

Start & End Dates	Ship	Project	Cruise id.	Country	Chief Scientist	Where	Record created
19/04/1993 to 06/05/1993	Belgica	OMEX I	BG93-09	Belgium	R. Wollast	Channel/Iberian slope 2E-11W 42-52N	31.03.1998
21/09/1993 to 06/10/1993	Belgica	OMEX I	BG93-22	Belgium	R. Wollast	NE Atlantic 5-15W 45-50N	31.03.1998
03/03/1995 to 17/03/1995	Belgica	OMEX I	BG95-06	Belgium	R. Wollast	NE Atlantic 5-15W 45-50N	31.03.1998
11/09/1995 to 20/09/1995	Belgica	OMEX I	BG95-21	Belgium	M. Frankignoulle	NE Atlantic 5-15W 45-50N	31.03.1998
20/04/1994 to 28/04/1994	Belgica	OMEX I	BG94-12	Belgium	R. Wollast	NE Atlantic 5-15W 45-50N	31.03.1998
21/09/1995 to 30/09/1995	Belgica	OMEX I	BG95-22	Belgium	P. Dauby	Shelf off Tagos River, 8-10W 38-39N	31.03.1998
01/02/1994 to 04/02/1994	Weatherbird II	BATS	BATS VAL10	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.10.1997
01/02/1995 to 01/02/1995	Weatherbird II	BATS	BATS 76a	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
01/03/1995 to 01/03/1995	Weatherbird II	BATS	BATS 77a	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
01/06/1998 to 05/06/1998	Weatherbird II	BATS	BATS 117	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.09.1998
02/04/1990 to 03/04/1990	Weatherbird II	BATS	BATS 18a	Bermuda	K. Gundersen	N. Atlantic at 31.8 N 64.2 W	07.09.1993
03/05/1994 to 04/05/1994	Weatherbird II	BATS	BATS 67a	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
03/06/1994 to 03/03/1994	Weatherbird II	BATS	BATS 68a	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
03/09/1996 to 06/09/1996	Weatherbird II	BATS	BATS 96	Bermuda		N. Atlantic at 31.8 N 64.2 W	16.04.1998
03/12/1990 to 06/12/1990	Weatherbird II	BATS	BATS 27	Bermuda	K. Gundersen	N. Atlantic at 31.8 N 64.2 W	07.09.1993
04/04/1991 to 06/04/1991	Weatherbird II	BATS	BATS 30b	Bermuda	A. Michaels	N. Atlantic at 31.8 N 64.2 W	07.09.1993
04/05/1992 to 08/05/1992	Weatherbird II	BATS	BATS 43a	Bermuda	A. Michaels	N. Atlantic at 31.8 N 64.2 W	05.11.1993
04/05/1998 to 08/05/1998	Weatherbird II	BATS	BATS 116	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.09.1998
05/04/1994 to 07/04/1994	Weatherbird II	BATS	BATS 66a	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
05/08/1996 to 08/08/1996	Weatherbird II	BATS	BATS 95	Bermuda		N. Atlantic at 31.8 N 64.2 W	16.04.1998
05/11/1990 to 08/11/1990	Weatherbird II	BATS	BATS 26	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	07.09.1993
05/11/1996 to 13/11/1996	Weatherbird II	BATS	BATS 98	Bermuda		N. Atlantic at 31.8 N 64.2 W	16.04.1998
06/01/1992 to 10/01/1992	Weatherbird II	BATS	BATS 40	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	05.11.1993
06/04/1998 to 10/04/1998	Weatherbird II	BATS	BATS 115	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.09.1998
06/05/1996 to 10/05/1996	Weatherbird II	BATS	BATS 92	Bermuda		N. Atlantic at 31.8 N 64.2 W	26.03.1997
06/12/1993 to 10/12/1993	Weatherbird II	BATS	BATS 63	Bermuda		N. Atlantic at 31.8 N 64.2 W	24.03.1997
07/07/1998 to 10/07/1998	Weatherbird II	BATS	BATS 118	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.09.1998
07/10/1991 to 10/10/1991	Weatherbird II	BATS	BATS 37	Bermuda		N. Atlantic at 31.8 N 64.2 W	18.03.1997

07/12/1992 to 10/12/1R/V Weatherbird II	BATS	BATS 51	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	05.11.1993
08/02/1993 to 11/02/1R/V Cape Hatteras	BATS	BATS 53	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	02.11.1993
08/04/1996 to 13/04/1R/V Weatherbird II	BATS	BATS 91	Bermuda		N. Atlantic at 31.8 N 64.2 W	26.03.1997
08/05/1990 to 11/05/1R/V Weatherbird II	BATS	BATS 20	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	07.09.1993
08/05/1993 to 11/05/1R/V Cape Hatteras	BATS	BATS 56	Bermuda	A. Close	N. Atlantic at 31.8 N 64.2 W	02.11.1993
08/10/1996 TO 12/10.R/V Weatherbird II	BATS	BATS 97	Bermuda		N. Atlantic at 31.8 N 64.2 W	16.04.1998
08/11/1993 to 12/11/1R/V Weatherbird II	BATS	BATS 62	Bermuda		N. Atlantic at 31.8 N 64.2 W	24.03.1997
08/12/1994 to 12/12/1R/V Weatherbird II	BATS	BATS 75	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
09/02/1998 to 13/02/1R/V Weatherbird II	BATS	BATS 113	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.09.1998
09/03/1992 to 13/03/1R/V Weatherbird II	BATS	BATS 42	Bermuda	J. Sorensen	N. Atlantic at 31.8 N 64.2 W	05.11.1993
09/03/1993 to 13/03/1R/V Cape Hatteras	BATS	BATS 54	Bermuda	K. Gundersen	N. Atlantic at 31.8 N 64.2 W	02.11.1993
09/03/1998 to 13/03/1R/V Weatherbird II	BATS	BATS 114	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.09.1998
09/07/1996 to 12/07/1R/V Weatherbird II	BATS	BATS 94	Bermuda		N. Atlantic at 31.8 N 64.2 W	16.04.1998
09/08/1998 to 14/08/1R/V Weatherbird II	BATS	BATS 119	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.09.1998
09/11/1992 to 13/11/1R/V Weatherbird II	BATS	BATS 50	Bermuda	F. Howse	N. Atlantic at 31.8 N 64.2 W	05.11.1993
09/12/1991 to 12/12/1R/V Weatherbird II	BATS	BATS 39	Bermuda		N. Atlantic at 31.8 N 64.2 W	18.03.1997
10/01/1995 to 13/01/1R/V Weatherbird II	BATS	BATS 76	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
10/02/1992 to 14/02/1R/V Weatherbird II	BATS	BATS 41	Bermuda	J. Sorensen	N. Atlantic at 31.8 N 64.2 W	05.11.1993
10/04/1995 to 13/04/1R/V Weatherbird II	BATS	BATS 79	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
10/05/1995 to 13/05/1R/V Weatherbird II	BATS	BATS 80	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
10/06/1996 to 14/06/1R/V Weatherbird II	BATS	BATS 93	Bermuda		N. Atlantic at 31.8 N 64.2 W	26.03.1997
10/07/1995 to 13/07/1R/V Weatherbird II	BATS	BATS 82	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
10/09/1990 to 13/09/1R/V Weatherbird II	BATS	BATS 24	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
10/09/1991 to 14/09/1R/V Weatherbird II	BATS	BATS 36	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	07.09.1993
10/10/1995 to 14/10/1R/V Weatherbird II	BATS	BATS 85	Bermuda		N. Atlantic at 31.8 N 64.2 W	26.03.1997
11/01/1993 to 15/01/1R/V Cape Hatteras	BATS	BATS 52	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	02.11.1993
11/01/1994 to 17/01/1R/V Weatherbird II	BATS	BATS 64	Bermuda		N. Atlantic at 31.8 N 64.2 W	24.03.1997
11/02/1991 to 14/02/1R/V Weatherbird II	BATS	BATS 29	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
11/04/1992 to 13/04/1R/V Weatherbird II	BATS	BATS 42b	Bermuda	J. Sorensen	N. Atlantic at 31.8 N 64.2 W	05.11.1993

11/10/1993 TO 14/10 R/V Weatherbird II	BATS	BATS 61	Bermuda		N. Atlantic at 31.8 N 64.2 W	21.03.1997
11/11/1991 to 15/11/1R/V Weatherbird II	BATS	BATS 38	Bermuda		N. Atlantic at 31.8 N 64.2 W	18.03.1997
11/11/1995 to 11/11/1R/V Weatherbird II	BATS	BATS 86	Bermuda		N. Atlantic at 31.8 N 64.2 W	26.03.1997
12/01/1998 to 16/01/1R/V Weatherbird II	BATS	BATS 112	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.09.1998
12/01/1998 to 16/01/1R/V Weatherbird II	BATS	BATS 112a	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.09.1998
12/02/1996 to 15/02/1R/V Weatherbird II	BATS	BATS 89	Bermuda		N. Atlantic at 31.8 N 64.2 W	26.03.1997
12/03/1990 to 16/03/1R/V Weatherbird II	BATS	BATS 18	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
12/04/1993 to 17/04/1R/V Cape Hatteras	BATS	BATS 55	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	02.11.1993
12/06/1995 to 15/06/1R/V Weatherbird II	BATS	BATS 81	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
12/07/1993 to 17/07/1R/V Weatherbird II	BATS	BATS 58	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	02.11.1993
12/08/1991 to 16/08/1R/V Weatherbird II	BATS	BATS 35	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
12/09/1995 to 15/09/1R/V Weatherbird II	BATS	BATS 84	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
12/12/1996 to 14/12/1R/V Weatherbird II	BATS	BATS 99	Bermuda		N. Atlantic at 31.8 N 64.2 W	16.04.1998
13/01/1992 to 16/01/1R/V Weatherbird II	BATS	BATS VAL3	Bermuda	J. Sorensen	N. Atlantic at 31.8 N 64.2 W	05.11.1993
13/01/1997 to 18/01/1R/V Weatherbird II	BATS	BATS 100	Bermuda		N. Atlantic at 31.8 N 64.2 W	16.04.1998
13/02/1995 to 16/02/1R/V Weatherbird II	BATS	BATS 77	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
13/03/1991 to 17/03/1R/V Weatherbird II	BATS	BATS 30	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	07.09.1993
13/05/1991 to 17/05/1R/V Weatherbird II	BATS	BATS 32	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
13/06/1993 to 16/06/1R/V Weatherbird II	BATS	BATS 57	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	02.11.1993
13/06/1994 to 16/06/1R/V Weatherbird II	BATS	BATS 69	Bermuda		N. Atlantic at 31.8 N 64.2 W	24.03.1997
13/07/1992 to 17/07/1R/V Weatherbird II	BATS	BATS 46	Bermuda	K. Gundersen	N. Atlantic at 31.8 N 64.2 W	05.11.1993
13/08/1990 to 16/08/1R/V Weatherbird II	BATS	BATS 23	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
13/09/1993 to 17/09/1R/V Weatherbird II	BATS	BATS 60	Bermuda	K. Gundersen	N. Atlantic at 31.8 N 64.2 W	02.11.1993
13/10/1992 to 17/10/1R/V Weatherbird II	BATS	BATS 49	Bermuda	A. Close	N. Atlantic at 31.8 N 64.2 W	05.11.1993
14/01/1991 to 17/01/1R/V Weatherbird II	BATS	BATS 28	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
14/02/1990 to 17/02/1R/V Weatherbird II	BATS	BATS 17	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	07.09.1993
14/03/1994 to 21/03/1R/V Weatherbird II	BATS	BATS 66	Bermuda		N. Atlantic at 31.8 N 64.2 W	24.03.1997
14/04/1998 to 17/04/1R/V Weatherbird II	BATS	BATS 115a	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.09.1998
14/08/1989 to 18/08/1R/V Weatherbird I	BATS	BATS 11	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993

14/09/1992 to 18/09/1R/V Weatherbird II	BATS	BATS 48	Bermuda	J. Sorensen	N. Atlantic at 31.8 N 64.2 W	05.11.1993
14/10/1990 to 18/10/1R/V Weatherbird II	BATS	BATS 25	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
14/11/1994 to 17/11/1R/V Weatherbird II	BATS	BATS 74	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
14/12/1995 to 16/12/1R/V Weatherbird II	BATS	BATS 87	Bermuda		N. Atlantic at 31.8 N 64.2 W	26.03.1997
15/01/1990 to 18/01/1R/V Weatherbird II	BATS	BATS 16	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
15/02/1994 to 19/02/1R/V Weatherbird II	BATS	BATS 65	Bermuda		N. Atlantic at 31.8 N 64.2 W	24.03.1997
15/03/1995 to 17/03/1R/V Weatherbird II	BATS	BATS 78	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
15/03/1996 to 16/03/1R/V Weatherbird II	BATS	BATS 90	Bermuda		N. Atlantic at 31.8 N 64.2 W	26.03.1997
15/04/1989 to 18/04/1R/V Cape Henlopen	BATS	BATS 7	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
15/04/1991 to 19/04/1R/V Weatherbird II	BATS	BATS 31	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
15/05/1989 to 18/05/1R/V Weatherbird I	BATS	BATS 8	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
15/07/1991 to 19/07/1R/V Weatherbird II	BATS	BATS 34	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
15/08/1994 to 19/08/1R/V Weatherbird II	BATS	BATS 71	Bermuda		N. Atlantic at 31.8 N 64.2 W	24.03.1997
16/04/1990 to 19/04/1R/V Weatherbird II	BATS	BATS 19	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
16/05/1994 to 20/05/1R/V Weatherbird II	BATS	BATS 68	Bermuda		N. Atlantic at 31.8 N 64.2 W	24.03.1997
16/06/1992 to 20/06/1R/V Weatherbird II	BATS	BATS 45	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	05.11.1993
16/07/1990 to 19/07/1R/V Weatherbird II	BATS	BATS 22	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	07.09.1993
16/08/1993 to 20/08/1R/V Weatherbird II	BATS	BATS 59	Bermuda	F. Howse	N. Atlantic at 31.8 N 64.2 W	02.11.1993
16/12/1988 to 20/12/1R/V Cape Henlopen	BATS	BATS 3	Bermuda	A. Knap	N. Atlantic at 31.8 N 64.2 W	07.09.1993
17/02/1989 to 21/02/1R/V Cape Henlopen	BATS	BATS 5	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
17/08/1992 to 21/08/1R/V Weatherbird II	BATS	BATS 47	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	05.11.1993
18/03/1992 to 20/03/1R/V Weatherbird II	BATS	BATS 42a	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	05.11.1993
18/04/1994 to 21/04/1R/V Weatherbird II	BATS	BATS 67	Bermuda		N. Atlantic at 31.8 N 64.2 W	24.03.1997
18/05/1992 to 23/05/1R/V Weatherbird II	BATS	BATS 44	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	05.11.1993
18/06/1991 to 21/06/1R/V Weatherbird II	BATS	BATS 33	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
18/07/1989 to 21/07/1R/V Weatherbird I	BATS	BATS 10	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
18/07/1994 to 21/07/1R/V Weatherbird II	BATS	BATS 70	Bermuda		N. Atlantic at 31.8 N 64.2 W	24.03.1997
18/08/1995 to 22/08/1R/V Weatherbird II	BATS	BATS 83	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
18/09/1989 to 19/09/1R/V Weatherbird I	BATS	BATS 12	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993

18/10/1994 to 22/10/1R/V Weatherbird II	BATS	BATS 73	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
18/12/1989 to 20/12/1R/V Weatherbird II	BATS	BATS 15	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
19/02/1991 to 21/02/1R/V Weatherbird II	BATS	BATS 29a	Bermuda	K. Gundersen	N. Atlantic at 31.8 N 64.2 W	07.09.1993
19/09/1994 to 22/09/1R/V Weatherbird II	BATS	BATS 72	Bermuda		N. Atlantic at 31.8 N 64.2 W	24.03.1997
19/10/1989 to 28/10/1R/V Weatherbird I	BATS	BATS 13	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
19/11/1989 to 28/11/1R/V Weatherbird II	BATS	BATS 14	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
19/11/1991 to 22/11/1R/V Weatherbird II	BATS	BATS VAL2	Bermuda		N. Atlantic at 31.8 N 64.2 W	26.03.1997
20/03/1991 to 22/03/1R/V Weatherbird II	BATS	BATS 30a	Bermuda	K. Gundersen	N. Atlantic at 31.8 N 64.2 W	07.09.1993
20/04/1992 to 25/04/1R/V Weatherbird II	BATS	BATS 43	Bermuda	A. Close	N. Atlantic at 31.8 N 64.2 W	05.11.1993
20/06/1989 to 23/06/1R/V Weatherbird I	BATS	BATS 9	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
20/10/1988 to 21/10/1R/V Weatherbird I	BATS	BATS 1	Bermuda	A. Knap	N. Atlantic at 31.8 N 64.2 W	07.09.1993
21/02/1990 to 23/02/1R/V Weatherbird II	BATS	BATS 17a	Bermuda	K. Gundersen	N. Atlantic at 31.8 N 64.2 W	07.09.1993
21/06/1990 to 24/06/1R/V Weatherbird II	BATS	BATS 21	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	07.09.1993
23/04/1996 to 23/04/1R/V Weatherbird II	BATS	BATS 91a	Bermuda		N. Atlantic at 31.8 N 64.2 W	26.03.1997
23/11/1988 to 23/11/1R/V Weatherbird I	BATS	BATS 2	Bermuda	A. Knap	N. Atlantic at 31.8 N 64.2 W	07.09.1993
23/11/1993 to 25/11/1R/V Weatherbird II	BATS	BATS VAL9	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.10.1997
24/02/1992 to 26/02/1R/V Weatherbird II	BATS	BATS 41a	Bermuda	K. Gundersen	N. Atlantic at 31.8 N 64.2 W	05.11.1993
24/02/1993 to 26/02/1R/V Cape Hatteras	BATS	BATS 53a	Bermuda	A. Close	N. Atlantic at 31.8 N 64.2 W	02.11.1993
24/02/1998 to 26/02/1R/V Weatherbird II	BATS	BATS 113a	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.09.1998
24/03/1989 to 28/03/1R/V Cape Henlopen	BATS	BATS 6	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
24/03/1992 to 24/03/1R/V Weatherbird II	BATS	BATS VAL4	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	05.11.1993
24/10/1995 to 27/10/1R/V Weatherbird II	BATS	BATS VAL15	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.10.1997
25/01/1989 to 29/01/1R/V Cape Henlopen	BATS	BATS 4	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	07.09.1993
25/01/1993 to 29/01/1R/V Cape Hatteras	BATS	BATS 52a	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	02.11.1993
25/03/1998 to 27/03/1R/V Weatherbird II	BATS	BATS 114a	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.09.1998
25/07/1995 to 28/07/1R/V Weatherbird II	BATS	BATS VAL14	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.10.1997
26/01/1993 to 29/01/1R/V Weatherbird II	BATS	BATS VAL7	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	02.11.1993
26/04/1993 to 28/04/1R/V Cape Hatteras	BATS	BATS 55a	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	02.11.1993
27/01/1992 to 29/01/1R/V Weatherbird II	BATS	BATS 40a	Bermuda	R. Sherriff-Dow	N. Atlantic at 31.8 N 64.2 W	05.11.1993

27/02/1990 to 02/03/1R/V Weatherbird II	BATS	BATS 17b	Bermuda	K. Gundersen	N. Atlantic at 31.8 N 64.2 W	07.09.1993
27/03/1995 to 31/03/1R/V Weatherbird II	BATS	BATS VAL13	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.10.1997
27/04/1995 to 27/04/1R/V Weatherbird II	BATS	BATS 79a	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
28/02/1994 to 01/03/1R/V Weatherbird II	BATS	BATS 65a	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
28/02/1996 to 28/02/1R/V Weatherbird II	BATS	BATS 89a	Bermuda		N. Atlantic at 31.8 N 64.2 W	26.03.1997
28/03/1996 to 28/03/1R/V Weatherbird II	BATS	BATS 90a	Bermuda		N. Atlantic at 31.8 N 64.2 W	26.03.1997
28/09/1992 to 01/10/1R/V Weatherbird II	BATS	BATS VAL6	Bermuda	R. Johnson	N. Atlantic at 31.8 N 64.2 W	05.11.1993
29/01/1991 to 31/01/1R/V Weatherbird II	BATS	BATS 28a	Bermuda	K. Gundersen	N. Atlantic at 31.8 N 64.2 W	07.09.1993
29/03/1993 to 31/03/1R/V Cape Hatteras	BATS	BATS 54a	Bermuda	A. Doyle	N. Atlantic at 31.8 N 64.2 W	02.11.1993
29/03/1995 to 29/03/1R/V Weatherbird II	BATS	BATS 78a	Bermuda		N. Atlantic at 31.8 N 64.2 W	25.03.1997
29/04/1991 to 03/05/1R/V Weatherbird II	BATS	BATS VAL1	Bermuda		N. Atlantic at 31.8 N 64.2 W	26.03.1997
29/06/1992 to 03/07/1R/V Weatherbird II	BATS	BATS VAL5	Bermuda	J. Sorensen	N. Atlantic at 31.8 N 64.2 W	05.11.1993
29/06/1994 to 01/07/1R/V Weatherbird II	BATS	BATS VAL11	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.10.1997
29/09/1993 to 01/10/1R/V Weatherbird II	BATS	BATS VAL8	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.10.1997
29/09/1994 to 02/10/1R/V Weatherbird II	BATS	BATS VAL12	Bermuda		N. Atlantic at 31.8 N 64.2 W	08.10.1997
30/01/1990 to 01/02/1R/V Weatherbird II	BATS	BATS 16a	Bermuda	A. Michaels	N. Atlantic at 31.8 N 64.2 W	07.09.1993
30/01/1996 to 31/01/1R/V Weatherbird II	BATS	BATS 88	Bermuda		N. Atlantic at 31.8 N 64.2 W	26.03.1997
01/09/1992 to 11/09/1CSS Fogo Isle	CJGOFS	IML JGOFS-2	Canada	B.Klein	Gulf of St. Lawrence	02.04.1997
02/04/1994 to ??/??/1 CSS Hudson	CJGOFS		Canada	T. Platt	NW Atlantic	03.04.1997
02/04/1994 to ??/??/1 CSS Parizeau	CJGOFS		Canada	Therriault	NW Atlantic (Gulf of Maine)	03.04.1997
03/04/1991 to 20/04/1CSS Hudson	CJGOFS	91-001	Canada	G. Harrison	N Atlantic 36-44 N 62-65 W	01.06.1994
05/04/1990 to 28/04/1CSS Hudson	CJGOFS	90-001	Canada	T. Platt	N. Atlantic 32-47 N 40-62 W	01.06.1994
05/04/1995 to ??/??/1 CSS Hudson	CJGOFS		Canada	T. Platt	NW Atlantic	03.04.1997
05/12/1993 to 15/12/1CSS Parizeau	CJGOFS	93-41(28)(leg	Canada	B. Sundby/A.Ha	N Atlantic 47 N 60 W and 43 N 50 W	
07/12/1992 to 17/12/1CSS Hudson	CJGOFS	IML JGOFS-4	Canada	B.Klein	Gulf of St. Lawrence	02.04.1997
08/05/1993 to 14/05/1CSS Alfred Needler	CJGOFS	CG2683	Canada	S.K. Juniper	NW Atlantic (Scotia Shelf, 43N 62W)	01.06.1994
09/05/1997 to 11/06/1CSS Hudson	WOCE	97009	Canada	A.Clarke	WOCE line AR7W (Greenland-Labrador)	21.04.1999
09/07/1993 to 19/07/1CSS Fogo Isle	CJGOFS	IML JGOFS-6	Canada	B. Klein	Gulf of St. Lawrence	03.04.1997
10/01/1994 to ??/??/1 CSS Hudson	CJGOFS		Canada	Therriault	NW Atlantic (Gulf of Maine)	03.04.1997

10/01/1996 to ??/??/1 CSS Hudson	CJGOFS		Canada	Therriault	NW Atlantic (Gulf of Maine)	03.04.1997
10/02/1995 to ??/??/1 CSS Parizeau	CJGOFS		Canada	Therriault	NW Atlantic (Gulf of Maine)	03.04.1997
10/03/1994 to ??/??/1 CSS Hudson	CJGOFS		Canada	Therriault	NW Atlantic (Gulf of Maine)	03.04.1997
10/04/1994 to 22/04/1 Sir Wilfrid Lau	CJGOFS	IML JGOFS-8	Canada	B. Klein	Gulf of St. Lawrence	03.04.1997
12/09/1994 to ??/??/1 CSS Parizeau	CJGOFS		Canada	B. Boudreau	NW Atlantic (Newfoundland shelf)	03.04.1997
13/06/1994 to 24/06/1 CSS Hudson	CJGOFS	IML JGOFS-9,	Canada	B.Klein,G.Desro	Gulf of St. Lawrence	03.04.1997
15/05/1993 to 08/06/1 CSS Hudson	CJGOFS	93-002	Canada	G. Harrison	N Atlantic 24-44 N 10-56 W	01.06.1994
15/12/1994 to ??/??/1 CSS Parizeau	CJGOFS		Canada	Therriault	NW Atlantic (Gulf of Maine)	03.04.1997
16/04/1994 to ??/??/1 CSS Parizeau	CJGOFS		Canada	B. Sundby	NW Atlantic (Gulf of Maine)	03.04.1997
16/09/1992 to 21/10/1 CSS Hudson	CJGOFS	92-037	Canada	G. Harrison	N. Atlantic 28-44 N 10-55 W (Transect Nova Scotia-Ma	01.06.1994
17/10/1996 to 20/11/1 CSS Hudson	WOCE	96026	Canada	J.Lazier/A.Clark	WOCE line AR7W (Greenland-Labrador)	21.04.1999
18/04/1989 to 18/05/1 CSS Baffin	CJGOFS	89-003	Canada	T. Platt	N Atlantic 35-43 N 40-60 W	01.06.1994
20/09/1995 to ??/??/1 CSS Parizeau	CJGOFS		Canada	B. Boudreau	NW Atlantic (Newfoundland shelf)	03.04.1997
21/11/1993 to 04/12/1 CSS Parizeau	CJGOFS	IML JGOFS-7	Canada	B. Klein	Gulf of St. Lawrence	03.04.1997
23/07/1992 to 30/07/1 CSS Fogo Isle	CJGOFS	IML JGOFS-1	Canada	B.Klein,S.Demer	Gulf of St. Lawrence	02.04.1997
24/06/1994 to 30/06/1 CSS Hudson	CJGOFS	IML JGOFS-9,	Canada	B.Klein,G.Desro	Gulf of St. Lawrence	03.04.1997
24/06/1998 to 09/07/1 CSS Hudson	WOCE	98023	Canada	E.Peter Jones	WOCE line AR7W (Greenland-Labrador)	21.04.1999
25/05/1993 to 04/06/1 CSS Fogo Isle	CJGOFS	IML JGOFS-5	Canada	B. Klein	Gulf of St. Lawrence	02.04.1997
25/09/1992 to 05/10/1 CSS Fogo Isle	CJGOFS	IML JGOFS-3	Canada	B.Klein	Gulf of St. Lawrence	02.04.1997
27/05/1992 to 14/06/1 CSS Hudson	WOCE	18HU9204/1	Canada	Lazier	WOCE LINE AR7W (Greenland-Labrador)	21.04.1999
??/??/1988 to ??/??/1988	FRONTAL	PREPOT	France	J.M. Brylinski	Pas de Calais front (English Channel)	06.07.1999
??/??/1988 to ??/??/15 Pluteus II	FRONTAL	AZOMIX	France	P. Morin	English Channel	06.07.1999
01/07/1989 to 28/07/1 Jean Charcot	EUMELI	Eumeli 1	France	G. A. Auffret	N. Atlantic 0-60 N 0-56 W	27.06.1997
07/08/1989 to 11/09/1 Jean Charcot	MEDATLANTE	Medatlante 2	France	C. Lambert	Atlantic and Mediterranean waters	27.06.1997
07/12/1992 to 30/12/1 Suroit	EUMELI	Eumeli 5	France	D. Tailliez	Northeast Atlantic 30N to 10N 40W to 10W	29.12.1993
09/01/1991 to 22/02/1 L'Atalante	EUMELI	Eumeli 2(2legs	France	M. Sibuet	N. Atlantic 0-60 N 0-56 W	07.05.1997
15/09/1991 to 21/10/1 L'Atalante	EUMELI	Eumeli 3(2legs	France	A. Morel,G.Jacq	Off coast Mauritania at 18-20N 20-23 W	14.03.1997
18/05/1992 to 30/06/1 L'Atalante	EUMELI	Eumeli 4(2legs	France	P. Buat-Menard	Northeast Atlantic 29N to 18N 32W to 15W	29.12.1993
26/12/1988 to 31/01/1 Jean Charcot	MEDATLANTE	Medatlante 1	France	J-P. Bethoux	North-east Atlantic and Mediterranean Sea	07.05.1997

25.09.1994 R/V Poseidon	ESTOC		994 Germany		NE Atlantic 20.1N 15.3 W	22.05.1998
04.10.1994 R/V Poseidon	ESTOC		994 Germany		NE Atlantic 20.1N 15.3 W	22.05.1998
01.06.1995 Victor Hensen	ESTOC		595 Germany		NE Atlantic 20.1N 15.3 W	22.05.1998
04.06.1995 Victor Hensen	ESTOC		695 Germany		NE Atlantic 20.1N 15.3 W	22.05.1998
01.10.1995 R/V Poseidon	ESTOC		995 Germany		NE Atlantic 20.1N 15.3 W	22.05.1998
03.10.1995 R/V Poseidon	ESTOC		1095 Germany		NE Atlantic 20.1N 15.3 W	22.05.1998
06.10.1995 R/V Poseidon	ESTOC		1095 Germany		NE Atlantic 20.1N 15.3 W	22.05.1998
11.01.1997 R/V Meteor	ESTOC		197 Germany		NE Atlantic 20.1N 15.3 W	22.05.1998
22.01.1997 R/V Meteor	ESTOC		297 Germany		NE Atlantic 20.1N 15.3 W	22.05.1998
13.04.1997 R/V Meteor	ESTOC		497 Germany		NE Atlantic 20.1N 15.3 W	22.05.1998
14.09.1997 R/V Poseidon	ESTOC		997 Germany		NE Atlantic 20.1N 15.3 W	22.05.1998
04.10.1997 R/V Poseidon	ESTOC		1097 Germany		NE Atlantic 20.1N 15.3 W	22.05.1998
??/09/1995 to ??/09/1 Heincke	BAH	JGOFS 1995	Germany		North eastern Atlantic	20.11.1996
01/05/1990 to 22/05/1Polarstern	VIII/7		Germany	Schrems	E. Atlantic 25S 9E to 54N 6W	01.06.1994
01/07/1992 to 23/07/1R/V Meteor	SFB313	Met21/5	Germany	G. Graf	Iceland/Norway/Svalbard	01.06.1994
01/09/1995 to 10/09/1R/V Poseidon	OMEX I	PS211	Germany	L. Mintrop	NE Atlantic 5-15W 45-50N	31.03.1998
02/02/1996 to 12/02/1Victor Hansen	ESTOC	A1/96-2	Germany		NE Atlantic 20.1N 15.3 W	20.05.1998
02/04/1998 to 17/04/1R/V Poseidon	ESTOC	237/3	Germany		NE Atlantic 20.1N 15.3 W	20.05.1998
02/05/1989 to 13/06/1R/V Meteor	JGOFS/NABE	Met10/2	Germany	J. Lenz	N.Atlantic 47N 20W, 58N 21W	01.06.1994
03/08/1997 to 15/08/1R/V Poseidon	GJGOFS	Pos231/3	Germany	J. Waniek	German JGOFS Mooring L1 (33N,22W)	23.09.1997
05/05/1997 to 14/05/1Victor Hansen	ESTOC	97/3-3	Germany		NE Atlantic 20.1N 15.3 W	20.05.1998
05/06/1993 to 21/06/1R/V Poseidon	GJGOFS	Pos200/6	Germany	W. Koeve	N.Atlantic 47N 20W	01.06.1994
05/09/1997 to 21/09/1R/V Poseidon	ESTOC	233A	Germany		NE Atlantic 20.1N 15.3 W	20.05.1998
06/01/1997 to 22/01/1Meteor	ESTOC		37 Germany		NE Atlantic 20.1N 15.3 W	20.05.1998
06/06/1996 to 19/06/1R/V Meteor	GJGOFS	Met36/1	Germany	D. Schulz-Bull	Transect Bermuda to Las Palmas	18.10.1996
06/09/1994 to 20/09/1R/V Meteor	GJGOFS/WOCE/OME	Met 30/1	Germany	O. Pfannkuche	N. Atlantic	11-16 W 38-50
07/09/1996 to 06/10/1R/V Meteor	GJGOFS	Met36/5	Germany	C. Hembelen	BIOTRANS (47N 20W) and BENGAL (49N 16.5 W)	18.10.1996
09/05/1992 to 02/06/1R/V Meteor	GJGOFS	Met21/3	Germany	J. Duinker	N. Atlantic section 20W, 34-60N	01.06.1994
09/10/1996 to 04/11/1R/V Meteor	GJGOFS(BIGSET/BEN	Met36/6	Germany	O. Pfannkuche	BIOTRANS (47N 20W) and BENGAL (49N 16.5W)	18.10.1996

10/07/1995 to 26/07/1R/V Poseidon	GJGOFS	Pos 209/2	Germany		N. Atlantic 53N 20W	20.11.1996
12/04/1992 to 06/05/1R/V Meteor	GJGOFS	Met21/2	Germany	B. Zeitzschel	N. Atlantic 47N 20W	01.06.1994
12/06/1994 to 14/07/1R/V Valdivia	TRAPS/WOCE/ORAS	Val 145/1	Germany	E. Mittelstaedt	Eastern boundary along the western-european continent	18.10.1996
12/10/1994 to 12/11/1R/V Meteor	WOCE	Met30/2	Germany	Koltermann	WOCE line A02 (50N 10W to 40N 50W)	27.04.1999
14/05/1996 to 01/06/1R/V Poseidon	ESTOC	219A	Germany		NE Atlantic 20.1N 15.3 W	20.05.1998
14/07/1995 to 30/07/1R/V Valdivia	OMEX I	VLD154	Germany	A. Spitzky	NE Atlantic 5-15W 45-50N	31.03.1998
14/08/1990 to 10/09/1R/V Poseidon	SFB313	Pos 173/2	Germany		72N 5W	20.11.1996
14/09/1995 to 29/09/1R/V Poseidon	TRAPS/WOCE	Pos 212/2	Germany	T.Mueller	N. Atlantic 34N 20W	01.06.1994
15/06/1989 to 12/07/1R/V Meteor	JGOFS/NABE	Met10/3	Germany	B. Zeitzschel	N. Atlantic 72N	8W
15/07/1989 to 30/08/1R/V Meteor	JGOFS/BIOCFL	Met10/4	Germany		N. Atlantic 47N 20 W	20.11.1996
15/09/1994 to 23/09/1R/V Poseidon	TRAPS	Pos 202/1a-c	Germany	M. Müller, M. K	North east Atlantic	20.11.1996
15/11/1994 to 19/12/1R/V Meteor	WOCE-JGOFS	MT30 leg 3	Germany	Meincke	Line AR7E (Ireland to Greenland)	21.04.1999
16/03/1992 to 09/04/1R/V Meteor	GJGOFS	Met21/1	Germany	O. Pfannkuche	N. Atlantic 47N 20W	01.06.1994
17/10/1993 to 27/11/1Polarstern	XI/1		Germany	Schrems	E. Atlantic 45N 13W to 57S 10E to 44S 15E	01.06.1994
18/02/1994 to 26/03/1R/V Meteor	WOCE	Met27/3	Germany	F. Schott	Atlantic section 37N-10S along 30W	01.06.1994
18/11/1991 to 22/12/1R/V Meteor	JGOFS	Met20/1	Germany	G. Wefer	Canary Islands, 29N 15W	01.06.1994
19/03/1989 to 27/04/1R/V Meteor	JGOFS/NABE	Met10/1	Germany	B. Zeitzschel	N.Atlantic 18N 30W, 33N 21W	01.06.1994
19/05/1993 to 01/06/1Keldysh	GJGOFS		Germany	J.Duinker	N.Atlantic 47N 20W, 54N 21W	01.06.1994
20/01/1994 to 15/02/1R/V Meteor	GJGOFS/GEOMAR	Met27/2	Germany	O. Pfannkuche	N.Atlantic 47N 20W	01.06.1994
20/08/1996 to 05/09/1R/V Meteor	BIGSET	Met36/4	Germany	G. Graf	BENGAL station; transect to 48N 11W	18.10.1996
21/03/1993 to 12/04/1R/V Meteor	JGOFS	Met23/3	Germany	G. Wefer	Canary Islands 29N 15W	01.06.1994
21/04/1998 to 30/04/1R/V Poseidon	ESTOC	237/4	Germany		NE Atlantic 20.1N 15.3 W	20.05.1998
21/05/1994 to 11/06/1R/V Valdivia	TRAPS	144/2	Germany		N. Atlantic at 31.8 N 64.2 W	24.03.1997
21/07/1996 to 17/08/1R/V Meteor	SFB313	Met36/3	Germany	J. Meinert	Bergen (Norway) to Rykjavik (Iceland)	18.10.1996
21/07/1997 to 01/08/1R/V Poseidon	GJGOFS	Pos231/2	Germany	U. Lundgreen	BIOTRANS (47N 20W)	23.09.1997
22/01/1996 to 01/02/1Victor Hansen	ESTOC	A1/96-1	Germany		NE Atlantic 20.1N 15.3 W	20.05.1998
22/06/1996 to 18/07/1R/V Meteor	GJGOFS	Met36/2	Germany	K. Kremling	Transect on 20W from 32N to 60 N (Las Palmas to Berg	18.10.1996
22/09/1992 to 21/10/1R/V Meteor	JGOFS	Met22/1	Germany	W. Balzer	Canary Islands 29N 15W	01.06.1994
23/01/1990 to 07/03/1R/V Meteor	WOCE	Met11/5	Germany	Roether	WOCE line SR2/A12 (South Africa to Antarctica)	22.04.1999

23/03/1998 to 31/03/1R/V Poseidon	ESTOC	237/2b	Germany		NE Atlantic 20.1N 15.3 W	20.05.1998
23/06/1993 to 04/07/1R/V Poseidon	OMEX I	PS200-7	Germany	B.von Bodungen	NE Atlantic 5-15 W 45-50 N	31.03.1998
23/06/1993 to 16/07/1R/V Valdivia	OMEX I	VLD137	Germany	T. Raabe	NE Atlantic 5-15 W 45-50 N	31.03.1998
24/06/1995 to 13/07/1R/V Valdivia	OMEX I	VLD153	Germany	Mohn	Porcupine Bank/SeaBight, 5-15W 50-55N	31.03.1998
24/08/1993 to 25/09/1R/V Meteor	GJGOFs/TRAPS	Met26/1	Germany	K. Kremling	N.Atlantic section near 20W 34-60N	01.06.1994
25/04/1994 to 08/10/1R/V Poseidon	ESTOC	201/c	Germany		NE Atlantic 20.1N 15.3 W	20.05.1998
25/04/1997 to 03/05/1Victor Hansen	ESTOC	97/3-2	Germany		NE Atlantic 20.1N 15.3 W	20.05.1998
25/05/1993 to 17/06/1Heincke	BAH	JGOFs 1993/1	Germany		P.Martens	N.Atlantic 47N
25/06/1995 to 08/07/1R/V Poseidon	GJGOFs	Pos 209/1	Germany	W. Koeve	N. Atlantic 47N 20W	20.11.1996
26/07/1992 to 31/08/1R/V Meteor	BIOCFL	Met21/6	Germany	O. Pfannkuche	N.Atlantic section 20W 59-47N	01.06.1994
27/03/1995 to 17/04/1Heincke	OMEX I	HEINK68	Germany	M. Kloppmann	Porcupine Bank/SeaBight, 5-15W 50-55N	31.03.1998
27/05/1990 to 30/06/1R/V Meteor	JGOFs/BIOFCL	Met12/3	Germany		N. Atlantic 34N to 40N along 20W	20.11.1996
29/08/1994 to 22/09/1Heincke	BAH	JGOFs 1994/6	Germany	P. Martens	North eastern Atlantic	20.11.1996
29/12/1993 to 17/01/1R/V Meteor	JGOFs/OMEX	Met27/1	Germany	W. Balzer	NE Atlantic 5-15 W 45-50 N	01.06.1994
30/05/1995 to 07/05/1Victor Hansen	ESTOC		95 Germany		NE Atlantic 20.1N 15.3 W	20.05.1998
30/09/1995 to 08/10/1R/V Poseidon	ESTOC	212/3	Germany		NE Atlantic 20.1N 15.3 W	20.05.1998
30/11/1991 to 18/12/1Sonne	IFMB/HH	76-A	Germany	Seifert	Central Atlantic 28N 33W to 18N 68W	01.06.1994
01/07/1990 to 23/07/1R.V. Tyro	Dutch Warp (WOCE)	90/3	Netherlands	van Aken	Line AR7E (Greenland to Ireland)	21.04.1999
02/03/1998 to 27/03/1MERLIM			Netherlands		N. Atlantic 37-42.3N along 23W	21.06.1999
02/06/1990 to 29/06/1R.V. Tyro	NAPP	leg 4	Netherlands	Ganssen/De Wit	North Atlantic, 40-58 N, along 20 W	26.12.1993
08/04/1991 to 01/05/1R.V. Tyro	Dutch Warp	91/1	Netherlands	van Aken	Line AR7E (Greenland to Ireland)	21.04.1999
17/04/1990 to 31/05/1R.V. Tyro	NAPP	leg 3	Netherlands	H.G.Fransz	N. Atlantic 33-60 N, along 20 W	26.12.1993
21/09/1989 to 26/09/1R.V. Tyro	NAPP	leg 2	Netherlands	W. Helder	North Atlantic, 33-50 N, along 20 W	26.12.1993
22/07/1996 to 31/08/1R/V Tydeman	DCM		Netherlands	M. Velhuis	North Atlantic 5 - 35° N and 50 - 15° W	23.11.1998
31/07/1989 to 11/09/1R.V. Tyro	NAPP	leg 1	Netherlands	H.J.W. de Baar	North Atlantic, 33-60 N, along 20 W	26.12.1993
10/11/1993 to 07/12/1Håkon Mosby	WOCE	AA58	Norway	Johannessen	WOCE line AR16	21.04.1999
??/11/1993 to ??/12/1 R/V Academica Mstislav Keldysh			Russia	A.P. Lisitzin	North Atlantic 23N to 40N	30.12.1993
??/04/1989 to ??/05/1 SA Agulhas	MOES	MOES II	South Africa	B.Allanson	Prince Edward Islands	26.01.1994
??/12/1992 to ??/01/1 SA Agulhas	SAAMES	v70. SAAMES	South Africa	M. Lucas	SANAE-Cape Town WOCE, JGOFs line A12SR2	26.01.1994

05/08/1987 to 04/09/1SA Agulhas	Benthic survey	V50	South Africa D. Gianakouras	Prince Edward Islands	26.01.1994
10/08/1989 to 31/08/1SA Agulhas	Benthic survey	V58	South Africa D. Gianakouras	Prince Edward Islands	26.01.1994
10.02.1994 Taliarte	ESTOC	294	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
30.03.1994 Taliarte	ESTOC	394	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
28.04.1994 Taliarte	ESTOC	494	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
28.05.1994 Taliarte	ESTOC	594	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
22.06.1994 Taliarte	ESTOC	694	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
13.07.1994 Taliarte	ESTOC	794	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
31.08.1994 Taliarte	ESTOC	894	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
25.10.1994 Taliarte	ESTOC	1094	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
17.11.1994 Taliarte	ESTOC	1194	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
16.12.1994 Taliarte	ESTOC	1294	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
25.01.1995 Taliarte	ESTOC	195	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
28.03.1995 Taliarte	ESTOC	395	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
30.08.1995 Taliarte	ESTOC	895	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
25.11.1995 Taliarte	ESTOC	1195	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
15.03.1996 Taliarte	ESTOC	396	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
24.04.1996 Taliarte	ESTOC	496	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
12.06.1996 Taliarte	ESTOC	696	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
09.07.1996 Taliarte	ESTOC	796	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
29.08.1996 Taliarte	ESTOC	896	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
27.09.1996 Taliarte	ESTOC	996	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
30.10.1996 Taliarte	ESTOC	1096	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
17.12.1996 Taliarte	ESTOC	1296	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
14.03.1997 Taliarte	ESTOC	397	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
09.06.1997 Taliarte	ESTOC	697	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
11.06.1997 Navarro	ESTOC	697	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
03.07.1997 Taliarte	ESTOC	797	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998
23.08.1997 Taliarte	ESTOC	897	Spain	NE Atlantic 20.1N 15.3 W	22.05.1998

04.11.1997 Taliarte	ESTOC	1197	Spain		NE Atlantic 20.1N 15.3 W	22.05.1998
02.12.1997 Taliarte	ESTOC	1297	Spain		NE Atlantic 20.1N 15.3 W	22.05.1998
20.01.1998 Taliarte	ESTOC	198	Spain		NE Atlantic 20.1N 15.3 W	22.05.1998
17.02.1998 Taliarte	ESTOC	298	Spain		NE Atlantic 20.1N 15.3 W	22.05.1998
24.03.1998 Taliarte	ESTOC	398	Spain		NE Atlantic 20.1N 15.3 W	22.05.1998
01/08/1993 to 30/08/1993 BIO Hesperides	MAST	HE011	Spain	J. Arístegui	Canary Islands	26.12.1993
10/05/1993 to 01/06/1993 Cornide de Saavedra	WOCE	29CS	Morena/1 Spain	Cabañas	WOCE line AR16	21.04.1999
15/07/1992 to 23/08/1992 BIO Hesperides	WOCE	HE06/Line A-5	Spain	G. Parrilla	Trans-Atlantic Transect	26.12.1993
03/06/1995 to 20/06/1995 RSS Charles Darwin	OMEX I	CD94	United Kingdom	P.J.Statham	NE Atlantic 5-15W 45-50N	31.03.1998
06/01/1998 to 19/01/1998 R/V Charles Darwin	OMEX II	CD110B	United Kingdom	J. Huthnance	NE Atlantic (Iberian Margin) 41-43°N 8.5-10W	31.03.1998
06/07/1991 to 29/07/1991 RRS Charles Darwin	BOFS	CD61	United Kingdom	R. Harris	N Atlantic 60-62 N along 20 W	18.05.1993
08/04/1994 to 05/05/1994 RSS Charles Darwin	OMEX I	CD85	United Kingdom	P. Pugh	NE Atlantic 5-15W 45-50N	31.03.1998
08/05/1989 to 08/06/1989 RRS Discovery	BOFS	DI182	United Kingdom	M. Fasham	N Atlantic 47-60 N along 20 W	18.05.1993
09/06/1990 to 27/06/1990 RRS Discovery	BOFS	DI192	United Kingdom	D. Turner	N Atlantic 46-49 N, 14-18 W	18.05.1993
10/06/1989 to 12/07/1989 RRS Discovery	BOFS	DI183	United Kingdom	R. Harris	N. Atlantic 47-60 N along 20 W	18.05.1993
10/06/1997 to 22/06/1997 R/V Charles Darwin	OMEX II	CD105B	United Kingdom	J. Huthnance	NE Atlantic 41.3-43N 9.3-10W	31.03.1998
11/05/1990 to 05/06/1990 RRS Discovery	BOFS	DI191	United Kingdom	M. Angel	N. Atlantic 47-60 N along 20 W	18.05.1993
11/06/1996 to 23/07/1996 RRS Discovery	PRIME	DI221	United Kingdom	G. Savidge	NE Atlantic	03.03.1998
12/06/1991 to 03/07/1991 RRS Charles Darwin	BOFS	CD60	United Kingdom	P. Holligan	N Atlantic 55-63 N along 20 W, 61N 23 W & 61 N 15 W	18.05.1993
12/10/1995 to 06/11/1995 RSS Charles Darwin	OMEX I	CD97	United Kingdom	R.D.Pingree	NE Atlantic 5-15W 45-50N	31.03.1998
13/12/1993 to 13/01/1994 RSS Charles Darwin	OMEX I	CD83	United Kingdom	R.D.Pingree	NE Atlantic 2-35W 23-52N	31.03.1998
14/04/1990 to 08/05/1990 RRS Discovery	BOFS	DI190	United Kingdom	A. Watson	N. Atlantic 48-50 N, 18-22 W	18.05.1993
14/07/1989 to 14/08/1989 RRS Discovery	BOFS	DI184	United Kingdom	N. McCave	N. Atlantic 47-60 N along 20 W	18.05.1993
15/04/1997 to 16/05/1997 RRS Discovery	Plank.patchiness studies	DI227	United Kingdom	M. Srokosz	N. Atlantic 45-49N, 15-20W	09.06.1998
16/05/1994 to 17/06/1994 RSS Charles Darwin	OMEX I	CD86	United Kingdom	T.C.E.van Weeri	NE Atlantic 5-15W 45-50N	31.03.1998
18/01/1994 to 02/02/1994 RSS Charles Darwin	OMEX I	CD84	United Kingdom	P.J.Statham	NE Atlantic 5-15W 45-50N	31.03.1998
18/05/1991 to 10/06/1991 RRS Charles Darwin	VIVALDI91	CD59	United Kingdom	H. Leach	N.Atlantic survey 48N to 53N 10W to 35W including se	30.12.1993
18/09/1990 to 24/10/1990 RRS Charles Darwin	BOFS	CD53	United Kingdom	G. Shimmiel	N Atlantic 20-47 N along 20 W	18.05.1993
23/04/1998 to 01/06/1998 RRS Discovery	KAOS	DI233	United Kingdom	D. Smythe-Wrigl	NE Atlantic 20-36N along 21W, 36-63N along 20W, Ro	09.06.1998

23/12/1997 to 05/01/1R/V Charles Darwin	OMEX II	CD110A	United Kingdom	J. Huthnance	NE Atlantic (Iberian Margin) 41-43°N 8.5-10W	31.03.1998
24/08/1992 to 11/09/1RRS Charles Darwin	CD72		United Kingdom	R. Lampitt	N. Atlantic	at 49N 16.3W
25/04/1991 to 16/05/1RRS Charles Darwin	VIVALDI91	CD58	United Kingdom	R. Pollard	N. Atlantic survey 39N to 48N 10W to 28W including se	30.12.1993
25/05/1990 to 18/06/1RRS Charles Darwin	BOFS	CD47	United Kingdom	P. Burkill	N. Atlantic 46-49 N, 15-19 W	18.05.1993
26/08/1995 to 12/09/1RRS Discovery	OMEX I	DI216	United Kingdom	P.J.Statham	NE Atlantic 5-15W 45-50N	31.03.1998
27/09/1995 to 22/10/1RRS Discovery	OMEX I	DI217	United Kingdom	R. Lampitt	NE Atlantic 5-15W 45-50N	31.03.1998
28/04/1990 to 23/05/1RRS Charles Darwin	BOFS	CD46	United Kingdom	G. Savidge	N. Atlantic 48-50 N, 16-20 W	18.05.1993
29/05/1997 to 09/06/1R/V Charles Darwin	OMEX II	CD105A	United Kingdom	J. Huthnance	NE Atlantic, off Iberian Peninsula 41.3-43N 10W	31.03.1998
02/05/1989 to 02/05/1NASA P3 Air Craft	NABE	M-117	United States	F. Hoge	N. Atlantic 48 N 20 W to 52 N 11 W	09.07.1993
02/08/1993 to 16/08/1R/V Malcolm Baldrige	OACES	MB-93-03 leg	United States	D. Atwood	Eastern North Atlantic 32N 18W to 15N 29W	24.09.1993
03/06/1989 to 03/06/1NASA P3 Air Craft	NABE	M-127	United States	F. Hoge	N. Atlantic 56 N 20 W to 64 N 23 W	09.07.1993
06/07/1993 to 17/07/1R/V Malcolm Baldrige	OACES	MB-93-03 leg	United States	R. Wanninkhof	Equatorial Atlantic 4S to 13N along 25W	24.09.1993
10/05/1989 to 10/05/1NASA P3 Air Craft	NABE	M-118	United States	F. Hoge	N. Atlantic 48 N 21 W to 53 N 9 W and N 19 W to 52 N	09.07.1993
13/03/1989 to 19/04/1Melville	WOCE	318HYDROS4	United States	Talley	WOCE line A16C	22.04.1999
13/05/1989 to 13/05/1NASA P3 Air Craft	NABE	M-119	United States	F. Hoge	N. Atlantic 47 N 20 W to 50 N to 17 W	19.11.1996
15/05/1989 to 08/06/1R/V Atlantis II	NABE	119 leg 5	United States	H. Ducklow	N. Atlantic 60-46 N along 20 W	09.07.1993
17/05/1989 to 17/05/1NASA P3 Air Craft	NABE	M-120	United States	F. Hoge	N. Atlantic 53 N 12.5 W to 53 N 9 W and 51.5 N 13.5 W	09.07.1993
17/08/1993 to 30/08/1R/V Malcolm Baldrige	OACES	MB-93-03 leg	United States	D. Frazel	Eastern North Atlantic 34N to 63N along 20W	24.09.1993
18/05/1989 to 18/05/1NASA P3 Air Craft	NABE	M-121	United States	F. Hoge	N. Atlantic 48 N 21 W to 53 N 9 W and 46 N 17 W to 5	09.07.1993
19/04/1989 to 10/05/1R/V Atlantis II	NABE	119 leg 4	United States	J. Marra	N. Atlantic 59-41 N along 20 W	09.07.1993
20/04/1989 to 20/04/1NASA P3 Air Craft	NABE	M-113	United States	F. Hoge	N. Atlantic 39-45 N along 61.5 W	09.07.1993
21/04/1989 to 21/04/1NASA P3 Air Craft	NABE	M-114	United States	F. Hoge	N. Atlantic 38 N 26 W to 48 N 54 W	09.07.1993
21/05/1989 to 21/05/1NASA P3 Air Craft	NABE	M-122	United States	F. Hoge	N. Atlantic 52 N 20 W to 64 N 22 W	09.07.1993
23/01/1989 to 08/03/1Melville	WOCE	318MSAVE5	United States	Smethie	WOCE line A16S	22.04.1999
24/05/1989 to 24/05/1NASA P3 Air Craft	NABE	M-124	United States	F. Hoge	N. Atlantic 57 N 21 W to 64 N 21 W	09.07.1993
26/03/1989 to 08/04/1R/V Atlantis II	NABE	119 leg 2	United States	S. Honjo	N. Atlantic 34 47 and 60 N along	20 W
26/04/1989 to 26/04/1NASA P3 Air Craft	NABE	M-116	United States	F. Hoge	N. Atlantic 48 N 20 W to 52 N 10 W	09.07.1993
28/06/1989 to 07/07/1R/V Endeavor	NABE	198	United States	J. Martin	N. Atlantic 59-64 N along 20 W	09.07.1993
29/05/1989 to 29/05/1NASA P3 Air Craft	NABE	M-126	United States	F. Hoge	N. Atlantic 56 N 22 W to 64 N 22 W	09.07.1993

08/01/1998 to 24/02/1R/V Ronald H. Brown	WOCE		USA		WOCE line AR1	21.04.1999
15/08/1997 to 03/09/1R/V Knorr	WOCE	151 leg 4	USA	T.M. Joyce	WOCE line A22	21.04.1999

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Comments

BOFS follow-up cruise

R. Reuther

Cruise Reference 89001711

Cruise Reference 92006111

Cruise Reference 92000511 & 92000512

Cruise Reference 88006311

Related cruise: JGOFS PI R. Reuther

Related cruise: JGOFS PI S. Kempe

Mooring service and other non-JGOFS moorings

Mooring service and other non-JGOFS moorings

pCO₂ intercalibration exercise

20.11.1996

Benthic working programme

Mainly Mooring

01.06.1994

Mainly Mooring

Related cruise: JGOFS PI

Related cruise: JGOFS PIS. Kempe

Mooring service and other non-JGOFS moorings

01.06.1994

Mooring service and other non-JGOFS moorings

01.06.1994

Related cruise: JGOFS PI S. Kempe

Mir submersibles available

Physics plus some Level 1s

30.12.1993

Physics plus some Level 1s

WOCE section with JGOFS observations

WOCE section with JGOFS observations

09.07.1993

