

„SOLEA“
Cruise 752
REPORT
20.08. – 05.09.2018

Personnel

Name	Institution
Kay Panten	SF
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Tobias Reßing	SF
Clara Scheuring	SF
Francine Vasseur	SF

Objectives

1. Participation in the ICES co-ordinated "International **B**eam **T**rawl **S**urvey" in the North Sea
2. Determination of temperature and salinity in the area of investigation

Narrative (Fig. 1)

FRV "Solea" left the port of Cuxhaven in the afternoon on 20th August. Working started the next day by sampling the ICES statistical rectangle 39F5 and 39F4. On the third day of the survey priority was given to monitoring the FFH area "Dogger Tail End". The following days the offshore stations were sampled from South to North. On the afternoon of 28th August a gale-force wind forced the stay in Hanstholm Harbour for two days. With this opportunity the representative of multimar left the ship with the up to now attained aquarium stock. On the evening of the 30th August FRV "Solea" disembarked the port and the research was continued on the next morning. Under very good weather conditions the coastal stations were sampled thereafter from North to South. In the afternoon on 2nd September the final haul of the BTS was conducted. The work in the FFH area "Sylter Außenriff" and "Borkum

Riffgrund" where carried out on 3rd and 4th September. The cruise ended in Cuxhaven in the evening on 4th September. The return trip to Bremerhaven took place the next morning.

Results (Fig. 2 – 10)

A total of 63 valid hauls with a standard duration of 30 minutes were conducted with the 7m beam trawl. Additional 29 15min hauls were carried out in the FFH areas. At 72 stations salinity and temperature were measured.

The distribution of species composition shows the usual geographic pattern with dab as the most frequent fish species, followed by plaice and lemon sole (offshore) or solenette (inshore).

Toward the north and the west soon the importance of long rough dab and starry ray in the biomass increases. Still, in the survey area some larger (up to 50 cm) plaice can be found, although quite sporadically.

Also in the FFH areas, nothing unusual was caught. The fish fauna is dominated by plaice and dab in all areas. The invertebrate fauna in the coastal areas ("Borkum Riffgrund" and "Sylter Aussenriff") dominate starfish (*Asterias rubens*) and swimming crab (*Liocarcinus holsatus*). In the offshore FFH area "Dogger Tail End", sponges (*Porifera*) and hermit crabs (*Pagurus bernhardus*) are the most commonly caught invertebrates.



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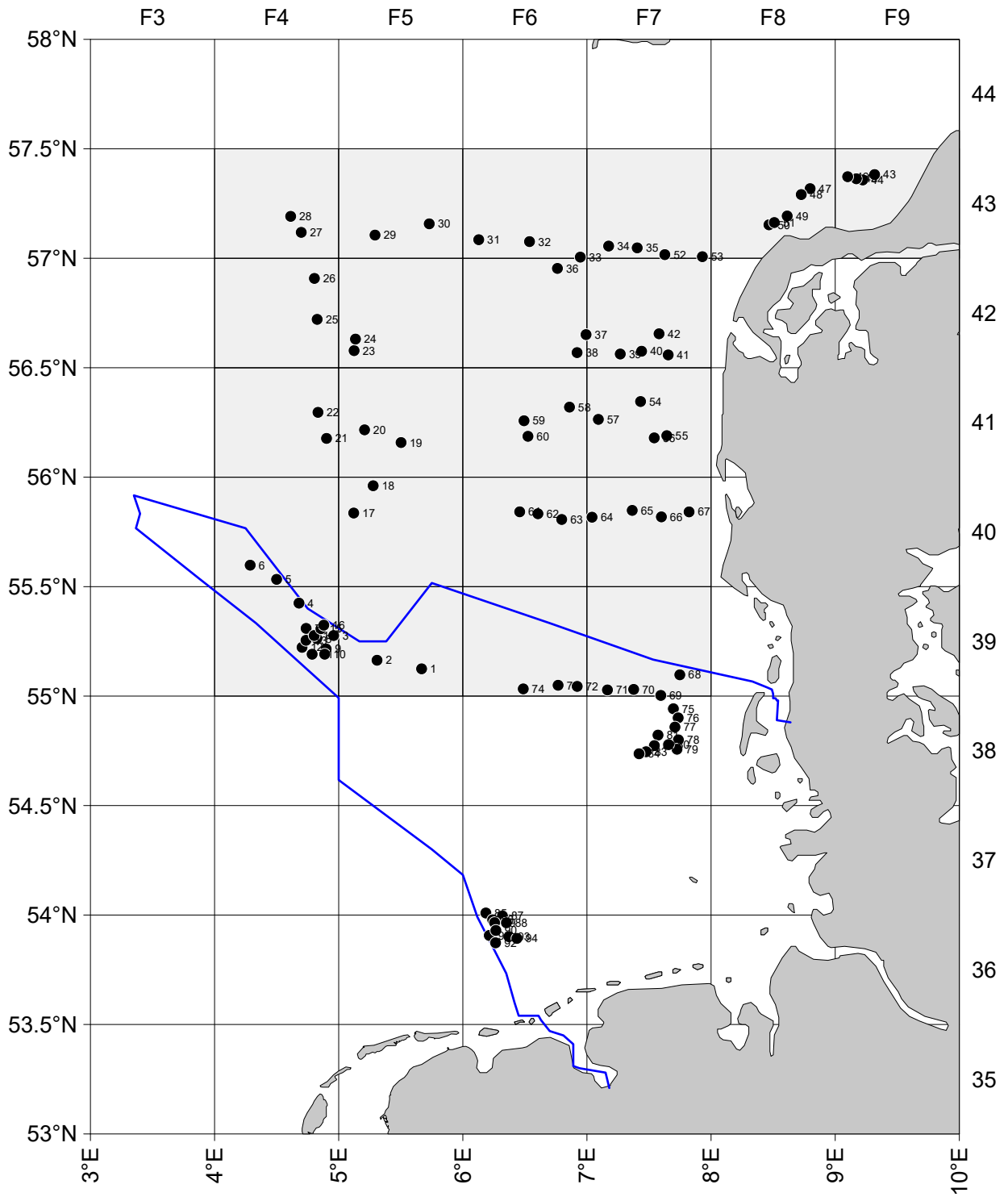


Fig. 1: "Solea", Cruise no. 752, Haul positions and area of investigation

Catch composition in kg and length distribution during Beam Trawl Survey

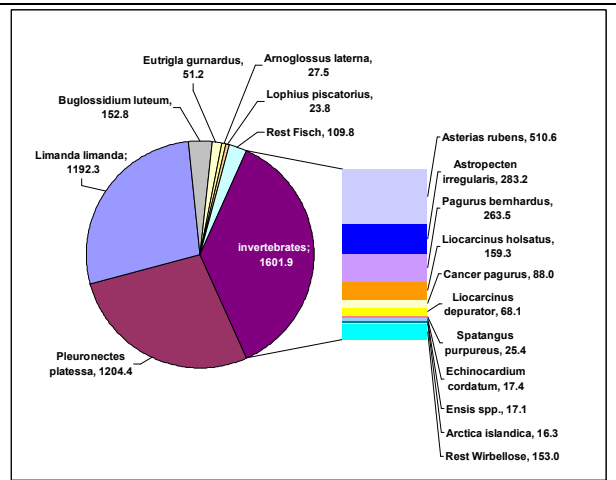
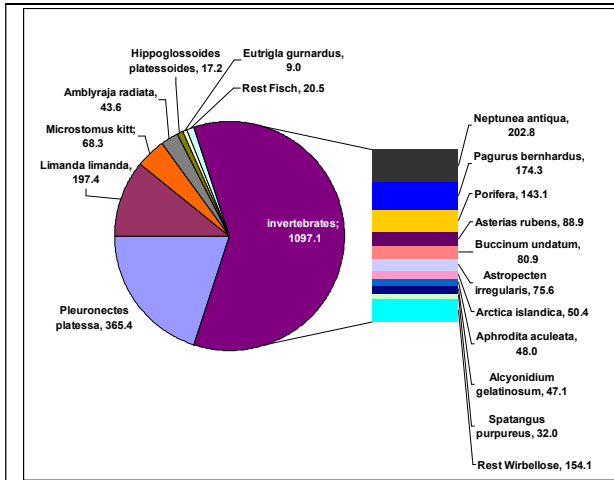


Fig. 2: Catch composition in 39-43F4&5 (offshore)

Fig. 3: Catch composition in 39-43F6&7, 43F8&9 (inshore)

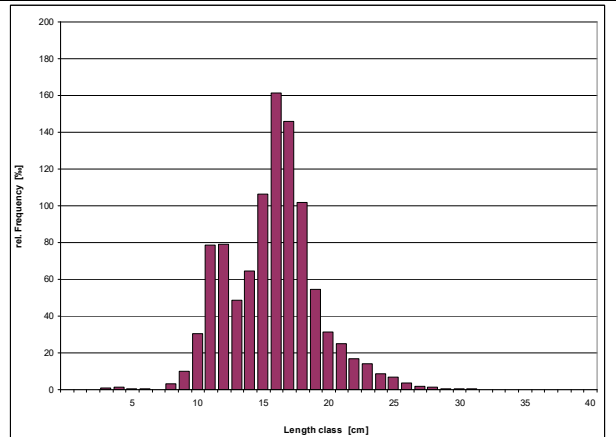
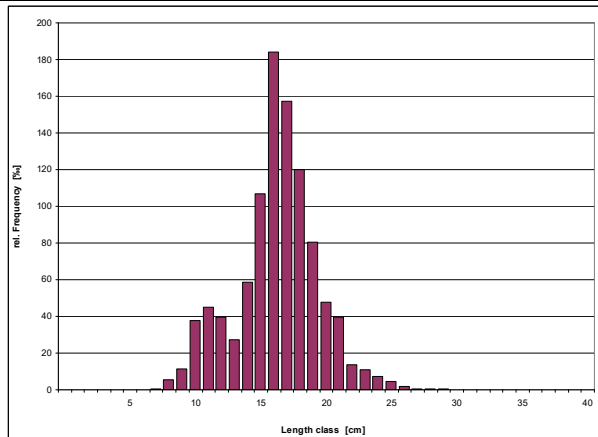


Fig. 4: Length distribution of Dab in 39-43F4&5

Fig. 5: Length distribution of Dab in 39-43F6&7, 43F8&9

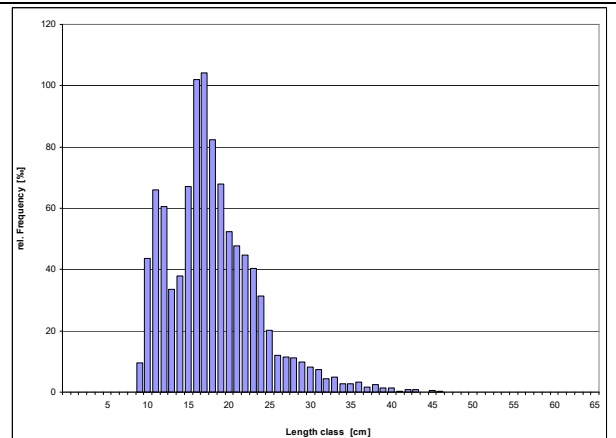
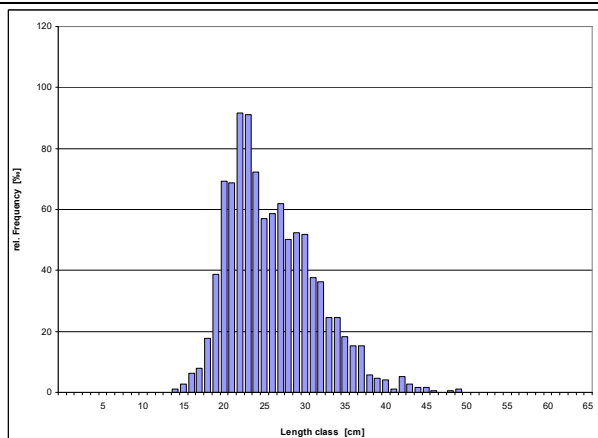


Fig. 6: Length distribution of Plaice in 39-43F4&5

Fig. 7: Length distribution of Plaice in 39-43F6&7, 43F8&9

Catch composition and length distribution during FFH Monitoring

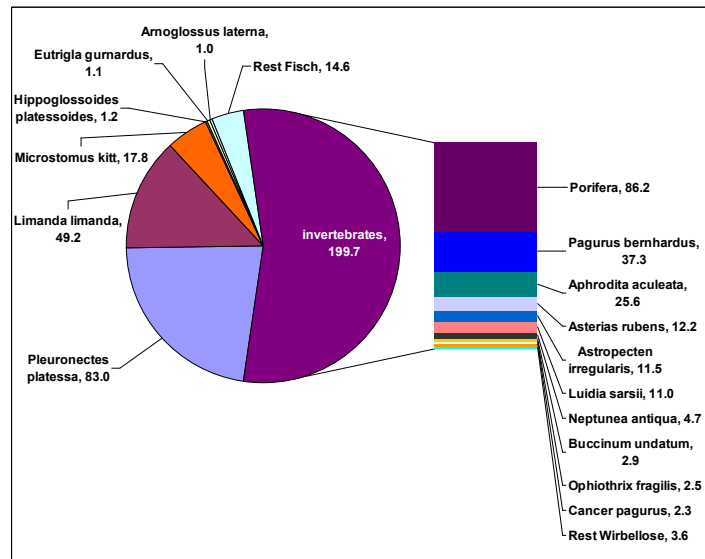


Abb. 8: Catch composition in FFH-Area „Dogger Tail End“

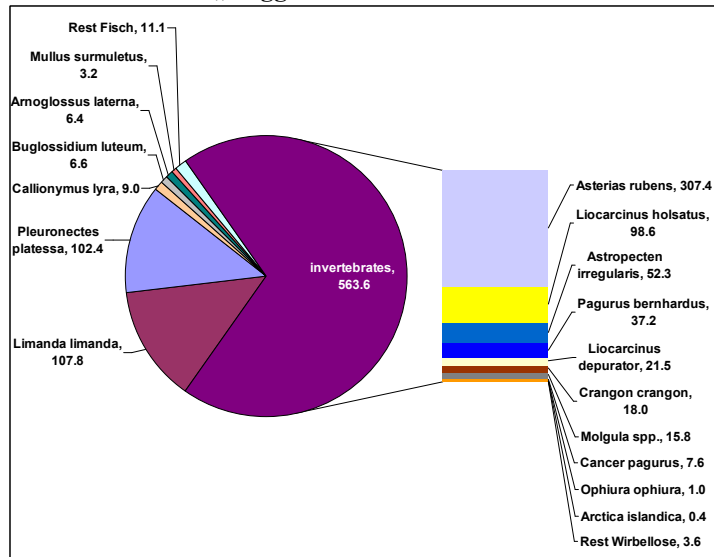


Abb. 9: Catch composition in FFH-Area „Borkum Riffgrund“

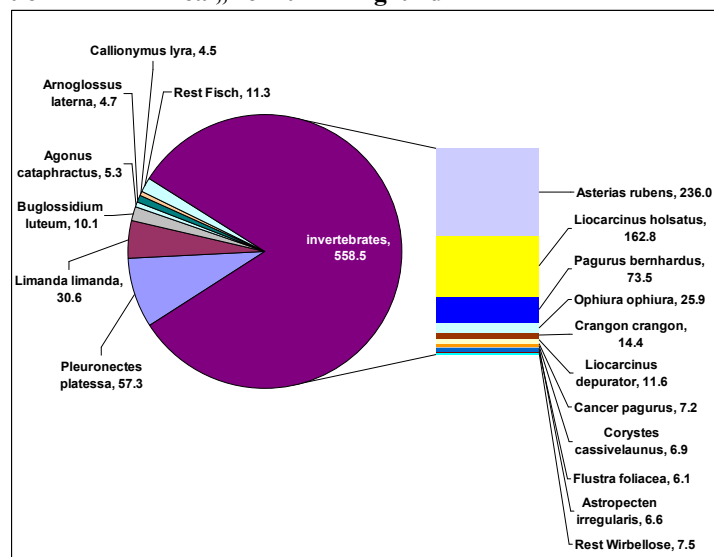


Abb. 10: Catch composition in FFH-Area „Sylter Aussenriff“

CRUISE SUMMARY REPORT

FOR COLLATING CENTRE USE

Centre: DOD Ref. No.:

Is data exchange restricted Yes In part No

SHIP enter the full name and international radio call sign of the ship from which the data were collected, and indicate the type of ship, for example, research ship; ship of opportunity, naval survey vessel; etc.

Name: SoleaCall Sign: DBFHType of ship: FRVCRUISE NO. / NAME 752

enter the unique number, name or acronym assigned to the cruise (or cruise leg, if appropriate).

CRUISE PERIOD start 20/08/2018 to 05/09/2018 end
(set sail) day/ month/ year day/ month/ year (return to port)

PORT OF DEPARTURE (enter name and country) Cuxhaven, GermanyPORT OF RETURN (enter name and country) Cuxhaven, Germany

RESPONSIBLE LABORATORY enter name and address of the laboratory responsible for coordinating the scientific planning of the cruise

Name: SF (Institut of Sea Fisheries)Address: Herwigstrasse 31, 27572 BremerhavenCountry: Germany

CHIEF SCIENTIST(S) enter name and laboratory of the person(s) in charge of the scientific work (chief of mission) during the cruise.

Dipl. Biol. K. Panten

OBJECTIVES AND BRIEF NARRATIVE OF CRUISE enter sufficient information about the purpose and nature of the cruise so as to provide the context in which the report data were collected.

International Beam Trawl Survey

PROJECT (IF APPLICABLE) if the cruise is designated as part of a larger scale cooperative project (or expedition), then enter the name of the project, and of organisation responsible for co-ordinating the project.

Project name: International Beam Trawl SurveyCoordinating body: ICES WGBEAM

TRACK CHART: You are strongly encouraged to submit, with the completed report, an annotated track chart illustrating the route followed and the points where measurements were taken.

Insert a tick(✓) in this box if a track chart is supplied



GENERAL OCEAN AREA(S): Enter the names of the oceans and/or seas in which data were collected during the cruise – please use commonly recognised names (see, for example, International Hydrographic Bureau Special Publication No. 23, 'Limits of Oceans and Seas').

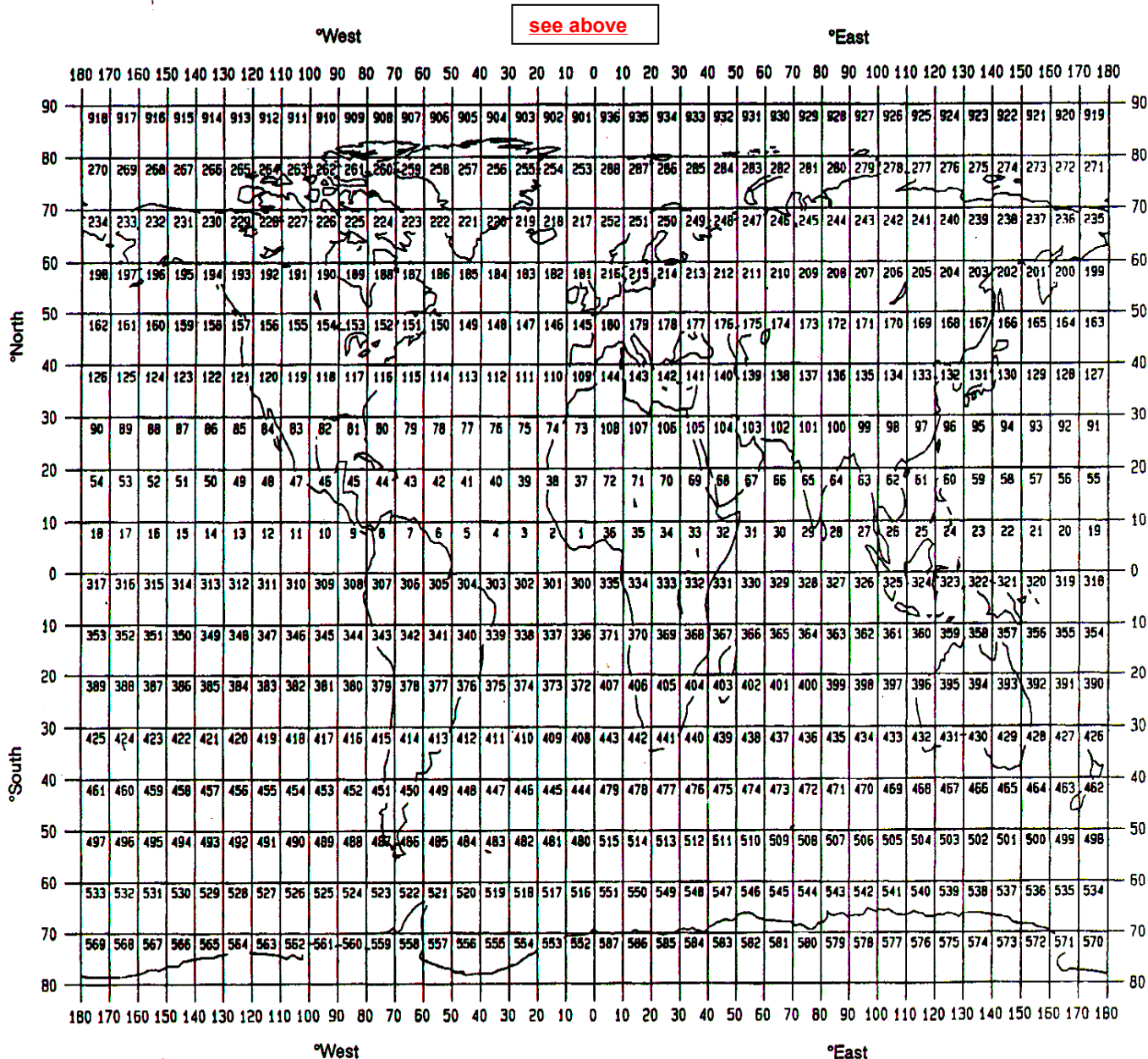
North Sea

SPECIFIC AREAS: If the cruise activities were concentrated in a specific area(s) of an ocean or sea, then enter a description of the area(s). Such descriptions may include references to local geographic areas, to sea floor features, or to geographic coordinates.

Please insert here the number of each square in which data were collected from the below given chart

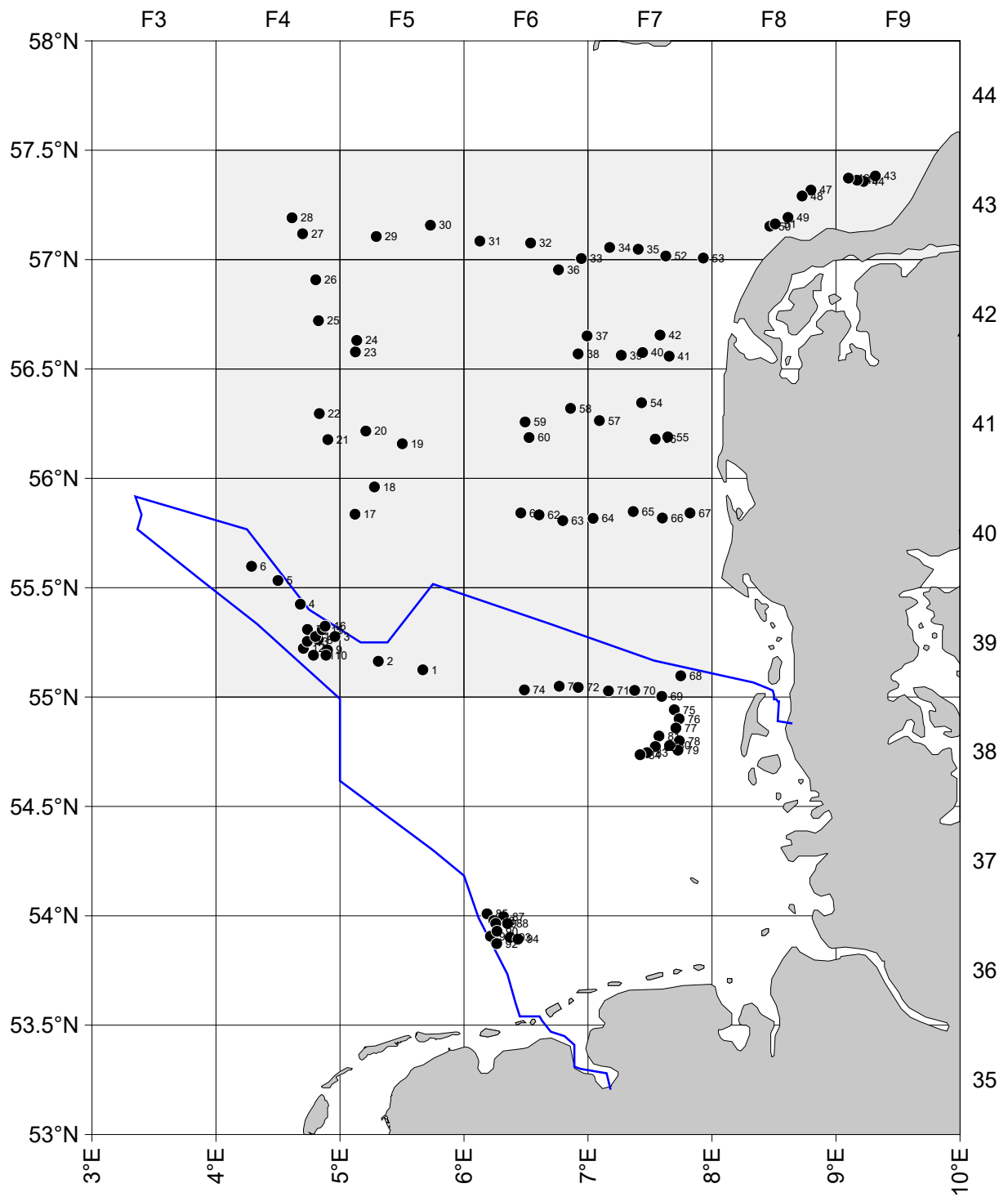
216

GEOGRAPHIC COVERAGE - INSERT 'X' IN EACH SQUARE IN WHICH DATA WERE COLLECTED



THANK YOU FOR YOUR COOPERATION

Please send your completed report without delay to the collating centre indicated on the cover page



Positions of cruise Solea 752