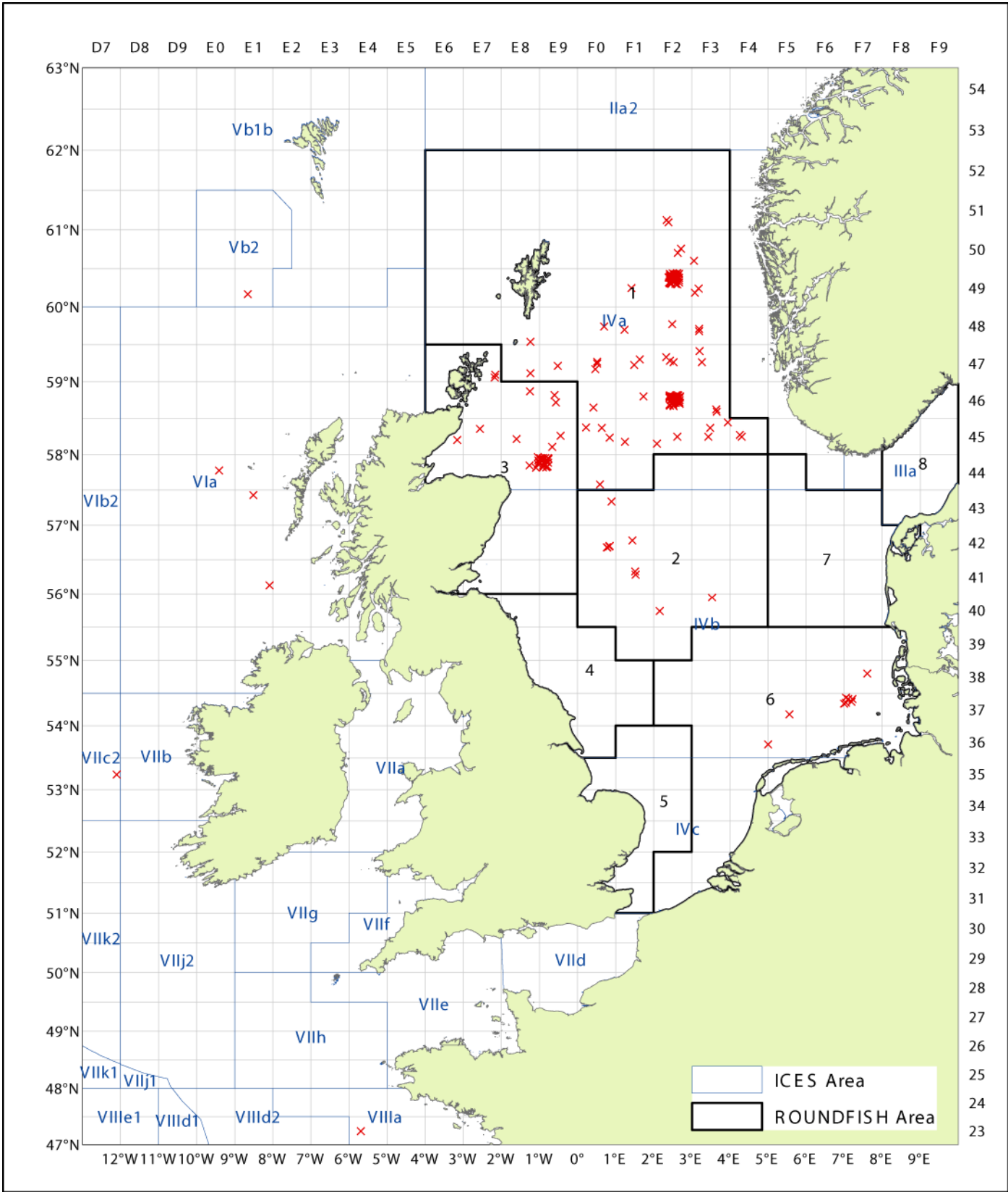
6.5 [cm]
46.5 [cm]

male -
female -
undefined 492

total numbers of data 492

Argentina sphyraena

Geographical distribution of data used for calculating the length-weight relationship



Argentina sphyraena

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0021

b = 3.346

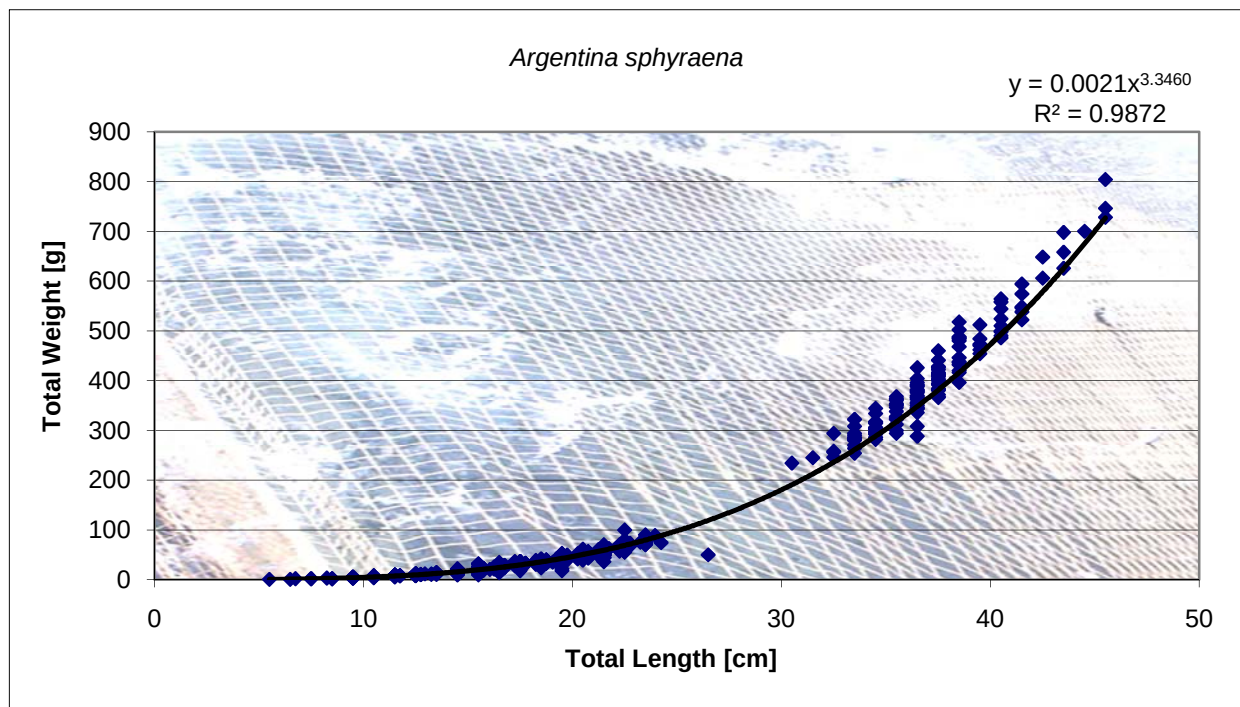
data collected

time period : 2000 - 2011

data source : research vessel, commercial trawler

numbers of data:

Numbers of salmon																			
Quarter																			
1	2	3	4																
95	137	515	1																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
30	61	4	135	-	2	288	227	-	-	-	1								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	609	134	3	1	1	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	588	21	-	-	134	3	-	-	-	1	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	1	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
450	12	138	-	-	9	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

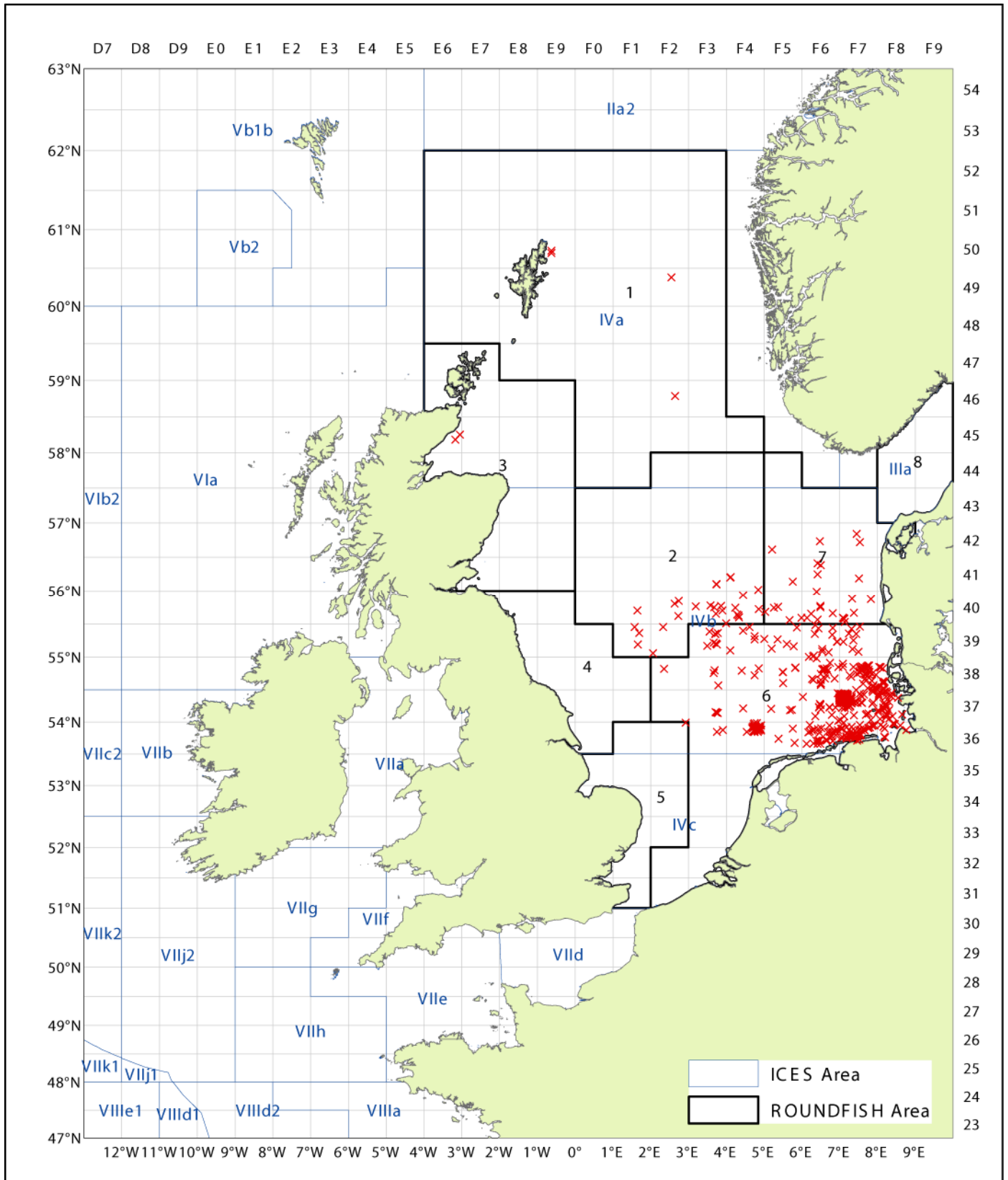
- Total length
- cm below, mm below
- min length
- max length

5.5 [cm]
45.5 [cm]

male -
female -
undefined 748
total numbers of data 748

Arnoglossus laterna

Geographical distribution of data used for calculating the length-weight relationship



Arnoglossus laterna

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0063

b = 3.084

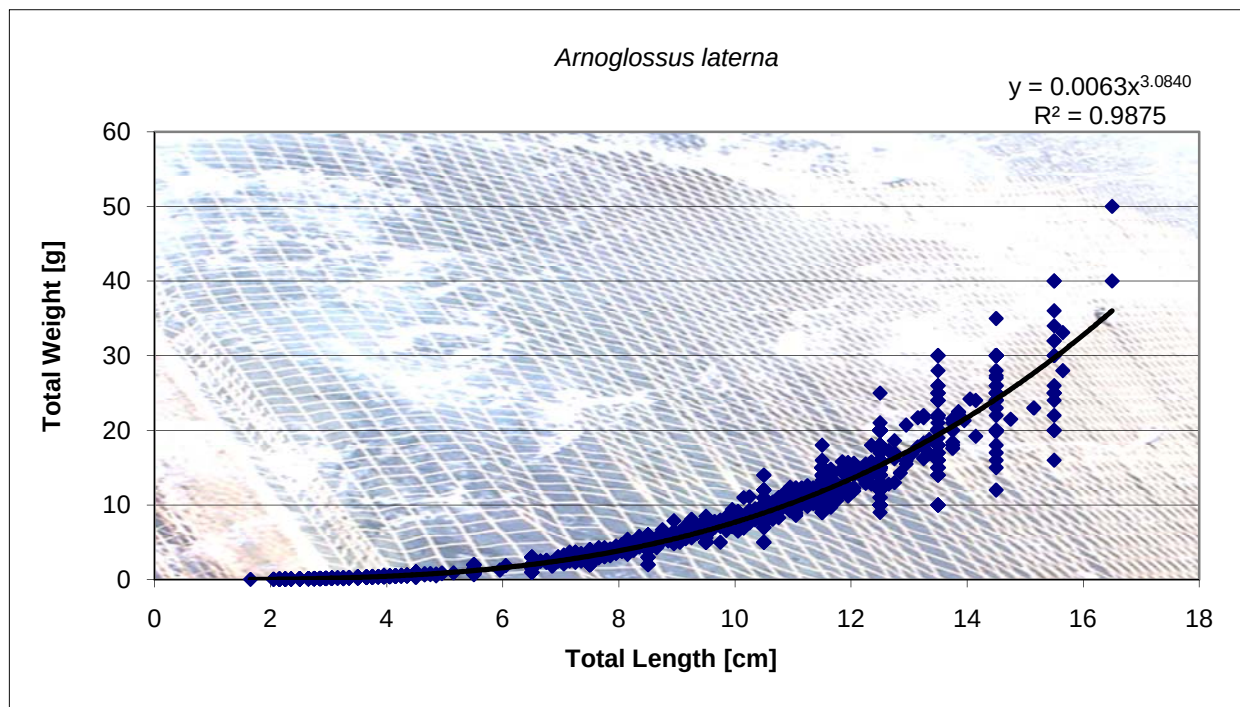
data collected

time period : 2000 - 2011

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
190	145	1160	23																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
170	20	-	10	133	2	422	722	16	3	16	4								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1518	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	10	1508	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
8	33	2	-	1	1415	59	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

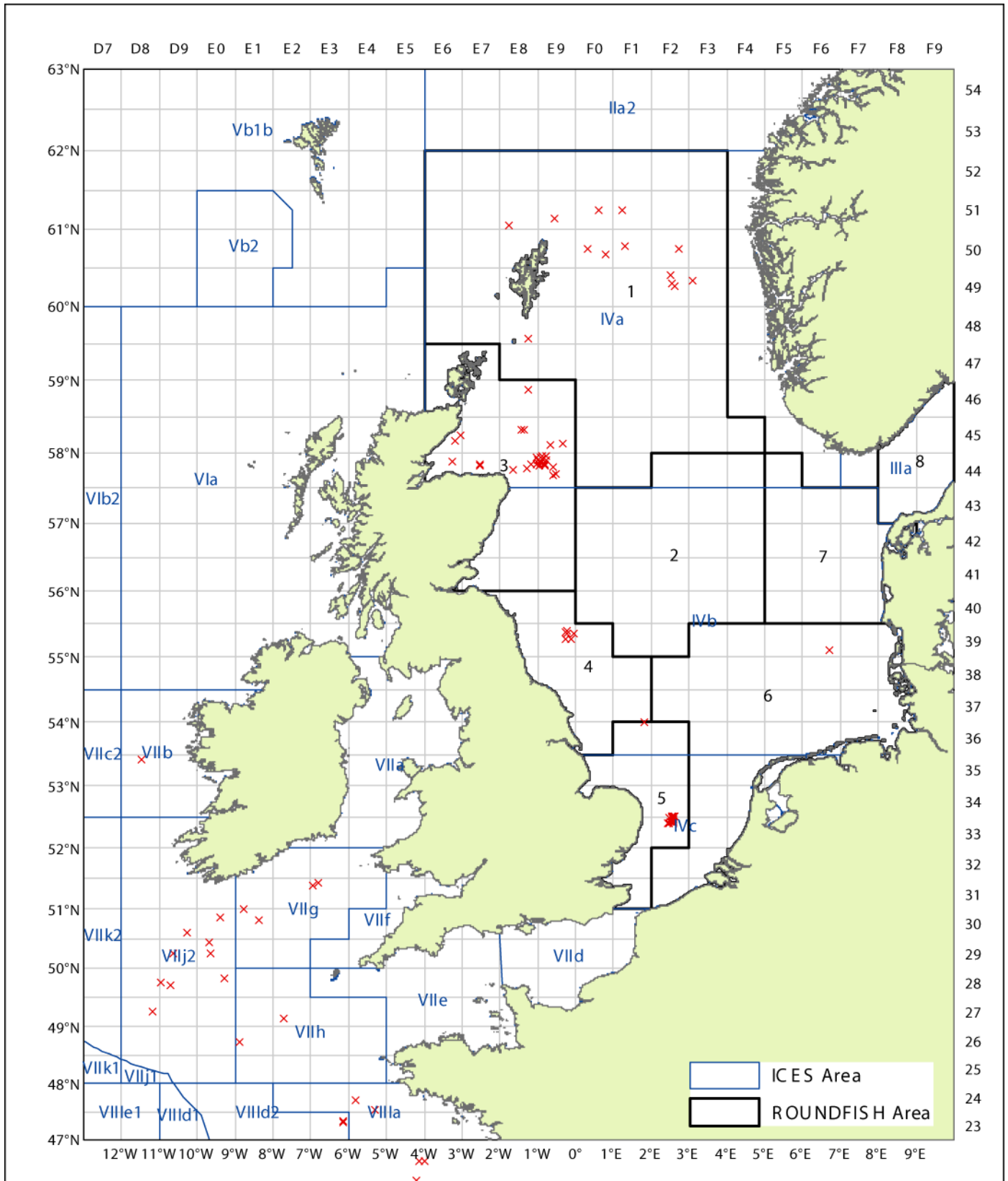
- Total length
- cm below, mm below
- min length
- max length

1.65 [cm]
16.5 [cm]

male -
female -
undefined 1518
total numbers of data 1518

Aspitrigla cuculus

Geographical distribution of data used for calculating the length-weight relationship



Aspitrigla cuculus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0061

b = 3.1054

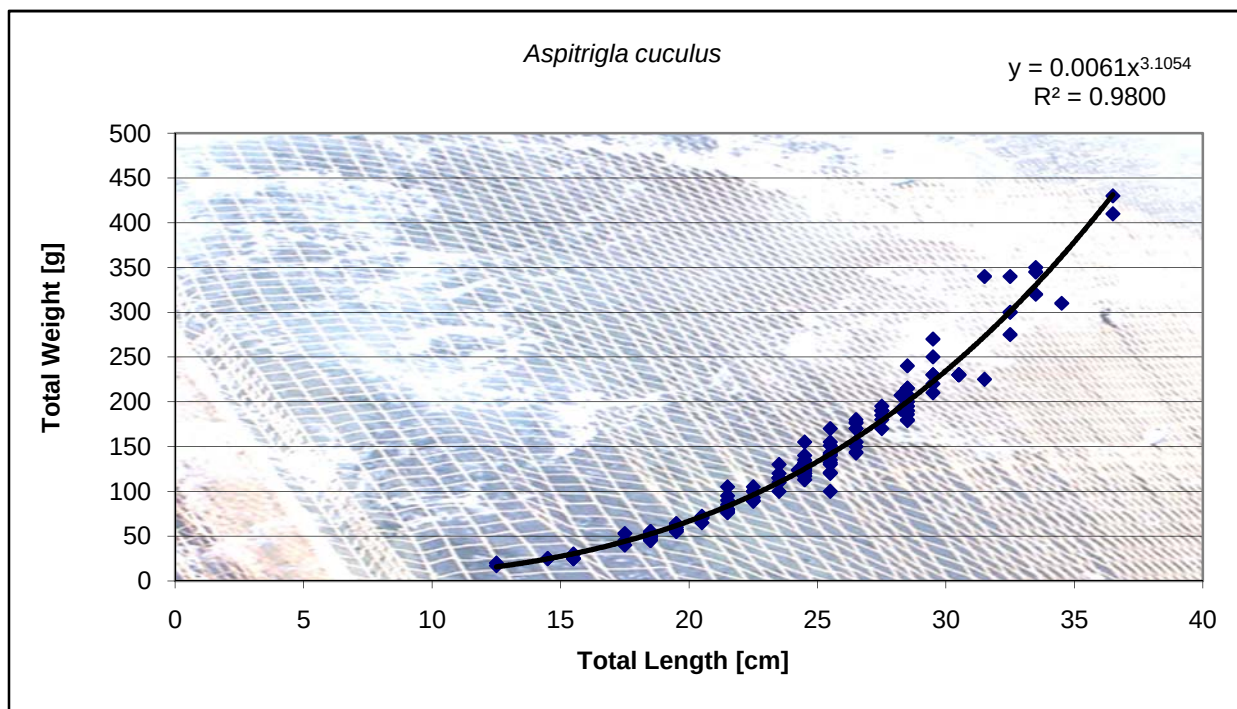
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
76	25	26	3																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
13	50	13	13	5	7	23	3	-	-	2	1								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	106	-	-	17	7	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	73	21	12	-	-	-	-	-	1	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
4	2	10	-	4	1	-	2	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
39	-	39	7	19	1	-	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

12.5 [cm]
36.5 [cm]

male

female

undefined

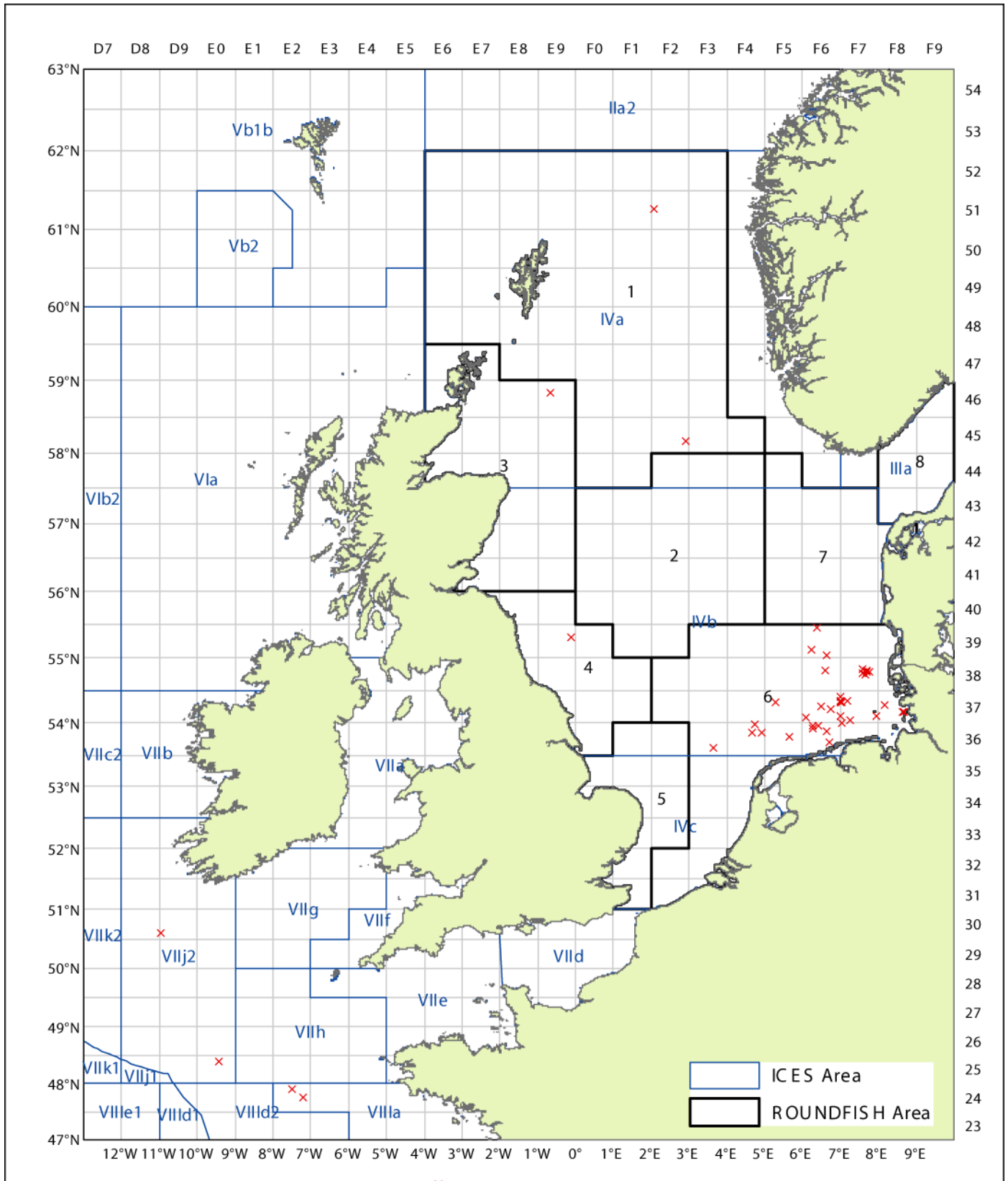
-
-
130

total numbers of data

130

Belone belone

Geographical distribution of data used for calculating the length-weight relationship



Belone belone

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0011

b = 3.0368

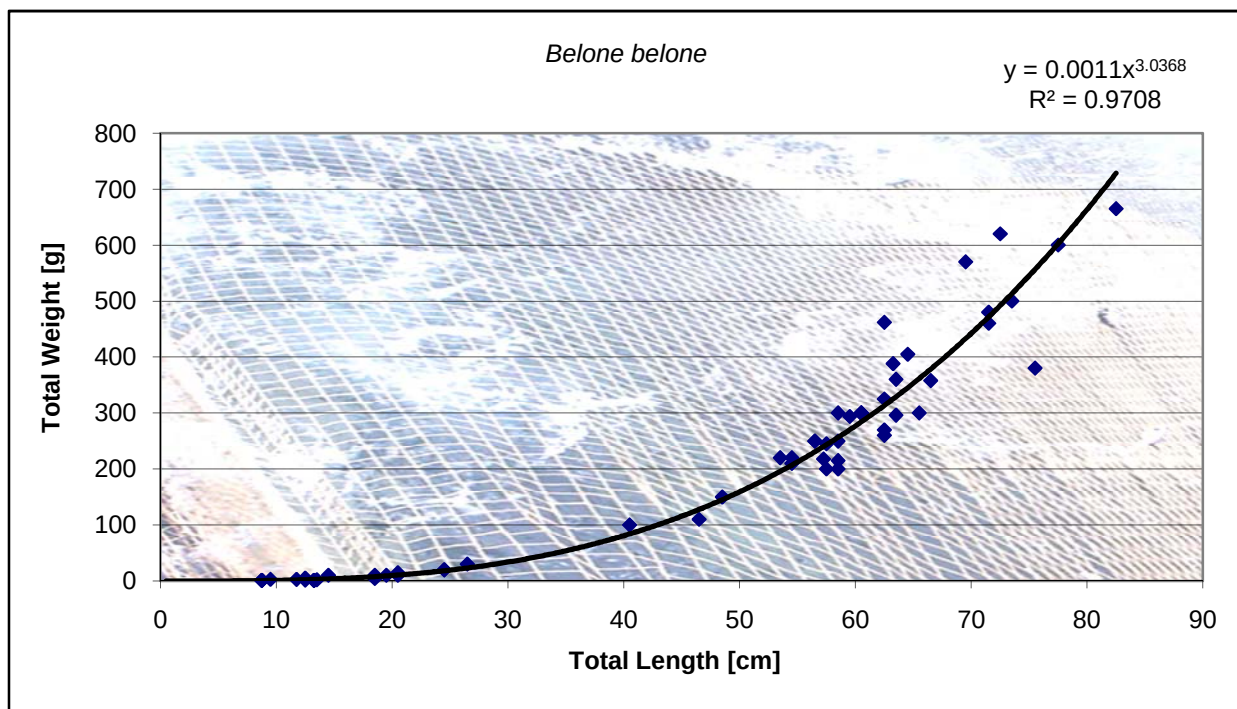
data collected

time period : 1970 - 2007

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
5	12	40	3																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
2	2	1	4	2	6	16	22	2	-	3	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	54	-	-	2	4	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	3	51	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	2	-	3	1	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
1	-	1	1	-	49	1	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

8.5 [cm]
82.5 [cm]

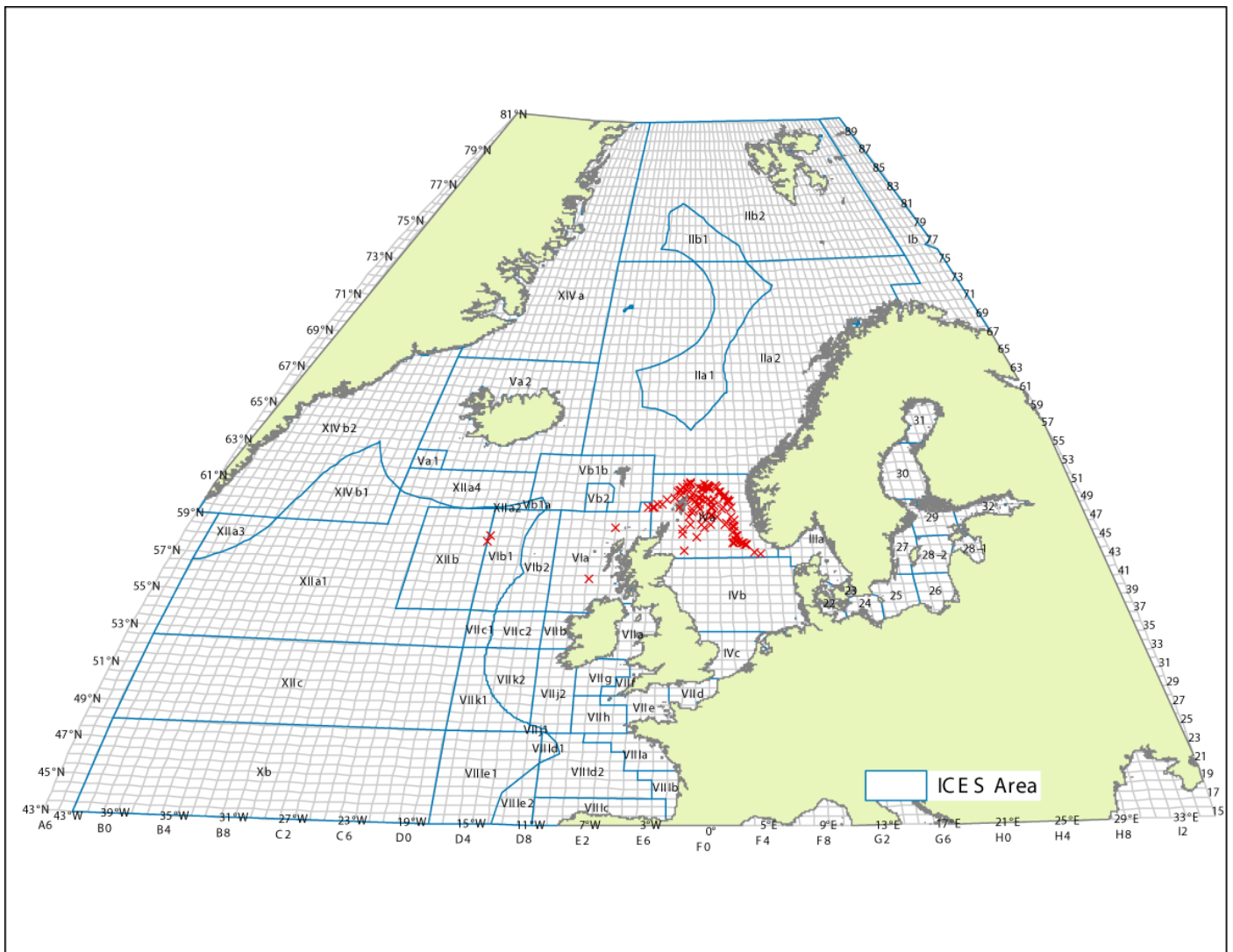
male
female
undefined

total numbers of data

-
-
60
60

Brosme brosme

Geographical distribution of data used for calculating the length-weight relationship



Brosme brosme

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0036

b = 3.2609

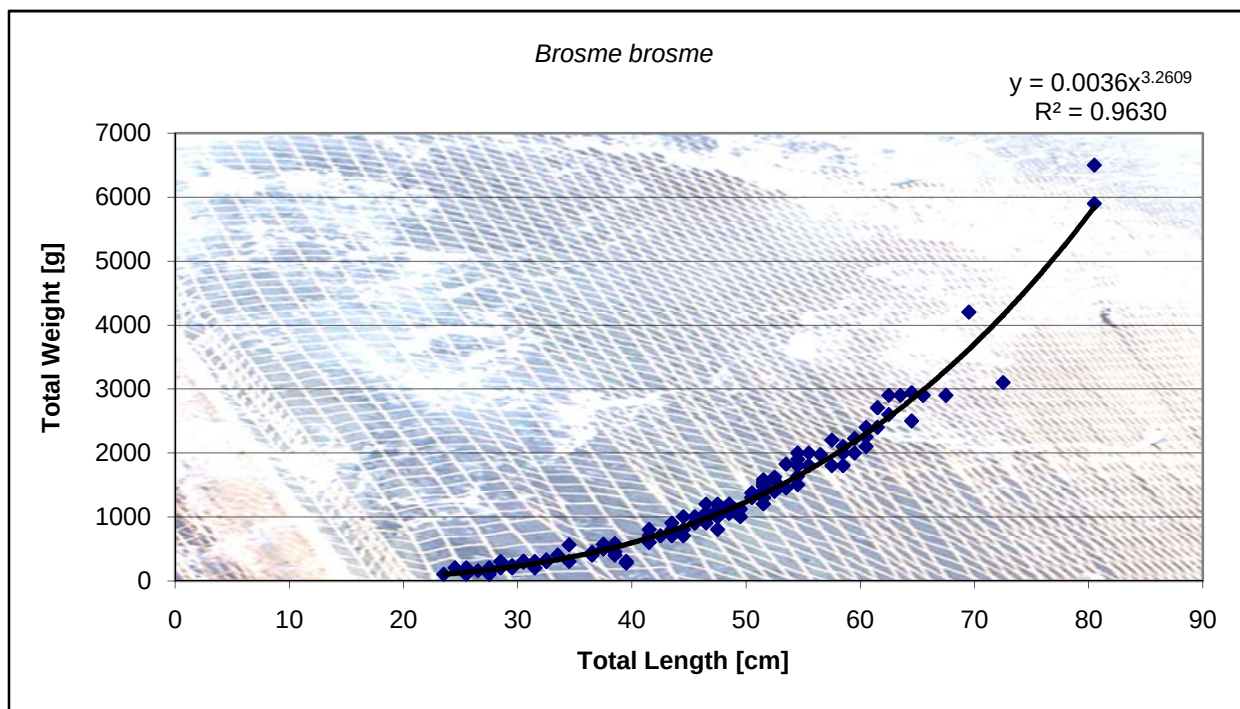
data collected

time period : 1975 - 2007

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
76	8	30	7																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
13	50	13	-	1	7	29	1	-	-	7	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	116	-	5	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	115	1	-	-	-	3	2	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
112	-	2	-	-	-	2	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length

- cm below

min length

max length

23.5 [cm]

80.5 [cm]

male

female

undefined

-

2

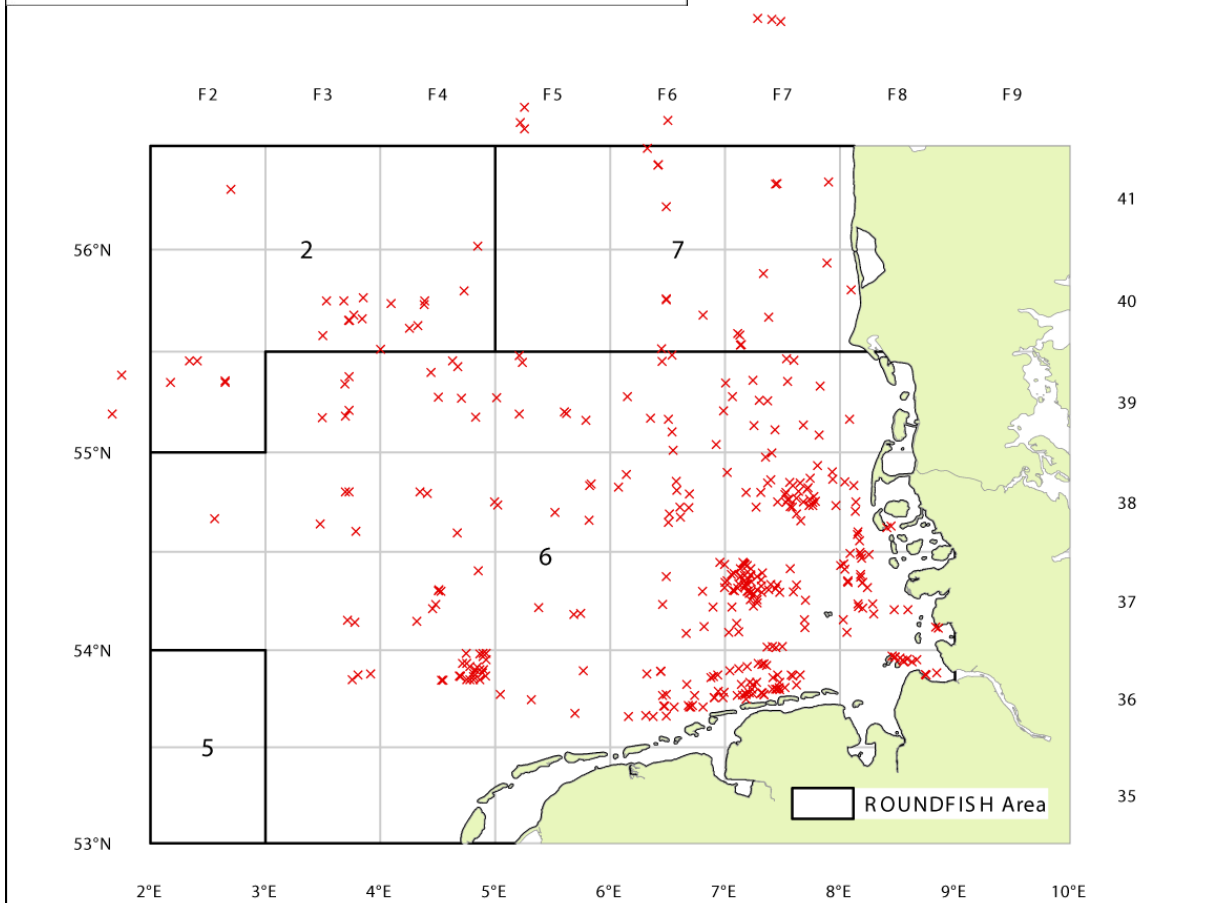
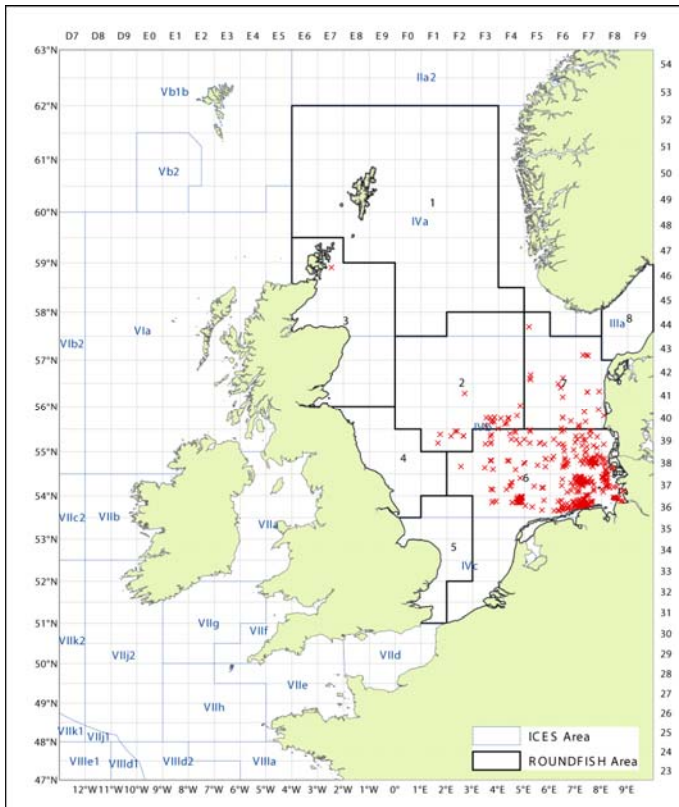
119

total numbers of data

121

Buglossidium luteum

Geographical distribution of data used for calculating the length-weight relationship



Buglossidium luteum

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0079

b = 3.1092

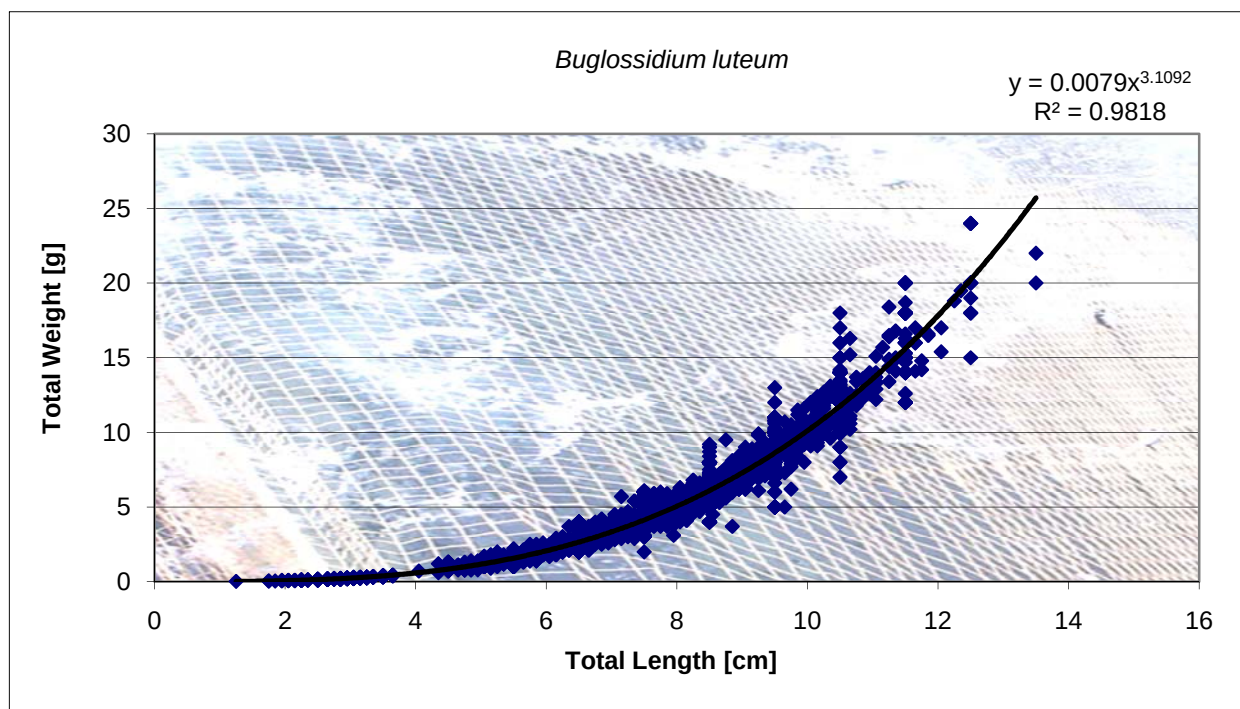
data collected

time period : 2000 - 2011

data source : research vessel

numbers of data:

Numbers of salmon																						
Quarter																						
1	2	3	4																			
433	114	2513	22																			
Month																						
1	2	3	4	5	6	7	8	9	10	11	12											
415	17	1	17	94	3	1353	1151	9	1	14	7											
Subarea																						
1	2	3	4	5	6	7	8	9	10	12	14											
-	-	-	3082	-	-	-	-	-	-	-	-											
Division																						
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F			
-	-	-	-	-	-	-	2	3080	-	-	-	-	-	-	-	-	-	-	-			
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B								
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Roundfisharea										NAFO												
1	2	3	4	5	6	7	8	9						1A	1B	1C	1D	1E	1F	2G	2H	2J
-	25	1	-	-	2783	273	-	-						-	-	-	-	-	-	-	-	-



Method of Measurement

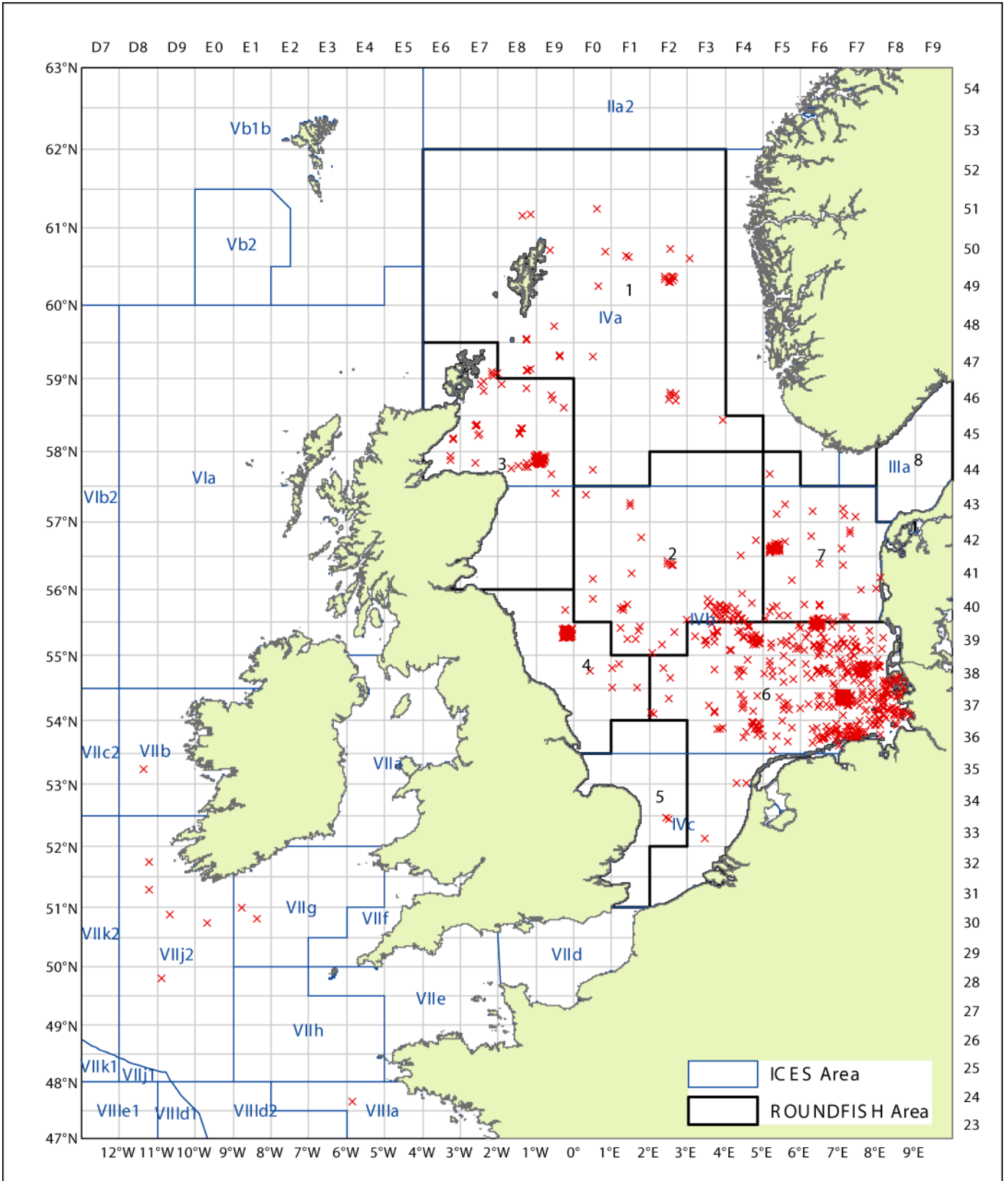
- Total length
- cm below, mm below
- min length
- max length

1.25 [cm]
13.5 [cm]

male -
female -
undefined 3082
total numbers of data 3082

Callionymus lyra

Geographical distribution of data used for calculating the length-weight relationship



Callionymus lyra

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0204

b = 2.5784

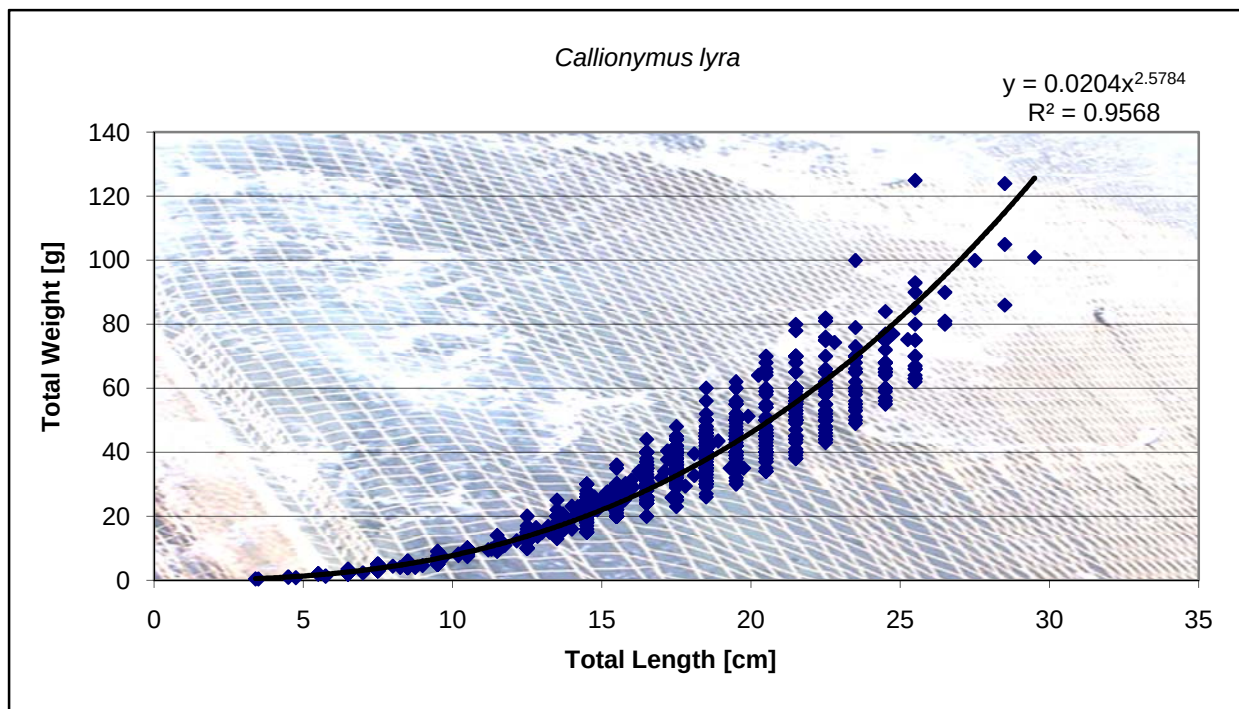
data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
287	146	716	85																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
200	77	10	20	95	31	219	437	60	13	50	22								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1224	-	-	9	1	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	132	1089	3	-	-	-	-	-	1	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
2	-	6	-	1	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
40	56	94	103	2	839	90	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

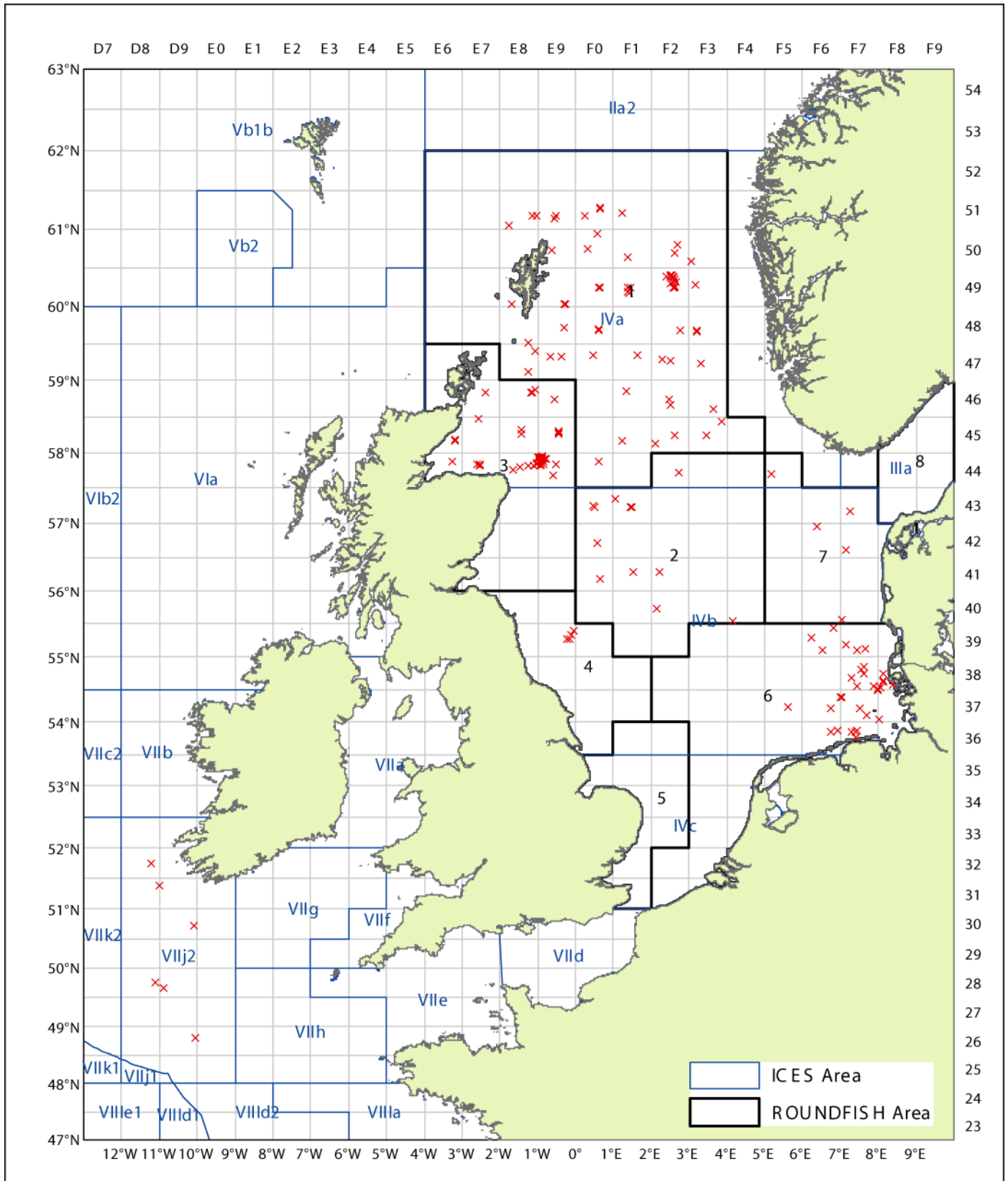
- Total length
- mm below, cm below
- min length
- max length

3.4 [cm]
29.5 [cm]

male 30
female 48
undefined 1156
total numbers of data 1234

Callionymus maculatus

Geographical distribution of data used for calculating the length-weight relationship



Callionymus maculatus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0282

b = 2.3129

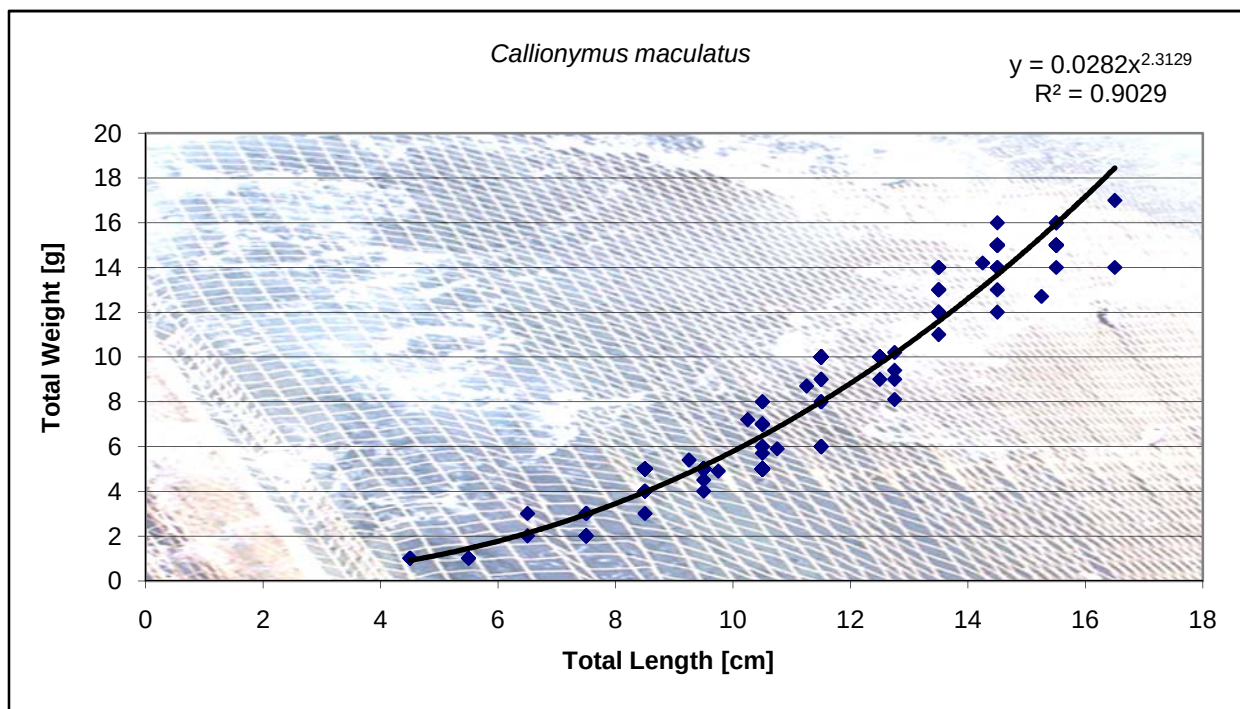
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
144	12	34	6																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
58	74	12	2	9	1	11	19	4	-	4	2								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	190	-	-	6	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	129	61	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	6	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
72	13	62	4	-	33	6	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

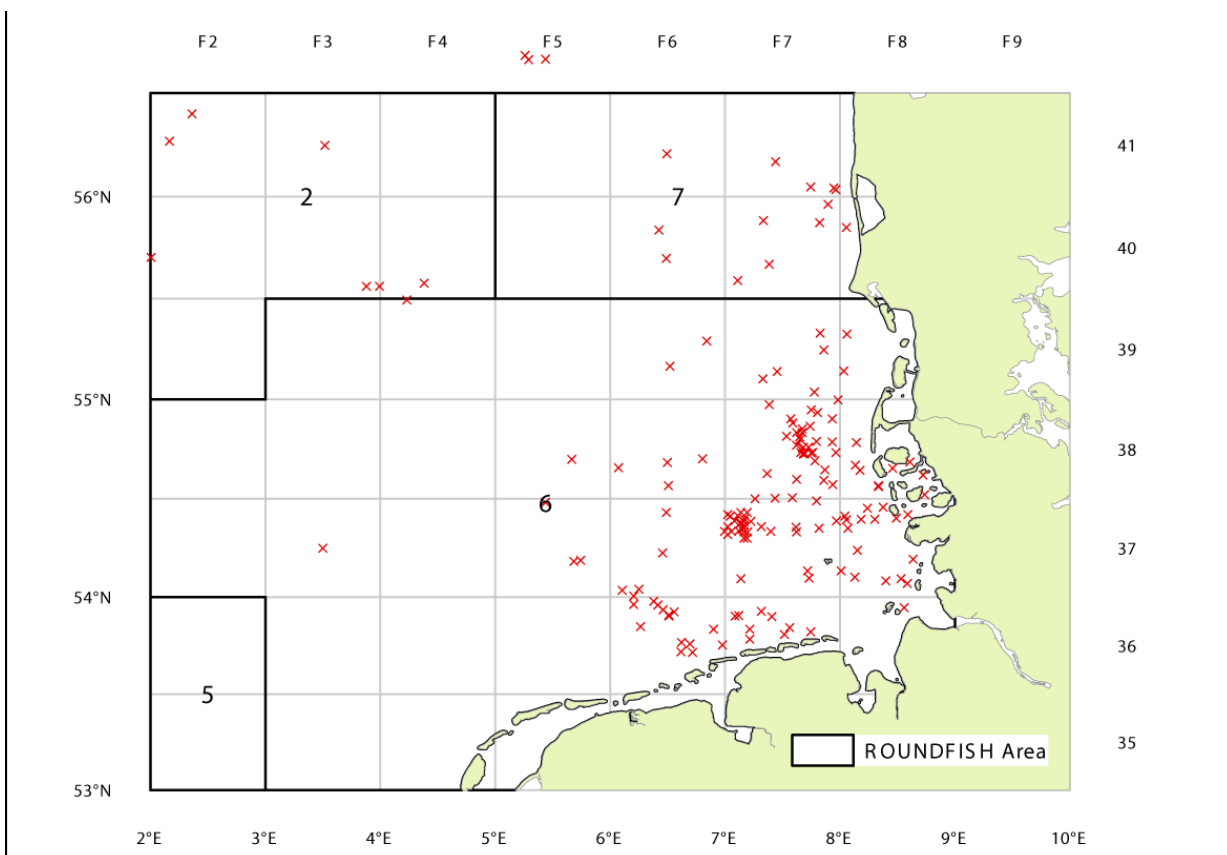
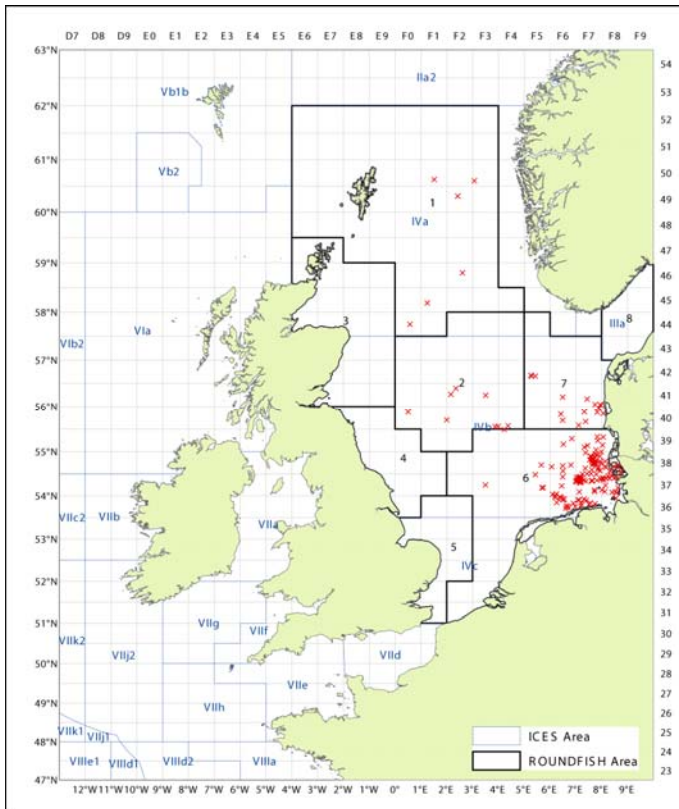
4.5 [cm]
16.5 [cm]

male 2
female 1
undefined 193

total numbers of data 196

Callionymus reticulatus

Geographical distribution of data used for calculating the length-weight relationship



Callionymus reticulatus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0159

b = 2.5712

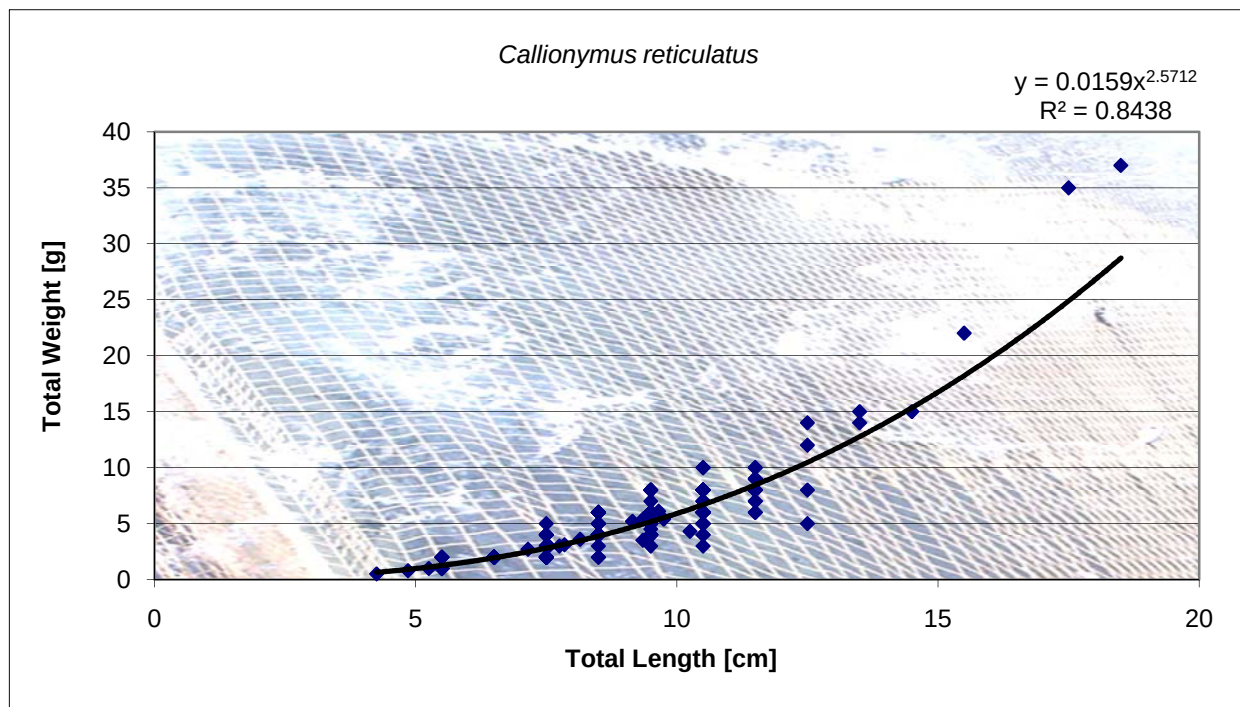
data collected

time period : 2002 - 2011

data source : research vessel

numbers of data:

Quarter																				
1	2	3	4																	
85	32	52	17																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
76	9	-	3	29	-	12	29	11	1	7	9									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	186	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	6	180	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
6	8	-	-	-	156	16	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

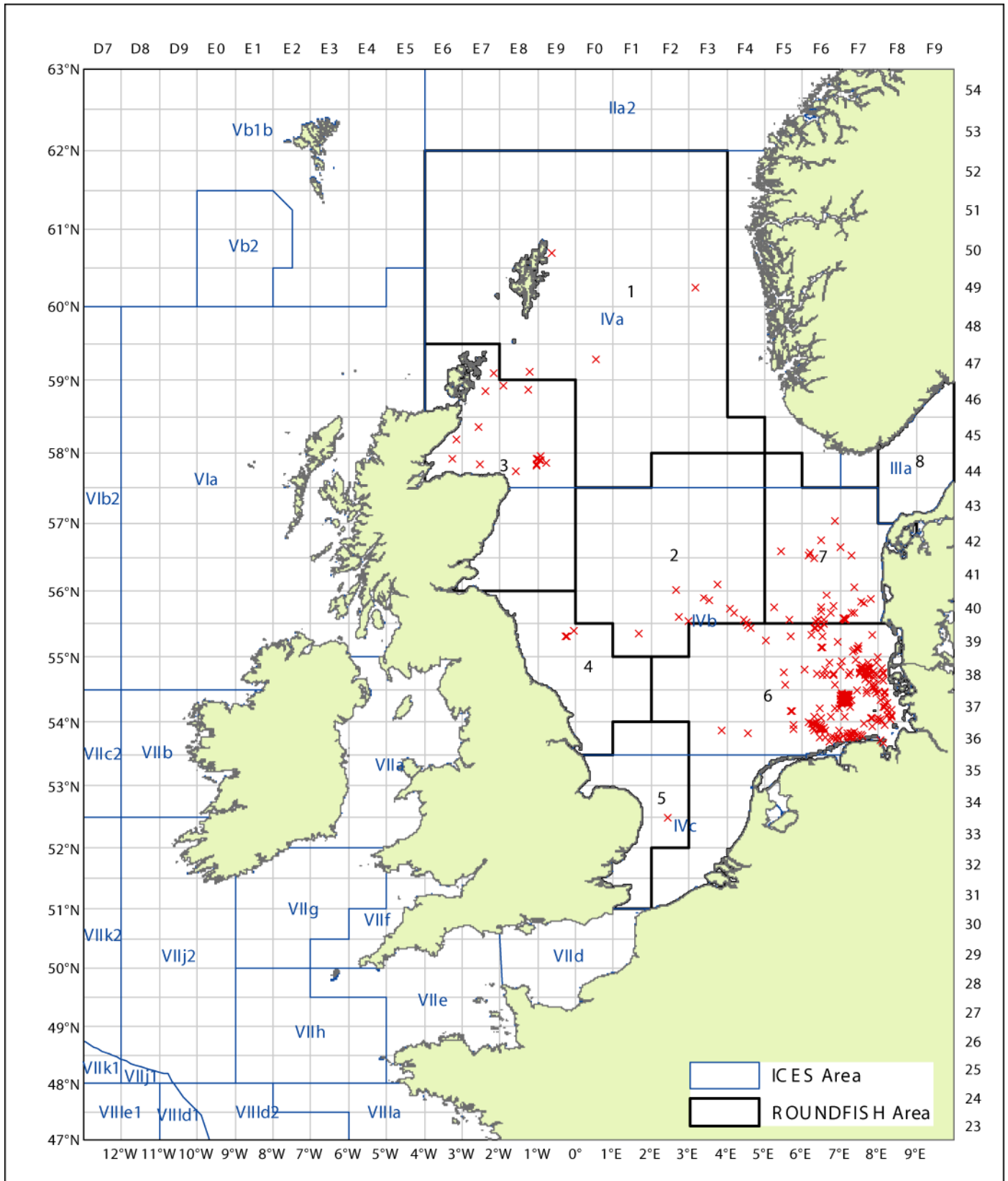
- Total length
- cm below, 1/2 cm below, mm below
 - min length 4.25 [cm]
 - max length 18.5 [cm]

male -
female -
undefined 186

total numbers of data 186

Cancer pagurus

Geographical distribution of data used for calculating the length-weight relationship



Cancer pagurus

Quarter: 1 - 4

$$Tw [g] = a * L [mm]^b$$

a = 0.00025

b = 2.90285

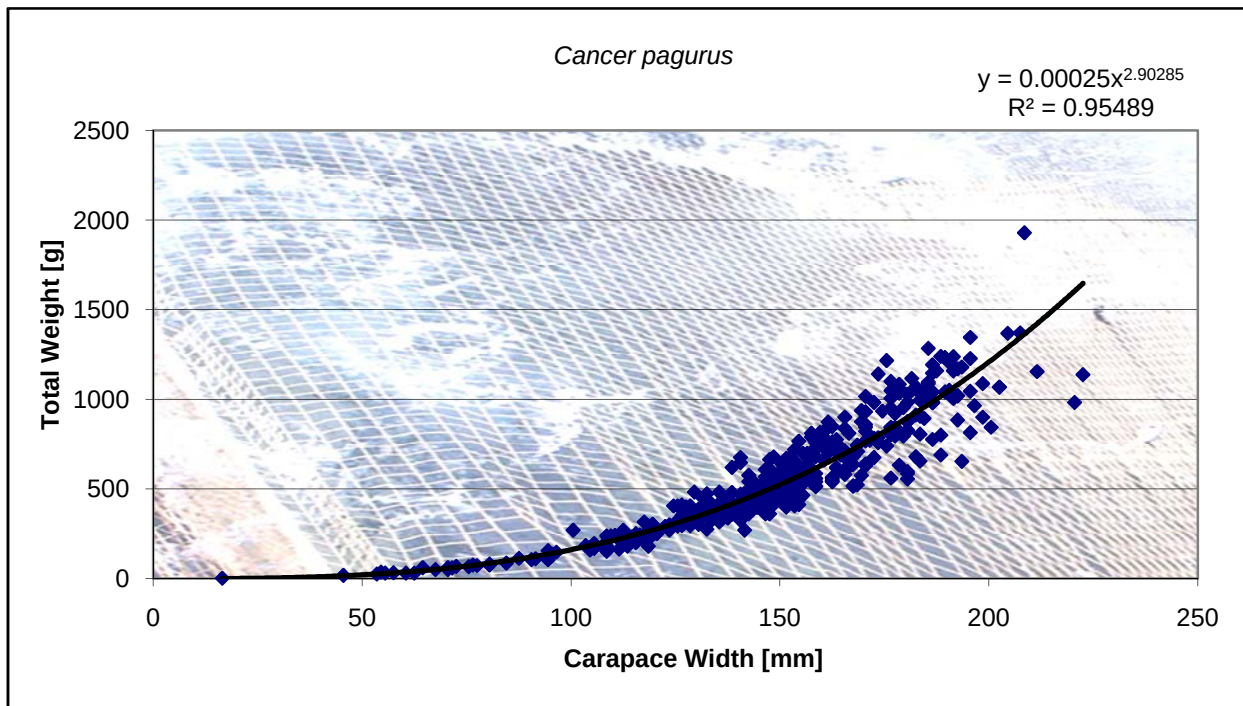
data collected

time period : 1990 - 2009

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
39	101	262	17																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
30	9	-	-	90	11	58	196	8	-	13	4								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	419	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	33	386	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
7	11	26	4	1	315	55	-	-											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Carapace width
- mm below

min length
max length

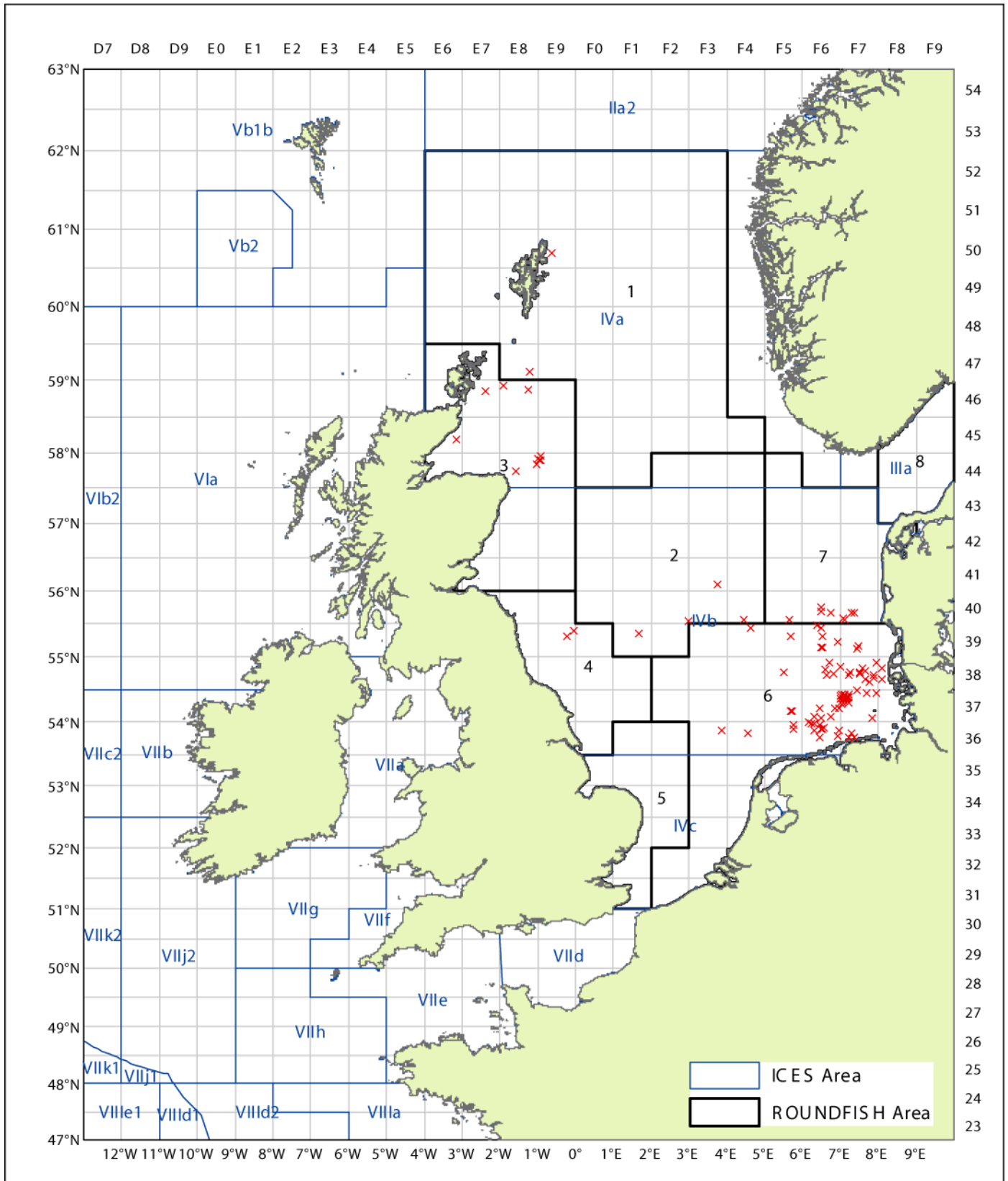
16.5 [mm]
222.5 [mm]

male 218
female 167
undefined 34

total numbers of data 419

Cancer pagurus ♀

Geographical distribution of data used for calculating the length-weight relationship



Cancer pagurus ♀

(female)

Quarter: 1 - 4

$$Tw [g] = a * L [mm]^b$$

a = 0.00028

b = 2.87693

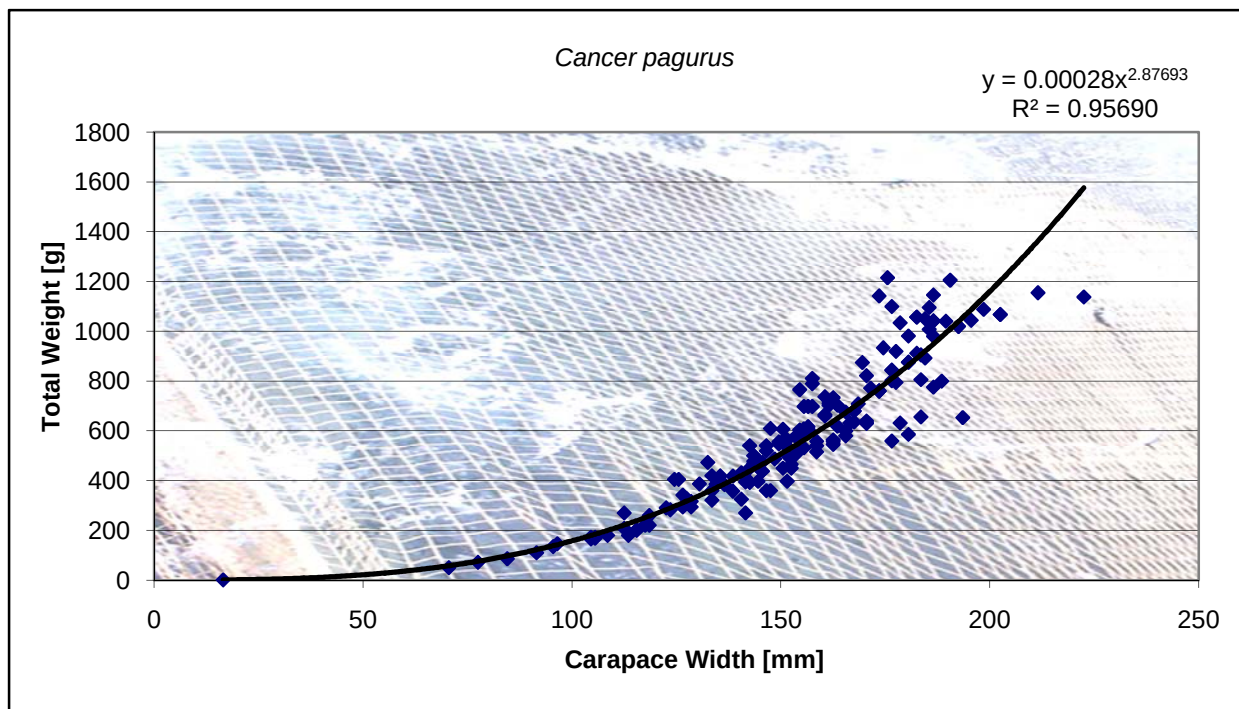
data collected

time period : 1992 - 2009

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
18	33	112	4																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
15	3	-	-	27	6	23	85	4	-	1	3								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	167	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	19	148	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
2	4	17	3	-	116	25	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Carapace width
- mm below

min length
max length

16.5 [mm]
222.5 [mm]

male
female
undefined

-
167
-

total numbers of data 167

length-weight relationship



Cancer pagurus



Quarter: 1 - 4

(male)

$$Tw [g] = a * L [mm]^b$$

a = 0.00019

b = 2.96327

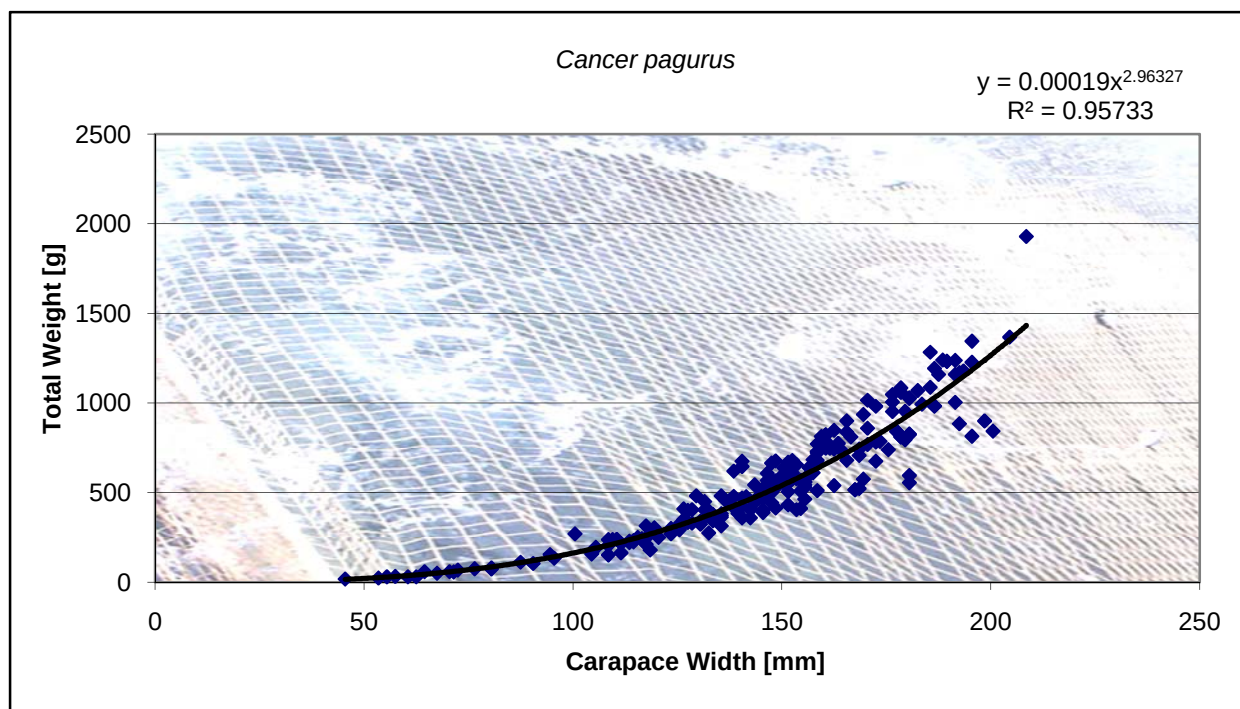
data collected

time period : 1990 - 2009

data source : research vessel

numbers of data:

Numbers of fish																				
Quarter																				
1	2	3	4																	
18	63	125	12																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
13	5	-	-	58	5	32	90	3	-	11	1									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	218	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	9	209	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
3	5	6	-	-	179	25	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Carapace width
- mm below

min length
max length

45.5 [mm]
208.5 [mm]

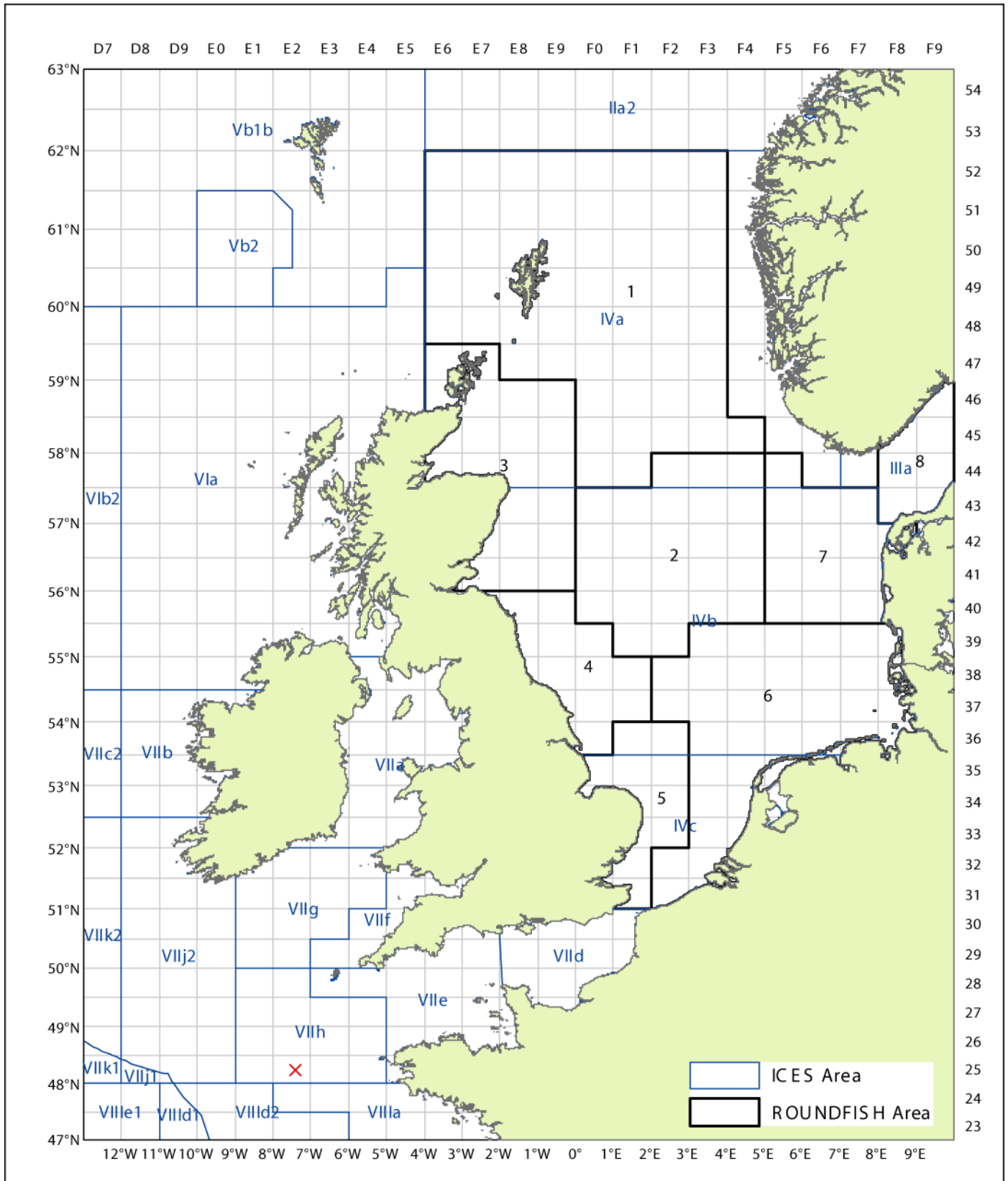
male
female
undefined

218
-
-

total numbers of data 218

Capros aper

Geographical distribution of data used for calculating the length-weight relationship



Capros aper

Quarter: 2

$$Tw [g] = a * L [cm]^b$$

a = 0.0346

b = 2.7595

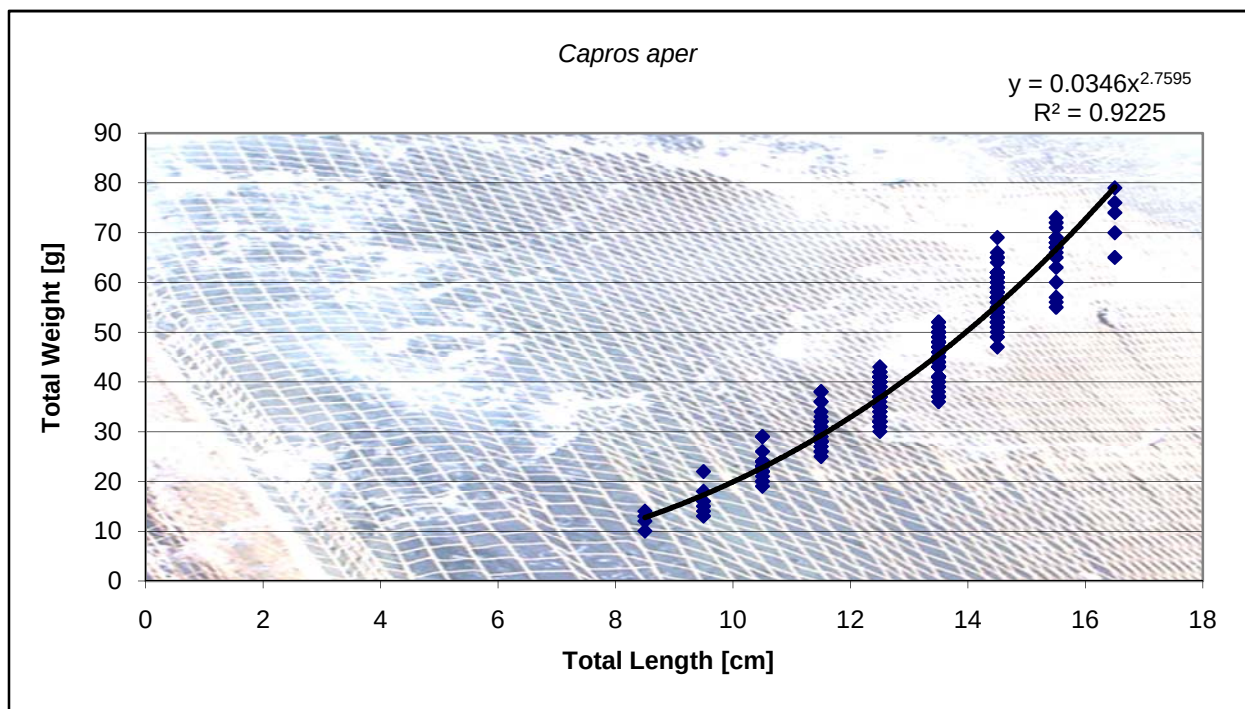
data collected

time period : 2001 - 2001

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
-	242	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	242	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	-	-	-	242	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	242	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

8.5 [cm]
16.5 [cm]

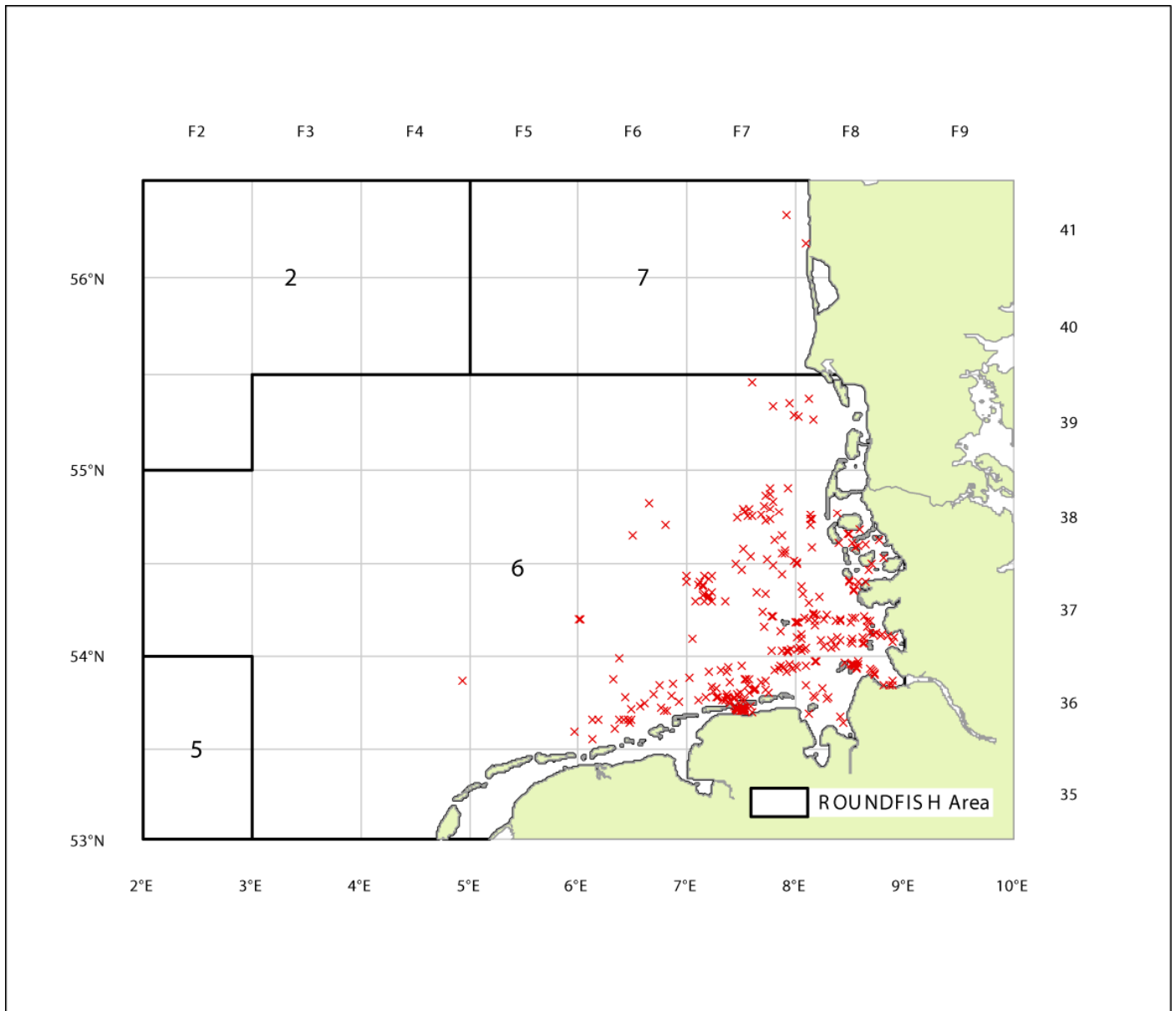
male
female
undefined

-
-
242

total numbers of data 242

Ciliata mustela

Geographical distribution of data used for calculating the length-weight relationship



Ciliata mustela

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0052

b = 3.169

data collected

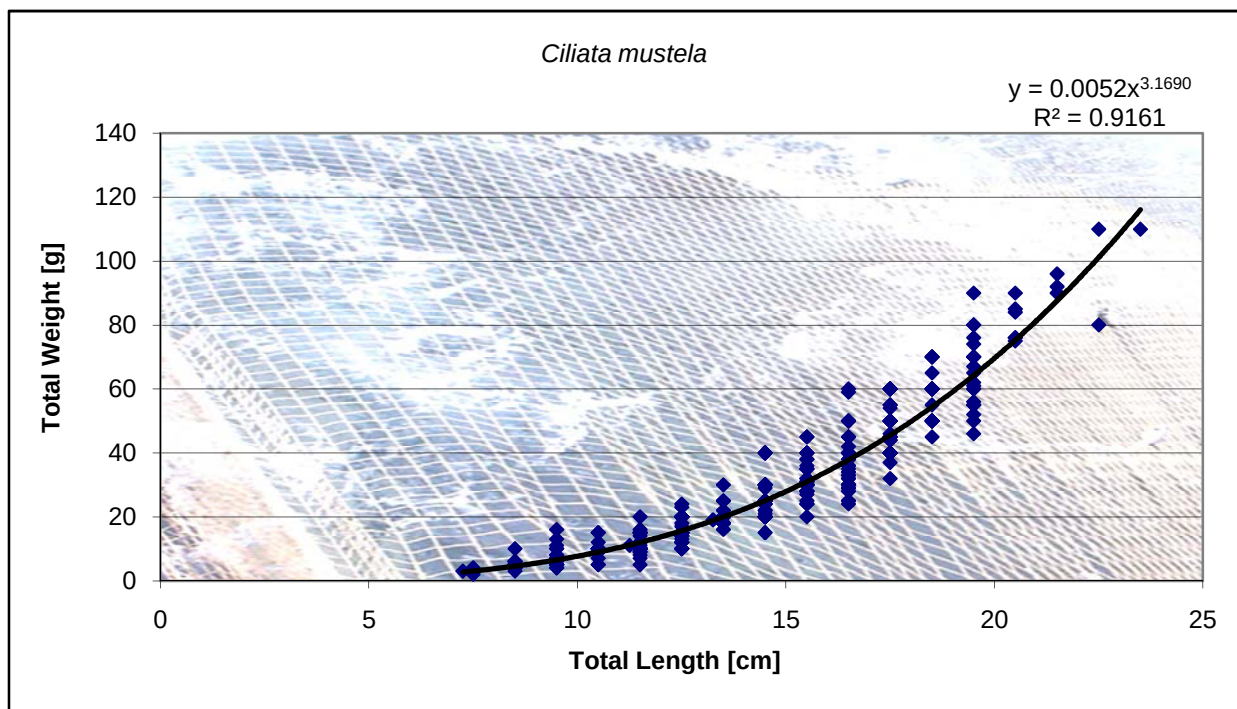
time period : 1994 - 2007

data source : research vessel

numbers of data:

Numbers of data:

Quarter																			
1	2	3	4																
160	12	75	60																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
139	21	-	5	7	-	4	2	69	23	9	28								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	307	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	307	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	-	-	-	-	307	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

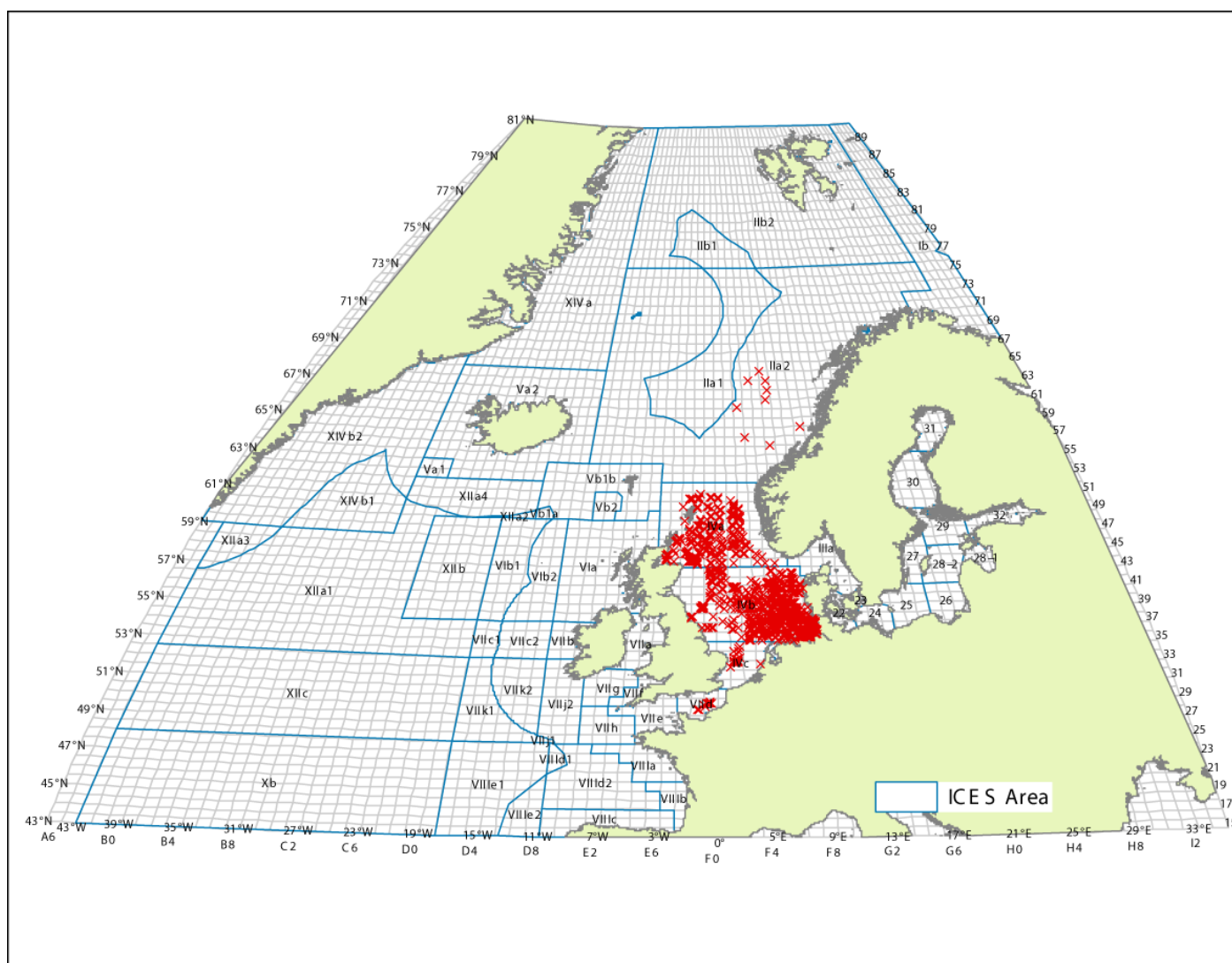
7.5 [cm]
23.5 [cm]

male -
female -
undefined 307

total numbers of data 307

Clupea harengus

Geographic distribution of data used for calculating the length-weight relationship



Clupea harengus

Quarter: 1 - 4

$$TW [g] = a * L [cm]^b$$

a = 0.0042

b = 3.1775

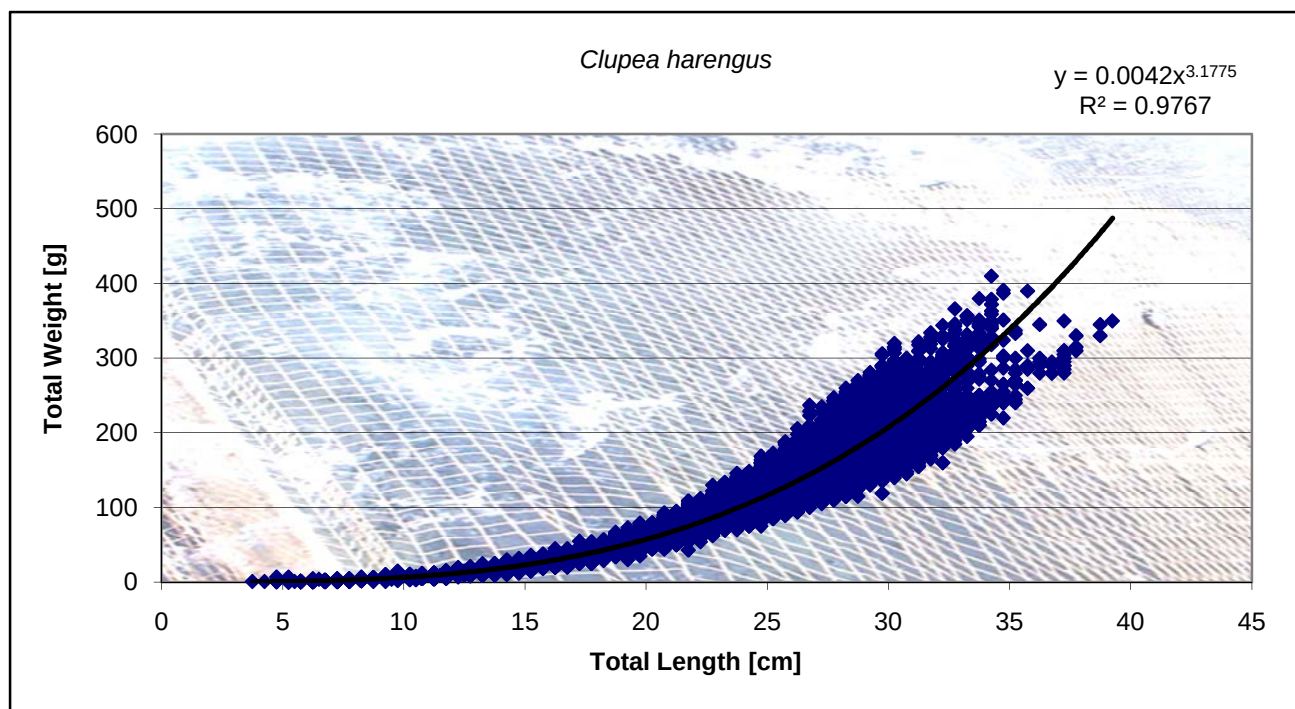
data collected

time period : 1996 - 2008

data source : research vessel, commercial trawler

numbers of data:

Numbers of data.																				
Quarter																				
1	2	3	4																	
9854	1761	11796	4012																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
4409	4814	631	156	91	1514	8655	2330	811	13	18	3981									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	631	-	23088	-	-	3704	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	631	-	-	-	-	-	7878	14661	549	-	-	-	-	-	-	-	3704	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
-	-	-	-	-	-	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9												
4153	2196	3432	1166	562	7203	4376	-	-												
1A	1B	1C	1D	1E	1F	2G	2H	2J												
-	-	-	-	-	-	-	-	-												



Method of Measurement

- Total length

- 1/2 cm below

min length

max length

3.75 [cm]

39.25 [cm]

male

female

undefined

10219

10292

6911

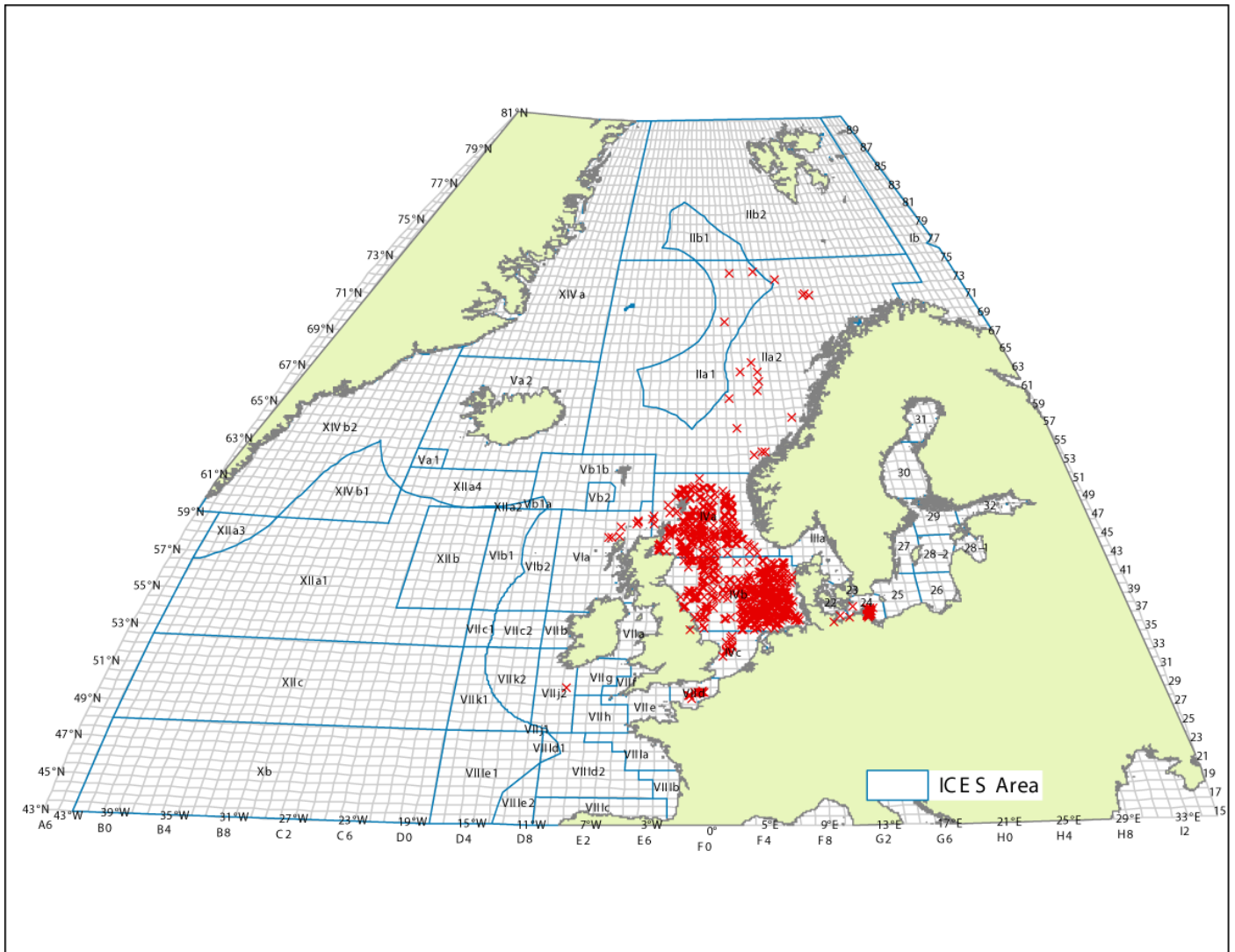
total numbers of data

27423

Clupea harengus



Geographical distribution of data used for calculating the length-weight relationship



Clupea harengus



Quarter: 1 - 4

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0036

b = 3.2448

data collected

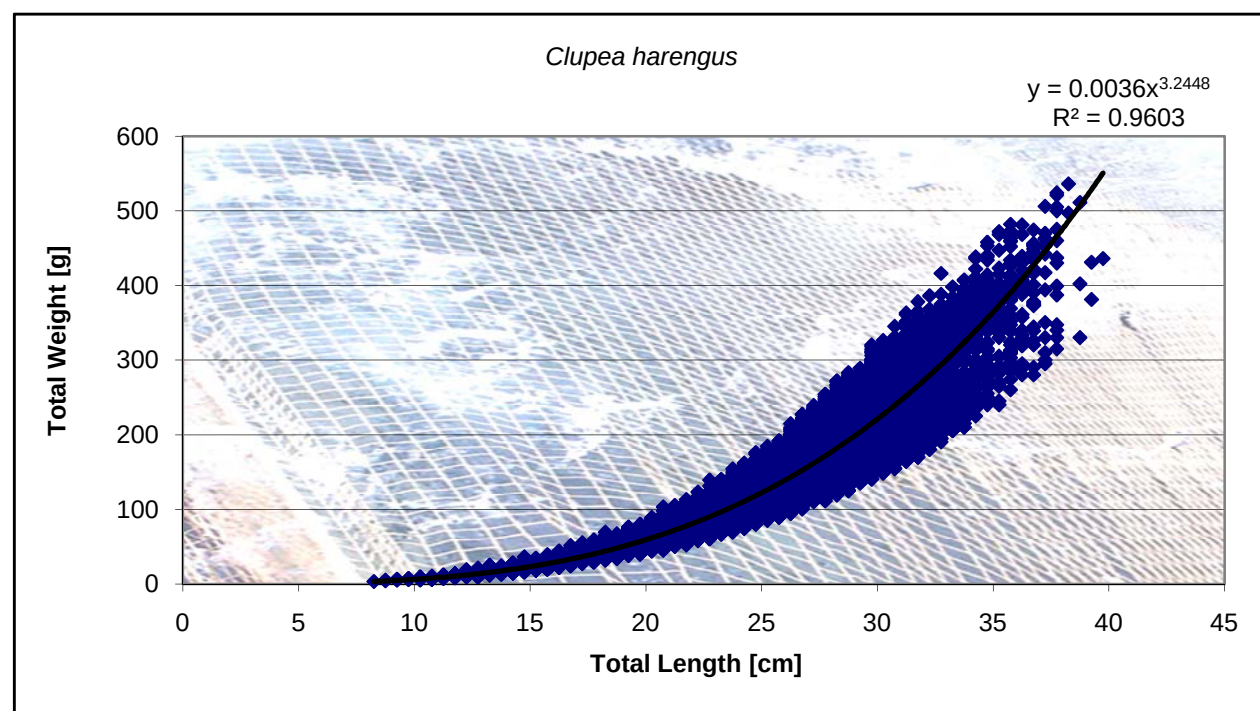
time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of data.

Quarter																			
1	2	3	4																
7271	2306	8969	3535																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
2718	3345	1208	640	509	1157	5755	2240	974	852	734	1949								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	1390	2387	15901	-	617	1786	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	1390	-	-	-	84	2303	7519	8240	142	-	-	617	-	-	-	-	1753	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	33	-	-	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
5105	1620	2978	1261	164	2734	1953	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length

- 1/2 cm below

min length

max length

6.25 [cm]

39.75 [cm]

male

female

undefined

-

22081

-

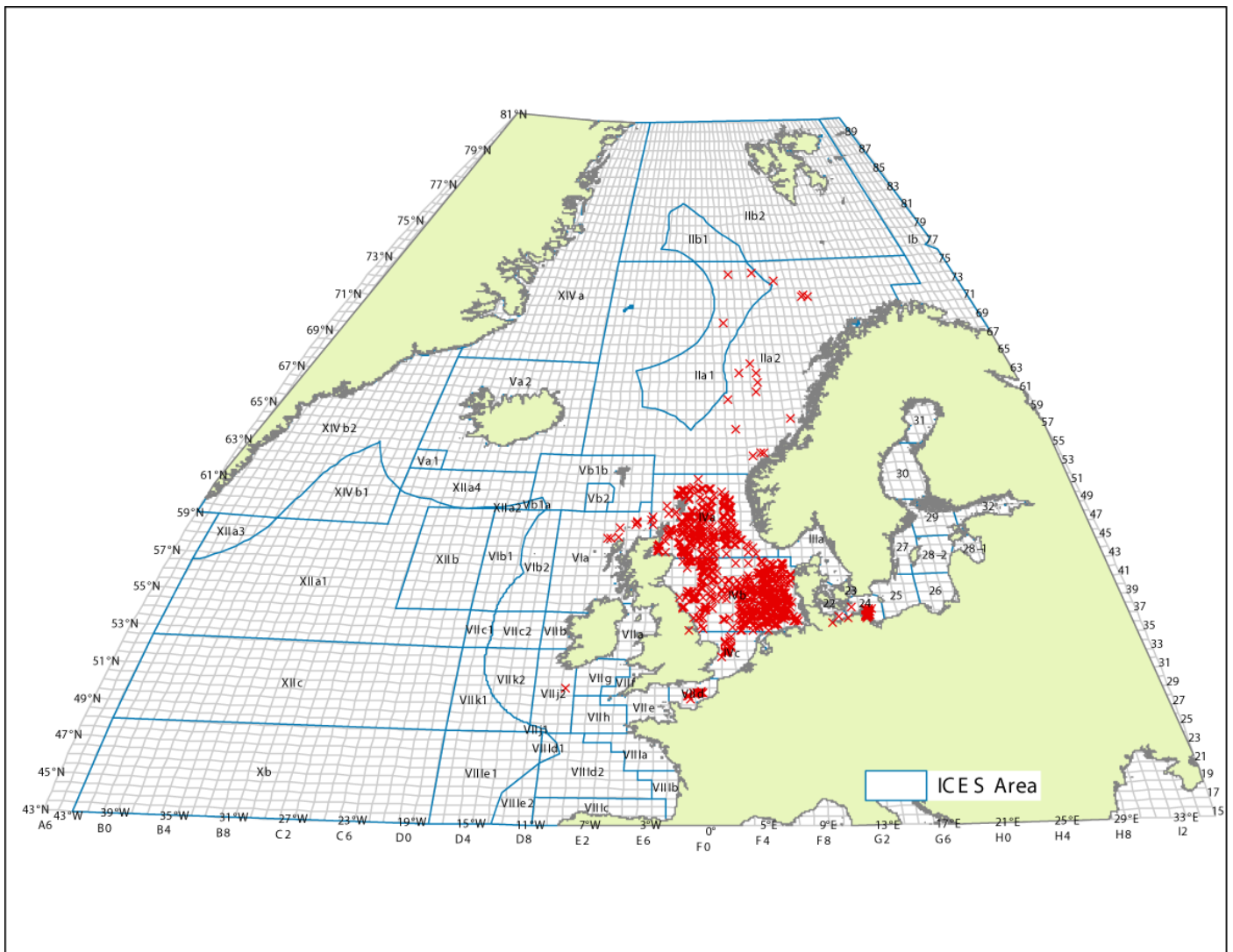
total numbers of data

22081

Clupea harengus



Geographical distribution of data used for calculating the length-weight relationship



Clupea harengus



Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0035

b = 3.2585

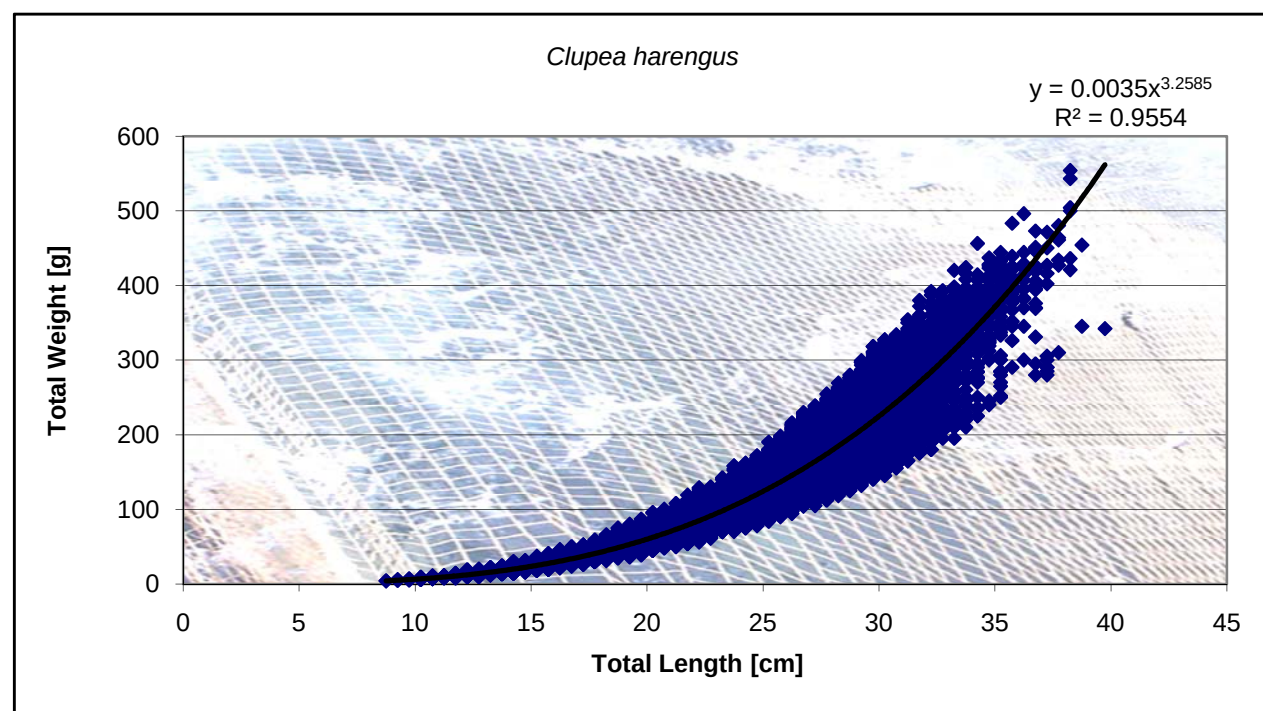
data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Quarter																		
1	2	3	4															
7115	2508	9163	3241															
Month																		
1	2	3	4	5	6	7	8	9	10	11	12							
2643	3292	1180	586	603	1319	6081	2098	984	771	675	1795							
Subarea																		
1	2	3	4	5	6	7	8	9	10	12	14							
-	1183	2230	16215	-	737	1662	-	-	-	-	-							
Division																		
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E
-	1183	-	-	-	82	2148	7621	8398	196	-	-	737	-	-	-	-	1640	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B								
-	-	22	-	-	-	-	-	-	-	-								
Roundfisharea											NAFO							
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H
5006	1676	3247	1359	218	2564	2048	-	-			-	-	-	-	-	-	-	-



Method of Measurement

- Total length

- 1/2 cm below

min length

max length

6.25 [cm]

39.75 [cm]

male

female

undefined

22027

-

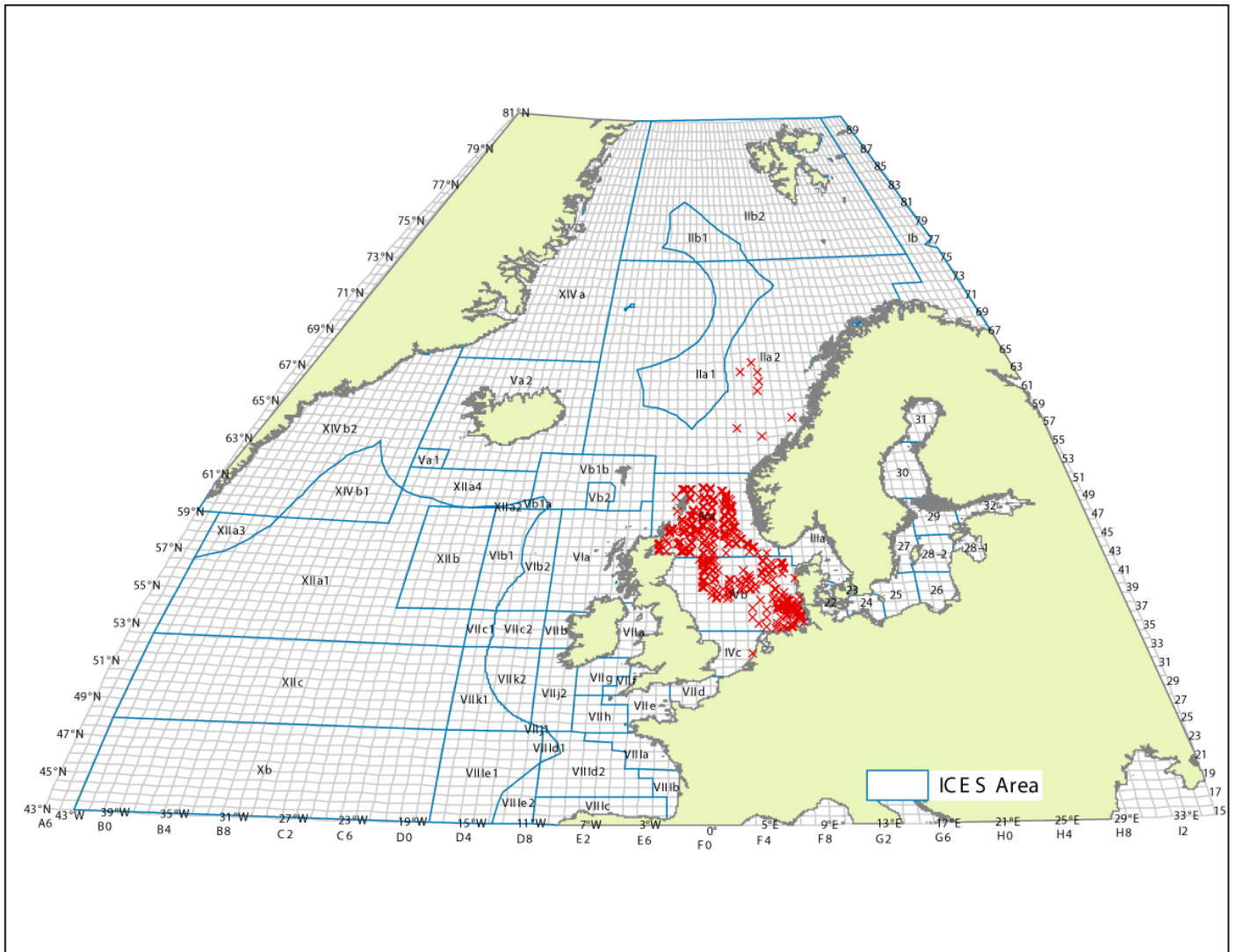
-

total numbers of data

22027

Clupea harengus Quarter 1

Geographical distribution of data used for calculating the length-weight relationship



Clupea harengus

Quarter: 1

$Tw [g] = a * L [cm]^b$

$a = 0.0038$

$b = 3.164$

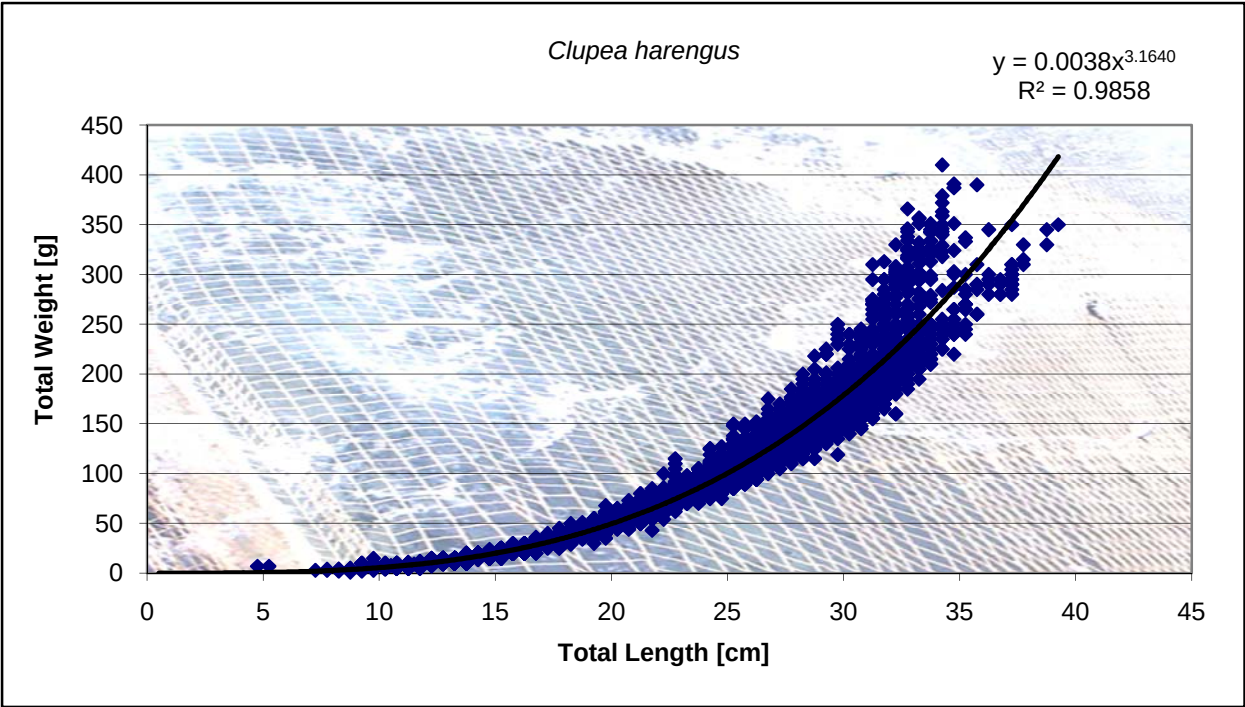
data collected

time period : 1996 - 2008

data source : research vessel

numbers of data:

Quarter																				
1	2	3	4																	
9854	-	-	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
4409	4814	631	-	-	-	-	-	-	-	-	-	-								
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	608	-	9246	-	-	-	-	-	-	-	-	-								
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	608	-	-	-	-	-	5314	3931	1	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
-	-	-	-	-	-	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9												
2939	1819	2099	-	-	1475	914	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J			
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

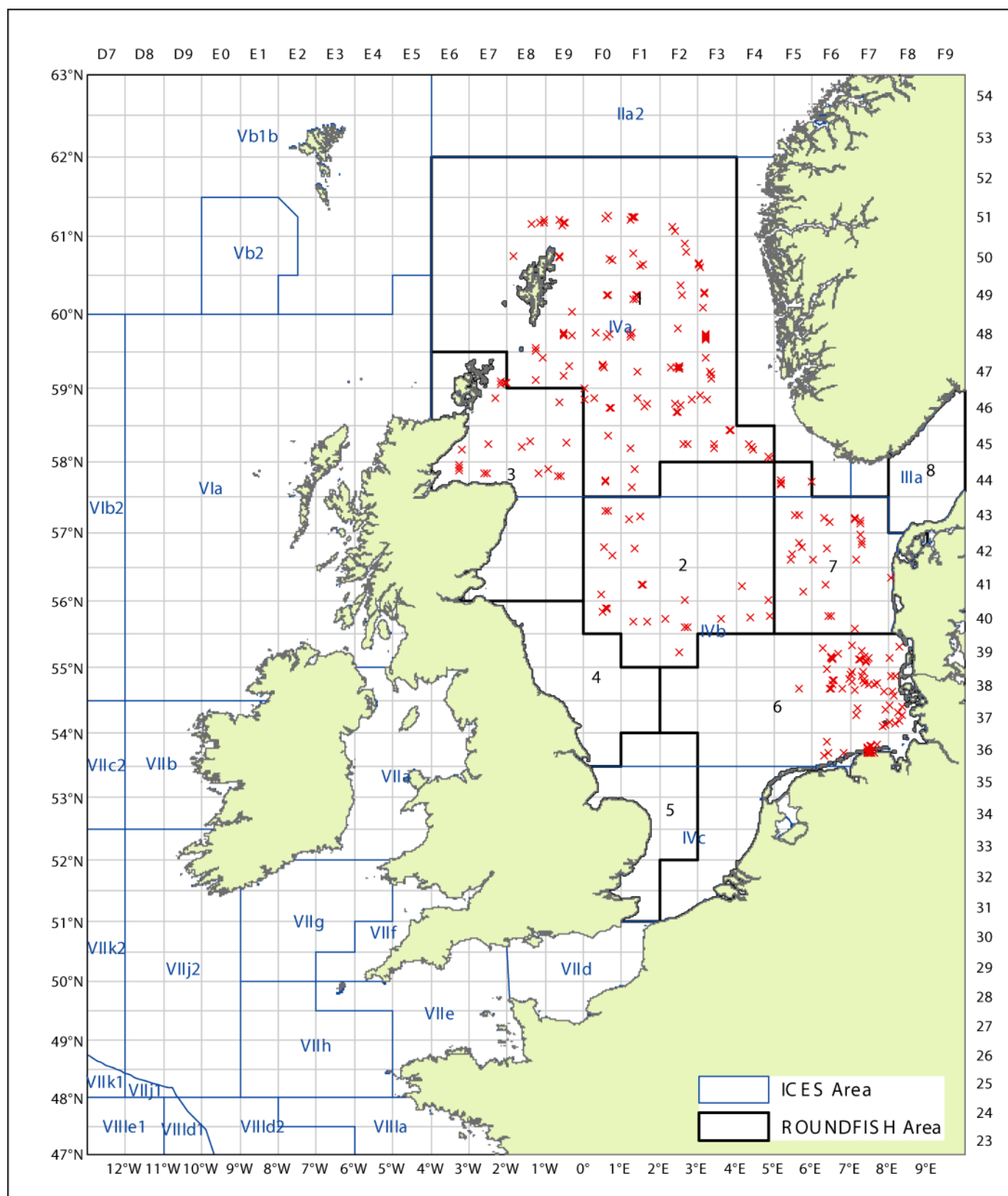


Method of Measurement

- Total length	male	4295
- 1/2 cm below	female	4388
min length	undefined	1171
max length		
4.75 [cm]		
39.25 [cm]		
total numbers of data		9854

Clupea harengus January

Geographical distribution of data used for calculating the length-weight relationship



Clupea harengus

January

$Tw [g] = a * L [cm]^b$

$a = 0.0036$

$b = 3.1839$

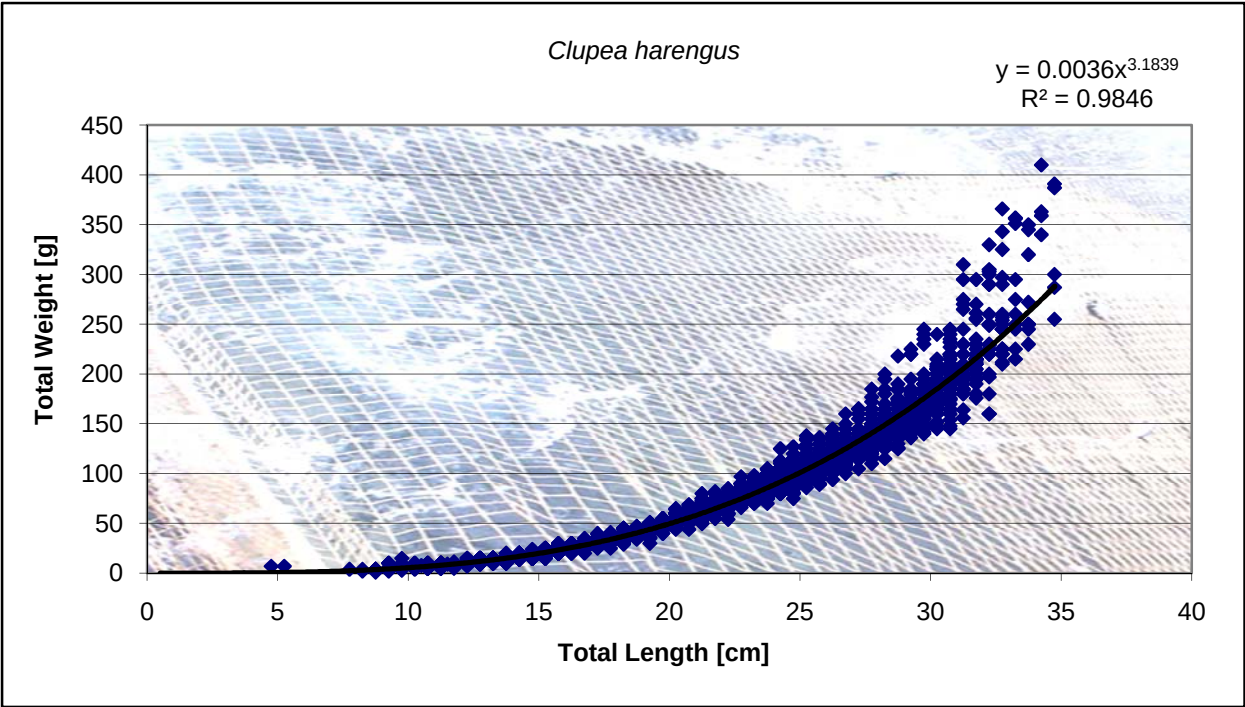
data collected

time period : 1996 - 2008

data source : research vessel

numbers of data:

Quarter																				
1	2	3	4																	
4409	-	-	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
4409	-	-	-	-	-	-	-	-	-	-	-	-								
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	4409	-	-	-	-	-	-	-	-	-								
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	2300	2109	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
-	-	-	-	-	-	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9												
1755	409	444	-	-	1070	731	-	-												
									1A	1B	1C	1D	1E	1F	2G	2H	2J			
									-	-	-	-	-	-	-	-	-			

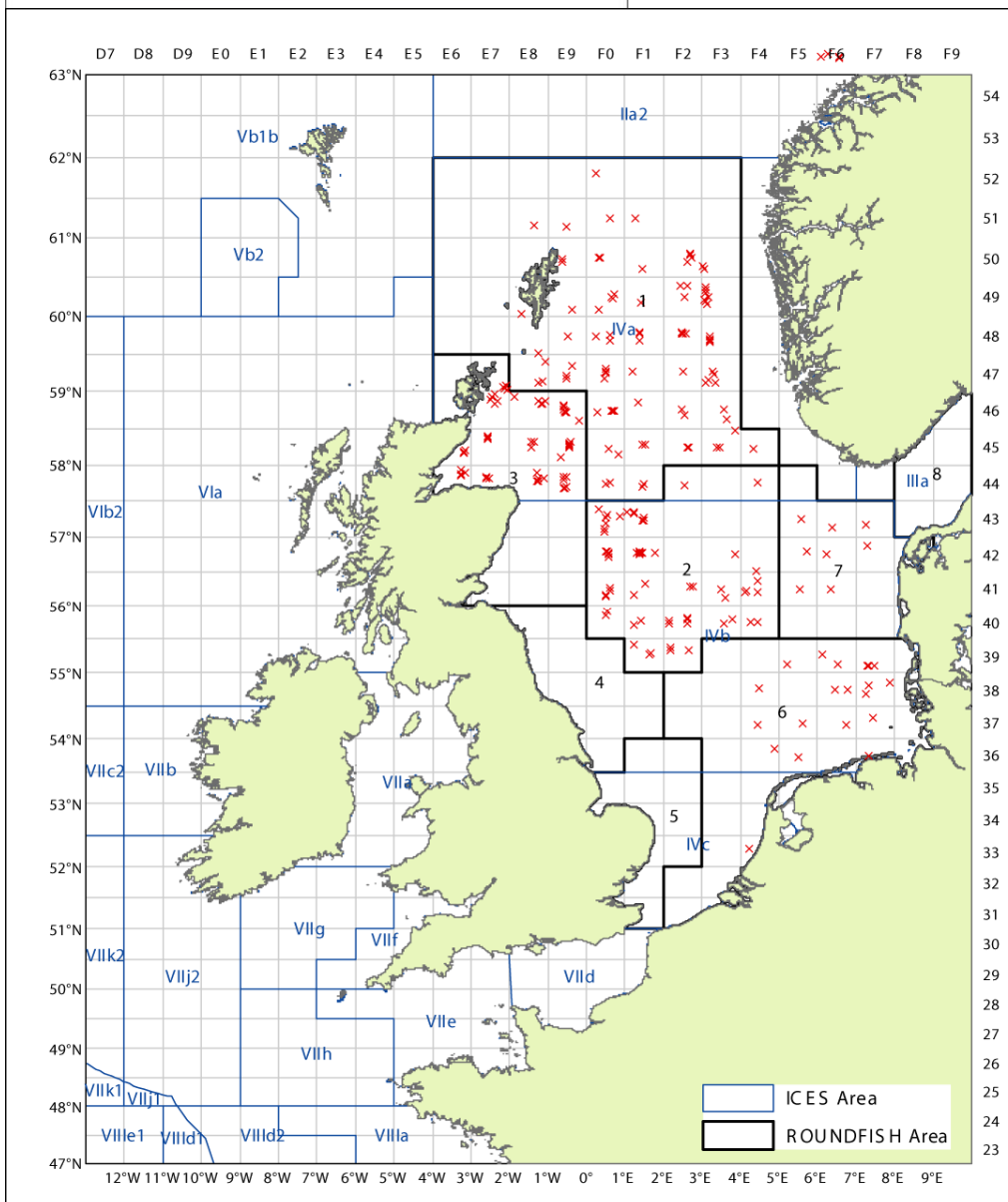
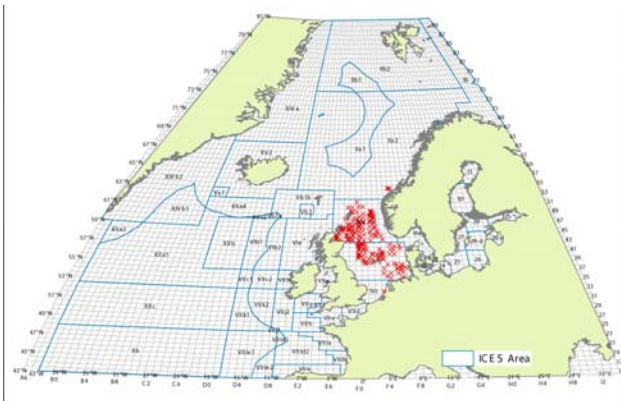


Method of Measurement

- Total length	male	1871
- 1/2 cm below	female	1913
min length	undefined	625
max length	total numbers of data	4409

Clupea harengus *February*

Geographical distribution of data used for calculating the length-weight relationship



Clupea harengus

February

$Tw [g] = a * L [cm]^b$

$a = 0.0029$

$b = 3.253$

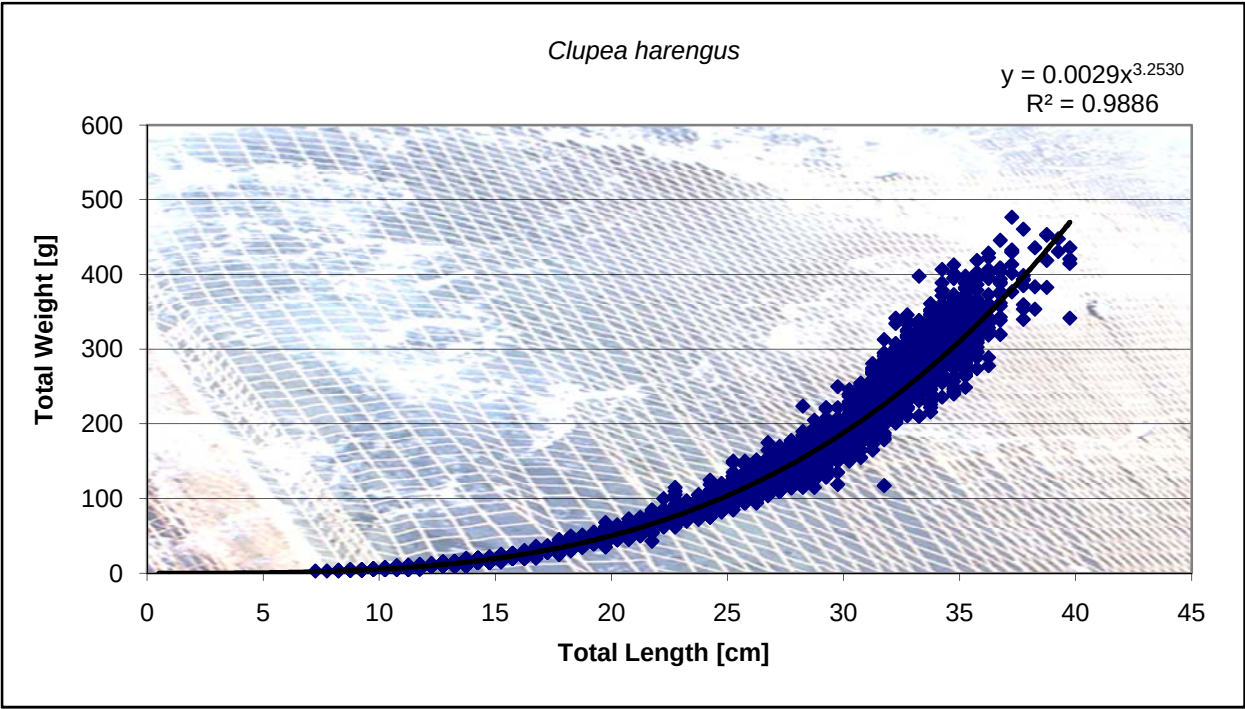
data collected

time period : 1996 - 2008

data source : research vessel

numbers of data:

Quarter																				
1	2	3	4																	
5749	-	-	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	5749	-	-	-	-	-	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	730	-	5019	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	730	-	-	-	-	-	3219	1799	1	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
1389	1410	1655	-	-	382	183	-	-			-	-	-	-	-	-	-	-	-	

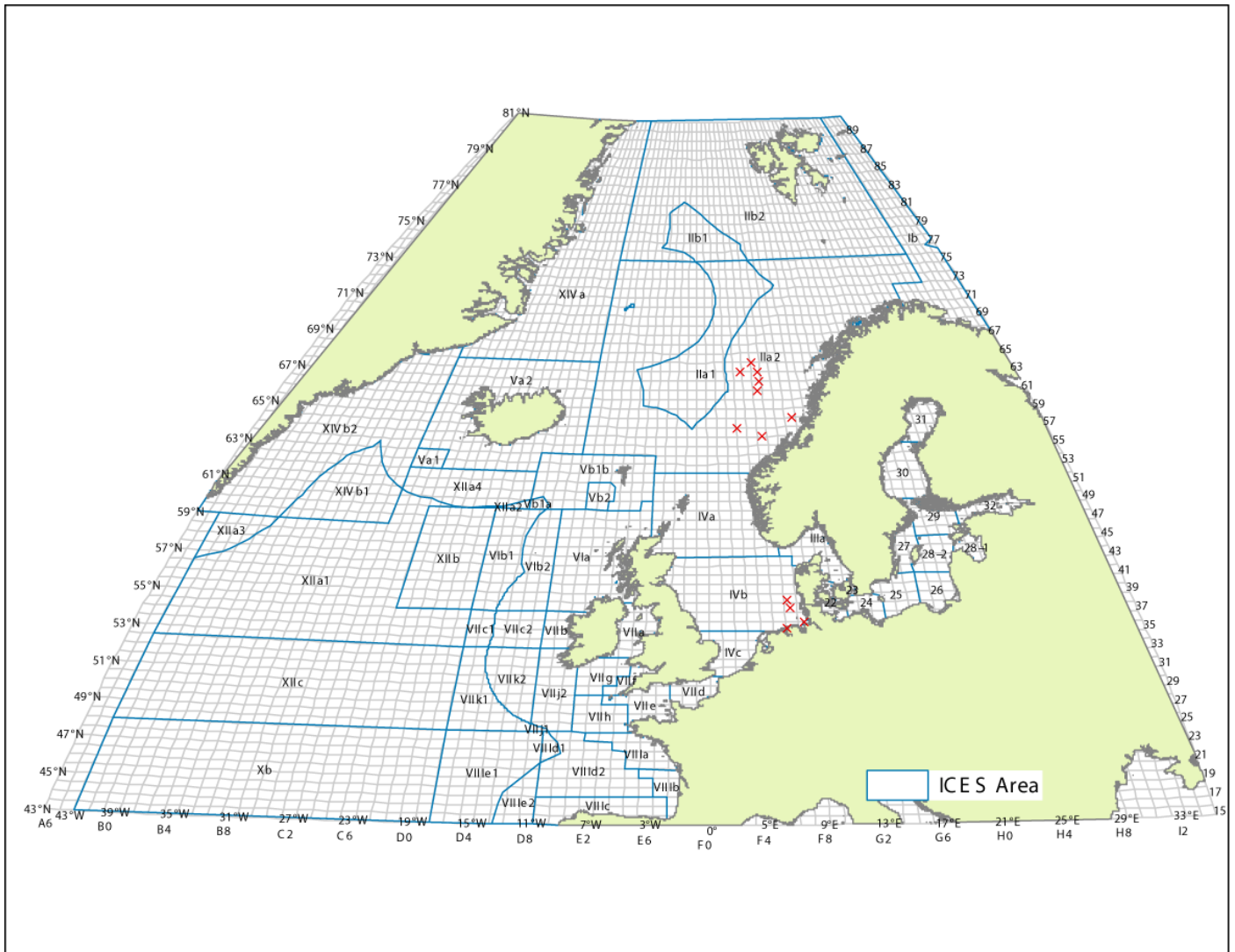


Method of Measurement

- Total length	male	2345
- 1/2 cm below	female	2358
min length	undefined	1046
max length	total numbers of data	5749
7.25 [cm]		
39.75 [cm]		

Clupea harengus March

Geographical distribution of data used for calculating the length-weight relationship



Clupea harengus

March

$$Tw [g] = a * L [cm]^b$$

a = 0.0046

b = 3.0789

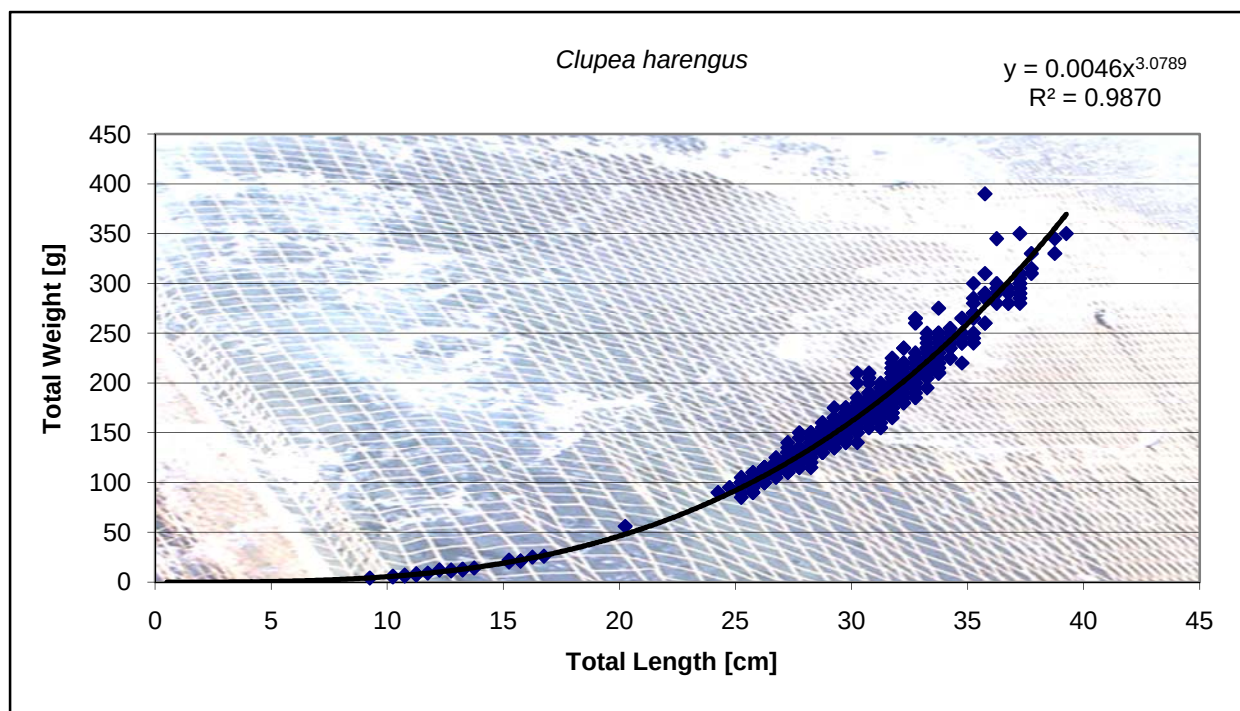
data collected

time period : 1997 - 2000

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
631	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	631	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	608	-	23	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	608	-	-	-	-	-	-	23	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	-	-	-	-	23	-	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- 1/2 cm below

min length
max length

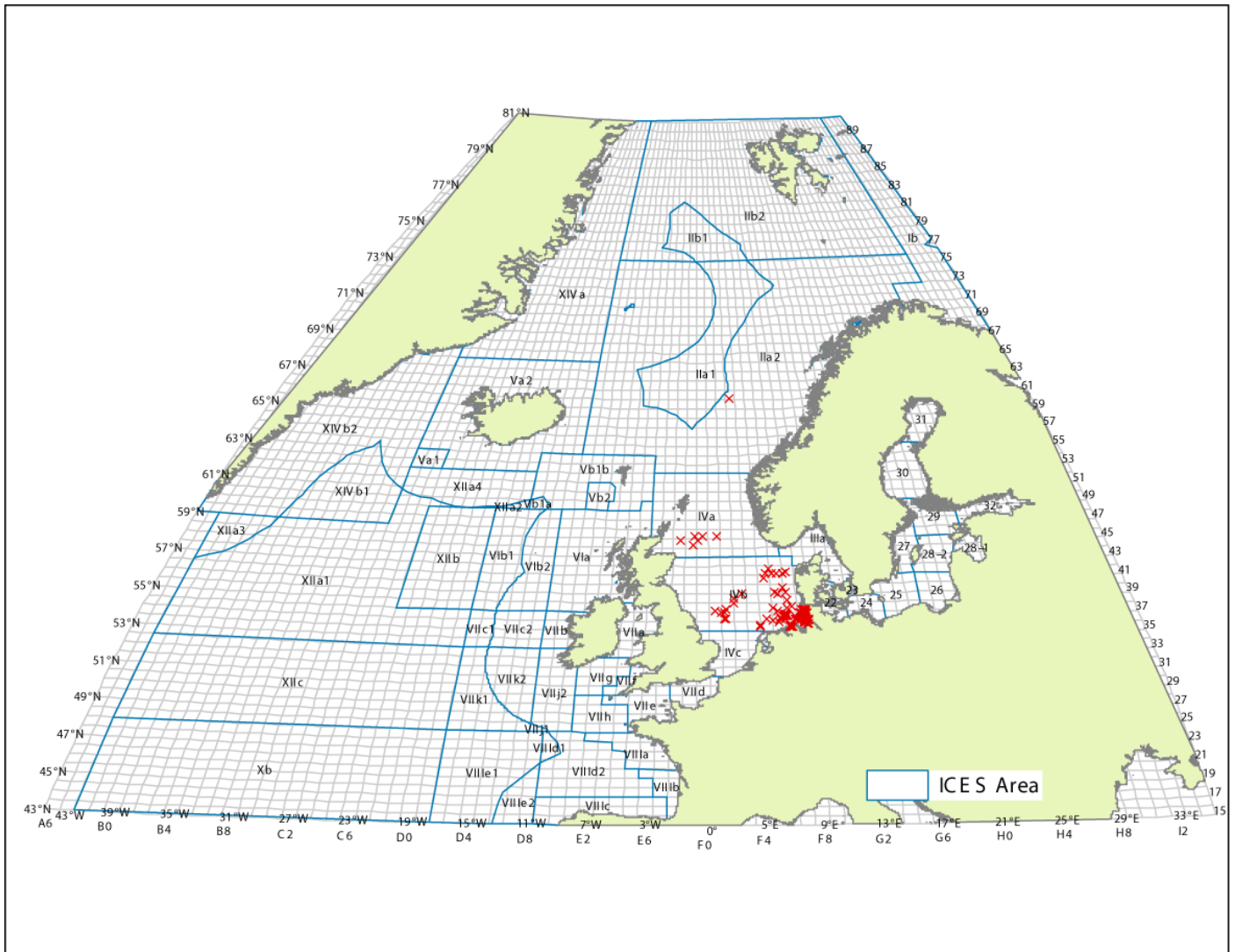
9.25 [cm]
39.25 [cm]

male 256
female 330
undefined 45

total numbers of data 631

Clupea harengus Quarter 2

Geographical distribution of data used for calculating the length-weight relationship



Clupea harengus

Quarter: 2

$$Tw [g] = a * L [cm]^b$$

a = 0.0043

b = 3.1879

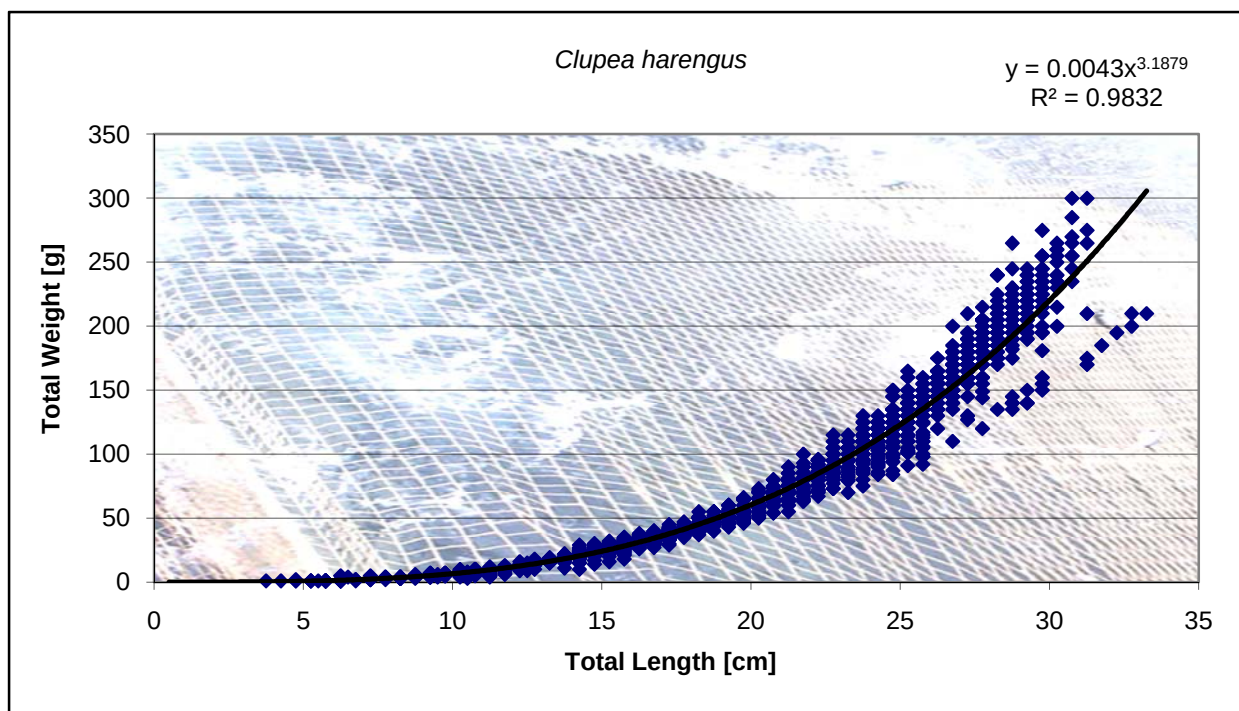
data collected

time period : 1996 - 2006

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	1761	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	156	91	1514	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	23	-	1738	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	23	-	-	-	-	-	750	988	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
381	1	369	1	-	545	441	-	-											



Method of Measurement

- Total length
- 1/2 cm below

min length
max length

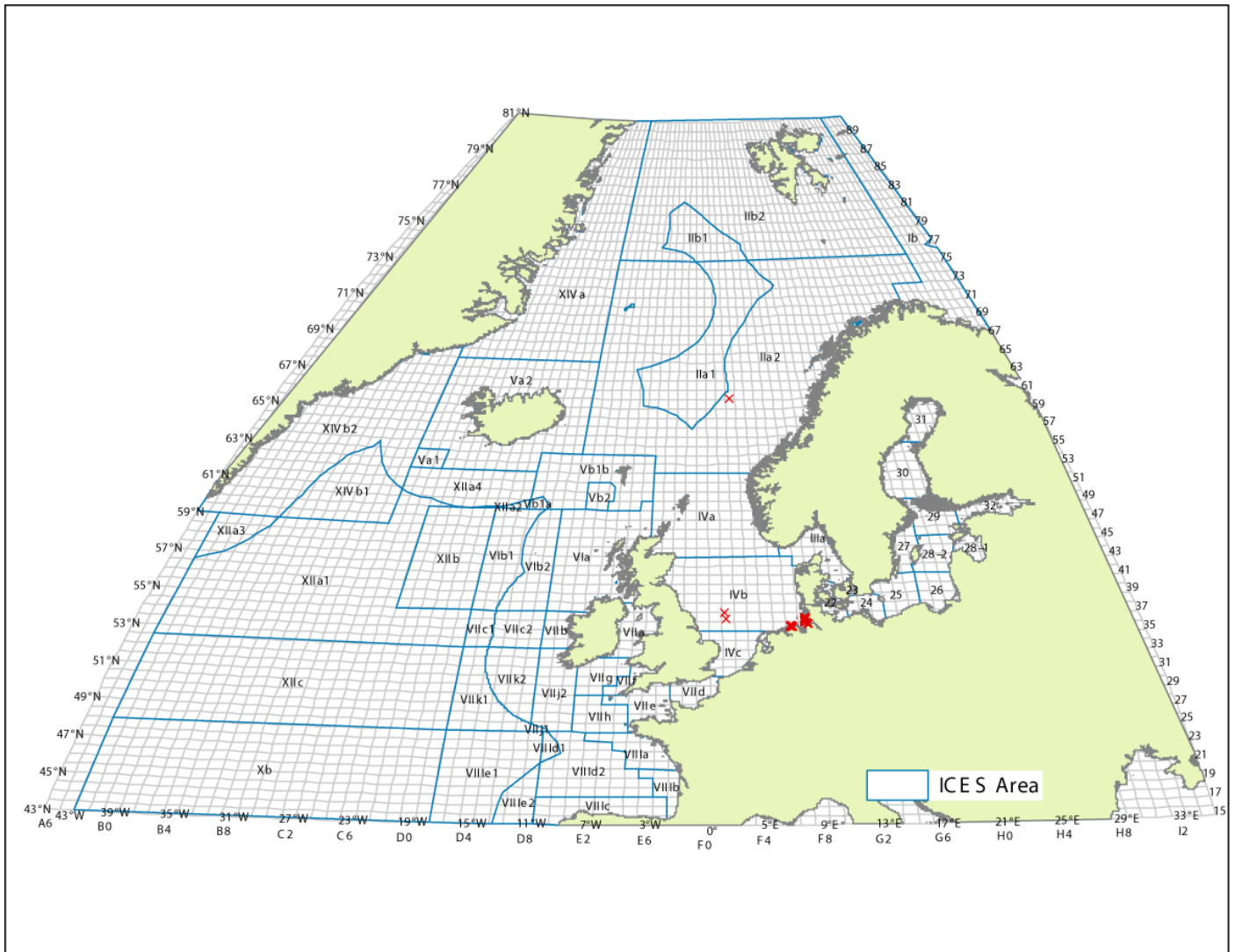
3.75 [cm]
33.25 [cm]

male 723
female 622
undefined 416

total numbers of data 1761

Clupea harengus April

Geographical distribution of data used for calculating the length-weight relationship



Clupea harengus

April

$Tw [g] = a * L [cm]^b$

$a = 0.0057$

$b = 3.0391$

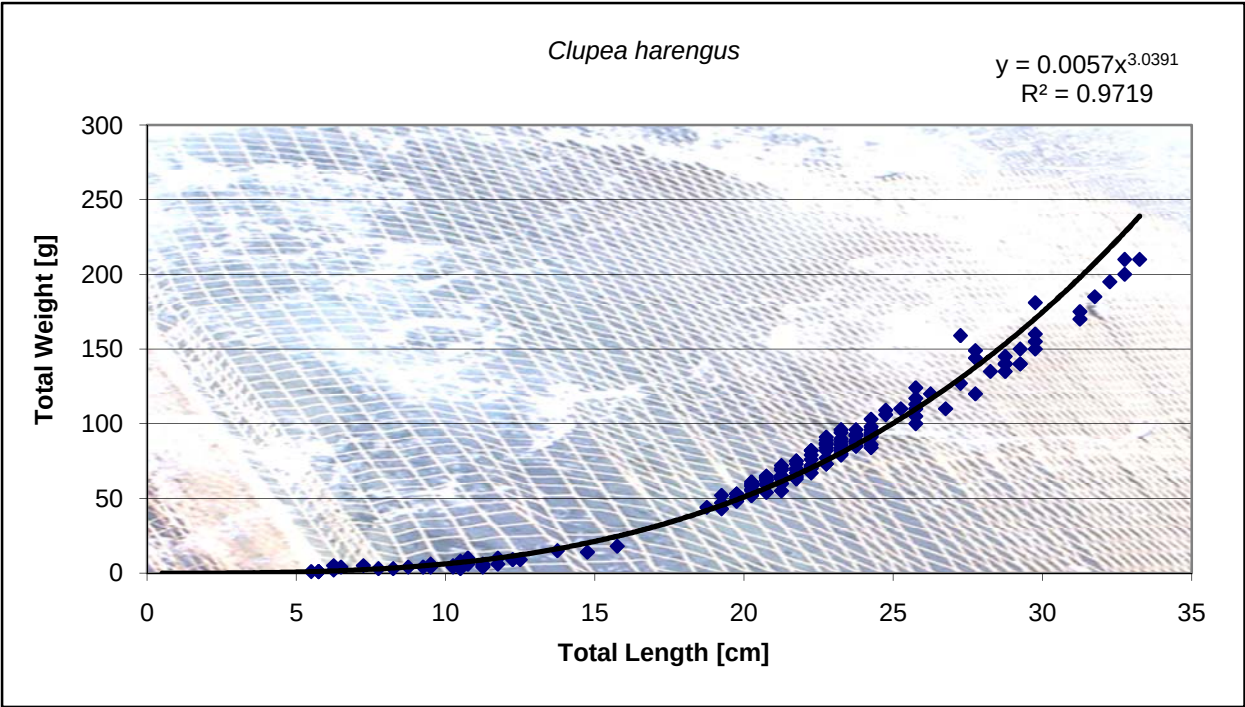
data collected

time period : 1996 - 2004

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	156	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	156	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	23	-	133	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	23	-	-	-	-	-	-	133	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	-	-	-	-	133	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											

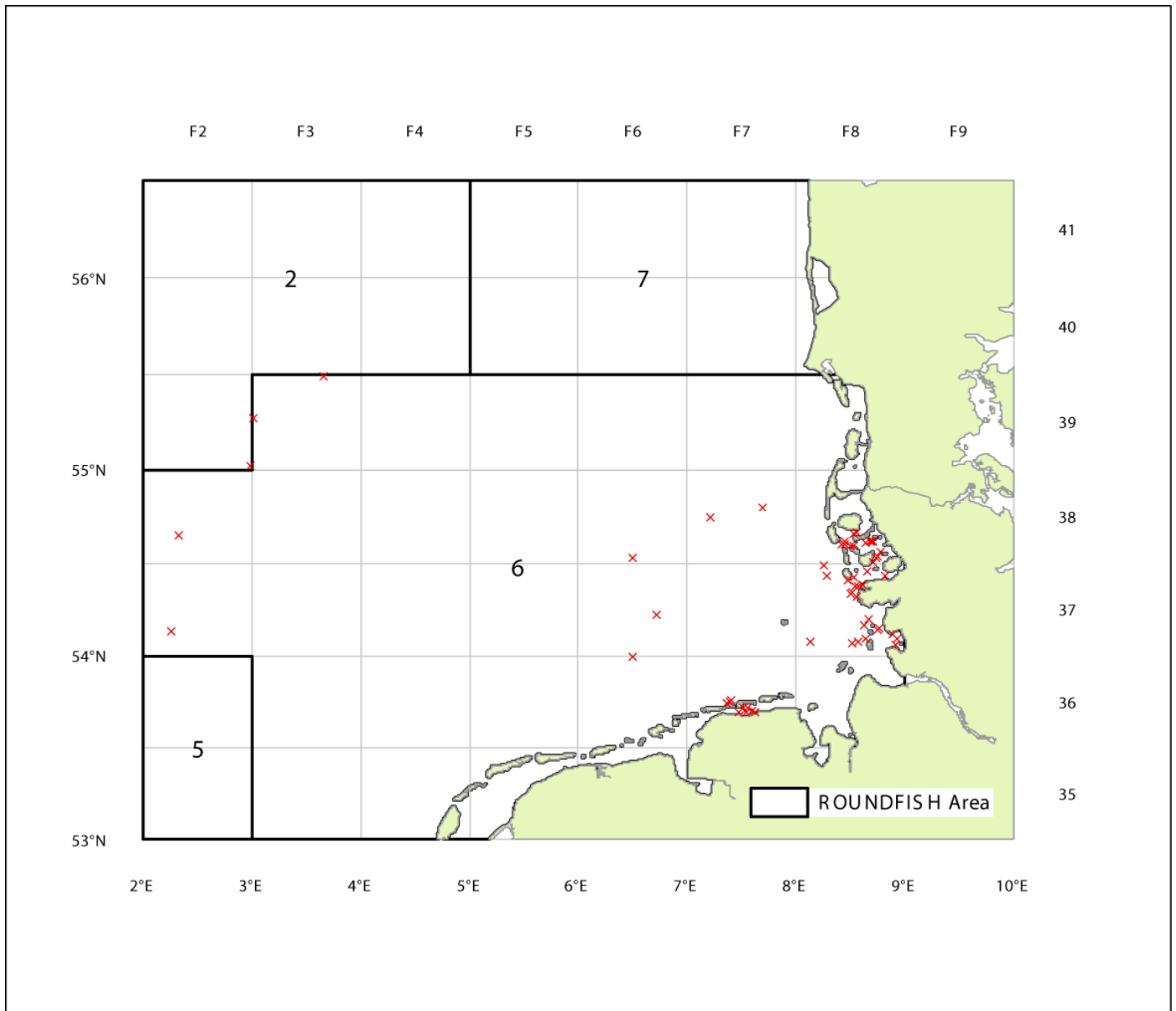


Method of Measurement

- Total length	male	66
- 1/2 cm below	female	57
min length	undefined	33
max length		
5.25 [cm]		
33.25 [cm]	total numbers of data	156

Clupea harengus *May*

Geographical distribution of data used for calculating the length-weight relationship



Clupea harengus

May

$Tw [g] = a * L [cm]^b$

$a = 0.0076$

$b = 2.9252$

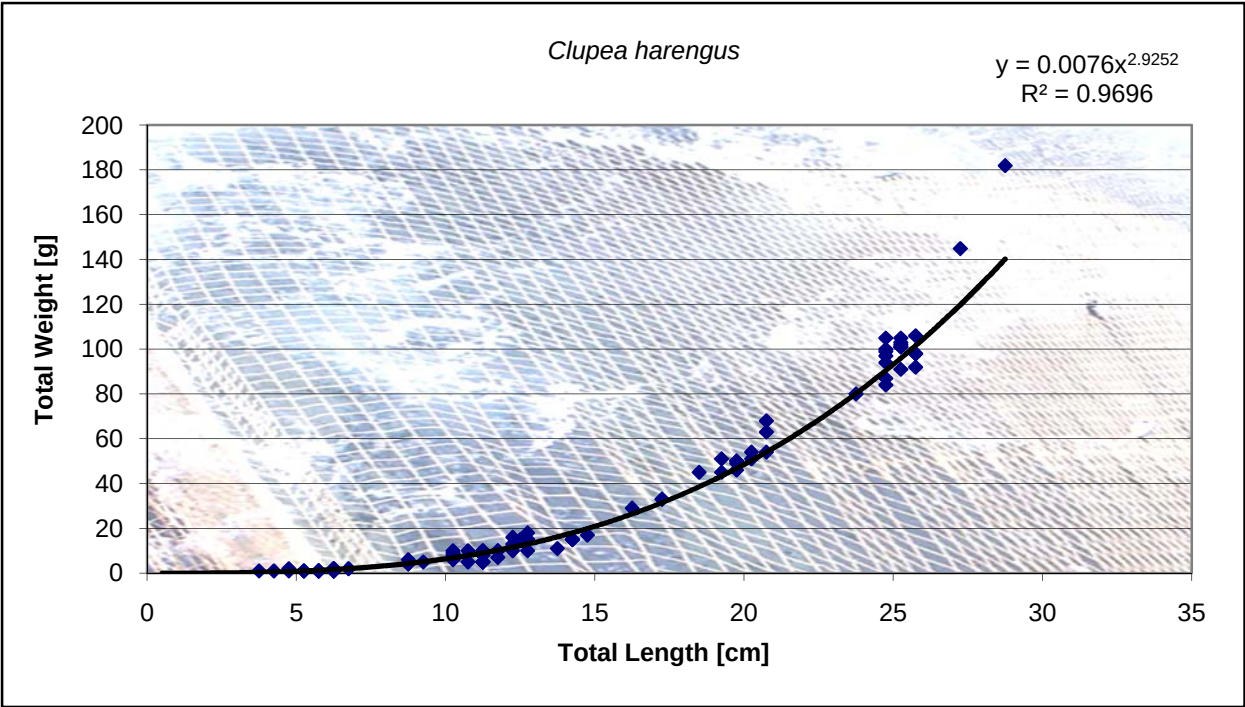
data collected

time period : 1996 - 2006

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	91	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	91	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	91	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	91	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	1	-	-	-	90	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											

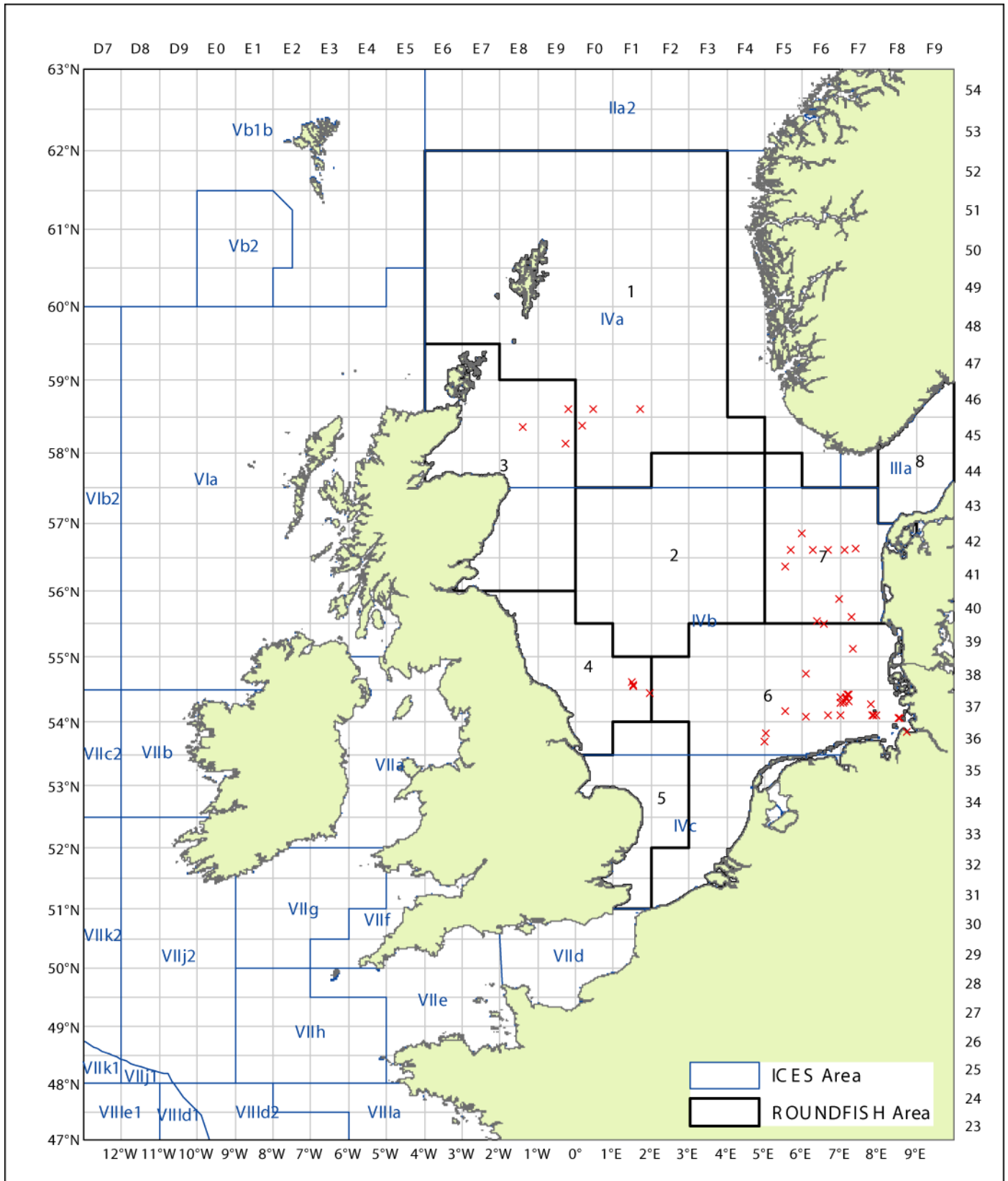


Method of Measurement

			male	19
			female	11
			undefined	61
- Total length				
- 1/2 cm below				
min length	3.75 [cm]			
max length	28.75 [cm]			
			total numbers of data	91

Clupea harengus June

Geographical distribution of data used for calculating the length-weight relationship



Clupea harengus

June

$$Tw [g] = a * L [cm]^b$$

a = 0.0038

b = 3.2383

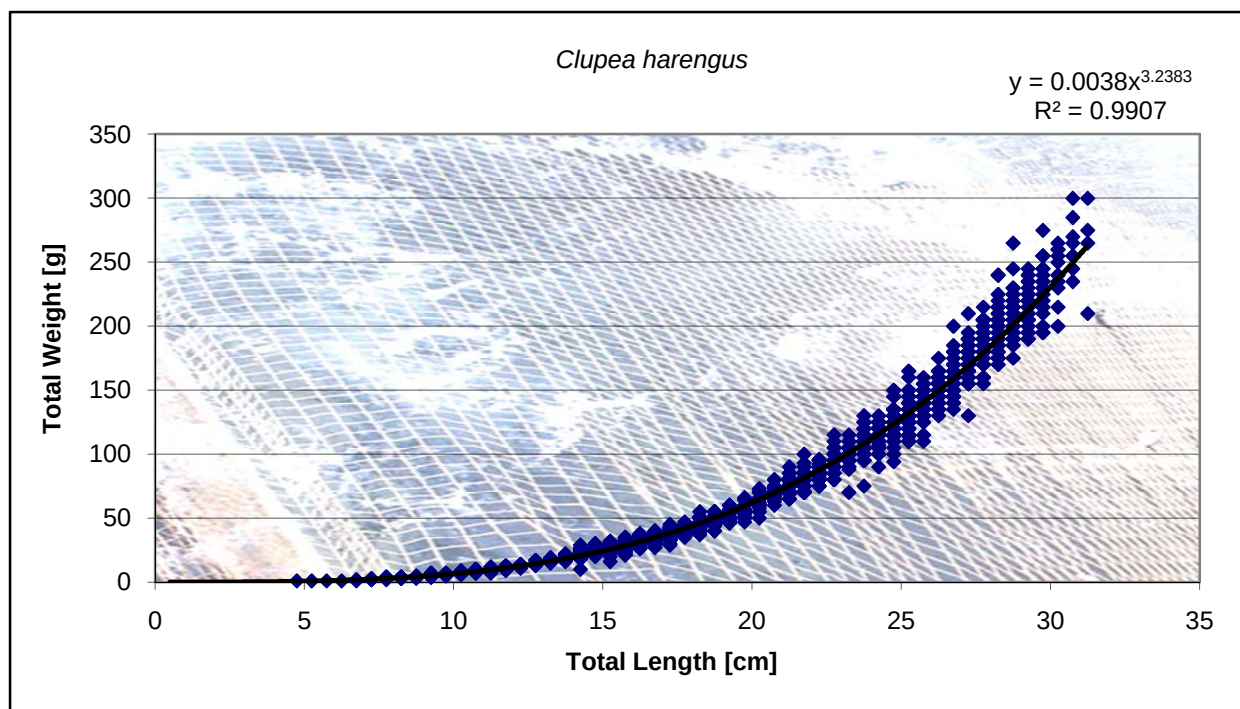
data collected

time period : 1996 - 2004

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	1514	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	1514	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1514	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	750	764	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
381	-	369	1	-	322	441	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- 1/2 cm below

min length
max length

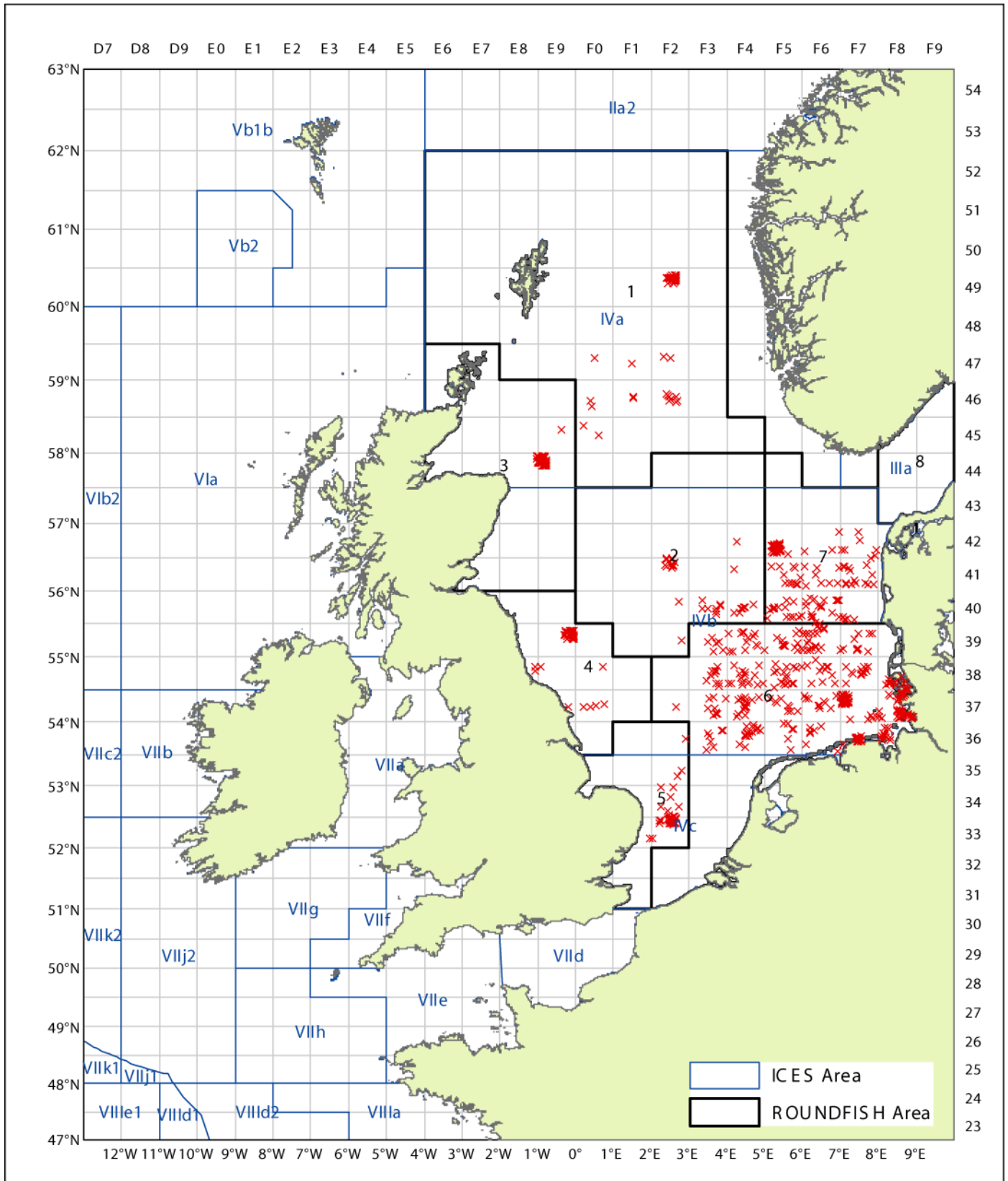
4.75 [cm]
31.25 [cm]

male 638
female 554
undefined 322

total numbers of data 1514

Clupea harengus *Quarter 3*

Geographical distribution of data used for calculating the length-weight relationship



Clupea harengus

Quarter: 3

$Tw [g] = a * L [cm]^b$

$a = 0.0033$

$b = 3.2912$

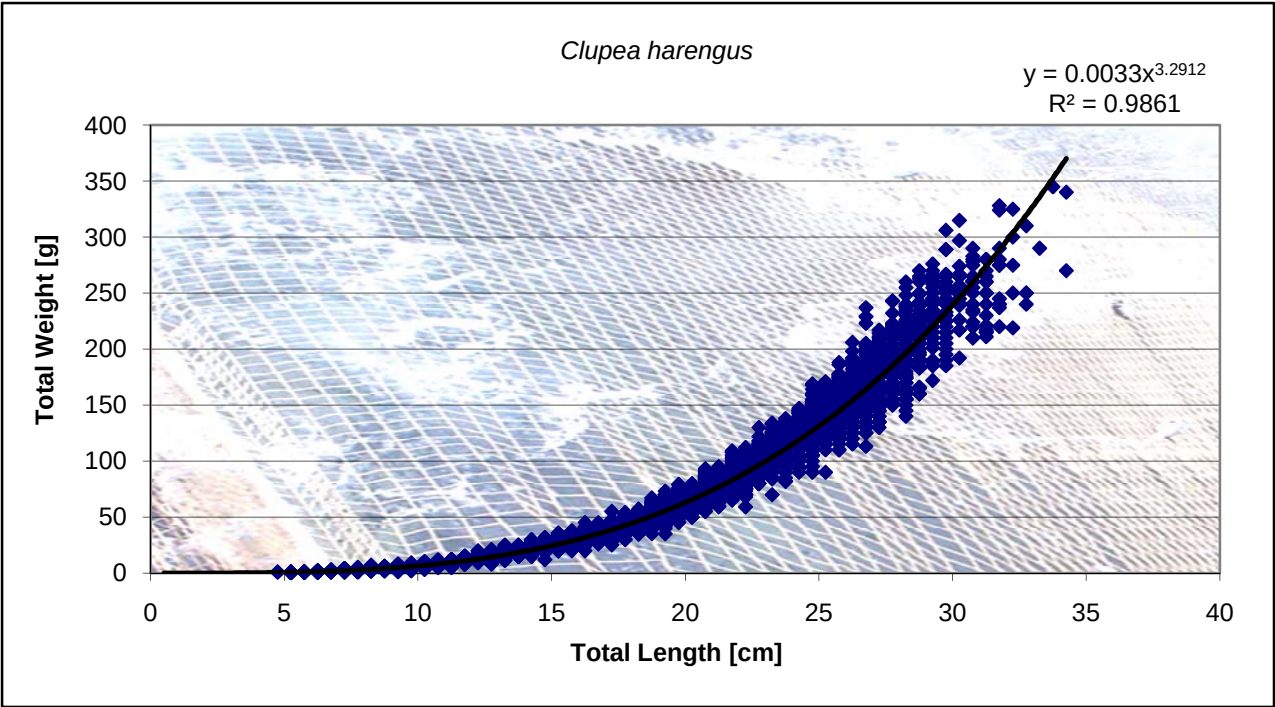
data collected

time period : 1996 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	-	11796	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	8655	2330	811	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	11796	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	1539	9709	548	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
558	375	961	1165	562	5154	3021	-	-		-	-	-	-	-	-	-	-	-	-

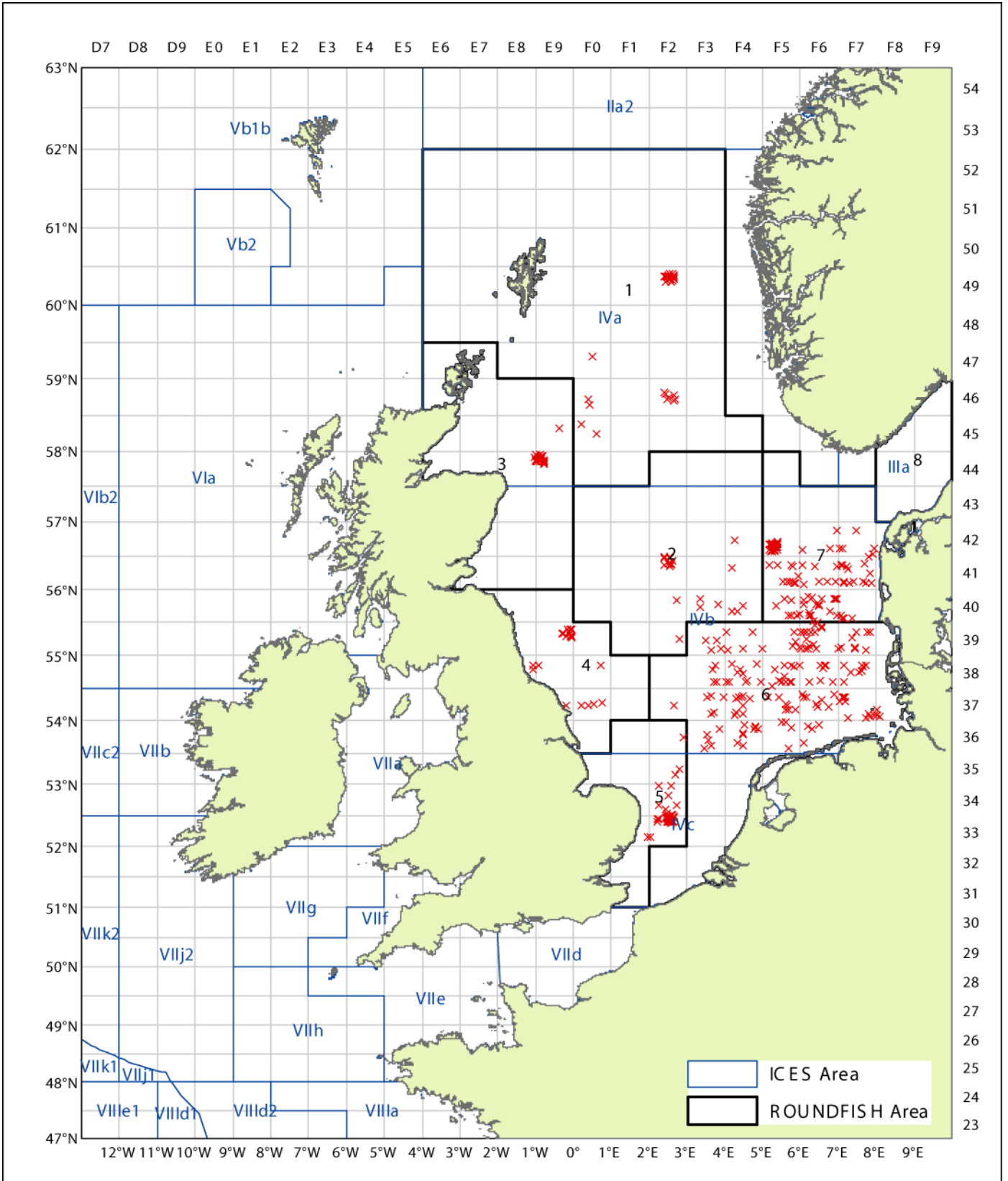


Method of Measurement

- Total length	male	4323
- 1/2 cm below	female	4323
min length	undefined	3150
max length	total numbers of data	11796
4.75 [cm]		
34.25 [cm]		

Clupea harengus *July*

Geographical distribution of data used for calculating the length-weight relationship



Clupea harengus

July

$Tw [g] = a * L [cm]^b$

$a = 0.0032$

$b = 3.3017$

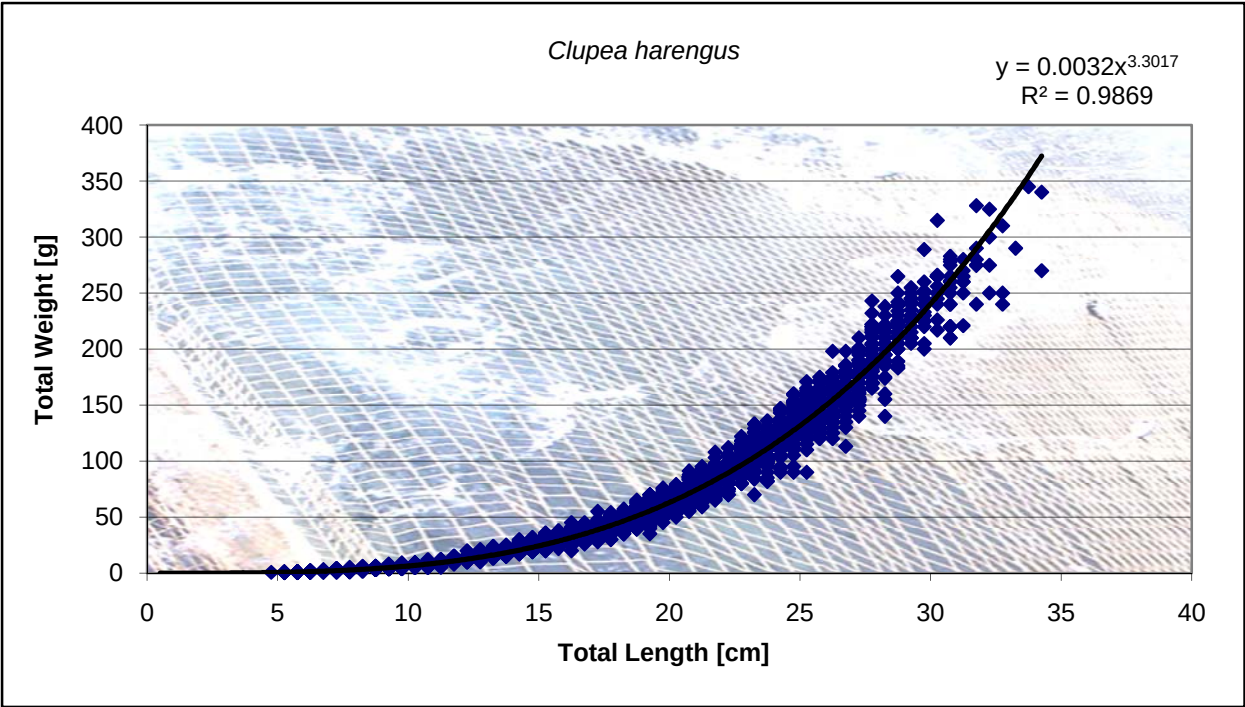
data collected

time period : 1996 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	-	8655	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	8655	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	8655	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	870	7237	548	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
337	250	519	730	561	3685	2573	-	-											
-	-	-	-	-	-	-	-	-											

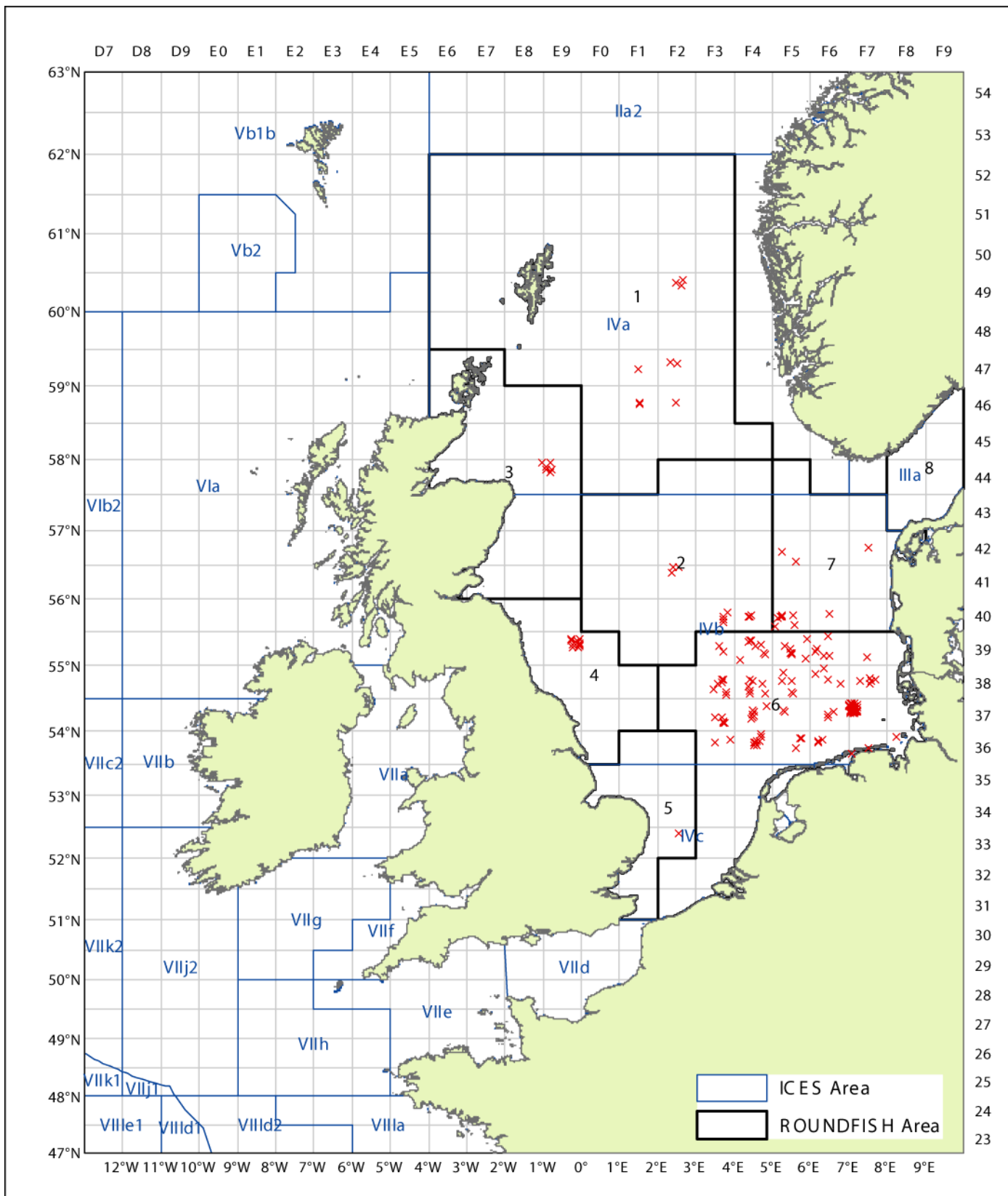


Method of Measurement

- Total length	male	3247
- 1/2 cm below	female	3138
min length	undefined	2270
max length	total numbers of data	8655
4.75 [cm]		
34.25 [cm]		

Clupea harengus *August*

Geographical distribution of data used for calculating the length-weight relationship



Clupea harengus

August

$$Tw [g] = a * L [cm]^b$$

a = 0.0037

b = 3.2582

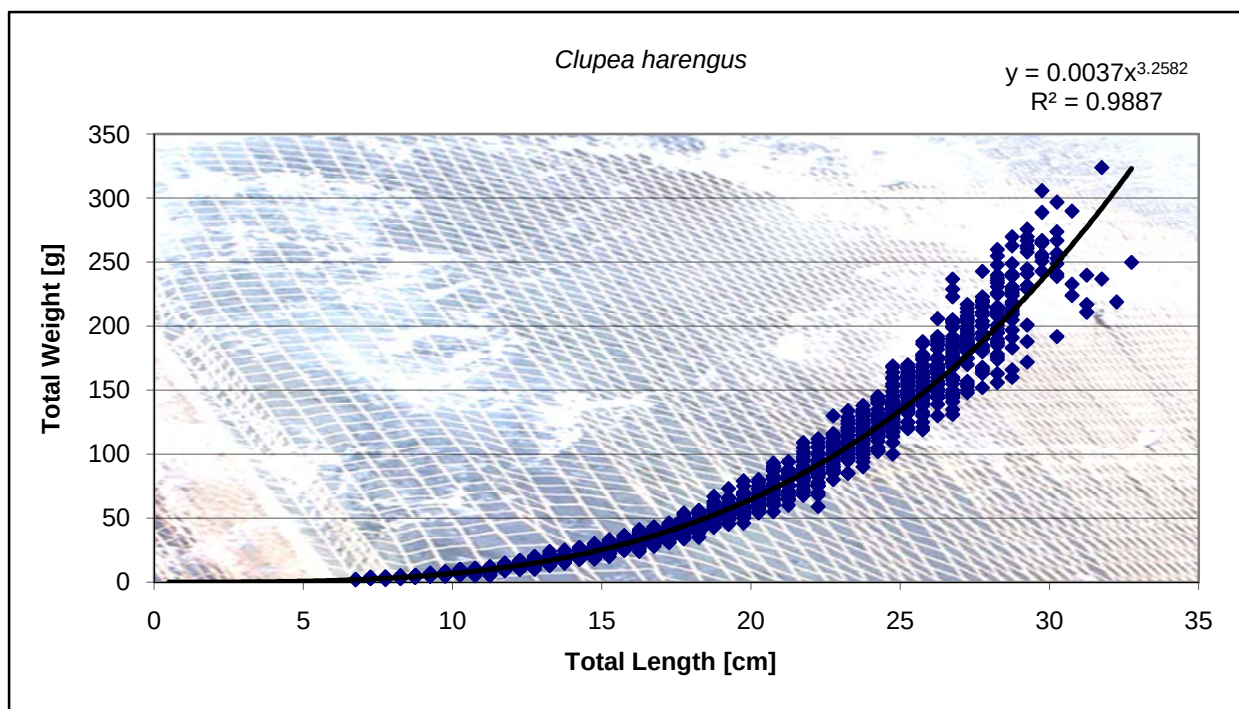
data collected

time period : 1996 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	-	2330	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	2330	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	2330	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	426	1904	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
221	81	199	261	1	1263	304	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- 1/2 cm below

min length
max length

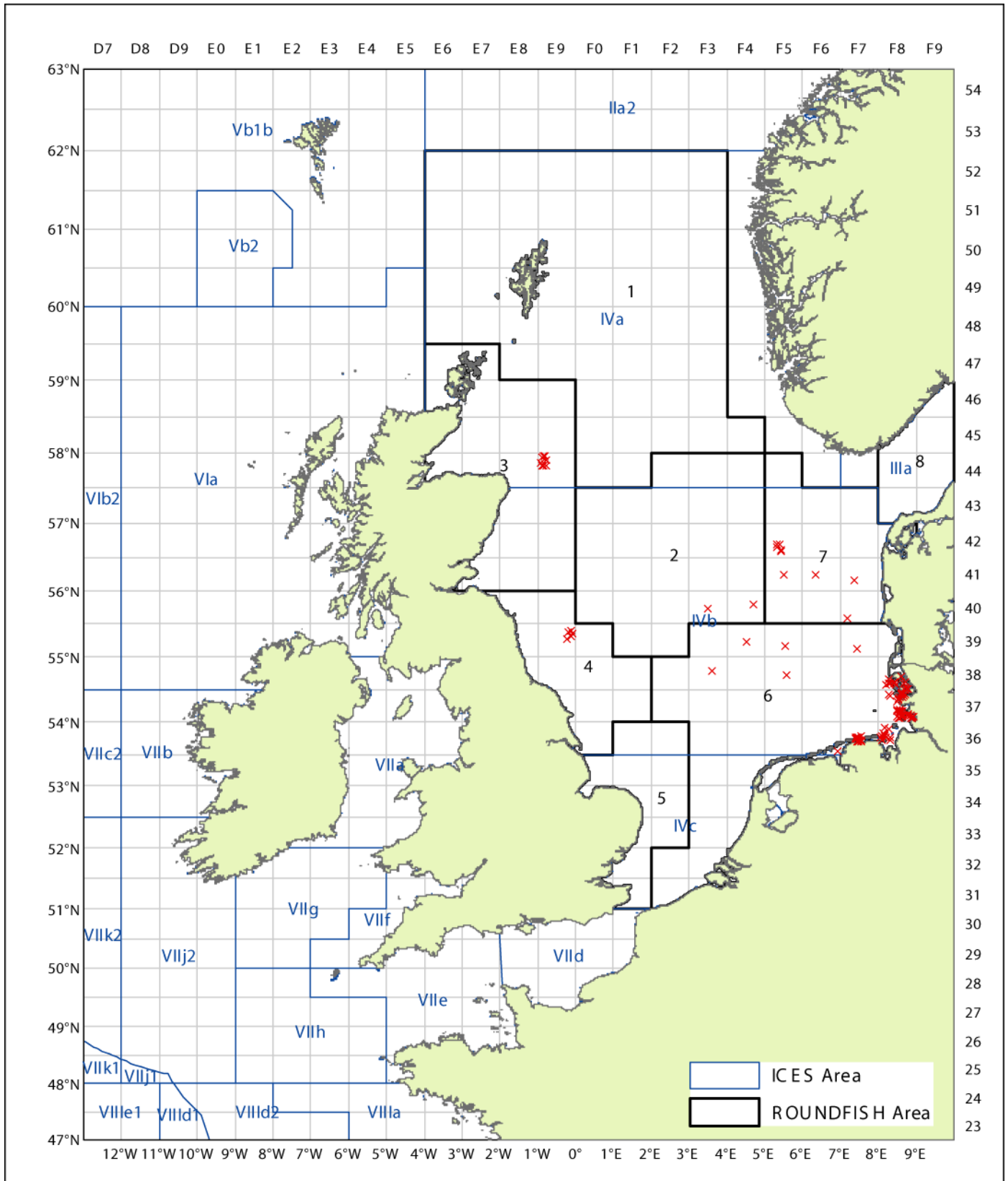
6.75 [cm]
32.75 [cm]

male 727
female 865
undefined 738

total numbers of data 2330

Clupea harengus September

Geographical distribution of data used for calculating the length-weight relationship



Clupea harengus

September

$$Tw [g] = a * L [cm]^b$$

a = 0.0027

b = 3.338

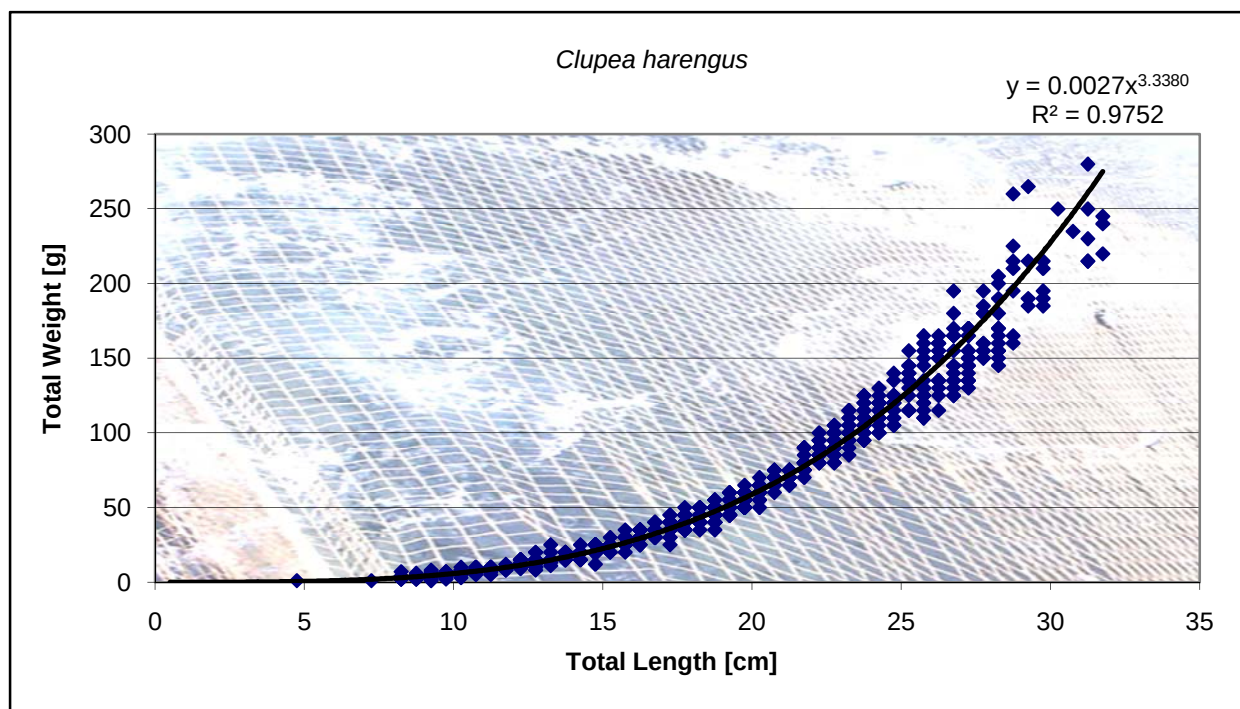
data collected

time period : 1996 - 2006

data source : research vessel

numbers of data:

Numbers of data																				
Quarter																				
1	2	3	4																	
-	-	811	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	-	-	811	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	811	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	243	568	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	44	243	174	-	206	144	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- 1/2 cm below

min length
max length

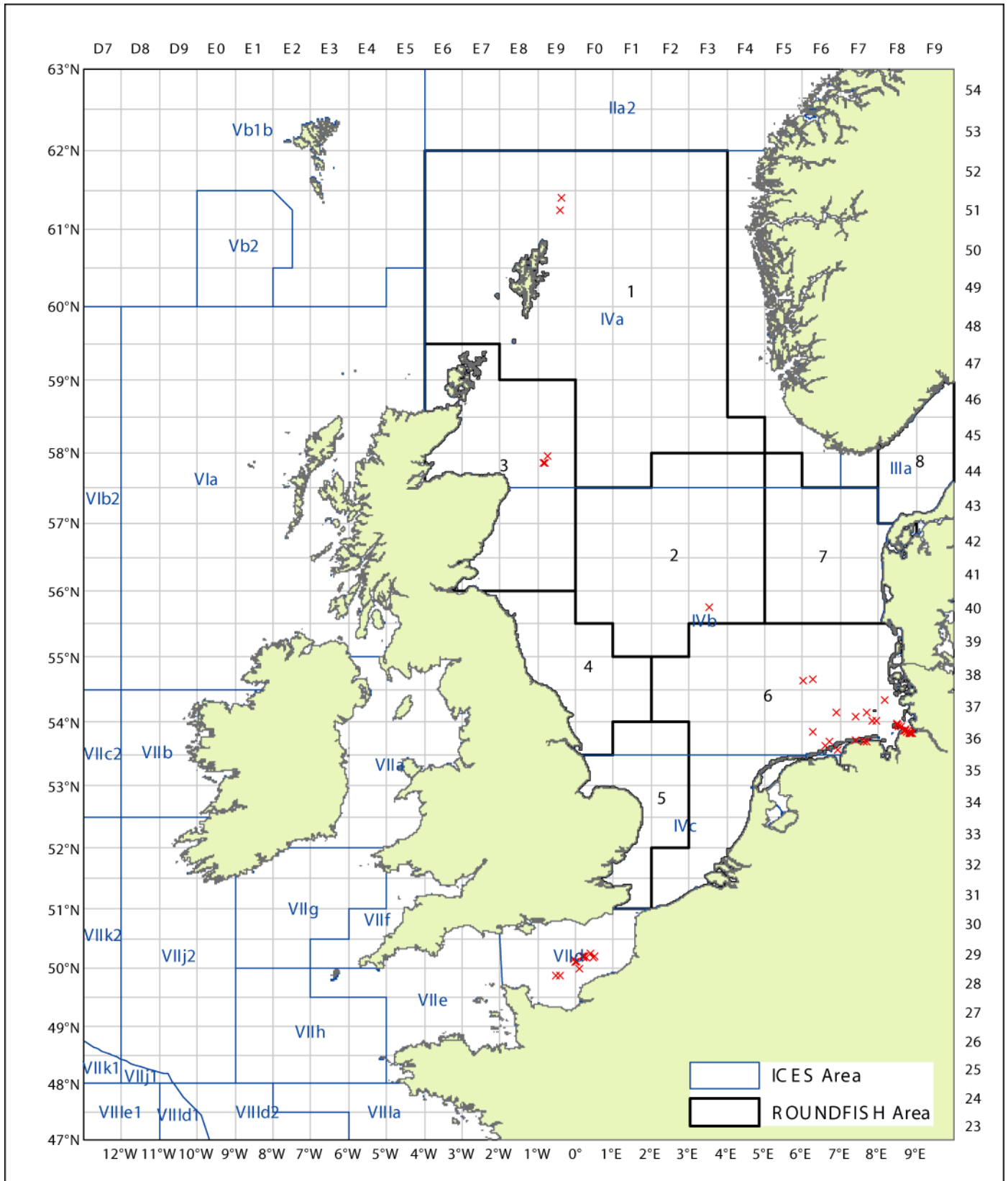
4.75 [cm]
31.75 [cm]

male 349
female 320
undefined 142

total numbers of data 811

Clupea harengus Quarter 4

Geographical distribution of data used for calculating the length-weight relationship



Clupea harengus

Quarter: 4

$$Tw [g] = a * L [cm]^b$$

a = 0.003

b = 3.3231

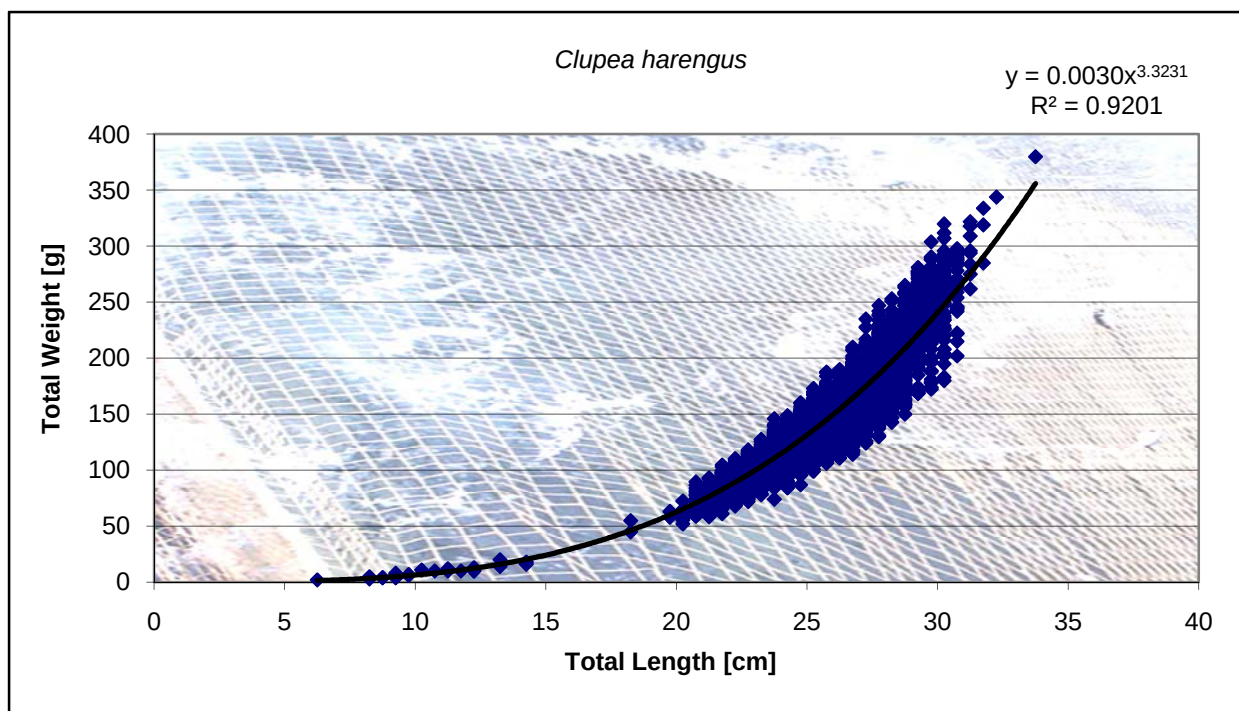
data collected

time period : 1996 - 2006

data source : commercial trawler

numbers of data:

Numbers of fish																			
Quarter																			
1	2	3	4																
-	-	-	4012																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	-	-	13	18	3981								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	308	-	-	3704	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	275	33	-	-	-	-	-	-	-	-	3704	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
275	1	3	-	-	29	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length

- 1/2 cm below

min length

max length

6.25 [cm]

33.75 [cm]

male

female

undefined

878

959

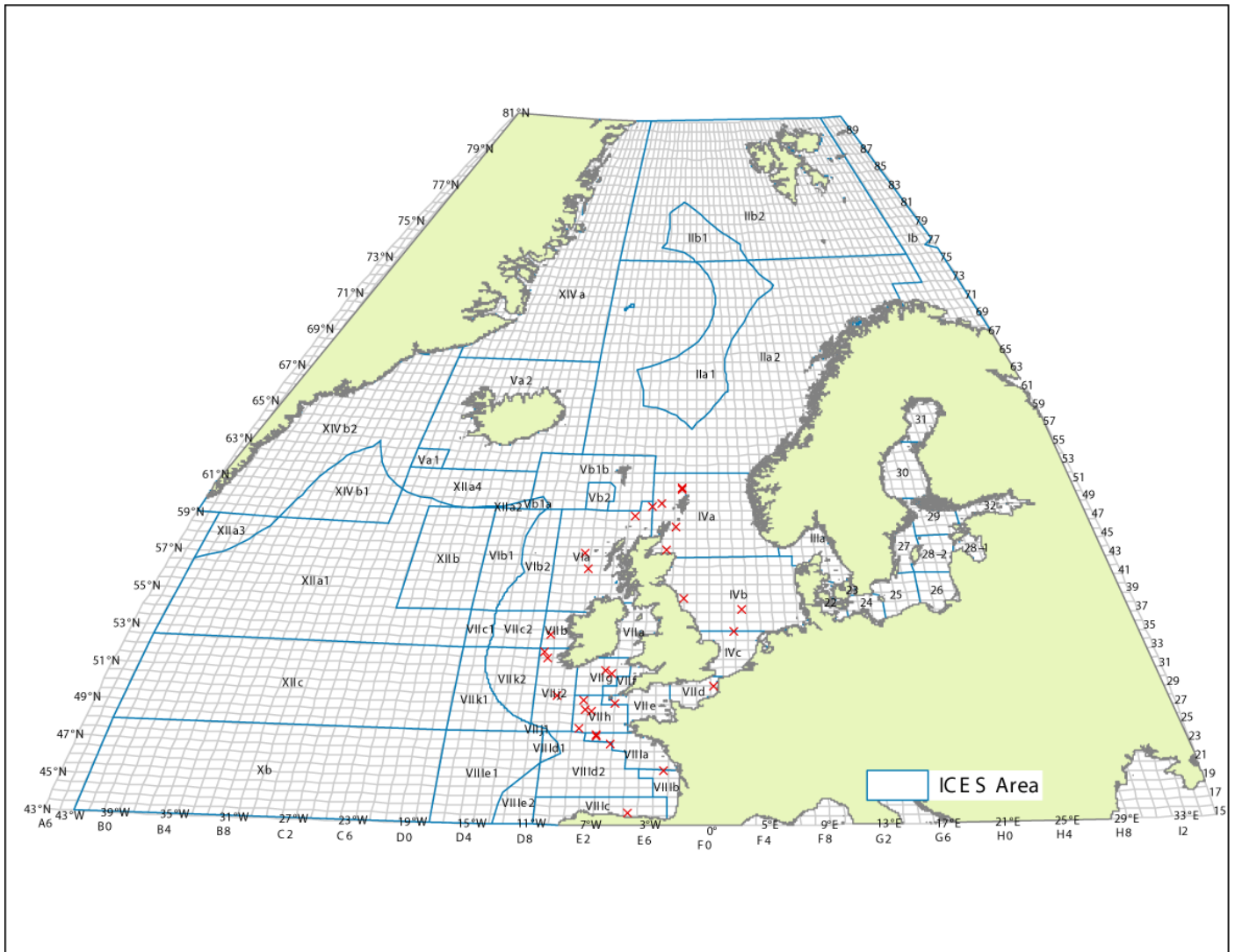
2174

total numbers of data

4012

Conger conger

Geographical distribution of data used for calculating the length-weight relationship



Conger conger

Quarter: 1 - 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0001

b = 3.7272

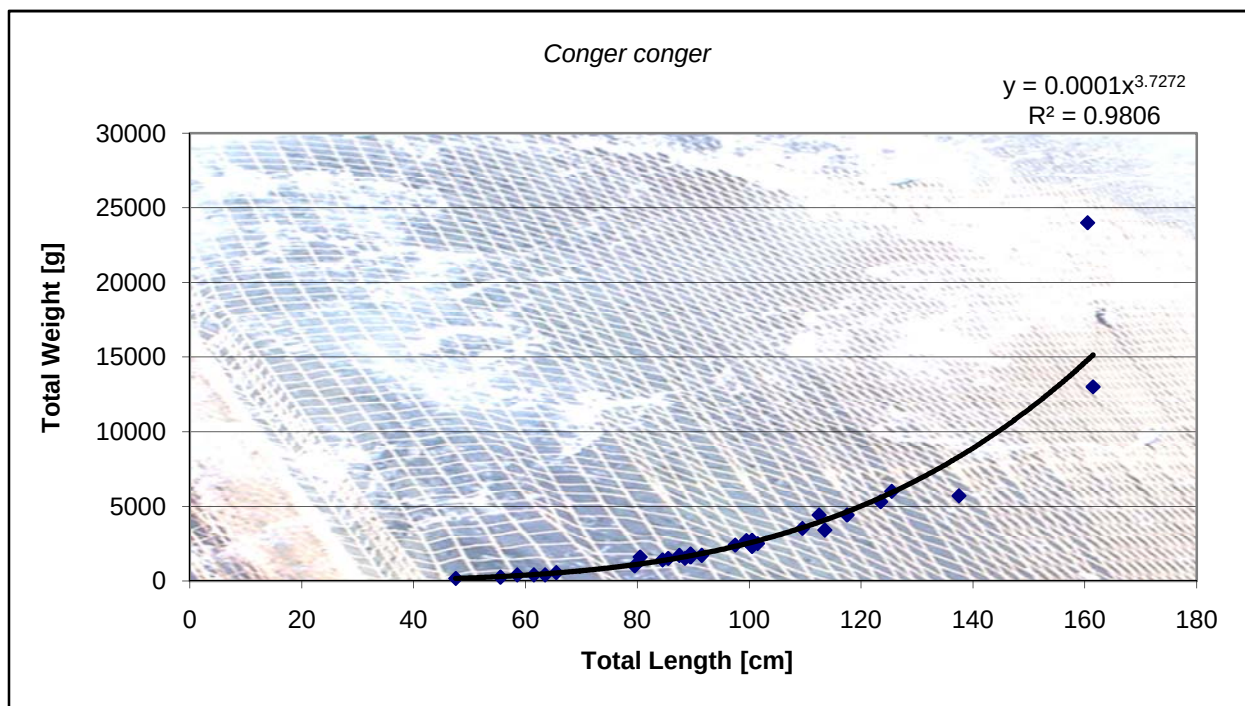
data collected

time period : 1962 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
21	6	2	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
5	8	8	6	-	-	-	-	2	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	9	-	3	13	4	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	6	3	-	-	-	3	-	-	1	-	1	1	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
2	4	4	-	2	-	1	1	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
5	-	1	1	1	1	-	-	-											
-	-	-	-	-	-	-	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

47.5 [cm]
161.5 [cm]

male
female
undefined

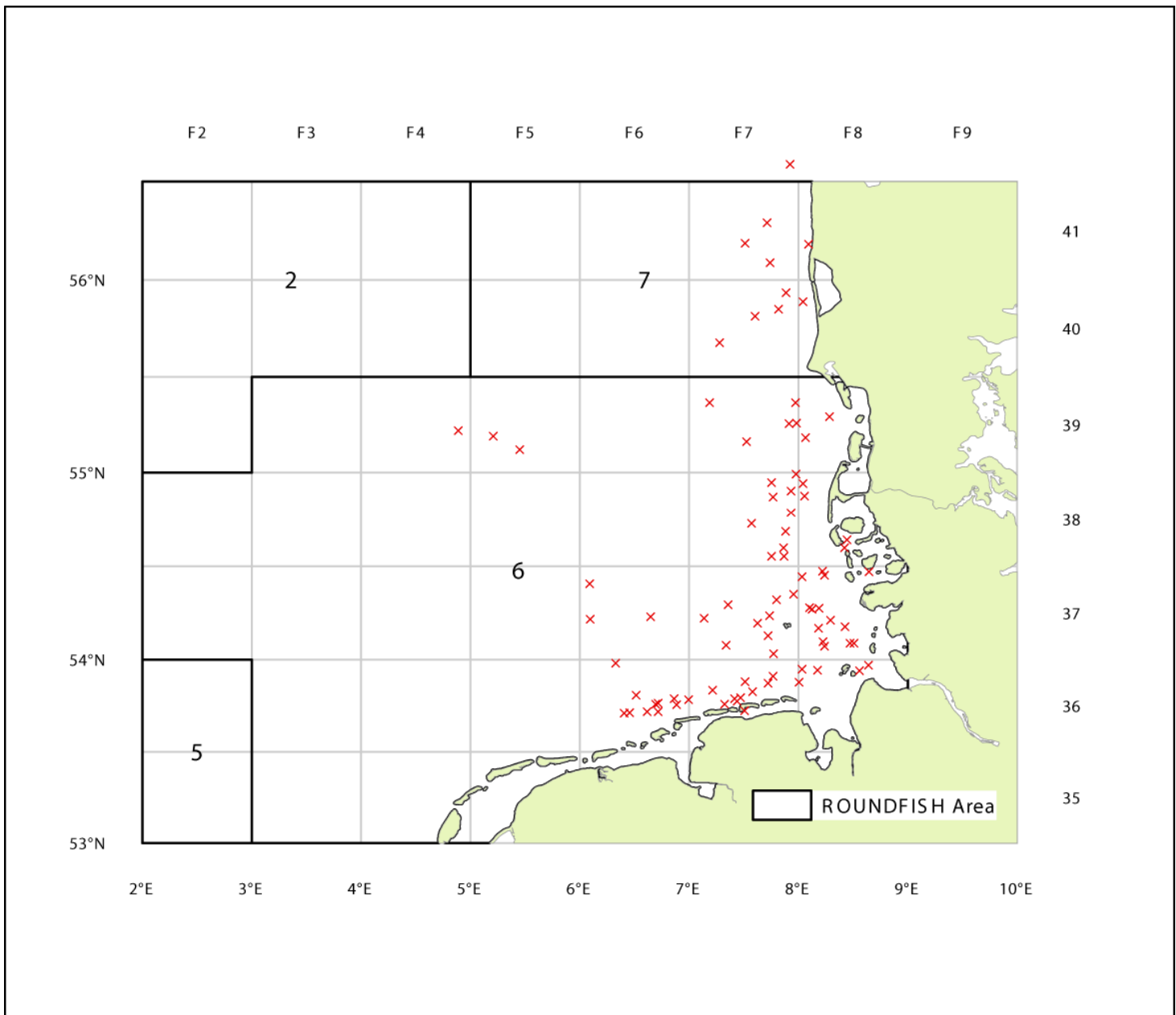
-
-
29

total numbers of data

29

Crangon allmanni

Geographical distribution of data used for calculating the length-weight relationship



Crangon allmanni

Quarter: 1 - 4

$$Tw [g] = a * L [mm]^b$$

a = 0.0000016

b = 3.3272115

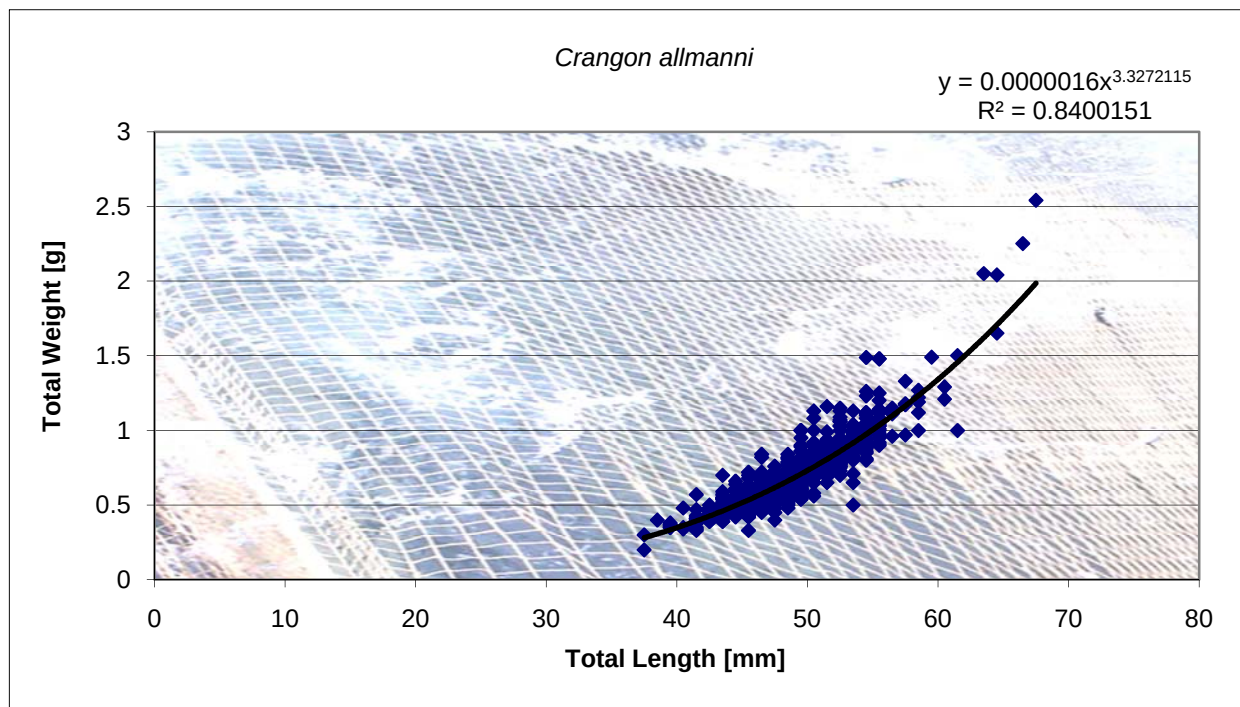
data collected

time period : 2001 - 2010

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
1087	10	3	2																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
1087	-	-	2	8	-	-	-	3	2	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1102	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	1102	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
-	-	-	-	-	937	165	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- mm below

min length
max length

37.5 [mm]
67.5 [mm]

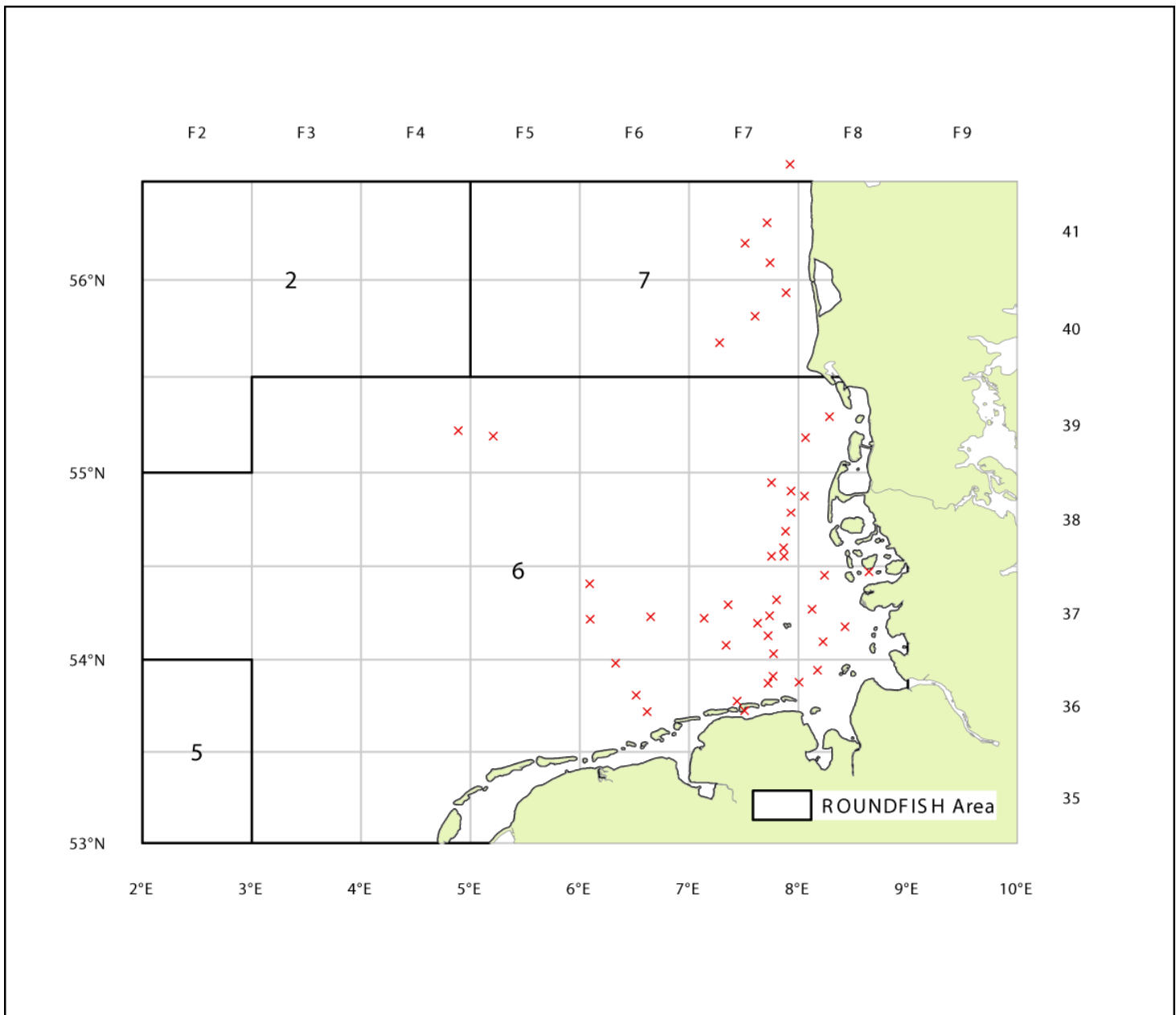
male
female
undefined

69
292
741

total numbers of data 1102

Crangon allmanni ♀

Geographical distribution of data used for calculating the length-weight relationship



Crangon allmanni ♀

Quarter: 1 - 3

$$Tw [g] = a * L [mm]^b$$

a = 0.0000027

b = 3.2114476

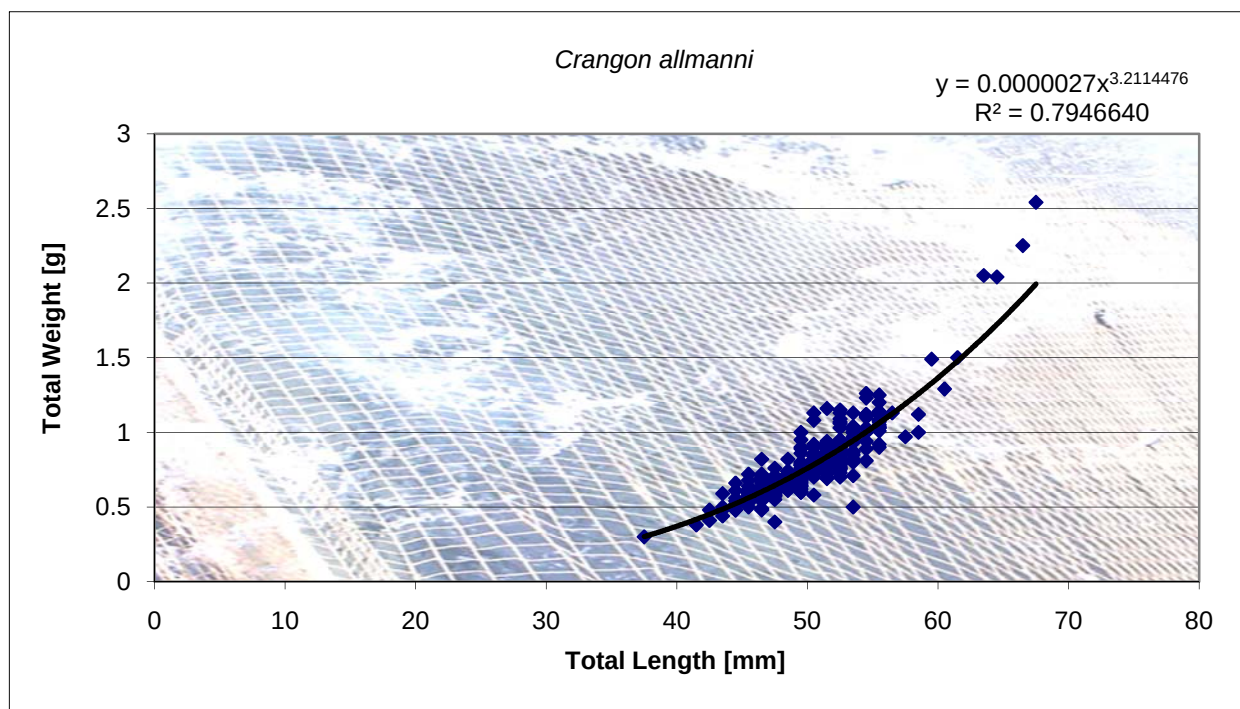
data collected

time period : 2001 - 2010

data source : research vessel

numbers of data:

Numbers of fish																			
Quarter																			
1	2	3	4																
285	5	2	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
285	-	-	1	4	-	-	-	2	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	292	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	292	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	-	-	-	-	233	59	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- mm below

min length
max length

37.5 [mm]
67.5 [mm]

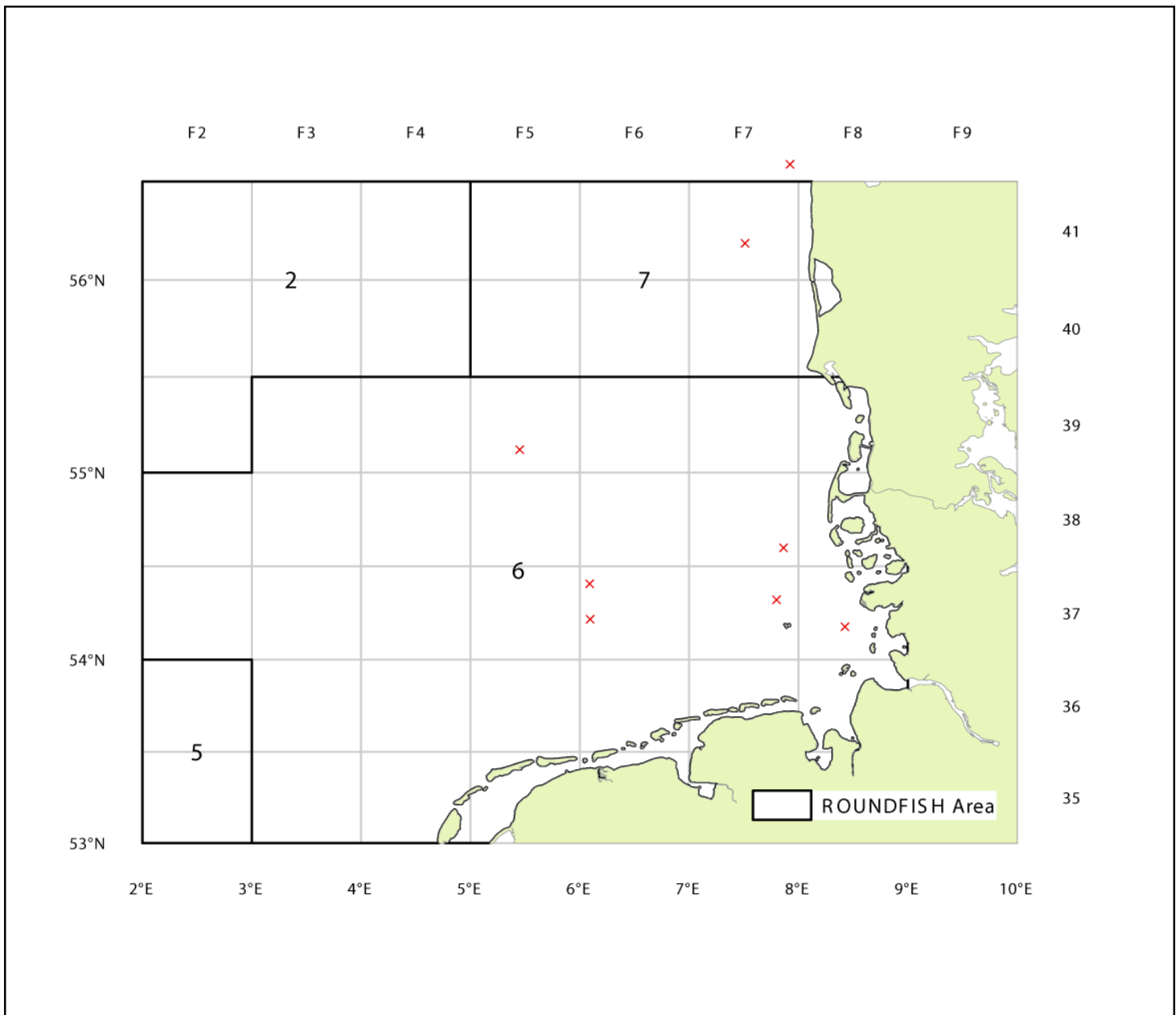
male
female
undefined

-
292
-

total numbers of data 292

Crangon allmanni ♂

Geographical distribution of data used for calculating the length-weight relationship



Crangon allmanni ♂

Quarter: 1

$$Tw [g] = a * L [mm]^b$$

a = 0.0000192

b = 2.6677417

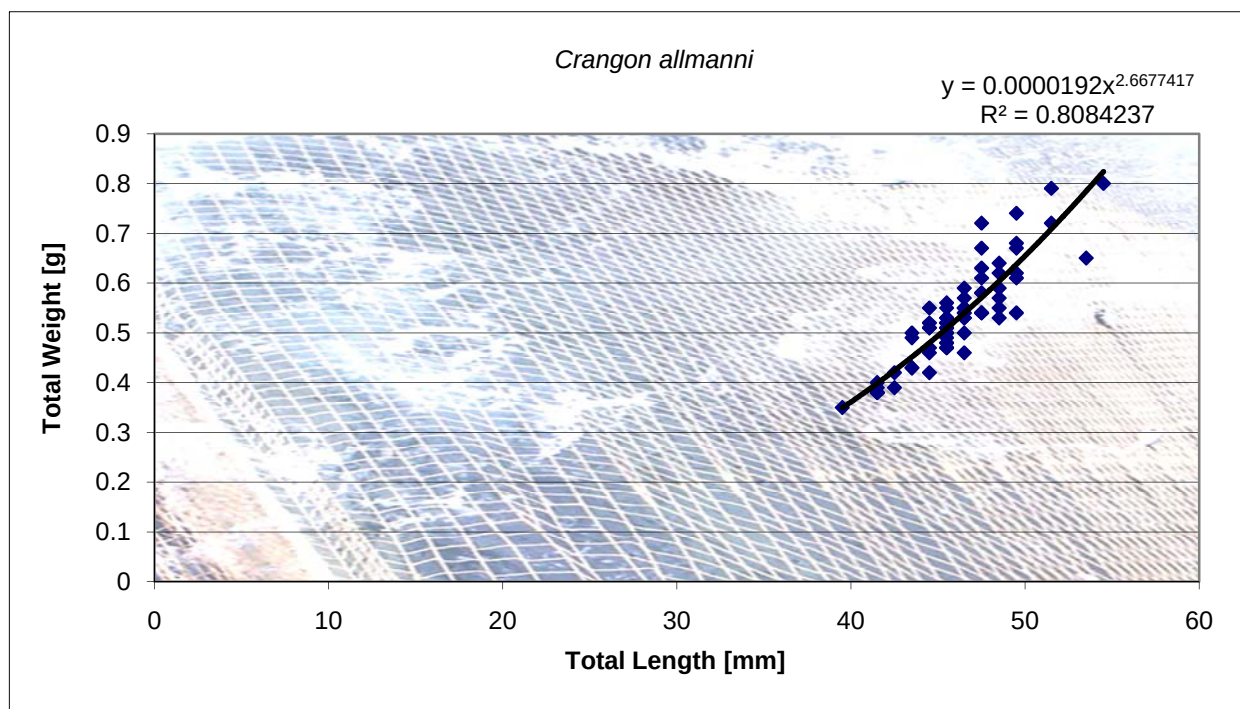
data collected

time period : 2009 - 2010

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
69	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
69	-	-	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	69	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	69	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
-	-	-	-	-	41	28	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- mm below

min length
max length

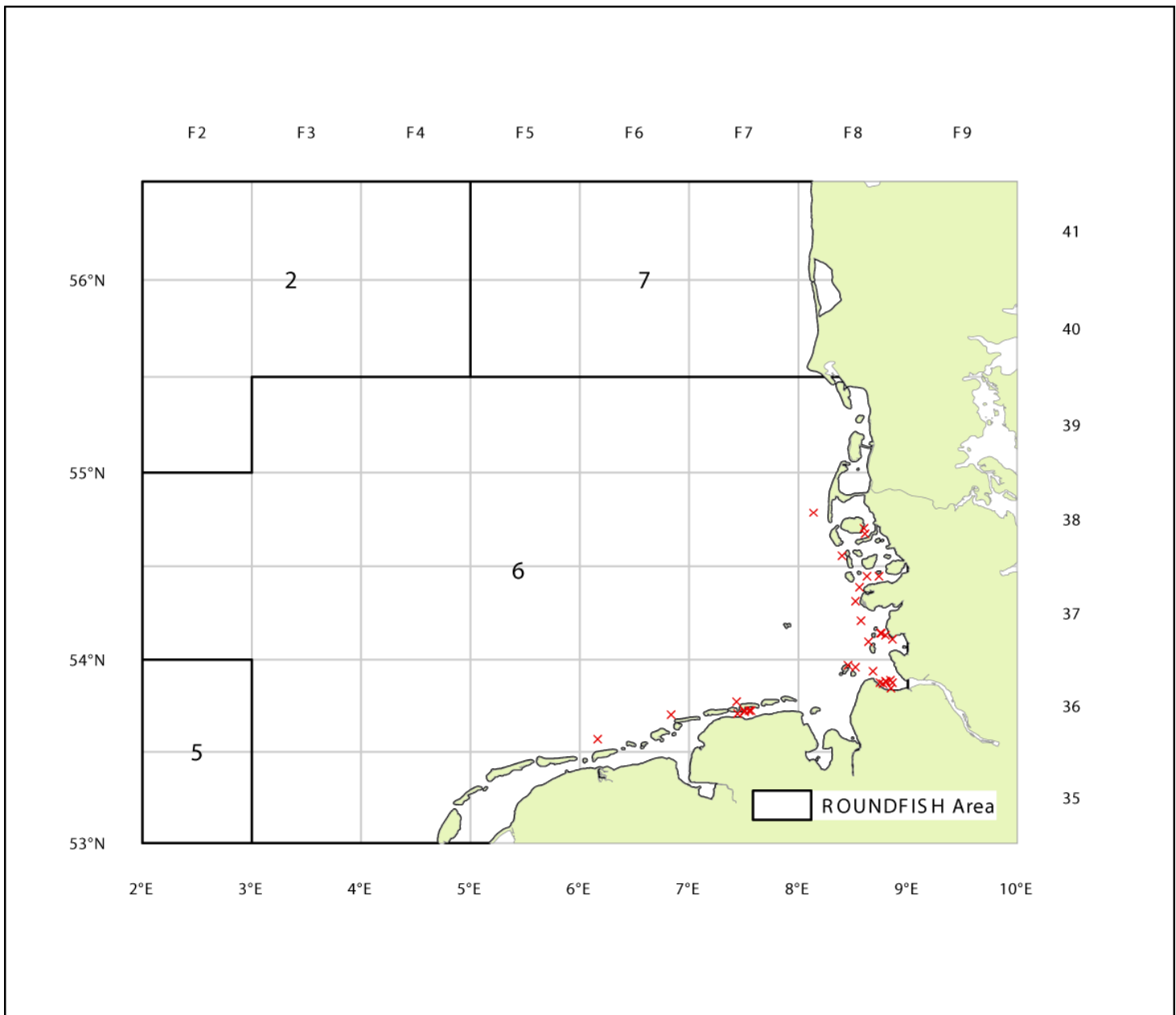
39.5 [mm]
54.5 [mm]

male 69
female -
undefined -

total numbers of data 69

Crangon crangon

Geographical distribution of data used for calculating the length-weight relationship



Crangon crangon

Quarter: 1 - 4

$$Tw [g] = a * L [mm]^b$$

a = 0.0000022

b = 3.278553

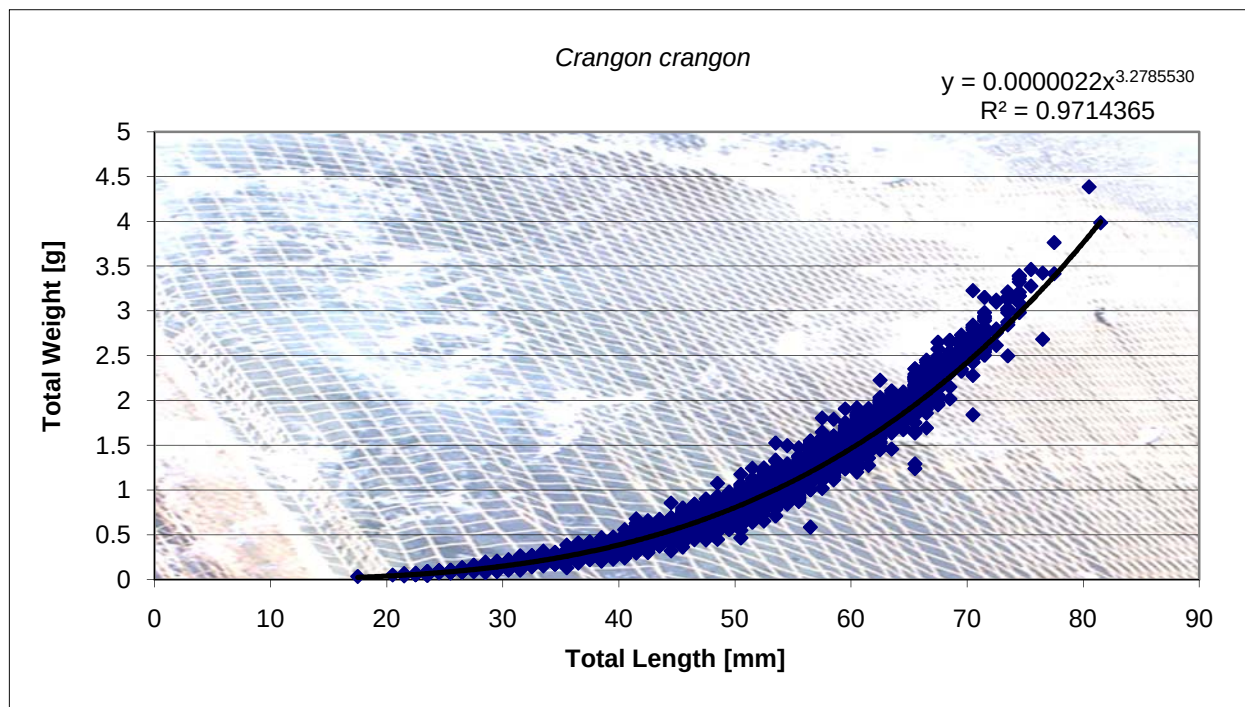
data collected

time period : 2002 - 2008

data source : research vessel

numbers of data:

Quarter																					
1	2	3	4																		
1504	1467	3360	1586																		
Month																					
1	2	3	4	5	6	7	8	9	10	11	12										
1504	-	-	427	1040	-	-	-	3360	1586	-	-										
Subarea																					
1	2	3	4	5	6	7	8	9	10	12	14										
-	-	-	7917	-	-	-	-	-	-	-	-										
Division																					
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F		
-	-	-	-	-	-	-	-	7917	-	-	-	-	-	-	-	-	-	-	-		
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B							
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Roundfisharea												NAFO									
1	2	3	4	5	6	7	8	9					1A	1B	1C	1D	1E	1F	2G	2H	2J
-	-	-	-	-	7917	-	-	-					-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- mm below

min length
max length

17.5 [mm]
81.5 [mm]

male
female
undefined

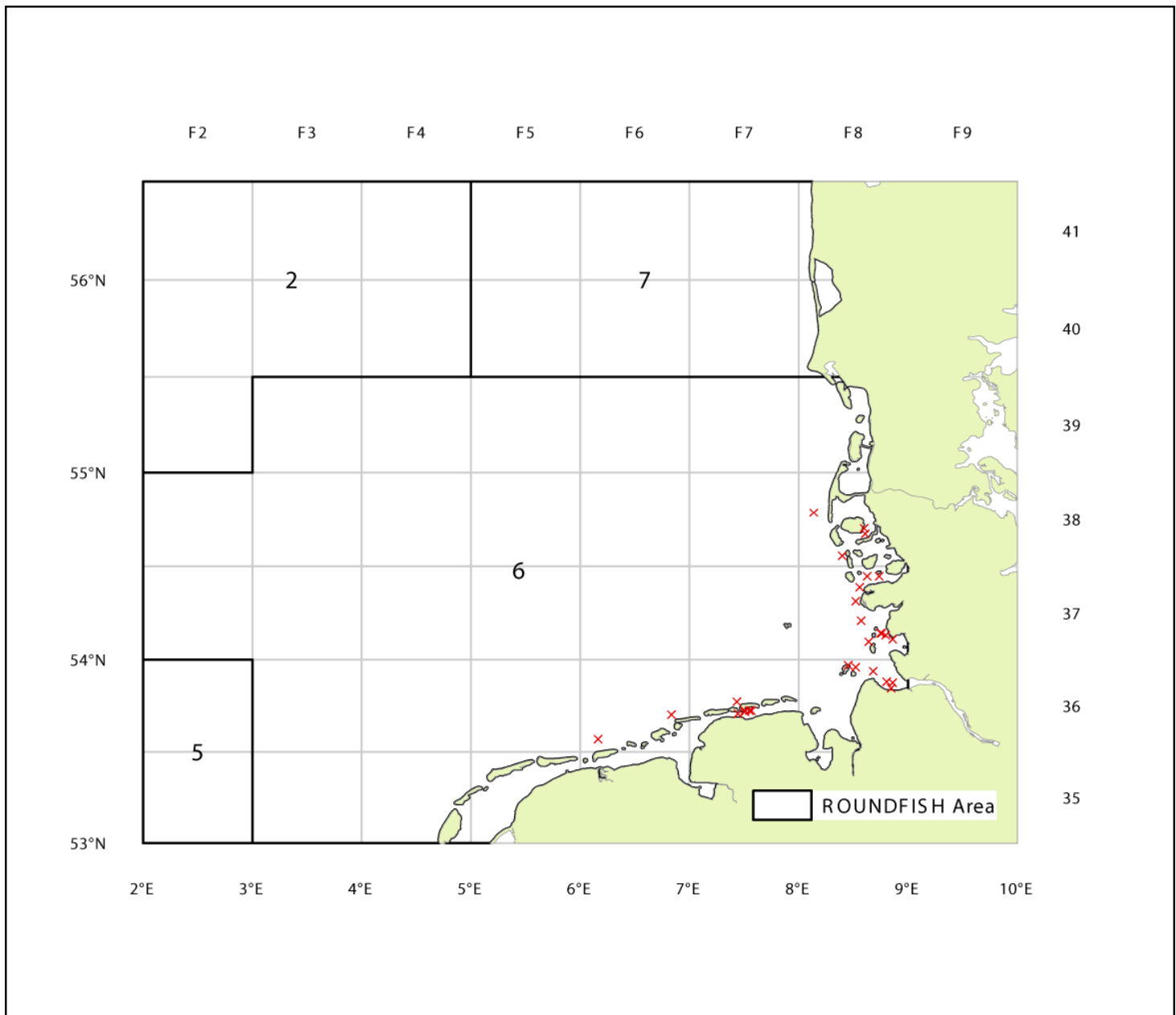
3108
4000
808

total numbers of data 7917

Crangon crangon



Geographical distribution of data used for calculating the length-weight relationship



Crangon crangon ♀

Quarter: 1 - 4

$$Tw [g] = a * L [mm]^b$$

a = 0.0000021

b = 3.2878593

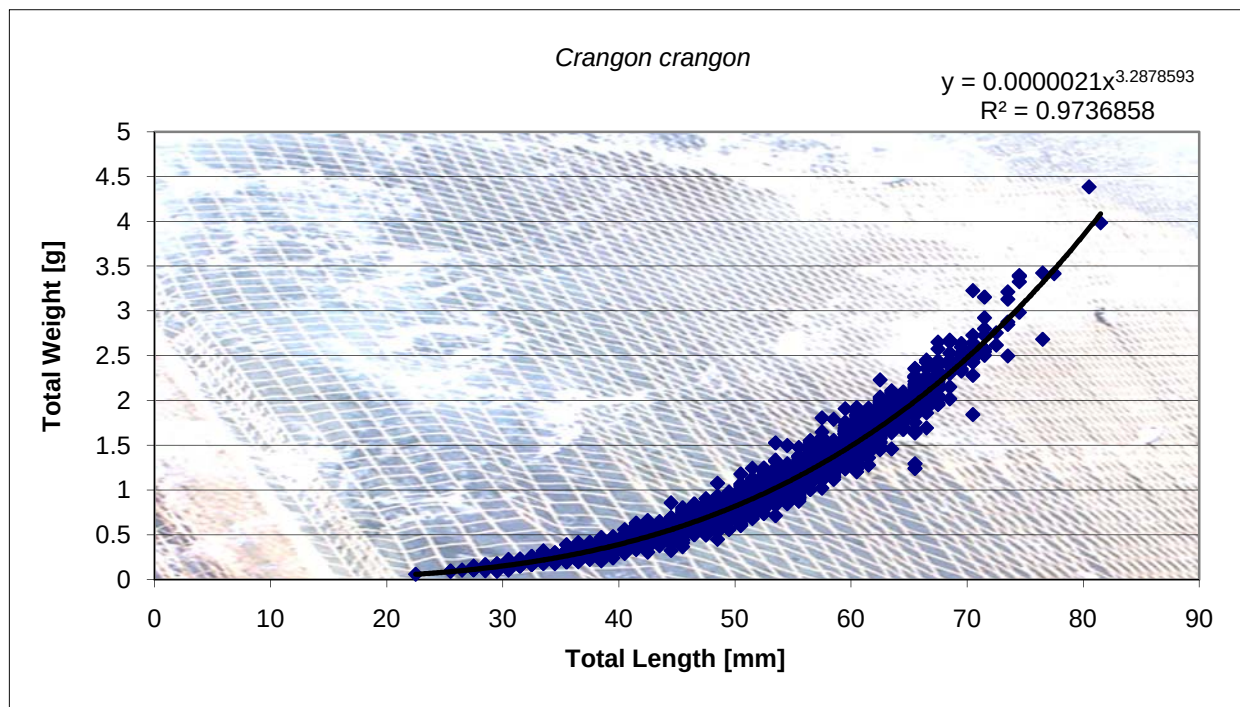
data collected

time period : 2002 - 2003

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
976	737	1814	473																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
976	-	-	254	483	-	-	-	1814	473	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	4000	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	4000	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
-	-	-	-	-	4000	-	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- mm below

min length
max length

22.5 [mm]
81.5 [mm]

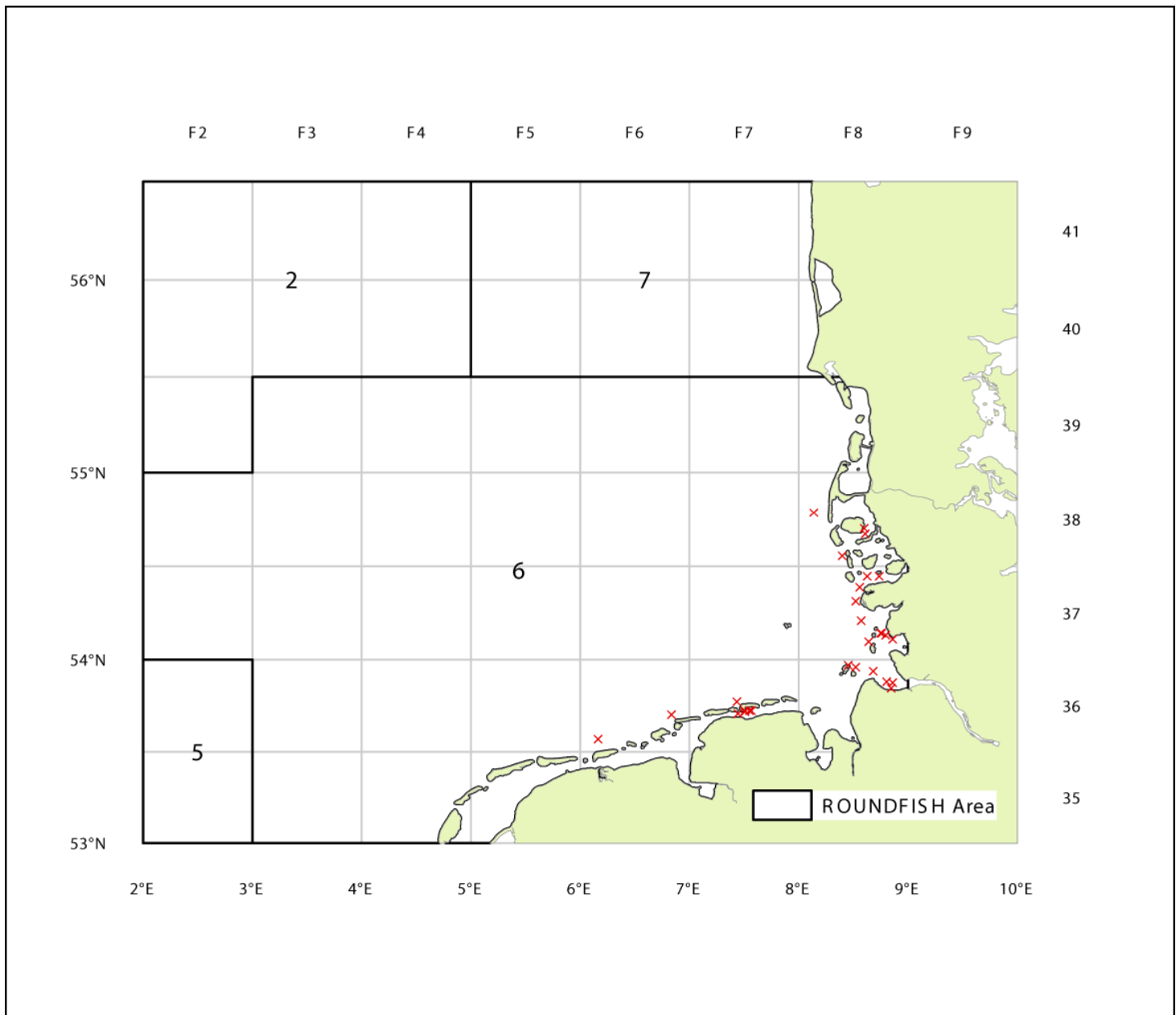
male
female
undefined

-
4000
-

total numbers of data 4000

Crangon crangon ♂

Geographical distribution of data used for calculating the length-weight relationship



Crangon crangon ♂

Quarter: 1 - 4

$$Tw [g] = a * L [mm]^b$$

a = 0.0000049

b = 3.0488185

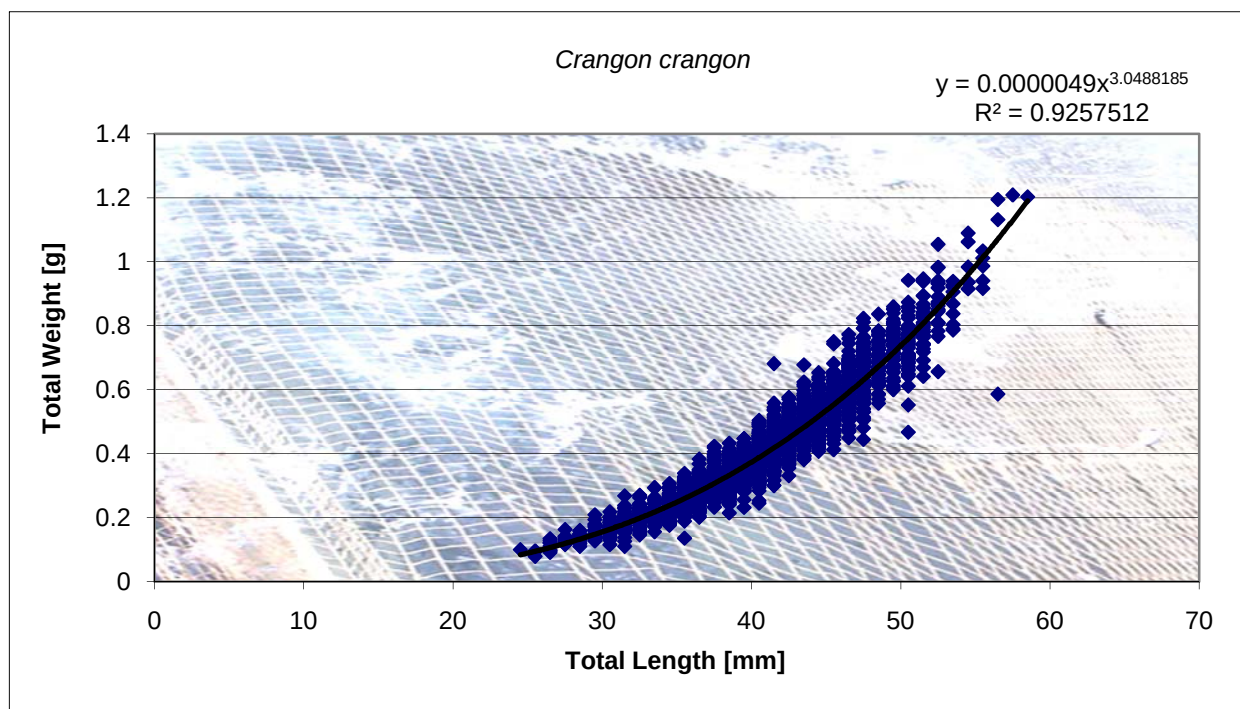
data collected

time period : 2002 - 2003

data source : research vessel

numbers of data:

Numbers of salmon																			
Quarter																			
1	2	3	4																
482	713	1488	425																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
482	-	-	164	549	-	-	-	1488	425	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	3108	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	3108	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
-	-	-	-	-	3108	-	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- mm below

min length
max length

24.5 [mm]
58.5 [mm]

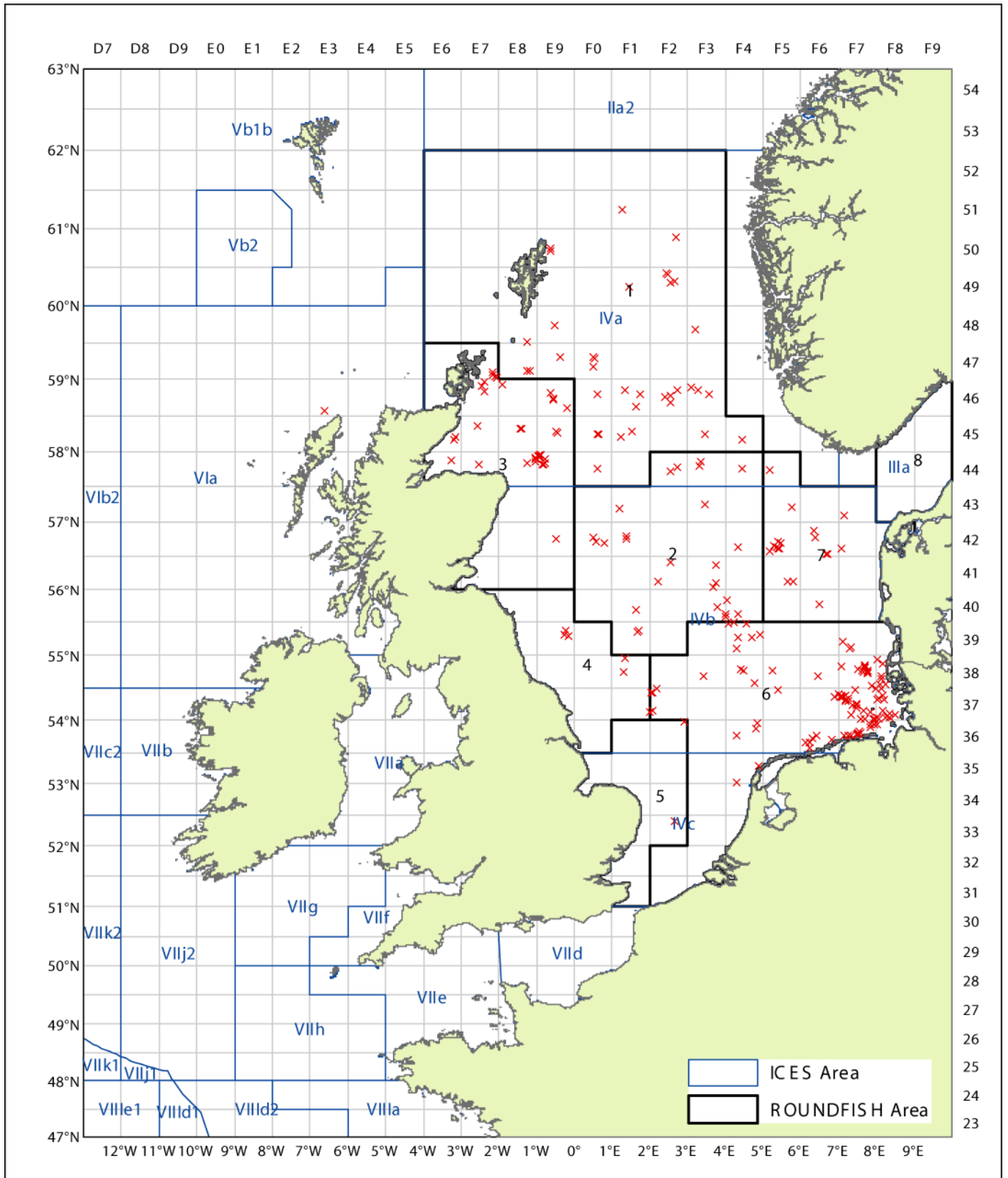
male
female
undefined

3108
-
-

total numbers of data 3108

Cyclopterus lumpus

Geographical distribution of data used for calculating the length-weight relationship



Cyclopterus lumpus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.063

b = 2.9405

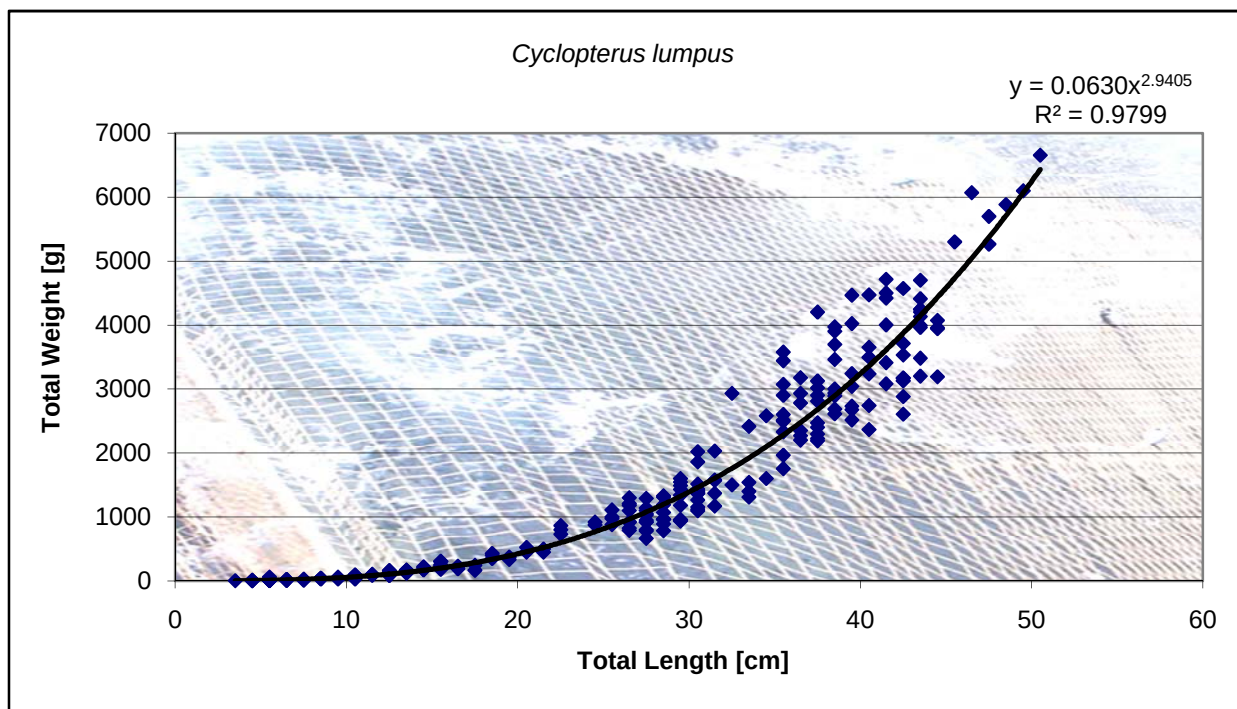
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
164	24	37	14																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
79	72	13	5	14	5	20	14	3	1	9	4								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	1	-	237	-	1	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	1	-	-	-	-	-	78	156	3	-	-	1	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
39	25	35	4	1	111	22	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

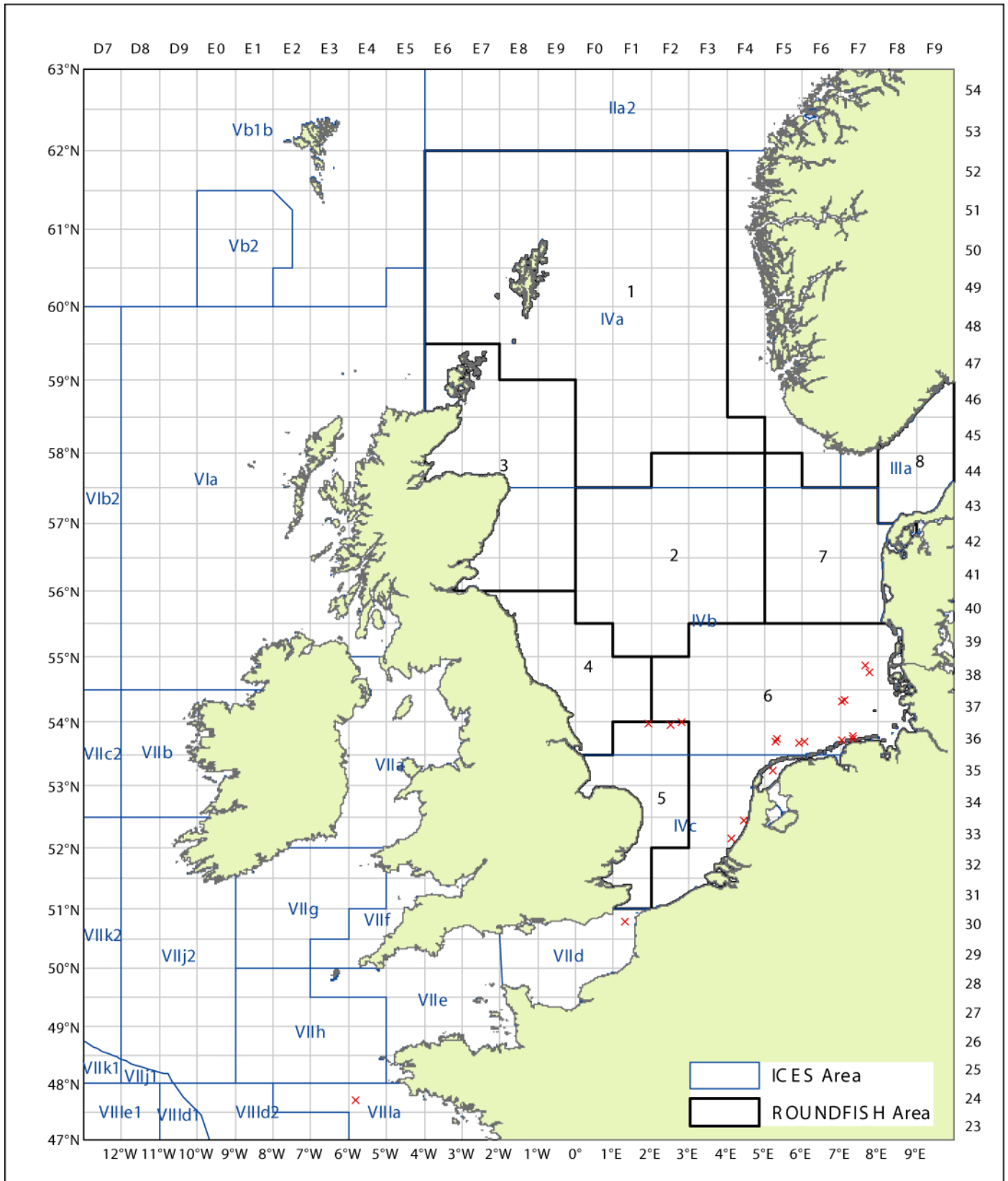
3.5 [cm]
50.5 [cm]

male 2
female 3
undefined 234

total numbers of data 239

Dicentrarchus labrax

Geographical distribution of data used for calculating the length-weight relationship



Dicentrarchus labrax

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0258

b = 2.7287

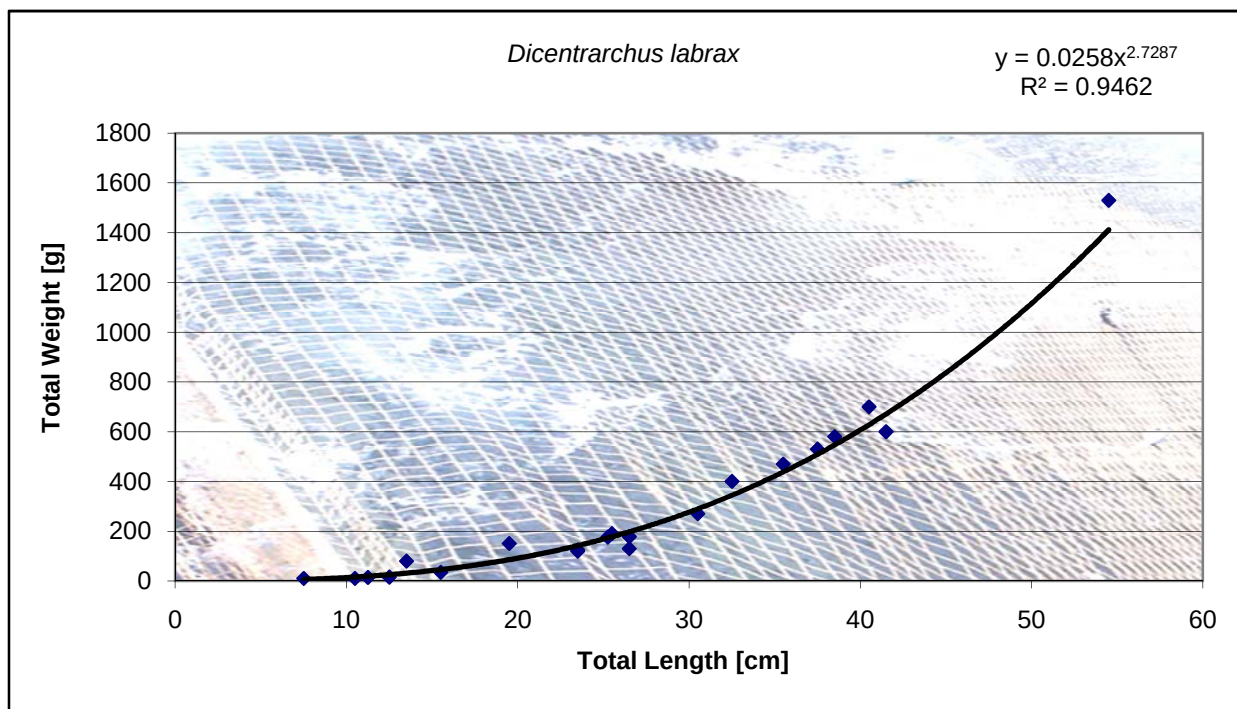
data collected

time period : 1990 - 2004

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
9	5	1	6																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
6	2	1	1	3	1	-	-	1	-	1	5								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	19	-	-	2	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	16	3	-	-	-	-	-	-	-	1	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	1	-	-	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
-	-	-	-	-	13	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

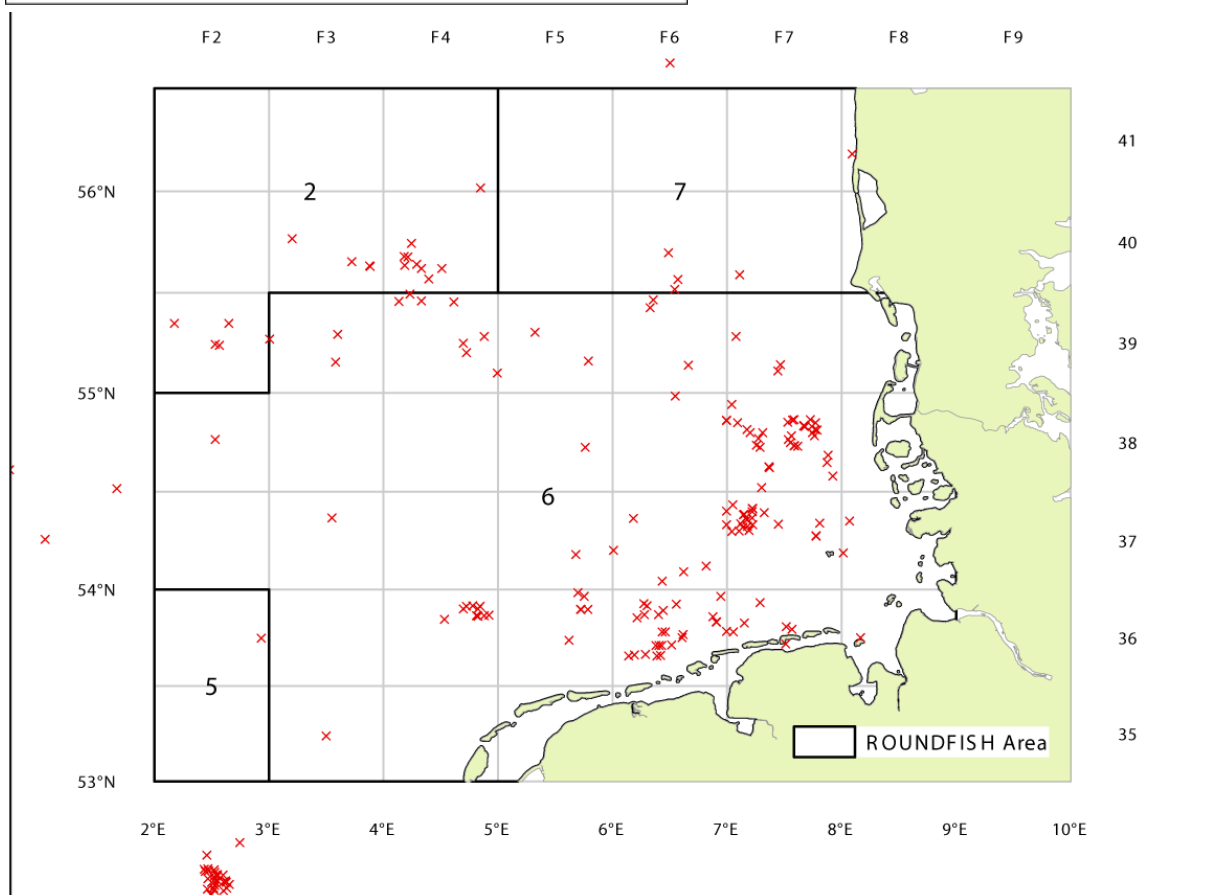
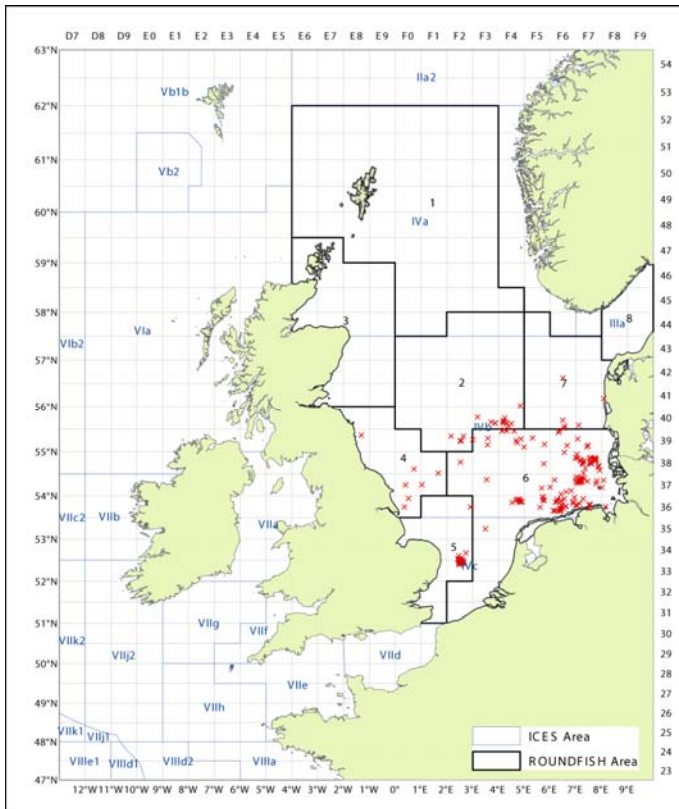
7.5 [cm]
54.5 [cm]

male -
female -
undefined 21

total numbers of data 21

Echiichthys vipera

Geographical distribution of data used for calculating the length-weight relationship



Echiichthys vipera

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0115

b = 2.9894

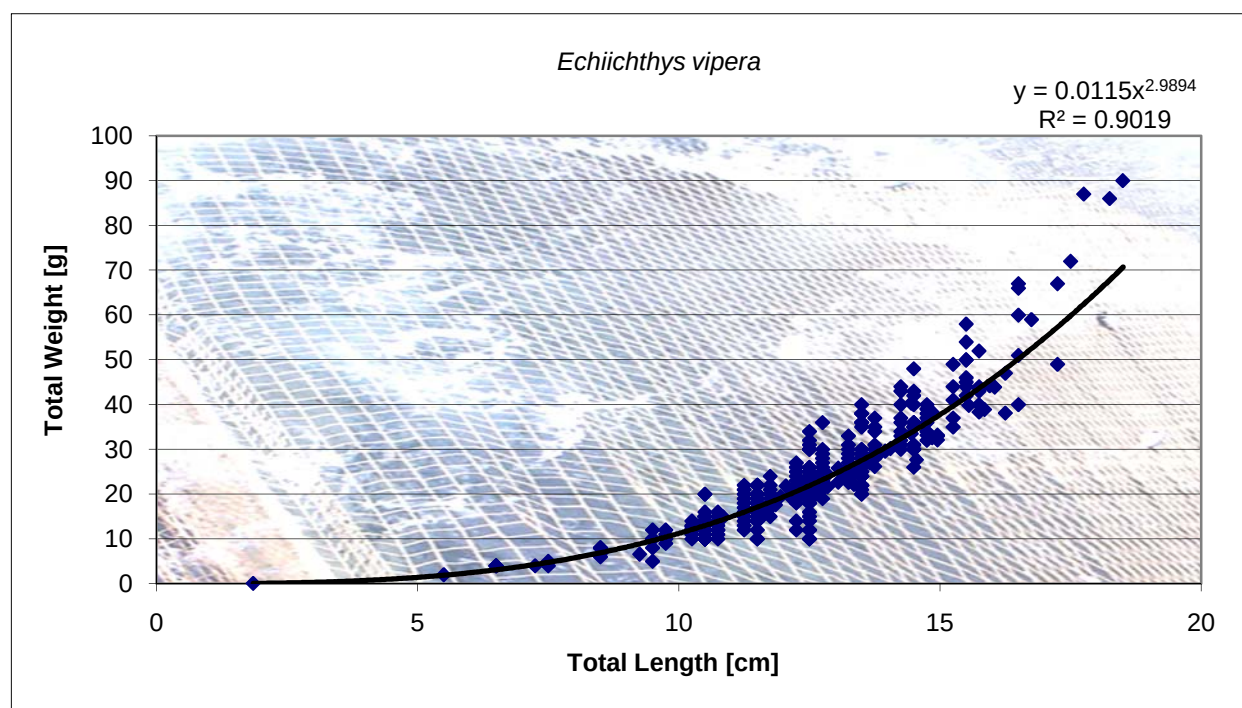
data collected

time period : 2000 - 2010

data source : research vessel

numbers of data:

Numbers of data.																				
Quarter																				
1	2	3	4																	
42	127	188	23																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
32	9	1	1	126	-	57	128	3	2	11	10									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	380	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	-	350	30	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9												
-	18	-	113	30	212	7	-	-												
1A	1B	1C	1D	1E	1F	2G	2H	2J												
-	-	-	-	-	-	-	-	-												



Method of Measurement

- Total length
- cm below, mm below
- min length
- max length

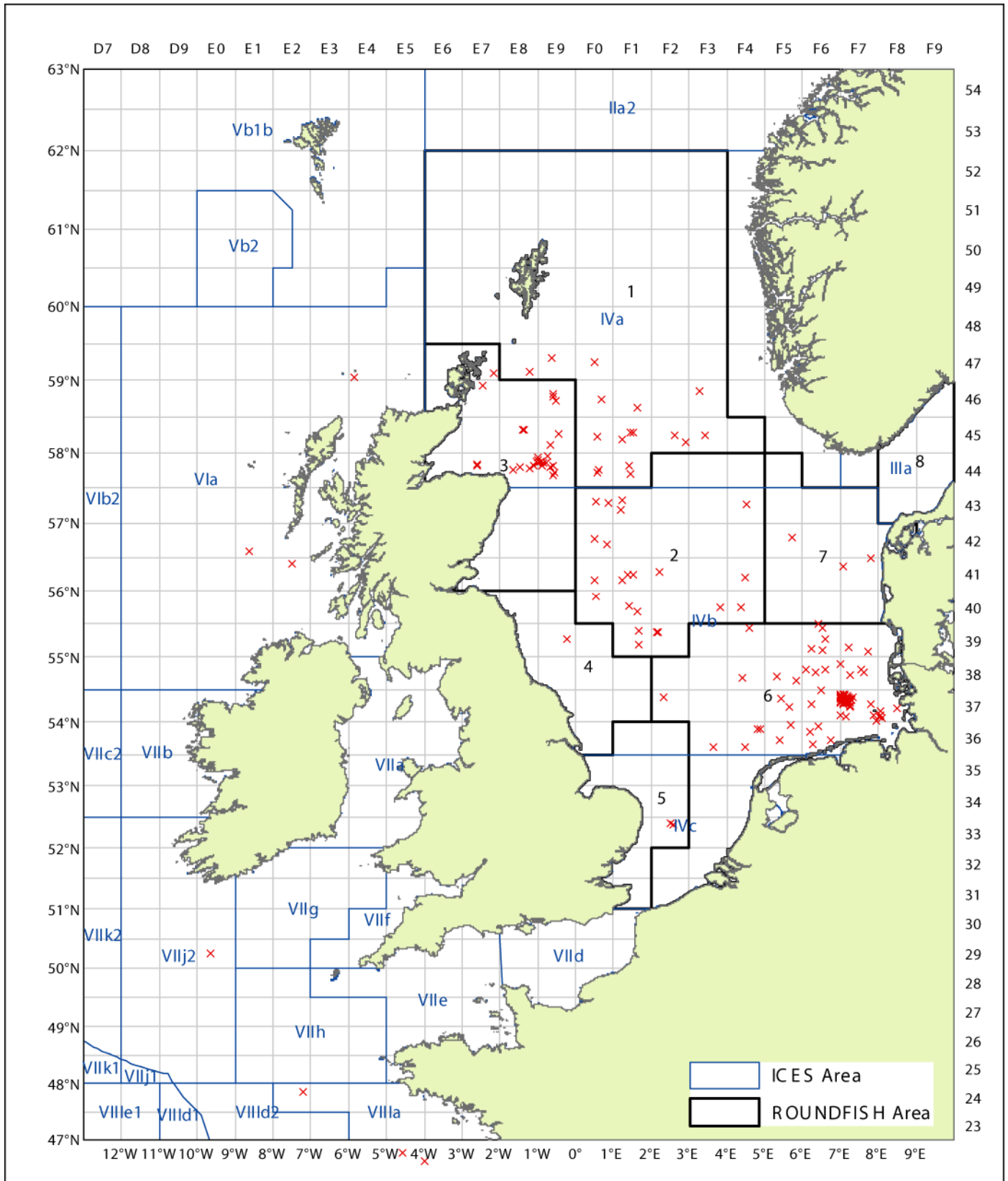
1.85 [cm]
18.5 [cm]

male -
female -
undefined 380

total numbers of data 380

Engraulis encrasicolus

Geographical distribution of data used for calculating the length-weight relationship



Engraulis encrasicolus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0041

b = 3.147

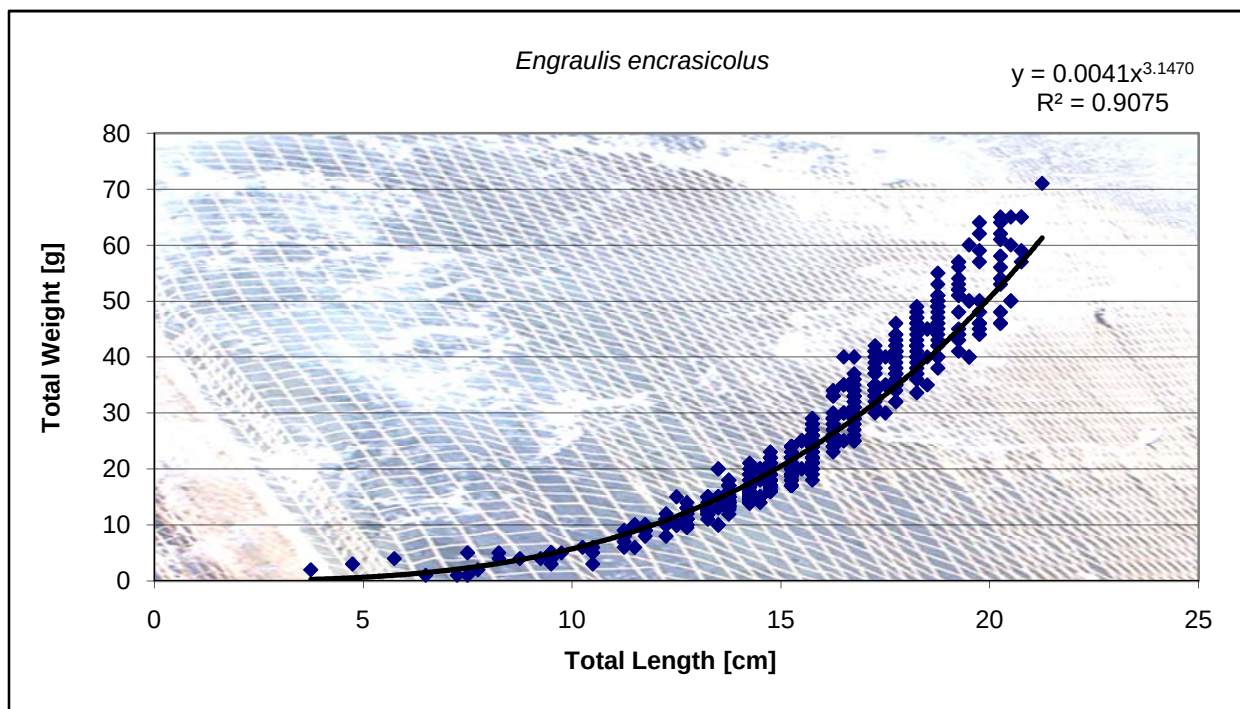
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Numbers by Quarter																			
Quarter																			
1	2	3	4																
331	45	221	19																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
166	159	6	2	3	40	197	22	2	3	14	2								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	608	-	3	2	3	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	145	462	1	-	-	3	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	2	-	3	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
22	156	132	1	2	291	4	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length

- 1/2 cm below

min length

max length

3.75 [cm]

21.25 [cm]

male

female

undefined

186

194

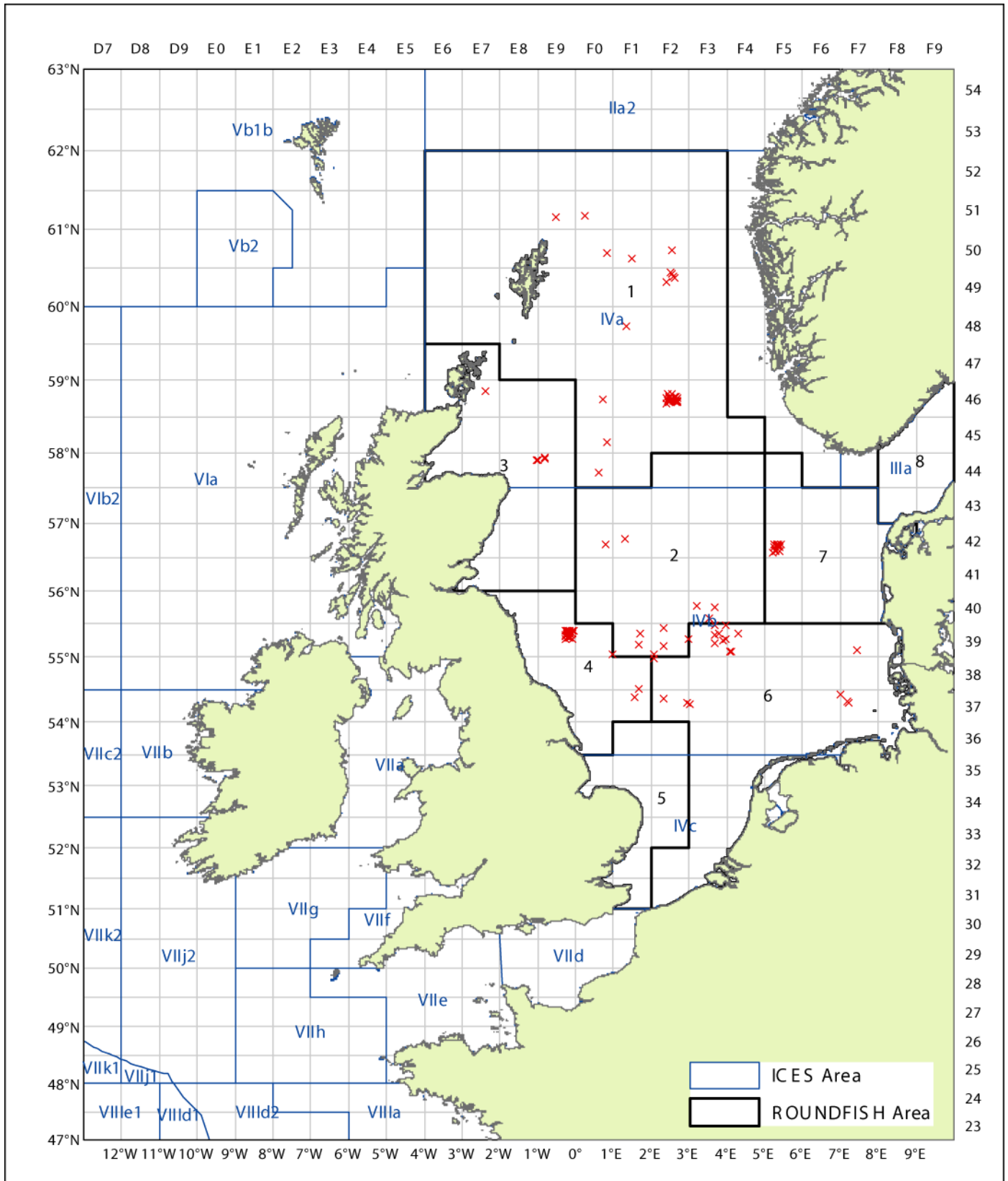
236

total numbers of data

616

Entelurus aequoreus

Geographical distribution of data used for calculating the length-weight relationship



Entelurus aequoreus

Quarter: 1 - 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0003

b = 2.7807

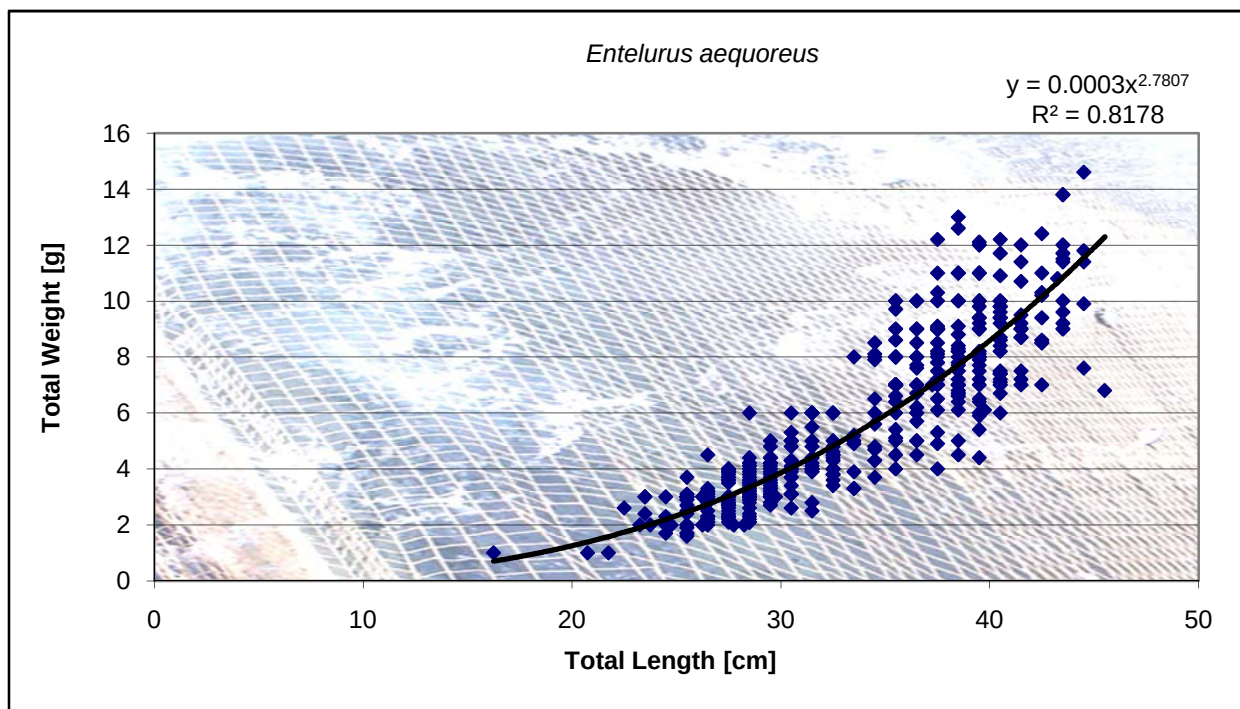
data collected

time period : 2004 - 2008

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
32	66	307	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
17	15	-	7	59	-	121	186	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	405	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	199	206	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
114	13	54	123	-	20	31	-	-											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

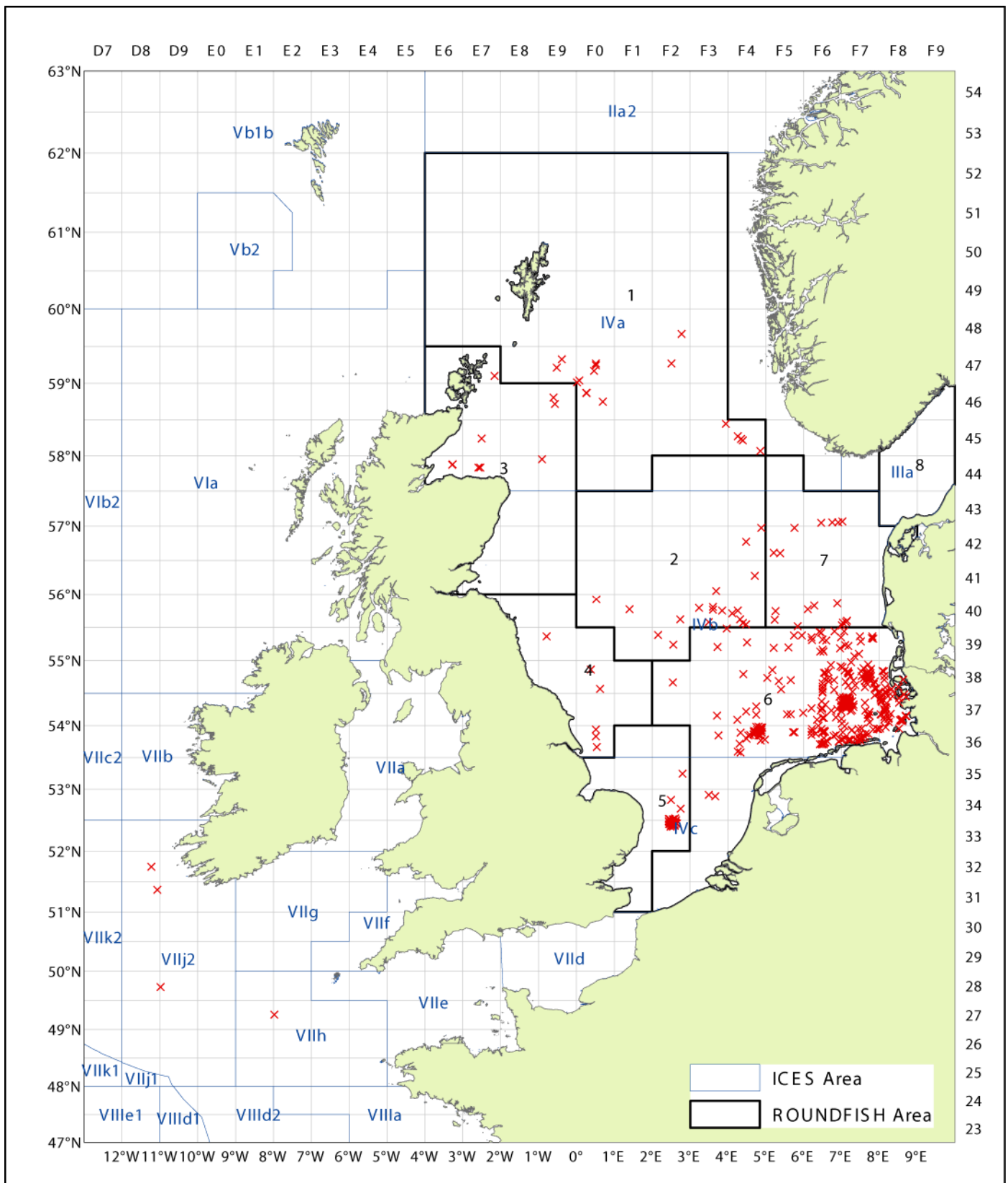
16.5 [cm]
45.5 [cm]

male 70
female 74
undefined 261

total numbers of data 405

Eutrigla gurnardus

Geographical distribution of data used for calculating the length-weight relationship



Eutrigla gurnardus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0112

b = 2.8774

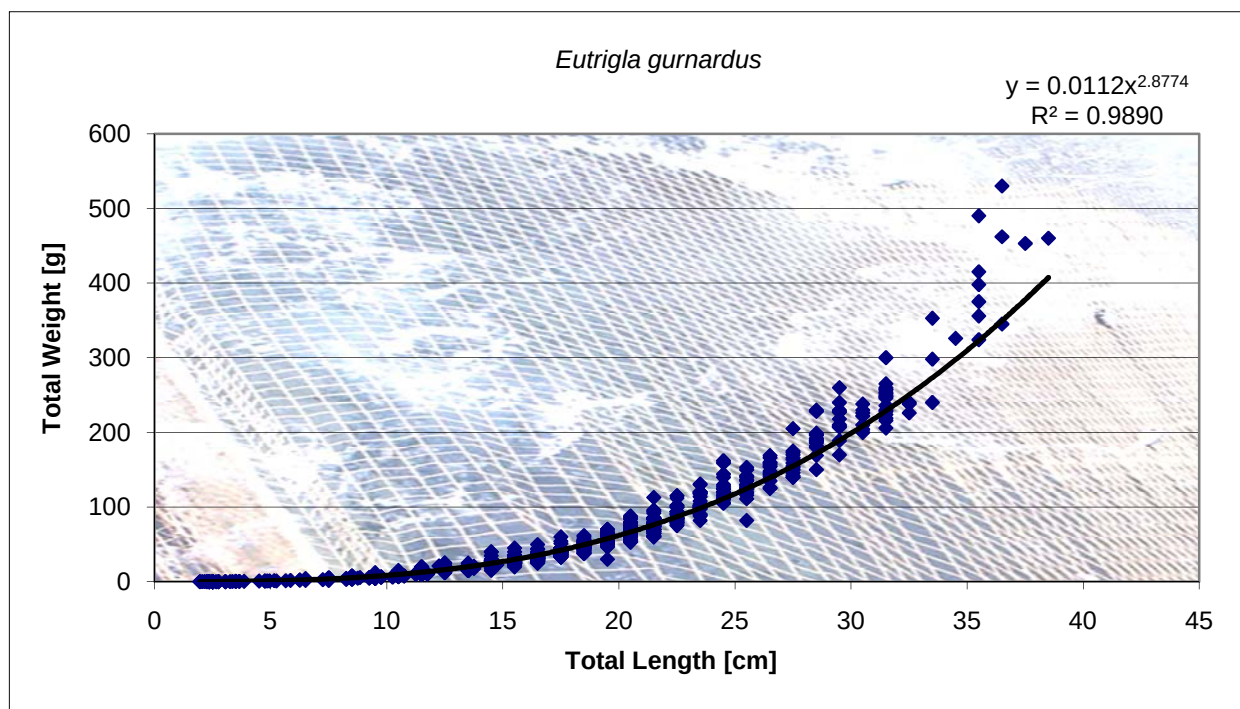
data collected

time period : 2000 - 2011

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
346	150	190	36																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
171	171	4	6	139	5	77	99	14	3	16	17								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	718	-	-	4	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	138	544	36	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	1	3	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
20	127	118	6	34	395	18	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

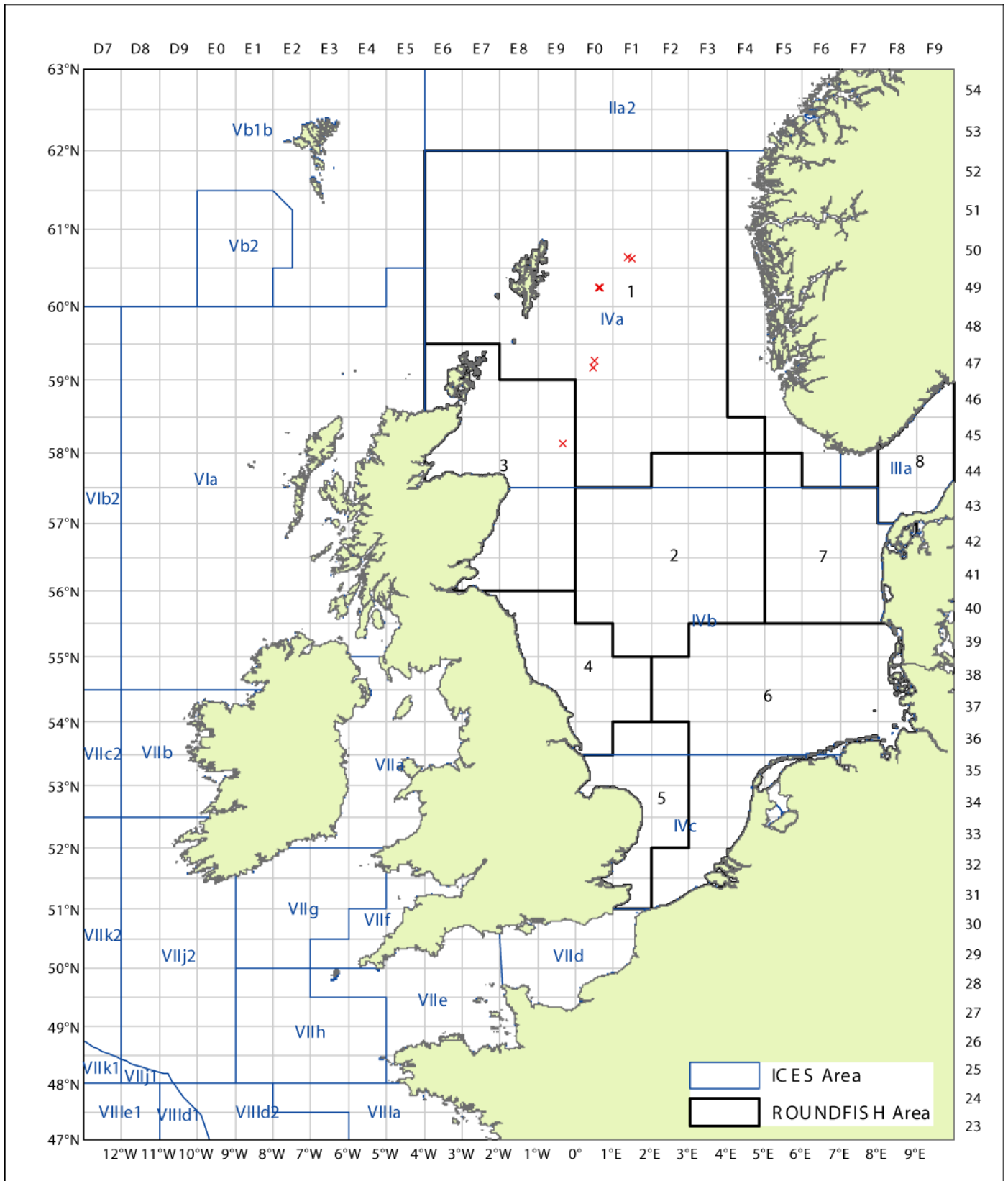
- Total length
- cm below, mm below
- min length
- max length

1.95 [cm]
38.5 [cm]

male -
female -
undefined 722
total numbers of data 722

Gadiculus argenteus

Geographical distribution of data used for calculating the length-weight relationship



Gadiculus argenteus

Quarter: 1 - 2

$$Tw [g] = a * L [cm]^b$$

a = 0.0154

b = 2.7217

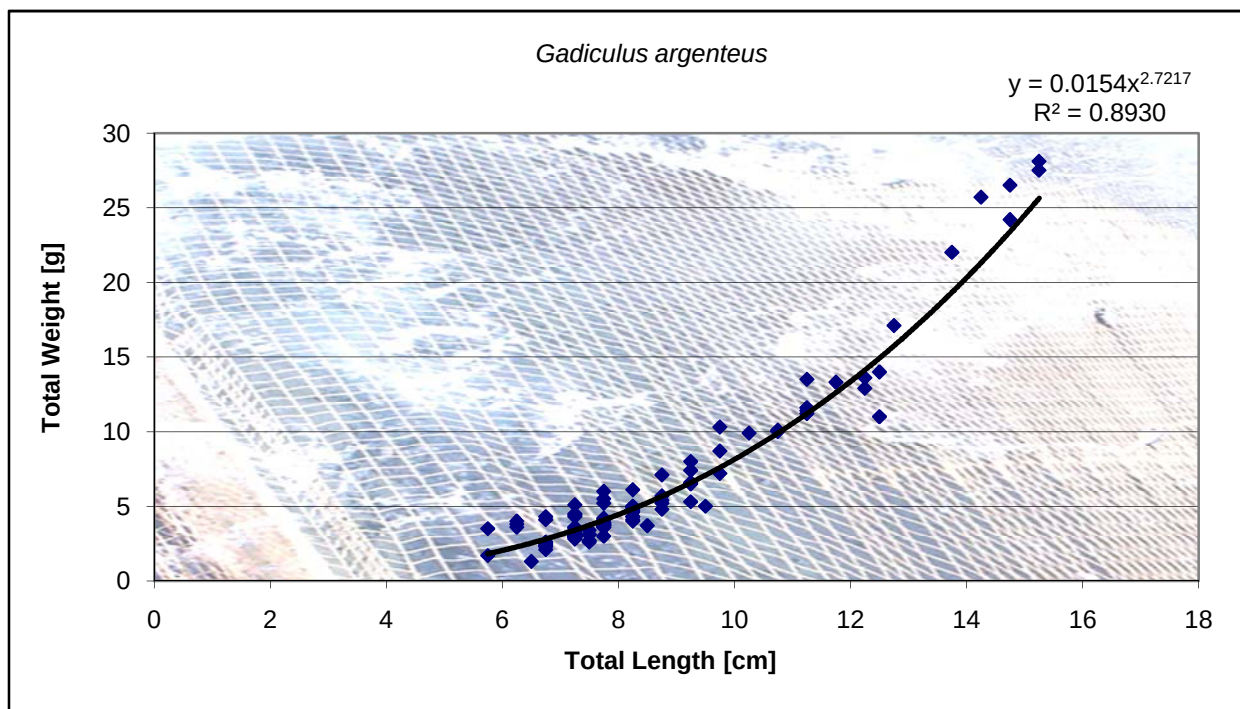
data collected

time period : 1995 - 2008

data source : research vessel

numbers of data:

Numbers of fish																			
Quarter																			
1	2	3	4																
83	19	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
71	12	-	-	19	-	-	-	-	-	-	-	-							
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	102	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	102	-	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
101	-	1	-	-	-	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below, 1/2 cm below
- min length
- max length

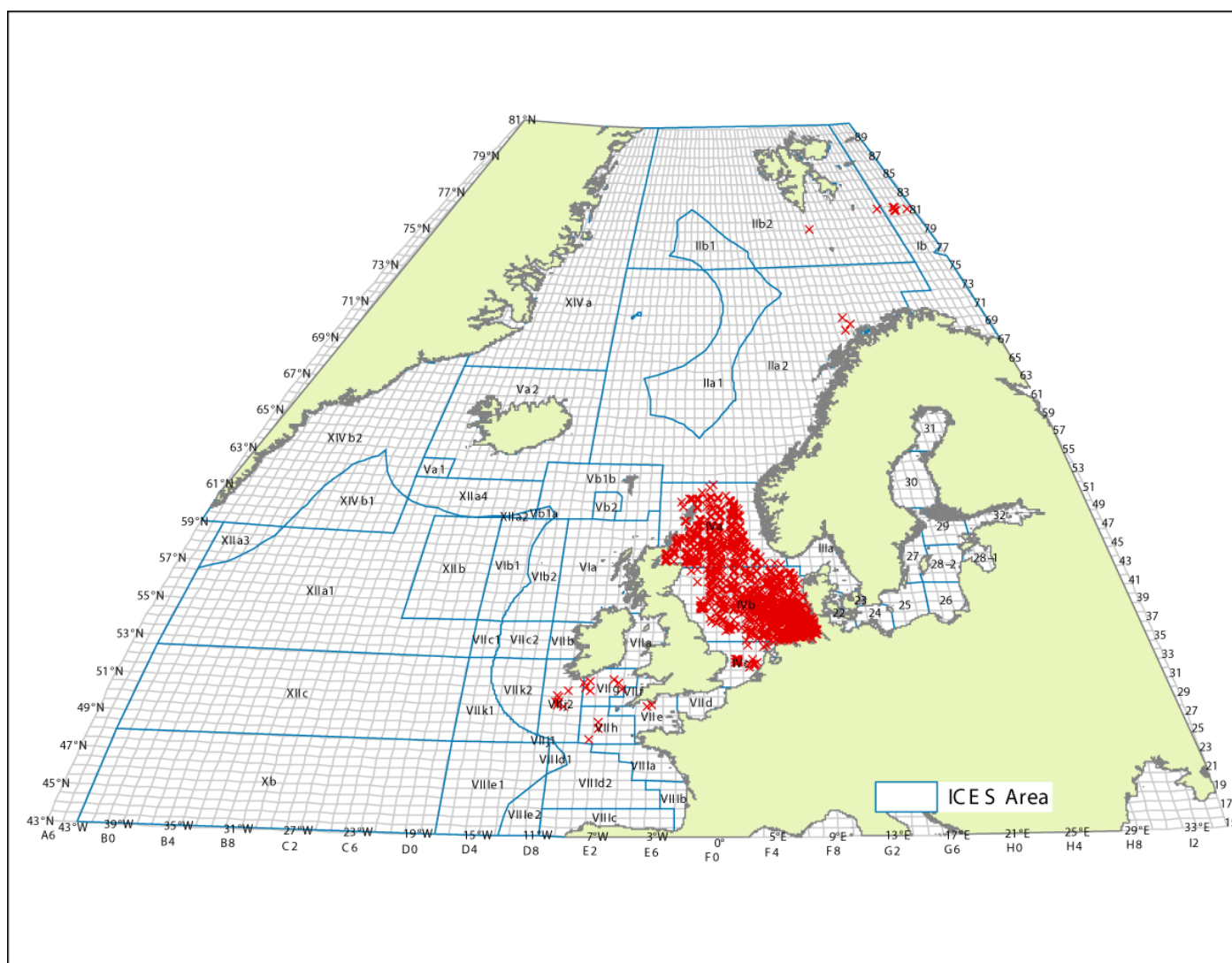
5.75 [cm]
15.25 [cm]

male -
female -
undefined 102

total numbers of data 102

Gadus morhua

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

Quarter: 1 - 4

$Tw_{[g]} = a * L_{[cm]}^b$

a = 0.0065

b = 3.0982

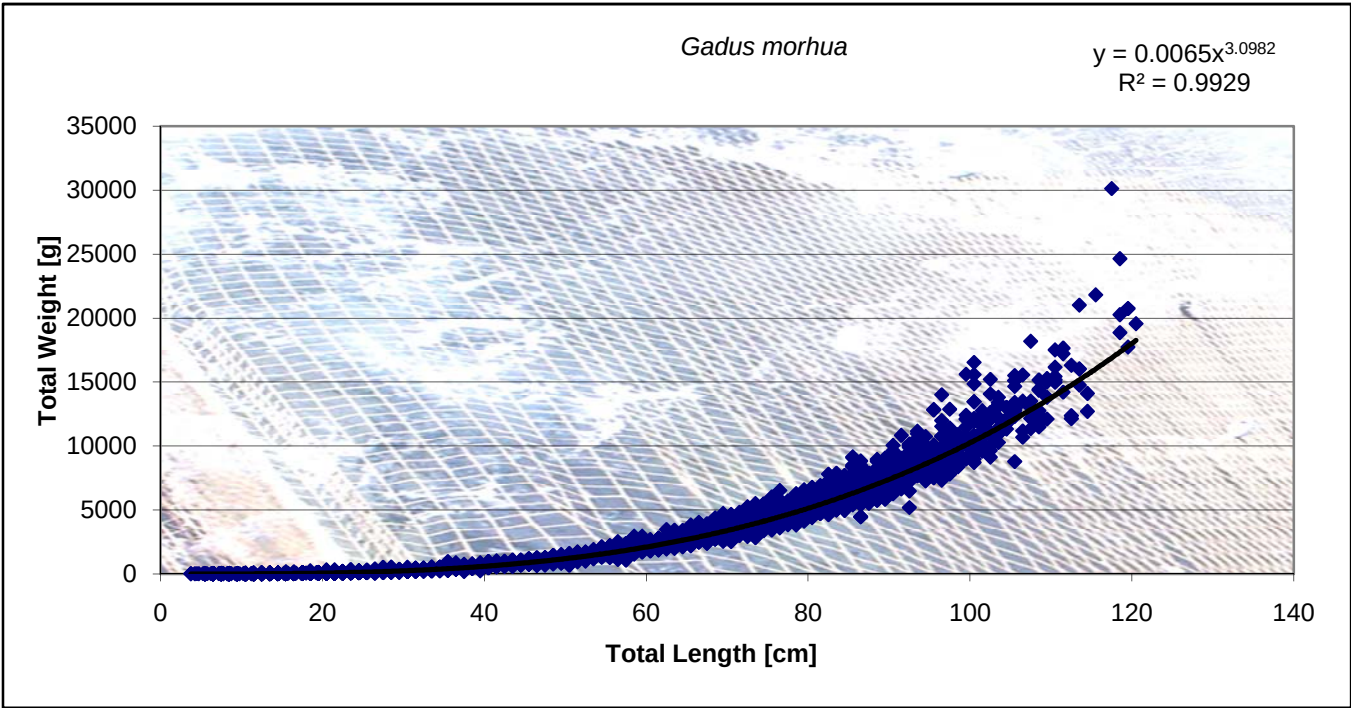
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
6400	2529	5999	1737																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
3280	2769	351	101	1386	1042	2908	2446	645	1210	445	82								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
711	833	-	15056	-	-	65	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
711	451	382	-	-	-	-	7084	7935	37	-	-	-	-	-	-	-	-	2	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
47	2	14	-	-	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
4874	2088	1601	1716	129	2644	2003	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length	male	6647
- cm below	female	6608
min length	undefined	3410
max length	total numbers of data	16665
		3.5 [cm]
		120.5 [cm]

♀

length-weight relationship



Gadus morhua



Quarter: 1 - 4

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0061

b = 3.1144

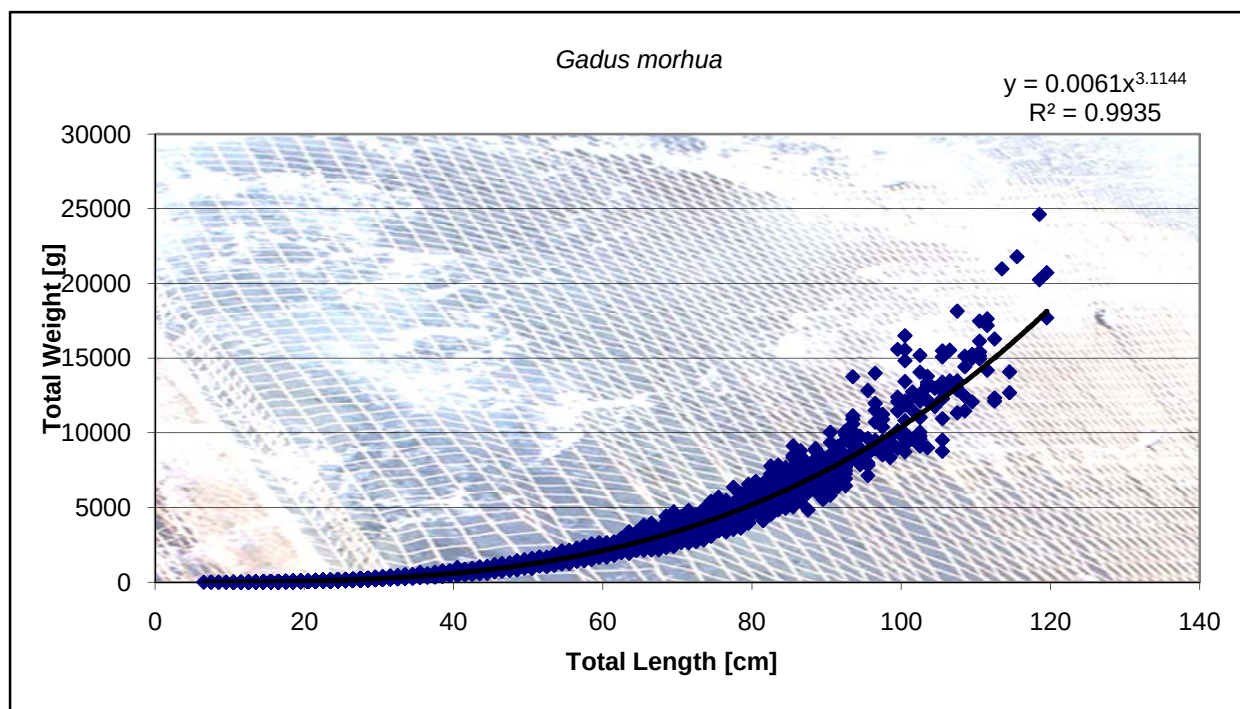
data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of salmon																				
Quarter																				
1	2	3	4																	
3024	1239	3061	46																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
1464	1400	160	38	675	526	1260	1459	342	-	30	16									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
314	2	-	7042	-	-	12	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	2	-	-	-	-	-	3628	3413	1	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
7	-	5	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
2526	995	768	847	124	840	918	-	-			-	-	-	-	-	314	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

6.5 [cm]
119.5 [cm]

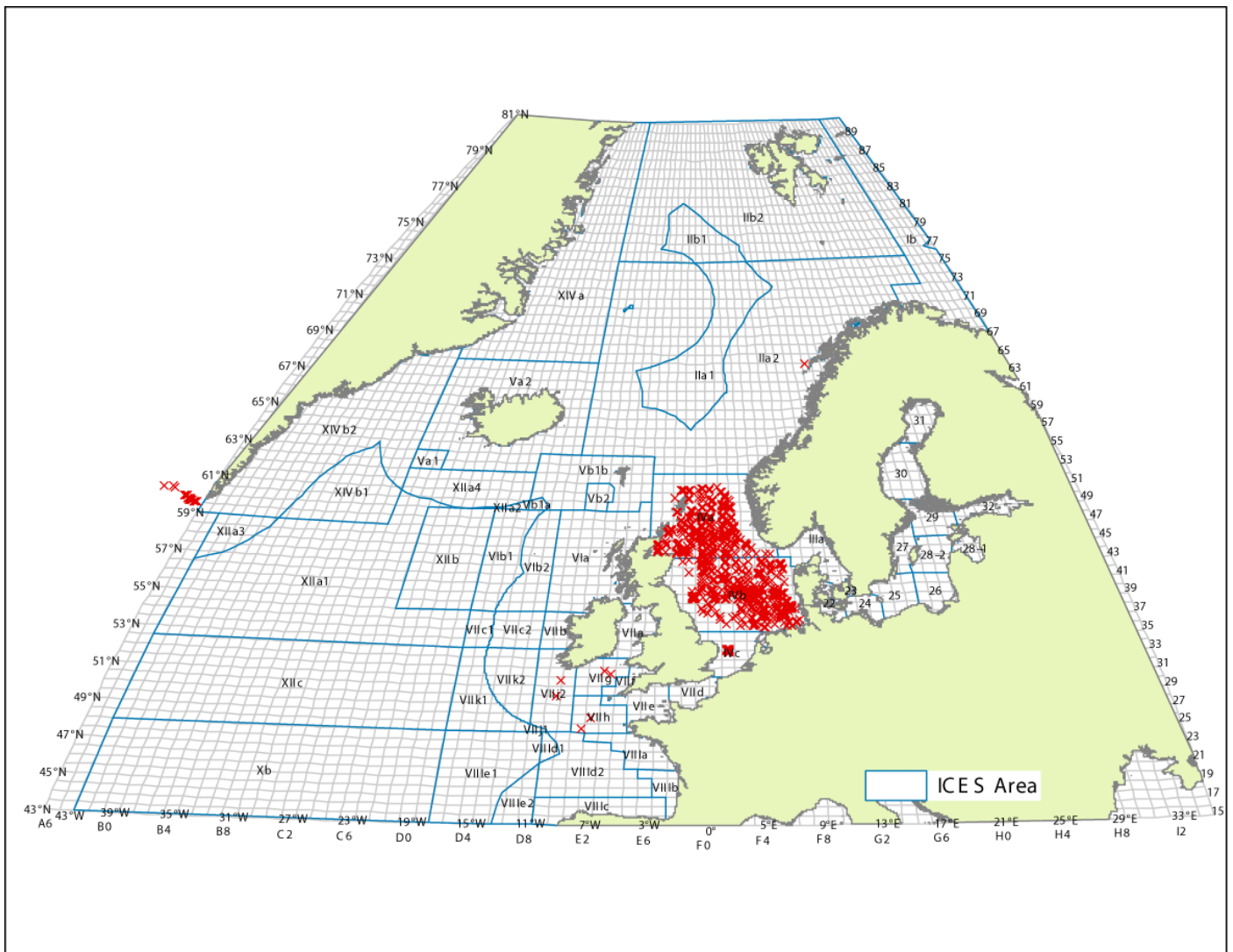
male
female
undefined

-
7370
-

total numbers of data 7370

Gadus morhua ♂

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua



Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0062

b = 3.1113

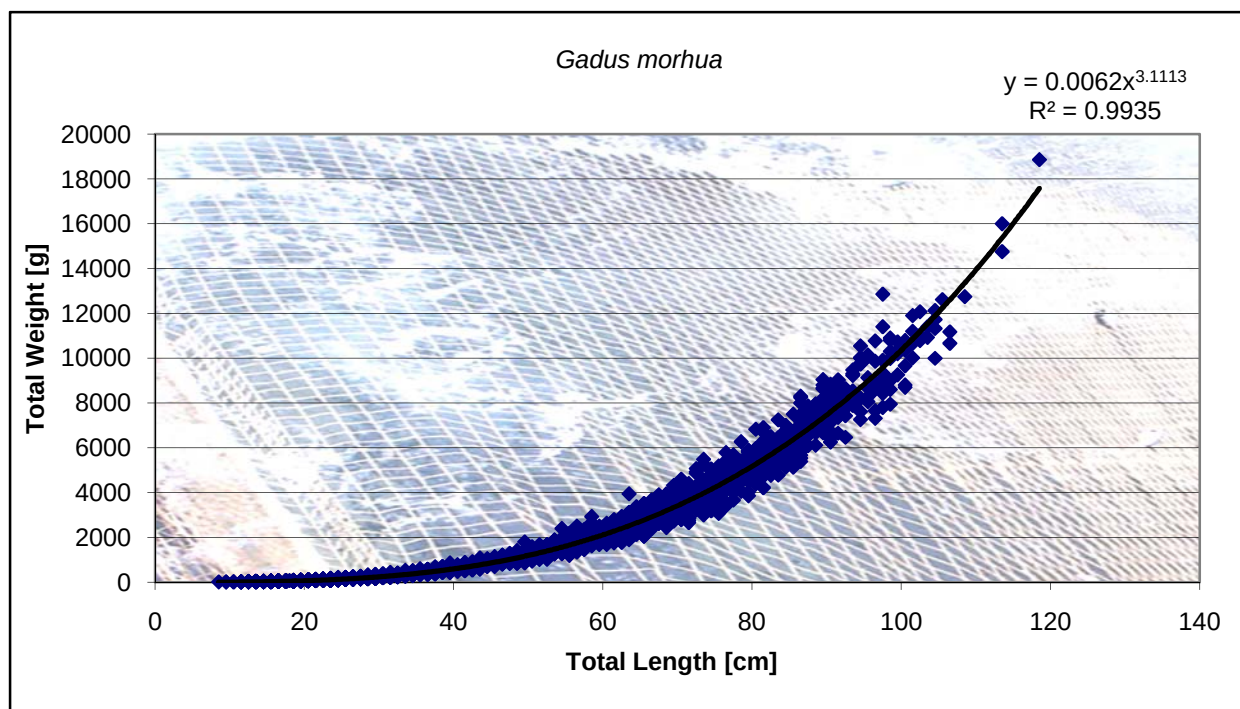
data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of data.																				
Quarter																				
1	2	3	4																	
3170	1096	3008	43																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
1502	1489	179	41	597	458	1329	1338	341	-	22	21									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
238	9	-	7063	-	-	7	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	9	-	-	-	-	-	3610	3450	3	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
3	1	3	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
2536	1023	748	803	126	895	903	-	-			-	-	-	-	-	238	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

8.5 [cm]
118.5 [cm]

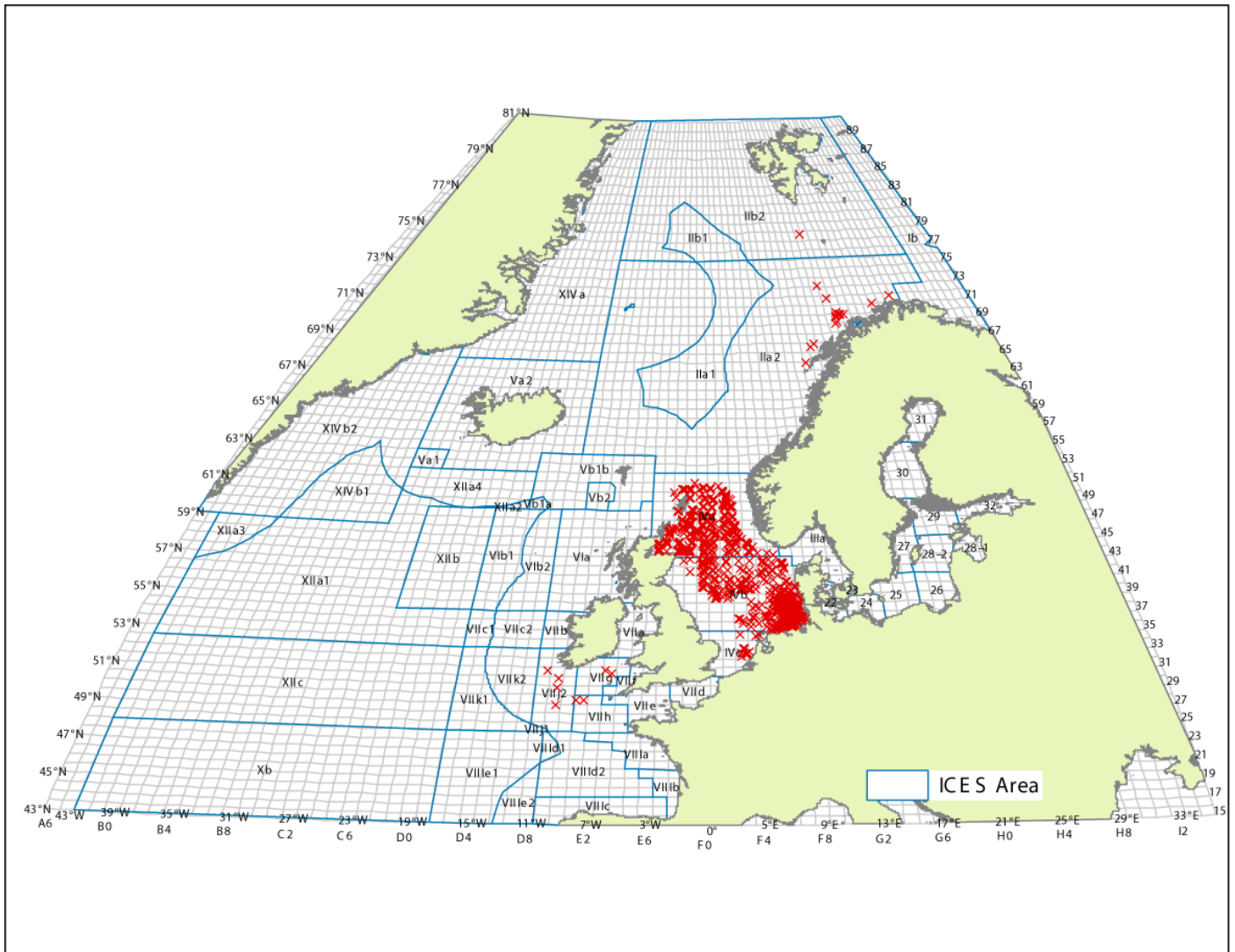
male
female
undefined

7317
-
-

total numbers of data 7317

Gadus morhua Quarter 1

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

Quarter: 1

$$Tw_{[g]} = a * L_{[cm]}^b$$

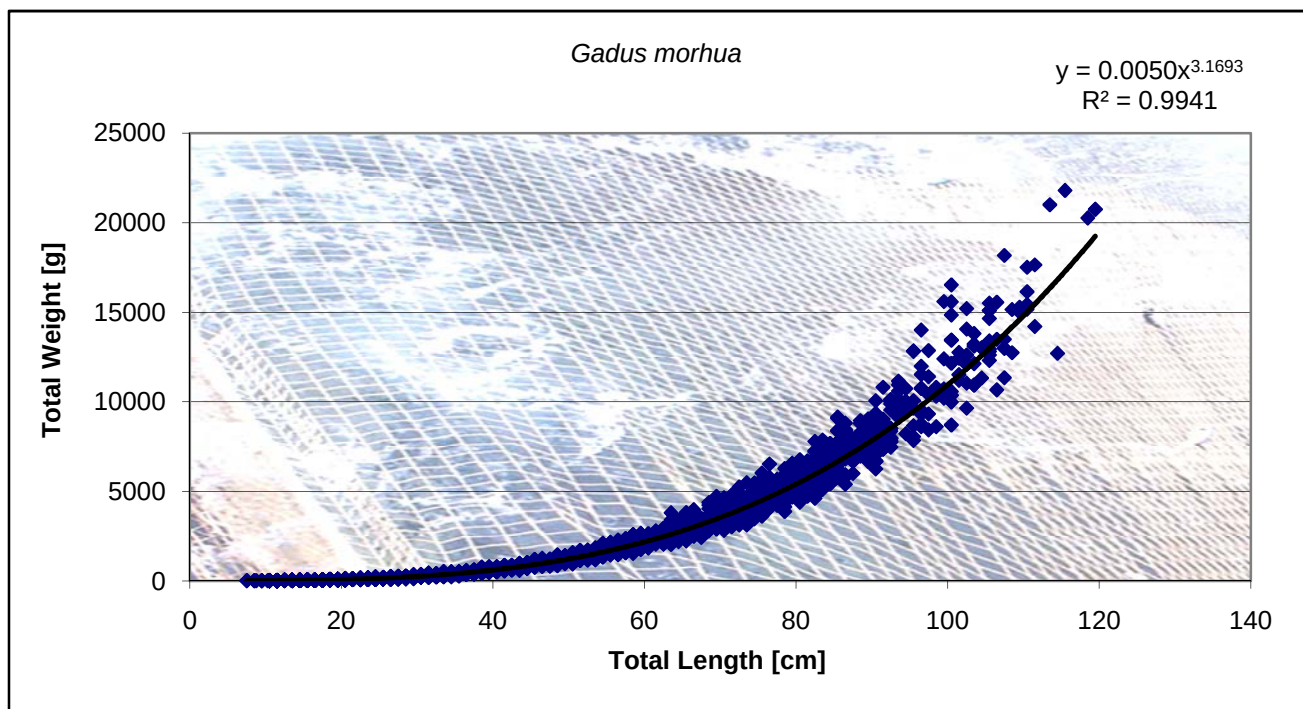
$$a = 0.005$$
 $b = 3.1693$

data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

[illegible]

Method of Measurement

- Total length

- cm below

min length

max length

7.5 [cm]

126.5 [cm]

male

2940

female

2768

undefined

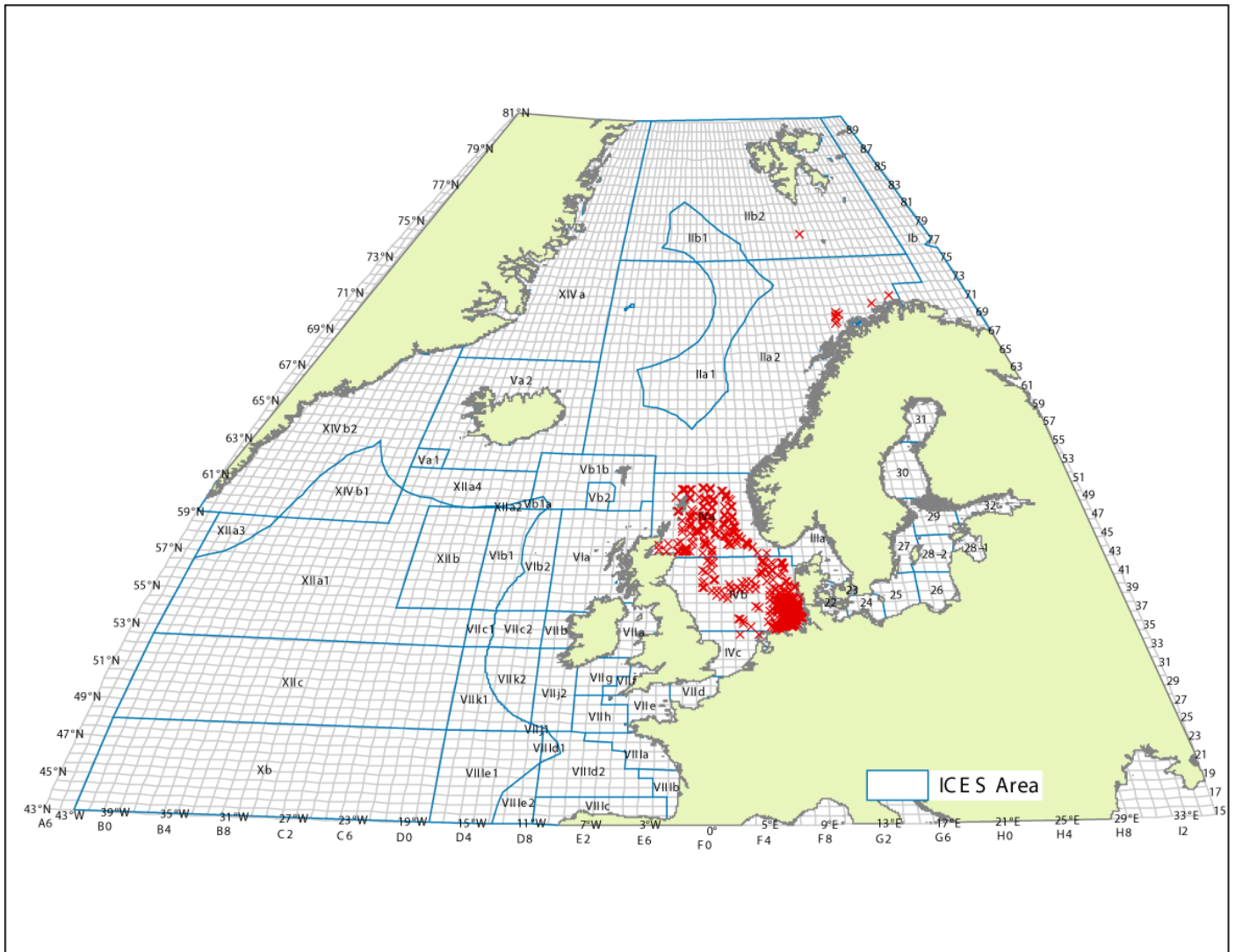
3647

total numbers of data

9355

Gadus morhua January

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

January

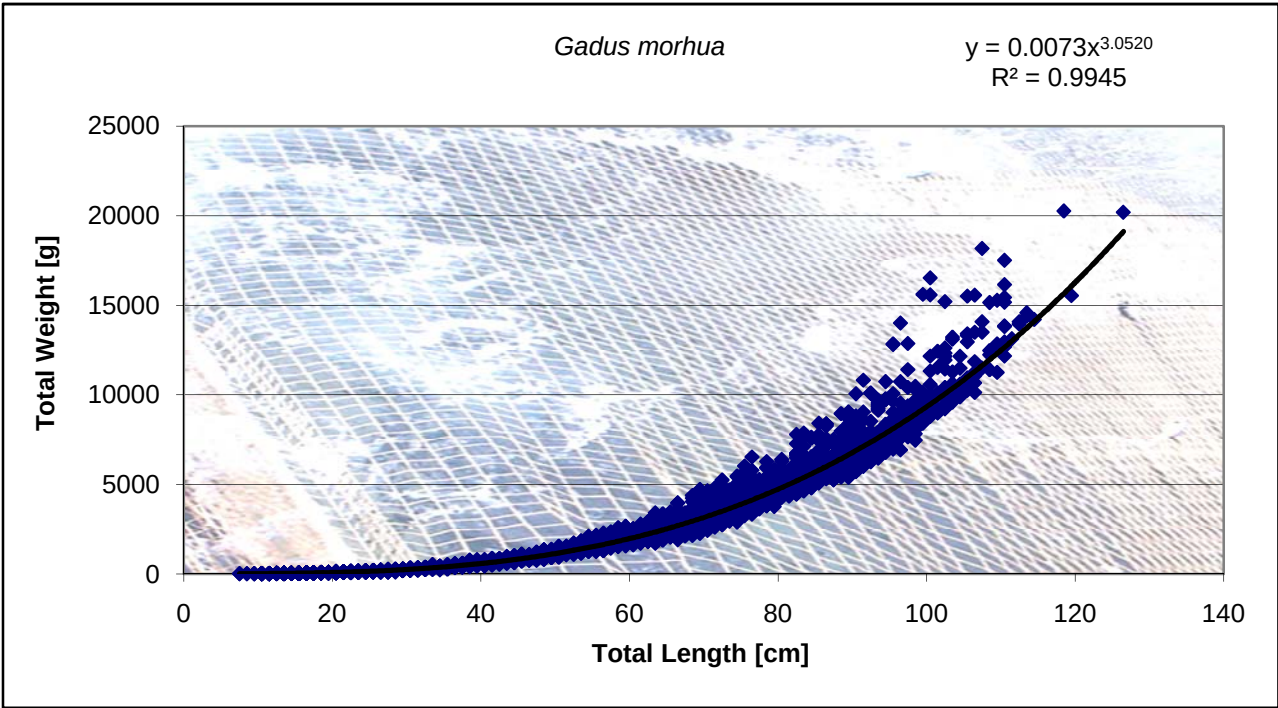
$Tw_{[g]} = a * L_{[cm]}^b$
a = 0.0073
b = 3.052

data collected

time period : 1994 - 2007
data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
5436	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
5436	-	-	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	2212	-	3224	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	1927	285	-	-	-	-	2088	1135	1	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
1611	133	226	-	-	713	541	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		

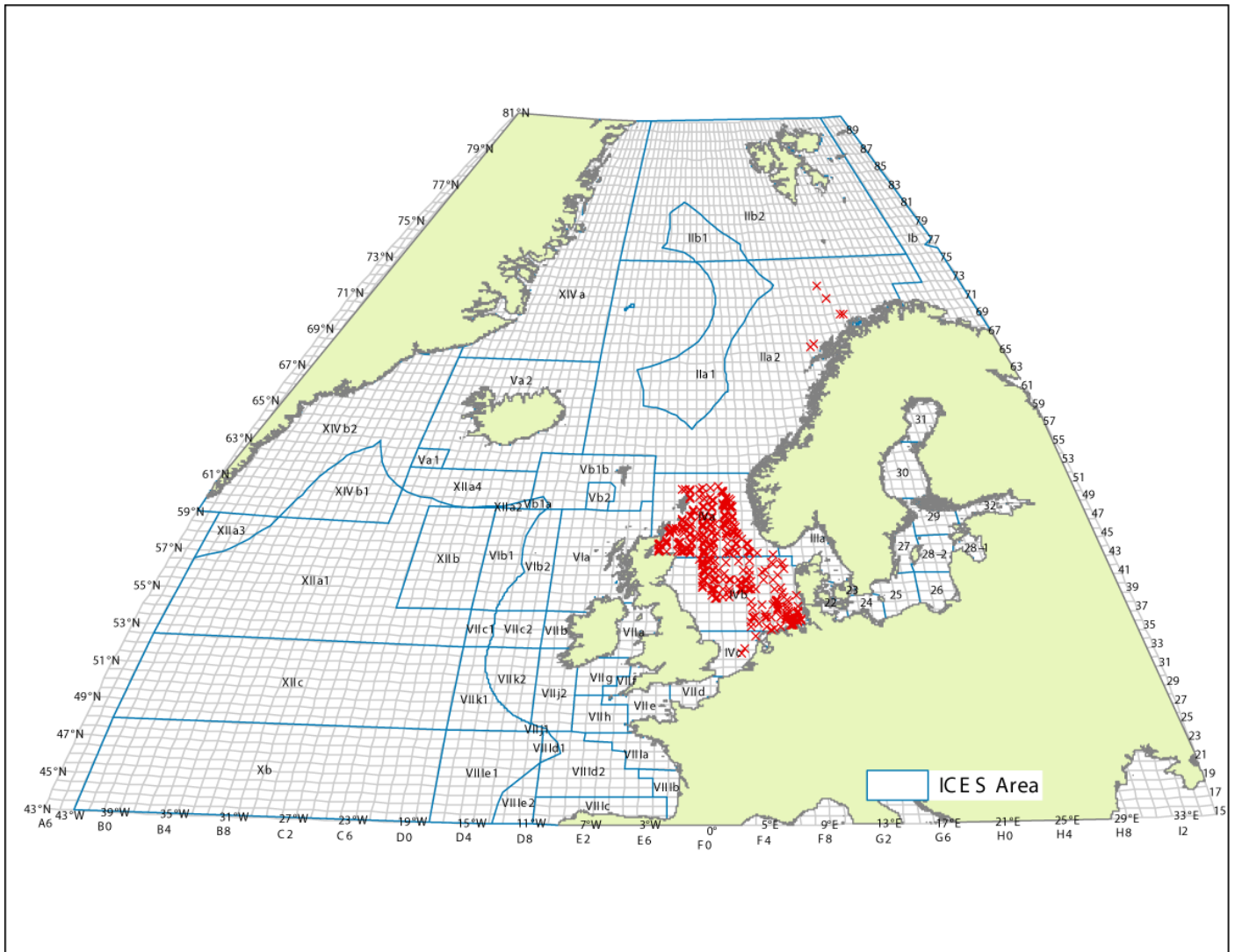


Method of Measurement

- Total length	male	1416
- cm below	female	1373
	undefined	2647
min length	7.5 [cm]	
max length	126.5 [cm]	
total numbers of data		5436

Gadus morhua February

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

February

$Tw [g] = a * L [cm]^b$

$a = 0.006$

$b = 3.111$

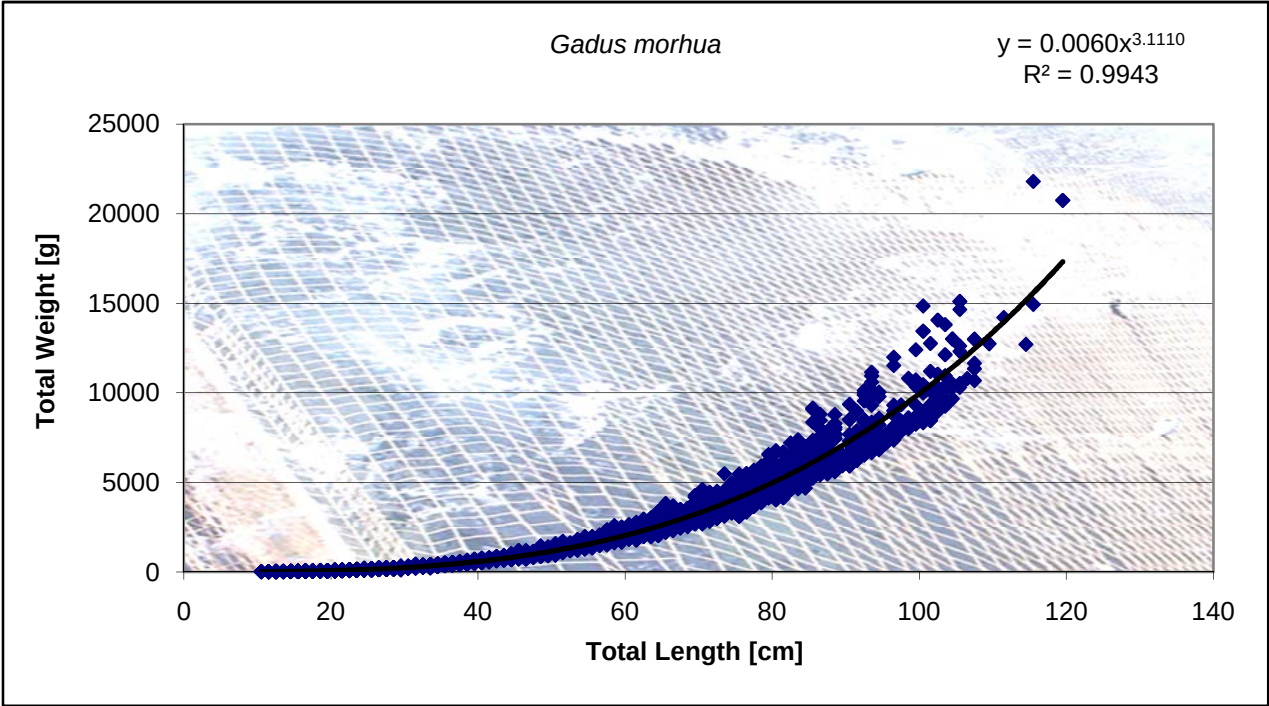
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
3533	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	3533	-	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	773	-	2760	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	773	-	-	-	-	-	2021	736	3	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
1452	686	428	-	-	109	84	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		

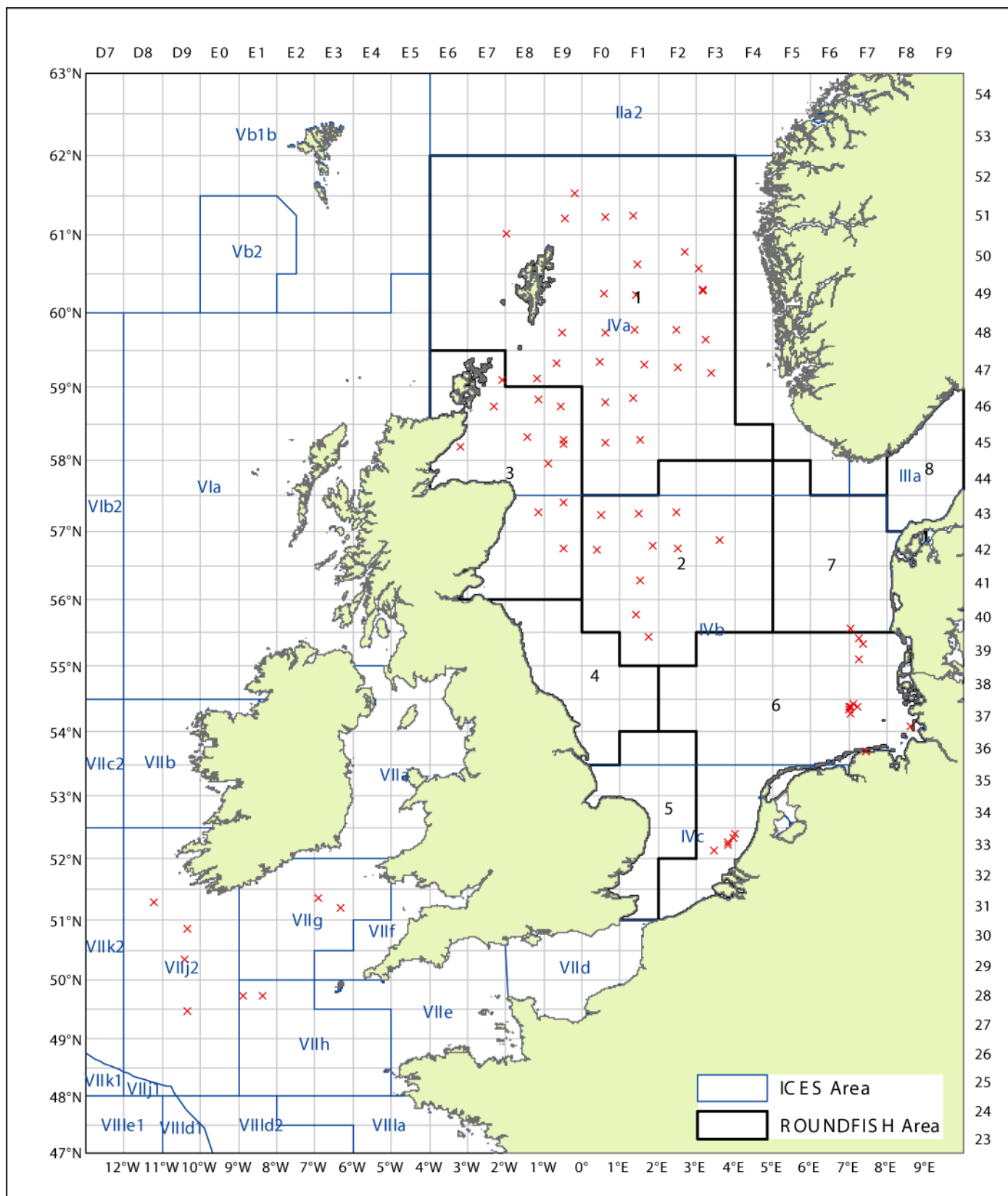


Method of Measurement

- Total length	male	1337
- cm below	female	1235
min length	undefined	961
max length	total numbers of data	3533

Gadus morhua *March*

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

March

$$Tw [g] = a * L [cm]^b$$

a = 0.0053

b = 3.1528

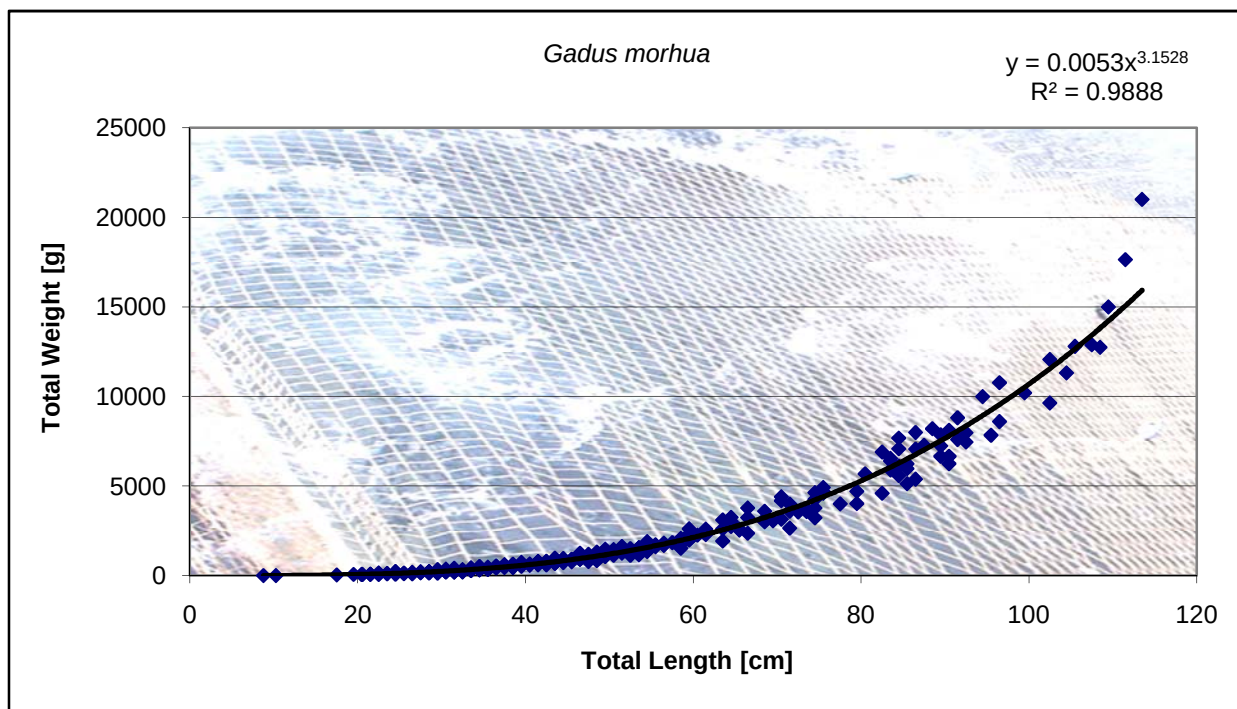
data collected

time period : 1994 - 2005

data source : research vessel

numbers of data:

Quarter																				
1	2	3	4																	
382	-	-	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	382	-	-	-	-	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	11	-	351	-	-	20	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	11	-	-	-	-	-	225	109	17	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
13	2	5	-	-	-	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
179	76	54	-	-	40	2	-	-			-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

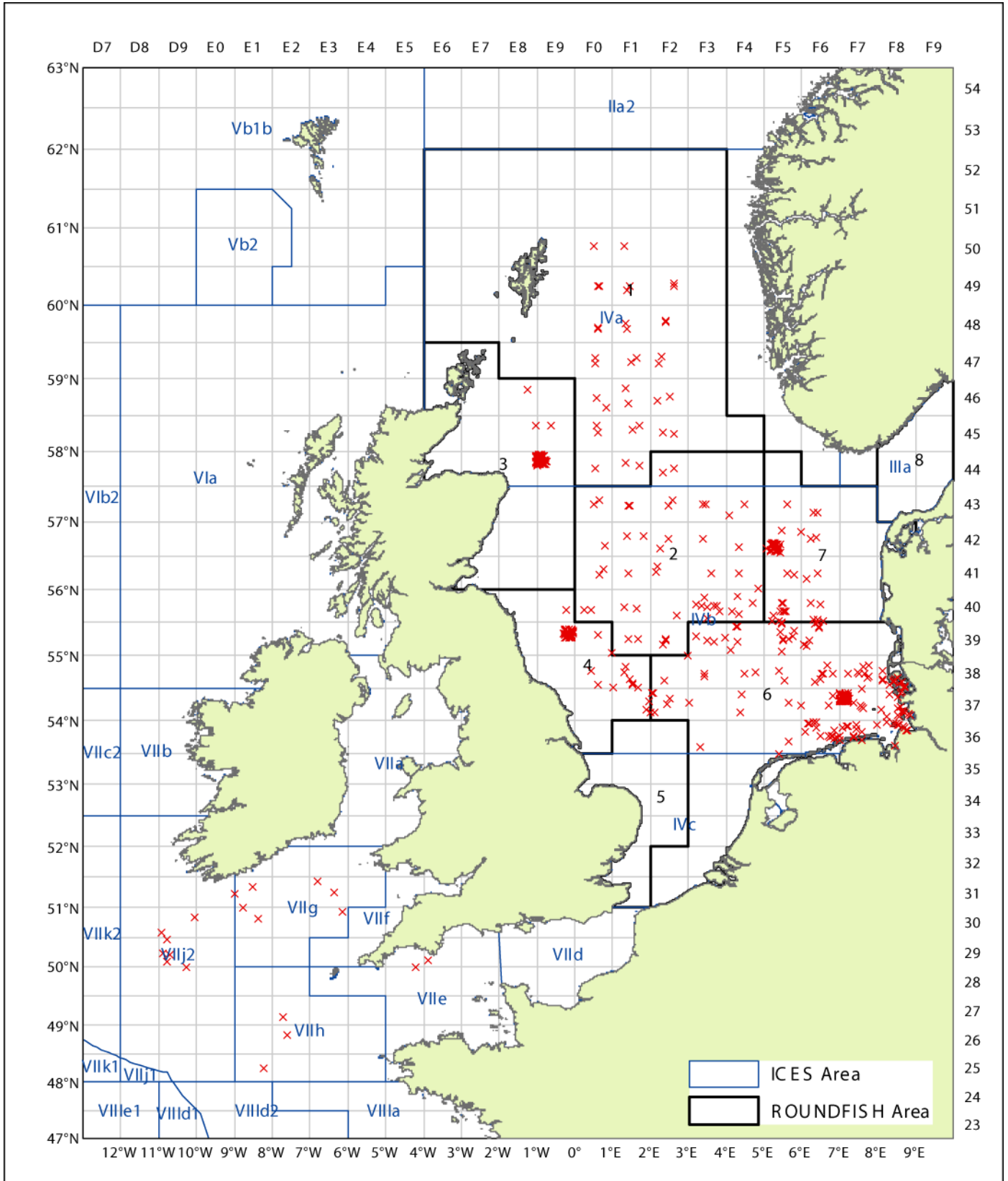
8.5 [cm]
113.5 [cm]

male 187
female 160
undefined 35

total numbers of data 382

Gadus morhua Quarter 2

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

Quarter: 2

$$TW [g] = a * L [cm]^b$$

a = 0.0069

b = 3.0855

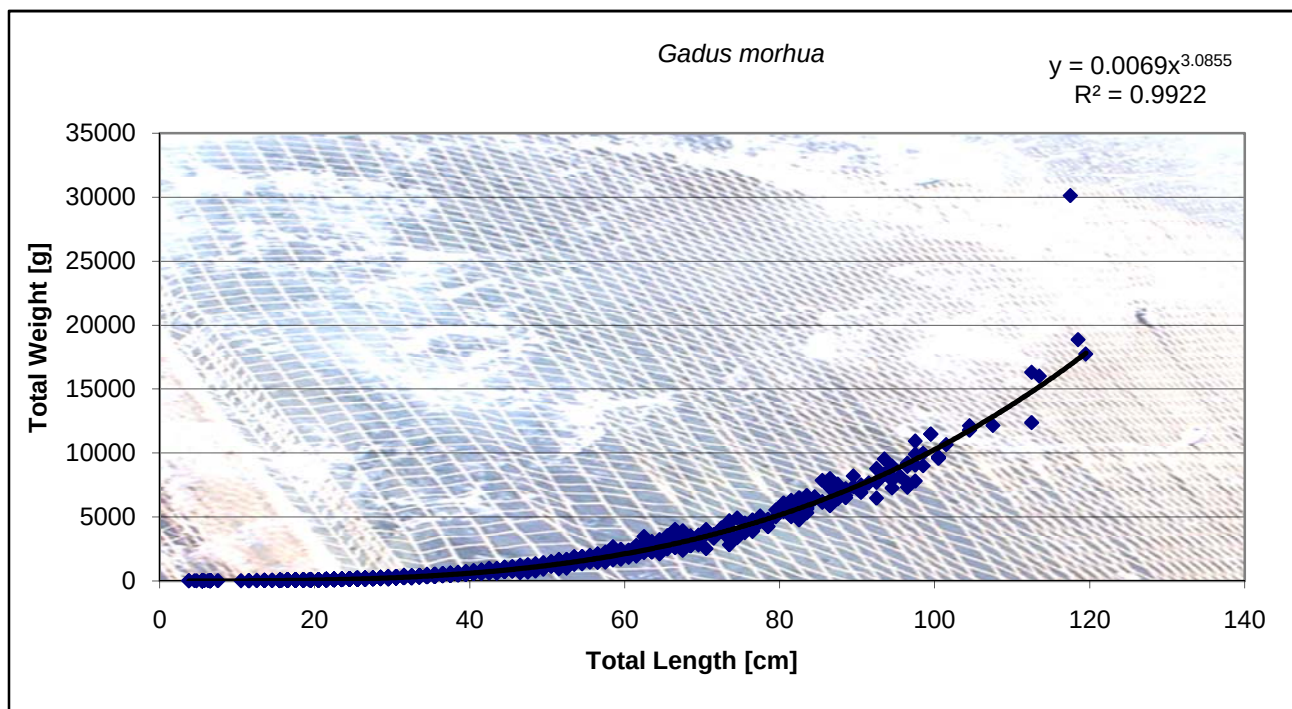
data collected

time period : 1994 - 2006

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
-	2529	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	101	1386	1042	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	2464	-	-	65	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	735	1729	-	-	-	-	-	-	-	-	-	2	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
47	2	14	-	-	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
341	499	381	235	-	625	383	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

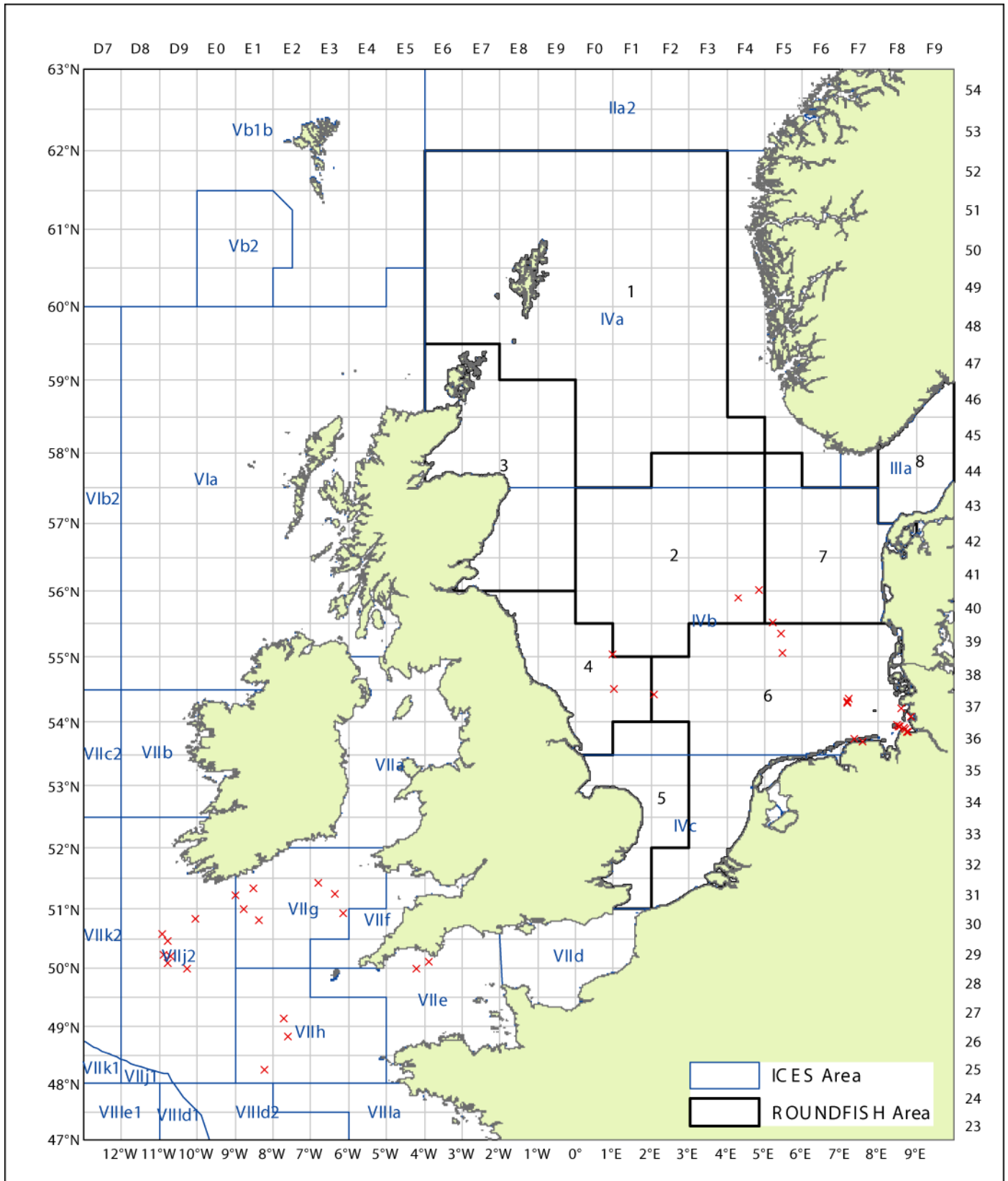
3.5 [cm]
119.5 [cm]

male 1035
female 1182
undefined 312

total numbers of data 2529

Gadus morhua April

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

April

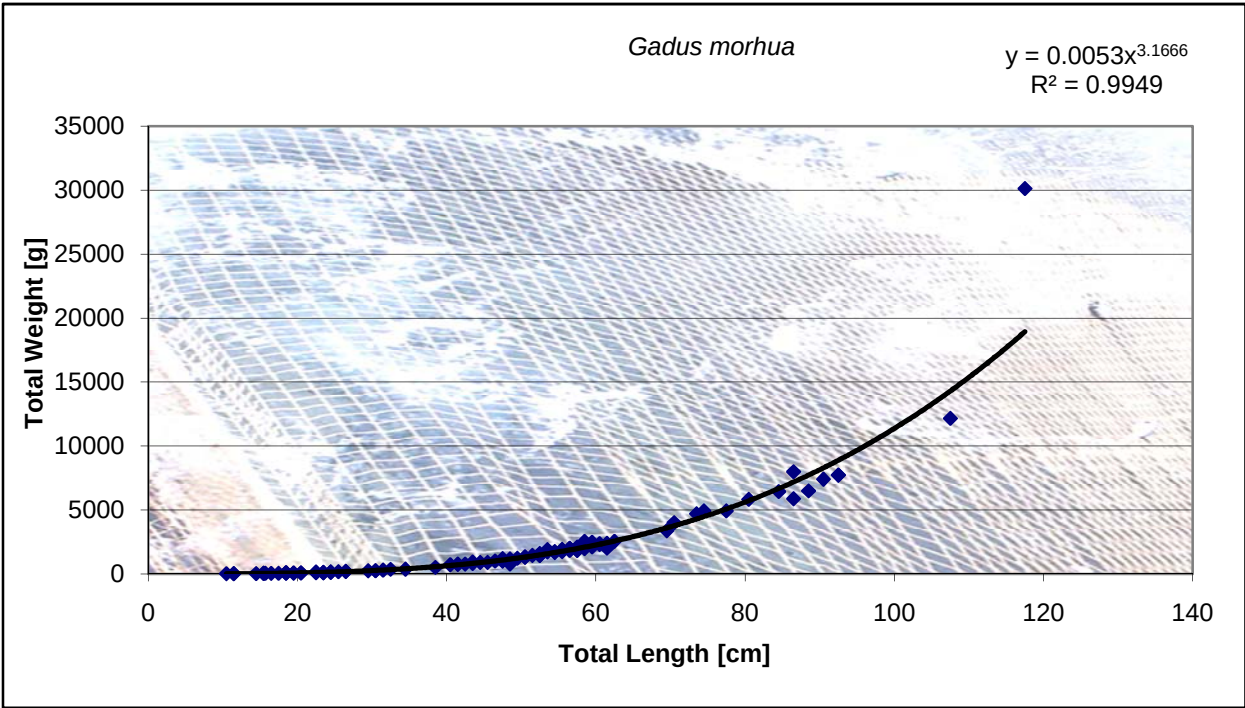
$Tw [g] = a * L [cm]^b$
 $a = 0.0053$
 $b = 3.1666$

data collected

time period : 1995 - 2006
data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	101	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	101	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	36	-	-	65	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	36	-	-	-	-	-	-	-	-	-	2	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
47	2	14	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	4	-	5	-	26	1	-	-		-	-	-	-	-	-	-	-	-	-

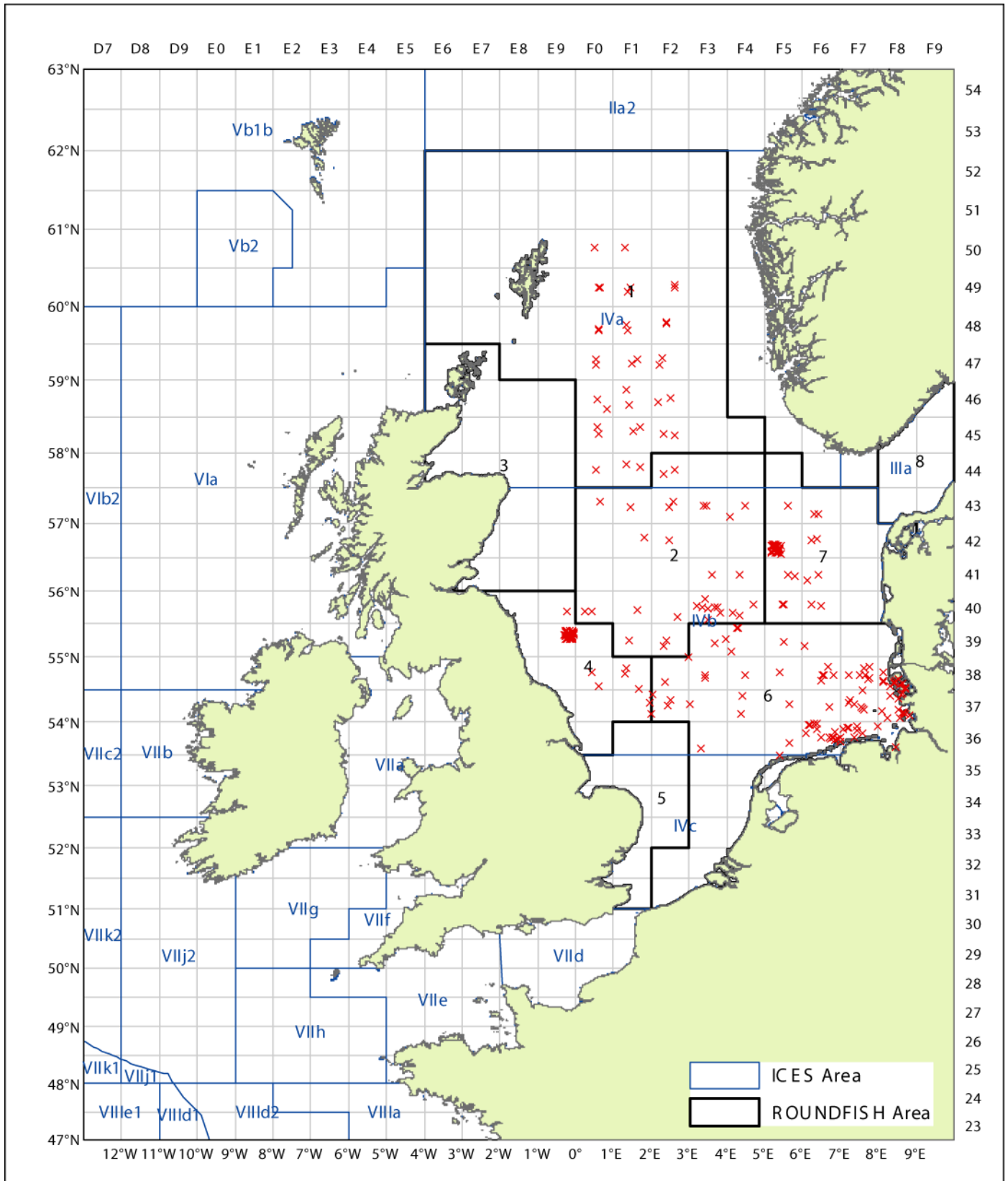


Method of Measurement

- Total length	male	13
- cm below	female	14
min length	undefined	74
max length	total numbers of data	101
10.5 [cm]		
117.5 [cm]		

Gadus morhua May

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

May

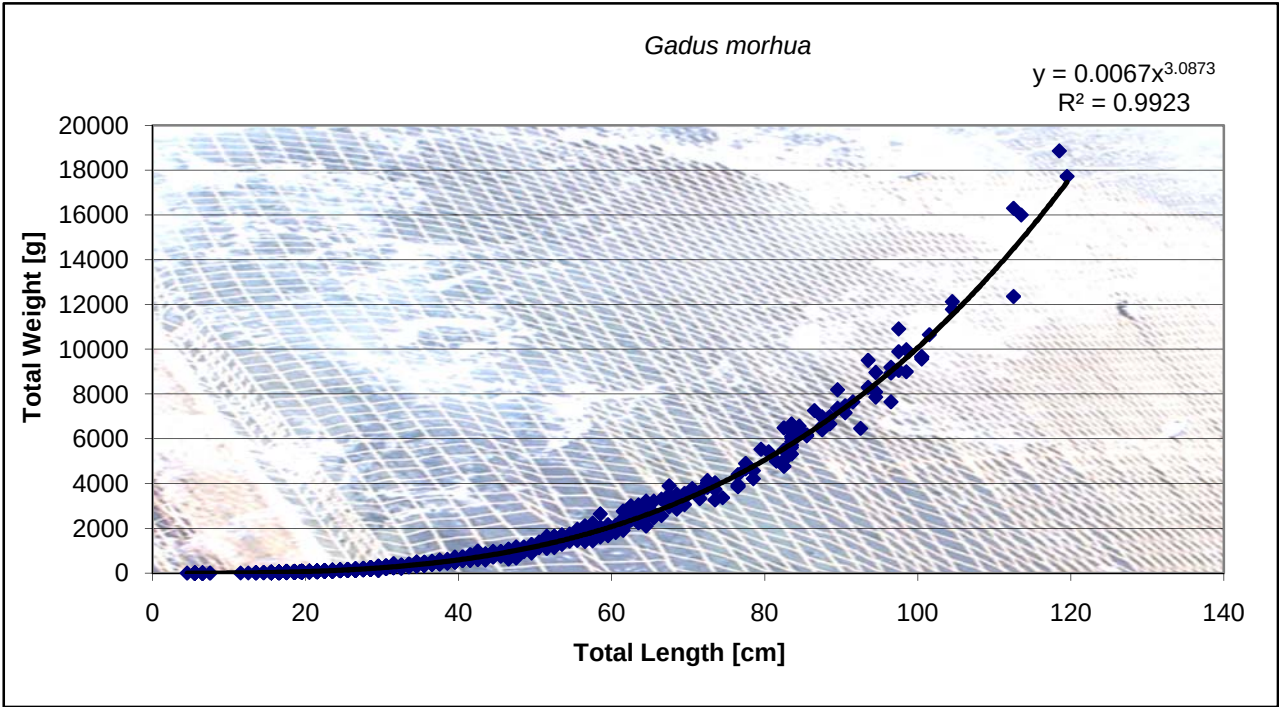
$TW [g] = a * L [cm]^b$
a = 0.0067
b = 3.0873

data collected

time period : 1994 - 2006
data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	1386	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	1386	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1386	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	354	1032	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
341	380	-	204	-	130	331	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		

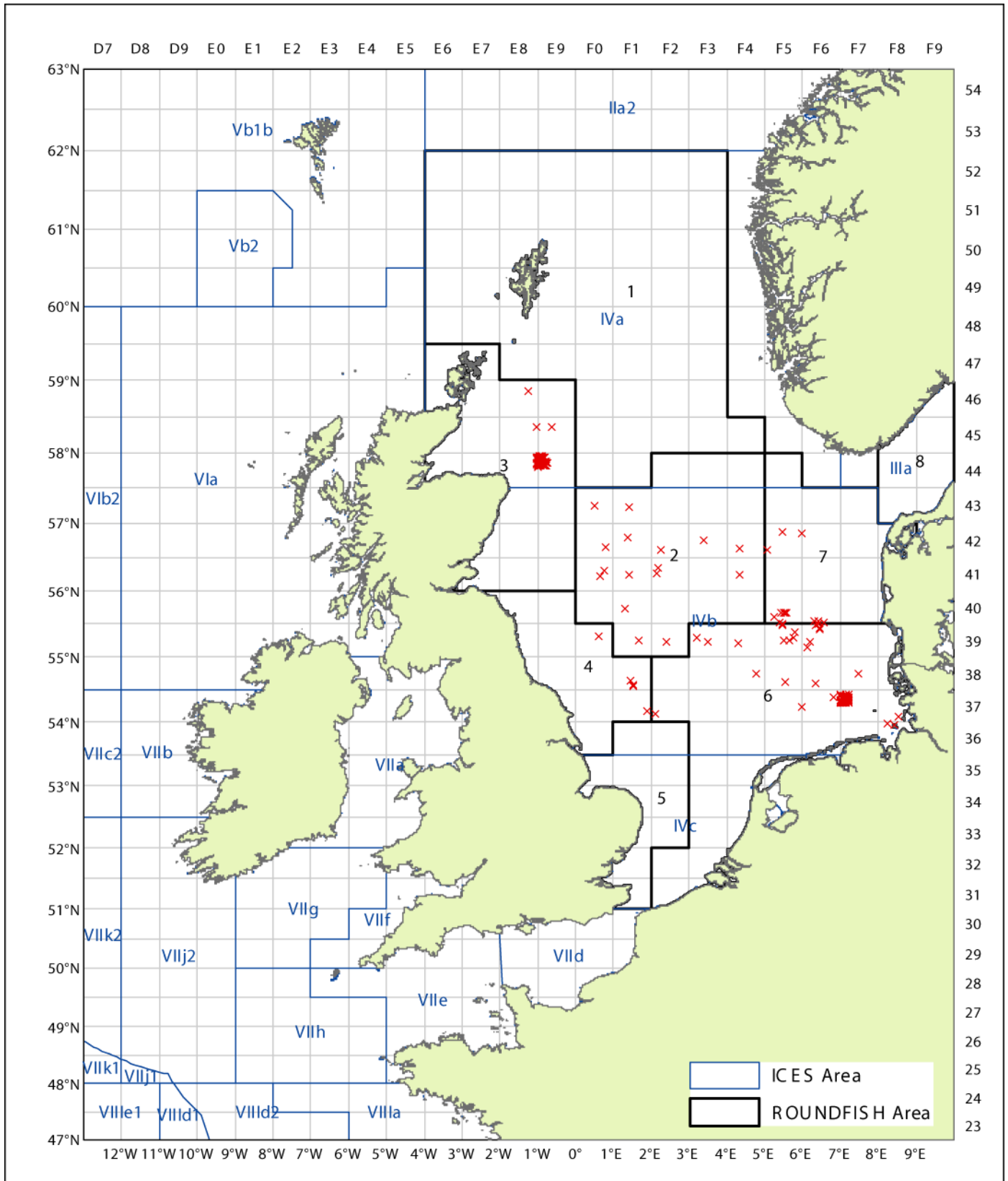


Method of Measurement

- Total length	male	600
- cm below	female	680
min length	undefined	106
max length	total numbers of data	1386

Gadus morhua June

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

June

$Tw [g] = a * L [cm]^b$

$a = 0.0081$

$b = 3.0489$

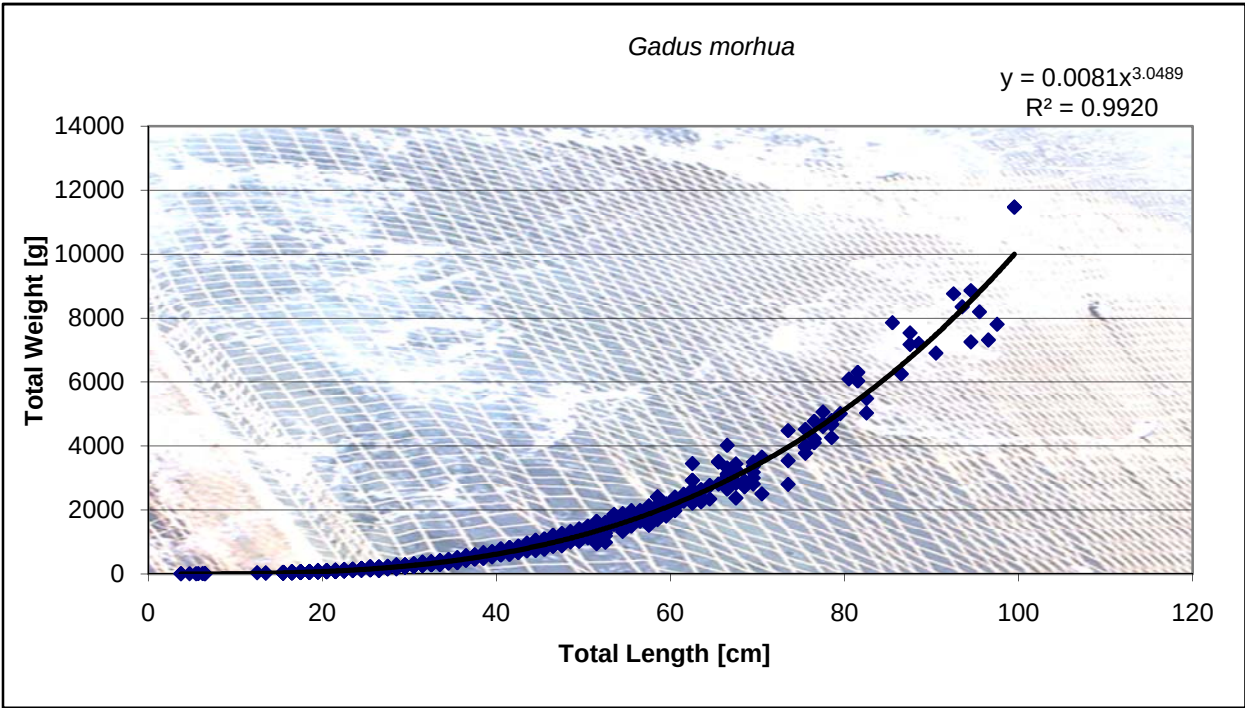
data collected

time period : 1994 - 2005

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	1042	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	1042	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1042	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	381	661	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
-	115	381	26	-	469	51	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

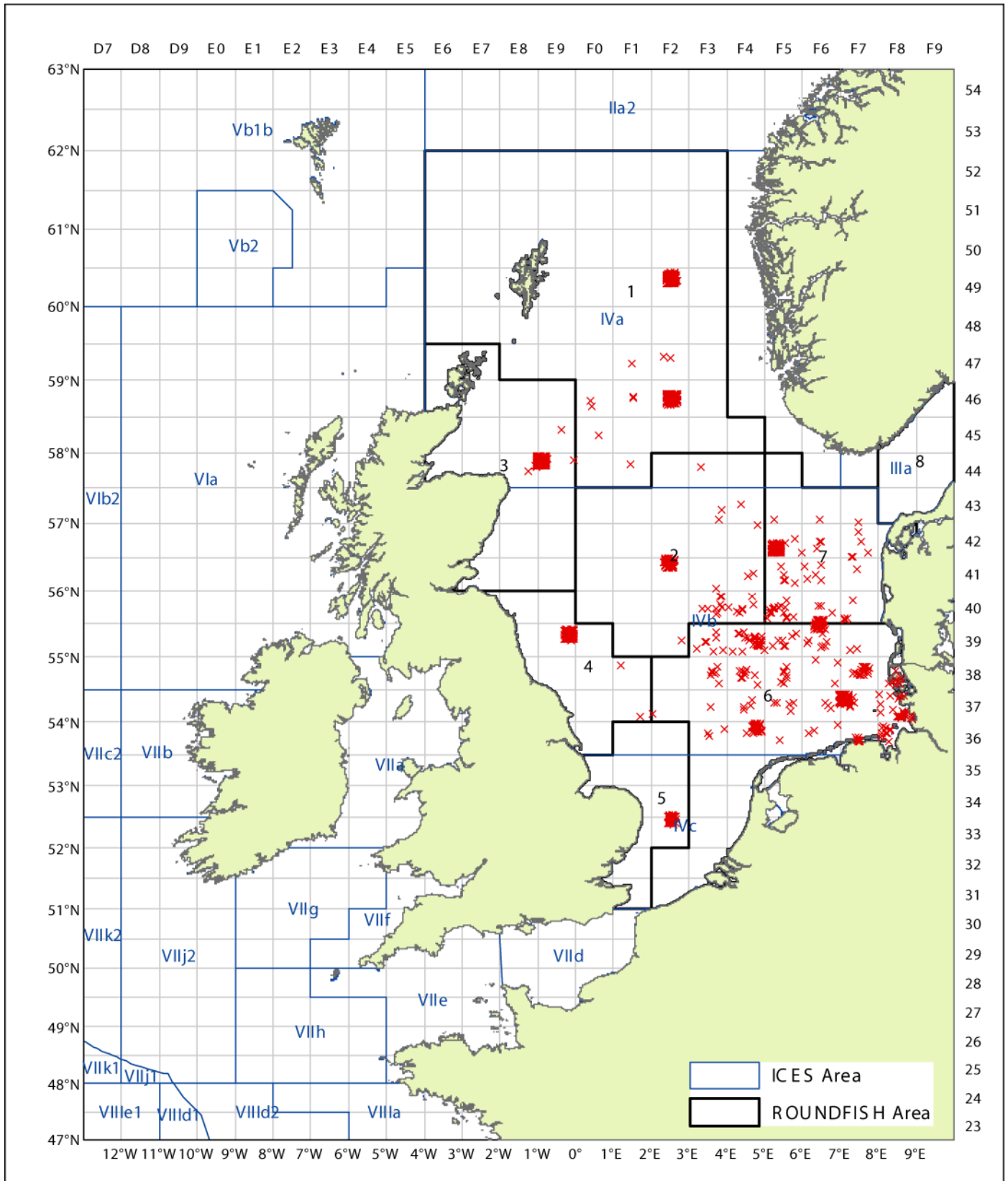


Method of Measurement

- Total length	male	422
- cm below	female	488
min length	undefined	132
max length	total numbers of data	1042

Gadus morhua Quarter 3

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

Quarter: 3

$Tw [g] = a * L [cm]^b$

$a = 0.0072$

$b = 3.0723$

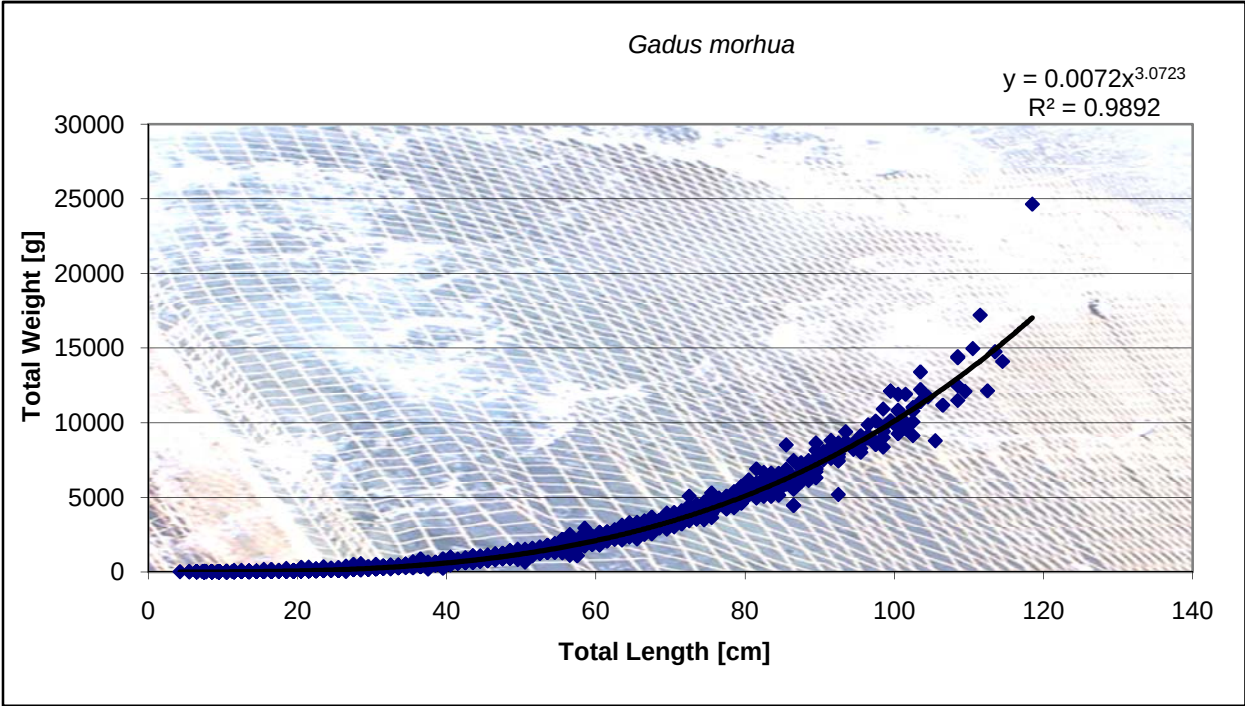
data collected

time period : 1994 - 2006

data source : research vessel

numbers of data:

Quarter																				
1	2	3	4																	
-	-	5714	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	2718	2351	645	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	5714	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	1822	3876	16	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
-	-	-	-	-	-	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9												
1127	657	473	1440	129	926	962	-	-												
1A	1B	1C	1D	1E	1F	2G	2H	2J												
-	-	-	-	-	-	-	-	-												

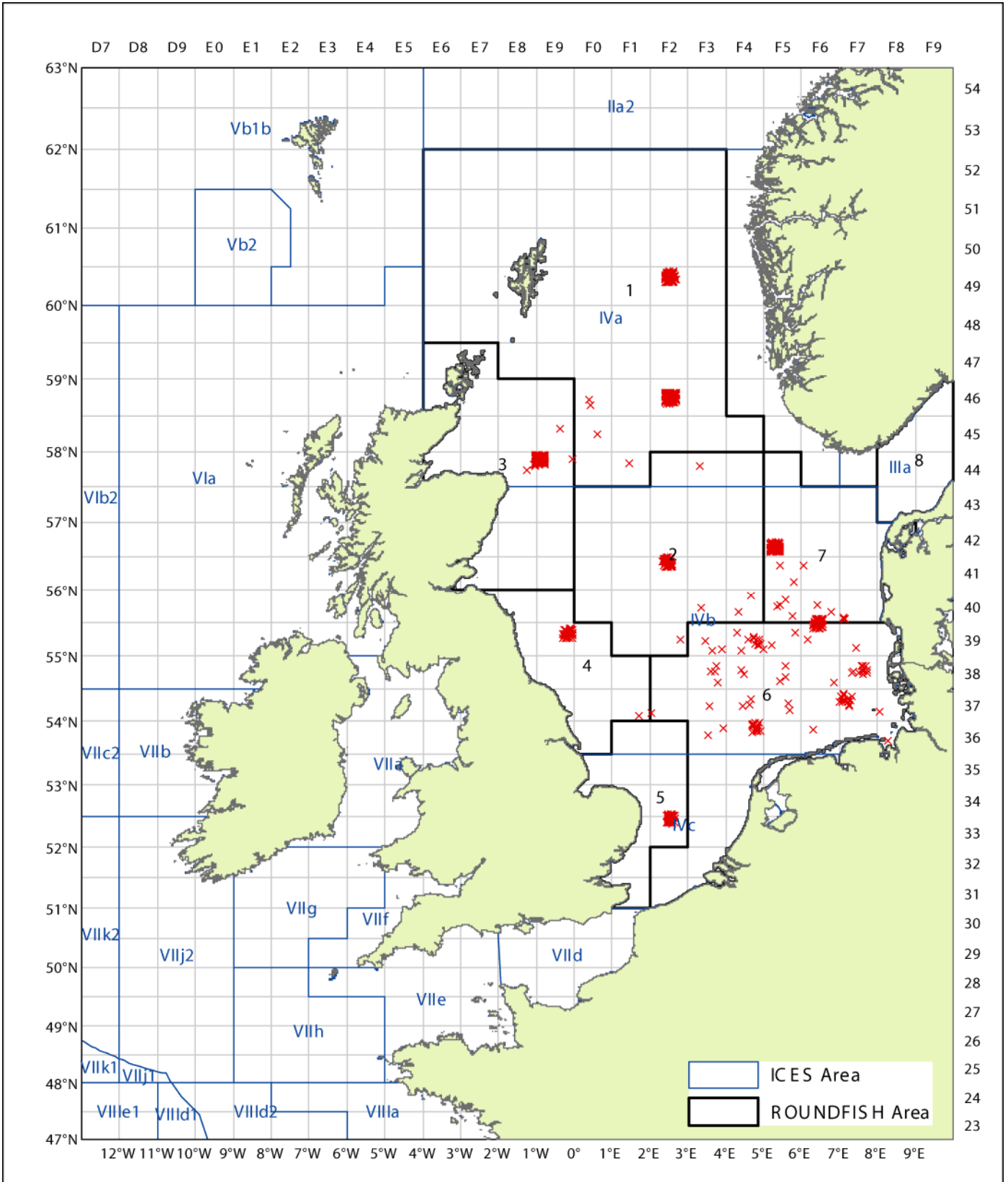


Method of Measurement

- Total length	male	2482
- cm below	female	2522
min length	undefined	710
max length	total numbers of data	5714

July

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

July

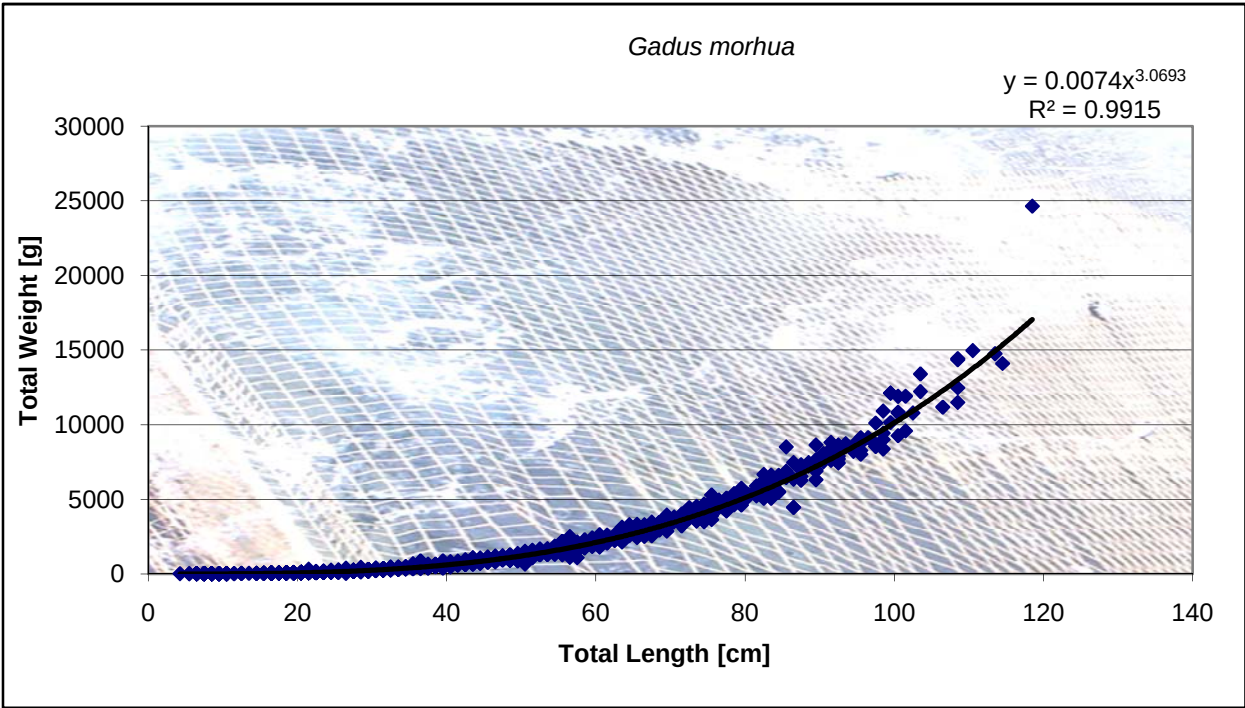
$Tw [g] = a * L [cm]^b$
 $a = 0.0074$
 $b = 3.0693$

data collected

time period : 1994 - 2006
data source : research vessel

numbers of data:

Quarter																				
1	2	3	4																	
-	-	2718	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	2718	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	2718	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	1257	1445	16	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
-	-	-	-	-	-	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9												
853	300	287	240	126	270	642	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J			
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

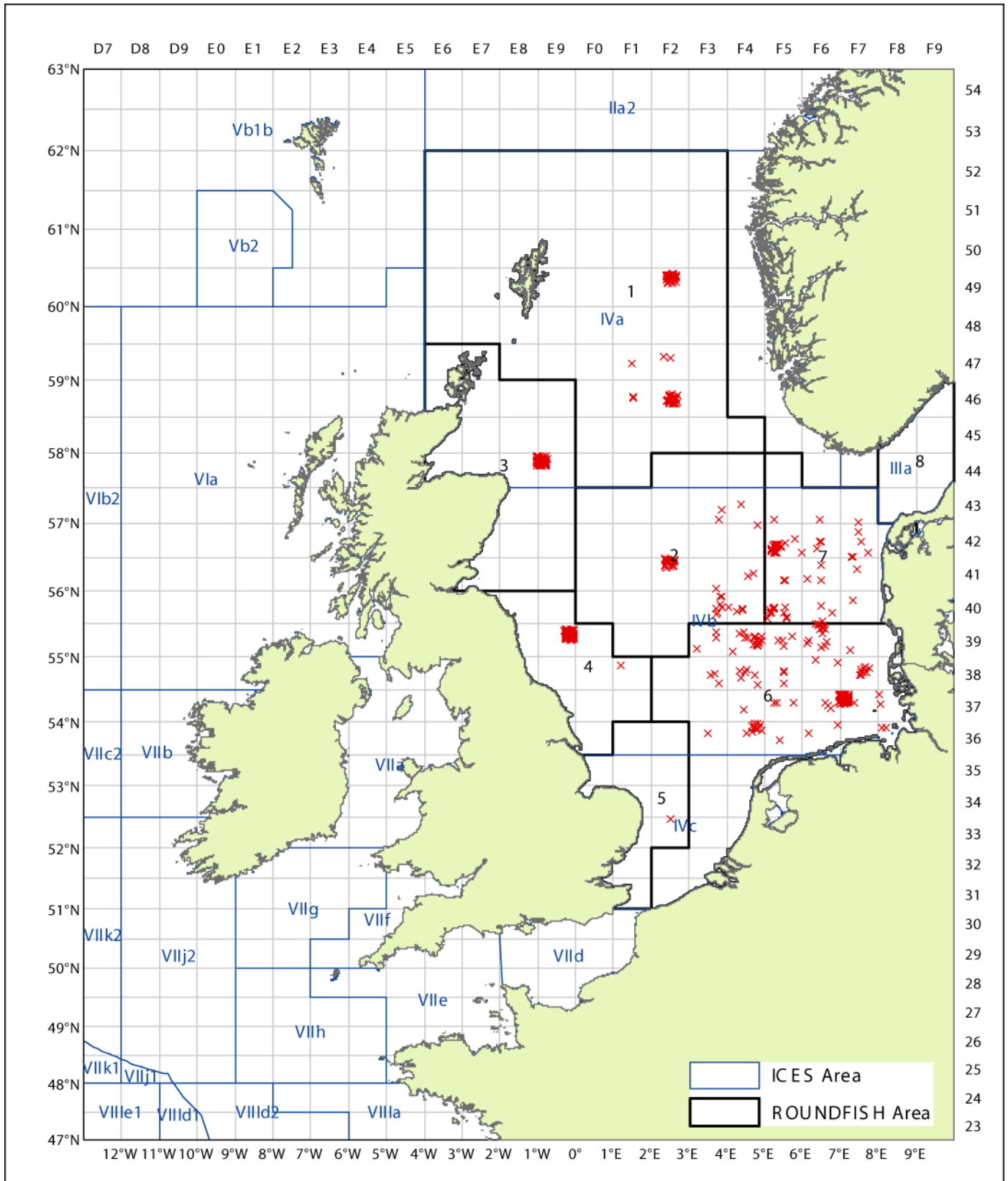


Method of Measurement

- Total length	male	1204
- cm below	female	1197
min length	undefined	317
max length	total numbers of data	2718

Gadus morhua August

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

August

$$Tw [g] = a * L [cm]^b$$

a = 0.0075

b = 3.0613

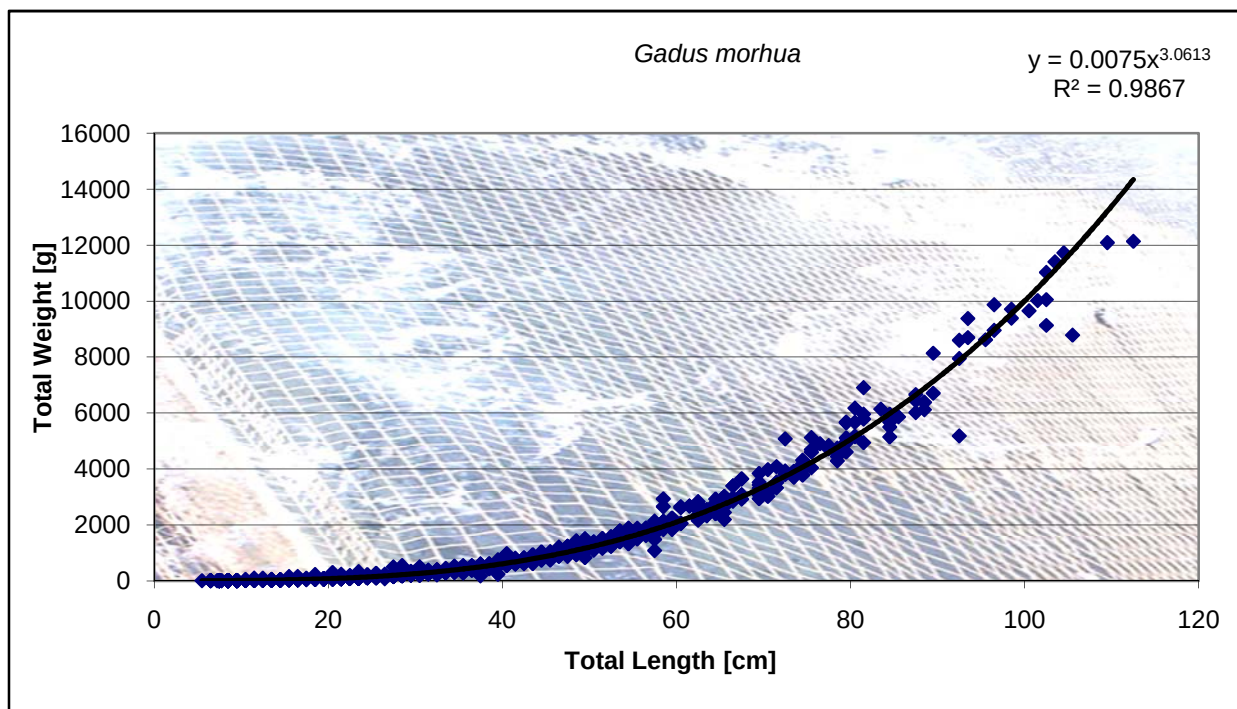
data collected

time period : 1994 - 2006

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	-	2351	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	2351	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	2351	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	526	1825	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
274	307	147	1036	3	426	158	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

5.5 [cm]
112.5 [cm]

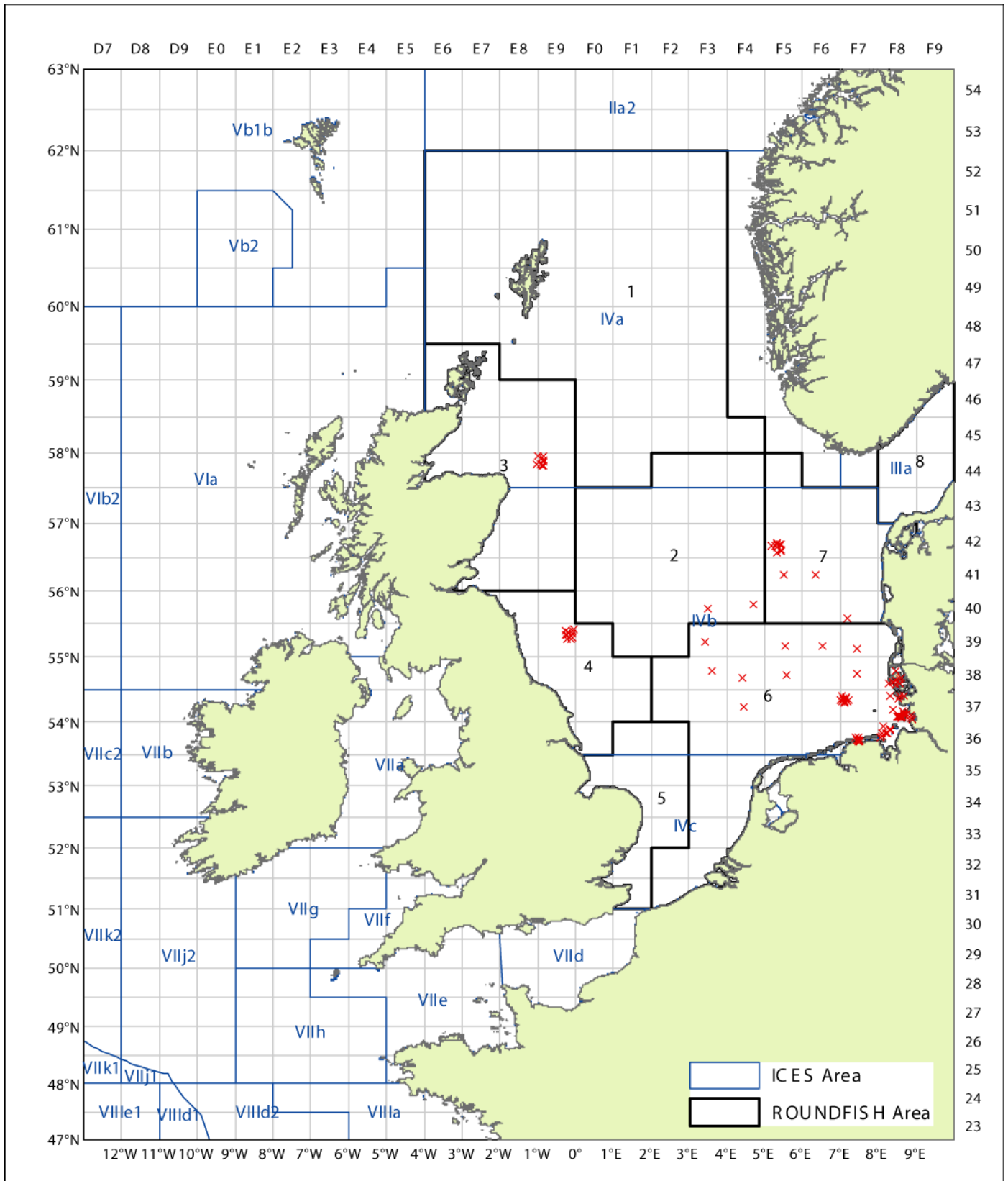
male
female
undefined

976
1043
332

total numbers of data 2351

Gadus morhua *September*

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

September

$Tw [g] = a * L [cm]^b$

$a = 0.0062$

$b = 3.1121$

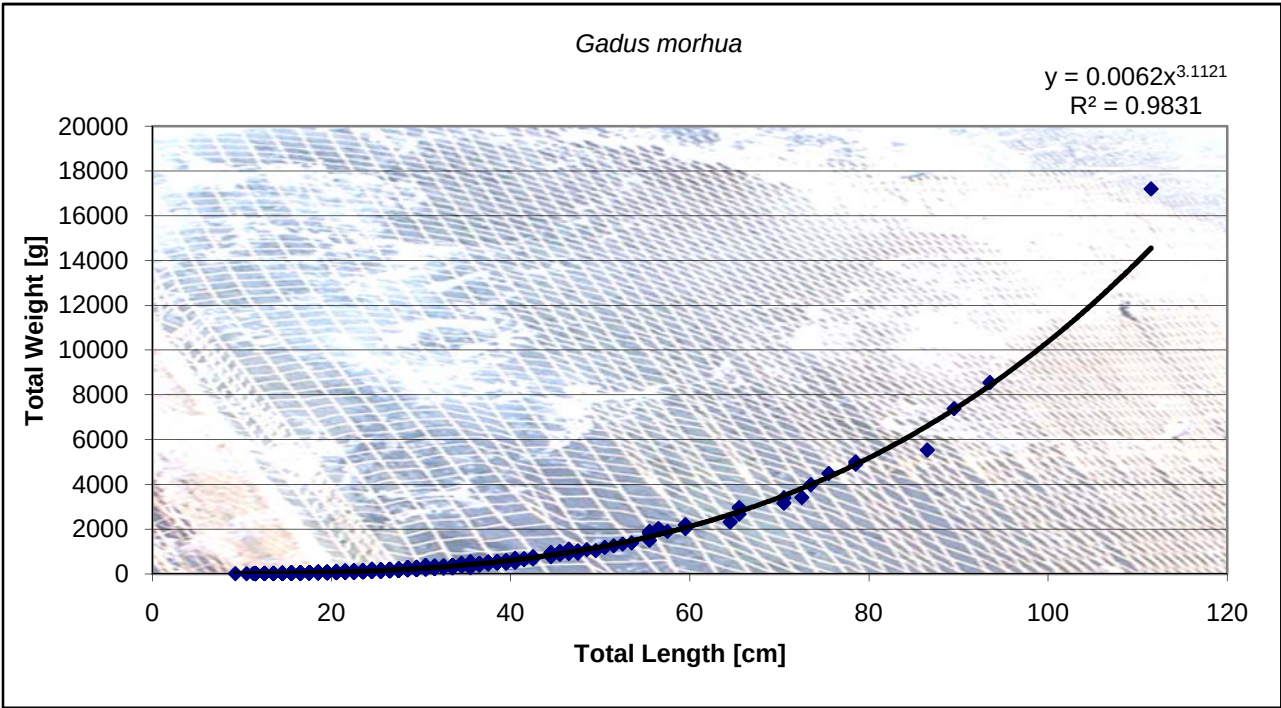
data collected

time period : 1995 - 2006

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	-	645	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	-	645	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	645	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	39	606	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	50	39	164	-	230	162	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		

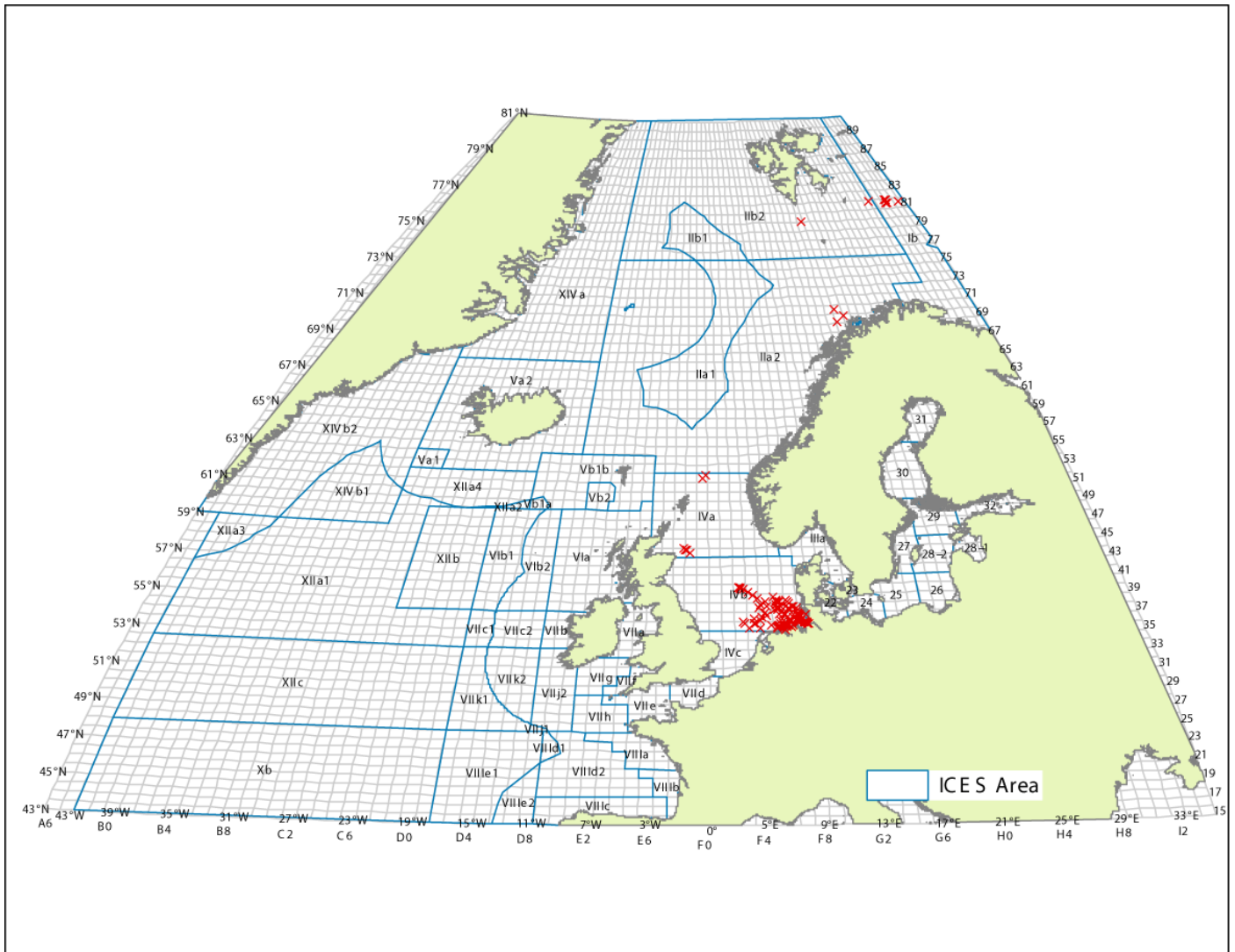


Method of Measurement

- Total length	male	302
- cm below	female	282
min length	undefined	61
max length	total numbers of data	645

Gadus morhua Quarter 4

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

Quarter: 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0076

b = 3.0488

data collected

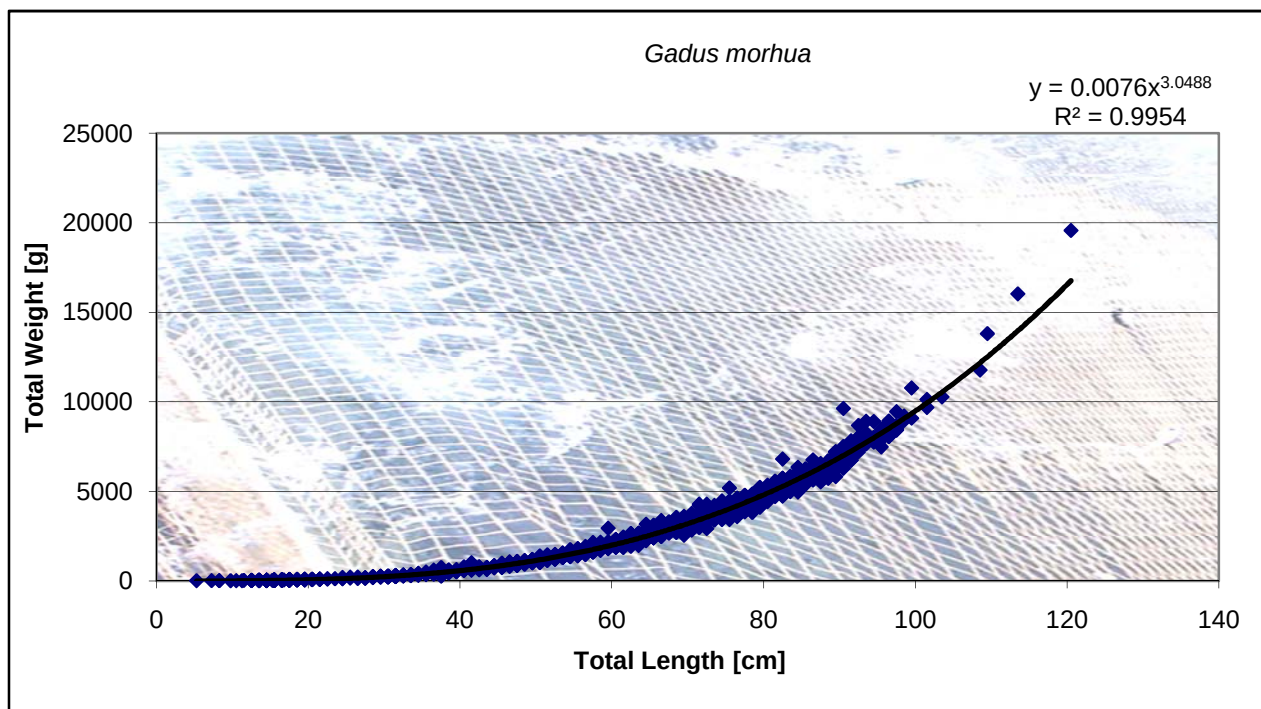
time period : 1994 - 2006

data source : research vessel, commercial trawler

numbers of data:

Numbers of data:

Quarter																				
1	2	3	4																	
-	-	-	1737																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	-	-	-	1210	445	82									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
711	833	-	193	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
711	451	382	-	-	-	-	2	191	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
-	-	-	-	-	-	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9												
2	26	6	-	-	159	-	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J			
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			



Method of Measurement

- Total length
- cm below

min length
max length

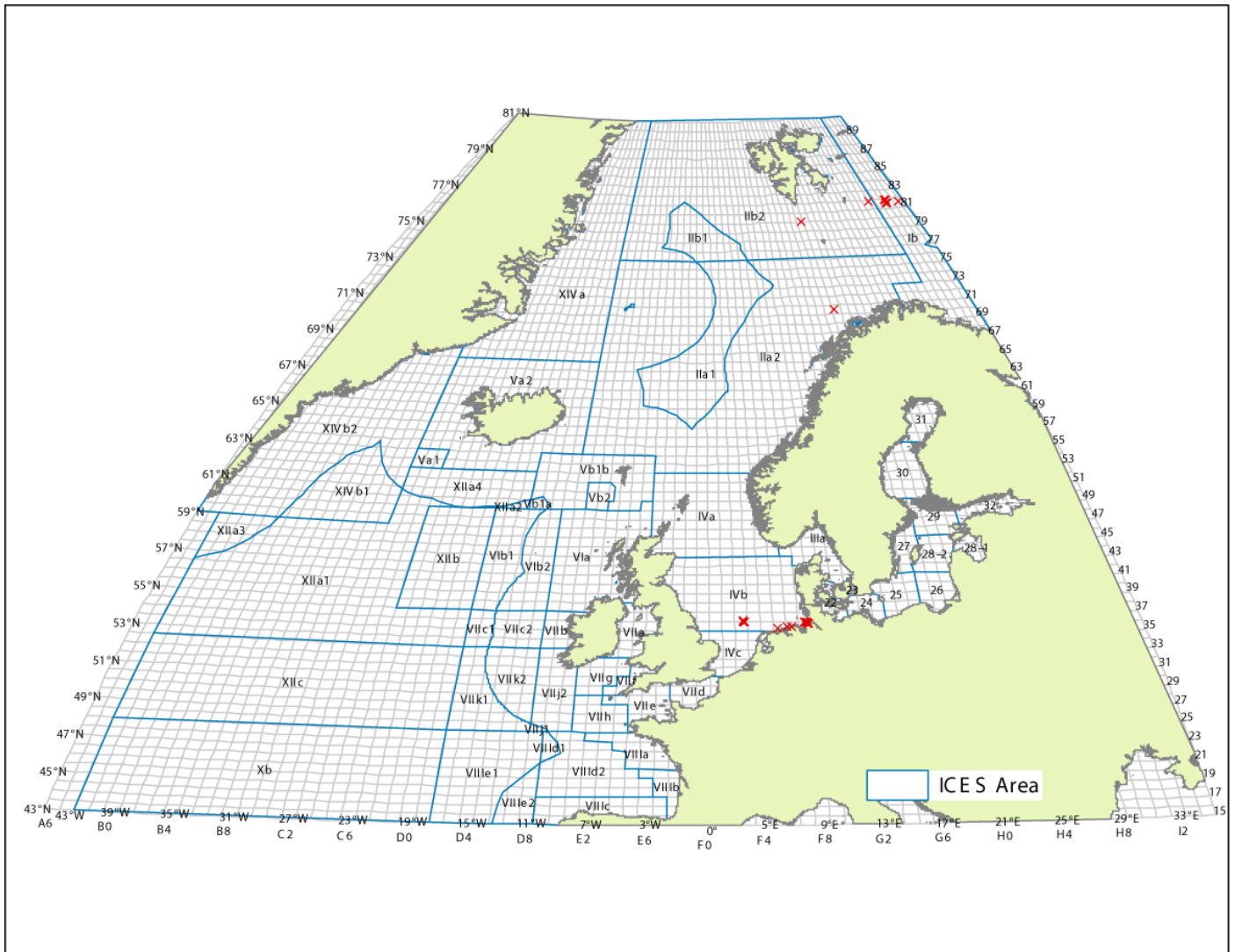
5.5 [cm]
120.5 [cm]

male 28
female 31
undefined 1678

total numbers of data 1737

Gadus morhua October

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

October

$$Tw [g] = a * L [cm]^b$$

a = 0.008

b = 3.0347

data collected

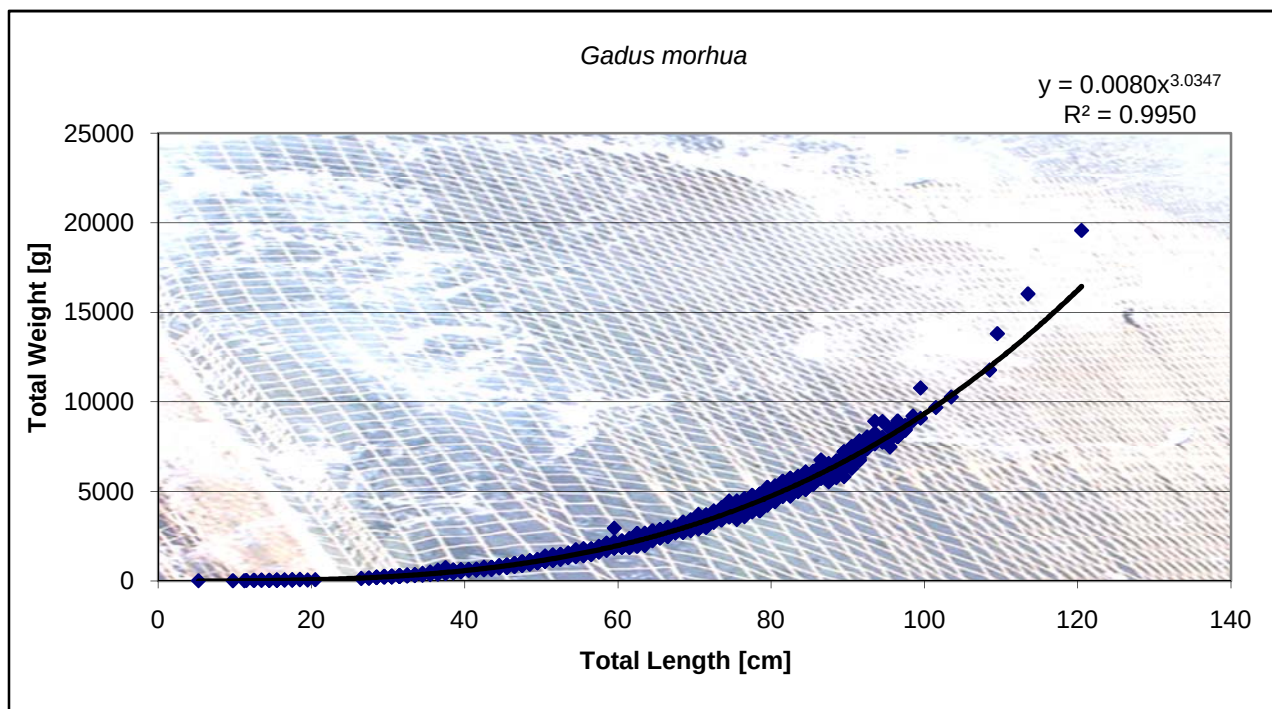
time period : 1995 - 2006

data source : research vessel, commercial trawler

numbers of data:

Numbers of data:

Quarter																			
1	2	3	4																
-	-	-	1210																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	-	-	1210	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
711	468	-	31	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
711	86	382	-	-	-	-	-	31	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	31	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

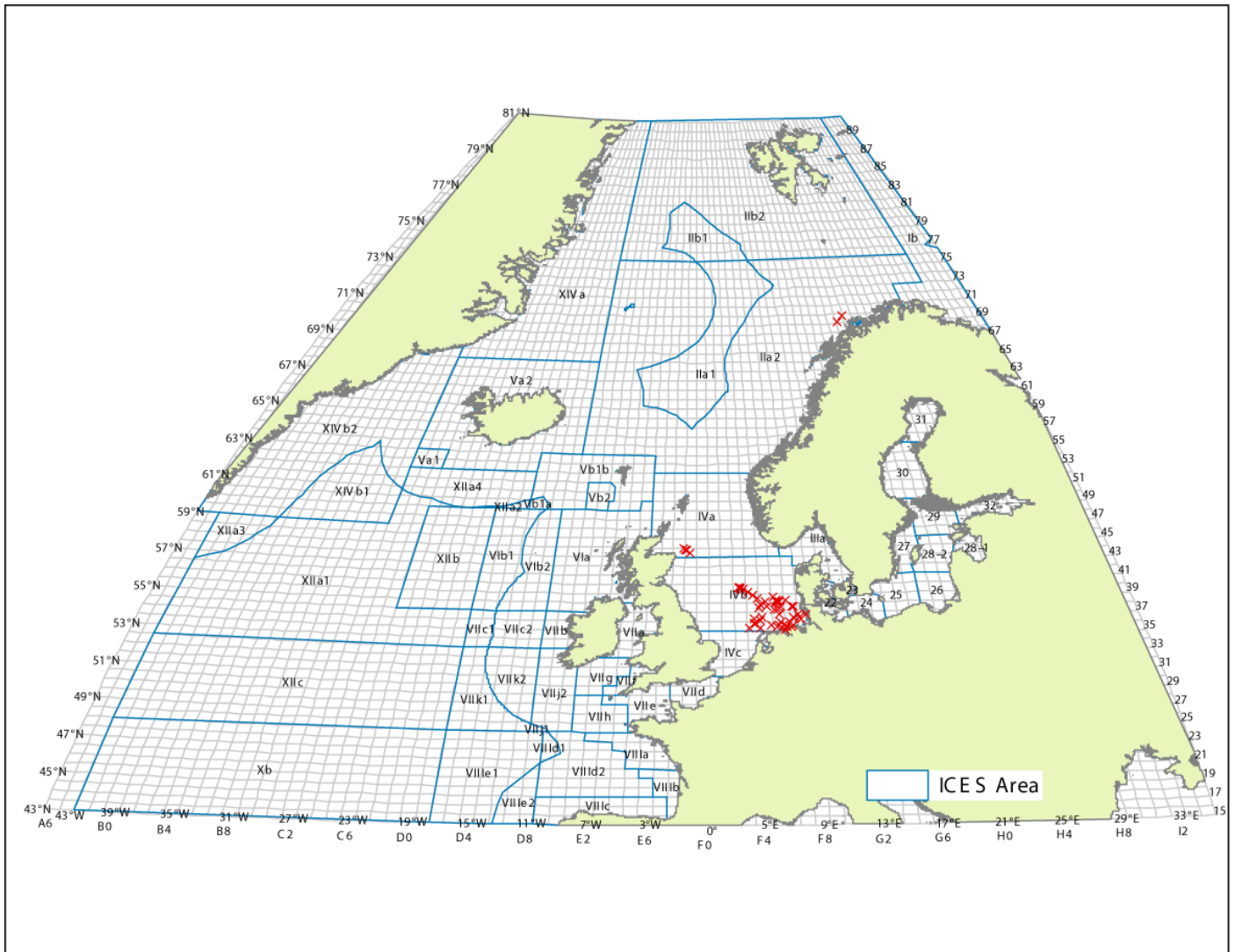
5.5 [cm]
120.5 [cm]

male -
female -
undefined 1210

total numbers of data 1210

Gadus morhua November

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

November

$$Tw [g] = a * L [cm]^b$$

a = 0.006

b = 3.1119

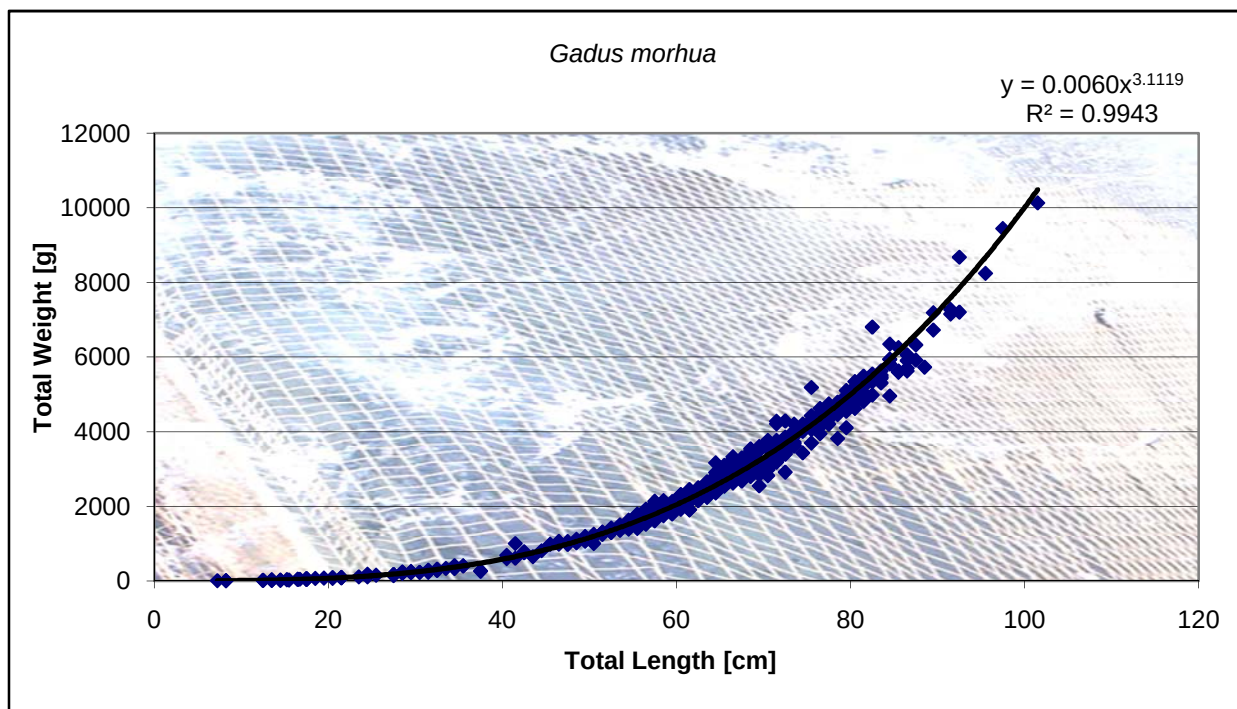
data collected

time period : 1996 - 2006

data source : research vessel, commercial trawler

numbers of data:

Numbers of salmon																			
Quarter																			
1	2	3	4																
-	-	-	445																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	-	-	-	445	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	365	-	80	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	365	-	-	-	-	-	-	80	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	26	6	-	-	48	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

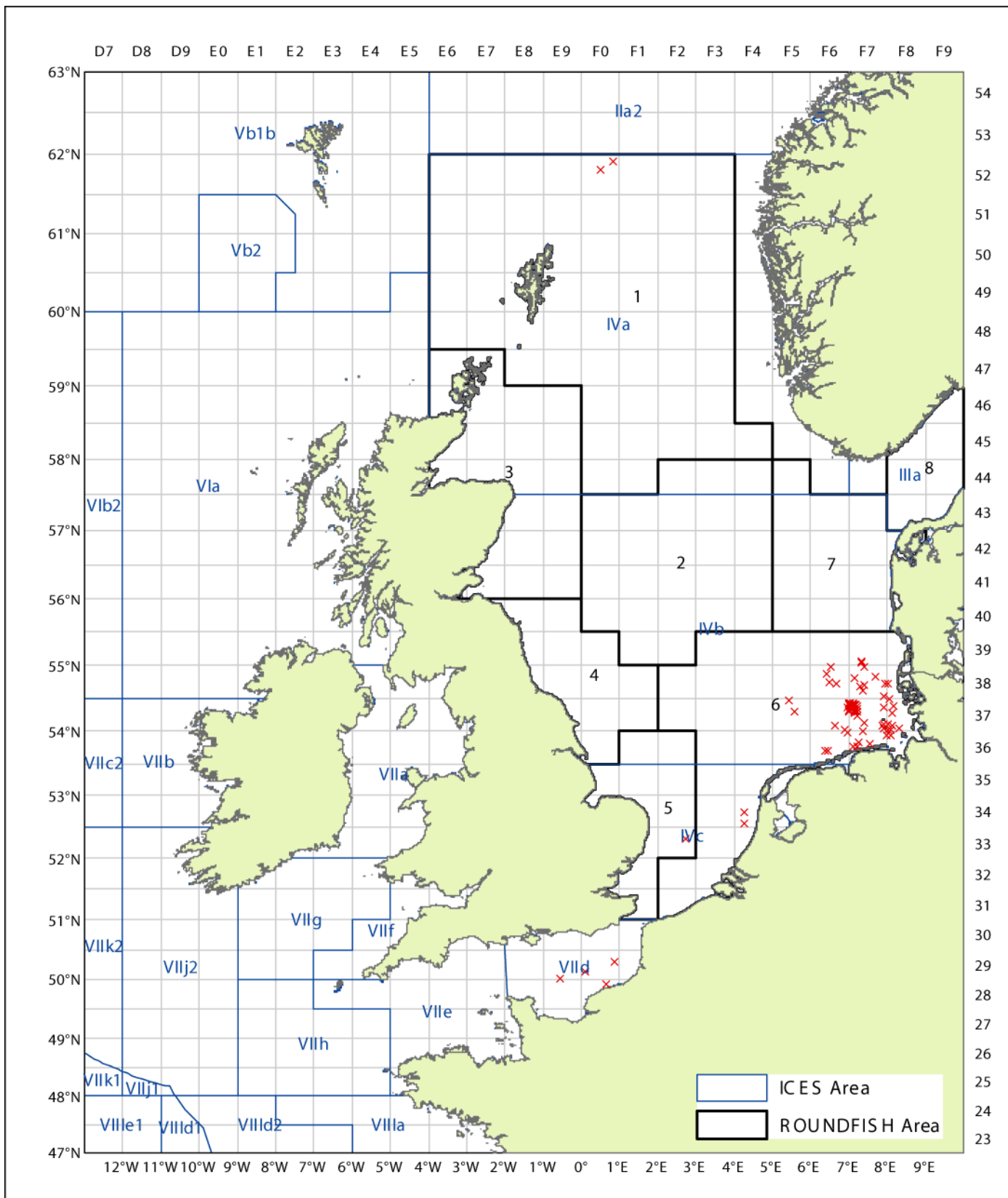
7.5 [cm]
101.5 [cm]

male 12
female 17
undefined 416

total numbers of data 445

Gadus morhua *December*

Geographical distribution of data used for calculating the length-weight relationship



Gadus morhua

December

$$Tw [g] = a * L [cm]^b$$

a = 0.0055

b = 3.1707

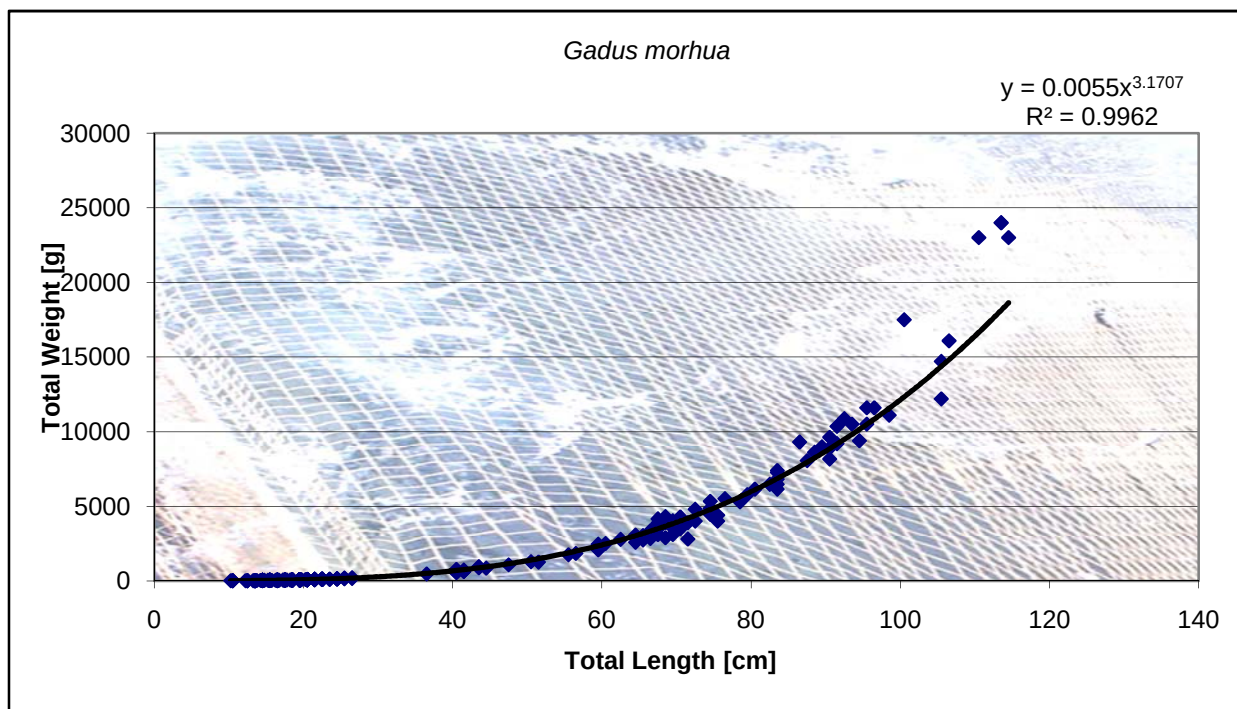
data collected

time period : 1990 - 2006

data source : research vessel

numbers of data:

Numbers of fish																			
Quarter																			
1	2	3	4																
-	-	-	300																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	-	-	-	-	300								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	296	-	-	4	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	2	293	1	-	-	-	-	-	-	-	4	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
2	-	-	-	-	294	-	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

10.5 [cm]
114.5 [cm]

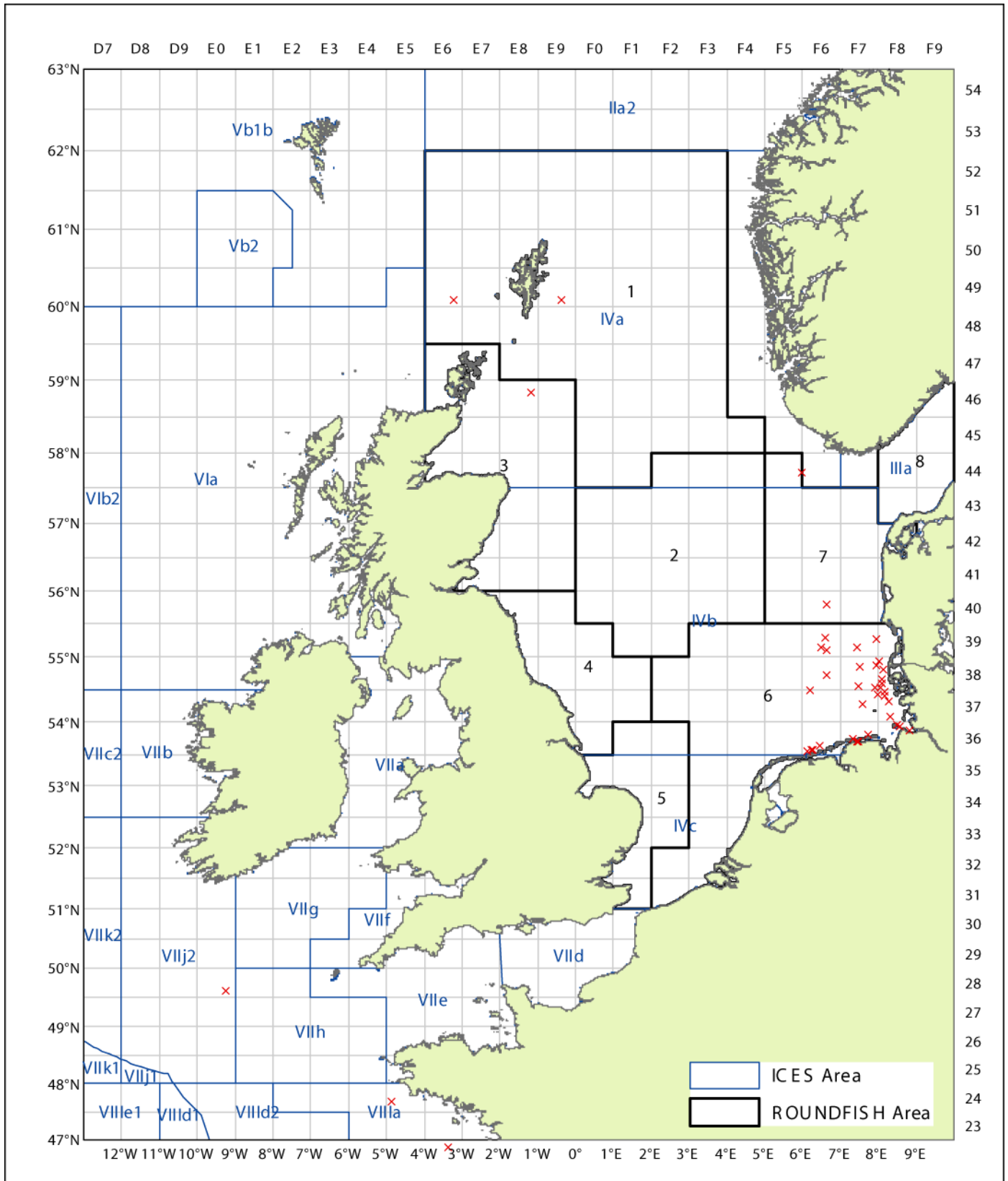
male
female
undefined

52
43
205

total numbers of data 300

Gaidropsarus vulgaris

Geographical distribution of data used for calculating the length-weight relationship



Gaidropsarus vulgaris

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0172

b = 2.7135

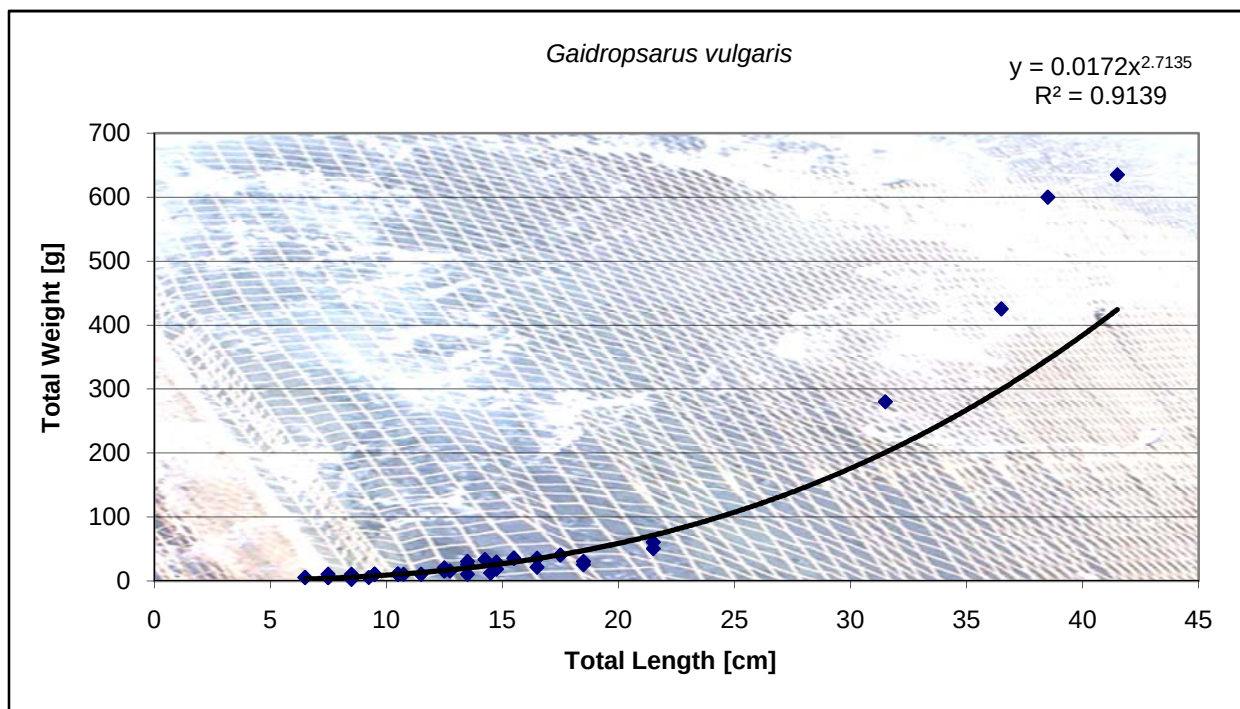
data collected

time period : 1977 - 2006

data source : research vessel

numbers of data:

Numbers of fish																			
Quarter																			
1	2	3	4																
40	5	1	3																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
31	6	3	2	1	2	-	1	-	3	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	46	-	-	1	2	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	4	42	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	1	-	2	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
2	-	1	-	-	41	2	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

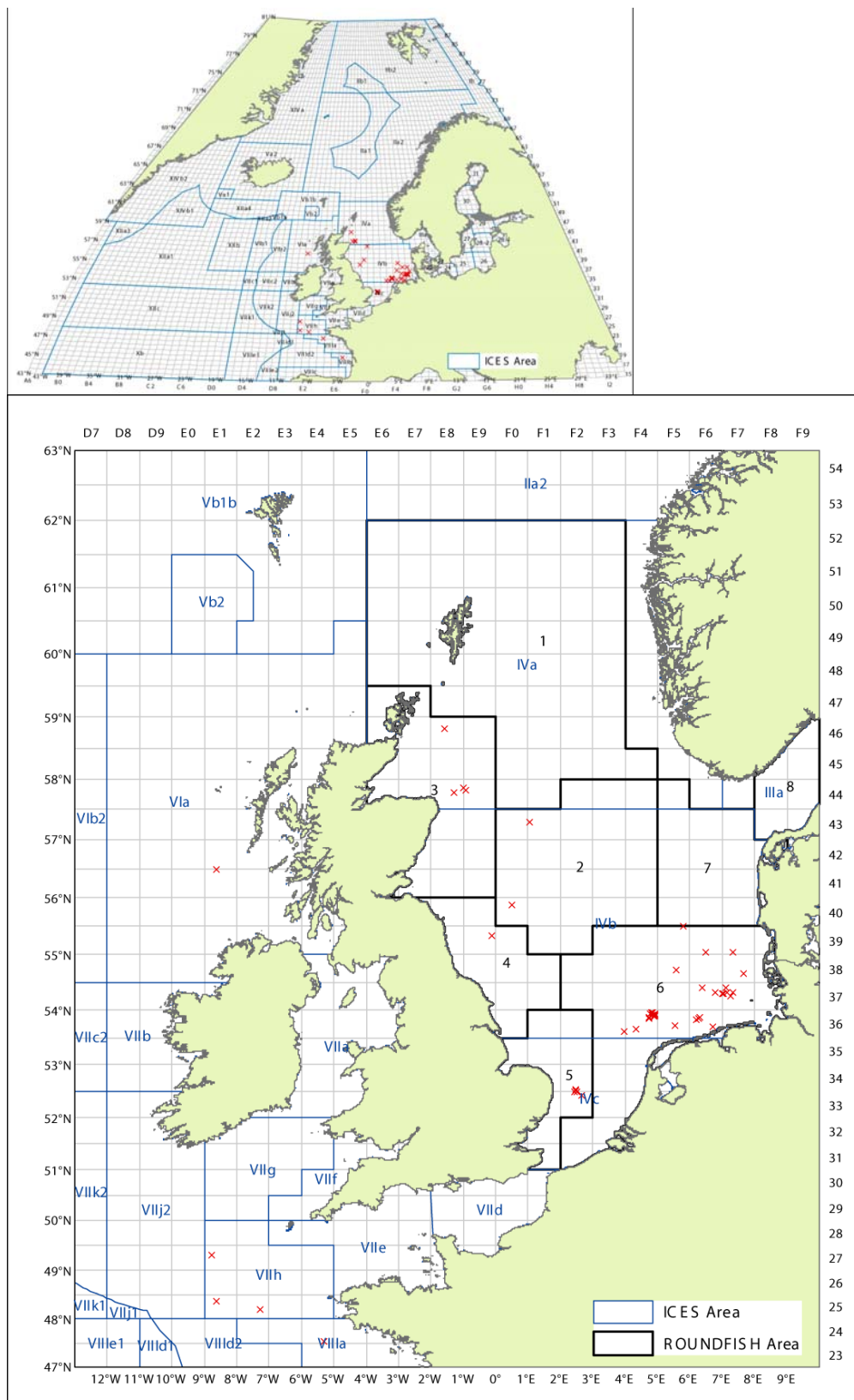
6.5 [cm]
41.5 [cm]

male -
female -
undefined 49

total numbers of data 49

Galeorhinus galeus

Geographical distribution of data used for calculating the length-weight relationship



Galeorhinus galeus

Quarter: 1 - 4

$Tw [g] = a * L [cm]^b$

$a = 0.0049$

$b = 2.9819$

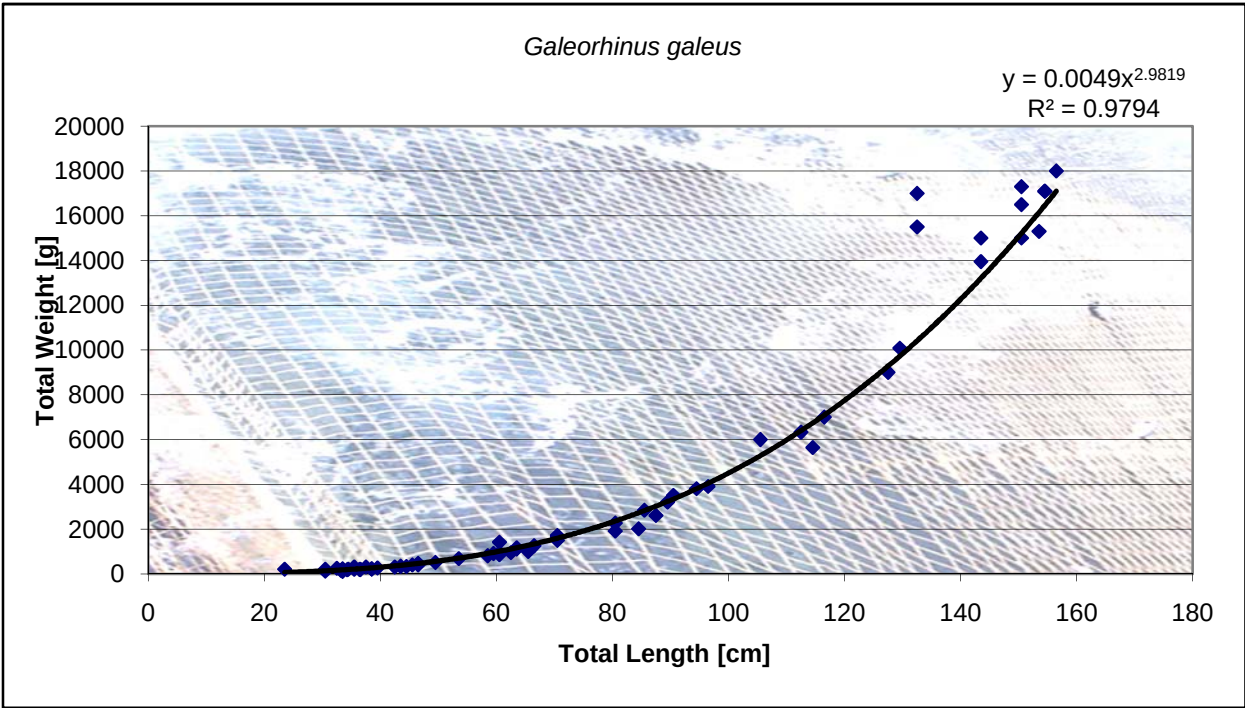
data collected

time period : 1963 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
8	6	49	7																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
3	3	2	3	-	3	35	13	1	1	6	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	64	-	1	3	2	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	2	56	6	-	-	1	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	3	-	-	1	1	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	3	4	1	6	50	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											

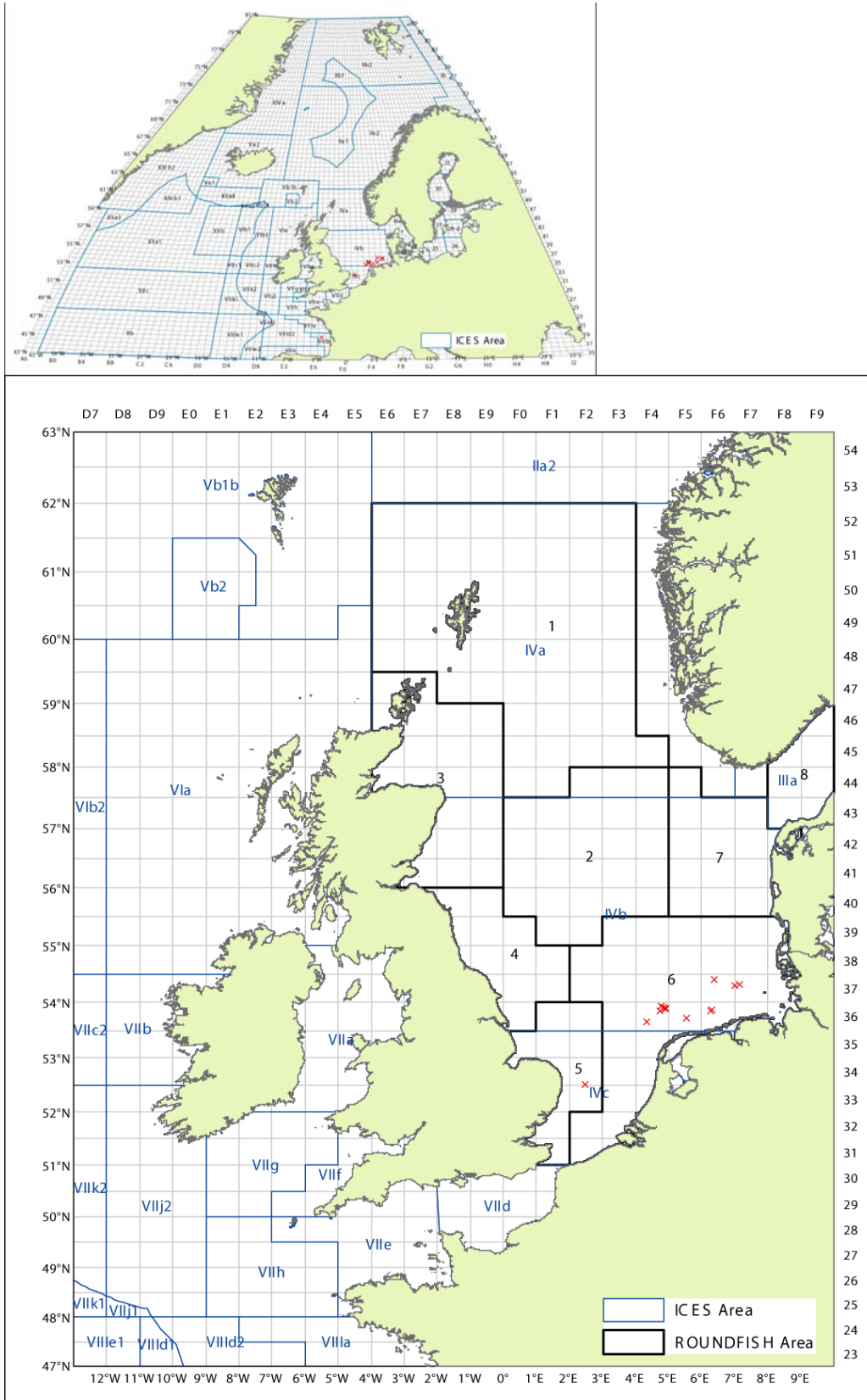


Method of Measurement

- Total length	male	25
- cm below	female	24
	undefined	21
min length	23.5 [cm]	
max length	156.5 [cm]	
total numbers of data		70

Galeorhinus galeus ♀

Geographical distribution of data used for calculating the length-weight relationship



Galeorhinus galeus ♀

Quarter: 2 - 3

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0114

b = 2.7697

data collected

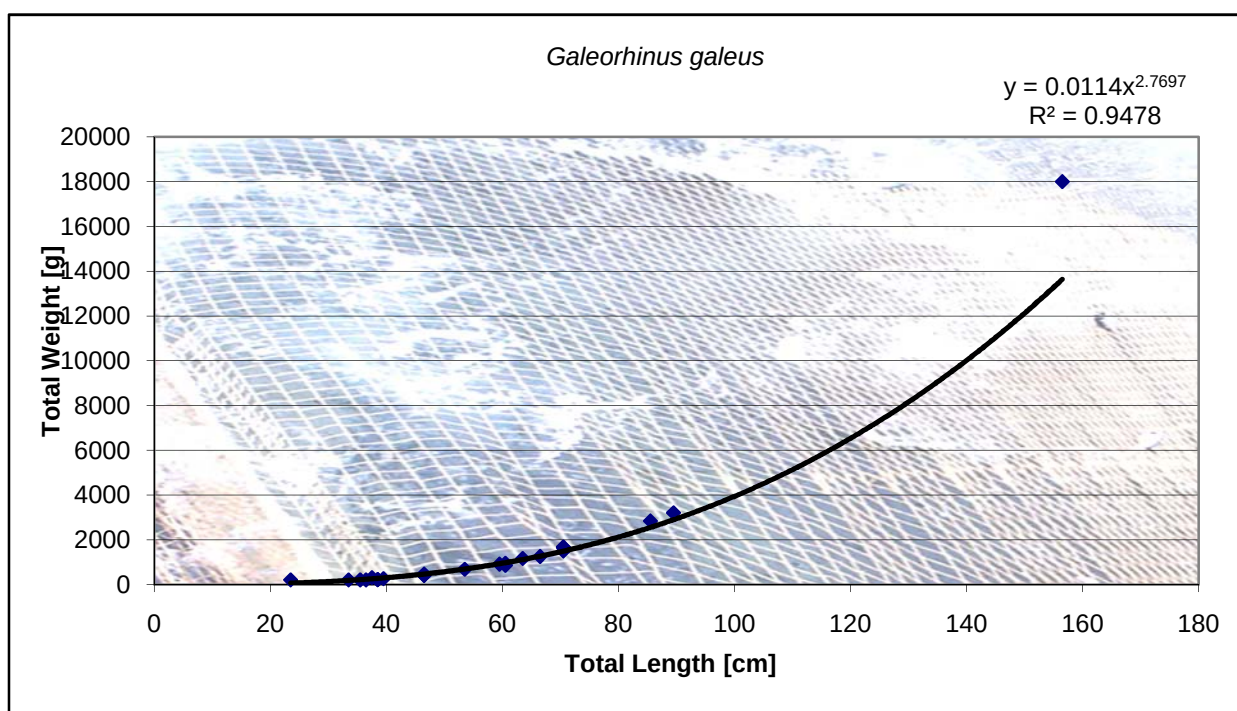
time period : 1991 - 2007

data source : research vessel

numbers of data:

Numbers of data:

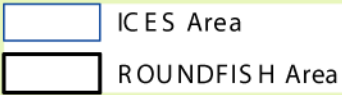
Quarter																			
1	2	3	4																
-	1	23	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	1	-	-	16	6	1	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	23	-	-	-	1	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	-	22	1	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	1	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	-	-	-	1	22	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length	male	-
- cm below	female	24
min length	undefined	-
max length		
	total numbers of data	24

length-weight relationship



Galeorhinus galeus ♂

Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0043

b = 3.0112

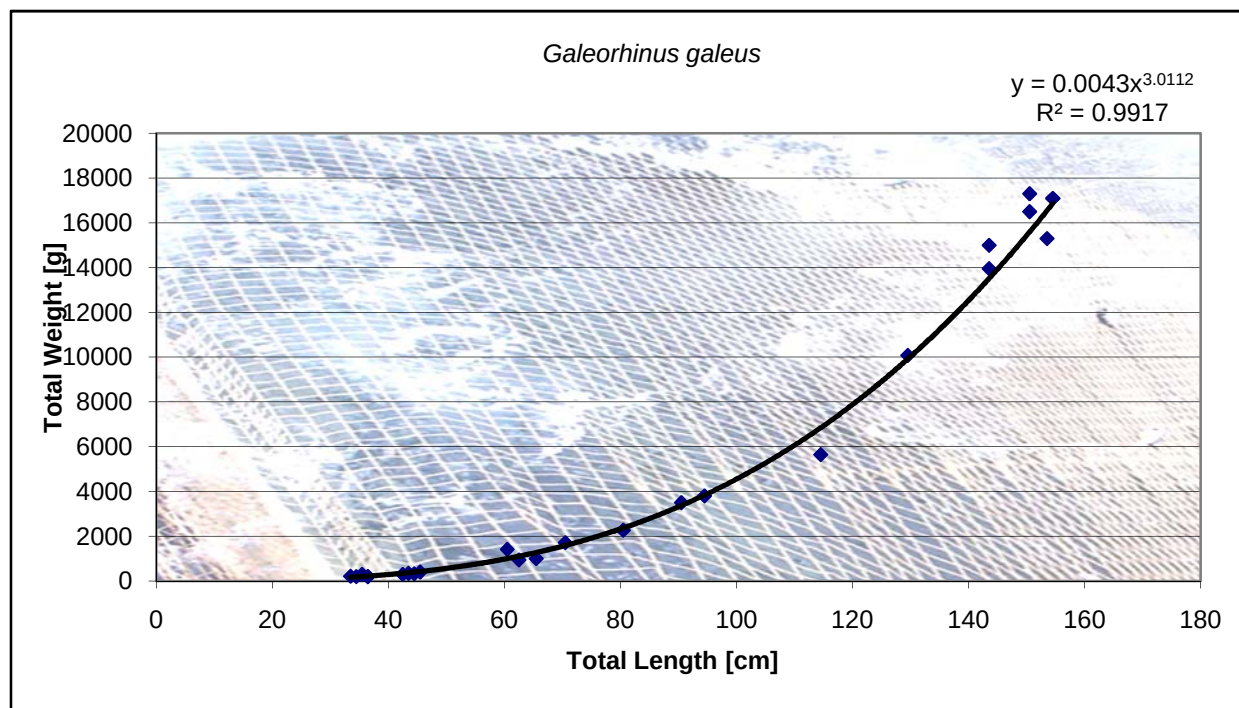
data collected

time period : 1963 - 2006

data source : research vessel

numbers of data:

Numbers of data.																			
Quarter																			
1	2	3	4																
4	1	17	3																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
3	1	-	1	-	-	11	6	-	-	3	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	24	-	-	1	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	2	20	2	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	1	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	2	4	1	2	15	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

33.5 [cm]
154.5 [cm]

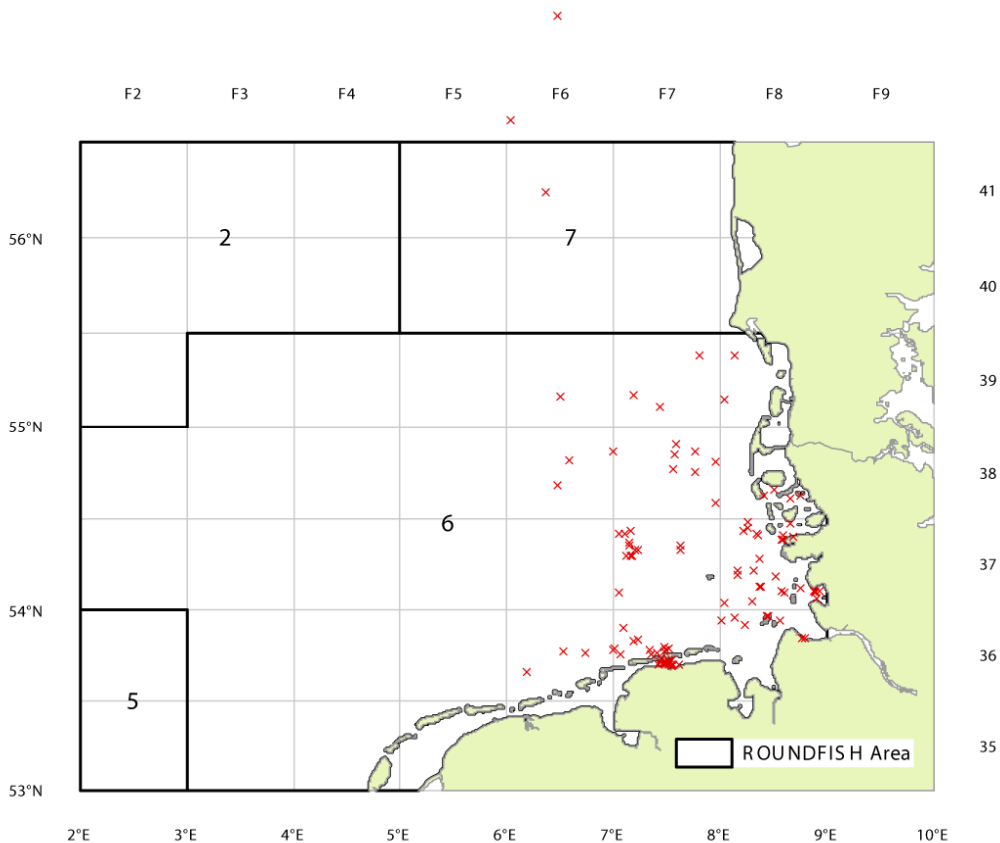
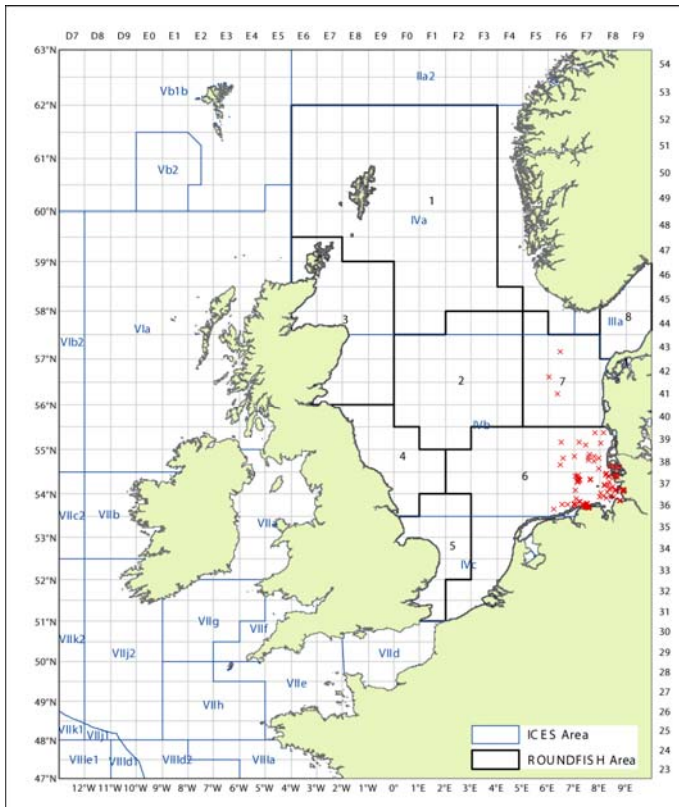
male
female
undefined

total numbers of data

25
-
-
25

Gasterosteus aculeatus

Geographical distribution of data used for calculating the length-weight relationship



Gasterosteus aculeatus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0239

b = 2.6111

data collected

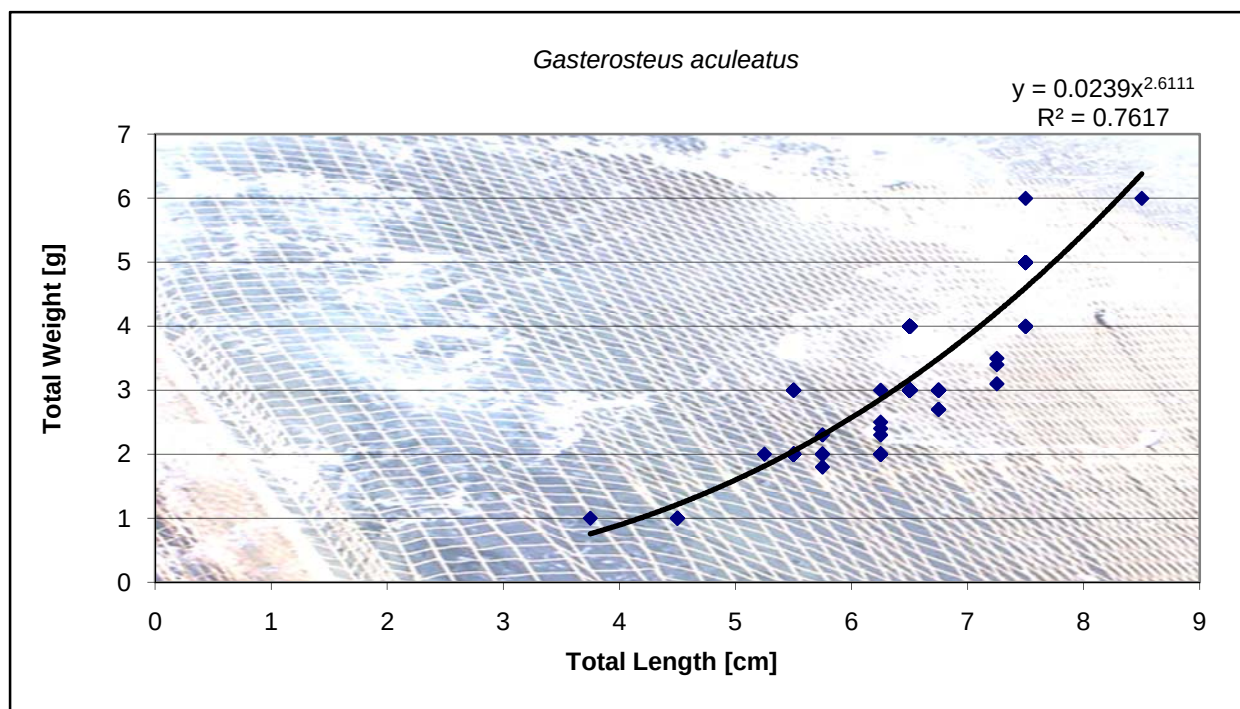
time period : 1994 - 2008

data source : research vessel

numbers of data:

Numbers of data

Quarter																			
1	2	3	4																
90	25	2	5																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
81	3	6	11	14	-	-	1	1	-	4	1								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	122	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	122	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	-	-	-	-	113	9	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- 1/2 cm below, cm below
min length
max length

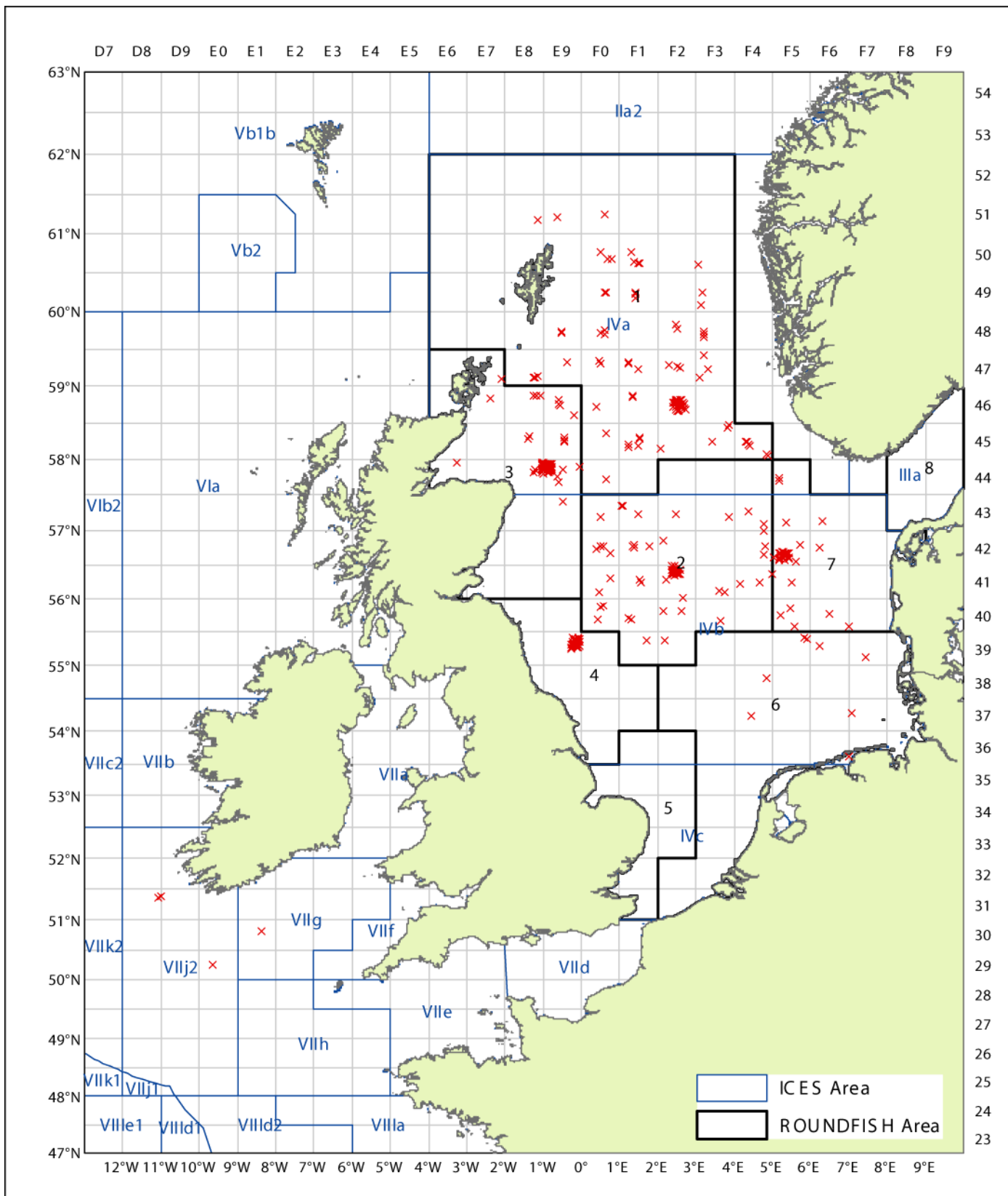
3.75 [cm]
8.5 [cm]

male -
female -
undefined 122

total numbers of data 122

Glyptocephalus cynoglossus

Geographical distribution of data used for calculating the length-weight relationship



Glyptocephalus cynoglossus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0032

b = 3.1895

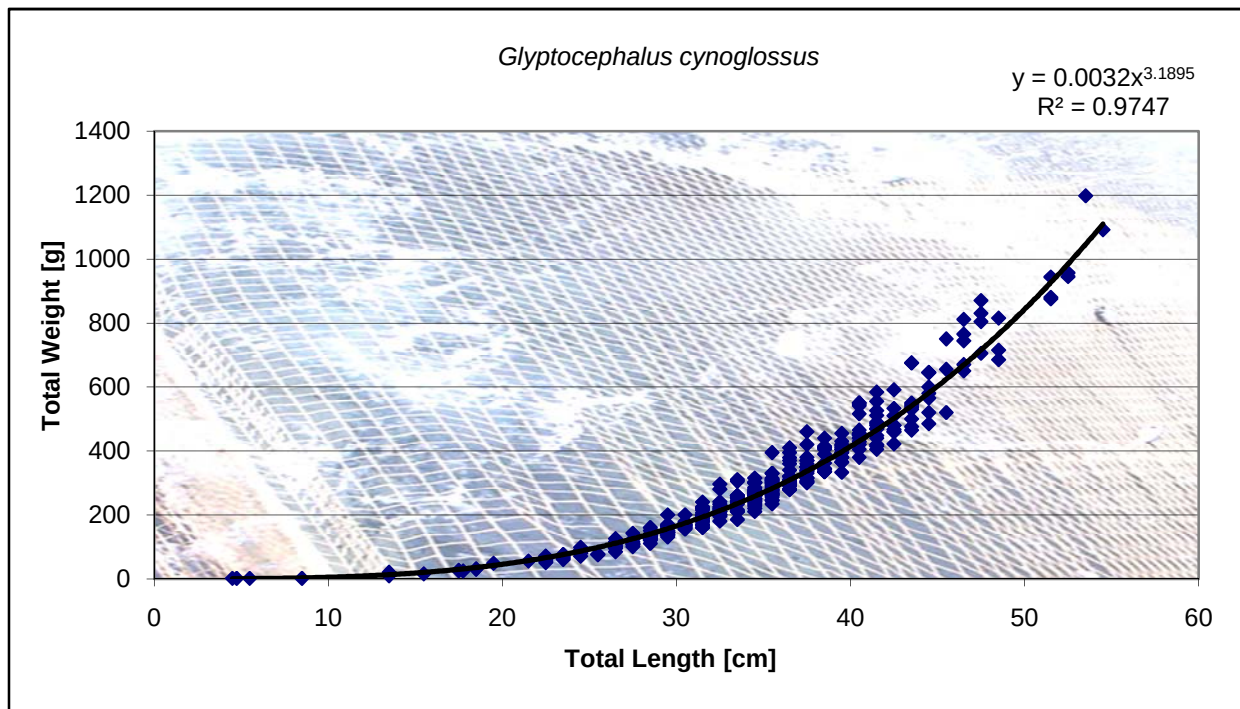
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
149	26	161	7																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
55	82	12	3	15	8	67	85	9	-	7	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	339	-	-	4	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	194	145	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
1	-	3	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9	1A	1B	1C	1D	1E	1F	2G	2H	2J		
121	59	76	30	-	9	44	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

4.5 [cm]
54.5 [cm]

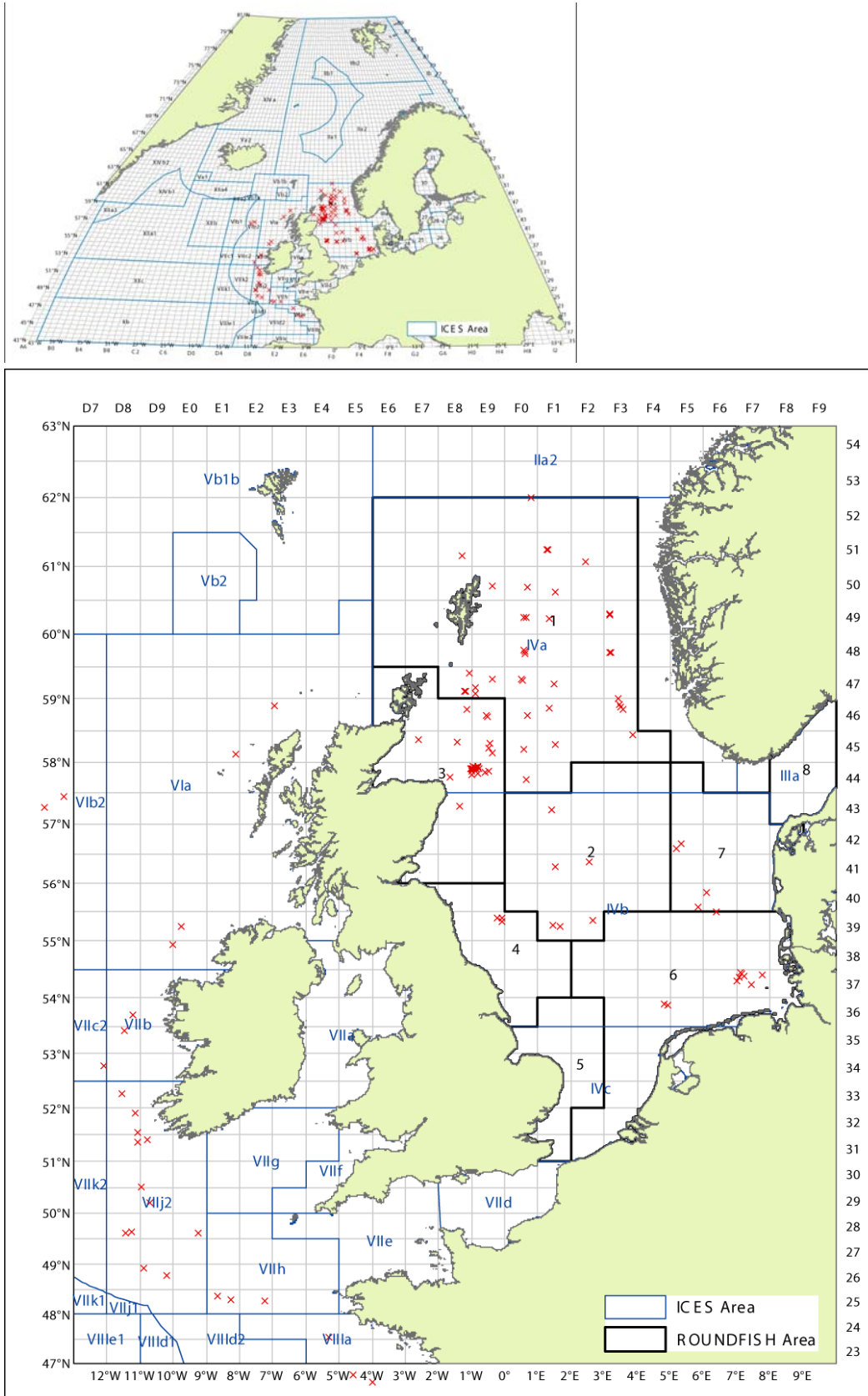
male
female
undefined

-
-
343

total numbers of data 343

Helicolenus dactylopterus

Geographical distribution of data used for calculating the length-weight relationship



Helicolenus dactylopterus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0098

b = 3.1616

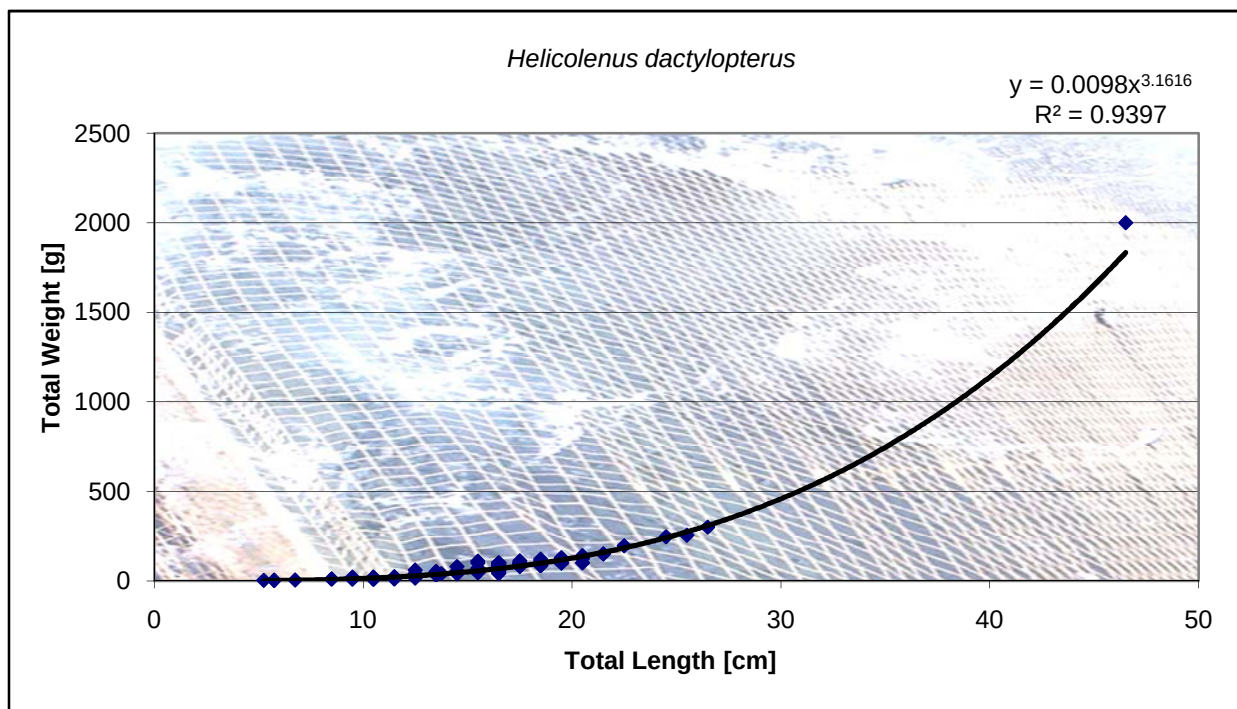
data collected

time period : 1987 - 2007

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
67	35	16	9																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
19	28	20	13	8	14	10	6	-	-	9	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	94	-	7	23	3	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	67	27	-	-	-	5	2	-	2	2	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	3	16	-	3	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
41	6	27	5	-	9	5	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below, 1/2 cm below
- min length
- max length

5.25 [cm]

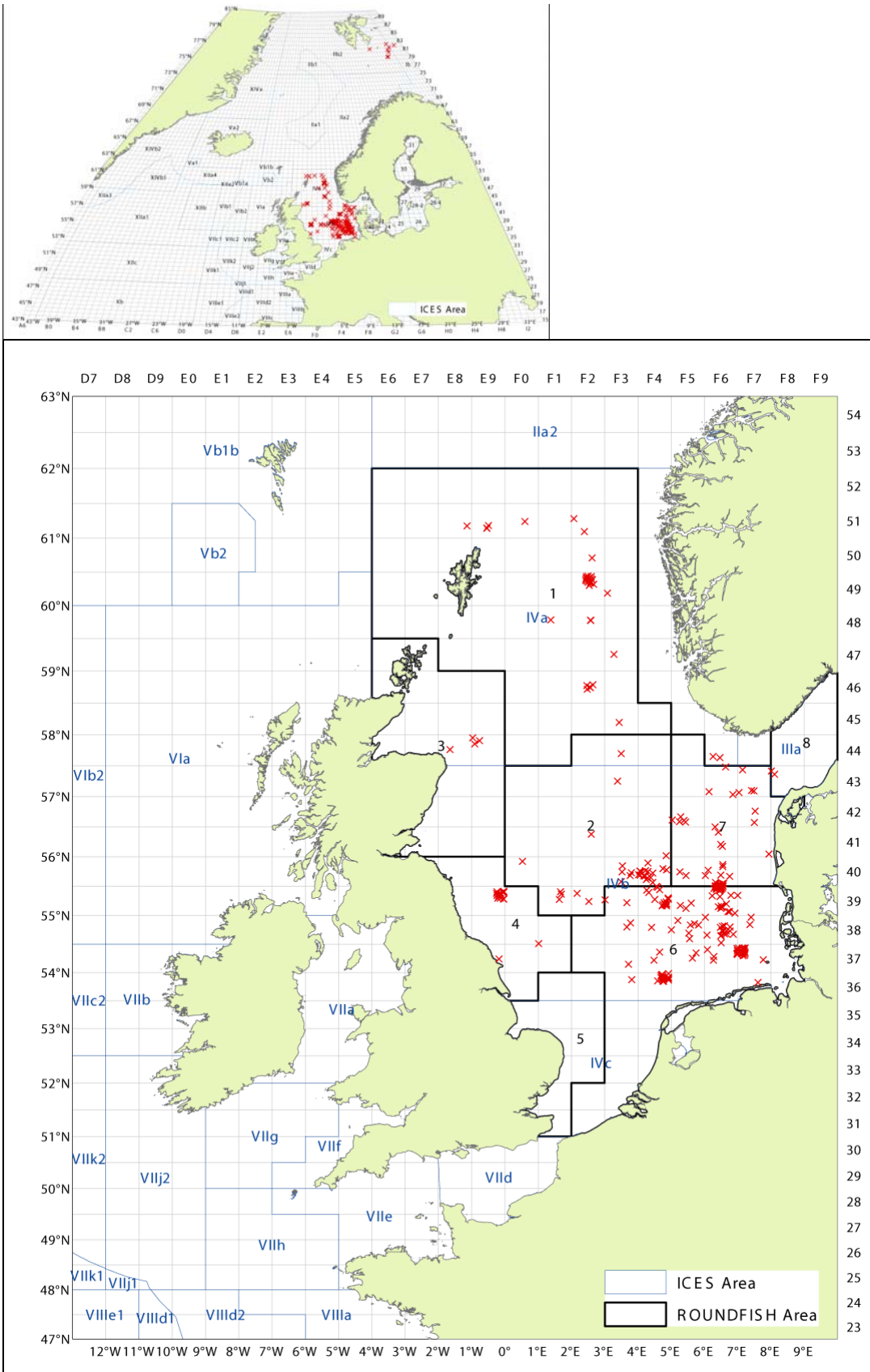
46.5 [cm]

male -
female -
undefined 127

total numbers of data 127

Hippoglossoides platessoides

Geographical distribution of data used for calculating the length-weight relationship



Hippoglossoides platessoides

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0034

b = 3.2851

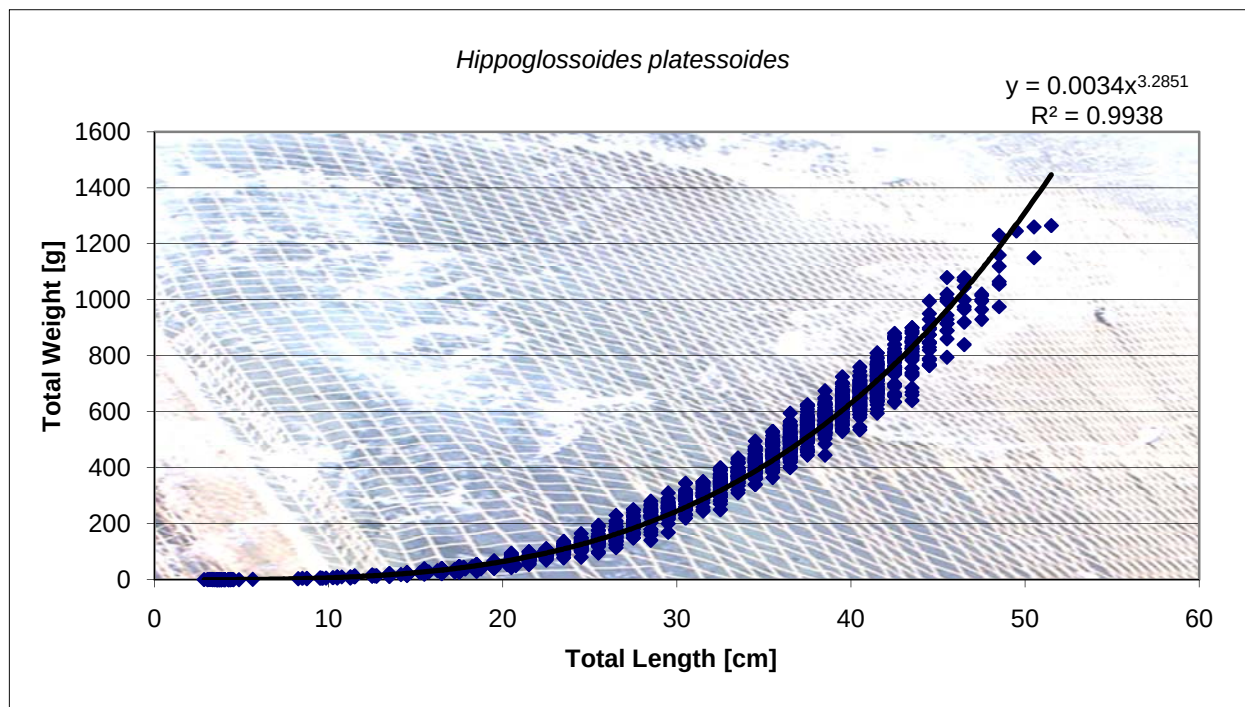
data collected

time period : 2000 - 2011

data source : research vessel, commercial trawler

numbers of data:

Numbers of data																					
Quarter																					
1	2	3	4																		
81	35	1007	329																		
Month																					
1	2	3	4	5	6	7	8	9	10	11	12										
48	33	-	5	24	6	94	913	-	309	12	8										
Subarea																					
1	2	3	4	5	6	7	8	9	10	12	14										
84	865	2	501	-	-	-	-	-	-	-	-										
Division																					
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F		
84	-	865	2	-	-	-	185	316	-	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B							
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Roundfisharea											NAFO										
1	2	3	4	5	6	7	8	9													
178	45	4	67	-	143	62	2	-	1A	1B	1C	1D	1E	1F	2G	2H	2J				
									-	-	-	-	-	-	-	-	-				



Method of Measurement

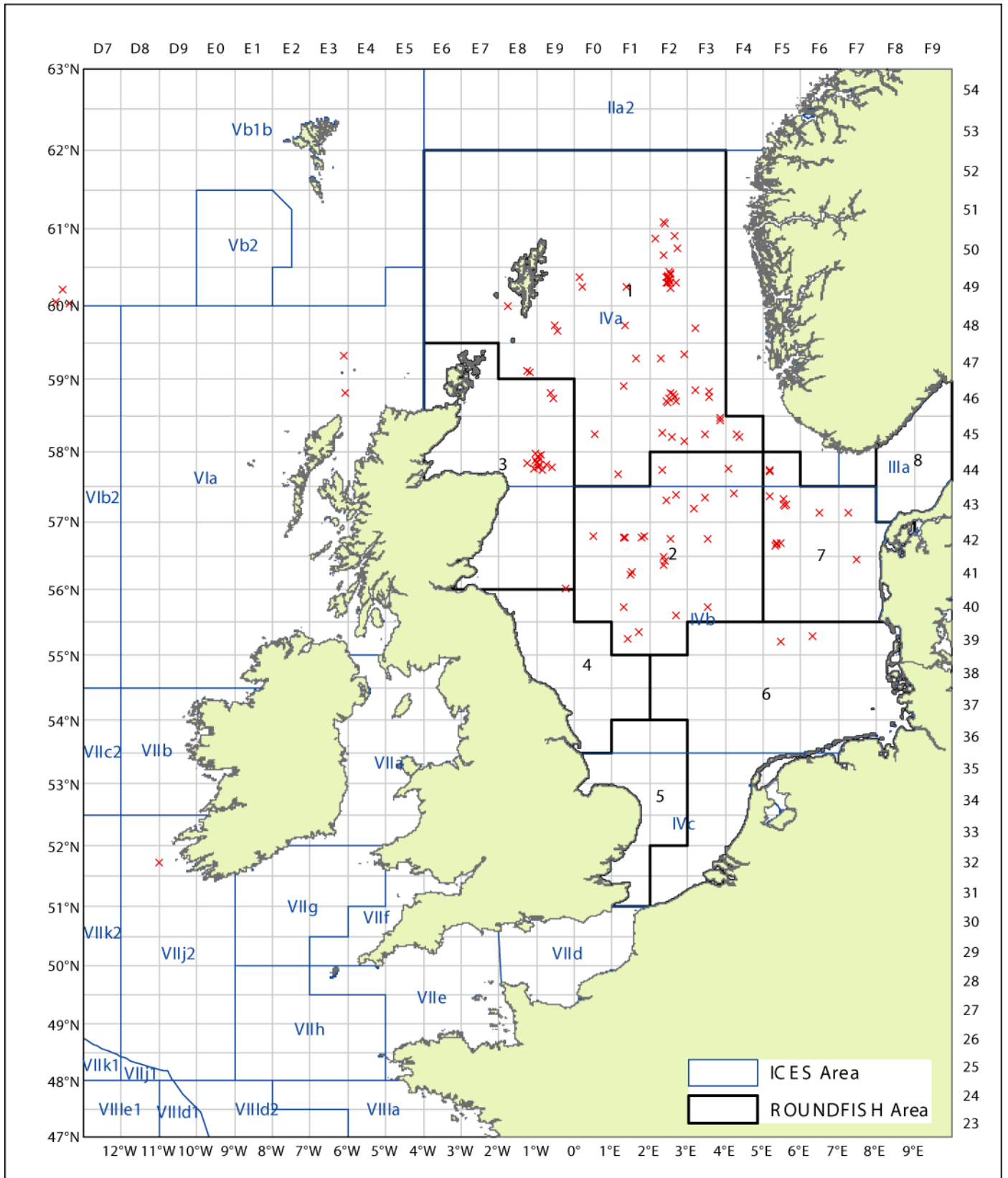
- Total length
- cm below, mm below
- min length
- max length

2.85 [cm]
51.5 [cm]

male -
female -
undefined 1452
total numbers of data 1452

Hippoglossus hippoglossus

Geographical distribution of data used for calculating the length-weight relationship



Hippoglossus hippoglossus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0026

b = 3.3322

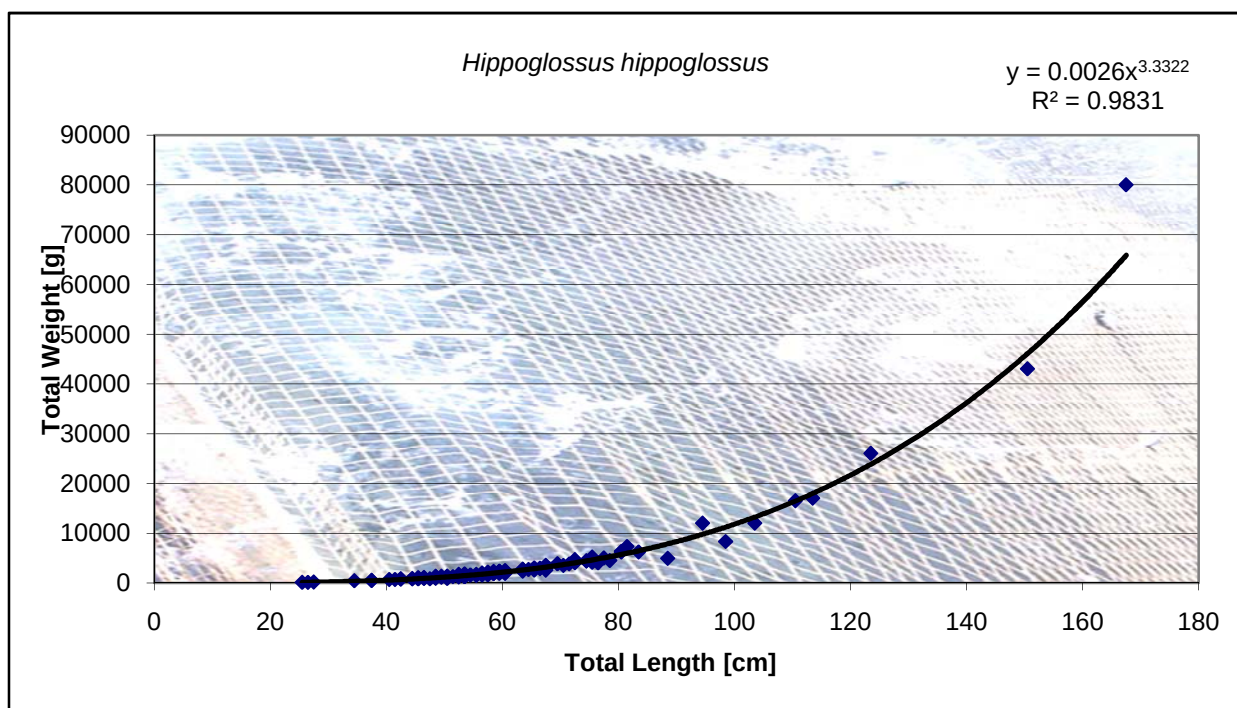
data collected

time period : 1981 - 2007

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
51	20	47	2																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
18	25	8	-	8	12	34	12	1	-	2	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	114	3	2	1	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	78	36	-	-	3	2	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	1	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
57	24	16	-	-	2	15	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

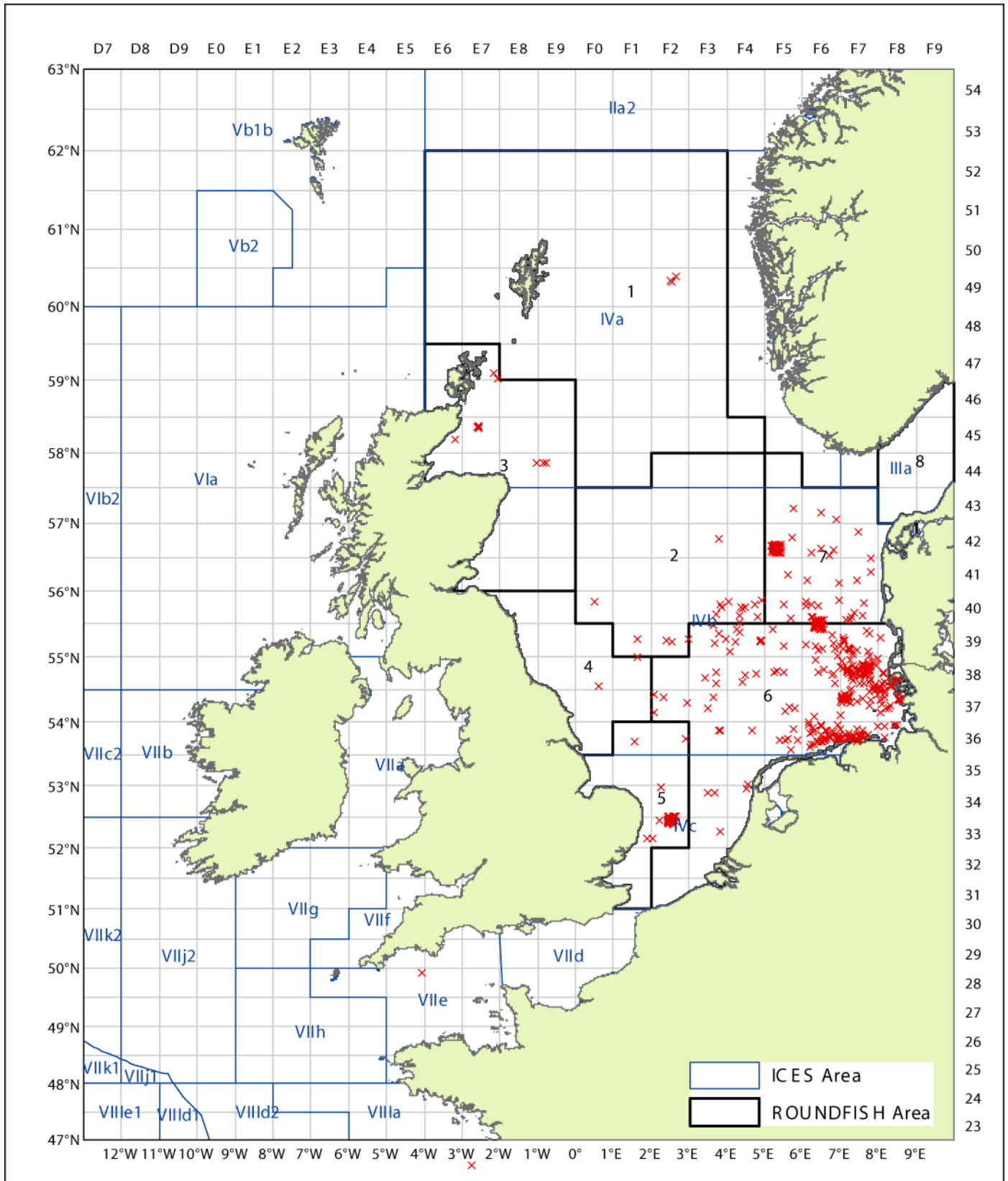
min length 25.5 [cm]
max length 167.5 [cm]

male 4
female -
undefined 116

total numbers of data 120

Hyperoplus lanceolatus

Geographical distribution of data used for calculating the length-weight relationship



Hyperoplus lanceolatus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0066

b = 2.6967

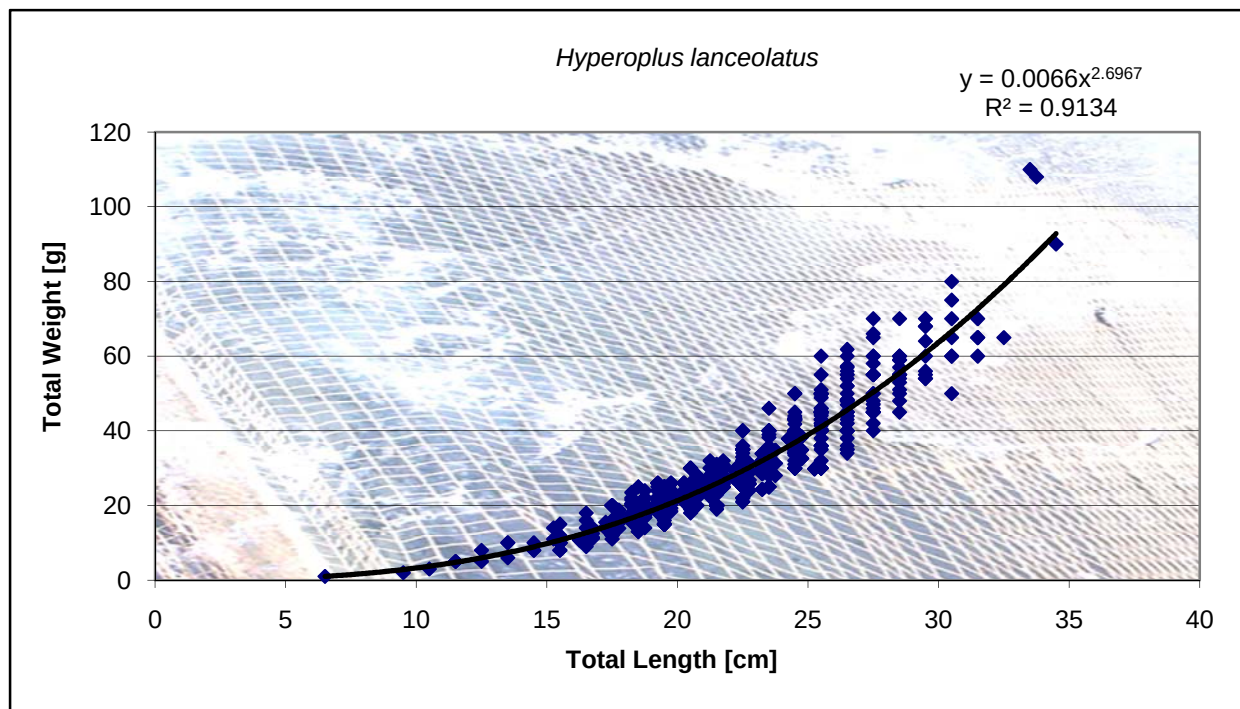
data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
109	135	496	42																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
88	19	2	6	111	18	288	194	14	4	17	21								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	780	-	-	2	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	18	731	31	-	-	-	-	-	-	-	-	1	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	1	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
3	54	10	1	43	586	83	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

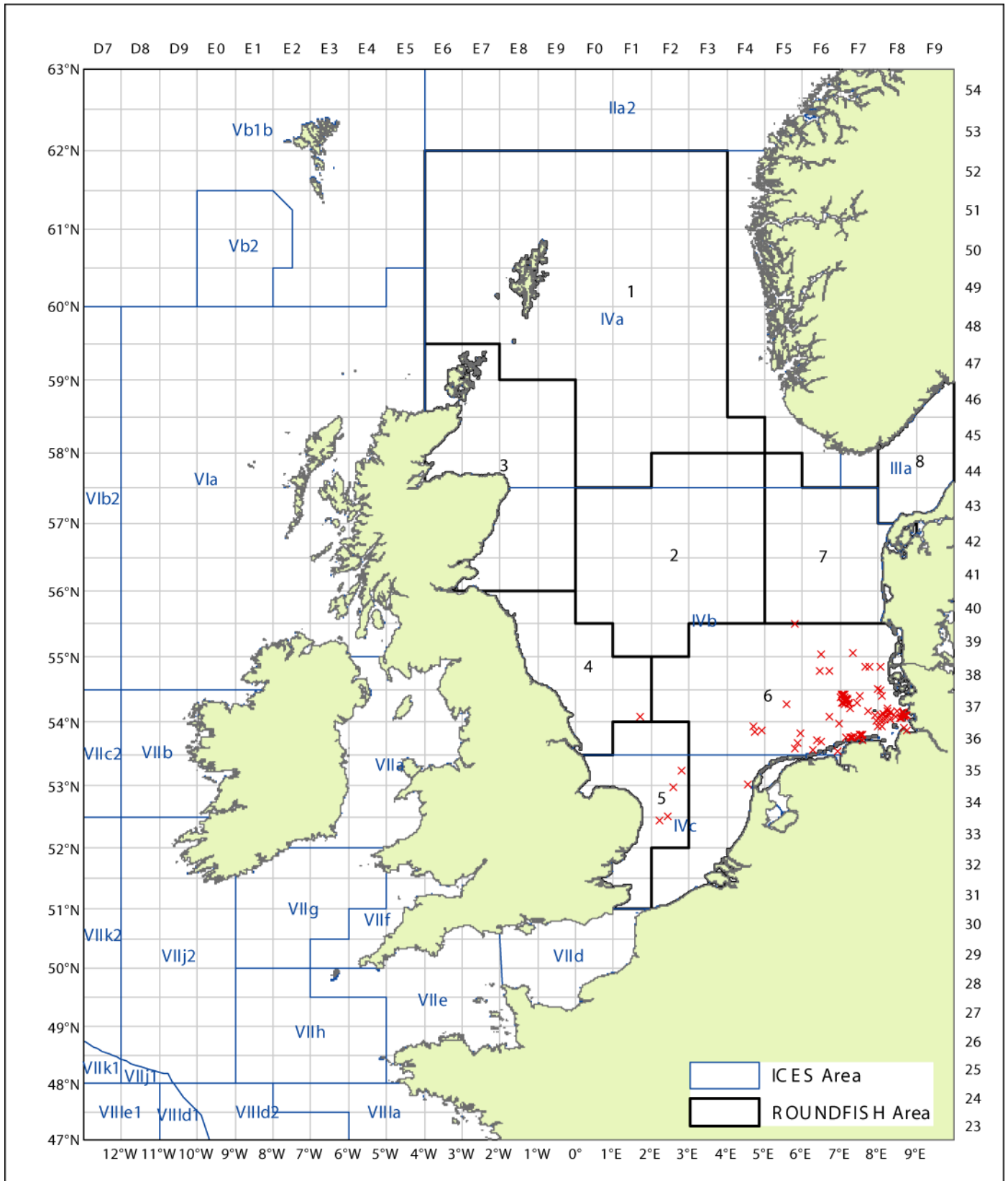
6.5 [cm]
34.5 [cm]

male -
female -
undefined 782

total numbers of data 782

Lampetra fluviatilis

Geographical distribution of data used for calculating the length-weight relationship



Lampetra fluviatilis

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0005

b = 3.3567

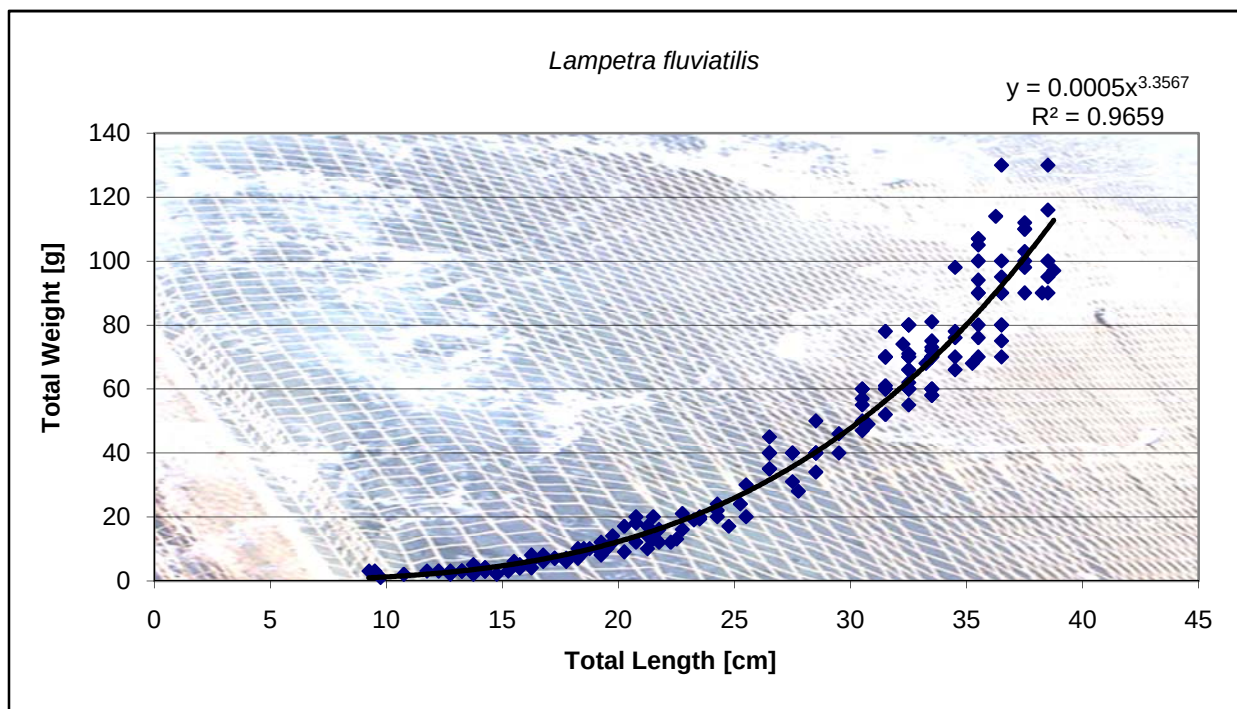
data collected

time period : 1955 - 2007

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
8	32	88	50																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
7	1	-	5	8	19	28	40	20	7	20	23								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	178	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	174	4	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
-	-	-	1	4	173	-	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

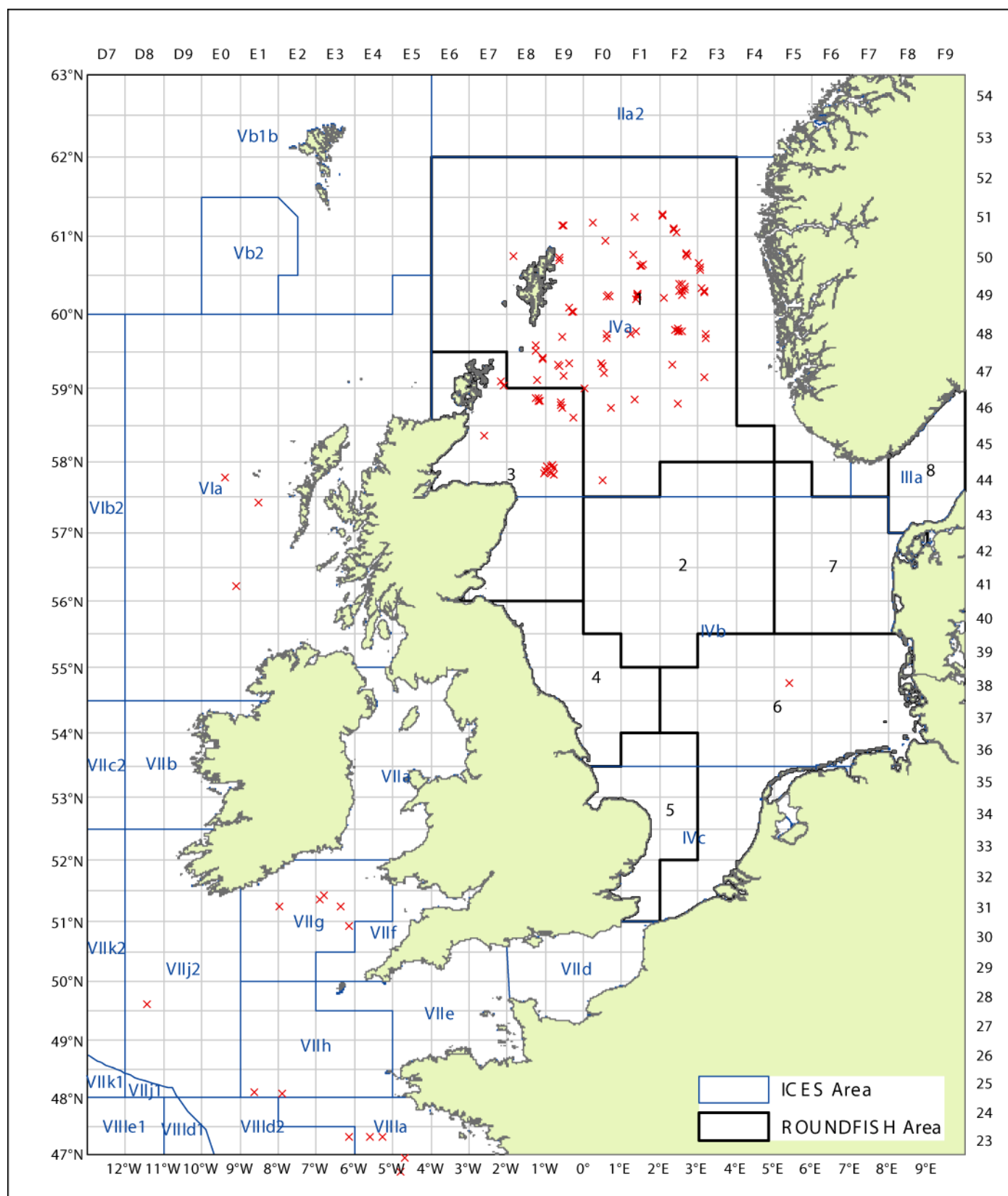
- Total length
- cm below, 1/2 cm below
- min length
- max length

9.25 [cm]
38.75 [cm]

male -
female 1
undefined 177
total numbers of data 178

Lepidorhombus whiffiagonis

Geographical distribution of data used for calculating the length-weight relationship



Lepidorhombus whiffiagonis

Quarter: 1 - 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0026

b = 3.2967

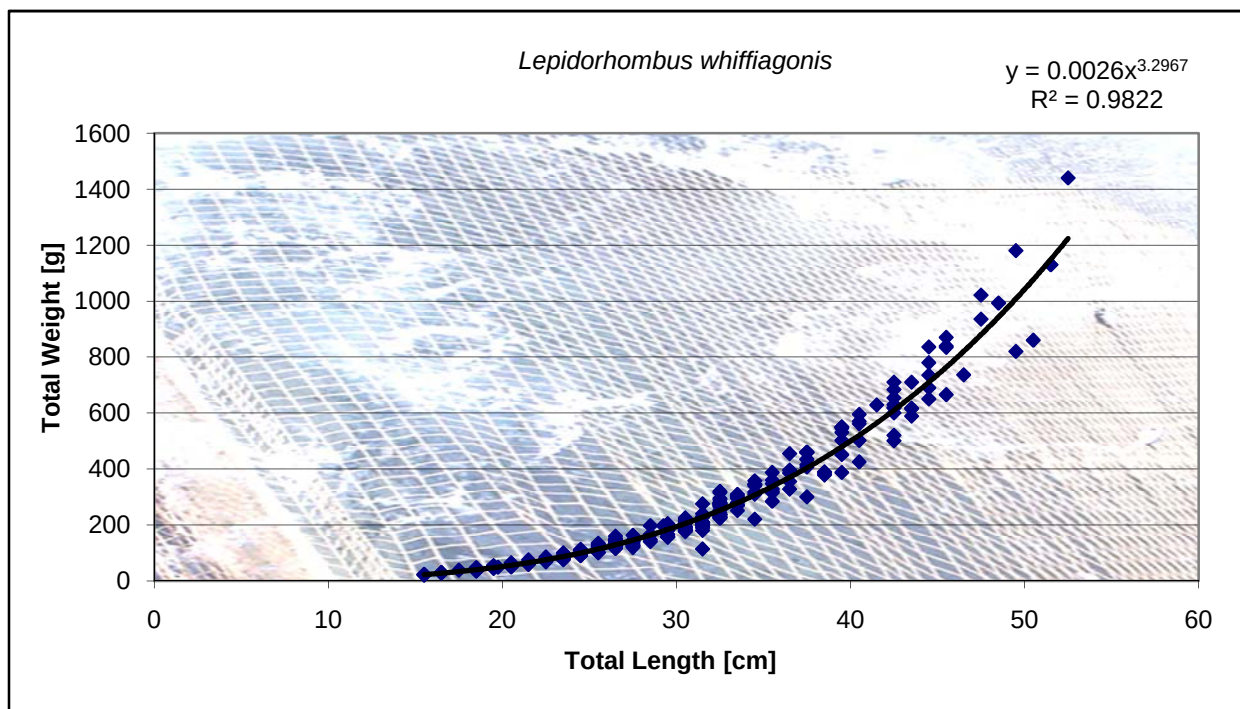
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Numbers of catch																					
Quarter																					
1	2	3	4																		
209	23	15	-																		
Month																					
1	2	3	4	5	6	7	8	9	10	11	12										
34	156	19	5	18	-	9	6	-	-	-	-										
Subarea																					
1	2	3	4	5	6	7	8	9	10	12	14										
-	-	-	230	-	3	8	6	-	-	-	-										
Division																					
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F		
-	-	-	-	-	-	-	229	1	-	-	-	3	-	-	-	-	-	-	-		
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B											
5	2	1	-	5	-	-	1	-	-	-											
Roundfisharea												NAFO									
1	2	3	4	5	6	7	8	9					1A	1B	1C	1D	1E	1F	2G	2H	2J
208	-	21	-	-	1	-	-	-					-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

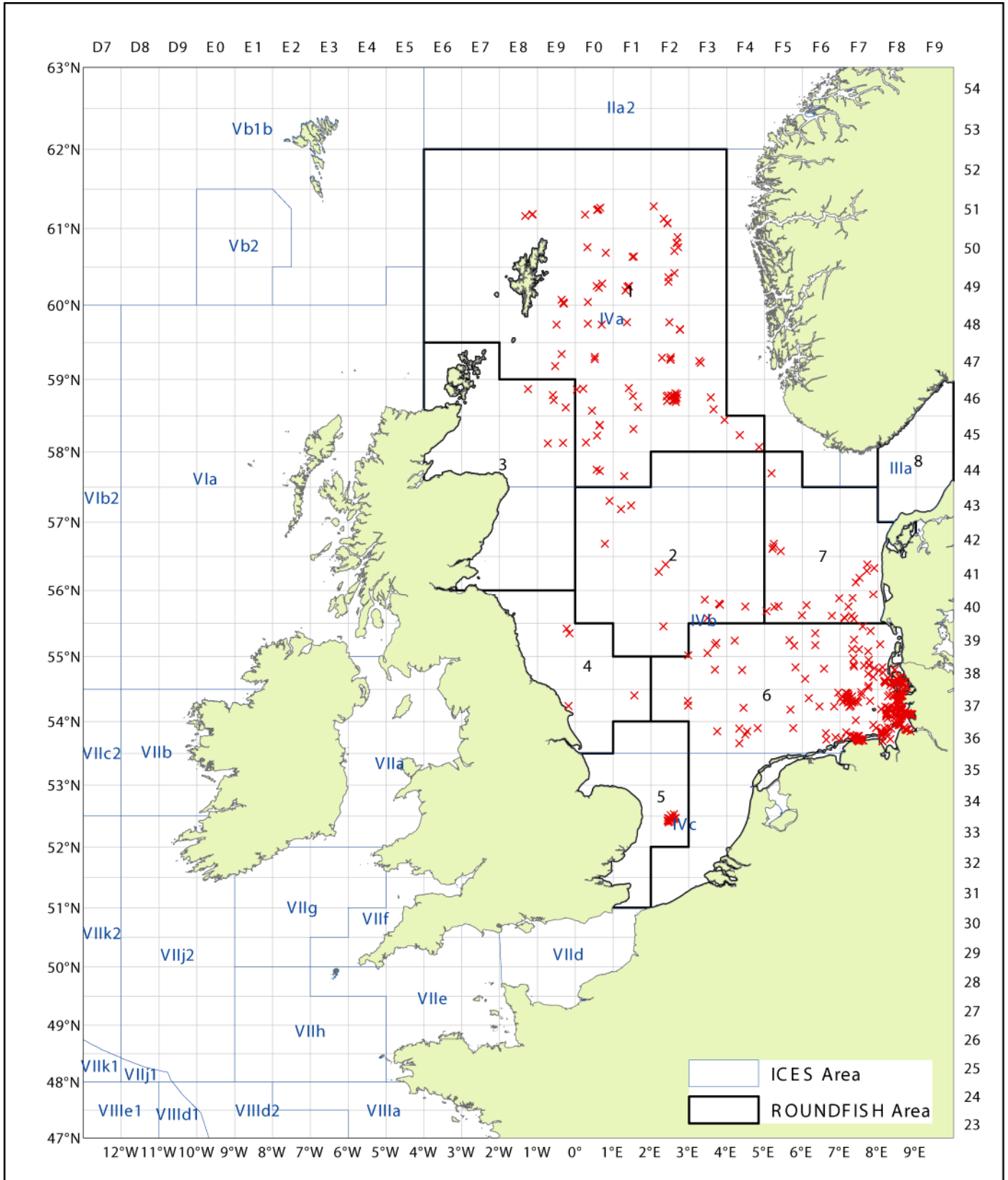
15.5 [cm]
52.5 [cm]

male 27
female 63
undefined 157

total numbers of data 247

Limanda limanda

Geographical distribution of data used for calculating the length-weight relationship



Limanda limanda

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0087

b = 3.0226

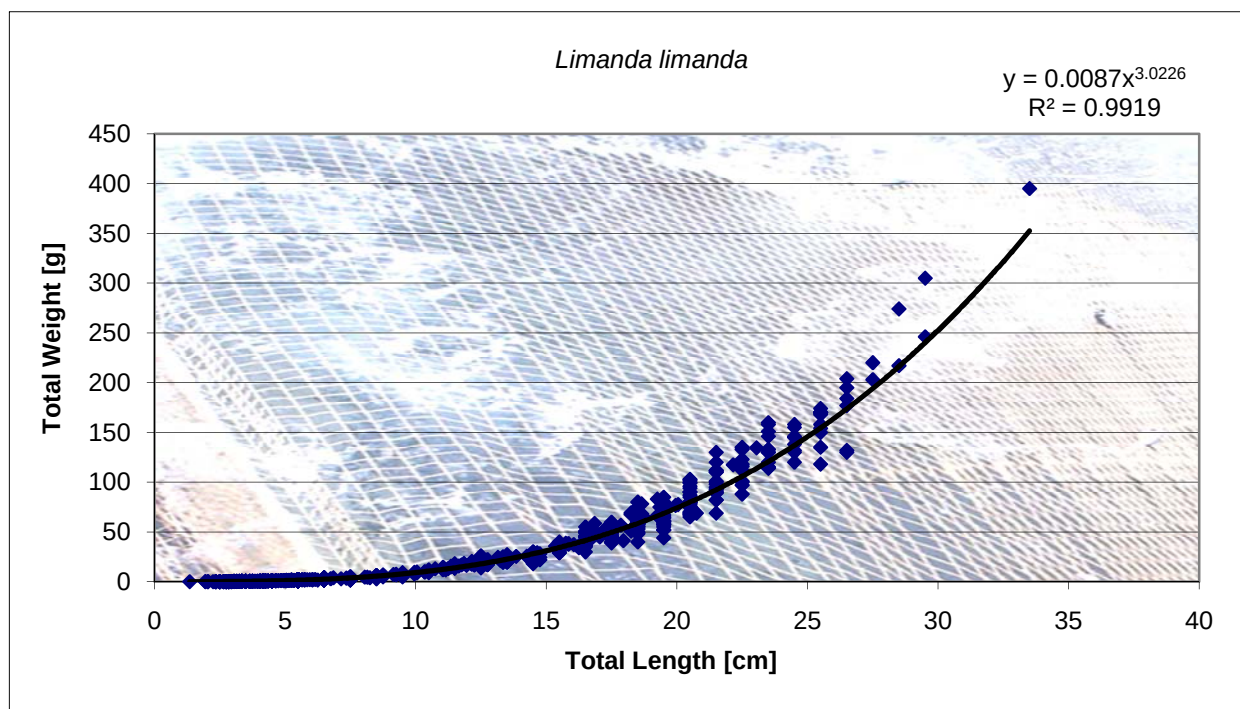
data collected

time period : 2000 - 2011

data source : research vessel

numbers of data:

Numbers of data																				
Quarter																				
1	2	3	4																	
206	65	447	25																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
141	65	-	13	48	4	206	136	105	25	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	743	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	105	624	14	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
98	46	6	4	14	507	68	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below, mm below
- min length
- max length

1.35 [cm]
33.5 [cm]

male 92
female 90
undefined 561
total numbers of data 743

♀

length-weight relationship



Limanda limanda



Quarter: 1 - 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0076

b = 3.0584

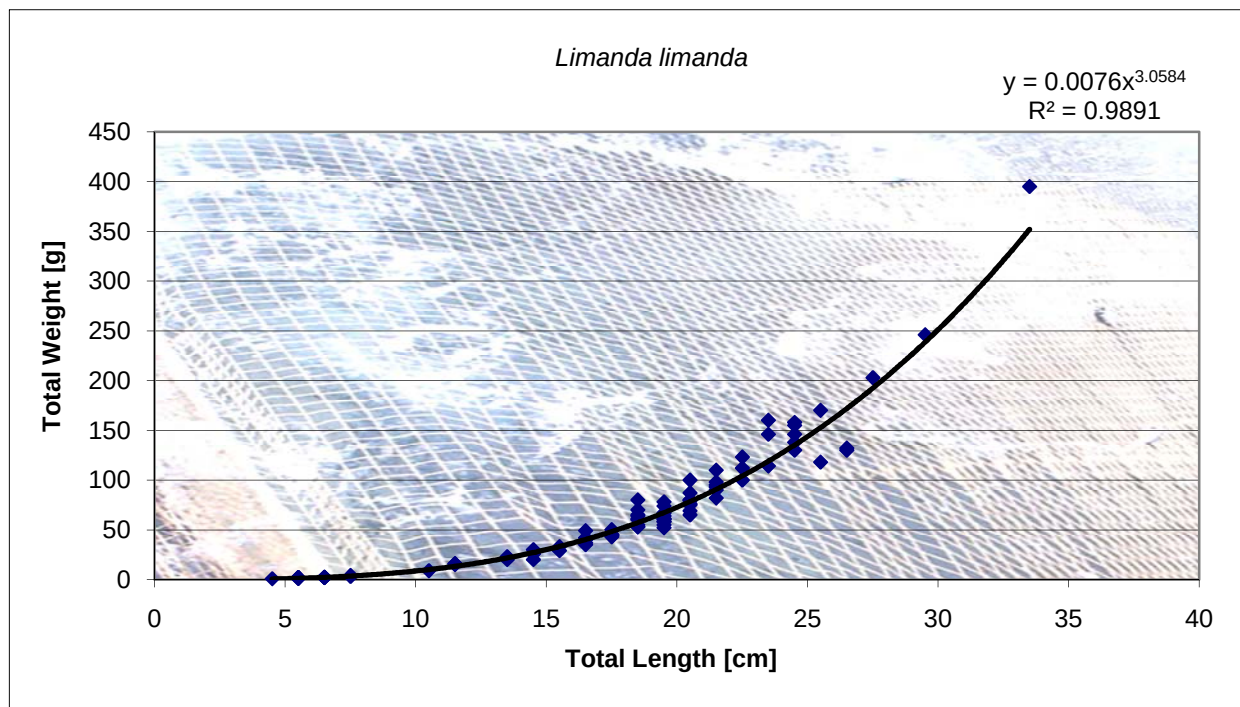
data collected

time period : 2000 - 2011

data source : research vessel

numbers of data:

Numbers of data																				
Quarter																				
1	2	3	4																	
70	1	19	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
38	32	-	-	1	-	13	6	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	90	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	53	36	1	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
49	3	4	-	1	32	1	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

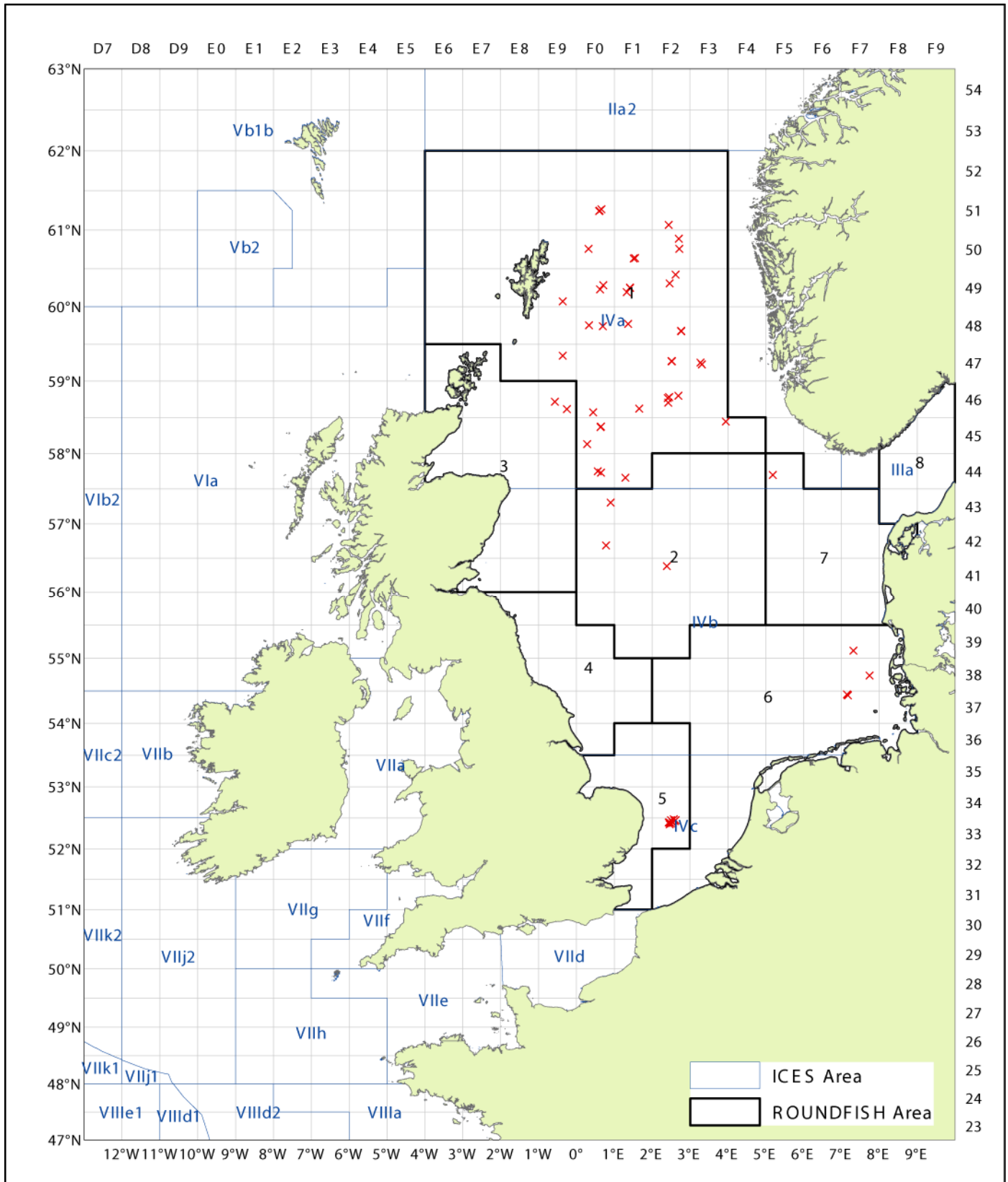
4.5 [cm]
33.5 [cm]

male -
female 90
undefined -

total numbers of data 90

Limanda limanda ♂

Geographical distribution of data used for calculating the length-weight relationship



Limanda limanda ♂

Quarter: 1 ; 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0076

b = 3.0587

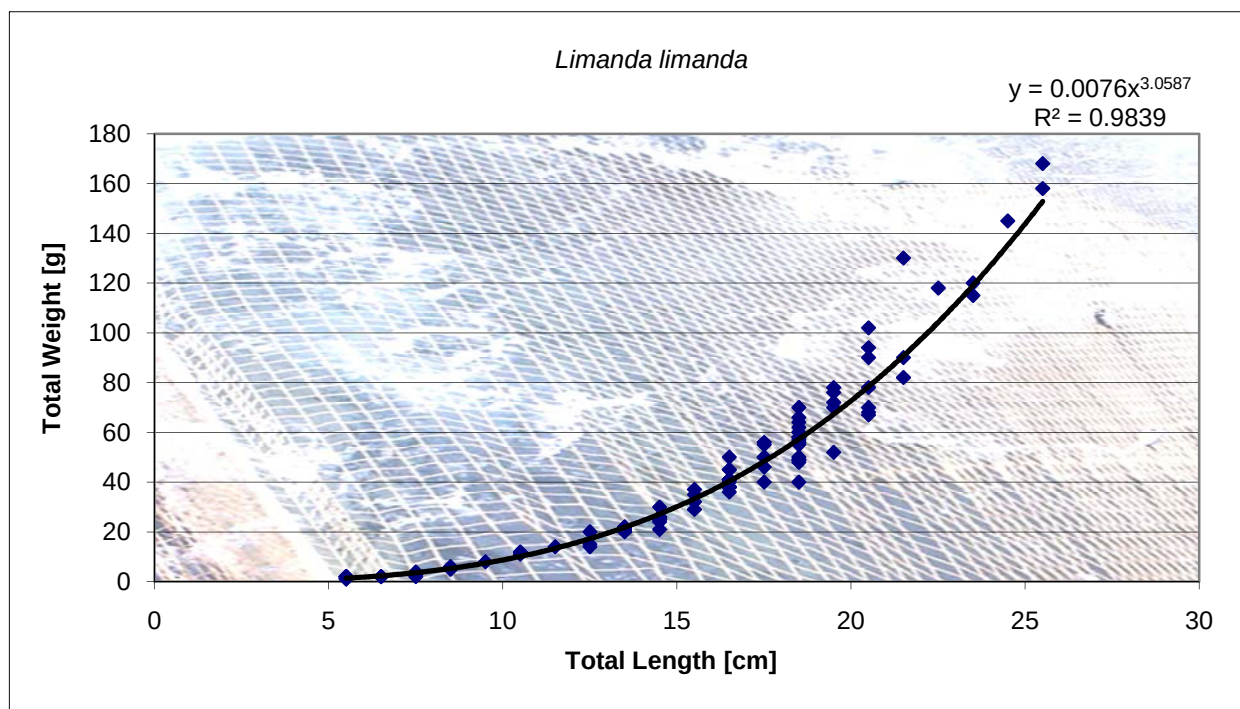
data collected

time period : 2000 - 2011

data source : research vessel

numbers of data:

Numbers of data.																			
Quarter																			
1	2	3	4																
74	-	18	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
46	28	-	-	-	-	14	4	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	92	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	44	39	9	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
41	3	2	-	9	36	1	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

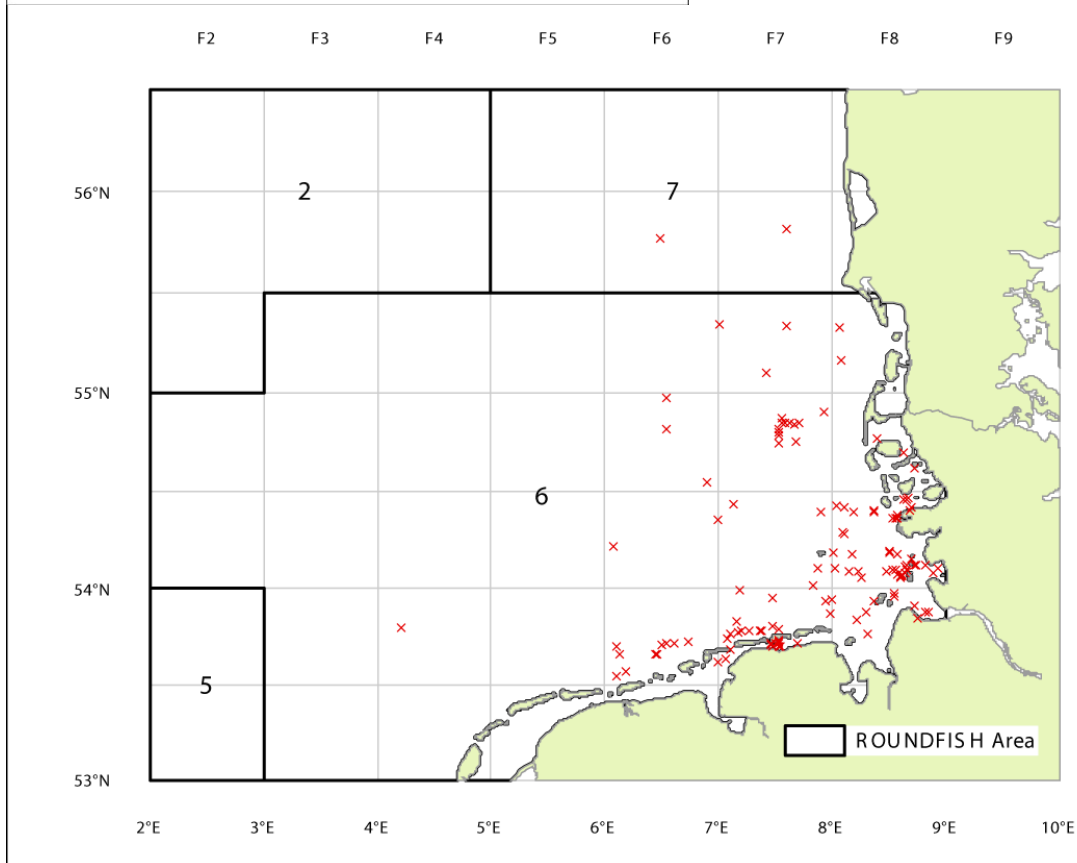
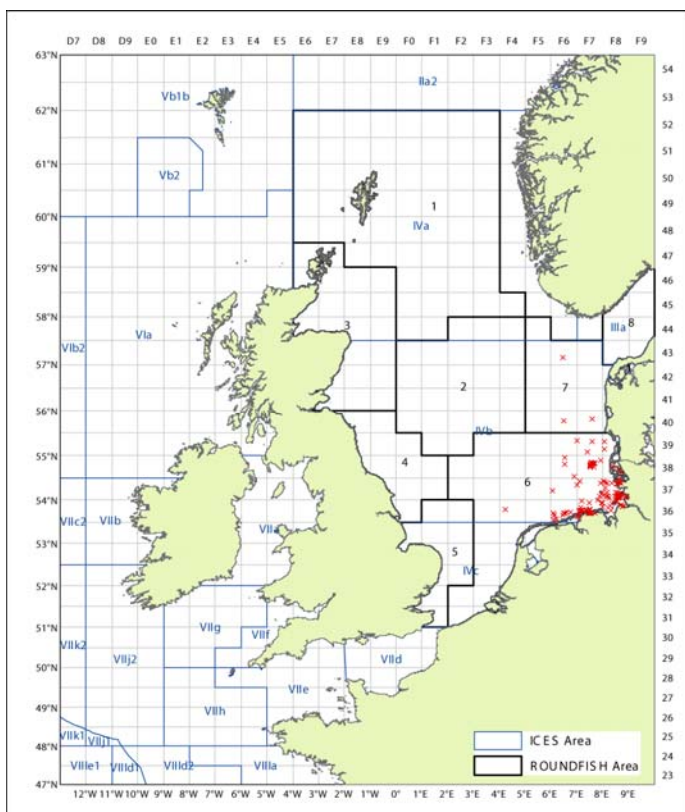
5.5 [cm]
25.5 [cm]

male 92
female -
undefined -

total numbers of data 92

Liparis liparis

Geographical distribution of data used for calculating the length-weight relationship



Liparis liparis

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0172

b = 3.0359

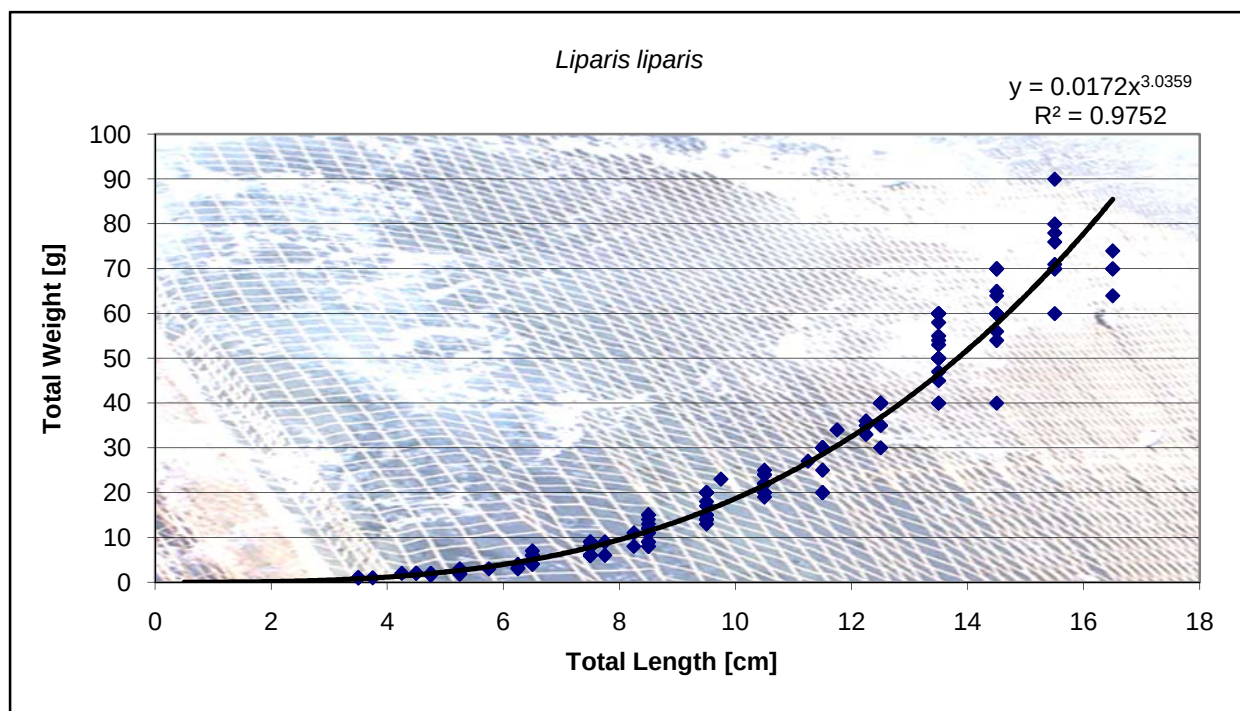
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
57	11	40	26																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
49	8	-	3	4	4	1	4	35	6	10	10								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	134	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	134	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	-	-	-	-	130	4	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- 1/2 cm below; cm below
- min length
- max length

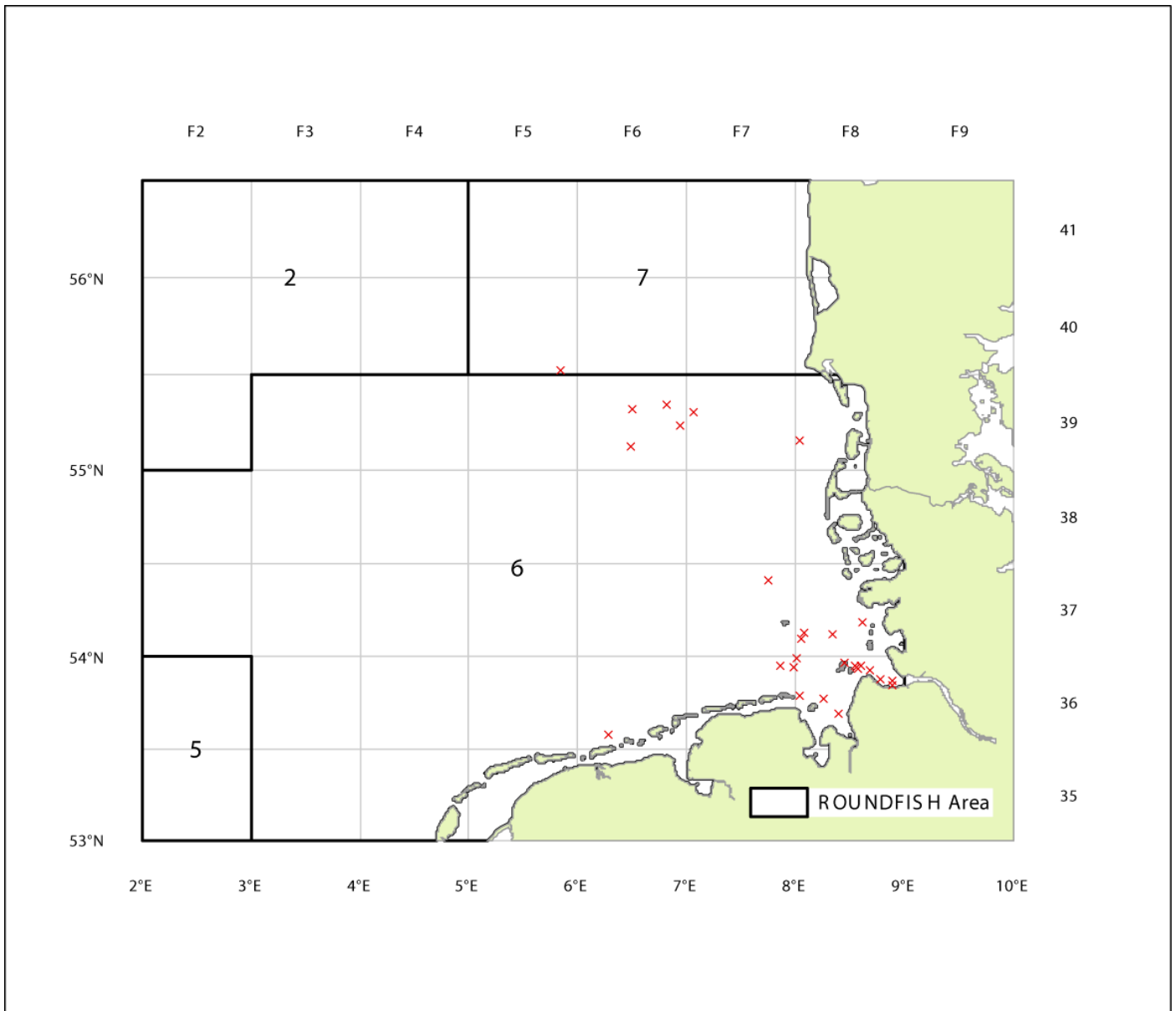
3.5 [cm]
16.5 [cm]

male -
female -
undefined 134

total numbers of data 134

Liparis montagui

Geographical distribution of data used for calculating the length-weight relationship



Liparis montagui

Quarter: 1; 3; 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0131

b = 3.1228

data collected

time period : 1995 - 2008

data source : research vessel

numbers of data:

Numbers of data

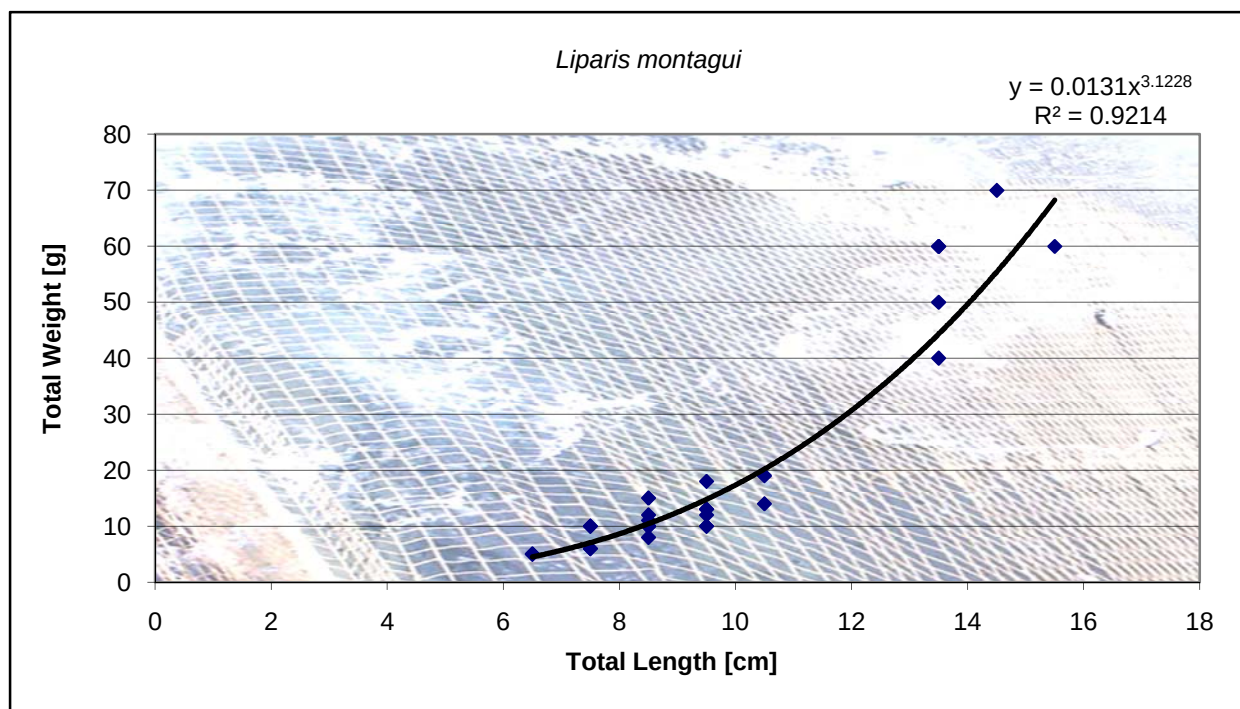
Quarter			
1	2	3	4
11	-	4	14

Month											
1	2	3	4	5	6	7	8	9	10	11	12
10	1	-	-	-	-	-	-	4	10	1	3

Subarea											
1	2	3	4	5	6	7	8	9	10	12	14
-	-	-	29	-	-	-	-	-	-	-	-

Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	29	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					

Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	1	-	-	-	28	-	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

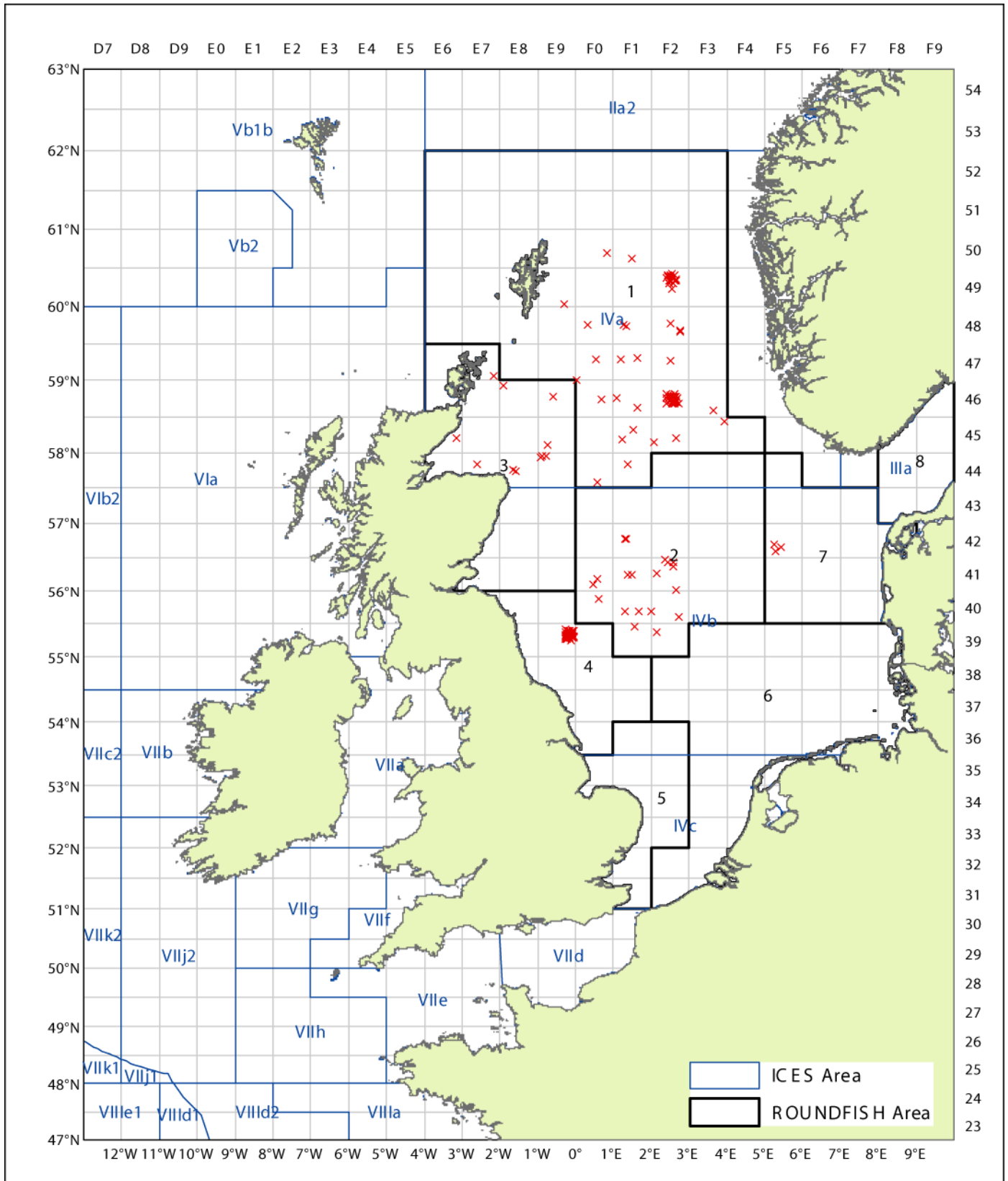
6.5 [cm]
15.5 [cm]

male -
female -
undefined 29

total numbers of data 29

Lithodes maja

Geographical distribution of data used for calculating the length-weight relationship



Lithodes maja

Quarter: 1 ; 3

$$Tw [g] = a * L [mm]^b$$

a = 0.00057

b = 2.99662

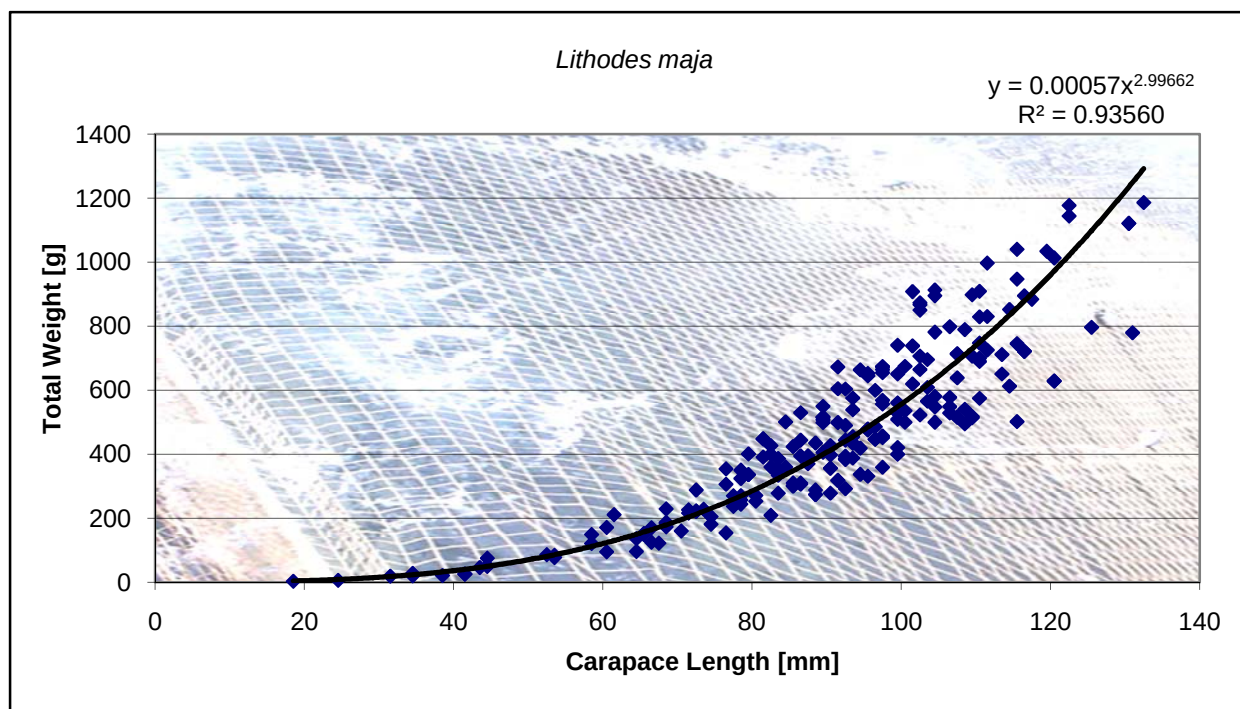
data collected

time period : 2004 - 2009

data source : research vessel

numbers of data:

Numbers of data.																				
Quarter																				
1	2	3	4																	
69	-	151	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
31	38	-	-	-	-	76	75	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	220	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	124	96	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
114	24	11	65	-	-	6	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Carapace length
- mm below

min length
max length

18.5 [mm]
132.5 [mm]

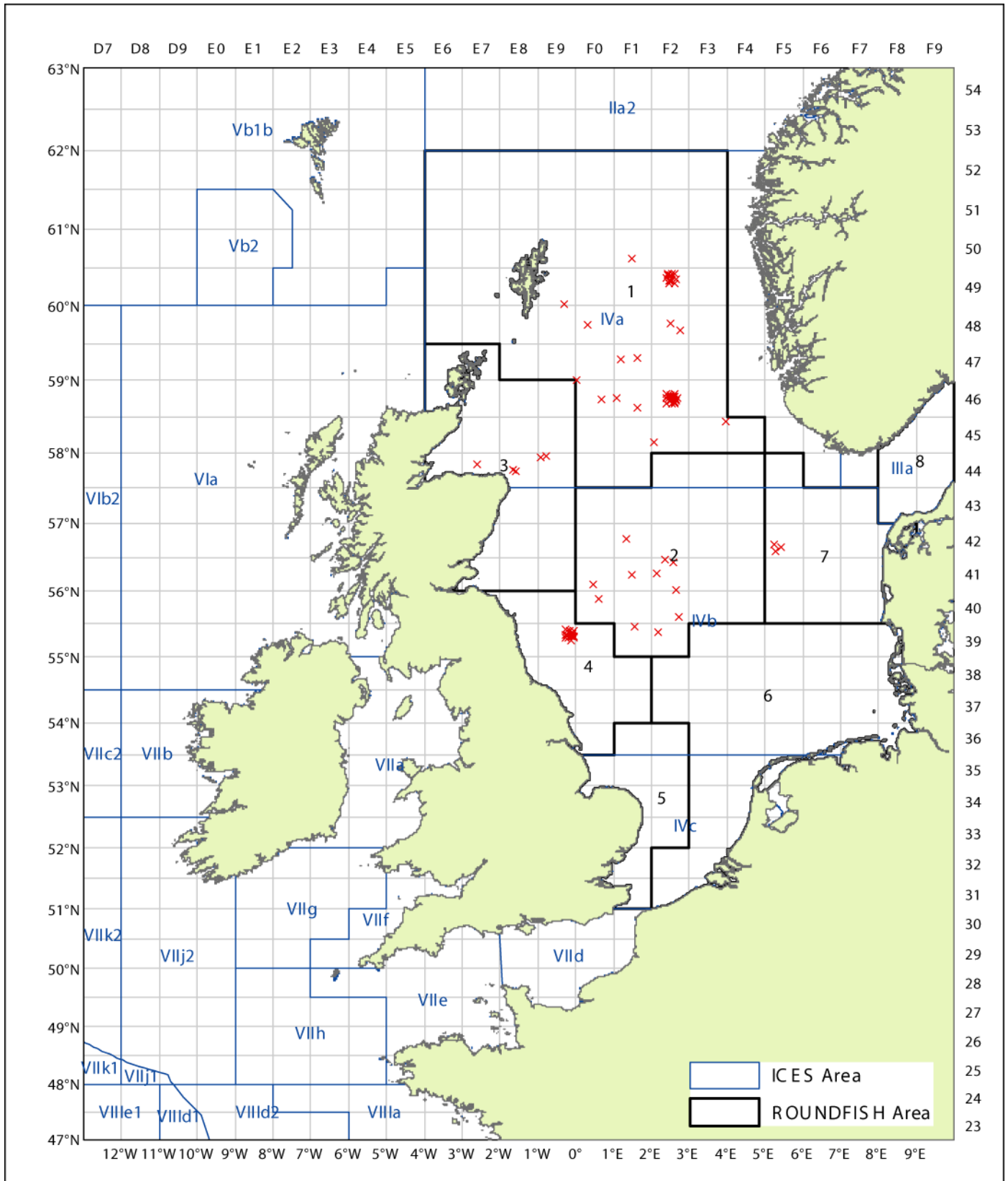
male
female
undefined

65
123
32

total numbers of data 220

Lithodes maja ♀

Geographical distribution of data used for calculating the length-weight relationship



Lithodes maja



Quarter: 1 ; 3

(female)

$$Tw [g] = a * L [mm]^b$$

a = 0.00093

b = 2.88717

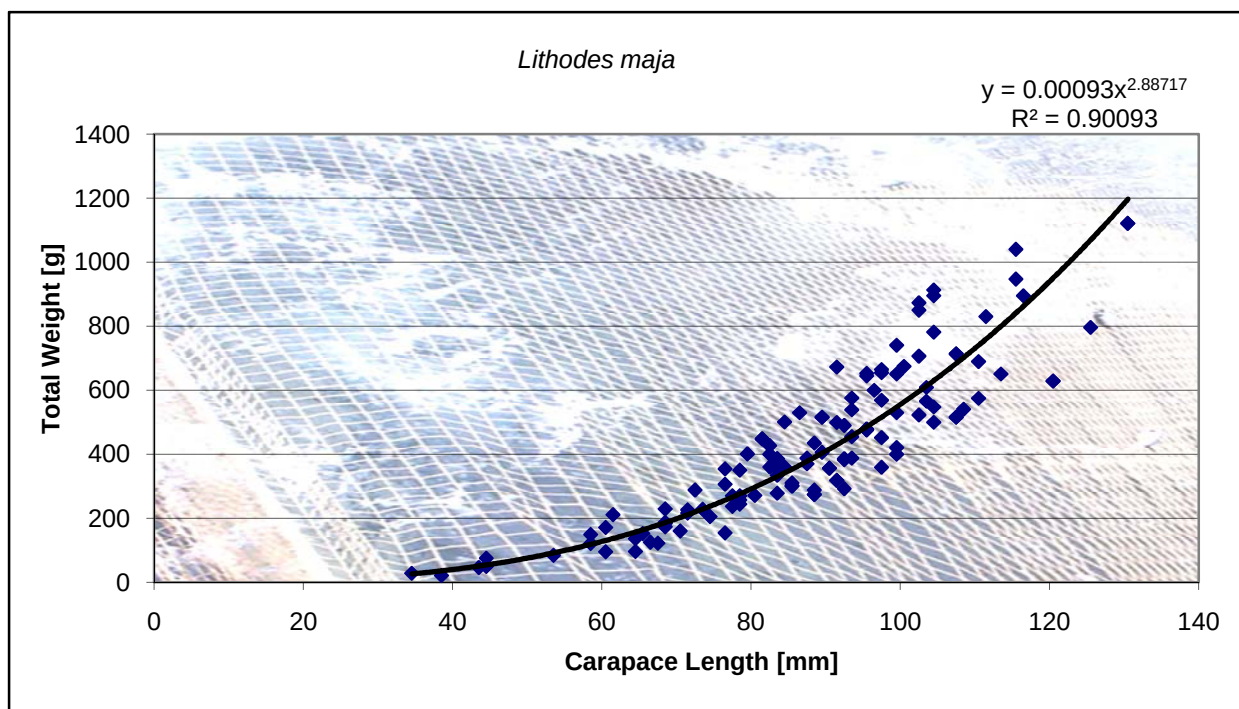
data collected

time period : 2005 - 2009

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
27	-	96	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
15	12	-	-	-	-	58	38	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	123	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	69	54	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea												NAFO							
1	2	3	4	5	6	7	8	9											
64	12	5	36	-	-	6	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Carapace length
- mm below

min length

max length

34.5 [mm]

130.5 [mm]

male

female

undefined

-

123

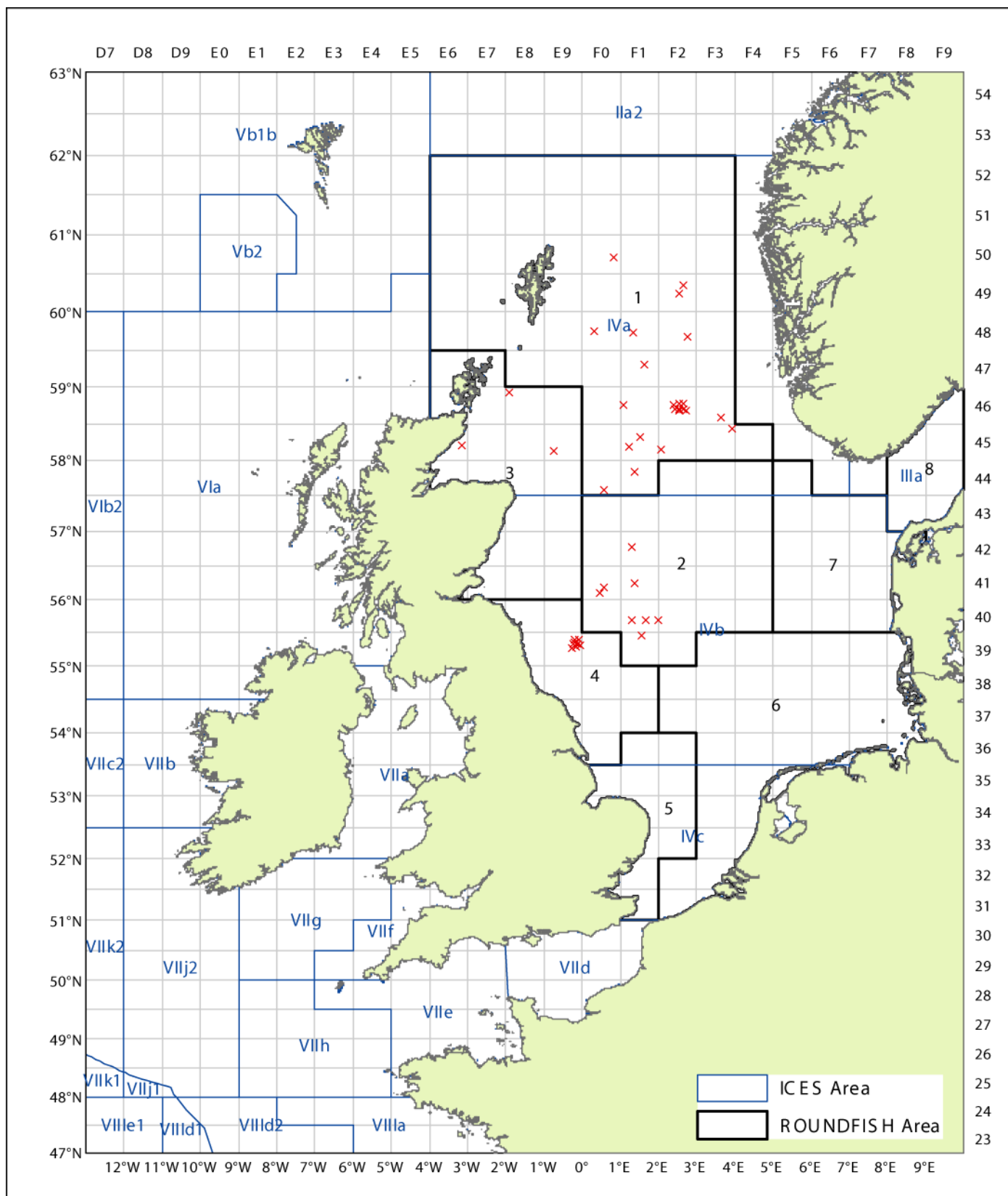
-

total numbers of data

123

Lithodes maja ♂

Geographical distribution of data used for calculating the length-weight relationship



Lithodes maja



Quarter: 1 ; 3

(male)

$$Tw [g] = a * L [mm]^b$$

a = 0.00035

b = 3.10704

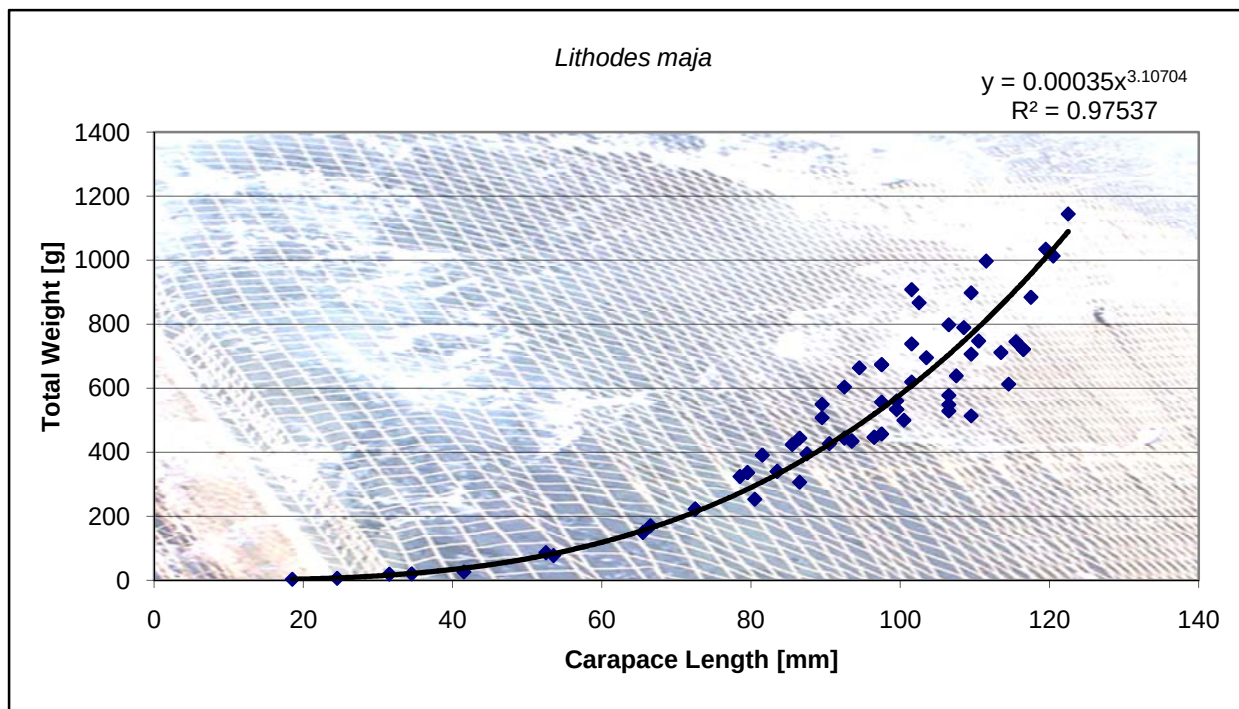
data collected

time period : 2005 - 2009

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
36	-	29	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
13	23	-	-	-	-	16	13	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	65	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	41	24	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea												NAFO							
1	2	3	4	5	6	7	8	9											
39	10	3	13	-	-	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Carapace length
- mm below

min length

max length

18.5 [mm]

122.5 [mm]

male

female

undefined

65

-

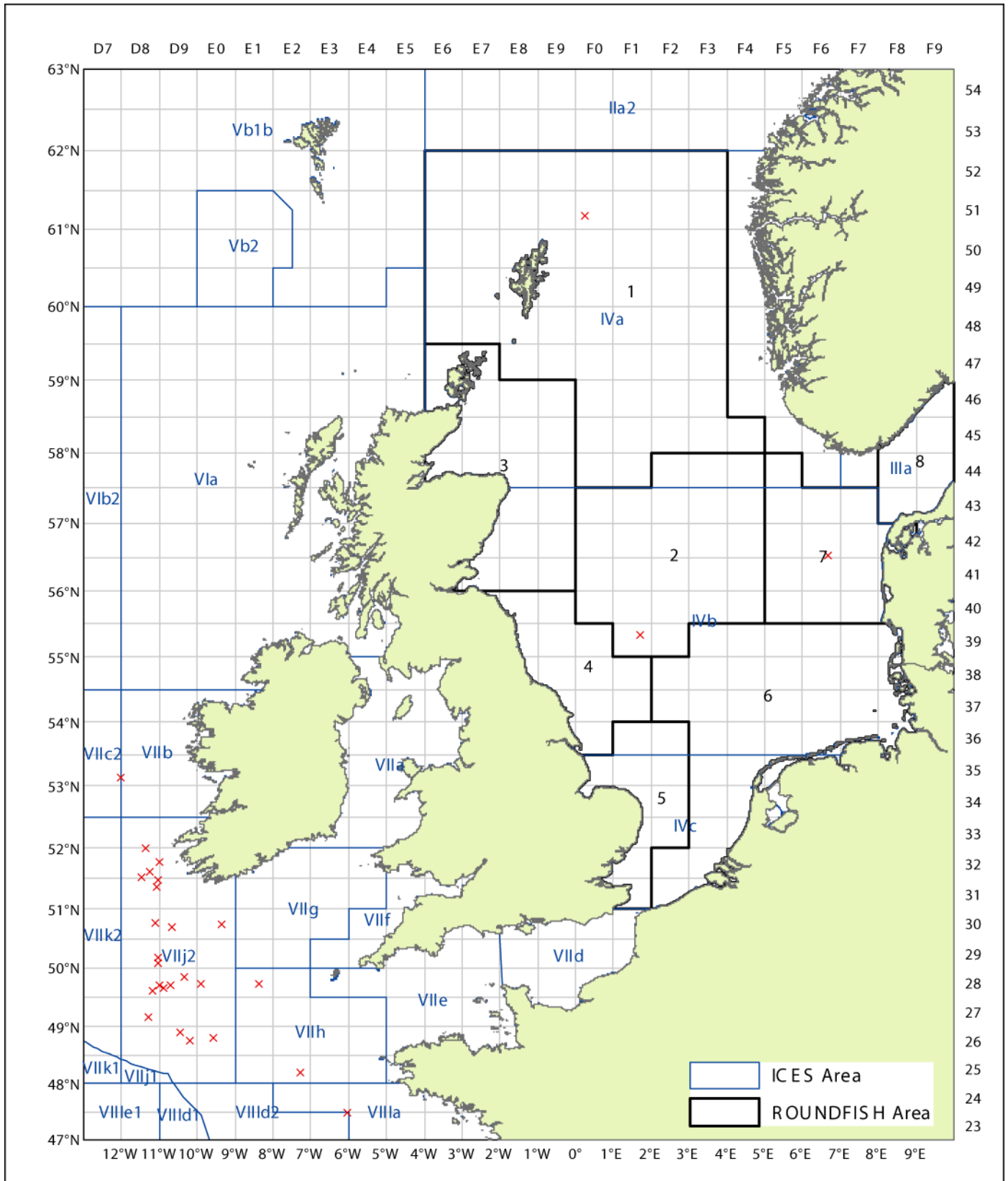
-

total numbers of data

65

Lophius budegassa

Geographical distribution of data used for calculating the length-weight relationship



Lophius budegassa

Quarter: 1 - 2

$$Tw [g] = a * L [cm]^b$$

a = 0.0203

b = 2.9304

data collected

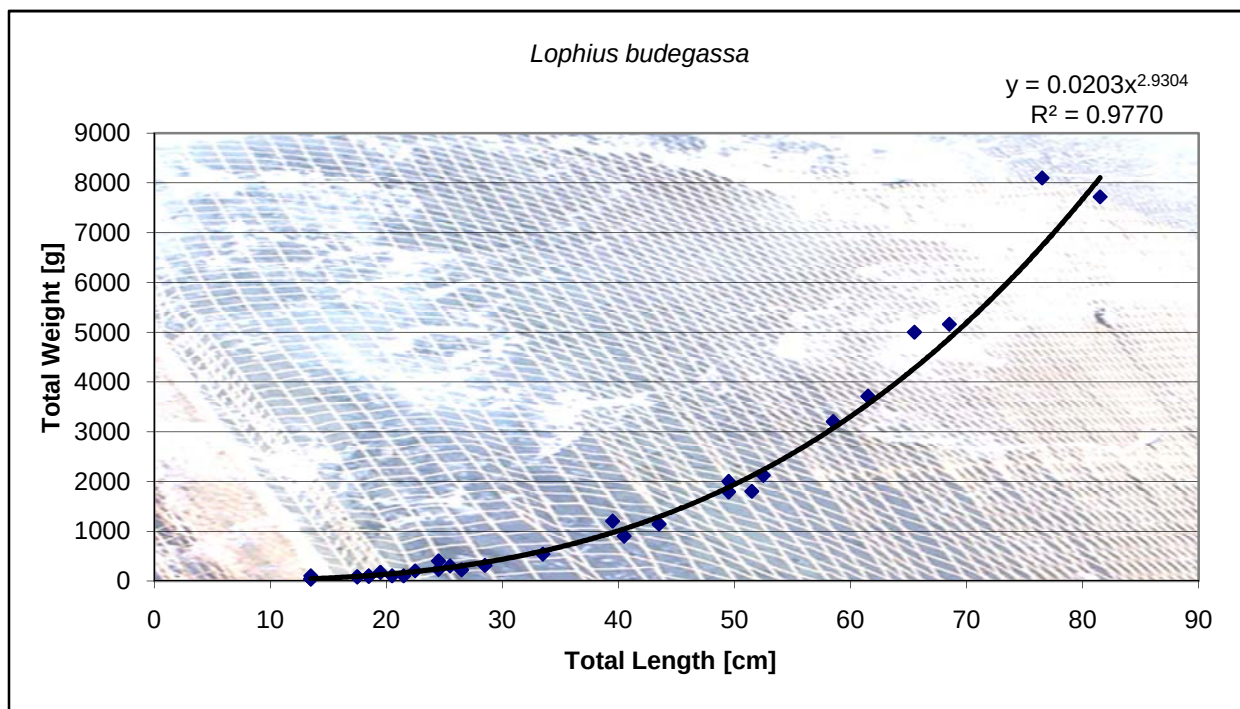
time period : 1992 - 2007

data source : research vessel

numbers of data:

Numbers of data:

Quarter																			
1	2	3	4																
19	12	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
1	5	13	12	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	4	-	-	24	3	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	1	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	2	21	-	-	2	-	1	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
2	1	-	-	-	-	1	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

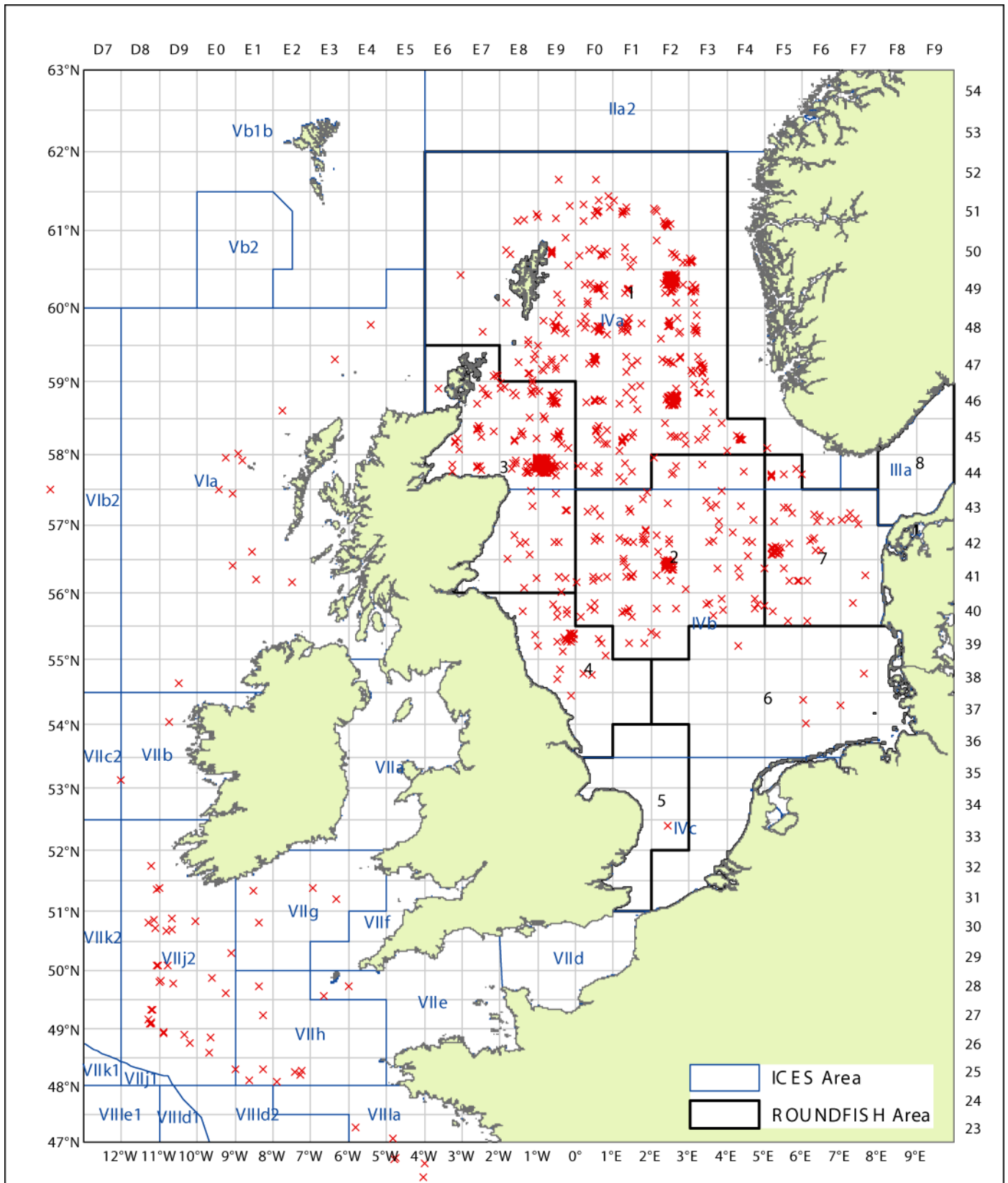
min length 13.5 [cm]
max length 81.5 [cm]

male -
female 1
undefined 30

total numbers of data 31

Lophius piscatorius

Geographical distribution of data used for calculating the length-weight relationship



Lophius piscatorius

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0266

b = 2.8568

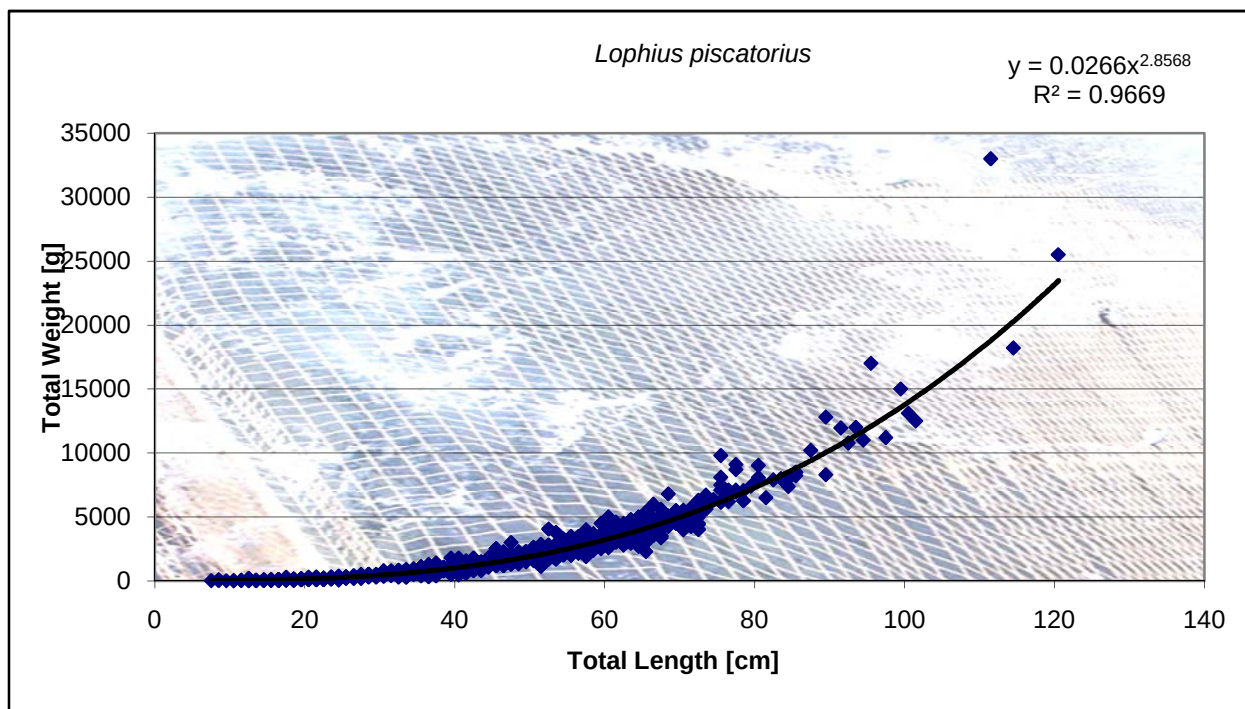
data collected

time period : 1960 - 2007

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
458	164	439	49																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
99	311	48	24	37	103	241	190	8	-	49	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1036	-	14	50	10	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	808	227	1	-	-	13	1	-	1	1	-	2	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
4	8	34	-	7	3	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
531	115	287	38	1	8	55	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

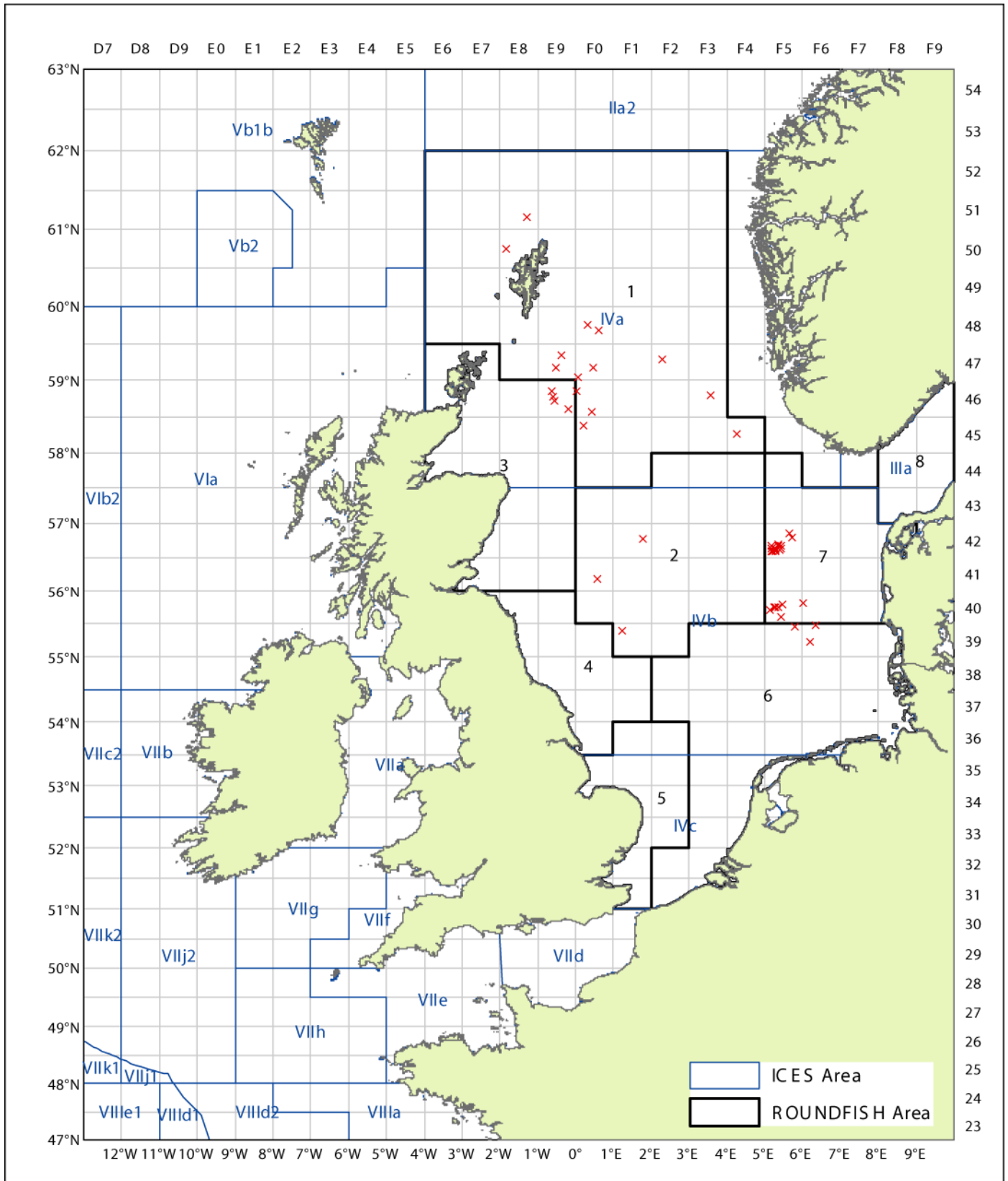
7.5 [cm]
120.5 [cm]

male 117
female 44
undefined 949

total numbers of data 1110

Lumpenus lampretaeformis

Geographical distribution of data used for calculating the length-weight relationship



Lumpenus lampretaeformis

Quarter: 1 - 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0063

b = 2.4477

data collected

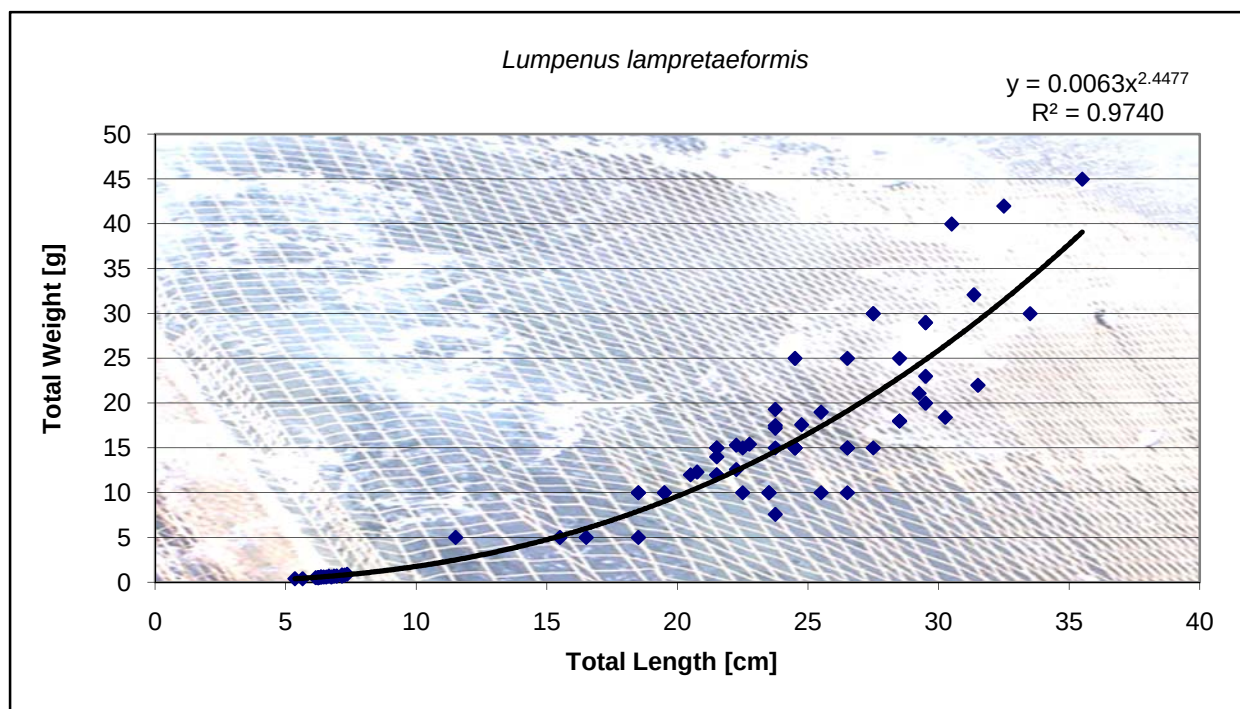
time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of data.

Quarter																			
1	2	3	4																
24	5	47	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
11	13	-	-	2	3	31	15	1	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	76	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	20	56	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
16	3	4	-	-	2	51	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

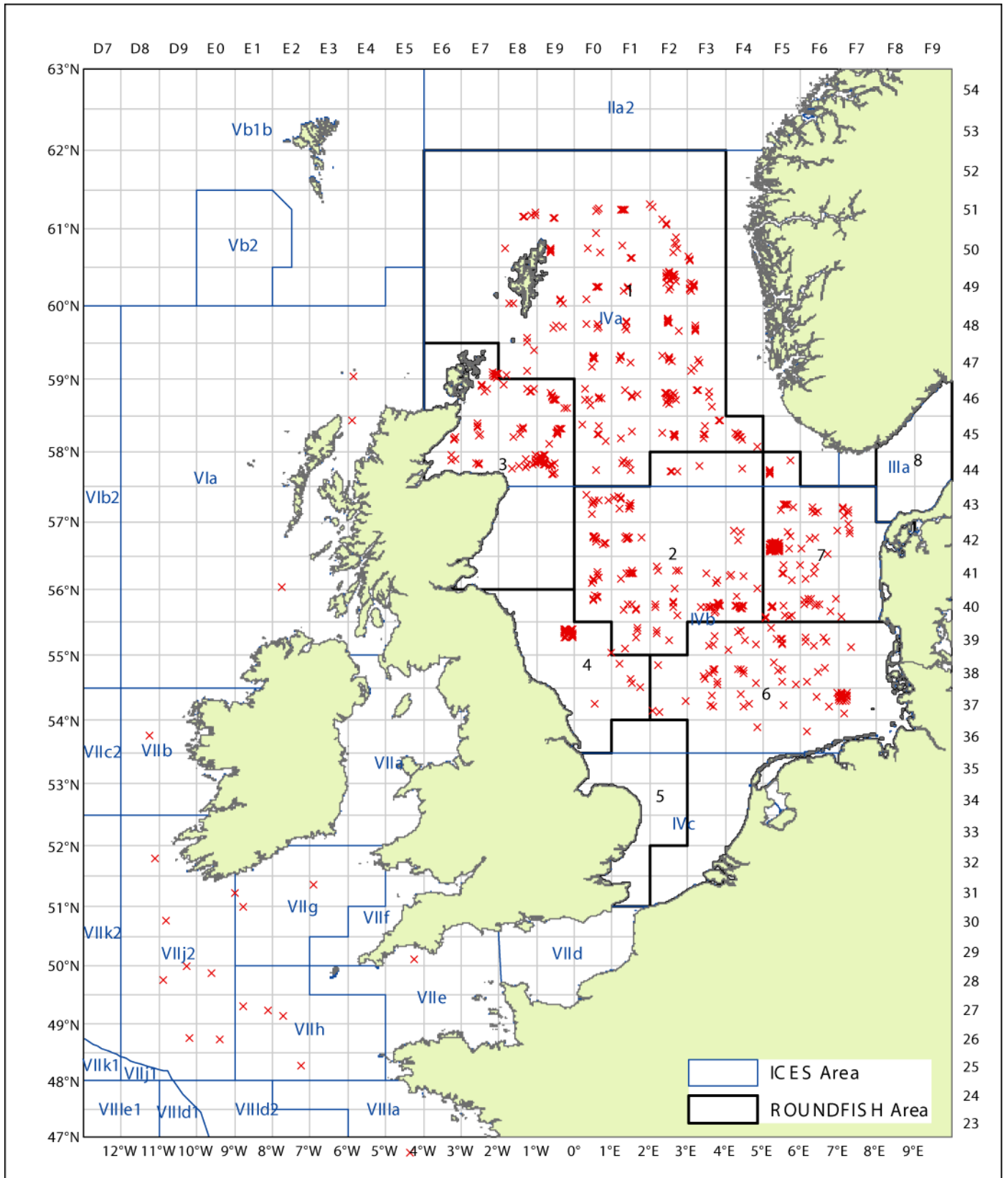
- Total length
- mm below, cm below
- min length
- max length

5.35 [cm]
35.5 [cm]

male -
female -
undefined 76
total numbers of data 76

Melanogrammus aeglefinus

Geographical distribution of data used for calculating the length-weight relationship



Melanogrammus aeglefinus

Quarter: 1 - 3

$$Tw [g] = a * L [cm]^b$$

a = 0.005

b = 3.1761

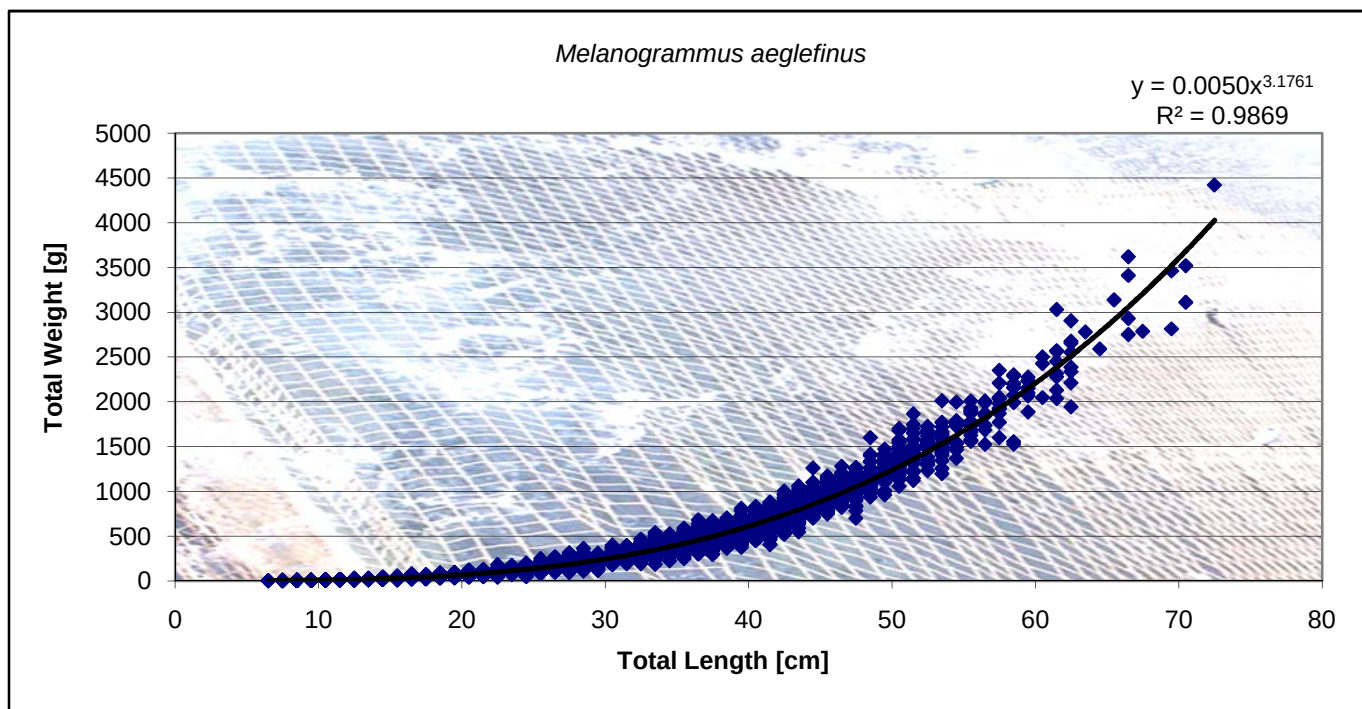
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Quarter																				
1	2	3	4																	
11461	161	5148	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
4907	6417	137	55	61	45	2439	2314	395	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	1	-	16596	-	31	141	1	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	1	-	-	-	-	-	12033	4563	-	-	-	31	-	-	1	-	-	1	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
110	19	10	-	1	-	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9												
6614	3070	4178	1145	-	207	1382	-	-												
1A	1B	1C	1D	1E	1F	2G	2H	2J												
-	-	-	-	-	-	-	-	-												



Method of Measurement

- Total length

- cm below

min length

max length

6.5 [cm]

72.5 [cm]

male

female

undefined

6850

6944

2976

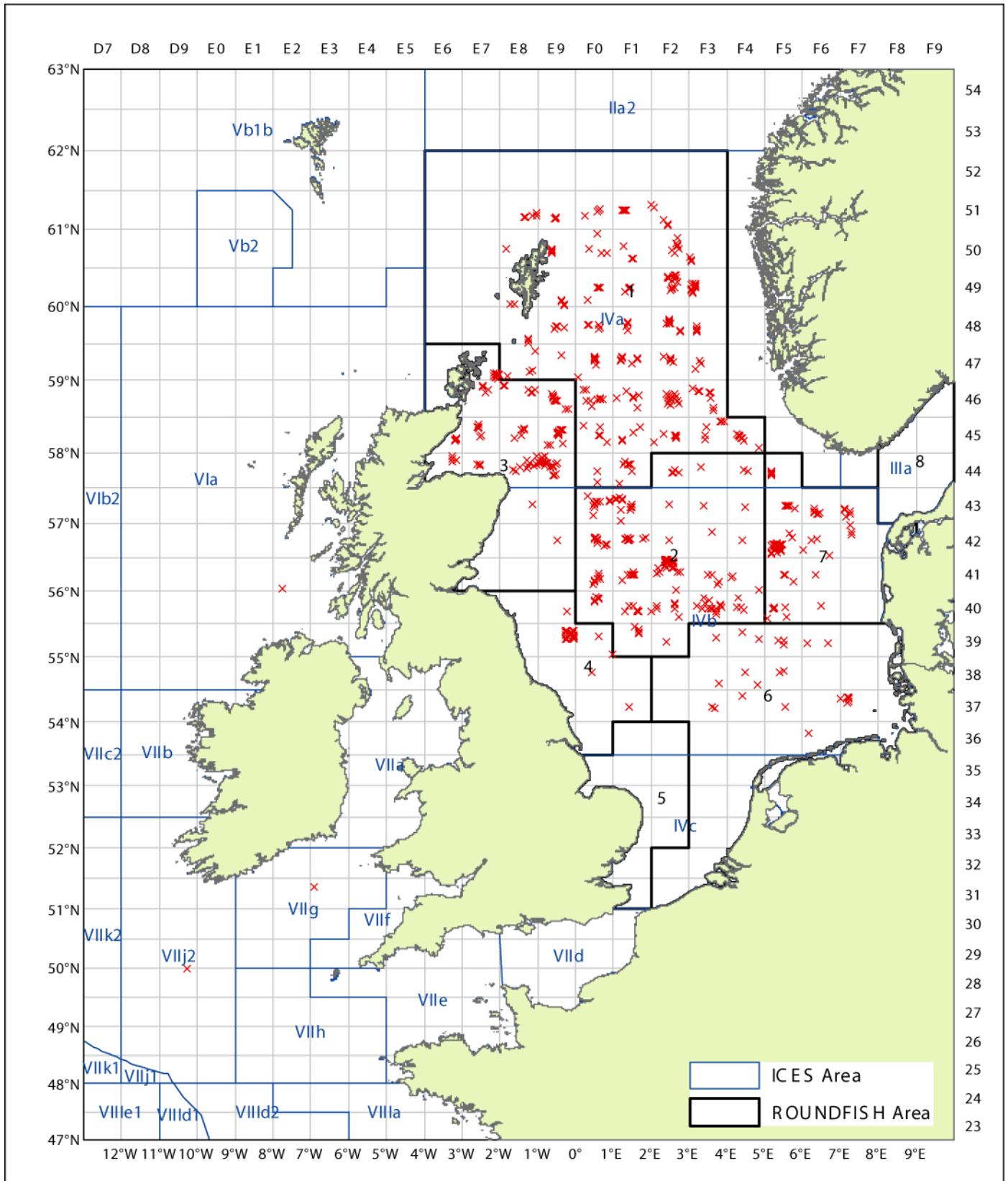
total numbers of data

16770

Melanogrammus aeglefinus



Geographical distribution of data used for calculating the length-weight relationship



Melanogrammus aeglefinus



Quarter: 1 - 4

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0047

b = 3.1937

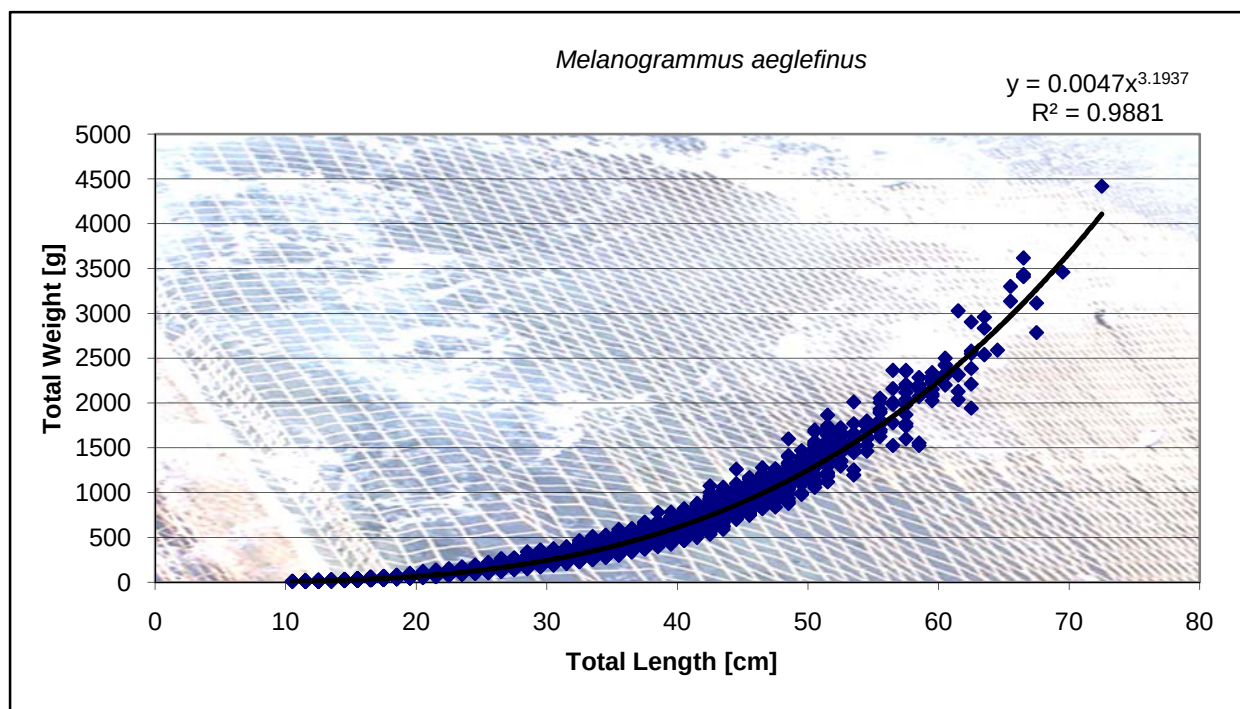
data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of salmon																				
Quarter																				
1	2	3	4																	
6949	358	1398	30																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
2813	3752	384	9	300	49	560	658	180	-	30	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	8640	-	16	79	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	5782	2858	-	-	-	16	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
78	-	1	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
3335	2069	2076	374	-	73	713	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

10.5 [cm]
72.5 [cm]

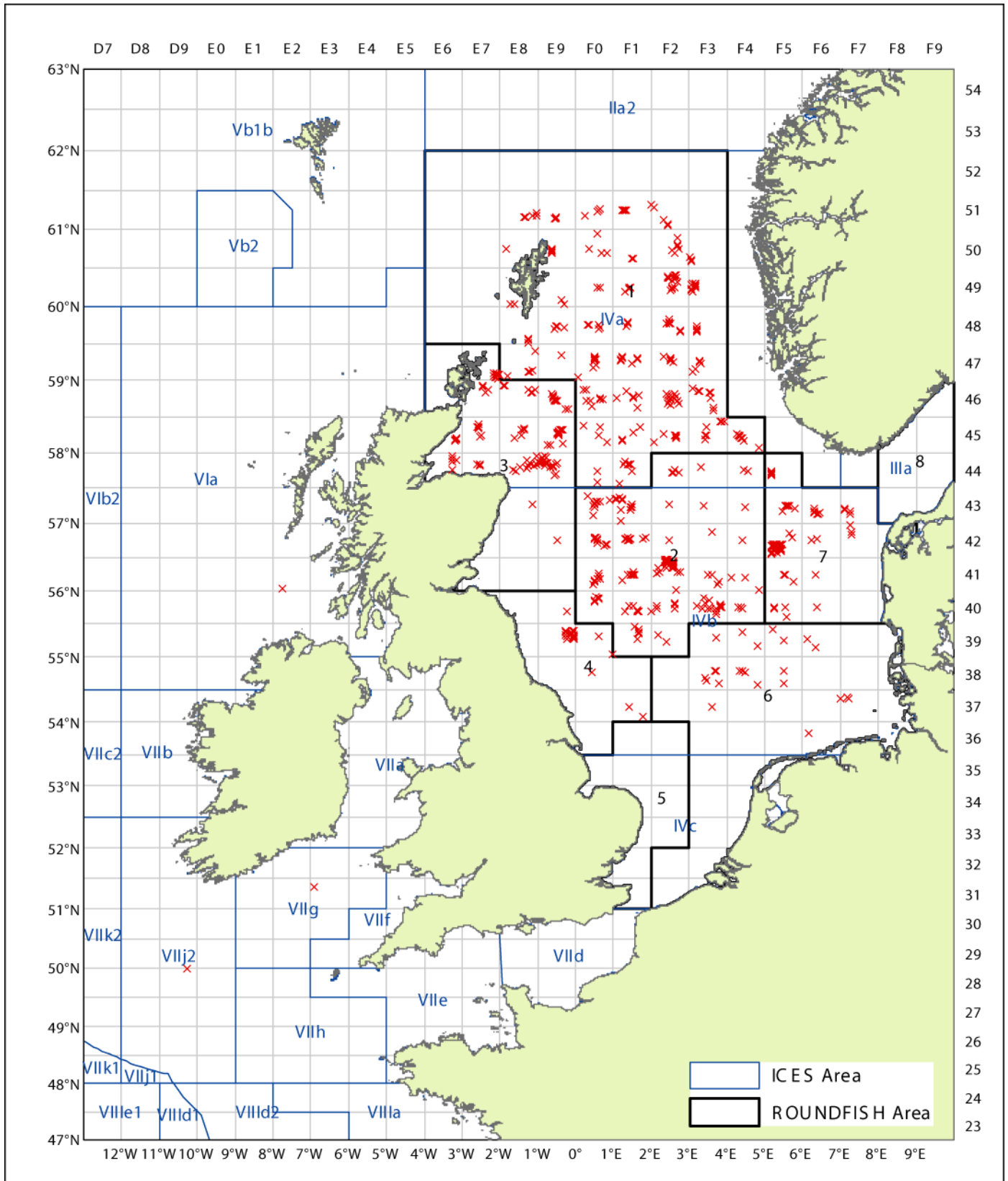
male
female
undefined

-
8735
-

total numbers of data 8735

Melanogrammus aeglefinus ♂

Geographical distribution of data used for calculating the length-weight relationship



Melanogrammus aeglefinus



Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0053

b = 3.1517

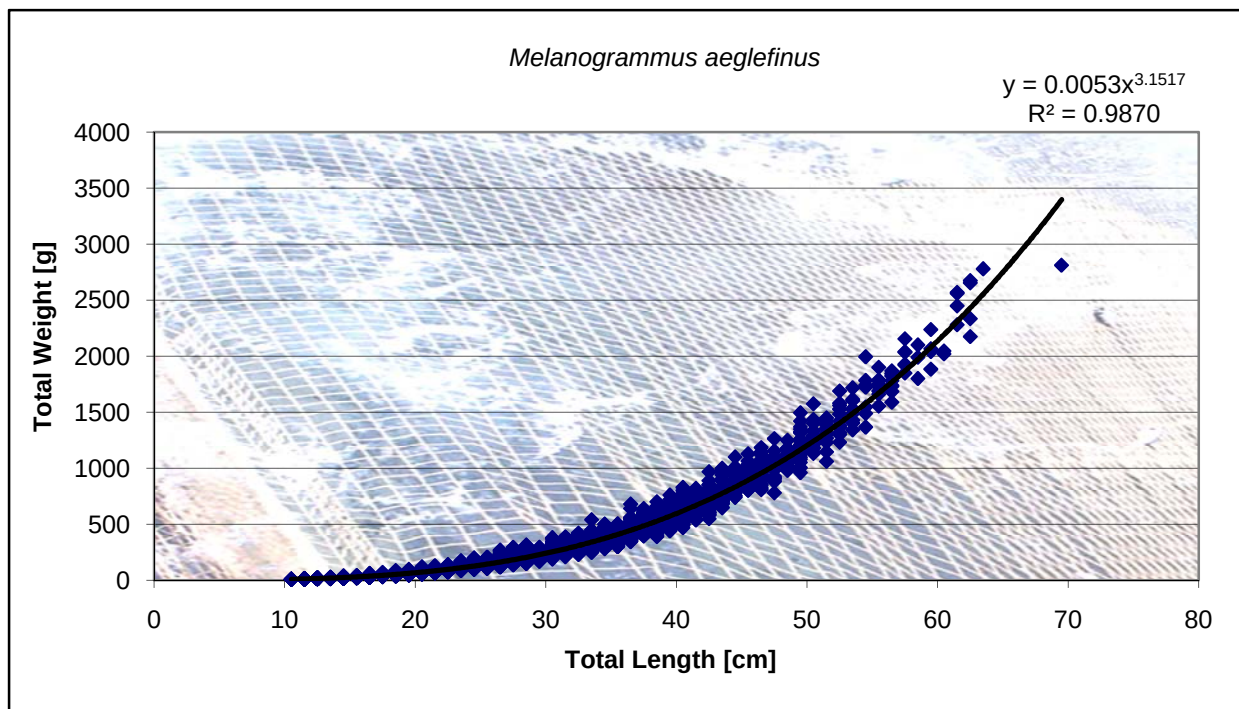
data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
6599	362	1505	33																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
2859	3481	259	11	293	58	662	639	204	-	31	2								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	8462	-	13	24	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	5538	2924	-	-	-	13	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
21	-	3	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea												NAFO							
1	2	3	4	5	6	7	8	9											
3093	2187	2069	362	-	53	698	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

10.5 [cm]
69.5 [cm]

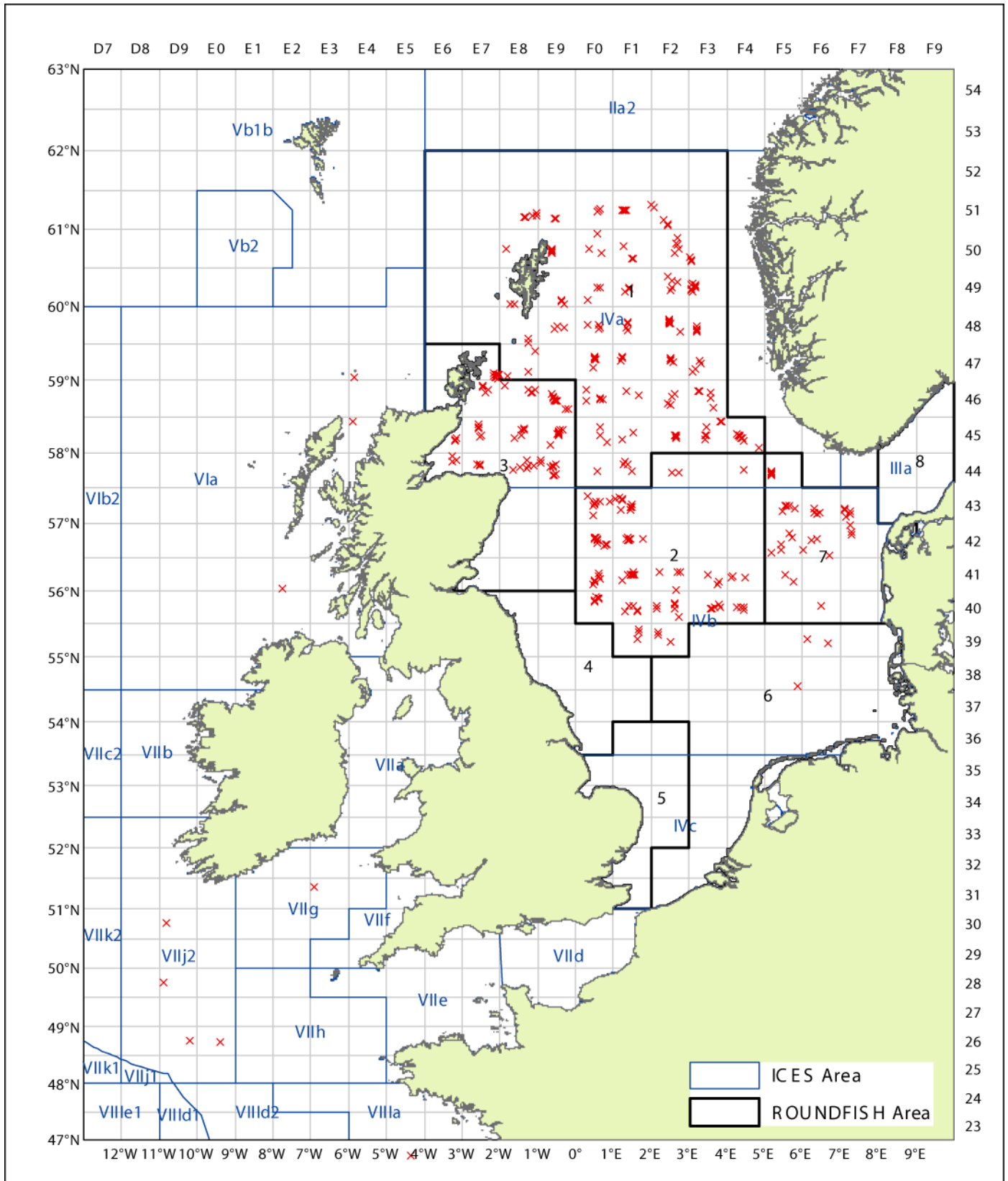
male
female
undefined

8499
-
-

total numbers of data 8499

Melanogrammus aeglefinus Quarter 1

Geographical distribution of data used for calculating the length-weight relationship



Melanogrammus aeglefinus

Quarter: 1

$$Tw_{[g]} = a * L_{[cm]}^b$$

a = 0.0046

b = 3.1932

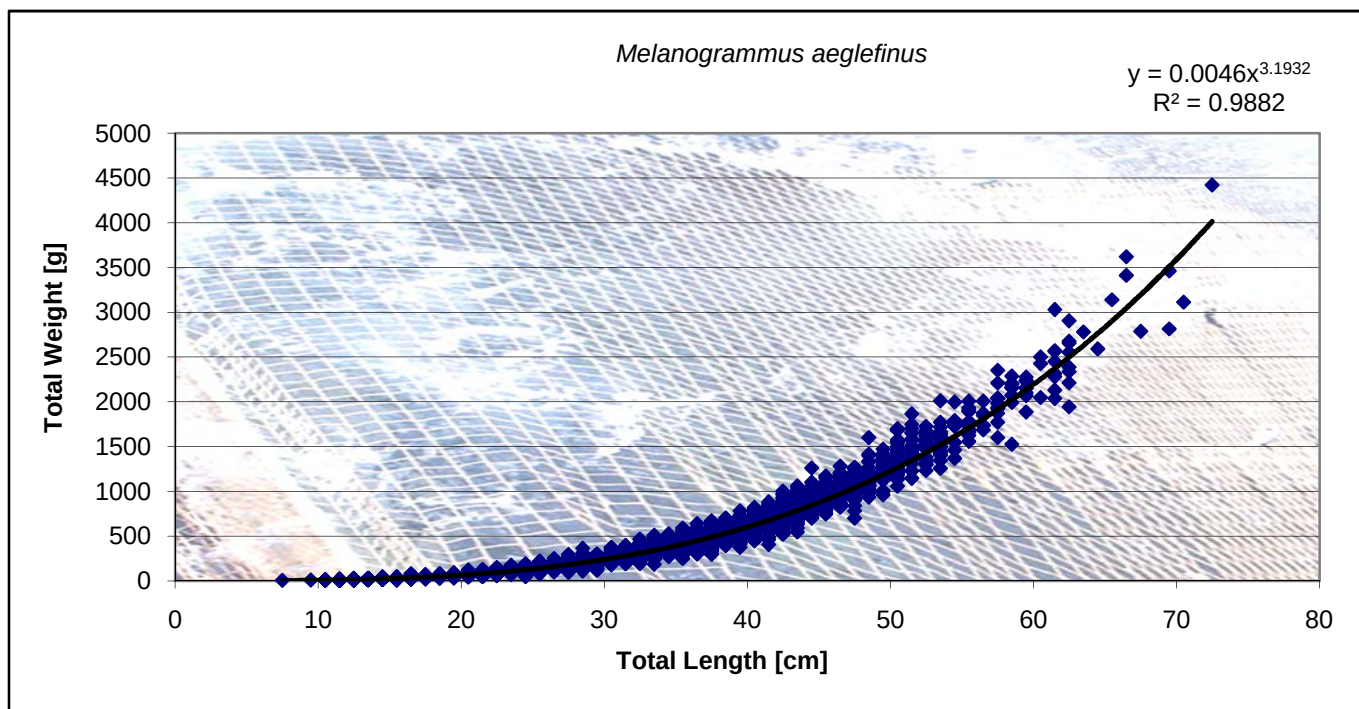
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
11461	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
4907	6417	137	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	1	-	11324	-	31	104	1	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	1	-	-	-	-	-	8028	3296	-	-	-	31	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
100	-	4	-	1	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
4366	2839	3049	-	-	5	1065	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

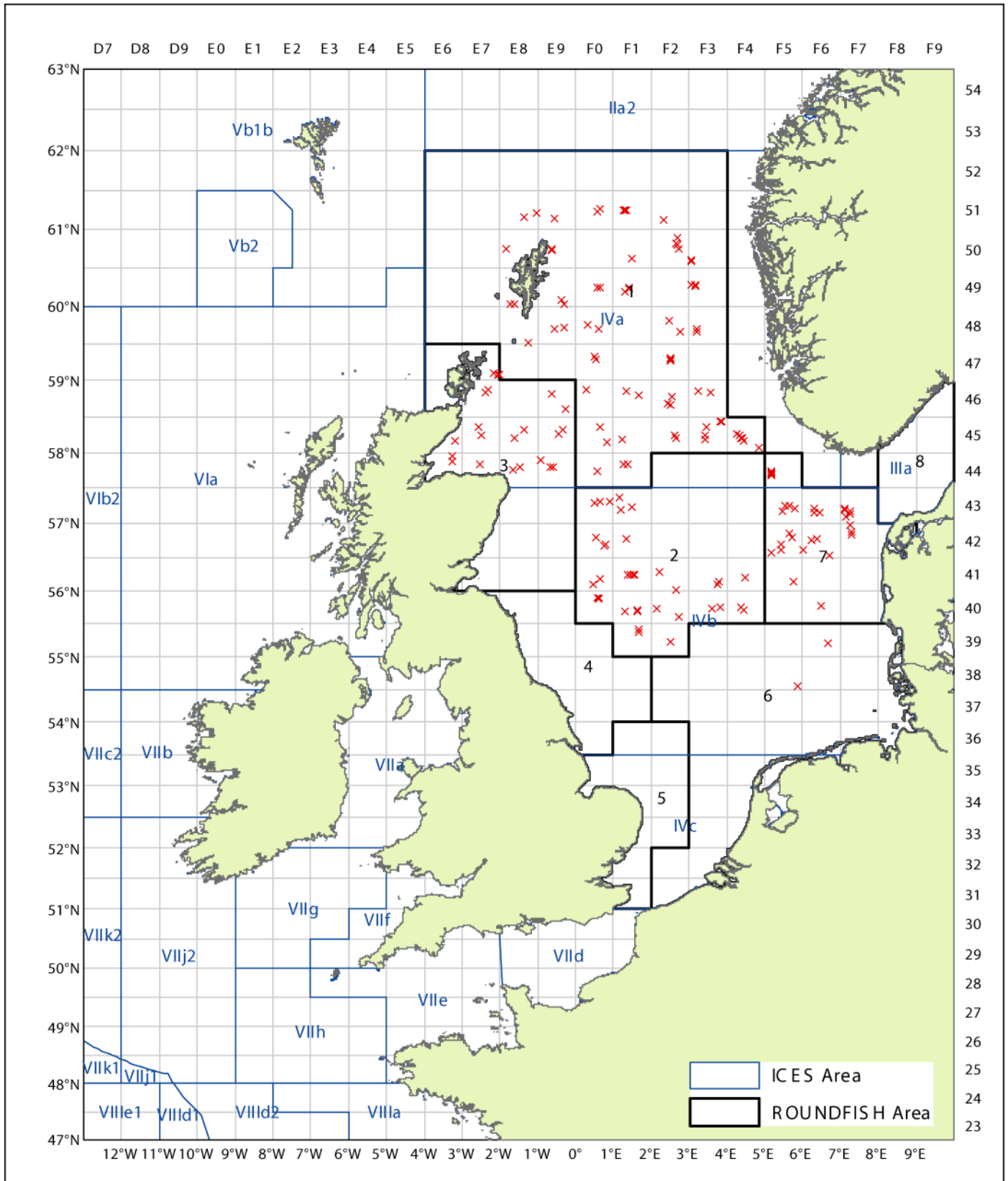
7.5 [cm]
72.5 [cm]

male 5501
female 5729
undefined 231

total numbers of data 11461

Melanogrammus aeglefinus January

Geographical distribution of data used for calculating the length-weight relationship



Melanogrammus aeglefinus

January

$$TW [g] = a * L [cm]^b$$

a = 0.0047

b = 3.1862

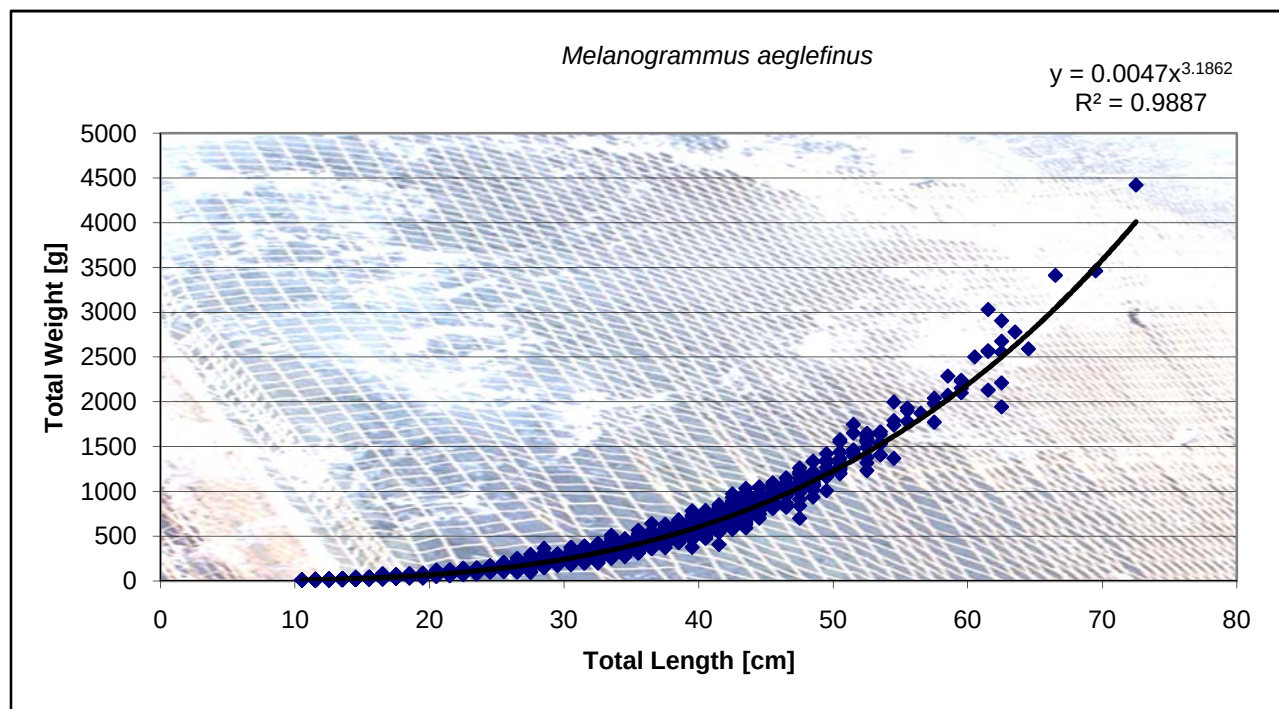
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
4907	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
4907	-	-	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	4907	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	3358	1549	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
2293	881	822	-	-	3	908	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length

max length

10.5 [cm]

72.5 [cm]

male

female

undefined

2400

2432

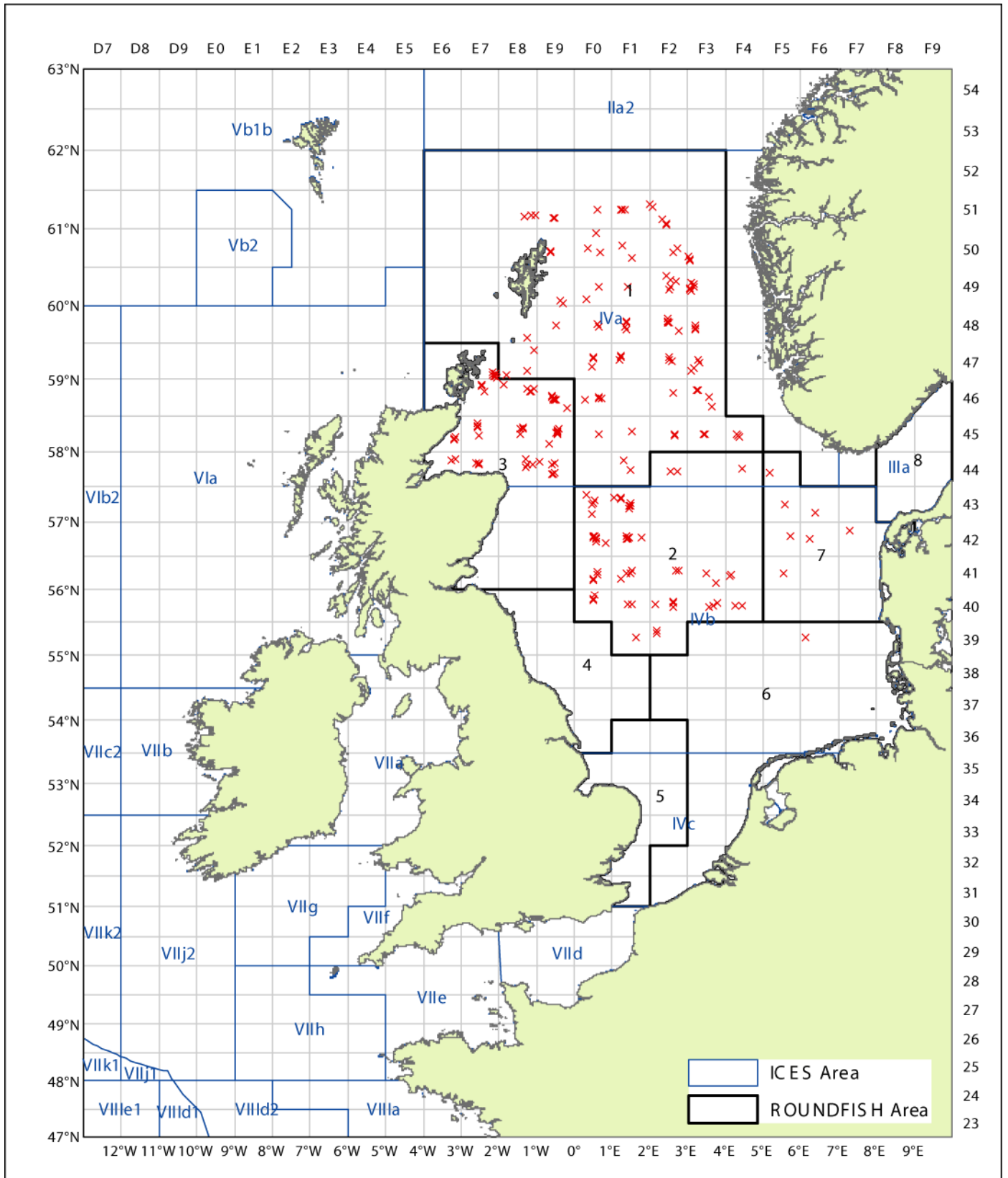
75

total numbers of data

4907

Melanogrammus aeglefinus February

Geographical distribution of data used for calculating the length-weight relationship



Melanogrammus aeglefinus

February

$$Tw [g] = a * L [cm]^b$$

a = 0.0045

b = 3.1955

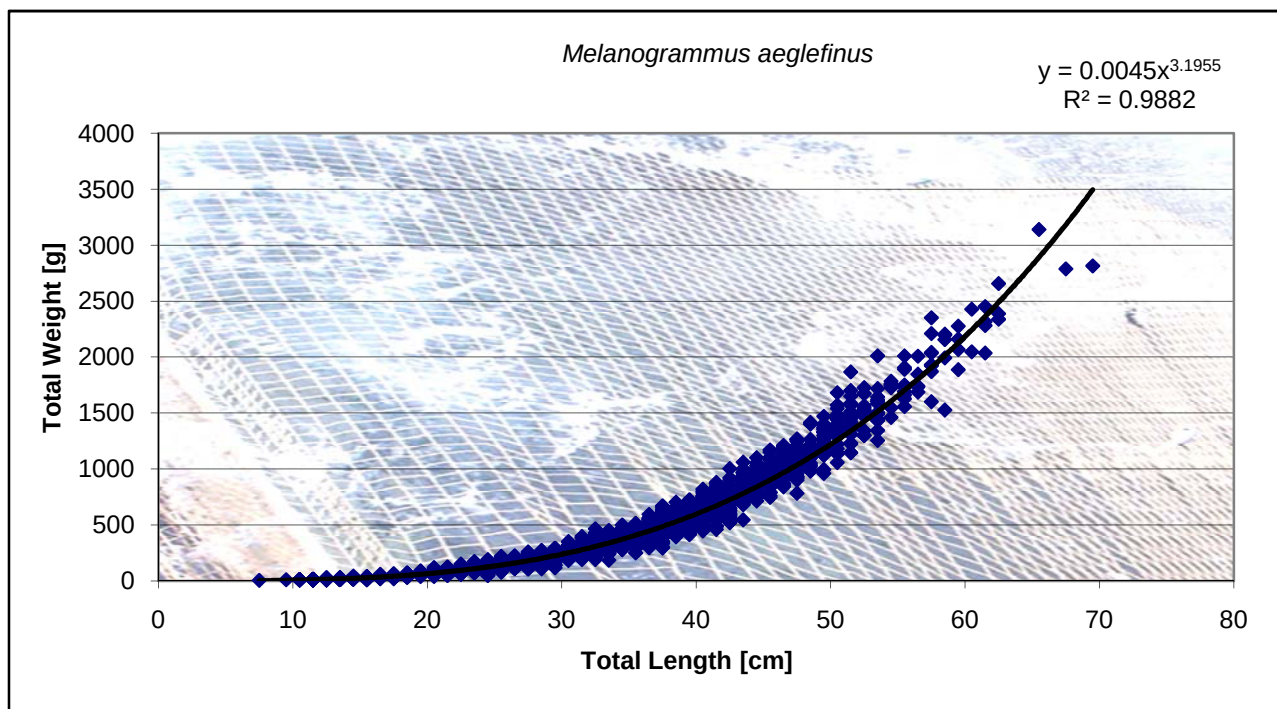
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
6417	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	6417	-	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	6417	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	4670	1747	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
2073	1958	2227	-	-	2	157	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

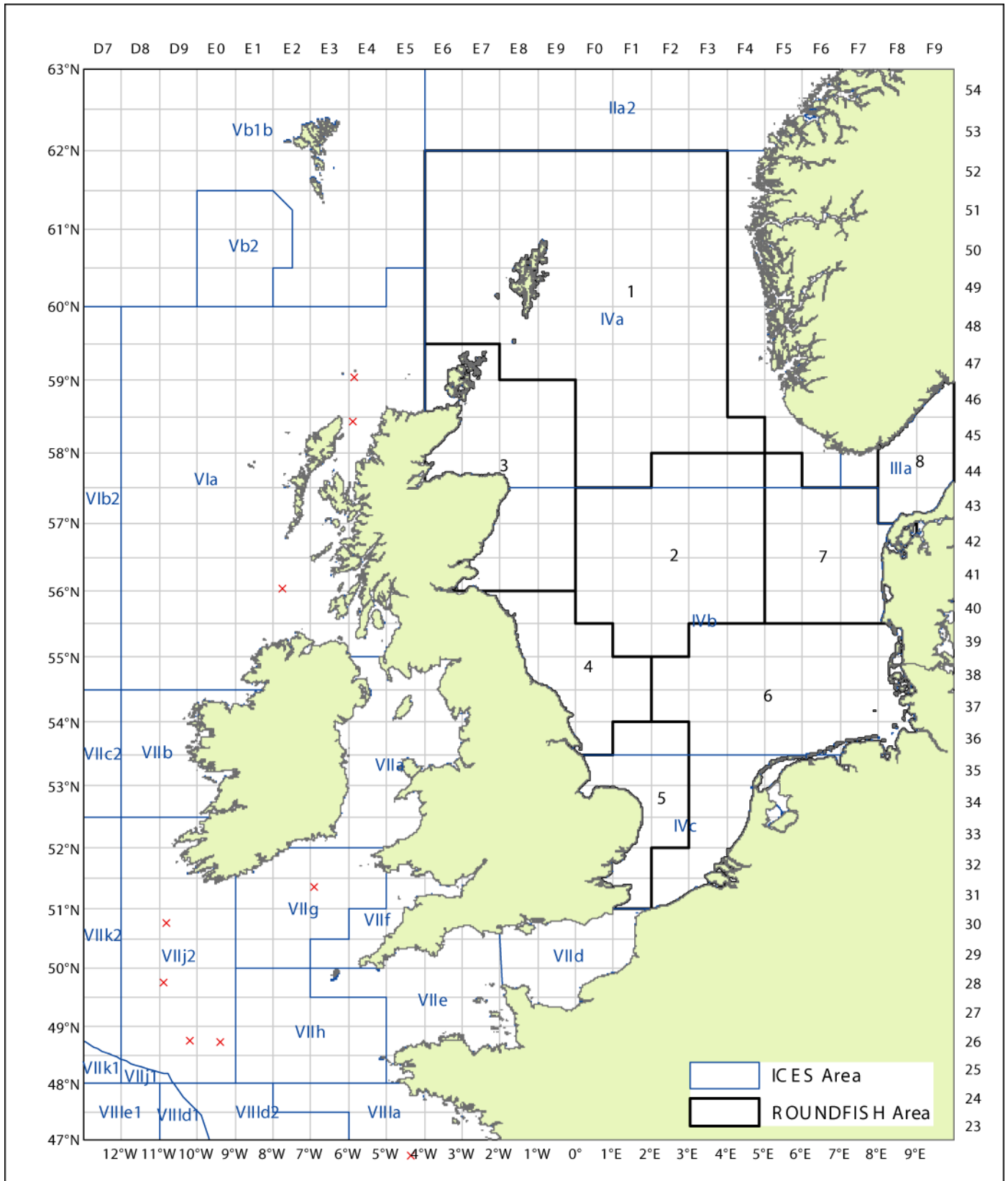
7.5 [cm]
69.5 [cm]

male 3067
female 3203
undefined 147

total numbers of data 6417

Melanogrammus aeglefinus March

Geographical distribution of data used for calculating the length-weight relationship



Melanogrammus aeglefinus

March

$$Tw [g] = a * L [cm]^b$$

a = 0.0034

b = 3.3003

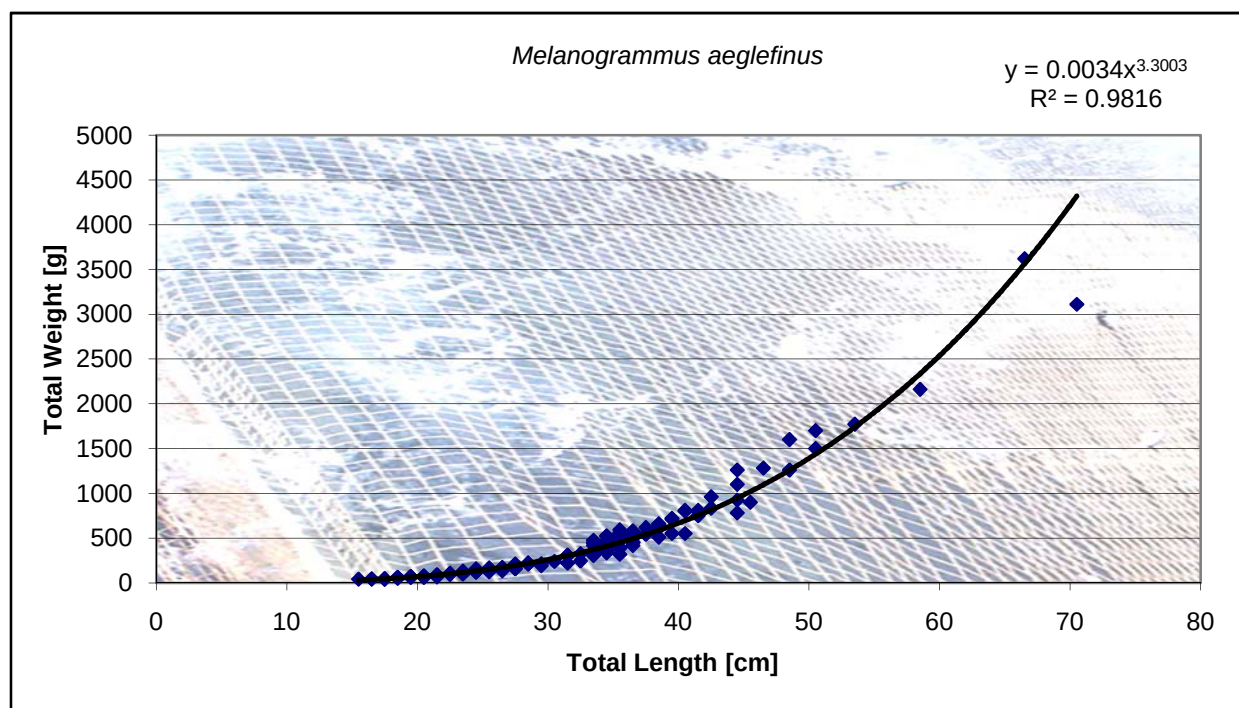
data collected

time period : 1995 - 2004

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
137	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	137	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	1	-	-	-	31	104	1	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	1	-	-	-	-	-	-	-	-	-	-	31	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
100	-	4	-	1	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

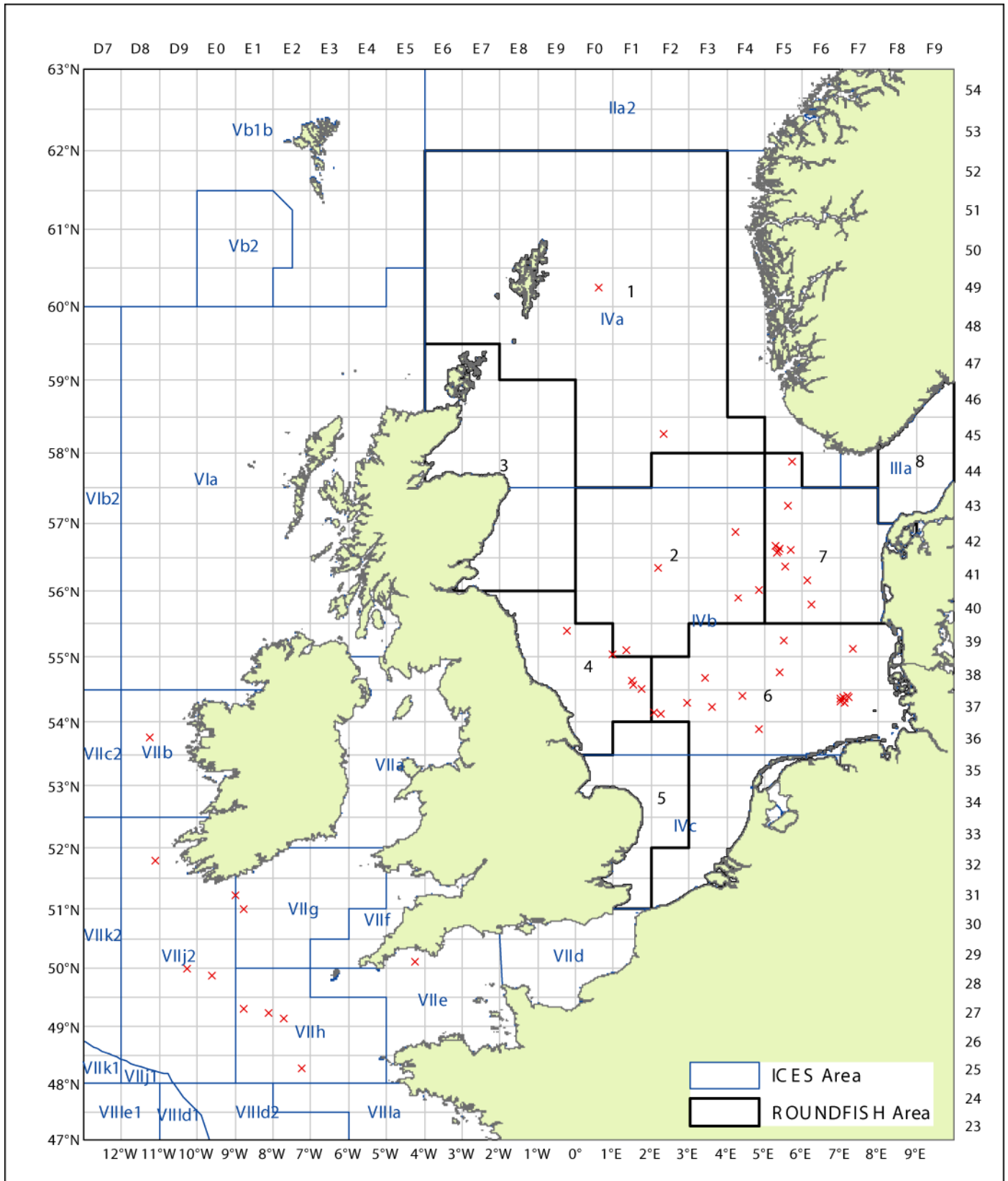
15.5 [cm]
70.5 [cm]

male 34
female 94
undefined 9

total numbers of data 137

Melanogrammus aeglefinus Quarter 2

Geographical distribution of data used for calculating the length-weight relationship



Melanogrammus aeglefinus

Quarter: 2

$$Tw [g] = a * L [cm]^b$$

a = 0.0083

b = 3.0284

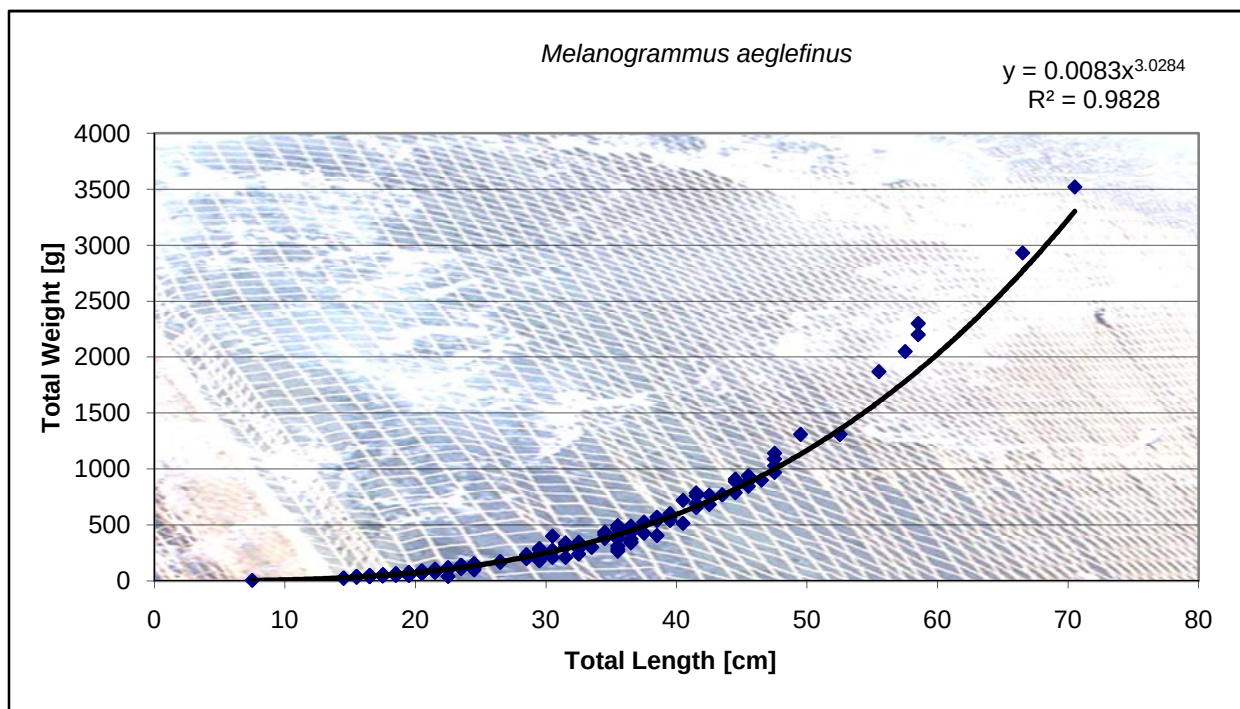
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
-	161	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	55	61	45	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	124	-	-	37	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	14	110	-	-	-	-	-	-	1	-	-	1	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
10	19	6	-	-	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
13	29	-	13	-	33	36	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

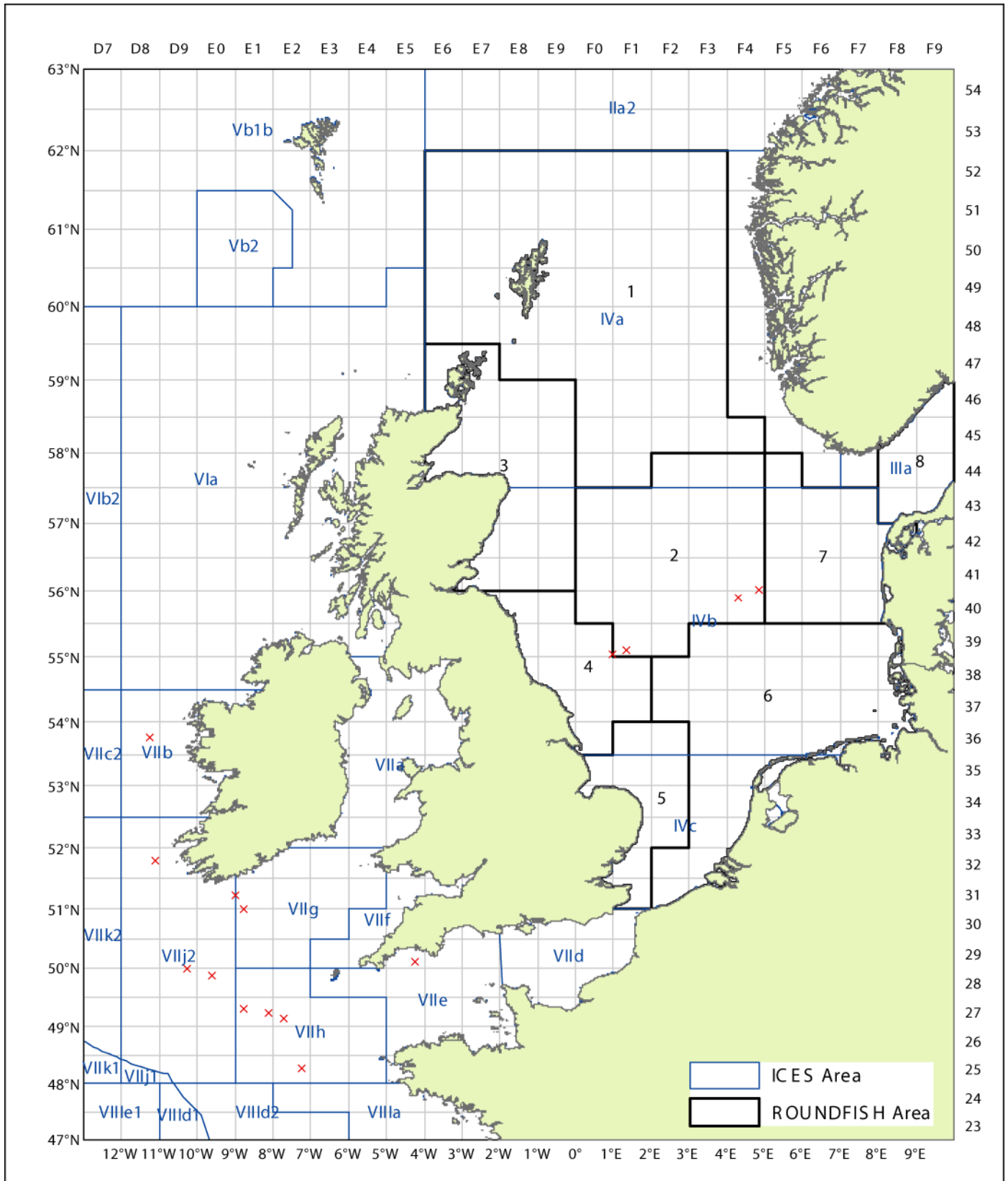
7.5 [cm]
70.5 [cm]

male 51
female 50
undefined 60

total numbers of data 161

Melanogrammus aeglefinus April

Geographical distribution of data used for calculating the length-weight relationship



Melanogrammus aeglefinus

April

$$Tw [g] = a * L [cm]^b$$

a = 0.0048

b = 3.1779

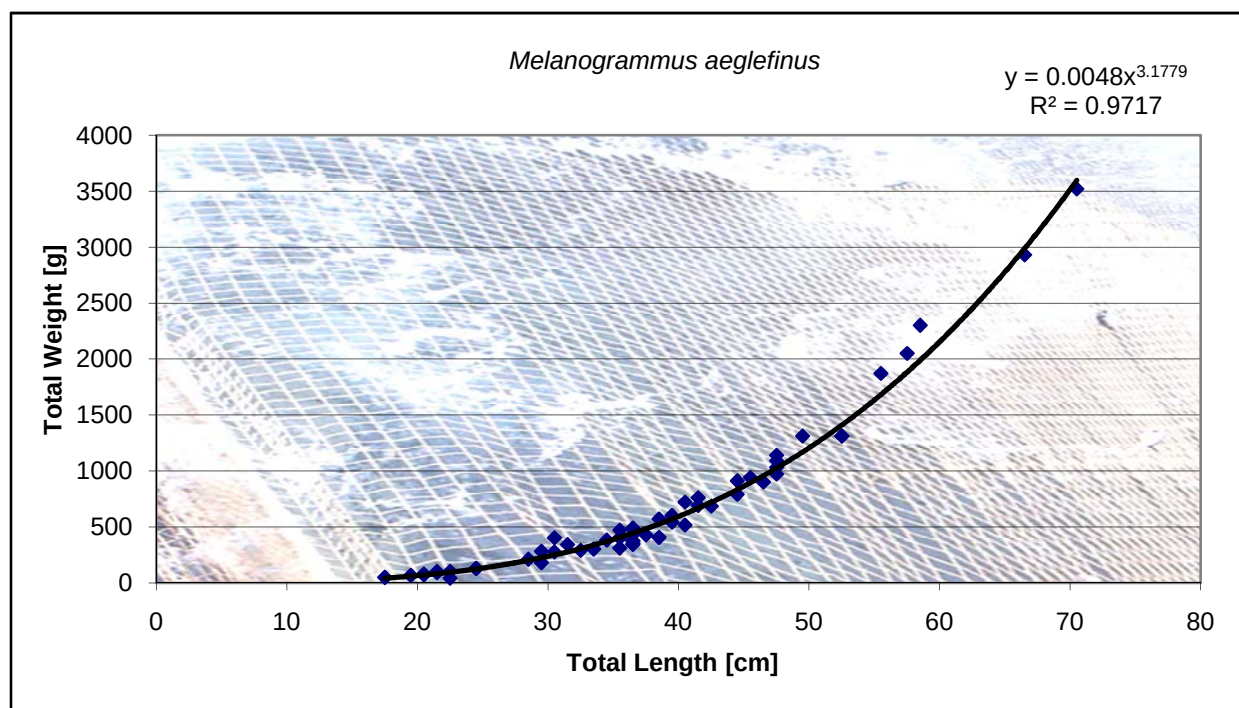
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Quarter																		
1	2	3	4															
-	55	-	-															
Month																		
1	2	3	4	5	6	7	8	9	10	11	12							
-	-	-	55	-	-	-	-	-	-	-	-							
Subarea																		
1	2	3	4	5	6	7	8	9	10	12	14							
-	-	-	18	-	-	37	-	-	-	-	-							
Division																		
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E
-	-	-	-	-	-	-	-	18	-	-	-	-	-	-	1	-	-	1
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B								
10	19	6	-	-	-	-	-	-	-	-								
Roundfisharea											NAFO							
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H
-	7	-	11	-	-	-	-	-			-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

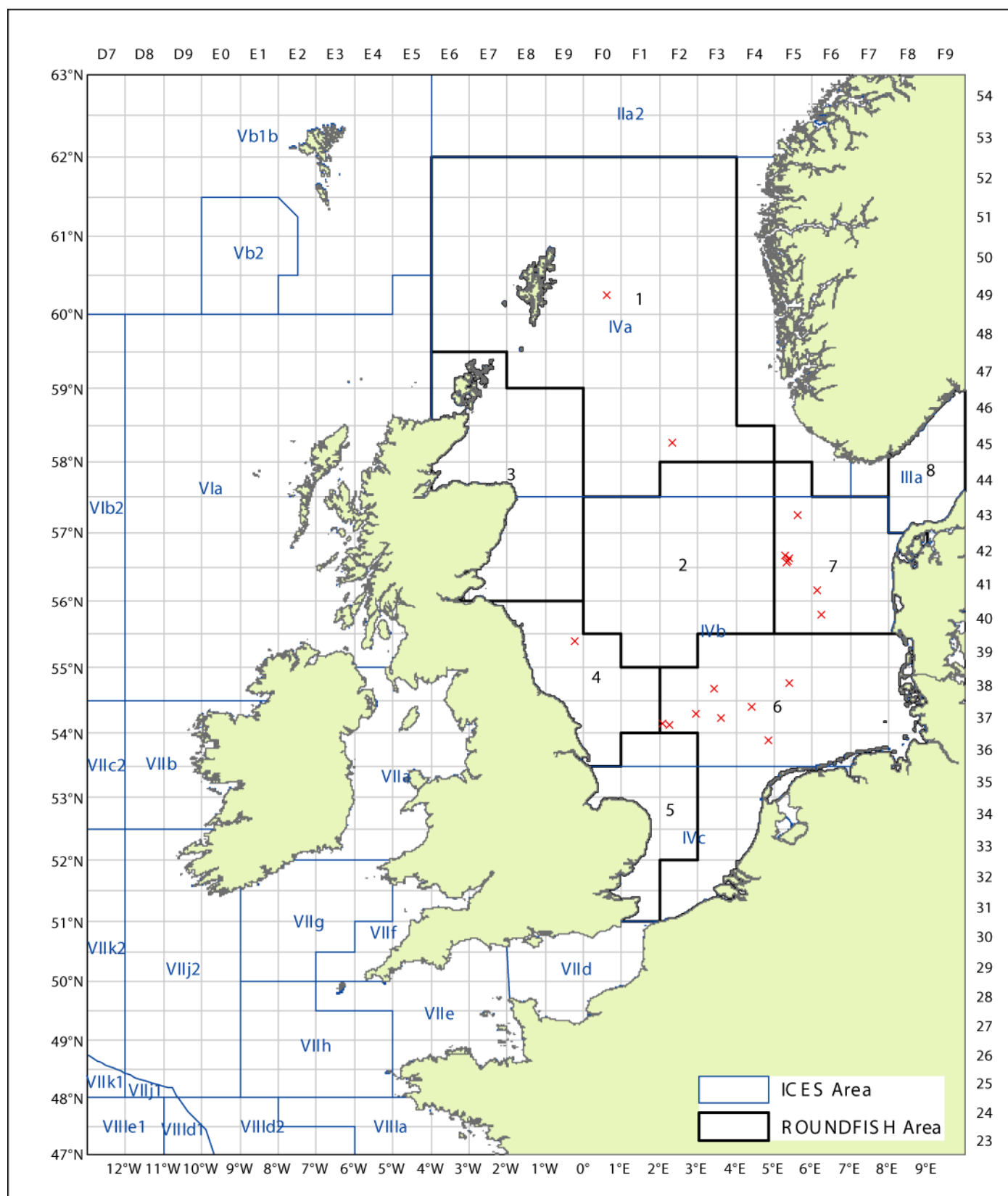
17.5 [cm]
70.5 [cm]

male 11
female 10
undefined 34

total numbers of data 55

Melanogrammus aeglefinus May

Geographical distribution of data used for calculating the length-weight relationship



Melanogrammus aeglefinus

May

$$Tw [g] = a * L [cm]^b$$

a = 0.0143

b = 2.8509

data collected

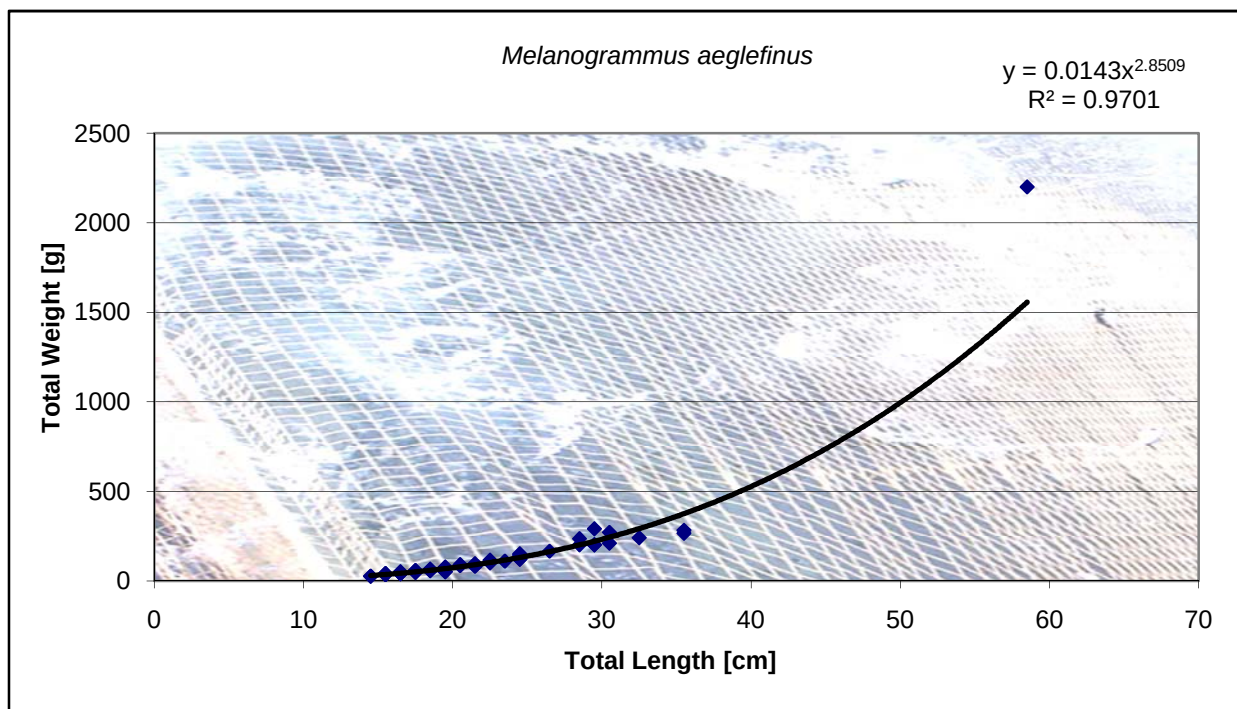
time period : 1995 - 2006

data source : research vessel

numbers of data:

Numbers of data:

Quarter																			
1	2	3	4																
-	61	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	61	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	61	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	13	48	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
13	-	-	2	-	13	33	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

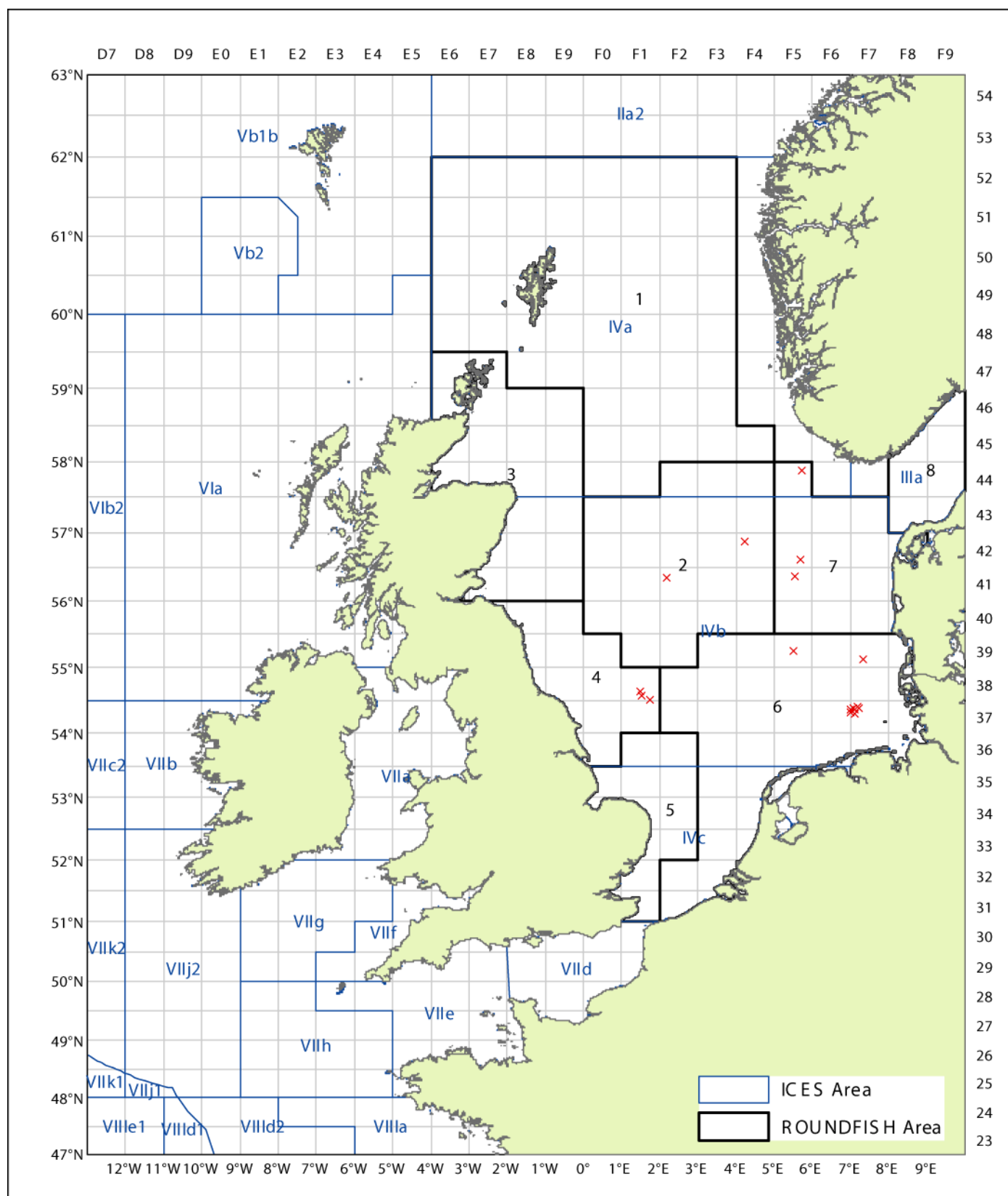
14.5 [cm]
58.5 [cm]

male 22
female 27
undefined 12

total numbers of data 61

Melanogrammus aeglefinus June

Geographical distribution of data used for calculating the length-weight relationship



Melanogrammus aeglefinus

June

$$Tw [g] = a * L [cm]^b$$

a = 0.0092

b = 3.008

data collected

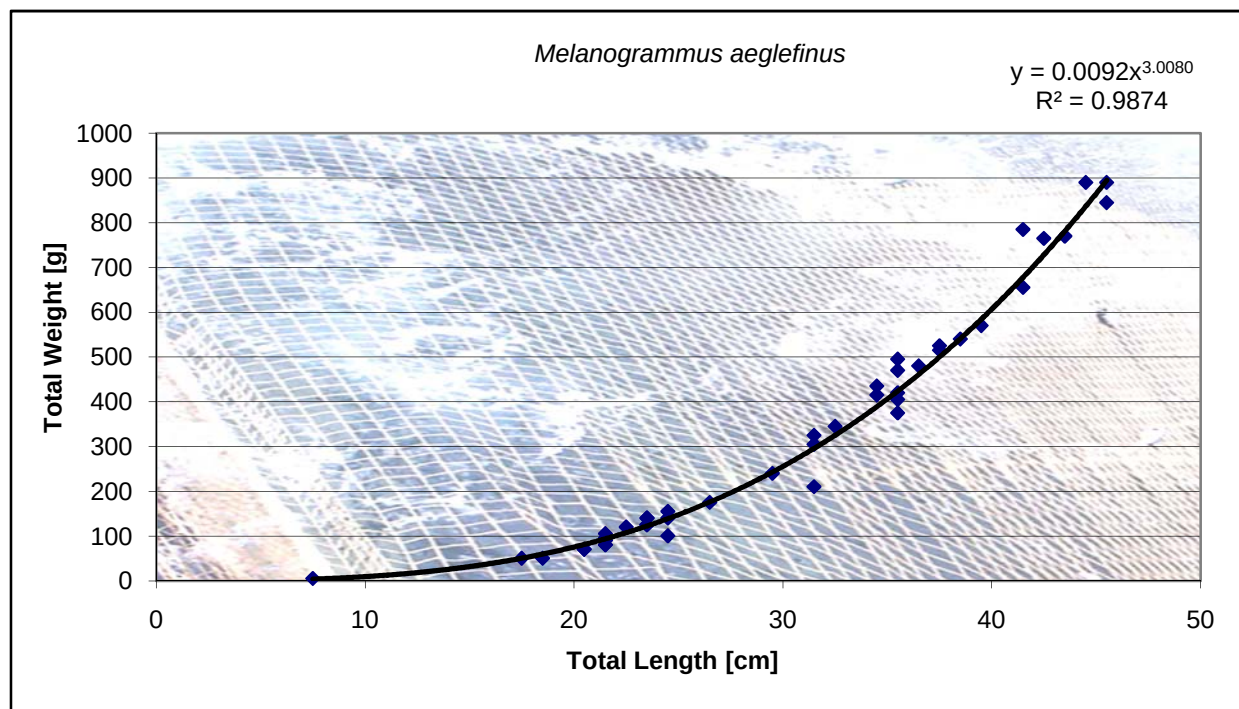
time period : 1995 - 2000

data source : research vessel

numbers of data:

Numbers of data:

Quarter																			
1	2	3	4																
-	45	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	45	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	45	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	1	44	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	22	-	-	-	20	3	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

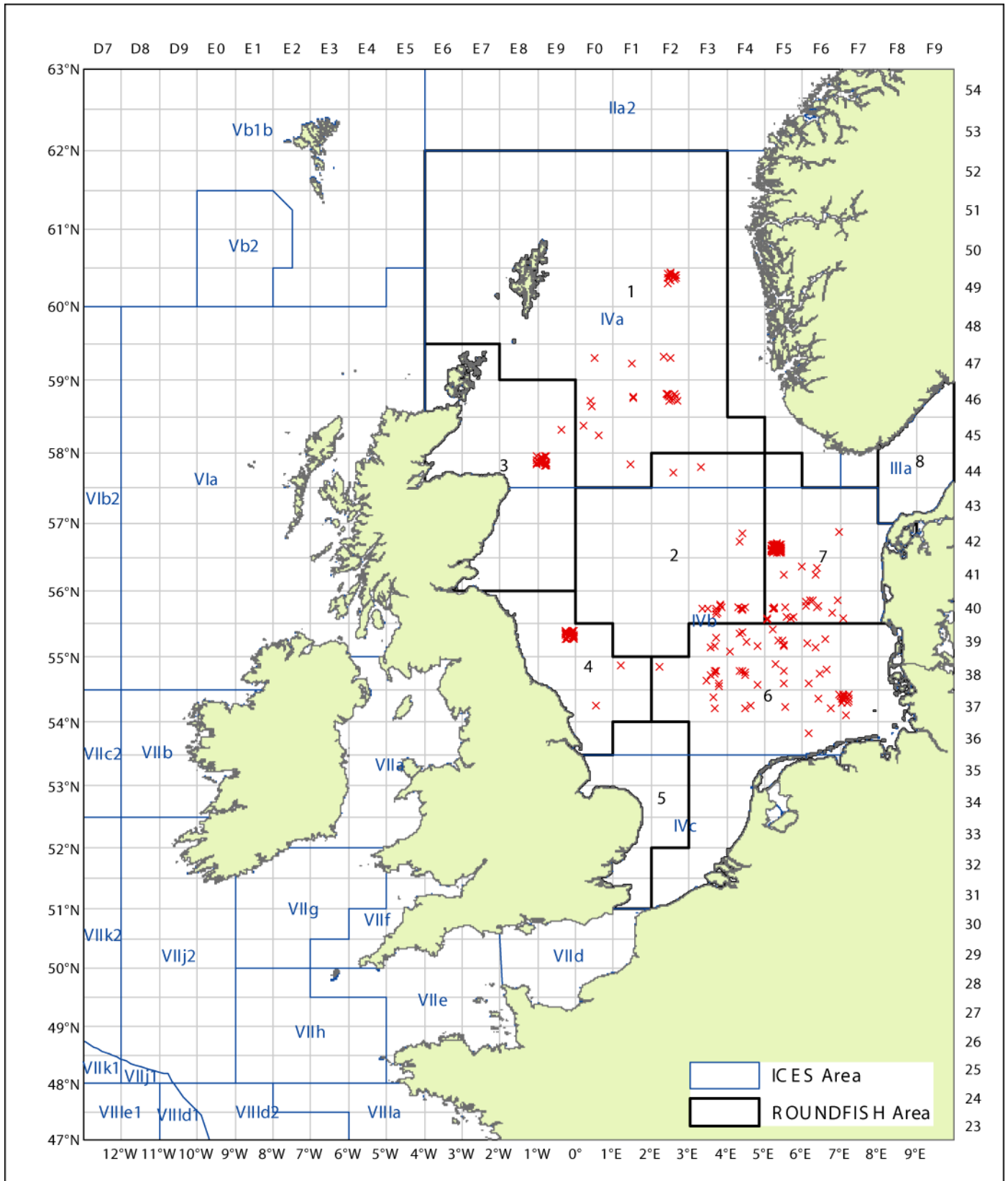
7.5 [cm]
45.5 [cm]

male 18
female 13
undefined 14

total numbers of data 45

Melanogrammus aeglefinus Quarter 3

Geographical distribution of data used for calculating the length-weight relationship



Melanogrammus aeglefinus

Quarter: 3

$$TW [g] = a * L [cm]^b$$

a = 0.0065

b = 3.1083

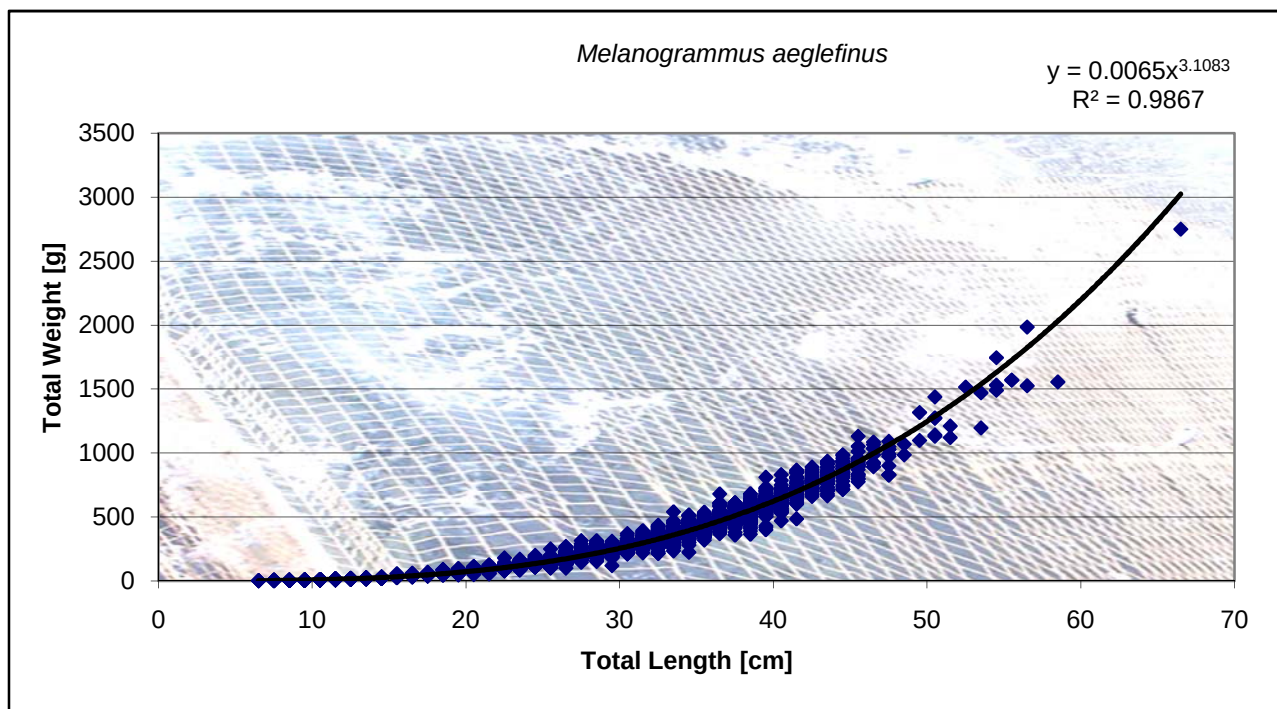
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	-	5148	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	2439	2314	395	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	5148	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	3991	1157	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
2235	202	1129	1132	-	169	281	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

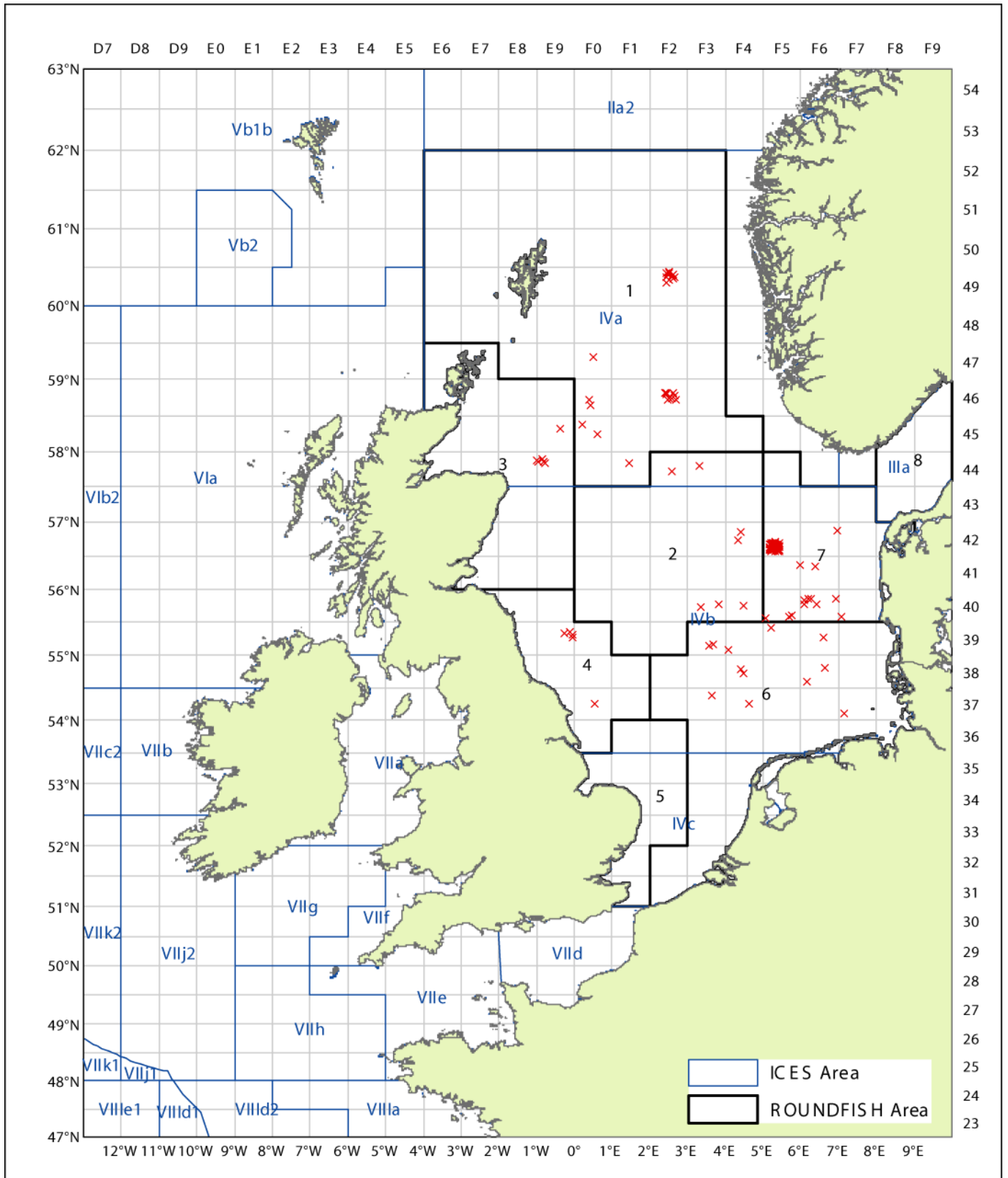
6.5 [cm]
66.5 [cm]

male 1298
female 1165
undefined 2685

total numbers of data 5148

Melanogrammus aeglefinus July

Geographical distribution of data used for calculating the length-weight relationship



Melanogrammus aeglefinus

July

$$Tw [g] = a * L [cm]^b$$

a = 0.0063

b = 3.1205

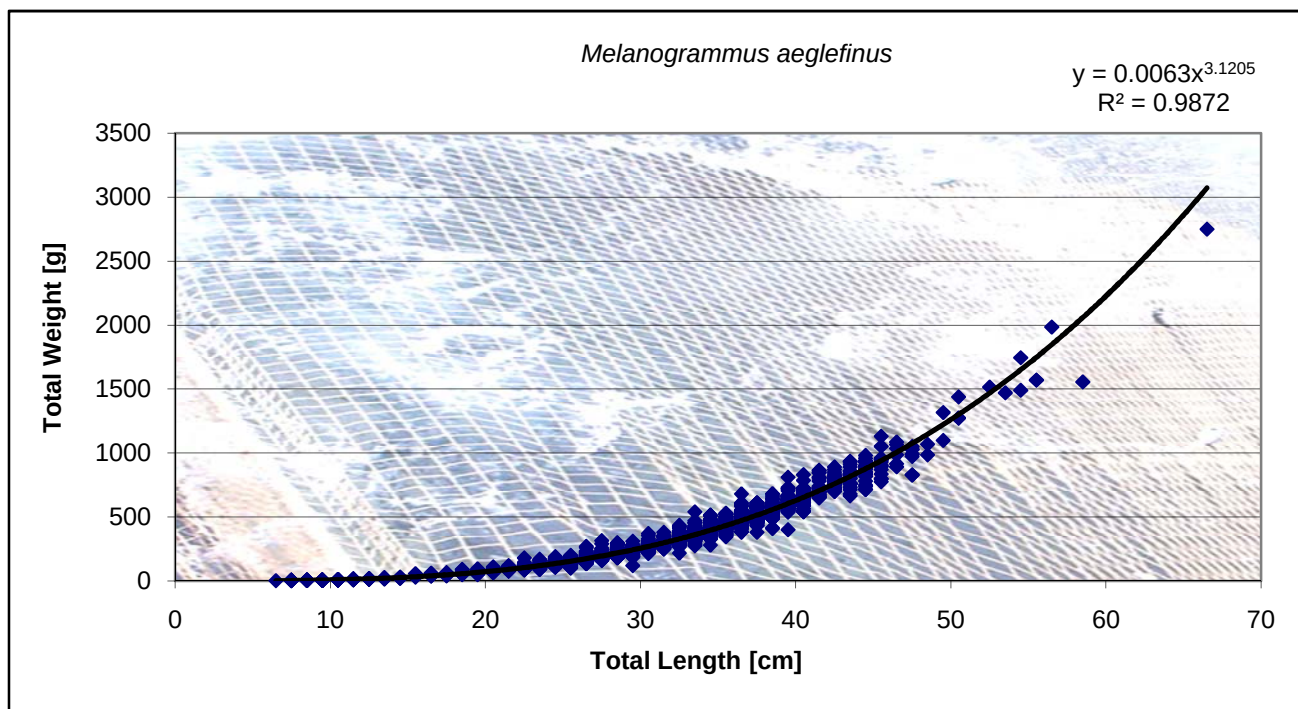
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Quarter																					
1	2	3	4																		
-	-	2439	-																		
Month																					
1	2	3	4	5	6	7	8	9	10	11	12										
-	-	-	-	-	-	2439	-	-	-	-	-										
Subarea																					
1	2	3	4	5	6	7	8	9	10	12	14										
-	-	-	2439	-	-	-	-	-	-	-	-										
Division																					
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F		
-	-	-	-	-	-	-	2151	288	-	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B											
-	-	-	-	-	-	-	-	-	-	-											
Roundfisharea											NAFO										
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J		
1909	74	189	139	-	17	111	-	-			-	-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length

- cm below

min length

max length

6.5 [cm]

66.5 [cm]

male

female

undefined

605

501

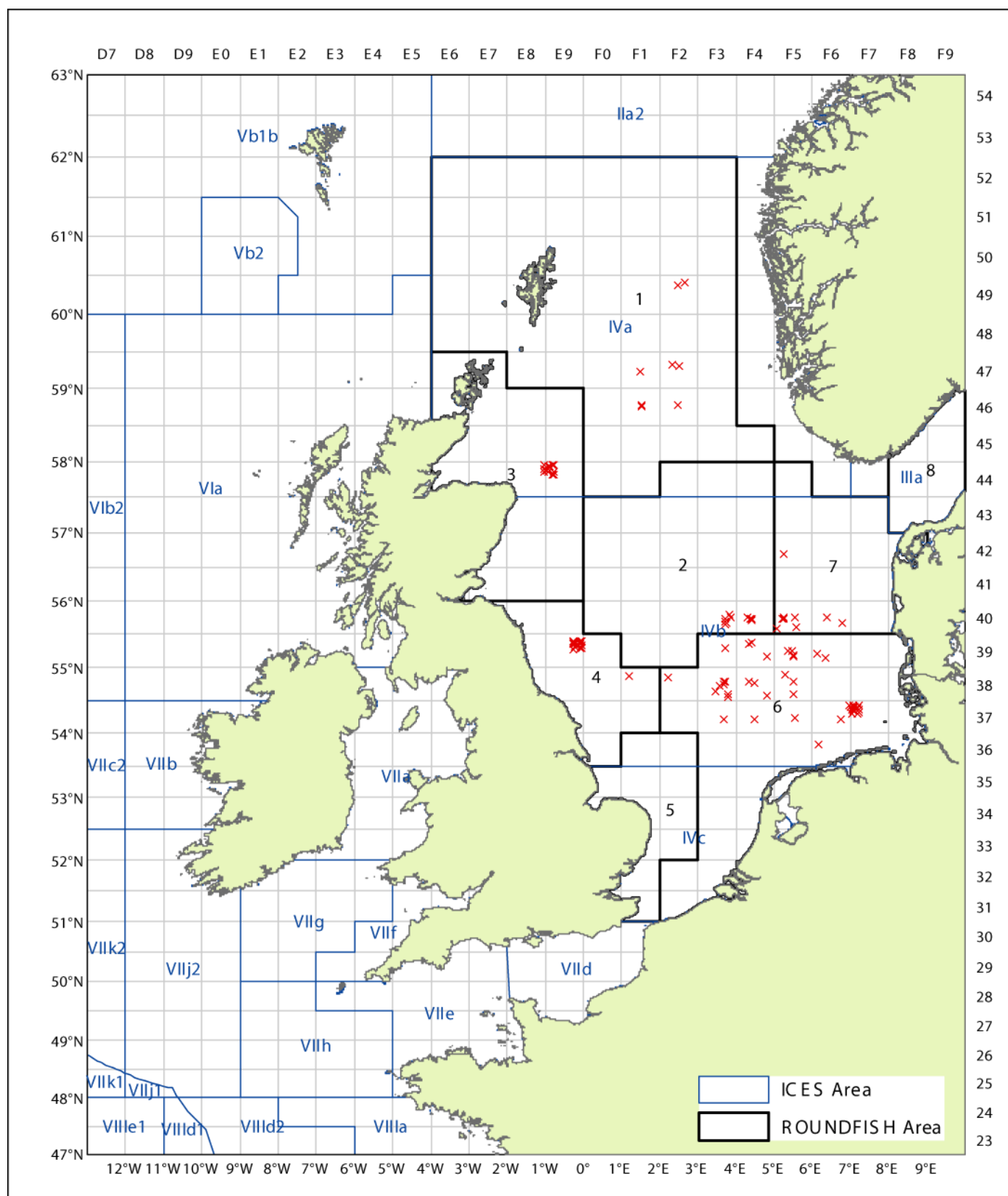
1333

total numbers of data

2439

August

Geographical distribution of data used for calculating the length-weight relationship



Melanogrammus aeglefinus

August

$$TW [g] = a * L [cm]^b$$

a = 0.0068

b = 3.0956

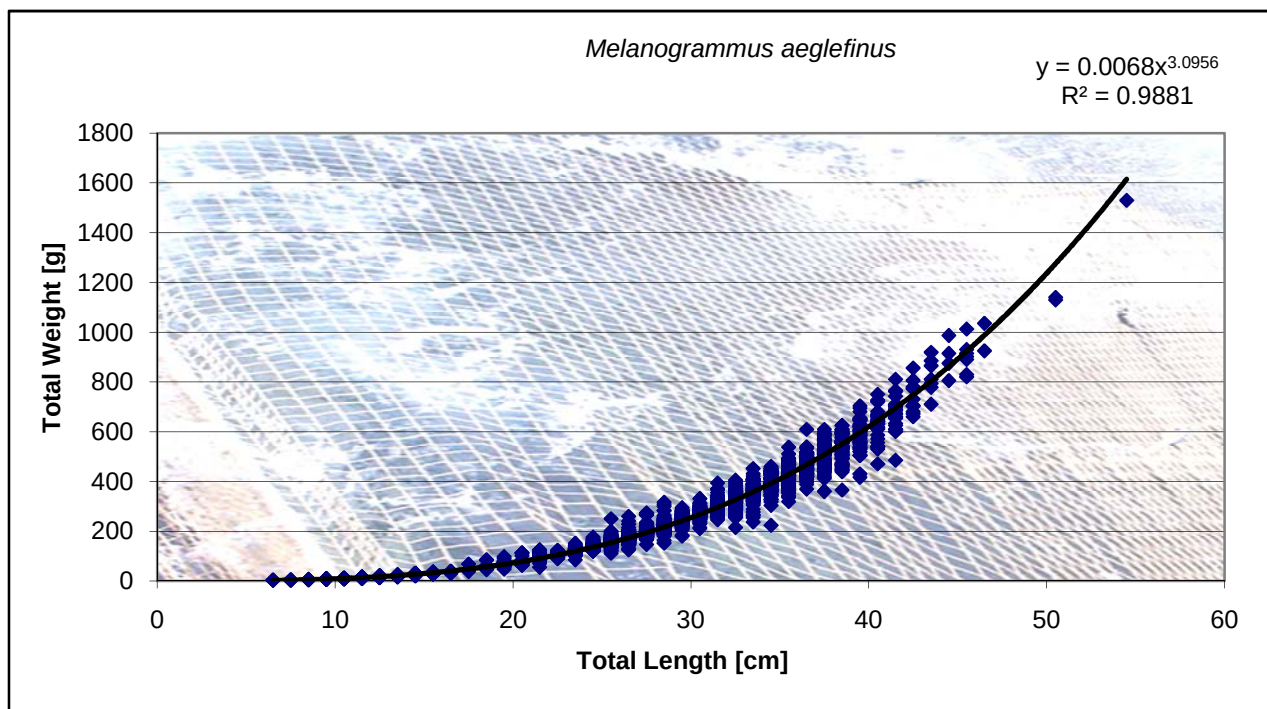
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	-	2314	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	2314	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	2314	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	1723	591	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
326	88	823	872	-	148	57	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

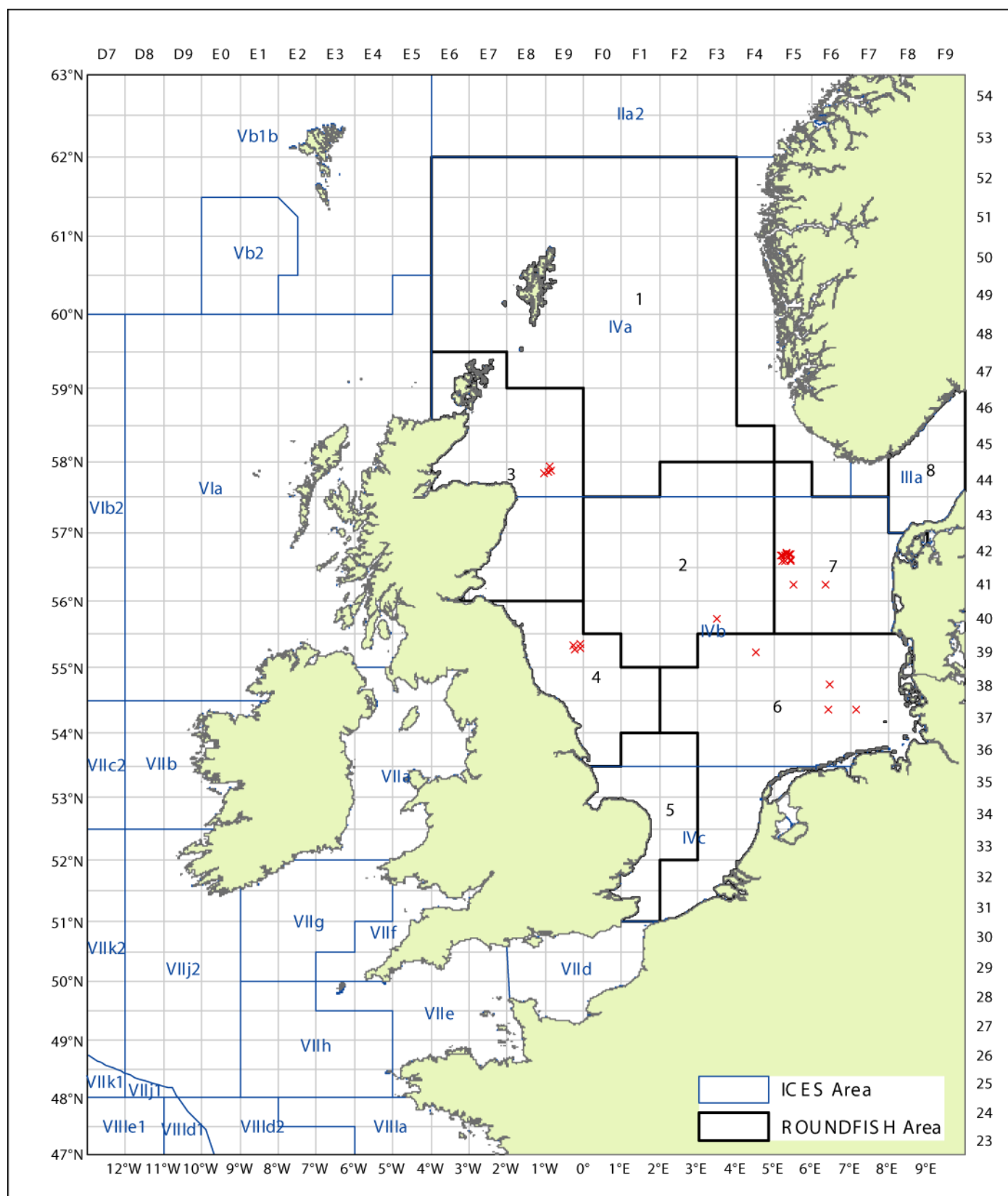
6.5 [cm]
54.5 [cm]

male 485
female 484
undefined 1345

total numbers of data 2314

September

Geographical distribution of data used for calculating the length-weight relationship



Melanogrammus aeglefinus

September

$$Tw [g] = a * L [cm]^b$$

a = 0.0065

b = 3.0997

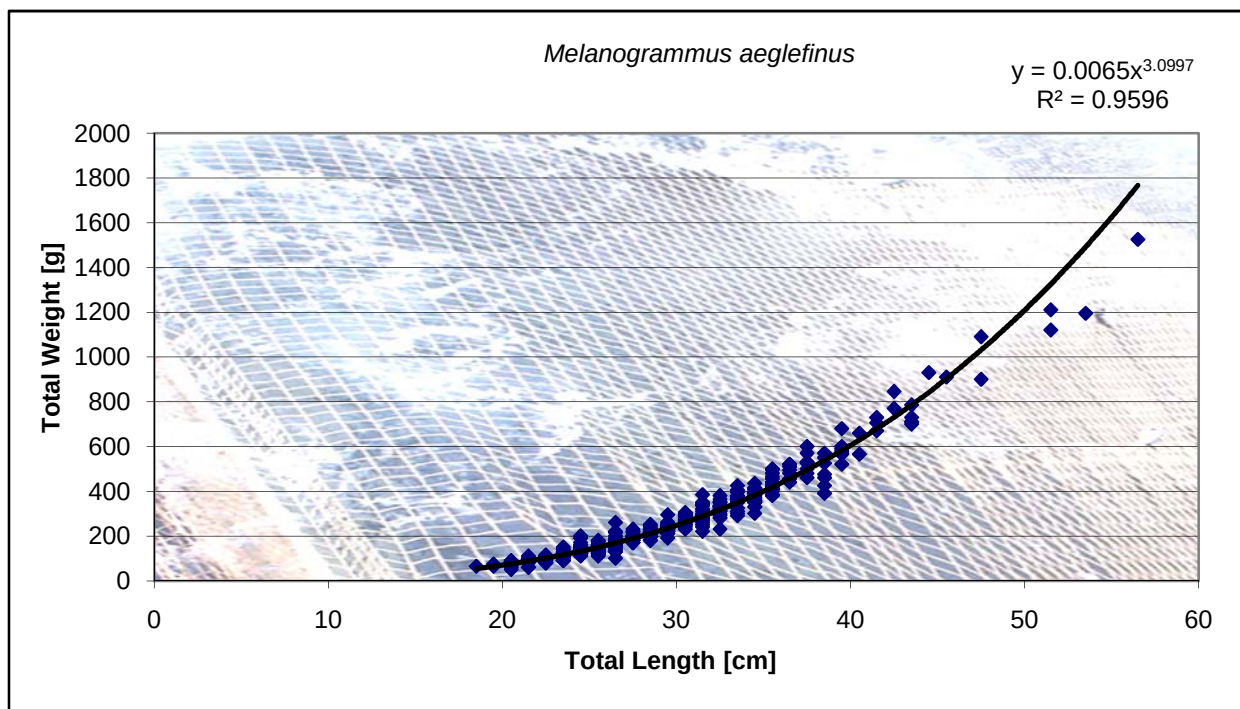
data collected

time period : 1997 - 1997

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
-	-	395	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	-	395	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	395	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	117	278	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	40	117	121	-	4	113	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

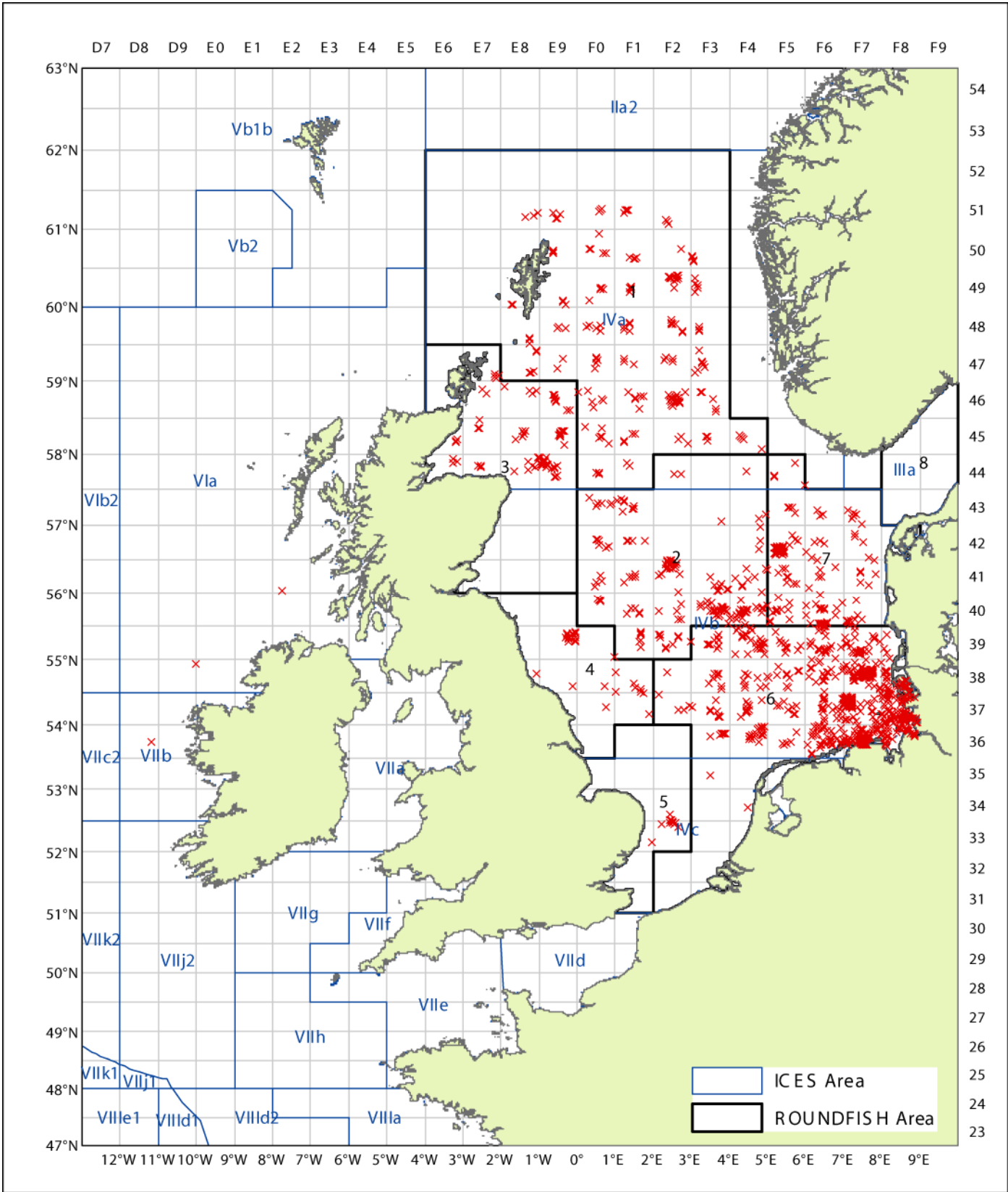
18.5 [cm]
56.5 [cm]

male 208
female 180
undefined 7

total numbers of data 395

Merlangius merlangus

Geographical distribution of data used for calculating the length-weight relationship



Merlangius merlangus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0061

b = 3.0671

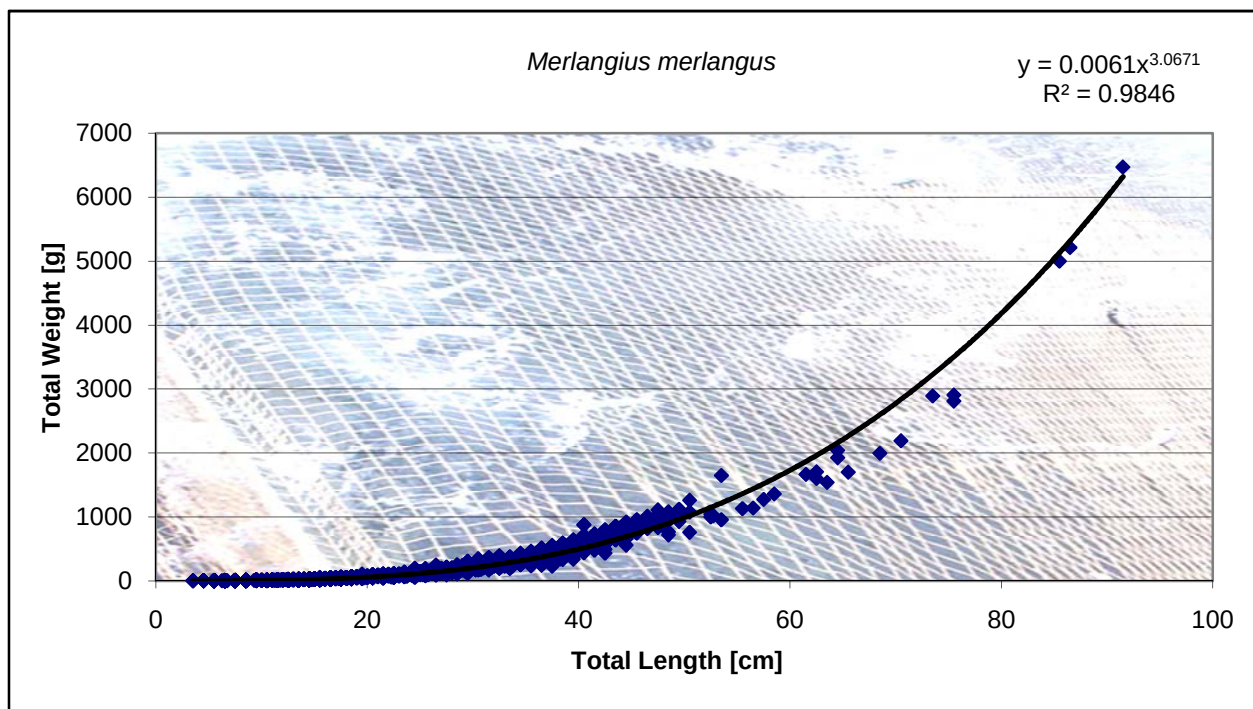
data collected

time period : 1997 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
8862	412	5473	133																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
4373	4446	43	184	216	12	1909	3006	558	13	103	17								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	14859	-	20	1	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	6335	8517	7	-	-	20	-	-	1	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
3525	2731	2655	676	138	3733	1401	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

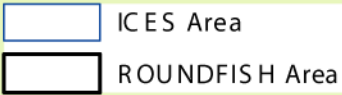
3.5 [cm]
91.5 [cm]

male 6574
female 6692
undefined 1614

total numbers of data 14880

♀

length-weight relationship



Merlangius merlangus

(female)



Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0045

b = 3.162

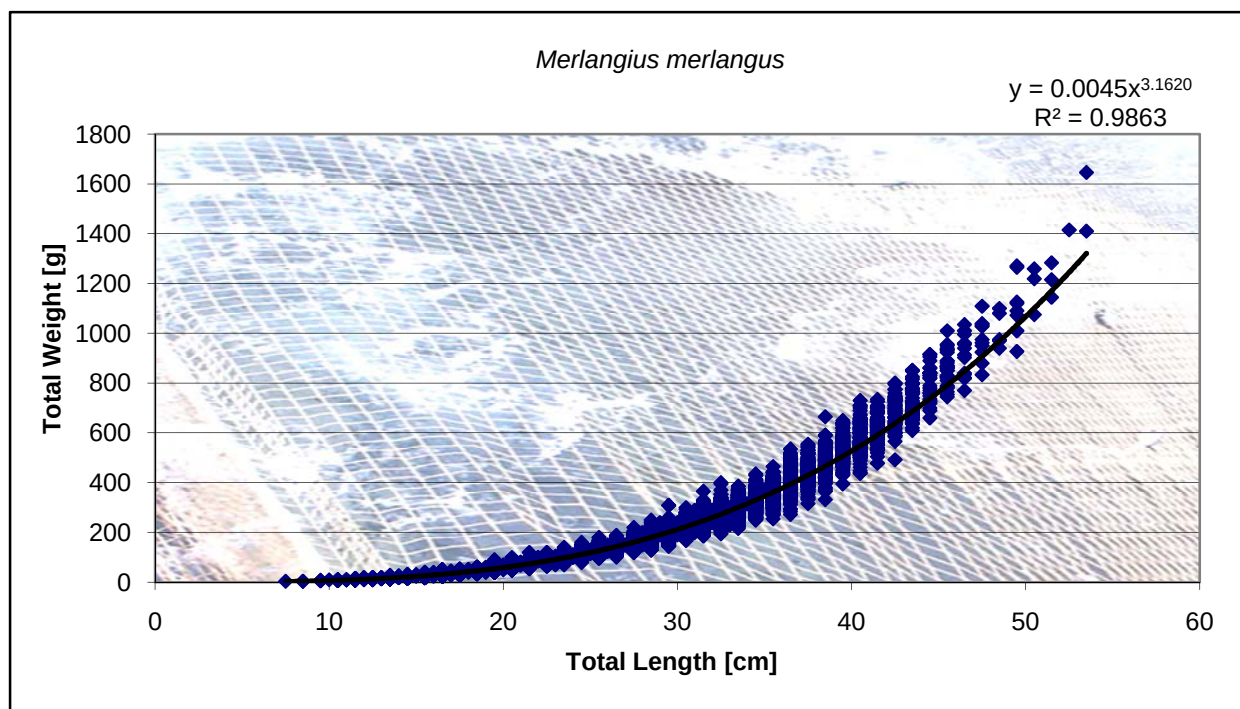
data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of salmon																			
Quarter																			
1	2	3	4																
6148	522	2654	111																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
2791	3103	254	94	346	82	975	1461	218	-	85	26								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	9428	-	6	-	1	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	4631	4797	-	-	-	6	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	1	-	-	-	-	-	-	-	-	-					
Roundfisharea												NAFO							
1	2	3	4	5	6	7	8	9											
2638	1929	1865	409	183	1666	738	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

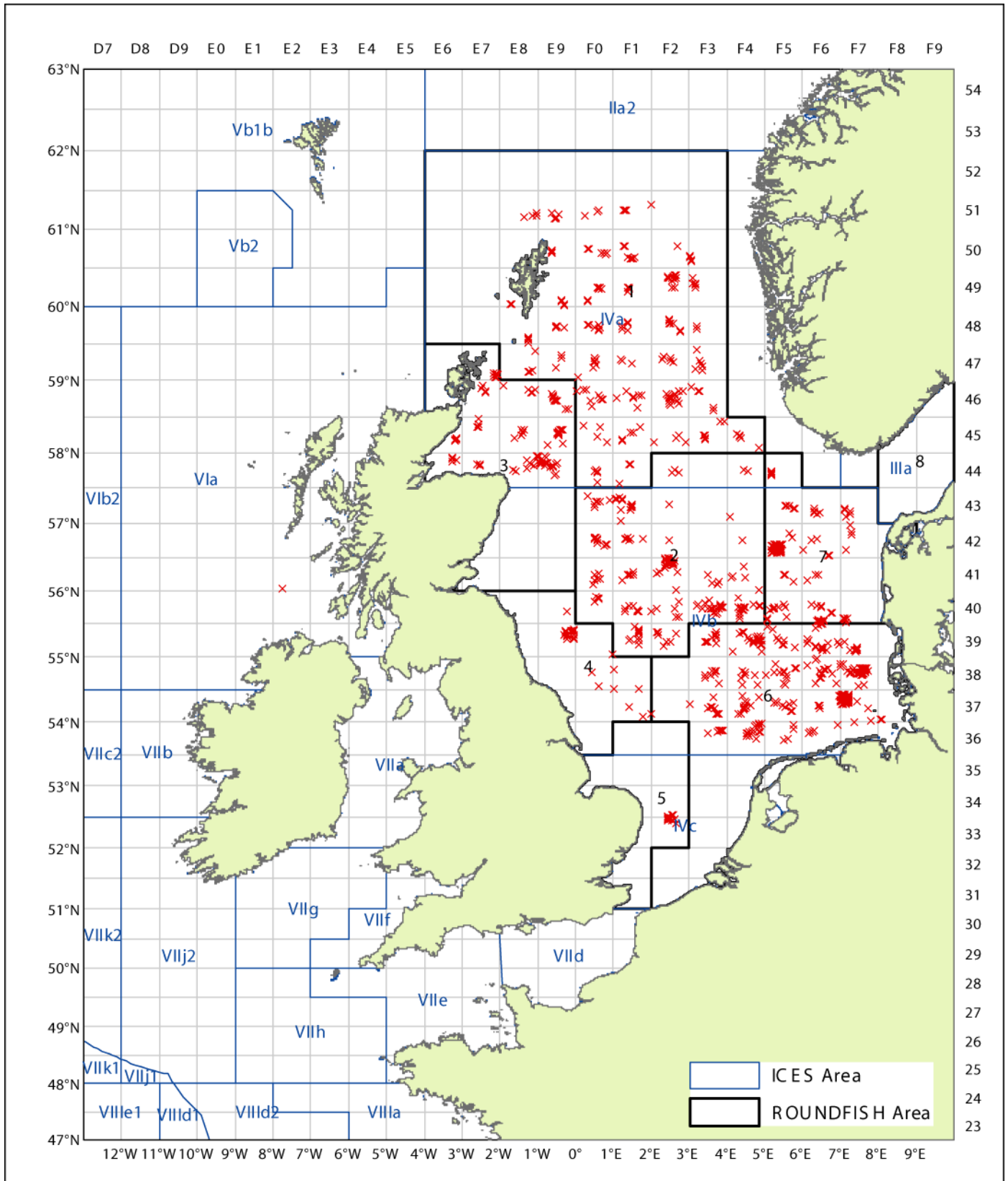
7.5 [cm]
53.5 [cm]

male
female
undefined

total numbers of data 9435

Merlangius merlangus ♂

Geographical distribution of data used for calculating the length-weight relationship



Merlangius merlangus



Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0057

b = 3.0863

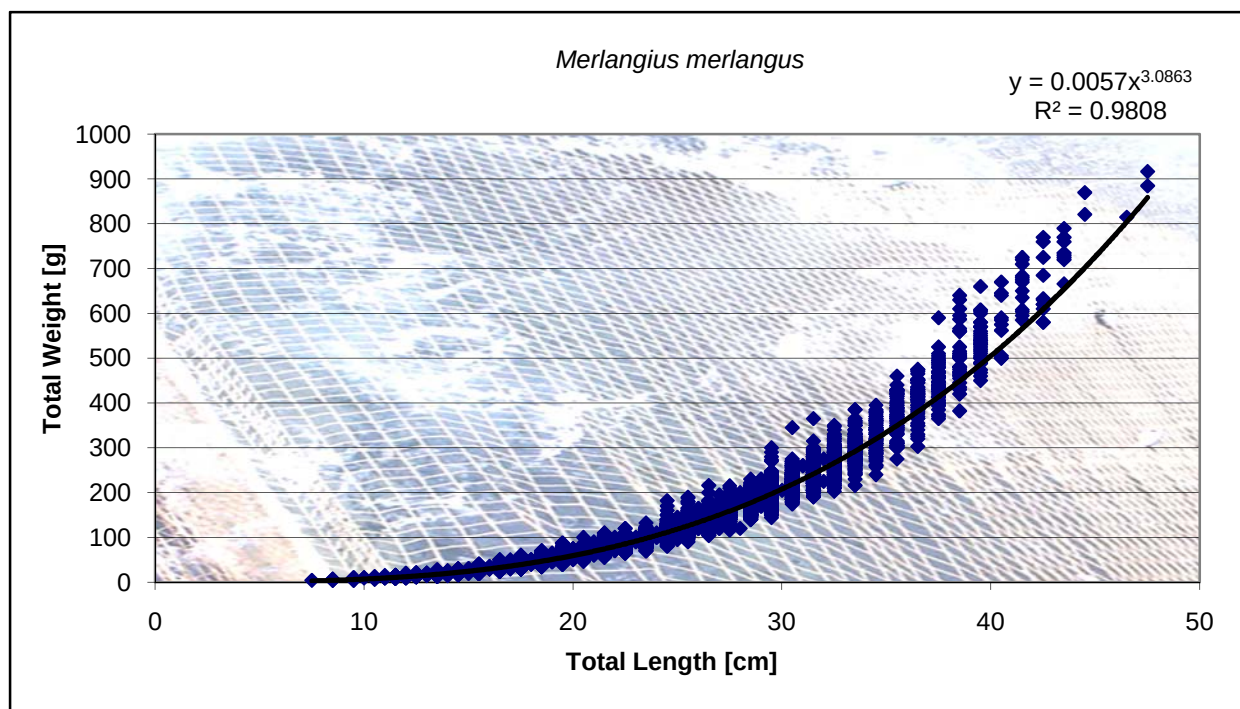
data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of salmon																				
Quarter																				
1	2	3	4																	
5710	590	2869	146																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
2887	2668	155	90	388	112	1119	1487	263	-	113	33									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	9303	-	12	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	3957	5346	-	-	-	12	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
2197	1871	1629	423	113	2210	860	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

7.5 [cm]
47.5 [cm]

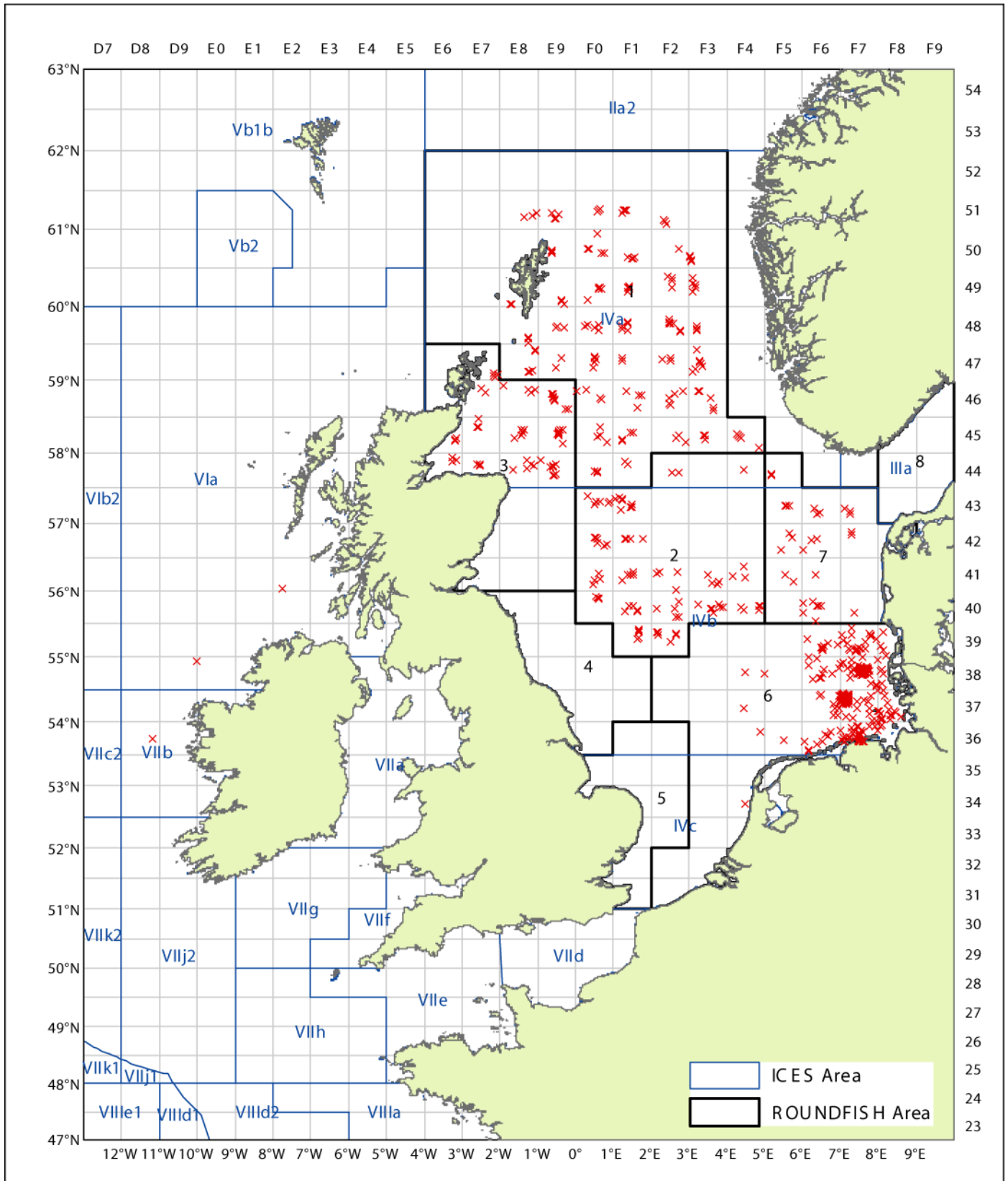
male
female
undefined

9315
-
-

total numbers of data 9315

Merlangius merlangus Quarter 1

Geographical distribution of data used for calculating the length-weight relationship



Merlangius merlangus

Quarter: 1

$$Tw [g] = a * L [cm]^b$$

a = 0.0042

b = 3.1775

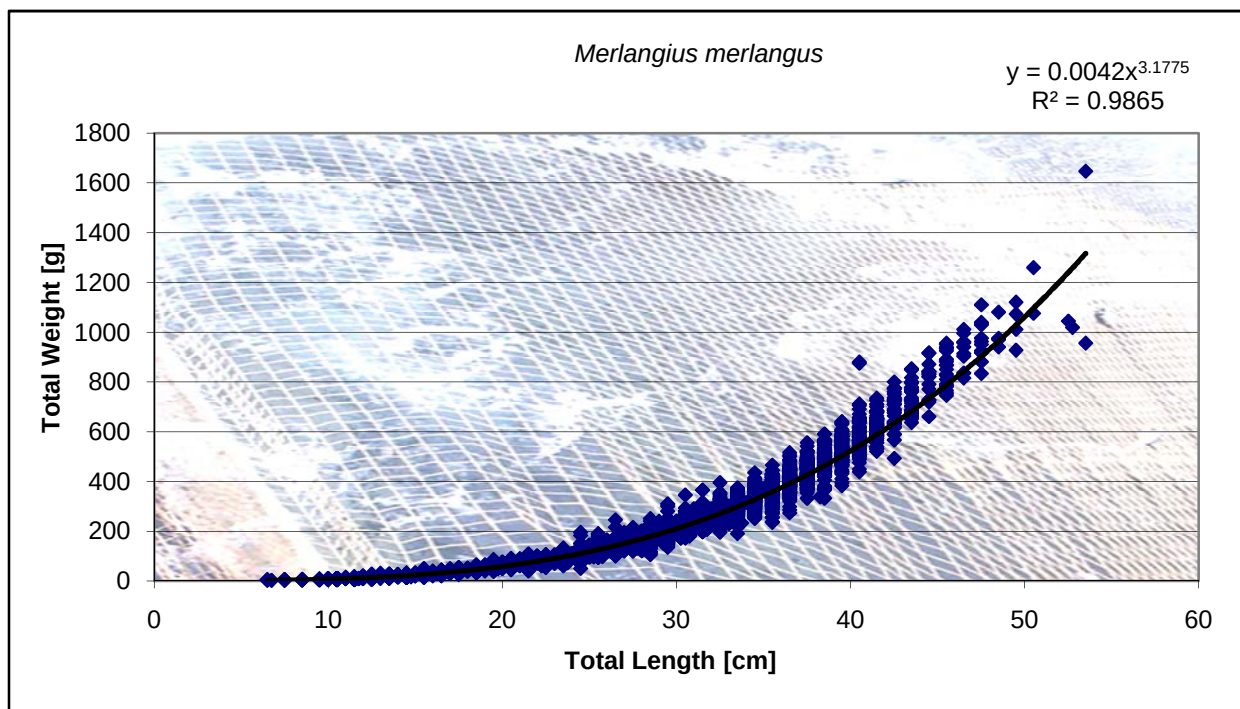
data collected

time period : 1997 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
8862	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
4373	4446	43	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	8841	-	20	1	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	5298	3543	-	-	-	20	-	-	1	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
2956	2063	2226	-	-	1121	475	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

6.5 [cm]
53.5 [cm]

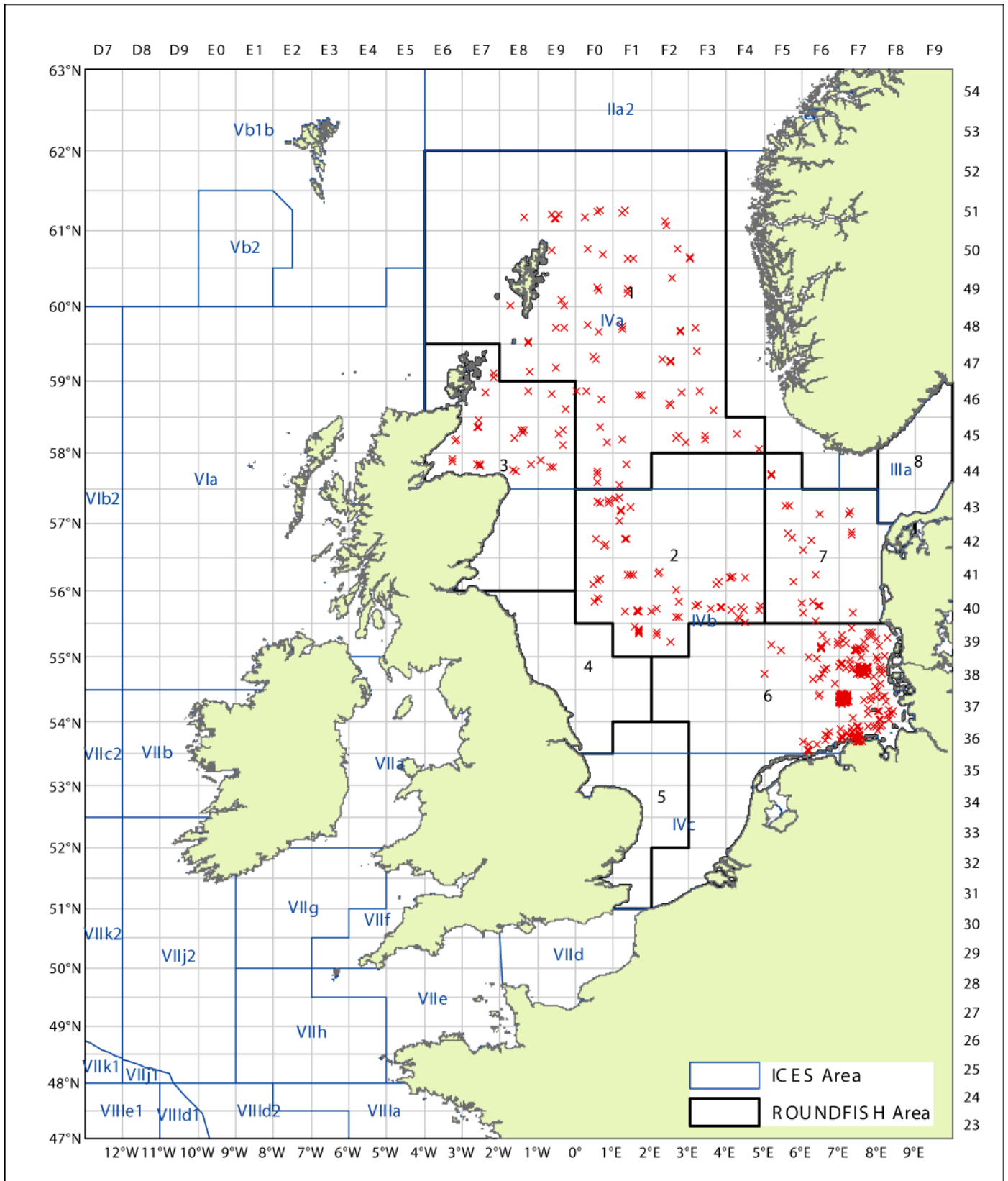
male
female
undefined

4018
4288
556

total numbers of data 8862

Merlangius merlangus January

Geographical distribution of data used for calculating the length-weight relationship



Merlangius merlangus

January

$$Tw [g] = a * L [cm]^b$$

a = 0.0049

b = 3.1319

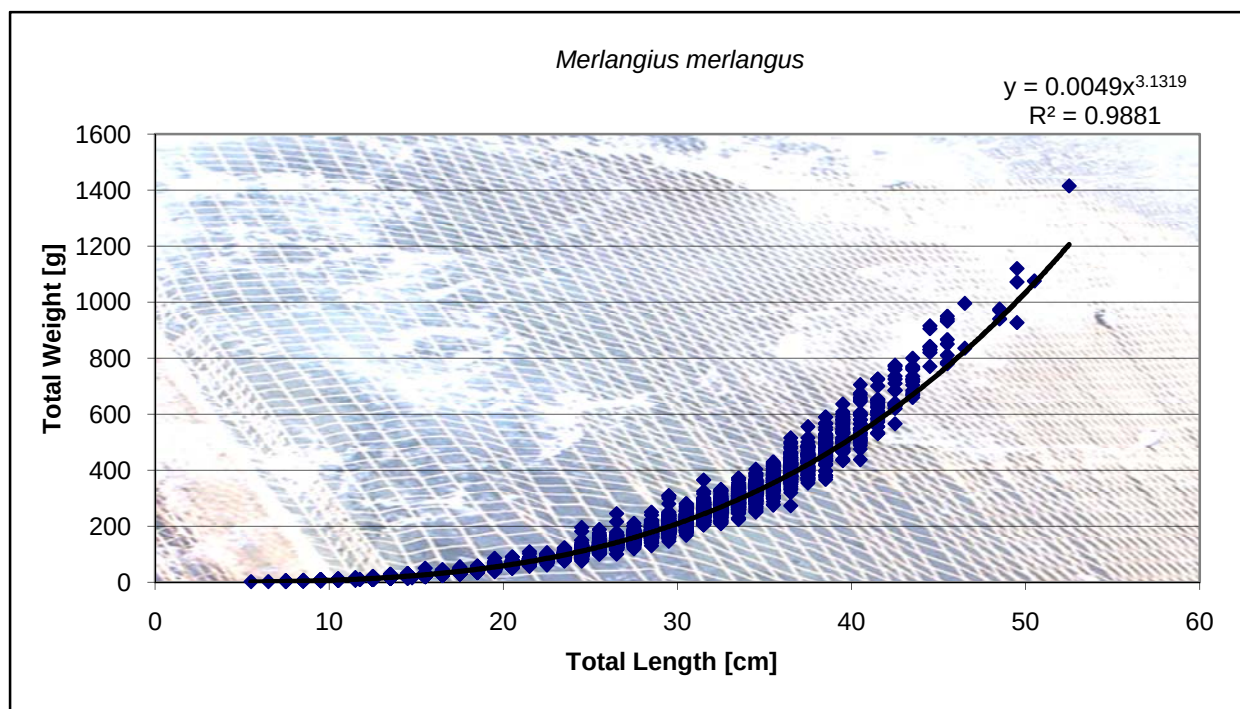
data collected

time period : 1998 - 2009

data source : research vessel

numbers of data:

Numbers of data																				
Quarter																				
1	2	3	4																	
5199	-	-	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
5199	-	-	-	-	-	-	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	5199	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	2572	2627	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
1549	1213	923	-	-	1182	332	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

5.5 [cm]
52.5 [cm]

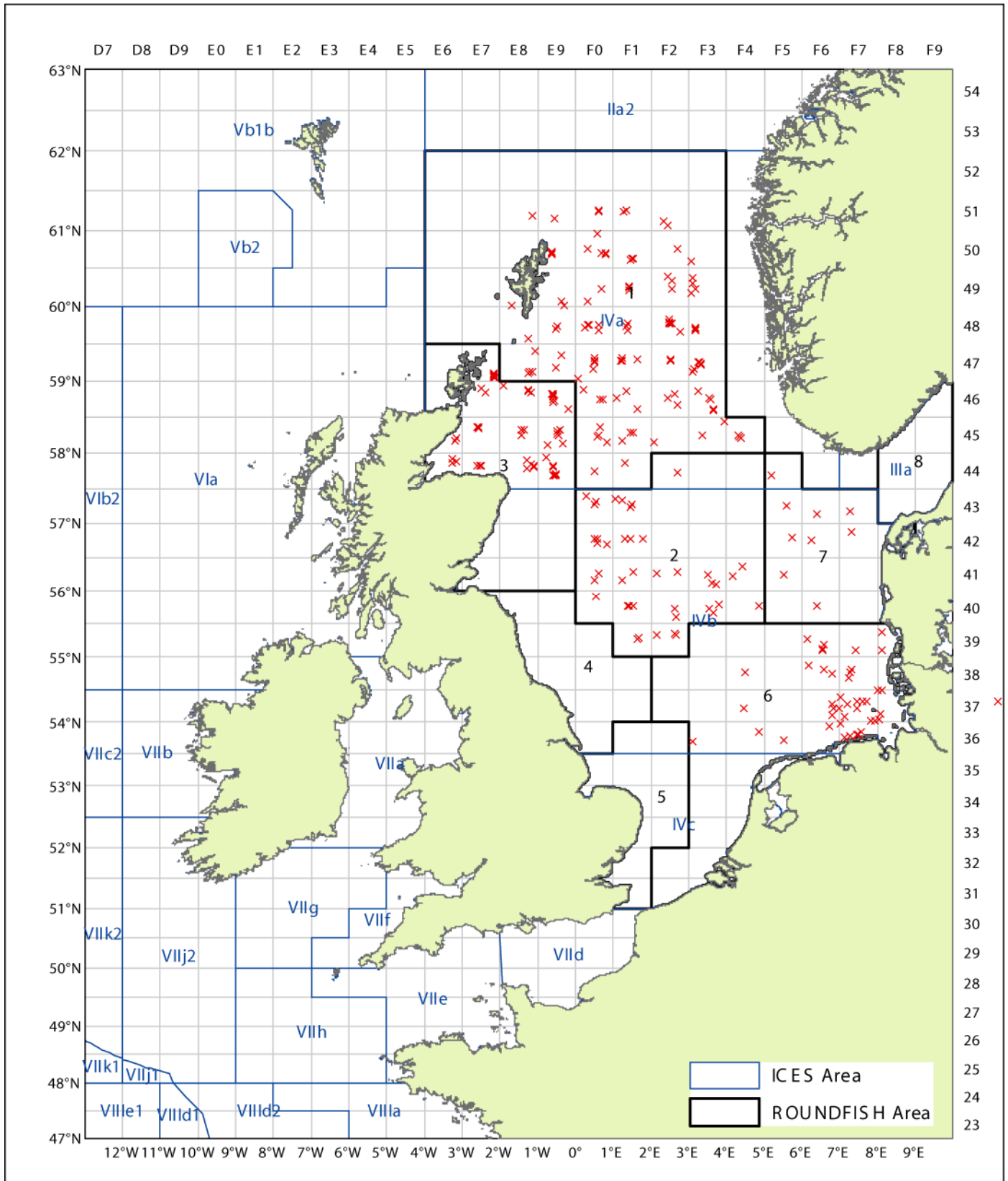
male
female
undefined

2566
2371
262

total numbers of data 5199

Merlangius merlangus February

Geographical distribution of data used for calculating the length-weight relationship



Merlangius merlangus

February

$$Tw [g] = a * L [cm]^b$$

a = 0.0041

b = 3.1868

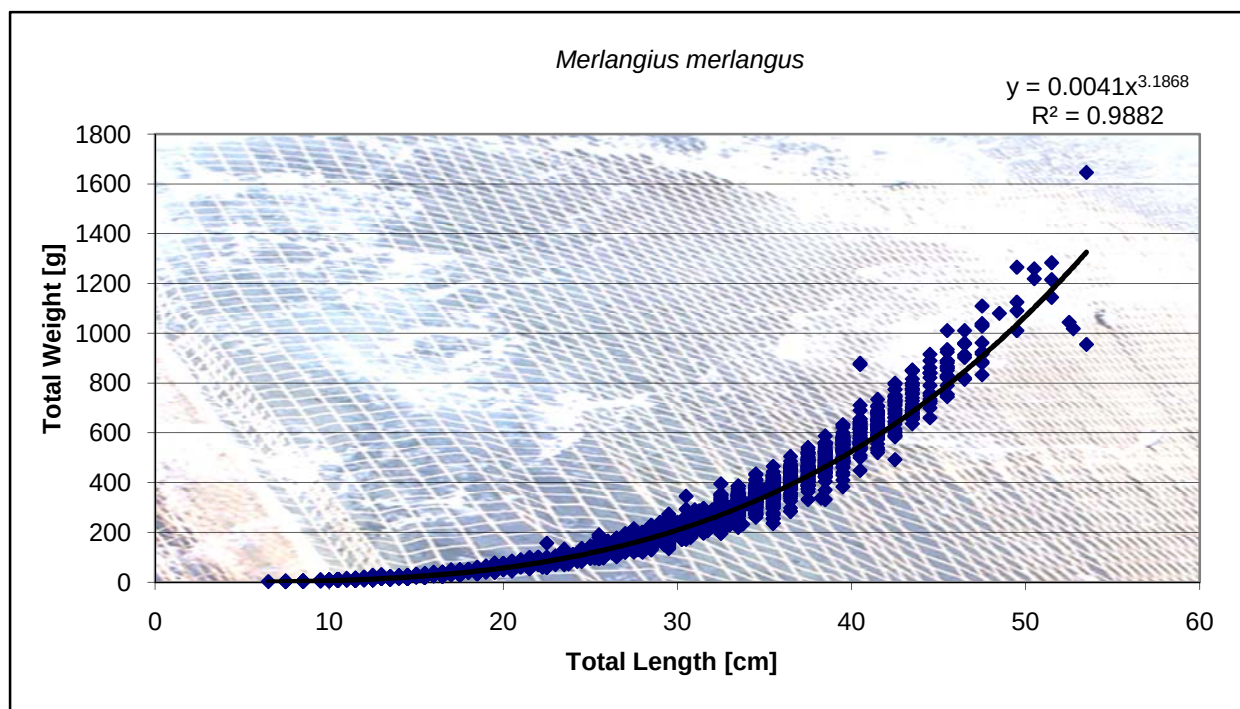
data collected

time period : 1998 - 2009

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
4895	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	4895	-	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	2	4893	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	2	-	3378	1515	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
1764	1166	1575	-	-	266	122	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

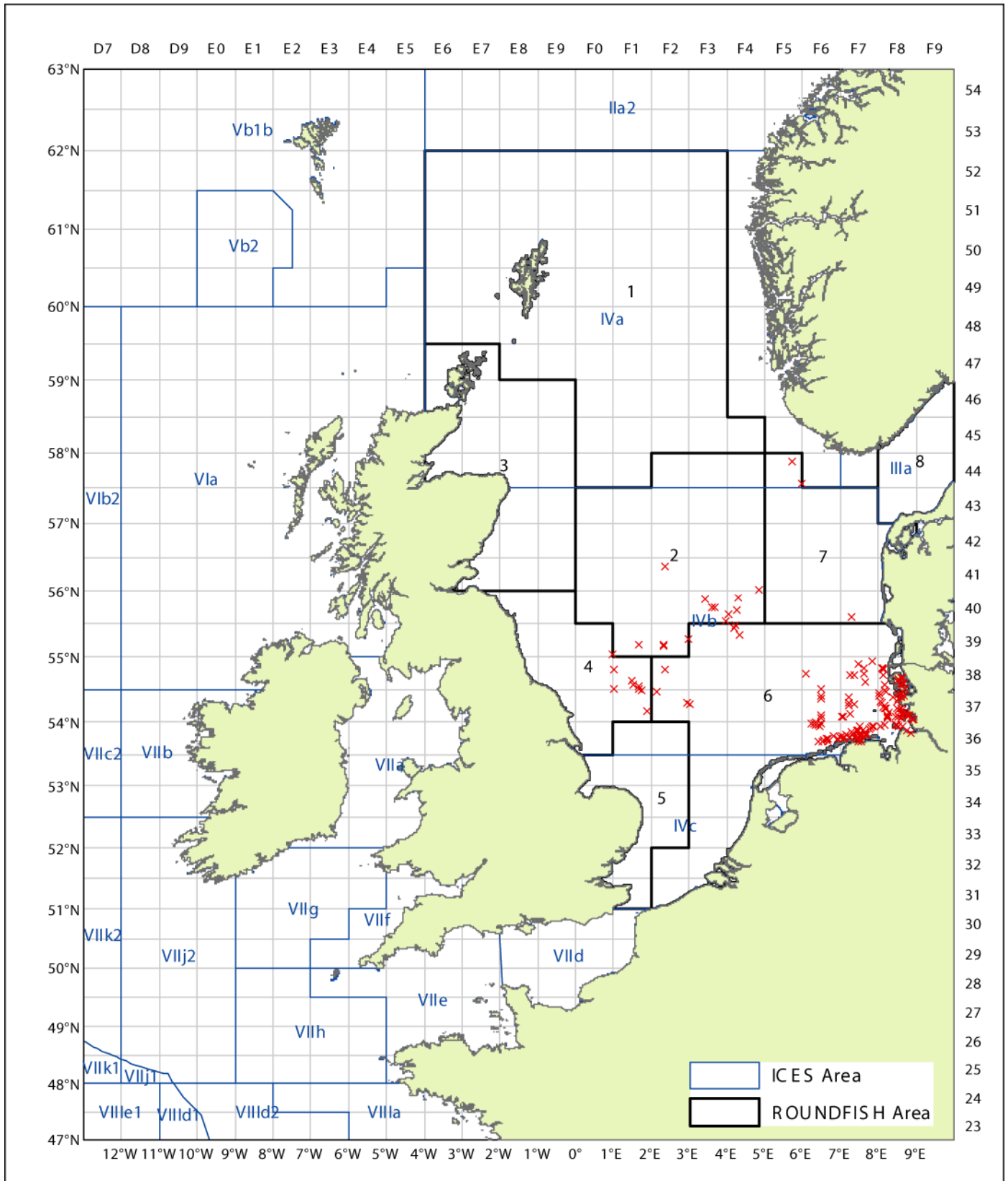
6.5 [cm]
53.5 [cm]

male 2127
female 2428
undefined 339

total numbers of data 4895

Merlangius merlangus Quarter 2

Geographical distribution of data used for calculating the length-weight relationship



Merlangius merlangus

Quarter 2

$$Tw [g] = a * L [cm]^b$$

a = 0.0111

b = 2.8596

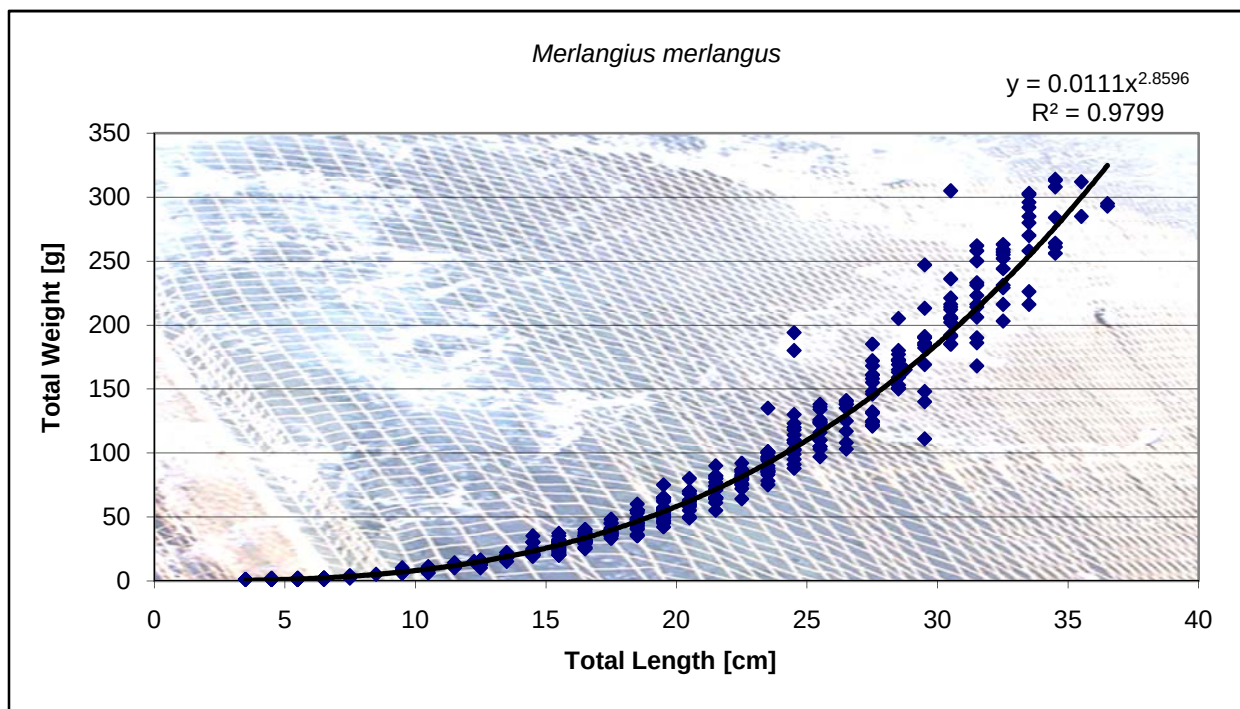
data collected

time period : 1997 - 2006

data source : research vessel

numbers of data:

Numbers by sector																			
Quarter																			
1	2	3	4																
-	412	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	184	216	12	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	412	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	2	410	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	91	-	151	-	167	3	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length

- cm below

min length

max length

3.5 [cm]

36.5 [cm]

male

female

undefined

116

129

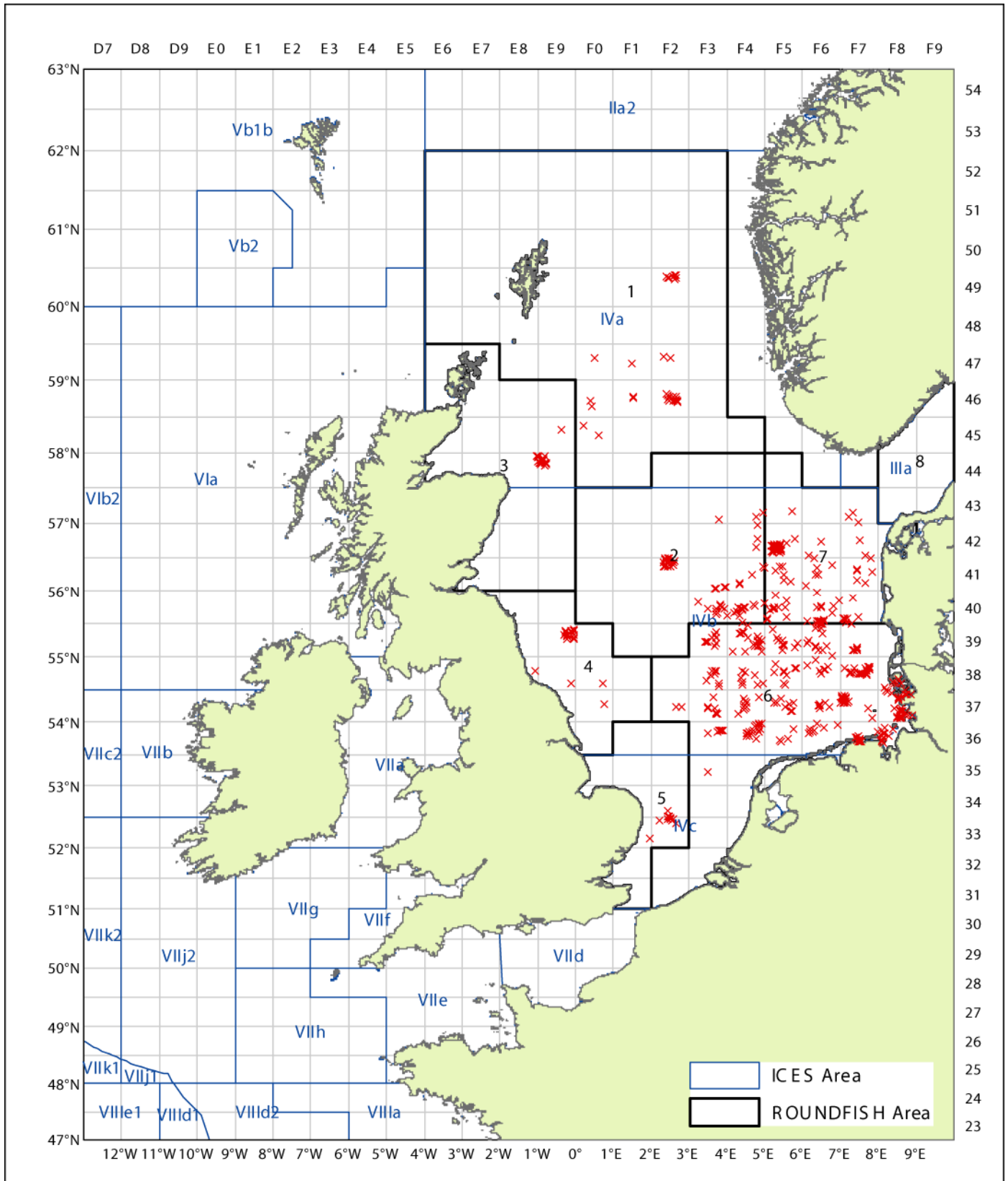
167

total numbers of data

412

Merlangius merlangus Quarter 3

Geographical distribution of data used for calculating the length-weight relationship



Merlangius merlangus

Quarter: 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0085

b = 2.9661

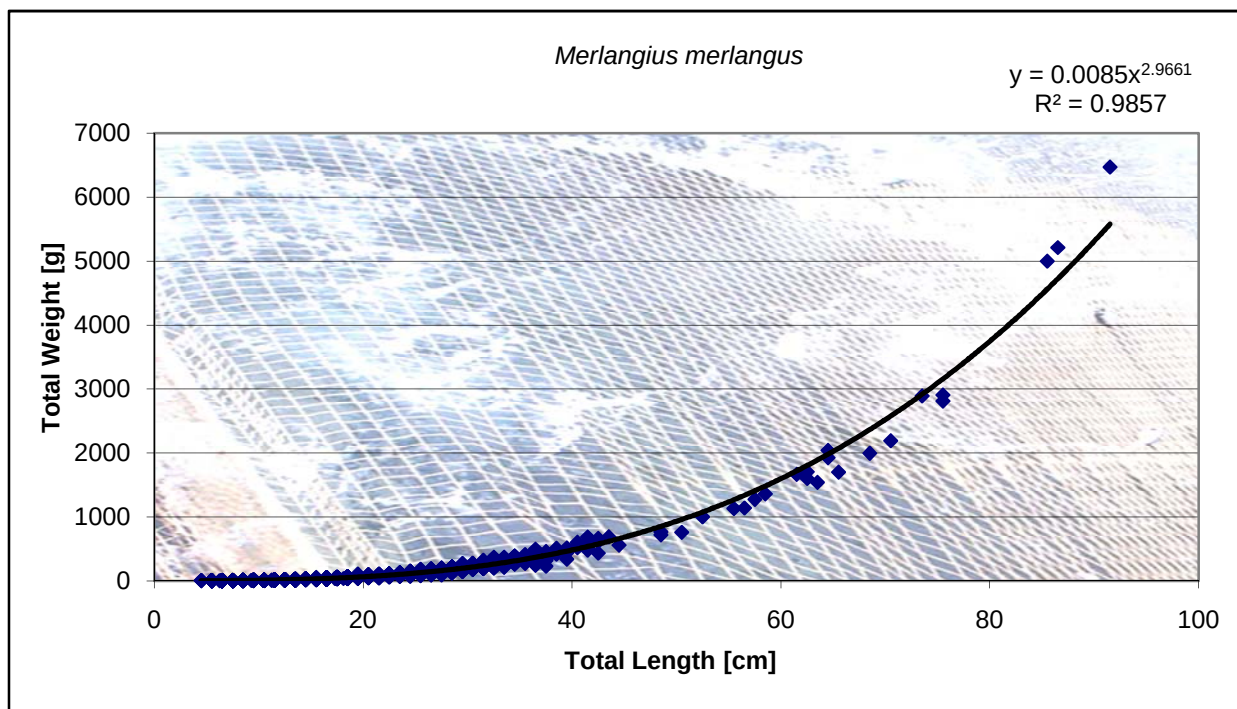
data collected

time period : 1997 - 2007

data source : research vessel

numbers of data:

Numbers of salmon																			
Quarter																			
1	2	3	4																
-	-	5473	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	1909	3006	558	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	5473	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	1035	4431	7	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
569	511	429	525	138	2378	923	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

4.5 [cm]
91.5 [cm]

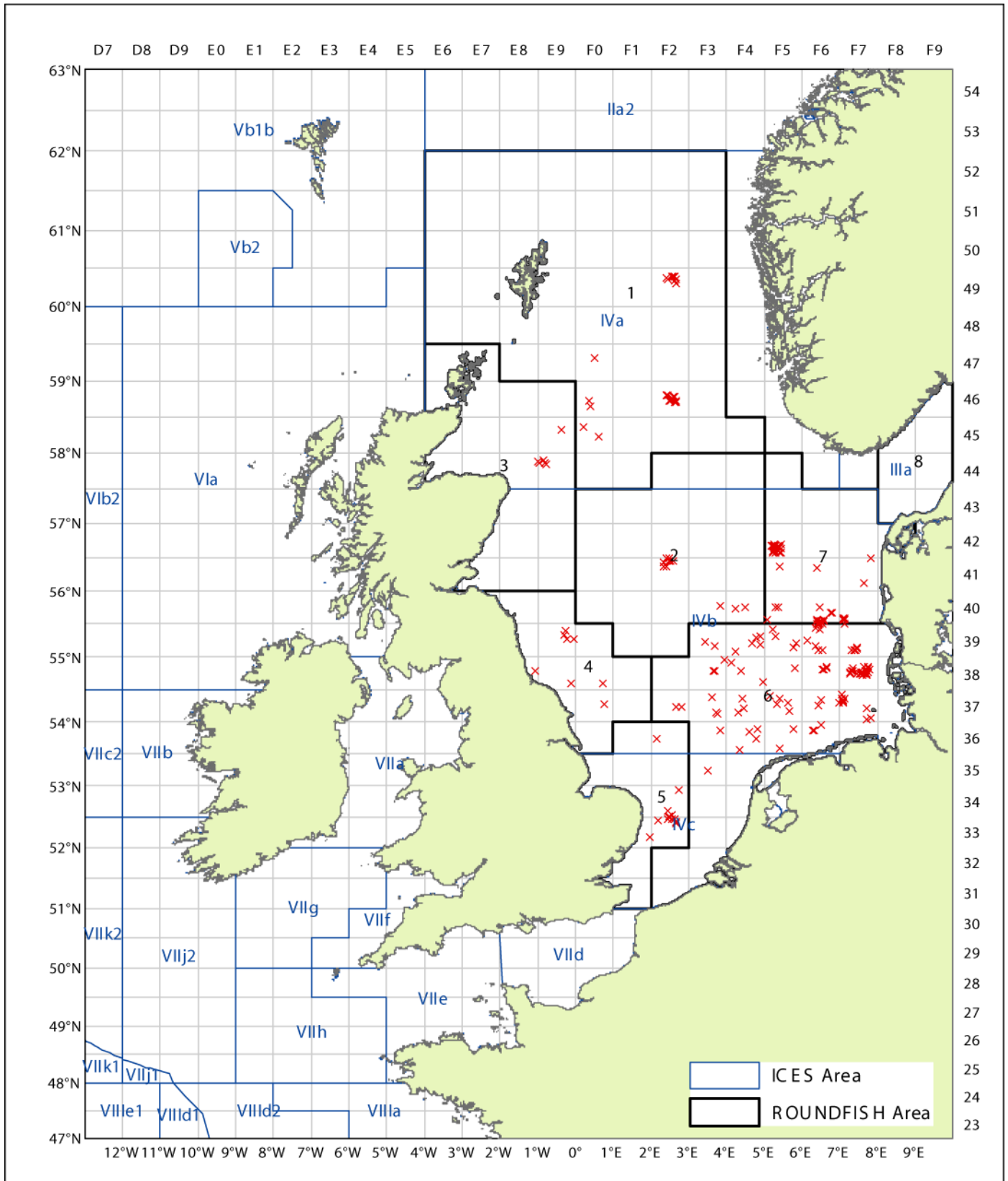
male
female
undefined

2385
2232
856

total numbers of data 5473

Merlangius merlangus July

Geographical distribution of data used for calculating the length-weight relationship



Merlangius merlangus

July

$$Tw [g] = a * L [cm]^b$$

a = 0.008

b = 2.9831

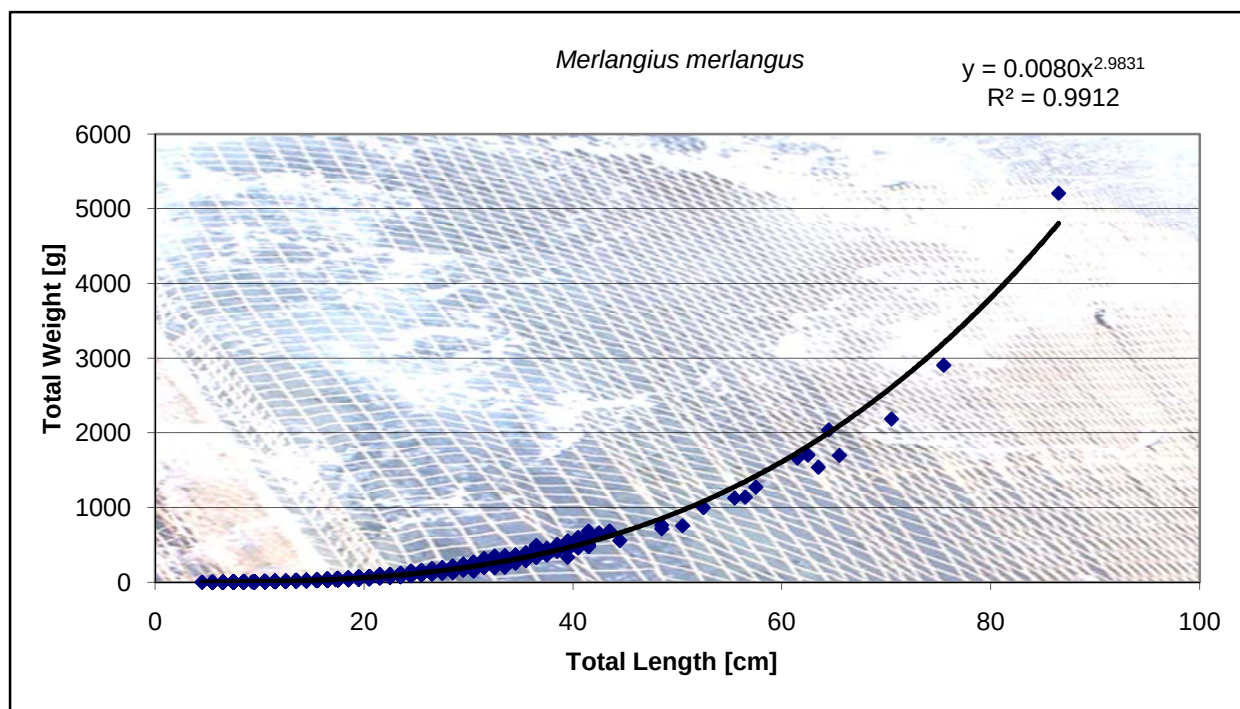
data collected

time period : 1998 - 2009

data source : research vessel

numbers of data:

Numbers of salmon																				
Quarter																				
1	2	3	4																	
-	-	2480	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	2480	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	2480	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	586	1748	146	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
422	153	164	136	146	898	561	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

4.5 [cm]
86.5 [cm]

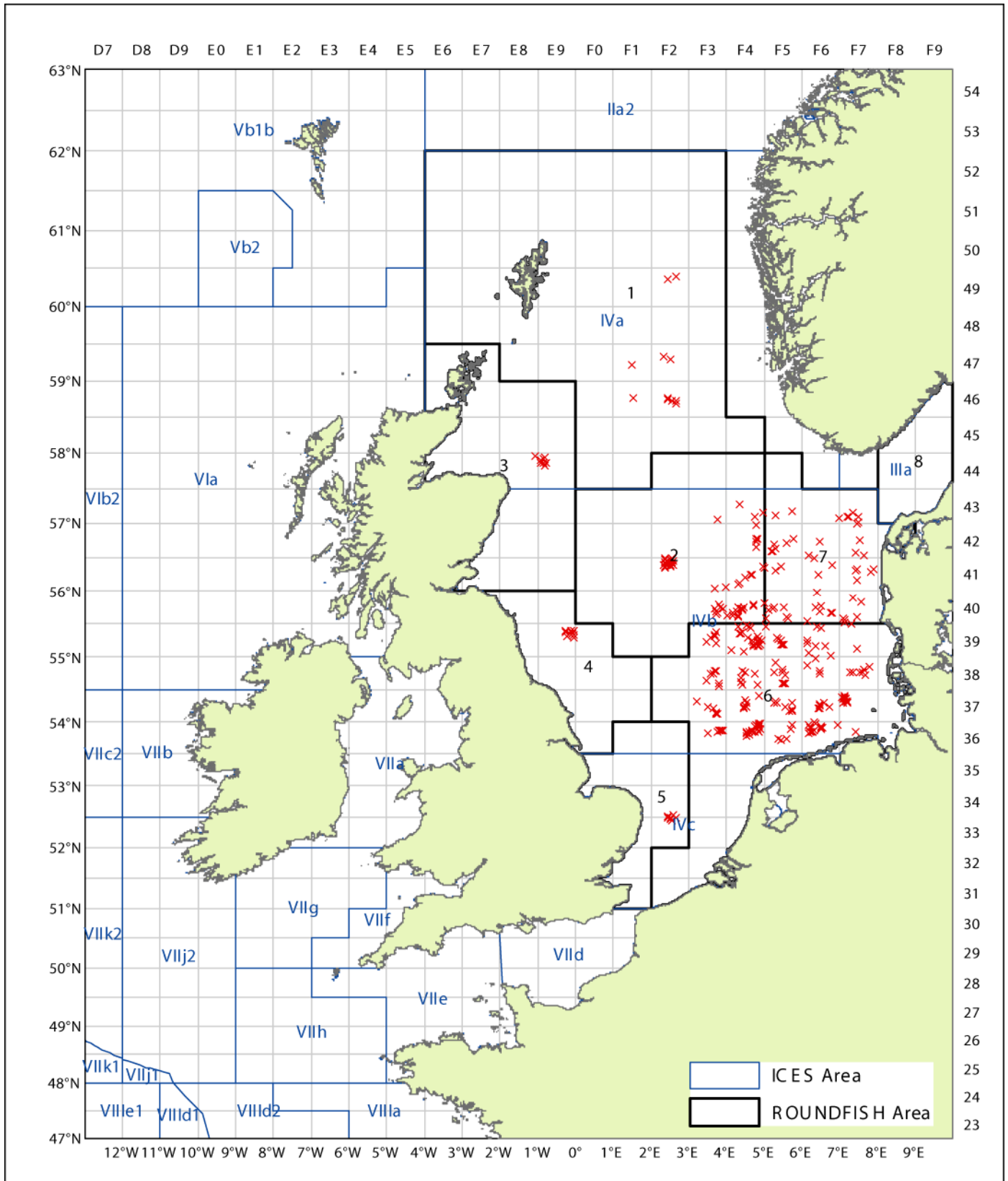
male
female
undefined

1119
950
411

total numbers of data 2480

Merlangius merlangus August

Geographical distribution of data used for calculating the length-weight relationship



Merlangius merlangus

August

$$Tw [g] = a * L [cm]^b$$

a = 0.0082

b = 2.978

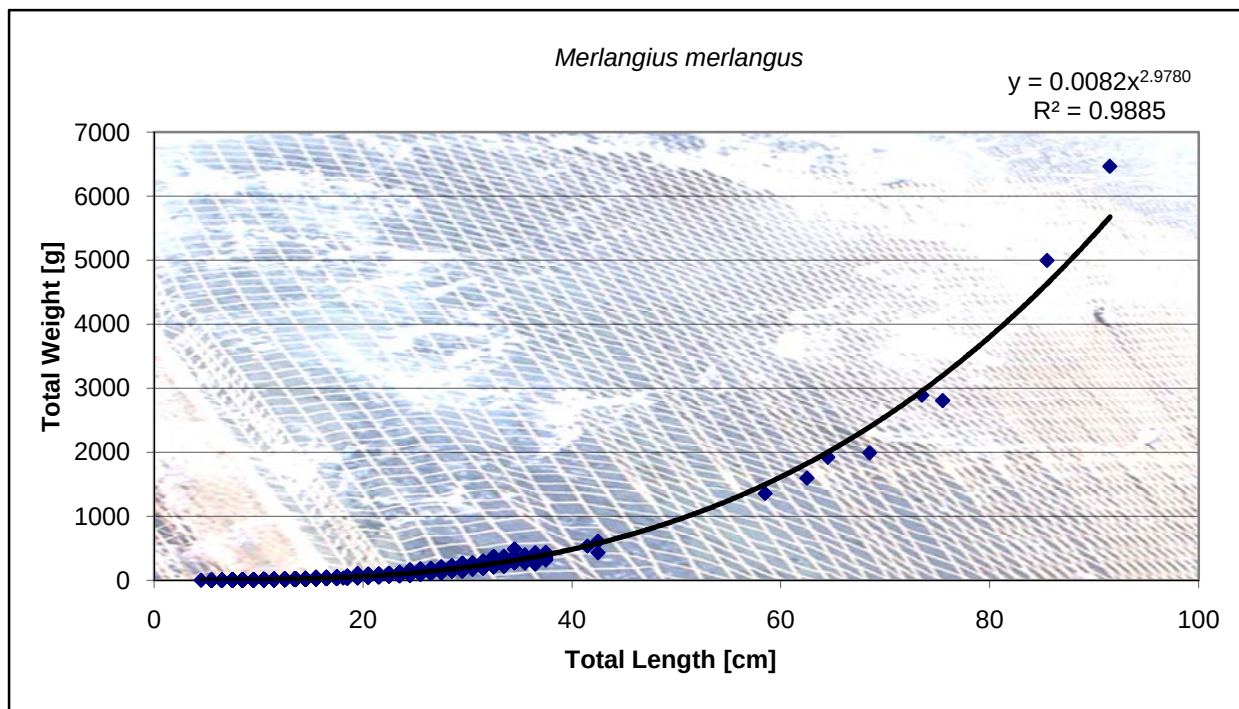
data collected

time period : 1998 - 2009

data source : research vessel

numbers of data:

Numbers of data																				
Quarter																				
1	2	3	4																	
-	-	3669	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	-	3669	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	3669	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	365	3142	162	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
169	489	196	274	162	2029	350	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

4.5 [cm]
91.5 [cm]

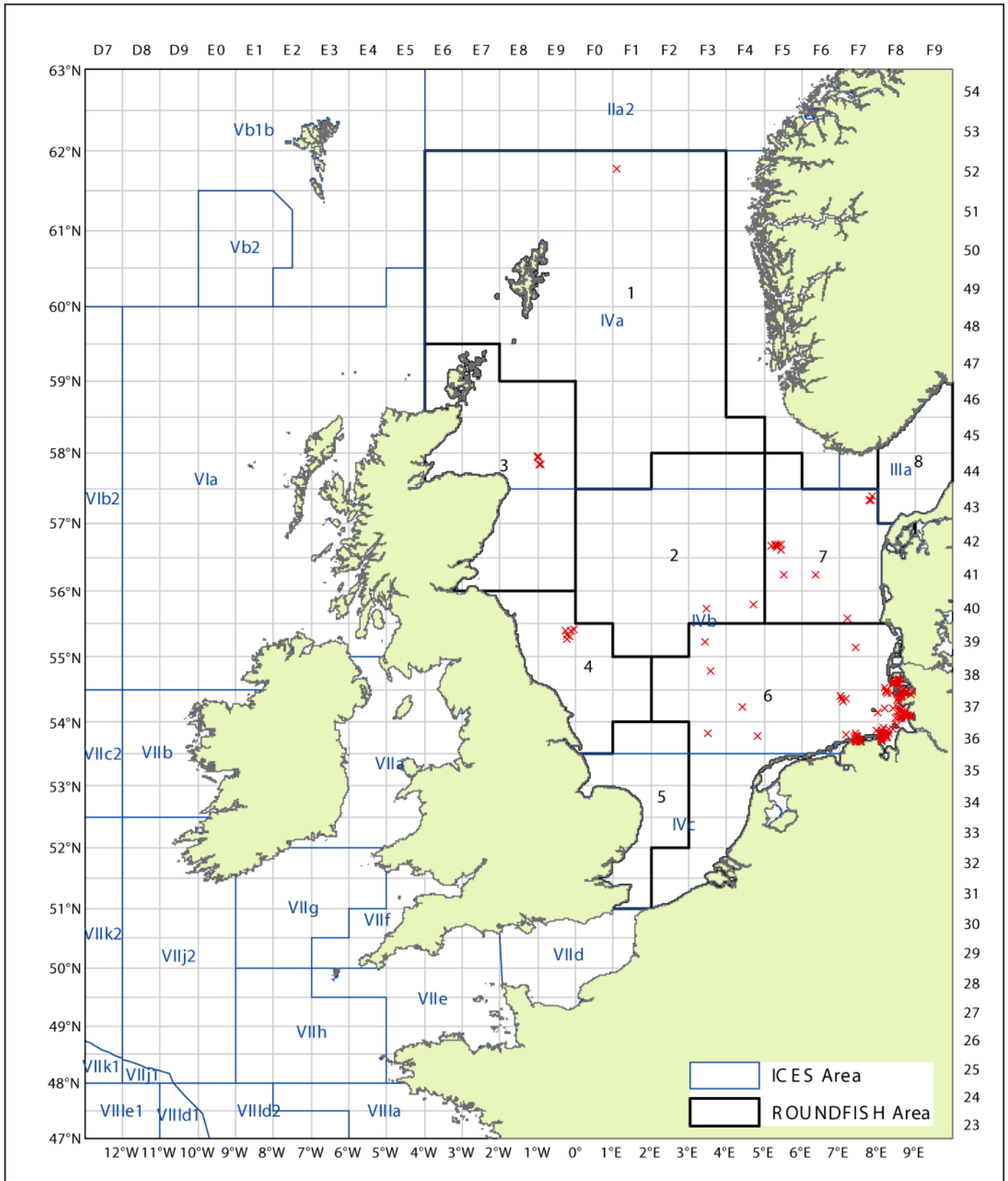
male
female
undefined

1512
1469
688

total numbers of data 3669

Merlangius merlangus September

Geographical distribution of data used for calculating the length-weight relationship



Merlangius merlangus

September

$$Tw [g] = a * L [cm]^b$$

a = 0.0072

b = 3.0222

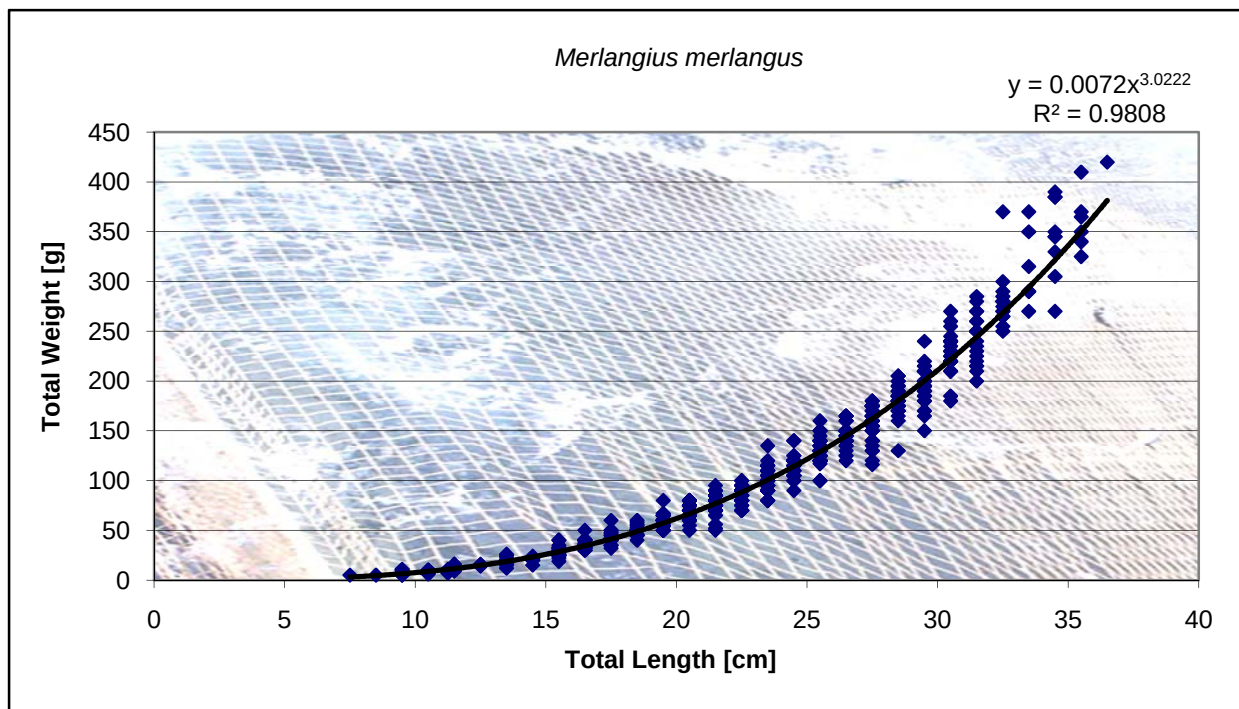
data collected

time period : 1997 - 2009

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	-	600	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	-	600	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	600	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	111	489	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
1	22	110	144	-	218	105	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

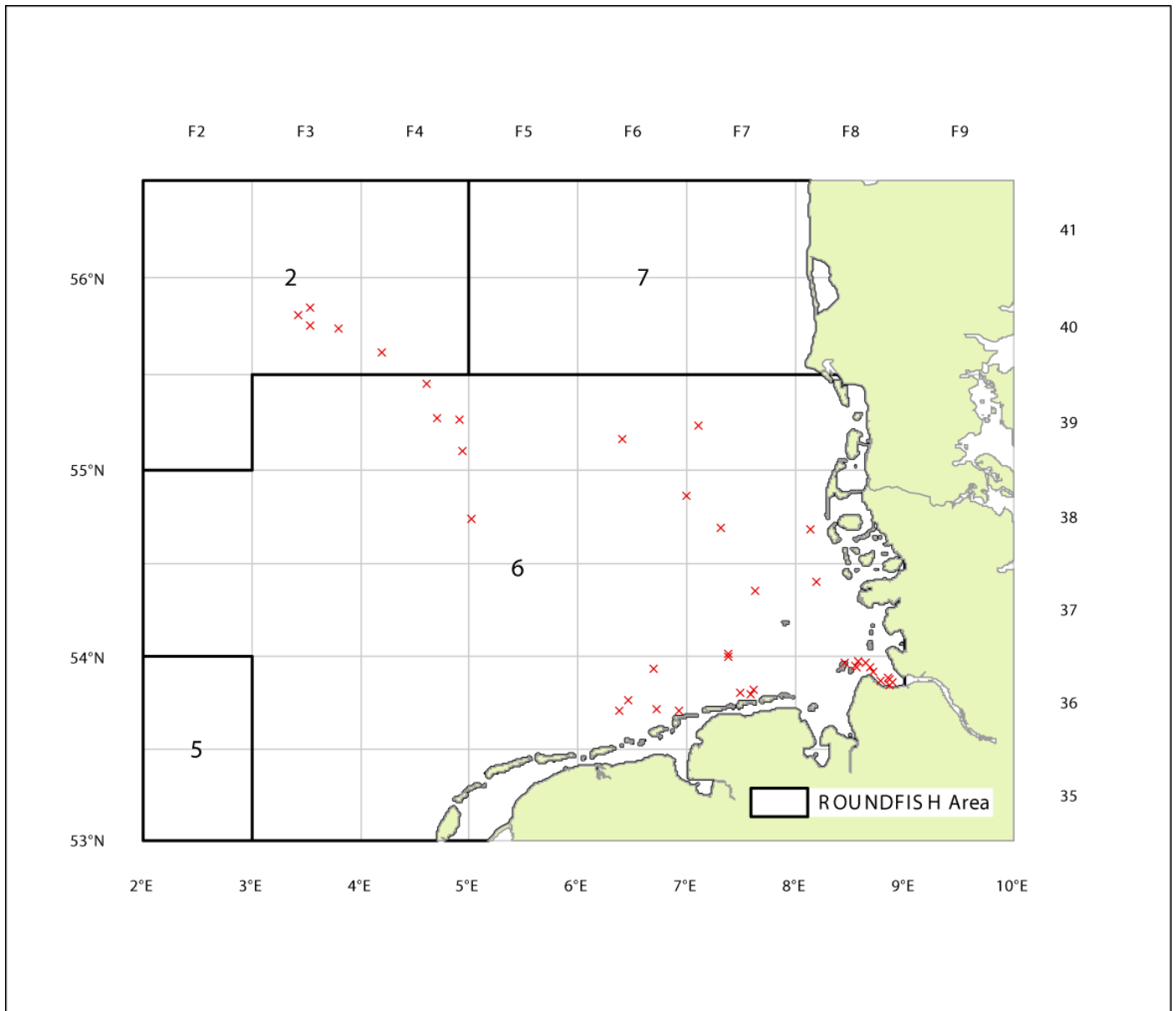
7.5 [cm]
36.5 [cm]

male 264
female 218
undefined 118

total numbers of data 600

Merlangius merlangus Quarter 4

Geographical distribution of data used for calculating the length-weight relationship



Merlangius merlangus

Quarter: 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0084

b = 2.9664

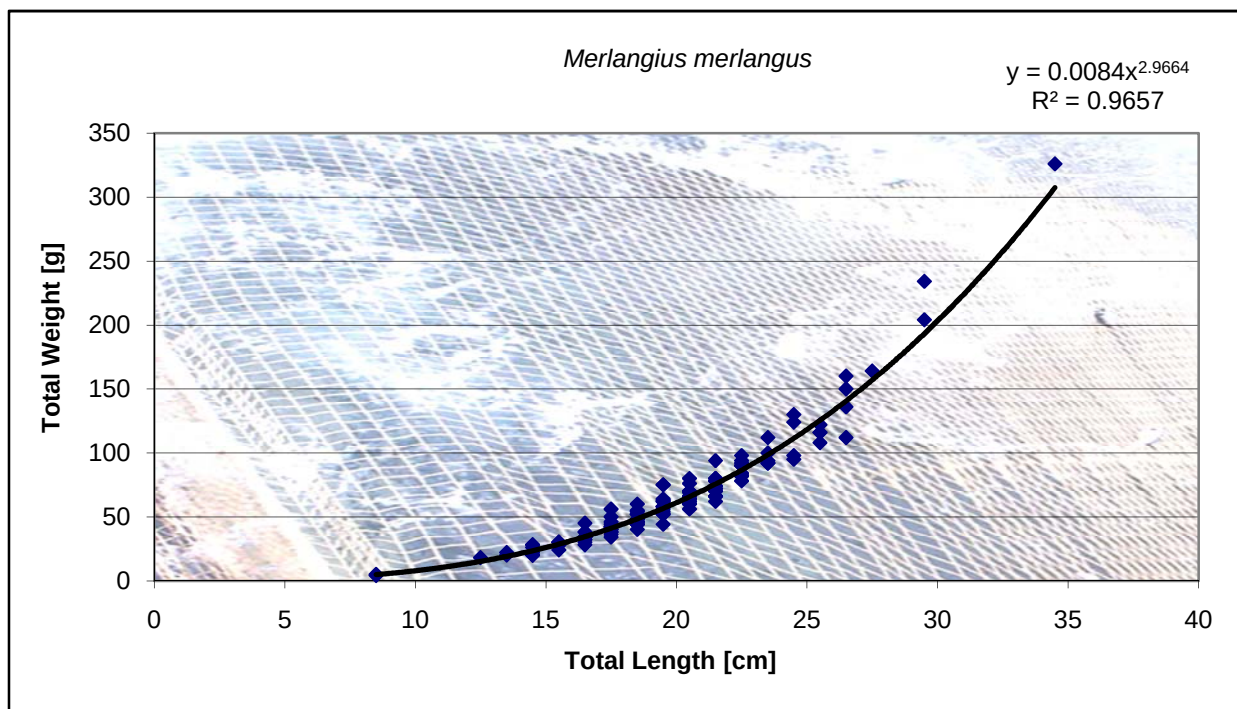
data collected

time period : 1997 - 2006

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
-	-	-	133																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	-	-	13	103	17								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	133	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	133	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	66	-	-	-	67	-	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

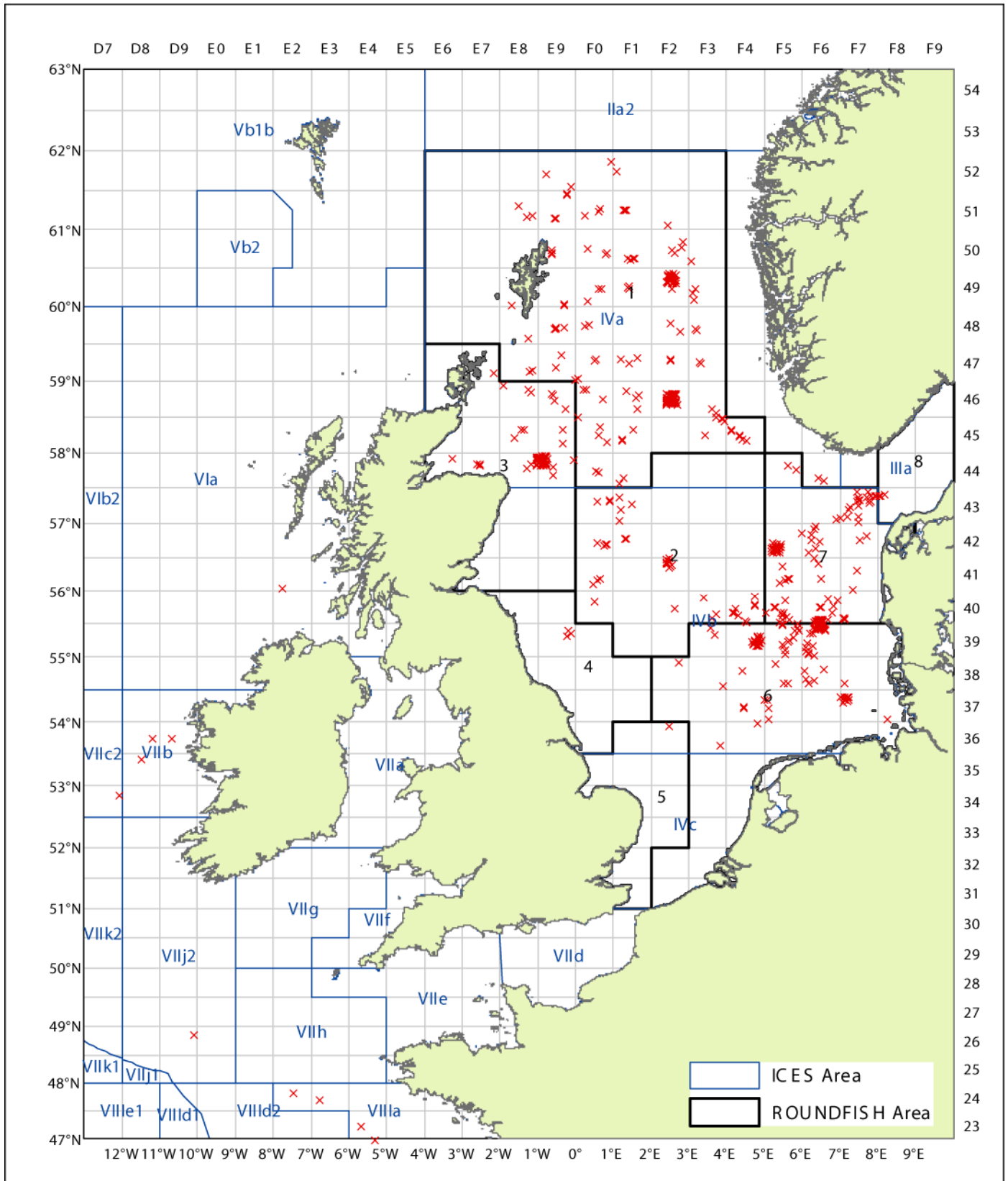
8.5 [cm]
34.5 [cm]

male 55
female 43
undefined 35

total numbers of data 133

Merluccius merluccius

Geographical distribution of data used for calculating the length-weight relationship



Merluccius merluccius

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.004

b = 3.13

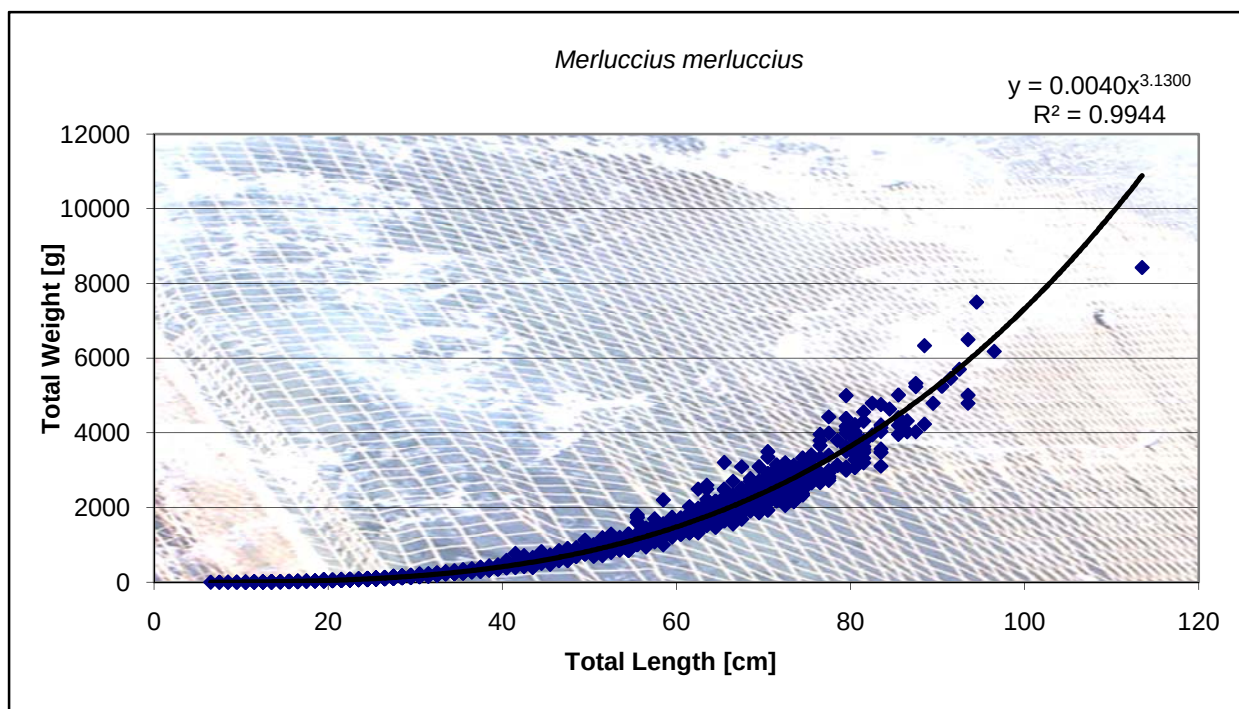
data collected

time period : 1998 - 2009

data source : research vessel, commercial trawler

numbers of data:

Numbers of catch																				
Quarter																				
1	2	3	4																	
928	126	614	14																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
324	473	131	7	32	87	324	239	51	3	10	1									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	2	1670	-	1	5	4	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	2	-	-	-	1148	522	-	-	-	1	-	-	3	1	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	1	-	3	-	-	1	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
1029	75	104	3	1	114	291	44	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

6.5 [cm]
113.5 [cm]

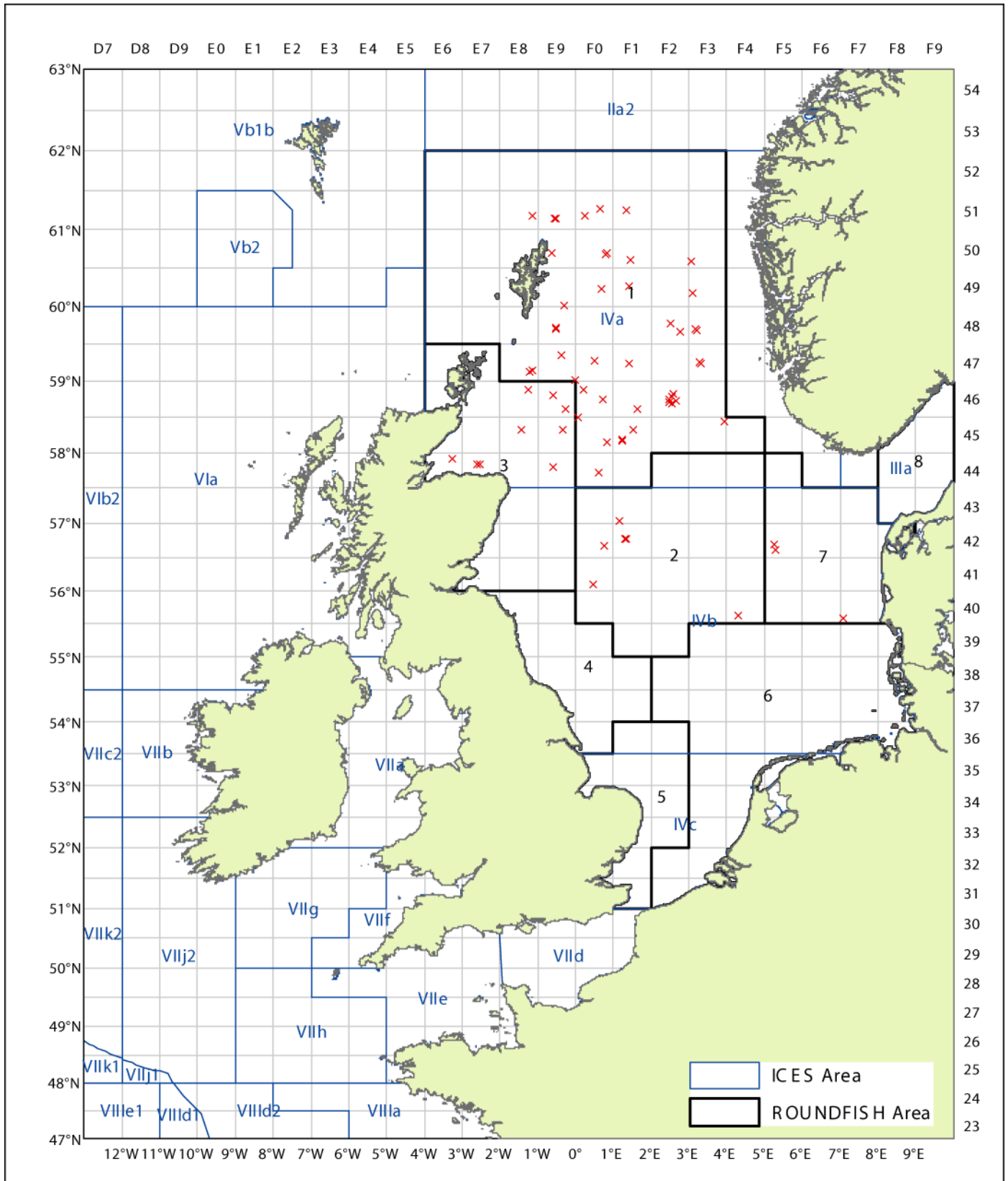
male
female
undefined

374
284
1024

total numbers of data 1682

Merluccius merluccius ♀

Geographical distribution of data used for calculating the length-weight relationship



Merluccius merluccius



Quarter: 1 ; 3

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0045

b = 3.0912

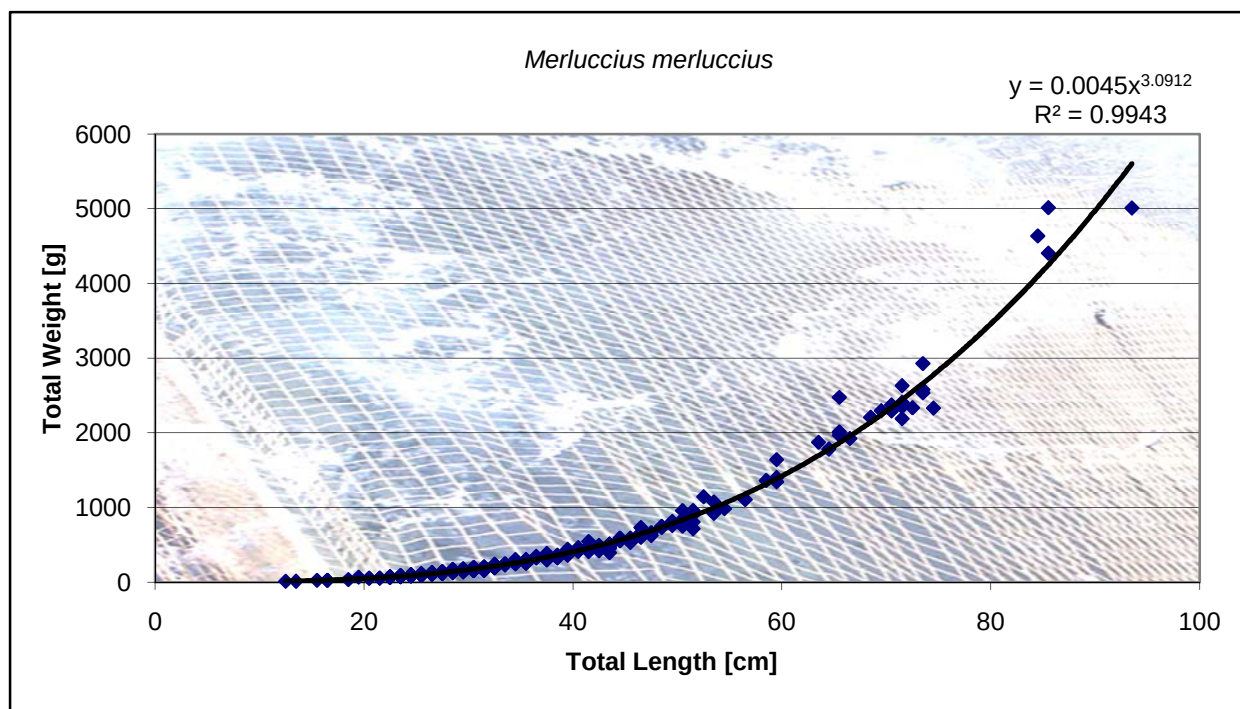
data collected

time period : 2007 - 2009

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
250	-	34	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
76	174	-	-	-	-	32	2	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	284	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	267	17	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
249	11	19	-	-	-	5	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

12.5 [cm]
93.5 [cm]

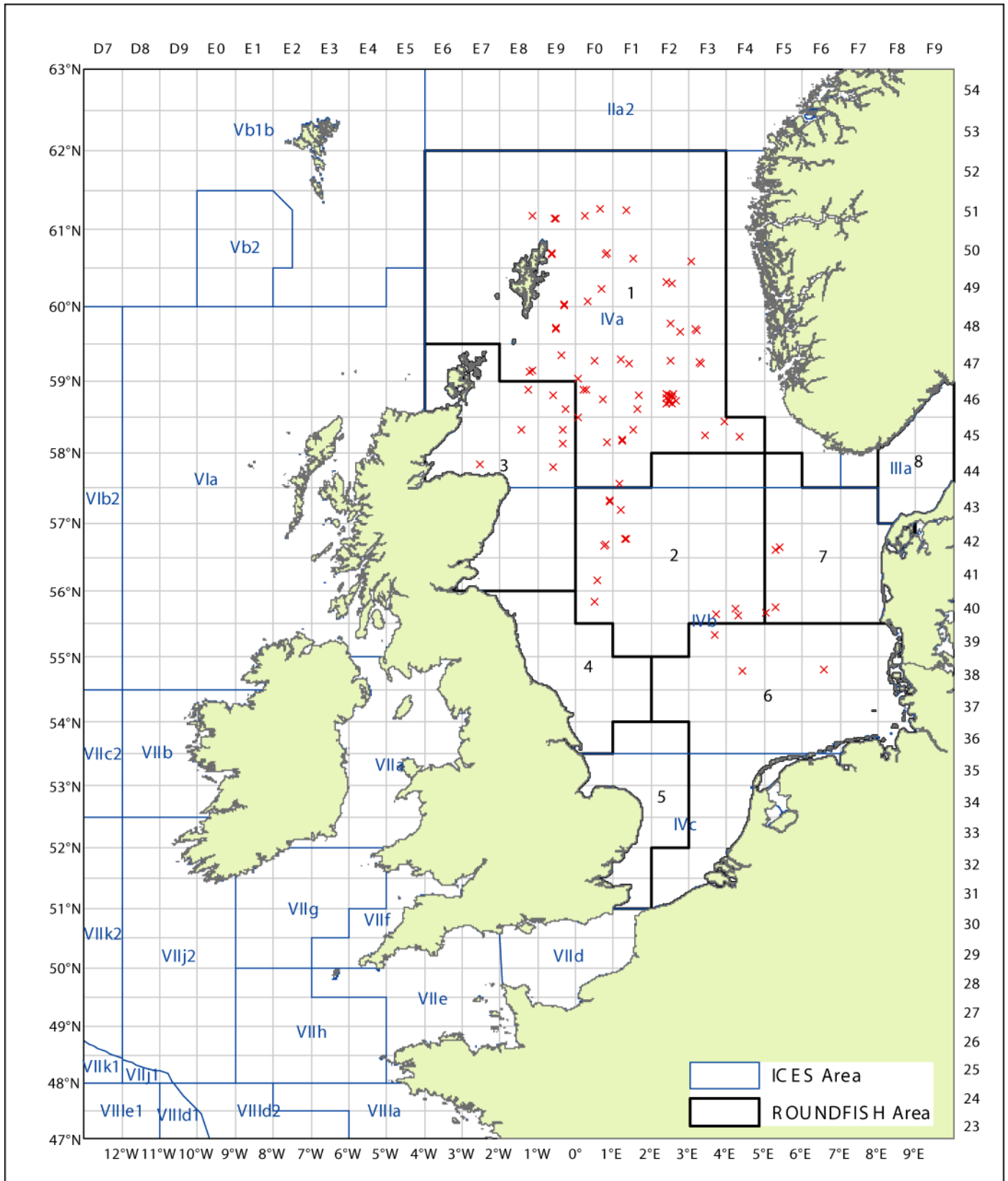
male
female
undefined

-
284
-

total numbers of data 284

Merluccius merluccius ♂

Geographical distribution of data used for calculating the length-weight relationship



Merluccius merluccius



Quarter: 1 ; 3

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0047

b = 3.0774

data collected

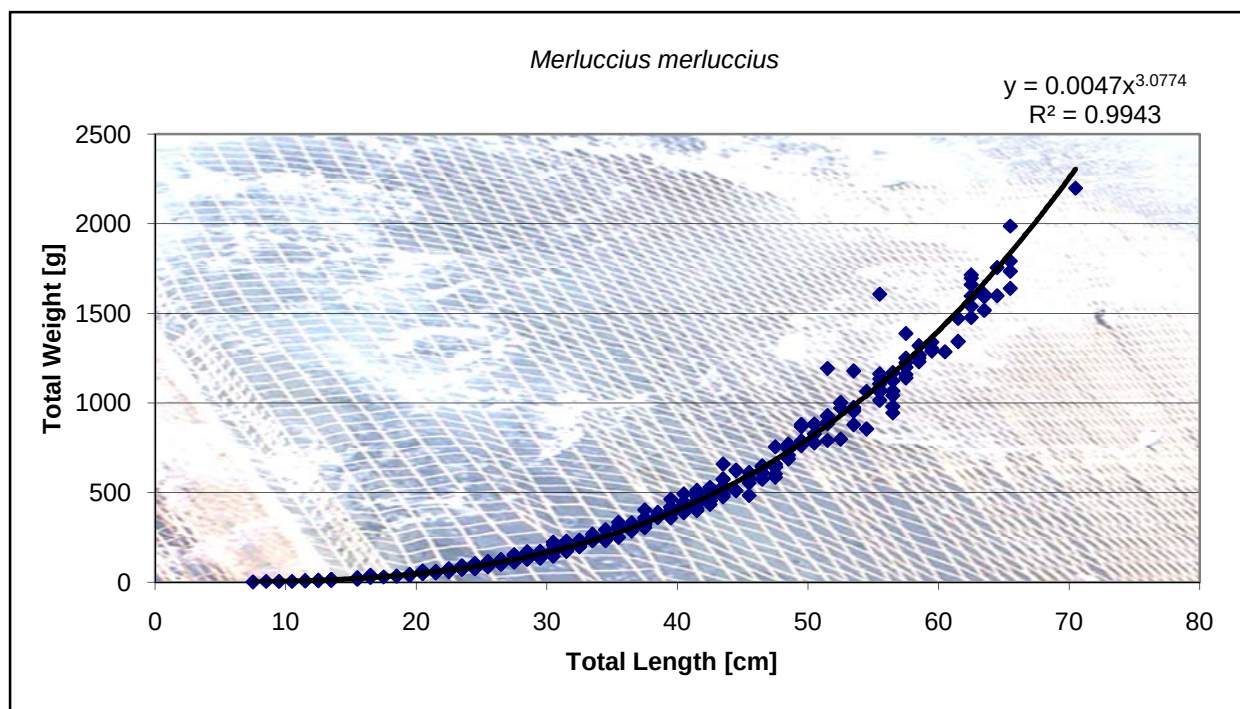
time period : 2003 - 2009

data source : research vessel

numbers of data:

Numbers of data.

Quarter																				
1	2	3	4																	
303	-	71	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
94	209	-	-	-	-	56	15	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	374	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	323	51	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
302	30	25	-	-	8	9	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

7.5 [cm]
70.5 [cm]

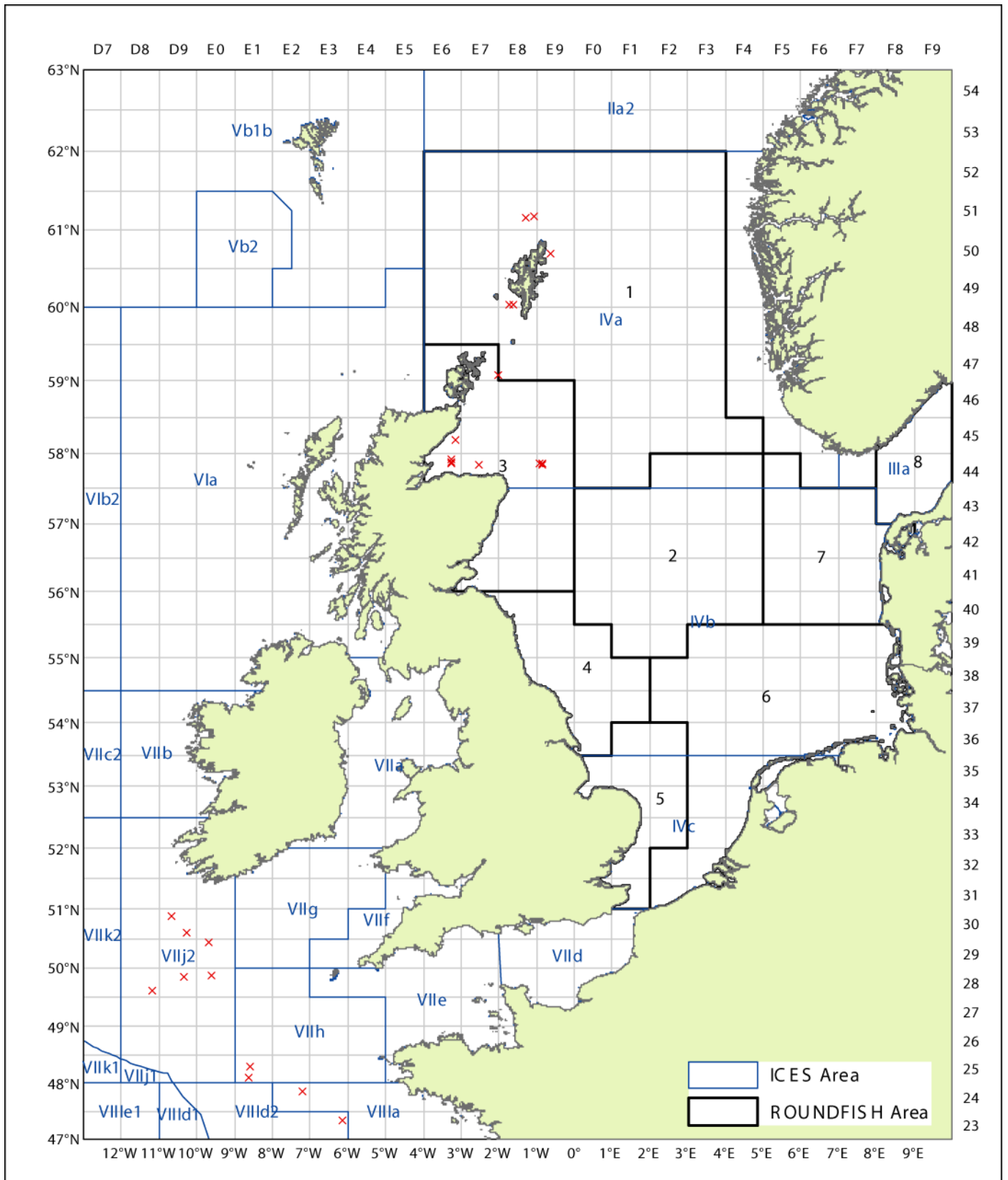
male
female
undefined

374
-
-

total numbers of data 374

Microchirus variegatus

Geographical distribution of data used for calculating the length-weight relationship



Microchirus variegatus

Quarter: 1 - 3

$$Tw [g] = a * L [cm]^b$$

a = 0.011

b = 2.9899

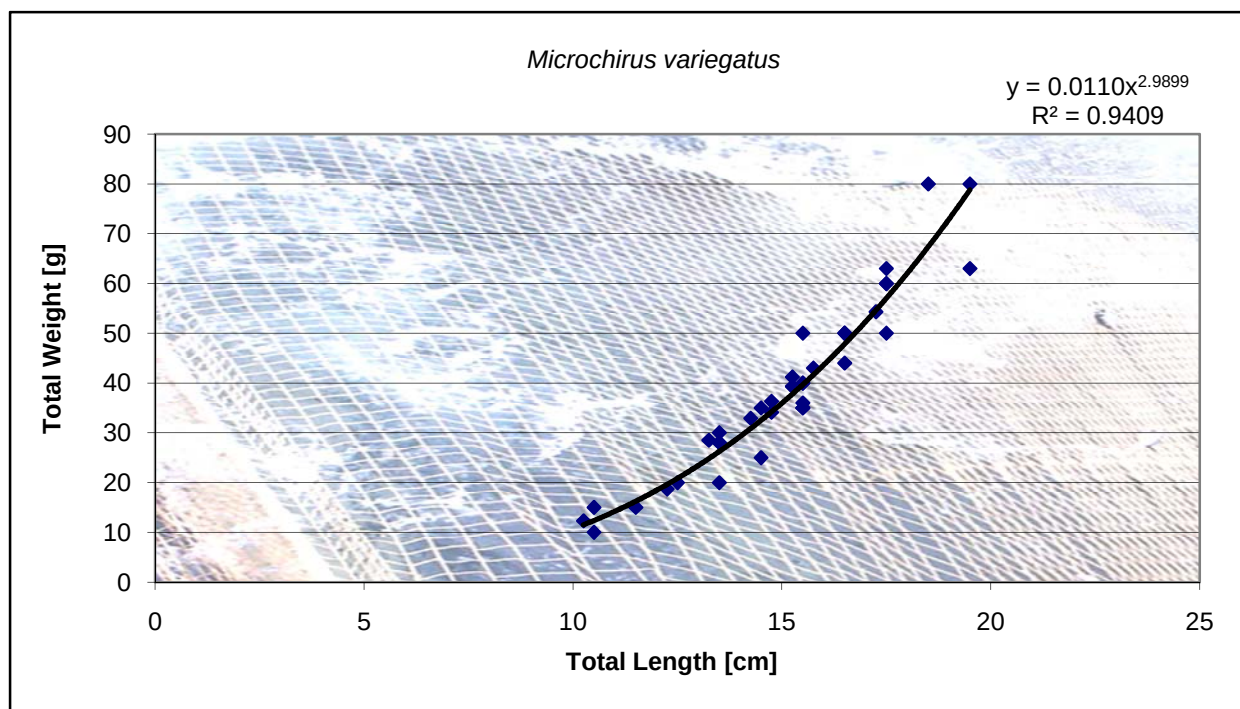
data collected

time period : 1995 - 2009

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
27	7	2	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
10	11	6	6	-	1	1	1	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	24	-	-	8	4	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	2	6	-	2	-	-	2	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
15	-	9	-	-	-	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

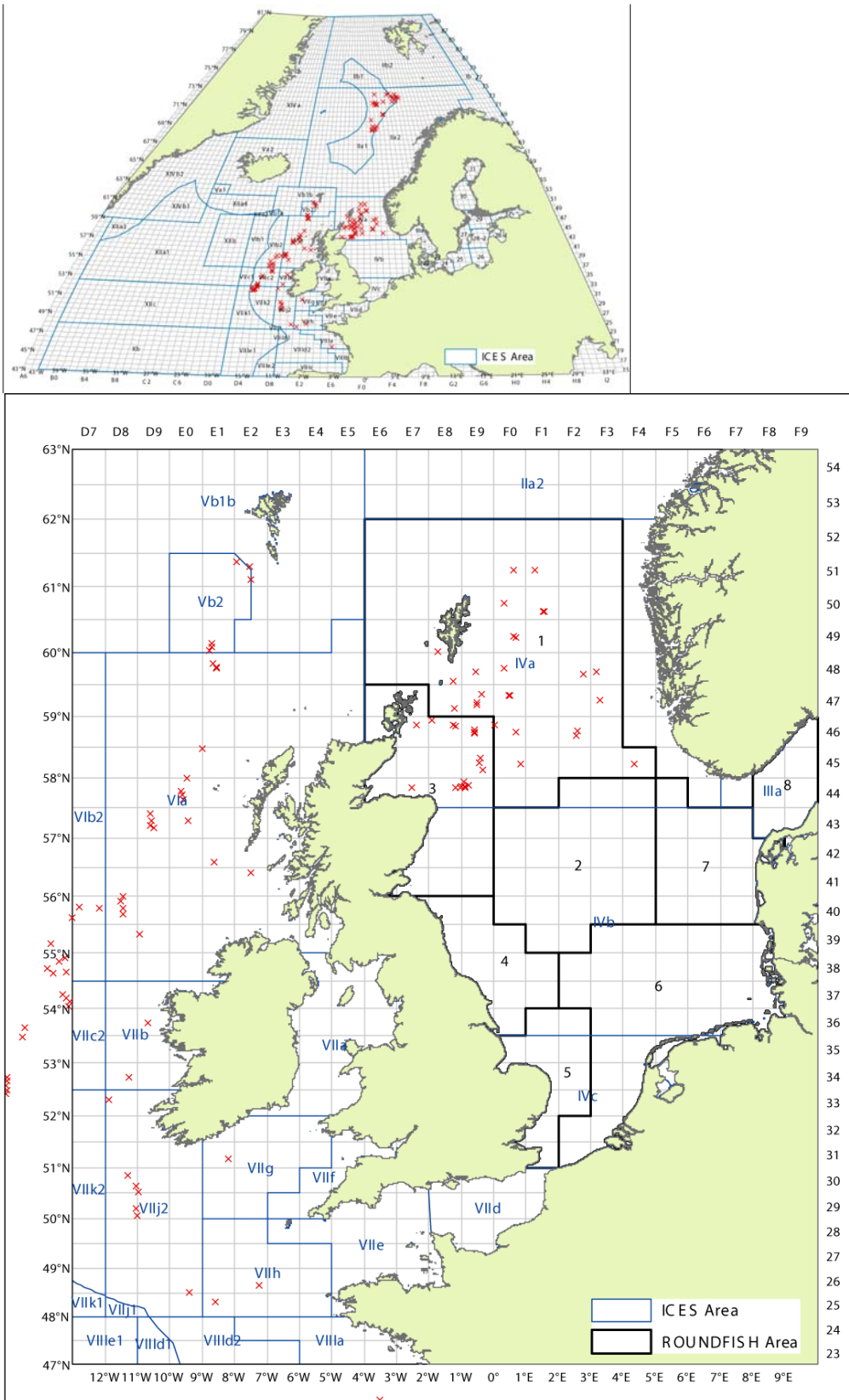
- Total length
- 1/2 cm below, cm below
- min length
- max length

10.25 [cm]
19.5 [cm]

male -
female -
undefined 36
total numbers of data 36

Micromesistius poutassou

Geographical distribution of data used for calculating the length-weight relationship



Micromesistius poutassou

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0073

b = 2.8926

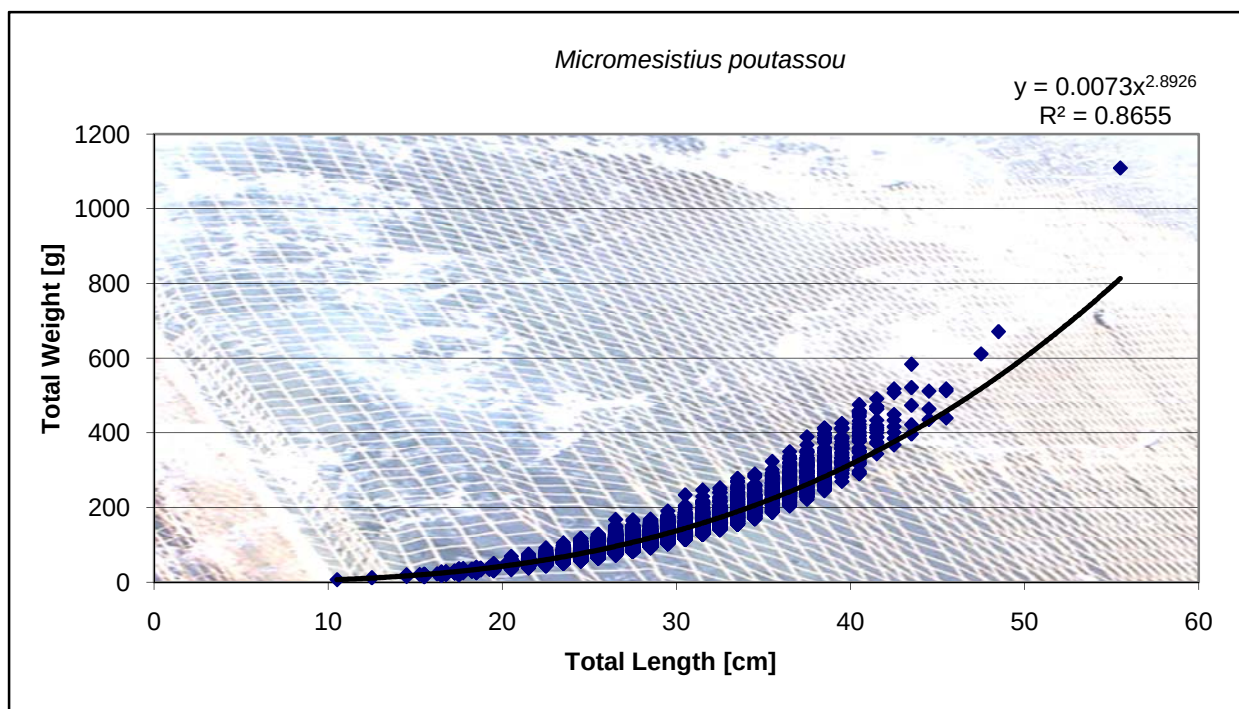
data collected

time period : 1998 - 2009

data source : research vessel, commercial trawler

numbers of data:

Numbers of catch																				
Quarter																				
1	2	3	4																	
9873	2196	5547	180																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
117	1270	8486	1770	426	-	4	9	5534	180	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	5534	-	198	773	8016	3275	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	5534	-	-	-	-	-	182	16	-	-	773	5289	2727	-	2	2398	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
1	181	462	231	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
155	-	43	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

10.5 [cm]
55.5 [cm]

male
female
undefined

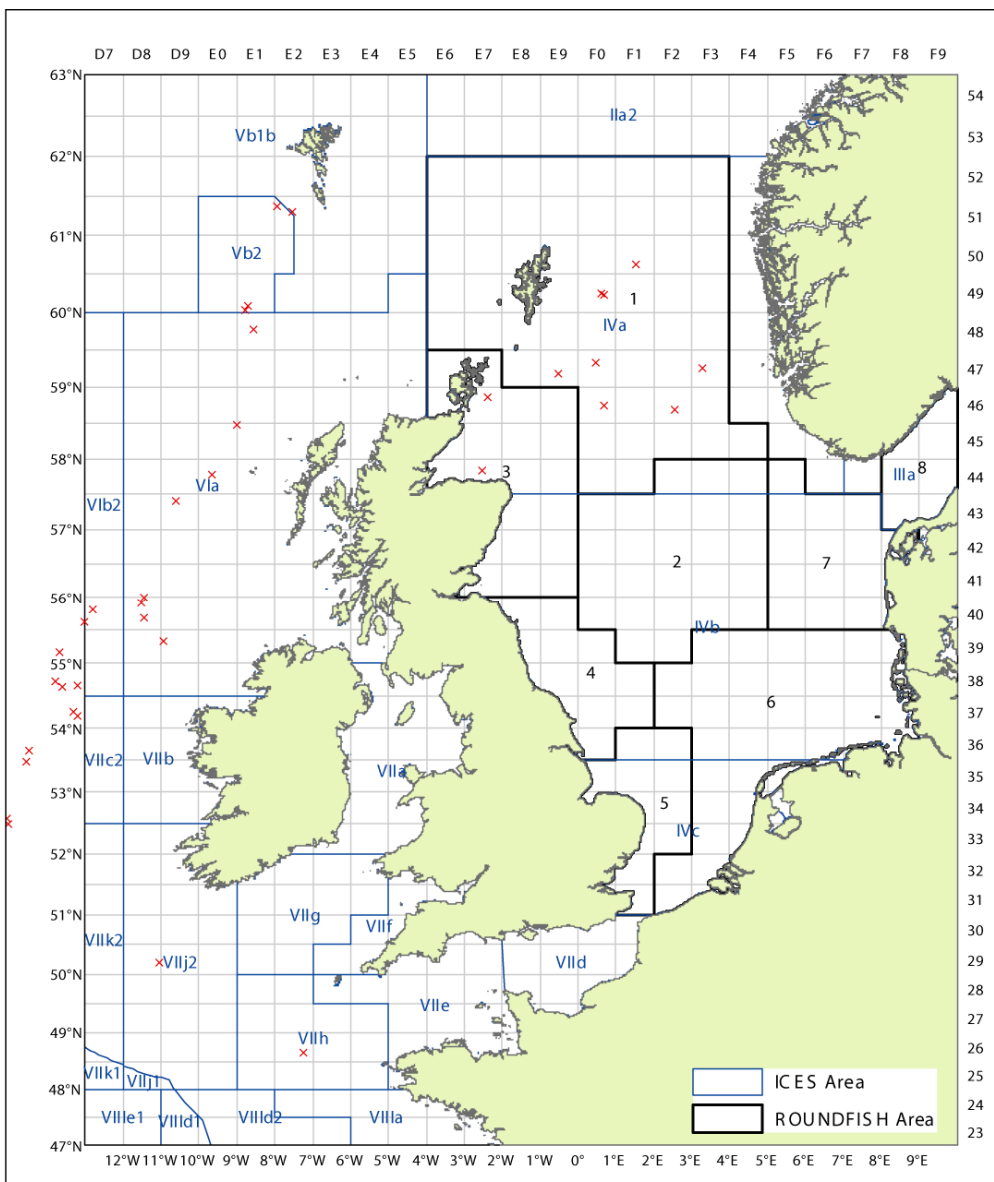
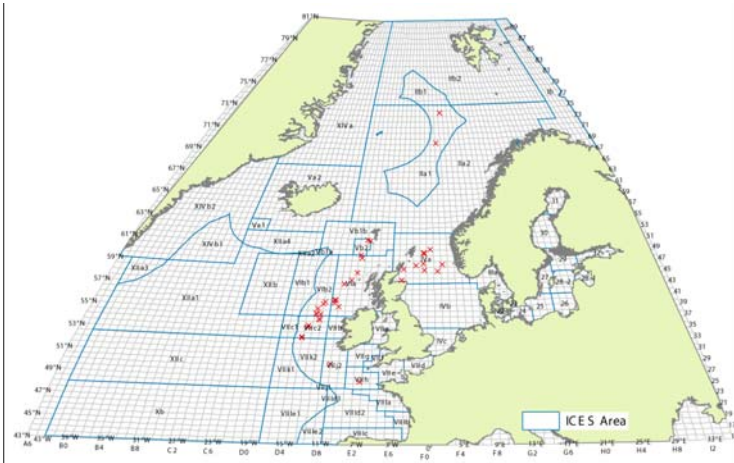
2760
2854
12182

total numbers of data 17796

Micromesistius poutassou



Geographical distribution of data used for calculating the length-weight relationship



Micromesistius poutassou



Quarter: 1 - 4

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0024

b = 3.2288

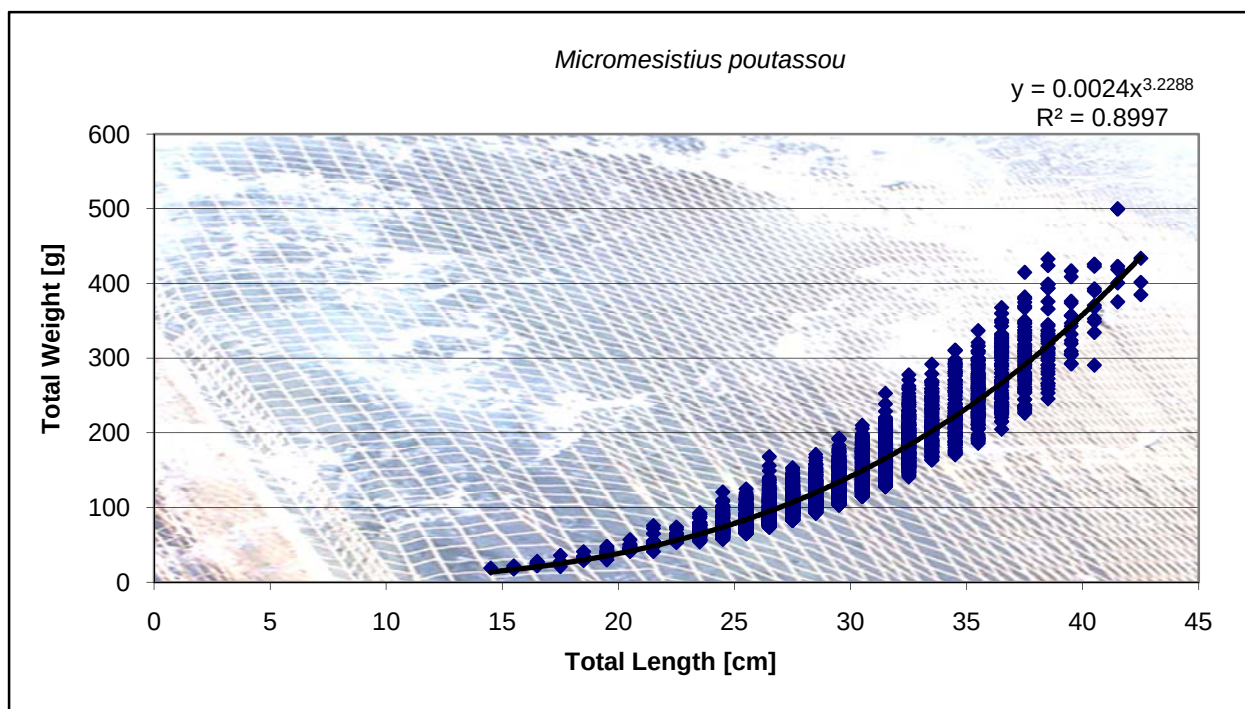
data collected

time period : 2003 - 2008

data source : research vessel, commercial trawler

numbers of data:

Quarter																				
1	2	3	4																	
2498	553	276	22																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
18	636	1844	377	176	-	1	-	275	22	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	275	-	39	267	1606	1162	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	275	-	-	-	-	-	29	10	-	-	267	994	612	-	-	685	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	22	121	334	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
28	-	11	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

14.5 [cm]
42.5 [cm]

male
female
undefined

total numbers of data 3349



Micromesistius poutassou



Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0029

b = 3.1651

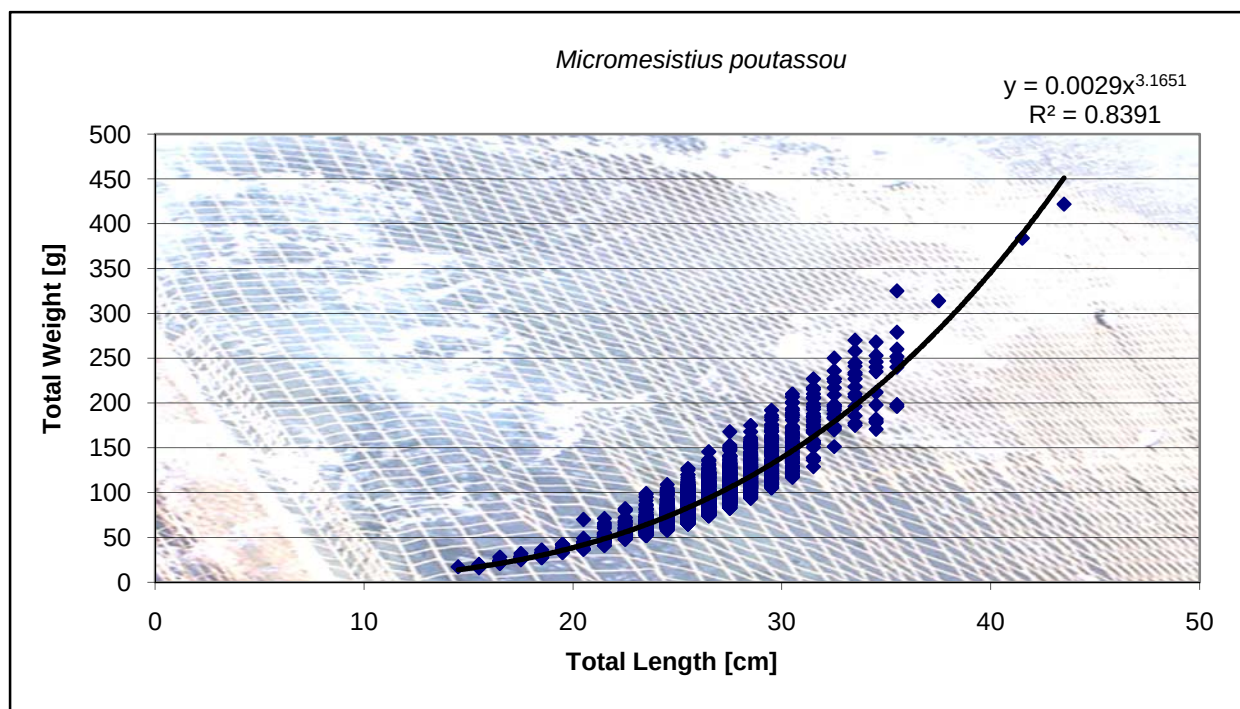
data collected

time period : 2003 - 2009

data source : research vessel, commercial trawler

numbers of data:

Numbers of catch																				
Quarter																				
1	2	3	4																	
2383	492	161	30																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
26	400	1957	400	92	-	-	-	161	30	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	161	-	50	160	1777	918	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	161	-	-	-	-	-	45	5	-	-	160	1039	738	-	-	588	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	30	70	230	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
40	-	10	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

14.5 [cm]
43.5 [cm]

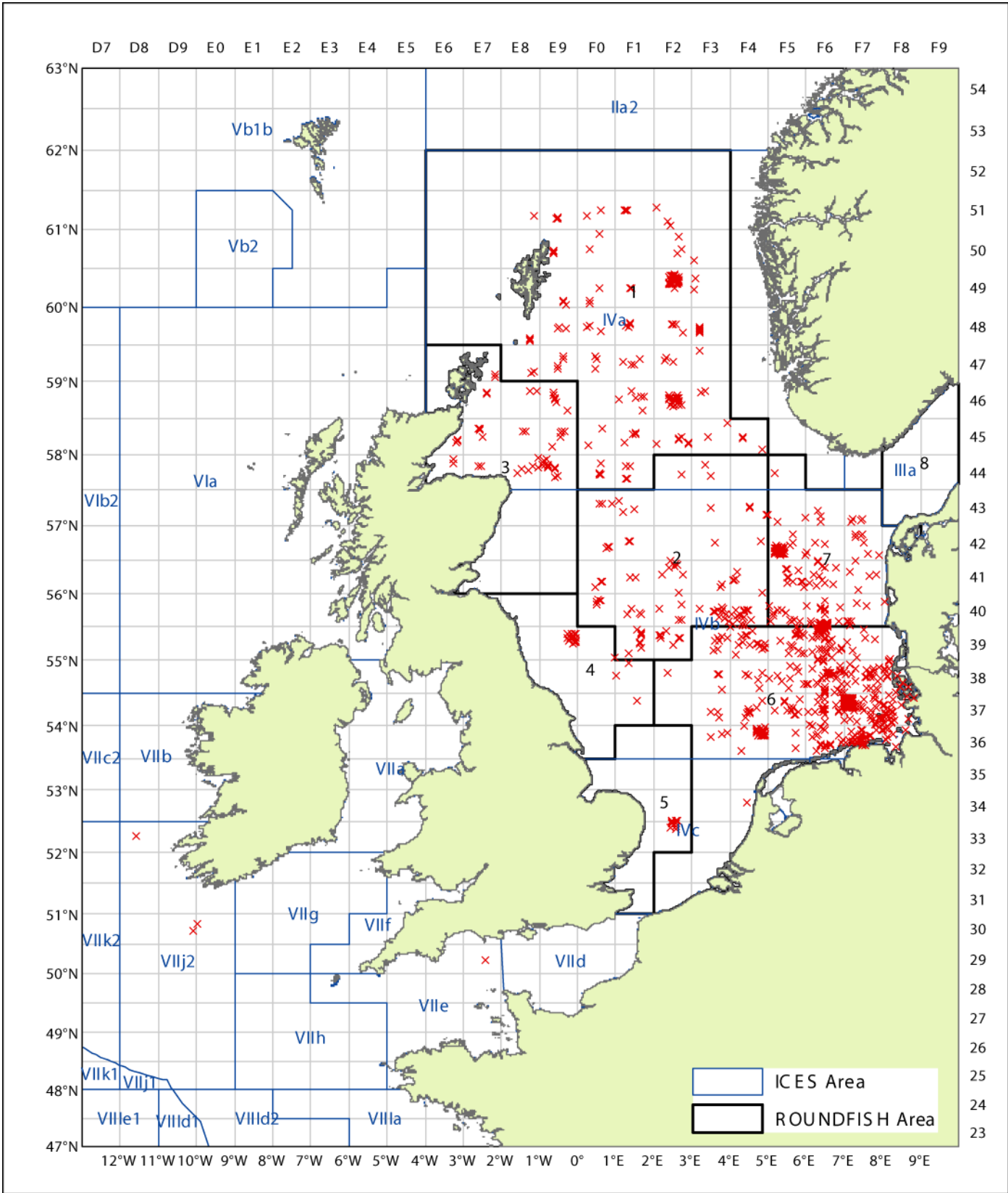
male
female
undefined

3066
-
-

total numbers of data 3066

Microstomus kitt

Geographical distribution of data used for calculating the length-weight relationship



Microstomus kitt

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0106

b = 2.9904

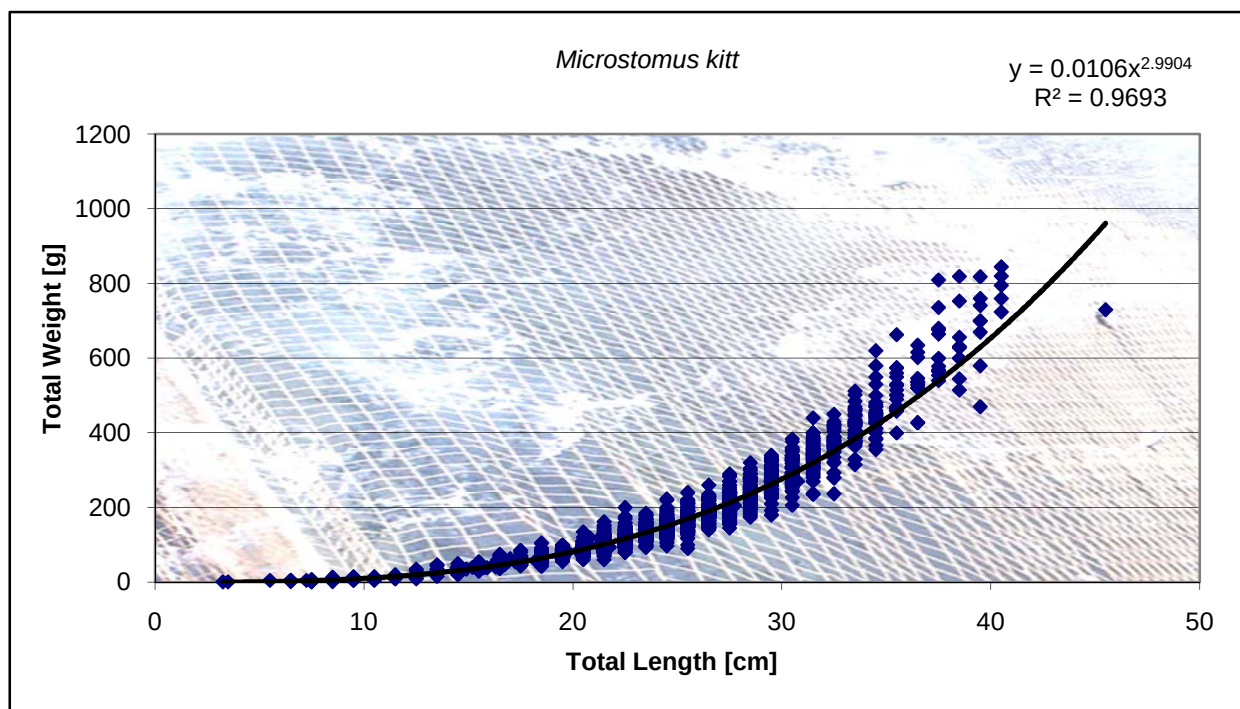
data collected

time period : 1997 - 2008

data source : research vessel

numbers of data:

Numbers of salmon																			
Quarter																			
1	2	3	4																
1274	57	1002	65																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
661	608	5	6	34	17	429	546	27	4	32	29								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	2394	-	-	4	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	1083	1299	12	-	-	-	-	-	-	-	-	1	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	3	-	-	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
649	291	483	46	13	663	249	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- 1/2 cm below, cm below
- min length
- max length

3.25 [cm]

45.5 [cm]

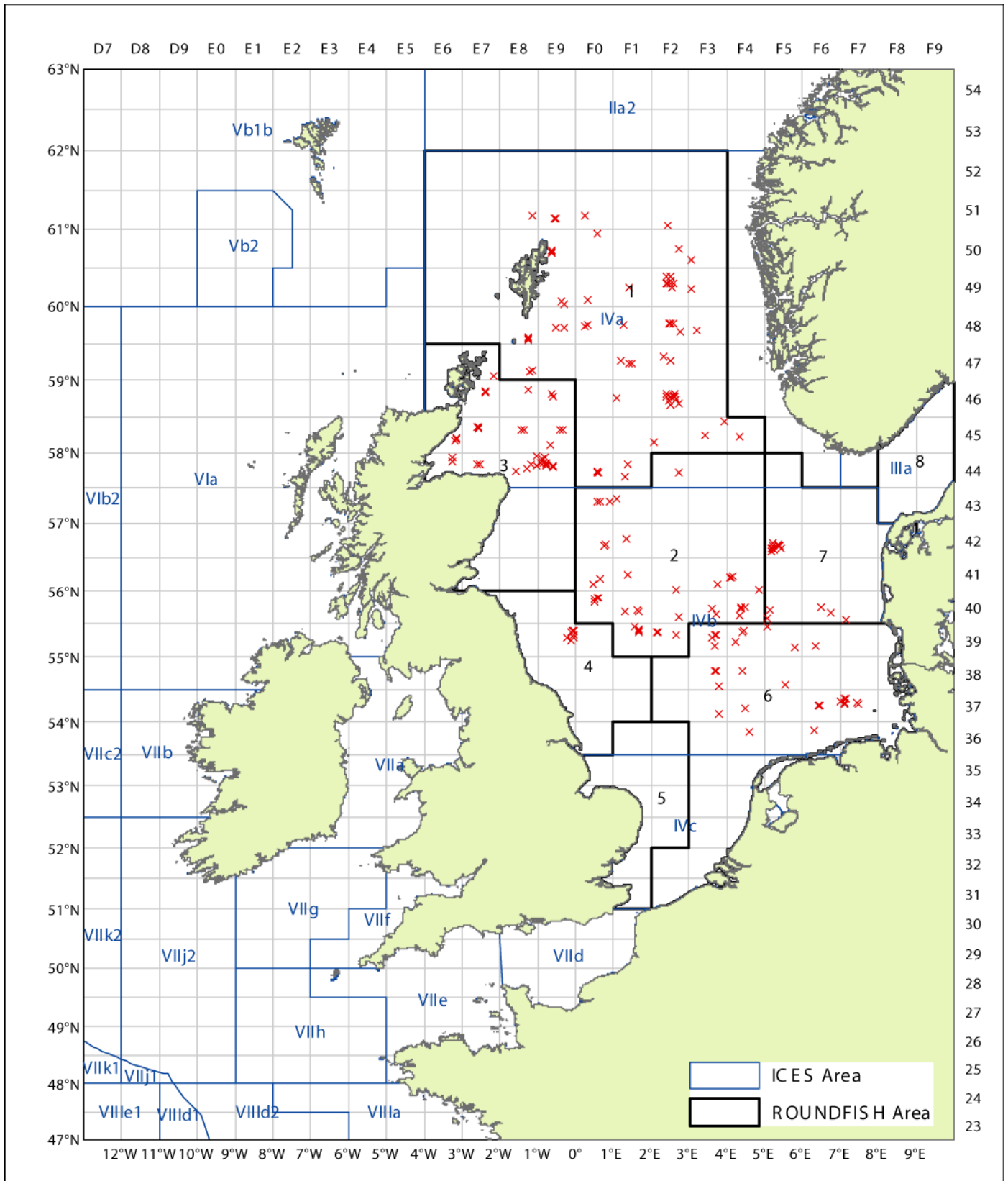
male 674
female 817
undefined 907

total numbers of data 2398

Microstomus kitt



Geographical distribution of data used for calculating the length-weight relationship



Microstomus kitt



Quarter: 1 ; 3

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0085

b = 3.0626

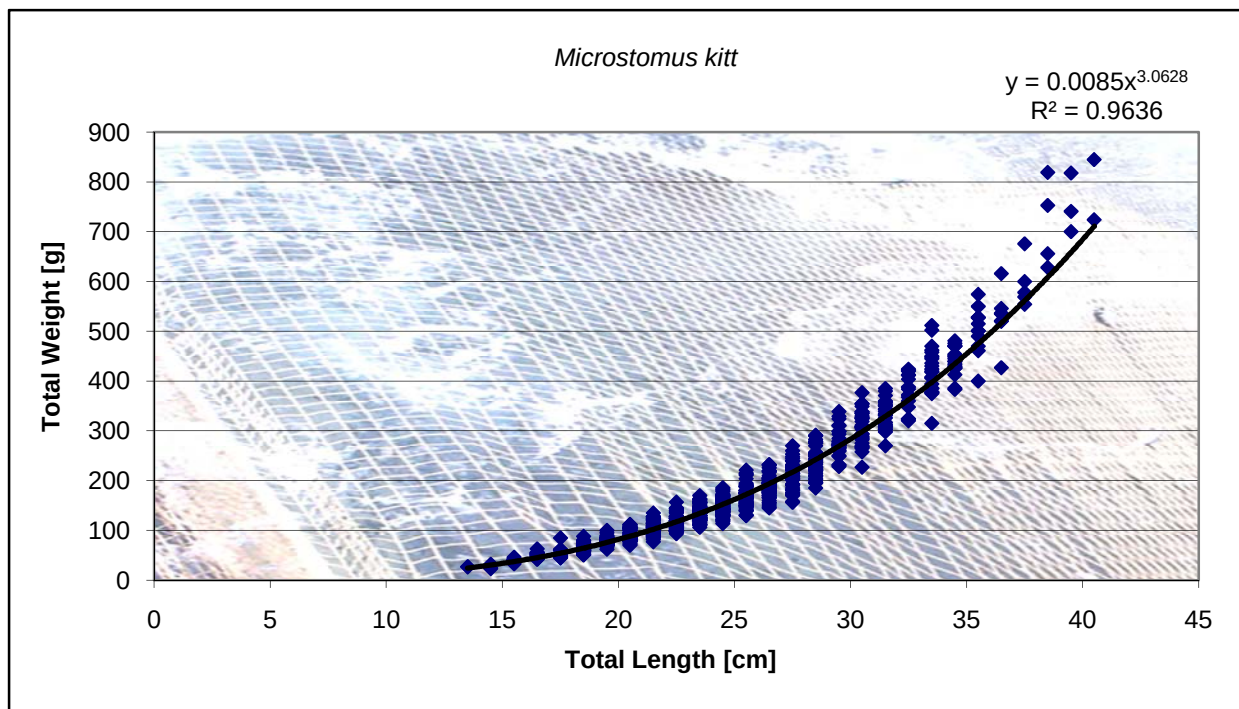
data collected

time period : 2003 - 2008

data source : research vessel

numbers of data:

Numbers by Quarter																				
Quarter																				
1	2	3	4																	
495	-	394	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
226	269	-	-	-	-	134	260	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	889	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	509	380	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
300	107	244	15	-	162	61	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

13.5 [cm]
40.5 [cm]

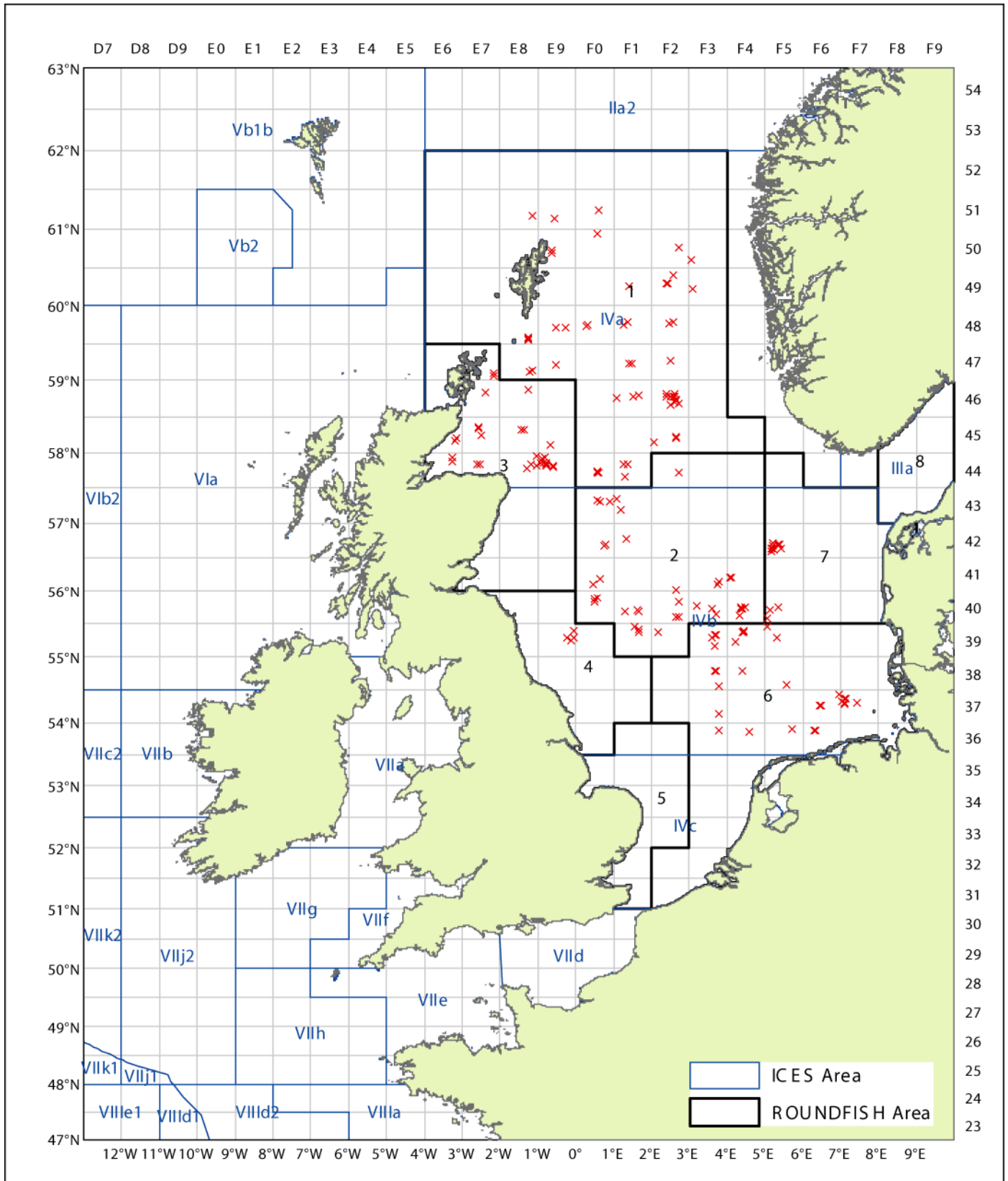
male
female
undefined

-
889
-

total numbers of data 889

Microstomus kitt ♂

Geographical distribution of data used for calculating the length-weight relationship



Microstomus kitt



Quarter: 1 ; 3

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0107

b = 2.9673

data collected

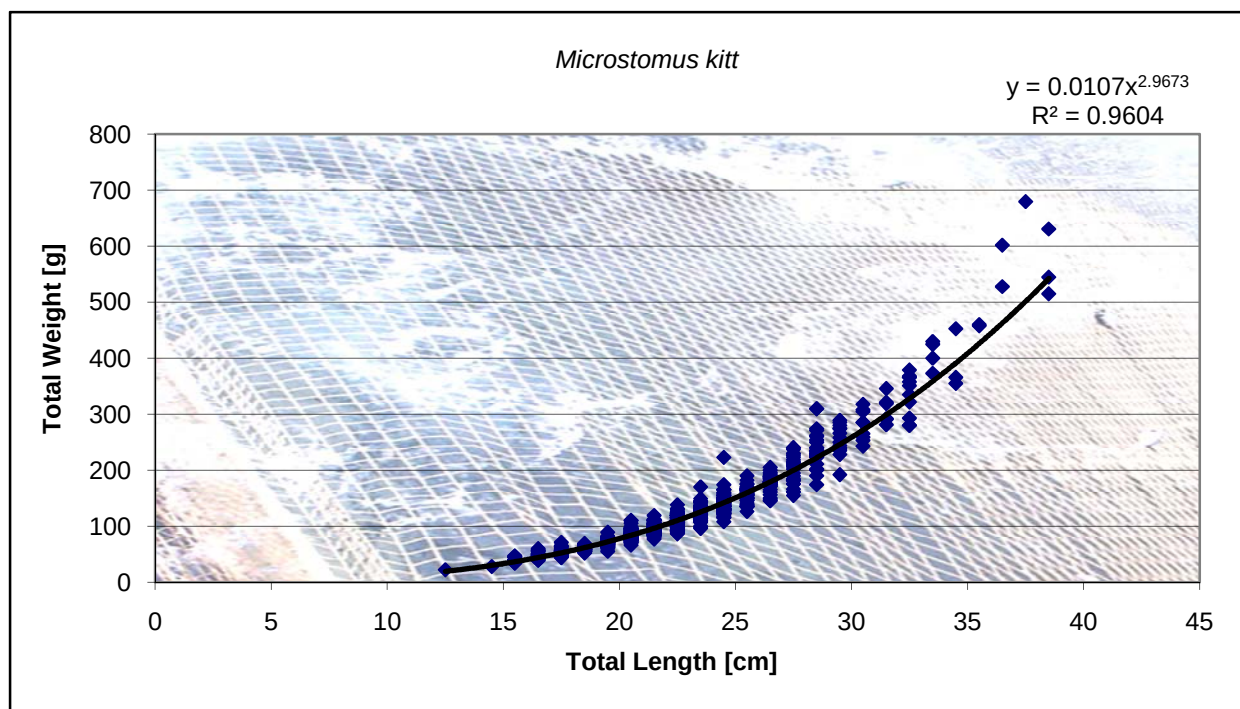
time period : 2003 - 2008

data source : research vessel

numbers of data:

Numbers of data.

Quarter																			
1	2	3	4																
391	-	338	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
218	173	-	-	-	-	115	223	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	729	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	394	335	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
211	140	206	8	-	100	64	-	-											
-	-	-	-	-	-	-	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

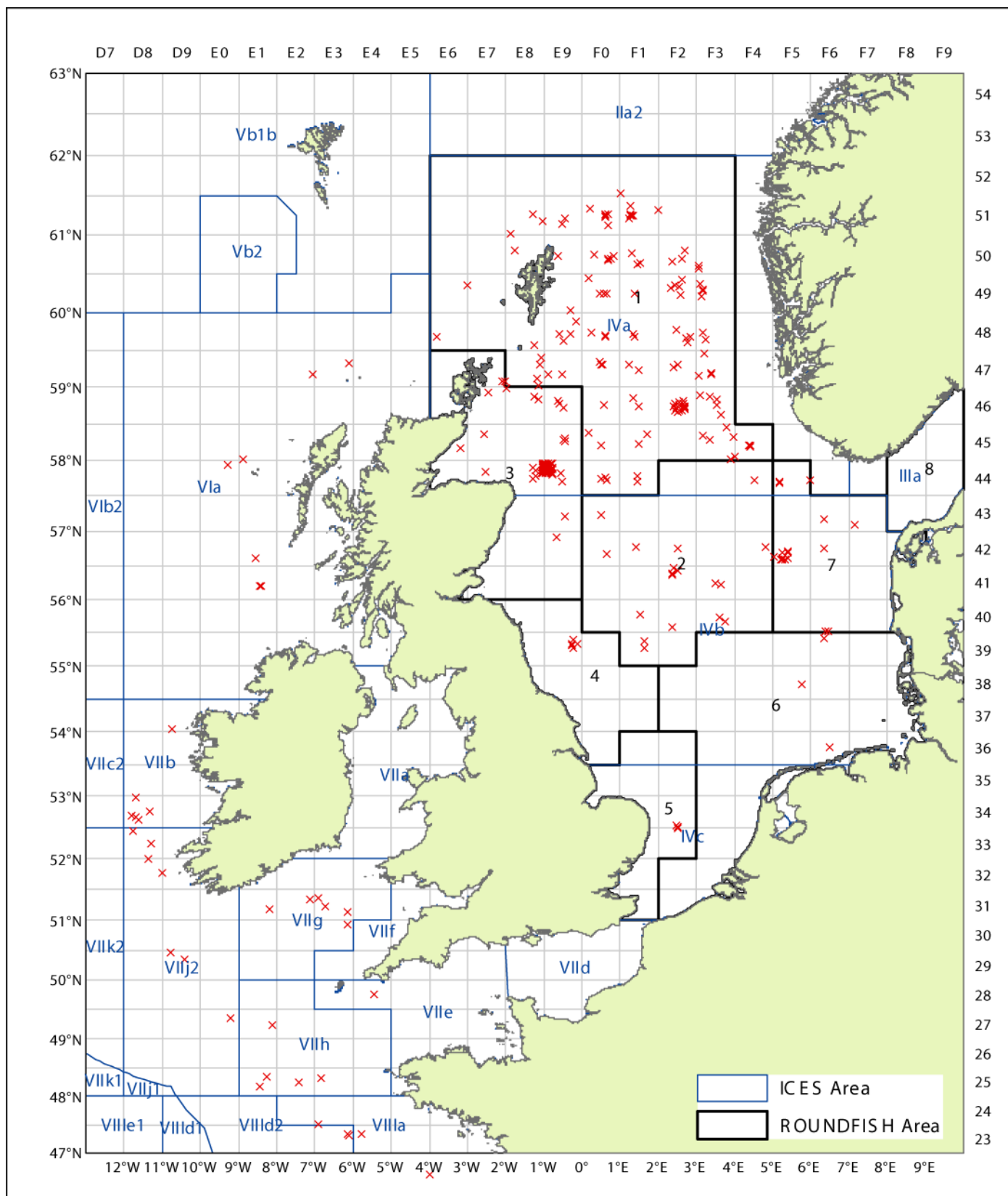
12.5 [cm]
38.5 [cm]

male 729
female -
undefined -

total numbers of data 729

Molva molva

Geographical distribution of data used for calculating the length-weight relationship



Molva molva

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0031

b = 3.1396

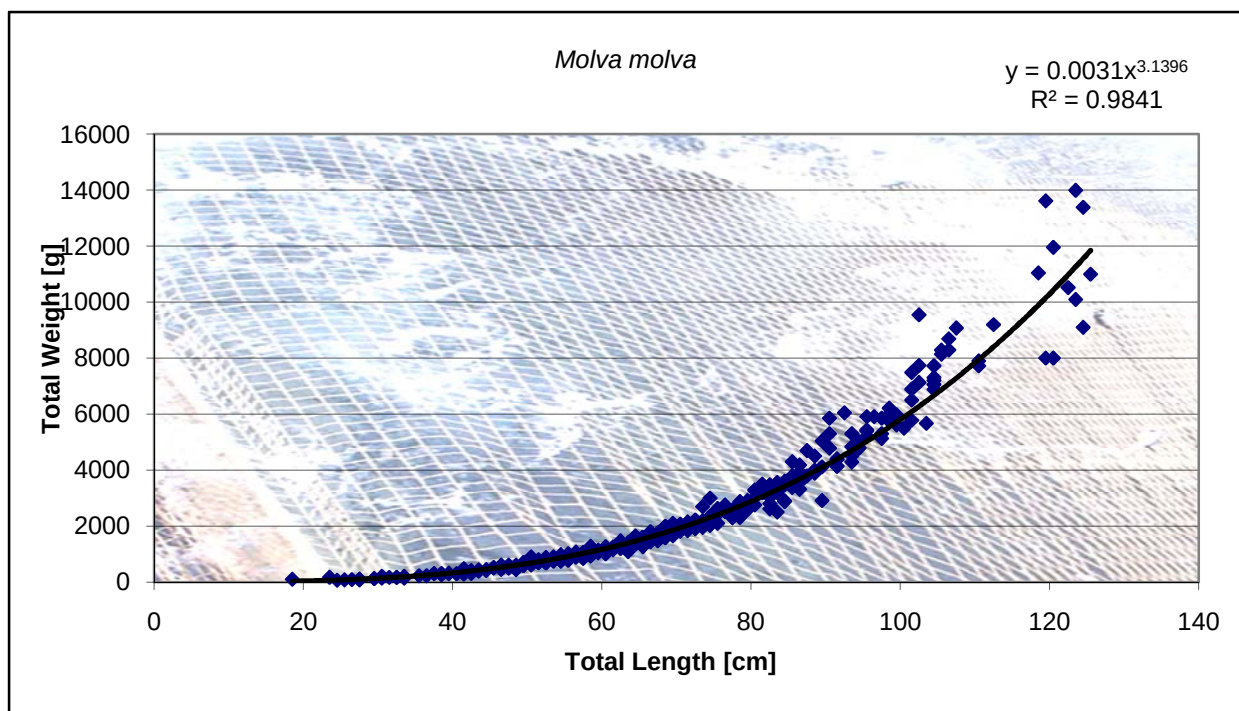
data collected

time period : 1991 - 2006

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
221	74	74	19																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
38	137	46	12	27	35	45	28	1	-	19	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	351	-	7	25	5	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	296	52	3	-	-	7	-	-	6	-	-	1	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
6	5	7	-	3	-	-	2	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
226	20	74	5	4	4	18	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

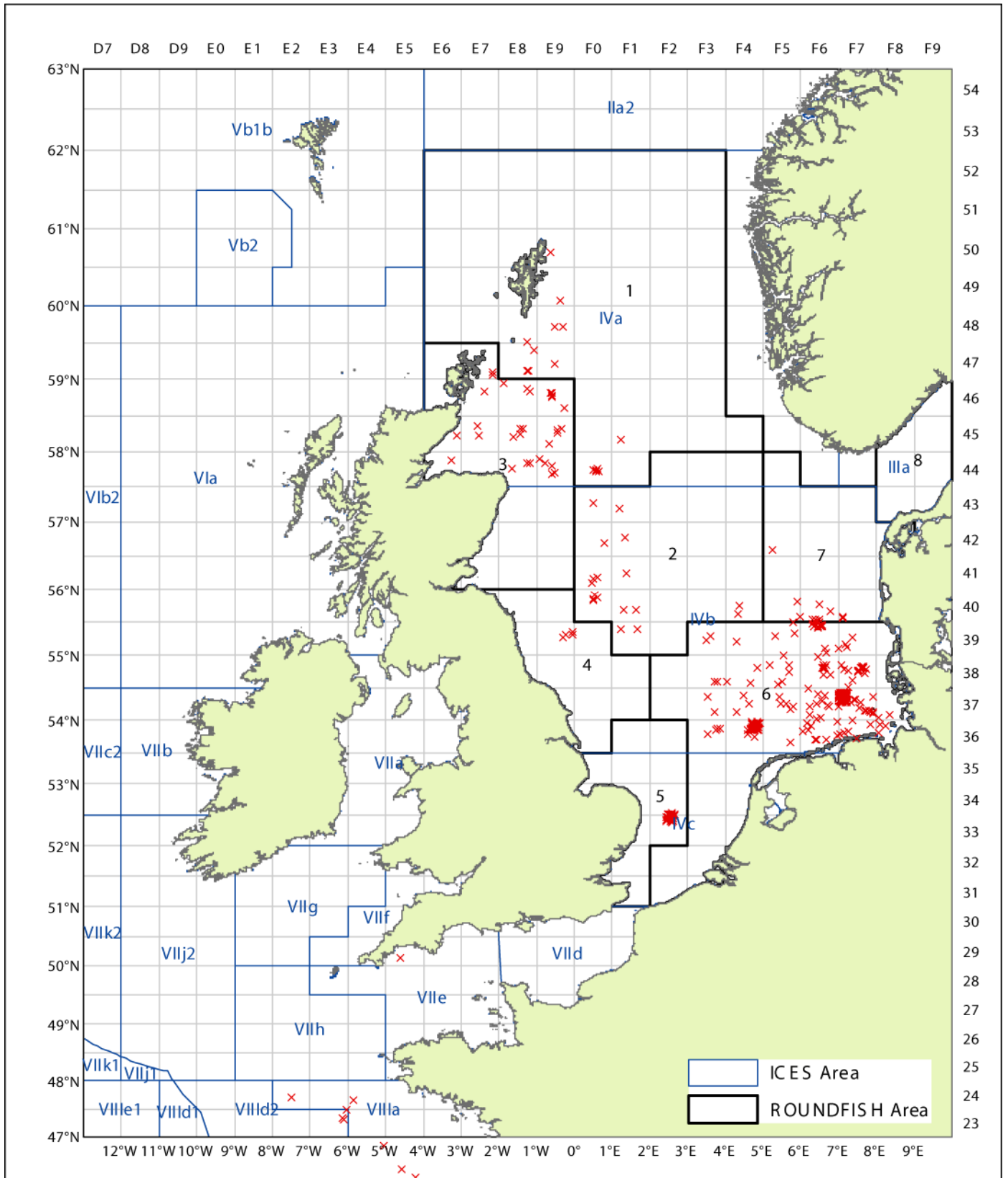
18.5 [cm]
125.5 [cm]

male 34
female 15
undefined 339

total numbers of data 388

Mullus surmuletus

Geographical distribution of data used for calculating the length-weight relationship



Mullus surmuletus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0149

b = 2.9185

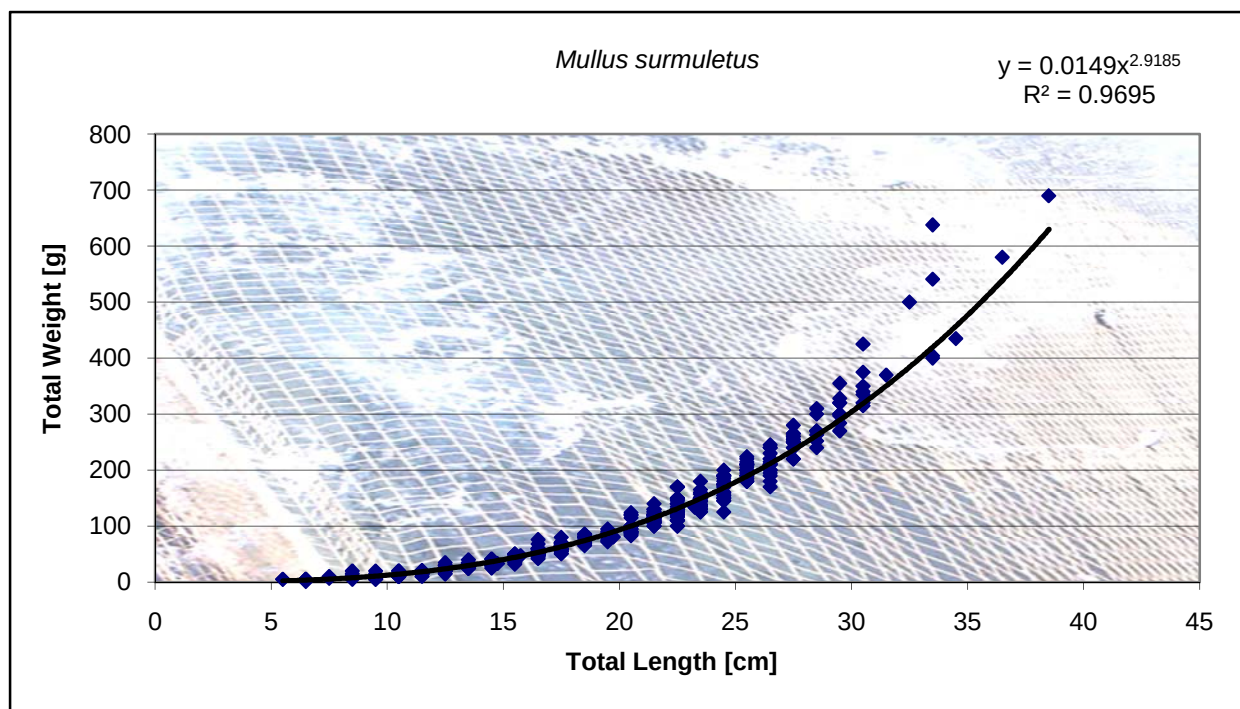
data collected

time period : 1993 - 2008

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
123	32	183	42																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
68	51	4	7	5	20	105	75	3	7	20	15								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	369	-	-	2	9	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	61	290	18	-	-	-	-	-	-	-	-	1	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	1	-	4	2	-	3	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
23	22	44	4	25	239	12	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

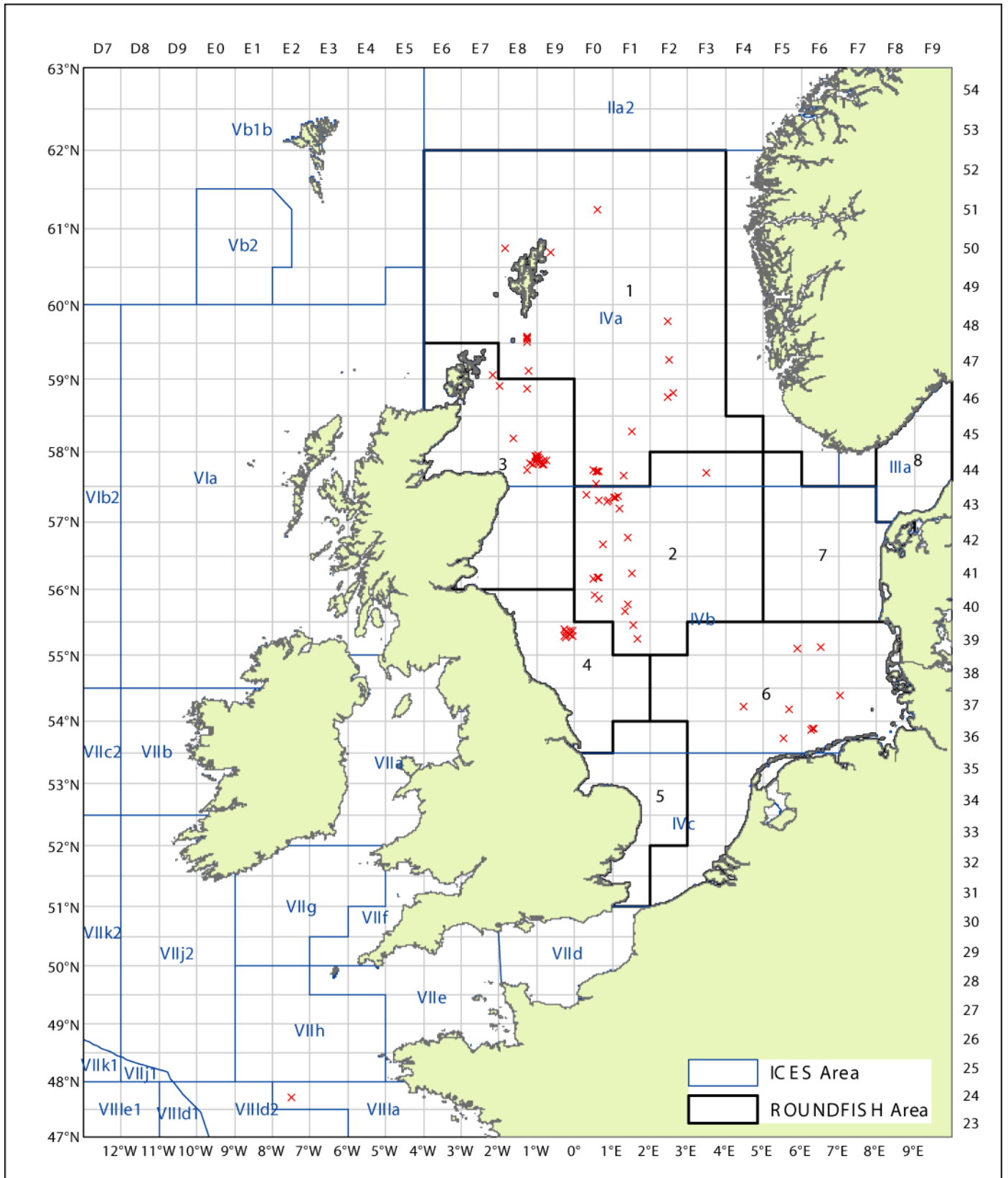
5.5 [cm]
38.5 [cm]

male 10
female 4
undefined 366

total numbers of data 380

Mustelus asterias

Geographical distribution of data used for calculating the length-weight relationship



Mustelus asterias

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0016

b = 3.1753

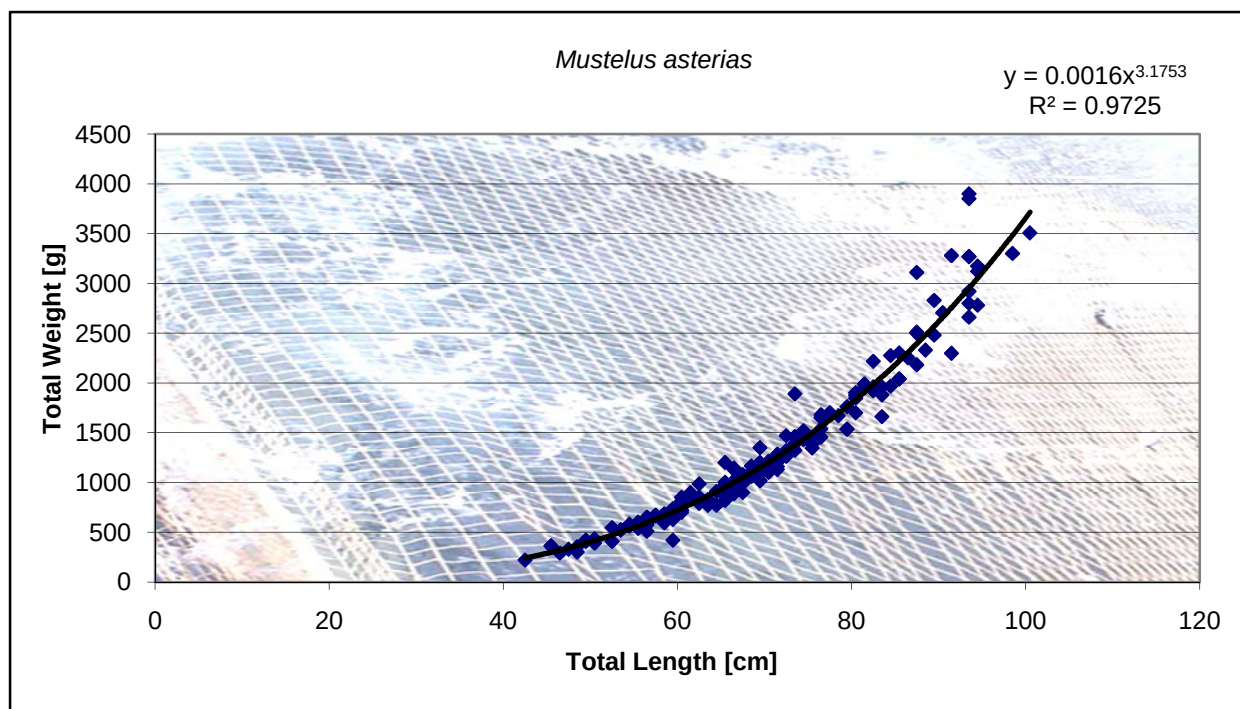
data collected

time period : 1984 - 2008

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
134	26	11	7																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
79	54	1	-	13	13	7	4	-	-	7	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	177	-	-	-	1	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	103	74	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	1	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
78	44	30	11	-	14	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

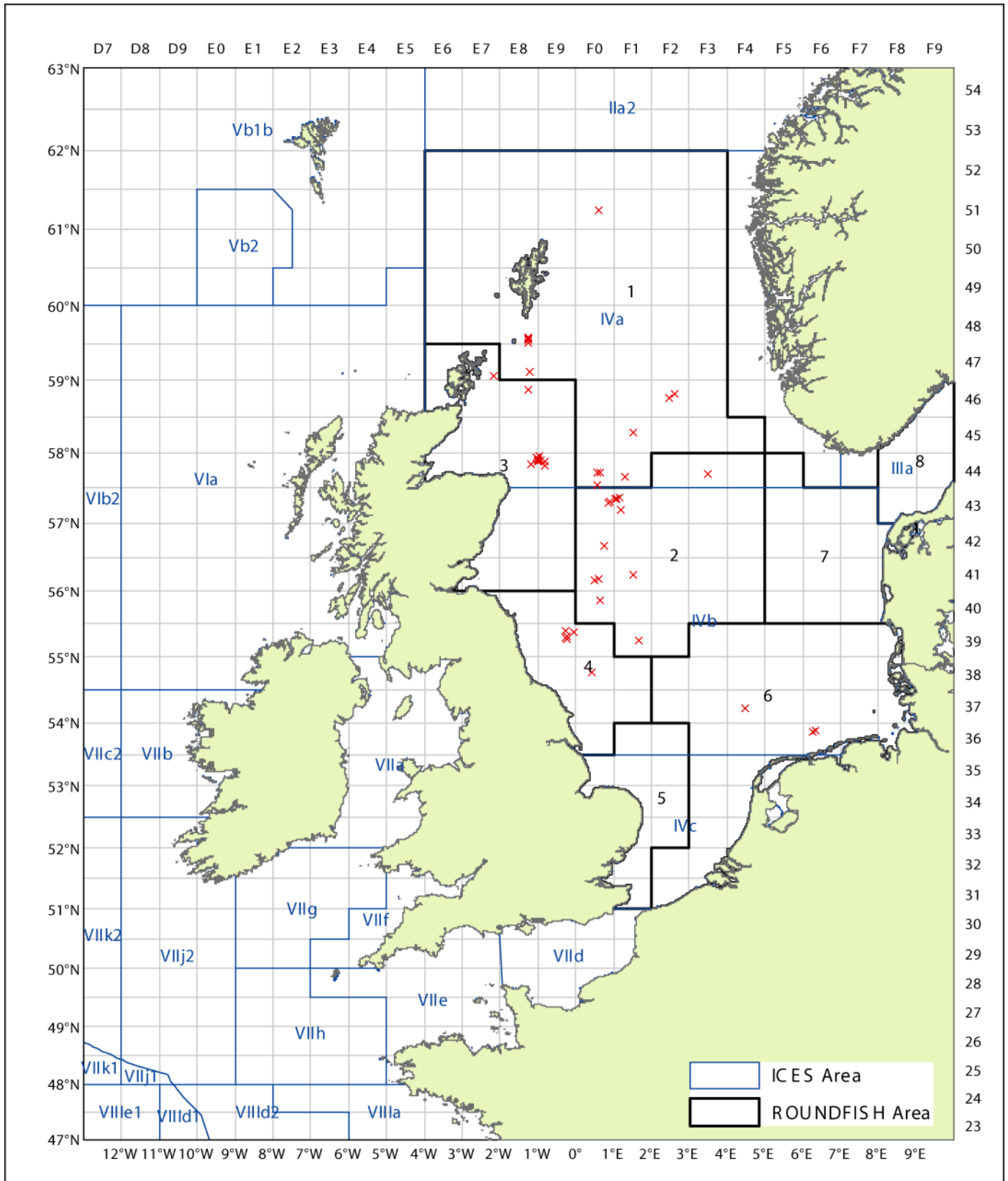
42.5 [cm]
100.5 [cm]

male 75
female 94
undefined 9

total numbers of data 178

Mustelus asterias ♀

Geographical distribution of data used for calculating the length-weight relationship



Mustelus asterias ♀

Quarter: 1 - 4

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0011

b = 3.2651

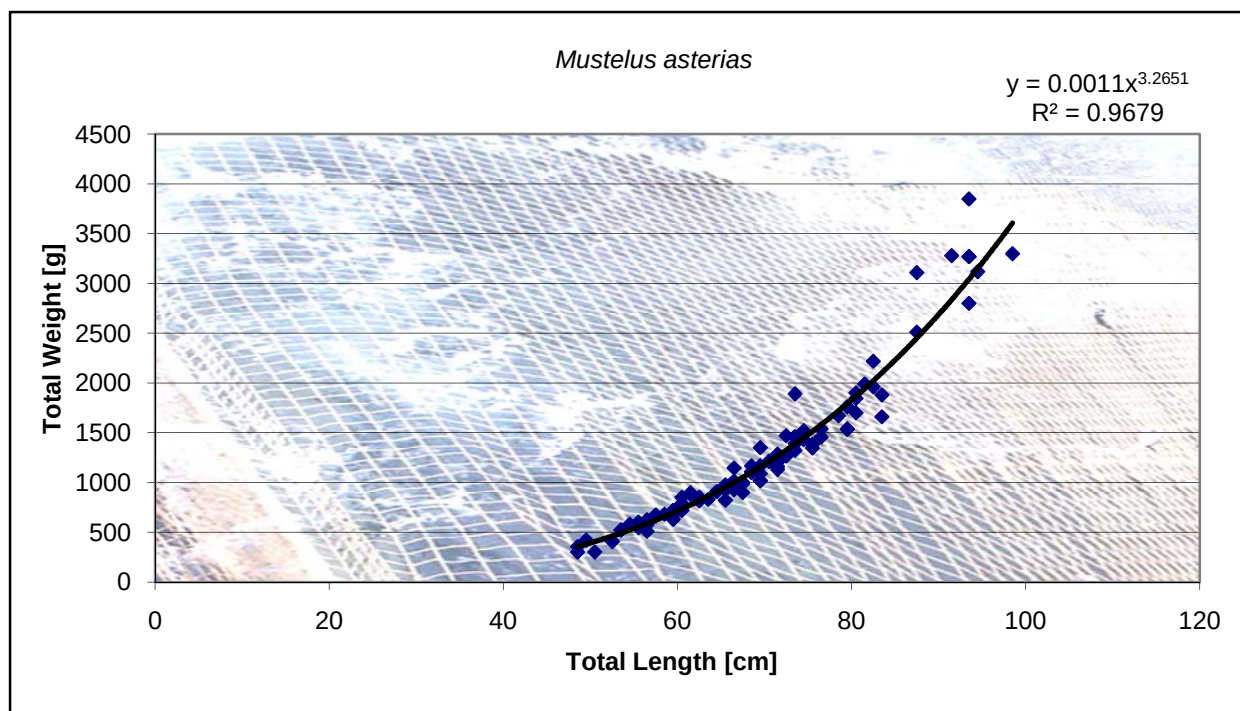
data collected

time period : 1984 - 2008

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
74	15	5	1																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
44	30	-	-	7	8	2	3	-	-	1	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	95	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	58	37	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
46	23	14	7	-	5	-	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

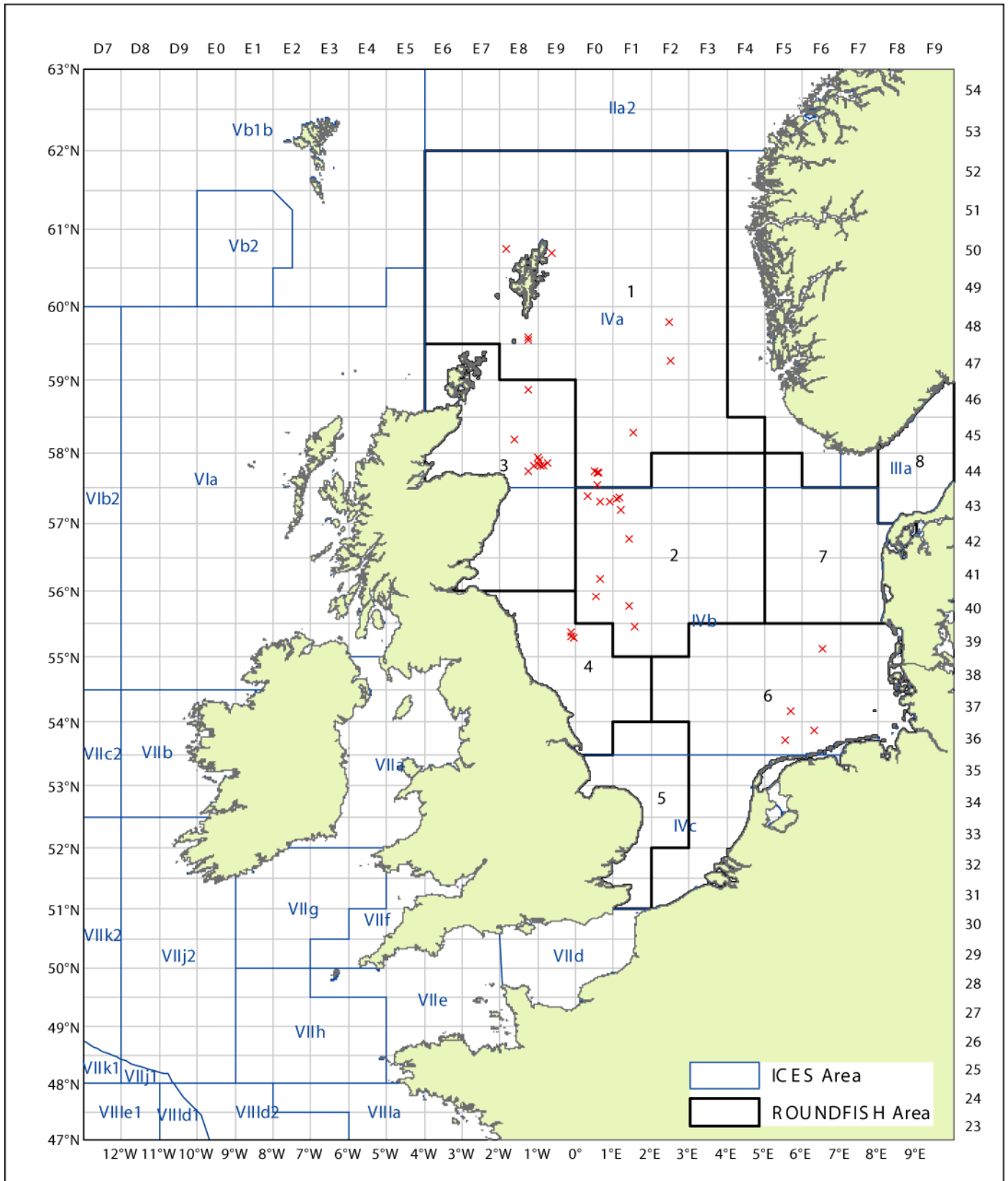
48.5 [cm]
98.5 [cm]

male -
female 95
undefined -

total numbers of data 95

Mustelus asterias ♂

Geographical distribution of data used for calculating the length-weight relationship



Mustelus asterias ♂

Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0023

b = 3.0919

data collected

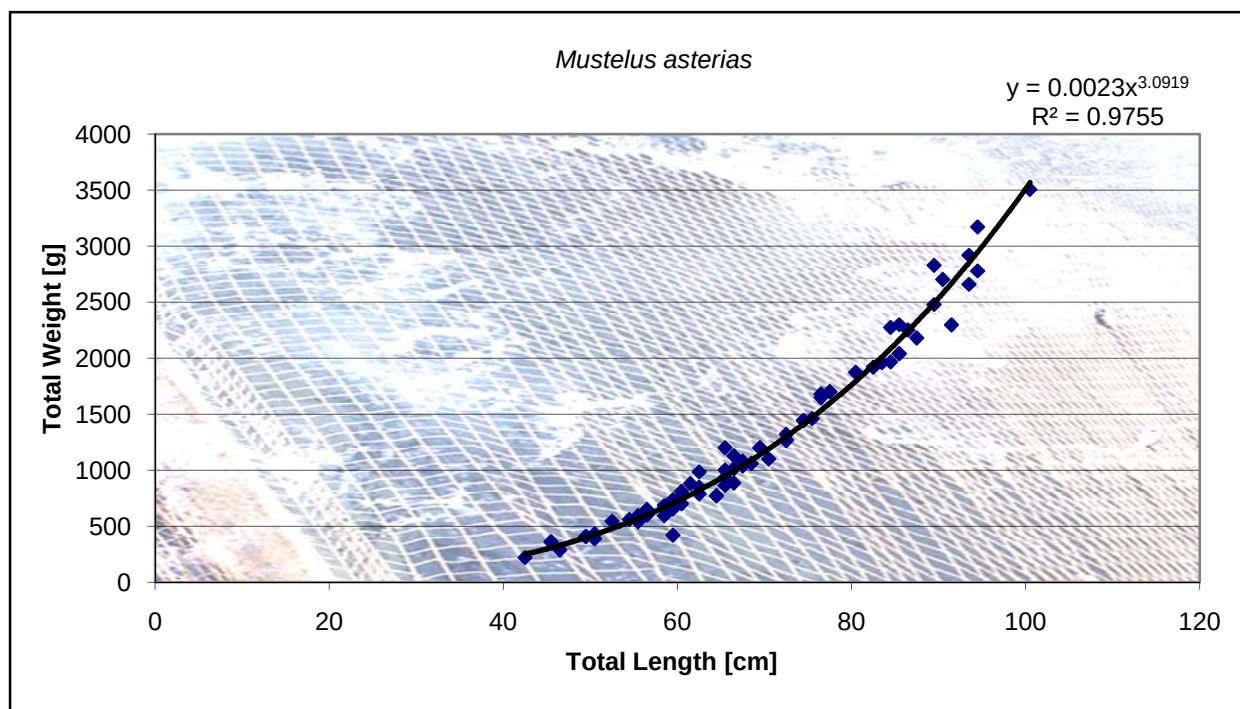
time period : 1992 - 2008

data source : research vessel

numbers of data:

Numbers of data:

Quarter																			
1	2	3	4																
57	9	6	3																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
33	24	-	-	4	5	5	1	-	-	3	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	75	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	42	33	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
32	20	13	3	-	7	-	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

42.5 [cm]
100.5 [cm]

male
female
undefined

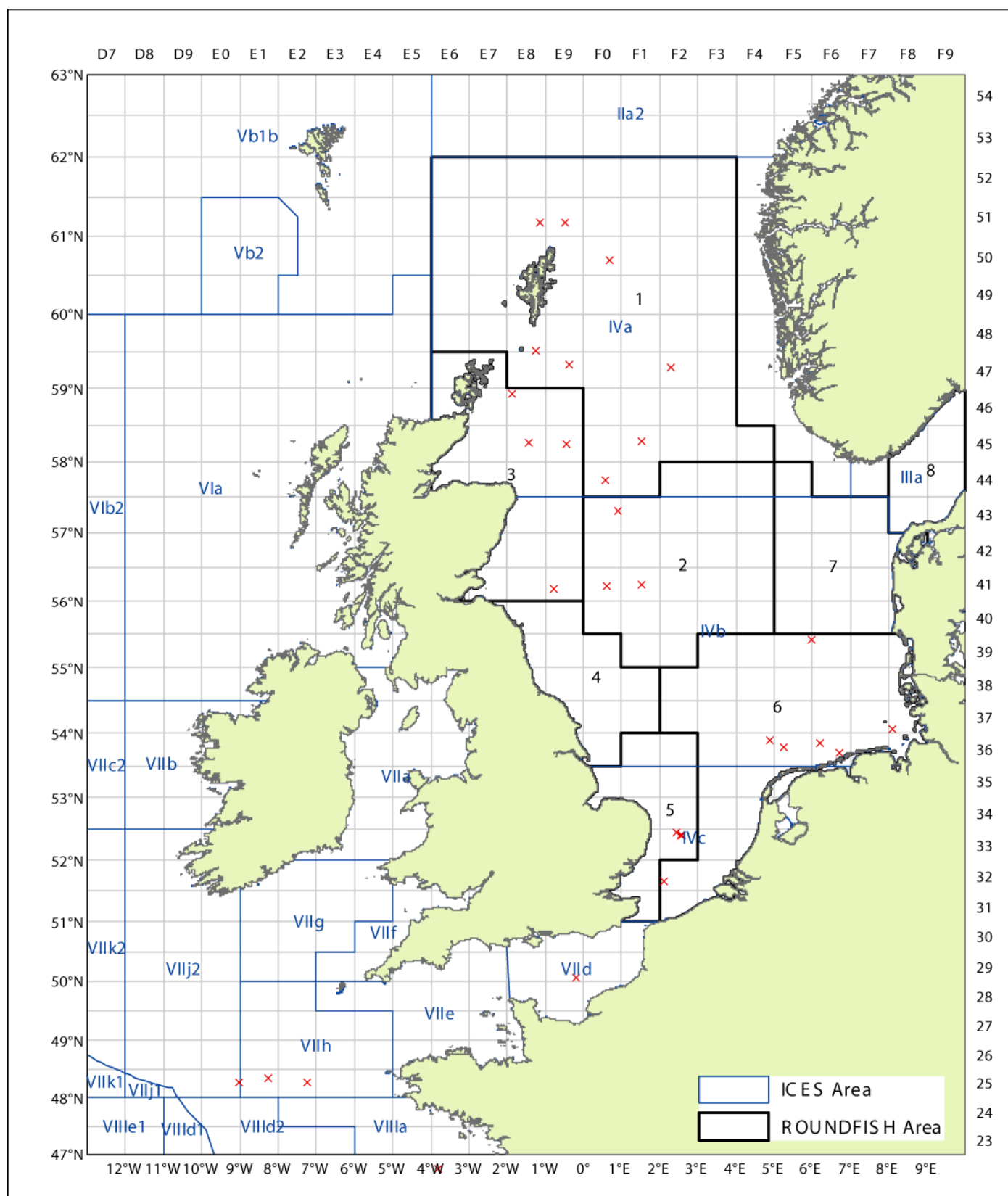
75
-
-

total numbers of data

75

Mustelus mustelus

Geographical distribution of data used for calculating the length-weight relationship



Mustelus mustelus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0033

b = 3.0231

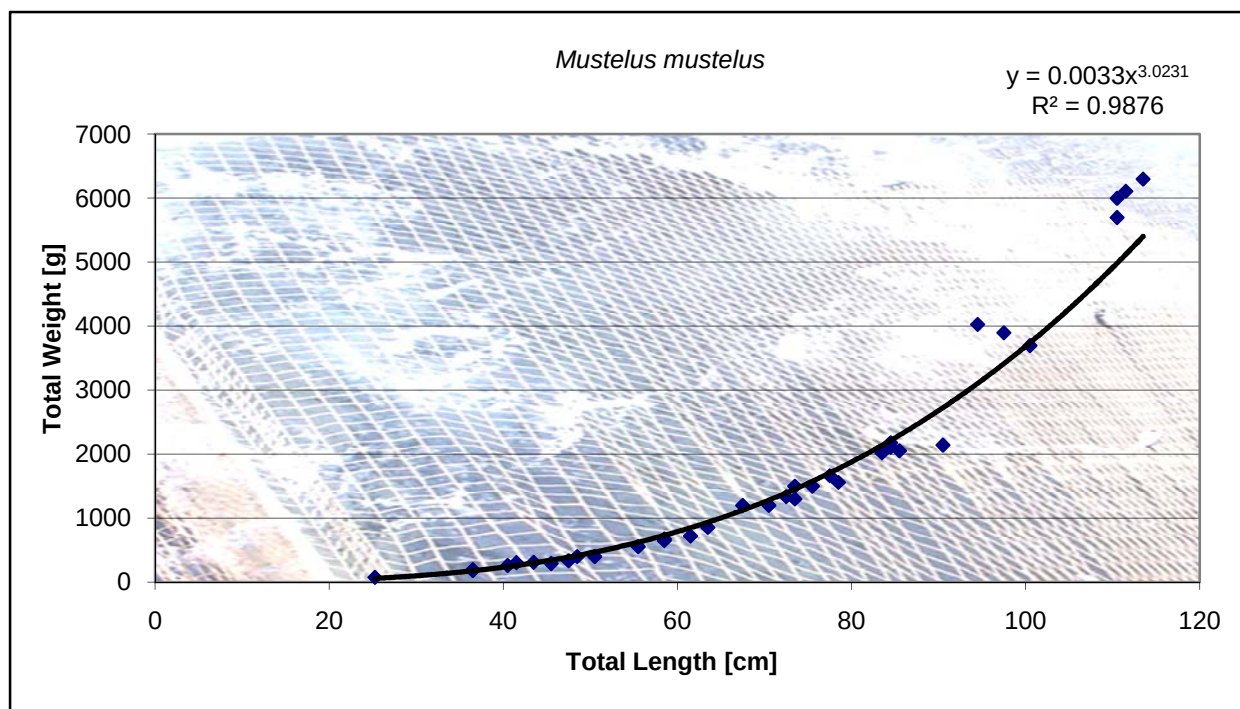
data collected

time period : 1976 - 2008

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
20	3	11	3																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
8	12	-	2	-	1	7	4	-	-	-	3								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	32	-	-	4	1	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	11	17	4	-	-	-	-	-	-	-	1	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	2	1	-	1	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
11	4	3	-	3	11	-	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

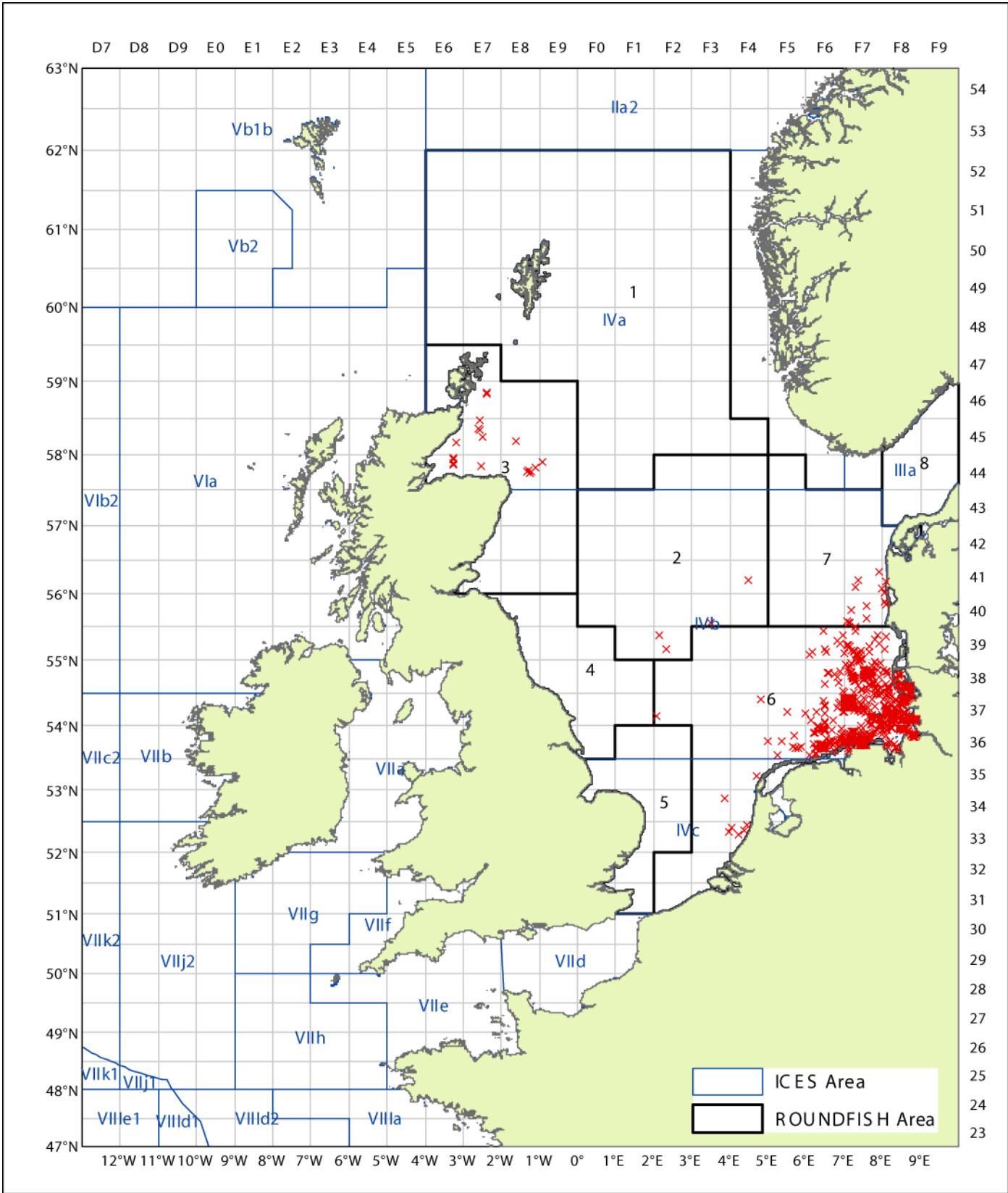
25.5 [cm]
113.5 [cm]

male 12
female 15
undefined 10

total numbers of data 37

Myoxocephalus scorpius

Geographical distribution of data used for calculating the length-weight relationship



Myoxocephalus scorpius

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0114

b = 3.1036

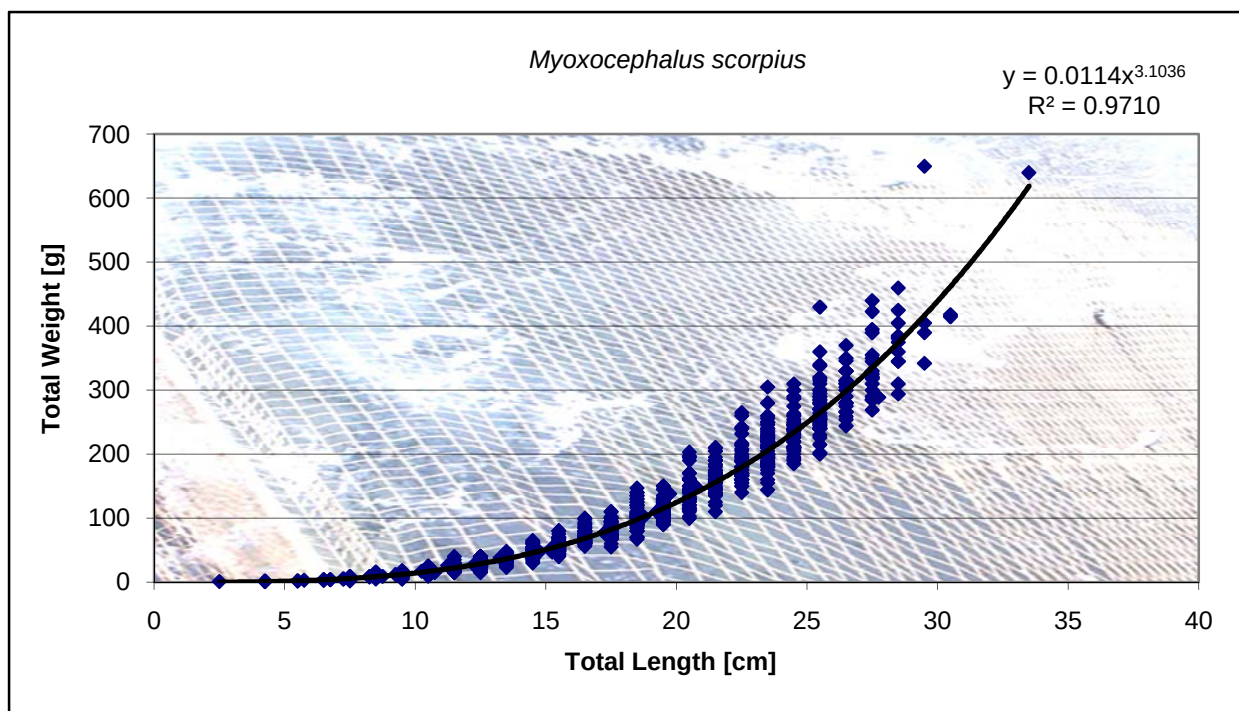
data collected

time period : 1995 - 2008

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
360	205	248	125																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
299	56	5	29	158	18	25	136	87	36	37	52								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	938	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	29	903	6	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	4	30	-	-	894	10	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

2.5 [cm]
33.5 [cm]

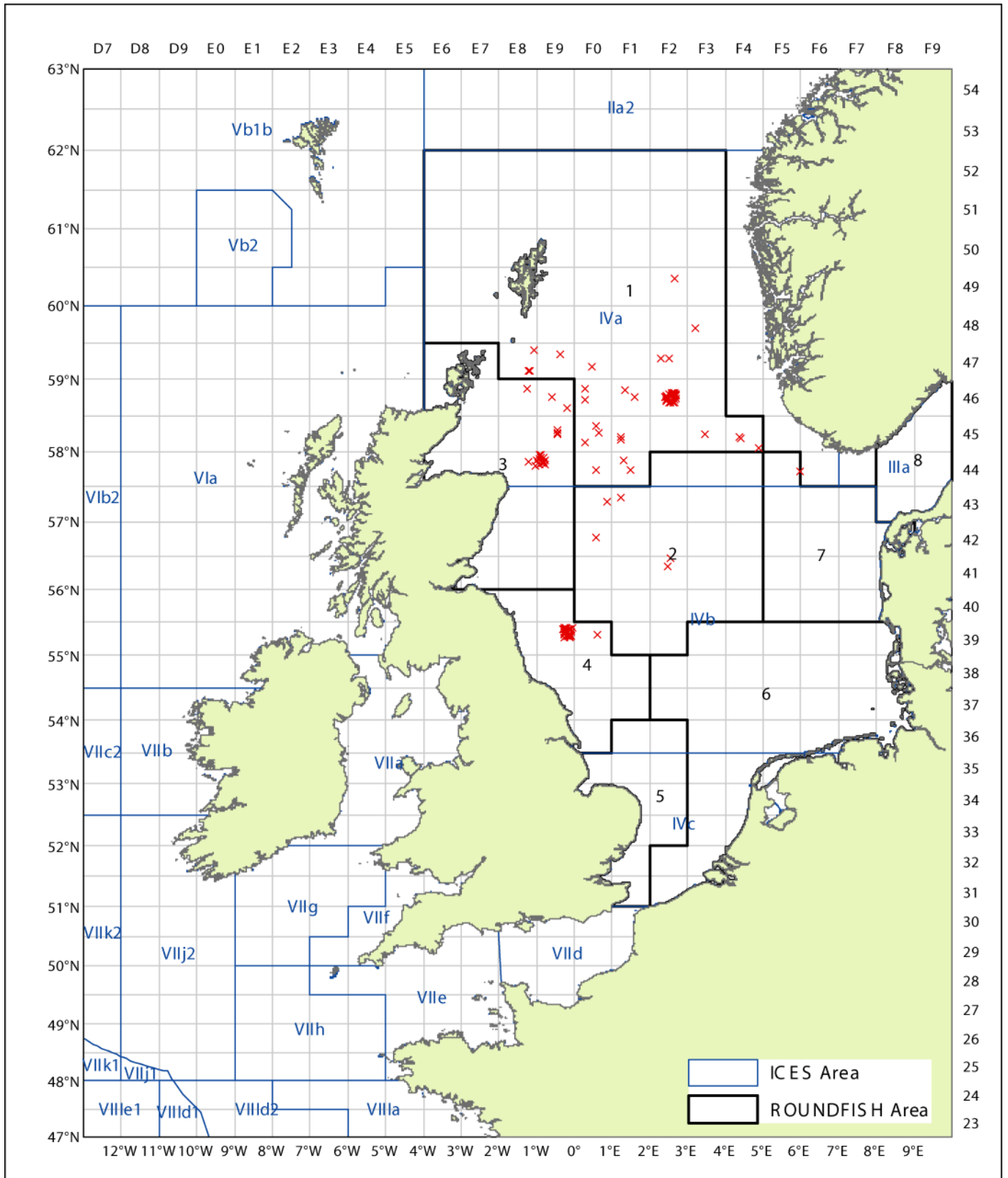
male
female
undefined

9
16
913

total numbers of data 938

Myxine glutinosa

Geographical distribution of data used for calculating the length-weight relationship



Myxine glutinosa

Quarter: 1 - 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0022

b = 2.8357

data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of data:

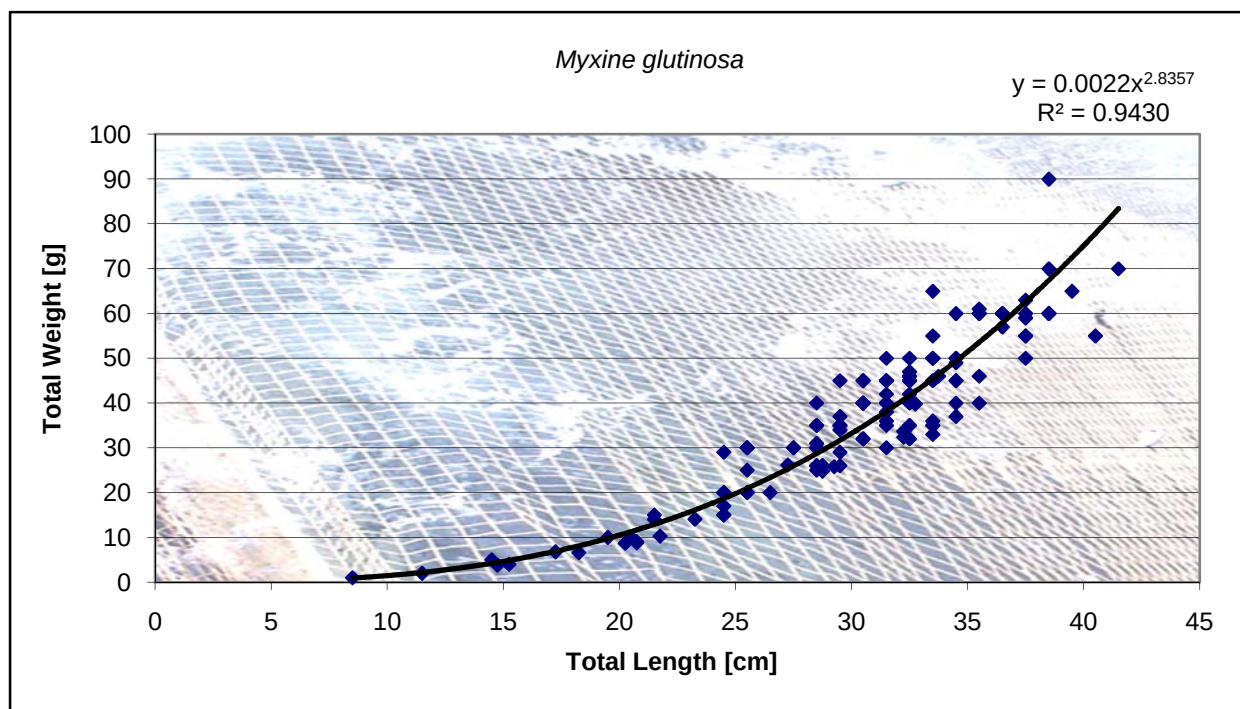
Quarter			
1	2	3	4
35	11	82	-

Month											
1	2	3	4	5	6	7	8	9	10	11	12
11	23	1	-	8	3	49	29	4	-	-	-

Subarea											
1	2	3	4	5	6	7	8	9	10	12	14
-	-	-	128	-	-	-	-	-	-	-	-

Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	97	31	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					

Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
67	5	23	32	-	-	1	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

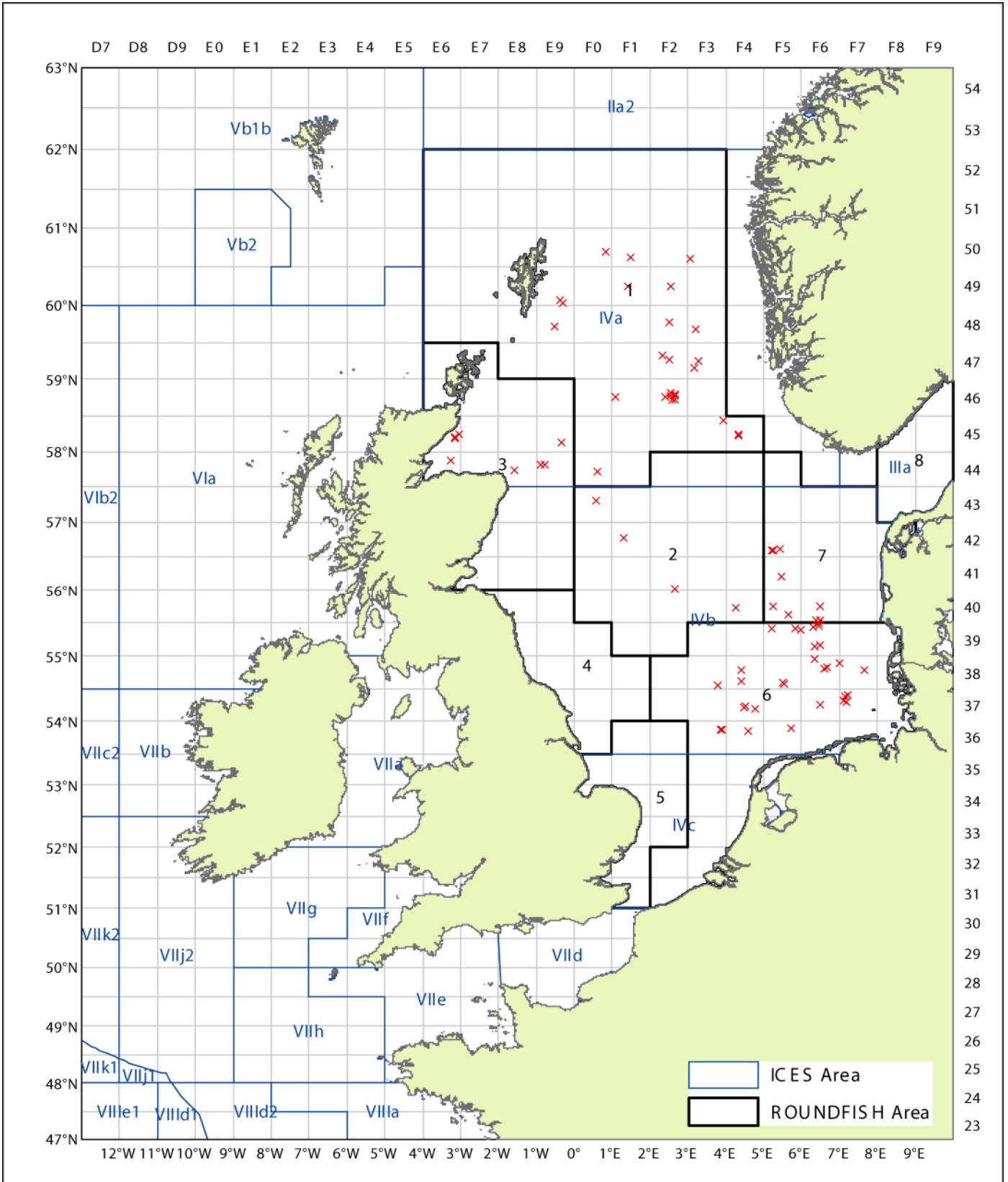
8.5 [cm]
41.5 [cm]

male -
female -
undefined 128

total numbers of data 128

Nephrops norvegicus

Geographical distribution of data used for calculating the length-weight relationship



Nephrops norvegicus

Quarter: 1 ; 3

$$Tw [g] = a * L [mm]^b$$

a = 0.00042

b = 3.11965

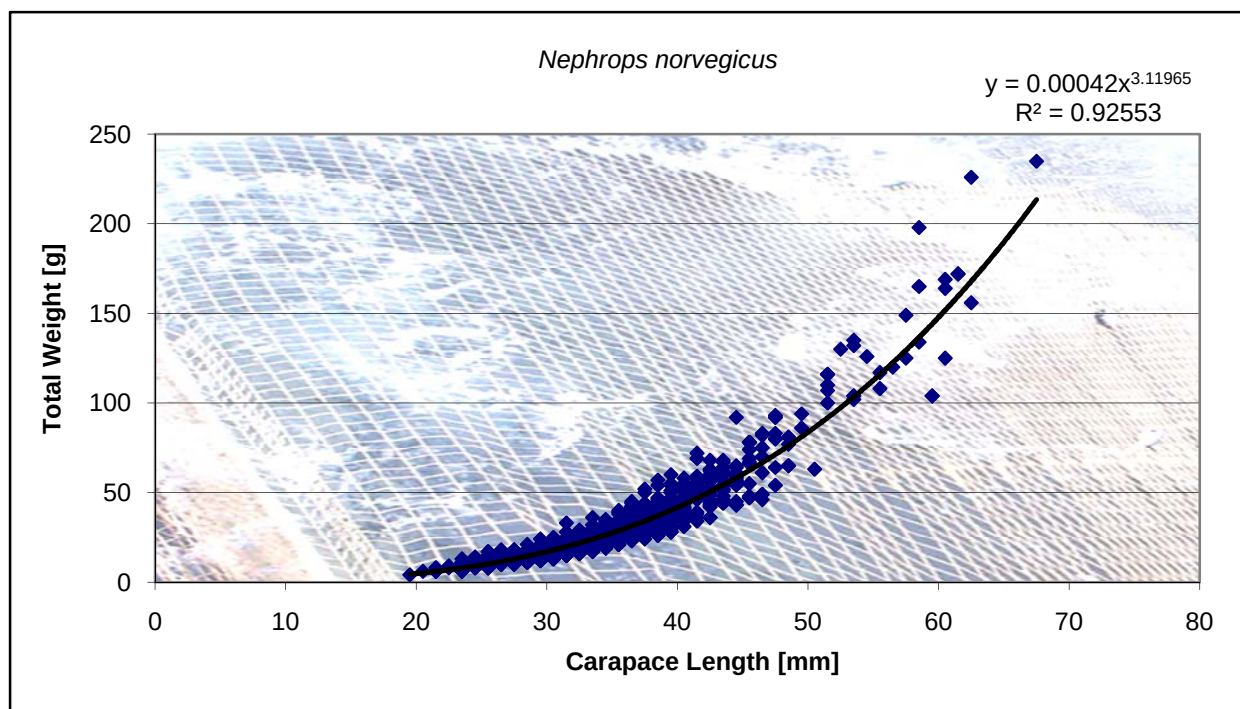
data collected

time period : 2004 - 2009

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
114	-	1220	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
81	33	-	-	-	-	40	1040	140	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1334	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	111	1223	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
88	6	23	-	-	1144	73	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Carapace length
- mm below

min length
max length

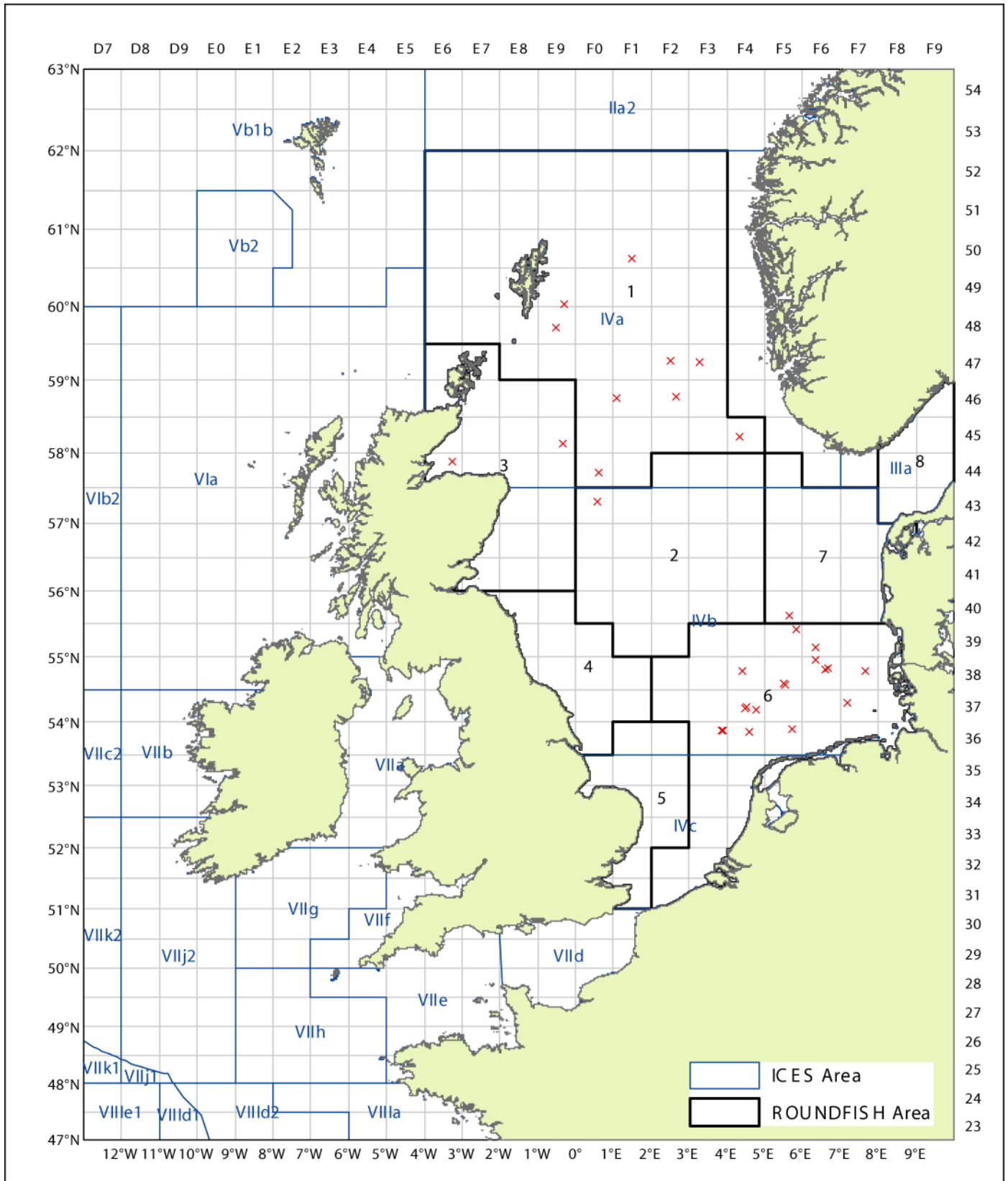
19.5 [mm]
67.5 [mm]

male 239
female 201
undefined 894

total numbers of data 1334

Nephrops norvegicus ♀

Geographical distribution of data used for calculating the length-weight relationship



Nephrops norvegicus

(female)



Quarter: 1 ; 3

$$Tw [g] = a * L [mm]^b$$

a = 0.00083

b = 2.93399

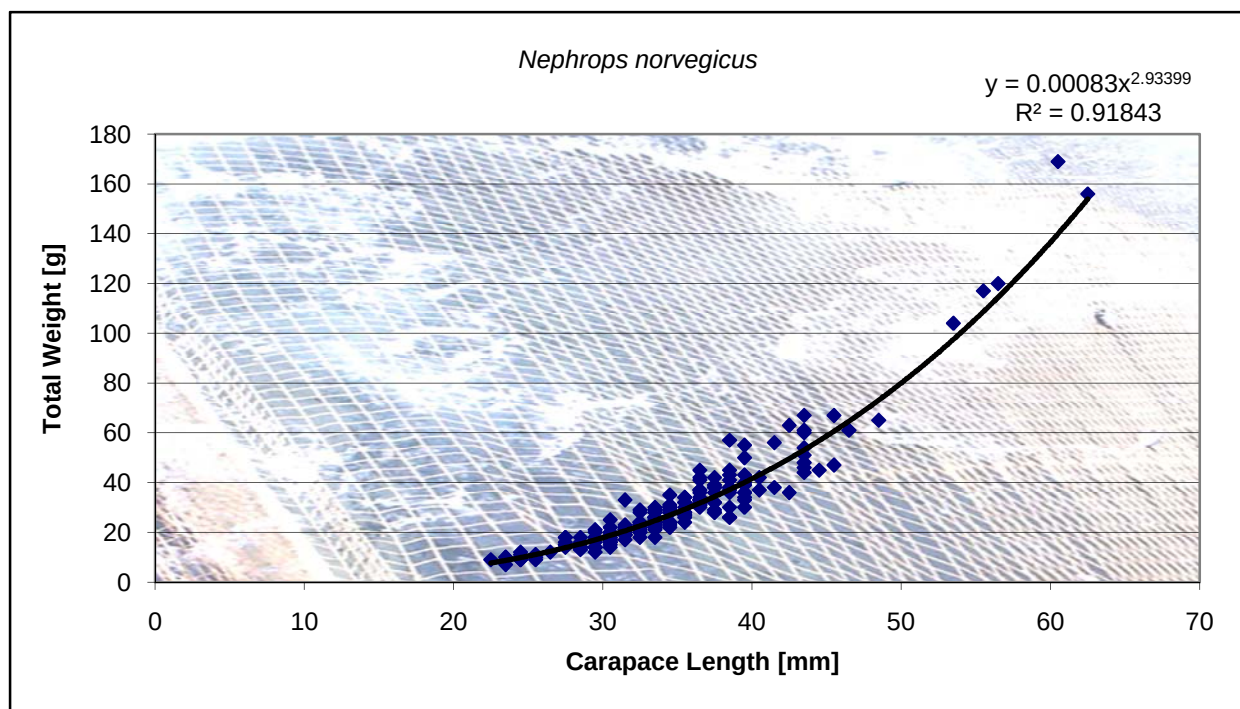
data collected

time period : 2005 - 2009

data source : research vessel

numbers of data:

Numbers of fish																				
Quarter																				
1	2	3	4																	
26	-	175	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
18	8	-	-	-	-	14	137	24	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	201	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	24	177	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
18	2	6	-	-	174	1	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Carapace length

- mm below

min length

max length

22.5 [mm]

62.5 [mm]

male

female

undefined

-

201

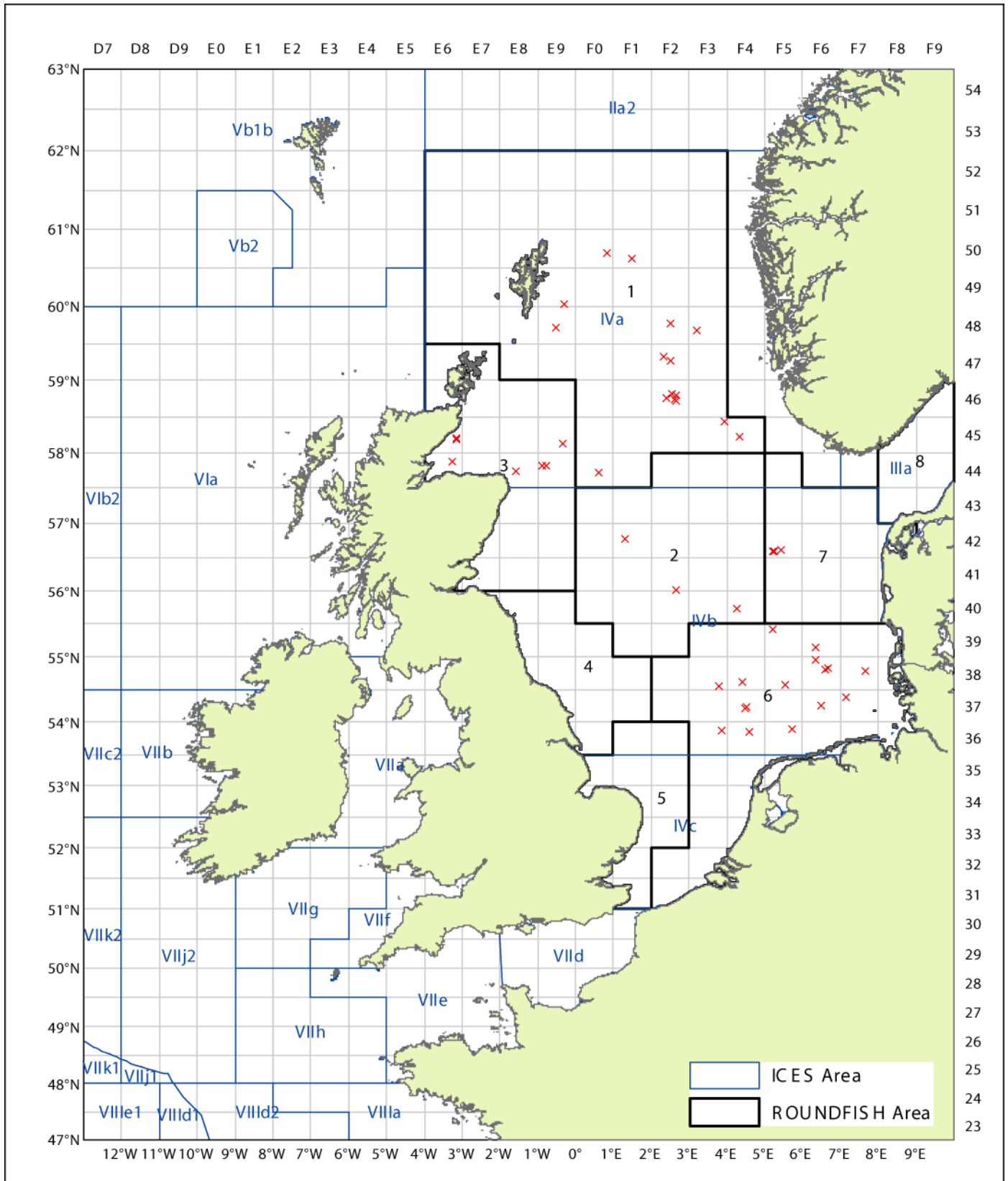
-

total numbers of data

201

Nephrops norvegicus ♂

Geographical distribution of data used for calculating the length-weight relationship



Nephrops norvegicus



Quarter: 1 ; 3

(male)

$$Tw [g] = a * L [mm]^b$$

a = 0.00053

b = 3.0791

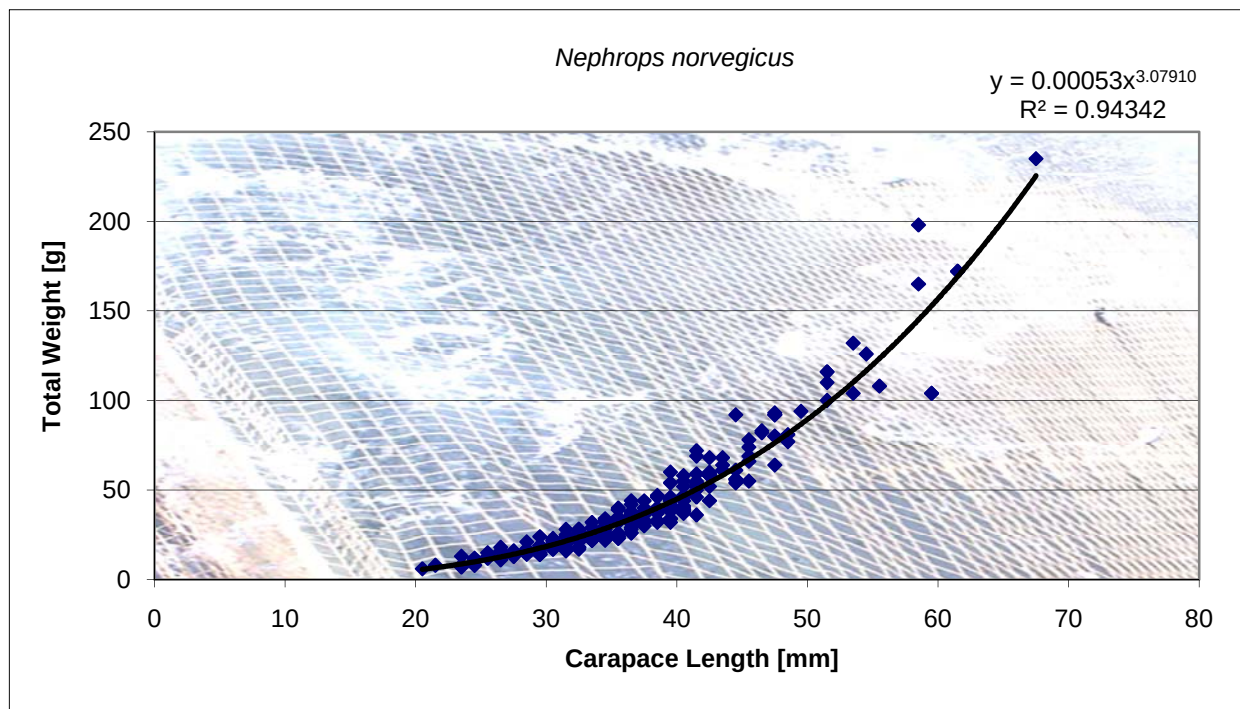
data collected

time period : 2004 - 2009

data source : research vessel

numbers of data:

Numbers of catch																				
Quarter																				
1	2	3	4																	
78	-	161	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
59	19	-	-	-	-	19	142	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	239	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	78	161	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
62	4	16	-	-	153	4	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Carapace length
- mm below

min length

max length

20.5 [mm]

67.5 [mm]

male

female

undefined

239

-

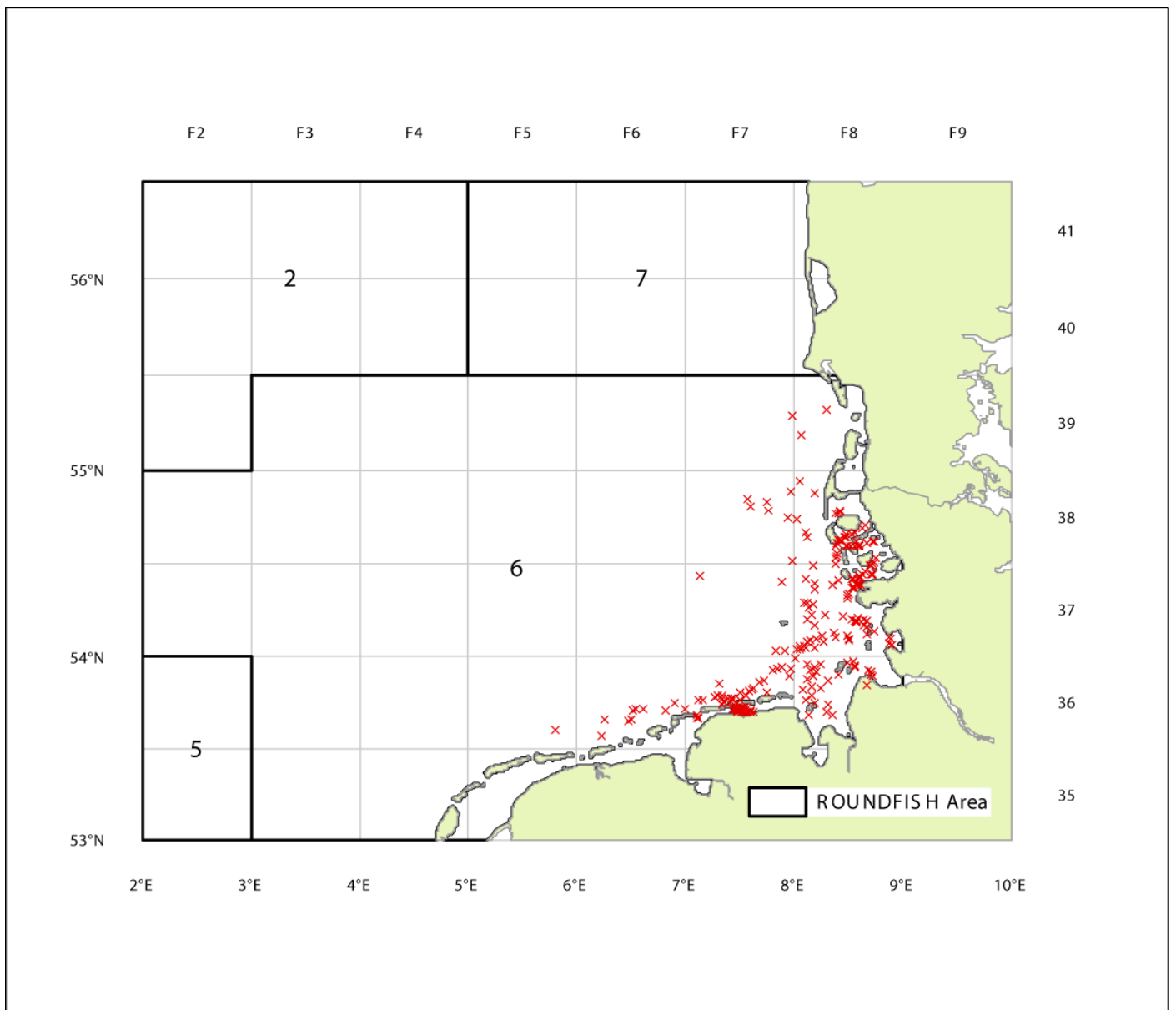
-

total numbers of data

239

Osmerus eperlanus

Geographical distribution of data used for calculating the length-weight relationship



Osmerus eperlanus

Quarter: 1 - 4

$Tw [g] = a * L [cm]^b$

$a = 0.0094$

$b = 2.8535$

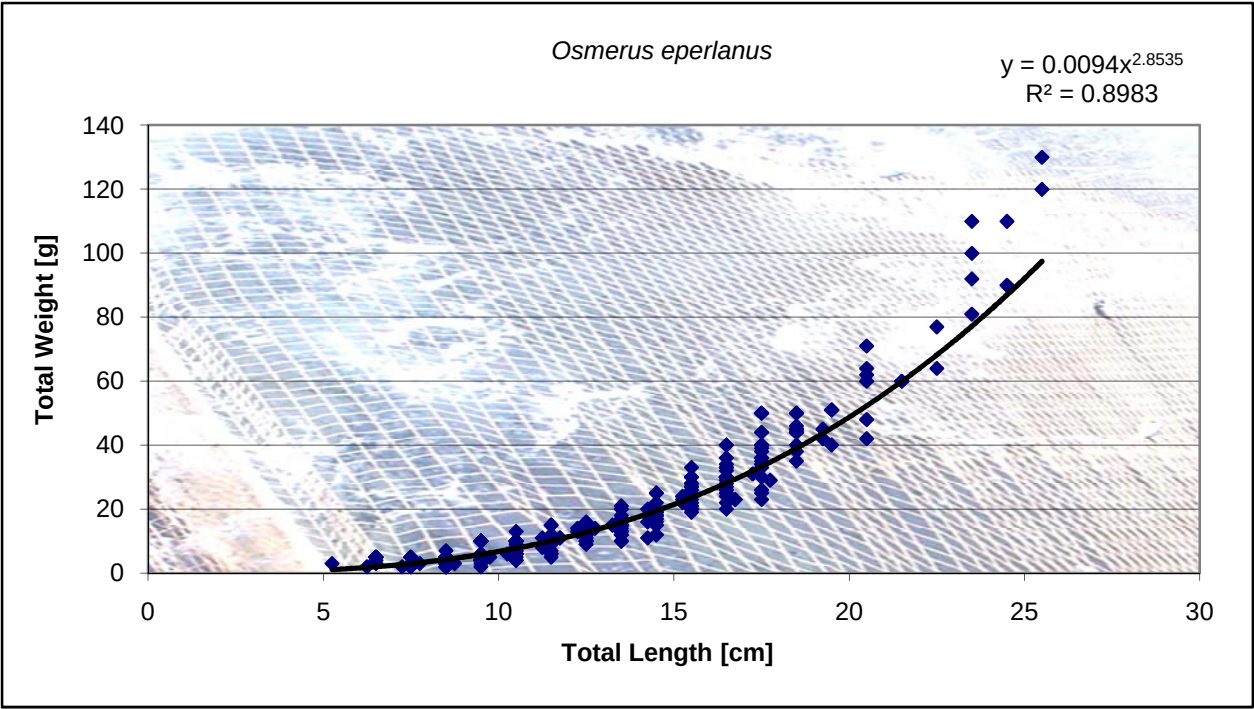
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
81	51	86	46																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
76	1	4	18	32	1	4	2	80	14	18	14								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	264	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	264	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	-	-	-	-	264	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											

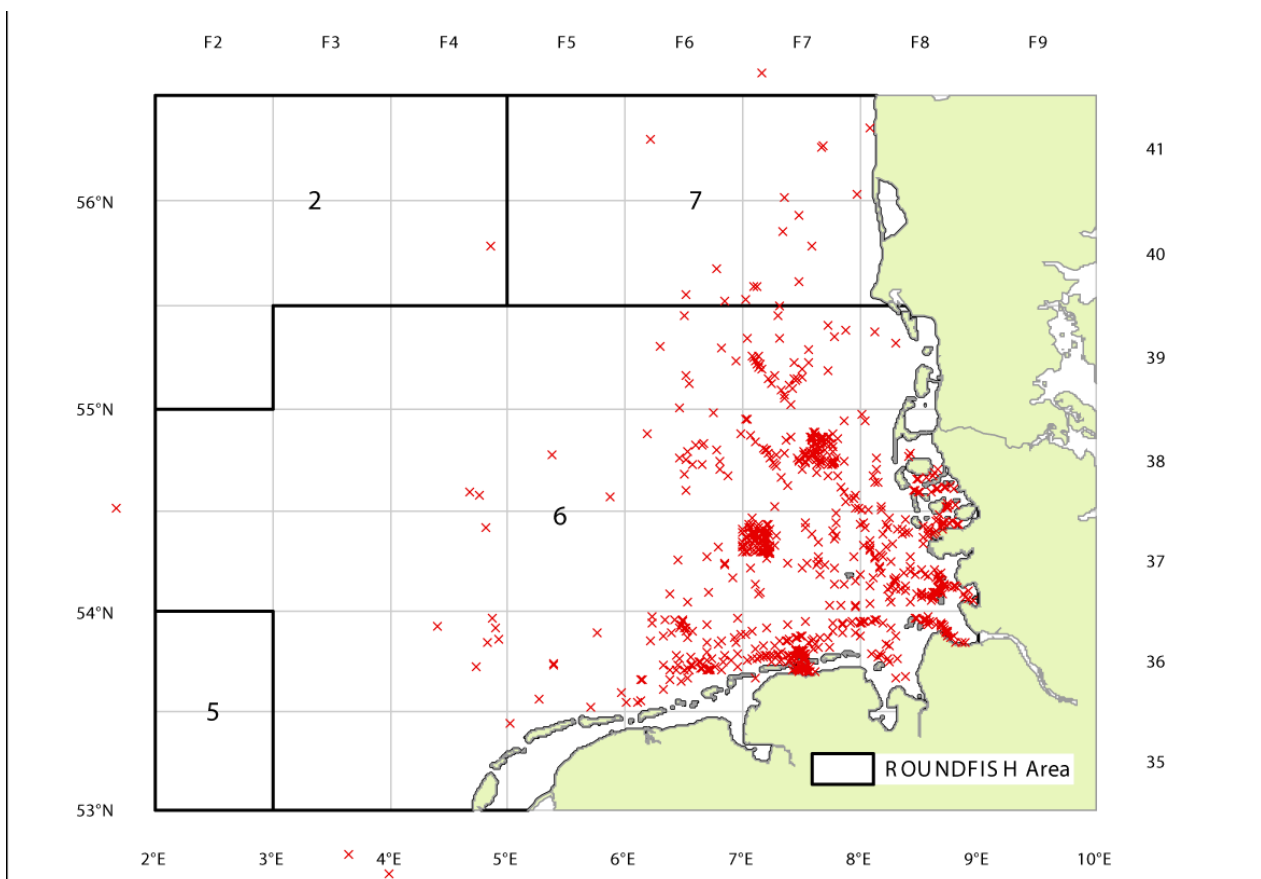
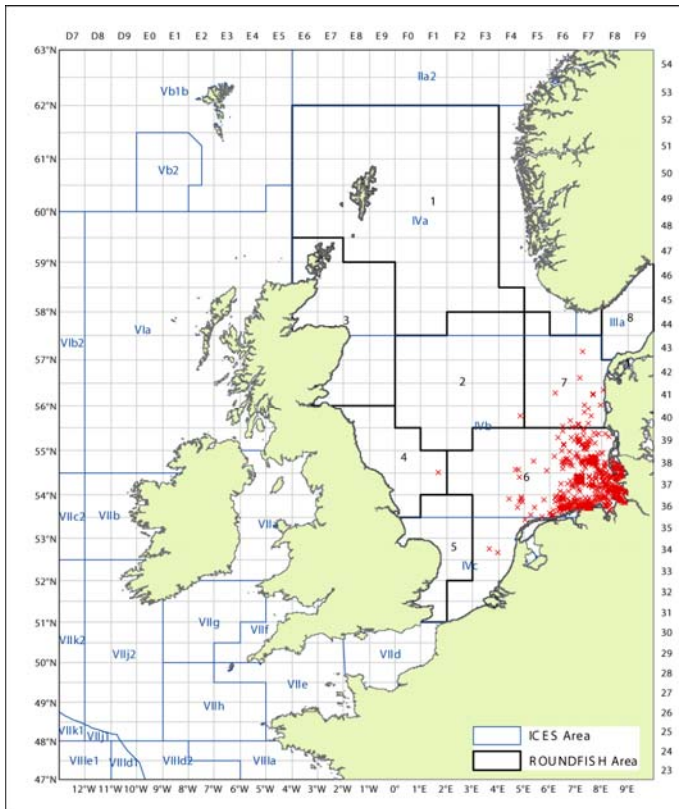


Method of Measurement

- Total length	male	-
- 1/2 cm below, cm below	female	-
min length	undefined	264
max length	total numbers of data	264

Platichthys flesus

Geographical distribution of data used for calculating the length-weight relationship



Platichthys flesus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0098

b = 3.0235

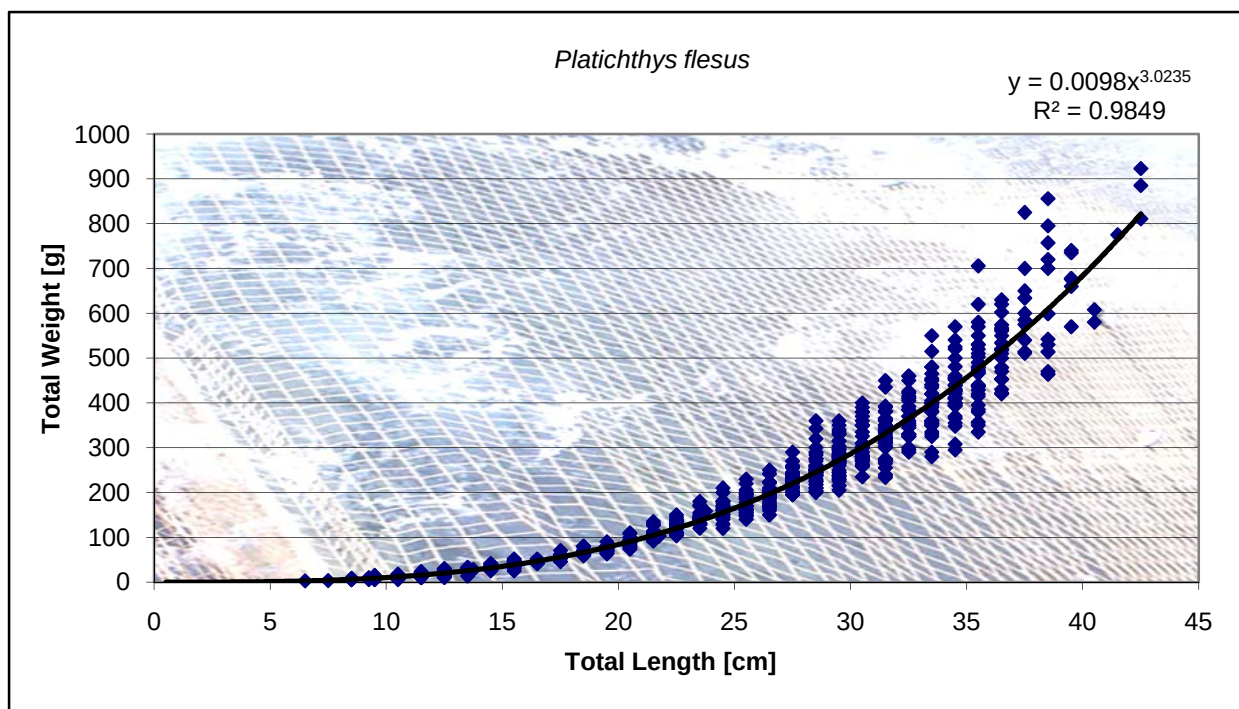
data collected

time period : 1997 - 2008

data source : research vessel

numbers of data:

Numbers of salmon																			
Quarter																			
1	2	3	4																
288	183	198	86																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
231	54	3	34	146	3	44	55	99	29	23	34								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	755	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	754	1	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	1	-	1	-	736	17	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

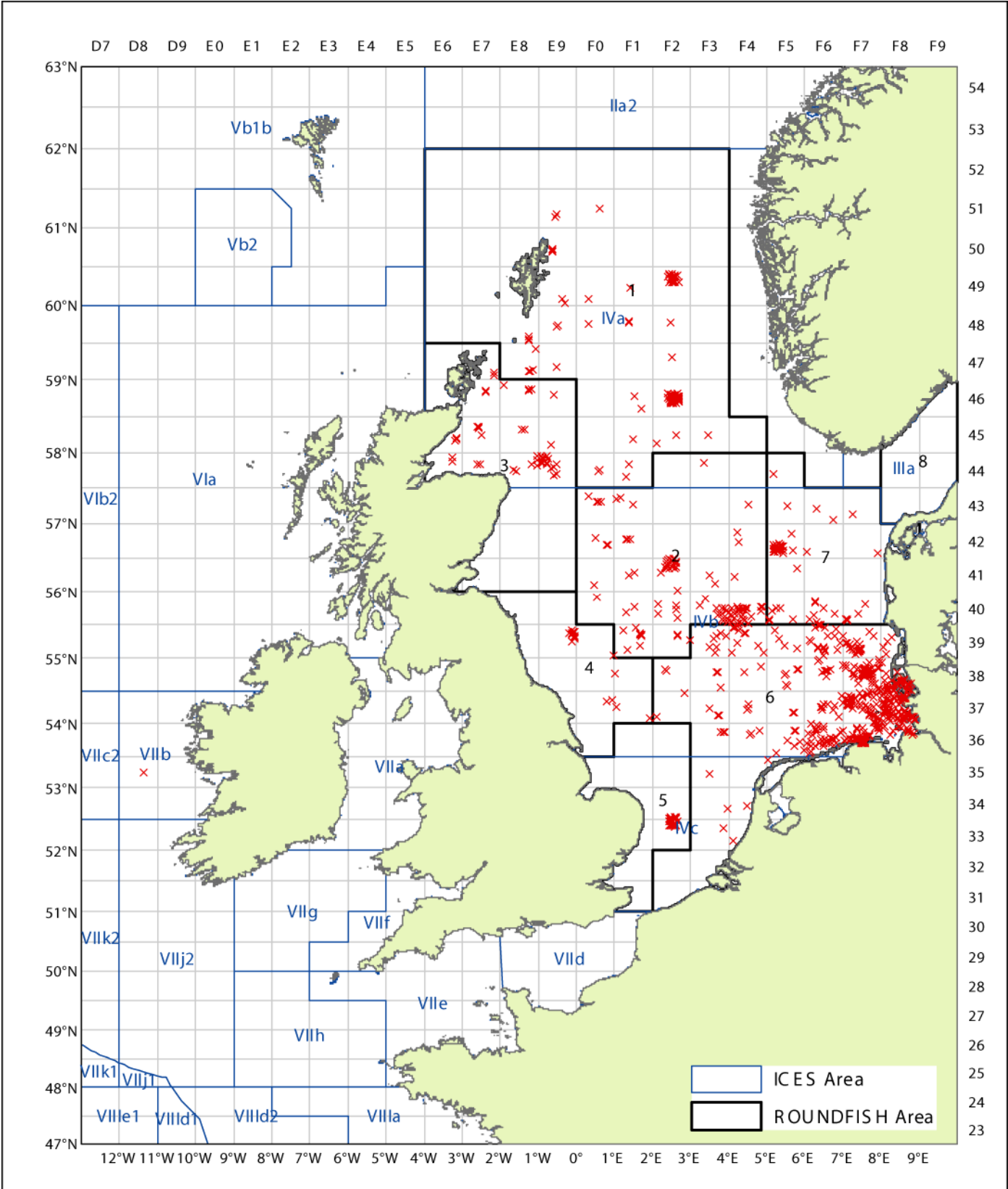
6.5 [cm]
42.5 [cm]

male 15
female 14
undefined 726

total numbers of data 755

Pleuronectes platessa

Geographical distribution of data used for calculating the length-weight relationship



Pleuronectes platessa

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0103

b = 2.9745

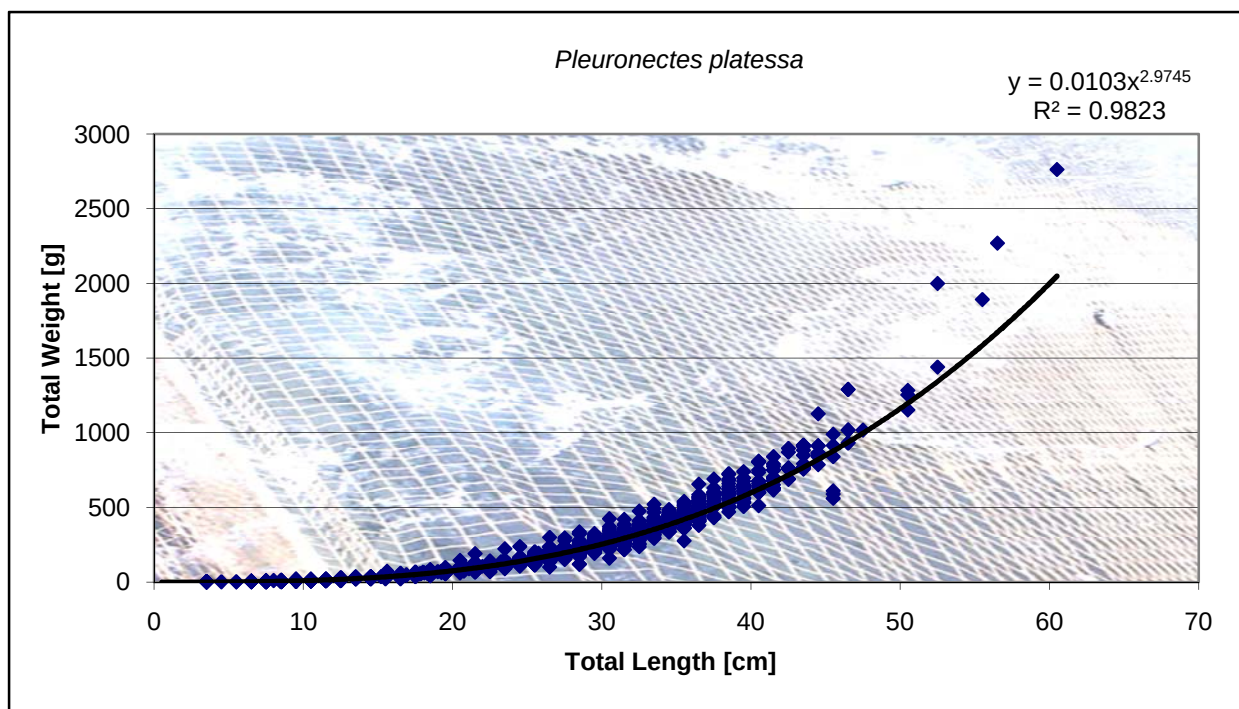
data collected

time period : 1997 - 2008

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
1166	407	1360	37																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
712	453	1	44	354	9	625	691	44	7	14	16								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	2969	-	-	1	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	797	2146	26	-	-	-	-	-	1	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
298	323	504	92	28	1515	209	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

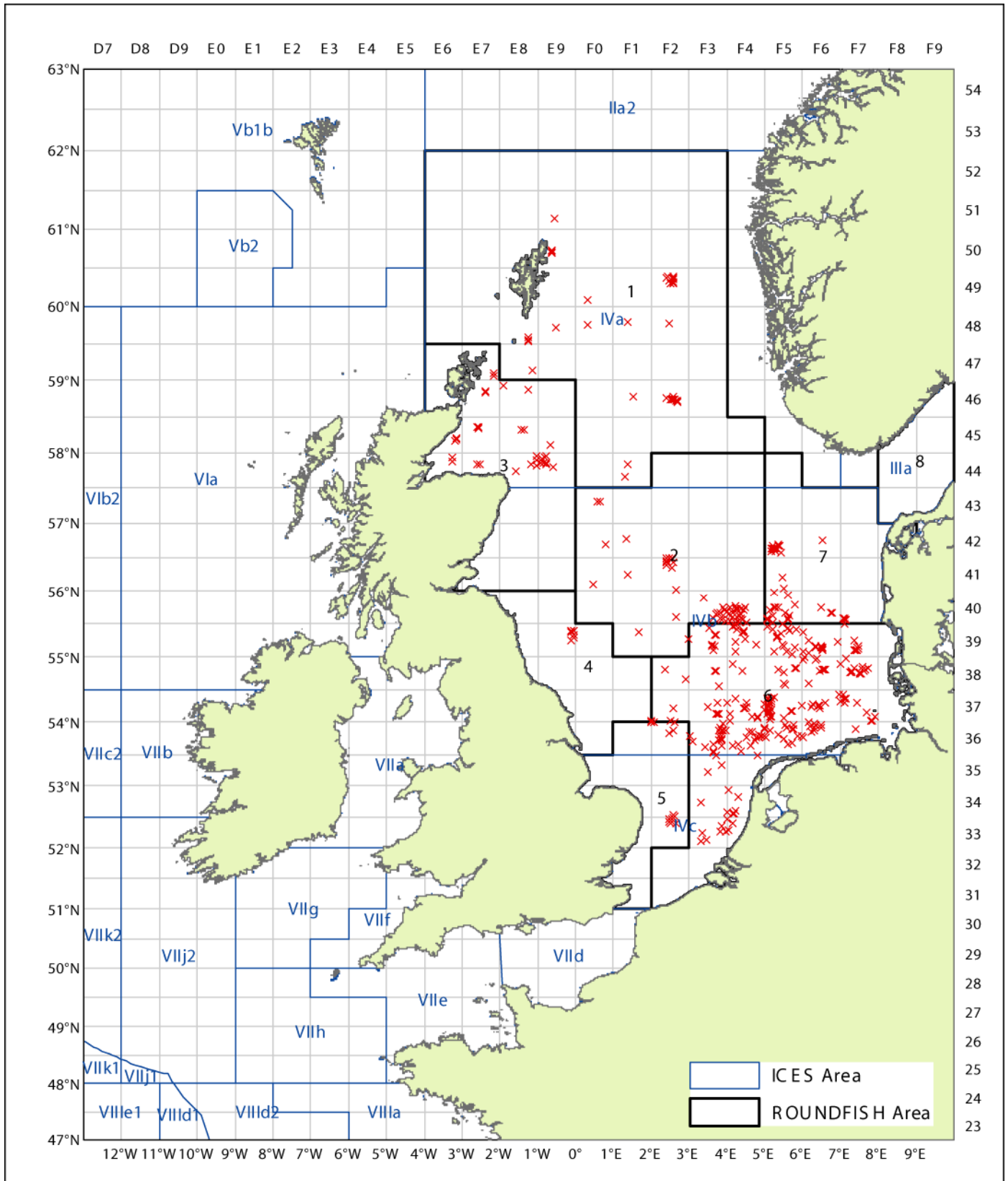
3.5 [cm]
60.5 [cm]

male 1185
female 1136
undefined 649

total numbers of data 2970

Pleuronectes platessa ♀

Geographical distribution of data used for calculating the length-weight relationship



Pleuronectes platessa



Quarter: 1 - 4

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0059

b = 3.1539

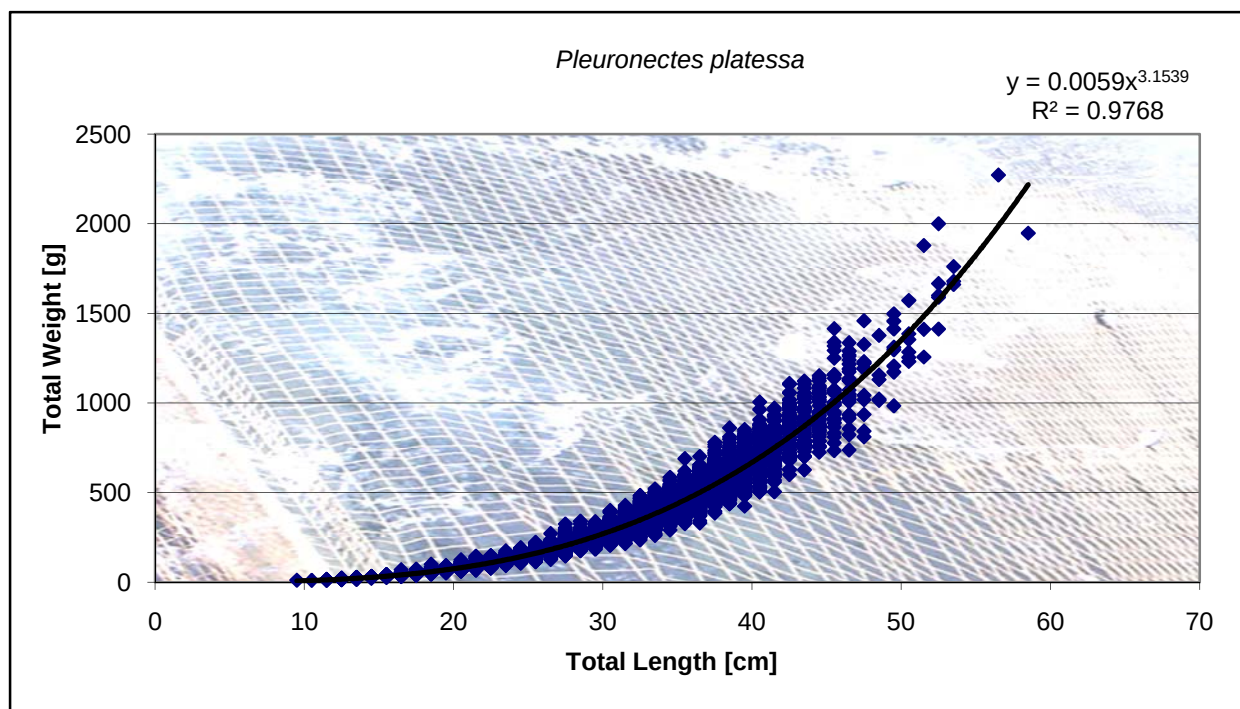
data collected

time period : 1999 - 2009

data source : research vessel, commercial trawler

numbers of data:

numbers of data.																				
Quarter																				
1	2	3	4																	
1574	3793	2883	1406																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
992	233	349	1835	326	1632	1340	965	578	689	352	365									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	9656	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	245	8085	1326	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
90	269	155	27	418	7805	892	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

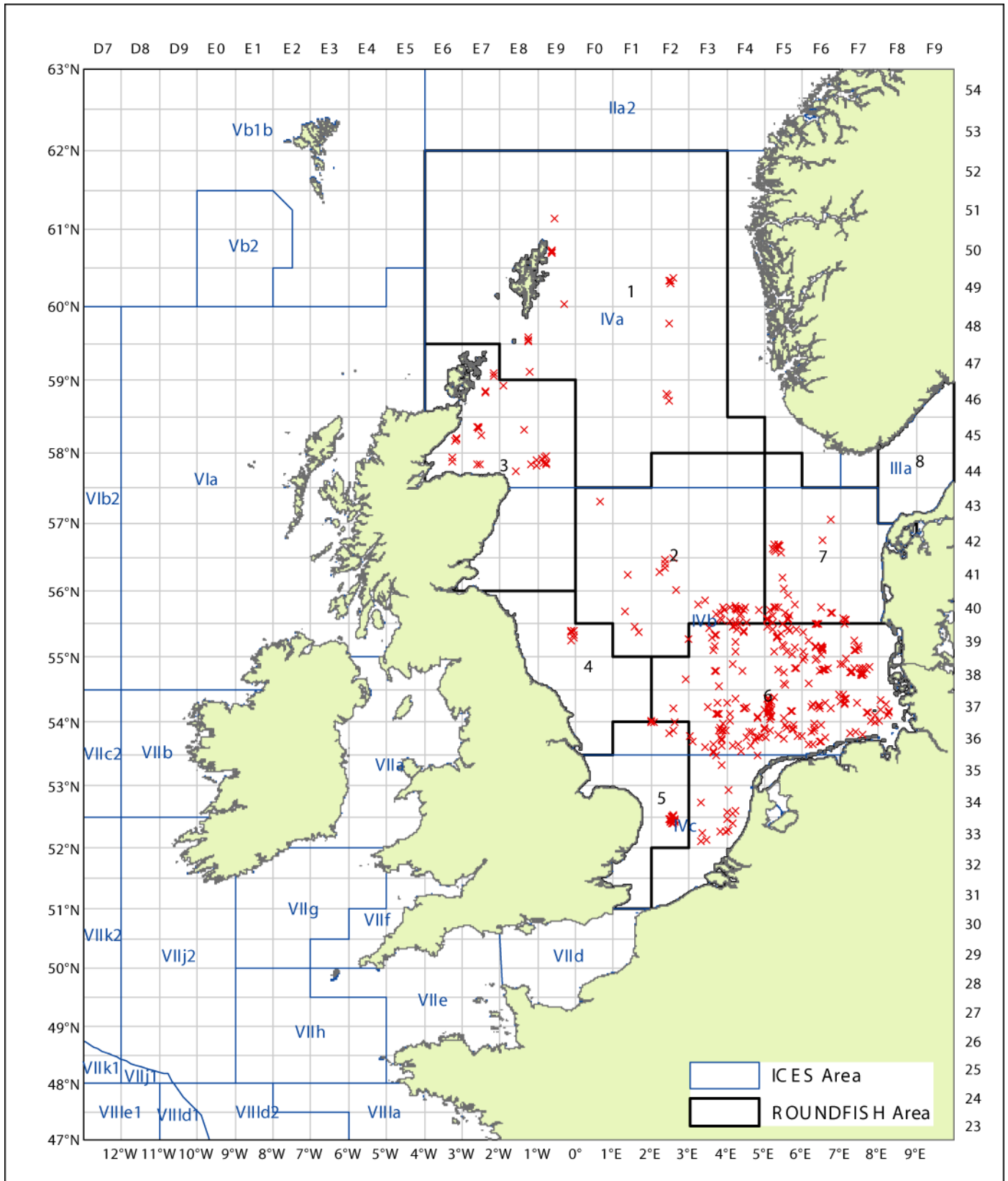
9.5 [cm]
58.5 [cm]

male
female
undefined

total numbers of data 9656

Pleuronectes platessa ♂

Geographical distribution of data used for calculating the length-weight relationship



Pleuronectes platessa



Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0077

b = 3.0623

data collected

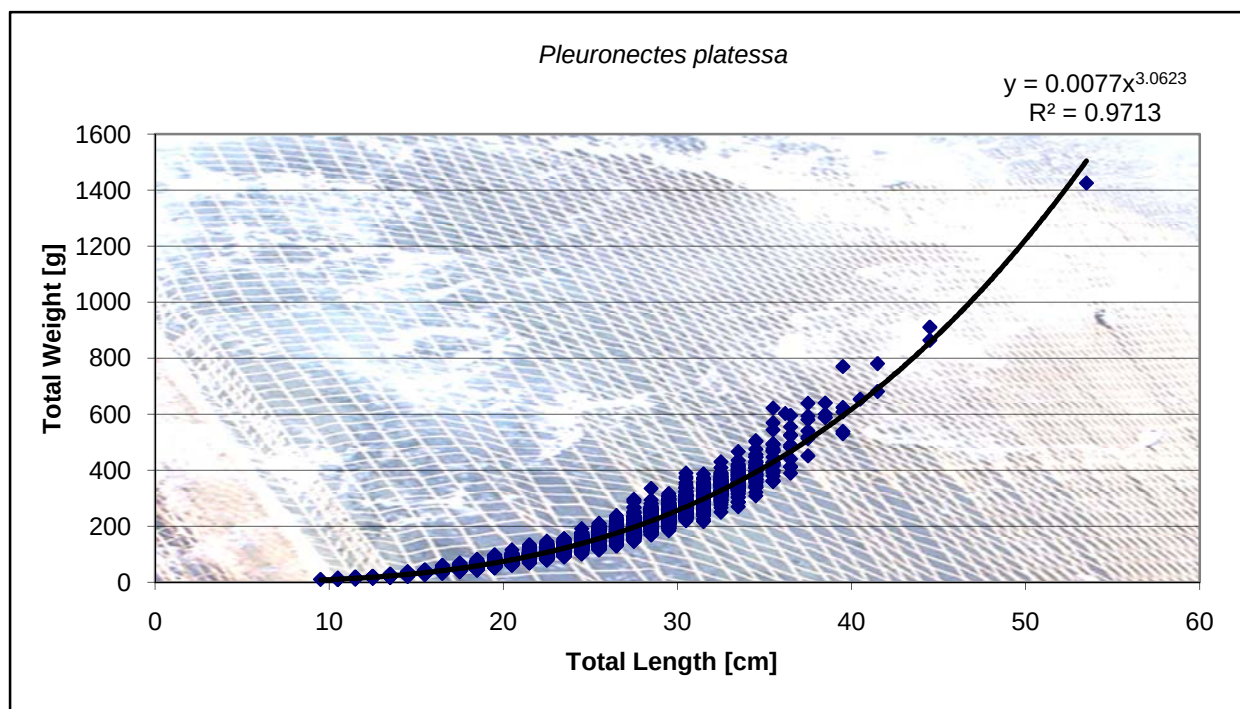
time period : 1998 - 2009

data source : research vessel, commercial trawler

numbers of data:

numbers of data.

Quarter																			
1	2	3	4																
1402	1929	1292	794																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
823	359	220	1101	132	696	569	525	198	410	216	168								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	5417	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	456	4068	893	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
123	77	339	74	80	4280	444	-	-											
-	-	-	-	-	-	-	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

9.5 [cm]
53.5 [cm]

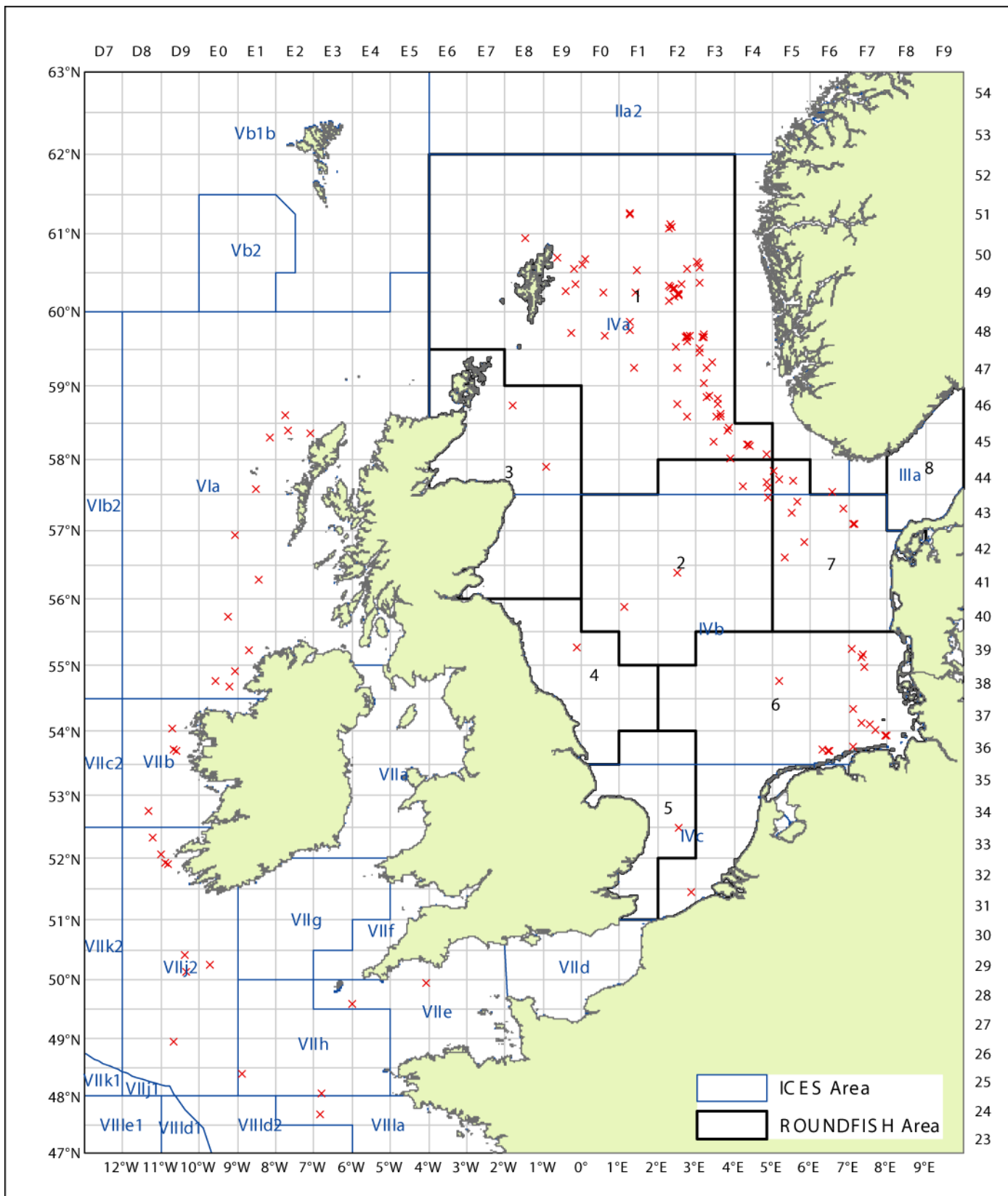
male
female
undefined

5417
-
-

total numbers of data 5417

Pollachius pollachius

Geographical distribution of data used for calculating the length-weight relationship



Pollachius pollachius

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0107

b = 2.966

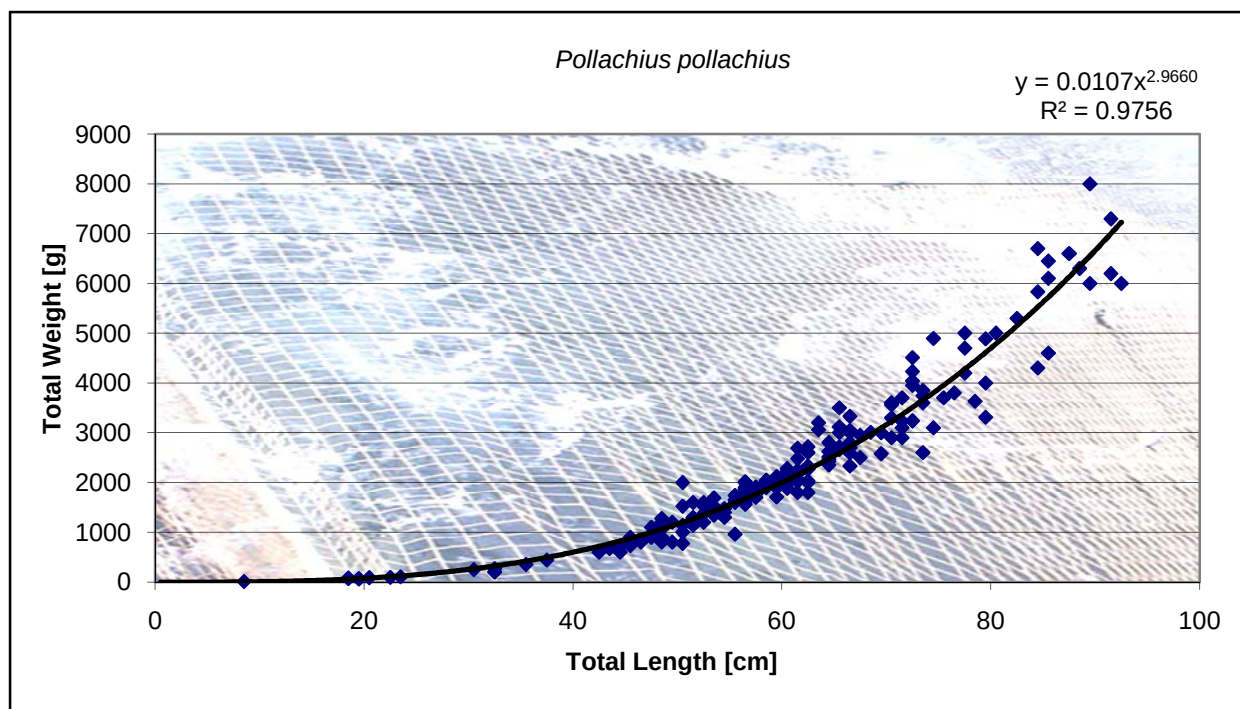
data collected

time period : 1959 - 2008

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
90	17	35	41																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
44	33	13	9	2	6	23	5	7	-	37	4								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	154	-	12	16	1	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	119	33	2	-	-	12	-	-	4	-	-	2	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
1	1	8	-	1	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
108	6	2	1	1	16	19	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

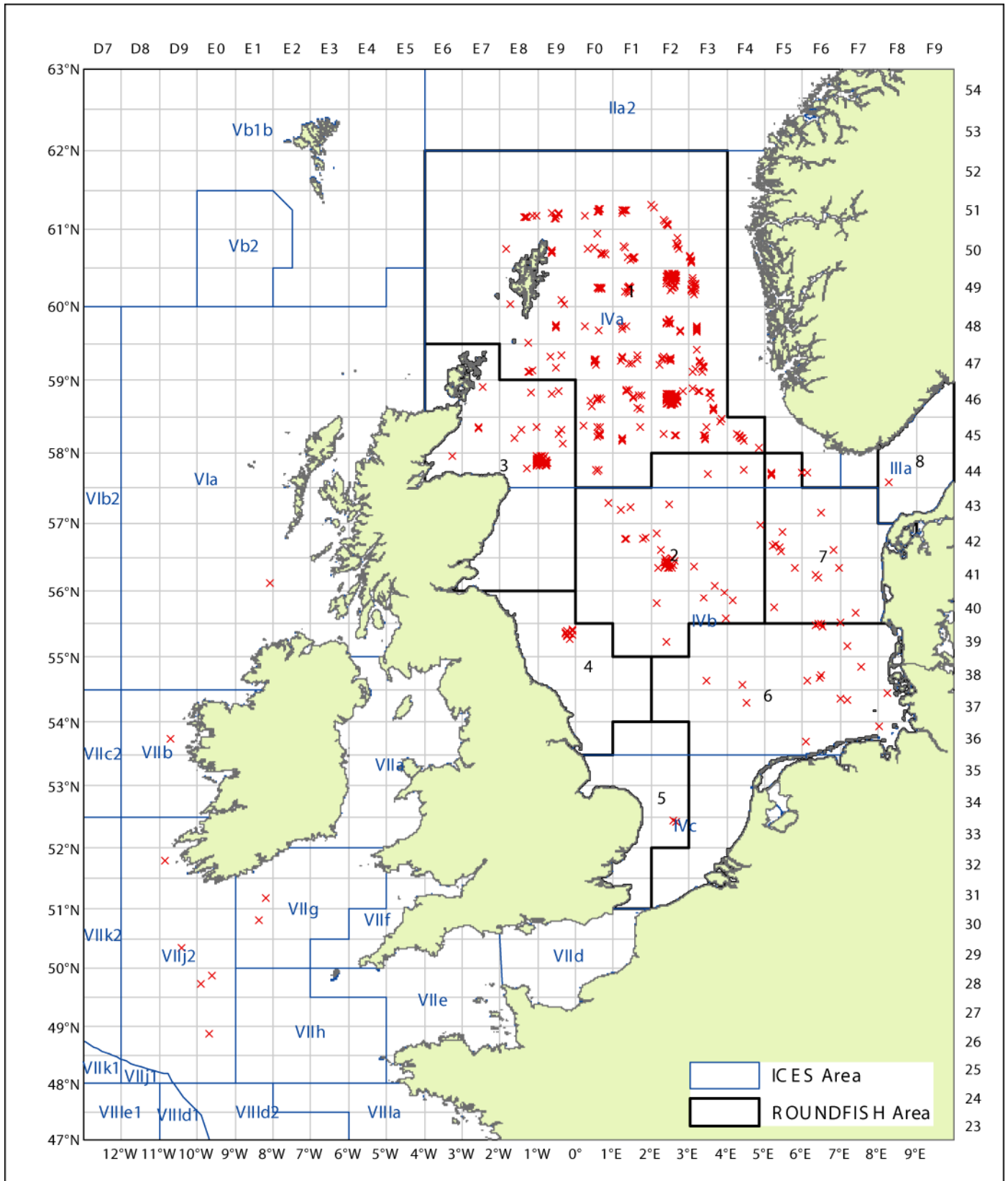
8.5 [cm]
92.5 [cm]

male 18
female 27
undefined 138

total numbers of data 183

Pollachius virens

Geographical distribution of data used for calculating the length-weight relationship



Pollachius virens

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0055

b = 3.1071

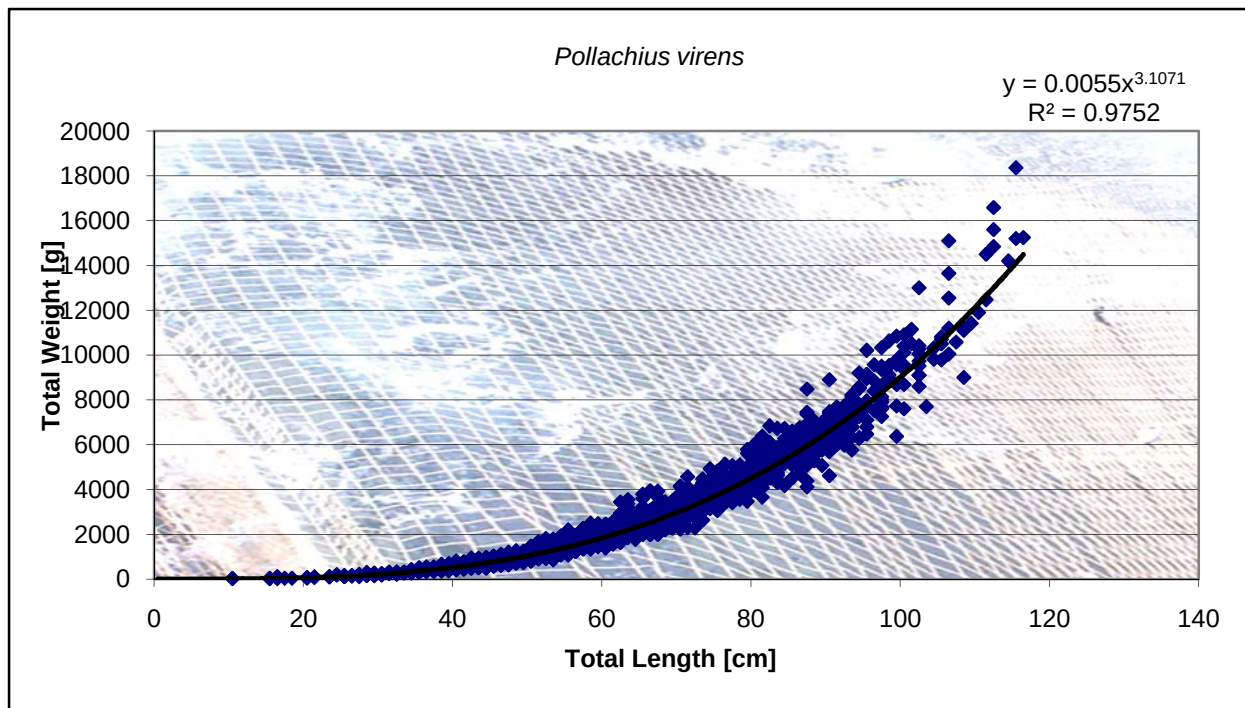
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Numbers of boats																			
Quarter																			
1	2	3	4																
3809	215	642	11																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
1628	2071	110	3	187	25	508	132	2	-	6	5								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	2	-	4666	-	1	8	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	2	-	-	-	-	-	4549	115	2	-	-	1	-	-	1	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
2	-	5	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
4247	67	89	15	2	17	227	1	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

10.5 [cm]
116.5 [cm]

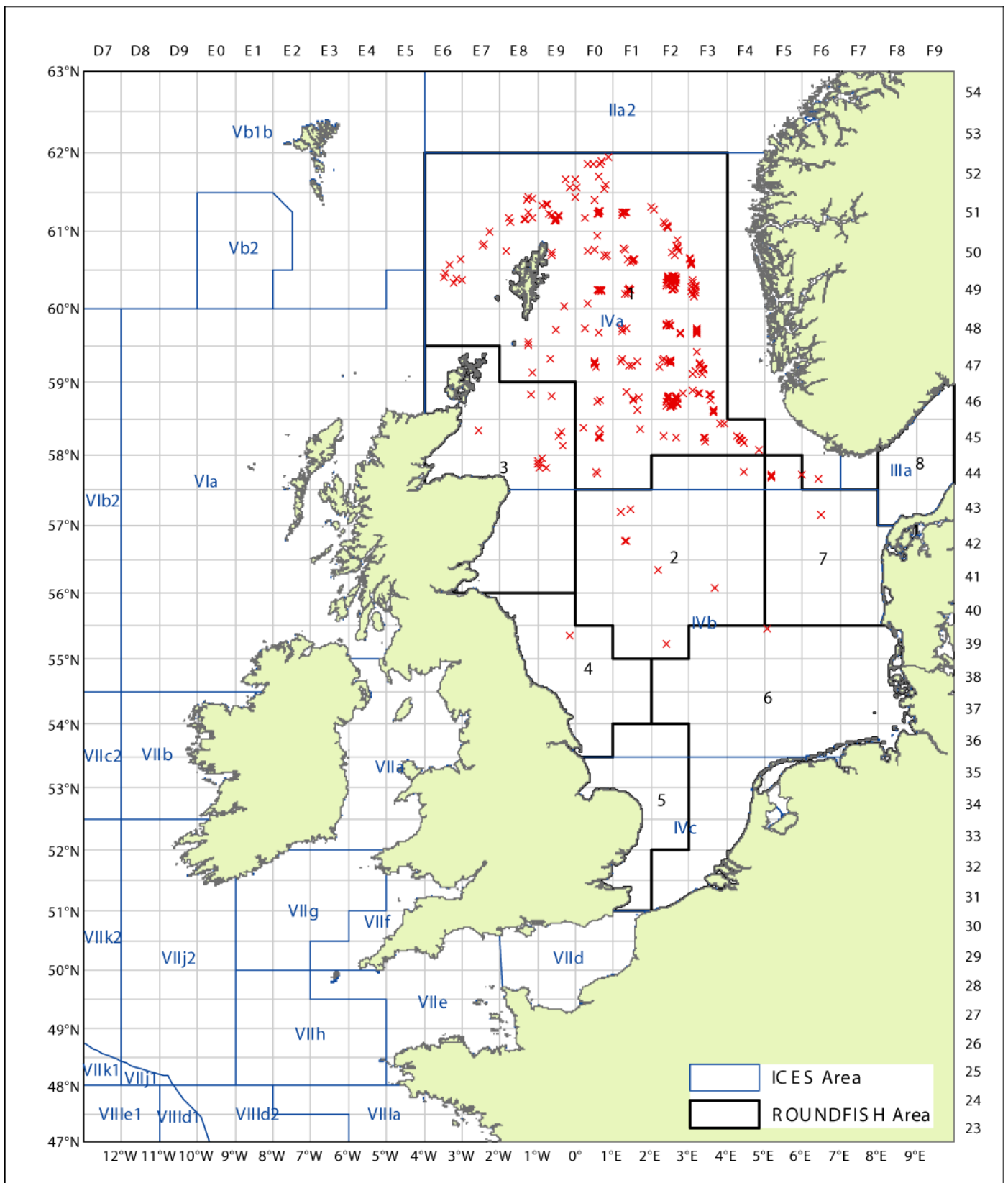
male
female
undefined

2456
1919
302

total numbers of data 4677

Pollachius virens ♀

Geographical distribution of data used for calculating the length-weight relationship



Pollachius virens



Quarter: 1 - 3

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0043

b = 3.1692

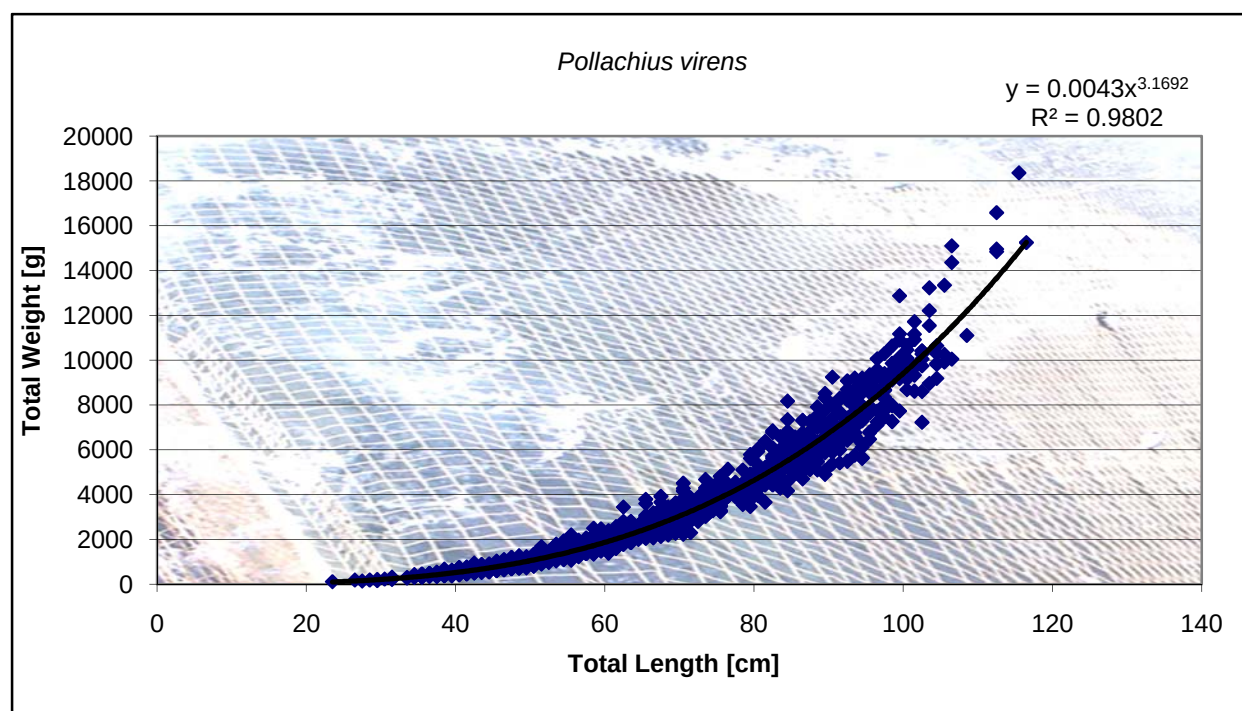
data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of data.																			
Quarter																			
1	2	3	4																
2244	134	240	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
750	1450	44	35	95	4	202	38	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	2618	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	2602	16	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
2439	14	13	1	-	1	115	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

23.5 [cm]
116.5 [cm]

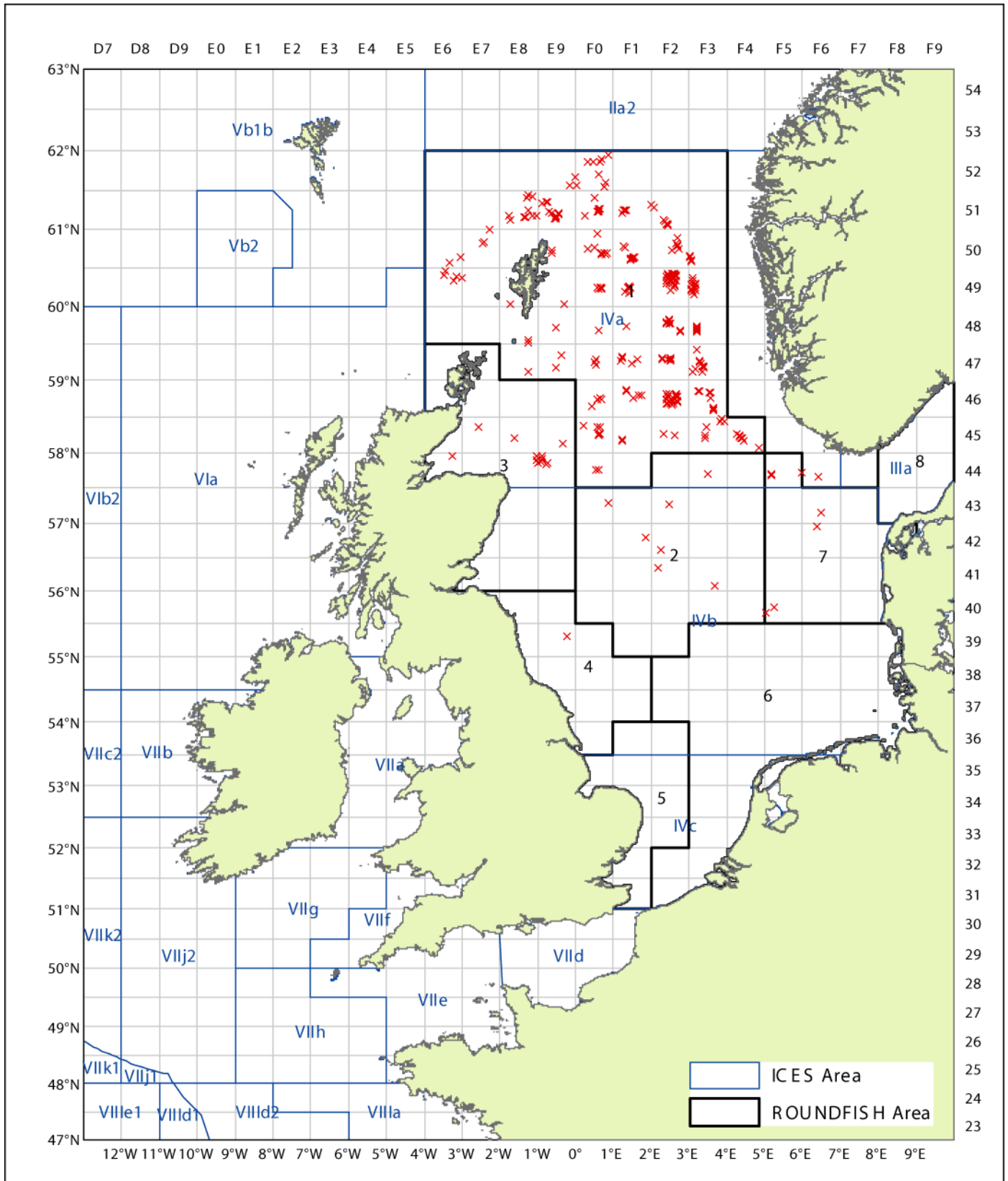
male
female
undefined

-
2618
-

total numbers of data 2618

Pollachius virens ♂

Geographical distribution of data used for calculating the length-weight relationship



Pollachius virens ♂

Quarter: 1 - 3

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0049

b = 3.1328

data collected

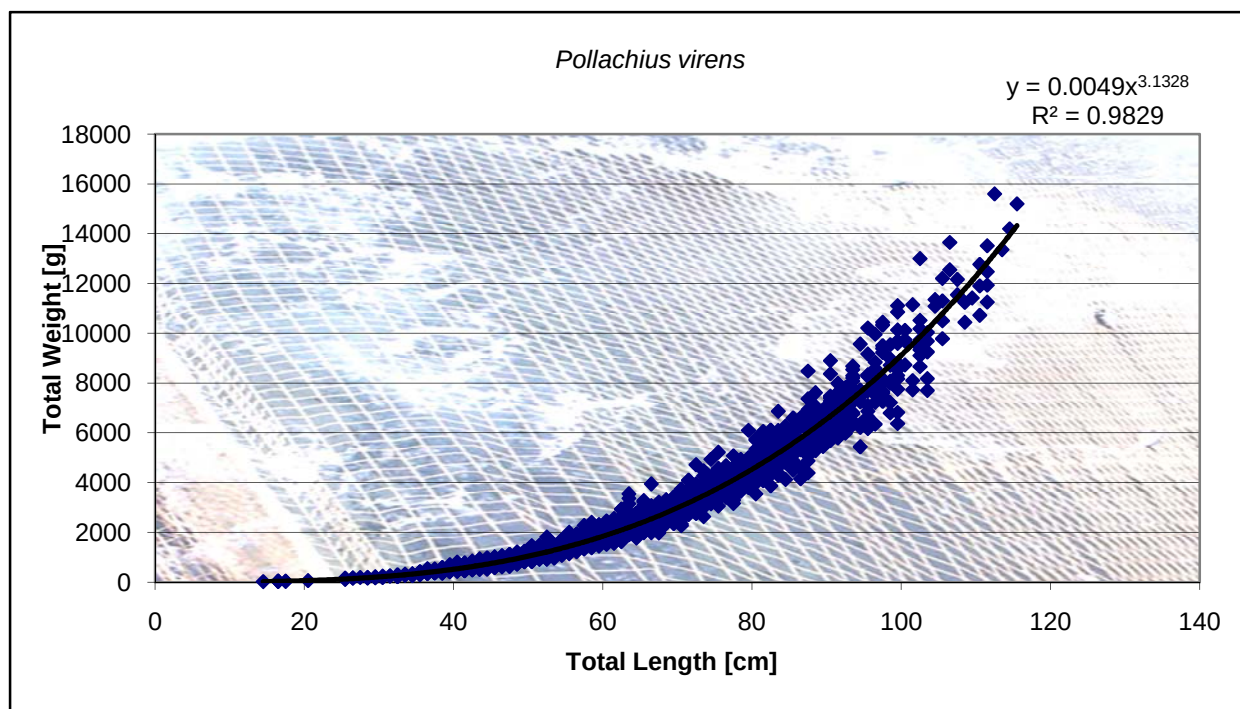
time period : 1994 - 2009

data source : research vessel

numbers of data:

numbers of data.

Quarter																				
1	2	3	4																	
2779	115	262	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
876	1851	52	21	86	8	219	43	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	3156	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	3139	17	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
3003	8	20	2	-	-	102	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

14.5 [cm]
115.5 [cm]

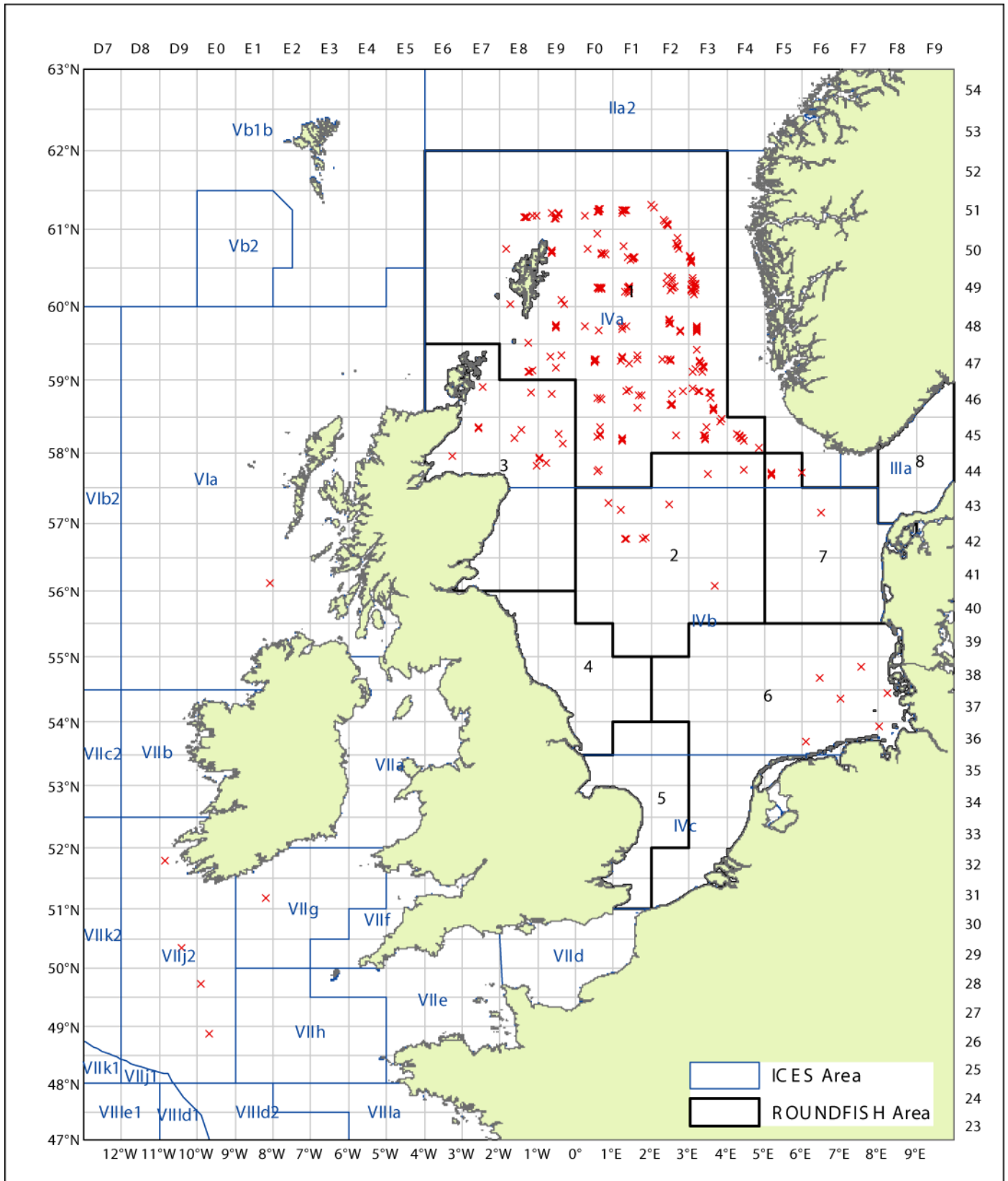
male
female
undefined

3156
-
-

total numbers of data 3156

Pollachius virens Quarter 1

Geographical distribution of data used for calculating the length-weight relationship



Pollachius virens

Quarter: 1

$$Tw [g] = a * L [cm]^b$$

a = 0.004

b = 3.1853

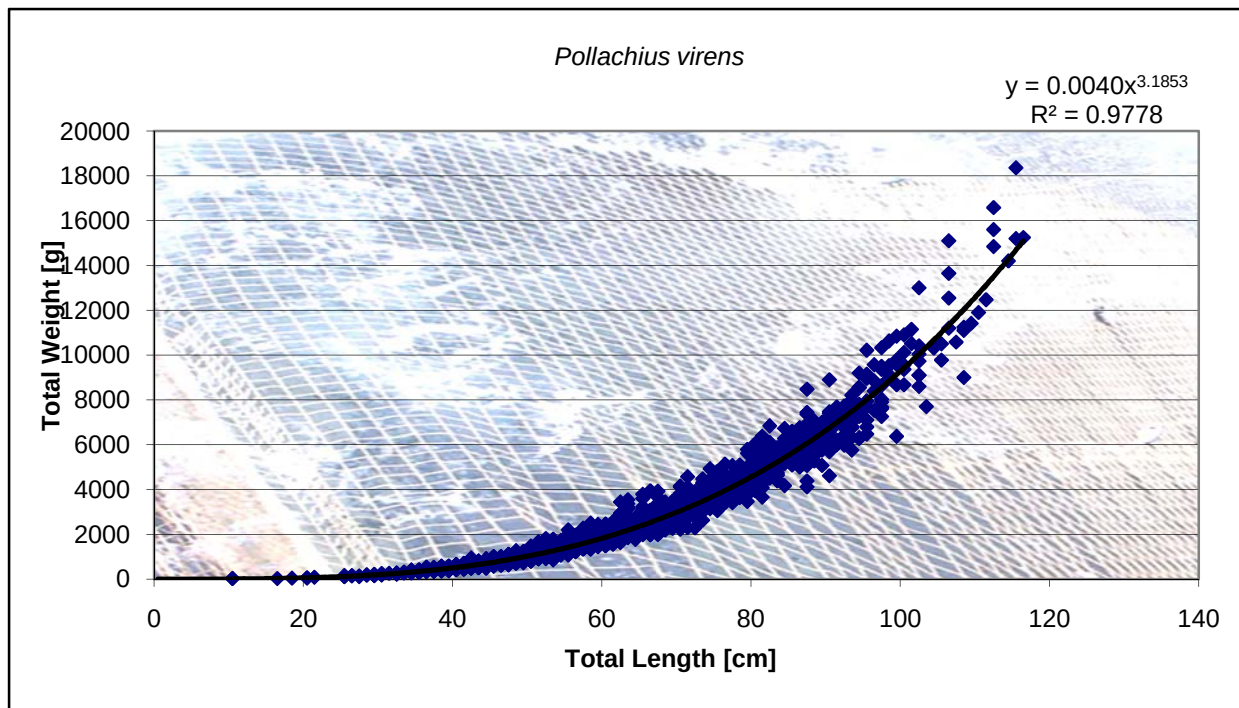
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
3809	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
1628	2071	110	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	2	-	3801	-	1	5	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	2	-	-	-	-	-	3770	31	-	-	-	1	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
1	-	4	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
3534	25	23	-	-	6	213	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

10.5 [cm]
116.5 [cm]

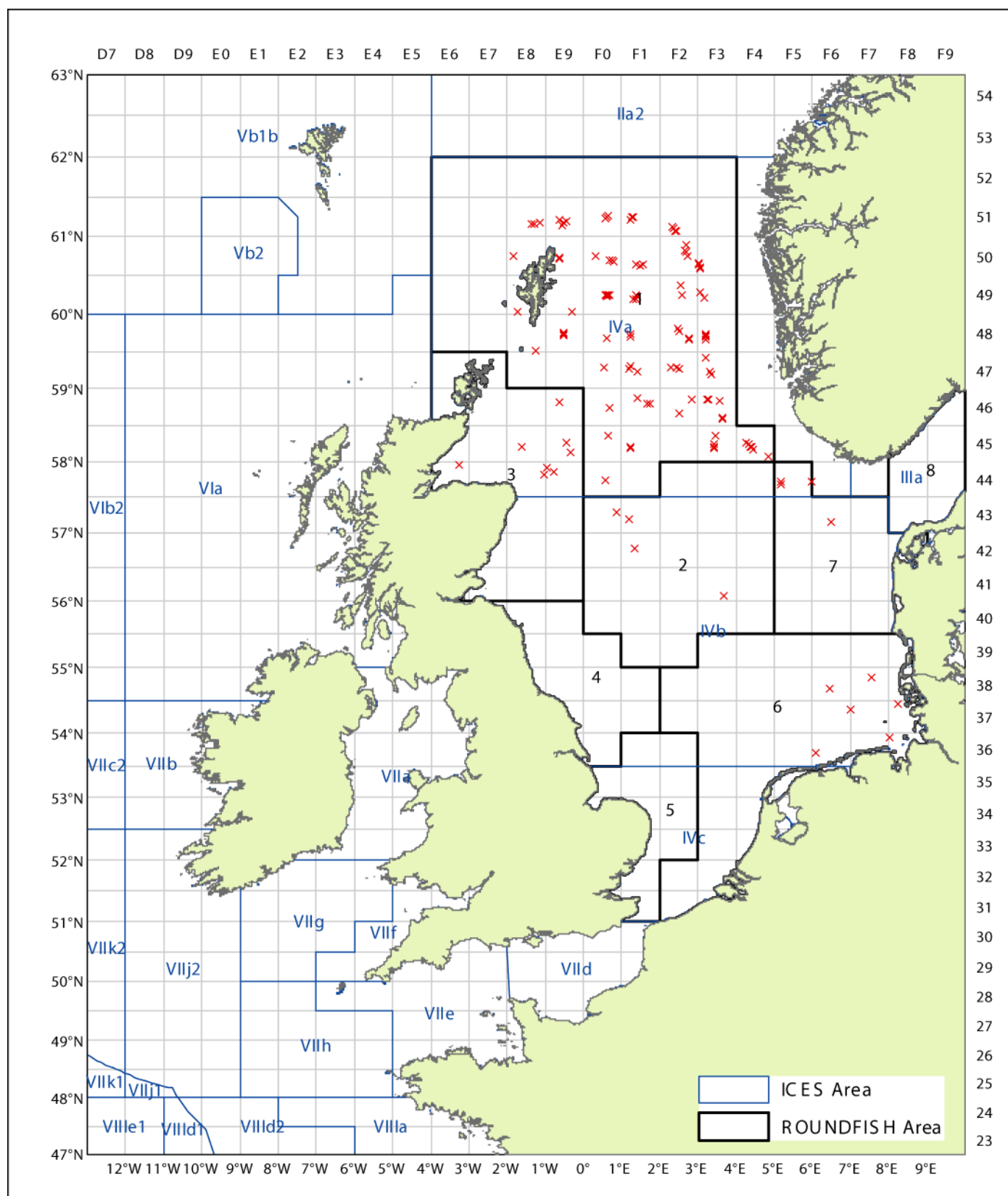
male
female
undefined

2105
1581
123

total numbers of data 3809

Pollachius virens *January*

Geographical distribution of data used for calculating the length-weight relationship



Pollachius virens

January

$$Tw [g] = a * L [cm]^b$$

a = 0.0032

b = 3.2409

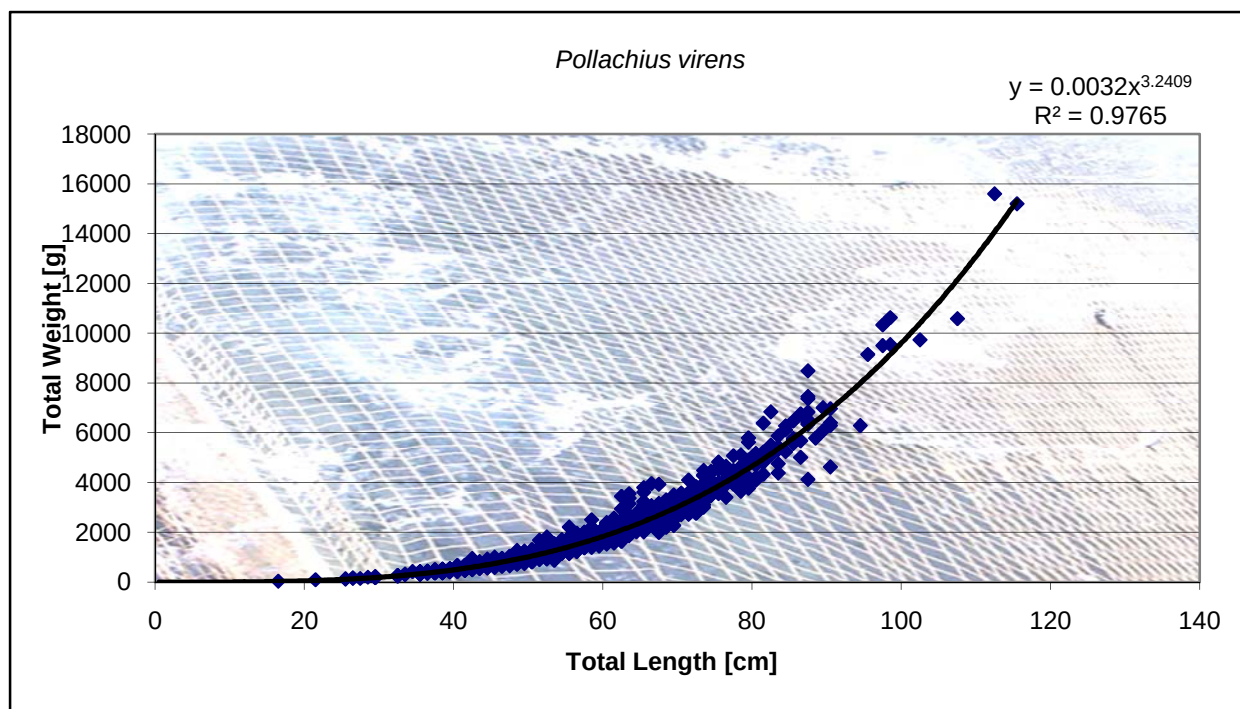
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
1628	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
1628	-	-	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1628	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	1604	24	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
1408	14	13	-	-	6	187	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

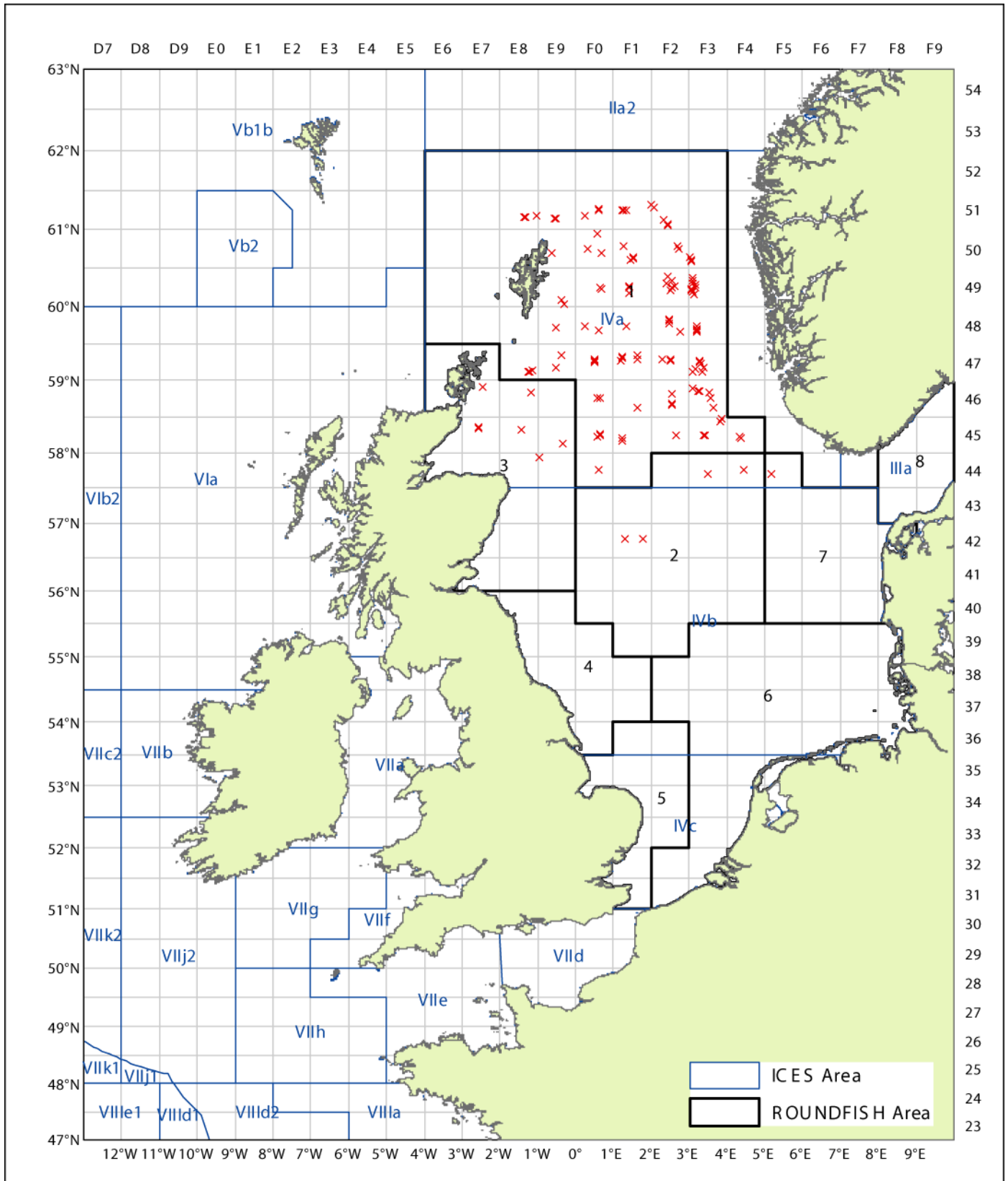
16.5 [cm]
115.5 [cm]

male 852
female 725
undefined 51

total numbers of data 1628

Pollachius virens February

Geographical distribution of data used for calculating the length-weight relationship



Pollachius virens

February

$$Tw [g] = a * L [cm]^b$$

a = 0.0044

b = 3.1573

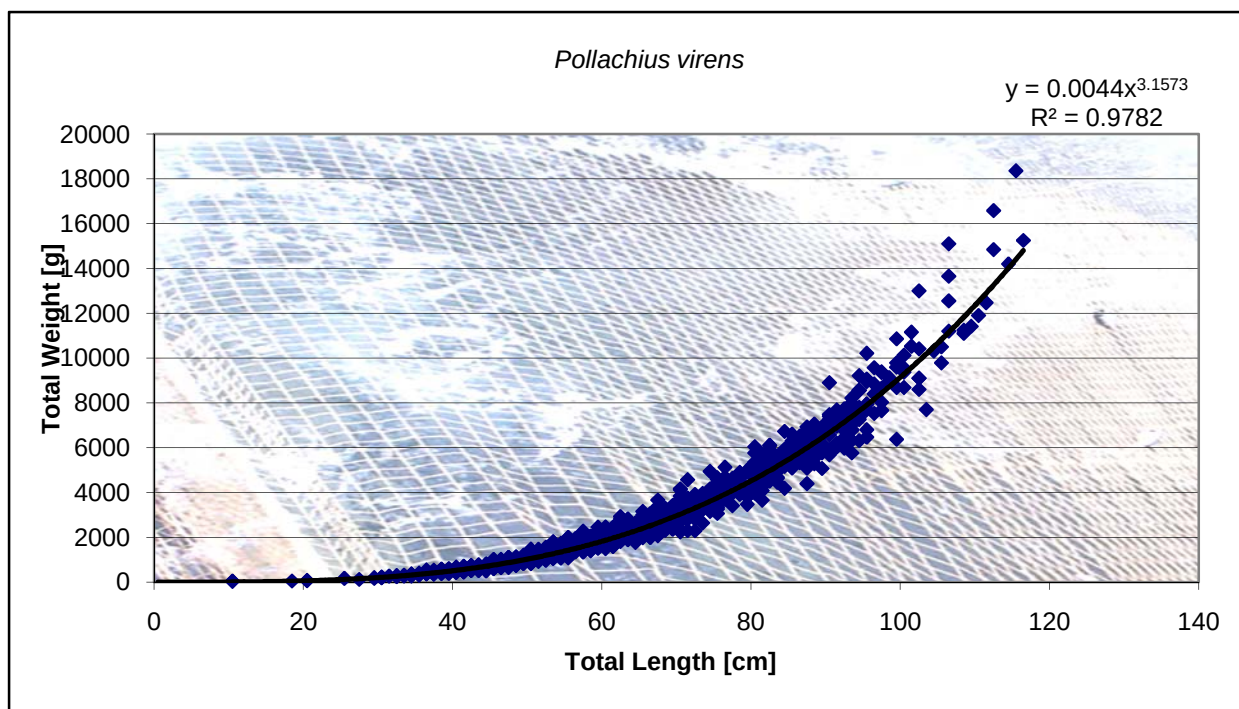
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
2071	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	2071	-	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	2071	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	2068	3	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
2028	7	10	-	-	-	26	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

10.5 [cm]
116.5 [cm]

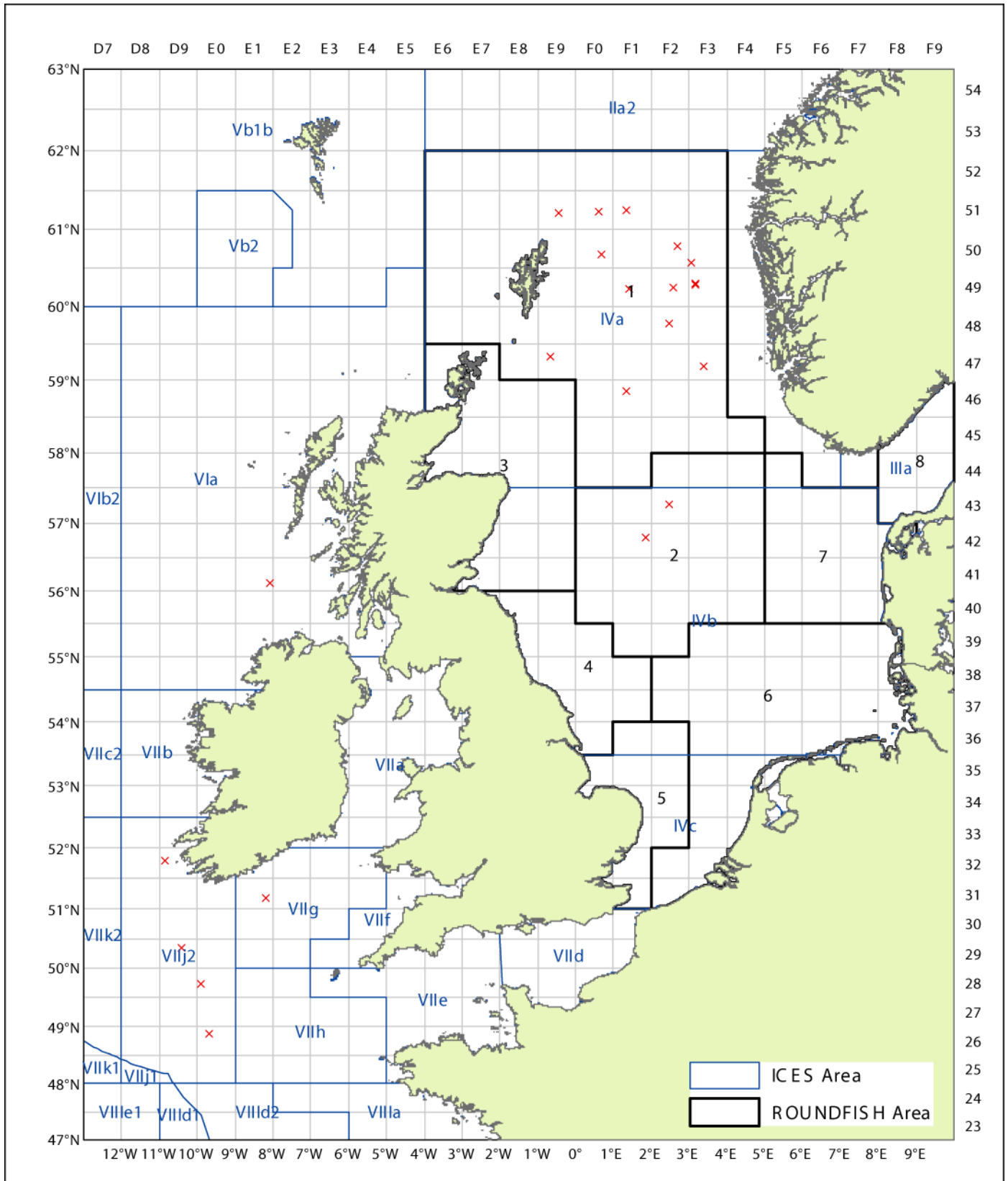
male
female
undefined

1200
812
59

total numbers of data 2071

Pollachius virens March

Geographical distribution of data used for calculating the length-weight relationship



Pollachius virens

March

$$Tw [g] = a * L [cm]^b$$

a = 0.0065

b = 3.0596

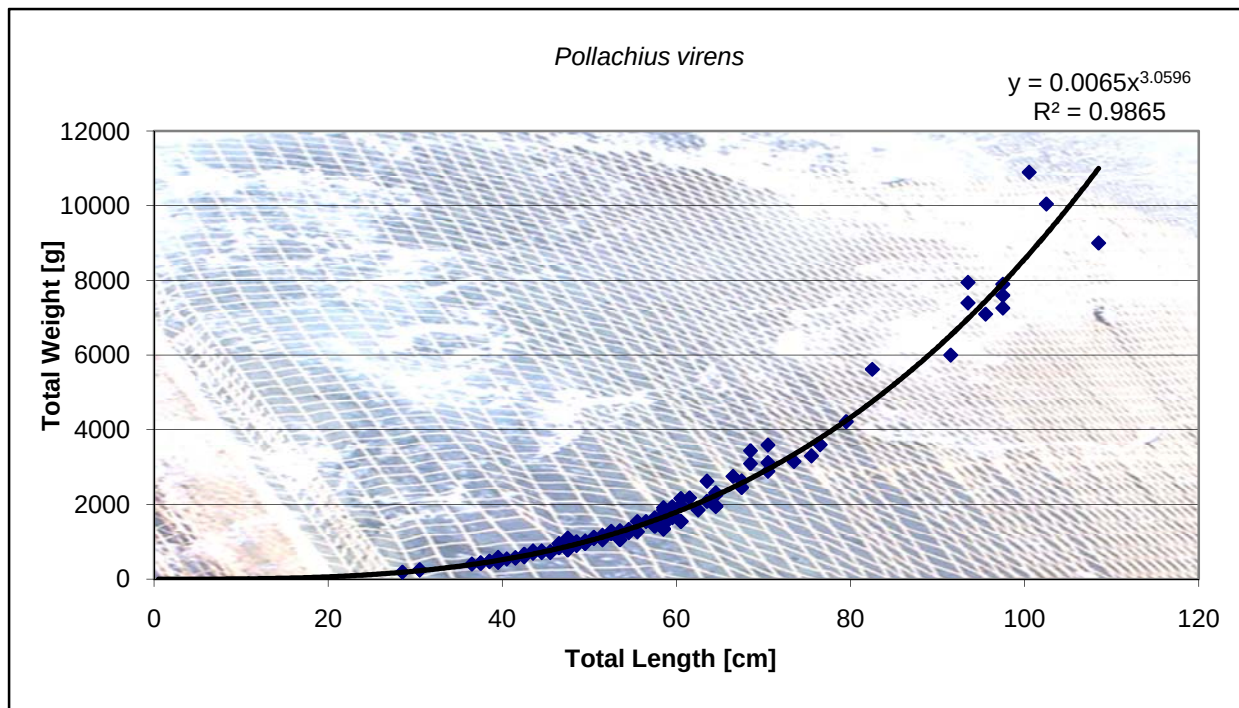
data collected

time period : 1994 - 2003

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
109	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	109	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	2	-	101	-	1	5	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	2	-	-	-	-	-	97	4	-	-	-	1	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
1	-	4	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
97	4	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

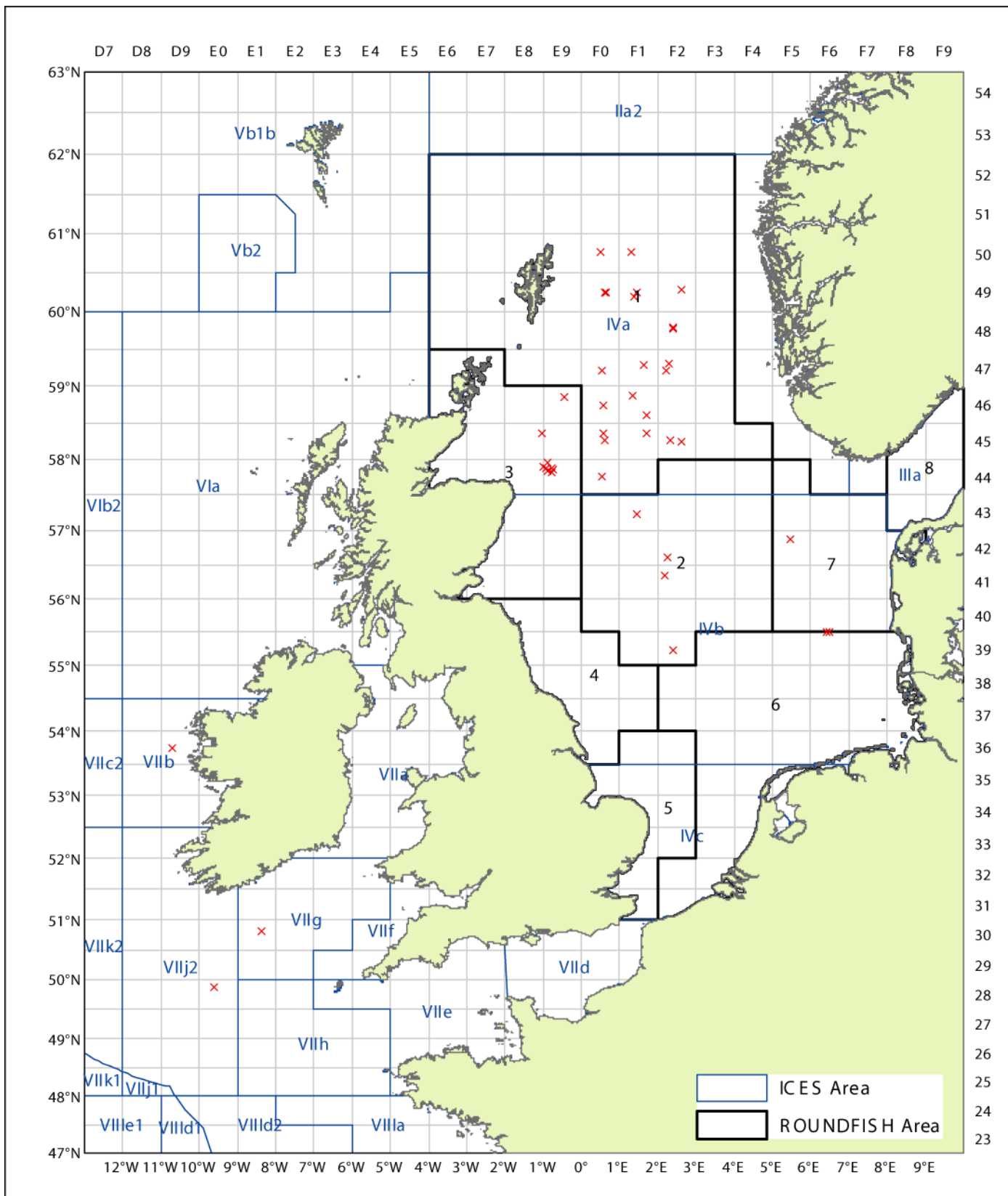
28.5 [cm]
108.5 [cm]

male 52
female 44
undefined 13

total numbers of data 109

Pollachius virens Quarter 2

Geographical distribution of data used for calculating the length-weight relationship



Pollachius virens

Quarter: 2

$$Tw [g] = a * L [cm]^b$$

a = 0.0164

b = 2.8586

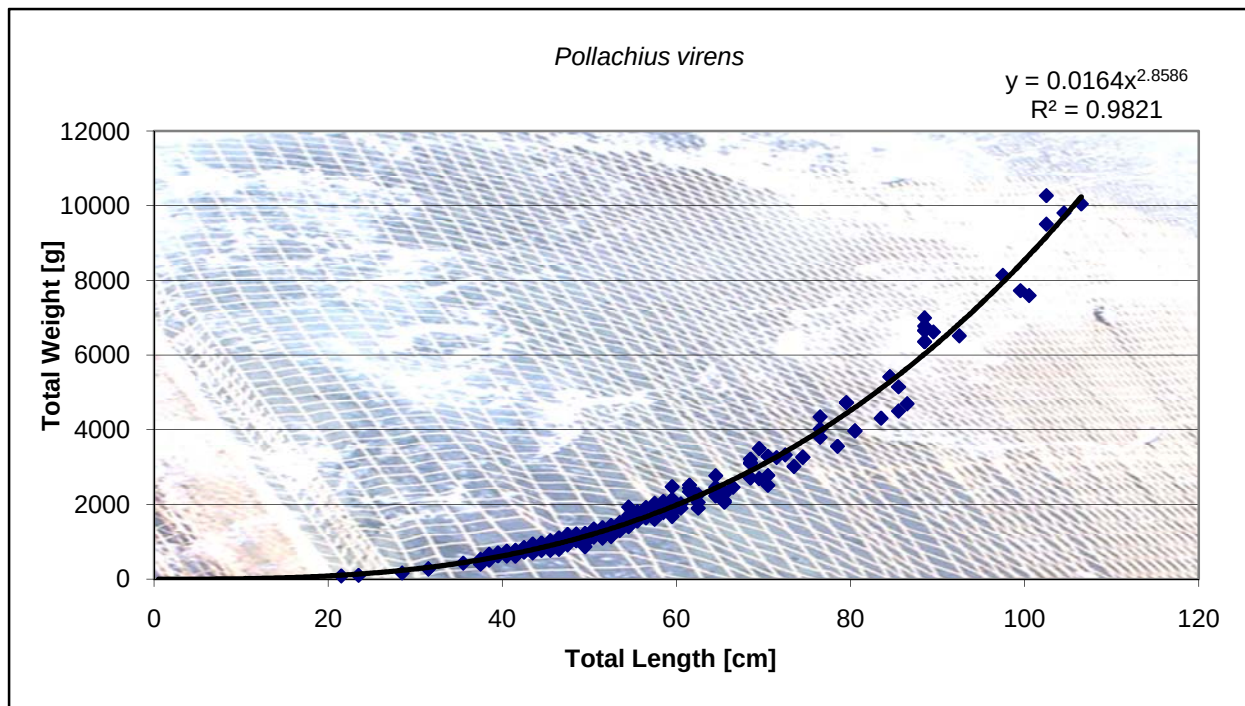
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Numbers by Quarter																			
Quarter																			
1	2	3	4																
-	215	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	3	187	25	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	212	-	-	3	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	201	11	-	-	-	-	-	-	1	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
1	-	1	-	-	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
186	8	15	-	-	-	3	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

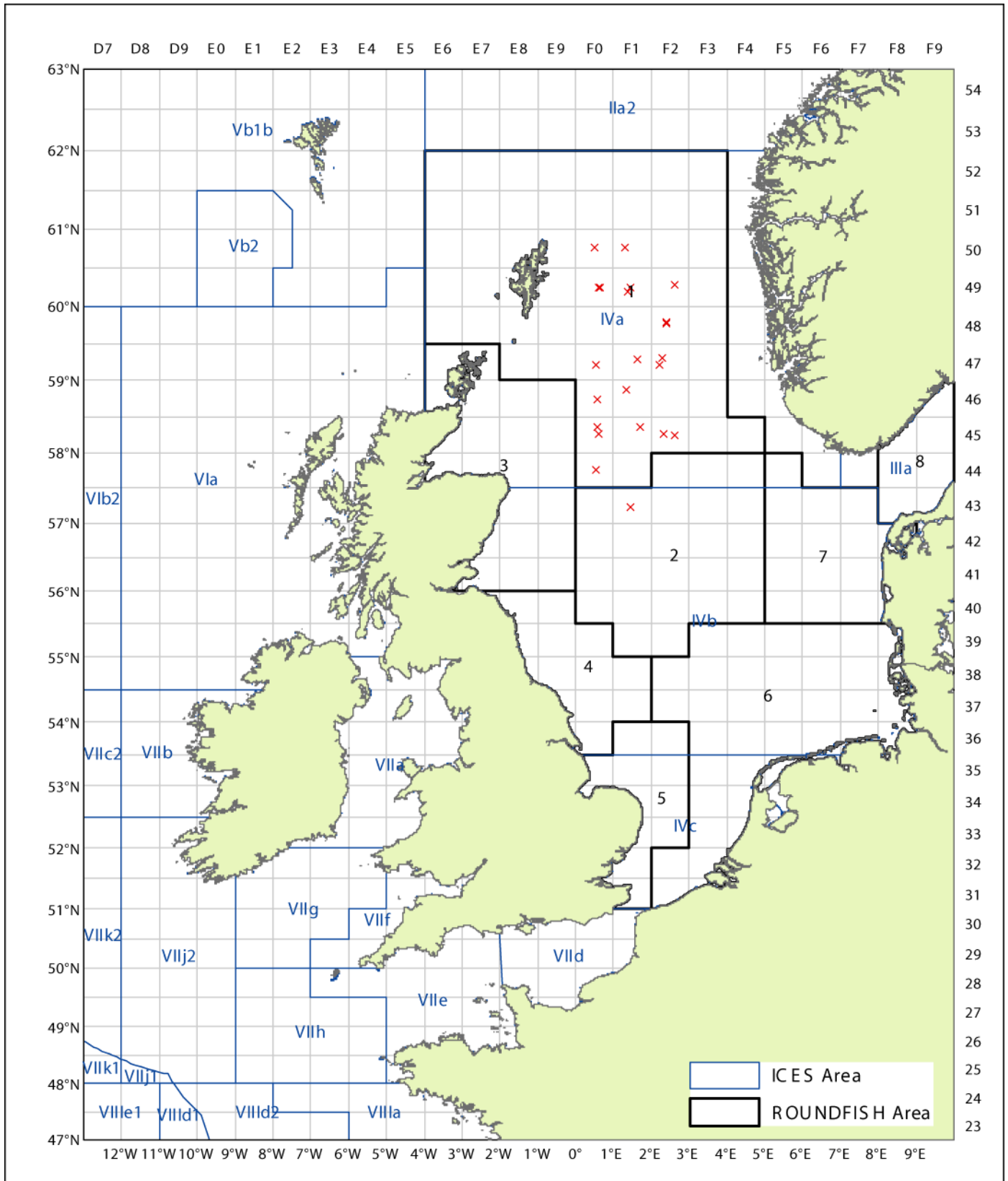
21.5 [cm]
106.5 [cm]

male 90
female 99
undefined 26

total numbers of data 215

Pollachius virens May

Geographical distribution of data used for calculating the length-weight relationship



Pollachius virens

May

$$Tw [g] = a * L [cm]^b$$

a = 0.0204

b = 2.8079

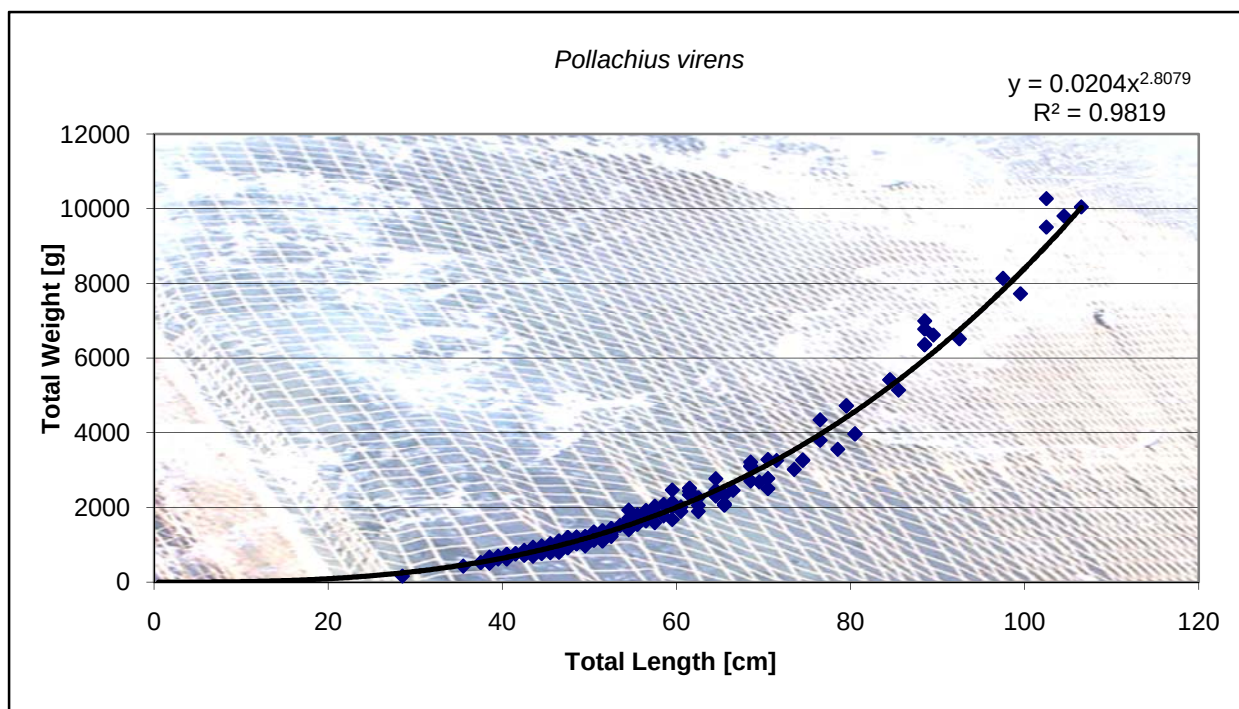
data collected

time period : 1994 - 1995

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
-	187	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	187	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	187	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	185	2	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
185	2	-	-	-	-	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

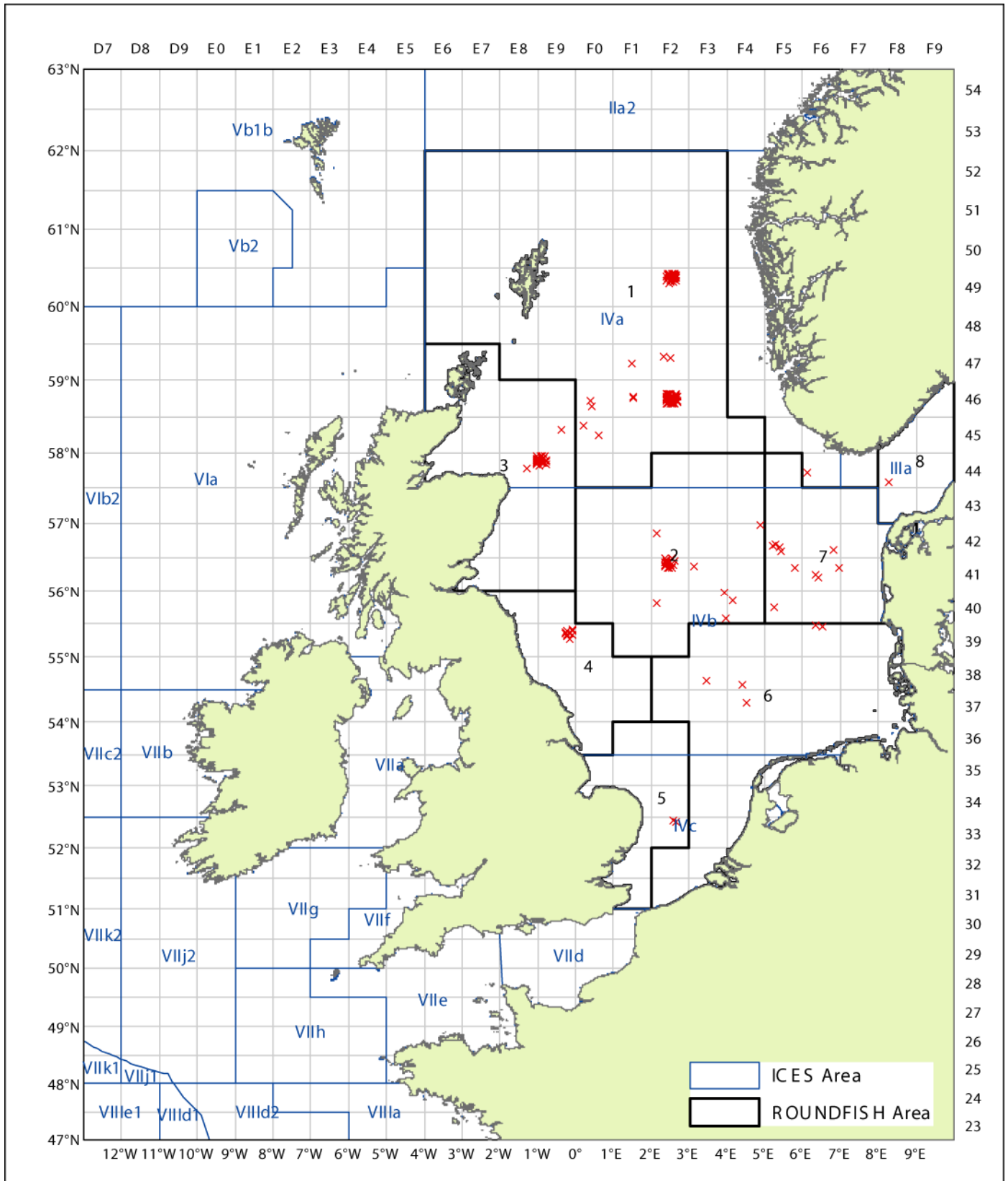
28.5 [cm]
106.5 [cm]

male 86
female 95
undefined 6

total numbers of data 187

Pollachius virens Quarter 3

Geographical distribution of data used for calculating the length-weight relationship



Pollachius virens

Quarter: 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0103

b = 2.9632

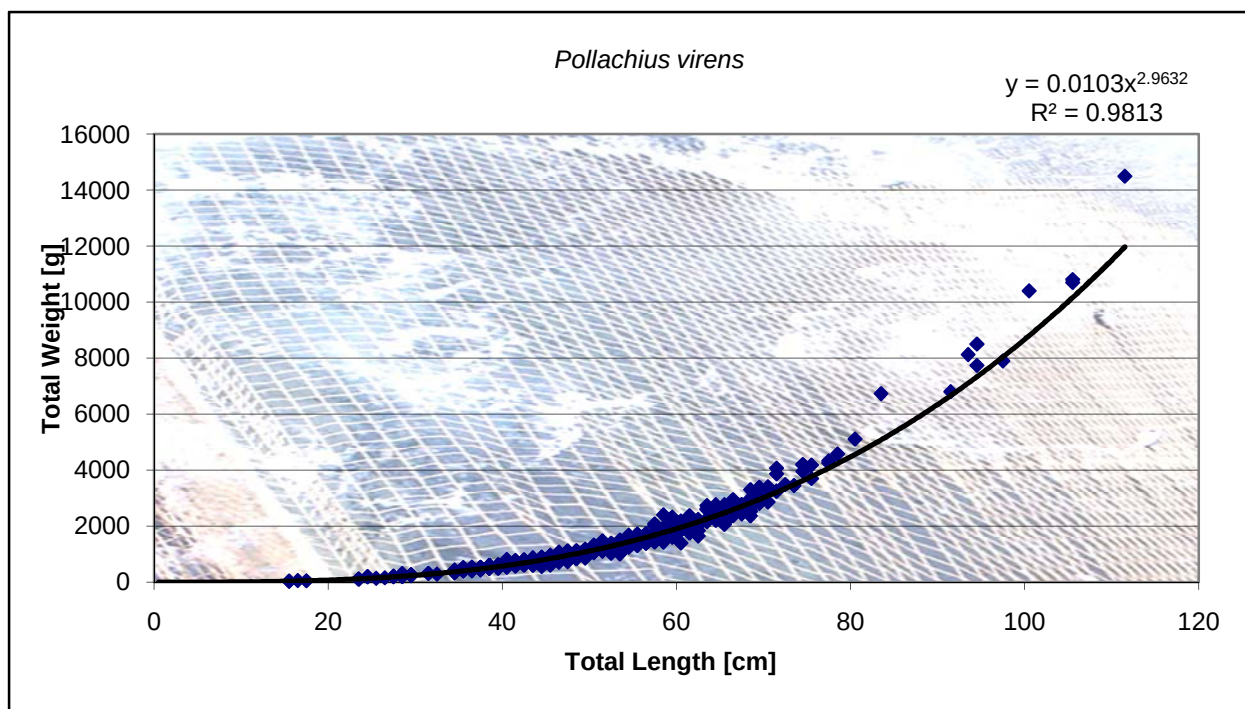
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Numbers of fish																			
Quarter																			
1	2	3	4																
-	-	642	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	508	132	2	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	642	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	578	62	2	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
527	33	47	15	2	5	11	1	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

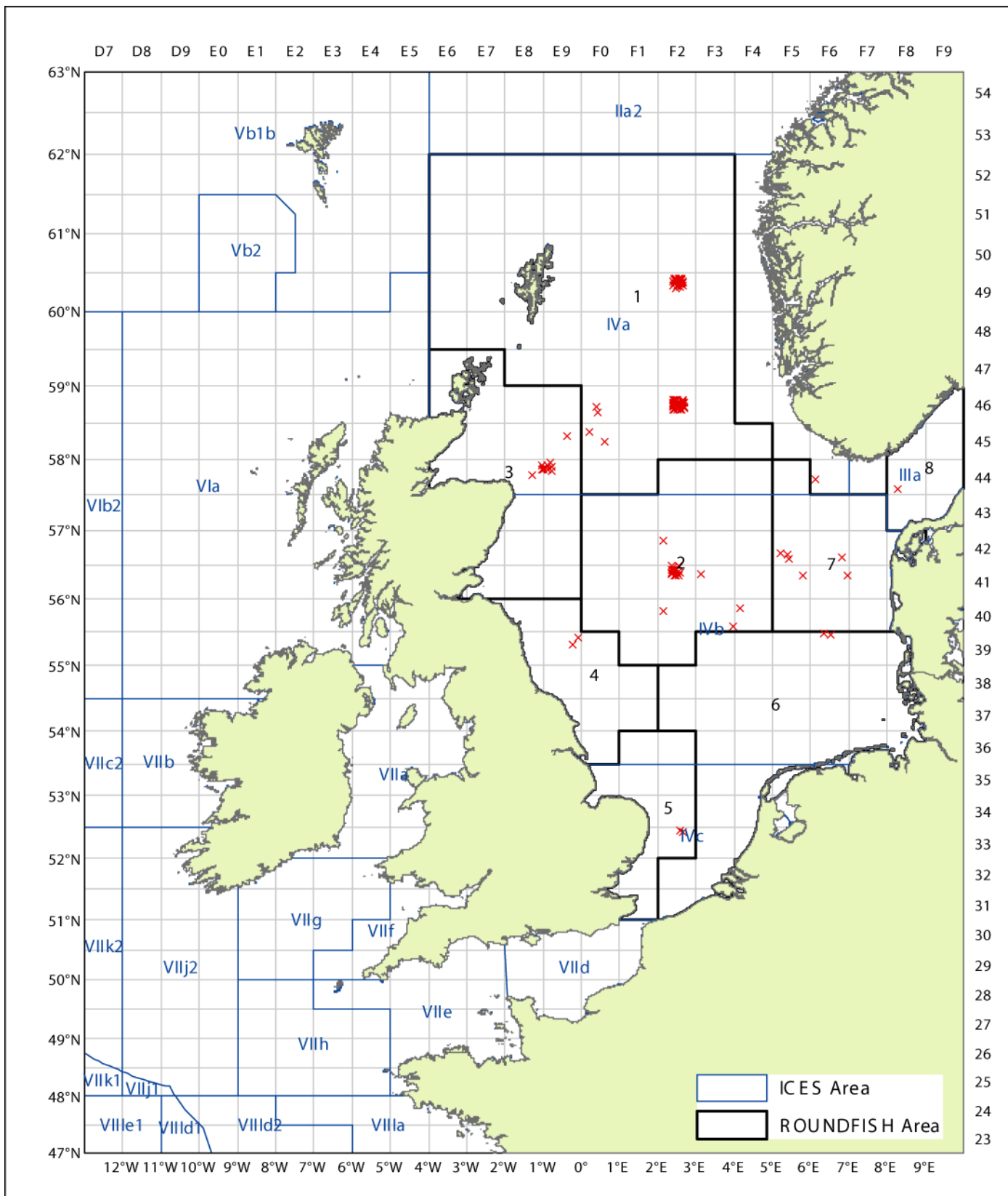
15.5 [cm]
111.5 [cm]

male 261
female 239
undefined 142

total numbers of data 642

Pollachius virens *July*

Geographical distribution of data used for calculating the length-weight relationship



Pollachius virens

July

$$Tw [g] = a * L [cm]^b$$

a = 0.0107

b = 2.9549

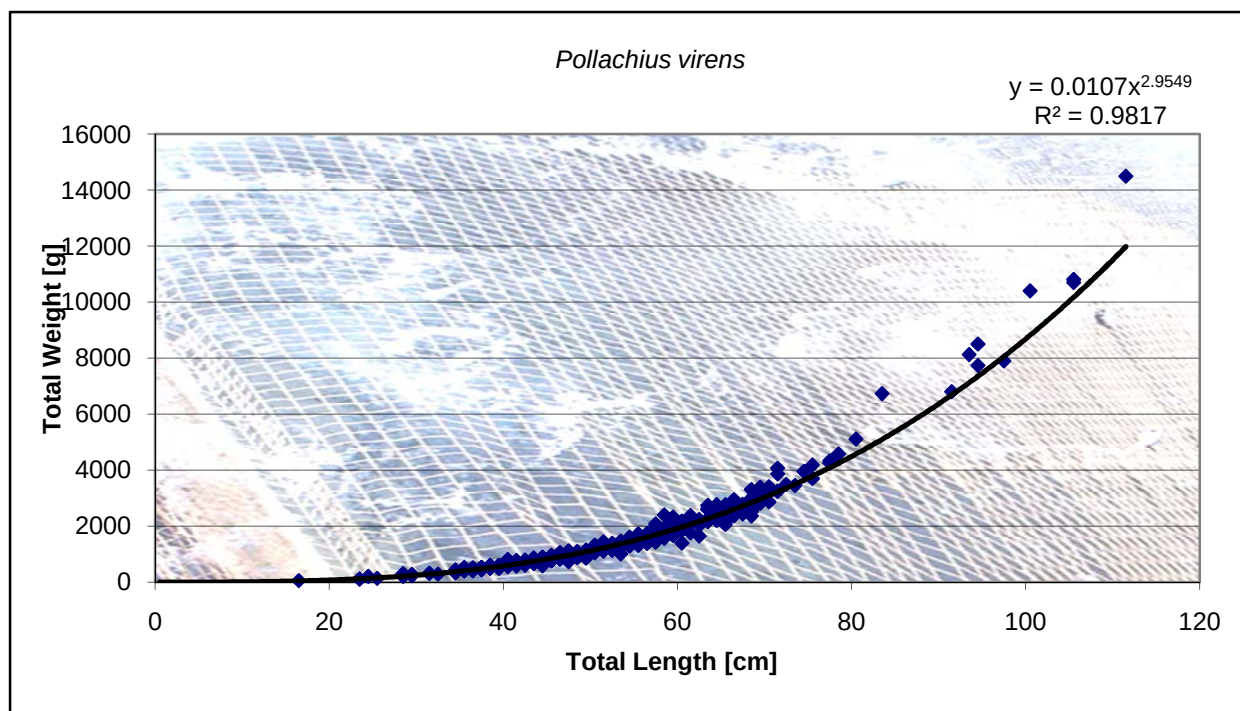
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
-	-	508	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	508	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	508	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	470	36	2	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
452	24	17	3	2	2	6	1	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

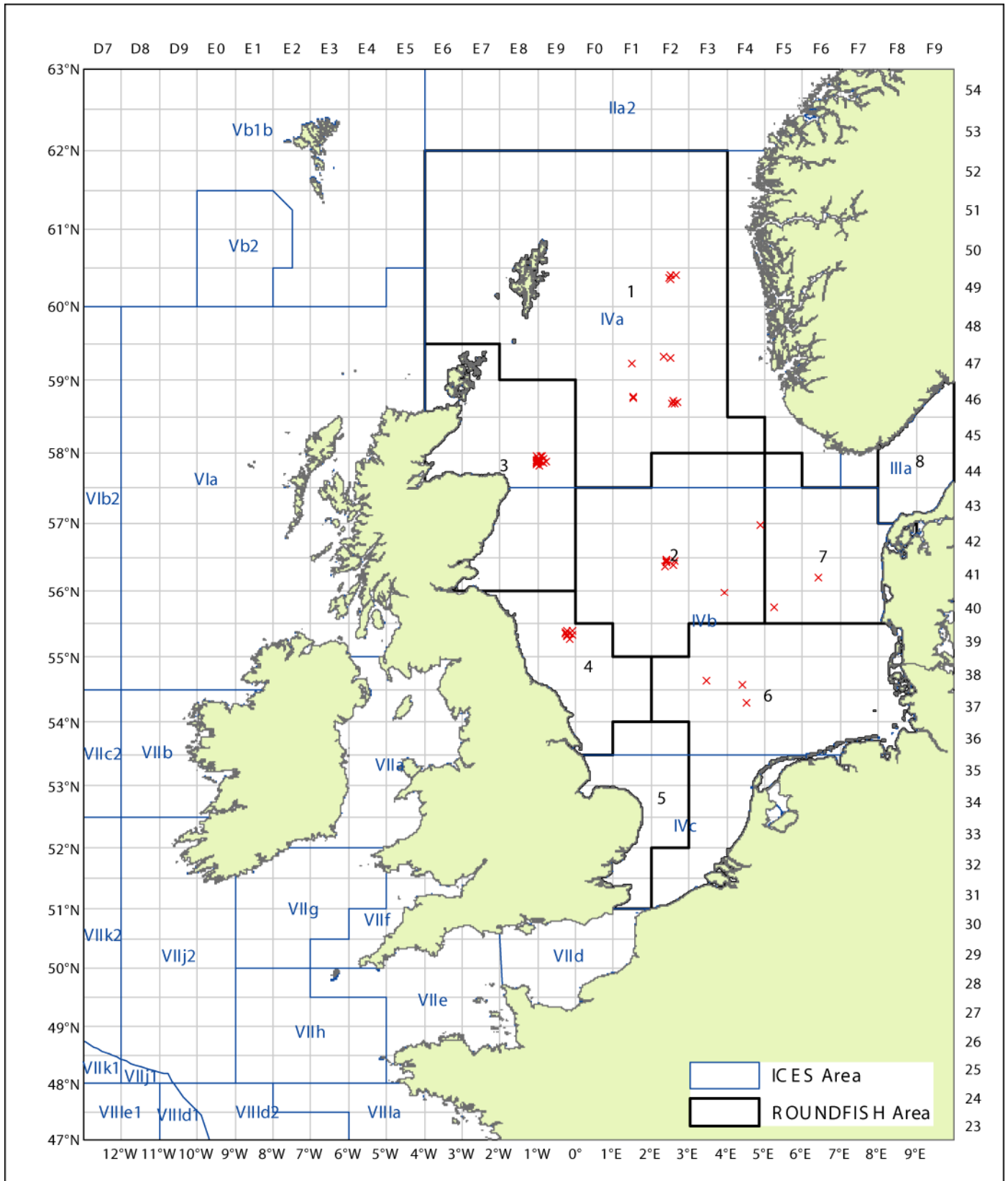
16.5 [cm]
111.5 [cm]

male 219
female 202
undefined 87

total numbers of data 508

Pollachius virens August

Geographical distribution of data used for calculating the length-weight relationship



Pollachius virens

August

$$Tw [g] = a * L [cm]^b$$

a = 0.0105

b = 2.9504

data collected

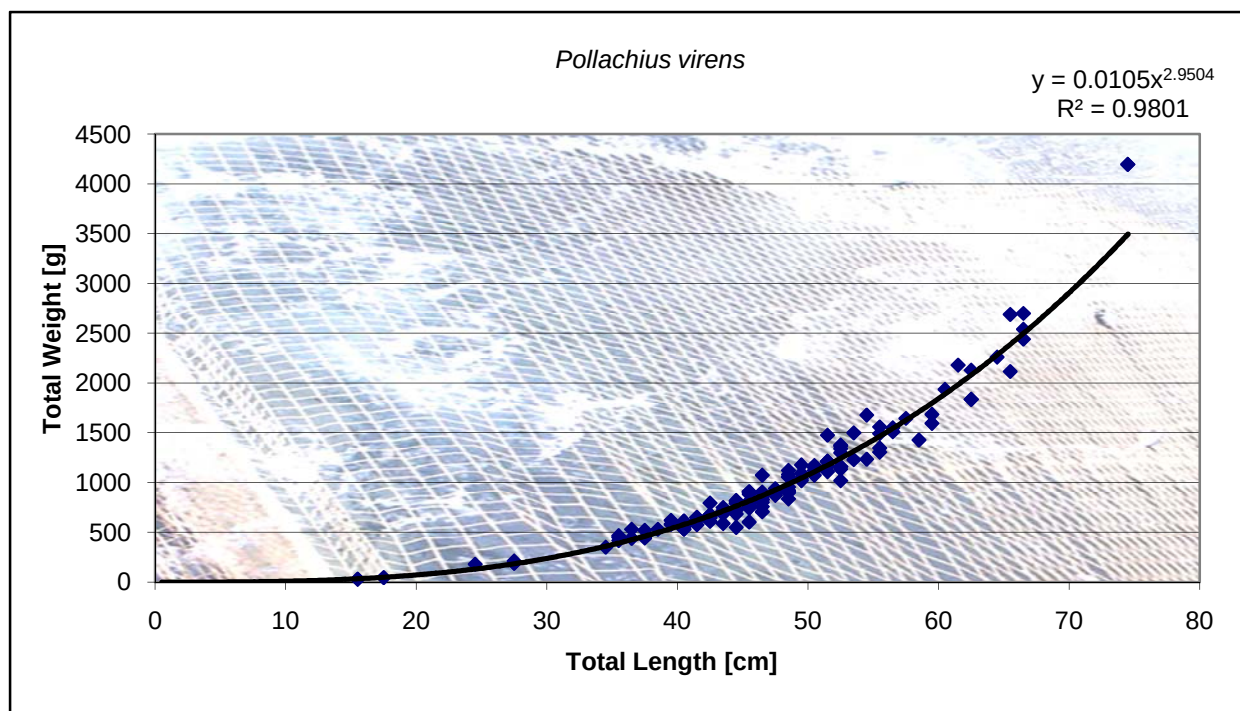
time period : 1997 - 2007

data source : research vessel

numbers of data:

Numbers of data:

Quarter																			
1	2	3	4																
-	-	132	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	132	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	132	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	108	24	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
75	9	30	12	-	3	3	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

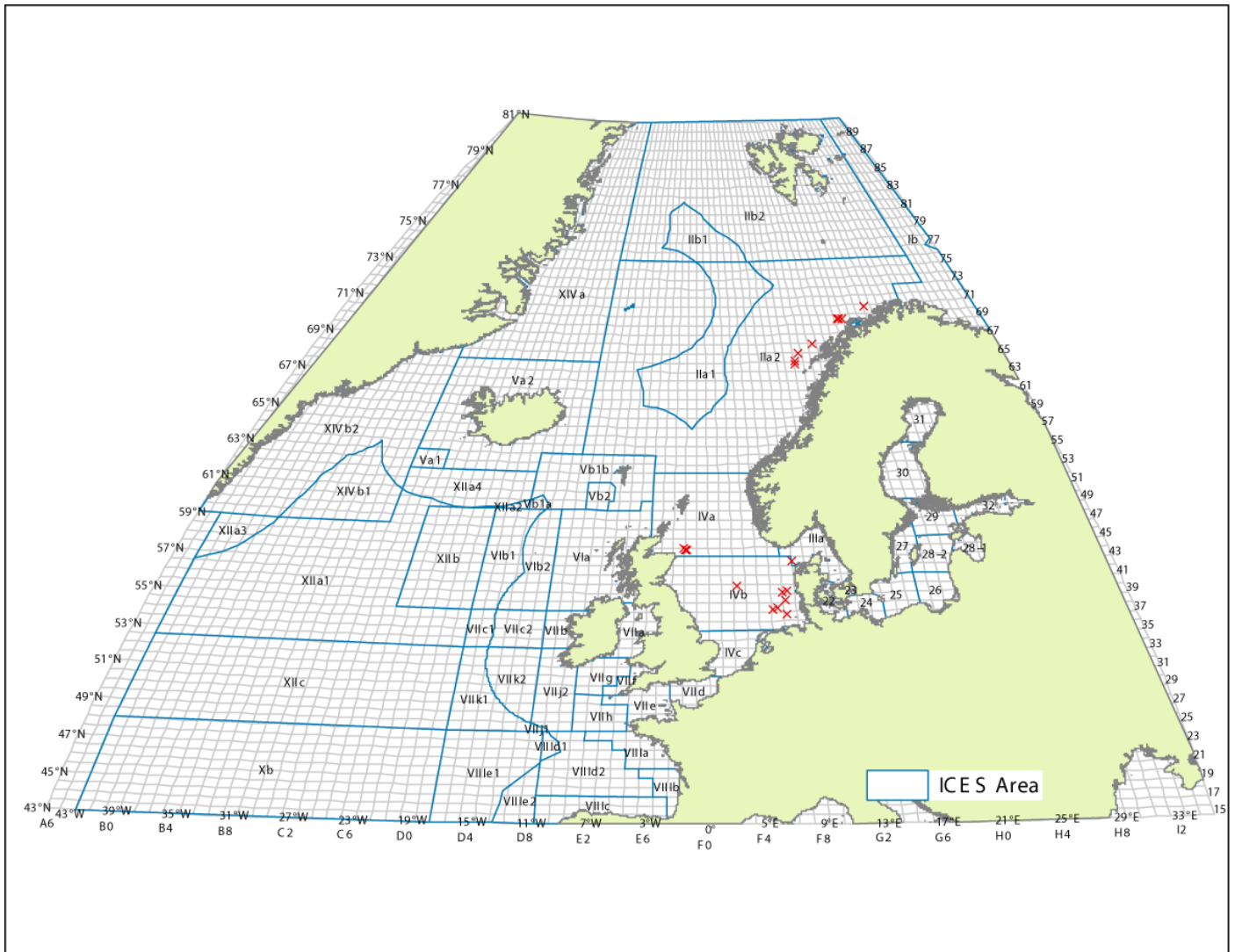
15.5 [cm]
74.5 [cm]

male 42
female 37
undefined 53

total numbers of data 132

Pollachius virens Quarter 4

Geographical distribution of data used for calculating the length-weight relationship



Pollachius virens

Quarter: 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0077

b = 3.0455

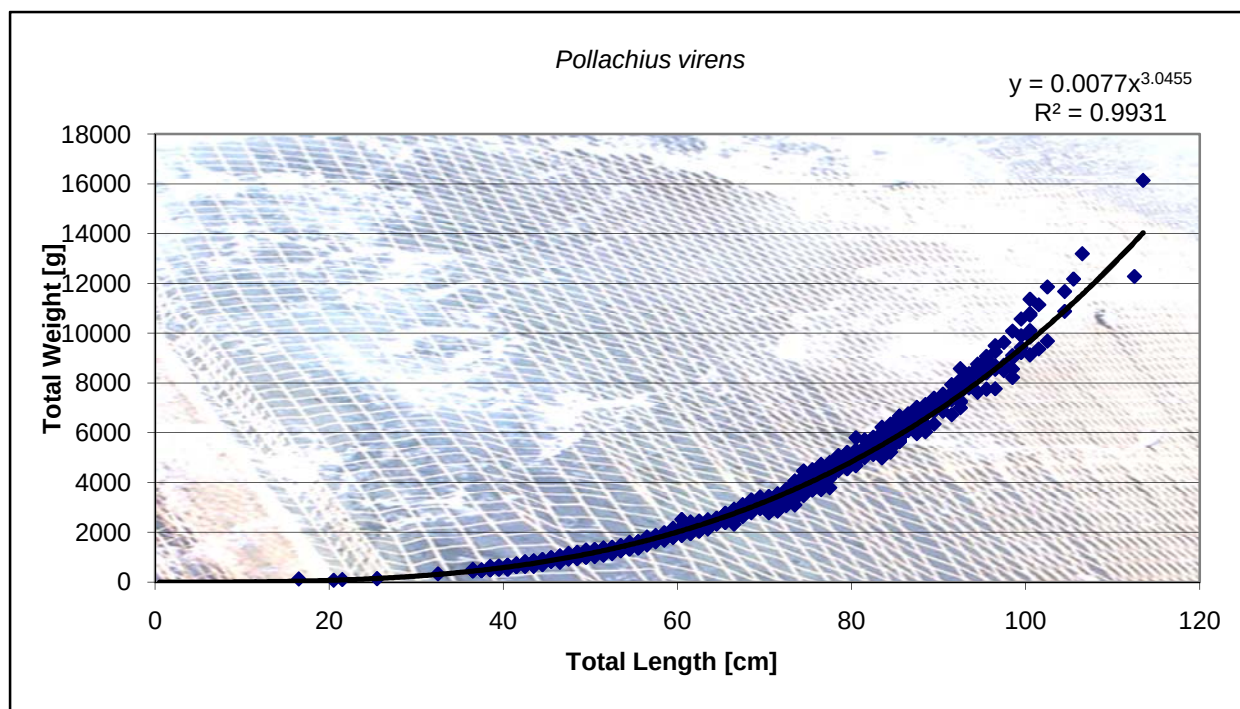
data collected

time period : 1996 - 2006

data source : research vessel, commercial trawler

numbers of data:

Numbers of data:																				
Quarter																				
1	2	3	4																	
-	-	-	1055																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	-	-	-	551	498	6									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	1043	1	11	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	1043	-	1	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
-	-	-	-	-	-	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9												
-	1	4	-	-	6	-	1	-												
1A	1B	1C	1D	1E	1F	2G	2H	2J												
-	-	-	-	-	-	-	-	-												



Method of Measurement

- Total length
- cm below

min length
max length

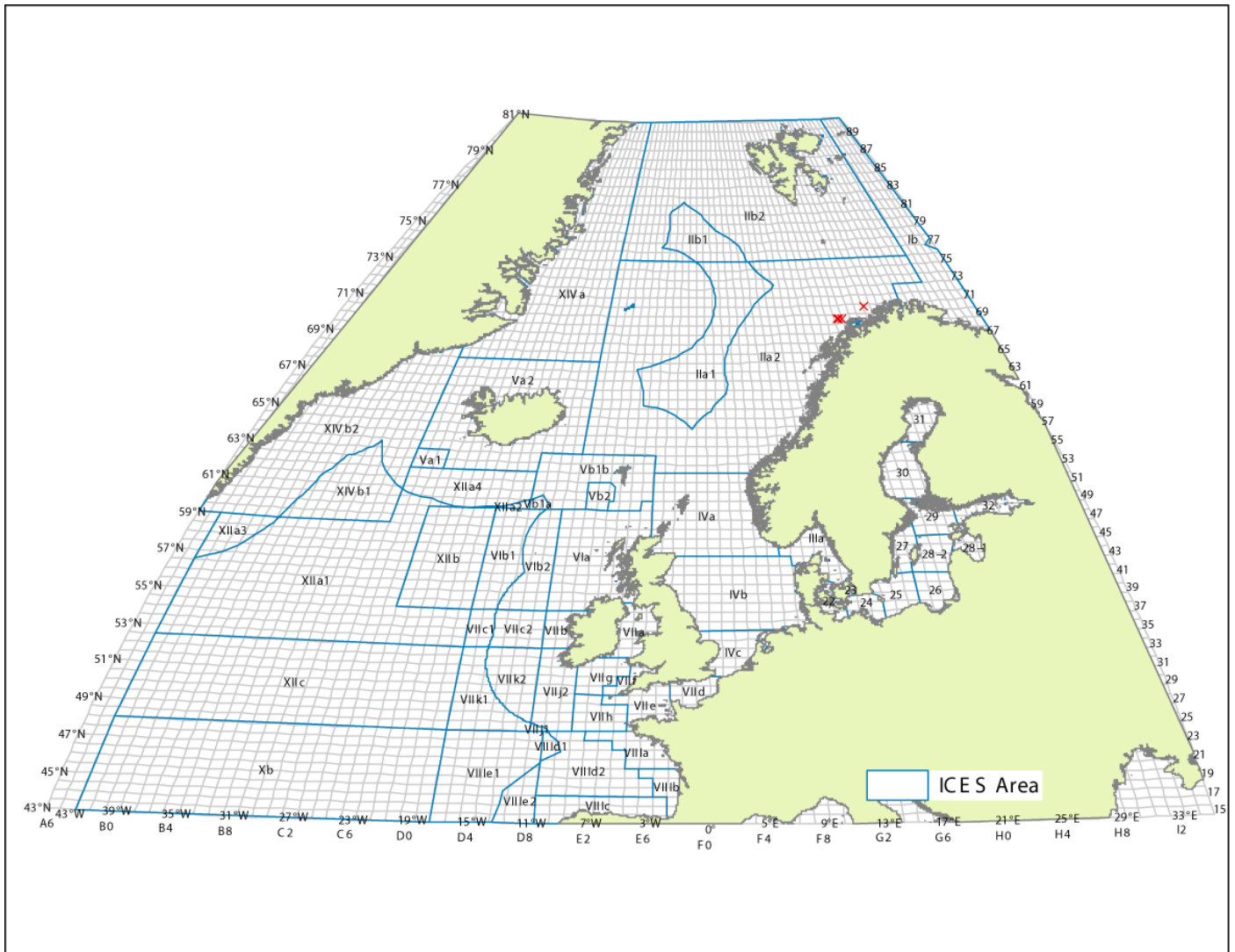
16.5 [cm]
113.5 [cm]

male -
female -
undefined 1055

total numbers of data 1055

Pollachius virens *October*

Geographical distribution of data used for calculating the length-weight relationship



Pollachius virens

October

$$Tw [g] = a * L [cm]^b$$

a = 0.0106

b = 2.9637

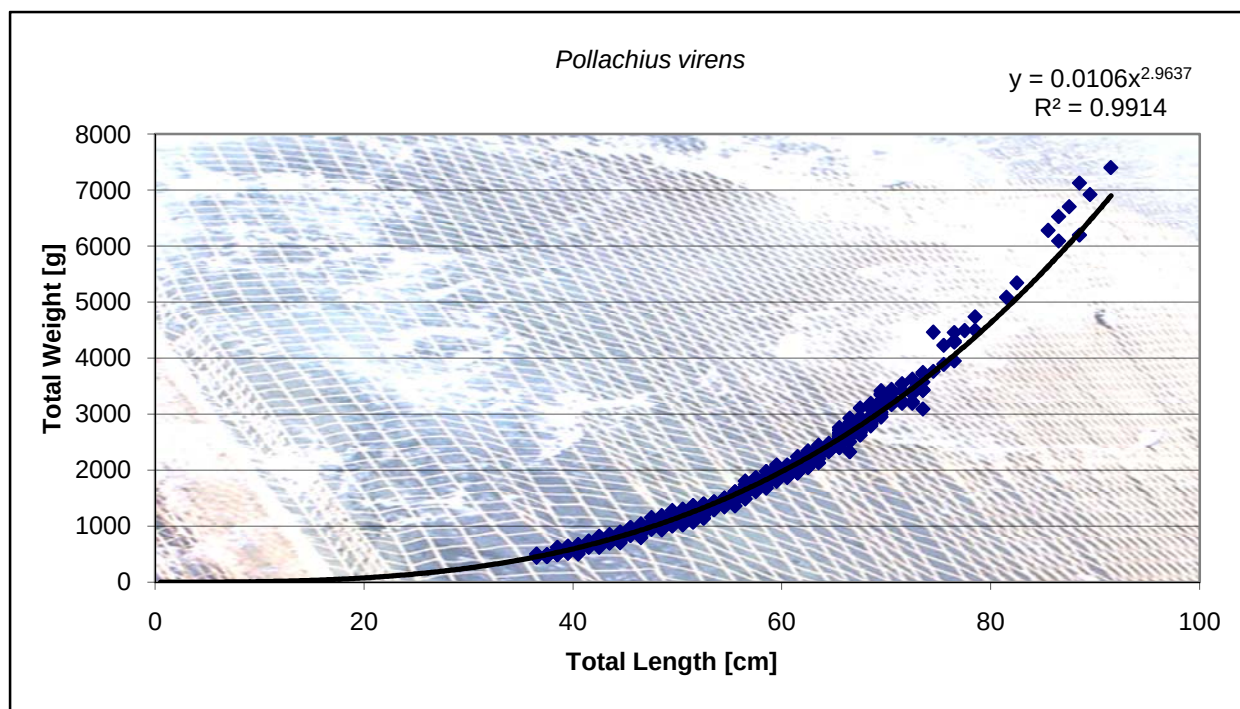
data collected

time period : 2002

data source : commercial trawler

numbers of data:

Numbers of data																				
Quarter																				
1	2	3	4																	
-	-	-	551																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	-	-	-	551	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	551	-	-	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	551	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
-	-	-	-	-	-	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length

- cm below

min length

max length

36.5 [cm]

91.5 [cm]

male

female

undefined

-

-

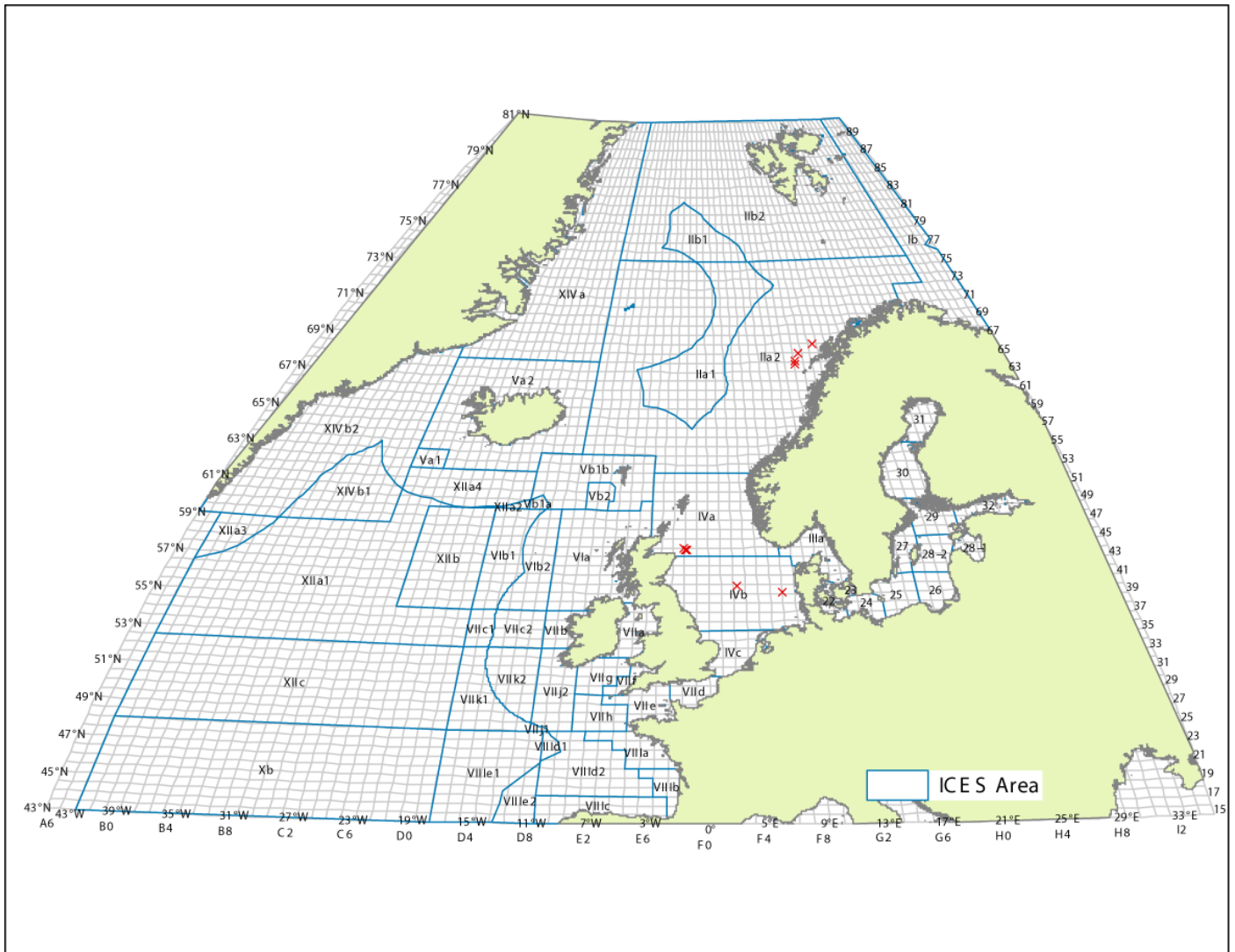
551

total numbers of data

551

Pollachius virens November

Geographical distribution of data used for calculating the length-weight relationship



Pollachius virens

November

$$Tw [g] = a * L [cm]^b$$

a = 0.0054

b = 3.1297

data collected

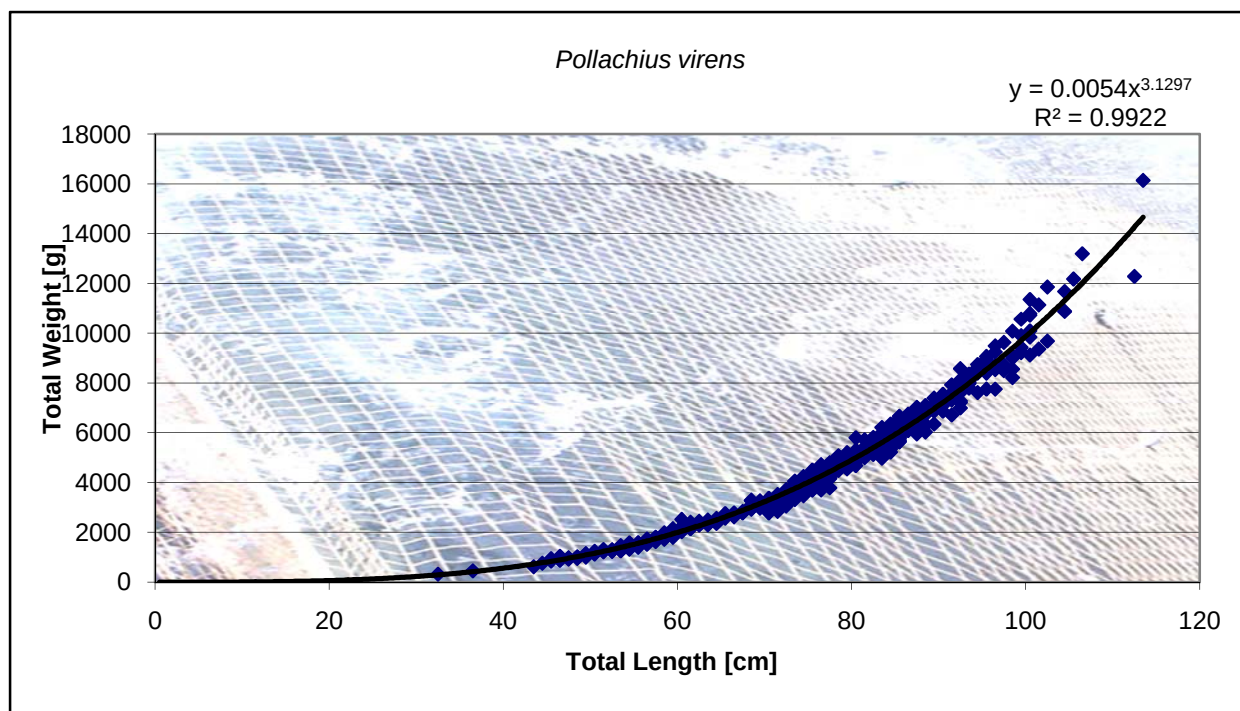
time period : 1997 - 2006

data source : research vessel, commercial trawler

numbers of data:

Numbers of data:

Quarter																				
1	2	3	4																	
-	-	-	498																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	-	-	-	-	498	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	492	-	6	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	492	-	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
-	-	-	-	-	-	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9												
-	1	4	-	-	1	-	-	-												
											1A	1B	1C	1D	1E	1F	2G	2H	2J	
											-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

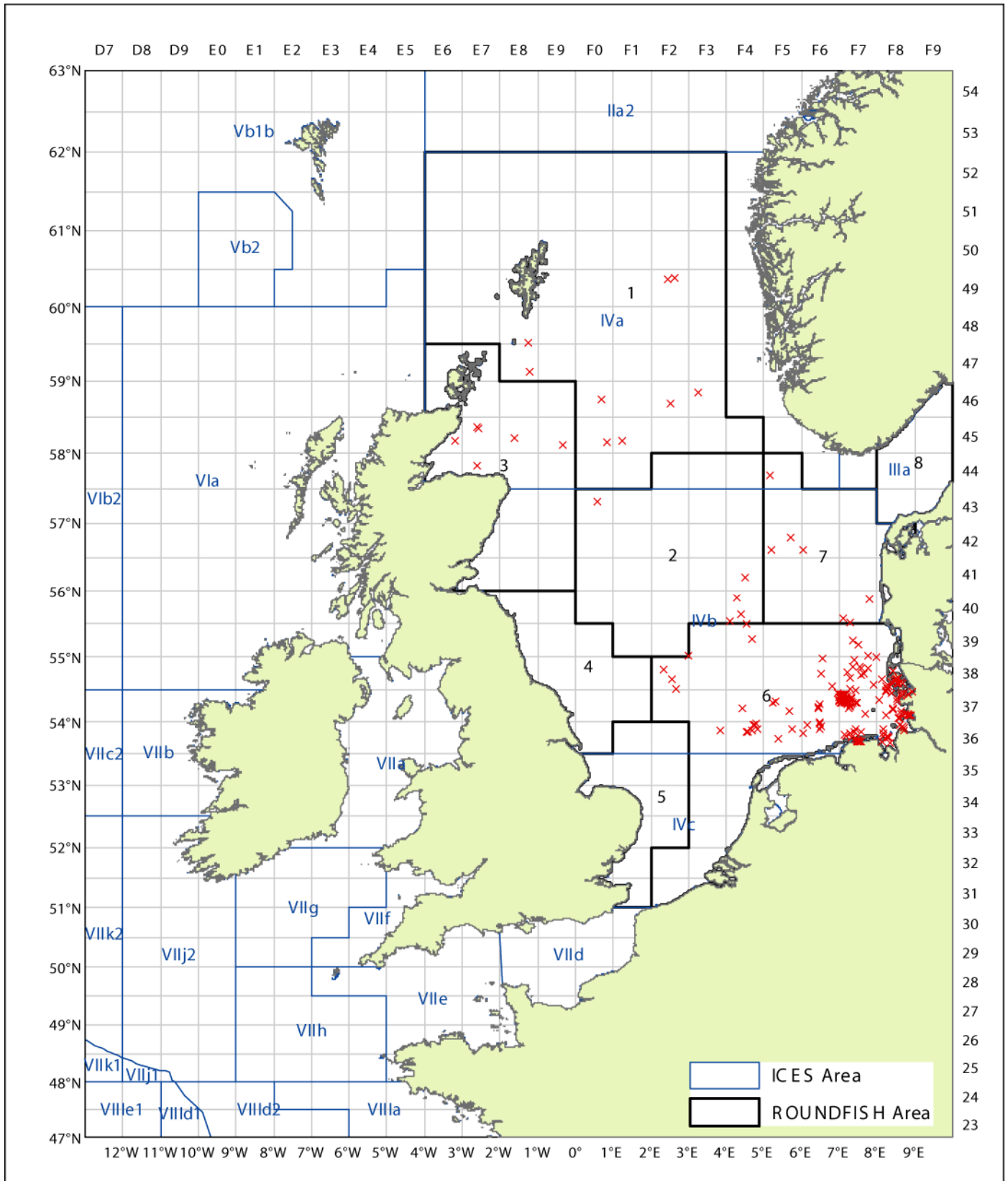
32.5 [cm]
113.5 [cm]

male -
female -
undefined 498

total numbers of data 498

Pomatoschistus minutus

Geographical distribution of data used for calculating the length-weight relationship



Pomatoschistus minutus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.01

b = 2.8976

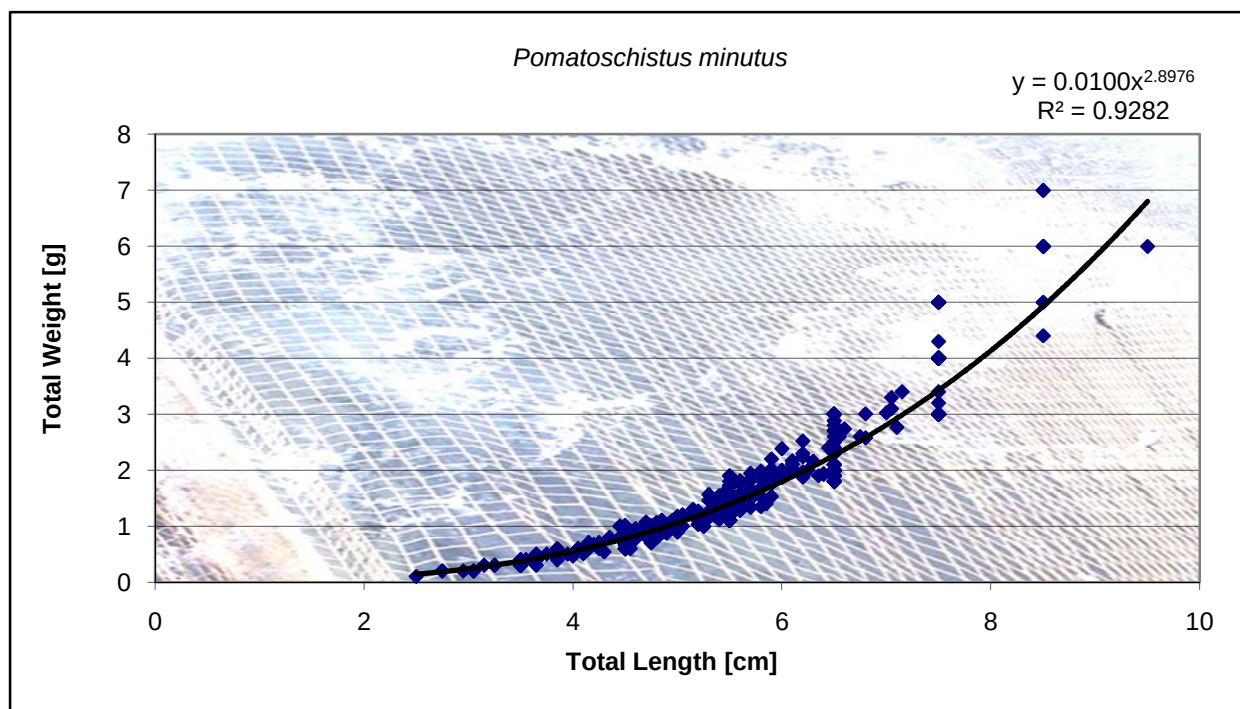
data collected

time period : 1998 - 2009

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
286	26	292	11																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
277	9	-	1	25	-	74	172	46	4	5	2								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	615	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	16	599	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
9	6	6	1	-	582	11	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- mm below, cm below
- min length
- max length

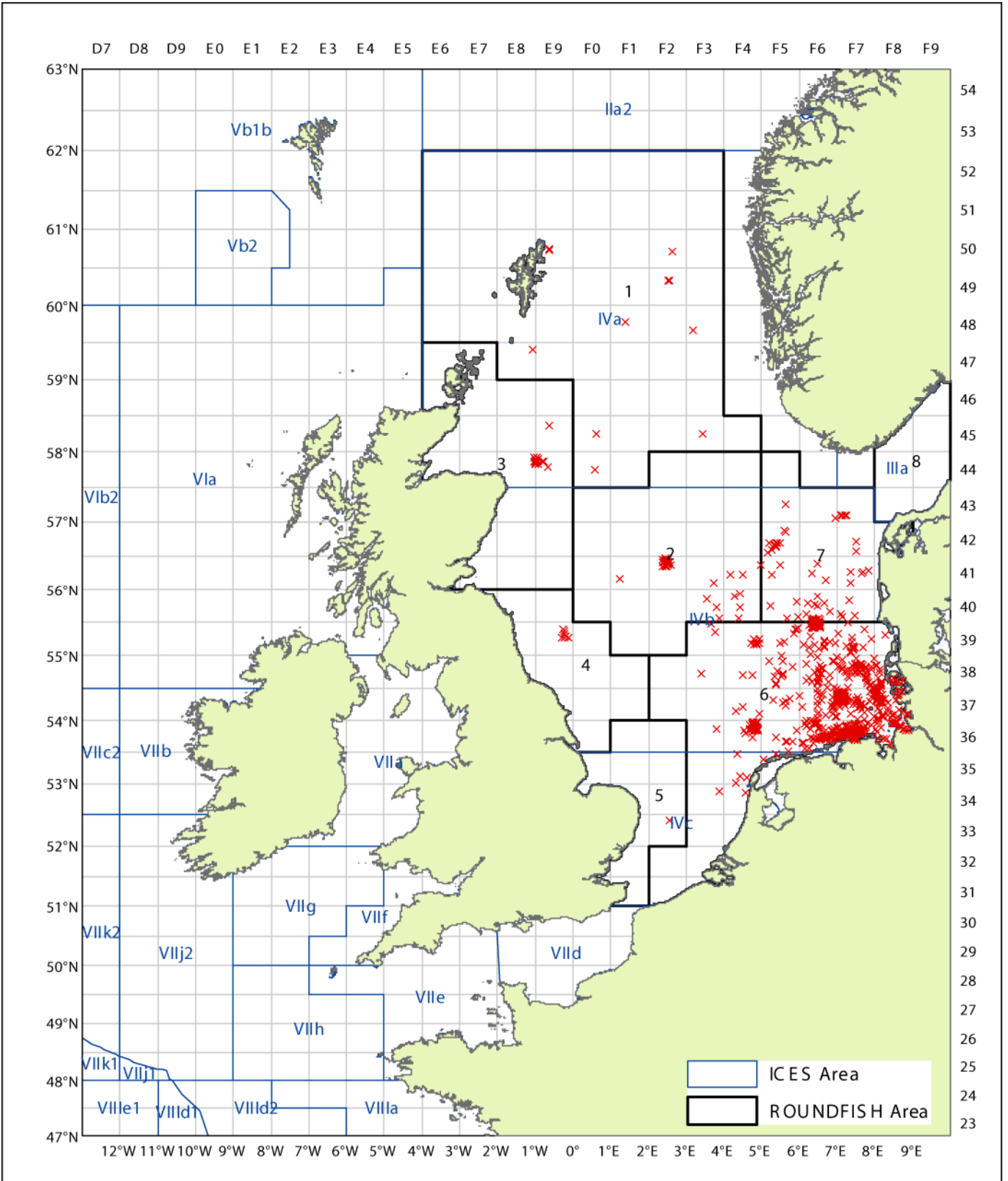
2.5 [cm]
9.5 [cm]

male -
female -
undefined 615

total numbers of data 615

Psetta maxima

Geographical distribution of data used for calculating the length-weight relationship



Psetta maxima

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0128

b = 3.1267

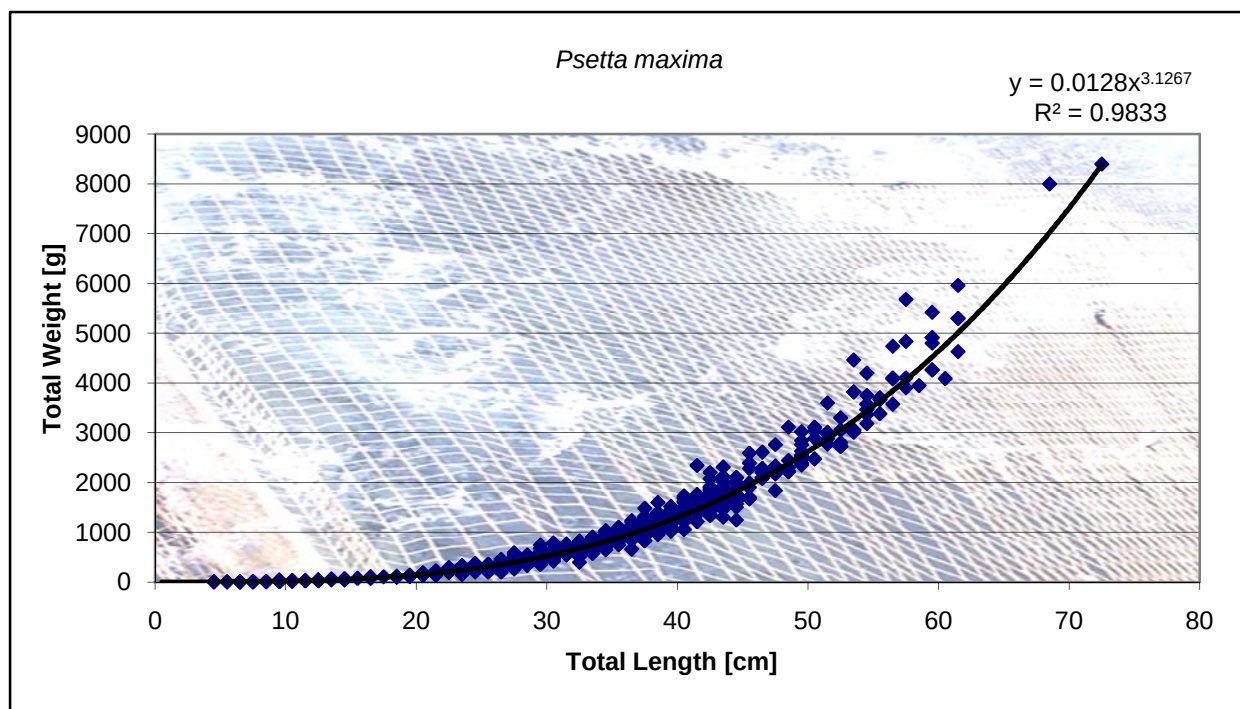
data collected

time period : 1993 - 2007

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
154	302	364	124																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
116	38	-	10	260	32	133	198	33	18	49	57								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	944	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	35	903	6	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
17	36	22	8	1	791	69	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

4.5 [cm]
72.5 [cm]

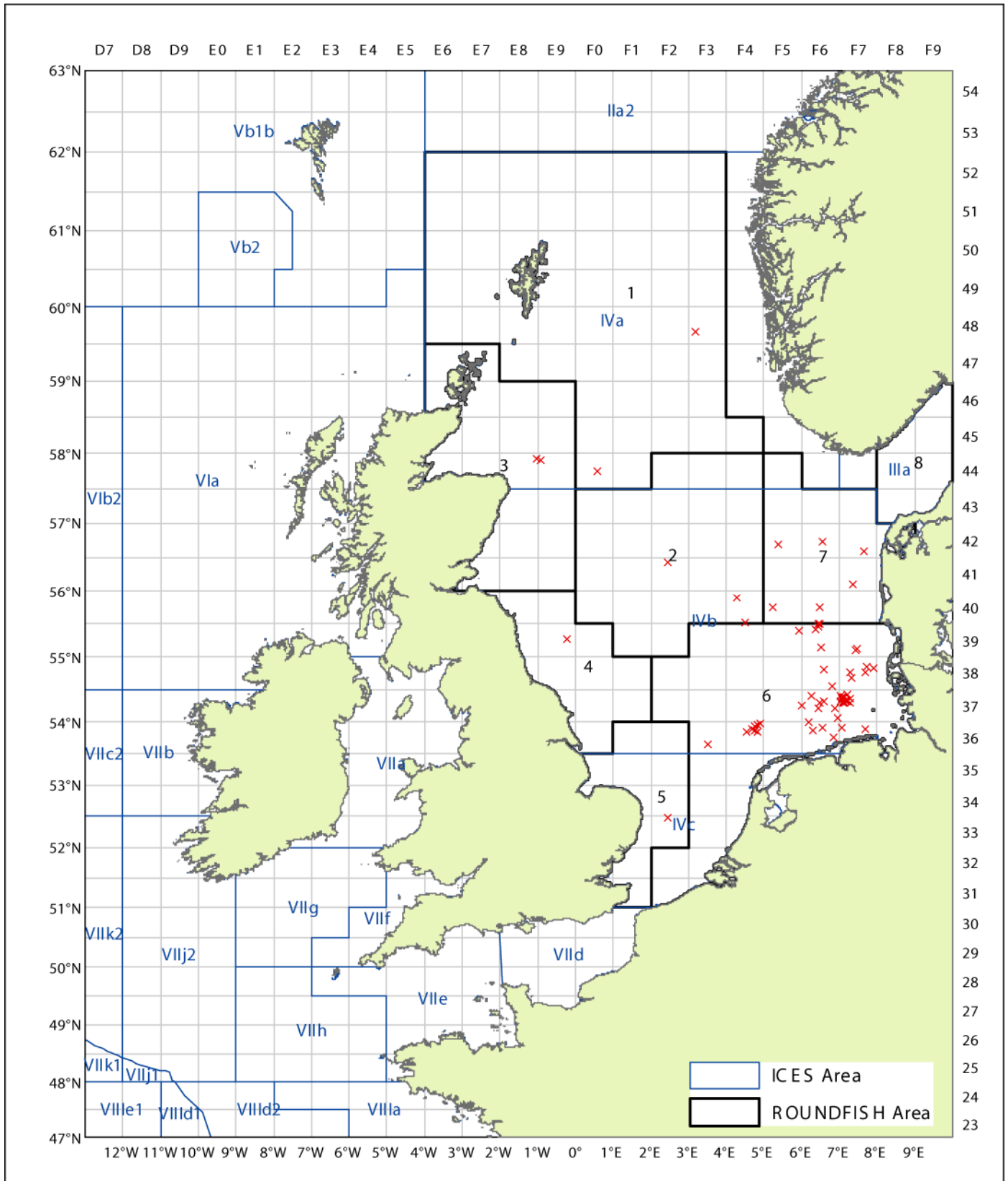
male 75
female 66
undefined 803

total numbers of data 944

Psetta maxima



Geographical distribution of data used for calculating the length-weight relationship



Psetta maxima



Quarter: 1 - 4

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0112

b = 3.1702

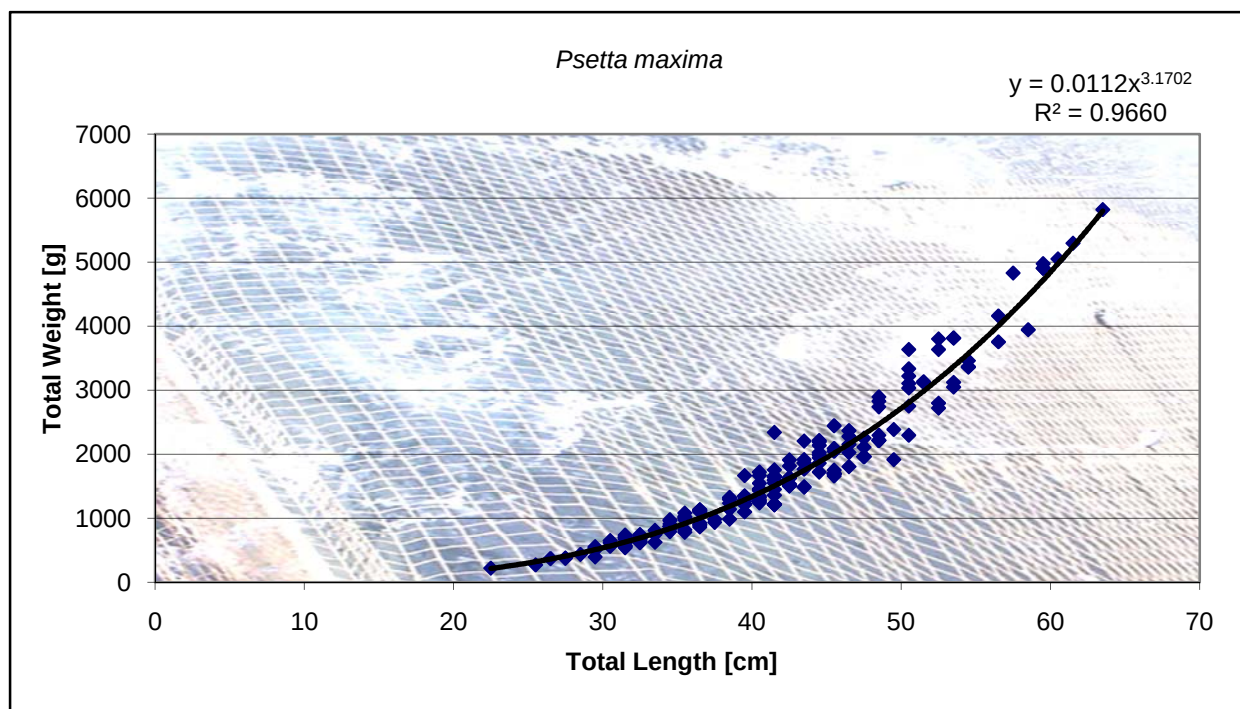
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Numbers of fish																				
Quarter																				
1	2	3	4																	
7	98	74	5																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
6	1	-	23	5	70	14	60	-	-	-	5									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	184	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	3	181	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
2	2	2	2	1	166	9	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

22.5 [cm]
63.5 [cm]

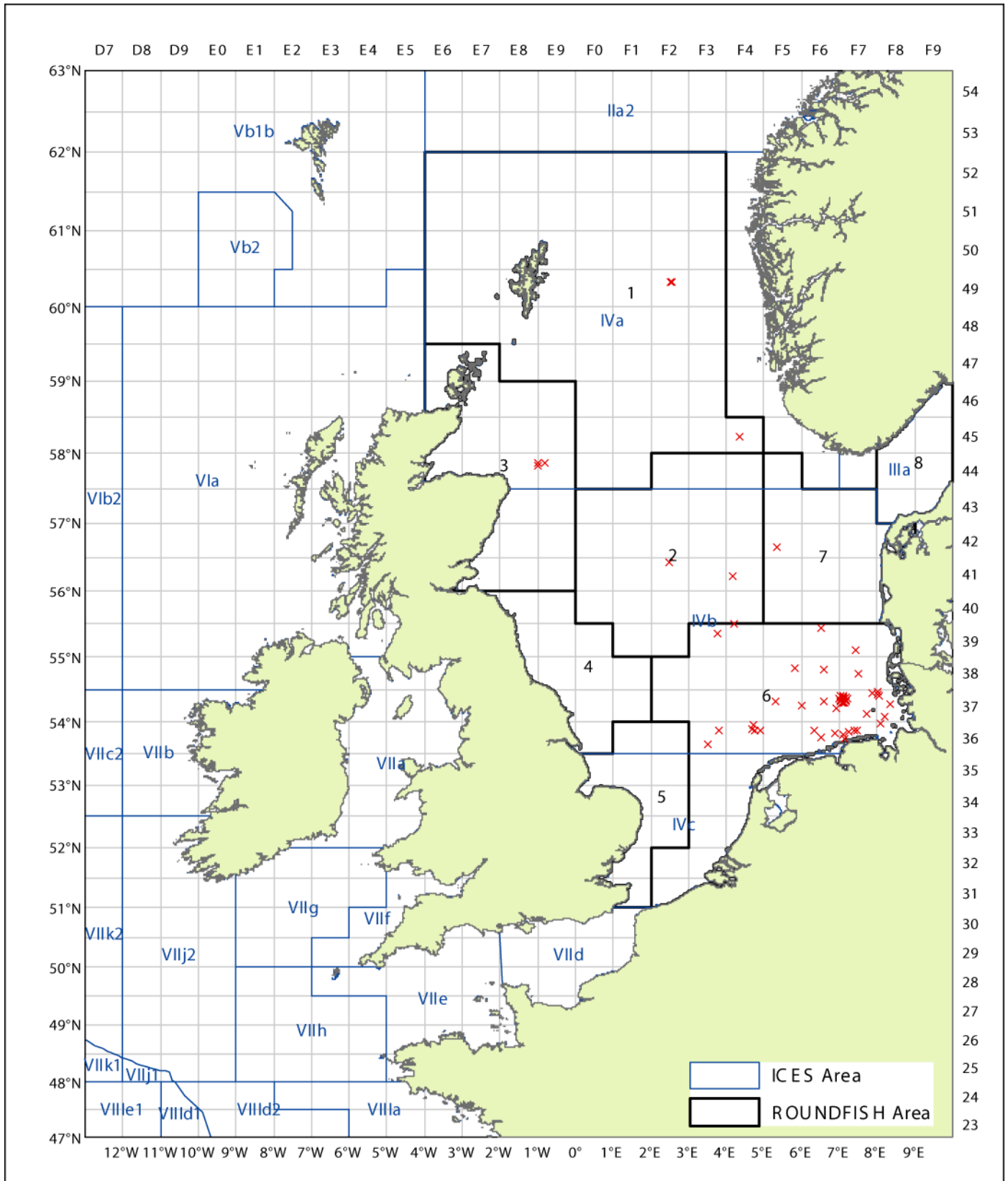
male
female
undefined

-
184
-

total numbers of data 184

Psetta maxima ♂

Geographical distribution of data used for calculating the length-weight relationship



Psetta maxima



Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0138

b = 3.0988

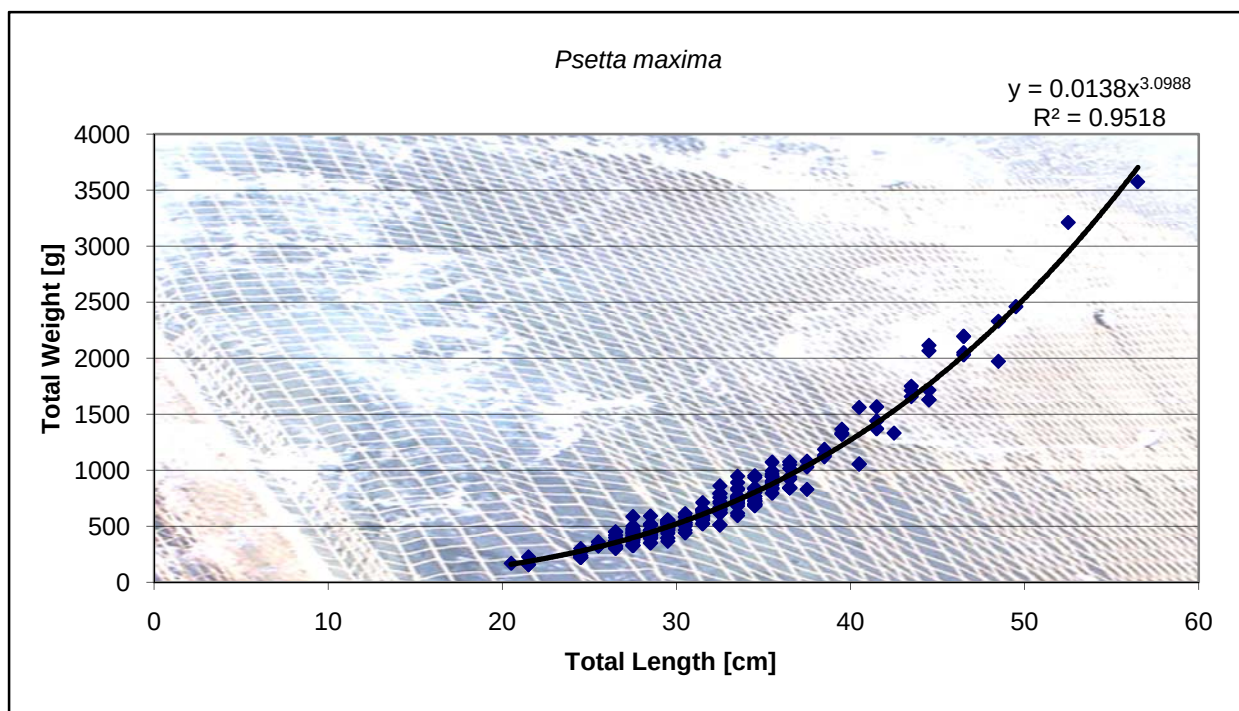
data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of catch																					
Quarter																					
1	2	3	4																		
6	159	54	2																		
Month																					
1	2	3	4	5	6	7	8	9	10	11	12										
5	1	-	18	16	125	9	45	-	-	1	1										
Subarea																					
1	2	3	4	5	6	7	8	9	10	12	14										
-	-	-	221	-	-	-	-	-	-	-	-										
Division																					
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F		
-	-	-	-	-	-	-	10	211	-	-	-	-	-	-	-	-	-	-	-		
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B							
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Roundfisharea												NAFO									
1	2	3	4	5	6	7	8	9					1A	1B	1C	1D	1E	1F	2G	2H	2J
4	2	6	-	-	208	1	-	-					-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

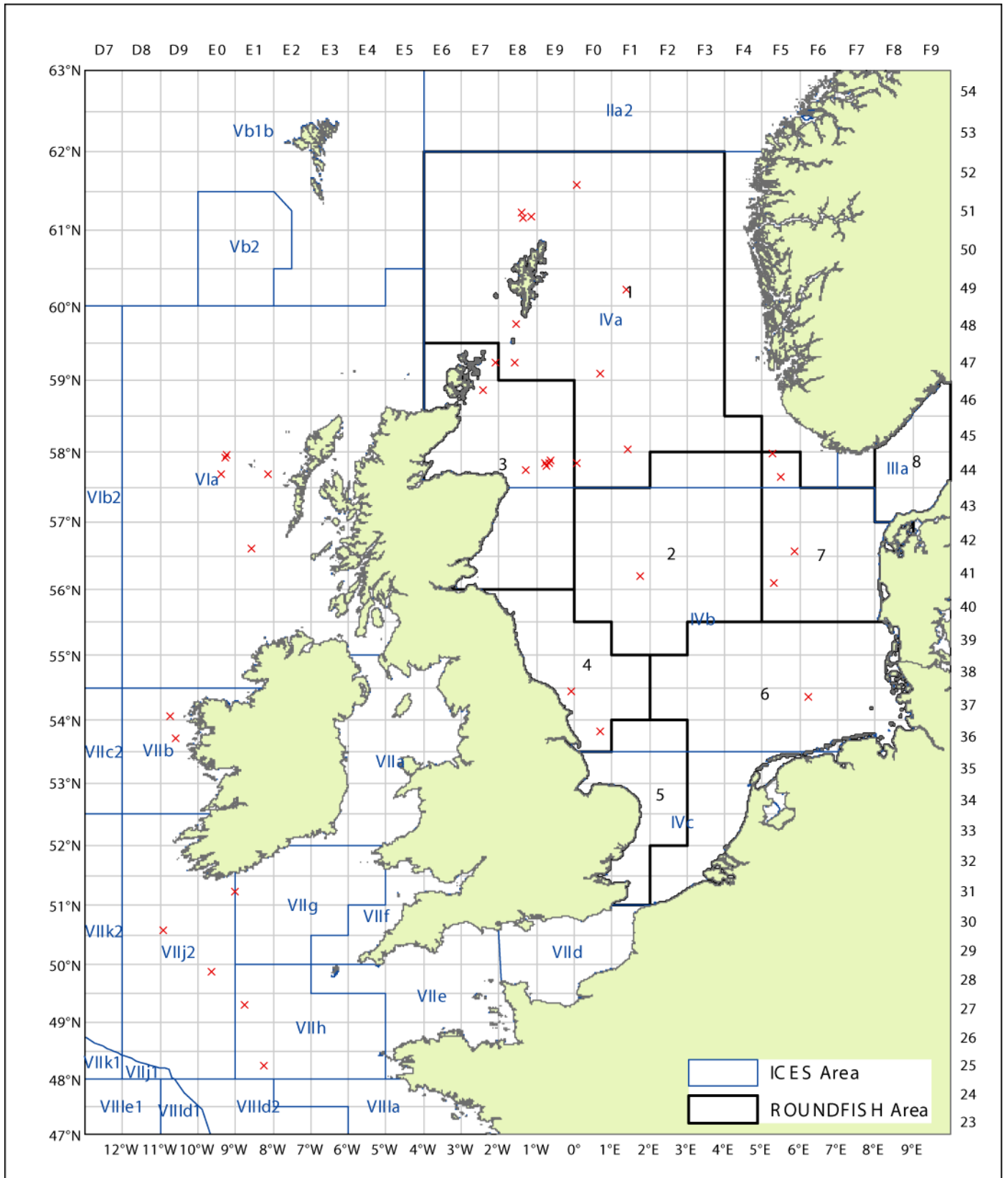
20.5 [cm]
56.5 [cm]

male 221
female -
undefined -

total numbers of data 221

Raja batis

Geographical distribution of data used for calculating the length-weight relationship



Raja batis

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0074

b = 2.9532

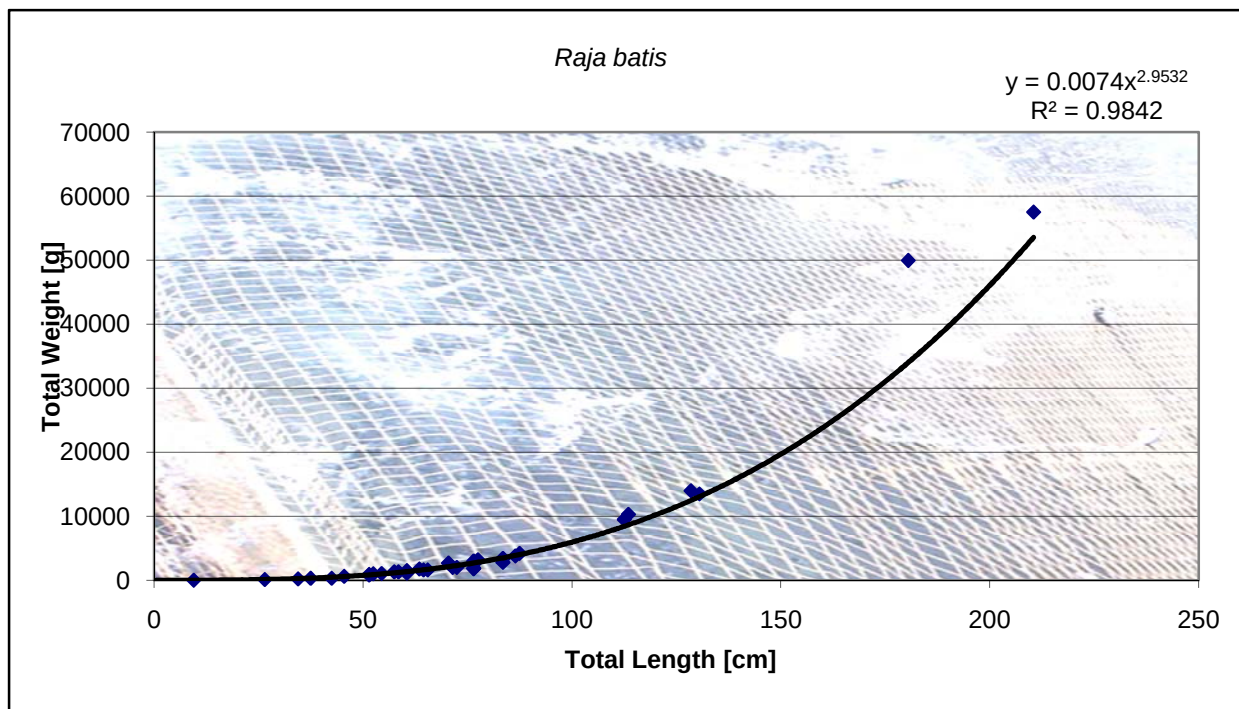
data collected

time period : 1962 - 2007

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
25	10	1	1																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
6	16	3	5	-	5	-	1	-	-	1	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	25	-	5	7	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	18	7	-	-	-	5	-	-	2	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
1	1	3	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
10	1	7	2	-	1	4	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

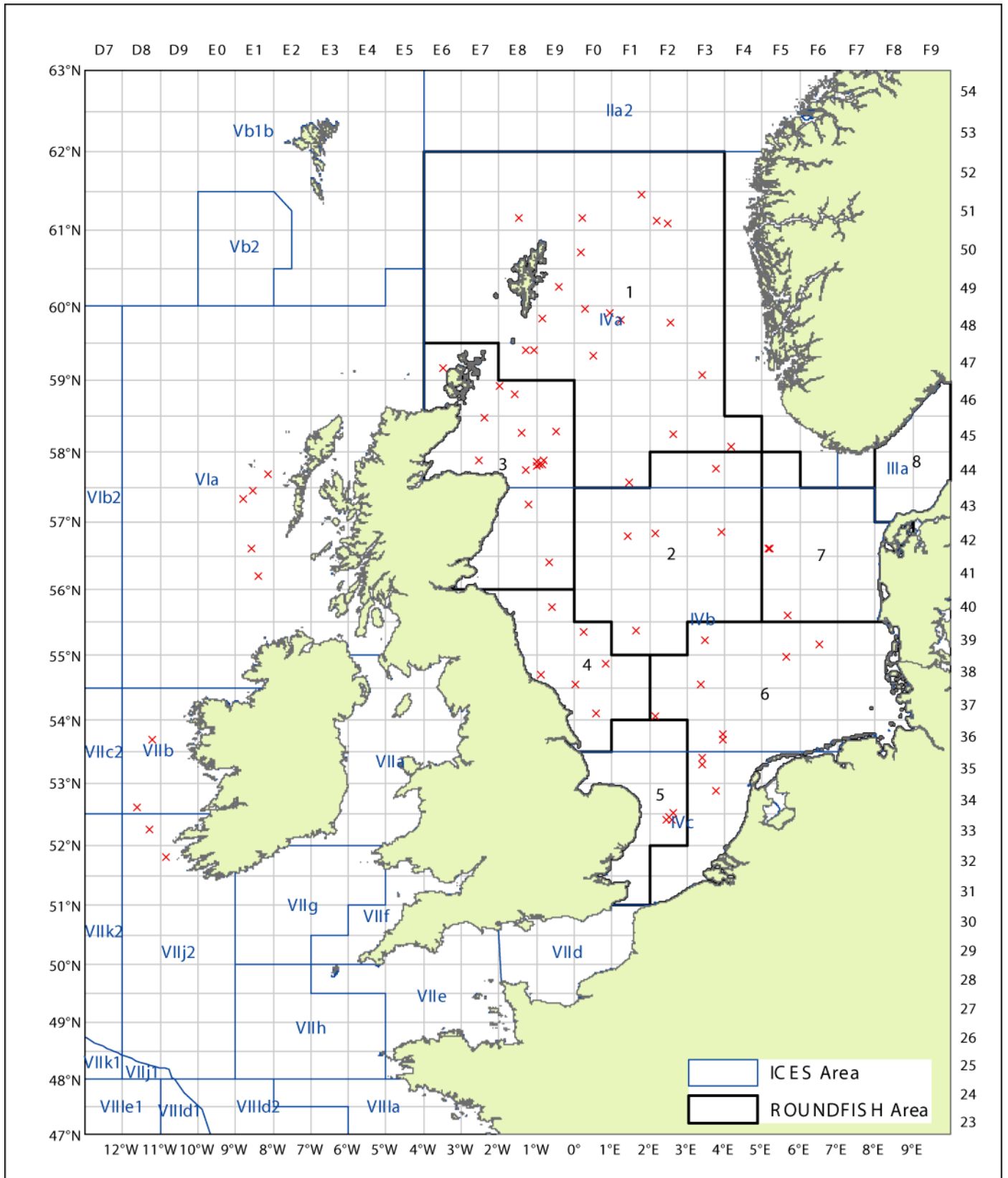
9.5 [cm]
210.5 [cm]

male 12
female 20
undefined 5

total numbers of data 37

Raja clavata

Geographical distribution of data used for calculating the length-weight relationship



Raja clavata

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0081

b = 2.976

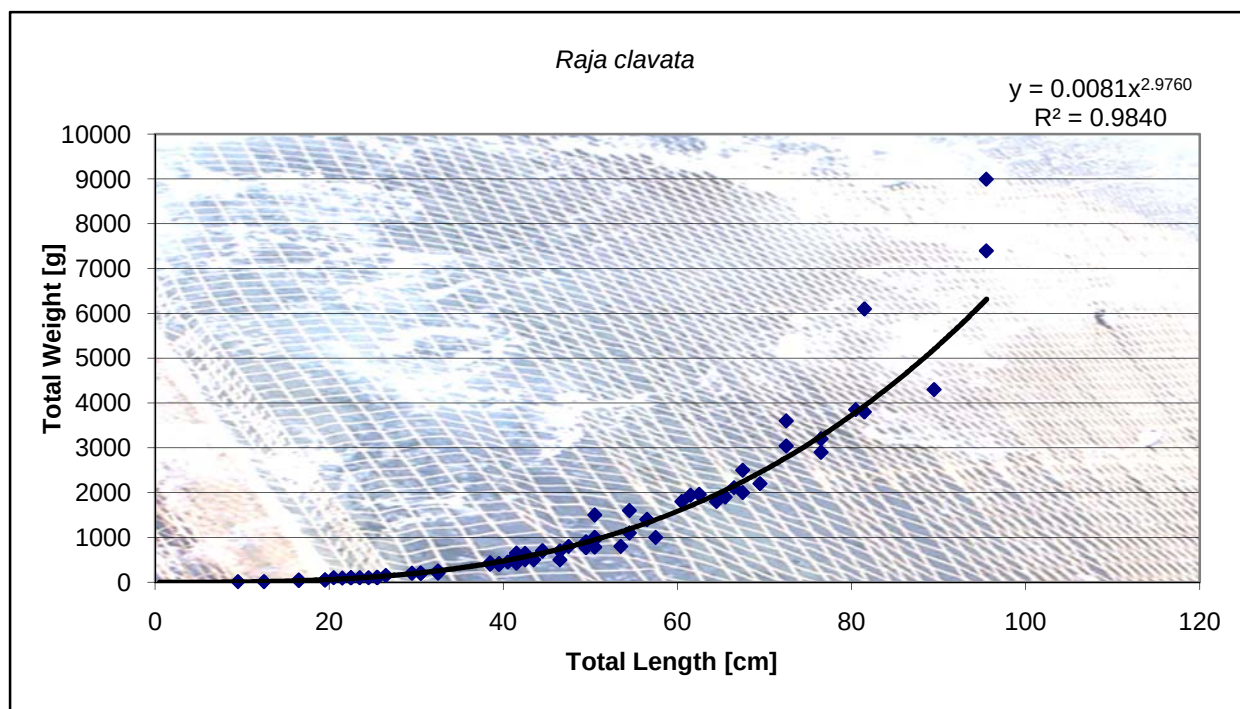
data collected

time period : 1959 - 2004

data source : research vessel

numbers of data:

Numbers of catch																						
Quarter																						
1	2	3	4																			
37	10	22	4																			
Month																						
1	2	3	4	5	6	7	8	9	10	11	12											
8	28	1	2	-	8	19	2	1	-	4	-											
Subarea																						
1	2	3	4	5	6	7	8	9	10	12	14											
-	-	-	64	-	5	4	-	-	-	-	-											
Division																						
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F			
-	-	-	-	-	-	-	34	24	6	-	-	5	-	-	2	-	-	-	-			
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B								
-	-	2	-	-	-	-	-	-	-	-	-	-	-	-								
Roundfisharea										NAFO												
1	2	3	4	5	6	7	8	9						1A	1B	1C	1D	1E	1F	2G	2H	2J
19	5	16	6	5	10	3	-	-						-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

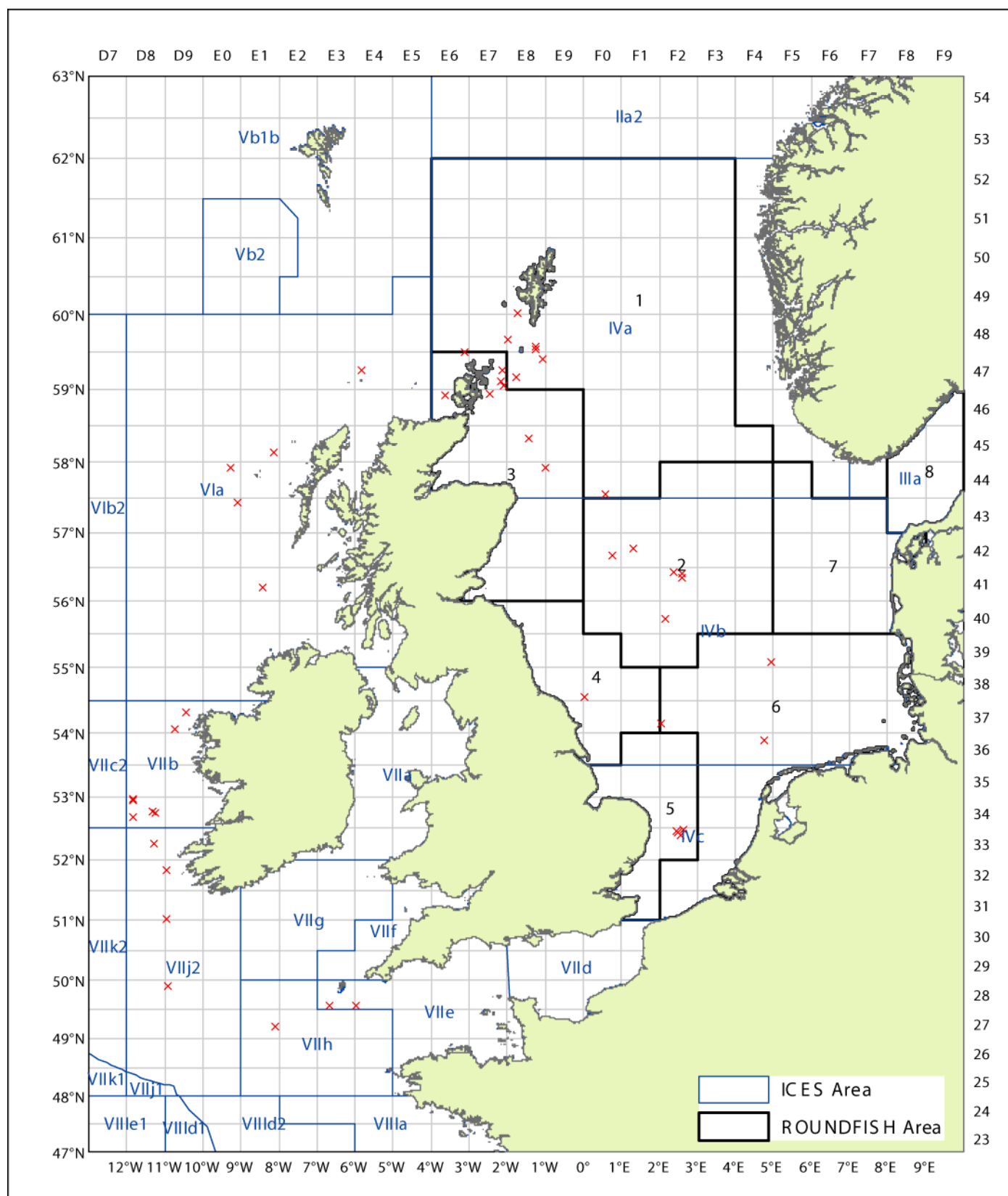
9.5 [cm]
95.5 [cm]

male 18
female 23
undefined 32

total numbers of data 73

Raja montagui

Geographical distribution of data used for calculating the length-weight relationship



Raja montagui

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0029

b = 3.2006

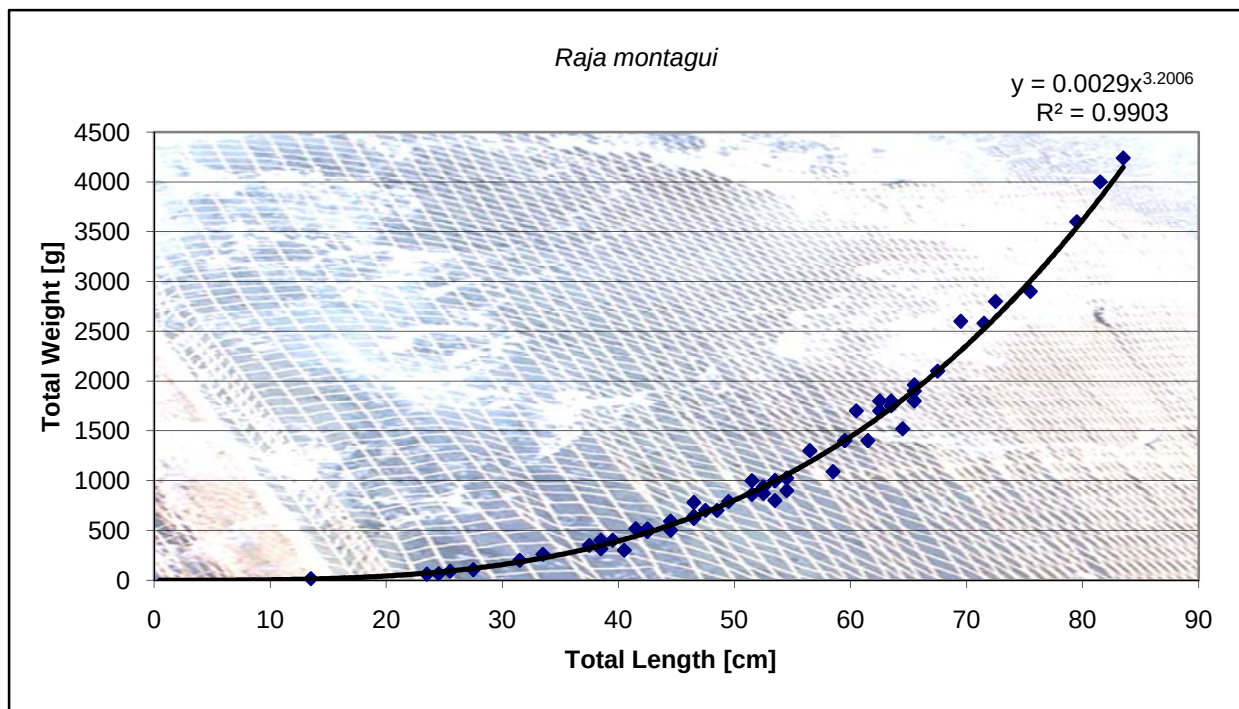
data collected

time period : 1962 - 2008

data source : research vessel

numbers of data:

Numbers of catch																				
Quarter																				
1	2	3	4																	
34	11	11	1																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
12	20	2	8	1	2	7	4	-	-	1	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	36	-	5	14	2	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	19	12	5	-	-	5	-	-	7	-	-	2	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
-	1	4	-	-	2	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9												
9	8	10	1	5	3	-	-	-												
1A	1B	1C	1D	1E	1F	2G	2H	2J												
-	-	-	-	-	-	-	-	-												



Method of Measurement

- Total length
- cm below

min length
max length

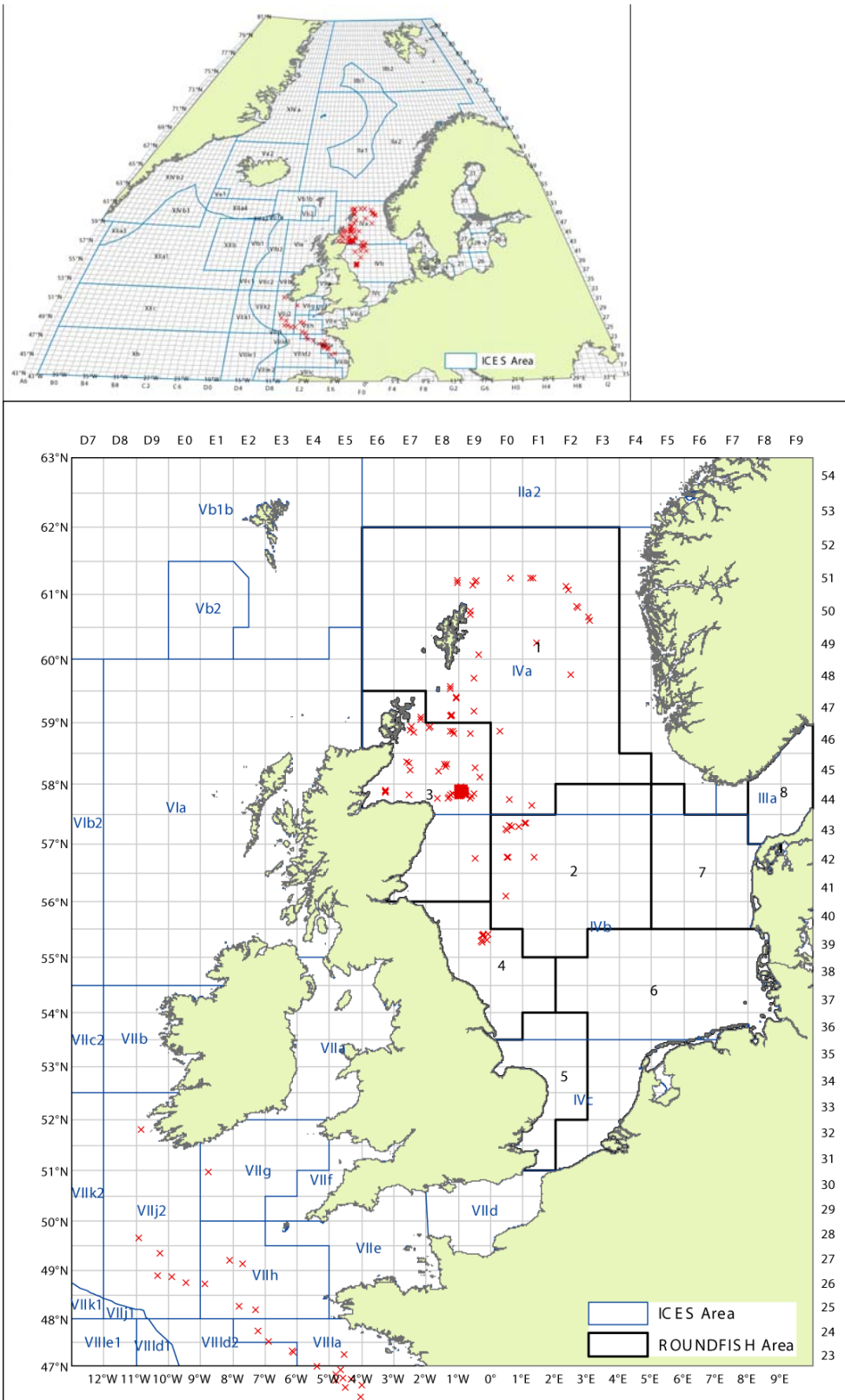
13.5 [cm]
83.5 [cm]

male 28
female 23
undefined 6

total numbers of data 57

Raja naevus

Geographical distribution of data used for calculating the length-weight relationship



Raja naevus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0025

b = 3.216

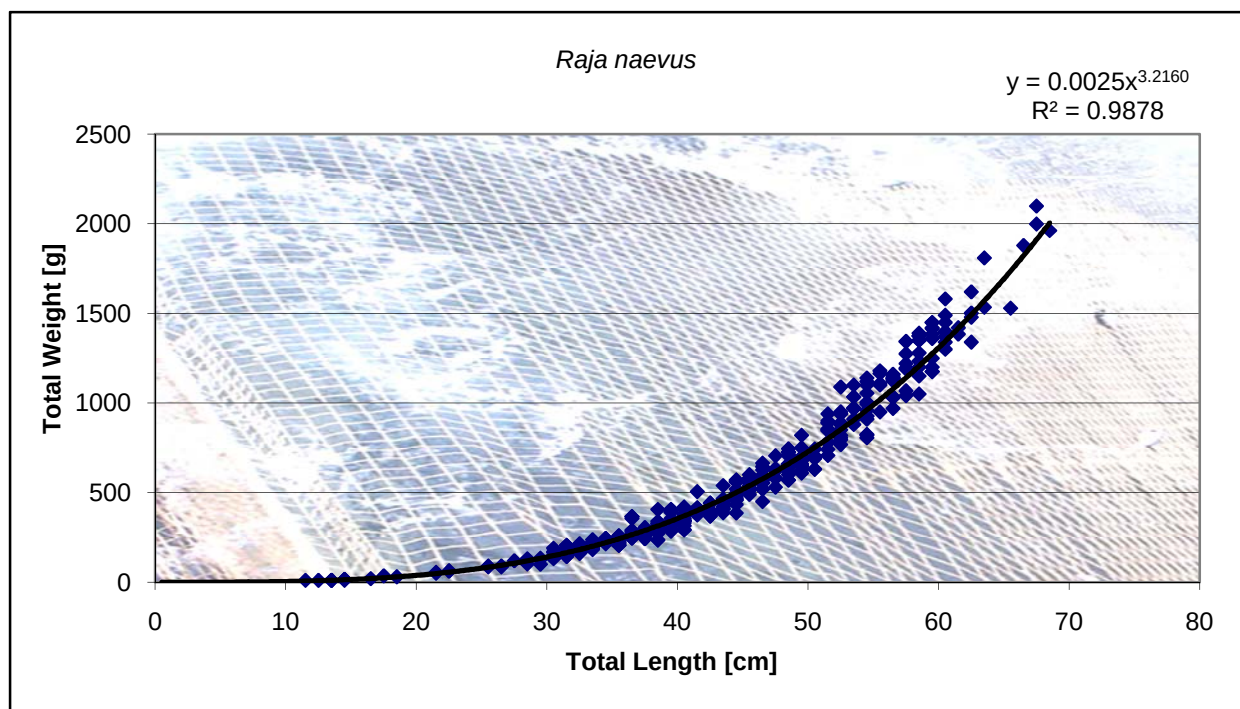
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
156	25	198	11																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
63	73	20	15	-	10	45	151	2	-	11	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	361	-	-	12	17	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	315	46	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
1	4	7	-	12	2	-	3	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
58	15	273	15	-	-	-	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

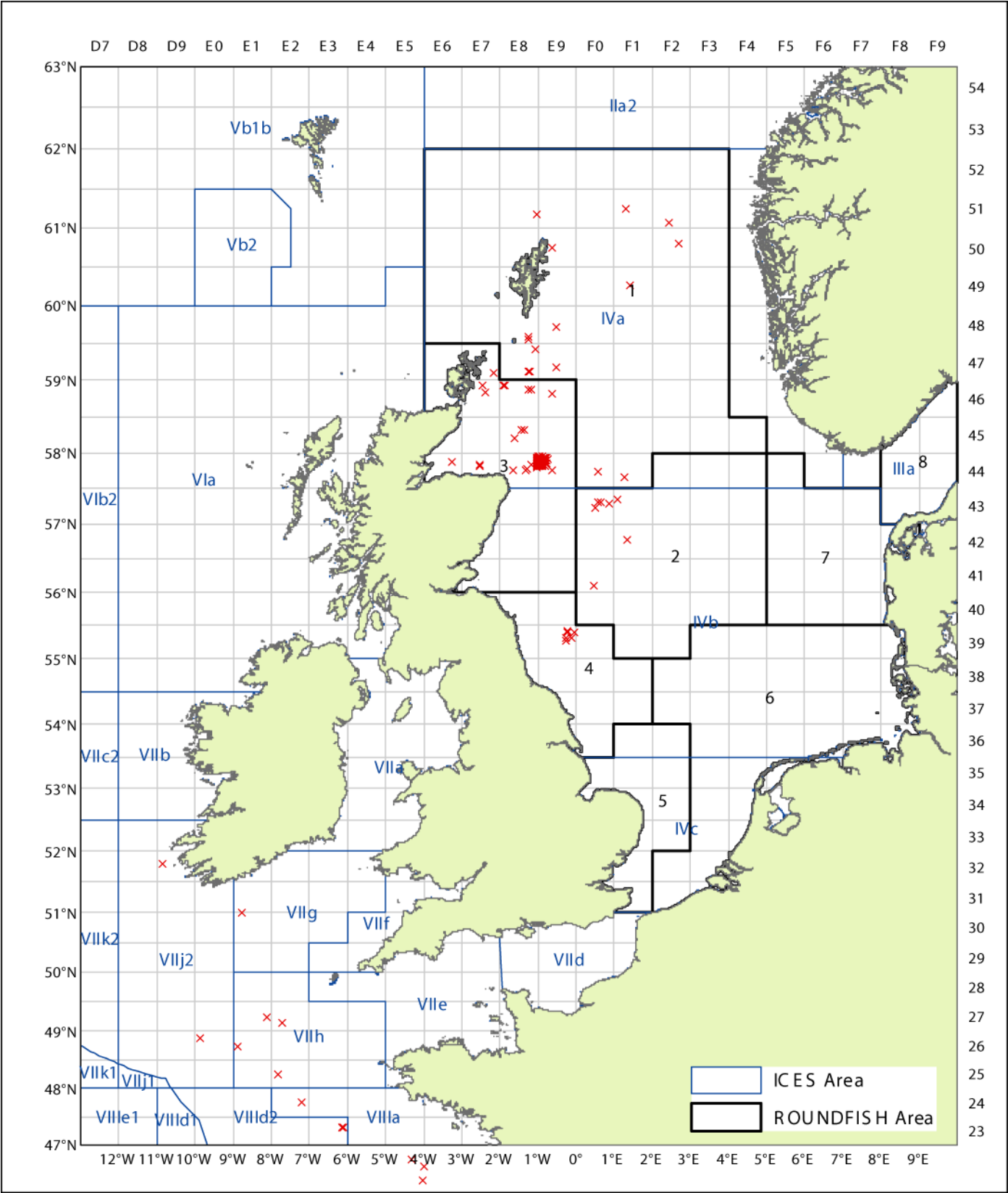
11.5 [cm]
68.5 [cm]

male 148
female 225
undefined 17

total numbers of data 390

Raja naevus ♀

Geographical distribution of data used for calculating the length-weight relationship



Raja naevus



Quarter: 1 - 4

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0023

b = 3.2423

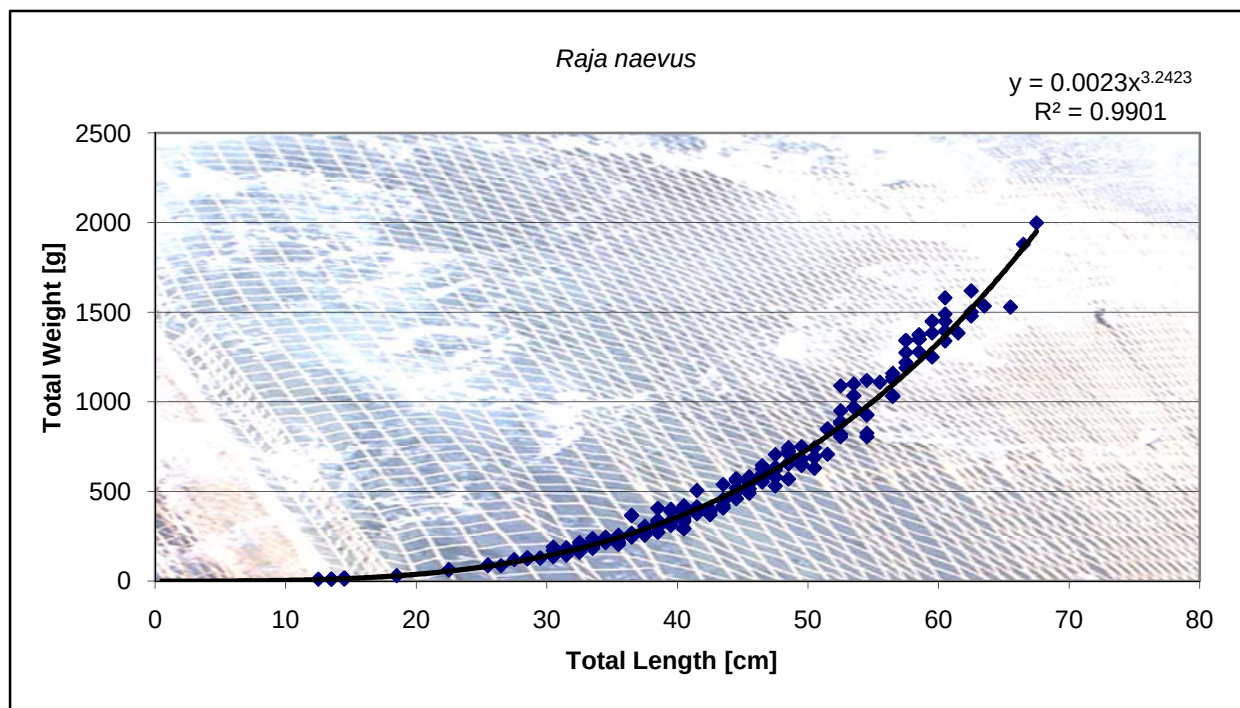
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
76	18	124	7																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
34	38	4	13	-	5	28	94	2	-	7	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	211	-	-	7	7	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	181	30	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
1	3	3	-	4	1	-	2	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
24	9	168	10	-	-	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

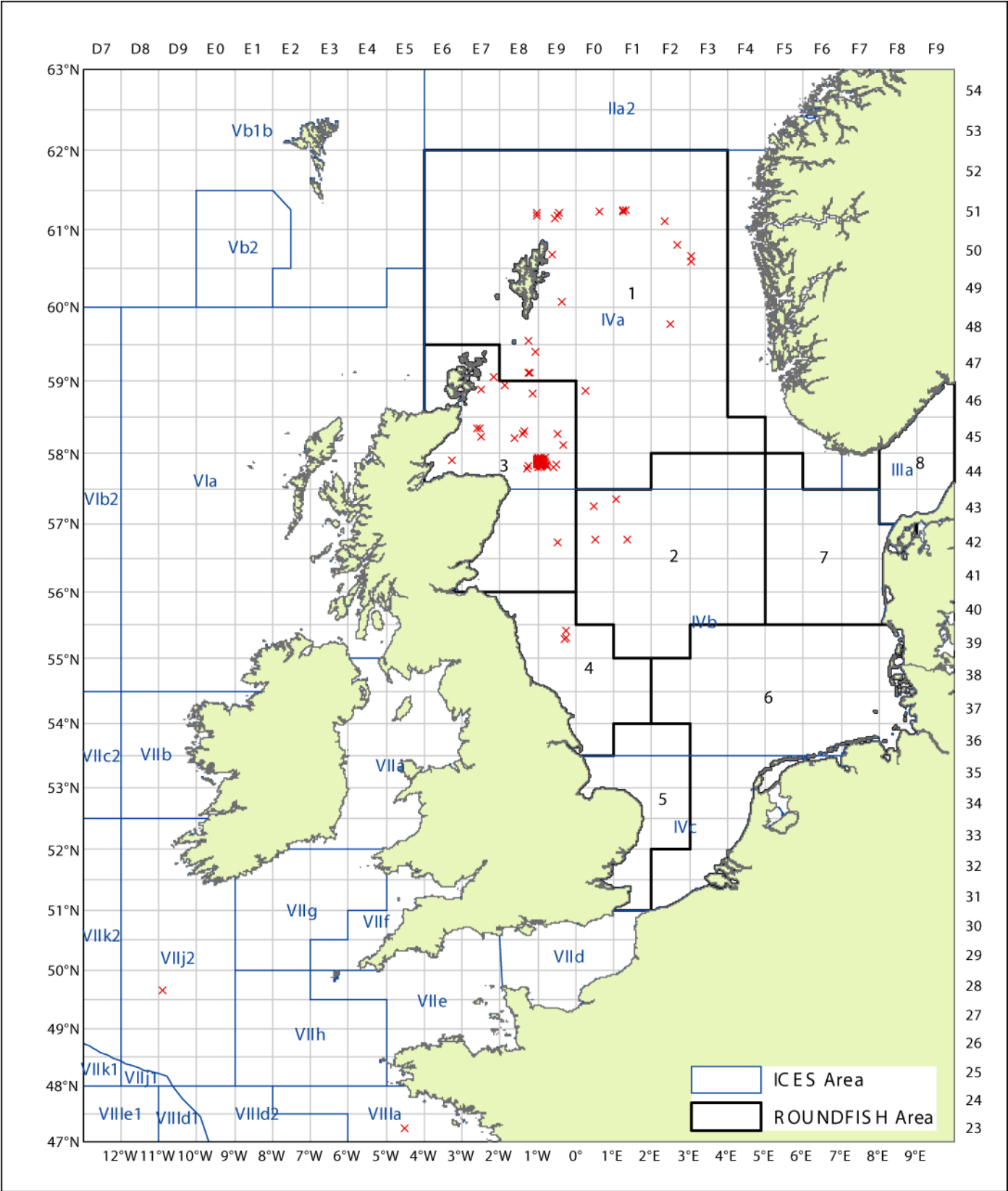
12.5 [cm]
67.5 [cm]

male -
female 225
undefined -

total numbers of data 225

Raja naevus ♂

Geographical distribution of data used for calculating the length-weight relationship



Raja naevus



Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0032

b = 3.1435

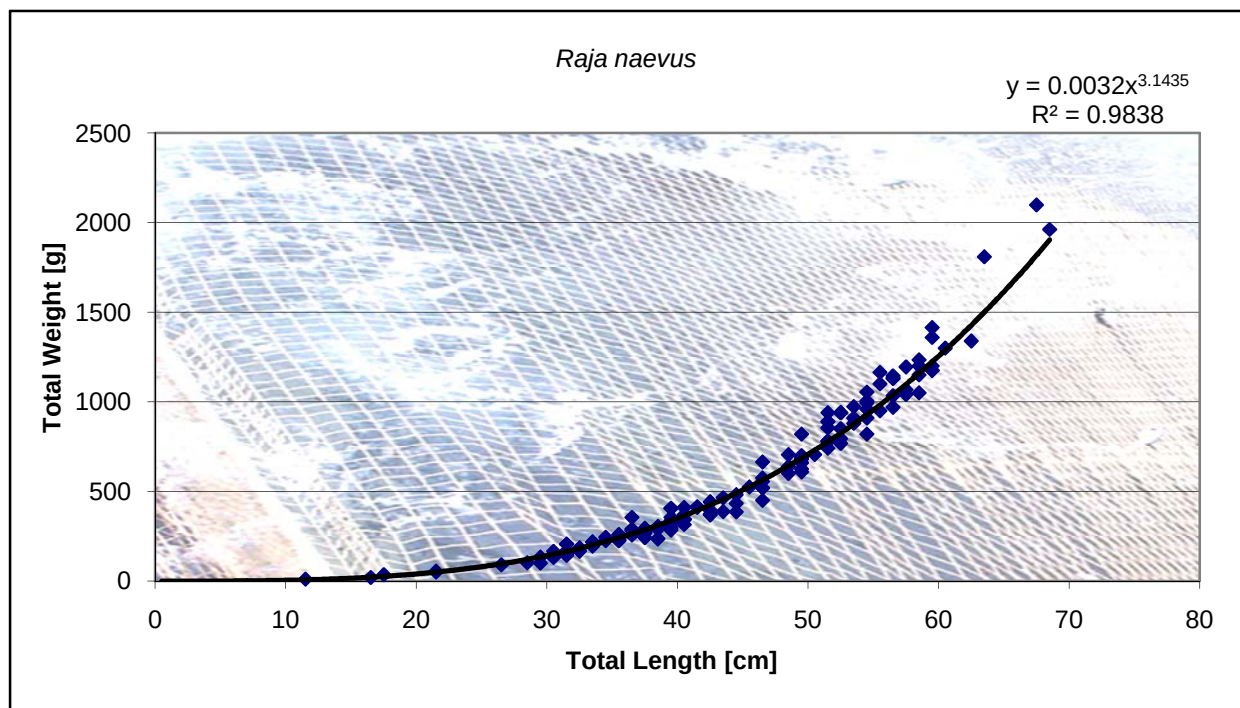
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
64	7	73	4																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
26	34	4	2	-	5	16	57	-	-	4	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	145	-	-	1	2	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	129	16	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	1	-	1	1	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
33	6	101	5	-	-	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

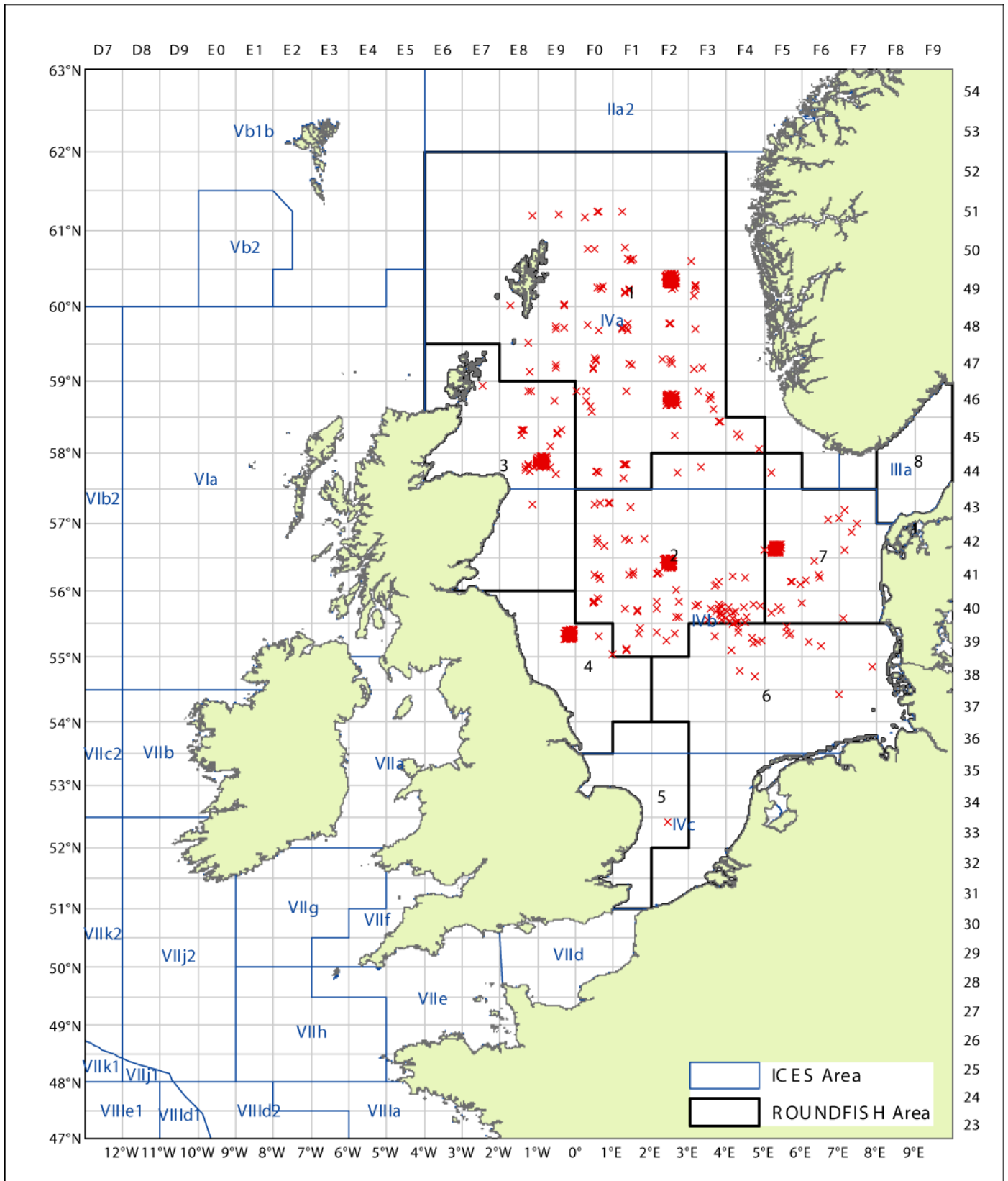
11.5 [cm]
68.5 [cm]

male 148
female -
undefined -

total numbers of data 148

Raja radiata

Geographical distribution of data used for calculating the length-weight relationship



Raja radiata

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0069

b = 3.0343

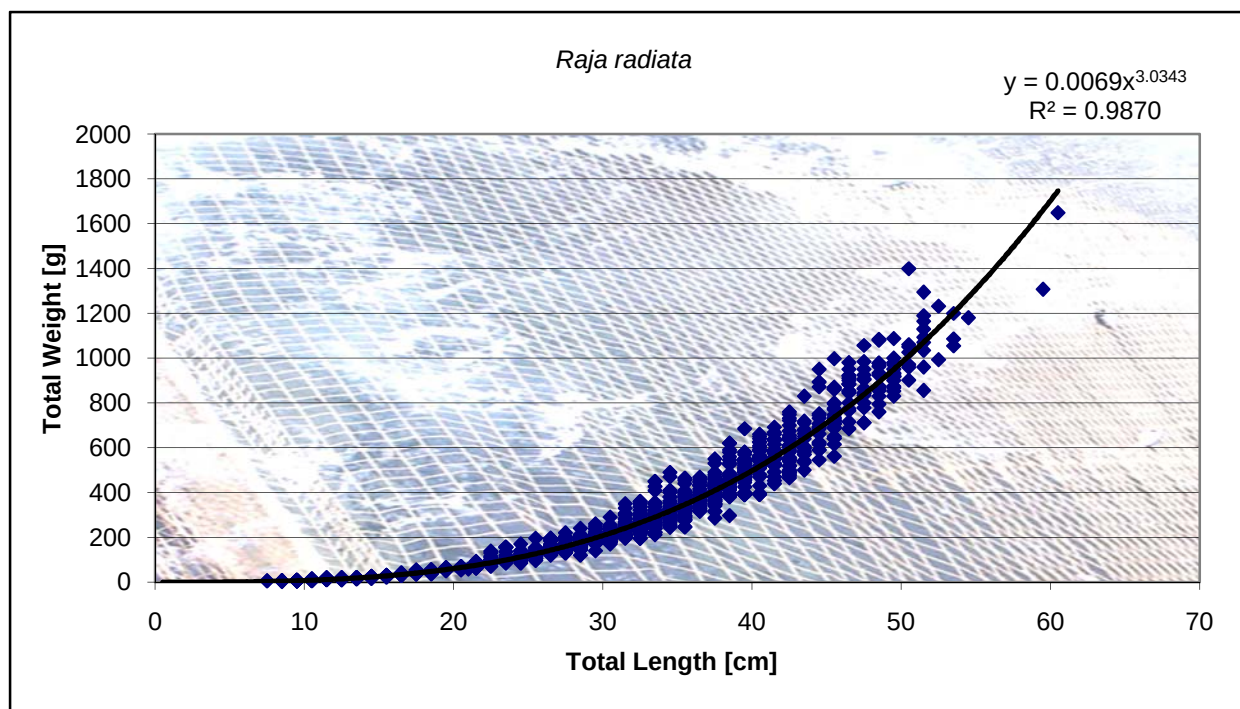
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
277	58	808	13																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
157	110	10	3	31	24	498	300	10	-	13	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1156	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	562	594	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9	1A	1B	1C	1D	1E	1F	2G	2H	2J		
423	197	102	86	1	26	321	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

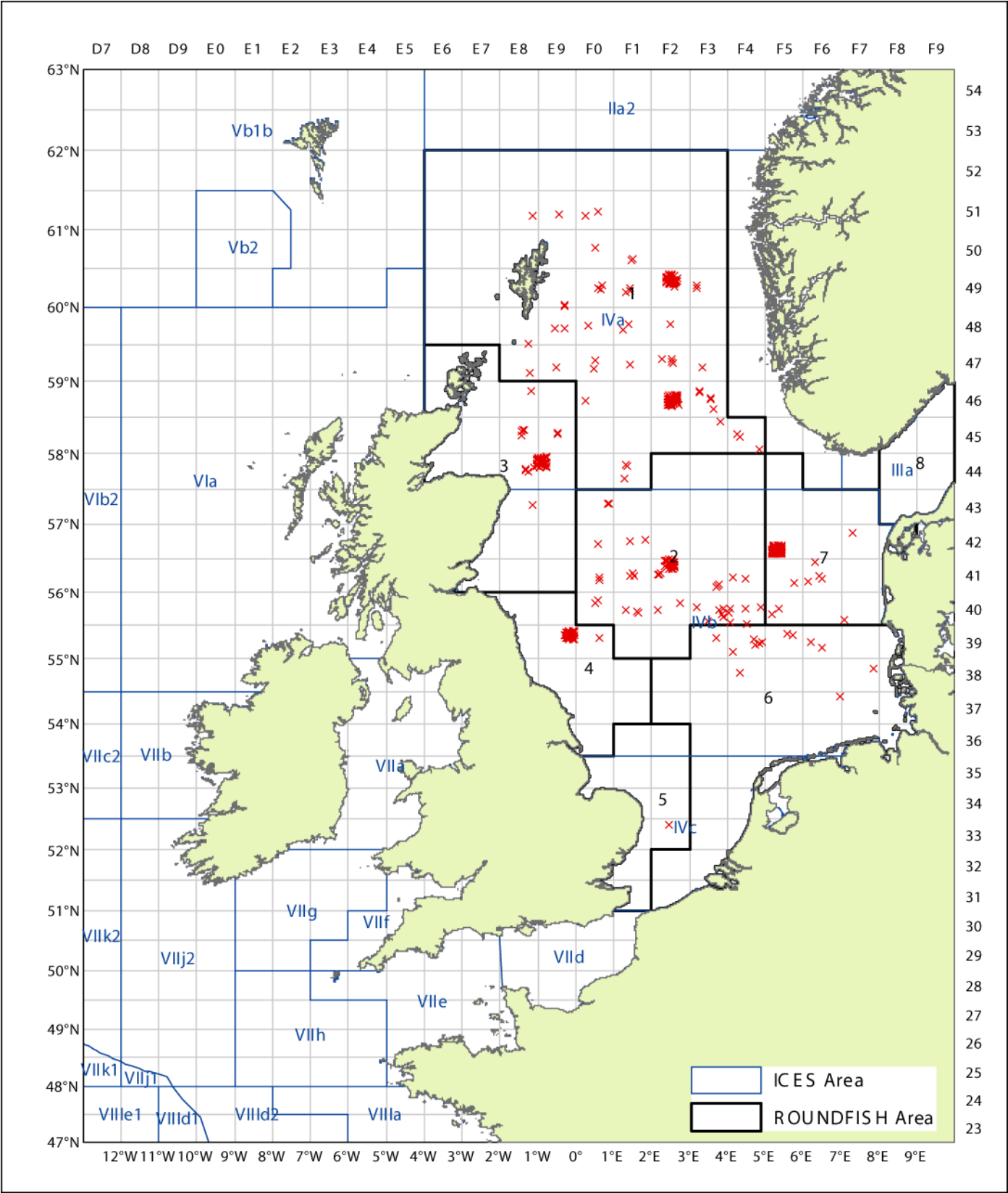
7.5 [cm]
60.5 [cm]

male 528
female 584
undefined 44

total numbers of data 1156

Raja radiata ♀

Geographical distribution of data used for calculating the length-weight relationship



Raja radiata

(female)



Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0073

b = 3.0145

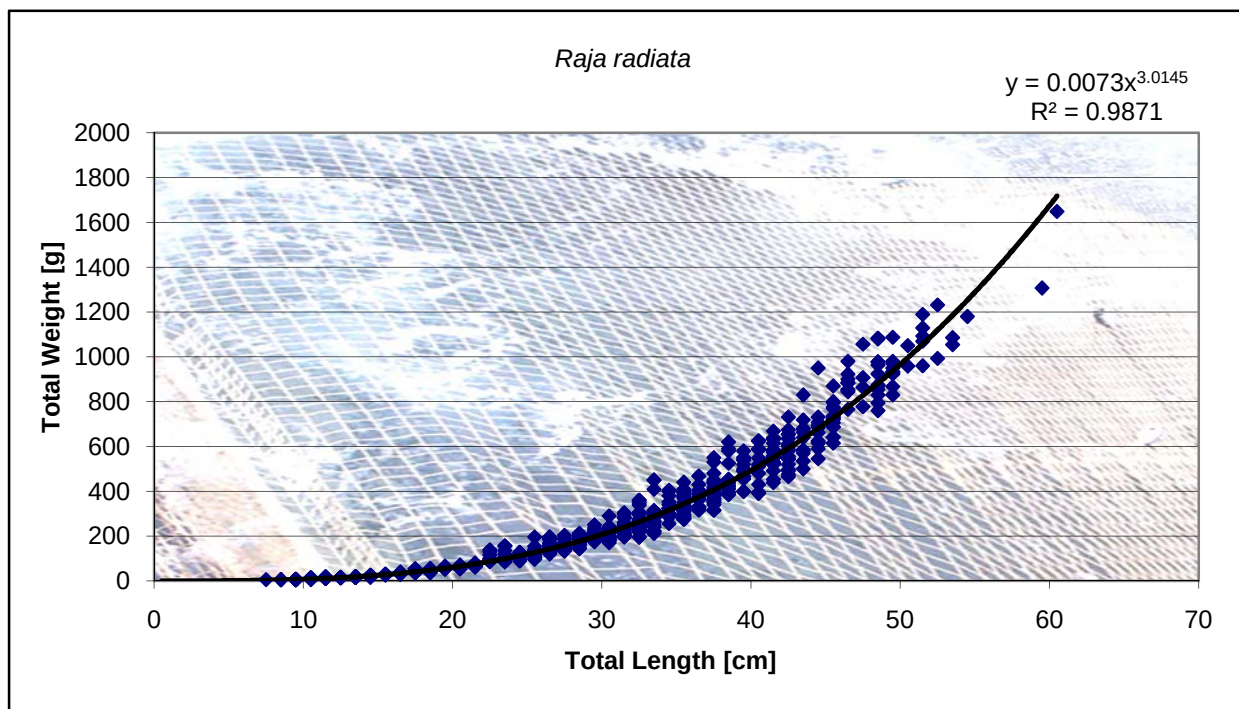
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
123	30	428	3																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
70	49	4	-	14	16	268	153	7	-	3	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	584	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	280	304	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
215	87	52	45	1	16	168	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											

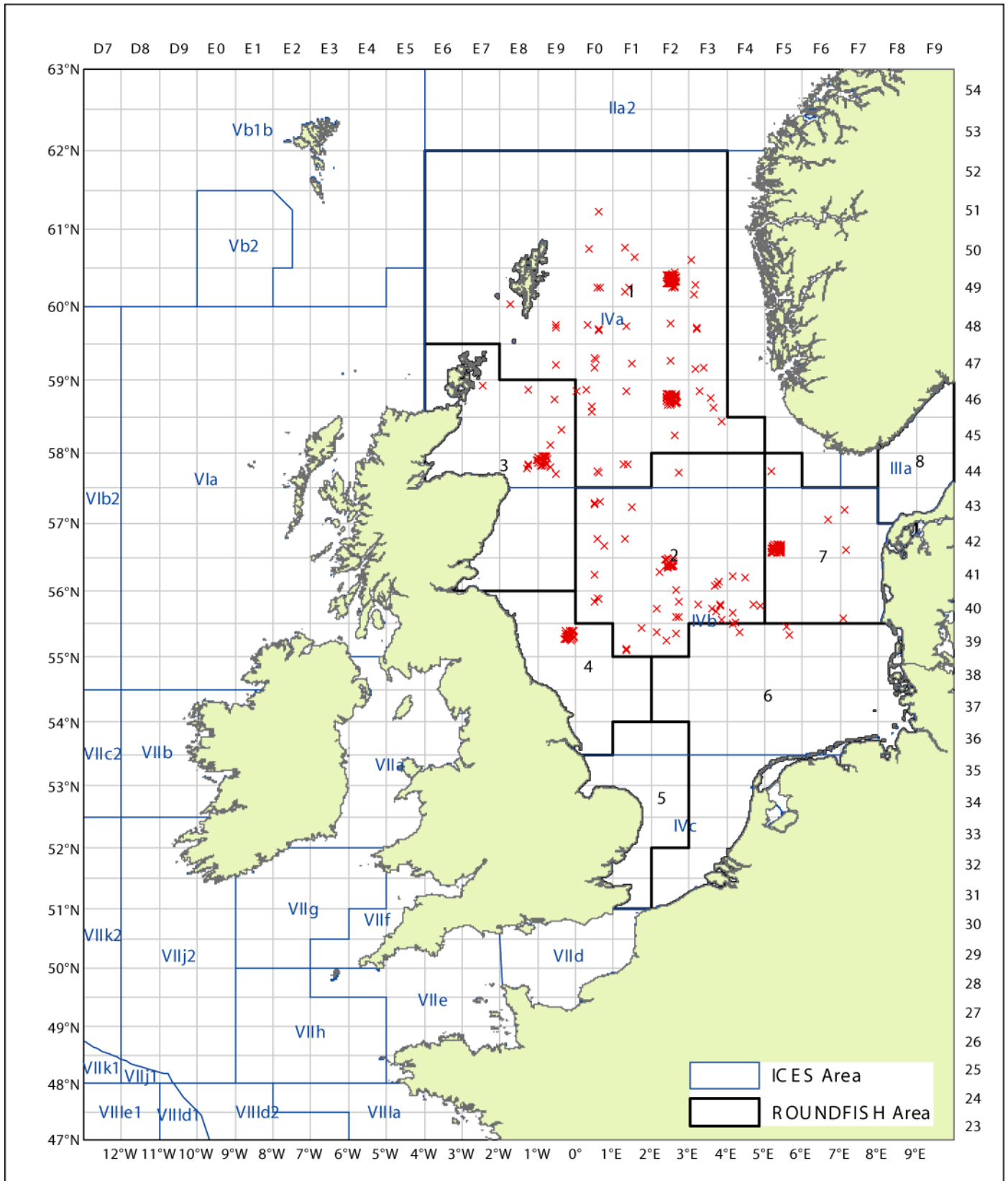


Method of Measurement

- Total length	male	-
- cm below	female	584
min length	undefined	-
max length	total numbers of data	584

Raja radiata ♂

Geographical distribution of data used for calculating the length-weight relationship



Raja radiata



Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0063

b = 3.0574

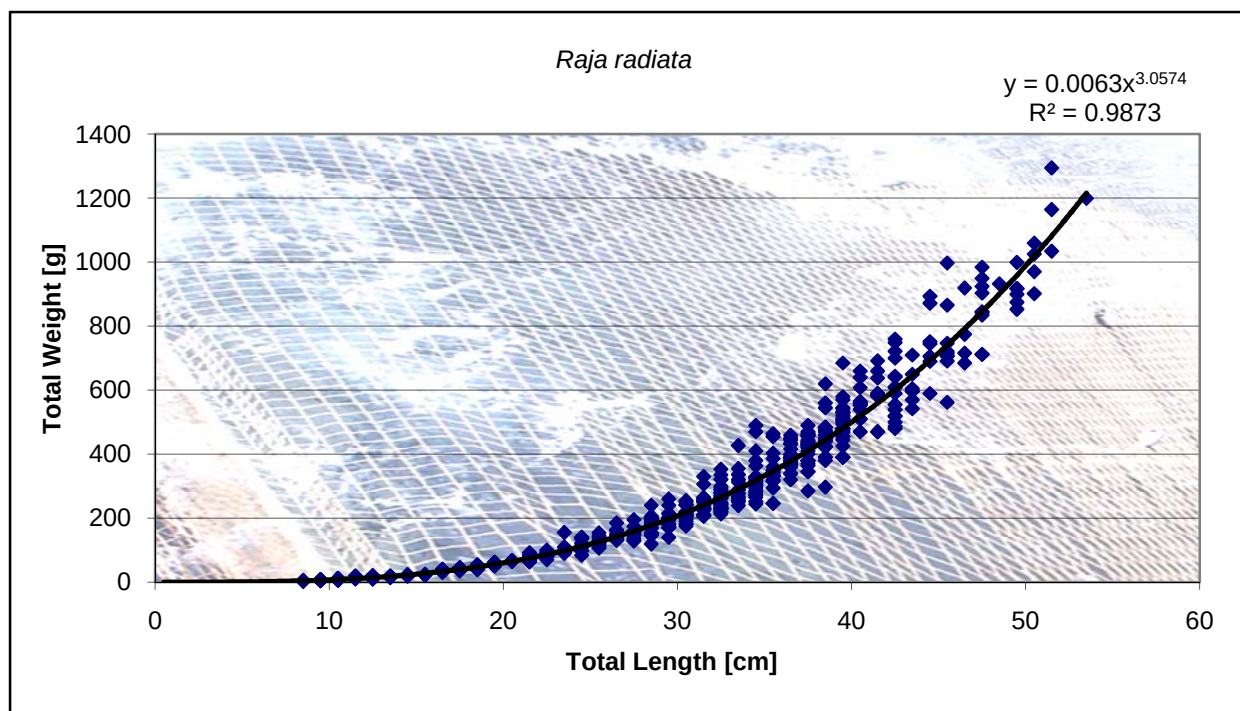
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
142	19	358	9																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
82	56	4	2	11	6	221	134	3	-	9	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	528	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	271	257	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9	1A	1B	1C	1D	1E	1F	2G	2H	2J		
199	92	48	39	-	4	146	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

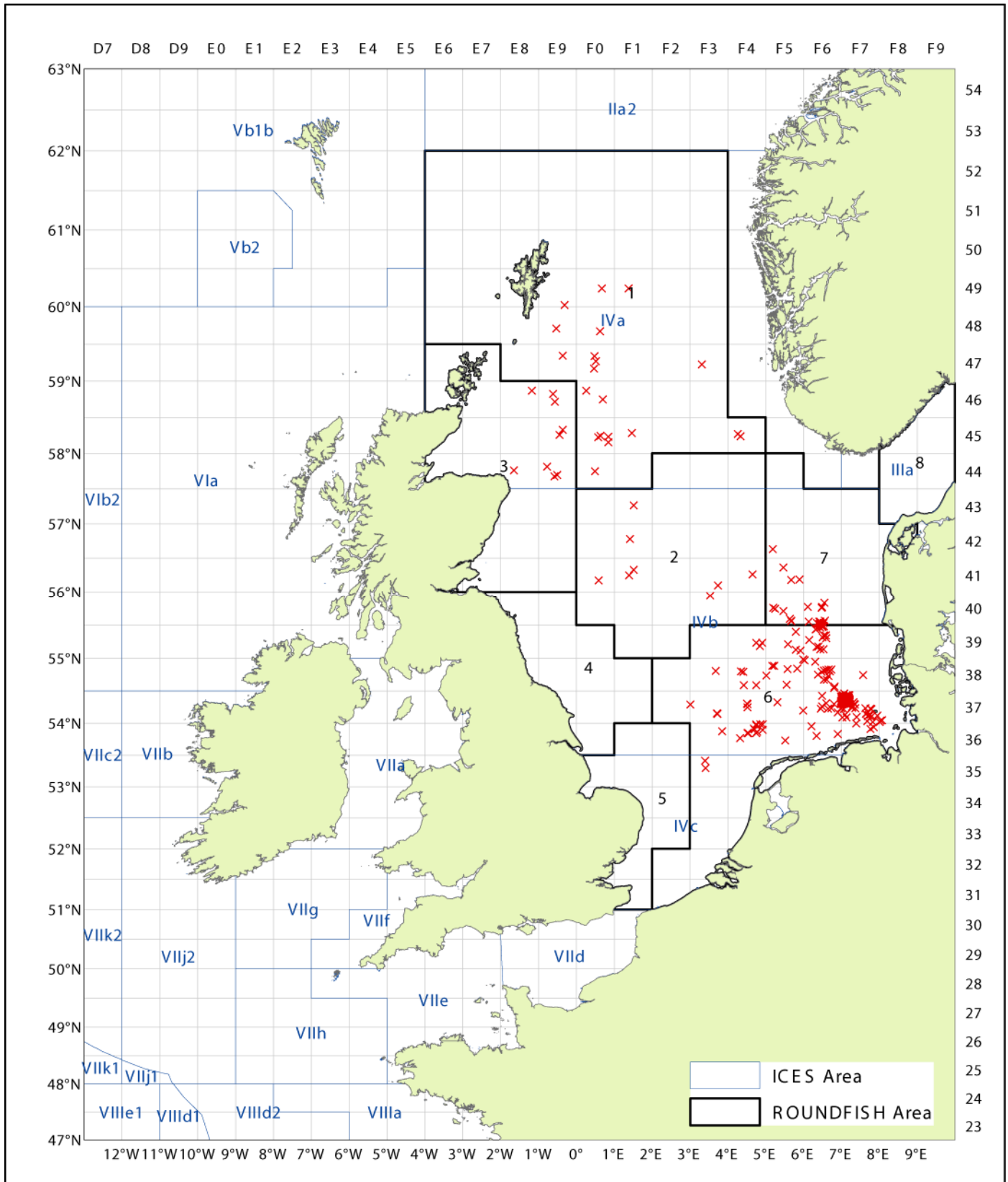
8.5 [cm]
53.5 [cm]

male 528
female -
undefined -

total numbers of data 528

Rhinonemus cimbrius

Geographical distribution of data used for calculating the length-weight relationship



Rhinonemus cimbrius

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0032

b = 3.1436

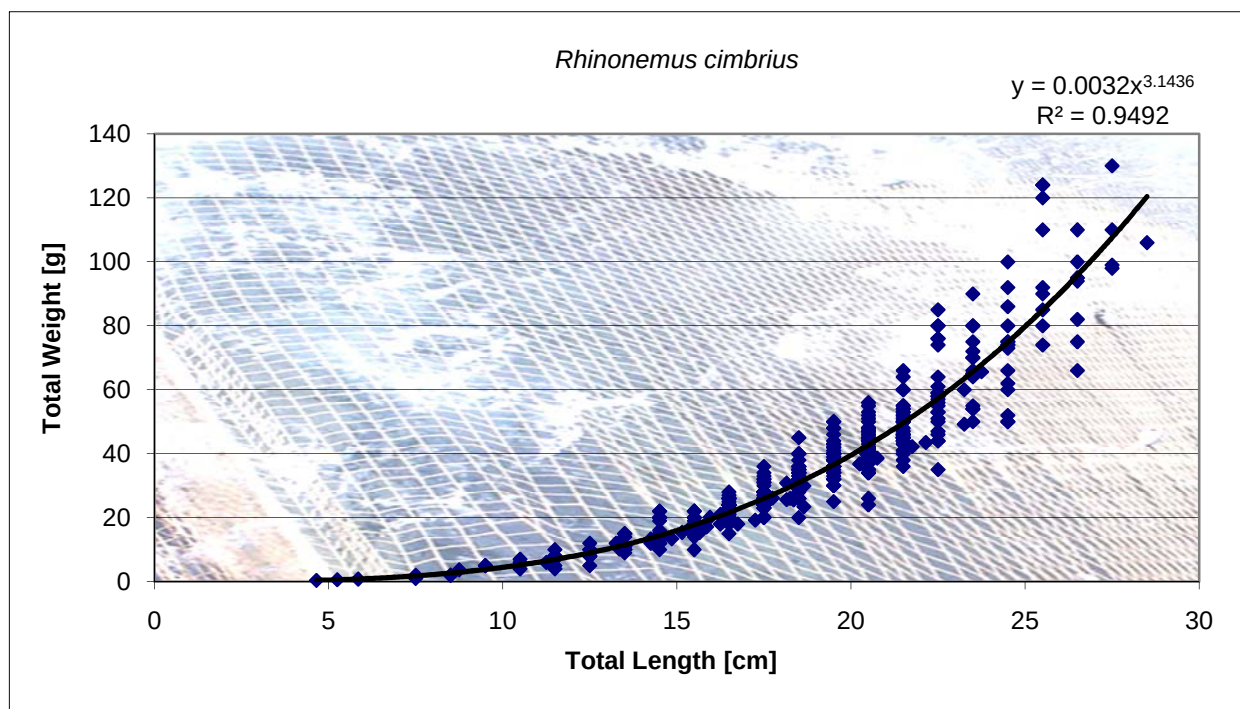
data collected

time period : 2000 - 2011

data source : research vessel

numbers of data:

Numbers of salmon																				
Quarter																				
1	2	3	4																	
145	10	264	29																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
101	42	2	-	6	4	40	224	-	1	9	19									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	448	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	35	411	2	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea										NAFO										
1	2	3	4	5	6	7	8	9												
23	8	12	-	-	373	32	-	-												
									1A	1B	1C	1D	1E	1F	2G	2H	2J			
									-	-	-	-	-	-	-	-	-			



Method of Measurement

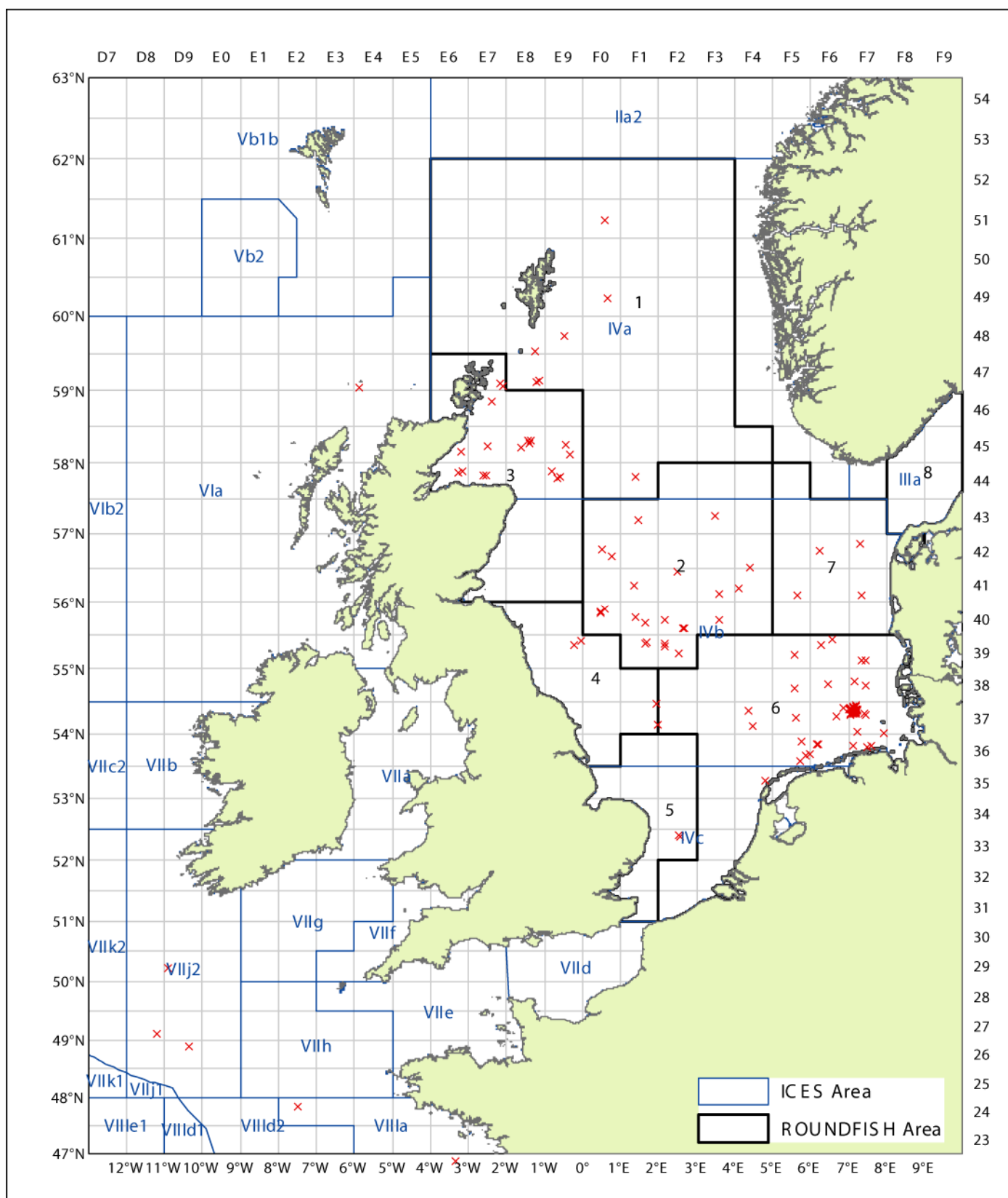
- Total length
- cm below, mm below
- min length
- max length

4.65 [cm]
28.5 [cm]

male -
female -
undefined 448
total numbers of data 448

Sardina pilchardus

Geographical distribution of data used for calculating the length-weight relationship



Sardina pilchardus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0034

b = 3.2665

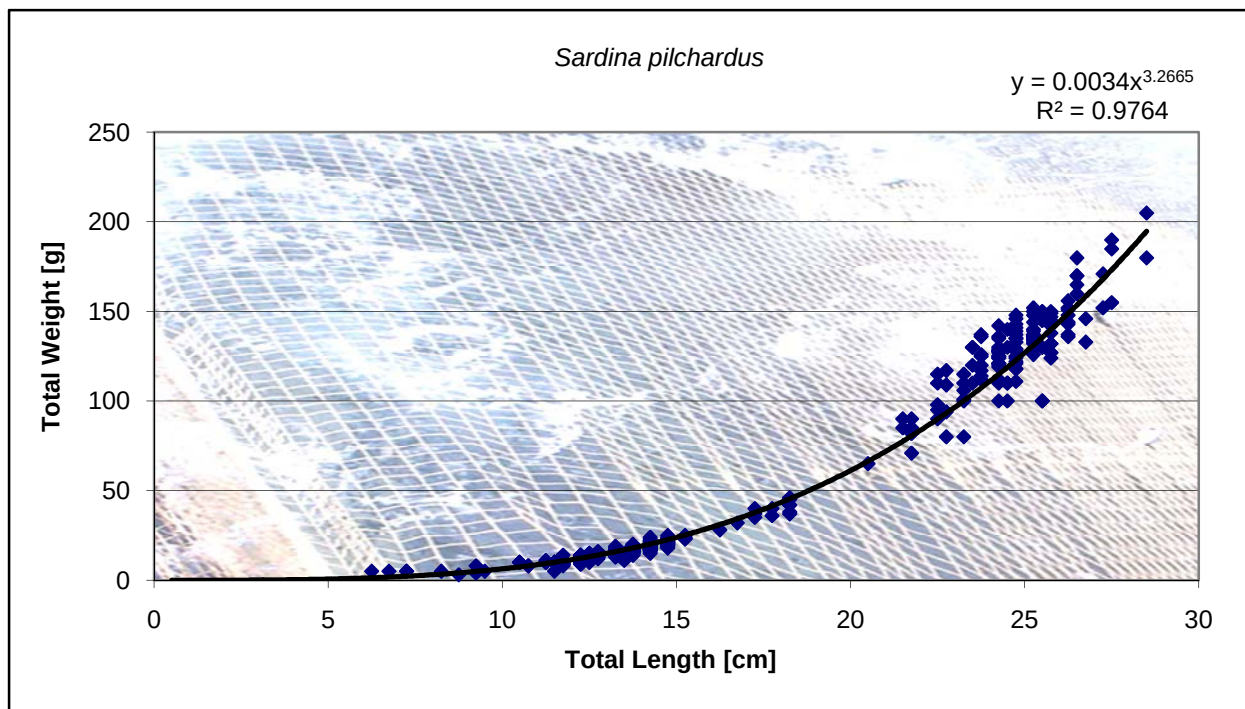
data collected

time period : 1995 - 2008

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
216	28	109	12																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
110	102	4	2	2	24	75	33	1	5	6	1								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	359	-	1	3	2	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	108	250	1	-	-	1	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	3	-	2	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
7	103	102	3	2	137	5	-	-											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length

- 1/2 cm below

min length

max length

6.25 [cm]

28.75 [cm]

male

female

undefined

73

84

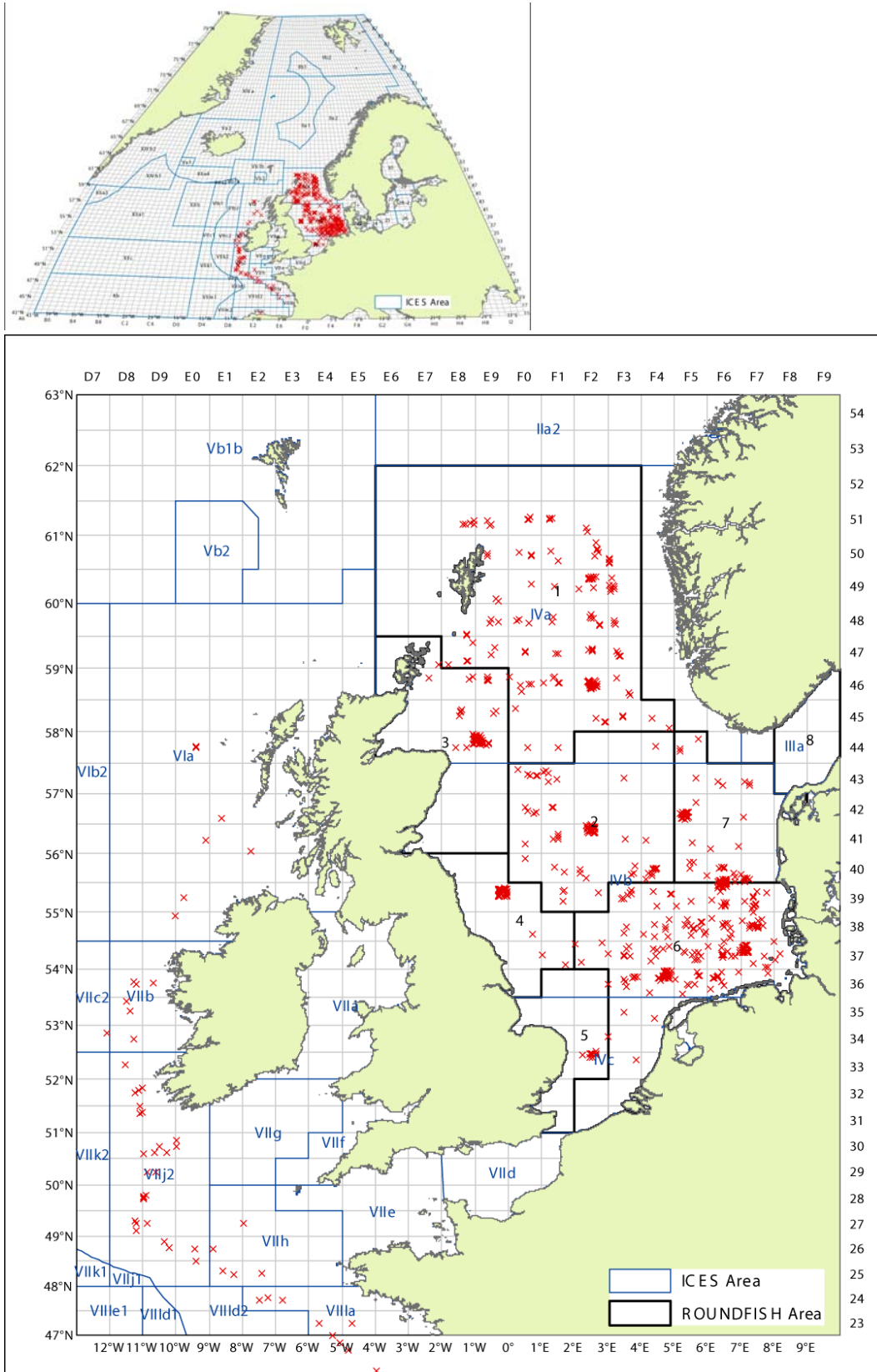
208

total numbers of data

365

Scomber scombrus

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.004

b = 3.1996

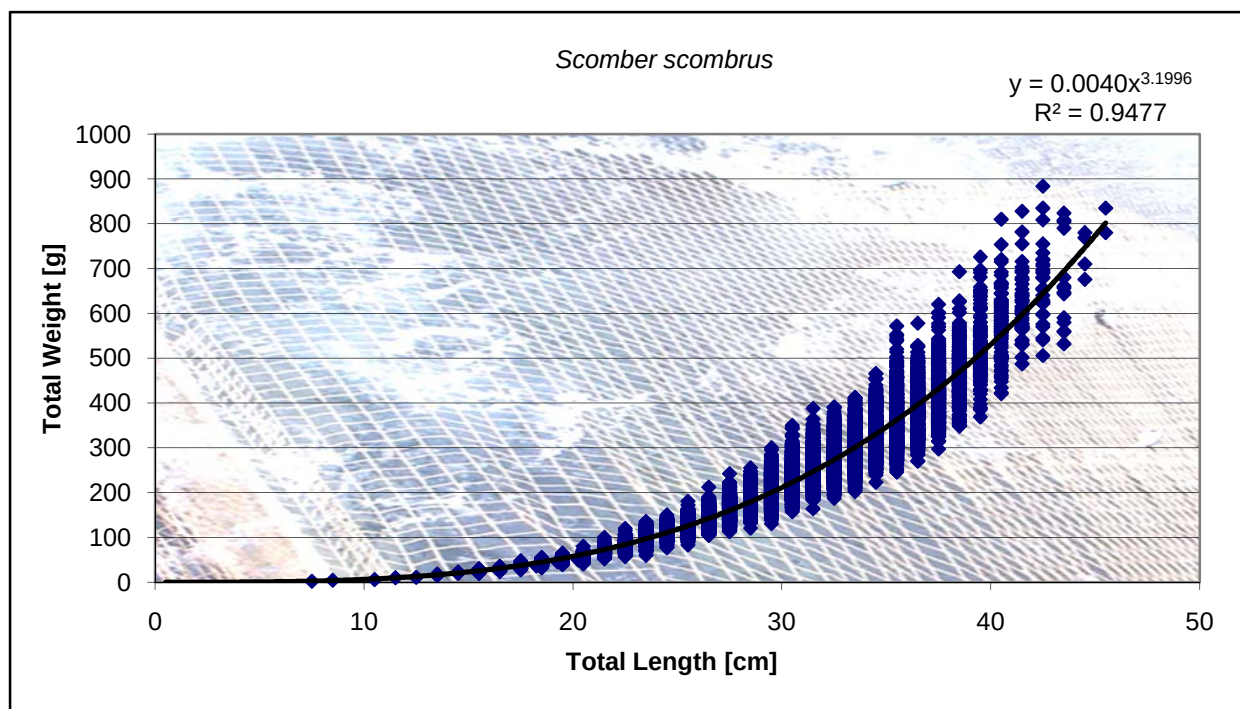
data collected

time period : 1996 - 2008

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
3239	1828	3509	24																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
807	1223	1209	1697	118	13	1781	1478	250	4	14	6								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	5696	-	435	2208	261	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	2719	2965	12	-	-	435	-	-	419	16	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	277	1496	-	208	18	20	15	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
2171	471	453	317	11	1858	415	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

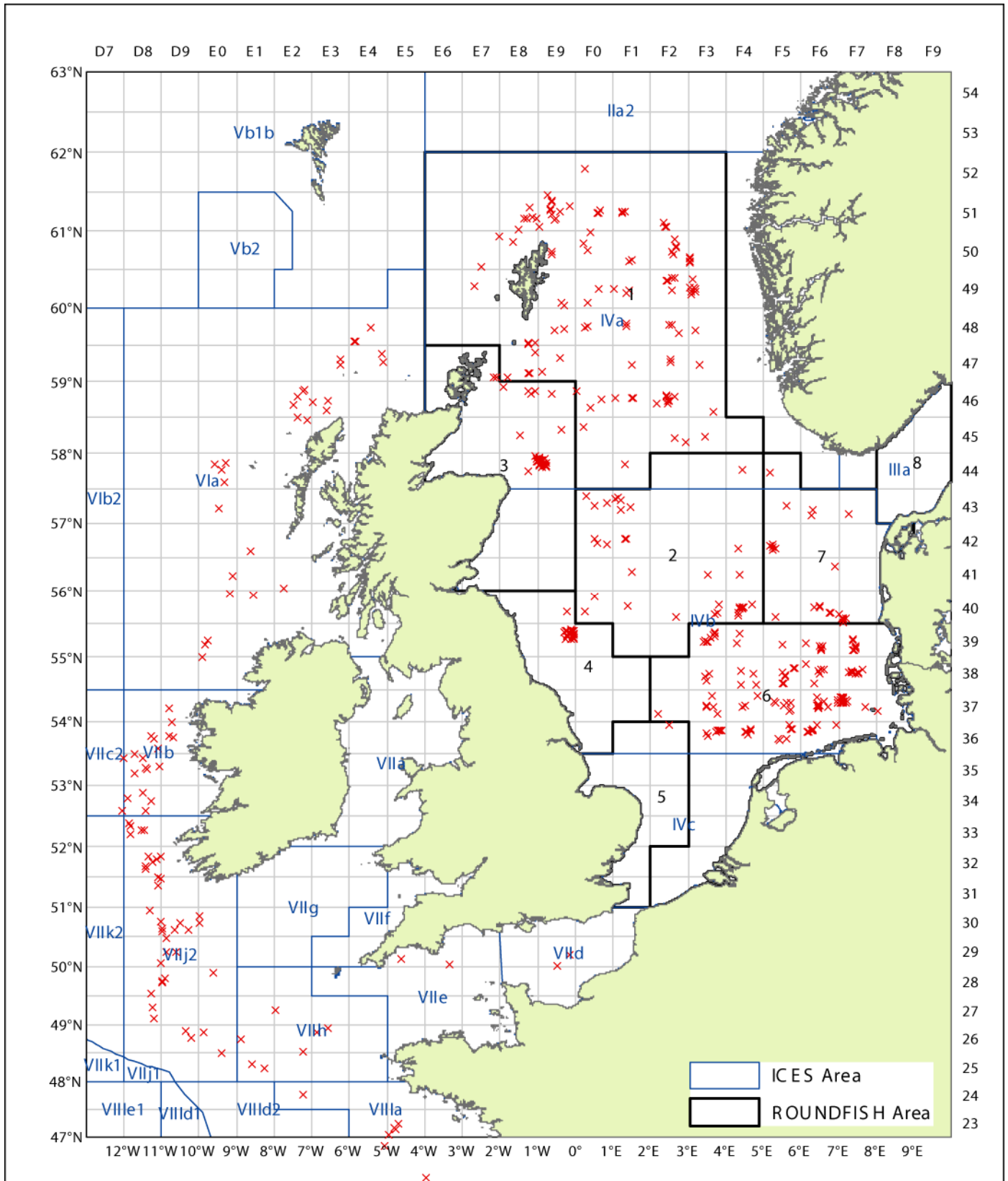
7.5 [cm]
45.5 [cm]

male 3721
female 3713
undefined 1166

total numbers of data 8600

Scomber scombrus ♀

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus



Quarter: 1 - 4

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.002

b = 3.4011

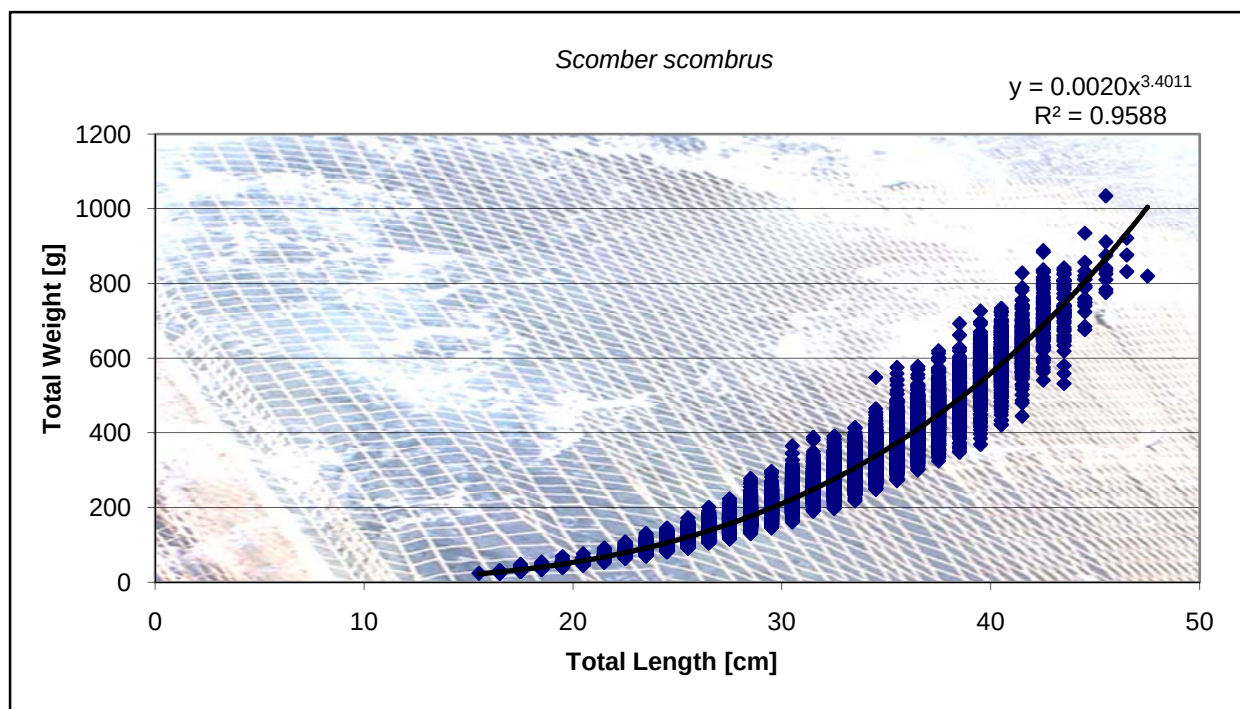
data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of data.																			
Quarter																			
1	2	3	4																
5497	1146	2154	1035																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
1985	2721	791	938	157	51	988	1030	136	348	457	230								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	4630	-	1734	3134	334	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	2805	1825	-	-	-	1683	-	-	1092	102	119	39	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	194	1639	-	311	-	-	23	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
2483	237	285	154	132	1026	313	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

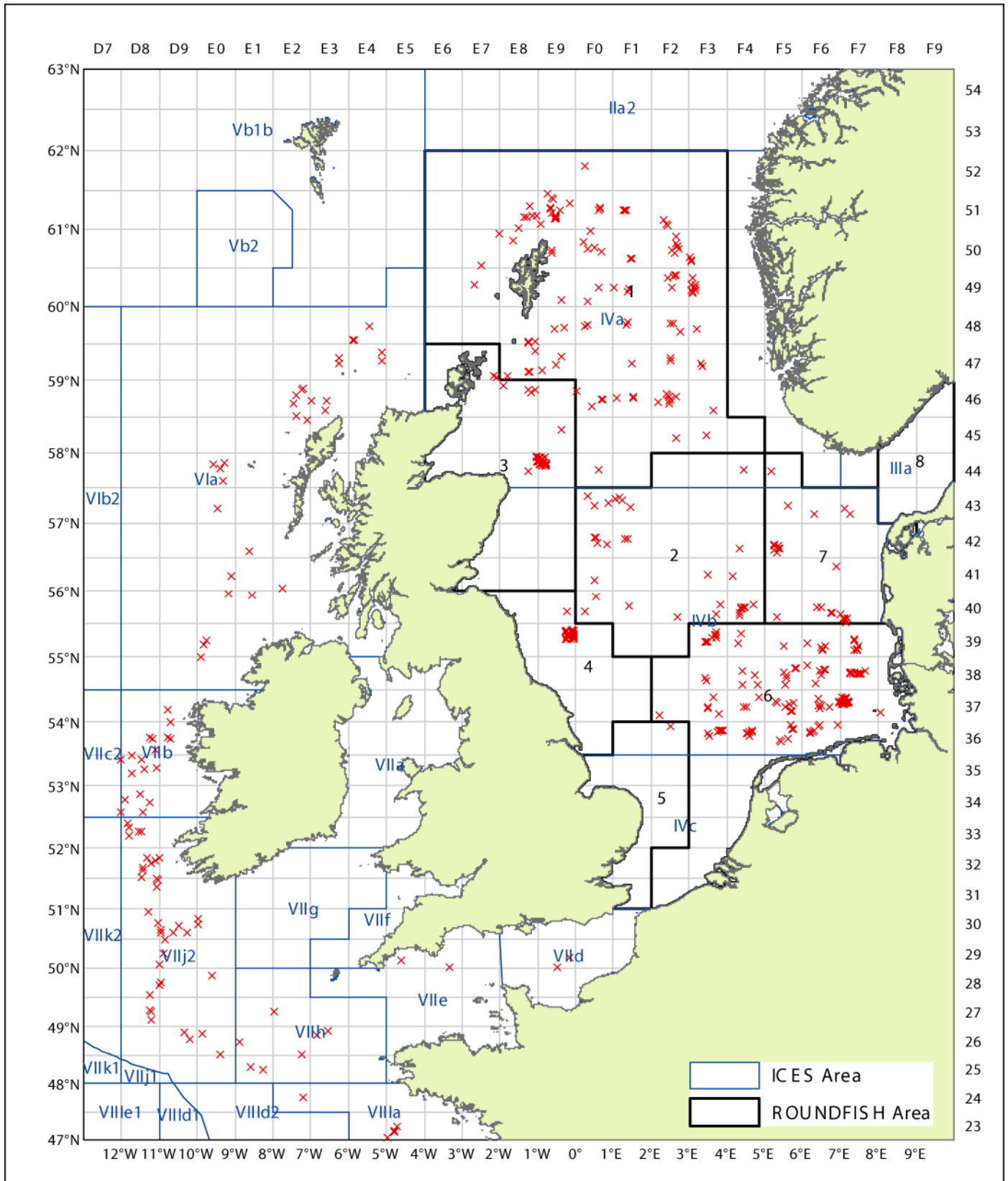
15.5 [cm]
47.5 [cm]

male -
female 9832
undefined -

total numbers of data 9832

Scomber scombrus ♂

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus



Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.002

b = 3.4036

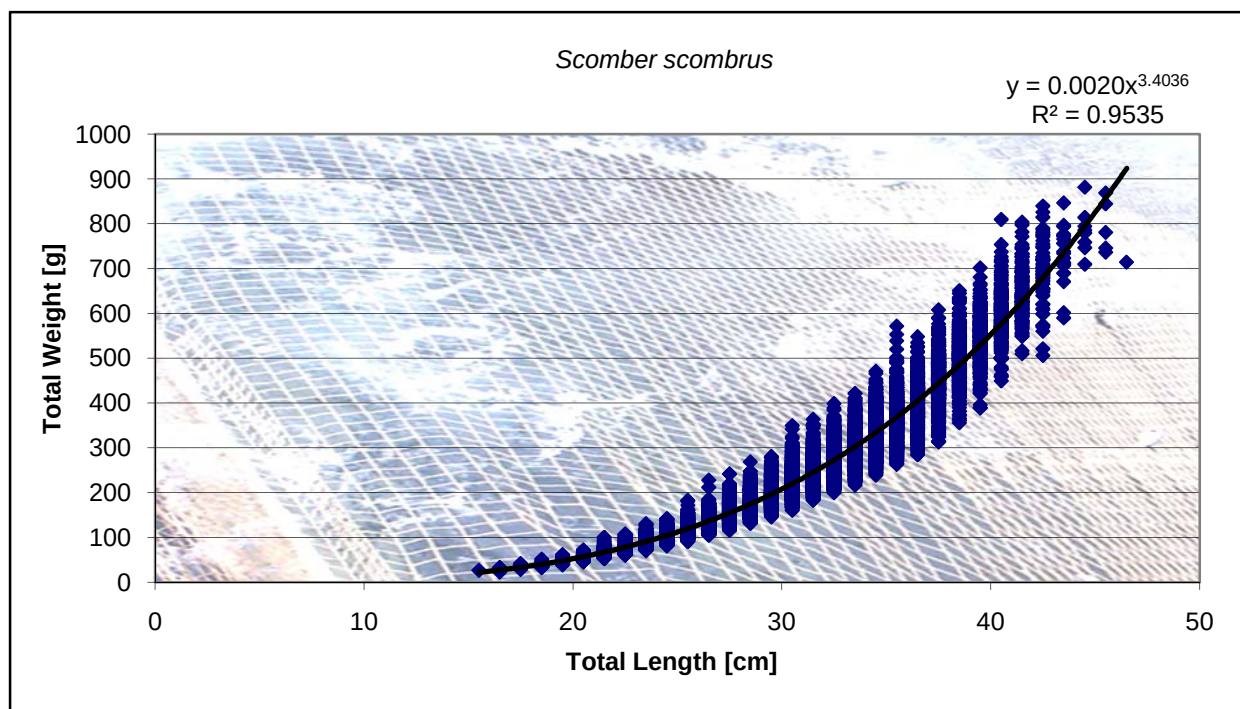
data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of data.																			
Quarter																			
1	2	3	4																
5375	1246	1823	884																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
1872	2573	930	1022	154	70	812	906	105	359	336	189								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	4039	-	1720	3292	277	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	2461	1578	-	-	-	1673	-	-	1048	108	114	59	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	234	1776	-	239	-	-	38	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
2183	226	254	176	114	855	231	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

15.5 [cm]
46.5 [cm]

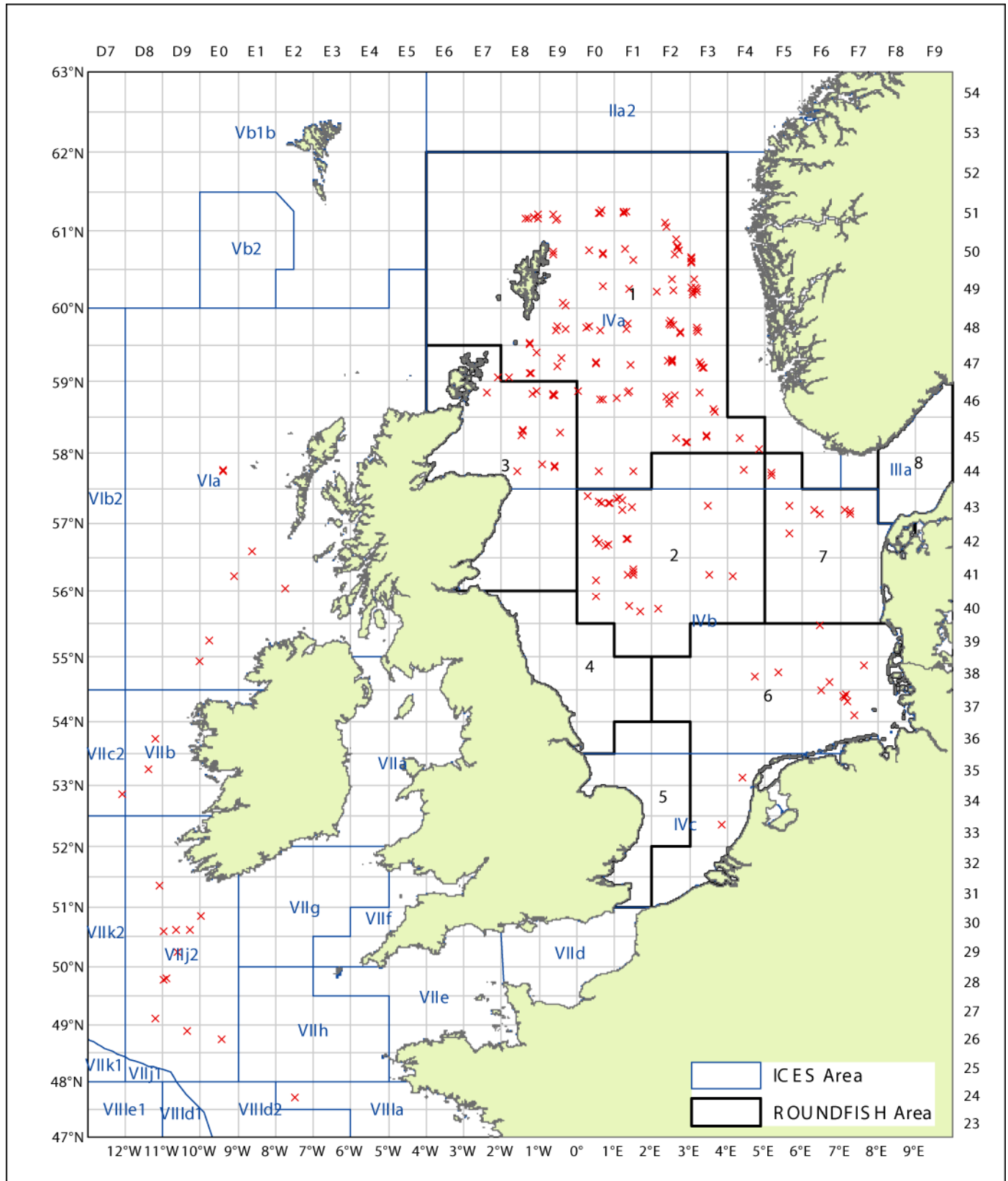
male
female
undefined

9328
-
-

total numbers of data 9328

Scomber scombrus Quarter 1

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

Quarter: 1

$$Tw [g] = a * L [cm]^b$$

a = 0.0027

b = 3.3022

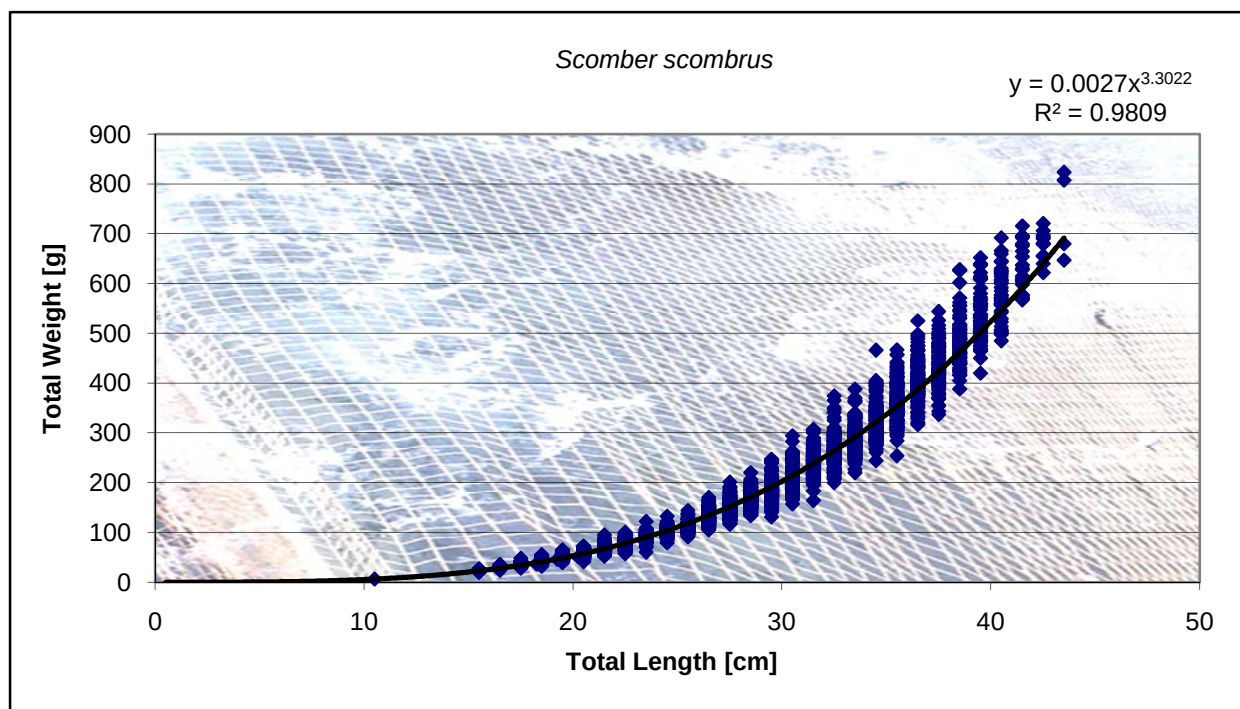
data collected

time period : 1996 - 2008

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
3239	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
807	1223	1209	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	2030	-	435	773	1	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	1733	295	2	-	-	435	-	-	171	16	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	586	-	1	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
1576	301	79	-	-	14	60	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

10.5 [cm]
43.5 [cm]

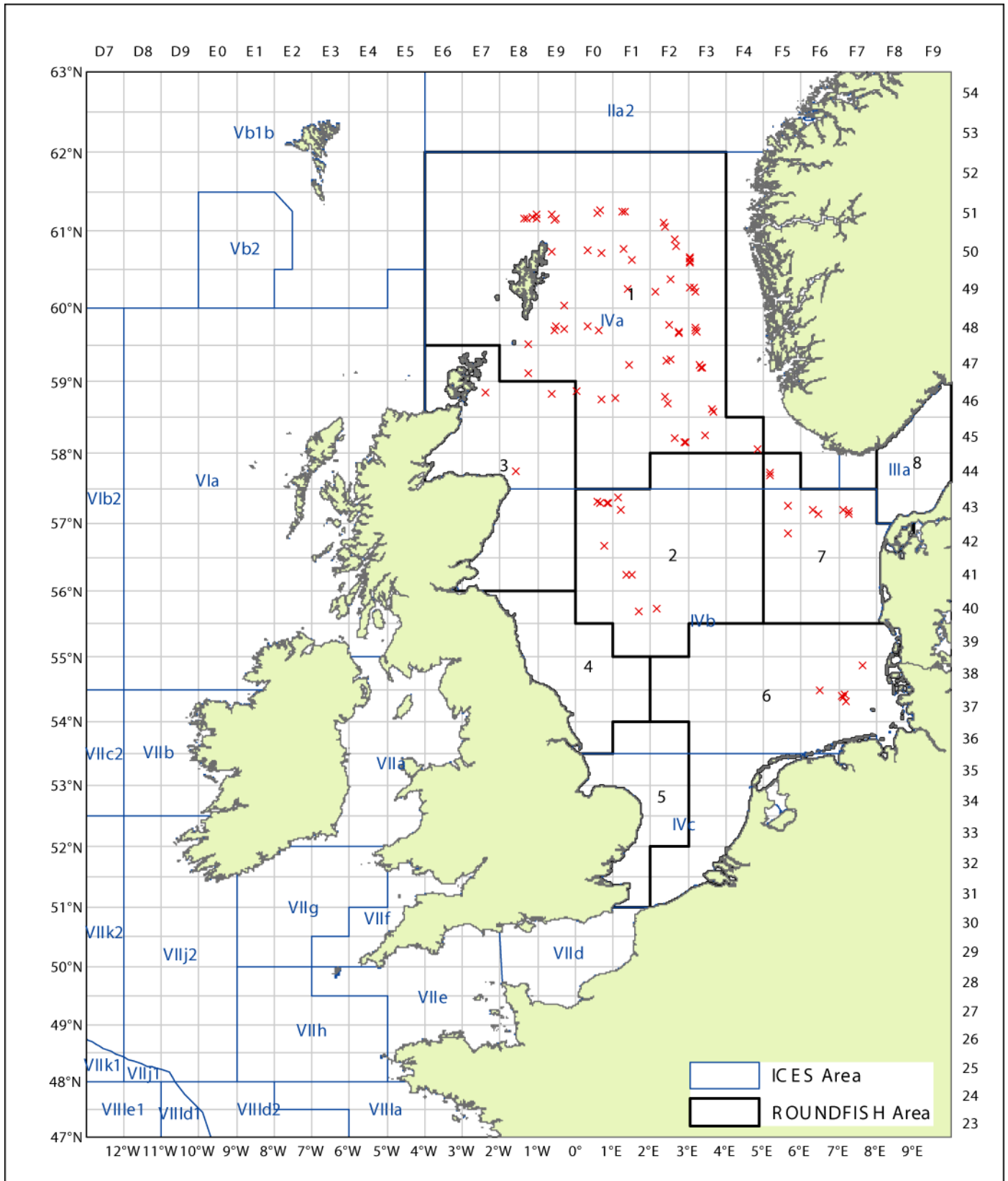
male
female
undefined

1451
1342
446

total numbers of data 3239

Scomber scombrus *January*

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

January

$$Tw [g] = a * L [cm]^b$$

a = 0.0022

b = 3.3809

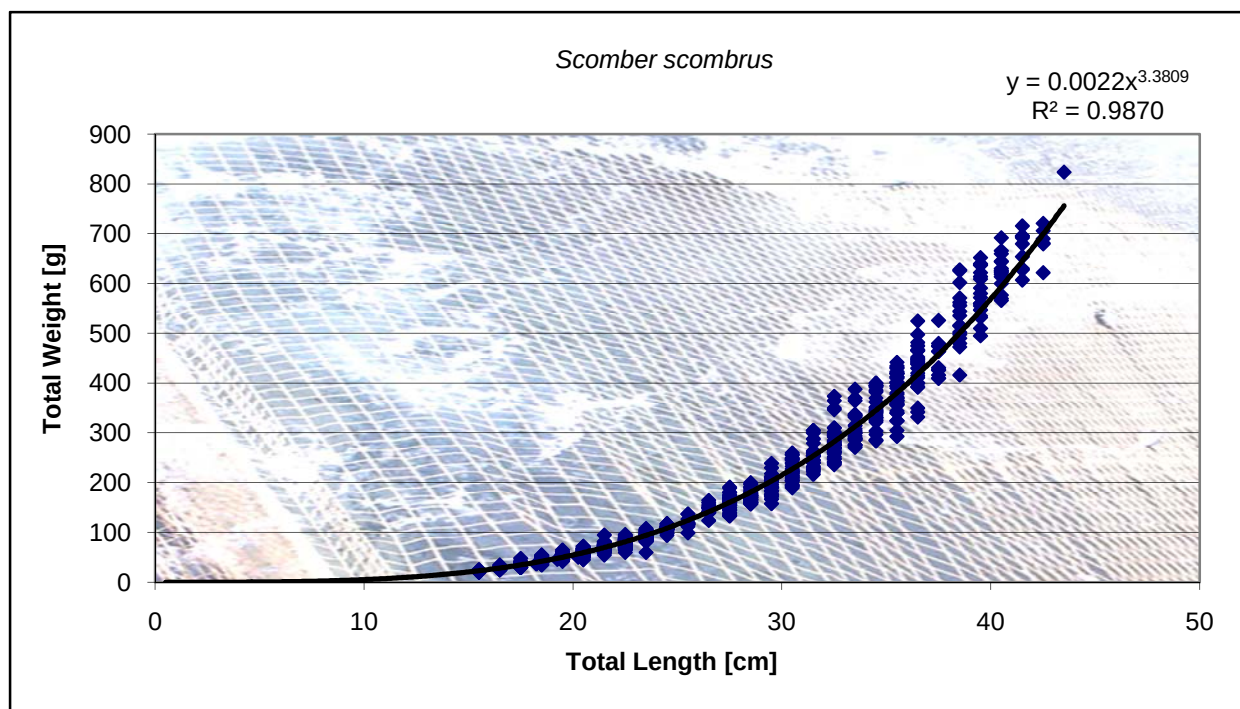
data collected

time period : 1996 - 2008

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
807	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
807	-	-	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	807	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	722	85	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
707	29	4	-	-	7	60	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

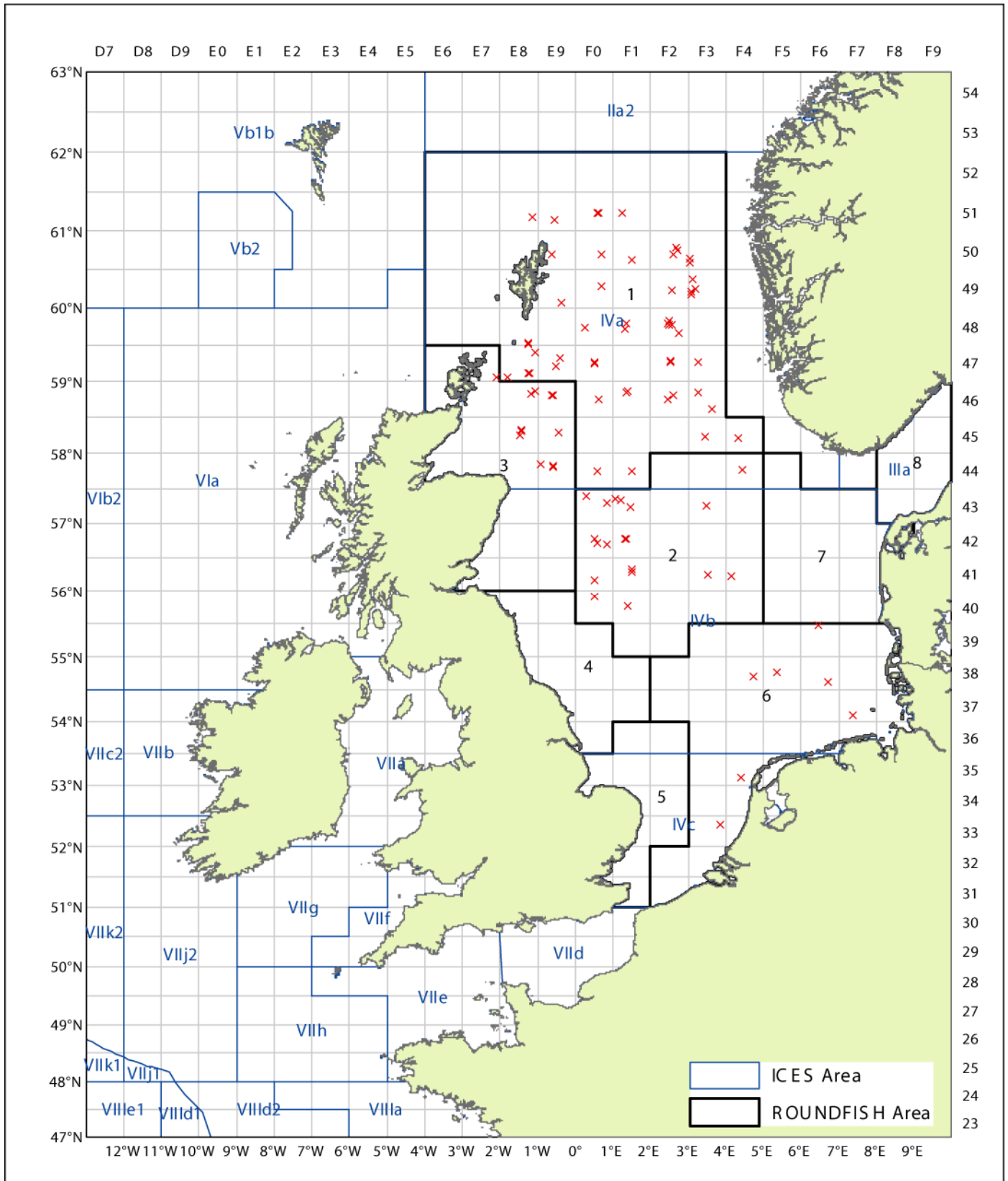
15.5 [cm]
43.5 [cm]

male 286
female 318
undefined 203

total numbers of data 807

Scomber scombrus February

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

February

$$Tw [g] = a * L [cm]^b$$

a = 0.0026

b = 3.3148

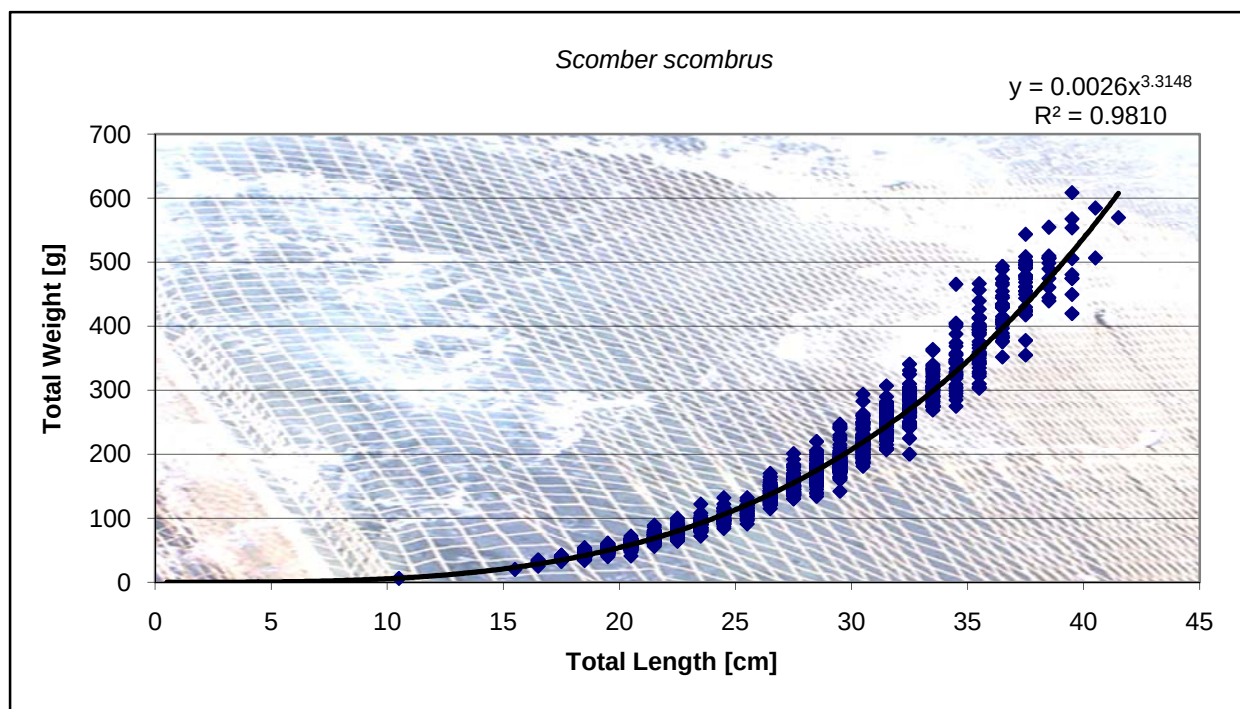
data collected

time period : 1996 - 2008

data source : research vessel

numbers of data:

Numbers of data																				
Quarter																				
1	2	3	4																	
1223	-	-	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	1223	-	-	-	-	-	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	1223	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	1011	210	2	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
-	-	-	-	-	-	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
869	272	75	-	-	7	-	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

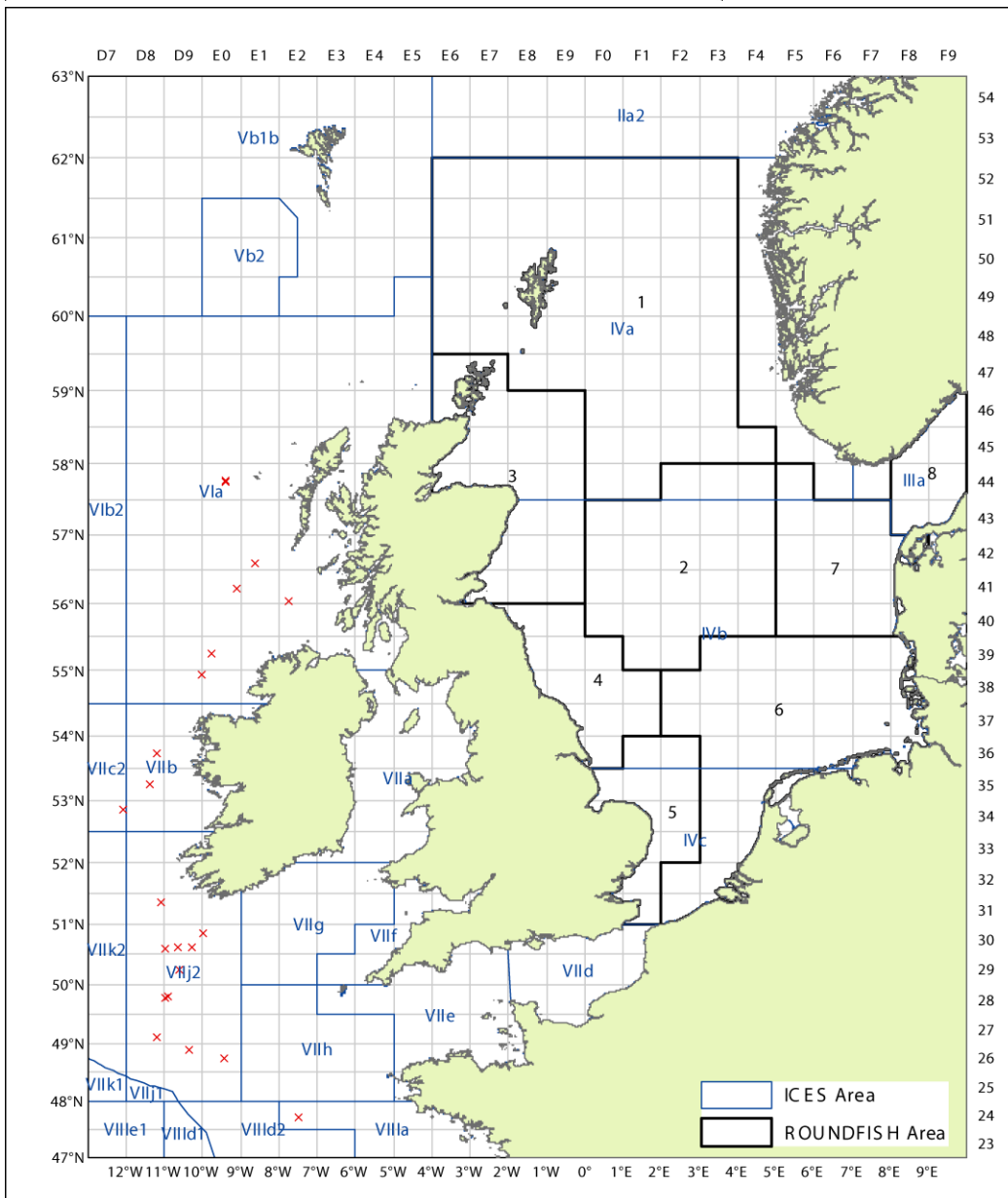
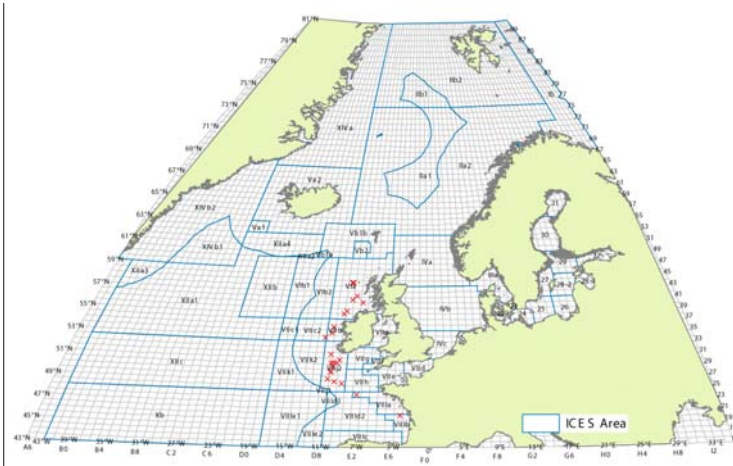
10.5 [cm]
41.5 [cm]

male 519
female 557
undefined 147

total numbers of data 1223

Scomber scombrus March

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

March

$$Tw [g] = a * L [cm]^b$$

a = 0.0017

b = 3.4118

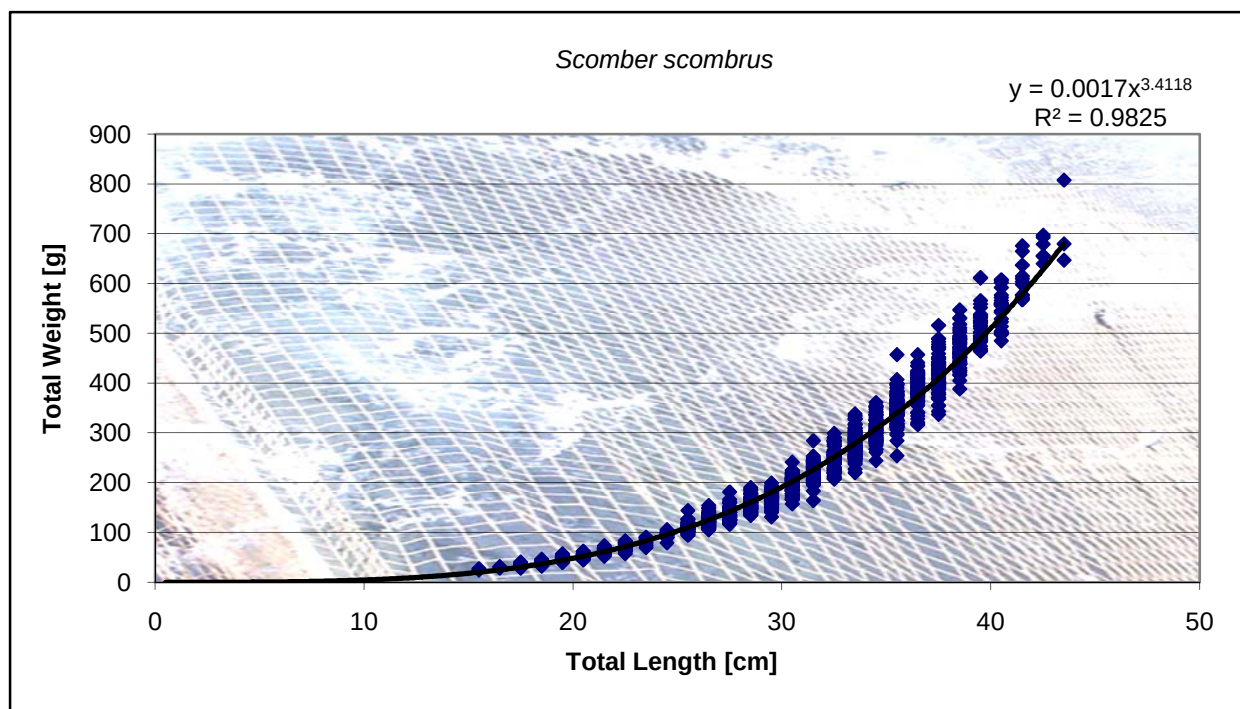
data collected

time period : 1996 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
1209	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	1209	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	-	-	435	773	1	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	-	-	-	-	435	-	-	171	16	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	586	-	1	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

15.5 [cm]
43.5 [cm]

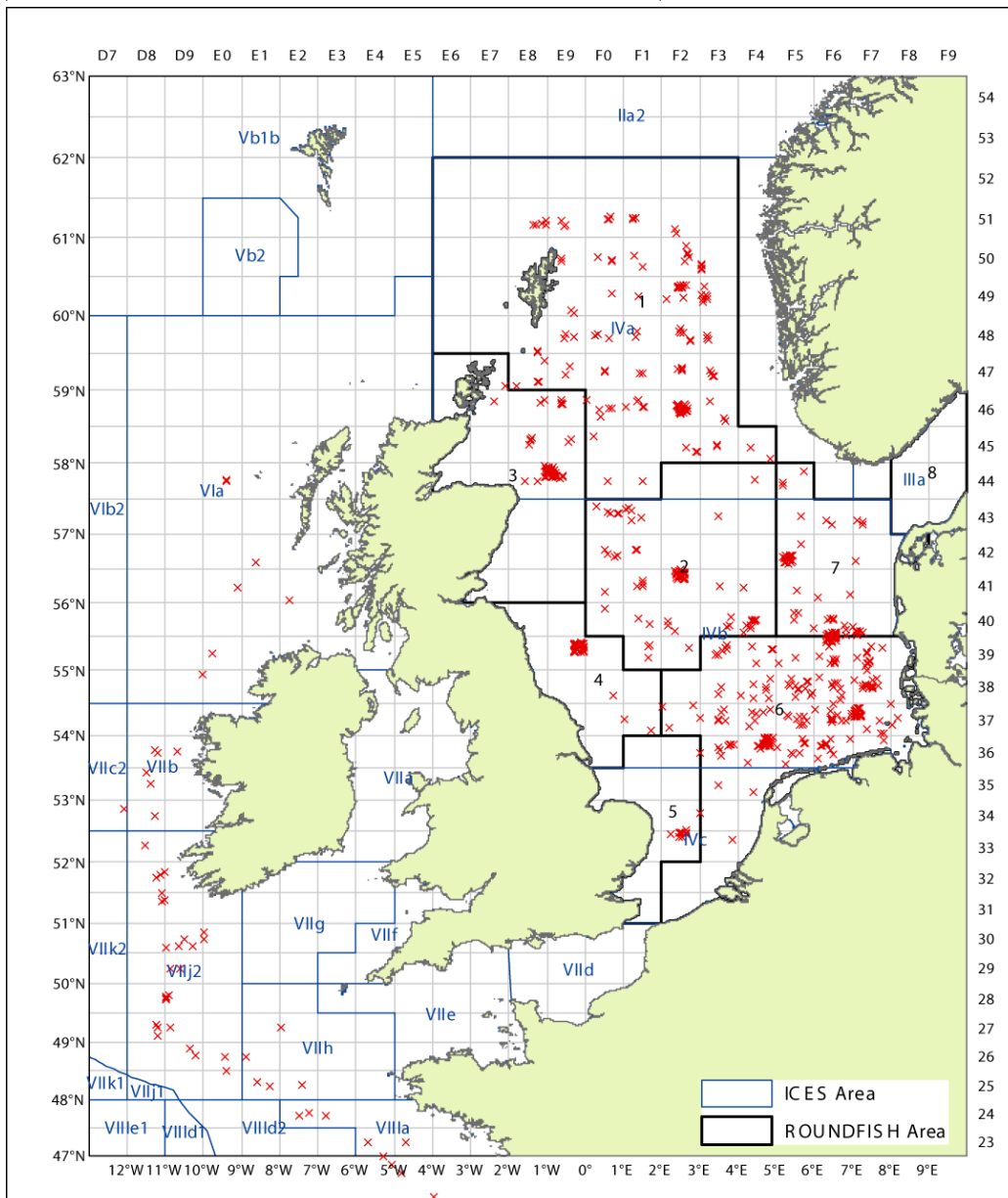
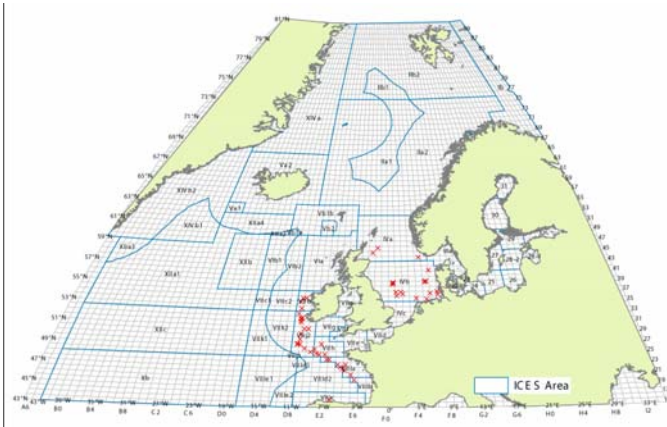
male
female
undefined

646
467
96

total numbers of data 1209

Scomber scombrus Quarter 2

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

Quarter: 2

$$Tw [g] = a * L [cm]^b$$

a = 0.0024

b = 3.308

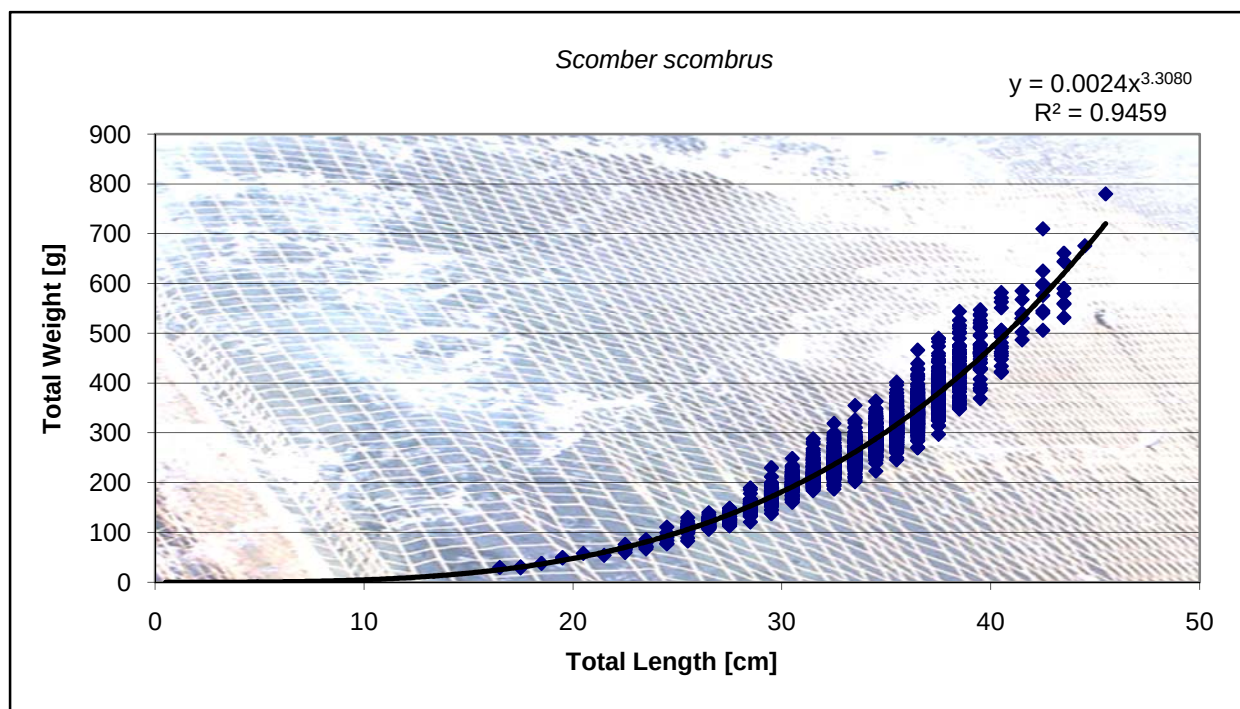
data collected

time period : 1996 - 2007

data source : research vessel

numbers of data:

Numbers of fish																			
Quarter																			
1	2	3	4																
-	1828	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	1697	118	13	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	133	-	-	1435	260	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	3	130	-	-	-	-	-	-	248	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	277	910	-	207	18	20	15	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	3	2	-	-	123	5	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

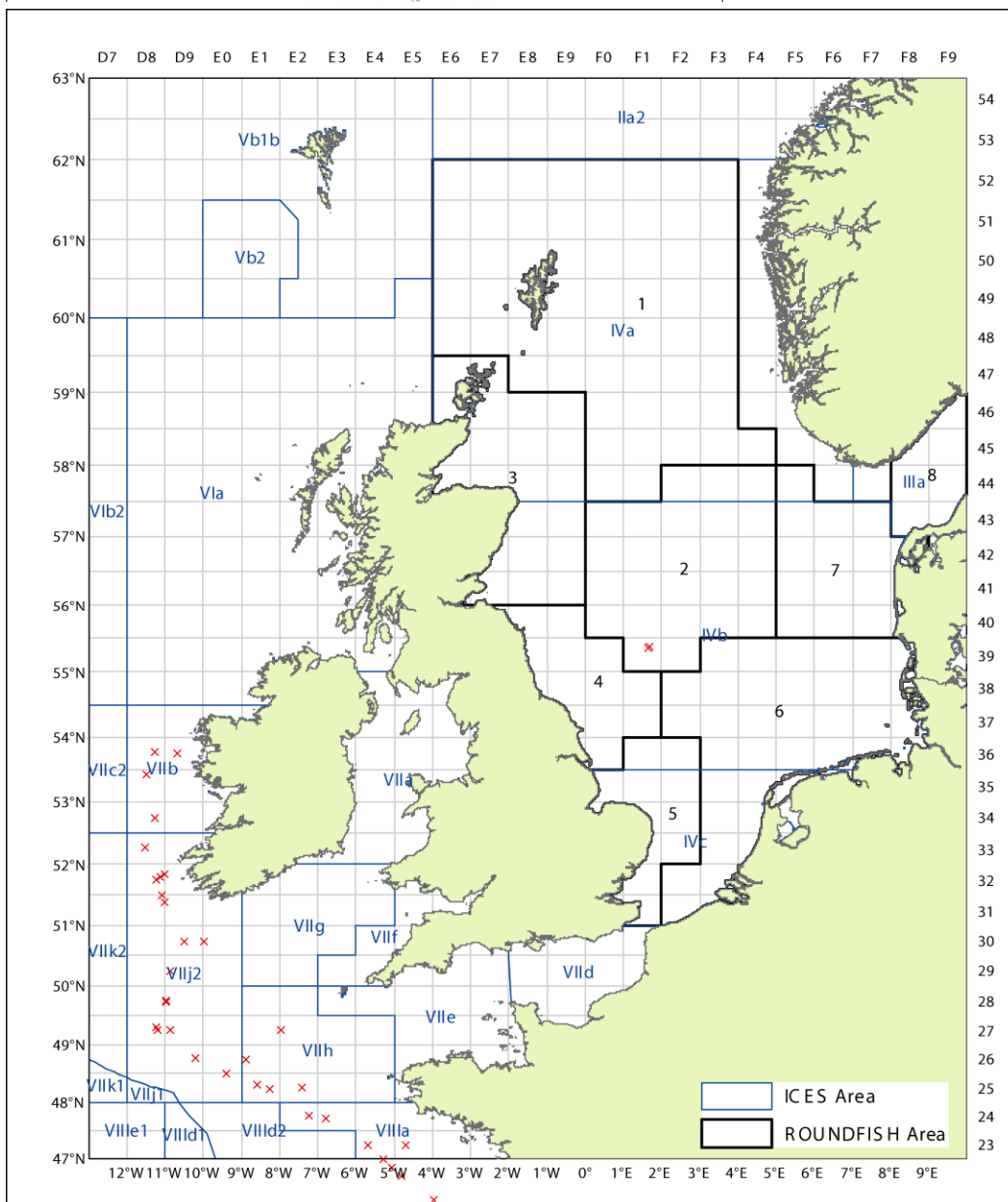
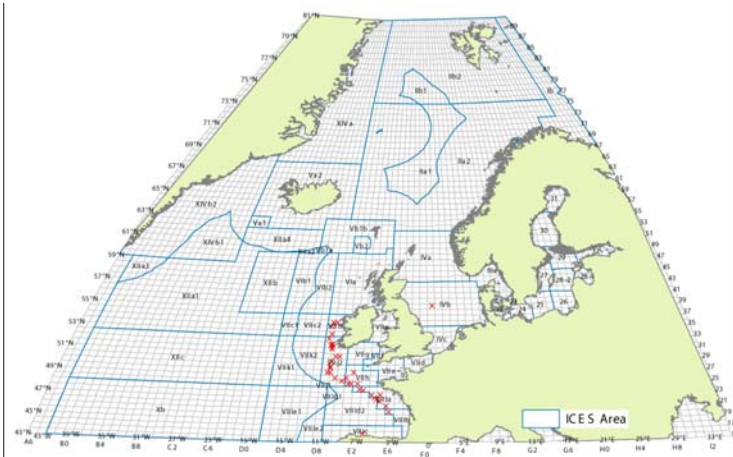
16.5 [cm]
45.5 [cm]

male 866
female 815
undefined 147

total numbers of data 1828

Scomber scombrus April

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

April

$$Tw [g] = a * L [cm]^b$$

a = 0.0024

b = 3.2954

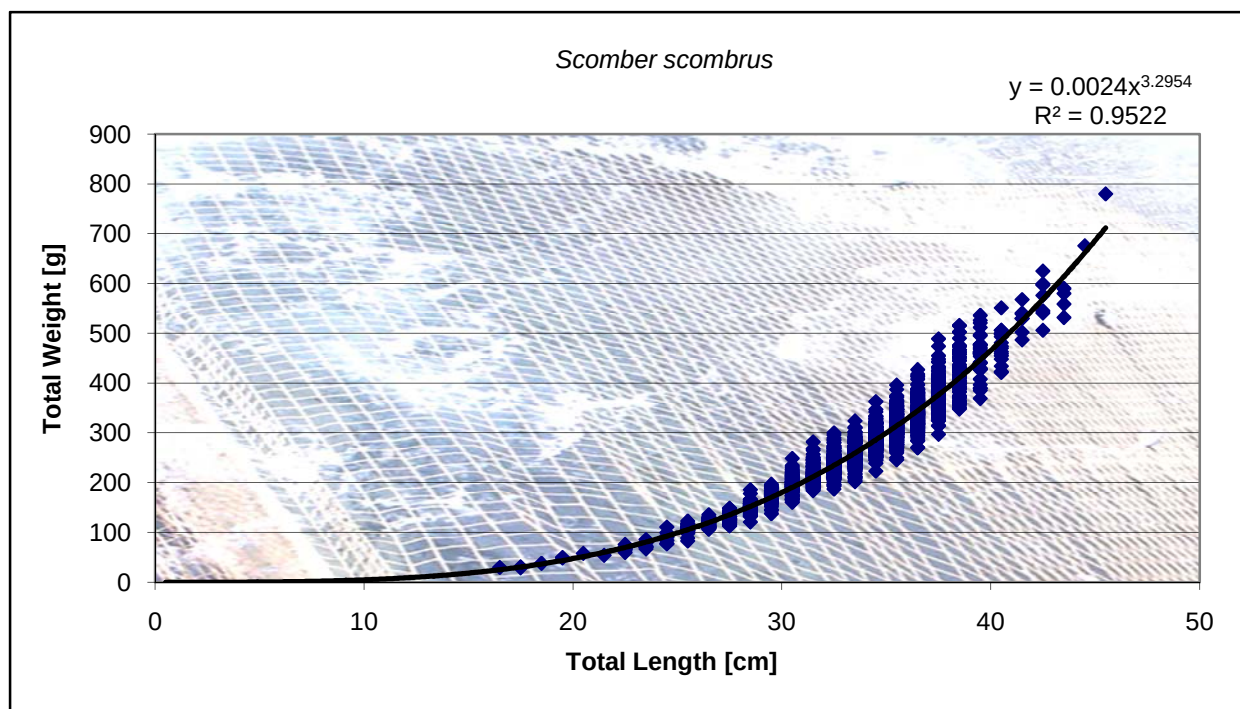
data collected

time period : 1997 - 2007

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
-	1696	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	1696	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	2	-	-	1434	260	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	248	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	277	909	-	207	18	20	15	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	2	-	-	-	-	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

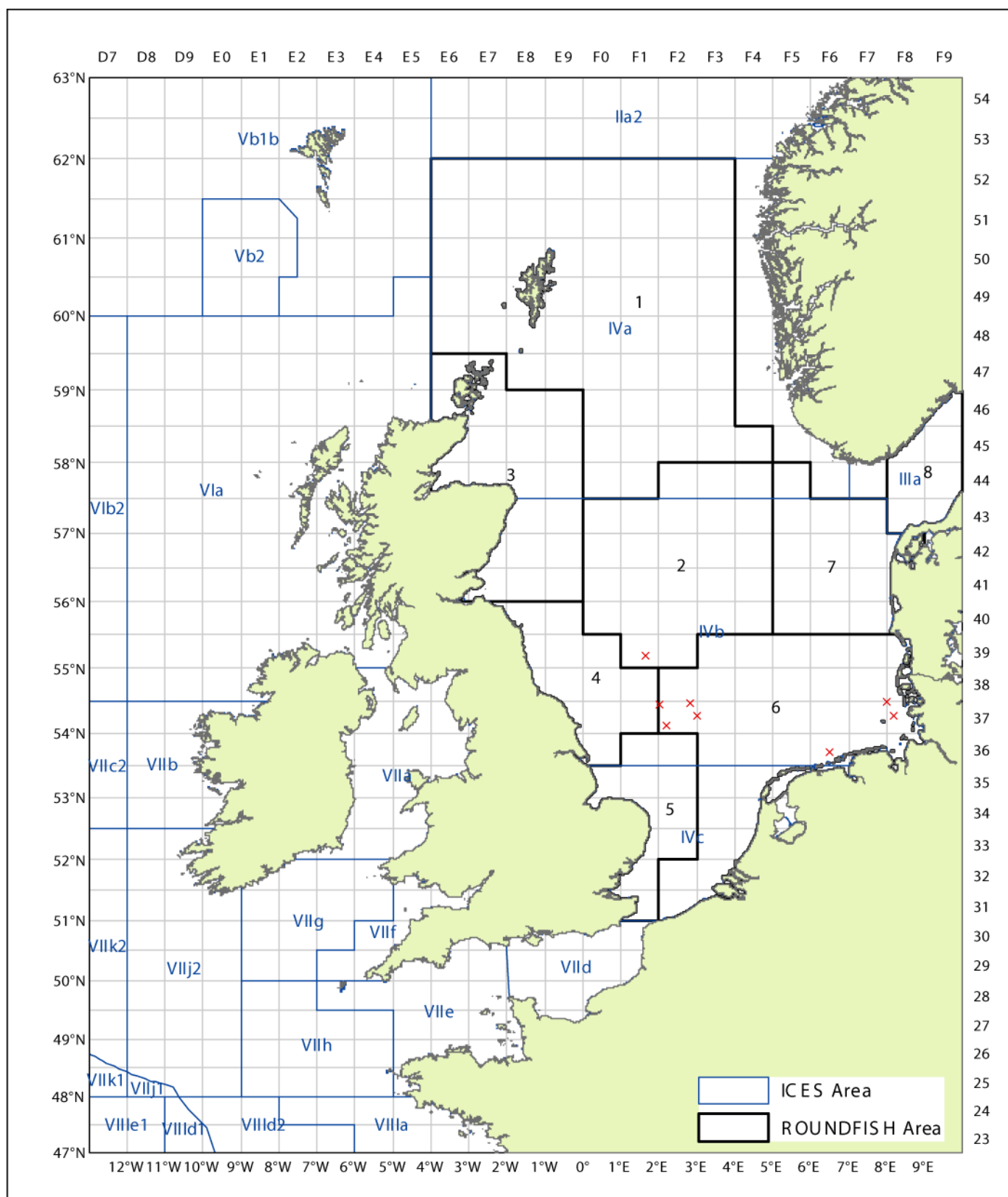
16.5 [cm]
45.5 [cm]

male 817
female 752
undefined 127

total numbers of data 1696

Scomber scombrus May

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

May

$$Tw [g] = a * L [cm]^b$$

a = 0.0028

b = 3.2932

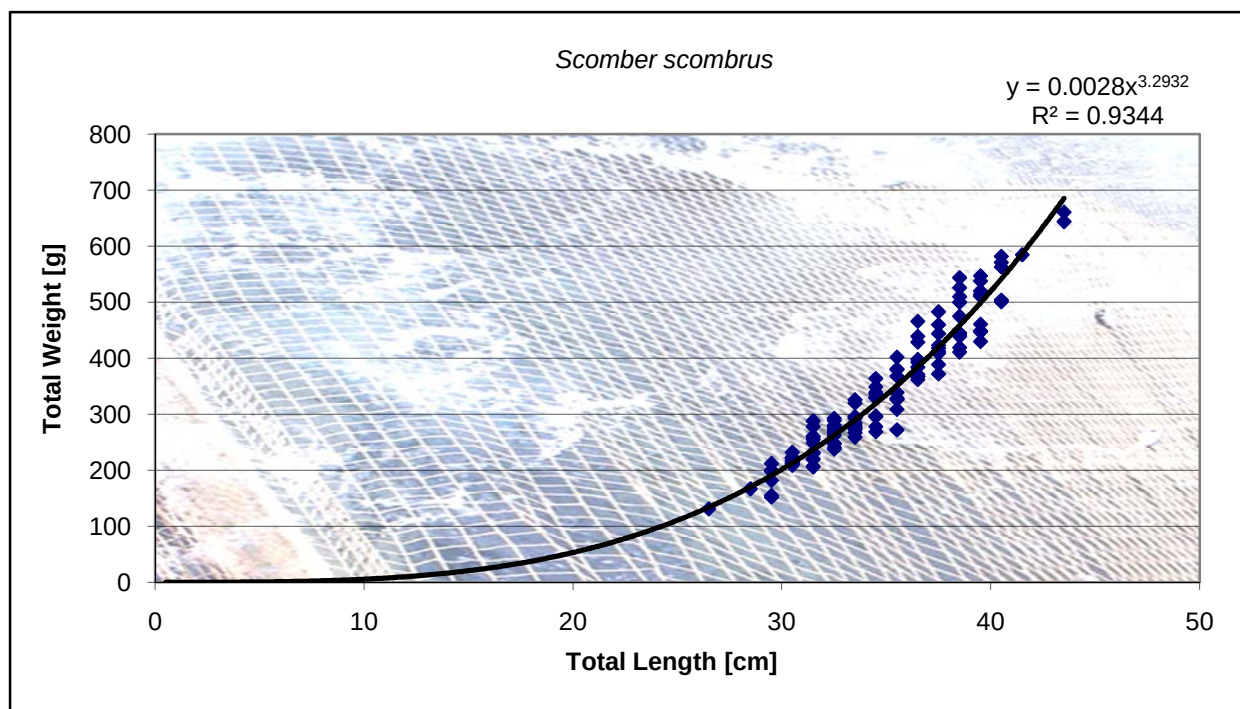
data collected

time period : 1996 - 2006

data source : research vessel

numbers of data:

Numbers of fish																				
Quarter																				
1	2	3	4																	
-	118	-	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	118	-	-	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	118	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	-	118	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
-	-	-	-	-	-	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	1	-	-	-	117	-	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

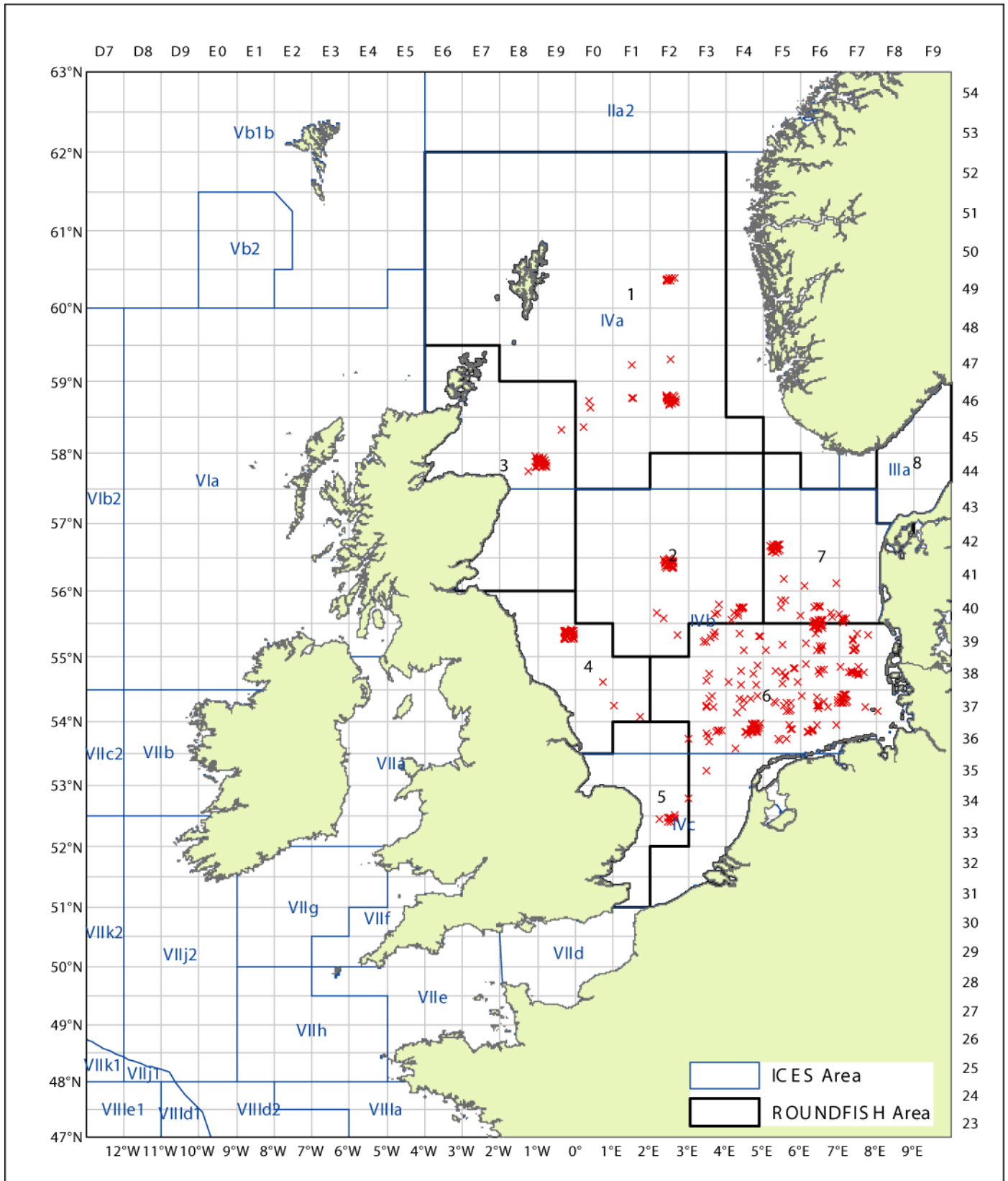
26.5 [cm]
43.5 [cm]

male 49
female 62
undefined 7

total numbers of data 118

Scomber scombrus Quarter 3

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

Quarter: 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0043

b = 3.2101

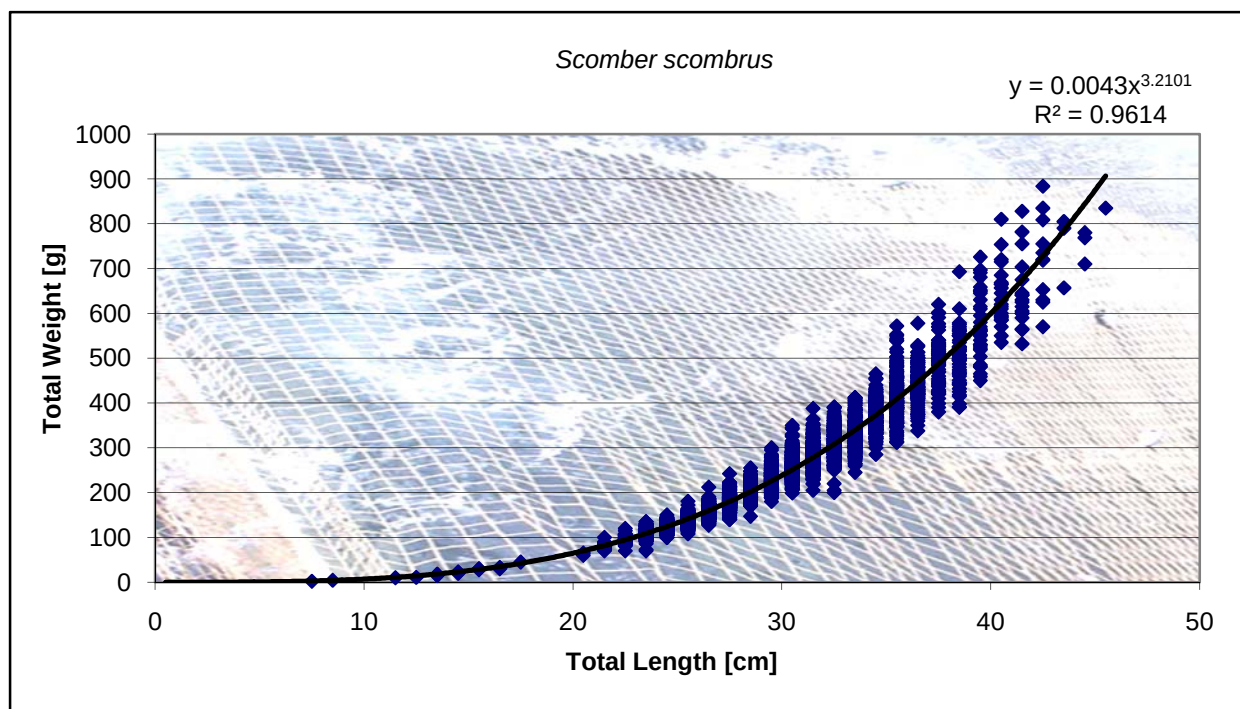
data collected

time period : 1996 - 2007

data source : research vessel

numbers of data:

Numbers of salmon																			
Quarter																			
1	2	3	4																
-	-	3509	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	1781	1478	250	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	3509	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	983	2516	10	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
595	167	370	317	11	1699	350	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

7.5 [cm]
45.5 [cm]

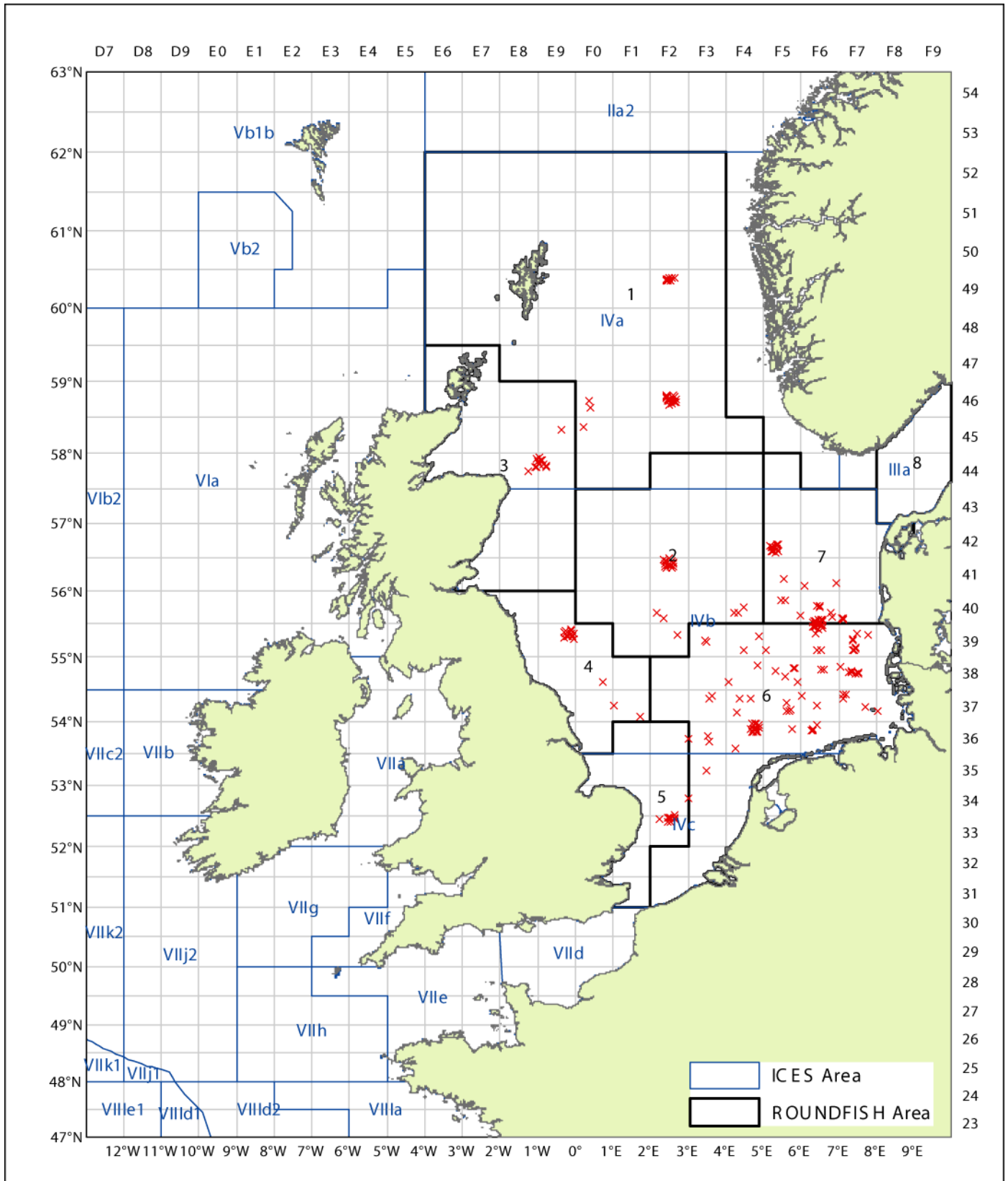
male
female
undefined

1404
1556
549

total numbers of data 3509

Scomber scombrus July

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

July

$$Tw [g] = a * L [cm]^b$$

a = 0.0043

b = 3.2122

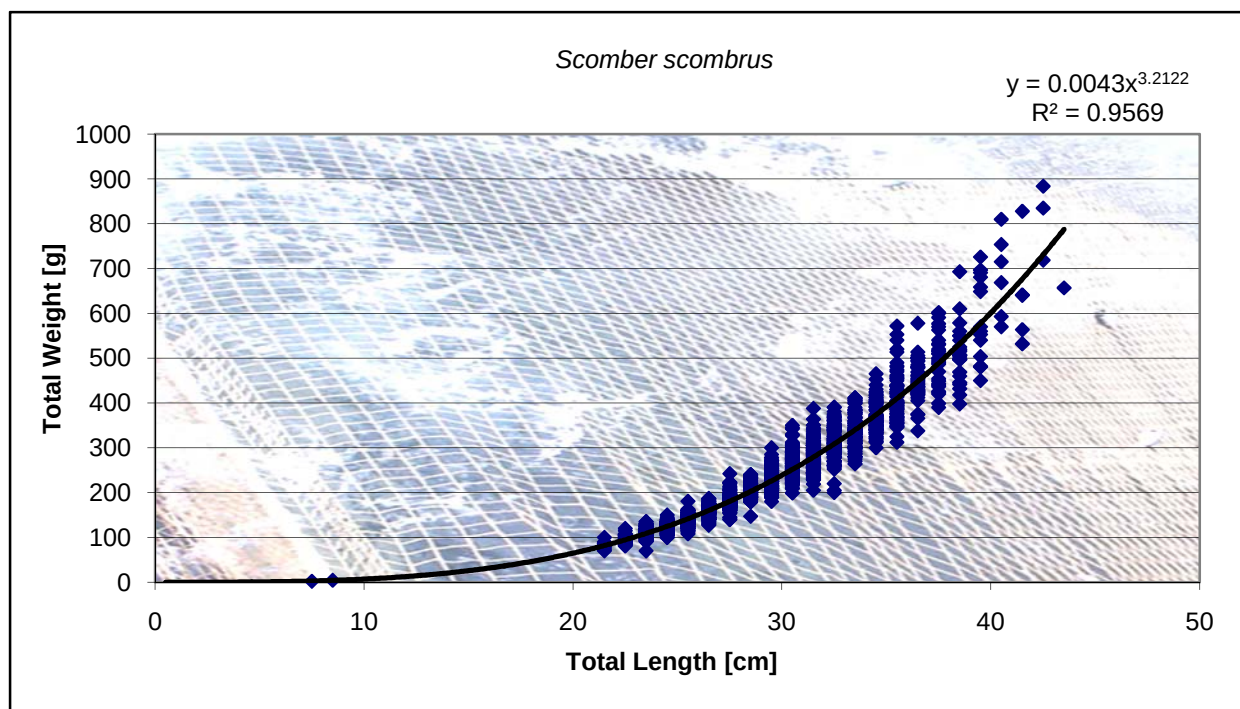
data collected

time period : 1996 - 2007

data source : research vessel

numbers of data:

Quarter																				
1	2	3	4																	
-	-	1781	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	1781	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	1781	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	737	1034	10	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
-	-	-	-	-	-	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
517	78	217	121	11	627	210	-	-			-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

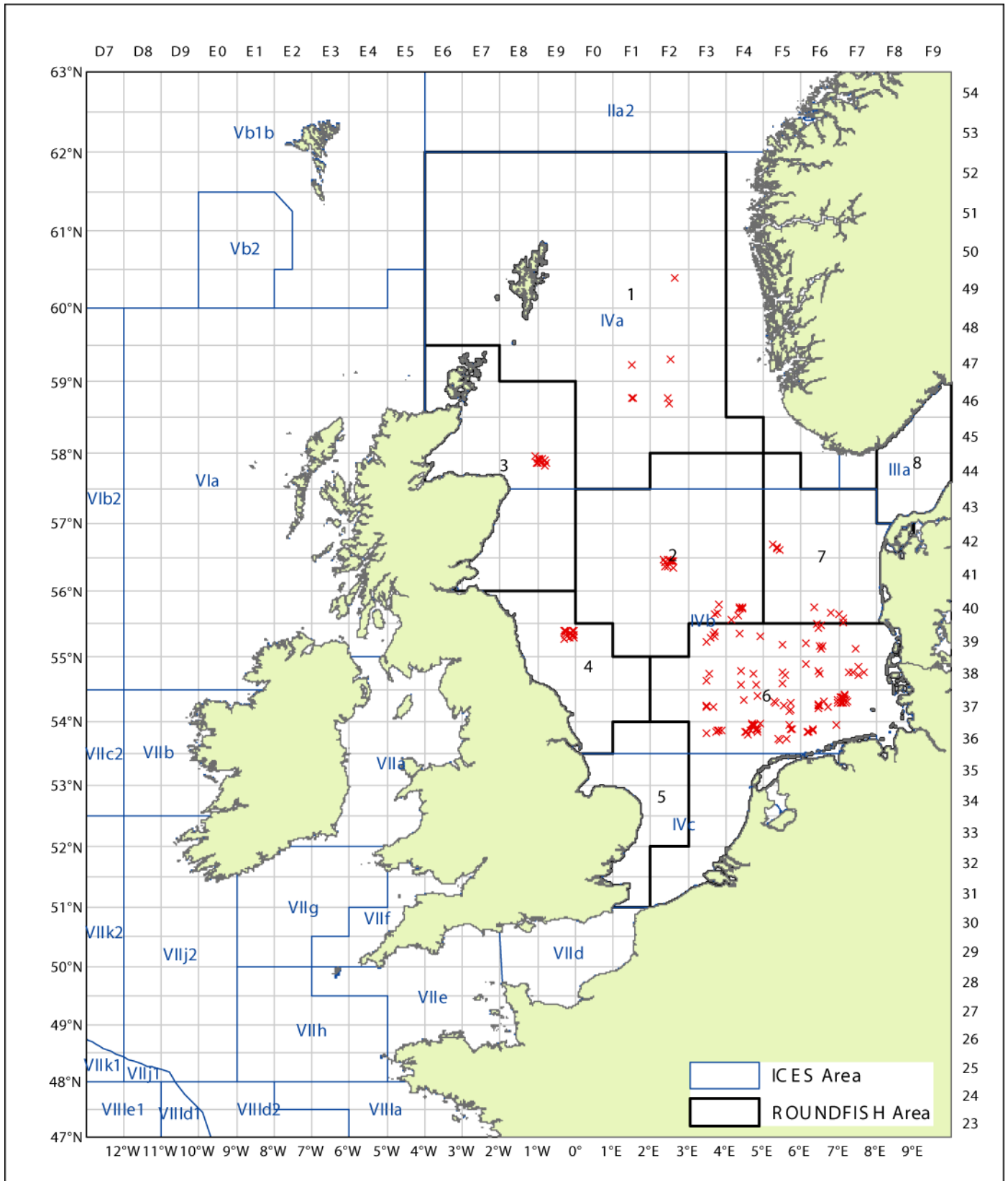
7.5 [cm]
43.5 [cm]

male 637
female 706
undefined 438

total numbers of data 1781

Scomber scombrus August

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

August

$$Tw [g] = a * L [cm]^b$$

a = 0.0046

b = 3.1875

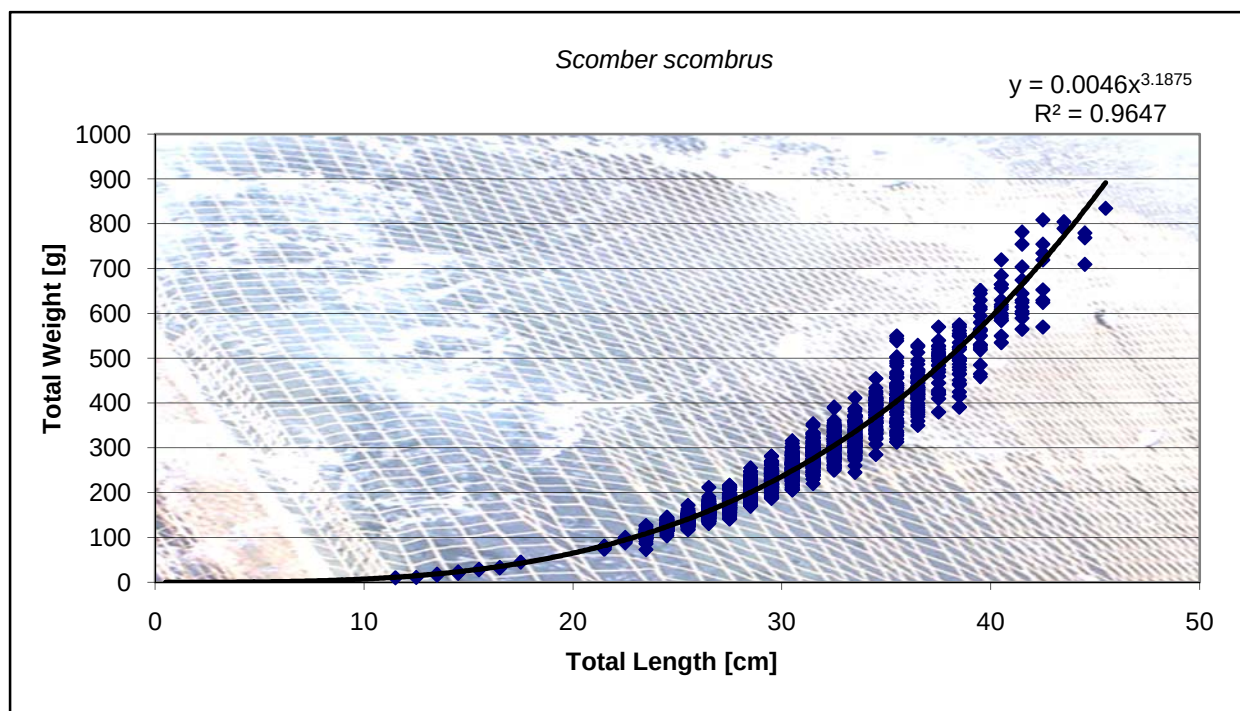
data collected

time period : 1996 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	-	1478	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	1478	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1478	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	178	1300	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
78	89	85	113	-	995	118	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

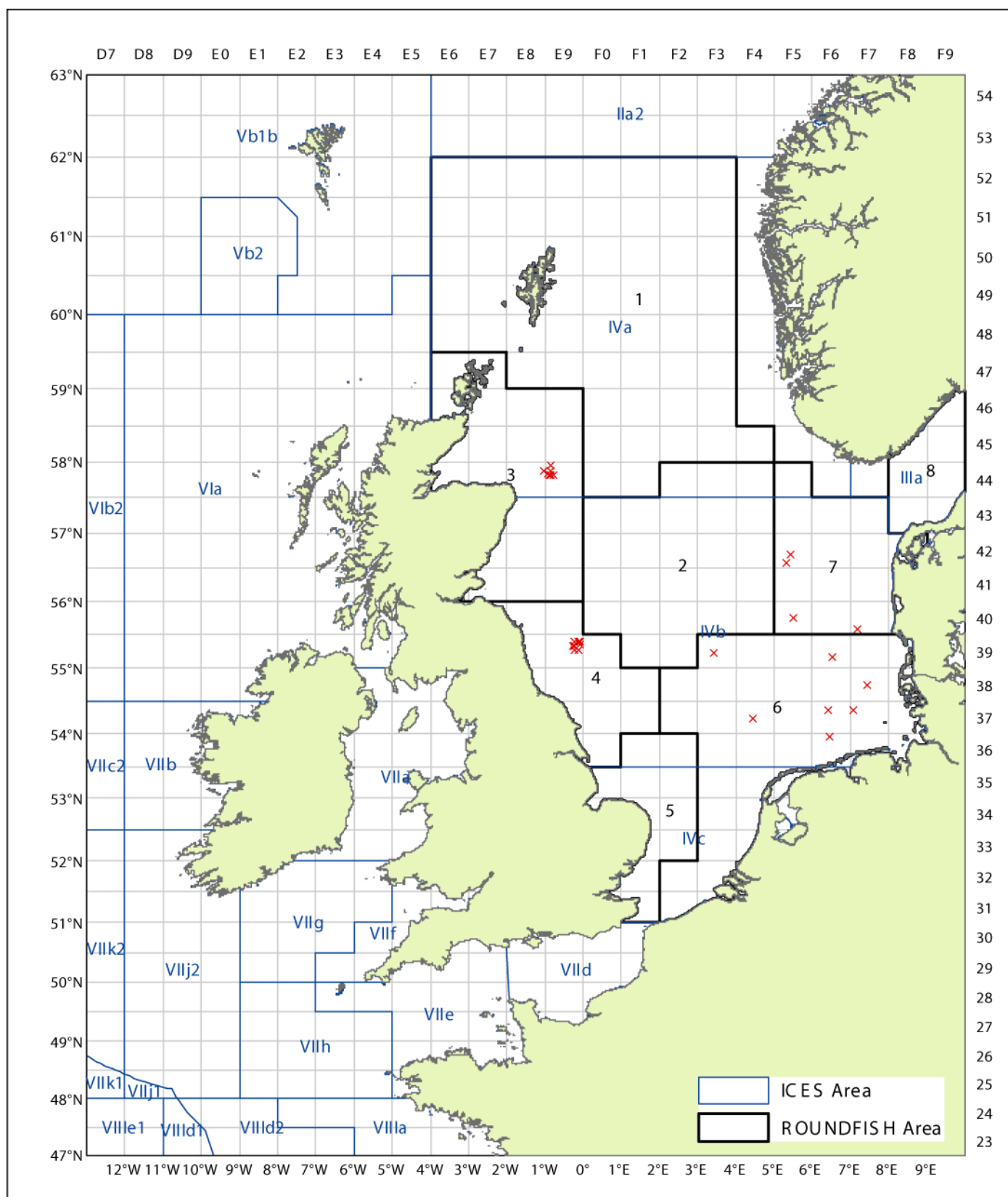
11.5 [cm]
45.5 [cm]

male 662
female 714
undefined 102

total numbers of data 1478

Scomber scombrus September

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

September

$$Tw [g] = a * L [cm]^b$$

a = 0.0029

b = 3.335

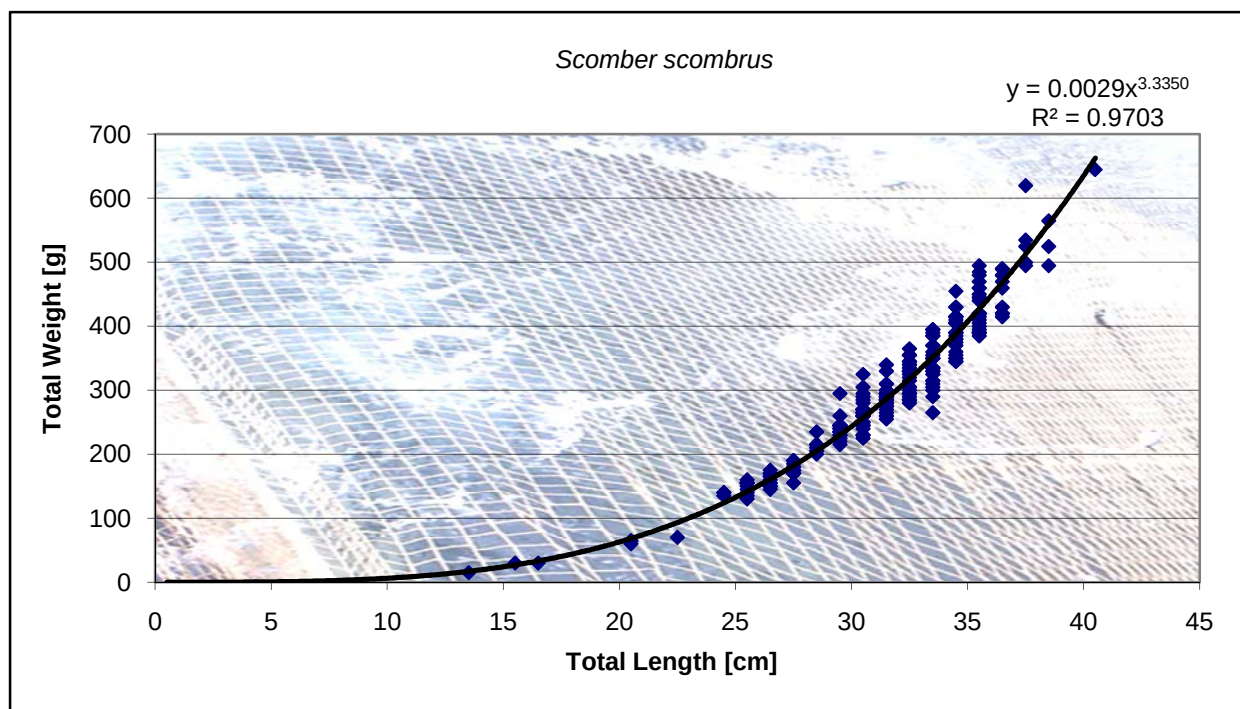
data collected

time period : 1997

data source : research vessel

numbers of data:

Numbers of salmon																			
Quarter																			
1	2	3	4																
-	-	250	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	-	250	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	250	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	68	182	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	-	68	83	-	77	22	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

13.5 [cm]
40.5 [cm]

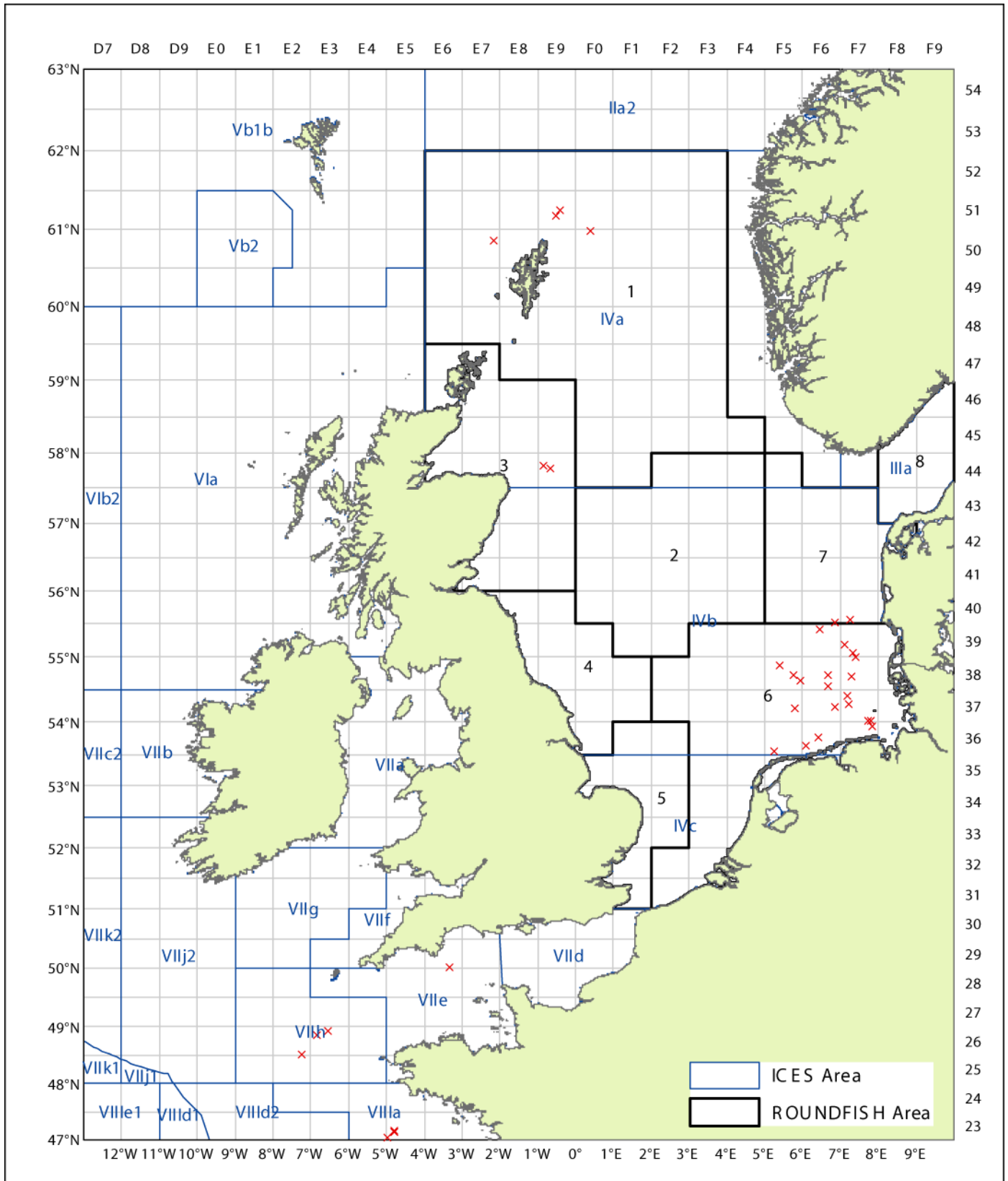
male
female
undefined

105
136
9

total numbers of data 250

Scomber scombrus Quarter 4

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

Quarter: 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0015

b = 3.4916

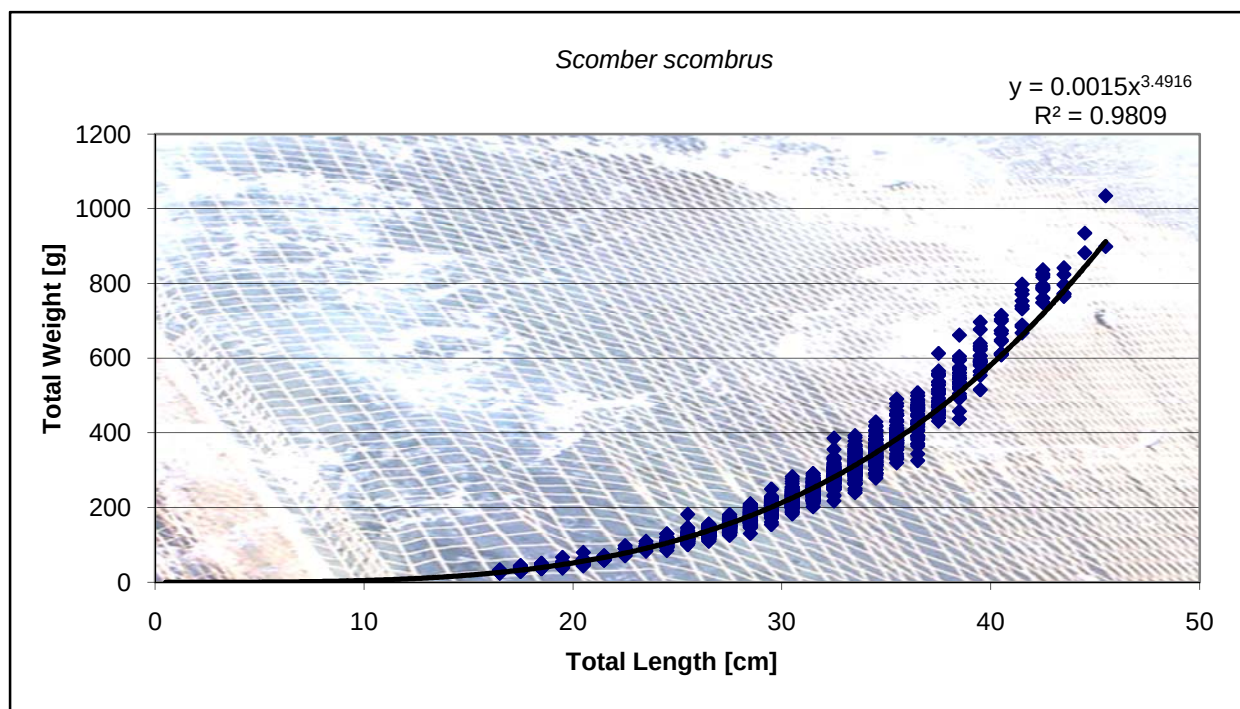
data collected

time period : 1997 - 2003

data source : research vessel, commercial trawler

numbers of data:

Numbers of fish																			
Quarter																			
1	2	3	4																
-	-	-	1510																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	-	-	286	499	725								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	673	-	-	352	485	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	649	24	-	-	-	-	-	-	-	-	-	88	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	264	-	-	485	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
649	-	2	-	-	22	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

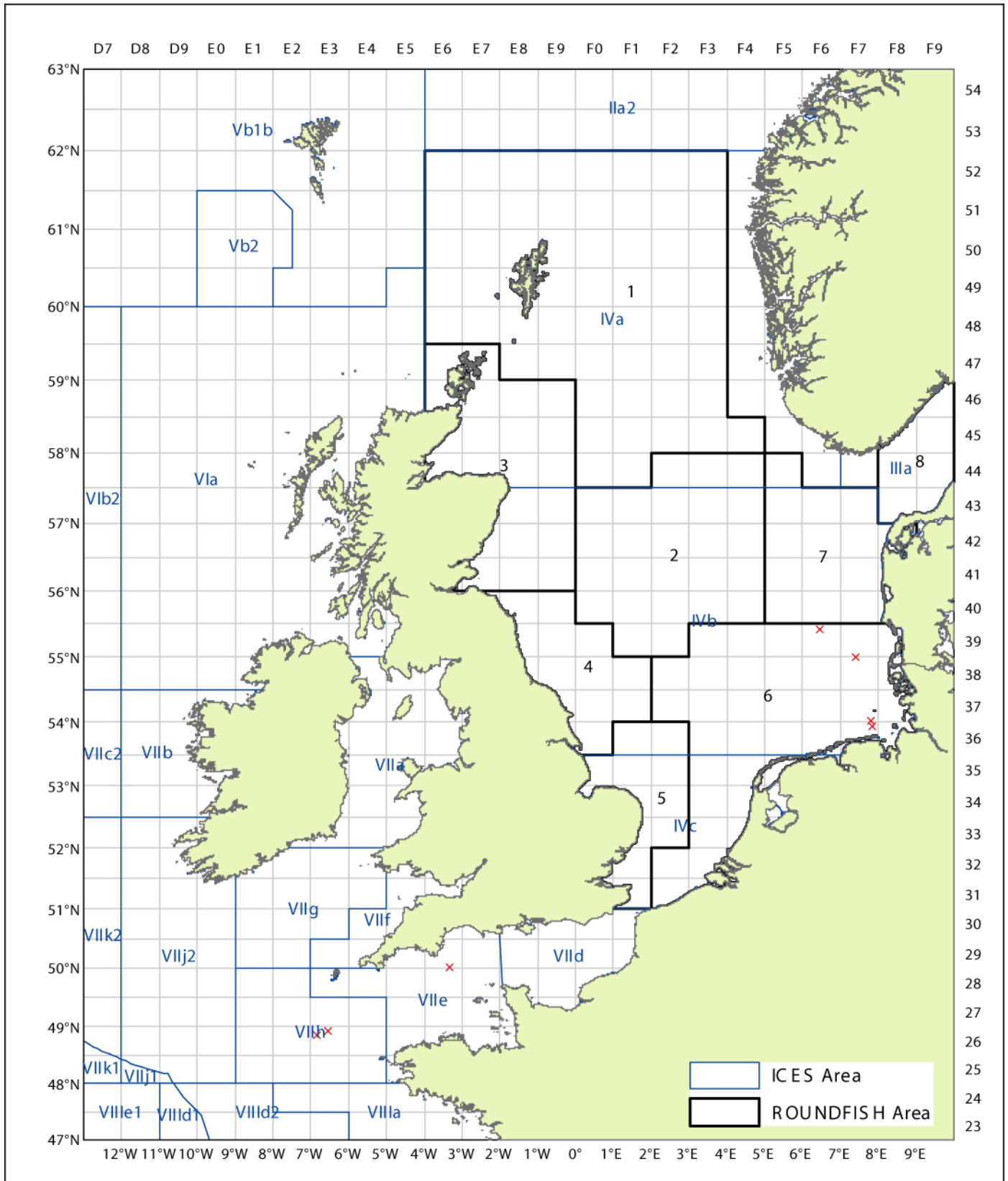
16.5 [cm]
45.5 [cm]

male 395
female 490
undefined 625

total numbers of data 1510

Scomber scombrus *October*

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

October

$$Tw [g] = a * L [cm]^b$$

a = 0.003

b = 3.2714

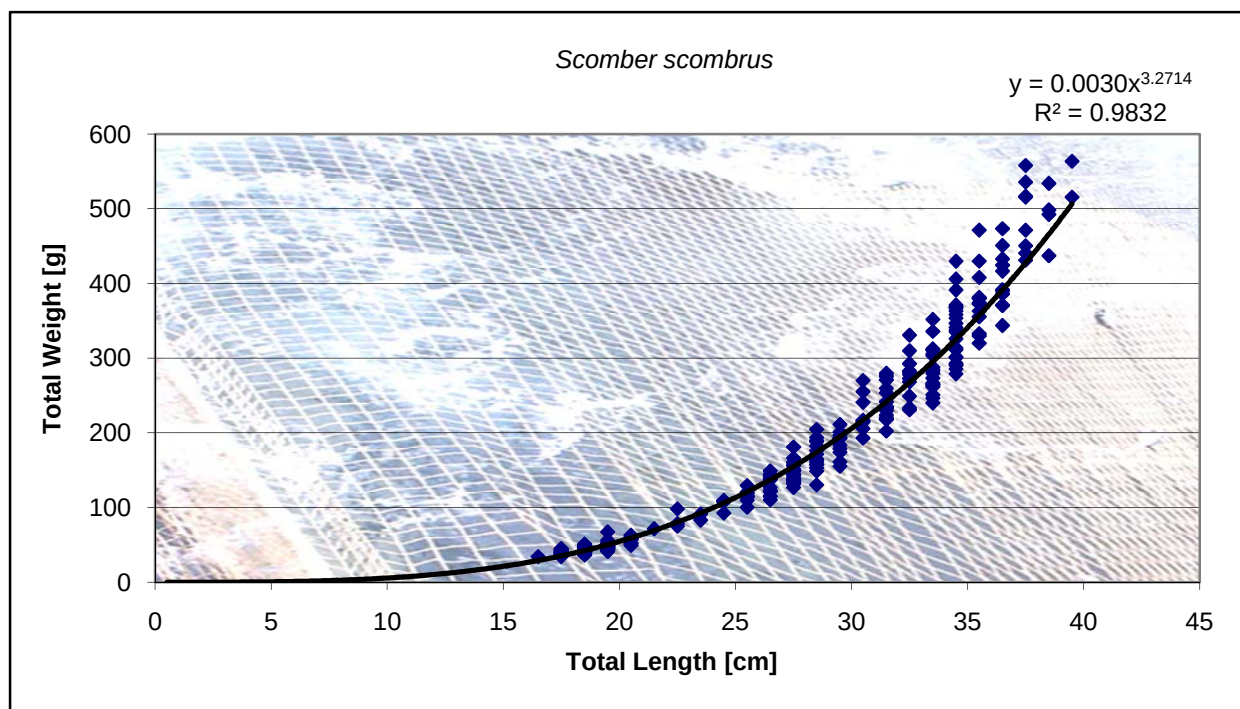
data collected

time period : 2001 - 2003

data source : research vessel, commercial trawler

numbers of data:

Numbers of fish																			
Quarter																			
1	2	3	4																
-	-	-	286																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	-	-	286	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	4	-	-	282	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	88	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	194	-	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	-	-	-	-	4	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

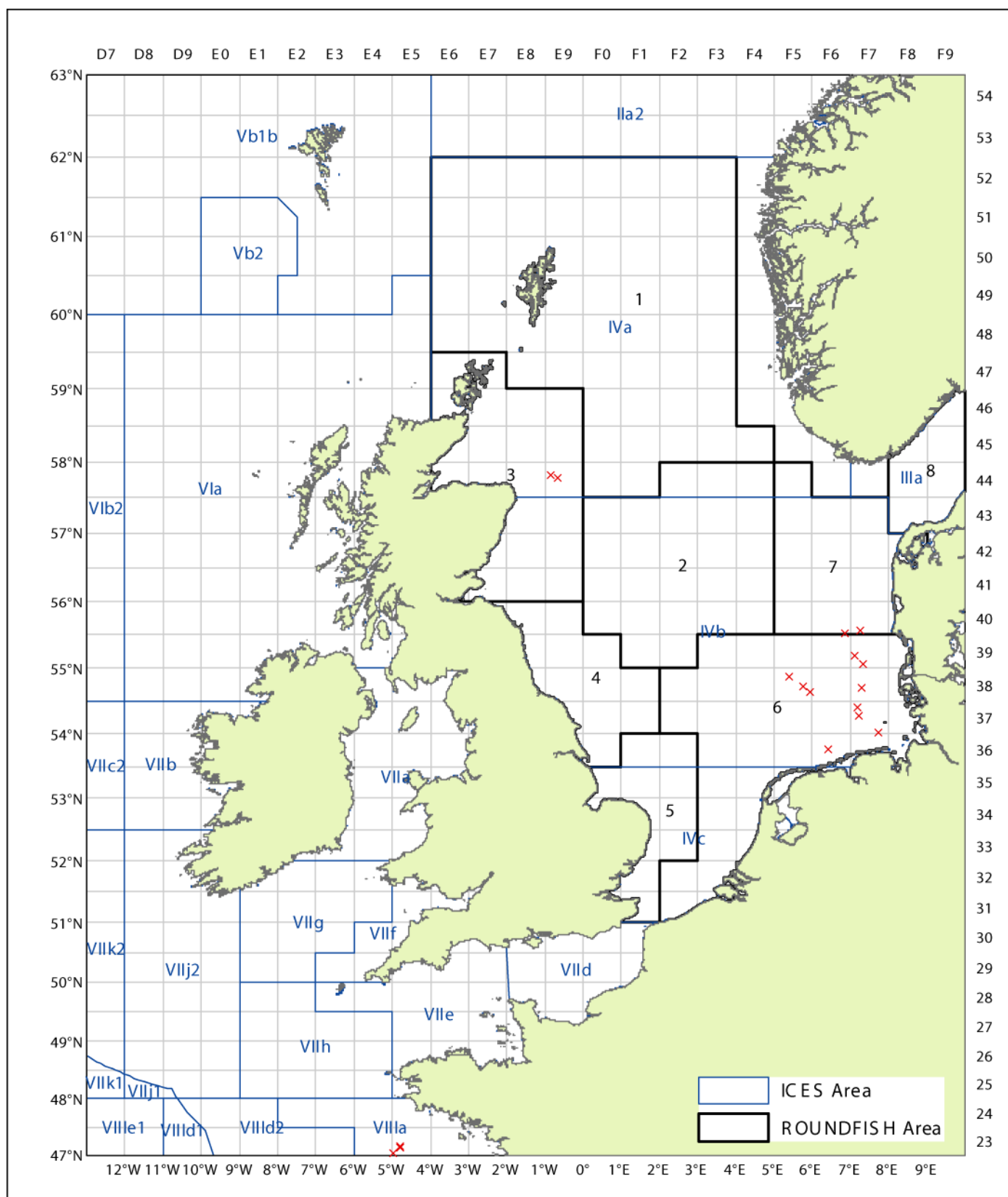
16.5 [cm]
39.5 [cm]

male 120
female 87
undefined 79

total numbers of data 286

Scomber scombrus November

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

November

$$Tw [g] = a * L [cm]^b$$

a = 0.0027

b = 3.3083

data collected

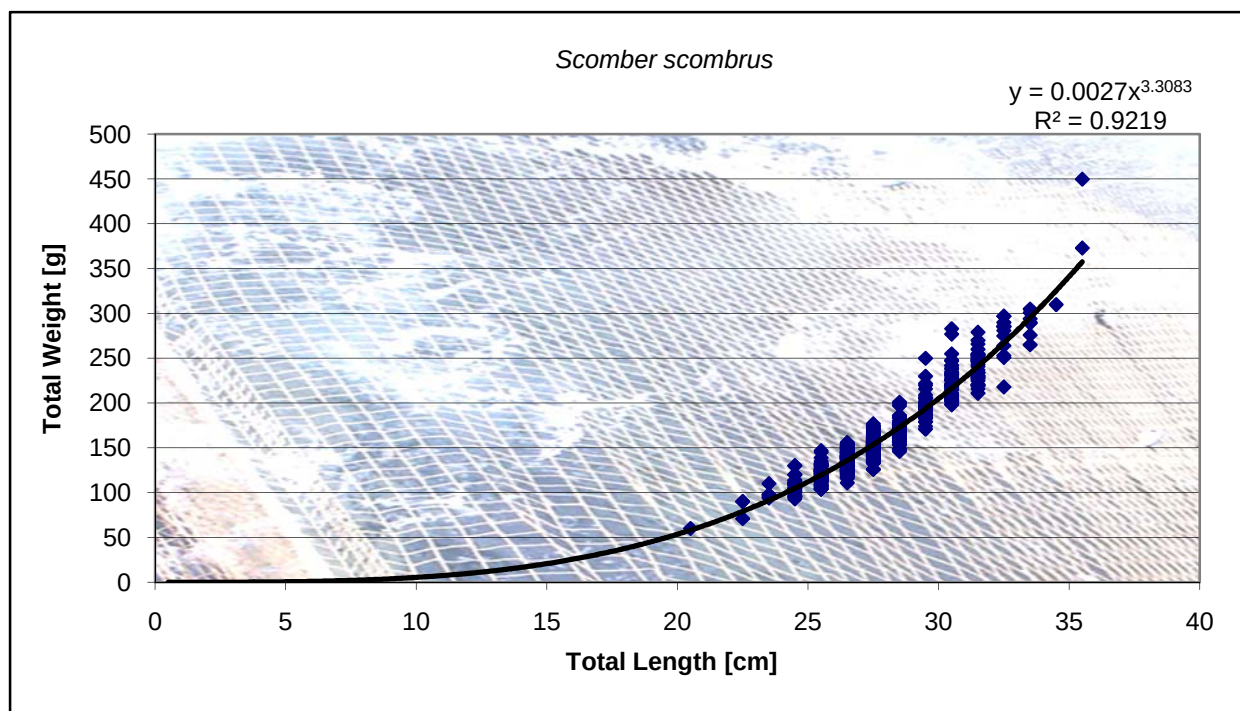
time period : 1997 - 2003

data source : research vessel, commercial trawler

numbers of data:

Numbers of data:

Quarter																			
1	2	3	4																
-	-	-	498																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	-	-	-	498	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	14	-	-	-	484	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	484	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	-	2	-	-	12	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

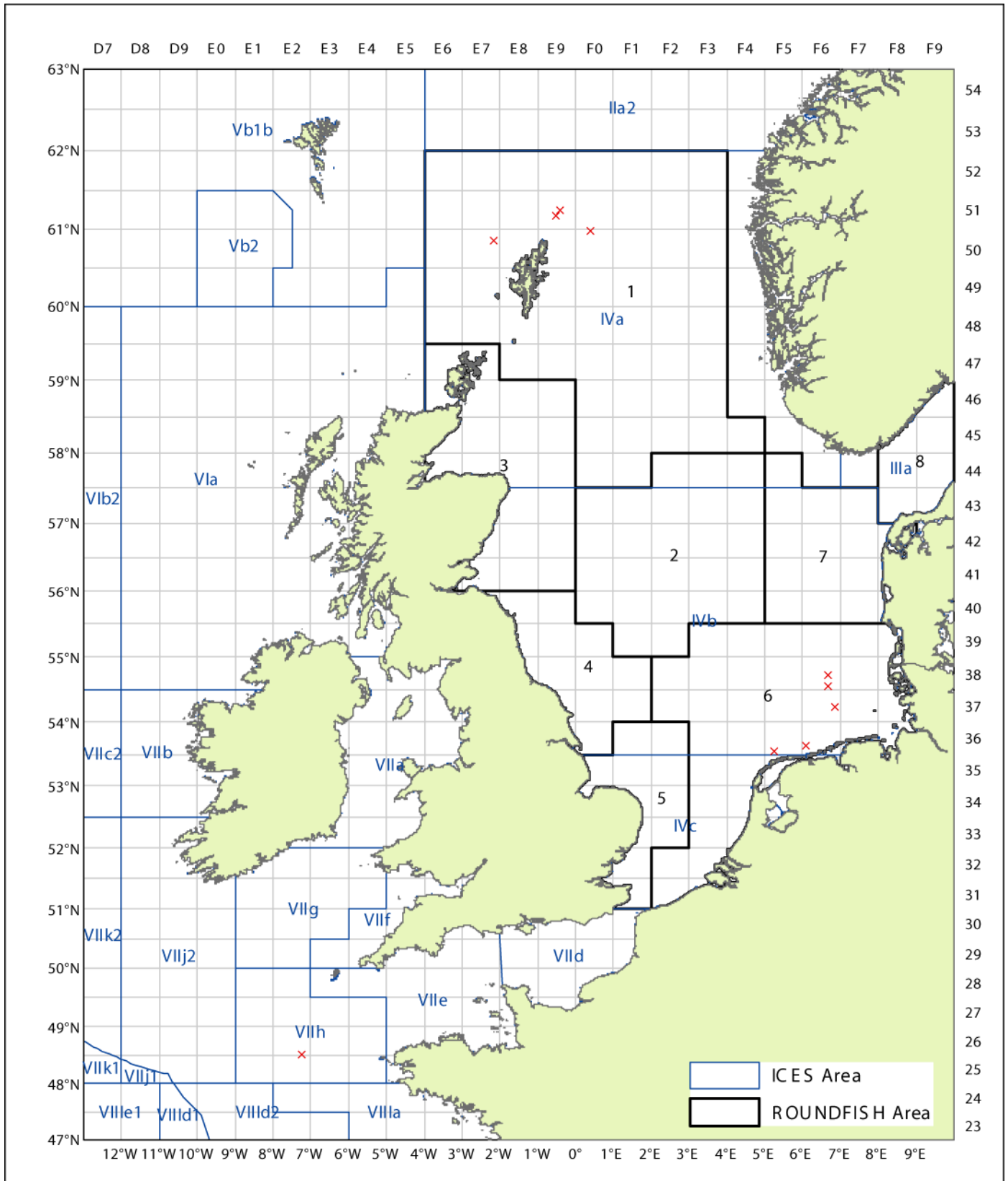
20.5 [cm]
35.5 [cm]

male 142
female 231
undefined 125

total numbers of data 498

December

Geographical distribution of data used for calculating the length-weight relationship



Scomber scombrus

December

$$Tw [g] = a * L [cm]^b$$

a = 0.001

b = 3.5993

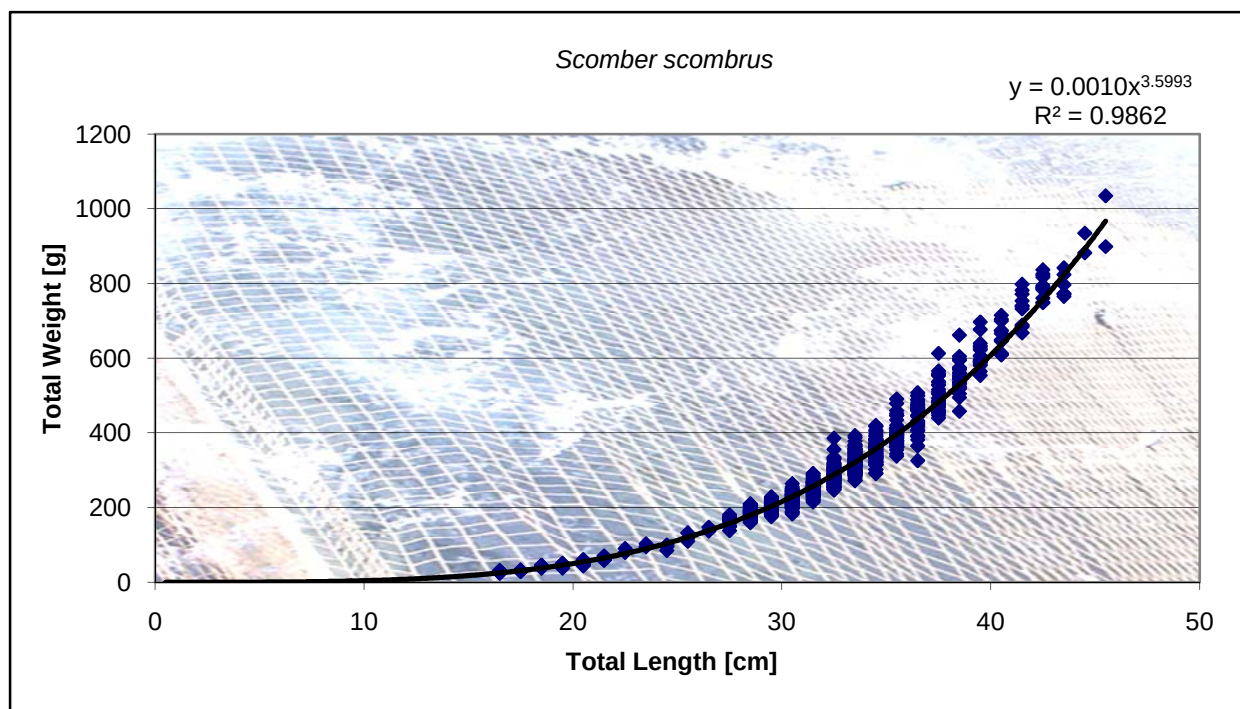
data collected

time period : 1997 - 2003

data source : research vessel, commercial trawler

numbers of data:

Numbers of fish																				
Quarter																				
1	2	3	4																	
-	-	-	724																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	-	-	-	-	-	724									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	654	-	-	70	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	649	5	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
-	70	-	-	-	-	-	-	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
649	-	-	-	-	5	-	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

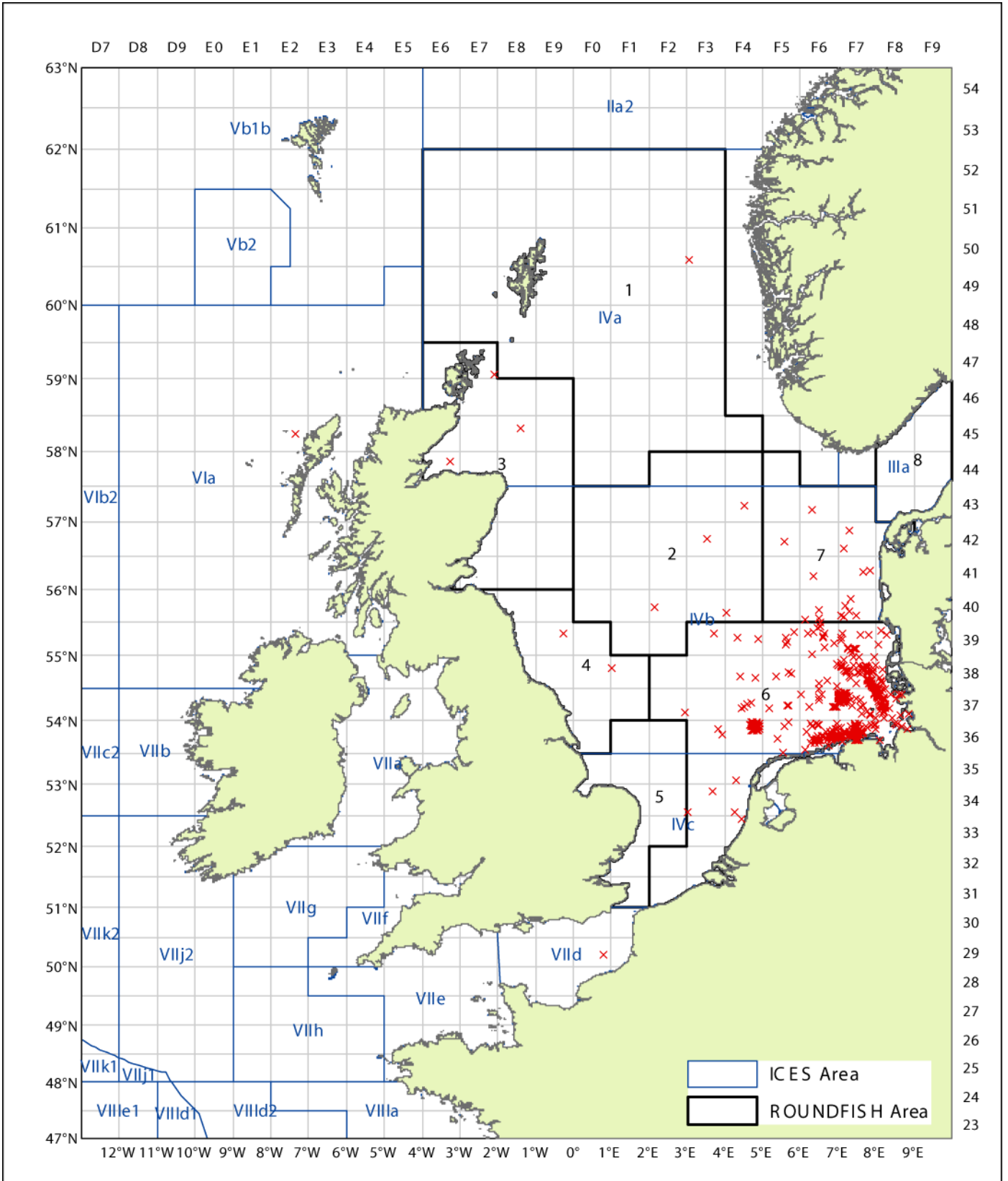
16.5 [cm]
45.5 [cm]

male 132
female 172
undefined 420

total numbers of data 724

Scophthalmus rhombus

Geographical distribution of data used for calculating the length-weight relationship



Scophthalmus rhombus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0103

b = 3.0937

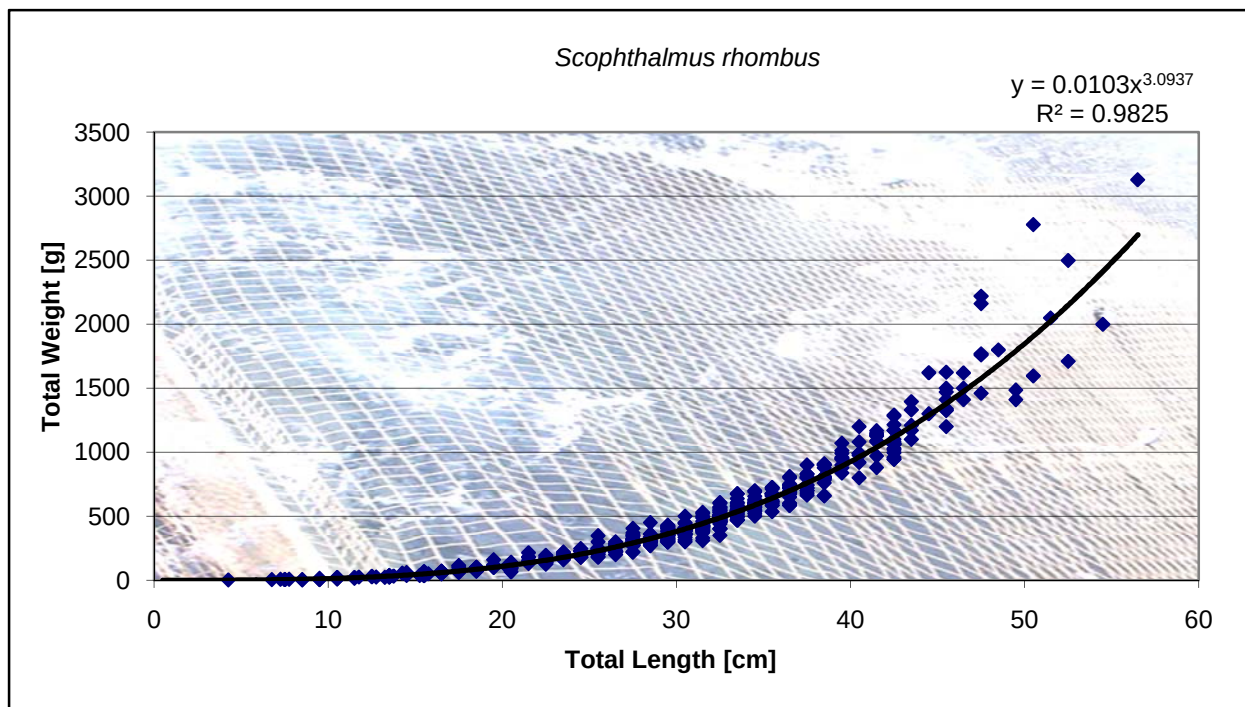
data collected

time period : 1990 - 2008

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
97	203	157	71																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
72	23	2	8	156	39	53	78	26	10	31	30								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	526	-	1	1	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	4	518	4	-	-	1	-	-	-	-	1	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
-	-	-	-	-	-	-	-	-	-	-									
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
1	4	3	2	-	500	16	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

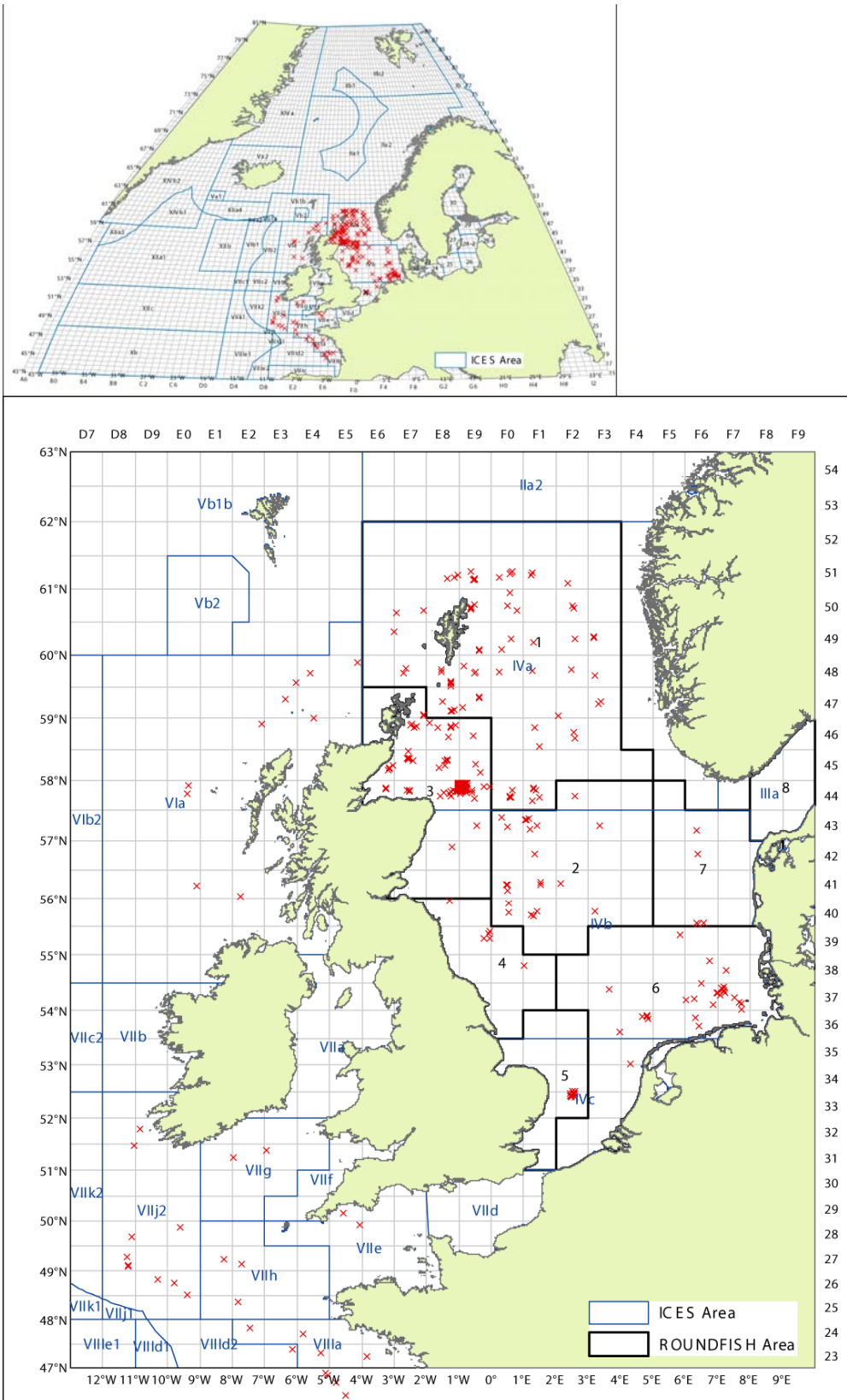
4.5 [cm]
56.5 [cm]

male 57
female 48
undefined 423

total numbers of data 528

Scyliorhinus canicula

Geographical distribution of data used for calculating the length-weight relationship



Scyliorhinus canicula

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0021

b = 3.1276

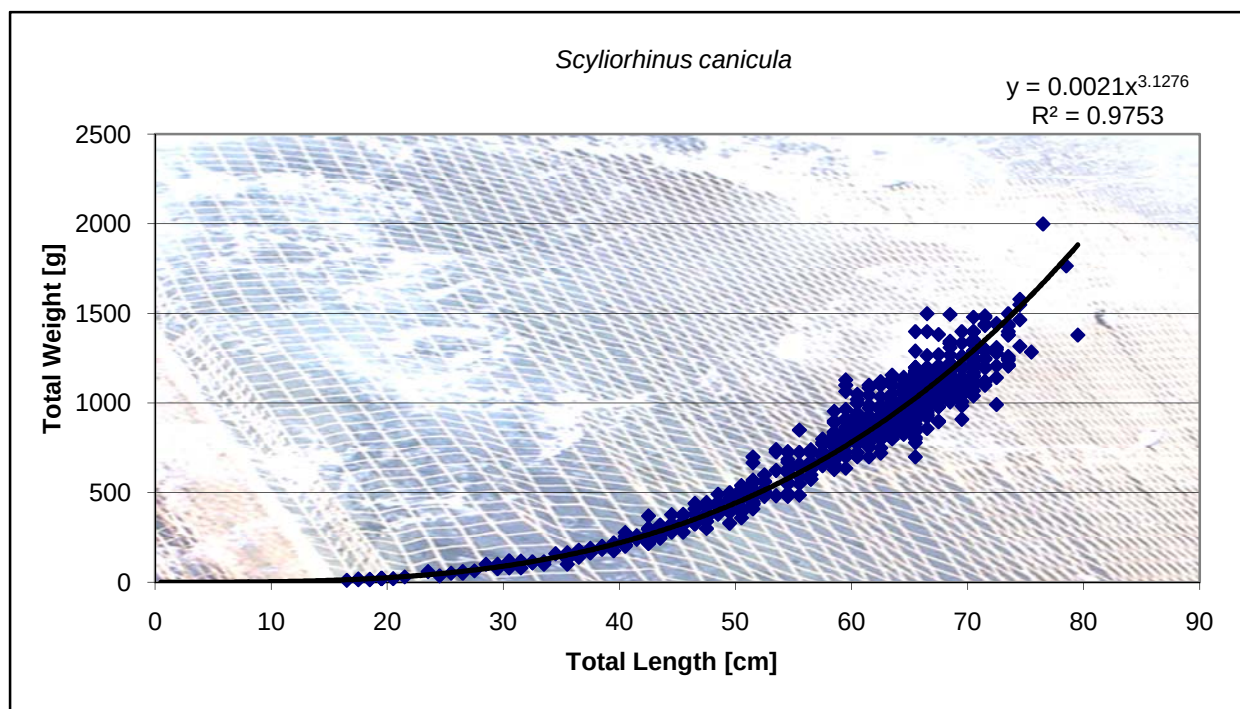
data collected

time period : 1986 - 2008

data source : research vessel

numbers of data:

Numbers of catch																				
Quarter																				
1	2	3	4																	
379	77	209	18																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
149	205	25	44	2	31	66	135	8	1	12	5									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	616	-	13	43	11	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	509	97	10	-	-	13	-	-	-	-	-	2	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
2	3	36	-	5	3	-	3	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9												
213	36	312	7	12	31	5	-	-												
1A	1B	1C	1D	1E	1F	2G	2H	2J												
-	-	-	-	-	-	-	-	-												



Method of Measurement

- Total length
- cm below

min length
max length

16.5 [cm]
79.5 [cm]

male 277
female 316
undefined 90

total numbers of data 683

♀

length-weight relationship



Scyliorhinus canicula



Quarter: 1 - 4

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0017

b = 3.1946

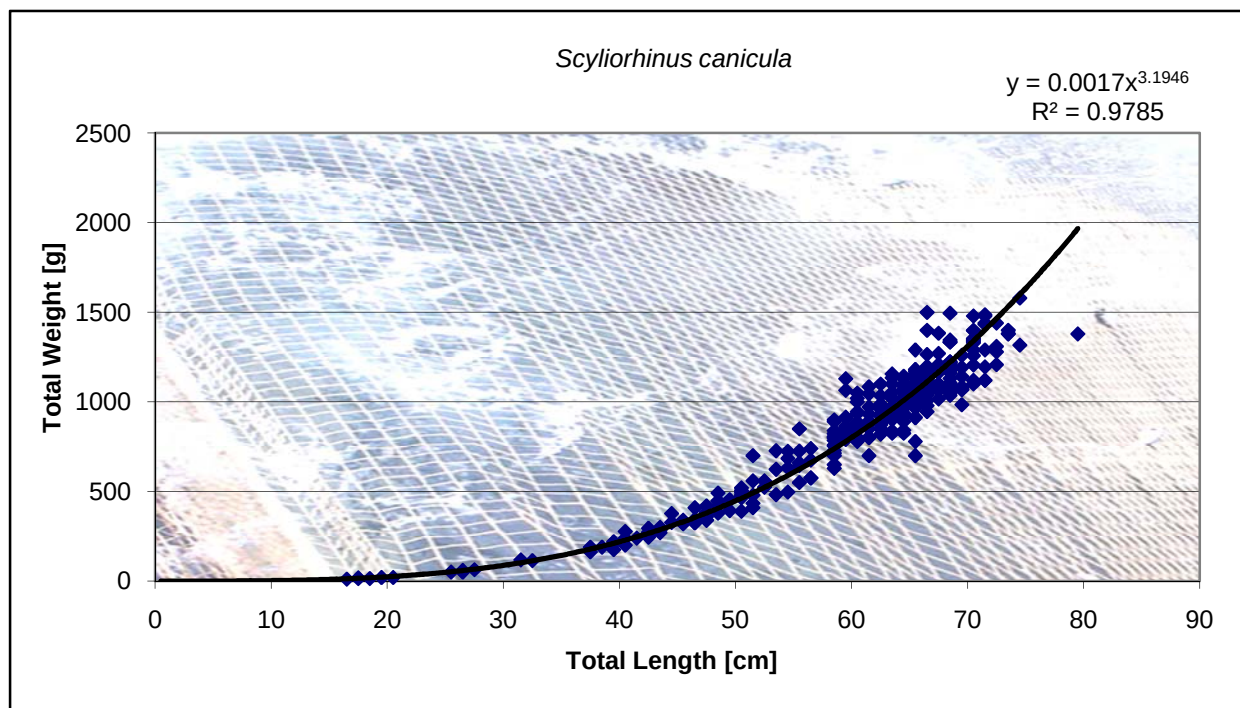
data collected

time period : 1986 - 2008

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
161	29	124	2																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
66	90	5	17	1	11	24	95	5	-	2	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	295	-	5	16	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	260	35	-	-	-	5	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B									
1	-	15	-	-	-	-	-	-	-	-									
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
68	13	200	5	2	7	-	-	-											
-	-	-	-	-	-	-	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length

- cm below

min length

max length

16.5 [cm]

79.5 [cm]

male

female

undefined

-

316

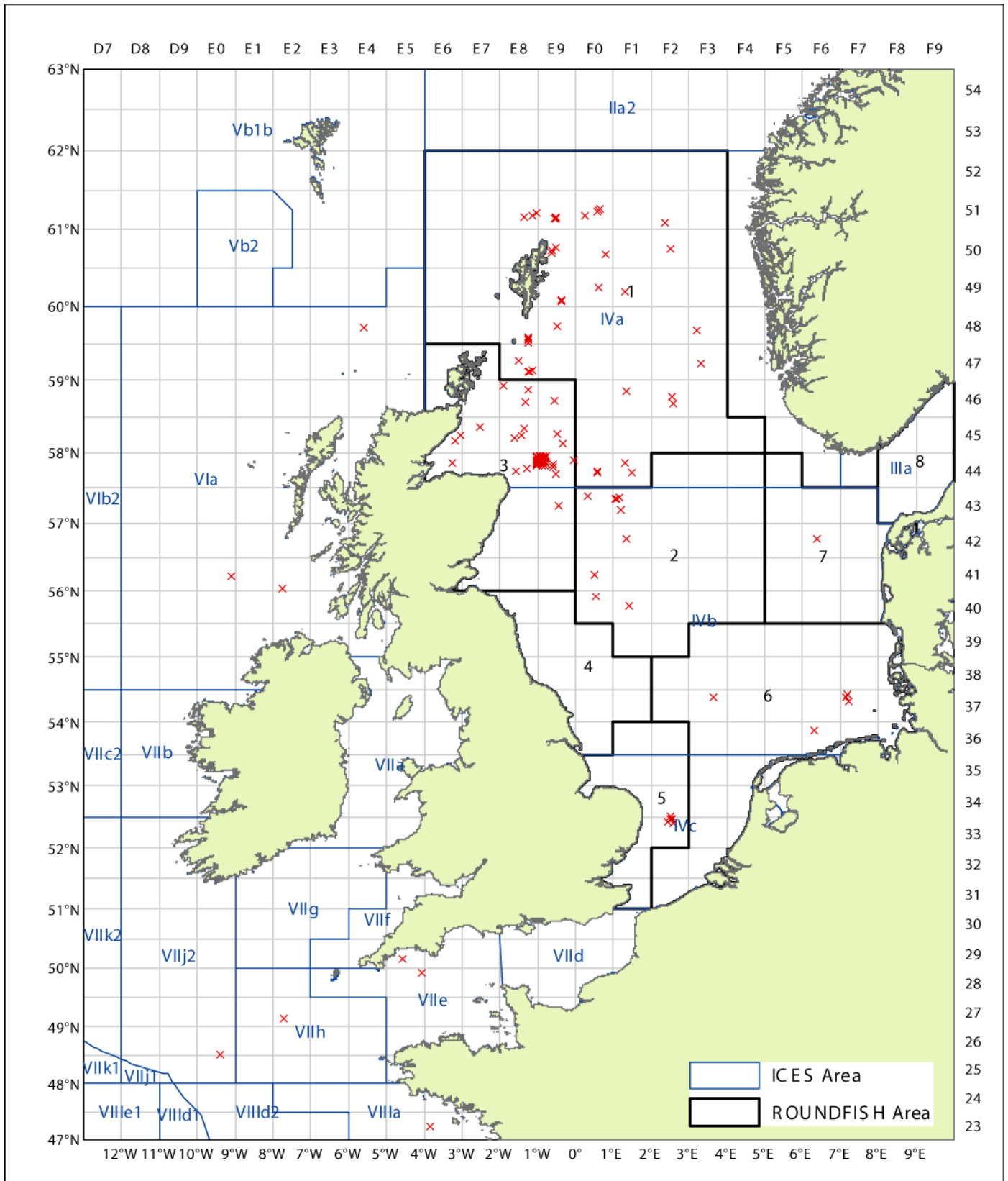
-

total numbers of data

316

Scyliorhinus canicula ♂

Geographical distribution of data used for calculating the length-weight relationship



Scyliorhinus canicula ♂

Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0033

b = 3.0097

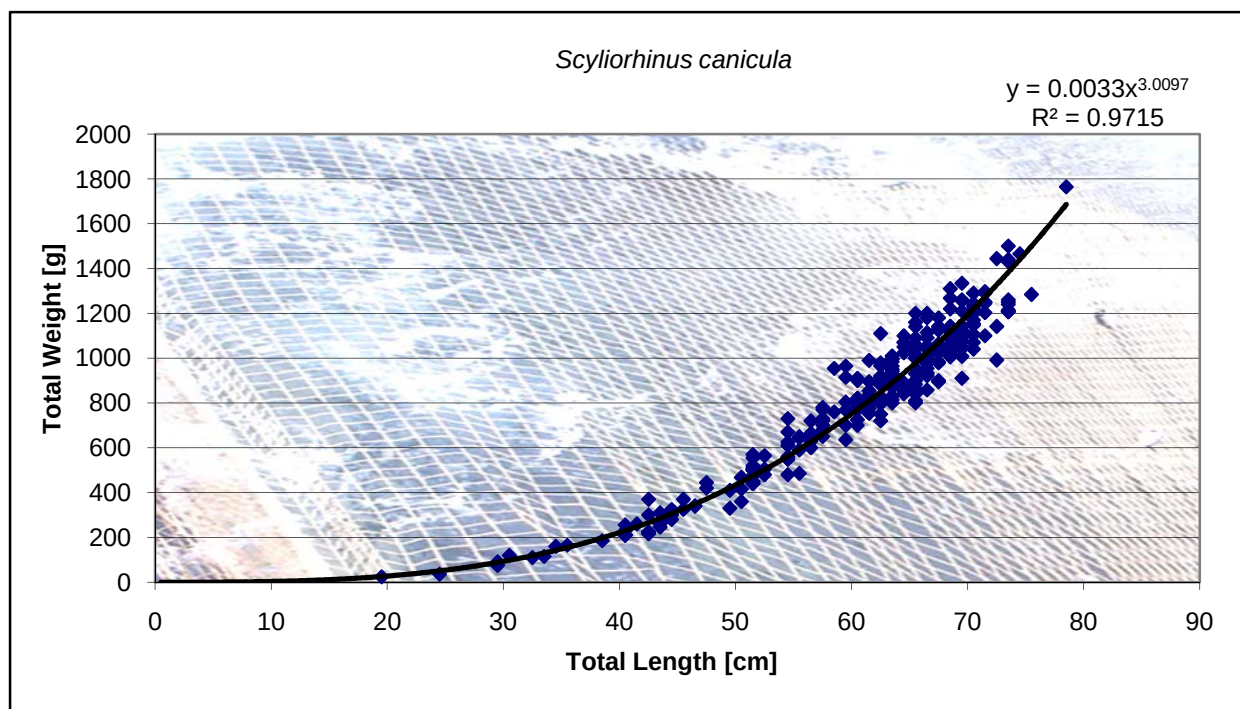
data collected

time period : 1986 - 2008

data source : research vessel

numbers of data:

Numbers of salmon																				
Quarter																				
1	2	3	4																	
175	32	66	4																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
75	94	6	17	-	15	28	37	1	-	4	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	255	-	4	13	5	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	218	33	4	-	-	4	-	-	-	-	-	2	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B										
-	1	10	-	1	3	-	1	-	-	-										
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
132	17	94	-	5	6	1	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

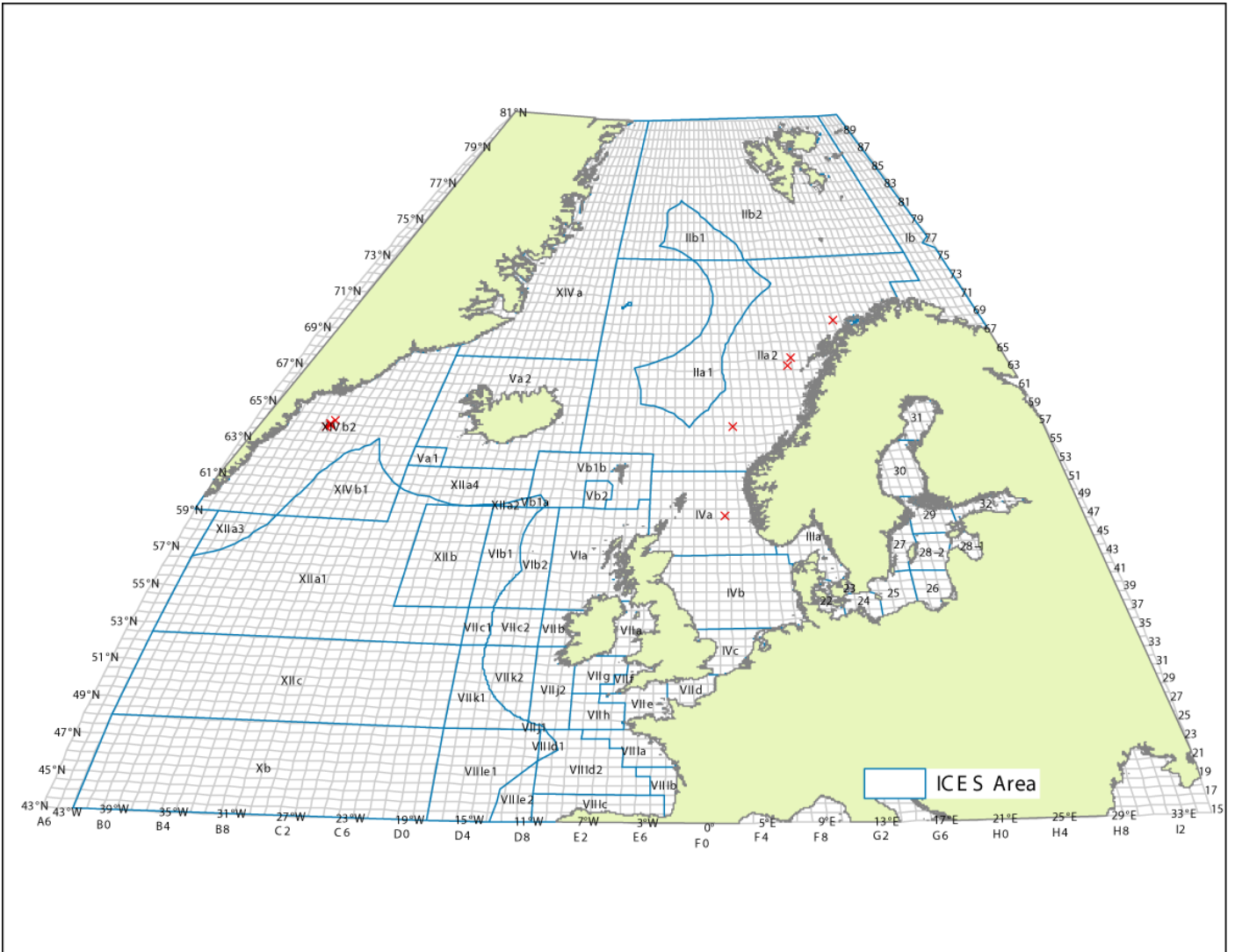
19.5 [cm]
78.5 [cm]

male 277
female -
undefined -

total numbers of data 277

Sebastes marinus

Geographical distribution of data used for calculating the length-weight relationship



Sebastes marinus

Quarter: 1; 3; 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0065

b = 3.2124

data collected

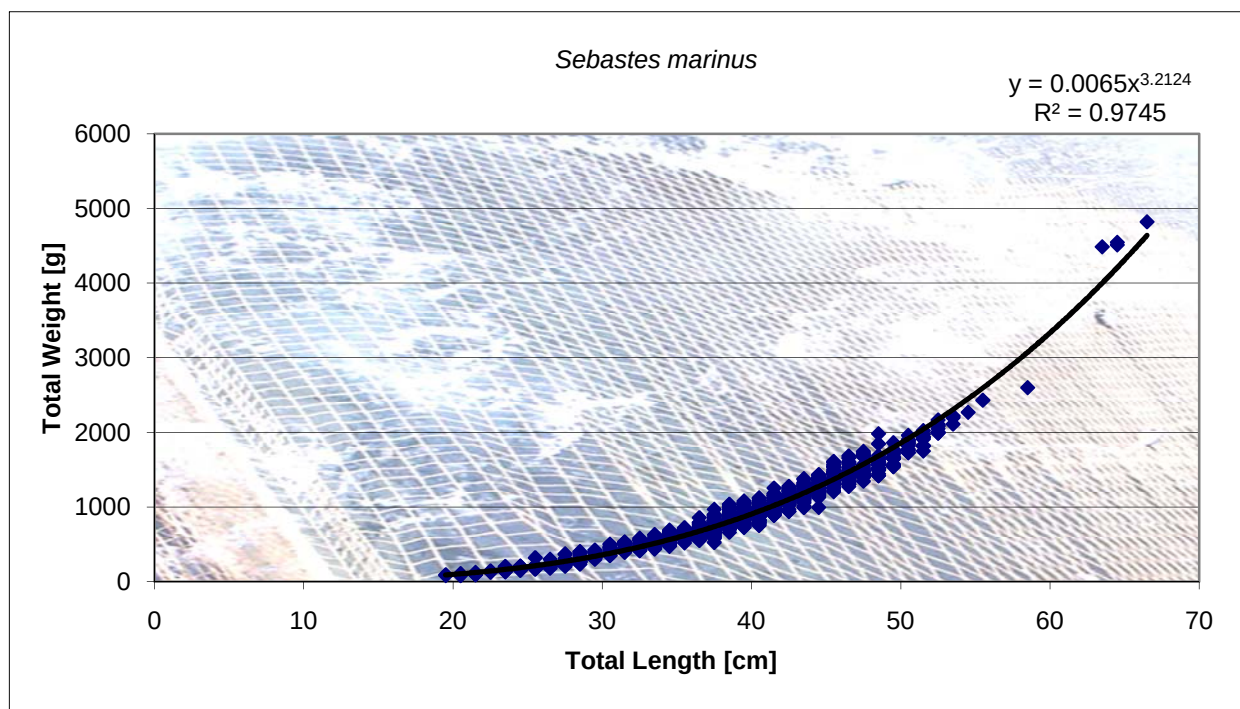
time period : 1997 - 2007

data source : research vessel, commercial trawler

numbers of data:

Numbers of data:

Quarter																				
1	2	3	4																	
356	-	393	324																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	355	1	-	-	-	393	-	-	-	324	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	677	-	3	-	-	-	-	-	-	-	393									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	677	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	393						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
3	-	-	-	-	-	-	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

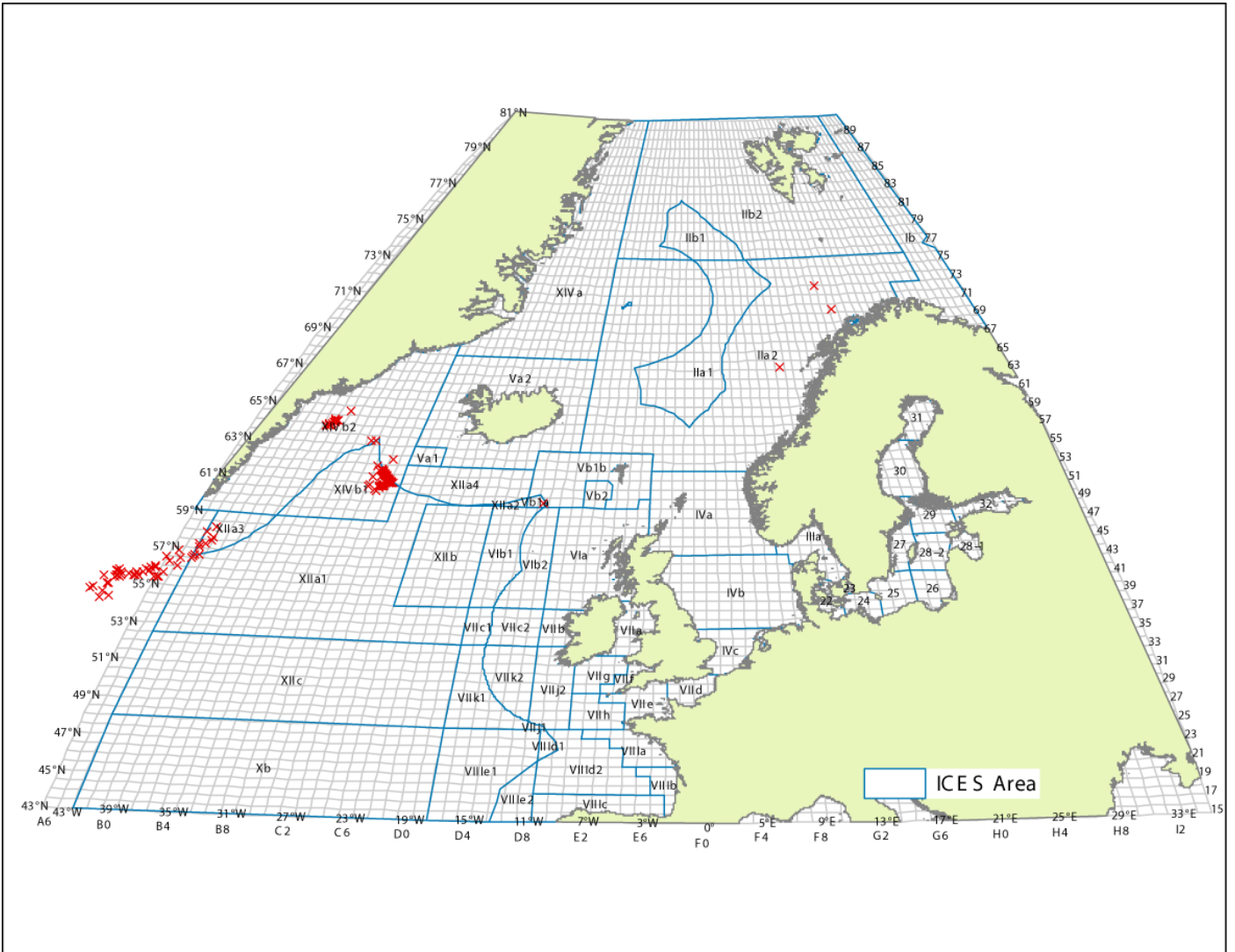
19.5 [cm]
66.5 [cm]

male 138
female 146
undefined 789

total numbers of data 1073

Sebastes mentella

Geographical distribution of data used for calculating the length-weight relationship



Sebastes mentella

Quarter: 1 - 3

$$TW [g] = a * L [cm]^b$$

a = 0.0127

b = 2.9773

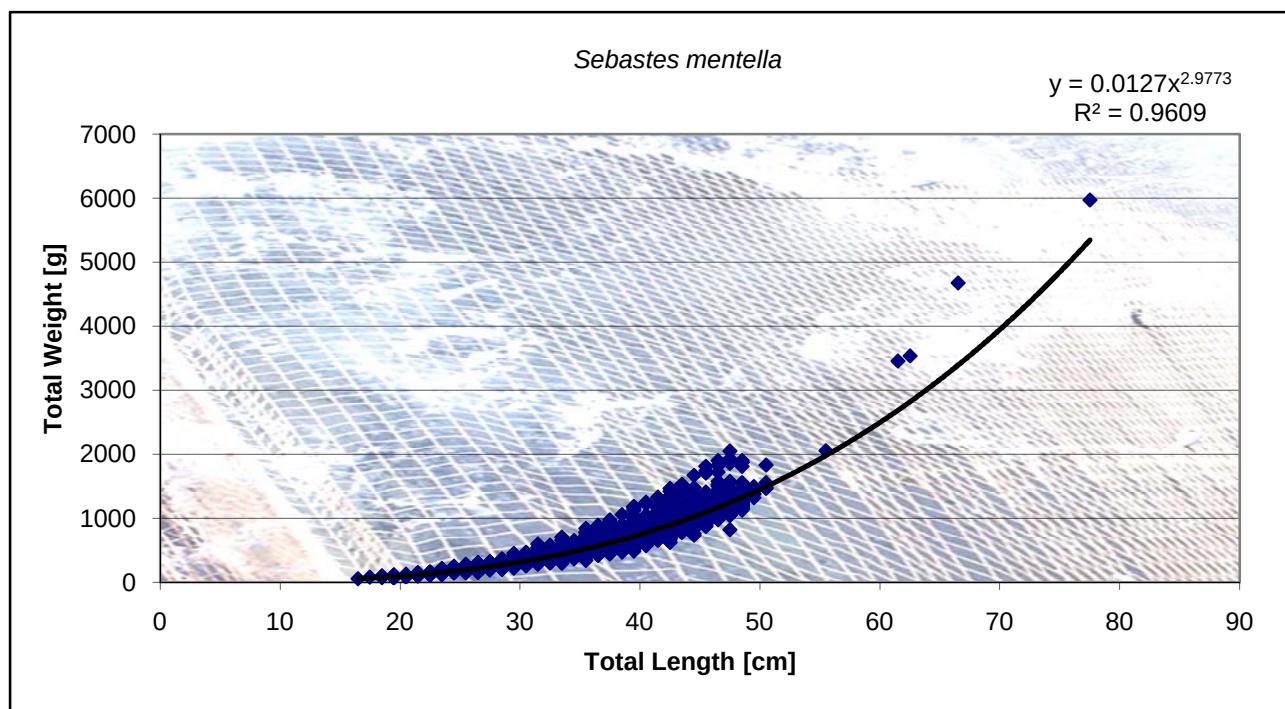
data collected

time period : 1988 - 2005

data source : commercial trawler, research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
674	12030	7326	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
127	246	301	7497	4226	307	1957	4770	599	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
3329	1476	-	-	1	-	-	-	-	-	1380	13844								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	373	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	1380	-	13844					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
5	-	-	-	-	-	-	-	-			-	-	-	-	-	3329	-	-	1103



Method of Measurement

- Total length
- cm below

min length
max length

16.5 [cm]
77.5 [cm]

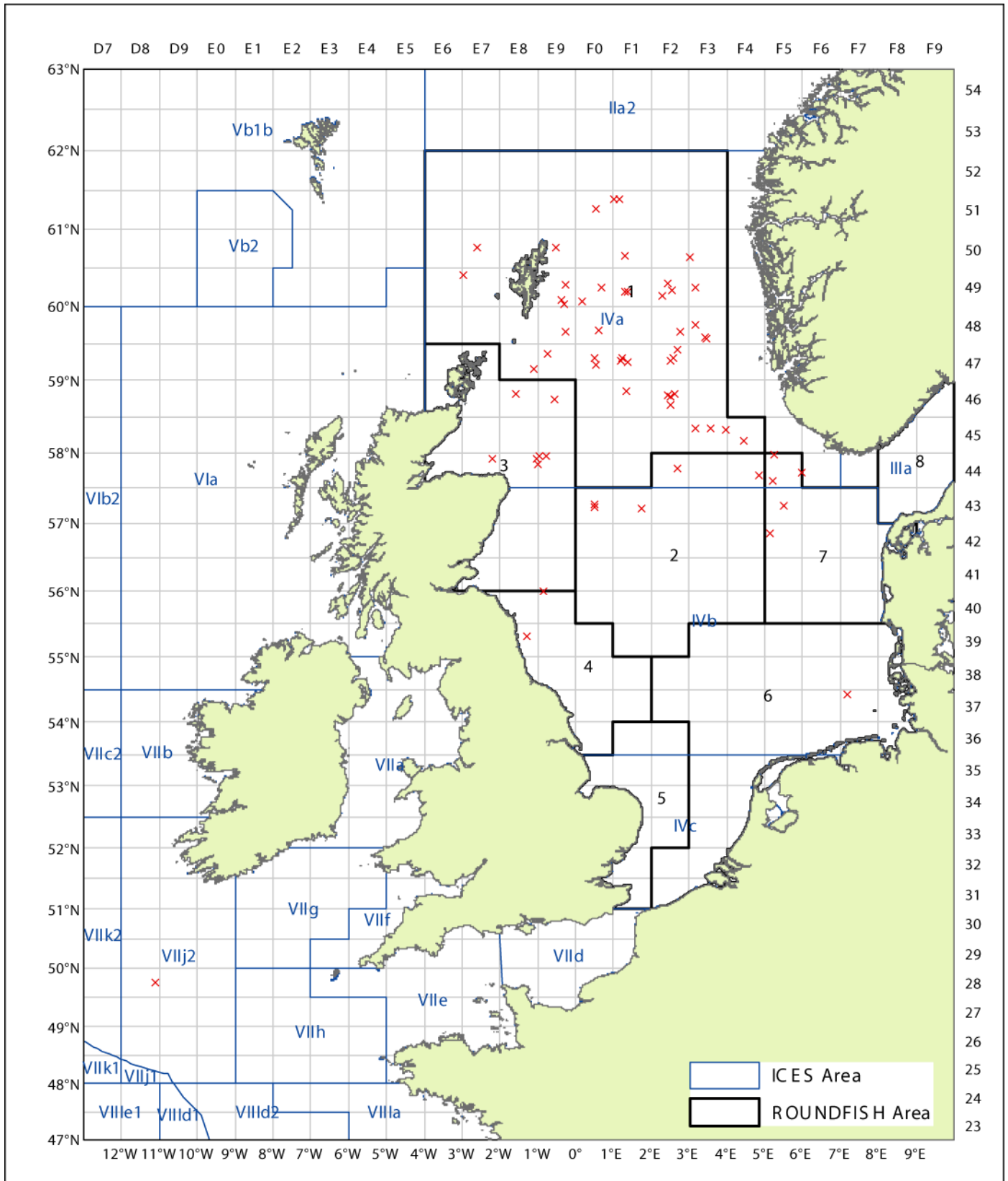
male
female
undefined

8727
10011
1292

total numbers of data 20030

Sebastes viviparus

Geographical distribution of data used for calculating the length-weight relationship



Sebastes viviparus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0127

b = 3.0797

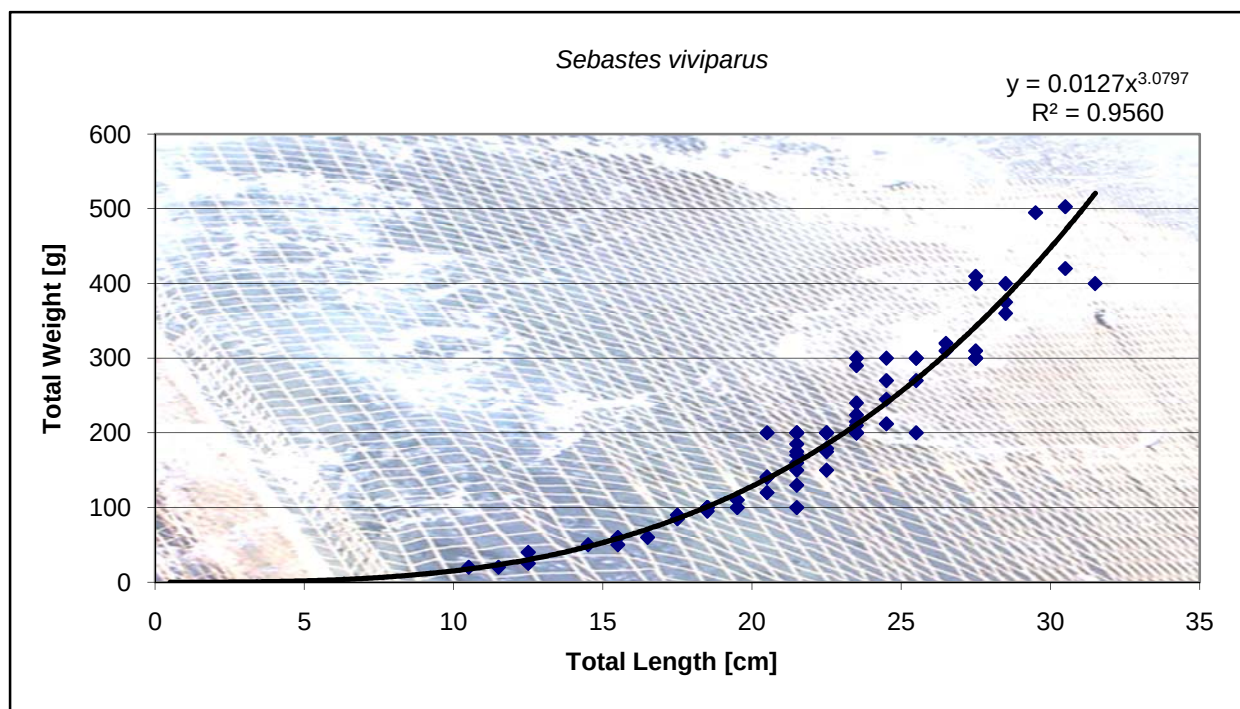
data collected

time period : 1960 - 2005

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
32	9	21	5																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
12	17	3	-	5	4	20	1	-	-	5	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	66	-	-	1	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	58	8	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	1	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
44	5	9	1	-	1	6	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

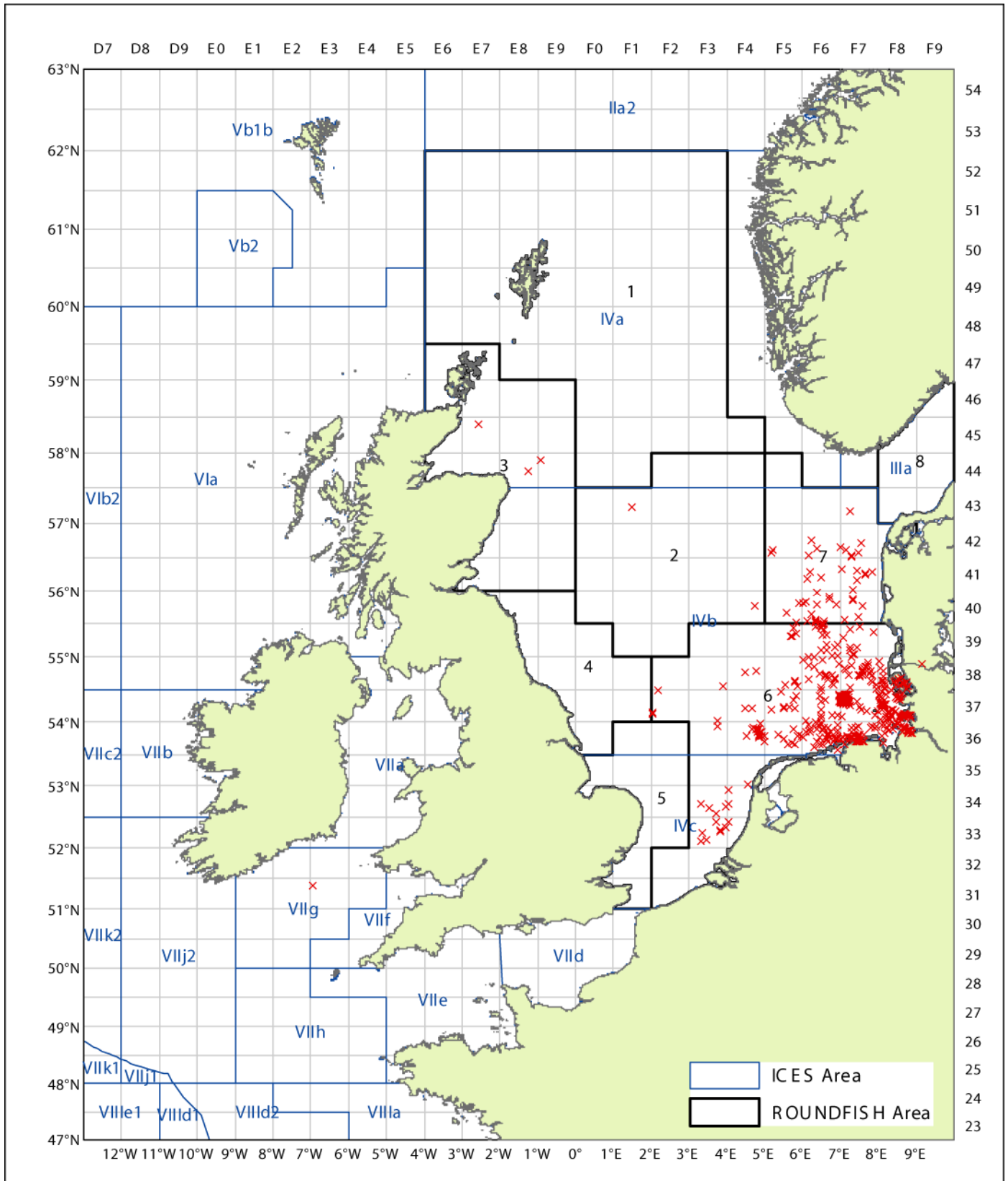
10.5 [cm]
31.5 [cm]

male -
female -
undefined 67

total numbers of data 67

Solea vulgaris

Geographical distribution of data used for calculating the length-weight relationship



Solea vulgaris

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0034

b = 3.2974

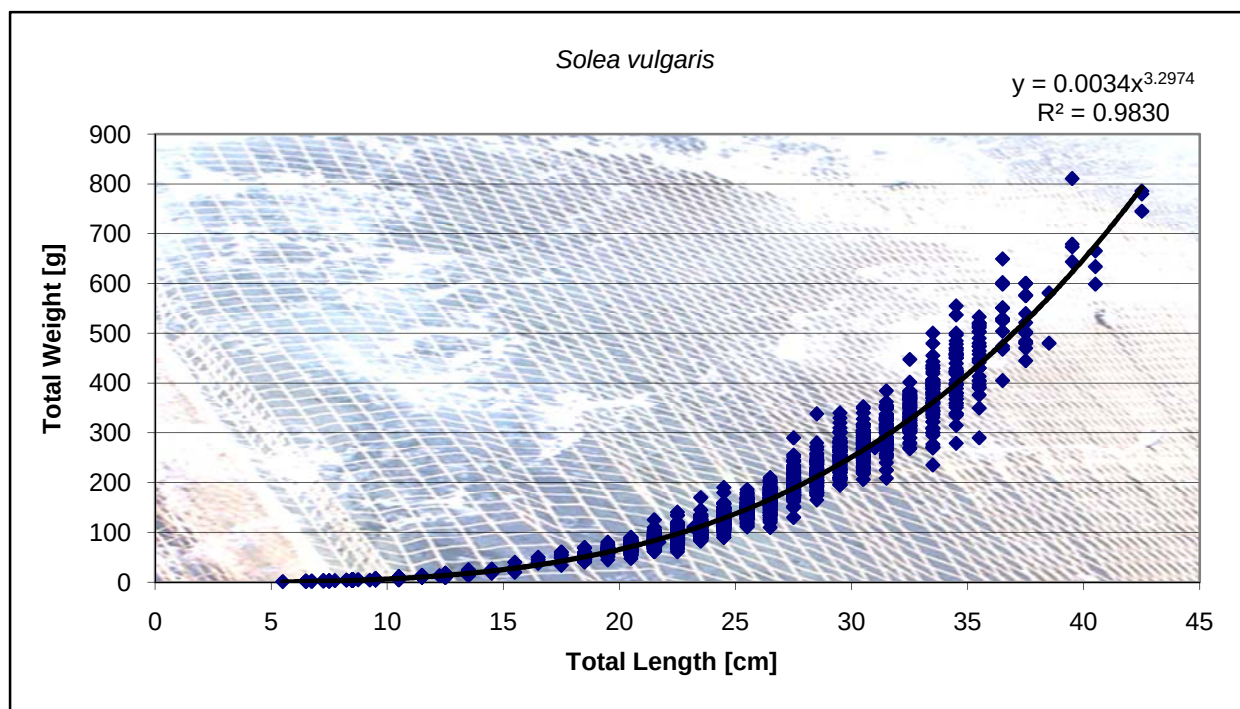
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
400	730	288	374																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
151	19	230	180	446	104	16	104	168	324	23	27								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1791	-	-	1	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	2	948	841	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	4	3	-	-	1736	48	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

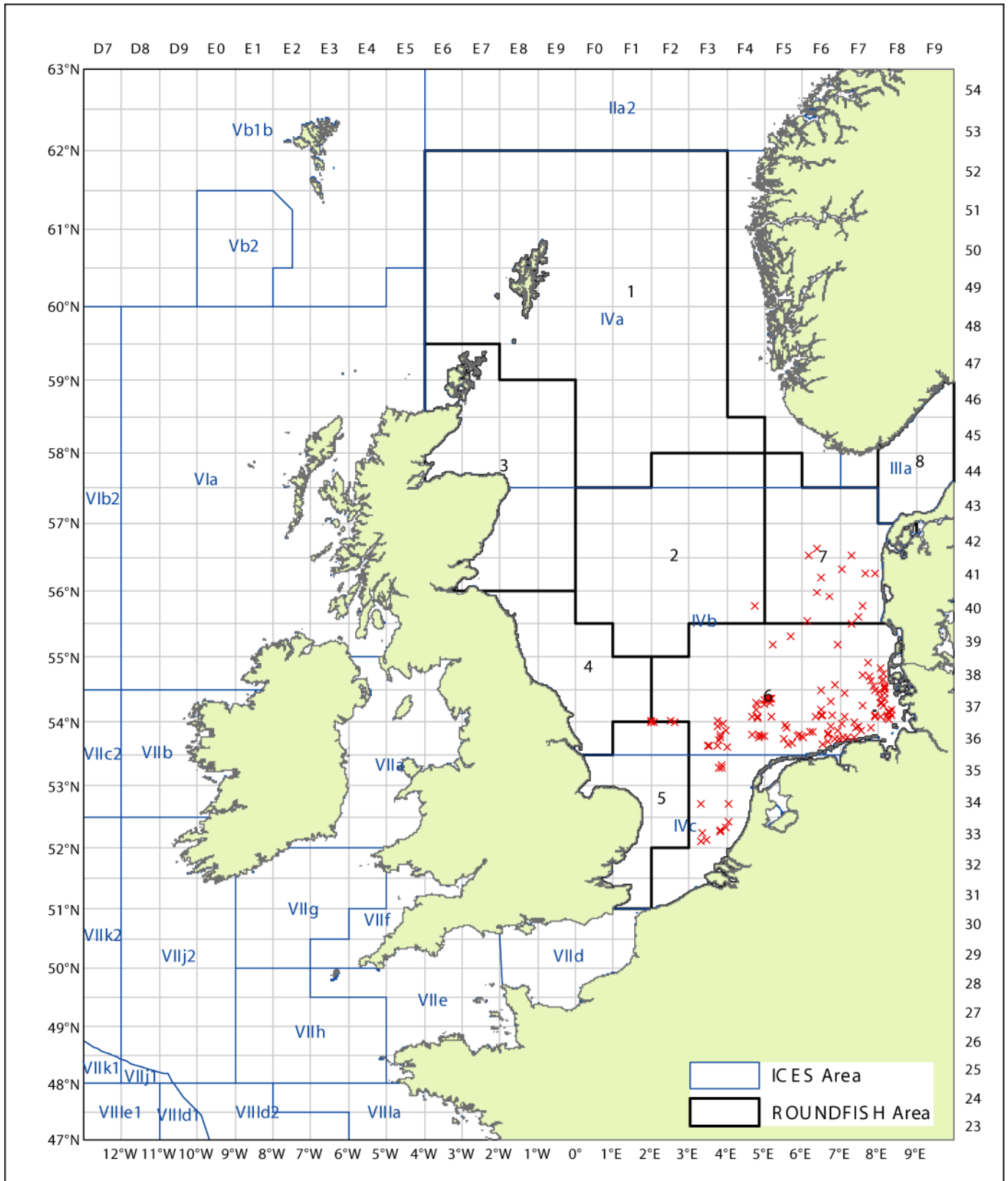
5.5 [cm]
42.5 [cm]

male 333
female 938
undefined 521

total numbers of data 1792

Solea vulgaris ♀

Geographical distribution of data used for calculating the length-weight relationship



Solea vulgaris



Quarter: 1 - 4

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0032

b = 3.3307

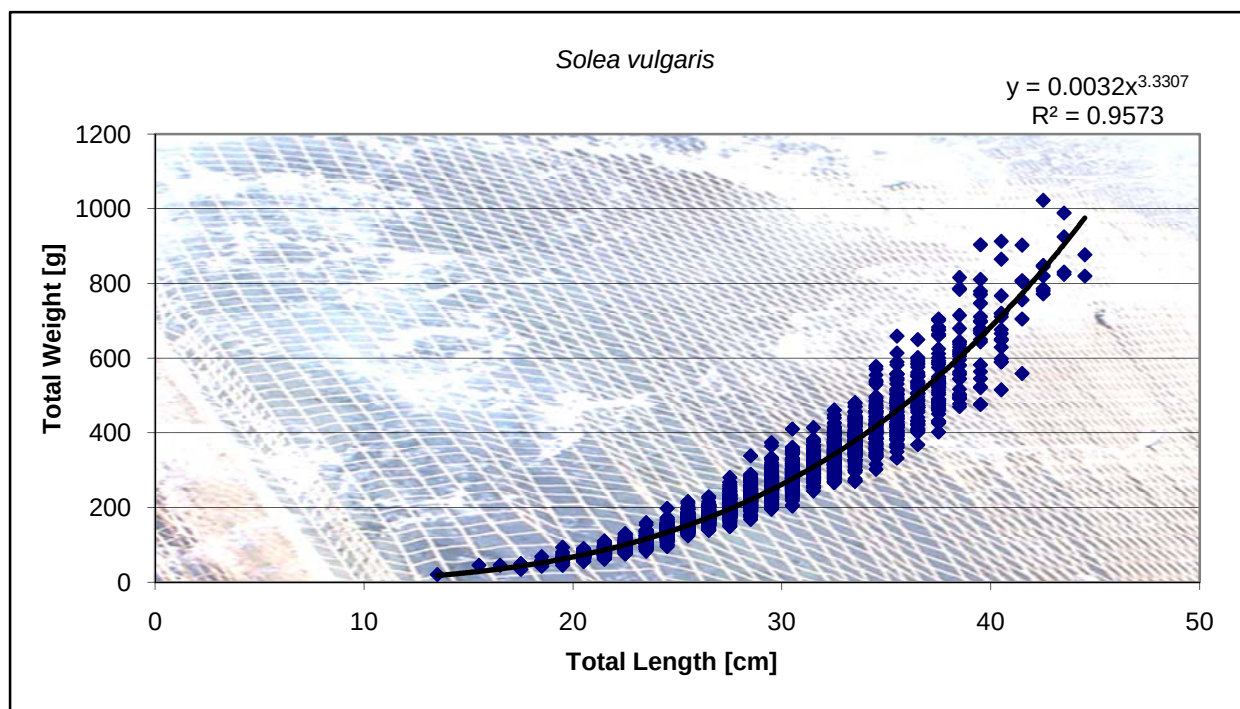
data collected

time period : 1996 - 2008

data source : research vessel, commercial trawler

numbers of data:

Numbers of salmon																				
Quarter																				
1	2	3	4																	
493	949	569	808																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
109	91	293	361	413	175	350	15	204	627	-	181									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	2819	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	-	2136	683	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	1	-	-	-	2786	32	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

13.5 [cm]
44.5 [cm]

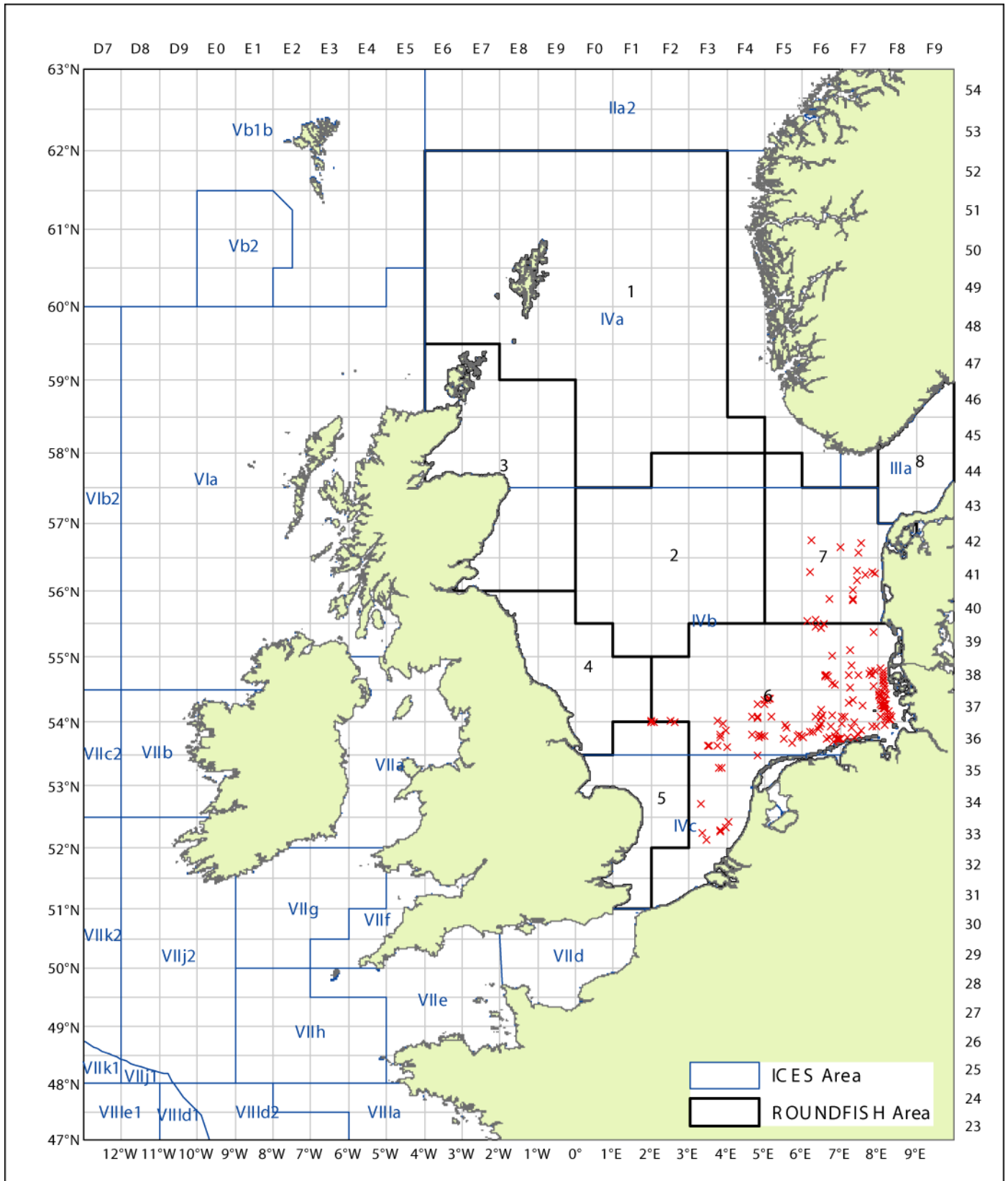
male
female
undefined

-
2819
-

total numbers of data 2819

Solea vulgaris ♂

Geographical distribution of data used for calculating the length-weight relationship



Solea vulgaris



Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0047

b = 3.1882

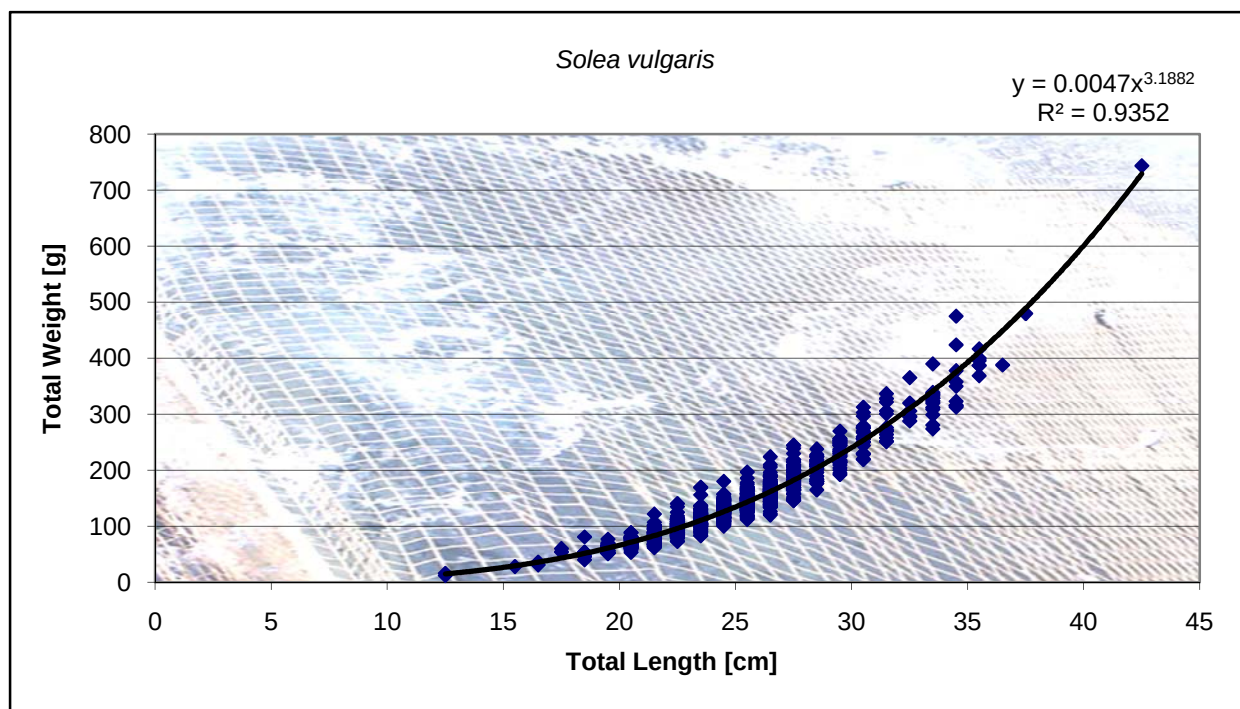
data collected

time period : 1996 - 2008

data source : research vessel, commercial trawler

numbers of data:

Numbers of data.																				
Quarter																				
1	2	3	4																	
108	508	159	118																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
11	17	80	79	365	64	46	23	90	64	-	54									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	893	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	-	757	136	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	-	-	-	-	781	112	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

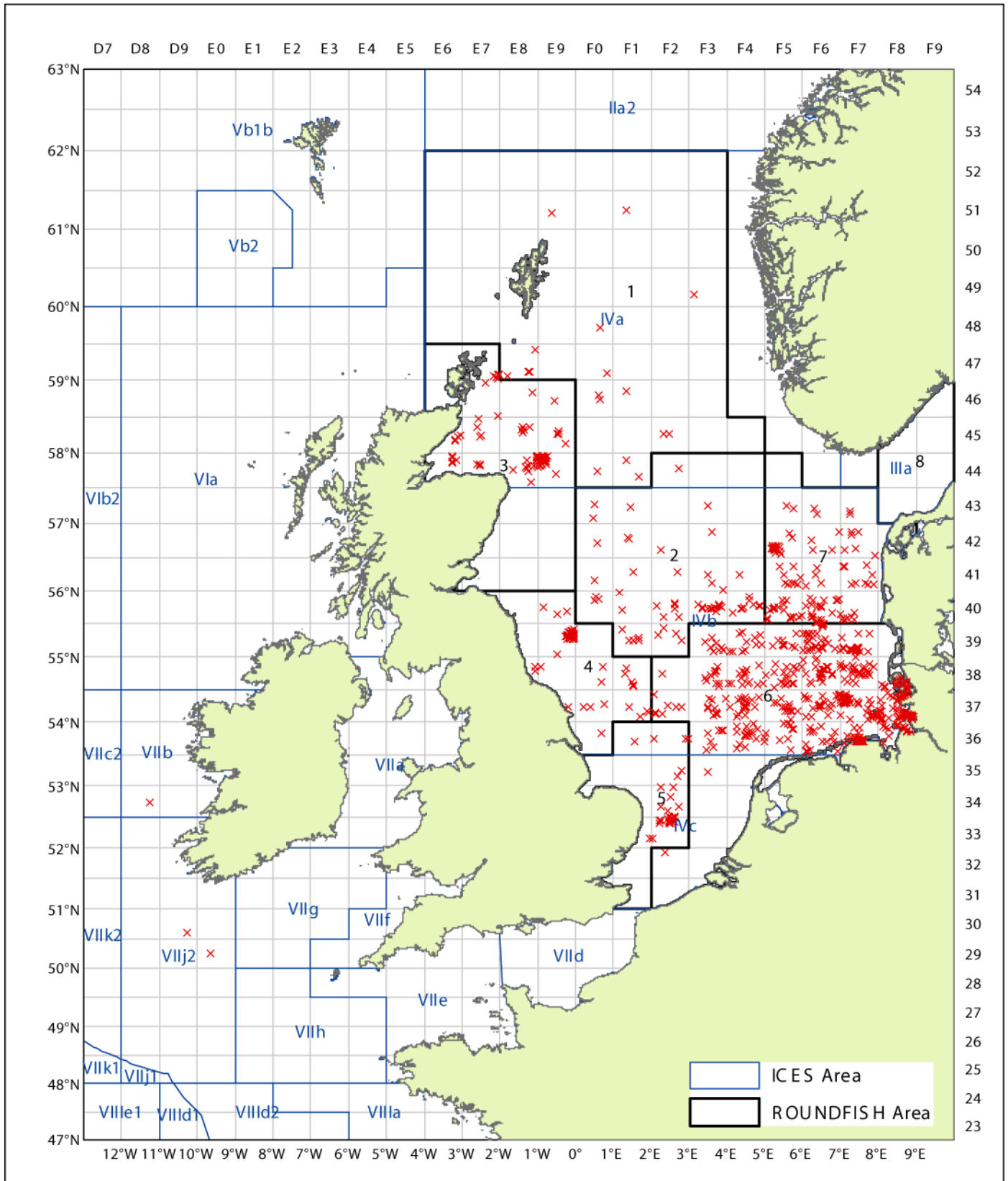
12.5 [cm]
42.5 [cm]

male 893
female -
undefined -

total numbers of data 893

Sprattus sprattus

Geographical distribution of data used for calculating the length-weight relationship



Sprattus sprattus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0052

b = 3.1474

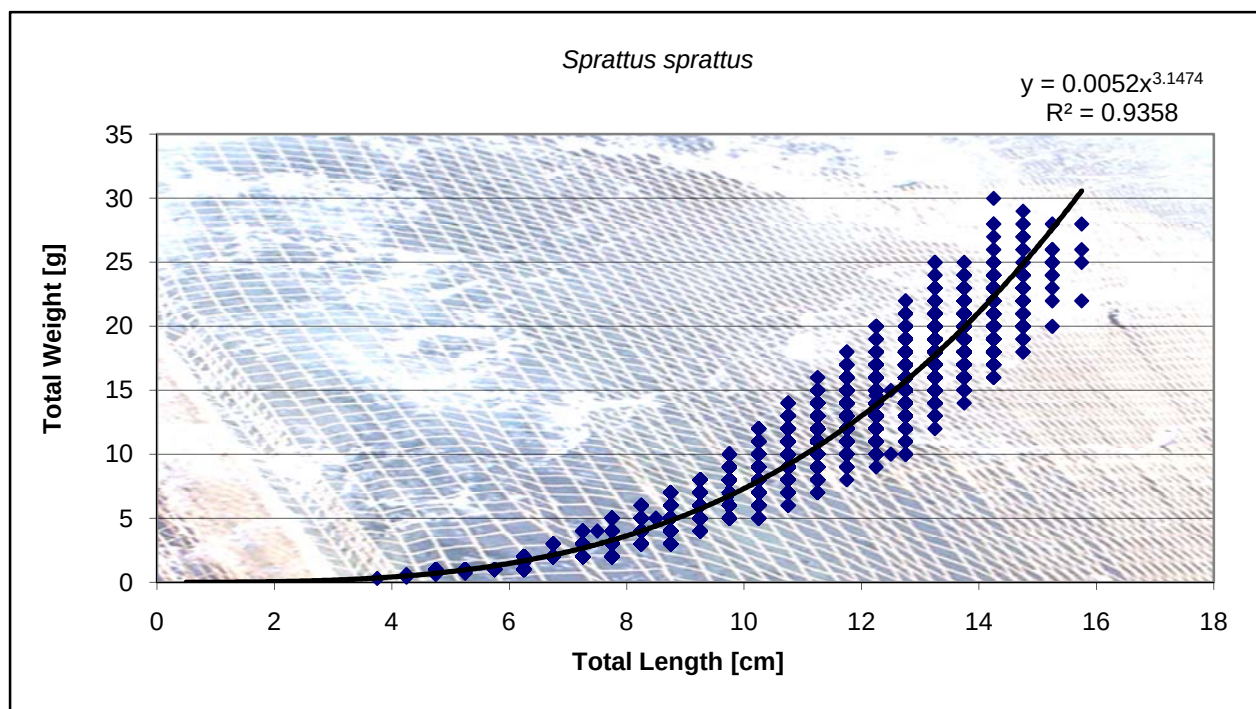
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
2663	1135	7656	25																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
1260	1254	149	122	261	752	5967	1341	348	10	7	8								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	11397	-	-	82	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	1096	9787	514	-	-	-	-	-	1	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	81	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
139	549	967	654	627	6732	1729	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- 1/2 cm below

min length
max length

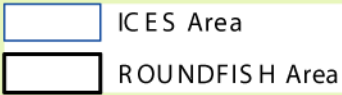
3.75 [cm]
15.75 [cm]

male 4684
female 5531
undefined 1264

total numbers of data 11479

♀

length-weight relationship



Sprattus sprattus



Quarter: 1 - 4

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0078

b = 2.9851

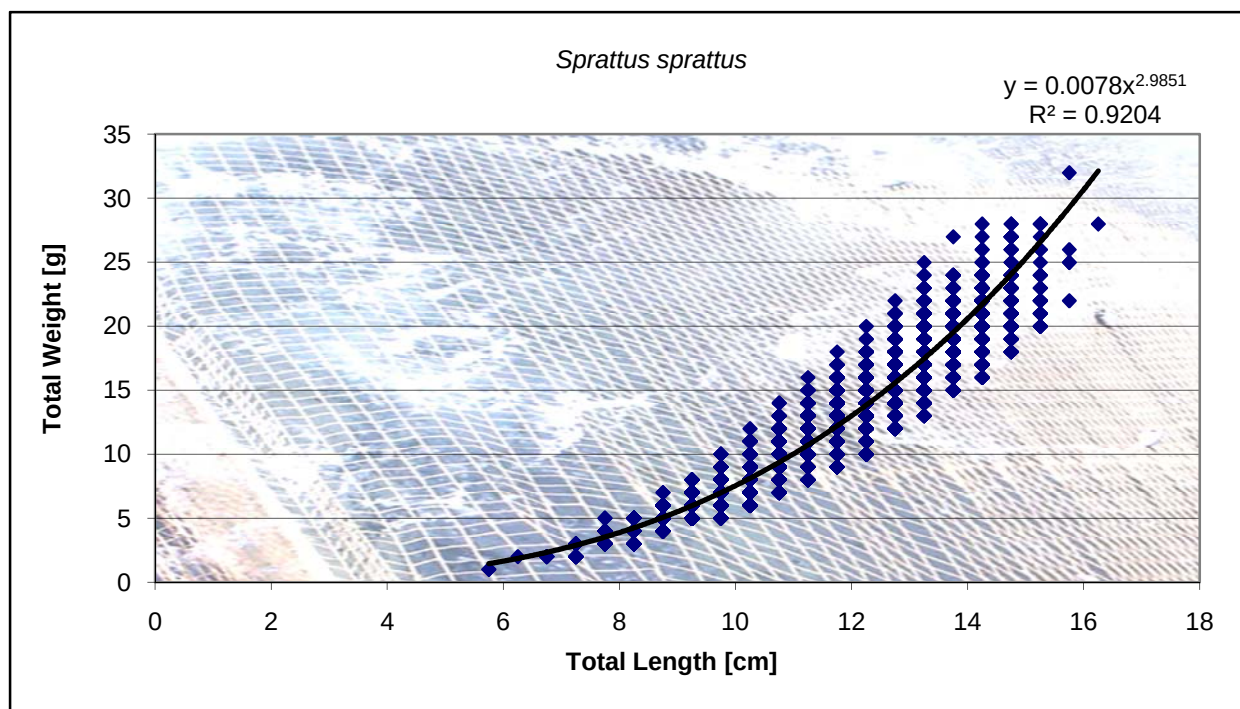
data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Numbers of salmon																			
Quarter																			
1	2	3	4																
1476	793	4859	49																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
688	697	91	153	147	493	4101	649	109	-	-	49								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	301	6838	-	-	38	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	140	161	526	6049	263	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	38	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
66	267	464	370	571	4190	910	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length

- 1/2 cm below

min length

max length

5.75 [cm]

16.25 [cm]

male

female

undefined

-

7177

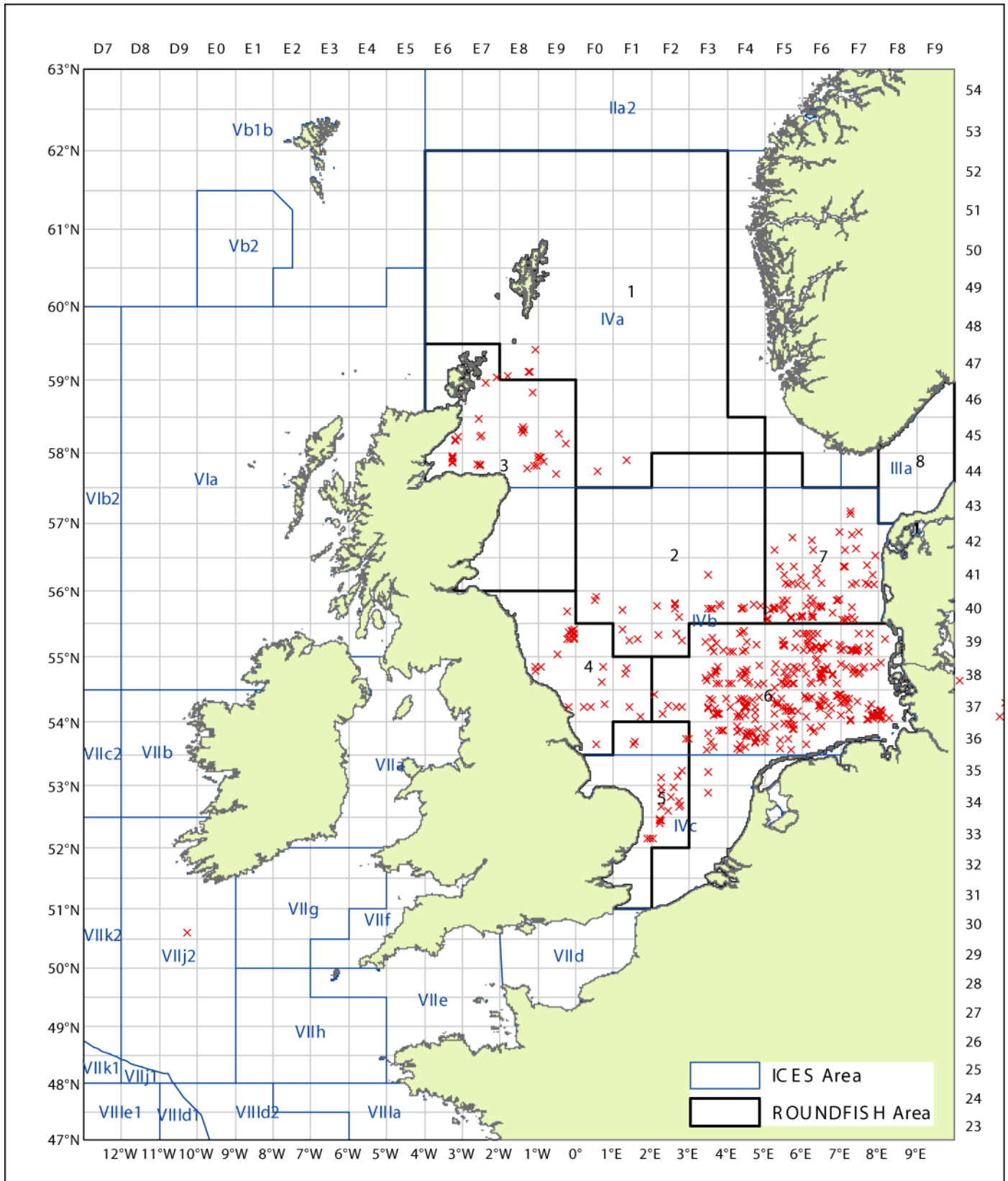
-

total numbers of data

7177

Sprattus sprattus ♂

Geographical distribution of data used for calculating the length-weight relationship



Sprattus sprattus ♂

Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0069

b = 3.0305

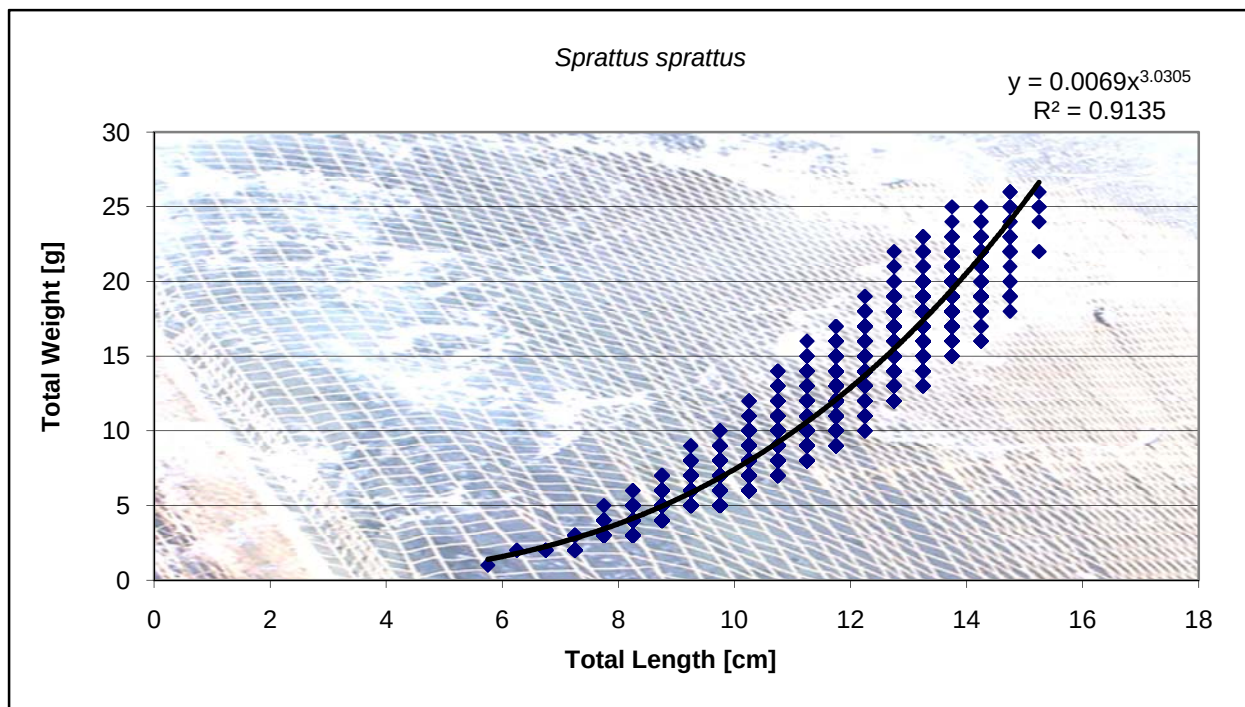
data collected

time period : 1994 - 2009

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
1326	632	3773	19																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
599	635	92	92	170	370	3120	548	105	-	-	19								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	202	5511	-	-	37	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	69	133	516	4782	213	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	37	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
55	241	466	341	431	3244	733	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length

- 1/2 cm below

min length

max length

5.75 [cm]

15.25 [cm]

male

female

undefined

5750

-

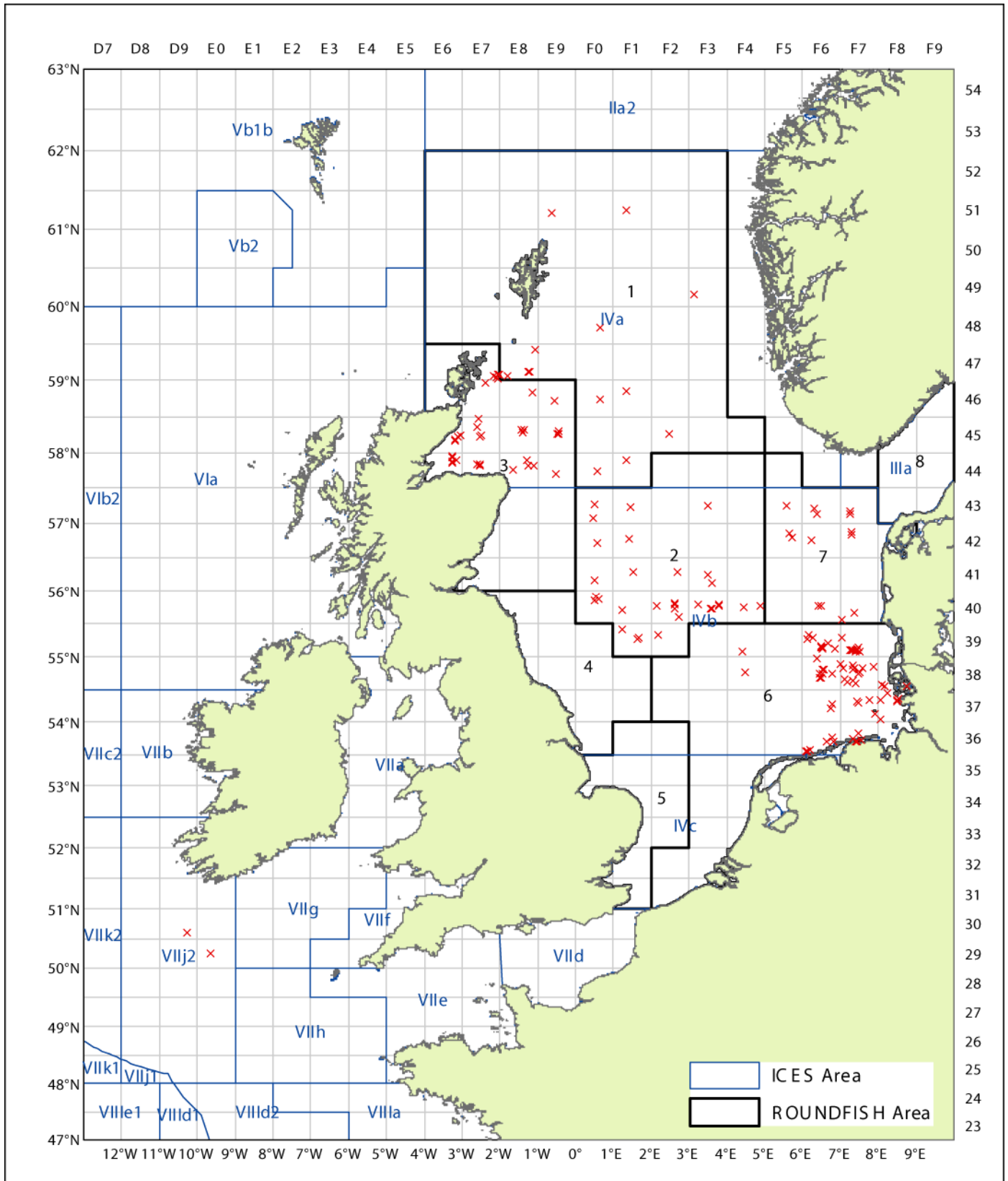
-

total numbers of data

5750

Sprattus sprattus Quarter 1

Geographical distribution of data used for calculating the length-weight relationship



Sprattus sprattus

Quarter: 1

$$Tw [g] = a * L [cm]^b$$

a = 0.0038

b = 3.2418

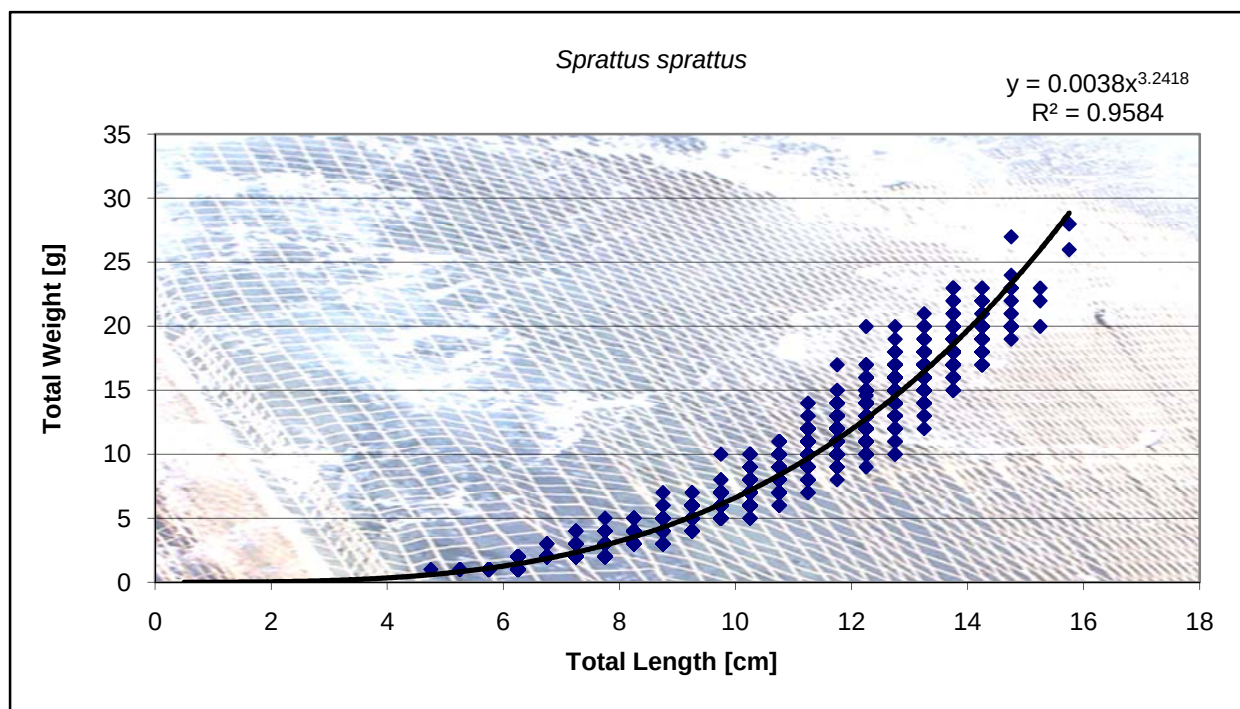
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Numbers of fish																			
Quarter																			
1	2	3	4																
2663	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
1260	1254	149	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	2582	-	-	81	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	913	1669	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	81	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
138	376	783	-	-	1073	212	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- 1/2 cm below

min length
max length

4.75 [cm]
15.75 [cm]

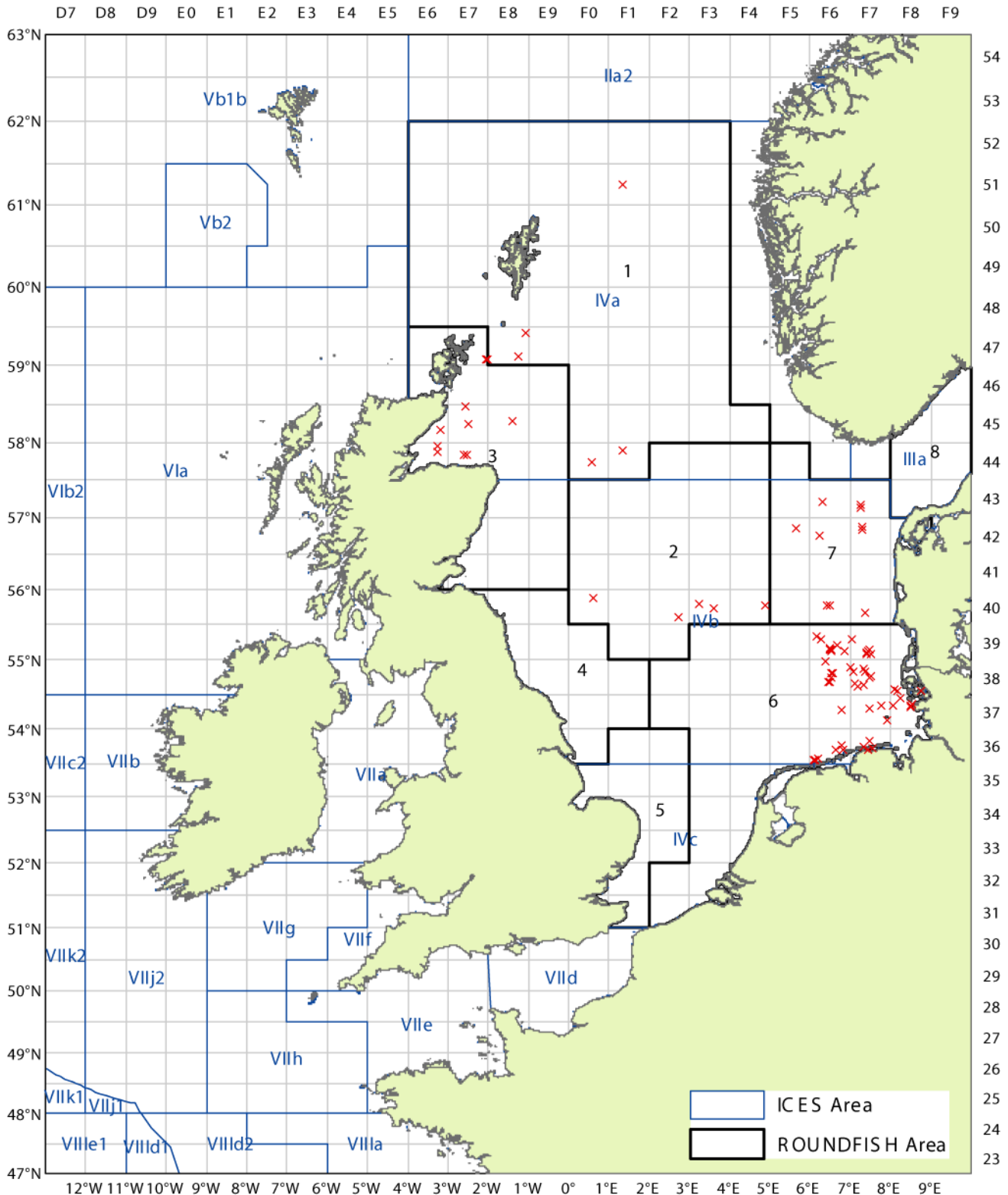
male
female
undefined

1113
1186
364

total numbers of data 2663

January

length-weight relationship



Sprattus sprattus

January

$$Tw_{[g]} = a * L_{[cm]}^b$$

$a = 0.0039$

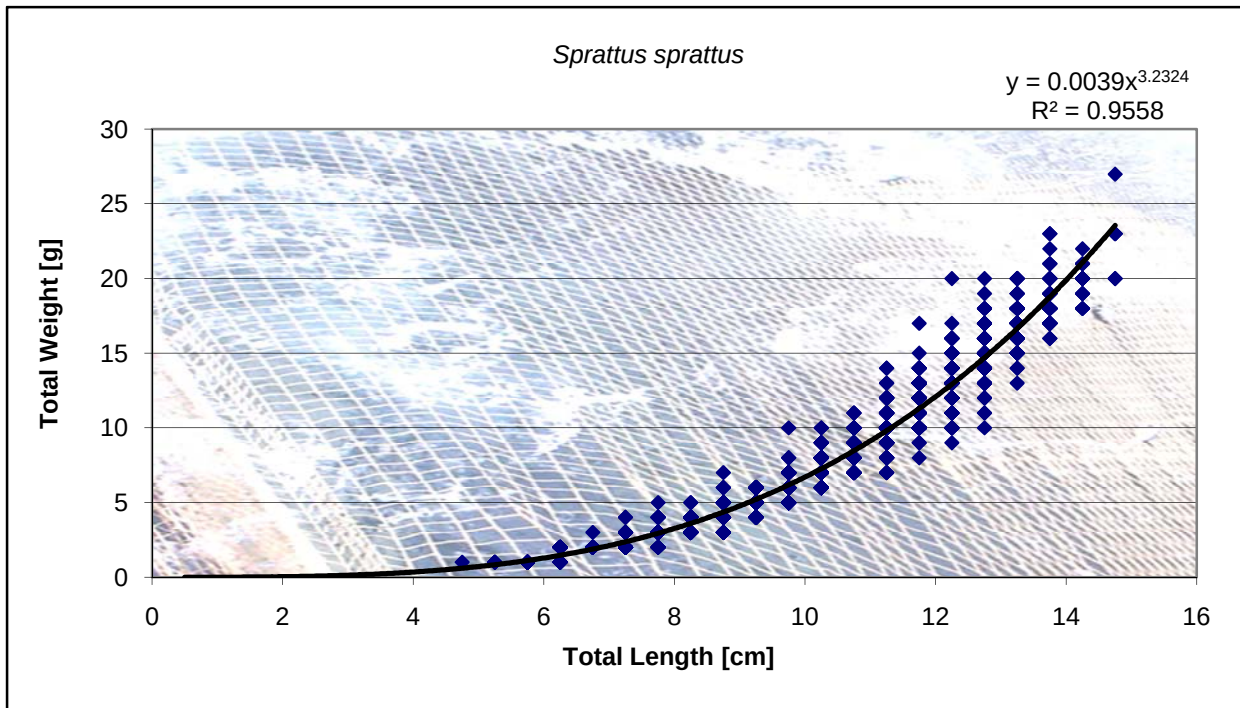
$$b = 3.2324$$

data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

[illegible]

Method of Measurement

- Total length

- 1/2 cm below

min length

max length

4.75 [cm]

14.75 [cm]

male

female

undefined

504

570

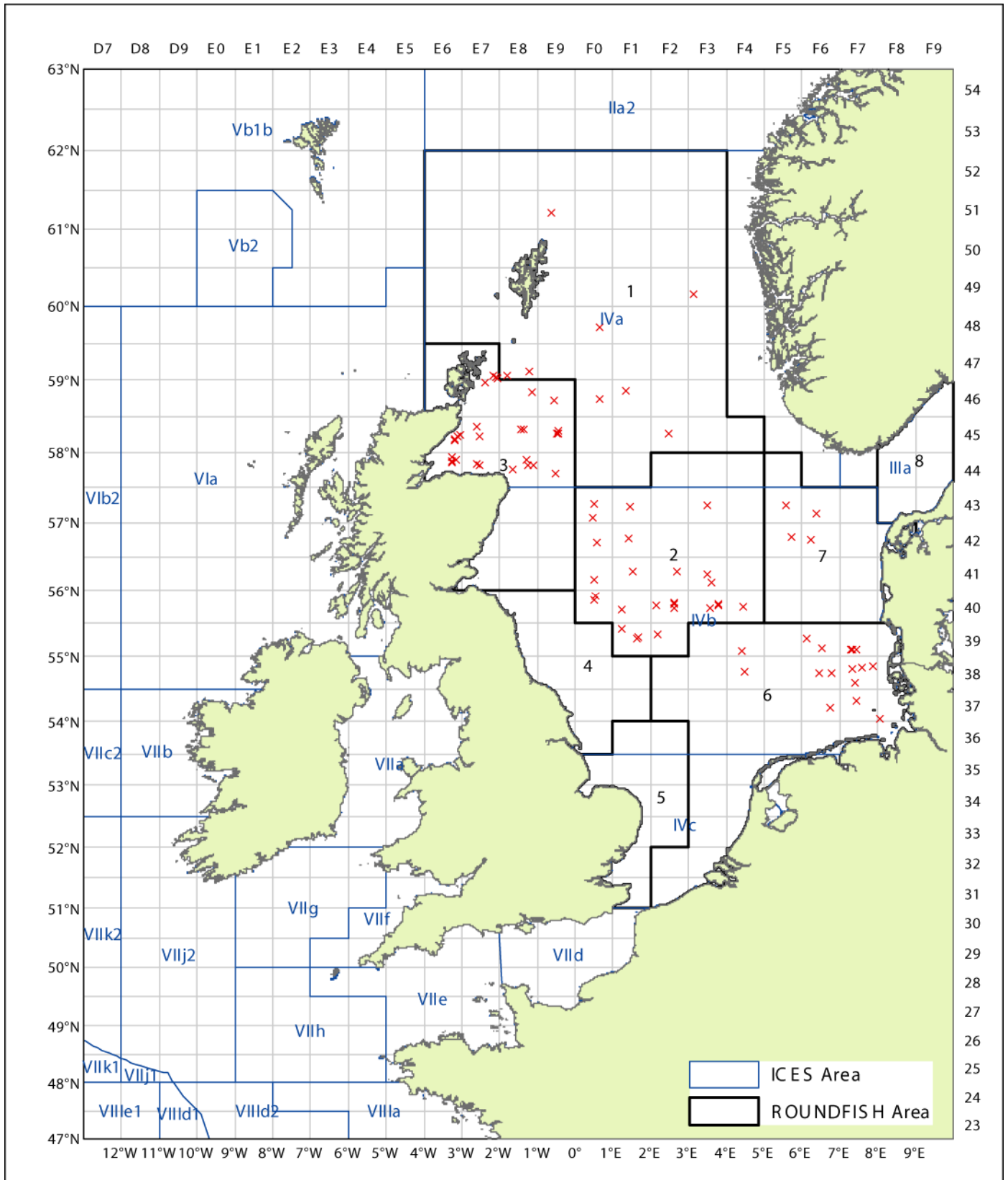
186

total numbers of data

1260

Sprattus sprattus February

Geographical distribution of data used for calculating the length-weight relationship



Sprattus sprattus

February

$$Tw [g] = a * L [cm]^b$$

a = 0.0033

b = 3.2926

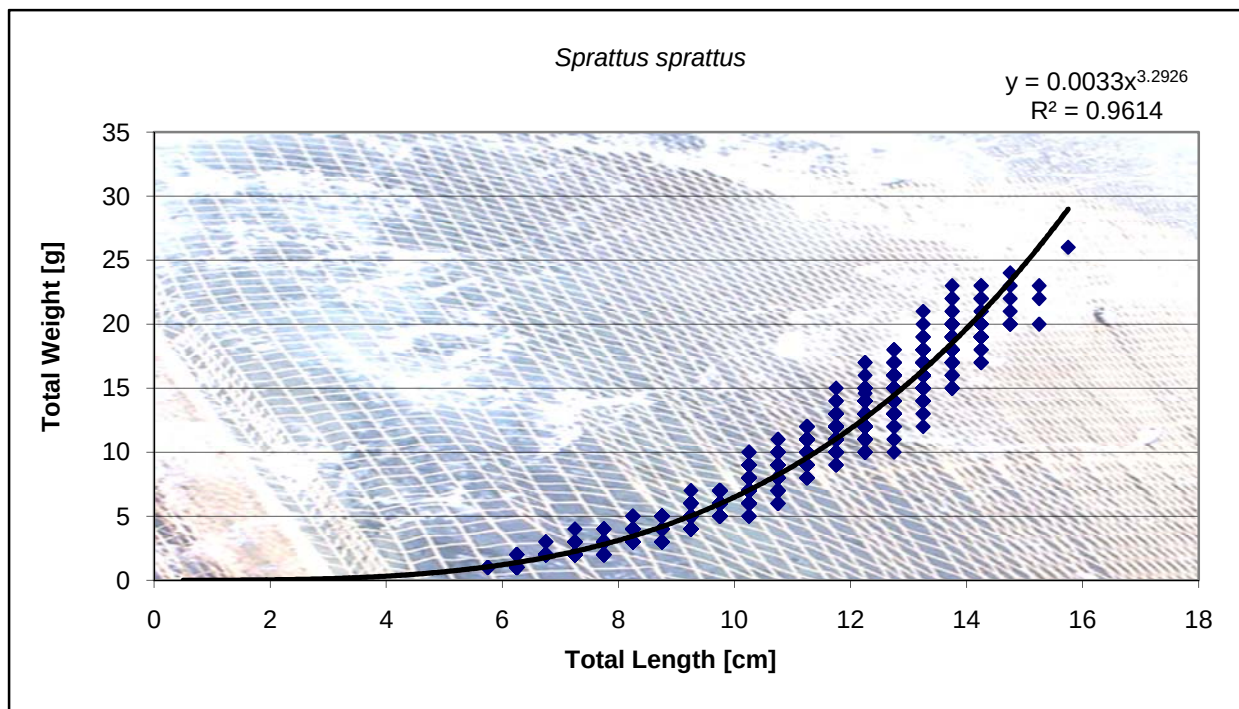
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
1254	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	1254	-	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1254	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	490	764	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
36	331	453	-	-	407	27	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- 1/2 cm below

min length
max length

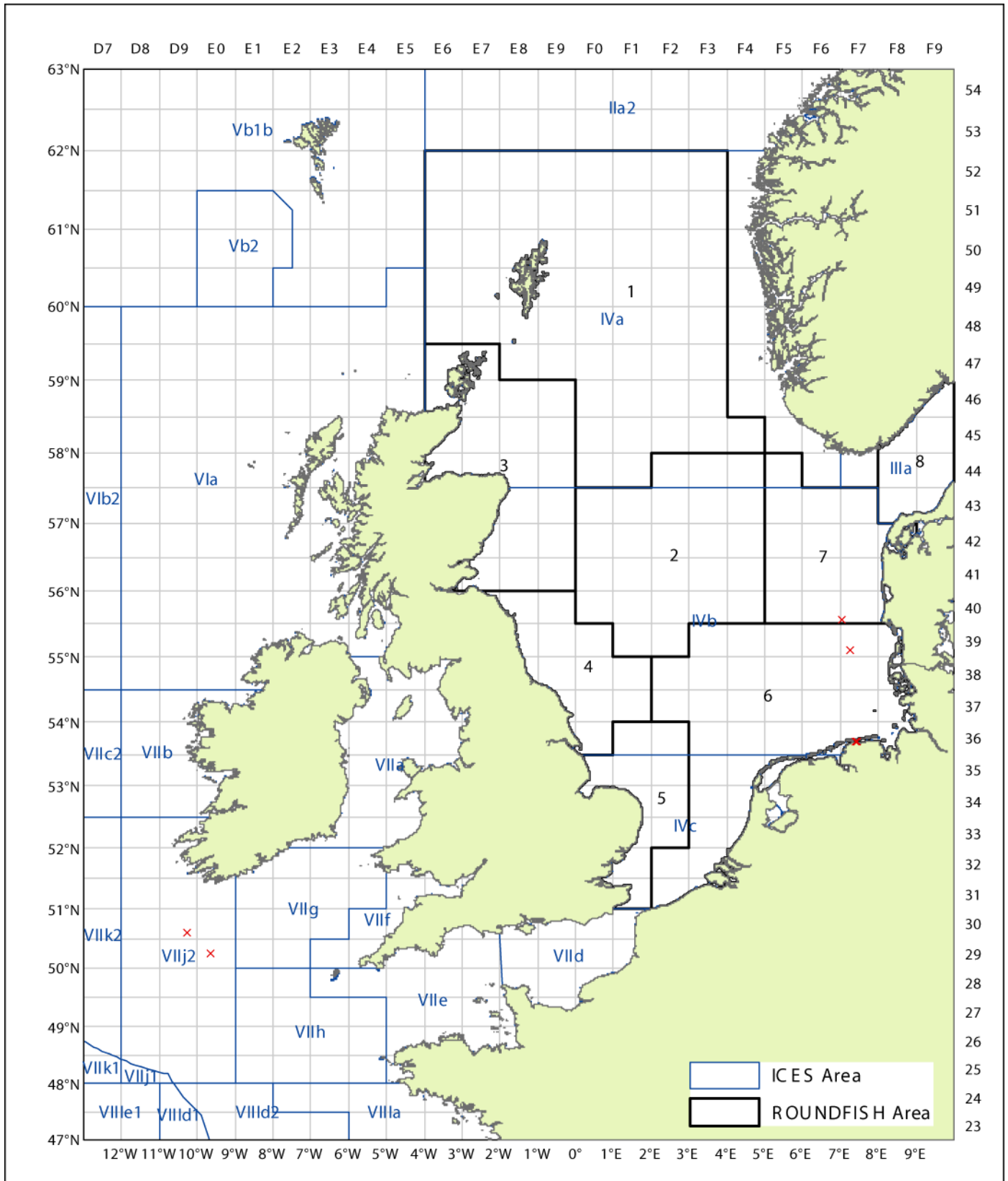
5.75 [cm]
15.75 [cm]

male 543
female 550
undefined 161

total numbers of data 1254

Sprattus sprattus *March*

Geographical distribution of data used for calculating the length-weight relationship



Sprattus sprattus

March

$$Tw [g] = a * L [cm]^b$$

a = 0.0072

b = 2.9707

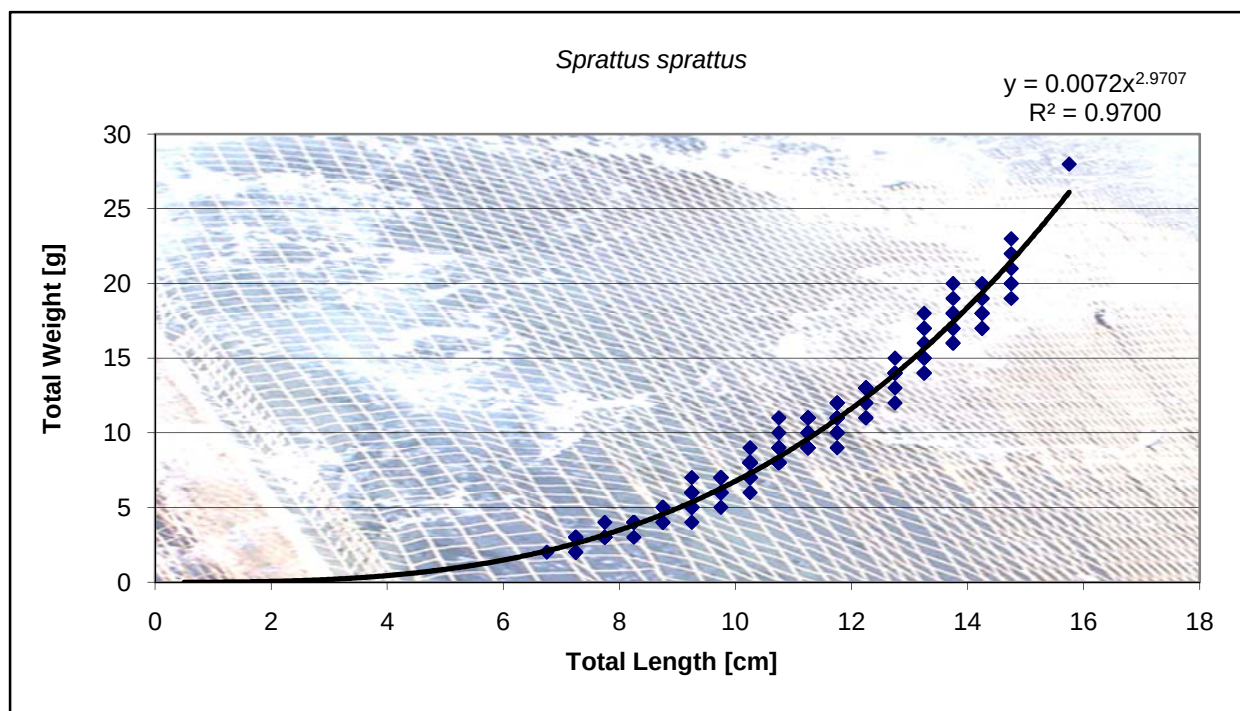
data collected

time period : 1996 - 2000

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
149	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	149	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	68	-	-	81	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	68	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	81	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	-	-	-	-	20	48	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- 1/2 cm below

min length
max length

6.75 [cm]
15.75 [cm]

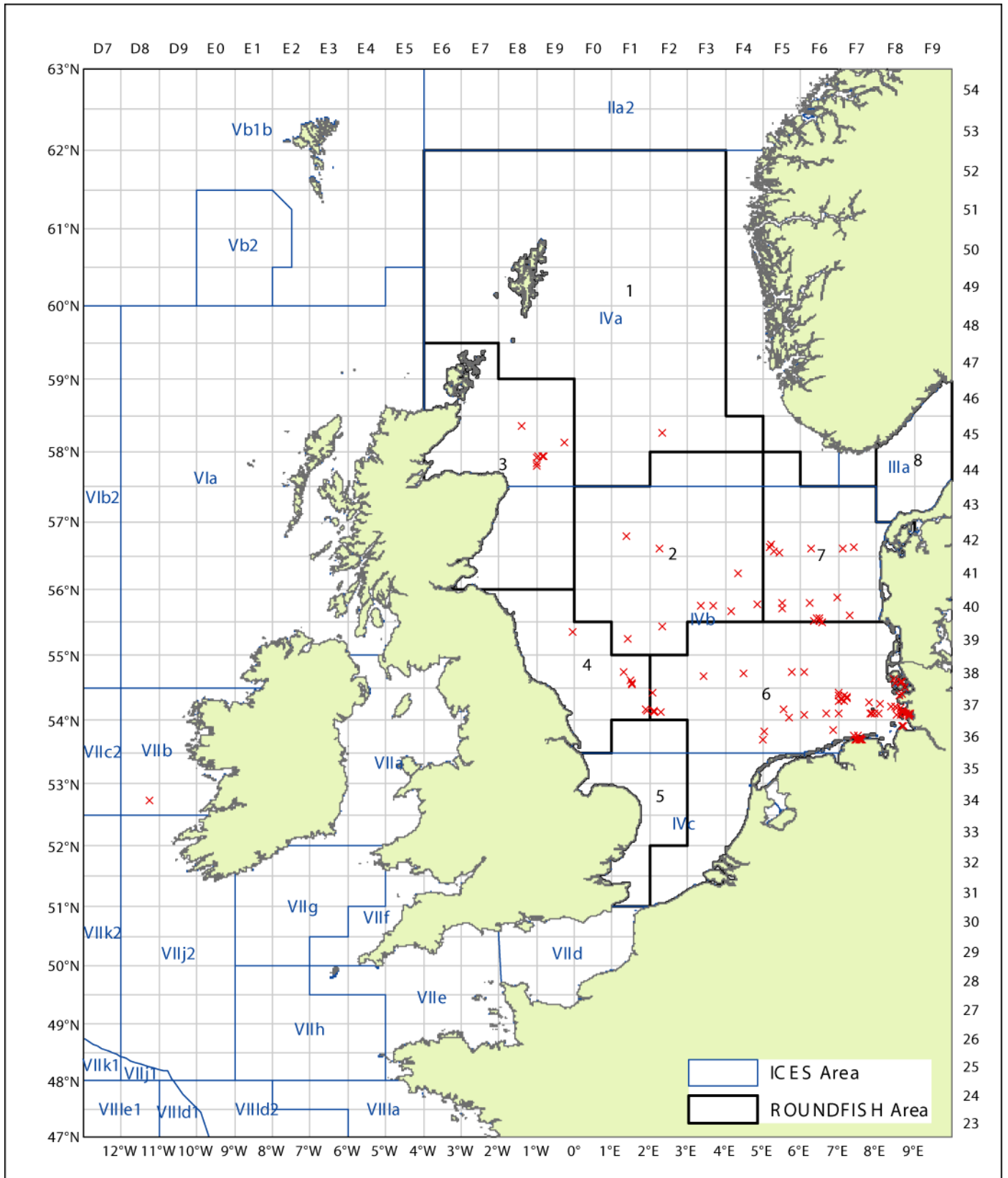
male
female
undefined

66
66
17

total numbers of data 149

Sprattus sprattus Quarter 2

Geographical distribution of data used for calculating the length-weight relationship



Sprattus sprattus

Quarter: 2

$$Tw [g] = a * L [cm]^b$$

a = 0.0075

b = 3.0174

data collected

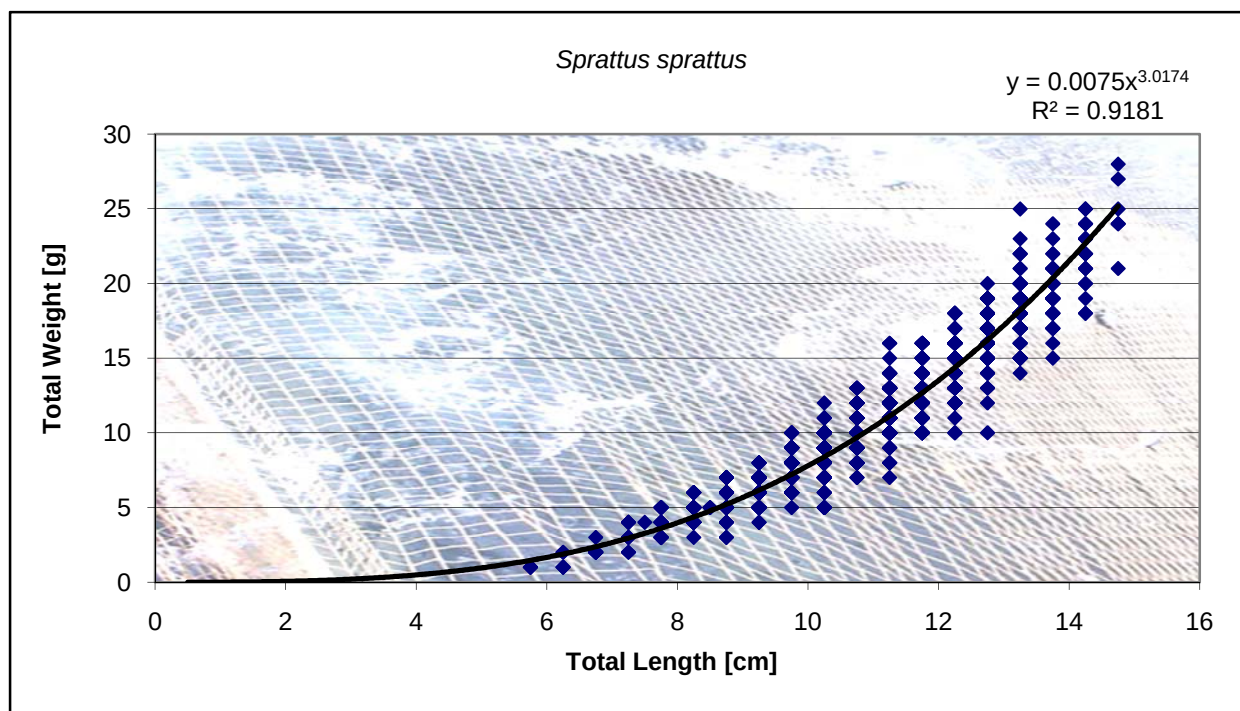
time period : 1995 - 2007

data source : research vessel

numbers of data:

Numbers of data:

Quarter																			
1	2	3	4																
-	1135	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	122	261	752	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1134	-	-	1	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	90	1044	-	-	-	-	-	-	1	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
1	31	89	93	-	683	237	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- 1/2 cm below

min length
max length

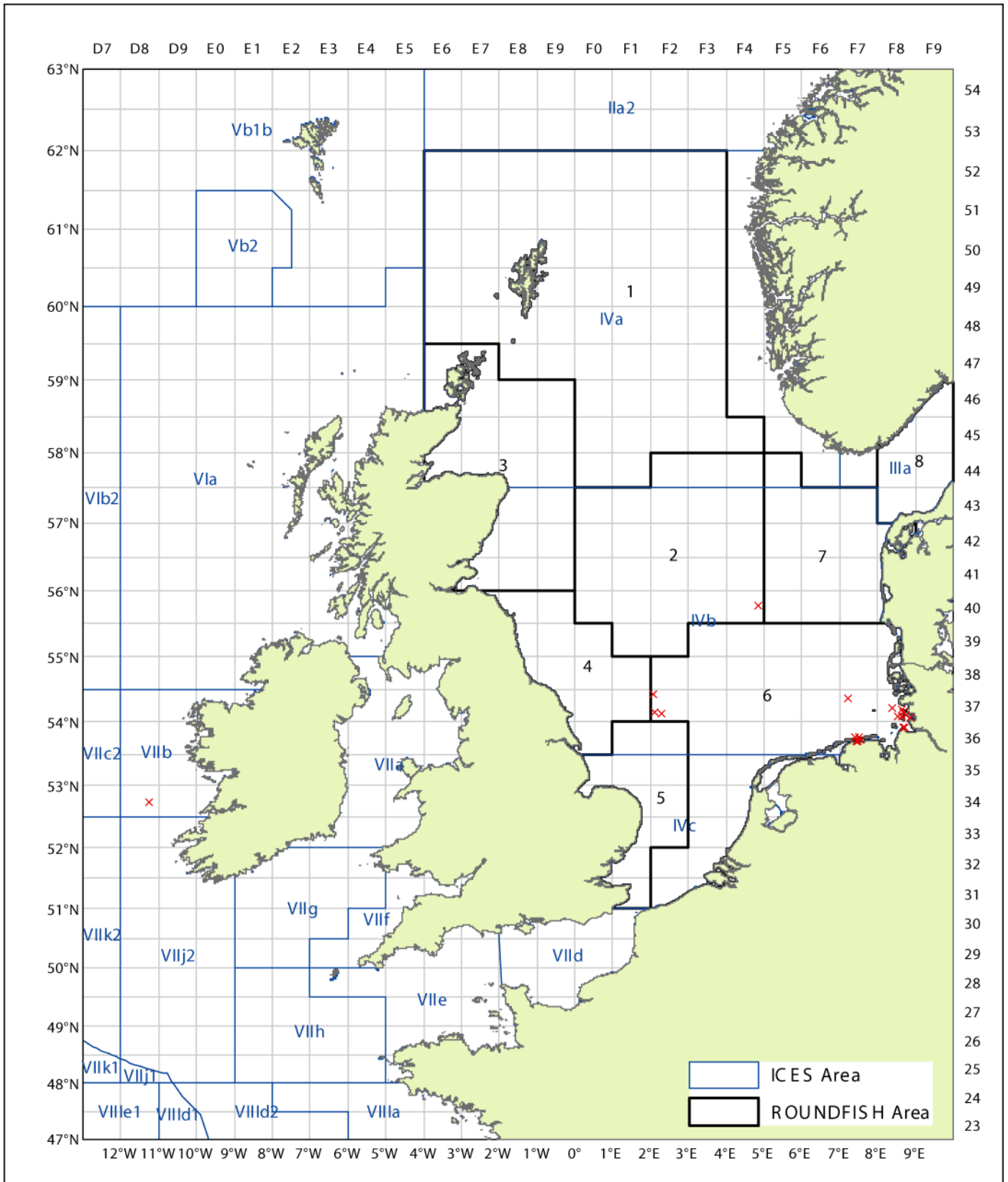
5.75 [cm]
14.75 [cm]

male 493
female 502
undefined 140

total numbers of data 1135

Sprattus sprattus *April*

Geographical distribution of data used for calculating the length-weight relationship



Sprattus sprattus

April

$$Tw [g] = a * L [cm]^b$$

a = 0.01

b = 2.8771

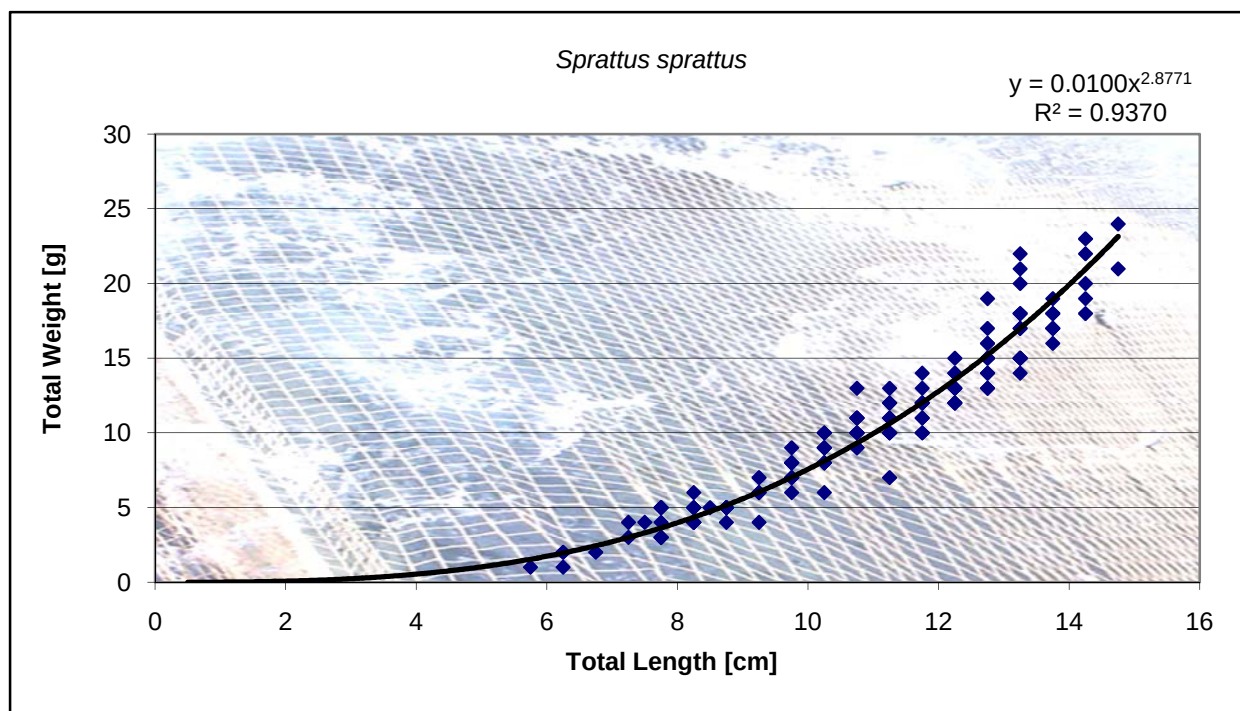
data collected

time period : 1996 - 2007

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
-	122	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	122	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	121	-	-	1	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	121	-	-	-	-	-	-	1	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	1	-	-	-	120	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- 1/2 cm below

min length
max length

5.75 [cm]
14.75 [cm]

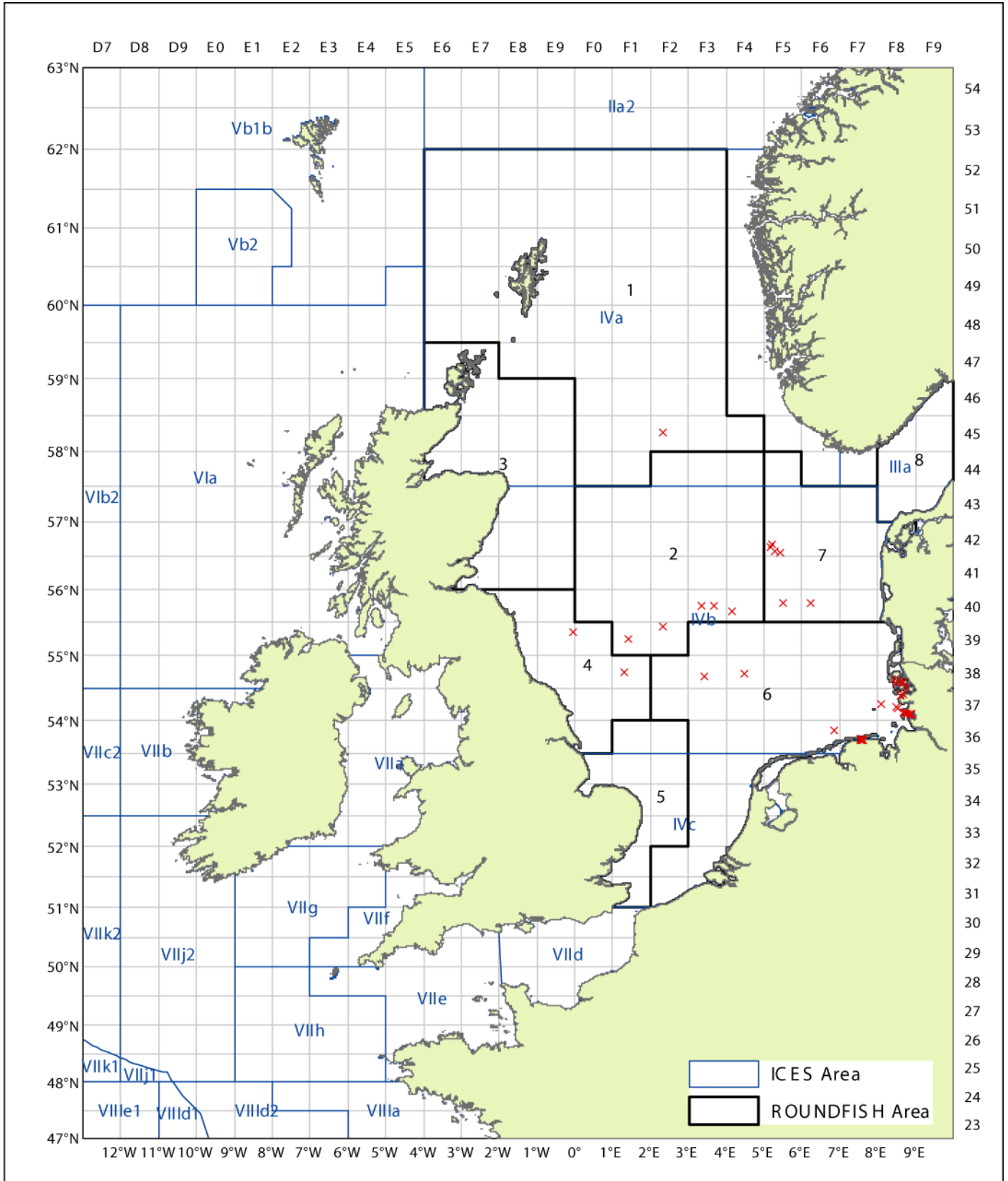
male
female
undefined

36
62
24

total numbers of data 122

Sprattus sprattus *May*

Geographical distribution of data used for calculating the length-weight relationship



Sprattus sprattus

May

$$Tw [g] = a * L [cm]^b$$

a = 0.0049

b = 3.2161

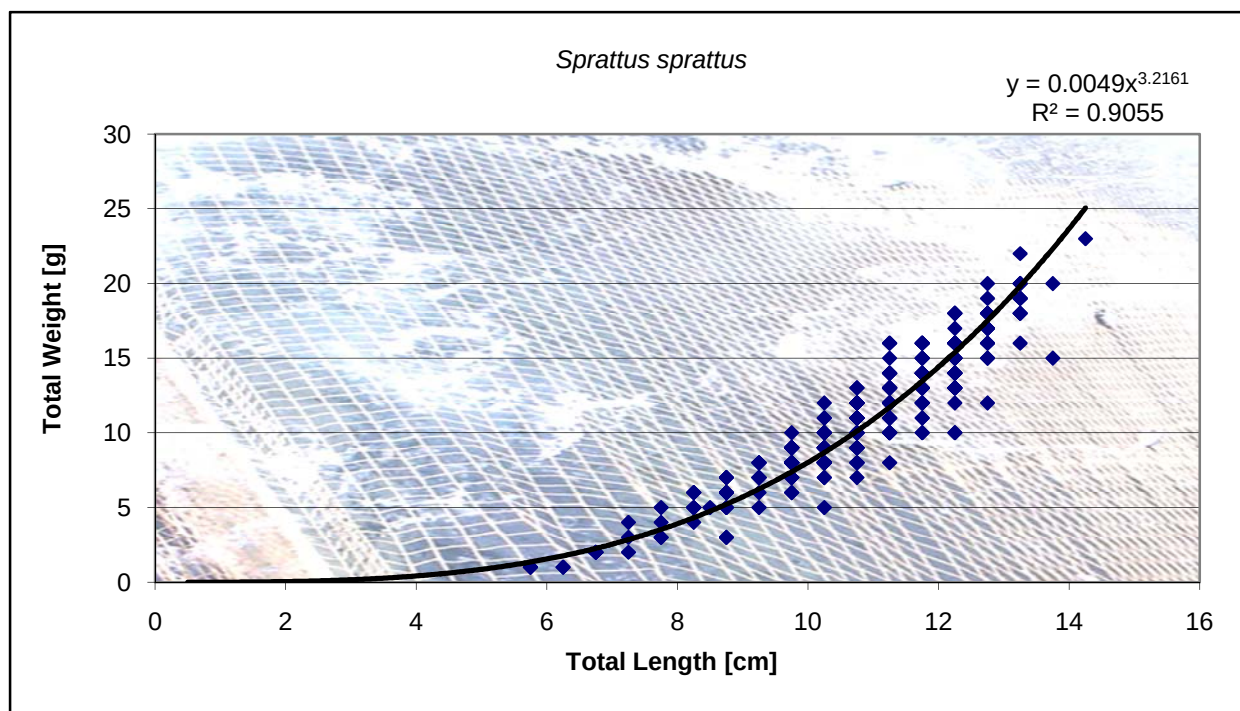
data collected

time period : 1995 - 2006

data source : research vessel

numbers of data:

Numbers of fish																			
Quarter																			
1	2	3	4																
-	261	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	261	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	261	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	1	260	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
1	27	-	91	-	69	73	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- 1/2 cm below

min length
max length

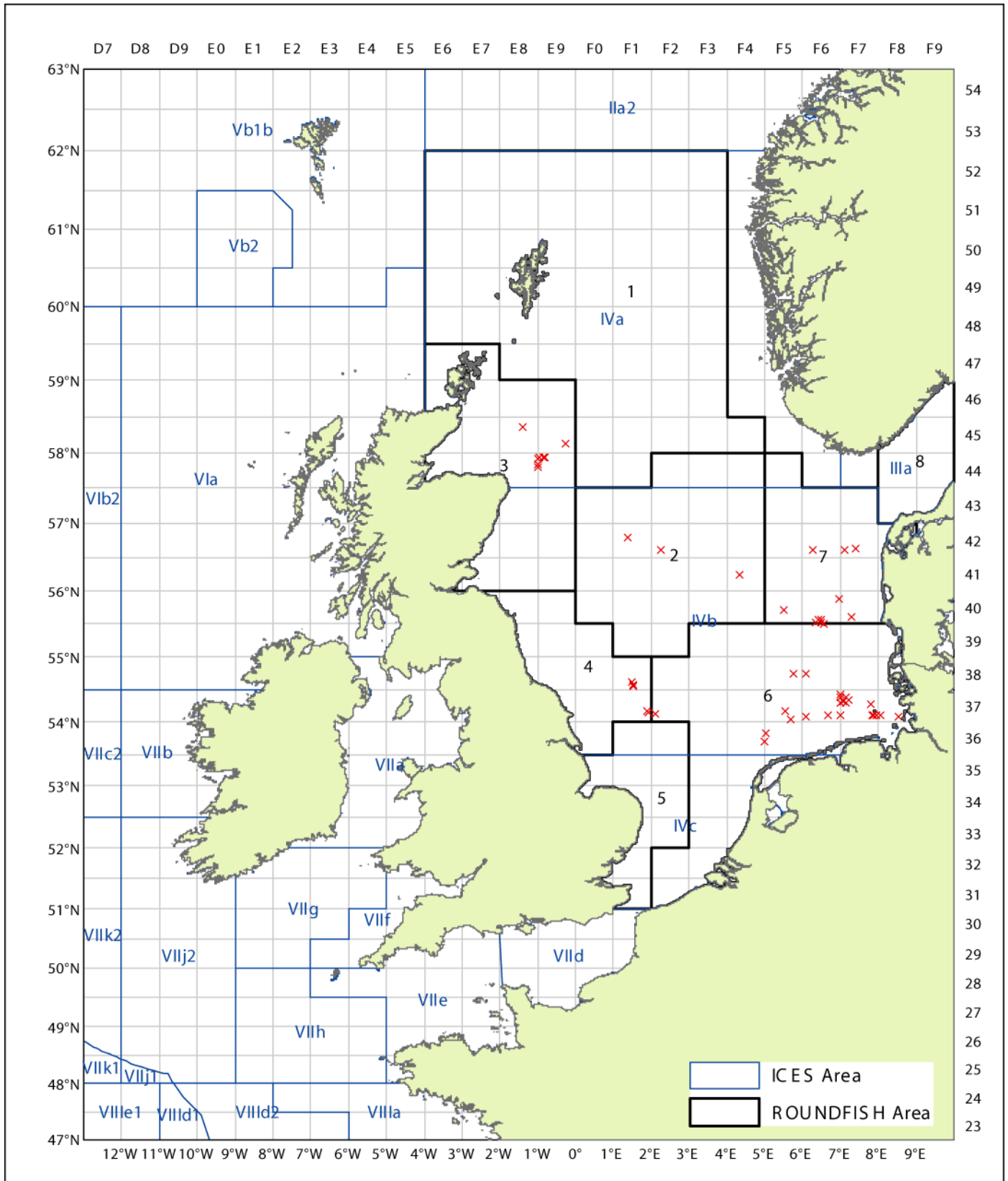
5.75 [cm]
14.25 [cm]

male 130
female 92
undefined 39

total numbers of data 261

Sprattus sprattus June

Geographical distribution of data used for calculating the length-weight relationship



Sprattus sprattus

June

$$Tw_{[g]} = a * L_{[cm]}^b$$

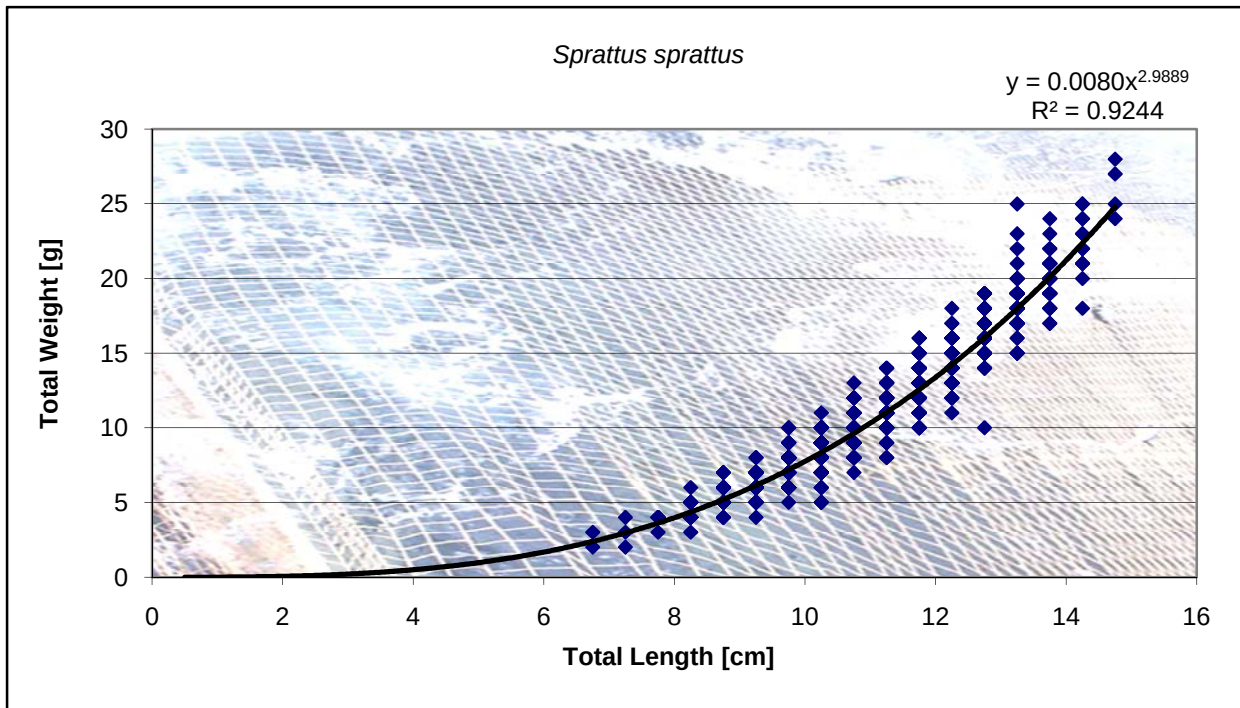
$$a = 0.008$$
$$b = 2.9889$$

data collected

time period : 1995 - 2004

data source : research vessel

numbers of data:

[illegible]

Method of Measurement

- Total length

- 1/2 cm below

min length

max length

6.75 [cm]

14.75 [cm]

male

female

undefined

327

348

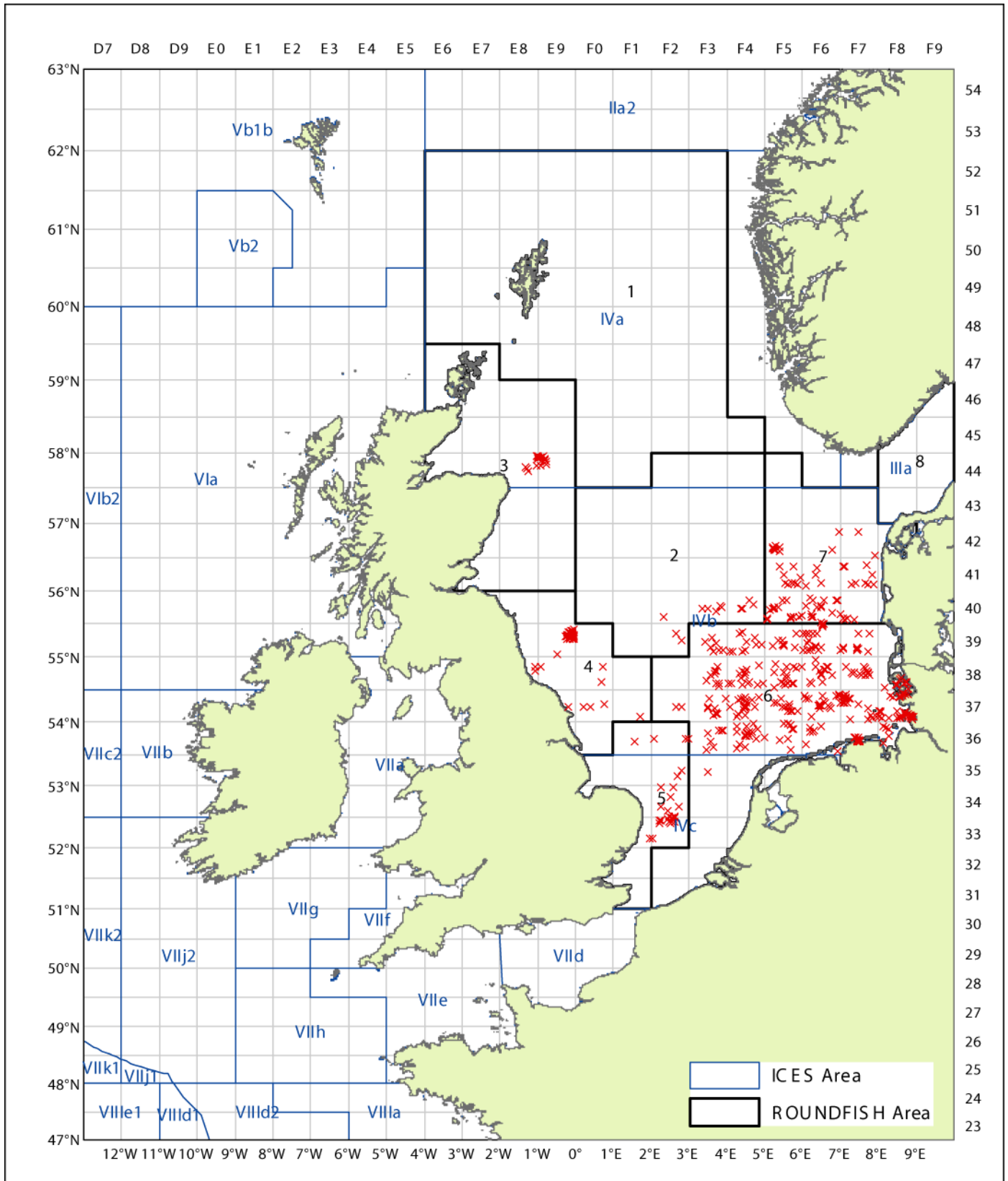
77

total numbers of data

752

Sprattus sprattus Quarter 3

Geographical distribution of data used for calculating the length-weight relationship



Sprattus sprattus

Quarter: 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0073

b = 3.0207

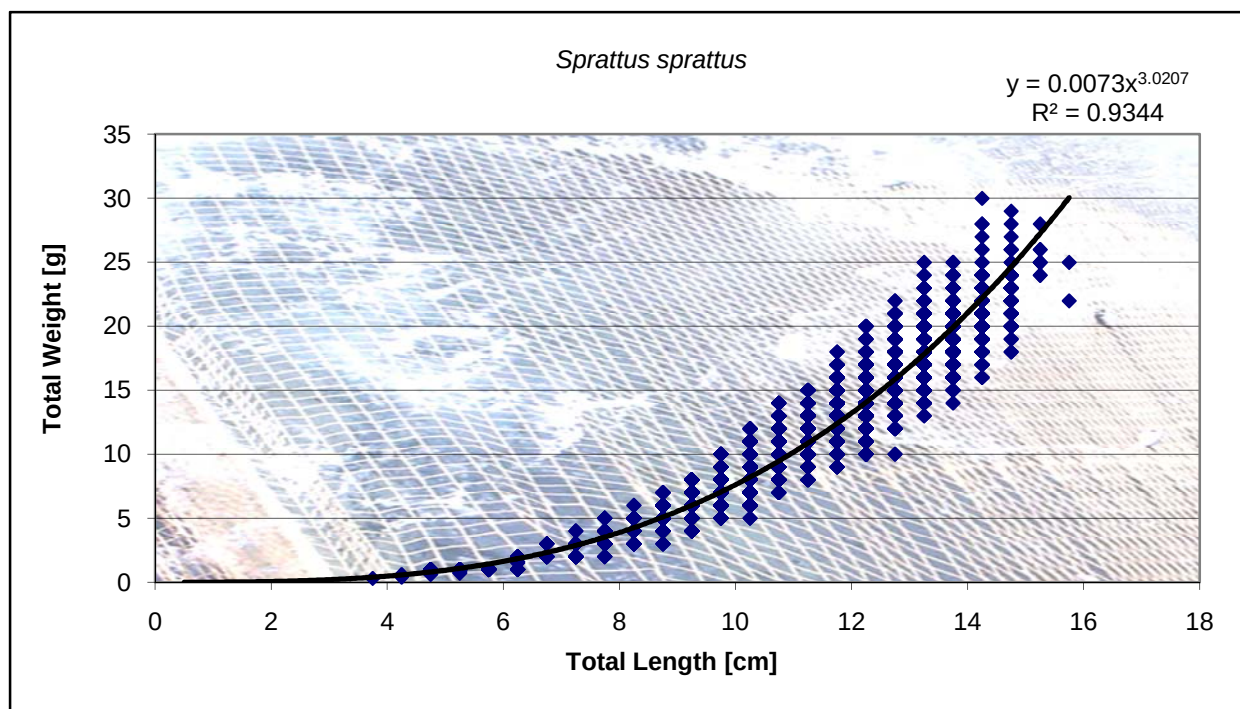
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Numbers of salmon																			
Quarter																			
1	2	3	4																
-	-	7656	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	5967	1341	348	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	7656	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	93	7049	514	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	142	93	561	627	4953	1280	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length

- 1/2 cm below

min length

max length

3.75 [cm]

15.75 [cm]

male

female

undefined

3078

3843

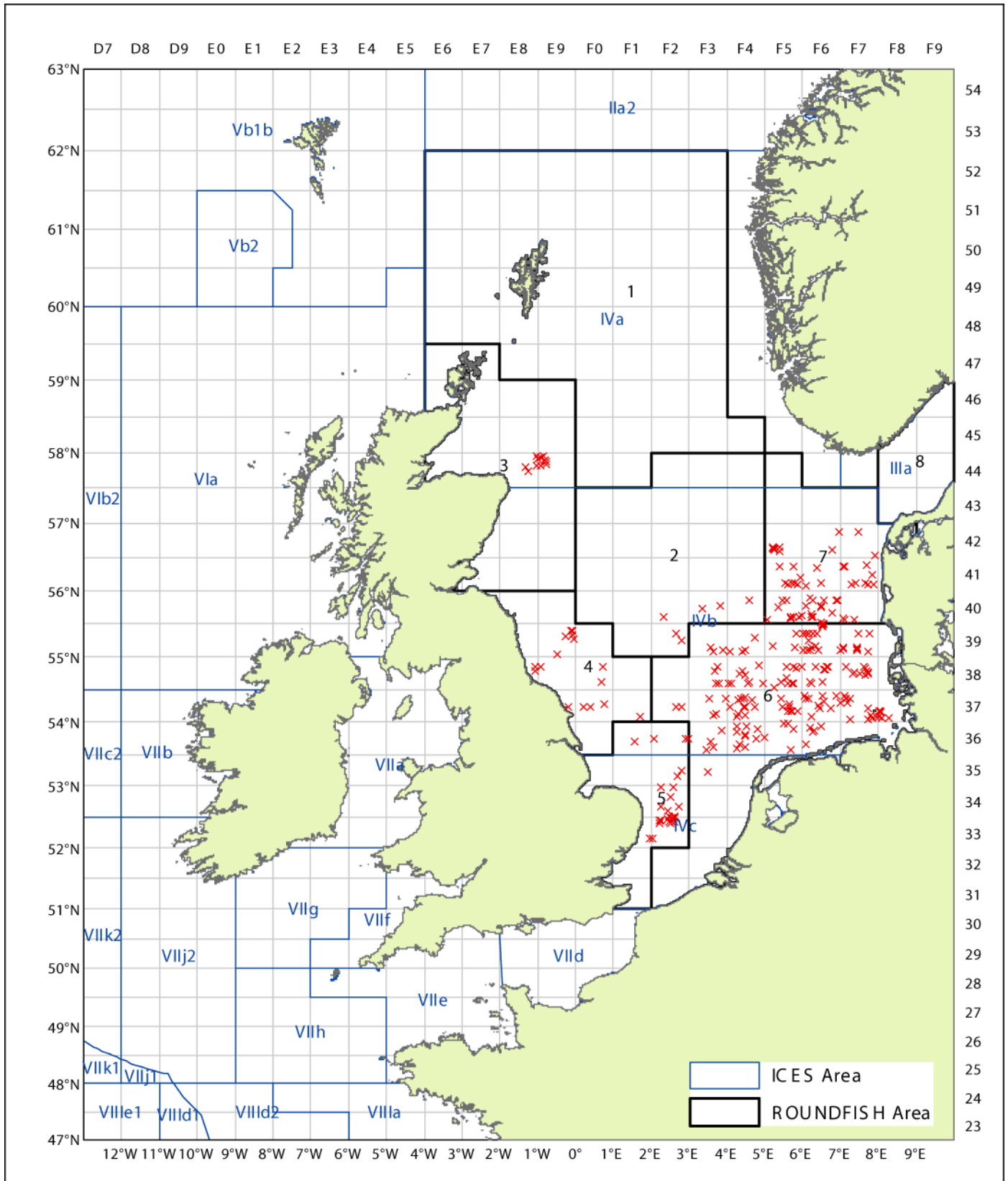
735

total numbers of data

7656

Sprattus sprattus July

Geographical distribution of data used for calculating the length-weight relationship



Sprattus sprattus

July

$$Tw [g] = a * L [cm]^b$$

a = 0.0084

b = 2.9566

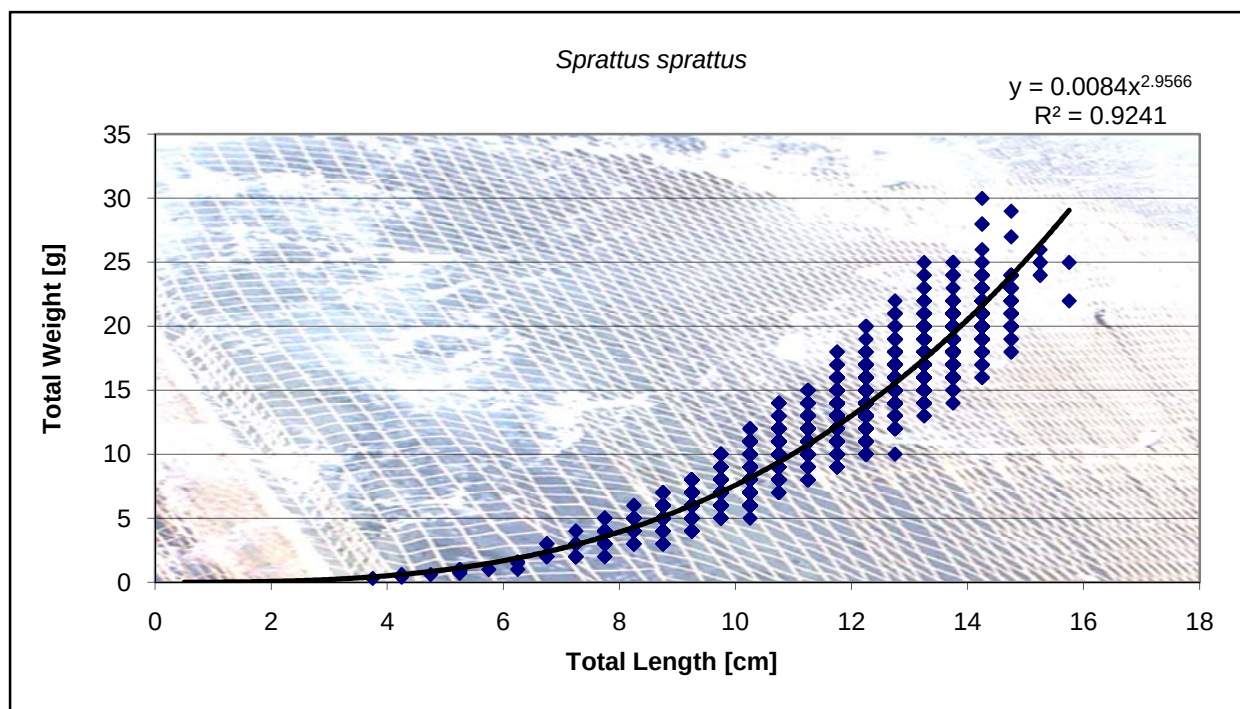
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Numbers of data.																					
Quarter																					
1	2	3	4																		
-	-	5967	-																		
Month																					
1	2	3	4	5	6	7	8	9	10	11	12										
-	-	-	-	-	-	5967	-	-	-	-	-										
Subarea																					
1	2	3	4	5	6	7	8	9	10	12	14										
-	-	-	5967	-	-	-	-	-	-	-	-										
Division																					
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F		
-	-	-	-	-	-	-	48	5405	514	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B							
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Roundfisharea											NAFO										
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	77	48	371	627	3776	1068	-	-				-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length

- 1/2 cm below

min length

max length

3.75 [cm]

15.75 [cm]

male

female

undefined

2468

3142

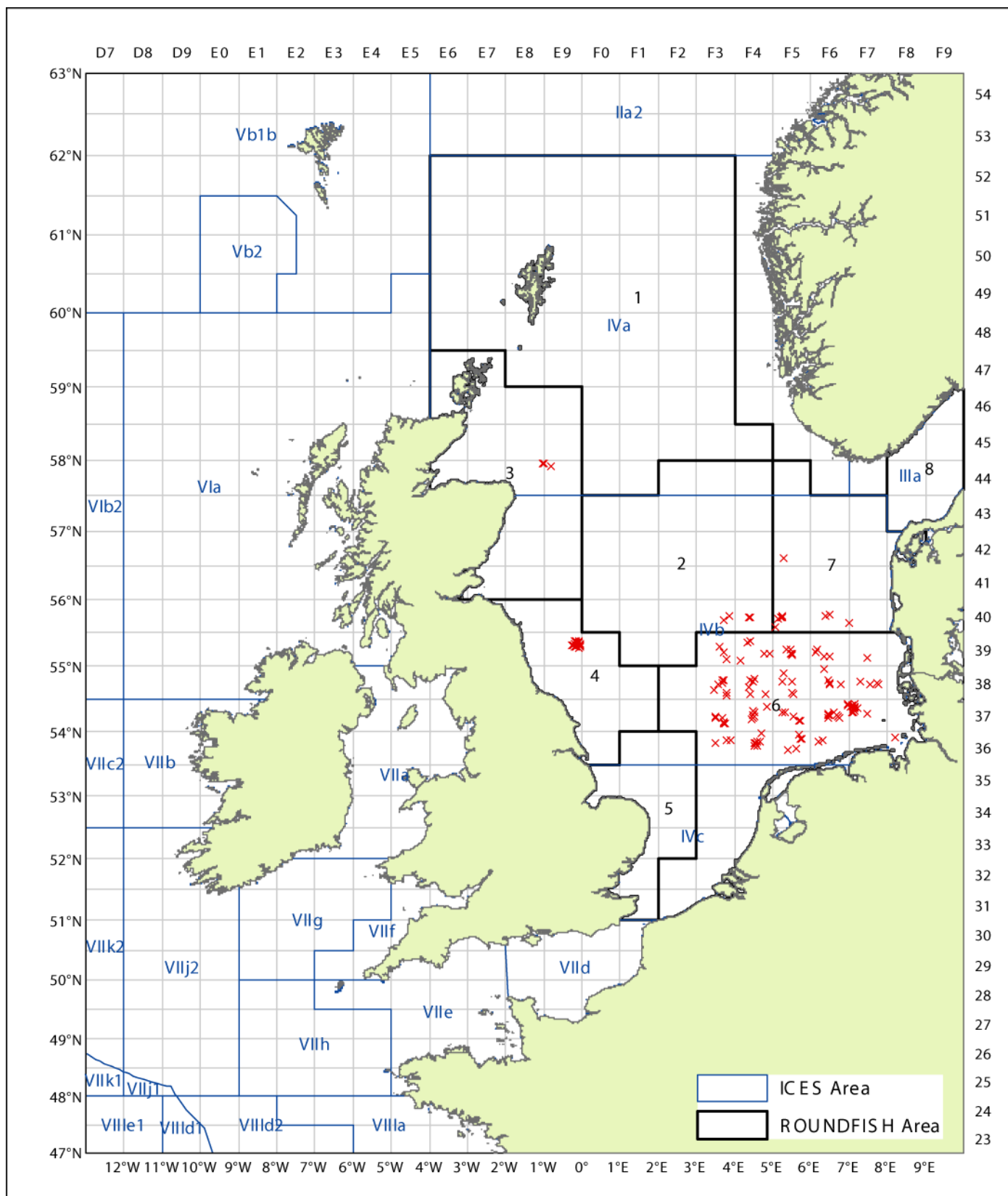
357

total numbers of data

5967

Sprattus sprattus August

Geographical distribution of data used for calculating the length-weight relationship



Sprattus sprattus

August

$$Tw [g] = a * L [cm]^b$$

a = 0.0055

b = 3.1562

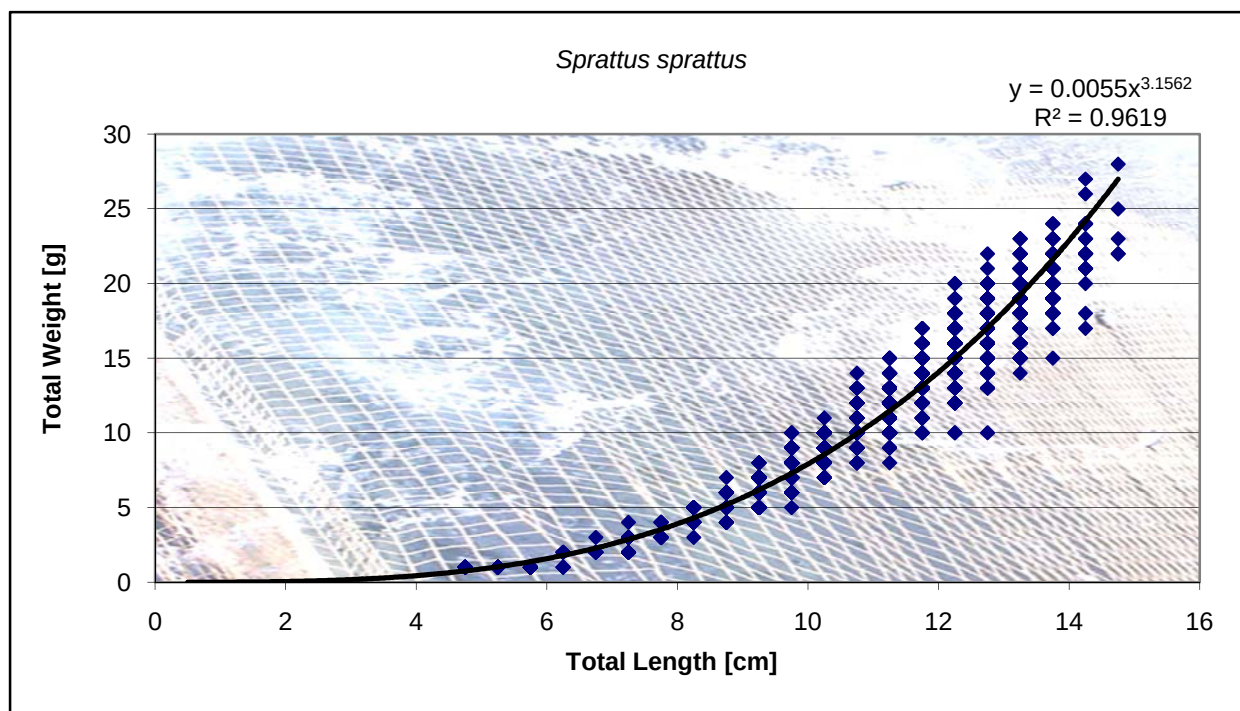
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Numbers of data.																				
Quarter																				
1	2	3	4																	
-	-	1341	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	-	1341	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	1341	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	3	1338	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	17	3	120	-	1025	176	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- 1/2 cm below

min length
max length

4.75 [cm]
14.75 [cm]

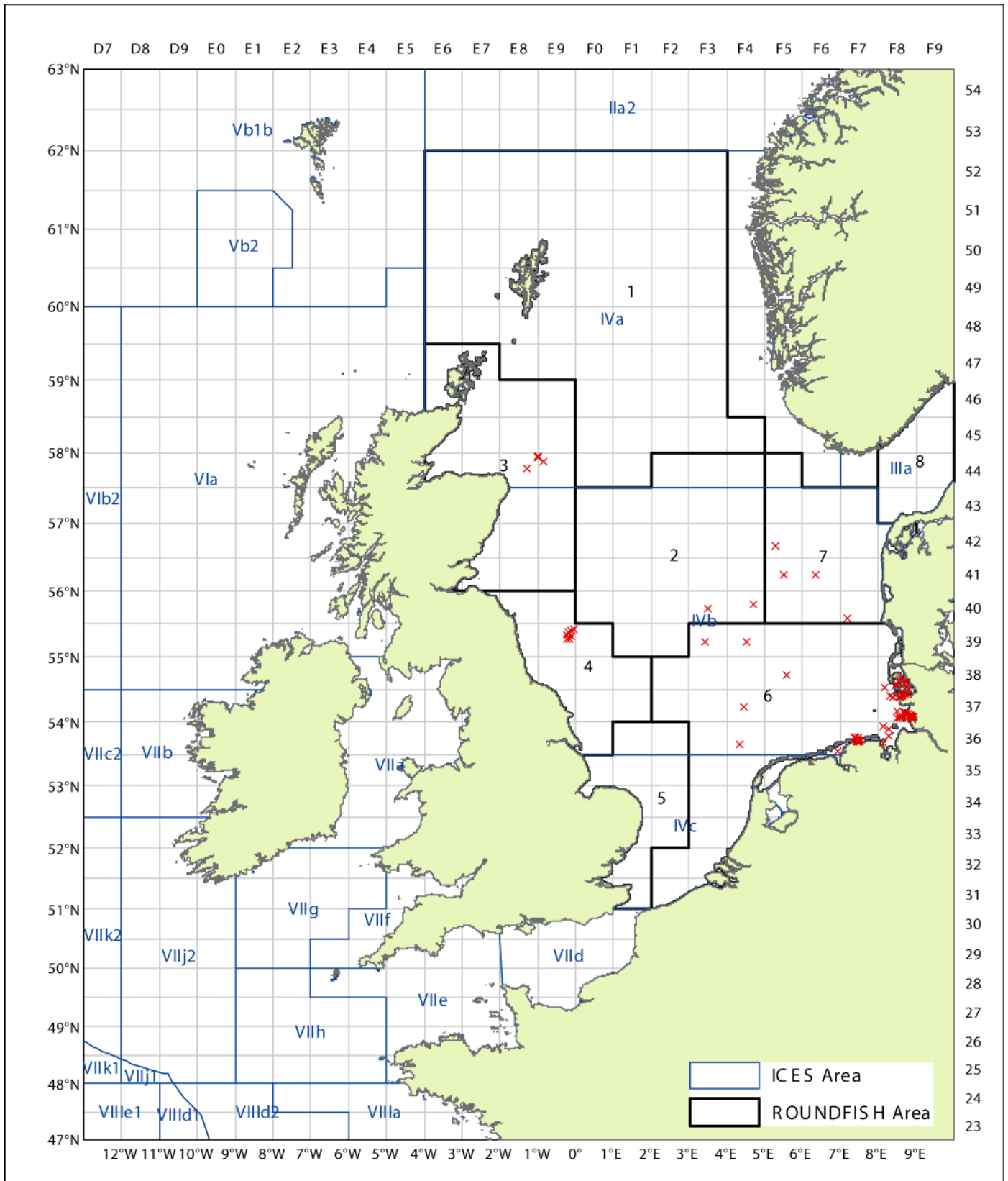
male
female
undefined

504
592
245

total numbers of data 1341

Sprattus sprattus *September*

Geographical distribution of data used for calculating the length-weight relationship



Sprattus sprattus

September

$$Tw [g] = a * L [cm]^b$$

a = 0.0046

b = 3.2214

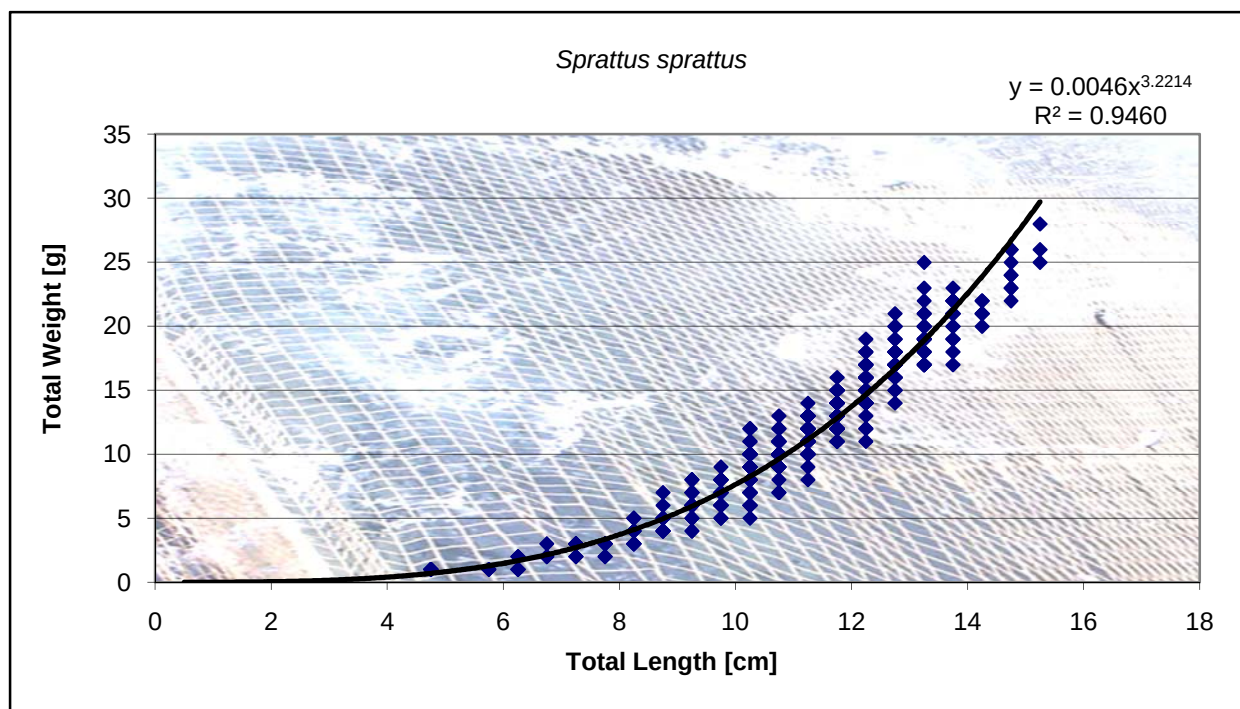
data collected

time period : 1996 - 2006

data source : research vessel

numbers of data:

Numbers of salmon																				
Quarter																				
1	2	3	4																	
-	-	348	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	-	-	348	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	348	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	42	306	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	48	42	70	-	152	36	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- 1/2 cm below

min length
max length

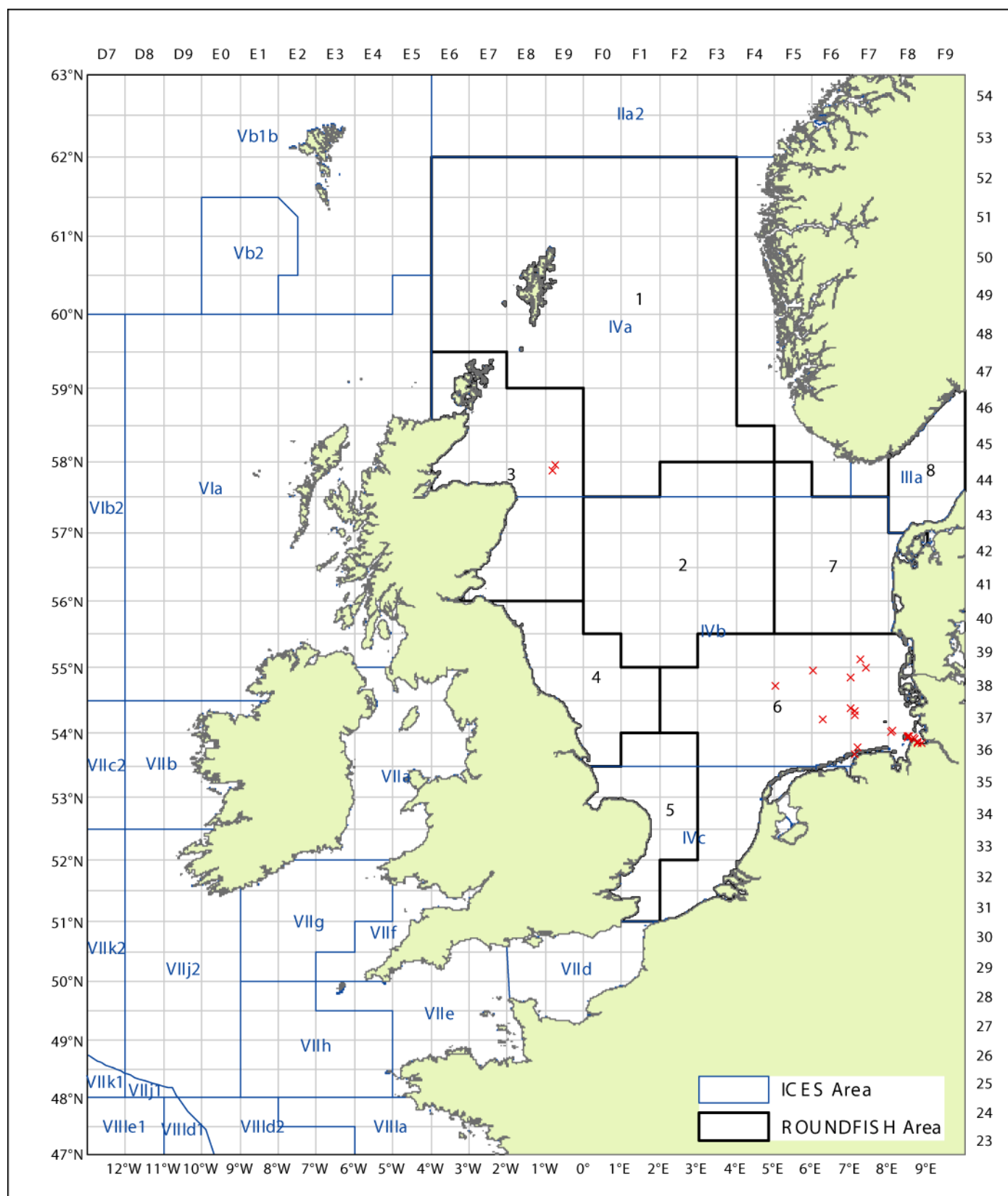
4.75 [cm]
15.25 [cm]

male 106
female 109
undefined 133

total numbers of data 348

Sprattus sprattus Quarter 4

Geographical distribution of data used for calculating the length-weight relationship



Sprattus sprattus

Quarter: 4

$$Tw [g] = a * L [cm]^b$$

a = 0.007

b = 3.0104

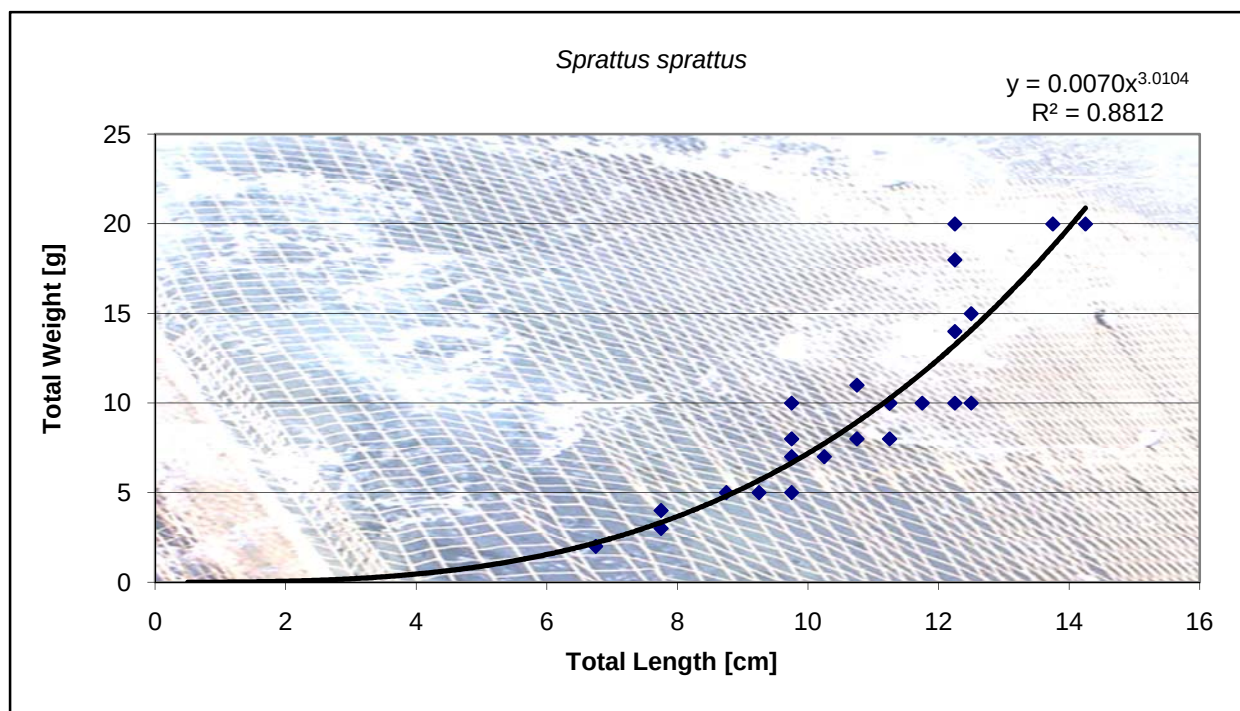
data collected

time period : 1995 - 2006

data source : research vessel

numbers of data:

Numbers of data:																			
Quarter																			
1	2	3	4																
-	-	-	25																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	-	-	10	7	8								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	25	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	25	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	-	2	-	-	23	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- 1/2 cm below

min length
max length

6.75 [cm]
14.25 [cm]

male
female
undefined

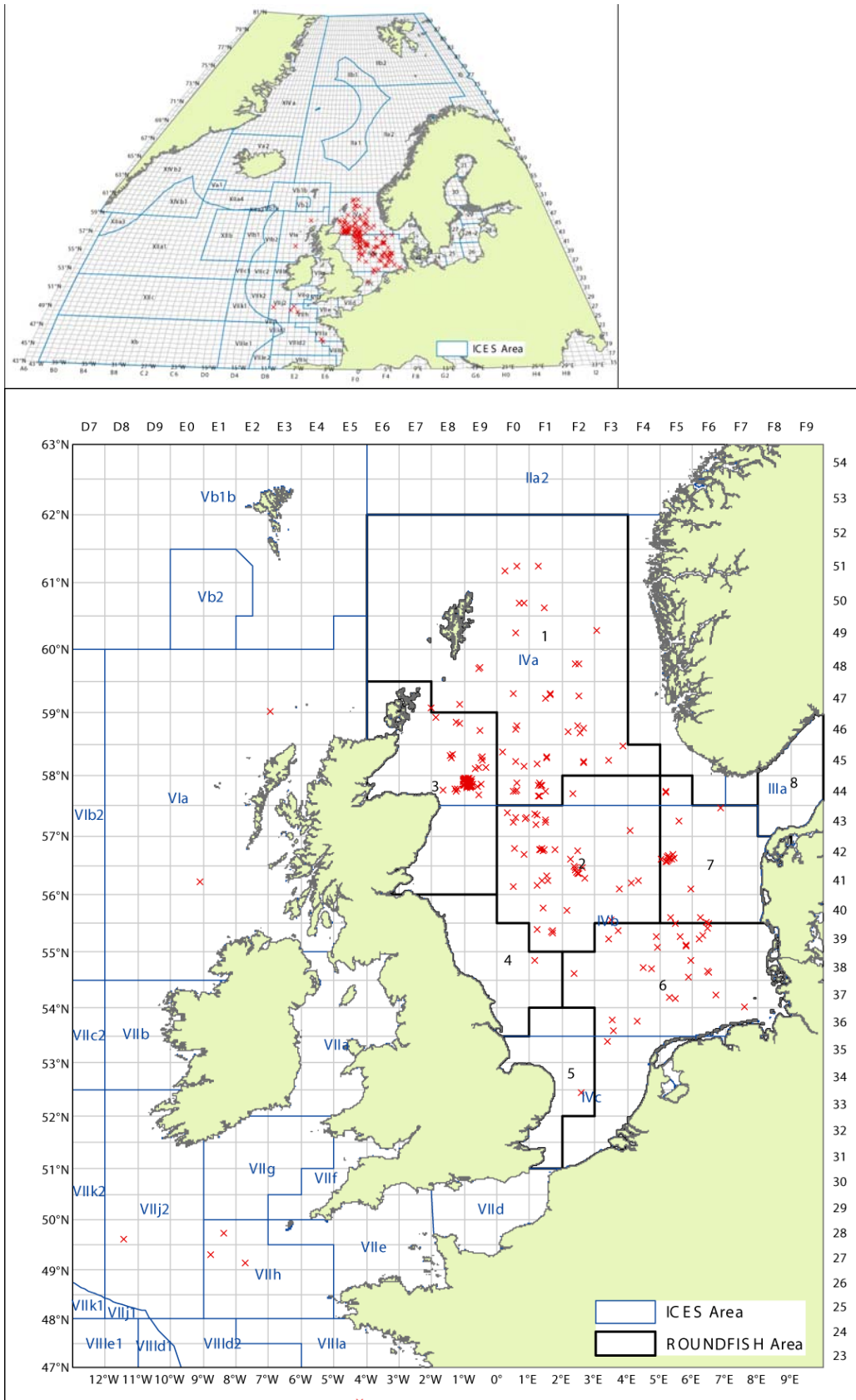
-
-
25

total numbers of data

25

Squalus acanthias

Geographical distribution of data used for calculating the length-weight relationship



Squalus acanthias

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0023

b = 3.1289

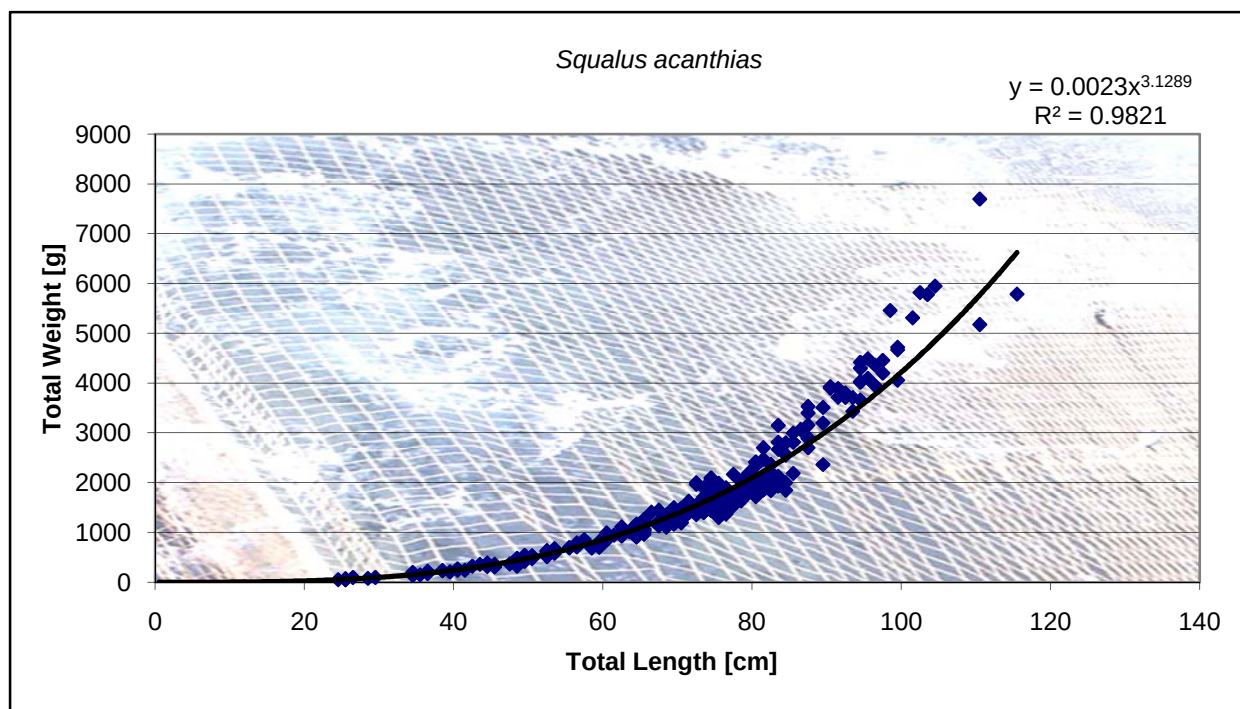
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Numbers of catch																				
Quarter																				
1	2	3	4																	
153	48	55	17																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
75	63	15	8	20	20	39	8	8	1	12	4									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	263	-	4	4	2	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	118	144	1	-	-	4	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	3	1	-	1	1	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
59	78	70	1	1	27	27	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

24.5 [cm]
115.5 [cm]

male
female
undefined

127
108
38

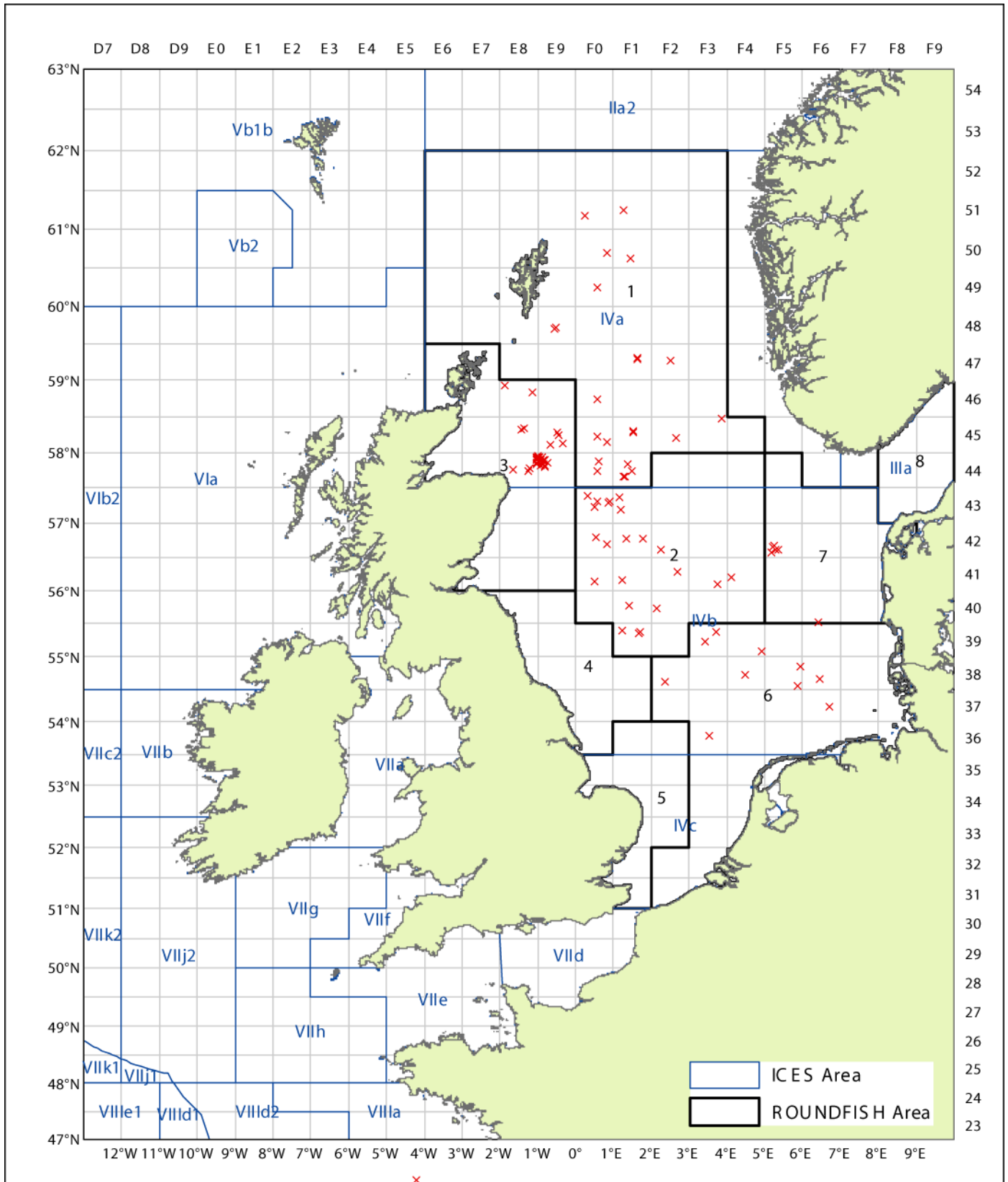
total numbers of data

273

Squalus acanthias



Geographical distribution of data used for calculating the length-weight relationship



Squalus acanthias ♀

Quarter: 1 - 4

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0015

b = 3.2491

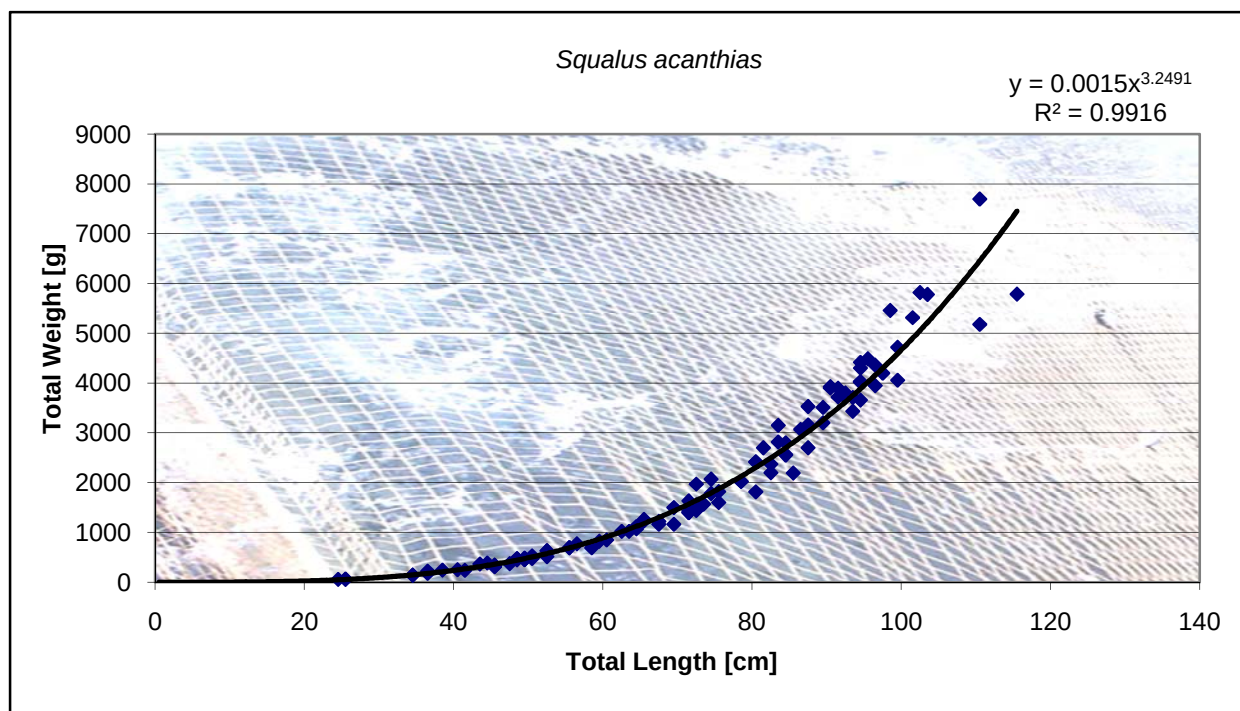
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Numbers of data.																						
Quarter																						
1	2	3	4																			
65	18	21	4																			
Month																						
1	2	3	4	5	6	7	8	9	10	11	12											
28	30	7	4	8	6	13	5	3	-	4	-											
Subarea																						
1	2	3	4	5	6	7	8	9	10	12	14											
-	-	-	107	-	-	-	1	-	-	-	-											
Division																						
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F			
-	-	-	-	-	-	-	53	54	-	-	-	-	-	-	-	-	-	-	-			
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B								
-	-	-	-	1	-	-	-	-	-	-	-	-	-	-								
Roundfisharea										NAFO												
1	2	3	4	5	6	7	8	9						1A	1B	1C	1D	1E	1F	2G	2H	2J
25	30	34	-	-	11	7	-	-						-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

24.5 [cm]
115.5 [cm]

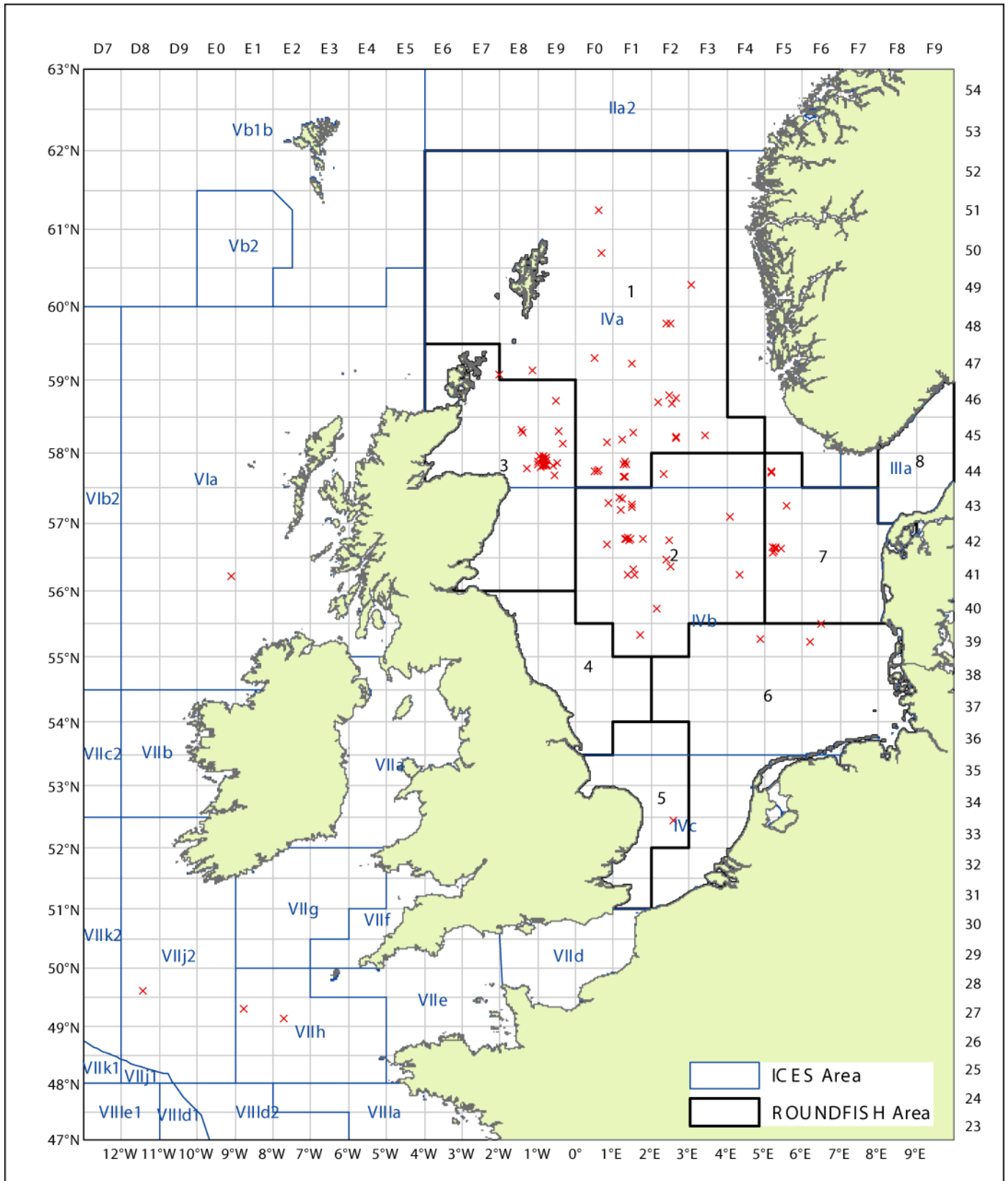
male
female
undefined

-
108
-

total numbers of data 108

Squalus acanthias ♂

Geographical distribution of data used for calculating the length-weight relationship



Squalus acanthias ♂

Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0041

b = 2.984

data collected

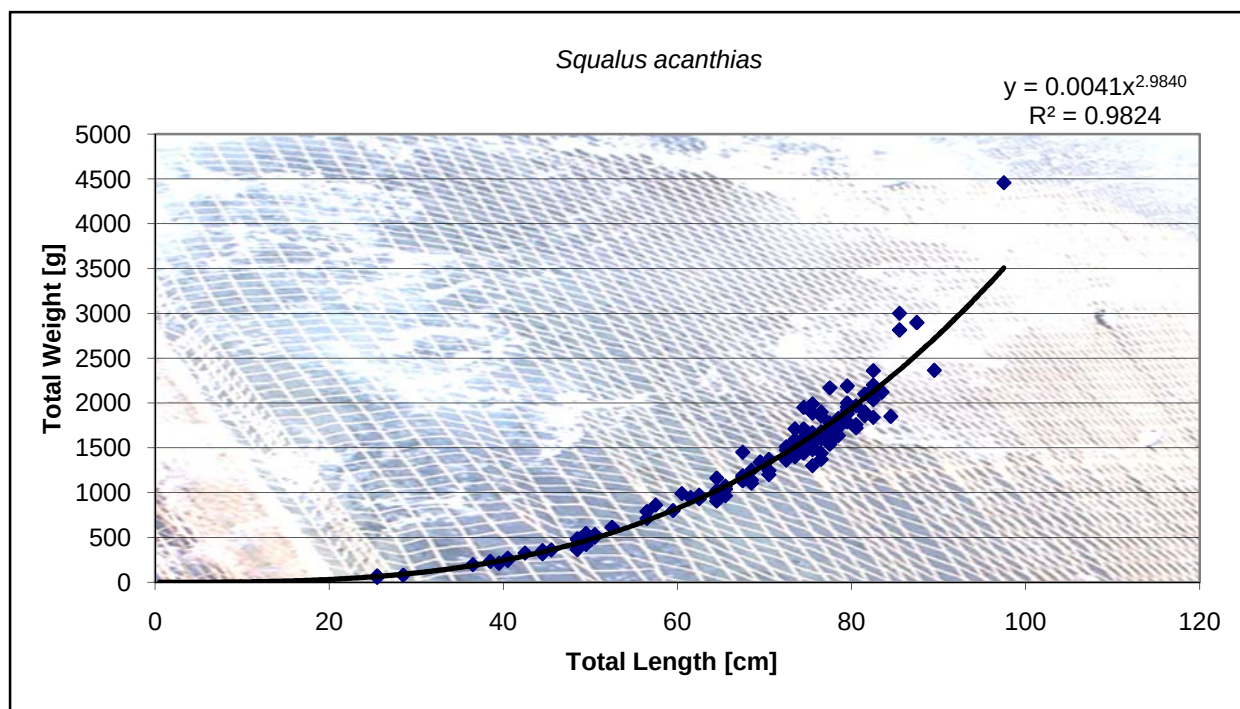
time period : 1994 - 2008

data source : research vessel

numbers of data:

Numbers of data.

Quarter																				
1	2	3	4																	
78	21	23	5																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
42	32	4	4	10	7	19	1	3	-	5	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	120	-	3	3	1	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	58	61	1	-	-	3	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	2	1	-	-	1	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
32	42	30	-	1	3	12	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

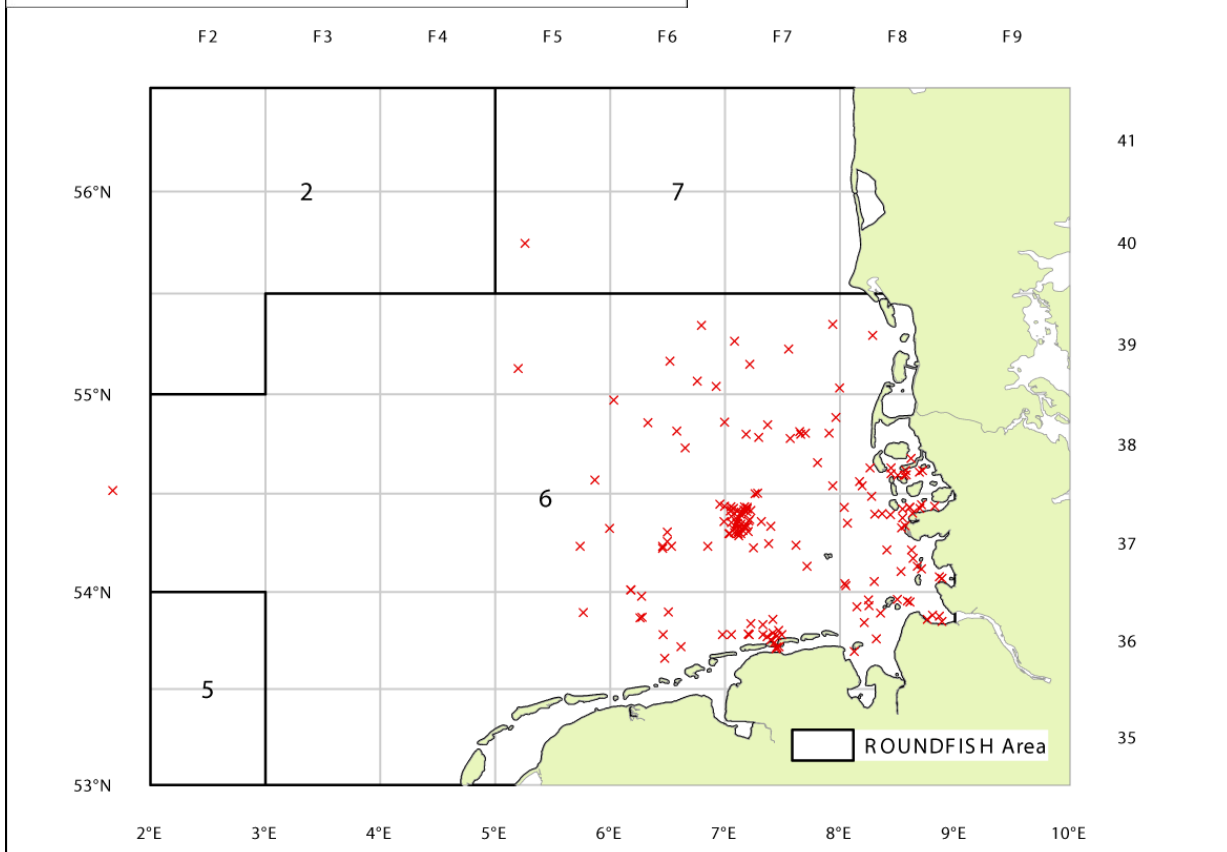
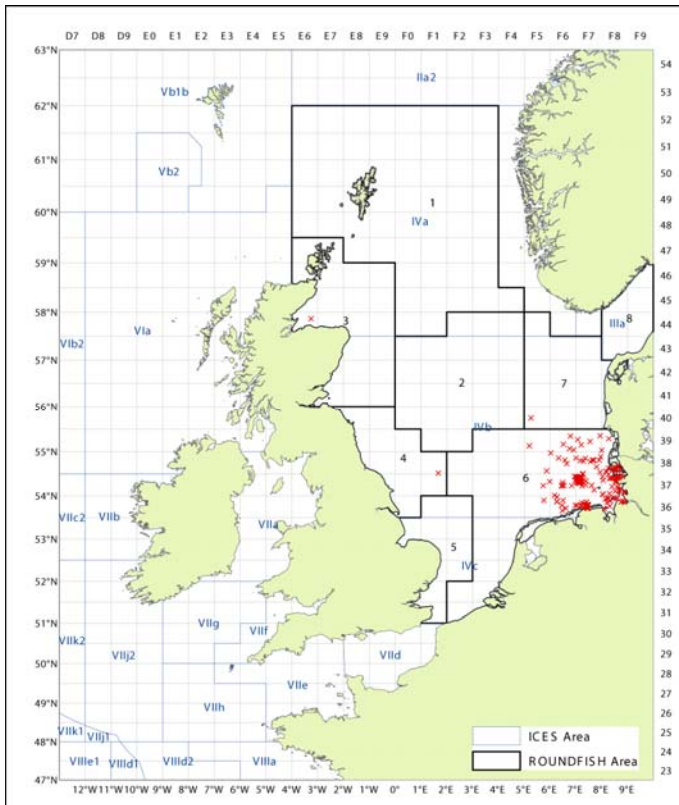
25.5 [cm]
97.5 [cm]

male 127
female -
undefined -

total numbers of data 127

Syngnathus rostellatus

Geographical distribution of data used for calculating the length-weight relationship



Syngnathus rostellatus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.00015

b = 3.40846

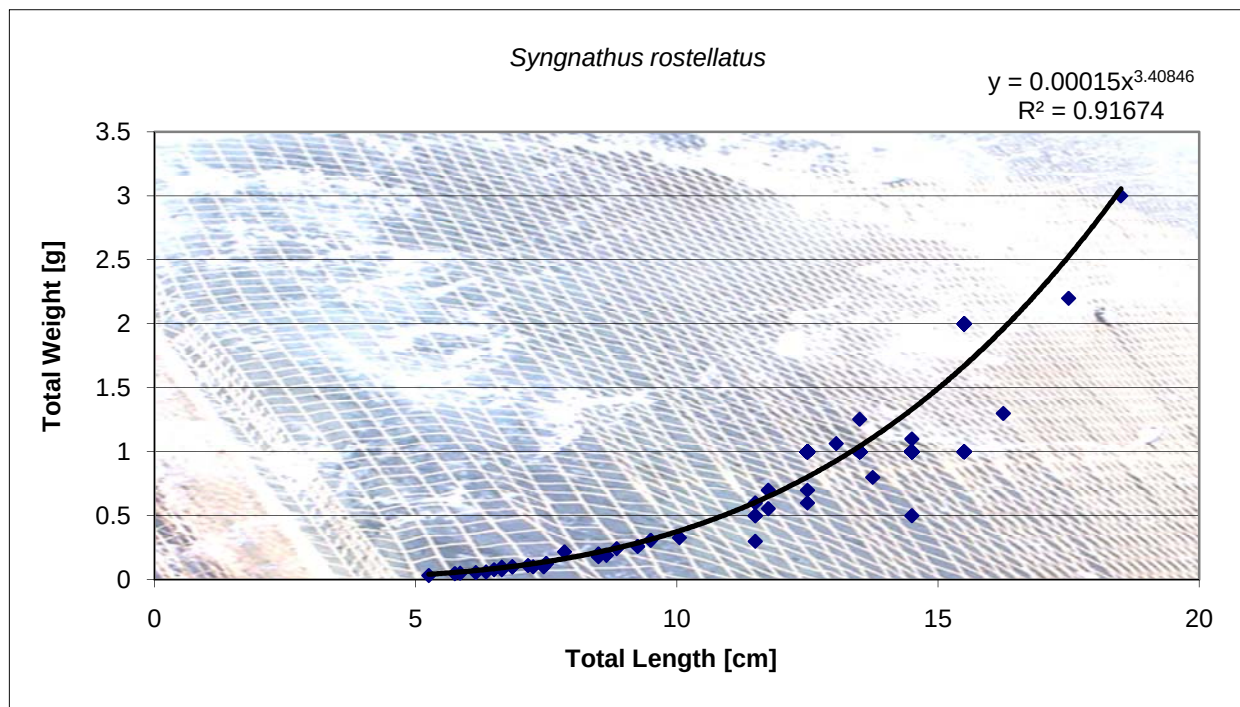
data collected

time period : 2000 - 2011

data source : research vessel

numbers of data:

Numbers of data																				
Quarter																				
1	2	3	4																	
66	29	68	21																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
58	7	1	6	23	-	8	28	32	4	6	11									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	184	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	1	183	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
-	-	1	1	-	181	1	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below, 1/2 cm below, mm below
 - min length 5.25 [cm]
 - max length 18.5 [cm]

male -

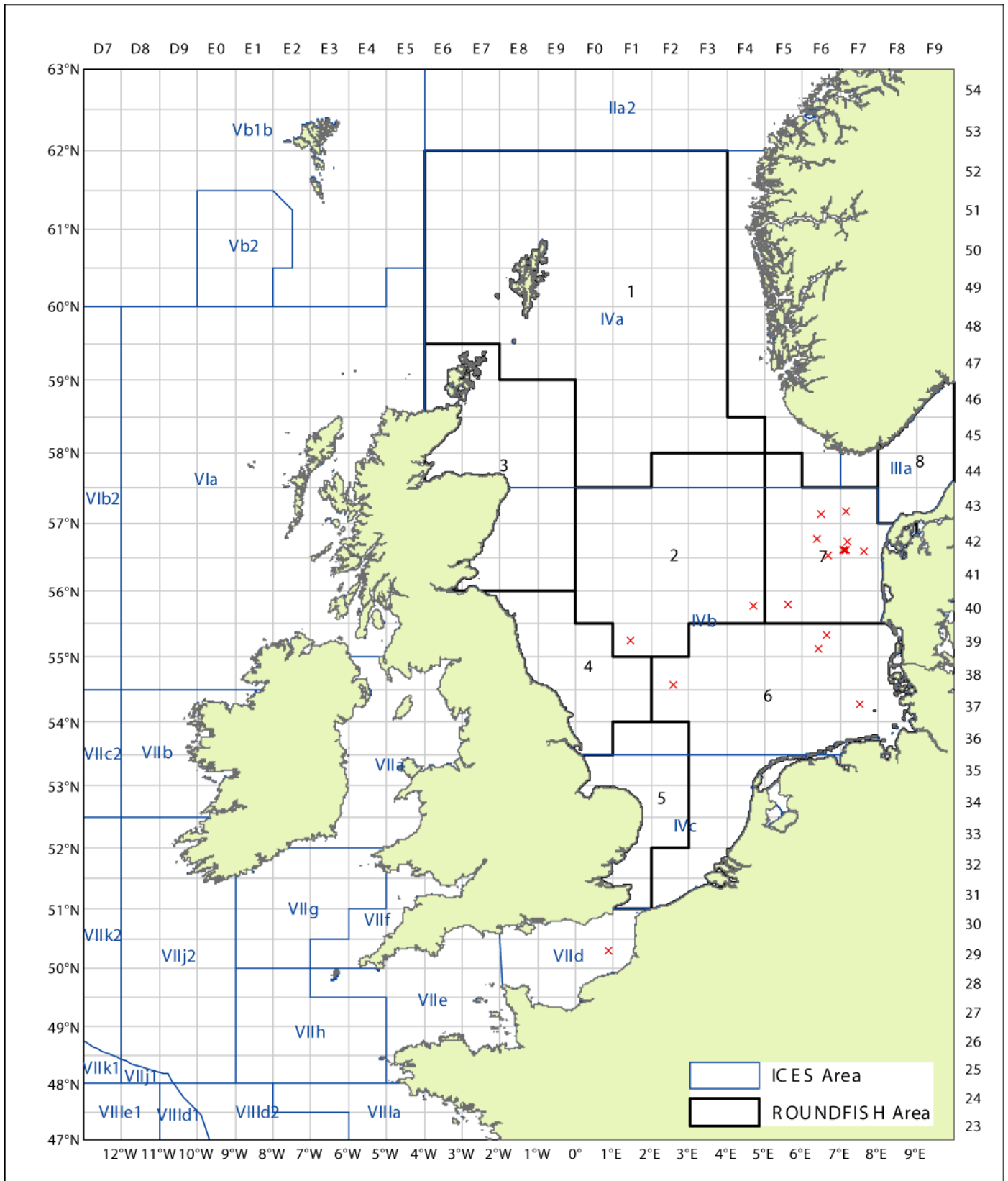
female -

undefined 184

total numbers of data 184

Trachinus draco

Geographical distribution of data used for calculating the length-weight relationship



Trachinus draco

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0061

b = 3.0482

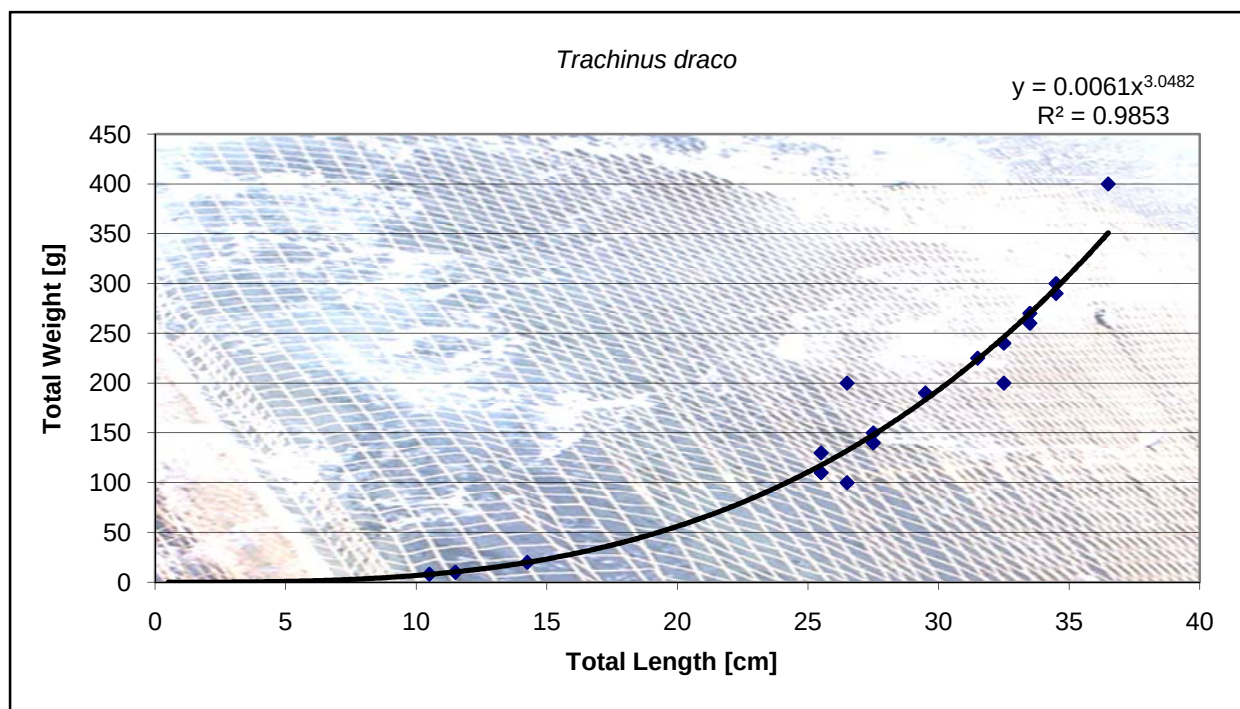
data collected

time period : 1961 - 2005

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
11	2	3	2																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
6	5	-	-	-	2	1	1	1	-	-	2								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	17	-	-	1	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	17	-	-	-	-	-	-	-	-	1	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
-	2	-	-	-	5	10	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

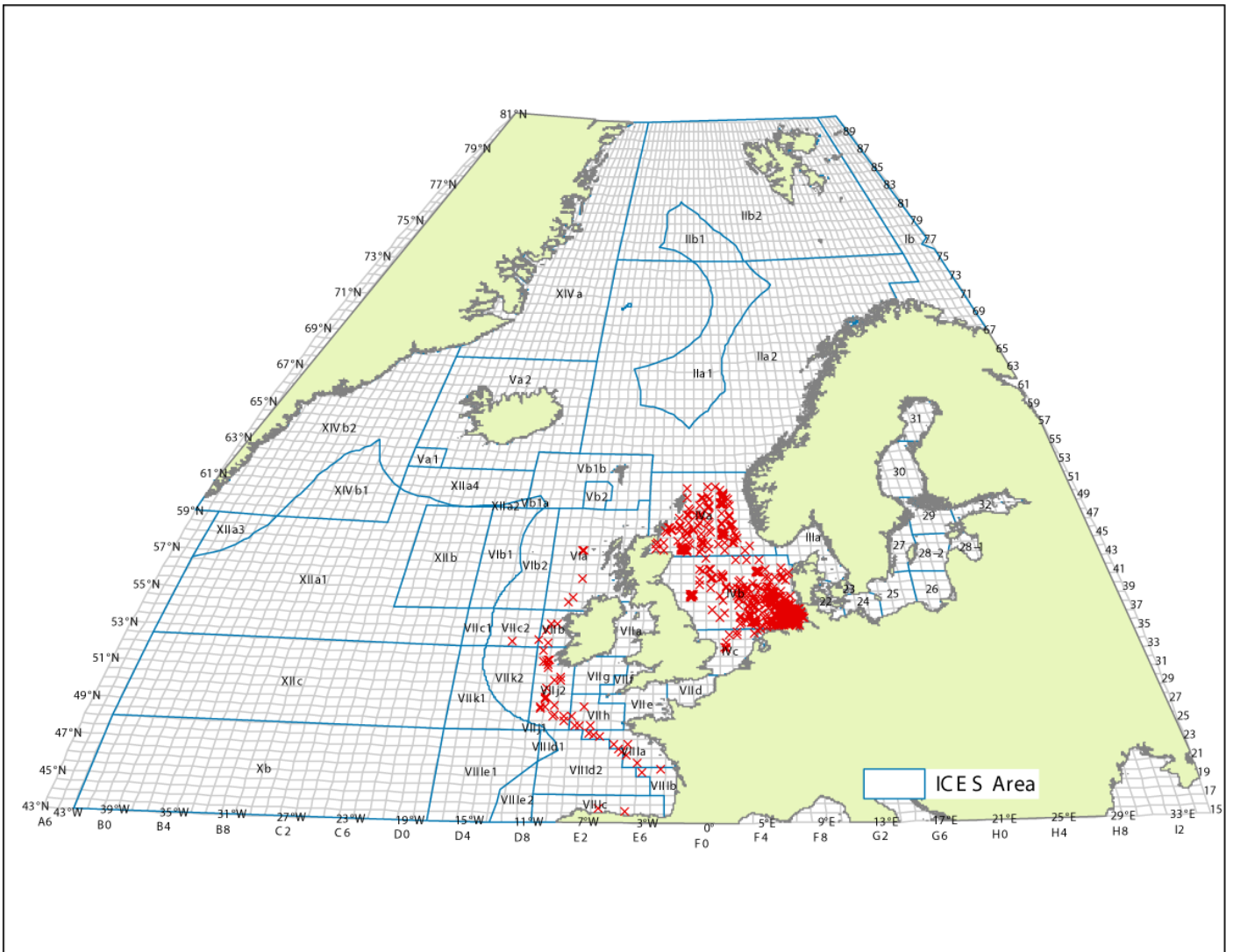
10.5 [cm]
36.5 [cm]

male -
female -
undefined 18

total numbers of data 18

Trachurus trachurus

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0112

b = 2.8824

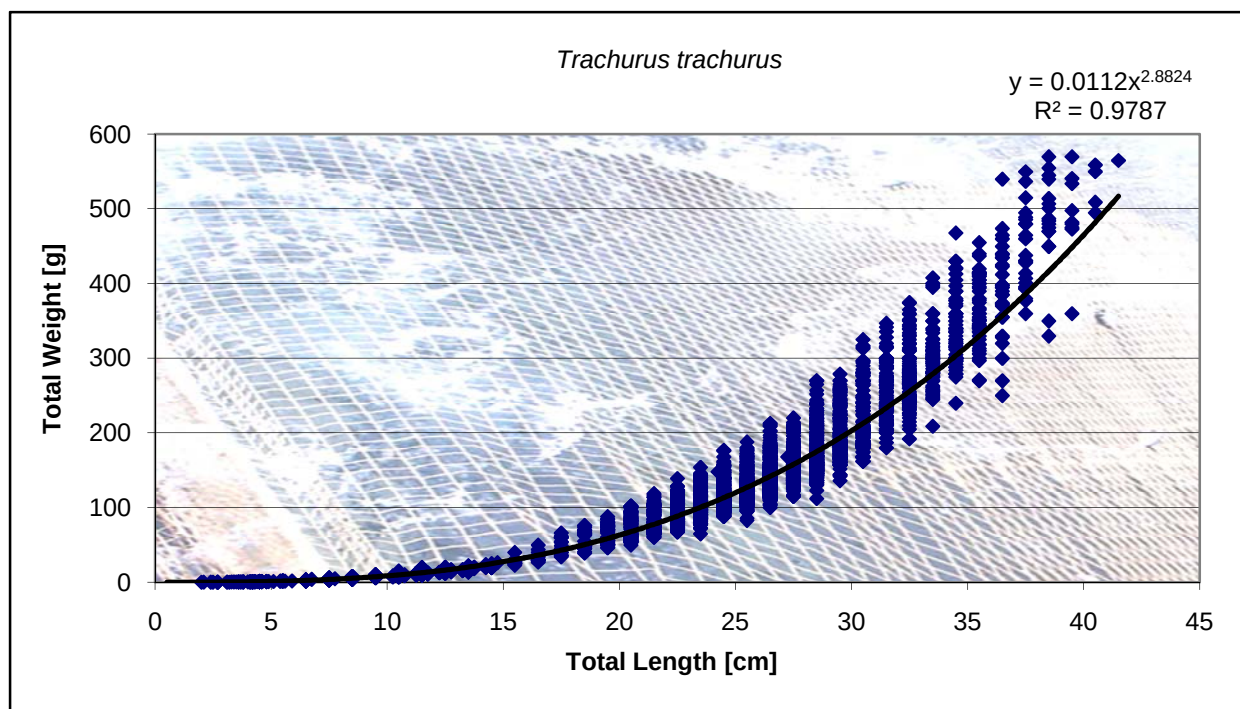
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
769	2031	977	38																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
173	166	430	1981	37	13	525	397	55	1	15	22								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1406	-	159	1865	385	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	285	1115	6	-	-	159	-	-	292	23	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	271	1279	-	325	7	34	19	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
156	136	122	41	7	811	133	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

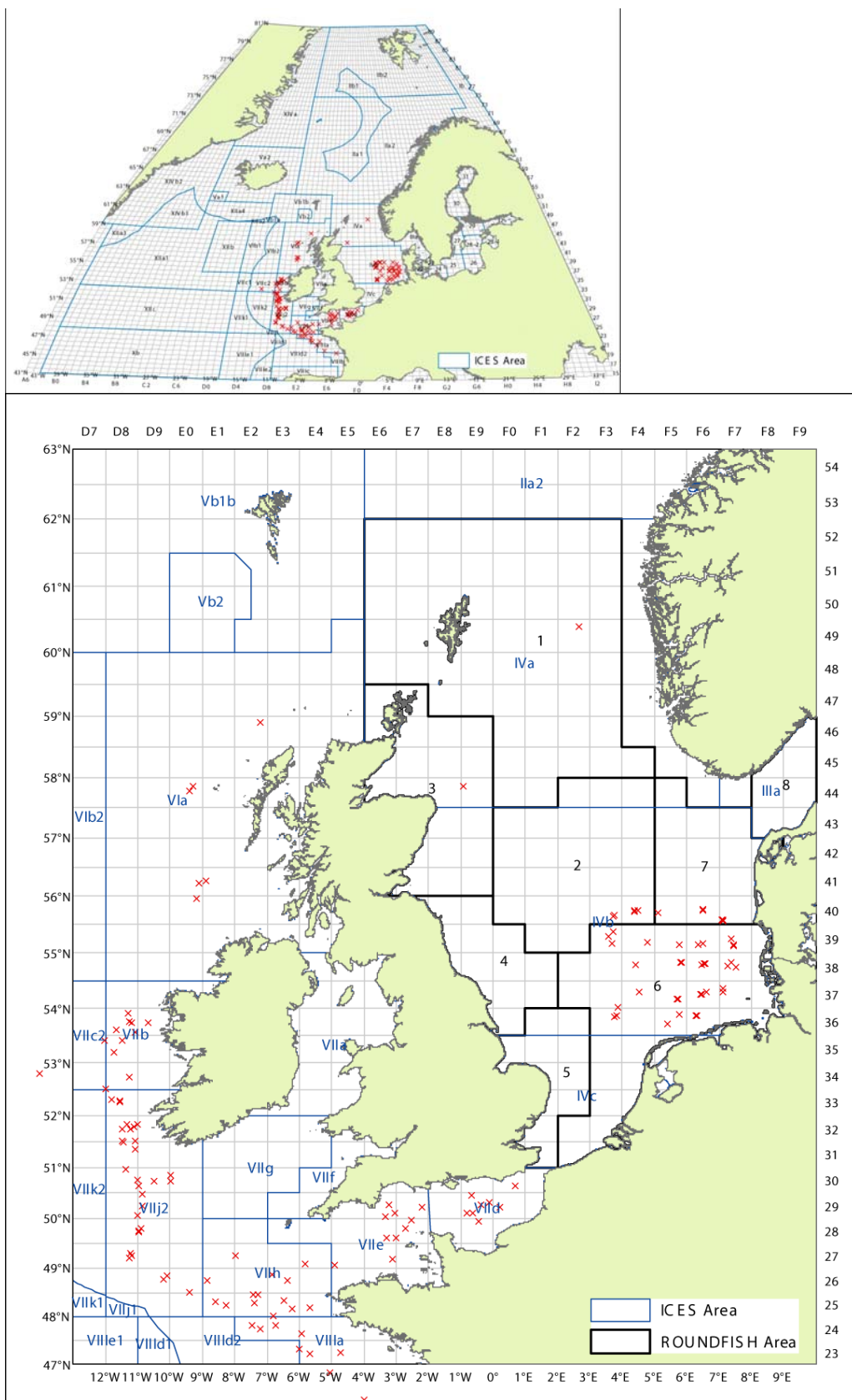
2.5 [cm]
41.5 [cm]

male
female
undefined

total numbers of data 3815

♀

length-weight relationship



Trachurus trachurus



Quarter: 1 - 4

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0177

b = 2.7566

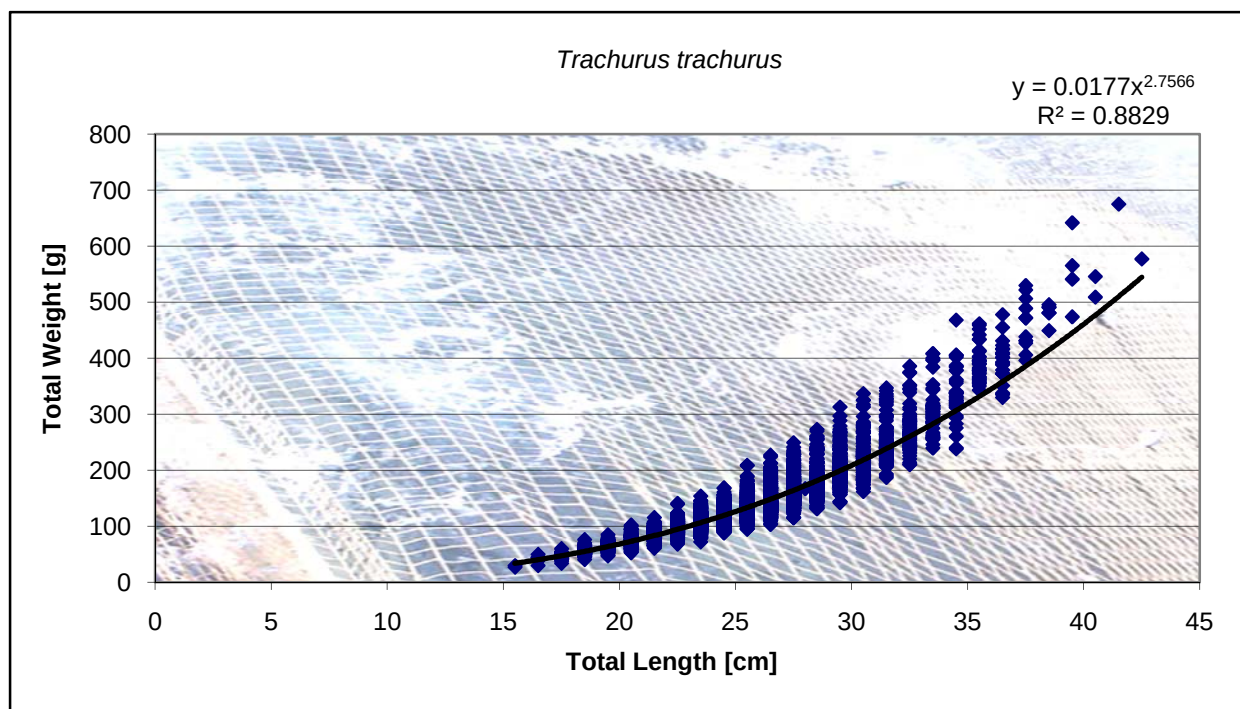
data collected

time period : 1998 - 2008

data source : research vessel, commercial trawler

numbers of data:

Numbers of data																				
Quarter																				
1	2	3	4																	
1496	1162	285	2150																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
221	936	339	904	-	258	172	113	-	1406	706	38									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	543	-	336	3818	396	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	3	540	-	-	-	336	-	-	566	64	744	719	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	566	1159	-	396	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
2	36	1	-	-	468	36	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

15.5 [cm]
42.5 [cm]

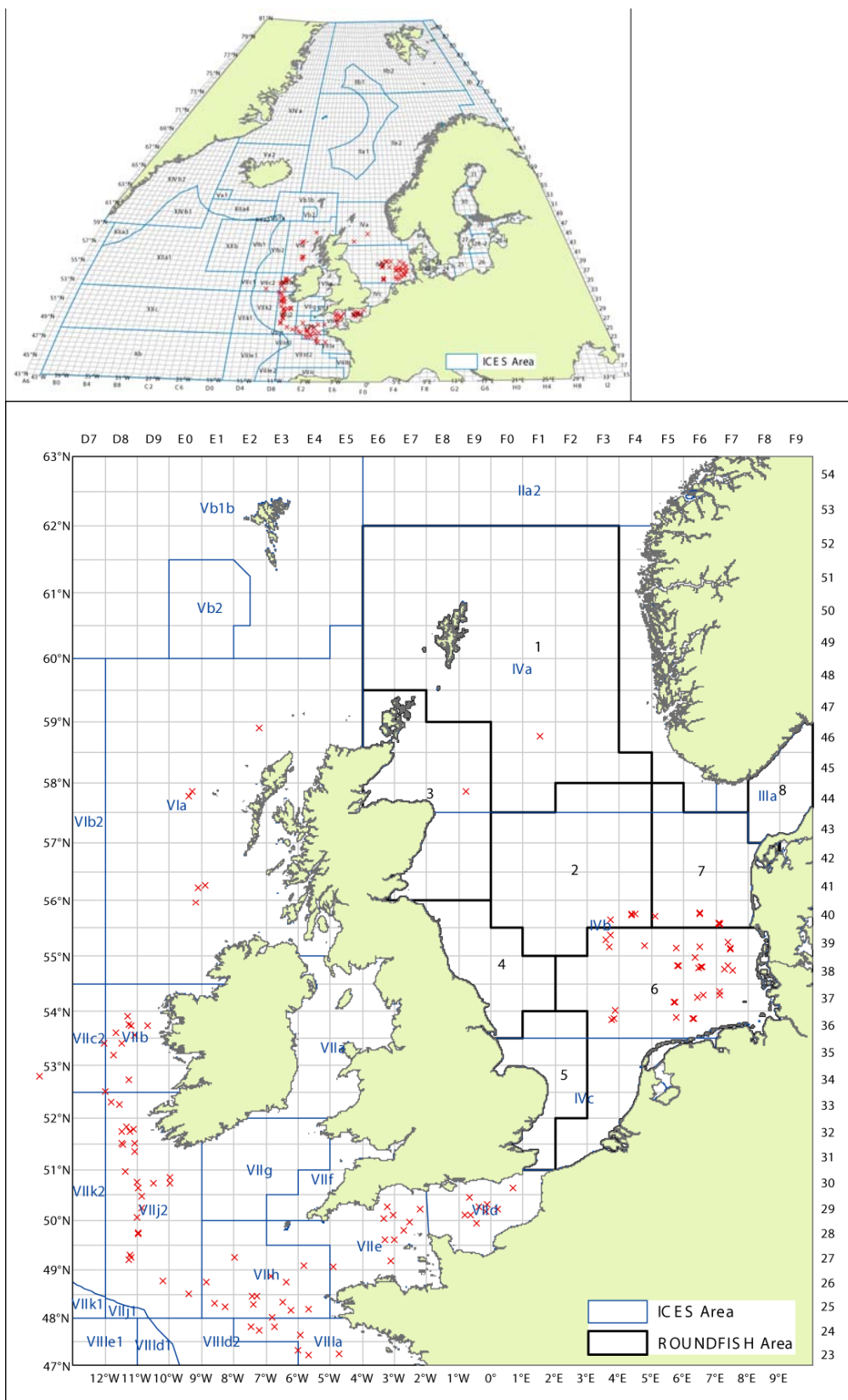
male
female
undefined

-
5093
-

total numbers of data 5093

Trachurus trachurus ♂

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus ♂

Quarter: 1 - 4

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0166

b = 2.7736

data collected

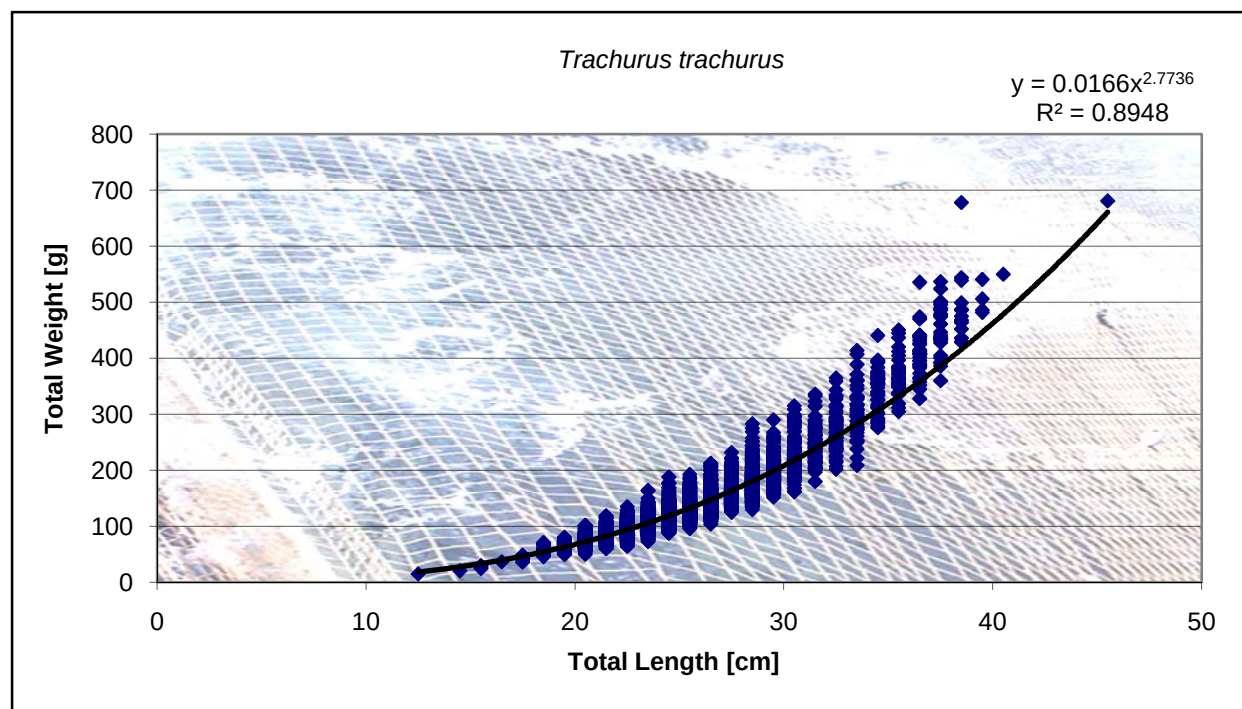
time period : 2002 - 2008

data source : research vessel, commercial trawler

numbers of data:

Numbers of data.

Quarter																			
1	2	3	4																
1557	1073	283	1798																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
272	925	360	927	-	146	184	99	-	1213	511	74								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	429	-	417	3534	331	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	2	427	-	-	-	417	-	-	481	93	574	651	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	530	1205	-	331	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
1	32	1	-	-	356	39	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

12.5 [cm]
45.5 [cm]

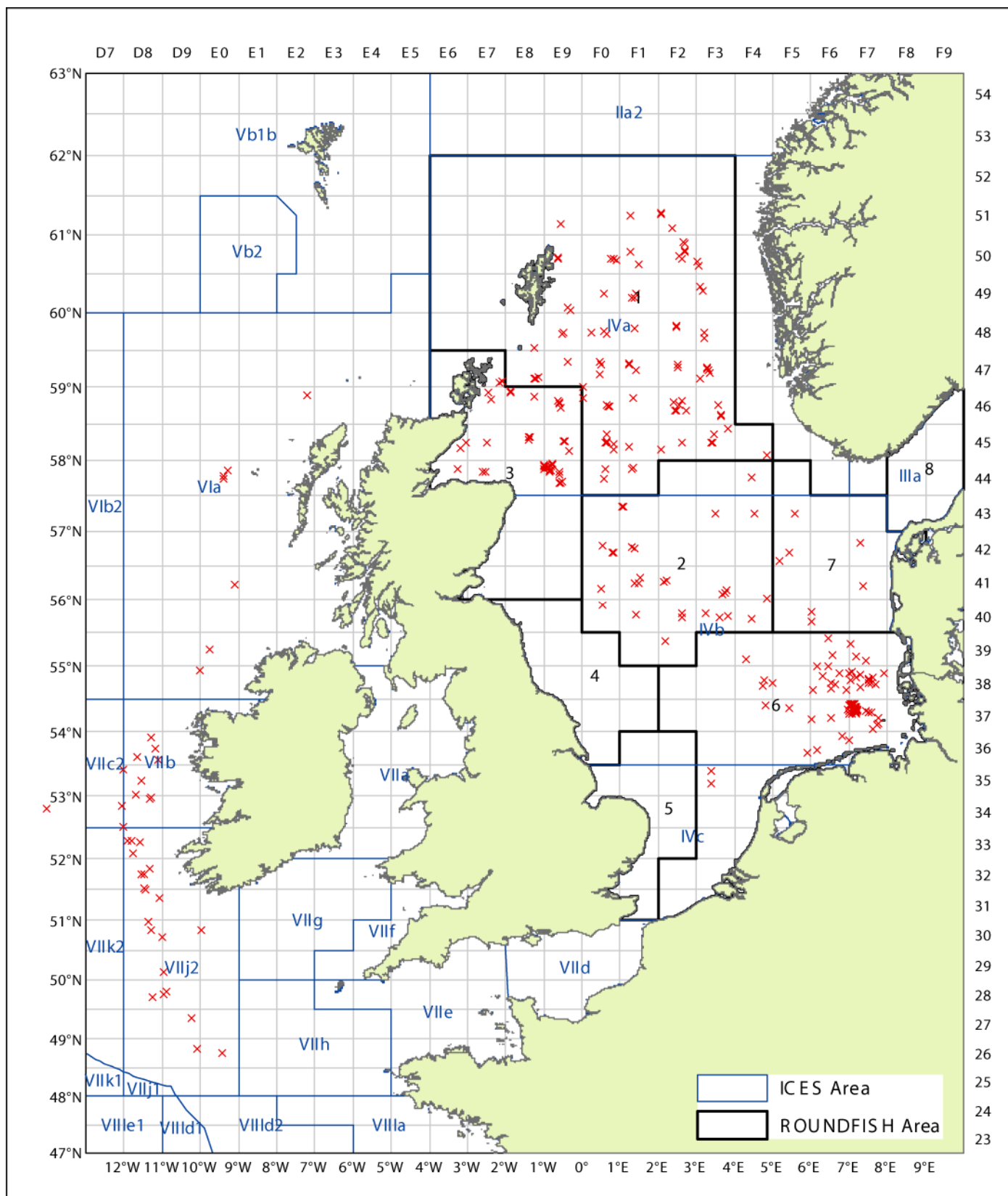
male
female
undefined

4711
-
-

total numbers of data 4711

Quarter 1

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

Quarter: 1

$$Tw [g] = a * L [cm]^b$$

a = 0.0072

b = 3.0172

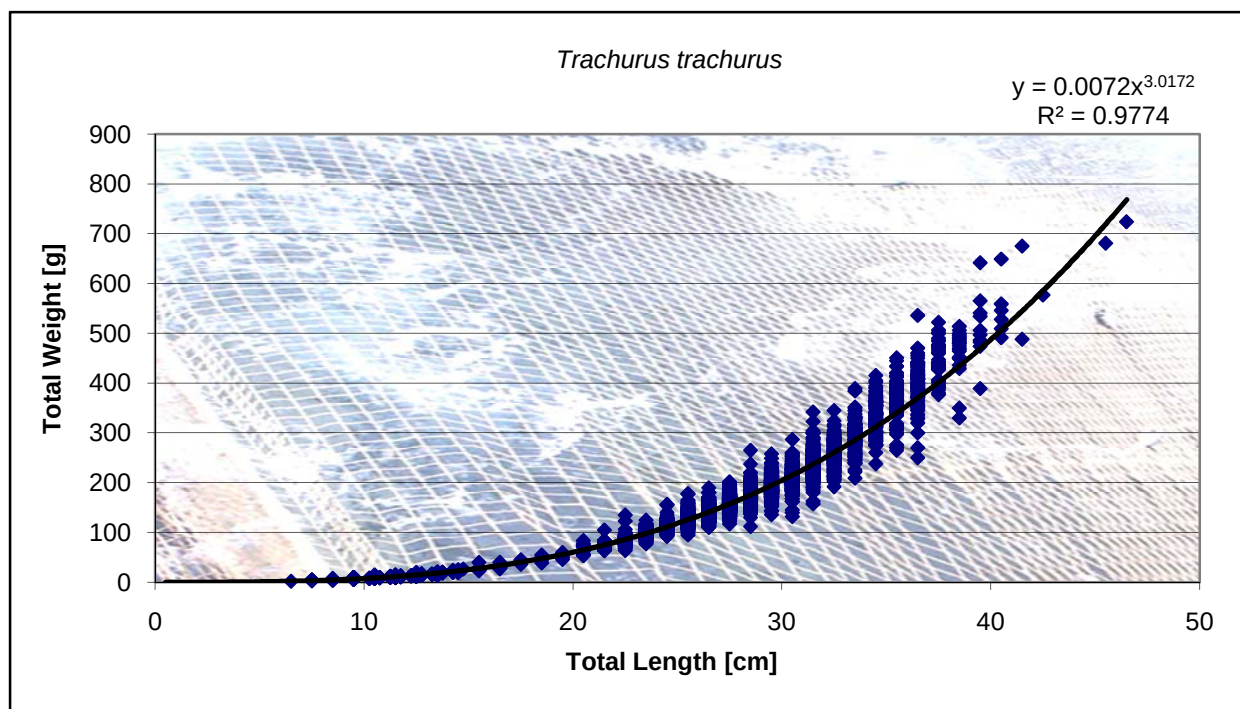
data collected

time period : 1994 - 2008

data source : research vessel, commercial trawler

numbers of data:

Numbers of fish																				
Quarter																				
1	2	3	4																	
3388	-	-	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
330	2289	769	-	-	-	-	-	-	-	-	-	-								
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	341	-	460	2587	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	183	158	-	-	-	460	-	-	860	314	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	1413	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
114	55	68	-	-	96	8	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

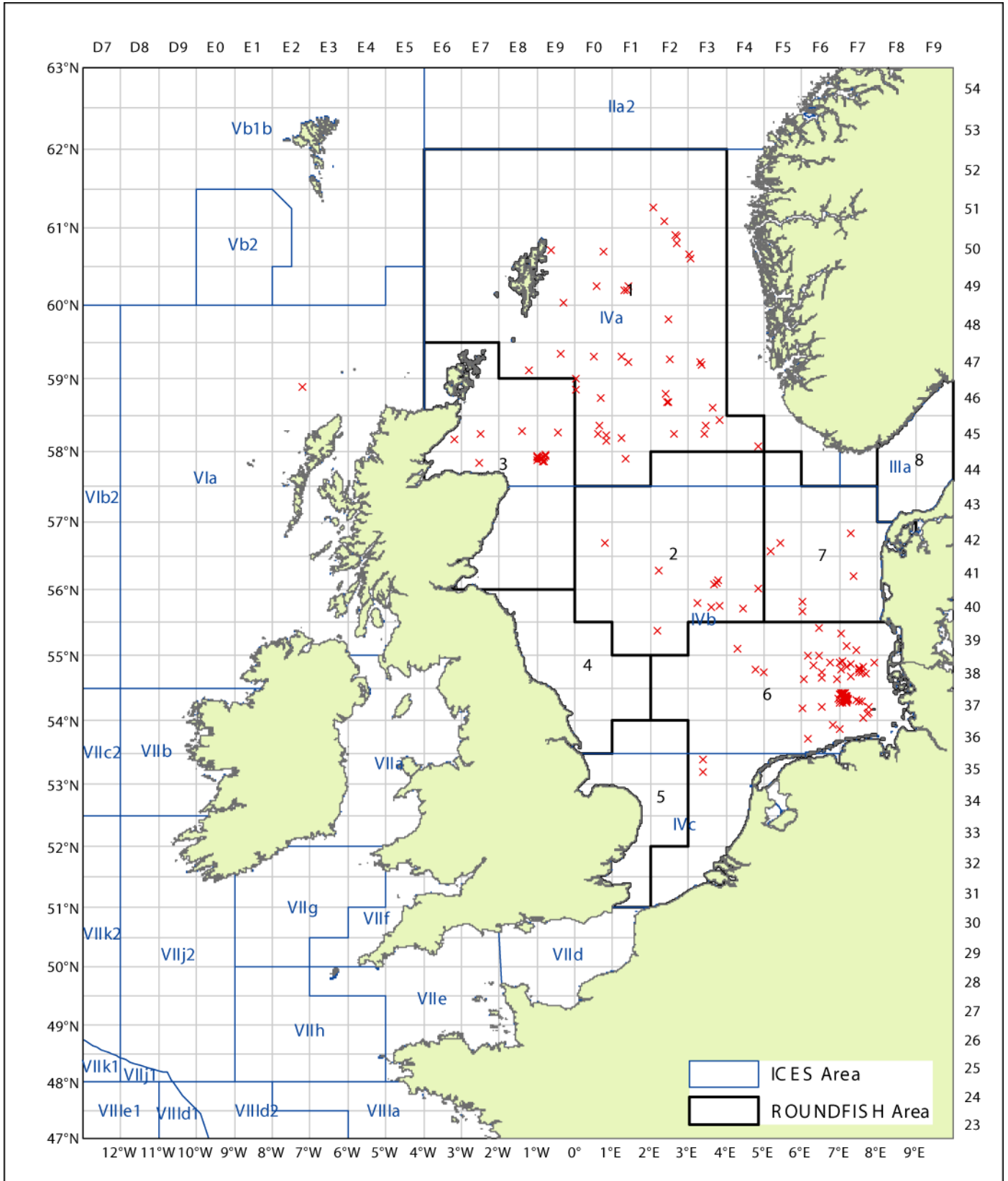
6.5 [cm]
46.5 [cm]

male 973
female 891
undefined 1523

total numbers of data 3388

Trachurus trachurus *January*

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

January

$$Tw [g] = a * L [cm]^b$$

a = 0.0073

b = 3.0281

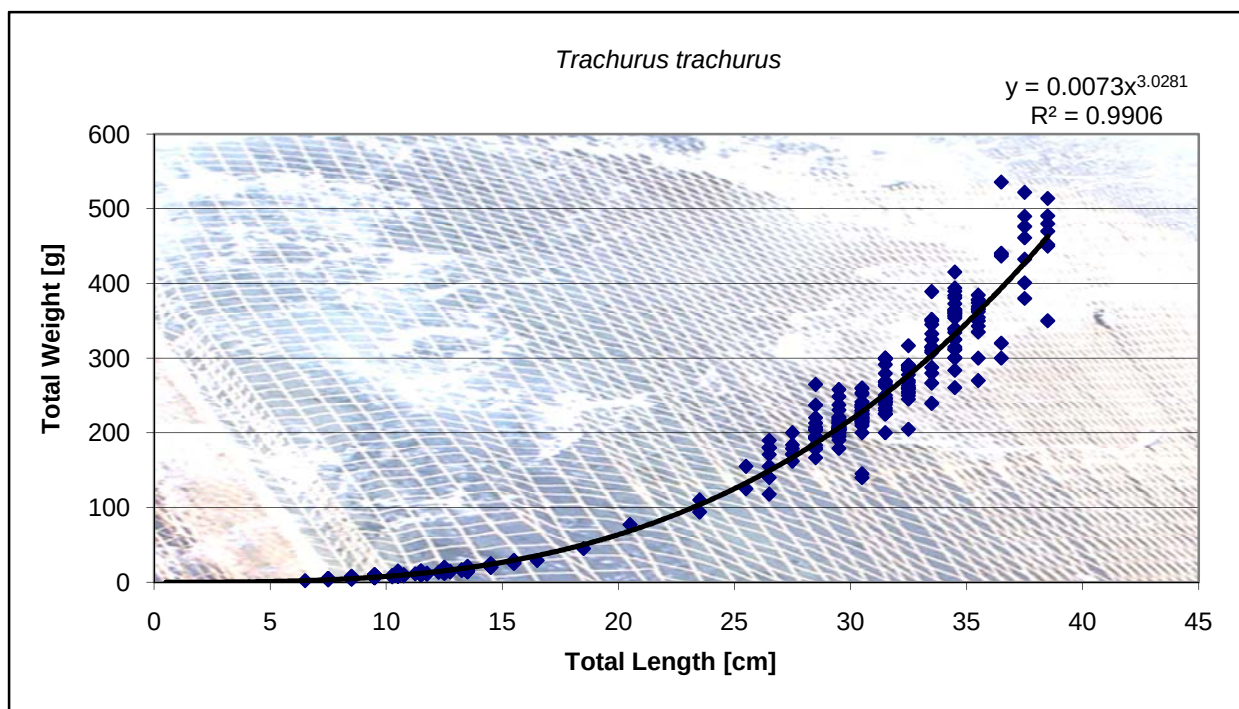
data collected

time period : 1994 - 2008

data source : research vessel, commercial trawler

numbers of data:

Numbers of fish																				
Quarter																				
1	2	3	4																	
330	-	-	-	-																
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
330	-	-	-	-	-	-	-	-	-	-	-	-								
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	173	-	157	-	-	-	-	-	-	-								
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	68	105	-	-	-	157	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
44	10	23	-	-	89	7	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

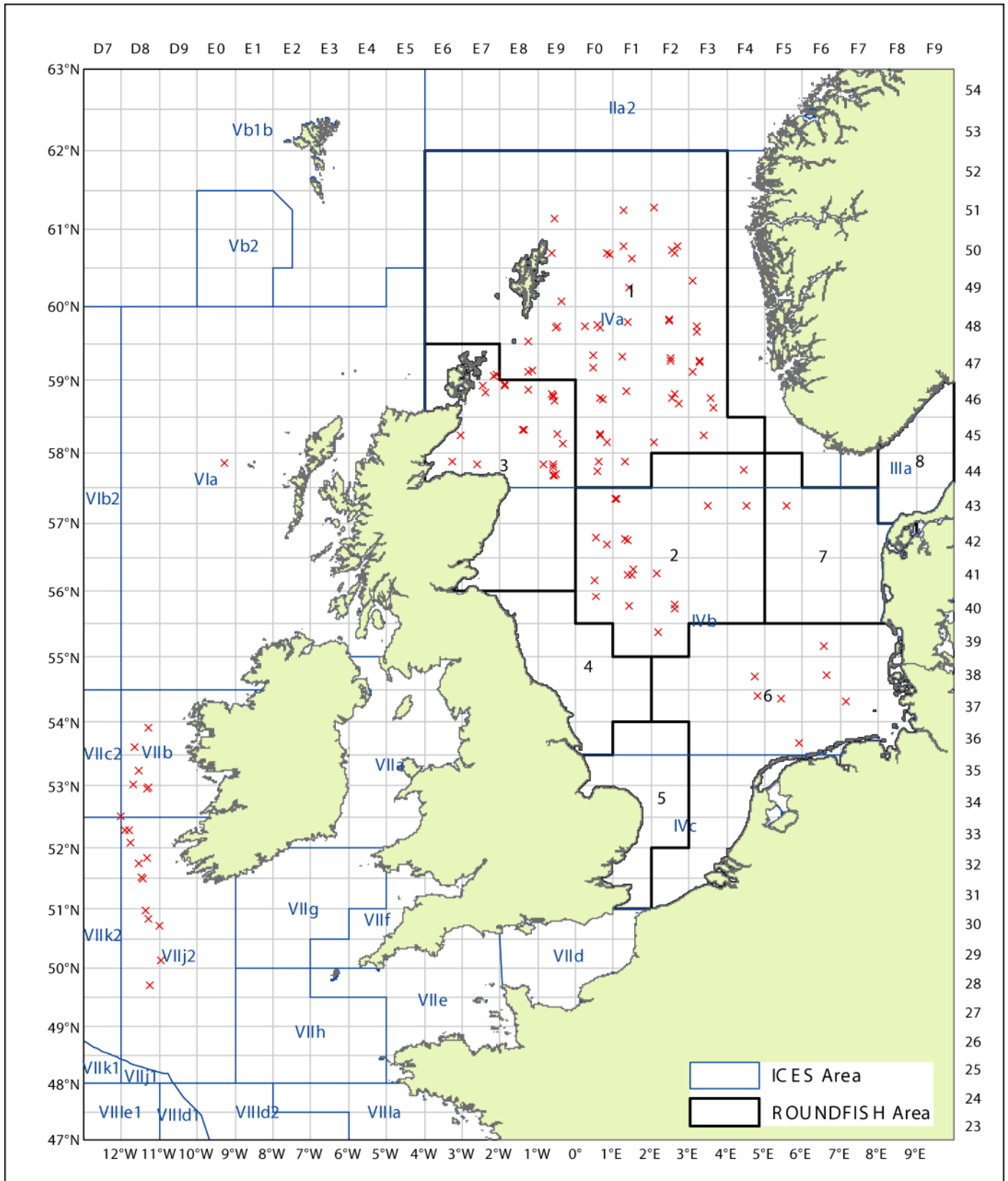
6.5 [cm]
38.5 [cm]

male 108
female 37
undefined 185

total numbers of data 330

Trachurus trachurus February

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

February

$$Tw [g] = a * L [cm]^b$$

a = 0.0065

b = 3.0504

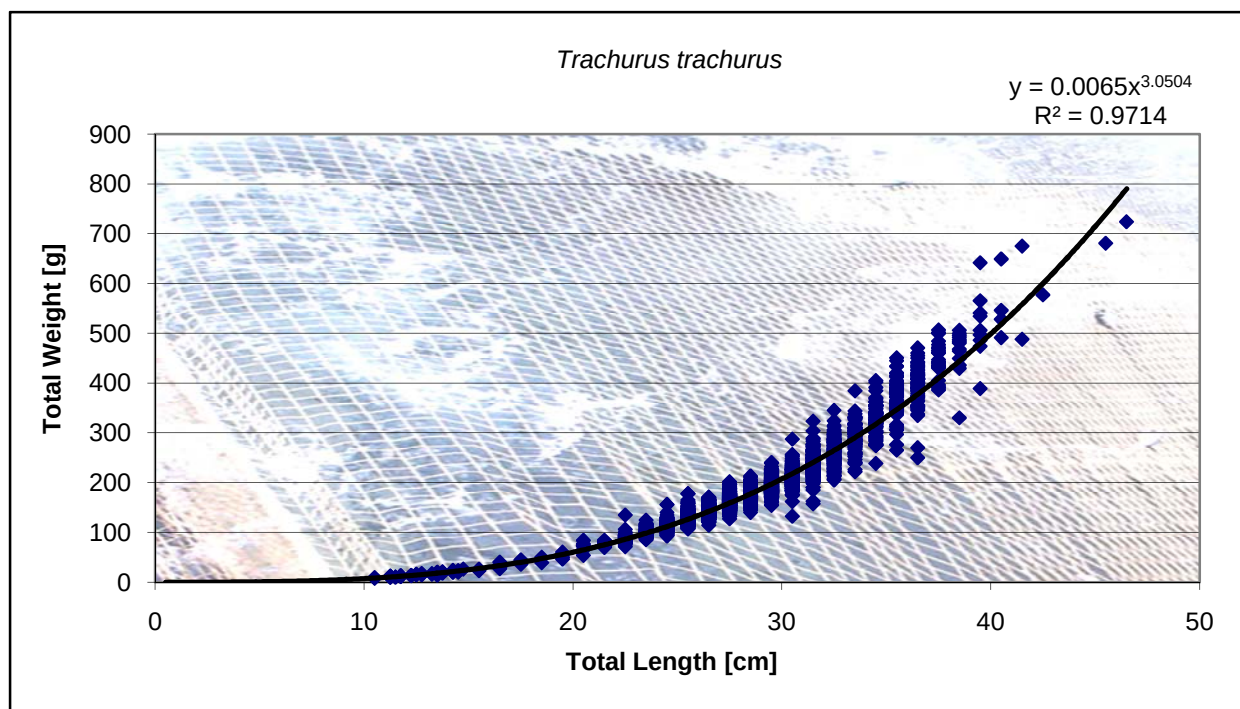
data collected

time period : 1995 - 2008

data source : research vessel, commercial trawler

numbers of data:

Numbers of catch																				
Quarter																				
1	2	3	4																	
2289	-	-	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	2289	-	-	-	-	-	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	166	-	144	1979	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	113	53	-	-	-	144	-	-	474	291	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	1214	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
68	45	45	-	-	7	1	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

10.5 [cm]
46.5 [cm]

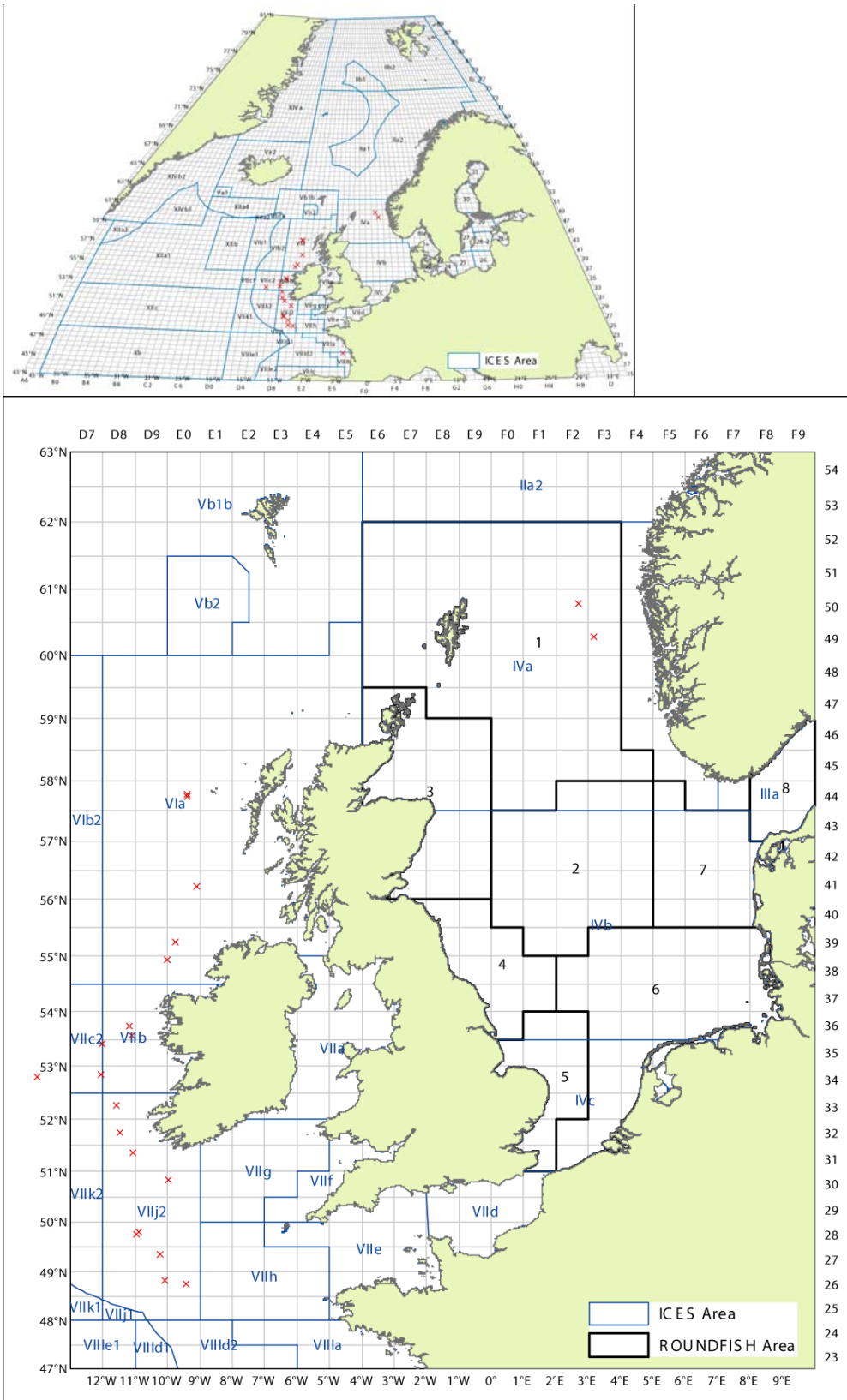
male
female
undefined

504
514
1270

total numbers of data 2289

Trachurus trachurus *March*

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

March

$$Tw [g] = a * L [cm]^b$$

a = 0.0073

b = 2.9946

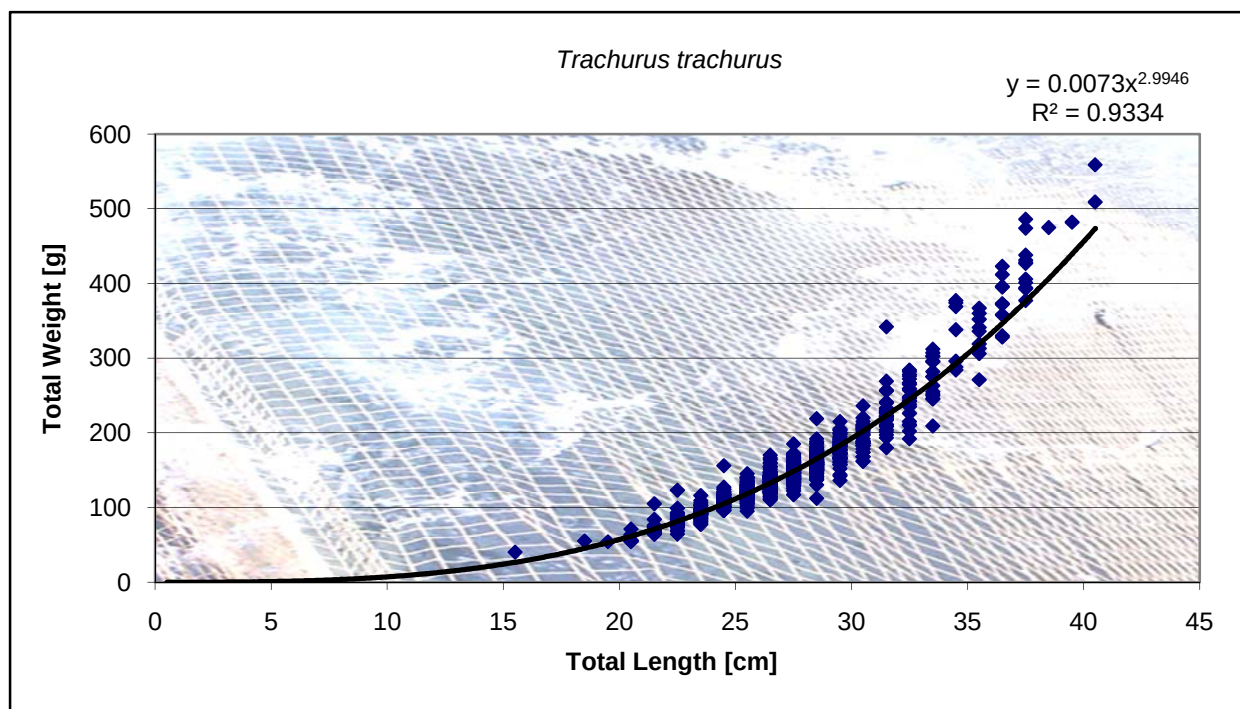
data collected

time period : 1994 - 2007

data source : research vessel, commercial trawler

numbers of data:

Quarter																			
1	2	3	4																
769	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	769	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	2	-	159	608	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	2	-	-	-	-	159	-	-	386	23	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	199	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
2	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

15.5 [cm]
40.5 [cm]

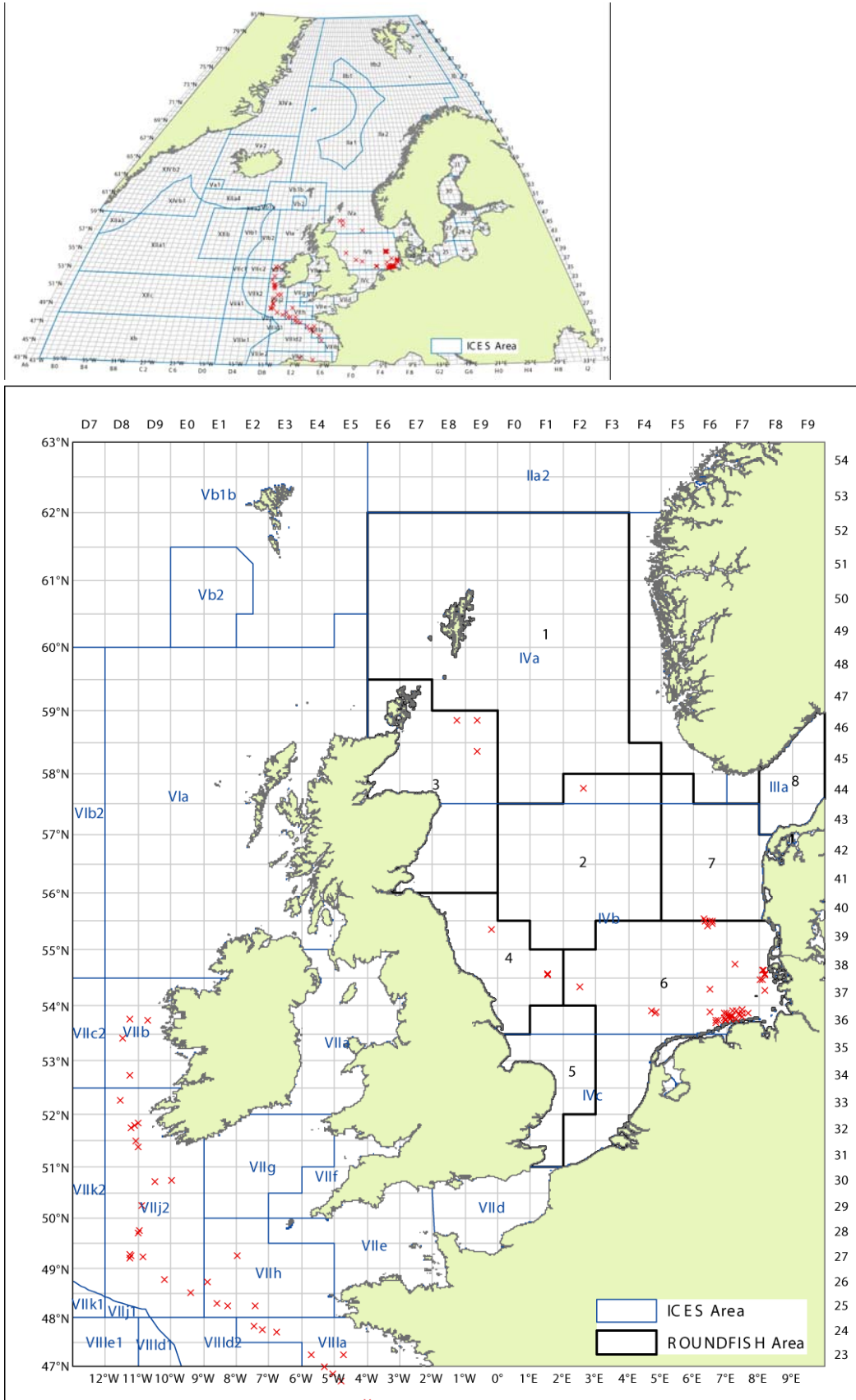
male
female
undefined

361
340
68

total numbers of data 769

Trachurus trachurus Quarter 2

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

Quarter: 2

$$Tw [g] = a * L [cm]^b$$

a = 0.0068

b = 3.0168

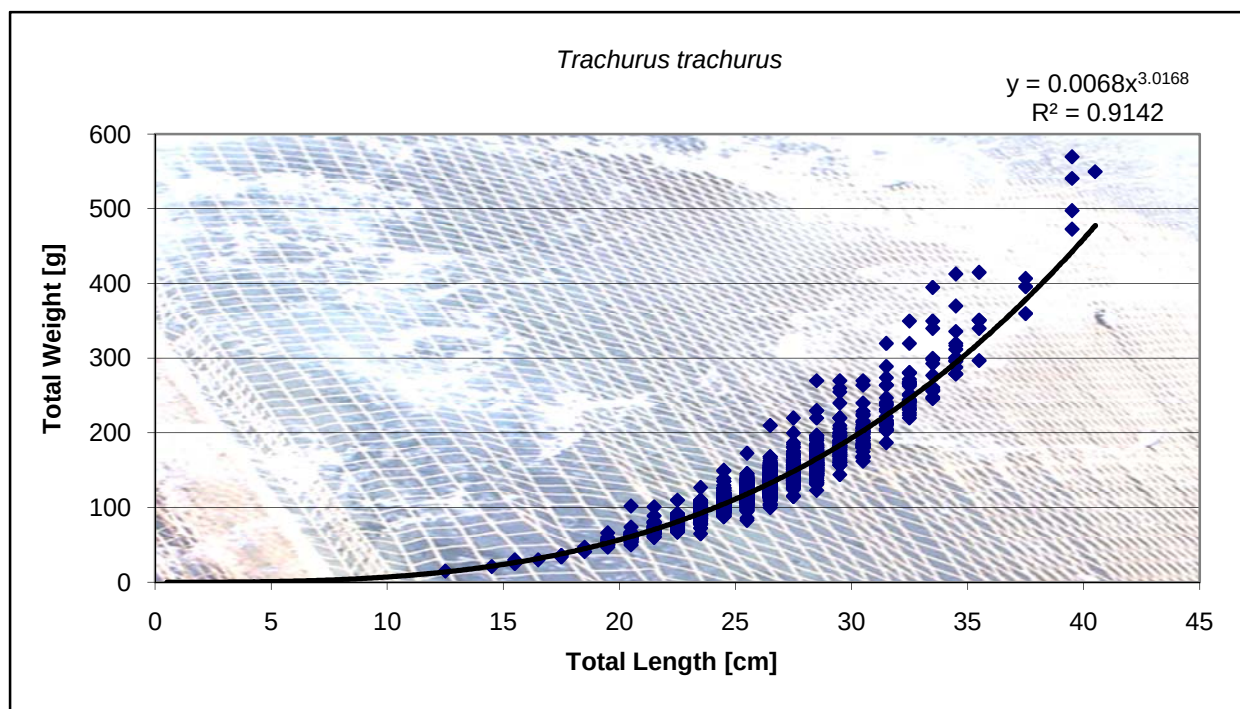
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Numbers of fish																			
Quarter																			
1	2	3	4																
-	2030	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	1981	36	13	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	49	-	-	1596	385	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	4	45	-	-	-	-	-	-	245	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	271	1080	-	325	7	34	19	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
-	1	3	1	-	42	2	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

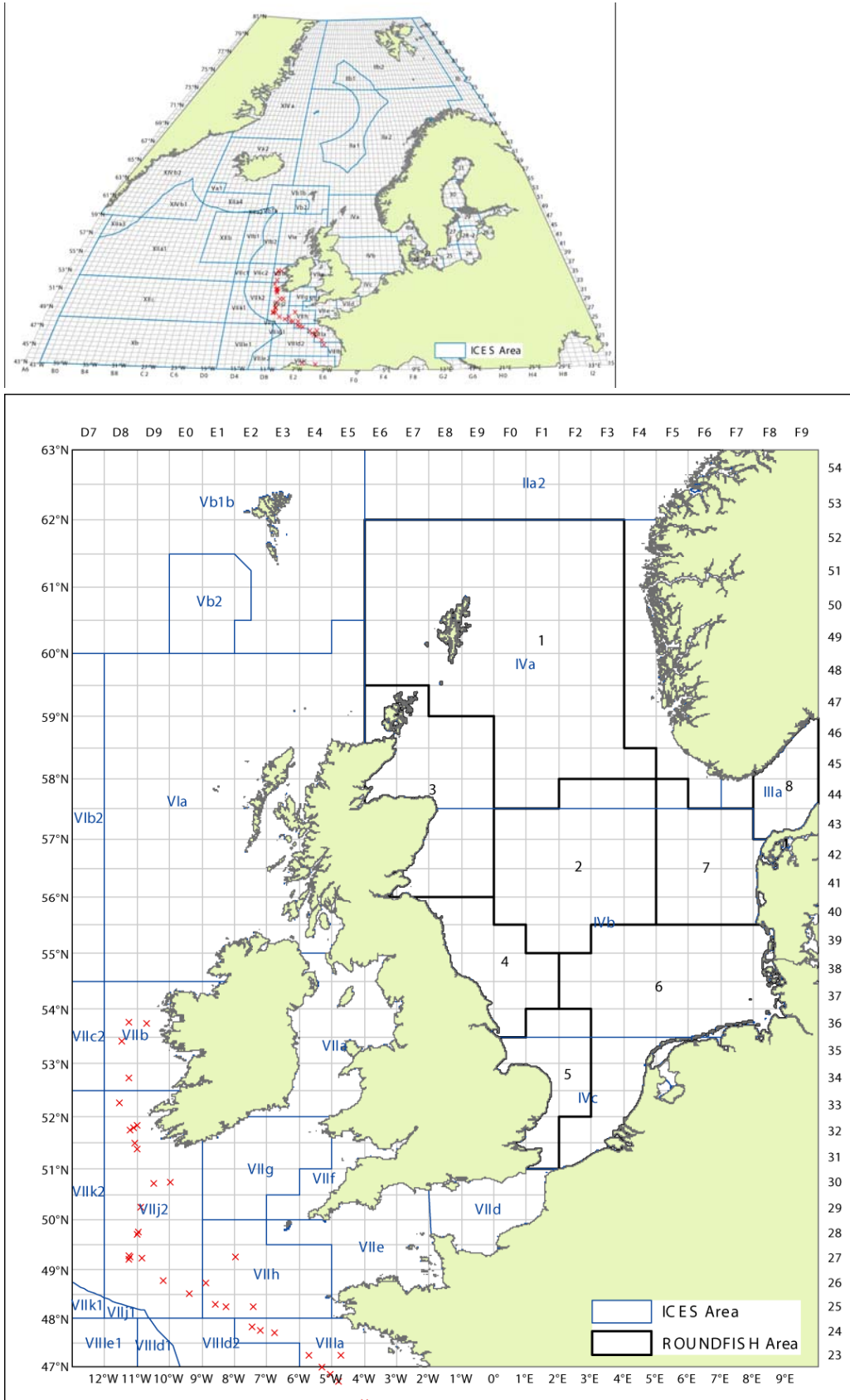
12.5 [cm]
40.5 [cm]

male 930
female 906
undefined 194

total numbers of data 2030

Trachurus trachurus April

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

April

$$Tw [g] = a * L [cm]^b$$

a = 0.0082

b = 2.9564

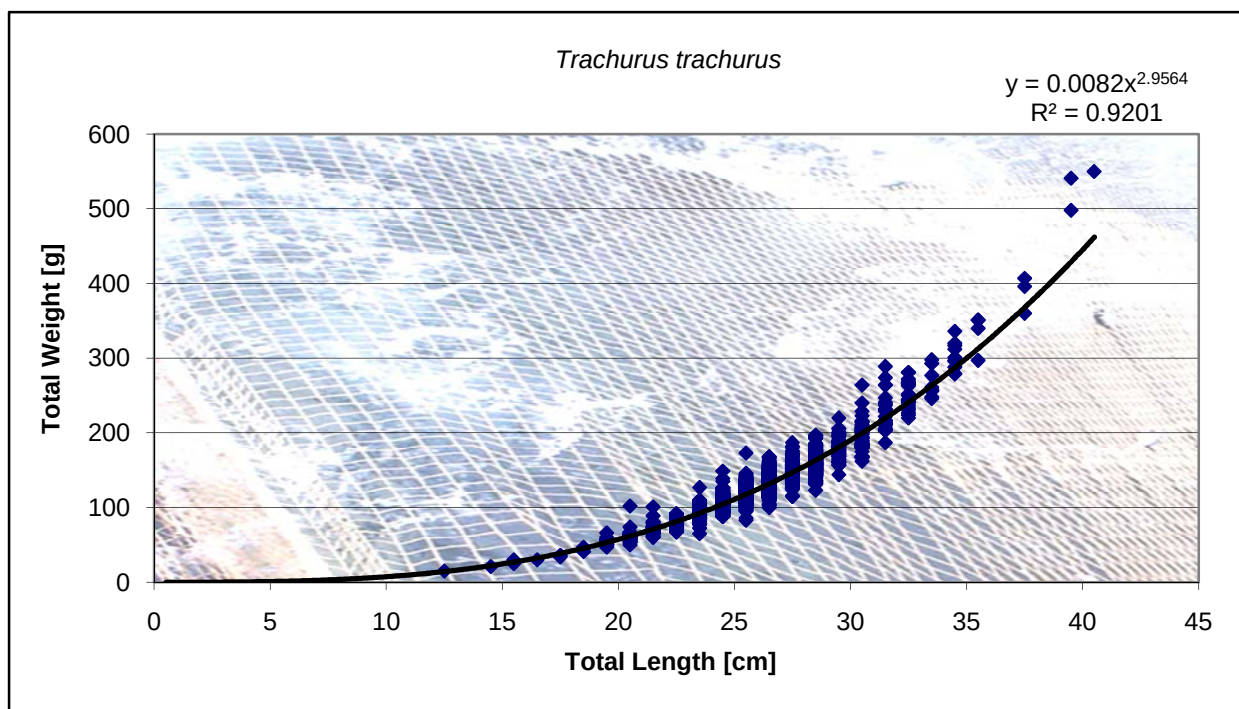
data collected

time period : 1998 - 2007

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
-	1981	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	1981	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	-	-	-	1596	385	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	245	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	271	1080	-	325	7	34	19	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
-	-	-	-	-	-	-	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

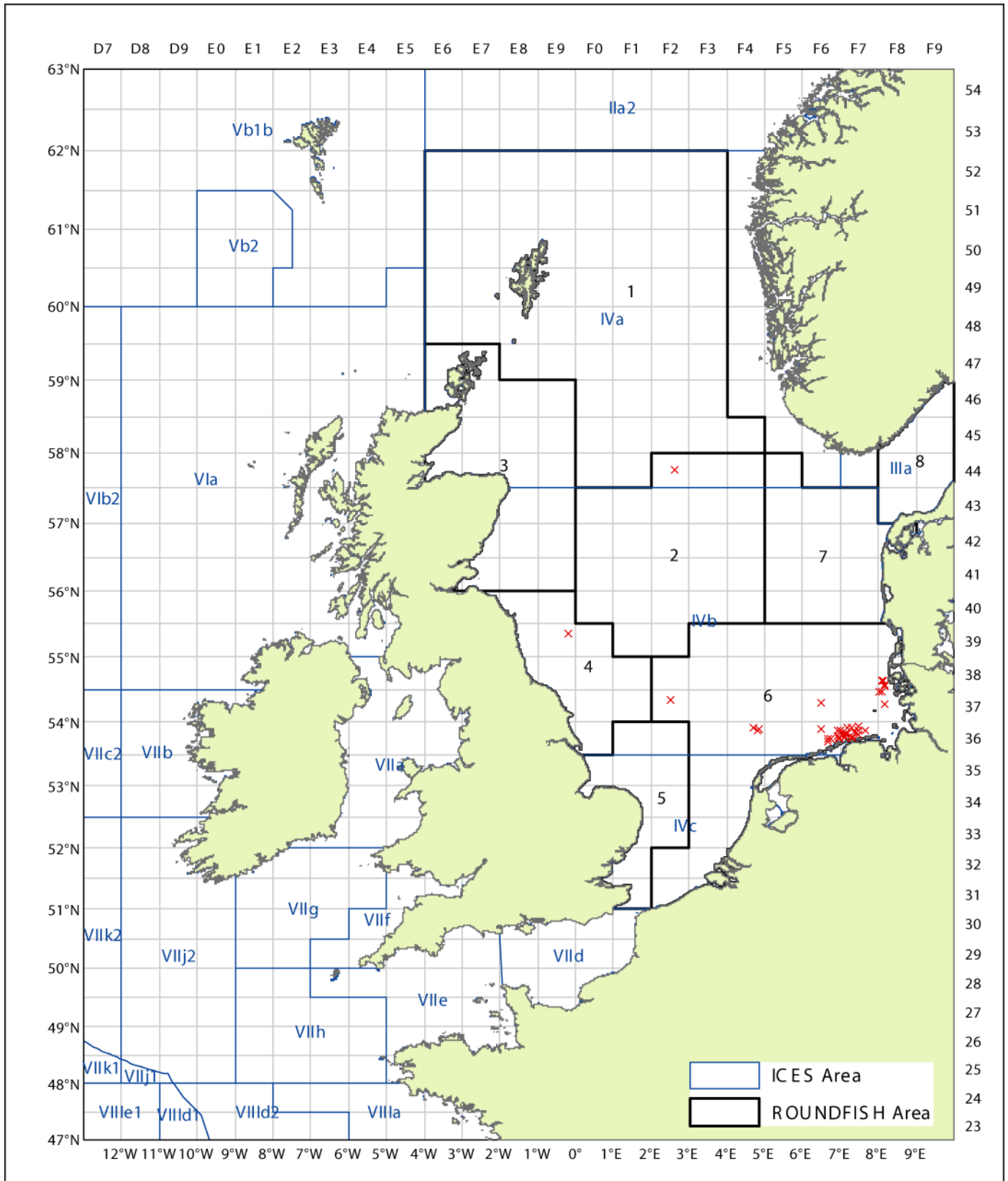
12.5 [cm]
40.5 [cm]

male 930
female 906
undefined 145

total numbers of data 1981

Trachurus trachurus May

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

May

$$Tw [g] = a * L [cm]^b$$

a = 0.0099

b = 2.9721

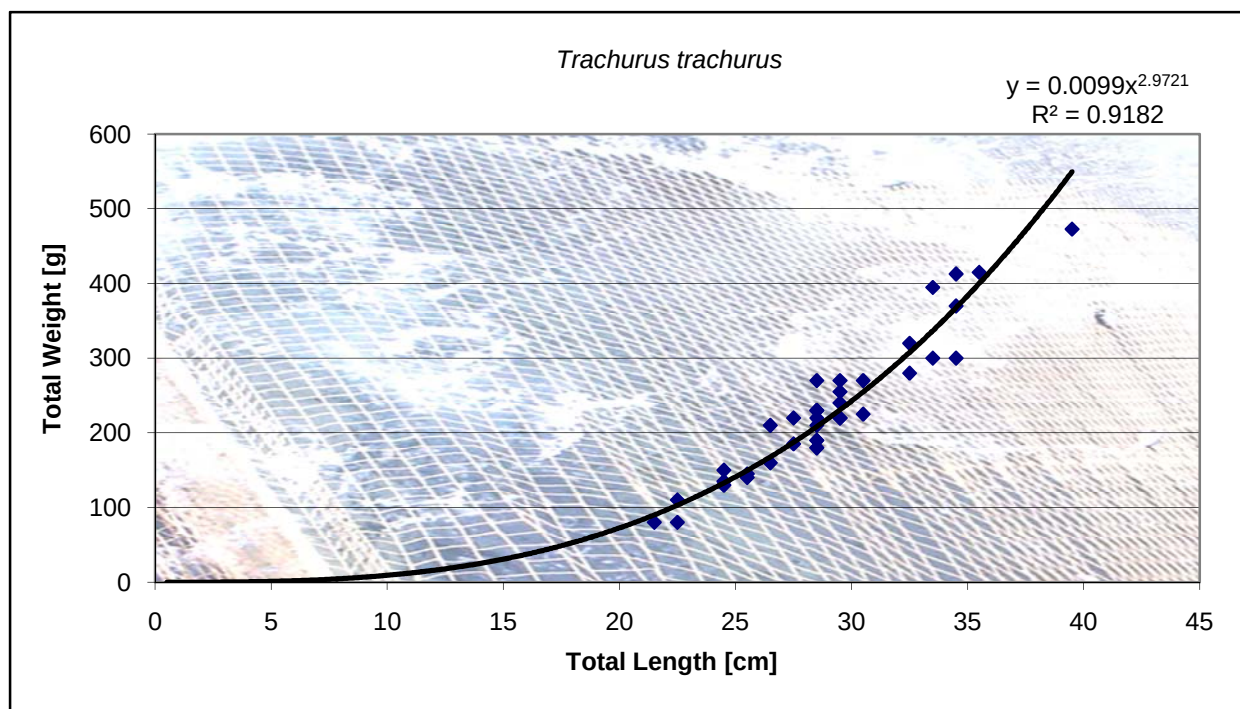
data collected

time period : 1994 - 2005

data source : research vessel

numbers of data:

Numbers of data																				
Quarter																				
1	2	3	4																	
-	37	-	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	37	-	-	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	37	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	1	36	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	1	-	1	-	35	-	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

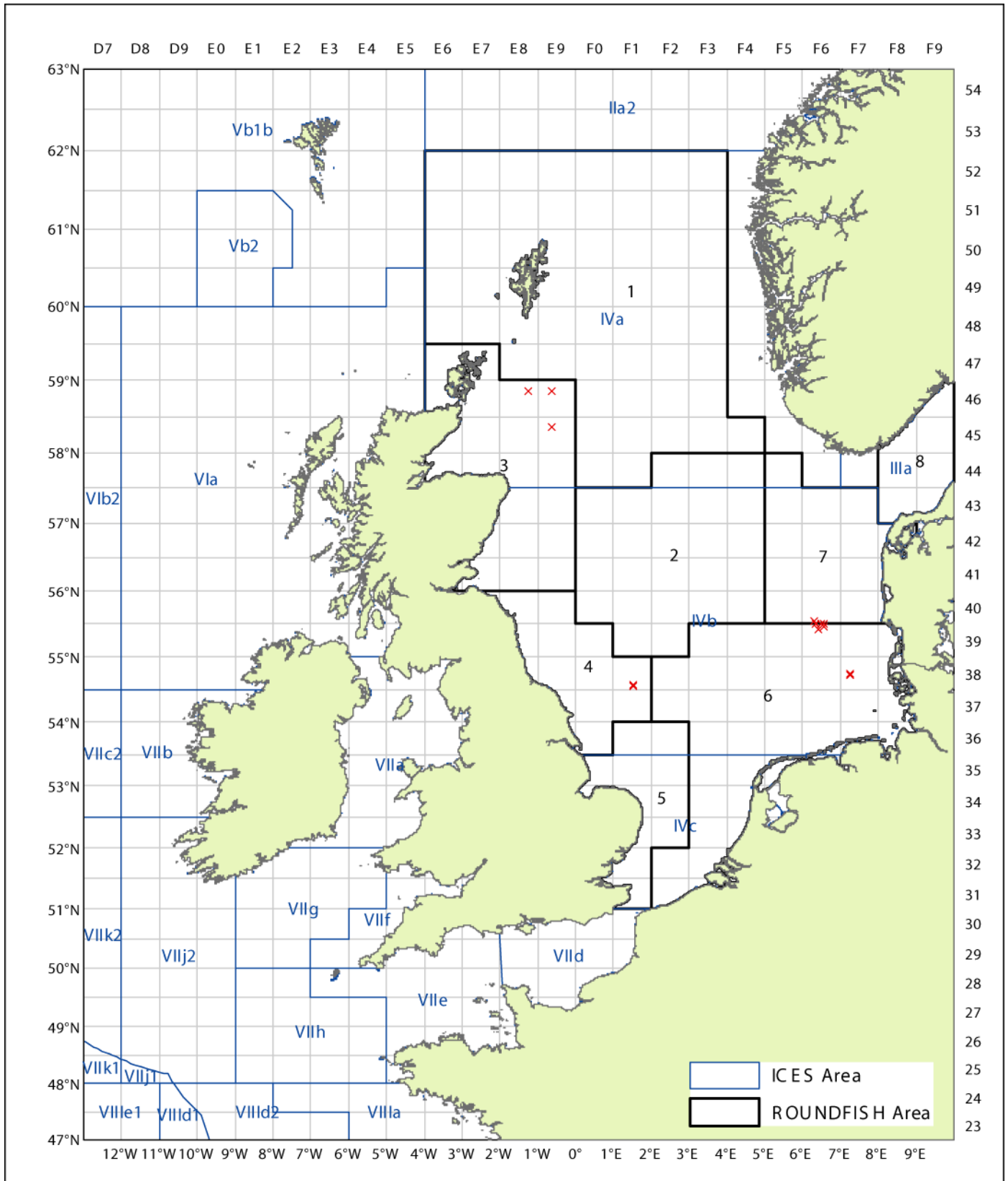
21.5 [cm]
39.5 [cm]

male -
female -
undefined 37

total numbers of data 37

Trachurus trachurus June

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

June

$$Tw [g] = a * L [cm]^b$$

a = 0.0021

b = 3.4271

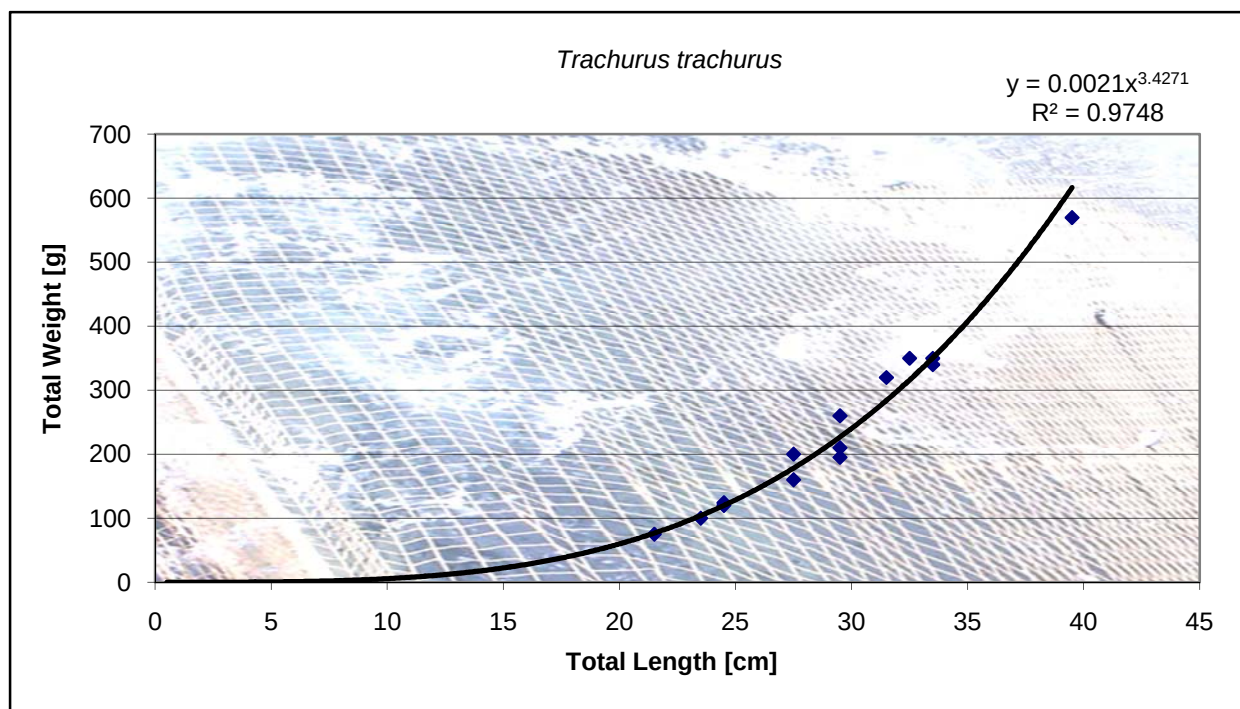
data collected

time period : 1994 - 2005

data source : research vessel

numbers of data:

Numbers of fish																				
Quarter																				
1	2	3	4																	
-	14	-	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	14	-	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	14	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	3	11	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
-	-	3	-	-	9	2	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

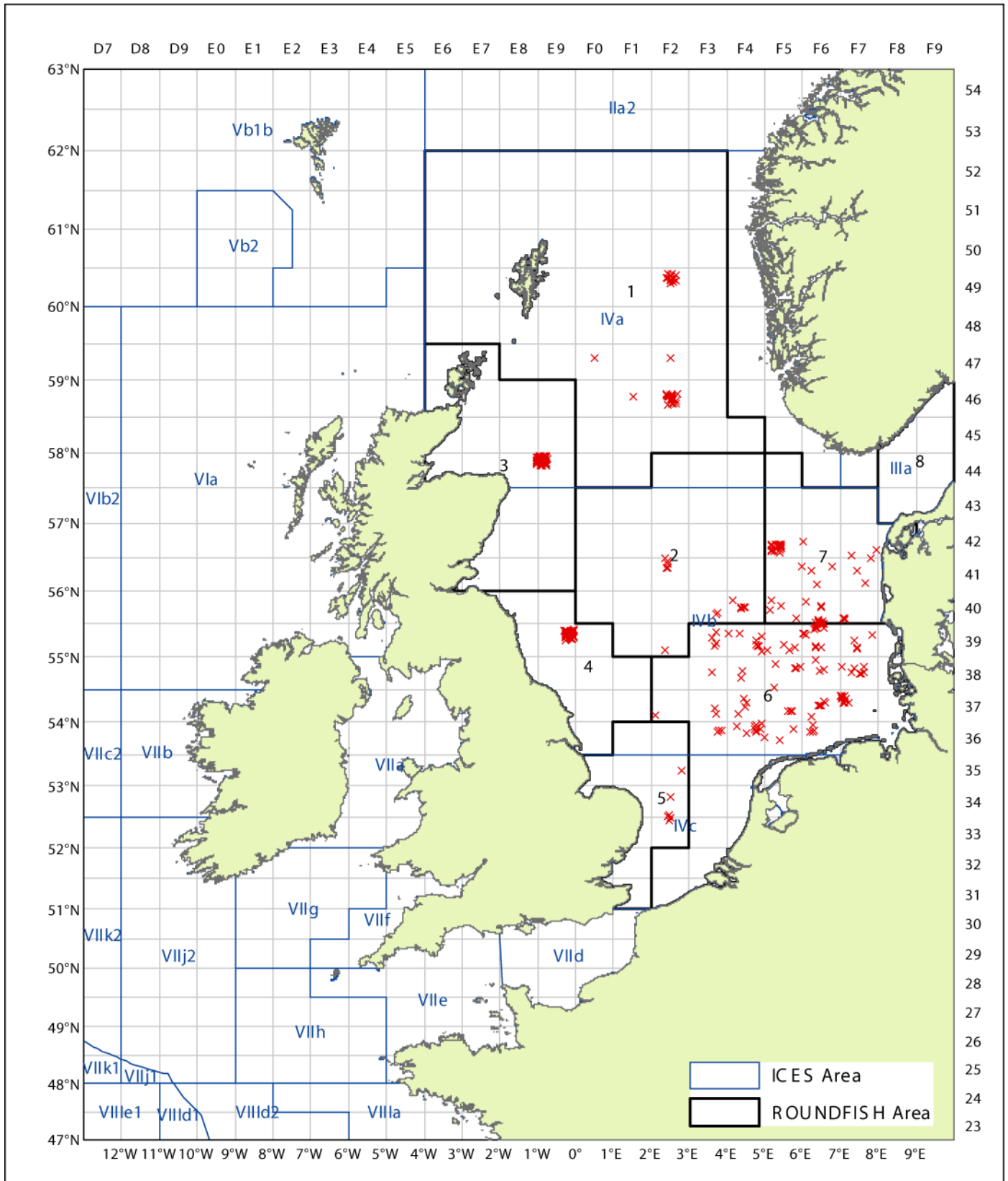
21.5 [cm]
39.5 [cm]

male -
female -
undefined 14

total numbers of data 14

Trachurus trachurus Quarter 3

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

Quarter: 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0125

b = 2.9076

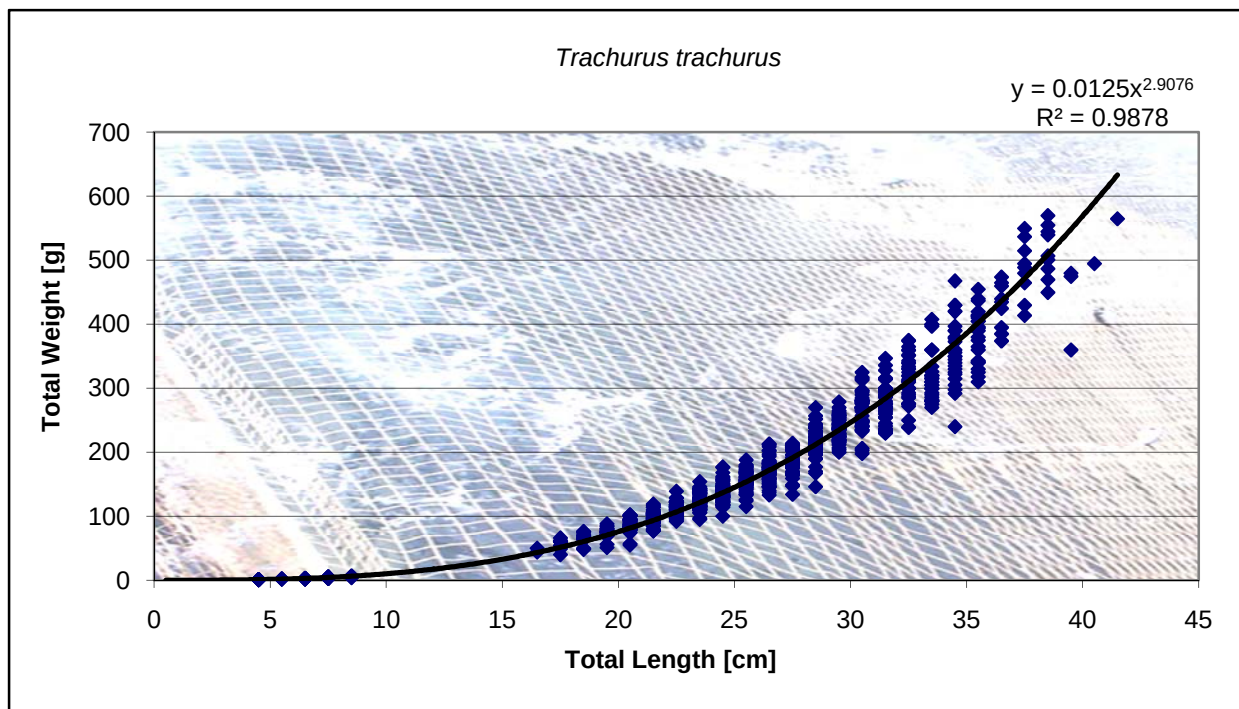
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
-	-	886	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	498	367	21	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	886	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	98	782	6	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
42	77	50	40	7	547	123	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

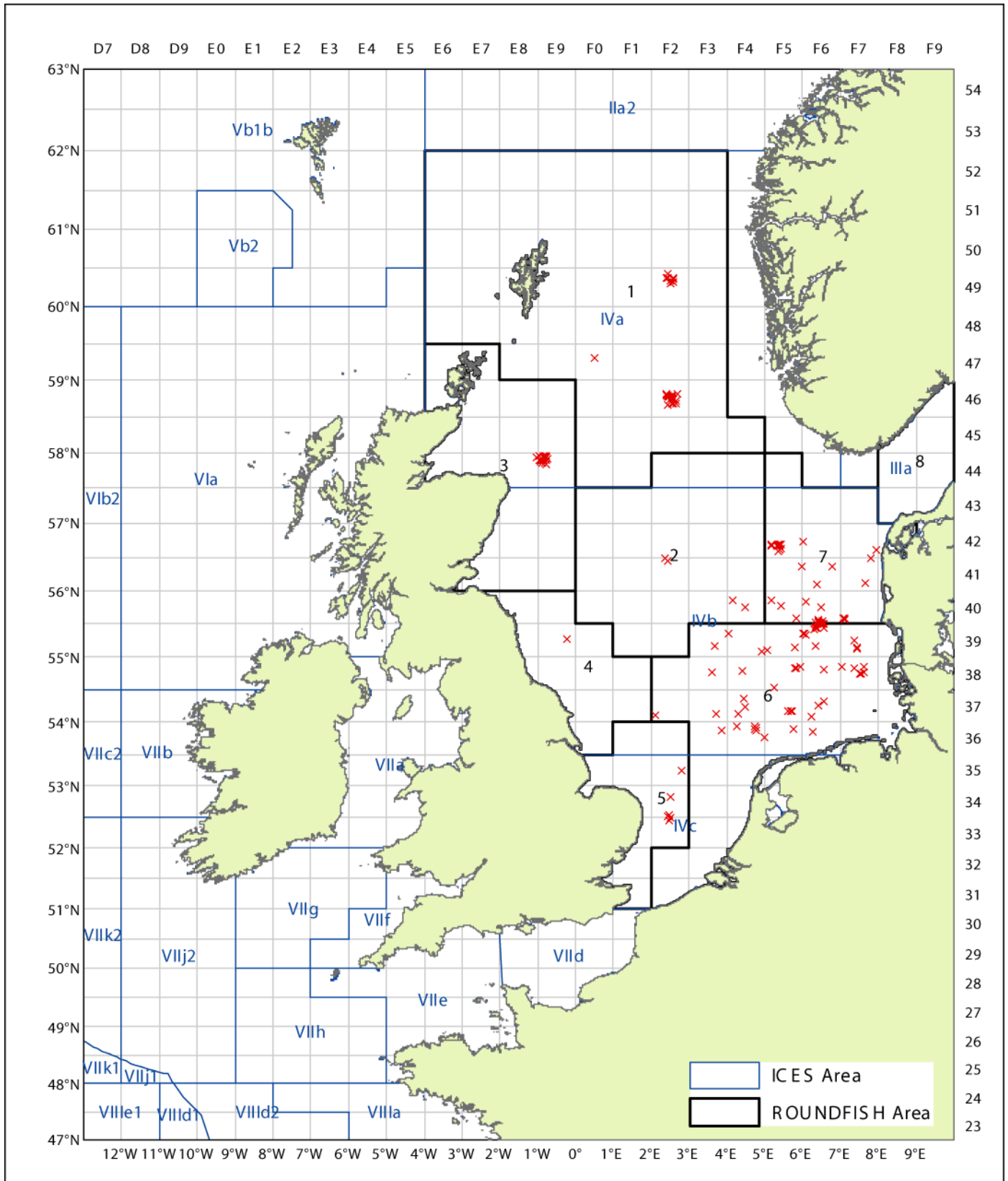
4.5 [cm]
41.5 [cm]

male 283
female 285
undefined 318

total numbers of data 886

Trachurus trachurus July

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

July

$$Tw [g] = a * L [cm]^b$$

a = 0.0165

b = 2.8229

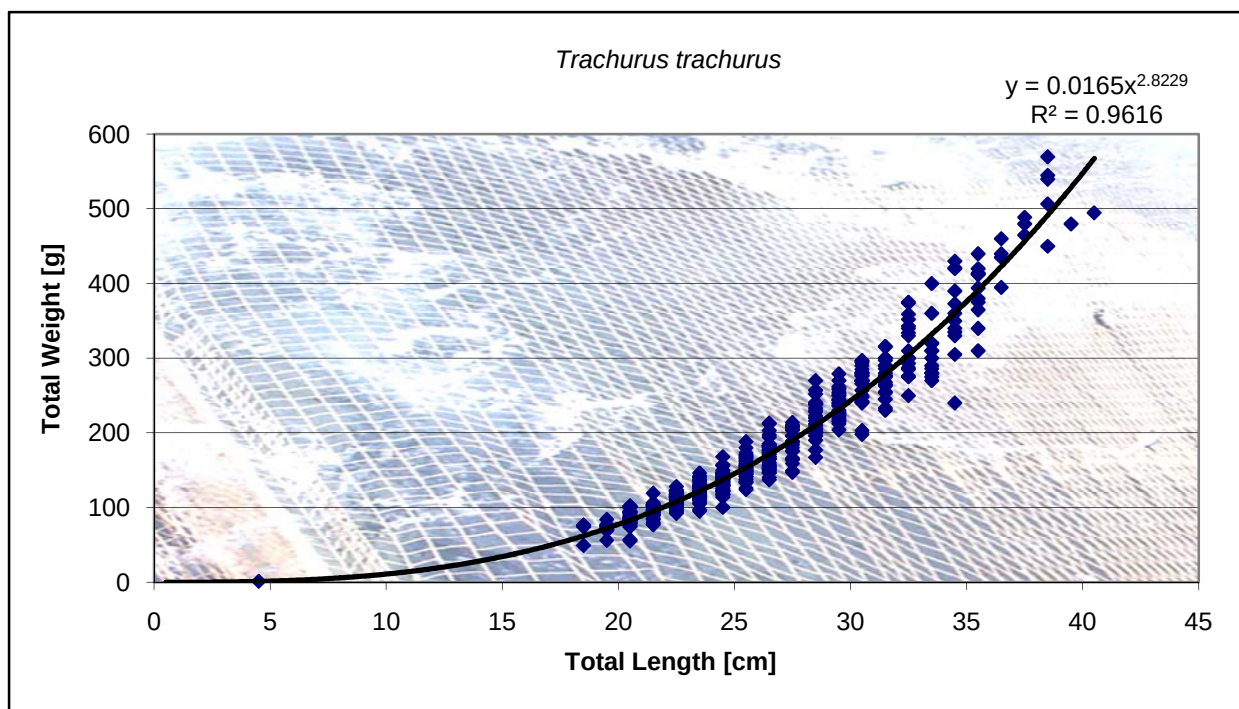
data collected

time period : 1994 - 2006

data source : research vessel

numbers of data:

Numbers of catch																				
Quarter																				
1	2	3	4																	
-	-	491	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	491	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	491	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	45	440	6	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
27	20	17	1	7	335	84	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

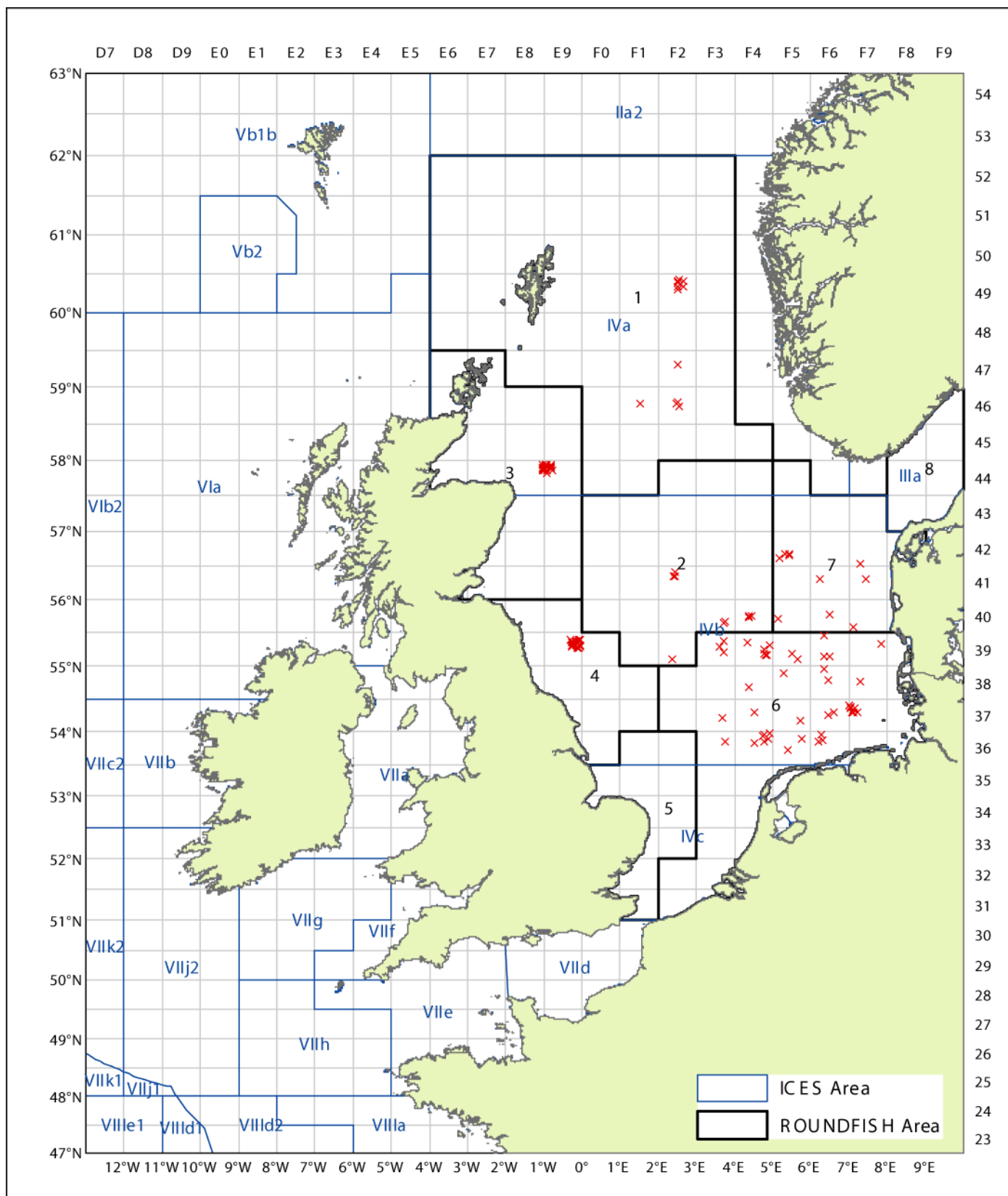
4.5 [cm]
40.5 [cm]

male 184
female 172
undefined 135

total numbers of data 491

August

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

August

$$Tw [g] = a * L [cm]^b$$

a = 0.0118

b = 2.9306

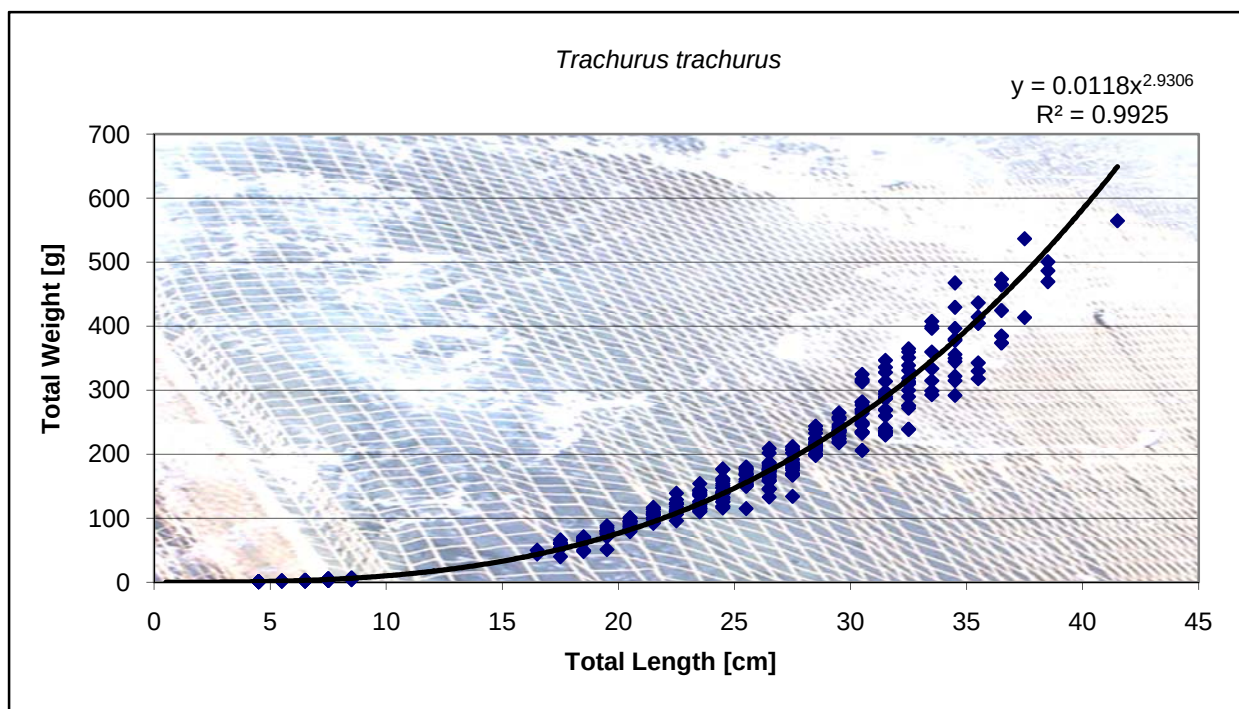
data collected

time period : 1995 - 2006

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
-	-	350	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	350	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	350	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	38	312	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
14	56	19	22	-	207	32	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

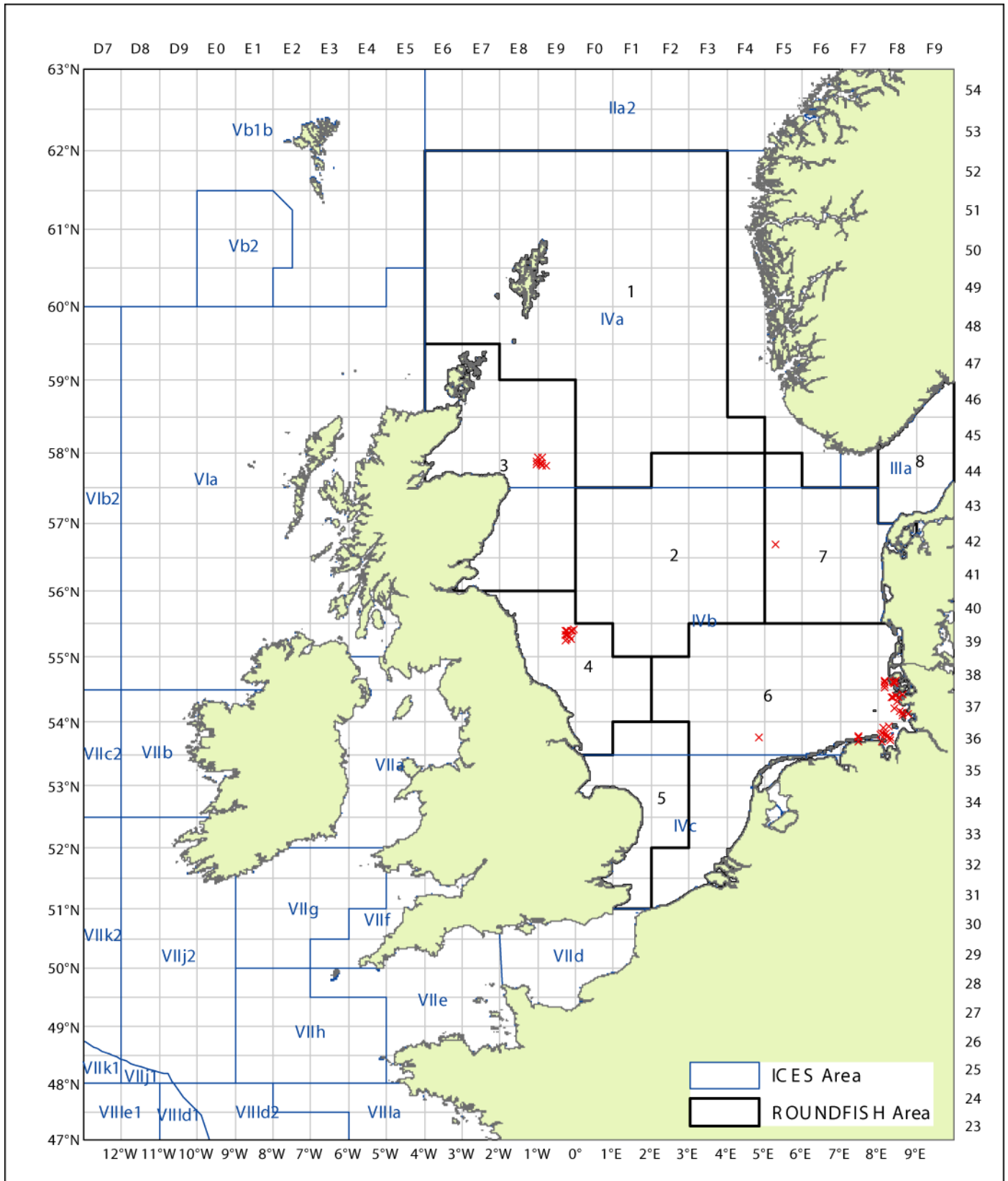
4.5 [cm]
41.5 [cm]

male 99
female 113
undefined 138

total numbers of data 350

Trachurus trachurus September

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

September

$$Tw [g] = a * L [cm]^b$$

a = 0.0112

b = 2.9286

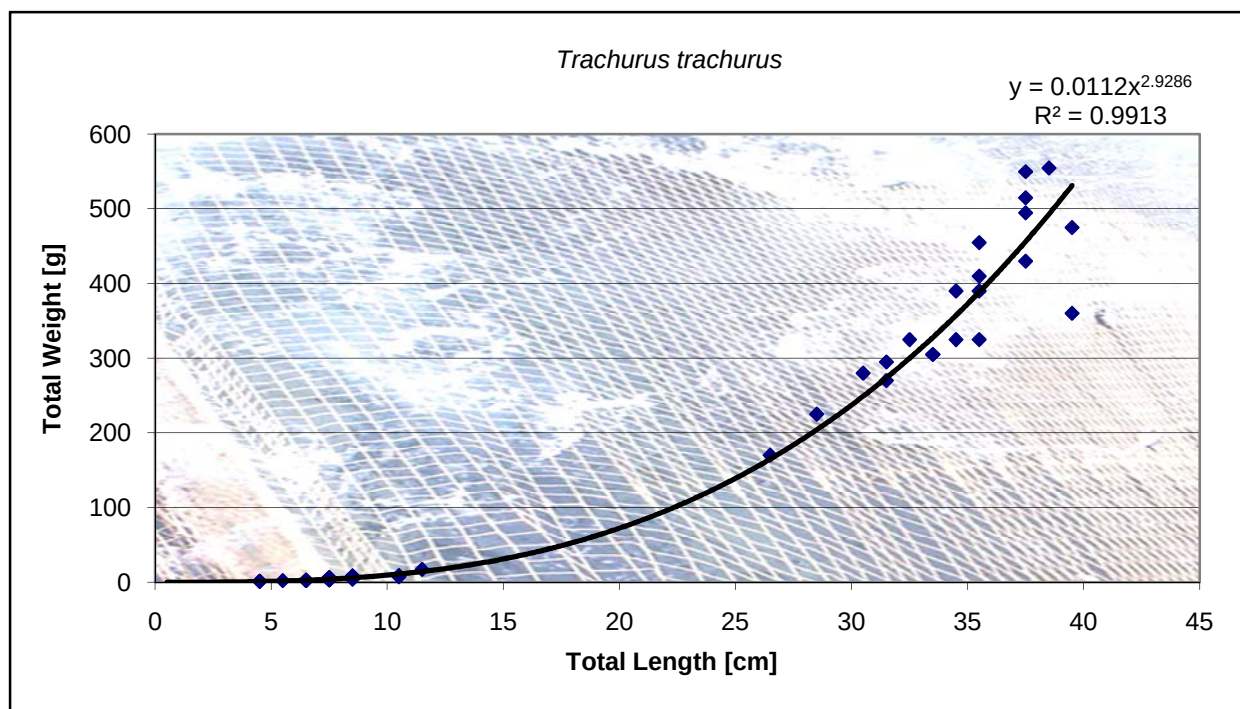
data collected

time period : 1997 - 2006

data source : research vessel

numbers of data:

Numbers of salmon																					
Quarter																					
1	2	3	4																		
-	-	56	-																		
Month																					
1	2	3	4	5	6	7	8	9	10	11	12										
-	-	-	-	-	-	-	-	56	-	-	-										
Subarea																					
1	2	3	4	5	6	7	8	9	10	12	14										
-	-	-	56	-	-	-	-	-	-	-	-										
Division																					
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F		
-	-	-	-	-	-	-	8	48	-	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B							
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Roundfisharea											NAFO										
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J	
-	-	8	12	-	35	1	-	-				-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

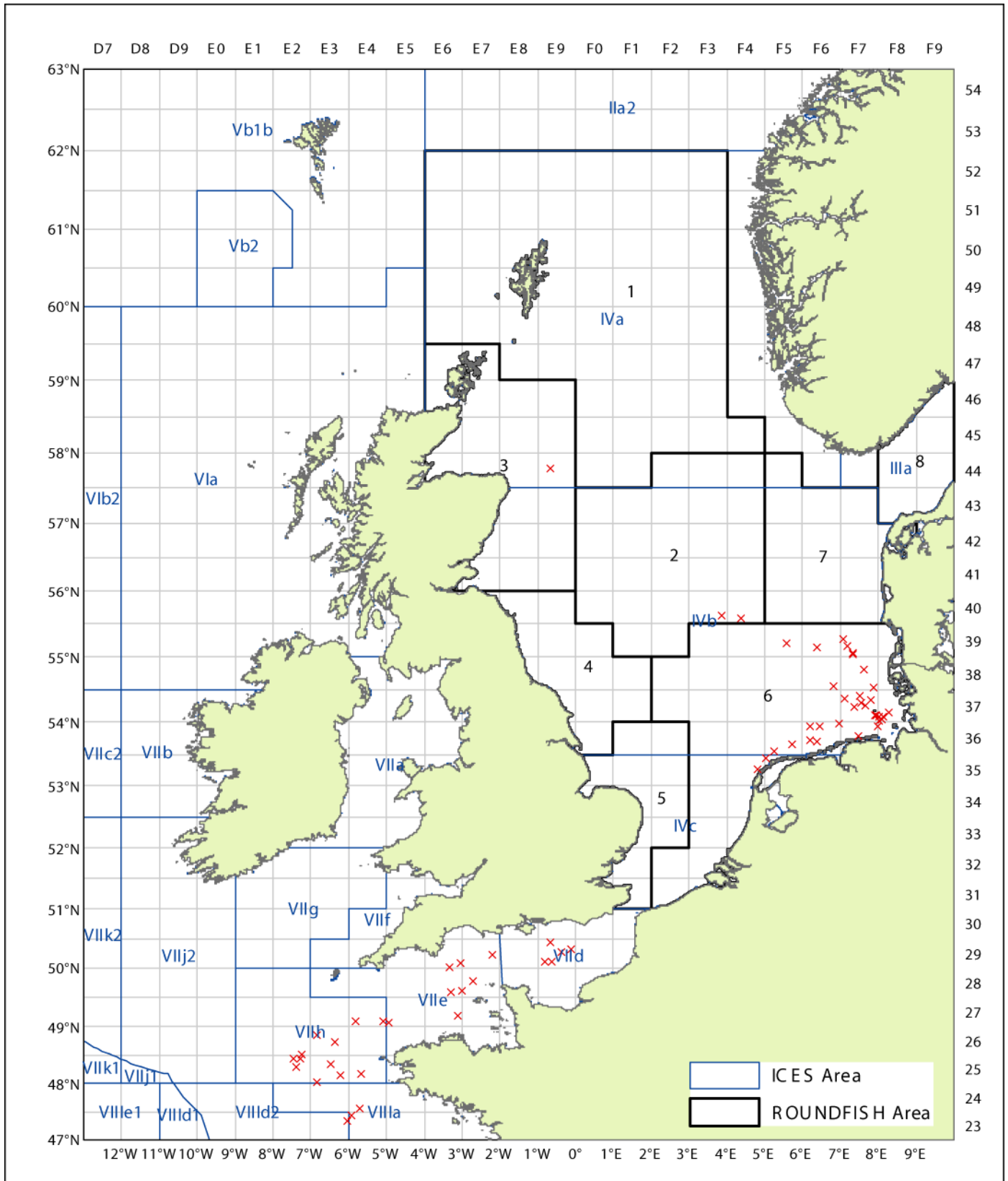
4.5 [cm]
39.5 [cm]

male -
female -
undefined 56

total numbers of data 56

Trachurus trachurus Quarter 4

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

Quarter: 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0079

b = 3.0199

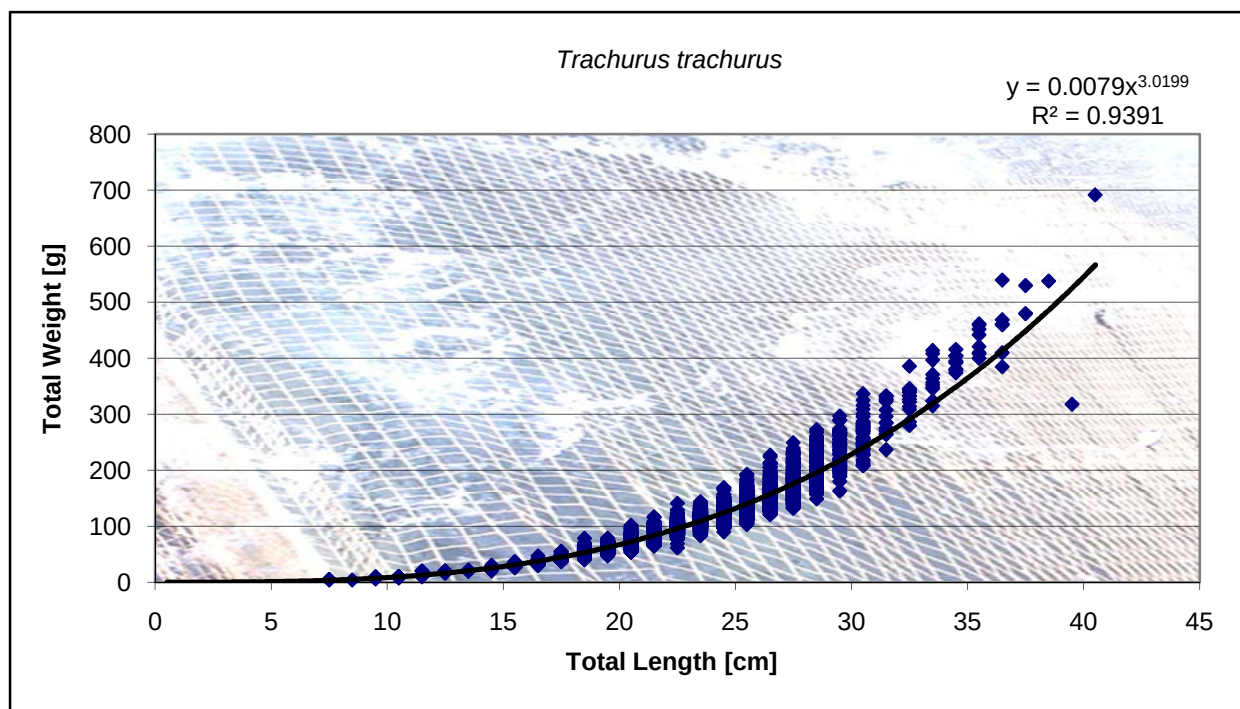
data collected

time period : 1994 - 2006

data source : commercial trawler, research vessel

numbers of data:

Numbers of salmon																			
Quarter																			
1	2	3	4																
-	-	-	4711																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	-	-	3447	928	336								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	38	-	-	4303	370	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	38	-	-	-	-	-	-	-	-	1325	1469	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	1509	-	-	370	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
-	3	1	-	-	34	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

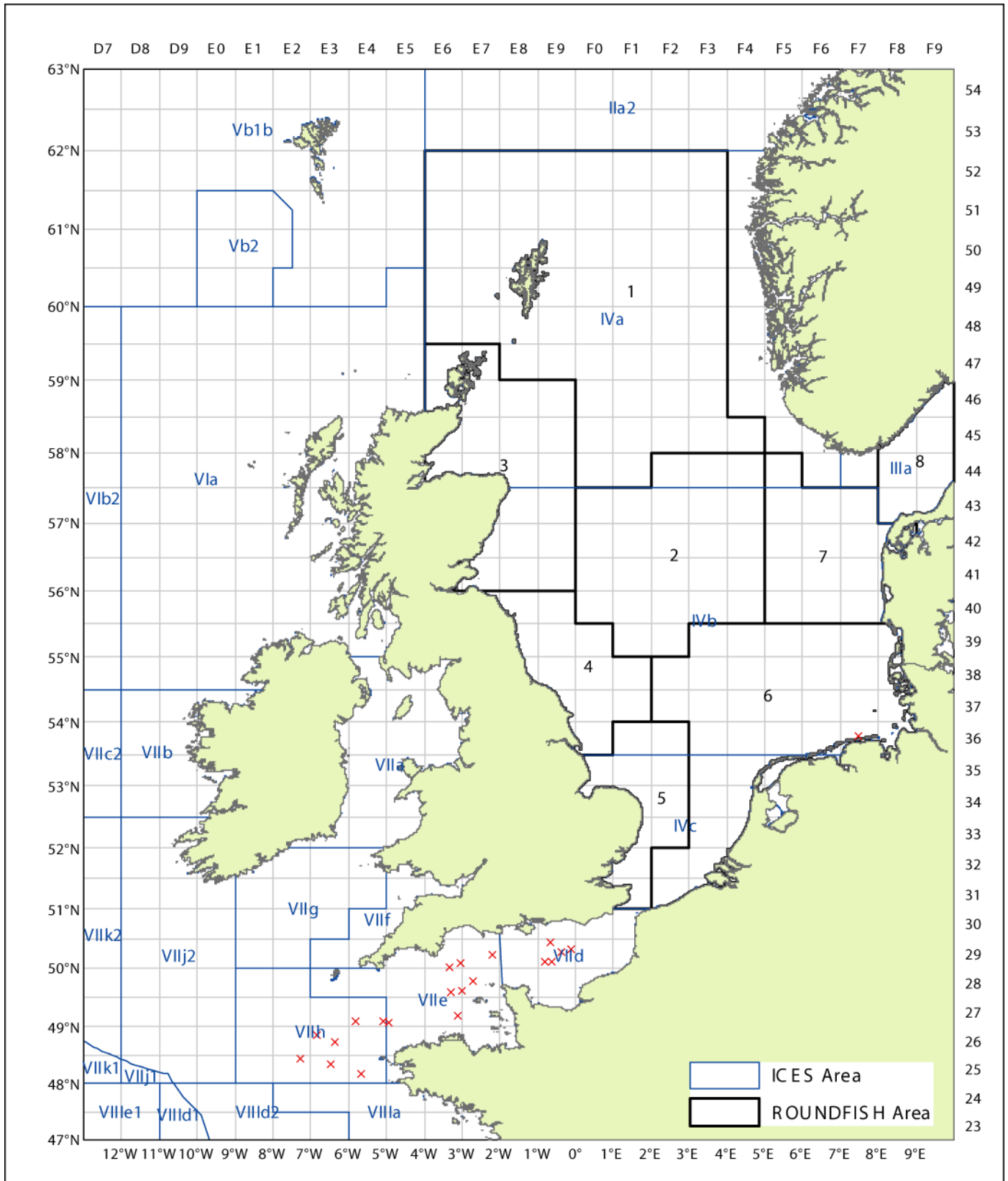
7.5 [cm]
40.5 [cm]

male 1378
female 1550
undefined 1783

total numbers of data 4711

Trachurus trachurus *October*

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

October

$$Tw [g] = a * L [cm]^b$$

a = 0.0067

b = 3.0818

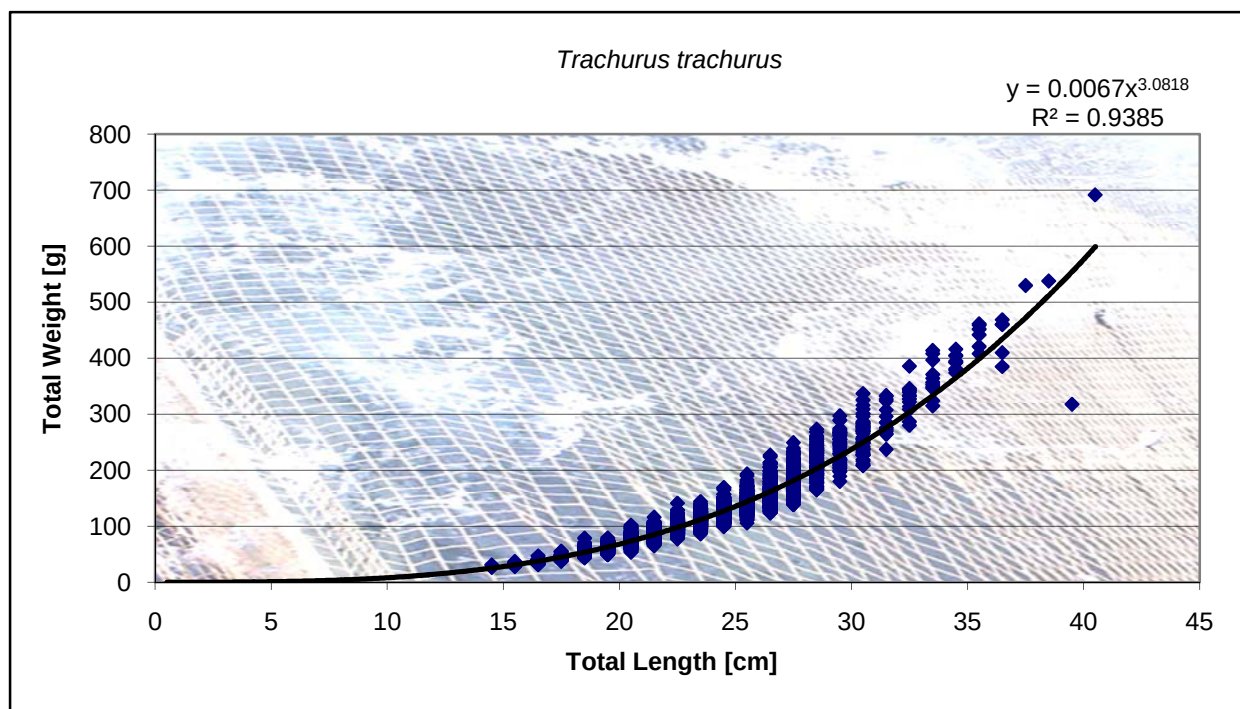
data collected

time period : 2001 - 2005

data source : commercial trawler, research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
-	-	-	3447																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	-	-	3447	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	1	-	-	3446	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1325	1469	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	652	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
-	-	-	-	-	1	-	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- cm below

min length
max length

14.5 [cm]
40.5 [cm]

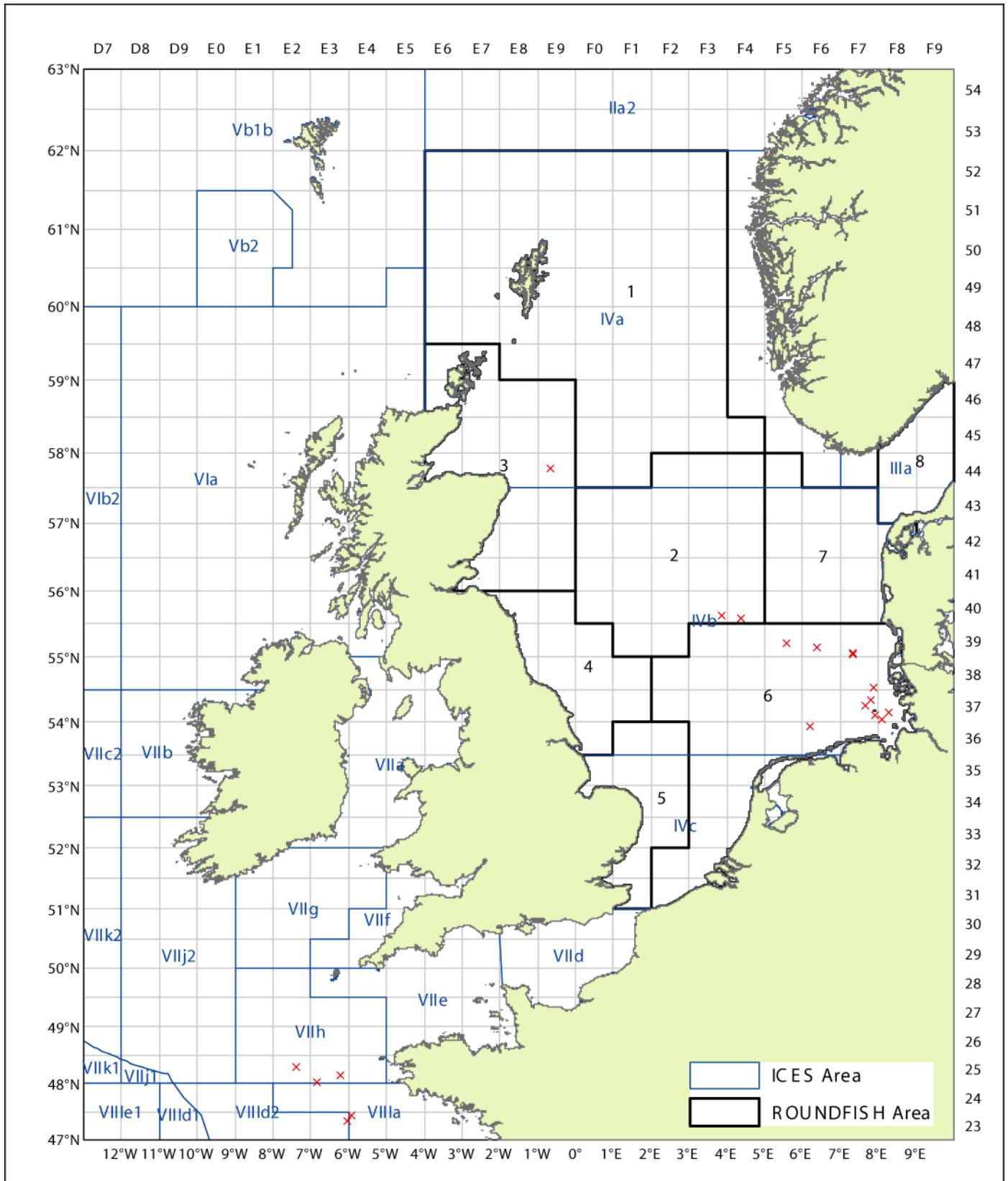
male
female
undefined

1055
1182
1210

total numbers of data 3447

Trachurus trachurus November

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

November

$$Tw [g] = a * L [cm]^b$$

a = 0.0137

b = 2.8256

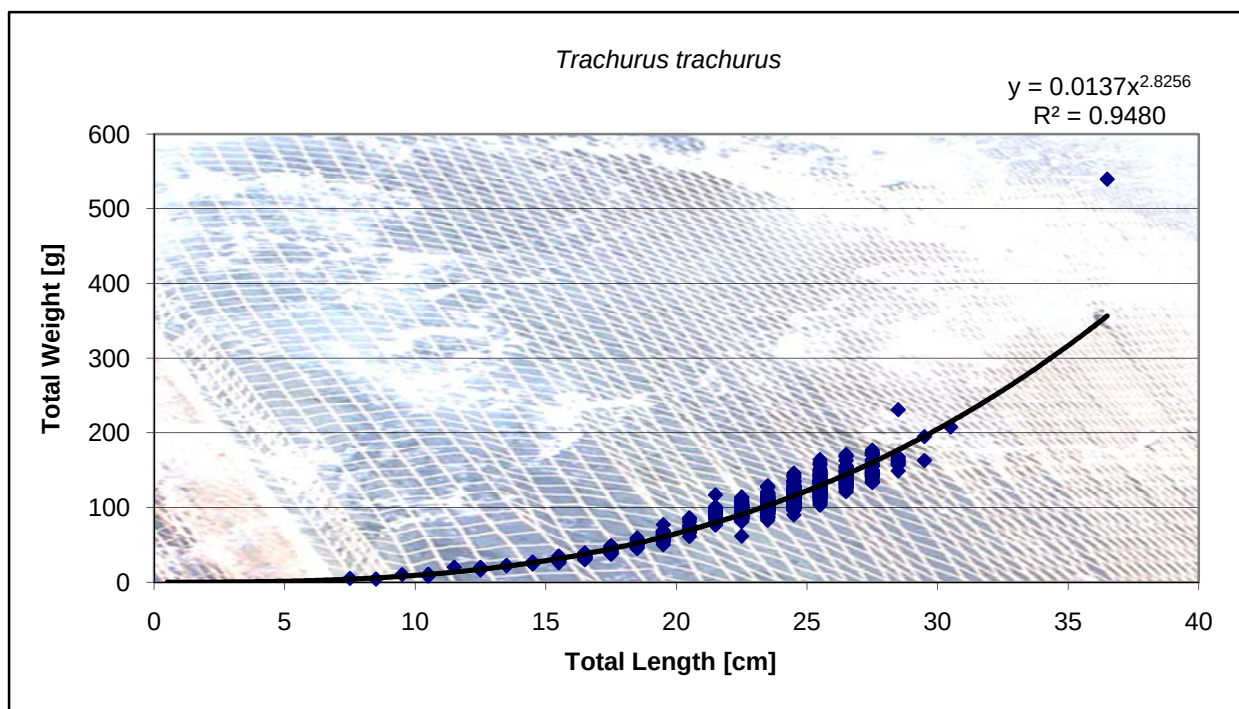
data collected

time period : 1994 - 2006

data source : commercial trawler, research vessel

numbers of data:

Numbers of salmon																				
Quarter																				
1	2	3	4																	
-	-	-	928																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	-	-	-	-	928	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	15	-	-	685	228	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	685	-	-	228	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
-	3	1	-	-	11	-	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

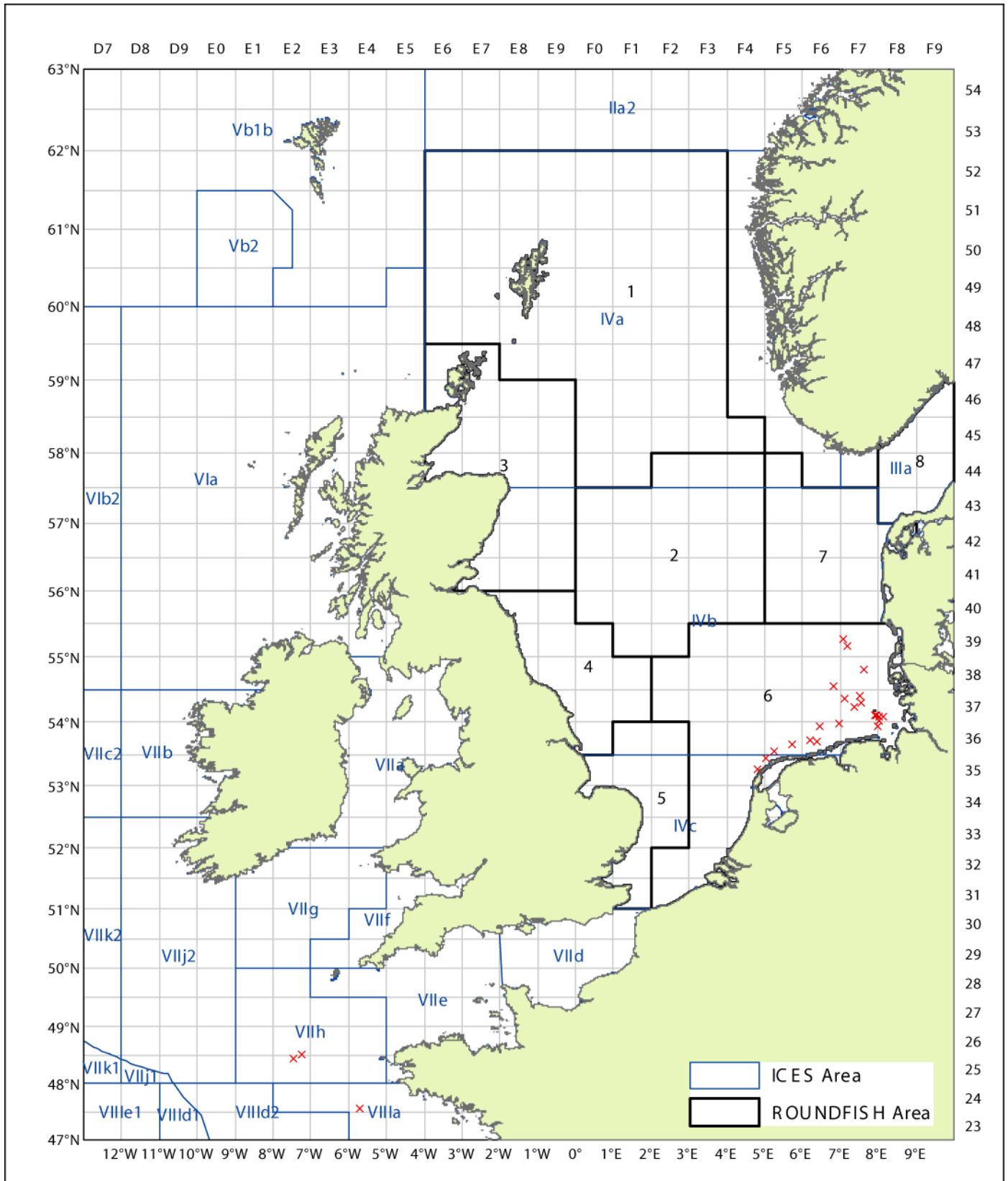
7.5 [cm]
36.5 [cm]

male 249
female 330
undefined 349

total numbers of data 928

December

Geographical distribution of data used for calculating the length-weight relationship



Trachurus trachurus

December

$$Tw [g] = a * L [cm]^b$$

a = 0.0086

b = 2.9778

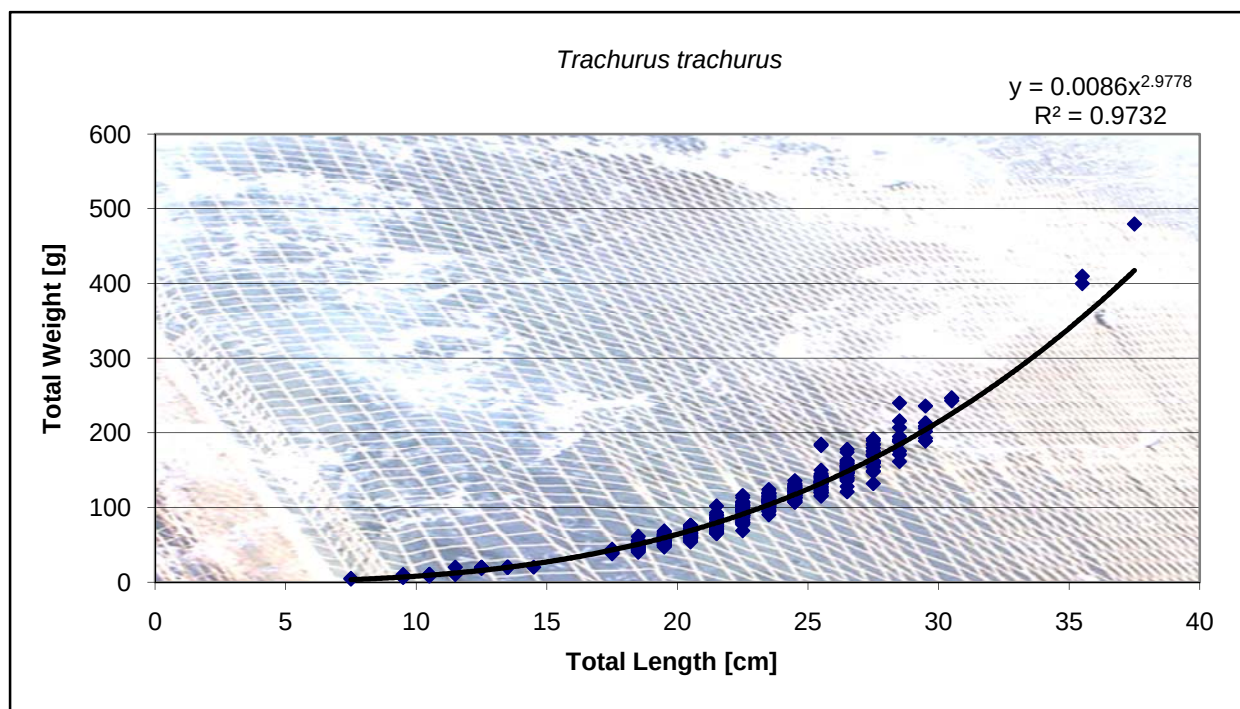
data collected

time period : 1994 - 2006

data source : research vessel, commercial trawler

numbers of data:

Numbers of fish																				
Quarter																				
1	2	3	4																	
-	-	-	336																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	-	-	-	-	-	336									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	22	-	-	172	142	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	172	-	-	142	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
-	-	-	-	-	22	-	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

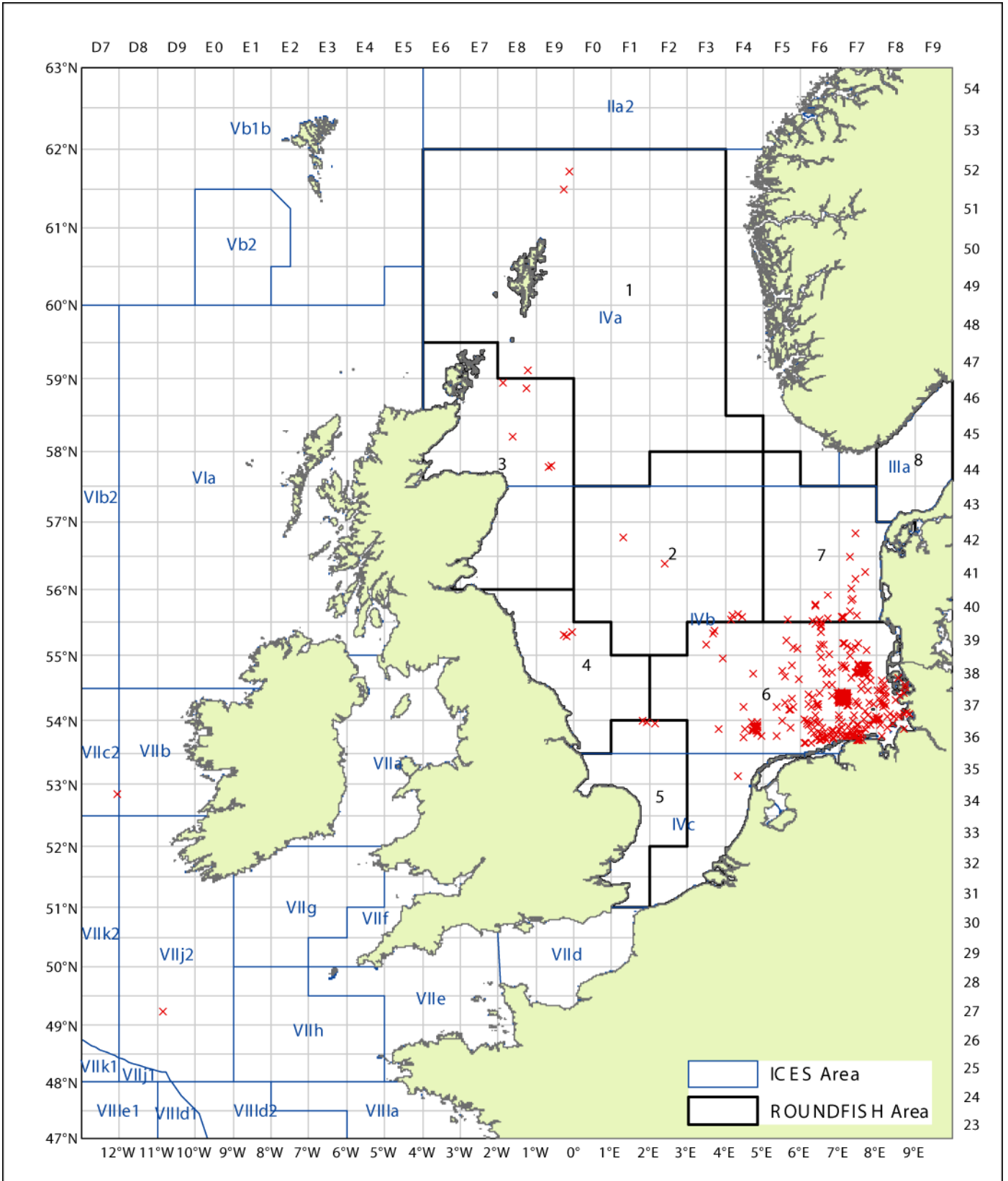
7.5 [cm]
37.5 [cm]

male 74
female 38
undefined 224

total numbers of data 336

Trigla lucerna

Geographical distribution of data used for calculating the length-weight relationship



Trigla lucerna

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0151

b = 2.8814

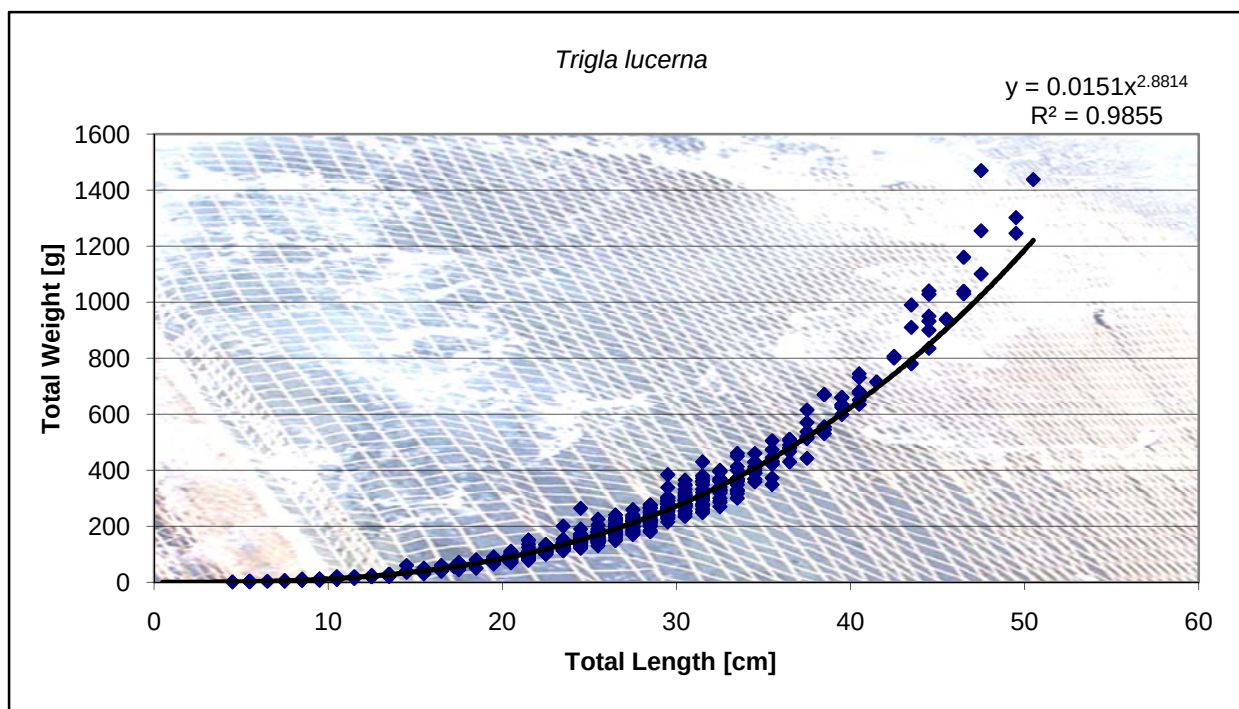
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Numbers of fish																				
Quarter																				
1	2	3	4																	
18	90	326	71																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
6	9	3	2	69	19	64	228	34	12	26	33									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	502	-	-	2	1	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	8	494	-	-	-	-	-	-	-	1	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	1	-	-	-	1	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
3	4	6	4	2	461	22	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

4.5 [cm]
50.5 [cm]

male
female
undefined

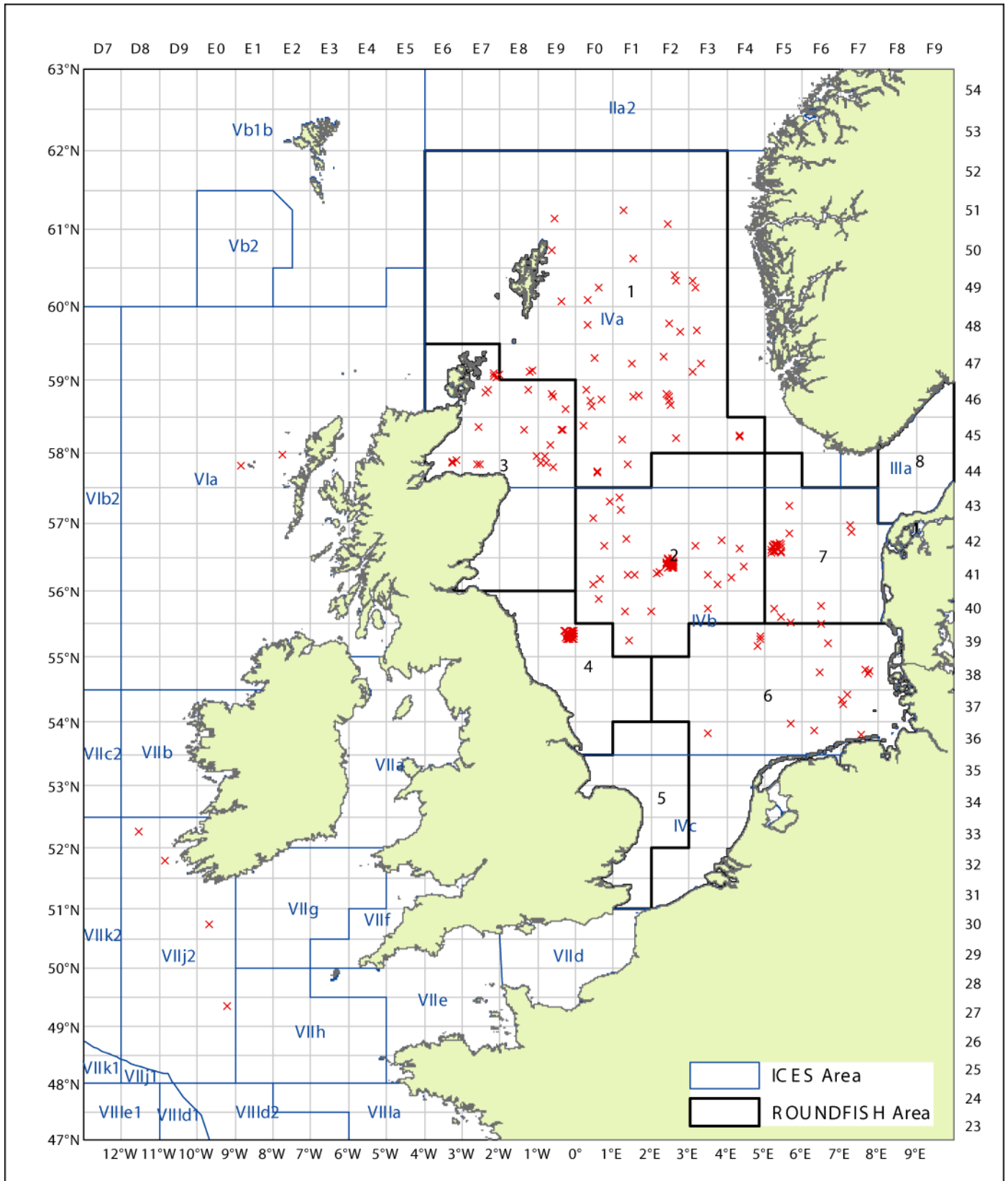
-
1
504

total numbers of data

505

Trisopterus esmarki

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus esmarki

Quarter: 1 - 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0045

b = 3.1484

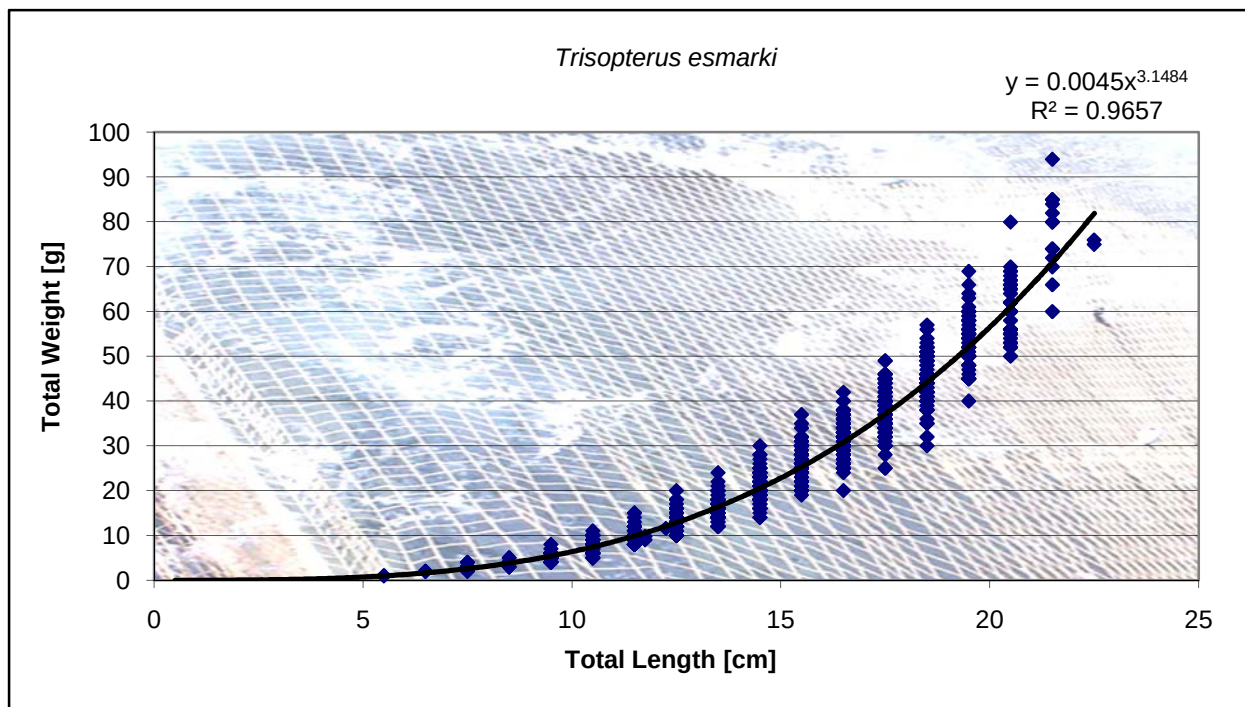
data collected

time period : 1995 - 2008

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
775	7	269	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
423	346	6	1	2	4	136	130	3	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	1	-	1044	-	2	4	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	1	-	-	-	-	-	729	315	-	-	-	2	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	4	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea												NAFO							
1	2	3	4	5	6	7	8	9											
455	163	349	32	-	17	28	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

5.5 [cm]
22.5 [cm]

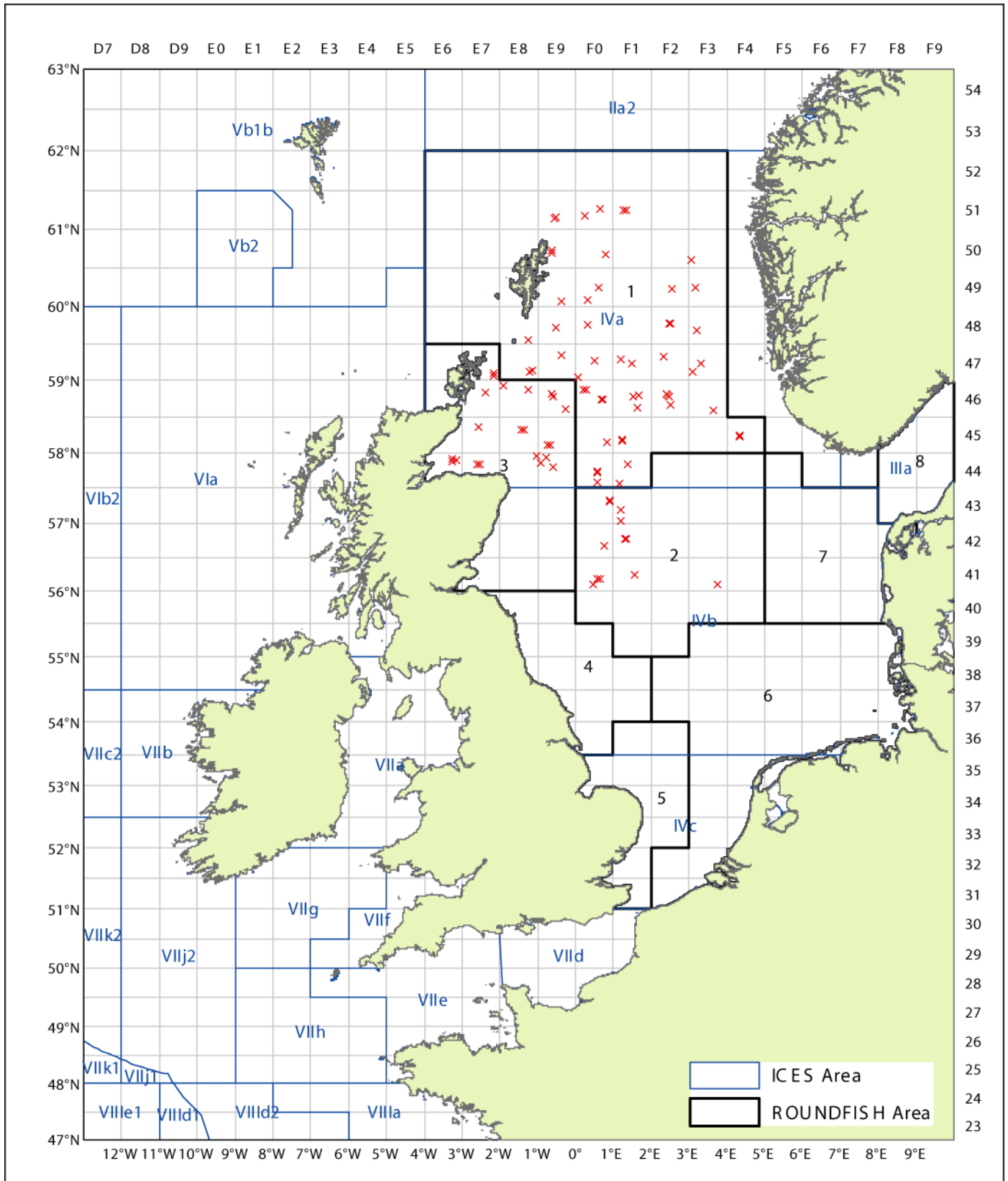
male
female
undefined

361
432
258

total numbers of data 1051

Trisopterus esmarki ♀

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus esmarki



Quarter: 1 ; 3

(female)

$$Tw [g] = a * L [cm]^b$$

a = 0.0039

b = 3.2015

data collected

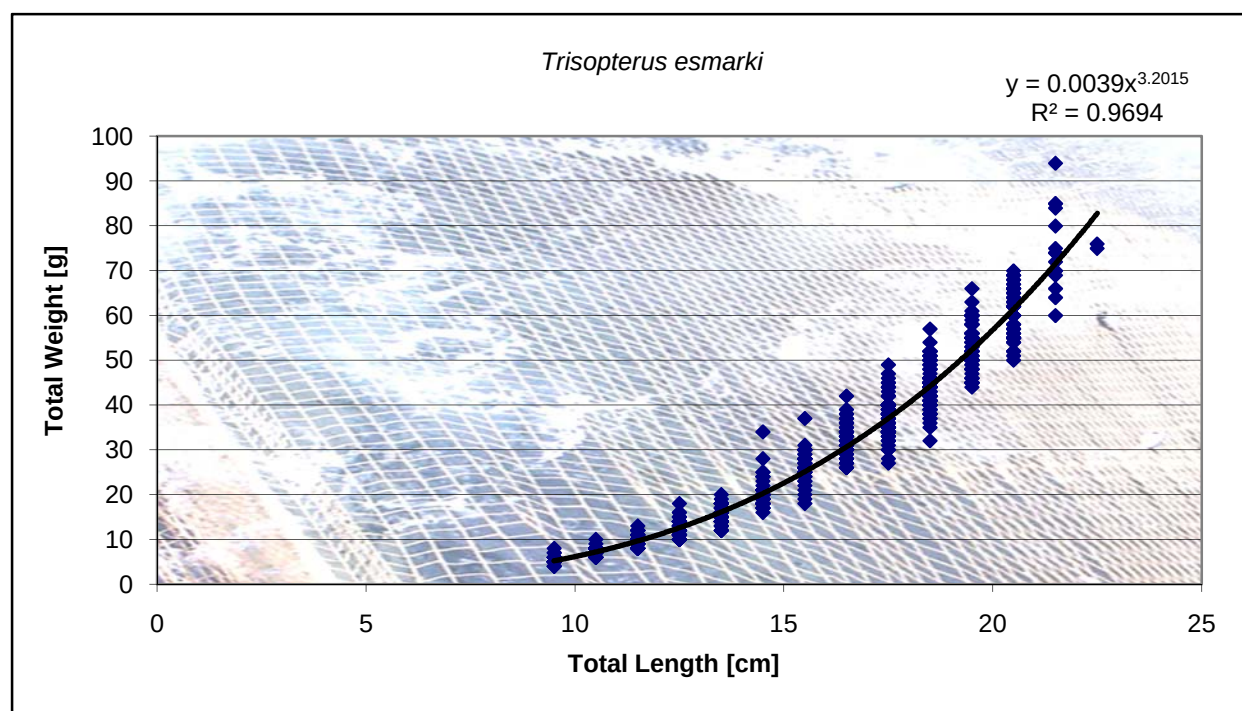
time period : 2004 - 2009

data source : research vessel

numbers of data:

Numbers of data.

Quarter																			
1	2	3	4																
613	-	59	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
313	300	-	-	-	-	17	42	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	672	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	504	168	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
336	137	199	-	-	-	-	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

9.5 [cm]
22.5 [cm]

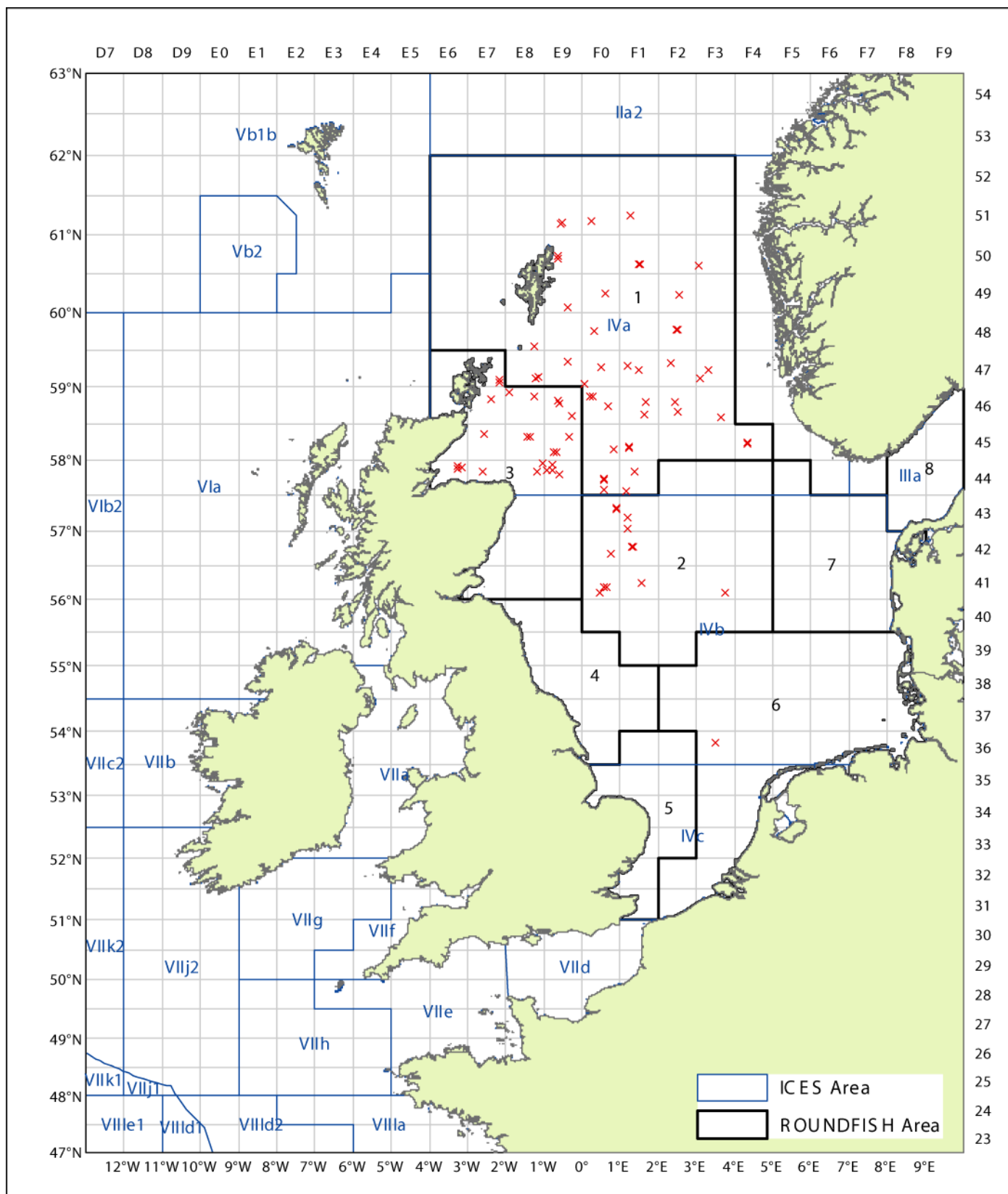
male
female
undefined

-
672
-

total numbers of data 672

Trisopterus esmarki ♂

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus esmarki



Quarter: 1 ; 3

(male)

$$Tw [g] = a * L [cm]^b$$

a = 0.0069

b = 2.9786

data collected

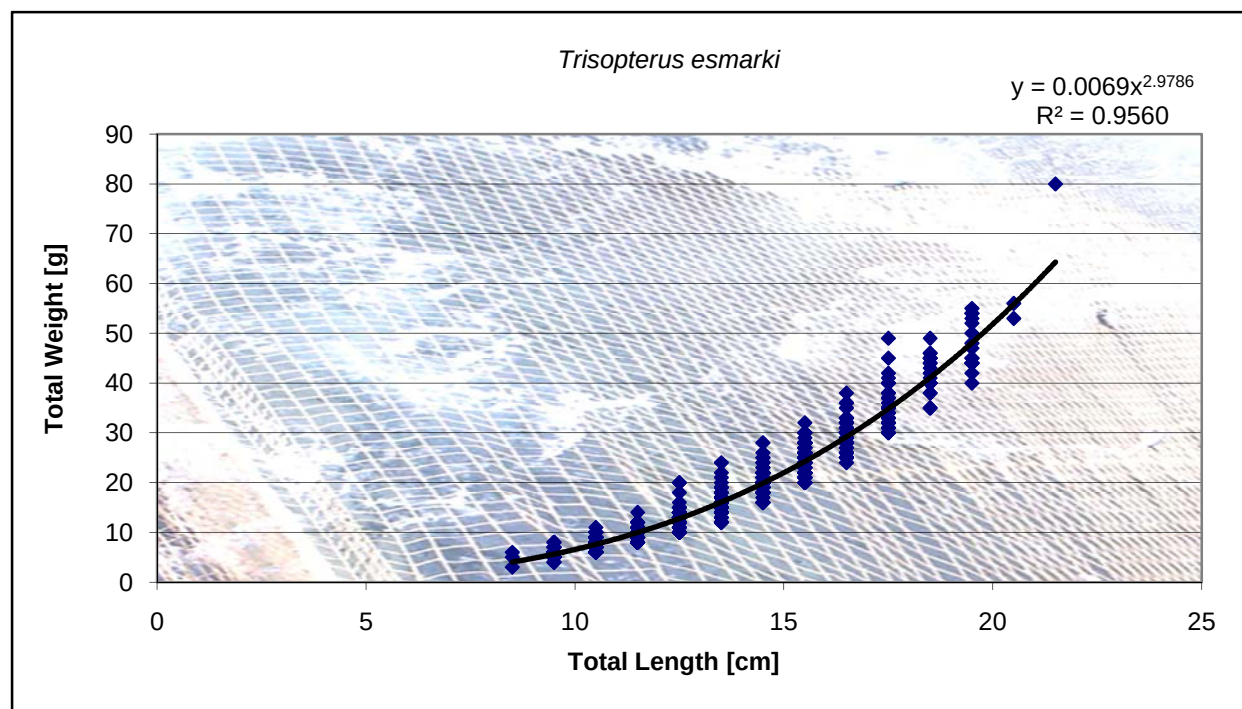
time period : 1999 - 2009

data source : research vessel

numbers of data:

Numbers of data.

Quarter																			
1	2	3	4																
526	-	24	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
265	261	-	-	-	-	3	21	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	550	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	418	132	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
262	91	196	-	-	1	-	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

8.5 [cm]
21.5 [cm]

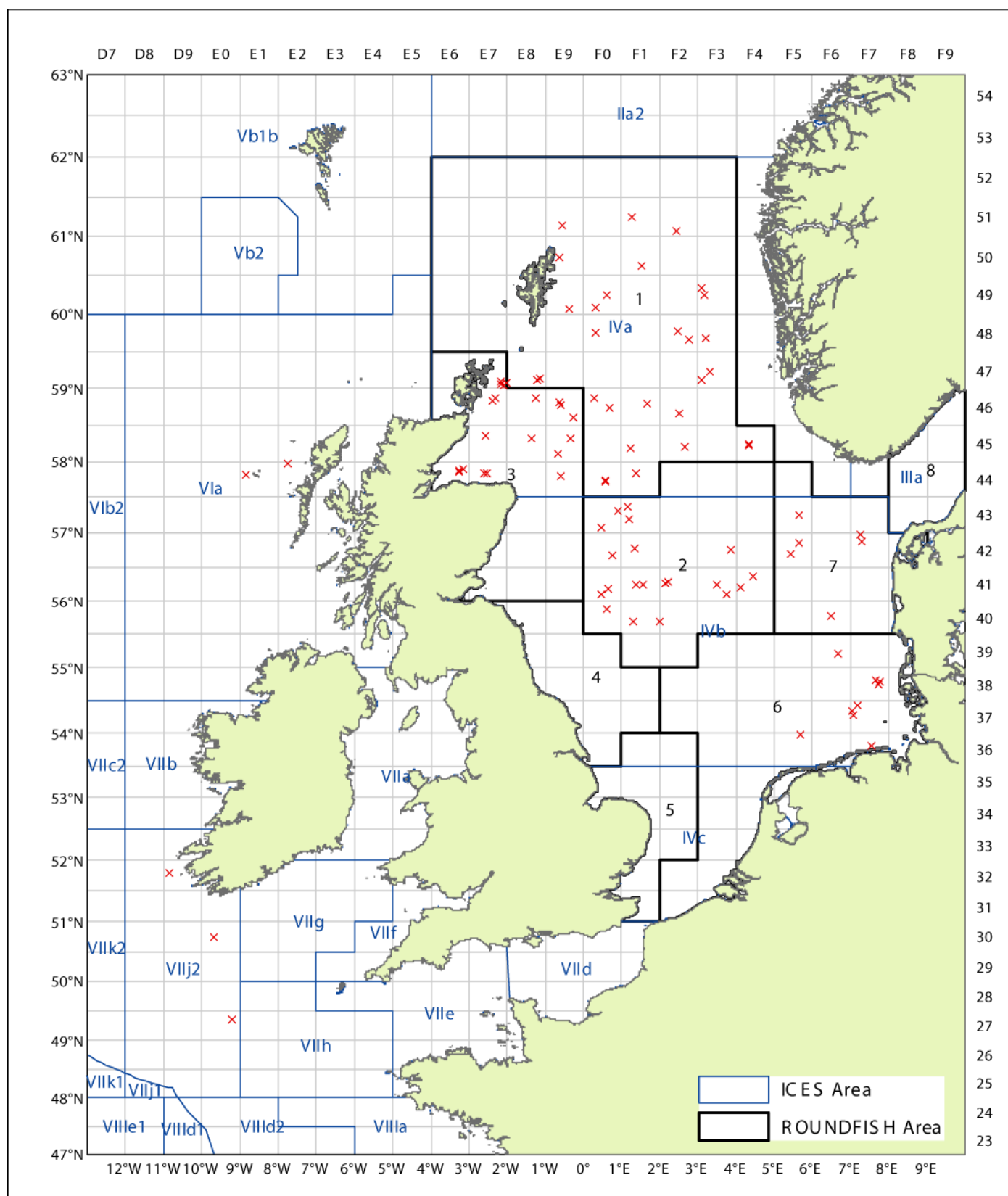
male
female
undefined

550
-
-

total numbers of data 550

Trisopterus esmarki Quarter 1

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus esmarki

Quarter: 1

$$Tw [g] = a * L [cm]^b$$

a = 0.0047

b = 3.1254

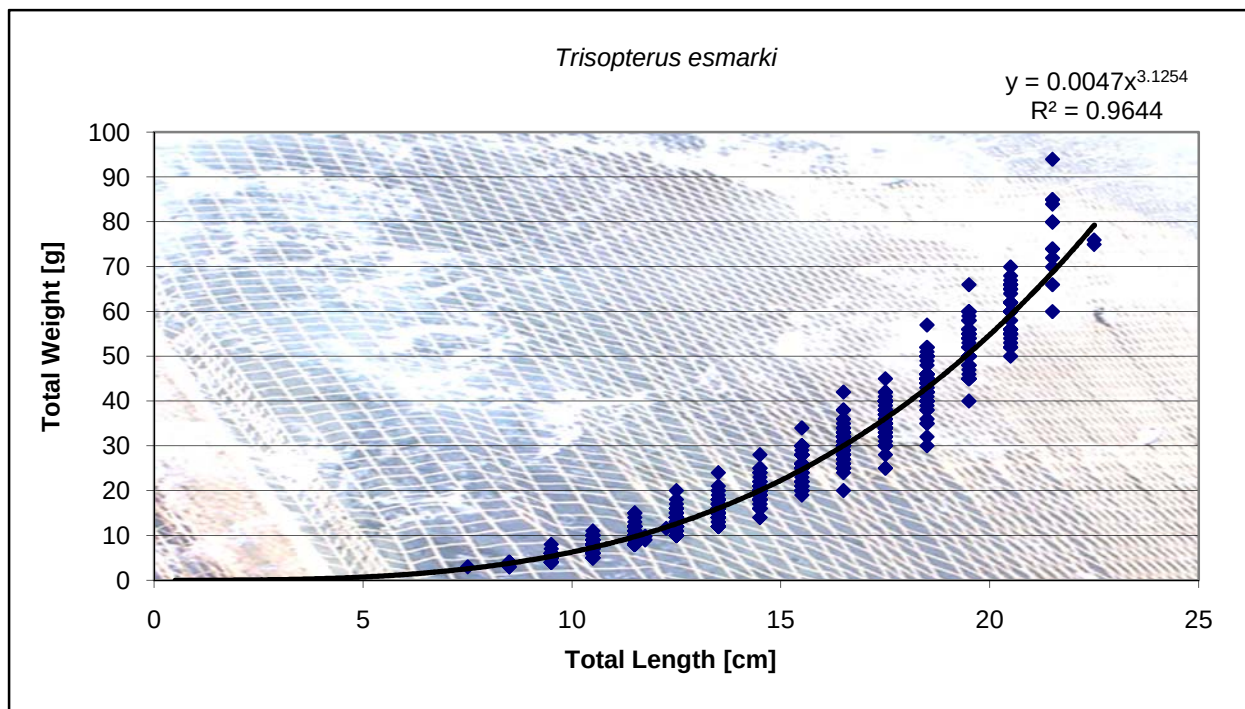
data collected

time period : 1995 - 2008

data source : research vessel

numbers of data:

Numbers of Data																			
Quarter																			
1	2	3	4																
775	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
423	346	6	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	1	-	769	-	2	3	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	1	-	-	-	-	-	535	234	-	-	-	2	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	3	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
324	140	288	-	-	10	7	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

7.5 [cm]
22.5 [cm]

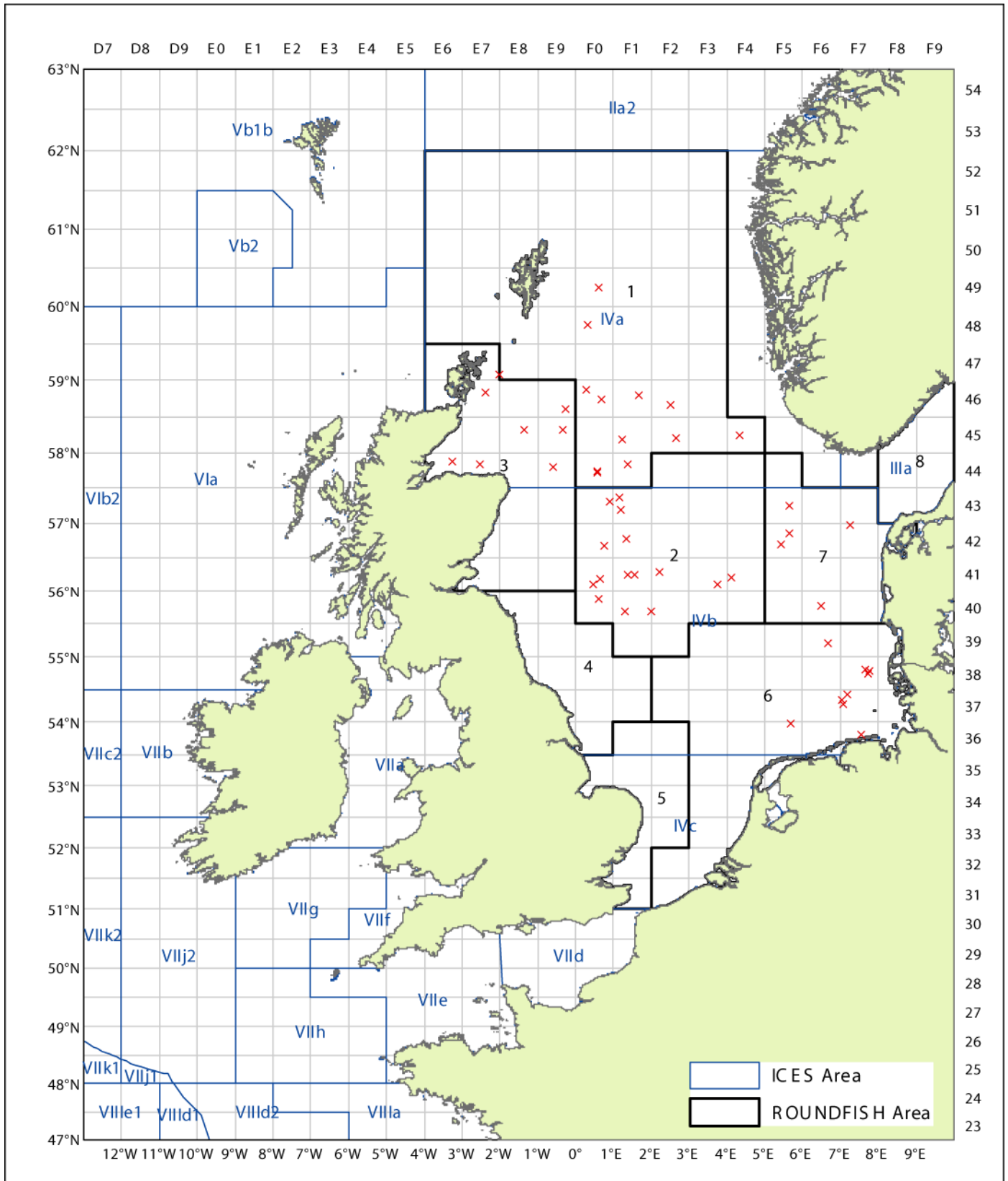
male
female
undefined

337
373
65

total numbers of data 775

Trisopterus esmarki January

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus esmarki

January

$$Tw [g] = a * L [cm]^b$$

a = 0.0057

b = 3.0558

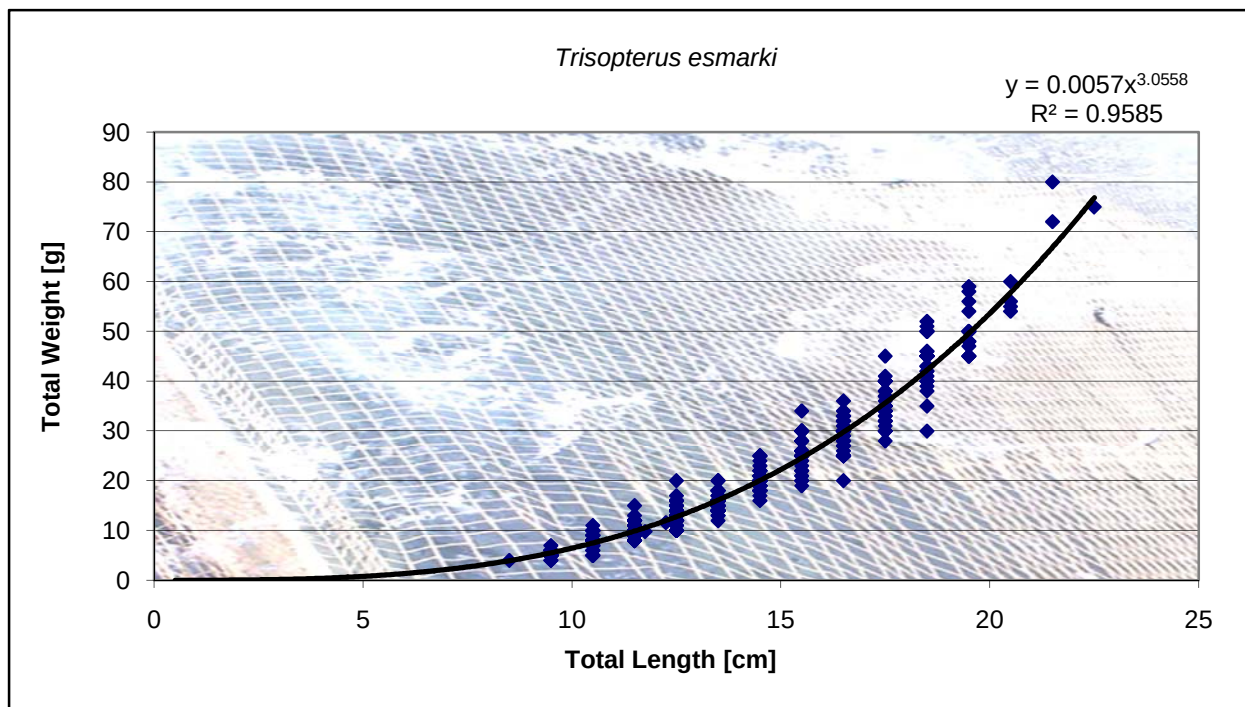
data collected

time period : 1995 - 2008

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
423	-	-	-	-															
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
423	-	-	-	-	-	-	-	-	-	-	-	-							
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	423	-	-	-	-	-	-	-	-	-							
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	195	228	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
171	135	101	-	-	10	6	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

8.5 [cm]
22.5 [cm]

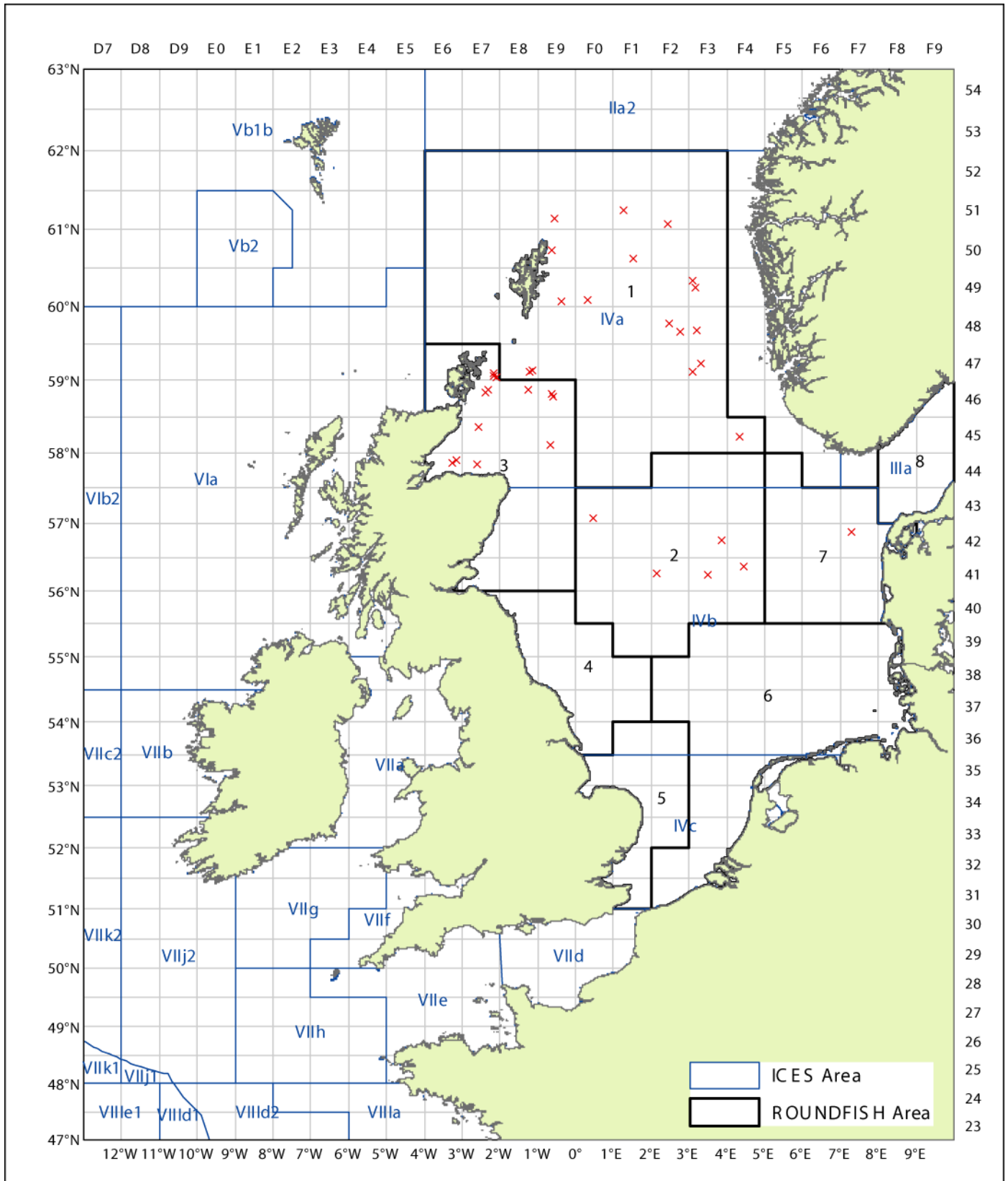
male
female
undefined

193
196
34

total numbers of data 423

Trisopterus esmarki February

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus esmarki

Februrary

$$Tw [g] = a * L [cm]^b$$

a = 0.0039

b = 3.1935

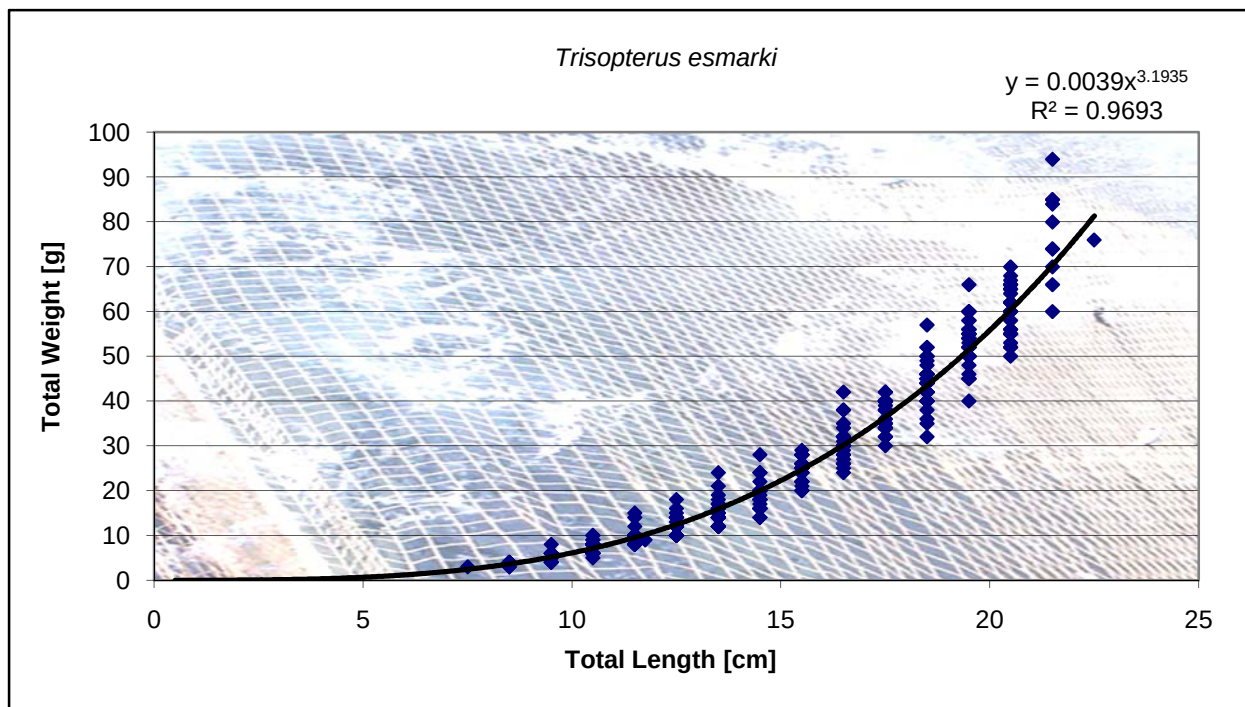
data collected

time period : 1999 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
346	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	346	-	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	346	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	340	6	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea												NAFO							
1	2	3	4	5	6	7	8	9											
153	5	187	-	-	-	1	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

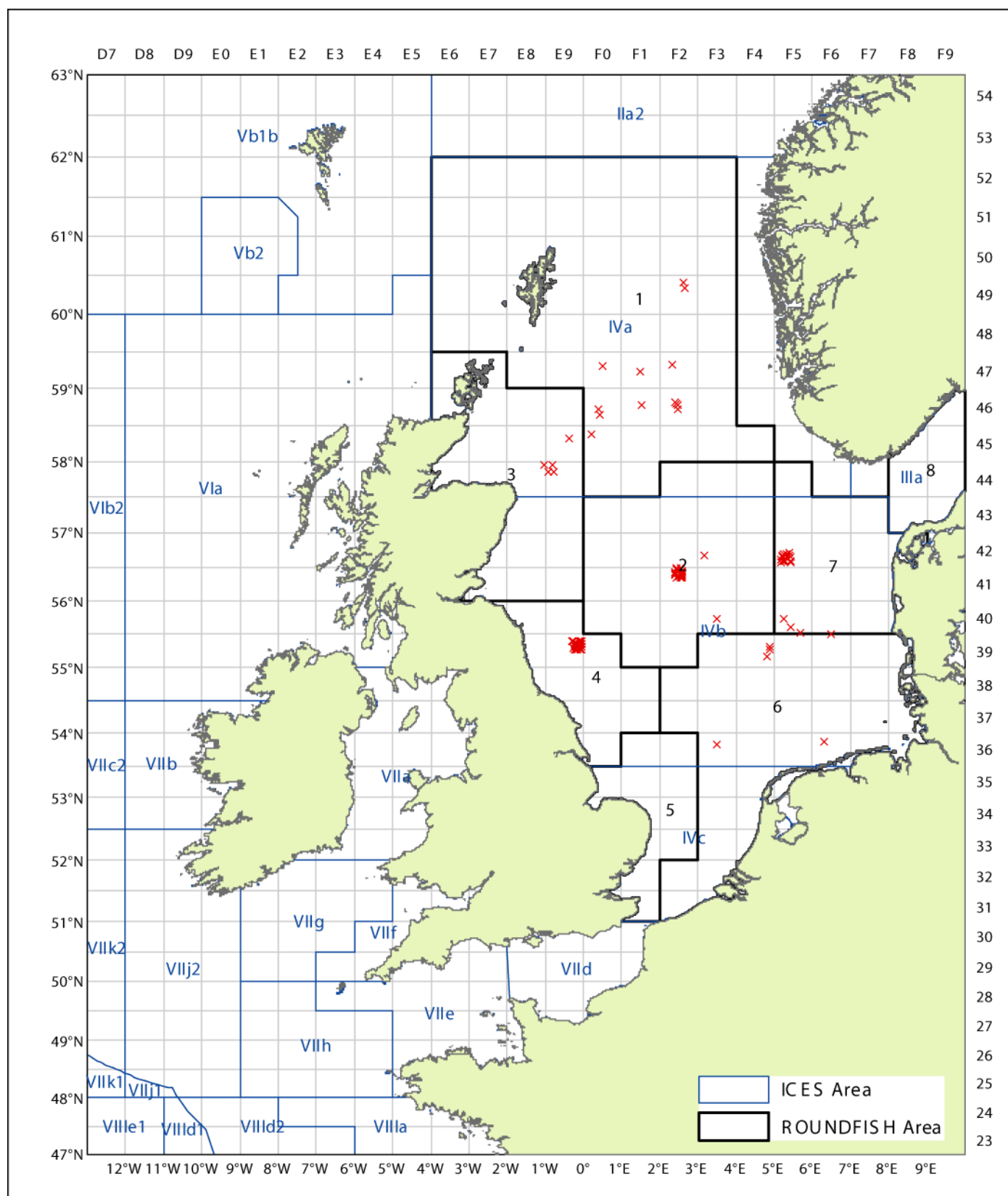
7.5 [cm]
22.5 [cm]

male 144
female 177
undefined 25

total numbers of data 346

Trisopterus esmarki Quarter 3

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus esmarki

Quarter: 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0048

b = 3.1515

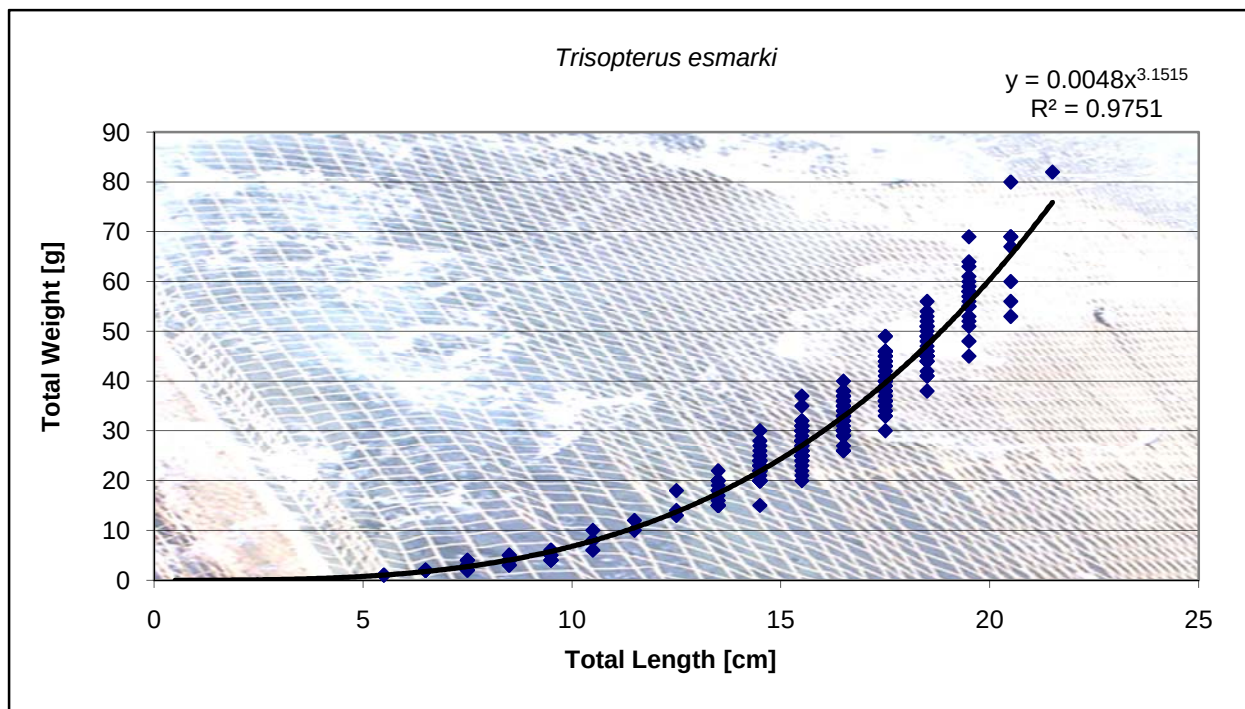
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	-	269	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	136	130	3	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	269	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	193	76	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea												NAFO							
1	2	3	4	5	6	7	8	9											
131	20	60	32	-	6	20	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

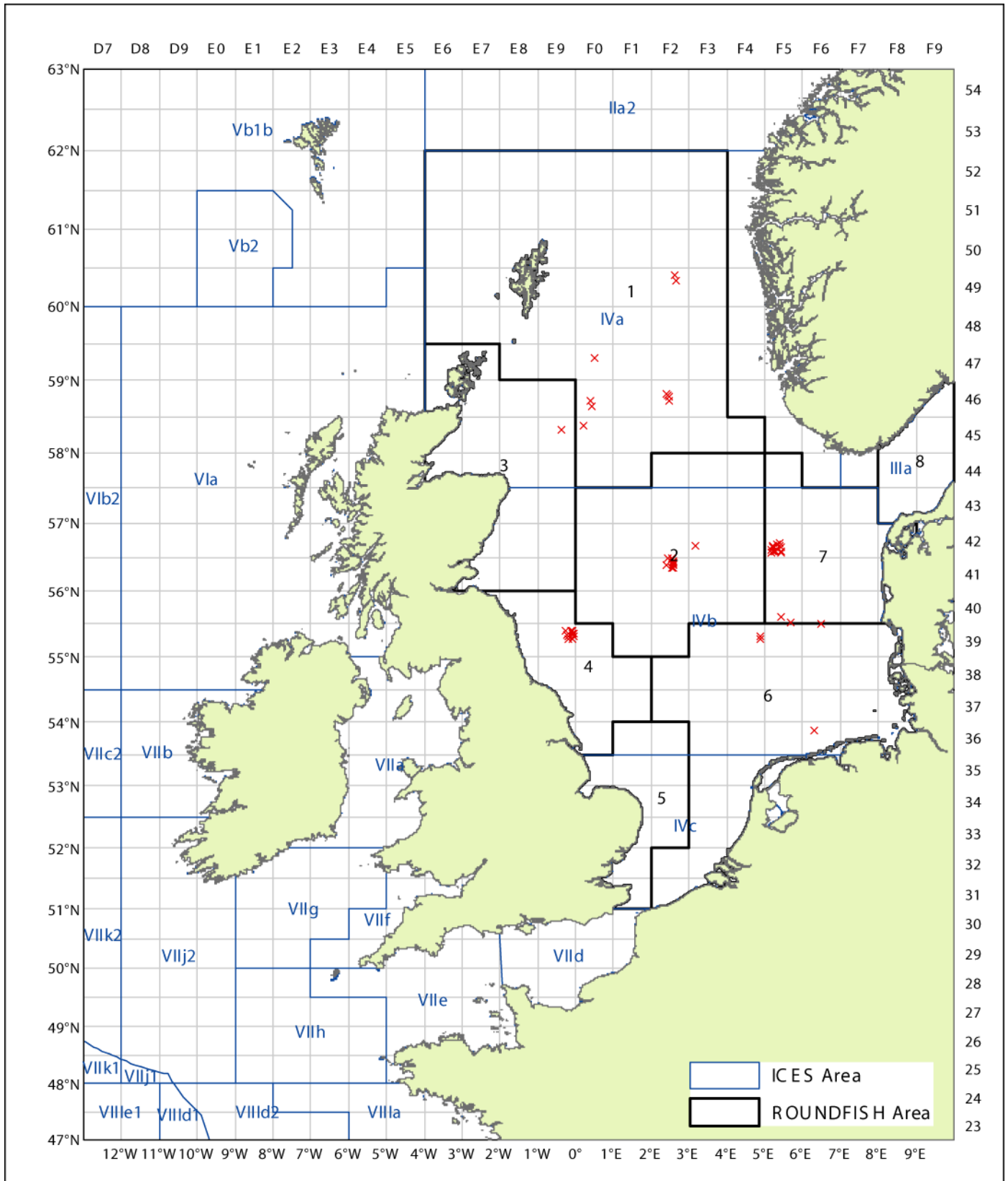
5.5 [cm]
21.5 [cm]

male 24
female 59
undefined 186

total numbers of data 269

Trisopterus esmarki July

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus esmarki

July

$$Tw [g] = a * L [cm]^b$$

a = 0.0043

b = 3.1932

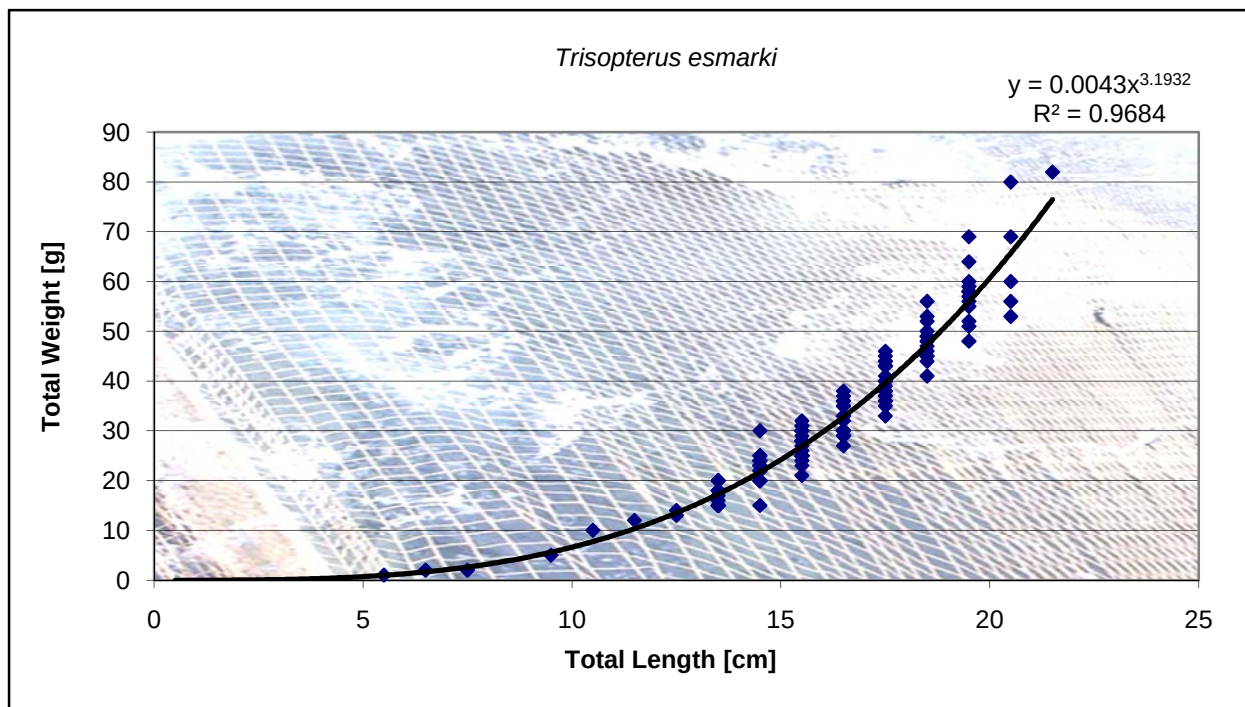
data collected

time period : 1995 - 2007

data source : research vessel

numbers of data:

Quarter																				
1	2	3	4																	
-	-	136	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
-	-	-	-	-	-	136	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	136	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	94	42	-	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
81	11	13	11	-	4	16	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

- Total length
- cm below

min length
max length

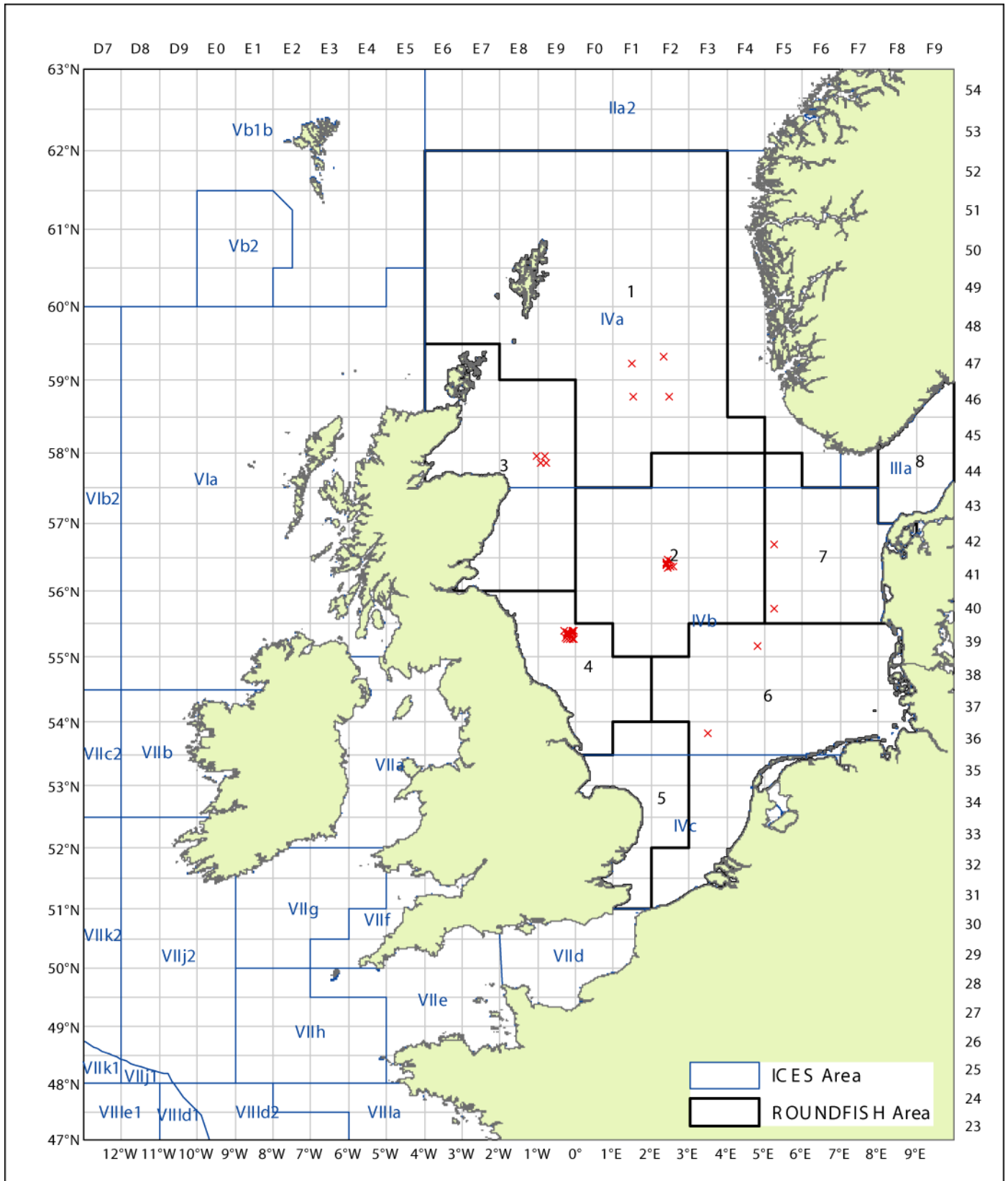
5.5 [cm]
21.5 [cm]

male 3
female 17
undefined 116

total numbers of data 136

Trisopterus esmarki August

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus esmarki

August

$$Tw [g] = a * L [cm]^b$$

a = 0.005

b = 3.1365

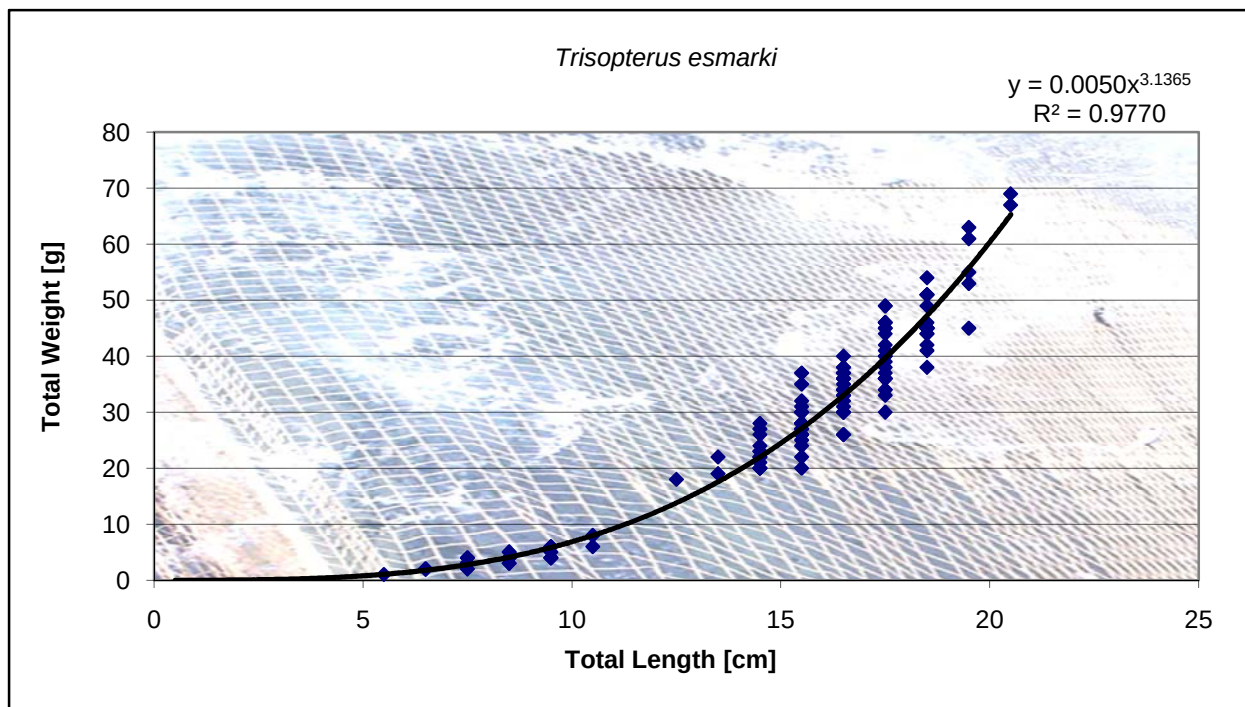
data collected

time period : 1999 - 2007

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
-	-	130	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	-	130	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	130	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	99	31	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
50	8	47	20	-	2	3	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

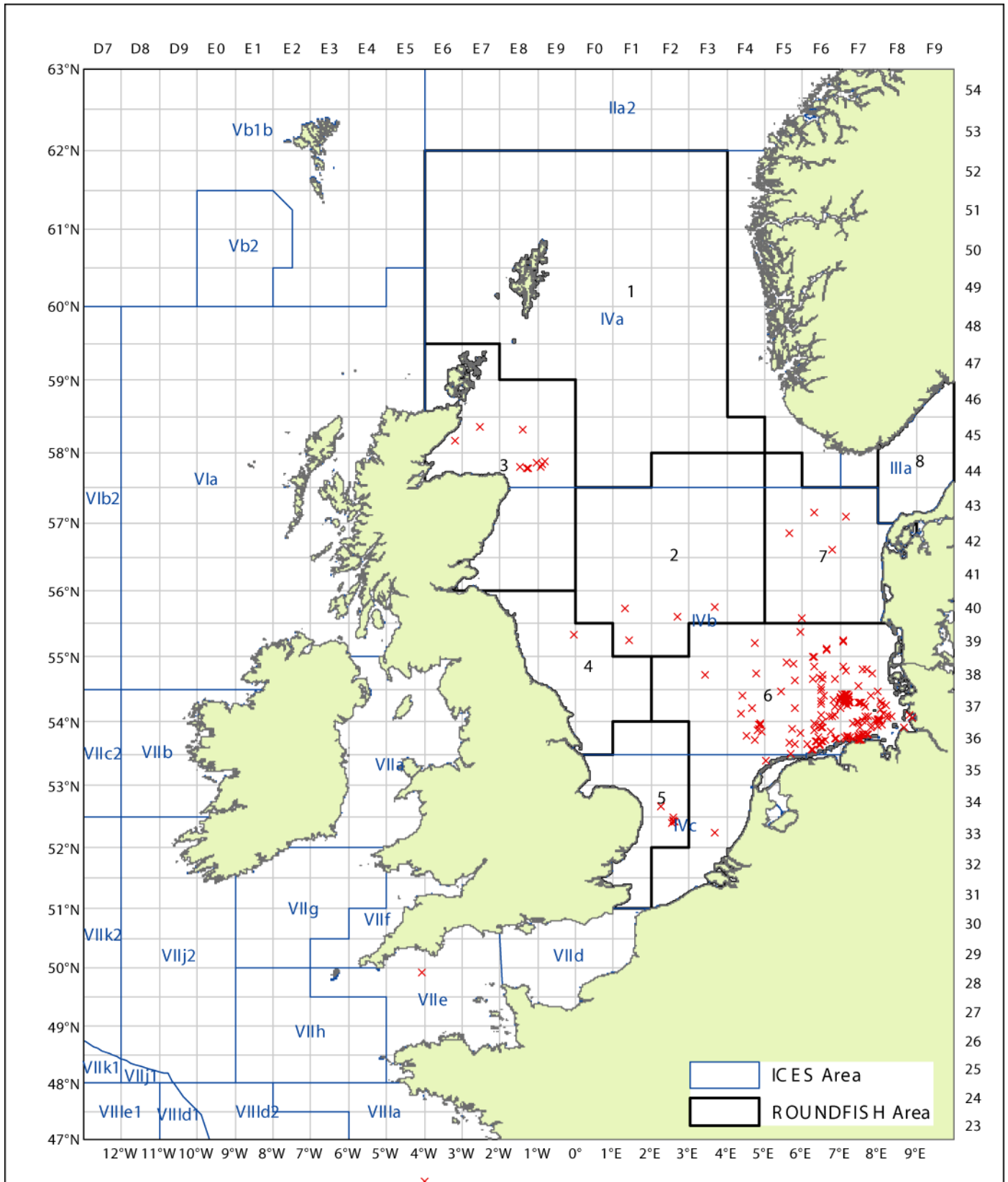
5.5 [cm]
20.5 [cm]

male 21
female 42
undefined 67

total numbers of data 130

Trisopterus luscus

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus luscus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0102

b = 3.0277

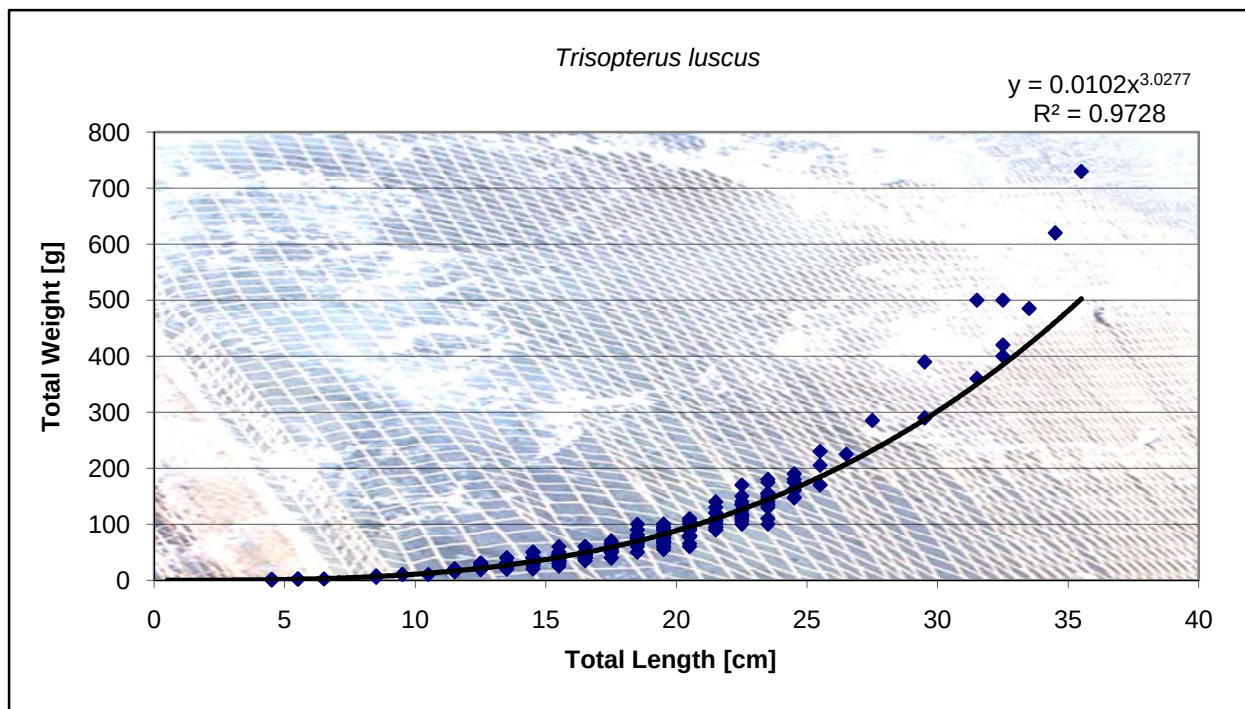
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Numbers of data																			
Quarter																			
1	2	3	4																
78	79	35	64																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
62	16	-	9	52	18	14	20	1	3	30	31								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	252	-	-	2	2	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	9	237	6	-	-	-	-	-	-	-	-	1	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	1	-	-	2	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9											
1	43	9	8	6	181	4	-	-	1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

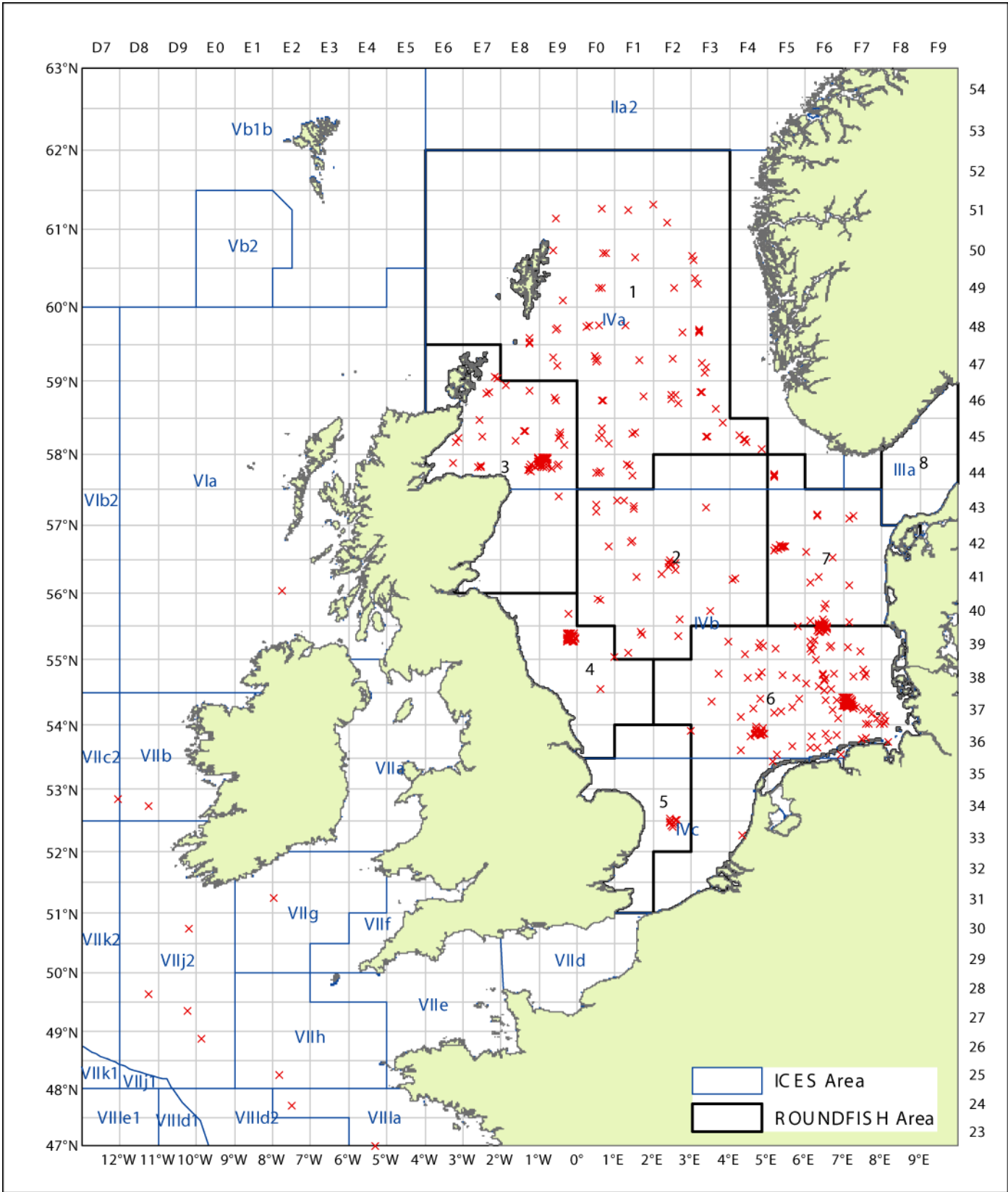
4.5 [cm]
35.5 [cm]

male 30
female 24
undefined 202

total numbers of data 256

Trisopterus minutes

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus minutus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.004

b = 3.275

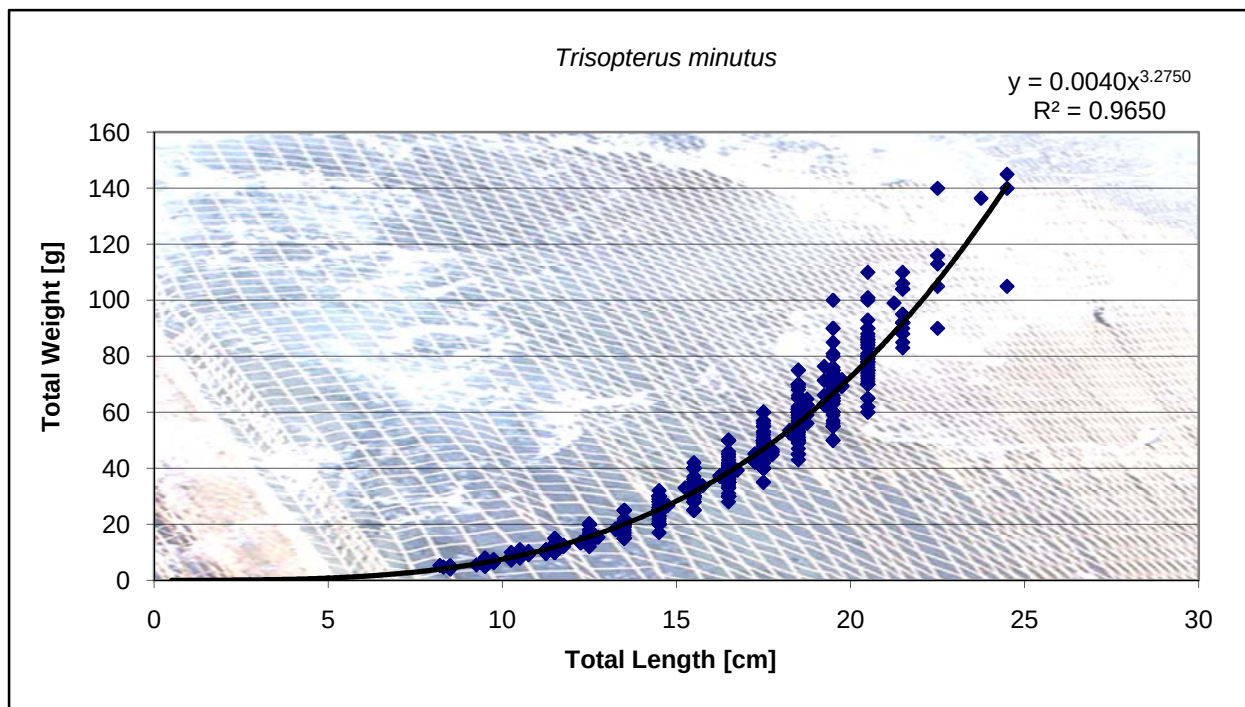
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Quarter																				
1	2	3	4																	
385	119	166	27																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
111	260	14	7	69	43	90	71	5	2	12	13									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	686	-	1	8	2	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	357	319	10	-	-	1	-	-	1	1	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
1	-	5	-	1	-	-	1	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
195	35	162	34	10	173	77	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

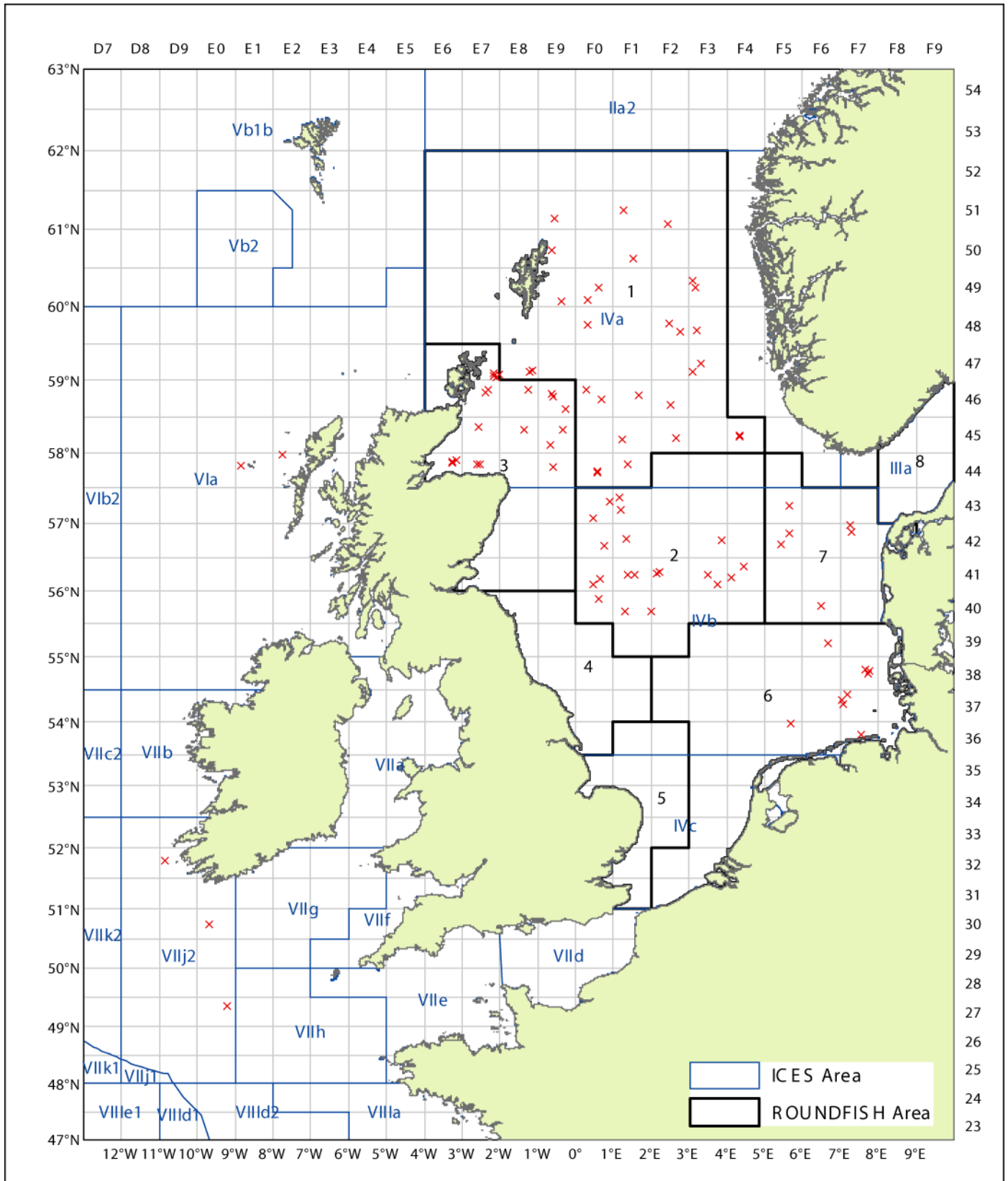
8.5 [cm]
24.5 [cm]

male 25
female 31
undefined 641

total numbers of data 697

Trisopterus minutus Quarter 1

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus minutus

Quarter: 1

$$Tw [g] = a * L [cm]^b$$

a = 0.0032

b = 3.3595

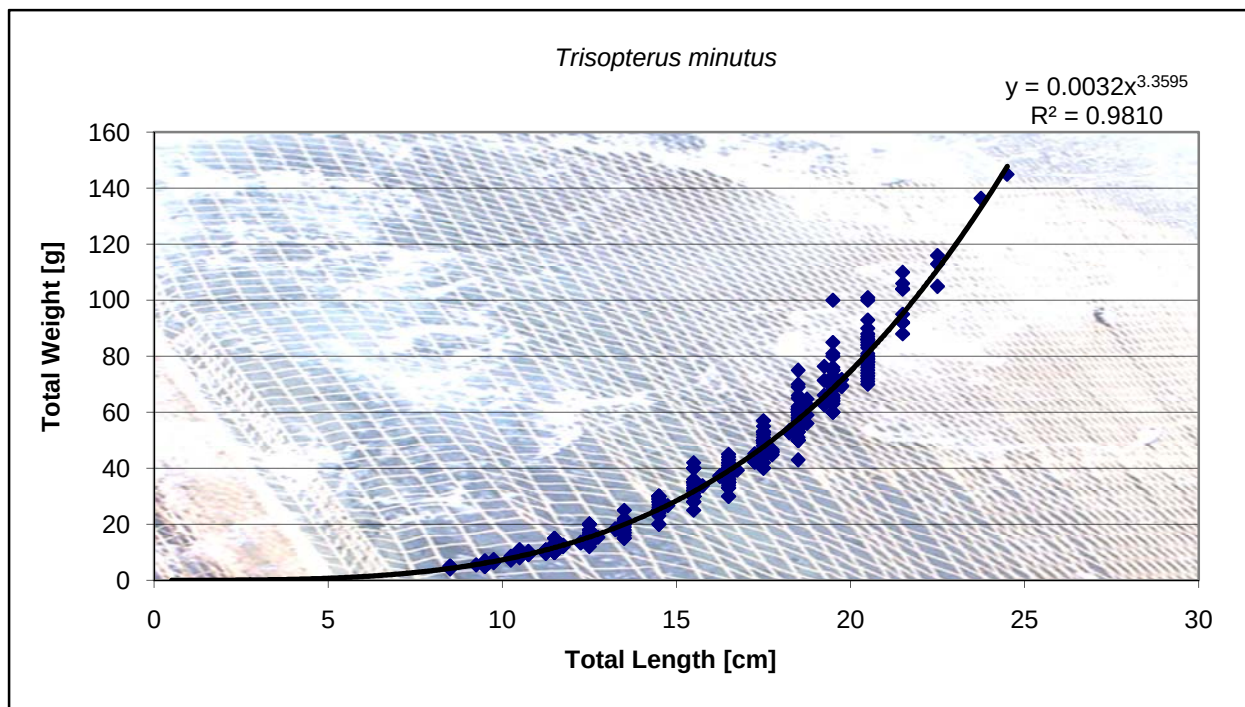
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Quarter																				
1	2	3	4																	
385	-	-	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
111	260	14	-	-	-	-	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	378	-	1	5	1	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	309	67	2	-	-	1	-	-	-	1	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
1	-	3	-	1	-	-	-	-	-	-	-	-	-	-						
Roundfisharea												NAFO								
1	2	3	4	5	6	7	8	9				1A	1B	1C	1D	1E	1F	2G	2H	2J
189	18	118	-	-	41	12	-	-				-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

8.5 [cm]
24.5 [cm]

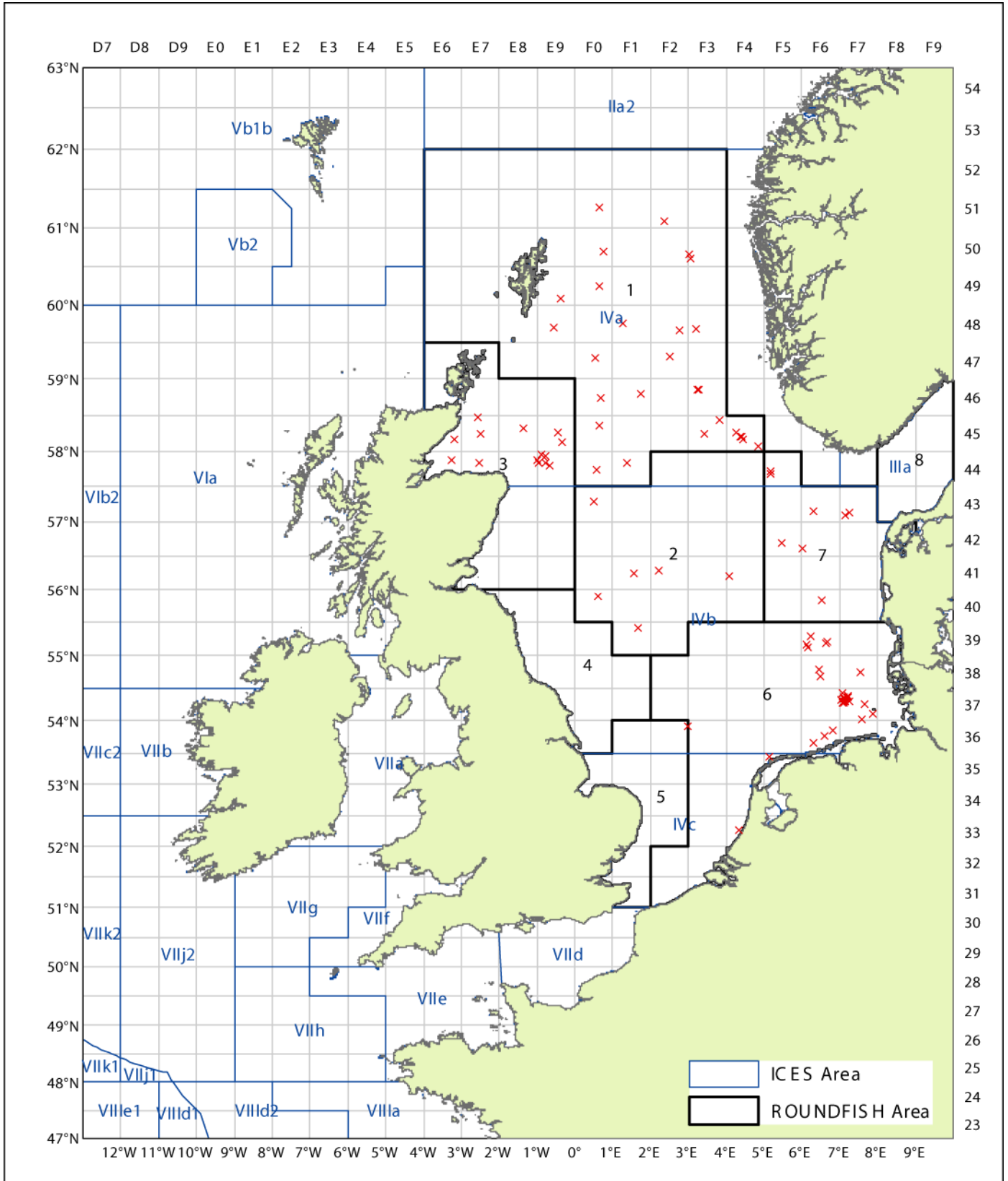
male
female
undefined

-
-
385

total numbers of data 385

Trisopterus minutus *January*

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus minutus

January

$$Tw [g] = a * L [cm]^b$$

a = 0.0029

b = 3.3963

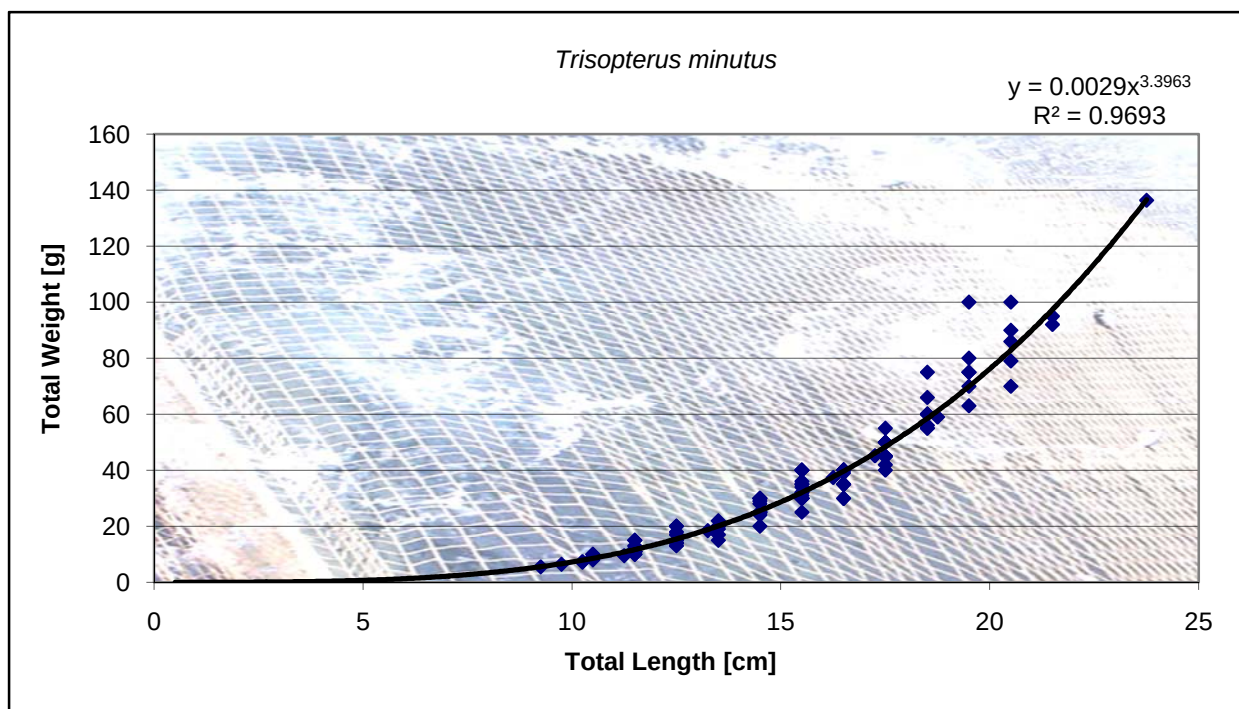
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Quarter																				
1	2	3	4																	
111	-	-	-																	
Month																				
1	2	3	4	5	6	7	8	9	10	11	12									
111	-	-	-	-	-	-	-	-	-	-	-									
Subarea																				
1	2	3	4	5	6	7	8	9	10	12	14									
-	-	-	111	-	-	-	-	-	-	-	-									
Division																				
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F	
-	-	-	-	-	-	-	66	43	2	-	-	-	-	-	-	-	-	-	-	
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B						
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Roundfisharea											NAFO									
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J	
26	6	38	-	-	32	9	-	-			-	-	-	-	-	-	-	-	-	



Method of Measurement

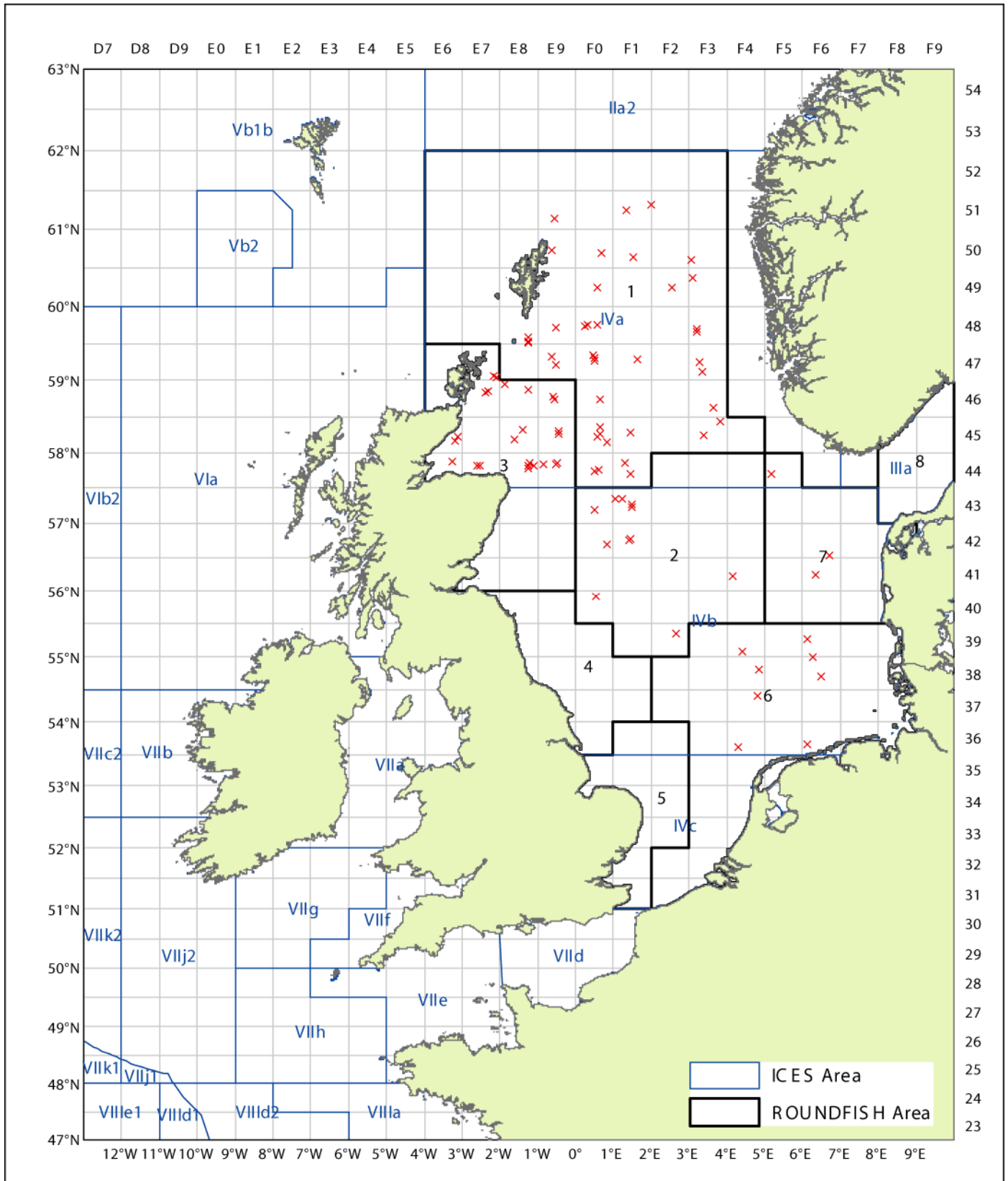
- Total length
- 1/2 cm below, cm below
min length
max length

9.25 [cm]
23.75 [cm]

male -
female -
undefined 111
total numbers of data 111

Trisopterus minutus February

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus minutus

February

$$Tw [g] = a * L [cm]^b$$

a = 0.0031

b = 3.3628

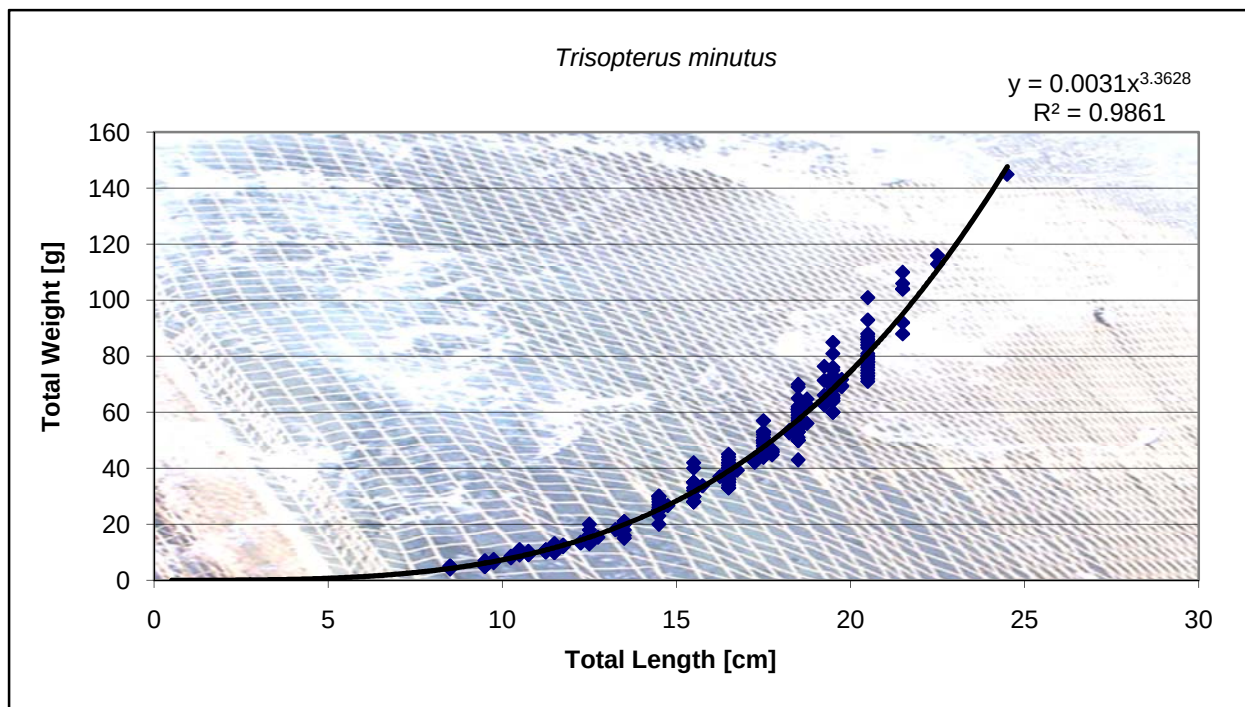
data collected

time period : 1994 - 2008

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
260	-	-	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	260	-	-	-	-	-	-	-	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	260	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	237	23	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea										NAFO									
1	2	3	4	5	6	7	8	9		1A	1B	1C	1D	1E	1F	2G	2H	2J	
159	12	77	-	-	9	3	-	-		-	-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

8.5 [cm]
24.5 [cm]

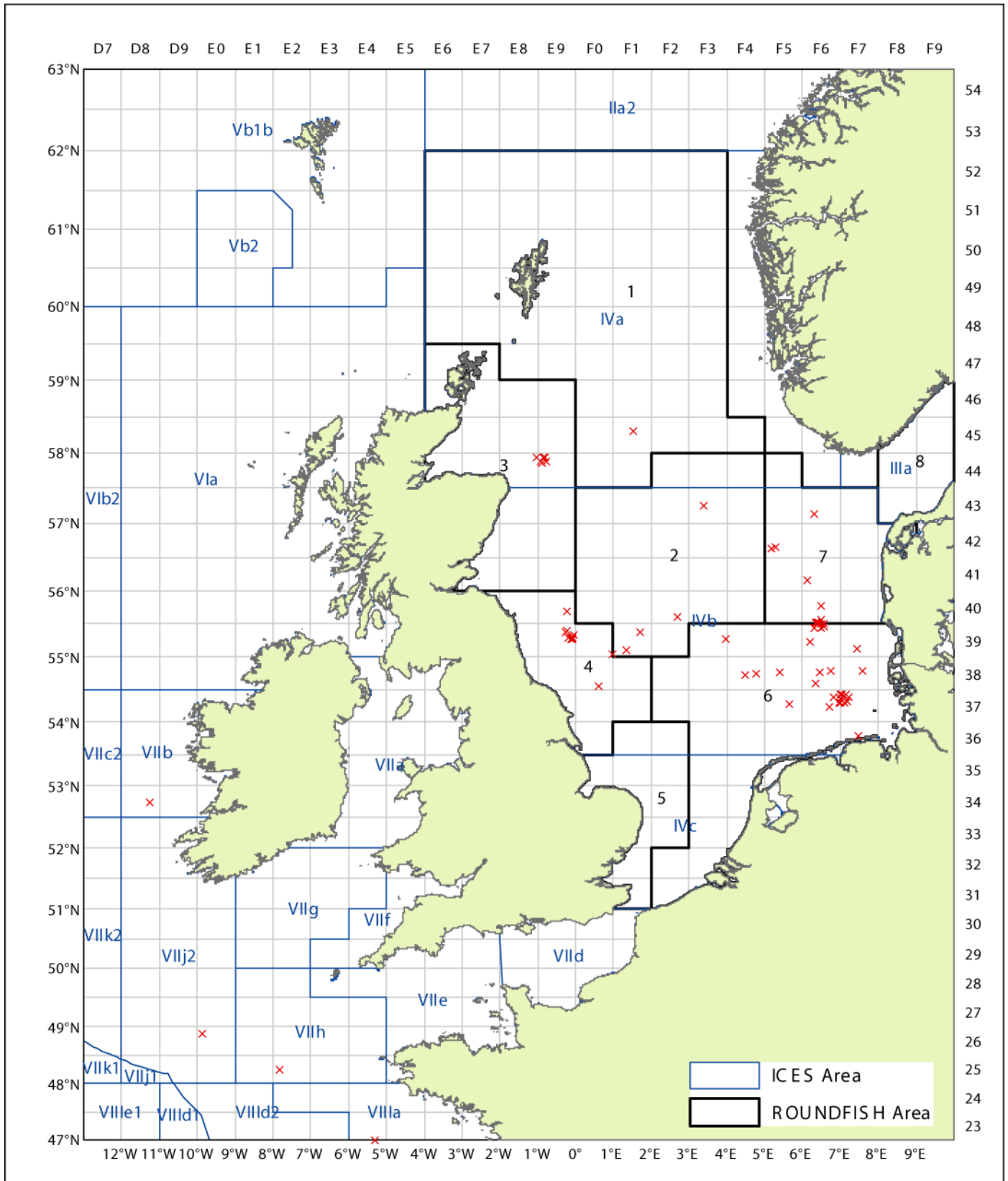
male
female
undefined

-
-
260

total numbers of data 260

Trisopterus minutus Quarter 2

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus minutus

Quarter: 2

$$Tw [g] = a * L [cm]^b$$

a = 0.0082

b = 3.0006

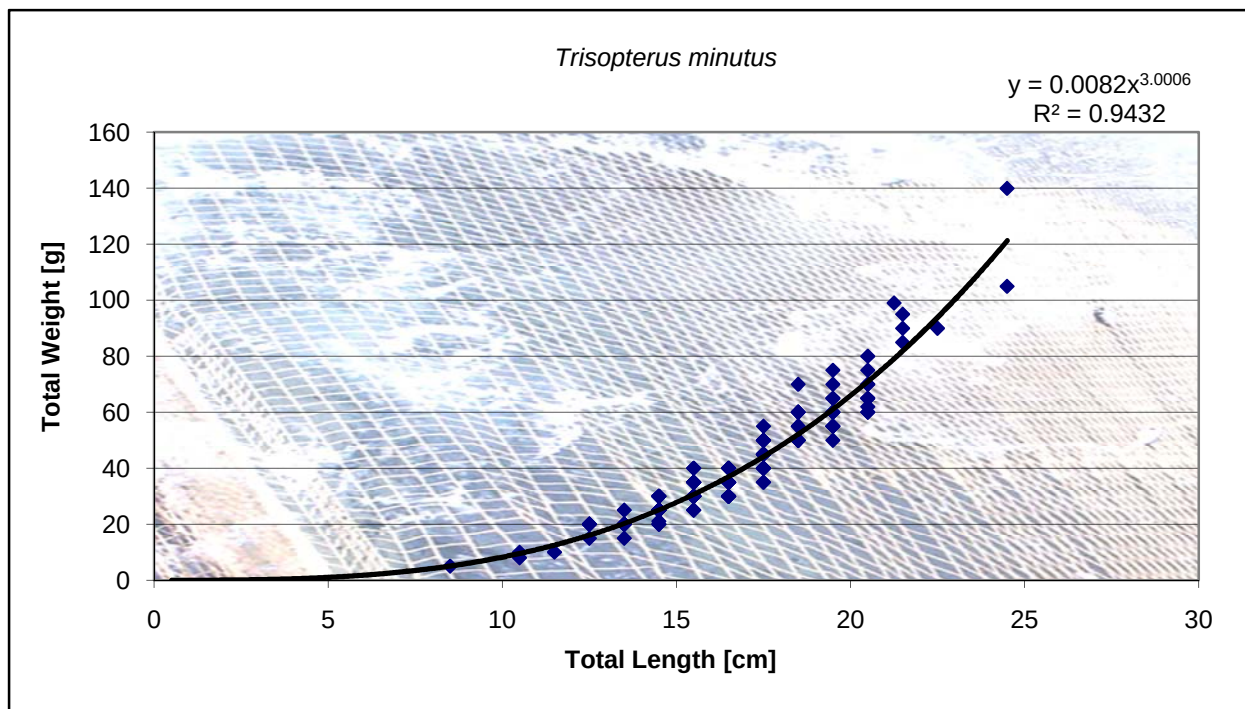
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Quarter																					
1	2	3	4																		
-	119	-	-																		
Month																					
1	2	3	4	5	6	7	8	9	10	11	12										
-	-	-	7	69	43	-	-	-	-	-	-										
Subarea																					
1	2	3	4	5	6	7	8	9	10	12	14										
-	-	-	115	-	-	3	1	-	-	-	-										
Division																					
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F		
-	-	-	-	-	-	-	8	107	-	-	-	-	-	-	1	-	-	-	-		
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B							
-	-	2	-	-	-	-	1	-	-	-	-	-	-	-							
Roundfisharea												NAFO									
1	2	3	4	5	6	7	8	9					1A	1B	1C	1D	1E	1F	2G	2H	2J
2	9	6	11	-	43	44	-	-					-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

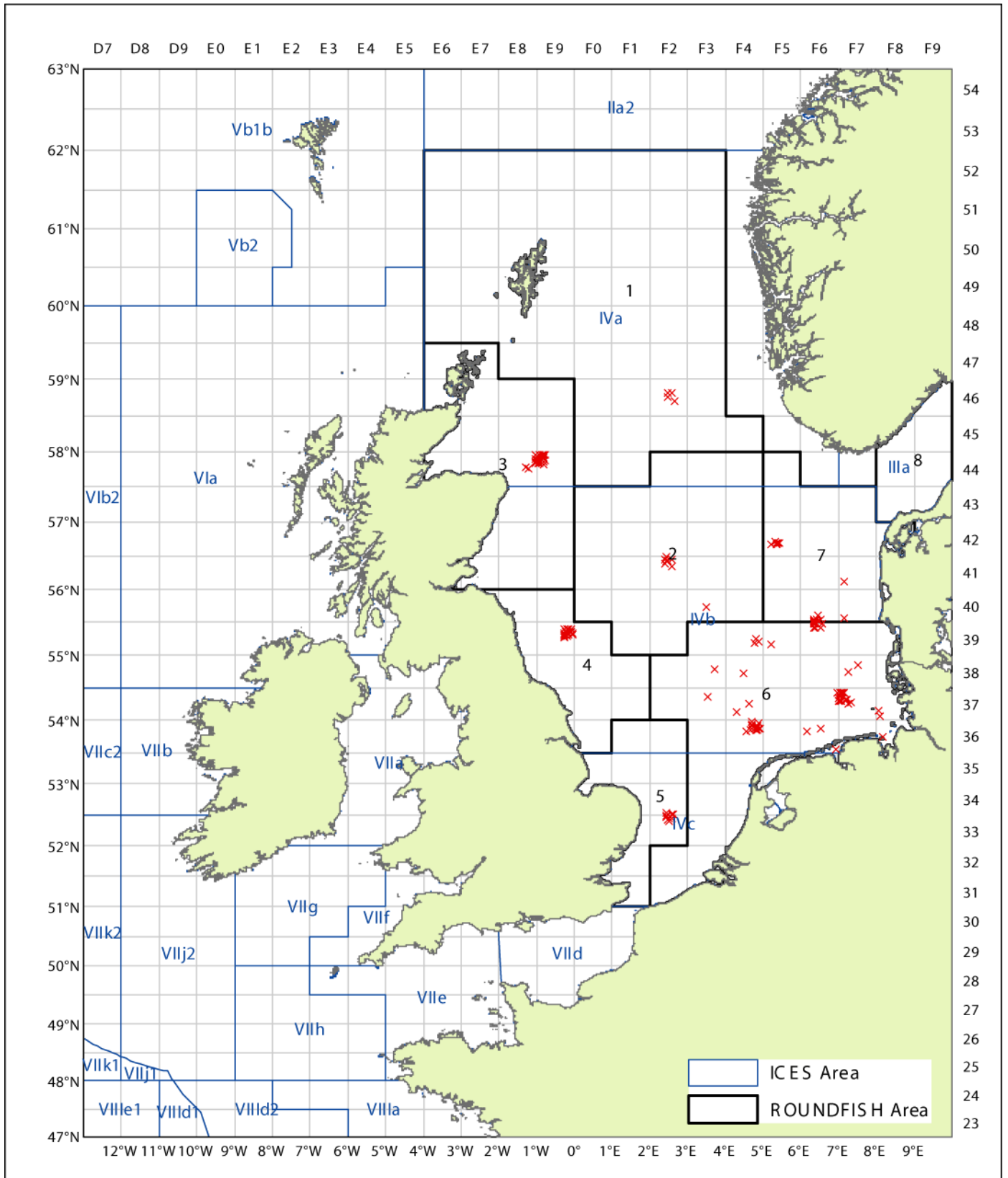
8.5 [cm]
24.5 [cm]

male 25
female 31
undefined 63

total numbers of data 119

Trisopterus minutus Quarter 3

Geographical distribution of data used for calculating the length-weight relationship



Trisopterus minutus

Quarter: 3

$$Tw [g] = a * L [cm]^b$$

a = 0.0072

b = 3.0566

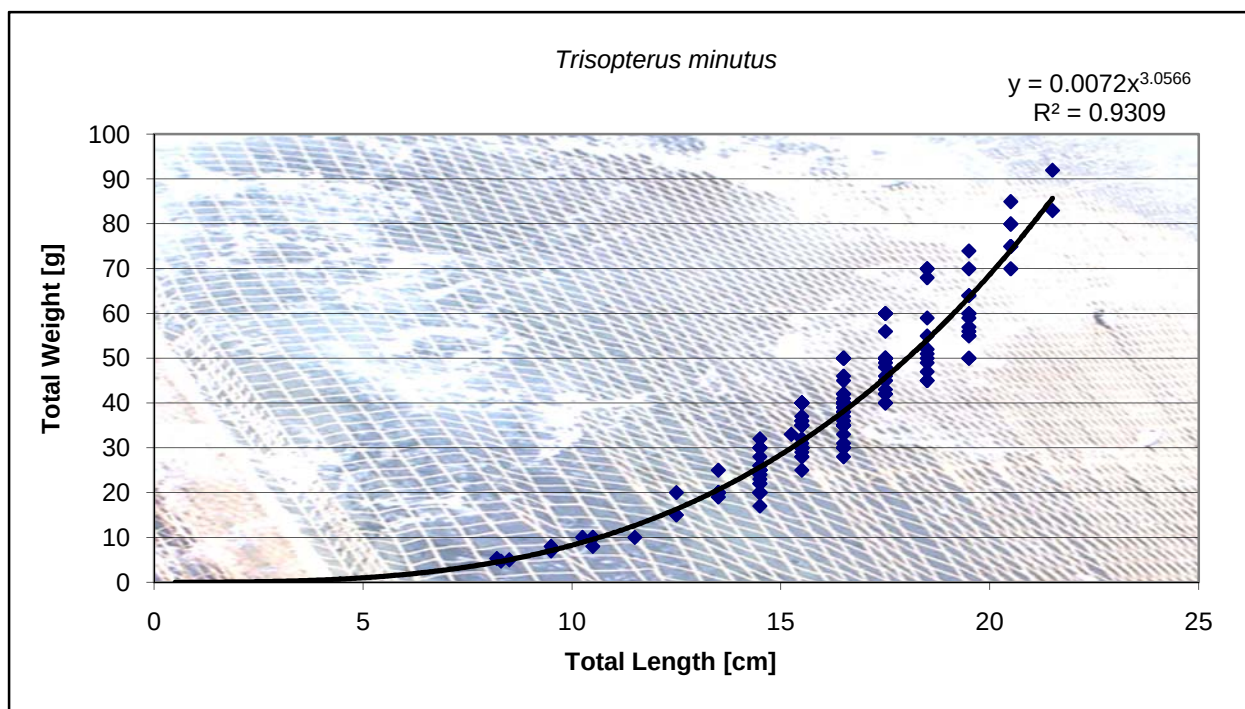
data collected

time period : 1994 - 2007

data source : research vessel

numbers of data:

Numbers of catch																			
Quarter																			
1	2	3	4																
-	-	166	-																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
-	-	-	-	-	-	90	71	5	-	-	-								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	166	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	40	118	8	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9											
4	8	35	23	10	65	21	-	-											
									1A	1B	1C	1D	1E	1F	2G	2H	2J		
									-	-	-	-	-	-	-	-	-		



Method of Measurement

- Total length
- cm below

min length
max length

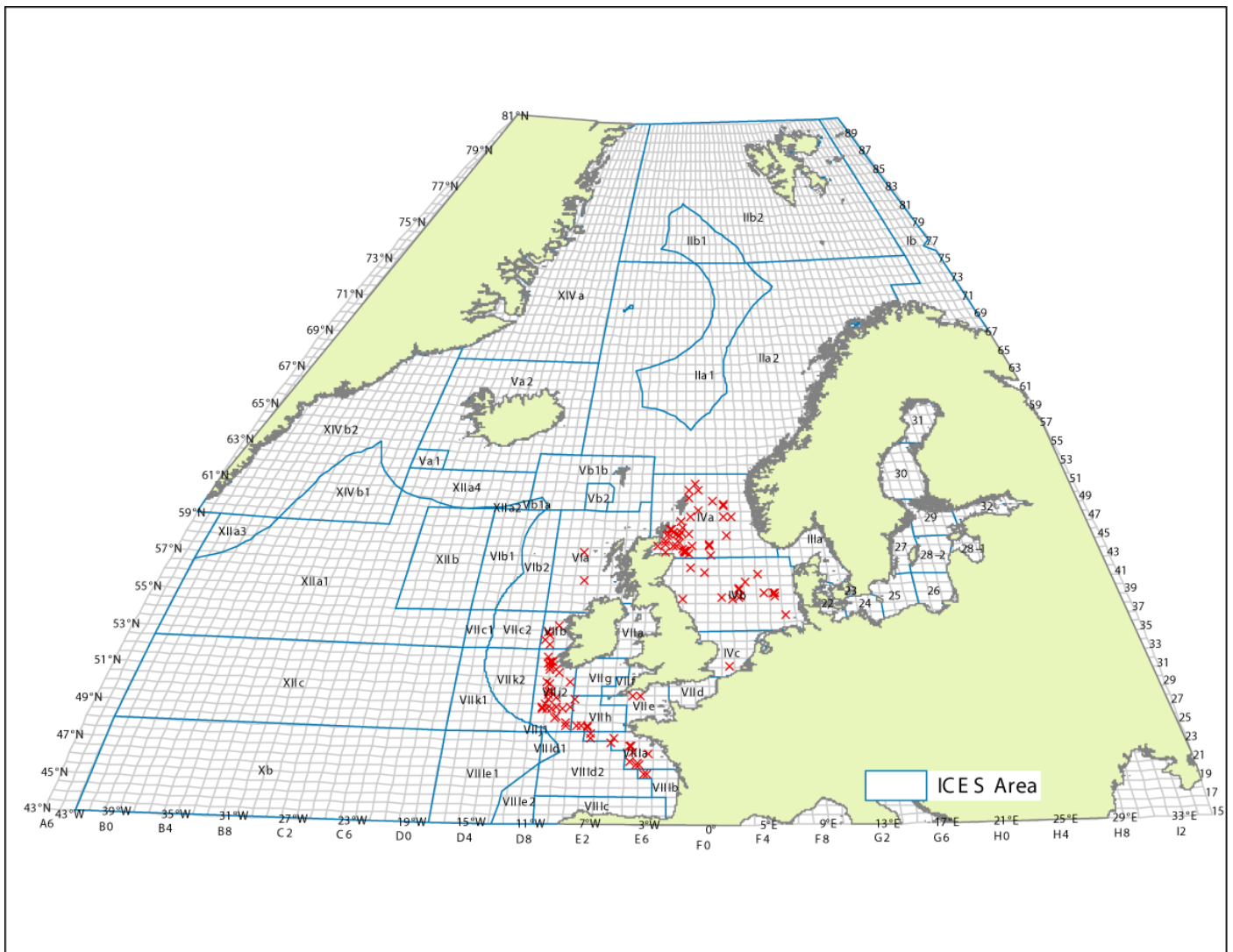
8.5 [cm]
21.5 [cm]

male -
female -
undefined 166

total numbers of data 166

Zeus faber

Geographical distribution of data used for calculating the length-weight relationship



Zeus faber

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0134

b = 3.0526

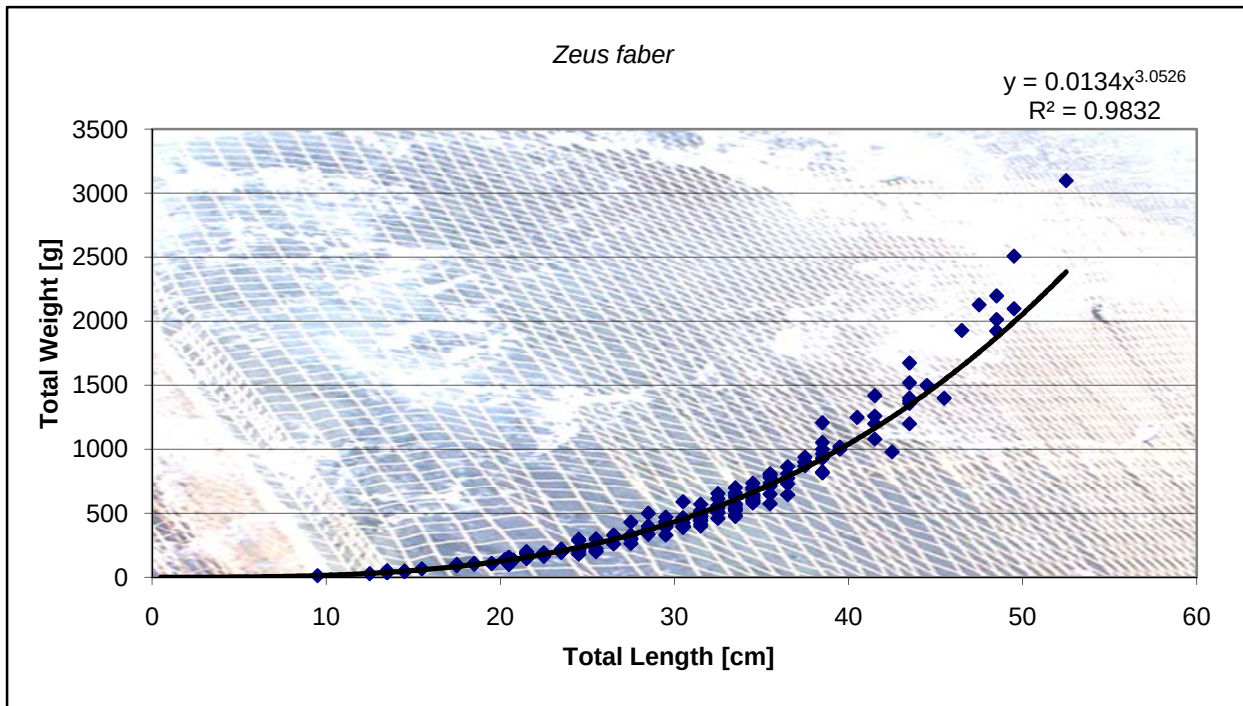
data collected

time period : 1962 - 2008

data source : research vessel

numbers of data:

Quarter																			
1	2	3	4																
117	41	19	7																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
25	33	59	35	3	3	9	10	-	-	6	1								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	86	-	41	46	11	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	63	22	1	-	-	41	-	-	5	-	-	2	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	4	35	-	9	1	-	1	-	-	-	-	-	-	-					
Roundfisharea											NAFO								
1	2	3	4	5	6	7	8	9			1A	1B	1C	1D	1E	1F	2G	2H	2J
23	6	45	1	-	7	4	-	-			-	-	-	-	-	-	-	-	-



Method of Measurement

- Total length
- cm below

min length
max length

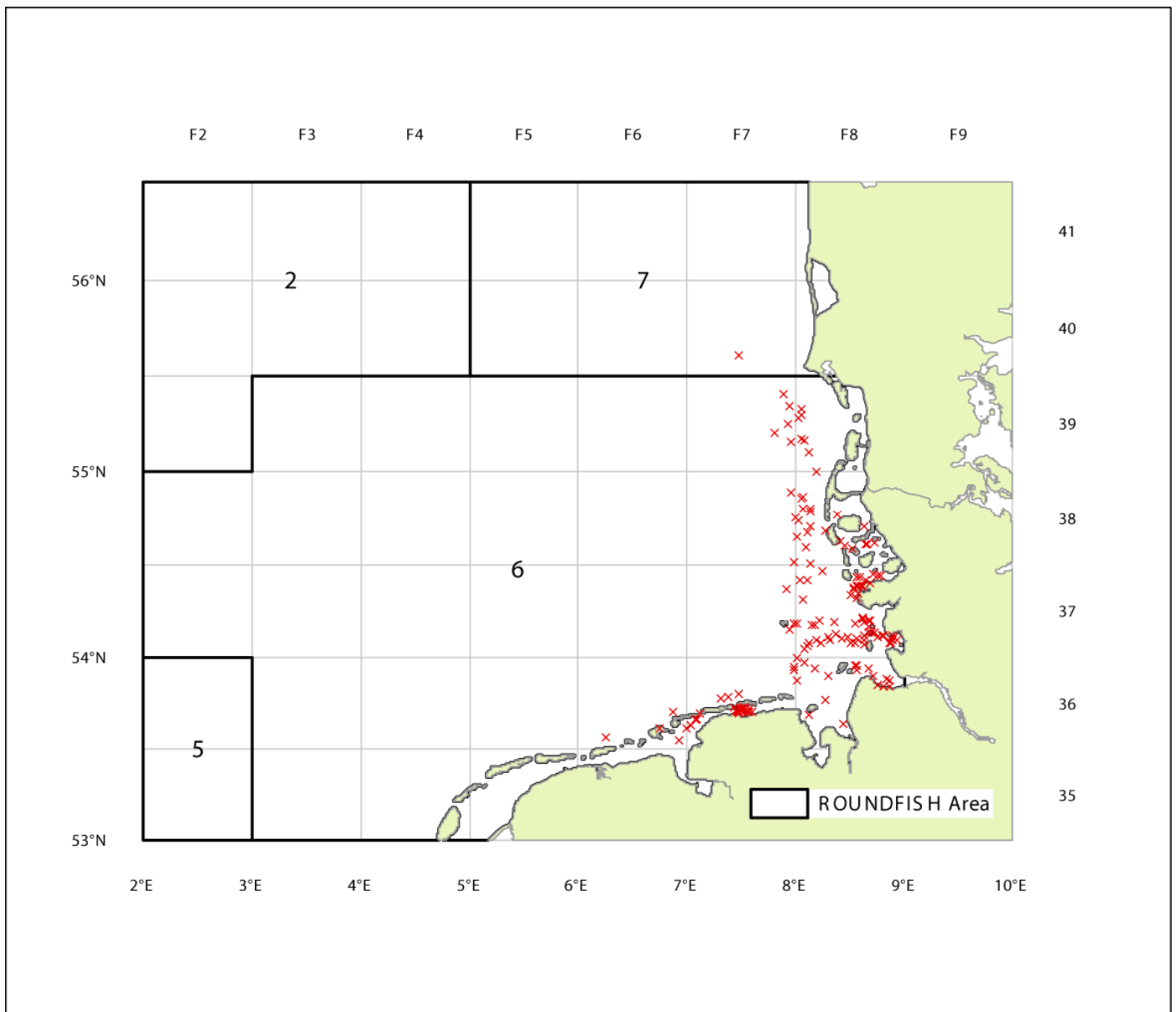
9.5 [cm]
52.5 [cm]

male 41
female -
undefined 143

total numbers of data 184

Zoarces viviparus

Geographical distribution of data used for calculating the length-weight relationship



Zoarces viviparus

Quarter: 1 - 4

$$Tw [g] = a * L [cm]^b$$

a = 0.0047

b = 3.0241

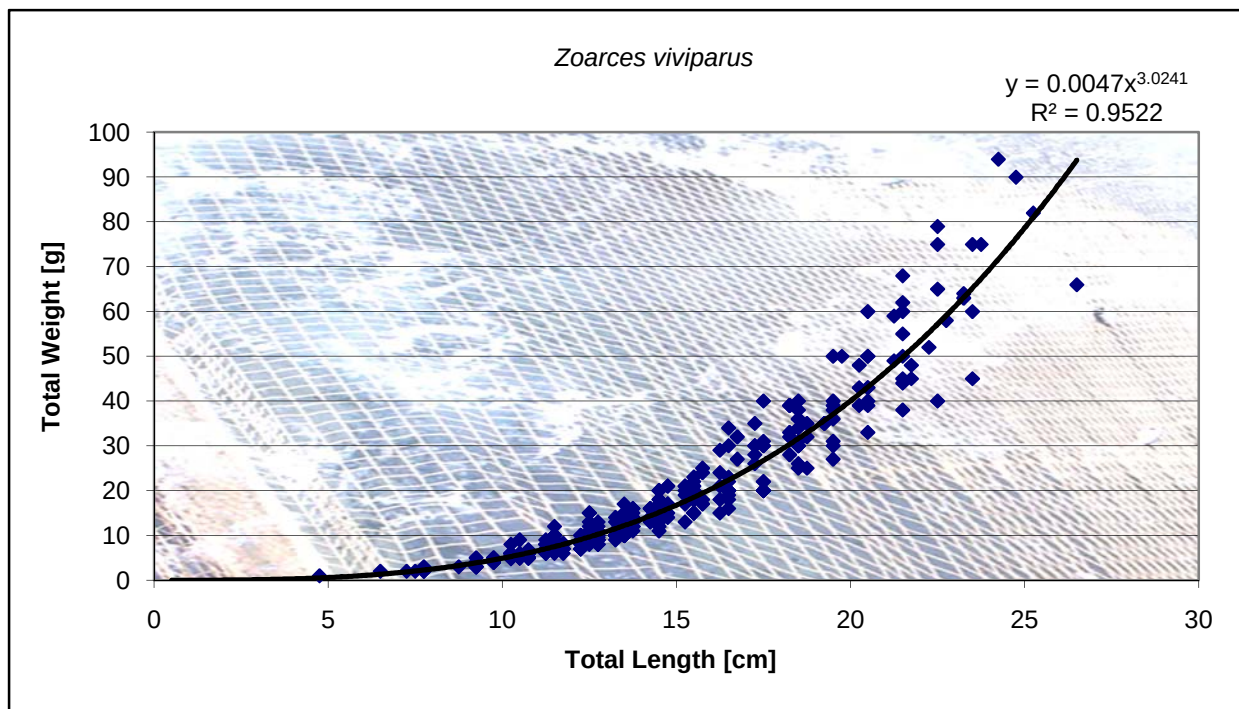
data collected

time period : 1990 - 2007

data source : research vessel

numbers of data:

Numbers of fish																			
Quarter																			
1	2	3	4																
67	101	120	33																
Month																			
1	2	3	4	5	6	7	8	9	10	11	12								
45	12	10	31	52	18	23	34	63	17	12	4								
Subarea																			
1	2	3	4	5	6	7	8	9	10	12	14								
-	-	-	321	-	-	-	-	-	-	-	-								
Division																			
1	2A	2B	3A	3B	3C	3D	4A	4B	4C	5A	5B	6A	6B	7A	7B	7C	7D	7E	7F
-	-	-	-	-	-	-	-	321	-	-	-	-	-	-	-	-	-	-	-
7G	7H	7J	7K	8A	8B	8C	8D	8E	9A	9B	10	12	14A	14B					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roundfisharea												NAFO							
1	2	3	4	5	6	7	8	9											
-	-	-	-	-	320	1	-	-											
1A	1B	1C	1D	1E	1F	2G	2H	2J											
-	-	-	-	-	-	-	-	-											



Method of Measurement

- Total length
- 1/2 cm below, cm below
- min length
- max length

4.75 [cm]
26.5 [cm]

male -
female -
undefined 321
total numbers of data 321

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