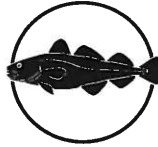


The Faroese Fisheries Laboratory

Fiskirannsóknarstovan



ADCP Deployments in Faroese Waters 2000 - 2001

By

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Introduction

This report documents 8 ADCP deployments in Faroese waters in 2000 – 2001 and 1 Aanderaa Current Meter record associated with one of the ADCP deployments. The measurements were acquired at 8 mooring sites (shown in Figure 1), of which 5 were standard sites. The 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.

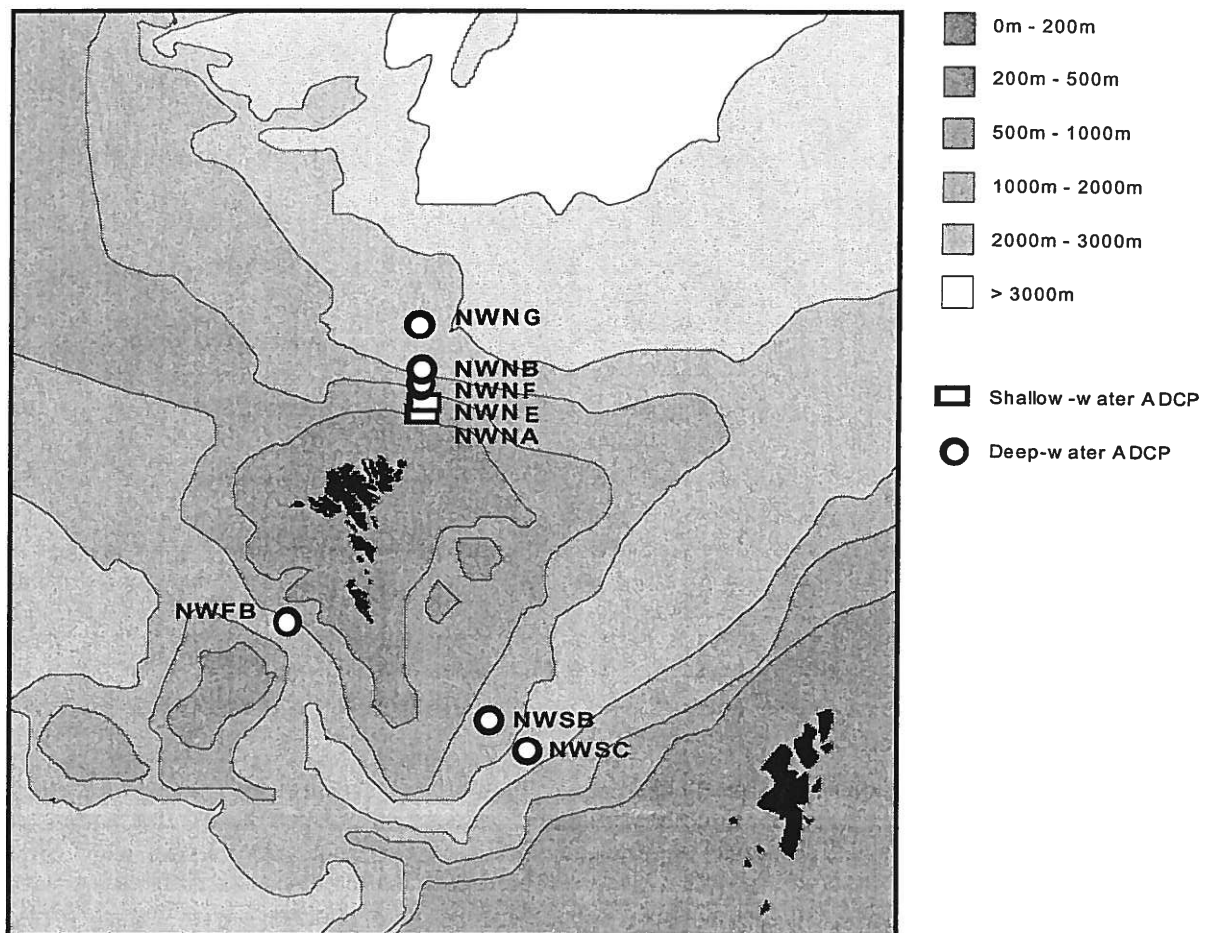


Figure 1. ADCP mooring sites in Faroese waters 2000-2001 superposed on a map with the bottom topography. Each site is indicated by a four-letter label. The sites NWFB, NWNA, NWNB, NWSB and NWSC are standard mooring sites.

As indicated in Figure 1, two types of moorings have been used. At site NWNA and NWNE, “shallow-water” rigs were used where 150 kHz RDI Broadband ADCP’s were placed on the bottom inside protective aluminium frames. At the other sites, 75 kHz RDI Broadband ADCP’s were placed in the top of single-point moorings (“deep-water” rigs). For each deployment the ADCP measures the velocity averaged over a number (15 – 25) of depth layers (“bins”) which were 25m for the deep-water rigs and the NWNE rig and 10m for the NWNA rig. 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. At site NWNG and NWSC, an Aanderaa Current Meter was on the mooring line, but the NWNG record failed because of an instrument leakage. The Aanderaa Current Meter at NWSC recorded speed, direction, temperature and conductivity at 60 minute’s interval.

Table 1. List of ADCP deployments in 2000 with information on duration and range of valid data. The last column indicates for one deployment that one of the ADCP beams has been faulty and 3-beam computations have been used.

Deployment	Bottom depth	Int. min.	Valid data period	Dur. days	No bins	Depthrange	Comments
NWFB0007	814	20	2000 07 09-2001 06 16	342	25	171- 771	
NWNA0007	297	20	2000 07 07-2001 06 16	343	24	50- 280	
NWNB0007	954	20	2000 07 07-2001 06 16	343	24	101- 676	
NWNE0007	456	20	2000 07 06-2001 06 16	344	15	74- 424	
NWNF0007	697	20	2000 07 07-2001 06 16	344	24	78- 653	
NWNG0007	1816	20	2000 07 07-2001 06 16	343	22	82- 607	
NWSB0007	786	20	2000 07 08-2001 06 17	343	22	117- 642	
NWSC0007	1075	20	2000 07 08-2001 06 18	344	23	75- 625	3-beam Aanderaa

Quality control and calibration

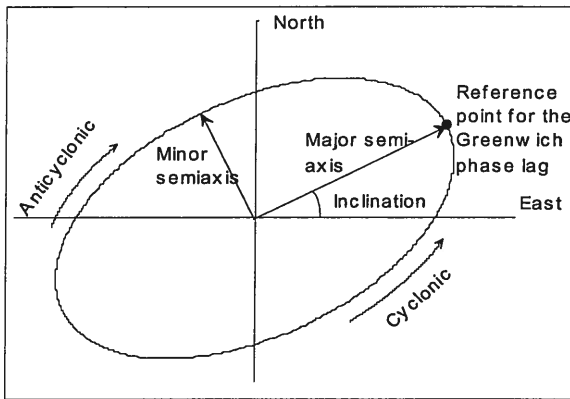
The ADCP data have been quality controlled by a standard procedure based upon consideration of ADCP performance (error velocity etc.) and data variation with time in relation to neighbouring bins (spikes). The editing has been done manually using an interactive graphical software package developed by 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 Aanderaa data have been calibrated using calibration data from the manufacturer. In the Aanderaa current meter, several speed and compass readings are taken during a sampling interval, while the temperature and conductivity readings are taken once at the end of the interval only. At the end of the interval, the instrument stores a vector average of the velocity for the whole sampling interval, as well as the temperature and conductivity readings. In the data file, the time of each record is the middle of the speed-averaging interval. In the calibration procedure the velocity direction has been corrected for magnetic deviation, by adding a constant. The actual correction for each deployment is stored in the header of the data file. The data have been quality controlled by a standard procedure based upon data variation with time in relation to neighbouring values (spikes). The editing has been done manually using an interactive graphical software package developed by the Faroese Fisheries Laboratory (FFL), based upon MATLAB. Salinity is not calibrated.

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. After that there are some pages describing the ADCP data beginning with 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, for deployments exceeding 2 months, 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.

For site NWSC the report also contains some pages describing the Aanderaa Current Meter data. There is a text page listing metadata information in the header and showing the list of parameters in the data file with a tally of the number of records flagged and not flagged for error in each parameter. Any comments to the data are then listed. The rest of the text page describes features of the velocity observations in the series. First is shown the residual current, defined as the vectorial average of all non-flagged records. Next are shown the results of tidal analysis on the series. The number of records interpolated before the analysis is listed as well the number that could not be interpolated (too large gap). Since all the deployments have 60 minutes intervals all analysis are performed on unfiltered data. 15 of the dominant constituents are listed and for each constituent, amplitude and Greenwich phase lag are shown for the east (E-ampl and E-gpl) and the north (N-ampl and N-gpl) velocity components respectively, followed by the characteristics of the tidal ellipse, its major and minor semi-axes, the inclination (Incl) of the ellipse, its Greenwich phase lag (Grphl), and whether it rotates cyclonically (C) or anticyclonically (A). The definitions of the tidal ellipse parameters are shown in figure 2. The tidal constants were computed by an adapted version of the Foreman FORTRAN package.



Finally, on the text page, is a table listing the directional current distribution as relative numbers of observations in parts per thousand. The table also lists for each direction interval, the relative flux, the average speed and the maximum speed. Then 2 pages show plots of the listed parameters as a function of time. Finally, there is a page showing the progressive vector diagram.

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.

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: NWFB0007

Latitude: 61°24.980'N

Longitude: 008°16.900'W

Echo sounding depth: 823m

Bottom depth corr.: 814m

Time of deployment: 09/07 -2000 0715UTC

Time of recovery: 16/06 - 2001 2022UTC

ADCP:

Instrument no.: RDI ADCP 1642

Instrument frequency: 75kHz

Height above bottom: 7m

Depth: 807m (corr.)

Time of first data: 09/07 - 2000 0740UTC

Time of last data: 16/06 - 2001 2000UTC

Sample interval: 20 min

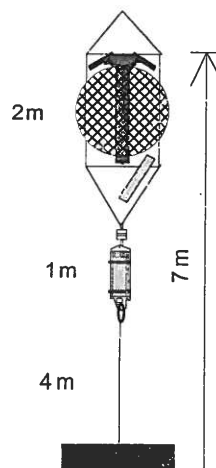
No. of ensembles: 24662

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 771m (corr.)

No. of bins: 28



Deployment: NWFB0007 updated 2001/08/16
 Instrument no.: 1642
 Instrument freq.: 75
 Latitude: 61 24.980 N
 Longitude: 08 16.900 W
 Bottom depth: 814
 Instrument depth: 807
 Center depth of first bin: 771
 Bin length: 25
 Number of bins: 25
 Number of first ensemble: 339
 Time of first ensemble: 2000 07 09 07 40
 Number of last ensemble: 25000
 Time of last ensemble: 2001 06 16 20 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	771	43	941	937	302	958
2	746	68	1012	1008	305	975
3	721	93	1035	1031	307	979
4	696	118	1040	1036	308	982
5	671	143	1034	1030	309	982
6	646	168	1011	1006	310	975
7	621	193	951	943	311	972
8	596	218	837	823	314	959
9	571	243	676	648	317	953
10	546	268	504	453	320	950
11	521	293	367	289	324	961
12	496	318	282	178	328	965
13	471	343	238	112	332	960
14	446	368	216	74	336	966
15	421	393	205	50	337	951
16	396	418	198	34	326	925
17	371	443	194	32	288	918
18	346	468	192	45	264	862
19	321	493	192	69	253	815
20	296	518	190	87	250	768
21	271	543	189	107	249	758
22	246	568	182	116	249	733
23	221	593	173	119	252	714
24	196	618	162	114	254	615
25	171	643	150	104	254	497

Error statistics for deployment: NWFB0007 updated 2001/08/16

Surface distance invalid due to range limitation
 Heading, pitch and roll not edited
 Temperature edited by MCP in Aug 2001
 Velocity edited up to and including bin 25 by GEJ in Jul 2001
 Intensity edited up to and including bin 28 by MCP in Aug 2001

Total number of ensembles: 24662
 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	% flgd	Number of velocity gaps of length										
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50	
1	2	1034	4	869	78	3	0	0	0	0	0	0	0	0
2	1	627	3	566	29	1	0	0	0	0	0	0	0	0
3	1	527	2	491	18	0	0	0	0	0	0	0	0	0
4	2	450	2	420	15	0	0	0	0	0	0	0	0	0
5	2	452	2	433	8	1	0	0	0	0	0	0	0	0
6	0	612	2	512	38	8	0	0	0	0	0	0	0	0
7	2	696	3	538	56	10	2	0	1	0	0	0	0	0
8	0	1015	4	786	86	13	3	0	1	0	0	0	0	0
9	0	1171	5	946	85	13	4	0	0	0	0	0	0	0
10	0	1234	5	966	99	16	4	0	1	0	0	0	0	0
11	1	971	4	785	69	12	3	0	0	0	0	0	0	0
12	0	867	4	671	71	14	3	0	0	0	0	0	0	0
13	0	988	4	758	80	18	4	0	0	0	0	0	0	0
14	1	831	3	550	72	27	6	4	2	0	0	0	0	0
15	0	1198	5	680	105	37	21	6	12	0	0	0	0	0
16	0	1839	7	804	180	66	25	17	26	7	1	0	0	0
17	0	2020	8	771	173	62	41	26	32	13	0	0	0	0
18	0	3411	14	1115	328	138	80	37	58	11	5	1	0	0
19	0	4559	18	1421	431	189	90	68	89	20	4	0	0	0
20	0	5717	23	1588	508	238	123	63	127	29	4	4	0	0
21	0	5973	24	1756	525	221	126	77	109	33	7	3	1	1
22	0	6575	27	1636	524	219	105	87	133	49	12	4	4	4
23	0	7047	29	1624	502	225	134	75	146	60	15	9	3	3
24	2	9500	39	1579	501	230	170	84	199	86	37	15	12	12
25	0	12395	50	1404	505	278	140	102	209	124	29	33	33	33

Harmonic constants for constituent M2 for deployment NWFB0007.

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	771	22	60	19	334	22	19	13	49	A
02	746	26	65	18	334	26	18	179	245	A
03	721	26	74	16	333	27	16	169	260	A
04	696	25	83	14	328	26	12	162	272	A
05	671	24	89	13	315	26	9	156	277	A
06	646	22	107	13	291	26	1	149	288	A
07	621	25	136	14	272	28	9	155	307	C
08	596	34	160	13	261	34	13	175	338	C
09	571	40	181	11	216	41	6	13	183	C
10	546	42	210	24	186	48	8	28	204	A
11	521	53	240	50	180	63	36	42	213	A
12	496	64	252	73	174	77	59	62	197	A
13	471	69	258	88	173	88	68	80	181	A
14	446	69	263	94	175	94	68	87	177	A
15	421	67	266	95	177	95	67	89	177	A
16	396	65	268	94	179	94	65	89	180	A
17	371	58	270	90	182	90	58	89	182	A
18	346	51	276	83	184	83	51	92	183	A
19	321	42	282	75	186	75	42	95	183	A
20	296	34	286	65	186	65	33	97	182	A
21	271	27	294	53	188	54	25	101	183	A
22	246	24	294	46	193	46	23	98	189	A
23	221	19	304	40	195	40	17	101	190	A
24	196	23	298	38	199	38	23	98	194	A
25	171	27	309	39	203	40	25	108	192	A

Harmonic constants for constituent S2 for deployment NWFB0007.

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	771	9	81	7	25	10	5	32	64	A
02	746	10	89	6	24	11	5	18	80	A
03	721	10	92	5	19	10	5	11	86	A
04	696	9	93	5	358	9	5	176	276	A
05	671	7	100	5	349	7	4	157	294	A
06	646	7	126	4	327	8	1	153	310	A
07	621	7	144	4	330	9	0	149	325	A
08	596	8	173	5	306	9	3	151	341	C
09	571	6	228	8	260	9	3	53	248	C
10	546	12	290	15	232	17	9	58	250	A
11	521	19	292	23	223	25	16	61	243	A
12	496	24	291	30	216	32	22	66	233	A
13	471	24	290	34	212	35	23	76	221	A
14	446	24	287	36	209	37	23	76	218	A
15	421	24	282	36	208	37	22	74	218	A
16	396	23	279	36	210	37	21	71	221	A
17	371	18	278	33	211	34	16	74	219	A
18	346	15	293	29	216	30	14	82	220	A
19	321	13	307	23	217	23	13	90	217	A
20	296	11	323	16	225	16	11	99	220	A
21	271	9	334	12	227	13	8	110	214	A
22	246	7	351	9	235	10	5	117	219	A
23	221	4	346	10	231	11	4	102	227	A
24	196	5	351	12	237	13	5	101	233	A
25	171	7	347	14	241	14	7	101	235	A

Harmonic constants for constituent N2 for deployment NWFB0007.

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	771	4	42	3	261	5	2	140	239	A
02	746	5	46	3	256	5	1	150	234	A
03	721	6	50	4	256	7	1	146	238	A
04	696	7	58	4	269	8	2	150	246	A
05	671	9	65	6	271	10	2	149	252	A
06	646	9	81	5	266	10	0	150	262	A
07	621	13	99	2	300	13	1	171	280	A
08	596	19	109	3	346	19	3	175	289	A
09	571	16	117	5	293	17	0	162	297	C
10	546	10	135	7	261	11	5	150	300	C
11	521	3	160	9	212	9	3	75	207	C
12	496	8	231	13	178	14	6	65	188	A
13	471	10	231	15	159	16	9	74	168	A
14	446	9	234	16	158	16	9	78	164	A
15	421	10	242	16	154	16	10	88	155	A
16	396	9	234	17	153	17	9	83	157	A
17	371	8	236	16	158	16	8	81	163	A
18	346	9	228	15	158	16	8	73	167	A
19	321	5	251	14	164	14	5	89	164	A
20	296	7	243	12	173	12	6	74	182	A
21	271	3	243	9	181	9	3	80	184	A
22	246	4	233	8	189	9	3	66	197	A
23	221	5	215	6	193	7	1	52	201	A
24	196	4	247	5	140	5	3	113	124	A
25	171	3	242	7	117	7	2	108	110	A

Harmonic constants for constituent O1 for deployment NWFB0007.

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	771	20	325	12	143	23	0	150	144	C
02	746	22	326	12	136	25	2	151	144	C
03	721	21	325	13	136	25	2	150	143	C
04	696	21	327	13	136	24	2	147	144	C
05	671	22	330	14	138	26	2	149	147	C
06	646	27	333	14	142	31	2	153	151	C
07	621	34	337	16	147	38	3	155	156	C
08	596	37	345	21	154	42	4	151	162	C
09	571	37	350	27	159	46	4	145	166	C
10	546	33	2	28	165	43	7	140	175	C
11	521	28	9	24	172	37	5	139	182	C
12	496	23	14	20	180	30	4	138	188	C
13	471	19	21	16	179	24	5	139	192	C
14	446	16	24	14	178	21	5	139	192	C
15	421	16	22	14	176	21	5	138	190	C
16	396	17	18	15	176	22	4	140	189	C
17	371	16	23	14	173	21	6	138	190	C
18	346	12	33	15	166	18	7	125	183	C
19	321	9	28	17	168	19	5	113	175	C
20	296	7	13	17	175	19	2	112	178	C
21	271	10	348	15	178	18	2	123	175	A
22	246	9	356	9	179	13	0	134	178	A
23	221	7	1	6	190	9	1	143	185	A
24	196	7	23	3	195	8	0	157	202	C
25	171	8	40	2	157	9	2	174	218	C

Harmonic constants for constituent K1 for deployment NWFB0007.

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	771	17	225	9	45	19	0	151	45	A
02	746	19	220	10	45	22	1	153	41	A
03	721	20	219	10	38	23	0	154	39	C
04	696	21	217	12	37	24	0	150	37	A
05	671	21	222	13	33	25	2	150	39	C
06	646	26	226	12	37	28	2	155	44	C
07	621	33	231	15	50	36	0	156	51	C
08	596	35	238	22	55	41	1	148	57	C
09	571	31	245	26	57	40	3	140	62	C
10	546	23	250	25	65	35	2	133	67	C
11	521	17	257	24	68	29	2	126	71	C
12	496	15	272	22	70	26	5	123	77	C
13	471	14	284	19	77	23	5	127	87	C
14	446	11	294	18	82	20	5	121	91	C
15	421	7	305	20	87	20	4	106	90	C
16	396	2	315	22	91	22	2	94	91	C
17	371	5	71	24	90	24	2	79	89	C
18	346	12	83	23	92	26	2	63	90	C
19	321	10	65	19	95	21	4	65	89	C
20	296	5	47	13	113	13	5	78	108	C
21	271	3	324	9	129	10	1	110	131	C
22	246	5	272	4	141	6	3	144	109	A
23	221	7	278	3	347	7	3	9	281	C
24	196	10	282	4	12	10	4	180	102	C
25	171	10	275	4	37	10	3	168	92	C

Deployment Id: NWNA0007

Latitude: 62°42.048'N

Longitude: 006°04.456'W

Echo sound depth: 298m

Bottom depth corr.: 297m

Time of deployment: 07/07 -2000 1400UTC

Time of recovery: 16/06 - 2001 0905UTC

ADCP:

Instrument no.: RDI ADCP 1279

Instrument frequency: 150kHz

Height above bottom: 1m

Depth: 296m (corr.)

Time of first data: 07/07 – 2000 1420UTC

Time of last data: 16/06 – 2001 0840UTC

Sample interval: 20 min

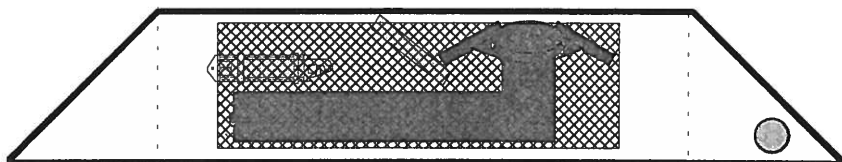
No. of ensembles: 24752

Pings per ens.: 1

Binlength: 10 m

Depth of first bin: 280m (corr.)

No. of bins: 28



Deployment: NWNA0007 updated 2001/08/21
 Instrument no.: 1279
 Instrument freq.: 150
 Latitude: 62 42.048 N
 Longitude: 06 04.456 W
 Bottom depth: 297
 Instrument depth: 296
 Center depth of first bin: 280
 Bin length: 10
 Number of bins: 24
 Number of first ensemble: 215
 Time of first ensemble: 2000 07 07 14 20
 Number of last ensemble: 24966
 Time of last ensemble: 2001 06 16 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	280	17	195	118	102	868
2	270	27	210	125	104	875
3	260	37	223	129	106	900
4	250	47	232	135	108	923
5	240	57	238	142	109	928
6	230	67	242	147	109	938
7	220	77	245	151	110	946
8	210	87	247	156	110	950
9	200	97	247	159	110	958
10	190	107	248	163	110	956
11	180	117	247	166	110	961
12	170	127	247	170	110	964
13	160	137	248	174	110	964
14	150	147	250	177	110	960
15	140	157	251	181	110	960
16	130	167	253	184	110	954
17	120	177	255	188	110	937
18	110	187	258	191	110	916
19	100	197	259	195	110	883
20	90	207	262	198	110	827
21	80	217	266	203	110	765
22	70	227	268	205	110	683
23	60	237	270	209	110	584
24	50	247	275	212	110	490

Error statistics for deployment: NWNA0007 updated 2001/08/21

Surface distance invalid due to range limitation
 Heading, pitch and roll not edited
 Temperature edited by MCP in Jul 2001
 Velocity edited up to and including bin 25 by MCP in Jul 2001
 Intensity edited up to and including bin 28 by MCP in Jul 2001
 Velocity reedited from bin 19 up to bin 24 by KMHL in Aug 2001

Total number of ensembles: 24752
 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	10	3271	13	2098	339	95	28	10	7	0	0	0	0	
2	5	3097	13	1781	354	112	32	17	9	0	0	0	0	
3	3	2471	10	1559	247	78	17	9	11	0	0	0	0	
4	0	1912	8	1307	177	46	12	2	5	1	0	0	0	
5	0	1771	7	1197	179	46	12	2	3	0	0	0	0	
6	0	1527	6	1147	114	29	7	6	1	0	0	0	0	
7	0	1333	5	957	106	30	9	5	2	0	0	0	0	
8	0	1235	5	940	86	29	9	0	0	0	0	0	0	
9	0	1050	4	805	68	15	8	2	3	0	0	0	0	
10	0	1098	4	837	80	23	8	0	0	0	0	0	0	
11	0	977	4	739	84	16	4	0	1	0	0	0	0	
12	1	895	4	699	73	14	2	0	0	0	0	0	0	
13	0	882	4	719	60	9	4	0	0	0	0	0	0	
14	0	986	4	757	79	14	4	0	2	0	0	0	0	
15	0	982	4	757	69	18	7	1	0	0	0	0	0	
16	2	1142	5	768	81	28	7	4	8	2	0	0	0	
17	0	1553	6	850	93	44	17	10	13	7	2	0	0	
18	1	2075	8	951	139	39	25	14	22	7	4	6	0	
19	0	2904	12	1013	155	71	27	22	43	18	4	8	2	
20	0	4285	17	1124	238	84	50	27	50	36	13	12	4	
21	0	5811	23	1227	266	107	48	35	71	33	14	29	4	
22	2	7848	32	1288	322	147	58	39	81	37	16	36	16	
23	1	10295	42	1155	293	119	62	31	51	27	17	42	37	
24	0	12622	51	1064	300	120	59	34	63	34	14	29	40	

Harmonic constants for constituent M2 for deployment NWNA0007.

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	131	292	96	172	143	76	151	129	A
02	270	145	291	112	173	160	89	150	129	A
03	260	157	291	124	174	172	101	149	130	A
04	250	164	291	132	176	180	109	149	131	A
05	240	171	292	138	178	187	115	149	132	A
06	230	174	293	139	180	189	118	150	133	A
07	220	177	295	139	182	191	119	151	133	A
08	210	177	296	137	185	189	119	153	134	A
09	200	176	298	134	187	187	118	154	135	A
10	190	174	300	131	189	184	116	155	136	A
11	180	173	301	127	191	182	113	156	137	A
12	170	171	303	123	193	180	110	157	138	A
13	160	170	305	119	195	178	107	158	139	A
14	150	168	307	116	197	176	104	159	140	A
15	140	167	309	114	199	174	102	160	141	A
16	130	166	311	110	201	172	100	160	142	A
17	120	164	313	108	203	170	98	161	144	A
18	110	162	315	105	206	168	96	162	145	A
19	100	159	317	102	208	164	94	162	147	A
20	90	157	319	100	211	162	92	163	149	A
21	80	157	321	95	214	161	89	165	149	A
22	70	157	323	96	217	161	90	165	152	A
23	60	160	325	95	220	163	90	167	152	A
24	50	160	326	94	223	162	91	169	152	A

Harmonic constants for constituent S2 for deployment NWNA0007.

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	49	339	34	219	53	27	154	173	A
02	270	51	336	38	221	55	32	152	173	A
03	260	53	334	43	221	58	36	149	175	A
04	250	56	332	46	220	61	40	149	173	A
05	240	59	332	49	222	64	43	149	174	A
06	230	61	333	50	223	66	44	150	174	A
07	220	63	334	51	224	68	44	151	174	A
08	210	64	336	50	224	68	43	152	174	A
09	200	65	337	48	226	69	42	155	173	A
10	190	65	338	47	227	68	42	156	172	A
11	180	64	339	46	228	68	40	157	174	A
12	170	64	340	44	228	67	39	157	174	A
13	160	63	342	43	229	67	38	158	175	A
14	150	62	343	41	230	65	36	159	176	A
15	140	61	346	40	232	64	35	159	177	A
16	130	60	347	38	234	63	34	160	179	A
17	120	60	350	37	236	62	32	161	180	A
18	110	59	352	37	240	62	33	161	183	A
19	100	59	353	34	242	60	31	164	181	A
20	90	58	352	34	245	60	32	167	180	A
21	80	57	355	32	247	58	30	166	183	A
22	70	57	356	31	247	58	29	167	182	A
23	60	48	356	28	252	49	27	168	182	A
24	50	50	356	27	252	51	26	170	181	A

Harmonic constants for constituent N2 for deployment NWNA0007.

Bin	Depth m	E-ampl mm/sec	E-gphl deg	N-ampl mm/sec	N-gphl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	280	26	273	17	138	29	11	150	105	A
02	270	27	271	20	143	31	14	148	107	A
03	260	29	270	21	146	32	16	150	105	A
04	250	32	269	22	146	35	17	152	104	A
05	240	32	266	24	146	35	19	149	104	A
06	230	33	267	24	150	36	20	152	103	A
07	220	34	267	26	150	37	21	150	105	A
08	210	34	270	27	154	38	22	150	109	A
09	200	35	272	26	155	38	21	152	108	A
10	190	35	276	25	159	38	21	153	112	A
11	180	35	277	24	161	37	20	155	111	A
12	170	35	279	24	165	37	20	157	112	A
13	160	34	283	23	169	36	20	158	116	A
14	150	35	286	23	170	37	20	157	118	A
15	140	34	287	22	173	36	19	159	119	A
16	130	34	289	21	175	36	19	161	119	A
17	120	34	290	20	178	35	18	163	119	A
18	110	33	289	20	178	35	18	163	119	A
19	100	34	291	19	180	35	18	164	119	A
20	90	32	290	20	184	33	19	165	119	A
21	80	32	290	20	186	33	20	167	118	A
22	70	31	290	23	191	32	22	167	119	A
23	60	33	302	22	192	35	20	160	134	A
24	50	31	305	21	193	33	18	159	137	A

Harmonic constants for constituent O1 for deployment NWNA0007.

Bin	Depth m	E-ampl mm/sec	E-gphl deg	N-ampl mm/sec	N-gphl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	280	26	37	12	300	27	12	176	219	A
02	270	27	36	12	299	27	12	176	218	A
03	260	28	32	14	291	29	13	173	215	A
04	250	30	33	14	293	30	14	174	216	A
05	240	30	34	15	291	30	14	172	218	A
06	230	29	34	15	290	29	15	170	219	A
07	220	29	34	15	285	30	14	168	220	A
08	210	29	34	16	287	29	15	168	220	A
09	200	28	35	16	287	29	15	166	222	A
10	190	28	35	17	289	29	16	166	223	A
11	180	29	35	18	291	30	17	167	223	A
12	170	29	34	17	287	30	16	166	222	A
13	160	30	33	17	286	31	16	167	220	A
14	150	30	34	18	286	31	17	165	222	A
15	140	31	35	18	286	32	17	164	223	A
16	130	32	36	19	285	33	17	163	226	A
17	120	32	37	19	287	33	17	164	226	A
18	110	32	38	21	285	33	18	159	230	A
19	100	29	38	21	286	31	19	156	233	A
20	90	29	37	22	288	30	19	156	234	A
21	80	27	39	22	291	29	20	151	240	A
22	70	27	40	24	289	30	20	147	244	A
23	60	30	38	25	280	34	20	145	240	A
24	50	26	28	23	283	28	21	148	233	A

Harmonic constants for constituent K1 for deployment NWNA0007.

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	34	268	16	181	34	16	1	267	A
02	270	36	271	17	177	36	17	178	92	A
03	260	40	277	21	172	40	20	169	103	A
04	250	39	278	22	170	40	20	167	104	A
05	240	37	276	22	168	38	20	165	104	A
06	230	36	276	22	165	37	19	163	105	A
07	220	36	276	22	161	37	19	159	107	A
08	210	35	275	23	161	37	20	159	107	A
09	200	35	274	23	158	37	20	157	107	A
10	190	36	273	24	158	38	21	156	107	A
11	180	36	271	25	157	38	22	157	104	A
12	170	36	269	25	158	38	22	158	102	A
13	160	36	268	25	157	38	22	159	100	A
14	150	34	265	25	159	36	23	160	99	A
15	140	34	264	25	156	35	23	157	99	A
16	130	33	263	26	157	35	24	157	99	A
17	120	32	262	25	158	34	24	158	98	A
18	110	33	262	25	158	34	24	160	97	A
19	100	32	264	25	157	34	23	157	99	A
20	90	33	264	24	157	34	22	159	98	A
21	80	35	268	24	155	37	21	158	101	A
22	70	34	267	24	157	35	21	159	100	A
23	60	34	267	23	156	35	21	158	100	A
24	50	36	268	25	161	37	23	161	100	A

Deployment Id: NWNB0007

Latitude: 62°55.106'N

Longitude: 006°05.024'W

Echo sounding depth: 975m

Bottom depth corr.: 954m

Time of deployment: 07/07 -2000 1548UTC

Time of recovery: 16/06 - 2001 0615UTC

ADCP:

Instrument no.: RDI ADCP 1577

Instrument frequency: 75kHz

Height above bottom: 242m (corr.)

Depth: 712m (corr.)

Time of first data: 07/07 - 2000 1620UTC

Time of last data: 16/06 - 2001 0600UTC

Sample interval: 20 min

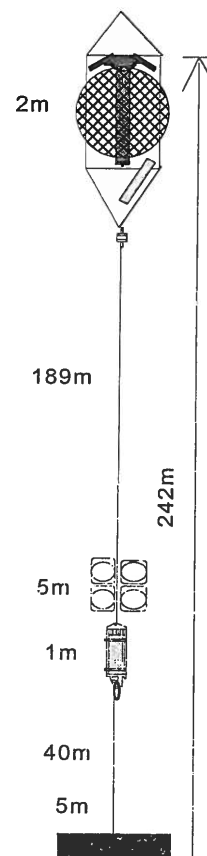
No. of ensembles: 24738

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 676m (corr.)

No. of bins: 28



Deployment: NWNB0007 updated 2001/08/16
 Instrument no.: 1577
 Instrument freq.: 75
 Latitude: 62 55.106 N
 Longitude: 06 05.024 W
 Bottom depth: 954
 Instrument depth: 712
 Center depth of first bin: 676
 Bin length: 25
 Number of bins: 24
 Number of first ensemble: 221
 Time of first ensemble: 2000 07 07 16 20
 Number of last ensemble: 24958
 Time of last ensemble: 2001 06 16 06 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	676	278	122	35	103	995
2	651	303	120	29	104	994
3	626	328	120	24	105	992
4	601	353	120	19	108	992
5	576	378	120	16	115	992
6	551	403	122	12	126	992
7	526	428	122	10	139	991
8	501	453	125	11	144	992
9	476	478	129	13	145	990
10	451	503	134	17	135	988
11	426	528	142	24	129	988
12	401	553	150	33	124	985
13	376	578	161	50	122	978
14	351	603	172	70	118	972
15	326	628	186	92	114	979
16	301	653	202	116	112	967
17	276	678	219	136	109	955
18	251	703	235	152	108	924
19	226	728	248	165	108	874
20	201	753	259	174	107	795
21	176	778	270	182	108	724
22	151	803	275	187	109	660
23	126	828	284	197	110	581
24	101	853	288	206	111	491

Error statistics for deployment: NWNB0007 updated 2001/08/16

Surface distance invalid due to range limitation
 Heading, pitch and roll not edited
 Temperature edited by MCP in Aug 2001
 Velocity edited up to and including bin 28 by GEJ in Jul 2001
 Intensity edited up to and including bin 28 by MCP in Aug 2001

Total number of ensembles: 24738
 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	Velocity % flgd	Number of velocity gaps of length										
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50	
1	5	136	1	130	3	0	0	0	0	0	0	0	0	0
2	5	156	1	152	2	0	0	0	0	0	0	0	0	0
3	1	198	1	184	7	0	0	0	0	0	0	0	0	0
4	1	193	1	186	2	1	0	0	0	0	0	0	0	0
5	0	190	1	183	2	1	0	0	0	0	0	0	0	0
6	0	192	1	182	5	0	0	0	0	0	0	0	0	0
7	0	212	1	206	3	0	0	0	0	0	0	0	0	0
8	0	210	1	197	5	1	0	0	0	0	0	0	0	0
9	0	257	1	251	3	0	0	0	0	0	0	0	0	0
10	0	302	1	296	3	0	0	0	0	0	0	0	0	0
11	0	303	1	287	8	0	0	0	0	0	0	0	0	0
12	0	364	1	349	6	1	0	0	0	0	0	0	0	0
13	1	544	2	499	18	3	0	0	0	0	0	0	0	0
14	0	692	3	629	30	1	0	0	0	0	0	0	0	0
15	0	521	2	488	14	0	0	1	0	0	0	0	0	0
16	0	826	3	715	38	6	0	0	2	0	0	0	0	0
17	1	1104	4	747	57	24	8	1	5	4	0	1	0	0
18	2	1869	8	765	82	26	14	11	25	15	5	5	0	0
19	3	3107	13	582	87	49	33	12	38	29	14	19	4	0
20	0	5077	21	724	129	44	32	9	30	22	29	38	18	0
21	1	6835	28	835	158	62	41	16	32	32	27	56	26	0
22	0	8413	34	693	182	68	31	20	57	29	31	60	33	0
23	0	10357	42	822	202	92	44	17	64	37	29	70	35	0
24	0	12580	51	729	193	115	49	35	67	46	31	59	51	0

Harmonic constants for constituent M2 for deployment NWNB0007.

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	80	270	43	143	85	33	159	98	A
02	651	82	271	43	147	86	34	160	99	A
03	626	83	273	43	150	87	35	162	100	A
04	601	85	274	42	155	88	36	164	101	A
05	576	88	276	42	161	90	37	166	102	A
06	551	91	278	43	165	93	39	167	103	A
07	526	92	280	42	171	93	39	170	104	A
08	501	94	283	41	180	95	40	173	106	A
09	476	97	286	42	188	97	42	176	108	A
10	451	99	290	43	200	99	43	180	110	A
11	426	103	295	45	214	103	45	5	293	A
12	401	104	303	50	229	106	48	9	299	A
13	376	107	309	56	238	109	52	13	303	A
14	351	108	310	57	242	111	51	15	303	A
15	326	104	313	55	248	107	48	16	305	A
16	301	100	316	55	255	105	46	19	308	A
17	276	102	321	61	261	108	50	21	311	A
18	251	107	324	68	263	114	56	23	313	A
19	226	113	327	74	263	119	63	23	315	A
20	201	117	327	80	264	125	67	25	313	A
21	176	120	327	88	263	129	74	27	310	A
22	151	120	327	90	263	130	74	28	310	A
23	126	120	330	91	264	130	76	28	313	A
24	101	117	332	90	267	127	75	29	314	A

Harmonic constants for constituent S2 for deployment NWNB0007.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphi deg	R
01	676	31	301	21	182	34	17	155	134	A
02	651	32	303	20	185	33	17	157	134	A
03	626	33	307	20	191	34	17	160	137	A
04	601	33	310	19	201	34	17	166	137	A
05	576	34	315	18	208	34	17	168	141	A
06	551	34	317	17	215	34	17	172	142	A
07	526	33	322	16	223	33	16	175	144	A
08	501	35	328	18	238	35	18	0	328	A
09	476	39	334	20	252	39	20	6	331	A
10	451	39	340	22	266	39	20	12	333	A
11	426	37	344	22	275	39	20	16	336	A
12	401	37	345	21	277	38	19	16	337	A
13	376	41	344	23	276	42	21	16	336	A
14	351	44	349	25	279	45	23	15	341	A
15	326	43	353	25	284	45	23	16	345	A
16	301	44	356	27	291	46	24	20	345	A
17	276	45	360	28	297	48	24	21	349	A
18	251	46	2	30	298	48	25	22	350	A
19	226	45	5	29	301	47	25	23	352	A
20	201	46	11	29	303	48	26	18	1	A
21	176	44	16	31	311	47	26	25	1	A
22	151	43	19	32	313	47	27	26	3	A
23	126	43	21	29	325	47	22	27	7	A
24	101	38	24	24	326	41	19	24	12	A

Harmonic constants for constituent N2 for deployment NWNB0007.

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	16	245	9	109	18	6	155	73	A
02	651	16	244	10	112	17	6	154	75	A
03	626	15	243	10	110	17	6	153	74	A
04	601	14	243	9	101	16	5	151	73	A
05	576	14	245	8	99	16	4	152	73	A
06	551	14	244	8	99	15	4	151	73	A
07	526	14	243	8	99	16	4	153	71	A
08	501	16	243	8	103	17	5	157	70	A
09	476	18	251	8	123	19	6	162	78	A
10	451	21	256	10	147	22	10	169	81	A
11	426	24	263	11	171	24	11	179	84	A
12	401	22	278	12	192	22	12	4	276	A
13	376	22	286	11	206	22	10	6	283	A
14	351	23	291	13	214	24	13	10	285	A
15	326	30	290	18	210	30	17	9	285	A
16	301	32	287	20	209	32	19	11	281	A
17	276	30	287	18	211	30	17	12	280	A
18	251	27	291	16	214	28	16	12	284	A
19	226	25	296	14	223	25	13	14	289	A
20	201	21	296	14	225	22	13	19	284	A
21	176	22	307	16	248	24	13	30	290	A
22	151	25	311	15	251	27	13	22	301	A
23	126	25	313	17	243	26	15	21	300	A
24	101	24	324	23	230	25	23	145	177	A

Harmonic constants for constituent O1 for deployment NWNB0007.

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	4	55	3	258	5	1	145	243	A
02	651	4	62	4	268	5	1	138	254	A
03	626	4	56	3	279	5	2	145	251	A
04	601	5	54	4	270	6	2	145	246	A
05	576	5	45	4	261	6	2	144	238	A
06	551	5	49	4	257	6	1	144	239	A
07	526	5	46	4	268	6	2	144	241	A
08	501	6	38	4	262	7	3	144	234	A
09	476	6	41	5	265	7	3	142	239	A
10	451	7	45	4	271	8	3	153	236	A
11	426	8	53	4	275	9	3	157	241	A
12	401	9	44	5	269	10	3	157	232	A
13	376	11	34	7	271	11	5	155	226	A
14	351	10	38	7	280	11	6	153	234	A
15	326	10	44	5	285	10	4	164	231	A
16	301	11	43	5	272	11	4	161	229	A
17	276	11	36	6	281	12	5	164	223	A
18	251	14	34	8	285	14	8	165	222	A
19	226	16	38	8	278	16	7	162	226	A
20	201	18	38	8	284	18	7	167	224	A
21	176	18	32	10	297	18	10	176	214	A
22	151	14	30	15	306	16	14	65	328	A
23	126	15	19	20	298	21	14	77	307	A
24	101	18	347	23	305	27	10	53	320	A

Harmonic constants for constituent K1 for deployment NWNB0007.

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	4	264	3	128	4	2	149	97	A
02	651	4	273	2	116	5	1	153	98	A
03	626	5	277	3	121	5	1	155	102	A
04	601	5	274	3	139	6	2	155	103	A
05	576	6	270	3	129	6	2	157	96	A
06	551	5	264	4	119	6	2	144	96	A
07	526	6	263	3	113	6	1	152	90	A
08	501	6	271	3	133	7	2	158	98	A
09	476	7	271	4	135	8	3	155	100	A
10	451	9	275	4	151	9	3	164	101	A
11	426	9	280	5	146	9	3	158	108	A
12	401	7	268	5	133	8	3	152	99	A
13	376	8	253	6	136	9	5	154	88	A
14	351	9	243	6	131	10	5	161	74	A
15	326	10	251	6	141	10	6	161	82	A
16	301	13	266	7	151	13	6	164	93	A
17	276	14	275	5	171	14	5	174	97	A
18	251	16	276	6	191	16	6	3	274	A
19	226	14	272	4	211	14	3	8	271	A
20	201	11	286	4	206	11	4	5	284	A
21	176	11	295	4	202	11	4	178	116	A
22	151	14	290	6	208	14	6	4	288	A
23	126	13	279	8	222	14	7	27	265	A
24	101	12	276	9	222	14	6	30	260	A

Deployment Id: NWNE0007

Latitude: 62°47.490'N

Longitude: 006°05.100'W

Echo sounding depth: 450m

Bottom depth corr.: 456m

Time of deployment: 06/07 -2000 2250UTC

Time of recovery: 16/06 – 2001 0802UTC

ADCP:

Instrument no.: RDI ADCP 1244

Instrument frequency: 150kHz

Height above bottom: 1m

Depth: 455m (corr.)

Time of first data: 06/07 – 2000 2300 UTC

Time of last data: 16/06 – 2001 0740 UTC

Sample interval: 20 min

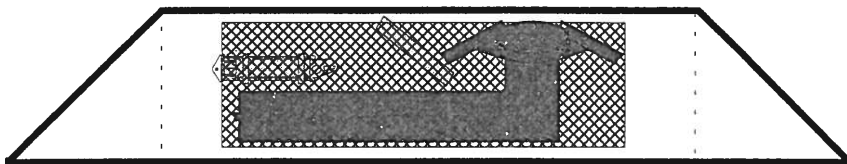
No. of ensembles: 24795

Pings per ens.: 1

Binlength: 25 m

Depth of first bin: 424 (corr.)

No. of bins: 20



Deployment: NWNE0007 updated 2001/08/16
 Instrument no.: 1244
 Instrument freq.: 150
 Latitude: 62 47.490 N
 Longitude: 06 05.100 W
 Bottom depth: 456
 Instrument depth: 455
 Center depth of first bin: 424
 Bin length: 25
 Number of bins: 15
 Number of first ensemble: 169
 Time of first ensemble: 2000 07 06 23 00
 Number of last ensemble: 24963
 Time of last ensemble: 2001 06 16 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	424	32	207	97	95	898
2	399	57	217	110	104	887
3	374	82	221	124	107	877
4	349	107	224	139	108	884
5	324	132	231	157	109	890
6	299	157	238	175	109	894
7	274	182	248	190	108	898
8	249	207	256	202	109	899
9	224	232	264	211	109	897
10	199	257	271	220	109	878
11	174	282	278	227	109	849
12	149	307	284	235	109	792
13	124	332	289	243	109	702
14	99	357	299	256	110	589
15	74	382	312	267	109	482

Error statistics for deployment: NWNE0007 updated 2001/08/16

Surface not edited
 Heading, pitch and roll not edited
 Temperature edited by MCP in Aug 2001
 Velocity edited up to and including bin 15 by MCP in Jul 2001
 Intensity edited up to and including bin 20 by MCP in Aug 2001

Total number of ensembles: 24795
 Interval between ensembles: 20 min
 Original number of bins: 20
 Number of acceptable velocity bins: 15
 Number of acceptable intensity bins: 15

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	5	2539	10	1885	217	39	13	4	4	4	0	0	0	0
2	2	2801	11	1903	266	70	21	5	5	1	0	0	0	0
3	0	3058	12	1962	299	73	21	13	16	1	0	0	0	0
4	0	2866	12	1988	255	59	19	10	9	0	0	0	0	0
5	0	2726	11	1921	230	59	18	4	11	0	0	0	0	0
6	0	2624	11	1872	224	51	22	6	5	0	0	0	0	0
7	0	2538	10	1908	204	52	8	3	3	0	0	0	0	0
8	2	2502	10	1815	224	48	12	3	3	1	0	0	0	0
9	3	2544	10	1863	229	44	5	4	7	0	0	0	0	0
10	0	3037	12	1897	298	71	24	13	18	2	0	0	0	0
11	1	3748	15	1791	306	87	46	28	77	12	2	0	0	0
12	0	5153	21	1615	283	118	57	45	88	43	19	9	1	1
13	1	7382	30	1435	322	129	53	36	123	51	29	38	8	8
14	0	10181	41	1296	270	114	61	35	101	48	26	59	32	32
15	0	12850	52	1043	229	89	53	29	83	42	14	61	46	46

Deployment: NUNE0007

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	424	736	429	176	55	13	2	0	0	0	0	0	0	0	0	0	0	0	0
2	399	745	445	199	73	22	4	1	0	0	0	0	0	0	0	0	0	0	0
3	374	733	438	213	84	24	6	1	0	0	0	0	0	0	0	0	0	0	0
4	349	733	445	229	98	29	7	2	0	0	0	0	0	0	0	0	0	0	0
5	324	743	457	246	114	40	11	3	0	0	0	0	0	0	0	0	0	0	0
6	299	748	474	267	128	50	15	4	1	0	0	0	0	0	0	0	0	0	0
7	274	759	498	291	145	62	20	4	1	0	0	0	0	0	0	0	0	0	0
8	249	761	516	311	159	73	27	8	2	0	0	0	0	0	0	0	0	0	0
9	224	764	524	326	178	82	33	11	3	1	0	0	0	0	0	0	0	0	0
10	199	752	521	333	185	93	40	14	5	1	0	0	0	0	0	0	0	0	0
11	174	729	514	331	192	100	46	17	7	2	0	0	0	0	0	0	0	0	0
12	149	685	489	316	187	99	50	20	7	2	0	0	0	0	0	0	0	0	0
13	124	614	441	287	168	91	50	21	8	3	0	0	0	0	0	0	0	0	0
14	99	522	384	252	149	83	45	22	10	4	1	0	0	0	0	0	0	0	0
15	74	435	326	217	128	75	44	23	11	4	1	0	0	0	0	0	0	0	0

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Harmonic constants for constituent M2 for deployment NWNE0007.

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	424	131	260	106	144	145	86	148	100	A
02	399	146	267	113	154	157	96	152	105	A
03	374	152	277	108	166	160	96	157	112	A
04	349	151	287	103	179	156	94	161	118	A
05	324	149	296	97	191	152	92	164	126	A
06	299	146	303	92	201	148	88	168	130	A
07	274	145	308	87	209	146	86	172	132	A
08	249	142	311	83	214	142	82	174	135	A
09	224	140	314	79	218	140	78	176	136	A
10	199	138	315	77	221	138	77	177	137	A
11	174	133	316	74	225	133	74	179	136	A
12	149	128	319	71	230	128	71	1	319	A
13	124	124	321	65	236	124	64	4	319	A
14	99	122	325	61	244	122	60	6	322	A
15	74	123	326	61	246	123	60	6	323	A

Harmonic constants for constituent S2 for deployment NWNE0007.

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	424	56	294	49	187	61	43	146	140	A
02	399	60	306	47	197	64	42	154	144	A
03	374	63	321	43	209	66	38	158	154	A
04	349	61	332	40	225	63	37	164	162	A
05	324	59	342	38	235	60	35	164	171	A
06	299	56	345	35	244	57	34	170	171	A
07	274	51	348	31	252	51	31	174	172	A
08	249	48	352	29	258	48	29	177	174	A
09	224	46	353	26	260	46	26	177	174	A
10	199	44	352	24	262	44	24	180	172	A
11	174	43	352	23	264	43	23	2	351	A
12	149	38	351	19	263	38	19	1	350	A
13	124	35	353	15	274	35	15	6	351	A
14	99	30	5	12	296	30	11	10	1	A
15	74	36	5	13	307	36	10	12	1	A

Harmonic constants for constituent N2 for deployment NWNE0007.

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	424	28	235	21	127	29	19	156	71	A
02	399	26	243	21	129	29	17	150	82	A
03	374	27	250	21	130	30	16	147	90	A
04	349	28	256	22	138	31	17	147	96	A
05	324	29	265	22	148	32	18	152	102	A
06	299	29	277	18	164	30	16	160	108	A
07	274	29	284	16	179	29	15	168	111	A
08	249	29	288	15	182	29	15	168	114	A
09	224	29	290	15	188	29	14	172	114	A
10	199	29	292	14	191	29	14	172	116	A
11	174	28	296	14	187	29	13	168	121	A
12	149	26	301	13	199	26	13	172	125	A
13	124	24	306	15	207	24	14	172	131	A
14	99	29	308	15	208	29	14	173	132	A
15	74	27	303	17	218	27	17	5	300	A

Harmonic constants for constituent O1 for deployment NWNE0007.

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	424	18	39	13	300	18	13	168	228	A
02	399	19	27	13	277	20	12	158	220	A
03	374	20	19	14	280	20	13	169	206	A
04	349	21	18	13	283	21	13	175	201	A
05	324	21	21	13	288	21	13	177	203	A
06	299	22	21	13	287	22	13	176	203	A
07	274	21	22	14	288	21	14	175	206	A
08	249	22	23	15	290	22	15	176	206	A
09	224	21	24	16	291	21	16	175	207	A
10	199	22	28	17	292	22	16	170	215	A
11	174	23	25	16	288	23	16	170	212	A
12	149	20	25	16	286	20	16	159	222	A
13	124	18	7	15	282	18	15	13	356	A
14	99	20	6	16	274	20	16	177	188	A
15	74	15	7	13	275	15	13	174	192	A

Harmonic constants for constituent K1 for deployment NWNE0007.

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	424	21	264	14	164	21	13	170	90	A
02	399	24	263	15	153	25	13	163	93	A
03	374	22	253	15	146	23	14	161	85	A
04	349	21	254	13	149	21	13	165	84	A
05	324	22	256	14	154	23	13	169	82	A
06	299	24	263	13	157	24	12	168	90	A
07	274	24	267	14	161	24	13	168	93	A
08	249	23	269	15	161	24	13	164	98	A
09	224	24	271	14	160	25	13	164	99	A
10	199	23	264	16	165	23	15	169	91	A
11	174	21	258	16	166	22	16	177	80	A
12	149	24	252	14	169	24	14	6	248	A
13	124	19	253	13	182	19	11	20	240	A
14	99	10	269	14	194	15	9	73	205	A
15	74	10	268	14	183	14	10	83	188	A

Deployment Id: NWNF0007

Latitude: 62°52.700'N

Longitude: 006°05.031'W

Echo sounding depth: 700m

Bottom depth corr.: 697m

Time of deployment: 07/07 -2000 0008UTC

Time of recovery: 16/06 - 2001 0715UTC

ADCP:

Instrument no.: RDI ADCP 1285

Instrument frequency: 75kHz

Height above bottom: 8m

Depth: 689m (corr.)

Time of first data: 07/07 - 2000 0040UTC

Time of last data: 16/06 - 2001 0700UTC

Sample interval: 20 min

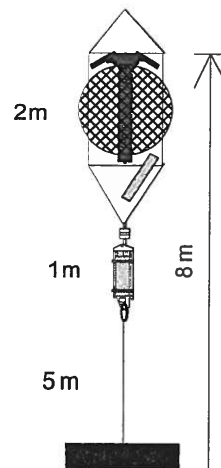
No. of ensembles: 24788

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 653m (corr.)

No. of bins: 28



Deployment: NWNF0007 updated 2001/08/16
 Instrument no.: 1285
 Instrument freq.: 75
 Latitude: 62 52.700 N
 Longitude: 06 05.031 W
 Bottom depth: 697
 Instrument depth: 689
 Center depth of first bin: 653
 Bin length: 25
 Number of bins: 24
 Number of first ensemble: 174
 Time of first ensemble: 2000 07 07 00 40
 Number of last ensemble: 24961
 Time of last ensemble: 2001 06 16 07 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	653	44	160	29	91	994
2	628	69	162	23	95	995
3	603	94	159	15	97	994
4	578	119	156	8	98	995
5	553	144	153	2	93	997
6	528	169	152	3	289	997
7	503	194	150	2	283	996
8	478	219	152	1	133	996
9	453	244	157	10	105	995
10	428	269	163	24	104	994
11	403	294	172	43	106	989
12	378	319	181	65	106	987
13	353	344	189	90	106	987
14	328	369	202	115	105	988
15	303	394	217	137	104	987
16	278	419	233	155	104	986
17	253	444	248	170	104	975
18	228	469	259	181	103	960
19	203	494	267	191	103	920
20	178	519	274	199	102	873
21	153	544	280	206	103	818
22	128	569	286	211	104	755
23	103	594	293	221	105	672
24	78	619	307	237	106	534

Error statistics for deployment: NWNF0007 updated 2001/08/16

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by MCP in Aug 2001
 Velocity edited up to and including bin 24 by MCP in Jul 2001
 Intensity edited up to and including bin 28 by MCP in Aug 2001

Total number of ensembles: 24788
 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	1	137	1	135	1	0	0	0	0	0	0	0	0	0
2	0	119	0	115	2	0	0	0	0	0	0	0	0	0
3	0	143	1	141	1	0	0	0	0	0	0	0	0	0
4	0	119	0	117	1	0	0	0	0	0	0	0	0	0
5	0	75	0	67	4	0	0	0	0	0	0	0	0	0
6	0	69	0	65	2	0	0	0	0	0	0	0	0	0
7	1	92	0	85	2	1	0	0	0	0	0	0	0	0
8	0	100	0	93	2	1	0	0	0	0	0	0	0	0
9	0	119	0	109	2	2	0	0	0	0	0	0	0	0
10	3	141	1	125	6	0	1	0	0	0	0	0	0	0
11	5	269	1	219	13	4	0	0	2	0	0	0	0	0
12	1	312	1	268	12	5	0	1	0	0	0	0	0	0
13	0	320	1	265	11	6	1	1	1	0	0	0	0	0
14	0	292	1	227	23	3	0	2	0	0	0	0	0	0
15	0	314	1	268	12	6	1	0	0	0	0	0	0	0
16	1	347	1	256	20	6	1	2	0	1	0	0	0	0
17	0	610	2	313	30	8	7	4	9	3	1	1	0	0
18	0	981	4	300	38	10	9	5	11	10	6	3	0	0
19	1	1987	8	374	67	29	20	20	23	18	7	13	1	1
20	0	3138	13	480	73	38	19	19	34	22	15	24	6	6
21	1	4522	18	511	97	37	26	10	44	24	27	34	15	15
22	0	6078	25	565	113	46	30	19	40	30	24	57	22	22
23	0	8132	33	779	179	64	30	18	53	32	28	72	30	30
24	0	11551	47	759	195	103	59	31	72	50	23	71	60	60

Deployment: NWNF0007

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	653	691	293	91	22	3	0	0	0	0	0	0	0	0	0	0	0	0	0
2	628	695	303	89	22	3	0	0	0	0	0	0	0	0	0	0	0	0	0
3	603	689	293	85	20	3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	578	679	275	76	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0
5	553	681	264	68	16	3	0	0	0	0	0	0	0	0	0	0	0	0	0
6	528	683	255	63	14	3	0	0	0	0	0	0	0	0	0	0	0	0	0
7	503	674	250	61	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0
8	478	686	254	66	13	3	0	0	0	0	0	0	0	0	0	0	0	0	0
9	453	701	272	76	16	4	0	0	0	0	0	0	0	0	0	0	0	0	0
10	428	723	297	91	20	4	1	0	0	0	0	0	0	0	0	0	0	0	0
11	403	739	337	105	26	4	1	0	0	0	0	0	0	0	0	0	0	0	0
12	378	757	368	128	35	8	1	0	0	0	0	0	0	0	0	0	0	0	0
13	353	770	393	154	45	11	2	0	0	0	0	0	0	0	0	0	0	0	0
14	328	794	440	184	62	18	4	0	0	0	0	0	0	0	0	0	0	0	0
15	303	815	494	229	82	23	7	1	0	0	0	0	0	0	0	0	0	0	0
16	278	839	545	274	108	32	9	2	0	0	0	0	0	0	0	0	0	0	0
17	253	847	577	315	135	45	14	4	1	0	0	0	0	0	0	0	0	0	0
18	228	839	585	338	159	59	20	6	1	0	0	0	0	0	0	0	0	0	0
19	203	807	571	343	172	69	24	7	2	0	0	0	0	0	0	0	0	0	0
20	178	769	551	340	177	77	30	10	3	0	0	0	0	0	0	0	0	0	0
21	153	724	524	330	179	81	34	12	5	1	0	0	0	0	0	0	0	0	0
22	128	667	489	318	175	83	34	12	4	1	0	0	0	0	0	0	0	0	0
23	103	594	446	297	169	80	34	12	4	1	0	0	0	0	0	0	0	0	0
24	78	483	369	250	149	74	31	11	4	2	1	0	0	0	0	0	0	0	0

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Harmonic constants for constituent M2 for deployment NWNF0007.

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	653	78	262	64	125	95	36	143	98	A
02	628	84	262	68	128	100	41	143	99	A
03	603	86	263	68	131	101	43	145	100	A
04	578	90	265	67	135	102	45	148	100	A
05	553	94	267	64	141	103	47	152	101	A
06	528	98	270	61	147	105	48	156	102	A
07	503	100	274	58	157	105	49	161	103	A
08	478	104	278	57	167	107	52	165	105	A
09	453	110	281	58	176	111	55	170	106	A
10	428	114	287	57	189	114	56	175	109	A
11	403	119	294	58	204	119	58	0	294	A
12	378	121	299	59	217	121	58	5	296	A
13	353	119	303	59	228	120	57	9	299	A
14	328	114	310	58	238	116	54	12	304	A
15	303	115	315	63	248	118	56	16	308	A
16	278	120	320	71	254	124	62	18	310	A
17	253	123	321	76	255	129	66	19	311	A
18	228	124	322	78	255	130	69	20	311	A
19	203	124	324	79	256	129	70	20	313	A
20	178	123	325	82	258	129	72	22	312	A
21	153	122	326	84	259	129	73	23	313	A
22	128	121	327	85	261	128	73	24	312	A
23	103	117	327	82	263	125	69	25	313	A
24	78	113	328	77	267	122	63	26	314	A

Harmonic constants for constituent S2 for deployment NWNF0007.

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	653	37	286	35	166	44	26	138	134	A
02	628	39	287	37	169	46	28	139	135	A
03	603	39	289	35	173	45	28	141	136	A
04	578	38	294	32	177	43	26	146	136	A
05	553	38	298	29	185	41	25	153	135	A
06	528	38	303	27	194	40	24	158	136	A
07	503	39	306	26	203	40	25	166	135	A
08	478	41	310	25	213	41	25	174	133	A
09	453	41	318	22	229	41	22	0	318	A
10	428	41	324	21	236	41	21	1	324	A
11	403	44	329	21	243	44	21	3	327	A
12	378	46	338	23	259	47	22	7	335	A
13	353	46	345	23	271	47	22	11	339	A
14	328	47	350	25	279	48	23	13	344	A
15	303	48	354	27	286	49	24	15	347	A
16	278	47	359	28	293	49	24	18	350	A
17	253	46	3	29	301	49	24	22	351	A
18	228	46	4	30	301	48	25	23	351	A
19	203	44	5	30	300	47	26	24	351	A
20	178	45	8	30	301	48	26	21	355	A
21	153	45	13	31	304	47	27	21	1	A
22	128	42	11	30	307	45	25	26	356	A
23	103	37	13	28	313	41	22	30	355	A
24	78	35	26	24	318	37	21	22	13	A

Harmonic constants for constituent N2 for deployment NWNF0007.

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	653	14	234	16	88	21	6	131	74	A
02	628	17	241	17	95	23	7	134	78	A
03	603	16	239	17	95	23	7	134	78	A
04	578	14	235	15	90	20	6	134	73	A
05	553	12	238	13	82	17	4	133	71	A
06	528	11	236	13	78	17	3	131	69	A
07	503	15	237	13	86	19	5	140	69	A
08	478	18	245	11	111	20	7	153	76	A
09	453	21	258	11	147	21	10	166	85	A
10	428	21	265	10	159	22	10	170	90	A
11	403	21	261	10	170	21	10	179	82	A
12	378	26	262	13	178	26	13	4	261	A
13	353	29	278	17	191	29	17	3	276	A
14	328	31	286	20	202	31	19	7	282	A
15	303	30	289	18	213	31	17	13	282	A
16	278	30	293	17	217	30	16	11	288	A
17	253	27	294	15	220	28	14	11	289	A
18	228	24	297	13	231	25	12	17	289	A
19	203	22	306	13	242	23	11	19	296	A
20	178	21	315	13	241	22	12	14	307	A
21	153	22	315	16	240	22	15	19	302	A
22	128	25	311	15	237	26	14	13	304	A
23	103	26	318	19	239	26	18	16	307	A
24	78	26	321	14	235	26	14	4	319	A

Harmonic constants for constituent O1 for deployment NWNF0007.

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	653	9	34	4	309	9	4	2	33	A
02	628	9	34	4	309	9	4	3	33	A
03	603	9	28	5	289	9	5	172	212	A
04	578	9	26	5	291	9	5	176	208	A
05	553	10	29	6	294	10	6	176	211	A
06	528	10	29	5	290	10	5	174	212	A
07	503	10	21	5	285	10	5	176	203	A
08	478	11	21	5	289	11	5	179	201	A
09	453	10	32	5	304	10	5	1	32	A
10	428	11	31	5	306	11	5	3	30	A
11	403	13	32	6	295	13	6	176	214	A
12	378	15	35	7	297	15	7	175	217	A
13	353	15	27	7	286	15	7	174	210	A
14	328	14	29	8	279	15	7	166	216	A
15	303	14	35	8	279	15	7	161	225	A
16	278	14	38	10	281	15	8	155	231	A
17	253	15	39	11	285	16	10	153	236	A
18	228	16	41	11	289	17	10	156	236	A
19	203	17	42	10	286	18	9	160	232	A
20	178	19	44	11	278	20	8	158	233	A
21	153	18	45	12	285	20	10	156	237	A
22	128	15	50	14	281	18	9	138	253	A
23	103	16	35	18	277	21	12	127	253	A
24	78	17	13	19	271	20	15	119	247	A

Harmonic constants for constituent K1 for deployment NWNF0007.

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	653	7	269	3	151	7	2	168	93	A
02	628	7	269	3	113	8	1	162	91	A
03	603	7	272	3	117	8	1	160	95	A
04	578	6	270	3	135	7	2	160	96	A
05	553	6	264	2	149	6	2	169	88	A
06	528	7	254	2	140	7	2	171	77	A
07	503	8	255	4	137	8	3	165	81	A
08	478	9	262	4	150	9	3	170	85	A
09	453	10	270	3	158	10	3	172	92	A
10	428	11	270	5	158	11	4	169	94	A
11	403	10	258	6	151	11	5	167	84	A
12	378	11	246	6	146	11	6	172	70	A
13	353	11	249	6	143	11	5	169	74	A
14	328	12	260	7	151	13	7	165	88	A
15	303	15	266	9	158	15	9	164	95	A
16	278	16	269	9	169	16	9	172	93	A
17	253	17	272	9	173	17	9	172	96	A
18	228	19	277	8	177	19	8	175	99	A
19	203	18	273	7	181	18	7	179	93	A
20	178	17	272	7	183	17	7	0	272	A
21	153	17	276	7	162	18	6	169	101	A
22	128	13	273	6	151	13	5	164	99	A
23	103	9	274	9	158	11	7	134	127	A
24	78	12	286	5	195	12	5	179	106	A

Deployment Id: NWNG0007

Latitude: 63°05.955'N

Longitude: 006°05.015'W

Echo sounding depth: 1844 m

Bottom depth corr.: 1816m

Time of deployment: 07/07 -2000 1724UTC

Time of recovery: 16/06 - 2001 0305UTC

ADCP:

Instrument no.: RDI ADCP 1292

Instrument frequency: 75kHz

Height above bottom: 1173 m

Depth: 643m (corr.)

Time of first data: 07/07 – 2000 1800UTC

Time of last data: 16/06 – 2001 0240UTC

Sample interval: 20 min

No. of ensembles: 24723

Pings per ens.: 1

Binlength: 25 m

Depth of first bin: 607 m (corr.)

No. of bins: 28

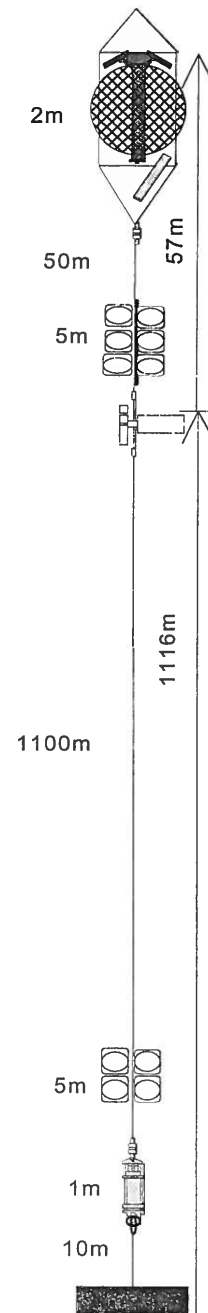
Aanderaa:

Instrument no.: RCM8 10067

Height above bottom: 1117 m

Depth: 699m (corr.)

Record failed because of instrument leakage.



Deployment: NWN0007 updated 2001/08/16
 Instrument no.: 1292
 Instrument freq.: 75
 Latitude: 63 05.955 N
 Longitude: 06 05.015 W
 Bottom depth: 1816
 Instrument depth: 643
 Center depth of first bin: 607
 Bin length: 25
 Number of bins: 22
 Number of first ensemble: 226
 Time of first ensemble: 2000 07 07 18 00
 Number of last ensemble: 24948
 Time of last ensemble: 2001 06 16 02 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	607	1209	93	21	129	991
2	582	1234	94	22	129	994
3	557	1259	95	23	129	995
4	532	1284	99	25	128	997
5	507	1309	102	27	126	997
6	482	1334	106	29	126	997
7	457	1359	110	32	127	997
8	432	1384	114	35	126	996
9	407	1409	119	41	125	995
10	382	1434	127	47	125	993
11	357	1459	137	55	126	992
12	332	1484	148	64	127	990
13	307	1509	161	74	126	988
14	282	1534	176	86	126	985
15	257	1559	193	98	125	984
16	232	1584	210	110	125	966
17	207	1609	227	121	124	938
18	182	1634	243	129	123	903
19	157	1659	259	137	123	852
20	132	1684	276	145	124	793
21	107	1709	293	152	125	737
22	82	1734	311	162	125	649

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by MCP in Aug 2001
 Velocity edited up to and including bin 22 by MCP in Jul 2001
 Intensity edited up to and including bin 28 by MCP in Aug 2001

Total number of ensembles: 24723
 Interval between ensembles: 20 min
 Original number of bins: 28
 Number of acceptable velocity bins: 22
 Number of acceptable intensity bins: 22

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

Number of temperature ens. flagged: 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	211	1	205	3	0	0	0	0	0	0	0	0	0
2	0	143	1	141	1	0	0	0	0	0	0	0	0	0
3	0	123	0	121	1	0	0	0	0	0	0	0	0	0
4	0	79	0	77	1	0	0	0	0	0	0	0	0	0
5	1	67	0	65	1	0	0	0	0	0	0	0	0	0
6	1	82	0	73	3	1	0	0	0	0	0	0	0	0
7	0	72	0	70	1	0	0	0	0	0	0	0	0	0
8	2	109	0	103	3	0	0	0	0	0	0	0	0	0
9	0	113	0	111	1	0	0	0	0	0	0	0	0	0
10	0	175	1	162	5	1	0	0	0	0	0	0	0	0
11	1	192	1	163	13	1	0	0	0	0	0	0	0	0
12	1	243	1	222	9	1	0	0	0	0	0	0	0	0
13	0	286	1	251	11	2	0	0	1	0	0	0	0	0
14	3	365	1	296	21	3	2	2	0	0	0	0	0	0
15	0	406	2	301	25	5	1	0	2	2	0	0	0	0
16	1	838	3	394	49	18	7	9	11	6	2	0	0	0
17	0	1544	6	404	51	29	16	10	24	18	8	5	0	0
18	3	2398	10	470	92	35	21	12	33	21	9	18	0	0
19	0	3649	15	560	120	57	24	9	38	35	17	24	6	6
20	0	5115	21	616	111	52	28	20	50	40	26	40	13	13
21	1	6506	26	607	121	53	25	20	34	40	32	61	20	20
22	5	8684	35	766	179	73	38	22	44	23	39	65	37	37

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Harmonic constants for constituent M2 for deployment NWNG0007.

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	607	66	297	32	257	71	19	22	291	A
02	582	66	299	33	260	71	19	23	292	A
03	557	65	300	34	262	71	19	24	293	A
04	532	66	301	36	264	72	20	26	294	A
05	507	65	304	38	268	73	20	28	295	A
06	482	65	308	41	272	74	21	30	298	A
07	457	65	310	43	276	75	21	31	301	A
08	432	63	313	44	282	74	19	33	303	A
09	407	61	317	46	288	74	19	36	307	A
10	382	60	322	49	292	75	20	39	310	A
11	357	58	327	54	295	76	22	42	312	A
12	332	58	330	57	298	78	22	44	314	A
13	307	58	336	61	303	80	24	47	318	A
14	282	57	345	69	308	85	28	52	323	A
15	257	58	352	77	311	91	32	55	324	A
16	232	60	357	82	312	95	36	57	326	A
17	207	64	360	89	313	102	41	58	327	A
18	182	68	1	95	313	108	44	58	327	A
19	157	70	2	99	314	112	46	59	327	A
20	132	77	6	105	313	118	55	59	329	A
21	107	81	339	115	285	128	60	61	299	A
22	82	84	343	118	284	129	66	62	299	A

Harmonic constants for constituent S2 for deployment NWNG0007.

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	607	22	328	9	289	23	5	19	323	A
02	582	22	329	9	296	23	5	19	325	A
03	557	22	331	9	297	24	5	20	327	A
04	532	23	333	11	295	25	6	21	327	A
05	507	23	334	11	295	25	6	21	328	A
06	482	23	336	11	298	24	6	22	330	A
07	457	23	339	12	306	25	6	24	333	A
08	432	24	343	13	309	26	7	26	336	A
09	407	24	347	15	315	27	7	29	339	A
10	382	23	351	16	323	27	6	34	342	A
11	357	21	0	19	328	27	8	41	346	A
12	332	21	16	23	337	29	10	47	355	A
13	307	23	25	26	342	32	13	50	0	A
14	282	22	30	27	347	33	12	52	3	A
15	257	20	33	28	349	33	12	58	2	A
16	232	19	42	29	354	32	12	63	5	A
17	207	19	52	30	357	32	14	65	8	A
18	182	18	52	28	2	31	12	62	14	A
19	157	21	49	29	3	33	13	58	17	A
20	132	23	61	37	2	39	19	66	14	A
21	107	27	28	41	333	44	21	63	346	A
22	82	32	31	39	335	45	23	55	355	A

Harmonic constants for constituent N2 for deployment NWNG0007.

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	607	15	279	9	234	17	6	24	271	A
02	582	16	284	9	232	17	7	23	274	A
03	557	17	284	10	229	18	8	24	273	A
04	532	18	284	11	227	20	9	23	273	A
05	507	19	285	12	229	20	9	24	274	A
06	482	19	287	12	232	20	9	25	275	A
07	457	19	289	11	236	20	8	25	278	A
08	432	19	292	13	237	20	9	28	278	A
09	407	19	295	13	241	21	10	29	281	A
10	382	19	301	14	251	22	10	33	285	A
11	357	17	304	14	259	20	8	37	287	A
12	332	14	299	11	269	18	4	37	288	A
13	307	14	300	10	274	16	4	36	291	A
14	282	13	304	11	274	17	4	39	292	A
15	257	12	304	10	284	16	3	39	296	A
16	232	10	317	13	294	16	3	52	303	A
17	207	12	344	18	298	20	8	61	311	A
18	182	13	351	23	301	25	9	66	310	A
19	157	15	1	25	299	27	13	69	309	A
20	132	19	1	26	299	28	15	62	315	A
21	107	18	328	25	262	26	15	65	277	A
22	82	23	318	29	240	30	22	70	255	A

Harmonic constants for constituent O1 for deployment NWNG0007.

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	607	5	59	1	336	5	1	2	58	A
02	582	6	62	1	316	6	1	177	243	A
03	557	6	63	2	311	6	2	171	246	A
04	532	5	57	2	308	6	2	173	239	A
05	507	5	52	1	294	5	1	172	234	A
06	482	4	50	0	300	4	0	178	231	A
07	457	4	58	0	263	4	0	177	238	A
08	432	6	60	1	308	6	1	174	242	A
09	407	7	63	3	320	7	3	173	246	A
10	382	7	63	3	313	7	3	171	246	A
11	357	7	56	3	312	7	3	174	238	A
12	332	7	59	2	344	7	2	4	58	A
13	307	6	62	2	324	6	2	177	243	A
14	282	6	60	2	302	6	2	169	244	A
15	257	5	66	1	286	5	1	171	247	A
16	232	7	59	1	150	7	1	180	239	C
17	207	6	61	3	39	7	1	21	58	A
18	182	7	59	4	83	8	1	28	64	C
19	157	10	70	3	63	10	0	15	70	A
20	132	15	89	2	61	15	1	8	88	A
21	107	16	65	3	58	17	0	10	65	A
22	82	19	65	6	43	20	2	16	64	A

Harmonic constants for constituent K1 for deployment NWNG0007.

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	607	4	281	2	159	4	2	161	109	A
02	582	4	289	2	154	4	1	163	113	A
03	557	4	294	2	142	5	1	152	120	A
04	532	5	295	2	157	5	2	158	122	A
05	507	4	306	3	154	5	1	149	133	A
06	482	4	306	2	171	4	1	157	134	A
07	457	5	303	2	155	5	1	162	126	A
08	432	5	297	2	147	6	1	162	121	A
09	407	5	295	2	118	5	0	155	116	A
10	382	6	283	3	135	7	1	156	109	A
11	357	5	268	3	130	6	2	158	95	A
12	332	6	266	3	142	6	2	160	94	A
13	307	5	298	2	154	5	1	160	123	A
14	282	6	304	3	165	6	2	160	129	A
15	257	6	290	4	171	7	3	158	121	A
16	232	7	283	3	193	7	3	180	104	A
17	207	8	279	5	231	9	4	28	267	A
18	182	8	274	4	238	9	2	24	268	A
19	157	7	274	5	233	9	3	32	262	A
20	132	10	267	7	247	12	2	32	261	A
21	107	14	261	5	246	15	1	21	259	A
22	82	12	260	5	255	13	0	22	259	A

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Deployment Id: NWSB0007

Latitude: 60°47.000'N

Longitude: 005°18.200'W

Echo sounding depth: 798m

Bottom depth corr.: 786m

Time of deployment: 08/07 -2000 2035UTC

Time of recovery: 17/06 - 2001 1811UTC

ADCP:

Instrument no.: RDI ADCP 1644

Instrument frequency: 75kHz

Height above bottom: 108m

Depth: 678m (corr.)

Time of first data: 08/07 - 2000 2120UTC

Time of last data: 17/06 - 2001 1740UTC

Sample interval: 20 min

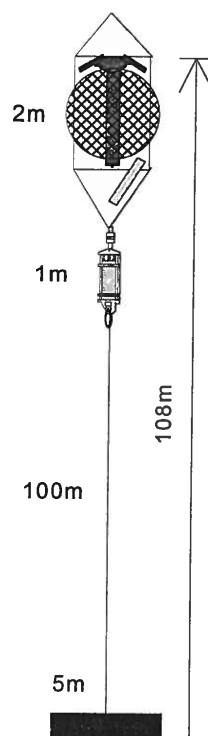
No. of ensembles: 24758

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 642 (corr.)

No. of bins: 28



Deployment: NWSB0007 updated 2001/08/21
 Instrument no.: 1644
 Instrument freq.: 75
 Latitude: 60 47.000 N
 Longitude: 05 18.200 W
 Bottom depth: 786
 Instrument depth: 678
 Center depth of first bin: 642
 Bin length: 25
 Number of bins: 22
 Number of first ensemble: 308
 Time of first ensemble: 2000 07 08 21 20
 Number of last ensemble: 25065
 Time of last ensemble: 2001 06 17 17 40
 Time between ensembles (min.): 20
 All directions have been corrected by adding: -11.0

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

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	642	144	223	27	195	978
2	617	169	219	25	196	990
3	592	194	214	24	197	993
4	567	219	208	23	195	991
5	542	244	205	21	195	991
6	517	269	203	20	197	989
7	492	294	201	17	198	987
8	467	319	199	15	200	989
9	442	344	197	15	201	989
10	417	369	195	20	205	987
11	392	394	194	26	208	985
12	367	419	196	31	211	984
13	342	444	198	33	209	982
14	317	469	201	32	209	980
15	292	494	205	30	209	966
16	267	519	211	29	214	939
17	242	544	215	30	214	891
18	217	569	218	28	211	831
19	192	594	222	26	210	747
20	167	619	228	18	210	655
21	142	644	233	16	198	574
22	117	669	237	7	148	465

Error statistics for deployment: NWSB0007 updated 2001/08/21

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by MCP in Aug 2001
 Velocity edited up to and including bin 22 by GEJ in Aug 2001
 Intensity edited up to and including bin 27 by MCP in Aug 2001

Total number of ensembles: 24758
 Interval between ensembles: 20 min
 Original number of bins: 28
 Number of acceptable velocity bins: 22
 Number of acceptable intensity bins: 22

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

Number of temperature ens. flagged: 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	3	534	2	468	30	2	0	0	0	0	0	0	0	0
2	0	259	1	240	8	1	0	0	0	0	0	0	0	0
3	0	176	1	162	7	0	0	0	0	0	0	0	0	0
4	0	223	1	205	9	0	0	0	0	0	0	0	0	0
5	0	223	1	215	4	0	0	0	0	0	0	0	0	0
6	0	263	1	249	7	0	0	0	0	0	0	0	0	0
7	0	321	1	297	12	0	0	0	0	0	0	0	0	0
8	0	263	1	244	8	1	0	0	0	0	0	0	0	0
9	0	270	1	244	13	0	0	0	0	0	0	0	0	0
10	0	332	1	309	10	1	0	0	0	0	0	0	0	0
11	0	367	1	335	13	2	0	0	0	0	0	0	0	0
12	0	389	2	342	22	1	0	0	0	0	0	0	0	0
13	0	444	2	418	10	2	0	0	0	0	0	0	0	0
14	0	507	2	448	17	3	2	0	1	0	0	0	0	0
15	0	838	3	512	38	16	7	4	7	8	0	0	0	0
16	1	1510	6	615	83	29	13	14	24	19	3	0	0	0
17	1	2695	11	923	139	47	37	27	70	28	6	0	0	0
18	1	4187	17	854	184	97	62	52	93	47	14	13	0	0
19	0	6263	25	791	185	101	56	42	88	63	40	41	3	3
20	0	8550	35	754	229	108	57	45	78	55	61	64	19	19
21	1	10540	43	729	199	100	52	28	75	62	50	81	40	40
22	0	13251	54	617	206	94	54	47	100	59	47	82	55	55

Deployment: NWSB0007

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	642	846	535	239	70	12	1	0	0	0	0	0	0	0	0	0	0	0	0
2	617	846	522	225	65	11	1	0	0	0	0	0	0	0	0	0	0	0	0
3	592	840	507	213	60	9	0	0	0	0	0	0	0	0	0	0	0	0	0
4	567	828	485	198	54	8	0	0	0	0	0	0	0	0	0	0	0	0	0
5	542	822	469	191	49	8	0	0	0	0	0	0	0	0	0	0	0	0	0
6	517	819	462	182	45	7	1	0	0	0	0	0	0	0	0	0	0	0	0
7	492	811	455	177	43	7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	467	806	451	175	44	6	1	0	0	0	0	0	0	0	0	0	0	0	0
9	442	798	439	170	43	6	1	0	0	0	0	0	0	0	0	0	0	0	0
10	417	788	422	162	46	7	0	0	0	0	0	0	0	0	0	0	0	0	0
11	392	787	417	165	47	9	0	0	0	0	0	0	0	0	0	0	0	0	0
12	367	786	426	171	49	7	1	0	0	0	0	0	0	0	0	0	0	0	0
13	342	791	435	177	50	9	1	0	0	0	0	0	0	0	0	0	0	0	0
14	317	798	442	182	55	10	1	0	0	0	0	0	0	0	0	0	0	0	0
15	292	794	454	188	56	11	2	0	0	0	0	0	0	0	0	0	0	0	0
16	267	782	457	196	63	12	2	0	0	0	0	0	0	0	0	0	0	0	0
17	242	752	445	196	65	13	2	0	0	0	0	0	0	0	0	0	0	0	0
18	217	702	423	190	66	16	2	0	0	0	0	0	0	0	0	0	0	0	0
19	192	632	389	182	65	18	3	0	0	0	0	0	0	0	0	0	0	0	0
20	167	555	348	172	66	21	5	1	0	0	0	0	0	0	0	0	0	0	0
21	142	492	313	156	64	22	6	1	0	0	0	0	0	0	0	0	0	0	0
22	117	400	255	131	57	22	7	2	0	0	0	0	0	0	0	0	0	0	0

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Harmonic constants for constituent M2 for deployment NWSB0007.

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	642	255	246	121	193	267	93	18	239	A
02	617	250	247	121	197	263	88	20	241	A
03	592	243	249	120	202	258	83	21	242	A
04	567	236	250	120	206	253	76	22	242	A
05	542	228	251	119	212	248	69	24	244	A
06	517	221	253	121	218	244	63	26	245	A
07	492	212	254	122	223	239	56	28	247	A
08	467	205	255	125	228	234	51	30	248	A
09	442	195	256	128	233	229	44	32	249	A
10	417	180	257	129	239	219	32	35	251	A
11	392	165	259	130	247	209	21	38	254	A
12	367	147	261	134	254	199	12	42	258	A
13	342	134	264	140	261	194	6	46	263	A
14	317	125	267	147	265	193	4	50	266	A
15	292	121	270	153	267	195	6	52	268	A
16	267	120	272	158	267	199	9	53	269	A
17	242	119	274	163	267	201	11	54	270	A
18	217	118	275	169	268	206	12	55	270	A
19	192	120	278	170	268	208	16	55	271	A
20	167	121	279	173	268	210	20	55	271	A
21	142	122	279	172	266	210	23	55	271	A
22	117	126	279	172	266	212	24	54	270	A

Harmonic constants for constituent S2 for deployment NWSB0007.

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	642	85	293	52	250	95	32	27	283	A
02	617	85	295	53	252	95	33	28	285	A
03	592	85	297	55	254	95	33	29	286	A
04	567	83	298	54	258	95	31	30	288	A
05	542	81	300	54	262	93	28	31	289	A
06	517	78	301	54	266	91	27	33	290	A
07	492	76	301	55	269	90	24	34	290	A
08	467	72	301	54	274	87	20	36	291	A
09	442	67	299	51	277	83	15	37	291	A
10	417	64	294	48	278	79	11	37	289	A
11	392	60	294	45	287	75	4	37	291	A
12	367	55	294	44	297	71	2	39	295	C
13	342	51	291	45	300	67	5	41	295	C
14	317	50	290	45	303	66	7	42	296	C
15	292	47	290	45	305	65	9	43	297	C
16	267	45	290	45	307	63	10	45	298	C
17	242	42	288	44	307	60	10	46	298	C
18	217	42	291	47	309	62	10	48	301	C
19	192	42	297	49	314	64	9	49	307	C
20	167	41	300	53	313	66	7	53	308	C
21	142	40	311	54	313	68	1	53	312	C
22	117	42	316	55	310	69	3	53	312	A

Harmonic constants for constituent N2 for deployment NWSB0007.

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	642	49	222	19	172	51	14	15	218	A
02	617	48	225	20	179	51	14	18	220	A
03	592	47	227	22	186	50	13	21	221	A
04	567	46	230	22	194	49	12	23	224	A
05	542	43	232	23	202	48	10	26	226	A
06	517	41	232	24	205	46	9	29	226	A
07	492	39	233	24	210	45	8	31	227	A
08	467	37	236	25	215	45	7	34	229	A
09	442	38	240	29	217	47	9	37	231	A
10	417	38	246	33	219	49	12	41	234	A
11	392	36	248	35	223	49	11	44	236	A
12	367	33	249	35	228	47	9	47	238	A
13	342	26	249	34	232	43	6	52	239	A
14	317	23	249	34	240	40	3	56	243	A
15	292	21	252	34	245	40	2	59	247	A
16	267	21	247	35	244	41	1	59	245	A
17	242	19	239	35	244	40	1	62	243	C
18	217	18	232	34	243	38	3	62	240	C
19	192	20	236	30	246	36	3	57	243	C
20	167	20	238	29	245	35	2	55	243	C
21	142	23	220	30	237	37	5	53	231	C
22	117	28	221	24	228	36	2	41	224	C

Harmonic constants for constituent O1 for deployment NWSB0007.

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	642	30	341	18	38	32	14	22	351	C
02	617	30	341	17	36	32	13	22	351	C
03	592	30	342	17	33	32	12	24	351	C
04	567	30	341	17	34	32	12	22	350	C
05	542	29	339	16	33	31	12	22	348	C
06	517	29	340	16	38	30	13	21	349	C
07	492	28	339	16	41	29	13	19	348	C
08	467	28	338	15	33	29	12	21	347	C
09	442	28	339	15	36	29	12	20	347	C
10	417	26	339	13	36	27	11	19	346	C
11	392	25	338	11	40	25	10	14	343	C
12	367	25	335	10	40	26	9	11	339	C
13	342	27	331	11	38	27	10	10	335	C
14	317	27	327	9	41	27	9	6	328	C
15	292	26	326	8	43	26	8	5	327	C
16	267	25	332	7	44	25	6	5	333	C
17	242	25	334	8	46	25	8	7	336	C
18	217	21	327	13	48	22	12	8	332	C
19	192	21	333	14	55	21	14	9	339	C
20	167	17	335	12	57	18	12	12	343	C
21	142	20	352	12	45	22	9	24	3	C
22	117	21	1	12	10	24	2	29	3	C

Harmonic constants for constituent K1 for deployment NWSB0007.

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	642	16	210	7	281	16	6	9	214	C
02	617	16	211	6	275	16	6	11	214	C
03	592	16	207	6	276	16	6	9	210	C
04	567	16	205	6	280	16	6	7	208	C
05	542	16	207	6	282	16	6	7	209	C
06	517	16	208	6	277	16	6	9	211	C
07	492	15	208	7	276	15	6	11	213	C
08	467	13	203	6	287	13	6	3	204	C
09	442	13	196	5	290	13	5	179	16	C
10	417	14	194	3	295	14	3	177	13	C
11	392	13	189	3	261	13	3	4	190	C
12	367	14	187	4	249	14	3	8	189	C
13	342	14	170	5	182	15	1	19	171	C
14	317	13	166	6	167	15	0	25	166	C
15	292	14	170	4	169	15	0	17	170	A
16	267	16	172	3	145	16	1	10	171	A
17	242	15	170	4	91	15	4	3	170	A
18	217	13	175	7	98	13	6	8	171	A
19	192	14	174	7	113	15	6	15	168	A
20	167	14	172	6	98	14	6	8	169	A
21	142	19	168	5	79	19	5	0	168	A
22	117	19	151	3	327	19	0	170	331	C

Deployment Id: NWSC0007

Latitude: 60°34.023'N

Longitude: 004°46.040'W

Echo sounding depth: 1086m

Bottom depth corr.: 1075m

Time of deployment: 08/07 -2000 1624UTC

Time of recovery: 18/06 - 2001 0318UTC

ADCP:

Instrument no.: RDI ADCP 1245

Instrument frequency: 75kHz

Height above bottom: 414m (corr.)

Depth: 661m (corr.)

Time of first data: 08/07 - 2000 1700UTC

Time of last data: 18/06 - 2001 0300UTC

Sample interval: 20 min

No. of ensembles: 24799

Pings per ens.: 1

Binlength: 25m

Depth of first bin: 625 m (corr.)

No. of bins: 28

Aanderaa:

Instrument no.: RCM9 9912

Height above bottom: 308m

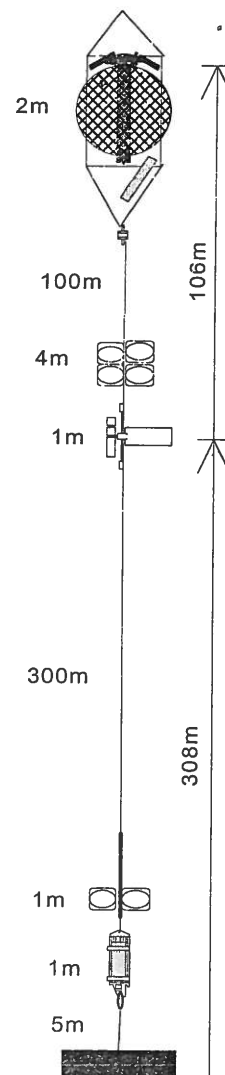
Depth: 767m (corr.)

Time of first data: 08/07 – 2000 1730 UTC

Time of last data: 18/06 – 2001 0230 UTC

Sample interval: 60 min

No. of records: 8266



Deployment: NWSC0007 updated 2001/08/23
 Instrument no.: 1245
 Instrument freq.: 75
 Latitude: 60 34.023 N
 Longitude: 04 46.040 W
 Bottom depth: 1075
 Instrument depth: 661
 Center depth of first bin: 625
 Bin length: 25
 Number of bins: 23
 Number of first ensemble: 295
 Time of first ensemble: 2000 07 08 17 00
 Number of last ensemble: 25093
 Time of last ensemble: 2001 06 18 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	625	450	185	45	185	991
2	600	475	186	45	183	991
3	575	500	187	46	179	992
4	550	525	188	45	173	992
5	525	550	192	45	167	992
6	500	575	197	46	161	991
7	475	600	203	48	152	988
8	450	625	211	52	147	990
9	425	650	219	56	142	995
10	400	675	226	60	137	993
11	375	700	235	66	132	992
12	350	725	244	71	126	991
13	325	750	252	75	123	993
14	300	775	258	77	117	992
15	275	800	264	80	113	991
16	250	825	272	82	111	982
17	225	850	277	86	110	970
18	200	875	281	93	109	936
19	175	900	284	100	108	889
20	150	925	289	107	107	843
21	125	950	295	113	105	793
22	100	975	304	120	105	718
23	75	1000	314	136	106	568

Surface distance not edited
 Heading, pitch and roll not edited
 Temperature edited by MCP in Aug 2001
 Velocity edited up to and including bin 23 by MCP in Aug 2001
 Intensity edited up to and including bin 26 by MCP in Aug 2001
 Velocity reedited from bin 22 to bin 23 by KMHL in Aug 2001

Total number of ensembles: 24799
 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	1	212	1	210	1	0	0	0	0	0	0	0	0	0
2	1	231	1	216	6	1	0	0	0	0	0	0	0	0
3	2	192	1	188	2	0	0	0	0	0	0	0	0	0
4	2	203	1	196	2	1	0	0	0	0	0	0	0	0
5	2	201	1	193	4	0	0	0	0	0	0	0	0	0
6	0	234	1	217	7	1	0	0	0	0	0	0	0	0
7	0	288	1	261	9	3	0	0	0	0	0	0	0	0
8	2	244	1	228	8	0	0	0	0	0	0	0	0	0
9	0	128	1	126	1	0	0	0	0	0	0	0	0	0
10	0	183	1	165	6	2	0	0	0	0	0	0	0	0
11	0	192	1	168	8	1	0	1	0	0	0	0	0	0
12	0	215	1	187	14	0	0	0	0	0	0	0	0	0
13	0	182	1	172	5	0	0	0	0	0	0	0	0	0
14	0	196	1	184	6	0	0	0	0	0	0	0	0	0
15	0	226	1	195	11	3	0	0	0	0	0	0	0	0
16	0	448	2	267	34	14	6	3	5	0	0	0	0	0
17	1	753	3	360	61	21	13	7	10	1	0	1	0	0
18	1	1581	6	384	70	36	22	12	35	20	7	3	0	0
19	1	2752	11	416	70	29	15	6	33	37	21	19	0	0
20	0	3900	16	553	87	29	18	13	15	16	30	49	0	0
21	0	5143	21	579	123	46	25	13	33	15	29	69	2	0
22	1	7002	28	715	144	48	41	18	46	28	27	85	12	0
23	3	10722	43	891	263	110	61	32	105	42	15	81	51	0

Deployment: NWSC0007

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	625	763	393	140	36	8	2	0	0	0	0	0	0	0	0	0	0	0	0
2	600	767	397	144	38	8	2	1	0	0	0	0	0	0	0	0	0	0	0
3	575	771	403	145	36	8	2	1	0	0	0	0	0	0	0	0	0	0	0
4	550	772	406	150	38	9	2	1	0	0	0	0	0	0	0	0	0	0	0
5	525	776	419	155	45	10	2	1	0	0	0	0	0	0	0	0	0	0	0
6	500	790	437	165	50	13	3	1	0	0	0	0	0	0	0	0	0	0	0
7	475	805	460	180	57	15	4	1	0	0	0	0	0	0	0	0	0	0	0
8	450	811	484	206	69	19	5	1	0	0	0	0	0	0	0	0	0	0	0
9	425	823	509	235	85	24	6	1	0	0	0	0	0	0	0	0	0	0	0
10	400	832	521	258	97	29	9	2	0	0	0	0	0	0	0	0	0	0	0
11	375	841	551	289	109	34	11	3	0	0	0	0	0	0	0	0	0	0	0
12	350	852	573	315	130	43	14	4	0	0	0	0	0	0	0	0	0	0	0
13	325	857	587	331	149	56	19	5	1	0	0	0	0	0	0	0	0	0	0
14	300	862	597	348	161	65	24	6	1	0	0	0	0	0	0	0	0	0	0
15	275	864	607	362	182	74	29	8	1	0	0	0	0	0	0	0	0	0	0
16	250	867	617	372	195	84	34	11	2	0	0	0	0	0	0	0	0	0	0
17	225	862	619	377	202	95	37	13	3	0	0	0	0	0	0	0	0	0	0
18	200	836	603	373	203	98	39	15	4	1	0	0	0	0	0	0	0	0	0
19	175	792	578	360	199	97	38	15	5	2	0	0	0	0	0	0	0	0	0
20	150	754	554	352	197	97	40	16	6	2	1	0	0	0	0	0	0	0	0
21	125	712	526	343	194	98	42	17	6	2	1	1	0	0	0	0	0	0	0
22	100	649	491	323	187	97	45	19	8	3	1	1	0	0	0	0	0	0	0
23	75	517	394	265	161	86	42	19	8	4	1	1	0	0	0	0	0	0	0

Harmonic constants for constituent M2 for deployment NWSC0007.

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	625	145	253	113	249	184	7	38	252	A
02	600	146	254	114	250	185	6	38	252	A
03	575	144	254	114	251	184	4	38	253	A
04	550	142	254	116	253	183	2	39	254	A
05	525	139	255	118	254	182	0	40	254	A
06	500	137	255	119	256	182	1	41	256	C
07	475	133	256	121	258	180	3	42	257	C
08	450	131	257	122	259	179	4	43	258	C
09	425	127	258	125	261	178	6	44	259	C
10	400	121	259	128	264	176	7	47	261	C
11	375	117	261	134	266	177	8	49	264	C
12	350	112	264	138	268	177	6	51	267	C
13	325	106	267	141	271	177	6	53	269	C
14	300	100	269	148	273	178	5	56	272	C
15	275	95	273	154	274	181	3	58	274	C
16	250	92	276	159	275	183	2	60	275	A
17	225	92	277	161	276	185	1	60	276	A
18	200	93	278	163	276	188	2	60	277	A
19	175	88	280	166	278	188	3	62	278	A
20	150	84	282	169	279	189	4	64	279	A
21	125	79	283	172	279	189	5	65	280	A
22	100	77	287	178	282	194	6	67	283	A
23	75	74	286	175	283	190	4	67	283	A

Harmonic constants for constituent S2 for deployment NWSC0007.

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	625	49	295	49	291	69	3	45	293	A
02	600	49	296	50	291	70	3	46	294	A
03	575	48	297	51	293	70	3	47	295	A
04	550	46	298	53	294	70	2	49	296	A
05	525	46	299	54	295	71	2	50	296	A
06	500	47	297	54	294	72	2	49	296	A
07	475	49	296	53	293	72	2	48	295	A
08	450	47	297	51	293	69	2	48	295	A
09	425	46	295	50	294	68	0	48	295	A
10	400	45	295	48	297	66	1	47	296	C
11	375	43	292	45	302	62	5	47	297	C
12	350	42	286	45	305	61	10	47	296	C
13	325	41	287	47	307	61	10	49	298	C
14	300	38	290	48	311	61	11	52	303	C
15	275	37	289	46	314	57	12	52	304	C
16	250	37	285	44	312	55	13	51	301	C
17	225	38	283	41	312	54	14	47	299	C
18	200	37	288	42	314	54	12	49	302	C
19	175	37	294	43	312	56	9	50	304	C
20	150	38	293	45	314	59	10	50	305	C
21	125	39	291	46	317	59	13	50	306	C
22	100	38	283	42	317	55	16	48	302	C
23	75	39	277	41	312	54	17	47	296	C

Harmonic constants for constituent N2 for deployment NWSC0007.

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	625	27	240	28	238	38	1	46	239	A
02	600	27	241	28	236	39	2	46	238	A
03	575	28	244	29	236	40	3	46	240	A
04	550	29	247	31	235	42	4	46	241	A
05	525	29	246	30	235	42	4	46	240	A
06	500	29	243	29	234	41	3	46	238	A
07	475	29	242	30	232	42	4	46	237	A
08	450	27	247	31	237	41	3	49	241	A
09	425	25	248	31	241	40	3	51	244	A
10	400	22	246	29	243	36	1	52	244	A
11	375	23	247	29	248	37	0	51	247	C
12	350	23	245	29	248	37	1	51	247	C
13	325	22	245	30	249	37	1	53	247	C
14	300	21	247	30	250	37	1	56	249	C
15	275	21	247	29	250	36	1	55	249	C
16	250	24	247	28	247	36	0	50	247	A
17	225	24	244	26	243	35	0	47	243	A
18	200	27	246	25	240	37	2	43	243	A
19	175	29	251	26	237	39	5	42	244	A
20	150	30	255	26	241	39	5	40	249	A
21	125	29	251	24	245	38	2	39	249	A
22	100	25	248	23	258	34	3	43	253	C
23	75	25	233	25	266	34	10	44	249	C

Harmonic constants for constituent O1 for deployment NWSC0007.

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	625	10	1	11	31	14	4	47	17	C
02	600	10	357	10	30	14	4	44	14	C
03	575	10	358	9	32	13	4	40	13	C
04	550	12	3	9	32	14	4	37	14	C
05	525	10	0	10	36	13	4	44	17	C
06	500	10	5	10	32	14	3	45	19	C
07	475	10	2	11	31	15	4	48	18	C
08	450	10	356	11	31	14	4	48	15	C
09	425	9	359	10	35	13	4	52	21	C
10	400	9	2	9	35	12	4	48	20	C
11	375	11	5	11	29	15	3	47	18	C
12	350	10	0	12	22	16	3	50	13	C
13	325	10	5	13	34	15	4	54	24	C
14	300	9	4	12	34	15	4	54	24	C
15	275	11	5	12	33	16	4	48	20	C
16	250	9	9	13	33	16	3	57	26	C
17	225	8	7	14	31	16	3	60	25	C
18	200	8	12	16	29	18	2	64	25	C
19	175	9	11	20	32	22	3	67	29	C
20	150	6	45	19	30	20	2	72	32	A
21	125	6	55	17	34	18	2	72	36	A
22	100	5	73	12	50	13	2	67	54	A
23	75	6	38	18	71	19	3	73	67	C

Harmonic constants for constituent K1 for deployment NWSC0007.

Bin	Depth m	E-ampl mm/sec	E-gphl deg	N-ampl mm/sec	N-gphl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	625	5	252	3	222	6	1	33	243	A
02	600	4	255	3	229	5	1	35	247	A
03	575	5	255	3	225	5	1	27	249	A
04	550	6	250	2	245	6	0	24	249	A
05	525	5	255	3	239	6	1	26	252	A
06	500	5	254	3	253	6	0	31	254	A
07	475	5	241	2	258	5	1	27	244	C
08	450	4	235	2	201	5	1	20	231	A
09	425	5	237	2	170	6	2	12	232	A
10	400	5	225	3	162	5	3	25	211	A
11	375	4	236	5	177	6	3	61	193	A
12	350	2	198	8	149	8	1	80	151	A
13	325	2	111	9	139	9	1	80	138	C
14	300	2	43	6	146	6	2	94	148	C
15	275	1	228	6	163	6	1	85	164	A
16	250	2	218	5	161	6	1	81	164	A
17	225	3	246	6	144	6	3	98	140	A
18	200	8	271	8	135	10	4	138	112	A
19	175	16	272	10	114	18	3	148	98	A
20	150	20	269	12	104	23	3	150	93	A
21	125	22	264	11	94	25	2	154	86	A
22	100	25	258	9	60	26	3	161	76	C
23	75	26	256	10	59	28	3	160	74	C

Deployment: NWSC0007 analyzed from beginning to end
Instrument no.: 9912
Instrument type: Aanderaa
Latitude: 60 34.023 N
Longitude: 04 46.040 W
Bottom depth: 1075
Instrument depth: 767
Number of records: 8266
Time of first record: 2000 07 08 17 30
Time of last record : 2001 06 18 02 30
Time between records (min.): 60.000

Parameters	Records OK	Records flagged
Column 1 : Recno		
Column 2- 4: Date		
Column 5- 6: Time		
Column 7 : Temp	8266	0
Column 8 : Speed	8266	0
Column 9 : Direct	8266	0
Column 10 : Salt	8256	10
Column 11 : N-temp	8266	0

Comments

Salinity is not calibrated.

Residual current: 45 mm/sec towards: 188 degrees

TIDAL ANALYSIS

Error flagged records interpolated for velocity: 0, records not int.: 0
Tidal analysis performed on unfiltered data

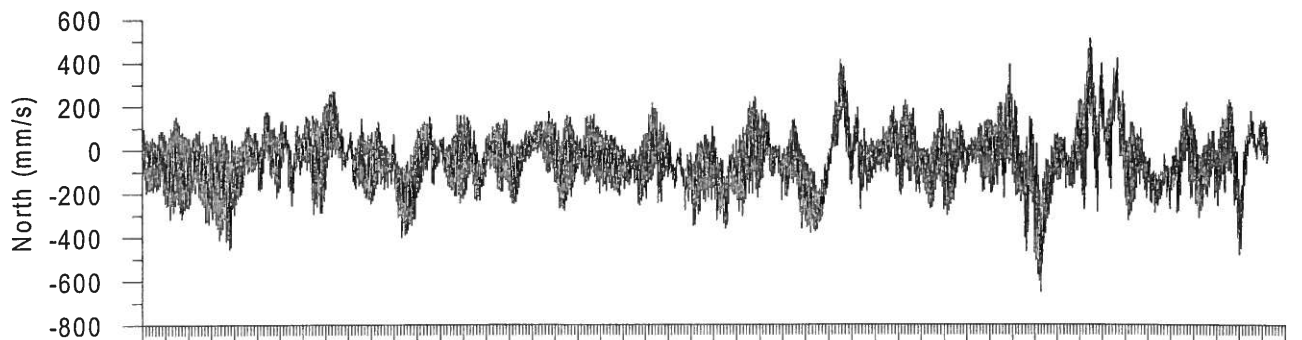
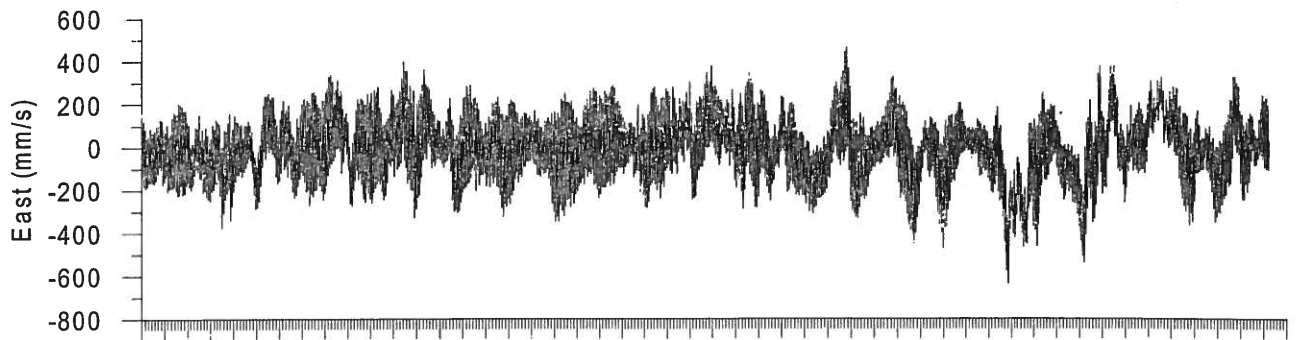
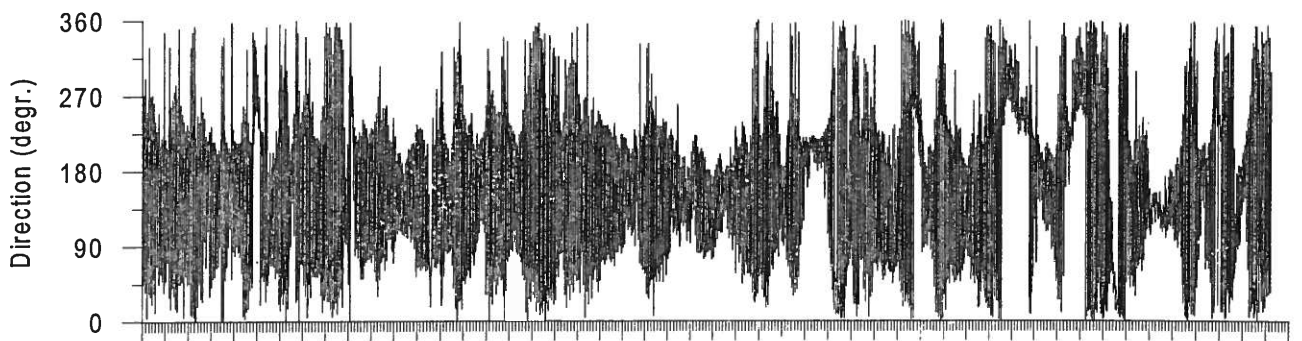
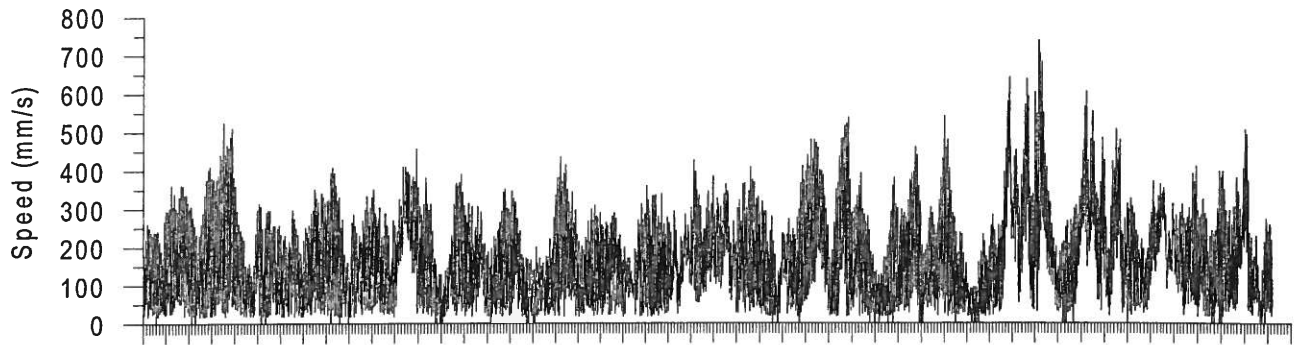
Const	Freq c/hr	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
MM	.00151215	28	148	15	322	31	1	152	327	C
MSF	.00282193	7	137	1	266	7	1	174	316	C
Q1	.03721850	4	342	5	354	6	1	55	350	C
O1	.03873065	9	7	10	30	13	3	47	19	C
NO1	.04026859	4	94	3	98	5	0	35	95	C
P1	.04155259	2	259	1	308	2	1	22	267	C
K1	.04178075	5	229	1	221	5	0	15	229	A
N2	.07899925	26	235	23	234	34	0	42	235	A
M2	.08051140	140	252	105	246	175	9	37	250	A
L2	.08202355	1	290	3	275	3	0	74	276	A
S2	.08333334	45	292	45	292	63	0	45	292	A
K2	.08356149	15	301	13	298	19	1	41	300	A
MK3	.12229210	1	271	1	227	1	0	36	255	A
M4	.16102280	1	278	3	318	3	1	73	314	C
MS4	.16384470	1	258	2	8	2	1	100	12	C

DIRECTIONAL CURRENT DISTRIBUTION (for all nonflagged observations in series)

Relative number of observations in parts per thousand (ppt) grouped into speed and direction intervals (of 30 degree width centred around the directions shown)

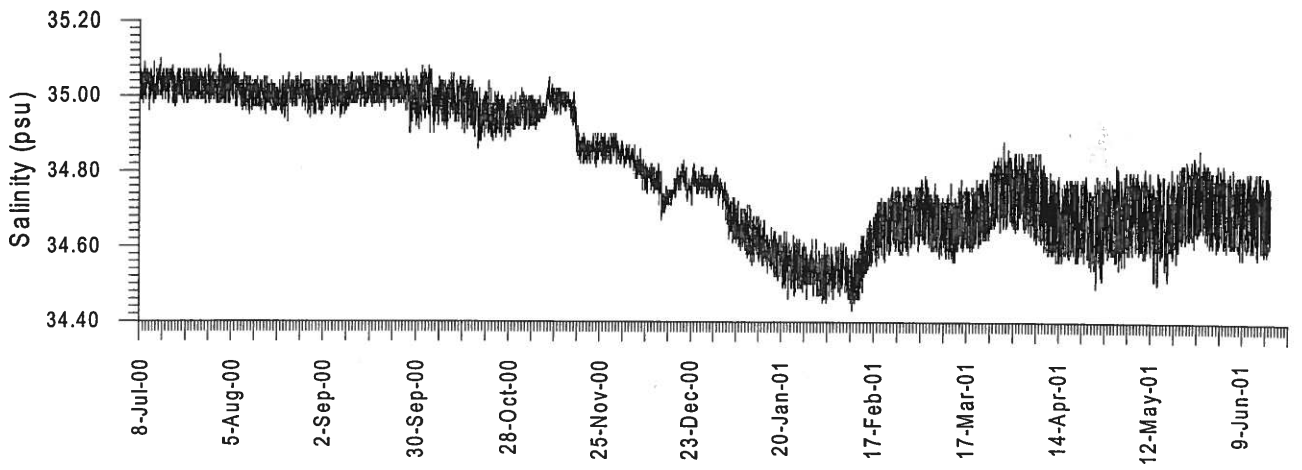
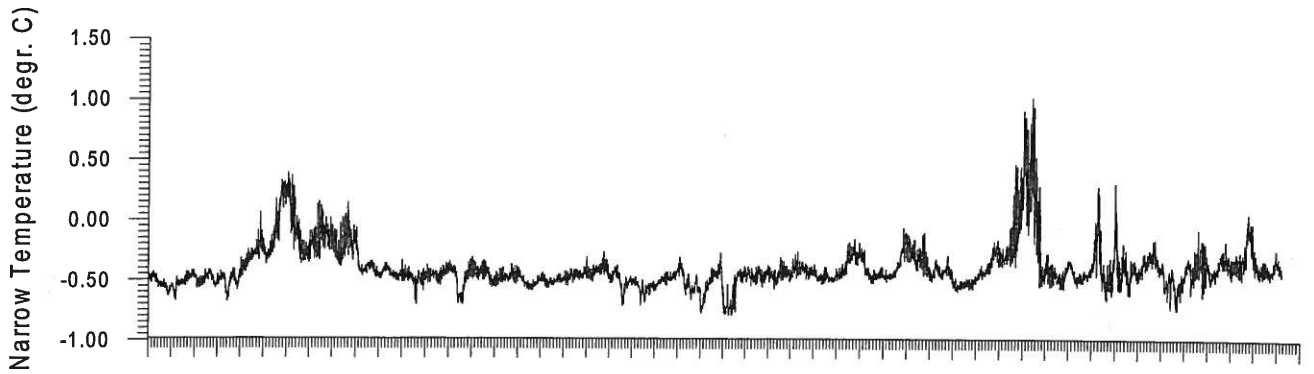
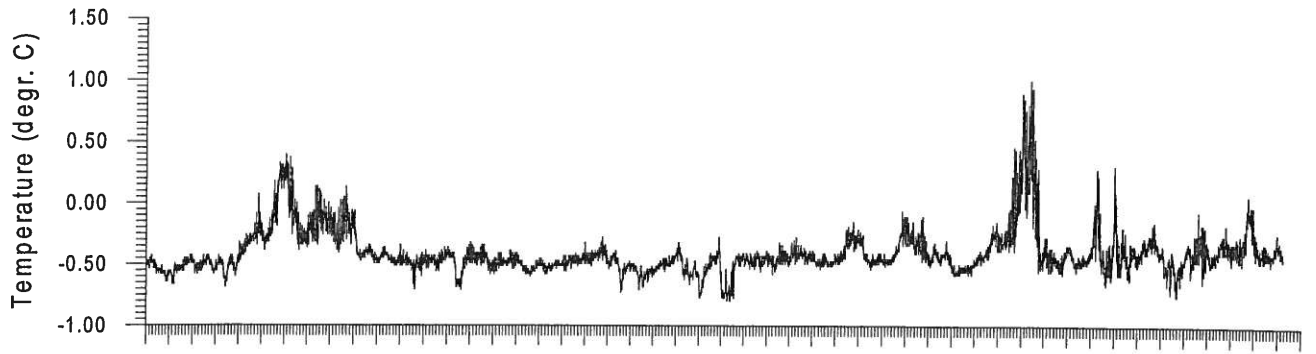
Speed intervals (mm/s)	Direction intervals												All dir.	
	15	45	75	105	135	165	195	225	255	285	315	345	Tot	Acc
0 - 50	9	10	15	9	6	7	11	13	7	4	6	5	107	107
50 - 100	10	21	29	20	16	15	20	21	17	9	6	6	195	303
100 - 150	8	25	29	15	13	15	21	30	13	6	3	3	186	489
150 - 200	5	21	23	14	10	11	23	34	14	2	1	2	165	655
200 - 300	5	23	33	15	12	12	31	60	23	5	4	3	231	887
300 - 400	2	8	5	3	2	2	12	28	12	3	0	0	83	970
400 - 500	1	3	0	0	0	0	3	6	3	0	0	0	21	991
500 - 600	0	0	0	0	0	0	1	2	1	0	0	0	6	997
600 - 700	0	0	0	0	0	0	0	0	0	0	0	0	1	999
700 - 800	0	0	0	0	0	0	0	0	0	0	0	0	0	1000
Total (ppt)	44	115	136	79	61	63	127	199	93	33	23	21		
Rel.flux (ppt)	37	115	120	65	52	53	139	244	108	30	17	14		
Avg.spd (mm/s)	141	169	150	140	144	142	185	207	195	156	130	111		
Max.spd (mm/s)	553	537	466	409	372	364	682	737	642	606	487	309		

NWSC0007
Instrument: Aanderaa 9912



8-Jul-00 5-Aug-00 2-Sep-00 30-Sep-00 28-Oct-00 25-Nov-00 23-Dec-00 20-Jan-01 17-Feb-01 17-Mar-01 14-Apr-01 12-May-01 9-Jun-01

NWSC0007
Instrument: Aanderaa 9912



**Progressive vector diagram
NWSC0007**

