CRUISE SUMMARY REPORT FOR COLLATING CENTRE USE Centre: ~centre~ Ref. no: ~no~ Is data exchange restricted? Yes In part No 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: TRIDENS Call Sign: PBVO Type of ship: RESEARCH VESSEL CRUISE NO /NAME enter the unique number, name or acronym assigned to the cruise (or cruise let, if appropriate). North Sea Mackerel Egg Survey CRUISE PERIOD start 03 06 2002 to 20 06 2002 (set sail) day month day month vear (return to port) vear PORT OF DEPARTURE (enter name and country) IJMUIDEN, The Netherlands PORT OF RETURN (enter name and country) IJMUIDEN, The Netherlands RESPONSIBLE LABORATORY enter name and address of the laboratory responsible for coordinating the scientific planning of the cruise. Name: NEDERLANDS INSTITUUT VOOR VISSERIJONDERZOEK, (NETHERLANDS INSTITUTE FOR FISHERIES RESEARCH) P.O. BOX 68 Address: 1970 AB IJMUIDEN HARINGKADE 1 Country: THE NETHERLANDS CHIEF SCIENTIST(S) enter name and laboratory of the person(s) in charge of the scientific work (chief of mission) during the cruise. A.T.G.W. Eltink (fishery biologist) 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 reported data were collected. During the North Sea Mackerel Egg Survey plankton samples are collected by the Netherlands and Norway in order to estimate the spawning stock biomass of North Sea Mackerel. In three successive weeks the spawning area is covered by the egg surveys of the Netherlands and Norway (Norway took care of the northern part and the Netherlands of the southern part of the spawning area). The total egg production will be converted to spawning stock biomass by using fecundity data. This information is important for the ICES Mackerel, Horse Mackerel Sardine and Anchovy Working Group. Pelagic trawl hauls have been carried out for obtaining biological samples of mackerel. In addition hydrographical data have been collected using a CTD.

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

Project name: International Mackerel and Horse Mackerel Egg Surveys

Coordinating body:

ICES Working Group on Mackerel and Horse Mackerel Egg Surveys Planning of this survey is carried out in: ICES CM 2002/G:06 Results of this survey are presented in: ICES CM 2003/G:??

PRINCIPAL INVESTIGATORS: Enter the name and address of the Principal Investigators responsible for the data collected on the cruise, and who may be contacted for further information about the data (The letter assigned below against each Principal Investigator is used on pages 2 and 3, under the column heading 'PI', to identify the data sets for which he/she is responsible)

A. A.T.G.W. Eltink, Netherlands Inst. for Fisheries Research, PO Box 68, 1970AB IJmuiden, Netherlands

В.

C.

D.

E. F.

MOO	RINGS, BOTTO	OM MOUNTED G	EAR AND D	RIFTING SYSTEMS
PI	APPROXIMATE POSITION		DATA TYPE	DESCRIPTION
see top of	LATITUDE LONGITUDE		enter code(s) from list on	identify, as appropriate, the nature of the instrumentation, the parameters (to be) measured, the number of instruments and
page	deg min N/S	deg min E/W	cover page	their depths, whether deployed and/or recovered, dates of deployment and/or recovery, and any identifiers given to the site.

SUMMARY OF MEASURED AND SAMPLES TAKEN

Except for the data already described on page 2 under "Moorings, Bottom Mounted Gear and Drifting Systems", this section should include a summary of all data collected on the cruise, whether they be measurements (e.g. temperature, salinity values) or samples (e.g. cores, net hauls).

Separate entries should be made for each distinct and coherent set of measurements of samples. Different modes of data collection (e.g. vertical profiles as opposed to underway measurements) should be clearly distinguished, as should measurement/sampling techniques that imply distinctly different accuracy's or spatial/temporal resolutions. Thus, for example, separate entries would be created for i) BT drops, ii) water bottle stations, iii) CTD casts, iv) towed CTD, v) towed undulating CTD profiler, vi) surface water intake measurements, etc.

Each data set entry should start on a new line - it's description may extend over several lines if necessary.

NO, UNITS: for each data set, enter the estimated amount of data collected expressed in terms of the number of: 'stations'; 'miles' of track; 'days' of recording; 'cores' taken; net 'hauls'; balloon 'ascents'; or whatever unit is most appropriate to the data. The amount should be entered under NO and the counting unit should be identified in plain text under 'UNITS'.

PI	NO	UNITS	DATA TYPE	DESCRIPTION
see page 2	see above	see above	enter code(s) from list on cover page	identify, as appropriate, the nature of the data and of the instrumentation/sampling gear and list the parameters measured. Include the supplementary information that may be appropriate, e.g. vertical or horizontal profiles, depth horizons, continuous recording or discrete samples, etc. For samples taken for later analysis on shore, an indication should be given of the type of analysis planned, i.e. the purpose for which the samples were taken.
A	142	hauls	plankton	double oblique hauls with Gulf III plankton sampler
A	142	stations	CTD	CTD profiles collected during plankton sampling
A	2	hauls	trawl	biological age samples of mackerel collected with pelagic trawl (total of 50 otoliths collected)

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 ($\sqrt{\ }$) in this box if a track chart is supplied.

Stationsnet MAKREELEISURVEY WEEK 23 3 t/m 7 juni 2002

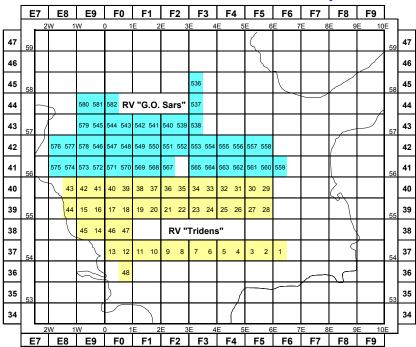


Figure 1. Station grid of Tridens and GO Sars week 23 2002.

Stationsnet MAKREELEISURVEY WEEK 24 10 t/m 14 juni 2002

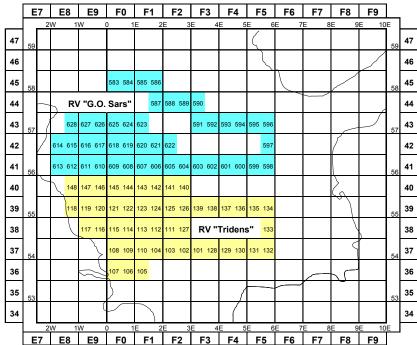


Figure 2. Station grid of Tridens and GO Sars week 24 2002.

E7 E8 E9 F0 F1 F2 F3 F4 F5 F6 F7 F8 F9 46 45 RV "G.O. Sars" 44 43 42 42 41 202 40 204 205 206 207 208 209 40 216 215 214 213 212 211 210 39 231 232 233 234 235 236 237 39 217 218 219 220 221 227 228 229 239 RV "Tridens" 238 38 38 224 225 226 246 245 244 243 242 241 240 239 222 223 37 37

E8 E9 F0 F1 F2 F3 F4 F5 F6 F7 F8 F9

Stationsnet MAKREELEISURVEY WEEK 25 17 t/m 20 juni 2002

Figure 3. Station grid of Tridens and GO Sars week 25 2002.

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')

36

35

34

North Sea

36

35

34

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.

Between 53°30'N and 59°N; between 2°W and 7°E

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.