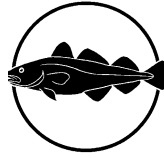


The Faroese Fisheries Laboratory

Fiskirannsóknarstovan



ADCP Deployments in Faroese Waters 1997 - 1999

By

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Introduction

This report documents 16 ADCP deployments in Faroese waters in the period 1997 - 1999. The measurements were acquired at 7 standard mooring sites and 3 special mooring sites (NWFA, NWFC and NWND), all 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.

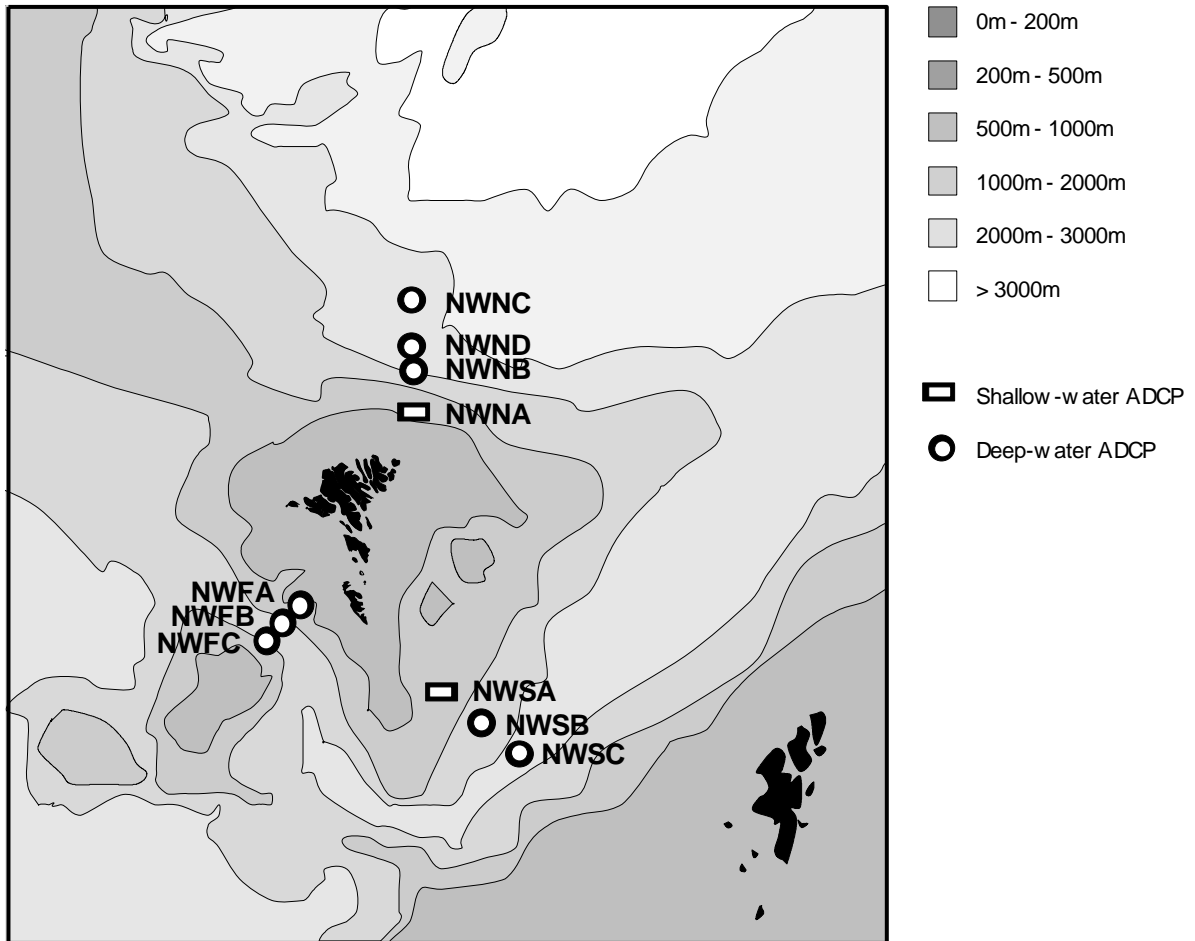


Figure 1. Standard and special ADCP mooring sites in Faroese waters superposed on a map with the bottom topography. Each site is indicated by a four-letter label.

As indicated in Figure 1, two types of moorings have been used. At site NWNA and NWSA, “shallow-water” rigs were used where 150 kHz RDI Broadband ADCP’s were placed on the bottom inside protective frames. For the deployment in 1997 steel frames were used, but for the deployment in 1998 aluminium frames were used instead. 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 (13 – 26) of depth layers (“bins”) which were 25m for the deep-water rigs and 10m for the shallow-water rigs. At 20 minutes intervals the ADCP records the data from all bins into “ensembles”. In these deployments, each ensemble is based only upon one ping. By accident, one of the deployments (NWSC9708) was turned upside down and profiled downwards.

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 in 1997 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 the separate FFL Technical Report No. 99-02. For the deployment in 1998 aluminium frames were used, and these should not influence the compass considerably. To check if the frames had any influence on the compass directions, these moorings were also calibrated by parallel Aanderaa moorings and the details are documented in the separate FFL Technical Report No. 99-04.

Table 1. List of Nordic WOCE ADCP deployments in the period 1997-1999 with information on duration and range of valid data. The last column indicates for three deployments that one of the ADCP beams has been faulty and 3-beam computations have been used and for one deployment, that the ADCP is looking downward. 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
NWFA9807	718	20	1998 07 03-1998 09 12	71	23	126- 676	
NWFB9706	816	20	1997 06 16-1998 06 14	362	23	224- 774	
NWFB9807	818	20	1998 07 03-1998 09 12	71	26	151- 776	
NWFB9809	815	20	1998 09 12-1999 06 13	273	13	473- 773	3-beam
NWFC9807	836	20	1998 07 03-1998 09 12	71	24	219- 794	
NWNA9706	300	20	1997 06 14-1998 06 09	359	24	53- 283	
NWNA9807	297	20	1998 07 07-1999 07 02	360	24	50- 280	
NWNB9706	907	20	1997 06 13-1998 06 13	365	23	73- 623	
NWNB9807	961	20	1998 07 04-1999 06 19	349	25	72- 672	3-beam
NWNC9706	1733	20	1997 06 13-1998 06 13	364	23	73- 623	Aanderaa
NWNC9807	1728	20	1998 07 05-1999 06 19	349	23	69- 619	
NWND9711	1283	20	1997 11 11-1998 06 13	214	23	84- 634	3-beam
NWSA9811	295	20	1998 11 06-1999 06 12	218	24	48- 278	
NWSB9809	782	20	1998 09 13-1999 06 12	271	23	88- 638	
NWSC9708	1068	20	1997 08 01-1998 06 15	318	13	990- 690	Downw.
NWSC9809	1076	20	1998 09 14-1999 06 12	271	23	76- 626	Aanderaa 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. 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.

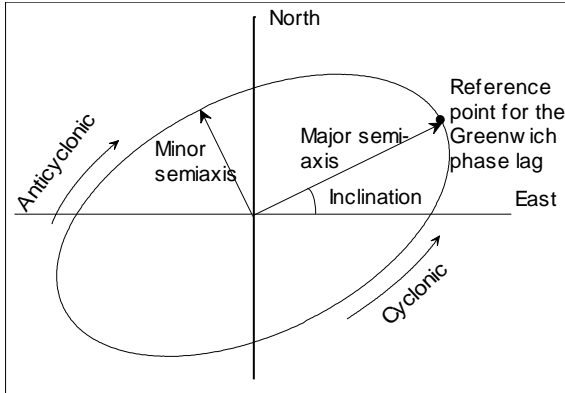


Figure 2. Parameters of the tidal ellipse for a given constituent. The reference point for the Greenwich phase lag is always chosen to be above the east-west axis.

Deployment Id: NWFA9807

Latitude: 61°26.409'N

Longitude: 008°14.560'W

Echo sounding depth: 727m

Bottom depth corr.: 718m

Time of deployment: 03/07 -1998 0750UTC

Time of recovery: 12/09 - 1998 1730UTC

ADCP:

Instrument no.: RDI ADCP 1284

Instrument frequency: 75kHz

Height above bottom: 6m

Depth: 712m (corr.)

Time of first data: 03/07 - 1998 0820UTC

Time of last data: 12/09 - 1998 1720UTC

Sample interval: 20 min

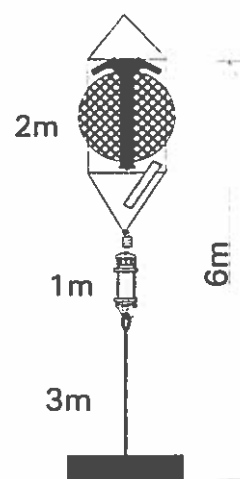
No. of ensembles: 5138

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 676m (corr.)

No. of bins: 28



Deployment: NWFA9807 updated 99/02/01
 Instrument no.: 1284
 Instrument freq.: 75
 Latitude: 61 26.409 N
 Longitude: 08 14.560 W
 Bottom depth: 718
 Instrument depth: 712
 Center depth of first bin: 676
 Bin length: 25
 Number of bins: 23
 Number of first ensemble: 120
 Time of first ensemble: 1998 07 03 08 20
 Number of last ensemble: 5257
 Time of last ensemble: 1998 09 12 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	676	42	935	930	283	994
2	651	67	984	979	285	997
3	626	92	989	985	287	997
4	601	117	970	966	288	999
5	576	142	931	926	290	999
6	551	167	860	852	293	996
7	526	192	751	739	297	991
8	501	217	617	599	301	985
9	476	242	480	456	304	988
10	451	267	369	333	305	988
11	426	292	296	244	305	991
12	401	317	254	189	303	993
13	376	342	233	156	301	994
14	351	367	222	137	300	994
15	326	392	216	121	300	994
16	301	417	211	110	300	993
17	276	442	207	102	300	989
18	251	467	205	96	301	990
19	226	492	204	92	301	986
20	201	517	204	89	301	978
21	176	542	199	83	299	953
22	151	567	191	70	288	826
23	126	592	187	60	266	546

Error statistics for deployment: NWFA9807 updated 99/02/01

Surface distance invalid due to range limitation
 Heading, pitch and roll not edited
 Temperature edited by KMH in Jan 1999
 Velocity edited up to and including bin 24 by KMH in Dec 1998
 Intensity edited up to and including bin 28 by KMH in Jan 1999

Total number of ensembles: 5138
 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										
		ens. flgd	% flgd	1	2	3	4	5	6-10	11-20	21-30	31-50	>50	
1	0	29	1	29	0	0	0	0	0	0	0	0	0	0
2	0	17	0	17	0	0	0	0	0	0	0	0	0	0
3	0	14	0	14	0	0	0	0	0	0	0	0	0	0
4	0	5	0	5	0	0	0	0	0	0	0	0	0	0
5	0	7	0	7	0	0	0	0	0	0	0	0	0	0
6	1	22	0	19	0	1	0	0	0	0	0	0	0	0
7	2	44	1	33	2	1	1	0	0	0	0	0	0	0
8	3	75	1	51	6	1	1	1	0	0	0	0	0	0
9	0	61	1	47	4	2	0	0	0	0	0	0	0	0
10	0	61	1	42	6	1	1	0	0	0	0	0	0	0
11	0	48	1	40	4	0	0	0	0	0	0	0	0	0
12	0	37	1	35	1	0	0	0	0	0	0	0	0	0
13	0	31	1	27	0	0	1	0	0	0	0	0	0	0
14	0	29	1	18	3	0	0	1	0	0	0	0	0	0
15	0	31	1	23	4	0	0	0	0	0	0	0	0	0
16	0	37	1	33	2	0	0	0	0	0	0	0	0	0
17	0	57	1	47	5	0	0	0	0	0	0	0	0	0
18	1	52	1	50	1	0	0	0	0	0	0	0	0	0
19	0	70	1	68	1	0	0	0	0	0	0	0	0	0
20	0	111	2	78	7	3	1	0	1	0	0	0	0	0
21	1	242	5	179	18	7	0	1	0	0	0	0	0	0
22	0	894	17	319	86	40	24	5	19	1	0	0	0	0
23	0	2331	45	409	151	73	42	28	63	16	11	4	0	0

Harmonic constants for constituent M2 for deployment NWFA9807.

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	676	47	79	23	319	49	19	164	265	A
02	651	52	81	27	329	53	25	166	268	A
03	626	50	86	29	343	51	28	169	272	A
04	601	47	96	22	357	47	22	175	279	A
05	576	44	106	14	12	44	14	179	286	A
06	551	37	129	5	229	37	5	179	309	C
07	526	33	162	25	206	38	15	35	177	C
08	501	35	206	47	202	59	2	53	203	A
09	476	47	245	62	200	73	28	56	215	A
10	451	63	267	79	198	85	55	62	217	A
11	426	71	278	98	195	98	70	80	202	A
12	401	72	285	108	194	108	72	91	193	A
13	376	71	291	109	196	109	70	96	192	A
14	351	70	299	105	199	106	68	101	192	A
15	326	74	305	103	202	106	71	107	191	A
16	301	79	310	102	204	107	73	113	188	A
17	276	83	314	103	206	109	74	117	187	A
18	251	87	316	105	207	112	76	120	186	A
19	226	92	319	107	210	116	79	123	186	A
20	201	96	323	110	212	121	82	124	188	A
21	176	99	325	113	213	125	83	125	189	A
22	151	99	324	114	214	125	85	124	189	A
23	126	106	325	114	214	129	87	130	184	A

Harmonic constants for constituent S2 for deployment NWFA9807.

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	676	14	87	20	347	20	14	105	336	A
02	651	21	94	22	354	23	20	123	326	A
03	626	22	106	19	5	23	18	151	310	A
04	601	20	113	14	12	20	13	167	302	A
05	576	18	140	7	26	18	6	171	323	A
06	551	21	167	11	114	22	8	22	158	A
07	526	23	182	16	132	26	11	30	169	A
08	501	22	210	12	171	25	7	25	203	A
09	476	15	275	17	227	21	9	50	247	A
10	451	29	309	29	235	33	25	47	270	A
11	426	32	318	33	235	35	31	53	268	A
12	401	33	331	39	233	39	32	110	216	A
13	376	31	341	39	238	40	29	111	222	A
14	351	31	350	39	247	41	29	112	232	A
15	326	31	355	37	253	38	29	115	233	A
16	301	30	356	34	257	35	29	115	236	A
17	276	28	353	32	256	33	28	109	240	A
18	251	29	351	31	254	32	27	119	228	A
19	226	28	356	30	253	33	26	126	223	A
20	201	28	357	30	254	32	25	125	225	A
21	176	27	359	28	256	30	24	132	220	A
22	151	24	358	26	258	28	22	122	231	A
23	126	21	340	25	249	25	21	93	246	A

Harmonic constants for constituent N2 for deployment NWFA9807.

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	676	14	55	12	349	16	10	37	29	A
02	651	14	55	12	6	17	8	39	35	A
03	626	9	58	8	27	11	3	41	44	A
04	601	3	116	5	140	6	1	62	135	C
05	576	4	191	8	179	9	1	67	181	A
06	551	7	272	11	236	13	4	60	245	A
07	526	9	293	11	234	13	7	56	254	A
08	501	5	284	7	223	8	4	64	237	A
09	476	3	253	5	189	6	3	68	201	A
10	451	6	208	10	160	11	4	63	171	A
11	426	6	207	7	151	8	4	53	172	A
12	401	7	280	8	174	8	6	123	148	A
13	376	11	298	12	180	14	8	126	157	A
14	351	14	287	17	188	17	13	108	174	A
15	326	17	277	21	186	21	17	93	184	A
16	301	21	273	24	187	24	21	74	201	A
17	276	22	274	26	181	26	22	99	174	A
18	251	24	271	27	180	27	24	96	175	A
19	226	26	267	30	180	30	26	80	188	A
20	201	25	268	29	178	29	25	88	180	A
21	176	25	270	28	182	28	25	82	189	A
22	151	23	279	25	178	26	21	120	153	A
23	126	17	284	18	192	18	17	124	159	A

Harmonic constants for constituent O1 for deployment NWFA9807.

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	676	25	293	3	213	25	3	1	293	A
02	651	28	292	5	209	28	5	1	292	A
03	626	27	297	4	197	27	4	178	117	A
04	601	26	300	5	148	26	2	171	120	A
05	576	25	320	5	62	25	5	177	139	C
06	551	28	328	6	30	28	5	6	329	C
07	526	32	337	4	90	32	4	177	157	C
08	501	33	341	7	98	33	6	174	160	C
09	476	30	357	5	83	30	5	1	357	C
10	451	25	352	4	130	25	3	173	171	C
11	426	22	342	7	136	23	3	165	160	C
12	401	17	347	3	121	17	2	174	166	C
13	376	12	355	3	73	12	3	3	356	C
14	351	15	341	6	95	15	5	170	158	C
15	326	18	338	9	100	19	7	163	152	C
16	301	19	343	8	107	20	7	164	157	C
17	276	19	344	7	104	19	6	169	160	C
18	251	20	347	6	108	20	5	170	164	C
19	226	18	353	8	127	19	5	163	168	C
20	201	18	2	5	103	18	5	177	182	C
21	176	17	12	6	87	17	5	5	14	C
22	151	21	15	7	160	22	4	165	193	C
23	126	22	18	12	170	24	5	153	192	C

Harmonic constants for constituent K1 for deployment NWFA9807.

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	676	20	203	2	111	20	2	180	23	A
02	651	24	206	3	70	24	2	176	26	A
03	626	24	210	3	41	24	1	172	30	A
04	601	23	215	4	41	23	0	171	35	A
05	576	24	213	6	25	25	1	167	33	C
06	551	21	214	8	49	23	2	159	36	A
07	526	20	214	12	31	24	0	149	33	C
08	501	17	227	14	52	22	1	140	49	A
09	476	12	246	17	70	21	1	125	69	A
10	451	7	206	18	78	18	5	104	74	A
11	426	11	191	17	74	18	9	112	62	A
12	401	12	234	17	78	20	4	126	70	A
13	376	14	253	13	94	19	4	138	83	A
14	351	15	274	10	111	17	2	146	99	A
15	326	15	287	9	137	17	4	150	115	A
16	301	14	290	10	122	17	2	146	114	A
17	276	14	295	10	116	18	0	144	115	A
18	251	13	289	10	116	16	1	143	112	A
19	226	14	282	9	115	17	2	149	105	A
20	201	16	282	9	117	18	2	151	106	A
21	176	13	289	10	117	16	1	142	112	A
22	151	11	275	10	115	14	3	138	104	A
23	126	13	258	14	112	18	6	131	97	A

Deployment Id: NWFB9706

Latitude: 61°24.980'N

Longitude: 008°16.980'W

Echo sounding depth: 825m

Bottom depth corr.: 816m

Time of deployment: 16/06 -1997 1535UTC

Time of recovery: 14/06 - 1998 1400UTC

ADCP:

Instrument no.: RDI ADCP 1292

Instrument frequency: 75kHz

Height above bottom: 6m

Depth: 810m (corr.)

Time of first data: 16/06 - 1997 1540UTC

Time of last data: 14/06 - 1998 1320UTC

Sample interval: 20 min

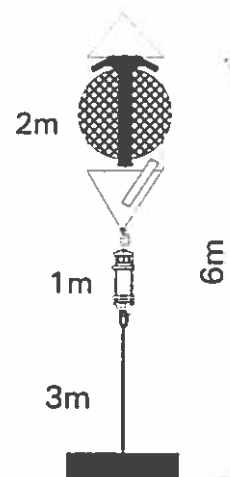
No. of ensembles: 26130

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 774 (corr.)

No. of bins: 28



Deployment: NWFB9706 updated 99/02/01
 Instrument no.: 1292
 Instrument freq.: 75
 Latitude: 61 24.980 N
 Longitude: 08 16.980 W
 Bottom depth: 816
 Instrument depth: 810
 Center depth of first bin: 774
 Bin length: 25
 Number of bins: 23
 Number of first ensemble: 573
 Time of first ensemble: 1997 06 16 15 40
 Number of last ensemble: 26702
 Time of last ensemble: 1998 06 14 13 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	774	42	986	976	306	991
2	749	67	1052	1043	309	995
3	724	92	1077	1069	311	995
4	699	117	1081	1074	312	994
5	674	142	1073	1066	313	994
6	649	167	1045	1037	314	990
7	624	192	979	969	316	986
8	599	217	856	840	319	977
9	574	242	681	654	323	959
10	549	267	499	449	327	956
11	524	292	360	279	332	963
12	499	317	282	171	336	975
13	474	342	244	110	341	983
14	449	367	226	74	347	986
15	424	392	219	53	355	984
16	399	417	217	41	5	985
17	374	442	216	34	14	977
18	349	467	216	30	23	941
19	324	492	216	28	32	873
20	299	517	217	26	39	794
21	274	542	219	26	45	702
22	249	567	220	28	43	591
23	224	592	223	28	32	482

Error statistics for deployment: NWFB9706 updated 99/02/01

Surface distance invalid due to range limitation
 Heading, pitch and roll not edited
 Temperature edited by KMHL in Jan 1999
 Velocity edited up to and including bin 23 by KMHL in Jan 1999
 Intensity edited up to and including bin 28 by KMHL in Jan 1999

Total number of ensembles: 26130
 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: 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	0	223	1	203	10	0	0	0	0	0	0	0	0	0	0
2	0	123	0	119	2	0	0	0	0	0	0	0	0	0	0
3	0	140	1	136	2	0	0	0	0	0	0	0	0	0	0
4	0	148	1	140	4	0	0	0	0	0	0	0	0	0	0
5	0	147	1	121	7	0	1	0	1	0	0	0	0	0	0
6	1	251	1	172	18	6	2	2	1	0	0	0	0	0	0
7	1	375	1	269	28	8	1	3	1	0	0	0	0	0	0
8	0	606	2	466	47	11	2	1	0	0	0	0	0	0	0
9	0	1079	4	825	85	23	2	0	1	0	0	0	0	0	0
10	0	1153	4	841	114	19	5	1	0	0	0	0	0	0	0
11	0	966	4	710	94	17	3	1	0	0	0	0	0	0	0
12	0	645	2	499	50	8	3	2	0	0	0	0	0	0	0
13	0	457	2	374	27	3	1	2	1	0	0	0	0	0	0
14	0	357	1	291	24	6	0	0	0	0	0	0	0	0	0
15	0	418	2	317	30	6	4	0	1	0	0	0	0	0	0
16	0	390	1	296	29	5	0	3	1	0	0	0	0	0	0
17	0	600	2	421	57	9	4	2	2	0	0	0	0	0	0
18	0	1552	6	672	150	49	31	16	22	4	0	0	0	0	0
19	0	3318	13	981	244	73	41	29	65	32	12	2	0	0	0
20	0	5382	21	1245	332	112	78	34	93	61	22	15	0	0	0
21	0	7787	30	1564	398	171	85	55	137	81	24	15	7	0	0
22	0	10689	41	1707	548	234	110	78	156	85	25	20	16	0	0
23	0	13537	52	1576	541	263	158	86	167	84	40	17	29	0	0

Harmonic constants for constituent M2 for deployment NWFB9706.

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	774	26	57	22	327	26	22	1	56	A
02	749	29	61	22	325	29	21	169	249	A
03	724	29	67	21	321	30	19	161	260	A
04	699	27	76	19	323	29	17	157	270	A
05	674	27	89	17	315	30	11	151	281	A
06	649	26	108	18	299	31	3	145	291	A
07	624	28	136	20	288	34	8	145	307	C
08	599	34	164	21	278	36	18	160	333	C
09	574	40	195	18	257	41	15	14	200	C
10	549	50	228	29	197	56	13	28	221	A
11	524	67	246	57	178	73	48	33	223	A
12	499	74	253	80	174	84	69	55	203	A
13	474	75	257	94	173	95	74	77	184	A
14	449	73	262	97	174	97	73	85	178	A
15	424	72	266	97	178	97	72	87	180	A
16	399	72	270	98	181	98	72	90	181	A
17	374	72	274	98	182	98	72	92	181	A
18	349	72	276	98	184	98	71	93	182	A
19	324	72	278	98	185	98	71	95	182	A
20	299	71	280	101	187	101	71	95	183	A
21	274	70	282	102	188	103	69	96	184	A
22	249	72	285	97	190	97	71	99	184	A
23	224	74	290	99	190	101	72	105	179	A

Harmonic constants for constituent S2 for deployment NWFB9706.

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	774	15	109	12	26	15	12	13	99	A
02	749	17	113	13	25	17	13	3	111	A
03	724	16	117	10	20	16	10	173	302	A
04	699	13	120	9	11	13	8	161	311	A
05	674	12	132	8	358	13	5	149	325	A
06	649	13	166	8	343	15	0	151	345	C
07	624	19	195	9	344	20	4	158	11	C
08	599	18	219	8	338	19	7	166	33	C
09	574	19	257	5	258	20	0	14	257	C
10	549	26	282	15	202	26	15	9	277	A
11	524	28	292	27	206	28	26	35	259	A
12	499	26	296	32	210	33	26	80	218	A
13	474	26	299	34	215	35	26	78	224	A
14	449	26	301	35	220	36	25	77	229	A
15	424	24	303	36	223	37	24	78	230	A
16	399	24	307	36	223	37	23	83	228	A
17	374	23	310	36	224	36	23	86	226	A
18	349	23	315	34	226	34	23	89	226	A
19	324	23	318	32	227	32	23	91	226	A
20	299	22	320	30	234	30	22	85	237	A
21	274	21	323	29	235	29	20	87	237	A
22	249	22	323	29	233	29	22	90	233	A
23	224	21	333	34	236	34	21	97	231	A

Harmonic constants for constituent N2 for deployment NWFB9706.

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	774	8	48	7	279	10	5	140	249	A
02	749	9	40	7	280	11	6	147	240	A
03	724	9	42	8	271	11	5	142	242	A
04	699	10	48	7	267	12	4	147	240	A
05	674	8	66	7	258	10	1	141	251	A
06	649	8	99	6	246	10	3	144	268	C
07	624	10	119	7	244	11	5	155	287	C
08	599	14	139	4	253	14	4	172	317	C
09	574	17	142	2	294	18	1	174	322	C
10	549	13	141	3	258	13	2	175	320	C
11	524	7	183	6	158	9	2	38	173	A
12	499	9	237	15	153	15	9	85	156	A
13	474	13	247	21	153	21	13	93	151	A
14	449	15	244	23	155	23	15	88	157	A
15	424	16	241	23	155	23	16	85	158	A
16	399	16	240	23	155	23	16	83	160	A
17	374	16	239	21	155	22	16	81	161	A
18	349	14	239	21	158	21	14	80	165	A
19	324	14	242	21	160	21	14	81	166	A
20	299	16	251	22	160	22	16	92	159	A
21	274	17	258	24	167	24	17	91	166	A
22	249	18	260	24	172	24	18	86	175	A
23	224	18	260	24	186	25	16	69	200	A

Harmonic constants for constituent O1 for deployment NWFB9706.

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	774	18	315	12	161	21	4	148	143	A
02	749	19	318	12	158	23	4	148	144	A
03	724	20	318	14	150	24	2	146	142	A
04	699	20	320	13	150	24	2	147	143	A
05	674	18	322	13	154	22	2	145	146	A
06	649	20	329	14	154	25	1	145	151	A
07	624	25	335	19	155	32	0	142	155	C
08	599	34	341	27	161	43	0	142	161	C
09	574	35	343	35	165	50	1	135	164	A
10	549	24	347	33	166	41	0	126	166	C
11	524	16	358	25	170	30	2	123	173	C
12	499	12	10	19	178	22	2	123	181	C
13	474	11	16	17	185	21	2	122	188	C
14	449	11	25	17	191	20	2	123	195	C
15	424	11	25	15	195	19	2	125	198	C
16	399	11	27	14	193	18	2	127	198	C
17	374	11	23	15	189	18	2	126	194	C
18	349	10	15	16	184	19	2	122	187	C
19	324	12	11	18	178	21	2	123	182	C
20	299	11	8	19	176	22	2	121	179	C
21	274	10	16	17	172	20	4	120	178	C
22	249	12	20	20	178	23	4	119	183	C
23	224	14	17	26	177	29	4	117	181	C

Harmonic constants for constituent K1 for deployment NWFB9706.

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	774	14	215	16	37	21	0	131	36	A
02	749	15	214	16	35	22	0	132	34	A
03	724	15	219	17	35	23	1	132	37	C
04	699	16	219	18	35	24	1	131	37	C
05	674	17	217	19	39	25	1	133	38	A
06	649	17	219	20	39	26	0	132	39	C
07	624	19	231	22	40	29	3	131	44	C
08	599	25	244	26	46	36	6	134	55	C
09	574	26	256	31	54	40	7	130	63	C
10	549	21	265	30	66	36	6	125	72	C
11	524	17	271	27	73	32	5	122	78	C
12	499	16	278	24	71	28	6	122	79	C
13	474	13	288	21	69	24	7	118	78	C
14	449	12	289	20	68	22	7	117	77	C
15	424	10	293	21	69	22	6	111	75	C
16	399	8	290	22	67	23	5	106	71	C
17	374	8	289	25	67	26	5	105	71	C
18	349	9	275	25	67	26	4	107	70	C
19	324	9	269	25	70	26	3	109	73	C
20	299	10	266	20	77	22	1	115	78	C
21	274	12	279	17	85	21	2	125	89	C
22	249	12	294	16	82	19	5	126	93	C
23	224	11	288	15	92	18	2	126	98	C

Deployment Id: NWFB9807

Latitude: 61°24.930'N

Longitude: 008°17.340'W

Echo sounding depth: 827m

Bottom depth corr.: 818m

Time of deployment: 03/07 -1998 0730UTC

Time of recovery: 12/09 - 1998 1635UTC

ADCP:

Instrument no.: RDI ADCP 1292

Instrument frequency: 75kHz

Height above bottom: 6m

Depth: 812m (corr.)

Time of first data: 03/07 - 1998 0820UTC

Time of last data: 12/09 - 1998 1540UTC

Sample interval: 20 min

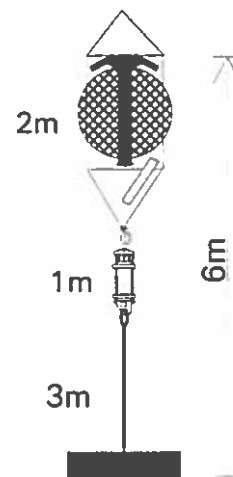
No. of ensembles: 5135

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 776m (corr.)

No. of bins: 28



Deployment: NWFB9807 updated 99/02/01
 Instrument no.: 1292
 Instrument freq.: 75
 Latitude: 61 24.930 N
 Longitude: 08 17.340 W
 Bottom depth: 818
 Instrument depth: 812
 Center depth of first bin: 776
 Bin length: 25
 Number of bins: 26
 Number of first ensemble: 120
 Time of first ensemble: 1998 07 03 08 20
 Number of last ensemble: 5254
 Time of last ensemble: 1998 09 12 15 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	776	42	1000	995	307	989
2	751	67	1072	1068	309	992
3	726	92	1101	1097	311	993
4	701	117	1108	1105	313	993
5	676	142	1104	1101	313	996
6	651	167	1089	1086	314	994
7	626	192	1046	1041	315	987
8	601	217	947	939	318	984
9	576	242	774	761	322	975
10	551	267	564	540	326	972
11	526	292	391	345	328	969
12	501	317	287	212	330	977
13	476	342	233	127	334	984
14	451	367	207	74	338	990
15	426	392	197	45	350	990
16	401	417	192	28	13	992
17	376	442	191	20	43	993
18	351	467	190	18	71	994
19	326	492	189	19	90	990
20	301	517	189	24	101	981
21	276	542	189	30	104	966
22	251	567	190	33	110	943
23	226	592	190	32	113	900
24	201	617	187	31	119	860
25	176	642	184	32	132	764
26	151	667	188	54	157	463

Surface distance invalid due to range limitation
 Heading, pitch and roll not edited
 Temperature edited by KMHL in Jan 1999
 Velocity edited up to and including bin 26 by KMHL in Jan 1999
 Intensity edited up to and including bin 28 by KMHL in Jan 1999

Total number of ensembles: 5135
 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	0	55	1	53	1	0	0	0	0	0	0	0	0	0
2	0	39	1	34	1	1	0	0	0	0	0	0	0	0
3	0	37	1	33	2	0	0	0	0	0	0	0	0	0
4	0	35	1	33	1	0	0	0	0	0	0	0	0	0
5	0	21	0	17	2	0	0	0	0	0	0	0	0	0
6	0	29	1	23	3	0	0	0	0	0	0	0	0	0
7	0	69	1	45	6	4	0	0	0	0	0	0	0	0
8	0	81	2	65	5	2	0	0	0	0	0	0	0	0
9	0	129	3	98	9	3	1	0	0	0	0	0	0	0
10	1	142	3	100	15	4	0	0	0	0	0	0	0	0
11	0	158	3	107	16	2	2	1	0	0	0	0	0	0
12	0	116	2	94	11	0	0	0	0	0	0	0	0	0
13	0	80	2	60	7	2	0	0	0	0	0	0	0	0
14	0	49	1	47	1	0	0	0	0	0	0	0	0	0
15	0	51	1	46	1	1	0	0	0	0	0	0	0	0
16	0	39	1	32	2	1	0	0	0	0	0	0	0	0
17	0	36	1	30	3	0	0	0	0	0	0	0	0	0
18	0	30	1	26	2	0	0	0	0	0	0	0	0	0
19	0	53	1	47	3	0	0	0	0	0	0	0	0	0
20	0	97	2	63	6	3	0	0	2	0	0	0	0	0
21	0	177	3	92	13	3	1	0	3	0	1	0	0	0
22	1	295	6	117	25	10	1	0	4	2	0	1	0	0
23	0	513	10	165	32	10	9	3	14	2	1	1	0	0
24	0	720	14	209	68	15	12	3	17	7	1	0	0	0
25	2	1211	24	430	108	55	25	8	18	5	3	0	0	0
26	2	2760	54	429	208	104	61	49	82	26	4	1	0	0

Harmonic constants for constituent M2 for deployment NWFB9807.

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	776	29	67	24	345	29	23	19	52	A
02	751	34	75	25	340	34	24	172	261	A
03	726	33	77	24	333	34	22	162	269	A
04	701	30	81	24	324	33	19	149	280	A
05	676	29	93	22	317	34	13	145	288	A
06	651	28	108	22	304	35	5	141	294	A
07	626	28	124	29	293	40	4	134	298	C
08	601	27	140	38	282	44	14	123	294	C
09	576	32	174	41	271	41	31	102	280	C
10	551	44	217	37	238	57	10	40	225	C
11	526	68	237	52	189	79	34	34	222	A
12	501	83	244	81	169	92	71	43	208	A
13	476	81	248	96	165	97	79	72	180	A
14	451	74	254	97	168	97	73	83	173	A
15	426	68	261	95	171	95	68	89	172	A
16	401	64	267	94	175	94	64	92	174	A
17	376	64	272	93	178	93	64	94	175	A
18	351	66	274	96	181	96	66	95	177	A
19	326	66	278	99	182	100	66	97	178	A
20	301	66	280	99	184	99	66	97	180	A
21	276	67	284	101	187	101	67	98	182	A
22	251	70	286	103	188	104	69	100	181	A
23	226	74	291	106	190	108	72	103	181	A
24	201	75	293	106	192	108	72	104	182	A
25	176	72	297	106	194	108	69	104	185	A
26	151	79	302	103	192	110	70	116	175	A

Harmonic constants for constituent S2 for deployment NWFB9807.

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	776	10	78	7	341	10	7	172	264	A
02	751	11	70	8	345	11	7	7	65	A
03	726	12	74	8	331	12	8	164	264	A
04	701	13	82	8	334	13	7	165	270	A
05	676	10	92	7	320	12	5	151	285	A
06	651	9	141	2	312	9	0	167	321	C
07	626	18	159	3	128	18	1	7	159	A
08	601	23	148	5	14	23	3	172	330	A
09	576	22	153	7	351	23	2	164	334	A
10	551	11	162	7	260	11	6	172	338	C
11	526	13	263	15	210	18	9	53	231	A
12	501	19	275	25	207	27	16	63	224	A
13	476	20	280	33	205	33	19	77	212	A
14	451	21	289	33	210	34	20	79	217	A
15	426	24	304	37	212	37	24	92	211	A
16	401	25	309	39	213	39	25	96	209	A
17	376	26	309	39	214	39	26	96	210	A
18	351	26	316	39	216	40	26	101	209	A
19	326	26	322	39	223	40	25	100	217	A
20	301	25	327	39	225	40	24	101	219	A
21	276	21	326	38	229	38	21	96	225	A
22	251	19	329	35	229	35	19	97	226	A
23	226	20	334	36	231	37	19	100	226	A
24	201	20	334	39	238	39	19	94	236	A
25	176	21	345	38	243	38	21	99	238	A
26	151	24	334	36	244	36	24	90	244	A

Harmonic constants for constituent N2 for deployment NWFB9807.

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	776	8	337	3	307	8	2	22	333	A
02	751	7	351	3	266	7	3	2	351	A
03	726	6	2	2	256	6	2	174	183	A
04	701	7	349	5	276	7	5	22	334	A
05	676	7	6	7	274	7	7	118	247	A
06	651	7	50	8	286	9	5	132	261	A
07	626	9	89	8	277	12	1	136	273	A
08	601	10	150	7	247	10	7	172	325	C
09	576	10	162	4	221	11	4	13	166	C
10	551	6	155	8	201	9	4	59	188	C
11	526	9	198	9	159	12	4	47	177	A
12	501	11	199	13	135	15	9	54	159	A
13	476	12	187	11	132	14	7	43	161	A
14	451	11	194	13	138	15	8	52	160	A
15	426	12	217	15	154	17	10	59	174	A
16	401	15	235	18	158	19	14	68	174	A
17	376	18	241	22	158	22	17	74	171	A
18	351	19	244	24	154	24	19	90	154	A
19	326	22	247	24	155	24	21	101	145	A
20	301	23	251	24	155	25	22	127	122	A
21	276	25	247	27	159	27	24	74	174	A
22	251	24	247	27	161	28	23	78	172	A
23	226	23	253	24	165	24	23	55	199	A
24	201	21	254	23	167	23	20	73	182	A
25	176	17	260	18	168	18	17	115	144	A
26	151	16	279	13	206	17	12	28	259	A

Harmonic constants for constituent O1 for deployment NWFB9807.

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	776	10	290	12	147	15	5	128	133	A
02	751	10	286	10	143	14	4	133	126	A
03	726	12	286	11	132	16	4	138	117	A
04	701	13	299	10	141	17	3	143	127	A
05	676	17	309	10	126	20	0	149	128	C
06	651	18	314	11	117	21	3	148	129	C
07	626	21	326	11	126	24	3	154	142	C
08	601	31	325	15	124	34	5	155	141	C
09	576	33	320	22	118	40	7	147	133	C
10	551	29	324	27	131	40	4	137	138	C
11	526	25	328	28	136	37	4	131	141	C
12	501	20	334	21	158	29	1	134	156	A
13	476	17	333	20	167	25	3	130	161	A
14	451	9	316	19	161	21	4	115	156	A
15	426	7	324	18	156	19	1	112	155	A
16	401	7	13	18	170	19	3	110	173	C
17	376	13	19	18	189	22	2	125	192	C
18	351	13	17	18	189	22	1	127	192	C
19	326	14	6	16	186	21	0	131	186	A
20	301	14	6	15	186	21	0	133	186	A
21	276	14	7	16	190	21	0	130	189	A
22	251	10	12	15	187	18	1	125	188	C
23	226	13	0	17	196	22	3	128	190	A
24	201	12	2	15	205	19	4	129	195	A
25	176	14	27	16	221	21	3	130	215	A
26	151	10	44	10	168	12	7	138	198	C

Harmonic constants for constituent K1 for deployment NWFB9807.

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	776	12	219	10	53	15	2	140	45	A
02	751	13	223	9	45	16	0	147	43	A
03	726	13	224	11	34	17	1	142	40	C
04	701	13	224	12	34	18	2	137	40	C
05	676	12	221	12	40	17	0	133	40	C
06	651	14	230	13	48	19	0	136	49	C
07	626	16	233	14	38	22	3	139	47	C
08	601	20	236	16	48	25	2	141	53	C
09	576	22	246	20	66	30	0	137	66	A
10	551	17	239	24	75	29	4	125	70	A
11	526	9	244	23	75	25	2	111	74	A
12	501	7	279	18	85	19	2	110	87	C
13	476	10	270	16	90	19	0	120	90	C
14	451	9	249	14	95	17	3	122	88	A
15	426	9	248	10	79	13	1	132	74	A
16	401	9	252	7	82	12	1	141	76	A
17	376	12	247	9	94	15	3	145	76	A
18	351	12	254	10	90	15	2	141	80	A
19	326	9	259	9	87	13	1	135	83	A
20	301	7	273	11	87	12	1	122	89	C
21	276	7	276	9	79	11	2	126	85	C
22	251	6	257	9	76	10	0	124	76	C
23	226	7	259	7	92	10	1	136	85	A
24	201	12	273	6	97	13	0	152	94	A
25	176	7	277	12	103	14	1	122	101	A
26	151	7	223	11	133	11	7	90	133	A

Deployment Id: NWFB9809

Latitude: 61°24.950'N

Longitude: 008°17.130'W

Echo sounding depth: 824m

Bottom depth corr.: 815m

Time of deployment: 12/09 -1998 1635UTC

Time of recovery: 13/06 - 1999 0640UTC

ADCP:

Instrument no.: RDI ADCP 1578

Instrument frequency: 75kHz

Height above bottom: 6m

Depth: 809m (corr.)

Time of first data: 12/09 - 1998 1700UTC

Time of last data: 13/06 - 1999 0620UTC

Sample interval: 20 min

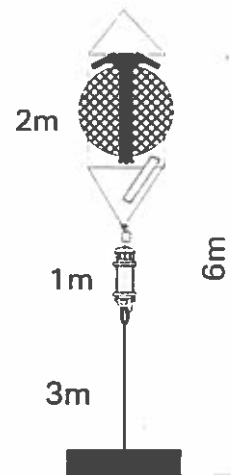
No. of ensembles: 19697

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 773m (corr.)

No. of bins: 28



Deployment: NWFB9809 updated 1999/09/17
 Instrument no.: 1578
 Instrument freq.: 75
 Latitude: 61 24.950 N
 Longitude: 08 17.130 W
 Bottom depth: 815
 Instrument depth: 809
 Center depth of first bin: 773
 Bin length: 25
 Number of bins: 13
 Number of first ensemble: 163
 Time of first ensemble: 1998 09 12 17 00
 Number of last ensemble: 19859
 Time of last ensemble: 1999 06 13 06 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	773	42	920	912	301	981
2	748	67	974	966	303	989
3	723	92	992	984	305	991
4	698	117	986	978	306	988
5	673	142	964	953	307	979
6	648	167	932	917	307	982
7	623	192	866	847	309	985
8	598	217	761	731	311	988
9	573	242	635	587	314	991
10	548	267	510	442	317	992
11	523	292	404	318	321	989
12	498	317	331	230	324	987
13	473	342	303	191	327	981

Error statistics for deployment: NWFB9809 updated 1999/09/17

Surface distance invalid due to range limitation

Heading, pitch and roll not edited

Temperature edited by MCP in July 1999

Velocity edited up to and including bin 24 by MCP in July 1999

Intensity edited up to and including bin 25 by MCP in July 1999

Beam 1 was defective, so only the other three beams went into the analysis.
The data was very noisy above bin 13.

Total number of ensembles: 19697
Interval between ensembles: 20 min
Original number of bins: 28
Number of acceptable velocity bins: 13
Number of acceptable intensity bins: 13

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	369	2	358	4	1	0	0	0	0	0	0	0	0
2	2	226	1	220	3	0	0	0	0	0	0	0	0	0
3	1	179	1	179	0	0	0	0	0	0	0	0	0	0
4	0	244	1	233	4	1	0	0	0	0	0	0	0	0
5	1	408	2	344	27	2	1	0	0	0	0	0	0	0
6	0	355	2	314	15	2	0	1	0	0	0	0	0	0
7	0	289	1	259	10	2	1	0	0	0	0	0	0	0
8	0	227	1	211	8	0	0	0	0	0	0	0	0	0
9	0	168	1	161	2	1	0	0	0	0	0	0	0	0
10	0	163	1	155	4	0	0	0	0	0	0	0	0	0
11	2	223	1	204	8	1	0	0	0	0	0	0	0	0
12	1	247	1	235	6	0	0	0	0	0	0	0	0	0
13	2	383	2	299	30	4	3	0	0	0	0	0	0	0

Deployment: NWFB9809

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	773	981	981	981	981	974	947	877	741	541	326	153	49	9	1	0	0	0	0
2	748	989	989	989	988	984	967	922	821	660	455	252	101	22	4	0	0	0	0
3	723	991	991	991	991	987	971	928	839	687	494	296	129	36	6	1	0	0	0
4	698	988	988	988	986	980	961	914	823	670	479	290	130	37	8	2	1	0	0
5	673	979	978	976	972	964	937	876	779	623	441	265	120	34	8	2	1	0	0
6	648	981	977	971	964	948	912	836	722	563	396	243	111	32	7	1	1	0	0
7	623	980	968	950	931	901	843	742	614	467	328	201	92	27	6	1	0	0	0
8	598	972	937	900	851	781	698	597	477	357	242	138	59	18	3	1	0	0	0
9	573	964	894	805	709	617	531	438	337	240	150	79	33	9	2	0	0	0	0
10	548	940	824	692	568	458	366	278	199	125	68	31	11	3	1	0	0	0	0
11	523	910	742	570	428	311	220	145	89	49	23	8	3	0	0	0	0	0	0
12	498	885	672	474	311	192	119	68	35	17	7	3	1	0	0	0	0	0	0
13	473	867	628	408	246	142	83	51	29	17	10	5	2	1	0	0	0	0	0

Harmonic constants for constituent M2 for deployment NWFB9809.

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	27	65	17	344	27	17	9	59	A
02	748	29	69	16	348	29	16	7	65	A
03	723	29	75	14	349	29	14	2	74	A
04	698	26	83	9	338	26	9	174	265	A
05	673	20	97	4	308	20	2	170	278	A
06	648	15	131	9	201	15	8	17	140	C
07	623	21	183	14	192	25	2	34	186	C
08	598	32	204	21	200	38	1	33	203	A
09	573	39	229	33	194	49	15	39	215	A
10	548	46	253	50	190	58	35	50	216	A
11	523	54	265	70	187	72	51	71	201	A
12	498	60	269	85	186	85	60	81	192	A
13	473	63	268	84	189	86	60	74	200	A

Harmonic constants for constituent S2 for deployment NWFB9809.

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	14	108	9	52	15	7	24	97	A
02	748	14	114	7	51	15	6	16	107	A
03	723	16	121	6	40	16	6	4	119	A
04	698	13	125	5	10	13	5	168	310	A
05	673	6	138	4	331	7	1	149	321	A
06	648	1	207	5	261	5	1	79	258	C
07	623	4	223	11	261	11	2	72	257	C
08	598	10	261	15	256	18	1	56	257	A
09	573	19	285	20	233	25	12	49	256	A
10	548	23	294	27	227	30	19	55	252	A
11	523	25	299	30	225	32	23	60	248	A
12	498	24	296	28	227	31	20	58	249	A
13	473	22	262	17	268	27	1	37	264	C

Harmonic constants for constituent N2 for deployment NWFB9809.

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	29	7	257	8	4	132	235	A
02	748	7	21	7	258	9	5	138	227	A
03	723	9	29	7	269	10	5	146	230	A
04	698	9	46	8	277	11	5	140	248	A
05	673	10	69	6	294	11	4	154	258	A
06	648	10	74	4	134	10	3	12	79	C
07	623	11	93	7	117	13	2	29	99	C
08	598	18	115	6	334	18	4	165	298	A
09	573	16	131	4	343	17	2	167	312	A
10	548	13	169	5	122	14	3	14	165	A
11	523	15	211	13	135	16	12	32	186	A
12	498	15	227	16	132	16	15	113	111	A
13	473	13	242	16	140	16	12	114	121	A

Harmonic constants for constituent O1 for deployment NWFB9809.

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	22	329	7	142	23	1	162	148	C
02	748	24	328	7	147	25	0	164	148	C
03	723	25	331	10	157	27	1	159	152	A
04	698	26	333	12	149	29	1	155	153	C
05	673	27	336	12	135	30	4	157	153	C
06	648	30	343	13	146	32	3	158	160	C
07	623	32	354	13	167	35	2	158	173	C
08	598	32	1	19	171	37	3	149	178	C
09	573	32	360	23	177	40	1	144	179	C
10	548	30	0	21	184	37	1	145	181	A
11	523	25	352	19	163	32	2	143	169	C
12	498	19	334	16	138	25	3	139	147	C
13	473	19	335	23	134	29	5	130	143	C

Harmonic constants for constituent K1 for deployment NWFB9809.

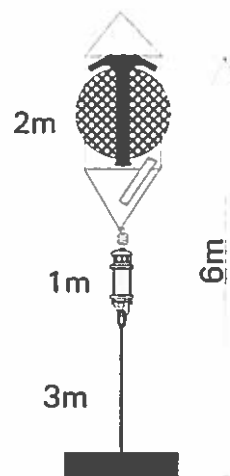
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	773	22	247	12	61	26	1	151	65	C
02	748	26	243	13	57	29	1	153	62	C
03	723	26	245	14	58	29	2	151	64	C
04	698	25	248	14	58	28	2	151	65	C
05	673	25	249	13	70	28	0	152	69	A
06	648	25	260	13	94	28	3	153	83	A
07	623	30	270	17	97	34	2	150	92	A
08	598	32	269	20	90	38	0	148	90	A
09	573	29	262	25	64	38	6	139	74	C
10	548	30	262	29	65	41	6	136	74	C
11	523	29	267	27	76	40	4	137	82	C
12	498	20	275	20	81	28	4	134	88	C
13	473	12	357	12	215	16	6	134	196	A

Deployment Id: NWFC9807

Latitude: 61°23.609'N
Longitude: 008°18.957'W
Echo sounding depth: 845m
Bottom depth corr.: 836m
Time of deployment: 03/07 -1998 0700UTC
Time of recovery: 12/09 - 1998 1500UTC

ADCP:

Instrument no.: RDI ADCP 1285
Instrument frequency: 75kHz
Height above bottom: 6m
Depth: 830m (corr.)
Time of first data: 03/07 - 1998 0740UTC
Time of last data: 12/09 - 1998 1420UTC
Sample interval: 20 min
No. of ensembles: 5133
Pings per ens.: 1
Binlength: 25m
Depth of first bin: 794m (corr.)
No. of bins: 28



Deployment: NWFC9807 updated 99/02/01
 Instrument no.: 1285
 Instrument freq.: 75
 Latitude: 61 23.609 N
 Longitude: 08 18.957 W
 Bottom depth: 836
 Instrument depth: 830
 Center depth of first bin: 794
 Bin length: 25
 Number of bins: 24
 Number of first ensemble: 118
 Time of first ensemble: 1998 07 03 07 40
 Number of last ensemble: 5250
 Time of last ensemble: 1998 09 12 14 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	794	42	1058	1054	297	933
2	769	67	1115	1112	299	952
3	744	92	1127	1124	301	957
4	719	117	1118	1115	302	944
5	694	142	1104	1101	302	927
6	669	167	1046	1042	303	913
7	644	192	894	885	304	894
8	619	217	652	622	308	864
9	594	242	407	327	313	853
10	569	267	270	130	326	898
11	544	292	215	38	20	938
12	519	317	200	54	94	964
13	494	342	197	77	106	973
14	469	367	196	88	111	982
15	444	392	197	96	113	985
16	419	417	198	100	113	982
17	394	442	201	105	114	984
18	369	467	201	106	115	983
19	344	492	201	106	117	976
20	319	517	204	108	118	972
21	294	542	205	109	118	953
22	269	567	205	108	119	926
23	244	592	205	110	120	861
24	219	617	205	111	123	747

Error statistics for deployment: NWFC9807 updated 99/02/01

Surface distance invalid due to range limitation
 Heading, pitch and roll not edited
 Temperature edited by KMHL in Jan 1999
 Velocity edited up to and including bin 26 by MCP in Jan 1999
 Intensity edited up to and including bin 28 by KMHL in Jan 1999

Total number of ensembles: 5133
 Interval between ensembles: 20 min
 Original number of bins: 28
 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: 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	346	7	303	16	1	2	0	0	0	0	0	0	0
2	0	245	5	233	6	0	0	0	0	0	0	0	0	0
3	0	219	4	210	3	1	0	0	0	0	0	0	0	0
4	0	285	6	228	20	4	0	1	0	0	0	0	0	0
5	0	376	7	282	34	4	1	2	0	0	0	0	0	0
6	0	448	9	296	40	14	4	1	1	0	0	0	0	0
7	0	542	11	379	49	11	4	1	0	1	0	0	0	0
8	0	698	14	448	67	26	8	0	1	0	0	0	0	0
9	0	753	15	458	78	25	12	2	1	0	0	0	0	0
10	0	525	10	333	61	15	5	1	0	0	0	0	0	0
11	0	319	6	241	19	9	2	1	0	0	0	0	0	0
12	0	183	4	145	11	4	1	0	0	0	0	0	0	0
13	0	138	3	117	7	1	1	0	0	0	0	0	0	0
14	0	90	2	86	2	0	0	0	0	0	0	0	0	0
15	0	76	1	74	1	0	0	0	0	0	0	0	0	0
16	0	93	2	81	6	0	0	0	0	0	0	0	0	0
17	0	84	2	78	3	0	0	0	0	0	0	0	0	0
18	0	89	2	78	4	1	0	0	0	0	0	0	0	0
19	0	122	2	102	10	0	0	0	0	0	0	0	0	0
20	0	146	3	115	10	2	1	0	0	0	0	0	0	0
21	0	239	5	127	20	6	2	0	2	2	0	0	0	0
22	0	382	7	183	30	4	3	2	7	3	0	0	0	0
23	0	711	14	264	64	20	12	9	5	3	2	1	0	0
24	3	1300	25	370	110	35	19	9	25	13	3	1	0	0

Harmonic constants for constituent M2 for deployment NWFC9807.

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	794	17	95	10	280	20	1	151	276	A
02	769	16	96	11	287	20	2	145	280	A
03	744	17	88	15	286	22	3	138	276	A
04	719	17	79	16	298	22	8	135	278	A
05	694	22	93	21	309	29	9	138	289	A
06	669	43	114	36	326	54	15	140	307	A
07	644	76	124	52	324	91	15	146	310	A
08	619	83	129	53	320	98	8	148	312	A
09	594	56	145	18	272	57	14	169	322	C
10	569	40	209	39	167	52	20	44	188	A
11	544	52	242	71	156	72	62	78	166	A
12	519	69	253	83	160	84	69	99	153	A
13	494	67	262	87	167	87	67	98	161	A
14	469	64	270	86	175	87	63	97	169	A
15	444	65	277	87	181	88	64	100	173	A
16	419	66	281	89	185	89	65	100	178	A
17	394	66	286	90	188	91	65	102	180	A
18	369	65	287	93	190	93	65	99	184	A
19	344	67	287	93	193	94	66	97	188	A
20	319	69	290	93	195	93	68	98	189	A
21	294	70	293	95	197	95	69	99	190	A
22	269	72	294	95	199	95	71	98	193	A
23	244	75	296	100	201	100	74	98	195	A
24	219	73	301	98	204	98	71	101	197	A

Harmonic constants for constituent S2 for deployment NWFC9807.

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	794	6	104	5	297	7	1	140	289	A
02	769	5	112	3	276	6	1	154	289	C
03	744	7	99	4	301	8	1	152	284	A
04	719	10	105	3	317	10	1	165	288	A
05	694	16	107	7	301	17	2	156	289	A
06	669	19	115	7	319	20	3	160	298	A
07	644	28	135	11	17	29	10	169	319	A
08	619	31	165	16	35	33	12	159	352	A
09	594	23	194	7	87	23	7	174	15	A
10	569	11	249	12	174	13	10	58	199	A
11	544	14	282	21	192	21	14	90	191	A
12	519	20	281	26	195	26	20	82	201	A
13	494	22	281	26	200	26	21	68	218	A
14	469	21	292	26	210	27	21	73	224	A
15	444	19	301	28	217	28	19	82	223	A
16	419	19	316	27	224	27	19	92	223	A
17	394	19	322	28	227	28	18	96	224	A
18	369	18	334	28	232	29	17	102	225	A
19	344	18	342	29	241	29	18	101	234	A
20	319	20	341	28	245	28	20	99	239	A
21	294	24	347	29	249	30	24	110	233	A
22	269	25	349	31	251	31	24	104	240	A
23	244	28	345	31	247	32	27	117	223	A
24	219	30	346	33	243	35	28	125	214	A

Harmonic constants for constituent N2 for deployment NWFC9807.

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	794	4	95	2	253	4	1	152	270	C
02	769	3	31	5	235	5	1	118	230	A
03	744	3	32	5	242	5	1	122	233	A
04	719	4	8	5	271	6	4	99	265	A
05	694	5	359	8	272	8	5	86	274	A
06	669	9	63	5	260	10	1	152	247	A
07	644	18	105	8	273	20	1	156	283	C
08	619	27	106	7	276	28	1	165	285	C
09	594	14	113	4	335	14	2	169	295	A
10	569	11	106	4	93	12	1	20	105	A
11	544	15	154	11	91	17	9	28	137	A
12	519	13	171	15	106	17	10	56	129	A
13	494	12	199	17	120	17	11	77	129	A
14	469	11	212	18	132	18	11	80	138	A
15	444	14	227	21	142	21	14	84	146	A
16	419	17	230	22	144	22	16	84	149	A
17	394	15	233	21	146	21	15	86	149	A
18	369	15	244	21	151	21	15	94	149	A
19	344	15	258	23	161	23	15	97	157	A
20	319	18	264	25	170	25	18	96	165	A
21	294	20	276	26	175	27	20	108	162	A
22	269	19	280	28	174	29	18	108	163	A
23	244	18	284	27	178	28	17	107	167	A
24	219	22	285	29	180	30	20	111	165	A

Harmonic constants for constituent O1 for deployment NWFC9807.

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	794	4	284	5	97	7	0	130	100	C
02	769	5	273	6	80	8	1	129	85	C
03	744	7	292	6	101	9	1	138	107	C
04	719	5	318	8	97	9	3	118	107	C
05	694	10	331	10	107	13	5	137	130	C
06	669	25	341	10	119	26	6	162	156	C
07	644	40	339	22	139	45	7	152	154	C
08	619	40	344	32	157	51	3	141	161	C
09	594	32	340	26	166	41	2	141	163	A
10	569	23	357	21	192	31	4	138	184	A
11	544	15	3	17	199	22	3	132	192	A
12	519	17	11	14	207	22	3	140	198	A
13	494	16	6	12	197	20	2	143	190	A
14	469	11	5	12	202	17	3	132	194	A
15	444	9	16	9	203	13	1	134	200	A
16	419	7	28	8	211	11	0	131	210	A
17	394	8	16	8	217	11	2	134	207	A
18	369	10	17	10	191	14	1	134	194	C
19	344	12	16	12	188	17	1	134	192	C
20	319	13	8	10	185	17	0	142	187	C
21	294	14	15	8	190	16	1	149	194	C
22	269	15	9	8	187	17	0	151	189	C
23	244	13	20	8	196	15	0	150	199	C
24	219	19	7	15	176	24	2	142	183	C

Harmonic constants for constituent K1 for deployment NWFC9807.

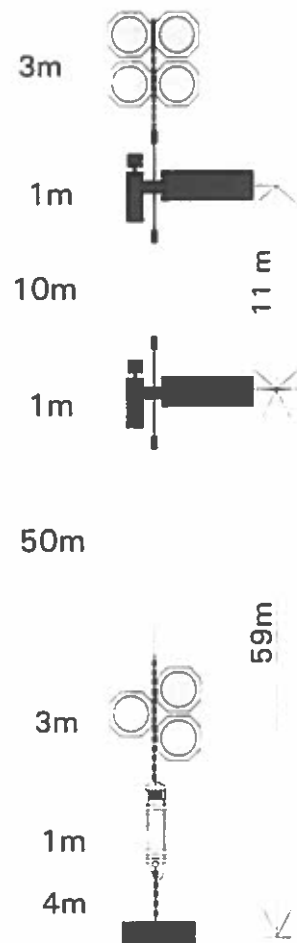
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	794	10	228	9	35	13	2	139	42	C
02	769	9	231	9	41	12	1	134	45	C
03	744	10	243	9	43	14	2	139	54	C
04	719	9	230	10	43	14	1	133	46	C
05	694	10	244	11	57	15	1	133	60	C
06	669	18	263	13	74	23	2	144	80	C
07	644	30	261	22	92	37	3	144	84	A
08	619	38	268	34	98	50	5	138	92	A
09	594	26	270	27	96	37	2	134	93	A
10	569	18	283	20	95	27	2	133	99	C
11	544	17	282	14	97	23	1	141	100	C
12	519	12	276	11	74	16	3	139	87	C
13	494	11	280	13	69	16	4	130	81	C
14	469	12	277	12	69	16	4	135	83	C
15	444	12	274	12	66	16	4	134	80	C
16	419	13	276	11	71	17	4	140	86	C
17	394	12	275	11	66	16	4	139	82	C
18	369	11	269	9	68	14	3	141	81	C
19	344	11	263	9	63	14	2	141	75	C
20	319	12	274	11	79	16	2	138	87	C
21	294	11	276	11	76	15	3	136	86	C
22	269	10	291	11	69	14	5	132	88	C
23	244	10	281	11	78	14	3	131	88	C
24	219	12	303	7	106	14	2	150	119	C

Deployment Id: Nwana9706

Latitude: 62°42.315'N
Longitude: 006°05.170'W
Echo sound depth: 301m
Bottom depth corr.: 300m
Time of deployment: 14/06 -1997 1220UTC
Time of recovery: 13/06 - 1998 1625UTC

ADCP:

Instrument no.: RDI ADCP 1244
Instrument frequency: 150kHz
Height above bottom: 1m
Depth: 299m (corr.)
Time of first data: 14/06 – 1997 1240UTC
Time of last data: 09/06 – 1998 0320UTC
Sample interval: 20 min
No. of ensembles: 25893
Pings per ens.: 1
Binlength: 10 m
Depth of first bin: 283m (corr.)
No. of bins: 30



Calibration rig: Nwana97S-cal

Instrument no.: RCM7 10309 RCM7 9494
Height above bottom: 70m 59m
Depth: 230 241m
Time of first data: 14/06-1997 UTC1300
Time of last data: 14/06-1997 UTC1800
Interval: 5 min 5 min

Calibration-rig: Nwana98R-cal

Instrument no.:RCM7 10309 RCM7 9494
Height above bottom: 70m 59m
Depth:230m 241m
Time of first data:12/02-1998 0520UTC
Time of last data: 12/02-1998 1145UTC
Interval: 5 min 5min

Deployment: NWNA9706 updated 99/02/01
 Instrument no.: 1244
 Instrument freq.: 150
 Latitude: 62 42.315 N
 Longitude: 06 05.170 W
 Bottom depth: 300
 Instrument depth: 299
 Center depth of first bin: 283
 Bin length: 10
 Number of bins: 24
 Number of first ensemble: 420
 Time of first ensemble: 1997 06 14 12 40
 Number of last ensemble: 26312
 Time of last ensemble: 1998 06 09 03 20
 Time between ensembles (min.): 20
 Current directions corrected, not headings

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	17	192	109	100	842
2	273	27	210	121	103	883
3	263	37	220	124	105	911
4	253	47	228	127	107	937
5	243	57	235	135	109	947
6	233	67	240	142	110	957
7	223	77	242	149	110	964
8	213	87	245	155	111	966
9	203	97	246	161	111	964
10	193	107	246	166	111	966
11	183	117	246	170	111	966
12	173	127	247	174	110	968
13	163	137	247	177	110	965
14	153	147	248	179	110	962
15	143	157	249	181	110	955
16	133	167	250	184	110	943
17	123	177	252	186	110	929
18	113	187	255	189	110	914
19	103	197	258	192	110	884
20	93	207	261	195	110	846
21	83	217	266	200	110	801
22	73	227	271	202	111	750
23	63	237	277	207	111	689
24	53	247	286	213	111	630

Error statistics for deployment: Nwana9706 updated 99/02/01

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by KMHL in Jan 1999
 Velocity edited up to and including bin 24 by MCP in Aug 1998
 Intensity edited up to and including bin 30 by KMHL in Jan 1999

Total number of ensembles: 25893
 Interval between ensembles: 20 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: 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	0	4088	16	2612	435	93	34	15	15	1	0	0	0	
2	3	3025	12	2137	309	62	12	3	3	0	0	0	0	
3	0	2309	9	1717	221	32	7	4	1	0	0	0	0	
4	2	1640	6	1254	144	23	6	1	0	0	0	0	0	
5	1	1372	5	1103	102	16	3	1	0	0	0	0	0	
6	0	1107	4	921	81	4	3	0	0	0	0	0	0	
7	2	935	4	788	52	13	1	0	0	0	0	0	0	
8	1	886	3	731	67	7	0	0	0	0	0	0	0	
9	0	929	4	784	54	11	1	0	0	0	0	0	0	
10	0	883	3	768	48	5	1	0	0	0	0	0	0	
11	1	879	3	718	59	10	2	1	0	0	0	0	0	
12	2	830	3	681	55	7	2	2	0	0	0	0	0	
13	0	910	4	698	62	9	4	5	3	0	0	0	0	
14	0	976	4	689	76	11	8	4	5	1	0	0	0	
15	0	1160	4	733	88	21	13	3	13	1	1	0	0	
16	1	1472	6	823	118	29	18	6	18	5	1	0	0	
17	3	1826	7	845	131	45	20	11	31	7	3	1	0	
18	0	2235	9	818	161	55	37	18	33	16	9	0	0	
19	0	2998	12	994	211	78	38	26	34	19	17	3	0	
20	0	3998	15	1173	248	82	56	26	56	32	13	13	1	
21	0	5140	20	1244	285	136	53	36	70	36	19	26	0	
22	0	6481	25	1421	361	136	70	43	68	39	23	34	7	
23	1	8058	31	1460	386	160	103	39	96	45	24	40	15	
24	1	9584	37	1478	413	192	97	67	119	44	24	36	23	

Harmonic constants for constituent M2 for deployment Nwna9706.

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	131	290	95	170	143	75	152	126	A
02	273	144	290	112	171	160	89	149	129	A
03	263	152	289	124	172	169	99	147	130	A
04	253	160	290	132	174	178	107	147	131	A
05	243	167	291	137	176	184	113	148	132	A
06	233	171	292	138	179	187	116	149	133	A
07	223	173	294	138	181	188	116	150	134	A
08	213	174	296	135	184	188	116	152	135	A
09	203	174	298	133	186	186	115	153	136	A
10	193	173	300	129	188	184	112	154	136	A
11	183	172	302	125	190	181	110	156	137	A
12	173	171	304	121	193	180	108	157	138	A
13	163	169	305	117	195	177	105	159	138	A
14	153	168	307	113	197	175	102	160	139	A
15	143	166	308	109	199	172	99	161	139	A
16	133	165	310	105	201	170	96	162	140	A
17	123	164	312	103	203	169	94	163	141	A
18	113	162	314	100	205	167	92	164	143	A
19	103	163	315	96	207	167	89	165	143	A
20	93	162	316	93	209	165	86	166	143	A
21	83	161	317	91	212	163	86	168	143	A
22	73	160	320	89	216	162	85	169	145	A
23	63	159	321	89	220	160	87	171	146	A
24	53	163	324	88	221	165	85	170	149	A

Harmonic constants for constituent S2 for deployment Nwna9706.

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	46	335	31	217	49	25	155	169	A
02	273	50	333	36	218	53	30	154	168	A
03	263	50	331	42	219	55	35	147	173	A
04	253	53	331	47	219	59	39	144	177	A
05	243	58	333	50	219	65	41	145	177	A
06	233	60	334	51	219	67	42	145	177	A
07	223	62	336	51	221	68	42	147	177	A
08	213	64	338	50	224	69	42	151	176	A
09	203	65	340	48	226	70	42	154	176	A
10	193	66	342	47	228	70	40	155	177	A
11	183	65	343	46	230	69	40	156	177	A
12	173	65	345	45	232	69	39	157	178	A
13	163	64	346	44	233	68	38	158	179	A
14	153	64	348	42	234	68	37	158	180	A
15	143	64	350	41	235	68	36	159	181	A
16	133	64	351	39	236	67	34	160	182	A
17	123	62	352	38	239	65	33	161	182	A
18	113	61	354	37	239	63	32	161	184	A
19	103	59	354	36	240	61	31	161	184	A
20	93	58	356	36	241	61	32	160	187	A
21	83	59	357	36	246	61	32	162	187	A
22	73	57	359	35	247	59	32	162	189	A
23	63	54	0	33	248	56	29	162	190	A
24	53	52	2	30	248	54	27	162	191	A

Harmonic constants for constituent N2 for deployment NWNA9706.

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	27	264	21	136	31	14	147	101	A
02	273	29	266	23	140	33	16	146	104	A
03	263	31	268	25	143	36	18	146	107	A
04	253	32	270	26	146	36	19	146	109	A
05	243	33	271	25	152	36	20	150	109	A
06	233	33	275	24	154	36	19	150	111	A
07	223	33	276	23	155	36	18	153	111	A
08	213	33	278	23	157	36	18	154	112	A
09	203	33	279	21	158	35	17	157	110	A
10	193	33	279	20	159	35	17	158	109	A
11	183	33	279	20	160	34	16	159	110	A
12	173	33	280	19	163	34	17	161	110	A
13	163	32	280	20	165	33	17	160	111	A
14	153	33	282	20	166	35	17	161	112	A
15	143	34	283	21	171	35	18	161	113	A
16	133	36	285	22	175	37	20	163	115	A
17	123	36	286	22	180	37	21	165	115	A
18	113	38	289	23	181	39	21	164	118	A
19	103	38	290	25	184	39	23	164	119	A
20	93	39	289	25	187	40	24	168	117	A
21	83	38	288	25	187	38	24	168	115	A
22	73	39	288	25	187	39	24	168	116	A
23	63	40	288	25	183	41	24	166	116	A
24	53	35	287	25	188	36	25	168	115	A

Harmonic constants for constituent O1 for deployment NWNA9706.

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	23	34	11	290	24	11	172	217	A
02	273	23	35	14	291	23	14	167	222	A
03	263	26	29	13	284	26	13	170	214	A
04	253	26	29	13	286	26	13	171	214	A
05	243	28	28	13	281	28	12	170	212	A
06	233	28	27	13	279	28	12	170	212	A
07	223	27	30	14	279	27	13	166	217	A
08	213	27	29	15	281	28	14	167	215	A
09	203	26	31	15	276	27	13	162	220	A
10	193	26	33	16	277	27	14	160	223	A
11	183	26	34	16	277	27	14	159	225	A
12	173	26	34	17	279	27	14	159	225	A
13	163	27	33	17	279	28	15	160	224	A
14	153	27	32	17	278	28	15	160	222	A
15	143	27	33	17	277	29	15	159	224	A
16	133	28	33	18	277	29	15	157	226	A
17	123	27	35	19	281	29	16	156	229	A
18	113	27	35	20	279	29	17	152	232	A
19	103	28	36	20	274	31	15	151	231	A
20	93	28	40	19	274	30	14	151	234	A
21	83	27	40	19	270	31	13	150	234	A
22	73	26	42	19	273	29	13	147	238	A
23	63	24	42	16	266	27	10	150	234	A
24	53	26	36	15	259	28	9	154	225	A

Harmonic constants for constituent K1 for deployment NWWA9706.

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	30	271	18	188	31	18	6	267	A
02	273	33	274	19	180	33	19	177	96	A
03	263	37	282	20	173	38	18	167	108	A
04	253	37	282	20	169	38	18	165	109	A
05	243	33	279	19	171	33	18	166	106	A
06	233	28	279	19	173	29	18	162	110	A
07	223	28	279	20	170	29	18	157	115	A
08	213	27	277	21	168	29	18	155	114	A
09	203	28	277	21	166	30	18	155	113	A
10	193	29	275	21	167	30	19	157	111	A
11	183	30	276	22	167	32	20	157	110	A
12	173	31	274	23	168	33	21	159	109	A
13	163	32	273	23	166	34	22	160	106	A
14	153	33	271	24	167	34	23	162	103	A
15	143	34	269	25	166	35	23	163	100	A
16	133	34	267	24	165	35	23	164	98	A
17	123	35	265	25	165	35	24	167	94	A
18	113	37	262	23	163	37	23	171	87	A
19	103	36	261	22	162	36	22	171	86	A
20	93	37	259	22	161	37	22	173	83	A
21	83	36	259	21	163	36	21	175	82	A
22	73	38	258	22	157	39	21	171	83	A
23	63	36	257	22	159	36	22	171	83	A
24	53	33	255	23	165	33	23	180	75	A

Deployment Id: Nwana9807

Latitude: 62°42.178'N

Longitude: 006°05.043'W

Echo sound depth: 298m

Bottom depth corr.: 297m

Time of deployment: 07/07 -1998 0611UTC

Time of recovery: 02/07 - 1999 2300UTC

ADCP:

Instrument no.: RDI ADCP 1244

Instrument frequency: 150kHz

Height above bottom: 1m

Depth: 296m (corr.)

Time of first data: 07/07 – 1998 0620UTC

Time of last data: 02/07 – 1999 2220UTC

Sample interval: 20 min

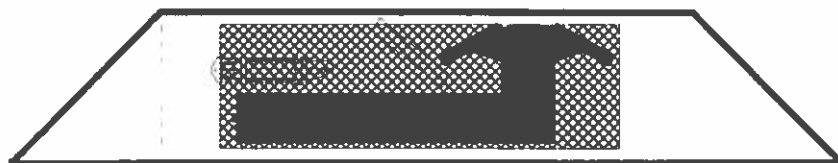
No. of ensembles: 25969

Pings per ens.: 1

Binlength: 10 m

Depth of first bin: 280m (corr.)

No. of bins: 30



Deployment: Nwana9807 updated 1999/09/22
 Instrument no.: 1244
 Instrument freq.: 150
 Latitude: 62 42.178 N
 Longitude: 06 05.043 W
 Bottom depth: 297
 Instrument depth: 296
 Center depth of first bin: 280
 Bin length: 10
 Number of bins: 24
 Number of first ensemble: 402
 Time of first ensemble: 1998 07 07 06 20
 Number of last ensemble: 26370
 Time of last ensemble: 1999 07 02 22 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	280	17	208	129	93	885
2	270	27	225	138	95	885
3	260	37	233	140	98	897
4	250	47	239	143	99	913
5	240	57	244	148	101	923
6	230	67	245	152	102	946
7	220	77	246	157	103	955
8	210	87	247	163	103	960
9	200	97	247	167	104	964
10	190	107	247	170	104	963
11	180	117	246	172	104	961
12	170	127	246	174	104	957
13	160	137	245	176	104	951
14	150	147	245	177	104	945
15	140	157	246	179	104	930
16	130	167	247	180	104	919
17	120	177	249	182	104	898
18	110	187	252	185	104	874
19	100	197	256	188	104	842
20	90	207	260	191	104	805
21	80	217	266	195	104	760
22	70	227	274	200	104	710
23	60	237	284	206	104	645
24	50	247	294	210	103	592

Surface distance invalid due to range limitation
 Heading, pitch and roll not edited
 Temperature edited by MCP in July 1999
 Velocity edited up to and including bin 24 by MCP in July 1999
 Intensity edited up to and including bin 25 by MCP in July 1999
 Velocity reedited from bin 18 up to bin 24 by KMH in Sept 1999

Total number of ensembles: 25969
 Interval between ensembles: 20 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: 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	6	2983	11	2044	283	73	16	10	6	0	0	0	0
2	9	2976	11	1934	309	76	35	3	6	0	0	0	0
3	3	2682	10	1816	285	63	19	5	1	0	0	0	0
4	2	2268	9	1496	237	67	14	3	4	0	0	0	0
5	2	1989	8	1396	207	41	9	4	0	0	0	0	0
6	3	1406	5	1117	104	21	3	0	1	0	0	0	0
7	1	1171	5	899	94	17	4	2	1	0	0	0	0
8	1	1027	4	796	75	18	5	0	1	0	0	0	0
9	1	931	4	705	81	13	5	1	0	0	0	0	0
10	0	963	4	748	78	15	2	0	1	0	0	0	0
11	0	1006	4	776	70	19	4	2	1	0	0	0	0
12	2	1121	4	778	85	14	19	6	2	1	0	0	0
13	1	1267	5	780	93	39	17	5	13	0	0	0	0
14	5	1420	5	799	110	33	14	14	18	4	0	0	0
15	1	1810	7	849	112	55	24	10	30	9	3	0	0
16	4	2111	8	840	123	47	30	21	43	15	4	1	0
17	2	2644	10	858	133	52	35	21	59	24	10	3	0
18	3	3284	13	889	175	56	23	22	55	43	12	10	0
19	3	4110	16	998	214	62	35	19	53	30	19	26	0
20	4	5063	19	1086	245	83	39	27	47	33	23	39	1
21	3	6245	24	1172	273	117	62	34	75	33	22	42	8
22	3	7528	29	1391	349	151	86	44	76	46	12	50	15
23	1	9215	35	1447	466	203	112	57	96	53	24	45	18
24	2	10604	41	1425	483	242	145	87	142	64	21	41	29

Deployment: NRNA9807

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	280	713	414	192	70	19	3	1	0	0	0	0	0	0	0	0	0	0	0
2	270	734	449	227	98	32	8	1	0	0	0	0	0	0	0	0	0	0	0
3	260	754	472	250	113	40	11	2	0	0	0	0	0	0	0	0	0	0	0
4	250	777	498	270	126	47	14	3	1	0	0	0	0	0	0	0	0	0	0
5	240	789	516	284	135	54	16	3	1	0	0	0	0	0	0	0	0	0	0
6	230	806	531	296	142	55	18	3	0	0	0	0	0	0	0	0	0	0	0
7	220	816	539	301	144	58	19	4	1	0	0	0	0	0	0	0	0	0	0
8	210	823	542	307	149	58	19	4	1	0	0	0	0	0	0	0	0	0	0
9	200	822	540	308	148	59	20	4	1	0	0	0	0	0	0	0	0	0	0
10	190	821	537	309	148	59	20	5	1	0	0	0	0	0	0	0	0	0	0
11	180	820	536	306	149	58	19	5	1	0	0	0	0	0	0	0	0	0	0
12	170	812	530	302	148	58	19	5	1	0	0	0	0	0	0	0	0	0	0
13	160	805	525	297	146	58	20	5	1	0	0	0	0	0	0	0	0	0	0
14	150	800	523	298	145	59	19	5	1	0	0	0	0	0	0	0	0	0	0
15	140	787	518	295	143	57	20	6	1	0	0	0	0	0	0	0	0	0	0
16	130	779	515	295	142	58	20	6	1	0	0	0	0	0	0	0	0	0	0
17	120	765	511	293	142	57	20	6	1	0	0	0	0	0	0	0	0	0	0
18	110	746	504	294	141	57	20	6	1	0	0	0	0	0	0	0	0	0	0
19	100	724	493	292	144	57	21	6	2	0	0	0	0	0	0	0	0	0	0
20	90	698	481	287	143	59	22	7	2	0	0	0	0	0	0	0	0	0	0
21	80	663	462	282	143	60	24	8	2	1	0	0	0	0	0	0	0	0	0
22	70	623	442	274	143	64	27	11	4	2	1	0	0	0	0	0	0	0	0
23	60	572	420	263	139	66	28	12	6	3	1	0	0	0	0	0	0	0	0
24	50	531	393	253	138	69	30	14	7	4	2	1	1	0	0	0	0	0	0

Harmonic constants for constituent M2 for deployment NWNA9807.

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	280	144	296	90	184	150	80	162	126	A
02	270	159	295	104	184	166	93	160	127	A
03	260	167	295	113	184	174	101	159	128	A
04	250	174	297	120	186	183	107	158	130	A
05	240	180	298	122	189	187	111	160	130	A
06	230	181	300	123	191	187	112	160	132	A
07	220	181	301	122	194	187	112	162	133	A
08	210	179	303	120	196	184	111	163	134	A
09	200	178	305	117	199	182	109	164	135	A
10	190	176	306	114	201	180	108	165	135	A
11	180	175	308	111	204	178	106	166	136	A
12	170	174	309	108	206	177	103	167	137	A
13	160	172	311	105	208	174	101	169	137	A
14	150	171	312	102	210	173	99	170	138	A
15	140	170	314	101	213	172	98	170	139	A
16	130	169	316	99	216	170	97	171	140	A
17	120	168	317	97	218	169	95	172	142	A
18	110	168	319	95	221	168	94	173	143	A
19	100	166	320	93	224	166	93	175	143	A
20	90	163	322	90	227	164	90	176	144	A
21	80	162	323	88	231	162	88	178	145	A
22	70	163	325	88	234	163	88	179	146	A
23	60	162	327	89	239	162	89	1	326	A
24	50	161	329	92	243	161	92	3	327	A

Harmonic constants for constituent S2 for deployment NWNA9807.

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	280	50	349	28	238	51	25	165	176	A
02	270	57	347	35	238	58	32	163	177	A
03	260	59	345	40	238	61	37	162	177	A
04	250	65	346	45	238	67	41	161	178	A
05	240	69	347	48	239	72	43	160	180	A
06	230	71	347	49	239	74	45	160	180	A
07	220	71	348	49	240	74	45	160	181	A
08	210	71	349	48	240	74	44	161	180	A
09	200	71	349	47	240	73	43	161	180	A
10	190	70	349	46	241	72	42	162	179	A
11	180	69	349	45	241	72	41	163	180	A
12	170	68	350	43	242	70	40	164	179	A
13	160	67	351	41	242	69	38	164	180	A
14	150	67	352	39	243	68	35	165	180	A
15	140	65	353	37	244	66	34	166	181	A
16	130	64	354	36	245	66	33	166	182	A
17	120	62	357	33	244	64	30	165	184	A
18	110	60	357	31	247	61	29	167	183	A
19	100	57	357	29	247	58	26	168	183	A
20	90	54	0	27	247	55	25	166	187	A
21	80	54	1	26	250	55	23	168	186	A
22	70	49	359	25	251	50	23	168	185	A
23	60	52	3	23	260	52	22	173	186	A
24	50	52	7	25	258	52	24	169	192	A

Harmonic constants for constituent N2 for deployment NWNA9807.

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	280	23	273	14	141	26	10	154	103	A
02	270	27	272	17	143	29	12	154	103	A
03	260	28	272	19	146	31	14	151	106	A
04	250	30	274	20	147	33	15	151	108	A
05	240	32	275	20	151	34	15	156	106	A
06	230	33	278	20	157	35	16	158	108	A
07	220	35	279	20	160	37	17	160	109	A
08	210	35	280	20	163	36	17	160	110	A
09	200	36	283	21	167	37	18	161	112	A
10	190	36	285	21	169	37	18	161	114	A
11	180	36	286	20	172	37	18	163	115	A
12	170	36	287	21	172	37	18	162	116	A
13	160	35	286	21	175	37	19	163	116	A
14	150	34	287	21	176	36	19	162	117	A
15	140	34	288	21	175	35	18	161	118	A
16	130	34	290	21	176	36	19	160	121	A
17	120	34	290	21	178	35	19	160	121	A
18	110	35	294	21	183	36	19	163	124	A
19	100	34	295	22	187	36	20	163	125	A
20	90	35	298	22	192	35	20	166	126	A
21	80	33	304	22	196	34	20	162	135	A
22	70	35	307	21	202	36	20	167	134	A
23	60	37	303	21	210	37	21	177	125	A
24	50	37	309	20	211	37	20	173	133	A

Harmonic constants for constituent O1 for deployment NWNA9807.

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	280	24	42	12	317	24	12	3	40	A
02	270	26	36	12	317	26	12	6	33	A
03	260	28	36	15	316	28	14	7	32	A
04	250	30	35	15	319	30	14	8	31	A
05	240	32	35	13	312	32	13	3	33	A
06	230	31	34	14	313	31	14	5	31	A
07	220	30	36	15	309	30	15	2	36	A
08	210	30	36	16	305	30	16	179	217	A
09	200	30	36	16	304	30	16	178	217	A
10	190	29	33	16	304	29	16	1	33	A
11	180	31	32	17	304	31	17	2	31	A
12	170	30	34	17	301	30	17	178	215	A
13	160	31	34	18	298	31	18	175	217	A
14	150	31	36	18	295	31	18	171	221	A
15	140	30	37	19	295	31	18	169	224	A
16	130	30	38	19	299	30	18	171	223	A
17	120	30	41	17	301	30	17	172	226	A
18	110	31	38	18	301	31	17	175	221	A
19	100	29	39	16	302	29	16	174	222	A
20	90	30	38	13	300	30	13	176	220	A
21	80	30	36	12	297	30	12	176	218	A
22	70	30	35	11	306	30	11	0	35	A
23	60	30	32	12	305	30	12	1	31	A
24	50	30	35	13	280	31	11	169	219	A

Harmonic constants for constituent K1 for deployment NRNA9807.

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	280	40	268	17	204	41	15	12	264	A
02	270	43	271	17	199	43	16	8	268	A
03	260	43	275	17	193	43	16	4	273	A
04	250	40	273	17	197	41	17	7	270	A
05	240	36	269	18	196	37	17	10	264	A
06	230	35	270	19	193	35	18	9	265	A
07	220	36	274	19	190	36	19	4	272	A
08	210	37	276	18	187	37	18	1	275	A
09	200	38	276	18	189	38	18	2	275	A
10	190	37	277	18	189	37	18	1	277	A
11	180	37	276	18	186	37	18	0	276	A
12	170	37	274	17	185	37	17	1	274	A
13	160	36	273	17	184	36	17	1	272	A
14	150	37	270	17	180	37	17	0	270	A
15	140	36	268	18	179	36	18	0	268	A
16	130	35	268	18	181	35	18	2	267	A
17	120	34	267	17	181	34	17	2	266	A
18	110	33	264	17	185	33	16	7	261	A
19	100	32	262	17	186	33	16	9	257	A
20	90	32	262	15	185	32	14	7	259	A
21	80	32	261	16	186	32	16	10	256	A
22	70	34	261	17	184	34	16	8	257	A
23	60	33	261	18	193	34	17	15	253	A
24	50	33	262	16	199	34	14	14	256	A

Deployment Id: NWNB9706

Latitude: 62°54.818'N

Longitude: 006°04.957'W

Echo sounding depth: 946m

Bottom depth corr.: 907m

Time of deployment: 13/06 -1997 0815UTC

Time of recovery: 13/06 - 1998 0900UTC

ADCP:

Instrument no.: RDI ADCP 1284

Instrument frequency: 75kHz

Height above bottom: 248m (corr.)

Depth: 659m (corr.)

Time of first data: 13/06 - 1997 0840UTC

Time of last data: 13/06 - 1998 0840UTC

Sample interval: 20 min

No. of ensembles: 26281

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 623m (corr.)

No. of bins: 28



Deployment: NWNB9706 updated 1999/09/03
 Instrument no.: 1284
 Instrument freq.: 75
 Latitude: 62 54.818 N
 Longitude: 06 04.957 W
 Bottom depth: 907
 Instrument depth: 659
 Center depth of first bin: 623
 Bin length: 25
 Number of bins: 23
 Number of first ensemble: 336
 Time of first ensemble: 1997 06 13 08 40
 Number of last ensemble: 26616
 Time of last ensemble: 1998 06 13 08 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	623	284	129	21	82	991
2	598	309	129	19	83	993
3	573	334	130	16	85	991
4	548	359	131	15	88	986
5	523	384	133	16	92	987
6	498	409	135	18	98	988
7	473	434	138	24	99	979
8	448	459	143	34	102	984
9	423	484	150	46	103	976
10	398	509	163	62	104	982
11	373	534	175	80	106	979
12	348	559	189	100	106	978
13	323	584	205	122	106	979
14	298	609	222	143	106	982
15	273	634	237	162	107	979
16	248	659	253	180	106	962
17	223	684	268	196	105	931
18	198	709	281	209	105	900
19	173	734	292	220	105	866
20	148	759	300	228	106	820
21	123	784	307	234	106	771
22	98	809	316	240	107	725
23	73	834	328	245	108	642

Error statistics for deployment: NWNB9706 updated 99/02/01

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by KMHL in Jan 1999
 Velocity edited up to and including bin 23 by RK in Jan 1999
 Intensity edited up to and including bin 28 by KMHL in Jan 1999

Total number of ensembles: 26281
 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	6	234	1	232	1	0	0	0	0	0	0	0	0	0
2	5	182	1	174	4	0	0	0	0	0	0	0	0	0
3	2	234	1	232	1	0	0	0	0	0	0	0	0	0
4	0	358	1	346	3	2	0	0	0	0	0	0	0	0
5	0	329	1	321	4	0	0	0	0	0	0	0	0	0
6	0	322	1	310	6	0	0	0	0	0	0	0	0	0
7	0	556	2	503	19	5	0	0	0	0	0	0	0	0
8	0	426	2	386	15	2	1	0	0	0	0	0	0	0
9	0	619	2	554	31	1	0	0	0	0	0	0	0	0
10	2	467	2	436	14	1	0	0	0	0	0	0	0	0
11	0	555	2	513	18	2	0	0	0	0	0	0	0	0
12	0	589	2	523	28	2	1	0	0	0	0	0	0	0
13	0	549	2	487	25	1	1	1	0	0	0	0	0	0
14	0	476	2	404	25	6	1	0	0	0	0	0	0	0
15	2	559	2	423	27	11	2	3	2	1	0	0	0	0
16	0	988	4	416	62	19	12	3	13	8	2	2	0	0
17	2	1822	7	452	81	23	18	12	16	16	12	8	1	1
18	3	2625	10	477	88	34	20	11	34	13	9	16	7	7
19	2	3522	13	507	104	47	20	16	43	31	12	11	17	17
20	1	4737	18	626	106	51	31	8	40	32	25	26	22	22
21	2	6028	23	696	132	67	29	21	46	49	37	35	22	22
22	3	7240	28	870	204	79	31	17	48	57	45	49	20	20
23	2	9413	36	1029	293	107	76	24	85	68	54	61	26	26

Harmonic constants for constituent M2 for deployment NWNB9706.

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	623	75	268	42	132	82	27	155	96	A
02	598	79	269	44	138	85	31	157	98	A
03	573	84	270	45	144	89	34	159	99	A
04	548	89	272	46	151	93	38	162	100	A
05	523	94	274	47	158	97	41	165	101	A
06	498	98	277	48	166	100	43	168	103	A
07	473	102	281	47	176	103	45	172	105	A
08	448	105	285	48	188	106	47	176	107	A
09	423	110	291	51	200	110	51	180	111	A
10	398	115	296	57	212	115	56	4	294	A
11	373	117	300	60	221	118	58	8	296	A
12	348	118	306	62	232	120	59	11	300	A
13	323	121	311	67	241	124	61	14	304	A
14	298	122	316	73	248	126	65	18	307	A
15	273	121	321	77	255	127	68	21	310	A
16	248	119	325	80	261	126	68	23	312	A
17	223	120	328	84	263	128	72	24	314	A
18	198	122	330	87	263	129	75	25	315	A
19	173	122	331	89	265	130	77	25	316	A
20	148	126	332	95	267	136	80	27	315	A
21	123	132	331	97	265	141	83	26	315	A
22	98	132	331	101	265	143	85	28	313	A
23	73	130	332	100	265	140	86	27	315	A

Harmonic constants for constituent S2 for deployment NWNB9706.

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	623	32	310	20	192	34	17	158	141	A
02	598	33	309	21	192	35	18	158	141	A
03	573	34	308	22	193	36	19	159	140	A
04	548	36	310	22	198	37	19	162	140	A
05	523	37	315	22	206	38	20	165	143	A
06	498	39	322	21	216	39	20	168	148	A
07	473	39	326	20	224	39	19	172	150	A
08	448	38	326	18	229	38	18	175	148	A
09	423	37	332	16	240	37	16	179	152	A
10	398	37	341	17	264	37	17	8	337	A
11	373	39	352	22	282	40	21	15	345	A
12	348	42	1	26	294	44	23	20	350	A
13	323	41	3	28	296	43	24	22	350	A
14	298	39	3	27	296	42	24	24	349	A
15	273	35	4	26	303	38	21	28	348	A
16	248	33	6	25	307	36	19	31	348	A
17	223	32	10	26	309	36	20	33	350	A
18	198	33	16	28	312	37	23	35	352	A
19	173	34	16	29	309	38	24	34	352	A
20	148	33	14	30	308	38	24	37	349	A
21	123	32	14	31	314	38	22	44	345	A
22	98	31	12	32	311	39	23	47	340	A
23	73	33	12	34	314	41	23	47	342	A

Harmonic constants for constituent N2 for deployment NWNB9706.

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	623	12	263	5	83	13	0	157	83	A
02	598	13	259	6	102	14	2	158	82	A
03	573	15	263	5	123	16	3	165	87	A
04	548	17	266	7	139	18	5	165	91	A
05	523	20	268	9	154	20	8	167	93	A
06	498	21	271	10	168	21	10	172	95	A
07	473	21	272	10	174	21	10	175	95	A
08	448	20	272	9	173	20	9	175	94	A
09	423	22	273	10	185	22	10	1	273	A
10	398	24	276	13	192	24	13	5	274	A
11	373	23	280	14	201	24	13	9	274	A
12	348	25	280	15	199	25	14	7	276	A
13	323	26	276	16	193	26	15	6	273	A
14	298	22	275	13	194	22	13	8	270	A
15	273	20	282	12	204	20	12	11	276	A
16	248	22	285	14	210	22	14	15	276	A
17	223	26	285	19	205	27	18	14	275	A
18	198	29	286	21	208	30	20	16	274	A
19	173	28	287	21	211	29	19	20	273	A
20	148	27	286	20	218	29	18	25	271	A
21	123	27	295	19	221	28	18	19	283	A
22	98	25	297	20	241	28	14	34	279	A
23	73	23	304	18	242	25	15	33	284	A

Harmonic constants for constituent O1 for deployment NWNB9706.

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	623	4	45	4	307	5	4	112	288	A
02	598	5	45	5	313	5	4	172	232	A
03	573	6	37	4	307	6	4	0	37	A
04	548	7	35	5	294	7	4	169	221	A
05	523	7	42	4	291	7	4	163	231	A
06	498	7	43	5	294	8	5	158	237	A
07	473	8	43	6	292	8	5	153	242	A
08	448	8	40	7	295	9	7	142	251	A
09	423	9	49	7	291	10	6	147	250	A
10	398	9	44	7	283	10	5	152	239	A
11	373	11	44	8	279	12	6	148	240	A
12	348	12	45	10	276	14	6	142	245	A
13	323	11	52	11	277	14	6	135	254	A
14	298	11	58	11	282	14	6	135	259	A
15	273	12	54	11	292	14	8	139	260	A
16	248	14	56	11	302	15	9	152	253	A
17	223	13	54	7	301	14	6	165	241	A
18	198	14	55	7	292	15	6	162	242	A
19	173	14	60	7	280	15	4	158	246	A
20	148	18	62	5	303	18	4	171	244	A
21	123	24	65	7	286	25	5	166	247	A
22	98	19	62	5	262	20	2	165	244	A
23	73	21	70	5	270	21	2	168	251	A

Harmonic constants for constituent K1 for deployment NWNB9706.

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	623	5	268	5	186	5	4	35	237	A
02	598	6	271	5	173	6	5	165	102	A
03	573	6	268	5	159	6	4	151	109	A
04	548	6	262	6	158	7	5	148	107	A
05	523	6	267	5	159	7	4	155	105	A
06	498	7	271	5	162	7	5	158	105	A
07	473	8	276	6	160	9	5	151	114	A
08	448	9	280	6	160	9	5	154	113	A
09	423	10	280	6	155	11	5	156	111	A
10	398	11	280	7	156	12	5	156	111	A
11	373	12	280	6	164	13	6	164	107	A
12	348	12	277	5	157	12	4	166	103	A
13	323	10	271	6	149	11	5	156	103	A
14	298	10	290	6	151	12	4	154	118	A
15	273	12	294	5	144	13	3	159	118	A
16	248	15	288	4	172	15	4	172	110	A
17	223	15	290	3	197	15	3	179	110	A
18	198	13	299	4	226	13	4	6	297	A
19	173	10	301	4	175	10	3	166	125	A
20	148	11	311	6	155	12	2	154	136	A
21	123	9	323	8	207	10	6	142	169	A
22	98	5	320	10	218	10	5	98	214	A
23	73	4	3	13	224	13	2	102	222	A

Deployment Id: NWNB9807

Latitude: 62°55.158'N

Longitude: 006°04.844'W

Echo sounding depth: 982m

Bottom depth corr.: 961m

Time of deployment: 04/07 -1998 2258UTC

Time of recovery: 19/06 - 1999 1840UTC

ADCP:

Instrument no.: RDI ADCP 1245

Instrument frequency: 75kHz

Height above bottom: 253m (corr.)

Depth: 708m (corr.)

Time of first data: 04/07 - 1998 2320UTC

Time of last data: 19/06 - 1999 1820UTC

Sample interval: 20 min

No. of ensembles: 25186

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 672m (corr.)

No. of bins: 28



Deployment: NWNB9807 updated 1999/09/20
 Instrument no.: 1245
 Instrument freq.: 75
 Latitude: 62 55.158 N
 Longitude: 06 04.844 W
 Bottom depth: 961
 Instrument depth: 708
 Center depth of first bin: 672
 Bin length: 25
 Number of bins: 25
 Number of first ensemble: 237
 Time of first ensemble: 1998 07 04 23 20
 Number of last ensemble: 25422
 Time of last ensemble: 1999 06 19 18 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	672	289	138	46	93	989
2	647	314	137	42	92	991
3	622	339	136	37	92	992
4	597	364	135	33	91	994
5	572	389	135	31	91	994
6	547	414	136	28	92	995
7	522	439	138	27	94	996
8	497	464	140	29	98	996
9	472	489	145	32	101	996
10	447	514	151	38	103	996
11	422	539	159	48	103	994
12	397	564	167	60	103	993
13	372	589	177	77	104	995
14	347	614	193	100	105	994
15	322	639	212	125	105	992
16	297	664	229	150	106	990
17	272	689	247	173	106	982
18	247	714	266	193	106	957
19	222	739	282	210	106	923
20	197	764	295	222	107	890
21	172	789	305	231	107	856
22	147	814	315	237	108	820
23	122	839	322	240	109	783
24	97	864	330	243	109	737
25	72	889	343	242	110	657

Error statistics for deployment: NWNB9807 updated 1999/09/20

Surface distance invalid due to range limitation
 Heading, pitch and roll not edited
 Temperature edited by MCP in July 1999
 Velocity edited up to and including bin 25 by MCP in July 1999
 Intensity edited up to and including bin 26 by MCP in July 1999
 Velocity reedited from bin 19 up to bin 25 by KMHL in Sept 1999
 Beam 4 was defective, so only the other three beams went into analysis

Total number of ensembles: 25186
 Interval between ensembles: 20 min
 Original number of bins: 28
 Number of acceptable velocity bins: 25
 Number of acceptable intensity bins: 25

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	4	267	1	254	5	1	0	0	0	0	0	0	0	0
2	7	230	1	217	5	1	0	0	0	0	0	0	0	0
3	1	202	1	192	2	2	0	0	0	0	0	0	0	0
4	1	146	1	139	2	1	0	0	0	0	0	0	0	0
5	0	157	1	146	4	1	0	0	0	0	0	0	0	0
6	0	123	0	121	1	0	0	0	0	0	0	0	0	0
7	1	94	0	92	1	0	0	0	0	0	0	0	0	0
8	1	112	0	107	1	1	0	0	0	0	0	0	0	0
9	0	102	0	96	0	2	0	0	0	0	0	0	0	0
10	3	103	0	100	0	1	0	0	0	0	0	0	0	0
11	0	148	1	140	4	0	0	0	0	0	0	0	0	0
12	0	181	1	168	5	1	0	0	0	0	0	0	0	0
13	0	136	1	130	3	0	0	0	0	0	0	0	0	0
14	0	156	1	142	4	2	0	0	0	0	0	0	0	0
15	1	191	1	161	11	1	0	1	0	0	0	0	0	0
16	0	250	1	204	11	4	3	0	0	0	0	0	0	0
17	1	450	2	271	23	3	7	2	4	2	1	0	0	0
18	1	1088	4	390	43	31	13	10	13	9	3	3	0	0
19	0	1930	8	437	54	33	17	13	31	13	13	11	0	0
20	2	2767	11	434	80	32	27	21	43	24	10	20	2	2
21	0	3618	14	447	85	51	30	23	50	44	16	16	9	9
22	2	4539	18	487	85	38	33	25	47	41	20	32	14	14
23	1	5474	22	544	116	51	16	20	37	44	29	43	17	17
24	0	6633	26	660	142	56	32	29	42	36	32	54	22	22
25	0	8650	34	867	206	89	71	36	55	50	31	69	29	29

Deployment: MNB9807

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	672	583	214	63	15	3	1	0	0	0	0	0	0	0	0	0	0	0	0
2	647	584	207	58	14	3	1	0	0	0	0	0	0	0	0	0	0	0	0
3	622	582	204	55	12	3	1	0	0	0	0	0	0	0	0	0	0	0	0
4	597	591	203	50	11	2	1	0	0	0	0	0	0	0	0	0	0	0	0
5	572	596	200	48	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0
6	547	610	199	48	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0
7	522	613	209	48	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0
8	497	627	213	52	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0
9	472	651	230	59	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0
10	447	675	257	67	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0
11	422	697	288	82	19	3	0	0	0	0	0	0	0	0	0	0	0	0	0
12	397	721	312	102	25	4	1	0	0	0	0	0	0	0	0	0	0	0	0
13	372	746	347	131	36	7	1	0	0	0	0	0	0	0	0	0	0	0	0
14	347	783	405	167	54	13	2	0	0	0	0	0	0	0	0	0	0	0	0
15	322	819	466	215	80	21	4	1	0	0	0	0	0	0	0	0	0	0	0
16	297	838	519	265	113	36	8	2	0	0	0	0	0	0	0	0	0	0	0
17	272	850	562	313	148	55	14	3	0	0	0	0	0	0	0	0	0	0	0
18	247	841	589	354	183	74	22	5	1	0	0	0	0	0	0	0	0	0	0
19	222	823	593	379	211	95	33	8	2	0	0	0	0	0	0	0	0	0	0
20	197	802	596	390	225	111	44	13	3	0	0	0	0	0	0	0	0	0	0
21	172	778	587	390	237	125	52	18	4	1	0	0	0	0	0	0	0	0	0
22	147	748	568	388	243	134	61	23	6	2	0	0	0	0	0	0	0	0	0
23	122	711	541	377	244	142	71	28	9	3	1	0	0	0	0	0	0	0	0
24	97	668	508	360	245	149	78	35	13	5	2	1	0	0	0	0	0	0	0
25	72	593	448	324	231	154	91	47	23	10	4	2	1	1	0	0	0	0	0

Harmonic constants for constituent M2 for deployment NWNB9807.

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	672	70	264	39	122	77	22	154	92	A
02	647	71	266	39	126	78	23	155	93	A
03	622	74	267	38	131	79	24	158	95	A
04	597	76	269	37	137	80	26	160	96	A
05	572	79	271	37	145	82	28	162	98	A
06	547	82	273	36	154	85	30	166	99	A
07	522	86	278	35	165	87	32	169	102	A
08	497	91	281	37	178	92	36	174	104	A
09	472	97	285	42	189	97	42	177	106	A
10	447	104	288	48	198	104	48	0	288	A
11	422	110	290	54	205	110	54	3	289	A
12	397	112	294	55	214	112	54	6	291	A
13	372	113	301	57	227	114	54	10	297	A
14	347	115	309	64	241	118	58	15	302	A
15	322	120	315	72	248	125	64	18	305	A
16	297	119	320	78	254	126	68	22	307	A
17	272	119	325	81	259	127	70	23	311	A
18	247	123	328	88	263	131	74	25	313	A
19	222	128	329	92	263	137	79	25	314	A
20	197	130	330	97	263	139	84	26	314	A
21	172	132	330	99	263	141	86	26	314	A
22	147	133	333	103	264	143	89	27	315	A
23	122	132	334	105	266	144	90	29	314	A
24	97	131	335	103	269	143	87	30	316	A
25	72	137	335	101	270	147	85	27	319	A

Harmonic constants for constituent S2 for deployment NWNB9807.

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	672	33	315	16	207	34	15	170	140	A
02	647	34	316	16	215	34	16	173	139	A
03	622	34	319	17	221	35	16	175	141	A
04	597	35	321	17	226	35	17	177	143	A
05	572	35	324	17	230	35	16	178	145	A
06	547	34	324	16	235	34	16	0	324	A
07	522	34	327	15	238	34	15	1	327	A
08	497	35	326	16	237	35	16	1	326	A
09	472	35	326	15	240	35	15	2	325	A
10	447	32	327	12	247	33	12	4	325	A
11	422	33	332	12	259	33	11	7	329	A
12	397	33	339	13	268	34	12	8	336	A
13	372	37	344	16	278	38	15	12	340	A
14	347	41	348	20	281	42	18	13	342	A
15	322	41	350	22	277	42	21	12	344	A
16	297	40	351	22	284	41	19	16	344	A
17	272	38	1	22	298	40	19	19	352	A
18	247	38	7	23	312	41	18	24	356	A
19	222	38	8	25	313	42	18	26	356	A
20	197	39	9	26	311	42	20	26	355	A
21	172	38	12	26	310	41	22	25	358	A
22	147	36	16	27	312	39	22	28	359	A
23	122	32	18	29	317	37	22	40	352	A
24	97	32	22	30	319	38	23	40	355	A
25	72	31	26	27	327	36	20	38	3	A

Harmonic constants for constituent N2 for deployment NWNB9807.

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	672	12	241	7	65	14	0	149	62	A
02	647	12	249	6	69	13	0	155	69	A
03	622	13	248	5	77	14	1	160	69	A
04	597	15	246	5	89	15	2	161	68	A
05	572	16	243	6	97	17	4	161	67	A
06	547	18	244	8	110	19	5	161	70	A
07	522	19	246	9	125	19	7	164	72	A
08	497	18	247	9	128	19	7	165	73	A
09	472	18	249	8	133	18	7	166	75	A
10	447	19	255	8	140	20	8	168	79	A
11	422	21	256	8	146	21	8	171	79	A
12	397	22	262	9	157	22	8	173	84	A
13	372	21	273	10	187	21	10	2	272	A
14	347	25	286	13	212	25	13	11	280	A
15	322	24	292	13	225	25	12	15	285	A
16	297	24	300	13	236	25	11	17	292	A
17	272	27	304	16	233	28	15	16	295	A
18	247	31	304	20	232	32	19	18	293	A
19	222	30	301	21	230	32	19	20	289	A
20	197	28	296	21	230	30	18	26	279	A
21	172	29	298	20	227	30	18	22	284	A
22	147	26	302	21	234	29	18	31	281	A
23	122	29	306	19	236	30	17	19	294	A
24	97	31	311	20	240	32	18	18	300	A
25	72	31	312	24	231	32	23	16	299	A

Harmonic constants for constituent O1 for deployment NWNB9807.

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	672	6	44	3	257	7	2	156	230	A
02	647	6	46	4	252	7	2	147	234	A
03	622	5	40	4	249	6	2	145	230	A
04	597	6	39	5	264	7	3	147	233	A
05	572	7	49	4	279	7	3	155	239	A
06	547	7	53	4	285	7	3	160	241	A
07	522	7	50	4	284	8	3	159	239	A
08	497	8	51	3	287	8	2	166	235	A
09	472	7	42	3	303	7	3	175	224	A
10	447	8	43	5	308	8	5	176	226	A
11	422	9	42	3	313	9	3	0	42	A
12	397	11	38	2	277	11	2	175	219	A
13	372	10	30	2	264	10	2	173	211	A
14	347	10	34	3	290	10	3	176	215	A
15	322	11	39	4	286	11	3	172	222	A
16	297	12	39	5	287	13	4	171	222	A
17	272	14	39	6	298	14	6	173	222	A
18	247	14	36	8	323	14	7	12	29	A
19	222	16	39	8	339	17	7	18	31	A
20	197	14	36	11	342	16	8	34	18	A
21	172	18	34	13	342	20	9	31	19	A
22	147	17	36	12	350	19	8	32	22	A
23	122	13	39	10	360	15	5	35	25	A
24	97	8	42	9	18	12	3	46	29	A
25	72	5	40	7	21	8	1	58	26	A

Harmonic constants for constituent K1 for deployment NWNB9807.

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	672	7	280	5	146	8	3	147	115	A
02	647	6	280	5	153	7	3	146	118	A
03	622	6	290	5	151	7	3	145	124	A
04	597	6	297	4	174	7	3	154	130	A
05	572	6	297	4	164	7	3	149	131	A
06	547	7	292	5	155	8	3	149	125	A
07	522	8	285	5	156	9	4	154	116	A
08	497	8	282	6	160	9	4	154	115	A
09	472	9	277	6	154	10	5	154	110	A
10	447	10	278	6	154	11	5	158	108	A
11	422	12	279	6	144	13	4	159	106	A
12	397	15	264	7	145	15	6	164	91	A
13	372	17	254	6	139	17	6	170	77	A
14	347	14	256	6	145	15	6	170	80	A
15	322	15	257	8	133	16	6	160	86	A
16	297	16	261	10	142	17	8	157	93	A
17	272	16	273	9	164	16	8	167	99	A
18	247	16	282	8	193	16	8	1	282	A
19	222	11	285	10	211	12	9	30	262	A
20	197	7	270	10	209	10	6	61	226	A
21	172	3	316	11	208	11	3	96	206	A
22	147	10	56	11	205	14	4	133	219	C
23	122	18	61	10	218	21	3	152	236	C
24	97	20	57	14	214	24	5	145	230	C
25	72	22	50	19	215	29	4	139	224	C

Deployment Id: NWNC9706

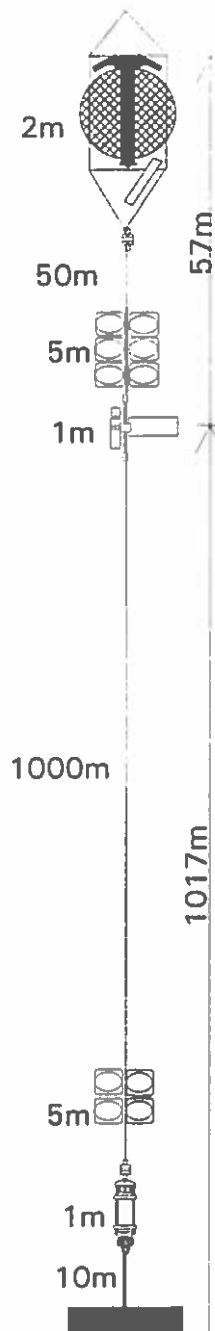
Latitude: 63°16.425'N
Longitude: 006°06.600'W
Echo sounding depth: 1770 m
Bottom depth corr.: 1733m
Time of deployment: 13/06 -1997 1300UTC
Time of recovery: 13/06 - 1998 0530UTC

ADCP:

Instrument no.: RDI ADCP 1285
Instrument frequency: 75kHz
Height above bottom: 1074 m
Depth: 659m (corr.)
Time of first data: 13/06 – 1997 1340UTC
Time of last data: 13/06 – 1998 0440UTC
Sample interval: 20 min
No. of ensembles: 26254
Pings per ens.: 1
Binlength: 25 m
Depth of first bin: 623 m (corr.)
No. of bins: 28

Aanderaa:

Instrument no.: RCM8 10069
Height above bottom: 1017 m
Depth: 716m (corr.)
Time of first data: 13/06 – 1997 1430 UTC
Time of last data: 13/06 – 1998 0330 UTC
Sample interval: 60 min
No. of records: 8750



Deployment: NWNC9706 updated 1999/09/03
 Instrument no.: 1285
 Instrument freq.: 75
 Latitude: 63 16.425 N
 Longitude: 06 06.600 W
 Bottom depth: 1733
 Instrument depth: 659
 Center depth of first bin: 623
 Bin length: 25
 Number of bins: 23
 Number of first ensemble: 351
 Time of first ensemble: 1997 06 13 13 40
 Number of last ensemble: 26604
 Time of last ensemble: 1998 06 13 04 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	623	1110	88	19	175	987
2	598	1135	89	19	174	990
3	573	1160	90	19	171	992
4	548	1185	91	19	168	994
5	523	1210	93	19	166	994
6	498	1235	94	19	163	995
7	473	1260	97	20	160	997
8	448	1285	100	21	156	998
9	423	1310	103	22	150	997
10	398	1335	108	25	146	997
11	373	1360	113	28	143	996
12	348	1385	119	32	138	995
13	323	1410	127	36	136	995
14	298	1435	136	41	133	994
15	273	1460	146	48	131	991
16	248	1485	157	55	129	978
17	223	1510	168	61	128	945
18	198	1535	182	68	127	908
19	173	1560	198	77	128	884
20	148	1585	216	85	128	857
21	123	1610	233	89	128	799
22	98	1635	248	95	126	726
23	73	1660	269	104	126	635

Error statistics for deployment: NWNC9706 updated 99/02/01

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by KMHL in Jan 1999
 Velocity edited up to and including bin 23 by MCP in Oct 1998
 Intensity edited up to and including bin 28 by KMHL in Jan 1999

Total number of ensembles: 26254
 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	338	1	321	7	1	0	0	0	0	0	0	0	0
2	0	257	1	243	7	0	0	0	0	0	0	0	0	0
3	0	215	1	205	5	0	0	0	0	0	0	0	0	0
4	0	169	1	163	3	0	0	0	0	0	0	0	0	0
5	0	167	1	161	3	0	0	0	0	0	0	0	0	0
6	0	122	0	114	4	0	0	0	0	0	0	0	0	0
7	0	90	0	86	2	0	0	0	0	0	0	0	0	0
8	0	59	0	59	0	0	0	0	0	0	0	0	0	0
9	1	77	0	75	1	0	0	0	0	0	0	0	0	0
10	0	76	0	70	3	0	0	0	0	0	0	0	0	0
11	0	107	0	99	4	0	0	0	0	0	0	0	0	0
12	0	124	0	120	2	0	0	0	0	0	0	0	0	0
13	0	141	1	132	3	1	0	0	0	0	0	0	0	0
14	1	166	1	162	2	0	0	0	0	0	0	0	0	0
15	3	232	1	205	8	2	0	1	0	0	0	0	0	0
16	0	573	2	244	39	12	3	2	9	8	0	0	0	0
17	0	1434	5	351	53	18	10	10	28	23	5	4	0	0
18	1	2411	9	442	89	63	30	16	43	34	7	7	3	3
19	2	3041	12	586	110	57	36	30	67	31	7	8	5	5
20	2	3757	14	736	131	73	28	30	48	39	16	11	9	9
21	0	5290	20	884	192	78	35	27	62	56	14	32	11	11
22	1	7193	27	949	208	111	50	41	79	74	41	39	14	14
23	0	9570	36	1216	325	150	86	53	103	90	56	50	18	18

Harmonic constants for constituent M2 for deployment NWNC9706.

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	623	64	277	29	243	69	15	22	272	A
02	598	63	276	28	245	68	13	22	271	A
03	573	62	276	26	248	66	12	21	272	A
04	548	59	276	25	251	64	10	21	272	A
05	523	57	276	24	258	61	7	22	273	A
06	498	52	275	22	270	57	2	23	274	A
07	473	48	273	21	280	52	2	23	274	C
08	448	45	272	21	290	49	6	24	275	C
09	423	41	273	22	297	46	8	27	278	C
10	398	38	275	25	303	44	10	32	283	C
11	373	35	276	27	307	43	11	36	287	C
12	348	32	278	29	313	41	13	41	293	C
13	323	29	280	32	317	41	14	49	301	C
14	298	25	280	35	323	41	15	58	310	C
15	273	20	277	39	329	41	15	70	322	C
16	248	14	275	44	335	45	12	80	333	C
17	223	7	260	49	340	49	7	89	340	C
18	198	4	178	56	348	57	1	94	348	C
19	173	12	116	67	351	67	10	96	350	A
20	148	20	103	79	351	80	19	96	349	A
21	123	22	102	82	351	82	21	96	349	A
22	98	26	104	79	355	80	24	97	353	A
23	73	31	115	85	358	86	27	100	355	A

Harmonic constants for constituent S2 for deployment NWNC9706.

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	623	21	305	8	287	22	2	19	303	A
02	598	21	304	7	286	22	2	17	302	A
03	573	21	304	6	284	22	2	16	302	A
04	548	20	304	6	283	21	2	16	303	A
05	523	20	308	7	294	22	2	19	306	A
06	498	20	312	9	299	22	2	22	310	A
07	473	20	317	10	304	23	2	26	315	A
08	448	20	321	10	309	22	2	28	318	A
09	423	19	319	11	307	22	2	29	316	A
10	398	20	317	9	301	22	2	25	314	A
11	373	20	316	9	307	22	1	25	315	A
12	348	18	319	9	318	20	0	26	318	A
13	323	16	320	9	327	18	1	30	322	C
14	298	15	321	10	333	17	2	33	325	C
15	273	14	326	10	341	17	2	34	331	C
16	248	11	333	12	358	16	3	47	346	C
17	223	10	352	14	2	17	1	55	359	C
18	198	10	8	14	11	17	0	56	10	C
19	173	7	18	15	30	16	1	66	28	C
20	148	3	359	15	27	15	1	80	26	C
21	123	3	327	18	35	18	3	86	35	C
22	98	3	4	14	36	14	2	78	35	C
23	73	10	11	15	33	18	3	58	27	C

Harmonic constants for constituent N2 for deployment NWNC9706.

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	623	14	263	8	229	15	4	27	256	A
02	598	14	264	8	228	15	4	27	256	A
03	573	13	265	7	233	14	3	27	258	A
04	548	12	261	7	234	14	3	26	256	A
05	523	12	260	6	232	13	3	24	255	A
06	498	13	260	6	231	14	3	22	255	A
07	473	13	263	6	225	14	4	23	256	A
08	448	12	265	7	231	13	3	28	257	A
09	423	10	273	8	251	13	2	38	264	A
10	398	9	283	9	270	13	1	44	277	A
11	373	9	297	10	278	13	2	50	286	A
12	348	8	303	11	284	14	2	54	290	A
13	323	8	304	11	284	13	2	55	291	A
14	298	7	296	10	287	12	1	54	290	A
15	273	6	314	12	300	13	1	65	302	A
16	248	7	357	16	304	16	5	74	309	A
17	223	9	349	18	300	19	6	71	306	A
18	198	10	337	19	296	20	6	65	304	A
19	173	11	331	19	298	21	5	62	305	A
20	148	10	304	16	288	19	2	58	293	A
21	123	10	295	13	293	17	0	53	293	A
22	98	13	308	12	280	17	4	42	295	A
23	73	9	293	11	303	15	1	51	299	C

Harmonic constants for constituent O1 for deployment NWNC9706.

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	623	5	38	1	40	6	0	10	38	C
02	598	6	42	1	8	6	1	11	40	A
03	573	6	46	1	5	6	1	7	45	A
04	548	6	47	1	14	6	1	9	46	A
05	523	6	47	1	67	6	0	7	47	C
06	498	6	46	1	86	6	0	5	47	C
07	473	6	47	0	99	6	0	2	47	C
08	448	7	43	1	328	7	1	3	42	A
09	423	7	47	2	347	7	2	10	45	A
10	398	5	41	1	305	5	1	179	221	A
11	373	7	35	2	281	7	2	173	217	A
12	348	7	45	2	305	7	2	177	225	A
13	323	6	64	1	26	6	1	10	63	A
14	298	7	64	1	81	7	0	9	65	C
15	273	6	47	1	313	6	1	180	227	A
16	248	7	52	0	325	7	0	0	52	A
17	223	8	62	3	31	8	2	20	58	A
18	198	11	50	2	36	11	0	9	49	A
19	173	10	52	2	342	10	2	4	52	A
20	148	9	58	6	45	11	1	32	54	A
21	123	9	62	8	3	11	6	38	39	A
22	98	8	51	12	335	12	7	75	344	A
23	73	5	85	13	311	14	4	108	306	A

Harmonic constants for constituent K1 for deployment NWNC9706.

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	623	5	285	1	152	5	1	169	107	A
02	598	5	283	1	151	5	1	171	104	A
03	573	5	277	1	185	5	1	180	97	A
04	548	6	278	1	165	6	1	175	99	A
05	523	5	279	1	163	5	1	174	100	A
06	498	5	281	2	153	5	1	169	103	A
07	473	6	285	2	168	6	1	173	106	A
08	448	7	282	2	180	7	2	177	103	A
09	423	7	284	2	184	7	2	177	105	A
10	398	7	286	3	202	7	3	2	285	A
11	373	6	293	2	214	6	2	3	292	A
12	348	5	287	0	315	5	0	3	287	C
13	323	5	266	0	334	5	0	2	266	C
14	298	5	264	1	185	6	1	3	263	A
15	273	7	274	1	196	7	1	2	273	A
16	248	5	266	4	272	6	0	40	268	C
17	223	5	265	5	273	7	0	48	269	C
18	198	3	236	3	339	3	2	161	42	C
19	173	4	207	4	26	5	0	131	26	C
20	148	2	222	1	96	2	1	160	50	A
21	123	5	248	3	314	5	3	19	258	C
22	98	7	248	8	322	8	6	58	297	C
23	73	8	216	10	322	11	7	112	337	C

Deployment Id: NWNC9807

Latitude: 63°15.944'N

Longitude: 006°06.299'W

Echo sounding depth: 1770 m

Bottom depth corr.: 1728m

Time of deployment: 05/07 -1998 0118UTC

Time of recovery: 19/06 - 1999 2115UTC

ADCP:

Instrument no.: RDI ADCP 1577

Instrument frequency: 75kHz

Height above bottom: 1073 m

Depth: 655m (corr.)

Time of first data: 05/07 – 1998 0140UTC

Time of last data: 19/06 – 1999 2100UTC

Sample interval: 20 min

No. of ensembles: 25187

Pings per ens.: 1

Binlength: 25 m

Depth of first bin: 619 m (corr.)

No. of bins: 28



Deployment: NWNC9807 updated 1999/09/22
Instrument no.: 1577
Instrument freq.: 75
Latitude: 63 15.944 N
Longitude: 06 06.299 W
Bottom depth: 1728
Instrument depth: 655
Center depth of first bin: 619
Bin length: 25
Number of bins: 23
Number of first ensemble: 244
Time of first ensemble: 1998 07 05 01 40
Number of last ensemble: 25430
Time of last ensemble: 1999 06 19 21 00
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	619	1109	89	23	189	994
2	594	1134	90	23	187	995
3	569	1159	93	23	185	995
4	544	1184	97	23	184	995
5	519	1209	101	23	181	996
6	494	1234	104	22	178	996
7	469	1259	107	22	173	995
8	444	1284	109	21	171	995
9	419	1309	112	21	166	996
10	394	1334	113	20	162	996
11	369	1359	115	20	158	995
12	344	1384	119	21	149	994
13	319	1409	126	23	139	993
14	294	1434	134	25	132	990
15	269	1459	145	28	126	979
16	244	1484	158	33	120	936
17	219	1509	173	36	115	869
18	194	1534	188	40	112	815
19	169	1559	202	44	110	778
20	144	1584	216	44	115	750
21	119	1609	230	46	118	698
22	94	1634	245	48	119	624
23	69	1659	264	45	115	495

Error statistics for deployment: NWNC9807 updated 1999/09/22

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by MCP in July 1999
 Velocity edited up to and including bin 23 by MCP in July 1999
 Intensity edited up to and including bin 24 by MCP in July 1999
 Velocity reedited from bin 18 up to bin 23 by KMHL in Sept 1999

Total number of ensembles: 25187
 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	153	1	145	4	0	0	0	0	0	0	0	0	0
2	0	138	1	135	0	1	0	0	0	0	0	0	0	0
3	0	135	1	131	2	0	0	0	0	0	0	0	0	0
4	0	116	0	108	4	0	0	0	0	0	0	0	0	0
5	0	111	0	107	2	0	0	0	0	0	0	0	0	0
6	0	106	0	102	2	0	0	0	0	0	0	0	0	0
7	0	138	1	134	2	0	0	0	0	0	0	0	0	0
8	0	115	0	109	3	0	0	0	0	0	0	0	0	0
9	0	103	0	101	1	0	0	0	0	0	0	0	0	0
10	0	94	0	94	0	0	0	0	0	0	0	0	0	0
11	0	130	1	128	1	0	0	0	0	0	0	0	0	0
12	0	140	1	136	2	0	0	0	0	0	0	0	0	0
13	0	179	1	175	2	0	0	0	0	0	0	0	0	0
14	0	248	1	225	10	1	0	0	0	0	0	0	0	0
15	0	538	2	319	22	13	7	4	9	2	0	0	0	0
16	0	1601	6	386	56	25	19	9	43	18	11	3	0	0
17	0	3292	13	473	114	44	33	18	64	61	17	11	0	0
18	6	4656	18	497	104	58	39	29	58	70	22	27	6	6
19	1	5604	22	562	113	73	40	33	77	67	32	27	15	15
20	1	6303	25	660	173	86	61	36	93	56	31	28	20	20
21	2	7615	30	696	235	96	61	50	109	67	42	30	26	26
22	2	9482	38	818	230	96	56	43	96	82	46	51	35	35
23	1	12711	50	1084	310	149	79	65	92	77	60	68	46	46

Harmonic constants for constituent M2 for deployment NWNC9807.

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	57	283	33	262	66	10	29	278	A
02	594	56	285	34	267	64	9	31	280	A
03	569	55	287	35	269	64	9	32	282	A
04	544	56	288	36	269	66	10	32	283	A
05	519	56	288	36	270	66	10	32	283	A
06	494	57	289	36	269	66	10	32	283	A
07	469	56	288	36	269	66	10	32	283	A
08	444	56	288	35	271	65	8	32	283	A
09	419	55	287	35	272	65	8	32	283	A
10	394	52	288	34	277	62	5	33	285	A
11	369	47	288	33	287	58	0	35	288	A
12	344	41	288	35	296	54	4	40	291	C
13	319	35	289	36	308	50	8	47	299	C
14	294	28	293	40	318	48	10	55	309	C
15	269	25	299	43	320	49	8	61	315	C
16	244	20	308	47	324	51	5	67	321	C
17	219	14	319	53	332	55	3	76	332	C
18	194	10	14	62	339	62	5	83	340	A
19	169	17	53	76	342	77	16	85	343	A
20	144	27	69	86	345	86	27	88	345	A
21	119	34	73	92	346	92	34	89	346	A
22	94	39	75	93	344	93	39	90	344	A
23	69	37	70	97	342	97	37	89	342	A

Harmonic constants for constituent S2 for deployment NWNC9807.

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	23	315	11	286	25	5	23	311	A
02	594	23	313	11	285	25	5	23	309	A
03	569	23	313	11	285	25	5	24	308	A
04	544	22	315	11	285	25	5	25	309	A
05	519	22	315	11	289	24	4	25	311	A
06	494	21	310	9	293	22	2	23	308	A
07	469	20	304	7	292	21	1	19	303	A
08	444	20	301	7	289	21	1	18	300	A
09	419	20	301	6	281	21	2	16	299	A
10	394	22	303	6	272	22	3	14	301	A
11	369	23	305	6	263	23	4	11	303	A
12	344	23	297	3	260	23	2	7	296	A
13	319	22	290	2	243	22	1	3	290	A
14	294	20	283	2	88	20	1	173	103	C
15	269	17	275	5	70	18	2	164	93	C
16	244	16	271	7	61	17	3	157	86	C
17	219	18	259	12	63	21	3	145	73	C
18	194	17	253	15	65	23	1	139	70	C
19	169	14	248	17	58	22	2	128	62	C
20	144	15	241	14	67	21	1	137	64	A
21	119	17	254	10	75	20	0	150	74	A
22	94	18	256	11	56	21	3	151	71	C
23	69	18	236	14	36	22	4	143	49	C

Harmonic constants for constituent N2 for deployment NWNC9807.

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	15	272	10	230	17	6	30	260	A
02	594	14	274	10	237	16	5	32	263	A
03	569	14	276	10	243	16	5	34	266	A
04	544	13	277	9	249	15	4	35	268	A
05	519	11	278	10	260	15	2	40	271	A
06	494	10	285	10	267	13	2	45	275	A
07	469	9	296	10	277	14	2	50	285	A
08	444	8	305	12	285	14	2	58	291	A
09	419	6	312	12	294	14	2	65	297	A
10	394	5	316	12	299	13	1	70	301	A
11	369	5	305	11	302	12	0	68	303	A
12	344	5	315	12	302	13	1	66	304	A
13	319	3	304	12	307	12	0	75	307	C
14	294	2	191	10	327	10	1	98	328	C
15	269	5	152	12	344	12	1	111	343	A
16	244	7	134	14	340	15	3	113	336	A
17	219	6	122	14	337	15	3	109	332	A
18	194	5	98	14	337	14	4	101	334	A
19	169	6	93	15	326	16	5	106	321	A
20	144	10	82	18	335	19	9	101	330	A
21	119	13	70	24	330	24	13	98	325	A
22	94	23	63	32	333	32	23	90	333	A
23	69	31	64	38	333	38	31	92	332	A

Harmonic constants for constituent O1 for deployment NWNC9807.

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	6	39	1	104	6	1	4	40	C
02	594	6	39	1	91	6	1	5	39	C
03	569	6	42	1	116	6	1	1	42	C
04	544	6	47	1	31	6	0	8	47	A
05	519	7	49	2	34	7	1	17	48	A
06	494	6	52	2	54	7	0	16	52	C
07	469	6	58	2	68	6	0	20	59	C
08	444	5	56	2	72	6	0	18	58	C
09	419	6	48	1	85	6	1	8	49	C
10	394	6	41	1	1	6	0	5	41	A
11	369	7	45	2	334	7	2	6	43	A
12	344	7	49	2	358	7	1	9	47	A
13	319	7	37	2	8	7	1	11	36	A
14	294	7	36	2	323	7	2	6	34	A
15	269	7	31	2	335	7	2	11	28	A
16	244	4	42	1	307	4	1	179	222	A
17	219	5	45	2	322	5	2	4	43	A
18	194	5	33	1	2	5	0	8	32	A
19	169	6	95	5	24	7	4	26	77	A
20	144	8	96	4	352	8	4	168	283	A
21	119	8	95	5	330	8	3	157	285	A
22	94	11	117	8	356	12	6	152	312	A
23	69	17	118	7	14	17	7	174	301	A

Harmonic constants for constituent K1 for deployment NWNC9807.

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	285	1	214	5	1	5	284	A
02	594	4	286	1	202	4	1	2	285	A
03	569	4	285	1	203	4	1	1	285	A
04	544	5	287	1	141	5	1	170	108	A
05	519	5	280	1	119	5	0	167	101	A
06	494	5	280	1	150	5	1	173	101	A
07	469	5	273	1	158	5	1	175	94	A
08	444	5	280	1	151	5	1	170	102	A
09	419	7	277	2	177	7	2	177	97	A
10	394	8	273	2	211	8	1	6	271	A
11	369	8	277	1	233	8	1	5	277	A
12	344	6	285	1	217	6	1	3	284	A
13	319	4	286	1	299	4	0	17	288	C
14	294	5	287	2	319	5	1	20	291	C
15	269	5	288	3	313	6	1	24	292	C
16	244	7	285	2	281	7	0	18	285	A
17	219	8	281	6	265	10	1	34	276	A
18	194	10	283	6	265	11	2	31	278	A
19	169	12	284	12	257	16	4	45	271	A
20	144	10	296	12	272	15	3	49	282	A
21	119	11	314	15	266	17	7	58	281	A
22	94	10	325	18	253	18	9	78	259	A
23	69	13	323	23	219	24	12	100	214	A

Deployment Id: NWND9711

Latitude: 62°57.540'N

Longitude: 006°05.600'W

Echo sounding depth: 1306m

Bottom depth corr.: 1283m

Time of deployment: 11/11 -1997 0645UTC

Time of recovery: 13/06 - 1998 0740UTC

ADCP:

Instrument no.: RDI ADCP 1245

Instrument frequency: 75kHz

Height above bottom: 613m

Depth: 670m (corr.)

Time of first data: 11/11 - 1997 0720UTC

Time of last data: 13/06 - 1998 0740UTC

Sample interval: 20 min

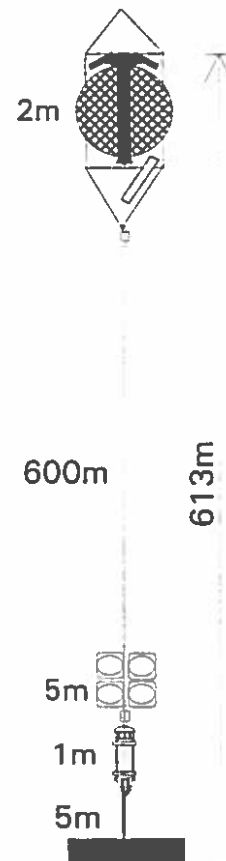
No. of ensembles: 15410

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 634m (corr.)

No. of bins: 28



Deployment: NWND9711 updated 1999/09/03
 Instrument no.: 1245
 Instrument freq.: 75
 Latitude: 62 57.540 N
 Longitude: 06 05.600 W
 Bottom depth: 1283
 Instrument depth: 670
 Center depth of first bin: 634
 Bin length: 25
 Number of bins: 23
 Number of first ensemble: 398
 Time of first ensemble: 1997 11 11 07 20
 Number of last ensemble: 15807
 Time of last ensemble: 1998 06 13 07 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	634	649	116	38	107	991
2	609	674	117	38	106	991
3	584	699	119	37	107	990
4	559	724	122	36	108	991
5	534	749	124	38	110	994
6	509	774	130	41	110	996
7	484	799	135	43	111	994
8	459	824	141	48	111	994
9	434	849	149	55	110	990
10	409	874	158	65	109	990
11	384	899	170	76	109	985
12	359	924	184	91	108	980
13	334	949	203	109	107	974
14	309	974	221	128	106	965
15	284	999	237	145	105	958
16	259	1024	256	163	104	933
17	234	1049	273	179	102	891
18	209	1074	290	194	100	828
19	184	1099	304	204	100	772
20	159	1124	318	215	100	721
21	134	1149	334	229	100	652
22	109	1174	349	240	101	577
23	84	1199	363	251	101	468

Error statistics for deployment: NWND9711 updated 99/02/01

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by KMHL in Jan 1999
 Velocity edited up to and including bin 24 by MCP in Jan 1999
 Intensity edited up to and including bin 28 by KMHL in Jan 1999
 Beam 4 was defective, so only the other three beams went into analysis

Total number of ensembles: 15410
 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: 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	1	139	1	132	2	1	0	0	0	0	0	0	0	0	0
2	1	132	1	123	4	0	0	0	0	0	0	0	0	0	0
3	1	149	1	144	2	0	0	0	0	0	0	0	0	0	0
4	1	142	1	129	6	0	0	0	0	0	0	0	0	0	0
5	1	99	1	89	3	1	0	0	0	0	0	0	0	0	0
6	1	59	0	58	0	0	0	0	0	0	0	0	0	0	0
7	1	93	1	82	5	0	0	0	0	0	0	0	0	0	0
8	1	93	1	75	3	1	2	0	0	0	0	0	0	0	0
9	1	155	1	133	6	3	0	0	0	0	0	0	0	0	0
10	1	155	1	141	5	1	0	0	0	0	0	0	0	0	0
11	1	235	2	178	12	1	0	0	4	0	0	0	0	0	0
12	2	314	2	207	17	3	3	2	4	1	0	0	0	0	0
13	2	394	3	230	18	10	5	3	7	1	0	0	0	0	0
14	1	546	4	288	38	15	5	3	7	4	0	0	0	0	0
15	1	654	4	322	33	20	10	8	7	5	0	0	0	0	0
16	3	1025	7	380	54	22	26	6	23	10	1	0	0	0	0
17	3	1687	11	356	80	37	19	13	34	24	6	4	0	0	0
18	5	2648	17	402	78	41	19	19	40	23	12	18	3	3	3
19	2	3518	23	408	122	50	33	24	58	35	11	19	9	9	9
20	3	4305	28	444	132	74	34	25	56	36	13	22	17	17	17
21	1	5356	35	480	139	58	39	23	66	49	27	22	25	25	25
22	1	6522	42	566	156	65	41	27	45	45	47	38	24	24	24
23	3	8196	53	628	197	93	57	32	73	48	48	57	28	28	28

Harmonic constants for constituent M2 for deployment NWND9711.

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	634	80	280	29	169	81	27	172	103	A
02	609	82	283	29	178	83	28	174	105	A
03	584	85	286	31	188	85	31	177	107	A
04	559	88	289	33	200	88	33	0	289	A
05	534	89	292	36	209	89	35	3	290	A
06	509	92	294	37	217	92	36	6	292	A
07	484	94	297	39	225	95	37	9	294	A
08	459	97	300	42	229	98	39	10	296	A
09	434	99	301	44	231	100	41	10	297	A
10	409	103	304	49	235	105	45	12	298	A
11	384	106	307	53	242	109	46	15	300	A
12	359	105	312	56	248	109	48	17	304	A
13	334	109	316	63	254	114	53	20	306	A
14	309	110	319	66	258	116	55	21	308	A
15	284	108	323	65	265	114	52	22	313	A
16	259	105	329	68	269	113	55	24	317	A
17	234	108	333	73	273	116	59	26	320	A
18	209	118	335	83	274	128	67	27	320	A
19	184	124	337	90	271	132	77	26	321	A
20	159	127	337	99	270	137	85	29	318	A
21	134	134	336	105	266	143	93	27	318	A
22	109	139	337	114	261	145	106	26	318	A
23	84	149	336	113	259	154	107	20	322	A

Harmonic constants for constituent S2 for deployment NWND9711.

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	634	26	323	8	207	26	7	171	145	A
02	609	26	324	8	215	27	8	174	146	A
03	584	27	326	7	215	27	7	174	147	A
04	559	27	324	8	217	27	7	175	146	A
05	534	27	325	8	225	27	7	177	146	A
06	509	28	326	9	244	28	9	3	325	A
07	484	27	331	8	262	27	7	6	329	A
08	459	26	335	8	279	26	6	10	333	A
09	434	25	339	7	302	26	4	14	336	A
10	409	25	345	8	318	26	3	16	342	A
11	384	29	351	12	314	31	7	18	347	A
12	359	34	359	19	313	37	13	24	350	A
13	334	35	5	24	321	40	15	31	353	A
14	309	35	10	24	321	39	16	30	357	A
15	284	34	12	22	319	37	16	27	359	A
16	259	33	7	23	321	38	15	30	355	A
17	234	35	6	19	322	38	12	24	358	A
18	209	38	7	19	310	39	15	17	1	A
19	184	33	7	17	311	35	13	19	359	A
20	159	30	15	20	307	31	18	22	2	A
21	134	30	29	23	312	31	22	20	15	A
22	109	44	21	34	311	47	30	26	3	A
23	84	38	42	43	339	49	29	52	4	A

Harmonic constants for constituent N2 for deployment NWND9711.

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	634	9	238	6	56	11	0	144	57	C
02	609	11	237	7	66	13	1	149	60	A
03	584	12	237	7	77	14	2	152	62	A
04	559	15	241	8	103	16	5	155	69	A
05	534	17	249	8	122	18	6	163	74	A
06	509	20	255	8	152	21	7	174	77	A
07	484	23	261	11	167	23	11	177	83	A
08	459	24	263	13	171	24	13	178	83	A
09	434	24	270	14	178	24	14	178	91	A
10	409	24	273	14	187	25	14	3	272	A
11	384	26	273	16	187	26	16	3	271	A
12	359	26	283	17	198	26	16	5	279	A
13	334	26	284	16	201	26	16	7	279	A
14	309	25	280	15	202	25	15	12	273	A
15	284	26	283	17	198	27	17	6	279	A
16	259	28	285	19	199	29	19	5	281	A
17	234	30	289	22	197	30	22	177	110	A
18	209	30	290	23	200	30	23	179	110	A
19	184	29	296	19	207	29	19	2	295	A
20	159	33	300	23	219	33	23	12	292	A
21	134	33	301	22	202	33	21	170	128	A
22	109	31	282	27	201	32	26	22	264	A
23	84	35	278	35	181	37	33	134	141	A

Harmonic constants for constituent O1 for deployment NWND9711.

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	634	5	53	3	288	5	2	156	244	A
02	609	6	56	2	266	6	1	160	240	A
03	584	5	51	3	288	6	3	156	242	A
04	559	5	44	3	276	6	2	153	237	A
05	534	6	45	3	283	7	2	164	231	A
06	509	7	41	4	280	7	3	158	231	A
07	484	6	33	6	282	7	5	134	248	A
08	459	7	50	8	287	9	5	129	263	A
09	434	8	67	7	305	9	5	144	268	A
10	409	6	81	4	301	6	2	148	273	A
11	384	4	75	5	292	6	2	127	278	A
12	359	6	72	5	286	7	2	142	265	A
13	334	6	56	8	285	9	4	123	270	A
14	309	7	76	8	278	11	2	130	269	A
15	284	7	94	7	262	10	1	135	268	C
16	259	10	81	8	290	12	3	140	273	A
17	234	11	65	8	299	13	6	152	259	A
18	209	16	44	11	319	16	11	6	40	A
19	184	16	48	8	324	16	8	4	46	A
20	159	12	46	8	320	12	8	5	42	A
21	134	10	16	13	299	14	10	68	315	A
22	109	16	20	22	283	22	15	100	277	A
23	84	19	17	26	261	28	16	117	245	A

Harmonic constants for constituent K1 for deployment NWND9711.

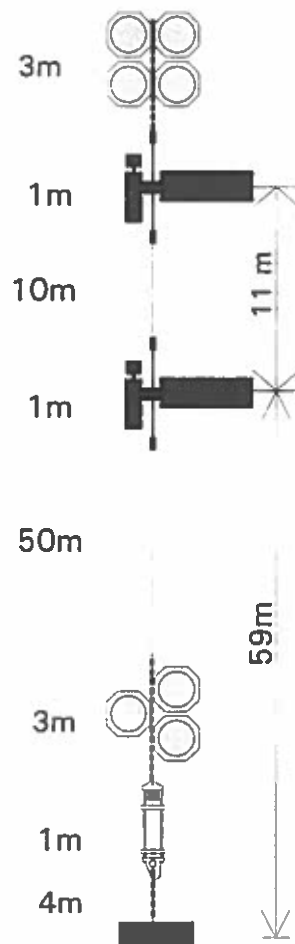
Bin	Depth m	E-ampl mm/sec	E-gph deg	N-ampl mm/sec	N-gph deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	634	5	280	4	169	5	3	154	118	A
02	609	5	275	4	151	6	3	149	112	A
03	584	5	286	4	170	6	3	155	120	A
04	559	5	302	4	170	5	2	146	138	A
05	534	4	296	4	153	6	2	137	133	A
06	509	4	286	5	147	6	2	127	132	A
07	484	5	296	5	148	7	2	134	133	A
08	459	7	302	6	153	8	2	141	135	A
09	434	7	304	7	153	10	2	134	139	A
10	409	8	295	8	145	11	3	135	130	A
11	384	6	288	5	138	8	2	140	120	A
12	359	6	283	5	98	8	0	144	102	C
13	334	9	267	5	108	10	2	152	92	A
14	309	9	269	3	130	10	2	165	92	A
15	284	10	284	3	195	10	3	0	284	A
16	259	13	280	5	263	14	1	19	278	A
17	234	15	276	6	322	15	4	15	280	C
18	209	15	263	5	312	15	4	13	267	C
19	184	4	223	6	324	6	4	108	337	C
20	159	12	92	4	333	12	4	170	275	A
21	134	21	48	8	84	22	5	19	52	C
22	109	24	316	21	134	31	1	139	135	C
23	84	51	329	8	152	51	0	171	149	A

Deployment Id: NWSA9811

Latitude: 61°00.137'N
Longitude: 005°50.612'W
Echo sounding depth: 295m
Bottom depth corr.: 295m
Time of deployment: 06/11 -1998 0820UTC
Time of recovery: 12/06 – 1999 1800 UTC

ADCP:

Instrument no.: RDI ADCP 1279
Instrument frequency: 150kHz
Height above bottom: 1m
Depth: 294m (corr.)
Time of first data: 06/11 – 1998 0840 UTC
Time of last data: 12/06 – 1999 1700 UTC
Sample interval: 20 min
No. of ensembles: 15722
Pings per ens.: 1
Binlength: 10 m
Depth of first bin: 278 (corr.)
No. of bins: 30



Calibration rig: NWSA99-cal

Instrument no.: RCM7 10309 RCM7 9494
Height above bottom: 70m 59m
Depth: 223m 234m
Time of first data: 12/06-1999 UTC1127
Time of last data: 12/06-1999 UTC1840
Interval: 5 min 5 min

Deployment: NWSA9811 updated 1999/09/21
 Instrument no.: 1279
 Instrument freq.: 150
 Latitude: 61 00.137 N
 Longitude: 05 50.612 W
 Bottom depth: 295
 Instrument depth: 294
 Center depth of first bin: 278
 Bin length: 10
 Number of bins: 24
 Number of first ensemble: 200
 Time of first ensemble: 1998 11 06 08 40
 Number of last ensemble: 15921
 Time of last ensemble: 1999 06 12 17 00
 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	278	17	180	29	189	895
2	268	27	197	31	192	926
3	258	37	211	34	199	941
4	248	47	220	36	202	951
5	238	57	226	37	203	957
6	228	67	228	38	205	964
7	218	77	229	36	206	967
8	208	87	230	36	207	969
9	198	97	230	36	207	972
10	188	107	230	35	207	970
11	178	117	230	34	205	965
12	168	127	231	32	205	962
13	158	137	233	31	204	964
14	148	147	235	30	204	958
15	138	157	239	30	202	952
16	128	167	242	28	202	935
17	118	177	246	27	202	909
18	108	187	251	27	202	872
19	98	197	255	24	200	819
20	88	207	262	22	198	752
21	78	217	269	19	192	689
22	68	227	279	15	200	608
23	58	237	295	13	204	534
24	48	247	313	10	192	440

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by MCP in July 1999
 Velocity edited up to and including bin 24 by MCP in July 1999
 Intensity edited up to and including bin 28 by MCP in July 1999
 Velocity reedited from bin 18 up to bin 24 by KMH in Sept 1999

Total number of ensembles: 15722
 Interval between ensembles: 20 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: 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	4	1653	11	1189	154	38	8	2	0	0	0	0	0	0
2	3	1159	7	856	99	27	6	0	0	0	0	0	0	0
3	3	934	6	751	70	13	1	0	0	0	0	0	0	0
4	1	776	5	643	47	10	1	1	0	0	0	0	0	0
5	1	679	4	523	52	16	1	0	0	0	0	0	0	0
6	0	559	4	470	38	3	1	0	0	0	0	0	0	0
7	3	514	3	424	37	4	1	0	0	0	0	0	0	0
8	1	480	3	414	24	6	0	0	0	0	0	0	0	0
9	1	438	3	376	20	1	1	1	1	0	0	0	0	0
10	1	469	3	344	31	7	5	0	1	1	0	0	0	0
11	0	555	4	377	38	10	5	1	5	1	0	0	0	0
12	1	596	4	382	35	13	7	1	10	0	0	0	0	0
13	0	571	4	341	48	9	10	2	5	2	0	0	0	0
14	0	666	4	399	41	15	4	2	12	1	1	0	0	0
15	0	753	5	446	52	21	4	6	9	2	0	0	0	0
16	0	1019	6	599	71	25	9	10	11	1	1	0	0	0
17	0	1433	9	755	141	35	20	10	8	3	2	0	0	0
18	0	2005	13	892	177	66	30	15	29	5	3	0	0	0
19	0	2843	18	1057	276	99	41	36	29	16	3	2	0	0
20	0	3899	25	1201	348	165	73	38	56	17	8	5	0	0
21	0	4888	31	1193	405	185	93	59	99	38	8	5	0	0
22	0	6158	39	1188	414	232	127	83	145	45	10	14	1	0
23	0	7324	47	1120	449	252	141	79	183	60	13	22	3	0
24	0	8812	56	1009	408	248	151	96	221	90	17	34	6	0

Deployment: NWSA9811

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	278	685	348	109	18	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	268	748	418	159	35	6	1	0	0	0	0	0	0	0	0	0	0	0	0
3	258	788	470	199	50	9	1	0	0	0	0	0	0	0	0	0	0	0	0
4	248	817	509	225	61	13	2	0	0	0	0	0	0	0	0	0	0	0	0
5	238	835	526	240	70	15	2	0	0	0	0	0	0	0	0	0	0	0	0
6	228	843	541	248	71	16	2	0	0	0	0	0	0	0	0	0	0	0	0
7	218	845	548	247	73	15	2	0	0	0	0	0	0	0	0	0	0	0	0
8	208	849	550	254	75	16	3	0	0	0	0	0	0	0	0	0	0	0	0
9	198	853	551	254	76	17	3	0	0	0	0	0	0	0	0	0	0	0	0
10	188	852	547	254	75	17	3	0	0	0	0	0	0	0	0	0	0	0	0
11	178	847	545	252	77	18	4	1	0	0	0	0	0	0	0	0	0	0	0
12	168	848	544	254	82	17	3	1	0	0	0	0	0	0	0	0	0	0	0
13	158	849	549	259	86	18	4	1	0	0	0	0	0	0	0	0	0	0	0
14	148	847	551	266	91	20	5	1	0	0	0	0	0	0	0	0	0	0	0
15	138	842	556	274	93	23	6	2	1	0	0	0	0	0	0	0	0	0	0
16	128	823	556	280	104	28	8	2	1	1	0	0	0	0	0	0	0	0	0
17	118	802	541	280	110	32	10	4	2	1	1	0	0	0	0	0	0	0	0
18	108	774	528	280	116	37	12	5	2	1	1	0	0	0	0	0	0	0	0
19	98	729	501	273	118	39	14	6	3	1	0	0	0	0	0	0	0	0	0
20	88	672	466	262	119	45	16	8	4	2	1	0	0	0	0	0	0	0	0
21	78	621	436	249	118	48	20	10	5	3	1	0	0	0	0	0	0	0	0
22	68	548	396	235	117	52	24	13	7	4	2	1	0	0	0	0	0	0	0
23	58	484	359	222	116	58	31	17	10	6	3	2	1	0	0	0	0	0	0
24	48	400	306	197	111	59	34	20	12	7	4	3	2	1	0	0	0	0	0

Harmonic constants for constituent M2 for deployment NWSA9811.

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	243	100	219	218	37	26	238	A
02	268	217	246	116	215	240	53	26	240	A
03	258	230	249	130	214	256	68	27	242	A
04	248	237	252	143	214	266	78	28	243	A
05	238	241	254	152	215	272	84	29	244	A
06	228	241	255	157	216	275	87	30	245	A
07	218	241	257	160	217	275	89	31	246	A
08	208	241	257	163	218	277	89	31	246	A
09	198	240	258	164	219	277	90	32	247	A
10	188	239	259	166	220	277	89	32	247	A
11	178	239	259	167	221	278	88	33	247	A
12	168	238	259	167	221	278	88	33	248	A
13	158	238	259	170	222	279	88	33	247	A
14	148	238	259	171	222	280	88	34	248	A
15	138	239	260	173	222	282	89	34	248	A
16	128	241	260	175	223	284	89	34	248	A
17	118	243	260	176	224	287	88	34	248	A
18	108	245	260	179	224	290	88	34	248	A
19	98	244	260	181	224	291	88	35	248	A
20	88	248	260	185	225	297	89	35	248	A
21	78	245	259	186	225	294	88	36	247	A
22	68	249	258	184	225	297	85	35	247	A
23	58	253	259	188	224	302	91	35	248	A
24	48	252	260	190	224	301	94	35	247	A

Harmonic constants for constituent S2 for deployment NWSA9811.

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	280	36	266	78	8	26	278	A
02	268	77	284	39	262	86	13	26	279	A
03	258	82	286	42	259	91	17	26	280	A
04	248	85	288	46	257	94	21	26	282	A
05	238	86	290	49	258	97	24	28	283	A
06	228	87	292	53	258	98	26	29	283	A
07	218	86	294	55	259	98	28	30	284	A
08	208	86	295	56	260	98	29	31	286	A
09	198	87	296	56	261	99	28	31	287	A
10	188	86	298	56	262	98	29	31	288	A
11	178	85	298	58	263	99	29	32	287	A
12	168	86	298	59	264	100	28	33	288	A
13	158	86	298	60	264	101	29	33	288	A
14	148	86	298	59	265	101	28	32	288	A
15	138	86	298	59	265	101	28	33	288	A
16	128	87	299	60	264	102	29	33	289	A
17	118	89	299	61	265	104	29	32	289	A
18	108	88	298	59	265	102	28	32	289	A
19	98	88	299	59	266	103	27	32	289	A
20	88	88	299	60	267	103	28	33	289	A
21	78	87	298	60	266	102	27	33	289	A
22	68	89	298	60	266	104	28	32	289	A
23	58	86	294	62	265	102	26	35	285	A
24	48	86	295	57	264	100	25	32	287	A

Harmonic constants for constituent N2 for deployment NWSA9811.

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	38	210	17	208	42	1	23	210	A
02	268	42	214	20	203	46	3	25	212	A
03	258	46	217	21	198	50	6	24	214	A
04	248	49	221	24	192	53	11	24	216	A
05	238	50	222	27	193	55	12	26	216	A
06	228	51	226	28	192	57	14	27	219	A
07	218	53	228	30	193	59	15	27	221	A
08	208	53	230	32	194	60	17	28	221	A
09	198	54	232	33	194	61	18	29	223	A
10	188	53	234	34	196	60	18	29	224	A
11	178	53	234	35	196	61	19	31	224	A
12	168	53	236	36	197	62	20	31	225	A
13	158	53	237	37	199	61	20	32	226	A
14	148	52	238	36	198	60	20	32	226	A
15	138	53	237	37	198	61	19	32	225	A
16	128	51	235	36	198	60	18	32	224	A
17	118	50	235	35	198	58	18	33	224	A
18	108	49	237	36	196	58	20	34	224	A
19	98	51	237	36	199	59	19	34	225	A
20	88	49	234	39	199	60	18	37	222	A
21	78	49	231	37	195	59	18	36	219	A
22	68	50	232	42	197	63	19	39	218	A
23	58	47	239	42	197	59	23	40	221	A
24	48	44	233	38	195	55	19	40	217	A

Harmonic constants for constituent O1 for deployment NWSA9811.

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	39	298	19	220	40	18	7	294	A
02	268	42	295	20	215	42	20	6	292	A
03	258	44	293	20	211	44	20	5	291	A
04	248	44	294	21	210	45	21	4	292	A
05	238	44	293	22	205	44	22	1	293	A
06	228	45	291	22	201	45	22	180	111	A
07	218	45	292	23	200	45	23	179	112	A
08	208	44	291	23	200	44	23	180	111	A
09	198	44	290	23	201	44	23	1	290	A
10	188	45	290	21	199	45	21	180	110	A
11	178	44	289	21	202	44	21	2	289	A
12	168	44	289	22	202	44	22	2	287	A
13	158	44	290	22	206	44	22	4	288	A
14	148	44	290	21	205	44	21	3	288	A
15	138	44	291	21	208	44	21	4	289	A
16	128	43	289	21	205	43	21	4	287	A
17	118	46	289	20	208	46	20	5	287	A
18	108	46	291	21	209	46	21	5	289	A
19	98	47	288	22	217	47	20	11	283	A
20	88	47	289	17	212	47	16	6	287	A
21	78	47	285	16	214	48	15	7	282	A
22	68	48	288	20	218	49	19	9	285	A
23	58	55	288	25	218	55	24	11	283	A
24	48	51	280	31	205	51	29	13	272	A

Harmonic constants for constituent K1 for deployment NWSA9811.

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	25	177	14	113	26	12	16	170	A
02	268	25	172	16	110	26	14	23	160	A
03	258	23	164	18	99	26	15	30	145	A
04	248	23	163	19	96	26	16	31	142	A
05	238	24	162	20	91	26	17	30	141	A
06	228	24	162	19	93	26	17	28	143	A
07	218	25	165	20	93	27	18	25	148	A
08	208	26	167	19	92	27	18	20	153	A
09	198	27	166	19	91	28	18	18	154	A
10	188	28	166	19	91	29	18	16	157	A
11	178	28	168	18	91	28	17	13	160	A
12	168	27	172	16	92	27	16	9	166	A
13	158	27	175	15	94	27	15	7	171	A
14	148	28	178	15	92	28	15	3	176	A
15	138	27	179	15	96	28	15	5	176	A
16	128	27	179	14	99	27	14	7	175	A
17	118	29	180	15	99	29	15	6	177	A
18	108	29	179	16	92	29	16	2	178	A
19	98	30	177	15	101	30	14	9	173	A
20	88	29	173	18	97	29	17	13	165	A
21	78	31	184	18	105	32	18	10	178	A
22	68	27	176	22	107	30	19	29	156	A
23	58	29	160	24	102	33	18	36	138	A
24	48	41	172	35	116	47	25	37	151	A

Deployment Id: NWSB9809

Latitude: 60°46.935'N

Longitude: 005°18.483'W

Echo sounding depth: 796m

Bottom depth corr.: 782m

Time of deployment: 13/09 -1998 2043UTC

Time of recovery: 12/06 - 1999 0821UTC

ADCP:

Instrument no.: RDI ADCP 1292

Instrument frequency: 75kHz

Height above bottom: 103m

Depth: 674m (corr.)

Time of first data: 13/09 - 1998 2100UTC

Time of last data: 12/06 - 1999 0800UTC

Sample interval: 20 min

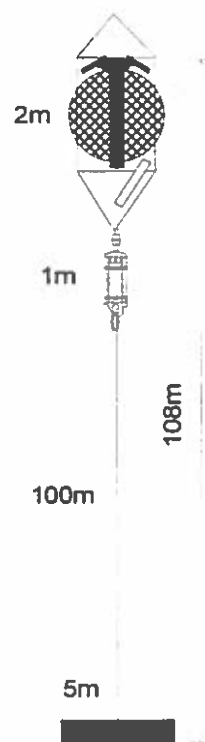
No. of ensembles: 19546

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 638 (corr.)

No. of bins: 28



Deployment: NWSB9809 updated 1999/09/21
 Instrument no.: 1292
 Instrument freq.: 75
 Latitude: 60 46.935 N
 Longitude: 05 18.483 W
 Bottom depth: 782
 Instrument depth: 674
 Center depth of first bin: 638
 Bin length: 25
 Number of bins: 23
 Number of first ensemble: 56
 Time of first ensemble: 1998 09 13 21 00
 Number of last ensemble: 19601
 Time of last ensemble: 1999 06 12 08 00
 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	638	144	217	46	195	996
2	613	169	214	45	195	997
3	588	194	210	44	195	997
4	563	219	208	43	195	997
5	538	244	206	43	194	997
6	513	269	204	44	193	997
7	488	294	205	45	191	997
8	463	319	208	45	188	996
9	438	344	211	47	185	994
10	413	369	215	51	184	995
11	388	394	220	53	186	992
12	363	419	228	55	190	991
13	338	444	235	55	195	992
14	313	469	240	55	197	992
15	288	494	247	53	196	989
16	263	519	254	51	194	985
17	238	544	261	50	192	982
18	213	569	268	50	190	965
19	188	594	275	50	195	908
20	163	619	284	48	198	838
21	138	644	293	47	202	779
22	113	669	305	47	207	719
23	88	694	321	47	213	616

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by MCP in July 1999
 Velocity edited up to and including bin 24 by MCP in June 1999
 Intensity edited up to and including bin 25 by MCP in July 1999
 Velocity reedited from bin 18 up to bin 23 by KMH in Sept 1999

Total number of ensembles: 19546
 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	72	0	70	1	0	0	0	0	0	0	0	0	0
2	0	56	0	54	1	0	0	0	0	0	0	0	0	0
3	0	54	0	52	1	0	0	0	0	0	0	0	0	0
4	0	52	0	50	1	0	0	0	0	0	0	0	0	0
5	0	50	0	46	2	0	0	0	0	0	0	0	0	0
6	0	57	0	57	0	0	0	0	0	0	0	0	0	0
7	0	57	0	55	1	0	0	0	0	0	0	0	0	0
8	0	73	0	73	0	0	0	0	0	0	0	0	0	0
9	0	113	1	111	1	0	0	0	0	0	0	0	0	0
10	0	91	0	85	3	0	0	0	0	0	0	0	0	0
11	0	149	1	144	1	1	0	0	0	0	0	0	0	0
12	0	177	1	163	4	2	0	0	0	0	0	0	0	0
13	0	152	1	131	6	3	0	0	0	0	0	0	0	0
14	0	158	1	148	3	0	1	0	0	0	0	0	0	0
15	0	217	1	182	11	2	0	0	1	0	0	0	0	0
16	0	290	1	249	13	5	0	0	0	0	0	0	0	0
17	0	354	2	272	18	7	3	1	1	0	0	0	0	0
18	0	691	4	333	41	23	7	6	9	2	2	0	0	0
19	0	1792	9	445	80	40	24	12	23	25	8	5	0	0
20	0	3164	16	479	124	43	31	12	29	29	36	17	0	0
21	2	4310	22	567	142	71	42	15	28	26	40	37	0	0
22	0	5498	28	670	203	71	53	24	64	27	21	65	0	0
23	4	7509	38	971	239	108	74	43	101	39	20	84	2	0

Harmonic constants for constituent M2 for deployment NWSB9809.

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	638	231	248	110	204	246	72	21	242	A
02	613	227	250	112	209	243	69	22	243	A
03	588	222	251	114	213	241	64	24	244	A
04	563	216	253	118	218	239	61	26	246	A
05	538	208	254	120	222	234	56	28	247	A
06	513	198	256	124	228	228	50	31	248	A
07	488	188	258	128	235	224	42	33	251	A
08	463	176	259	130	241	217	33	36	253	A
09	438	162	260	131	248	208	22	39	256	A
10	413	153	261	134	253	203	14	41	257	A
11	388	145	261	136	256	199	10	43	259	A
12	363	139	263	138	258	196	8	45	261	A
13	338	134	264	142	260	195	7	47	262	A
14	313	129	266	148	262	196	6	49	263	A
15	288	125	267	152	262	197	8	51	264	A
16	263	123	269	155	263	197	11	52	265	A
17	238	122	270	158	263	199	11	52	266	A
18	213	121	269	159	263	200	10	53	266	A
19	188	121	269	160	263	201	10	53	265	A
20	163	124	269	163	263	205	10	53	265	A
21	138	127	270	164	262	207	14	52	265	A
22	113	131	272	164	262	209	17	51	266	A
23	88	136	272	165	261	213	19	51	265	A

Harmonic constants for constituent S2 for deployment NWSB9809.

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	638	82	284	38	241	87	24	20	278	A
02	613	80	285	39	245	86	23	22	278	A
03	588	78	286	39	248	84	22	23	280	A
04	563	76	288	39	254	83	20	24	282	A
05	538	74	290	41	259	82	19	27	284	A
06	513	73	292	44	265	83	18	30	285	A
07	488	70	294	44	272	81	14	32	288	A
08	463	66	294	45	278	79	10	34	289	A
09	438	64	297	47	283	79	9	36	292	A
10	413	61	295	47	286	77	6	37	292	A
11	388	57	294	46	293	73	1	39	294	A
12	363	50	292	49	300	70	5	45	296	C
13	338	46	291	53	303	70	7	49	298	C
14	313	45	297	55	304	71	4	51	301	C
15	288	47	304	57	302	74	1	51	303	A
16	263	50	309	58	301	76	6	50	304	A
17	238	50	312	58	300	77	8	49	305	A
18	213	50	315	58	299	76	10	50	305	A
19	188	50	314	61	299	79	10	51	305	A
20	163	50	309	65	297	82	8	53	302	A
21	138	50	309	67	298	83	8	53	302	A
22	113	54	312	68	298	86	10	52	303	A
23	88	58	316	63	299	85	13	47	306	A

Harmonic constants for constituent N2 for deployment NWSB9809.

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	638	44	221	14	188	45	7	15	218	A
02	613	42	224	16	200	44	6	20	221	A
03	588	41	227	18	205	45	6	22	224	A
04	563	41	229	21	208	45	7	26	225	A
05	538	41	232	23	209	47	8	28	227	A
06	513	41	232	24	210	46	8	30	227	A
07	488	38	233	25	219	46	5	33	229	A
08	463	36	236	28	226	46	4	37	233	A
09	438	34	237	29	230	45	3	40	234	A
10	413	30	235	28	236	41	0	43	235	C
11	388	28	236	29	242	40	2	46	239	C
12	363	29	242	32	239	43	1	49	240	A
13	338	32	246	35	234	47	5	48	239	A
14	313	32	245	35	233	47	5	47	238	A
15	288	31	240	33	232	45	3	47	236	A
16	263	28	236	31	236	42	0	49	236	A
17	238	26	236	31	239	40	1	50	238	C
18	213	25	242	34	238	42	1	53	239	A
19	188	26	245	36	235	44	4	53	239	A
20	163	26	248	36	237	44	4	55	240	A
21	138	27	249	35	237	44	4	53	241	A
22	113	24	250	36	234	43	6	56	239	A
23	88	30	254	39	231	49	10	53	240	A

Harmonic constants for constituent O1 for deployment NWSB9809.

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	638	33	349	18	35	36	12	23	357	C
02	613	34	349	18	35	36	12	22	356	C
03	588	33	347	18	33	35	12	24	356	C
04	563	32	348	19	35	35	13	26	358	C
05	538	30	346	17	36	33	13	24	355	C
06	513	28	341	14	40	29	12	18	349	C
07	488	26	337	14	43	27	12	16	345	C
08	463	27	331	12	38	28	11	12	336	C
09	438	27	331	8	41	27	8	7	333	C
10	413	24	333	7	58	24	7	1	333	C
11	388	22	330	8	51	22	8	4	332	C
12	363	22	326	9	69	22	8	174	144	C
13	338	22	321	9	68	22	9	172	138	C
14	313	23	322	10	69	23	9	172	139	C
15	288	24	319	9	73	24	8	170	135	C
16	263	23	316	6	78	24	5	171	134	C
17	238	23	319	4	58	23	4	178	139	C
18	213	23	322	4	57	23	4	179	142	C
19	188	23	314	3	69	23	3	177	133	C
20	163	26	310	6	58	26	6	176	129	C
21	138	25	312	9	24	25	8	7	314	C
22	113	23	318	11	24	23	10	13	323	C
23	88	19	315	5	354	19	3	13	317	C

Harmonic constants for constituent K1 for deployment NWSB9809.

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	638	16	217	4	291	16	4	4	218	C
02	613	16	219	4	276	16	3	8	221	C
03	588	16	215	4	285	16	3	5	216	C
04	563	16	213	4	275	16	4	7	214	C
05	538	16	211	3	274	16	3	6	212	C
06	513	15	212	3	278	15	3	6	213	C
07	488	15	210	5	292	15	4	3	211	C
08	463	15	204	3	271	15	2	4	205	C
09	438	14	203	3	237	14	2	10	204	C
10	413	11	208	3	237	12	1	11	209	C
11	388	11	199	3	214	11	1	15	200	C
12	363	7	165	2	177	8	0	14	165	C
13	338	7	96	3	135	7	2	22	102	C
14	313	8	83	4	151	8	4	15	90	C
15	288	6	121	4	146	7	1	32	128	C
16	263	9	147	3	136	9	1	20	146	A
17	238	10	158	3	112	10	2	12	155	A
18	213	13	167	4	103	13	4	9	165	A
19	188	18	151	3	90	18	3	5	150	A
20	163	26	132	5	120	26	1	10	132	A
21	138	30	123	6	100	30	2	10	123	A
22	113	33	127	6	67	33	5	5	126	A
23	88	37	123	3	93	37	2	4	123	A

Deployment Id: NWSC9708

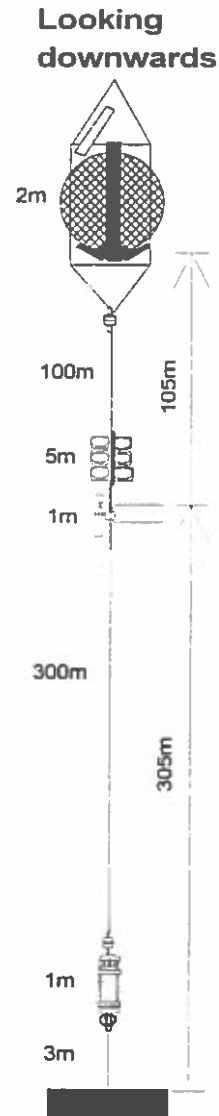
Latitude: 60°34.030'N
Longitude: 004°46.100'W
Echo sounding depth: 1085m
Bottom depth corr.: 1068m
Time of deployment: 01/08 -1997 1145UTC
Time of recovery: 15/06 - 1998 1550UTC

ADCP:

Instrument no.: RDI ADCP 1577
Instrument frequency: 75kHz
Height above bottom: 410m
Depth: 658m (corr.)
Time of first data: 01/08 - 1997 1220UTC
Time of last data: 15/06 - 1998 1500UTC
Sample interval: 20 min
No. of ensembles: 22905
Pings per ens.: 1
Binlength: 25 m
Depth of first bin: 694m (corr.)
No. of bins: 28

Aanderaa:

Instrument no.: RCM8 10067
Height above bottom: 305m
Depth: 763m (corr.)
Time of first data: 01/08 - 1997 1300 UTC
Time of last data: 15/06 - 1998 1400 UTC
Sample interval: 60 min
No. of records: 7634



Deployment: NWSC9708 updated 1999/11/03
 Instrument no.: 1577
 Instrument freq.: 75
 Latitude: 60 34.030 N
 Longitude: 04 46.100 W
 Bottom depth: 1068
 Instrument depth: 658
 Center depth of first bin: 694
 Bin length: -25
 Number of bins: 13
 Number of first ensemble: 59
 Time of first ensemble: 1997 08 01 12 20
 Number of last ensemble: 22963
 Time of last ensemble: 1998 06 15 15 00
 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	694	374	176	55	186	993
2	719	349	176	55	187	993
3	744	324	170	52	187	993
4	769	299	177	55	187	992
5	794	274	177	54	187	993
6	819	249	177	54	187	994
7	844	224	177	54	187	994
8	869	199	177	54	187	993
9	894	174	178	54	188	995
10	919	149	179	54	187	993
11	944	124	180	55	187	991
12	969	99	180	54	186	989
13	994	74	179	54	185	972

Error statistics for deployment: NWSC9708 updated 1999/11/03

Surface distance file shows distance to bottom, not edited
 Heading, pitch and roll not edited
 Temperature edited by KMHL in Jan 1999
 Velocity edited up to and including bin 13 by KMHL in Jan 1999
 Intensity edited up to and including bin 15 by KMHL in Jan 1999

Total number of ensembles: 22905
 Interval between ensembles: 20 min
 Original number of bins: 28
 Number of acceptable velocity bins: 13
 Number of acceptable intensity bins: 13

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	0	171	1	161	5	0	0	0	0	0	0	0	0	0
2	0	152	1	141	4	1	0	0	0	0	0	0	0	0
3	0	153	1	147	3	0	0	0	0	0	0	0	0	0
4	0	172	1	166	3	0	0	0	0	0	0	0	0	0
5	1	153	1	149	2	0	0	0	0	0	0	0	0	0
6	0	148	1	140	4	0	0	0	0	0	0	0	0	0
7	1	146	1	144	1	0	0	0	0	0	0	0	0	0
8	1	155	1	153	1	0	0	0	0	0	0	0	0	0
9	0	116	1	110	3	0	0	0	0	0	0	0	0	0
10	0	162	1	150	3	2	0	0	0	0	0	0	0	0
11	0	209	1	189	6	1	0	1	0	0	0	0	0	0
12	0	259	1	185	8	0	1	0	5	1	0	0	0	0
13	0	646	3	313	44	8	2	6	10	7	0	0	0	0

Harmonic constants for constituent M2 for deployment NWSC9708.

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	694	164	249	87	243	186	9	28	248	A
02	719	165	249	87	242	186	9	28	247	A
03	744	159	248	82	241	179	9	27	247	A
04	769	166	248	86	241	186	10	27	247	A
05	794	166	248	86	241	187	10	27	247	A
06	819	166	248	86	241	187	10	27	247	A
07	844	166	248	86	240	187	10	27	246	A
08	869	167	248	85	240	187	11	27	246	A
09	894	168	248	85	239	188	12	27	246	A
10	919	169	247	84	238	188	12	26	246	A
11	944	170	247	83	237	189	13	26	245	A
12	969	171	246	81	235	189	14	25	244	A
13	994	171	245	75	234	187	13	23	243	A

Harmonic constants for constituent S2 for deployment NWSC9708.

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	694	52	294	42	296	67	1	39	295	C
02	719	52	294	42	296	67	1	39	295	C
03	744	49	294	39	297	63	2	38	295	C
04	769	52	293	40	296	66	2	38	294	C
05	794	52	293	40	295	66	1	37	294	C
06	819	53	292	40	294	67	1	37	293	C
07	844	54	293	40	294	67	1	37	293	C
08	869	54	293	41	293	68	0	37	293	C
09	894	54	292	40	292	68	0	37	292	A
10	919	54	292	40	292	68	0	36	292	A
11	944	55	291	40	292	68	0	36	291	C
12	969	55	290	38	289	67	0	35	290	A
13	994	55	289	35	289	66	0	33	289	C

Harmonic constants for constituent N2 for deployment NWSC9708.

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	694	34	212	9	223	35	2	15	212	C
02	719	34	209	9	226	35	3	14	210	C
03	744	31	207	7	238	32	4	12	208	C
04	769	33	205	7	241	33	4	10	206	C
05	794	32	204	7	247	33	5	9	205	C
06	819	32	204	6	244	33	4	9	205	C
07	844	33	203	6	244	33	4	8	204	C
08	869	33	205	6	244	33	4	8	206	C
09	894	33	204	5	243	33	3	7	205	C
10	919	34	203	5	245	34	3	6	203	C
11	944	34	202	4	250	34	3	4	202	C
12	969	34	203	3	272	34	3	2	203	C
13	994	33	204	3	287	33	3	1	204	C

Harmonic constants for constituent O1 for deployment NWSC9708.

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	694	11	9	9	43	14	4	36	21	C
02	719	12	7	9	44	14	4	35	19	C
03	744	11	7	8	46	13	4	32	19	C
04	769	12	8	9	46	14	5	36	21	C
05	794	12	10	9	49	14	5	36	24	C
06	819	12	10	9	47	14	5	37	24	C
07	844	12	10	9	50	15	5	35	23	C
08	869	12	13	10	48	15	4	36	26	C
09	894	12	12	9	45	15	4	36	23	C
10	919	12	10	9	49	15	5	35	24	C
11	944	11	9	9	49	14	5	37	24	C
12	969	12	8	8	50	13	5	32	20	C
13	994	12	8	8	48	14	5	31	19	C

Harmonic constants for constituent K1 for deployment NWSC9708.

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	694	6	235	4	238	7	0	30	236	C
02	719	6	235	3	239	7	0	28	236	C
03	744	7	236	3	238	8	0	26	237	C
04	769	7	234	3	243	8	0	26	236	C
05	794	7	233	3	243	7	0	21	234	C
06	819	6	235	3	238	7	0	23	236	C
07	844	6	236	2	231	7	0	21	235	A
08	869	6	233	2	234	7	0	20	233	C
09	894	7	236	2	217	7	1	19	234	A
10	919	7	237	2	204	7	1	13	235	A
11	944	7	230	1	227	7	0	11	230	A
12	969	7	231	2	242	7	0	12	232	C
13	994	7	236	2	248	7	0	14	237	C

Deployment Id: NWSC9809

Latitude: 60°33.980'N
Longitude: 004°46.100'W
Echo sounding depth: 1087m
Bottom depth corr.: 1076m
Time of deployment: 14/09 -1998 0125UTC
Time of recovery: 12/06 - 1999 0330UTC

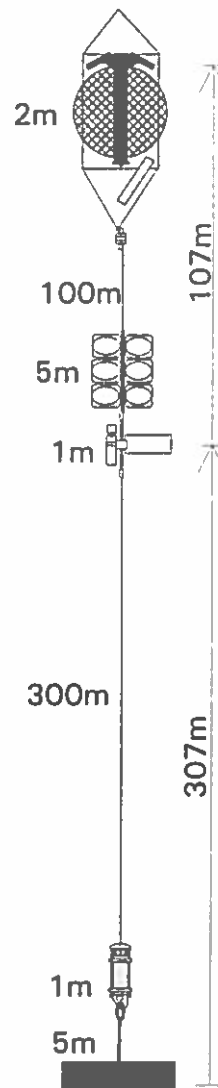
ADCP:

Instrument no.: RDI ADCP 1285
Instrument frequency: 75kHz
Height above bottom: 414m (corr.)
Depth: 662m (corr.)
Time of first data: 14/09 - 1998 0140UTC
Time of last data: 12/06 - 1999 0300UTC
Sample interval: 20 min
No. of ensembles: 19517
Pings per ens.: 1
Binlength: 25m
Depth of first bin: 626m (corr.)
No. of bins: 28

Aanderaa:

Instrument no.: RCM8 10067
Height above bottom: 307m
Depth: 769m (corr.)

The instrument did not record any data.



Deployment: NWSC9809 updated 1999/09/21
 Instrument no.: 1285
 Instrument freq.: 75
 Latitude: 60 33.980 N
 Longitude: 04 46.100 W
 Bottom depth: 1076
 Instrument depth: 662
 Center depth of first bin: 626
 Bin length: 25
 Number of bins: 23
 Number of first ensemble: 70
 Time of first ensemble: 1998 09 14 01 40
 Number of last ensemble: 19586
 Time of last ensemble: 1999 06 12 03 00
 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	626	450	191	64	180	993
2	601	475	192	62	175	996
3	576	500	194	60	167	996
4	551	525	197	58	158	995
5	526	550	203	59	147	994
6	501	575	211	63	134	995
7	476	600	221	71	124	995
8	451	625	235	81	116	996
9	426	650	249	90	112	995
10	401	675	260	96	109	995
11	376	700	269	101	105	995
12	351	725	276	102	103	995
13	326	750	282	103	101	995
14	301	775	289	106	99	992
15	276	800	294	110	97	989
16	251	825	298	113	96	985
17	226	850	302	114	95	976
18	201	875	305	112	95	947
19	176	900	308	110	94	889
20	151	925	313	109	93	829
21	126	950	321	108	90	778
22	101	975	332	107	88	715
23	76	1000	348	108	86	589

Error statistics for deployment: NWSC9809 updated 1999/09/21

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by MCP in June 1999
 Velocity edited up to and including bin 23 by MCP in June 1999
 Intensity edited up to and including bin 28 by MCP in June 1999
 Velocity reedited from bin 18 up to bin 23 by KMHL in Sept 1999

Total number of ensembles: 19517
 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	129	1	127	1	0	0	0	0	0	0	0	0	0	0
2	0	83	0	81	1	0	0	0	0	0	0	0	0	0	0
3	0	80	0	78	1	0	0	0	0	0	0	0	0	0	0
4	0	93	0	91	1	0	0	0	0	0	0	0	0	0	0
5	0	123	1	119	2	0	0	0	0	0	0	0	0	0	0
6	0	106	1	96	5	0	0	0	0	0	0	0	0	0	0
7	0	91	0	89	1	0	0	0	0	0	0	0	0	0	0
8	0	81	0	77	2	0	0	0	0	0	0	0	0	0	0
9	0	92	0	88	2	0	0	0	0	0	0	0	0	0	0
10	0	95	0	90	1	1	0	0	0	0	0	0	0	0	0
11	0	96	0	92	2	0	0	0	0	0	0	0	0	0	0
12	0	89	0	87	1	0	0	0	0	0	0	0	0	0	0
13	0	93	0	89	2	0	0	0	0	0	0	0	0	0	0
14	0	150	1	129	8	0	0	1	0	0	0	0	0	0	0
15	0	221	1	166	12	5	2	0	1	0	0	0	0	0	0
16	0	302	2	210	22	4	6	0	2	0	0	0	0	0	0
17	0	470	2	275	28	6	5	5	7	2	0	0	0	0	0
18	0	1027	5	363	58	27	15	8	16	13	2	0	0	0	0
19	0	2175	11	364	97	46	20	12	24	44	14	4	0	0	0
20	0	3344	17	453	109	45	27	13	25	26	46	18	0	0	0
21	1	4336	22	507	148	59	30	24	45	25	37	39	0	0	0
22	0	5565	29	649	191	91	41	29	55	42	25	61	0	0	0
23	2	8015	41	971	289	131	73	39	79	54	43	77	2	0	0

Deployment: NWSC9809

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	626	765	400	151	47	14	3	0	0	0	0	0	0	0	0	0	0	0	0
2	601	793	415	154	44	14	3	0	0	0	0	0	0	0	0	0	0	0	0
3	576	757	421	156	44	13	3	0	0	0	0	0	0	0	0	0	0	0	0
4	551	807	436	166	47	13	2	0	0	0	0	0	0	0	0	0	0	0	0
5	526	814	457	180	55	15	3	0	0	0	0	0	0	0	0	0	0	0	0
6	501	829	480	204	67	20	6	0	0	0	0	0	0	0	0	0	0	0	0
7	476	839	509	236	88	30	8	2	0	0	0	0	0	0	0	0	0	0	0
8	451	855	546	280	113	40	13	3	0	0	0	0	0	0	0	0	0	0	0
9	426	860	579	328	141	55	17	5	0	0	0	0	0	0	0	0	0	0	0
10	401	871	598	357	173	67	22	6	1	0	0	0	0	0	0	0	0	0	0
11	376	871	621	380	200	79	28	7	1	0	0	0	0	0	0	0	0	0	0
12	351	873	628	400	216	92	33	8	1	0	0	0	0	0	0	0	0	0	0
13	326	875	635	411	233	106	39	12	2	0	0	0	0	0	0	0	0	0	0
14	301	875	644	419	247	119	46	17	4	0	0	0	0	0	0	0	0	0	0
15	276	875	643	430	258	129	51	19	6	1	0	0	0	0	0	0	0	0	0
16	251	873	649	437	265	135	56	21	8	1	0	0	0	0	0	0	0	0	0
17	226	870	648	438	271	141	61	24	9	2	0	0	0	0	0	0	0	0	0
18	201	844	633	430	267	142	66	26	11	3	0	0	0	0	0	0	0	0	0
19	176	792	598	407	251	139	66	27	12	4	1	0	0	0	0	0	0	0	0
20	151	741	564	391	240	137	67	31	13	4	1	0	0	0	0	0	0	0	0
21	126	705	542	372	234	135	70	33	15	5	1	0	0	0	0	0	0	0	0
22	101	654	509	356	228	134	74	36	17	7	3	0	0	0	0	0	0	0	0
23	76	545	435	308	205	125	73	37	19	8	3	1	0	0	0	0	0	0	0

Harmonic constants for constituent M2 for deployment NWSC9809.

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	626	139	253	111	252	178	1	39	252	A
02	601	138	253	112	253	178	1	39	253	A
03	576	135	254	114	255	176	1	40	255	C
04	551	132	256	118	257	177	2	42	256	C
05	526	129	257	120	258	176	1	43	257	C
06	501	124	257	120	260	173	5	44	259	C
07	476	121	259	123	263	172	5	45	261	C
08	451	117	262	127	265	173	4	47	263	C
09	426	115	265	134	266	177	1	49	266	C
10	401	116	267	137	266	179	1	50	266	A
11	376	117	268	138	266	180	3	50	267	A
12	351	115	268	139	267	181	3	50	267	A
13	326	113	269	140	268	180	1	51	269	A
14	301	112	269	140	269	179	0	51	269	A
15	276	111	268	137	269	177	2	51	269	C
16	251	110	267	137	270	176	4	51	269	C
17	226	110	267	137	270	176	4	51	269	C
18	201	111	266	138	270	177	6	51	269	C
19	176	112	267	139	270	178	4	51	268	C
20	151	108	267	143	269	179	4	53	269	C
21	126	106	268	146	271	180	5	54	270	C
22	101	107	270	149	272	183	3	54	271	C
23	76	108	269	155	273	189	6	55	272	C

Harmonic constants for constituent S2 for deployment NWSC9809.

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	626	43	290	45	307	62	9	46	299	C
02	601	43	289	44	307	61	10	46	298	C
03	576	44	287	42	305	60	9	44	295	C
04	551	45	286	42	305	61	10	42	295	C
05	526	44	287	42	304	60	9	43	295	C
06	501	43	293	44	303	61	6	45	298	C
07	476	42	297	45	307	61	5	47	302	C
08	451	41	297	43	308	59	6	47	303	C
09	426	42	293	42	309	58	8	45	301	C
10	401	41	291	44	310	59	10	47	301	C
11	376	42	289	43	307	59	10	46	298	C
12	351	44	288	43	301	61	7	44	295	C
13	326	45	290	42	301	61	6	43	295	C
14	301	47	296	43	303	64	4	42	299	C
15	276	50	302	45	304	68	2	42	303	C
16	251	52	304	46	303	70	0	41	303	A
17	226	54	305	45	302	71	2	40	304	A
18	201	53	302	44	301	69	1	39	301	A
19	176	56	297	41	297	69	0	37	297	C
20	151	53	295	39	299	66	2	37	296	C
21	126	55	297	36	296	65	1	33	297	A
22	101	58	294	34	294	67	0	30	294	C
23	76	63	289	34	284	72	3	29	288	A

Harmonic constants for constituent N2 for deployment NWSC9809.

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	626	24	212	18	244	29	8	34	222	C
02	601	24	212	18	247	29	9	35	224	C
03	576	23	219	20	244	29	7	41	230	C
04	551	21	227	21	244	30	4	45	235	C
05	526	21	237	23	244	31	2	49	241	C
06	501	19	238	25	250	32	3	53	246	C
07	476	20	239	26	248	33	2	52	245	C
08	451	21	242	27	242	35	0	52	242	A
09	426	24	248	27	239	36	3	48	243	A
10	401	26	252	31	239	40	5	51	244	A
11	376	26	255	31	237	40	6	51	245	A
12	351	28	253	32	236	42	6	49	243	A
13	326	30	251	32	231	43	7	47	240	A
14	301	31	250	32	229	43	8	46	239	A
15	276	31	252	33	229	45	9	47	240	A
16	251	30	253	34	231	45	9	48	241	A
17	226	30	254	34	230	44	9	49	240	A
18	201	28	250	33	231	42	7	49	239	A
19	176	32	248	31	232	44	6	44	240	A
20	151	33	239	29	234	44	2	41	237	A
21	126	31	239	31	234	44	2	45	236	A
22	101	32	240	31	237	44	1	44	238	A
23	76	30	255	35	246	46	4	50	249	A

Harmonic constants for constituent O1 for deployment NWSC9809.

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	626	11	7	9	25	14	2	41	15	C
02	601	11	12	10	15	15	0	42	14	C
03	576	12	5	10	20	16	2	38	11	C
04	551	12	6	10	27	15	3	38	14	C
05	526	13	4	9	15	16	1	32	7	C
06	501	11	1	11	19	16	2	46	10	C
07	476	9	22	11	27	14	1	51	25	C
08	451	9	23	10	28	13	1	48	25	C
09	426	10	17	10	24	14	1	47	21	C
10	401	10	14	12	27	15	2	50	22	C
11	376	10	7	12	27	16	3	51	19	C
12	351	8	5	11	22	14	2	54	16	C
13	326	9	356	10	19	13	3	48	9	C
14	301	9	359	10	19	13	2	46	9	C
15	276	8	356	11	16	14	2	55	10	C
16	251	7	4	12	11	14	1	57	9	C
17	226	8	15	10	8	12	1	51	11	A
18	201	7	6	9	5	12	0	51	5	A
19	176	7	325	5	340	9	1	36	330	C
20	151	9	284	6	331	10	4	26	294	C
21	126	10	258	6	337	10	6	9	262	C
22	101	11	241	9	30	13	4	143	49	C
23	76	15	205	8	19	17	1	152	24	C

Harmonic constants for constituent K1 for deployment NWSC9809.

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	626	6	241	2	250	6	0	19	242	C
02	601	6	238	2	262	6	1	13	239	C
03	576	5	230	1	222	5	0	12	229	A
04	551	6	229	2	207	7	1	20	226	A
05	526	8	226	3	173	8	2	12	223	A
06	501	7	214	4	145	7	3	13	208	A
07	476	5	229	3	187	6	2	21	223	A
08	451	6	243	5	214	7	2	38	232	A
09	426	4	270	4	237	5	1	46	253	A
10	401	2	324	3	234	3	2	90	234	A
11	376	3	11	2	131	3	1	161	182	C
12	351	7	36	7	106	9	6	41	67	C
13	326	10	42	9	107	11	7	36	66	C
14	301	7	41	7	114	8	6	35	68	C
15	276	3	23	5	133	5	3	111	146	C
16	251	1	30	5	144	5	1	97	146	C
17	226	2	211	3	154	4	1	74	160	A
18	201	0	24	2	204	2	0	101	204	C
19	176	5	108	3	318	5	1	149	296	A
20	151	10	102	8	335	12	6	146	300	A
21	126	10	103	12	323	15	5	127	308	A
22	101	13	112	16	326	20	6	127	314	A
23	76	13	121	8	334	15	4	150	309	A

