

Cruise report IBTS 2007 Q1 Tridens weeks 5-9

(short version, in English)

Remment ter Hofstede

Project: WOT Surveys IBTS
Projectnummer: 439.12110.01
Period: weeks 5-9 2007

Mission: Coordination of the ICES International Bottom Trawl Survey (IBTS).
Estimation of recruitment indices and tuning data for commercial roundfish species. The recruitment indices are used for the assessment of fish stocks by several working groups from ICES (International Council for the Exploration of the Sea) (e.g. Herring Assessment Working Group (HAWG), Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK) and the ICES Advisory Committee on Fishery Management (ACFM). The data on the spatial distribution of species are used by multiple working groups dealing with ecosystem studies and in contract research.

Harbours:

Departure from	Date	Time	Arrival in	Date	Time
Scheveningen	29 January	11:00	Scheveningen	2 February	8:00
Scheveningen	5 February	10:30	Aberdeen	9 February	22:00
Aberdeen	12 February	20:00	Scheveningen	15 February	8:30
Scheveningen	19 February	11:00	Scheveningen	24 February	8:30
Scheveningen	26 February	11:00	Scheveningen	2 March	8:30

Scientific crew:

week 5: R. ter Hofstede (cruiseleader), C. Bakker, R. van Hal, B. van Os-Koomen, S. Rijs.
Week 6 en 7: N. Daan (cruiseleader), K. Groeneveld, P. Groot, B. van Os-Koomen, M. de Vries.
week 8: R. ter Hofstede (cruiseleader), I. de Boois, E. van Helmond, S. Rijs, S. Verver.
week 9: H. Heessen (cruiseleader), H. Bothe, A. Dijkman, S. Rijs, J. van Willigen.

Summary:

- Number of stations:
 - o 63 GOV stations, of which 60 valid (planning 54; 111%).
 - o 80 MIK stations (planning 108; 74%).
- Number of otolith samples:
 - o Herring *Clupea harengus* 358
 - o Sprat *Sprattus sprattus* 330
 - o Cod *Gadus morhua* 170
 - o Haddock *Melanogrammus aeglefinus* 364
 - o Whiting *Merlangius merlangius* 793
 - o Norway pout *Trisopterus esmarki* 50
 - o Mullet *Mullus surmuletus* 6
 - o Lemon sole *Microstomus kitt* 29
 - o Plaice *Pleuronectes platessa* 238
 - o Halibut *Hippoglossus hippoglossus* 1

Stations

Figure 1: GOV-stations Tridens IBTS 2007 Q1. Numbers refer to fishing day (Table 1).

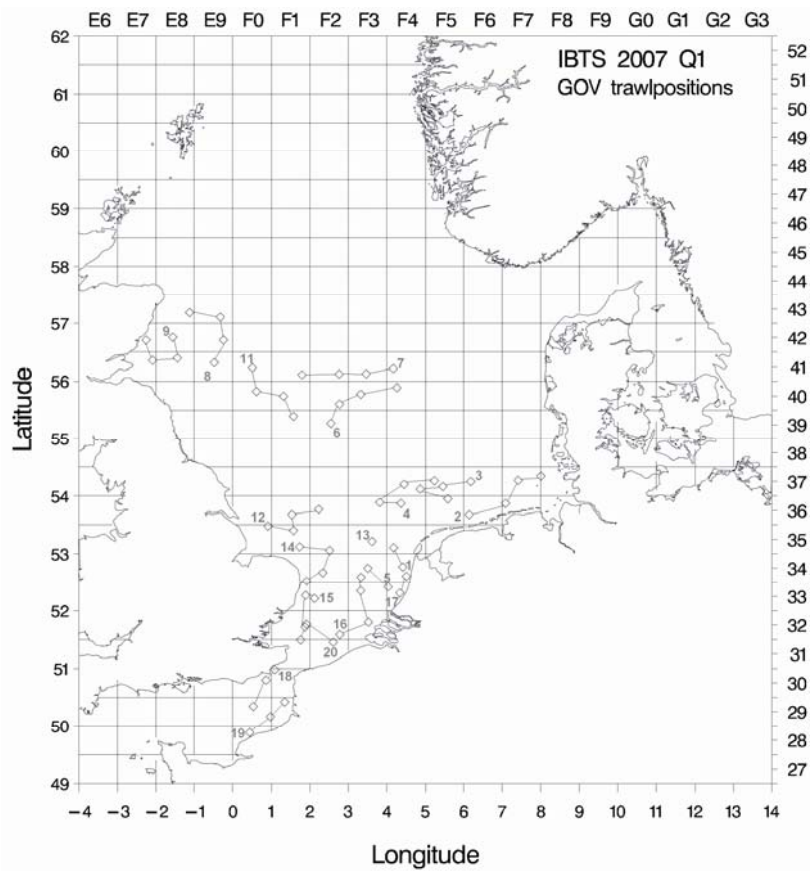


Figure 2: MIK-stations Tridens IBTS 2007 Q1. Numbers refer to fishing day (Table 2).

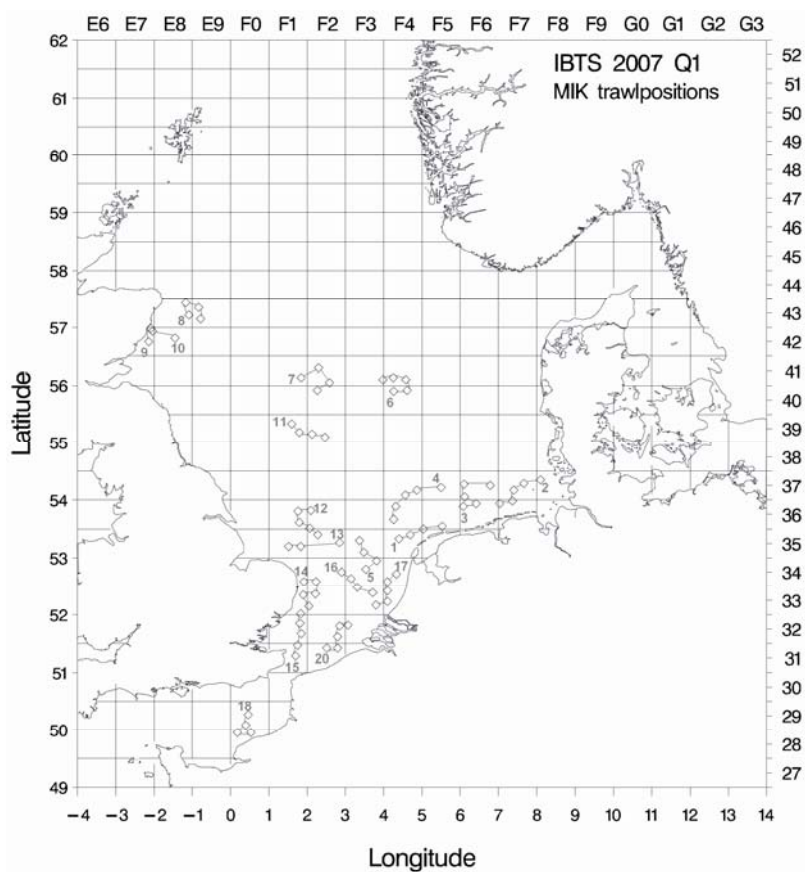


Table 1: GOV-stations Tridens IBTS 2007 Q1.

GOV station	valid y/n	ship	year	month	day	time	fishing day	ICES rectangle	latitude (degr-dec)	longitude (degr-dec)	depth (m)	total catch (kg)
3400001	y	Tridens II	2007	1	29	1309	1	34F4	52.7680	4.4168	21	35000
3400002	y	Tridens II	2007	1	29	1540	1	35F4	53.1089	4.1759	29	70000
3400003	y	Tridens II	2007	1	30	723	2	36F6	53.6749	6.1393	28	52500
3400004	y	Tridens II	2007	1	30	1031	2	36F7	53.8693	7.0847	24	17500
3400005	y	Tridens II	2007	1	30	1315	2	37F7	54.2651	7.4136	40	70000
3400006	y	Tridens II	2007	1	30	1532	2	37F8	54.3387	8.0090	17	35000
3400007	y	Tridens II	2007	1	31	721	3	37F6	54.2473	6.1822	38	17500
3400008	y	Tridens II	2007	1	31	1025	3	37F5	54.1577	5.4626	41	52500
3400009	y	Tridens II	2007	1	31	1252	3	37F4	54.1167	4.8667	43	35000
3400010	y	Tridens II	2007	1	31	1545	3	36F5	53.9468	5.5879	34	17500
3400011	y	Tridens II	2007	2	1	728	4	36F4	53.8729	4.3690	42	52500
3400012	y	Tridens II	2007	2	1	937	4	36F3	53.8895	3.8216	38	192500
3400013	y	Tridens II	2007	2	1	1237	4	37F4	54.1987	4.4541	48	157500
3400014	y	Tridens II	2007	2	1	1520	4	37F5	54.2646	5.2375	42	17500
3400015	y	Tridens II	2007	2	5	1235	5	33F4	52.4145	4.0343	21	140000
3400016	y	Tridens II	2007	2	5	1537	5	34F3	52.7485	3.5062	26	52500
3400017	y	Tridens II	2007	2	6	747	6	39F2	55.2672	2.5522	37	17500
3400018	y	Tridens II	2007	2	6	1010	6	40F2	55.6045	2.7753	58	35000
3400019	y	Tridens II	2007	2	6	1237	6	40F3	55.7745	3.3283	56	17500
3400020	y	Tridens II	2007	2	6	1531	6	40F4	55.8907	4.2627	51	35000
3400021	y	Tridens II	2007	2	7	730	7	41F4	56.2178	4.1713	68	280000
3400022	y	Tridens II	2007	2	7	1002	7	41F3	56.1262	3.4675	71	385000
3400023	y	Tridens II	2007	2	7	1236	7	41F2	56.1248	2.7642	78	315000
3400024	y	Tridens II	2007	2	7	1537	7	41F1	56.1147	1.7987	94	140000
3400025	y	Tridens II	2007	2	8	735	8	41E9	56.3247	-0.4800	70	70000
3400026	y	Tridens II	2007	2	8	1010	8	42E9	56.7163	-0.2438	82	245000
3400027	y	Tridens II	2007	2	8	1239	8	43E9	57.1098	-0.3183	84	875000
3400028	y	Tridens II	2007	2	8	1530	8	43E8	57.1913	-1.1183	71	175000
3400029	y	Tridens II	2007	2	9	736	9	42E8	56.7582	-1.5585	57	70000
3400030	y	Tridens II	2007	2	9	1010	9	41E8	56.4015	-1.4408	58	52500
3400031	y	Tridens II	2007	2	9	1240	9	41E7	56.3608	-2.0828	50	175000
3400032	y	Tridens II	2007	2	9	1456	9	42E7	56.7118	-2.2523	44	280000
3400033	y	Tridens II	2007	2	13	726	11	41F0	56.2333	0.5130	86	140000
3400034	y	Tridens II	2007	2	13	1000	11	40F0	55.8247	0.6143	84	315000
3400035	y	Tridens II	2007	2	13	1230	11	40F1	55.7425	1.3197	77	105000
3400036	y	Tridens II	2007	2	13	1600	11	39F1	55.3913	1.5763	59	70000
3400037	y	Tridens II	2007	2	14	728	12	35F0	53.4815	0.9150	20	35000
3400038	y	Tridens II	2007	2	14	1015	12	35F1	53.4013	1.5755	29	280000
3400039	y	Tridens II	2007	2	14	1238	12	36F1	53.6740	1.5355	86	175000
3400040	y	Tridens II	2007	2	14	1525	12	36F2	53.7722	2.2320	35	280000
3400041	y	Tridens II	2007	2	19	1514	13	35F3	53.2168	3.6192	25	26250
3400042	y	Tridens II	2007	2	20	719	14	35F1	53.1188	1.7352	38	NA
3400043	y	Tridens II	2007	2	20	1011	14	35F2	53.0601	2.5155	36	17500
3400044	y	Tridens II	2007	2	20	1240	14	34F2	52.6669	2.3400	48	8750
3400045	n	Tridens II	2007	2	20	1508	14	34F1	52.5198	1.9169	27	35000
3400046	y	Tridens II	2007	2	21	727	15	33F2	52.2124	2.1218	44	17500
3400047	y	Tridens II	2007	2	21	940	15	33F1	52.2673	1.8947	26	17500
3400048	y	Tridens II	2007	2	21	1258	15	32F1	51.7161	1.8778	47	35000
3400049	y	Tridens II	2007	2	21	1545	15	31F1	51.4870	1.7654	42	52500
3400050	y	Tridens II	2007	2	22	712	16	32F2	51.5806	2.7812	32	26250
3400051	y	Tridens II	2007	2	22	1008	16	32F3	51.7975	3.5238	23	8750
3400052	y	Tridens II	2007	2	22	1407	16	33F3	52.3498	3.3218	34	227500
3400053	y	Tridens II	2007	2	22	1549	16	34F3	52.5899	3.3297	39	140000
3400054	y	Tridens II	2007	2	26	1232	17	33F4	52.3107	4.3384	16	35000
3400055	y	Tridens II	2007	2	26	1529	17	34F4	52.6061	4.5057	18	35000
3400056	y	Tridens II	2007	2	27	734	18	30F1	50.9825	1.0922	33	35000
3400057	y	Tridens II	2007	2	27	1311	18	30F0	50.7990	0.8667	35	210000
3400058	y	Tridens II	2007	2	27	1602	18	29F0	50.3433	0.5330	43	210000
3400059	y	Tridens II	2007	2	28	721	19	28F0	49.8826	0.4363	32	35000
3400060	y	Tridens II	2007	2	28	1015	19	29F0	50.1598	0.9763	32	4375000
3400061	y	Tridens II	2007	2	28	1252	19	29F1	50.4217	1.3502	28	3745000
3400062	n	Tridens II	2007	3	1	712	20	31F2	51.4515	2.6104	34	17500
3400063	y	Tridens II	2007	3	1	1321	20	32F1	51.7604	1.9124	41	350000

Table 2: MKK-stations Tridens IBTS 2007 Q1.

MIK station	valid y/n	ship	year	month	day	time	fishing day	ICES rectangle	latitude (degr-dec)	longitude (degr-dec)	depth (m)	herring larvae (number)
1	y	Tridens II	2007	1	29	1833	1	35F4	53.3333	4.4000	28	10
2	y	Tridens II	2007	1	29	1936	1	35F4	53.4000	4.7000	28	4
3	y	Tridens II	2007	1	29	2048	1	36F5	53.5000	5.0333	23	1
4	y	Tridens II	2007	1	29	2223	1	36F5	53.5500	5.5333	26	0
5	y	Tridens II	2007	1	30	1830	2	37F8	54.3500	8.1000	17	0
6	y	Tridens II	2007	1	30	1948	2	37F7	54.2833	7.6667	26	0
7	y	Tridens II	2007	1	30	2103	2	37F7	54.1667	7.4000	40	0
8	y	Tridens II	2007	1	30	2210	2	36F7	53.9833	7.3667	31	2
9	y	Tridens II	2007	1	30	2310	2	36F7	53.9333	7.0333	26	5
10	y	Tridens II	2007	1	31	1834	3	36F6	53.8833	6.0833	31	18
11	y	Tridens II	2007	1	31	1936	3	36F6	53.9333	6.4167	28	0
12	y	Tridens II	2007	1	31	2055	3	37F6	54.0500	6.1167	33	3
13	y	Tridens II	2007	1	31	2205	3	37F6	54.2667	6.1000	40	0
14	y	Tridens II	2007	1	31	2315	3	37F5	54.2500	6.7833	40	0
15	y	Tridens II	2007	2	1	1835	4	37F5	54.2167	5.5000	46	1
16	y	Tridens II	2007	2	1	1946	4	37F4	54.1667	4.8667	49	0
17	y	Tridens II	2007	2	1	2050	4	37F4	54.0833	4.5667	46	0
18	y	Tridens II	2007	2	1	2205	4	36F4	53.8833	4.3167	43	2
19	y	Tridens II	2007	2	1	2315	4	36F4	53.6667	4.2667	38	5
20	y	Tridens II	2007	2	5	1847	5	34F3	52.8000	3.5333	29	14
21	y	Tridens II	2007	2	5	1955	5	34F3	52.9500	3.8167	28	0
22	y	Tridens II	2007	2	5	2124	5	35F3	53.1000	3.4833	38	0
23	y	Tridens II	2007	2	5	2245	5	35F3	53.3000	3.3667	38	3
24	y	Tridens II	2007	2	6	1852	6	40F4	55.9000	4.2667	49	0
25	y	Tridens II	2007	2	6	1955	6	40F4	55.9167	4.6167	42	0
26	y	Tridens II	2007	2	6	2105	6	41F4	56.1000	4.5833	54	2
27	y	Tridens II	2007	2	6	2219	6	41F4	56.1333	4.2500	62	2
28	y	Tridens II	2007	2	6	2320	6	41F3	56.1000	3.9833	63	6
29	y	Tridens II	2007	2	7	1850	7	41F1	56.1333	1.8500	90	10
30	y	Tridens II	2007	2	7	2010	7	41F2	56.3000	2.3000	80	16
31	y	Tridens II	2007	2	7	2134	7	41F2	56.0500	2.5833	79	14
32	y	Tridens II	2007	2	7	2255	7	40F2	55.9167	2.2667	84	8
33	y	Tridens II	2007	2	8	1856	8	43E8	57.2167	-1.0833	71	17
34	y	Tridens II	2007	2	8	2016	8	43E8	57.4333	-1.1667	79	9
35	y	Tridens II	2007	2	8	2149	8	43E9	57.3500	-0.8333	67	0
36	y	Tridens II	2007	2	8	2214	8	43E9	57.1500	-0.7833	71	3
37	y	Tridens II	2007	2	9	1900	9	42E7	56.7500	-2.1333	53	150
38	y	Tridens II	2007	2	9	2005	9	42E7	56.9333	-2.0333	59	71
39	y	Tridens II	2007	2	12	2138	10	42E8	56.9833	-2.0833	77	11
40	y	Tridens II	2007	2	12	2303	10	42E8	56.8167	-1.4500	64	110
41	y	Tridens II	2007	2	13	1900	11	39F1	55.3333	1.6000	53	1
42	y	Tridens II	2007	2	13	2110	11	39F1	55.1833	1.8000	41	2
43	y	Tridens II	2007	2	13	2213	11	39F2	55.1500	2.1333	37	3
44	y	Tridens II	2007	2	13	2313	11	39F2	55.1000	2.4667	37	1
45	y	Tridens II	2007	2	14	1905	12	36F2	53.8167	2.1000	31	2
46	y	Tridens II	2007	2	14	2012	12	36F1	53.8000	1.7667	37	0
47	y	Tridens II	2007	2	14	2112	12	36F1	53.6167	1.8000	25	2
48	y	Tridens II	2007	2	14	2212	12	36F2	53.5167	2.0667	34	8
49	y	Tridens II	2007	2	14	2312	12	35F2	53.4000	2.2833	37	18
50	y	Tridens II	2007	2	19	1908	13	35F2	53.2667	2.8500	33	5
51	y	Tridens II	2007	2	19	2205	13	35F1	53.2000	1.8333	37	4
52	y	Tridens II	2007	2	19	2307	13	35F1	53.2000	1.5167	27	35
53	y	Tridens II	2007	2	20	1858	14	34F1	52.5833	1.9167	23	1
54	y	Tridens II	2007	2	20	2002	14	34F2	52.5833	2.2333	44	1
55	y	Tridens II	2007	2	20	2106	14	33F2	52.3667	2.2167	41	0
56	y	Tridens II	2007	2	20	2210	14	33F1	52.3500	1.9000	34	0
57	y	Tridens II	2007	2	20	2305	14	33F2	52.1500	2.0500	37	3
58	y	Tridens II	2007	2	21	1923	15	31F1	51.2833	1.7000	44	7
59	y	Tridens II	2007	2	21	2020	15	31F1	51.4667	1.7500	38	7
60	y	Tridens II	2007	2	21	2125	15	32F1	51.6667	1.8500	37	0
61	y	Tridens II	2007	2	21	2225	15	32F1	51.8500	1.8167	48	1
62	y	Tridens II	2007	2	21	2325	15	33F1	52.0167	1.8333	25	0
63	y	Tridens II	2007	2	22	1905	16	34F2	52.7500	2.9000	41	2499
64	y	Tridens II	2007	2	22	2015	16	34F3	52.6333	3.1500	35	656
65	y	Tridens II	2007	2	22	2124	16	33F3	52.4833	3.3167	37	1312
66	y	Tridens II	2007	2	22	2240	16	33F3	52.3833	3.7167	27	544
67	y	Tridens II	2007	2	26	1905	17	34F4	52.7167	4.3333	24	664
68	y	Tridens II	2007	2	26	2005	17	34F4	52.5833	4.1000	28	1112
69	y	Tridens II	2007	2	26	2100	17	33F4	52.4167	4.1000	24	464
70	y	Tridens II	2007	2	26	2200	17	33F4	52.2333	4.1000	24	1312
71	y	Tridens II	2007	2	26	2310	17	33F3	52.1667	3.8000	27	224
72	y	Tridens II	2007	2	27	1922	18	29F0	50.2667	0.4667	42	36
73	y	Tridens II	2007	2	27	2035	18	29F0	50.0833	0.4000	39	50
74	y	Tridens II	2007	2	27	0.91	18	28F0	49.9500	0.1833	39	286
75	y	Tridens II	2007	2	27	0.96	18	28F0	49.9500	0.5333	32	280
76	y	Tridens II	2007	3	1	1920	20	31F2	51.4167	2.5167	32	10
77	y	Tridens II	2007	3	1	2025	20	31F2	51.4167	2.8000	27	220
78	y	Tridens II	2007	3	1	2130	20	32F2	51.6167	2.8000	36	186
79	y	Tridens II	2007	3	1	2230	20	32F2	51.8000	2.8500	40	390
80	y	Tridens II	2007	3	1	2325	20	32F3	51.8167	3.0667	32	376

