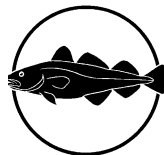


The Faroese Fisheries Laboratory

Fiskirannsóknarstovan



Nordic WOCE ADCP Deployments 1994 - 1997

by

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Introduction

This report documents ADCP measurements in Faroese waters within the Nordic WOCE programme in the period 1994 - 1997. The measurements were acquired at 7 standard mooring sites shown in Figure 1. The successful deployments are listed in Table 1. Each deployment is identified by an 8-character label where the first four characters indicate the site (Fig. 1) while the last characters show year and month of deployment.

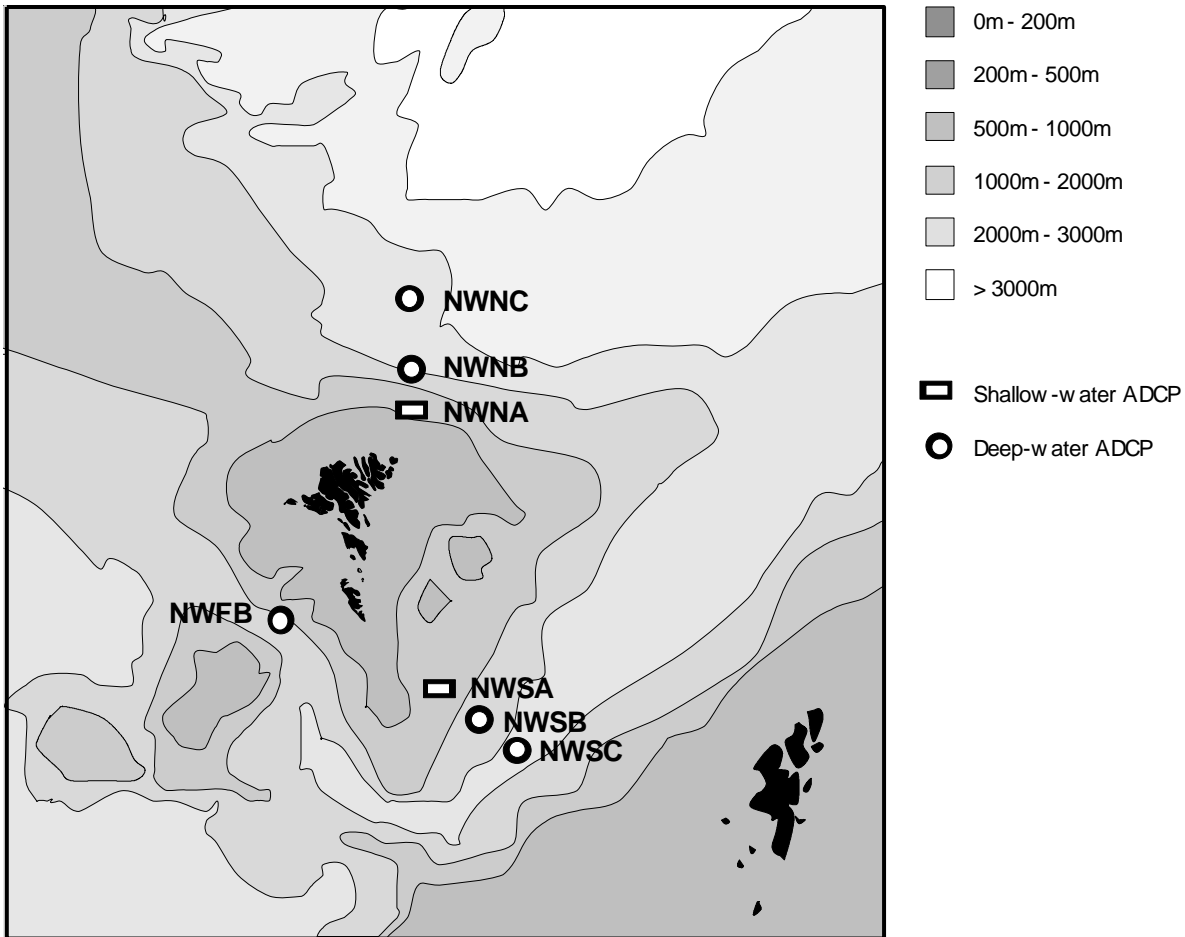


Figure 1. Standard ADCP mooring sites in Faroese waters superposed on a map with the bottom topography. Each site is indicated by a four-letter label.

As indicated in Figure 1, two types of moorings have been used. At site NUNA and NWSA, “shallow-water” rigs were used where 150 kHz RDI Broadband ADCP’s were placed on the bottom inside protective steel frames. At the other sites, 75 kHz RDI Broadband ADCP’s were placed in the top of single-point moorings (“deep-water” rigs). For each deployment the ADCP measures the velocity averaged over a number (21 - 26) of depth layers (“bins”) which were 25m for the deep-water rigs and 10m for the shallow-water rigs. At regular intervals (5 - 20 minutes) the ADCP records the data from all bins into “ensembles”. In these deployments, each ensemble is based only upon one ping.

Quality control and calibration

The data have been quality controlled by a standard procedure based upon consideration of ADCP performance (error velocity etc.) and data variation with time in relation to neighbouring bins (spikes). The editing has been done manually using an interactive graphical software package developed by the Faroese Fisheries Laboratory (FFL), based upon MATLAB. Generally, the series have been edited up to the level where about 50% of the observations

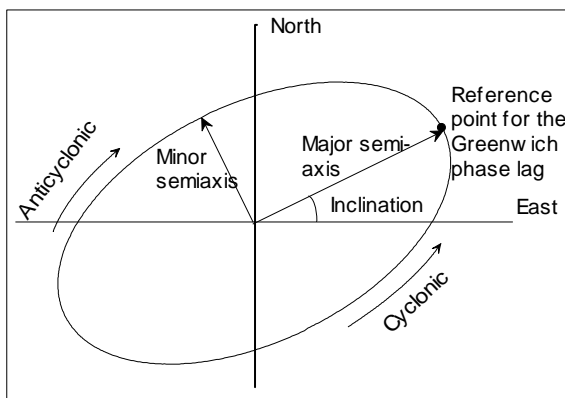
were found to be valid. Bins above this level have not been included. The steel frames protecting the shallow-water rigs influence the compass directions considerably. In these deployments, the compass has therefore been calibrated by parallel Aanderaa moorings deployed for short periods (hours) close to the ADCP sites. The details of these calibrations are documented in separate FFL Technical Reports No.: 97-01 and 98-01.

Table 1. List of Nordic WOCE ADCP deployments in the period 1994-1997 with information on duration and range of valid data. The last column indicates for two deployments that one of the ADCP beams has been faulty and 3-beam computations have been used. The comment "Aanderaa" means that there was an Aanderaa current meter on the mooring.

Deployment	Bottom depth	Int. min.	Valid data period	Dur. days	No bins	Depthrange	Comments
NWFB9410	689	5	1994 10 24-1994 10 27	2	24	71- 646	
NWFB9511	813	15	1995 11 12-1996 05 25	195	26	150- 775	
NWFB9606	817	20	1996 06 15-1997 05 25	343	26	148- 773	
NWNA9601	302	15	1996 01 24-1996 05 26	123	21	87- 287	
NWNA9606	292	20	1996 06 16-1997 05 22	340	26	25- 275	
NWNB9410	962	5	1994 10 22-1995 02 17	118	23	74- 624	
NWNC9410	1730	5	1994 10 22-1995 02 17	118	22	61- 586	Aanderaa
NWNC9606	1731	20	1996 06 16-1997 05 22	339	23	54- 604	Aanderaa
NWSA9511	298	15	1995 11 10-1996 05 27	199	23	63- 283	
NWSA9606	295	20	1996 06 14-1997 05 23	343	26	28- 278	
NWSB9410	783	5	1994 10 23-1995 02 20	119	23	100- 650	3-beam
NWSB9511	785	15	1995 11 10-1996 05 24	196	23	102- 652	3-beam
NWSC9410	1063	5	1994 10 23-1995 02 20	119	22	99- 624	Aanderaa
NWSC9511	1063	15	1995 11 10-1996 05 24	195	23	69- 619	Aanderaa
NWSC9606	1066	20	1996 06 15-1997 05 23	342	23	66- 616	Aanderaa

Report format

For each deployment the report contains several pages, beginning with a page that has a drawing of the mooring and details of the deployment. For the shallow-water rigs, details of calibration deployments are also shown on this page. After that there is a page which for each bin lists the average speed (scalar average) and velocity magnitude and direction (vectorial average) as well as the fraction of "good" ensembles (in parts per thousand). On the next page there is a more detailed error statistics for the deployment which indicates also how many "long" (i.e. several consecutive ensembles) error gaps are for each bin. This is followed by a frequency distribution of speeds for each bin which lists the frequency (in parts per thousand) of speeds (scalar) exceeding specified values. Finally, there are 2-3 pages listing tidal constituents for all deployments of sufficient duration. These pages contain 5 tables with data



for the constituents M2, S2, N2, O1, and K1. Each table lists for each bin the amplitude and Greenwich phase lag for the east and north velocity components and lists also major and minor axes of the tidal ellipse for the constituent as well as its inclination (Fig. 2) and sense of rotation (cyclonic = C, anticyclonic = A). The tidal constants were computed by an adapted version of the Foreman FORTRAN package.

Figure 2. Parameters of the tidal ellipse for a given constituent. The reference point for the Greenwich phase lag is always chosen to be above the east-west axis.

Deployment Id: NWFB9410

Project: NORDIC WOCE

Latitude: 61°22.539'N

Longitude: 007°49.079'W

Echo sounding depth: 698m

Bottom depth corr.: 689m

Time of deployment: 24/10 -1994 2045UTC

Time of recovery: 19/02 - 1995 1330UTC

ADCP:

Instrument no.: RDI ADCP 1292

Instrument frequency: 75kHz

Height above bottom: 13m (corr.)

Depth: 676m (corr.)

Time of first data: 24/10 - 1994 2100UTC

Time of last data: 27/10 - 1994 1125UTC

Sample interval: 5 min

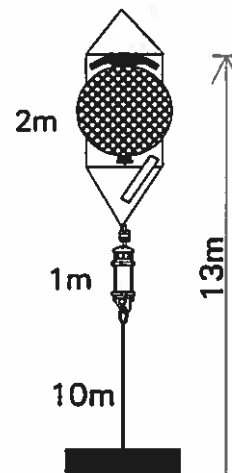
No. of ensembles: 750

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 646m (corr.)

No. of bins: 30



Deployment: NWFB9410 updated 98/04/23

Instrument no.: 1292

Instrument freq.: 75

Latitude: 61 22.539 N

Longitude: 07 49.079 W

Bottom depth: 689

Instrument depth: 676

Center depth of first bin: 646

Bin length: 25

Number of bins: 24

Number of first ensemble: 5233

Time of first ensemble: 1994 10 24 21 00

Number of last ensemble: 5982

Time of last ensemble: 1994 10 27 11 25

Time between ensembles (min.): 5

All directions have been corrected by adding: -12.0

Below is listed for each bin the average speed (scalar average) and the average velocity magnitude and direction formed as a vectorial average of non-flagged (Good) observations. The last column shows the number of good values used in parts per thousand

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	646	43	125	94	217	955
2	621	68	123	92	219	979
3	596	93	113	84	222	984
4	571	118	108	73	221	977
5	546	143	118	64	227	995
6	521	168	143	59	222	985
7	496	193	163	74	221	985
8	471	218	181	90	227	977
9	446	243	170	78	230	987
10	421	268	148	61	212	991
11	396	293	170	73	201	984
12	371	318	175	73	189	984
13	346	343	168	64	182	987
14	321	368	156	57	180	981
15	296	393	154	49	165	987
16	271	418	159	46	154	968
17	246	443	174	46	154	965
18	221	468	182	41	171	976
19	196	493	179	42	174	976
20	171	518	167	46	178	979
21	146	543	141	46	175	964
22	121	568	113	46	172	964
23	96	593	103	45	171	943
24	71	618	109	30	170	781

Error statistics for deployment: NWFB9410 updated 98/04/23

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by RK in Apr 1998
 Velocity edited up to and including bin 24 by MCP in Apr 1998
 Intensity edited up to and including bin 28 by RK in Apr 1998

Total number of ensembles: 750
 Interval between ensembles: 5 min
 Original number of bins: 30
 Number of acceptable velocity bins: 24
 Number of acceptable intensity bins: 24

Flagged values have been replaced by error codes: -999.99 for temperature, -999 for velocity and intensity. For observations where velocity is flagged, error codes have been inserted into speed, direction and vertical velocity files

Number of temperature ens. flagged: 1

Below are for each bin listed ensembles flagged for intensity in number and for velocity in number and % of total ens.number. For velocity is also shown the number of gaps of various lengths (gap length = number of consecutive flagged ens.)

Bin	Int. ens. flgd	Velocity ens. flgd	Velocity % flgd	Number of velocity gaps of length										
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50	
1	1	34	5	32	1	0	0	0	0	0	0	0	0	0
2	1	16	2	14	1	0	0	0	0	0	0	0	0	0
3	1	12	2	12	0	0	0	0	0	0	0	0	0	0
4	1	17	2	17	0	0	0	0	0	0	0	0	0	0
5	1	4	1	4	0	0	0	0	0	0	0	0	0	0
6	1	11	1	11	0	0	0	0	0	0	0	0	0	0
7	1	11	1	11	0	0	0	0	0	0	0	0	0	0
8	1	17	2	17	0	0	0	0	0	0	0	0	0	0
9	1	10	1	10	0	0	0	0	0	0	0	0	0	0
10	1	7	1	5	1	0	0	0	0	0	0	0	0	0
11	1	12	2	12	0	0	0	0	0	0	0	0	0	0
12	1	12	2	10	1	0	0	0	0	0	0	0	0	0
13	1	10	1	8	1	0	0	0	0	0	0	0	0	0
14	1	14	2	14	0	0	0	0	0	0	0	0	0	0
15	1	10	1	10	0	0	0	0	0	0	0	0	0	0
16	1	24	3	20	2	0	0	0	0	0	0	0	0	0
17	1	26	3	24	1	0	0	0	0	0	0	0	0	0
18	1	18	2	16	1	0	0	0	0	0	0	0	0	0
19	1	18	2	15	0	1	0	0	0	0	0	0	0	0
20	1	16	2	12	2	0	0	0	0	0	0	0	0	0
21	1	27	4	23	2	0	0	0	0	0	0	0	0	0
22	1	27	4	23	2	0	0	0	0	0	0	0	0	0
23	1	43	6	35	1	2	0	0	0	0	0	0	0	0
24	1	164	22	48	15	4	2	0	3	1	0	1	0	0

Deployment Id: NWFB9511

Project: NORDIC WOCE

Latitude: 61°25.051'N

Longitude: 008°17.207'W

Echo sounding depth: 822m

Bottom depth corr.: 813m

Time of deployment: 12/11 -1995 0139UTC

Time of recovery: 25/05 - 1996 0542UTC

ADCP:

Instrument no.: RDI ADCP 1292

Instrument frequency: 75kHz

Height above bottom: 8m (corr.)

Depth: 805m (corr.)

Time of first data: 12/11 - 1995 0200UTC

Time of last data: 25/05 - 1996 0530UTC

Sample interval: 15 min

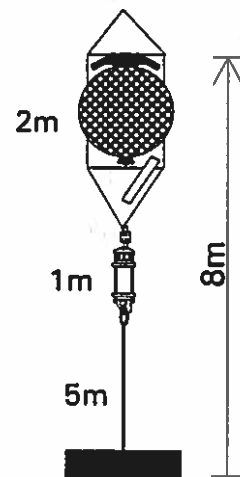
No. of ensembles: 18735

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 775m (corr.)

No. of bins: 30



Deployment: NWFB9511 updated 98/04/23
 Instrument no.: 1292
 Instrument freq.: 75
 Latitude: 61 25.051 N
 Longitude: 08 17.207 W
 Bottom depth: 813
 Instrument depth: 805
 Center depth of first bin: 775
 Bin length: 25
 Number of bins: 26
 Number of first ensemble: 8297
 Time of first ensemble: 1995 11 12 02 00
 Number of last ensemble: 27031
 Time of last ensemble: 1996 05 25 05 30
 Time between ensembles (min.): 15
 All directions have been corrected by adding: -12.0

Below is listed for each bin the average speed (scalar average) and the average velocity magnitude and direction formed as a vectorial average of non-flagged (Good) observations. The last column shows the number of good values used in parts per thousand

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	775	38	980	976	306	915
2	750	63	1056	1053	309	934
3	725	88	1087	1084	311	959
4	700	113	1092	1089	312	974
5	675	138	1085	1082	312	974
6	650	163	1062	1058	313	978
7	625	188	1004	998	314	962
8	600	213	889	876	317	954
9	575	238	721	697	319	943
10	550	263	537	497	322	943
11	525	288	395	334	325	935
12	500	313	309	230	328	944
13	475	338	260	168	330	954
14	450	363	232	132	333	950
15	425	388	216	111	334	958
16	400	413	207	97	336	953
17	375	438	202	88	337	952
18	350	463	199	83	338	936
19	325	488	199	84	338	890
20	300	513	199	84	339	789
21	275	538	197	82	340	672
22	250	563	195	79	340	612
23	225	588	192	77	339	542
24	200	613	188	73	339	431
25	175	638	189	62	339	289
26	150	663	190	42	327	127

Error statistics for deployment: NWFB9511 updated 98/04/23

Surface distance file invalid due to range limitation
 Heading, pitch and roll not edited
 Temperature edited by RK in Apr 1998
 Velocity edited up to and including bin 26 by MCP in Apr 1998
 Intensity edited up to and including bin 29 by RK in Apr 1998

Total number of ensembles: 18735
 Interval between ensembles: 15 min
 Original number of bins: 30
 Number of acceptable velocity bins: 26
 Number of acceptable intensity bins: 26

Flagged values have been replaced by error codes: -999.99 for temperature, -999 for velocity and intensity. For observations where velocity is flagged, error codes have been inserted into speed, direction and vertical velocity files

Number of temperature ens. flagged: 1

Below are for each bin listed ensembles flagged for intensity in number and for velocity in number and % of total ens.number. For velocity is also shown the number of gaps of various lengths (gap length = number of consecutive flagged ens.)

Bin	Int. ens. flgd	Velocity ens. flgd	%	Number of velocity gaps of length									
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	9	1590	8	1293	108	21	2	2	0	0	0	0	0
2	9	1233	7	1115	49	5	0	1	0	0	0	0	0
3	9	776	4	718	27	0	1	0	0	0	0	0	0
4	9	483	3	449	17	0	0	0	0	0	0	0	0
5	9	481	3	450	14	1	0	0	0	0	0	0	0
6	9	419	2	358	21	5	1	0	0	0	0	0	0
7	9	703	4	591	32	7	1	2	2	0	0	0	0
8	9	853	5	673	65	13	0	1	1	0	0	0	0
9	9	1060	6	824	85	13	4	1	1	0	0	0	0
10	9	1075	6	769	103	24	4	1	1	0	0	0	0
11	9	1212	6	900	96	17	12	3	1	0	0	0	0
12	9	1045	6	827	72	12	5	0	3	0	0	0	0
13	9	853	5	667	59	14	5	0	1	0	0	0	0
14	9	941	5	753	53	11	8	2	1	0	0	0	0
15	9	785	4	602	58	12	4	3	0	0	0	0	0
16	9	875	5	679	55	16	5	2	1	0	0	0	0
17	9	901	5	685	62	14	9	0	2	0	0	0	0
18	9	1202	6	820	81	29	8	6	6	2	0	0	0
19	9	2066	11	923	142	57	32	14	36	10	2	1	0
20	9	3951	21	1129	243	95	50	45	68	42	12	6	0
21	9	6143	33	1192	266	136	48	63	124	91	27	11	2
22	9	7270	39	1205	265	125	95	57	122	85	25	20	13
23	9	8578	46	1188	307	152	96	56	133	98	30	19	24
24	9	10658	57	1148	335	158	98	82	146	93	35	33	37
25	9	13318	71	943	366	166	121	74	154	103	37	52	50
26	9	16349	87	429	181	141	76	72	183	87	51	48	79

Harmonic constants for constituent M2 for deployment NWFB9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphi deg	R
01	775	27	72	17	353	27	16	10	66	A
02	750	30	74	17	356	30	16	9	69	A
03	725	29	78	11	352	29	11	2	78	A
04	700	26	82	7	344	26	7	177	263	A
05	675	24	88	6	300	24	3	167	270	A
06	650	19	105	10	265	22	3	152	280	C
07	625	18	146	18	250	19	15	135	288	C
08	600	19	200	24	237	29	9	52	223	C
09	575	32	240	34	212	45	11	47	225	A
10	550	51	261	53	194	61	41	49	224	A
11	525	70	270	80	184	81	69	76	196	A
12	500	79	273	98	181	98	79	95	177	A
13	475	83	274	107	180	107	82	98	173	A
14	450	79	276	110	180	111	78	98	174	A
15	425	77	277	109	181	109	76	99	175	A
16	400	76	279	107	182	108	75	100	175	A
17	375	74	281	106	184	107	73	100	177	A
18	350	75	284	106	186	107	73	101	179	A
19	325	75	287	108	187	110	73	102	178	A
20	300	77	290	111	188	112	75	104	179	A
21	275	78	292	112	192	113	76	102	184	A
22	250	71	296	106	193	108	68	105	183	A
23	225	70	300	101	194	104	66	108	183	A
24	200	70	300	103	193	107	64	109	181	A
25	175	78	301	101	199	104	74	109	185	A
26	150	85	298	132	192	135	80	105	183	A

Harmonic constants for constituent S2 for deployment NWFB9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphi deg	R
01	775	11	110	8	74	13	4	35	98	A
02	750	12	117	8	77	14	5	31	106	A
03	725	13	116	5	84	13	3	20	112	A
04	700	11	109	2	104	11	0	9	109	A
05	675	8	114	1	276	8	0	172	294	C
06	650	5	159	5	265	6	4	150	316	C
07	625	7	231	7	268	10	3	45	249	C
08	600	9	258	7	275	11	2	35	264	C
09	575	10	308	10	272	13	4	47	288	A
10	550	20	322	20	242	22	18	39	288	A
11	525	27	321	34	227	34	27	98	221	A
12	500	29	321	38	220	39	28	106	209	A
13	475	28	315	40	218	40	28	100	211	A
14	450	27	308	38	217	38	27	92	215	A
15	425	25	303	36	216	36	25	86	219	A
16	400	25	301	34	217	34	25	81	223	A
17	375	24	303	33	219	34	24	82	225	A
18	350	22	311	34	223	34	22	88	224	A
19	325	23	320	33	227	33	23	94	225	A
20	300	25	335	33	228	34	23	114	211	A
21	275	28	334	31	228	34	24	123	202	A
22	250	27	334	33	228	35	24	116	209	A
23	225	25	331	31	222	33	22	117	203	A
24	200	24	334	32	225	33	21	115	208	A
25	175	27	324	28	227	29	26	123	197	A
26	150	22	357	46	220	49	14	111	214	A

Harmonic constants for constituent N2 for deployment NWFB9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	775	5	27	4	235	6	2	140	219	A
02	750	6	29	4	243	7	2	148	219	A
03	725	7	31	2	251	7	1	165	214	A
04	700	7	30	1	239	7	1	172	211	A
05	675	4	24	2	223	4	1	150	209	A
06	650	3	87	2	214	3	2	143	247	C
07	625	5	125	2	215	5	2	0	125	C
08	600	7	157	4	179	8	1	29	162	C
09	575	10	192	13	151	16	5	56	164	A
10	550	17	209	21	139	23	15	59	161	A
11	525	19	206	23	136	25	16	59	158	A
12	500	14	203	20	136	21	12	65	151	A
13	475	13	226	20	144	20	13	81	150	A
14	450	13	250	19	156	19	13	96	152	A
15	425	13	263	20	164	20	12	99	159	A
16	400	12	267	21	174	21	12	92	173	A
17	375	13	274	24	179	24	13	93	177	A
18	350	13	277	24	179	24	13	96	175	A
19	325	15	279	23	177	23	14	102	170	A
20	300	14	277	24	174	24	14	102	167	A
21	275	14	264	23	172	23	14	92	171	A
22	250	14	277	20	177	21	13	102	169	A
23	225	18	292	22	181	24	16	121	159	A
24	200	24	296	27	181	30	19	129	154	A
25	175	28	302	27	188	33	21	137	154	A
26	150	22	290	30	192	31	22	103	182	A

Harmonic constants for constituent O1 for deployment NWFB9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	775	19	324	6	138	20	1	161	143	C
02	750	19	323	8	148	21	1	158	144	A
03	725	21	319	9	154	23	2	158	142	A
04	700	22	316	12	151	24	3	152	140	A
05	675	23	320	13	147	26	1	150	142	A
06	650	25	328	15	146	29	1	148	148	C
07	625	32	343	16	159	35	1	153	162	C
08	600	40	353	21	180	46	2	152	175	A
09	575	43	354	33	188	54	6	143	179	A
10	550	37	349	38	186	52	8	134	178	A
11	525	25	343	31	171	39	3	128	168	A
12	500	16	344	20	154	26	2	129	158	C
13	475	11	351	14	160	18	2	129	164	C
14	450	9	348	12	174	15	1	128	172	A
15	425	8	1	13	180	15	0	121	180	C
16	400	8	13	13	180	15	1	120	184	C
17	375	8	17	13	175	15	3	121	181	C
18	350	9	26	13	184	15	3	126	191	C
19	325	10	24	13	195	16	1	127	198	C
20	300	12	22	18	210	21	1	124	208	A
21	275	14	22	12	197	18	1	139	200	C
22	250	10	35	10	218	14	0	136	216	A
23	225	11	50	12	201	16	4	132	214	C
24	200	7	48	8	183	10	4	128	201	C
25	175	18	25	18	181	25	5	135	193	C
26	150	31	51	29	219	42	4	137	225	C

Harmonic constants for constituent K1 for deployment NWFB9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	775	17	233	14	49	23	1	140	51	C
02	750	19	232	15	54	24	0	142	53	A
03	725	20	234	15	49	25	1	143	52	C
04	700	20	237	16	48	26	2	142	53	C
05	675	22	243	16	44	27	4	146	57	C
06	650	27	242	16	46	31	4	149	58	C
07	625	32	246	18	58	37	2	151	64	C
08	600	40	254	25	80	47	2	148	76	A
09	575	43	257	33	87	54	5	143	80	A
10	550	37	259	37	81	52	1	134	80	A
11	525	26	265	32	83	41	1	129	84	C
12	500	19	271	26	85	32	2	126	87	C
13	475	11	276	22	91	25	1	117	92	C
14	450	8	292	20	99	22	2	110	100	C
15	425	6	312	17	97	18	3	107	100	C
16	400	4	324	16	93	17	3	100	95	C
17	375	6	339	18	91	18	5	98	94	C
18	350	9	336	18	92	18	8	105	99	C
19	325	11	328	19	98	21	8	114	107	C
20	300	13	308	21	91	23	7	120	101	C
21	275	13	303	22	94	25	5	118	100	C
22	250	14	319	27	100	29	8	114	107	C
23	225	16	321	34	93	36	12	110	99	C
24	200	19	321	39	93	41	14	111	100	C
25	175	19	321	34	95	37	13	115	105	C
26	150	30	338	61	73	61	30	94	75	C

Deployment Id: NWFB9606

Project: NORDIC WOCE

Latitude: 61°25.038'N

Longitude: 008°17.366'W

Echo sounding depth: 826m

Bottom depth corr.: 817m

Time of deployment: 15/06 -1996 2110UTC

Time of recovery: 25/05 - 1997 1205UTC

ADCP:

Instrument no.: RDI ADCP 1292

Instrument frequency: 75kHz

Height above bottom: 8m (corr.)

Depth: 809m (corr.)

Time of first data: 15/06 - 1996 2200UTC

Time of last data: 25/05 - 1997 1140UTC

Sample interval: 20 min

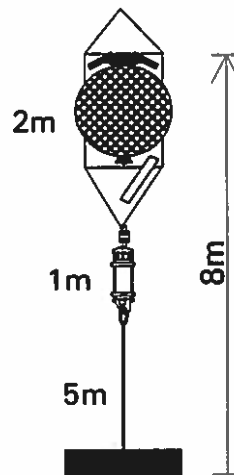
No. of ensembles: 24738

Plings per ens.: 1

Binlength: 25m

Depth of first bin: 773 (corr.)

No. of bins: 28



Deployment: NWFB9606 updated 98/04/23
 Instrument no.: 1292
 Instrument freq.: 75
 Latitude: 61 25.038 N
 Longitude: 08 17.366 W
 Bottom depth: 817
 Instrument depth: 809
 Center depth of first bin: 773
 Bin length: 25
 Number of bins: 26
 Number of first ensemble: 250
 Time of first ensemble: 1996 06 15 22 00
 Number of last ensemble: 24987
 Time of last ensemble: 1997 05 25 11 40
 Time between ensembles (min.): 20
 All directions have been corrected by adding: -12.0

Below is listed for each bin the average speed (scalar average) and the average velocity magnitude and direction formed as a vectorial average of non-flagged (Good) observations. The last column shows the number of good values used in parts per thousand

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	773	44	984	980	301	997
2	748	69	1034	1030	304	999
3	723	94	1058	1054	306	999
4	698	119	1057	1054	307	999
5	673	144	1039	1036	307	998
6	648	169	987	980	309	996
7	623	194	877	864	311	996
8	598	219	729	703	314	996
9	573	244	566	522	317	998
10	548	269	420	355	320	999
11	523	294	317	231	321	998
12	498	319	266	161	323	998
13	473	344	237	116	325	997
14	448	369	219	85	327	995
15	423	394	209	64	329	994
16	398	419	204	52	331	994
17	373	444	201	44	335	988
18	348	469	199	38	339	971
19	323	494	199	35	342	938
20	298	519	199	31	347	894
21	273	544	199	29	351	841
22	248	569	198	27	353	784
23	223	594	197	25	358	716
24	198	619	196	18	360	633
25	173	644	199	6	172	418
26	148	669	217	50	178	170

Error statistics for deployment: NWFB9606 updated 98/04/23

Surface distance invalid due to range limitation
 Heading, pitch and roll not edited
 Temperature edited by BH in Jan 1998
 Velocity edited up to and including bin 28 by KMHL in Nov 1997
 Intensity edited up to and including bin 28 by BH in Jan 1998

Total number of ensembles: 24738
 Interval between ensembles: 20 min
 Original number of bins: 28
 Number of acceptable velocity bins: 26
 Number of acceptable intensity bins: 26

Flagged values have been replaced by error codes: -999.99 for temperature, -999 for velocity and intensity. For observations where velocity is flagged, error codes have been inserted into speed, direction and vertical velocity files

Number of temperature ens. flagged: 1

Below are for each bin listed ensembles flagged for intensity in number and for velocity in number and % of total ens.number. For velocity is also shown the number of gaps of various lengths (gap length = number of consecutive flagged ens.)

Bin	Int. ens. flgd	Velocity ens. flgd	%	Number of velocity gaps of length										
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50	
1	2	78	0	76	1	0	0	0	0	0	0	0	0	0
2	2	28	0	28	0	0	0	0	0	0	0	0	0	0
3	2	22	0	22	0	0	0	0	0	0	0	0	0	0
4	2	27	0	27	0	0	0	0	0	0	0	0	0	0
5	2	55	0	40	6	1	0	0	0	0	0	0	0	0
6	2	98	0	64	9	4	1	0	0	0	0	0	0	0
7	2	95	0	68	6	5	0	0	0	0	0	0	0	0
8	2	92	0	66	10	2	0	0	0	0	0	0	0	0
9	2	57	0	57	0	0	0	0	0	0	0	0	0	0
10	2	35	0	30	1	1	0	0	0	0	0	0	0	0
11	2	43	0	39	2	0	0	0	0	0	0	0	0	0
12	3	53	0	45	4	0	0	0	0	0	0	0	0	0
13	2	68	0	60	1	2	0	0	0	0	0	0	0	0
14	2	118	0	84	12	2	1	0	0	0	0	0	0	0
15	2	137	1	102	13	0	1	1	0	0	0	0	0	0
16	2	143	1	107	15	2	0	0	0	0	0	0	0	0
17	5	292	1	150	19	13	4	0	4	1	0	0	0	0
18	2	725	3	167	41	19	9	6	12	10	5	0	0	0
19	2	1536	6	238	69	42	20	4	29	17	10	7	0	0
20	2	2616	11	365	101	54	31	12	55	49	13	7	0	0
21	2	3941	16	495	130	69	53	44	87	57	17	14	2	2
22	2	5332	22	531	154	94	58	47	95	81	17	26	7	7
23	3	7014	28	651	193	91	79	38	111	81	41	38	10	10
24	3	9091	37	834	268	115	77	60	145	96	45	34	28	28
25	2	14403	58	1175	470	258	148	96	212	136	55	47	42	42
26	4	20525	83	539	263	158	127	91	189	142	72	83	91	91

Harmonic constants for constituent M2 for deployment NWFB9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	773	26	57	25	330	26	24	23	35	A
02	748	29	64	24	330	29	24	169	253	A
03	723	30	71	20	330	30	19	168	259	A
04	698	27	81	15	322	29	13	161	270	A
05	673	24	99	12	297	27	3	154	283	A
06	648	23	137	14	254	24	12	159	306	C
07	623	31	174	17	233	32	14	20	183	C
08	598	35	201	20	212	40	3	30	204	C
09	573	40	227	32	194	49	14	37	215	A
10	548	52	249	53	181	62	41	47	214	A
11	523	62	260	75	177	76	61	74	190	A
12	498	65	266	87	177	87	65	90	177	A
13	473	67	272	93	178	93	67	95	174	A
14	448	68	277	96	181	97	67	99	174	A
15	423	69	283	98	184	99	67	101	176	A
16	398	70	286	99	187	101	68	103	178	A
17	373	71	290	99	189	101	69	104	179	A
18	348	71	291	98	191	100	69	105	181	A
19	323	73	293	100	193	101	71	104	183	A
20	298	74	295	101	194	103	71	106	183	A
21	273	75	298	101	195	104	71	109	182	A
22	248	76	301	99	198	102	72	110	184	A
23	223	79	304	98	200	103	73	114	182	A
24	198	81	305	101	202	105	76	114	184	A
25	173	90	308	105	205	110	83	118	183	A
26	148	99	308	107	203	116	87	127	173	A

Harmonic constants for constituent S2 for deployment NWFB9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	773	9	100	7	30	10	6	28	81	A
02	748	10	94	7	22	10	7	25	77	A
03	723	9	89	6	10	9	6	13	81	A
04	698	8	104	5	351	8	4	162	293	A
05	673	7	115	5	339	8	3	147	309	A
06	648	5	147	5	339	7	1	138	332	A
07	623	7	193	2	341	7	1	166	11	C
08	598	10	247	4	208	11	2	16	243	A
09	573	16	280	11	202	16	11	16	269	A
10	548	21	288	19	200	21	19	8	281	A
11	523	21	298	24	205	24	21	99	197	A
12	498	22	306	27	210	27	22	107	196	A
13	473	24	308	30	213	30	23	100	205	A
14	448	24	309	33	215	33	24	97	210	A
15	423	24	312	33	219	34	24	96	215	A
16	398	24	317	33	222	33	24	97	216	A
17	373	24	321	33	225	33	23	99	218	A
18	348	24	324	32	230	32	24	98	224	A
19	323	25	329	32	233	32	25	100	226	A
20	298	27	332	34	232	35	26	109	218	A
21	273	30	337	35	233	37	27	117	213	A
22	248	29	337	34	242	34	29	105	229	A
23	223	28	336	33	239	33	27	109	223	A
24	198	24	341	32	241	32	23	105	231	A
25	173	22	342	31	248	31	22	95	244	A
26	148	32	352	39	241	42	27	120	220	A

Harmonic constants for constituent N2 for deployment NWFB9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	773	6	37	6	268	8	4	133	244	A
02	748	7	43	6	269	9	4	143	240	A
03	723	9	54	6	281	10	4	149	247	A
04	698	10	49	6	291	10	5	160	239	A
05	673	9	52	5	290	10	4	160	241	A
06	648	9	76	3	279	9	1	163	259	A
07	623	9	114	2	240	9	2	172	292	C
08	598	14	134	2	241	14	2	177	313	C
09	573	12	145	3	232	12	3	1	146	C
10	548	9	186	6	178	11	1	32	184	A
11	523	14	236	14	152	15	13	50	189	A
12	498	17	250	20	150	20	16	115	130	A
13	473	17	256	22	154	22	16	111	138	A
14	448	17	260	22	159	23	17	108	146	A
15	423	17	265	22	165	22	16	107	153	A
16	398	16	271	22	171	22	15	105	160	A
17	373	16	275	22	173	22	15	106	162	A
18	348	16	275	22	173	23	15	105	163	A
19	323	15	272	22	172	22	15	102	164	A
20	298	14	274	20	179	20	14	96	175	A
21	273	15	285	18	185	19	14	112	167	A
22	248	16	293	20	187	21	15	116	168	A
23	223	15	295	19	182	20	12	120	162	A
24	198	12	290	20	184	21	11	103	177	A
25	173	18	279	24	176	24	17	108	164	A
26	148	24	310	40	191	42	20	111	181	A

Harmonic constants for constituent O1 for deployment NWFB9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	773	21	320	14	149	25	2	147	143	A
02	748	22	319	15	142	27	1	146	140	A
03	723	21	322	16	135	26	1	143	139	C
04	698	22	330	16	135	27	3	143	144	C
05	673	25	337	16	144	30	3	148	153	C
06	648	28	351	20	149	34	6	144	164	C
07	623	30	1	21	158	36	7	146	174	C
08	598	34	5	22	173	40	4	148	182	C
09	573	33	11	26	171	42	7	143	183	C
10	548	30	20	28	177	40	8	137	189	C
11	523	21	29	22	183	30	7	134	195	C
12	498	17	30	18	183	24	6	133	195	C
13	473	15	28	16	180	21	5	132	192	C
14	448	16	31	16	178	22	6	135	194	C
15	423	16	31	16	183	22	6	135	197	C
16	398	16	24	16	184	22	4	135	194	C
17	373	16	20	16	182	22	4	134	191	C
18	348	14	18	16	174	21	5	131	185	C
19	323	14	17	14	174	20	4	135	185	C
20	298	12	11	11	183	16	1	138	188	C
21	273	13	24	10	182	16	3	144	196	C
22	248	12	18	6	183	14	2	154	195	C
23	223	8	37	6	152	9	5	154	202	C
24	198	8	31	4	126	8	4	176	209	C
25	173	5	18	4	168	6	2	140	185	C
26	148	8	311	3	271	8	2	16	308	A

Harmonic constants for constituent K1 for deployment NWFB9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	773	19	229	10	57	21	1	152	51	A
02	748	20	228	11	57	23	2	151	50	A
03	723	21	224	12	51	24	1	149	46	A
04	698	21	221	13	56	24	3	150	45	A
05	673	24	221	14	52	28	2	150	44	A
06	648	28	229	18	47	33	1	147	49	C
07	623	32	236	23	49	39	2	144	53	C
08	598	38	246	26	56	46	4	146	63	C
09	573	40	248	32	69	51	1	142	68	A
10	548	33	243	33	74	47	5	134	69	A
11	523	21	244	28	80	35	5	126	74	A
12	498	14	253	24	80	28	1	120	78	A
13	473	12	261	21	86	24	1	119	84	A
14	448	12	270	19	89	23	0	122	90	C
15	423	10	262	19	89	21	1	118	88	A
16	398	9	253	19	83	21	1	114	81	A
17	373	8	252	19	80	20	1	113	79	A
18	348	7	256	17	83	18	1	114	82	A
19	323	8	244	14	85	16	3	119	80	A
20	298	9	254	16	89	18	2	121	85	A
21	273	12	266	20	90	24	1	121	89	A
22	248	15	268	21	90	26	0	125	89	A
23	223	19	271	19	88	27	1	135	90	C
24	198	23	280	18	88	30	3	142	95	C
25	173	23	288	19	108	30	0	142	108	A
26	148	29	272	23	115	36	7	143	101	A

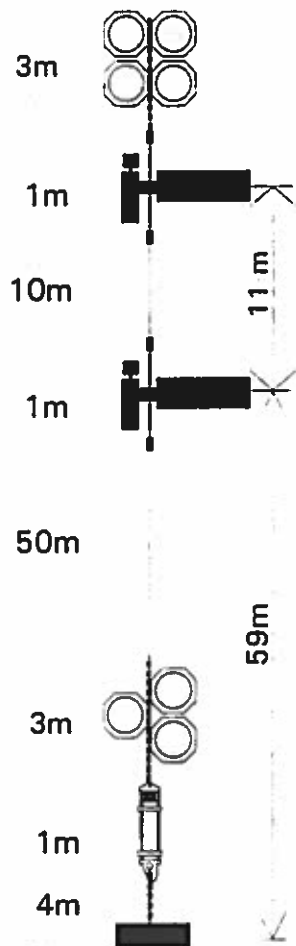
Deployment Id: Nwana9601

Project: NORDIC WOCE

Latitude: 62°42.370'N
Longitude: 006°05.310'W
Echo sounding depth: 303m
Bottom depth corr.: 302m
Time of deployment: 24/01 -1996 1030UTC
Time of recovery: 23/05 - 1996 1500UTC

ADCP:

Instrument no.: RDI ADCP 1244
Instrument frequency: 150kHz
Height above bottom: 1m (corr.)
Depth: 301m (corr.)
Time of first data: 24/01 - 1996 1031UTC
Time of last data: 26/05 - 1996 1016UTC
Sample interval: 15 min
No. of ensembles: 11808
Pings per ens.: 1
Binlength: 10m
Depth of first bin: 287m (corr.)
No. of bins: 33



Calibration rig: Nwana96S-cal

Instrument no.: RCM7 10309 RCM7 9494
Height above bottom: 70m 59m
Depth: 233 244m
Time of first data: 24/01-1996 UTC1054
Time of last data: 24/01-1996 UTC1240
Interval: 1 min 1 min

Calibration-rig: Nwana96R-cal

Instrument no.:RCM7 10309 RCM7 9494
Height above bottom: 70m 59m
Depth: 234m 245m
Time of first data:23/05-1996 0557UTC
Time of last data: 23/05-1996 1526UTC
Interval: 5 min 5min

Deployment: NWNA9601 updated 98/04/23
 Instrument no.: 1244
 Instrument freq.: 150
 Latitude: 62 42.370 N
 Longitude: 06 05.310 W
 Bottom depth: 302
 Instrument depth: 301
 Center depth of first bin: 287
 Bin length: 10
 Number of bins: 21
 Number of first ensemble: 854
 Time of first ensemble: 1996 01 24 10 31
 Number of last ensemble: 12661
 Time of last ensemble: 1996 05 26 10 16
 Time between ensembles (min.): 15
 Current directions corrected, not headings by +8.0

Below is listed for each bin the average speed (scalar average) and the average velocity magnitude and direction formed as a vectorial average of non-flagged (Good) observations. The last column shows the number of good values used in parts per thousand

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	287	15	180	116	94	829
2	277	25	193	121	98	860
3	267	35	201	121	100	875
4	257	45	205	118	102	888
5	247	55	207	115	104	898
6	237	65	208	112	105	913
7	227	75	209	111	107	921
8	217	85	209	109	108	923
9	207	95	210	107	108	920
10	197	105	210	106	108	926
11	187	115	210	104	108	931
12	177	125	210	104	109	932
13	167	135	209	103	108	918
14	157	145	210	100	108	913
15	147	155	211	99	108	902
16	137	165	211	97	107	881
17	127	175	212	95	107	837
18	117	185	214	93	107	794
19	107	195	217	90	107	740
20	97	205	219	87	107	682
21	87	215	222	87	107	615

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by RK in Apr 1998
 Velocity edited up to and including bin 21 by MCP in March 1998
 Intensity edited up to and including bin 32 by RK in Apr 1998

Total number of ensembles: 11808
 Interval between ensembles: 15 min
 Original number of bins: 33
 Number of acceptable velocity bins: 21
 Number of acceptable intensity bins: 21

Flagged values have been replaced by error codes: -999.99 for temperature, -999 for velocity and intensity. For observations where velocity is flagged, error codes have been inserted into speed, direction and vertical velocity files

Number of temperature ens. flagged: 0

Below are for each bin listed ensembles flagged for intensity in number and for velocity in number and % of total ens.number. For velocity is also shown the number of gaps of various lengths (gap length = number of consecutive flagged ens.)

Bin	Int. ens. flgd	Velocity ens. % flgd	Number of velocity gaps of length										
			1	2	3	4	5	6-10	11-20	21-30	31-50	>50	
1	1	2022	17	1156	221	75	24	8	9	0	0	0	0
2	1	1648	14	944	188	67	14	10	3	0	0	0	0
3	1	1474	12	920	146	45	12	6	7	0	0	0	0
4	1	1327	11	769	154	45	14	3	7	0	0	0	0
5	1	1208	10	788	102	52	10	4	0	0	0	0	0
6	1	1025	9	689	114	26	5	2	0	0	0	0	0
7	1	928	8	637	78	30	10	1	0	0	0	0	0
8	1	908	8	614	86	22	9	1	2	0	0	0	0
9	1	950	8	678	84	24	5	1	1	0	0	0	0
10	1	868	7	663	64	15	3	4	0	0	0	0	0
11	1	813	7	608	70	11	5	0	2	0	0	0	0
12	1	808	7	584	67	14	2	2	3	1	0	0	0
13	1	970	8	658	83	22	4	4	7	0	0	0	0
14	1	1030	9	668	92	31	14	1	3	0	0	0	0
15	1	1161	10	693	95	30	14	9	11	1	0	0	0
16	1	1410	12	630	115	49	29	9	21	7	0	0	0
17	1	1930	16	674	150	69	28	23	37	11	4	0	0
18	1	2430	21	652	160	90	36	27	37	31	8	0	0
19	1	3070	26	653	147	72	45	32	70	39	7	8	0
20	1	3757	32	624	165	67	56	20	78	49	12	19	0
21	1	4547	39	591	181	69	43	37	76	45	20	24	5

Harmonic constants for constituent M2 for deployment NWNA9601.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	287	132	308	65	199	134	61	168	134	A
02	277	148	309	79	199	151	73	167	135	A
03	267	158	309	90	201	161	84	166	136	A
04	257	167	309	101	203	171	95	166	137	A
05	247	172	310	108	205	176	102	166	138	A
06	237	175	311	112	206	179	106	165	140	A
07	227	177	312	113	208	180	108	166	140	A
08	217	178	313	113	209	181	108	167	141	A
09	207	179	313	113	210	182	108	167	141	A
10	197	177	314	112	211	179	107	167	141	A
11	187	174	314	111	211	177	107	167	142	A
12	177	172	314	110	211	175	105	167	142	A
13	167	172	314	109	211	175	105	167	142	A
14	157	173	314	110	211	176	105	167	142	A
15	147	172	314	109	211	175	105	167	142	A
16	137	172	314	107	211	174	103	167	142	A
17	127	173	314	108	211	175	104	168	141	A
18	117	172	313	109	211	175	105	168	140	A
19	107	175	313	112	211	178	108	167	141	A
20	97	173	312	111	212	175	108	170	138	A
21	87	176	315	107	212	178	103	169	141	A

Harmonic constants for constituent S2 for deployment NWNA9601.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	287	41	348	23	232	43	20	163	176	A
02	277	48	348	28	240	49	26	165	176	A
03	267	54	351	33	242	56	31	164	180	A
04	257	57	350	37	244	58	34	164	179	A
05	247	58	350	39	243	60	37	162	181	A
06	237	59	350	41	245	60	38	162	182	A
07	227	60	351	40	246	61	38	164	181	A
08	217	63	354	41	246	65	38	163	184	A
09	207	65	354	40	246	66	38	164	183	A
10	197	67	354	41	248	69	38	166	182	A
11	187	69	355	40	250	71	38	168	182	A
12	177	70	355	40	251	71	38	169	181	A
13	167	71	356	40	252	72	38	169	181	A
14	157	71	357	39	252	72	38	169	183	A
15	147	70	357	40	253	71	38	169	182	A
16	137	71	357	40	255	72	39	170	182	A
17	127	67	356	40	256	68	39	171	181	A
18	117	69	357	44	255	70	42	168	184	A
19	107	66	358	43	254	68	41	166	186	A
20	97	63	358	46	255	65	44	163	189	A
21	87	65	351	46	251	66	45	167	180	A

Harmonic constants for constituent N2 for deployment NWNA9601.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	287	21	271	13	144	23	10	154	103	A
02	277	22	271	14	148	24	11	154	104	A
03	267	26	274	17	145	28	12	153	106	A
04	257	29	277	18	154	31	14	157	108	A
05	247	29	283	18	157	31	14	154	114	A
06	237	30	284	18	163	32	14	158	115	A
07	227	30	288	18	167	32	15	158	118	A
08	217	30	290	20	171	32	16	156	122	A
09	207	30	292	19	178	32	17	160	123	A
10	197	32	290	19	178	33	17	163	119	A
11	187	31	292	19	177	32	16	160	122	A
12	177	32	292	18	178	33	16	163	121	A
13	167	32	291	18	174	33	15	162	119	A
14	157	31	292	16	183	32	15	168	117	A
15	147	31	289	16	180	32	14	168	115	A
16	137	31	292	13	182	31	12	170	116	A
17	127	32	289	14	189	32	14	175	111	A
18	117	32	288	17	186	33	17	171	113	A
19	107	31	293	16	193	31	16	173	116	A
20	97	30	298	14	195	30	14	172	121	A
21	87	34	304	13	195	34	12	172	127	A

Harmonic constants for constituent O1 for deployment NWNA9601.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	287	23	44	6	336	23	6	6	43	A
02	277	23	47	6	310	23	6	178	227	A
03	267	27	43	9	305	27	8	177	224	A
04	257	25	41	9	300	25	9	175	223	A
05	247	26	41	13	299	26	13	172	225	A
06	237	25	38	13	296	25	13	171	223	A
07	227	26	36	11	291	26	11	172	219	A
08	217	26	37	13	290	26	12	170	221	A
09	207	27	34	13	289	28	13	171	218	A
10	197	28	38	14	289	28	13	168	224	A
11	187	28	39	14	288	29	13	167	224	A
12	177	29	40	15	292	30	14	168	226	A
13	167	30	43	16	295	30	15	167	230	A
14	157	30	41	16	289	31	14	165	228	A
15	147	32	43	18	282	33	15	159	232	A
16	137	30	43	18	286	31	15	160	234	A
17	127	35	41	20	285	36	17	162	230	A
18	117	35	42	25	285	37	20	153	238	A
19	107	37	48	28	292	40	23	152	245	A
20	97	31	40	25	297	33	24	158	237	A
21	87	26	66	23	302	30	16	140	269	A

Harmonic constants for constituent K1 for deployment NWNA9601.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	287	42	278	20	207	43	19	11	273	A
02	277	52	275	21	202	52	20	8	272	A
03	267	54	274	23	197	54	22	7	271	A
04	257	47	273	24	195	47	24	8	270	A
05	247	40	277	24	195	41	24	7	273	A
06	237	35	278	23	195	35	23	7	274	A
07	227	30	277	22	195	30	22	12	268	A
08	217	31	281	20	191	31	20	179	101	A
09	207	29	281	20	189	29	20	177	103	A
10	197	31	282	20	183	32	19	170	108	A
11	187	33	282	19	183	34	18	173	106	A
12	177	37	278	18	182	37	18	176	99	A
13	167	37	278	18	180	38	18	175	101	A
14	157	40	278	18	183	40	18	177	99	A
15	147	41	276	18	184	41	18	179	96	A
16	137	44	275	20	184	44	20	179	95	A
17	127	39	274	21	190	39	21	5	271	A
18	117	41	276	29	194	41	29	11	268	A
19	107	35	279	29	203	36	27	27	259	A
20	97	33	282	37	205	39	30	57	232	A
21	87	19	264	37	204	38	16	73	211	A

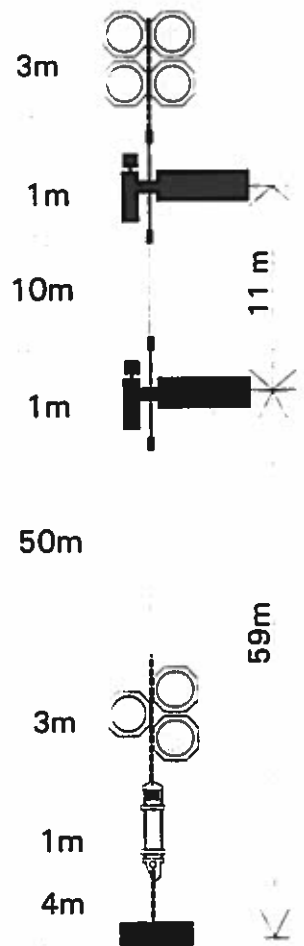
Deployment Id: Nwana9606

Project: NORDIC WOCE

Latitude: 62°41.928'N
Longitude: 006°04.665'W
Echo sounding depth: 293m
Bottom depth corr.: 292m
Time of deployment: 16/06 -1996 1204UTC
Time of recovery: 22/05 - 1997 1400UTC

ADCP:

Instrument no.: RDI ADCP 1244
Instrument frequency: 150kHz
Height above bottom: 1m (corr.)
Depth: 291m (corr.)
Time of first data: 16/06 - 1996 1240UTC
Time of last data: 22/05 - 1997 1300UTC
Sample interval: 20min
No. of ensembles: 24482
Pings per ens.: 1
Binlength: 10m
Depth of first bin: 275m (corr.)
No. of bins: 28



Calibration rig: Nwana96S-cal

Instrument no.: RCM7 10309 RCM7 9494
Height above bottom: 70m 59m
Depth: 223 234m
Time of first data: 16/06-1996 UTC1245
Time of last data: 16/06-1996 UTC1610
Interval: 5 min 5 min

Calibration rig: Nwana97R-cal

Instrument no.: RCM7 10309 RCM7 9494
Height above bottom: 70m 59m
Depth: 211m 222m
Time of first data: 22/05-1997 0332UTC
Time of last data: 22/05-1997 0643UTC
Interval: 5 min 5 min

Deployment: NWNA9606 updated 98/04/23
 Instrument no.: 1244
 Instrument freq.: 150
 Latitude: 62 41.928 N
 Longitude: 06 04.665 W
 Bottom depth: 292
 Instrument depth: 291
 Center depth of first bin: 275
 Bin length: 10
 Number of bins: 26
 Number of first ensemble: 297
 Time of first ensemble: 1996 06 16 12 40
 Number of last ensemble: 24778
 Time of last ensemble: 1997 05 22 13 00
 Time between ensembles (min.): 20
 Current directions corrected, not headings by +3.0

Below is listed for each bin the average speed (scalar average) and the average velocity magnitude and direction formed as a vectorial average of non-flagged (Good) observations. The last column shows the number of good values used in parts per thousand

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	275	17	190	111	101	873
2	265	27	205	118	104	903
3	255	37	215	117	106	920
4	245	47	224	121	108	924
5	235	57	231	129	109	937
6	225	67	236	137	109	934
7	215	77	237	142	109	948
8	205	87	239	148	109	951
9	195	97	239	153	109	956
10	185	107	239	157	109	952
11	175	117	239	160	109	954
12	165	127	240	163	109	950
13	155	137	241	166	109	945
14	145	147	241	168	109	931
15	135	157	243	171	109	926
16	125	167	246	174	108	913
17	115	177	249	179	108	888
18	105	187	252	181	109	857
19	95	197	257	185	109	816
20	85	207	262	187	109	766
21	75	217	267	188	109	706
22	65	227	275	192	109	639
23	55	237	286	195	109	569
24	45	247	303	197	109	496
25	35	257	328	199	110	422
26	25	267	358	201	108	331

Error statistics for deployment: NWNA9606 updated 98/04/23

Surface distance file invalid due to range limitation
 Heading, pitch and roll not edited
 Temperature edited by RK in Apr 1998
 Velocity edited up to and including bin 28 by KMHL in Dec 1997
 Intensity edited up to and including bin 27 by RK in Apr 1998

Total number of ensembles: 24482
 Interval between ensembles: 20 min
 Original number of bins: 28
 Number of acceptable velocity bins: 26
 Number of acceptable intensity bins: 26

Flagged values have been replaced by error codes: -999.99 for temperature, -999 for velocity and intensity. For observations where velocity is flagged, error codes have been inserted into speed, direction and vertical velocity files

Number of temperature ens. flagged: 0

Below are for each bin listed ensembles flagged for intensity in number and for velocity in number and % of total ens.number. For velocity is also shown the number of gaps of various lengths (gap length = number of consecutive flagged ens.)

Bin	Int. ens. flgd	Velocity ens. flgd	Velocity % flgd	Number of velocity gaps of length										
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50	
1	1	3113	13	1985	338	69	24	14	11	0	0	0	0	0
2	1	2373	10	1684	251	48	8	1	1	0	0	0	0	0
3	1	1968	8	1482	197	24	5	0	0	0	0	0	0	0
4	0	1860	8	1443	153	23	8	2	0	0	0	0	0	0
5	0	1544	6	1209	129	15	4	2	1	0	0	0	0	0
6	0	1604	7	1206	141	26	5	2	1	0	0	0	0	0
7	0	1284	5	1015	105	13	5	0	0	0	0	0	0	0
8	0	1207	5	924	108	14	5	1	0	0	0	0	0	0
9	0	1083	4	884	71	15	3	0	0	0	0	0	0	0
10	0	1177	5	873	111	21	2	1	1	0	0	0	0	0
11	0	1136	5	807	113	22	5	2	1	0	0	0	0	0
12	0	1233	5	857	102	28	7	2	6	1	0	0	0	0
13	0	1358	6	838	145	32	10	8	8	0	0	0	0	0
14	0	1681	7	877	166	50	27	11	16	3	0	0	0	0
15	0	1813	7	826	153	60	22	14	28	9	1	0	0	0
16	0	2128	9	873	155	62	31	22	34	14	4	0	0	0
17	0	2735	11	886	183	66	25	29	66	22	8	1	0	0
18	0	3503	14	1001	195	70	40	30	52	30	16	11	0	0
19	0	4515	18	1119	274	99	56	19	44	34	23	23	0	0
20	0	5739	23	1309	327	127	52	35	61	46	23	31	2	2
21	0	7193	29	1410	375	165	73	47	105	47	25	37	7	7
22	0	8831	36	1360	464	205	105	72	109	62	26	48	12	12
23	0	10547	43	1517	472	227	137	78	132	84	30	42	27	27
24	0	12351	50	1429	556	279	146	70	159	96	40	37	38	38
25	0	14162	58	1389	544	300	159	111	222	90	39	47	39	39
26	0	16389	67	1308	520	285	154	95	211	85	27	37	74	74

Deployment: NWNA9606

Frequency of high speeds.

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Frequency (in parts per thousand) of speeds equal to or exceeding specified vales.

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Bin no.	Depth m	Speed (cm/s)																	
		10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	275	668	352	147	46	11	2	0	0	0	0	0	0	0	0	0	0	0	0
2	265	722	408	182	63	18	4	1	0	0	0	0	0	0	0	0	0	0	0
3	255	758	441	207	80	25	7	1	0	0	0	0	0	0	0	0	0	0	0
4	245	776	474	230	95	30	7	1	0	0	0	0	0	0	0	0	0	0	0
5	235	799	495	251	105	35	10	2	0	0	0	0	0	0	0	0	0	0	0
6	225	804	506	262	114	40	11	2	0	0	0	0	0	0	0	0	0	0	0
7	215	814	516	273	122	42	13	2	0	0	0	0	0	0	0	0	0	0	0
8	205	816	517	279	127	46	14	2	0	0	0	0	0	0	0	0	0	0	0
9	195	818	520	282	128	47	15	3	0	0	0	0	0	0	0	0	0	0	0
10	185	809	519	282	128	47	14	3	0	0	0	0	0	0	0	0	0	0	0
11	175	814	521	283	129	49	14	3	0	0	0	0	0	0	0	0	0	0	0
12	165	808	519	281	128	50	14	3	0	0	0	0	0	0	0	0	0	0	0
13	155	804	521	286	128	49	14	4	0	0	0	0	0	0	0	0	0	0	0
14	145	791	513	285	130	51	16	4	0	0	0	0	0	0	0	0	0	0	0
15	135	788	514	285	135	52	17	4	1	0	0	0	0	0	0	0	0	0	0
16	125	781	515	283	139	53	18	4	1	0	0	0	0	0	0	0	0	0	0
17	115	764	505	283	140	57	18	6	1	0	0	0	0	0	0	0	0	0	0
18	105	740	497	281	138	56	18	5	1	0	0	0	0	0	0	0	0	0	0
19	95	708	482	277	138	55	20	7	2	1	0	0	0	0	0	0	0	0	0
20	85	670	464	271	134	56	21	8	3	1	1	0	0	0	0	0	0	0	0
21	75	620	436	257	128	55	21	8	3	2	1	0	0	0	0	0	0	0	0
22	65	566	403	245	129	55	23	10	5	2	1	1	1	0	0	0	0	0	0
23	55	507	369	231	126	59	26	11	6	3	2	2	1	1	0	0	0	0	0
24	45	446	335	217	124	63	31	16	8	5	3	2	2	1	1	1	0	0	0
25	35	388	297	198	120	69	38	21	13	8	5	4	3	2	2	1	1	1	1
26	25	306	239	167	105	64	38	25	16	12	9	7	5	4	3	3	2	2	2

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Harmonic constants for constituent M2 for deployment NWNA9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	275	130	296	89	174	141	69	153	130	A
02	265	143	295	105	175	157	83	151	132	A
03	255	154	295	117	176	169	94	150	132	A
04	245	165	294	126	177	181	102	150	132	A
05	235	171	295	131	179	187	108	150	133	A
06	225	174	296	132	181	189	111	152	133	A
07	215	175	297	132	183	189	112	153	134	A
08	205	176	298	131	185	189	112	154	135	A
09	195	175	300	128	187	187	111	154	136	A
10	185	175	301	125	189	186	109	156	136	A
11	175	174	303	123	191	184	107	157	137	A
12	165	173	305	120	193	182	105	157	139	A
13	155	172	307	117	195	181	103	158	140	A
14	145	172	309	114	197	179	102	160	140	A
15	135	170	310	112	200	177	100	160	142	A
16	125	168	312	109	202	174	99	161	143	A
17	115	167	313	106	204	173	97	163	143	A
18	105	164	316	104	207	169	95	163	146	A
19	95	163	317	101	209	167	94	164	146	A
20	85	161	320	98	213	165	92	166	148	A
21	75	159	320	95	216	161	90	168	147	A
22	65	159	320	96	219	161	93	170	146	A
23	55	157	323	96	223	159	94	171	148	A
24	45	162	324	97	226	163	96	172	149	A
25	35	166	324	97	226	167	96	174	147	A
26	25	161	325	96	227	162	95	173	149	A

Harmonic constants for constituent S2 for deployment NWNA9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	275	51	344	31	224	55	25	158	175	A
02	265	53	342	38	226	57	31	154	177	A
03	255	53	339	42	228	57	37	151	179	A
04	245	59	339	46	226	63	39	151	177	A
05	235	63	339	49	225	69	41	152	176	A
06	225	66	339	50	224	71	42	152	176	A
07	215	67	340	50	224	73	42	153	176	A
08	205	70	341	49	224	75	41	154	176	A
09	195	71	341	48	225	76	41	156	175	A
10	185	71	342	47	226	75	40	157	175	A
11	175	71	343	45	226	75	38	158	174	A
12	165	70	344	43	227	73	37	159	175	A
13	155	68	345	44	229	72	37	159	176	A
14	145	67	346	42	232	70	36	160	177	A
15	135	67	347	40	233	69	35	161	176	A
16	125	65	347	40	234	68	36	161	177	A
17	115	64	348	38	237	65	34	164	176	A
18	105	61	349	36	237	63	33	163	178	A
19	95	60	352	34	238	62	30	163	181	A
20	85	59	352	35	239	62	31	162	181	A
21	75	57	357	31	243	59	28	164	185	A
22	65	54	356	30	253	54	29	170	181	A
23	55	51	3	27	252	52	25	166	190	A
24	45	55	4	27	272	55	27	179	184	A
25	35	59	6	18	261	59	17	175	187	A
26	25	48	1	32	269	48	32	178	182	A

Harmonic constants for constituent N2 for deployment NRNA9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	275	21	279	13	124	24	5	150	106	A
02	265	24	276	15	134	27	8	150	106	A
03	255	26	277	18	134	31	9	147	109	A
04	245	29	276	20	135	34	11	148	107	A
05	235	31	274	22	139	35	13	149	107	A
06	225	32	274	23	143	36	15	147	109	A
07	215	33	276	23	145	37	16	149	110	A
08	205	33	277	24	148	37	16	150	111	A
09	195	34	278	24	150	38	17	151	112	A
10	185	35	280	24	154	39	18	152	114	A
11	175	37	281	24	158	40	19	154	114	A
12	165	37	284	25	160	40	19	153	117	A
13	155	38	284	25	165	40	20	156	117	A
14	145	39	285	24	169	41	21	159	116	A
15	135	39	286	23	172	40	21	161	115	A
16	125	39	287	24	174	40	21	161	117	A
17	115	40	289	24	179	41	22	163	118	A
18	105	40	291	25	181	41	23	163	120	A
19	95	41	291	26	188	41	25	168	118	A
20	85	41	292	26	190	42	25	167	120	A
21	75	39	292	25	195	40	24	173	117	A
22	65	38	299	27	199	38	27	166	129	A
23	55	38	301	25	198	38	24	166	130	A
24	45	38	302	29	210	38	29	176	125	A
25	35	41	308	30	209	42	30	166	139	A
26	25	41	272	30	211	45	24	29	255	A

Harmonic constants for constituent O1 for deployment NRNA9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	275	25	44	13	300	25	13	170	229	A
02	265	24	33	14	299	24	14	177	214	A
03	255	26	28	15	289	26	14	172	213	A
04	245	26	34	16	291	27	16	168	221	A
05	235	27	34	16	290	27	15	168	220	A
06	225	27	34	16	287	28	15	167	222	A
07	215	27	33	15	286	27	14	167	220	A
08	205	27	34	16	286	28	15	164	223	A
09	195	27	33	16	283	28	15	164	221	A
10	185	27	32	17	282	28	16	161	222	A
11	175	27	32	18	278	28	15	158	224	A
12	165	27	31	18	280	28	16	160	223	A
13	155	27	32	19	280	28	16	156	227	A
14	145	28	31	19	278	30	17	159	223	A
15	135	29	31	19	278	30	17	158	223	A
16	125	29	31	20	283	30	18	160	224	A
17	115	29	32	19	281	30	17	160	224	A
18	105	26	34	20	289	27	19	158	229	A
19	95	27	30	18	291	27	17	171	216	A
20	85	29	26	20	286	29	20	167	215	A
21	75	26	29	22	297	26	22	173	215	A
22	65	24	24	24	294	25	24	57	327	A
23	55	28	33	26	297	28	25	155	236	A
24	45	25	28	27	284	29	22	123	257	A
25	35	24	24	26	291	26	24	104	278	A
26	25	29	5	33	307	38	21	53	330	A

Harmonic constants for constituent K1 for deployment Nwana9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	275	36	262	18	164	36	18	174	85	A
02	265	42	270	22	165	42	21	169	96	A
03	255	48	277	25	166	49	23	166	103	A
04	245	48	275	25	162	49	22	166	102	A
05	235	47	273	24	161	48	22	166	100	A
06	225	44	272	25	159	45	22	164	100	A
07	215	42	273	25	160	43	23	162	103	A
08	205	40	273	27	162	42	24	160	104	A
09	195	39	274	26	163	41	23	160	106	A
10	185	39	273	25	162	40	23	161	104	A
11	175	38	272	25	162	40	23	161	103	A
12	165	37	268	24	162	38	23	164	98	A
13	155	37	264	24	162	37	23	167	93	A
14	145	37	263	25	162	37	24	168	91	A
15	135	36	261	24	162	36	23	171	86	A
16	125	35	259	23	162	36	23	172	84	A
17	115	35	259	23	160	35	22	170	85	A
18	105	35	258	23	159	36	22	171	84	A
19	95	35	260	23	162	36	23	172	85	A
20	85	36	264	25	161	37	24	165	94	A
21	75	33	265	26	166	33	25	164	97	A
22	65	36	262	26	166	37	25	171	89	A
23	55	35	270	29	169	36	27	158	107	A
24	45	29	270	29	172	31	27	134	132	A
25	35	45	260	34	166	45	34	172	86	A
26	25	17	262	28	163	28	17	99	157	A

Deployment Id: NWNB9410

Project: NORDIC WOCE

Latitude: 62°55.088'N

Longitude: 006°04.630'W

Echo sounding depth: 972m

Bottom depth corr.: 962m

Time of deployment: 22/10 -1994 0615UTC

Time of recovery: 17/02 - 1995 1030UTC

ADCP:

Instrument no.: RDI ADCP 1287

Instrument frequency: 75kHz

Height above bottom: 308m (corr.)

Depth: 654m (corr.)

Time of first data: 10/22 - 1994 0625UTC

Time of last data: 17/02 - 1995 1000UTC

Sample interval: 5 min

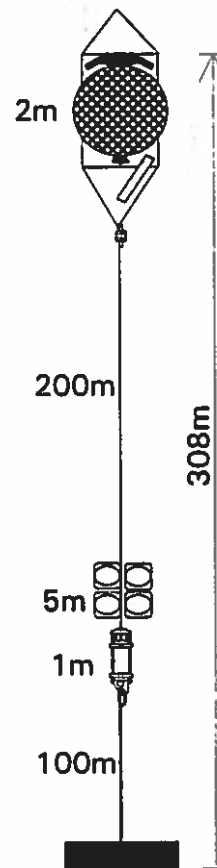
No. of ensembles: 34028

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 624m (corr.)

No. of bins: 30



Deployment: NWNB9410 updated 1999/09/03
 Instrument no.: 1287
 Instrument freq.: 75
 Latitude: 62 55.088 N
 Longitude: 06 04.630 W
 Bottom depth: 962
 Instrument depth: 654
 Center depth of first bin: 624
 Bin length: 25
 Number of bins: 23
 Number of first ensemble: 4482
 Time of first ensemble: 1994 10 22 06 25
 Number of last ensemble: 38509
 Time of last ensemble: 1995 02 17 10 00
 Time between ensembles (min.): 5
 All directions have been corrected by adding: -12.0

Below is listed for each bin the average speed (scalar average) and the average velocity magnitude and direction formed as a vectorial average of non-flagged (Good) observations. The last column shows the number of good values used in parts per thousand

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	624	338	148	101	91	999
2	599	363	148	98	91	999
3	574	388	146	95	90	999
4	549	413	144	92	90	999
5	524	438	145	91	91	999
6	499	463	149	92	92	999
7	474	488	156	96	93	998
8	449	513	165	103	94	998
9	424	538	176	113	96	996
10	399	563	189	128	98	997
11	374	588	207	151	98	996
12	349	613	226	175	99	996
13	324	638	251	207	100	995
14	299	663	275	236	101	994
15	274	688	300	262	102	994
16	249	713	323	284	103	988
17	224	738	345	306	103	987
18	199	763	362	321	102	978
19	174	788	375	332	103	966
20	149	813	386	341	103	930
21	124	838	398	350	104	851
22	99	863	412	357	104	722
23	74	888	436	365	105	516

Error statistics for deployment: NWNB9410 updated 98/04/23

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by RK in Apr 1998
 Velocity edited up to and including bin 23 by KMHL in Feb 1998
 Intensity edited up to and including bin 29 by RK in Apr 1998

Total number of ensembles: 34028
 Interval between ensembles: 5 min
 Original number of bins: 30
 Number of acceptable velocity bins: 23
 Number of acceptable intensity bins: 23

Flagged values have been replaced by error codes: -999.99 for temperature, -999 for velocity and intensity. For observations where velocity is flagged, error codes have been inserted into speed, direction and vertical velocity files

Number of temperature ens. flagged: 7

Below are for each bin listed ensembles flagged for intensity in number and for velocity in number and % of total ens.number. For velocity is also shown the number of gaps of various lengths (gap length = number of consecutive flagged ens.)

Bin	Int. ens. flgd	Velocity ens. % flgd	Number of velocity gaps of length												
			1	2	3	4	5	6-10	11-20	21-30	31-50	>50			
1	4	46	0	46	0	0	0	0	0	0	0	0	0	0	0
2	4	33	0	33	0	0	0	0	0	0	0	0	0	0	0
3	4	25	0	25	0	0	0	0	0	0	0	0	0	0	0
4	4	18	0	16	1	0	0	0	0	0	0	0	0	0	0
5	4	20	0	18	1	0	0	0	0	0	0	0	0	0	0
6	4	37	0	37	0	0	0	0	0	0	0	0	0	0	0
7	4	58	0	54	2	0	0	0	0	0	0	0	0	0	0
8	4	80	0	74	3	0	0	0	0	0	0	0	0	0	0
9	4	139	0	127	6	0	0	0	0	0	0	0	0	0	0
10	4	98	0	98	0	0	0	0	0	0	0	0	0	0	0
11	4	124	0	109	6	1	0	0	0	0	0	0	0	0	0
12	4	145	0	131	7	0	0	0	0	0	0	0	0	0	0
13	4	171	1	153	9	0	0	0	0	0	0	0	0	0	0
14	4	190	1	171	8	1	0	0	0	0	0	0	0	0	0
15	4	189	1	161	8	1	0	0	1	0	0	0	0	0	0
16	4	399	1	260	19	7	2	2	3	0	0	1	1	0	0
17	4	440	1	290	22	7	2	2	4	2	0	0	0	0	0
18	4	733	2	389	49	15	3	4	6	4	0	2	2	0	0
19	4	1155	3	534	78	24	13	6	14	6	1	1	1	1	1
20	4	2390	7	806	140	70	32	13	35	10	4	4	4	3	3
21	4	5056	15	1061	250	92	50	29	50	22	17	18	18	12	12
22	4	9443	28	1590	370	147	72	33	59	39	22	18	18	43	43
23	4	16455	48	2089	655	250	95	58	93	37	17	26	26	87	87

Deployment: NWNB9410

Frequency of high speeds.

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Frequency (in parts per thousand) of speeds equal to or exceeding specified vales.

Bin no.	Depth m	Speed (cm/s)																	
		10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	624	625	257	83	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0
2	599	632	252	81	16	2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	574	630	247	76	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0
4	549	617	244	70	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0
5	524	632	246	67	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	499	657	257	72	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	474	689	282	80	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	449	722	320	97	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	424	751	366	117	26	1	0	0	0	0	0	0	0	0	0	0	0	0	0
10	399	775	410	159	40	4	0	0	0	0	0	0	0	0	0	0	0	0	0
11	374	798	474	217	68	11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	349	830	530	264	101	25	2	0	0	0	0	0	0	0	0	0	0	0	0
13	324	875	596	337	147	46	8	1	0	0	0	0	0	0	0	0	0	0	0
14	299	903	673	397	190	66	18	4	0	0	0	0	0	0	0	0	0	0	0
15	274	929	731	472	238	90	27	8	0	0	0	0	0	0	0	0	0	0	0
16	249	937	769	531	297	120	40	11	2	0	0	0	0	0	0	0	0	0	0
17	224	945	802	585	352	155	55	19	4	0	0	0	0	0	0	0	0	0	0
18	199	940	814	615	389	188	79	29	8	1	0	0	0	0	0	0	0	0	0
19	174	932	812	626	408	216	95	40	13	3	1	0	0	0	0	0	0	0	0
20	149	896	790	617	413	235	111	47	17	5	1	1	0	0	0	0	0	0	0
21	124	823	729	575	394	236	119	57	25	9	3	1	1	0	0	0	0	0	0
22	99	698	622	498	349	219	120	61	30	12	5	2	1	0	0	0	0	0	0
23	74	502	452	366	268	181	108	58	31	15	7	3	1	1	0	0	0	0	0

Harmonic constants for constituent M2 for deployment NWNB9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	624	64	271	32	119	70	14	156	96	A
02	599	67	272	32	124	72	16	156	98	A
03	574	70	273	32	131	75	19	159	98	A
04	549	75	275	32	140	79	22	162	101	A
05	524	82	278	33	152	84	26	165	102	A
06	499	88	281	35	165	90	31	169	104	A
07	474	97	282	41	177	98	39	172	105	A
08	449	108	286	48	189	108	47	176	108	A
09	424	114	291	53	202	114	53	1	291	A
10	399	118	295	57	213	118	56	5	293	A
11	374	122	302	65	226	124	62	10	297	A
12	349	125	308	72	234	128	68	13	301	A
13	324	125	311	76	241	129	69	17	301	A
14	299	124	316	77	249	129	68	20	305	A
15	274	124	321	83	257	131	71	23	309	A
16	249	125	325	91	261	134	77	27	309	A
17	224	129	327	100	260	139	84	29	308	A
18	199	135	328	106	260	145	91	29	309	A
19	174	140	329	114	260	151	99	29	309	A
20	149	144	329	117	259	156	101	30	308	A
21	124	146	326	119	259	160	100	31	306	A
22	99	142	326	121	259	158	101	34	303	A
23	74	146	328	131	260	163	110	37	302	A

Harmonic constants for constituent S2 for deployment NWNB9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	624	41	316	25	209	42	24	165	144	A
02	599	41	317	26	215	42	25	169	144	A
03	574	41	319	24	221	41	24	172	144	A
04	549	39	325	22	230	39	22	176	147	A
05	524	37	332	18	243	37	18	1	331	A
06	499	34	334	15	255	35	14	6	332	A
07	474	33	336	12	267	33	11	8	333	A
08	449	29	339	9	287	29	7	11	337	A
09	424	25	352	13	324	28	5	25	347	A
10	399	26	1	14	334	29	6	27	356	A
11	374	27	4	12	345	30	4	24	1	A
12	349	27	359	11	343	29	3	22	357	A
13	324	29	6	16	328	32	9	26	358	A
14	299	36	3	20	304	37	16	20	354	A
15	274	38	355	23	290	40	20	18	346	A
16	249	38	353	23	293	40	19	22	342	A
17	224	36	358	23	307	40	16	26	346	A
18	199	40	5	26	313	44	18	26	353	A
19	174	43	8	30	314	48	22	28	354	A
20	149	48	10	35	313	53	27	30	354	A
21	124	55	9	37	313	60	28	27	356	A
22	99	58	6	39	314	64	28	28	353	A
23	74	67	359	43	312	75	28	28	347	A

Harmonic constants for constituent N2 for deployment NWNB9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	624	11	237	6	56	12	0	151	57	C
02	599	12	244	3	74	12	1	164	65	A
03	574	14	250	3	111	14	2	169	71	A
04	549	14	254	5	124	15	3	168	77	A
05	524	15	257	6	128	15	4	165	81	A
06	499	17	251	8	132	17	7	166	76	A
07	474	17	243	8	134	18	7	170	68	A
08	449	16	238	7	118	16	6	166	63	A
09	424	16	240	7	110	17	5	161	66	A
10	399	18	240	8	120	18	7	166	65	A
11	374	23	234	11	116	23	10	164	60	A
12	349	21	235	12	105	23	9	157	64	A
13	324	21	240	10	122	22	9	165	66	A
14	299	20	264	7	186	20	7	5	262	A
15	274	24	289	17	225	26	14	25	275	A
16	249	29	295	23	226	31	19	28	276	A
17	224	32	295	28	221	34	25	30	272	A
18	199	36	296	31	219	38	29	28	274	A
19	174	39	296	34	220	41	31	29	273	A
20	149	40	296	35	219	43	32	28	274	A
21	124	44	291	34	219	46	30	25	274	A
22	99	48	291	33	212	49	32	13	282	A
23	74	56	294	40	201	56	40	175	118	A

Harmonic constants for constituent O1 for deployment NWNB9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	624	6	62	2	274	6	1	159	247	A
02	599	5	64	3	260	5	1	151	248	A
03	574	3	48	3	266	4	2	137	246	A
04	549	4	33	4	263	5	2	136	238	A
05	524	4	35	3	274	5	3	148	234	A
06	499	6	47	4	317	6	4	0	47	A
07	474	7	53	4	320	7	4	179	233	A
08	449	8	78	2	346	8	2	179	258	A
09	424	8	64	1	203	8	1	172	243	C
10	399	10	27	5	254	11	3	162	213	A
11	374	12	35	8	271	13	6	154	228	A
12	349	14	33	9	266	15	6	153	226	A
13	324	14	41	8	277	15	6	157	231	A
14	299	14	45	9	276	15	7	151	238	A
15	274	13	49	8	274	15	5	151	240	A
16	249	10	51	8	266	12	4	142	244	A
17	224	8	36	7	257	10	4	136	236	A
18	199	10	20	7	256	11	5	149	217	A
19	174	10	7	8	248	11	6	147	208	A
20	149	13	356	10	250	14	9	160	189	A
21	124	19	4	9	255	20	8	169	189	A
22	99	23	343	9	226	23	8	168	167	A
23	74	24	335	12	198	26	8	157	162	A

Harmonic constants for constituent K1 for deployment NWNB9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	624	7	279	6	169	8	5	140	130	A
02	599	7	275	7	167	8	6	135	131	A
03	574	6	283	6	161	8	4	140	128	A
04	549	7	286	5	173	7	4	153	123	A
05	524	8	289	5	185	8	5	167	117	A
06	499	8	291	6	200	8	6	179	111	A
07	474	7	294	6	185	8	5	153	132	A
08	449	9	307	5	170	9	3	156	135	A
09	424	10	303	4	158	10	2	161	127	A
10	399	9	281	4	142	9	2	161	106	A
11	374	10	273	3	130	11	2	165	96	A
12	349	13	276	6	118	14	2	158	99	A
13	324	14	293	4	95	15	1	164	112	C
14	299	17	297	4	78	17	2	170	116	C
15	274	21	306	5	84	22	3	170	125	C
16	249	23	310	8	89	24	5	165	127	C
17	224	24	300	7	96	25	3	164	118	C
18	199	21	299	7	108	22	1	161	118	C
19	174	18	303	7	114	20	1	159	122	C
20	149	16	302	7	118	18	0	155	121	C
21	124	15	275	7	120	16	3	155	100	A
22	99	12	262	9	114	14	4	146	92	A
23	74	11	169	8	114	12	6	30	154	A

Deployment Id: NWNC9410

Project: NORDIC WOCE

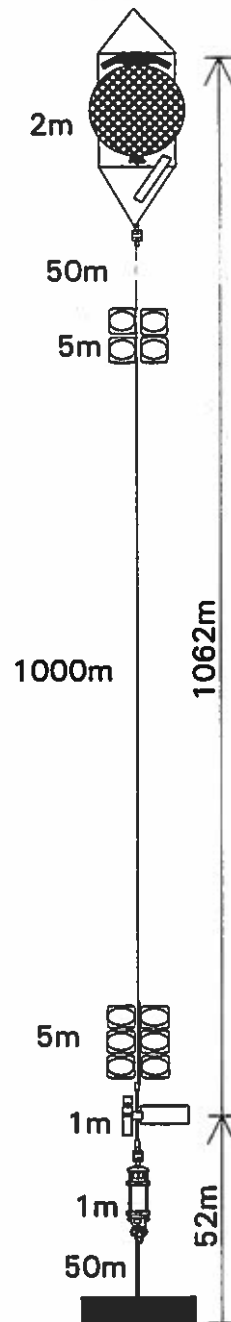
Latitude: 63°16.350'N
Longitude: 006°06.300'W
Echo sounding depth: 1775m
Bottom depth corr.: 1730m
Time of deployment: 22/10 -1994 0210UTC
Time of recovery: 17/02 - 1995 1600UTC

ADCP:

Instrument no.: RDI ADCP 1285
Instrument frequency: 75kHz
Height above bottom: 1114m (corr.)
Depth: 616m (corr.)
Time of first data: 22/10 - 1994 0235UTC
Time of last data: 17/02 - 1995 1455UTC
Sample interval: 5 min
No. of ensembles: 34133
Pings per ens.: 1
Binlength: 25m
Depth of first bin: 586m (corr.)
No. of bins: 30

Aanderaa:

Instrument no.: RCM8 10067
Height above bottom: 52m (corr.)
Depth: 1678m (corr.)
Time of first data: 22/10 - 1994 0400UTC
Time of last data: 17/02 - 1995 1400UTC
Sample interval: 60 min
No. of records: 2843



Deployment: NWNC9410 updated 1999/09/03
 Instrument no.: 1285
 Instrument freq.: 75
 Latitude: 63 16.350 N
 Longitude: 06 06.300 W
 Bottom depth: 1730
 Instrument depth: 616
 Center depth of first bin: 586
 Bin length: 25
 Number of bins: 22
 Number of first ensemble: 4436
 Time of first ensemble: 1994 10 22 02 35
 Number of last ensemble: 38568
 Time of last ensemble: 1995 02 17 14 55
 Time between ensembles (min.): 5
 All directions have been corrected by adding: -12.0

Below is listed for each bin the average speed (scalar average) and the average velocity magnitude and direction formed as a vectorial average of non-flagged (Good) observations. The last column shows the number of good values used in parts per thousand

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	586	1144	96	47	180	996
2	561	1169	96	49	179	995
3	536	1194	97	50	178	994
4	511	1219	98	51	178	996
5	486	1244	99	51	177	996
6	461	1269	100	51	175	996
7	436	1294	102	51	174	997
8	411	1319	104	52	172	998
9	386	1344	106	53	170	997
10	361	1369	108	53	168	997
11	336	1394	109	55	164	996
12	311	1419	111	57	161	995
13	286	1444	114	60	159	992
14	261	1469	118	64	158	989
15	236	1494	128	69	157	982
16	211	1519	143	77	154	975
17	186	1544	157	89	150	970
18	161	1569	180	104	147	950
19	136	1594	205	119	146	911
20	111	1619	230	131	145	834
21	86	1644	255	139	144	665
22	61	1669	289	147	145	457

Error statistics for deployment: NWNC9410 updated 98/04/23

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by Rk in Apr 1998
 Velocity edited up to and including bin 22 by KMHL in Feb 1998
 Intensity edited up to and including bin 29 by RK in Apr 1998

Total number of ensembles: 34133
 Interval between ensembles: 5 min
 Original number of bins: 30
 Number of acceptable velocity bins: 22
 Number of acceptable intensity bins: 22

Flagged values have been replaced by error codes: -999.99 for temperature, -999 for velocity and intensity. For observations where velocity is flagged, error codes have been inserted into speed, direction and vertical velocity files

Number of temperature ens. flagged: 14

Below are for each bin listed ensembles flagged for intensity in number and for velocity in number and % of total ens.number. For velocity is also shown the number of gaps of various lengths (gap length = number of consecutive flagged ens.)

Bin	Int. ens. flgd	Velocity ens. flgd	%	Number of velocity gaps of length										
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50	
1	0	152	0	148	2	0	0	0	0	0	0	0	0	0
2	0	171	1	167	2	0	0	0	0	0	0	0	0	0
3	0	191	1	187	2	0	0	0	0	0	0	0	0	0
4	0	129	0	125	2	0	0	0	0	0	0	0	0	0
5	0	148	0	142	3	0	0	0	0	0	0	0	0	0
6	0	130	0	126	2	0	0	0	0	0	0	0	0	0
7	0	113	0	111	1	0	0	0	0	0	0	0	0	0
8	0	76	0	76	0	0	0	0	0	0	0	0	0	0
9	0	92	0	90	1	0	0	0	0	0	0	0	0	0
10	0	101	0	99	1	0	0	0	0	0	0	0	0	0
11	0	138	0	134	2	0	0	0	0	0	0	0	0	0
12	0	174	1	160	7	0	0	0	0	0	0	0	0	0
13	0	272	1	255	7	1	0	0	0	0	0	0	0	0
14	0	364	1	324	18	0	1	0	0	0	0	0	0	0
15	0	601	2	523	30	6	0	0	0	0	0	0	0	0
16	0	856	3	690	65	12	0	0	0	0	0	0	0	0
17	0	1036	3	741	96	17	9	2	1	0	0	0	0	0
18	0	1691	5	905	177	50	29	3	12	0	0	0	0	1
19	0	3030	9	1209	256	101	39	26	29	4	3	1	3	3
20	0	5669	17	1782	496	170	89	35	62	17	6	3	7	7
21	0	11420	33	2282	726	286	153	76	104	28	6	8	24	24
22	0	18551	54	2326	824	402	176	120	170	51	10	17	51	51

Harmonic constants for constituent M2 for deployment NWNC9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	586	59	292	40	265	70	16	33	284	A
02	561	58	291	38	268	68	13	32	284	A
03	536	56	290	36	270	66	10	32	284	A
04	511	54	287	33	273	63	7	31	284	A
05	486	53	285	31	276	61	4	30	283	A
06	461	52	284	30	277	60	3	30	283	A
07	436	50	285	30	281	58	2	31	284	A
08	411	47	287	31	284	57	1	33	286	A
09	386	46	287	30	286	55	1	33	287	A
10	361	46	288	30	288	55	0	33	288	A
11	336	44	290	32	291	54	1	36	291	C
12	311	41	291	33	295	52	2	39	293	C
13	286	37	288	33	304	49	7	41	295	C
14	261	33	282	30	313	43	12	42	296	C
15	236	29	268	28	329	34	20	42	296	C
16	211	28	247	27	351	31	24	142	36	C
17	186	27	220	35	14	44	10	127	24	C
18	161	37	190	51	28	62	10	126	22	A
19	136	53	175	67	36	80	29	126	21	A
20	111	55	168	76	37	87	37	122	22	A
21	86	60	160	81	34	91	43	122	18	A
22	61	70	158	88	38	99	54	123	19	A

Harmonic constants for constituent S2 for deployment NWNC9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	586	19	332	15	315	24	4	39	325	A
02	561	20	333	15	313	24	4	37	326	A
03	536	20	332	13	304	23	5	33	323	A
04	511	20	327	12	295	23	6	30	318	A
05	486	22	324	12	287	24	7	26	316	A
06	461	24	320	12	280	26	7	24	313	A
07	436	26	316	12	271	28	8	21	309	A
08	411	27	312	12	262	28	9	18	306	A
09	386	27	310	11	255	28	9	15	305	A
10	361	26	306	8	246	26	7	9	304	A
11	336	24	306	5	239	24	5	5	305	A
12	311	24	307	4	249	24	4	6	306	A
13	286	21	308	6	286	22	2	15	306	A
14	261	18	308	7	317	19	1	20	309	C
15	236	14	294	6	1	15	5	10	297	C
16	211	14	287	7	26	14	7	173	103	C
17	186	17	292	4	19	17	4	1	292	C
18	161	22	282	3	100	23	0	172	102	C
19	136	23	262	12	94	26	2	152	85	A
20	111	22	231	23	73	31	6	134	63	A
21	86	20	227	26	59	32	3	128	54	A
22	61	28	254	3	83	28	1	173	74	A

Harmonic constants for constituent N2 for deployment NWNC9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	586	24	276	18	213	26	15	28	260	A
02	561	24	280	19	220	27	15	33	260	A
03	536	22	283	20	226	26	14	38	260	A
04	511	21	288	20	232	26	13	41	264	A
05	486	20	294	19	238	25	13	42	268	A
06	461	19	300	19	244	24	13	44	273	A
07	436	18	302	18	249	23	11	47	273	A
08	411	17	301	18	249	23	11	49	272	A
09	386	17	304	19	252	23	11	50	274	A
10	361	16	306	19	259	22	10	52	278	A
11	336	12	304	16	268	20	6	55	281	A
12	311	8	307	14	279	16	3	61	286	A
13	286	8	311	14	279	15	4	62	286	A
14	261	8	326	15	278	16	6	69	285	A
15	236	10	346	20	286	21	8	73	293	A
16	211	15	357	25	291	26	13	72	300	A
17	186	17	6	27	295	27	15	74	304	A
18	161	15	19	28	305	28	14	78	310	A
19	136	18	63	31	328	31	18	94	326	A
20	111	32	81	44	343	45	32	101	336	A
21	86	47	79	60	348	60	47	93	345	A
22	61	61	71	84	341	84	61	90	340	A

Harmonic constants for constituent O1 for deployment NWNC9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	586	6	39	2	359	6	1	15	35	A
02	561	5	35	1	33	5	0	7	35	A
03	536	5	40	0	354	5	0	1	40	A
04	511	5	45	0	332	5	0	1	45	A
05	486	7	36	1	337	7	1	6	36	A
06	461	7	34	2	346	7	2	15	30	A
07	436	6	42	3	340	7	3	17	35	A
08	411	6	49	2	339	6	2	7	47	A
09	386	6	52	2	331	6	2	4	51	A
10	361	6	51	2	325	6	2	2	50	A
11	336	6	49	2	343	6	2	11	45	A
12	311	6	45	2	355	6	1	12	42	A
13	286	6	24	2	13	6	0	15	23	A
14	261	6	32	2	338	6	1	9	30	A
15	236	6	38	1	231	6	0	170	218	A
16	211	5	43	1	119	5	1	3	43	C
17	186	5	46	1	187	5	1	171	225	C
18	161	7	29	4	174	8	2	156	202	C
19	136	6	23	1	154	6	1	170	201	C
20	111	4	32	3	38	5	0	32	34	C
21	86	5	22	6	24	8	0	50	24	C
22	61	6	69	7	347	7	6	66	7	A

Harmonic constants for constituent K1 for deployment NWNC9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	586	5	266	1	160	5	1	176	87	A
02	561	5	270	1	163	5	1	176	91	A
03	536	4	282	1	127	5	0	169	103	A
04	511	5	297	1	92	5	0	173	117	C
05	486	6	298	0	96	6	0	177	118	C
06	461	6	293	0	100	6	0	178	113	C
07	436	6	295	1	296	6	0	7	295	C
08	411	6	295	1	308	6	0	9	295	C
09	386	6	292	1	5	6	1	2	292	C
10	361	7	282	1	71	7	1	170	101	C
11	336	7	279	2	90	8	0	164	98	C
12	311	8	273	3	63	8	1	163	90	C
13	286	6	276	4	25	6	3	165	88	C
14	261	6	300	4	356	6	3	26	313	C
15	236	9	311	3	339	10	1	14	313	C
16	211	11	312	3	317	11	0	17	313	C
17	186	11	317	2	320	11	0	10	317	C
18	161	11	309	1	146	11	0	173	130	A
19	136	10	299	2	151	10	1	168	120	A
20	111	11	299	4	206	11	4	179	120	A
21	86	11	305	9	230	12	8	23	288	A
22	61	3	346	11	246	11	3	93	245	A

Deployment Id: NWNC9606

Project: NORDIC WOCE

Latitude: 63°16.082'N

Longitude: 006°06.509'W

Echo sounding depth: 1777 m

Bottom depth corr.: 1731 m

Time of deployment: 16/06 -1996 2117UTC

Time of recovery: 22/05 - 1997 1841UTC

ADCP:

Instrument no.: RDI ADCP 1285

Instrument frequency: 75kHz

Height above bottom: 1062 m (corr.)

Depth: 640 m (corr.)

Time of first data: 16/06 - 1996 2200UTC

Time of last data: 22/05 - 1997 1720UTC

Sample interval: 20 min

No. of ensembles: 24467

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 604m (corr.)

No. of bins: 28

Aanderaa:

Instrument no.: RCM8 10069

Height above bottom: 29 m

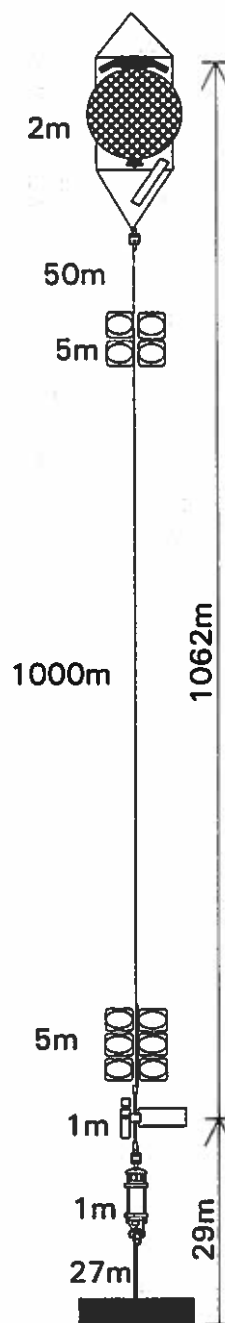
Depth: 1702 m (corr.)

Time of first data: 16/06 - 1996 2300UTC

Time of last data: 22/05 - 1997 1700UTC

Sample interval: 60 min

No. of records: 8155



Deployment: NWNC9606 updated 1999/09/03

Instrument no.: 1285

Instrument freq.: 75

Latitude: 63 16.082 N

Longitude: 06 06.509 W

Bottom depth: 1731

Instrument depth: 640

Center depth of first bin: 604

Bin length: 25

Number of bins: 23

Number of first ensemble: 176

Time of first ensemble: 1996 06 16 22 00

Number of last ensemble: 24642

Time of last ensemble: 1997 05 22 17 20

Time between ensembles (min.): 20

All directions have been corrected by adding: -12.0

Below is listed for each bin the average speed (scalar average) and the average velocity magnitude and direction formed as a vectorial average of non-flagged (Good) observations. The last column shows the number of good values used in parts per thousand

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	604	1127	85	22	169	996
2	579	1152	85	22	167	996
3	554	1177	86	22	167	997
4	529	1202	87	22	165	998
5	504	1227	89	23	163	998
6	479	1252	91	24	159	998
7	454	1277	94	26	154	999
8	429	1302	97	26	149	998
9	404	1327	100	28	145	999
10	379	1352	104	30	139	997
11	354	1377	110	34	134	997
12	329	1402	118	40	131	997
13	304	1427	127	46	128	997
14	279	1452	138	55	125	995
15	254	1477	152	64	123	992
16	229	1502	169	74	123	980
17	204	1527	189	86	122	951
18	179	1552	210	98	122	897
19	154	1577	231	109	123	847
20	129	1602	253	122	124	785
21	104	1627	278	133	124	698
22	79	1652	304	143	123	608
23	54	1677	317	131	121	417

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by RK in Apr 1998
 Velocity edited up to and including bin 24 by KMHL in Dec 1997
 Intensity edited up to and including bin 29 by RK in Apr 1998

Total number of ensembles: 24467
 Interval between ensembles: 20 min
 Original number of bins: 28
 Number of acceptable velocity bins: 23
 Number of acceptable intensity bins: 23

Flagged values have been replaced by error codes: -999.99 for temperature, -999 for velocity and intensity. For observations where velocity is flagged, error codes have been inserted into speed, direction and vertical velocity files

Number of temperature ens. flagged: 0

Below are for each bin listed ensembles flagged for intensity in number and for velocity in number and % of total ens.number. For velocity is also shown the number of gaps of various lengths (gap length = number of consecutive flagged ens.)

Bin	Int. ens. flgd	Velocity ens. flgd	%	Number of velocity gaps of length										
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50	
1	0	104	0	102	1	0	0	0	0	0	0	0	0	0
2	0	105	0	99	3	0	0	0	0	0	0	0	0	0
3	0	70	0	70	0	0	0	0	0	0	0	0	0	0
4	0	58	0	52	3	0	0	0	0	0	0	0	0	0
5	0	40	0	40	0	0	0	0	0	0	0	0	0	0
6	0	42	0	42	0	0	0	0	0	0	0	0	0	0
7	0	35	0	35	0	0	0	0	0	0	0	0	0	0
8	0	37	0	37	0	0	0	0	0	0	0	0	0	0
9	0	29	0	29	0	0	0	0	0	0	0	0	0	0
10	0	62	0	62	0	0	0	0	0	0	0	0	0	0
11	0	63	0	59	2	0	0	0	0	0	0	0	0	0
12	0	83	0	77	3	0	0	0	0	0	0	0	0	0
13	0	81	0	79	1	0	0	0	0	0	0	0	0	0
14	0	122	0	118	2	0	0	0	0	0	0	0	0	0
15	0	199	1	186	5	1	0	0	0	0	0	0	0	0
16	0	480	2	340	38	9	4	0	3	0	0	0	0	0
17	0	1204	5	443	80	35	21	16	28	7	1	0	0	0
18	0	2518	10	694	135	63	23	20	55	35	5	3	0	0
19	0	3746	15	812	176	93	45	30	86	42	18	7	0	0
20	0	5272	22	874	216	108	56	42	102	57	19	27	3	3
21	0	7381	30	913	237	116	78	53	111	91	40	35	9	9
22	0	9594	39	1086	337	142	72	57	163	116	50	44	14	14
23	0	14272	58	1290	418	198	104	59	189	123	80	83	38	38

Deployment: MWNC9606

Frequency of high speeds.

Frequency (in parts per thousand) of speeds equal to or exceeding specified vales.

Bin no.	Depth m	Speed (cm/s)																	
		10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	604	344	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	579	345	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	554	350	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	529	362	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	504	368	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	479	390	27	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	454	409	37	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	429	428	47	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	404	449	56	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	379	479	66	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	354	514	90	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	329	553	121	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	304	591	159	20	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	279	624	212	37	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	254	668	268	70	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	229	717	330	109	19	2	0	0	0	0	0	0	0	0	0	0	0	0	0
17	204	740	386	149	41	7	1	0	0	0	0	0	0	0	0	0	0	0	0
18	179	725	425	195	66	17	3	0	0	0	0	0	0	0	0	0	0	0	0
19	154	706	455	235	99	33	8	2	0	0	0	0	0	0	0	0	0	0	0
20	129	672	452	264	128	55	19	4	1	0	0	0	0	0	0	0	0	0	0
21	104	615	441	276	147	70	32	11	3	1	0	0	0	0	0	0	0	0	0
22	79	547	411	272	157	83	43	19	8	3	1	1	1	0	0	0	0	0	0
23	54	381	288	187	112	65	38	21	11	5	3	2	1	1	1	0	0	0	0

Harmonic constants for constituent M2 for deployment NWNC9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	604	61	282	35	252	69	16	28	275	A
02	579	59	283	35	255	67	14	29	277	A
03	554	58	284	35	259	66	13	30	278	A
04	529	56	284	34	262	65	11	31	278	A
05	504	54	284	33	264	62	10	31	279	A
06	479	52	286	33	268	61	8	32	281	A
07	454	50	289	34	274	60	7	34	284	A
08	429	47	290	34	280	58	5	36	287	A
09	404	44	293	34	286	56	3	38	290	A
10	379	41	293	33	292	53	1	39	293	A
11	354	38	293	32	297	50	2	41	295	C
12	329	33	298	35	304	48	3	47	301	C
13	304	29	301	38	310	48	4	53	307	C
14	279	22	307	40	319	46	4	62	317	C
15	254	13	322	46	329	47	1	75	329	C
16	229	7	350	50	338	50	1	82	338	A
17	204	3	66	55	348	55	3	89	348	A
18	179	15	99	67	353	67	14	94	352	A
19	154	29	100	79	357	80	28	95	355	A
20	129	38	98	91	358	92	37	95	356	A
21	104	45	90	100	357	100	45	92	356	A
22	79	50	86	104	352	104	50	93	350	A
23	54	44	67	95	344	96	43	86	346	A

Harmonic constants for constituent S2 for deployment NWNC9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	604	23	320	14	286	27	7	30	312	A
02	579	24	318	14	281	27	8	28	309	A
03	554	24	317	14	277	27	8	27	308	A
04	529	24	317	14	278	27	8	28	308	A
05	504	23	321	15	283	26	8	30	311	A
06	479	21	325	16	293	25	7	35	315	A
07	454	20	330	16	302	24	6	38	319	A
08	429	19	330	15	306	23	5	39	320	A
09	404	18	327	14	308	23	4	39	320	A
10	379	18	324	13	307	22	3	36	318	A
11	354	17	317	11	308	20	1	31	315	A
12	329	20	307	8	288	21	2	20	305	A
13	304	22	301	6	265	23	4	13	298	A
14	279	22	298	6	261	22	3	12	296	A
15	254	22	294	6	238	22	5	9	292	A
16	229	22	286	5	205	22	5	2	285	A
17	204	22	278	6	158	22	5	172	100	A
18	179	24	265	11	138	25	8	163	91	A
19	154	23	249	15	123	25	11	154	81	A
20	129	23	240	19	107	27	12	143	78	A
21	104	21	230	22	86	29	9	134	69	A
22	79	27	208	28	66	36	13	133	48	A
23	54	33	203	29	76	39	19	142	44	A

Harmonic constants for constituent N2 for deployment NWNC9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	604	12	249	4	226	13	1	16	248	A
02	579	11	244	3	221	12	1	15	243	A
03	554	11	241	2	235	12	0	12	241	A
04	529	12	243	2	222	12	1	11	242	A
05	504	12	248	3	229	12	1	13	247	A
06	479	12	248	3	232	12	1	14	247	A
07	454	11	249	3	247	11	0	16	249	A
08	429	10	255	4	260	11	0	21	256	C
09	404	10	260	5	249	12	1	27	258	A
10	379	11	262	5	246	12	1	25	259	A
11	354	12	266	6	243	13	2	25	262	A
12	329	12	280	8	246	14	4	33	270	A
13	304	12	298	12	254	15	6	43	277	A
14	279	12	315	14	264	17	8	51	285	A
15	254	8	326	14	292	15	4	61	300	A
16	229	5	324	13	305	14	1	71	307	A
17	204	6	342	14	301	15	4	71	306	A
18	179	8	351	15	294	16	6	71	302	A
19	154	11	349	16	291	18	9	63	305	A
20	129	13	1	18	295	19	11	65	310	A
21	104	17	355	22	302	25	12	57	319	A
22	79	21	355	29	290	31	18	63	306	A
23	54	31	341	35	300	43	16	49	318	A

Harmonic constants for constituent O1 for deployment NWNC9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	604	5	48	1	47	5	0	11	48	A
02	579	5	50	1	46	6	0	7	50	A
03	554	6	42	0	46	6	0	5	42	C
04	529	5	42	1	94	5	1	5	43	C
05	504	5	47	1	113	5	1	6	48	C
06	479	5	48	1	95	5	1	8	50	C
07	454	5	50	1	358	6	1	6	49	A
08	429	6	41	1	307	6	1	179	221	A
09	404	7	36	0	193	7	0	179	216	C
10	379	7	44	1	23	7	0	8	44	A
11	354	8	45	1	43	8	0	6	45	A
12	329	6	43	1	38	6	0	9	43	A
13	304	6	40	0	178	6	0	178	220	C
14	279	8	45	1	328	8	1	2	45	A
15	254	7	40	1	62	7	0	9	41	C
16	229	5	48	3	53	6	0	29	49	C
17	204	6	54	1	79	6	0	7	55	C
18	179	8	61	2	141	8	2	3	62	C
19	154	6	62	2	166	6	2	174	240	C
20	129	9	78	3	196	9	3	170	255	C
21	104	12	88	1	6	12	1	1	88	A
22	79	18	97	8	1	18	8	176	279	A
23	54	24	103	8	314	25	4	164	285	A

Harmonic constants for constituent K1 for deployment NWNC9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	604	5	282	2	217	6	2	10	279	A
02	579	6	277	1	239	6	1	11	275	A
03	554	5	277	1	174	5	1	177	97	A
04	529	5	281	1	123	5	0	168	102	A
05	504	5	287	2	117	5	0	159	108	A
06	479	5	293	3	110	5	0	151	112	C
07	454	5	283	3	113	6	0	148	106	A
08	429	5	280	3	127	6	1	152	106	A
09	404	5	282	2	130	6	1	165	104	A
10	379	6	289	0	87	6	0	176	109	C
11	354	6	286	1	284	6	0	7	286	A
12	329	7	284	1	297	7	0	10	284	C
13	304	7	280	1	1	7	1	1	280	C
14	279	8	272	1	284	8	0	5	272	C
15	254	8	279	3	281	8	0	17	280	C
16	229	10	284	3	265	10	1	18	282	A
17	204	10	279	3	258	10	1	19	277	A
18	179	11	275	5	242	12	2	20	271	A
19	154	11	274	5	209	11	5	14	268	A
20	129	12	272	6	209	12	5	16	265	A
21	104	15	273	7	212	16	6	15	267	A
22	79	19	301	15	266	23	7	37	288	A
23	54	16	326	16	287	22	8	45	306	A

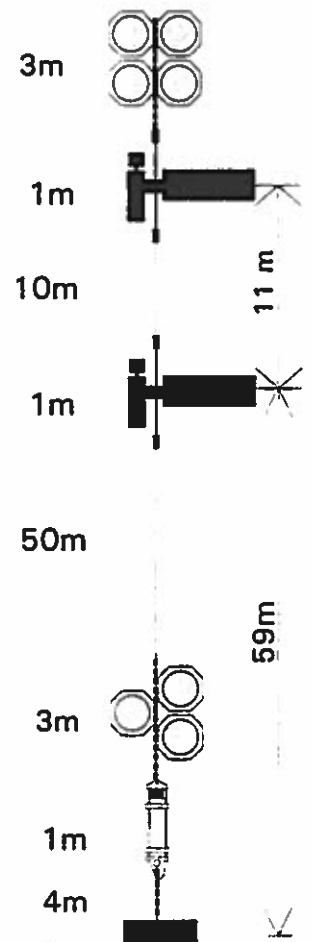
Deployment Id: NWSA9511

Project: NORDIC WOCE

Latitude: 61°00.069'N
Longitude: 005°50.027'W
Echo sounding depth: 298m
Bottom depth corr.: 298m
Time of deployment: 10/11 -1995 0851UTC
Time of recovery: 27/05 - 1996 1800UTC

ADCP:

Instrument no.: RDI ADCP 1278
Instrument frequency: 150kHz
Height above bottom: 1m (corr.)
Depth: 297m (corr.)
Time of first data: 10/11 - 1995 0900UTC
Time of last data: 27/05 - 1996 1730UTC
Sample interval: 15 min
No. of ensembles: 19139
Pings per ens.: 1
Binlength: 10m
Depth of first bin: 283m (corr.)
No. of bins: 33



Calibration rig: NWSA95S-cal

Instruments no.: RCM8 10069 RCM8 10067
Height above bottom: 70m 59m
Depth: 230 241m
Time of first data: 10/11-1995 UTC1020
Time of last data: 10/11-1995 UTC1200
Interval: 5 min 5 min

Calibration rig: NWSA96R-cal

Instruments no.: RCM7 10309 RCM7 9494
Height above bottom: 70m 59m
Depth: 228m 239m
Time of first data: 24/05-1996 0425UTC
Time of last data: 24/05-1996 0600UTC
Interval: 5 min 5min

Deployment: NWSA9511 updated 98/04/23
 Instrument no.: 1278
 Instrument freq.: 150
 Latitude: 61 00.069 N
 Longitude: 05 50.027 W
 Bottom depth: 298
 Instrument depth: 297
 Center depth of first bin: 283
 Bin length: 10
 Number of bins: 23
 Number of first ensemble: 8134
 Time of first ensemble: 1995 11 10 09 00
 Number of last ensemble: 27272
 Time of last ensemble: 1996 05 27 17 30
 Time between ensembles (min.): 15
 Current directions corrected, not headings by +4.0

Below is listed for each bin the average speed (scalar average) and the average velocity magnitude and direction formed as a vectorial average of non-flagged (Good) observations. The last column shows the number of good values used in parts per thousand

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	283	15	174	25	168	876
2	273	25	192	27	169	870
3	263	35	205	29	178	899
4	253	45	214	29	178	916
5	243	55	220	30	183	925
6	233	65	225	30	184	934
7	223	75	227	31	186	938
8	213	85	229	31	190	947
9	203	95	230	32	189	948
10	193	105	231	32	189	946
11	183	115	231	31	190	955
12	173	125	232	32	190	955
13	163	135	232	32	188	959
14	153	145	232	32	187	961
15	143	155	234	32	186	961
16	133	165	235	32	184	951
17	123	175	236	32	184	940
18	113	185	238	31	183	930
19	103	195	241	31	183	898
20	93	205	245	32	183	835
21	83	215	252	33	183	762
22	73	225	256	31	182	677
23	63	235	261	33	181	568

Error statistics for deployment: NWSA9511 updated 98/04/23

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by RK in Apr 1998
 Velocity edited up to and including bin 23 by MCP in March 1998
 Intensity edited up to and including bin 32 by RK in Apr 1998

Total number of ensembles: 19139
 Interval between ensembles: 15 min
 Original number of bins: 33
 Number of acceptable velocity bins: 23
 Number of acceptable intensity bins: 23

Flagged values have been replaced by error codes: -999.99 for temperature, -999 for velocity and intensity. For observations where velocity is flagged, error codes have been inserted into speed, direction and vertical velocity files

Number of temperature ens. flagged: 3

Below are for each bin listed ensembles flagged for intensity in number and for velocity in number and % of total ens.number. For velocity is also shown the number of gaps of various lengths (gap length = number of consecutive flagged ens.)

Bin	Int. ens. flgd	Velocity ens. flgd	%	Number of velocity gaps of length									
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	5	2366	12	1680	230	48	11	5	2	0	0	0	0
2	5	2497	13	1618	275	75	16	4	3	0	0	0	0
3	5	1942	10	1369	209	31	11	1	2	0	0	0	0
4	5	1614	8	1169	159	30	8	1	0	0	0	0	0
5	5	1432	7	1095	125	19	5	2	0	0	0	0	0
6	5	1263	7	1013	101	10	2	2	0	0	0	0	0
7	5	1183	6	930	89	21	3	0	0	0	0	0	0
8	5	1018	5	837	70	11	2	0	0	0	0	0	0
9	5	1002	5	864	57	5	1	1	0	0	0	0	0
10	5	1035	5	880	58	9	3	0	0	0	0	0	0
11	5	870	5	760	47	4	1	0	0	0	0	0	0
12	5	860	4	754	47	4	0	0	0	0	0	0	0
13	5	791	4	672	55	3	0	0	0	0	0	0	0
14	5	741	4	614	43	7	2	1	1	0	0	0	0
15	5	744	4	612	45	6	4	0	1	0	0	0	0
16	5	947	5	721	72	14	7	1	1	0	0	0	0
17	5	1155	6	821	85	21	8	6	6	0	0	0	0
18	5	1348	7	867	118	27	15	5	6	1	1	0	0
19	5	1953	10	1090	172	67	22	14	17	3	0	0	0
20	5	3160	17	1275	261	109	56	48	56	8	1	1	0
21	5	4560	24	1426	353	134	84	41	89	33	7	4	1
22	5	6180	32	1432	462	213	101	59	122	38	13	10	6
23	5	8263	43	1344	454	211	136	84	143	61	21	17	15

Harmonic constants for constituent M2 for deployment NWSA9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	283	189	240	101	219	212	31	27	236	A
02	273	211	243	113	216	235	47	26	237	A
03	263	224	246	126	214	250	61	27	239	A
04	253	232	249	138	213	260	72	28	241	A
05	243	238	251	147	214	268	79	29	242	A
06	233	241	253	155	214	274	85	30	243	A
07	223	242	254	162	216	278	88	31	243	A
08	213	243	256	166	217	280	90	32	244	A
09	203	243	257	170	218	283	91	33	245	A
10	193	243	257	173	219	284	92	33	246	A
11	183	242	258	176	220	285	92	34	246	A
12	173	242	259	178	221	286	92	34	246	A
13	163	241	259	179	222	286	92	35	247	A
14	153	239	260	181	223	286	91	35	247	A
15	143	239	260	182	223	287	91	35	247	A
16	133	240	260	182	223	287	91	35	247	A
17	123	240	260	182	224	288	90	35	248	A
18	113	240	260	182	224	287	90	35	247	A
19	103	242	260	183	224	290	89	35	247	A
20	93	245	260	185	225	294	90	35	248	A
21	83	252	260	188	225	301	89	35	248	A
22	73	252	260	190	226	304	87	36	248	A
23	63	255	260	192	225	306	92	35	248	A

Harmonic constants for constituent S2 for deployment NWSA9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	283	67	281	39	261	77	11	29	276	A
02	273	75	284	44	256	85	18	28	278	A
03	263	81	287	46	255	91	22	28	280	A
04	253	85	289	51	254	95	26	28	281	A
05	243	85	291	53	255	97	27	30	282	A
06	233	86	292	56	254	98	29	30	282	A
07	223	86	293	58	255	99	31	32	282	A
08	213	84	294	60	257	99	30	33	282	A
09	203	84	295	60	259	99	30	34	283	A
10	193	83	295	61	262	99	28	35	284	A
11	183	82	297	61	263	98	28	35	285	A
12	173	82	297	62	264	99	28	36	286	A
13	163	82	297	63	266	100	27	36	286	A
14	153	83	298	63	266	100	27	36	286	A
15	143	84	297	64	266	102	28	36	286	A
16	133	84	297	64	265	102	28	36	286	A
17	123	85	297	64	265	103	28	36	286	A
18	113	85	297	65	264	103	29	36	285	A
19	103	87	297	65	263	104	30	35	285	A
20	93	87	297	66	263	105	30	36	285	A
21	83	87	297	66	264	105	30	36	286	A
22	73	84	296	67	261	103	32	37	283	A
23	63	91	298	70	259	109	36	36	284	A

Harmonic constants for constituent N2 for deployment NWSA9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	283	37	204	14	188	39	4	20	202	A
02	273	41	207	17	182	44	7	21	204	A
03	263	44	212	19	184	48	8	22	208	A
04	253	45	216	22	184	49	11	24	210	A
05	243	47	220	25	186	52	13	25	214	A
06	233	48	223	28	187	53	15	28	215	A
07	223	48	227	30	187	54	17	29	217	A
08	213	48	230	33	189	55	19	31	219	A
09	203	50	233	35	191	57	20	32	221	A
10	193	49	235	37	193	58	21	35	221	A
11	183	49	238	39	194	58	22	36	222	A
12	173	49	239	40	197	59	22	37	223	A
13	163	49	240	41	197	60	23	38	223	A
14	153	48	241	41	198	59	23	39	224	A
15	143	48	242	41	200	59	22	39	225	A
16	133	48	242	43	200	60	23	41	224	A
17	123	47	243	43	203	60	22	41	225	A
18	113	47	243	44	202	60	22	42	224	A
19	103	48	242	43	202	61	22	41	224	A
20	93	49	242	44	202	62	22	40	225	A
21	83	52	244	47	202	65	25	41	226	A
22	73	51	242	48	200	66	25	42	223	A
23	63	54	245	51	200	69	28	42	225	A

Harmonic constants for constituent O1 for deployment NWSA9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	283	37	304	15	236	38	14	10	301	A
02	273	40	302	17	221	40	16	4	300	A
03	263	41	300	18	215	41	18	3	299	A
04	253	40	296	19	208	40	19	1	295	A
05	243	41	296	21	210	41	21	3	295	A
06	233	41	293	21	209	41	21	4	291	A
07	223	41	294	21	206	41	21	1	294	A
08	213	41	294	22	208	41	21	3	292	A
09	203	41	294	20	206	41	20	1	293	A
10	193	40	293	21	202	40	21	179	113	A
11	183	41	293	21	200	41	20	178	114	A
12	173	40	293	20	200	40	20	178	113	A
13	163	40	293	20	200	40	20	178	114	A
14	153	41	290	20	198	41	20	179	111	A
15	143	41	290	21	199	41	21	179	111	A
16	133	41	290	21	200	41	21	180	110	A
17	123	40	292	20	204	40	20	1	292	A
18	113	39	291	20	205	39	20	3	289	A
19	103	39	292	18	202	39	18	0	292	A
20	93	42	288	19	204	42	19	3	287	A
21	83	41	292	21	204	41	21	2	291	A
22	73	38	294	17	211	38	17	3	293	A
23	63	36	286	22	214	37	21	17	276	A

Harmonic constants for constituent K1 for deployment NWSA9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	283	22	195	16	107	22	16	5	191	A
02	273	25	192	19	96	25	19	169	20	A
03	263	25	185	20	90	25	20	168	14	A
04	253	26	178	20	88	26	20	180	358	A
05	243	26	178	20	89	26	20	1	177	A
06	233	26	175	20	89	26	20	8	169	A
07	223	26	173	20	90	27	20	11	165	A
08	213	26	170	19	89	26	18	13	161	A
09	203	25	169	17	86	25	17	8	164	A
10	193	26	170	16	85	26	16	4	167	A
11	183	27	168	16	83	27	16	5	166	A
12	173	26	169	15	85	26	15	5	166	A
13	163	26	167	15	86	27	15	8	163	A
14	153	27	169	15	88	27	15	8	164	A
15	143	27	167	14	89	27	14	9	163	A
16	133	28	165	14	97	28	13	14	159	A
17	123	27	165	14	101	28	12	15	159	A
18	113	26	164	14	97	27	12	15	157	A
19	103	27	164	15	98	28	13	17	155	A
20	93	26	166	15	101	27	13	17	158	A
21	83	30	167	15	91	30	15	9	162	A
22	73	27	160	18	82	27	17	13	152	A
23	63	27	169	16	80	27	16	1	169	A

Deployment Id: NWSA9606

Project: NORDIC WOCE

Latitude: 60°59.818'N

Longitude: 005°50.459'W

Echo sounding depth: 295m

Bottom depth corr.: 295m

Time of deployment: 14/06 -1996 0710UTC

Time of recovery: 23/05 - 1997 1245UTC

ADCP:

Instrument no.: RDI ADCP 1278

Instrument frequency: 150kHz

Height above bottom: 1m (corr.)

Depth: 294m (corr.)

Time of first data: 14/06 - 1996 0720UTC

Time of last data: 23/05 - 1997 1040

Sample interval: 20 min

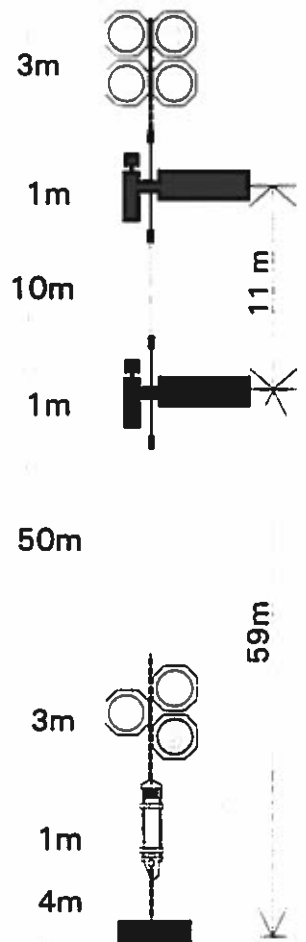
No. of ensembles: 24707

Pings per ens.: 1

Binlength: 10m

Depth of first bin: 278m (corr.)

No. of bins: 28



Calibration rig: NWSA96S-cal

Instrument no.: RCM7 10309 RCM7 9494
 Height above bottom: 70m 59m
 Depth: 226 237m
 Time of first data: 14/06-1996 UTC0820
 Time of last data: 14/06-1996 UTC1420
 Interval: 5 min 5 min

Calibration-rig: NWSA97R-cal

Instrument no.:RCM7 10309 RCM7 9494
 Height above bottom: 70m 59m
 Depth: 224m 235m
 Time of first data:23/05-1997 0720UTC
 Time of last data: 23/05-1997 1040UTC
 Interval: 5 min 5min

Deployment: NWSA9606 updated 98/04/23
 Instrument no.: 1278
 Instrument freq.: 150
 Latitude: 60 59.818 N
 Longitude: 05 50.459 W
 Bottom depth: 295
 Instrument depth: 294
 Center depth of first bin: 278
 Bin length: 10
 Number of bins: 26
 Number of first ensemble: 137
 Time of first ensemble: 1996 06 14 07 20
 Number of last ensemble: 24843
 Time of last ensemble: 1997 05 23 10 40
 Time between ensembles (min.): 20
 Current directions corrected, not headings by +4.0

Below is listed for each bin the average speed (scalar average) and the average velocity magnitude and direction formed as a vectorial average of non-flagged (Good) observations. The last column shows the number of good values used in parts per thousand

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	278	17	178	22	185	897
2	268	27	196	25	190	908
3	258	37	209	27	193	926
4	248	47	218	28	196	943
5	238	57	225	29	196	955
6	228	67	228	31	198	965
7	218	77	230	32	200	972
8	208	87	231	32	199	969
9	198	97	231	32	201	973
10	188	107	231	32	201	975
11	178	117	230	31	200	976
12	168	127	230	29	201	975
13	158	137	231	29	202	974
14	148	147	232	28	202	969
15	138	157	234	27	202	962
16	128	167	237	25	202	953
17	118	177	241	22	202	933
18	108	187	245	20	202	900
19	98	197	249	19	204	853
20	88	207	254	16	204	818
21	78	217	259	14	201	761
22	68	227	268	8	199	706
23	58	237	279	6	208	628
24	48	247	294	6	253	558
25	38	257	326	7	270	481
26	28	267	423	15	236	431

Surface distance file invalid due to limited range
 Heading, pitch and roll not edited
 Temperature edited by RK in Apr 1998
 Velocity edited up to and including bin 26 by KMHL in Jan 1998
 Intensity edited up to and including bin 27 by RK in Apr 1998

Total number of ensembles: 24707
 Interval between ensembles: 20 min
 Original number of bins: 28
 Number of acceptable velocity bins: 26
 Number of acceptable intensity bins: 26

Flagged values have been replaced by error codes: -999.99 for temperature, -999 for velocity and intensity. For observations where velocity is flagged, error codes have been inserted into speed, direction and vertical velocity files

Number of temperature ens. flagged: 0

Below are for each bin listed ensembles flagged for intensity in number and for velocity in number and % of total ens.number. For velocity is also shown the number of gaps of various lengths (gap length = number of consecutive flagged ens.)

Bin	Int. ens. flgd	Velocity ens. flgd	%	Number of velocity gaps of length									
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	2	2549	10	1761	278	54	10	6	0	0	0	0	0
2	2	2276	9	1621	242	36	12	3	0	0	0	0	0
3	2	1831	7	1323	200	23	6	3	0	0	0	0	0
4	2	1403	6	1067	121	24	3	2	0	0	0	0	0
5	2	1101	4	895	78	11	3	1	0	0	0	0	0
6	2	871	4	727	61	6	1	0	0	0	0	0	0
7	2	704	3	603	43	3	0	0	1	0	0	0	0
8	2	778	3	665	46	7	0	0	0	0	0	0	0
9	2	672	3	597	34	1	1	0	0	0	0	0	0
10	2	611	2	538	29	5	0	0	0	0	0	0	0
11	2	589	2	525	29	2	0	0	0	0	0	0	0
12	2	616	2	557	25	3	0	0	0	0	0	0	0
13	2	646	3	558	35	2	3	0	0	0	0	0	0
14	2	760	3	618	48	8	3	2	0	0	0	0	0
15	2	930	4	657	66	17	6	4	6	0	0	0	0
16	2	1170	5	743	92	23	15	6	6	1	1	0	0
17	2	1658	7	862	145	44	21	9	14	10	1	0	0
18	2	2473	10	1106	196	58	26	16	43	14	3	1	0
19	2	3622	15	1433	268	95	57	18	37	20	7	9	0
20	2	4485	18	1517	333	114	61	33	43	25	10	17	0
21	2	5902	24	1791	443	157	80	43	69	31	14	24	0
22	2	7254	29	1866	488	181	118	67	89	37	10	34	5
23	2	9200	37	2025	597	244	130	88	128	49	15	43	7
24	2	10916	44	2068	726	298	164	87	151	47	17	50	12
25	2	12815	52	2017	812	375	223	117	192	74	9	43	28
26	2	14067	57	2116	829	367	166	98	179	69	24	35	37

Deployment: NWSA9606

Frequency of high speeds.

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Frequency (in parts per thousand) of speeds equal to or exceeding specified vales.

Bin no.	Depth m	Speed (cm/s)																	
		10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	278	685	344	106	18	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	268	733	406	155	34	4	0	0	0	0	0	0	0	0	0	0	0	0	0
3	258	777	458	192	48	6	0	0	0	0	0	0	0	0	0	0	0	0	0
4	248	810	494	216	59	9	0	0	0	0	0	0	0	0	0	0	0	0	0
5	238	834	523	235	71	11	1	0	0	0	0	0	0	0	0	0	0	0	0
6	228	849	541	247	76	12	1	0	0	0	0	0	0	0	0	0	0	0	0
7	218	858	547	254	79	14	1	0	0	0	0	0	0	0	0	0	0	0	0
8	208	857	552	256	81	14	1	0	0	0	0	0	0	0	0	0	0	0	0
9	198	859	554	256	82	15	1	0	0	0	0	0	0	0	0	0	0	0	0
10	188	863	553	257	80	16	1	0	0	0	0	0	0	0	0	0	0	0	0
11	178	860	553	254	80	15	1	0	0	0	0	0	0	0	0	0	0	0	0
12	168	860	550	258	79	16	2	0	0	0	0	0	0	0	0	0	0	0	0
13	158	859	552	257	81	16	2	0	0	0	0	0	0	0	0	0	0	0	0
14	148	856	550	258	82	15	2	0	0	0	0	0	0	0	0	0	0	0	0
15	138	851	554	262	85	19	4	1	0	0	0	0	0	0	0	0	0	0	0
16	128	846	557	267	91	21	5	1	0	0	0	0	0	0	0	0	0	0	0
17	118	831	556	272	98	25	7	2	1	0	0	0	0	0	0	0	0	0	0
18	108	803	539	271	104	29	9	3	1	0	0	0	0	0	0	0	0	0	0
19	98	763	516	268	106	33	11	4	2	1	0	0	0	0	0	0	0	0	0
20	88	733	503	264	111	37	13	6	3	1	1	0	0	0	0	0	0	0	0
21	78	683	475	257	112	41	15	7	4	2	1	0	0	0	0	0	0	0	0
22	68	636	450	252	117	47	19	10	6	4	2	1	1	0	0	0	0	0	0
23	58	567	408	237	117	51	24	13	8	5	4	2	1	1	0	0	0	0	0
24	48	507	374	228	123	58	28	16	10	6	4	3	2	1	1	1	0	0	0
25	38	445	343	228	132	71	39	23	15	10	7	5	4	3	2	1	1	1	0
26	28	402	329	242	168	116	81	58	44	34	27	22	17	13	12	9	8	6	5

Harmonic constants for constituent M2 for deployment NWSA9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	278	197	241	92	217	215	34	24	237	A
02	268	217	244	106	213	236	51	24	239	A
03	258	230	247	121	211	251	65	25	241	A
04	248	238	250	132	211	262	75	26	242	A
05	238	243	252	142	212	269	82	27	243	A
06	228	245	254	149	214	274	86	28	244	A
07	218	245	255	155	215	276	89	29	245	A
08	208	245	256	159	216	277	91	30	246	A
09	198	243	257	162	217	277	91	31	246	A
10	188	241	258	164	218	277	91	31	247	A
11	178	239	259	165	220	277	90	32	247	A
12	168	239	259	166	221	277	89	32	248	A
13	158	238	260	167	221	277	89	33	248	A
14	148	237	260	169	222	277	89	33	248	A
15	138	237	261	171	223	279	89	34	249	A
16	128	239	261	172	223	280	91	34	249	A
17	118	240	261	175	223	282	92	34	249	A
18	108	241	261	177	223	284	94	34	248	A
19	98	242	261	179	221	286	97	34	248	A
20	88	244	260	180	220	287	99	34	247	A
21	78	248	260	181	220	291	100	34	247	A
22	68	250	259	181	218	291	104	33	246	A
23	58	257	258	178	216	295	105	32	246	A
24	48	260	256	172	212	293	106	30	245	A
25	38	268	254	169	209	299	106	28	243	A
26	28	248	254	153	204	272	106	26	243	A

Harmonic constants for constituent S2 for deployment NWSA9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	278	70	278	33	263	76	7	25	275	A
02	268	78	281	36	257	84	14	24	277	A
03	258	82	283	40	255	90	17	24	278	A
04	248	86	286	45	253	94	22	25	280	A
05	238	87	289	49	253	97	26	26	281	A
06	228	88	291	52	253	98	28	28	282	A
07	218	88	293	54	254	99	30	29	283	A
08	208	87	294	56	256	99	30	30	284	A
09	198	85	294	56	258	98	29	31	284	A
10	188	84	295	56	259	97	28	31	285	A
11	178	83	295	55	260	96	28	31	285	A
12	168	82	295	55	260	95	27	31	285	A
13	158	81	294	54	260	94	26	31	285	A
14	148	81	294	54	261	94	26	32	285	A
15	138	80	294	52	261	92	25	31	285	A
16	128	80	294	53	262	93	25	32	285	A
17	118	81	295	53	262	94	25	31	285	A
18	108	82	294	54	261	94	26	31	285	A
19	98	85	295	55	260	97	28	31	285	A
20	88	86	295	55	259	98	28	30	286	A
21	78	87	295	54	257	98	29	29	285	A
22	68	88	294	54	256	99	30	29	284	A
23	58	87	296	58	256	99	33	31	285	A
24	48	86	297	60	254	99	36	31	284	A
25	38	91	299	62	259	105	35	31	287	A
26	28	73	299	66	254	91	38	41	279	A

Harmonic constants for constituent N2 for deployment NWSA9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	278	43	217	20	189	47	9	24	212	A
02	268	48	219	22	188	52	10	22	214	A
03	258	51	222	24	185	54	14	22	216	A
04	248	53	225	27	185	58	16	23	218	A
05	238	55	226	31	185	61	18	25	218	A
06	228	56	228	33	184	62	21	26	219	A
07	218	57	229	36	185	63	22	28	219	A
08	208	57	232	38	188	65	23	30	220	A
09	198	58	233	39	189	66	24	31	221	A
10	188	57	235	40	192	65	24	32	222	A
11	178	56	236	40	194	65	23	33	223	A
12	168	55	238	40	197	64	23	34	224	A
13	158	54	238	39	198	63	21	34	225	A
14	148	53	238	39	200	62	20	34	225	A
15	138	51	237	37	201	61	19	34	226	A
16	128	50	237	37	202	60	18	35	225	A
17	118	50	236	37	200	60	18	35	224	A
18	108	51	237	37	198	60	20	34	224	A
19	98	50	236	36	198	59	19	34	224	A
20	88	50	237	36	200	59	18	34	225	A
21	78	49	239	39	200	60	20	37	224	A
22	68	49	238	38	196	58	21	35	224	A
23	58	50	236	37	199	59	19	35	224	A
24	48	46	234	32	198	54	16	33	223	A
25	38	49	235	24	199	52	13	23	229	A
26	28	50	225	29	194	56	13	28	218	A

Harmonic constants for constituent O1 for deployment NWSA9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	278	41	300	21	223	41	20	9	295	A
02	268	42	296	22	216	42	22	7	292	A
03	258	44	294	22	211	44	22	5	292	A
04	248	46	294	23	210	46	23	4	292	A
05	238	47	295	23	206	47	23	1	295	A
06	228	48	294	25	203	48	25	180	114	A
07	218	47	294	24	203	47	24	180	114	A
08	208	47	293	24	203	47	24	180	114	A
09	198	47	293	24	201	47	24	178	114	A
10	188	47	292	24	200	47	24	179	112	A
11	178	48	291	25	202	48	25	0	291	A
12	168	47	290	25	202	47	25	1	290	A
13	158	48	291	26	201	48	26	0	291	A
14	148	48	291	26	201	48	26	179	112	A
15	138	49	292	26	199	49	26	178	113	A
16	128	49	291	25	200	49	25	179	111	A
17	118	49	290	26	197	49	26	178	111	A
18	108	45	289	25	195	46	25	176	111	A
19	98	48	291	25	197	48	25	178	112	A
20	88	48	290	24	198	48	24	178	111	A
21	78	47	291	24	202	47	24	1	290	A
22	68	49	293	22	201	49	22	179	113	A
23	58	47	293	22	203	47	22	0	293	A
24	48	47	290	18	215	48	17	6	288	A
25	38	46	291	23	202	46	23	1	291	A
26	28	44	294	17	216	45	17	5	292	A

Harmonic constants for constituent K1 for deployment NWSA9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	278	30	165	19	101	31	16	21	154	A
02	268	32	164	18	97	33	16	17	156	A
03	258	32	167	19	94	33	18	14	160	A
04	248	32	163	20	89	33	19	13	156	A
05	238	33	161	20	89	34	18	15	152	A
06	228	33	161	20	83	34	19	11	155	A
07	218	33	160	20	85	33	19	13	152	A
08	208	33	160	21	85	34	19	14	151	A
09	198	32	159	20	86	33	19	15	151	A
10	188	32	159	21	87	33	19	17	149	A
11	178	32	159	20	86	33	19	17	149	A
12	168	31	160	21	86	32	19	17	150	A
13	158	31	160	21	84	31	20	17	148	A
14	148	31	160	21	83	31	20	16	149	A
15	138	31	158	22	81	32	21	17	147	A
16	128	30	159	23	79	31	22	16	148	A
17	118	31	158	23	79	32	22	15	148	A
18	108	29	158	21	80	30	20	15	148	A
19	98	29	154	20	80	30	19	17	143	A
20	88	29	160	18	79	30	18	9	154	A
21	78	30	161	17	80	30	17	7	157	A
22	68	32	164	16	80	32	16	4	162	A
23	58	34	166	11	91	34	10	5	164	A
24	48	34	167	16	91	34	15	8	163	A
25	38	40	166	13	80	40	13	2	165	A
26	28	39	167	16	89	40	16	6	165	A

Deployment Id: NWSB9410

Project: NORDIC WOCE

Latitude: 60°47.330'N

Longitude: 005°17.877'W

Echo sounding depth: 798m

Bottom depth corr.: 783m

Time of deployment: 23/10 -1994 0915UTC

Time of recovery: 20/02 - 1995 0805UTC

ADCP:

Instrument no.: RDI ADCP 1245

Instrument frequency: 75kHz

Height above bottom: 103m (corr.)

Depth: 680m (corr.)

Time of first data: 23/10 - 1994 0935UTC

Time of last data: 20/02 - 1995 0755UTC

Sample interval: 5 min

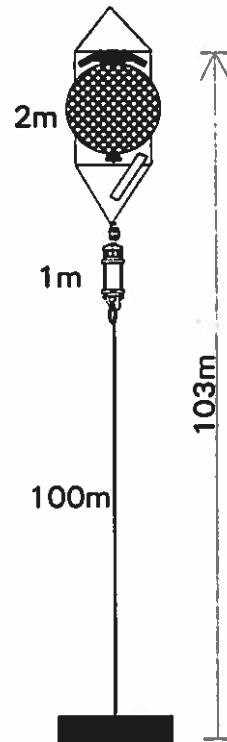
No. of ensembles: 34541

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 650m (corr.)

No. of bins: 30



Deployment: NWSB9410 updated 1999/09/03
 Instrument no.: 1245
 Instrument freq.: 75
 Latitude: 60 47.330 N
 Longitude: 05 17.877 W
 Bottom depth: 783
 Instrument depth: 680
 Center depth of first bin: 650
 Bin length: 25
 Number of bins: 23
 Number of first ensemble: 4807
 Time of first ensemble: 1994 10 23 09 35
 Number of last ensemble: 39347
 Time of last ensemble: 1995 02 20 07 55
 Time between ensembles (min.): 5
 All directions have been corrected by adding: -11.0

Below is listed for each bin the average speed (scalar average) and the average velocity magnitude and direction formed as a vectorial average of non-flagged (Good) observations. The last column shows the number of good values used in parts per thousand

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	650	133	225	56	179	997
2	625	158	218	55	179	999
3	600	183	212	55	177	999
4	575	208	205	54	173	999
5	550	233	201	54	170	999
6	525	258	197	54	167	998
7	500	283	195	57	165	998
8	475	308	195	62	166	997
9	450	333	198	64	168	997
10	425	358	200	65	166	997
11	400	383	200	70	166	994
12	375	408	200	75	167	993
13	350	433	199	80	168	993
14	325	458	200	84	171	991
15	300	483	204	89	174	991
16	275	508	208	91	174	991
17	250	533	212	95	172	991
18	225	558	217	99	170	989
19	200	583	221	102	168	978
20	175	608	223	102	167	925
21	150	633	227	102	163	818
22	125	658	233	101	163	702
23	100	683	245	100	161	602

Error statistics for deployment: NWSB9410 updated 98/04/25

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by RK in Apr 1998
 Velocity edited up to and including bin 23 by KMHL in Apr 1998
 Intensity edited up to and including bin 29 by RK in Apr 1998

Total number of ensembles: 34541
 Interval between ensembles: 5 min
 Original number of bins: 30
 Number of acceptable velocity bins: 23
 Number of acceptable intensity bins: 23

Flagged values have been replaced by error codes: -999.99 for temperature, -999 for velocity and intensity. For observations where velocity is flagged, error codes have been inserted into speed, direction and vertical velocity files

Number of temperature ens. flagged: 8

Below are for each bin listed ensembles flagged for intensity in number and for velocity in number and % of total ens.number. For velocity is also shown the number of gaps of various lengths (gap length = number of consecutive flagged ens.)

Bin	Int. ens. flgd	Velocity ens. flgd	%	Number of velocity gaps of length										
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50	
1	27	101	0	97	2	0	0	0	0	0	0	0	0	0
2	27	40	0	36	2	0	0	0	0	0	0	0	0	0
3	27	34	0	32	1	0	0	0	0	0	0	0	0	0
4	27	42	0	40	1	0	0	0	0	0	0	0	0	0
5	27	39	0	37	1	0	0	0	0	0	0	0	0	0
6	27	59	0	57	1	0	0	0	0	0	0	0	0	0
7	27	75	0	69	3	0	0	0	0	0	0	0	0	0
8	27	89	0	85	2	0	0	0	0	0	0	0	0	0
9	27	100	0	98	1	0	0	0	0	0	0	0	0	0
10	27	105	0	103	1	0	0	0	0	0	0	0	0	0
11	27	219	1	193	13	0	0	0	0	0	0	0	0	0
12	27	235	1	212	10	1	0	0	0	0	0	0	0	0
13	27	252	1	211	14	3	1	0	0	0	0	0	0	0
14	27	298	1	262	15	2	0	0	0	0	0	0	0	0
15	27	327	1	271	19	3	1	1	0	0	0	0	0	0
16	27	296	1	255	15	1	2	0	0	0	0	0	0	0
17	27	325	1	273	16	3	0	1	1	0	0	0	0	0
18	27	389	1	327	19	2	2	2	0	0	0	0	0	0
19	27	743	2	415	45	13	5	4	4	4	3	0	0	0
20	27	2595	8	521	82	32	24	12	22	12	5	6	12	12
21	27	6288	18	631	105	57	31	18	48	32	14	17	29	29
22	27	10279	30	648	136	43	36	24	39	28	21	19	57	57
23	27	13750	40	862	193	74	21	25	48	32	16	24	74	74

Harmonic constants for constituent M2 for deployment NWSB9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	650	248	248	126	198	263	92	20	241	A
02	625	240	250	123	202	256	85	22	242	A
03	600	233	251	120	207	250	79	22	244	A
04	575	223	253	121	213	243	72	25	246	A
05	550	214	256	125	219	238	67	27	248	A
06	525	203	259	129	226	232	62	30	250	A
07	500	190	262	133	233	226	55	34	253	A
08	475	180	265	138	239	221	51	37	256	A
09	450	171	267	143	243	219	46	39	257	A
10	425	160	268	144	248	212	37	42	259	A
11	400	144	269	144	254	202	27	45	261	A
12	375	131	270	145	260	194	18	48	264	A
13	350	118	272	145	264	187	12	51	267	A
14	325	110	274	150	267	186	11	54	269	A
15	300	105	276	155	268	187	12	56	271	A
16	275	102	279	157	270	187	13	57	273	A
17	250	102	280	159	270	188	15	57	273	A
18	225	103	279	158	269	188	16	57	272	A
19	200	106	279	157	268	188	16	56	272	A
20	175	109	280	156	269	189	17	55	272	A
21	150	114	280	162	268	197	19	55	272	A
22	125	112	280	163	269	197	18	56	273	A
23	100	120	284	167	265	203	33	55	271	A

Harmonic constants for constituent S2 for deployment NWSB9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	650	88	296	56	248	97	38	28	285	A
02	625	85	295	54	248	94	35	28	283	A
03	600	83	293	50	250	91	31	27	283	A
04	575	81	293	48	254	91	27	27	284	A
05	550	76	292	45	263	87	19	29	285	A
06	525	69	291	42	271	80	12	31	285	A
07	500	61	291	42	279	74	7	34	287	A
08	475	52	298	46	287	69	7	42	293	A
09	450	48	304	53	292	71	7	48	298	A
10	425	48	306	59	293	75	9	51	298	A
11	400	49	309	63	295	80	9	52	300	A
12	375	52	306	62	295	81	8	50	300	A
13	350	53	299	56	295	77	3	46	297	A
14	325	50	285	49	293	70	5	44	289	C
15	300	50	272	45	295	66	13	42	282	C
16	275	46	272	42	300	60	15	42	285	C
17	250	40	281	42	303	57	11	46	293	C
18	225	40	294	43	307	59	7	47	301	C
19	200	40	299	45	308	60	5	48	304	C
20	175	40	298	45	309	59	6	48	304	C
21	150	40	306	53	312	66	3	53	310	C
22	125	46	317	65	318	80	0	54	317	C
23	100	54	327	74	320	92	5	54	323	A

Harmonic constants for constituent N2 for deployment NWSB9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	650	62	217	30	150	63	27	13	211	A
02	625	62	220	31	156	64	27	15	213	A
03	600	62	223	34	161	65	29	18	215	A
04	575	63	228	36	168	66	30	21	219	A
05	550	58	233	36	180	63	26	25	222	A
06	525	50	237	36	193	57	21	33	223	A
07	500	43	246	37	205	54	20	39	229	A
08	475	39	250	37	214	51	16	43	233	A
09	450	36	248	36	219	49	13	45	234	A
10	425	37	248	35	221	50	12	43	235	A
11	400	36	245	33	224	48	9	43	235	A
12	375	33	241	31	228	45	5	44	235	A
13	350	30	243	34	235	45	3	48	239	A
14	325	27	246	35	240	44	2	53	243	A
15	300	23	254	36	246	43	3	57	248	A
16	275	22	260	37	247	43	4	60	250	A
17	250	20	268	38	249	43	6	63	253	A
18	225	20	271	41	250	45	6	64	254	A
19	200	20	271	38	250	43	6	64	254	A
20	175	21	265	37	256	43	3	60	258	A
21	150	22	252	37	258	43	2	59	257	C
22	125	25	251	35	251	44	0	55	251	A
23	100	26	250	31	245	40	1	50	247	A

Harmonic constants for constituent O1 for deployment NWSB9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	650	35	3	15	63	36	13	15	9	C
02	625	35	3	15	64	36	13	13	7	C
03	600	36	4	15	62	37	12	14	8	C
04	575	35	5	15	54	37	11	18	10	C
05	550	33	3	17	53	35	12	21	10	C
06	525	33	0	15	50	35	11	19	6	C
07	500	31	359	14	49	33	11	19	6	C
08	475	28	356	13	49	29	10	17	2	C
09	450	29	352	12	52	30	10	13	356	C
10	425	28	350	11	44	29	9	15	355	C
11	400	27	349	11	39	28	8	17	354	C
12	375	28	352	12	50	28	10	14	357	C
13	350	29	347	11	51	29	10	11	351	C
14	325	28	343	7	45	28	6	7	345	C
15	300	28	343	7	22	28	4	11	344	C
16	275	25	343	5	40	25	4	7	344	C
17	250	24	345	5	59	24	5	4	345	C
18	225	23	345	5	71	23	5	1	345	C
19	200	22	346	4	84	22	4	178	165	C
20	175	23	354	8	104	23	8	172	171	C
21	150	24	9	10	83	24	9	8	12	C
22	125	29	347	10	117	29	7	166	163	C
23	100	26	346	11	41	27	9	16	351	C

Harmonic constants for constituent K1 for deployment NWSB9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	650	20	204	5	279	20	4	3	205	C
02	625	19	202	4	281	19	4	2	203	C
03	600	19	205	5	271	19	4	7	207	C
04	575	20	210	6	249	21	4	14	212	C
05	550	19	210	7	238	20	3	18	213	C
06	525	18	203	6	245	19	4	14	206	C
07	500	18	202	5	238	18	3	13	204	C
08	475	18	200	4	267	18	3	5	200	C
09	450	15	202	2	305	15	2	178	22	C
10	425	18	201	3	296	18	3	179	20	C
11	400	16	195	3	293	16	3	179	15	C
12	375	13	190	2	236	13	1	6	191	C
13	350	11	166	3	118	11	2	10	164	A
14	325	10	129	6	77	11	4	23	120	A
15	300	9	98	10	61	12	4	50	76	A
16	275	8	80	10	63	12	2	53	70	A
17	250	4	119	6	61	6	3	63	75	A
18	225	6	157	4	64	6	4	175	341	A
19	200	10	174	4	51	10	3	168	358	A
20	175	13	167	4	34	14	3	168	350	A
21	150	18	163	3	152	18	0	8	163	A
22	125	26	169	9	209	27	5	15	172	C
23	100	32	172	21	201	37	9	32	180	C

Deployment Id: NWSB9511

Project: NORDIC WOCE

Latitude: 60°47.206'N

Longitude: 005°17.911'W

Echo sounding depth: 797m

Bottom depth corr.: 785m

Time of deployment: 10/11 -1995 1427UTC

Time of recovery: 24/05 - 1996 2045UTC

ADCP:

Instrument no.: RDI ADCP 1245

Instrument frequency: 75kHz

Height above bottom: 103m (corr.)

Depth: 682m (corr.)

Time of first data: 10/11 - 1995 1445UTC

Time of last data: 24/05 - 1996 2015UTC

Sample interval: 15 min

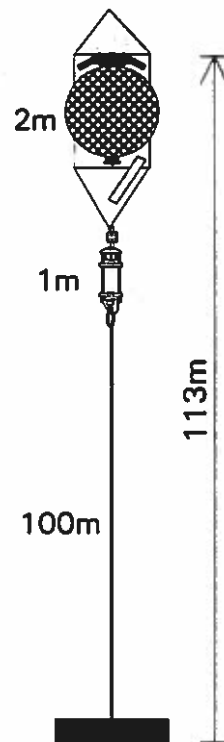
No. of ensembles: 18839

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 652m(corr.)

No. of bins: 30



Deployment: NWSB9511 updated 1999/09/03
 Instrument no.: 1245
 Instrument freq.: 75
 Latitude: 60 47.206 N
 Longitude: 05 17.911 W
 Bottom depth: 785
 Instrument depth: 682
 Center depth of first bin: 652
 Bin length: 25
 Number of bins: 23
 Number of first ensemble: 8156
 Time of first ensemble: 1995 11 10 14 45
 Number of last ensemble: 26994
 Time of last ensemble: 1996 05 24 20 15
 Time between ensembles (min.): 15
 All directions have been corrected by adding: -11.0

Below is listed for each bin the average speed (scalar average) and the average velocity magnitude and direction formed as a vectorial average of non-flagged (Good) observations. The last column shows the number of good values used in parts per thousand

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	652	133	215	33	211	989
2	627	158	210	32	212	992
3	602	183	208	32	213	994
4	577	208	206	32	214	993
5	552	233	205	32	214	992
6	527	258	203	31	217	991
7	502	283	200	32	222	990
8	477	308	198	34	225	988
9	452	333	198	36	224	986
10	427	358	204	38	225	984
11	402	383	210	42	224	981
12	377	408	214	45	223	983
13	352	433	220	48	222	982
14	327	458	225	54	224	977
15	302	483	232	58	224	978
16	277	508	238	60	224	975
17	252	533	242	60	223	970
18	227	558	246	61	223	965
19	202	583	253	62	224	941
20	177	608	257	59	224	869
21	152	633	259	53	221	774
22	127	658	259	50	218	685
23	102	683	266	54	216	573

Error statistics for deployment: NWSB9511 updated 98/04/23

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by RK in Apr 1998
 Velocity edited up to and including bin 23 by KMHL in March 1998
 Intensity edited up to and including bin 29 by RK in Apr 1998

Total number of ensembles: 18839
 Interval between ensembles: 15 min
 Original number of bins: 30
 Number of acceptable velocity bins: 23
 Number of acceptable intensity bins: 23

Flagged values have been replaced by error codes: -999.99 for temperature, -999 for velocity and intensity. For observations where velocity is flagged, error codes have been inserted into speed, direction and vertical velocity files

Number of temperature ens. flagged: 2

Below are for each bin listed ensembles flagged for intensity in number and for velocity in number and % of total ens.number. For velocity is also shown the number of gaps of various lengths (gap length = number of consecutive flagged ens.)

Bin	Int. ens. flgd	Velocity ens. flgd	Velocity % flgd	Number of velocity gaps of length										
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50	
1	10	200	1	194	3	0	0	0	0	0	0	0	0	0
2	10	147	1	143	2	0	0	0	0	0	0	0	0	0
3	10	118	1	112	3	0	0	0	0	0	0	0	0	0
4	10	128	1	122	3	0	0	0	0	0	0	0	0	0
5	10	155	1	147	4	0	0	0	0	0	0	0	0	0
6	10	164	1	154	5	0	0	0	0	0	0	0	0	0
7	10	185	1	177	4	0	0	0	0	0	0	0	0	0
8	10	224	1	212	6	0	0	0	0	0	0	0	0	0
9	10	271	1	252	3	3	1	0	0	0	0	0	0	0
10	10	305	2	271	14	2	0	0	0	0	0	0	0	0
11	10	363	2	301	23	4	1	0	0	0	0	0	0	0
12	10	323	2	252	25	7	0	0	0	0	0	0	0	0
13	10	336	2	274	23	4	1	0	0	0	0	0	0	0
14	10	436	2	338	39	4	2	0	0	0	0	0	0	0
15	10	410	2	332	27	4	3	0	0	0	0	0	0	0
16	10	469	2	363	33	9	2	1	0	0	0	0	0	0
17	10	556	3	437	41	5	4	0	1	0	0	0	0	0
18	10	658	3	478	58	10	3	2	2	0	0	0	0	0
19	10	1118	6	533	77	30	8	6	12	9	2	0	0	0
20	10	2462	13	569	86	43	27	14	34	25	13	12	0	0
21	10	4252	23	546	132	41	25	26	35	24	22	43	3	3
22	10	5941	32	645	152	52	20	19	34	23	12	61	19	19
23	10	8035	43	763	206	73	44	34	55	20	8	57	45	45

Harmonic constants for constituent M2 for deployment NWSB9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	652	231	244	101	201	244	65	19	238	A
02	627	225	246	103	207	240	61	21	240	A
03	602	220	248	107	213	238	57	23	242	A
04	577	216	250	112	217	237	55	25	244	A
05	552	211	252	118	223	236	52	27	246	A
06	527	203	254	123	228	233	47	30	248	A
07	502	194	256	127	232	228	44	32	249	A
08	477	184	258	129	237	221	38	34	251	A
09	452	174	259	130	241	215	33	36	253	A
10	427	168	261	134	245	213	29	38	254	A
11	402	161	262	137	249	210	23	40	257	A
12	377	153	263	143	254	208	18	43	259	A
13	352	145	265	149	256	207	17	46	261	A
14	327	139	267	154	258	206	17	48	262	A
15	302	135	269	157	260	207	17	49	264	A
16	277	133	271	158	260	206	18	50	265	A
17	252	132	271	160	260	206	19	51	264	A
18	227	133	271	161	260	207	20	51	264	A
19	202	134	271	164	260	211	20	51	264	A
20	177	131	273	167	261	211	22	52	266	A
21	152	135	275	170	263	216	23	52	268	A
22	127	132	274	167	263	212	19	52	267	A
23	102	127	273	163	266	207	12	52	269	A

Harmonic constants for constituent S2 for deployment NWSB9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	652	96	293	56	242	103	40	24	284	A
02	627	94	294	53	245	101	37	24	284	A
03	602	92	292	51	245	99	35	24	284	A
04	577	88	291	49	247	96	32	24	283	A
05	552	85	293	47	252	93	28	25	285	A
06	527	80	296	48	259	90	26	28	287	A
07	502	77	299	50	266	89	24	31	290	A
08	477	75	300	53	271	89	22	34	290	A
09	452	70	300	52	274	85	19	36	291	A
10	427	66	300	50	279	81	15	37	292	A
11	402	59	297	45	287	74	6	37	293	A
12	377	51	293	42	299	66	3	40	296	C
13	352	42	292	46	308	62	9	48	301	C
14	327	37	291	54	309	64	9	56	303	C
15	302	34	299	56	312	65	6	59	309	C
16	277	35	310	60	314	69	2	60	313	C
17	252	36	316	62	312	72	2	60	313	A
18	227	37	317	63	311	73	3	60	313	A
19	202	40	317	67	314	78	2	60	314	A
20	177	43	322	72	316	84	4	59	317	A
21	152	48	331	74	314	87	12	58	319	A
22	127	51	336	77	314	91	16	58	320	A
23	102	56	336	82	310	97	20	57	318	A

Harmonic constants for constituent N2 for deployment NWSB9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	652	53	227	27	175	56	21	20	220	A
02	627	50	228	24	179	53	18	20	221	A
03	602	46	227	21	184	49	13	20	221	A
04	577	44	226	20	193	47	10	22	221	A
05	552	42	226	21	198	46	9	25	221	A
06	527	41	231	23	203	46	9	27	225	A
07	502	39	233	25	209	46	9	32	226	A
08	477	37	237	28	216	45	8	37	229	A
09	452	35	237	27	218	43	7	37	230	A
10	427	33	236	27	220	42	6	39	230	A
11	402	31	239	26	226	41	5	40	234	A
12	377	29	239	27	237	40	1	43	238	A
13	352	26	238	29	242	39	1	48	241	C
14	327	22	236	28	245	36	3	53	242	C
15	302	19	242	31	252	37	3	58	249	C
16	277	20	247	33	252	39	1	59	251	C
17	252	21	248	34	250	40	1	58	250	C
18	227	21	252	34	246	40	2	59	248	A
19	202	22	253	34	245	40	3	57	247	A
20	177	24	249	35	246	42	1	55	247	A
21	152	28	246	34	245	44	0	51	245	A
22	127	28	246	33	247	43	1	50	246	C
23	102	30	245	34	244	45	0	49	245	A

Harmonic constants for constituent O1 for deployment NWSB9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	652	28	345	16	44	29	13	20	354	C
02	627	28	347	15	41	29	11	21	355	C
03	602	29	347	15	38	31	11	22	355	C
04	577	29	348	17	34	31	11	25	357	C
05	552	27	346	17	34	30	12	27	357	C
06	527	26	346	16	36	28	11	25	356	C
07	502	24	344	14	36	26	10	25	355	C
08	477	23	343	14	50	24	12	17	351	C
09	452	22	342	13	52	23	11	15	350	C
10	427	23	337	11	44	24	10	12	342	C
11	402	23	332	9	42	23	8	9	336	C
12	377	25	327	10	29	26	9	12	331	C
13	352	24	323	11	21	25	9	15	328	C
14	327	22	321	10	15	23	8	17	327	C
15	302	20	321	10	7	22	7	20	327	C
16	277	20	325	10	17	21	7	20	332	C
17	252	19	326	10	30	20	8	15	333	C
18	227	18	328	10	48	19	9	7	332	C
19	202	20	327	10	57	20	10	180	146	C
20	177	18	331	9	57	18	9	2	332	C
21	152	30	346	15	36	32	11	19	353	C
22	127	39	336	15	38	40	13	11	339	C
23	102	30	329	21	72	30	20	163	137	C

Harmonic constants for constituent K1 for deployment NWSB9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	652	15	230	5	296	15	4	8	233	C
02	627	16	228	5	286	16	4	11	231	C
03	602	15	231	5	269	16	3	16	234	C
04	577	13	229	6	280	14	4	17	234	C
05	552	12	219	6	292	12	6	12	225	C
06	527	14	212	4	298	14	4	1	212	C
07	502	14	207	3	297	14	3	0	207	C
08	477	12	202	2	295	12	2	179	22	C
09	452	11	218	1	280	11	1	3	218	C
10	427	12	219	3	240	13	1	14	220	C
11	402	11	212	4	264	12	3	13	216	C
12	377	13	204	4	232	13	2	16	206	C
13	352	12	191	3	194	12	0	12	191	C
14	327	9	164	7	110	10	5	32	148	A
15	302	8	157	8	104	10	5	46	130	A
16	277	6	174	7	82	7	6	95	78	A
17	252	6	193	6	72	7	4	142	37	A
18	227	9	185	6	90	9	6	175	8	A
19	202	13	183	6	141	14	4	21	177	A
20	177	19	191	13	194	23	0	34	192	C
21	152	27	233	20	185	31	13	32	218	A
22	127	50	263	28	189	51	27	12	256	A
23	102	75	261	41	185	76	39	10	255	A

Deployment Id: NWSC9410

Project: NORDIC WOCE

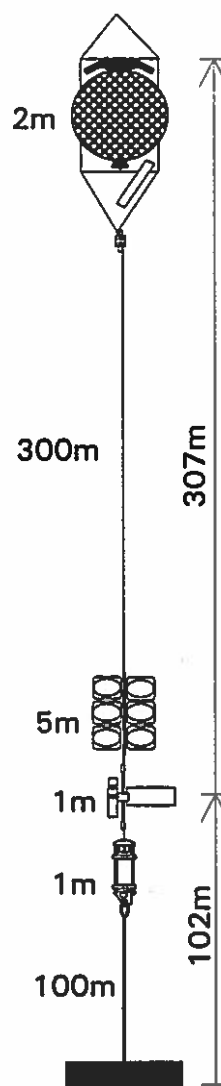
Latitude: 60°34.072'N
Longitude: 004°45.896'W
Echo sounding depth: 1086m
Bottom depth corr.: 1063m
Time of deployment: 23/10 -1994 1325UTC
Time of recovery: 20/02 - 1995 1245UTC

ADCP:

Instrument no.: RDI ADCP 1284
Instrument frequency: 75kHz
Height above bottom: 409m (corr.)
Depth: 654m (corr.)
Time of first data: 23/10 - 1994 1335UTC
Time of last data: 20/02 - 1995 1150UTC
Interval: 5 min
No. of ensembles: 34540
Pings per ens.: 1
Binlength: 25m
Depth of first bin: 624m (corr.)
No. of bins: 30

Aanderaa:

Instrument no.: RCM8 10069
Height above bottom: 102m
Depth: 961m (corr.)
Time of first data: 23/10 -1994 1500UTC
Time of last data: 20/02 -1995 1100UTC
Sample interval: 60 min
No. of records: 2877



Deployment: NWSC9410 updated 1999/09/03
 Instrument no.: 1284
 Instrument freq.: 75
 Latitude: 60 34.072 N
 Longitude: 04 45.896 W
 Bottom depth: 1063
 Instrument depth: 654
 Center depth of first bin: 624
 Bin length: 25
 Number of bins: 22
 Number of first ensemble: 4856
 Time of first ensemble: 1994 10 23 13 35
 Number of last ensemble: 39395
 Time of last ensemble: 1995 02 20 11 50
 Time between ensembles (min.): 5
 All directions have been corrected by adding: -11.0

Below is listed for each bin the average speed (scalar average) and the average velocity magnitude and direction formed as a vectorial average of non-flagged (Good) observations. The last column shows the number of good values used in parts per thousand

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	624	439	163	42	153	994
2	599	464	168	48	147	997
3	574	489	173	54	141	998
4	549	514	179	61	136	996
5	524	539	190	72	132	995
6	499	564	199	84	128	993
7	474	589	212	98	126	994
8	449	614	224	111	126	993
9	424	639	236	125	125	992
10	399	664	248	139	122	993
11	374	689	256	150	120	990
12	349	714	264	158	118	991
13	324	739	275	165	116	991
14	299	764	284	174	114	992
15	274	789	292	182	112	987
16	249	814	301	191	110	987
17	224	839	310	200	109	988
18	199	864	319	207	109	963
19	174	889	324	211	109	920
20	149	914	334	216	109	854
21	124	939	349	224	109	790
22	99	964	371	236	110	698

Error statistics for deployment: NWSC9410 updated 98/04/23

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by RK in Apr 1998
 Velocity edited up to and including bin 22 by KMH in April 1998
 Intensity edited up to and including bin 29 by RK in Apr 1998

Total number of ensembles: 34540
 Interval between ensembles: 5 min
 Original number of bins: 30
 Number of acceptable velocity bins: 22
 Number of acceptable intensity bins: 22

Flagged values have been replaced by error codes: -999.99 for temperature, -999 for velocity and intensity. For observations where velocity is flagged, error codes have been inserted into speed, direction and vertical velocity files

Number of temperature ens. flagged: 20

Below are for each bin listed ensembles flagged for intensity in number and for velocity in number and % of total ens. number. For velocity is also shown the number of gaps of various lengths (gap length = number of consecutive flagged ens.)

Bin	Int. ens. flgd	Velocity ens. flgd	%	Number of velocity gaps of length											
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50		
1	33	214	1	207	2	1	0	0	0	0	0	0	0	0	0
2	33	106	0	104	1	0	0	0	0	0	0	0	0	0	0
3	33	82	0	82	0	0	0	0	0	0	0	0	0	0	0
4	33	139	0	135	2	0	0	0	0	0	0	0	0	0	0
5	33	180	1	170	5	0	0	0	0	0	0	0	0	0	0
6	33	235	1	221	7	0	0	0	0	0	0	0	0	0	0
7	33	210	1	198	6	0	0	0	0	0	0	0	0	0	0
8	33	245	1	226	8	1	0	0	0	0	0	0	0	0	0
9	33	263	1	247	8	0	0	0	0	0	0	0	0	0	0
10	33	241	1	217	8	1	0	1	0	0	0	0	0	0	0
11	33	355	1	322	13	1	1	0	0	0	0	0	0	0	0
12	33	299	1	287	6	0	0	0	0	0	0	0	0	0	0
13	33	298	1	282	8	0	0	0	0	0	0	0	0	0	0
14	33	286	1	263	10	1	0	0	0	0	0	0	0	0	0
15	33	444	1	376	22	3	0	0	2	0	0	0	0	0	0
16	33	460	1	389	21	2	3	1	1	0	0	0	0	0	0
17	33	420	1	379	9	4	1	0	1	0	0	0	0	0	0
18	33	1262	4	554	63	14	7	9	19	10	3	1	1	1	1
19	33	2768	8	778	121	52	32	15	23	22	10	5	7	7	7
20	33	5041	15	1140	245	96	59	31	64	25	15	13	14	14	14
21	33	7253	21	1378	363	133	64	48	91	57	22	23	19	19	19
22	33	10447	30	1863	494	168	112	65	106	39	28	22	44	44	44

Deployment: NWSC9410

Frequency of high speeds.

Frequency (in parts per thousand) of speeds equal to or exceeding specified vales.

Bin no.	Depth m	Speed (cm/s)																	
		10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	624	721	298	83	19	5	1	0	0	0	0	0	0	0	0	0	0	0	0
2	599	740	316	94	22	6	1	0	0	0	0	0	0	0	0	0	0	0	0
3	574	751	341	107	26	7	1	0	0	0	0	0	0	0	0	0	0	0	0
4	549	760	363	123	35	8	1	0	0	0	0	0	0	0	0	0	0	0	0
5	524	776	404	152	49	14	3	0	0	0	0	0	0	0	0	0	0	0	0
6	499	789	433	175	64	21	6	0	0	0	0	0	0	0	0	0	0	0	0
7	474	807	465	213	80	32	11	3	0	0	0	0	0	0	0	0	0	0	0
8	449	821	499	248	98	40	16	4	0	0	0	0	0	0	0	0	0	0	0
9	424	832	542	287	124	46	19	5	0	0	0	0	0	0	0	0	0	0	0
10	399	852	567	323	145	54	19	6	1	0	0	0	0	0	0	0	0	0	0
11	374	861	589	351	165	57	19	6	1	0	0	0	0	0	0	0	0	0	0
12	349	872	615	366	179	69	22	6	1	0	0	0	0	0	0	0	0	0	0
13	324	883	645	391	199	80	26	7	2	0	0	0	0	0	0	0	0	0	0
14	299	889	667	415	219	92	32	9	2	0	0	0	0	0	0	0	0	0	0
15	274	891	673	437	241	101	37	10	3	1	0	0	0	0	0	0	0	0	0
16	249	891	683	461	269	115	43	11	3	0	0	0	0	0	0	0	0	0	0
17	224	892	702	485	291	132	50	15	4	1	0	0	0	0	0	0	0	0	0
18	199	883	698	486	300	145	57	19	6	1	0	0	0	0	0	0	0	0	0
19	174	848	673	473	297	148	58	21	7	2	0	0	0	0	0	0	0	0	0
20	149	788	639	453	296	154	65	24	10	3	0	0	0	0	0	0	0	0	0
21	124	737	606	444	296	161	74	31	14	6	1	0	0	0	0	0	0	0	0
22	99	659	556	425	294	166	82	36	17	8	3	1	0	0	0	0	0	0	0

Harmonic constants for constituent M2 for deployment NWSC9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	624	159	250	81	245	178	6	27	249	A
02	599	158	251	84	247	179	6	28	250	A
03	574	156	252	85	248	177	4	29	251	A
04	549	153	254	89	251	177	3	30	253	A
05	524	150	257	95	254	177	4	32	256	A
06	499	145	258	99	256	175	3	34	258	A
07	474	141	261	106	258	176	3	37	260	A
08	449	134	266	115	262	176	6	41	264	A
09	424	130	268	121	263	178	9	43	266	A
10	399	124	269	123	265	175	6	45	267	A
11	374	118	271	125	268	172	4	47	270	A
12	349	110	275	127	272	167	4	49	273	A
13	324	101	278	133	275	167	4	53	276	A
14	299	97	281	139	277	169	5	55	279	A
15	274	99	285	142	277	173	11	55	279	A
16	249	101	287	144	276	175	15	55	280	A
17	224	99	287	145	278	175	14	56	281	A
18	199	99	288	148	280	177	12	56	282	A
19	174	98	290	148	279	177	17	57	282	A
20	149	100	290	153	278	182	17	57	282	A
21	124	101	291	156	279	185	19	57	282	A
22	99	100	290	161	281	189	12	58	284	A

Harmonic constants for constituent S2 for deployment NWSC9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	624	57	294	43	284	71	6	37	290	A
02	599	55	297	45	288	71	5	39	293	A
03	574	53	297	44	293	69	3	39	296	A
04	549	51	297	44	294	68	2	41	296	A
05	524	50	297	43	294	66	2	41	295	A
06	499	53	302	47	288	70	8	42	296	A
07	474	54	309	50	284	72	16	43	297	A
08	449	57	308	49	282	73	17	40	297	A
09	424	59	301	43	281	72	12	35	294	A
10	399	50	297	37	292	62	3	36	295	A
11	374	44	295	37	299	57	2	40	297	C
12	349	42	294	37	301	56	3	41	297	C
13	324	48	295	39	301	62	3	39	297	C
14	299	48	295	41	305	63	5	40	299	C
15	274	44	299	43	311	61	6	45	305	C
16	249	44	307	46	313	63	3	47	310	C
17	224	43	314	48	314	65	0	48	314	C
18	199	43	312	51	318	66	3	50	315	C
19	174	39	307	55	325	67	10	55	319	C
20	149	35	302	56	323	65	11	59	317	C
21	124	37	309	55	327	66	10	56	322	C
22	99	36	313	57	330	66	9	58	325	C

Harmonic constants for constituent N2 for deployment NWSC9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	624	40	214	15	198	42	4	20	212	A
02	599	39	213	14	199	41	3	19	211	A
03	574	39	210	12	201	40	2	17	209	A
04	549	38	211	12	201	40	2	18	210	A
05	524	40	215	17	203	43	3	22	214	A
06	499	37	221	20	215	42	2	28	220	A
07	474	35	228	21	222	41	2	31	226	A
08	449	35	229	22	218	41	3	32	226	A
09	424	32	237	25	225	41	4	38	233	A
10	399	32	248	29	228	43	7	42	239	A
11	374	31	243	26	230	40	5	40	238	A
12	349	26	244	24	234	35	3	43	239	A
13	324	23	251	27	245	36	2	49	247	A
14	299	21	262	29	251	36	3	55	255	A
15	274	20	263	29	252	36	3	56	255	A
16	249	21	276	33	253	38	7	58	260	A
17	224	25	290	40	251	45	14	62	260	A
18	199	28	295	44	247	48	19	62	259	A
19	174	31	300	46	248	51	22	62	261	A
20	149	36	303	47	252	54	24	57	268	A
21	124	37	303	45	253	53	24	53	272	A
22	99	37	313	51	250	55	30	63	266	A

Harmonic constants for constituent O1 for deployment NWSC9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	624	13	14	10	63	15	6	35	31	C
02	599	12	25	10	64	15	5	36	39	C
03	574	12	33	10	60	15	4	39	44	C
04	549	11	26	10	59	15	4	41	40	C
05	524	11	15	10	67	13	6	41	38	C
06	499	8	10	11	79	12	7	65	64	C
07	474	7	3	12	76	12	6	78	70	C
08	449	6	14	9	67	10	4	64	55	C
09	424	6	343	8	76	8	6	94	78	C
10	399	8	332	7	67	8	7	169	143	C
11	374	6	313	9	56	9	6	106	66	C
12	349	6	297	12	56	12	5	107	64	C
13	324	6	325	12	43	12	6	83	40	C
14	299	6	329	11	40	11	6	77	33	C
15	274	6	325	12	36	12	6	76	29	C
16	249	8	338	11	42	12	7	64	27	C
17	224	8	345	10	34	12	5	56	18	C
18	199	10	347	10	35	13	6	43	9	C
19	174	10	322	7	36	11	7	18	334	C
20	149	13	291	7	50	14	6	160	102	C
21	124	19	286	8	68	21	5	161	102	C
22	99	29	283	10	139	30	6	163	106	A

Harmonic constants for constituent K1 for deployment NWSC9410.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	624	8	221	4	227	8	0	25	222	C
02	599	10	224	4	215	10	1	22	223	A
03	574	10	224	4	208	11	1	20	222	A
04	549	10	226	4	223	11	0	23	225	A
05	524	9	217	5	230	10	1	29	220	C
06	499	7	206	4	250	8	3	27	216	C
07	474	8	203	5	274	8	4	15	211	C
08	449	5	216	7	265	8	3	63	254	C
09	424	2	177	8	271	8	2	91	271	C
10	399	4	157	8	250	8	4	92	251	C
11	374	4	140	6	217	6	4	76	208	C
12	349	5	133	6	192	7	4	55	171	C
13	324	5	87	6	185	6	5	123	214	C
14	299	4	47	7	171	8	3	114	182	C
15	274	4	345	9	181	10	1	115	178	A
16	249	5	309	8	197	9	4	106	189	A
17	224	6	266	6	206	8	4	46	235	A
18	199	7	227	7	225	10	0	47	226	A
19	174	8	186	15	239	16	6	67	230	C
20	149	11	167	15	243	16	10	74	233	C
21	124	20	176	19	256	21	17	42	213	C
22	99	22	180	23	258	25	20	52	226	C

Deployment Id: NWSC9511

Project: NORDIC WOCE

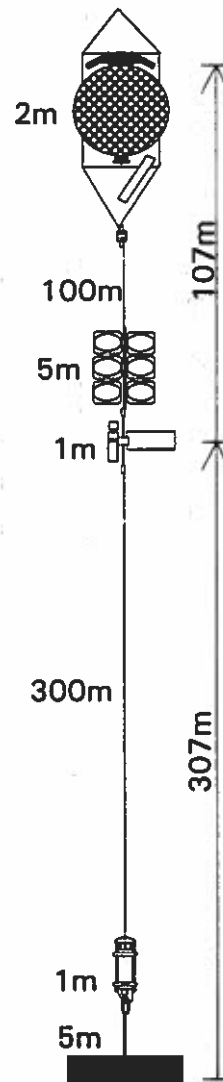
Latitude: 60°33.689'N
Longitude: 004°45.308'W
Echo sounding depth: 1083m
Bottom depth corr.: 1063m
Time of deployment: 10/11 -1995 1843UTC
Time of recovery: 24/05 - 1996 1250UTC

ADCP:

Instrument no.: RDI ADCP 1284
Instrument frequency: 75kHz
Height above bottom: 414m (corr.)
Depth: 649m (corr.)
Time of first data: 10/11 - 1995 1900UTC
Time of last data: 24/05 - 1996 1245UTC
Sample interval: 15 min
No. of ensembles: 18792
Pings per ens.: 1
Binlength: 25m
Depth of first bin: 619m (corr.)
No. of bins: 30

Aanderaa:

Instrument no.: RCM8 10069
Height above bottom: 307m
Depth: 756m (corr.)
Time of first data: 10/11 - 1995 2000UTC
Time of last data: 24/05 - 1996 1000UTC
Sample interval: 60 min
No. of records: 4695



Deployment: NWSC9511 updated 1999/09/03
 Instrument no.: 1284
 Instrument freq.: 75
 Latitude: 60 33.689 N
 Longitude: 04 45.308 W
 Bottom depth: 1063
 Instrument depth: 649
 Center depth of first bin: 619
 Bin length: 25
 Number of bins: 23
 Number of first ensemble: 8173
 Time of first ensemble: 1995 11 10 19 00
 Number of last ensemble: 26964
 Time of last ensemble: 1996 05 24 12 45
 Time between ensembles (min.): 15
 All directions have been corrected by adding: -11.0

Below is listed for each bin the average speed (scalar average) and the average velocity magnitude and direction formed as a vectorial average of non-flagged (Good) observations. The last column shows the number of good values used in parts per thousand

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	619	444	172	61	194	988
2	594	469	176	63	190	994
3	569	494	180	64	185	994
4	544	519	184	67	181	993
5	519	544	188	73	175	994
6	494	569	196	78	169	989
7	469	594	205	84	165	971
8	444	619	215	90	159	976
9	419	644	223	96	153	973
10	394	669	231	102	149	970
11	369	694	238	106	146	964
12	344	719	245	109	143	973
13	319	744	254	115	142	959
14	294	769	262	120	139	968
15	269	794	272	124	136	973
16	244	819	279	127	133	962
17	219	844	288	131	133	959
18	194	869	296	134	134	930
19	169	894	301	135	135	870
20	144	919	308	134	135	781
21	119	944	316	134	135	722
22	94	969	326	136	133	609
23	69	994	330	128	127	419

Error statistics for deployment: NWSC9511 updated 98/04/23

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by RK in Apr 1998
 Velocity edited up to and including bin 23 by MCP in feb 1998
 Intensity edited up to and including bin 29 by RK in Apr 1998

Total number of ensembles: 18792
 Interval between ensembles: 15 min
 Original number of bins: 30
 Number of acceptable velocity bins: 23
 Number of acceptable intensity bins: 23

Flagged values have been replaced by error codes: -999.99 for temperature, -999 for velocity and intensity. For observations where velocity is flagged, error codes have been inserted into speed, direction and vertical velocity files

Number of temperature ens. flagged: 1

Below are for each bin listed ensembles flagged for intensity in number and for velocity in number and % of total ens.number. For velocity is also shown the number of gaps of various lengths (gap length = number of consecutive flagged ens.)

Bin	Int. ens. flgd	Velocity ens. % flgd	Number of velocity gaps of length											
			1	2	3	4	5	6-10	11-20	21-30	31-50	>50		
1	4	227	1	204	8	1	1	0	0	0	0	0	0	0
2	4	113	1	109	2	0	0	0	0	0	0	0	0	0
3	4	109	1	105	2	0	0	0	0	0	0	0	0	0
4	4	135	1	129	3	0	0	0	0	0	0	0	0	0
5	4	122	1	112	5	0	0	0	0	0	0	0	0	0
6	4	200	1	188	6	0	0	0	0	0	0	0	0	0
7	4	547	3	485	25	4	0	0	0	0	0	0	0	0
8	4	450	2	409	19	1	0	0	0	0	0	0	0	0
9	4	498	3	443	26	1	0	0	0	0	0	0	0	0
10	4	566	3	550	8	0	0	0	0	0	0	0	0	0
11	4	683	4	543	41	16	1	0	1	0	0	0	0	0
12	4	509	3	427	22	8	1	2	0	0	0	0	0	0
13	4	773	4	627	51	10	2	0	1	0	0	0	0	0
14	4	596	3	488	28	8	4	1	1	0	0	0	0	0
15	4	502	3	416	31	8	0	0	0	0	0	0	0	0
16	4	723	4	481	64	17	2	3	6	0	0	0	0	0
17	4	769	4	511	62	15	7	2	4	2	0	0	0	0
18	4	1317	7	614	84	43	9	10	16	8	4	0	0	0
19	4	2448	13	695	123	39	12	12	34	23	13	9	0	0
20	4	4112	22	834	136	60	34	14	42	36	16	30	4	4
21	4	5229	28	773	149	67	26	16	43	32	22	43	11	11
22	4	7345	39	996	237	100	51	33	67	47	19	45	26	26
23	4	10918	58	872	307	128	78	37	89	55	23	36	69	69

Harmonic constants for constituent M2 for deployment NWSC9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	619	152	253	91	251	177	3	31	253	A
02	594	151	255	96	252	179	3	32	254	A
03	569	150	255	99	254	180	2	33	255	A
04	544	148	255	100	256	179	1	34	255	C
05	519	143	255	100	258	175	4	35	256	C
06	494	140	257	105	260	175	3	37	258	C
07	469	137	258	109	261	175	4	38	259	C
08	444	135	258	109	262	173	7	39	259	C
09	419	130	258	111	264	171	9	40	261	C
10	394	126	260	113	266	169	9	42	263	C
11	369	120	262	118	268	168	9	44	265	C
12	344	118	264	125	270	172	8	47	267	C
13	319	114	267	131	271	173	6	49	270	C
14	294	111	271	137	273	177	3	51	272	C
15	269	110	273	141	274	179	1	52	273	C
16	244	109	273	143	274	180	1	53	273	C
17	219	110	273	145	273	182	0	53	273	C
18	194	110	274	144	273	181	1	53	273	A
19	169	106	274	144	274	179	0	54	274	C
20	144	104	273	146	273	179	0	54	273	A
21	119	99	274	147	274	178	0	56	274	A
22	94	108	272	144	273	180	2	53	273	C
23	69	109	272	151	273	187	3	54	273	C

Harmonic constants for constituent S2 for deployment NWSC9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	619	46	300	43	304	63	2	43	302	C
02	594	46	298	43	303	63	3	43	300	C
03	569	48	298	44	301	65	2	42	300	C
04	544	49	299	45	301	66	1	42	300	C
05	519	51	298	44	300	67	1	40	299	C
06	494	51	294	40	300	65	3	38	296	C
07	469	50	295	40	299	64	2	39	296	C
08	444	51	299	43	297	66	1	40	298	A
09	419	51	300	44	298	68	1	41	299	A
10	394	50	301	45	300	67	0	42	300	A
11	369	50	298	44	296	66	1	41	297	A
12	344	51	293	39	293	64	0	37	293	C
13	319	52	291	36	298	63	4	34	294	C
14	294	52	294	35	305	63	6	34	297	C
15	269	53	298	36	309	64	6	34	301	C
16	244	52	299	37	309	64	5	35	302	C
17	219	52	301	39	308	65	3	37	303	C
18	194	53	304	40	304	66	0	37	304	C
19	169	53	304	41	298	67	3	38	302	A
20	144	56	306	45	301	72	3	39	304	A
21	119	58	303	49	299	76	2	40	301	A
22	94	60	307	42	292	73	9	35	302	A
23	69	66	312	32	297	73	7	25	309	A

Harmonic constants for constituent N2 for deployment NWSC9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	619	31	224	19	237	36	4	32	227	C
02	594	30	226	20	237	36	3	33	230	C
03	569	30	226	19	234	36	2	31	228	C
04	544	31	226	19	230	36	1	31	227	C
05	519	29	227	20	234	35	2	35	229	C
06	494	28	231	23	236	36	2	39	233	C
07	469	31	235	27	235	41	0	41	235	A
08	444	33	240	28	231	44	3	41	237	A
09	419	35	241	29	230	45	4	40	237	A
10	394	34	243	31	235	46	3	42	240	A
11	369	31	243	30	239	43	2	44	241	A
12	344	27	245	30	245	40	0	48	245	A
13	319	27	245	30	245	40	0	48	245	A
14	294	25	242	29	250	38	3	49	247	C
15	269	23	242	29	256	37	4	52	250	C
16	244	22	235	29	256	35	6	53	249	C
17	219	21	233	30	258	36	7	55	250	C
18	194	19	232	30	261	35	8	59	253	C
19	169	16	239	28	261	32	5	62	256	C
20	144	18	238	29	262	33	6	59	256	C
21	119	20	240	30	261	36	6	58	255	C
22	94	13	220	33	256	35	7	71	251	C
23	69	26	213	26	273	32	18	47	244	C

Harmonic constants for constituent O1 for deployment NWSC9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	619	8	40	7	36	11	0	41	38	A
02	594	8	31	7	36	11	1	41	33	C
03	569	9	27	6	60	11	3	32	36	C
04	544	9	17	7	58	11	4	33	30	C
05	519	9	13	6	52	10	3	31	24	C
06	494	12	18	7	42	14	3	30	24	C
07	469	11	19	9	42	14	3	38	28	C
08	444	10	11	8	36	13	3	38	21	C
09	419	9	15	8	37	11	2	41	24	C
10	394	8	22	10	42	12	2	49	34	C
11	369	8	16	10	42	12	3	51	32	C
12	344	6	7	8	42	10	3	55	30	C
13	319	6	12	7	42	9	2	54	31	C
14	294	6	4	8	40	9	3	51	25	C
15	269	6	3	8	50	9	4	53	33	C
16	244	6	7	7	48	8	3	52	32	C
17	219	5	4	8	39	9	2	59	29	C
18	194	4	1	5	75	5	3	68	60	C
19	169	3	25	7	111	7	3	88	111	C
20	144	6	75	9	109	10	3	56	98	C
21	119	13	135	9	125	16	1	36	132	A
22	94	8	123	15	120	17	0	63	120	A
23	69	12	73	36	108	38	6	75	105	C

Harmonic constants for constituent K1 for deployment NWSC9511.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	619	5	244	2	23	6	1	160	58	C
02	594	6	240	3	38	6	1	155	56	C
03	569	6	237	2	58	6	0	163	57	A
04	544	5	255	2	65	6	0	157	73	C
05	519	3	245	4	41	5	1	131	52	C
06	494	4	200	5	44	7	1	130	34	A
07	469	6	219	5	41	8	0	141	40	A
08	444	7	211	3	29	8	0	159	31	C
09	419	9	191	3	51	9	2	167	14	A
10	394	8	197	1	149	8	1	7	196	A
11	369	7	193	6	110	7	6	14	182	A
12	344	5	160	10	94	11	5	75	101	A
13	319	6	127	13	89	14	3	69	95	A
14	294	5	122	14	88	15	3	73	91	A
15	269	2	138	10	75	10	2	84	76	A
16	244	3	154	9	68	9	3	89	68	A
17	219	7	152	10	74	10	7	75	84	A
18	194	11	140	13	73	14	9	55	97	A
19	169	13	134	10	63	14	9	29	113	A
20	144	13	160	8	342	16	0	149	341	A
21	119	21	160	21	303	28	9	135	321	C
22	94	15	186	26	327	29	9	118	336	C
23	69	27	219	25	14	36	8	137	27	C

Deployment Id: NWSC9606

Project: NORDIC WOCE

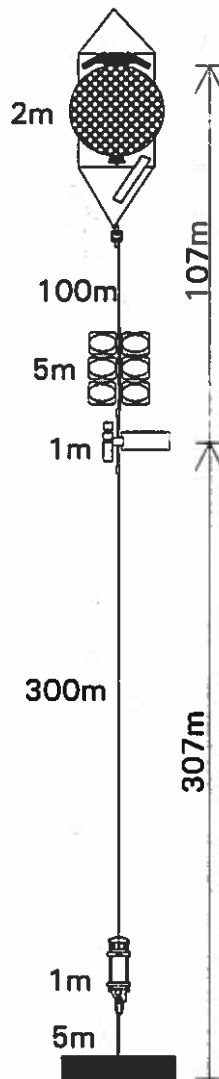
Latitude: 60°33.666'N
Longitude: 004°45.580'W
Echo sounding depth: 1084m
Bottom depth corr.: 1066m
Time of deployment: 15/06 -1996 1045UTC
Time of recovery: 23/05 - 1997 1700UTC

ADCP:

Instrument no.: RDI ADCP 1284
Instrument frequency: 75kHz
Height above bottom: 414m (corr.)
Depth: 652m (corr.)
Time of first data: 15/06 - 1996 1120UTC
Time of last data: 23/05 - 1997 1640UTC
Sample interval: 20 min
No. of ensembles: 24641
Pings per ens.: 1
Binlength: 25m
Depth of first bin: 616m (corr.)
No. of bins: 28

Aanderaa:

Instrument no.: RCM8 10067
Height above bottom: 307m
Depth: 759m (corr.)
Time of first data: 15/06 - 1996 1300UTC
Time of last data: 23/05 - 1997 1600UTC
Sample interval: 60 min
No. of records: 8212



Deployment: NWSC9606 updated 1999/09/03

Instrument no.: 1284

Instrument freq.: 75

Latitude: 60 33.666 N

Longitude: 04 45.580 W

Bottom depth: 1066

Instrument depth: 652

Center depth of first bin: 616

Bin length: 25

Number of bins: 23

Number of first ensemble: 218

Time of first ensemble: 1996 06 15 11 20

Number of last ensemble: 24858

Time of last ensemble: 1997 05 23 16 40

Time between ensembles (min.): 20

All directions have been corrected by adding: -11.0

Below is listed for each bin the average speed (scalar average) and the average velocity magnitude and direction formed as a vectorial average of non-flagged (Good) observations. The last column shows the number of good values used in parts per thousand

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	616	450	176	35	200	986
2	591	475	181	34	190	987
3	566	500	186	37	178	985
4	541	525	192	40	169	987
5	516	550	199	45	160	984
6	491	575	206	53	154	986
7	466	600	213	60	150	983
8	441	625	219	66	146	982
9	416	650	225	71	143	983
10	391	675	232	73	140	983
11	366	700	237	75	137	987
12	341	725	242	77	135	987
13	316	750	247	79	133	985
14	291	775	252	80	131	974
15	266	800	257	82	129	966
16	241	825	261	84	129	955
17	216	850	266	86	128	959
18	191	875	266	83	130	915
19	166	900	266	79	134	857
20	141	925	269	77	136	806
21	116	950	273	76	140	750
22	91	975	280	74	143	653
23	66	1000	285	69	141	525

Error statistics for deployment: NWSC9606 updated 98/04/26

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by RK in Apr 1998
 Velocity edited up to and including bin 24 by KMHL in Jan 1998
 Intensity edited up to and including bin 27 by RK in Apr 1998

Total number of ensembles: 24641
 Interval between ensembles: 20 min
 Original number of bins: 28
 Number of acceptable velocity bins: 23
 Number of acceptable intensity bins: 23

Flagged values have been replaced by error codes: -999.99 for temperature, -999 for velocity and intensity. For observations where velocity is flagged, error codes have been inserted into speed, direction and vertical velocity files

Number of temperature ens. flagged: 0

Below are for each bin listed ensembles flagged for intensity in number and for velocity in number and % of total ens.number. For velocity is also shown the number of gaps of various lengths (gap length = number of consecutive flagged ens.)

Bin	Int. ens. flgd	Velocity ens. flgd	%	Number of velocity gaps of length										
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50	
1	0	349	1	309	20	0	0	0	0	0	0	0	0	0
2	0	321	1	285	18	0	0	0	0	0	0	0	0	0
3	0	359	1	318	16	3	0	0	0	0	0	0	0	0
4	0	316	1	280	13	2	1	0	0	0	0	0	0	0
5	0	391	2	346	18	3	0	0	0	0	0	0	0	0
6	0	333	1	302	14	1	0	0	0	0	0	0	0	0
7	0	421	2	377	16	4	0	0	0	0	0	0	0	0
8	0	443	2	377	24	6	0	0	0	0	0	0	0	0
9	0	410	2	359	19	3	1	0	0	0	0	0	0	0
10	0	430	2	369	24	3	1	0	0	0	0	0	0	0
11	0	322	1	282	17	2	0	0	0	0	0	0	0	0
12	0	312	1	273	15	3	0	0	0	0	0	0	0	0
13	0	380	2	307	30	3	1	0	0	0	0	0	0	0
14	0	646	3	457	44	8	7	3	1	2	0	0	0	0
15	0	832	3	507	52	20	7	1	8	3	1	0	0	0
16	0	1116	5	615	82	20	11	9	10	8	0	0	0	0
17	0	1004	4	477	75	31	7	11	21	3	0	0	0	0
18	0	2094	8	661	112	47	26	28	35	24	9	0	0	0
19	0	3531	14	703	132	55	20	17	46	28	40	12	0	0
20	0	4780	19	807	171	79	28	23	34	24	35	46	0	0
21	0	6168	25	850	235	106	49	24	44	33	18	77	1	1
22	0	8539	35	1083	295	106	67	45	76	40	27	84	10	10
23	0	11712	48	1109	350	151	83	32	96	40	28	79	46	46

Harmonic constants for constituent M2 for deployment NWSC9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	616	159	254	99	250	187	6	32	253	A
02	591	154	255	105	254	187	2	34	255	A
03	566	148	256	108	257	184	1	36	256	C
04	541	144	258	113	259	183	1	38	258	C
05	516	142	260	119	260	185	1	40	260	C
06	491	139	260	123	261	185	1	41	260	C
07	466	133	261	126	264	183	4	43	262	C
08	441	126	263	129	266	180	5	46	264	C
09	416	121	265	133	268	180	5	48	266	C
10	391	118	266	137	269	181	5	49	268	C
11	366	116	268	140	270	182	3	50	269	C
12	341	115	269	144	271	184	3	51	270	C
13	316	113	270	145	272	184	3	52	271	C
14	291	112	270	147	272	185	2	53	271	C
15	266	110	271	149	272	185	1	54	272	C
16	241	110	272	151	273	186	1	54	272	C
17	216	109	272	151	273	186	0	54	272	C
18	191	108	273	155	274	189	0	55	274	C
19	166	107	273	152	275	186	3	55	275	C
20	141	106	274	154	275	188	1	55	275	C
21	116	104	275	156	275	188	1	56	275	A
22	91	103	277	161	275	191	3	57	275	A
23	66	94	279	158	275	184	5	59	276	A

Harmonic constants for constituent S2 for deployment NWSC9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	616	41	298	44	307	59	5	47	303	C
02	591	41	296	43	307	59	6	46	302	C
03	566	41	295	43	306	59	6	46	301	C
04	541	43	297	43	303	61	3	45	300	C
05	516	44	296	43	302	61	4	45	299	C
06	491	44	295	43	300	61	3	44	297	C
07	466	46	293	42	299	62	3	42	296	C
08	441	49	292	40	296	63	2	39	294	C
09	416	51	293	39	293	64	0	37	293	C
10	391	54	297	42	293	68	2	38	296	A
11	366	54	298	44	292	69	3	40	296	A
12	341	54	296	44	291	69	3	39	294	A
13	316	54	295	43	291	69	2	38	294	A
14	291	55	297	43	295	70	1	38	296	A
15	266	55	298	44	295	71	2	39	296	A
16	241	56	298	43	291	71	4	38	295	A
17	216	57	299	43	291	72	5	37	296	A
18	191	55	296	45	297	72	0	39	296	C
19	166	52	293	44	297	68	2	40	295	C
20	141	53	293	42	294	68	1	39	294	C
21	116	56	299	42	293	70	4	36	297	A
22	91	56	301	41	287	69	8	36	296	A
23	66	50	300	40	291	64	4	38	296	A

Harmonic constants for constituent N2 for deployment NWSC9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	616	31	220	12	231	33	2	22	221	C
02	591	29	223	15	239	32	4	27	227	C
03	566	27	226	17	233	33	2	32	228	C
04	541	29	229	19	229	35	0	34	229	A
05	516	28	233	21	232	35	0	37	233	A
06	491	26	235	23	238	35	1	42	236	C
07	466	23	240	24	245	33	2	46	243	C
08	441	21	242	25	250	33	2	50	247	C
09	416	21	248	27	251	34	1	52	250	C
10	391	21	253	30	251	36	1	54	252	A
11	366	24	258	32	247	40	4	54	250	A
12	341	24	262	34	246	41	5	55	252	A
13	316	24	266	36	247	43	7	57	253	A
14	291	25	268	38	246	44	8	58	252	A
15	266	25	269	39	244	46	9	58	251	A
16	241	26	268	39	242	46	10	57	250	A
17	216	27	267	39	241	46	10	56	249	A
18	191	28	270	39	240	46	12	56	250	A
19	166	29	264	39	238	47	10	55	247	A
20	141	27	261	37	238	45	8	54	246	A
21	116	26	258	35	241	43	6	53	247	A
22	91	27	254	37	242	46	5	54	246	A
23	66	29	259	33	246	43	5	49	252	A

Harmonic constants for constituent O1 for deployment NWSC9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	616	11	11	10	34	14	3	43	22	C
02	591	11	13	10	38	14	3	41	24	C
03	566	11	8	10	35	15	3	41	20	C
04	541	12	15	10	43	15	4	38	26	C
05	516	13	30	11	38	17	1	41	34	C
06	491	12	23	10	50	15	3	39	33	C
07	466	12	18	10	54	15	5	37	31	C
08	441	10	19	12	58	15	5	52	43	C
09	416	9	20	11	52	14	4	49	38	C
10	391	11	16	11	41	15	3	45	28	C
11	366	11	20	11	37	15	2	45	28	C
12	341	10	19	10	36	14	2	46	28	C
13	316	9	21	10	40	14	2	50	32	C
14	291	7	24	10	46	12	2	54	38	C
15	266	6	25	10	45	11	2	59	40	C
16	241	5	18	10	47	11	2	65	42	C
17	216	5	7	9	46	10	3	65	39	C
18	191	9	19	11	38	14	2	53	31	C
19	166	12	26	17	49	20	4	56	42	C
20	141	16	29	21	49	26	5	53	42	C
21	116	17	21	19	50	25	6	49	38	C
22	91	21	24	21	55	28	8	45	40	C
23	66	21	28	17	62	26	8	39	41	C

Harmonic constants for constituent K1 for deployment NWSC9606.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	616	7	256	3	249	8	0	21	255	A
02	591	6	246	3	235	7	0	22	244	A
03	566	7	241	2	197	7	1	11	238	A
04	541	7	244	3	215	8	1	21	240	A
05	516	8	242	4	235	9	0	27	240	A
06	491	7	237	3	240	8	0	23	237	C
07	466	6	232	2	225	7	0	16	231	A
08	441	7	228	2	169	7	2	10	225	A
09	416	8	223	3	157	8	3	9	220	A
10	391	7	227	2	181	7	1	11	225	A
11	366	5	236	1	219	5	0	13	235	A
12	341	3	216	1	120	3	1	178	36	A
13	316	2	198	0	89	2	0	175	19	A
14	291	2	188	1	209	2	0	36	195	C
15	266	2	206	3	265	3	1	64	252	C
16	241	3	209	2	196	4	0	32	205	A
17	216	3	171	3	157	5	1	42	165	A
18	191	8	118	3	237	8	3	167	294	C
19	166	17	107	8	302	19	2	154	290	A
20	141	22	112	11	303	24	2	154	294	A
21	116	24	113	13	303	27	2	152	295	A
22	91	21	101	14	299	25	4	146	287	A
23	66	20	100	15	295	25	3	142	286	A

