

# THOR ADCP Deployments in Faroeese Waters 2012 - 2013

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# Contents

Introduction.....	3
Quality control and calibration .....	4
Report format .....	4
NWFB1209 .....	7
NWNA1206 .....	19
NWNB1206 .....	27
NWSB1206 .....	35
NWSC1206 .....	45
NWSX1206.....	53
NWSY1206.....	65

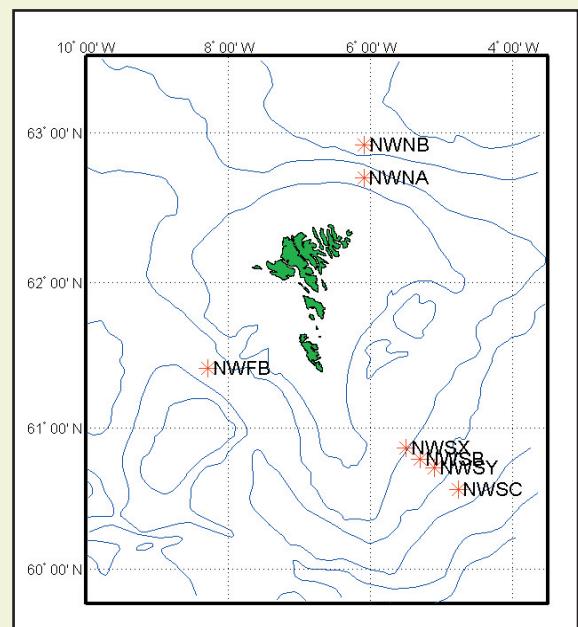
# Introduction

This report documents 7 ADCP deployments in Faroese waters in 2012 – 2013. MicroCats are included in two 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, NWNB, NWSB, NWSC, and NWSY RDI ADCPs were placed in the top of single-point moorings. At sites NWNA, and NWSX “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”.

The MicroCats attached to two of the ADCPs recorded temperature, salinity and pressure every 10 minutes.



*Figure 1. ADCP mooring sites in Faroese waters 2012–2013 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.	Freq.		Pings per ens	Binlngth
		No	ADCP type	kHz	
NWFB1209	13486	Long Ranger	75	11	10
NWNA1206	1279	Broadband	150	1	10
NWNB1206	1577	Broadband	75	1	25
NWSB1206	8552	Long Ranger	75	10	10
NWSC1206	1644	Broadband	75	1	25
NWSX1206	3368	Long Ranger	75	10	10
NWSY1206	1285	Broadband	75	1	25

*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	Int.	Valid data period	Dur.	No		Comments
	depth	min.		days	bins	Depthrange	
NWFB1209	822	20	2012 09 30–2013 05 16	228	60	206– 796	Microcat
NWNA1206	300	20	2012 06 07–2013 05 17	343	24	53– 283	
NWNB1206	961	20	2012 06 08–2013 05 17	343	23	121– 671	
NWSB1206	775	20	2012 06 09–2013 05 19	344	60	58– 648	
NWSC1206	1063	20	2012 06 09–2013 05 19	343	22	84– 609	
NWSX1206	546	20	2012 06 09–2013 05 19	344	48	56– 526	Microcat
NWSY1206	897	20	2012 06 09–2013 05 19	343	23	98– 648	

## 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.

After the automatic routine, two of the series, NWNA and NWSX, still had erroneous data in the upper most layers. These layers were additionally quality controlled by the usual standard procedure, which is done manually using an interactive graphical software package developed by Faroe Marine Research Institute (FAMRI), based upon MATLAB. The editing has been done with a philosophy of minimal interference. Thus, only observations, which were considered clearly erroneous, were flagged.

Generally, the series have been edited up to the level where about 50% of the observations were found to be valid. Bins above this level have not been included.

The velocity direction has been corrected for magnetic deviation, by adding a constant as indicated in the header of the data file.

The instrument depths at sites NWNB, NWSB, NWSC and NWSY are found using the data from the surface echo. The instrument depth at site NWNA is found from the echo sounding depth (corrected for change in sound velocity). The instrument depths at sites NWFB and NWSX are found from the MicroCat pressure measurements.

At site NWFB an RDI Broadband ADCP usually is deployed, but because of an accident when deploying the mooring in June 2012, this Broadband ADCP is not recoverable. Havstovan therefore borrowed an RDI LongRanger ADCP from the University of Hamburg, and this instrument was deployed at NWFB in September 2012. Later it

became clear that when LongRanger instruments are deployed close to the bottom in strong bottom flows (as in the Faroe Bank Channel) an echo problem occurs which is believed to be due to the sidelobes hitting the bottom (Nuno Nunes, pers comm). The LongRanger ADCP data therefore show very low velocities close to the bottom. Here, the data from the NWFB1209 LongRanger are quality controlled by the automatic routine only and presented as a normal data series, but the results must be interpreted with this fault in mind. In another report (Hansen et al, 2014. Faroe Bank Channel overflow 2012 - 2013. Havstovan Nr. 14-01, Technical report) an attempt is made to reconstruct the velocity profile of the overflow plume based on Broadband ADCP data at the same site.

The pressure and temperature data from the MicroCats 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 threshold 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 M<sub>2</sub>, S<sub>2</sub>, N<sub>2</sub>, O<sub>1</sub>, and K<sub>1</sub>. Each table lists for each bin the amplitude and Greenwich phase lag for the east and north velocity components and lists also major and minor semi-axes of the tidal ellipse for the constituent as well as its inclination (Fig. 2) and

sense of rotation (cyclonic = C, anticyclonic = A). The tidal constants were computed by an adapted version of the Foreman FORTRAN package.

The 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 MicroCat data.

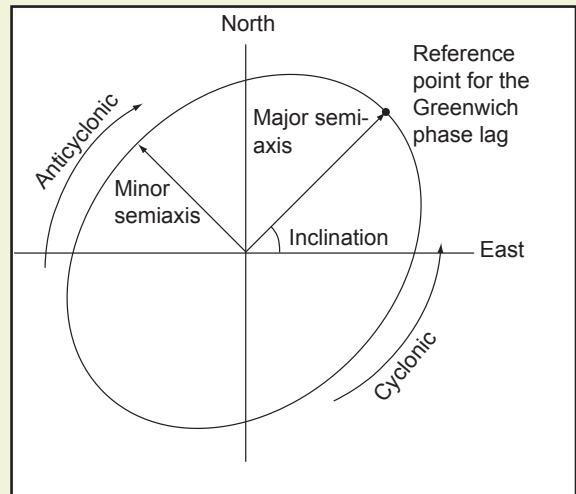


Figure 2. Parameters of the tidal ellipse for a given constituent. The reference point for the Greenwich phase lag is always chosen to be above the east-west axis.



# NWFB1209

**Latitude:** 61°24.870'N

**Longitude:** 008°17.241'W

**Echo sounding depth:** 826 m

**Bottom depth corr.:** 822 m (MicroCat)

**Time of deployment:** 30/9 - 2012 0054 UTC

**Time of recovery:** 16/5 - 2013 1406 UTC

## ADCP:

**Instrument no.:** RDI ADCP 13486

**Instrument frequency:** 75 kHz

**Height above bottom:** 7 m

**Depth:** 815 m (corr.)

**Time of first data:** 30/9 - 2012 0120 UTC

**Time of last data:** 16/5 - 2013 1340 UTC

**Sample interval:** 20 min

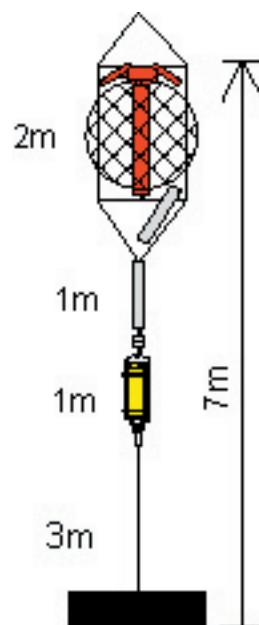
**No. of ensembles:** 16454

**Pings per ens.:** 11

**Binlength:** 10 m

**Depth of first bin:** 796 m (corr.)

**No. of bins:** 60



## MicroCat:

**Instrument no.:** 4049

**Height above bottom:** 5 m

**Time of first data:** 30/9 – 2012 0110 UTC

**Time of last data:** 16/5 – 2013 1400 UTC

**Sample interval:** 10 min

**No. of ensembles:** 32910

**Instrument depth:** 817 m

## Data:

**Bins close to the bottom are affected by ringing, which disturbs the data echo.**

**The lowest 200m (at least) are affected and must be analysed with caution.**

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

## NWFB1209 ADCP 13486

Error statistics for deployment: NWFB1209 updated 2014/05/05

Temperature edited

Depth edited

Surface distance not edited

Heading, pitch and roll not edited

Intensity not edited

Velocity edited using these data filters:

Minimum Mean Correlation: 64

Maximum Speed, number of std dev for each bin: 5

Maximum Error Velocity (erv tr+0.1\*spd): 100

Speed Spikes, u and v deviated from 3 point median by number of std dev: 5

Vertical Speed Spikes, u and v deviated from 3 point median by number of std dev: 5

Bins close to the bottom are affected by ringing, which disturbs the data echo.

The lowest 200m (at least) are affected and must be analysed with caution.

Total number of ensembles: 16454

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.	Number of velocity gaps of length									
			1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	0	124	1	112	0	0	0	1	1	0	0	0
2	0	165	1	159	0	0	0	0	0	0	0	0
3	0	255	2	231	12	0	0	0	0	0	0	0
4	0	283	2	255	11	0	0	0	0	0	0	0
5	0	207	1	1855	2	0	0	0	0	0	0	0
6	0	208	1	1833	12	0	0	0	0	0	0	0
7	0	146	1	134	6	0	0	0	0	0	0	0
8	0	116	1	1000	8	0	0	0	0	0	0	0
9	0	193	1	81	4	0	0	0	0	0	0	0
10	0	87	1	77	3	0	0	0	0	0	0	0
11	0	60	0	51	3	0	0	0	0	0	0	0
12	0	34	0	29	1	0	0	0	0	0	0	0
13	0	35	0	33	2	0	0	0	0	0	0	0
14	0	32	0	28	1	0	0	0	0	0	0	0
15	0	18	0	16	1	0	0	0	0	0	0	0
16	0	25	0	25	0	0	0	0	0	0	0	0
17	0	23	0	23	0	0	0	0	0	0	0	0
18	0	20	0	16	1	0	0	0	0	0	0	0
19	0	24	0	17	1	0	0	0	0	0	0	0
20	0	17	0	19	0	0	0	0	0	0	0	0
21	0	19	0	16	0	0	0	0	0	0	0	0
22	0	18	0	22	0	0	0	0	0	0	0	0
23	0	22	0	27	0	0	0	0	0	0	0	0
24	0	25	0	33	0	0	0	0	0	0	0	0
25	0	33	0	31	0	0	0	0	0	0	0	0
26	0	36	0	34	0	0	0	0	0	0	0	0
27	0	41	0	37	0	0	0	0	0	0	0	0
28	0	37	0	35	0	0	0	0	0	0	0	0
29	0	35	0	33	0	0	0	0	0	0	0	0
30	0	30	0	30	0	0	0	0	0	0	0	0
31	0	47	0	47	0	0	0	0	0	0	0	0
32	0	57	0	45	0	0	0	0	0	0	0	0
33	0	68	0	44	0	0	0	0	0	0	0	0
34	0	75	0	55	0	0	0	0	0	0	0	0
35	0	77	0	55	0	0	0	0	0	0	0	0
36	0	96	1	88	3	0	0	0	0	0	0	0
37	0	129	1	1002	6	0	0	0	0	0	0	0
38	0	114	1	107	10	0	0	0	0	0	0	0
39	0	149	1	118	11	0	0	0	0	0	0	0
40	0	157	1	101	15	0	0	0	0	0	0	0
41	0	153	1	108	4	0	0	0	0	0	0	0
42	0	182	1	123	14	0	0	0	0	0	0	0
43	0	228	1	1138	21	0	0	0	0	0	0	0
44	0	293	2	213	25	0	0	0	0	0	0	0
45	0	391	2	138	10	0	0	0	0	0	0	0
46	0	548	3	159	4	0	0	0	0	0	0	0
47	0	844	5	213	44	0	0	0	0	0	0	0
48	0	1182	7	244	66	0	0	0	0	0	0	0
49	0	1626	10	297	64	0	0	0	0	0	0	0
50	0	2113	13	373	85	0	0	0	0	0	0	0
51	0	2753	17	4359	37	0	0	0	0	0	0	0
52	0	3414	21	4359	37	0	0	0	0	0	0	0
53	0	4240	26	4833	38	0	0	0	0	0	0	0
54	0	4968	30	508	63	0	0	0	0	0	0	0
55	0	5608	34	6284	79	0	0	0	0	0	0	0
56	0	6362	39	5568	94	0	0	0	0	0	0	0
57	0	7052	43	5568	94	0	0	0	0	0	0	0
58	0	7873	48	545	163	0	0	0	0	0	0	0
59	0	8610	52	524	145	83	57	48	112	109	58	40
60	0											23

## NWFB1209 ADCP 13486

Deployment: NWFB1209 updated 2014/05/05

Instrument no.: 13486

Instrument freq.: 75

Latitude: 61 24.870 N

Longitude: 08 17.241 W

Bottom depth: 822

Instrument depth: 815

Center depth of first bin: 796

Bin length: 10

Number of bins: 60

Number of first ensemble: 689

Time of first ensemble: 2012 09 30 01 20

Number of last ensemble: 17142

Time of last ensemble: 2013 05 16 13 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	796	26	121	99	310	992
2	786	36	227	218	313	990
3	776	46	349	343	313	985
4	766	56	461	456	315	983
5	756	66	570	566	316	987
6	746	76	661	658	316	987
7	736	86	722	719	318	991
8	726	96	771	768	318	993
9	716	106	811	808	319	994
10	706	116	849	847	319	995
11	696	126	888	886	319	996
12	686	136	924	921	319	998
13	676	146	949	947	320	998
14	666	156	968	965	320	998
15	656	166	979	976	320	999
16	646	176	979	975	320	998
17	636	186	964	959	321	999
18	626	196	932	926	322	999
19	616	206	887	879	323	999
20	606	216	832	820	324	999
21	596	226	768	750	325	999
22	586	236	702	676	326	999
23	576	246	637	599	327	999
24	566	256	575	524	328	998
25	556	266	517	453	329	998
26	546	276	463	387	330	998
27	536	286	416	326	331	998
28	526	296	375	273	332	998
29	516	306	341	227	332	998
30	506	316	312	186	333	998
31	496	326	289	153	334	998
32	486	336	271	124	335	997
33	476	346	256	101	336	997
34	466	356	244	81	337	996
35	456	366	235	65	341	995
36	446	376	229	52	343	995
37	436	386	225	43	346	994
38	426	396	222	35	351	992
39	416	406	220	28	356	993
40	406	416	217	22	2	991
41	396	426	216	18	10	990
42	386	436	216	15	21	991
43	376	446	215	12	36	989
44	366	456	214	10	54	986
45	356	466	215	11	84	982
46	346	476	216	12	99	976
47	336	486	216	15	109	967
48	326	496	216	18	112	949
49	316	506	217	21	118	928
50	306	516	218	24	120	901
51	296	526	218	27	122	872
52	286	536	220	29	122	833
53	276	546	222	30	124	793
54	266	556	224	31	126	742
55	256	566	226	29	129	698
56	246	576	228	28	132	659
57	236	586	230	27	137	613
58	226	596	232	29	142	571
59	216	606	234	30	148	522
60	206	616	238	35	150	477

## NWFB1209 ADCP 13486

Frequency of high speeds.

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

Bin no.	Depth m	Speed (cm/s)																	
		10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	796	445	162	68	26	6	0	0	0	0	0	0	0	0	0	0	0	0	0
2	786	762	452	269	146	78	35	11	3	1	0	0	0	0	0	0	0	0	0
3	776	911	713	522	352	217	126	67	26	8	2	1	0	0	0	0	0	0	0
4	766	957	848	710	560	403	262	157	87	38	12	3	1	0	0	0	0	0	0
5	756	983	926	838	727	591	444	302	180	93	39	12	3	1	0	0	0	0	0
6	746	987	967	909	831	724	592	446	298	170	76	28	10	1	0	0	0	0	0
7	736	991	984	947	885	797	685	545	391	250	125	46	16	4	0	0	0	0	0
8	726	993	990	972	920	843	750	623	476	323	175	70	23	6	0	0	0	0	0
9	716	994	993	983	943	875	789	685	551	392	230	95	29	8	1	0	0	0	0
10	706	995	994	986	958	905	826	735	616	464	290	134	41	11	1	0	0	0	0
11	696	996	996	991	975	937	874	783	677	534	358	174	54	11	2	0	0	0	0
12	686	998	998	995	988	964	918	838	731	589	416	212	64	13	2	0	0	0	0
13	676	998	998	997	994	982	951	885	775	627	451	233	74	14	2	0	0	0	0
14	666	998	998	998	997	991	969	918	815	656	469	250	81	16	2	0	0	0	0
15	656	999	999	999	999	996	985	945	846	680	480	256	84	17	2	0	0	0	0
16	646	998	998	998	998	996	986	952	850	678	469	254	80	15	2	0	0	0	0
17	636	999	999	998	997	991	976	934	819	644	443	238	76	16	3	0	0	0	0
18	626	999	998	994	987	974	945	882	759	585	401	206	68	13	2	0	0	0	0
19	616	997	992	980	963	936	890	809	681	522	350	174	56	11	1	0	0	0	0
20	606	994	978	954	923	880	817	725	602	458	293	138	42	8	1	0	0	0	0
21	596	988	958	919	866	805	733	637	521	381	230	103	29	6	1	0	0	0	0
22	586	982	936	871	797	726	650	555	439	303	171	67	20	4	1	0	0	0	0
23	576	974	906	816	724	646	566	474	354	231	117	45	14	4	1	0	0	0	0
24	566	965	870	753	654	571	489	385	272	162	82	33	10	3	0	0	0	0	0
25	556	950	828	693	588	496	399	304	203	114	58	21	6	2	0	0	0	0	0
26	546	938	791	641	516	414	319	233	145	79	37	13	5	1	0	0	0	0	0
27	536	927	755	585	442	334	252	170	101	51	23	10	3	0	0	0	0	0	0
28	526	912	720	529	377	268	191	122	67	35	17	6	2	0	0	0	0	0	0
29	516	904	686	475	314	217	143	82	45	26	12	4	0	0	0	0	0	0	0
30	506	893	658	422	263	169	100	55	33	19	7	2	0	0	0	0	0	0	0
31	496	886	633	381	216	126	69	40	25	11	4	1	0	0	0	0	0	0	0
32	486	877	608	343	178	93	49	30	17	7	2	1	0	0	0	0	0	0	0
33	476	874	583	310	146	70	36	21	11	3	1	0	0	0	0	0	0	0	0
34	466	864	564	286	121	53	26	13	5	1	1	0	0	0	0	0	0	0	0
35	456	856	549	265	106	42	18	8	2	1	0	0	0	0	0	0	0	0	0
36	446	850	538	253	97	32	11	3	1	0	0	0	0	0	0	0	0	0	0
37	436	847	533	245	88	25	8	1	0	0	0	0	0	0	0	0	0	0	0
38	426	842	524	237	78	20	5	1	0	0	0	0	0	0	0	0	0	0	0
39	416	839	521	234	74	18	4	0	0	0	0	0	0	0	0	0	0	0	0
40	406	834	512	229	69	16	3	0	0	0	0	0	0	0	0	0	0	0	0
41	396	836	512	220	70	17	3	0	0	0	0	0	0	0	0	0	0	0	0
42	386	837	504	220	65	16	3	0	0	0	0	0	0	0	0	0	0	0	0
43	376	833	508	216	65	16	2	0	0	0	0	0	0	0	0	0	0	0	0
44	366	823	502	213	68	16	2	0	0	0	0	0	0	0	0	0	0	0	0
45	356	823	497	214	70	19	2	0	0	0	0	0	0	0	0	0	0	0	0
46	346	820	495	215	69	19	3	0	0	0	0	0	0	0	0	0	0	0	0
47	336	806	491	220	74	19	3	1	0	0	0	0	0	0	0	0	0	0	0
48	326	790	479	213	73	18	3	0	0	0	0	0	0	0	0	0	0	0	0
49	316	772	467	212	74	20	4	0	0	0	0	0	0	0	0	0	0	0	0
50	306	750	457	208	74	20	4	0	0	0	0	0	0	0	0	0	0	0	0
51	296	724	442	206	73	20	4	1	0	0	0	0	0	0	0	0	0	0	0
52	286	696	426	199	72	22	5	0	0	0	0	0	0	0	0	0	0	0	0
53	276	663	411	194	70	24	5	0	0	0	0	0	0	0	0	0	0	0	0
54	266	624	386	185	70	22	5	1	0	0	0	0	0	0	0	0	0	0	0
55	256	592	369	177	67	21	5	1	0	0	0	0	0	0	0	0	0	0	0
56	246	559	350	174	66	21	5	1	0	0	0	0	0	0	0	0	0	0	0
57	236	525	336	161	61	20	5	1	0	0	0	0	0	0	0	0	0	0	0
58	226	491	313	154	58	20	5	1	0	0	0	0	0	0	0	0	0	0	0
59	216	452	291	144	56	18	4	1	0	0	0	0	0	0	0	0	0	0	0
60	206	414	271	136	52	17	5	1	0	0	0	0	0	0	0	0	0	0	0

## NWFB1209 ADCP 13486

Harmonic constants for constituent M2 for deployment NWFB1209.

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	796	4	275	4	64	6	2	137	80	C
02	786	5	286	5	58	7	3	134	81	C
03	776	6	303	6	50	7	5	132	83	C
04	766	6	316	8	36	8	6	74	24	C
05	756	6	330	7	35	8	5	56	12	C
06	746	8	1	7	26	10	2	40	11	C
07	736	8	20	4	16	10	0	27	19	A
08	726	10	35	5	354	10	3	23	28	A
09	716	12	51	6	328	12	6	5	49	A
10	706	13	63	8	318	13	7	167	250	A
11	696	15	70	10	322	15	9	162	261	A
12	686	16	73	11	324	17	10	161	264	A
13	676	17	81	11	313	19	8	152	274	A
14	666	19	81	13	298	22	7	149	271	A
15	656	20	89	15	290	25	4	144	277	A
16	646	22	101	16	287	27	1	143	283	A
17	636	25	115	17	292	31	1	146	294	C
18	626	29	123	18	296	34	2	148	301	C
19	616	32	134	18	301	36	4	150	311	C
20	606	35	143	17	304	39	5	154	319	C
21	596	35	155	16	302	38	8	159	331	C
22	586	36	171	8	284	36	8	174	350	C
23	576	39	187	7	200	40	1	10	188	C
24	566	43	204	17	167	45	10	19	200	A
25	556	48	217	31	161	52	23	26	204	A
26	546	52	224	43	163	59	33	34	203	A
27	536	57	230	52	163	64	43	39	202	A
28	526	61	235	61	164	70	50	45	199	A
29	516	63	238	68	165	75	55	51	196	A
30	506	65	242	73	167	78	59	58	192	A
31	496	66	246	79	169	83	61	63	190	A
32	486	67	248	85	172	88	63	68	188	A
33	476	67	251	90	173	92	64	72	186	A
34	466	69	254	93	174	95	66	75	185	A
35	456	69	256	96	175	97	67	78	183	A
36	446	70	258	98	175	99	69	81	181	A
37	436	71	260	99	175	99	70	83	181	A
38	426	70	263	99	176	99	70	85	179	A
39	416	70	265	100	177	100	70	87	179	A
40	406	70	266	101	179	101	70	87	181	A
41	396	70	268	102	181	102	70	87	183	A
42	386	70	271	102	181	102	70	89	182	A
43	376	71	271	103	183	103	71	88	184	A
44	366	70	273	103	183	103	70	90	184	A
45	356	70	275	103	184	103	70	91	183	A
46	346	71	277	105	184	105	71	94	181	A
47	336	72	278	104	184	104	72	95	180	A
48	326	71	280	105	184	106	70	97	179	A
49	316	71	281	104	185	105	70	97	180	A
50	306	70	281	106	185	106	69	97	180	A
51	296	71	281	105	185	106	70	97	180	A
52	286	71	283	105	187	105	70	97	183	A
53	276	69	283	105	187	106	69	96	183	A
54	266	69	284	109	190	109	69	94	187	A
55	256	73	283	105	191	105	73	92	189	A
56	246	76	283	108	191	108	76	92	190	A
57	236	75	286	108	191	109	75	96	187	A
58	226	79	286	105	189	106	78	101	181	A
59	216	79	283	109	189	109	79	96	185	A
60	206	83	289	109	186	113	78	110	172	A

## NWFB1209 ADCP 13486

Harmonic constants for constituent S2 for deployment NWFB1209.

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	796	4	183	6	27	7	1	124	20	A
02	786	4	169	5	24	6	2	123	13	A
03	776	3	120	6	28	6	3	91	27	A
04	766	6	106	5	18	6	5	7	100	A
05	756	7	94	4	8	7	4	3	92	A
06	746	9	86	6	352	9	6	176	268	A
07	736	10	99	7	339	11	6	154	292	A
08	726	12	101	9	331	14	6	147	297	A
09	716	11	103	10	337	13	7	140	306	A
10	706	9	105	9	343	11	6	136	313	A
11	696	9	112	9	352	11	6	133	324	A
12	686	9	120	10	3	11	7	132	334	A
13	676	10	122	9	5	12	7	137	331	A
14	666	12	125	9	354	14	6	145	322	A
15	656	13	138	10	352	16	5	143	330	A
16	646	15	152	10	351	18	3	148	338	A
17	636	15	165	10	356	18	2	147	348	A
18	626	16	177	11	352	20	1	146	355	C
19	616	17	189	10	353	19	2	148	4	C
20	606	18	199	8	355	20	3	158	16	C
21	596	22	208	5	18	22	1	168	28	C
22	586	23	214	4	55	23	2	170	35	A
23	576	24	223	4	130	24	4	179	44	A
24	566	23	239	7	181	24	6	10	236	A
25	556	23	251	14	195	25	11	22	241	A
26	546	25	261	22	200	28	17	37	237	A
27	536	27	269	28	202	32	21	48	232	A
28	526	29	275	33	202	36	26	56	228	A
29	516	30	279	36	203	38	28	64	223	A
30	506	31	280	38	203	40	29	67	220	A
31	496	30	282	39	203	40	28	71	217	A
32	486	29	285	38	204	39	28	76	215	A
33	476	28	288	38	206	38	28	78	214	A
34	466	28	290	37	208	37	27	76	218	A
35	456	27	293	36	209	36	26	80	217	A
36	446	26	293	35	210	36	26	78	218	A
37	436	25	294	35	212	35	25	78	221	A
38	426	25	294	36	214	36	25	77	223	A
39	416	25	296	36	214	36	25	79	222	A
40	406	25	297	36	217	36	24	77	226	A
41	396	25	299	36	218	36	25	78	226	A
42	386	25	299	37	219	37	24	79	226	A
43	376	24	301	38	219	39	24	82	224	A
44	366	23	304	38	222	39	23	82	226	A
45	356	23	309	39	222	39	23	87	224	A
46	346	24	313	38	224	38	24	89	225	A
47	336	26	314	39	226	39	26	88	227	A
48	326	26	316	37	226	37	26	90	227	A
49	316	26	320	37	228	37	26	92	227	A
50	306	26	325	34	231	34	26	97	226	A
51	296	26	326	37	235	37	26	92	233	A
52	286	25	326	37	233	37	25	94	230	A
53	276	23	330	37	231	38	22	98	226	A
54	266	22	324	38	234	38	22	90	234	A
55	256	21	325	33	237	33	21	88	238	A
56	246	19	321	36	236	36	19	86	238	A
57	236	20	328	32	237	32	20	91	236	A
58	226	16	325	34	242	34	16	86	243	A
59	216	18	324	37	246	38	17	82	250	A
60	206	18	331	42	252	42	17	84	255	A

## NWFB1209 ADCP 13486

Harmonic constants for constituent N2 for deployment NWFB1209.

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	796	3	152	3	343	4	0	132	338	A
02	786	4	176	5	353	6	0	127	354	C
03	776	4	172	4	346	6	0	135	349	C
04	766	5	175	5	345	7	1	134	350	C
05	756	4	180	5	339	6	1	127	347	C
06	746	4	181	4	344	6	1	132	352	C
07	736	2	154	4	335	4	0	112	335	A
08	726	3	71	4	313	4	2	110	304	A
09	716	4	47	6	293	6	4	120	273	A
10	706	5	34	5	270	7	3	134	243	A
11	696	8	31	6	253	9	3	146	225	A
12	686	8	22	7	254	10	5	141	223	A
13	676	8	34	8	255	10	4	138	233	A
14	666	8	42	7	250	10	3	139	234	A
15	656	8	57	6	236	10	0	141	237	C
16	646	8	75	5	232	9	2	146	248	C
17	636	9	97	4	237	10	3	159	272	C
18	626	12	102	5	275	13	1	159	281	C
19	616	13	101	5	285	14	0	158	282	A
20	606	13	105	4	297	13	1	162	286	A
21	596	13	111	4	332	13	2	167	294	A
22	586	13	112	4	343	14	3	168	295	A
23	576	14	116	5	342	14	3	164	300	A
24	566	13	125	5	348	14	3	164	309	A
25	556	11	139	4	343	12	2	162	322	A
26	546	11	154	2	13	11	1	172	335	A
27	536	10	175	4	122	10	3	14	171	A
28	526	10	203	7	143	11	6	28	187	A
29	516	10	218	10	154	12	7	44	187	A
30	506	10	234	12	161	13	9	61	182	A
31	496	11	243	15	159	15	11	80	167	A
32	486	13	246	17	160	17	12	83	166	A
33	476	13	250	19	159	19	13	92	157	A
34	466	12	247	20	159	20	12	88	160	A
35	456	12	246	22	160	22	12	87	162	A
36	446	12	248	23	160	23	12	89	161	A
37	436	13	243	23	161	23	13	83	165	A
38	426	14	241	23	159	23	13	83	163	A
39	416	14	240	23	159	23	13	82	164	A
40	406	14	239	22	159	22	14	80	166	A
41	396	13	239	22	159	22	13	82	164	A
42	386	13	240	22	160	22	13	81	165	A
43	376	12	242	23	159	23	12	85	162	A
44	366	12	246	23	160	23	12	87	162	A
45	356	11	246	23	161	23	11	87	162	A
46	346	12	254	24	161	24	12	92	160	A
47	336	12	254	24	161	24	12	92	160	A
48	326	11	256	23	158	23	11	95	156	A
49	316	12	255	22	165	22	12	90	165	A
50	306	11	255	23	163	23	11	91	163	A
51	296	11	258	20	161	21	11	95	158	A
52	286	11	266	21	166	22	11	97	162	A
53	276	10	260	22	168	22	10	91	168	A
54	266	11	258	19	166	19	11	92	164	A
55	256	12	241	19	158	19	12	83	162	A
56	246	15	235	18	173	20	12	55	195	A
57	236	14	239	19	169	20	13	65	186	A
58	226	16	252	17	155	18	15	121	128	A
59	216	20	248	22	169	24	19	59	195	A
60	206	17	259	19	180	20	16	57	208	A

## NWFB1209 ADCP 13486

Harmonic constants for constituent O1 for deployment NWFB1209.

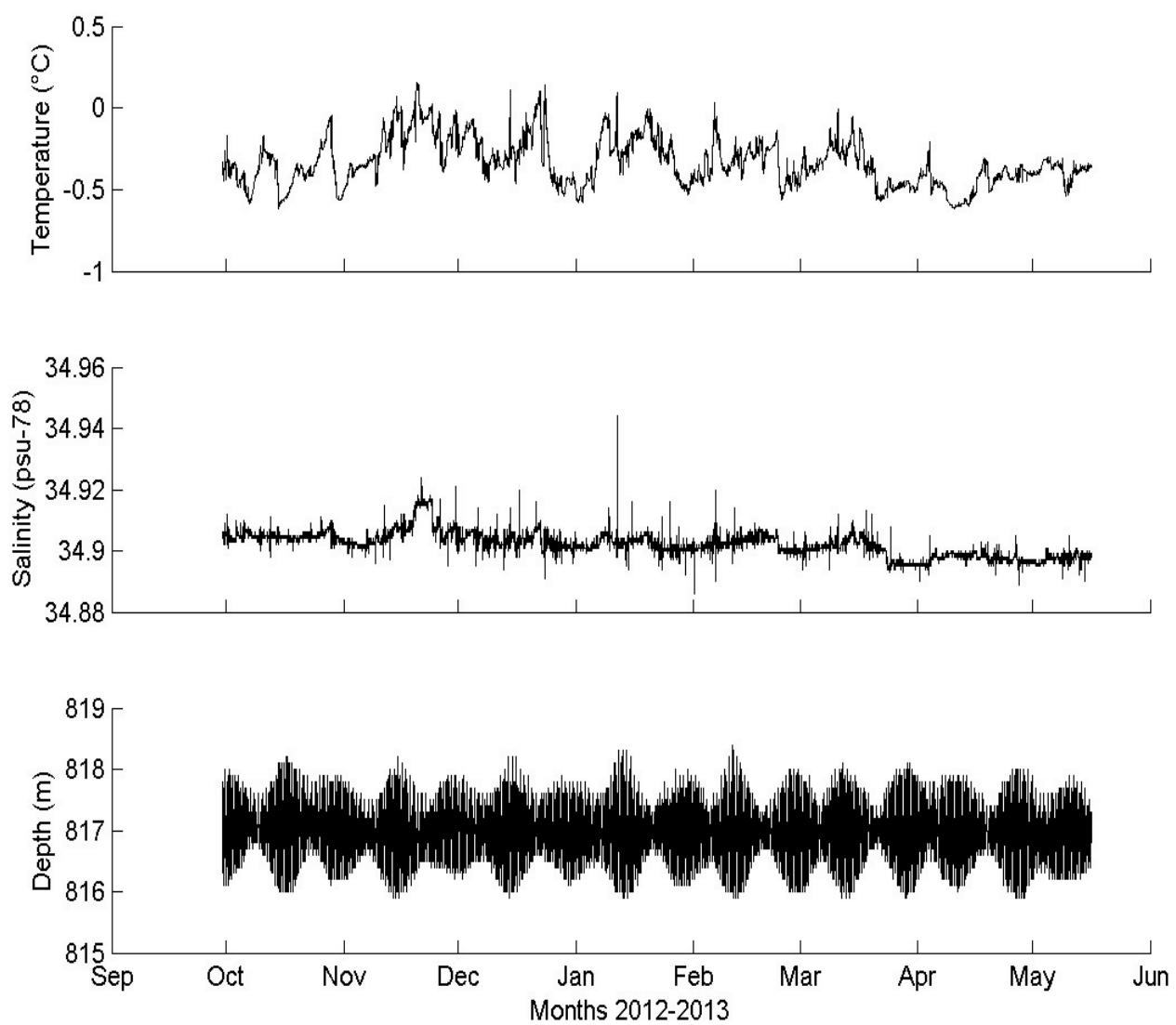
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	796	2	42	2	249	3	1	127	239	A
02	786	1	77	4	293	4	0	100	292	A
03	776	1	175	3	313	3	1	112	319	C
04	766	1	144	2	295	2	0	108	298	C
05	756	1	23	1	239	2	1	133	222	A
06	746	6	13	3	186	7	0	153	192	C
07	736	8	4	5	169	9	1	146	179	C
08	726	9	353	7	164	11	1	143	170	C
09	716	9	346	9	154	12	1	136	160	C
10	706	10	346	10	153	14	2	135	159	C
11	696	12	343	13	148	17	2	133	155	C
12	686	14	338	14	141	20	3	134	149	C
13	676	15	333	15	137	21	3	134	145	C
14	666	15	328	16	140	22	2	134	144	C
15	656	18	332	18	147	25	1	136	150	C
16	646	19	335	18	148	26	2	137	151	C
17	636	23	335	20	155	30	0	138	155	C
18	626	28	337	24	156	37	0	139	156	C
19	616	34	341	29	155	44	2	140	158	C
20	606	37	345	32	157	49	3	140	162	C
21	596	39	349	33	159	51	4	139	165	C
22	586	38	352	36	164	52	4	137	168	C
23	576	34	356	36	163	49	6	133	169	C
24	566	31	359	35	160	46	8	132	169	C
25	556	29	2	33	162	43	7	131	170	C
26	546	24	2	31	162	39	6	127	169	C
27	536	20	0	29	164	35	5	124	169	C
28	526	16	1	28	167	32	3	120	171	C
29	516	15	2	25	170	29	3	121	173	C
30	506	15	5	23	170	28	3	123	174	C
31	496	16	12	21	173	25	4	127	180	C
32	486	14	20	19	178	24	4	126	186	C
33	476	14	18	18	179	23	4	126	186	C
34	466	13	20	18	181	22	3	126	188	C
35	456	13	19	17	182	21	3	127	188	C
36	446	13	26	16	188	20	3	129	195	C
37	436	12	30	14	196	19	2	130	202	C
38	426	12	34	13	202	18	2	134	208	C
39	416	12	33	13	209	18	1	134	211	C
40	406	13	31	12	214	18	0	137	212	A
41	396	13	33	12	211	18	0	138	212	C
42	386	13	34	12	203	17	2	137	209	C
43	376	12	30	12	202	17	1	135	206	C
44	366	12	30	11	206	17	1	138	208	C
45	356	12	31	12	203	18	1	135	207	C
46	346	12	32	13	202	18	2	132	206	C
47	336	13	33	14	203	19	2	132	208	C
48	326	11	41	14	205	18	3	128	211	C
49	316	12	43	16	192	19	5	125	202	C
50	306	10	51	15	187	17	6	122	200	C
51	296	10	49	17	180	18	7	116	191	C
52	286	9	42	17	176	18	6	113	184	C
53	276	6	43	18	172	18	5	104	176	C
54	266	4	50	15	168	16	4	98	170	C
55	256	4	37	15	155	15	3	97	157	C
56	246	11	29	15	139	16	10	114	155	C
57	236	10	17	17	127	18	9	106	136	C
58	226	13	28	12	155	16	8	139	185	C
59	216	10	358	14	142	17	5	124	154	C
60	206	6	360	11	114	11	5	107	123	C

## NWFB1209 ADCP 13486

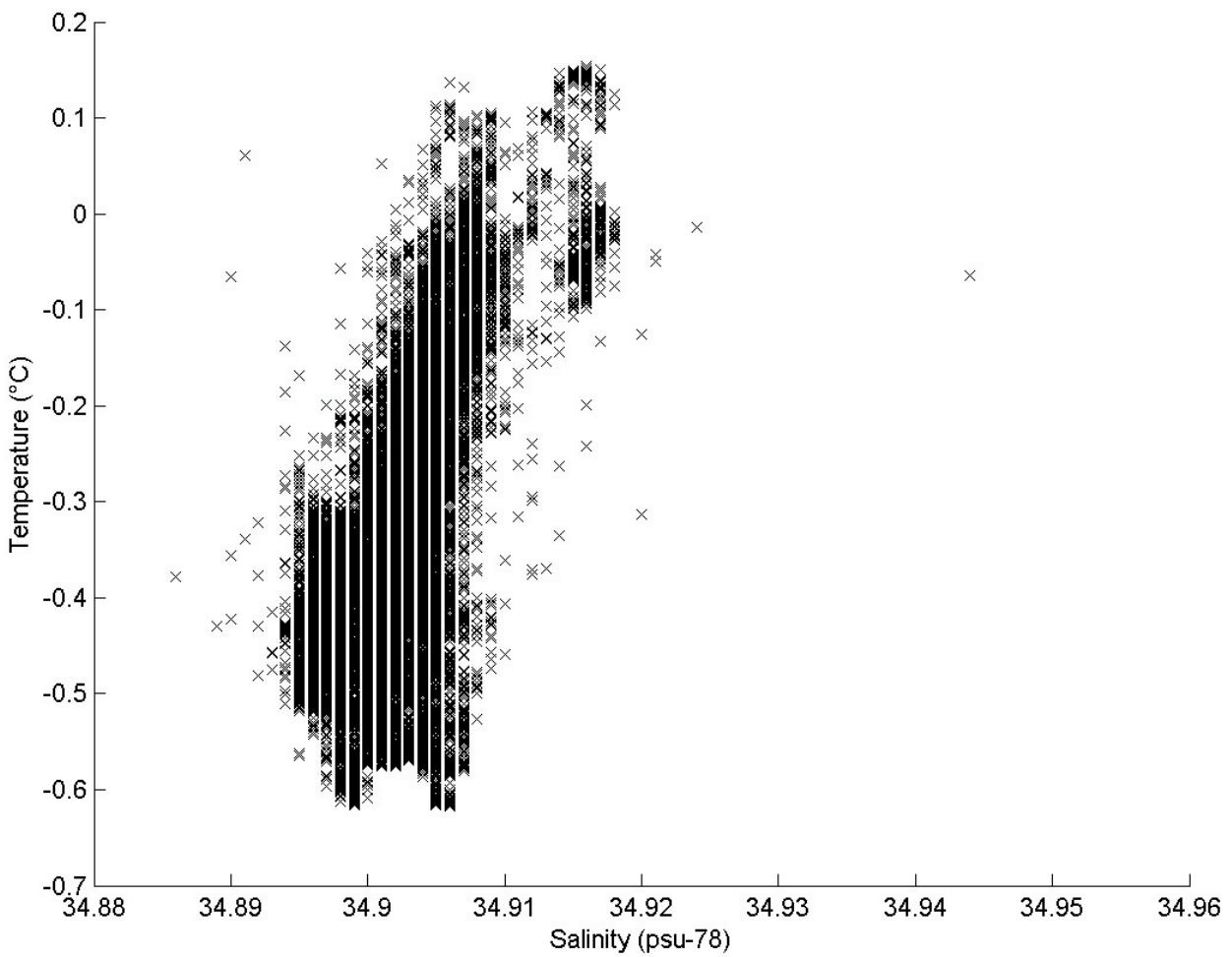
Harmonic constants for constituent K1 for deployment NWFB1209.

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	796	8	4	6	187	10	0	143	185	A
02	786	8	359	8	189	11	1	137	184	A
03	776	7	340	6	164	9	0	140	162	A
04	766	5	310	3	128	6	0	147	130	C
05	756	6	265	6	88	8	0	135	86	A
06	746	7	244	7	71	10	1	136	68	A
07	736	8	227	7	64	11	2	138	55	A
08	726	8	218	9	57	12	2	132	49	A
09	716	9	217	8	59	12	2	139	47	A
10	706	9	213	9	54	13	2	136	43	A
11	696	11	210	9	48	14	2	141	38	A
12	686	12	212	10	42	15	1	140	36	A
13	676	12	217	10	41	16	1	139	39	A
14	666	13	225	10	40	17	1	143	43	C
15	656	16	228	12	46	20	0	143	47	C
16	646	21	232	17	55	27	1	141	53	A
17	636	26	234	22	59	34	2	140	56	A
18	626	31	237	26	57	41	0	140	57	A
19	616	36	241	31	60	48	1	139	61	C
20	606	38	243	37	64	54	1	136	64	A
21	596	38	244	40	65	55	1	133	64	A
22	586	35	244	41	67	54	1	131	66	A
23	576	32	247	41	68	52	0	128	68	A
24	566	27	251	39	70	47	0	125	70	C
25	556	24	253	37	73	44	0	123	73	A
26	546	21	254	34	75	40	0	122	75	A
27	536	20	249	33	80	38	3	122	77	A
28	526	20	245	32	80	37	4	122	76	A
29	516	19	244	32	81	36	5	120	77	A
30	506	18	247	33	84	37	5	119	80	A
31	496	18	253	32	86	37	4	119	83	A
32	486	16	257	31	87	35	2	117	85	A
33	476	12	260	28	90	31	2	113	88	A
34	466	10	269	25	90	27	0	112	90	A
35	456	8	273	22	91	24	0	111	91	C
36	446	6	270	20	87	21	0	107	88	C
37	436	5	291	19	91	19	2	104	92	C
38	426	4	282	18	93	18	1	103	93	C
39	416	3	286	17	91	17	1	101	91	C
40	406	4	279	17	90	17	1	103	90	C
41	396	3	275	17	89	17	0	100	89	C
42	386	3	268	19	88	19	0	99	88	A
43	376	3	268	20	88	20	0	99	88	C
44	366	3	262	21	86	21	0	99	86	A
45	356	3	269	22	85	22	0	97	85	C
46	346	3	252	22	88	22	1	97	87	A
47	336	4	239	22	86	22	2	99	86	A
48	326	6	247	21	85	21	2	106	84	A
49	316	8	254	18	85	20	1	114	83	A
50	306	10	261	20	81	22	0	117	81	A
51	296	15	268	18	85	23	1	129	87	C
52	286	18	269	19	91	26	1	133	90	A
53	276	18	279	20	93	27	1	132	96	C
54	266	20	281	24	97	32	1	130	99	C
55	256	17	283	24	98	29	1	126	99	C
56	246	15	285	25	90	29	3	120	94	C
57	236	11	298	27	81	28	6	109	85	C
58	226	10	321	23	88	24	7	105	92	C
59	216	8	357	30	85	30	8	89	85	C
60	206	11	340	26	86	26	11	98	89	C

**NWFB1209 MicroCat 4049**



## NWFB1209 MicroCat 4049





## NWNA1206

**Latitude:** 62°42.200'N

**Longitude:** 006°04.900'W

**Echo sound depth:** 301 m

**Bottom depth corr.:** 300 m (sound velocity)

**Time of deployment:** 7/6 - 2012 2317 UTC

**Time of recovery:** 17/5 - 2013 1704 UTC

### ADCP:

**Instrument no.:** RDI ADCP 1279

**Instrument frequency:** 150 kHz

**Height above bottom:** 1 m

**Depth:** 299 m (corr.)

**Time of first data:** 7/6 – 2012 2320 UTC

**Time of last data:** 17/5 – 2013 1640 UTC

**Sample interval:** 20 min

**No. of ensembles:** 24749

**Pings per ens.:** 1

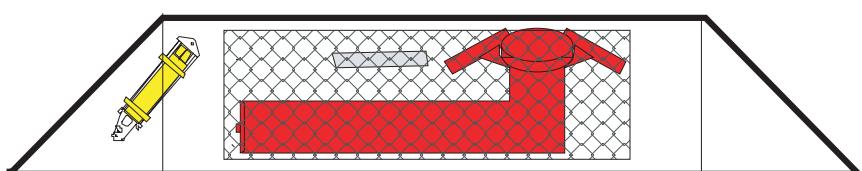
**Binlength:** 10 m

**Depth of first bin:** 283 m (corr.)

**No. of bins:** 24

### Data:

All data ok.



## NWNA1206 ADCP 1279

Error statistics for deployment: NWNA1206 updated 2014/02/12

Temperature edited

Surface distance not edited

Heading, pitch and roll not edited

Intensity not edited

Velocity edited using these data filters (ADCPproc.m):

Minimum Intensity: 42

Minimum Mean Correlation: 50

Maximum Speed, number of std dev for each bin: 4

Maximum Vertical Velocity: 150

Maximum Error Velocity (erv\_tr+0.1\*spd): 100

Speed Spikes, u and v deviated from 3 point median by number of std dev: 2

Velocity edited up to and including bin 24 by KMHL in Feb 2014

Total number of ensembles: 24749

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, -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.	Velocity	Number of velocity gaps of length												
			ens.	ens.	%	1	2	3	4	5	6-10	11-20	21-30	31-50	>50
flgd.	flgd.	flgd.													
1	0	1763	7	1	1326	157	25	8	2	1	0	0	0	0	0
2	0	1822	7	1	1326	169	44	4	2	0	0	0	0	0	0
3	0	1773	7	1	1263	175	39	7	3	0	0	0	0	0	0
4	0	1695	7	1	1195	165	38	9	4	0	0	0	0	0	0
5	0	1485	6	1	1097	139	27	6	1	0	0	0	0	0	0
6	0	1334	5	1	971	132	27	2	2	0	0	0	0	0	0
7	0	1181	5	1	887	106	18	3	2	1	0	0	0	0	0
8	0	1072	4	1	837	83	13	5	2	0	0	0	0	0	0
9	0	958	4	1	759	68	15	2	2	0	0	0	0	0	0
10	0	928	4	1	696	73	15	5	3	1	0	0	0	0	0
11	0	906	4	1	689	57	16	8	1	1	1	0	0	0	0
12	0	929	4	1	639	74	14	7	4	7	0	0	0	0	0
13	0	1076	4	1	665	88	28	14	5	5	1	1	0	0	0
14	0	1363	6	1	674	109	33	23	11	18	4	2	0	0	0
15	0	1755	7	1	698	128	48	30	12	28	13	3	0	0	0
16	0	2328	9	1	664	137	52	37	23	48	20	6	2	1	
17	0	2980	12	1	651	135	63	37	17	56	40	14	5	1	
18	0	3739	15	1	682	125	59	33	13	50	50	27	13	2	
19	0	4714	19	1	640	126	55	21	17	44	47	31	26	8	
20	0	5935	24	1	729	144	44	23	11	47	49	31	34	16	
21	0	7128	29	1	808	161	55	40	14	40	49	33	37	20	
22	0	8578	35	1	879	194	78	38	24	33	45	35	34	27	
23	0	10861	44	1	805	189	58	33	18	27	26	38	27	34	
24	0	12250	49	1	906	267	103	33	16	26	25	35	29	37	

## NWNA1206 ADCP 1279

Deployment: NWNA1206 updated 2014/02/12  
Instrument no.: 1279  
Instrument freq.: 150  
Latitude: 62 42.200 N  
Longitude: 06 04.900 W  
Bottom depth: 300  
Instrument depth: 299  
Center depth of first bin: 283  
Bin length: 10  
Number of bins: 24  
Number of first ensemble: 245  
Time of first ensemble: 2012 06 07 23 20  
Number of last ensemble: 24993  
Time of last ensemble: 2013 05 17 16 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	204	131	104	929
2	273	27	220	137	108	926
3	263	37	229	137	110	928
4	253	47	235	137	112	932
5	243	57	240	140	113	940
6	233	67	242	144	114	946
7	223	77	244	148	115	952
8	213	87	246	154	115	957
9	203	97	246	159	115	961
10	193	107	246	162	115	963
11	183	117	246	165	115	963
12	173	127	246	168	115	962
13	163	137	247	170	115	957
14	153	147	247	173	115	945
15	143	157	248	174	115	929
16	133	167	250	176	114	906
17	123	177	251	178	114	880
18	113	187	253	179	114	849
19	103	197	257	182	114	810
20	93	207	260	183	114	760
21	83	217	264	185	114	712
22	73	227	269	189	114	653
23	63	237	274	195	114	561
24	53	247	279	198	113	505

## NWNA1206 ADCP 1279

Frequency of high speeds.

=====

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

Bin Depth  no.	m	Speed (cm/s)																	
		10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	283	736	421	187	64	18	4	1	0	0	0	0	0	0	0	0	0	0	0
2	273	758	460	227	91	30	8	2	0	0	0	0	0	0	0	0	0	0	0
3	263	771	484	250	106	40	11	3	1	0	0	0	0	0	0	0	0	0	0
4	253	784	502	263	118	45	14	4	1	0	0	0	0	0	0	0	0	0	0
5	243	798	518	277	124	49	16	5	2	0	0	0	0	0	0	0	0	0	0
6	233	807	521	281	132	54	18	6	2	0	0	0	0	0	0	0	0	0	0
7	223	813	525	285	136	57	21	7	3	1	0	0	0	0	0	0	0	0	0
8	213	817	532	294	141	60	22	8	3	1	0	0	0	0	0	0	0	0	0
9	203	819	535	296	143	60	22	8	3	1	0	0	0	0	0	0	0	0	0
10	193	818	534	296	144	62	22	8	3	1	0	0	0	0	0	0	0	0	0
11	183	820	532	298	146	62	22	9	3	1	0	0	0	0	0	0	0	0	0
12	173	817	534	300	145	61	22	8	3	1	0	0	0	0	0	0	0	0	0
13	163	814	533	298	147	63	24	8	3	1	0	0	0	0	0	0	0	0	0
14	153	803	529	296	147	63	22	8	3	1	0	0	0	0	0	0	0	0	0
15	143	789	521	290	145	64	21	8	3	1	0	0	0	0	0	0	0	0	0
16	133	771	511	288	145	62	21	8	3	1	0	0	0	0	0	0	0	0	0
17	123	750	499	285	141	61	21	9	4	1	0	0	0	0	0	0	0	0	0
18	113	727	491	281	138	60	22	8	4	1	0	0	0	0	0	0	0	0	0
19	103	695	475	274	138	61	22	8	4	1	0	0	0	0	0	0	0	0	0
20	93	658	454	261	132	59	22	8	4	1	0	0	0	0	0	0	0	0	0
21	83	620	431	253	129	58	21	8	4	1	0	0	0	0	0	0	0	0	0
22	73	571	400	240	126	58	22	9	4	1	0	0	0	0	0	0	0	0	0
23	63	494	351	214	112	53	21	9	3	1	0	0	0	0	0	0	0	0	0
24	53	444	322	198	106	51	21	9	3	1	0	0	0	0	0	0	0	0	0

## NWNA1206 ADCP 1279

Harmonic constants for constituent M2 for deployment NWNA1206.

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
<hr/>										
01	283	126	291	94	170	140	73	150	128	A
02	273	141	291	111	171	158	85	147	130	A
03	263	151	291	123	172	170	97	147	131	A
04	253	159	292	130	175	177	104	147	133	A
05	243	165	292	135	178	182	111	148	133	A
06	233	168	294	136	180	184	114	149	135	A
07	223	169	296	135	183	184	114	150	136	A
08	213	168	298	134	185	183	114	150	137	A
09	203	168	299	131	187	181	113	152	137	A
10	193	168	301	127	189	179	111	154	138	A
11	183	167	302	124	190	177	109	154	138	A
12	173	166	304	122	192	176	107	155	139	A
13	163	165	305	118	194	174	105	157	139	A
14	153	165	307	116	196	173	103	158	141	A
15	143	164	308	113	197	172	101	159	141	A
16	133	164	309	111	199	171	99	159	142	A
17	123	161	311	108	200	168	97	159	143	A
18	113	162	312	106	202	168	95	161	144	A
19	103	160	314	104	204	166	94	161	145	A
20	93	160	316	100	205	165	91	162	146	A
21	83	161	317	98	207	166	89	163	146	A
22	73	159	318	94	208	164	86	164	147	A
23	63	161	320	93	211	165	86	165	148	A
24	53	160	320	92	213	163	86	166	148	A

Harmonic constants for constituent S2 for deployment NWNA1206.

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
<hr/>										
01	283	42	327	35	213	47	29	146	170	A
02	273	45	324	40	218	48	36	148	169	A
03	263	43	319	42	222	45	40	143	173	A
04	253	45	324	46	224	50	41	130	189	A
05	243	50	330	49	225	56	42	138	185	A
06	233	55	334	51	224	62	43	142	183	A
07	223	59	337	51	224	66	43	146	181	A
08	213	62	340	51	225	68	42	147	182	A
09	203	64	341	50	226	70	41	151	179	A
10	193	65	342	49	227	70	41	152	179	A
11	183	66	343	48	227	71	40	154	178	A
12	173	66	344	46	228	71	39	155	178	A
13	163	66	345	45	228	71	37	156	178	A
14	153	65	346	43	230	69	36	157	179	A
15	143	64	348	41	232	68	35	158	180	A
16	133	64	350	40	232	68	34	158	181	A
17	123	63	351	38	233	66	32	159	181	A
18	113	63	353	37	235	66	31	159	184	A
19	103	61	355	35	235	65	29	160	184	A
20	93	63	356	35	237	66	29	161	185	A
21	83	61	359	33	238	64	27	161	187	A
22	73	61	1	33	238	64	26	160	189	A
23	63	57	6	30	246	59	25	163	193	A
24	53	57	7	29	246	59	24	162	194	A

## NWNA1206 ADCP 1279

Harmonic constants for constituent N2 for deployment NWNA1206.

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	28	274	21	151	31	15	150	110	A
02	273	31	273	24	151	35	18	149	110	A
03	263	33	274	27	152	37	20	146	113	A
04	253	34	271	27	150	39	21	147	110	A
05	243	33	272	27	150	38	20	147	111	A
06	233	32	271	26	149	37	20	146	111	A
07	223	34	272	27	148	38	20	146	111	A
08	213	34	271	26	147	38	19	147	110	A
09	203	34	274	26	152	38	20	148	112	A
10	193	34	277	25	154	38	19	149	114	A
11	183	34	280	25	156	38	19	150	116	A
12	173	34	283	24	159	38	18	152	117	A
13	163	34	287	23	162	38	17	152	120	A
14	153	33	289	23	163	37	17	151	123	A
15	143	33	291	22	164	36	16	152	124	A
16	133	33	293	23	166	37	17	151	128	A
17	123	32	297	21	167	36	15	152	129	A
18	113	31	298	20	171	34	14	154	130	A
19	103	31	300	19	168	34	13	154	130	A
20	93	30	308	15	170	32	9	157	135	A
21	83	30	306	14	174	32	10	160	133	A
22	73	30	309	14	168	32	8	157	135	A
23	63	31	308	16	171	34	10	158	135	A
24	53	32	312	18	179	34	12	156	141	A

Harmonic constants for constituent O1 for deployment NWNA1206.

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	26	32	14	286	26	13	169	217	A
02	273	28	30	15	282	29	14	167	216	A
03	263	27	30	17	278	28	15	161	220	A
04	253	28	30	17	279	29	15	163	219	A
05	243	29	27	14	278	30	13	168	213	A
06	233	27	26	14	277	28	13	168	212	A
07	223	28	25	15	273	29	14	165	212	A
08	213	28	27	15	277	29	14	166	213	A
09	203	29	26	16	276	30	15	166	213	A
10	193	30	29	16	279	30	14	167	215	A
11	183	29	31	17	278	30	15	163	220	A
12	173	30	30	18	280	31	16	164	219	A
13	163	30	33	18	283	31	17	163	222	A
14	153	28	36	18	286	29	17	162	226	A
15	143	28	36	18	286	29	16	162	226	A
16	133	28	36	18	286	30	16	162	227	A
17	123	28	32	17	285	29	16	164	221	A
18	113	28	34	18	283	29	17	160	225	A
19	103	27	32	18	280	28	16	158	225	A
20	93	27	36	18	271	29	14	152	231	A
21	83	25	41	19	276	28	14	148	238	A
22	73	25	46	18	274	29	12	148	241	A
23	63	22	51	19	280	27	12	142	250	A
24	53	21	43	19	277	25	13	141	245	A

## NWNA1206 ADCP 1279

Harmonic constants for constituent K1 for deployment NWNA1206.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	283	30	278	19	185	30	19	176	100	A
02	273	33	293	23	183	35	21	159	126	A
03	263	42	299	26	171	46	19	155	130	A
04	253	45	295	25	159	49	16	155	124	A
05	243	42	289	22	156	45	15	157	117	A
06	233	37	282	20	154	39	15	158	111	A
07	223	35	276	19	154	37	15	161	104	A
08	213	32	272	19	154	34	16	160	102	A
09	203	31	271	20	154	33	17	158	103	A
10	193	31	269	21	155	33	18	157	102	A
11	183	32	267	20	155	33	18	161	97	A
12	173	32	264	20	157	33	19	164	94	A
13	163	34	263	22	153	35	20	162	93	A
14	153	35	263	22	152	37	20	162	94	A
15	143	37	266	23	149	39	20	158	97	A
16	133	38	264	24	147	40	20	158	96	A
17	123	40	264	23	146	42	19	161	93	A
18	113	43	263	24	141	45	19	160	91	A
19	103	44	257	23	138	46	20	162	85	A
20	93	46	254	22	136	48	19	165	80	A
21	83	47	252	20	129	49	17	165	77	A
22	73	47	247	19	116	49	14	164	72	A
23	63	45	242	16	109	47	12	166	65	A
24	53	41	239	14	115	42	12	168	63	A



# NWNB1206

**Latitude:** 62°55.200'N

**Longitude:** 006°04.800'W

**Echo sounding depth:** 984 m

**Bottom depth corr.:** 961 m (surface echo)

**Time of deployment:** 8/6 - 2012 0143 UTC

**Time of recovery:** 17/5 - 2013 1505 UTC

## ADCP:

**Instrument no.:** RDI ADCP 1577

**Instrument frequency:** 75 kHz

**Height above bottom:** 254 m

**Depth:** 707 m (corr.)

**Time of first data:** 8/6 - 2012 0240 UTC

**Time of last data:** 17/5 - 2013 1440 UTC

**Sample interval:** 20 min

**No. of ensembles:** 24733

**Pings per ens.:** 1

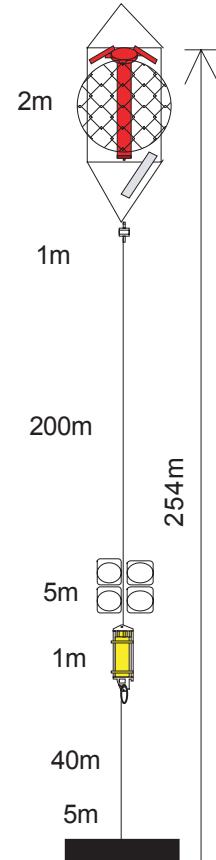
**Binlength:** 25 m

**Depth of first bin:** 671 m (corr.)

**No. of bins:** 23

## Data:

All data ok.



## NWNB1206 ADCP 1577

Error statistics for deployment: NWNB1206 updated 2014/01/23

Depth edited

Surface distance not edited

Heading, pitch and roll not edited

Intensity not edited

Velocity edited using these data filters:

Minimum Intensity: 40

Minimum Mean Correlation: 64

Maximum Speed, number of std dev for each bin: 6

Maximum Vertical Velocity: 120

Maximum Error Velocity (erv\_tr+0.1\*spd): 100

Speed Spikes, u and v deviated from 3 point median by number of std dev: 3

Total number of ensembles: 24733

Interval between ensembles: 20 min

Original number of bins: 32

Number of acceptable velocity bins: 23

Number of acceptable intensity bins: 0

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.	Velocity	Number of velocity gaps of length												
			ens.	ens.	%	1	2	3	4	5	6-10	11-20	21-30	31-50	>50
flgd.	flgd.	flgd.													
1	0	259	1	205	21	4	0	0	0	0	0	0	0	0	0
2	0	247	1	201	20	2	0	0	0	0	0	0	0	0	0
3	0	278	1	214	29	2	0	0	0	0	0	0	0	0	0
4	0	250	1	176	24	3	1	0	2	0	0	0	0	0	0
5	0	318	1	207	41	5	2	0	1	0	0	0	0	0	0
6	0	339	1	210	35	11	2	2	1	0	0	0	0	0	0
7	0	337	1	221	39	6	3	0	1	0	0	0	0	0	0
8	0	311	1	197	50	3	1	0	0	0	0	0	0	0	0
9	0	338	1	193	55	5	3	0	1	0	0	0	0	0	0
10	0	357	1	243	38	7	1	1	1	0	0	0	0	0	0
11	0	391	2	238	51	10	1	1	2	0	0	0	0	0	0
12	0	405	2	239	60	8	1	1	2	0	0	0	0	0	0
13	0	464	2	277	69	8	2	1	2	0	0	0	0	0	0
14	0	448	2	274	55	15	2	1	1	0	0	0	0	0	0
15	0	531	2	333	66	15	4	1	0	0	0	0	0	0	0
16	0	807	3	424	90	20	15	4	9	0	0	0	0	0	0
17	0	1606	6	381	81	29	8	8	16	23	16	1	0	0	0
18	0	2670	11	361	97	40	25	15	33	22	14	24	0	0	0
19	0	3561	14	354	106	48	31	19	50	42	10	35	0	0	0
20	0	4803	19	429	119	65	29	22	65	51	12	40	8	0	0
21	0	6707	27	471	147	72	40	40	69	40	51	42	19	0	0
22	0	9212	37	463	167	90	70	32	84	69	55	55	36	0	0
23	0	11841	48	476	172	78	62	35	78	84	66	68	56	0	0

## NWNB1206 ADCP 1577

Deployment: NWNB1206 updated 2014/01/23  
Instrument no.: 1577  
Instrument freq.: 75  
Latitude: 62 55.200 N  
Longitude: 06 04.800 W  
Bottom depth: 961  
Instrument depth: 707  
Center depth of first bin: 671  
Bin length: 25  
Number of bins: 23  
Number of first ensemble: 255  
Time of first ensemble: 2012 06 08 02 40  
Number of last ensemble: 24987  
Time of last ensemble: 2013 05 17 14 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	671	290	123	24	98	990
2	646	315	122	19	96	990
3	621	340	122	14	92	989
4	596	365	122	10	88	990
5	571	390	122	7	88	987
6	546	415	124	4	99	986
7	521	440	126	3	107	986
8	496	465	130	4	119	987
9	471	490	134	8	126	986
10	446	515	140	16	125	986
11	421	540	148	26	122	984
12	396	565	159	42	121	984
13	371	590	172	59	118	981
14	346	615	185	77	118	982
15	321	640	202	98	118	979
16	296	665	222	117	118	967
17	271	690	244	138	119	935
18	246	715	267	163	120	892
19	221	740	289	189	119	856
20	196	765	308	209	119	806
21	171	790	324	222	119	729
22	146	815	336	230	120	628
23	121	840	347	236	123	521

## NWNB1206 ADCP 1577

Frequency of high speeds.

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

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Bin	Depth	Speed (cm/s)																		
		no.	m	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170
1	671	519	154	40	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	646	522	154	38	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	621	522	151	34	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	596	528	148	33	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	571	535	148	31	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	546	553	148	30	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	521	571	152	26	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	496	596	166	26	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	471	614	185	30	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	446	644	208	34	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	421	682	240	41	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	396	709	287	66	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	371	743	335	96	21	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	346	776	386	133	31	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0
15	321	806	452	174	50	12	2	0	0	0	0	0	0	0	0	0	0	0	0	0
16	296	826	513	228	75	20	3	0	0	0	0	0	0	0	0	0	0	0	0	0
17	271	826	558	286	110	31	6	0	0	0	0	0	0	0	0	0	0	0	0	0
18	246	805	586	334	150	53	13	2	0	0	0	0	0	0	0	0	0	0	0	0
19	221	784	600	372	188	80	24	6	1	0	0	0	0	0	0	0	0	0	0	0
20	196	748	587	385	212	101	38	11	3	0	0	0	0	0	0	0	0	0	0	0
21	171	680	545	373	219	112	48	16	4	1	0	0	0	0	0	0	0	0	0	0
22	146	585	473	335	209	116	55	21	5	1	0	0	0	0	0	0	0	0	0	0
23	121	485	394	285	187	108	55	23	8	3	1	0	0	0	0	0	0	0	0	0

## NWNB1206 ADCP 1577

Harmonic constants for constituent M2 for deployment NWNB1206.

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	671	70	269	38	126	77	21	155	97	A
02	646	72	270	38	130	79	22	156	97	A
03	621	74	271	38	134	79	24	157	99	A
04	596	76	273	37	139	81	25	159	100	A
05	571	79	275	37	146	83	27	161	101	A
06	546	82	277	38	154	85	31	164	103	A
07	521	87	278	39	161	89	34	166	104	A
08	496	93	281	41	168	94	37	168	105	A
09	471	97	283	43	176	98	41	171	107	A
10	446	102	286	45	188	102	44	175	108	A
11	421	107	290	50	198	107	49	179	111	A
12	396	113	294	54	207	113	54	2	294	A
13	371	115	301	58	220	115	57	6	298	A
14	346	114	307	59	230	116	57	9	302	A
15	321	115	311	63	239	117	59	13	304	A
16	296	118	316	69	246	121	63	16	307	A
17	271	119	320	74	255	124	64	20	309	A
18	246	119	322	78	260	127	65	23	310	A
19	221	121	325	84	262	130	70	25	311	A
20	196	124	327	85	262	132	73	23	314	A
21	171	127	327	84	262	135	72	22	315	A
22	146	131	329	89	267	140	74	25	316	A
23	121	136	302	94	239	146	77	25	287	A

Harmonic constants for constituent S2 for deployment NWNB1206.

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	671	32	308	17	190	34	14	163	136	A
02	646	32	309	17	192	33	14	164	136	A
03	621	33	309	17	194	33	15	165	136	A
04	596	32	311	17	199	33	15	166	138	A
05	571	33	314	16	204	33	15	168	140	A
06	546	33	319	16	212	33	15	170	143	A
07	521	32	322	15	222	32	14	175	144	A
08	496	33	324	14	222	33	13	174	147	A
09	471	32	329	13	231	33	13	176	150	A
10	446	34	333	14	248	34	14	2	332	A
11	421	36	336	16	258	36	15	6	333	A
12	396	36	338	16	258	37	15	5	336	A
13	371	39	342	19	269	39	17	10	337	A
14	346	39	348	23	275	40	21	13	341	A
15	321	40	350	23	276	40	22	13	343	A
16	296	38	352	23	284	39	21	17	343	A
17	271	36	355	20	294	38	17	19	346	A
18	246	39	359	20	300	40	17	18	351	A
19	221	39	6	25	314	43	18	27	354	A
20	196	36	9	31	326	45	17	39	351	A
21	171	34	16	37	329	46	20	48	350	A
22	146	35	19	37	326	46	23	47	351	A
23	121	34	345	44	296	51	22	56	312	A

## NWNB1206 ADCP 1577

Harmonic constants for constituent N2 for deployment NWNB1206.

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	671	14	244	9	92	16	4	147	73	A
02	646	14	239	11	91	17	5	144	71	A
03	621	14	236	11	91	17	5	143	69	A
04	596	15	236	12	95	19	6	143	70	A
05	571	16	230	14	95	20	8	140	69	A
06	546	20	223	18	98	23	12	140	66	A
07	521	21	223	19	102	25	14	141	68	A
08	496	20	228	18	105	24	13	142	71	A
09	471	20	231	15	108	22	11	149	68	A
10	446	19	238	13	117	21	10	155	71	A
11	421	19	253	10	140	20	9	165	79	A
12	396	19	261	9	165	19	9	177	82	A
13	371	19	270	10	187	19	10	4	268	A
14	346	21	279	12	205	21	11	12	273	A
15	321	24	281	13	214	25	12	17	273	A
16	296	24	283	15	218	25	13	20	273	A
17	271	27	290	18	225	28	15	22	278	A
18	246	29	300	23	234	32	19	29	282	A
19	221	35	299	25	231	37	22	23	285	A
20	196	35	301	26	233	37	23	24	286	A
21	171	36	300	26	237	39	22	28	283	A
22	146	37	298	24	246	41	17	28	285	A
23	121	33	257	20	206	36	14	24	247	A

Harmonic constants for constituent O1 for deployment NWNB1206.

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	671	6	37	4	261	7	2	150	229	A
02	646	6	32	4	258	7	2	150	225	A
03	621	6	35	4	263	6	2	153	226	A
04	596	7	42	3	267	7	2	159	229	A
05	571	7	44	4	270	8	3	155	233	A
06	546	7	41	4	260	8	2	152	230	A
07	521	8	45	4	284	8	3	164	231	A
08	496	8	43	5	285	8	4	158	234	A
09	471	9	41	6	285	10	5	157	234	A
10	446	10	32	5	286	10	5	170	217	A
11	421	10	41	4	286	10	3	169	224	A
12	396	10	41	4	254	10	2	163	224	A
13	371	11	37	5	260	12	3	159	224	A
14	346	11	38	5	277	12	4	165	224	A
15	321	11	35	7	267	12	5	154	227	A
16	296	13	31	8	276	13	7	159	222	A
17	271	13	37	6	284	13	5	168	222	A
18	246	13	39	3	325	13	3	5	37	A
19	221	16	25	4	308	16	4	4	23	A
20	196	14	33	8	289	15	8	169	219	A
21	171	14	30	11	275	15	9	151	228	A
22	146	11	40	14	291	15	10	115	274	A
23	121	12	16	17	281	17	12	97	277	A

## NWNB1206 ADCP 1577

Harmonic constants for constituent K1 for deployment NWNB1206.

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	671	5	277	6	136	8	3	130	120	A
02	646	5	271	7	140	8	3	122	125	A
03	621	6	264	7	139	8	4	126	118	A
04	596	5	267	7	133	9	3	123	119	A
05	571	6	262	7	133	8	4	122	117	A
06	546	5	266	7	135	8	3	122	120	A
07	521	5	268	7	136	8	3	121	122	A
08	496	6	264	8	135	9	4	122	119	A
09	471	6	254	8	131	9	5	127	109	A
10	446	8	260	9	142	10	6	131	115	A
11	421	9	274	8	153	11	6	143	116	A
12	396	9	273	7	151	11	6	147	112	A
13	371	10	273	8	131	12	4	144	107	A
14	346	12	278	9	137	14	5	145	112	A
15	321	12	289	6	141	13	3	157	115	A
16	296	11	294	2	99	11	1	168	113	C
17	271	12	282	1	103	13	0	173	102	A
18	246	17	284	7	140	18	4	160	109	A
19	221	21	297	11	151	23	6	156	124	A
20	196	29	298	15	159	31	9	156	125	A
21	171	28	301	17	168	31	11	154	131	A
22	146	30	297	19	178	32	16	158	129	A
23	121	33	289	20	166	35	15	157	119	A



# NWSB1206

**Latitude:** 60°47.000'N

**Longitude:** 005°18.300'W

**Echo sounding depth:** 795 m

**Bottom depth corr.:** 775 m (Surface echo)

**Time of deployment:** 9/6 - 2012 1206 UTC

**Time of recovery:** 19/5 – 2013 1337 UTC

## ADCP:

**Instrument no.:** RDI ADCP 8552

**Instrument frequency:** 75 kHz

**Height above bottom:** 108 m

**Depth:** 667 m (corr.)

**Time of first data:** 9/6 - 2012 1220 UTC

**Time of last data:** 19/5 - 2013 1300 UTC

**Sample interval:** 20 min

**No. of ensembles:** 24771

**Pings per ens.:** 10

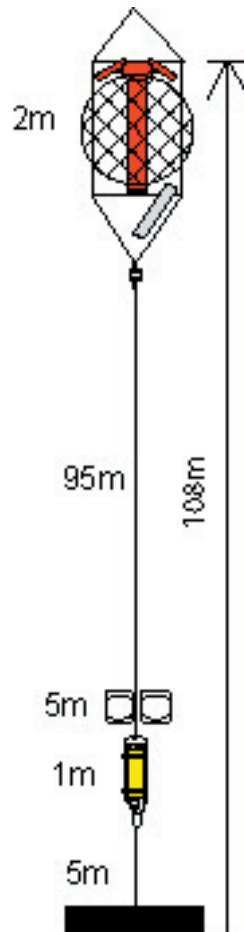
**Binlength:** 10 m

**Depth of first bin:** 648 m (corr.)

**No. of bins:** 60

## Data:

All data ok.



## NWSB1206 ADCP 8552

Error statistics for deployment: NWSB1206 updated 2014/04/22

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: 66

Minimum Mean Correlation: 70

Maximum Speed, number of std dev for each bin: 4

Maximum Vertical Velocity: 100

Maximum Error Velocity (erv tr+0.1\*spd): 100

Speed Spikes, u and v deviated from 3 point median by number of std dev: 5

Vertical Speed Spikes, u and v deviated from 3 point median by number of std dev: 5

Vertical Velocity Spikes, deviated from 3 point median by number of std dev: 5

Total number of ensembles: 24771

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.	Number of velocity gaps of length									
			1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	0	42	0	40	1	0	0	0	0	0	0	0
2	0	47	0	45	10	0	0	0	0	0	0	0
3	0	41	0	41	0	0	0	0	0	0	0	0
4	0	47	0	43	20	0	0	0	0	0	0	0
5	0	53	0	53	0	0	0	0	0	0	0	0
6	0	41	0	41	0	0	0	0	0	0	0	0
7	0	55	0	49	33	1	0	0	0	0	0	0
8	0	41	0	39	31	1	0	0	0	0	0	0
9	0	58	0	56	11	1	0	0	0	0	0	0
10	0	36	0	34	11	1	0	0	0	0	0	0
11	0	39	0	37	22	2	0	0	0	0	0	0
12	0	47	0	43	30	3	0	0	0	0	0	0
13	0	53	0	47	30	3	0	0	0	0	0	0
14	0	32	0	32	30	3	0	0	0	0	0	0
15	0	54	0	48	33	3	0	0	0	0	0	0
16	0	35	0	31	43	3	0	0	0	0	0	0
17	0	47	0	31	43	3	0	0	0	0	0	0
18	0	59	0	50	43	3	0	0	0	0	0	0
19	0	44	0	40	43	3	0	0	0	0	0	0
20	0	35	0	31	43	3	0	0	0	0	0	0
21	0	46	0	42	43	3	0	0	0	0	0	0
22	0	55	0	53	43	3	0	0	0	0	0	0
23	0	65	0	61	43	3	0	0	0	0	0	0
24	0	50	0	46	46	3	0	0	0	0	0	0
25	0	71	0	52	46	3	0	0	0	0	0	0
26	0	54	0	46	46	3	0	0	0	0	0	0
27	0	46	0	52	46	3	0	0	0	0	0	0
28	0	72	0	70	46	3	0	0	0	0	0	0
29	0	55	0	55	48	3	0	0	0	0	0	0
30	0	60	0	58	48	3	0	0	0	0	0	0
31	0	48	0	48	48	3	0	0	0	0	0	0
32	0	43	0	43	48	3	0	0	0	0	0	0
33	0	74	0	69	48	3	0	0	0	0	0	0
34	0	70	0	68	48	3	0	0	0	0	0	0
35	0	67	0	65	47	3	0	0	0	0	0	0
36	0	60	0	59	47	3	0	0	0	0	0	0
37	0	90	0	89	47	3	0	0	0	0	0	0
38	0	116	1	103	40	3	0	0	0	0	0	0
39	0	164	1	108	45	3	0	0	0	0	0	0
40	0	211	1	125	51	3	0	0	0	0	0	0
41	0	312	2	121	52	3	0	0	0	0	0	0
42	0	373	2	152	52	3	0	0	0	0	0	0
43	0	414	2	177	53	3	0	0	0	0	0	0
44	0	521	3	177	53	3	0	0	0	0	0	0
45	0	788	3	184	61	3	0	0	0	0	0	0
46	0	1283	5	199	61	3	0	0	0	0	0	0
47	0	1945	8	186	61	3	0	0	0	0	0	0
48	0	2620	11	199	56	3	0	0	0	0	0	0
49	0	3373	14	194	49	3	0	0	0	0	0	0
50	0	3987	16	178	48	3	0	0	0	0	0	0
51	0	4514	18	178	48	3	0	0	0	0	0	0
52	0	4983	20	194	56	3	0	0	0	0	0	0
53	0	5441	22	142	82	3	0	0	0	0	0	0
54	0	5886	24	242	73	3	0	0	0	0	0	0
55	0	6300	25	254	74	3	0	0	0	0	0	0
56	0	6757	27	246	74	3	0	0	0	0	0	0
57	0	7385	30	265	82	3	0	0	0	0	0	0
58	0	8113	33	292	82	3	0	0	0	0	0	0
59	0	9028	36	308	92	3	0	0	0	0	0	0
60	0	10054	41	368	80	40	25	14	51	52	47	21

## NWSB1206 ADCP 8552

Deployment: NWSB1206 updated 2014/04/22  
 Instrument no.: 8552  
 Instrument freq.: 75  
 Latitude: 60 47.000 N  
 Longitude: 05 18.300 W  
 Bottom depth: 775  
 Instrument depth: 667  
 Center depth of first bin: 648  
 Bin length: 10  
 Number of bins: 60  
 Number of first ensemble: 290  
 Time of first ensemble: 2012 06 09 12 20  
 Number of last ensemble: 25060  
 Time of last ensemble: 2013 05 19 12 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	648	127	217	47	204	998
2	638	137	216	47	204	998
3	628	147	215	47	203	998
4	618	157	214	46	203	998
5	608	167	212	45	203	998
6	598	177	211	44	202	998
7	588	187	210	43	202	998
8	578	197	208	42	202	998
9	568	207	207	41	201	998
10	558	217	206	40	200	999
11	548	227	205	39	200	998
12	538	237	204	38	200	998
13	528	247	203	37	200	999
14	518	257	202	36	199	998
15	508	267	201	35	198	998
16	498	277	201	34	197	999
17	488	287	200	34	197	998
18	478	297	200	35	197	998
19	468	307	202	35	198	998
20	458	317	203	35	200	999
21	448	327	204	35	201	998
22	438	337	206	36	203	998
23	428	347	208	37	204	997
24	418	357	209	36	204	998
25	408	367	210	37	204	997
26	398	377	211	38	204	998
27	388	387	211	39	204	998
28	378	397	213	41	202	997
29	368	407	215	43	203	998
30	358	417	217	44	204	998
31	348	427	218	47	204	998
32	338	437	220	49	205	998
33	328	447	223	52	206	997
34	318	457	227	53	205	997
35	308	467	230	55	204	997
36	298	477	233	56	204	998
37	288	487	235	56	202	996
38	278	497	236	57	202	995
39	268	507	237	58	201	993
40	258	517	238	58	199	991
41	248	527	240	58	199	987
42	238	537	243	58	197	985
43	228	547	244	59	196	983
44	218	557	247	60	195	979
45	208	567	250	61	193	968
46	198	577	252	62	193	948
47	188	587	255	62	193	921
48	178	597	257	62	193	894
49	168	607	259	61	192	864
50	158	617	260	61	191	839
51	148	627	262	61	191	818
52	138	637	264	61	190	799
53	128	647	267	63	190	780
54	118	657	270	63	191	762
55	108	667	273	64	190	746
56	98	677	276	64	190	727
57	88	687	279	67	188	702
58	78	697	283	69	187	672
59	68	707	285	69	186	636
60	58	717	287	67	184	594

## NWSB1206 ADCP 8552

Frequency of high speeds.

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

Bin no.	Depth m	Speed (cm/s)																	
		10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	648	839	510	230	72	15	2	0	0	0	0	0	0	0	0	0	0	0	0
2	638	839	504	228	71	15	2	0	0	0	0	0	0	0	0	0	0	0	0
3	628	836	506	224	69	16	2	0	0	0	0	0	0	0	0	0	0	0	0
4	618	832	501	218	66	16	2	0	0	0	0	0	0	0	0	0	0	0	0
5	608	829	497	215	65	16	2	0	0	0	0	0	0	0	0	0	0	0	0
6	598	829	493	210	63	15	2	0	0	0	0	0	0	0	0	0	0	0	0
7	588	828	490	207	59	14	2	0	0	0	0	0	0	0	0	0	0	0	0
8	578	828	484	202	57	14	2	0	0	0	0	0	0	0	0	0	0	0	0
9	568	824	478	196	53	12	2	0	0	0	0	0	0	0	0	0	0	0	0
10	558	824	473	193	53	11	2	0	0	0	0	0	0	0	0	0	0	0	0
11	548	822	475	190	53	11	2	0	0	0	0	0	0	0	0	0	0	0	0
12	538	821	470	188	52	10	1	0	0	0	0	0	0	0	0	0	0	0	0
13	528	818	465	184	50	10	1	0	0	0	0	0	0	0	0	0	0	0	0
14	518	818	461	181	50	9	1	0	0	0	0	0	0	0	0	0	0	0	0
15	508	810	459	183	50	9	1	0	0	0	0	0	0	0	0	0	0	0	0
16	498	812	457	186	52	9	0	0	0	0	0	0	0	0	0	0	0	0	0
17	488	808	452	185	51	9	1	0	0	0	0	0	0	0	0	0	0	0	0
18	478	803	450	187	51	9	1	0	0	0	0	0	0	0	0	0	0	0	0
19	468	806	457	192	54	11	2	0	0	0	0	0	0	0	0	0	0	0	0
20	458	806	460	193	56	13	2	0	0	0	0	0	0	0	0	0	0	0	0
21	448	811	460	196	59	13	2	0	0	0	0	0	0	0	0	0	0	0	0
22	438	812	469	202	59	13	2	0	0	0	0	0	0	0	0	0	0	0	0
23	428	817	477	205	61	15	2	0	0	0	0	0	0	0	0	0	0	0	0
24	418	824	480	208	65	15	2	0	0	0	0	0	0	0	0	0	0	0	0
25	408	827	480	209	64	16	2	0	0	0	0	0	0	0	0	0	0	0	0
26	398	829	483	210	67	16	3	0	0	0	0	0	0	0	0	0	0	0	0
27	388	831	483	212	67	18	3	0	0	0	0	0	0	0	0	0	0	0	0
28	378	832	493	214	70	19	3	0	0	0	0	0	0	0	0	0	0	0	0
29	368	836	497	215	73	22	4	1	0	0	0	0	0	0	0	0	0	0	0
30	358	840	500	218	76	25	6	1	0	0	0	0	0	0	0	0	0	0	0
31	348	837	504	223	82	29	7	1	0	0	0	0	0	0	0	0	0	0	0
32	338	835	506	232	87	31	8	1	0	0	0	0	0	0	0	0	0	0	0
33	328	832	515	243	95	36	11	2	0	0	0	0	0	0	0	0	0	0	0
34	318	838	524	253	99	38	12	2	0	0	0	0	0	0	0	0	0	0	0
35	308	847	532	260	105	40	15	3	0	0	0	0	0	0	0	0	0	0	0
36	298	848	543	269	107	41	15	3	0	0	0	0	0	0	0	0	0	0	0
37	288	851	548	275	109	44	16	4	0	0	0	0	0	0	0	0	0	0	0
38	278	849	548	277	114	44	16	5	1	0	0	0	0	0	0	0	0	0	0
39	268	845	550	279	118	46	18	5	1	0	0	0	0	0	0	0	0	0	0
40	258	847	549	282	122	48	18	6	1	0	0	0	0	0	0	0	0	0	0
41	248	845	552	288	124	49	19	7	1	0	0	0	0	0	0	0	0	0	0
42	238	845	555	292	129	51	20	7	2	0	0	0	0	0	0	0	0	0	0
43	228	846	557	297	131	54	21	7	2	0	0	0	0	0	0	0	0	0	0
44	218	844	560	304	135	56	23	9	2	0	0	0	0	0	0	0	0	0	0
45	208	835	558	310	140	59	24	10	2	0	0	0	0	0	0	0	0	0	0
46	198	820	550	308	147	61	26	10	3	0	0	0	0	0	0	0	0	0	0
47	188	794	538	308	149	62	27	11	3	0	0	0	0	0	0	0	0	0	0
48	178	775	525	300	148	62	27	11	3	0	0	0	0	0	0	0	0	0	0
49	168	754	511	293	149	65	26	11	3	1	0	0	0	0	0	0	0	0	0
50	158	731	498	287	145	63	25	11	4	1	0	0	0	0	0	0	0	0	0
51	148	716	488	286	144	64	26	11	3	1	0	0	0	0	0	0	0	0	0
52	138	699	482	282	144	64	26	11	3	1	0	0	0	0	0	0	0	0	0
53	128	686	477	281	144	65	26	11	4	1	0	0	0	0	0	0	0	0	0
54	118	673	472	279	144	66	28	11	4	1	0	0	0	0	0	0	0	0	0
55	108	660	470	277	144	67	29	12	4	1	0	0	0	0	0	0	0	0	0
56	98	646	467	275	144	68	29	12	4	1	0	0	0	0	0	0	0	0	0
57	88	625	456	275	142	67	30	13	5	1	0	0	0	0	0	0	0	0	0
58	78	602	443	271	142	68	30	13	5	1	0	0	0	0	0	0	0	0	0
59	68	570	421	256	137	67	29	13	4	1	0	0	0	0	0	0	0	0	0
60	58	532	396	245	132	63	27	13	4	1	0	0	0	0	0	0	0	0	0

## NWSB1206 ADCP 8552

Harmonic constants for constituent M2 for deployment NWSB1206.

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	648	237	239	91	187	244	70	15	235	A
02	638	236	240	92	190	244	69	15	236	A
03	628	236	241	93	192	245	68	16	236	A
04	618	234	241	95	194	243	67	17	237	A
05	608	233	242	96	196	243	66	17	237	A
06	598	232	243	97	198	243	65	18	238	A
07	588	231	243	97	200	242	63	18	238	A
08	578	228	244	98	202	240	62	19	239	A
09	568	226	245	99	204	239	60	20	239	A
10	558	224	245	99	206	238	59	20	240	A
11	548	222	246	101	208	237	58	21	240	A
12	538	220	247	101	210	235	56	21	241	A
13	528	217	247	102	212	233	54	22	242	A
14	518	214	248	103	215	231	52	23	243	A
15	508	210	249	105	217	229	51	24	244	A
16	498	206	250	107	220	227	48	25	244	A
17	488	201	251	109	223	224	45	27	245	A
18	478	198	252	111	226	223	42	28	246	A
19	468	196	253	114	229	223	40	29	247	A
20	458	193	253	117	231	222	39	30	247	A
21	448	190	254	120	232	221	38	31	248	A
22	438	188	255	122	235	221	36	32	249	A
23	428	184	256	124	236	220	34	33	250	A
24	418	182	256	126	238	219	33	34	250	A
25	408	178	257	127	239	216	32	35	251	A
26	398	174	258	129	240	214	31	36	251	A
27	388	169	258	130	241	211	31	37	252	A
28	378	165	259	131	243	209	29	38	253	A
29	368	161	260	133	245	207	26	40	254	A
30	358	156	260	135	248	205	23	41	255	A
31	348	151	261	137	249	202	22	42	256	A
32	338	149	262	139	250	202	21	43	257	A
33	328	146	264	142	252	202	21	44	258	A
34	318	144	264	143	253	202	20	45	259	A
35	308	142	265	145	254	202	21	46	259	A
36	298	141	266	147	254	202	21	46	259	A
37	288	139	266	148	254	202	20	47	260	A
38	278	137	267	148	255	200	20	47	260	A
39	268	136	267	149	255	200	20	48	260	A
40	258	135	267	150	255	201	21	48	261	A
41	248	134	268	150	255	200	21	48	261	A
42	238	133	268	150	255	199	22	49	261	A
43	228	133	268	152	256	201	21	49	261	A
44	218	132	269	153	256	201	22	49	262	A
45	208	131	269	154	257	201	22	50	262	A
46	198	132	269	156	257	203	21	50	262	A
47	188	132	269	157	257	204	21	50	262	A
48	178	131	269	157	258	204	21	50	262	A
49	168	131	270	158	257	204	21	50	262	A
50	158	129	270	160	258	205	20	51	263	A
51	148	128	270	161	258	205	21	52	263	A
52	138	129	271	163	259	207	21	52	264	A
53	128	128	271	164	259	207	21	52	263	A
54	118	128	272	167	259	209	22	53	264	A
55	108	128	273	168	259	210	24	53	264	A
56	98	130	273	172	259	214	25	53	264	A
57	88	130	274	172	259	214	26	53	264	A
58	78	131	275	175	259	217	29	53	265	A
59	68	131	277	174	259	216	33	54	266	A
60	58	129	279	177	260	216	34	54	266	A

## NWSB1206 ADCP 8552

Harmonic constants for constituent S2 for deployment NWSB1206.

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	648	89	287	48	234	95	36	21	279	A
02	638	89	288	48	236	95	35	22	279	A
03	628	88	288	47	238	94	34	22	279	A
04	618	87	288	46	240	93	32	22	280	A
05	608	85	288	45	241	91	31	23	280	A
06	598	84	288	43	243	90	28	22	281	A
07	588	82	288	43	246	89	27	23	281	A
08	578	82	288	41	246	88	26	22	281	A
09	568	80	288	40	247	86	24	23	281	A
10	558	80	287	40	248	86	24	23	281	A
11	548	80	287	40	249	86	23	23	281	A
12	538	79	287	39	250	85	22	23	281	A
13	528	78	288	40	251	85	22	24	281	A
14	518	77	288	40	253	84	21	24	282	A
15	508	76	288	40	256	84	20	26	282	A
16	498	74	289	40	260	82	17	26	283	A
17	488	71	289	39	263	80	15	27	284	A
18	478	69	289	38	268	78	12	28	284	A
19	468	68	290	38	273	77	10	29	286	A
20	458	64	289	38	277	74	7	30	286	A
21	448	62	290	38	281	72	5	31	287	A
22	438	58	291	37	284	69	3	32	289	A
23	428	57	290	37	288	68	1	33	289	A
24	418	56	290	37	290	67	0	34	290	A
25	408	54	289	38	293	66	2	35	290	C
26	398	53	290	39	295	66	2	36	292	C
27	388	51	290	42	297	65	4	39	293	C
28	378	49	291	43	300	65	5	41	295	C
29	368	48	291	44	300	65	5	43	296	C
30	358	48	292	46	299	66	4	44	296	C
31	348	48	293	46	299	67	3	44	296	C
32	338	49	294	47	298	68	2	44	296	C
33	328	48	293	48	297	68	3	45	295	C
34	318	49	292	48	296	68	2	45	294	C
35	308	49	293	47	295	68	1	44	294	C
36	298	50	294	47	294	68	0	43	294	A
37	288	50	294	46	294	69	0	43	294	A
38	278	50	295	47	294	69	1	43	294	A
39	268	50	296	46	295	68	1	43	296	A
40	258	50	298	46	295	68	2	42	296	A
41	248	50	299	46	295	68	2	43	297	A
42	238	51	300	45	294	68	3	41	297	A
43	228	51	299	45	293	67	4	41	297	A
44	218	50	299	45	292	67	4	42	296	A
45	208	51	300	45	292	68	5	41	297	A
46	198	51	300	46	293	69	4	42	297	A
47	188	50	299	47	295	69	3	44	297	A
48	178	50	299	47	297	68	1	43	298	A
49	168	50	300	48	298	69	1	44	299	A
50	158	49	300	48	299	69	1	45	299	A
51	148	49	300	49	299	69	0	45	299	A
52	138	48	300	49	301	69	0	45	301	C
53	128	47	303	52	301	70	1	48	302	A
54	118	48	305	50	303	69	2	47	304	A
55	108	48	305	51	304	70	1	47	304	A
56	98	49	305	52	306	71	0	47	306	C
57	88	50	305	53	304	73	1	46	305	A
58	78	48	306	55	303	73	2	49	304	A
59	68	48	308	55	305	73	2	49	306	A
60	58	43	305	54	305	69	0	51	305	C

## NWSB1206 ADCP 8552

Harmonic constants for constituent N2 for deployment NWSB1206.

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	648	58	207	21	129	58	20	5	205	A
02	638	58	208	21	132	58	21	6	206	A
03	628	57	210	21	135	57	20	6	208	A
04	618	57	211	22	139	57	20	8	208	A
05	608	56	213	22	142	57	21	9	209	A
06	598	56	213	22	150	57	19	11	209	A
07	588	55	214	21	151	55	18	11	210	A
08	578	53	215	20	155	54	17	12	211	A
09	568	52	216	20	161	53	16	14	212	A
10	558	51	217	19	164	52	15	14	213	A
11	548	51	219	20	169	52	15	16	214	A
12	538	50	219	21	172	52	15	17	214	A
13	528	49	220	21	176	51	14	19	215	A
14	518	48	221	21	179	50	13	19	216	A
15	508	47	222	21	183	50	13	21	216	A
16	498	47	223	21	183	50	13	21	217	A
17	488	47	225	22	187	50	13	22	219	A
18	478	48	226	25	190	52	13	24	219	A
19	468	48	227	26	194	53	13	26	220	A
20	458	47	229	27	196	53	13	28	222	A
21	448	46	230	28	199	53	13	30	222	A
22	438	45	232	29	200	52	13	31	223	A
23	428	45	232	30	200	52	14	32	223	A
24	418	44	233	31	203	52	13	34	223	A
25	408	42	233	29	205	50	11	34	224	A
26	398	39	234	28	210	47	9	34	226	A
27	388	36	234	27	215	44	7	36	227	A
28	378	33	235	27	223	42	4	38	230	A
29	368	29	235	27	229	40	2	43	232	A
30	358	27	236	27	234	38	1	45	235	A
31	348	26	239	29	238	39	0	48	238	A
32	338	24	241	30	240	38	0	51	240	A
33	328	23	243	31	241	38	1	53	242	A
34	318	23	246	32	242	40	2	54	243	A
35	308	22	248	33	243	40	2	57	244	A
36	298	22	252	35	243	41	3	58	246	A
37	288	22	254	36	243	42	4	59	246	A
38	278	22	256	37	244	43	4	59	247	A
39	268	22	257	38	244	44	4	60	247	A
40	258	22	259	38	243	43	5	60	247	A
41	248	23	259	38	244	44	5	60	248	A
42	238	22	261	37	245	43	5	60	249	A
43	228	22	259	36	244	42	5	59	248	A
44	218	22	258	36	244	42	5	59	248	A
45	208	23	256	37	245	43	4	58	248	A
46	198	25	257	36	245	44	4	56	249	A
47	188	25	262	36	245	43	6	56	250	A
48	178	26	263	37	245	45	7	55	251	A
49	168	26	265	38	242	45	9	56	249	A
50	158	26	268	38	240	45	10	56	249	A
51	148	25	272	37	241	44	11	57	250	A
52	138	25	271	39	240	45	11	59	248	A
53	128	26	273	39	240	45	12	58	250	A
54	118	25	271	38	236	44	12	59	246	A
55	108	26	273	41	237	47	14	60	246	A
56	98	25	271	42	236	47	13	61	244	A
57	88	26	275	41	239	47	13	60	248	A
58	78	27	272	41	235	47	14	59	245	A
59	68	30	272	41	234	48	16	56	246	A
60	58	31	272	40	232	47	17	55	246	A

## NWSB1206 ADCP 8552

Harmonic constants for constituent O1 for deployment NWSB1206.

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	648	30	344	15	46	31	13	15	350	C
02	638	30	343	14	47	31	12	14	349	C
03	628	30	342	15	46	31	13	16	349	C
04	618	30	343	15	45	31	13	16	350	C
05	608	30	343	15	41	31	13	18	351	C
06	598	30	343	16	40	31	13	20	352	C
07	588	31	343	16	41	32	13	18	350	C
08	578	30	343	16	40	32	13	19	351	C
09	568	31	343	16	39	32	12	19	351	C
10	558	31	342	15	38	32	12	18	349	C
11	548	31	342	15	39	32	12	16	348	C
12	538	31	342	14	37	32	11	17	348	C
13	528	31	342	14	36	32	11	17	348	C
14	518	30	342	14	35	31	11	18	348	C
15	508	29	340	14	32	30	11	19	347	C
16	498	29	338	15	31	31	11	19	345	C
17	488	28	339	14	28	30	10	21	347	C
18	478	28	339	14	30	29	10	20	346	C
19	468	27	340	14	36	28	11	19	347	C
20	458	26	341	13	37	27	10	17	347	C
21	448	26	339	13	39	27	11	17	347	C
22	438	25	337	13	40	26	11	16	344	C
23	428	26	336	13	41	27	11	14	341	C
24	418	26	334	11	41	27	10	11	338	C
25	408	26	334	10	44	26	10	9	337	C
26	398	26	334	10	38	27	9	10	338	C
27	388	26	333	9	36	26	8	10	336	C
28	378	24	333	9	42	25	8	9	336	C
29	368	24	335	10	44	24	9	10	338	C
30	358	23	333	10	42	23	9	10	337	C
31	348	22	331	9	42	22	9	9	335	C
32	338	21	330	7	40	21	6	7	332	C
33	328	22	324	7	42	22	7	4	326	C
34	318	22	326	6	42	22	6	4	328	C
35	308	22	329	8	39	22	7	7	332	C
36	298	22	328	8	37	22	7	8	330	C
37	288	22	327	8	40	22	8	7	329	C
38	278	22	325	7	50	22	7	2	326	C
39	268	21	327	7	50	21	7	2	327	C
40	258	21	328	7	55	21	7	1	328	C
41	248	21	331	7	70	21	6	177	150	C
42	238	21	331	6	71	21	6	177	150	C
43	228	21	331	7	79	21	6	174	149	C
44	218	21	328	6	82	21	5	174	147	C
45	208	23	328	7	87	23	6	171	145	C
46	198	23	329	6	63	23	6	179	148	C
47	188	24	328	7	60	24	7	179	148	C
48	178	24	326	6	66	24	6	177	145	C
49	168	21	325	6	66	21	6	176	144	C
50	158	19	322	7	64	19	6	175	140	C
51	148	20	314	7	74	20	6	169	131	C
52	138	19	317	8	87	20	6	164	132	C
53	128	18	322	9	82	19	8	162	135	C
54	118	16	320	11	90	18	7	151	127	C
55	108	17	321	11	90	19	8	153	129	C
56	98	19	328	13	86	20	11	155	134	C
57	88	18	328	13	83	19	11	155	133	C
58	78	19	323	12	81	20	10	158	132	C
59	68	20	321	11	65	20	11	169	135	C
60	58	23	322	9	67	23	9	173	139	C

## NWSB1206 ADCP 8552

Harmonic constants for constituent K1 for deployment NWSB1206.

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	648	17	210	4	252	17	3	11	212	C
02	638	17	211	4	253	17	3	12	213	C
03	628	17	208	4	260	17	3	9	210	C
04	618	18	211	4	252	18	2	9	212	C
05	608	19	212	3	249	19	2	8	213	C
06	598	18	209	3	250	19	2	6	209	C
07	588	18	211	3	237	18	1	8	212	C
08	578	17	210	2	236	17	1	6	211	C
09	568	17	208	3	233	17	1	10	209	C
10	558	17	208	3	241	17	1	8	209	C
11	548	17	211	3	249	18	2	8	212	C
12	538	17	213	3	257	18	2	8	214	C
13	528	18	212	3	243	18	2	9	213	C
14	518	17	212	4	253	17	3	11	214	C
15	508	17	209	5	269	17	4	9	212	C
16	498	17	208	5	271	17	4	8	210	C
17	488	16	206	4	287	16	4	2	206	C
18	478	16	199	4	285	16	4	1	199	C
19	468	15	198	4	265	15	4	6	199	C
20	458	15	195	5	261	15	4	8	197	C
21	448	14	195	5	259	14	4	9	198	C
22	438	14	198	4	261	14	4	8	200	C
23	428	14	199	3	269	14	3	5	200	C
24	418	14	192	3	270	14	3	3	193	C
25	408	14	186	3	283	14	3	179	5	C
26	398	14	182	2	297	14	2	176	1	C
27	388	12	181	3	303	12	2	172	360	C
28	378	11	183	3	297	11	3	173	1	C
29	368	12	182	4	287	12	4	174	360	C
30	358	11	175	4	282	11	4	172	352	C
31	348	11	166	5	262	11	4	177	345	C
32	338	12	161	4	241	12	4	3	163	C
33	328	13	154	4	203	13	3	12	157	C
34	318	13	152	5	185	13	3	18	155	C
35	308	13	146	4	171	13	2	17	149	C
36	298	12	147	4	163	13	1	17	148	C
37	288	12	152	4	149	13	0	17	151	A
38	278	11	164	4	153	12	1	19	163	A
39	268	11	165	4	142	12	1	17	163	A
40	258	11	171	3	153	11	1	14	170	A
41	248	10	175	2	148	10	1	11	174	A
42	238	10	171	2	116	10	2	7	170	A
43	228	10	173	2	143	10	1	9	172	A
44	218	12	165	2	116	12	2	7	164	A
45	208	13	172	2	123	13	2	6	172	A
46	198	15	172	3	134	15	2	10	171	A
47	188	15	164	4	145	16	1	15	163	A
48	178	15	166	4	149	16	1	13	165	A
49	168	15	171	4	159	15	1	17	170	A
50	158	14	172	5	161	15	1	20	171	A
51	148	16	175	6	160	17	1	20	173	A
52	138	17	175	6	156	18	2	18	174	A
53	128	19	177	9	168	21	1	24	176	A
54	118	22	183	9	179	23	1	23	183	A
55	108	22	179	8	174	24	1	19	178	A
56	98	22	178	8	175	24	0	20	178	A
57	88	25	176	8	176	26	0	19	176	A
58	78	24	173	10	180	26	1	23	174	C
59	68	26	166	14	179	29	3	28	169	C
60	58	25	159	12	174	27	3	26	162	C



# NWSC1206

**Latitude:** 60°33.900'N

**Longitude:** 004°46.000'W

**Echo sounding depth:** 1082 m

**Bottom depth corr.:** 1063 m (surface echo)

**Time of deployment:** 9/6 - 2012 1501 UTC

**Time of recovery:** 19/5 - 2013 1041 UTC

## ADCP:

**Instrument no.:** RDI ADCP 1644

**Instrument frequency:** 75 kHz

**Height above bottom:** 418 m (corr.)

**Depth:** 645 m (corr.)

**Time of first data:** 9/6 - 2012 1540 UTC

**Time of last data:** 19/5 - 2013 1020 UTC

**Sample interval:** 20 min

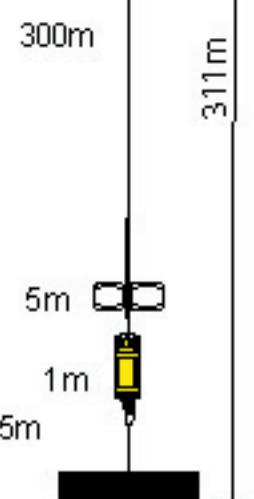
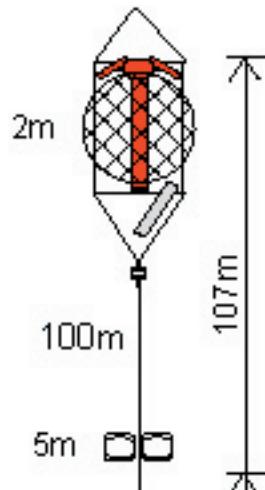
**No. of ensembles:** 24753

**Pings per ens.:** 1

**Binlength:** 25 m

**Depth of first bin:** 609 m (corr.)

**No. of bins:** 22



## Data:

All data ok.

## NWSC1206 ADCP 1644

Error statistics for deployment: NWSC1206 updated 2014/04/23

Temperature edited

Surface distance not edited

Heading, pitch and roll not edited

Intensity not edited

Velocity edited using these data filters:

Minimum Intensity: 50

Minimum Mean Correlation: 64

Maximum Speed, number of std dev for each bin: 4

Maximum Vertical Velocity: 90

Maximum Error Velocity (erv\_tr+0.1\*spd): 100

Speed Spikes, u and v deviated from 3 point median by number of std dev: 4

Vertical Speed Spikes, u and v deviated from 3 point median by number of std dev: 4

Vertical Velocity Spikes, deviated from 3 point median by number of std dev: 5

Total number of ensembles: 24753

Interval between ensembles: 20 min

Original number of bins: 32

Number of acceptable velocity bins: 22

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.	Velocity		Number of velocity gaps of length											
				ens.	ens.	%	1	2	3	4	5	6-10	11-20	21-30	31-50
flgd.	flgd.	flgd.													
1	0	123	0	101	9	0	1	0	0	0	0	0	0	0	0
2	0	161	1	136	11	1	0	0	0	0	0	0	0	0	0
3	0	165	1	144	9	1	0	0	0	0	0	0	0	0	0
4	0	200	1	140	25	2	1	0	0	0	0	0	0	0	0
5	0	253	1	183	29	2	0	0	0	1	0	0	0	0	0
6	0	248	1	181	24	5	1	0	0	0	0	0	0	0	0
7	0	218	1	157	27	1	1	0	0	0	0	0	0	0	0
8	0	215	1	174	17	1	1	0	0	0	0	0	0	0	0
9	0	226	1	178	19	2	1	0	0	0	0	0	0	0	0
10	0	196	1	157	15	3	0	0	0	0	0	0	0	0	0
11	0	270	1	213	24	3	0	0	0	0	0	0	0	0	0
12	0	293	1	216	26	2	2	1	1	0	0	0	0	0	0
13	0	429	2	234	38	5	4	2	6	3	0	0	0	0	0
14	0	663	3	218	37	16	9	3	12	9	2	0	0	0	0
15	0	1172	5	306	62	24	17	14	18	17	6	1	0	0	0
16	0	2085	8	366	89	49	38	14	58	17	11	6	0	0	0
17	0	3609	15	464	127	68	48	28	75	62	23	8	0	0	0
18	0	5502	22	485	152	75	48	23	80	57	59	34	0	0	0
19	0	7220	29	462	157	102	48	38	77	60	62	65	3	0	0
20	0	8745	35	450	188	80	64	34	80	114	49	82	9	0	0
21	0	10241	41	503	187	95	42	48	117	110	49	85	23	0	0
22	0	11874	48	623	191	102	48	39	91	66	89	84	40	0	0

## NWSC1206 ADCP 1644

Deployment: NWSC1206 updated 2014/04/23  
Instrument no.: 1644  
Instrument freq.: 75  
Latitude: 60 33.900 N  
Longitude: 04 46.000 W  
Bottom depth: 1063  
Instrument depth: 645  
Center depth of first bin: 609  
Bin length: 25  
Number of bins: 22  
Number of first ensemble: 366  
Time of first ensemble: 2012 06 09 15 40  
Number of last ensemble: 25118  
Time of last ensemble: 2013 05 19 10 20  
Time between ensembles (min.): 20  
All directions have been corrected by adding: -5.0

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

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	609	454	185	58	189	995
2	584	479	187	59	187	993
3	559	504	191	60	184	993
4	534	529	195	60	180	992
5	509	554	199	59	175	990
6	484	579	203	57	168	990
7	459	604	208	55	162	991
8	434	629	215	55	156	991
9	409	654	223	56	149	991
10	384	679	232	59	141	992
11	359	704	241	61	135	989
12	334	729	249	62	129	988
13	309	754	258	63	125	983
14	284	779	265	66	121	973
15	259	804	271	69	117	953
16	234	829	280	73	113	916
17	209	854	287	73	110	854
18	184	879	291	74	106	778
19	159	904	298	79	103	708
20	134	929	303	83	102	647
21	109	954	312	89	98	586
22	84	979	320	99	96	520

## NWSC1206 ADCP 1644

Frequency of high speeds.

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

Bin Depth  no.	m	Speed (cm/s)																	
		10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	609	777	391	132	35	10	3	0	0	0	0	0	0	0	0	0	0	0	0
2	584	783	401	134	37	10	3	0	0	0	0	0	0	0	0	0	0	0	0
3	559	789	421	143	39	11	4	1	0	0	0	0	0	0	0	0	0	0	0
4	534	801	432	150	42	11	4	1	0	0	0	0	0	0	0	0	0	0	0
5	509	808	443	163	48	13	4	1	0	0	0	0	0	0	0	0	0	0	0
6	484	813	455	174	56	16	5	1	0	0	0	0	0	0	0	0	0	0	0
7	459	819	472	188	62	22	7	2	0	0	0	0	0	0	0	0	0	0	0
8	434	835	497	207	70	25	7	3	0	0	0	0	0	0	0	0	0	0	0
9	409	847	521	233	81	27	8	2	0	0	0	0	0	0	0	0	0	0	0
10	384	855	554	263	97	35	10	2	0	0	0	0	0	0	0	0	0	0	0
11	359	859	569	293	117	41	11	2	0	0	0	0	0	0	0	0	0	0	0
12	334	865	585	315	140	50	14	3	0	0	0	0	0	0	0	0	0	0	0
13	309	875	595	332	158	62	19	3	0	0	0	0	0	0	0	0	0	0	0
14	284	872	607	343	174	73	24	4	0	0	0	0	0	0	0	0	0	0	0
15	259	855	605	351	182	78	28	5	0	0	0	0	0	0	0	0	0	0	0
16	234	828	601	361	194	87	33	7	1	0	0	0	0	0	0	0	0	0	0
17	209	777	574	351	194	89	35	8	1	0	0	0	0	0	0	0	0	0	0
18	184	708	527	329	182	87	35	9	1	0	0	0	0	0	0	0	0	0	0
19	159	647	490	311	177	87	35	11	2	0	0	0	0	0	0	0	0	0	0
20	134	594	456	294	167	84	35	11	2	0	0	0	0	0	0	0	0	0	0
21	109	542	420	275	164	84	37	13	3	0	0	0	0	0	0	0	0	0	0
22	84	485	380	253	154	80	37	14	5	1	0	0	0	0	0	0	0	0	0

## NWSC1206 ADCP 1644

Harmonic constants for constituent M2 for deployment NWSC1206.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	609	156	255	91	251	181	6	30	254	A
02	584	156	255	94	251	182	6	31	254	A
03	559	155	256	97	253	183	5	32	255	A
04	534	154	257	100	253	183	5	33	256	A
05	509	151	257	102	256	182	2	34	257	A
06	484	147	258	105	259	181	1	35	258	C
07	459	144	259	108	261	180	3	37	259	C
08	434	141	259	109	261	178	3	38	260	C
09	409	138	259	113	263	178	5	39	261	C
10	384	135	261	116	264	178	5	41	262	C
11	359	131	261	118	265	177	6	42	263	C
12	334	130	261	120	266	177	7	43	264	C
13	309	128	263	122	268	177	8	44	265	C
14	284	123	265	127	270	177	7	46	268	C
15	259	116	268	135	271	178	4	49	270	C
16	234	115	272	141	271	182	0	51	271	A
17	209	115	274	147	271	187	4	52	272	A
18	184	114	277	151	272	190	7	53	274	A
19	159	116	280	155	273	194	11	53	276	A
20	134	117	281	159	272	197	14	54	275	A
21	109	115	281	168	272	203	15	56	275	A
22	84	112	283	168	271	201	19	57	275	A

Harmonic constants for constituent S2 for deployment NWSC1206.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	609	55	293	38	291	67	1	35	292	A
02	584	54	294	40	293	67	1	36	294	A
03	559	55	295	41	295	69	0	37	295	C
04	534	54	294	41	294	68	0	37	294	A
05	509	55	294	41	295	69	1	37	295	C
06	484	55	294	41	298	69	2	36	295	C
07	459	54	293	41	298	68	3	37	295	C
08	434	53	295	43	299	68	3	39	297	C
09	409	51	296	44	302	67	4	40	298	C
10	384	50	296	44	304	67	5	41	299	C
11	359	49	296	47	304	68	5	44	300	C
12	334	46	297	48	305	66	4	46	301	C
13	309	46	300	49	305	67	3	47	303	C
14	284	48	305	50	307	70	1	46	306	C
15	259	48	310	49	308	69	1	45	309	A
16	234	46	312	47	310	66	1	46	311	A
17	209	46	314	51	311	69	2	48	313	A
18	184	51	318	54	316	74	1	47	317	A
19	159	54	321	51	311	74	7	43	316	A
20	134	53	322	44	305	68	10	40	315	A
21	109	48	323	44	298	64	14	42	311	A
22	84	38	317	36	297	52	9	43	308	A

## NWSC1206 ADCP 1644

Harmonic constants for constituent N2 for deployment NWSC1206.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	609	37	232	20	214	42	6	27	228	A
02	584	35	232	20	220	40	4	29	229	A
03	559	34	235	20	225	39	3	31	233	A
04	534	33	237	21	231	39	2	32	236	A
05	509	31	236	20	237	37	0	33	237	C
06	484	30	236	19	241	35	2	32	237	C
07	459	26	231	18	247	32	4	34	236	C
08	434	22	230	19	259	28	7	40	242	C
09	409	19	235	21	261	27	6	48	249	C
10	384	17	240	24	263	29	6	55	256	C
11	359	17	249	26	262	31	3	58	258	C
12	334	16	255	29	266	33	3	60	263	C
13	309	16	261	31	264	35	1	63	263	C
14	284	17	273	34	264	38	2	63	266	A
15	259	19	280	35	260	40	6	63	264	A
16	234	21	278	39	256	44	7	62	261	A
17	209	23	280	40	254	45	9	61	260	A
18	184	20	276	39	253	44	7	65	257	A
19	159	23	278	44	252	49	9	64	257	A
20	134	26	278	46	245	51	13	62	252	A
21	109	34	276	49	242	58	16	58	252	A
22	84	39	281	54	237	62	24	58	250	A

Harmonic constants for constituent O1 for deployment NWSC1206.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	609	13	17	9	30	15	2	34	21	C
02	584	12	11	9	30	15	2	36	18	C
03	559	12	6	7	28	14	2	29	11	C
04	534	13	9	8	26	15	2	31	14	C
05	509	12	10	10	35	15	3	38	20	C
06	484	10	13	10	29	14	2	44	21	C
07	459	10	8	8	27	13	2	40	16	C
08	434	9	3	7	40	11	3	40	18	C
09	409	8	15	8	40	11	3	44	27	C
10	384	10	13	7	41	12	3	32	21	C
11	359	10	19	8	41	13	2	38	28	C
12	334	11	34	8	46	13	1	37	39	C
13	309	12	30	7	59	14	3	28	37	C
14	284	12	25	6	53	13	2	23	29	C
15	259	10	32	7	63	12	3	34	42	C
16	234	11	37	11	67	15	4	43	51	C
17	209	14	31	14	52	20	4	44	41	C
18	184	16	47	15	55	22	2	44	51	C
19	159	18	62	18	67	25	1	44	65	C
20	134	23	79	20	57	30	6	41	69	A
21	109	25	80	22	55	33	7	41	69	A
22	84	18	81	20	50	26	7	49	64	A

## NWSC1206 ADCP 1644

Harmonic constants for constituent K1 for deployment NWSC1206.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	609	6	243	1	225	6	0	7	243	A
02	584	5	234	1	193	5	1	6	234	A
03	559	5	227	1	192	5	1	10	226	A
04	534	5	225	1	152	5	1	4	224	A
05	509	5	231	1	108	5	1	170	54	A
06	484	4	246	1	165	4	1	2	246	A
07	459	5	253	2	224	5	1	18	250	A
08	434	2	239	2	215	3	1	46	226	A
09	409	3	197	4	187	5	0	49	191	A
10	384	4	196	3	188	5	0	34	193	A
11	359	4	173	4	173	6	0	42	173	A
12	334	5	145	3	149	6	0	33	146	C
13	309	6	139	5	123	8	1	38	133	A
14	284	6	163	5	116	7	3	37	145	A
15	259	7	191	4	98	7	4	177	13	A
16	234	7	226	4	55	8	0	154	48	A
17	209	6	251	3	346	6	3	177	70	C
18	184	12	266	12	304	16	6	44	284	C
19	159	23	258	21	306	29	13	42	280	C
20	134	31	257	26	316	36	20	36	279	C
21	109	34	270	32	320	42	20	41	292	C
22	84	34	264	38	307	47	19	49	288	C



## NWSX1206

**Latitude:** 60°51.670'N

**Longitude:** 005°29.750'W

**Echo sounding depth:** 550 m

**Bottom depth corr.:** 546 m (MicroCat)

**Time of deployment:** 9/6 - 2012 1045 UTC

**Time of recovery:** 19/5 – 2013 1447 UTC

### ADCP:

**Instrument no.:** RDI ADCP 3368

**Instrument frequency:** 75 kHz

**Height above bottom:** 1 m

**Depth:** 545 m (corr.)

**Time of first data:** 9/6 – 2012 1100 UTC

**Time of last data:** 19/5 – 2013 1420 UTC

**Sample interval:** 20 min

**No. of ensembles:** 24779

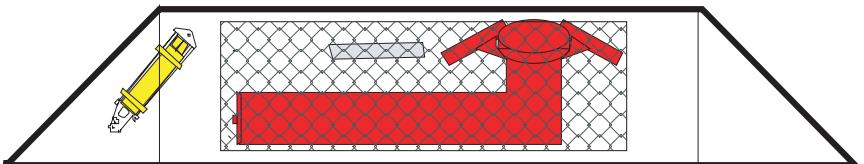
**Pings per ens.:** 10

**Binlength:** 10 m

**Depth of first bin:** 526 m (corr.)

**No. of bins:** 48

### MicroCat:



**Instrument no.:** 0984

**Height above bottom:** 1 m

**Time of first data:** 9/6 – 2012 1100 UTC

**Time of last data:** 19/5 – 2013 1440 UTC

**Sample interval:** 10 min

**No. of ensembles:** 49559

**Instrument depth:** 545 m

### Data:

**ADCP data ok.**

**The salinity from the MicroCat has not been edited.**

## NWSX1206 ADCP 3368

Error statistics for deployment: NWSX1206 updated 2014/04/24

Temperature edited

Depth edited

Surface distance not edited

Heading, pitch and roll not edited

Intensity not edited

Velocity edited using these data filters (ADCPproc.m):

Minimum Intensity: 65

Minimum Mean Correlation: 68

Maximum Speed, number of std dev for each bin: 4

Maximum Vertical Velocity: 100

Maximum Error Velocity (erv\_tr+0.1\*spd): 100

Speed Spikes, u and v deviated from 3 point median by number of std dev: 5

Vertical Speed Spikes, u and v deviated from 3 point median by number of std dev: 4

Vertical Velocity Spikes, deviated from 3 point median by number of std dev: 4

Velocity edited up to and including bin 48 by KMHL in Apr 2014

Total number of ensembles: 24779

Interval between ensembles: 20 min

Original number of bins: 60

Number of acceptable velocity bins: 48

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

Number of 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	124	1	104	7	2	0	0	0	0	0	0	0
2	0	128	1	118	5	0	0	0	0	0	0	0	0
3	0	128	1	103	9	1	1	0	0	0	0	0	0
4	0	132	1	111	7	1	1	0	0	0	0	0	0
5	0	125	1	94	11	3	0	0	0	0	0	0	0
6	0	112	0	103	3	1	0	0	0	0	0	0	0
7	0	111	0	90	6	3	0	0	0	0	0	0	0
8	0	115	0	101	5	3	1	0	0	0	0	0	0
9	0	122	0	111	4	1	0	0	0	0	0	0	0
10	0	118	0	96	9	1	1	0	0	0	0	0	0
11	0	102	0	82	8	0	0	0	0	0	0	0	0
12	0	119	0	92	9	0	0	1	0	0	0	0	0
13	0	125	1	109	8	0	0	0	0	0	0	0	0
14	0	129	1	113	6	0	0	1	0	0	0	0	0
15	0	128	1	108	10	0	0	0	0	0	0	0	0
16	0	114	0	105	3	1	0	0	0	0	0	0	0
17	0	142	1	133	3	1	0	0	0	0	0	0	0
18	0	117	0	105	4	1	1	0	0	0	0	0	0
19	0	123	0	119	2	2	1	0	0	0	0	0	0
20	0	115	0	102	5	1	0	0	0	0	0	0	0
21	0	108	0	102	3	0	0	0	0	0	0	0	0
22	0	115	0	109	3	0	0	0	0	0	0	0	0
23	0	103	0	99	2	0	0	0	0	0	0	0	0
24	0	113	0	105	4	0	0	0	0	0	0	0	0
25	0	90	0	88	1	0	0	0	0	0	0	0	0
26	0	125	1	114	4	1	0	0	0	0	0	0	0
27	0	122	0	112	5	0	0	0	0	0	0	0	0
28	0	126	1	116	5	0	0	0	0	0	0	0	0
29	0	168	1	147	9	1	0	0	0	0	0	0	0
30	0	125	1	114	4	1	0	0	0	0	0	0	0
31	0	143	1	119	9	2	3	1	0	0	0	0	0
32	0	218	1	155	17	4	4	6	6	0	0	0	0
33	0	322	1	173	22	6	7	7	2	1	0	0	0
34	0	513	2	202	33	11	6	6	12	5	0	0	0
35	0	712	3	199	29	21	14	10	24	13	1	0	0
36	0	923	4	217	46	25	22	9	25	7	0	0	0
37	0	1155	5	225	41	33	13	12	32	16	0	0	0
38	0	1429	6	260	57	27	22	22	34	18	0	0	0
39	0	1783	7	259	74	35	23	11	45	29	10	2	0
40	0	2095	8	297	57	42	23	14	50	36	9	7	0
41	0	2630	11	313	72	38	26	12	52	31	21	13	11
42	0	3121	13	291	83	36	25	10	38	37	27	23	11
43	0	3659	15	315	62	53	15	17	30	42	38	28	12
44	0	4186	17	364	68	26	24	16	32	53	34	36	11
45	0	4832	20	370	87	32	19	19	26	43	39	47	11
46	0	5633	23	408	61	23	20	10	20	44	43	55	12
47	0	6530	26	428	83	29	16	11	26	54	59	71	15
48	0	9005	36	922	174	71	29	24	33	26	26	26	26

## NWSX1206 ADCP 3368

Deployment: NWSX1206 updated 2014/04/24  
 Instrument no.: 3368  
 Instrument freq.: 75  
 Latitude: 60 51.670 N  
 Longitude: 05 29.750 W  
 Bottom depth: 546  
 Instrument depth: 545  
 Center depth of first bin: 526  
 Bin length: 10  
 Number of bins: 48  
 Number of first ensemble: 352  
 Time of first ensemble: 2012 06 09 11 00  
 Number of last ensemble: 25130  
 Time of last ensemble: 2013 05 19 14 20  
 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	526	20	242	71	191	995
2	516	30	255	73	195	995
3	506	40	263	73	200	995
4	496	50	267	71	204	995
5	486	60	268	69	208	995
6	476	70	268	67	211	995
7	466	80	266	66	214	996
8	456	90	264	64	216	995
9	446	100	263	64	218	995
10	436	110	260	62	219	995
11	426	120	257	61	218	996
12	416	130	254	60	219	995
13	406	140	251	59	219	995
14	396	150	246	58	220	995
15	386	160	242	60	221	995
16	376	170	239	61	221	995
17	366	180	236	63	221	994
18	356	190	233	65	221	995
19	346	200	232	68	222	995
20	336	210	231	70	223	995
21	326	220	229	72	223	996
22	316	230	229	73	223	995
23	306	240	229	73	224	996
24	296	250	230	74	223	995
25	286	260	230	73	223	996
26	276	270	229	73	222	995
27	266	280	229	72	222	995
28	256	290	229	72	221	995
29	246	300	230	73	221	993
30	236	310	230	73	220	995
31	226	320	231	73	219	994
32	216	330	233	73	219	991
33	206	340	235	73	218	987
34	196	350	237	73	218	979
35	186	360	238	73	217	971
36	176	370	239	72	217	963
37	166	380	240	71	216	953
38	156	390	240	69	216	942
39	146	400	240	68	215	928
40	136	410	241	69	215	915
41	126	420	241	69	216	894
42	116	430	242	71	216	874
43	106	440	243	72	217	852
44	96	450	245	73	217	831
45	86	460	247	75	218	805
46	76	470	250	76	217	773
47	66	480	252	79	217	736
48	56	490	251	82	219	637

## NWSX1206 ADCP 3368

Frequency of high speeds.

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

Bin Depth  no.	m	Speed (cm/s)																	
		10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	526	845	561	309	132	46	14	3	0	0	0	0	0	0	0	0	0	0	0
2	516	863	596	340	157	64	18	4	1	0	0	0	0	0	0	0	0	0	0
3	506	877	614	359	174	69	20	6	1	0	0	0	0	0	0	0	0	0	0
4	496	881	629	373	181	70	21	6	1	0	0	0	0	0	0	0	0	0	0
5	486	886	631	377	183	69	21	6	1	0	0	0	0	0	0	0	0	0	0
6	476	887	630	375	182	69	21	5	2	1	0	0	0	0	0	0	0	0	0
7	466	883	628	370	179	68	20	5	2	1	0	0	0	0	0	0	0	0	0
8	456	883	623	364	175	65	20	4	1	0	0	0	0	0	0	0	0	0	0
9	446	882	624	358	170	62	19	5	1	0	0	0	0	0	0	0	0	0	0
10	436	883	617	348	164	61	18	5	1	0	0	0	0	0	0	0	0	0	0
11	426	881	607	337	155	58	17	5	1	0	0	0	0	0	0	0	0	0	0
12	416	879	598	329	154	57	17	4	1	0	0	0	0	0	0	0	0	0	0
13	406	875	585	318	149	55	16	3	0	0	0	0	0	0	0	0	0	0	0
14	396	867	573	305	140	52	14	3	0	0	0	0	0	0	0	0	0	0	0
15	386	862	558	297	133	51	13	2	0	0	0	0	0	0	0	0	0	0	0
16	376	856	548	289	131	47	12	2	0	0	0	0	0	0	0	0	0	0	0
17	366	845	540	283	127	44	11	2	0	0	0	0	0	0	0	0	0	0	0
18	356	841	531	275	123	43	11	2	0	0	0	0	0	0	0	0	0	0	0
19	346	840	523	276	122	42	11	2	0	0	0	0	0	0	0	0	0	0	0
20	336	835	523	270	121	43	11	2	0	0	0	0	0	0	0	0	0	0	0
21	326	829	516	267	121	43	10	2	0	0	0	0	0	0	0	0	0	0	0
22	316	825	513	272	122	44	10	2	0	0	0	0	0	0	0	0	0	0	0
23	306	824	514	270	122	44	11	2	0	0	0	0	0	0	0	0	0	0	0
24	296	825	516	274	125	47	11	2	0	0	0	0	0	0	0	0	0	0	0
25	286	828	514	272	123	44	11	2	0	0	0	0	0	0	0	0	0	0	0
26	276	825	513	269	124	43	10	2	0	0	0	0	0	0	0	0	0	0	0
27	266	825	511	268	122	43	10	2	0	0	0	0	0	0	0	0	0	0	0
28	256	826	513	271	122	43	11	1	0	0	0	0	0	0	0	0	0	0	0
29	246	827	511	270	122	42	11	2	0	0	0	0	0	0	0	0	0	0	0
30	236	828	516	271	122	42	11	2	0	0	0	0	0	0	0	0	0	0	0
31	226	830	519	278	122	44	12	2	0	0	0	0	0	0	0	0	0	0	0
32	216	827	523	278	126	43	12	2	0	0	0	0	0	0	0	0	0	0	0
33	206	828	525	288	129	47	13	2	0	0	0	0	0	0	0	0	0	0	0
34	196	821	530	287	130	48	14	2	0	0	0	0	0	0	0	0	0	0	0
35	186	815	527	291	134	49	14	3	0	0	0	0	0	0	0	0	0	0	0
36	176	808	525	289	134	50	14	2	0	0	0	0	0	0	0	0	0	0	0
37	166	801	519	288	134	49	15	3	1	0	0	0	0	0	0	0	0	0	0
38	156	792	514	287	133	48	14	3	0	0	0	0	0	0	0	0	0	0	0
39	146	784	507	282	130	48	14	3	0	0	0	0	0	0	0	0	0	0	0
40	136	772	502	279	130	48	15	3	0	0	0	0	0	0	0	0	0	0	0
41	126	756	490	271	127	49	14	3	0	0	0	0	0	0	0	0	0	0	0
42	116	738	484	268	126	49	15	4	1	0	0	0	0	0	0	0	0	0	0
43	106	720	472	265	124	50	16	4	1	0	0	0	0	0	0	0	0	0	0
44	96	706	466	262	123	48	17	5	1	0	0	0	0	0	0	0	0	0	0
45	86	687	457	257	121	49	18	5	1	0	0	0	0	0	0	0	0	0	0
46	76	664	444	250	118	49	19	5	1	0	0	0	0	0	0	0	0	0	0
47	66	636	424	238	115	51	19	7	2	0	0	0	0	0	0	0	0	0	0
48	56	550	365	204	97	43	17	6	2	1	0	0	0	0	0	0	0	0	0

## NWSX1206 ADCP 3368

Harmonic constants for constituent M2 for deployment NWSX1206

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	526	234	241	102	193	245	72	18	235	A
02	516	252	242	112	189	262	87	17	237	A
03	506	262	243	121	189	273	94	17	237	A
04	496	267	244	130	191	279	100	19	238	A
05	486	268	246	136	194	283	101	20	238	A
06	476	268	247	140	197	285	101	21	239	A
07	466	266	248	144	200	285	100	23	240	A
08	456	263	249	146	202	284	99	24	241	A
09	446	261	251	148	205	284	98	25	242	A
10	436	256	252	149	207	281	95	26	242	A
11	426	250	253	150	209	277	93	27	243	A
12	416	246	254	150	212	274	89	28	244	A
13	406	240	255	150	215	270	87	29	245	A
14	396	235	256	149	217	265	83	29	246	A
15	386	229	256	147	219	261	77	30	246	A
16	376	223	256	145	221	256	74	31	246	A
17	366	217	256	143	222	251	69	31	247	A
18	356	213	256	140	224	247	65	32	247	A
19	346	210	256	138	225	244	62	32	247	A
20	336	208	256	135	226	241	59	31	247	A
21	326	206	256	132	227	238	56	31	248	A
22	316	204	256	131	228	237	53	31	248	A
23	306	202	256	130	228	235	51	32	248	A
24	296	200	255	130	229	233	49	32	248	A
25	286	197	255	128	230	231	46	32	248	A
26	276	195	255	126	231	228	44	32	248	A
27	266	193	255	125	232	226	42	32	248	A
28	256	191	255	124	233	224	40	32	248	A
29	246	188	255	122	233	221	38	32	249	A
30	236	187	255	121	234	219	37	32	249	A
31	226	186	255	120	234	219	36	32	249	A
32	216	186	255	120	234	218	36	32	249	A
33	206	186	254	120	234	219	35	32	249	A
34	196	187	254	119	235	219	34	32	249	A
35	186	186	254	118	234	218	34	32	248	A
36	176	186	253	117	234	217	34	32	248	A
37	166	185	253	116	234	216	33	31	248	A
38	156	184	253	114	234	214	32	31	248	A
39	146	184	253	113	234	214	32	31	248	A
40	136	183	253	112	233	212	32	31	248	A
41	126	182	252	111	234	211	31	31	247	A
42	116	181	252	109	234	209	30	31	248	A
43	106	179	253	111	234	208	30	31	248	A
44	96	179	253	109	236	208	28	31	248	A
45	86	178	253	108	236	207	28	31	248	A
46	76	177	253	107	236	205	27	31	249	A
47	66	174	253	104	237	201	25	30	249	A
48	56	175	251	93	238	197	20	27	248	A

## NWSX1206 ADCP 3368

Harmonic constants for constituent S2 for deployment NWSX1206

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	526	83	294	54	245	92	36	28	282	A
02	516	92	293	56	242	100	40	25	283	A
03	506	96	293	58	241	104	42	25	282	A
04	496	97	293	60	241	106	43	26	282	A
05	486	97	293	60	243	106	42	26	282	A
06	476	98	293	59	243	106	42	26	282	A
07	466	98	293	58	246	107	39	26	283	A
08	456	96	294	56	249	105	36	26	284	A
09	446	93	294	55	253	103	33	27	285	A
10	436	90	295	54	255	100	31	27	286	A
11	426	86	295	52	257	96	28	28	286	A
12	416	84	295	51	258	95	27	28	286	A
13	406	83	294	50	260	94	25	29	285	A
14	396	81	293	50	261	93	23	30	285	A
15	386	79	291	50	263	91	21	31	284	A
16	376	77	291	49	265	90	19	31	284	A
17	366	76	290	48	264	88	18	31	283	A
18	356	74	288	47	265	86	15	31	282	A
19	346	73	286	46	267	85	13	31	281	A
20	336	71	286	45	268	84	12	32	281	A
21	326	70	285	45	270	83	9	32	280	A
22	316	69	285	45	270	82	9	33	280	A
23	306	70	286	45	271	82	10	32	282	A
24	296	71	288	45	272	83	10	32	283	A
25	286	70	289	44	274	82	10	32	285	A
26	276	70	290	43	275	82	10	31	286	A
27	266	68	291	42	275	79	9	31	287	A
28	256	68	291	41	275	79	10	30	287	A
29	246	67	291	40	275	78	9	30	287	A
30	236	66	291	38	274	76	10	29	287	A
31	226	66	290	38	275	75	9	29	287	A
32	216	65	290	38	274	75	9	30	286	A
33	206	65	291	37	275	74	9	29	287	A
34	196	65	290	38	277	75	7	30	287	A
35	186	66	290	38	276	76	8	30	287	A
36	176	66	290	38	278	76	7	30	287	A
37	166	67	290	38	278	77	7	29	287	A
38	156	67	291	36	279	76	7	28	288	A
39	146	66	289	35	277	75	7	28	287	A
40	136	67	288	34	273	75	8	26	285	A
41	126	67	287	34	268	75	10	26	283	A
42	116	67	284	33	266	74	10	26	281	A
43	106	67	283	32	264	73	9	25	279	A
44	96	66	280	33	259	73	11	25	276	A
45	86	67	279	34	257	74	11	26	275	A
46	76	66	275	35	256	73	10	27	271	A
47	66	66	275	32	257	72	9	25	272	A
48	56	63	273	31	261	70	6	25	271	A

## NWSX1206 ADCP 3368

Harmonic constants for constituent N2 for deployment NWSX1206.

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	526	53	219	26	148	54	24	11	214	A
02	516	58	218	29	147	59	27	12	213	A
03	506	61	218	29	149	62	27	12	213	A
04	496	62	220	31	154	63	27	14	214	A
05	486	62	222	31	159	64	27	16	215	A
06	476	64	224	33	165	66	27	18	217	A
07	466	64	226	33	171	67	26	20	218	A
08	456	63	228	33	174	66	26	20	220	A
09	446	59	229	32	177	63	24	22	221	A
10	436	58	230	32	181	63	23	23	221	A
11	426	57	231	32	184	61	22	24	222	A
12	416	55	232	32	187	60	20	25	223	A
13	406	53	233	32	191	59	19	27	223	A
14	396	49	232	31	193	55	17	29	222	A
15	386	45	232	29	196	51	15	30	223	A
16	376	42	231	26	199	48	12	30	223	A
17	366	40	229	24	201	46	10	29	222	A
18	356	40	226	22	208	45	6	28	222	A
19	346	39	224	22	210	45	5	28	221	A
20	336	38	225	21	211	44	5	29	222	A
21	326	37	225	22	213	43	4	30	222	A
22	316	38	226	21	216	43	3	29	224	A
23	306	37	226	22	216	43	3	31	224	A
24	296	37	228	24	216	44	4	33	225	A
25	286	37	229	24	217	44	4	33	225	A
26	276	36	229	25	216	44	5	35	224	A
27	266	35	229	25	217	43	4	35	225	A
28	256	35	228	25	215	43	5	35	224	A
29	246	34	229	25	216	43	5	36	224	A
30	236	35	230	25	215	43	6	35	225	A
31	226	36	230	24	215	43	5	33	225	A
32	216	36	231	25	216	43	5	34	226	A
33	206	36	231	24	215	43	6	33	226	A
34	196	36	232	24	214	43	6	33	227	A
35	186	37	232	24	216	44	6	32	228	A
36	176	37	231	22	215	43	5	31	227	A
37	166	36	230	22	218	43	4	31	227	A
38	156	36	230	22	218	42	4	31	227	A
39	146	35	231	23	219	42	4	33	228	A
40	136	36	231	24	221	43	4	33	228	A
41	126	35	235	22	216	41	6	32	230	A
42	116	36	232	24	214	43	6	33	227	A
43	106	35	232	25	215	42	6	35	226	A
44	96	35	228	24	219	42	3	35	225	A
45	86	34	231	23	217	41	5	34	226	A
46	76	34	229	25	220	42	3	36	226	A
47	66	34	229	24	219	42	4	35	226	A
48	56	33	230	25	218	41	4	37	226	A

## NWSX1206 ADCP 3368

Harmonic constants for constituent O1 for deployment NWSX1206.

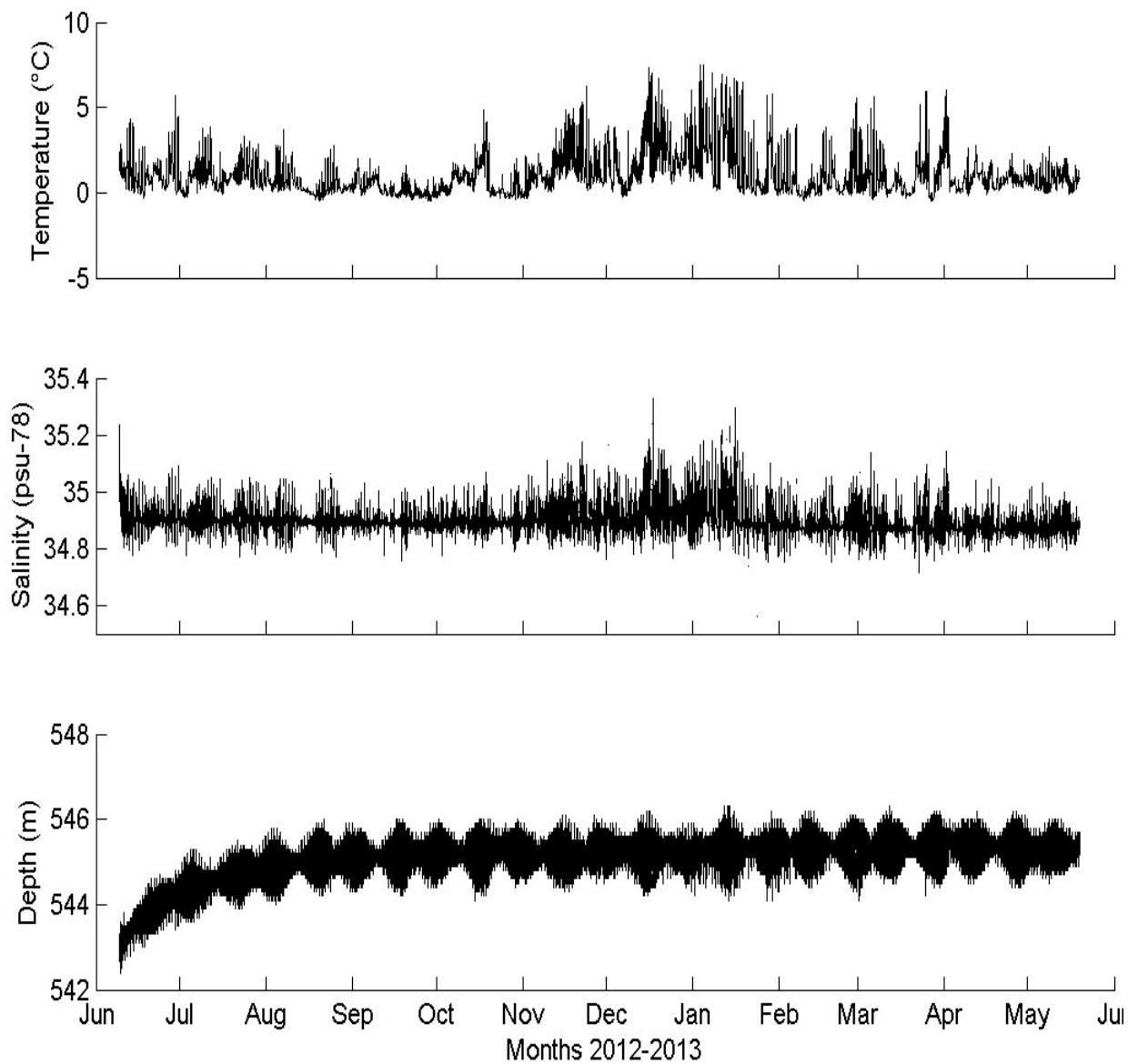
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	526	75	321	18	359	76	11	11	323	C
02	516	72	320	18	11	73	14	9	322	C
03	506	67	318	18	21	68	16	7	319	C
04	496	65	316	16	26	65	15	5	317	C
05	486	61	314	15	32	61	15	3	315	C
06	476	58	312	14	40	58	14	1	313	C
07	466	55	311	14	45	55	14	179	131	C
08	456	51	309	14	51	51	14	176	128	C
09	446	48	306	14	56	48	13	174	124	C
10	436	46	303	13	67	47	11	170	121	C
11	426	44	302	13	80	46	8	167	120	C
12	416	42	302	13	89	43	7	165	120	C
13	406	38	302	13	98	40	5	163	120	C
14	396	36	301	14	105	38	3	159	119	C
15	386	34	299	13	106	37	3	159	118	C
16	376	34	298	14	113	36	1	158	117	C
17	366	33	298	15	113	36	1	155	117	C
18	356	32	298	15	116	35	0	155	117	C
19	346	32	296	14	119	35	0	157	117	A
20	336	32	295	14	120	35	1	157	116	A
21	326	32	295	13	127	34	2	158	117	A
22	316	31	295	12	129	33	3	159	117	A
23	306	30	295	13	128	33	3	158	117	A
24	296	29	294	14	124	32	2	155	116	A
25	286	29	294	14	126	32	3	155	116	A
26	276	28	295	14	123	31	2	154	117	A
27	266	27	296	15	123	31	2	151	117	A
28	256	27	294	15	125	31	3	152	116	A
29	246	28	294	16	123	32	2	151	117	A
30	236	28	295	16	125	32	2	151	118	A
31	226	28	296	15	124	32	2	152	118	A
32	216	29	295	15	124	33	2	153	117	A
33	206	29	295	15	125	32	2	153	118	A
34	196	30	295	15	123	33	2	154	117	A
35	186	30	296	15	123	33	2	153	117	A
36	176	29	296	14	120	33	1	154	117	A
37	166	28	297	15	118	32	0	152	117	A
38	156	27	300	15	117	31	1	150	119	C
39	146	26	303	15	116	30	2	151	121	C
40	136	25	301	15	120	29	0	149	121	C
41	126	27	303	13	120	30	1	153	122	C
42	116	27	300	13	119	30	0	154	120	C
43	106	26	296	12	115	28	0	154	115	C
44	96	27	297	14	115	30	1	152	116	C
45	86	26	298	13	110	29	1	154	116	C
46	76	26	295	12	99	28	3	156	112	C
47	66	24	299	11	91	26	5	157	115	C
48	56	26	304	8	69	26	6	170	121	C

## NWSX1206 ADCP 3368

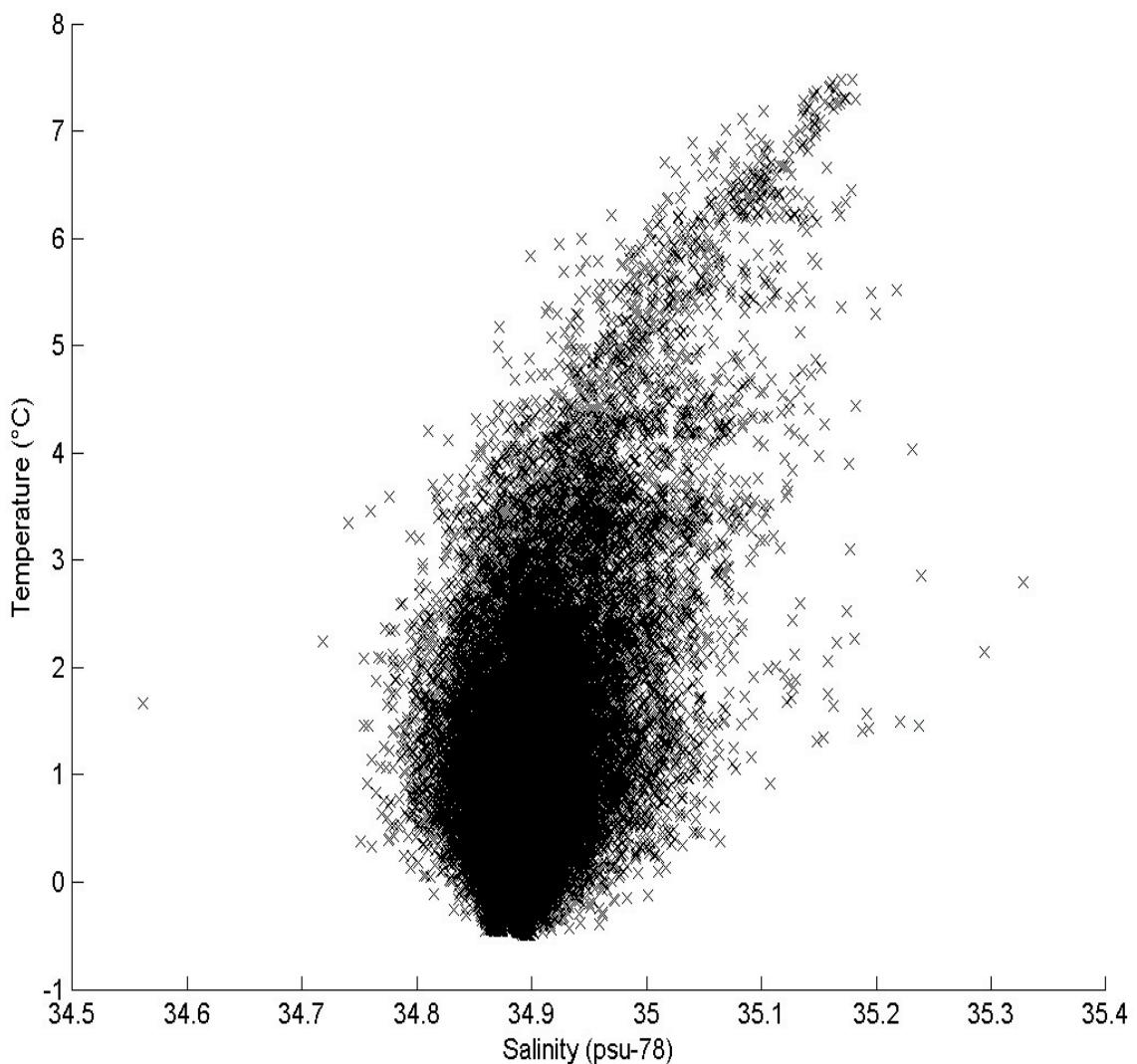
Harmonic constants for constituent K1 for deployment NWSX1206.

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	526	50	210	12	195	51	3	13	209	A
02	516	47	209	9	204	48	1	11	209	A
03	506	42	205	7	220	42	2	10	205	C
04	496	38	200	6	245	39	4	7	200	C
05	486	36	196	5	263	36	4	3	196	C
06	476	34	191	4	284	34	4	180	11	C
07	466	33	185	3	320	33	2	176	5	C
08	456	31	181	3	348	32	1	174	1	C
09	446	30	176	4	355	31	0	172	356	C
10	436	29	174	6	11	30	2	168	355	A
11	426	29	171	8	10	30	3	164	353	A
12	416	27	168	8	9	28	3	164	350	A
13	406	27	165	9	12	28	4	163	347	A
14	396	27	163	10	21	28	6	163	347	A
15	386	27	163	9	22	28	6	165	346	A
16	376	26	158	7	31	27	6	170	340	A
17	366	27	154	6	43	28	6	175	335	A
18	356	28	148	6	61	28	6	1	148	A
19	346	29	142	6	71	29	6	4	141	A
20	336	29	136	7	67	29	6	5	135	A
21	326	29	135	7	73	29	6	7	134	A
22	316	28	133	7	78	29	6	9	132	A
23	306	27	133	8	78	27	6	10	131	A
24	296	27	134	9	65	27	8	7	132	A
25	286	26	138	10	64	26	9	7	136	A
26	276	24	141	10	61	24	10	5	139	A
27	266	23	143	10	56	23	10	1	142	A
28	256	23	143	10	56	23	10	2	142	A
29	246	23	143	10	58	23	10	3	142	A
30	236	24	145	12	57	24	12	1	145	A
31	226	24	144	12	56	24	12	1	144	A
32	216	25	144	12	58	25	12	2	143	A
33	206	26	145	12	59	26	12	2	145	A
34	196	26	147	11	59	26	11	1	147	A
35	186	27	151	12	54	27	12	176	333	A
36	176	26	154	10	44	26	9	171	338	A
37	166	26	159	10	40	26	9	168	343	A
38	156	24	162	11	32	26	8	162	348	A
39	146	23	161	12	31	24	9	160	348	A
40	136	24	160	13	28	26	9	157	348	A
41	126	23	156	14	30	25	10	157	346	A
42	116	22	151	14	27	24	11	155	343	A
43	106	22	144	16	28	23	13	153	340	A
44	96	22	140	18	31	23	16	150	341	A
45	86	23	137	18	35	24	17	159	333	A
46	76	24	135	19	30	25	17	157	332	A
47	66	24	132	19	28	25	18	157	328	A
48	56	23	127	17	30	23	17	170	314	A

**NWSX1206 MicroCat 0984**



## NWSX1206 MicroCat 0984





# NWSY1206

**Latitude:** 60°43.100'N

**Longitude:** 005°05.900'W

**Echo sounding depth:** 909 m

**Bottom depth corr.:** 897m (Surface echo)

**Time of deployment:** 9/6 - 2012 1311 UTC

**Time of recovery:** 19/5 - 2013 1225 UTC

## ADCP:

**Instrument no.:** RDI ADCP 1285

**Instrument frequency:** 75 kHz

**Height above bottom:** 213 m

**Depth:** 684 m

**Time of first data:** 9/6 - 2012 1340 UTC

**Time of last data:** 19/5 - 2013 1200 UTC

**Sample interval:** 20 min

**No. of ensembles:** 24764

**Pings per ens.:** 1

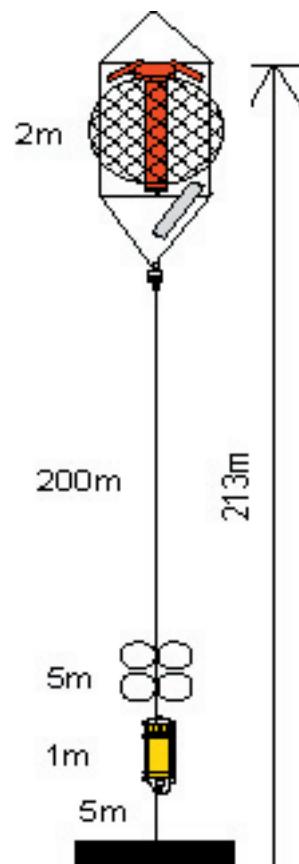
**Binlength:** 25 m

**Depth of first bin:** 648 m (corr.)

**No. of bins:** 23

## Data:

All data ok.



## NWSY1206 ADCP 1285

Error statistics for deployment: NWSY1206 updated 2014/04/28

Temperature edited

Surface distance not edited

Heading, pitch and roll not edited

Intensity not edited

Velocity edited using these data filters:

Minimum Mean Correlation: 60

Maximum Speed, number of std dev for each bin: 4

Maximum Vertical Velocity: 90

Maximum Error Velocity (erv\_tr+0.1\*spd): 100

Speed Spikes, u and v deviated from 3 point median by number of std dev: 4

Vertical Speed Spikes, u and v deviated from 3 point median by number of std dev: 4

Vertical Velocity Spikes, deviated from 3 point median by number of std dev: 5

Maximum absolute Pitch and Roll: 15

Total number of ensembles: 24764

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	ens.	Velocity	Number of velocity gaps of length												
			Int.		Velocity										
			flgd.	flgd.	flgd.	flgd.	1	2	3	4	5	6-10	11-20	21-30	31-50
1	0	180	1	136	22	0	0	0	0	0	0	0	0	0	0
2	0	188	1	143	21	1	0	0	0	0	0	0	0	0	0
3	0	215	1	161	24	2	0	0	0	0	0	0	0	0	0
4	0	225	1	138	30	6	1	1	0	0	0	0	0	0	0
5	0	210	1	155	17	4	1	1	0	0	0	0	0	0	0
6	0	211	1	155	23	2	1	0	0	0	0	0	0	0	0
7	0	212	1	144	34	0	0	0	0	0	0	0	0	0	0
8	0	210	1	161	20	3	0	0	0	0	0	0	0	0	0
9	0	246	1	188	24	2	1	0	0	0	0	0	0	0	0
10	0	230	1	175	19	3	2	0	0	0	0	0	0	0	0
11	0	278	1	204	28	3	2	0	0	0	0	0	0	0	0
12	0	287	1	235	21	2	1	0	0	0	0	0	0	0	0
13	0	313	1	240	26	3	3	0	0	0	0	0	0	0	0
14	0	335	1	242	27	5	6	0	0	0	0	0	0	0	0
15	0	367	1	249	35	6	5	0	1	0	0	0	0	0	0
16	0	509	2	299	37	9	7	5	4	2	0	0	0	0	0
17	0	671	3	324	41	17	8	2	10	7	0	0	0	0	0
18	0	1136	5	380	81	37	17	8	27	11	0	0	0	0	0
19	0	2393	10	423	92	57	30	17	51	42	14	2	0	0	0
20	0	4076	16	370	98	51	29	18	38	59	46	22	0	0	0
21	0	5589	23	335	105	64	32	12	49	54	59	52	0	0	0
22	0	6791	27	438	117	71	30	16	48	73	52	69	2	0	0
23	0	8387	34	587	154	67	26	29	55	72	55	84	12	0	0

## NWSY1206 ADCP 1285

Deployment: NWSY1206 updated 2014/04/28  
Instrument no.: 1285  
Instrument freq.: 75  
Latitude: 60 43.100 N  
Longitude: 05 05.900 W  
Bottom depth: 897  
Instrument depth: 684  
Center depth of first bin: 648  
Bin length: 25  
Number of bins: 23  
Number of first ensemble: 360  
Time of first ensemble: 2012 06 09 13 40  
Number of last ensemble: 25123  
Time of last ensemble: 2013 05 19 12 00  
Time between ensembles (min.): 20  
All directions have been corrected by adding: -5.0

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

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	648	249	210	73	184	993
2	623	274	210	72	184	992
3	598	299	210	71	183	991
4	573	324	210	69	182	991
5	548	349	210	68	180	992
6	523	374	210	65	179	991
7	498	399	211	65	178	991
8	473	424	213	65	177	992
9	448	449	216	64	177	990
10	423	474	217	64	177	991
11	398	499	221	65	177	989
12	373	524	228	65	177	988
13	348	549	237	67	178	987
14	323	574	246	68	178	986
15	298	599	256	70	177	985
16	273	624	263	71	175	979
17	248	649	269	71	171	973
18	223	674	277	71	166	954
19	198	699	285	73	165	903
20	173	724	291	74	162	835
21	148	749	298	75	158	774
22	123	774	307	77	155	726
23	98	799	316	82	151	661

## NWSY1206 ADCP 1285

Frequency of high speeds.

=====

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

Bin Depth  no.	m	Speed (cm/s)																	
		10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1	648	827	483	199	62	15	5	1	0	0	0	0	0	0	0	0	0	0	0
2	623	830	485	198	60	16	5	1	0	0	0	0	0	0	0	0	0	0	0
3	598	831	482	198	60	16	5	1	0	0	0	0	0	0	0	0	0	0	0
4	573	827	482	198	62	16	5	1	0	0	0	0	0	0	0	0	0	0	0
5	548	826	479	198	63	18	5	1	0	0	0	0	0	0	0	0	0	0	0
6	523	823	478	200	66	18	5	1	0	0	0	0	0	0	0	0	0	0	0
7	498	822	475	205	72	20	5	1	0	0	0	0	0	0	0	0	0	0	0
8	473	824	481	210	77	23	6	1	0	0	0	0	0	0	0	0	0	0	0
9	448	823	486	217	83	26	7	1	0	0	0	0	0	0	0	0	0	0	0
10	423	819	490	223	88	31	9	1	0	0	0	0	0	0	0	0	0	0	0
11	398	821	498	233	98	36	12	2	0	0	0	0	0	0	0	0	0	0	0
12	373	825	512	256	112	43	16	4	1	0	0	0	0	0	0	0	0	0	0
13	348	839	532	279	128	52	21	7	1	0	0	0	0	0	0	0	0	0	0
14	323	844	555	303	143	60	25	9	2	1	0	0	0	0	0	0	0	0	0
15	298	856	579	326	160	68	30	11	3	1	0	0	0	0	0	0	0	0	0
16	273	860	594	344	170	74	32	12	4	1	0	0	0	0	0	0	0	0	0
17	248	856	606	360	181	79	34	14	5	1	0	0	0	0	0	0	0	0	0
18	223	846	617	373	192	85	37	16	5	2	0	0	0	0	0	0	0	0	0
19	198	813	599	370	192	87	40	17	7	2	1	0	0	0	0	0	0	0	0
20	173	753	565	357	190	87	39	17	7	3	1	0	0	0	0	0	0	0	0
21	148	701	536	346	186	89	40	17	7	3	1	0	0	0	0	0	0	0	0
22	123	662	513	340	190	93	41	18	7	3	1	0	0	0	0	0	0	0	0
23	98	608	477	324	186	94	41	18	7	3	2	0	0	0	0	0	0	0	0

## NWSY1206 ADCP 1285

Harmonic constants for constituent M2 for deployment NWSY1206.

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	648	203	249	100	220	221	44	24	244	A
02	623	200	250	101	222	220	43	25	245	A
03	598	198	251	101	224	218	42	26	246	A
04	573	195	251	102	226	217	39	26	246	A
05	548	190	252	101	228	212	37	27	247	A
06	523	184	251	99	231	207	30	27	247	A
07	498	177	251	99	236	201	23	29	248	A
08	473	168	252	100	241	194	16	31	249	A
09	448	155	253	102	248	186	7	33	251	A
10	423	140	254	107	255	176	1	37	255	C
11	398	124	258	117	262	170	6	43	260	C
12	373	113	263	129	266	171	5	49	265	C
13	348	105	269	141	269	176	0	53	269	A
14	323	100	274	150	271	181	4	56	272	A
15	298	97	279	158	273	185	9	59	274	A
16	273	94	282	164	273	188	13	60	275	A
17	248	94	286	168	273	192	18	61	276	A
18	223	95	289	172	273	196	22	62	277	A
19	198	96	291	177	273	199	27	62	277	A
20	173	96	293	181	273	203	30	63	277	A
21	148	99	294	187	272	208	34	63	277	A
22	123	102	297	196	272	217	40	64	277	A
23	98	103	298	202	273	223	40	64	278	A

Harmonic constants for constituent S2 for deployment NWSY1206.

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	648	71	289	42	264	81	16	29	283	A
02	623	71	290	43	264	81	17	30	283	A
03	598	71	290	43	265	81	16	30	284	A
04	573	71	290	43	265	81	16	30	284	A
05	548	69	291	44	268	80	15	31	285	A
06	523	67	292	43	271	78	13	32	286	A
07	498	64	292	42	275	76	11	33	287	A
08	473	62	292	40	279	73	7	33	288	A
09	448	58	290	39	285	70	3	34	288	A
10	423	52	288	39	294	64	3	37	290	C
11	398	44	291	43	302	61	6	44	297	C
12	373	39	295	49	307	62	7	51	302	C
13	348	35	298	53	310	63	6	57	306	C
14	323	31	297	54	312	62	7	61	309	C
15	298	29	301	56	314	63	6	62	311	C
16	273	30	309	57	317	64	3	63	315	C
17	248	33	317	59	317	67	0	61	317	A
18	223	34	317	60	315	69	1	60	315	A
19	198	35	317	62	313	71	2	61	314	A
20	173	38	321	64	316	74	2	60	317	A
21	148	39	325	70	319	80	3	61	320	A
22	123	41	330	73	323	84	4	61	325	A
23	98	40	334	77	326	87	5	63	328	A

## NWSY1206 ADCP 1285

Harmonic constants for constituent N2 for deployment NWSY1206.

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	648	50	221	21	175	53	14	17	217	A
02	623	51	221	22	175	53	15	18	216	A
03	598	51	222	23	177	53	15	19	217	A
04	573	49	223	22	178	52	15	19	218	A
05	548	49	223	22	181	52	14	20	217	A
06	523	46	220	19	183	49	11	20	216	A
07	498	43	218	17	190	46	7	20	214	A
08	473	37	217	15	209	40	2	21	216	A
09	448	31	214	14	232	34	4	24	217	C
10	423	26	216	17	247	30	8	31	224	C
11	398	19	223	23	257	29	8	51	243	C
12	373	16	245	30	258	34	3	62	255	C
13	348	17	262	35	257	38	1	64	258	A
14	323	17	277	36	257	40	5	66	260	A
15	298	20	291	41	257	44	10	67	262	A
16	273	21	296	44	255	47	13	69	261	A
17	248	23	300	46	254	49	15	69	261	A
18	223	24	300	48	255	51	16	68	263	A
19	198	26	299	49	253	52	17	67	261	A
20	173	27	290	51	249	55	16	66	256	A
21	148	28	286	53	245	57	17	66	252	A
22	123	29	285	50	247	56	16	63	255	A
23	98	30	284	51	244	56	18	63	253	A

Harmonic constants for constituent O1 for deployment NWSY1206.

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	648	17	349	12	44	19	9	28	3	C
02	623	18	350	12	44	20	9	28	4	C
03	598	17	350	12	45	19	9	28	4	C
04	573	17	351	13	43	19	9	33	8	C
05	548	16	348	13	41	19	9	35	6	C
06	523	18	348	12	49	19	10	24	1	C
07	498	18	346	11	47	19	10	22	357	C
08	473	18	346	11	43	19	9	24	357	C
09	448	18	347	11	40	19	8	26	359	C
10	423	17	341	11	38	18	8	25	353	C
11	398	15	342	11	47	16	9	27	358	C
12	373	14	339	10	43	15	8	27	355	C
13	348	15	337	10	38	16	8	26	352	C
14	323	15	337	11	39	17	9	29	354	C
15	298	17	337	11	39	18	9	24	350	C
16	273	18	336	12	39	19	10	23	348	C
17	248	18	337	11	46	18	10	19	348	C
18	223	17	339	12	50	18	11	23	355	C
19	198	13	350	13	60	15	11	48	28	C
20	173	9	1	16	74	17	8	79	69	C
21	148	7	12	15	74	15	6	75	68	C
22	123	8	24	15	84	16	7	70	74	C
23	98	7	35	14	75	15	4	69	69	C

## NWSY1206 ADCP 1285

Harmonic constants for constituent K1 for deployment NWSY1206.

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	648	11	206	4	258	11	3	13	209	C
02	623	11	202	3	246	11	2	12	204	C
03	598	11	203	3	228	11	1	14	204	C
04	573	12	202	2	220	12	1	10	202	C
05	548	13	201	2	196	13	0	11	200	A
06	523	11	199	3	205	12	0	13	200	C
07	498	11	198	3	207	11	0	14	198	C
08	473	11	192	1	190	11	0	8	192	A
09	448	11	188	1	223	11	1	5	188	C
10	423	10	181	1	196	10	0	6	181	C
11	398	8	167	2	188	8	1	10	168	C
12	373	7	156	2	203	7	1	10	158	C
13	348	9	143	2	152	9	0	13	143	C
14	323	10	141	7	147	12	1	34	143	C
15	298	8	141	8	149	12	1	45	145	C
16	273	5	161	8	157	10	0	60	158	A
17	248	6	189	9	173	11	1	55	178	A
18	223	7	177	10	174	12	0	56	175	A
19	198	7	170	10	165	12	1	56	167	A
20	173	10	211	13	182	16	4	53	192	A
21	148	15	219	18	201	23	4	51	208	A
22	123	21	224	22	212	30	3	46	218	A
23	98	21	217	26	208	33	3	50	212	A



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