HAVSTOVAN
FAROE MARINE RESEARCH INSTITUTE

THOR ADCP Deployments in Faroese Waters 2011 - 2012

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TECHNICAL REPORT

Innihald

Introduction

This report documents 11 ADCP deployments in Faroese waters in 2011 – 2012. Aanderaa Current Meters are included in two, MicroCats in four, and a Starmon temperature sensor in one of the deployments. 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. The deployments are listed in Tables 1 and 2.

At sites NWFB, NWFC, NWNB, NWNG, NWSB, NWSC, NWZB, and NWSC, 75 kHz RDI ADCPs were placed in the top of single-point moorings. At sites NWNA, NWZA, and NWZQ, "shallow-water" rigs were used, where a RDI ADCP was placed on the bottom inside a protective aluminum frame.

For each deployment, the ADCP measures the velocity averaged over a number of depth layers ("bins"). At 20 minute intervals, the ADCP records the data from all bins into "ensembles".

An Aanderaa current meter on the mooring line below two of the ADCPs recorded speed, direction and temperature at 60 minute intervals. The MicroCats attached to four of the ADCPs recorded temperature, salinity and pressure every 10 minutes. The Starmon attached to one of the ADCPs recorded temperature every 10 minutes.

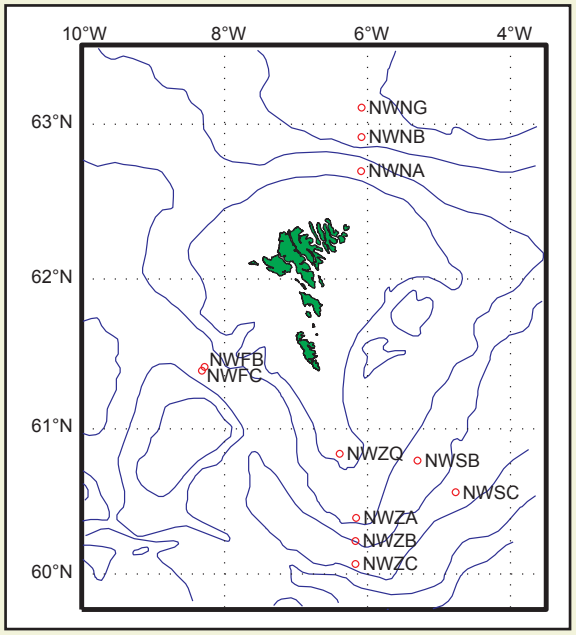


Figure 1. ADCP mooring sites in Faroese waters 2011-2012 superposed on a map with the bottom topography. Each site is indicated by a four-letter label.

Table 1. List of deployments with information on ADCP number, type and settings.

Deployment	Instr. No	ADCP type	Freq. kHz	Pings per ens	Binlng. m
NWFB1106	1642	Broadband	75	1	25
NWFC1106	1285	Broadband	75	1	25
NWNA1106	1279	Broadband	150	1	25
NWNB1106	1577	Broadband	75	1	25
NWNG1106	1292	Broadband	75	1	25
NWSB1106	8552	Long Ranger	75	10	10
NWSC1106	1644	Broadband	75	1	25
NWZA1106	3368	Long Ranger	75	10	10
NWZB1109	13287	Long Ranger	75	10	10
NWZC1109	13288	Long Ranger	75	10	10
NWZQ1109	0936	WH Sentinel	300	24	8

Table 2. 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	Depthrange	Comments
NWFB1106	808	20	2011 06 12-2012 05 22	345	16	392- 767	Microcat
NWFC1106	842	20	2011 06 12-2012 05 22	345	25	201- 801	
NWNA1106	298	20	2011 06 10-2012 05 20	345	23	61- 281	
NWNB1106	951	20	2011 06 10-2012 05 20	345	23	112- 662	
NWNG1106	1813	20	2011 06 10-2012 05 20	345	22	85- 610	Aanderaa
NWSB1106	792	20	2011 06 11-2012 05 19	342	60	76- 666	
NWSC1106	1063	20	2011 06 11-2012 05 18	342	22	84- 609	Aanderaa
NWZA1106	416	20	2011 06 11-2012 05 18	342	36	47- 397	Microcat
NWZB1109	1165	20	2011 09 04-2012 05 18	257	60	140- 730	Microcat
NWZC1109	1079	20	2011 09 04-2012 05 18	257	60	90- 680	Microcat
NWZQ1109	165	20	2011 09 04-2012 05 19	258	17	26- 154	Starmon

In this deployment period, ADCPs were deployed along two sections in the Faroe Shetland Chanel (FSC). Along the original S-section, two ADCPs were deployed in Faroese waters at the two deployment sites that mainly have been occupied since 1994. The data from this section have a very high variability for the Atlantic inflow which makes it difficult to estimate the transports. A test was therefore done to observe the current at the new Z-section, since an investigation of drifter data show a more continuous inflow west of 6 °W. In this test deployment, four ADCPs were deployed in Faroese waters. The data from the Faroese deployments in the FSC will be combined with data from Scottish deployments and a comparison of the data from these two sections will be presented in a separate report.

Quality control and calibration

The ADCP data have been quality controlled using two different procedures. First, the data have been processed in an automatic routine where threshold values for maximum speed, maximum vertical velocity and minimum mean correlation were set. Also, error velocities deviating more than a selected number times the standard deviation from the mean error velocity were error flagged. Speed spikes are calculated in a similar manner selecting a number of standard deviations and then error flagging those values where u or v deviated more than the threshold from a 3 point median filtered u and v series.

Next, the ADCP data were quality controlled by the usual standard procedure, which is done manually using an interactive graphical software package developed by Faroe Marine Research Institute (FAMRI), based upon MATLAB. This latter editing has been done mainly to remove single points that were not flagged by the automatic routine. 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 at sites NWNB, NWNG, and NWSC are found using the data from the surface echo. The instrument depths at sites NWFC, NWNA, and NWZQ are found from the echo sounding depths (corrected for change in sound velocity) and the length of the mooring line. The instrument depths at sites NWSB and NWZC are found from the ADCP pressure measurements, while the instrument depths at sites NWFB, NWZA, and NWZB are found from the MicroCat pressure measurements. Here the MicroCat pressure measurements showed that the instrument at NWZB frequently was dragged down by as much as 200 m, while the instrument at NWZC occasionally was dragged down by almost 60 m. For these two series, the depths of the bins were rearranged for each ensemble according to the MicroCat measurements. The final data sets include only the rearranged bins with approximately 50% data or more.

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.

At NWZC, post deployment tests of the Long Ranger ADCP showed that it had a bad beam. A 3-beam solution was sought, but since the instrument was set up to average 10 pings, the beam velocities were not directly available. The beam velocities were therefore calculated from the earth velocities by reversing the Beam-to-Instrument and Instrument-to-Earth transformations in the ADCP Coordinate Transformation booklet from RD Instruments. Plots of the individual beam velocities confirmed that beam 1 was bad and had beam velocities close to zero. Earth velocities were recalculated based on the three good beams and by setting the error velocitiy to zero to reproduce values for beam 1. The accuracy of these velocities is dependent on how much the instrument is rotating during the ensemble interval. Throughout the deployment, pitch and roll were very small. If the instrument heading is fixed, the recalculated velocities should therefore be fairly accurate, but if the instrument is rotating heavily, the accuracy is low. Inspection of the instrument heading data showed that generally the instrument rotates slowly, but occasionally rotates by 180° from one ensemble to the next. It was thus concluded that the transformation method was applicable, but the data must be treated with this in mind.

At NWZC the MicroCat had a depth dependant pressure offset. These data were recalculated by a linear regression of the MicroCat depth readings on the ADCP depth readings.

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.

The pressure data from the MicroCats and the temperature data from the MicroCats and Starmon instruments have been quality controlled by a standard procedure based upon data variation with time in relation to neighboring values (spikes). The editing has been done manually using an interactive graphical software package developed by FAMRI, based upon MATLAB. The salinity data from the MicroCats have not been edited and must be treated with caution.

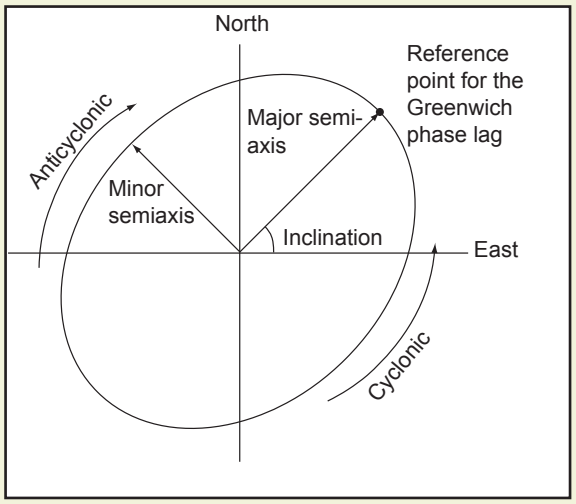


Figure 2. Parameters of the tidal ellipse for a given constituent. The reference point for the Greenwich phase lag is always chosen to be above the east-west axis.

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 M2, S2, N2, O1, and K1. Each table lists for each bin the amplitude and Greenwich phase lag for the east and north velocity components and lists also major and minor 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.

The data from the Starmon is presented on one page showing a plot of the temperature as a function of time.

On the following pages, the data descriptions from each deployment are presented in the same sequence as Tables 1 and 2. For each deployment, the ADCP data are presented first, followed by possible Aanderaa, MicroCat, or Starmon data.

NWFB1106

Latitude: 61°24.988´N

Longitude: 008°16.975´W

Echo sounding depth: 825 m

Bottom depth corr.: 808 m (MicroCat)

Time of deployment: 12/6 - 2011 0626 UTC

Time of recovery: 22/5 - 2012 0945 UTC

ADCP:

Instrument no.: RDI ADCP 1642

Instrument frequency: 75 kHz

Height above bottom: 6 m

Depth: 802 m (corr.)

Time of first data: 12/6 - 2011 0700 UTC

Time of last data: 22/5 - 2012 0920 UTC

Sample interval: 20 min

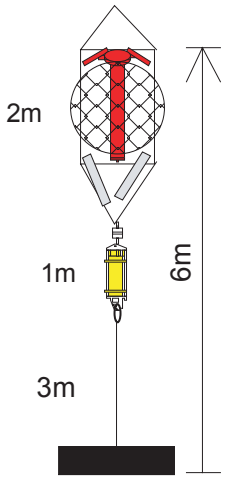
No. of ensembles: 24848

Pings per ens.: 1

Binlength: 25 m

Depth of first bin: 767 m (corr.)

No. of bins: 16



MicroCat:

Instrument no.: 1993

Height above bottom: 5 m

Time of first data: 12/6 – 2011 0650 UTC

Time of last data: 22/5 – 2012 0940 UTC

Sample interval: 10 min

No. of ensembles: 49698

Instrument depth: 803 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 has not been edited.

NWFB1106 ADCP 1642

Error statistics for deployment: NWFB1106 updated 2012/09/04

Surface distance not edited
Heading, pitch and roll not edited
Temperature edited by EVM in Sep 2012
Velocity edited up to and including bin 16 by KMHL in Sep 2012
Intensity edited up to and including bin 16 by EVM in Sep 2012

Total number of ensembles: 24848
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: 24848

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

Bin	Int. ens. flgd	Velocity ens. flgd	Velocity % flgd	Number of velocity gaps of length 1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	0	413	2	229	25	21	7	3	4	0	0	0	0
2	3	116	0	99	7	1	0	0	0	0	0	0	0
3	0	102	0	86	6	0	1	0	0	0	0	0	0
4	0	117	0	90	10	1	1	0	0	0	0	0	0
5	1	119	0	97	9	0	1	0	0	0	0	0	0
6	0	152	1	120	14	0	1	0	0	0	0	0	0
7	0	236	1	169	24	4	0	0	1	0	0	0	0
8	2	342	1	248	35	8	0	0	0	0	0	0	0
9	0	565	2	430	50	7	1	2	0	0	0	0	0
10	1	598	2	442	57	5	4	1	1	0	0	0	0
11	0	525	2	367	60	5	3	1	1	0	0	0	0
12	0	395	2	295	31	9	1	0	1	0	0	0	0
13	0	344	1	240	28	12	1	0	1	0	0	0	0
14	0	386	2	195	35	7	5	4	4	2	0	0	0
15	0	619	2	235	41	12	11	2	6	3	2	0	1
16	0	1400	6	396	97	37	19	11	26	13	1	2	1

NWFB1106 ADCP 1642

Deployment: NWFB1106 updated 2012/09/04
Instrument no.: 1642
Instrument freq.: 75
Latitude: 61 24.988 N
Longitude:08 16.975 W
Bottom depth: 808
Instrument depth: 802
Center depth of first bin: 767
Bin length: 25
Number of bins: 16
Number of first ensemble: 394
Time of first ensemble: 2011 06 12 07 00
Number of last ensemble: 25241
Time of last ensemble: 2012 05 22 09 20
Time between ensembles (min.): 20
All directions have been corrected by adding: -7.0

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	767	41	957	951	302	983
2	742	66	1029	1024	305	995
3	717	91	1055	1049	307	996
4	692	116	1059	1054	309	995
5	667	141	1051	1045	309	995
6	642	166	1017	1010	311	994
7	617	191	937	926	312	991
8	592	216	801	782	315	986
9	567	241	628	593	317	977
10	542	266	461	399	319	976
11	517	291	341	243	320	979
12	492	316	270	136	321	984
13	467	341	233	68	323	986
14	442	366	216	25	330	984
15	417	391	211	8	84	975
16	392	416	214	29	119	944

NWFB1106 ADCP 1642

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

Bin no.	Depth m	Speed (cm/s) 10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	767	983	983	983	983	981	970	933	835	642	391	177	53	10	1	0	0	0	0
2	742	995	995	995	995	994	987	967	914	792	587	347	145	36	5	0	0	0	0
3	717	996	996	996	996	995	988	972	927	825	645	416	196	54	7	0	0	0	0
4	692	995	995	995	995	994	988	972	927	825	657	434	210	55	7	1	0	0	0
5	667	995	995	995	995	994	986	966	913	802	635	423	207	54	7	1	0	0	0
6	642	994	994	994	991	984	966	930	854	731	562	373	186	47	6	0	0	0	0
7	617	990	986	977	959	933	889	824	722	587	442	299	144	34	4	0	0	0	0
8	592	976	949	914	865	802	724	630	522	417	314	195	80	17	2	0	0	0	0
9	567	943	871	783	683	593	505	421	333	248	161	81	26	5	1	0	0	0	0
10	542	906	759	608	489	388	297	222	159	105	57	23	6	1	0	0	0	0	0
11	517	874	659	451	304	208	144	98	63	34	15	6	1	0	0	0	0	0	0
12	492	849	571	326	186	109	63	35	18	9	3	1	0	0	0	0	0	0	0
13	467	827	511	258	120	55	23	10	4	2	1	0	0	0	0	0	0	0	0
14	442	812	476	224	89	31	9	3	0	0	0	0	0	0	0	0	0	0	0
15	417	796	464	210	78	23	6	1	0	0	0	0	0	0	0	0	0	0	0
16	392	775	458	212	81	22	6	1	0	0	0	0	0	0	0	0	0	0	0

NWFB1106 ADCP 1642

Harmonic constants for constituent M2 for deployment NWFB1106.

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	767	28	68	21	330	28	20	169	256	A
02	742	33	71	18	328	33	17	170	256	A
03	717	34	77	17	325	35	15	166	264	A
04	692	33	87	15	317	35	11	162	273	A
05	667	31	97	14	303	34	6	157	281	A
06	642	30	117	16	276	34	5	153	292	C
07	617	36	148	18	256	37	17	169	323	C
08	592	45	169	16	242	45	15	7	172	C
09	567	49	189	17	211	52	6	18	191	C
10	542	51	217	37	189	61	14	35	208	A
11	517	59	242	65	182	76	44	51	207	A
12	492	67	254	85	178	89	63	68	194	A
13	467	71	259	94	178	96	69	76	189	A
14	442	70	265	100	181	100	69	82	186	A
15	417	70	270	101	183	101	70	86	185	A
16	392	72	274	102	183	102	72	91	182	A

Harmonic constants for constituent S2 for deployment NWFB1106.

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	767	13	134	7	41	13	7	177	316	A
02	742	14	131	7	46	14	7	3	130	A
03	717	13	134	7	45	13	7	1	134	A
04	692	10	134	6	21	11	5	163	323	A
05	667	7	143	5	341	8	1	145	329	A
06	642	4	183	9	315	9	3	109	321	C
07	617	5	205	11	321	11	4	104	326	C
08	592	7	210	9	343	10	4	123	358	C
09	567	10	230	5	312	10	5	5	233	C
10	542	16	269	13	231	20	7	38	254	A
11	517	25	283	23	216	29	19	39	255	A
12	492	29	286	30	213	34	25	50	245	A
13	467	28	294	35	217	36	26	67	234	A
14	442	28	303	38	222	39	27	77	231	A
15	417	27	312	41	225	41	27	86	228	A
16	392	27	318	44	225	44	27	93	224	A

NWFB1106 ADCP 1642

Harmonic constants for constituent N2 for deployment NWFB1106.

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	767	7	57	0	139	7	0	0	57	C
02	742	8	59	2	182	8	2	172	238	C
03	717	8	62	3	192	9	2	168	239	C
04	692	10	66	2	216	10	1	168	244	C
05	667	10	54	4	269	11	2	163	238	A
06	642	9	40	7	262	10	4	144	235	A
07	617	8	64	7	240	10	0	138	242	C
08	592	10	91	8	246	13	3	142	261	C
09	567	8	81	10	249	13	1	129	254	C
10	542	4	70	11	235	12	1	110	237	C
11	517	3	234	14	201	14	1	81	202	A
12	492	10	241	19	174	20	9	76	180	A
13	467	13	245	22	168	23	12	80	174	A
14	442	14	250	23	166	23	14	84	170	A
15	417	14	251	24	168	25	14	84	171	A
16	392	16	257	24	167	24	16	90	167	A

Harmonic constants for constituent O1 for deployment NWFB1106.

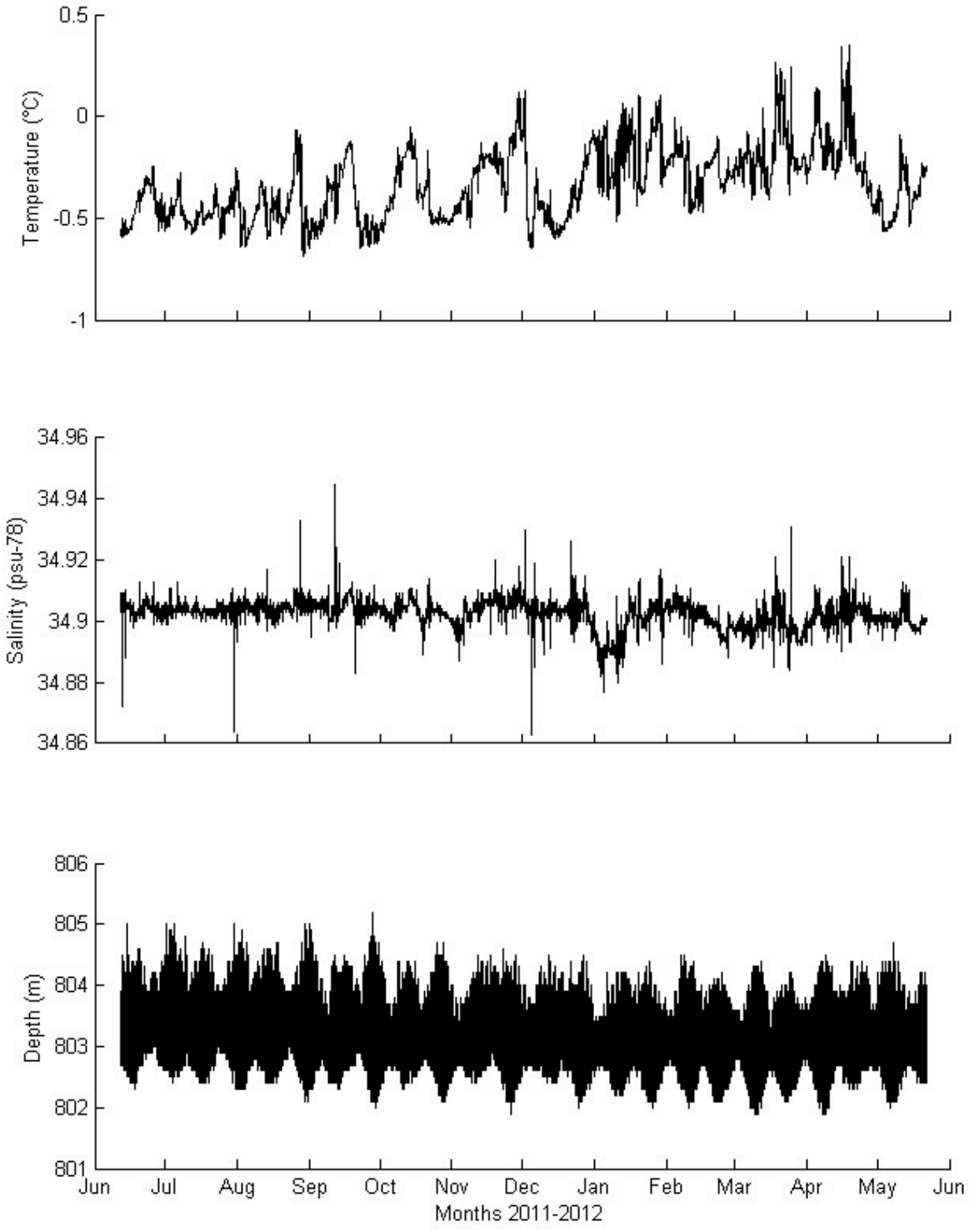
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	767	16	326	7	130	18	2	157	143	C
02	742	18	327	9	132	20	2	155	144	C
03	717	20	331	10	138	23	2	153	148	C
04	692	20	335	11	137	23	3	152	151	C
05	667	23	338	12	136	26	4	154	154	C
06	642	29	340	14	142	32	4	155	157	C
07	617	34	341	21	154	40	2	148	159	C
08	592	36	344	29	160	46	2	142	162	C
09	567	34	351	29	162	45	3	140	167	C
10	542	27	1	22	165	35	5	141	174	C
11	517	23	5	19	173	29	3	140	180	C
12	492	19	8	18	177	26	3	136	183	C
13	467	16	13	17	180	23	3	132	186	C
14	442	14	19	15	181	20	3	134	190	C
15	417	13	26	13	189	18	3	135	197	C
16	392	13	21	13	195	19	1	134	198	C

NWFB1106 ADCP 1642

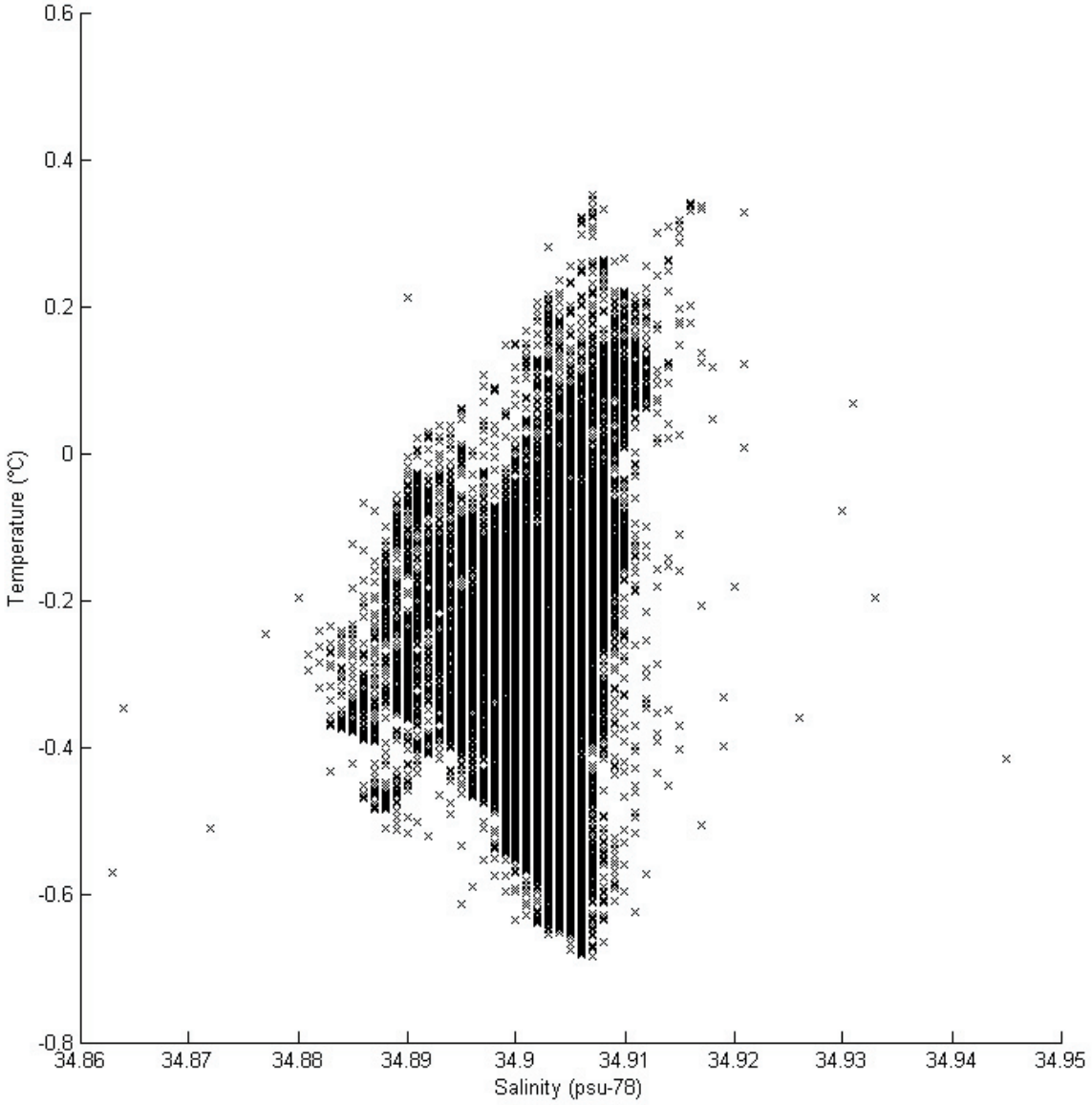
Harmonic constants for constituent K1 for deployment NWFB1106.

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	767	17	220	8	49	19	1	155	41	A
02	742	20	222	9	42	22	0	154	42	A
03	717	20	221	12	51	23	2	150	44	A
04	692	20	227	12	46	23	0	148	47	C
05	667	21	231	13	44	24	1	148	49	C
06	642	25	241	14	49	29	3	150	58	C
07	617	32	244	21	65	38	0	147	64	A
08	592	34	241	29	68	45	2	140	64	A
09	567	30	240	30	65	43	2	135	62	A
10	542	22	240	28	60	35	0	128	60	C
11	517	16	241	22	59	28	1	126	60	C
12	492	12	253	20	66	23	1	121	68	C
13	467	11	269	18	78	21	2	121	81	C
14	442	13	280	18	85	22	3	125	90	C
15	417	16	284	21	87	26	4	126	93	C
16	392	20	284	23	89	30	4	131	95	C

NWFB1106 MicroCat 1993



NWFB1106 MicroCat 1993



NWFC1106

Latitude: 61°23.538´N

Longitude: 008°19.047´W

Echo sounding depth: 851 m

Bottom depth corr.: 842 m (sound velocity)

Time of deployment: 12/6 - 2011 0600 UTC

Time of recovery: 22/5 - 2012 1025 UTC

ADCP:

Instrument no.: RDI ADCP 1285

Instrument frequency: 75 kHz

Height above bottom: 6 m

Depth: 836 m (corr.)

Time of first data: 12/6 - 2011 0620 UTC

Time of last data: 22/5 - 2012 1000 UTC

Sample interval: 20 min

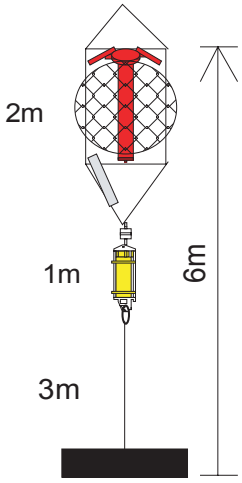
No. of ensembles: 24852

Pings per ens.: 1

Binlength: 25 m

Depth of first bin: 801 m (corr.)

No. of bins: 25



Data:

All data ok.

NWFC1106 ADCP 1285

Error statistics for deployment: NWFC1106 updated 2012/09/05

Surface distance not edited
Heading, pitch and roll not edited
Temperature edited by EVM in Sep 2012
Velocity edited up to and including bin 25 by KMHL in Sep 2012
Intensity edited up to and including bin 25 by EVM in Sep 2012

Total number of ensembles: 24852
Interval between ensembles: 20 min
Original number of bins: 32
Number of acceptable velocity bins: 25
Number of acceptable intensity bins: 25

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

Number of temperature ens. flagged: 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	164	1	128	12	4	0	0	0	0	0	0	0
2	3	121	0	109	6	0	0	0	0	0	0	0	0
3	1	213	1	182	14	1	0	0	0	0	0	0	0
4	0	903	4	573	100	33	5	1	1	0	0	0	0
5	0	2067	8	922	221	86	38	16	28	1	0	0	0
6	0	2735	11	1099	284	107	62	28	43	5	0	0	0
7	0	2918	12	1503	303	103	40	21	25	4	0	0	0
8	0	2803	11	1514	330	96	32	11	18	2	0	0	0
9	0	2087	8	1212	250	80	17	7	5	0	0	0	0
10	0	1470	6	874	160	54	22	4	1	0	0	0	0
11	0	891	4	553	90	29	12	2	2	0	0	0	0
12	0	619	2	384	61	23	4	2	3	0	0	0	0
13	0	417	2	275	33	15	5	1	1	0	0	0	0
14	0	309	1	244	21	2	3	1	0	0	0	0	0
15	0	249	1	194	16	4	1	0	1	0	0	0	0
16	0	234	1	170	13	6	0	0	0	1	0	0	0
17	0	314	1	183	21	8	1	0	3	3	0	0	0
18	0	769	3	269	41	18	7	1	6	12	1	2	0
19	0	1759	7	299	60	21	20	9	26	25	6	3	3
20	0	3024	12	390	69	22	16	13	38	20	14	6	4
21	0	4855	20	452	122	58	43	22	44	31	15	15	5
22	0	7482	30	490	123	63	32	20	52	53	20	23	15
23	0	9936	40	510	110	53	28	16	39	40	30	28	20
24	1	11989	48	686	171	75	45	21	45	36	28	26	32
25	1	14364	58	737	191	82	43	27	55	32	17	22	36

NWFC1106 ADCP 1285

Deployment: NWFC1106 updated 2012/09/05
Instrument no.: 1285
Instrument freq.: 75
Latitude: 61 23.538 N
Longitude:08 19.047 W
Bottom depth: 842
Instrument depth: 836
Center depth of first bin: 801
Bin length: 25
Number of bins: 25
Number of first ensemble: 392
Time of first ensemble: 2011 06 12 06 20
Number of last ensemble: 25243
Time of last ensemble: 2012 05 22 10 00
Time between ensembles (min.): 20
All directions have been corrected by adding: -7.0

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	801	41	1019	1008	302	993
2	776	66	1070	1061	305	995
3	751	91	1075	1065	307	991
4	726	116	1058	1048	308	964
5	701	141	1005	994	308	917
6	676	166	890	873	308	890
7	651	191	712	667	311	883
8	626	216	536	441	316	887
9	601	241	399	251	324	916
10	576	266	301	103	336	941
11	551	291	240	42	59	964
12	526	316	216	65	102	975
13	501	341	207	86	114	983
14	476	366	204	99	119	988
15	451	391	202	109	122	990
16	426	416	204	114	124	991
17	401	441	205	117	125	987
18	376	466	206	118	126	969
19	351	491	207	117	126	929
20	326	516	207	116	127	878
21	301	541	208	116	128	805
22	276	566	209	115	128	699
23	251	591	209	115	127	600
24	226	616	207	108	128	518
25	201	641	204	100	129	422

NWFC1106 ADCP 1285

Frequency of high speeds.
==========

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

Bin no.	Depth m	Speed (cm/s) 10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	801	993	993	991	989	984	972	947	882	755	558	340	161	51	9	1	0	0	0
2	776	995	995	993	990	987	978	958	919	835	683	468	248	88	17	2	0	0	0
3	751	991	991	989	987	983	974	956	917	840	695	480	260	91	16	1	0	0	0
4	726	963	963	962	959	953	940	915	867	782	633	442	243	84	14	1	0	0	0
5	701	915	912	906	896	879	854	814	746	650	517	367	211	80	14	2	0	0	0
6	676	875	851	828	802	766	718	657	580	485	382	280	172	68	16	3	0	0	0
7	651	844	772	710	651	594	534	465	388	313	238	171	107	43	11	2	0	0	0
8	626	816	683	561	474	404	341	284	228	181	140	103	63	30	9	2	0	0	0
9	601	809	606	433	319	251	200	161	129	103	79	53	33	17	6	2	1	0	0
10	576	807	535	324	202	138	102	77	61	45	30	19	11	6	3	1	0	0	0
11	551	805	494	255	119	65	38	25	15	9	5	2	1	0	0	0	0	0	0
12	526	803	470	215	82	32	13	7	3	1	1	0	0	0	0	0	0	0	0
13	501	806	464	195	63	17	5	2	1	0	0	0	0	0	0	0	0	0	0
14	476	810	457	185	55	13	2	1	0	0	0	0	0	0	0	0	0	0	0
15	451	809	448	185	53	12	2	1	0	0	0	0	0	0	0	0	0	0	0
16	426	811	454	188	55	14	3	1	0	0	0	0	0	0	0	0	0	0	0
17	401	808	458	192	60	17	3	1	0	0	0	0	0	0	0	0	0	0	0
18	376	790	450	193	62	17	4	1	0	0	0	0	0	0	0	0	0	0	0
19	351	755	433	189	62	16	4	1	0	0	0	0	0	0	0	0	0	0	0
20	326	712	410	178	58	16	4	1	0	0	0	0	0	0	0	0	0	0	0
21	301	653	377	168	56	15	4	1	0	0	0	0	0	0	0	0	0	0	0
22	276	570	329	149	52	13	3	0	0	0	0	0	0	0	0	0	0	0	0
23	251	488	284	129	45	12	3	0	0	0	0	0	0	0	0	0	0	0	0
24	226	419	241	107	35	9	2	0	0	0	0	0	0	0	0	0	0	0	0
25	201	336	195	86	26	6	2	0	0	0	0	0	0	0	0	0	0	0	0

NWFC1106 ADCP 1285

Harmonic constants for constituent M2 for deployment NWFC1106.

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	801	10	86	16	297	18	5	121	288	A
02	776	12	77	17	291	21	6	124	281	A
03	751	16	74	21	289	25	8	126	277	A
04	726	16	71	25	291	28	9	120	280	A
05	701	21	88	30	297	36	8	124	288	A
06	676	36	117	38	311	52	6	133	304	A
07	651	56	136	38	322	67	3	146	318	A
08	626	63	150	23	330	67	0	160	330	A
09	601	58	167	6	282	58	5	177	347	C
10	576	45	190	25	180	51	4	29	188	A
11	551	44	232	54	169	60	36	56	190	A
12	526	51	249	69	171	70	48	74	182	A
13	501	53	258	77	173	78	52	83	178	A
14	476	54	266	81	177	81	54	89	177	A
15	451	56	272	83	181	83	56	92	180	A
16	426	57	277	86	185	86	57	92	184	A
17	401	60	282	88	189	89	59	94	186	A
18	376	61	285	90	192	91	61	94	189	A
19	351	63	288	92	194	92	63	95	190	A
20	326	64	289	93	194	93	64	97	190	A
21	301	65	289	96	195	96	64	96	191	A
22	276	65	289	95	195	95	65	95	192	A
23	251	66	291	96	197	96	66	94	194	A
24	226	67	294	95	199	95	67	97	194	A
25	201	75	295	96	196	97	73	105	185	A

Harmonic constants for constituent S2 for deployment NWFC1106.

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	801	4	118	4	14	4	3	142	329	A
02	776	4	123	3	4	5	3	150	321	A
03	751	4	119	4	7	5	3	133	335	A
04	726	4	118	7	10	7	4	104	3	A
05	701	7	144	12	9	13	5	117	359	A
06	676	16	155	21	13	25	8	124	1	A
07	651	22	171	19	21	28	7	139	4	A
08	626	23	192	9	37	24	4	159	15	A
09	601	22	219	5	123	22	5	179	39	A
10	576	26	243	14	169	26	13	11	238	A
11	551	25	262	21	190	26	18	30	240	A
12	526	23	277	26	203	28	20	56	230	A
13	501	23	287	30	212	31	21	68	227	A
14	476	23	294	32	216	33	22	75	227	A
15	451	23	302	34	219	34	23	82	225	A
16	426	23	309	35	224	35	23	85	227	A
17	401	24	316	37	225	37	24	92	224	A
18	376	25	319	37	227	37	25	92	226	A
19	351	26	322	38	230	38	26	92	228	A
20	326	26	323	37	235	37	26	87	237	A
21	301	27	323	36	238	36	26	82	244	A
22	276	28	324	36	239	36	27	80	246	A
23	251	27	325	38	239	38	27	84	243	A
24	226	25	324	36	244	36	24	78	252	A
25	201	26	331	38	245	38	26	85	249	A

NWFC1106 ADCP 1285

Harmonic constants for constituent N2 for deployment NWFC1106.

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	801	5	26	3	245	6	2	153	215	A
02	776	5	34	3	258	6	2	157	222	A
03	751	6	27	4	254	7	3	150	220	A
04	726	7	12	5	248	8	4	152	207	A
05	701	8	14	6	254	9	5	150	211	A
06	676	11	25	10	246	14	5	140	222	A
07	651	12	54	11	256	16	3	137	245	A
08	626	14	78	11	276	17	3	142	265	A
09	601	14	99	14	279	20	0	136	279	A
10	576	14	126	8	295	16	1	149	303	C
11	551	9	185	3	111	9	3	6	183	A
12	526	10	210	9	139	11	8	43	176	A
13	501	11	227	16	143	16	11	81	149	A
14	476	14	239	19	148	19	14	90	148	A
15	451	16	244	20	151	20	15	97	145	A
16	426	17	252	20	152	20	16	111	135	A
17	401	19	254	21	156	21	18	118	131	A
18	376	20	255	22	155	23	19	122	128	A
19	351	21	259	22	158	24	19	127	127	A
20	326	20	258	22	157	24	19	122	131	A
21	301	22	258	22	158	24	20	130	123	A
22	276	23	253	20	156	23	19	160	91	A
23	251	20	256	17	159	20	17	158	94	A
24	226	19	257	18	153	21	16	142	109	A
25	201	17	270	22	157	24	15	118	139	A

Harmonic constants for constituent O1 for deployment NWFC1106.

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	801	12	332	17	147	21	1	125	148	C
02	776	11	332	16	147	19	1	123	148	C
03	751	12	334	17	147	20	1	125	149	C
04	726	12	349	19	156	22	2	123	160	C
05	701	23	358	24	169	33	3	134	173	C
06	676	38	357	32	175	49	1	140	176	C
07	651	43	355	36	178	56	1	140	176	A
08	626	40	356	36	176	54	0	139	176	C
09	601	33	354	30	177	44	1	138	175	A
10	576	26	357	26	189	37	4	135	183	A
11	551	19	358	21	188	29	2	132	183	A
12	526	17	360	19	187	26	2	132	184	A
13	501	17	358	16	186	23	2	135	182	A
14	476	15	4	14	192	20	1	136	188	A
15	451	14	9	13	195	19	1	138	192	A
16	426	14	10	13	193	19	1	137	191	A
17	401	13	11	13	192	19	0	136	191	A
18	376	14	5	14	192	20	1	136	188	A
19	351	16	2	14	196	21	2	137	189	A
20	326	15	1	16	190	22	2	133	186	A
21	301	15	10	17	193	23	1	132	192	A
22	276	13	3	15	191	20	1	132	188	A
23	251	11	358	13	194	16	2	130	187	A
24	226	8	6	10	200	12	1	128	195	A
25	201	9	13	14	218	17	3	122	211	A

NWFC1106 ADCP 1285

Harmonic constants for constituent K1 for deployment NWFC1106.

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	801	8	261	18	48	19	4	113	53	C
02	776	9	264	19	51	21	4	112	56	C
03	751	9	255	20	53	22	3	113	56	C
04	726	10	266	22	57	23	4	112	61	C
05	701	18	262	26	64	32	5	124	70	C
06	676	33	257	35	66	48	5	134	71	C
07	651	41	253	39	63	57	5	136	68	C
08	626	38	247	39	62	54	3	135	65	C
09	601	31	248	33	65	46	1	133	67	C
10	576	23	243	25	62	34	0	132	63	C
11	551	16	257	19	73	24	1	130	75	C
12	526	15	266	19	81	24	1	129	83	C
13	501	13	274	17	84	21	2	128	88	C
14	476	12	272	16	83	20	2	126	86	C
15	451	12	271	16	82	20	1	126	85	C
16	426	12	270	16	83	20	1	126	86	C
17	401	12	266	18	82	22	1	125	83	C
18	376	13	258	18	80	22	0	126	79	A
19	351	13	256	16	75	21	0	129	75	C
20	326	12	257	14	67	18	2	132	71	C
21	301	11	261	13	68	17	2	129	73	C
22	276	11	282	12	89	16	2	133	95	C
23	251	9	286	13	107	16	0	123	107	A
24	226	8	299	14	118	16	0	120	119	C
25	201	10	292	15	125	18	2	124	121	A

NWNA1106

Latitude: 62°42.170´N

Longitude: 006°05.078´W

Echo sound depth: 299 m

Bottom depth corr.: 298 m (sound velocity)

Time of deployment: 10/6 - 2011 0139 UTC

Time of recovery: 20/5 - 2012 0322 UTC

ADCP:

Instrument no.: RDI ADCP 1279

Instrument frequency: 150 kHz

Height above bottom: 1 m

Depth: 297 m (corr.)

Time of first data: 10/6 – 2011 0200 UTC

Time of last data: 20/5 – 2012 0300 UTC

Sample interval: 20 min

No. of ensembles: 24844

Pings per ens.: 1

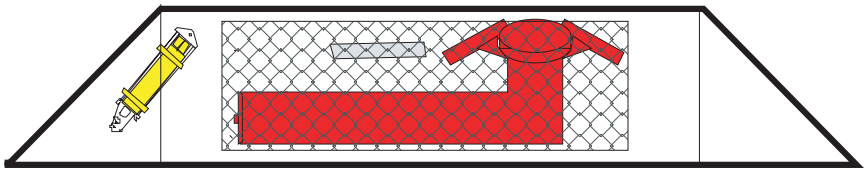
Binlength: 10 m

Depth of first bin: 281 m (corr.)

No. of bins: 23

Data:

All data ok.



NWNA1106 ADCP 1279

Error statistics for deployment: NWNA1106 updated 2012/09/03

Surface distance not edited
Heading, pitch and roll not edited
Temperature edited by AKL in Jul 2012
Velocity edited up to and including bin 23 by KMHL in Aug 2012
Intensity not edited up to and including bin 23 by EVM in Sep 2012

Total number of ensembles: 24844
Interval between ensembles: 20 min
Original number of bins: 30
Number of acceptable velocity bins: 23
Number of acceptable intensity bins: 23

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

Number of temperature ens. flagged: 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	1932	8	1233	127	81	26	12	5	0	0	0	0
2	0	2264	9	1560	230	57	12	5	0	0	0	0	0
3	1	1997	8	1421	204	45	7	1	0	0	0	0	0
4	0	1852	7	1332	175	34	9	4	2	0	0	0	0
5	0	1573	6	1177	135	24	8	3	1	0	0	0	0
6	0	1378	6	1007	121	23	9	0	3	0	0	0	0
7	0	1260	5	910	111	21	7	2	4	0	0	0	0
8	0	1052	4	801	76	20	3	4	1	0	0	0	0
9	1	1106	4	758	100	26	4	7	1	1	0	0	0
10	0	1126	5	727	96	35	9	4	4	1	0	0	0
11	0	1188	5	713	102	24	8	6	12	2	1	0	0
12	0	1296	5	689	113	31	14	13	15	4	0	0	0
13	0	1357	5	665	102	31	16	12	14	10	1	0	0
14	0	1648	7	653	109	34	18	9	32	11	4	2	0
15	0	2385	10	629	99	37	22	9	25	18	3	3	6
16	0	3034	12	573	105	43	22	17	26	14	7	5	11
17	0	4485	18	613	86	40	16	13	23	17	8	16	18
18	0	5989	24	524	101	32	19	11	28	13	12	15	25
19	0	8058	32	469	102	31	23	15	24	13	10	17	27
20	0	10160	41	423	81	32	9	12	22	5	10	13	31
21	0	11626	47	377	60	31	15	10	18	8	7	8	20
22	1	12437	50	468	103	32	18	12	23	12	3	11	20
23	0	14481	58	450	88	29	17	8	13	4	8	10	19

NWNA1106 ADCP 1279

Deployment: NWNA1106 updated 2012/09/03
Instrument no.: 1279
Instrument freq.: 150
Latitude: 62 42.170 N
Longitude:06 05.078 W
Bottom depth: 298
Instrument depth: 297
Center depth of first bin: 281
Bin length: 10
Number of bins: 23
Number of first ensemble: 235
Time of first ensemble: 2011 06 10 02 00
Number of last ensemble: 25078
Time of last ensemble: 2012 05 20 03 00
Time between ensembles (min.): 20
All directions have been corrected by adding: -6.0

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	281	17	196	113	96	922
2	271	27	209	115	100	909
3	261	37	219	114	103	920
4	251	47	226	113	105	925
5	241	57	231	118	107	937
6	231	67	235	124	107	945
7	221	77	237	131	108	949
8	211	87	239	138	108	958
9	201	97	239	142	108	955
10	191	107	239	145	108	955
11	181	117	239	149	108	952
12	171	127	239	152	107	948
13	161	137	239	155	107	945
14	151	147	239	157	107	934
15	141	157	238	157	107	904
16	131	167	238	158	107	878
17	121	177	236	156	107	819
18	111	187	235	157	107	759
19	101	197	237	160	107	676
20	91	207	239	165	106	591
21	81	217	241	167	106	532
22	71	227	247	172	107	499
23	61	237	247	167	107	417

NWNA1106 ADCP 1279

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

Bin no.	Depth m	Speed (cm/s) 10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	281	720	383	160	59	19	6	2	0	0	0	0	0	0	0	0	0	0	0
2	271	735	411	189	73	27	9	3	1	0	0	0	0	0	0	0	0	0	0
3	261	763	443	212	87	36	13	5	1	0	0	0	0	0	0	0	0	0	0
4	251	778	464	227	98	41	16	5	2	1	0	0	0	0	0	0	0	0	0
5	241	793	484	240	107	46	19	7	3	1	0	0	0	0	0	0	0	0	0
6	231	807	499	248	113	48	21	8	3	1	0	0	0	0	0	0	0	0	0
7	221	814	507	258	118	51	21	9	3	1	0	0	0	0	0	0	0	0	0
8	211	819	512	264	124	54	24	10	4	1	0	0	0	0	0	0	0	0	0
9	201	817	508	266	126	54	24	10	4	1	0	0	0	0	0	0	0	0	0
10	191	814	501	266	128	55	25	10	4	1	0	0	0	0	0	0	0	0	0
11	181	813	501	267	130	55	24	10	4	1	0	0	0	0	0	0	0	0	0
12	171	805	493	268	132	57	24	11	4	1	0	0	0	0	0	0	0	0	0
13	161	798	491	270	133	58	24	11	5	1	0	0	0	0	0	0	0	0	0
14	151	785	484	267	136	58	25	11	4	1	0	0	0	0	0	0	0	0	0
15	141	758	468	259	129	54	23	10	4	1	0	0	0	0	0	0	0	0	0
16	131	735	453	251	126	52	22	9	3	0	0	0	0	0	0	0	0	0	0
17	121	679	422	230	116	48	20	9	4	1	0	0	0	0	0	0	0	0	0
18	111	630	390	214	104	42	17	8	3	1	0	0	0	0	0	0	0	0	0
19	101	562	351	194	94	39	16	7	3	1	0	0	0	0	0	0	0	0	0
20	91	491	309	173	87	37	16	7	3	1	0	0	0	0	0	0	0	0	0
21	81	446	284	156	77	34	14	6	2	1	0	0	0	0	0	0	0	0	0
22	71	423	274	152	76	34	15	6	2	1	0	0	0	0	0	0	0	0	0
23	61	354	229	126	65	28	12	5	1	0	0	0	0	0	0	0	0	0	0

NWNA1106 ADCP 1279

Harmonic constants for constituent M2 for deployment NWNA1106.

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	281	129	293	88	173	139	70	154	127	A
02	271	143	293	102	175	155	84	153	128	A
03	261	156	293	114	177	169	95	153	129	A
04	251	166	294	120	179	178	102	154	130	A
05	241	171	295	124	182	182	107	155	130	A
06	231	173	297	125	185	183	110	156	132	A
07	221	175	298	126	188	184	111	157	133	A
08	211	176	300	125	190	185	112	158	134	A
09	201	176	302	122	193	184	110	159	135	A
10	191	176	303	119	195	182	109	161	135	A
11	181	176	305	118	197	182	109	162	136	A
12	171	176	307	116	199	182	107	163	137	A
13	161	175	308	112	202	179	105	164	138	A
14	151	175	310	110	205	179	104	166	139	A
15	141	176	312	108	207	179	103	166	140	A
16	131	175	314	106	210	178	101	168	141	A
17	121	176	316	104	212	178	100	168	142	A
18	111	174	317	102	216	175	99	170	143	A
19	101	172	320	101	219	174	99	171	145	A
20	91	173	323	100	224	174	98	172	148	A
21	81	174	326	96	228	175	94	174	149	A
22	71	174	299	97	202	175	96	175	121	A
23	61	174	300	100	203	175	99	174	123	A

Harmonic constants for constituent S2 for deployment NWNA1106.

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	281	41	339	28	226	43	25	158	172	A
02	271	43	335	34	230	45	31	157	172	A
03	261	45	335	37	230	47	34	152	176	A
04	251	47	336	41	231	50	37	149	180	A
05	241	52	339	43	229	57	37	150	180	A
06	231	56	340	44	228	61	38	151	179	A
07	221	60	342	44	229	65	38	154	178	A
08	211	65	343	45	229	69	39	156	178	A
09	201	66	345	45	231	70	39	157	178	A
10	191	69	346	45	233	72	39	159	178	A
11	181	71	347	44	236	73	40	162	177	A
12	171	72	349	44	237	75	39	162	178	A
13	161	72	351	42	240	74	38	164	180	A
14	151	71	352	41	243	73	38	165	180	A
15	141	70	355	40	244	72	36	164	183	A
16	131	69	357	38	245	70	35	165	184	A
17	121	66	360	36	251	67	34	167	186	A
18	111	63	2	35	254	64	33	167	189	A
19	101	61	1	33	260	62	32	172	186	A
20	91	60	4	32	261	61	31	171	189	A
21	81	59	7	32	263	59	30	170	192	A
22	71	56	336	30	235	56	29	172	161	A
23	61	54	338	31	237	55	30	171	163	A

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Harmonic constants for constituent N2 for deployment NWNA1106.

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	281	24	262	18	136	27	13	148	98	A
02	271	26	263	19	136	29	13	150	98	A
03	261	29	264	20	137	32	14	151	99	A
04	251	29	266	23	142	33	17	146	105	A
05	241	31	264	24	147	34	19	151	101	A
06	231	34	263	23	152	35	20	159	96	A
07	221	36	263	24	154	37	22	160	96	A
08	211	37	267	25	157	39	23	160	99	A
09	201	38	268	26	160	39	24	162	99	A
10	191	38	271	25	165	39	24	164	101	A
11	181	37	274	25	167	38	23	163	105	A
12	171	37	276	24	171	38	23	164	106	A
13	161	36	280	23	173	37	21	164	110	A
14	151	37	285	23	177	38	22	164	114	A
15	141	36	286	22	180	37	21	166	114	A
16	131	36	289	22	185	37	21	168	116	A
17	121	37	290	22	186	38	21	169	116	A
18	111	38	290	22	190	38	21	172	115	A
19	101	39	291	23	193	39	23	173	115	A
20	91	38	295	22	192	38	21	169	121	A
21	81	37	295	22	192	38	21	169	121	A
22	71	34	267	20	169	34	20	174	90	A
23	61	34	269	16	171	34	16	175	91	A

Harmonic constants for constituent O1 for deployment NWNA1106.

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	281	26	40	11	309	26	11	180	220	A
02	271	26	33	11	304	26	11	0	33	A
03	261	27	34	14	299	27	14	177	216	A
04	251	28	32	13	299	28	13	179	212	A
05	241	28	32	13	295	28	13	176	214	A
06	231	28	33	12	292	28	12	174	215	A
07	221	28	34	12	286	28	12	171	218	A
08	211	29	34	14	289	29	14	171	218	A
09	201	29	36	14	289	29	13	170	221	A
10	191	30	35	14	290	31	13	172	218	A
11	181	31	38	15	287	31	13	168	223	A
12	171	30	37	13	288	30	12	170	221	A
13	161	31	36	13	285	31	12	170	220	A
14	151	31	38	14	286	32	13	169	222	A
15	141	31	35	14	289	31	14	171	219	A
16	131	30	40	15	285	31	13	166	226	A
17	121	29	41	15	290	29	14	166	228	A
18	111	29	38	16	283	30	14	164	225	A
19	101	29	38	16	285	30	14	164	226	A
20	91	31	46	17	289	32	15	162	235	A
21	81	36	41	17	280	38	14	164	227	A
22	71	36	27	19	262	38	15	160	215	A
23	61	39	25	21	255	42	15	157	214	A

NWNA1106 ADCP 1279

Harmonic constants for constituent K1 for deployment NWNA1106.

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	281	32	276	19	186	32	19	0	276	A
02	271	35	287	24	183	36	23	165	117	A
03	261	40	291	24	175	42	21	160	121	A
04	251	46	287	22	172	47	20	166	114	A
05	241	43	284	21	171	44	19	166	110	A
06	231	41	284	21	172	42	19	166	110	A
07	221	37	282	22	172	38	20	164	110	A
08	211	36	279	22	168	37	20	163	109	A
09	201	36	275	23	167	37	21	163	105	A
10	191	36	273	23	166	37	21	165	102	A
11	181	37	270	23	164	38	22	166	98	A
12	171	37	270	23	161	38	21	164	99	A
13	161	40	267	24	160	41	22	166	95	A
14	151	40	267	24	158	41	22	164	96	A
15	141	40	266	24	156	41	22	164	94	A
16	131	42	266	24	153	44	22	163	95	A
17	121	44	266	26	155	45	23	164	95	A
18	111	45	266	25	156	46	23	166	93	A
19	101	42	271	28	159	44	25	160	102	A
20	91	40	275	27	155	44	22	154	109	A
21	81	39	274	27	155	42	22	153	109	A
22	71	37	260	28	139	41	22	149	98	A
23	61	41	255	29	138	44	24	154	90	A

NWNB1106

Latitude: 62°54.950´N

Longitude: 006°05.005´W

Echo sounding depth: 967 m

Bottom depth corr.: 951 m (surface echo)

Time of deployment: 10/6 - 2011 0354 UTC

Time of recovery: 20/5 - 2012 1230 UTC

ADCP:

Instrument no.: RDI ADCP 1577

Instrument frequency: 75 kHz

Height above bottom: 254 m

Depth: 697 m (corr.)

Time of first data: 10/6 - 2011 0420 UTC

Time of last data: 20/5 - 2012 1200 UTC

Sample interval: 20 min

No. of ensembles: 24864

Pings per ens.: 1

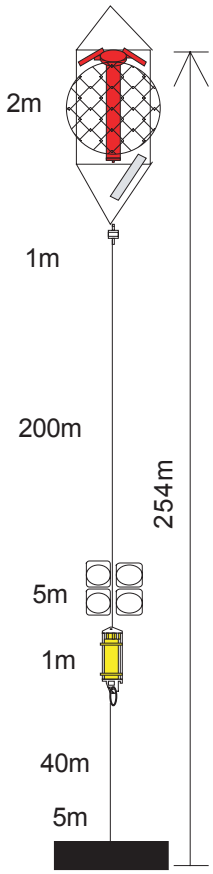
Binlength: 25 m

Depth of first bin: 662 m (corr.)

No. of bins: 23

Data:

All data ok.



NWNB1106 ADCP 1577

Error statistics for deployment: NWNB1106 updated 2012/08/29

Surface distance not edited
Heading, pitch and roll not edited
Temperature edited by AKL in Jul 2012
Velocity edited up to and including bin 23 by KMHL in Aug 2012
Intensity edited up to and including bin 23 by EVM in Aug 2012

Total number of ensembles: 24864
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: 0

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

Bin	Int. ens. flgd	Velocity ens. flgd	Velocity % flgd	Number of velocity gaps of length 1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	6	43	0	39	2	0	0	0	0	0	0	0	0
2	10	41	0	41	0	0	0	0	0	0	0	0	0
3	1	44	0	38	3	0	0	0	0	0	0	0	0
4	0	44	0	42	1	0	0	0	0	0	0	0	0
5	1	26	0	24	1	0	0	0	0	0	0	0	0
6	0	38	0	36	1	0	0	0	0	0	0	0	0
7	0	38	0	32	3	0	0	0	0	0	0	0	0
8	1	48	0	39	3	1	0	0	0	0	0	0	0
9	0	49	0	33	8	0	0	0	0	0	0	0	0
10	0	56	0	39	3	2	0	1	0	0	0	0	0
11	0	68	0	38	7	1	0	0	0	1	0	0	0
12	0	60	0	44	3	2	1	0	0	0	0	0	0
13	0	73	0	56	7	1	0	0	0	0	0	0	0
14	0	85	0	50	6	4	0	1	1	0	0	0	0
15	0	260	1	118	12	3	3	1	4	3	1	0	0
16	1	812	3	147	21	19	12	4	23	8	3	4	0
17	3	1966	8	240	55	28	16	16	25	27	13	13	0
18	0	3539	14	255	65	49	33	20	59	36	16	36	1
19	3	5183	21	320	126	57	45	30	67	61	21	50	3
20	0	7393	30	405	133	64	60	35	106	69	29	62	16
21	0	9386	38	453	147	93	37	40	91	59	44	70	34
22	0	11427	46	447	159	85	50	34	112	76	49	61	52
23	1	13452	54	423	156	99	37	33	82	74	41	48	81

NWNB1106 ADCP 1577

Deployment: NWNB1106 updated 2012/08/29
Instrument no.: 1577
Instrument freq.: 75
Latitude: 62 54.950 N
Longitude:06 05.005 W
Bottom depth: 951
Instrument depth: 697
Center depth of first bin: 662
Bin length: 25
Number of bins: 23
Number of first ensemble: 242
Time of first ensemble: 2011 06 10 04 20
Number of last ensemble: 25105
Time of last ensemble: 2012 05 20 12 00
Time between ensembles (min.): 20
All directions have been corrected by adding: -6.0

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	662	289	135	36	97	998
2	637	314	134	31	96	998
3	612	339	133	26	95	998
4	587	364	132	21	95	998
5	562	389	133	17	95	999
6	537	414	134	15	91	998
7	512	439	136	13	94	998
8	487	464	139	14	102	998
9	462	489	146	18	108	998
10	437	514	154	26	112	998
11	412	539	160	39	111	997
12	387	564	170	56	110	998
13	362	589	185	75	111	997
14	337	614	202	94	111	997
15	312	639	220	115	111	990
16	287	664	233	132	111	967
17	262	689	244	144	111	921
18	237	714	255	154	110	858
19	212	739	268	165	111	792
20	187	764	280	179	110	703
21	162	789	289	191	110	623
22	137	814	290	194	110	540
23	112	839	287	190	109	459

NWNB1106 ADCP 1577

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

Bin no.	Depth m	Speed (cm/s) 10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	662	595	195	50	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	637	599	194	46	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0
3	612	594	194	42	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0
4	587	590	191	40	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	562	598	195	40	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	537	600	199	42	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	512	613	203	41	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	487	635	213	42	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0
9	462	664	240	49	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0
10	437	693	271	61	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0
11	412	717	296	75	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0
12	387	749	338	94	20	2	0	0	0	0	0	0	0	0	0	0	0	0	0
13	362	788	393	132	35	7	0	0	0	0	0	0	0	0	0	0	0	0	0
14	337	819	450	180	58	13	1	0	0	0	0	0	0	0	0	0	0	0	0
15	312	833	504	227	91	25	4	0	0	0	0	0	0	0	0	0	0	0	0
16	287	829	520	263	117	39	8	1	0	0	0	0	0	0	0	0	0	0	0
17	262	793	524	279	128	51	13	2	0	0	0	0	0	0	0	0	0	0	0
18	237	747	503	288	144	60	19	5	1	0	0	0	0	0	0	0	0	0	0
19	212	699	481	286	155	72	29	8	1	0	0	0	0	0	0	0	0	0	0
20	187	624	440	270	156	81	36	14	4	1	0	0	0	0	0	0	0	0	0
21	162	555	392	248	146	80	41	17	6	1	0	0	0	0	0	0	0	0	0
22	137	478	337	214	132	73	39	18	7	1	0	0	0	0	0	0	0	0	0
23	112	403	282	178	107	60	33	17	8	2	0	0	0	0	0	0	0	0	0

NWNB1106 ADCP 1577

Harmonic constants for constituent M2 for deployment NWNB1106.

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	662	71	268	42	126	79	23	153	97	A
02	637	73	268	42	128	80	25	153	97	A
03	612	75	269	42	130	82	26	154	98	A
04	587	77	270	42	135	83	27	156	99	A
05	562	80	273	41	142	85	29	159	100	A
06	537	85	275	40	150	88	31	162	102	A
07	512	89	279	39	159	91	33	166	105	A
08	487	93	282	41	169	95	37	168	107	A
09	462	99	285	45	178	100	42	171	108	A
10	437	106	290	48	195	106	48	177	111	A
11	412	109	296	50	210	109	50	2	294	A
12	387	114	301	55	221	115	54	7	297	A
13	362	118	305	61	230	119	59	10	300	A
14	337	120	310	65	238	122	61	13	303	A
15	312	124	314	70	244	127	64	15	306	A
16	287	124	317	75	249	129	68	18	307	A
17	262	123	320	80	254	129	70	21	308	A
18	237	126	324	84	259	133	72	22	312	A
19	212	128	327	88	262	136	75	24	313	A
20	187	127	299	89	235	136	75	25	285	A
21	162	123	300	86	236	131	72	25	285	A
22	137	120	330	83	266	128	70	25	316	A
23	112	113	332	78	268	121	65	25	318	A

Harmonic constants for constituent S2 for deployment NWNB1106.

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	662	26	307	14	169	28	8	157	134	A
02	637	27	307	14	172	29	9	158	134	A
03	612	28	307	14	177	30	10	159	134	A
04	587	29	308	15	181	30	11	161	135	A
05	562	29	310	13	189	30	11	165	135	A
06	537	30	315	13	201	30	11	169	139	A
07	512	31	321	13	215	32	12	172	144	A
08	487	33	324	15	226	33	15	176	146	A
09	462	35	329	16	237	35	16	179	149	A
10	437	36	332	17	241	36	17	180	152	A
11	412	36	336	17	257	36	16	6	333	A
12	387	37	343	20	270	37	19	12	337	A
13	362	37	346	20	273	38	19	12	340	A
14	337	38	346	19	275	38	18	13	340	A
15	312	38	350	21	283	39	19	16	342	A
16	287	37	353	23	294	39	18	23	342	A
17	262	34	354	24	308	39	15	32	340	A
18	237	32	1	29	314	39	17	41	340	A
19	212	37	2	31	318	45	17	38	345	A
20	187	39	325	30	296	48	12	37	314	A
21	162	30	325	29	290	40	13	44	308	A
22	137	25	342	27	316	36	8	47	328	A
23	112	21	343	23	303	29	11	49	320	A

NWNB1106 ADCP 1577

Harmonic constants for constituent N2 for deployment NWNB1106.

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	662	12	232	11	68	16	2	138	60	A
02	637	13	233	11	74	17	3	140	61	A
03	612	14	235	12	84	18	5	141	66	A
04	587	15	238	11	92	18	5	144	70	A
05	562	17	245	12	109	20	7	150	77	A
06	537	20	249	13	126	22	10	156	80	A
07	512	21	252	13	131	22	10	157	83	A
08	487	21	255	12	129	22	9	158	85	A
09	462	23	253	13	131	24	11	158	83	A
10	437	23	249	15	130	24	12	155	82	A
11	412	23	254	13	135	24	11	159	84	A
12	387	24	264	12	154	24	11	168	90	A
13	362	26	274	14	177	26	14	175	96	A
14	337	28	278	16	187	28	16	179	98	A
15	312	28	280	16	194	28	16	3	278	A
16	287	28	282	14	196	28	14	3	281	A
17	262	26	286	14	202	26	14	4	285	A
18	237	27	298	17	220	27	16	11	291	A
19	212	28	303	19	234	29	17	22	289	A
20	187	32	273	23	213	34	18	28	258	A
21	162	29	279	24	209	31	21	30	257	A
22	137	31	307	24	240	34	21	28	289	A
23	112	32	301	24	239	35	19	28	285	A

Harmonic constants for constituent O1 for deployment NWNB1106.

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	662	2	48	3	205	3	1	129	214	C
02	637	3	48	3	219	4	0	134	223	C
03	612	3	51	3	242	4	0	136	236	A
04	587	4	53	3	243	5	0	136	238	A
05	562	4	48	3	241	5	1	143	233	A
06	537	4	41	4	253	6	2	140	234	A
07	512	5	38	4	246	6	2	144	228	A
08	487	8	34	6	245	9	2	144	225	A
09	462	7	41	6	261	8	3	141	237	A
10	437	6	43	5	256	8	2	145	234	A
11	412	9	37	5	273	9	4	161	225	A
12	387	9	30	6	259	10	4	153	222	A
13	362	11	32	7	262	12	5	150	226	A
14	337	12	40	7	269	13	5	154	230	A
15	312	13	38	8	265	14	6	150	231	A
16	287	14	40	9	274	15	7	152	234	A
17	262	13	41	10	273	15	7	147	238	A
18	237	14	38	8	282	14	7	161	228	A
19	212	14	22	9	297	14	9	5	18	A
20	187	14	17	10	276	15	10	166	206	A
21	162	12	18	7	247	13	5	154	209	A
22	137	12	16	8	283	12	8	176	199	A
23	112	9	31	15	275	16	7	108	266	A

NWNB1106 ADCP 1577

Harmonic constants for constituent K1 for deployment NWNB1106.

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	662	5	281	5	122	7	1	137	111	A
02	637	5	280	5	118	7	1	138	108	A
03	612	6	274	5	120	7	2	142	104	A
04	587	5	273	5	121	7	2	138	105	A
05	562	5	276	5	118	7	1	138	106	A
06	537	5	279	4	117	6	1	146	105	A
07	512	5	281	4	128	7	2	142	112	A
08	487	6	275	5	139	8	3	139	115	A
09	462	5	272	6	138	7	3	128	120	A
10	437	7	265	6	134	8	4	139	106	A
11	412	10	266	7	144	11	5	151	102	A
12	387	11	270	8	153	12	7	154	105	A
13	362	12	268	9	155	13	8	155	103	A
14	337	14	274	10	156	15	8	152	110	A
15	312	13	274	9	169	13	9	161	107	A
16	287	12	267	11	190	13	10	40	234	A
17	262	6	269	12	211	13	5	73	218	A
18	237	3	65	17	218	17	1	100	219	C
19	212	5	55	21	216	22	2	103	217	C
20	187	11	14	27	205	29	2	111	204	A
21	162	22	12	28	204	35	4	128	199	A
22	137	31	16	31	208	44	5	135	202	A
23	112	36	12	31	205	47	5	139	198	A

NWNG1106

Latitude: 63°06.000´N

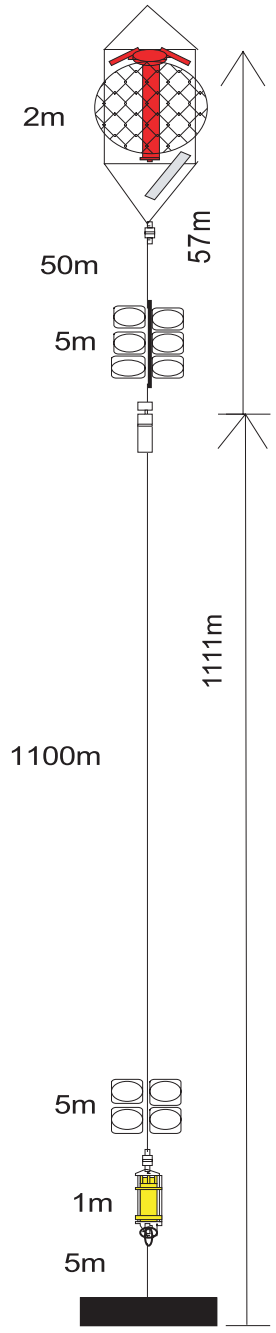
Longitude: 006°05.000´W

Echo sounding depth: 1854 m

Bottom depth corr.: 1813 m (surface echo)

Time of deployment: 10/6 - 2011 0537 UTC

Time of recovery: 20/5 - 2012 1357 UTC



ADCP:

Instrument no.: RDI ADCP 1292

Instrument frequence: 75 kHz

Height above bottom: 1168 m

Depth: 645 m (corr.)

Time of first data: 10/6 – 2011 0620 UTC

Time of last data: 20/5 – 2012 1340 UTC

Sample interval: 20 min

No. of ensembles: 24863

Pings per ens.: 1

Binlength: 25 m

Depth of first bin: 610 m (corr.)

No. of bins: 22

Aanderaa:

Instrument no.: RCM9 721

Height above bottom: 1111 m

Depth: 702 m (corr.)

Time of first data: 10/6 – 2011 0629 UTC

Time of last data: 29/6 – 2011 1829 UTC

Sample interval: 60 min

No. of ensembles: 469

Data:

ADCP data ok.

Aanderaa data only for 19 days because of battery failure.

NWNG1106 ADCP 1292

Error statistics for deployment: NWNG1106 updated 2012/08/29

Surface distance not edited
Heading, pitch and roll not edited
Temperature edited by AKL in Jul 2012
Velocity edited up to and including bin 22 by KMHL in Aug 2012
Intensity edited up to and including bin 22 by EVM in Aug 2012

Total number of ensembles: 24863
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: 0

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

Bin	Int. ens. flgd	Velocity ens. flgd	Velocity % flgd	Number of velocity gaps of length 1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	0	40	0	40	0	0	0	0	0	0	0	0	0
2	0	78	0	72	3	0	0	0	0	0	0	0	0
3	0	71	0	66	1	1	0	0	0	0	0	0	0
4	0	88	0	78	5	0	0	0	0	0	0	0	0
5	0	92	0	73	8	1	0	0	0	0	0	0	0
6	0	91	0	67	9	2	0	0	0	0	0	0	0
7	0	62	0	58	2	0	0	0	0	0	0	0	0
8	0	56	0	50	3	0	0	0	0	0	0	0	0
9	0	24	0	22	1	0	0	0	0	0	0	0	0
10	0	38	0	31	2	1	0	0	0	0	0	0	0
11	0	37	0	37	0	0	0	0	0	0	0	0	0
12	0	67	0	57	2	2	0	0	0	0	0	0	0
13	0	110	0	98	6	0	0	0	0	0	0	0	0
14	0	170	1	135	11	3	1	0	0	0	0	0	0
15	0	295	1	177	26	9	1	3	1	1	0	0	0
16	0	994	4	265	71	26	8	9	23	10	3	1	0
17	0	2212	9	311	64	33	25	24	43	25	16	9	0
18	0	3615	15	348	85	49	24	24	51	42	12	33	1
19	0	5299	21	429	107	50	36	24	63	43	29	48	5
20	0	7089	29	456	98	56	36	23	63	44	45	47	25
21	0	9596	39	491	137	60	31	24	55	53	31	60	46
22	0	13935	56	485	142	54	43	20	38	24	25	34	56

NWNG1106 ADCP 1292

Deployment: NWNG1106 updated 2012/08/29
Instrument no.: 1292
Instrument freq.: 75
Latitude: 63 06.000 N
Longitude:06 05.000 W
Bottom depth: 1813
Instrument depth: 645
Center depth of first bin: 610
Bin length: 25
Number of bins: 22
Number of first ensemble: 248
Time of first ensemble: 2011 06 10 06 20
Number of last ensemble: 25110
Time of last ensemble: 2012 05 20 13 40
Time between ensembles (min.): 20
All directions have been corrected by adding: -6.0

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	610	1203	96	20	133	998
2	585	1228	97	20	131	997
3	560	1253	99	21	130	997
4	535	1278	101	22	130	996
5	510	1303	103	23	131	996
6	485	1328	106	26	129	996
7	460	1353	109	29	127	998
8	435	1378	113	33	126	998
9	410	1403	119	38	123	999
10	385	1428	129	44	120	998
11	360	1453	141	53	119	999
12	335	1478	157	63	117	997
13	310	1503	173	73	116	996
14	285	1528	190	83	116	993
15	260	1553	207	94	117	988
16	235	1578	223	103	117	960
17	210	1603	239	112	116	911
18	185	1628	253	119	116	855
19	160	1653	269	125	115	787
20	135	1678	286	133	113	715
21	110	1703	301	139	112	614
22	85	1728	315	138	108	440

NWNG1106 ADCP 1292

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

Bin no.	Depth m	Speed (cm/s) 10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	610	427	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	585	437	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	560	452	41	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	535	460	49	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	510	469	59	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	485	484	69	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	460	505	77	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	435	523	95	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	410	554	120	17	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	385	595	162	28	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0
11	360	641	212	48	12	4	0	0	0	0	0	0	0	0	0	0	0	0	0
12	335	700	268	75	21	8	1	0	0	0	0	0	0	0	0	0	0	0	0
13	310	744	329	107	33	13	3	0	0	0	0	0	0	0	0	0	0	0	0
14	285	783	397	149	47	18	5	0	0	0	0	0	0	0	0	0	0	0	0
15	260	808	457	192	66	25	8	1	0	0	0	0	0	0	0	0	0	0	0
16	235	807	491	237	91	35	10	1	0	0	0	0	0	0	0	0	0	0	0
17	210	783	511	265	110	44	12	2	0	0	0	0	0	0	0	0	0	0	0
18	185	746	515	288	126	49	13	2	0	0	0	0	0	0	0	0	0	0	0
19	160	699	501	303	143	58	17	3	0	0	0	0	0	0	0	0	0	0	0
20	135	643	480	308	159	72	25	7	1	0	0	0	0	0	0	0	0	0	0
21	110	556	424	280	161	79	31	8	3	0	0	0	0	0	0	0	0	0	0
22	85	402	314	214	127	65	30	12	4	1	0	0	0	0	0	0	0	0	0

NWNG1106 ADCP 1292

Harmonic constants for constituent M2 for deployment NWNG1106.

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	610	70	292	26	242	72	20	15	288	A
02	585	69	294	27	247	72	19	16	290	A
03	560	68	297	28	255	71	18	18	293	A
04	535	66	301	31	261	71	18	21	295	A
05	510	64	304	31	269	69	16	23	298	A
06	485	63	307	33	273	69	17	25	300	A
07	460	64	308	35	275	70	17	26	302	A
08	435	64	309	36	276	71	17	27	302	A
09	410	64	312	37	281	72	17	28	305	A
10	385	63	317	41	288	73	17	31	309	A
11	360	62	322	46	293	75	19	35	312	A
12	335	64	326	51	294	79	22	38	314	A
13	310	66	332	58	296	83	27	40	317	A
14	285	66	337	64	300	88	30	44	319	A
15	260	67	343	70	302	91	33	47	321	A
16	235	69	350	77	306	96	38	49	325	A
17	210	71	356	86	309	103	43	53	327	A
18	185	72	359	92	312	108	45	55	328	A
19	160	75	3	100	312	114	51	57	328	A
20	135	79	336	104	282	118	57	58	298	A
21	110	85	4	107	310	123	60	56	328	A
22	85	92	1	119	301	132	72	59	320	A

Harmonic constants for constituent S2 for deployment NWNG1106.

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	610	20	339	9	309	22	4	23	335	A
02	585	19	338	9	317	21	3	24	334	A
03	560	18	339	10	325	21	2	28	336	A
04	535	18	345	11	327	21	3	31	340	A
05	510	19	352	13	328	23	4	34	345	A
06	485	19	356	14	328	23	5	35	347	A
07	460	19	358	16	335	24	5	40	349	A
08	435	18	1	16	339	23	5	42	351	A
09	410	17	10	17	345	23	5	45	357	A
10	385	18	15	19	348	25	6	48	0	A
11	360	19	14	19	344	26	7	44	360	A
12	335	19	12	17	345	25	6	42	0	A
13	310	17	11	17	347	23	5	45	359	A
14	285	14	11	16	353	21	3	49	1	A
15	260	12	20	18	357	21	4	58	4	A
16	235	14	21	20	354	24	6	55	3	A
17	210	18	21	22	350	27	7	52	2	A
18	185	16	21	27	354	31	6	61	1	A
19	160	13	22	29	0	32	5	67	4	A
20	135	8	346	27	334	29	2	73	335	A
21	110	10	18	24	3	26	2	69	5	A
22	85	9	29	26	358	27	4	73	1	A

NWNG1106 ADCP 1292

Harmonic constants for constituent N2 for deployment NWNG1106.

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	610	15	276	7	228	15	5	20	270	A
02	585	14	274	7	222	15	5	18	268	A
03	560	15	275	7	221	15	5	16	269	A
04	535	15	278	7	230	16	5	19	272	A
05	510	13	284	8	249	15	4	28	276	A
06	485	12	288	8	253	14	4	31	279	A
07	460	13	287	7	245	14	4	25	279	A
08	435	13	291	8	254	15	4	31	281	A
09	410	13	302	10	256	15	6	33	288	A
10	385	15	302	11	256	17	7	31	289	A
11	360	16	301	11	245	18	8	26	288	A
12	335	18	301	11	244	19	9	24	289	A
13	310	19	298	12	247	20	9	28	286	A
14	285	18	301	12	247	20	9	28	288	A
15	260	16	311	13	262	19	8	37	293	A
16	235	14	316	13	275	18	7	42	298	A
17	210	15	318	12	270	18	7	34	302	A
18	185	17	323	17	272	22	11	46	296	A
19	160	23	336	23	279	29	16	45	308	A
20	135	28	308	28	242	33	22	45	275	A
21	110	34	336	32	280	41	22	43	310	A
22	85	37	335	31	282	44	21	37	315	A

Harmonic constants for constituent O1 for deployment NWNG1106.

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	610	5	63	1	308	5	1	173	245	A
02	585	6	64	1	325	6	1	178	244	A
03	560	5	63	1	304	5	1	172	245	A
04	535	5	57	2	276	5	1	162	242	A
05	510	5	54	2	274	6	1	161	239	A
06	485	5	57	2	279	5	1	162	242	A
07	460	5	55	2	283	5	1	167	238	A
08	435	6	49	1	263	6	0	174	229	A
09	410	7	48	2	287	7	2	171	230	A
10	385	7	55	3	303	7	3	170	238	A
11	360	7	58	3	305	7	2	170	241	A
12	335	6	51	2	304	6	2	174	232	A
13	310	7	56	2	286	7	1	171	238	A
14	285	9	56	3	285	9	2	168	239	A
15	260	9	57	4	310	9	4	170	242	A
16	235	11	56	5	320	11	5	177	237	A
17	210	13	58	2	314	13	2	177	239	A
18	185	15	54	1	355	15	1	2	54	A
19	160	15	58	5	336	15	5	3	57	A
20	135	12	33	4	303	12	4	180	213	A
21	110	12	33	9	276	13	7	152	230	A
22	85	16	10	17	294	19	14	54	323	A

NWNG1106 ADCP 1292

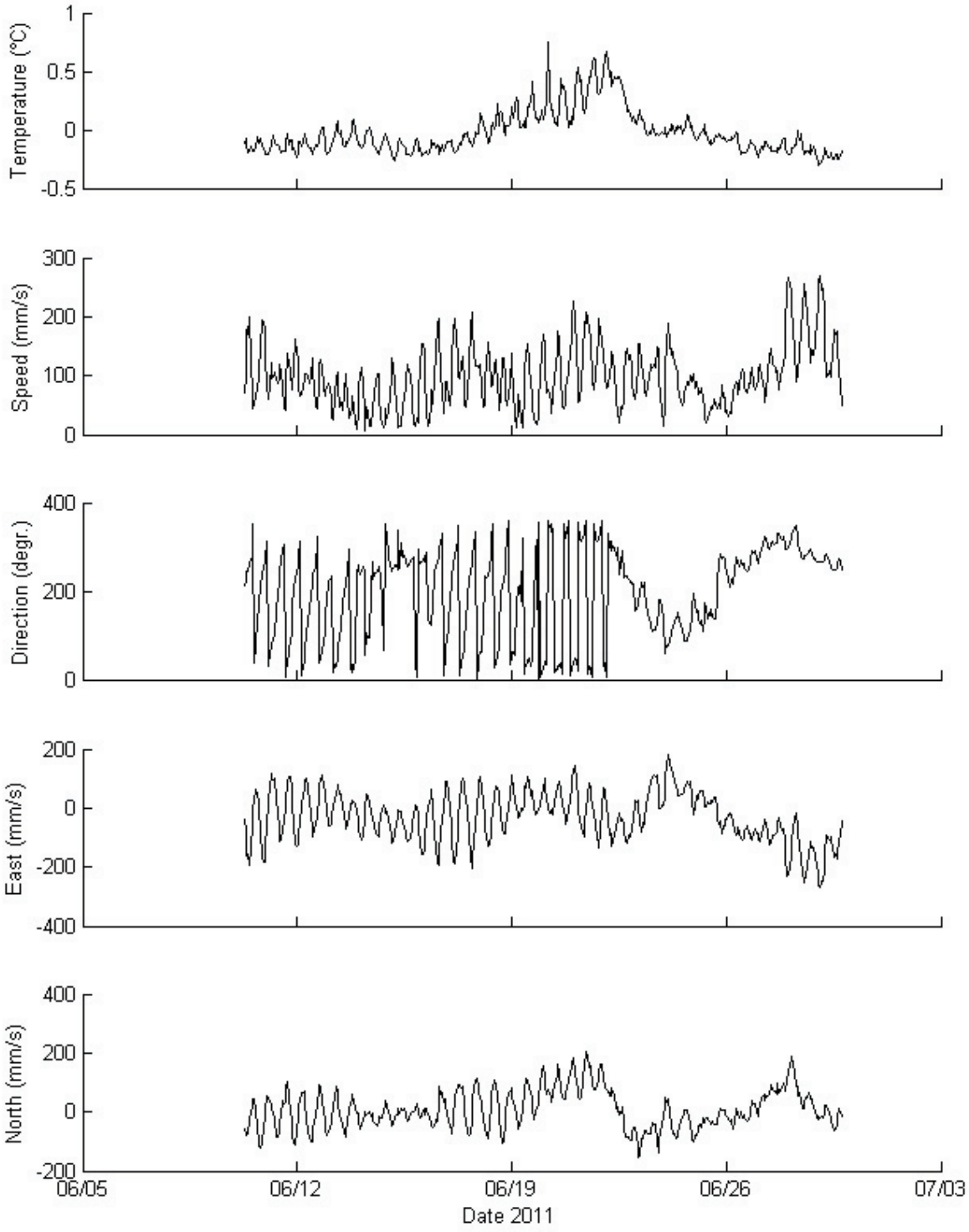
Harmonic constants for constituent K1 for deployment NWNG1106.

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	610	3	286	2	166	3	2	159	116	A
02	585	3	294	2	162	3	1	149	127	A
03	560	4	305	2	153	4	1	148	133	A
04	535	3	300	3	148	4	1	140	132	A
05	510	4	288	3	133	5	1	144	117	A
06	485	4	287	3	140	5	1	152	115	A
07	460	5	288	3	155	5	2	151	120	A
08	435	5	296	3	141	6	1	145	124	A
09	410	5	295	3	155	5	2	150	126	A
10	385	5	298	2	169	5	2	162	124	A
11	360	5	289	2	156	6	2	161	114	A
12	335	4	281	2	142	4	1	157	108	A
13	310	6	287	5	165	7	3	149	124	A
14	285	7	290	6	174	8	5	142	136	A
15	260	7	293	7	184	8	6	139	145	A
16	235	8	294	7	177	9	6	138	143	A
17	210	11	309	11	185	14	7	135	156	A
18	185	15	328	13	196	18	8	140	169	A
19	160	17	338	13	200	21	8	145	173	A
20	135	14	326	15	177	20	6	132	163	A
21	110	14	343	18	212	20	9	125	196	A
22	85	19	314	30	211	30	18	102	204	A

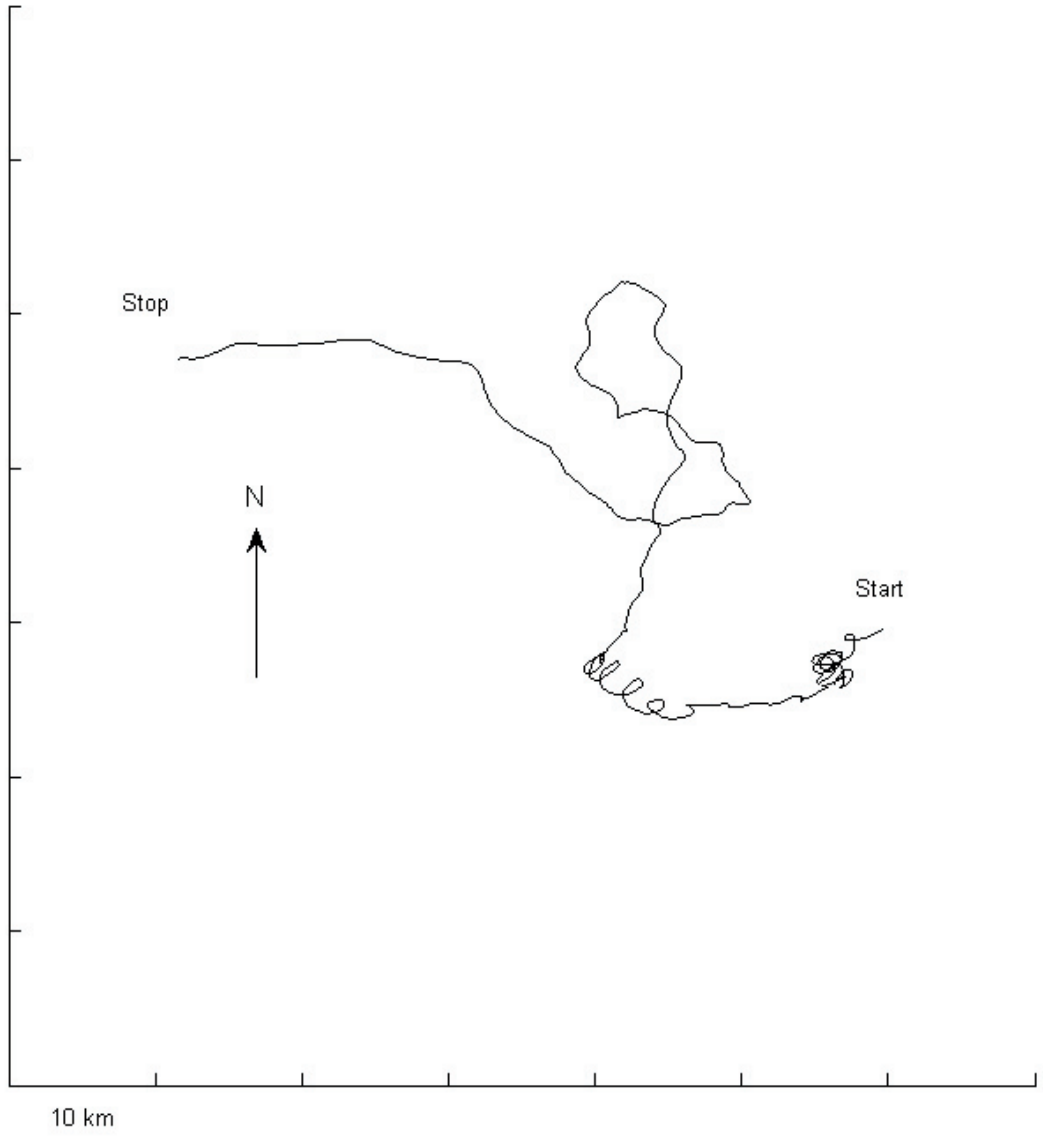
NWNG1106 Aanderaa 721

```
Deployment: NWNG1106         analyzed from beginning to end
Instrument no.:   721
Instrument type: Aanderaa
Latitude: 63 06.000 N
Longitude:06 05.000 W
Bottom depth: 1813
Instrument depth:  702
Number of records:  469
Time of first record: 2011 06 10 06 29
Time of last record : 2011 06 29 18 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          469               0
Column  8   : Speed         469               0
Column  9   : Direct        469               0

Comments
--------



Residual current:  30 mm/sec towards: 289 degrees
----------------



TIDAL ANALYSIS
--------------
Error flagged records interpolated for velocity:     0, records not int.:     0
Tidal analysis performed on unfiltered data
================================================================================
Const     Freq      E-ampl   E-gpl  N-ampl   N-gpl   Major   Minor    Incl   Grphl  R
          c/hr      mm/sec     deg  mm/sec     deg  mm/sec  mm/sec     deg     deg
--------------------------------------------------------------------------------
MSF    .00282193        48     145      28      69      49      27      11     139  A
O1     .03873065         5      50       2     200       5       1     161     227  C
P1     .04155259         1     257       1     189       1       0      68     202  A  I
K1     .04178075         2     278       2     206       3       1      72     217  A
N2     .07899925        14     241       6     200      15       4      21     236  A  I
M2     .08051140        72     267      35     228      77      21      23     261  A
S2     .08333334        12     334      10     324      16       1      40     330  A
M4     .16102280         1      54       2     221       2       0     128     226  C
MS4    .16384470         2     311       2     295       3       0      38     305  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     |                    Direction intervals                    | All dir.
  intervals   |---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ----|---- ----
    (mm/s)    | 15   45   75   105  135  165  195  225  255  285  315  345| Tot  Acc
--------------|---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ----|---- ----
    0 -   50  |  17   13    4   13   19   19   13   21   23   23   13   15| 194  194
   50 -  100  |  28   23   30   19   32   32   17   32   58   47   34   30| 382  576
  100 -  150  |  11   41   15   17   15    9    6   34   51   34   36    9| 277  853
  150 -  200  |  15    9    4    2    0    2    2    6   28   23    6    9| 107  959
  200 -  300  |   2    2    0    0    0    0    0    0   13   13    9    2|  41 1000
--------------|---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ----|---- ----
Total    (ppt)|  72   87   53   51   66   62   38   94  173  141   98   64|
Rel.flux (ppt)|  75   92   51   43   49   46   28   89  198  162  111   57|
--------------|---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ---- ----
Avg.spd (mm/s)| 102  105   95   83   73   73   72   94  114  114  112   88|
Max.spd (mm/s)| 202  226  188  155  150  155  153  194  270  255  267  208|
```

NWNG1106 Aanderaa 721



NWNG1106 Aanderaa 721



NWSB1106

Latitude: 60°47.015´N

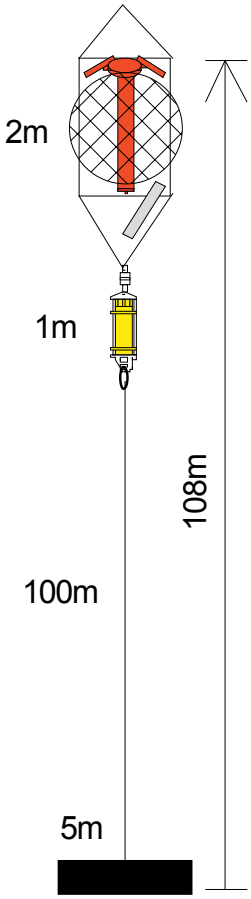
Longitude: 005°18.120´W

Echo sounding depth: 800 m

Bottom depth corr.: 792 m (ADCP pressure)

Time of deployment: 11/6 - 2011 2035 UTC

Time of recovery: 19/5 – 2012 0325 UTC



ADCP:

Instrument no.: RDI ADCP 8552

Instrument frequency: 75 kHz

Height above bottom: 108 m

Depth: 684 m (corr.)

Time of first data: 11/6 - 2011 2100 UTC

Time of last data: 19/5 - 2012 0300 UTC

Sample interval: 20 min

No. of ensembles: 24643

Pings per ens.: 10

Binlength: 10 m

Depth of first bin: 666 m (corr.)

No. of bins: 60

Data:

All data ok.

NWSB1106 ADCP 8552

Error statistics for deployment: NWSB1106 updated 2012/09/07

Surface distance not edited
Heading, pitch and roll not edited
Temperature edited by AKL in Jul 2012
Velocity edited up to and including bin 60 by KMHL in Sep 2012
Intensity edited up to and including bin 60 by EVM in Sep 2012

Total number of ensembles: 24643
Interval between ensembles: 20 min
Original number of bins: 70
Number of acceptable velocity bins: 60
Number of acceptable intensity bins: 60

Flagged values have been replaced by error codes: -999.99 for temperature and depth, -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 depth ens. flagged : 0
Number of temperature ens. flagged: 0

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

Bin	Int. ens. flgd	Velocity ens. flgd	Velocity % flgd	Number of velocity gaps of length 1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	1	62	0	58	2	0	0	0	0	0	0	0	0
2	0	42	0	38	2	0	0	0	0	0	0	0	0
3	0	170	1	133	17	1	0	0	0	0	0	0	0
4	0	155	1	114	19	1	0	0	0	0	0	0	0
5	0	164	1	120	22	0	0	0	0	0	0	0	0
6	0	159	1	135	12	0	0	0	0	0	0	0	0
7	0	187	1	148	15	3	0	0	0	0	0	0	0
8	0	184	1	141	18	1	1	0	0	0	0	0	0
9	0	151	1	121	15	0	0	0	0	0	0	0	0
10	0	168	1	129	18	1	0	0	0	0	0	0	0
11	0	179	1	129	20	2	1	0	0	0	0	0	0
12	0	155	1	132	11	0	0	0	0	0	0	0	0
13	0	145	1	125	10	0	0	0	0	0	0	0	0
14	0	150	1	121	14	0	0	0	0	0	0	0	0
15	0	158	1	125	13	1	1	0	0	0	0	0	0
16	0	170	1	131	19	0	0	0	0	0	0	0	0
17	0	175	1	147	14	0	0	0	0	0	0	0	0
18	0	155	1	123	13	2	0	0	0	0	0	0	0
19	0	153	1	129	9	2	0	0	0	0	0	0	0
20	0	149	1	118	14	1	0	0	0	0	0	0	0
21	0	155	1	132	10	1	0	0	0	0	0	0	0
22	0	164	1	136	14	0	0	0	0	0	0	0	0
23	0	165	1	145	10	0	0	0	0	0	0	0	0
24	0	163	1	138	11	1	0	0	0	0	0	0	0
25	0	172	1	128	22	0	0	0	0	0	0	0	0
26	0	145	1	125	10	0	0	0	0	0	0	0	0
27	0	169	1	141	12	0	1	0	0	0	0	0	0
28	0	164	1	123	19	1	0	0	0	0	0	0	0
29	0	168	1	129	18	1	0	0	0	0	0	0	0
30	0	146	1	125	9	1	0	0	0	0	0	0	0
31	0	170	1	131	18	1	0	0	0	0	0	0	0
32	0	173	1	138	16	1	0	0	0	0	0	0	0
33	0	174	1	153	9	1	0	0	0	0	0	0	0
34	0	185	1	161	12	0	0	0	0	0	0	0	0
35	0	155	1	135	10	0	0	0	0	0	0	0	0
36	0	164	1	138	10	2	0	0	0	0	0	0	0
37	0	167	1	136	14	1	0	0	0	0	0	0	0
38	0	153	1	131	11	0	0	0	0	0	0	0	0
39	0	183	1	139	19	2	0	0	0	0	0	0	0
40	0	191	1	160	11	1	0	0	1	0	0	0	0
41	0	206	1	168	11	1	1	0	1	0	0	0	0
42	0	209	1	156	11	3	2	1	1	0	0	0	0
43	0	218	1	151	15	3	3	0	2	0	0	0	0
44	0	284	1	185	18	4	2	2	2	1	0	0	0
45	0	301	1	161	16	3	10	1	5	1	0	0	0
46	0	460	2	171	23	11	9	4	11	6	0	0	0
47	0	735	3	167	29	24	6	11	21	11	1	0	0
48	0	1107	4	156	45	22	15	13	32	18	6	0	0
49	0	1658	7	174	43	27	14	18	26	36	17	1	0
50	1	2112	9	178	54	26	26	12	30	35	27	4	0
51	1	2588	11	184	41	21	14	16	32	38	34	11	0
52	2	3091	13	186	60	19	9	7	24	25	34	34	0
53	1	3566	14	187	47	19	6	11	20	17	36	46	1
54	1	3871	16	188	55	14	5	7	19	14	32	56	2
55	0	4350	18	231	40	18	14	7	21	10	28	69	2
56	0	4813	20	248	49	18	13	6	18	17	28	70	7
57	1	5661	23	219	41	21	8	10	19	15	27	67	17
58	1	6633	27	225	36	16	6	3	12	13	21	64	30
59	1	7756	31	246	41	16	9	5	8	9	29	55	28
60	0	9280	38	273	53	5	11	5	12	6	18	46	26

NWSB1106 ADCP 8552

Deployment: NWSB1106 updated 2012/09/07
Instrument no.: 8552
Instrument freq.: 75
Latitude: 60 47.015 N
Longitude:05 18.120 W
Bottom depth: 792
Instrument depth: 684
Center depth of first bin: 666
Bin length: 10
Number of bins: 60
Number of first ensemble: 235
Time of first ensemble: 2011 06 11 21 00
Number of last ensemble: 24877
Time of last ensemble: 2012 05 19 03 00
Time between ensembles (min.): 20
All directions have been corrected by adding: -5.0

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	666	126	215	47	197	997
2	656	136	214	47	197	998
3	646	146	212	46	195	993
4	636	156	211	46	195	994
5	626	166	209	45	194	993
6	616	176	208	45	194	994
7	606	186	207	44	193	992
8	596	196	206	44	192	993
9	586	206	205	44	191	994
10	576	216	204	43	189	993
11	566	226	203	42	187	993
12	556	236	201	41	185	994
13	546	246	200	39	183	994
14	536	256	198	39	181	994
15	526	266	198	38	179	994
16	516	276	197	37	177	993
17	506	286	196	37	174	993
18	496	296	195	37	172	994
19	486	306	195	37	171	994
20	476	316	195	37	170	994
21	466	326	194	36	167	994
22	456	336	194	36	165	993
23	446	346	194	36	163	993
24	436	356	195	35	161	993
25	426	366	195	34	158	993
26	416	376	195	34	156	994
27	406	386	196	34	153	993
28	396	396	197	35	153	993
29	386	406	199	36	154	993
30	376	416	201	38	155	994
31	366	426	204	39	158	993
32	356	436	207	38	158	993
33	346	446	210	38	160	993
34	336	456	213	39	159	992
35	326	466	215	41	158	994
36	316	476	218	42	156	993
37	306	486	221	44	156	993
38	296	496	224	45	155	994
39	286	506	227	46	154	993
40	276	516	230	47	153	992
41	266	526	232	48	152	992
42	256	536	234	49	151	992
43	246	546	236	49	149	991
44	236	556	239	50	149	988
45	226	566	241	50	147	988
46	216	576	245	52	148	981
47	206	586	249	52	149	970
48	196	596	252	52	148	955
49	186	606	254	52	145	933
50	176	616	255	53	141	914
51	166	626	257	54	138	895
52	156	636	258	55	136	875
53	146	646	260	56	133	855
54	136	656	262	58	129	843
55	126	666	264	58	126	823
56	116	676	266	59	123	805
57	106	686	267	60	120	770
58	96	696	269	64	115	731
59	86	706	271	67	112	685
60	76	716	275	71	106	623

NWSB1106 ADCP 8552

Frequency of high speeds.
==========

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

Bin no.	Depth m	Speed (cm/s) 10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	666	850	507	213	60	11	2	0	0	0	0	0	0	0	0	0	0	0	0
2	656	852	507	211	59	11	1	0	0	0	0	0	0	0	0	0	0	0	0
3	646	847	496	206	57	11	2	0	0	0	0	0	0	0	0	0	0	0	0
4	636	838	494	205	56	10	2	0	0	0	0	0	0	0	0	0	0	0	0
5	626	835	484	200	53	9	2	0	0	0	0	0	0	0	0	0	0	0	0
6	616	833	482	198	50	9	1	0	0	0	0	0	0	0	0	0	0	0	0
7	606	828	479	193	50	9	1	0	0	0	0	0	0	0	0	0	0	0	0
8	596	827	474	193	49	8	2	0	0	0	0	0	0	0	0	0	0	0	0
9	586	828	468	189	49	8	2	0	0	0	0	0	0	0	0	0	0	0	0
10	576	824	470	188	46	8	1	0	0	0	0	0	0	0	0	0	0	0	0
11	566	820	464	183	44	8	2	0	0	0	0	0	0	0	0	0	0	0	0
12	556	814	460	179	44	7	2	0	0	0	0	0	0	0	0	0	0	0	0
13	546	811	458	174	43	8	1	0	0	0	0	0	0	0	0	0	0	0	0
14	536	810	450	171	42	9	1	0	0	0	0	0	0	0	0	0	0	0	0
15	526	804	445	170	42	7	1	0	0	0	0	0	0	0	0	0	0	0	0
16	516	802	443	169	41	8	1	0	0	0	0	0	0	0	0	0	0	0	0
17	506	796	436	168	41	7	1	0	0	0	0	0	0	0	0	0	0	0	0
18	496	799	435	168	42	6	1	0	0	0	0	0	0	0	0	0	0	0	0
19	486	796	434	168	41	6	0	0	0	0	0	0	0	0	0	0	0	0	0
20	476	794	433	166	42	6	0	0	0	0	0	0	0	0	0	0	0	0	0
21	466	793	428	164	42	6	0	0	0	0	0	0	0	0	0	0	0	0	0
22	456	794	429	164	43	6	0	0	0	0	0	0	0	0	0	0	0	0	0
23	446	797	428	165	42	6	0	0	0	0	0	0	0	0	0	0	0	0	0
24	436	801	428	163	42	6	0	0	0	0	0	0	0	0	0	0	0	0	0
25	426	801	427	162	44	6	0	0	0	0	0	0	0	0	0	0	0	0	0
26	416	800	429	166	43	6	0	0	0	0	0	0	0	0	0	0	0	0	0
27	406	802	434	168	45	7	0	0	0	0	0	0	0	0	0	0	0	0	0
28	396	803	438	171	46	7	0	0	0	0	0	0	0	0	0	0	0	0	0
29	386	805	446	176	50	9	1	0	0	0	0	0	0	0	0	0	0	0	0
30	376	812	451	184	53	9	1	0	0	0	0	0	0	0	0	0	0	0	0
31	366	814	460	190	57	10	1	0	0	0	0	0	0	0	0	0	0	0	0
32	356	814	467	201	61	11	1	0	0	0	0	0	0	0	0	0	0	0	0
33	346	821	479	208	65	14	2	0	0	0	0	0	0	0	0	0	0	0	0
34	336	821	488	218	70	17	3	0	0	0	0	0	0	0	0	0	0	0	0
35	326	824	496	226	74	20	5	0	0	0	0	0	0	0	0	0	0	0	0
36	316	827	503	234	79	23	5	1	0	0	0	0	0	0	0	0	0	0	0
37	306	829	512	243	86	26	7	1	0	0	0	0	0	0	0	0	0	0	0
38	296	833	521	251	93	28	8	2	0	0	0	0	0	0	0	0	0	0	0
39	286	839	529	257	95	31	9	2	0	0	0	0	0	0	0	0	0	0	0
40	276	846	536	263	101	34	9	2	1	0	0	0	0	0	0	0	0	0	0
41	266	842	543	270	106	35	10	3	1	0	0	0	0	0	0	0	0	0	0
42	256	845	545	276	112	37	11	3	1	0	0	0	0	0	0	0	0	0	0
43	246	844	553	283	116	38	11	3	1	0	0	0	0	0	0	0	0	0	0
44	236	847	555	289	121	40	13	3	0	0	0	0	0	0	0	0	0	0	0
45	226	849	559	299	127	43	14	4	1	0	0	0	0	0	0	0	0	0	0
46	216	850	566	303	133	47	15	5	1	0	0	0	0	0	0	0	0	0	0
47	206	845	567	311	140	50	18	6	1	0	0	0	0	0	0	0	0	0	0
48	196	833	566	314	143	53	19	6	1	0	0	0	0	0	0	0	0	0	0
49	186	816	558	314	142	54	20	7	1	0	0	0	0	0	0	0	0	0	0
50	176	799	546	309	143	55	20	7	2	0	0	0	0	0	0	0	0	0	0
51	166	783	539	307	144	55	20	7	1	0	0	0	0	0	0	0	0	0	0
52	156	767	529	302	144	54	20	7	2	0	0	0	0	0	0	0	0	0	0
53	146	752	518	295	142	55	21	7	3	1	0	0	0	0	0	0	0	0	0
54	136	743	518	299	145	56	20	8	3	1	0	0	0	0	0	0	0	0	0
55	126	727	509	299	144	56	20	8	3	1	0	0	0	0	0	0	0	0	0
56	116	713	500	293	144	57	21	8	3	1	0	0	0	0	0	0	0	0	0
57	106	681	480	284	138	56	22	8	3	1	0	0	0	0	0	0	0	0	0
58	96	647	458	273	139	58	23	8	3	0	0	0	0	0	0	0	0	0	0
59	86	608	433	262	132	55	21	7	3	0	0	0	0	0	0	0	0	0	0
60	76	554	399	245	126	53	20	7	2	1	0	0	0	0	0	0	0	0	0

NWSB1106 ADCP 8552

Harmonic constants for constituent M2 for deployment NWSB1106.

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	666	238	240	99	186	246	78	15	235	A
02	656	237	240	100	187	245	77	16	235	A
03	646	235	241	100	189	244	76	16	236	A
04	636	233	241	100	190	242	74	17	236	A
05	626	232	242	100	192	241	73	17	237	A
06	616	230	242	100	194	240	71	18	237	A
07	606	229	243	100	196	240	70	18	238	A
08	596	227	244	101	198	239	69	19	238	A
09	586	225	244	101	199	237	67	19	239	A
10	576	224	245	101	201	237	66	20	239	A
11	566	222	246	100	203	235	64	20	240	A
12	556	219	246	102	205	233	62	21	240	A
13	546	217	247	103	208	232	60	22	241	A
14	536	213	248	103	210	230	58	23	242	A
15	526	211	248	104	213	229	56	23	242	A
16	516	208	249	105	215	227	54	24	243	A
17	506	205	250	105	217	225	51	25	244	A
18	496	202	250	106	219	223	49	26	244	A
19	486	199	251	107	222	221	47	26	245	A
20	476	195	251	108	225	219	44	27	246	A
21	466	191	252	108	227	216	40	28	246	A
22	456	186	252	109	231	213	36	29	247	A
23	446	181	253	109	234	209	30	30	248	A
24	436	175	253	109	238	205	25	31	249	A
25	426	168	254	110	241	200	20	33	250	A
26	416	162	255	110	244	195	17	34	251	A
27	406	156	255	113	247	193	13	36	253	A
28	396	150	257	117	250	190	11	38	254	A
29	386	145	258	119	252	187	9	40	255	A
30	376	141	259	122	254	186	7	41	257	A
31	366	138	260	125	256	186	6	42	258	A
32	356	136	261	130	257	188	6	44	259	A
33	346	134	262	133	258	189	7	45	260	A
34	336	132	263	137	258	190	8	46	261	A
35	326	130	264	139	259	190	9	47	262	A
36	316	128	266	142	260	192	10	48	263	A
37	306	127	267	146	261	193	11	49	264	A
38	296	126	269	149	261	195	13	50	264	A
39	286	126	269	151	261	196	13	50	265	A
40	276	126	270	153	262	197	14	51	265	A
41	266	125	270	153	262	197	14	51	265	A
42	256	126	270	154	261	198	15	51	265	A
43	246	126	270	154	261	198	16	51	265	A
44	236	125	271	155	260	199	17	51	265	A
45	226	126	271	156	260	200	19	51	265	A
46	216	127	272	158	260	202	21	51	265	A
47	206	129	273	161	260	205	22	51	265	A
48	196	132	273	162	260	207	24	51	265	A
49	186	133	274	163	259	208	26	51	265	A
50	176	133	273	162	258	208	26	51	264	A
51	166	133	273	162	258	208	28	51	264	A
52	156	133	274	162	258	208	29	51	264	A
53	146	134	274	163	258	209	29	51	264	A
54	136	136	275	165	257	212	32	51	264	A
55	126	138	275	166	257	213	34	51	264	A
56	116	140	275	165	256	214	35	50	264	A
57	106	141	275	166	256	215	36	50	264	A
58	96	144	276	168	255	218	40	50	264	A
59	86	147	276	168	254	219	43	49	263	A
60	76	151	276	170	252	223	46	49	262	A

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Harmonic constants for constituent S2 for deployment NWSB1106.

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	666	82	281	35	242	87	21	19	276	A
02	656	81	282	35	243	86	21	20	277	A
03	646	80	282	36	244	85	20	21	277	A
04	636	79	282	36	246	85	20	21	277	A
05	626	79	283	36	247	85	19	22	277	A
06	616	79	282	37	248	85	19	22	277	A
07	606	79	283	36	248	84	19	22	277	A
08	596	79	283	36	248	84	19	22	277	A
09	586	78	283	36	249	84	19	22	278	A
10	576	77	284	36	251	84	18	23	279	A
11	566	77	285	36	253	83	18	23	280	A
12	556	76	286	36	256	82	16	24	281	A
13	546	75	287	36	258	81	16	24	282	A
14	536	73	287	37	260	80	16	25	282	A
15	526	71	288	36	261	79	15	25	283	A
16	516	70	289	35	264	77	13	25	284	A
17	506	68	289	35	266	75	12	26	284	A
18	496	66	288	36	270	74	10	28	284	A
19	486	65	288	35	273	73	8	28	285	A
20	476	64	288	35	276	73	6	28	285	A
21	466	63	288	36	276	73	6	30	285	A
22	456	63	288	36	278	72	5	30	286	A
23	446	62	289	36	278	72	6	30	286	A
24	436	62	289	37	279	72	5	30	286	A
25	426	63	288	38	278	73	6	31	286	A
26	416	62	289	39	278	73	6	32	286	A
27	406	62	289	39	280	73	5	32	286	A
28	396	61	290	39	283	72	4	32	288	A
29	386	61	290	41	286	73	3	34	289	A
30	376	59	291	42	289	73	2	36	290	A
31	366	57	291	45	291	73	0	38	291	A
32	356	56	293	46	294	72	1	40	293	C
33	346	55	293	47	295	72	1	40	294	C
34	336	55	294	47	295	73	1	41	294	C
35	326	55	294	49	293	73	1	42	294	A
36	316	56	294	49	292	75	1	41	293	A
37	306	56	296	52	292	76	3	43	294	A
38	296	56	297	52	291	76	4	43	294	A
39	286	55	298	52	291	75	5	44	295	A
40	276	55	299	51	292	75	5	43	296	A
41	266	55	300	51	292	75	5	43	296	A
42	256	55	301	52	292	75	6	44	297	A
43	246	54	301	52	291	74	6	44	296	A
44	236	54	302	52	292	75	7	44	297	A
45	226	54	303	53	291	75	7	44	297	A
46	216	53	303	52	290	74	8	44	297	A
47	206	53	303	53	290	74	8	45	296	A
48	196	54	303	54	292	76	7	45	298	A
49	186	54	304	55	296	77	5	45	300	A
50	176	54	307	56	295	78	8	46	301	A
51	166	54	309	57	296	78	9	47	302	A
52	156	54	307	58	295	78	8	47	301	A
53	146	53	309	57	295	77	9	47	301	A
54	136	52	309	56	295	76	9	47	301	A
55	126	52	309	56	294	75	10	47	301	A
56	116	52	309	56	293	76	10	48	300	A
57	106	53	309	58	295	78	10	47	301	A
58	96	53	309	58	296	79	9	48	302	A
59	86	53	307	57	294	77	9	47	300	A
60	76	51	306	56	292	75	9	48	298	A

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Harmonic constants for constituent N2 for deployment NWSB1106.

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	666	46	201	9	121	46	9	2	200	A
02	656	47	202	11	124	47	10	3	201	A
03	646	48	203	11	126	48	11	3	202	A
04	636	48	203	12	131	48	11	4	202	A
05	626	48	204	12	131	48	12	5	203	A
06	616	48	205	12	133	48	12	5	204	A
07	606	48	206	13	140	48	12	7	204	A
08	596	48	208	13	145	48	12	8	206	A
09	586	49	209	14	149	49	12	9	207	A
10	576	49	210	15	153	49	12	10	207	A
11	566	49	211	15	152	50	13	10	209	A
12	556	49	213	17	154	50	14	11	209	A
13	546	50	213	18	157	51	14	12	210	A
14	536	49	215	18	159	50	15	13	211	A
15	526	49	216	18	163	50	14	14	212	A
16	516	48	219	19	168	49	14	15	214	A
17	506	47	222	20	176	49	13	18	217	A
18	496	47	224	22	182	50	14	21	218	A
19	486	47	226	23	185	50	14	23	220	A
20	476	47	227	25	189	51	14	24	220	A
21	466	47	228	26	190	52	14	25	220	A
22	456	47	230	26	190	52	15	25	222	A
23	446	45	231	26	193	50	14	26	223	A
24	436	44	230	24	197	49	12	27	223	A
25	426	41	231	25	201	46	11	29	223	A
26	416	39	232	24	205	45	9	30	225	A
27	406	37	232	24	209	43	8	31	226	A
28	396	36	234	24	210	42	8	33	226	A
29	386	35	234	25	212	42	8	35	226	A
30	376	34	236	26	215	42	8	37	229	A
31	366	33	235	27	218	42	6	39	229	A
32	356	31	236	26	223	41	5	40	231	A
33	346	30	240	26	228	39	4	41	235	A
34	336	29	243	26	234	39	3	43	239	A
35	326	28	245	28	235	40	4	45	240	A
36	316	28	249	30	237	41	4	47	243	A
37	306	29	251	33	237	44	5	48	243	A
38	296	29	253	34	236	45	7	50	243	A
39	286	30	253	35	234	45	8	50	242	A
40	276	30	254	36	233	47	8	50	242	A
41	266	31	254	36	235	47	8	50	243	A
42	256	31	256	36	236	47	8	50	245	A
43	246	30	256	37	236	47	8	51	244	A
44	236	31	256	38	236	48	8	51	243	A
45	226	30	256	37	236	47	8	52	244	A
46	216	29	256	37	236	46	8	53	244	A
47	206	29	257	38	237	48	8	53	244	A
48	196	28	257	39	237	48	8	54	244	A
49	186	27	255	38	236	46	7	55	243	A
50	176	27	257	38	237	46	8	56	244	A
51	166	27	261	38	236	45	9	56	244	A
52	156	27	257	38	238	46	7	55	244	A
53	146	27	256	40	238	47	7	56	243	A
54	136	27	255	40	234	48	8	56	241	A
55	126	27	257	40	231	47	10	57	239	A
56	116	30	256	41	232	49	10	54	240	A
57	106	31	256	42	233	52	10	55	241	A
58	96	32	258	43	231	52	12	54	240	A
59	86	36	263	43	231	54	16	51	244	A
60	76	36	263	42	232	53	15	49	245	A

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Harmonic constants for constituent O1 for deployment NWSB1106.

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	666	29	338	13	22	31	9	19	344	C
02	656	29	339	13	22	30	8	20	345	C
03	646	29	339	13	19	31	8	20	344	C
04	636	29	339	13	20	30	8	20	344	C
05	626	28	339	14	23	30	9	21	346	C
06	616	28	340	14	22	30	9	22	347	C
07	606	27	340	13	21	29	8	22	346	C
08	596	28	339	13	16	30	8	23	345	C
09	586	28	339	14	16	30	8	24	346	C
10	576	29	339	13	18	31	8	22	345	C
11	566	28	340	12	19	30	7	20	345	C
12	556	28	339	12	19	29	7	20	344	C
13	546	28	338	12	23	30	8	19	344	C
14	536	28	338	13	26	30	9	19	344	C
15	526	28	333	13	27	29	10	18	339	C
16	516	27	334	13	27	28	10	18	340	C
17	506	27	333	13	31	28	11	17	340	C
18	496	26	331	12	31	27	10	15	337	C
19	486	26	332	12	28	27	10	17	339	C
20	476	24	333	11	29	25	9	16	339	C
21	466	24	333	11	30	25	9	16	339	C
22	456	24	333	12	38	25	10	14	339	C
23	446	24	332	11	36	24	9	13	337	C
24	436	23	332	9	31	23	8	13	337	C
25	426	22	336	10	34	23	8	15	342	C
26	416	21	336	9	33	21	8	16	342	C
27	406	19	338	10	29	20	7	21	346	C
28	396	18	340	10	28	20	7	23	349	C
29	386	19	341	9	27	20	6	20	347	C
30	376	19	341	8	31	20	6	16	346	C
31	366	20	339	7	36	20	6	12	343	C
32	356	19	339	7	31	20	5	13	343	C
33	346	19	336	6	39	19	5	9	339	C
34	336	18	333	6	31	19	5	11	336	C
35	326	18	328	5	29	19	5	8	330	C
36	316	19	328	6	18	20	4	11	330	C
37	306	21	328	6	15	21	4	13	331	C
38	296	20	330	6	13	20	4	13	333	C
39	286	19	329	6	22	19	5	11	332	C
40	276	18	330	6	21	19	5	13	333	C
41	266	17	329	6	23	18	4	11	332	C
42	256	17	329	5	35	17	5	8	332	C
43	246	16	332	5	34	16	4	9	335	C
44	236	15	331	5	46	15	5	6	333	C
45	226	15	332	5	48	15	5	5	334	C
46	216	16	337	5	35	16	4	10	340	C
47	206	17	340	6	28	17	4	14	344	C
48	196	18	342	7	34	19	5	15	347	C
49	186	17	350	7	28	18	4	19	355	C
50	176	16	345	6	23	17	4	17	349	C
51	166	15	349	6	19	16	3	21	353	C
52	156	16	353	7	18	17	3	21	356	C
53	146	16	347	6	0	17	1	21	348	C
54	136	15	347	6	345	16	0	22	347	A
55	126	16	349	5	338	17	1	18	348	A
56	116	17	347	5	321	18	2	14	345	A
57	106	15	344	6	313	16	3	19	340	A
58	96	14	348	6	335	15	1	22	346	A
59	86	14	332	6	295	15	4	20	327	A
60	76	15	326	9	298	17	4	28	320	A

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Harmonic constants for constituent K1 for deployment NWSB1106.

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	666	19	205	5	255	19	4	11	207	C
02	656	18	205	6	248	19	4	13	208	C
03	646	18	205	6	252	19	4	13	208	C
04	636	19	206	5	245	19	3	13	208	C
05	626	19	204	5	240	20	3	12	206	C
06	616	20	205	5	235	20	2	12	206	C
07	606	20	207	4	227	21	1	12	208	C
08	596	20	206	5	230	20	2	13	207	C
09	586	20	205	5	235	20	3	13	206	C
10	576	20	204	5	232	20	2	13	206	C
11	566	19	204	5	240	20	3	12	206	C
12	556	19	207	6	245	20	3	13	209	C
13	546	19	207	6	242	20	3	16	210	C
14	536	19	205	6	240	20	3	16	208	C
15	526	19	207	6	240	19	3	15	209	C
16	516	18	208	6	235	19	3	17	210	C
17	506	18	207	6	234	19	3	16	210	C
18	496	18	205	6	232	18	2	16	208	C
19	486	18	202	6	233	19	3	17	205	C
20	476	17	199	5	233	18	3	15	201	C
21	466	17	197	4	239	18	3	11	199	C
22	456	17	197	3	226	17	1	8	198	C
23	446	16	195	2	243	16	1	5	196	C
24	436	16	195	2	246	16	2	5	195	C
25	426	16	197	3	268	16	3	3	197	C
26	416	15	195	3	288	15	3	179	15	C
27	406	15	193	2	315	15	1	177	13	C
28	396	16	192	2	337	16	1	175	12	C
29	386	15	186	2	308	15	2	176	6	C
30	376	15	178	2	241	15	2	4	179	C
31	366	15	172	4	218	15	3	10	174	C
32	356	14	161	5	218	15	4	12	164	C
33	346	14	154	6	218	14	5	13	159	C
34	336	14	151	8	204	15	6	23	161	C
35	326	15	149	8	203	16	6	20	157	C
36	316	15	156	8	201	16	5	24	164	C
37	306	15	157	7	200	16	5	23	164	C
38	296	14	157	7	200	15	4	21	163	C
39	286	13	162	6	198	14	3	22	168	C
40	276	13	167	6	194	14	2	22	171	C
41	266	13	170	4	188	14	1	16	171	C
42	256	13	170	3	179	13	1	15	170	C
43	246	13	169	3	153	13	1	13	168	A
44	236	14	167	3	139	15	2	12	166	A
45	226	14	163	4	137	15	2	13	162	A
46	216	15	159	4	127	15	2	14	157	A
47	206	16	159	6	116	17	4	15	155	A
48	196	17	160	4	118	17	3	10	159	A
49	186	16	165	1	194	16	1	5	165	C
50	176	14	182	3	238	14	3	7	183	C
51	166	14	196	4	269	14	4	5	197	C
52	156	13	210	5	268	13	4	12	214	C
53	146	12	219	8	276	13	6	28	234	C
54	136	13	229	7	281	14	5	22	238	C
55	126	13	233	7	274	15	5	25	241	C
56	116	15	227	8	266	16	5	27	236	C
57	106	16	227	12	252	19	4	37	236	C
58	96	19	227	14	243	24	3	36	233	C
59	86	19	236	15	247	24	2	37	240	C
60	76	20	240	17	248	26	2	40	243	C

NWSC1106

Latitude: 60°33.800´N

Longitude: 004°46.300´W

Echo sounding depth: 1089 m

Bottom depth corr.: 1063 m (surface echo)

Time of deployment: 11/6 - 2011 1835 UTC

Time of recovery: 18/5 - 2012 1927 UTC

ADCP:

Instrument no.: RDI ADCP 1644

Instrument frequency: 75 kHz

Height above bottom: 419 m (corr.)

Depth: 644 m (corr.)

Time of first data: 11/6 - 2011 1900 UTC

Time of last data: 18/5 - 2012 1900 UTC

Sample interval: 20 min

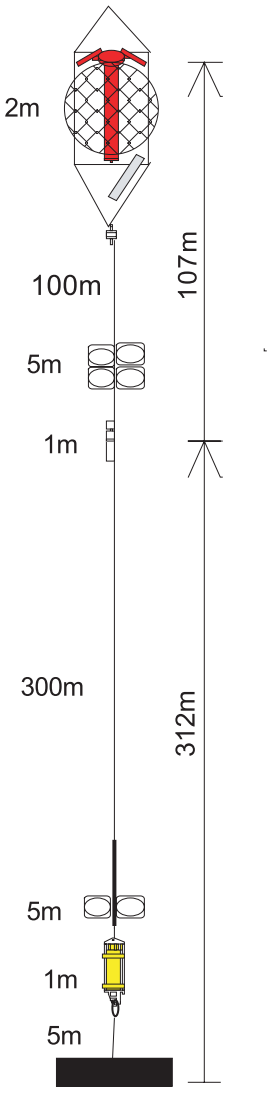
No. of ensembles: 24625

Pings per ens.: 1

Binlength: 25 m

Depth of first bin: 609 m (corr.)

No. of bins: 22



Aanderaa:

Instrument no.: RCM9 718

Height above bottom: 312 m

Depth: 751 m (corr.)

Time of first data: 11/6 – 2011 1930 UTC

Time of last data: 18/5 – 2012 1830 UTC

Sample interval: 60 min

No. of records: 8208

Data:

All data ok.

NWSC1106 ADCP 1644

Error statistics for deployment: NWSC1106 updated 2012/09/11

Surface distance not edited
Heading, pitch and roll not edited
Temperature edited by EVM in Sep 2012
Velocity edited up to and including bin 22 by KMHL in Sep 2012
Intensity edited up to and including bin 22 by EVM in Sep 2012

Total number of ensembles: 24625
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: 0

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

Bin	Int. ens. flgd	Velocity ens. flgd	Velocity % flgd	Number of velocity gaps of length 1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	0	95	0	83	3	2	0	0	0	0	0	0	0
2	0	168	1	136	13	0	0	1	0	0	0	0	0
3	0	215	1	169	19	0	2	0	0	0	0	0	0
4	1	223	1	151	24	4	3	0	0	0	0	0	0
5	0	229	1	188	16	3	0	0	0	0	0	0	0
6	0	230	1	172	26	2	0	0	0	0	0	0	0
7	0	219	1	163	22	4	0	0	0	0	0	0	0
8	0	212	1	158	24	2	0	0	0	0	0	0	0
9	0	177	1	141	13	2	1	0	0	0	0	0	0
10	1	201	1	149	21	2	1	0	0	0	0	0	0
11	0	309	1	171	28	5	3	3	3	1	0	0	0
12	0	492	2	169	25	7	1	2	6	8	3	0	0
13	0	840	3	183	42	17	4	1	9	3	7	6	0
14	0	1349	5	242	57	20	11	11	19	7	3	14	0
15	0	2327	9	353	112	45	30	22	41	19	4	12	3
16	0	3812	15	398	147	66	45	39	82	47	10	14	4
17	0	5357	22	397	140	71	59	30	107	64	24	26	7
18	0	7246	29	455	173	74	59	39	85	58	38	48	15
19	0	9566	39	515	167	92	49	47	98	60	28	54	35
20	0	11885	48	475	159	72	50	36	95	47	32	61	54
21	0	14207	58	415	147	62	45	37	80	30	22	36	59
22	1	16735	68	380	146	72	49	28	49	32	19	27	60

NWSC1106 ADCP 1644

Deployment: NWSC1106 updated 2012/09/11
Instrument no.: 1644
Instrument freq.: 75
Latitude: 60 33.800 N
Longitude:04 46.300 W
Bottom depth: 1063
Instrument depth: 644
Center depth of first bin: 609
Bin length: 25
Number of bins: 22
Number of first ensemble: 358
Time of first ensemble: 2011 06 11 19 00
Number of last ensemble: 24982
Time of last ensemble: 2012 05 18 19 00
Time between ensembles (min.): 20
All directions have been corrected by adding: -5.0

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	609	454	166	33	189	996
2	584	479	169	33	182	993
3	559	504	173	34	176	991
4	534	529	178	36	165	991
5	509	554	184	40	151	991
6	484	579	192	49	140	991
7	459	604	202	59	130	991
8	434	629	214	72	123	991
9	409	654	227	86	119	993
10	384	679	240	99	115	992
11	359	704	254	110	113	987
12	334	729	266	118	112	980
13	309	754	277	125	110	966
14	284	779	287	132	109	945
15	259	804	296	137	109	906
16	234	829	303	144	109	845
17	209	854	310	148	109	782
18	184	879	315	150	109	706
19	159	904	323	152	108	612
20	134	929	333	156	109	517
21	109	954	342	154	114	423
22	84	979	348	148	128	320

NWSC1106 ADCP 1644

Frequency of high speeds.
==========

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

Bin no.	Depth m	Speed (cm/s) 10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	609	718	320	99	24	4	1	0	0	0	0	0	0	0	0	0	0	0	0
2	584	721	329	107	26	5	1	0	0	0	0	0	0	0	0	0	0	0	0
3	559	732	344	109	27	5	1	0	0	0	0	0	0	0	0	0	0	0	0
4	534	753	363	120	28	6	1	0	0	0	0	0	0	0	0	0	0	0	0
5	509	774	387	131	34	8	2	0	0	0	0	0	0	0	0	0	0	0	0
6	484	787	417	151	43	11	3	0	0	0	0	0	0	0	0	0	0	0	0
7	459	800	448	178	57	17	6	2	0	0	0	0	0	0	0	0	0	0	0
8	434	823	483	216	73	23	7	3	0	0	0	0	0	0	0	0	0	0	0
9	409	846	535	253	93	28	9	3	1	0	0	0	0	0	0	0	0	0	0
10	384	856	572	292	114	39	13	4	1	0	0	0	0	0	0	0	0	0	0
11	359	872	613	336	136	45	14	5	1	0	0	0	0	0	0	0	0	0	0
12	334	878	639	365	155	54	17	5	2	0	0	0	0	0	0	0	0	0	0
13	309	873	654	392	180	66	20	6	2	1	0	0	0	0	0	0	0	0	0
14	284	859	658	418	201	74	24	7	2	1	0	0	0	0	0	0	0	0	0
15	259	828	642	421	222	84	27	8	3	1	0	0	0	0	0	0	0	0	0
16	234	777	605	402	226	92	30	9	3	1	0	0	0	0	0	0	0	0	0
17	209	723	565	385	220	97	33	10	4	1	1	0	0	0	0	0	0	0	0
18	184	653	516	358	209	92	33	11	4	1	1	0	0	0	0	0	0	0	0
19	159	568	453	322	191	90	32	11	4	1	1	0	0	0	0	0	0	0	0
20	134	483	393	285	174	84	32	10	4	1	0	0	0	0	0	0	0	0	0
21	109	398	328	240	151	77	29	9	3	1	0	0	0	0	0	0	0	0	0
22	84	304	250	186	119	61	24	7	2	0	0	0	0	0	0	0	0	0	0

NWSC1106 ADCP 1644

Harmonic constants for constituent M2 for deployment NWSC1106.

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	609	160	251	82	248	179	4	27	250	A
02	584	162	251	85	248	182	4	28	251	A
03	559	162	251	87	250	184	3	28	251	A
04	534	160	252	89	251	183	2	29	252	A
05	509	156	254	94	254	183	0	31	254	C
06	484	153	255	100	256	183	2	33	255	C
07	459	149	257	106	259	183	4	35	258	C
08	434	142	258	112	261	181	4	38	260	C
09	409	135	260	118	264	179	6	41	262	C
10	384	128	262	122	267	177	8	44	265	C
11	359	122	265	129	270	177	8	47	267	C
12	334	117	268	135	272	178	5	49	270	C
13	309	117	272	142	272	184	0	50	272	C
14	284	120	275	150	271	191	6	51	273	A
15	259	123	276	154	271	197	9	51	273	A
16	234	125	278	158	271	201	12	52	274	A
17	209	124	279	161	271	203	14	52	274	A
18	184	126	281	164	272	206	17	53	275	A
19	159	126	282	167	272	208	17	53	276	A
20	134	133	281	168	273	214	14	52	276	A
21	109	143	280	170	274	222	11	50	276	A
22	84	144	275	166	270	219	11	49	272	A

Harmonic constants for constituent S2 for deployment NWSC1106.

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	609	52	294	39	294	65	0	37	294	A
02	584	52	295	40	295	65	0	37	295	A
03	559	53	296	41	295	67	1	38	296	A
04	534	53	297	40	294	67	2	37	296	A
05	509	55	297	41	293	68	2	37	296	A
06	484	56	298	43	292	70	4	38	296	A
07	459	56	297	44	292	71	3	38	295	A
08	434	54	293	40	294	67	0	36	294	C
09	409	52	295	42	298	66	2	39	296	C
10	384	53	301	48	299	72	1	42	300	A
11	359	56	299	51	299	75	0	42	299	A
12	334	54	295	49	301	72	4	42	297	C
13	309	53	293	47	305	71	7	41	298	C
14	284	53	295	46	306	70	7	41	300	C
15	259	53	297	44	306	69	5	40	301	C
16	234	53	298	46	307	70	5	41	302	C
17	209	55	295	47	302	72	4	40	298	C
18	184	55	294	49	303	73	6	42	298	C
19	159	56	291	48	299	74	5	41	294	C
20	134	57	290	47	298	74	5	40	294	C
21	109	50	298	52	294	72	2	46	296	A
22	84	53	300	61	294	81	5	49	297	A

NWSC1106 ADCP 1644

Harmonic constants for constituent N2 for deployment NWSC1106.

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	609	29	211	13	258	30	9	18	216	C
02	584	28	209	13	264	29	11	18	216	C
03	559	27	209	13	270	28	11	16	215	C
04	534	30	215	15	262	32	10	22	223	C
05	509	31	220	17	245	35	6	28	225	C
06	484	32	226	21	235	38	3	33	229	C
07	459	31	234	25	230	40	1	39	232	A
08	434	30	240	26	232	40	3	41	237	A
09	409	32	240	27	231	41	3	40	236	A
10	384	30	245	27	235	40	4	42	241	A
11	359	30	249	28	239	41	3	44	244	A
12	334	30	249	29	240	42	3	44	245	A
13	309	31	253	31	242	43	4	46	247	A
14	284	30	260	34	248	45	5	48	253	A
15	259	31	263	37	245	48	8	50	252	A
16	234	34	265	37	242	49	10	47	252	A
17	209	34	264	36	240	49	11	47	251	A
18	184	33	263	39	236	49	12	50	247	A
19	159	33	266	40	236	50	13	51	248	A
20	134	35	279	43	236	52	19	53	252	A
21	109	38	281	48	241	58	20	54	256	A
22	84	45	287	44	242	58	24	45	265	A

Harmonic constants for constituent O1 for deployment NWSC1106.

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	609	10	15	8	36	13	2	38	23	C
02	584	10	16	8	41	12	3	39	26	C
03	559	10	13	8	34	13	2	40	21	C
04	534	11	15	8	31	13	2	37	21	C
05	509	10	13	9	37	13	3	40	23	C
06	484	11	11	8	32	13	2	36	18	C
07	459	10	15	8	36	13	2	40	23	C
08	434	10	4	8	36	12	3	38	16	C
09	409	9	1	8	36	12	4	40	16	C
10	384	8	10	8	44	11	3	48	28	C
11	359	8	359	6	58	9	5	34	18	C
12	334	9	348	6	62	10	6	18	360	C
13	309	11	355	8	43	12	5	31	9	C
14	284	13	355	10	37	15	6	36	10	C
15	259	12	3	11	47	15	6	40	22	C
16	234	10	11	12	60	14	6	55	43	C
17	209	10	14	11	57	14	5	51	40	C
18	184	9	4	14	63	15	7	67	52	C
19	159	8	16	17	59	18	5	69	53	C
20	134	7	6	16	73	16	7	78	67	C
21	109	7	51	19	84	20	4	72	81	C
22	84	10	115	24	65	25	7	73	70	A

NWSC1106 ADCP 1644

Harmonic constants for constituent K1 for deployment NWSC1106.

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	609	6	254	2	245	6	0	19	253	A
02	584	5	248	1	233	6	0	13	247	A
03	559	5	241	1	261	5	0	9	242	C
04	534	5	211	1	155	6	1	9	209	A
05	509	6	222	2	168	6	1	9	220	A
06	484	5	212	1	150	5	1	6	210	A
07	459	5	203	1	144	5	1	10	201	A
08	434	4	189	2	166	4	1	24	185	A
09	409	5	194	1	151	5	1	7	193	A
10	384	5	187	1	142	5	1	9	186	A
11	359	3	165	3	198	4	1	36	176	C
12	334	2	168	6	199	6	1	71	195	C
13	309	3	121	8	189	8	2	83	187	C
14	284	3	197	7	175	8	1	71	177	A
15	259	5	244	5	171	6	4	44	209	A
16	234	6	277	2	157	6	2	169	101	A
17	209	11	309	3	86	11	2	168	127	C
18	184	19	315	3	107	19	1	173	134	C
19	159	22	318	1	269	22	1	2	318	A
20	134	27	325	4	42	27	4	2	325	C
21	109	28	321	13	120	31	4	156	137	C
22	84	45	323	14	142	47	0	162	143	C

NWSC1106 AANDERAA 718

```
Deployment: NWSC1106          analyzed from beginning to end
Instrument no.:   718
Instrument type: Aanderaa
Latitude: 60 33.800 N
Longitude:04 46.300 W
Bottom depth: 1063
Instrument depth:  751
Number of records: 8208
Time of first record: 2011 06 11 19 30
Time of last record : 2012 05 18 18 30
Time between records (min.): 60.000
```

Parameters	Records OK	Records flagged
Column 1 : Recno		
Column 2- 4: Date		
Column 5- 6: Time		
Column 7 : Temp	8208	0
Column 8 : Speed	8208	0
Column 9 : Direct	8208	0

Comments

Residual current: 56 mm/sec towards: 183 degrees

TIDAL ANALYSIS

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

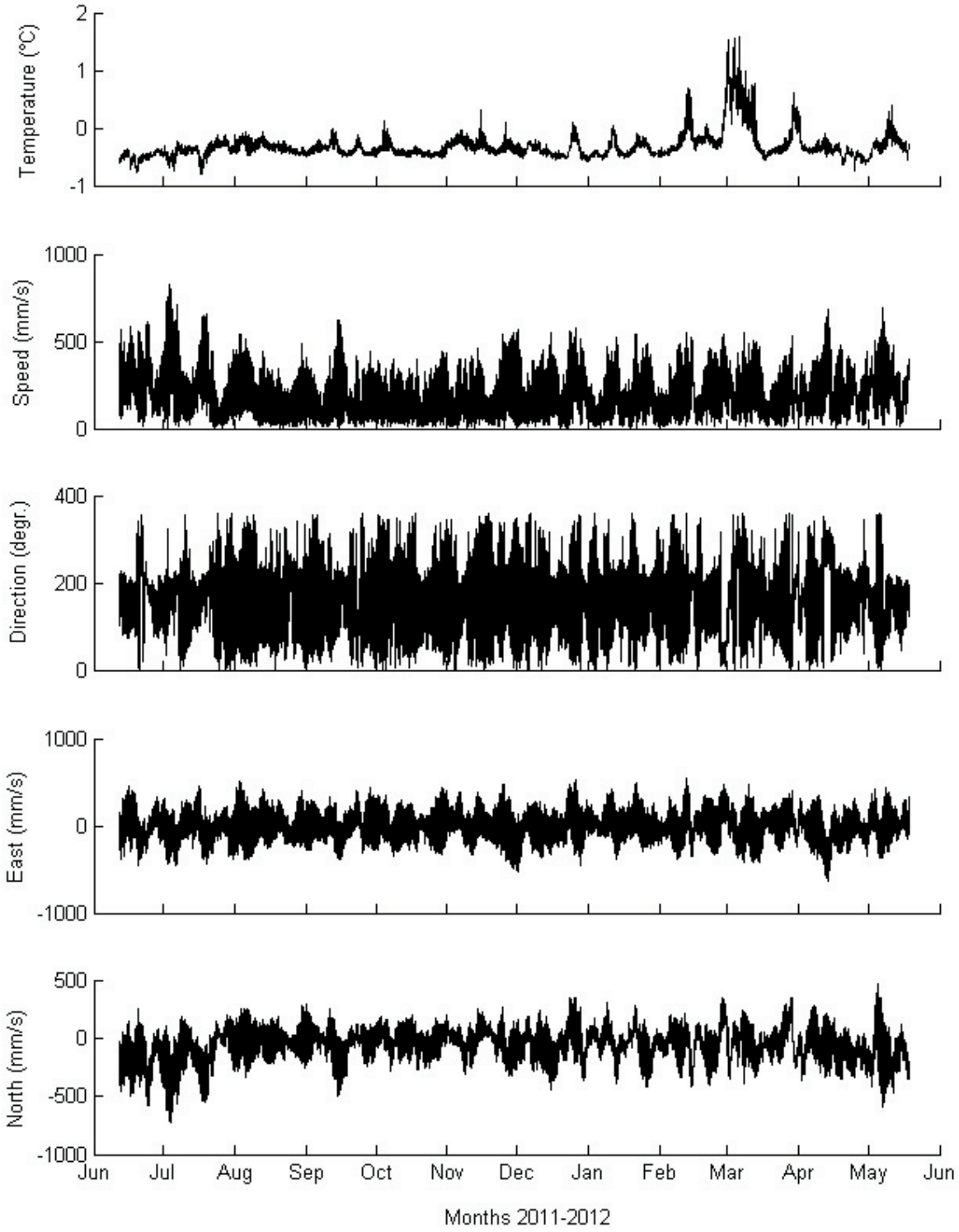
Const	Freq c/hr	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
MM	.00151215	4	126	6	317	7	1	125	314	A
MSF	.00282193	22	310	15	296	26	3	33	306	A
Q1	.03721850	5	311	5	340	7	2	45	326	C
O1	.03873065	11	17	12	29	16	2	47	24	C
NO1	.04026859	2	81	2	102	3	1	47	92	C
P1	.04155259	3	239	1	192	3	1	11	237	A
K1	.04178075	8	245	3	248	8	0	19	245	C
N2	.07899925	39	216	17	229	42	4	23	218	C
M2	.08051140	189	250	117	248	223	3	32	249	A
L2	.08202355	3	198	2	55	4	1	144	31	A
S2	.08333334	62	292	52	295	81	2	40	293	C
K2	.08356149	14	301	19	300	23	0	53	301	A
MK3	.12229210	0	209	1	262	1	0	87	262	C
M4	.16102280	2	131	7	318	7	0	109	318	A
MS4	.16384470	2	201	4	8	4	0	122	12	C

DIRECTIONAL CURRENT DISTRIBUTION (for all nonflagged observations in series)

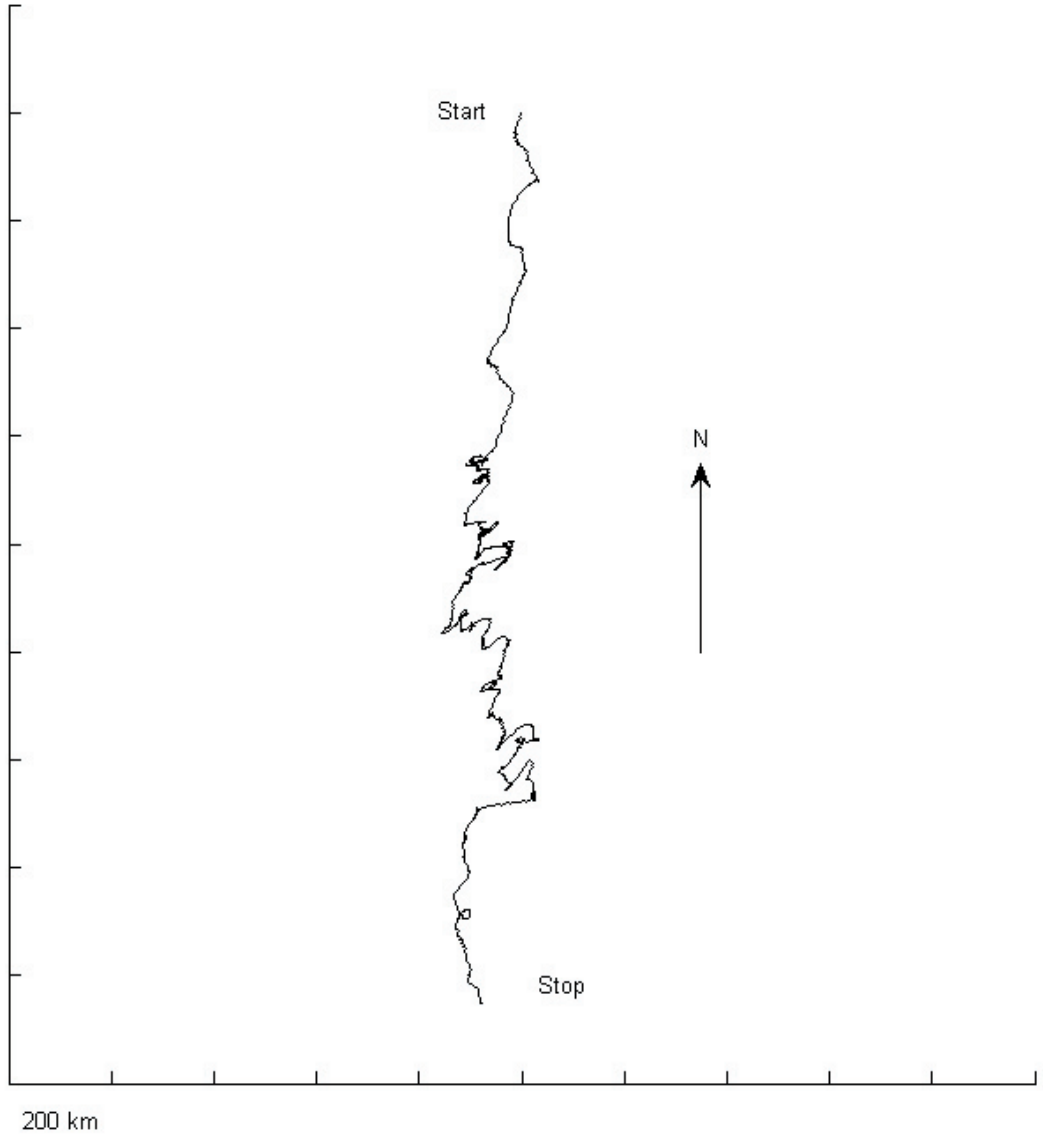
Relative number of observations in parts per thousand (ppt) grouped into speed and direction intervals (of 30 degree width centred around the directions shown)

Speed intervals (mm/s)	Direction intervals 15	45	75	105	135	165	195	225	255	285	315	345	All dir. Tot	Acc
0 - 50	6	6	8	6	6	9	7	8	5	7	7	3	78	78
50 - 100	10	15	19	16	13	12	17	17	17	9	8	5	159	237
100 - 150	8	19	28	18	11	12	17	25	18	8	4	3	171	408
150 - 200	4	21	29	15	9	10	17	27	16	6	3	1	157	566
200 - 300	2	28	46	19	7	12	30	56	24	3	1	0.49	231	797
300 - 400	1	15	24	5	2	4	18	43	12	1	0.12	0.12	126	922
400 - 500	0.49	8	6	1	0	0.12	9	24	4	0.12	0	0	53	975
500 - 600	0	2	2	0	0	0	4	7	3	0	0	0	17	992
600 - 700	0	0	0	0	0	0	2	3	1	0	0	0	6	999
700 - 800	0	0	0	0	0	0	0.37	1	0	0	0	0	1	1000
800 - 900	0	0	0	0	0	0	0.12	0.12	0	0	0	0	.24	1000
Total (ppt)	32	113	163	80	47	58	122	211	100	34	23	14		
Rel.flux (ppt)	19	118	168	66	31	42	138	277	103	20	11	6		
Avg.spd (mm/s)	121	210	208	166	134	148	229	265	207	119	93	93		
Max.spd (mm/s)	490	557	578	475	399	419	801	827	680	475	308	305		

NWSC1106 Aanderaa 718



NWSC1106 Aanderaa 718



NWZA1106

Latitude: 60°23.403´N

Longitude: 006°09.590´W

Echo sounding depth: 416 m

Bottom depth corr.: 416 m (MicroCat)

Time of deployment: 11/6 - 2011 0303 UTC

Time of recovery: 18/5 – 2012 0636 UTC

ADCP:

Instrument no.: RDI ADCP 3368

Instrument frequency: 75 kHz

Height above bottom: 1 m

Depth: 415 m (corr.)

Time of first data: 11/6 – 2011 0320 UTC

Time of last data: 18/5 – 2012 0600 UTC

Sample interval: 20 min

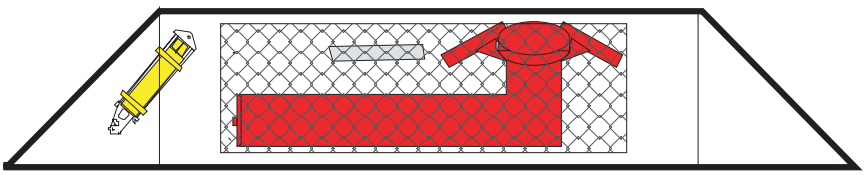
No. of ensembles: 24633

Pings per ens.: 10

Binlength: 10 m

Depth of first bin: 397 m (corr.)

No. of bins: 36



MicroCat:

Instrument no.: 0984

Height above bottom: 1 m

Time of first data: 11/6 – 2011 0320 UTC

Time of last data: 18/5 – 2012 0620 UTC

Sample interval: 10 min

No. of ensembles: 49267

Instrument depth: 415 m

Data:

ADCP data ok.

The salinity from the MicroCat has not been edited.

NWZA1106 ADCP 3368

Error statistics for deployment: NWZA1106 updated 2012/09/17

Surface distance not edited
Heading, pitch and roll not edited
Temperature edited by AKL in Jul 2012
Velocity edited up to and including bin 36 by KMHL in Sep 2012
Intensity edited up to and including bin 36 by EVM in Sep 2012

Total number of ensembles: 24633
Interval between ensembles: 20 min
Original number of bins: 60
Number of acceptable velocity bins: 36
Number of acceptable intensity bins: 36

Flagged values have been replaced by error codes: -999.99 for temperature and depth, -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 depth ens. flagged : 0
Number of temperature ens. flagged: 0

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

Bin	Int. ens. flgd	Velocity ens. flgd	Velocity % flgd	Number of velocity gaps of length 1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	0	101	0	86	4	1	1	0	0	0	0	0	0
2	0	116	0	93	6	2	0	1	0	0	0	0	0
3	0	98	0	76	9	0	1	0	0	0	0	0	0
4	0	123	0	103	6	1	0	1	0	0	0	0	0
5	0	107	0	82	9	1	1	0	0	0	0	0	0
6	0	121	0	98	9	0	0	1	0	0	0	0	0
7	0	123	0	102	9	1	0	0	0	0	0	0	0
8	0	104	0	79	8	3	0	0	0	0	0	0	0
9	0	141	1	109	10	4	0	0	0	0	0	0	0
10	0	130	1	114	6	0	1	0	0	0	0	0	0
11	0	118	0	89	9	1	2	0	0	0	0	0	0
12	0	133	1	111	11	0	0	0	0	0	0	0	0
13	0	136	1	120	8	0	0	0	0	0	0	0	0
14	0	102	0	83	5	3	0	0	0	0	0	0	0
15	0	121	0	105	6	0	1	0	0	0	0	0	0
16	0	114	0	103	4	1	0	0	0	0	0	0	0
17	0	112	0	93	8	1	0	0	0	0	0	0	0
18	0	132	1	111	7	1	1	0	0	0	0	0	0
19	0	104	0	87	7	1	0	0	0	0	0	0	0
20	0	97	0	84	5	1	0	0	0	0	0	0	0
21	0	106	0	90	8	0	0	0	0	0	0	0	0
22	0	109	0	95	7	0	0	0	0	0	0	0	0
23	0	113	0	96	7	1	0	0	0	0	0	0	0
24	0	122	0	99	10	1	0	0	0	0	0	0	0
25	0	157	1	116	12	1	1	2	0	0	0	0	0
26	0	181	1	124	10	2	2	1	0	1	0	0	0
27	0	206	1	130	14	5	3	0	1	1	0	0	0
28	0	276	1	154	27	6	4	1	2	1	0	0	0
29	0	409	2	160	24	10	2	2	5	2	1	0	1
30	0	653	3	218	37	7	4	1	7	5	1	2	1
31	0	945	4	265	43	12	2	0	5	2	2	5	3
32	0	1280	5	378	48	19	3	1	7	4	5	6	3
33	0	1804	7	440	65	20	8	3	15	2	4	4	9
34	0	2819	11	556	115	29	25	7	14	6	2	7	12
35	0	4050	16	669	129	48	18	8	17	6	1	9	22
36	0	5649	23	718	119	39	14	9	20	10	0	5	29

NWZA1106 ADCP 3368

Deployment: NWZA1106 updated 2012/09/17
Instrument no.: 3368
Instrument freq.: 75
Latitude: 60 23.403 N
Longitude:06 09.590 W
Bottom depth: 416
Instrument depth: 415
Center depth of first bin: 397
Bin length: 10
Number of bins: 36
Number of first ensemble: 254
Time of first ensemble: 2011 06 11 03 20
Number of last ensemble: 24886
Time of last ensemble: 2012 05 18 06 00
Time between ensembles (min.): 20
All directions have been corrected by adding: -6.0

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	397	19	320	100	220	996
2	387	29	339	100	222	995
3	377	39	347	92	224	996
4	367	49	351	83	228	995
5	357	59	351	72	231	996
6	347	69	350	61	236	995
7	337	79	348	52	241	995
8	327	89	346	44	245	996
9	317	99	343	39	248	994
10	307	109	340	35	251	995
11	297	119	336	32	254	995
12	287	129	331	29	254	995
13	277	139	329	28	253	994
14	267	149	326	27	253	996
15	257	159	323	25	250	995
16	247	169	321	24	247	995
17	237	179	320	23	244	995
18	227	189	318	23	241	995
19	217	199	318	22	236	996
20	207	209	318	21	230	996
21	197	219	317	21	224	996
22	187	229	317	21	218	996
23	177	239	316	20	212	995
24	167	249	316	18	204	995
25	157	259	317	19	198	994
26	147	269	318	19	190	993
27	137	279	320	19	185	992
28	127	289	321	20	179	989
29	117	299	322	21	174	983
30	107	309	325	22	171	973
31	97	319	327	24	170	962
32	87	329	331	26	168	948
33	77	339	335	29	165	927
34	67	349	338	32	161	886
35	57	359	345	35	153	836
36	47	369	353	40	143	771

NWZA1106 ADCP 3368

Frequency of high speeds.
==========

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

Bin no.	Depth m	Speed (cm/s) 10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	397	922	727	495	297	158	69	24	5	0	0	0	0	0	0	0	0	0	0
2	387	932	755	528	331	188	93	37	12	2	0	0	0	0	0	0	0	0	0
3	377	941	769	550	347	199	102	41	15	3	1	0	0	0	0	0	0	0	0
4	367	943	777	559	356	203	101	42	15	4	0	0	0	0	0	0	0	0	0
5	357	942	781	561	355	200	100	42	15	4	0	0	0	0	0	0	0	0	0
6	347	941	780	564	356	198	94	39	14	3	1	0	0	0	0	0	0	0	0
7	337	939	782	561	352	193	90	37	12	2	1	0	0	0	0	0	0	0	0
8	327	941	781	560	349	186	86	34	11	2	0	0	0	0	0	0	0	0	0
9	317	938	777	554	339	180	84	31	10	3	0	0	0	0	0	0	0	0	0
10	307	936	769	545	334	177	81	31	9	2	0	0	0	0	0	0	0	0	0
11	297	934	763	533	324	172	79	30	10	2	0	0	0	0	0	0	0	0	0
12	287	929	752	524	312	166	76	29	10	3	0	0	0	0	0	0	0	0	0
13	277	928	747	516	309	161	74	30	10	2	0	0	0	0	0	0	0	0	0
14	267	925	742	506	300	157	73	30	10	2	0	0	0	0	0	0	0	0	0
15	257	925	734	500	291	155	76	31	11	2	0	0	0	0	0	0	0	0	0
16	247	924	727	492	289	153	75	33	11	2	0	0	0	0	0	0	0	0	0
17	237	922	723	489	284	153	75	32	11	3	0	0	0	0	0	0	0	0	0
18	227	916	718	480	283	152	76	33	11	3	0	0	0	0	0	0	0	0	0
19	217	917	718	479	281	153	78	34	12	3	1	0	0	0	0	0	0	0	0
20	207	916	711	474	282	154	79	34	13	3	1	0	0	0	0	0	0	0	0
21	197	914	707	472	284	156	78	35	13	3	1	0	0	0	0	0	0	0	0
22	187	914	706	470	285	159	79	35	12	3	1	0	0	0	0	0	0	0	0
23	177	909	698	470	286	161	80	36	13	4	1	0	0	0	0	0	0	0	0
24	167	906	696	466	285	161	82	37	13	3	1	0	0	0	0	0	0	0	0
25	157	906	694	470	285	162	84	38	15	4	1	0	0	0	0	0	0	0	0
26	147	903	694	469	289	164	85	39	16	5	1	0	0	0	0	0	0	0	0
27	137	907	695	472	293	167	87	40	15	4	1	0	0	0	0	0	0	0	0
28	127	905	697	473	291	168	88	39	15	4	1	0	0	0	0	0	0	0	0
29	117	899	695	474	296	170	89	41	15	4	1	0	0	0	0	0	0	0	0
30	107	890	692	474	295	172	91	41	15	5	1	0	0	0	0	0	0	0	0
31	97	884	688	474	295	174	93	43	15	4	1	0	0	0	0	0	0	0	0
32	87	874	685	476	300	176	96	44	16	4	1	0	0	0	0	0	0	0	0
33	77	854	672	471	300	177	99	45	18	5	1	0	0	0	0	0	0	0	0
34	67	819	648	454	291	173	96	47	19	5	1	0	0	0	0	0	0	0	0
35	57	774	620	441	286	172	96	48	21	7	2	0	0	0	0	0	0	0	0
36	47	718	582	418	272	168	96	49	22	8	2	1	0	0	0	0	0	0	0

NWZA1106 ADCP 3368

Harmonic constants for constituent M2 for deployment NWZA1106.

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	397	244	261	232	224	320	106	43	244	A
02	387	268	263	243	220	337	131	41	244	A
03	377	281	264	250	218	346	149	40	245	A
04	367	289	265	253	215	349	160	39	245	A
05	357	292	265	253	214	350	164	38	245	A
06	347	293	265	253	214	350	166	38	244	A
07	337	292	265	252	213	349	167	38	244	A
08	327	291	264	251	213	347	166	38	244	A
09	317	290	264	248	212	345	163	38	244	A
10	307	288	263	245	212	342	159	38	243	A
11	297	285	263	239	212	339	155	37	243	A
12	287	282	262	234	212	334	151	37	243	A
13	277	279	261	228	212	330	146	36	243	A
14	267	276	260	223	211	325	142	36	242	A
15	257	273	259	217	211	320	138	35	242	A
16	247	271	258	212	210	316	136	35	242	A
17	237	269	257	207	209	312	132	34	241	A
18	227	267	257	202	209	309	130	34	241	A
19	217	266	256	198	208	306	127	33	241	A
20	207	264	255	194	208	303	125	32	241	A
21	197	263	255	190	207	300	123	32	241	A
22	187	261	254	187	207	298	121	32	240	A
23	177	260	254	183	206	296	118	31	240	A
24	167	258	253	181	206	293	117	31	240	A
25	157	257	253	179	206	291	115	31	240	A
26	147	257	253	176	206	290	113	30	240	A
27	137	256	252	174	206	288	112	30	240	A
28	127	254	252	171	206	286	109	30	240	A
29	117	253	252	169	206	285	108	30	240	A
30	107	253	252	168	207	285	106	29	240	A
31	97	253	252	166	207	284	105	29	240	A
32	87	254	252	164	206	284	104	29	240	A
33	77	254	251	162	206	283	103	28	240	A
34	67	252	251	159	206	280	101	28	240	A
35	57	254	251	157	205	280	102	27	240	A
36	47	255	250	154	204	280	101	26	240	A

Harmonic constants for constituent S2 for deployment NWZA1106.

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	397	100	298	87	257	124	46	40	281	A
02	387	110	298	91	251	132	56	37	280	A
03	377	116	298	95	247	137	63	36	279	A
04	367	117	297	97	245	138	65	36	278	A
05	357	117	296	98	244	138	66	37	277	A
06	347	116	296	97	244	137	65	37	276	A
07	337	115	295	94	244	135	62	36	276	A
08	327	113	294	91	245	132	58	36	277	A
09	317	110	294	87	246	129	55	35	277	A
10	307	108	294	85	247	127	53	35	278	A
11	297	105	294	82	248	123	51	35	278	A
12	287	103	294	79	248	120	49	35	279	A
13	277	101	295	78	249	118	48	35	279	A
14	267	98	296	76	249	115	47	35	280	A
15	257	96	296	74	250	112	46	34	280	A
16	247	94	296	73	249	110	45	35	280	A
17	237	93	297	72	249	108	45	34	281	A
18	227	90	296	69	249	105	44	34	280	A
19	217	89	296	68	248	104	43	34	280	A
20	207	88	296	66	248	102	43	33	281	A
21	197	88	296	64	248	100	42	32	281	A
22	187	86	296	62	248	98	41	32	282	A
23	177	86	295	61	248	98	40	31	282	A
24	167	86	295	60	248	97	39	31	282	A
25	157	85	295	58	247	95	38	30	282	A
26	147	85	294	56	246	94	37	29	282	A
27	137	84	293	55	247	94	35	29	281	A
28	127	84	292	54	248	94	34	29	281	A
29	117	83	291	55	248	94	33	30	279	A
30	107	83	290	55	247	94	33	30	279	A
31	97	83	290	55	247	93	34	30	279	A
32	87	82	291	54	247	92	34	30	279	A
33	77	81	290	54	246	92	34	30	279	A
34	67	81	291	53	246	91	34	29	280	A
35	57	81	291	52	245	90	33	29	279	A
36	47	79	288	49	243	88	32	27	277	A

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Harmonic constants for constituent N2 for deployment NWZA1106.

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	397	40	242	39	205	53	18	44	224	A
02	387	44	245	41	201	56	22	42	225	A
03	377	48	244	41	201	59	23	39	227	A
04	367	52	244	42	200	62	24	37	228	A
05	357	56	242	43	199	66	25	35	227	A
06	347	60	241	44	196	69	27	33	227	A
07	337	62	241	45	196	71	28	32	227	A
08	327	64	240	45	193	73	29	31	226	A
09	317	65	238	45	191	73	29	30	225	A
10	307	65	238	44	190	73	29	30	225	A
11	297	63	238	43	189	71	29	30	225	A
12	287	63	237	43	190	71	28	30	224	A
13	277	62	236	43	190	70	27	31	223	A
14	267	60	235	42	190	69	26	32	221	A
15	257	58	234	42	190	67	25	33	220	A
16	247	58	233	42	190	67	25	33	220	A
17	237	56	232	42	189	66	25	34	218	A
18	227	56	231	42	189	66	24	34	217	A
19	217	57	230	42	186	66	25	34	216	A
20	207	56	230	42	186	66	25	34	216	A
21	197	56	231	42	185	66	26	34	216	A
22	187	57	230	43	184	66	27	34	215	A
23	177	57	230	43	183	66	27	34	214	A
24	167	58	230	44	182	67	28	34	214	A
25	157	57	229	45	182	67	28	35	213	A
26	147	59	228	45	180	68	29	34	212	A
27	137	59	227	44	178	68	29	33	211	A
28	127	58	226	44	177	67	29	33	211	A
29	117	58	225	42	176	66	28	32	211	A
30	107	57	224	41	176	65	27	32	210	A
31	97	56	222	40	176	63	25	32	208	A
32	87	56	221	38	176	63	23	30	209	A
33	77	55	219	35	176	62	21	28	209	A
34	67	52	219	33	176	59	20	28	209	A
35	57	50	220	33	177	57	20	30	208	A
36	47	47	217	31	179	54	17	31	207	A

Harmonic constants for constituent O1 for deployment NWZA1106.

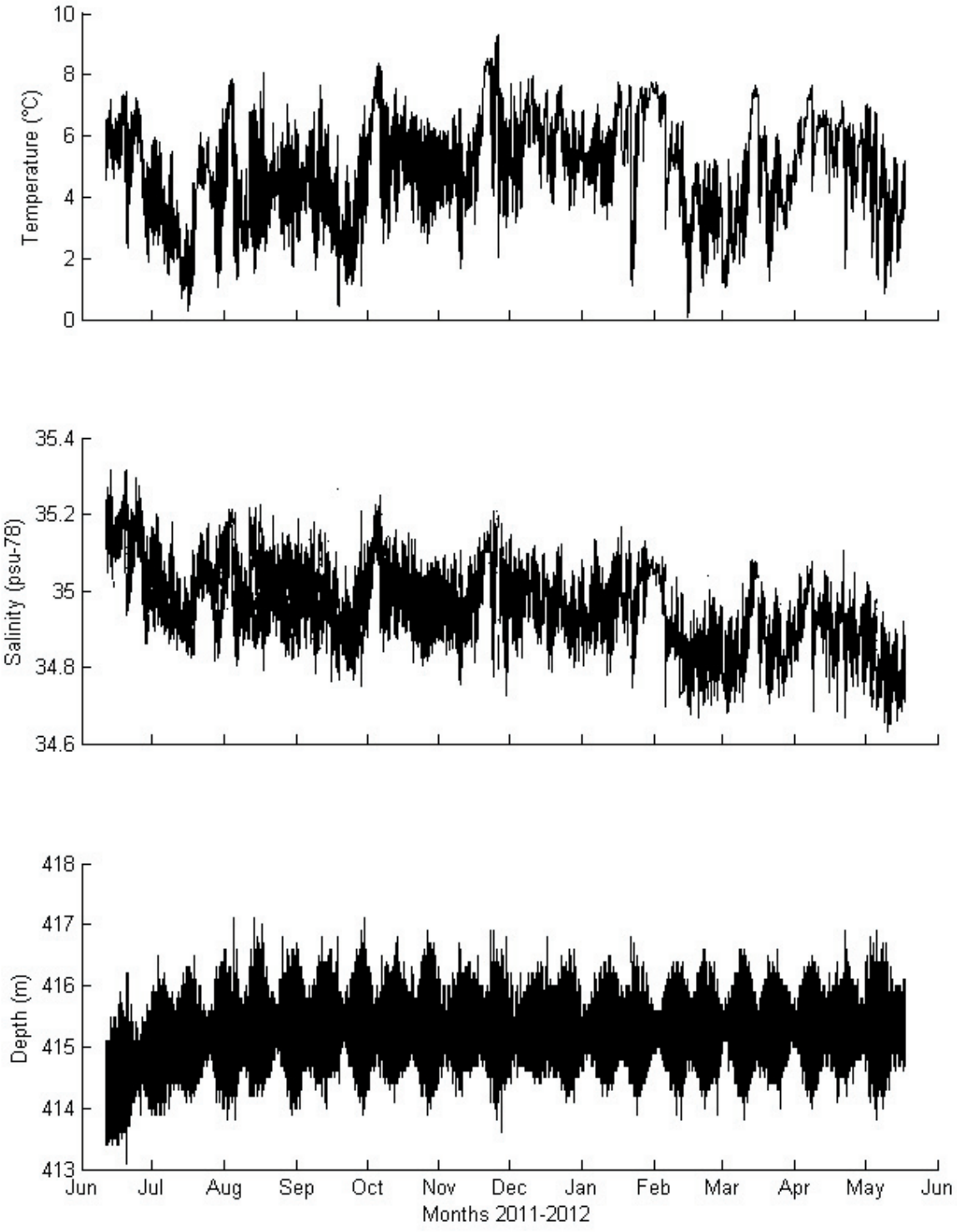
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	397	16	49	3	271	16	2	171	230	A
02	387	15	51	5	248	16	1	162	233	A
03	377	16	48	8	252	18	3	156	232	A
04	367	17	43	8	252	18	4	155	229	A
05	357	18	38	9	251	20	4	156	224	A
06	347	19	37	9	241	21	3	156	221	A
07	337	19	37	8	244	21	3	158	221	A
08	327	20	33	8	258	21	6	162	218	A
09	317	19	35	9	260	20	6	159	222	A
10	307	18	34	11	256	20	6	153	223	A
11	297	19	35	11	251	21	6	153	223	A
12	287	20	38	10	253	22	5	155	224	A
13	277	19	36	11	254	21	6	154	224	A
14	267	19	34	11	255	20	6	154	223	A
15	257	19	33	11	257	20	7	155	222	A
16	247	18	33	10	256	20	6	155	221	A
17	237	19	31	11	260	20	8	156	221	A
18	227	18	31	10	260	20	7	156	220	A
19	217	18	32	10	261	19	7	157	220	A
20	207	17	34	10	264	18	7	154	225	A
21	197	16	35	10	259	18	6	153	225	A
22	187	16	38	9	259	18	6	154	226	A
23	177	17	37	9	257	18	5	156	225	A
24	167	17	40	10	257	19	5	153	228	A
25	157	17	38	9	260	18	6	155	226	A
26	147	17	39	9	257	19	5	155	226	A
27	137	16	38	10	253	18	5	152	226	A
28	127	17	35	10	247	19	5	153	222	A
29	117	17	38	10	246	19	4	151	225	A
30	107	17	39	9	239	19	3	154	223	A
31	97	18	34	8	240	19	3	156	218	A
32	87	17	30	9	242	19	4	154	217	A
33	77	17	26	9	241	19	5	154	213	A
34	67	17	32	9	242	19	4	154	218	A
35	57	18	33	11	245	20	5	152	220	A
36	47	17	30	10	264	18	7	157	220	A

NWZA1106 ADCP 3368

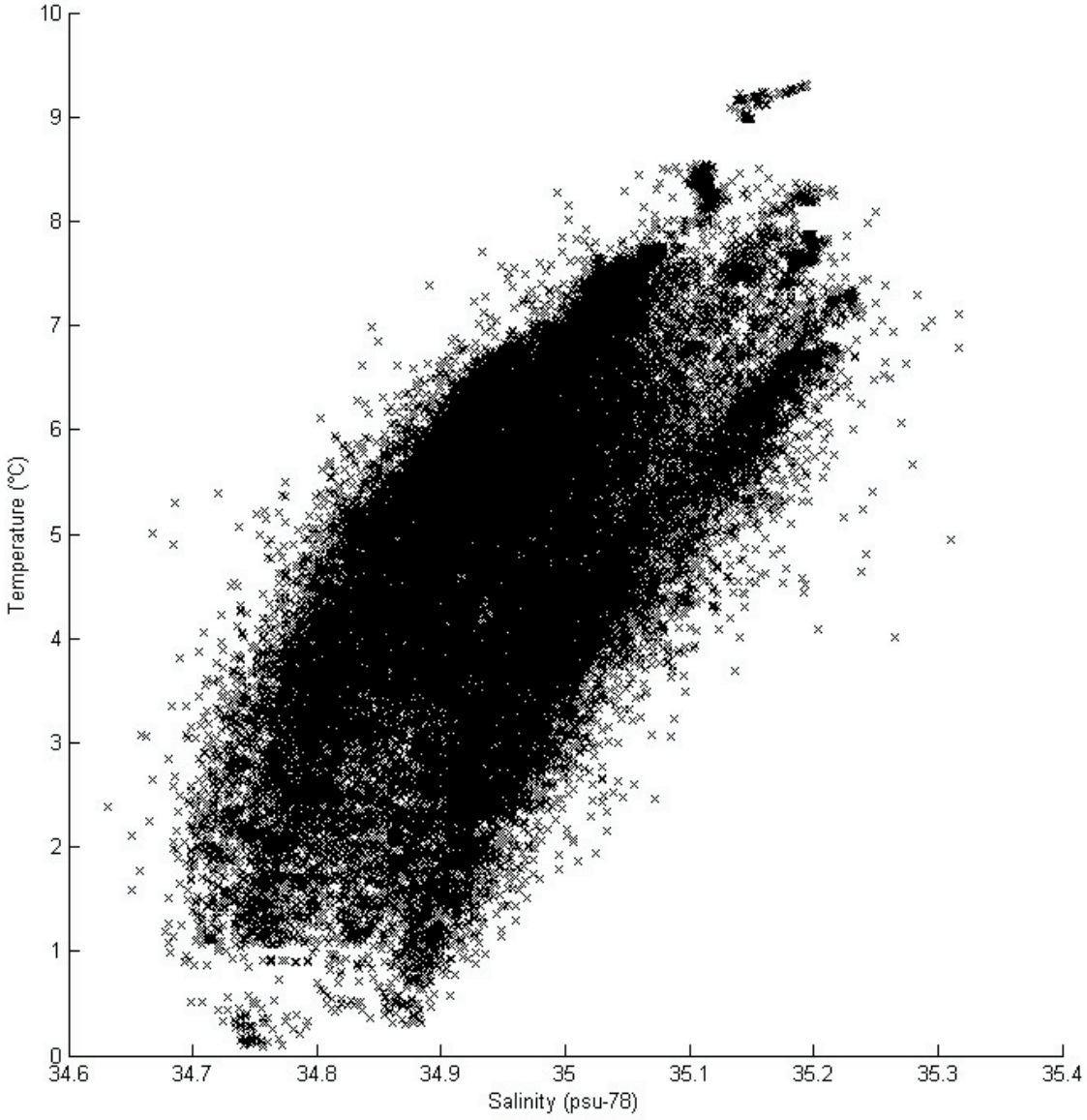
Harmonic constants for constituent K1 for deployment NWZA1106.

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	397	13	254	2	277	13	1	7	254	C
02	387	14	252	2	302	14	1	4	253	C
03	377	14	245	1	343	14	1	180	65	C
04	367	11	236	1	80	11	1	173	56	A
05	357	9	229	5	113	10	4	165	55	A
06	347	9	223	5	124	9	5	173	47	A
07	337	9	216	7	148	10	6	33	193	A
08	327	8	206	9	150	11	6	51	173	A
09	317	9	197	12	150	14	6	58	165	A
10	307	10	198	14	150	16	7	59	164	A
11	297	10	199	15	150	16	7	61	162	A
12	287	10	203	14	152	15	7	59	167	A
13	277	11	203	13	147	15	8	54	168	A
14	267	11	214	11	139	12	9	39	182	A
15	257	11	219	9	129	11	9	179	40	A
16	247	12	221	9	119	12	8	163	53	A
17	237	12	224	8	114	13	7	161	55	A
18	227	13	221	8	104	14	6	161	50	A
19	217	14	222	7	99	14	5	162	50	A
20	207	14	221	8	105	14	7	162	50	A
21	197	15	223	7	100	15	5	164	49	A
22	187	15	225	7	92	16	5	159	52	A
23	177	15	231	7	94	16	4	160	56	A
24	167	16	232	7	85	17	4	157	57	A
25	157	16	236	7	80	18	3	158	59	A
26	147	16	238	8	70	18	1	155	60	A
27	137	16	240	7	66	18	1	155	61	A
28	127	17	244	8	58	19	1	155	63	C
29	117	17	240	8	50	19	1	154	58	C
30	107	16	242	9	49	18	2	150	59	C
31	97	17	248	9	44	19	3	152	62	C
32	87	15	249	11	48	18	3	146	62	C
33	77	15	256	10	43	18	5	149	68	C
34	67	16	260	8	36	18	5	159	73	C
35	57	16	260	6	44	17	3	161	76	C
36	47	18	260	7	40	18	4	163	76	C

NWZA1106 MicroCat 0984



NWZA1106 MicroCat 0984



NWZB1109

Latitude: 60°13.500´N

Longitude: 006°10.000´W

Echo sounding depth: 1175 m

Bottom depth corr.: 1165 m (MicroCat)

Time of deployment: 4/9 - 2011 0557 UTC

Time of recovery: 18/5 - 2012 0900 UTC

ADCP:

Instrument no.: RDI ADCP 13287

Instrument frequency: 75 kHz

Height above bottom: 442 m (max)

Depth: 723 m (shallowest)

Time of first data: 4/9 - 2011 0620 UTC

Time of last data: 18/5 - 2012 0840 UTC

Sample interval: 20 min

No. of ensembles: 18512

Pings per ens.: 10

Binlength: 10 m

Depth of first bin: 730 m (rebinned)

No. of bins: 60

Micro Cat:

Instrument no.: 4049

Height above bottom: 440 m (max)

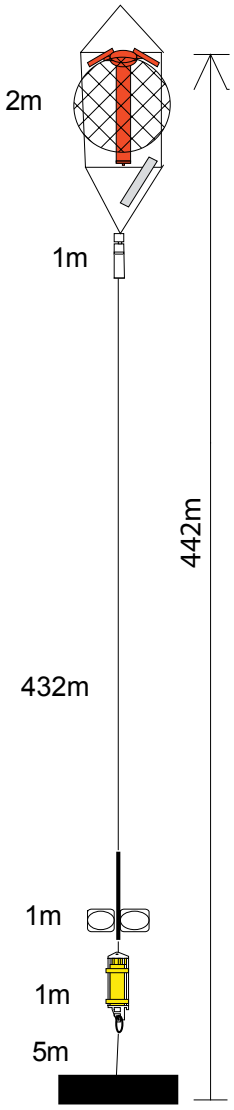
Time of first data: 4/9 – 2011 0620 UTC

Time of last data: 18/5 – 2012 0850 UTC

Sample interval: 10 min

No. of ensembles: 37024

Instrument depth: 725 m (shallowest)



Data:

ADCP data are ok, but the buoy has occasionally been dragged down by 200m. The ADCP layers have been adjusted according to the MicroCat depth readings.

The salinity from the MicroCat has not been edited.

NWZB1109 ADCP 13287

Error statistics for deployment: NWZB1109 - ReBined 22-Oct-2012

Surface distance not edited
Heading, pitch and roll not edited
Temperature edited by EVM in Sep 2012
Velocity edited up to and including bin 60 by KMHL in Oct 2012
Intensity edited up to and including bin 60 by EVM in Sep 2012

Total number of ensembles: 18512
Interval between ensembles: 20 min
Original number of bins: 70
Number of acceptable velocity bins: 60
Number of acceptable intensity bins: 60

Flagged values have been replaced by error codes: -999.99 for temperature and depth, -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 depth ens. flagged : 0
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	9296	9300	50	14	2	8	2	5	35	194	111	10	19
2	7030	7037	38	20	8	7	11	5	40	197	94	14	7
3	0	14	0	14	0	0	0	0	0	0	0	0	0
4	0	21	0	19	1	0	0	0	0	0	0	0	0
5	0	23	0	21	1	0	0	0	0	0	0	0	0
6	0	14	0	14	0	0	0	0	0	0	0	0	0
7	0	22	0	22	0	0	0	0	0	0	0	0	0
8	0	24	0	22	1	0	0	0	0	0	0	0	0
9	0	23	0	19	2	0	0	0	0	0	0	0	0
10	0	20	0	20	0	0	0	0	0	0	0	0	0
11	0	28	0	24	2	0	0	0	0	0	0	0	0
12	0	28	0	24	2	0	0	0	0	0	0	0	0
13	0	24	0	22	1	0	0	0	0	0	0	0	0
14	0	22	0	18	2	0	0	0	0	0	0	0	0
15	0	36	0	34	1	0	0	0	0	0	0	0	0
16	0	38	0	34	2	0	0	0	0	0	0	0	0
17	0	37	0	35	1	0	0	0	0	0	0	0	0
18	0	36	0	34	1	0	0	0	0	0	0	0	0
19	0	41	0	37	2	0	0	0	0	0	0	0	0
20	0	51	0	49	1	0	0	0	0	0	0	0	0
21	0	38	0	36	1	0	0	0	0	0	0	0	0
22	0	34	0	34	0	0	0	0	0	0	0	0	0
23	0	38	0	36	1	0	0	0	0	0	0	0	0
24	0	50	0	46	2	0	0	0	0	0	0	0	0
25	0	34	0	34	0	0	0	0	0	0	0	0	0
26	0	42	0	40	1	0	0	0	0	0	0	0	0
27	0	49	0	45	2	0	0	0	0	0	0	0	0
28	0	49	0	46	0	1	0	0	0	0	0	0	0
29	0	47	0	45	1	0	0	0	0	0	0	0	0
30	0	51	0	43	4	0	0	0	0	0	0	0	0
31	0	53	0	51	1	0	0	0	0	0	0	0	0
32	0	47	0	45	1	0	0	0	0	0	0	0	0
33	0	48	0	44	2	0	0	0	0	0	0	0	0
34	0	55	0	49	3	0	0	0	0	0	0	0	0
35	0	40	0	40	0	0	0	0	0	0	0	0	0
36	0	45	0	40	1	1	0	0	0	0	0	0	0
37	0	61	0	55	3	0	0	0	0	0	0	0	0
38	0	46	0	41	1	1	0	0	0	0	0	0	0
39	0	62	0	55	1	0	0	1	0	0	0	0	0
40	0	66	0	53	3	0	0	0	1	0	0	0	0
41	0	88	0	54	5	0	0	0	2	1	0	0	0
42	5	134	1	61	1	3	2	2	4	1	0	0	0
43	8	190	1	62	6	3	0	3	7	3	0	0	0
44	13	234	1	62	6	7	1	6	5	5	0	0	0
45	20	353	2	83	10	8	9	2	8	6	1	0	0
46	36	509	3	89	18	10	8	3	14	14	0	0	0
47	48	661	4	104	24	14	14	5	18	12	1	1	0
48	71	874	5	122	20	20	7	15	22	20	1	2	0
49	106	1028	6	129	21	20	11	15	27	22	5	1	0
50	193	1276	7	164	37	26	19	8	35	24	6	2	0
51	305	1607	9	148	53	25	24	13	39	44	7	1	0
52	454	2081	11	173	52	30	21	20	55	50	14	1	0
53	692	2659	14	200	58	46	26	20	72	65	18	1	0
54	952	3320	18	210	65	42	31	23	76	87	20	4	2
55	1325	4171	23	201	73	42	36	27	78	96	45	3	3
56	1690	4984	27	213	80	48	41	23	67	109	64	6	4
57	2165	5917	32	178	87	31	35	26	72	109	80	21	5
58	2698	6822	37	179	89	30	32	15	79	106	72	40	10
59	3279	7764	42	179	91	38	19	20	74	123	62	58	14
60	3959	8686	47	181	62	36	14	20	68	125	76	68	17

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Deployment: NWZB1109 - ReBined 22-Oct-2012
Instrument no.: 13287
Instrument freq.: 75
Latitude: 60 13.500 N
Longitude:06 10.000 W
Bottom depth: 1165
Instrument depth: 723
Center depth of first bin: 730
Bin length: 10
Number of bins: 60
Number of first ensemble: 128
Time of first ensemble: 2011 09 04 06 20
Number of last ensemble: 18639
Time of last ensemble: 2012 05 18 08 39
Time between ensembles (min.): 20
All directions have been corrected by adding: -6.0

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	730	435	517	510	273	498
2	720	445	473	465	273	620
3	710	455	356	339	273	999
4	700	465	353	335	273	999
5	690	475	349	331	273	999
6	680	485	344	325	273	999
7	670	495	340	320	273	999
8	660	505	335	313	273	999
9	650	515	330	306	273	999
10	640	525	324	299	273	999
11	630	535	319	292	273	998
12	620	545	313	284	273	998
13	610	555	307	275	273	999
14	600	565	301	265	273	999
15	590	575	295	254	273	998
16	580	585	289	244	273	998
17	570	595	283	231	273	998
18	560	605	276	216	274	998
19	550	615	271	202	274	998
20	540	625	266	186	275	997
21	530	635	263	172	275	998
22	520	645	259	156	276	998
23	510	655	257	142	277	998
24	500	665	255	128	278	997
25	490	675	255	115	280	998
26	480	685	255	101	281	998
27	470	695	255	90	282	997
28	460	705	255	77	283	997
29	450	715	255	66	285	997
30	440	725	256	55	289	997
31	430	735	256	45	294	997
32	420	745	258	37	300	997
33	410	755	259	30	309	997
34	400	765	262	23	320	997
35	390	775	266	18	335	998
36	380	785	269	16	355	998
37	370	795	271	16	16	997
38	360	805	274	17	32	998
39	350	815	277	19	40	997
40	340	825	280	21	53	996
41	330	835	284	23	58	995
42	320	845	287	24	64	993
43	310	855	291	26	69	990
44	300	865	294	29	73	987
45	290	875	297	32	76	981
46	280	885	300	36	77	973
47	270	895	301	40	78	964
48	260	905	303	43	79	953
49	250	915	304	46	79	944
50	240	925	306	49	80	931
51	230	935	308	51	80	913
52	220	945	310	53	79	888
53	210	955	312	55	77	856
54	200	965	312	59	75	821
55	190	975	312	64	73	775
56	180	985	312	70	72	731
57	170	995	313	78	71	680
58	160	1005	315	86	69	631
59	150	1015	317	96	68	581
60	140	1025	318	104	67	531

NWZB1109 ADCP 13287

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

Bin no.	Depth m	Speed (cm/s) 10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	730	498	497	482	388	249	134	56	17	4	1	0	0	0	0	0	0	0	0
2	720	620	614	551	396	244	131	54	14	3	0	0	0	0	0	0	0	0	0
3	710	913	757	572	389	240	124	49	14	3	0	0	0	0	0	0	0	0	0
4	700	913	755	569	383	233	119	45	12	2	0	0	0	0	0	0	0	0	0
5	690	912	751	560	375	228	114	41	9	2	0	0	0	0	0	0	0	0	0
6	680	908	746	554	368	216	107	38	8	2	0	0	0	0	0	0	0	0	0
7	670	905	739	549	358	211	102	34	6	2	0	0	0	0	0	0	0	0	0
8	660	906	732	540	347	199	91	29	5	1	0	0	0	0	0	0	0	0	0
9	650	904	726	528	338	191	85	24	4	1	0	0	0	0	0	0	0	0	0
10	640	902	719	513	325	181	77	19	3	1	0	0	0	0	0	0	0	0	0
11	630	900	711	506	314	168	70	17	3	0	0	0	0	0	0	0	0	0	0
12	620	897	704	490	300	158	63	14	2	0	0	0	0	0	0	0	0	0	0
13	610	895	696	480	286	145	56	11	2	0	0	0	0	0	0	0	0	0	0
14	600	893	685	466	271	134	48	10	2	0	0	0	0	0	0	0	0	0	0
15	590	890	675	449	257	122	41	9	1	0	0	0	0	0	0	0	0	0	0
16	580	889	663	434	243	113	38	9	1	0	0	0	0	0	0	0	0	0	0
17	570	885	652	420	228	105	34	7	1	0	0	0	0	0	0	0	0	0	0
18	560	883	638	399	213	94	28	6	1	0	0	0	0	0	0	0	0	0	0
19	550	882	629	380	197	84	26	6	0	0	0	0	0	0	0	0	0	0	0
20	540	882	621	367	186	76	23	5	0	0	0	0	0	0	0	0	0	0	0
21	530	881	619	355	177	70	22	5	0	0	0	0	0	0	0	0	0	0	0
22	520	882	607	345	168	67	20	4	0	0	0	0	0	0	0	0	0	0	0
23	510	879	600	339	161	63	19	3	1	0	0	0	0	0	0	0	0	0	0
24	500	874	592	333	159	63	19	3	0	0	0	0	0	0	0	0	0	0	0
25	490	876	599	332	159	62	18	4	1	0	0	0	0	0	0	0	0	0	0
26	480	875	595	334	159	64	19	4	1	0	0	0	0	0	0	0	0	0	0
27	470	872	597	334	160	65	20	5	1	0	0	0	0	0	0	0	0	0	0
28	460	869	598	334	159	66	22	5	1	0	0	0	0	0	0	0	0	0	0
29	450	868	594	331	161	69	23	5	1	0	0	0	0	0	0	0	0	0	0
30	440	867	597	335	159	69	22	6	2	0	0	0	0	0	0	0	0	0	0
31	430	869	599	336	159	68	24	6	1	0	0	0	0	0	0	0	0	0	0
32	420	869	602	342	162	70	24	7	2	0	0	0	0	0	0	0	0	0	0
33	410	867	605	343	167	70	25	7	2	0	0	0	0	0	0	0	0	0	0
34	400	873	617	350	169	72	26	8	2	0	0	0	0	0	0	0	0	0	0
35	390	879	622	364	179	74	27	8	2	0	0	0	0	0	0	0	0	0	0
36	380	881	630	374	187	77	27	8	2	0	0	0	0	0	0	0	0	0	0
37	370	882	638	379	192	83	29	7	2	0	0	0	0	0	0	0	0	0	0
38	360	888	646	386	199	86	30	8	2	0	0	0	0	0	0	0	0	0	0
39	350	888	652	398	205	88	30	8	2	0	0	0	0	0	0	0	0	0	0
40	340	891	657	409	213	91	32	8	2	0	0	0	0	0	0	0	0	0	0
41	330	894	663	414	222	96	33	9	2	0	0	0	0	0	0	0	0	0	0
42	320	894	670	421	228	101	36	9	2	0	0	0	0	0	0	0	0	0	0
43	310	896	674	427	236	105	37	10	2	1	0	0	0	0	0	0	0	0	0
44	300	898	678	434	240	111	38	10	2	0	0	0	0	0	0	0	0	0	0
45	290	892	680	441	247	111	40	11	2	0	0	0	0	0	0	0	0	0	0
46	280	887	679	443	249	115	40	11	2	0	0	0	0	0	0	0	0	0	0
47	270	881	678	446	251	118	40	11	2	0	0	0	0	0	0	0	0	0	0
48	260	869	672	443	254	119	40	11	2	0	0	0	0	0	0	0	0	0	0
49	250	862	665	441	257	118	41	12	3	0	0	0	0	0	0	0	0	0	0
50	240	852	659	442	255	121	42	12	3	1	0	0	0	0	0	0	0	0	0
51	230	835	649	440	256	120	43	12	4	1	0	0	0	0	0	0	0	0	0
52	220	813	636	429	255	120	44	14	4	1	0	0	0	0	0	0	0	0	0
53	210	786	616	419	246	117	44	13	4	2	0	0	0	0	0	0	0	0	0
54	200	752	589	402	237	111	41	12	3	1	0	0	0	0	0	0	0	0	0
55	190	710	557	381	225	107	37	11	4	1	0	0	0	0	0	0	0	0	0
56	180	672	530	362	209	99	32	9	3	1	0	0	0	0	0	0	0	0	0
57	170	627	493	338	197	91	30	8	3	1	0	0	0	0	0	0	0	0	0
58	160	584	464	317	186	87	28	8	2	1	0	0	0	0	0	0	0	0	0
59	150	539	428	295	173	79	26	6	2	1	0	0	0	0	0	0	0	0	0
60	140	494	393	274	160	74	25	6	2	0	0	0	0	0	0	0	0	0	0

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Harmonic constants for constituent M2 for deployment NWZB1109.

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	730	90	222	35	144	91	34	6	220	A
02	720	103	193	35	108	103	34	2	193	A
03	710	185	214	30	119	185	30	179	34	A
04	700	185	214	29	123	185	29	180	34	A
05	690	185	214	30	127	185	30	0	214	A
06	680	186	215	30	133	186	30	1	215	A
07	670	187	216	30	139	187	29	2	216	A
08	660	186	217	30	144	187	29	3	216	A
09	650	186	218	32	150	186	30	4	217	A
10	640	185	219	34	154	185	30	5	218	A
11	630	185	220	34	162	186	29	6	219	A
12	620	183	221	36	169	184	28	7	220	A
13	610	182	222	37	176	184	26	8	221	A
14	600	181	223	40	183	183	25	10	222	A
15	590	180	225	45	187	184	27	11	223	A
16	580	180	226	48	192	184	26	13	225	A
17	570	180	228	52	198	185	25	14	226	A
18	560	178	231	58	204	185	25	16	229	A
19	550	176	233	64	208	186	26	19	231	A
20	540	176	236	71	212	188	27	21	233	A
21	530	175	238	77	216	189	27	22	235	A
22	520	175	241	85	217	192	31	24	237	A
23	510	176	243	91	218	196	35	26	238	A
24	500	177	245	98	220	198	37	28	239	A
25	490	178	247	103	221	202	39	29	240	A
26	480	179	248	108	222	205	42	30	242	A
27	470	180	250	114	223	208	45	31	243	A
28	460	181	252	118	224	211	47	32	244	A
29	450	181	253	123	225	213	50	33	245	A
30	440	181	255	128	227	215	51	34	246	A
31	430	181	258	133	229	218	53	35	248	A
32	420	181	260	138	231	221	55	36	249	A
33	410	180	261	143	232	223	57	38	250	A
34	400	179	263	148	233	225	59	39	251	A
35	390	181	264	152	234	228	61	39	252	A
36	380	182	266	156	235	231	63	40	253	A
37	370	182	267	158	235	233	65	40	254	A
38	360	183	267	163	236	236	66	41	254	A
39	350	185	268	166	236	239	68	41	254	A
40	340	187	269	170	236	243	70	42	254	A
41	330	189	269	174	236	246	74	42	254	A
42	320	192	270	177	236	250	76	42	254	A
43	310	195	270	179	236	253	78	42	254	A
44	300	196	270	181	235	254	80	42	255	A
45	290	199	271	182	235	257	82	42	255	A
46	280	201	271	184	235	260	84	42	254	A
47	270	202	271	186	234	261	85	42	254	A
48	260	203	271	186	234	262	86	42	255	A
49	250	203	271	187	234	261	88	42	254	A
50	240	202	271	188	234	261	88	42	254	A
51	230	202	271	190	233	262	89	43	254	A
52	220	205	272	191	233	264	93	42	254	A
53	210	205	271	191	232	264	94	42	253	A
54	200	204	271	190	232	263	93	42	253	A
55	190	205	271	190	231	263	94	42	253	A
56	180	204	271	185	231	259	95	41	253	A
57	170	200	272	191	230	258	99	43	252	A
58	160	201	271	197	231	265	96	44	251	A
59	150	204	271	195	232	267	93	43	253	A
60	140	208	271	189	232	264	94	41	253	A

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Harmonic constants for constituent S2 for deployment NWZB1109.

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	730	37	239	21	157	37	20	6	236	A
02	720	47	213	22	128	47	22	3	212	A
03	710	75	254	16	154	75	16	178	74	A
04	700	75	255	16	163	75	16	180	75	A
05	690	75	255	16	168	75	16	1	255	A
06	680	75	256	16	173	75	16	2	256	A
07	670	75	257	17	177	75	16	2	257	A
08	660	75	259	15	180	75	15	3	258	A
09	650	75	259	16	185	75	15	3	259	A
10	640	75	259	16	186	75	16	4	258	A
11	630	74	260	16	191	75	15	5	259	A
12	620	75	261	17	193	75	16	5	260	A
13	610	74	262	18	198	75	16	6	261	A
14	600	74	263	18	201	74	16	7	261	A
15	590	73	264	18	206	74	16	8	262	A
16	580	73	265	18	210	73	15	9	263	A
17	570	74	266	19	218	75	14	10	264	A
18	560	73	268	20	229	75	12	12	266	A
19	550	72	269	21	237	74	11	14	267	A
20	540	70	271	22	243	72	10	16	269	A
21	530	67	274	23	248	70	9	17	271	A
22	520	64	275	23	253	67	8	19	273	A
23	510	62	276	23	259	66	6	20	274	A
24	500	59	276	27	266	64	4	24	275	A
25	490	58	280	31	269	66	5	28	277	A
26	480	58	284	36	271	68	7	32	280	A
27	470	58	291	41	272	70	11	35	285	A
28	460	59	295	45	275	73	13	37	287	A
29	450	59	297	48	275	75	15	39	288	A
30	440	59	298	50	275	76	15	40	288	A
31	430	59	300	51	275	76	17	41	289	A
32	420	60	300	52	274	77	18	41	289	A
33	410	61	300	53	274	79	18	41	289	A
34	400	62	303	55	275	80	20	41	290	A
35	390	62	302	57	274	81	20	42	289	A
36	380	62	303	60	275	83	21	44	289	A
37	370	63	304	62	275	85	21	44	290	A
38	360	62	304	64	276	87	22	46	290	A
39	350	62	305	65	278	87	21	46	291	A
40	340	62	307	65	280	87	21	47	293	A
41	330	61	307	67	281	88	20	48	293	A
42	320	62	310	68	282	89	22	48	295	A
43	310	63	312	68	281	90	24	48	295	A
44	300	65	314	68	282	90	26	47	297	A
45	290	66	315	69	282	91	27	47	298	A
46	280	66	317	69	282	91	29	47	299	A
47	270	66	317	68	281	90	29	46	299	A
48	260	66	318	68	280	90	31	46	298	A
49	250	67	318	68	279	90	32	46	298	A
50	240	66	318	67	277	89	33	45	297	A
51	230	68	318	69	275	90	35	46	296	A
52	220	66	318	70	276	90	35	47	296	A
53	210	66	317	73	278	93	32	49	295	A
54	200	67	318	74	280	95	32	48	297	A
55	190	69	321	73	284	95	32	47	301	A
56	180	75	324	73	287	99	33	44	306	A
57	170	75	328	80	287	103	39	47	306	A
58	160	78	331	85	283	105	46	49	305	A
59	150	80	333	86	279	104	53	48	303	A
60	140	82	334	90	276	107	59	50	300	A

NWZB1109 ADCP 13287

Harmonic constants for constituent N2 for deployment NWZB1109.

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	730	31	195	2	130	31	2	2	195	A
02	720	35	170	6	125	35	4	8	169	A
03	710	39	203	10	125	39	10	3	202	A
04	700	39	202	9	122	39	8	2	202	A
05	690	38	203	10	128	38	9	4	202	A
06	680	38	202	9	134	38	9	5	201	A
07	670	37	203	10	138	38	9	7	201	A
08	660	37	203	10	144	37	9	8	201	A
09	650	37	203	10	148	37	8	9	201	A
10	640	36	203	10	149	37	8	9	201	A
11	630	36	202	9	151	36	7	9	200	A
12	620	36	201	8	148	36	6	8	199	A
13	610	34	199	8	146	34	6	8	198	A
14	600	35	200	8	155	35	5	9	199	A
15	590	35	203	7	173	35	4	10	202	A
16	580	34	205	8	181	35	3	12	203	A
17	570	32	207	8	184	33	3	13	206	A
18	560	29	211	9	196	31	2	17	210	A
19	550	30	215	11	203	32	2	19	214	A
20	540	30	218	13	209	33	2	23	217	A
21	530	31	218	14	210	34	2	24	217	A
22	520	33	220	16	216	36	1	27	219	A
23	510	34	225	19	213	39	4	30	222	A
24	500	34	231	23	215	41	5	33	226	A
25	490	34	236	25	215	41	7	36	229	A
26	480	35	237	27	211	43	10	36	228	A
27	470	37	236	28	208	45	11	36	227	A
28	460	39	237	28	205	46	13	34	226	A
29	450	39	236	28	204	46	12	34	225	A
30	440	38	236	27	202	45	13	34	225	A
31	430	37	237	27	203	45	13	34	226	A
32	420	37	239	28	204	44	13	35	227	A
33	410	35	241	28	208	43	12	37	228	A
34	400	33	242	27	210	41	12	39	229	A
35	390	32	242	27	211	40	11	39	230	A
36	380	33	242	27	215	41	10	39	231	A
37	370	32	240	27	217	41	9	40	230	A
38	360	32	240	28	219	42	8	41	231	A
39	350	33	239	29	218	43	8	41	230	A
40	340	33	240	29	220	43	8	41	231	A
41	330	34	240	29	218	44	9	40	231	A
42	320	35	241	29	216	45	10	39	231	A
43	310	37	242	30	214	46	11	38	231	A
44	300	36	244	30	213	46	12	39	231	A
45	290	36	245	31	213	46	13	40	232	A
46	280	35	246	33	214	46	13	42	232	A
47	270	36	245	32	214	47	13	42	231	A
48	260	38	245	32	217	48	12	40	233	A
49	250	38	246	33	216	49	13	41	233	A
50	240	38	242	33	212	49	13	41	229	A
51	230	39	241	36	210	51	14	43	227	A
52	220	40	243	36	208	51	16	41	227	A
53	210	37	243	37	205	50	17	45	224	A
54	200	37	246	35	206	48	17	44	227	A
55	190	34	247	38	207	48	17	49	225	A
56	180	33	249	36	205	46	18	49	224	A
57	170	32	247	38	208	47	16	51	224	A
58	160	34	244	36	208	47	15	46	225	A
59	150	33	240	33	200	44	16	44	220	A
60	140	33	237	32	206	44	12	44	223	A

NWZB1109 ADCP 13287

Harmonic constants for constituent O1 for deployment NWZB1109.

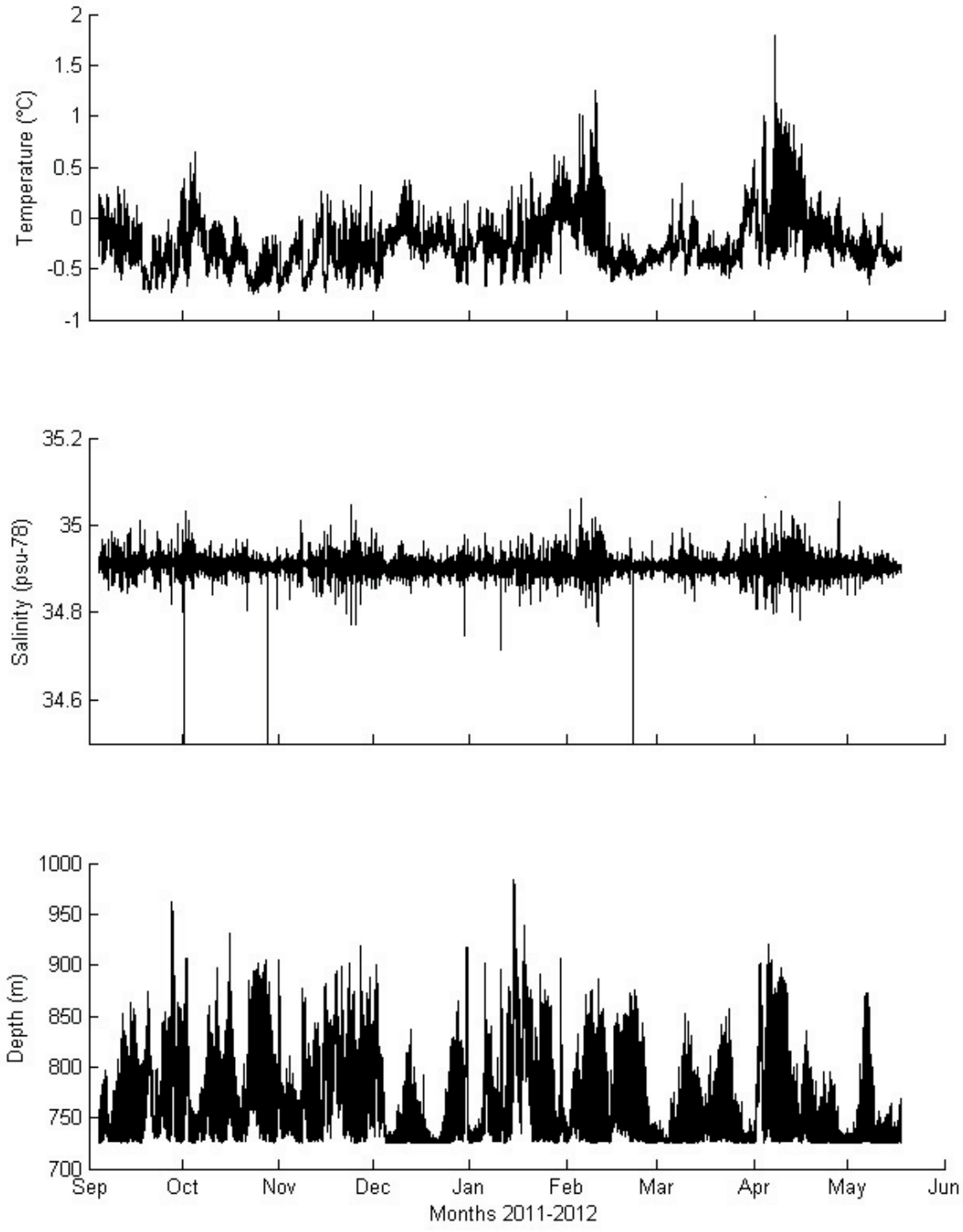
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	730	9	9	2	198	9	0	169	189	A
02	720	11	18	2	322	11	2	7	16	A
03	710	8	70	2	349	8	2	3	69	A
04	700	6	65	3	0	7	3	16	57	A
05	690	7	63	3	1	7	3	15	57	A
06	680	7	63	3	31	7	2	24	58	A
07	670	8	71	4	29	8	2	21	65	A
08	660	8	69	5	43	9	2	31	62	A
09	650	7	67	4	45	8	1	26	62	A
10	640	7	63	3	38	8	1	20	60	A
11	630	7	69	2	39	8	1	13	67	A
12	620	7	69	2	52	8	1	14	68	A
13	610	8	74	3	30	8	2	16	71	A
14	600	9	71	4	7	9	3	13	66	A
15	590	10	69	5	355	10	4	9	65	A
16	580	11	62	5	348	11	4	7	59	A
17	570	11	63	4	345	11	4	5	61	A
18	560	11	66	2	346	11	2	2	65	A
19	550	9	56	2	269	9	1	170	237	A
20	540	9	51	3	238	10	0	160	232	A
21	530	10	49	3	247	10	1	163	231	A
22	520	8	46	2	250	9	1	169	227	A
23	510	8	53	1	277	8	0	177	233	A
24	500	7	62	0	19	7	0	3	62	A
25	490	6	74	1	340	6	1	179	254	A
26	480	6	81	1	310	6	1	174	262	A
27	470	7	72	4	282	8	2	155	258	A
28	460	9	72	6	276	10	2	146	259	A
29	450	9	64	7	277	11	3	147	254	A
30	440	10	68	6	287	11	3	152	257	A
31	430	11	62	6	293	11	4	159	250	A
32	420	12	62	4	300	12	3	169	245	A
33	410	12	65	3	314	12	3	173	247	A
34	400	10	75	3	311	10	2	171	257	A
35	390	9	77	3	299	9	2	164	261	A
36	380	8	81	5	302	9	3	152	271	A
37	370	8	84	4	307	8	3	156	272	A
38	360	7	85	5	327	8	4	155	279	A
39	350	7	85	4	329	7	3	163	273	A
40	340	7	88	5	313	8	3	150	280	A
41	330	7	77	4	306	8	3	156	266	A
42	320	7	74	4	304	8	3	155	264	A
43	310	8	67	4	286	8	2	156	254	A
44	300	8	58	4	281	8	3	157	245	A
45	290	8	54	5	271	9	2	154	242	A
46	280	10	59	4	254	11	1	156	241	A
47	270	9	68	5	246	10	0	152	247	C
48	260	9	73	5	259	10	0	153	255	A
49	250	9	79	3	260	10	0	161	260	A
50	240	10	82	3	256	10	0	161	261	C
51	230	11	81	3	253	12	0	167	260	C
52	220	11	78	2	246	11	0	169	257	C
53	210	11	78	3	261	11	0	166	258	A
54	200	11	88	2	138	11	1	6	89	C
55	190	16	103	5	105	17	0	17	103	C
56	180	21	98	9	105	23	1	24	99	C
57	170	26	100	12	86	28	3	24	98	A
58	160	25	97	19	76	31	6	37	89	A
59	150	29	98	25	70	37	9	41	86	A
60	140	30	98	28	73	40	9	43	86	A

NWZB1109 ADCP 13287

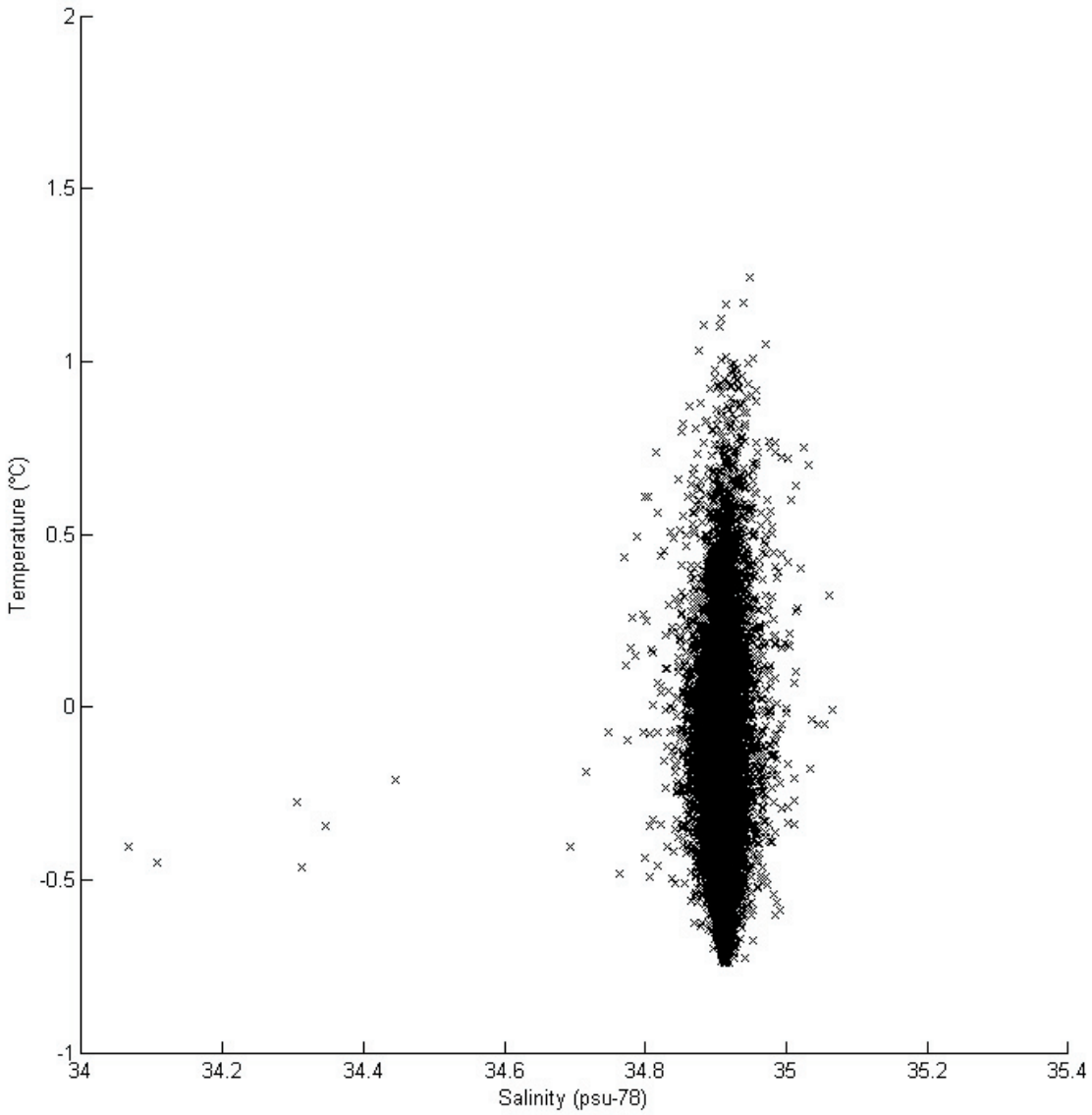
Harmonic constants for constituent K1 for deployment NWZB1109.

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	730	10	233	2	96	10	2	170	55	A
02	720	8	191	3	196	9	0	18	192	C
03	710	6	236	1	136	6	1	178	56	A
04	700	6	240	2	184	6	1	10	237	A
05	690	6	239	1	182	6	1	8	237	A
06	680	7	236	1	182	7	1	6	235	A
07	670	6	225	2	178	6	2	16	220	A
08	660	6	225	2	163	6	1	7	223	A
09	650	5	222	2	158	5	2	10	219	A
10	640	6	232	1	195	6	1	10	230	A
11	630	7	232	1	139	7	1	179	52	A
12	620	8	225	2	87	8	1	171	47	A
13	610	7	233	2	111	7	2	172	55	A
14	600	8	236	1	68	8	0	170	57	A
15	590	5	243	2	86	5	1	164	65	A
16	580	4	251	0	95	4	0	180	71	A
17	570	2	244	0	52	2	0	176	64	C
18	560	3	261	1	331	3	1	8	264	C
19	550	5	258	1	193	5	1	6	257	A
20	540	8	252	2	160	8	2	179	72	A
21	530	8	243	3	159	8	3	3	242	A
22	520	8	234	5	159	8	4	14	226	A
23	510	7	236	5	158	7	5	18	224	A
24	500	6	243	5	172	6	4	34	218	A
25	490	5	231	4	167	6	4	36	207	A
26	480	4	237	3	143	4	3	175	60	A
27	470	4	246	2	100	5	1	159	71	A
28	460	4	266	2	60	4	1	150	79	C
29	450	5	284	2	26	5	2	174	102	C
30	440	4	298	2	24	4	2	2	298	C
31	430	4	274	3	22	4	3	160	81	C
32	420	4	264	3	7	4	3	165	74	C
33	410	3	265	3	29	4	2	136	58	C
34	400	3	247	2	35	4	1	142	55	C
35	390	3	245	2	48	3	0	146	60	C
36	380	2	232	2	37	3	0	141	46	C
37	370	2	223	2	17	3	1	140	32	C
38	360	2	211	1	101	2	1	166	38	A
39	350	3	180	1	132	3	1	17	175	A
40	340	4	168	3	194	5	1	32	176	C
41	330	6	155	4	179	7	1	34	163	C
42	320	6	151	5	192	8	3	38	167	C
43	310	6	146	5	184	7	3	39	161	C
44	300	5	151	5	187	7	2	47	170	C
45	290	4	157	5	177	6	1	51	169	C
46	280	2	166	6	178	6	0	73	177	C
47	270	2	145	5	185	5	1	73	181	C
48	260	1	205	4	166	4	1	78	168	A
49	250	3	197	2	144	3	1	28	184	A
50	240	4	196	2	157	4	1	29	186	A
51	230	3	199	1	198	3	0	26	199	A
52	220	3	163	3	265	3	3	143	311	C
53	210	4	105	6	253	7	2	127	264	C
54	200	3	95	12	266	13	0	102	266	C
55	190	3	316	17	267	17	3	82	268	A
56	180	8	269	22	272	23	0	69	271	C
57	170	14	289	23	276	26	3	59	279	A
58	160	21	284	24	275	32	3	49	279	A
59	150	30	285	24	282	39	1	39	284	A
60	140	35	286	21	274	40	4	31	282	A

NWZB1109 MicroCat 4049



NWZB1109 MicroCat 4049



NWZC1109

Latitude: 60°04.100´N

Longitude: 006°10.100´W

Echo sounding depth: 1100 m

Bottom depth corr.: 1080 m (ADCP)

Time of deployment: 4/9 - 2011 0658 UTC

Time of recovery: 18/5 - 2012 1147 UTC

ADCP:

Instrument no.: RDI ADCP 13288

Instrument frequency: 75 kHz

Height above bottom: 387 m (max)

Depth: 693 m (shallowest)

Time of first data: 4/9 - 2011 0720 UTC

Time of last data: 18/5 - 2012 1119 UTC

Sample interval: 20 min

No. of ensembles: 18517

Pings per ens.: 10

Binlength: 10 m

Depth of first bin: 680 m (rebinned)

No. of bins: 60

Micro Cat:

Instrument no.: 4295

Height above bottom: 385 m (max)

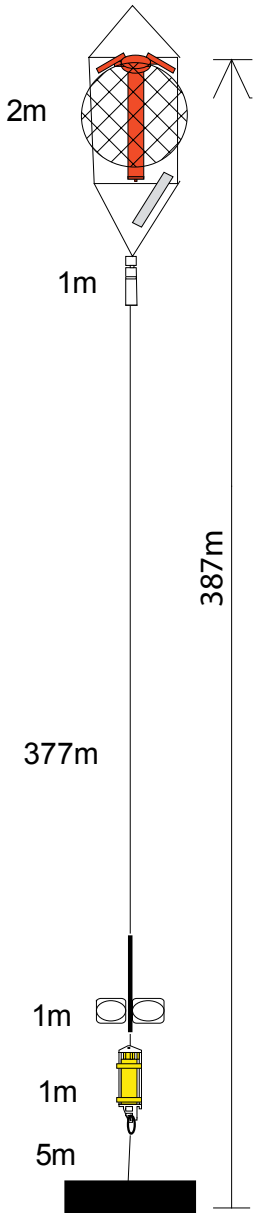
Time of first data: 4/9 – 2011 0720 UTC

Time of last data: 18/5 – 2012 1130 UTC

Sample interval: 10 min

No. of ensembles: 37034

Instrument depth: 695 m (shallowest)



Data:

ADCP velocity is based on 3 beams, only. The buoy has occasionally been dragged down by 60m.

The salinity from the MicroCat has not been edited.

The depths have been adjusted according to the ADCP depth sensor.

NWZC1109 ADCP 13288

Error statistics for deployment: NWZC1109 - ReBined 31-Oct-2012

Surface distance not edited
Heading, pitch and roll not edited
Temperature edited by EVM in Sep 2012
Velocity edited up to and including bin 60 by KMHL in Oct 2012
Intensity edited up to and including bin 60 by EVM in Sep 2012

Total number of ensembles: 18517
Interval between ensembles: 20 min
Original number of bins: 70
Number of acceptable velocity bins: 60
Number of acceptable intensity bins: 60

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	4	0	4	0	0	0	0	0	0	0	0	0
2	0	39	0	31	4	0	0	0	0	0	0	0	0
3	0	602	3	441	64	7	3	0	0	0	0	0	0
4	0	599	3	418	71	7	4	0	0	0	0	0	0
5	0	580	3	389	71	12	3	0	0	0	0	0	0
6	0	581	3	426	61	7	3	0	0	0	0	0	0
7	0	600	3	398	76	11	3	1	0	0	0	0	0
8	0	605	3	396	85	9	3	0	0	0	0	0	0
9	0	618	3	418	79	10	3	0	0	0	0	0	0
10	0	647	3	438	78	15	2	0	0	0	0	0	0
11	0	636	3	432	80	9	3	1	0	0	0	0	0
12	0	647	3	431	86	9	3	1	0	0	0	0	0
13	0	614	3	412	82	10	2	0	0	0	0	0	0
14	0	634	3	433	82	11	1	0	0	0	0	0	0
15	0	648	3	431	93	9	1	0	0	0	0	0	0
16	0	656	4	426	88	14	3	0	0	0	0	0	0
17	0	646	3	427	77	12	6	1	0	0	0	0	0
18	0	640	3	426	86	11	1	1	0	0	0	0	0
19	0	631	3	420	89	11	0	0	0	0	0	0	0
20	0	619	3	416	75	10	2	1	1	0	0	0	0
21	0	632	3	437	81	7	3	0	0	0	0	0	0
22	0	632	3	437	79	11	1	0	0	0	0	0	0
23	0	638	3	416	90	10	3	0	0	0	0	0	0
24	0	655	4	457	82	6	4	0	0	0	0	0	0
25	0	672	4	470	80	11	2	0	0	0	0	0	0
26	0	667	4	423	97	14	2	0	0	0	0	0	0
27	0	645	3	436	82	11	3	0	0	0	0	0	0
28	0	666	4	441	90	12	2	0	0	0	0	0	0
29	0	655	4	405	86	18	6	0	0	0	0	0	0
30	0	626	3	429	80	7	4	0	0	0	0	0	0
31	0	113	1	86	12	1	0	0	0	0	0	0	0
32	0	667	4	416	104	10	2	1	0	0	0	0	0
33	0	634	3	442	79	10	1	0	0	0	0	0	0
34	0	630	3	412	87	12	2	0	0	0	0	0	0
35	0	623	3	419	76	10	4	0	1	0	0	0	0
36	0	61	0	25	2	0	2	0	3	0	0	0	0
37	0	90	0	32	7	1	1	0	3	1	0	0	0
38	0	84	0	23	3	0	2	0	5	1	0	0	0
39	0	141	1	38	6	2	2	1	6	2	0	0	0
40	0	220	1	62	4	4	3	1	6	2	2	0	0
41	0	283	2	78	19	3	3	2	4	2	3	0	0
42	0	406	2	112	22	10	3	3	9	3	2	1	0
43	0	575	3	118	36	14	8	2	13	4	6	0	0
44	0	712	4	118	42	22	15	9	14	8	3	1	0
45	0	949	5	138	38	26	20	6	23	14	6	1	0
46	0	1201	6	158	42	36	11	13	29	20	6	1	1
47	0	1578	9	136	52	28	22	15	36	25	9	5	1
48	0	2152	12	146	64	33	33	18	46	39	11	9	1
49	0	2822	15	182	70	46	19	24	56	42	27	9	2
50	0	3397	18	219	74	41	24	19	45	46	38	17	2
51	0	3995	22	207	69	44	29	17	47	56	41	23	2
52	0	4531	24	233	73	46	18	19	55	45	46	35	3
53	0	5388	29	199	70	33	25	9	37	29	49	48	11
54	0	6162	33	222	77	38	28	10	40	26	38	59	14
55	2	6902	37	236	72	27	25	14	31	37	21	63	19
56	9	7574	41	210	58	31	25	10	23	24	27	59	25
57	28	7888	43	150	54	26	14	11	25	20	28	55	26
58	57	8449	46	179	53	31	24	10	22	22	17	60	25
59	188	9305	50	219	83	23	24	7	24	16	17	53	31
60	968	10347	56	252	61	32	17	8	37	27	12	46	37

NWZC1109 ADCP 13288

Deployment: NWZC1109 - ReBined 31-Oct-2012
Instrument no.: 13288
Instrument freq.: 75
Latitude: 60 04.100 N
Longitude:06 10.100 W
Bottom depth: 1080
Instrument depth: 693
Center depth of first bin: 680
Bin length: 10
Number of bins: 60
Number of first ensemble: 131
Time of first ensemble: 2011 09 04 07 20
Number of last ensemble: 18647
Time of last ensemble: 2012 05 18 11 19
Time between ensembles (min.):   20
All directions have been corrected by adding: -6.0

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	680	400	155	44	78	1000
2	670	410	159	44	74	998
3	660	420	163	43	69	967
4	650	430	167	44	64	968
5	640	440	173	46	60	969
6	630	450	181	47	54	969
7	620	460	190	50	53	968
8	610	470	198	51	50	967
9	600	480	206	52	47	967
10	590	490	216	54	48	965
11	580	500	224	55	51	966
12	570	510	231	58	57	965
13	560	520	237	61	62	967
14	550	530	242	66	65	966
15	540	540	247	72	67	965
16	530	550	250	77	70	965
17	520	560	253	84	72	965
18	510	570	255	90	75	965
19	500	580	258	97	78	966
20	490	590	262	104	79	967
21	480	600	267	112	80	966
22	470	610	272	122	82	966
23	460	620	277	130	83	966
24	450	630	284	137	84	965
25	440	640	287	144	85	964
26	430	650	293	152	86	964
27	420	660	298	160	87	965
28	410	670	304	167	87	964
29	400	680	308	173	87	965
30	390	690	312	178	88	966
31	380	700	316	183	88	994
32	370	710	318	186	89	964
33	360	720	321	188	89	966
34	350	730	323	191	90	966
35	340	740	326	194	90	966
36	330	750	329	196	91	997
37	320	760	332	199	91	995
38	310	770	336	203	91	995
39	300	780	339	207	92	992
40	290	790	343	211	91	988
41	280	800	345	215	91	985
42	270	810	349	219	92	978
43	260	820	350	222	92	969
44	250	830	352	225	92	962
45	240	840	354	226	92	949
46	230	850	356	228	92	935
47	220	860	355	227	93	915
48	210	870	356	228	93	884
49	200	880	356	229	93	848
50	190	890	358	232	93	817
51	180	900	360	235	93	784
52	170	910	360	238	93	755
53	160	920	363	242	94	709
54	150	930	364	246	94	667
55	140	940	364	247	95	627
56	130	950	367	251	96	591
57	120	960	369	253	96	574
58	110	970	372	253	98	544
59	100	980	376	255	99	497
60	90	990	371	247	100	441

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

Bin no.	Depth m	Speed (cm/s) 10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	680	700	273	68	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	670	711	293	73	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	660	700	298	80	15	3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	650	712	313	93	17	4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	640	728	338	103	21	4	0	0	0	0	0	0	0	0	0	0	0	0	0
6	630	744	377	122	27	6	1	0	0	0	0	0	0	0	0	0	0	0	0
7	620	760	400	150	36	8	1	0	0	0	0	0	0	0	0	0	0	0	0
8	610	775	428	171	48	10	2	0	0	0	0	0	0	0	0	0	0	0	0
9	600	786	456	194	59	14	3	0	0	0	0	0	0	0	0	0	0	0	0
10	590	800	488	221	73	18	5	2	0	0	0	0	0	0	0	0	0	0	0
11	580	812	511	242	86	23	6	1	0	0	0	0	0	0	0	0	0	0	0
12	570	817	533	258	100	31	8	1	0	0	0	0	0	0	0	0	0	0	0
13	560	833	543	278	110	37	10	1	0	0	0	0	0	0	0	0	0	0	0
14	550	833	559	293	120	41	12	3	0	0	0	0	0	0	0	0	0	0	0
15	540	836	570	302	131	47	14	3	0	0	0	0	0	0	0	0	0	0	0
16	530	841	575	311	139	51	14	3	0	0	0	0	0	0	0	0	0	0	0
17	520	845	579	317	148	54	16	4	0	0	0	0	0	0	0	0	0	0	0
18	510	845	582	323	148	58	18	4	0	0	0	0	0	0	0	0	0	0	0
19	500	852	585	330	157	63	19	5	1	0	0	0	0	0	0	0	0	0	0
20	490	855	598	339	164	69	22	6	1	0	0	0	0	0	0	0	0	0	0
21	480	859	607	352	174	74	25	7	2	0	0	0	0	0	0	0	0	0	0
22	470	864	614	365	184	80	30	9	1	0	0	0	0	0	0	0	0	0	0
23	460	870	629	373	192	87	32	10	2	0	0	0	0	0	0	0	0	0	0
24	450	876	638	390	207	97	37	12	3	0	0	0	0	0	0	0	0	0	0
25	440	876	649	397	210	99	39	13	3	0	0	0	0	0	0	0	0	0	0
26	430	878	656	412	225	109	43	16	5	1	0	0	0	0	0	0	0	0	0
27	420	884	666	424	239	116	48	17	6	1	0	0	0	0	0	0	0	0	0
28	410	887	674	439	248	123	52	20	7	1	0	0	0	0	0	0	0	0	0
29	400	886	681	445	260	130	57	23	7	2	0	0	0	0	0	0	0	0	0
30	390	890	691	455	269	137	62	24	7	2	0	0	0	0	0	0	0	0	0
31	380	915	714	480	285	149	68	27	9	2	0	0	0	0	0	0	0	0	0
32	370	890	698	471	280	145	67	27	8	2	0	0	0	0	0	0	0	0	0
33	360	893	704	478	286	150	69	28	9	2	0	0	0	0	0	0	0	0	0
34	350	893	703	486	293	151	69	28	9	2	0	0	0	0	0	0	0	0	0
35	340	895	712	492	295	157	75	31	11	2	0	0	0	0	0	0	0	0	0
36	330	924	737	512	313	167	80	34	12	3	0	0	0	0	0	0	0	0	0
37	320	925	742	516	318	174	84	37	13	4	0	0	0	0	0	0	0	0	0
38	310	926	747	526	326	182	91	40	14	5	0	0	0	0	0	0	0	0	0
39	300	921	743	527	335	184	94	43	16	5	1	0	0	0	0	0	0	0	0
40	290	920	741	535	340	192	101	46	18	5	1	0	0	0	0	0	0	0	0
41	280	916	743	537	345	197	103	48	19	6	1	0	0	0	0	0	0	0	0
42	270	910	744	538	348	201	107	53	21	7	1	0	0	0	0	0	0	0	0
43	260	901	735	532	345	205	109	54	21	7	2	0	0	0	0	0	0	0	0
44	250	896	729	525	347	207	115	56	23	8	2	0	0	0	0	0	0	0	0
45	240	885	722	524	345	206	114	57	24	9	3	0	0	0	0	0	0	0	0
46	230	870	712	519	343	207	114	58	25	10	3	0	0	0	0	0	0	0	0
47	220	852	696	504	333	201	113	57	26	10	3	1	0	0	0	0	0	0	0
48	210	826	675	489	321	197	108	55	24	9	3	1	0	0	0	0	0	0	0
49	200	791	645	472	311	187	104	54	24	10	3	1	0	0	0	0	0	0	0
50	190	760	622	453	299	184	104	52	25	10	4	1	0	0	0	0	0	0	0
51	180	732	598	437	291	181	102	54	24	10	3	1	0	0	0	0	0	0	0
52	170	705	574	421	283	175	100	52	23	10	3	1	0	0	0	0	0	0	0
53	160	659	541	399	266	167	95	50	24	11	4	1	0	0	0	0	0	0	0
54	150	621	506	377	252	162	92	49	25	11	4	1	0	0	0	0	0	0	0
55	140	583	473	352	241	149	88	45	23	10	4	2	1	0	0	0	0	0	0
56	130	549	446	332	228	147	85	47	25	10	4	2	1	0	0	0	0	0	0
57	120	534	435	325	225	141	83	44	23	11	5	2	1	0	0	0	0	0	0
58	110	507	418	312	215	136	80	44	24	11	5	2	1	0	0	0	0	0	0
59	100	465	387	293	200	127	73	40	21	10	6	2	1	0	0	0	0	0	0
60	90	414	342	257	173	107	61	33	18	8	4	2	1	0	0	0	0	0	0

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Harmonic constants for constituent M2 for deployment NWZC1109.

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	680	121	198	28	29	124	5	167	19	A
02	670	123	200	22	31	125	4	170	21	A
03	660	125	204	14	36	126	3	174	24	A
04	650	128	207	5	51	128	2	178	27	A
05	640	133	211	6	175	133	4	2	211	A
06	630	140	216	19	190	141	8	7	215	A
07	620	149	219	31	187	152	16	10	218	A
08	610	157	222	43	187	161	24	13	220	A
09	600	166	225	53	188	172	31	15	222	A
10	590	177	226	63	188	185	37	16	223	A
12	570	196	230	81	191	206	48	19	226	A
13	560	201	233	90	193	214	54	20	227	A
14	550	205	235	98	195	219	58	22	229	A
15	540	208	236	103	197	224	60	23	230	A
16	530	210	237	108	199	228	61	24	230	A
17	520	211	238	111	200	230	63	24	231	A
19	500	211	241	120	203	233	68	26	233	A
20	490	212	243	124	204	236	70	27	234	A
21	480	214	244	128	205	239	72	28	235	A
22	470	215	245	133	207	241	74	29	236	A
23	460	216	247	137	208	244	77	29	237	A
24	450	216	248	141	209	246	78	30	237	A
25	440	215	249	144	210	246	79	31	238	A
26	430	215	250	147	211	248	80	32	239	A
27	420	214	251	150	212	249	81	33	239	A
28	410	214	251	154	213	251	81	34	239	A
29	400	213	252	156	214	251	82	34	239	A
30	390	211	252	158	214	250	82	35	240	A
31	380	209	253	159	215	250	81	35	240	A
32	370	206	254	158	216	247	80	36	240	A
33	360	205	254	160	217	247	80	36	240	A
34	350	205	254	159	216	246	80	36	241	A
35	340	205	254	159	217	247	81	36	241	A
36	330	205	254	159	217	247	79	36	241	A
37	320	205	255	161	218	248	80	36	241	A
38	310	206	255	161	218	249	81	36	242	A
39	300	205	255	162	218	248	80	37	241	A
40	290	205	255	161	218	248	79	37	241	A
41	280	204	254	161	218	248	78	37	241	A
42	270	202	255	162	219	246	78	37	241	A
43	260	203	254	162	219	248	76	37	241	A
44	250	199	255	159	219	244	76	37	241	A
45	240	199	254	162	219	245	75	38	241	A
46	230	200	255	161	220	246	76	37	242	A
47	220	201	255	158	220	244	74	37	242	A
48	210	198	255	160	220	243	75	38	242	A
49	200	195	255	160	220	241	74	38	241	A
50	190	198	255	158	220	242	75	37	242	A
51	180	195	255	158	219	239	75	38	241	A
52	170	195	255	157	219	239	74	38	241	A
53	160	192	255	161	219	239	76	39	241	A
54	150	197	256	159	219	240	78	37	242	A
55	140	196	257	162	219	241	81	38	242	A
56	130	193	257	169	218	242	85	40	241	A
57	120	188	259	168	218	236	88	41	241	A
58	110	199	259	167	218	243	90	38	243	A
59	100	199	258	172	216	247	93	39	241	A
60	90	189	260	183	215	243	101	44	238	A

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Harmonic constants for constituent S2 for deployment NWZC1109.

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	680	46	234	11	97	47	7	170	55	A
02	670	47	237	8	102	47	6	173	58	A
03	660	47	241	6	118	47	5	176	61	A
04	650	46	243	4	143	46	4	179	63	A
05	640	45	245	3	186	45	3	2	245	A
06	630	47	250	6	222	48	3	7	249	A
07	620	50	252	13	233	52	4	13	251	A
08	610	53	256	18	242	56	4	18	254	A
09	600	57	261	21	241	60	7	19	259	A
10	590	61	264	26	245	66	8	22	262	A
12	570	70	268	32	243	76	12	23	264	A
13	560	74	268	33	242	80	14	23	264	A
14	550	78	269	37	241	84	16	24	264	A
15	540	80	270	38	240	87	18	23	265	A
16	530	80	272	42	243	88	18	26	266	A
17	520	80	275	44	245	89	20	27	268	A
19	500	77	278	49	249	89	21	31	270	A
20	490	77	280	52	248	90	24	32	271	A
21	480	78	283	54	250	91	25	33	273	A
22	470	77	284	56	251	91	26	34	273	A
23	460	78	285	57	251	93	26	35	274	A
24	450	79	286	59	251	94	28	35	274	A
25	440	77	286	61	254	95	27	37	275	A
26	430	78	288	64	254	97	29	38	275	A
27	420	78	288	64	255	96	28	38	275	A
28	410	77	288	64	255	96	28	39	275	A
29	400	75	288	63	256	94	26	39	275	A
30	390	76	289	64	256	95	28	40	275	A
31	380	76	289	65	256	96	28	40	275	A
32	370	75	288	64	258	95	25	40	276	A
33	360	74	289	65	260	96	25	41	276	A
34	350	73	289	64	260	94	24	40	277	A
35	340	73	289	65	263	95	22	41	278	A
36	330	75	291	63	264	96	22	40	280	A
37	320	74	292	63	265	95	22	40	281	A
38	310	74	293	65	266	96	23	41	282	A
39	300	74	295	63	266	94	23	40	283	A
40	290	73	296	63	269	94	23	40	285	A
41	280	73	298	63	268	93	24	40	285	A
42	270	73	299	63	268	93	26	40	286	A
43	260	73	300	63	268	93	26	40	286	A
44	250	73	300	65	268	94	27	41	286	A
45	240	74	300	65	267	95	28	40	286	A
46	230	71	301	66	266	93	29	42	285	A
47	220	70	300	66	266	92	29	43	284	A
48	210	71	300	67	264	93	30	43	284	A
49	200	75	297	64	268	95	24	40	285	A
50	190	73	297	65	269	95	23	41	285	A
51	180	75	298	61	266	93	26	38	286	A
52	170	74	300	64	266	93	29	40	286	A
53	160	75	297	63	265	94	26	39	284	A
54	150	76	296	63	263	95	27	39	283	A
55	140	76	296	61	263	94	27	38	283	A
56	130	80	299	62	257	95	35	35	284	A
57	120	85	299	59	255	97	36	31	287	A
58	110	90	299	68	258	107	38	35	285	A
59	100	97	295	61	251	107	38	28	285	A
60	90	95	297	59	248	104	40	26	286	A

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Harmonic constants for constituent N2 for deployment NWZC1109.

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	680	28	188	5	96	28	5	180	8	A
02	670	28	190	5	93	28	5	179	10	A
03	660	26	191	5	118	26	4	3	190	A
04	650	26	190	3	109	26	3	1	190	A
05	640	27	189	2	101	27	2	0	189	A
06	630	29	189	4	93	29	4	179	9	A
07	620	31	190	6	108	31	6	2	190	A
08	610	31	192	6	145	31	4	8	191	A
09	600	29	198	7	166	29	3	11	197	A
10	590	30	205	10	178	32	4	17	202	A
12	570	30	211	15	190	33	5	26	207	A
13	560	31	214	16	193	34	5	27	210	A
14	550	32	216	17	194	36	6	27	212	A
15	540	31	218	18	194	36	7	30	212	A
16	530	30	221	20	193	36	8	33	213	A
17	520	30	227	22	196	36	9	35	216	A
19	500	32	232	22	200	38	10	33	222	A
20	490	34	234	23	200	39	11	32	224	A
21	480	34	236	24	199	40	12	32	225	A
22	470	36	237	25	199	42	14	33	225	A
23	460	35	236	25	201	41	12	34	225	A
24	450	34	235	26	199	41	13	35	223	A
25	440	36	234	26	198	42	13	34	222	A
26	430	35	235	25	198	42	13	33	223	A
27	420	37	235	26	197	43	14	32	223	A
28	410	38	236	26	195	43	15	32	224	A
29	400	39	237	27	196	45	15	32	225	A
30	390	40	236	28	195	46	16	33	224	A
31	380	42	237	28	193	47	17	30	225	A
32	370	41	236	28	191	47	17	30	224	A
33	360	41	235	30	191	48	18	32	222	A
34	350	41	237	28	191	46	18	31	224	A
35	340	42	234	27	189	47	17	29	223	A
36	330	42	234	26	192	46	15	28	224	A
37	320	42	233	26	189	47	16	28	222	A
38	310	41	231	25	192	46	14	28	222	A
39	300	41	230	25	192	46	13	28	221	A
40	290	41	228	24	192	46	13	27	220	A
41	280	41	229	23	191	45	13	26	221	A
42	270	40	228	23	195	44	11	27	221	A
43	260	37	229	22	195	42	11	29	221	A
44	250	37	228	22	192	41	11	28	220	A
45	240	35	230	20	194	39	11	27	222	A
46	230	36	225	20	192	40	10	26	218	A
47	220	34	227	19	190	38	10	25	219	A
48	210	35	225	20	189	39	11	27	217	A
49	200	36	227	18	196	39	8	24	222	A
50	190	36	230	16	203	38	7	22	226	A
51	180	36	225	16	201	39	6	23	222	A
52	170	35	230	15	206	38	6	22	226	A
53	160	32	225	14	208	35	4	22	222	A
54	150	32	226	10	170	33	8	10	224	A
55	140	35	225	13	192	37	7	19	221	A
56	130	38	224	15	199	40	6	20	221	A
57	120	40	229	20	196	43	10	24	223	A
58	110	46	222	17	192	48	8	19	219	A
59	100	49	225	25	184	53	15	23	218	A
60	90	49	239	31	174	52	27	21	227	A

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Harmonic constants for constituent O1 for deployment NWZC1109.

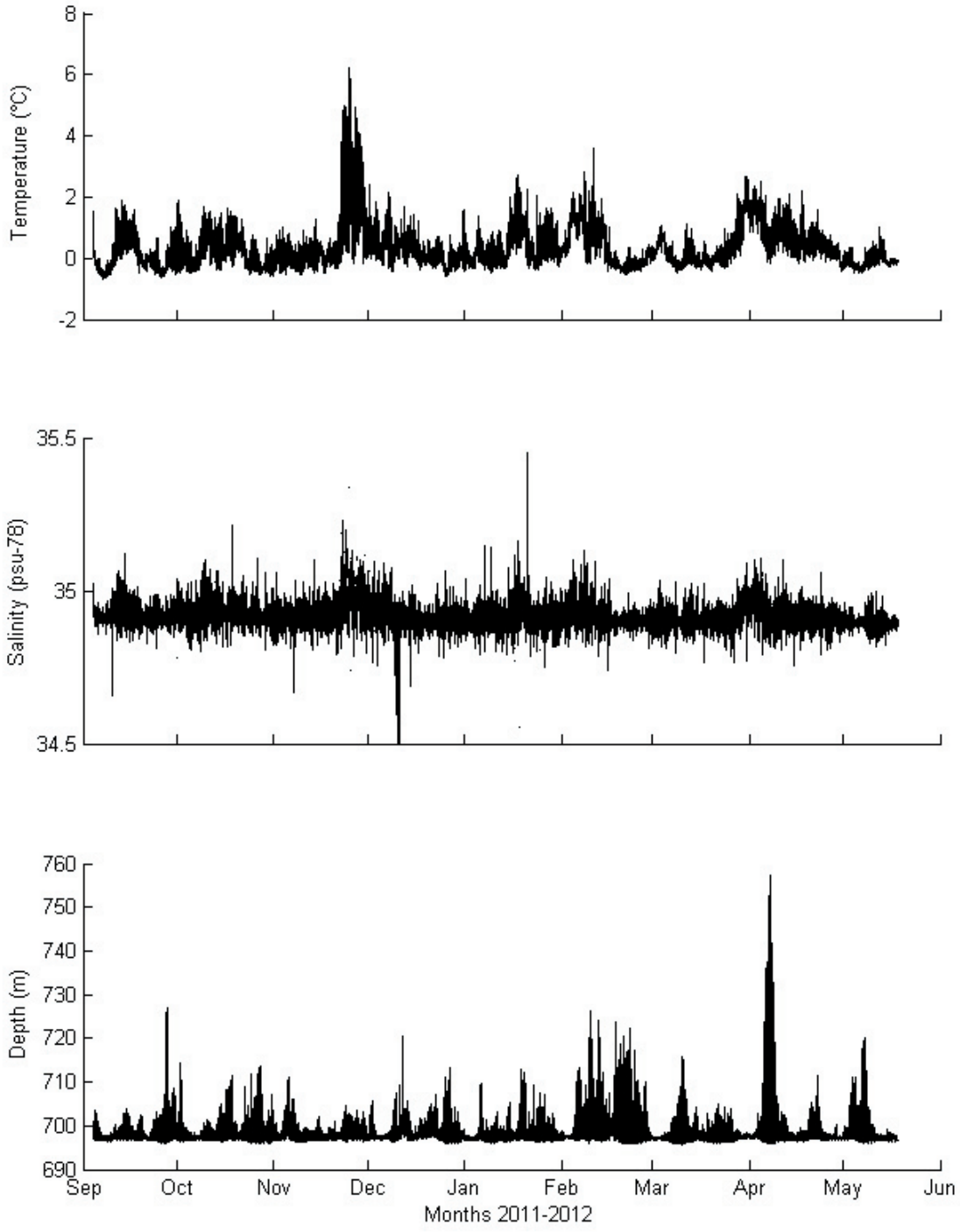
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	680	6	51	1	251	6	0	170	232	A
02	670	5	49	1	234	5	0	170	229	A
03	660	5	56	0	252	5	0	176	236	A
04	650	5	59	3	250	5	0	151	242	A
05	640	5	49	2	300	5	2	169	234	A
06	630	5	57	1	340	5	1	2	57	A
07	620	4	58	2	289	5	2	159	246	A
08	610	5	63	2	307	5	2	170	246	A
09	600	5	83	1	351	5	1	179	263	A
10	590	5	61	0	298	5	0	178	241	A
12	570	7	34	1	226	7	0	171	215	A
13	560	11	32	2	262	11	2	172	214	A
14	550	11	26	2	302	11	2	1	26	A
15	540	10	33	3	340	10	2	10	31	A
16	530	8	38	3	5	9	2	20	34	A
17	520	7	36	3	41	8	0	21	36	C
19	500	6	15	3	2	6	1	23	13	A
20	490	7	3	3	303	7	3	14	359	A
21	480	8	5	5	316	9	3	24	356	A
22	470	10	15	5	319	10	4	18	8	A
23	460	10	28	7	326	11	6	26	14	A
24	450	11	18	7	326	12	5	25	8	A
25	440	10	25	4	314	10	4	9	22	A
26	430	11	31	3	312	11	3	4	30	A
27	420	11	28	3	321	11	2	5	27	A
28	410	12	33	2	303	12	2	180	213	A
29	400	12	33	3	307	12	3	1	32	A
30	390	10	34	3	317	10	3	3	33	A
31	380	9	38	3	346	9	2	10	36	A
32	370	8	43	3	16	9	1	20	40	A
33	360	8	46	4	360	9	3	24	38	A
34	350	7	54	4	346	7	4	17	45	A
35	340	7	43	4	7	7	2	28	34	A
36	330	7	44	2	340	7	1	6	43	A
37	320	7	48	3	332	7	3	10	43	A
38	310	8	44	4	322	8	3	5	42	A
39	300	8	46	3	315	8	3	179	227	A
40	290	7	36	4	318	7	4	10	31	A
41	280	6	27	4	310	7	4	13	19	A
42	270	7	28	3	329	7	3	16	22	A
43	260	8	22	5	315	9	5	19	11	A
44	250	7	41	5	339	8	4	27	25	A
45	240	6	14	5	314	7	4	40	348	A
46	230	5	56	5	322	5	5	159	255	A
47	220	6	64	7	344	7	6	51	18	A
48	210	6	94	8	359	8	6	101	350	A
49	200	5	147	7	6	8	3	119	356	A
50	190	6	116	7	41	7	5	51	73	A
51	180	4	123	5	94	6	2	49	106	A
52	170	4	151	6	79	6	4	71	91	A
53	160	9	179	9	83	9	8	120	56	A
54	150	3	179	6	58	6	3	107	51	A
55	140	3	162	9	56	9	3	96	54	A
56	130	8	163	5	52	8	5	159	355	A
57	120	7	149	4	358	8	2	153	335	A
58	110	6	143	8	319	10	0	128	320	C
59	100	5	345	3	323	6	1	33	338	A
60	90	14	285	4	230	14	3	9	283	A

NWZC1109 ADCP 13288

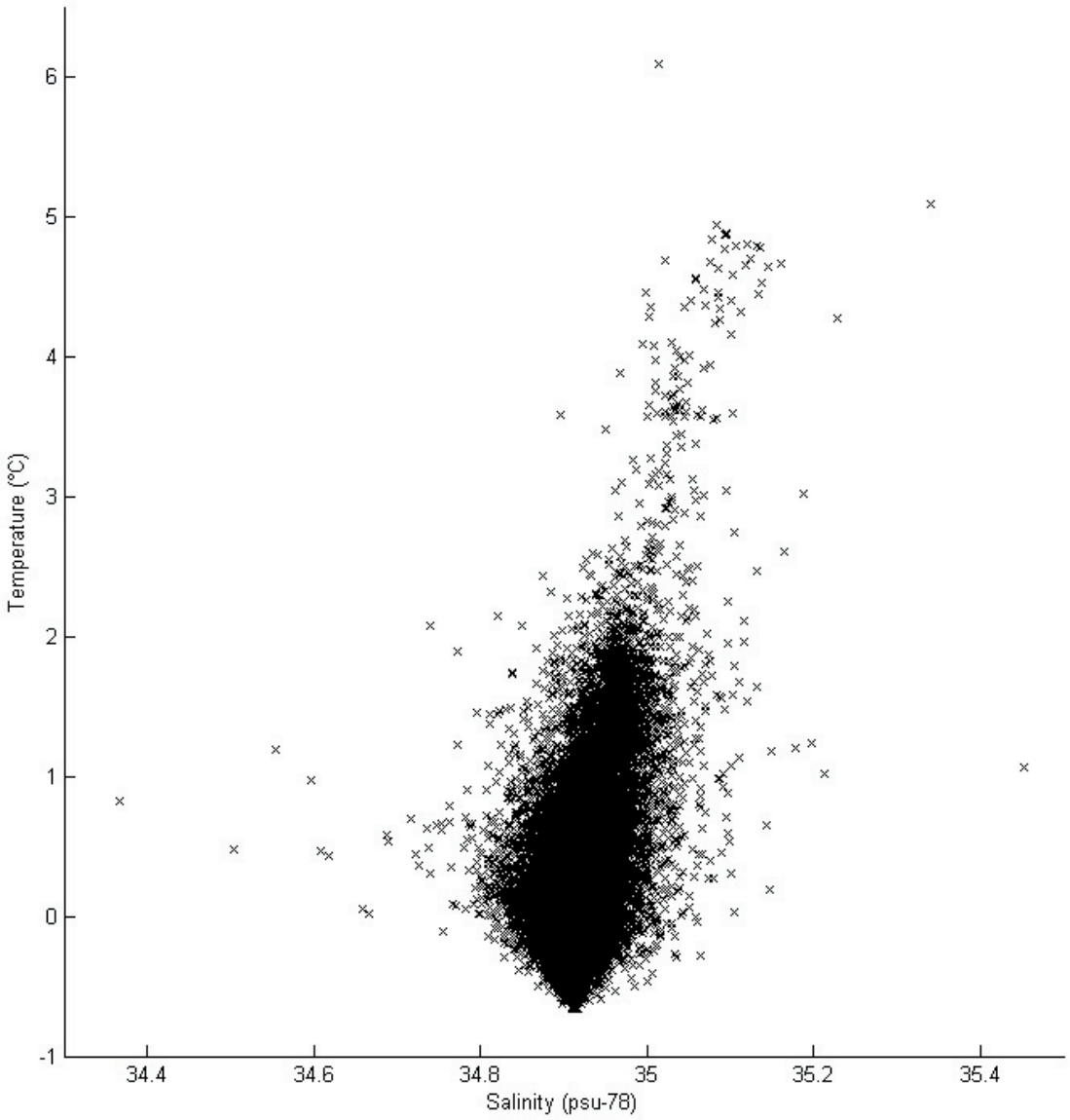
Harmonic constants for constituent K1 for deployment NWZC1109.

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	680	6	232	1	44	6	0	168	52	C
02	670	7	229	1	59	7	0	168	50	A
03	660	6	225	2	75	7	1	168	47	A
04	650	6	225	3	46	6	0	156	46	A
05	640	4	211	2	44	5	0	149	34	A
06	630	3	230	3	61	4	0	139	55	A
07	620	4	246	2	60	5	0	155	65	C
08	610	5	235	2	88	6	1	163	58	A
09	600	8	236	5	107	8	3	155	66	A
10	590	8	248	4	142	8	4	168	74	A
12	570	7	242	2	205	7	1	12	240	A
13	560	5	261	4	216	6	2	38	243	A
14	550	6	278	5	221	7	3	37	256	A
15	540	6	286	6	210	7	5	42	251	A
16	530	5	272	7	188	7	5	79	196	A
17	520	4	292	7	190	7	4	100	184	A
19	500	3	283	6	184	6	3	96	181	A
20	490	2	261	5	177	5	2	88	178	A
21	480	2	271	5	172	5	2	94	170	A
22	470	1	239	3	167	3	1	82	170	A
23	460	1	194	2	157	2	1	61	166	A
24	450	2	173	3	142	4	1	59	151	A
25	440	2	143	4	134	4	0	59	137	A
26	430	3	152	2	54	3	2	168	340	A
27	420	3	161	2	83	3	2	16	150	A
28	410	4	145	3	42	4	3	162	338	A
29	400	4	125	5	66	6	3	61	81	A
30	390	4	124	4	61	4	3	41	96	A
31	380	6	125	5	67	7	4	43	98	A
32	370	7	109	5	76	8	2	35	98	A
33	360	9	109	4	65	10	3	18	104	A
34	350	10	110	4	75	11	2	21	105	A
35	340	11	112	4	95	11	1	19	110	A
36	330	10	116	3	102	11	1	18	115	A
37	320	10	121	3	112	10	0	19	120	A
38	310	8	125	5	114	9	1	32	122	A
39	300	7	127	5	112	8	1	34	122	A
40	290	5	152	4	113	6	2	41	135	A
41	280	3	201	2	132	4	2	23	187	A
42	270	4	201	3	146	4	2	34	183	A
43	260	3	233	1	207	3	0	17	231	A
44	250	3	179	2	162	4	0	28	175	A
45	240	4	133	2	195	5	2	12	137	C
46	230	6	122	0	69	6	0	2	122	A
47	220	8	121	1	191	8	1	3	122	C
48	210	10	113	1	326	10	1	175	293	A
49	200	15	111	6	260	16	3	160	287	C
50	190	17	101	6	274	18	1	160	280	C
51	180	16	91	9	281	19	1	153	273	A
52	170	18	104	9	283	20	0	152	284	C
53	160	21	95	13	264	25	2	147	272	C
54	150	23	78	19	270	30	3	140	263	A
55	140	27	92	21	272	34	0	142	272	A
56	130	32	111	24	280	39	4	143	287	C
57	120	45	115	21	295	49	0	155	295	C
58	110	56	116	21	301	60	2	160	297	A
59	100	72	126	28	329	77	11	160	308	A
60	90	96	130	45	322	106	9	155	312	A

NWZC1109 MicroCat 4295



NWZC1109 MicroCat 4295



NWZQ1109

Latitude: 60°50.008´N

Longitude: 006°23.553´W

Echo sounding depth: 165 m

Bottom depth corr.: 165 m (sound velocity)

Time of deployment: 4/9 - 2011 0146 UTC

Time of recovery: 19/5 – 2012 0755 UTC

ADCP:

Instrument no.: RDI ADCP 0936

Instrument frequency: 300 kHz

Height above bottom: 1 m

Depth: 164 m (corr.)

Time of first data: 4/9 – 2011 0200 UTC

Time of last data: 19/5 – 2012 0739 UTC

Sample interval: 20 min

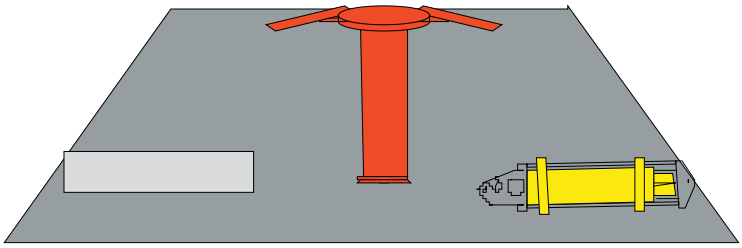
No. of ensembles: 18594

Pings per ens.: 24

Binlength: 8 m

Depth of first bin: 154 m (corr.)

No. of bins: 17



Starmon:

Instrument no.: 0656

Height above bottom: 1 m

Time of first data: 4/9 – 2011 0150 UTC

Time of last data: 19/5 – 2012 0740 UTC

Sample interval: 10 min

No. of ensembles: 37188

Instrument depth: 164 m

Data:

All data ok.

ADCP heading is calibrated against calibration mooring NWZQ1205.

NWZQ1109 ADCP 0936

Error statistics for deployment: NWZQ1109 updated 2012/09/19

Surface distance not edited
Heading, pitch and roll not edited
Temperature edited by EVM in Sep 2012
Velocity edited up to and including bin 17 by KMHL in Sep 2012
Intensity edited up to and including bin 17 by EVM in Sep 2012

Total number of ensembles: 18594
Interval between ensembles: 20 min
Original number of bins: 21
Number of acceptable velocity bins: 17
Number of acceptable intensity bins: 17

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	76	0	66	3	0	1	0	0	0	0	0	0
2	0	86	0	57	10	3	0	0	0	0	0	0	0
3	0	98	1	63	16	1	0	0	0	0	0	0	0
4	0	104	1	66	16	2	0	0	0	0	0	0	0
5	1	129	1	79	22	2	0	0	0	0	0	0	0
6	0	111	1	73	13	4	0	0	0	0	0	0	0
7	1	116	1	70	14	6	0	0	0	0	0	0	0
8	0	145	1	81	16	8	2	0	0	0	0	0	0
9	0	152	1	87	19	7	0	0	1	0	0	0	0
10	0	195	1	96	24	8	3	0	2	0	0	0	0
11	0	495	3	145	38	17	10	6	13	2	1	0	0
12	0	1545	8	159	53	22	12	11	23	21	7	3	5
13	0	3466	19	200	84	32	20	21	45	24	17	5	9
14	0	5457	29	146	48	22	15	8	26	16	16	11	22
15	0	7230	39	187	81	38	22	18	38	23	8	7	15
16	0	9485	51	245	75	41	22	20	51	26	17	16	13
17	0	11886	64	278	100	52	36	15	36	34	9	12	20

NWZQ1109 ADCP 0936

Deployment: NWZQ1109 updated 2012/09/19
Instrument no.: 936
Instrument freq.: 300
Latitude: 60 50.008 N
Longitude:06 23.553 W
Bottom depth: 165
Instrument depth: 164
Center depth of first bin: 154
Bin length: 8
Number of bins: 17
Number of first ensemble: 259
Time of first ensemble: 2011 09 04 02 00
Number of last ensemble: 18852
Time of last ensemble: 2012 05 19 07 39
Time between ensembles (min.): 20
All directions have been corrected by adding: +8.0

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

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	154	11	346	41	249	996
2	146	19	380	44	245	995
3	138	27	400	46	242	995
4	130	35	416	48	240	994
5	122	43	431	50	239	993
6	114	51	443	53	238	994
7	106	59	454	55	238	994
8	98	67	464	57	238	992
9	90	75	473	58	237	992
10	82	83	480	59	237	990
11	74	91	487	58	238	973
12	66	99	494	59	238	917
13	58	107	500	57	239	814
14	50	115	506	63	234	707
15	42	123	508	57	235	611
16	34	131	516	49	235	490
17	26	139	528	46	236	361

NWZQ1109 ADCP 0936

Frequency of high speeds.
==========

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

Bin no.	Depth m	Speed (cm/s) 10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	154	969	838	599	333	146	51	14	2	0	0	0	0	0	0	0	0	0	0
2	146	976	874	671	422	216	89	30	7	1	0	0	0	0	0	0	0	0	0
3	138	979	893	710	472	259	116	42	13	2	0	0	0	0	0	0	0	0	0
4	130	982	906	737	512	289	141	55	19	3	0	0	0	0	0	0	0	0	0
5	122	982	917	759	539	318	165	69	23	6	0	0	0	0	0	0	0	0	0
6	114	984	927	779	565	345	186	82	29	8	1	0	0	0	0	0	0	0	0
7	106	985	933	796	588	372	205	94	36	11	2	0	0	0	0	0	0	0	0
8	98	984	936	807	605	391	222	106	42	14	3	0	0	0	0	0	0	0	0
9	90	985	940	819	621	410	238	116	49	16	5	1	0	0	0	0	0	0	0
10	82	983	941	824	631	426	251	127	56	20	6	1	0	0	0	0	0	0	0
11	74	967	928	816	631	433	259	135	61	23	7	2	0	0	0	0	0	0	0
12	66	912	875	773	605	421	258	138	65	25	8	3	1	0	0	0	0	0	0
13	58	809	776	685	543	382	239	133	64	26	10	3	1	0	0	0	0	0	0
14	50	702	673	595	478	337	214	123	62	28	11	4	1	0	0	0	0	0	0
15	42	607	581	516	417	293	186	107	54	27	11	4	1	0	0	0	0	0	0
16	34	487	468	418	338	242	154	91	48	24	10	4	1	0	0	0	0	0	0
17	26	360	346	313	253	183	121	75	41	20	9	4	1	0	0	0	0	0	0

NWZQ1109 ADCP 0936

Harmonic constants for constituent M2 for deployment NWZQ1109.

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	154	389	248	238	177	400	219	16	240	A
02	146	428	249	261	177	439	242	15	240	A
03	138	451	249	276	176	462	258	15	241	A
04	130	469	250	289	176	480	271	14	242	A
05	122	484	251	300	176	495	283	14	242	A
06	114	497	251	310	176	507	293	14	243	A
07	106	508	252	320	177	519	303	14	244	A
08	98	518	252	329	177	528	312	14	244	A
09	90	526	253	337	177	537	320	14	244	A
10	82	533	254	344	178	544	327	14	245	A
11	74	539	254	350	178	550	333	14	245	A
12	66	544	254	355	178	555	338	14	246	A
13	58	547	255	359	179	558	342	14	246	A
14	50	548	255	362	179	560	344	15	246	A
15	42	551	256	361	179	562	344	14	247	A
16	34	553	256	362	179	563	345	14	247	A
17	26	556	256	361	180	566	345	14	248	A

Harmonic constants for constituent S2 for deployment NWZQ1109.

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	154	134	287	77	216	138	72	15	279	A
02	146	148	287	84	215	151	78	14	279	A
03	138	156	287	89	215	159	83	14	280	A
04	130	162	288	93	215	166	87	13	281	A
05	122	168	288	96	215	171	90	13	281	A
06	114	173	288	99	215	176	94	13	282	A
07	106	177	289	103	215	180	97	13	282	A
08	98	181	289	106	215	185	101	13	282	A
09	90	185	290	109	215	188	104	13	283	A
10	82	188	290	112	215	192	107	13	283	A
11	74	191	291	115	216	195	109	13	284	A
12	66	193	292	117	216	197	112	13	284	A
13	58	196	293	122	216	199	116	12	285	A
14	50	197	292	123	216	201	117	13	284	A
15	42	201	293	124	218	206	117	14	285	A
16	34	194	291	127	218	199	118	17	281	A
17	26	191	293	124	220	196	115	17	283	A

NWZQ1109 ADCP 0936

Harmonic constants for constituent N2 for deployment NWZQ1109.

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	154	84	226	51	153	86	47	15	217	A
02	146	91	226	54	154	93	51	15	218	A
03	138	95	226	57	154	97	53	15	218	A
04	130	98	227	59	154	101	54	15	218	A
05	122	101	227	60	155	103	56	15	219	A
06	114	102	227	61	155	105	57	15	219	A
07	106	104	228	62	155	106	58	15	219	A
08	98	105	228	63	155	108	59	15	220	A
09	90	107	228	64	155	109	60	15	220	A
10	82	108	228	65	155	110	60	15	220	A
11	74	109	228	66	155	112	62	14	220	A
12	66	111	228	68	155	114	64	14	220	A
13	58	114	229	70	154	116	67	13	222	A
14	50	121	229	74	152	123	70	13	221	A
15	42	128	230	78	153	130	75	12	224	A
16	34	127	230	81	154	130	77	14	221	A
17	26	133	230	86	157	136	80	16	220	A

Harmonic constants for constituent O1 for deployment NWZQ1109.

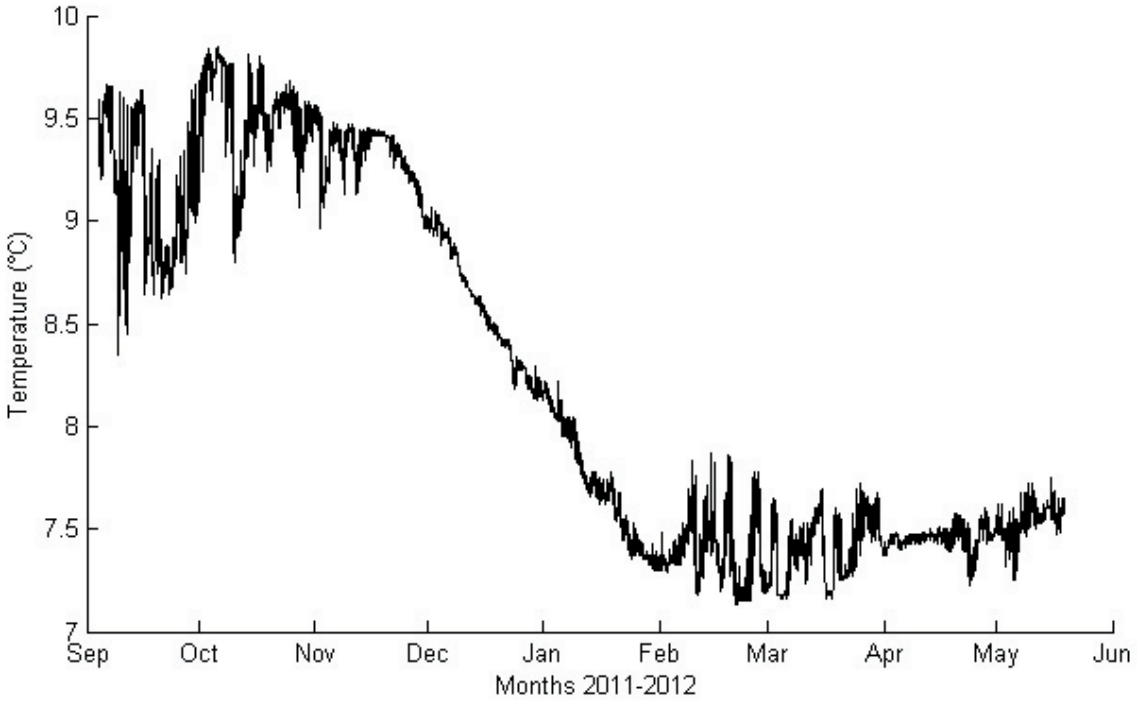
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	154	72	321	71	219	79	64	138	177	A
02	146	78	320	76	218	84	69	138	177	A
03	138	80	320	79	218	88	71	137	177	A
04	130	82	319	81	217	90	73	137	176	A
05	122	83	319	82	217	91	74	137	176	A
06	114	84	318	83	217	91	75	137	175	A
07	106	85	317	84	216	92	76	137	175	A
08	98	86	316	85	216	93	77	137	174	A
09	90	86	316	85	216	93	78	138	173	A
10	82	87	315	85	215	93	78	138	173	A
11	74	86	314	86	215	93	79	136	174	A
12	66	86	314	86	215	92	80	135	174	A
13	58	87	312	86	214	93	81	137	171	A
14	50	87	309	86	211	93	80	136	169	A
15	42	89	308	85	210	93	79	144	161	A
16	34	92	310	82	209	96	77	152	153	A
17	26	95	306	77	203	99	72	156	144	A

NWZQ1109 ADCP 0936

Harmonic constants for constituent K1 for deployment NWZQ1109.

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	154	50	179	48	74	55	42	140	32	A
02	146	53	178	52	74	59	46	139	32	A
03	138	55	178	54	74	60	47	137	34	A
04	130	55	177	55	74	61	48	136	34	A
05	122	56	177	56	73	62	49	135	36	A
06	114	56	176	56	73	62	49	135	35	A
07	106	56	176	57	73	63	50	135	35	A
08	98	57	176	57	72	63	50	135	34	A
09	90	57	175	57	72	63	50	136	32	A
10	82	58	174	56	71	63	50	139	29	A
11	74	59	175	57	71	65	50	140	28	A
12	66	59	177	57	73	64	51	139	31	A
13	58	59	178	58	72	66	50	137	33	A
14	50	60	179	57	77	64	52	143	30	A
15	42	69	182	60	77	74	55	148	27	A
16	34	56	177	57	68	65	46	134	33	A
17	26	60	173	50	63	65	43	149	15	A

NWZQ1109 Starmon 0656



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