HAVSTOVAN
FAROE MARINE RESEARCH INSTITUTE

NACLIM

NACLIM ADCP Deployments in Faroese Waters 2013 - 2014

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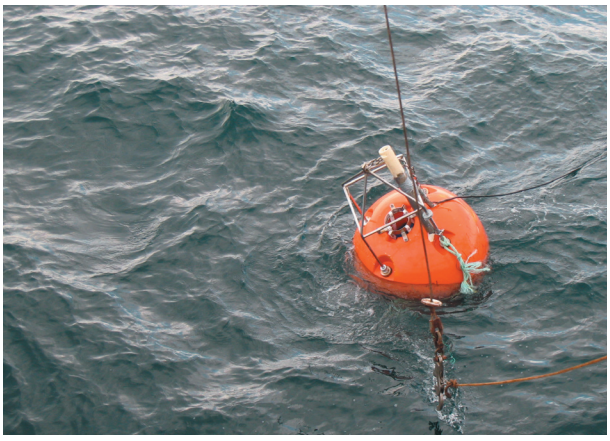

Ebba Mortensen

Karin Margretha H. Larsen

Bogi Hansen

Regin Kristiansen

and Svein Østerhus

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TECHNICAL REPORT

Contents

Introduction

This report documents 7 ADCP deployments in Faroese waters in 2013 – 2014. MicroCats are included in three 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, and NWZB RDI ADCPs were placed in the top of single-point moorings. At sites NWNA, and NWZA "shallow-water" rigs were used, where an 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 one of the ADCP recorded speed, direction and temperature at 60 minutes intervals. The MicroCats attached to three of the ADCPs recorded temperature, salinity and pressure every 10 minutes.

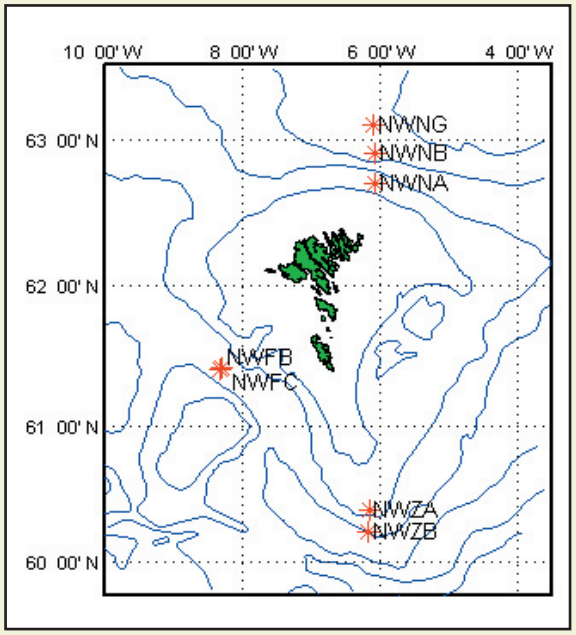


Figure 1. ADCP mooring sites in Faroese waters 2013-2014 superposed on a map with the bottom topography. Each site is indicated by a four-letter label.

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
NWFB1306	1577	Broadband	75	1	25
NWFC1306	1285	Broadband	75	1	25
NWNA1306	1279	Broadband	150	1	10
NWNB1306	19518	Long Ranger	75	10	10
NWNG1306	1644	Broadband	75	1	25
NWZA1306	3368	Long Ranger	75	10	10
NWZB1306	8552	Long Ranger	75	10	10

Table 2. List of deployments with information on duration and range of valid data. All depths are in meters. The last column indicates whether other instruments were on the mooring.

Deployment	Bottom depth	Int. min.	Valid data period	Dur. days	No bins	Depthrange	Comments
NWFB1306	814	20	2013 06 07-2014 05 16	343	23	221- 771	Microcat
NWFC1306	835	20	2013 06 07-2014 05 16	343	25	192- 792	
NWNA1306	300	20	2013 06 09-2014 05 15	339	24	53- 283	Microcat
NWNB1306	964	20	2013 06 09-2014 05 15	340	63	71- 691	
NWNG1306	1808	20	2013 06 09-2014 05 15	340	21	104- 604	Aanderaa
NWZA1306	417	20	2013 06 07-2014 05 17	344	36	47- 397	Microcat
NWZB1306	1139	20	2013 06 07-2014 05 17	344	60	110- 700	

Quality control

The ADCP data have been quality controlled using an automatic routine. The data have been processed such that threshold values for e.g. maximum error velocity, minimum mean correlation and others 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. For specific values used, see the error statistics for the individual series.

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 depth at site NWNG is found using the data from the surface echo. The instrument depth at site NWFC is found from the echo sounding depth (corrected for change in sound velocity). The instrument depths at sites NWFB, NWNA and NWZA are found from the MicroCat pressure measurements. The instrument depths at sites NWNB and NWZB are found from the ADCP pressure measurements. The ADCP pressure measurements at NWZB showed that the instrument frequently was dragged down by as much as 200 m. For this serie, the depths of the bins were rearranged for each ensemble according to the ADCP measurements. The final data sets include only the rearranged bins with approximately 50% data or more.

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 and temperature data from the MicroCat 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.

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 and treshold settings for the deployment, and it 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.

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 Aandreaa or MicroCat data.

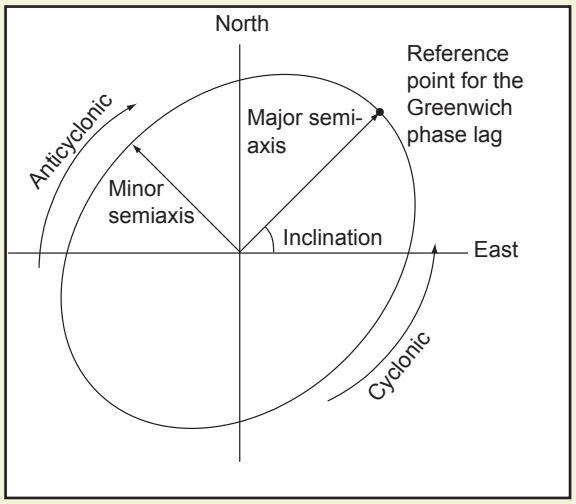


Figure 2. Parameters of the tidal ellipse for a given constituent. The reference point for the Greenwich phase lag is always chosen to be above the east-west axis.

NWFB1306

Latitude: 61°24.951´N

Longitude: 008°16.987´W

Echo sounding depth: 821 m

Bottom depth corr.: 814 m (MicroCat)

Time of deployment: 7/6 - 2013 0054 UTC

Time of recovery: 16/5 - 2014 0610 UTC

ADCP:

Instrument no.: RDI ADCP 1577

Instrument frequency: 75 kHz

Height above bottom: 7 m

Depth: 807 m (corr.)

Time of first data: 7/6 - 2013 0200 UTC

Time of last data: 16/5 - 2014 0540 UTC

Sample interval: 20 min

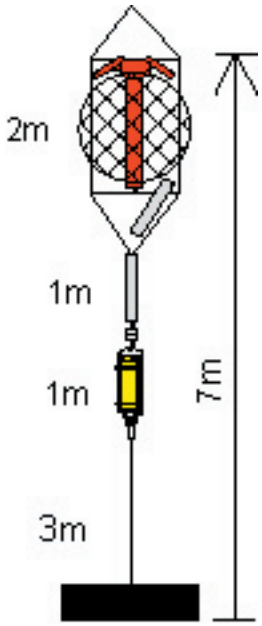
No. of ensembles: 24708

Pings per ens.: 1

Binlength: 25 m

Depth of first bin: 771 m (corr.)

No. of bins: 23



MicroCat

Instrument no.: 5185

Height above bottom: 5 m

Time of first data: 7/6 – 2013 0100 UTC

Time of last data: 16/5 – 2014 0610 UTC

Sample interval: 10 min

No. of ensembles: 49423

Instrument depth: 809 m

Data:

ADCP data ok.

The salinity from the MicroCat has not been edited and may have a small drift.

NWFB1306 ADCP 1577

Error statistics for deployment: NWFB1306 updated 2014/09/19

Temperature edited
Surface distance not edited
Heading, pitch and roll not edited
Intensity not edited

Velocity edited using these data filters:
Minimum Intensity:40.0
Minimum Mean Correlation:64.0
Maximum Speed, number of std dev for each bin: 5.0
Maximum Error Velocity (erv_tr+0.1*spd):100.0
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 1): 5.00
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 23): 2.52
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 32): 0.20
Vertical Speed Spikes, u and v deviated from 3 point median by number of std dev: 5.0

Total number of ensembles: 24708
Interval between ensembles: 20 min
Original number of bins: 32
Number of acceptable velocity bins: 23

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 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	44	0	44	0	0	0	0	0	0	0	0	0
2	0	30	0	30	0	0	0	0	0	0	0	0	0
3	0	20	0	20	0	0	0	0	0	0	0	0	0
4	0	15	0	15	0	0	0	0	0	0	0	0	0
5	0	24	0	20	2	0	0	0	0	0	0	0	0
6	0	48	0	40	4	0	0	0	0	0	0	0	0
7	0	103	0	79	12	0	0	0	0	0	0	0	0
8	0	250	1	200	22	2	0	0	0	0	0	0	0
9	0	509	2	404	49	1	1	0	0	0	0	0	0
10	0	674	3	516	61	12	0	0	0	0	0	0	0
11	0	567	2	428	48	8	2	1	1	0	0	0	0
12	0	401	2	294	35	6	2	1	1	0	0	0	0
13	0	321	1	253	23	6	1	0	0	0	0	0	0
14	0	270	1	232	14	2	1	0	0	0	0	0	0
15	0	282	1	243	18	1	0	0	0	0	0	0	0
16	0	349	1	289	28	0	1	0	0	0	0	0	0
17	0	552	2	356	48	8	5	1	7	0	0	0	0
18	0	1327	5	436	86	27	19	12	25	14	3	1	0
19	0	2899	12	537	124	52	27	22	44	33	15	14	1
20	0	5441	22	649	152	69	46	28	91	59	27	16	15
21	0	8416	34	609	181	78	51	29	108	74	36	40	28
22	0	11168	45	571	159	66	51	38	79	75	42	54	41
23	0	13143	53	468	141	66	35	25	61	56	37	48	47

NWFB1306 ADCP 1577

Deployment: NWFB1306 updated 2014/09/19
Instrument no.: 1577
Instrument freq.: 75
Latitude: 61 24.951 N
Longitude:08 16.987 W
Bottom depth: 814
Instrument depth: 807
Center depth of first bin: 771
Bin length: 25
Number of bins: 23
Number of first ensemble: 756
Time of first ensemble: 2013 06 07 02 00
Number of last ensemble: 25463
Time of last ensemble: 2014 05 16 05 40
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	771	43	993	985	306	998
2	746	68	1063	1055	309	999
3	721	93	1088	1081	311	999
4	696	118	1097	1090	312	999
5	671	143	1095	1088	313	999
6	646	168	1075	1068	314	998
7	621	193	1013	1003	315	996
8	596	218	880	865	318	990
9	571	243	686	660	321	979
10	546	268	489	439	324	973
11	521	293	349	262	327	977
12	496	318	270	148	330	984
13	471	343	227	80	334	987
14	446	368	204	40	345	989
15	421	393	192	20	17	989
16	396	418	187	18	69	986
17	371	443	186	24	98	978
18	346	468	184	28	108	946
19	321	493	184	32	111	883
20	296	518	185	36	110	780
21	271	543	187	37	106	659
22	246	568	186	37	107	548
23	221	593	183	34	109	468

NWFB1306 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	771	998	998	998	998	998	995	982	932	779	491	197	46	7	1	0	0	0	0
2	746	999	999	999	999	999	998	991	971	899	709	404	130	24	2	0	0	0	0
3	721	999	999	999	999	999	999	992	977	927	777	494	183	37	4	0	0	0	0
4	696	999	999	999	999	999	999	993	980	933	799	522	201	37	4	0	0	0	0
5	671	999	999	999	999	999	999	993	980	933	793	518	195	36	4	1	0	0	0
6	646	998	998	998	998	998	998	991	969	901	739	456	166	30	3	1	0	0	0
7	621	996	996	996	994	990	979	949	889	771	573	326	111	20	2	0	0	0	0
8	596	988	982	970	950	919	869	787	669	519	337	167	52	8	1	0	0	0	0
9	571	962	924	869	792	705	607	502	382	262	146	60	14	2	0	0	0	0	0
10	546	918	800	671	542	434	343	253	165	93	42	11	2	0	0	0	0	0	0
11	521	871	674	485	336	232	156	95	52	22	7	1	0	0	0	0	0	0	0
12	496	842	579	349	193	106	58	26	11	4	1	0	0	0	0	0	0	0	0
13	471	813	500	255	111	43	18	7	4	1	0	0	0	0	0	0	0	0	0
14	446	793	444	193	67	21	6	2	1	0	0	0	0	0	0	0	0	0	0
15	421	775	407	160	52	13	2	1	0	0	0	0	0	0	0	0	0	0	0
16	396	769	392	146	43	10	1	0	0	0	0	0	0	0	0	0	0	0	0
17	371	755	385	142	42	9	1	0	0	0	0	0	0	0	0	0	0	0	0
18	346	729	366	134	38	9	1	0	0	0	0	0	0	0	0	0	0	0	0
19	321	677	339	125	36	9	2	0	0	0	0	0	0	0	0	0	0	0	0
20	296	599	303	115	33	8	1	0	0	0	0	0	0	0	0	0	0	0	0
21	271	504	259	102	30	8	1	0	0	0	0	0	0	0	0	0	0	0	0
22	246	418	211	84	26	7	1	0	0	0	0	0	0	0	0	0	0	0	0
23	221	355	174	71	22	5	1	0	0	0	0	0	0	0	0	0	0	0	0

NWFB1306 ADCP 1577

Harmonic constants for constituent M2 for deployment NWFB1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	771	26	55	21	321	27	21	171	242	A
02	746	30	60	22	316	31	21	162	252	A
03	721	31	66	21	315	33	19	158	259	A
04	696	31	74	19	315	33	16	158	265	A
05	671	31	82	18	309	34	12	154	272	A
06	646	28	94	19	291	34	5	147	279	A
07	621	30	128	19	279	35	8	149	300	C
08	596	42	152	19	283	44	14	161	326	C
09	571	46	170	14	271	46	14	176	348	C
10	546	45	197	24	191	51	2	28	195	A
11	521	55	224	54	174	70	33	44	200	A
12	496	63	241	77	171	83	55	60	192	A
13	471	68	249	90	172	93	64	71	185	A
14	446	68	253	95	174	97	66	76	184	A
15	421	67	260	98	176	98	66	82	181	A
16	396	66	266	100	179	100	66	87	180	A
17	371	66	272	101	182	101	66	90	181	A
18	346	67	275	100	184	100	67	91	183	A
19	321	67	277	102	185	102	67	93	183	A
20	296	67	281	104	187	104	66	94	184	A
21	271	68	283	105	186	106	67	97	182	A
22	246	74	284	109	186	110	73	100	179	A
23	221	77	284	110	188	110	76	99	182	A

Harmonic constants for constituent S2 for deployment NWFB1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	771	12	98	8	41	13	6	26	85	A
02	746	13	104	9	35	13	8	23	89	A
03	721	12	109	8	28	12	8	9	103	A
04	696	11	109	7	27	11	7	8	104	A
05	671	7	115	5	9	8	5	159	309	A
06	646	5	154	5	335	7	0	138	335	A
07	621	10	187	7	314	11	5	152	354	C
08	596	11	213	10	317	12	9	152	11	C
09	571	13	253	5	275	14	2	20	256	C
10	546	20	275	11	200	20	11	12	268	A
11	521	24	290	24	201	24	24	17	273	A
12	496	28	299	35	208	35	27	93	205	A
13	471	28	304	38	212	38	28	94	208	A
14	446	26	306	39	215	39	26	91	214	A
15	421	26	309	41	217	41	26	92	216	A
16	396	27	314	42	217	42	26	97	213	A
17	371	26	318	41	221	42	26	97	217	A
18	346	25	319	37	227	37	25	92	226	A
19	321	23	319	35	231	35	23	87	233	A
20	296	25	319	35	228	35	25	91	228	A
21	271	24	321	30	231	30	24	89	231	A
22	246	25	321	32	232	32	25	88	234	A
23	221	21	320	33	230	33	21	89	230	A

NWFB1306 ADCP 1577

Harmonic constants for constituent N2 for deployment NWFB1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	771	6	59	3	316	7	3	172	243	A
02	746	8	55	4	314	8	4	174	238	A
03	721	10	55	4	304	10	4	171	238	A
04	696	9	51	5	286	9	4	161	238	A
05	671	8	58	5	280	9	3	154	247	A
06	646	8	77	6	262	9	0	143	259	A
07	621	8	108	6	258	10	3	144	277	C
08	596	9	129	7	268	11	4	145	295	C
09	571	8	132	5	286	9	2	147	304	C
10	546	5	178	5	222	7	3	39	196	C
11	521	10	240	12	182	14	7	57	201	A
12	496	15	246	19	168	20	15	70	183	A
13	471	18	242	23	157	23	18	79	166	A
14	446	19	240	23	152	23	19	84	157	A
15	421	20	239	23	149	23	20	90	150	A
16	396	21	243	22	148	22	20	116	125	A
17	371	20	249	23	152	23	19	111	134	A
18	346	19	253	24	154	24	19	108	139	A
19	321	19	252	24	154	24	19	107	141	A
20	296	19	250	23	159	23	19	92	157	A
21	271	19	237	22	154	22	18	71	170	A
22	246	19	241	24	150	24	19	91	150	A
23	221	21	246	28	152	28	21	98	145	A

Harmonic constants for constituent O1 for deployment NWFB1306.

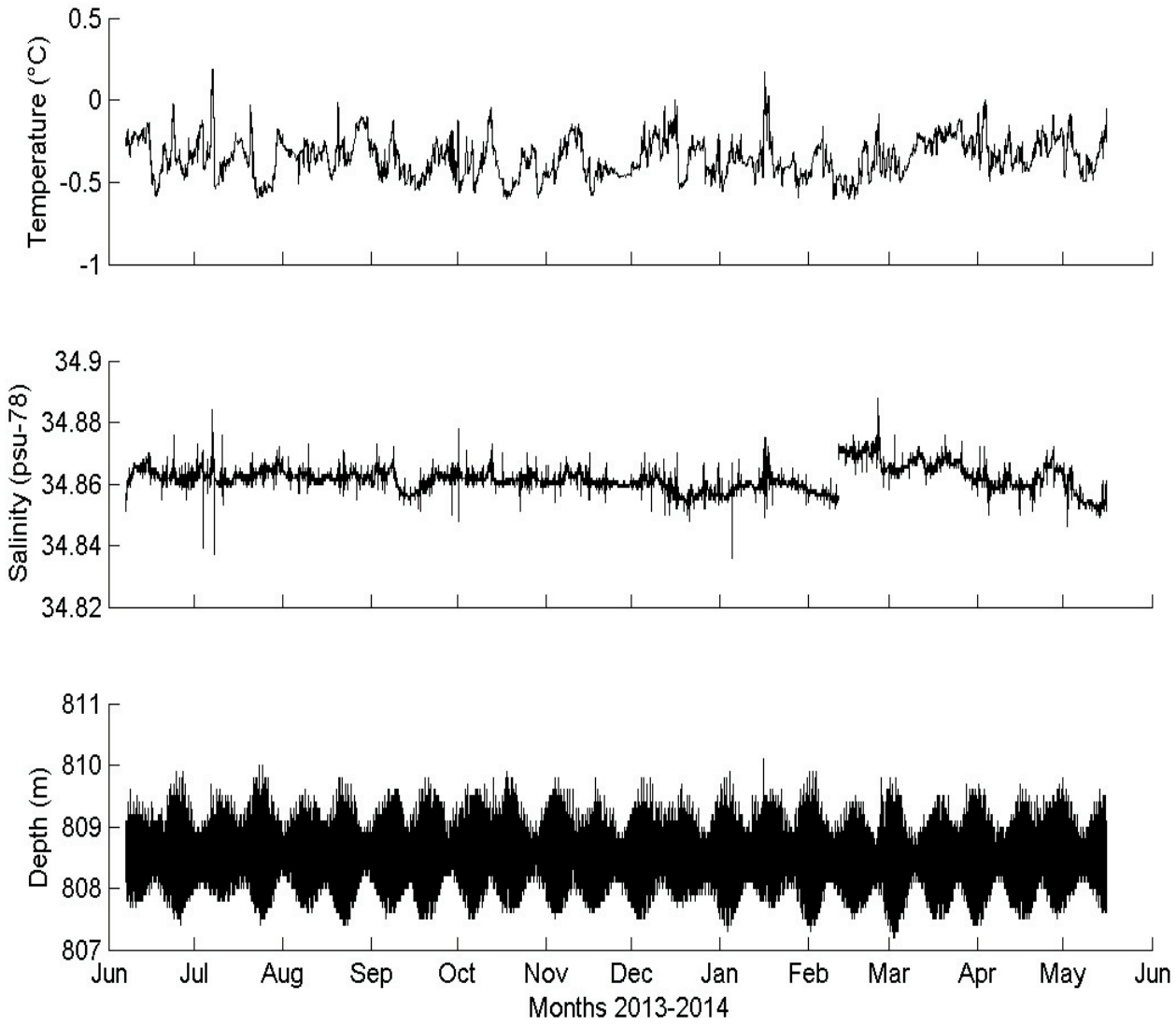
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	771	18	320	10	147	21	1	150	142	A
02	746	19	320	12	142	23	0	148	141	A
03	721	19	319	12	143	23	1	148	140	A
04	696	19	321	14	143	23	0	144	142	A
05	671	19	326	14	142	23	1	144	145	C
06	646	22	333	14	143	26	2	147	150	C
07	621	27	336	20	147	33	3	143	153	C
08	596	31	339	29	150	42	3	137	155	C
09	571	33	347	35	153	48	6	132	159	C
10	546	27	357	34	163	43	5	129	168	C
11	521	18	3	26	173	32	3	125	176	C
12	496	15	17	17	178	23	4	132	187	C
13	471	17	31	15	192	22	4	139	203	C
14	446	16	34	14	194	21	4	140	206	C
15	421	14	34	14	191	20	4	136	203	C
16	396	13	28	14	190	19	3	134	199	C
17	371	12	25	13	189	18	3	132	196	C
18	346	13	26	14	190	19	3	132	197	C
19	321	11	32	15	202	19	2	127	205	C
20	296	13	35	12	194	17	3	136	205	C
21	271	12	41	13	184	17	6	133	202	C
22	246	8	25	14	186	16	2	119	190	C
23	221	9	14	15	186	17	1	122	188	C

NWFB1306 ADCP 1577

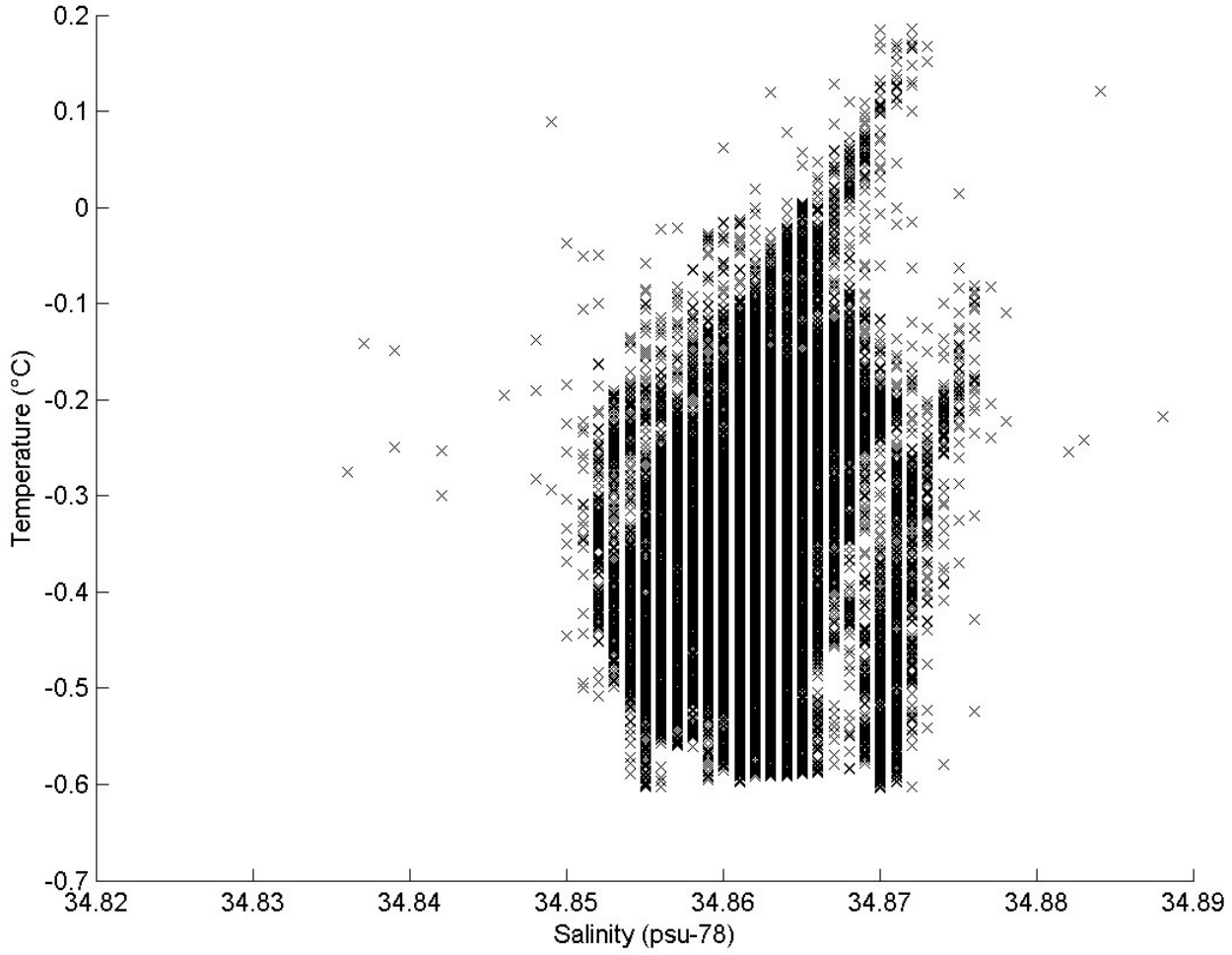
Harmonic constants for constituent K1 for deployment NWFB1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	771	14	214	10	59	17	4	145	42	A
02	746	17	212	11	56	20	4	148	39	A
03	721	17	219	13	50	21	2	143	43	A
04	696	16	217	13	51	21	2	141	43	A
05	671	16	220	13	53	21	2	141	45	A
06	646	19	223	12	53	22	2	147	46	A
07	621	21	235	17	55	28	0	141	55	C
08	596	26	244	27	64	37	0	133	64	A
09	571	29	237	33	66	44	4	131	62	A
10	546	27	234	33	64	43	4	129	60	A
11	521	19	240	28	66	34	1	125	64	A
12	496	15	243	25	77	29	3	121	73	A
13	471	11	258	22	84	25	1	117	83	A
14	446	9	277	19	86	21	1	113	88	C
15	421	7	263	20	82	21	0	109	82	C
16	396	8	264	22	81	23	0	109	82	C
17	371	8	268	22	82	23	1	111	83	C
18	346	9	271	19	79	21	2	115	81	C
19	321	9	264	14	70	17	2	121	73	C
20	296	14	263	17	68	22	3	129	74	C
21	271	14	270	13	79	19	2	137	85	C
22	246	14	261	16	90	21	2	130	86	A
23	221	16	267	19	87	25	0	130	87	A

NWFB1306 MicroCat 5185



NWFB1306 MicroCat 5185



NWFC1306

Latitude: 61°24.448´N

Longitude: 008°18.900´W

Echo sound depth: 844 m

Bottom depth corr.: 835 m (sound velocity)

Time of deployment: 7/6 - 2013 0136 UTC

Time of recovery: 16/5 - 2014 0647 UTC

ADCP:

Instrument no.: RDI ADCP 1285

Instrument frequency: 75 kHz

Height above bottom: 7 m

Depth: 828 m (corr.)

Time of first data: 7/6 – 2013 0240 UTC

Time of last data: 16/5 – 2014 0620 UTC

Sample interval: 20 min

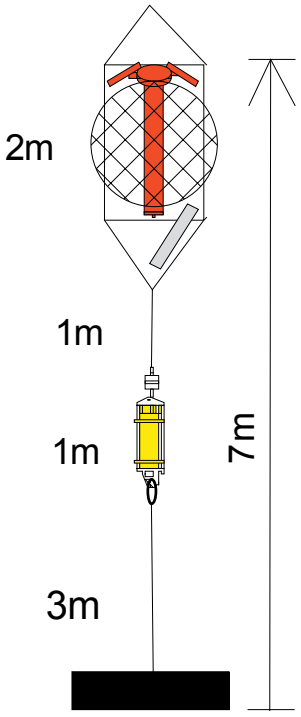
No. of ensembles: 24717

Pings per ens.: 1

Binlength: 25 m

Depth of first bin: 792 m (corr.)

No. of bins: 25



Data:

All data ok.

NWFC1306 ADCP 1285

```
Error statistics for deployment: NWFC1306 updated 2014/10/09
-----------------------------------------------------------------
Temperature edited
Surface distance not edited
Heading, pitch and roll not edited
Intensity not edited

Velocity edited using these data filters:
Minimum Mean Correlation:64.0
Maximum Speed, number of std dev for each bin: 5.0
Maximum Vertical Velocity:150.0
Maximum Error Velocity (erv_tr+0.1*spd):150.0
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 1): 4.00
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 25): 2.66
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 32): 2.00
Vertical Speed Spikes, u and v deviated from 3 point median by number of std dev: 4.0
Vertical Velocity Spikes, deviated from 3 point median by number of std dev: 4.0

Pitch exceeds 15° almost through out the deployment period
- this might affect the heading readings.

Total number of  ensembles:       24708
Interval between ensembles:      20 min
Original number of bins:            32
Number of acceptable velocity bins:  25

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 vel-
ocity 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 num-
ber 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	370	1	277	23	7	3	1	1	0	0	0	0
2	0	853	3	665	58	15	2	2	1	0	0	0	0
3	0	796	3	580	73	19	1	0	1	0	0	0	0
4	0	1461	6	931	168	36	8	4	5	0	0	0	0
5	0	2312	9	1280	278	89	19	13	9	1	0	0	0
6	0	2643	11	1362	287	106	34	19	19	2	0	0	0
7	0	2280	9	1319	216	98	25	9	11	1	0	0	0
8	0	1844	7	1156	199	61	14	5	4	0	0	0	0
9	0	1399	6	865	155	40	18	4	2	0	0	0	0
10	0	1090	4	656	104	47	11	5	2	0	0	0	0
11	0	848	3	479	91	34	10	4	3	0	0	0	0
12	0	732	3	477	76	16	5	7	0	0	0	0	0
13	0	703	3	447	85	19	3	2	1	0	0	0	0
14	0	714	3	447	85	17	3	4	2	0	0	0	0
15	0	733	3	520	54	19	2	3	2	1	0	0	0
16	0	755	3	519	69	20	7	0	1	0	0	0	0
17	0	752	3	522	71	17	1	4	2	0	0	0	0
18	0	854	3	538	87	21	8	4	4	0	0	0	0
19	0	1377	6	614	94	32	13	6	14	14	3	0	0
20	0	2494	10	663	138	46	23	15	41	25	14	6	0
21	0	4070	16	733	173	75	35	27	55	51	23	11	5
22	0	6372	26	736	196	80	46	36	92	64	32	28	13
23	0	8848	36	702	205	85	73	36	87	66	49	36	29
24	0	11175	45	633	154	96	61	33	85	67	43	55	40
25	0	13037	53	627	158	66	39	29	80	56	31	48	57

NWFC1306 ADCP 1285

Deployment: NWFC1306 updated 2014/10/09
Instrument no.: 1285
Instrument freq.: 75
Latitude: 61 23.448 N
Longitude:08 18.900 W
Bottom depth: 835
Instrument depth: 828
Center depth of first bin: 792
Bin length: 25
Number of bins: 25
Number of first ensemble: 771
Time of first ensemble: 2013 06 07 02 40
Number of last ensemble: 25478
Time of last ensemble: 2014 05 16 06 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	792	43	1024	1017	299	985
2	767	68	1094	1088	302	965
3	742	93	1100	1094	304	968
4	717	118	1082	1076	306	941
5	692	143	1044	1038	306	906
6	667	168	947	938	306	893
7	642	193	753	725	307	908
8	617	218	538	457	312	925
9	592	243	377	232	321	943
10	567	268	274	84	341	956
11	542	293	221	47	69	966
12	517	318	201	73	101	970
13	492	343	194	91	110	972
14	467	368	193	101	114	971
15	442	393	193	108	116	970
16	417	418	194	110	117	969
17	392	443	196	113	119	970
18	367	468	198	114	121	965
19	342	493	198	114	122	944
20	317	518	198	113	122	899
21	292	543	199	113	122	835
22	267	568	202	114	122	742
23	242	593	201	112	122	642
24	217	618	200	108	122	548
25	192	643	200	103	123	472

NWFC1306 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	792	985	985	985	984	982	975	962	923	801	575	307	108	24	3	0	0	0	0
2	767	965	965	965	964	963	958	950	936	890	749	500	217	55	6	1	0	0	0
3	742	968	968	967	967	965	961	952	939	900	771	525	225	52	7	1	0	0	0
4	717	941	941	940	940	938	933	923	903	848	708	463	190	43	5	0	0	0	0
5	692	906	906	905	903	897	886	863	824	748	595	379	158	40	5	0	0	0	0
6	667	891	883	873	857	836	804	756	685	581	432	267	115	31	5	1	0	0	0
7	642	888	846	800	749	691	621	538	448	350	244	138	58	16	2	0	0	0	0
8	617	865	747	632	537	457	381	309	238	170	106	52	21	6	1	0	0	0	0
9	592	842	636	463	346	262	198	141	92	56	29	14	6	2	1	0	0	0	0
10	567	813	539	323	190	115	72	43	25	14	7	3	1	0	0	0	0	0	0
11	542	790	465	218	93	41	20	11	5	3	1	0	0	0	0	0	0	0	0
12	517	776	424	177	61	21	7	3	1	0	0	0	0	0	0	0	0	0	0
13	492	770	406	157	52	16	4	1	0	0	0	0	0	0	0	0	0	0	0
14	467	771	400	152	46	14	3	0	0	0	0	0	0	0	0	0	0	0	0
15	442	768	404	156	48	16	3	0	0	0	0	0	0	0	0	0	0	0	0
16	417	766	410	161	51	15	3	0	0	0	0	0	0	0	0	0	0	0	0
17	392	768	414	166	58	17	3	0	0	0	0	0	0	0	0	0	0	0	0
18	367	769	411	167	63	19	3	0	0	0	0	0	0	0	0	0	0	0	0
19	342	753	398	168	64	21	3	0	0	0	0	0	0	0	0	0	0	0	0
20	317	715	378	162	64	20	3	0	0	0	0	0	0	0	0	0	0	0	0
21	292	663	353	152	64	21	3	0	0	0	0	0	0	0	0	0	0	0	0
22	267	588	317	141	60	20	2	0	0	0	0	0	0	0	0	0	0	0	0
23	242	508	269	123	54	19	3	0	0	0	0	0	0	0	0	0	0	0	0
24	217	425	227	104	49	18	2	0	0	0	0	0	0	0	0	0	0	0	0
25	192	367	195	89	42	14	2	0	0	0	0	0	0	0	0	0	0	0	0

NWFC1306 ADCP 1285

Harmonic constants for constituent M2 for deployment NWFC1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	792	12	88	16	279	20	2	128	275	A
02	767	12	85	16	276	20	2	125	272	A
03	742	15	85	19	278	24	3	129	273	A
04	717	16	85	23	286	27	5	125	279	A
05	692	21	94	29	301	35	8	124	292	A
06	667	37	115	39	314	53	8	133	305	A
07	642	65	128	48	322	80	10	144	313	A
08	617	76	136	39	320	85	3	153	317	A
09	592	57	158	7	298	57	5	174	337	C
10	567	44	195	32	155	51	17	33	182	A
11	542	47	231	57	155	60	44	64	175	A
12	517	50	246	69	162	69	49	82	168	A
13	492	53	257	77	168	77	53	89	168	A
14	467	55	265	82	174	82	55	91	173	A
15	442	57	272	85	181	85	57	92	179	A
16	417	59	278	88	185	88	59	94	182	A
17	392	61	282	90	188	91	61	95	185	A
18	367	64	286	93	191	93	63	96	187	A
19	342	65	289	95	193	95	65	97	189	A
20	317	66	291	97	195	98	65	97	190	A
21	292	66	291	98	196	98	66	96	192	A
22	267	67	292	100	197	100	66	95	194	A
23	242	70	292	99	198	99	69	96	193	A
24	217	73	293	102	198	102	72	97	193	A
25	192	74	292	103	200	103	74	92	198	A

Harmonic constants for constituent S2 for deployment NWFC1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	792	5	130	4	345	6	2	141	324	A
02	767	4	120	4	345	6	2	134	323	A
03	742	4	128	5	349	7	2	127	333	A
04	717	5	141	6	349	8	2	124	340	A
05	692	9	164	8	12	11	3	138	357	A
06	667	17	170	14	20	21	6	141	3	A
07	642	25	178	16	27	29	7	148	6	A
08	617	24	177	15	36	27	8	151	7	A
09	592	17	210	9	87	18	7	160	38	A
10	567	18	259	16	170	18	16	2	258	A
11	542	22	292	26	194	26	21	110	178	A
12	517	23	301	31	206	31	23	98	200	A
13	492	22	306	32	215	32	22	91	214	A
14	467	22	308	32	222	32	22	85	225	A
15	442	22	315	34	225	34	22	91	225	A
16	417	23	322	37	228	37	23	95	224	A
17	392	24	326	39	229	39	23	96	225	A
18	367	25	328	39	231	39	25	97	227	A
19	342	25	325	37	236	37	25	90	236	A
20	317	26	329	36	237	36	26	93	235	A
21	292	27	333	37	240	37	27	95	236	A
22	267	27	335	37	242	37	27	94	239	A
23	242	24	329	35	241	35	24	88	242	A
24	217	22	332	30	246	30	22	84	250	A
25	192	20	344	31	244	31	19	100	238	A

NWFC1306 ADCP 1285

Harmonic constants for constituent N2 for deployment NWFC1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	792	3	55	5	277	6	2	120	266	A
02	767	4	41	4	265	5	2	129	247	A
03	742	5	49	6	260	7	2	130	247	A
04	717	5	55	7	266	8	2	124	256	A
05	692	5	80	6	278	7	1	132	270	A
06	667	8	106	6	307	10	2	145	293	A
07	642	14	127	8	306	16	0	151	307	C
08	617	18	138	8	321	19	0	157	318	A
09	592	9	152	1	260	9	1	179	332	C
10	567	4	231	10	151	10	4	85	152	A
11	542	11	239	16	145	16	11	95	142	A
12	517	14	238	20	147	20	14	91	146	A
13	492	15	242	20	149	20	15	95	146	A
14	467	16	246	21	154	21	16	95	150	A
15	442	16	254	20	159	20	16	100	151	A
16	417	15	256	20	162	20	15	97	157	A
17	392	16	253	20	164	20	16	87	166	A
18	367	16	254	21	164	21	16	90	163	A
19	342	16	256	21	162	21	16	96	157	A
20	317	16	254	23	162	23	16	93	160	A
21	292	17	254	22	161	22	17	95	157	A
22	267	15	251	21	162	21	15	89	163	A
23	242	19	253	20	163	20	19	92	161	A
24	217	17	256	24	165	24	17	92	163	A
25	192	15	246	19	172	20	13	68	187	A

Harmonic constants for constituent O1 for deployment NWFC1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	792	13	342	16	154	20	2	130	157	C
02	767	13	338	16	152	21	1	130	154	C
03	742	13	335	18	155	22	0	125	155	C
04	717	14	340	18	160	23	0	127	160	C
05	692	19	343	21	164	28	0	132	164	A
06	667	30	349	28	170	41	0	137	170	A
07	642	41	353	36	174	54	1	139	173	A
08	617	47	358	39	180	61	1	140	179	A
09	592	40	6	36	190	54	2	138	188	A
10	567	29	14	27	197	40	1	137	195	A
11	542	21	15	20	194	29	0	136	195	C
12	517	18	17	17	191	24	1	138	194	C
13	492	17	13	15	185	23	2	138	189	C
14	467	16	9	15	185	22	1	136	187	C
15	442	15	10	15	188	21	0	134	189	C
16	417	14	9	14	186	20	0	135	188	C
17	392	14	14	14	188	19	1	134	191	C
18	367	14	13	14	184	19	1	136	189	C
19	342	15	13	15	190	21	1	135	191	C
20	317	16	14	16	190	23	1	136	192	C
21	292	15	8	15	181	21	1	135	184	C
22	267	17	6	14	192	22	1	140	189	A
23	242	18	5	16	192	23	1	139	188	A
24	217	18	14	17	200	24	1	136	197	A
25	192	15	11	16	203	22	2	134	197	A

NWFC1306 ADCP 1285

Harmonic constants for constituent K1 for deployment NWFC1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	792	9	242	11	60	14	0	129	61	C
02	767	9	232	11	53	15	0	130	52	A
03	742	10	224	14	55	17	2	127	51	A
04	717	10	228	15	59	18	2	124	55	A
05	692	14	242	19	70	24	1	126	67	A
06	667	25	249	22	73	34	1	138	71	A
07	642	37	243	27	72	46	3	144	66	A
08	617	37	245	31	71	48	2	140	67	A
09	592	34	246	31	70	46	2	137	68	A
10	567	26	248	24	71	35	1	137	69	A
11	542	17	257	16	79	23	0	136	78	A
12	517	14	254	16	83	21	2	130	80	A
13	492	12	250	17	77	21	1	126	74	A
14	467	10	253	16	69	19	1	121	70	C
15	442	10	259	17	65	20	2	120	68	C
16	417	9	265	18	66	20	3	116	70	C
17	392	11	265	20	71	23	2	118	74	C
18	367	12	264	21	70	24	2	118	73	C
19	342	10	270	20	66	23	4	116	71	C
20	317	12	267	19	67	22	4	121	72	C
21	292	12	262	16	71	20	2	126	75	C
22	267	9	266	14	69	16	2	124	74	C
23	242	8	272	11	80	14	1	127	85	C
24	217	12	285	11	80	16	3	137	93	C
25	192	10	274	12	82	15	2	132	87	C

NWNA1306

Latitude: 62°42.039´N

Longitude: 006°04.610´W

Echo sound depth: 299 m

Bottom depth corr.: 300 m (MicroCat)

Time of deployment: 9/6 - 2013 0359 UTC

Time of recovery: 15/5 - 2014 0401 UTC

ADCP:

Instrument no.: RDI ADCP 1279

Instrument frequency: 150 kHz

Height above bottom: 1 m

Depth: 299 m (corr.)

Time of first data: 9/6 – 2013 0420 UTC

Time of last data: 15/5 – 2014 0340 UTC

Sample interval: 20 min

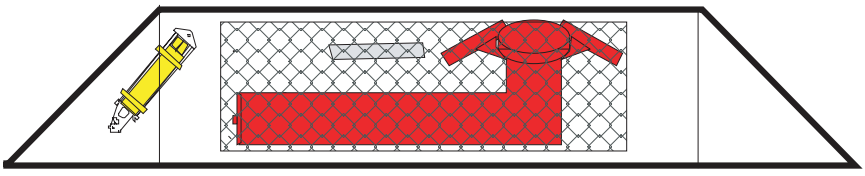
No. of ensembles: 24479

Pings per ens.: 1

Binlength: 10 m

Depth of first bin: 283 m (corr.)

No. of bins: 24



MicroCat

Instrument no.: **0**984

Height above bottom: 1 m

Time of first data: 9/6 – 2013 0420 UTC

Time of last data: 15/5 – 2014 0400 UTC

Sample interval: 10 min

No. of ensembles: 48959

Instrument depth: 299 m

Data:

ADCP data ok.

The salinity from the MicroCat has not been edited and may have a small drift.

NWNA1306 ADCP 1279

Error statistics for deployment: NWNA1306 updated 2014/09/23

Temperature edited
Surface distance not edited
Heading, pitch and roll not edited
Intensity not edited

Velocity edited using these data filters:
Minimum Intensity:42.0
Minimum Mean Correlation:45.0
Maximum Speed, number of std dev for each bin: 5.0
Maximum Vertical Velocity:150.0
Maximum Error Velocity (erv_tr+0.1*spd):100.0
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 1): 4.00
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 24): 1.53
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 30): 0.20
Vertical Speed Spikes, u and v deviated from 3 point median by number of std dev: 4.0
Vertical Velocity Spikes, deviated from 3 point median by number of std dev: 4.0

Total number of ensembles: 24479
Interval between ensembles: 20 min
Original number of bins: 30
Number of acceptable velocity bins: 24

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 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	1930	8	1402	195	30	7	1	2	0	0	0	0
2	0	2095	9	1524	217	28	12	1	0	0	0	0	0
3	0	1974	8	1453	198	36	3	1	0	0	0	0	0
4	0	2000	8	1455	183	39	13	2	0	0	0	0	0
5	0	1722	7	1206	167	45	5	3	2	0	0	0	0
6	0	1554	6	1085	150	37	6	2	4	0	0	0	0
7	0	1405	6	984	152	22	9	0	2	0	0	0	0
8	0	1232	5	837	138	28	4	0	1	1	0	0	0
9	0	1149	5	768	101	41	6	1	4	0	0	0	0
10	0	1084	4	721	115	24	6	5	2	0	0	0	0
11	0	1078	4	722	99	18	11	4	6	0	0	0	0
12	0	1200	5	750	132	31	12	2	5	0	0	0	0
13	0	1428	6	772	153	45	18	10	11	1	0	0	0
14	0	1601	7	804	163	55	26	11	15	3	0	0	0
15	0	2044	8	796	193	73	40	17	30	7	3	0	0
16	0	2620	11	862	198	71	41	27	54	24	1	3	0
17	0	3326	14	878	234	100	38	26	52	36	11	5	0
18	0	4239	17	994	246	123	53	25	69	33	27	10	0
19	0	5386	22	1032	303	127	64	27	96	46	32	21	0
20	0	6798	28	1074	340	171	78	54	103	51	38	31	5
21	0	8317	34	1142	360	160	92	57	126	81	35	46	9
22	0	9858	40	1208	348	176	92	77	124	68	44	64	18
23	0	11441	47	1212	363	183	129	67	120	72	43	68	31
24	0	13132	54	1168	397	190	130	64	156	78	39	63	48

NWNA1306 ADCP 1279

Deployment: NWNA1306 updated 2014/09/23
Instrument no.: 1279
Instrument freq.: 150
Latitude: 62 42.039 N
Longitude:06 04.610 W
Bottom depth: 300
Instrument depth: 299
Center depth of first bin: 283
Bin length: 10
Number of bins: 24
Number of first ensemble: 907
Time of first ensemble: 2013 06 09 04 20
Number of last ensemble: 25385
Time of last ensemble: 2014 05 15 03 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	283	17	193	118	95	921
2	273	27	207	124	99	914
3	263	37	216	125	101	919
4	253	47	223	127	103	918
5	243	57	229	132	105	930
6	233	67	233	139	106	937
7	223	77	237	146	106	943
8	213	87	240	153	106	950
9	203	97	241	159	106	953
10	193	107	244	164	106	956
11	183	117	244	168	106	956
12	173	127	245	171	106	951
13	163	137	247	174	106	942
14	153	147	248	177	106	935
15	143	157	249	178	106	916
16	133	167	252	182	105	893
17	123	177	255	185	105	864
18	113	187	258	189	105	827
19	103	197	261	193	105	780
20	93	207	266	201	105	722
21	83	217	273	209	105	660
22	73	227	281	219	105	597
23	63	237	287	225	106	533
24	53	247	294	229	106	464

NWNA1306 ADCP 1279

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	283	720	385	156	46	13	3	0	0	0	0	0	0	0	0	0	0	0	0
2	273	741	417	188	67	20	5	2	0	0	0	0	0	0	0	0	0	0	0
3	263	760	442	209	79	28	9	3	1	0	0	0	0	0	0	0	0	0	0
4	253	769	462	224	94	34	11	4	1	0	0	0	0	0	0	0	0	0	0
5	243	787	483	239	102	37	14	5	2	0	0	0	0	0	0	0	0	0	0
6	233	794	494	255	111	42	15	6	2	0	0	0	0	0	0	0	0	0	0
7	223	805	506	264	121	45	17	6	2	1	0	0	0	0	0	0	0	0	0
8	213	812	515	273	128	51	19	7	2	1	0	0	0	0	0	0	0	0	0
9	203	812	519	276	134	56	20	8	3	1	0	0	0	0	0	0	0	0	0
10	193	816	524	284	137	59	21	8	3	1	0	0	0	0	0	0	0	0	0
11	183	814	526	286	137	60	22	9	4	1	0	0	0	0	0	0	0	0	0
12	173	810	523	290	143	60	22	9	4	1	0	0	0	0	0	0	0	0	0
13	163	805	520	289	143	61	22	9	4	1	0	0	0	0	0	0	0	0	0
14	153	799	517	295	144	62	24	9	4	1	0	0	0	0	0	0	0	0	0
15	143	785	510	291	143	62	23	9	4	1	0	0	0	0	0	0	0	0	0
16	133	767	501	289	144	64	25	10	4	1	0	0	0	0	0	0	0	0	0
17	123	743	495	287	145	64	26	10	4	1	0	0	0	0	0	0	0	0	0
18	113	714	480	283	142	64	26	10	4	1	0	0	0	0	0	0	0	0	0
19	103	673	459	274	140	62	26	10	3	1	0	0	0	0	0	0	0	0	0
20	93	629	436	264	137	62	25	9	3	1	0	0	0	0	0	0	0	0	0
21	83	580	408	254	134	61	26	10	3	1	0	0	0	0	0	0	0	0	0
22	73	529	383	241	130	60	27	10	4	2	0	0	0	0	0	0	0	0	0
23	63	475	348	223	123	57	25	9	4	2	1	0	0	0	0	0	0	0	0
24	53	416	310	201	114	55	24	9	4	2	1	0	0	0	0	0	0	0	0

NWNA1306 ADCP 1279

Harmonic constants for constituent M2 for deployment NWNA1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	283	127	294	88	176	137	72	154	129	A
02	273	140	295	102	177	152	83	152	131	A
03	263	148	295	113	179	161	93	151	133	A
04	253	158	296	120	181	172	100	151	134	A
05	243	166	297	125	184	178	107	153	134	A
06	233	170	299	128	187	181	111	154	136	A
07	223	172	300	128	189	183	113	155	136	A
08	213	174	301	126	192	183	113	157	136	A
09	203	173	303	125	194	182	113	157	138	A
10	193	172	304	124	196	180	112	158	139	A
11	183	171	306	120	198	178	110	160	139	A
12	173	170	307	117	200	176	108	161	140	A
13	163	169	309	115	201	175	106	161	141	A
14	153	168	311	112	203	174	104	162	141	A
15	143	167	312	110	206	171	102	163	143	A
16	133	166	314	107	208	171	100	164	144	A
17	123	166	316	105	210	171	98	164	145	A
18	113	164	289	102	184	167	97	166	117	A
19	103	162	291	99	187	164	94	167	119	A
20	93	157	323	95	220	159	92	169	149	A
21	83	156	326	92	225	158	90	171	151	A
22	73	155	329	92	231	156	91	173	153	A
23	63	155	332	94	234	156	92	173	156	A
24	53	163	304	98	209	164	98	175	127	A

Harmonic constants for constituent S2 for deployment NWNA1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	283	48	336	32	223	50	28	158	169	A
02	273	51	335	39	226	54	35	155	172	A
03	263	50	332	43	227	53	39	152	173	A
04	253	51	331	45	229	54	42	151	175	A
05	243	56	335	46	229	59	42	153	174	A
06	233	60	337	46	229	63	41	155	174	A
07	223	63	340	47	232	66	43	158	174	A
08	213	64	342	45	233	67	41	159	175	A
09	203	65	343	45	235	68	42	160	176	A
10	193	65	344	44	235	68	40	160	177	A
11	183	64	346	44	237	67	40	160	178	A
12	173	65	348	43	237	68	38	161	179	A
13	163	65	349	42	238	68	38	161	180	A
14	153	65	350	41	239	68	37	162	180	A
15	143	64	351	40	242	66	37	163	180	A
16	133	63	352	38	243	65	35	165	180	A
17	123	62	353	37	245	63	34	165	181	A
18	113	60	326	36	215	62	32	163	154	A
19	103	59	326	34	216	60	31	164	154	A
20	93	59	358	31	254	59	30	170	183	A
21	83	59	2	30	252	60	27	168	188	A
22	73	58	8	30	259	59	28	168	193	A
23	63	56	8	29	260	57	27	168	193	A
24	53	51	339	29	237	52	28	171	164	A

NWNA1306 ADCP 1279

Harmonic constants for constituent N2 for deployment NWNA1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	283	25	276	17	141	28	11	150	108	A
02	273	28	280	18	146	31	12	152	111	A
03	263	30	281	21	151	34	14	149	115	A
04	253	31	284	22	156	35	16	149	120	A
05	243	32	282	22	160	35	17	153	116	A
06	233	32	283	23	161	36	18	151	119	A
07	223	34	283	23	164	37	19	154	117	A
08	213	35	283	24	167	37	20	155	117	A
09	203	35	285	24	171	37	21	156	119	A
10	193	36	285	24	174	38	22	158	118	A
11	183	36	285	24	175	38	22	160	117	A
12	173	37	287	24	177	38	22	161	118	A
13	163	36	288	24	177	38	22	159	120	A
14	153	36	287	23	179	37	21	162	118	A
15	143	34	290	23	182	35	21	161	121	A
16	133	34	288	21	181	35	20	164	118	A
17	123	34	291	21	179	35	19	161	122	A
18	113	33	264	21	149	34	18	159	96	A
19	103	30	267	20	151	32	17	156	101	A
20	93	32	295	20	180	33	17	160	126	A
21	83	31	299	20	188	32	18	160	130	A
22	73	34	302	20	197	35	19	168	128	A
23	63	37	302	19	195	37	18	170	127	A
24	53	35	273	19	164	36	18	166	100	A

Harmonic constants for constituent O1 for deployment NWNA1306.

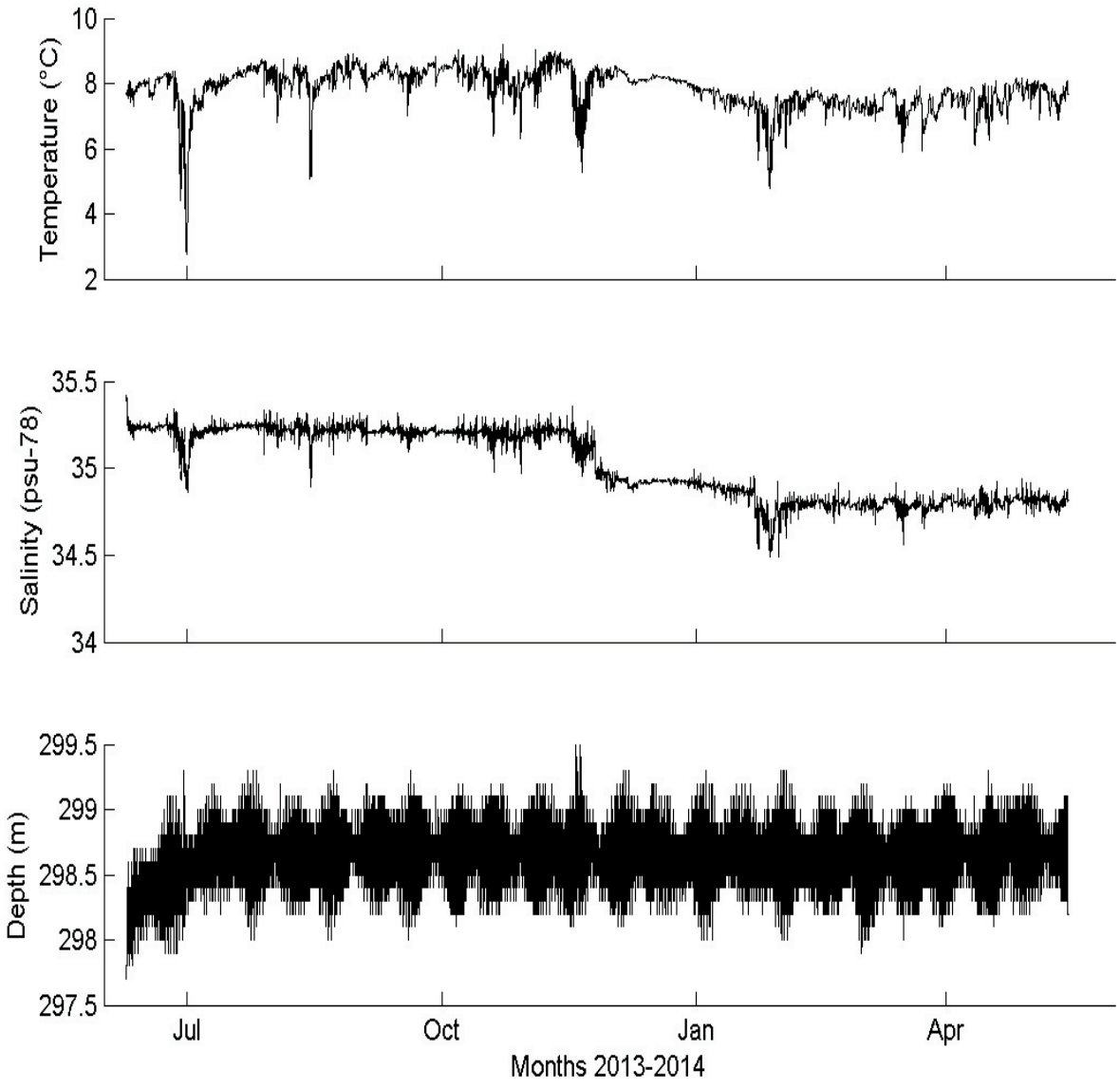
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	283	22	46	14	293	23	12	161	237	A
02	273	22	41	16	292	23	15	157	237	A
03	263	25	40	17	286	27	15	156	234	A
04	253	25	39	19	287	27	16	154	236	A
05	243	25	38	18	285	27	15	157	232	A
06	233	26	39	16	284	27	14	159	230	A
07	223	26	35	15	289	26	14	167	222	A
08	213	27	33	16	291	27	15	170	218	A
09	203	26	33	15	296	26	15	174	216	A
10	193	27	35	15	295	27	14	173	219	A
11	183	27	34	14	294	27	14	173	217	A
12	173	26	35	14	297	26	14	174	218	A
13	163	26	36	12	293	26	12	172	219	A
14	153	26	35	12	289	27	12	171	219	A
15	143	26	35	12	291	26	12	171	219	A
16	133	26	35	13	287	26	13	168	221	A
17	123	26	38	14	290	27	13	168	224	A
18	113	27	21	15	274	28	14	167	208	A
19	103	28	12	14	273	28	14	174	194	A
20	93	27	29	14	283	27	13	170	214	A
21	83	31	21	12	280	31	11	175	202	A
22	73	27	24	13	273	27	12	168	209	A
23	63	27	29	13	264	28	10	162	215	A
24	53	23	7	12	258	23	12	166	194	A

NWNA1306 ADCP 1279

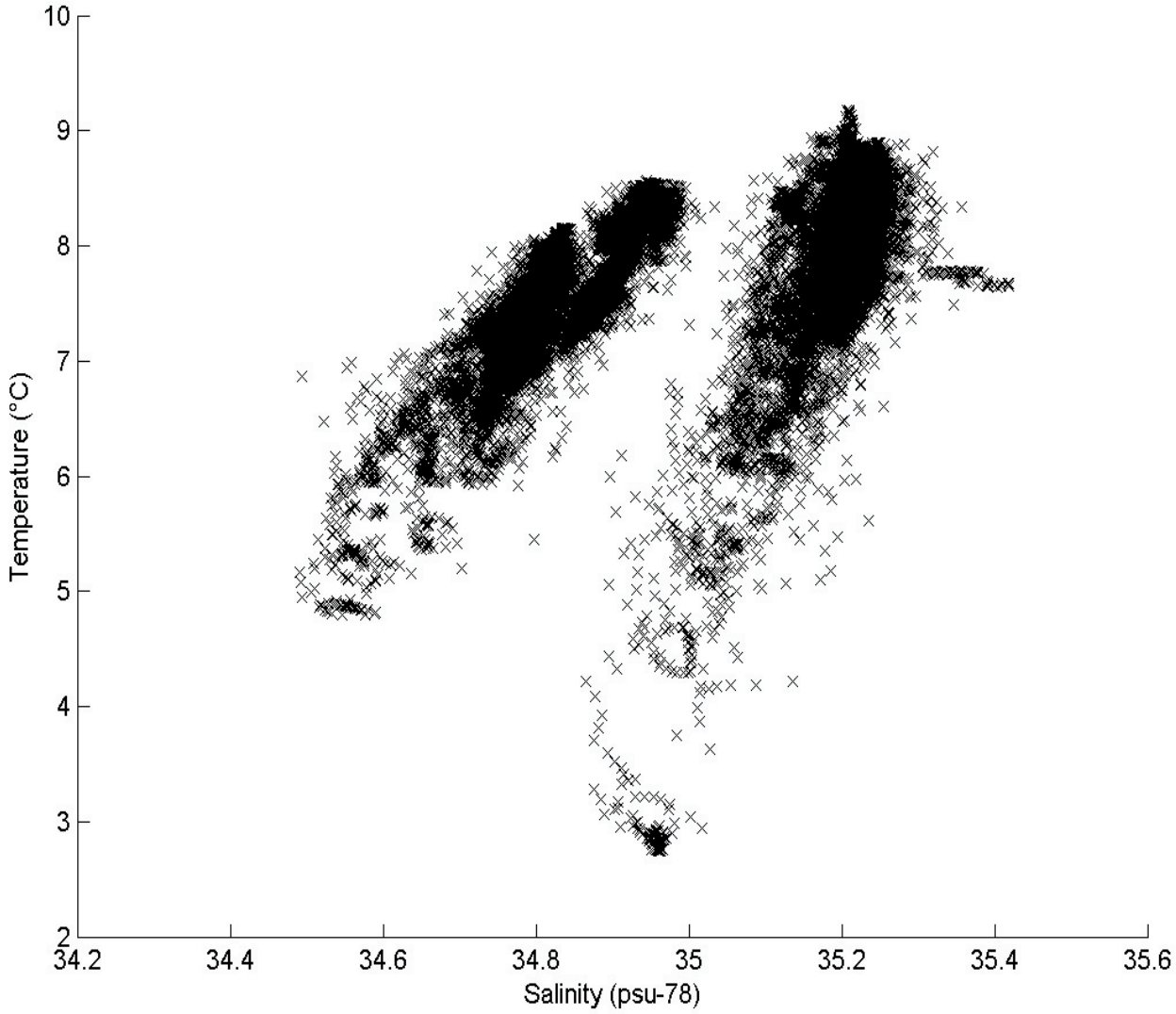
Harmonic constants for constituent K1 for deployment NWNA1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	283	32	272	15	198	32	15	9	268	A
02	273	34	281	18	191	34	18	0	281	A
03	263	38	288	19	184	38	18	171	112	A
04	253	42	288	19	174	43	17	167	113	A
05	243	38	283	17	170	39	16	168	108	A
06	233	35	277	16	167	35	15	169	101	A
07	223	34	275	15	169	34	15	171	99	A
08	213	34	273	17	166	35	16	170	97	A
09	203	34	271	17	166	34	17	170	96	A
10	193	34	269	18	165	34	18	170	94	A
11	183	34	267	19	166	35	18	172	91	A
12	173	36	267	19	162	36	18	169	92	A
13	163	38	266	19	159	38	18	168	92	A
14	153	38	266	19	158	39	18	169	91	A
15	143	40	265	19	155	41	17	168	90	A
16	133	40	263	20	155	41	19	169	89	A
17	123	42	263	19	156	42	18	170	87	A
18	113	43	250	18	142	44	17	171	73	A
19	103	45	247	18	145	45	18	174	69	A
20	93	44	264	19	163	44	18	174	86	A
21	83	43	259	17	165	43	17	178	80	A
22	73	41	259	15	166	41	15	179	79	A
23	63	41	255	16	161	41	16	178	76	A
24	53	42	239	15	147	42	15	179	59	A

NWNA1306 MicroCat 0984



NWNA1306 MicroCat 0984



NWNB1306

Latitude: 62°54.700´N

Longitude: 006°04.930´W

Echo sounding depth: 972 m

Bottom depth corr.: 964 m (ADCP)

Time of deployment: 9/6 - 2013 0540 UTC

Time of recovery: 15/5 - 2014 0610 UTC

ADCP:

Instrument no.: RDI ADCP 19518

Instrument frequency: 75 kHz

Height above bottom: 254 m

Depth: 710 m (corr.)

Time of first data: 9/6 - 2013 0600 UTC

Time of last data: 15/5 - 2014 0540 UTC

Sample interval: 20 min

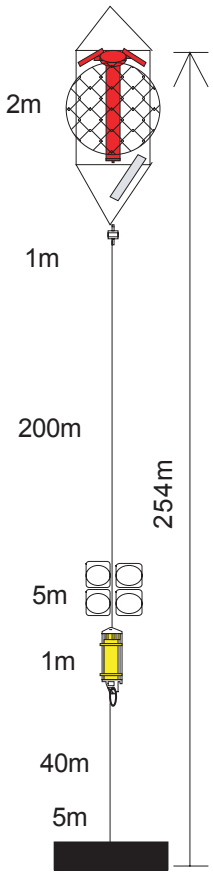
No. of ensembles: 24480

Pings per ens.: 10

Binlength: 10 m

Depth of first bin: 691 m (corr.)

No. of bins: 63



Data:

All data ok.

NWNB1306 ADCP 19518

Error statistics for deployment: NWNB1306 updated 2014/09/19

Temperature edited
Depth edited
Surface distance not edited
Heading, pitch and roll not edited
Intensity not edited

Velocity edited using these data filters:
Minimum Intensity:60.0
Minimum Mean Correlation:64.0
Maximum Speed, number of std dev for each bin: 5.0
Maximum Vertical Velocity:150.0
Maximum Error Velocity (erv tr+0.1*spd):100.0
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 1): 5.00
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 63): 3.32
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 70): 3.00
Vertical Speed Spikes, u and v deviated from 3 point median by number of std dev: 4.0

Total number of ensembles: 24480
Interval between ensembles: 20 min
Original number of bins: 70
Number of acceptable velocity bins: 63

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	37	0	35	1	0	0	0	0	0	0	0	0
2	0	35	0	35	0	0	0	0	0	0	0	0	0
3	0	39	0	39	0	0	0	0	0	0	0	0	0
4	0	44	0	42	1	0	0	0	0	0	0	0	0
5	0	35	0	35	0	0	0	0	0	0	0	0	0
6	0	42	0	40	1	0	0	0	0	0	0	0	0
7	0	46	0	44	1	0	0	0	0	0	0	0	0
8	0	43	0	41	1	0	0	0	0	0	0	0	0
9	0	44	0	44	0	0	0	0	0	0	0	0	0
10	0	40	0	40	0	0	0	0	0	0	0	0	0
11	0	53	0	53	0	0	0	0	0	0	0	0	0
12	0	34	0	34	0	0	0	0	0	0	0	0	0
13	0	44	0	42	1	0	0	0	0	0	0	0	0
14	0	42	0	42	0	0	0	0	0	0	0	0	0
15	0	56	0	54	1	0	0	0	0	0	0	0	0
16	0	41	0	39	1	0	0	0	0	0	0	0	0
17	0	46	0	44	1	0	0	0	0	0	0	0	0
18	0	47	0	43	2	0	0	0	0	0	0	0	0
19	0	47	0	47	0	0	0	0	0	0	0	0	0
20	0	72	0	68	2	0	0	0	0	0	0	0	0
21	0	64	0	60	2	0	0	0	0	0	0	0	0
22	0	47	0	47	0	0	0	0	0	0	0	0	0
23	0	65	0	63	1	0	0	0	0	0	0	0	0
24	0	62	0	58	2	0	0	0	0	0	0	0	0
25	0	82	0	70	6	0	0	0	0	0	0	0	0
26	0	68	0	64	2	0	0	0	0	0	0	0	0
27	0	59	0	55	2	0	0	0	0	0	0	0	0
28	0	81	0	75	3	0	0	0	0	0	0	0	0
29	0	72	0	68	2	0	0	0	0	0	0	0	0
30	0	77	0	73	2	0	0	0	0	0	0	0	0
31	0	94	0	77	7	1	0	0	0	0	0	0	0
32	0	93	0	85	4	0	0	0	0	0	0	0	0
33	0	96	0	90	3	0	0	0	0	0	0	0	0
34	0	94	0	81	5	1	0	0	0	0	0	0	0
35	0	81	0	63	9	0	0	0	0	0	0	0	0
36	0	107	0	97	5	0	0	0	0	0	0	0	0
37	0	111	0	101	5	0	0	0	0	0	0	0	0
38	0	104	0	90	7	0	0	0	0	0	0	0	0
39	0	127	1	113	7	0	0	0	0	0	0	0	0
40	0	160	1	134	10	0	0	0	1	0	0	0	0
41	0	160	1	125	9	1	0	0	0	1	0	0	0
42	0	234	1	140	13	2	1	2	3	0	1	0	0
43	0	331	1	142	21	3	3	2	4	4	1	0	0
44	0	486	2	155	20	13	3	5	7	4	3	1	0
45	0	740	3	128	29	16	11	7	10	14	5	1	0
46	0	1099	4	139	24	25	11	11	21	19	9	2	0
47	0	1472	6	152	33	24	12	7	23	24	10	9	0
48	0	1905	8	166	38	18	12	5	28	31	14	14	0
49	0	2307	9	189	43	19	8	8	16	24	23	22	0
50	0	2697	11	194	34	25	15	10	22	23	24	29	0
51	0	3232	13	219	65	20	20	9	22	29	27	35	0
52	0	3847	16	236	69	35	19	13	35	30	31	41	1
53	0	4456	18	284	67	33	20	11	36	36	39	48	2
54	0	5194	21	298	51	30	16	9	35	47	46	55	3
55	0	5796	24	253	83	32	18	12	37	49	37	72	7
56	0	6458	26	280	64	49	17	8	33	54	41	73	14
57	0	7083	29	304	69	26	28	14	43	60	39	77	20
58	0	7750	32	370	93	40	24	13	29	72	43	80	23
59	0	8358	34	407	105	41	20	13	29	73	52	80	29
60	0	9150	37	464	121	39	24	15	44	65	47	76	44
61	0	9935	41	489	120	53	28	10	46	68	62	75	49
62	0	10925	45	547	142	73	35	18	69	62	61	84	50
63	0	12871	53	1043	303	143	38	32	78	56	74	68	64

NWNB1306 ADCP 19518

Deployment: NWNB1306 updated 2014/09/19
Instrument no.: 19518
Instrument freq.: 75
Latitude: 62 54.700 N
Longitude:06 04.930 W
Bottom depth: 964
Instrument depth: 710
Center depth of first bin: 691
Bin length: 10
Number of bins: 63
Number of first ensemble: 409
Time of first ensemble: 2013 06 09 06 00
Number of last ensemble: 24888
Time of last ensemble: 2014 05 15 05 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	691	273	131	10	95	998
2	681	283	133	9	93	999
3	671	293	132	8	94	998
4	661	303	132	6	92	998
5	651	313	132	4	89	999
6	641	323	131	3	87	998
7	631	333	132	2	85	998
8	621	343	131	0	268	998
9	611	353	131	2	299	998
10	601	363	132	2	298	998
11	591	373	132	3	293	998
12	581	383	132	4	287	999
13	571	393	132	5	286	998
14	561	403	133	5	282	998
15	551	413	133	5	276	998
16	541	423	135	6	269	998
17	531	433	135	6	265	998
18	521	443	136	6	266	998
19	511	453	137	6	261	998
20	501	463	137	6	254	997
21	491	473	137	6	239	997
22	481	483	138	5	225	998
23	471	493	140	5	200	997
24	461	503	141	7	178	997
25	451	513	142	9	165	997
26	441	523	143	11	151	997
27	431	533	145	15	138	998
28	421	543	148	20	127	997
29	411	553	151	25	124	997
30	401	563	154	30	121	997
31	391	573	157	37	121	996
32	381	583	161	43	119	996
33	371	593	165	50	119	996
34	361	603	171	58	119	996
35	351	613	176	67	118	997
36	341	623	182	75	118	996
37	331	633	187	83	118	995
38	321	643	192	90	117	996
39	311	653	198	98	117	995
40	301	663	204	106	117	993
41	291	673	210	114	118	993
42	281	683	216	121	118	990
43	271	693	223	130	117	986
44	261	703	230	138	117	980
45	251	713	236	145	117	970
46	241	723	242	151	117	955
47	231	733	247	157	117	940
48	221	743	252	162	116	922
49	211	753	258	167	116	906
50	201	763	262	171	116	890
51	191	773	267	175	116	868
52	181	783	271	177	117	843
53	171	793	275	180	117	818
54	161	803	278	182	116	788
55	151	813	281	183	116	763
56	141	823	284	185	116	736
57	131	833	287	186	116	711
58	121	843	290	189	116	683
59	111	853	293	190	117	659
60	101	863	296	191	117	626
61	91	873	298	192	117	594
62	81	883	302	192	116	554
63	71	893	295	184	116	474

NWNB1306 ADCP 19518

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	691	601	184	26	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	681	613	188	28	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	671	610	186	28	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	661	605	183	26	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	651	607	184	25	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	641	607	183	25	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	631	609	185	24	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	621	609	182	24	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	611	607	184	24	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	601	614	182	25	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	591	613	180	25	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	581	613	181	26	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	571	613	181	26	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	561	622	182	26	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	551	622	184	26	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	541	629	191	26	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	531	635	194	27	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	521	636	194	28	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	511	641	197	28	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	501	644	197	27	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	491	650	197	26	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	481	651	200	29	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	471	662	206	30	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	461	665	214	33	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	451	667	216	35	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	441	670	224	37	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	431	681	231	41	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0
28	421	692	237	46	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0
29	411	704	247	50	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0
30	401	706	263	57	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0
31	391	715	276	66	13	2	1	0	0	0	0	0	0	0	0	0	0	0	0
32	381	723	291	76	16	3	0	0	0	0	0	0	0	0	0	0	0	0	0
33	371	733	313	85	20	4	0	0	0	0	0	0	0	0	0	0	0	0	0
34	361	749	331	99	23	4	0	0	0	0	0	0	0	0	0	0	0	0	0
35	351	761	353	115	28	4	0	0	0	0	0	0	0	0	0	0	0	0	0
36	341	773	375	130	35	6	1	0	0	0	0	0	0	0	0	0	0	0	0
37	331	785	395	143	43	9	1	0	0	0	0	0	0	0	0	0	0	0	0
38	321	791	413	156	49	11	2	0	0	0	0	0	0	0	0	0	0	0	0
39	311	801	435	173	57	14	3	0	0	0	0	0	0	0	0	0	0	0	0
40	301	813	453	188	66	17	3	0	0	0	0	0	0	0	0	0	0	0	0
41	291	820	474	208	73	19	4	1	0	0	0	0	0	0	0	0	0	0	0
42	281	825	492	225	81	21	5	1	0	0	0	0	0	0	0	0	0	0	0
43	271	833	514	246	91	25	5	1	0	0	0	0	0	0	0	0	0	0	0
44	261	835	531	265	103	30	5	1	0	0	0	0	0	0	0	0	0	0	0
45	251	832	542	281	114	34	7	1	0	0	0	0	0	0	0	0	0	0	0
46	241	825	553	291	123	38	7	1	0	0	0	0	0	0	0	0	0	0	0
47	231	818	551	299	132	44	10	2	0	0	0	0	0	0	0	0	0	0	0
48	221	806	555	308	138	48	11	2	0	0	0	0	0	0	0	0	0	0	0
49	211	797	553	317	149	54	14	3	1	0	0	0	0	0	0	0	0	0	0
50	201	786	549	320	156	58	16	3	1	0	0	0	0	0	0	0	0	0	0
51	191	772	548	321	160	65	19	4	1	0	0	0	0	0	0	0	0	0	0
52	181	751	538	320	164	69	22	5	1	0	0	0	0	0	0	0	0	0	0
53	171	730	531	316	165	74	23	5	1	0	0	0	0	0	0	0	0	0	0
54	161	706	516	309	165	76	25	5	0	0	0	0	0	0	0	0	0	0	0
55	151	687	502	304	163	77	26	6	1	0	0	0	0	0	0	0	0	0	0
56	141	664	492	299	161	76	27	6	1	0	0	0	0	0	0	0	0	0	0
57	131	643	477	297	160	75	28	6	1	0	0	0	0	0	0	0	0	0	0
58	121	618	467	288	157	76	29	7	1	0	0	0	0	0	0	0	0	0	0
59	111	598	450	283	156	76	27	7	1	0	0	0	0	0	0	0	0	0	0
60	101	570	432	276	153	74	27	7	1	0	0	0	0	0	0	0	0	0	0
61	91	545	413	264	148	72	26	6	1	0	0	0	0	0	0	0	0	0	0
62	81	510	386	251	143	72	27	6	1	0	0	0	0	0	0	0	0	0	0
63	71	431	325	207	118	57	20	4	1	0	0	0	0	0	0	0	0	0	0

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Harmonic constants for constituent M2 for deployment NWNB1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	691	74	260	45	124	82	29	153	90	A
02	681	76	261	46	124	85	28	153	91	A
03	671	77	261	46	125	85	29	154	90	A
04	661	77	262	45	125	85	28	154	91	A
05	651	77	262	44	126	84	28	155	91	A
06	641	77	262	43	127	84	28	155	91	A
07	631	78	263	44	129	84	29	156	92	A
08	621	78	263	43	129	85	29	156	92	A
09	611	78	264	43	130	84	28	156	93	A
10	601	79	265	43	131	85	28	156	93	A
11	591	79	266	42	133	85	29	157	94	A
12	581	81	266	42	136	86	30	159	94	A
13	571	82	268	41	139	87	30	160	95	A
14	561	85	269	42	142	89	32	161	96	A
15	551	87	270	43	146	90	34	162	97	A
16	541	88	271	44	149	92	36	163	98	A
17	531	90	272	44	152	93	37	164	98	A
18	521	92	272	45	156	95	39	165	98	A
19	511	93	274	45	158	96	40	166	100	A
20	501	94	275	44	162	96	40	168	100	A
21	491	96	277	45	166	97	41	169	102	A
22	481	98	278	44	170	99	42	170	102	A
23	471	99	280	45	175	100	43	172	104	A
24	461	101	282	45	179	102	43	173	105	A
25	451	102	283	43	186	102	43	176	105	A
26	441	102	286	43	191	102	43	178	107	A
27	431	103	287	43	197	103	43	180	108	A
28	421	105	290	44	201	105	44	1	289	A
29	411	107	291	47	206	107	47	2	290	A
30	401	108	294	48	210	108	48	4	292	A
31	391	110	295	50	215	110	49	5	293	A
32	381	111	297	51	218	112	50	6	294	A
33	371	112	299	52	224	113	50	9	295	A
34	361	114	300	55	228	115	52	11	295	A
35	351	115	302	59	230	117	55	11	297	A
36	341	117	304	61	232	119	57	12	298	A
37	331	119	306	63	234	121	59	13	300	A
38	321	120	307	65	238	122	60	14	300	A
39	311	121	309	66	241	124	60	15	302	A
40	301	122	311	68	243	125	62	16	303	A
41	291	122	313	70	245	125	63	16	305	A
42	281	122	315	72	248	126	64	17	306	A
43	271	123	317	75	250	128	66	19	307	A
44	261	125	318	77	252	130	68	20	307	A
45	251	125	320	80	255	132	69	22	308	A
46	241	126	320	83	256	133	71	22	308	A
47	231	125	321	83	256	132	71	22	309	A
48	221	125	321	84	257	132	72	23	308	A
49	211	126	322	85	258	134	72	23	309	A
50	201	125	322	87	258	133	74	24	308	A
51	191	127	323	88	259	135	74	25	308	A
52	181	126	324	90	260	135	75	26	309	A
53	171	126	324	90	260	136	75	26	308	A
54	161	127	324	92	263	138	75	28	309	A
55	151	126	325	93	262	137	76	28	308	A
56	141	128	325	95	262	139	77	28	308	A
57	131	129	295	95	234	141	76	29	279	A
58	121	127	294	95	235	140	74	30	277	A
59	111	126	293	93	234	139	72	29	277	A
60	101	124	293	94	234	138	73	31	275	A
61	91	125	293	93	235	138	72	30	277	A
62	81	123	294	91	236	136	70	30	278	A
63	71	118	291	84	234	130	64	29	276	A

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Harmonic constants for constituent S2 for deployment NWNB1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	691	29	304	16	182	31	13	160	133	A
02	681	30	305	17	185	32	14	159	135	A
03	671	30	305	17	189	31	14	162	134	A
04	661	31	306	16	190	32	14	164	134	A
05	651	30	308	17	192	32	15	162	137	A
06	641	31	308	17	194	32	15	164	136	A
07	631	31	309	18	196	32	16	164	137	A
08	621	32	309	19	196	33	16	162	139	A
09	611	33	309	19	198	34	18	164	137	A
10	601	33	310	20	201	34	18	164	139	A
11	591	33	311	21	200	34	19	162	141	A
12	581	34	309	21	200	35	19	164	138	A
13	571	34	311	21	202	35	19	164	140	A
14	561	33	310	19	203	34	18	167	137	A
15	551	34	312	19	200	35	17	165	139	A
16	541	33	312	19	203	34	18	166	140	A
17	531	33	312	19	203	34	18	165	140	A
18	521	34	313	18	208	34	17	169	138	A
19	511	34	315	17	207	34	16	168	140	A
20	501	33	317	16	214	33	15	172	140	A
21	491	30	319	14	216	31	13	173	142	A
22	481	30	321	12	223	30	12	176	142	A
23	471	30	322	11	228	30	11	178	143	A
24	461	30	323	10	232	30	10	179	143	A
25	451	30	324	10	233	30	10	180	144	A
26	441	29	326	10	234	29	10	180	146	A
27	431	30	327	10	235	30	10	179	147	A
28	421	31	328	10	248	31	10	3	327	A
29	411	33	332	11	256	33	11	5	330	A
30	401	35	335	13	264	35	12	8	332	A
31	391	36	338	15	269	37	14	10	335	A
32	381	38	340	17	275	39	15	13	335	A
33	371	40	344	19	278	41	17	13	339	A
34	361	42	347	21	278	42	19	13	341	A
35	351	43	348	23	278	43	21	13	342	A
36	341	43	350	24	282	44	22	16	342	A
37	331	45	352	26	286	46	23	18	343	A
38	321	44	353	26	287	46	23	19	343	A
39	311	45	353	27	286	47	24	19	343	A
40	301	46	353	27	285	48	24	17	345	A
41	291	46	354	26	284	47	24	15	346	A
42	281	44	352	26	285	46	23	17	344	A
43	271	41	352	23	286	43	20	17	344	A
44	261	40	351	22	290	42	18	19	342	A
45	251	38	351	20	294	40	16	19	343	A
46	241	36	353	19	297	38	15	20	345	A
47	231	35	354	20	304	37	14	24	345	A
48	221	35	356	21	307	38	15	26	345	A
49	211	34	356	21	305	37	15	26	345	A
50	201	35	358	23	310	39	15	28	347	A
51	191	36	359	24	310	40	16	29	346	A
52	181	36	2	25	312	41	17	30	348	A
53	171	36	3	28	309	41	20	33	346	A
54	161	40	2	29	311	45	20	32	347	A
55	151	44	360	29	310	49	20	28	348	A
56	141	50	359	29	308	54	21	24	349	A
57	131	51	328	28	273	54	22	22	318	A
58	121	53	328	27	269	55	22	18	320	A
59	111	54	327	25	261	55	22	13	322	A
60	101	53	325	24	256	54	22	11	320	A
61	91	55	327	25	259	56	23	12	322	A
62	81	54	331	23	259	54	22	9	327	A
63	71	48	322	22	258	50	19	13	317	A

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Harmonic constants for constituent N2 for deployment NWNB1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	691	12	234	9	74	15	2	145	61	A
02	681	12	235	9	78	15	3	145	63	A
03	671	13	234	10	79	16	3	144	63	A
04	661	13	237	9	77	15	2	146	63	A
05	651	13	237	8	80	15	3	148	64	A
06	641	13	234	8	81	15	3	148	62	A
07	631	14	234	8	80	16	3	149	61	A
08	621	13	237	9	82	16	3	147	65	A
09	611	13	235	9	86	15	4	147	65	A
10	601	14	234	9	86	16	4	149	63	A
11	591	15	237	9	87	18	4	151	65	A
12	581	16	239	9	88	18	4	151	66	A
13	571	17	240	10	95	19	5	152	69	A
14	561	17	239	10	99	19	6	153	68	A
15	551	18	236	10	100	20	7	155	65	A
16	541	19	239	11	102	21	7	154	68	A
17	531	20	239	11	106	22	8	157	67	A
18	521	21	238	13	110	22	9	155	69	A
19	511	21	239	13	117	23	10	158	69	A
20	501	21	239	13	115	23	10	156	70	A
21	491	21	242	12	111	22	8	156	71	A
22	481	20	246	10	113	22	7	158	73	A
23	471	20	246	9	117	21	6	163	71	A
24	461	20	251	8	122	21	6	164	75	A
25	451	19	253	7	134	20	6	168	77	A
26	441	20	262	7	155	20	6	174	85	A
27	431	22	269	8	167	22	8	175	90	A
28	421	24	270	10	180	24	10	180	90	A
29	411	26	272	13	181	26	13	180	92	A
30	401	29	272	15	189	29	15	5	270	A
31	391	29	273	16	191	29	16	6	270	A
32	381	30	274	17	193	30	17	8	269	A
33	371	30	273	18	195	30	17	11	266	A
34	361	30	272	17	196	30	16	12	265	A
35	351	30	272	16	193	31	16	8	268	A
36	341	30	271	15	190	30	15	6	268	A
37	331	30	271	15	192	31	15	7	268	A
38	321	30	275	16	197	30	15	8	270	A
39	311	30	278	17	201	30	17	10	273	A
40	301	30	280	18	202	31	18	10	274	A
41	291	30	281	18	205	31	18	12	274	A
42	281	29	282	18	208	30	17	14	274	A
43	271	29	284	17	211	29	16	14	276	A
44	261	28	286	17	214	28	15	15	277	A
45	251	28	287	17	215	28	16	16	278	A
46	241	27	292	17	220	28	16	17	281	A
47	231	26	296	18	227	27	16	22	283	A
48	221	26	302	19	234	28	17	25	287	A
49	211	28	306	20	243	30	17	28	290	A
50	201	27	307	21	245	30	17	29	290	A
51	191	29	310	22	249	32	18	30	292	A
52	181	30	309	23	248	33	18	32	289	A
53	171	31	307	23	245	33	18	28	291	A
54	161	32	303	24	244	36	19	31	285	A
55	151	34	299	24	243	38	18	28	285	A
56	141	36	303	23	244	39	19	24	291	A
57	131	35	275	23	217	37	18	25	262	A
58	121	35	274	23	215	38	19	25	261	A
59	111	37	278	23	214	39	20	21	267	A
60	101	36	278	23	213	38	20	21	267	A
61	91	37	281	26	209	38	23	21	268	A
62	81	37	281	26	208	39	24	19	268	A
63	71	34	272	26	197	35	25	23	256	A

NWNB1306 ADCP 19518

Harmonic constants for constituent O1 for deployment NWNB1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	691	8	27	4	283	8	4	171	212	A
02	681	7	34	4	283	7	3	168	219	A
03	671	7	34	4	277	7	3	164	221	A
04	661	7	30	3	287	7	3	173	213	A
05	651	7	30	4	283	7	4	164	219	A
06	641	6	37	4	283	6	3	154	233	A
07	631	6	36	4	292	7	4	166	225	A
08	621	6	32	4	281	6	4	159	224	A
09	611	6	33	4	289	6	4	164	223	A
10	601	7	37	5	297	7	4	168	225	A
11	591	7	40	3	297	7	3	173	223	A
12	581	7	36	4	289	7	4	164	225	A
13	571	7	37	4	285	8	4	165	224	A
14	561	7	32	3	274	7	3	165	218	A
15	551	7	36	4	265	8	3	155	226	A
16	541	7	29	5	263	7	3	153	222	A
17	531	7	32	4	270	7	3	159	221	A
18	521	7	33	4	265	7	3	159	221	A
19	511	8	32	4	269	8	3	162	219	A
20	501	8	30	4	269	8	4	160	219	A
21	491	7	30	4	270	8	3	160	219	A
22	481	7	30	3	263	7	3	160	218	A
23	471	6	32	3	257	6	2	160	218	A
24	461	6	43	2	252	7	1	163	225	A
25	451	7	46	3	263	7	2	161	230	A
26	441	6	35	4	258	7	2	153	225	A
27	431	7	36	4	262	8	3	156	224	A
28	421	8	34	5	272	9	4	159	224	A
29	411	9	29	6	264	9	4	154	221	A
30	401	9	23	6	263	10	5	156	215	A
31	391	10	22	7	270	10	6	155	218	A
32	381	10	26	7	272	11	6	153	223	A
33	371	11	35	7	272	12	5	157	226	A
34	361	11	39	6	273	11	4	160	227	A
35	351	11	38	5	287	11	4	170	222	A
36	341	12	34	6	295	12	6	175	216	A
37	331	11	34	6	296	11	6	174	217	A
38	321	10	34	5	286	11	5	168	220	A
39	311	11	25	5	280	11	4	173	208	A
40	301	11	22	4	280	11	4	176	203	A
41	291	12	17	5	291	12	5	2	17	A
42	281	13	19	6	292	13	6	2	19	A
43	271	15	20	7	290	15	7	180	200	A
44	261	16	18	8	288	16	8	180	199	A
45	251	17	23	7	284	17	7	176	204	A
46	241	19	23	8	292	19	8	180	203	A
47	231	18	22	7	296	18	7	2	21	A
48	221	17	22	9	290	17	9	178	203	A
49	211	17	20	8	298	17	8	5	18	A
50	201	17	23	8	296	17	8	2	22	A
51	191	17	27	6	288	17	6	176	208	A
52	181	15	29	7	297	15	7	179	210	A
53	171	18	28	6	298	18	6	0	28	A
54	161	16	30	7	316	16	6	8	27	A
55	151	16	33	5	310	16	5	2	32	A
56	141	17	35	6	310	17	6	2	34	A
57	131	16	22	5	290	16	5	179	202	A
58	121	15	29	3	314	15	3	3	29	A
59	111	14	37	3	349	14	3	10	35	A
60	101	11	34	5	359	12	3	21	29	A
61	91	11	31	5	25	12	0	26	30	A
62	81	11	10	8	16	14	1	35	12	C
63	71	7	3	13	39	15	4	65	32	C

NWNB1306 ADCP 19518

Harmonic constants for constituent K1 for deployment NWNB1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	691	6	274	5	110	8	1	141	101	A
02	681	6	279	6	114	8	1	135	106	A
03	671	5	275	5	111	7	1	135	103	A
04	661	6	282	5	112	8	1	140	106	A
05	651	6	277	4	118	7	1	144	104	A
06	641	5	276	5	110	7	1	136	102	A
07	631	5	283	5	105	7	0	139	104	A
08	621	6	275	5	108	7	1	141	100	A
09	611	5	275	4	106	7	1	141	99	A
10	601	5	272	4	101	6	0	136	96	A
11	591	4	282	4	101	6	0	134	102	C
12	581	5	283	4	107	7	0	138	105	A
13	571	5	281	5	103	7	0	134	102	A
14	561	5	287	5	108	7	0	135	107	A
15	551	5	286	4	110	7	0	142	108	A
16	541	5	287	4	105	6	0	139	106	C
17	531	5	291	5	107	7	0	135	109	C
18	521	5	284	6	109	7	0	131	107	A
19	511	4	279	5	109	6	1	129	105	A
20	501	5	280	6	112	8	1	127	108	A
21	491	5	277	7	120	9	2	128	111	A
22	481	6	272	7	122	9	2	131	109	A
23	471	7	278	7	122	10	2	136	110	A
24	461	7	271	7	129	10	3	136	109	A
25	451	7	273	7	141	9	4	140	113	A
26	441	7	270	7	148	9	5	137	117	A
27	431	8	278	7	150	10	5	137	122	A
28	421	9	271	7	153	10	6	146	112	A
29	411	9	272	7	145	10	5	145	111	A
30	401	9	271	8	145	11	5	141	113	A
31	391	10	271	8	149	12	6	147	110	A
32	381	11	279	7	145	12	5	149	112	A
33	371	10	279	8	149	12	5	143	118	A
34	361	10	269	8	146	11	6	143	111	A
35	351	8	267	8	145	10	5	141	111	A
36	341	8	267	8	146	10	5	137	115	A
37	331	7	268	9	140	10	5	128	120	A
38	321	8	264	9	139	11	6	131	115	A
39	311	9	272	8	136	11	4	137	112	A
40	301	9	272	7	141	11	5	143	110	A
41	291	9	268	7	143	10	5	151	102	A
42	281	10	272	5	137	11	3	160	98	A
43	271	11	275	6	145	12	4	158	104	A
44	261	11	267	7	155	11	6	162	97	A
45	251	10	262	7	155	11	7	161	94	A
46	241	9	259	7	169	9	7	179	80	A
47	231	7	257	7	171	7	7	49	210	A
48	221	6	247	8	174	9	5	68	189	A
49	211	5	233	8	169	8	5	66	183	A
50	201	3	212	8	171	8	2	72	176	A
51	191	3	197	8	167	9	2	70	171	A
52	181	2	187	6	165	6	1	70	168	A
53	171	3	149	6	172	7	1	67	169	C
54	161	6	207	7	174	9	3	47	189	A
55	151	8	208	5	177	9	2	33	199	A
56	141	14	199	7	190	15	1	26	198	A
57	131	19	181	7	183	20	0	21	182	C
58	121	20	178	6	186	21	1	17	178	C
59	111	20	169	8	187	21	2	20	171	C
60	101	21	168	6	187	22	2	16	169	C
61	91	21	171	7	192	22	2	17	173	C
62	81	22	158	9	180	24	3	22	162	C
63	71	18	162	13	186	21	4	35	170	C

NWNG1306

Latitude: 63°05.800´N

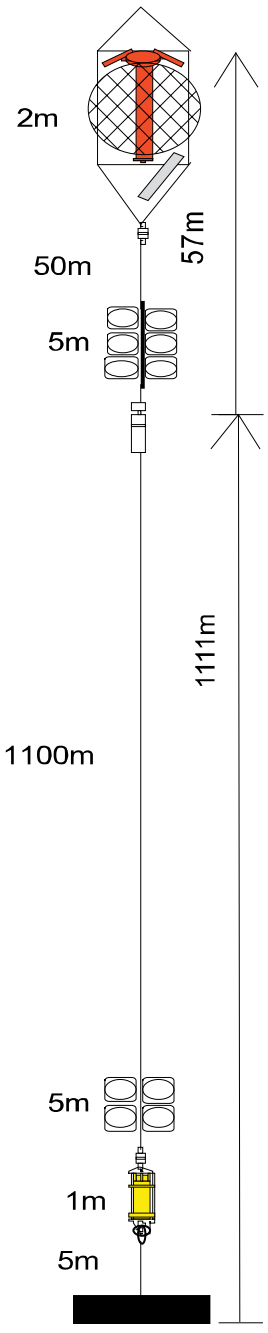
Longitude: 006°06.100´W

Echo sounding depth: 1846 m

Bottom depth corr.: 1808 m (surface echo)

Time of deployment: 9/6 - 2013 0700 UTC

Time of recovery: 15/5 - 2014 0755 UTC



ADCP:

Instrument no.: RDI ADCP 1644

Instrument frequency: 75 kHz

Height above bottom: 1168 m

Depth: 640 m (corr.)

Time of first data: 9/6 - 2013 0800 UTC

Time of last data: 15/5 - 2014 0740 UTC

Sample interval: 20 min

No. of ensembles: 24480

Pings per ens.: 1

Binlength: 25 m

Depth of first bin: 604 m (corr.)

No. of bins: 21

Aanderaa:

Instrument no.: RCM9 721

Height above bottom: 1111 m

Depth: 697 m (corr.)

Time of first data: 9/6 - 2013 0729 UTC

Time of last data: 15/5 - 2014 0629 UTC

Sample interval: 60 min

No. of ensembles: 8160

Data:

All data ok.

NWNG1306 ADCP 1644

Error statistics for deployment: NWNG1306 updated 2014/09/22

Temperature edited
Surface distance not edited
Heading, pitch and roll not edited
Intensity not edited

Velocity edited using these data filters:
Minimum Intensity:50.0
Minimum Mean Correlation:64.0
Maximum Speed, number of std dev for each bin: 5.0
Maximum Vertical Velocity:150.0
Maximum Error Velocity (erv_tr+0.1*spd):100.0
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 1): 6.00
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 21): 3.56
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 32): 0.20
Vertical Speed Spikes, u and v deviated from 3 point median by number of std dev: 5.0
Vertical Velocity Spikes, deviated from 3 point median by number of std dev: 5.0

Total number of ensembles: 24480
Interval between ensembles: 20 min
Original number of bins: 32
Number of acceptable velocity bins: 21

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 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.)

	Int.	Velocity		Number of velocity gaps of length									
Bin	ens. flgd	ens. flgd	% flgd	1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	0	39	0	37	1	0	0	0	0	0	0	0	0
2	0	60	0	56	2	0	0	0	0	0	0	0	0
3	0	82	0	67	6	1	0	0	0	0	0	0	0
4	0	80	0	62	6	2	0	0	0	0	0	0	0
5	0	82	0	67	6	1	0	0	0	0	0	0	0
6	0	68	0	55	5	1	0	0	0	0	0	0	0
7	0	74	0	63	4	1	0	0	0	0	0	0	0
8	0	84	0	67	7	1	0	0	0	0	0	0	0
9	0	83	0	69	7	0	0	0	0	0	0	0	0
10	0	113	0	91	7	1	0	1	0	0	0	0	0
11	0	117	0	96	9	1	0	0	0	0	0	0	0
12	0	162	1	132	15	0	0	0	0	0	0	0	0
13	0	214	1	170	12	1	0	0	2	0	0	0	0
14	0	374	2	207	27	5	7	0	2	4	0	0	0
15	0	789	3	237	49	19	9	11	12	15	0	0	0
16	0	2073	8	318	74	37	20	21	43	25	16	6	0
17	0	3611	15	365	74	46	22	6	37	38	28	33	0
18	0	5127	21	434	98	44	30	13	27	30	38	55	6
19	0	6769	28	504	158	66	33	20	43	36	41	76	10
20	0	9097	37	623	184	80	47	22	68	64	57	73	30
21	0	11599	47	675	192	92	59	35	90	71	81	73	44

NWNG1306 ADCP 1644

Deployment: NWNG1306 updated 2014/09/22
Instrument no.: 1644
Instrument freq.: 75
Latitude: 63 05.800 N
Longitude:06 06.100 W
Bottom depth: 1808
Instrument depth: 640
Center depth of first bin: 604
Bin length: 25
Number of bins: 21
Number of first ensemble: 918
Time of first ensemble: 2013 06 09 08 00
Number of last ensemble: 25397
Time of last ensemble: 2014 05 15 07 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	604	1204	96	23	131	998
2	579	1229	97	24	131	998
3	554	1254	99	26	130	997
4	529	1279	102	27	130	997
5	504	1304	105	29	131	997
6	479	1329	108	32	131	997
7	454	1354	112	35	132	997
8	429	1379	117	38	132	997
9	404	1404	123	43	132	997
10	379	1429	128	48	131	995
11	354	1454	137	55	131	995
12	329	1479	148	63	130	993
13	304	1504	161	74	130	991
14	279	1529	177	86	130	985
15	254	1554	194	97	130	968
16	229	1579	213	109	131	915
17	204	1604	230	120	132	852
18	179	1629	249	135	133	791
19	154	1654	266	146	135	723
20	129	1679	286	159	137	628
21	104	1704	309	175	138	526

NWNG1306 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	604	427	35	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	579	433	42	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	554	452	45	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	529	475	55	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	504	490	63	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	479	498	76	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	454	520	90	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	429	546	104	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	404	582	129	19	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	379	605	150	23	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	354	644	187	36	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	329	679	235	51	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0
13	304	713	296	77	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0
14	279	746	360	113	30	6	0	0	0	0	0	0	0	0	0	0	0	0	0
15	254	767	413	159	48	13	1	0	0	0	0	0	0	0	0	0	0	0	0
16	229	751	444	203	71	21	5	0	0	0	0	0	0	0	0	0	0	0	0
17	204	718	450	226	99	35	9	1	0	0	0	0	0	0	0	0	0	0	0
18	179	681	451	251	119	52	17	4	0	0	0	0	0	0	0	0	0	0	0
19	154	638	436	255	133	66	26	8	2	0	0	0	0	0	0	0	0	0	0
20	129	560	401	249	140	77	38	14	5	1	0	0	0	0	0	0	0	0	0
21	104	479	358	233	137	81	45	22	9	3	0	0	0	0	0	0	0	0	0

NWNG1306 ADCP 1644

Harmonic constants for constituent M2 for deployment NWNG1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	604	76	288	30	231	78	25	14	284	A
02	579	76	289	30	233	78	24	14	284	A
03	554	76	290	30	236	78	23	15	285	A
04	529	77	291	32	239	79	24	16	287	A
05	504	76	293	33	243	79	24	17	288	A
06	479	75	295	33	248	79	24	18	290	A
07	454	74	299	36	256	79	23	21	293	A
08	429	72	305	40	265	79	23	25	297	A
09	404	70	311	44	273	79	24	30	301	A
10	379	68	315	48	280	79	23	33	305	A
11	354	67	320	52	286	81	24	37	307	A
12	329	65	327	57	292	83	25	41	312	A
13	304	62	331	62	297	84	26	45	315	A
14	279	62	336	67	299	87	29	47	316	A
15	254	64	343	76	302	93	34	51	319	A
16	229	67	352	83	306	99	40	54	323	A
17	204	68	359	91	310	104	45	57	325	A
18	179	70	4	105	311	116	51	62	324	A
19	154	74	338	112	284	122	55	63	297	A
20	129	78	14	119	315	128	63	65	327	A
21	104	90	17	130	317	140	72	64	332	A

Harmonic constants for constituent S2 for deployment NWNG1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	604	24	329	9	276	25	7	15	325	A
02	579	25	329	10	276	26	8	14	325	A
03	554	27	331	11	273	27	9	14	326	A
04	529	26	331	12	280	27	9	17	326	A
05	504	25	334	12	291	27	8	22	327	A
06	479	24	341	13	301	26	8	26	333	A
07	454	23	344	14	308	26	7	28	336	A
08	429	22	348	14	317	25	6	31	339	A
09	404	21	352	15	326	25	6	36	343	A
10	379	20	353	15	328	24	5	37	344	A
11	354	19	352	15	338	24	3	39	346	A
12	329	19	355	16	339	25	3	40	349	A
13	304	18	2	20	341	27	5	48	351	A
14	279	17	8	20	345	26	5	51	354	A
15	254	15	7	20	349	25	4	53	356	A
16	229	12	351	19	350	23	0	57	351	A
17	204	11	344	17	360	20	3	58	355	C
18	179	9	354	18	10	20	2	63	6	C
19	154	8	333	21	336	22	0	69	336	C
20	129	11	32	25	7	27	4	68	11	A
21	104	20	31	18	347	25	10	41	11	A

NWNG1306 ADCP 1644

Harmonic constants for constituent N2 for deployment NWNG1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	604	21	257	11	172	21	11	4	254	A
02	579	22	258	11	177	22	11	6	255	A
03	554	23	261	12	182	23	11	7	258	A
04	529	22	266	11	189	22	11	9	262	A
05	504	21	270	11	195	22	11	11	264	A
06	479	21	272	11	202	22	10	14	265	A
07	454	20	276	11	215	21	9	18	268	A
08	429	18	280	10	225	19	7	20	271	A
09	404	18	282	10	227	19	7	21	273	A
10	379	18	284	10	226	19	8	20	276	A
11	354	19	293	12	237	20	9	24	281	A
12	329	19	297	13	243	21	10	28	283	A
13	304	19	305	15	252	22	11	34	288	A
14	279	21	317	20	260	25	14	42	290	A
15	254	24	322	22	263	28	16	42	295	A
16	229	26	332	28	265	32	21	49	295	A
17	204	30	331	33	264	37	24	53	290	A
18	179	29	337	32	267	35	25	51	296	A
19	154	27	317	33	242	34	25	63	263	A
20	129	26	343	32	275	34	22	60	296	A
21	104	25	335	32	276	36	19	57	296	A

Harmonic constants for constituent O1 for deployment NWNG1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	604	5	56	1	291	5	1	173	237	A
02	579	4	51	1	269	4	1	169	233	A
03	554	5	46	1	313	5	1	179	226	A
04	529	6	50	2	328	6	2	2	49	A
05	504	5	54	1	311	5	1	176	235	A
06	479	4	53	2	300	5	2	167	238	A
07	454	6	52	2	302	6	2	172	235	A
08	429	6	57	1	332	6	1	1	57	A
09	404	5	54	2	310	5	2	175	235	A
10	379	6	46	3	291	6	2	165	233	A
11	354	5	34	3	264	5	2	152	227	A
12	329	6	33	3	272	6	2	164	219	A
13	304	6	48	2	335	6	2	6	46	A
14	279	4	53	3	308	5	3	163	244	A
15	254	6	60	4	311	6	3	162	250	A
16	229	7	69	2	276	7	1	166	250	A
17	204	11	71	5	192	11	4	167	247	C
18	179	10	75	4	167	10	4	179	254	C
19	154	11	74	4	129	11	3	13	78	C
20	129	18	100	3	182	18	3	1	101	C
21	104	18	91	5	132	18	3	12	93	C

NWNG1306 ADCP 1644

Harmonic constants for constituent K1 for deployment NWNG1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	604	5	281	3	158	5	2	158	111	A
02	579	5	279	4	151	6	3	147	116	A
03	554	5	275	3	145	6	2	151	108	A
04	529	5	277	3	145	6	2	149	111	A
05	504	5	276	4	153	6	3	153	109	A
06	479	5	277	3	165	5	3	162	107	A
07	454	5	284	3	182	5	3	170	110	A
08	429	5	281	3	156	5	2	154	113	A
09	404	5	294	3	155	6	2	155	122	A
10	379	6	298	2	141	6	1	162	121	A
11	354	5	287	2	91	5	1	158	105	C
12	329	6	275	2	108	7	1	160	96	A
13	304	7	272	3	156	7	2	169	96	A
14	279	8	272	3	163	8	3	173	94	A
15	254	8	277	3	155	9	3	168	100	A
16	229	6	274	3	145	6	2	155	105	A
17	204	4	285	2	101	5	0	157	104	C
18	179	5	264	6	66	7	1	129	73	C
19	154	3	264	7	25	8	3	104	30	C
20	129	7	241	9	38	11	2	126	46	C
21	104	13	184	15	0	20	1	130	2	C

NWNG1306 Aanderaa 721

```
Deployment NWNG1306         analyzed from beginning to end
Instrument no.:   721
Instrument type: Aanderaa
Latitude: 63 05.800 N
Longitude:06 06.100 W
Bottom depth: 1808
Instrument depth:  697
Number of records: 8160
Time of first record: 2013 06 09 07 29
Time of last record : 2014 05 15 06 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         8160                0
Column  8   : Speed        8160                0
Column  9   : Direct       8160                0

Comments
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Residual current:  24 mm/sec towards: 133 degrees
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TIDAL ANALYSIS
--------------
Error flagged records interpolated for velocity:     0, records not int.:     0
Tidal analysis performed on unfiltered data
```

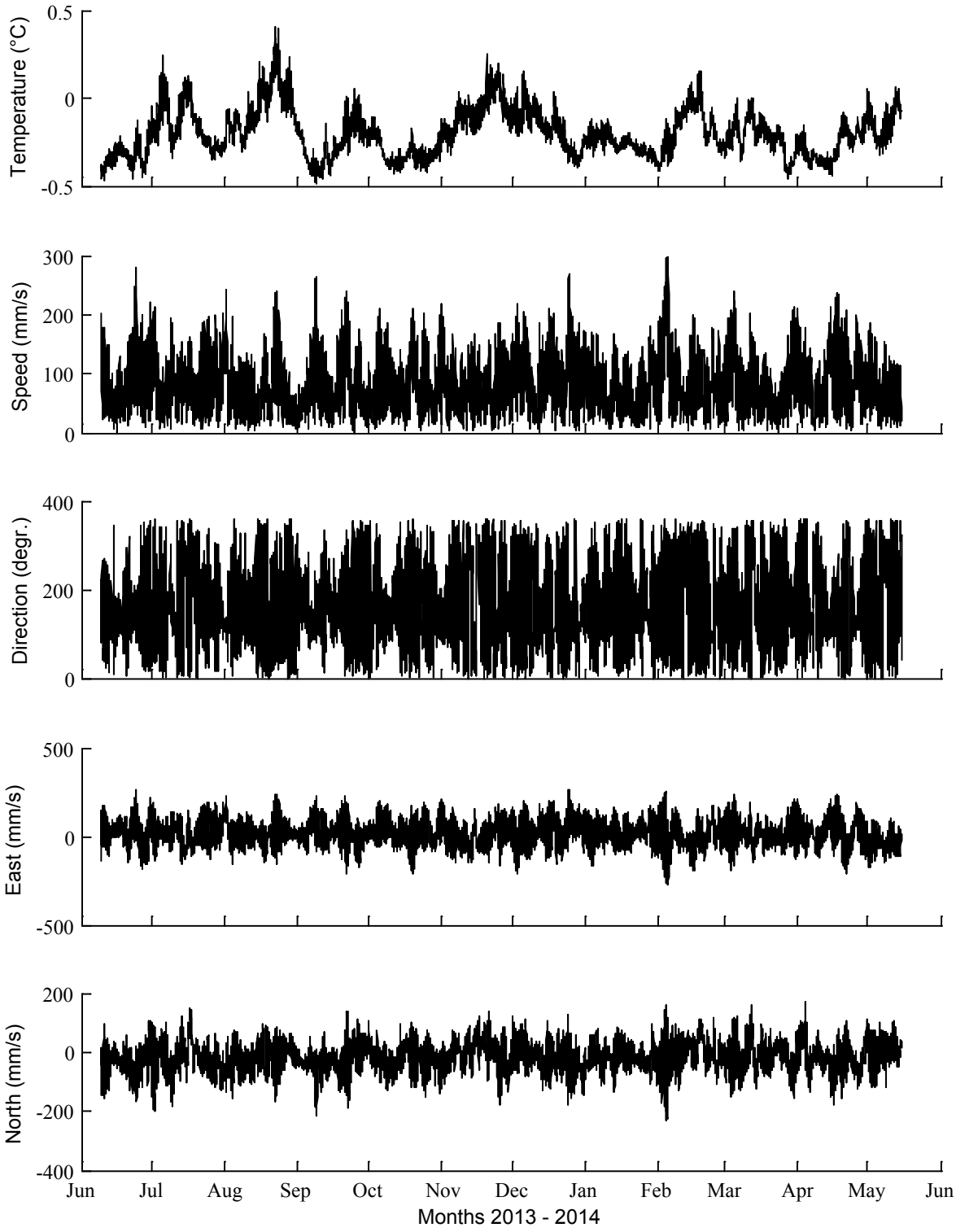
Const	Freq c/hr	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
MM	.00151215	5	315	6	167	7	2	128	155	A
MSF	.00282193	5	356	4	186	6	1	138	180	A
Q1	.03721850	3	35	0	202	3	0	173	215	C
O1	.03873065	4	60	1	299	4	1	173	242	A
NO1	.04026859	1	254	0	193	1	0	4	254	A
P1	.04155259	2	302	1	148	2	0	146	130	A
K1	.04178075	4	296	2	198	4	2	175	118	A
N2	.07899925	22	256	12	171	22	12	4	254	A
M2	.08051140	72	287	30	234	74	23	15	283	A
L2	.08202355	2	303	2	251	2	1	38	283	A
S2	.08333334	23	333	11	289	25	7	21	327	A
K2	.08356149	6	316	4	254	7	3	18	307	A
MK3	.12229210	1	301	0	231	1	0	11	297	A
M4	.16102280	1	342	0	132	1	0	174	162	C
MS4	.16384470	0	217	1	99	1	0	102	95	A

DIRECTIONAL CURRENT DISTRIBUTION (for all nonflagged observations in series)

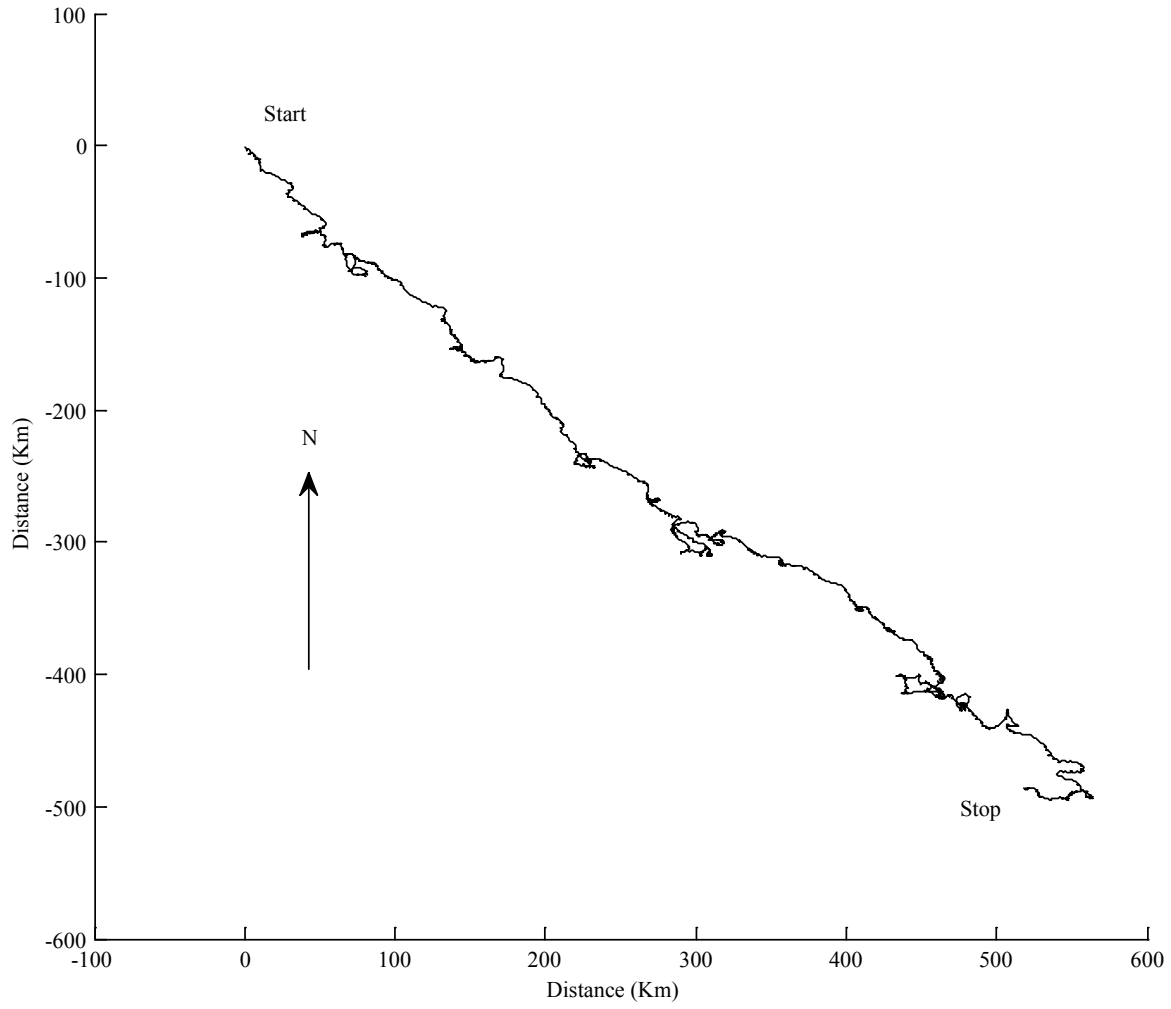
Relative number of observations in parts per thousand (ppt) grouped into speed and direction intervals (of 30 degree width centred around the directions shown)

Speed intervals (mm/s)	Direction intervals 15	45	75	105	135	165	195	225	255	285	315	345	All dir. Tot	Acc
0 - 50	24	18	23	25	26	26	27	22	21	16	18	13	260	260
50 - 100	20	33	45	55	42	29	37	47	38	28	20	14	408	667
100 - 150	6	16	37	48	24	15	19	25	25	14	5	3	237	905
150 - 200	1	2	16	25	11	3	3	6	10	2	0.12	0.37	80	984
200 - 300	0	0.25	3	6	2	0.49	1	1	2	0.12	0	0	16	1000
Total (ppt)	50	69	125	159	105	74	87	101	94	61	44	31		
Rel.flux (ppt)	35	63	144	195	110	65	76	102	101	55	32	22		
Avg.spd (mm/s)	59	78	99	105	89	75	75	86	92	77	62	61		
Max.spd (mm/s)	179	232	255	279	264	235	238	299	282	214	153	173		

NWNG1306 Aanderaa 721



NWNG1306 Aanderaa 721



NWZA1306

Latitude: 60°23.300´N

Longitude: 006°09.600´W

Echo sounding depth: 422 m

Bottom depth corr.: 417 m (MicroCat)

Time of deployment: 7/6 - 2013 1035 UTC

Time of recovery: 17/5 – 2014 1821 UTC

ADCP:

Instrument no.: RDI ADCP 3368

Instrument frequency: 75 kHz

Height above bottom: 1 m

Depth: 416 m (corr.)

Time of first data: 7/6 – 2013 1100 UTC

Time of last data: 17/5 – 2014 1759 UTC

Sample interval: 20 min

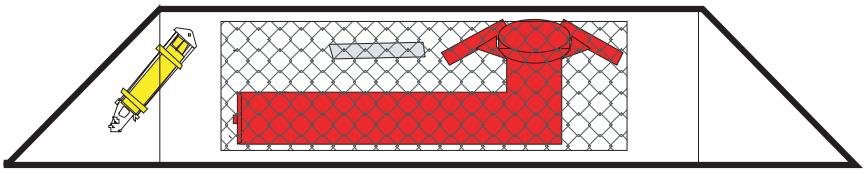
No. of ensembles: 24790

Pings per ens.: 10

Binlength: 10 m

Depth of first bin: 397 m (corr.)

No. of bins: 36



MicroCat:

Instrument no.: 5184

Height above bottom: 1 m

Time of first data: 7/6 – 2013 1050 UTC

Time of last data: 17/5 – 2014 1800 UTC

Sample interval: 10 min

No. of ensembles: 49580

Instrument depth: 416 m

Data:

ADCP data ok.

The salinity from the MicroCat has not been edited.

NWZA1306 ADCP 3368

Error statistics for deployment: NWZA1306 updated 2014/10/06

Temperature edited
Depth edited
Surface distance not edited
Heading, pitch and roll not edited
Intensity not edited

Velocity edited using these data filters:
Minimum Intensity:70.0
Minimum Mean Correlation:64.0
Maximum Speed, number of std dev for each bin: 5.0
Maximum Vertical Velocity:150.0
Maximum Error Velocity (erv_tr+0.1*spd):100.0
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 1):10.00
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 36): 4.91
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 60):-10.00
Vertical Speed Spikes, u and v deviated from 3 point median by number of std dev: 5.0
Vertical Velocity Spikes, deviated from 3 point median by number of std dev: 5.0

Total number of ensembles: 24790
Interval between ensembles: 20 min
Original number of bins: 60
Number of acceptable velocity 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	% flgd	Number of velocity gaps of length 1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	0	70	0	62	4	0	0	0	0	0	0	0	0
2	0	85	0	78	2	1	0	0	0	0	0	0	0
3	0	96	0	80	5	2	0	0	0	0	0	0	0
4	0	112	0	87	8	3	0	0	0	0	0	0	0
5	0	121	0	95	4	3	1	1	0	0	0	0	0
6	0	106	0	83	5	3	1	0	0	0	0	0	0
7	0	114	0	99	3	3	0	0	0	0	0	0	0
8	0	94	0	69	5	5	0	0	0	0	0	0	0
9	0	84	0	56	7	2	2	0	0	0	0	0	0
10	0	98	0	70	4	5	0	1	0	0	0	0	0
11	0	98	0	64	8	3	1	1	0	0	0	0	0
12	0	90	0	59	7	4	0	1	0	0	0	0	0
13	0	101	0	74	8	2	0	1	0	0	0	0	0
14	0	99	0	68	10	2	0	1	0	0	0	0	0
15	0	96	0	67	9	2	0	1	0	0	0	0	0
16	0	111	0	76	10	3	0	0	1	0	0	0	0
17	0	129	1	86	13	4	0	1	0	0	0	0	0
18	0	113	0	65	14	3	0	1	1	0	0	0	0
19	0	121	0	86	7	1	0	1	0	1	0	0	0
20	0	161	1	105	10	4	0	2	2	0	0	0	0
21	0	186	1	105	8	3	2	1	2	2	0	0	0
22	0	232	1	112	16	4	3	2	4	2	0	0	0
23	0	267	1	106	12	7	1	2	4	1	1	1	0
24	0	308	1	131	12	8	3	2	4	5	0	0	0
25	0	369	1	159	19	10	3	3	5	6	0	0	0
26	0	437	2	167	29	10	4	4	5	5	0	1	0
27	0	601	2	221	36	22	6	5	6	7	2	0	0
28	0	717	3	244	51	19	11	6	9	7	2	1	0
29	0	933	4	297	55	28	15	7	21	8	2	1	0
30	0	1247	5	382	95	30	12	8	27	13	4	1	0
31	0	1597	6	493	101	28	21	11	27	20	6	2	0
32	0	2014	8	571	125	43	32	23	41	17	6	3	0
33	0	2598	10	676	168	65	36	16	52	28	7	5	0
34	0	3254	13	794	208	90	42	24	57	31	16	6	0
35	0	4006	16	929	252	89	49	36	94	34	14	10	0
36	0	5175	21	1145	305	151	75	50	118	46	19	12	0

NWZA1306 ADCP 3368

Deployment: NWZA1306 updated 2014/10/06
Instrument no.: 3368
Instrument freq.: 75
Latitude: 60 23.300 N
Longitude:06 09.600 W
Bottom depth: 417
Instrument depth: 416
Center depth of first bin: 397
Bin length: 10
Number of bins: 36
Number of first ensemble: 493
Time of first ensemble: 2013 06 07 11 00
Number of last ensemble: 25282
Time of last ensemble: 2014 05 17 17 59
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	397	20	302	79	214	997
2	387	30	320	74	215	997
3	377	40	329	67	218	996
4	367	50	335	59	222	995
5	357	60	340	50	226	995
6	347	70	342	41	232	996
7	337	80	341	34	237	995
8	327	90	340	25	243	996
9	317	100	338	18	249	997
10	307	110	335	11	258	996
11	297	120	333	6	286	996
12	287	130	330	5	340	996
13	277	140	326	7	16	996
14	267	150	324	10	34	996
15	257	160	322	12	46	996
16	247	170	320	16	53	996
17	237	180	319	18	58	995
18	227	190	317	21	63	995
19	217	200	317	24	66	995
20	207	210	316	26	70	994
21	197	220	315	28	73	992
22	187	230	315	30	77	991
23	177	240	316	32	79	989
24	167	250	316	34	81	988
25	157	260	317	37	83	985
26	147	270	318	39	83	982
27	137	280	320	41	86	976
28	127	290	322	43	86	971
29	117	300	324	45	86	962
30	107	310	327	47	87	950
31	97	320	330	49	88	936
32	87	330	332	53	88	919
33	77	340	336	56	90	895
34	67	350	339	59	91	869
35	57	360	345	62	94	838
36	47	370	350	64	96	791

NWZA1306 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	898	680	445	266	139	64	24	6	1	0	0	0	0	0	0	0	0	0
2	387	909	704	479	295	166	87	39	13	3	1	0	0	0	0	0	0	0	0
3	377	921	723	498	310	173	93	45	15	4	2	0	0	0	0	0	0	0	0
4	367	925	740	515	317	177	95	46	16	5	1	0	0	0	0	0	0	0	0
5	357	929	753	527	329	186	95	45	17	5	1	0	0	0	0	0	0	0	0
6	347	933	764	540	332	186	96	43	17	4	1	0	0	0	0	0	0	0	0
7	337	932	767	540	331	184	92	42	15	3	0	0	0	0	0	0	0	0	0
8	327	930	766	540	330	183	89	40	14	3	0	0	0	0	0	0	0	0	0
9	317	934	766	538	327	177	86	37	11	2	0	0	0	0	0	0	0	0	0
10	307	932	762	529	323	175	81	33	10	2	0	0	0	0	0	0	0	0	0
11	297	932	754	525	319	170	78	32	9	2	0	0	0	0	0	0	0	0	0
12	287	929	749	518	312	168	76	28	9	2	0	0	0	0	0	0	0	0	0
13	277	928	744	512	305	162	73	28	9	2	0	0	0	0	0	0	0	0	0
14	267	924	735	503	301	157	72	27	8	1	0	0	0	0	0	0	0	0	0
15	257	923	728	495	297	156	71	27	8	1	0	0	0	0	0	0	0	0	0
16	247	922	724	494	293	155	68	26	9	2	0	0	0	0	0	0	0	0	0
17	237	917	724	489	289	152	68	25	9	2	0	0	0	0	0	0	0	0	0
18	227	914	720	485	286	153	68	26	10	2	0	0	0	0	0	0	0	0	0
19	217	915	716	480	284	153	69	28	10	2	0	0	0	0	0	0	0	0	0
20	207	909	708	479	283	150	71	28	10	3	1	0	0	0	0	0	0	0	0
21	197	908	707	477	281	152	70	28	11	3	1	0	0	0	0	0	0	0	0
22	187	906	705	474	280	152	72	30	11	4	1	0	0	0	0	0	0	0	0
23	177	902	703	471	282	154	74	31	12	3	1	0	0	0	0	0	0	0	0
24	167	900	699	471	285	153	75	33	13	4	1	0	0	0	0	0	0	0	0
25	157	899	698	469	280	158	77	34	14	4	1	0	0	0	0	0	0	0	0
26	147	895	693	469	285	159	79	35	15	5	1	0	0	0	0	0	0	0	0
27	137	888	693	470	286	162	82	37	15	5	2	0	0	0	0	0	0	0	0
28	127	888	689	470	289	164	84	39	16	5	2	0	0	0	0	0	0	0	0
29	117	878	687	468	294	166	86	42	18	6	2	0	0	0	0	0	0	0	0
30	107	870	677	469	294	168	91	44	18	7	3	1	0	0	0	0	0	0	0
31	97	854	669	467	295	172	94	45	18	7	3	1	0	0	0	0	0	0	0
32	87	842	659	461	292	172	96	47	20	8	3	1	0	0	0	0	0	0	0
33	77	817	645	456	291	174	97	49	21	8	3	1	0	0	0	0	0	0	0
34	67	794	628	448	289	174	97	50	23	9	3	1	0	0	0	0	0	0	0
35	57	769	615	440	289	176	98	50	24	10	4	1	0	0	0	0	0	0	0
36	47	728	586	425	282	170	96	48	22	9	3	1	0	0	0	0	0	0	0

NWZA1306 ADCP 3368

Harmonic constants for constituent M2 for deployment NWZA1306

Bin	Depth m	E-ampl 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	235	256	217	222	306	95	42	240	A
02	387	261	259	231	217	326	122	40	241	A
03	377	274	260	239	214	336	140	40	241	A
04	367	281	261	244	213	341	151	39	241	A
05	357	288	262	247	211	345	158	38	242	A
06	347	293	262	247	210	347	163	37	242	A
07	337	293	261	244	210	345	163	37	242	A
08	327	293	261	241	209	343	163	36	242	A
09	317	291	261	237	209	340	160	36	242	A
10	307	290	260	233	208	337	158	35	242	A
11	297	288	260	228	209	334	153	35	242	A
12	287	285	259	223	208	330	150	34	242	A
13	277	281	259	219	209	326	145	34	242	A
14	267	278	258	215	209	322	141	34	242	A
15	257	275	258	211	209	318	139	34	242	A
16	247	273	257	206	209	315	134	33	242	A
17	237	270	257	202	208	311	132	33	241	A
18	227	268	256	197	209	308	128	33	242	A
19	217	267	256	193	208	305	125	32	241	A
20	207	265	255	189	208	302	122	31	242	A
21	197	264	255	184	208	299	121	31	242	A
22	187	264	255	181	208	297	118	30	242	A
23	177	263	255	179	207	296	117	30	242	A
24	167	262	254	175	207	294	115	29	242	A
25	157	262	254	173	207	292	114	29	242	A
26	147	263	254	171	206	292	113	28	242	A
27	137	263	253	168	207	292	110	28	242	A
28	127	264	253	167	207	293	109	28	242	A
29	117	264	253	166	206	292	109	27	242	A
30	107	265	253	165	206	292	108	27	242	A
31	97	265	252	164	206	293	107	27	241	A
32	87	262	252	163	205	289	107	27	241	A
33	77	261	251	161	206	288	105	27	241	A
34	67	260	251	157	206	287	99	27	241	A
35	57	259	251	155	207	285	98	27	241	A
36	47	253	250	149	209	280	89	27	241	A

Harmonic constants for constituent S2 for deployment NWZA1306.

Bin	Depth m	E-ampl 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	108	290	86	244	128	52	36	274	A
02	387	119	292	89	244	137	58	33	277	A
03	377	121	294	91	244	139	61	33	278	A
04	367	120	294	93	244	138	63	34	278	A
05	357	118	295	95	243	138	64	35	276	A
06	347	116	295	95	244	136	63	36	276	A
07	337	114	295	94	245	135	62	37	276	A
08	327	112	295	94	246	134	60	37	277	A
09	317	109	295	92	247	131	57	38	276	A
10	307	106	295	91	247	128	56	39	276	A
11	297	103	294	87	249	124	52	38	276	A
12	287	100	294	84	250	121	49	38	277	A
13	277	97	295	81	250	117	47	38	278	A
14	267	96	295	78	251	115	45	37	278	A
15	257	95	295	76	252	114	43	37	279	A
16	247	93	295	74	253	111	42	36	280	A
17	237	91	295	71	252	108	41	35	280	A
18	227	90	296	70	252	107	41	35	281	A
19	217	90	296	68	252	105	41	34	281	A
20	207	88	296	67	251	103	41	34	281	A
21	197	88	296	66	251	102	40	34	282	A
22	187	87	295	64	250	100	39	33	281	A
23	177	86	295	64	250	100	39	33	281	A
24	167	86	295	62	250	99	38	32	281	A
25	157	86	295	61	249	98	38	32	281	A
26	147	86	294	59	250	97	36	31	282	A
27	137	86	294	57	249	97	35	30	282	A
28	127	86	292	58	248	97	36	30	280	A
29	117	87	293	56	248	97	35	29	282	A
30	107	87	293	56	248	97	36	29	282	A
31	97	86	293	56	248	96	35	29	282	A
32	87	84	294	55	247	94	36	29	282	A
33	77	84	294	54	247	93	36	29	282	A
34	67	81	294	52	247	90	34	28	282	A
35	57	83	294	49	245	90	34	25	284	A
36	47	81	292	44	245	87	30	23	283	A

NWZA1306 ADCP 3368

Harmonic constants for constituent N2 for deployment NWZA1306

Bin	Depth m	E-ampl 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	50	243	56	199	70	28	50	218	A
02	387	57	244	62	197	78	34	49	218	A
03	377	62	245	65	193	81	39	48	217	A
04	367	65	244	67	190	83	42	47	216	A
05	357	65	244	68	187	83	45	47	214	A
06	347	67	243	68	187	84	45	45	215	A
07	337	69	242	68	186	85	46	45	214	A
08	327	69	242	68	185	86	46	44	214	A
09	317	69	241	67	183	84	47	43	214	A
10	307	68	240	65	182	83	46	43	213	A
11	297	68	239	62	180	80	45	41	213	A
12	287	66	238	59	179	78	43	39	213	A
13	277	64	237	56	179	75	41	38	214	A
14	267	63	235	53	179	73	38	36	215	A
15	257	62	234	50	179	71	36	35	215	A
16	247	60	233	48	179	69	34	34	215	A
17	237	59	233	46	180	68	32	33	216	A
18	227	58	233	44	181	66	31	33	216	A
19	217	57	232	43	181	65	30	32	216	A
20	207	56	232	41	181	64	28	32	217	A
21	197	55	231	39	181	62	27	31	217	A
22	187	54	232	38	180	60	26	30	218	A
23	177	52	231	36	182	58	24	30	218	A
24	167	51	232	34	183	57	23	30	219	A
25	157	50	232	33	182	55	23	28	219	A
26	147	48	231	31	184	53	20	29	219	A
27	137	48	231	30	186	53	19	28	220	A
28	127	46	230	29	186	52	18	28	219	A
29	117	46	229	29	189	52	17	29	219	A
30	107	46	229	30	187	52	18	30	218	A
31	97	45	227	31	189	52	17	32	216	A
32	87	45	230	30	189	51	17	31	218	A
33	77	43	229	30	192	50	15	33	217	A
34	67	42	228	28	195	49	13	32	218	A
35	57	41	229	28	198	48	12	33	220	A
36	47	39	231	27	197	45	13	33	220	A

Harmonic constants for constituent O1 for deployment NWZA1306.

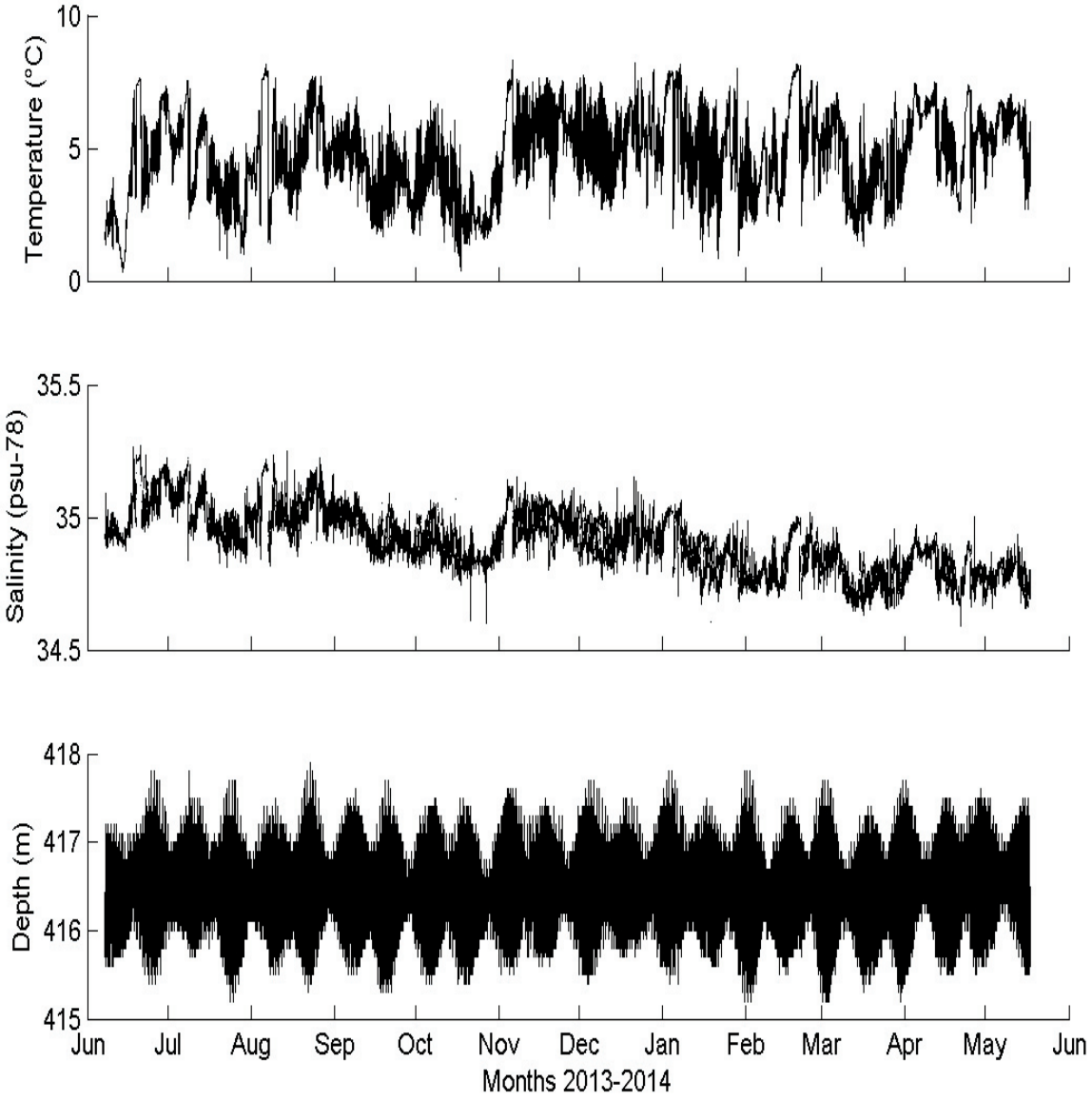
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	397	15	66	3	198	15	2	172	245	C
02	387	15	63	4	227	15	1	165	242	C
03	377	15	58	5	249	16	1	162	239	A
04	367	16	52	7	258	17	3	157	236	A
05	357	17	47	8	264	18	5	157	233	A
06	347	18	47	9	280	19	7	161	234	A
07	337	18	48	9	281	19	7	160	236	A
08	327	18	51	9	288	19	7	162	239	A
09	317	19	51	9	284	20	7	162	238	A
10	307	18	48	9	288	19	7	164	234	A
11	297	18	47	9	286	19	8	162	234	A
12	287	17	49	9	283	18	7	160	237	A
13	277	17	44	6	284	17	5	168	228	A
14	267	17	41	7	285	17	6	169	225	A
15	257	17	43	6	282	17	5	168	226	A
16	247	17	42	6	273	17	5	166	226	A
17	237	18	42	6	273	18	5	167	226	A
18	227	17	43	6	271	18	4	166	226	A
19	217	18	41	6	261	18	4	165	224	A
20	207	17	39	6	269	17	5	165	223	A
21	197	18	38	6	264	18	4	166	221	A
22	187	17	36	7	252	18	4	161	220	A
23	177	17	39	8	251	18	4	156	224	A
24	167	17	37	8	248	18	4	158	222	A
25	157	16	41	7	241	17	2	158	224	A
26	147	16	38	7	241	17	2	157	222	A
27	137	15	36	7	237	16	2	154	220	A
28	127	13	37	7	241	15	3	153	222	A
29	117	13	32	8	234	15	3	149	218	A
30	107	13	35	9	228	16	2	144	220	A
31	97	13	38	10	228	17	1	144	221	A
32	87	14	34	10	229	17	2	145	219	A
33	77	12	33	11	233	17	3	138	222	A
34	67	15	27	10	229	18	3	148	213	A
35	57	15	34	10	236	18	3	148	220	A
36	47	12	25	8	228	14	3	148	212	A

NWZA1306 ADCP 3368

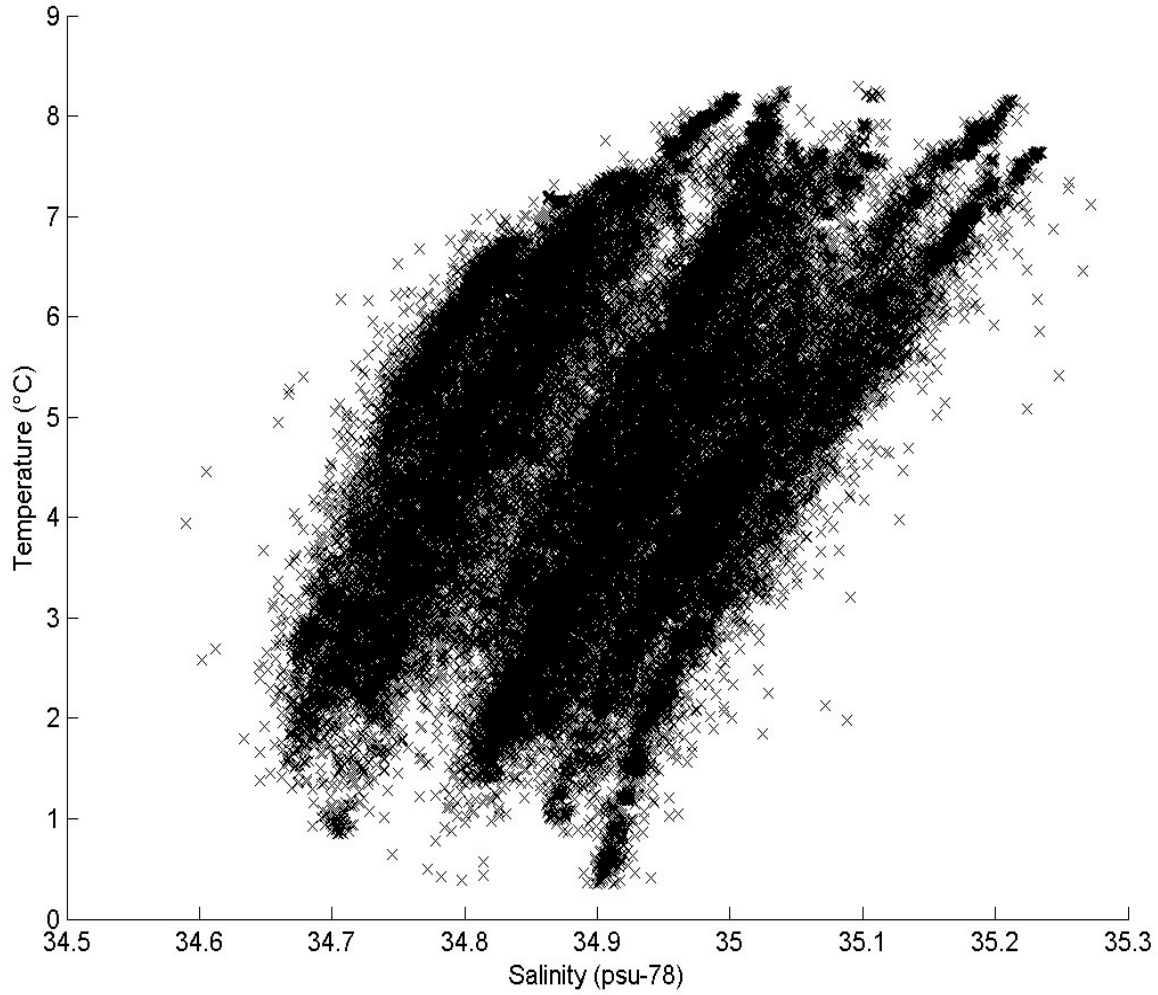
Harmonic constants for constituent K1 for deployment NWZA1306

Bin	Depth m	E-ampl 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	11	237	4	92	12	2	165	60	A
02	387	13	235	5	70	14	1	161	57	A
03	377	11	240	6	81	12	2	154	64	A
04	367	8	237	6	89	10	3	148	66	A
05	357	8	233	5	86	9	2	150	61	A
06	347	7	216	4	97	8	4	159	46	A
07	337	5	191	5	118	6	4	52	148	A
08	327	5	189	6	113	7	5	63	134	A
09	317	6	192	8	117	9	6	72	129	A
10	307	5	195	10	114	10	5	84	117	A
11	297	7	211	12	117	12	7	94	115	A
12	287	8	200	13	117	13	8	83	121	A
13	277	9	203	11	109	11	9	99	102	A
14	267	9	201	10	111	10	9	87	114	A
15	257	9	198	10	110	10	9	74	125	A
16	247	10	202	9	108	10	9	172	28	A
17	237	11	202	8	106	11	7	172	27	A
18	227	11	204	7	95	12	7	164	33	A
19	217	12	206	7	91	13	6	163	34	A
20	207	12	210	8	86	13	6	154	43	A
21	197	12	213	7	79	13	5	155	42	A
22	187	12	213	7	80	13	5	154	43	A
23	177	12	217	7	78	13	4	151	47	A
24	167	13	218	8	72	15	4	150	46	A
25	157	13	221	7	68	15	3	152	47	A
26	147	14	223	8	60	16	2	151	47	A
27	137	16	221	9	55	18	2	151	44	A
28	127	17	221	9	59	19	3	152	45	A
29	117	19	219	8	52	20	2	157	41	A
30	107	18	222	9	64	19	3	154	46	A
31	97	18	223	9	64	20	3	155	47	A
32	87	19	222	10	62	21	3	153	46	A
33	77	18	220	11	68	21	5	151	46	A
34	67	20	213	11	62	22	5	154	39	A
35	57	22	214	12	62	24	5	153	40	A
36	47	24	212	10	70	26	6	160	37	A

NWZA1306 MicroCat 5184



NWZA1306 MicroCat 5184



NWZB1306

Latitude: 60°13.700´N

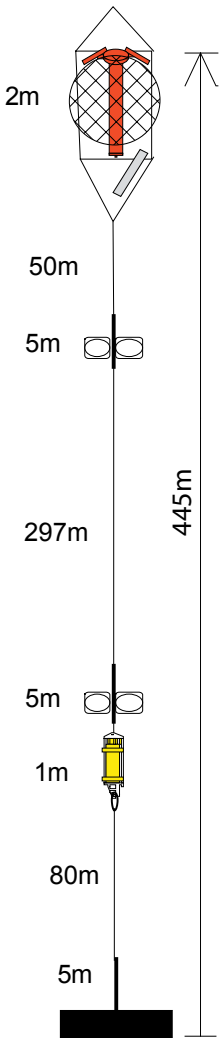
Longitude: 006°10.000´W

Echo sounding depth: 1167 m

Bottom depth corr.: 1139m (ADCP)

Time of deployment: 7/6 - 2013 1208 UTC

Time of recovery: 17/5 - 2014 2010 UTC



ADCP:

Instrument no.: RDI ADCP 8552

Instrument frequency: 75 kHz

Height above bottom: 445 m

Depth: 719 m

Time of first data: 7/6 - 2013 1240 UTC

Time of last data: 17/5 - 2014 1940 UTC

Sample interval: 20 min

No. of ensembles: 24790

Pings per ens.: 10

Binlength: 10 m

Depth of first bin: 700 m (corr.)

No. of bins: 60

Data:

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

NWZB1306 ADCP 8552

Error statistics for deployment: NWZB1306 - ReBined 08-Oct-2014

Temperature edited
Depth edited
Surface distance not edited
Heading, pitch and roll not edited
Intensity not edited

Velocity edited using these data filters:
Minimum Intensity:60.0
Minimum Mean Correlation:70.0
Maximum Speed, number of std dev for each bin: 5.0
Maximum Vertical Velocity:150.0
Maximum Error Velocity (erv_tr+0.1*spd):100.0
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 1): 5.00
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 62): 2.59
Speed Spikes, u and v deviated from 3 point median by number of std dev (bin 70): 2.00
Vertical Speed Spikes, u and v deviated from 3 point median by number of std dev: 4.0

Total number of ensembles: 24790
Interval between ensembles: 20 min
Original number of bins: 70
Number of acceptable velocity 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	12679	12701	51	30	6	4	5	3	43	286	200	15	18
2	8200	8228	33	38	7	8	12	14	72	313	92	2	4
3	0	49	0	47	1	0	0	0	0	0	0	0	0
4	0	40	0	36	2	0	0	0	0	0	0	0	0
5	0	52	0	50	1	0	0	0	0	0	0	0	0
6	0	44	0	40	2	0	0	0	0	0	0	0	0
7	0	50	0	45	1	1	0	0	0	0	0	0	0
8	0	56	0	54	1	0	0	0	0	0	0	0	0
9	0	68	0	58	5	0	0	0	0	0	0	0	0
10	0	58	0	54	2	0	0	0	0	0	0	0	0
11	0	62	0	60	1	0	0	0	0	0	0	0	0
12	0	67	0	63	2	0	0	0	0	0	0	0	0
13	0	69	0	63	3	0	0	0	0	0	0	0	0
14	0	76	0	74	1	0	0	0	0	0	0	0	0
15	0	95	0	89	3	0	0	0	0	0	0	0	0
16	0	103	0	85	9	0	0	0	0	0	0	0	0
17	0	90	0	84	3	0	0	0	0	0	0	0	0
18	0	98	0	90	4	0	0	0	0	0	0	0	0
19	0	101	0	95	3	0	0	0	0	0	0	0	0
20	0	126	1	118	4	0	0	0	0	0	0	0	0
21	0	122	0	116	3	0	0	0	0	0	0	0	0
22	0	140	1	124	8	0	0	0	0	0	0	0	0
23	0	138	1	127	4	1	0	0	0	0	0	0	0
24	0	132	1	126	3	0	0	0	0	0	0	0	0
25	0	136	1	130	3	0	0	0	0	0	0	0	0
26	0	153	1	131	11	0	0	0	0	0	0	0	0
27	0	150	1	135	6	1	0	0	0	0	0	0	0
28	0	177	1	165	6	0	0	0	0	0	0	0	0
29	0	188	1	173	6	1	0	0	0	0	0	0	0
30	0	173	1	150	10	1	0	0	0	0	0	0	0
31	0	205	1	174	14	1	0	0	0	0	0	0	0
32	0	193	1	158	11	3	1	0	0	0	0	0	0
33	0	214	1	178	14	0	2	0	0	0	0	0	0
34	0	215	1	178	11	3	0	0	1	0	0	0	0
35	0	232	1	197	13	3	0	0	0	0	0	0	0
36	0	227	1	187	15	2	1	0	0	0	0	0	0
37	0	246	1	210	11	3	0	1	0	0	0	0	0
38	0	283	1	239	19	2	0	0	0	0	0	0	0
39	0	266	1	205	24	3	1	0	0	0	0	0	0
40	0	344	1	246	33	5	3	1	0	0	0	0	0
41	0	358	1	231	36	6	3	1	3	0	0	0	0
42	0	433	2	269	39	10	5	1	4	0	0	0	0
43	0	471	2	266	38	12	9	4	4	1	0	0	0
44	0	607	2	281	60	13	9	6	10	3	0	0	0
45	0	784	3	290	68	24	10	6	12	10	0	0	0
46	4	1123	5	300	58	28	22	9	28	15	2	0	0
47	10	1552	6	316	74	21	13	13	30	28	11	1	0
48	23	1975	8	269	57	34	21	13	34	37	15	4	0
49	53	2438	10	259	74	30	21	15	42	38	31	3	0
50	127	2988	12	279	57	31	28	15	48	50	36	9	0
51	249	3498	14	303	58	42	19	14	64	40	45	17	0
52	414	4024	16	268	63	30	24	24	73	53	39	27	0
53	618	4650	19	267	64	43	18	24	56	76	38	39	1
54	928	5357	22	299	95	29	24	28	68	77	42	50	1
55	1370	6185	25	295	94	45	34	20	83	85	41	59	4
56	1916	7251	29	308	88	41	30	29	82	113	44	63	9
57	2613	8406	34	258	75	58	28	21	85	132	41	69	19
58	3377	9633	39	240	75	41	20	20	94	138	60	76	25
59	4347	10860	44	234	70	27	24	19	74	137	65	79	40
60	5633	12181	49	192	57	23	21	10	74	142	78	65	59

NWZB1306 ADCP 8552

Deployment: NWZB1306 - ReBined 08-Oct-2014
Instrument no.: 8552
Instrument freq.: 75
Latitude: 60 13.700 N
Longitude:06 10.000 W
Bottom depth: 1139
Instrument depth: 719
Center depth of first bin: 700
Bin length: 10
Number of bins: 60
Number of first ensemble: 504
Time of first ensemble: 2013 06 07 12 40
Number of last ensemble: 25293
Time of last ensemble: 2014 05 17 19 40
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	700	439	529	520	283	488
2	690	449	469	459	284	668
3	680	459	370	351	284	998
4	670	469	364	344	284	998
5	660	479	358	335	284	998
6	650	489	351	327	284	998
7	640	499	345	318	284	998
8	630	509	338	308	284	998
9	620	519	331	297	284	997
10	610	529	325	286	285	998
11	600	539	317	273	285	997
12	590	549	309	260	286	997
13	580	559	301	245	287	997
14	570	569	294	230	288	997
15	560	579	287	214	289	996
16	550	589	279	197	290	996
17	540	599	273	179	291	996
18	530	609	268	160	293	996
19	520	619	264	140	295	996
20	510	629	261	121	298	995
21	500	639	259	104	302	995
22	490	649	256	90	306	994
23	480	659	254	76	312	994
24	470	669	253	64	320	995
25	460	679	254	54	330	995
26	450	689	256	47	342	994
27	440	699	257	43	357	994
28	430	709	259	43	13	993
29	420	719	261	46	25	992
30	410	729	263	49	35	993
31	400	739	265	54	43	992
32	390	749	267	59	48	992
33	380	759	269	64	54	991
34	370	769	270	69	57	991
35	360	779	272	73	60	991
36	350	789	273	77	62	991
37	340	799	276	80	64	990
38	330	809	277	84	65	989
39	320	819	280	86	67	989
40	310	829	281	90	67	986
41	300	839	283	92	68	986
42	290	849	284	95	69	983
43	280	859	285	98	69	981
44	270	869	287	99	70	976
45	260	879	288	102	71	968
46	250	889	289	103	71	955
47	240	899	290	104	71	937
48	230	909	290	104	72	920
49	220	919	291	106	73	902
50	210	929	292	107	73	879
51	200	939	292	109	73	859
52	190	949	292	110	73	838
53	180	959	293	112	73	812
54	170	969	293	114	72	784
55	160	979	294	117	71	751
56	150	989	296	120	70	708
57	140	999	298	125	69	661
58	130	1009	301	130	68	611
59	120	1019	306	137	67	562
60	110	1029	310	146	66	509

NWZB1306 ADCP 8552

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	700	487	486	477	415	266	134	52	16	3	0	0	0	0	0	0	0	0	0
2	690	666	656	594	437	259	127	47	13	2	0	0	0	0	0	0	0	0	0
3	680	934	796	620	428	248	118	42	11	2	0	0	0	0	0	0	0	0	0
4	670	933	788	609	417	238	111	37	9	1	0	0	0	0	0	0	0	0	0
5	660	931	778	595	402	224	103	34	7	1	0	0	0	0	0	0	0	0	0
6	650	928	768	585	387	213	95	29	6	1	0	0	0	0	0	0	0	0	0
7	640	927	761	570	373	201	86	25	4	0	0	0	0	0	0	0	0	0	0
8	630	925	755	553	357	190	76	21	3	0	0	0	0	0	0	0	0	0	0
9	620	923	749	536	339	177	67	15	2	0	0	0	0	0	0	0	0	0	0
10	610	922	741	522	323	164	59	14	1	0	0	0	0	0	0	0	0	0	0
11	600	916	731	504	303	149	49	11	2	0	0	0	0	0	0	0	0	0	0
12	590	913	720	488	283	132	43	10	1	0	0	0	0	0	0	0	0	0	0
13	580	909	704	469	263	119	37	8	1	0	0	0	0	0	0	0	0	0	0
14	570	903	691	452	246	107	34	6	1	0	0	0	0	0	0	0	0	0	0
15	560	893	674	430	231	97	30	6	1	0	0	0	0	0	0	0	0	0	0
16	550	886	651	412	216	88	27	6	0	0	0	0	0	0	0	0	0	0	0
17	540	881	640	395	201	81	24	5	1	0	0	0	0	0	0	0	0	0	0
18	530	874	635	383	188	74	22	5	1	0	0	0	0	0	0	0	0	0	0
19	520	875	621	369	179	68	22	4	0	0	0	0	0	0	0	0	0	0	0
20	510	874	614	358	168	64	20	4	0	0	0	0	0	0	0	0	0	0	0
21	500	874	606	346	163	64	20	5	0	0	0	0	0	0	0	0	0	0	0
22	490	869	599	340	162	62	19	4	1	0	0	0	0	0	0	0	0	0	0
23	480	862	587	333	161	63	18	4	1	0	0	0	0	0	0	0	0	0	0
24	470	862	584	335	162	63	18	4	1	0	0	0	0	0	0	0	0	0	0
25	460	863	588	337	166	64	17	4	1	0	0	0	0	0	0	0	0	0	0
26	450	865	592	338	166	65	18	3	0	0	0	0	0	0	0	0	0	0	0
27	440	870	595	343	168	66	18	3	0	0	0	0	0	0	0	0	0	0	0
28	430	869	599	352	173	68	18	2	0	0	0	0	0	0	0	0	0	0	0
29	420	871	605	359	178	70	18	2	0	0	0	0	0	0	0	0	0	0	0
30	410	877	610	361	182	72	17	1	0	0	0	0	0	0	0	0	0	0	0
31	400	879	617	365	187	75	18	2	0	0	0	0	0	0	0	0	0	0	0
32	390	882	624	371	189	74	18	2	0	0	0	0	0	0	0	0	0	0	0
33	380	880	628	374	192	76	19	2	0	0	0	0	0	0	0	0	0	0	0
34	370	881	633	382	195	77	19	2	0	0	0	0	0	0	0	0	0	0	0
35	360	880	638	387	196	80	20	3	0	0	0	0	0	0	0	0	0	0	0
36	350	880	639	389	201	82	22	4	0	0	0	0	0	0	0	0	0	0	0
37	340	884	645	395	205	85	23	4	0	0	0	0	0	0	0	0	0	0	0
38	330	885	648	401	208	85	23	4	0	0	0	0	0	0	0	0	0	0	0
39	320	889	654	409	213	85	24	5	1	0	0	0	0	0	0	0	0	0	0
40	310	888	653	408	216	87	26	5	1	0	0	0	0	0	0	0	0	0	0
41	300	891	657	410	217	90	27	5	1	0	0	0	0	0	0	0	0	0	0
42	290	888	659	413	218	92	27	6	1	0	0	0	0	0	0	0	0	0	0
43	280	887	661	414	221	94	29	7	1	0	0	0	0	0	0	0	0	0	0
44	270	884	661	416	221	94	30	8	1	0	0	0	0	0	0	0	0	0	0
45	260	876	657	417	223	97	33	8	1	0	0	0	0	0	0	0	0	0	0
46	250	865	648	414	221	98	34	9	2	0	0	0	0	0	0	0	0	0	0
47	240	849	637	406	221	97	32	8	2	0	0	0	0	0	0	0	0	0	0
48	230	837	627	401	217	95	32	9	2	0	0	0	0	0	0	0	0	0	0
49	220	819	614	394	215	93	33	9	2	0	0	0	0	0	0	0	0	0	0
50	210	797	602	389	209	91	32	8	2	1	0	0	0	0	0	0	0	0	0
51	200	781	589	380	201	88	32	8	2	1	0	0	0	0	0	0	0	0	0
52	190	762	574	367	198	86	29	9	2	1	0	0	0	0	0	0	0	0	0
53	180	743	557	362	189	83	30	8	2	1	0	0	0	0	0	0	0	0	0
54	170	714	540	349	184	78	27	8	2	1	0	0	0	0	0	0	0	0	0
55	160	684	522	335	179	76	26	8	2	1	0	0	0	0	0	0	0	0	0
56	150	647	494	322	171	75	26	7	2	1	0	0	0	0	0	0	0	0	0
57	140	605	464	303	165	73	26	7	2	1	0	0	0	0	0	0	0	0	0
58	130	559	431	285	157	71	25	8	2	1	0	0	0	0	0	0	0	0	0
59	120	518	399	265	149	68	26	8	3	1	0	0	0	0	0	0	0	0	0
60	110	470	365	247	140	66	24	8	2	1	0	0	0	0	0	0	0	0	0

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Harmonic constants for constituent M2 for deployment NWZB1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	700	103	222	56	129	103	56	178	43	A
02	690	129	221	57	124	130	56	176	42	A
03	680	189	215	56	105	190	52	174	36	A
04	670	190	215	55	107	191	52	174	36	A
05	660	191	215	54	110	191	52	175	37	A
06	650	192	216	53	113	192	52	176	37	A
07	640	192	217	54	116	192	53	177	38	A
08	630	192	218	54	120	193	53	178	39	A
09	620	192	219	52	124	192	51	179	39	A
10	610	191	220	51	130	191	51	0	220	A
11	600	190	222	49	137	190	48	2	221	A
12	590	187	224	46	144	187	45	3	223	A
13	580	186	225	44	152	186	43	4	224	A
14	570	184	227	44	160	185	40	6	225	A
15	560	182	228	44	168	183	38	7	227	A
16	550	178	230	44	176	180	36	9	229	A
17	540	178	233	48	183	181	36	10	231	A
18	530	178	235	52	190	182	36	12	233	A
19	520	179	238	57	196	184	36	14	235	A
20	510	177	240	61	203	184	35	16	236	A
21	500	176	242	67	207	185	36	18	238	A
22	490	175	243	72	212	186	35	20	239	A
23	480	175	245	77	215	188	36	22	241	A
24	470	176	247	83	218	191	37	23	242	A
25	460	179	249	88	220	195	39	24	244	A
26	450	180	251	93	223	198	39	26	245	A
27	440	182	252	98	225	203	41	27	246	A
28	430	185	254	104	226	208	43	28	248	A
29	420	188	255	111	227	213	46	29	248	A
30	410	190	257	117	228	218	49	30	249	A
31	400	193	258	122	229	223	51	31	250	A
32	390	196	259	128	229	227	54	32	251	A
33	380	199	259	132	230	232	56	32	251	A
34	370	202	260	135	229	236	59	32	251	A
35	360	205	261	140	229	240	63	33	251	A
36	350	207	261	143	229	243	65	33	252	A
37	340	208	262	145	229	245	67	33	252	A
38	330	209	262	146	229	246	67	33	252	A
39	320	210	262	148	229	248	69	33	252	A
40	310	211	263	150	230	249	68	34	252	A
41	300	211	263	152	230	251	69	34	252	A
42	290	211	263	153	230	251	71	34	252	A
43	280	211	263	155	230	252	71	35	252	A
44	270	212	264	156	230	253	73	35	252	A
45	260	212	264	158	230	254	73	35	252	A
46	250	213	265	159	230	255	76	35	253	A
47	240	213	265	160	230	256	76	35	253	A
48	230	213	265	161	230	255	77	35	253	A
49	220	213	266	162	230	256	78	36	253	A
50	210	214	265	162	230	257	77	36	253	A
51	200	213	266	163	230	257	79	36	253	A
52	190	211	266	163	230	255	79	36	253	A
53	180	212	267	163	229	255	82	36	254	A
54	170	212	267	165	229	256	84	36	254	A
55	160	211	267	167	230	256	83	37	253	A
56	150	212	268	171	229	258	88	37	254	A
57	140	213	269	177	230	262	91	38	253	A
58	130	216	270	181	229	265	96	38	254	A
59	120	218	271	188	229	269	102	39	254	A
60	110	217	272	196	228	271	110	41	253	A

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Harmonic constants for constituent S2 for deployment NWZB1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	700	43	248	33	151	44	32	169	77	A
02	690	52	252	29	154	53	29	173	76	A
03	680	76	252	28	139	76	25	171	75	A
04	670	76	253	28	141	77	26	171	76	A
05	660	75	254	27	145	76	25	172	77	A
06	650	75	255	26	149	76	25	174	77	A
07	640	75	255	24	151	75	24	175	77	A
08	630	73	257	23	154	74	22	176	78	A
09	620	73	258	22	159	73	22	177	79	A
10	610	72	259	20	163	72	20	178	80	A
11	600	71	261	19	169	71	19	180	81	A
12	590	70	263	18	175	70	18	1	263	A
13	580	69	265	16	184	69	15	2	265	A
14	570	68	268	14	201	68	13	5	267	A
15	560	67	270	13	217	68	11	7	269	A
16	550	66	273	13	223	67	10	8	271	A
17	540	66	274	13	227	66	10	8	273	A
18	530	65	275	15	229	66	11	9	274	A
19	520	66	276	16	230	67	11	10	274	A
20	510	67	277	20	232	68	14	12	275	A
21	500	67	279	23	237	69	15	15	276	A
22	490	67	282	26	242	69	16	17	278	A
23	480	67	284	27	245	70	16	19	280	A
24	470	67	284	29	247	71	17	20	279	A
25	460	67	286	31	250	72	17	22	281	A
26	450	68	286	31	252	73	16	22	281	A
27	440	68	286	32	257	74	15	23	281	A
28	430	68	287	33	259	74	15	24	282	A
29	420	67	289	34	262	74	14	25	284	A
30	410	66	290	35	266	74	13	27	285	A
31	400	65	292	38	269	74	13	29	287	A
32	390	64	295	40	272	75	13	31	289	A
33	380	64	297	44	275	77	14	34	290	A
34	370	64	299	46	277	78	15	35	292	A
35	360	63	301	50	279	79	15	38	293	A
36	350	63	303	52	280	80	16	39	294	A
37	340	64	304	55	281	82	17	40	294	A
38	330	65	306	57	281	84	18	41	295	A
39	320	67	306	59	283	87	18	41	296	A
40	310	67	308	61	282	88	20	42	296	A
41	300	68	310	61	282	89	22	41	298	A
42	290	71	311	64	282	93	24	41	298	A
43	280	72	312	66	281	94	26	42	298	A
44	270	73	313	67	281	95	28	42	298	A
45	260	75	313	68	279	97	29	42	298	A
46	250	75	313	71	278	98	31	43	296	A
47	240	74	312	70	276	97	32	43	295	A
48	230	76	311	72	276	99	31	43	294	A
49	220	77	311	71	274	99	33	42	294	A
50	210	77	312	72	275	100	33	43	295	A
51	200	77	313	73	275	100	34	43	295	A
52	190	78	313	73	277	102	33	42	296	A
53	180	78	313	74	276	102	34	43	296	A
54	170	78	314	74	277	102	35	43	297	A
55	160	77	315	75	277	102	35	44	297	A
56	150	78	317	76	276	102	38	44	297	A
57	140	78	320	79	276	103	41	45	298	A
58	130	80	322	79	274	103	46	45	298	A
59	120	82	322	83	273	106	49	45	297	A
60	110	81	324	87	271	106	52	48	295	A

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Harmonic constants for constituent N2 for deployment NWZB1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	700	30	214	16	121	30	16	178	35	A
02	690	32	206	15	120	32	15	2	205	A
03	680	40	203	14	118	40	14	2	202	A
04	670	40	205	15	118	40	15	2	204	A
05	660	41	205	16	119	41	16	2	204	A
06	650	41	206	17	125	41	17	4	205	A
07	640	42	209	17	129	42	16	5	207	A
08	630	43	209	18	131	43	18	6	207	A
09	620	44	210	20	134	44	19	8	206	A
10	610	45	211	21	139	45	19	10	207	A
11	600	44	213	20	146	44	18	12	208	A
12	590	42	215	19	156	43	16	15	210	A
13	580	40	217	17	167	41	13	17	212	A
14	570	37	220	17	177	39	11	20	214	A
15	560	35	221	16	181	38	10	21	215	A
16	550	35	222	15	186	37	8	20	217	A
17	540	34	224	16	187	37	9	23	218	A
18	530	33	222	16	192	36	7	23	217	A
19	520	32	223	16	201	35	5	25	219	A
20	510	30	223	16	212	34	3	27	221	A
21	500	30	226	16	218	34	2	29	224	A
22	490	30	228	19	221	35	2	32	226	A
23	480	30	231	21	221	36	3	34	228	A
24	470	32	232	22	215	39	5	34	227	A
25	460	35	233	25	208	42	9	34	225	A
26	450	40	233	28	203	48	12	34	224	A
27	440	44	234	31	200	52	15	34	223	A
28	430	46	234	33	199	55	16	34	223	A
29	420	47	235	35	199	56	17	34	223	A
30	410	47	235	35	199	56	18	35	223	A
31	400	47	234	36	198	56	17	36	222	A
32	390	45	233	35	200	55	16	36	221	A
33	380	45	231	34	200	54	14	36	220	A
34	370	44	231	33	201	53	13	36	221	A
35	360	43	232	31	203	51	12	35	222	A
36	350	41	231	31	207	50	10	36	223	A
37	340	39	232	31	212	49	9	39	225	A
38	330	37	233	31	215	48	8	40	225	A
39	320	37	234	32	218	48	7	40	227	A
40	310	35	237	32	219	47	7	43	229	A
41	300	33	237	32	221	45	6	43	229	A
42	290	32	236	31	222	44	6	44	229	A
43	280	31	236	31	224	44	5	45	230	A
44	270	32	235	31	224	44	4	44	230	A
45	260	32	235	30	226	44	3	44	230	A
46	250	32	235	30	228	44	3	44	232	A
47	240	31	236	30	228	43	3	44	232	A
48	230	32	235	31	228	44	3	44	232	A
49	220	30	238	31	228	43	4	45	233	A
50	210	31	240	32	231	44	3	46	235	A
51	200	30	240	34	230	46	4	48	234	A
52	190	29	242	35	232	45	4	50	236	A
53	180	31	241	35	233	46	3	48	236	A
54	170	30	241	37	232	48	4	51	236	A
55	160	30	238	34	227	45	4	49	232	A
56	150	30	245	33	223	44	8	48	233	A
57	140	29	244	35	218	44	10	51	228	A
58	130	31	245	37	218	47	11	51	228	A
59	120	32	251	38	219	47	13	51	232	A
60	110	32	259	39	214	47	19	53	231	A

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Harmonic constants for constituent O1 for deployment NWZB1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	700	8	105	8	334	10	5	134	311	A
02	690	9	106	9	322	12	4	135	304	A
03	680	11	103	6	305	12	2	150	289	A
04	670	10	98	6	311	12	3	151	287	A
05	660	10	101	6	311	12	3	149	289	A
06	650	9	96	5	296	10	2	151	281	A
07	640	9	101	4	293	10	1	155	283	A
08	630	8	94	4	274	9	0	156	274	A
09	620	8	94	3	239	8	2	162	270	C
10	610	8	100	3	256	9	1	161	277	C
11	600	8	103	3	254	9	2	159	279	C
12	590	9	110	4	254	9	2	161	286	C
13	580	9	98	3	278	9	0	159	278	C
14	570	9	91	4	285	9	1	155	274	A
15	560	9	80	5	297	10	3	154	267	A
16	550	9	70	5	299	10	3	160	257	A
17	540	10	74	5	299	11	4	156	263	A
18	530	9	82	4	284	10	1	159	265	A
19	520	10	78	2	278	10	1	167	260	A
20	510	10	75	2	330	10	2	176	256	A
21	500	10	73	4	332	10	4	175	255	A
22	490	7	75	3	321	8	3	169	259	A
23	480	7	82	4	296	8	2	156	268	A
24	470	7	79	5	276	9	1	147	264	A
25	460	7	68	6	276	9	2	137	261	A
26	450	8	68	7	273	11	2	141	258	A
27	440	10	73	6	272	12	2	149	258	A
28	430	10	76	6	271	11	1	151	260	A
29	420	8	76	5	266	10	1	147	259	A
30	410	9	69	6	268	10	2	146	255	A
31	400	10	58	7	276	12	4	150	248	A
32	390	11	56	6	281	12	4	158	243	A
33	380	12	56	6	284	12	4	159	243	A
34	370	11	53	6	283	12	5	155	243	A
35	360	10	51	6	283	10	4	155	242	A
36	350	9	49	6	276	10	4	152	240	A
37	340	8	61	5	278	9	3	152	250	A
38	330	9	59	4	273	9	2	157	245	A
39	320	7	61	4	278	8	2	155	248	A
40	310	8	58	4	283	8	2	159	244	A
41	300	7	68	5	277	8	2	150	255	A
42	290	7	72	6	283	8	2	141	264	A
43	280	7	68	6	282	9	3	139	263	A
44	270	7	68	5	277	8	2	143	259	A
45	260	7	67	7	282	9	3	138	263	A
46	250	10	69	6	294	11	4	154	258	A
47	240	13	64	5	300	13	4	167	248	A
48	230	13	74	2	306	14	2	173	255	A
49	220	14	75	3	282	14	1	170	255	A
50	210	14	75	1	200	14	1	176	255	C
51	200	12	71	3	236	13	1	168	250	C
52	190	10	72	3	237	11	1	166	251	C
53	180	10	65	3	170	10	3	176	244	C
54	170	9	63	1	134	9	1	3	64	C
55	160	7	75	3	139	7	3	12	79	C
56	150	5	81	4	164	6	4	15	93	C
57	140	5	74	6	126	7	4	51	105	C
58	130	5	46	7	175	8	3	116	187	C
59	120	5	75	3	169	5	3	175	252	C
60	110	9	69	5	156	9	5	3	71	C

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Harmonic constants for constituent K1 for deployment NWZB1306.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	700	8	325	2	202	8	2	171	147	A
02	690	5	306	4	182	5	3	142	148	A
03	680	4	290	1	131	5	0	165	111	A
04	670	5	294	2	140	5	1	163	117	A
05	660	4	292	3	149	4	1	145	125	A
06	650	3	281	2	146	4	1	153	111	A
07	640	3	273	2	139	4	1	147	107	A
08	630	4	271	3	129	5	2	149	102	A
09	620	5	266	1	133	5	1	167	89	A
10	610	5	268	1	84	5	0	163	88	C
11	600	4	255	1	100	4	0	168	76	A
12	590	4	246	2	108	5	1	158	72	A
13	580	5	252	2	85	5	0	157	74	A
14	570	5	251	3	65	6	0	150	69	C
15	560	4	252	2	58	5	0	153	69	C
16	550	4	269	1	74	4	0	167	88	C
17	540	4	290	1	108	5	0	169	110	C
18	530	4	299	2	76	4	1	149	107	C
19	520	3	270	3	64	5	1	135	77	C
20	510	4	269	4	62	5	1	134	75	C
21	500	4	257	5	60	6	1	131	68	C
22	490	4	259	5	59	6	1	134	69	C
23	480	4	250	5	47	6	1	130	57	C
24	470	4	254	5	58	7	1	129	64	C
25	460	6	242	5	83	8	1	139	71	A
26	450	7	246	5	100	8	2	149	76	A
27	440	7	254	3	94	8	1	155	78	A
28	430	5	253	3	111	6	2	157	80	A
29	420	5	263	2	90	5	0	156	84	A
30	410	4	258	4	93	6	1	137	85	A
31	400	3	239	5	96	5	2	122	85	A
32	390	4	225	4	96	5	2	127	77	A
33	380	3	202	5	96	5	3	103	89	A
34	370	4	205	6	97	6	3	104	90	A
35	360	4	195	8	98	8	4	94	97	A
36	350	4	196	7	97	7	4	97	93	A
37	340	5	193	8	99	8	5	93	97	A
38	330	5	194	7	110	7	5	80	117	A
39	320	5	205	7	120	7	5	84	124	A
40	310	4	208	6	121	6	4	87	123	A
41	300	4	212	6	119	6	4	92	117	A
42	290	4	226	6	118	6	4	117	100	A
43	280	5	223	5	115	6	4	125	88	A
44	270	4	229	8	114	8	4	107	106	A
45	260	4	227	6	123	6	4	105	113	A
46	250	3	216	7	121	7	3	93	119	A
47	240	4	140	8	118	9	1	64	122	A
48	230	7	131	10	124	12	1	56	126	A
49	220	8	132	10	120	13	1	53	124	A
50	210	9	134	12	120	15	2	56	125	A
51	200	8	130	14	130	16	0	60	130	C
52	190	8	139	14	129	16	1	59	132	A
53	180	10	150	13	128	16	3	53	136	A
54	170	11	162	13	132	17	4	52	143	A
55	160	9	155	13	135	16	3	57	141	A
56	150	9	158	12	143	16	2	53	149	A
57	140	8	160	11	152	13	1	52	155	A
58	130	10	175	14	154	17	3	56	161	A
59	120	9	176	13	158	16	2	56	164	A
60	110	7	172	15	149	17	3	67	153	A

HAVSTOVAN
FAROE MARINE RESEARCH INSTITUTE

P.O. Box 3051 · Nóatún 1
FO-110 Tórshavn
Faroe Islands

Tel +298 35 39 00
hav@hav.fo
www.hav.fo