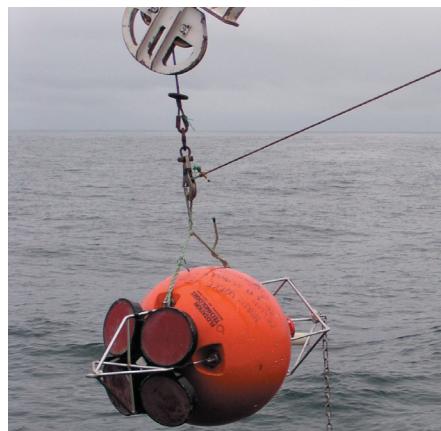


# THOR ADCP Deployments in Faroese Waters 2008 - 2009

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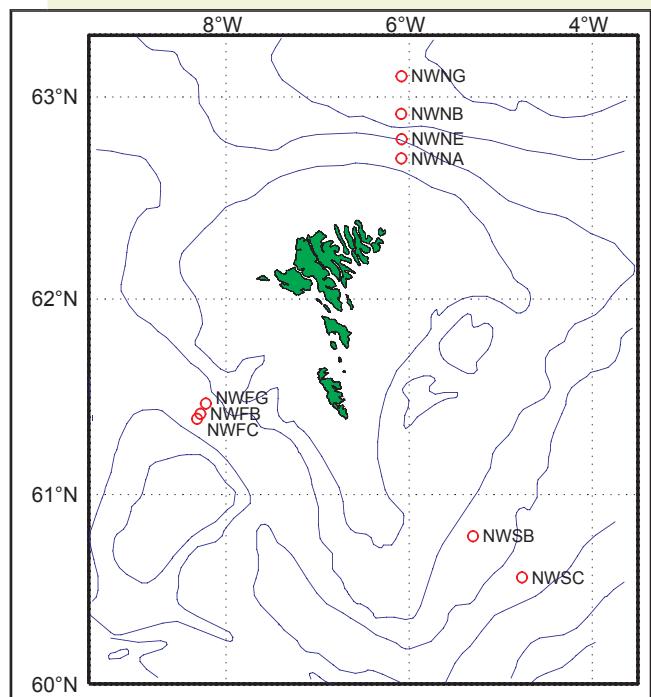
# Introduction

This is an updated version of Report 09-05, which has been retracted due to errors.

The report documents nine ADCP deployments in Faroese waters in 2008 – 2009. Aanderaa Current Meters are included in two, and Microcats in two of the deployments. 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. Most of the moorings were located at standard (Nordic WOCE) sites. There were no ADCP data, and Aanderaa data only for the first month, from the mooring at site NWSC due to instrument failure.

At sites NWFB, NWFC, NWNB, NWNG, NWSB, and NWSC, 75 kHz RDI Broadband ADCP's were placed in the top of single-point moorings. At sites NWFG, NWNA, and NWNE, "shallow-water" rigs were used, where a RDI ADCP was placed on the bottom inside a protective aluminium frame. At site NWFG the instrument was a 75 kHz Long Ranger. At NWNA and NWNE the instruments were 150 kHz Broadbands. For each deployment, the ADCP measures the velocity averaged over a number (15 – 51) of depth layers ("bins") which were 25 m for all rigs except for the deployments NWNA and NWFG where the depth layers were 10 m. At 20 minute intervals, the ADCP records the data from all bins into "ensembles". In all deployments, except NWFG, each ensemble is based only upon one ping. In deployment NWFG, each ensemble is based upon 12 pings. At sites NWNG and NWSC, an Aanderaa current meter was on the mooring line below the ADCP. The Aanderaa current meters recorded speed, direction and temperature at 60 minute intervals. At deployments NWFB and NWFG, a Microcat was attached to the ADCP. The Microcat recorded temperature, salinity and pressure every 10 minutes.

At NWFB, the data for the uppermost bins were affected by some instrumental malfunction. Therefore only the deepest 16 bins are included in this record.



*Figure 1. ADCP mooring sites in Faroese waters 2008-2009 superposed on a map with the bottom topography. Each site is indicated by a four-letter label.*

*Table 1. List of deployments with information on duration and range of valid data. All depths are in meters. The last column indicates whether Aanderaa or Microcat instruments were on the mooring.*

Deployment	Bottom depth	Int. min.	Valid data period	Dur. days	No bins	Depth range	Comments
NWFB0806	812	20	2008 06 06-2009 06 05	364	16	396- 771	Microcat
NWFC0806	846	20	2008 06 06-2009 05 16	343	24	230- 805	
NWFG0805	561	20	2008 05 16-2009 05 16	364	51	42- 542	Microcat
NWNA0806	296	20	2008 06 05-2009 05 15	343	24	49- 279	
NWNB0806	953	20	2008 06 06-2009 05 15	343	23	114- 664	
NWNE0806	457	20	2008 06 06-2009 05 15	343	15	75- 425	
NWNG0806	1796	20	2008 06 06-2009 05 15	343	22	68- 593	Aanderaa
NWSB0806	784	20	2008 06 07-2009 05 17	344	22	116- 641	
NWSC0806	1073	-	2008 06 07-2008 07 04	-	-	-	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 Faroe Marine Research Institute (FAMRI), based upon MATLAB. The editing has been done with a philosophy of minimal interference. Thus, only observations, which were considered clearly erroneous, were flagged. 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 velocity direction has been corrected for magnetic deviation, by adding a constant as indicated in the header of the data file. The instrument depths are found using the data from the surface echo, except for the sites NWFB, NWFC, NWFG, and NWNA. The instrument depths at sites NWFC and NWNA are found from the echo sounding depth (corrected for change in sound velocity) and the length of the mooring line. The instrument depths at sites NWFB and NWFG are found from the Microcat pressure measurements.

The Aanderaa data have been calibrated using calibration coefficients 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 FAMRI, based upon MATLAB.

Data from the Microcat instruments 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 FAMRI, based upon MATLAB. In addition the salinity data have been edited by removing all consecutive salinity pairs, where there is a large jump in the temperature. The data from the MicroCat at site NWFB indicate a possible drift in salinity.

## 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 with detailed error statistics for the deployment, which indicates also how many “long” (i.e. several consecutive ensembles) error gaps are for each bin. On the next page there is for each bin listed the average speed (scalar average) and velocity magnitude and direction (vectorial average) as well as the fraction of “good” ensembles (in parts per thousand). 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. Then there are some pages listing tidal constituents. These pages contain five tables with data for the constituents M<sub>2</sub>, S<sub>2</sub>, N<sub>2</sub>, O<sub>1</sub>, and K<sub>1</sub>. 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 semi-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.

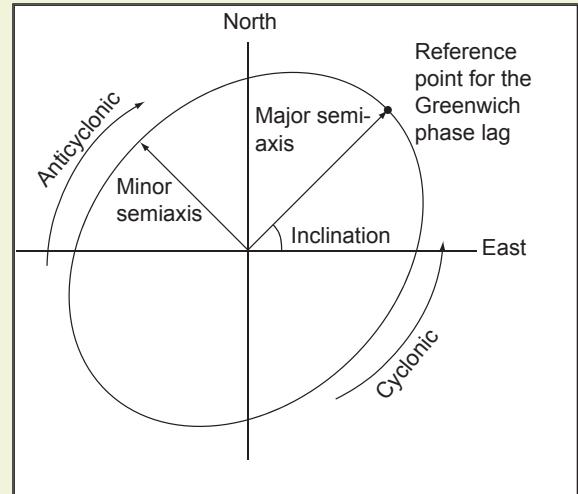
The description of the Aanderaa current meter data includes first a text page listing metadata information in the header and showing the list of parameters in the data file with a tally of the number of records flagged and not flagged for error in each parameter. Any comments to the data are then listed. 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 as the number that could not be interpolated (too large gap). Since both deployments have 60 minutes intervals, all analyses 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 Aanderaa 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 one page shows plots of the listed parameters as a function of time and one page shows the progressive vector diagram.

The Microcat data all include temperature, salinity, pressure and depth. The data are presented on two pages, the first page showing plots of temperature, salinity and depth time series, while the second is a T-S diagram of the recorded data.

On the following pages, the data descriptions from each deployment are presented in the same sequence as Table 1. For each deployment, the ADCP data are presented first, followed by possible Aanderaa or Microcat data. There are, however, no ADCP data from the deployment at site NWSC.



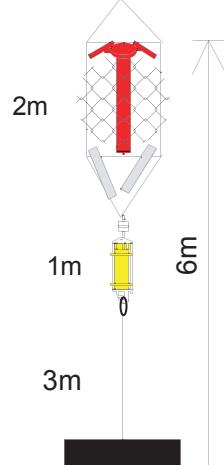
*Figure 2. Parameters of the tidal ellipse for a given constituent. The reference point for the Greenwich phase lag is always chosen to be above the east-west axis.*

# NWFBo8o6

**Latitude:** 61°25.002'N  
**Longitude:** 008°16.866'W  
**Echo sounding depth:** 826 m  
**Bottom depth corr.:** 812 m  
**Time of deployment:** 6/6 - 2008 1748 UTC  
**Time of recovery:** 5/6 - 2009 2200 UTC

## ADCP:

**Instrument no.:** RDI ADCP 1642  
**Instrument frequency:** 75 kHz  
**Height above bottom:** 6 m  
**Depth:** 806 m (corr.)  
**Time of first data:** 6/6 - 2008 1820 UTC  
**Time of last data:** 5/6 - 2009 2120 UTC  
**Sample interval:** 20 min  
**No. of ensembles:** 26218  
**Pings per ens.:** 1  
**Binlength:** 25 m  
**Depth of first bin:** 771 m (corr.)  
**No. of bins:** 16



## Micro Cat:

**Instrument no.:** 5184  
**Height above bottom:** 5 m  
**Time of first data:** 6/6 - 2008 1800 UTC  
**Time of last data:** 5/6 - 2009 2130 UTC  
**Sample interval:** 10 min  
**No. of ensembles:** 52438  
**Instrument depth:** 807 m

## Data:

The ADCP data for the uppermost bins were affected by some instrumental malfunction.  
The temperature measurements from the ADCP could not be used.  
The salinity from the MicroCat is uncalibrated and may have a drift.

## NWFB0806 ADCP 1642

Error statistics for deployment: NWFB0806 updated 2010/12/03

-----  
Surface distance invalid due to range limitation  
Heading, pitch and roll not edited  
Temperature data invalid due to instrument failure  
Velocity edited up to and including bin 16 by EJ in Jun 2009  
Intensity edited up to and including bin 16 by EJ in Sep 2009

Total number of ensembles: 26218  
Interval between ensembles: 20 min  
Original number of bins: 32  
Number of acceptable velocity bins: 16  
Number of acceptable intensity bins: 16

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: 26218

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.	Velocity ens.	%	Number of velocity gaps of length									
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	3	61	0	61	0	0	0	0	0	0	0	0	0
2	2	26	0	26	0	0	0	0	0	0	0	0	0
3	1	30	0	30	0	0	0	0	0	0	0	0	0
4	2	24	0	24	0	0	0	0	0	0	0	0	0
5	1	24	0	22	1	0	0	0	0	0	0	0	0
6	1	44	0	40	2	0	0	0	0	0	0	0	0
7	1	92	0	73	8	1	0	0	0	0	0	0	0
8	1	205	1	175	15	0	0	0	0	0	0	0	0
9	1	424	2	362	28	2	0	0	0	0	0	0	0
10	0	487	2	393	44	2	0	0	0	0	0	0	0
11	2	476	2	355	50	7	0	0	0	0	0	0	0
12	1	325	1	260	24	3	0	0	1	0	0	0	0
13	1	261	1	181	16	9	2	1	1	0	0	0	0
14	1	324	1	209	25	13	3	0	2	0	0	0	0
15	1	524	2	254	59	14	6	8	7	0	0	0	0
16	4	1072	4	501	109	57	25	6	6	1	0	0	0

## NWFB0806 ADCP 1642

Deployment: NWFB0806 updated 2010/12/03

Instrument no.: 1642

Instrument freq.: 75

Latitude: 61 25.002 N

Longitude: 08 16.866 W

Bottom depth: 812

Instrument depth: 806

Center depth of first bin: 771

Bin length: 25

Number of bins: 16

Number of first ensemble: 224

Time of first ensemble: 2008 06 06 18 20

Number of last ensemble: 26441

Time of last ensemble: 2009 06 05 21 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	771	41	927	923	303	998
2	746	66	995	991	305	999
3	721	91	1019	1015	307	999
4	696	116	1024	1021	309	999
5	671	141	1017	1014	309	999
6	646	166	989	985	310	998
7	621	191	922	914	311	996
8	596	216	800	782	314	992
9	571	241	639	600	317	984
10	546	266	482	410	321	981
11	521	291	358	249	324	982
12	496	316	281	140	327	988
13	471	341	239	74	331	990
14	446	366	219	38	342	988
15	421	391	211	21	8	980
16	396	416	209	22	35	959

## NWFB0806 ADCP 1642

Frequency of high speeds.

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

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	771	998	998	998	998	996	980	922	792	580	327	128	32	6	1	0	0	0	0
2	746	999	999	999	999	999	991	960	881	733	517	264	83	17	3	0	0	0	0
3	721	999	999	999	999	998	991	964	898	772	580	336	117	24	4	1	0	0	0
4	696	999	999	999	999	998	991	964	901	779	594	355	128	26	5	1	0	0	0
5	671	999	999	999	999	996	985	955	887	765	582	342	125	26	5	1	0	0	0
6	646	998	997	995	991	983	962	920	845	714	531	311	111	22	4	1	0	0	0
7	621	993	985	975	961	940	899	833	734	597	427	238	83	18	4	1	0	0	0
8	596	982	956	923	880	827	757	671	557	420	279	140	46	10	2	1	0	0	0
9	571	957	888	812	730	642	545	441	333	231	138	60	19	4	1	0	0	0	0
10	546	932	815	672	534	412	312	229	161	102	50	18	5	1	0	0	0	0	0
11	521	899	712	497	329	223	153	101	62	33	14	5	1	0	0	0	0	0	0
12	496	863	613	363	197	110	65	38	20	10	4	1	0	0	0	0	0	0	0
13	471	839	537	277	122	58	27	14	6	2	1	0	0	0	0	0	0	0	0
14	446	812	492	230	89	34	11	5	2	1	0	0	0	0	0	0	0	0	0
15	421	795	465	211	75	24	6	2	0	0	0	0	0	0	0	0	0	0	0
16	396	772	443	206	77	22	7	2	1	0	0	0	0	0	0	0	0	0	0

## NWFB0806 ADCP 1642

Harmonic constants for constituent M2 for deployment NWFB0806.

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	27	59	21	327	27	21	175	243	A
02	746	33	63	20	328	33	20	175	246	A
03	721	35	71	19	330	35	18	172	255	A
04	696	34	82	16	335	34	15	170	267	A
05	671	34	92	13	332	34	11	167	276	A
06	646	30	110	11	307	32	3	161	292	A
07	621	33	138	11	264	34	9	168	315	C
08	596	34	167	17	236	35	16	12	172	C
09	571	38	200	27	214	47	5	35	205	C
10	546	51	225	43	192	64	19	40	211	A
11	521	65	240	66	177	79	48	46	208	A
12	496	71	249	81	172	86	65	61	195	A
13	471	71	255	90	174	92	69	74	187	A
14	446	70	262	94	178	94	69	80	185	A
15	421	69	269	95	181	95	69	88	182	A
16	396	68	274	95	183	95	68	92	182	A

Harmonic constants for constituent S2 for deployment NWFB0806.

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	12	82	8	336	12	7	164	271	A
02	746	13	88	9	340	13	8	159	281	A
03	721	13	93	9	340	14	8	155	289	A
04	696	12	95	8	336	13	7	153	290	A
05	671	9	98	8	317	11	4	138	296	A
06	646	7	113	9	302	11	1	130	298	A
07	621	10	175	7	278	11	7	163	343	C
08	596	20	200	6	213	21	1	16	201	C
09	571	23	217	10	182	25	6	21	212	A
10	546	20	239	15	190	23	10	32	224	A
11	521	20	271	22	203	25	17	53	230	A
12	496	25	288	30	208	31	24	69	225	A
13	471	27	295	35	211	35	27	78	221	A
14	446	27	299	39	214	39	27	83	219	A
15	421	25	304	41	218	42	25	86	220	A
16	396	23	315	39	223	39	23	92	222	A

## NWFB0806 ADCP 1642

Harmonic constants for constituent N2 for deployment NWFB0806.

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	7	33	5	286	7	5	158	227	A
02	746	7	42	5	277	8	4	154	234	A
03	721	7	47	4	279	8	3	156	237	A
04	696	8	55	4	289	9	3	164	241	A
05	671	10	60	3	294	10	3	168	243	A
06	646	12	66	4	286	13	3	163	250	A
07	621	14	81	5	297	15	3	165	264	A
08	596	13	108	3	307	13	1	169	289	A
09	571	13	144	1	135	13	0	2	144	A
10	546	14	169	4	155	15	1	15	168	A
11	521	10	197	8	156	12	4	39	181	A
12	496	9	233	13	153	14	9	76	163	A
13	471	11	245	18	153	18	11	93	151	A
14	446	12	244	21	150	21	12	93	148	A
15	421	12	244	19	148	19	11	96	144	A
16	396	11	252	17	146	18	10	105	137	A

Harmonic constants for constituent O1 for deployment NWFB0806.

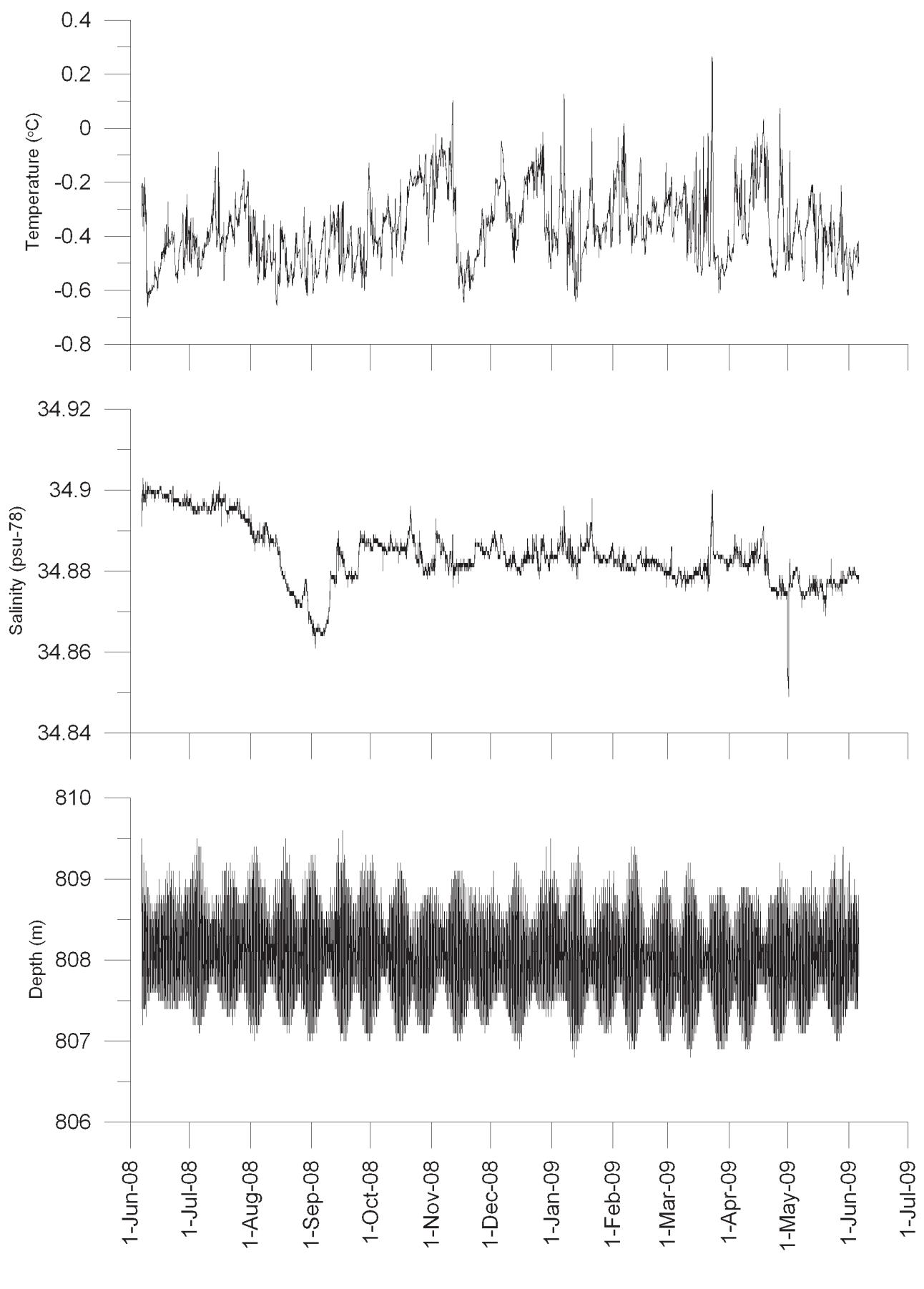
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	771	20	321	11	149	23	1	152	143	A
02	746	22	322	12	142	25	0	152	142	C
03	721	24	326	13	140	27	1	152	144	C
04	696	25	330	13	138	28	2	152	147	C
05	671	25	334	14	140	28	3	150	150	C
06	646	28	336	15	147	31	2	151	153	C
07	621	33	337	19	156	38	0	150	157	C
08	596	37	342	25	159	44	1	146	161	C
09	571	37	342	30	160	47	1	141	161	C
10	546	30	344	34	159	45	2	131	161	C
11	521	21	351	29	161	36	3	126	165	C
12	496	16	4	22	166	27	4	125	172	C
13	471	14	14	18	177	22	3	128	184	C
14	446	13	20	15	182	20	3	131	190	C
15	421	13	24	15	177	19	4	130	188	C
16	396	13	15	15	170	19	4	129	180	C

## NWFB0806 ADCP 1642

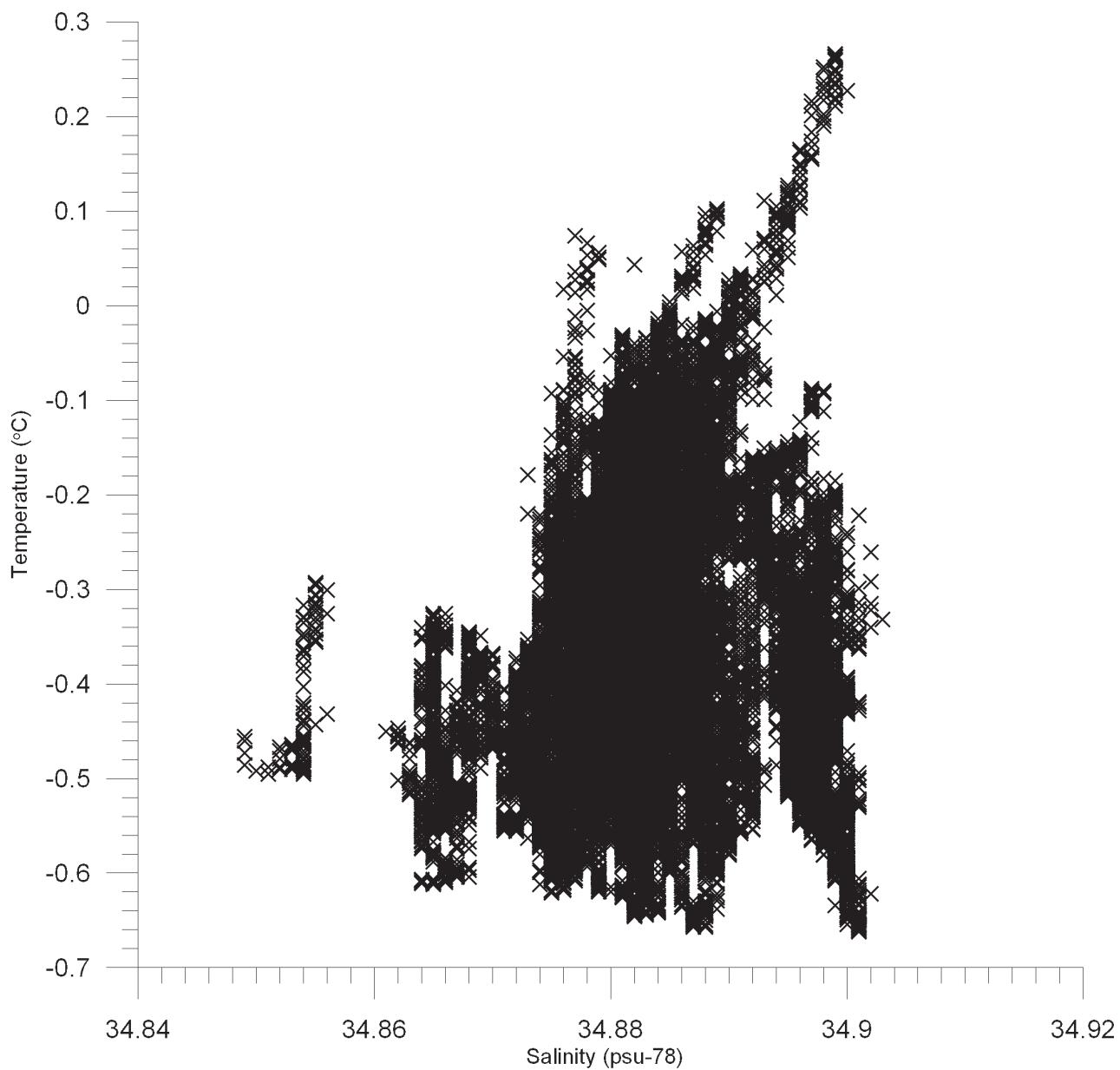
Harmonic constants for constituent K1 for deployment NWFB0806.

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	18	221	10	46	20	1	151	42	A
02	746	20	220	10	45	22	1	153	41	A
03	721	20	221	12	45	24	1	149	42	A
04	696	20	223	13	50	24	1	146	45	A
05	671	20	226	14	52	24	1	145	48	A
06	646	24	231	14	54	28	1	149	51	A
07	621	29	236	18	62	35	2	148	58	A
08	596	33	240	22	66	40	2	146	62	A
09	571	32	240	27	64	42	1	139	62	A
10	546	25	243	29	62	38	0	131	63	C
11	521	20	247	29	66	35	0	124	66	C
12	496	15	256	25	67	30	2	121	69	C
13	471	12	273	21	68	24	5	118	74	C
14	446	11	290	19	70	21	7	118	80	C
15	421	12	294	18	71	20	7	122	84	C
16	396	13	302	16	74	19	8	126	91	C

### NWFB0806 MicroCat 5184



## NWFB0806 MicroCat 5184



# NWFCo806

**Latitude:** 61°23.502'N

**Longitude:** 008°18.980'W

**Echo sounding depth:** 855 m

**Bottom depth corr.:** 846 m

**Time of deployment:** 6/6 - 2008 1914 UTC

**Time of recovery:** 16/5 - 2009 1531 UTC

## ADCP:

**Instrument no.:** RDI ADCP 1285

**Instrument frequency:** 75 kHz

**Height above bottom:** 6 m

**Depth:** 840 m (corr.)

**Time of first data:** 6/6 - 2008 1940 UTC

**Time of last data:** 16/5 - 2009 1500 UTC

**Sample interval:** 20 min

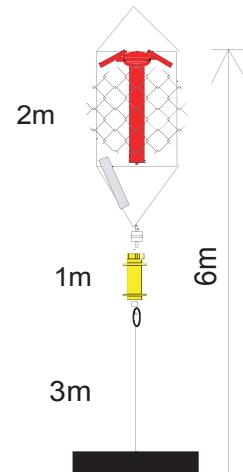
**No. of ensembles:** 24755

**Pings per ens.:** 1

**Binlength:** 25 m

**Depth of first bin:** 805 m (corr.)

**No. of bins:** 24



## Data:

All data ok.

## NWFC0806 ADCP 1285

Error statistics for deployment: NWFC0806 updated 2009/10/07

Surface distance invalid due to range limitation

Heading, pitch and roll not edited

Temperature edited by EJ in Aug 2009

Velocity edited up to and including bin 24 by EJ in Jul 2009

Intensity edited up to and including bin 24 by EJ in Aug 2009

Total number of ensembles: 24755

Interval between ensembles: 20 min

Original number of bins: 32

Number of acceptable velocity bins: 24

Number of acceptable intensity bins: 24

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

Number of temperature ens. flagged: 1

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

Bin	Int. ens. flgd	Velocity ens. flgd	% flgd	Number of velocity gaps of length									
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	2	134	1	126	4	0	0	0	0	0	0	0	0
2	5	59	0	59	0	0	0	0	0	0	0	0	0
3	3	163	1	137	3	4	2	0	0	0	0	0	0
4	1	626	3	439	67	12	2	0	1	0	0	0	0
5	0	1217	5	770	126	42	9	4	2	0	0	0	0
6	0	1732	7	991	183	64	19	12	7	0	0	0	0
7	0	2278	9	1363	268	78	19	5	5	1	0	0	0
8	0	2381	10	1501	282	69	14	4	5	0	0	0	0
9	1	1817	7	1134	218	51	11	3	5	0	0	0	0
10	2	992	4	677	106	19	7	2	1	0	0	0	0
11	0	552	2	385	57	12	3	1	0	0	0	0	0
12	2	382	2	297	38	3	0	0	0	0	0	0	0
13	0	279	1	215	25	2	2	0	0	0	0	0	0
14	1	259	1	198	20	4	1	1	0	0	0	0	0
15	1	179	1	152	12	1	0	0	0	0	0	0	0
16	1	168	1	133	13	3	0	0	0	0	0	0	0
17	2	244	1	180	20	4	0	1	1	0	0	0	0
18	1	574	2	335	55	12	11	2	1	2	0	0	0
19	1	1368	6	580	107	31	15	8	22	10	3	0	0
20	1	2884	12	1004	194	75	45	20	49	23	6	4	0
21	0	4936	20	1166	305	118	72	40	94	65	17	6	1
22	0	7114	29	1296	366	135	86	56	128	92	49	11	2
23	2	9033	36	1430	403	181	110	62	141	116	52	29	4
24	2	10861	44	1602	440	188	99	64	186	143	57	39	11

## NWFC0806 ADCP 1285

Deployment: NWFC0806 updated 2009/10/07  
Instrument no.: 1285  
Instrument freq.: 75  
Latitude: 61 23.502 N  
Longitude: 08 18.980 W  
Bottom depth: 846  
Instrument depth: 840  
Center depth of first bin: 805  
Bin length: 25  
Number of bins: 24  
Number of first ensemble: 228  
Time of first ensemble: 2008 06 06 19 40  
Number of last ensemble: 24982  
Time of last ensemble: 2009 05 16 15 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	805	41	991	984	295	995
2	780	66	1064	1059	298	998
3	755	91	1066	1061	300	993
4	730	116	1043	1038	301	975
5	705	141	991	984	301	951
6	680	166	870	857	302	930
7	655	191	675	635	303	908
8	630	216	466	364	308	904
9	605	241	324	145	319	927
10	580	266	256	36	21	960
11	555	291	229	63	96	978
12	530	316	219	89	108	985
13	505	341	215	101	112	989
14	480	366	214	108	115	990
15	455	391	214	111	117	993
16	430	416	215	114	119	993
17	405	441	217	116	121	990
18	380	466	216	116	122	977
19	355	491	216	114	122	945
20	330	516	214	111	122	883
21	305	541	213	109	121	801
22	280	566	213	106	120	713
23	255	591	213	103	120	635
24	230	616	210	98	120	561

## NWFC0806 ADCP 1285

Deployment: NWFC0806

Frequency of high speeds.

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

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	805	995	995	995	994	993	981	933	842	698	494	274	115	36	11	3	1	0	0
2	780	998	998	998	997	997	993	972	915	819	677	458	218	68	14	2	0	0	0
3	755	993	993	993	993	993	988	968	911	822	688	468	212	61	11	1	0	0	0
4	730	975	975	974	973	971	964	935	872	778	627	404	174	48	9	2	0	0	0
5	705	950	947	943	938	927	908	863	778	660	511	325	148	42	8	2	0	0	0
6	680	923	908	888	859	819	763	688	591	477	352	220	102	34	7	2	1	0	0
7	655	878	809	739	669	599	528	448	356	268	189	115	54	18	4	1	0	0	0
8	630	833	683	544	434	349	276	216	164	120	81	44	17	5	2	0	0	0	0
9	605	815	583	378	243	169	121	86	59	43	26	10	4	1	1	0	0	0	0
10	580	820	541	295	143	73	43	29	20	13	6	2	1	0	0	0	0	0	0
11	555	823	515	249	97	36	16	9	5	2	1	0	0	0	0	0	0	0	0
12	530	826	503	229	80	22	6	2	1	0	0	0	0	0	0	0	0	0	0
13	505	832	498	217	73	17	2	0	0	0	0	0	0	0	0	0	0	0	0
14	480	829	495	216	74	16	2	0	0	0	0	0	0	0	0	0	0	0	0
15	455	829	493	220	74	16	2	0	0	0	0	0	0	0	0	0	0	0	0
16	430	827	494	224	78	19	3	0	0	0	0	0	0	0	0	0	0	0	0
17	405	827	492	226	83	23	5	1	0	0	0	0	0	0	0	0	0	0	0
18	380	811	481	227	83	24	6	1	0	0	0	0	0	0	0	0	0	0	0
19	355	781	460	216	80	24	6	1	0	0	0	0	0	0	0	0	0	0	0
20	330	725	426	197	75	25	6	1	0	0	0	0	0	0	0	0	0	0	0
21	305	658	382	175	67	22	7	1	0	0	0	0	0	0	0	0	0	0	0
22	280	585	335	154	60	21	6	1	0	0	0	0	0	0	0	0	0	0	0
23	255	521	302	136	54	19	6	1	0	0	0	0	0	0	0	0	0	0	0
24	230	459	261	117	45	16	4	0	0	0	0	0	0	0	0	0	0	0	0

## NWFC0806 ADCP 1285

Harmonic constants for constituent M2 for deployment NWFC0806.

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	805	15	93	8	300	17	3	154	279	A
02	780	17	87	9	297	19	4	154	274	A
03	755	18	83	13	290	21	5	145	272	A
04	730	17	81	18	293	24	7	133	278	A
05	705	24	99	22	309	32	8	138	292	A
06	680	43	121	31	325	52	11	145	309	A
07	655	63	137	29	338	69	10	157	320	A
08	630	60	153	7	19	61	5	175	333	A
09	605	49	191	29	146	54	19	26	181	A
10	580	55	227	59	155	65	47	52	184	A
11	555	58	244	71	161	72	57	74	174	A
12	530	58	256	77	168	77	58	86	171	A
13	505	58	265	79	175	79	58	90	175	A
14	480	58	273	82	181	82	58	93	179	A
15	455	58	280	83	186	83	58	96	181	A
16	430	59	287	83	190	84	59	99	184	A
17	405	60	292	84	194	85	59	100	187	A
18	380	62	295	86	198	87	61	101	190	A
19	355	64	298	88	201	88	63	101	193	A
20	330	64	301	89	202	90	63	103	193	A
21	305	67	302	90	203	91	65	103	194	A
22	280	67	304	92	206	93	66	102	198	A
23	255	69	305	92	206	93	67	105	195	A
24	230	67	306	92	208	93	66	102	199	A

Harmonic constants for constituent S2 for deployment NWFC0806.

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	805	8	91	7	308	10	3	144	284	A
02	780	8	89	6	313	10	4	145	284	A
03	755	10	90	7	319	11	5	149	284	A
04	730	10	91	8	319	12	5	144	289	A
05	705	10	118	7	324	12	3	145	307	A
06	680	15	154	8	344	17	1	153	336	A
07	655	23	171	11	35	25	7	160	356	A
08	630	26	204	14	89	27	12	164	31	A
09	605	28	228	17	134	28	17	176	51	A
10	580	23	248	19	171	24	18	25	229	A
11	555	22	271	24	190	25	21	65	211	A
12	530	22	283	29	200	29	21	79	207	A
13	505	21	295	31	206	31	21	89	207	A
14	480	21	304	32	211	32	21	92	210	A
15	455	21	313	33	217	33	21	97	213	A
16	430	21	323	33	221	34	21	101	214	A
17	405	21	328	33	227	34	20	102	219	A
18	380	21	331	32	232	32	21	101	225	A
19	355	22	334	28	240	28	22	98	234	A
20	330	22	338	28	247	28	22	91	246	A
21	305	22	340	29	252	29	22	88	253	A
22	280	21	341	31	250	31	21	91	249	A
23	255	21	345	33	259	33	21	86	262	A
24	230	17	342	29	263	29	17	80	268	A

## NWFC0806 ADCP 1285

Harmonic constants for constituent N2 for deployment NWFC0806.

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	805	5	86	5	267	6	0	134	267	A
02	780	5	68	4	255	6	0	139	251	A
03	755	4	40	5	262	6	2	125	247	A
04	730	4	46	6	264	7	2	120	254	A
05	705	5	62	7	275	8	2	124	265	A
06	680	11	96	8	309	13	4	147	286	A
07	655	20	116	10	328	22	5	156	301	A
08	630	17	134	8	330	19	2	156	316	A
09	605	11	152	0	145	11	0	2	152	A
10	580	11	196	7	142	12	5	24	185	A
11	555	9	213	10	156	12	6	47	183	A
12	530	8	230	11	166	12	7	66	179	A
13	505	7	247	12	167	12	7	81	172	A
14	480	8	255	13	173	13	8	82	177	A
15	455	10	257	14	178	15	10	76	187	A
16	430	12	260	15	177	15	12	77	187	A
17	405	12	266	16	179	16	12	85	182	A
18	380	11	276	17	180	17	11	97	176	A
19	355	11	277	18	184	18	11	93	182	A
20	330	12	279	19	186	19	12	93	184	A
21	305	11	281	21	184	21	11	95	182	A
22	280	11	273	18	181	18	11	92	180	A
23	255	12	282	19	179	19	11	102	172	A
24	230	11	270	15	177	15	11	94	174	A

Harmonic constants for constituent O1 for deployment NWFC0806.

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	805	16	338	11	159	20	0	145	158	A
02	780	16	338	12	157	20	0	144	157	C
03	755	17	337	14	156	22	0	142	156	C
04	730	19	342	15	162	24	0	141	162	A
05	705	25	352	19	169	31	1	142	171	C
06	680	38	356	26	177	46	0	146	176	A
07	655	46	356	30	181	54	2	147	178	A
08	630	41	358	27	182	49	1	147	179	A
09	605	31	11	24	187	39	1	143	190	C
10	580	23	18	19	188	29	2	140	194	C
11	555	17	22	17	185	24	4	135	193	C
12	530	16	24	17	185	23	4	134	194	C
13	505	16	27	16	186	22	4	135	197	C
14	480	16	28	15	189	22	4	135	199	C
15	455	16	24	16	188	22	3	136	196	C
16	430	16	24	17	188	23	3	134	196	C
17	405	17	26	17	189	24	3	134	197	C
18	380	17	25	18	190	24	3	133	197	C
19	355	16	22	16	190	22	2	136	196	C
20	330	15	20	17	191	23	2	131	195	C
21	305	15	26	17	191	22	3	131	197	C
22	280	19	29	18	196	25	3	137	203	C
23	255	17	34	18	195	24	4	134	204	C
24	230	17	21	18	184	24	4	133	192	C

## NWFC0806 ADCP 1285

Harmonic constants for constituent K1 for deployment NWFC0806.

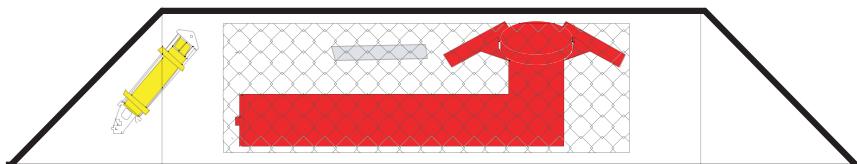
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	805	16	238	10	40	18	3	150	53	C
02	780	18	237	10	39	20	3	150	52	C
03	755	17	237	12	46	21	2	147	53	C
04	730	18	241	13	47	22	3	144	56	C
05	705	23	245	17	60	29	1	144	63	C
06	680	35	249	21	72	40	1	149	70	A
07	655	44	254	26	73	51	0	149	74	C
08	630	40	257	25	78	47	0	148	78	A
09	605	31	263	22	78	38	2	144	82	C
10	580	25	270	19	84	32	2	143	88	C
11	555	22	274	19	88	29	1	139	91	C
12	530	20	277	19	86	27	3	137	92	C
13	505	17	280	19	85	25	3	132	92	C
14	480	15	280	19	83	24	4	128	90	C
15	455	14	279	21	79	25	4	124	85	C
16	430	14	279	22	76	26	5	121	82	C
17	405	13	278	23	78	26	4	119	83	C
18	380	14	275	23	79	26	3	121	83	C
19	355	14	269	19	74	23	3	126	79	C
20	330	14	260	17	74	22	1	130	76	C
21	305	15	258	15	73	21	1	136	75	C
22	280	16	269	16	78	23	2	135	84	C
23	255	16	260	19	91	25	3	130	86	A
24	230	16	265	13	83	20	0	141	84	C

# NWFGo805

**Latitude:** 61°28.260'N  
**Longitude:** 008°13.251'W  
**Echo sound depth:** 573 m  
**Bottom depth corr.:** 561 m  
**Time of deployment:** 16/5 - 2008 1933 UTC  
**Time of recovery:** 16/5 - 2009 1705 UTC

## ADCP:

**Instrument no.:** RDI ADCP 3368  
**Instrument frequency:** 75 kHz  
**Height above bottom:** 1 m  
**Depth:** 560 m (corr.)  
**Time of first data:** 16/5 - 2008 1940 UTC  
**Time of last data:** 16/5 - 2009 1640 UTC  
**Sample interval:** 20 min  
**No. of ensembles:** 26272  
**Pings per ens.:** 12  
**Binlength:** 10 m  
**Depth of first bin:** 542 m (corr.)  
**No. of bins:** 51



## MicroCat:

**Instrument no.:** 0984  
**Height above bottom:** 1 m  
**Time of first data:** 16/5 - 2008 1940 UTC  
**Time of last data:** 16/5 - 2009 1700 UTC  
**Sample interval:** 10 min  
**No. of ensembles:** 52545  
**Instrument depth:** 560 m

## Data:

All data ok, but even after editing, the Microcat salinity show spikes, probably due to the rapid temperature variations.

## NWFG0805 ADCP 3368

Error statistics for deployment: NWFG0805 updated 2009/10/13

Surface distance invalid due to range limitation

Heading, pitch and roll not edited

Temperature edited by EJ in Sep 2009

Velocity edited up to and including bin 51 by EJ in Sep 2009

Intensity edited up to and including bin 51 by EJ in Sep 2009

Total number of ensembles: 26272

Interval between ensembles: 20 min

Original number of bins: 60

Number of acceptable velocity bins: 51

Number of acceptable intensity bins: 51

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	0	18	0	16	1	0	0	0	0	0	0	0	0
2	0	11	0	9	1	0	0	0	0	0	0	0	0
3	0	23	0	13	3	0	1	0	0	0	0	0	0
4	2	32	0	14	0	0	0	0	0	2	0	0	0
5	0	32	0	15	3	0	0	1	1	0	0	0	0
6	0	40	0	23	0	0	0	0	0	1	0	0	0
7	0	41	0	25	1	0	0	0	0	0	1	0	0
8	1	46	0	30	0	1	0	0	0	0	1	0	0
9	1	32	0	24	2	0	1	0	0	0	0	0	0
10	0	39	0	32	0	1	1	0	0	0	0	0	0
11	1	34	0	32	1	0	0	0	0	0	0	0	0
12	0	54	0	44	1	1	0	0	1	0	0	0	0
13	1	69	0	48	0	0	0	0	3	0	0	0	0
14	0	67	0	38	1	0	0	1	0	2	0	0	0
15	0	98	0	60	2	0	0	0	0	2	1	0	0
16	0	92	0	57	2	1	0	0	2	0	1	0	0
17	0	93	0	69	4	0	0	0	0	0	1	0	0
18	0	105	0	70	7	1	0	0	0	0	1	0	0
19	0	122	0	85	4	0	1	1	0	0	1	0	0
20	0	91	0	59	7	1	0	1	0	0	1	0	0
21	1	97	0	74	3	1	0	0	0	0	1	0	0
22	0	69	0	51	0	2	0	0	0	0	1	0	0
23	0	81	0	54	1	0	2	0	0	0	1	0	0
24	0	110	0	61	6	0	1	0	0	0	2	0	0
25	0	106	0	65	2	0	0	0	0	0	2	0	0
26	0	118	0	72	3	0	0	0	1	0	2	0	0
27	1	134	1	83	4	0	1	0	0	1	2	0	0
28	0	128	0	75	7	1	1	0	0	2	0	0	0
29	0	170	1	87	10	5	1	0	0	0	1	1	0
30	0	194	1	98	12	5	2	1	1	1	1	0	0
31	1	283	1	131	21	3	4	3	1	4	0	0	0
32	0	425	2	161	36	9	3	4	7	4	1	0	0
33	1	629	2	206	35	15	11	6	8	6	3	0	0
34	1	802	3	240	46	23	7	11	15	10	2	0	0
35	0	1092	4	263	67	23	13	13	19	18	4	0	0
36	1	1271	5	301	73	22	27	13	18	19	8	0	0
37	0	1467	6	309	80	48	15	11	22	13	11	3	0
38	0	1749	7	328	85	50	20	12	27	23	11	4	0
39	0	2008	8	337	88	47	21	13	28	28	13	6	0
40	0	2175	8	375	101	49	25	18	35	24	17	5	0
41	0	2454	9	417	130	38	22	17	34	28	12	16	0
42	0	2825	11	440	143	42	30	16	33	29	17	19	0
43	0	3238	12	570	111	53	30	15	43	33	17	24	0
44	0	3719	14	564	142	64	35	21	51	37	15	25	2
45	1	4273	16	668	153	55	39	18	68	48	21	26	3
46	0	4859	18	719	192	84	41	24	50	52	28	26	6
47	0	5525	21	731	215	92	50	32	53	62	32	29	6
48	0	6223	24	725	248	82	59	32	64	65	30	26	17
49	1	6907	26	792	201	104	52	27	87	63	27	30	23
50	0	7829	30	902	265	109	66	35	86	74	33	25	23
51	6	10547	40	1825	586	252	118	85	163	98	40	27	16

## NWFG0805 ADCP 3368

Deployment: NWFG0805 updated 2009/10/13

Instrument no.: 3368

Instrument freq.: 75

Latitude: 61 28.260 N

Longitude: 08 13.251 W

Bottom depth: 561

Instrument depth: 560

Center depth of first bin: 542

Bin length: 10

Number of bins: 51

Number of first ensemble: 237

Time of first ensemble: 2008 05 16 19 40

Number of last ensemble: 26508

Time of last ensemble: 2009 05 16 16 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	542	19	598	585	305	999
2	532	29	635	623	307	1000
3	522	39	637	625	308	999
4	512	49	617	604	310	999
5	502	59	586	570	312	999
6	492	69	551	530	313	998
7	482	79	515	488	315	998
8	472	89	480	445	317	998
9	462	99	449	406	318	999
10	452	109	419	368	319	999
11	442	119	392	333	320	999
12	432	129	367	300	321	998
13	422	139	347	271	322	997
14	412	149	329	246	323	997
15	402	159	315	223	323	996
16	392	169	302	202	323	996
17	382	179	291	185	323	996
18	372	189	282	171	322	996
19	362	199	275	159	321	995
20	352	209	269	148	320	997
21	342	219	264	140	319	996
22	332	229	260	132	318	997
23	322	239	256	124	317	997
24	312	249	253	118	315	996
25	302	259	250	114	314	996
26	292	269	248	109	312	996
27	282	279	247	106	311	995
28	272	289	245	103	310	995
29	262	299	244	100	309	994
30	252	309	243	97	308	993
31	242	319	243	96	307	989
32	232	329	242	94	307	984
33	222	339	242	94	306	976
34	212	349	243	94	306	969
35	202	359	243	93	307	958
36	192	369	242	93	307	952
37	182	379	243	93	307	944
38	172	389	243	91	307	933
39	162	399	244	90	308	924
40	152	409	243	88	308	917
41	142	419	244	88	309	907
42	132	429	244	87	309	892
43	122	439	245	86	309	877
44	112	449	246	86	310	858
45	102	459	247	85	311	837
46	92	469	249	85	312	815
47	82	479	252	84	313	790
48	72	489	257	86	315	763
49	62	499	262	88	316	737
50	52	509	268	91	317	702
51	42	519	261	69	322	599

## NWFG0805 ADCP 3368

Deployment: NWFG0805

Frequency of high speeds.

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

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	542	955	888	829	755	657	536	397	252	135	54	15	4	2	1	0	0	0	0
2	532	962	896	833	762	680	577	455	323	199	102	39	12	4	2	1	0	0	0
3	522	961	891	823	754	674	574	455	328	212	115	51	19	6	2	1	1	0	0
4	512	956	880	806	731	647	543	420	301	192	107	49	20	8	3	1	0	0	0
5	502	946	865	783	701	609	496	372	261	167	90	43	19	7	3	1	0	0	0
6	492	938	844	754	663	558	438	320	221	138	72	36	15	6	3	1	1	0	0
7	482	937	827	721	618	499	379	272	184	109	57	29	12	5	2	1	1	0	0
8	472	933	804	683	565	439	327	230	148	85	46	22	10	4	2	1	0	0	0
9	462	930	782	641	510	391	282	195	120	68	36	18	8	4	2	1	0	0	0
10	452	923	758	595	461	342	241	161	95	53	28	16	8	4	2	1	0	0	0
11	442	919	731	558	416	300	203	128	74	40	22	12	7	3	2	0	0	0	0
12	432	912	705	520	377	260	169	103	59	31	17	10	6	2	1	0	0	0	0
13	422	905	684	492	342	226	141	83	45	24	14	8	4	1	0	0	0	0	0
14	412	899	668	463	312	195	116	66	34	19	11	6	2	0	0	0	0	0	0
15	402	896	655	435	280	169	98	53	27	15	8	4	1	0	0	0	0	0	0
16	392	892	642	412	255	148	81	41	21	12	6	3	0	0	0	0	0	0	0
17	382	890	628	392	232	131	68	34	17	9	4	2	0	0	0	0	0	0	0
18	372	888	619	369	214	115	57	28	13	7	3	1	0	0	0	0	0	0	0
19	362	888	611	357	201	103	49	23	9	4	2	0	0	0	0	0	0	0	0
20	352	886	609	345	186	92	43	18	7	3	1	0	0	0	0	0	0	0	0
21	342	883	603	336	175	83	36	15	5	2	0	0	0	0	0	0	0	0	0
22	332	881	597	327	163	76	32	13	4	2	0	0	0	0	0	0	0	0	0
23	322	880	592	323	153	68	27	8	2	1	0	0	0	0	0	0	0	0	0
24	312	879	591	318	147	61	24	6	1	0	0	0	0	0	0	0	0	0	0
25	302	879	588	311	140	58	21	5	1	0	0	0	0	0	0	0	0	0	0
26	292	880	584	306	135	54	19	4	1	0	0	0	0	0	0	0	0	0	0
27	282	875	582	299	130	51	17	4	1	0	0	0	0	0	0	0	0	0	0
28	272	871	580	296	128	49	16	4	1	0	0	0	0	0	0	0	0	0	0
29	262	868	576	295	126	46	14	3	0	0	0	0	0	0	0	0	0	0	0
30	252	866	575	294	126	45	13	3	0	0	0	0	0	0	0	0	0	0	0
31	242	861	574	295	123	44	12	3	0	0	0	0	0	0	0	0	0	0	0
32	232	854	570	291	121	44	13	3	0	0	0	0	0	0	0	0	0	0	0
33	222	847	564	290	120	43	13	3	0	0	0	0	0	0	0	0	0	0	0
34	212	841	560	288	121	43	13	3	1	0	0	0	0	0	0	0	0	0	0
35	202	833	551	284	120	42	13	4	1	0	0	0	0	0	0	0	0	0	0
36	192	826	545	286	122	43	12	4	1	0	0	0	0	0	0	0	0	0	0
37	182	818	542	286	119	44	13	4	2	1	0	0	0	0	0	0	0	0	0
38	172	809	537	285	117	42	13	4	1	0	0	0	0	0	0	0	0	0	0
39	162	799	530	284	118	42	13	4	1	0	0	0	0	0	0	0	0	0	0
40	152	794	528	279	118	43	14	5	1	0	0	0	0	0	0	0	0	0	0
41	142	784	520	276	117	43	14	5	1	1	0	0	0	0	0	0	0	0	0
42	132	772	510	276	117	43	15	5	1	0	0	0	0	0	0	0	0	0	0
43	122	755	504	272	116	44	15	6	2	0	0	0	0	0	0	0	0	0	0
44	112	744	496	268	115	44	14	5	1	0	0	0	0	0	0	0	0	0	0
45	102	728	484	261	113	45	15	5	2	0	0	0	0	0	0	0	0	0	0
46	92	714	475	255	112	47	16	6	2	1	0	0	0	0	0	0	0	0	0
47	82	694	467	252	113	47	17	6	2	1	0	0	0	0	0	0	0	0	0
48	72	675	459	250	116	50	20	8	4	1	0	0	0	0	0	0	0	0	0
49	62	653	452	250	117	53	22	10	5	2	1	0	0	0	0	0	0	0	0
50	52	624	441	252	123	55	24	11	5	2	1	0	0	0	0	0	0	0	0
51	42	512	334	184	96	53	33	20	14	8	6	4	3	2	1	0	0	0	0

## NWFG0805 ADCP 3368

Harmonic constants for constituent M2 for deployment NWFG0805.

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	542	19	67	19	308	23	14	136	277	A
02	532	15	73	18	312	20	11	127	289	A
03	522	13	78	13	321	16	10	135	290	A
04	512	12	87	6	338	13	5	169	272	A
05	502	13	93	5	119	14	2	19	96	C
06	492	15	107	14	145	19	7	44	125	C
07	482	16	123	22	158	26	8	57	147	C
08	472	17	142	31	163	35	5	62	158	C
09	462	19	167	38	166	42	0	64	166	A
10	452	22	192	45	170	49	8	65	174	A
11	442	27	215	53	171	57	17	67	179	A
12	432	33	230	59	175	63	26	69	184	A
13	422	40	241	67	177	70	35	70	187	A
14	412	46	249	75	178	77	42	74	188	A
15	402	53	256	84	180	85	50	77	188	A
16	392	58	261	93	181	93	56	81	187	A
17	382	63	265	99	182	100	62	83	186	A
18	372	65	268	105	183	105	65	85	186	A
19	362	66	271	110	185	110	66	86	187	A
20	352	68	273	115	186	115	68	87	187	A
21	342	70	274	118	187	118	70	87	189	A
22	332	71	276	121	188	121	71	88	189	A
23	322	74	277	123	189	123	74	88	191	A
24	312	76	278	125	191	125	75	88	192	A
25	302	77	280	128	192	128	77	88	193	A
26	292	79	281	128	193	128	79	89	194	A
27	282	81	283	129	194	129	81	89	194	A
28	272	82	284	130	194	130	82	89	195	A
29	262	83	284	131	195	131	83	89	195	A
30	252	84	285	130	196	130	84	89	196	A
31	242	85	286	132	196	132	85	90	196	A
32	232	87	287	132	197	132	87	90	197	A
33	222	89	287	133	198	133	89	89	198	A
34	212	90	288	134	198	134	90	90	198	A
35	202	90	288	136	198	136	90	90	198	A
36	192	90	289	137	198	137	90	91	198	A
37	182	93	290	138	198	138	93	92	197	A
38	172	94	289	139	198	139	94	91	197	A
39	162	97	290	141	199	141	97	91	198	A
40	152	97	290	142	199	142	97	92	198	A
41	142	98	290	143	200	143	98	91	199	A
42	132	101	292	144	200	145	101	93	197	A
43	122	103	292	144	200	144	103	93	198	A
44	112	104	293	147	201	147	104	92	200	A
45	102	106	294	149	201	149	106	94	199	A
46	92	112	294	149	202	149	112	94	199	A
47	82	115	294	153	202	153	114	94	199	A
48	72	117	295	149	203	149	117	94	200	A
49	62	122	295	155	202	155	121	95	198	A
50	52	125	294	158	201	159	125	96	196	A
51	42	71	293	99	210	100	70	80	217	A

## NWFG0805 ADCP 3368

Harmonic constants for constituent S2 for deployment NWFG0805.

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	542	18	29	2	176	18	1	175	209	C
02	532	15	29	4	177	16	2	166	207	C
03	522	12	34	8	180	13	4	149	204	C
04	512	9	42	12	194	15	4	126	204	C
05	502	5	57	15	195	16	4	105	198	C
06	492	4	82	20	198	20	4	96	199	C
07	482	3	114	22	205	22	3	90	205	C
08	472	2	145	23	208	23	2	88	208	C
09	462	2	232	25	213	25	1	86	214	A
10	452	5	269	26	218	26	4	83	219	A
11	442	7	283	27	220	27	6	83	222	A
12	432	8	294	29	222	29	7	85	224	A
13	422	9	301	29	223	29	9	86	224	A
14	412	10	308	31	223	31	10	88	224	A
15	402	11	308	32	223	32	11	88	223	A
16	392	13	310	33	221	33	13	89	222	A
17	382	15	312	35	220	35	15	91	220	A
18	372	16	317	37	220	37	16	94	218	A
19	362	19	320	39	219	39	18	97	215	A
20	352	20	319	40	220	40	20	96	216	A
21	342	22	318	40	221	40	22	96	217	A
22	332	24	319	40	223	40	23	96	219	A
23	322	24	320	40	223	40	24	96	220	A
24	312	25	320	41	225	41	25	94	223	A
25	302	26	321	42	227	42	26	94	225	A
26	292	27	321	42	228	42	26	94	225	A
27	282	27	322	42	229	42	27	93	228	A
28	272	26	323	42	230	42	26	93	228	A
29	262	27	324	42	231	42	27	93	230	A
30	252	26	324	43	232	43	26	92	231	A
31	242	28	323	43	234	43	28	89	234	A
32	232	28	323	43	233	43	28	89	234	A
33	222	28	323	42	233	42	28	90	233	A
34	212	30	324	42	234	42	30	90	234	A
35	202	29	324	43	237	43	29	86	239	A
36	192	29	325	44	238	44	29	87	240	A
37	182	32	324	45	238	45	31	85	242	A
38	172	32	324	47	238	47	32	85	242	A
39	162	32	324	48	238	48	31	86	240	A
40	152	32	322	48	235	48	32	86	238	A
41	142	30	323	50	237	50	29	86	239	A
42	132	28	318	50	236	50	28	84	240	A
43	122	30	317	48	238	49	29	79	245	A
44	112	28	317	48	240	48	27	79	247	A
45	102	29	317	47	240	48	28	78	247	A
46	92	29	315	45	242	47	27	74	251	A
47	82	27	317	46	242	47	26	77	250	A
48	72	28	322	45	239	46	28	83	243	A
49	62	27	320	45	240	45	26	81	246	A
50	52	24	313	45	236	45	23	81	240	A
51	42	12	329	31	250	31	11	86	251	A

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Harmonic constants for constituent N2 for deployment NWFG0805.

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	542	2	165	3	245	3	2	82	241	C
02	532	2	201	3	248	3	1	69	241	C
03	522	2	283	2	256	3	1	45	270	A
04	512	3	314	1	239	3	1	7	311	A
05	502	3	2	2	147	3	1	151	173	C
06	492	4	41	5	132	5	4	92	134	C
07	482	4	75	6	126	7	3	61	112	C
08	472	3	114	9	138	9	1	70	135	C
09	462	3	149	10	149	10	0	71	149	C
10	452	4	185	11	154	12	2	74	157	A
11	442	6	234	14	160	14	5	82	163	A
12	432	8	257	15	166	15	8	91	165	A
13	422	11	258	17	168	17	11	91	167	A
14	412	12	268	17	173	17	12	98	167	A
15	402	14	267	18	176	18	14	91	175	A
16	392	15	262	19	176	19	15	83	181	A
17	382	15	261	20	178	20	14	80	185	A
18	372	15	262	21	174	21	15	87	176	A
19	362	15	261	21	172	21	15	88	174	A
20	352	15	259	22	167	22	15	92	166	A
21	342	16	258	23	168	23	16	91	167	A
22	332	15	256	23	166	23	15	90	166	A
23	322	16	255	23	164	23	16	91	163	A
24	312	15	254	22	163	22	15	91	162	A
25	302	15	255	23	164	23	15	91	163	A
26	292	15	256	22	165	22	15	92	163	A
27	282	14	258	21	167	21	14	92	165	A
28	272	14	258	21	170	21	14	88	172	A
29	262	14	256	20	167	20	14	89	168	A
30	252	14	256	21	168	21	14	87	170	A
31	242	14	252	21	166	21	14	85	170	A
32	232	14	251	20	167	21	14	82	172	A
33	222	14	248	20	164	20	14	81	171	A
34	212	14	245	19	161	19	14	80	168	A
35	202	15	243	18	161	18	15	70	177	A
36	192	16	241	19	162	19	15	66	182	A
37	182	16	247	20	158	20	16	89	159	A
38	172	15	246	20	159	20	15	86	162	A
39	162	15	247	21	161	21	15	84	165	A
40	152	16	250	21	164	21	16	82	170	A
41	142	15	255	24	164	24	15	90	164	A
42	132	16	258	24	167	24	16	91	167	A
43	122	17	268	25	170	25	17	100	163	A
44	112	17	270	28	167	28	17	102	160	A
45	102	19	273	28	167	29	18	108	156	A
46	92	21	278	32	166	33	19	110	155	A
47	82	22	273	35	171	36	21	102	164	A
48	72	27	267	36	175	36	27	93	173	A
49	62	27	269	35	171	36	26	103	161	A
50	52	28	270	38	173	38	28	101	165	A
51	42	21	272	24	164	26	19	125	138	A

## NWFG0805 ADCP 3368

Harmonic constants for constituent O1 for deployment NWFG0805.

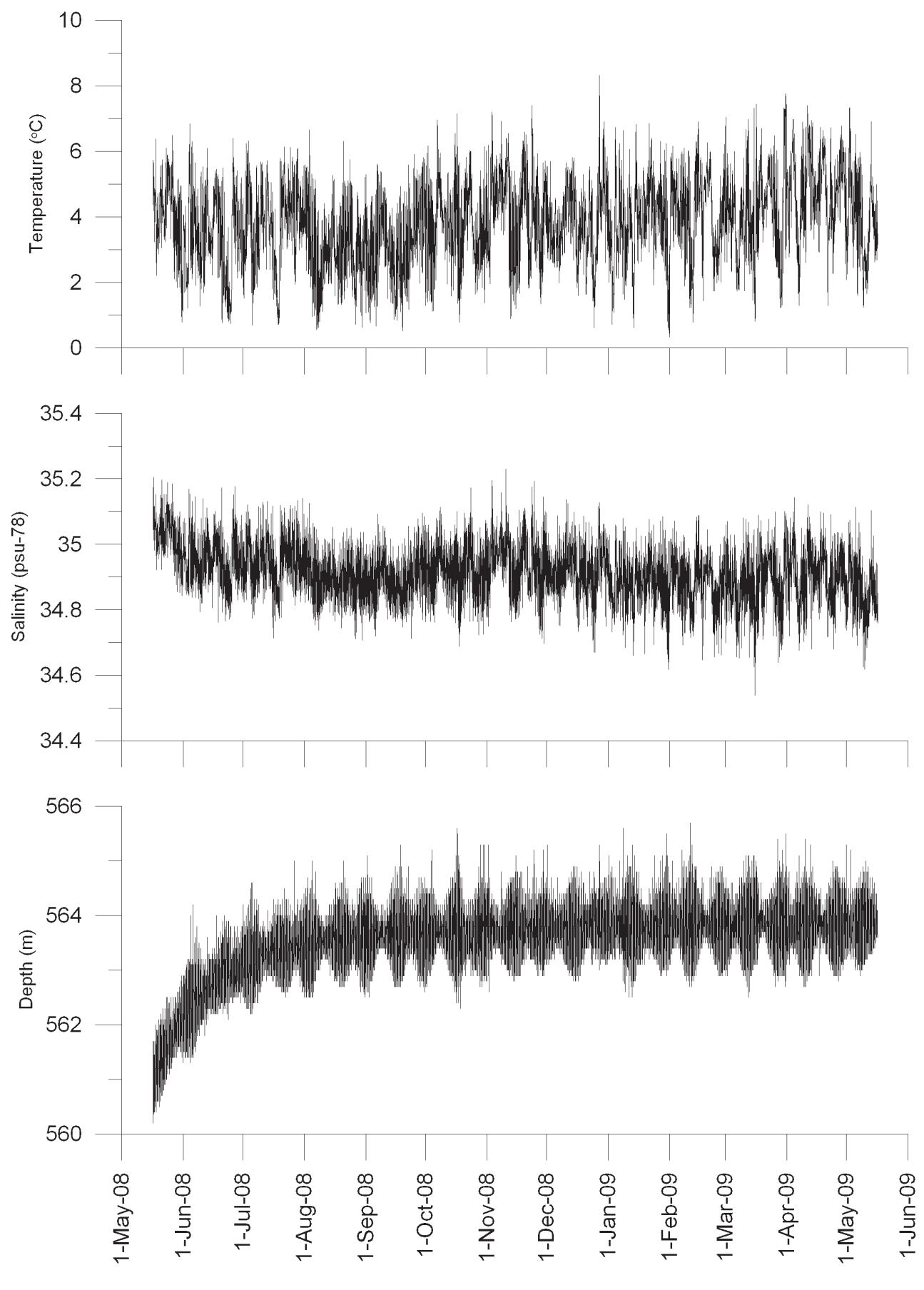
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	542	42	336	25	141	48	6	150	152	C
02	532	43	338	25	146	49	5	150	155	C
03	522	42	342	25	149	48	5	150	159	C
04	512	40	346	24	154	46	4	149	163	C
05	502	37	349	22	155	43	5	150	166	C
06	492	34	355	20	155	40	6	150	170	C
07	482	31	1	20	154	36	8	149	174	C
08	472	28	5	18	156	32	8	148	177	C
09	462	25	9	17	161	29	7	147	180	C
10	452	21	11	15	162	25	6	146	182	C
11	442	17	13	13	162	21	6	144	182	C
12	432	15	15	11	163	18	5	145	185	C
13	422	12	18	9	167	15	4	144	187	C
14	412	11	17	9	175	14	3	141	189	C
15	402	12	21	9	187	15	2	143	196	C
16	392	12	27	8	195	14	1	145	204	C
17	382	12	34	7	204	14	1	150	211	C
18	372	12	40	7	215	14	1	152	219	C
19	362	14	39	6	219	15	0	155	219	C
20	352	14	42	7	221	15	0	153	222	C
21	342	15	40	7	226	17	1	154	221	A
22	332	14	37	7	233	16	2	153	220	A
23	322	14	38	7	228	16	1	153	220	A
24	312	14	40	7	223	16	0	154	221	A
25	302	14	40	7	222	16	0	154	220	A
26	292	15	41	7	223	16	0	153	221	A
27	282	15	43	8	223	17	0	152	223	C
28	272	15	43	8	219	17	0	152	222	C
29	262	15	41	8	218	17	0	152	220	C
30	252	15	42	8	213	17	1	153	220	C
31	242	15	42	8	212	16	1	152	219	C
32	232	15	42	8	210	17	2	152	219	C
33	222	16	42	8	221	18	0	153	222	C
34	212	16	45	9	224	18	0	151	225	C
35	202	15	46	9	235	17	1	149	228	A
36	192	15	49	9	239	17	1	149	231	A
37	182	16	46	10	238	19	2	149	229	A
38	172	17	44	10	238	20	2	149	227	A
39	162	17	44	12	251	20	5	146	232	A
40	152	17	46	12	251	20	4	147	234	A
41	142	18	45	11	264	20	6	152	234	A
42	132	18	46	10	262	20	6	153	233	A
43	122	18	43	11	258	20	6	151	232	A
44	112	19	43	10	261	21	6	156	229	A
45	102	17	41	12	269	19	8	150	234	A
46	92	18	40	11	265	20	7	152	231	A
47	82	17	35	12	281	18	10	156	229	A
48	72	17	42	13	269	20	8	145	238	A
49	62	17	48	15	269	21	8	141	245	A
50	52	15	46	13	248	20	4	139	236	A
51	42	12	85	4	219	12	3	166	261	C

## NWFG0805 ADCP 3368

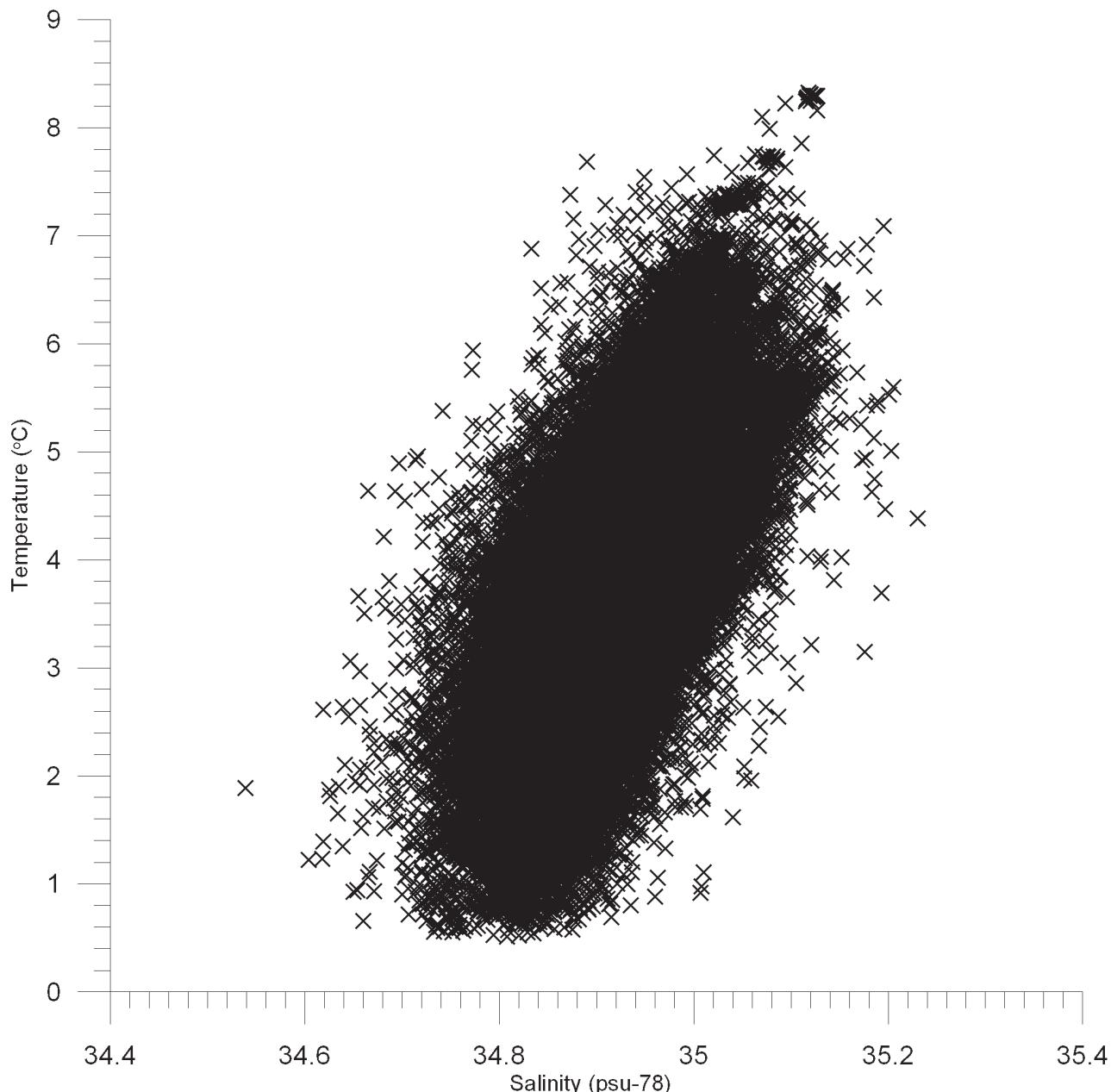
Harmonic constants for constituent K1 for deployment NWFG0805.

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	542	47	236	26	49	54	3	151	54	C
02	532	47	235	28	53	54	1	149	55	C
03	522	45	236	27	56	53	0	149	56	A
04	512	41	235	24	59	47	1	150	56	A
05	502	38	233	22	59	43	2	150	54	A
06	492	33	234	19	58	38	1	150	55	A
07	482	27	238	17	57	32	0	148	57	C
08	472	22	246	14	55	26	2	148	63	C
09	462	20	255	12	62	23	2	149	71	C
10	452	17	267	10	71	20	2	150	83	C
11	442	16	279	10	79	18	3	149	93	C
12	432	15	293	8	94	16	2	153	108	C
13	422	15	298	9	100	17	2	149	113	C
14	412	15	306	10	98	17	4	146	117	C
15	402	14	310	10	99	16	4	144	119	C
16	392	12	313	11	97	15	5	137	116	C
17	382	10	316	10	101	14	4	134	118	C
18	372	8	311	10	98	12	4	131	112	C
19	362	7	305	8	94	11	3	131	107	C
20	352	7	302	8	89	11	3	131	103	C
21	342	8	299	9	81	11	4	129	97	C
22	332	7	292	9	79	11	3	126	90	C
23	322	7	294	9	78	11	3	123	90	C
24	312	6	301	9	72	10	4	120	85	C
25	302	7	300	8	68	10	5	127	88	C
26	292	7	301	9	68	11	5	125	87	C
27	282	8	306	9	68	10	6	127	90	C
28	272	7	311	9	65	10	6	120	84	C
29	262	9	316	10	65	11	8	122	88	C
30	252	10	318	11	68	13	9	128	97	C
31	242	11	319	10	72	12	8	141	111	C
32	232	12	316	10	73	13	8	145	114	C
33	222	12	317	9	74	13	7	152	120	C
34	212	13	318	9	74	14	7	158	126	C
35	202	13	324	7	77	13	6	166	137	C
36	192	13	322	5	69	13	5	172	139	C
37	182	14	323	4	79	14	4	171	140	C
38	172	13	319	4	78	13	3	171	137	C
39	162	14	319	4	77	14	3	172	137	C
40	152	13	320	4	73	13	4	172	138	C
41	142	13	322	3	111	13	1	169	141	C
42	132	12	327	4	150	13	0	163	147	A
43	122	13	324	3	190	13	2	169	146	A
44	112	13	315	6	179	14	4	162	140	A
45	102	14	314	6	189	14	5	163	140	A
46	92	13	311	5	187	13	4	165	136	A
47	82	14	312	5	155	15	2	162	134	A
48	72	12	310	4	121	12	1	160	129	C
49	62	12	304	4	124	13	0	160	124	A
50	52	13	299	11	100	17	3	141	111	C
51	42	8	301	3	153	8	1	164	123	A

### NWFG0805 MicroCat 0984



**NWFG0805 MicroCat 0984**



## NWNAo806

**Latitude:** 62°41.996'N

**Longitude:** 006°05.114'W

**Echo sound depth:** 297 m

**Bottom depth corr.:** 296 m

**Time of deployment:** 5/6 - 2008 2339 UTC

**Time of recovery:** 15/5 - 2009 1050 UTC

### ADCP:

**Instrument no.:** RDI ADCP 1279

**Instrument frequency:** 150 kHz

**Height above bottom:** 1 m

**Depth:** 295 m (corr.)

**Time of first data:** 5/6 - 2008 2340 UTC

**Time of last data:** 15/5 - 2009 1040 UTC

**Sample interval:** 20 min

**No. of ensembles:** 24730

**Pings per ens.:** 1

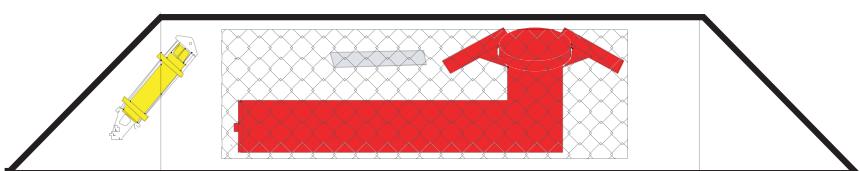
**Binlength:** 10 m

**Depth of first bin:** 279 m (corr.)

**No. of bins:** 24

### Data:

All data ok.



## NWNA0806 ADCP 1279

Error statistics for deployment: NWNA0806 updated 2009/10/07

Surface distance invalid due to range limitation  
Heading, pitch and roll not edited  
Temperature edited by EJ in Aug 2009  
Velocity edited up to and including bin 24 by EJ in Jul 2009  
Intensity edited up to and including bin 24 by EJ in Sep 2009

Total number of ensembles: 24730  
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	% flgd	Number of velocity gaps of length									
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	2	2217	9	1636	218	43	4	0	0	0	0	0	0
2	4	2016	8	1495	205	30	4	1	0	0	0	0	0
3	3	1851	7	1407	155	25	9	2	2	0	0	0	0
4	0	1741	7	1357	142	21	5	1	2	0	0	0	0
5	2	1526	6	1177	138	14	5	1	1	0	0	0	0
6	1	1288	5	979	119	15	5	0	1	0	0	0	0
7	0	1160	5	895	104	15	3	0	0	0	0	0	0
8	5	1074	4	847	95	11	1	0	0	0	0	0	0
9	0	1023	4	776	81	13	9	2	0	0	0	0	0
10	2	1081	4	780	99	21	6	2	1	0	0	0	0
11	4	1083	4	783	80	20	6	6	2	1	0	0	0
12	2	1112	4	730	80	23	12	8	4	3	0	0	0
13	2	1318	5	772	102	38	10	13	10	4	0	0	0
14	2	1648	7	811	122	37	19	15	27	9	0	0	0
15	3	2007	8	834	138	41	17	16	35	19	3	1	0
16	1	2417	10	855	134	49	24	23	45	20	8	3	0
17	1	3167	13	948	172	64	28	21	47	30	21	5	0
18	3	3969	16	1048	217	64	40	26	63	35	19	14	1
19	2	4987	20	1173	238	84	59	37	63	47	28	21	1
20	1	6276	25	1318	342	123	65	31	74	57	23	35	3
21	2	7637	31	1478	423	165	75	50	78	60	32	38	8
22	3	9224	37	1601	495	197	113	60	89	85	36	34	17
23	3	10790	44	1583	573	220	132	73	135	60	56	37	22
24	1	12367	50	1486	561	291	163	82	167	86	44	47	25

## NWNA0806 ADCP 1279

Deployment: NWNA0806 updated 2009/10/07  
Instrument no.: 1279  
Instrument freq.: 150  
Latitude: 62 41.996 N  
Longitude: 06 05.114 W  
Bottom depth: 296  
Instrument depth: 295  
Center depth of first bin: 279  
Bin length: 10  
Number of bins: 24  
Number of first ensemble: 168  
Time of first ensemble: 2008 06 05 23 40  
Number of last ensemble: 24897  
Time of last ensemble: 2009 05 15 10 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	279	17	196	114	98	910
2	269	27	213	117	102	918
3	259	37	221	116	104	925
4	249	47	228	121	107	930
5	239	57	233	128	109	938
6	229	67	237	135	110	948
7	219	77	238	142	111	953
8	209	87	240	148	111	957
9	199	97	241	153	111	959
10	189	107	240	154	111	956
11	179	117	241	157	112	956
12	169	127	242	159	111	955
13	159	137	244	161	111	947
14	149	147	245	162	111	933
15	139	157	247	161	111	919
16	129	167	251	163	111	902
17	119	177	255	164	112	872
18	109	187	260	168	112	840
19	99	197	267	171	113	798
20	89	207	274	176	113	746
21	79	217	283	183	113	691
22	69	227	295	190	113	627
23	59	237	309	200	114	564
24	49	247	331	211	113	500

## NWNA0806 ADCP 1279

Frequency of high speeds.

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

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	279	707	383	162	61	16	2	0	0	0	0	0	0	0	0	0	0	0	0
2	269	742	434	203	85	28	5	1	0	0	0	0	0	0	0	0	0	0	0
3	259	765	459	220	94	34	9	1	0	0	0	0	0	0	0	0	0	0	0
4	249	778	481	242	105	41	12	2	0	0	0	0	0	0	0	0	0	0	0
5	239	789	495	256	116	45	14	3	0	0	0	0	0	0	0	0	0	0	0
6	229	804	510	268	121	49	17	4	1	0	0	0	0	0	0	0	0	0	0
7	219	811	516	273	126	51	18	4	1	0	0	0	0	0	0	0	0	0	0
8	209	815	521	278	129	54	19	4	1	0	0	0	0	0	0	0	0	0	0
9	199	822	523	281	131	54	19	4	1	0	0	0	0	0	0	0	0	0	0
10	189	814	519	280	133	54	20	5	1	0	0	0	0	0	0	0	0	0	0
11	179	812	518	282	135	53	19	5	1	0	0	0	0	0	0	0	0	0	0
12	169	816	520	285	137	57	20	5	1	0	0	0	0	0	0	0	0	0	0
13	159	808	520	288	138	58	21	6	1	0	0	0	0	0	0	0	0	0	0
14	149	796	511	286	140	58	22	7	1	0	0	0	0	0	0	0	0	0	0
15	139	786	511	287	142	59	21	6	1	0	0	0	0	0	0	0	0	0	0
16	129	779	510	289	146	61	23	8	2	0	0	0	0	0	0	0	0	0	0
17	119	755	501	287	147	65	24	8	2	0	0	0	0	0	0	0	0	0	0
18	109	731	496	292	147	65	24	9	2	0	0	0	0	0	0	0	0	0	0
19	99	704	490	289	149	66	25	9	2	1	0	0	0	0	0	0	0	0	0
20	89	665	471	284	151	66	27	9	3	1	0	0	0	0	0	0	0	0	0
21	79	620	451	279	152	70	29	10	4	2	1	1	0	0	0	0	0	0	0
22	69	569	425	269	151	72	30	11	5	2	1	1	1	0	0	0	0	0	0
23	59	517	396	255	149	75	33	15	7	4	2	1	1	1	1	1	1	0	0
24	49	464	367	252	153	82	40	20	10	7	5	3	2	2	1	1	1	0	0

## NWNA0806 ADCP 1279

Harmonic constants for constituent M2 for deployment NWNA0806.

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	279	131	293	91	174	141	74	154	127	A
02	269	146	292	107	174	159	87	152	128	A
03	259	157	292	117	175	171	96	151	129	A
04	249	166	292	123	177	180	103	153	129	A
05	239	172	294	129	179	185	109	153	131	A
06	229	175	295	132	182	188	114	153	132	A
07	219	177	297	131	185	188	115	155	133	A
08	209	180	299	130	188	190	115	157	133	A
09	199	180	301	127	191	188	113	158	134	A
10	189	179	302	124	193	187	112	159	135	A
11	179	177	304	122	195	185	110	160	137	A
12	169	177	306	118	197	184	108	161	137	A
13	159	178	307	116	199	183	107	162	138	A
14	149	176	308	113	201	181	105	163	138	A
15	139	175	310	111	203	180	103	164	140	A
16	129	174	312	108	205	179	101	165	141	A
17	119	174	314	105	207	178	98	165	142	A
18	109	173	315	103	209	176	97	167	143	A
19	99	172	317	101	212	175	96	167	145	A
20	89	172	319	97	215	174	93	169	145	A
21	79	168	321	96	219	170	93	170	146	A
22	69	165	322	94	222	166	92	172	147	A
23	59	169	324	92	225	170	90	173	148	A
24	49	172	326	100	227	173	98	172	151	A

Harmonic constants for constituent S2 for deployment NWNA0806.

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	279	46	340	31	229	48	28	160	172	A
02	269	47	340	38	229	51	33	150	180	A
03	259	51	340	45	230	56	39	146	185	A
04	249	61	342	49	229	67	42	149	182	A
05	239	66	344	52	228	72	43	150	183	A
06	229	70	345	52	226	77	42	151	182	A
07	219	74	345	51	227	79	41	154	179	A
08	209	73	346	49	227	78	40	155	179	A
09	199	73	346	48	227	78	39	156	178	A
10	189	72	348	46	228	77	38	156	180	A
11	179	71	348	46	229	76	37	156	181	A
12	169	71	350	44	230	75	36	157	182	A
13	159	73	352	43	230	77	35	158	182	A
14	149	71	352	42	230	76	33	158	182	A
15	139	71	353	42	231	75	33	158	183	A
16	129	70	354	41	232	74	33	158	184	A
17	119	69	355	39	231	73	31	159	184	A
18	109	69	355	36	231	72	29	161	183	A
19	99	68	355	36	231	72	28	160	183	A
20	89	68	357	35	234	71	28	161	184	A
21	79	69	357	36	238	71	30	162	185	A
22	69	65	359	31	236	68	25	163	185	A
23	59	66	359	29	235	68	23	164	185	A
24	49	62	1	26	242	64	22	167	186	A

## NWNA0806 ADCP 1279

Harmonic constants for constituent N2 for deployment NWNA0806.

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	279	25	256	24	140	29	18	136	107	A
02	269	27	258	25	136	32	18	140	103	A
03	259	30	260	28	137	35	19	139	105	A
04	249	30	263	29	140	37	20	138	109	A
05	239	31	262	29	144	36	22	140	108	A
06	229	32	265	28	149	36	22	143	109	A
07	219	33	269	27	155	36	23	147	111	A
08	209	35	273	27	157	38	22	150	111	A
09	199	36	276	27	160	39	22	151	113	A
10	189	36	279	26	165	38	23	154	115	A
11	179	37	281	25	170	38	23	159	114	A
12	169	36	284	25	176	38	23	160	116	A
13	159	37	286	25	180	38	23	164	116	A
14	149	36	293	25	183	38	22	159	126	A
15	139	36	295	24	188	37	22	162	126	A
16	129	35	299	23	188	36	20	161	130	A
17	119	34	299	23	189	35	21	159	132	A
18	109	33	305	22	198	34	21	162	136	A
19	99	33	312	21	205	34	20	164	141	A
20	89	34	312	19	206	35	18	168	138	A
21	79	32	316	22	209	33	21	161	148	A
22	69	31	320	21	212	32	19	161	151	A
23	59	29	316	17	217	29	17	172	141	A
24	49	29	327	21	229	30	20	169	155	A

Harmonic constants for constituent O1 for deployment NWNA0806.

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	279	20	29	9	309	20	8	5	26	A
02	269	24	30	11	306	24	11	4	28	A
03	259	25	27	11	297	25	11	180	207	A
04	249	26	23	11	288	26	11	177	205	A
05	239	27	23	10	286	27	10	177	204	A
06	229	27	22	10	286	27	10	177	203	A
07	219	27	24	11	281	27	11	174	206	A
08	209	27	25	10	283	27	10	175	206	A
09	199	26	25	11	276	26	11	170	209	A
10	189	25	25	12	277	25	11	169	210	A
11	179	24	25	13	276	25	12	167	212	A
12	169	24	28	13	275	25	11	165	215	A
13	159	25	27	13	277	25	12	167	213	A
14	149	25	27	13	278	26	12	167	213	A
15	139	25	25	13	276	25	12	168	210	A
16	129	24	24	14	279	24	13	168	211	A
17	119	26	25	15	280	26	14	168	212	A
18	109	27	25	14	273	27	13	165	212	A
19	99	26	26	14	274	27	13	165	213	A
20	89	27	29	14	277	27	12	166	215	A
21	79	28	28	12	273	28	11	169	212	A
22	69	30	27	14	271	31	12	167	212	A
23	59	30	22	17	273	31	16	166	209	A
24	49	28	14	16	275	29	16	172	198	A

## NWNA0806 ADCP 1279

Harmonic constants for constituent K1 for deployment NWNA0806.

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	279	26	275	22	192	26	21	17	261	A
02	269	31	289	26	187	32	25	154	129	A
03	259	36	285	25	181	37	24	163	116	A
04	249	38	281	23	175	39	22	165	110	A
05	239	36	281	22	174	37	20	165	109	A
06	229	34	280	22	174	35	20	165	109	A
07	219	35	283	21	175	36	20	164	112	A
08	209	36	281	22	171	37	20	163	111	A
09	199	36	280	22	168	38	19	163	109	A
10	189	37	279	23	167	39	21	161	109	A
11	179	37	275	23	164	38	21	161	106	A
12	169	39	272	25	162	41	23	163	102	A
13	159	42	268	25	159	43	23	165	96	A
14	149	42	264	26	155	43	24	164	93	A
15	139	45	263	27	151	46	24	163	92	A
16	129	46	260	27	149	47	24	164	89	A
17	119	47	257	27	146	48	25	164	85	A
18	109	50	253	27	140	51	24	165	80	A
19	99	50	248	27	138	52	25	166	75	A
20	89	53	247	26	134	54	24	167	73	A
21	79	49	244	27	137	50	26	168	70	A
22	69	47	247	25	139	48	23	168	73	A
23	59	44	243	26	142	45	25	170	69	A
24	49	41	242	21	140	41	20	172	66	A

# NWNBo806

**Latitude:** 62°55.100'N

**Longitude:** 006°05.200'W

**Echo sounding depth:** 978 m

**Bottom depth corr.:** 953 m

**Time of deployment:** 6/6 - 2008 0253 UTC

**Time of recovery:** 15/5 - 2009 0747 UTC

## ADCP:

**Instrument no.:** RDI ADCP 1577

**Instrument frequency:** 75 kHz

**Height above bottom:** 254 m (corr.)

**Depth:** 699 m (corr.)

**Time of first data:** 6/6 - 2008 0320 UTC

**Time of last data:** 15/5 - 2009 0720 UTC

**Sample interval:** 20 min

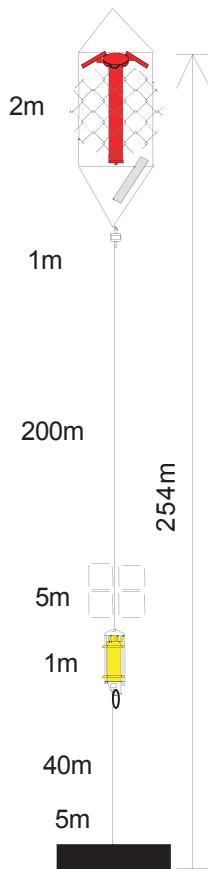
**No. of ensembles:** 24709

**Pings per ens.:** 1

**Binlength:** 25 m

**Depth of first bin:** 664 m (corr.)

**No. of bins:** 23



## Data:

All data ok.

## NWNB0806 ADCP 1577

Error statistics for deployment: NWNB0806 updated 2009/10/07

Surface distance not edited

Heading, pitch and roll not edited

Temperature edited by EJ in Aug 2009

Velocity edited up to and including bin 23 by EJ in Jul 2009

Intensity edited up to and including bin 23 by EJ in Sep 2009

Total number of ensembles: 24709

Interval between ensembles: 20 min

Original number of bins: 32

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	% flgd	Number of velocity gaps of length									
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	6	17	0	17	0	0	0	0	0	0	0	0	0
2	3	26	0	26	0	0	0	0	0	0	0	0	0
3	1	21	0	21	0	0	0	0	0	0	0	0	0
4	0	27	0	27	0	0	0	0	0	0	0	0	0
5	0	17	0	17	0	0	0	0	0	0	0	0	0
6	0	20	0	18	1	0	0	0	0	0	0	0	0
7	0	13	0	13	0	0	0	0	0	0	0	0	0
8	1	30	0	30	0	0	0	0	0	0	0	0	0
9	0	28	0	28	0	0	0	0	0	0	0	0	0
10	1	31	0	31	0	0	0	0	0	0	0	0	0
11	0	41	0	35	1	0	1	0	0	0	0	0	0
12	1	65	0	51	7	0	0	0	0	0	0	0	0
13	4	92	0	77	4	1	1	0	0	0	0	0	0
14	4	91	0	79	2	0	0	0	1	0	0	0	0
15	2	196	1	132	15	2	2	0	3	0	0	0	0
16	2	567	2	151	34	9	8	3	17	8	1	0	0
17	1	1268	5	241	43	16	19	5	21	18	11	3	0
18	1	2136	9	321	75	37	24	16	35	24	11	12	0
19	1	3557	14	445	132	60	35	28	83	40	15	19	1
20	0	5670	23	543	174	93	41	26	124	80	30	31	2
21	3	7823	32	637	216	132	74	58	129	97	36	50	9
22	2	9926	40	694	242	148	87	63	152	110	59	52	23
23	2	12361	50	715	258	152	85	56	157	134	59	82	36

## NWNB0806 ADCP 1577

Deployment: NWNB0806 updated 2009/10/07

Instrument no.: 1577

Instrument freq.: 75

Latitude: 62 55.100 N

Longitude: 06 05.200 W

Bottom depth: 953

Instrument depth: 699

Center depth of first bin: 664

Bin length: 25

Number of bins: 23

Number of first ensemble: 179

Time of first ensemble: 2008 06 06 03 20

Number of last ensemble: 24887

Time of last ensemble: 2009 05 15 07 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	664	289	135	34	96	999
2	639	314	133	30	96	999
3	614	339	131	27	98	999
4	589	364	130	25	100	999
5	564	389	129	24	104	999
6	539	414	130	23	108	999
7	514	439	131	25	111	999
8	489	464	134	28	115	999
9	464	489	138	32	117	999
10	439	514	142	40	118	999
11	414	539	150	52	117	998
12	389	564	162	67	116	997
13	364	589	176	83	116	996
14	339	614	190	102	116	996
15	314	639	209	124	116	992
16	289	664	225	142	116	977
17	264	689	242	158	117	949
18	239	714	258	173	116	914
19	214	739	272	184	116	856
20	189	764	281	189	117	771
21	164	789	287	194	117	683
22	139	814	289	194	119	598
23	114	839	292	195	122	500

## NWNB0806 ADCP 1577

Frequency of high speeds.

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

Bin no. 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	664	608	195	46	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	639	598	189	42	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3	614	588	180	40	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	589	590	172	35	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	564	591	169	32	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0
6	539	597	170	31	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0
7	514	606	173	31	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0
8	489	621	182	36	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0
9	464	638	197	44	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0
10	439	653	210	52	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0
11	414	674	244	67	17	3	0	0	0	0	0	0	0	0	0	0	0	0	0
12	389	707	289	93	26	6	1	0	0	0	0	0	0	0	0	0	0	0	0
13	364	747	343	120	39	9	1	0	0	0	0	0	0	0	0	0	0	0	0
14	339	785	400	154	50	14	2	0	0	0	0	0	0	0	0	0	0	0	0
15	314	817	465	200	72	21	5	1	0	0	0	0	0	0	0	0	0	0	0
16	289	828	511	240	95	32	7	1	0	0	0	0	0	0	0	0	0	0	0
17	264	821	543	279	120	46	13	2	0	0	0	0	0	0	0	0	0	0	0
18	239	810	565	307	142	58	19	5	0	0	0	0	0	0	0	0	0	0	0
19	214	773	557	319	156	68	25	8	1	0	0	0	0	0	0	0	0	0	0
20	189	696	516	307	159	69	27	9	1	0	0	0	0	0	0	0	0	0	0
21	164	617	458	284	149	69	29	11	3	0	0	0	0	0	0	0	0	0	0
22	139	535	398	251	136	66	29	12	4	1	0	0	0	0	0	0	0	0	0
23	114	444	330	212	117	60	27	13	5	2	0	0	0	0	0	0	0	0	0

## NWNB0806 ADCP 1577

Harmonic constants for constituent M2 for deployment NWNB0806.

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	664	77	264	43	133	83	30	157	93	A
02	639	79	266	42	137	84	30	159	94	A
03	614	81	268	41	141	85	31	161	95	A
04	589	83	270	40	145	87	31	162	97	A
05	564	85	272	40	151	88	33	164	98	A
06	539	89	276	40	163	90	37	168	100	A
07	514	94	280	42	176	95	40	172	104	A
08	489	100	284	45	187	100	45	176	106	A
09	464	105	289	49	199	105	49	180	109	A
10	439	107	294	50	210	107	50	4	292	A
11	414	110	299	54	223	111	52	8	295	A
12	389	114	305	59	233	116	55	12	300	A
13	364	114	312	63	244	118	57	16	304	A
14	339	110	318	67	256	115	56	21	307	A
15	314	113	323	74	260	120	62	23	311	A
16	289	118	326	81	262	126	68	24	312	A
17	264	121	328	85	263	129	72	24	314	A
18	239	125	329	87	264	133	74	25	315	A
19	214	125	328	90	264	134	76	26	313	A
20	189	125	330	89	264	133	77	25	315	A
21	164	128	330	91	265	137	78	25	315	A
22	139	127	329	89	266	137	74	26	314	A
23	114	131	329	87	267	140	72	24	316	A

Harmonic constants for constituent S2 for deployment NWNB0806.

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	664	33	302	20	187	35	17	161	132	A
02	639	33	306	18	193	33	16	164	133	A
03	614	32	309	16	201	33	15	168	134	A
04	589	33	313	16	208	33	15	171	137	A
05	564	33	317	16	219	34	16	175	140	A
06	539	34	320	16	230	34	16	0	320	A
07	514	35	323	17	238	35	17	3	322	A
08	489	37	329	19	248	37	18	6	326	A
09	464	39	331	20	254	39	20	9	327	A
10	439	37	336	19	266	37	17	13	330	A
11	414	34	342	17	284	35	14	17	335	A
12	389	36	351	20	296	38	16	22	342	A
13	364	38	355	23	298	40	18	24	344	A
14	339	37	358	23	297	39	19	22	347	A
15	314	36	360	24	302	39	19	26	346	A
16	289	33	4	26	311	38	18	35	346	A
17	264	33	15	29	319	39	20	38	353	A
18	239	38	16	30	321	44	22	34	358	A
19	214	42	16	32	319	47	24	32	358	A
20	189	41	12	33	322	48	22	35	354	A
21	164	43	13	33	324	50	22	34	357	A
22	139	39	13	30	315	44	23	31	356	A
23	114	43	14	29	318	47	22	27	1	A

## NWNB0806 ADCP 1577

Harmonic constants for constituent N2 for deployment NWNB0806.

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	664	14	247	7	84	15	2	155	70	A
02	639	13	248	6	86	15	2	157	71	A
03	614	13	252	6	87	14	1	156	74	A
04	589	12	252	5	81	13	1	157	73	A
05	564	12	246	5	74	13	1	156	68	A
06	539	13	249	5	82	14	1	158	71	A
07	514	15	248	6	96	16	3	160	71	A
08	489	16	250	7	103	17	4	158	75	A
09	464	16	250	7	109	17	4	159	75	A
10	439	20	255	8	129	21	6	166	79	A
11	414	22	260	9	133	22	7	165	84	A
12	389	21	264	7	147	22	7	170	88	A
13	364	21	268	5	173	21	5	179	89	A
14	339	19	287	6	224	19	6	10	284	A
15	314	24	296	11	232	25	10	13	291	A
16	289	28	298	15	231	29	14	16	290	A
17	264	30	306	19	235	31	17	17	296	A
18	239	30	309	19	231	30	19	12	301	A
19	214	29	304	18	228	30	17	12	297	A
20	189	30	299	18	229	31	17	16	290	A
21	164	32	308	19	243	33	16	19	298	A
22	139	28	313	21	244	29	19	26	296	A
23	114	29	310	24	235	30	22	25	291	A

Harmonic constants for constituent O1 for deployment NWNB0806.

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	664	5	26	7	245	8	3	125	232	A
02	639	6	24	7	248	8	3	126	232	A
03	614	6	19	7	253	8	4	128	232	A
04	589	6	17	7	251	8	4	132	227	A
05	564	6	19	7	248	9	4	127	229	A
06	539	6	15	6	249	8	4	130	226	A
07	514	6	20	6	257	7	4	133	230	A
08	489	7	26	5	261	8	4	144	227	A
09	464	8	31	7	262	9	4	141	232	A
10	439	9	31	7	270	10	5	147	231	A
11	414	10	29	6	275	10	5	161	219	A
12	389	10	23	6	266	11	5	160	212	A
13	364	11	18	6	268	11	5	167	204	A
14	339	13	28	6	281	13	6	170	213	A
15	314	12	29	6	273	13	5	165	216	A
16	289	11	22	7	266	12	6	160	212	A
17	264	11	29	9	271	12	7	147	230	A
18	239	11	27	11	275	13	9	139	237	A
19	214	9	17	9	283	10	9	141	234	A
20	189	10	18	10	286	10	10	150	227	A
21	164	13	38	10	292	13	9	155	235	A
22	139	14	49	13	301	15	11	141	259	A
23	114	7	52	8	298	9	6	129	270	A

## NWNB0806 ADCP 1577

Harmonic constants for constituent K1 for deployment NWNB0806.

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	664	5	291	4	192	5	4	146	140	A
02	639	5	289	4	191	5	4	167	118	A
03	614	5	285	4	181	5	4	157	121	A
04	589	5	283	5	178	6	4	149	127	A
05	564	5	279	5	170	6	4	146	124	A
06	539	5	274	5	163	6	4	145	119	A
07	514	6	273	5	162	7	5	146	117	A
08	489	7	274	6	170	7	5	157	111	A
09	464	8	282	6	176	8	5	160	115	A
10	439	8	282	6	158	9	5	149	118	A
11	414	11	283	8	158	12	6	147	121	A
12	389	12	288	8	165	13	6	156	120	A
13	364	9	279	7	153	11	5	145	118	A
14	339	9	283	9	134	12	3	136	118	A
15	314	10	290	9	129	13	2	137	119	A
16	289	7	290	8	128	10	2	133	120	A
17	264	6	306	8	130	10	0	126	129	A
18	239	4	287	9	136	9	2	111	132	A
19	214	1	211	9	130	9	1	88	130	A
20	189	8	83	10	134	12	5	56	117	C
21	164	12	86	13	107	17	3	48	97	C
22	139	15	84	13	89	20	1	40	86	C
23	114	18	65	10	87	21	3	29	70	C

# NWNEo806

**Latitude:** 62°47.636'N

**Longitude:** 006°04.905'W

**Echo sounding depth:** 455 m

**Bottom depth corr.:** 457 m

**Time of deployment:** 6/6 - 2008 0128 UTC

**Time of recovery:** 15/5 - 2009 0944 UTC

## ADCP:

**Instrument no.:** RDI ADCP 1244

**Instrument frequency:** 150 kHz

**Height above bottom:** 1 m

**Depth:** 456 m (corr.)

**Time of first data:** 6/6 - 2008 0140 UTC

**Time of last data:** 15/5 - 2009 0920 UTC

**Sample interval:** 20 min

**No. of ensembles:** 24720

**Pings per ens.:** 1

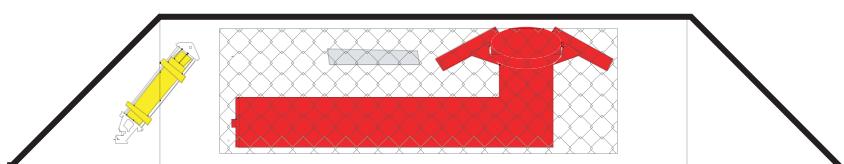
**Binlength:** 25 m

**Depth of first bin:** 425 m (corr.)

**No. of bins:** 15

## Data:

All data ok.



## NWNE0806 ADCP 1244

Error statistics for deployment: NWNE0806 updated 2009/10/07

Surface distance not edited

Heading, pitch and roll not edited

Temperature edited by EJ in Aug 2009

Velocity edited up to and including bin 15 by EJ in Jul 2009

Intensity edited up to and including bin 15 by EJ in Sep 2009

Total number of ensembles: 24720

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	% flgd	Number of velocity gaps of length									
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	3	983	4	862	51	5	1	0	0	0	0	0	0
2	4	1023	4	876	62	5	2	0	0	0	0	0	0
3	5	1151	5	1001	67	4	1	0	0	0	0	0	0
4	4	1171	5	1019	65	6	1	0	0	0	0	0	0
5	2	1149	5	1017	58	4	1	0	0	0	0	0	0
6	3	1126	5	991	55	7	1	0	0	0	0	0	0
7	1	1127	5	983	59	3	3	1	0	0	0	0	0
8	1	1187	5	1011	62	7	2	0	1	1	0	0	0
9	1	1469	6	1060	87	9	12	10	5	4	1	0	0
10	3	2109	9	1085	116	35	16	6	24	19	4	1	0
11	2	3260	13	1050	111	46	23	10	50	40	25	4	0
12	2	4568	18	1026	153	45	27	16	46	52	43	20	0
13	2	6177	25	1154	208	108	44	25	42	67	54	35	0
14	3	8628	35	1292	302	120	67	40	75	97	38	71	2
15	3	11866	48	1364	404	159	88	46	110	87	70	91	11

## NWNE0806 ADCP 1244

Deployment: NWNE0806 updated 2009/10/07  
Instrument no.: 1244  
Instrument freq.: 150  
Latitude: 62 47.636 N  
Longitude: 06 04.905 W  
Bottom depth: 457  
Instrument depth: 456  
Center depth of first bin: 425  
Bin length: 25  
Number of bins: 15  
Number of first ensemble: 174  
Time of first ensemble: 2008 06 06 01 40  
Number of last ensemble: 24893  
Time of last ensemble: 2009 05 15 09 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	425	32	217	104	98	960
2	400	57	225	127	106	959
3	375	82	231	148	110	953
4	350	107	238	166	112	953
5	325	132	244	180	113	954
6	300	157	250	192	113	954
7	275	182	258	205	113	954
8	250	207	268	219	113	952
9	225	232	277	230	113	941
10	200	257	284	236	113	915
11	175	282	286	238	114	868
12	150	307	290	240	114	815
13	125	332	296	243	115	750
14	100	357	306	246	116	651
15	75	382	329	255	117	520

## NWNE0806 ADCP 1244

Frequency of high speeds.

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

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	425	803	490	217	71	16	3	1	0	0	0	0	0	0	0	0	0	0	0
2	400	821	506	243	86	22	4	1	0	0	0	0	0	0	0	0	0	0	0
3	375	812	515	264	103	29	6	1	0	0	0	0	0	0	0	0	0	0	0
4	350	813	534	287	119	38	7	0	0	0	0	0	0	0	0	0	0	0	0
5	325	816	543	306	137	46	10	1	0	0	0	0	0	0	0	0	0	0	0
6	300	823	553	321	149	55	13	2	0	0	0	0	0	0	0	0	0	0	0
7	275	829	572	337	164	67	18	4	1	0	0	0	0	0	0	0	0	0	0
8	250	840	595	358	180	77	26	6	1	0	0	0	0	0	0	0	0	0	0
9	225	835	606	374	195	90	34	10	2	0	0	0	0	0	0	0	0	0	0
10	200	816	598	372	202	98	38	13	3	1	0	0	0	0	0	0	0	0	0
11	175	775	570	358	196	97	40	13	4	1	0	0	0	0	0	0	0	0	0
12	150	729	539	340	191	95	42	15	5	1	0	0	0	0	0	0	0	0	0
13	125	676	501	320	185	99	44	16	6	1	0	0	0	0	0	0	0	0	0
14	100	592	451	294	172	93	44	18	7	3	0	0	0	0	0	0	0	0	0
15	75	481	382	260	159	88	44	20	9	3	1	1	0	0	0	0	0	0	0

## NWNE0806 ADCP 1244

Harmonic constants for constituent M2 for deployment NWNE0806.

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	425	123	248	119	132	146	90	137	98	A
02	400	138	259	120	142	156	95	144	103	A
03	375	149	271	112	158	160	95	153	108	A
04	350	153	284	103	174	160	93	160	117	A
05	325	153	296	97	190	157	91	165	125	A
06	300	149	303	90	201	150	87	169	129	A
07	275	145	308	84	208	146	82	172	132	A
08	250	143	310	81	213	144	80	174	134	A
09	225	141	312	78	217	141	78	176	134	A
10	200	139	313	78	220	139	78	178	134	A
11	175	138	313	77	224	138	77	1	313	A
12	150	133	313	74	228	133	74	4	311	A
13	125	132	315	70	235	133	68	7	312	A
14	100	130	318	65	242	132	63	9	314	A
15	75	131	326	69	251	133	66	10	321	A

Harmonic constants for constituent S2 for deployment NWNE0806.

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	425	71	296	57	189	75	52	154	135	A
02	400	61	300	46	195	63	43	159	134	A
03	375	53	315	40	211	55	37	160	149	A
04	350	55	332	38	225	57	35	161	164	A
05	325	55	338	37	235	56	35	165	168	A
06	300	50	342	32	243	51	32	170	168	A
07	275	47	348	29	248	47	28	170	174	A
08	250	47	354	26	250	48	25	169	180	A
09	225	50	356	24	255	51	24	173	179	A
10	200	51	358	22	262	51	22	177	179	A
11	175	48	360	21	266	49	21	178	181	A
12	150	48	359	19	265	48	19	178	179	A
13	125	50	0	19	273	50	19	1	360	A
14	100	56	3	17	273	56	17	0	3	A
15	75	58	7	15	265	58	14	177	187	A

## NWNE0806 ADCP 1244

Harmonic constants for constituent N2 for deployment NWNE0806.

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	425	9	193	19	66	20	7	109	59	A
02	400	20	212	23	88	28	14	128	66	A
03	375	31	228	30	112	36	23	138	77	A
04	350	35	243	28	130	38	24	150	83	A
05	325	33	259	23	151	34	21	158	93	A
06	300	32	270	22	164	33	21	161	102	A
07	275	31	277	21	174	31	20	166	106	A
08	250	29	286	19	188	29	19	171	111	A
09	225	29	290	19	194	29	19	174	114	A
10	200	32	290	19	194	32	19	174	114	A
11	175	31	293	19	197	32	19	174	117	A
12	150	33	300	18	204	33	18	175	122	A
13	125	34	305	18	212	34	18	178	126	A
14	100	32	310	18	224	32	18	3	308	A
15	75	35	306	21	226	36	21	10	300	A

Harmonic constants for constituent 01 for deployment NWNE0806.

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	425	22	20	10	285	22	9	177	201	A
02	400	24	31	10	283	24	9	172	214	A
03	375	22	38	7	280	22	6	170	221	A
04	350	19	35	6	272	19	5	169	218	A
05	325	20	29	7	263	20	6	167	213	A
06	300	21	30	9	263	22	7	163	215	A
07	275	20	30	9	270	20	7	165	216	A
08	250	19	26	10	269	20	8	163	214	A
09	225	19	26	10	268	20	9	163	214	A
10	200	17	31	10	268	18	8	157	221	A
11	175	18	27	10	267	19	8	160	216	A
12	150	18	17	10	275	18	10	171	202	A
13	125	18	17	8	268	18	7	170	201	A
14	100	16	16	9	248	17	7	157	205	A
15	75	18	39	8	243	19	3	158	223	A

## NWNE0806 ADCP 1244

Harmonic constants for constituent K1 for deployment NWNE0806.

Bin	Depth	E-ampl	E-gpl	N-ampl	N-gpl	Major	Minor	Incl	Grphl	R
	m	mm/sec	deg	mm/sec	deg	mm/sec	mm/sec	deg	deg	
01	425	20	264	15	161	21	14	163	96	A
02	400	18	274	16	152	21	12	141	118	A
03	375	17	277	16	147	21	10	136	121	A
04	350	15	267	15	141	19	10	135	115	A
05	325	16	263	14	136	19	10	142	104	A
06	300	17	266	14	136	21	9	143	105	A
07	275	19	271	15	138	23	9	144	108	A
08	250	17	274	15	138	22	8	139	113	A
09	225	18	273	15	142	21	9	142	112	A
10	200	18	270	16	146	21	11	142	112	A
11	175	16	271	15	144	20	10	137	116	A
12	150	11	262	14	140	16	9	123	121	A
13	125	8	244	13	139	13	7	103	132	A
14	100	12	197	13	131	15	10	51	159	A
15	75	16	169	8	110	16	7	19	160	A

# NWNGo806

**Latitude:** 63°06.080'N

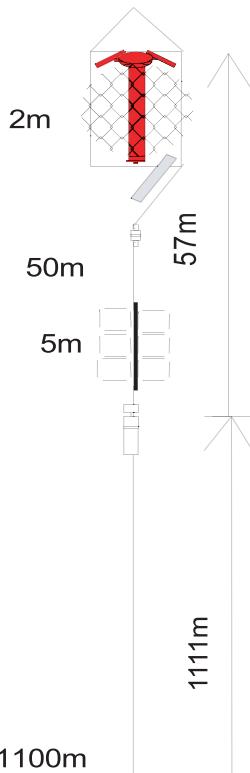
**Longitude:** 006°05.059'W

**Echo sounding depth:** 1844 m

**Bottom depth corr.:** 1796 m

**Time of deployment:** 6/6 - 2008 0429 UTC

**Time of recovery:** 15/5 - 2009 0543 UTC



## ADCP:

**Instrument no.:** RDI ADCP 1292

**Instrument frequency:** 75 kHz

**Height above bottom:** 1168 m

**Depth:** 628 m (corr.)

**Time of first data:** 6/6 - 2008 0500 UTC

**Time of last data:** 15/5 - 2009 0520 UTC

**Sample interval:** 20 min

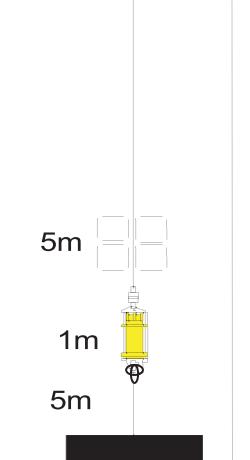
**No. of ensembles:** 24698

**Pings per ens.:** 1

**Binlength:** 25 m

**Depth of first bin:** 593 m (corr.)

**No. of bins:** 22



## Aanderaa:

**Instrument no.:** RCM9 721

**Height above bottom:** 1111 m

**Depth:** 685 m (corr.)

**Time of first data:** 6/6 - 2008 0429 UTC

**Time of last data:** 15/5 - 2009 0329 UTC

**Sample interval:** 60 min

**No. of ensembles:** 8232

## Data:

All data ok.

## NWNG0806 ADCP 1292

Error statistics for deployment: NWNG0806 updated 2009/10/07

Surface distance not edited

Heading, pitch and roll not edited

Temperature edited by EJ in Aug 2009

Velocity edited up to and including bin 22 by EJ in Aug 2009

Intensity edited up to and including bin 22 by EJ in Sep 2009

Total number of ensembles: 24698

Interval between ensembles: 20 min

Original number of bins: 32

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: 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	% flgd	Number of velocity gaps of length									
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	3	24	0	24	0	0	0	0	0	0	0	0	0
2	0	28	0	28	0	0	0	0	0	0	0	0	0
3	0	36	0	34	1	0	0	0	0	0	0	0	0
4	2	32	0	32	0	0	0	0	0	0	0	0	0
5	0	33	0	33	0	0	0	0	0	0	0	0	0
6	0	30	0	28	1	0	0	0	0	0	0	0	0
7	3	30	0	30	0	0	0	0	0	0	0	0	0
8	1	27	0	23	2	0	0	0	0	0	0	0	0
9	2	48	0	42	1	0	1	0	0	0	0	0	0
10	2	60	0	54	3	0	0	0	0	0	0	0	0
11	2	83	0	75	4	0	0	0	0	0	0	0	0
12	2	89	0	78	4	1	0	0	0	0	0	0	0
13	2	112	0	102	5	0	0	0	0	0	0	0	0
14	2	188	1	141	14	3	1	0	1	0	0	0	0
15	1	442	2	236	24	7	2	4	8	2	1	0	0
16	4	884	4	327	49	21	6	11	18	4	2	2	0
17	1	1643	7	476	105	30	27	11	34	13	3	5	0
18	2	2517	10	521	109	47	29	18	34	23	17	10	0
19	1	3712	15	531	149	67	37	23	49	37	18	26	0
20	1	5322	22	667	213	84	51	29	70	64	39	26	3
21	0	7528	30	970	274	123	70	47	91	89	50	45	2
22	2	10757	44	1453	467	195	112	52	160	112	51	68	4

## NWNG0806 ADCP 1292

Deployment: NWNG0806 updated 2009/10/07

Instrument no.: 1292

Instrument freq.: 75

Latitude: 63 06.080 N

Longitude: 06 05.059 W

Bottom depth: 1796

Instrument depth: 628

Center depth of first bin: 593

Bin length: 25

Number of bins: 22

Number of first ensemble: 184

Time of first ensemble: 2008 06 06 05 00

Number of last ensemble: 24881

Time of last ensemble: 2009 05 15 05 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	593	1203	89	10	134	999
2	568	1228	91	11	138	999
3	543	1253	94	12	139	999
4	518	1278	98	13	140	999
5	493	1303	101	15	141	999
6	468	1328	104	17	143	999
7	443	1353	107	21	143	999
8	418	1378	114	25	142	999
9	393	1403	120	30	141	998
10	368	1428	129	36	139	998
11	343	1453	139	44	138	997
12	318	1478	152	53	138	996
13	293	1503	167	63	139	995
14	268	1528	183	73	140	992
15	243	1553	200	84	140	982
16	218	1578	217	95	140	964
17	193	1603	234	104	141	933
18	168	1628	247	111	141	898
19	143	1653	261	117	141	850
20	118	1678	277	127	141	785
21	93	1703	296	132	142	695
22	68	1728	327	135	143	564

## NWNG0806 ADCP 1292

Frequency of high speeds.

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

Bin no. no.	Depth m	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	Speed (cm/s)
1	593	366	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	568	383	30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	543	408	37	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	518	433	45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	493	455	55	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	468	472	64	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	443	492	77	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	418	535	99	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	393	562	126	15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	368	598	160	27	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	343	643	202	42	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	318	688	260	62	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	293	736	325	87	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	268	762	390	137	32	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	243	781	444	183	58	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0
16	218	789	486	227	85	26	5	0	0	0	0	0	0	0	0	0	0	0	0	0
17	193	783	513	260	111	42	11	1	0	0	0	0	0	0	0	0	0	0	0	0
18	168	768	526	281	127	52	18	4	0	0	0	0	0	0	0	0	0	0	0	0
19	143	740	521	302	140	62	25	6	2	0	0	0	0	0	0	0	0	0	0	0
20	118	696	505	307	157	74	31	11	3	1	0	0	0	0	0	0	0	0	0	0
21	93	624	472	301	168	85	40	16	6	2	1	0	0	0	0	0	0	0	0	0
22	68	516	402	277	172	98	52	26	13	7	3	1	1	0	0	0	0	0	0	0

## NWNG0806 ADCP 1292

Harmonic constants for constituent M2 for deployment NWNG0806.

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	593	64	299	36	265	71	18	27	292	A
02	568	65	301	38	268	73	19	28	294	A
03	543	66	304	40	269	75	20	29	295	A
04	518	66	305	42	272	75	20	30	296	A
05	493	64	307	43	275	75	20	32	297	A
06	468	63	309	45	278	75	19	34	299	A
07	443	63	311	47	280	76	20	36	300	A
08	418	65	313	49	281	78	22	36	302	A
09	393	64	316	51	283	78	22	37	304	A
10	368	62	319	52	288	78	21	39	306	A
11	343	62	323	57	292	80	23	42	309	A
12	318	62	329	65	296	85	26	47	311	A
13	293	65	339	76	299	94	33	51	315	A
14	268	69	344	85	301	102	39	53	317	A
15	243	76	350	93	303	111	47	54	320	A
16	218	81	354	102	303	119	54	55	321	A
17	193	86	357	110	303	126	61	56	321	A
18	168	93	358	118	303	134	67	57	321	A
19	143	97	358	123	302	141	70	57	321	A
20	118	102	359	129	303	147	73	56	322	A
21	93	104	360	131	303	149	77	57	321	A
22	68	102	1	129	302	145	77	57	322	A

Harmonic constants for constituent S2 for deployment NWNG0806.

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	593	25	324	10	277	26	7	17	319	A
02	568	25	325	10	281	26	7	18	320	A
03	543	23	325	9	285	25	6	18	320	A
04	518	22	326	10	293	23	5	22	321	A
05	493	21	331	10	307	23	4	23	327	A
06	468	20	335	11	318	22	3	28	331	A
07	443	18	338	12	327	22	2	33	334	A
08	418	16	343	13	338	21	1	39	341	A
09	393	17	349	14	336	22	3	39	344	A
10	368	20	354	16	329	25	5	39	344	A
11	343	17	358	17	336	24	5	44	348	A
12	318	14	7	19	346	23	4	54	353	A
13	293	14	16	22	349	26	5	60	356	A
14	268	13	30	26	349	28	8	67	356	A
15	243	14	33	29	350	31	9	68	357	A
16	218	16	39	32	352	34	11	68	360	A
17	193	17	49	34	354	36	13	71	1	A
18	168	19	58	39	358	41	16	74	4	A
19	143	19	61	40	358	41	17	75	5	A
20	118	20	60	41	359	42	17	74	5	A
21	93	23	65	42	358	43	20	74	5	A
22	68	29	59	45	353	47	25	69	5	A

## NWNG0806 ADCP 1292

Harmonic constants for constituent N2 for deployment NWNG0806.

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	593	16	273	8	233	17	5	23	266	A
02	568	16	272	8	229	17	5	23	265	A
03	543	16	276	8	230	17	5	23	268	A
04	518	17	281	10	235	19	6	25	272	A
05	493	18	287	12	237	20	8	28	274	A
06	468	18	294	15	246	21	9	35	277	A
07	443	18	303	17	253	22	10	43	280	A
08	418	19	302	17	250	23	11	41	279	A
09	393	21	301	18	244	25	13	38	279	A
10	368	22	298	19	242	26	13	36	278	A
11	343	20	294	16	243	23	11	35	276	A
12	318	18	299	14	251	20	9	35	282	A
13	293	16	306	15	269	21	7	41	290	A
14	268	15	316	18	277	22	8	52	293	A
15	243	15	330	20	282	23	10	56	298	A
16	218	19	337	22	284	26	13	51	306	A
17	193	22	340	24	281	28	16	51	305	A
18	168	22	337	26	282	31	15	54	302	A
19	143	24	336	27	278	32	17	50	303	A
20	118	23	333	30	279	34	16	58	296	A
21	93	26	334	31	280	36	18	54	300	A
22	68	26	346	33	279	36	22	60	300	A

Harmonic constants for constituent 01 for deployment NWNG0806.

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	593	5	60	1	302	5	1	175	241	A
02	568	5	61	1	296	5	1	174	242	A
03	543	5	61	1	330	5	1	180	241	A
04	518	6	61	1	356	6	1	3	61	A
05	493	5	59	1	281	5	1	173	240	A
06	468	5	52	1	271	5	1	171	233	A
07	443	5	58	1	316	5	1	179	238	A
08	418	6	63	1	360	6	1	3	63	A
09	393	5	61	0	270	5	0	176	241	A
10	368	7	51	2	300	7	2	175	232	A
11	343	7	48	1	298	7	1	176	229	A
12	318	8	50	1	318	8	1	180	230	A
13	293	8	44	1	312	8	1	180	224	A
14	268	6	38	2	276	6	1	172	220	A
15	243	7	56	1	290	7	1	175	237	A
16	218	8	75	2	0	8	2	4	74	A
17	193	9	72	2	5	9	1	4	71	A
18	168	8	57	2	315	8	2	177	238	A
19	143	7	59	5	318	7	5	167	247	A
20	118	7	64	6	334	7	6	0	64	A
21	93	6	105	6	351	7	4	140	314	A
22	68	7	94	3	311	7	2	159	280	A

## NWNG0806 ADCP 1292

Harmonic constants for constituent K1 for deployment NWNG0806.

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	593	4	292	3	178	4	2	156	126	A
02	568	4	292	2	158	4	1	156	121	A
03	543	4	298	2	157	4	1	157	124	A
04	518	3	284	2	161	4	2	150	120	A
05	493	4	289	3	163	4	2	143	129	A
06	468	4	292	3	172	5	2	154	126	A
07	443	5	291	3	189	5	3	171	116	A
08	418	4	295	3	183	4	2	163	124	A
09	393	5	290	2	137	5	1	154	115	A
10	368	6	278	3	153	6	2	159	107	A
11	343	5	277	3	170	5	3	166	104	A
12	318	4	284	3	177	4	2	165	113	A
13	293	6	307	4	183	6	3	149	144	A
14	268	6	320	4	180	7	2	154	149	A
15	243	6	327	2	183	6	1	161	152	A
16	218	6	320	3	185	6	2	154	150	A
17	193	5	303	6	160	7	2	132	143	A
18	168	8	318	6	148	10	1	141	142	A
19	143	7	334	5	140	9	1	146	150	C
20	118	10	352	6	114	11	5	157	161	C
21	93	14	23	5	86	14	5	11	27	C
22	68	11	14	14	84	15	10	62	65	C

## NWNG0806 Aanderaa 721

Deployment: NWNG0806                                  analyzed from beginning to end  
 Instrument no.: 721  
 Instrument type: Aanderaa  
 Latitude: 63° 06.080 N  
 Longitude: 06° 05.059 W  
 Bottom depth: 1796  
 Instrument depth: 685  
 Number of records: 8232  
 Time of first record: 2008 06 06 04 29  
 Time of last record: 2009 05 15 03 29  
 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	8232	0
Column 8 : Speed	8231	1
Column 9 : Direct	8232	0

### Comments

Residual current: 15 mm/sec towards: 143 degrees

### TIDAL ANALYSIS

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

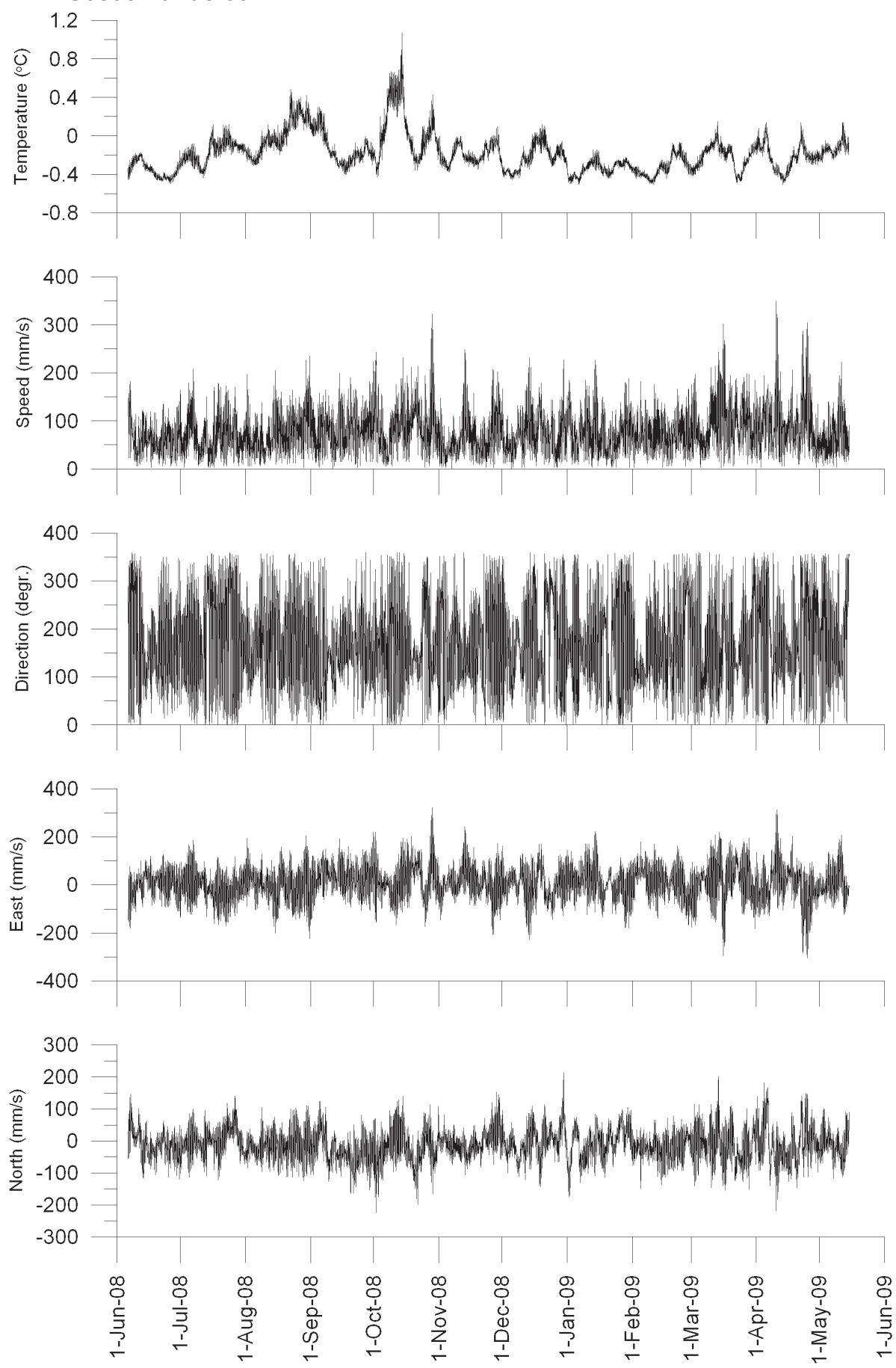
Const	Freq c/hr	E-amp mm/sec	E-gpl deg	N-amp1 mm/sec	N-gpl1 deg	Major mm/sec	Minor mm/sec	Incl deg	Grph1 deg	R
MM	.00151215	6	70	2	199	6	2	163	245	C
MSF	.00282193	3	330	1	95	3	1	169	147	C
Q1	.03721850	2	28	1	177	2	0	166	207	C
O1	.03873065	6	61	1	306	6	1	174	242	A
NO1	.04026859	2	139	1	358	2	1	156	326	A
P1	.04155259	1	305	1	157	1	0	161	128	A
K1	.04178075	4	283	3	178	4	3	163	114	A
N2	.07899925	14	287	8	245	16	5	25	279	A
M2	.08051140	65	292	26	250	68	17	18	288	A
L2	.08202355	4	311	3	253	4	2	29	295	A
S2	.08333334	27	315	8	246	27	8	7	313	A
K2	.08356149	6	320	2	265	7	2	10	318	A
MK3	.12229210	0	94	1	191	1	0	99	198	C
M4	.16102280	1	70	1	32	1	0	34	58	A
MS4	.16384470	1	192	1	66	1	1	137	38	A

### DIRECTIONAL CURRENT DISTRIBUTION (for all nonflagged observations in series)

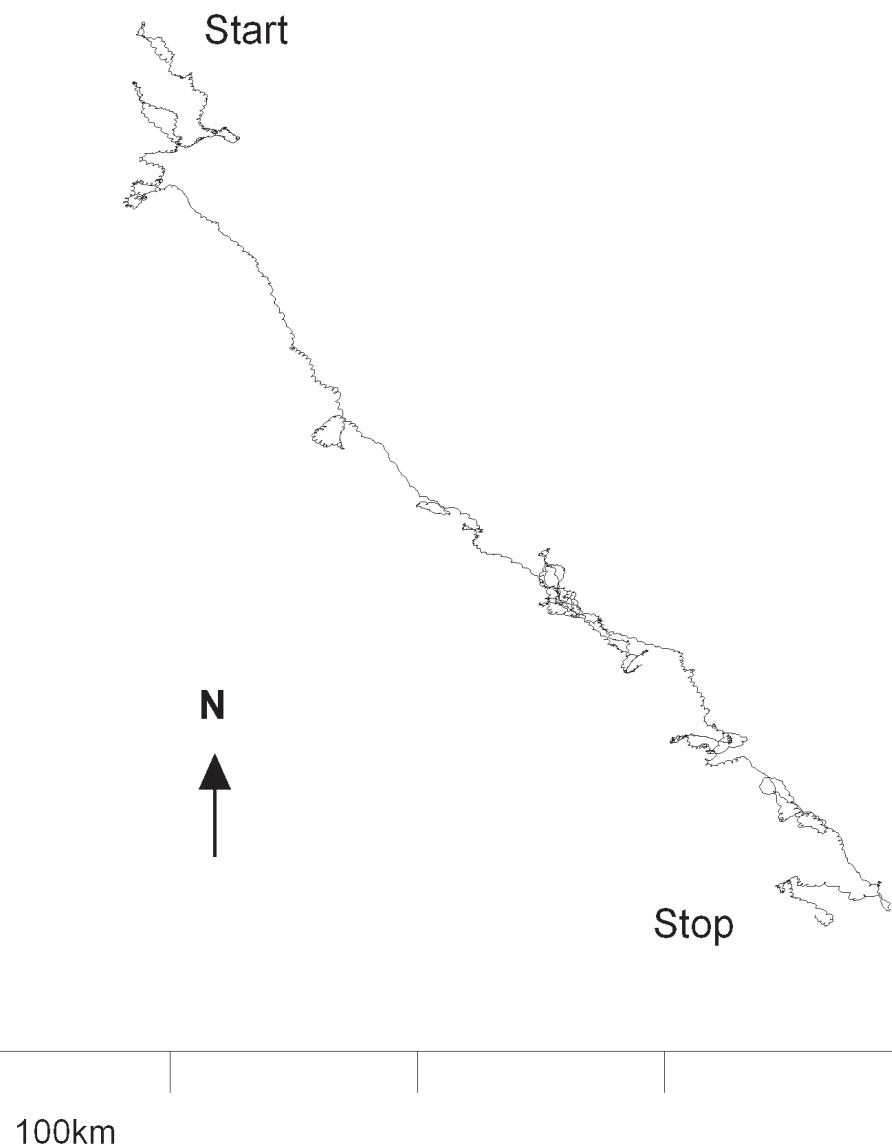
Relative number of observations in parts per thousand (ppt) grouped into speed and direction intervals (of 30 degree width centred around the directions shown)

Speed intervals (mm/s)	Direction intervals												All dir. Tot	Acc
	15	45	75	105	135	165	195	225	255	285	315	345		
0 - 50	19	26	31	31	31	29	28	29	27	22	19	17	307	307
50 - 100	21	31	48	55	46	35	44	47	43	31	19	15	434	741
100 - 150	5	15	28	35	20	11	12	21	24	16	6	4	197	938
150 - 200	1	4	9	11	5	2	1	3	7	4	1	0.49	48	986
200 - 300	0.12	1	2	3	1	0.24	0.24	1	3	1	0.36	0.12	13	999
300 - 400	0	0	0.12	0.36	0.24	0	0	0	0.12	0.12	0	0	1	1000
Total (ppt)	47	76	119	134	102	76	85	100	105	75	45	36		
Rel.flux (ppt)	40	74	130	154	102	66	74	98	117	79	38	28		
Avg.spd (mm/s)	66	76	85	90	78	67	68	76	87	82	67	61		
Max.spd (mm/s)	226	243	323	323	349	226	223	243	302	305	238	208		

## NWNG0806 Aanderaa 721



**NWNG0806 Aanderaa 721**



# NWSBo806

**Latitude:** 60°47.005'N

**Longitude:** 005°18.100'W

**Echo sounding depth:** 802 m

**Bottom depth corr.:** 784 m

**Time of deployment:** 7/6 - 2008 1451 UTC

**Time of recovery:** 17/5 - 2009 1500 UTC

## ADCP:

**Instrument no.:** RDI ADCP 1644

**Instrument frequency:** 75 kHz

**Height above bottom:** 108 m

**Depth:** 676 m (corr.)

**Time of first data:** 7/6 - 2008 1500 UTC

**Time of last data:** 17/5 - 2009 1440 UTC

**Sample interval:** 20 min

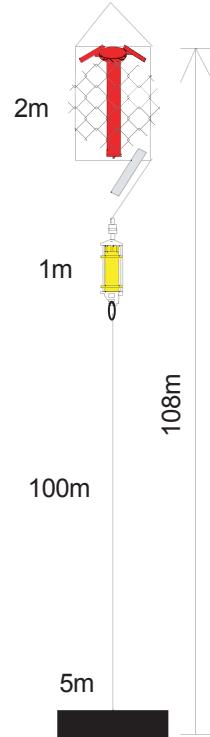
**No. of ensembles:** 24768

**Pings per ens.:** 1

**Binlength:** 25 m

**Depth of first bin:** 641 m (corr.)

**No. of bins:** 22



## Data:

All data ok.

## NWSB0806 ADCP 1644

Error statistics for deployment: NWSB0806 updated 2009/10/07

Surface distance not edited

Heading, pitch and roll not edited

Temperature edited by EJ in Aug 2009

Velocity edited up to and including bin 22 by EJ in Aug 2009

Intensity edited up to and including bin 22 by EJ in Sep 2009

Total number of ensembles: 24768

Interval between ensembles: 20 min

Original number of bins: 32

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: 2

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

Bin	Int. ens. flgd	Velocity ens. flgd	% flgd	Number of velocity gaps of length									
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	2	21	0	19	1	0	0	0	0	0	0	0	0
2	3	16	0	14	1	0	0	0	0	0	0	0	0
3	0	18	0	18	0	0	0	0	0	0	0	0	0
4	0	19	0	15	2	0	0	0	0	0	0	0	0
5	0	25	0	20	1	1	0	0	0	0	0	0	0
6	1	10	0	10	0	0	0	0	0	0	0	0	0
7	1	19	0	19	0	0	0	0	0	0	0	0	0
8	2	17	0	15	1	0	0	0	0	0	0	0	0
9	3	32	0	32	0	0	0	0	0	0	0	0	0
10	0	31	0	29	1	0	0	0	0	0	0	0	0
11	0	28	0	28	0	0	0	0	0	0	0	0	0
12	2	25	0	25	0	0	0	0	0	0	0	0	0
13	0	50	0	44	3	0	0	0	0	0	0	0	0
14	1	129	1	76	7	5	2	0	2	0	0	0	0
15	2	381	2	144	25	5	4	2	5	8	0	0	0
16	0	756	3	215	23	10	6	11	10	6	9	0	0
17	1	1453	6	289	68	30	12	12	26	18	10	3	0
18	2	2868	12	433	103	46	25	18	54	49	19	8	0
19	3	4674	19	544	158	81	48	37	68	57	47	19	0
20	1	6797	27	717	253	114	86	32	108	73	46	45	0
21	2	9076	37	803	304	139	91	68	129	106	56	66	3
22	1	11196	45	897	326	154	114	56	141	116	37	96	13

## NWSB0806 ADCP 1644

Deployment: NWSB0806 updated 2009/10/07

Instrument no.: 1644

Instrument freq.: 75

Latitude: 60 47.005 N

Longitude: 05 18.100 W

Bottom depth: 784

Instrument depth: 676

Center depth of first bin: 641

Bin length: 25

Number of bins: 22

Number of first ensemble: 286

Time of first ensemble: 2008 06 07 15 00

Number of last ensemble: 25053

Time of last ensemble: 2009 05 17 14 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	641	143	218	22	209	999
2	616	168	213	21	212	999
3	591	193	207	20	216	999
4	566	218	203	19	218	999
5	541	243	200	16	218	999
6	516	268	198	12	221	1000
7	491	293	194	10	224	999
8	466	318	189	10	220	999
9	441	343	187	10	205	999
10	416	368	189	12	196	999
11	391	393	192	14	192	999
12	366	418	197	15	192	999
13	341	443	204	12	189	998
14	316	468	211	10	176	995
15	291	493	218	10	157	985
16	266	518	225	12	142	969
17	241	543	233	14	135	941
18	216	568	242	17	127	884
19	191	593	252	20	116	811
20	166	618	264	25	100	726
21	141	643	283	30	87	634
22	116	668	301	40	75	548

## NWSB0806 ADCP 1644

Frequency of high speeds.

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

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	641	850	519	222	66	18	4	1	0	0	0	0	0	0	0	0	0	0	0
2	616	842	503	207	60	15	3	0	0	0	0	0	0	0	0	0	0	0	0
3	591	834	483	191	50	12	2	0	0	0	0	0	0	0	0	0	0	0	0
4	566	824	470	182	44	9	1	0	0	0	0	0	0	0	0	0	0	0	0
5	541	817	462	172	42	6	1	0	0	0	0	0	0	0	0	0	0	0	0
6	516	813	448	168	39	6	1	0	0	0	0	0	0	0	0	0	0	0	0
7	491	803	432	159	38	6	1	0	0	0	0	0	0	0	0	0	0	0	0
8	466	793	410	150	36	7	1	0	0	0	0	0	0	0	0	0	0	0	0
9	441	787	399	146	39	6	1	0	0	0	0	0	0	0	0	0	0	0	0
10	416	790	406	152	42	8	1	0	0	0	0	0	0	0	0	0	0	0	0
11	391	794	420	163	43	8	1	0	0	0	0	0	0	0	0	0	0	0	0
12	366	801	440	176	50	9	1	0	0	0	0	0	0	0	0	0	0	0	0
13	341	818	462	191	58	11	2	0	0	0	0	0	0	0	0	0	0	0	0
14	316	832	482	205	66	15	2	0	0	0	0	0	0	0	0	0	0	0	0
15	291	829	495	227	77	23	6	1	0	0	0	0	0	0	0	0	0	0	0
16	266	826	507	240	85	27	8	3	1	0	0	0	0	0	0	0	0	0	0
17	241	811	515	252	95	32	11	5	2	1	1	0	0	0	0	0	0	0	0
18	216	767	502	261	107	39	14	6	3	1	1	1	0	0	0	0	0	0	0
19	191	707	476	258	116	47	17	8	3	2	1	1	0	0	0	0	0	0	0
20	166	640	447	255	123	53	21	9	4	2	1	1	0	0	0	0	0	0	0
21	141	567	415	252	130	60	26	12	5	3	2	2	1	1	1	0	0	0	0
22	116	495	377	237	131	66	29	13	7	4	3	2	2	2	1	1	1	1	1

## NWSB0806 ADCP 1644

Harmonic constants for constituent M2 for deployment NWSB0806.

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	641	252	246	125	196	267	91	20	239	A
02	616	244	248	125	201	261	85	22	240	A
03	591	236	249	123	206	254	79	23	242	A
04	566	229	251	124	211	250	73	25	244	A
05	541	221	253	125	217	245	66	27	245	A
06	516	212	254	127	222	240	60	29	246	A
07	491	202	256	128	228	233	52	31	248	A
08	466	188	257	127	235	223	41	33	250	A
09	441	172	258	130	242	213	30	37	252	A
10	416	157	260	135	249	206	21	41	255	A
11	391	141	263	139	256	197	12	45	259	A
12	366	129	265	144	262	194	6	48	263	A
13	341	121	268	149	264	192	7	51	266	A
14	316	115	271	156	266	194	8	53	268	A
15	291	114	272	162	267	198	9	55	269	A
16	266	115	275	168	266	203	14	56	269	A
17	241	120	276	175	265	211	18	56	269	A
18	216	124	277	180	265	217	22	56	268	A
19	191	131	276	186	265	227	20	55	268	A
20	166	134	277	193	265	234	24	56	269	A
21	141	137	278	201	264	242	28	56	268	A
22	116	140	277	205	263	247	28	56	268	A

Harmonic constants for constituent S2 for deployment NWSB0806.

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	641	83	288	46	243	90	30	24	279	A
02	616	81	288	46	247	89	27	25	280	A
03	591	78	289	45	251	87	25	27	281	A
04	566	76	290	45	255	85	23	28	282	A
05	541	74	291	44	259	84	21	29	284	A
06	516	72	293	45	263	83	19	30	285	A
07	491	70	293	47	268	82	17	33	286	A
08	466	65	295	47	273	79	14	35	287	A
09	441	60	297	49	278	76	12	39	290	A
10	416	55	297	47	283	72	9	40	291	A
11	391	53	292	47	286	71	3	42	289	A
12	366	50	285	48	293	69	5	44	289	C
13	341	45	283	51	299	67	10	49	292	C
14	316	41	288	53	307	66	11	53	300	C
15	291	39	297	59	308	70	6	57	304	C
16	266	37	304	61	306	71	1	58	305	C
17	241	41	310	63	303	75	4	57	305	A
18	216	50	320	66	304	82	11	53	310	A
19	191	55	324	72	304	89	15	53	311	A
20	166	59	326	74	304	93	18	52	313	A
21	141	55	319	80	301	96	14	56	307	A
22	116	55	320	79	299	95	16	56	306	A

## NWSB0806 ADCP 1644

Harmonic constants for constituent N2 for deployment NWSB0806.

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	641	62	205	26	123	63	25	4	203	A
02	616	63	208	27	131	64	26	6	206	A
03	591	63	212	27	140	64	25	9	208	A
04	566	62	216	27	151	63	24	12	211	A
05	541	60	222	30	165	62	24	18	215	A
06	516	56	228	31	178	60	22	23	219	A
07	491	51	233	30	189	56	19	27	223	A
08	466	46	236	28	200	52	15	29	227	A
09	441	42	236	29	209	50	11	33	227	A
10	416	38	240	32	217	48	10	40	231	A
11	391	33	250	33	227	46	9	45	239	A
12	366	31	258	35	234	45	10	49	244	A
13	341	27	268	37	242	45	10	55	251	A
14	316	27	277	42	246	48	12	59	254	A
15	291	27	279	43	246	49	13	60	254	A
16	266	28	277	43	244	49	13	59	253	A
17	241	29	276	44	244	51	13	59	253	A
18	216	29	276	44	246	51	12	58	255	A
19	191	31	280	46	251	54	13	58	259	A
20	166	26	280	47	250	52	12	63	256	A
21	141	27	284	46	248	52	14	62	256	A
22	116	23	273	45	248	50	9	64	253	A

Harmonic constants for constituent 01 for deployment NWSB0806.

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	641	31	342	16	31	33	11	22	351	C
02	616	30	341	16	31	32	11	22	349	C
03	591	29	340	15	31	31	11	21	348	C
04	566	29	339	15	31	31	11	21	347	C
05	541	29	338	16	31	31	12	21	347	C
06	516	27	338	16	31	29	12	23	348	C
07	491	27	339	15	31	29	11	23	349	C
08	466	27	339	15	34	28	11	21	348	C
09	441	25	337	13	32	27	10	20	345	C
10	416	24	335	12	32	25	10	18	342	C
11	391	23	336	11	32	24	9	17	342	C
12	366	24	336	11	34	24	9	16	342	C
13	341	22	337	10	38	23	9	14	343	C
14	316	22	336	8	37	22	7	11	339	C
15	291	21	333	8	31	22	7	13	337	C
16	266	19	328	8	33	20	7	11	332	C
17	241	18	327	7	48	18	7	3	328	C
18	216	17	332	7	40	17	6	10	336	C
19	191	20	336	6	21	20	4	13	339	C
20	166	22	343	10	26	23	6	20	349	C
21	141	22	351	16	10	27	4	35	357	C
22	116	22	353	19	6	29	3	42	359	C

## NWSB0806 ADCP 1644

Harmonic constants for constituent K1 for deployment NWSB0806.

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	641	16	221	8	264	17	5	20	227	C
02	616	15	219	8	264	17	5	22	226	C
03	591	16	219	7	263	17	5	20	225	C
04	566	16	217	7	264	16	5	17	222	C
05	541	15	211	6	270	16	5	14	216	C
06	516	15	209	7	271	16	6	15	215	C
07	491	14	208	6	273	14	6	13	213	C
08	466	13	202	6	285	13	6	4	203	C
09	441	11	196	5	293	11	5	176	14	C
10	416	11	187	6	306	11	5	159	357	C
11	391	10	180	4	278	10	4	177	359	C
12	366	11	162	6	222	11	5	19	170	C
13	341	12	147	9	190	14	5	32	160	C
14	316	10	154	9	172	13	2	42	162	C
15	291	8	175	8	167	12	1	46	171	A
16	266	10	200	8	170	12	3	38	188	A
17	241	12	215	6	185	13	3	23	210	A
18	216	15	216	6	235	16	2	20	218	C
19	191	18	227	9	257	20	4	25	232	C
20	166	27	234	14	263	30	6	25	240	C
21	141	30	236	16	277	33	9	24	244	C
22	116	29	240	16	280	31	9	25	248	C

# NWSCo806

**Latitude:** 60°34.000'N

**Longitude:** 004°46.000'W

**Echo sounding depth:** 1090 m

**Bottom depth corr.:** 1073 m

**Time of deployment:** 7/6 - 2008 1923 UTC

**Time of recovery:** 17/5 - 2009 1935 UTC

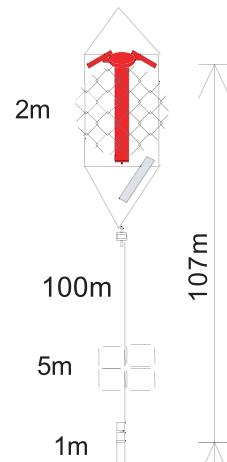
## ADCP:

**Instrument no.:** RDI ADCP 1245

**Instrument frequency:** 75 kHz

**Height above bottom:** 419 m (corr.)

**Depth:** 654 m (corr.)



## Aanderaa:

**Instrument no.:** RCM9 718

**Height above bottom:** 312 m

300m

**Depth:** 761 m (corr.)

312m

**Time of first data:** 7/6 - 2008 1929 UTC

**Time of last data:** 4/7 - 2008 0229 UTC

**Sample interval:** 60 min

5m

**No. of records:** 632

1m  
5m

## Data:

**No ADCP data because of instrument leakage.**

**Aanderaa data only for less than a month because of instrument failure.**

## NWSC0806 AANDERAA 718

Deployment: NWSC0806    analyzed from beginning to end  
Instrument no.: 718  
Instrument type: Aanderaa  
Latitude: 60 34.000 N  
Longitude: 04 46.000 W  
Bottom depth: 1073  
Instrument depth: 761  
Number of records: 632  
Time of first record: 2008 06 07 19 29  
Time of last record: 2008 07 04 02 29  
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	632	0
Column 8 : Speed	632	0
Column 9 : Direct	632	0

### Comments

Residual current: 40 mm/sec towards: 207 degrees

### TIDAL ANALYSIS

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

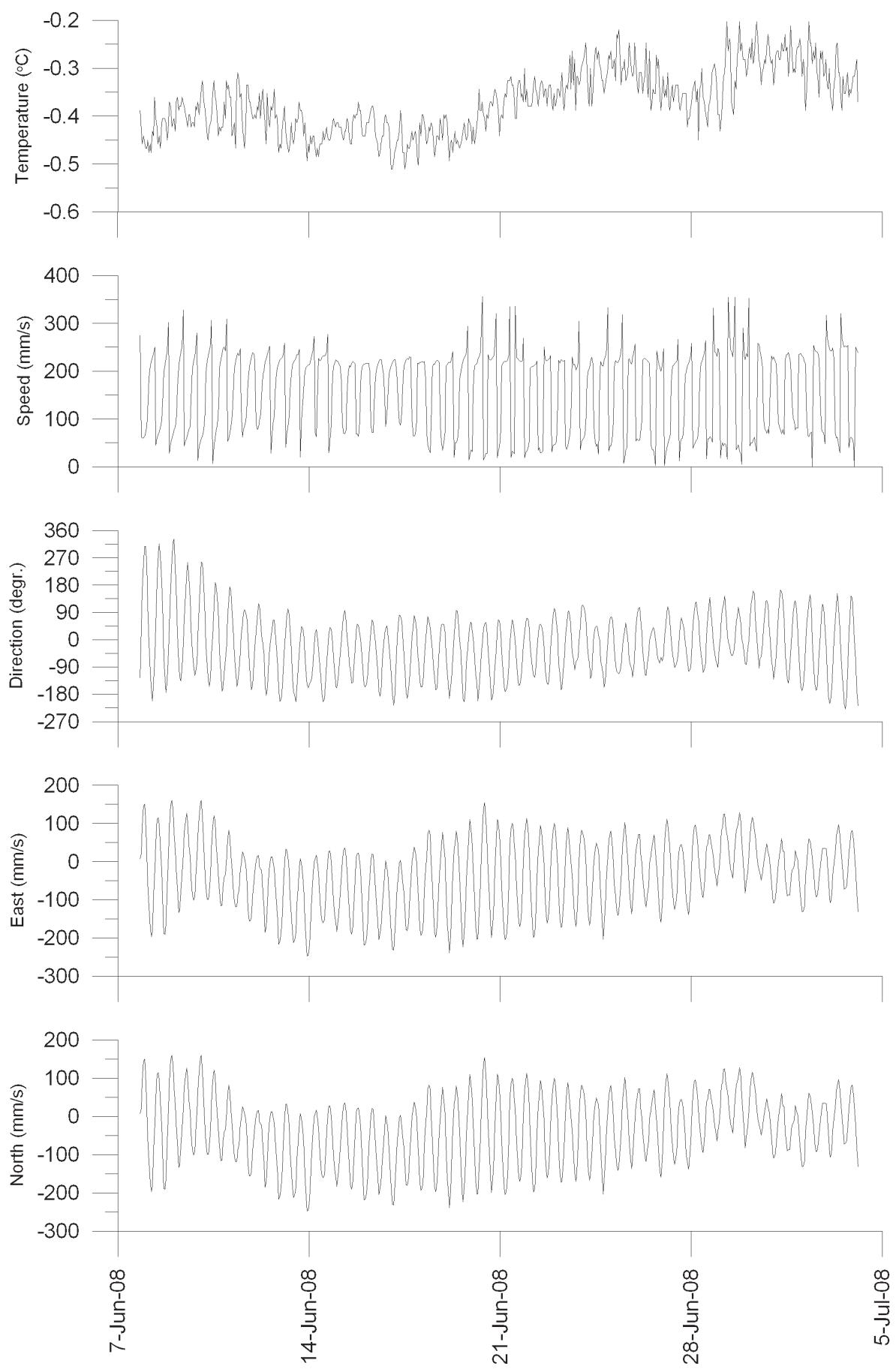
Const	Freq c/hr	E-amp mm/sec	E-gpl deg	N-amp mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
MSF	.00282193	20	157	12	136	23	4	31	152	A
O1	.03873065	10	22	10	25	14	0	45	24	C
P1	.04155259	2	233	1	341	2	1	168	47	C I
K1	.04178075	5	245	3	347	5	2	173	62	C
N2	.07899925	26	239	21	228	34	3	39	234	A I
M2	.08051140	134	264	116	253	176	17	41	260	A
S2	.08333334	20	321	36	318	41	1	61	319	A
M4	.16102280	3	89	7	346	7	3	97	343	A
MS4	.16384470	2	18	2	23	2	0	44	21	C

### DIRECTIONAL CURRENT DISTRIBUTION (for all nonflagged observations in series)

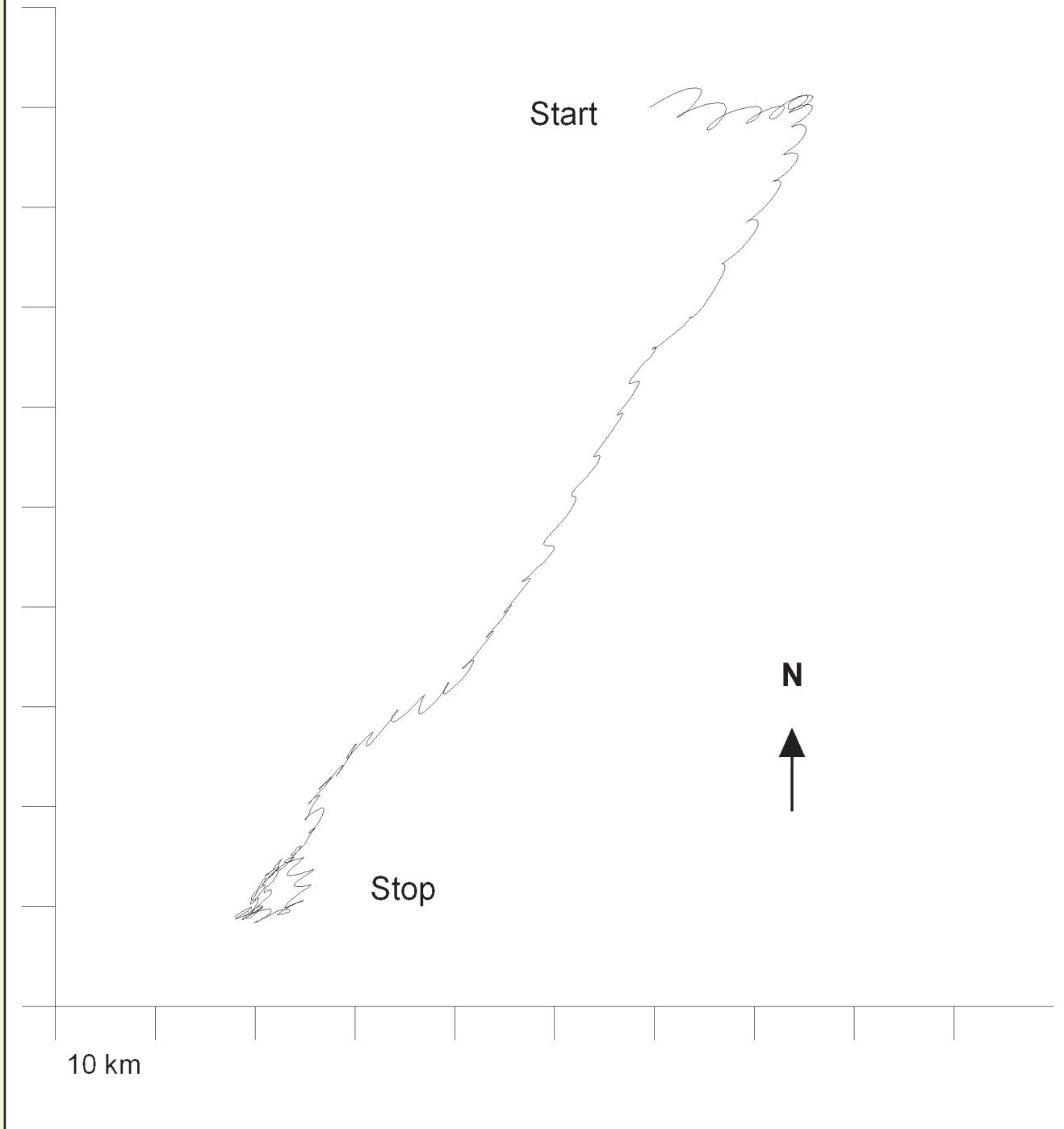
Relative number of observations in parts per thousand (ppt) grouped into speed and direction intervals (of 30 degree width centred around the directions shown)

Speed intervals (mm/s)	Direction intervals												All dir. Tot Acc	
	15	45	75	105	135	165	195	225	255	285	315	345		
0 - 50	22	24	32	14	14	14	11	17	19	9	9	9	196	196
50 - 100	21	51	35	21	8	9	24	52	30	5	5	3	263	459
100 - 150	13	59	28	6	0	3	19	68	11	2	0	0	209	668
150 - 200	2	21	17	2	0	0	21	85	16	0	0	0	163	831
200 - 300	0	8	11	0	0	0	5	123	6	0	0	0	153	984
300 - 400	0	3	9	0	0	0	0	3	0	0	0	0	0	16 1000
Total (ppt)	57	165	133	43	22	27	79	350	82	16	14	13		
Rel.flux (ppt)	33	152	129	25	7	12	76	480	71	7	5	4		
Avg.spd (mm/s)	71	113	119	71	42	56	117	169	105	51	41	38		
Max.spd (mm/s)	164	311	349	194	88	144	243	317	240	126	65	88		

### NWSC0806 Aanderaa 718



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