

RV BELGICA CRUISE 2010/21AB – CRUISE REPORT

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Fishery: 23/08/2010 – 3/09/2010

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2. List of participants
3. Scientific objectives
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1. CRUISE DETAILS

1.	Cruise number	2010/21ab
2.	Date/time	Zeebrugge TD: 23/08/2010 at 10h30 Great Yarmouth TA: 27/08/2010 pm Chatham TD: 30/08/2010 at 08h30 Zeebrugge TA: 3/09/2010 pm
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	23/08 - 28/08/08	29/08-03/09/09
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	David Vuylsteke	X	X
ILVO	Els Torreele	X	
ILVO	Sofie Nimmegeers		X
ILVO	Annemie Zenner		X
Total number of participants:		8	9

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, geographic 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 23/08/2010

08h00-10h30 Embarkation of instruments and personnel
10h30-14h00 Waiting for problems with the vessel to be solved
14h00 Departure at Zeebrugge
14h00-15h20 Transit to station 40a
15h20-22h00 Fishing & sampling stations 40a, 86, 39 & 37 + transits between stations
22h00 Start transit to station 96b

Tuesday 24/08/2010

07h00 – 19h40 Fishing & sampling stations 96b, 93, 34, 33, 91a, 98b, 83 & 82bis + transits between stations

Wednesday 25/08/2010

06h20 – 20h40 Fishing & sampling stations 7, 8, 9, 116, 113, 11 & 112 + transits between stations

Thursday 26/08/2010

06h00 – 21h10 Fishing & sampling stations 110b, 60, 111bis, 22bis, 114, 18, 19, 20, 17 & 16 + transits between stations

Friday 27/08/2010

06h30 – 09h10 Fishing & sampling stations 63, 29 & 107bis + transits between stations
09h10 – 14h00 Transit to Great Yarmouth
14h00 Arrival to Great Yarmouth

Monday 30/08/2010

08h30 Departure at Great Yarmouth + start transit to station 90
14h10-20u10 Fishing & sampling stations 90, 102b, 64, 82 & 92bis + transits between stations

Tuesday 31/08/2010

06h00-20h40 Fishing & sampling stations 62bis, 61, 24, 26, 25, 115, 81 & 72 + transits between stations

Wednesday 1/09/2010

06h00-21h20 Fishing & sampling stations 73bis, 28, 6, 5, 30, 4, 3, 32, 85 & 96 + transits between stations

Thursday 2/09/2010

06h30-16h40 Fishing & sampling stations 94bis, 84, 38, 36, 1 & 2bis + transits between stations
16h40 Start transit to Zeebrugge

Friday 3/09/2010

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

- End of campaign 2010/21ab

5. TRACK PLOT

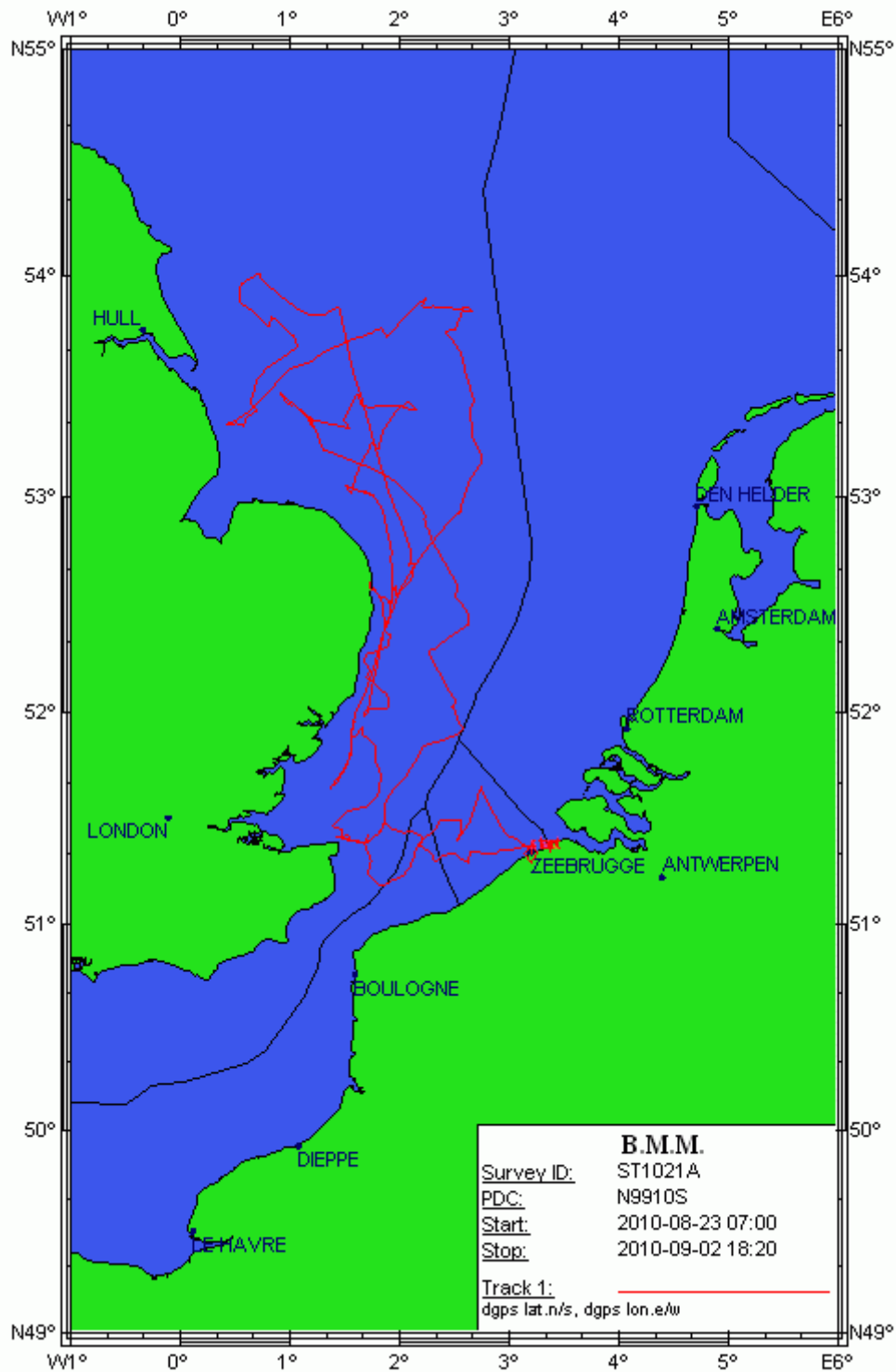


Figure 1: Track plot of campaign 2010/21ab

6. MEASUREMENTS AND SAMPLING

Table 1: List of fishing stations (tracks) of campaign 2010/21ab

Stations North Sea Beam Trawl Survey (NSBTS)				
Station	Positie begin		Positie einde	
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

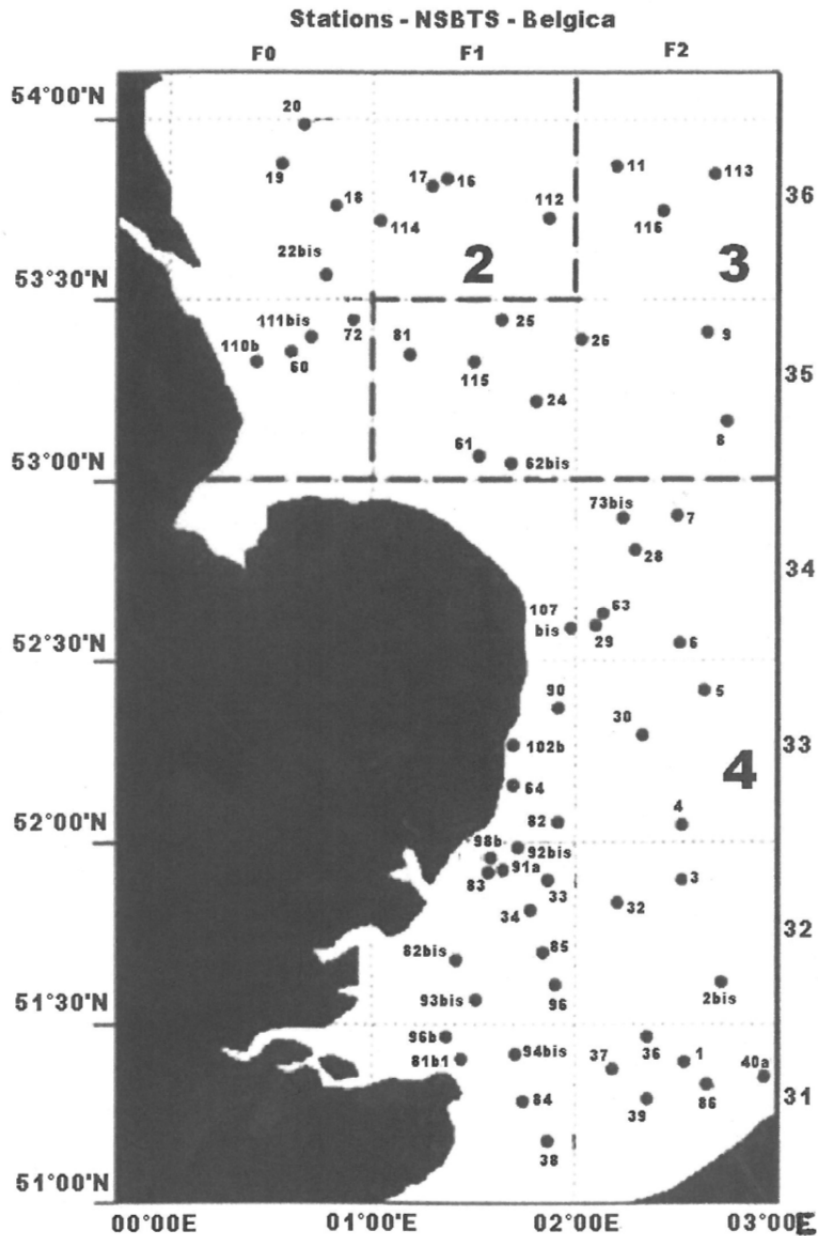


Figure 3: Map of fishing stations of campaign 2010/21ab

7. REMARKS

- In 2010, no technical issues interfered with the fishing activities during campaign 2010/21ab. Only the departure at Zeebrugge was delayed because of technical problems.
- One station (81b) was missed due to the presence of an anchored vessel on the track. Station 2 had to be moved because a windmill was built there, and station 93 was fished a second time after the catch was partially lost due to a rupture of the codend. No overlap with stations of the UK BTS could be realized because of bad weather.

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.