

RV BELGICA CRUISE 2009/22AB – CRUISE REPORT

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Fishery: 24/08/2009 – 4/09/2009

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1. CRUISE DETAILS

1.	Cruise number	2009/22ab
2.	Date/time	Zeebrugge TD: 24/08/2009 at 10h30 Chatham TA: 28/08/2009 at 16h30 Chatham TD: 31/08/2009 at 08h30 Zeebrugge TA: 4/09/2009 at 12h00
3.	Chief Scientist Participating institutes	MSc. Kelle Moreau ILVO
4.	Area of interest	Southern North Sea (Belgian, French and English Continental Shelves)

2. LIST OF PARTICIPANTS

INSTITUTE	NAME	24/08 - 30/08/08	31/08-04/09/09
ILVO	Kelle Moreau	X	X
ILVO	Patrick Calebout	X	X
ILVO	Jurgen Bossaert	X	X
ILVO	Glenn Kyndt	X	X
ILVO	Benny Deputter	X	X
ILVO	Coenraad Deputter	X	X
ILVO	Stefan Hoffman	X	X
ILVO	Wouter Willems	X	X
ILVO	Els Torreele	X	
ILVO	Sara Vandamme	X	
ILVO	Kris Van Nieuwenhove		X
ILVO	Sofie Vandemaele		X
MUMM	Georges Pichot	X	
Total number of participants:		11	10

3. SCIENTIFIC OBJECTIVES

a) Indices of abundance and biomass of adult flatfishes (mainly plaice and sole) will be calculated by means of stratified tows in the southern and central North Sea. The results will be incorporated in the DATRAS-database of the "International Council for the Exploration of the Sea (ICES)" and will be used in analytical population studies of these species/stocks.

Additionally, several other investigations are planned, such as (a) the construction of "age-length-keys" for a number of commercially important flatfish species and cod, (b) documenting distribution and abundance of all commercial and non-commercial bycatch species, (c) collecting an array of organisms that will be used as training material for biology students at several Belgian universities, (d) documenting the amount and types of litter at sea.

b) Research concerning authenticity, geografic labelling and stock discrimination using "finclips" (tissue samples from tail- or dorsal fins) and "otoliths" (microchemistry) for sole, turbot, brill and sea trout (caught in the above mentioned tows).

4. OPERATIONAL COURSE

Monday 24/08/2009

08h00-10h30 Embarkation of instruments and personnel
10h30 Departure at Zeebrugge
10h30-12h45 Transit to station 40a
12h45-20h30 Fishing & sampling stations 40a, 86, 39, 37, 36 & 1 + transits between stations
20h30 Start transit to station 7

Tuesday 25/08/2009

06h30 – 21h45 Fishing & sampling stations 7, 8, 9, 116, 113, 11, 112, 16 & 17 + transits between stations

Wednesday 26/08/2009

06h20 – 21h10 Fishing & sampling stations 20, 19, 18, 114, 22bis, 72, 111bis, 110b & 60 + transits between stations

Thursday 27/08/2009

06h45 – 19h Fishing & sampling stations 81, 115, 25, 26, 24, 61 & 62bis + transits between stations

Friday 28/08/2009

07h00 – 11h10 Fishing & sampling stations 93, 81b & 96b + transits between stations
11h10 – 16h30 Transit to Chatham
16h30 Arrival to Chatham

Monday 31/08/2009

08h30 Departure at Chatham + start transit to station 94bis
14h30-24u45 Fishing & sampling stations 94bis, 85, 32, 3 & 4 + transits between stations

Tuesday 1/09/2009

06h30-19h40 Fishing & sampling stations 30, 5, 6, 28, 73bis, 63, 29, 107bis & 90 + transits between stations

Wednesday 2/09/2009

06h30-19h30 Fishing & sampling stations 38, 84, 96, 34, 33, 82, 102b, 64 & 92bis + transits between stations

Thursday 3/09/2009

09h20-10h40 Fishing & sampling stations 98b & 93 + transits between stations
10h40 Start transit to Zeebrugge

Friday 4/09/2009

09h00 Arrival to Zeebrugge
09h00-12h00 Disembarkation of instruments and personnel

- End of campaign 2009/22ab

5. TRACK PLOT

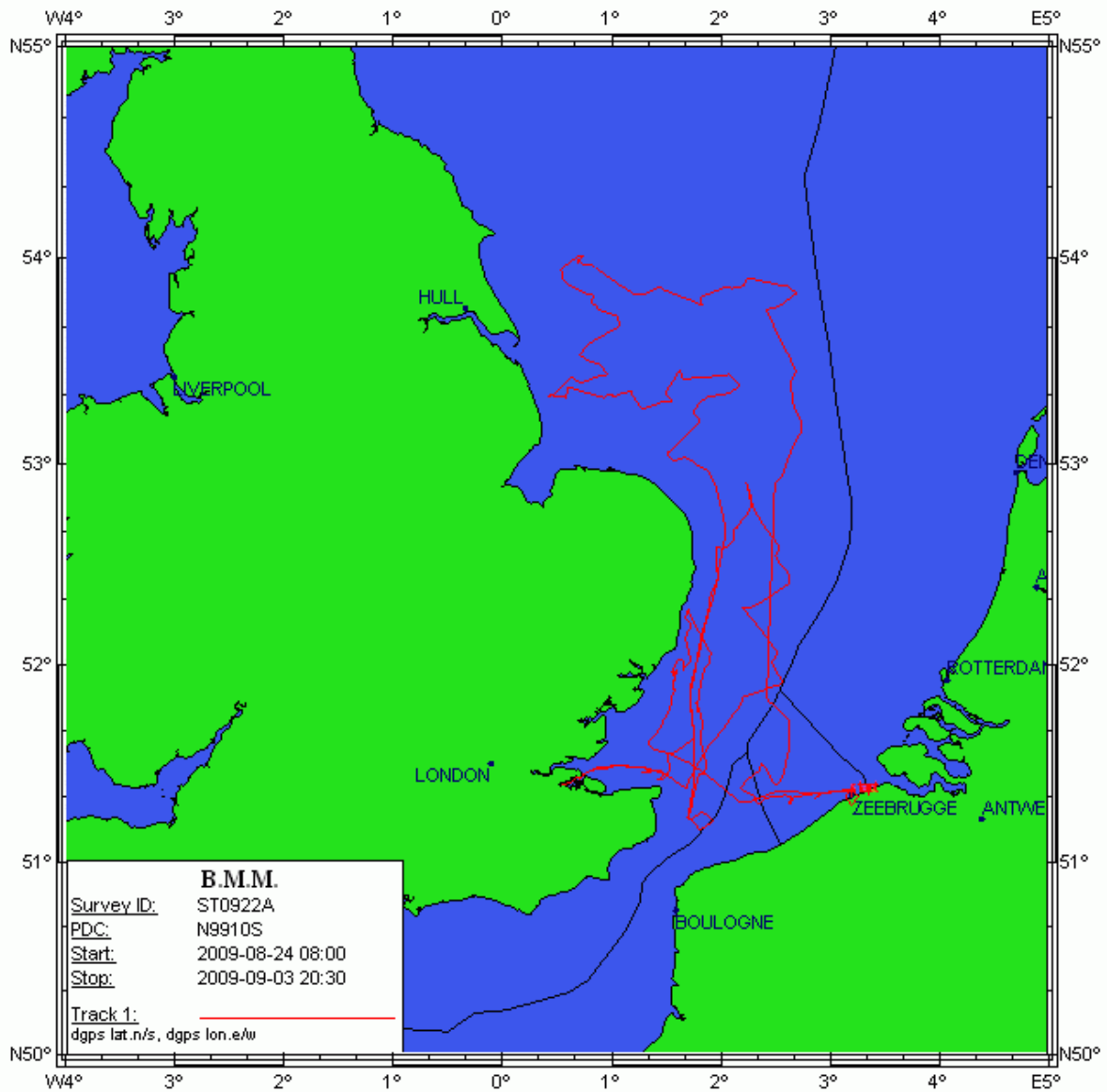


Figure 1: Track plot of campaign 2009/22ab

6. MEASUREMENTS AND SAMPLING

Table 1: List of fishing stations (tracks) of campaign 2009/22ab

Stations North Sea Beam Trawl Survey (NSBTS)				
Station	Position begin		Position end	
1	N 51° 24 ' 07	E 2° 31' 37	N 51° 25 ' 47	E 2° 33' 11
2bis	N 51° 37 ' 21	E 2° 43' 03	N 51° 39 ' 40	E 2° 45' 33
3	N 51° 53 ' 75	E 2° 31' 21	N 51° 54 ' 95	E 2° 34' 52
4	N 52° 03 ' 03	E 2° 30' 92	N 52° 01 ' 27	E 2° 28' 36
5	N 52° 24 ' 82	E 2° 37' 34	N 52° 27 ' 03	E 2° 37' 42
6	N 52° 32 ' 66	E 2° 30' 37	N 52° 34 ' 59	E 2° 31' 84

7	N 52° 54 ' 40	E 2° 30' 07	N 52° 55 ' 74	E 2° 32' 89
8	N 53° 09 ' 63	E 2° 44' 35	N 53° 11 ' 69	E 2° 44' 54
9	N 53° 24 ' 45	E 2° 39' 10	N 53° 26 ' 94	E 2° 41' 37
11	N 53° 51 ' 66	E 2° 12' 19	N 53° 53 ' 62	E 2° 14' 24
16	N 53° 50 ' 62	E 1° 22' 57	N 53° 51 ' 32	E 1° 26' 35
17	N 53° 49 ' 27	E 1° 17' 55	N 53° 49 ' 25	E 1° 13' 24
18	N 53° 45 ' 46	E 0° 48' 92	N 53° 48 ' 67	E 0° 49' 64
19	N 53° 52 ' 61	E 0° 32' 92	N 53° 56 ' 40	E 0° 32' 33
20	N 53° 59 ' 43	E 0° 39' 38	N 54° 00 ' 51	E 0° 42' 09
22bis	N 53° 34 ' 16	E 0° 45' 85	N 53° 32 ' 41	E 0° 43' 50
24	N 53° 13 ' 32	E 1° 47' 80	N 53° 14 ' 88	E 1° 44' 88
25	N 53° 27 ' 20	E 1° 37' 71	N 53° 25 ' 24	E 1° 38' 99
26	N 53° 23 ' 40	E 2° 09' 59	N 53° 25 ' 80	E 2° 05' 50
28	N 52° 48 ' 26	E 2° 17' 18	N 52° 50 ' 48	E 2° 16' 22
29	N 52° 35 ' 91	E 2° 04' 80	N 52° 34 ' 92	E 2° 01' 63
30	N 52° 18 ' 04	E 2° 19' 83	N 52° 17 ' 22	E 2° 15' 49
32	N 51° 50 ' 37	E 2° 12' 46	N 51° 48 ' 20	E 2° 10' 83
33	N 51° 48 ' 66	E 1° 46' 58	N 51° 46 ' 56	E 1° 46' 86
34	N 51° 41 ' 74	E 1° 50' 19	N 51° 39 ' 58	E 1° 48' 78
36	N 51° 27 ' 80	E 2° 20' 67	N 51° 29 ' 93	E 2° 22' 37
37	N 51° 22 ' 74	E 2° 11' 02	N 51° 24 ' 69	E 2° 13' 54
38	N 51° 11 ' 02	E 1° 51' 75	N 51° 12 ' 15	E 1° 54' 76
39	N 51° 17 ' 80	E 2° 20' 50	N 51° 19 ' 41	E 2° 23' 39
40a	N 51° 21 ' 30	E 2° 55' 82	N 51° 19 ' 94	E 2° 52' 84
60	N 53° 21 ' 39	E 0° 35' 58	N 53° 19 ' 16	E 0° 34' 91
61	N 53° 02 ' 67	E 1° 30' 67	N 53° 00 ' 78	E 1° 33' 54
62bis	N 53° 01 ' 56	E 1° 40' 99	N 53° 00 ' 64	E 1° 44' 45
63	N 52° 37 ' 49	E 2° 07' 38	N 52° 39 ' 83	E 2° 07' 27
64	N 52° 09 ' 73	E 1° 41' 46	N 52° 11 ' 71	E 1° 43' 79
72	N 53° 26 ' 52	E 0° 56' 87	N 53° 28 ' 43	E 0° 54' 56
73bis	N 52° 54 ' 00	E 2° 13' 50	N 52° 51 ' 92	E 2° 14' 43
81	N 53° 21 ' 08	E 1° 10' 38	N 53° 19 ' 64	E 1° 11' 85
81b1	N 51° 24 ' 56	E 1° 26' 22	N 51° 24 ' 63	E 1° 29' 61
82	N 52° 03 ' 36	E 1° 54' 37	N 52° 01 ' 03	E 1° 53' 47
82 bis	N 51° 41 ' 00	E 1° 24' 86	N 51° 39 ' 50	E 1° 23' 37
83	N 51° 55 ' 04	E 1° 34' 32	N 51° 56 ' 98	E 1° 35' 04
84	N 51° 17 ' 20	E 1° 44' 20	N 51° 14 ' 33	E 1° 42' 25
85	N 51° 36 ' 50	E 1° 54' 17	N 51° 33 ' 80	E 1° 51' 40
86	N 51° 20 ' 41	E 2° 38' 37	N 51° 18 ' 07	E 2° 37' 85
90	N 52° 21 ' 79	E 1° 54' 79	N 52° 19 ' 71	E 1° 54' 01
91a	N 51° 55 ' 69	E 1° 39' 16	N 51° 54 ' 02	E 1° 36' 74
92bis	N 51° 59 ' 48	E 1° 43' 14	N 51° 01 ' 04	E 1° 73' 20
93bis	N 51° 34 ' 00	E 1° 30' 26	N 51° 32 ' 39	E 1° 27' 74
94bis	N 51° 25 ' 00	E 001°42'31	N 51° 23' 04	E 1° 41' 24
96	N 51° 29 ' 93	E 1° 52' 10	N 51° 27 ' 27	E 1° 50' 66
96b	N 51° 28 ' 10	E 1° 21' 66	N 51° 27 ' 10	E 1° 16' 21
98b	N 51° 57 ' 47	E 1° 35' 28	N 51° 55 ' 39	E 1° 34' 49
102b	N 52° 16 ' 30	E 1° 41' 79	N 52° 14 ' 10	E 1° 40' 50

107bis	N 52° 35 ' 36	E 1° 57' 97	N 52° 32 ' 91	E 1° 57' 56
110b	N 53° 19 ' 96	E 0° 25' 64	N 53° 19 ' 90	E 0° 29' 36
111bis	N 53° 23 ' 81	E 0° 41' 79	N 53° 25 ' 35	E 0° 38' 39
112	N 53° 43 ' 77	E 1° 52' 29	N 53° 46 ' 45	E 1° 49' 79
113	N 53° 50 ' 46	E 2° 40' 79	N 53° 51 ' 58	E 2° 36' 67
114	N 53° 43 ' 22	E 1° 02' 50	N 53° 40 ' 99	E 1° 04' 38
115	N 53° 20 ' 00	E 1° 29' 95	N 53° 18 ' 47	E 1° 32' 95
116	N 53° 45 ' 00	E 2° 25' 60	N 53° 45 ' 63	E 2° 32' 33

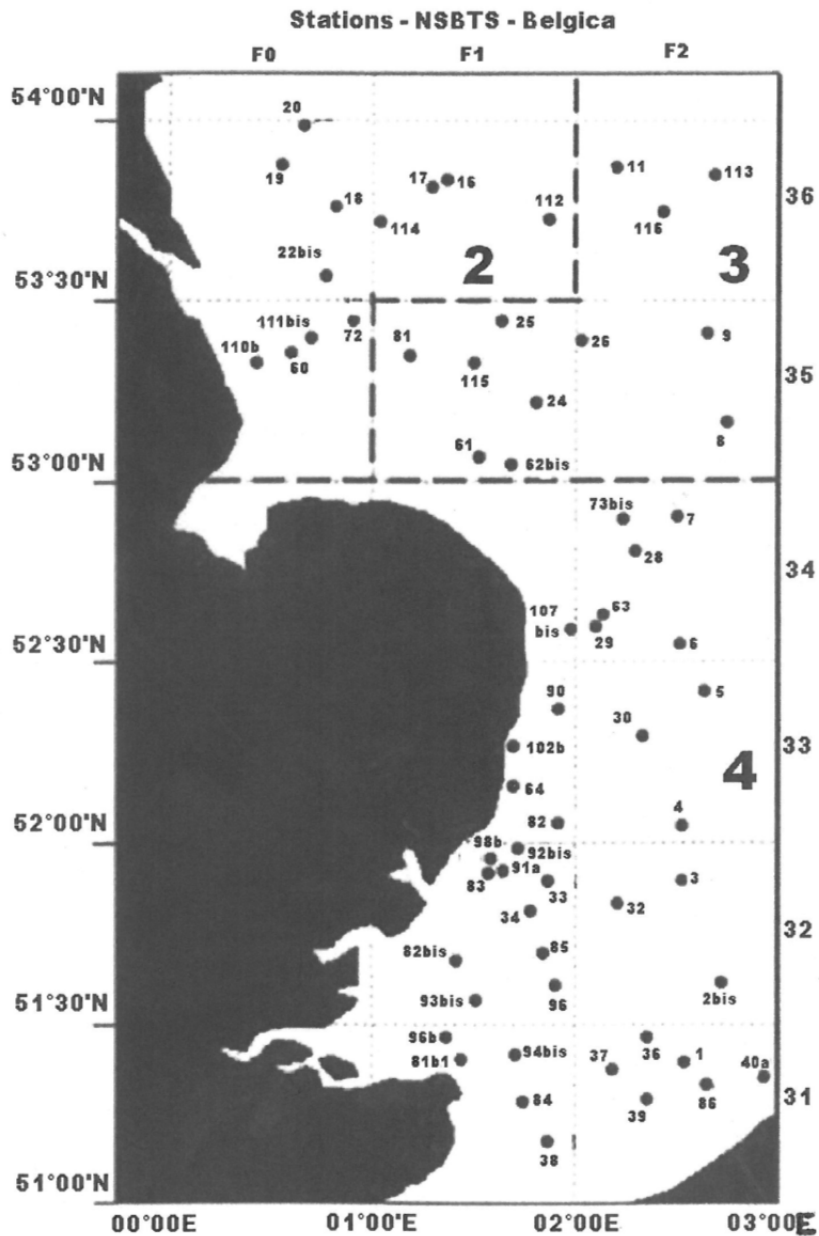


Figure 3: Map of fishing stations of campaign 2012/22ab

7. REMARKS

- In 2009, no technical issues interfered with the fishing activities during campaign 2009/22ab.
- Three stations were missed due to bad weather conditions during the second half of the survey.

8. DATA STORAGE

- All biological data on fish (numbers, lengths, weights and ages) and invertebrates (numbers for all species, measurements for commercially important species), and the accompanying ODAS-parameters are being stored.
- Currently, all data are only stored at ILVO, where a new database is currently under development for this purpose. The data on fish are being prepared to be uploaded to DATRAS, the survey-database hosted by ICES.
- No data have been specifically submitted to MUMM-BMM.