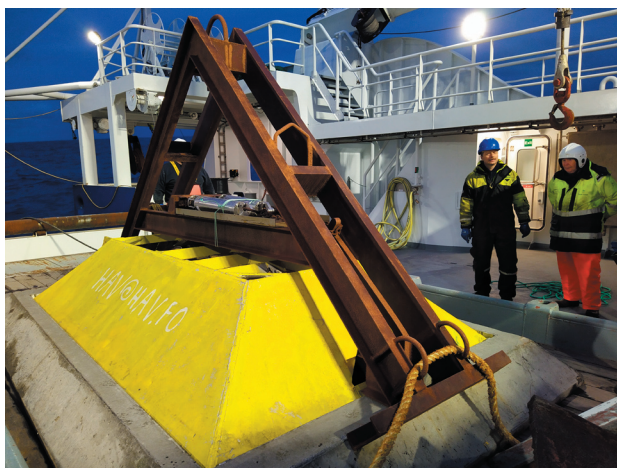


ADCP deployments in Faroese Waters 2020 - 2021

Tórshavn · December 2021



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Introduction

This report documents six current meter deployments in Faroese waters in 2020 – 2021.

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. Three of the moorings (NWFB, NWFC and NWNB) were located at standard (Nordic WOCE) sites funded by the Danish Ministry of Climate, Energy and Utilities; two moorings (IFRD and IFRE) were deployed on the Iceland-Faroe Ridge funded by Jens Smeds Oceanografiske fond and the last mooring (NWNM) had other funding and was deployed on the northern part of Havstovans standard section N.

At all sites except IFRD, RDI ADCPs (Acoustic Doppler Current Profiler) were placed in the top of single-point moorings. At site IFRD an RDI ADCP was placed on the bottom inside a protective aluminium frame.

The ADCP's measure the velocity averaged over a number of depth layers ("bins"). At 20 minute intervals, the ADCP's record the data from all bins into "ensembles" as well as the instruments heading, pitch, roll and temperature.

In addition to ADCP's the moorings had other recorders attached as shown in Table 2. The MicroCat (SBE 37) at site NWFB recorded pressure, temperature and salinity. The SBE39plus and SBE56 are temperature recorders only. The Starmon TD measures pressure and temperature, but the instrument had no data due to leakage.

For more details see Tables 1 and 2.

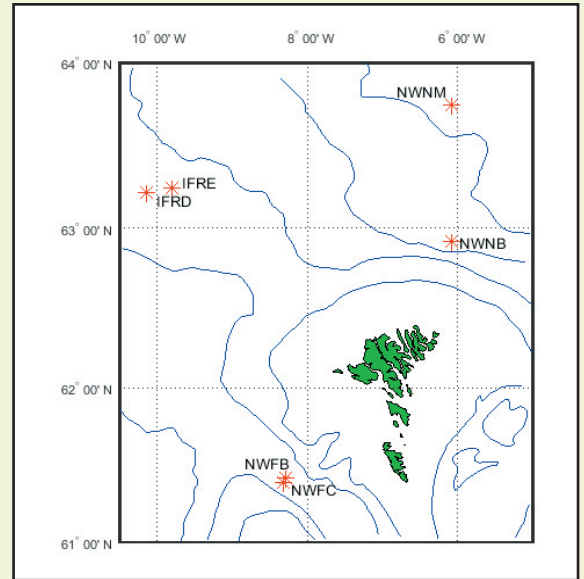


Figure 1. Mooring sites in Faroese waters 2020-2021 superposed on a map with the bottom topography. Each site is indicated by a four-letter label.

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

Deployment	Instr. No	Current Meter type	Freq. kHz	Pings per ens	Binlng. m
NWFB2006	1642	BB ADCP	75	1	25
NWFC2006	1285	BB ADCP	75	1	25
NWNB2006	19518	LR ADCP	75	10	10
NWNM2006	1292	BB ADCP	75	1	25
IFRD2005	1279	BB ADCP	150	1	10
IFRE2006	1644	BB ADCP	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 depth	Int. min.	Valid data period	Dur. days	No bins	Depth range	Other instr.
NWFB2006	811	20	2020 06 12-2021 05 25	347	19	319- 769	Microcat + SBE56
NWFC2006	845	20	2020 06 12-2021 05 25	347	25	203- 803	SBE39
NWNB2006	965	20	2020 06 14-2021 05 20	340	64	66- 696	SBE56
NWNM2006	2390	20	2020 06 13-2021 05 21	341	22	79- 604	Starmon TD
IFRD2005	434	20	2020 05 24-2021 05 22	363	29	137- 417	SBE56
IFRE2006	490	20	2020 06 12-2021 05 22	343	15	98- 448	SBE56

Quality control

ADCP data

The velocity data from the ADCPs have been quality controlled using a semi-automatic routine that error flags observations that are above/below specified thresholds or are identified by specific filters as elaborated below:

- i) A minimum threshold can be set for intensity and correlation.
- ii) In order to remove extremely large speed (spd) values, the mean speed is calculated for each bin and multiplied by a specified factor. The result is the maximum threshold for each bin.
- iii) A maximum threshold for absolute vertical velocity (w) can be set.
- iv) The ADCP data also include an error velocity and a maximum absolute threshold can be specified for this parameter. The final threshold is this threshold plus ten percent of the observed speed for the individual observations.
- v) A de-spiking filter for horizontal velocities u and v can be applied. Observations, where u and v deviate from a three point median filter by more than the standard deviation multiplied by a specified factor, are error flagged. The specified factor can be chosen to vary between bins. One factor can be specified for bin 1 and another for the uppermost bin. For the intermediate bins the factor varies exponentially from bin 1 to the uppermost bin, such that the “sensitivity” of the filter can decrease with increasing distance from the instrument.
- vi) A de-spiking filter similar to that described in v) can be selected that operates vertically between bins instead of temporally between ensembles, but here only one factor is specified.
- vii) A separate de-spiking filter (similar to that described in v)) can be set for the vertical velocity component, w . Also here only one factor is specified.
- viii) Finally, an absolute maximum threshold can be set for Pitch and Roll.

In the final process, all the thresholds and filters are combined and applied to the velocity components u , v and w . In the data files this corresponds to the Speed, Direction and Vertical velocity files. 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. Generally, the temperature recordings have been edited, but not the other ADCP sensor data nor intensity or correlation.

The instrument depth at site NWFB is found from the MicroCat pressure measurements. The instrument depths at sites NWFC, IFRD and IFRE are found using the data from the echo sounding depth (corrected for change in sound velocity). The instrument depth at site NWNB is found from the ADCP pressure measurements. The instrument depth at site NWNM is found from the surface echo.

Auxiliary data

In order to calibrate the data from the auxiliary sensors, these have been attached to a CTD and set to record data while on the CTD cast. Offsets have then been found by comparing the auxiliary data to the CTD recordings. Typically such calibrations have been performed just prior to or after the deployment, and if done this is indicated in the details for the deployment. Additionally, the data from the MicroCat SBE37 and the SBE39 and SBE56 instruments have been quality controlled by a standard procedure based upon data variation with time in relation to neighbouring values (spikes). The editing has been done manually using an interactive graphical software package developed by FAMRI, based upon MATLAB.

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 M2, S2, N2, O1, and K1. Each table lists for each bin the amplitude and Greenwich phase lag for the east and north velocity components and lists also major and minor semi-axes of the tidal ellipse for the constituent as well as its inclination (Fig. 2) and sense of rotation (cyclonic = C, anticyclonic = A). The tidal constants were computed by an adapted version of the Foreman FORTRAN package.

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

The SBE39 and SBE56 temperature data are presented on one page.

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 or temperature recorder data.

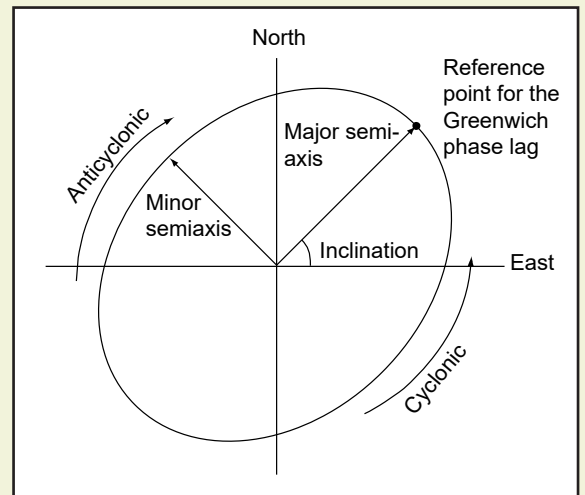


Figure 2. Parameters of the tidal ellipse for a given constituent. The reference point for the Greenwich phase lag is always chosen to be above the east-west axis.

NWFB2006

Latitude: 61°25.022'N
Longitude: 008°17.072'W
Echo sounding depth: 824 m
Bottom depth corr.: 811 m
Time of deployment: 12/6 - 2020 0314 UTC
Time of recovery: 25/5 - 2021 1012 UTC

ADCP:

Instrument no.: RDI ADCP 1642
Instrument frequency: 75 kHz
Height above bottom: 6 m
Depth: 805 m
Time of first data: 12/6 - 2020 0400 UTC
Time of last data: 25/5 - 2021 1000 UTC
Sample interval: 20 min
No. of ensembles: 25003
Pings per ens.: 1
Binlength: 25 m
Depth of first bin: 769 m
No. of bins: 19

MicroCat

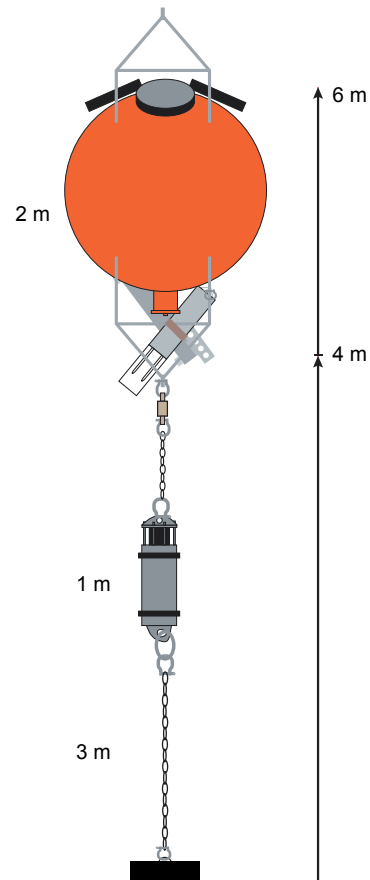
Instrument no.: 5184
Height above bottom: 4 m
Instrument depth: 807 m
Time of first data: 12/6 - 2020 0330 UTC
Time of last data: 25/5 - 2021 1010 UTC
Sample interval: 10 min
No. of ensembles: 50009

SBE56

Instrument no.: 06503
Height above bottom: 4 m
Instrument depth: 807 m
Time of first data: 12/6 - 2020 0319 UTC
Time of last data: 25/5 - 2021 1012 UTC
Sample interval: 1 min
No. of ensembles: 500094

Data:

The data from the MicroCat are not calibrated. The salinity data seem to have a drift.



NWFB2006 ADCP 1642

Error statistics for deployment: NWFB2006 updated 2021/09/21

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

Velocity (spd, dir, wel) is error flagged using these data filters:

Minimum Intensity threshold: 55.0
 Minimum Correlation threshold: 64.0
 Maximum Speed factor (Average speed for each bin times factor): 5.0
 Maximum Absolute Vertical Velocity threshold: 150.0
 Maximum Absolute Error Velocity threshold (erv_tr+0.1*spd): 150.0
 Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 1): 5.00
 Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 19): 3.76
 Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 32): 2.00
 Std dev for vertical de-spiking (u and v deviate from 3 point median by more than number of std dev): 4.0
 Std dev for de-spiking (w deviates from 3 point median by more than number of std dev): 4.0

Total number of ensembles: 25003
 Interval between ensembles: 20 min
 Original number of bins: 32
 Number of acceptable velocity bins: 19

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

Number of temperature ens. flagged: 0

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

Bin	Int. ens. flgd	Velocity ens. flgd	% flgd	Number of velocity gaps of length										
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50	
1	0	78	0	70	4	0	0	0	0	0	0	0	0	0
2	0	325	1	305	10	0	0	0	0	0	0	0	0	0
3	0	259	1	250	3	1	0	0	0	0	0	0	0	0
4	0	192	1	184	2	0	1	0	0	0	0	0	0	0
5	0	172	1	147	7	1	2	0	0	0	0	0	0	0
6	0	208	1	159	11	7	0	0	1	0	0	0	0	0
7	0	287	1	216	15	6	2	3	0	0	0	0	0	0
8	0	296	1	218	19	3	3	1	0	1	0	0	0	0
9	0	294	1	217	31	5	0	0	0	0	0	0	0	0
10	0	344	1	247	35	6	1	1	0	0	0	0	0	0
11	0	348	1	261	31	4	2	1	0	0	0	0	0	0
12	0	305	1	236	22	2	3	0	1	0	0	0	0	0
13	0	303	1	230	16	7	2	0	2	0	0	0	0	0
14	0	409	2	268	28	5	0	2	2	2	1	0	0	0
15	0	657	3	304	42	14	5	3	6	8	1	0	0	0
16	0	1304	5	393	71	36	21	12	25	9	7	1	0	0
17	0	2809	11	574	141	59	36	25	53	32	8	7	3	3
18	0	5728	23	848	263	122	76	34	97	66	20	16	8	8
19	0	9895	40	963	342	152	94	73	167	112	40	38	20	20

NWFB2006 ADCP 1642

Deployment: NWFB2006 updated 2021/09/21
 Instrument no.: 1642
 Instrument freq.: 75
 Latitude: 61 25.022 N
 Longitude: 08 17.072 W
 Bottom depth: 811
 Instrument depth: 805
 Center depth of first bin: 769
 Bin length: 25
 Number of bins: 19
 Number of first ensemble: 262
 Time of first ensemble: 2020 06 12 04 00
 Number of last ensemble: 25264
 Time of last ensemble: 2021 05 25 10 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	769	42	959	953	306	997
2	744	67	1025	1019	309	987
3	719	92	1052	1047	311	990
4	694	117	1060	1054	312	992
5	669	142	1053	1048	313	993
6	644	167	1021	1015	314	992
7	619	192	945	936	315	989
8	594	217	811	795	318	988
9	569	242	638	607	321	988
10	544	267	467	412	324	986
11	519	292	340	255	326	986
12	494	317	265	151	327	988
13	469	342	225	87	332	988
14	444	367	204	47	342	984
15	419	392	193	27	13	974
16	394	417	188	29	59	948
17	369	442	187	43	79	888
18	344	467	190	60	89	771
19	319	492	194	75	94	604

NWFB2006 ADCP 1642

Frequency of high speeds.

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

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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	180
1 769	997	997	997	997	994	983	946	855	674	414	166	42	6	1	0	0	0	0
2 744	987	987	987	987	986	980	961	909	792	601	325	104	19	2	0	0	0	0
3 719	990	990	990	989	988	984	967	925	831	665	415	155	31	3	0	0	0	0
4 694	992	992	992	992	991	987	969	930	842	686	440	172	35	4	0	0	0	0
5 669	993	993	993	993	991	984	966	922	827	677	428	163	32	3	0	0	0	0
6 644	992	991	990	988	983	970	940	874	775	609	363	131	26	2	0	0	0	0
7 619	987	984	976	964	945	908	853	772	646	463	253	86	18	2	0	0	0	0
8 594	980	958	931	890	845	784	695	574	425	266	124	40	8	1	0	0	0	0
9 569	968	911	835	749	659	557	439	323	209	110	42	13	3	0	0	0	0	0
10 544	935	813	660	522	406	307	218	140	75	30	10	2	0	0	0	0	0	0
11 519	892	682	475	316	213	137	80	42	18	5	1	0	0	0	0	0	0	0
12 494	856	581	339	176	91	46	23	10	4	1	0	0	0	0	0	0	0	0
13 469	831	505	239	95	39	16	7	3	1	0	0	0	0	0	0	0	0	0
14 444	804	453	181	57	17	6	2	1	0	0	0	0	0	0	0	0	0	0
15 419	783	413	148	40	9	2	1	0	0	0	0	0	0	0	0	0	0	0
16 394	753	391	128	32	6	1	0	0	0	0	0	0	0	0	0	0	0	0
17 369	708	362	116	27	6	1	0	0	0	0	0	0	0	0	0	0	0	0
18 344	625	324	104	24	5	1	0	0	0	0	0	0	0	0	0	0	0	0
19 319	496	267	84	20	4	1	0	0	0	0	0	0	0	0	0	0	0	0

NWFB2006 ADCP 1642

Harmonic constants for constituent M2 for deployment NWFB2006.

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	769	29	57	21	324	29	20	175	241	A
02	744	32	61	22	319	32	21	166	251	A
03	719	32	72	21	318	34	18	159	264	A
04	694	32	82	18	320	34	15	159	272	A
05	669	32	89	17	312	34	11	156	277	A
06	644	31	106	17	292	35	2	152	287	A
07	619	34	135	21	270	38	14	152	304	C
08	594	43	163	24	260	43	24	174	339	C
09	569	53	189	21	228	55	13	18	193	C
10	544	63	215	34	183	70	16	26	208	A
11	519	71	234	62	171	81	48	37	210	A
12	494	74	246	84	170	90	67	59	195	A
13	469	75	252	95	171	97	72	73	184	A
14	444	73	258	98	173	99	73	81	179	A
15	419	70	262	98	175	98	70	86	178	A
16	394	67	266	96	179	96	67	86	181	A
17	369	66	267	94	180	94	65	85	184	A
18	344	64	271	93	183	93	64	87	185	A
19	319	62	274	95	187	95	62	87	189	A

Harmonic constants for constituent S2 for deployment NWFB2006.

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	769	9	107	11	4	12	8	110	350	A
02	744	11	112	11	4	13	9	130	333	A
03	719	10	114	11	5	12	9	126	338	A
04	694	10	120	11	3	13	7	128	337	A
05	669	9	129	10	351	13	5	130	333	A
06	644	8	151	9	332	12	0	133	331	A
07	619	13	200	6	299	13	6	174	17	C
08	594	23	228	3	203	24	1	6	228	A
09	569	32	242	10	163	32	10	4	241	A
10	544	31	258	16	171	31	16	2	256	A
11	519	28	280	22	201	29	21	19	266	A
12	494	27	290	27	209	29	25	48	247	A
13	469	26	295	28	214	29	24	59	241	A
14	444	24	298	29	219	30	23	70	235	A
15	419	24	302	30	223	31	23	71	237	A
16	394	25	311	33	223	33	24	85	227	A
17	369	24	320	34	226	34	24	95	223	A
18	344	25	328	34	224	35	24	108	212	A
19	319	29	328	33	221	35	26	124	195	A

NWFB2006 ADCP 1642

Harmonic constants for constituent N2 for deployment NWFB2006.

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	769	8	51	3	293	8	3	167	236	A
02	744	9	59	4	283	9	2	163	243	A
03	719	11	62	5	280	11	3	159	247	A
04	694	10	53	6	279	11	4	152	244	A
05	669	8	50	7	271	10	4	143	245	A
06	644	7	70	6	264	9	1	139	256	A
07	619	9	105	6	244	10	3	150	274	C
08	594	12	111	7	275	14	2	150	287	C
09	569	14	114	12	297	19	1	140	295	A
10	544	9	142	8	296	12	3	139	310	C
11	519	7	211	6	192	9	1	37	204	A
12	494	9	236	12	161	12	8	68	177	A
13	469	10	233	14	149	14	10	82	155	A
14	444	9	224	14	139	14	9	83	143	A
15	419	10	213	14	132	14	10	76	142	A
16	394	10	216	15	134	15	10	81	140	A
17	369	10	225	15	142	16	10	82	147	A
18	344	10	221	15	151	15	9	70	163	A
19	319	10	222	12	141	12	9	72	155	A

Harmonic constants for constituent O1 for deployment NWFB2006.

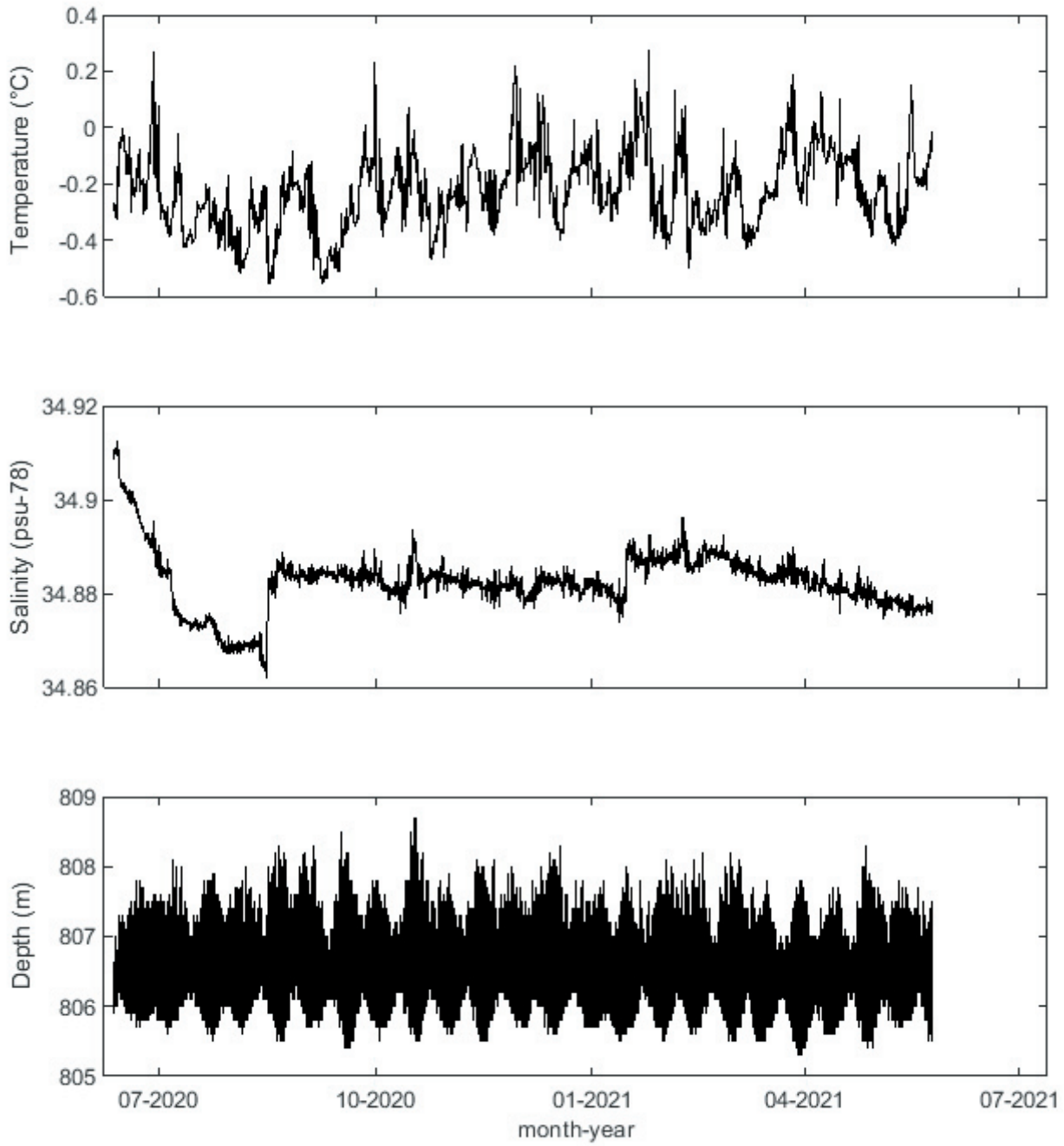
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	769	20	313	8	138	21	1	159	134	A
02	744	22	313	11	131	25	0	154	133	C
03	719	22	312	13	131	26	0	149	132	C
04	694	22	314	14	131	26	1	147	133	C
05	669	22	321	15	130	27	2	146	137	C
06	644	26	325	16	136	30	2	149	142	C
07	619	32	333	21	138	38	5	148	149	C
08	594	38	343	28	149	47	5	144	158	C
09	569	34	347	32	156	47	4	137	162	C
10	544	26	357	28	164	38	4	133	170	C
11	519	19	11	22	174	28	4	131	181	C
12	494	14	17	18	180	23	3	128	187	C
13	469	15	14	17	182	22	2	132	187	C
14	444	14	10	16	183	21	1	130	186	C
15	419	13	12	16	191	21	0	128	191	C
16	394	11	24	16	196	19	1	124	198	C
17	369	9	36	17	199	19	2	119	203	C
18	344	8	42	17	197	19	3	112	201	C
19	319	7	23	17	208	19	1	111	208	A

NWFB2006 ADCP 1642

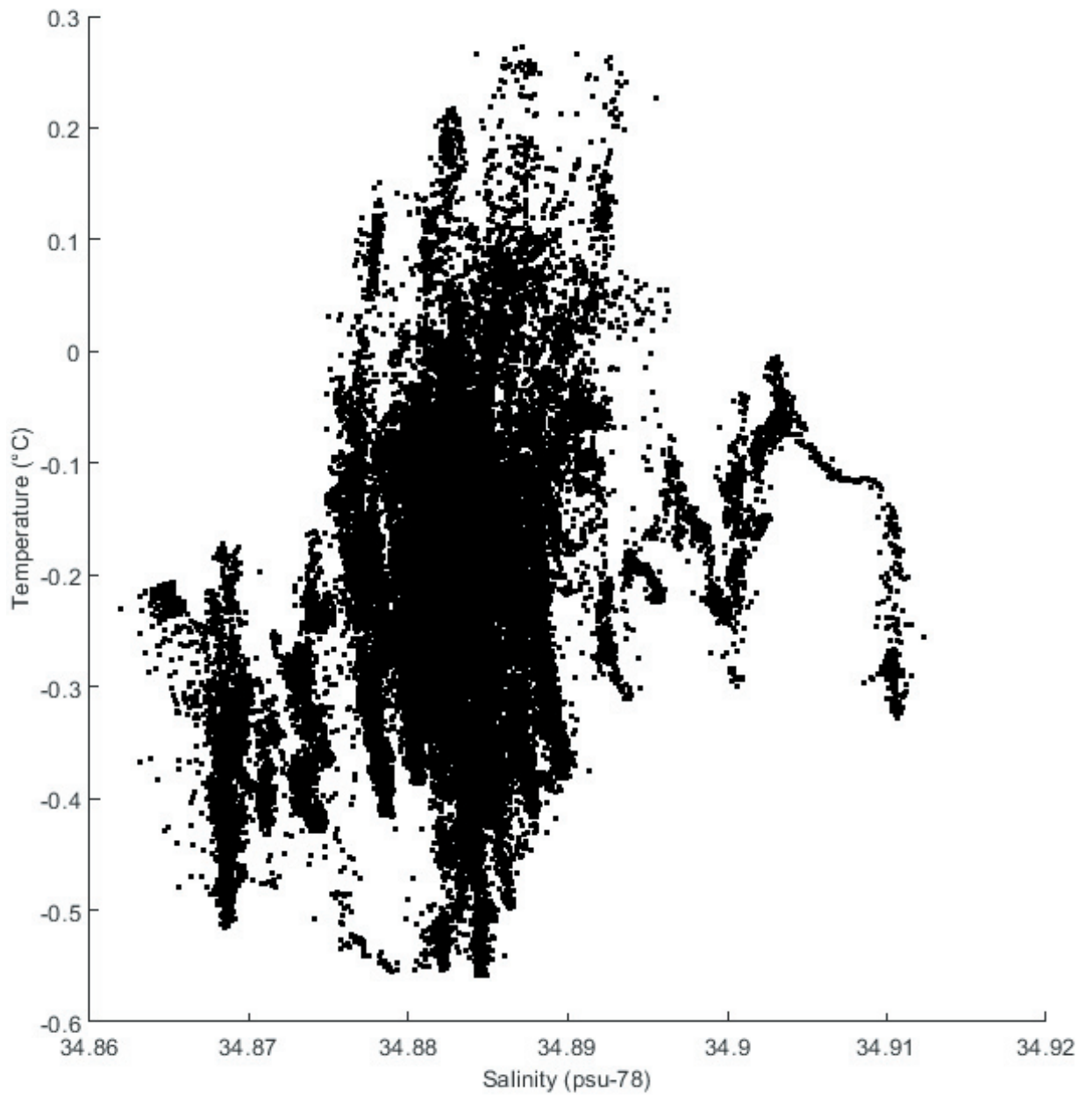
Harmonic constants for constituent K1 for deployment NWFB2006.

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	769	17	211	10	47	19	2	151	35	A
02	744	18	212	11	40	21	1	150	34	A
03	719	20	216	11	39	23	1	151	37	A
04	694	20	217	13	42	24	1	146	39	A
05	669	21	218	15	45	25	2	145	40	A
06	644	25	228	16	46	29	1	147	47	C
07	619	31	235	20	50	37	2	146	53	C
08	594	37	237	27	54	46	1	144	56	C
09	569	38	242	35	60	52	1	137	61	C
10	544	30	246	36	62	47	1	129	64	C
11	519	19	245	31	60	36	1	122	61	C
12	494	12	250	23	61	26	2	118	63	C
13	469	11	262	19	69	22	2	121	72	C
14	444	12	269	18	74	22	3	123	79	C
15	419	13	275	17	74	21	4	127	82	C
16	394	16	276	16	71	22	5	135	83	C
17	369	19	273	15	72	24	4	143	85	C
18	344	23	269	15	64	27	5	148	82	C
19	319	20	274	14	68	24	5	146	86	C

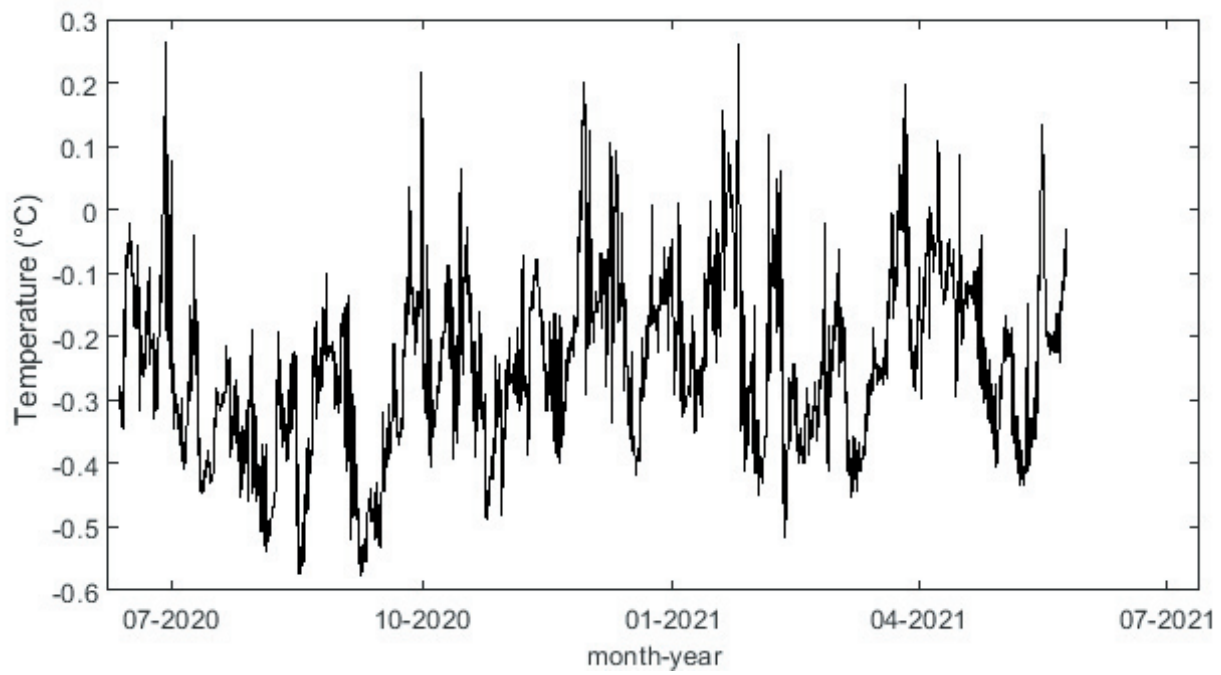
NWFB2006 MicroCat 5184



NWFB2006 MicroCat 5184



NWFB2006 SBE56 06503



NWFC2006

Latitude: 61°23.480'N

Longitude: 008°18.920'W

Echo sounding depth: 851 m

Bottom depth corr.: 845 m

Time of deployment: 12/6 - 2020 0333 UTC

Time of recovery: 25/5 - 2021 0924 UTC

ADCP:

Instrument no.: RDI ADCP 1285

Instrument frequency: 75 kHz

Height above bottom: 6 m

Depth: 839 m

Time of first data: 12/6 - 2020 0420 UTC

Time of last data: 25/5 - 2021 0900 UTC

Sample interval: 20 min

No. of ensembles: 24999

Pings per ens.: 1

Binlength: 25 m

Depth of first bin: 803 m

No. of bins: 25

SBE39plus

Instrument no.: 7752

Height above bottom: 4 m

Instrument depth: 841 m

Time of first data: 12/6 - 2020 0339 UTC

Time of last data: 25/5 - 2021 0924 UTC

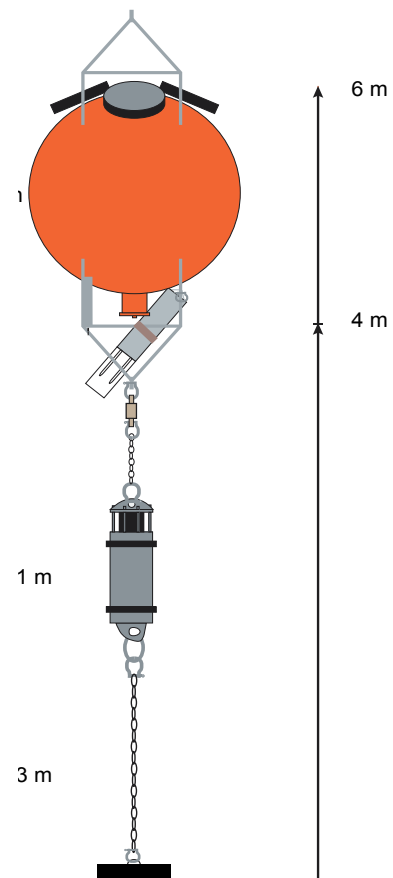
Sample interval: 1 min

No. of ensembles: 500026

Data:

All data ok.

The SBE39plus is calibrated against an SBE911+ CTD prior to deployment.



NWFC2006 ADCP 1285

Error statistics for deployment: NWFC2006 updated 2021/10/28

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

Velocity (spd, dir, wel) is error flagged using these data filters:

Minimum Correlation threshold: 60.0

Maximum Speed factor (Average speed for each bin times factor): 4.0

Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 1): 4.00

Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 25): 2.66

Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 32): 2.00

Std dev for vertical de-spiking (u and v deviate from 3 point median by more than number of std dev): 4.0

Total number of ensembles: 24999

Interval between ensembles: 20 min

Original number of bins: 32

Number of acceptable velocity bins: 25

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

Number of temperature ens. flagged: 0

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

Bin	Int. ens. flgd	Velocity ens. flgd	% flgd	Number of velocity gaps of length										
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50	
1	0	178	1	156	11	0	0	0	0	0	0	0	0	0
2	0	781	3	666	50	5	0	0	0	0	0	0	0	0
3	0	690	3	571	48	5	2	0	0	0	0	0	0	0
4	0	1010	4	721	86	19	7	5	1	0	0	0	0	0
5	0	1545	6	948	150	46	14	9	8	0	0	0	0	0
6	0	1551	6	905	164	45	18	9	10	0	0	0	0	0
7	0	1161	5	712	135	30	12	3	4	0	0	0	0	0
8	0	840	3	582	69	20	8	3	2	0	0	0	0	0
9	0	868	3	559	92	27	7	2	1	0	0	0	0	0
10	0	747	3	466	77	29	6	2	1	0	0	0	0	0
11	0	598	2	406	60	14	5	2	0	0	0	0	0	0
12	0	511	2	372	42	12	2	1	1	0	0	0	0	0
13	0	515	2	356	51	12	1	2	1	0	0	0	0	0
14	0	584	2	391	59	8	1	5	1	1	0	0	0	0
15	0	626	3	417	63	11	5	2	1	1	0	0	0	0
16	0	670	3	449	55	20	2	3	2	1	0	0	0	0
17	0	687	3	427	62	18	3	3	2	1	1	0	0	0
18	0	838	3	487	75	19	4	3	0	1	0	1	1	1
19	0	1560	6	597	106	31	24	10	22	11	2	0	2	2
20	0	2912	12	643	131	45	30	17	42	24	23	5	2	2
21	0	4682	19	668	142	65	34	36	61	53	25	24	6	6
22	0	6269	25	727	192	89	52	33	88	78	38	32	7	7
23	0	7811	31	836	218	115	64	44	133	116	31	32	11	11
24	0	9126	37	795	221	101	68	55	137	100	46	35	24	24
25	0	10649	43	1081	265	128	73	51	126	87	32	42	34	34

NWFC2006 ADCP 1285

Deployment: NWFC2006 updated 2021/10/28
 Instrument no.: 1285
 Instrument freq.: 75
 Latitude: 61 23.480 N
 Longitude: 08 18.920 W
 Bottom depth: 845
 Instrument depth: 839
 Center depth of first bin: 803
 Bin length: 25
 Number of bins: 25
 Number of first ensemble: 263
 Time of first ensemble: 2020 06 12 04 20
 Number of last ensemble: 25261
 Time of last ensemble: 2021 05 25 09 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	803	42	994	984	297	993
2	778	67	1069	1061	300	969
3	753	92	1081	1073	302	972
4	728	117	1063	1055	304	960
5	703	142	1021	1012	304	938
6	678	167	919	907	304	938
7	653	192	736	706	306	954
8	628	217	520	447	309	966
9	603	242	355	220	317	965
10	578	267	263	77	335	970
11	553	292	220	35	53	976
12	528	317	201	59	96	980
13	503	342	193	77	106	979
14	478	367	191	88	111	977
15	453	392	192	94	113	975
16	428	417	194	97	115	973
17	403	442	196	100	116	973
18	378	467	198	101	118	966
19	353	492	199	102	118	938
20	328	517	199	100	118	884
21	303	542	198	96	118	813
22	278	567	198	94	117	749
23	253	592	197	89	116	688
24	228	617	196	83	117	635
25	203	642	194	78	116	574

NWFC2006 ADCP 1285

Frequency of high speeds.

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

=====

Bin Depth	Speed (cm/s)																	
no. m	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1 803	992	991	989	986	980	969	941	863	724	518	287	110	25	3	0	0	0	0
2 778	968	967	965	963	958	951	940	907	825	679	461	223	63	9	1	0	0	0
3 753	972	971	969	967	962	955	944	915	843	711	497	249	68	10	1	0	0	0
4 728	959	958	956	954	948	938	924	889	804	658	451	222	59	8	1	0	0	0
5 703	937	935	931	924	911	893	865	809	710	563	388	190	52	8	1	0	0	0
6 678	932	918	899	875	844	804	752	673	560	424	286	143	42	7	1	0	0	0
7 653	929	874	819	766	701	625	539	440	343	244	155	77	24	5	0	0	0	0
8 628	901	773	648	543	452	369	289	221	156	99	57	26	9	2	0	0	0	0
9 603	855	634	446	318	228	167	120	81	49	25	12	5	1	0	0	0	0	0
10 578	829	540	304	169	101	61	35	19	8	2	0	0	0	0	0	0	0	0
11 553	808	480	223	91	38	17	8	2	0	0	0	0	0	0	0	0	0	0
12 528	794	442	179	56	13	2	0	0	0	0	0	0	0	0	0	0	0	0
13 503	785	419	153	40	7	1	0	0	0	0	0	0	0	0	0	0	0	0
14 478	776	412	150	38	8	1	0	0	0	0	0	0	0	0	0	0	0	0
15 453	773	412	155	42	9	2	0	0	0	0	0	0	0	0	0	0	0	0
16 428	774	413	161	47	12	2	0	0	0	0	0	0	0	0	0	0	0	0
17 403	773	416	167	51	13	2	0	0	0	0	0	0	0	0	0	0	0	0
18 378	768	418	173	55	15	2	0	0	0	0	0	0	0	0	0	0	0	0
19 353	743	409	174	57	16	3	0	0	0	0	0	0	0	0	0	0	0	0
20 328	701	381	163	57	17	4	0	0	0	0	0	0	0	0	0	0	0	0
21 303	641	346	147	51	16	4	0	0	0	0	0	0	0	0	0	0	0	0
22 278	592	320	136	47	15	4	0	0	0	0	0	0	0	0	0	0	0	0
23 253	542	292	123	42	14	4	0	0	0	0	0	0	0	0	0	0	0	0
24 228	501	265	109	37	13	3	1	0	0	0	0	0	0	0	0	0	0	0
25 203	450	234	95	32	12	4	1	0	0	0	0	0	0	0	0	0	0	0

NWFC2006 ADCP 1285

Harmonic constants for constituent M2 for deployment NWFC2006.

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	803	11	102	17	302	20	3	123	296	A
02	778	12	90	18	297	22	5	123	289	A
03	753	14	88	22	289	25	4	123	283	A
04	728	12	83	25	293	27	5	113	288	A
05	703	17	99	29	301	33	6	119	296	A
06	678	37	115	38	309	53	6	134	302	A
07	653	61	128	43	315	75	5	145	310	A
08	628	66	140	27	312	72	3	158	319	C
09	603	52	174	14	163	54	3	14	173	A
10	578	52	217	50	152	61	39	41	188	A
11	553	57	239	66	157	68	55	67	177	A
12	528	58	252	72	165	73	58	83	170	A
13	503	58	262	76	172	76	58	89	173	A
14	478	57	270	78	179	78	57	92	177	A
15	453	59	277	82	185	82	59	94	182	A
16	428	62	283	84	189	84	62	96	185	A
17	403	64	286	88	193	88	64	96	188	A
18	378	66	290	89	196	90	66	95	192	A
19	353	67	292	91	198	91	67	95	194	A
20	328	69	293	91	199	91	69	96	195	A
21	303	70	296	94	202	94	69	96	198	A
22	278	69	298	96	203	97	69	96	199	A
23	253	72	300	99	206	99	72	96	201	A
24	228	75	301	100	207	100	75	97	202	A
25	203	76	302	99	210	99	76	93	208	A

Harmonic constants for constituent S2 for deployment NWFC2006.

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	803	3	146	7	7	8	2	108	3	A
02	778	3	129	7	356	8	2	109	350	A
03	753	6	98	8	348	8	5	111	335	A
04	728	6	112	9	347	10	5	119	332	A
05	703	8	142	11	354	13	4	127	342	A
06	678	15	169	14	18	20	5	137	3	A
07	653	24	188	12	43	27	6	156	14	A
08	628	28	207	11	74	29	7	164	31	A
09	603	23	236	9	153	23	9	4	234	A
10	578	22	264	17	188	23	16	21	249	A
11	553	21	279	22	200	24	19	53	232	A
12	528	19	291	24	207	24	19	78	216	A
13	503	18	300	24	214	24	18	84	219	A
14	478	19	313	26	220	26	19	94	217	A
15	453	19	321	29	225	29	19	97	220	A
16	428	20	328	30	229	31	20	100	222	A
17	403	21	330	31	232	32	21	100	225	A
18	378	22	336	32	234	33	21	104	225	A
19	353	22	339	32	238	33	21	104	229	A
20	328	22	340	32	242	33	22	101	234	A
21	303	21	339	31	245	31	21	95	242	A
22	278	22	340	34	246	34	22	95	242	A
23	253	23	343	32	246	32	23	101	238	A
24	228	22	350	33	249	34	22	103	240	A
25	203	23	349	35	254	35	23	96	250	A

NWFC2006 ADCP 1285

Harmonic constants for constituent N2 for deployment NWFC2006.

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	803	4	86	9	264	10	0	112	264	C
02	778	2	48	9	253	9	1	101	252	A
03	753	2	46	10	249	10	1	100	248	A
04	728	3	14	9	256	9	2	98	254	A
05	703	4	72	10	269	11	1	109	267	A
06	678	10	106	12	286	16	0	129	286	C
07	653	18	98	16	288	24	2	139	283	A
08	628	21	113	12	300	24	1	151	295	A
09	603	20	130	6	324	21	1	164	311	A
10	578	13	158	4	85	13	3	5	157	A
11	553	8	196	8	124	9	7	47	158	A
12	528	7	229	11	136	11	7	92	135	A
13	503	6	244	11	144	11	6	97	140	A
14	478	6	257	12	146	13	5	102	141	A
15	453	7	257	13	148	14	7	103	142	A
16	428	9	251	14	149	15	8	100	144	A
17	403	10	246	15	148	15	10	99	142	A
18	378	11	248	17	153	17	11	95	150	A
19	353	12	253	18	155	18	11	97	151	A
20	328	13	253	18	160	18	13	95	156	A
21	303	15	259	20	162	20	15	102	153	A
22	278	17	264	21	162	21	16	111	146	A
23	253	17	262	19	169	19	17	100	161	A
24	228	18	260	23	173	23	18	83	179	A
25	203	18	265	23	184	24	18	74	196	A

Harmonic constants for constituent O1 for deployment NWFC2006.

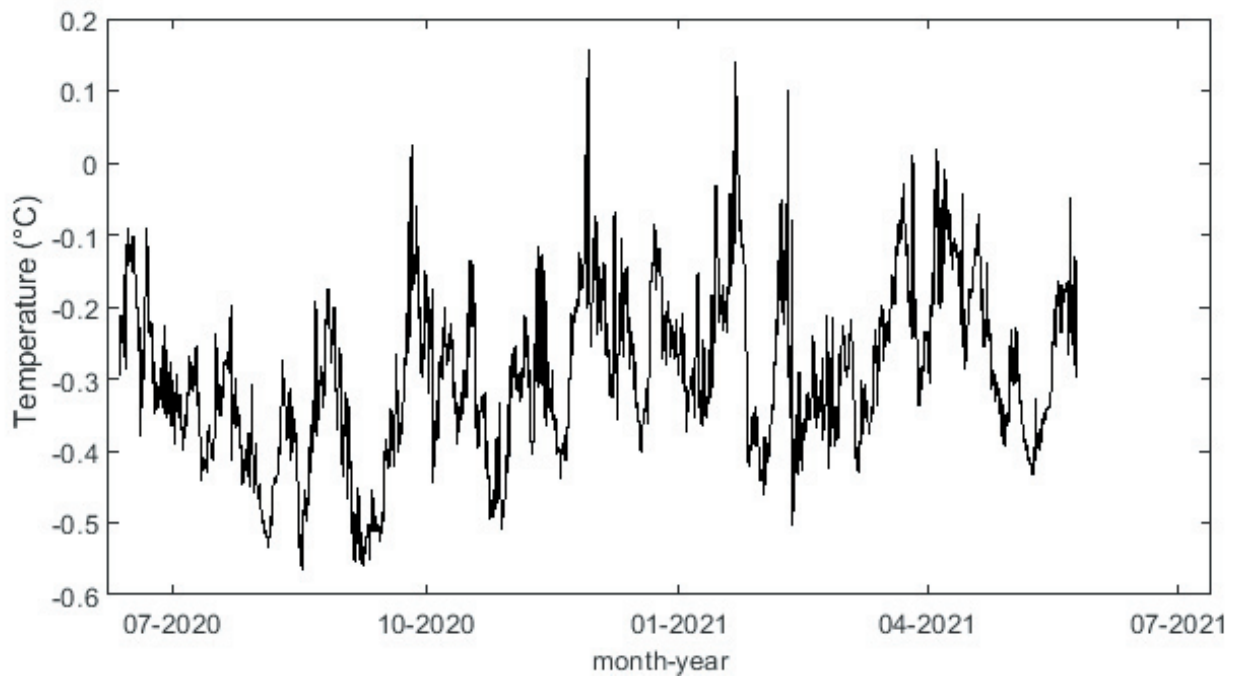
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	803	12	318	16	148	20	2	127	144	A
02	778	12	313	16	148	20	2	127	142	A
03	753	12	315	19	144	22	2	122	142	A
04	728	12	323	20	149	23	1	121	147	A
05	703	15	342	23	159	27	1	123	160	C
06	678	26	350	29	166	39	1	132	168	C
07	653	40	357	34	175	52	1	140	176	C
08	628	44	2	36	180	57	1	141	181	C
09	603	39	10	32	186	51	2	140	188	C
10	578	32	14	25	194	41	0	143	194	C
11	553	26	15	19	197	32	1	143	196	A
12	528	21	12	16	195	26	1	144	193	A
13	503	18	13	13	193	22	0	144	193	C
14	478	16	15	12	193	20	0	142	194	C
15	453	14	15	12	194	18	0	141	195	C
16	428	15	16	12	195	19	0	140	195	C
17	403	14	17	13	194	20	0	138	196	C
18	378	15	15	13	189	20	1	138	192	C
19	353	14	16	14	189	20	1	134	192	C
20	328	15	17	17	189	22	2	132	192	C
21	303	15	18	17	191	23	1	132	194	C
22	278	17	22	15	205	22	1	138	203	A
23	253	18	19	14	212	23	3	142	204	A
24	228	19	16	15	206	24	2	141	200	A
25	203	18	22	14	196	23	1	142	200	C

NWFC2006 ADCP 1285

Harmonic constants for constituent K1 for deployment NWFC2006.

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	803	12	225	15	45	19	0	127	45	A
02	778	11	227	15	43	18	1	127	45	C
03	753	12	228	16	42	20	1	127	44	C
04	728	13	236	17	47	22	2	127	50	C
05	703	17	239	21	50	27	2	129	53	C
06	678	30	247	26	59	40	3	140	64	C
07	653	46	250	33	66	56	2	145	69	C
08	628	48	250	35	70	59	0	144	70	C
09	603	37	251	31	71	48	0	140	71	C
10	578	26	255	25	73	36	1	137	74	C
11	553	20	262	21	71	28	3	134	77	C
12	528	19	267	19	72	26	3	134	79	C
13	503	17	268	19	73	25	3	132	80	C
14	478	16	274	18	73	24	5	132	82	C
15	453	15	279	17	73	23	5	131	84	C
16	428	15	278	18	73	23	5	129	83	C
17	403	14	276	19	72	23	5	126	80	C
18	378	14	272	20	68	24	5	125	76	C
19	353	15	269	18	67	23	4	129	76	C
20	328	17	269	15	59	22	6	139	76	C
21	303	15	272	13	48	18	7	138	72	C
22	278	12	272	12	44	15	7	136	69	C
23	253	10	259	13	41	16	5	126	55	C
24	228	11	249	14	39	17	4	127	50	C
25	203	6	234	13	41	14	1	115	43	C

NWFC2006 SBE39plus 7752



NWNB2006

Latitude: 62°55.000'N
Longitude: 006°05.000'W
Echo sound depth: 969 m
Bottom depth corr.: 965 m
Time of deployment: 14/6 - 2020 0310 UTC
Time of recovery: 20/5 - 2021 1825 UTC

ADCP:

Instrument no.: RDI ADCP 19518
Instrument frequency: 75 kHz
Height above bottom: 250 m
Depth: 715 m
Time of first data: 14/6 - 2020 0320 UTC
Time of last data: 20/5 - 2021 1740 UTC
Sample interval: 20 min
No. of ensembles: 24524
Pings per ens.: 10
Binlength: 10 m
Depth of first bin: 696 m
No. of bins: 64

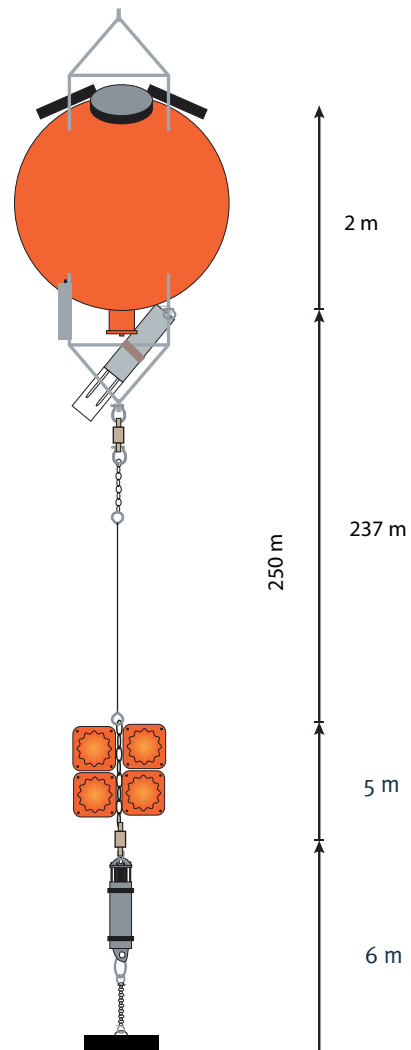
SBE56

Instrument no.: 06504
Height above bottom: 248 m
Instrument depth: 717 m
Time of first data: 14/6 - 2020 0310 UTC
Time of last data: 20/5 - 2021 1825 UTC
Sample interval: 1 min
No. of ensembles: 490516

Data:

All data ok.

The SBE56 is calibrated against an SBE911+ CTD prior to deployment.



NWNB2006 ADCP 19518

Error statistics for deployment: NWNB2006 updated 2021/11/25

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

Velocity (spd, dir, wel) is error flagged using these data filters:
 Minimum Correlation threshold: 64.0
 Maximum Speed factor (Average speed for each bin times factor): 5.0
 Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 1): 5.00
 Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 64): 2.45
 Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 70): 2.00
 Std dev for vertical de-spiking (u and v deviate from 3 point median by more than number of std dev): 4.0

Total number of ensembles: 24524
 Interval between ensembles: 20 min
 Original number of bins: 70
 Number of acceptable velocity bins: 64

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	5	0	5	0	0	0	0	0	0	0	0	0	0
2	0	15	0	15	0	0	0	0	0	0	0	0	0	0
3	0	24	0	24	0	0	0	0	0	0	0	0	0	0
4	0	15	0	15	0	0	0	0	0	0	0	0	0	0
5	0	23	0	23	0	0	0	0	0	0	0	0	0	0
6	0	12	0	12	0	0	0	0	0	0	0	0	0	0
7	0	14	0	12	1	0	0	0	0	0	0	0	0	0
8	0	20	0	18	1	0	0	0	0	0	0	0	0	0
9	0	17	0	17	0	0	0	0	0	0	0	0	0	0
10	0	23	0	21	1	0	0	0	0	0	0	0	0	0
11	0	21	0	21	0	0	0	0	0	0	0	0	0	0
12	0	15	0	15	0	0	0	0	0	0	0	0	0	0
13	0	21	0	19	1	0	0	0	0	0	0	0	0	0
14	0	26	0	26	0	0	0	0	0	0	0	0	0	0
15	0	26	0	27	1	0	0	0	0	0	0	0	0	0
16	0	27	0	27	0	0	0	0	0	0	0	0	0	0
17	0	26	0	22	0	0	1	0	0	0	0	0	0	0
18	0	28	0	28	0	0	0	0	0	0	0	0	0	0
19	0	30	0	30	0	0	0	0	0	0	0	0	0	0
20	0	36	0	34	1	0	0	0	0	0	0	0	0	0
21	0	33	0	33	0	0	0	0	0	0	0	0	0	0
22	0	46	0	44	1	0	0	0	0	0	0	0	0	0
23	0	44	0	44	0	0	0	0	0	0	0	0	0	0
24	0	47	0	47	0	0	0	0	0	0	0	0	0	0
25	0	64	0	54	5	0	0	0	0	0	0	0	0	0
26	0	61	0	53	4	0	0	0	0	0	0	0	0	0
27	0	57	0	45	6	0	0	0	0	0	0	0	0	0
28	0	60	0	52	4	0	0	0	0	0	0	0	0	0
29	0	77	0	65	6	0	0	0	0	0	0	0	0	0
30	0	67	0	53	7	0	0	0	0	0	0	0	0	0
31	0	89	0	73	8	0	0	0	0	0	0	0	0	0
32	0	98	0	88	5	0	0	0	0	0	0	0	0	0
33	0	116	0	103	5	1	0	0	0	0	0	0	0	0
34	0	105	0	95	5	0	0	0	0	0	0	0	0	0
35	0	105	0	89	6	0	1	0	0	0	0	0	0	0
36	0	120	0	87	15	1	0	0	0	0	0	0	0	0
37	0	139	1	113	11	0	1	0	0	0	0	0	0	0
38	0	154	1	140	7	0	0	0	0	0	0	0	0	0
39	0	153	1	130	10	1	0	0	0	0	0	0	0	0
40	0	169	1	136	15	1	0	0	0	0	0	0	0	0
41	0	220	1	178	18	2	0	0	0	0	0	0	0	0
42	0	226	1	182	16	4	0	0	0	0	0	0	0	0
43	0	203	1	163	17	2	0	0	0	0	0	0	0	0
44	0	240	1	175	24	2	1	0	0	0	0	0	0	0
45	0	301	1	193	34	9	0	0	2	0	0	0	0	0
46	0	377	2	163	39	9	6	4	5	0	0	0	0	0
47	0	498	2	166	22	2	2	5	11	0	0	0	0	0
48	0	654	3	181	37	15	2	8	16	6	2	0	0	0
49	0	880	4	151	51	21	14	11	22	7	2	4	0	0
50	0	1112	5	144	39	23	9	14	29	12	7	4	0	0
51	0	1503	6	151	51	33	23	5	41	26	7	5	0	0
52	0	1862	8	150	64	22	15	17	39	31	12	7	0	0
53	0	2334	10	136	59	33	16	16	48	39	23	6	0	0
54	0	2823	12	166	55	33	18	15	46	43	25	16	1	0
55	0	3327	14	154	48	51	19	19	45	48	32	21	2	0
56	0	3911	16	130	63	21	25	14	55	51	38	31	3	0
57	0	4512	18	128	64	27	12	24	58	59	31	46	4	0
58	0	5090	21	128	64	43	18	12	50	70	27	58	6	0
59	0	5690	23	160	53	48	15	15	64	78	23	66	6	0
60	0	6200	25	154	52	38	25	16	46	91	32	73	6	0
61	0	6900	28	199	59	33	20	16	56	85	45	73	10	0
62	0	7531	31	190	69	34	24	25	58	83	50	74	16	0
63	0	8297	34	238	72	31	27	25	60	81	48	71	33	0
64	0	9728	40	385	96	45	34	18	59	84	56	72	44	0

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Deployment: NWNB2006 updated 2021/11/25
 Instrument no.: 19518
 Instrument freq.: 75
 Latitude: 62 55.000 N
 Longitude: 06 05.000 W
 Bottom depth: 965
 Instrument depth: 715
 Center depth of first bin: 696
 Bin length: 10
 Number of bins: 64
 Number of first ensemble: 701
 Time of first ensemble: 2020 06 14 03 20
 Number of last ensemble: 25224
 Time of last ensemble: 2021 05 20 17 40
 Time between ensembles (min.): 20
 All directions have been corrected by adding: -4.0

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	696	269	132	51	96	1000
2	686	279	131	50	96	999
3	676	289	131	48	96	999
4	666	299	130	47	95	999
5	656	309	129	45	94	999
6	646	319	129	44	95	1000
7	636	329	128	42	95	999
8	626	339	128	41	94	999
9	616	349	127	39	95	999
10	606	359	127	36	94	999
11	596	369	127	35	94	999
12	586	379	127	33	93	999
13	576	389	127	32	94	999
14	566	399	127	30	94	999
15	556	409	128	29	95	999
16	546	419	128	27	96	999
17	536	429	129	27	96	999
18	526	439	130	26	97	999
19	516	449	132	27	95	999
20	506	459	134	27	96	999
21	496	469	136	28	97	999
22	486	479	139	30	98	998
23	476	489	141	32	100	998
24	466	499	143	35	102	998
25	456	509	145	38	102	997
26	446	519	149	42	102	998
27	436	529	151	47	102	998
28	426	539	154	51	103	998
29	416	549	157	57	103	997
30	406	559	161	63	103	997
31	396	569	166	71	104	996
32	386	579	170	79	104	996
33	376	589	177	87	104	995
34	366	599	184	95	105	996
35	356	609	191	103	105	996
36	346	619	198	112	105	995
37	336	629	205	122	106	994
38	326	639	211	131	106	994
39	316	649	219	140	106	994
40	306	659	226	150	106	993
41	296	669	233	159	106	991
42	286	679	241	170	106	991
43	276	689	250	180	106	992
44	266	699	260	189	106	990
45	256	709	268	198	106	988
46	246	719	276	205	106	985
47	236	729	284	212	106	980
48	226	739	290	218	106	973
49	216	749	297	224	106	964
50	206	759	302	229	106	955
51	196	769	307	234	106	939
52	186	779	312	239	106	924
53	176	789	317	242	106	905
54	166	799	321	247	107	885
55	156	809	325	251	107	864
56	146	819	327	253	107	841
57	136	829	329	255	107	816
58	126	839	330	256	107	792
59	116	849	333	258	107	768
60	106	859	335	260	107	747
61	96	869	337	261	107	719
62	86	879	340	263	107	693
63	76	889	342	264	107	662
64	66	899	340	260	107	603

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Frequency of high speeds.

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

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	696	561	189	54	16	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	686	562	183	54	15	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	676	561	183	53	15	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	666	554	180	52	16	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	656	553	174	50	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	646	553	172	50	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	636	551	171	50	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	626	553	171	47	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	616	552	166	47	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	606	548	164	45	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	596	551	167	44	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	586	556	165	42	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	576	557	164	42	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	566	560	165	41	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	556	567	167	39	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	546	567	169	40	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	536	577	172	40	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	526	581	174	39	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	516	594	180	41	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	506	606	185	42	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	496	617	192	45	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	486	631	204	48	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	476	641	211	53	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	466	650	219	56	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	456	653	233	58	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	446	666	248	64	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	436	672	259	72	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	426	683	270	80	15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	416	685	281	84	18	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0
30	406	697	299	94	22	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0
31	396	706	316	105	27	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0
32	386	717	334	115	30	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0
33	376	731	362	130	35	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0
34	366	750	383	149	41	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0
35	356	767	406	166	53	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0
36	346	782	432	188	60	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0
37	336	794	457	205	68	15	2	0	0	0	0	0	0	0	0	0	0	0	0	0
38	326	808	480	224	75	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0
39	316	827	504	242	84	20	4	1	0	0	0	0	0	0	0	0	0	0	0	0
40	306	842	528	259	95	24	5	1	0	0	0	0	0	0	0	0	0	0	0	0
41	296	848	551	276	105	29	6	1	0	0	0	0	0	0	0	0	0	0	0	0
42	286	861	569	302	123	35	9	1	0	0	0	0	0	0	0	0	0	0	0	0
43	276	876	598	328	138	42	10	2	0	0	0	0	0	0	0	0	0	0	0	0
44	266	885	623	355	156	51	11	2	0	0	0	0	0	0	0	0	0	0	0	0
45	256	890	645	377	173	59	15	3	0	0	0	0	0	0	0	0	0	0	0	0
46	246	894	661	394	190	66	18	4	1	0	0	0	0	0	0	0	0	0	0	0
47	236	895	674	412	206	78	21	5	1	0	0	0	0	0	0	0	0	0	0	0
48	226	893	683	427	222	88	27	7	1	0	0	0	0	0	0	0	0	0	0	0
49	216	887	682	441	235	94	32	8	2	0	0	0	0	0	0	0	0	0	0	0
50	206	882	689	445	245	104	36	10	2	0	0	0	0	0	0	0	0	0	0	0
51	196	868	682	452	252	111	40	12	2	0	0	0	0	0	0	0	0	0	0	0
52	186	856	676	456	261	121	45	14	4	1	0	0	0	0	0	0	0	0	0	0
53	176	841	666	454	267	126	47	16	4	1	0	0	0	0	0	0	0	0	0	0
54	166	821	657	450	268	131	51	17	4	1	0	0	0	0	0	0	0	0	0	0
55	156	805	647	448	270	134	53	17	5	1	0	0	0	0	0	0	0	0	0	0
56	146	784	628	438	269	136	57	18	6	1	0	0	0	0	0	0	0	0	0	0
57	136	763	612	426	263	135	57	19	5	1	1	0	0	0	0	0	0	0	0	0
58	126	740	595	416	258	133	57	20	6	2	1	0	0	0	0	0	0	0	0	0
59	116	718	580	406	251	131	58	21	6	2	1	0	0	0	0	0	0	0	0	0
60	106	700	565	398	244	129	60	22	7	2	1	1	0	0	0	0	0	0	0	0
61	96	675	549	386	237	127	59	24	8	3	1	1	0	0	0	0	0	0	0	0
62	86	650	532	375	229	125	58	26	10	3	1	1	0	0	0	0	0	0	0	0
63	76	619	508	363	219	122	59	27	11	4	2	1	0	0	0	0	0	0	0	0
64	66	566	462	324	196	109	53	24	12	5	2	1	0	0	0	0	0	0	0	0

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Harmonic constants for constituent M2 for deployment NWNB2006.

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	696	64	265	36	113	72	15	152	92	A
02	686	65	266	36	115	72	16	153	92	A
03	676	66	266	37	116	74	17	152	93	A
04	666	66	266	36	117	74	17	153	93	A
05	656	68	267	36	118	75	17	154	93	A
06	646	69	267	36	120	76	18	154	94	A
07	636	69	267	36	121	76	18	155	94	A
08	626	70	268	37	123	76	19	155	95	A
09	616	69	269	36	124	76	19	155	96	A
10	606	70	270	35	126	76	19	156	96	A
11	596	72	270	35	128	77	20	157	96	A
12	586	72	271	35	130	78	20	158	97	A
13	576	73	272	35	131	79	21	158	98	A
14	566	74	272	34	133	78	21	159	98	A
15	556	75	272	35	136	79	23	160	98	A
16	546	76	273	35	138	81	23	161	98	A
17	536	79	273	35	140	82	25	162	99	A
18	526	81	273	36	144	84	27	163	99	A
19	516	84	274	38	149	87	30	164	99	A
20	506	88	275	39	153	91	32	165	101	A
21	496	92	276	41	157	95	35	166	101	A
22	486	96	277	43	164	98	39	168	102	A
23	476	100	279	44	171	101	42	170	103	A
24	466	103	281	45	175	104	43	172	104	A
25	456	105	282	46	179	105	45	173	105	A
26	446	107	283	47	183	108	46	174	106	A
27	436	108	284	47	186	108	47	175	106	A
28	426	109	286	48	189	109	48	177	107	A
29	416	109	287	49	193	110	49	178	108	A
30	406	111	289	49	196	111	49	179	109	A
31	396	112	290	51	201	112	51	0	290	A
32	386	113	292	53	205	113	53	2	291	A
33	376	115	294	55	210	115	55	4	292	A
34	366	118	296	58	214	118	57	5	293	A
35	356	120	297	59	217	120	58	6	294	A
36	346	121	299	60	219	122	59	7	295	A
37	336	121	300	62	222	122	60	8	296	A
38	326	121	302	63	227	123	60	10	297	A
39	316	120	304	63	231	122	60	11	299	A
40	306	120	306	63	233	122	60	11	301	A
41	296	119	309	64	237	121	60	13	302	A
42	286	119	311	66	241	122	61	14	304	A
43	276	120	314	69	244	123	63	15	306	A
44	266	123	316	73	247	127	66	17	307	A
45	256	124	318	76	249	128	69	18	308	A
46	246	126	319	80	250	131	72	19	308	A
47	236	129	319	83	250	134	74	19	308	A
48	226	130	320	84	251	135	76	19	309	A
49	216	132	320	87	251	137	78	20	308	A
50	206	132	320	88	252	138	78	20	308	A
51	196	135	321	89	252	140	80	20	309	A
52	186	135	320	92	252	141	82	22	308	A
53	176	136	320	91	251	142	82	20	308	A
54	166	137	320	91	250	143	82	19	309	A
55	156	138	320	92	251	144	83	20	308	A
56	146	137	321	91	252	143	81	21	308	A
57	136	136	320	91	252	142	80	21	308	A
58	126	134	319	91	253	141	78	23	306	A
59	116	131	318	89	254	139	75	24	305	A
60	106	130	318	88	253	138	75	23	305	A
61	96	133	317	86	254	141	72	23	304	A
62	86	132	317	85	254	140	71	22	305	A
63	76	132	316	85	251	139	73	22	304	A
64	66	131	316	77	249	136	68	18	307	A

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Harmonic constants for constituent S2 for deployment NWNB2006.

Bin	Depth m	E-ampl mm/sec	E-gphl deg	N-ampl mm/sec	N-gphl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	696	27	293	20	155	31	11	145	128	A
02	686	27	293	21	158	31	12	145	129	A
03	676	27	292	21	160	31	13	146	128	A
04	666	27	293	21	160	32	13	146	128	A
05	656	28	294	20	161	32	13	147	129	A
06	646	27	295	21	164	32	14	146	131	A
07	636	29	296	21	167	33	14	149	131	A
08	626	29	296	20	169	32	14	150	131	A
09	616	30	300	21	172	33	15	151	134	A
10	606	30	300	20	174	33	14	153	133	A
11	596	31	301	20	177	34	15	155	133	A
12	586	32	303	20	179	35	15	156	134	A
13	576	32	304	19	180	35	15	157	135	A
14	566	33	306	19	181	35	15	157	136	A
15	556	34	309	19	184	36	15	159	137	A
16	546	34	311	18	190	36	15	162	138	A
17	536	35	315	17	199	36	15	166	141	A
18	526	34	317	16	207	34	15	169	141	A
19	516	33	320	15	213	34	14	171	144	A
20	506	33	322	15	221	33	14	174	145	A
21	496	33	324	14	224	34	14	175	146	A
22	486	34	326	14	228	34	14	176	147	A
23	476	35	327	14	234	35	14	179	148	A
24	466	35	329	15	243	35	15	2	328	A
25	456	36	332	16	253	37	15	6	329	A
26	446	38	334	17	257	38	16	7	331	A
27	436	39	336	18	262	39	17	9	332	A
28	426	40	338	19	267	40	18	11	333	A
29	416	41	338	20	268	42	18	12	333	A
30	406	42	338	21	268	43	19	12	333	A
31	396	42	340	22	271	43	20	14	333	A
32	386	43	341	23	275	44	20	16	333	A
33	376	44	343	23	277	45	20	15	336	A
34	366	46	345	25	280	47	22	17	337	A
35	356	47	348	27	284	49	24	19	339	A
36	346	47	350	29	288	50	25	21	339	A
37	336	48	353	31	290	51	26	22	341	A
38	326	49	355	31	291	51	27	22	343	A
39	316	48	356	31	292	51	27	22	344	A
40	306	48	356	30	291	50	26	21	344	A
41	296	46	356	30	293	49	25	23	344	A
42	286	45	357	29	294	48	24	23	344	A
43	276	43	357	28	295	46	23	23	345	A
44	266	42	358	27	296	44	23	23	346	A
45	256	41	359	26	296	43	22	22	348	A
46	246	40	1	26	299	43	22	23	348	A
47	236	40	1	27	297	42	22	23	348	A
48	226	41	0	27	297	44	23	23	348	A
49	216	43	0	26	296	45	23	20	350	A
50	206	43	360	28	297	45	23	22	348	A
51	196	43	3	28	294	45	25	19	352	A
52	186	44	3	28	298	46	24	21	352	A
53	176	44	0	28	295	46	24	21	349	A
54	166	45	360	28	295	47	24	21	349	A
55	156	45	359	27	296	47	23	20	349	A
56	146	45	1	28	291	46	26	18	351	A
57	136	43	358	28	295	46	23	23	346	A
58	126	42	0	25	297	44	22	20	350	A
59	116	41	358	26	295	43	22	22	346	A
60	106	39	358	28	296	42	23	26	343	A
61	96	38	356	27	289	41	23	23	342	A
62	86	39	352	26	289	42	22	24	339	A
63	76	42	351	26	282	43	23	18	340	A
64	66	46	353	28	267	46	28	4	350	A

NWNB2006 ADCP 19518

Harmonic constants for constituent N2 for deployment NWNB2006.

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	696	12	252	6	88	13	2	153	75	A
02	686	12	249	7	88	13	2	152	73	A
03	676	12	250	7	85	14	2	152	74	A
04	666	12	246	7	84	14	2	151	70	A
05	656	13	246	7	85	14	2	153	70	A
06	646	13	246	7	89	15	2	154	71	A
07	636	13	249	7	83	15	2	152	72	A
08	626	13	250	7	85	14	1	153	73	A
09	616	12	251	7	92	14	2	152	76	A
10	606	13	252	7	88	14	2	152	76	A
11	596	12	253	7	89	14	2	151	76	A
12	586	13	255	7	87	15	1	153	77	A
13	576	12	253	7	96	14	3	151	78	A
14	566	12	253	8	93	14	2	149	79	A
15	556	12	252	7	99	14	3	151	78	A
16	546	12	250	8	95	14	3	148	77	A
17	536	12	248	8	95	14	3	149	75	A
18	526	13	244	9	92	15	3	148	72	A
19	516	15	247	9	96	17	4	149	75	A
20	506	15	247	10	110	17	6	150	78	A
21	496	16	248	10	114	18	6	154	78	A
22	486	16	249	8	118	17	6	159	77	A
23	476	15	252	7	120	16	5	161	78	A
24	466	15	255	6	123	16	4	164	80	A
25	456	14	260	3	127	14	2	172	81	A
26	446	14	268	1	117	14	0	177	88	A
27	436	14	271	1	24	14	1	178	91	C
28	426	13	267	1	16	13	1	178	87	C
29	416	14	267	1	73	14	0	175	87	C
30	406	16	265	2	148	16	1	177	86	A
31	396	18	268	4	176	18	4	179	88	A
32	386	19	266	6	179	19	6	1	265	A
33	376	20	265	7	187	20	7	5	264	A
34	366	20	268	8	190	20	8	6	265	A
35	356	19	275	9	194	19	9	5	273	A
36	346	19	275	9	206	19	8	11	270	A
37	336	19	277	9	205	19	8	10	273	A
38	326	19	276	9	204	20	8	10	272	A
39	316	20	274	8	208	20	8	11	270	A
40	306	21	276	9	207	21	8	10	272	A
41	296	21	280	10	214	21	9	14	274	A
42	286	21	283	11	221	22	9	16	277	A
43	276	23	286	12	227	24	10	17	279	A
44	266	24	287	13	226	25	11	19	278	A
45	256	25	290	14	224	26	12	16	282	A
46	246	27	291	15	222	28	13	15	284	A
47	236	28	293	16	219	28	15	12	287	A
48	226	29	292	17	219	29	16	14	284	A
49	216	29	292	17	222	30	16	16	283	A
50	206	29	291	17	222	30	15	15	283	A
51	196	28	292	16	224	29	15	17	283	A
52	186	28	289	15	222	29	13	15	282	A
53	176	27	288	15	216	28	14	12	282	A
54	166	27	285	15	213	28	14	12	279	A
55	156	26	283	14	210	27	13	12	278	A
56	146	26	286	12	218	27	11	12	281	A
57	136	25	284	11	213	25	10	10	280	A
58	126	23	288	11	218	23	10	12	283	A
59	116	24	284	12	220	24	11	15	277	A
60	106	23	291	11	221	23	10	11	287	A
61	96	25	296	12	210	25	12	3	295	A
62	86	25	304	13	198	25	13	168	130	A
63	76	26	308	16	202	26	15	165	137	A
64	66	26	296	20	206	26	20	178	118	A

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Harmonic constants for constituent O1 for deployment NWNB2006.

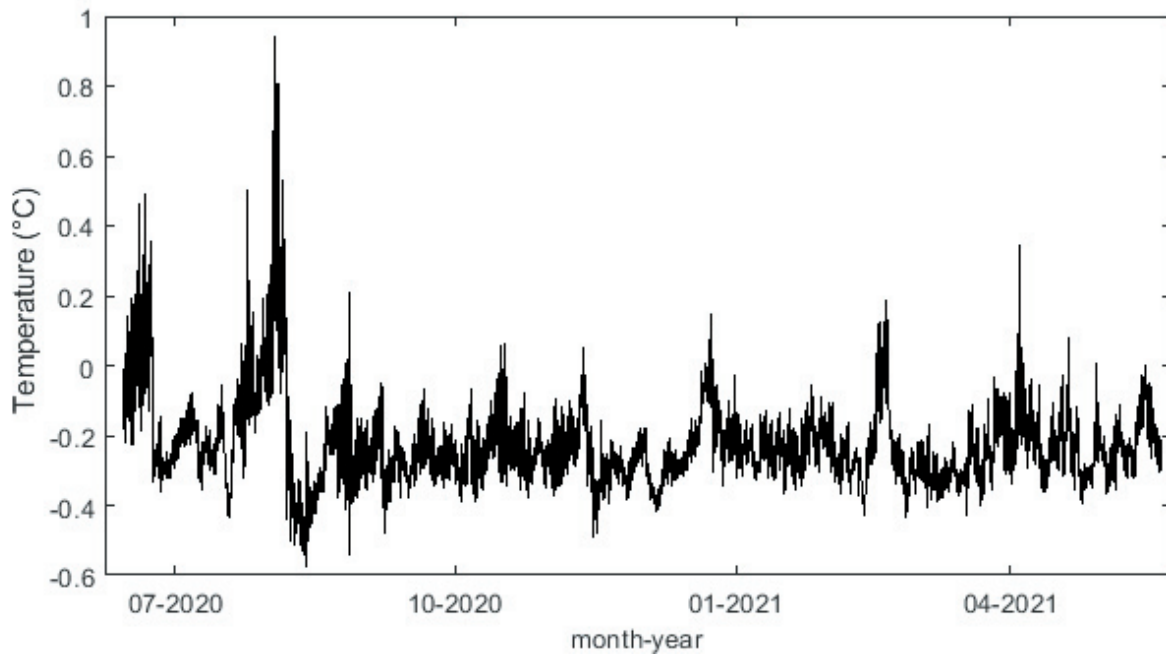
Bin	Depth m	E-ampl mm/sec	E-gphl deg	N-ampl mm/sec	N-gphl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	696	5	48	3	283	6	3	155	240	A
02	686	6	57	4	261	7	1	148	244	A
03	676	5	49	4	272	6	2	145	244	A
04	666	6	56	4	277	6	2	152	246	A
05	656	5	53	4	280	6	2	152	245	A
06	646	6	48	3	271	7	2	155	237	A
07	636	6	57	4	266	7	2	146	246	A
08	626	6	56	4	263	6	1	149	244	A
09	616	5	55	3	244	6	0	150	238	A
10	606	5	62	3	252	6	0	146	245	A
11	596	5	62	3	265	6	1	147	249	A
12	586	5	65	3	279	5	1	152	253	A
13	576	5	59	3	274	5	1	150	248	A
14	566	5	63	3	277	6	1	157	249	A
15	556	6	56	3	280	6	2	155	244	A
16	546	6	50	3	276	6	2	154	240	A
17	536	6	41	3	279	6	3	161	229	A
18	526	7	39	3	279	7	3	165	225	A
19	516	7	38	4	286	7	3	166	225	A
20	506	7	38	3	295	7	3	173	221	A
21	496	6	35	2	297	6	2	177	216	A
22	486	7	30	2	290	7	2	176	212	A
23	476	6	35	2	304	6	2	180	215	A
24	466	7	23	2	288	7	2	179	203	A
25	456	8	27	2	275	8	2	173	209	A
26	446	8	25	3	258	8	2	167	209	A
27	436	7	28	3	262	8	2	167	212	A
28	426	8	31	3	253	8	2	163	215	A
29	416	8	22	4	247	8	3	158	209	A
30	406	9	22	4	247	9	3	162	207	A
31	396	9	23	4	256	9	3	166	207	A
32	386	10	25	4	274	10	3	172	208	A
33	376	10	26	4	270	10	4	169	210	A
34	366	10	27	5	268	11	4	164	213	A
35	356	11	27	5	268	12	4	167	212	A
36	346	11	31	5	263	12	4	164	216	A
37	336	11	33	6	259	12	4	159	220	A
38	326	12	32	7	262	13	5	158	220	A
39	316	12	31	6	255	13	4	157	219	A
40	306	12	29	7	257	13	5	154	219	A
41	296	12	29	7	266	13	5	157	220	A
42	286	12	23	7	261	12	6	157	214	A
43	276	13	26	6	261	13	5	161	214	A
44	266	12	27	7	252	13	5	153	217	A
45	256	12	28	7	247	13	4	152	217	A
46	246	12	24	9	243	14	5	145	217	A
47	236	12	21	9	245	14	5	147	215	A
48	226	13	21	8	250	14	6	152	213	A
49	216	13	25	9	254	15	6	151	218	A
50	206	13	23	9	260	14	7	154	216	A
51	196	14	28	8	265	14	6	157	218	A
52	186	14	31	8	269	15	6	158	221	A
53	176	15	30	7	271	15	6	165	215	A
54	166	15	36	8	257	17	5	157	223	A
55	156	15	39	7	259	16	4	158	225	A
56	146	17	45	7	273	17	5	163	230	A
57	136	18	43	6	283	19	5	170	226	A
58	126	20	46	6	277	20	5	169	228	A
59	116	21	42	6	280	21	5	170	225	A
60	106	22	44	7	256	23	4	165	227	A
61	96	22	45	7	236	23	1	162	226	A
62	86	20	40	9	236	22	2	156	223	A
63	76	18	39	9	226	20	1	154	220	A
64	66	20	39	9	224	21	1	157	220	A

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Harmonic constants for constituent K1 for deployment NWNB2006.

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	696	6	259	5	162	6	5	156	100	A
02	686	5	265	5	156	6	4	135	120	A
03	676	5	263	5	153	6	4	136	117	A
04	666	5	262	5	160	5	4	150	106	A
05	656	5	269	4	166	5	4	150	113	A
06	646	4	269	5	162	5	4	128	132	A
07	636	5	263	5	155	5	4	130	124	A
08	626	5	267	5	155	6	4	138	119	A
09	616	5	270	5	160	6	4	136	124	A
10	606	6	268	5	166	6	5	145	117	A
11	596	7	266	5	161	7	5	154	105	A
12	586	7	269	6	158	7	5	150	110	A
13	576	7	271	5	162	7	5	155	108	A
14	566	7	268	6	161	7	5	151	109	A
15	556	7	264	5	163	7	5	164	95	A
16	546	7	261	5	162	7	5	165	92	A
17	536	6	264	6	160	7	5	146	111	A
18	526	7	262	6	159	7	6	152	104	A
19	516	7	262	7	150	8	5	133	118	A
20	506	7	264	7	144	9	5	131	118	A
21	496	7	266	8	148	9	5	131	120	A
22	486	8	265	7	156	9	6	147	109	A
23	476	8	267	7	156	9	6	147	110	A
24	466	8	268	6	155	8	5	148	109	A
25	456	7	274	7	160	8	5	140	123	A
26	446	7	278	6	157	8	4	150	114	A
27	436	8	272	6	145	9	4	152	105	A
28	426	9	274	6	147	10	4	149	110	A
29	416	9	273	7	139	11	4	145	108	A
30	406	10	268	8	137	12	5	143	107	A
31	396	11	263	8	135	13	6	148	99	A
32	386	13	267	8	142	14	6	155	99	A
33	376	12	272	9	146	13	6	147	110	A
34	366	11	277	10	153	13	7	142	119	A
35	356	11	275	10	155	13	7	142	119	A
36	346	11	274	11	148	14	7	137	119	A
37	336	11	267	9	141	13	7	143	107	A
38	326	11	260	10	139	13	7	142	103	A
39	316	12	264	11	139	14	8	137	110	A
40	306	12	262	11	136	15	7	140	105	A
41	296	13	265	10	139	15	7	144	105	A
42	286	12	272	11	138	15	6	142	110	A
43	276	13	273	11	145	15	7	142	113	A
44	266	14	276	12	147	16	8	141	116	A
45	256	14	274	13	146	17	8	141	116	A
46	246	14	278	13	148	17	8	137	122	A
47	236	13	279	13	154	17	9	136	125	A
48	226	14	278	13	152	17	9	137	123	A
49	216	13	274	12	154	15	9	137	123	A
50	206	12	271	12	159	14	10	135	125	A
51	196	11	275	12	155	14	8	129	130	A
52	186	11	278	12	153	14	7	132	128	A
53	176	11	273	13	152	14	8	126	130	A
54	166	10	269	11	154	13	8	128	128	A
55	156	9	262	9	144	11	7	132	115	A
56	146	8	273	8	158	10	6	138	123	A
57	136	5	264	8	163	8	5	100	157	A
58	126	4	284	7	179	7	4	101	174	A
59	116	2	296	9	176	9	2	97	175	A
60	106	4	351	10	188	11	1	112	186	A
61	96	4	2	10	190	11	1	112	189	A
62	86	4	348	12	198	13	2	107	195	A
63	76	6	336	12	193	13	3	113	187	A
64	66	6	324	11	188	12	4	116	178	A

NWNB2006 SBE56 06504



NWNM2006

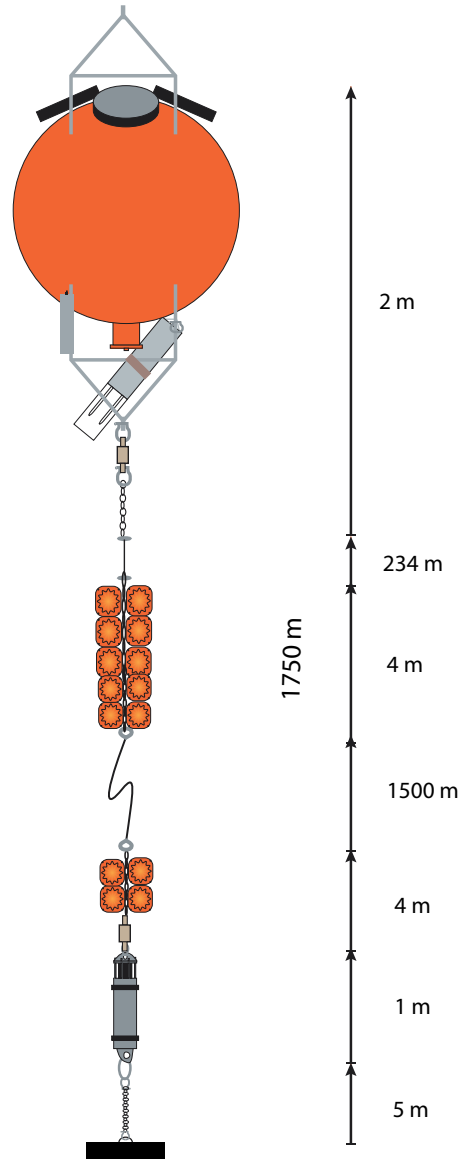
Latitude: 63°45.000'N
Longitude: 006°05.080'W
Echo sounding depth: 2442 m
Bottom depth corr.: 2390 m
Time of deployment: 13/6 - 2020 2135 UTC
Time of recovery: 21/5 - 2021 0357 UTC

ADCP:

Instrument no.: RDI ADCP 1292
Instrument frequency: 75 kHz
Height above bottom: 1750 m
Depth: 640 m
Time of first data: 13/6 - 2020 2200 UTC
Time of last data: 21/5 - 2021 0340 UTC
Sample interval: 20 min
No. of ensembles: 24570
Pings per ens.: 1
Binlength: 25 m
Depth of first bin: 604 m
No. of bins: 22

Starmon TD

Instrument no.: 0089
Height above bottom: 1748 m
Instrument depth: 642 m



Data:

The Starmon TD had no data due to instrumental leakage.

NWNM2006 ADCP 1292

Error statistics for deployment: NWNM2006 updated 2021/11/09

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

Velocity (spd, dir, wel) is error flagged using these data filters:
 Minimum Correlation threshold: 40.0
 Maximum Speed factor (Average speed for each bin times factor): 5.0
 Maximum Absolute Error Velocity threshold (erv_tr+0.1*spd): 100.0
 Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 1): 5.00
 Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 22): 3.02
 Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 32): 1.00
 Std dev for vertical de-spiking (u and v deviate from 3 point median by more than number of std dev): 3.0

Total number of ensembles: 24570
 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. flgd	ens. flgd	% flgd	1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	0	44	0	44	0	0	0	0	0	0	0	0	0
2	0	254	1	246	4	0	0	0	0	0	0	0	0
3	0	299	1	289	5	0	0	0	0	0	0	0	0
4	0	244	1	232	6	0	0	0	0	0	0	0	0
5	0	225	1	214	1	3	0	0	0	0	0	0	0
6	0	228	1	216	6	0	0	0	0	0	0	0	0
7	0	231	1	217	7	0	0	0	0	0	0	0	0
8	0	239	1	223	6	0	1	0	0	0	0	0	0
9	0	266	1	239	12	1	0	0	0	0	0	0	0
10	0	332	1	288	19	2	0	0	0	0	0	0	0
11	0	473	2	413	27	2	0	0	0	0	0	0	0
12	0	632	3	542	36	6	0	0	0	0	0	0	0
13	0	893	4	744	51	9	5	0	0	0	0	0	0
14	0	1370	6	1067	114	15	5	2	0	0	0	0	0
15	0	1816	7	1271	163	40	18	3	2	0	0	0	0
16	0	2447	10	1501	227	57	11	6	13	7	2	0	0
17	0	3130	13	1532	223	67	35	15	27	16	12	1	0
18	0	4543	18	1412	267	93	48	23	69	52	26	2	0
19	0	5775	24	1296	250	103	50	35	90	53	39	21	1
20	0	7396	30	1281	275	122	58	38	100	86	45	30	8
21	0	9723	40	1225	301	132	72	44	87	76	89	60	13
22	0	12315	50	1366	402	158	81	63	97	100	96	100	9

NWNM2006 ADCP 1292

Deployment: NWNM2006 updated 2021/11/09
 Instrument no.: 1292
 Instrument freq.: 75
 Latitude: 63 45.000 N
 Longitude: 06 05.080 W
 Bottom depth: 2390
 Instrument depth: 640
 Center depth of first bin: 604
 Bin length: 25
 Number of bins: 22
 Number of first ensemble: 388
 Time of first ensemble: 2020 06 13 22 00
 Number of last ensemble: 24957
 Time of last ensemble: 2021 05 21 03 40
 Time between ensembles (min.): 20
 All directions have been corrected by adding: -4.0

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

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	604	1786	123	108	114	998
2	579	1811	122	108	114	990
3	554	1836	123	108	114	988
4	529	1861	123	107	115	990
5	504	1886	123	106	115	991
6	479	1911	124	106	116	991
7	454	1936	125	106	116	991
8	429	1961	126	106	116	990
9	404	1986	127	106	116	989
10	379	2011	128	105	116	986
11	354	2036	129	104	116	981
12	329	2061	129	102	116	974
13	304	2086	131	99	117	964
14	279	2111	135	97	117	944
15	254	2136	141	95	119	926
16	229	2161	147	96	121	900
17	204	2186	153	99	121	873
18	179	2211	160	104	120	815
19	154	2236	172	113	119	765
20	129	2261	188	125	119	699
21	104	2286	207	138	118	604
22	79	2311	229	149	117	499

NWNM2006 ADCP 1292

Frequency of high speeds.

=====

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

=====

Bin Depth	Speed (cm/s)																	
no. m	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
1 604	662	74	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 579	650	71	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 554	652	72	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 529	652	71	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 504	649	75	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 479	648	79	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 454	650	84	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 429	658	91	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 404	658	99	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 379	653	109	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 354	649	123	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 329	640	128	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 304	637	137	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 279	635	154	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 254	646	178	20	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16 229	649	200	28	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17 204	636	222	39	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18 179	604	234	52	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0
19 154	581	259	73	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0
20 129	550	278	99	28	8	1	0	0	0	0	0	0	0	0	0	0	0	0
21 104	491	278	120	43	15	4	0	0	0	0	0	0	0	0	0	0	0	0
22 79	418	260	129	56	22	8	2	1	0	0	0	0	0	0	0	0	0	0

NWNM2006 ADCP 1292

Harmonic constants for constituent M2 for deployment NWNM2006.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	604	40	257	29	288	48	12	35	268	C
02	579	40	258	29	285	49	11	35	267	C
03	554	41	259	29	283	49	10	35	267	C
04	529	41	259	29	281	50	9	34	266	C
05	504	42	259	29	280	50	8	34	266	C
06	479	42	260	29	280	51	8	35	266	C
07	454	42	261	30	278	51	8	35	266	C
08	429	43	261	30	277	52	7	35	266	C
09	404	43	260	31	277	52	7	35	266	C
10	379	44	261	31	276	53	6	35	266	C
11	354	45	263	32	272	55	4	35	266	C
12	329	46	266	33	268	57	1	35	267	C
13	304	49	267	34	264	60	1	35	266	A
14	279	53	268	36	260	64	4	34	265	A
15	254	58	269	38	253	69	9	33	264	A
16	229	62	269	41	248	73	12	32	263	A
17	204	66	270	43	245	77	15	32	263	A
18	179	70	270	45	240	81	19	31	262	A
19	154	77	272	49	234	88	26	30	262	A
20	129	87	245	57	199	98	36	29	233	A
21	104	99	274	67	224	110	46	29	261	A
22	79	105	276	77	227	120	51	32	261	A

Harmonic constants for constituent S2 for deployment NWNM2006.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	604	10	306	15	335	17	4	58	327	C
02	579	10	307	15	334	17	4	58	326	C
03	554	9	304	15	335	17	4	60	327	C
04	529	9	306	15	334	17	4	60	327	C
05	504	9	305	15	336	17	4	63	329	C
06	479	8	306	16	340	17	4	64	333	C
07	454	8	305	16	344	17	5	66	337	C
08	429	9	306	16	345	17	5	64	337	C
09	404	10	311	16	343	18	5	61	335	C
10	379	10	317	17	342	19	4	60	335	C
11	354	10	325	17	337	20	2	61	335	C
12	329	9	321	16	336	18	2	61	332	C
13	304	8	320	17	341	18	3	65	337	C
14	279	8	320	17	340	19	2	66	336	C
15	254	9	319	16	334	18	2	62	330	C
16	229	12	316	15	327	19	2	51	322	C
17	204	14	310	13	321	19	2	44	315	C
18	179	19	307	12	316	22	2	33	310	C
19	154	20	314	17	310	26	1	40	312	A
20	129	19	290	22	285	30	1	49	287	A
21	104	18	317	24	324	30	2	53	322	C
22	79	11	288	29	332	30	7	74	328	C

NWNM2006 ADCP 1292

Harmonic constants for constituent N2 for deployment NWNM2006.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	604	5	216	9	300	9	5	85	297	C
02	579	4	211	8	304	8	4	92	305	C
03	554	4	198	8	306	9	4	101	311	C
04	529	4	197	8	305	8	4	100	310	C
05	504	4	211	8	304	8	4	92	305	C
06	479	3	225	9	298	10	3	84	296	C
07	454	3	233	9	297	9	3	81	294	C
08	429	3	236	10	298	10	2	83	296	C
09	404	2	224	11	297	11	2	86	296	C
10	379	3	218	10	301	10	3	88	300	C
11	354	4	239	9	292	10	3	76	288	C
12	329	5	270	10	276	11	1	61	275	C
13	304	7	268	10	271	12	0	56	270	C
14	279	5	265	10	277	11	1	62	275	C
15	254	5	245	7	291	8	3	63	280	C
16	229	6	214	6	305	6	6	178	33	C
17	204	8	221	4	300	8	4	7	224	C
18	179	6	209	3	295	6	3	3	211	C
19	154	5	188	5	296	6	4	133	330	C
20	129	7	160	2	310	7	1	164	337	C
21	104	14	186	7	64	15	6	163	13	A
22	79	21	175	9	82	21	9	178	355	A

Harmonic constants for constituent O1 for deployment NWNM2006.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	604	5	355	4	43	6	2	34	10	C
02	579	6	353	4	40	6	3	31	6	C
03	554	6	2	4	34	7	2	33	12	C
04	529	6	4	4	39	6	2	32	14	C
05	504	5	358	4	38	6	2	36	12	C
06	479	5	356	4	38	6	2	41	15	C
07	454	5	1	4	40	6	2	42	19	C
08	429	5	4	4	36	6	2	41	18	C
09	404	5	9	4	46	6	2	37	23	C
10	379	5	5	4	41	6	2	33	16	C
11	354	5	1	4	49	5	2	34	17	C
12	329	5	4	3	55	5	2	29	17	C
13	304	5	1	3	45	6	2	25	10	C
14	279	6	0	3	69	6	2	12	5	C
15	254	6	1	3	67	6	3	16	8	C
16	229	5	359	3	40	6	2	30	9	C
17	204	5	355	3	39	5	2	25	4	C
18	179	5	338	2	23	5	1	16	342	C
19	154	6	324	1	86	6	1	177	144	C
20	129	11	308	3	203	11	3	175	130	A
21	104	16	337	6	252	16	6	2	337	A
22	79	11	327	2	256	11	2	3	327	A

NWNM2006 ADCP 1292

Harmonic constants for constituent K1 for deployment NWNM2006.

Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	604	5	257	2	280	5	1	25	262	C
02	579	4	257	2	282	4	1	29	263	C
03	554	4	256	1	311	4	1	13	260	C
04	529	4	257	1	295	4	1	16	260	C
05	504	4	263	2	296	4	1	33	273	C
06	479	4	259	3	298	5	2	42	276	C
07	454	4	258	3	295	5	2	35	271	C
08	429	5	260	3	285	6	1	29	266	C
09	404	6	257	3	280	6	1	26	262	C
10	379	7	251	3	304	7	2	18	258	C
11	354	7	246	3	320	7	3	11	251	C
12	329	8	255	4	323	8	4	17	263	C
13	304	7	255	6	315	8	5	36	277	C
14	279	6	262	7	318	8	4	51	295	C
15	254	4	279	7	318	8	3	63	309	C
16	229	4	275	6	326	6	3	62	313	C
17	204	2	266	3	310	4	1	58	297	C
18	179	4	278	0	296	4	0	7	278	C
19	154	8	277	2	189	8	2	1	276	A
20	129	6	252	8	165	8	6	82	172	A
21	104	5	318	11	200	11	4	103	195	A
22	79	12	326	13	202	16	8	131	177	A

IFRD2005

Latitude: 63°12.953'N
Longitude: 010°08.519'W
Echo sound depth: 431 m
Bottom depth corr.: 434 m
Time of deployment: 24/5 - 2020 1117 UTC
Time of recovery: 22/5 - 2021 1549 UTC

ADCP:

Instrument no.: RDI ADCP 1279
Instrument frequency: 150 kHz
Height above bottom: 1 m
Depth: 433 m
Time of first data: 24/5 - 2020 1220 UTC
Time of last data: 22/5 - 2021 1520 UTC
Sample interval: 20 min
No. of ensembles: 26146
Pings per ens.: 1
Binlength: 10 m
Depth of first bin: 417 m
No. of bins: 29



SBE56

Instrument no.: 06505
Height above bottom: 1 m
Instrument depth: 433 m
Time of first data: 24/5 - 2020 1214 UTC
Time of last data: 22/5 - 2021 1549 UTC
Sample interval: 1 min
No. of ensembles: 522936

Data:

All data ok.

IFRD2005 ADCP 1279

Error statistics for deployment: IFRD2005 updated 2021/09/13

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

Velocity (spd, dir, wel) is error flagged using these data filters:

Maximum Speed factor (Average speed for each bin times factor): 5.0

Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 1): 5.00

Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 29): 2.19

Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 30): 2.00

Total number of ensembles: 26146
 Interval between ensembles: 20 min
 Original number of bins: 30
 Number of acceptable velocity bins: 29

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

Number of temperature ens. flagged: 0

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

Bin	Int. ens. flgd	Velocity ens. flgd	% flgd	Number of velocity gaps of length										
				1	2	3	4	5	6-10	11-20	21-30	31-50	>50	
1	0	147	1	114	12	3	0	0	0	0	0	0	0	0
2	0	168	1	120	17	3	0	1	0	0	0	0	0	0
3	0	195	1	134	24	3	1	0	0	0	0	0	0	0
4	0	226	1	154	27	6	0	0	0	0	0	0	0	0
5	0	254	1	171	32	5	1	0	0	0	0	0	0	0
6	0	281	1	187	29	9	1	1	0	0	0	0	0	0
7	0	301	1	199	30	6	6	0	0	0	0	0	0	0
8	0	330	1	226	33	10	2	0	0	0	0	0	0	0
9	0	327	1	220	38	9	1	0	0	0	0	0	0	0
10	0	365	1	233	54	8	0	0	0	0	0	0	0	0
11	0	366	1	233	49	9	2	0	0	0	0	0	0	0
12	0	408	2	286	39	8	5	0	0	0	0	0	0	0
13	0	363	1	259	29	10	4	0	0	0	0	0	0	0
14	0	416	2	285	46	9	3	0	0	0	0	0	0	0
15	0	414	2	277	48	8	3	1	0	0	0	0	0	0
16	0	455	2	322	53	5	3	0	0	0	0	0	0	0
17	0	540	2	340	64	17	1	1	2	0	0	0	0	0
18	0	655	3	365	92	19	4	3	0	1	0	0	0	0
19	0	706	3	397	89	14	4	3	3	1	1	0	0	0
20	0	916	4	464	102	13	7	3	6	5	2	0	0	0
21	0	1096	4	386	94	22	11	9	20	8	5	0	0	0
22	0	1462	6	393	98	36	18	8	24	17	5	2	0	0
23	0	2018	8	436	128	50	21	15	38	25	8	4	0	0
24	0	2602	10	468	136	57	29	23	42	30	14	11	0	0
25	0	3317	13	440	164	65	27	25	50	47	15	17	0	0
26	0	4508	17	454	171	61	50	27	63	58	42	21	1	0
27	0	6358	24	452	184	84	50	26	84	88	34	53	3	0
28	0	8468	32	590	199	90	58	36	92	95	46	78	9	0
29	0	10136	39	605	215	100	55	41	101	107	60	88	17	0

IFRD2005 ADCP 1279

Deployment: IFRD2005 updated 2021/09/13
 Instrument no.: 1279
 Instrument freq.: 150
 Latitude: 63 12.953 N
 Longitude: 10 08.519 W
 Bottom depth: 434
 Instrument depth: 433
 Center depth of first bin: 417
 Bin length: 10
 Number of bins: 29
 Number of first ensemble: 367
 Time of first ensemble: 2020 05 24 12 20
 Number of last ensemble: 26512
 Time of last ensemble: 2021 05 22 15 20
 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	417	17	272	156	213	994
2	407	27	290	160	217	994
3	397	37	300	157	221	993
4	387	47	307	150	224	991
5	377	57	312	141	227	990
6	367	67	316	126	228	989
7	357	77	318	115	229	988
8	347	87	321	106	230	987
9	337	97	324	95	230	987
10	327	107	326	85	230	986
11	317	117	328	78	230	986
12	307	127	330	68	230	984
13	297	137	332	59	230	986
14	287	147	335	51	230	984
15	277	157	338	44	232	984
16	267	167	342	34	232	983
17	257	177	344	30	235	979
18	247	187	347	26	239	975
19	237	197	350	23	242	973
20	227	207	352	21	247	965
21	217	217	353	19	249	958
22	207	227	354	17	256	944
23	197	237	354	17	263	923
24	187	247	353	17	266	900
25	177	257	354	17	271	873
26	167	267	355	17	284	828
27	157	277	355	17	306	757
28	147	287	359	19	318	676
29	137	297	363	18	332	612

IFRD2005 ADCP 1279

Frequency of high speeds.

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

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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	180
1 417	873	633	381	198	88	31	8	1	0	0	0	0	0	0	0	0	0	0
2 407	884	660	427	236	113	44	13	4	0	0	0	0	0	0	0	0	0	0
3 397	896	674	450	259	130	53	18	5	1	0	0	0	0	0	0	0	0	0
4 387	903	686	462	271	139	60	20	6	2	0	0	0	0	0	0	0	0	0
5 377	907	699	473	280	146	64	22	6	2	0	0	0	0	0	0	0	0	0
6 367	909	709	481	286	151	65	21	7	2	0	0	0	0	0	0	0	0	0
7 357	916	720	489	290	151	63	20	7	2	0	0	0	0	0	0	0	0	0
8 347	918	732	498	293	150	62	20	6	2	0	0	0	0	0	0	0	0	0
9 337	925	744	508	296	150	60	20	6	1	0	0	0	0	0	0	0	0	0
10 327	925	755	515	299	149	60	19	6	2	0	0	0	0	0	0	0	0	0
11 317	925	760	520	302	152	60	20	6	2	0	0	0	0	0	0	0	0	0
12 307	925	761	527	306	152	60	20	6	2	0	0	0	0	0	0	0	0	0
13 297	928	768	540	313	151	60	20	7	2	0	0	0	0	0	0	0	0	0
14 287	931	771	544	317	155	61	21	6	2	1	0	0	0	0	0	0	0	0
15 277	932	775	551	325	157	63	22	7	2	1	0	0	0	0	0	0	0	0
16 267	931	781	562	334	163	64	21	7	2	1	0	0	0	0	0	0	0	0
17 257	929	783	567	344	168	66	22	7	2	1	0	0	0	0	0	0	0	0
18 247	925	781	570	348	176	71	23	7	2	1	0	0	0	0	0	0	0	0
19 237	925	782	571	353	182	74	25	8	2	1	0	0	0	0	0	0	0	0
20 227	918	776	567	355	184	77	26	9	3	1	0	0	0	0	0	0	0	0
21 217	911	769	566	353	185	80	29	10	3	1	0	0	0	0	0	0	0	0
22 207	897	759	560	350	183	80	29	10	4	1	0	0	0	0	0	0	0	0
23 197	876	740	547	340	179	79	28	10	3	1	0	0	0	0	0	0	0	0
24 187	854	721	532	333	176	77	28	10	4	1	1	0	0	0	0	0	0	0
25 177	827	699	516	323	173	76	28	10	3	1	0	0	0	0	0	0	0	0
26 167	783	663	489	308	167	75	27	10	3	1	0	0	0	0	0	0	0	0
27 157	714	603	446	281	153	69	25	9	3	1	0	0	0	0	0	0	0	0
28 147	639	543	406	260	143	67	24	10	3	1	0	0	0	0	0	0	0	0
29 137	581	495	371	236	133	63	25	9	3	1	0	0	0	0	0	0	0	0

IFRD2005 ADCP 1279

Harmonic constants for constituent M2 for deployment IFRD2005.

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	417	165	249	135	210	201	70	38	234	A
02	407	184	255	159	212	227	88	39	237	A
03	397	199	261	182	215	249	104	41	240	A
04	387	213	266	204	218	270	119	43	243	A
05	377	225	270	224	221	288	132	45	246	A
06	367	242	276	238	224	306	149	44	251	A
07	357	249	278	250	226	316	157	45	252	A
08	347	254	281	260	227	324	164	46	253	A
09	337	256	282	268	228	330	169	47	253	A
10	327	258	283	274	228	334	173	48	253	A
11	317	260	283	278	228	338	176	48	253	A
12	307	263	284	282	228	341	180	49	253	A
13	297	266	284	286	227	344	184	49	252	A
14	287	268	284	291	227	348	189	49	252	A
15	277	270	284	295	226	351	193	50	251	A
16	267	272	284	298	226	353	196	50	251	A
17	257	274	284	300	225	354	198	50	250	A
18	247	275	284	302	225	355	201	50	250	A
19	237	275	284	304	225	356	203	51	250	A
20	227	276	284	305	224	357	205	51	249	A
21	217	276	284	304	224	356	205	51	249	A
22	207	275	284	304	223	355	206	51	249	A
23	197	273	284	304	223	354	204	51	248	A
24	187	273	284	301	223	352	205	51	249	A
25	177	274	284	302	223	352	205	51	249	A
26	167	272	284	300	223	350	204	51	248	A
27	157	267	284	297	222	345	202	51	247	A
28	147	269	283	297	223	347	201	51	248	A
29	137	268	284	297	222	344	203	51	247	A

Harmonic constants for constituent S2 for deployment IFRD2005.

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	417	62	299	61	254	81	33	44	277	A
02	407	70	302	68	256	89	38	44	280	A
03	397	74	304	74	258	96	41	45	282	A
04	387	78	307	79	261	102	43	46	284	A
05	377	81	311	85	265	108	46	47	286	A
06	367	86	316	90	269	114	50	47	291	A
07	357	89	319	95	271	119	53	48	293	A
08	347	91	321	97	271	121	55	48	294	A
09	337	92	322	99	272	123	56	48	294	A
10	327	93	322	99	272	123	57	48	295	A
11	317	94	322	99	272	123	57	47	295	A
12	307	95	322	98	272	124	58	47	296	A
13	297	96	322	98	271	124	59	46	295	A
14	287	96	321	98	269	124	60	46	294	A
15	277	96	320	99	268	124	60	47	293	A
16	267	97	319	100	267	125	61	46	292	A
17	257	98	319	100	265	125	63	46	291	A
18	247	98	318	100	264	125	64	46	290	A
19	237	99	317	100	263	125	65	46	290	A
20	227	99	317	101	262	125	65	46	289	A
21	217	100	317	101	262	126	66	45	289	A
22	207	100	317	101	261	126	66	46	288	A
23	197	100	316	102	260	126	67	46	287	A
24	187	98	316	103	259	125	69	48	285	A
25	177	98	316	104	257	125	70	48	284	A
26	167	100	316	106	258	128	71	48	285	A
27	157	100	314	104	258	128	67	47	284	A
28	147	98	313	106	256	127	69	49	281	A
29	137	98	313	108	254	127	72	51	279	A

IFRD2005 ADCP 1279

Harmonic constants for constituent N2 for deployment IFRD2005.

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	417	23	219	21	230	31	3	42	224	C
02	407	27	222	21	219	34	1	38	221	A
03	397	29	228	24	209	37	6	39	221	A
04	387	33	232	28	204	42	10	40	220	A
05	377	35	237	32	203	45	14	42	221	A
06	367	41	242	36	204	52	17	41	225	A
07	357	43	246	41	204	55	21	43	227	A
08	347	45	251	45	205	58	25	45	228	A
09	337	47	254	50	205	63	29	47	228	A
10	327	51	256	54	205	68	32	48	229	A
11	317	53	257	58	205	71	35	49	228	A
12	307	56	259	61	206	74	36	49	229	A
13	297	55	260	61	207	74	36	50	230	A
14	287	55	261	61	208	74	36	50	231	A
15	277	55	263	61	208	73	37	50	231	A
16	267	58	263	62	208	76	39	49	233	A
17	257	58	262	63	208	77	39	49	232	A
18	247	59	261	64	207	78	39	49	231	A
19	237	60	260	65	207	79	39	49	230	A
20	227	61	260	66	206	80	40	49	231	A
21	217	62	260	67	206	82	41	49	230	A
22	207	63	262	67	206	82	43	48	231	A
23	197	63	262	65	207	80	41	46	233	A
24	187	63	261	65	206	81	42	47	233	A
25	177	63	262	65	206	80	42	47	232	A
26	167	63	259	66	207	82	40	47	231	A
27	157	65	262	65	207	82	43	45	235	A
28	147	64	261	67	207	83	42	47	232	A
29	137	67	261	70	206	85	45	47	232	A

Harmonic constants for constituent O1 for deployment IFRD2005.

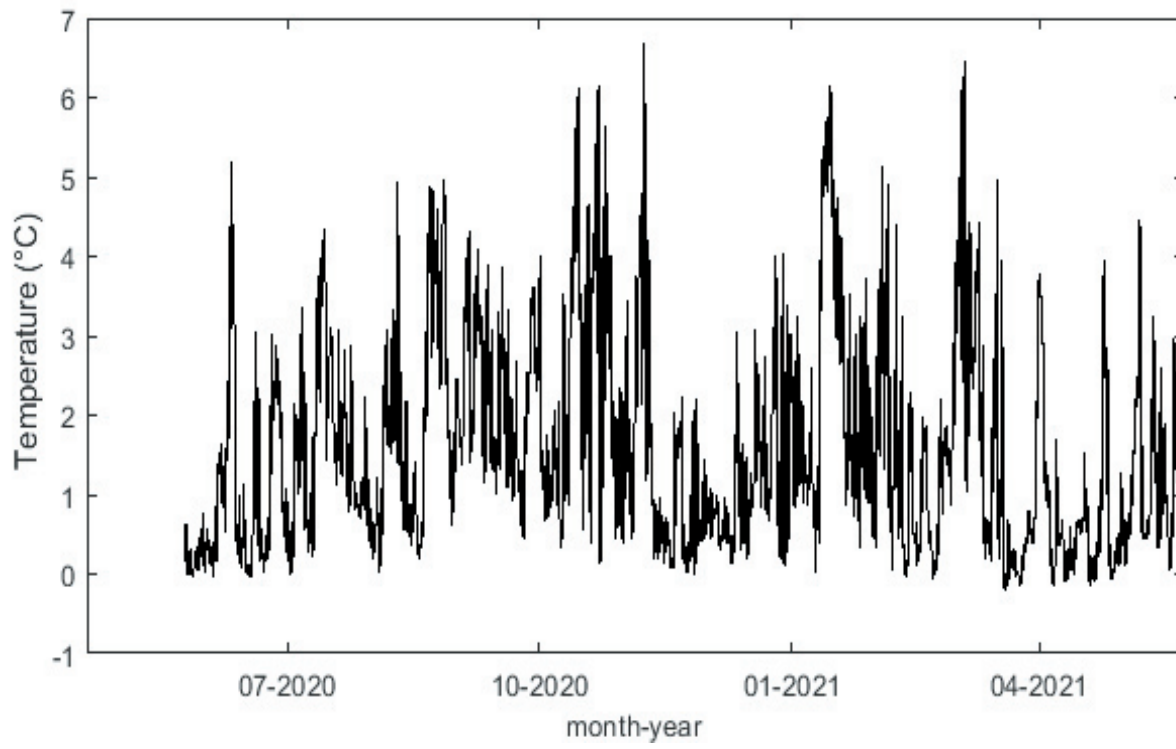
Bin	Depth m	E-ampl mm/sec	E-gpl deg	N-ampl mm/sec	N-gpl deg	Major mm/sec	Minor mm/sec	Incl deg	Grphl deg	R
01	417	49	19	23	265	50	21	167	204	A
02	407	53	17	27	267	54	25	167	204	A
03	397	53	16	31	270	55	29	167	203	A
04	387	53	14	32	273	54	31	170	200	A
05	377	51	11	32	273	52	31	172	196	A
06	367	49	8	31	272	49	30	174	191	A
07	357	48	5	30	271	48	30	175	188	A
08	347	48	3	30	268	48	30	176	186	A
09	337	48	1	30	266	48	30	175	184	A
10	327	48	0	30	265	48	29	174	184	A
11	317	47	358	29	266	47	29	177	180	A
12	307	46	358	28	265	46	28	177	180	A
13	297	45	357	27	267	45	27	180	177	A
14	287	44	356	27	265	44	27	179	176	A
15	277	43	354	26	264	43	26	0	354	A
16	267	42	353	27	263	42	27	1	352	A
17	257	41	352	26	262	41	26	180	172	A
18	247	42	353	25	259	42	25	176	175	A
19	237	42	353	26	260	42	26	176	176	A
20	227	41	353	26	258	42	26	175	176	A
21	217	43	352	27	257	43	26	175	175	A
22	207	43	352	27	257	43	27	174	176	A
23	197	43	351	26	257	43	26	176	174	A
24	187	43	350	26	258	43	26	178	172	A
25	177	44	352	25	263	44	25	1	351	A
26	167	45	354	25	263	45	25	180	174	A
27	157	44	353	24	261	44	24	178	174	A
28	147	46	355	23	260	46	23	177	176	A
29	137	47	352	25	255	47	25	175	175	A

IFRD2005 ADCP 1279

Harmonic constants for constituent K1 for deployment IFRD2005.

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	417	45	275	26	158	47	22	161	104	A
02	407	51	274	31	160	53	27	160	105	A
03	397	51	273	35	163	53	31	160	105	A
04	387	52	271	36	165	54	34	162	102	A
05	377	52	267	36	164	53	35	165	97	A
06	367	51	263	36	164	51	35	168	91	A
07	357	49	261	35	162	50	34	168	89	A
08	347	48	259	34	160	49	33	168	87	A
09	337	47	258	34	159	48	33	167	87	A
10	327	46	256	33	158	47	33	169	83	A
11	317	46	255	33	158	46	32	171	81	A
12	307	45	254	32	158	45	31	172	79	A
13	297	44	252	31	157	44	31	173	77	A
14	287	43	253	31	156	43	30	170	81	A
15	277	42	254	31	155	42	31	168	83	A
16	267	41	253	30	156	42	30	169	81	A
17	257	42	254	30	156	42	30	168	83	A
18	247	42	255	31	157	42	30	169	83	A
19	237	42	257	31	157	43	30	166	87	A
20	227	42	256	32	157	43	31	166	87	A
21	217	43	257	33	157	44	32	163	89	A
22	207	42	259	33	156	43	31	158	95	A
23	197	42	261	34	154	44	31	154	100	A
24	187	41	262	33	151	44	29	150	103	A
25	177	42	264	32	147	46	26	150	102	A
26	167	46	261	31	151	48	28	160	93	A
27	157	47	263	28	151	48	25	163	92	A
28	147	50	265	25	149	52	22	165	92	A
29	137	47	264	27	146	49	23	161	93	A

IFRD2005 SBE56 06505



IFRE2006

Latitude: 63°14.780'N
Longitude: 009°47.860'W
Echo sound depth: 487 m
Bottom depth corr.: 490 m
Time of deployment: 12/6 - 2020 1732 UTC
Time of recovery: 22/5 - 2021 1407 UTC

ADCP:

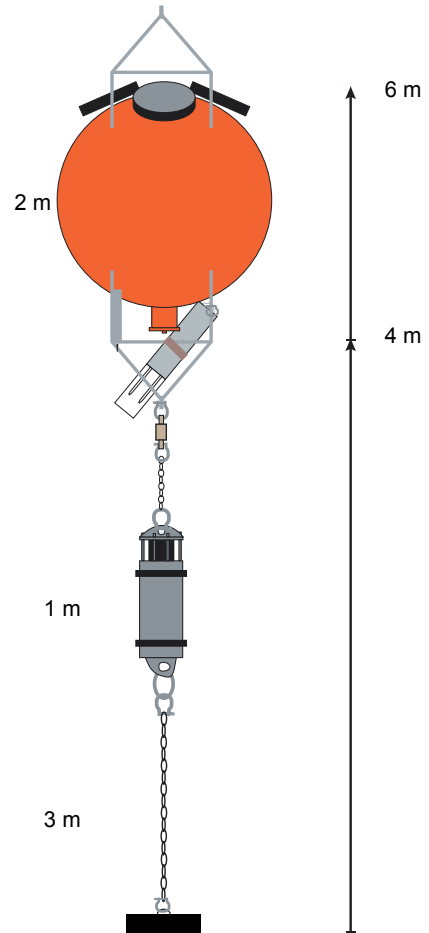
Instrument no.: RDI ADCP 1644
Instrument frequency: 75 kHz
Height above bottom: 6 m
Depth: 484 m
Time of first data: 12/6 - 2020 1800 UTC
Time of last data: 22/5 - 2021 1340 UTC
Sample interval: 20 min
No. of ensembles: 24756
Pings per ens.: 1
Binlength: 25 m
Depth of first bin: 448 m
No. of bins: 15

SBE56

Instrument no.: 06506
Height above bottom: 4 m
Instrument depth: 486 m
Time of first data: 12/6 - 2020 1741 UTC
Time of last data: 22/5 - 2021 1407 UTC
Sample interval: 1 min
No. of ensembles: 495147

Data:

No data were available from beam #2 of the ADCP. This means that no error velocity is calculated since it is based on the fourth (redundant) beam.



IFRE2006 ADCP 1644

Error statistics for deployment: IFRE2006 updated 2021/09/21

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

Velocity (spd, dir, wel) is error flagged using these data filters:

Minimum Intensity threshold : 55.0
 Minimum Correlation threshold: 61.0
 Maximum Speed factor (Average speed for each bin times factor): 4.0
 Maximum Absolute Vertical Velocity threshold:150.0
 Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 1): 5.00
 Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 15): 3.93
 Std dev for de-spiking (u, v deviate from 3 point median by more than number of std dev, bin 32): 1.00
 Std dev for vertical de-spiking (u and v deviate from 3 point median by more than number of std dev): 4.0
 Std dev for de-spiking (w deviates from 3 point median by more than number of std dev): 4.0

Total number of ensembles: 24756
 Interval between ensembles: 20 min
 Original number of bins: 32
 Number of acceptable velocity bins: 15

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. flgd	ens. flgd	% flgd	1	2	3	4	5	6-10	11-20	21-30	31-50	>50
1	0	195	1	159	14	1	0	1	0	0	0	0	0
2	0	220	1	144	31	3	0	1	0	0	0	0	0
3	0	234	1	174	16	8	1	0	0	0	0	0	0
4	0	243	1	173	26	6	0	0	0	0	0	0	0
5	0	245	1	183	25	4	0	0	0	0	0	0	0
6	0	234	1	185	14	7	0	0	0	0	0	0	0
7	0	246	1	175	23	7	1	0	0	0	0	0	0
8	0	321	1	210	30	8	2	0	1	1	0	0	0
9	0	694	3	264	46	14	7	8	4	7	0	3	0
10	0	1372	6	259	65	29	13	9	7	12	5	10	0
11	0	2226	9	353	83	50	19	19	24	20	13	12	1
12	0	3366	14	365	138	54	36	23	43	46	13	18	5
13	0	4898	20	396	114	66	49	22	78	59	37	24	8
14	0	6514	26	386	165	64	60	15	77	99	43	43	11
15	0	8511	34	418	170	87	63	38	83	99	50	69	18

IFRE2006 ADCP 1644

Deployment: IFRE2006 updated 2021/09/21
 Instrument no.: 1644
 Instrument freq.: 75
 Latitude: 63 14.780 N
 Longitude: 09 47.860 W
 Bottom depth: 490
 Instrument depth: 484
 Center depth of first bin: 448
 Bin length: 25
 Number of bins: 15
 Number of first ensemble: 304
 Time of first ensemble: 2020 06 12 18 00
 Number of last ensemble: 25059
 Time of last ensemble: 2021 05 22 13 40
 Time between ensembles (min.): 20
 All directions have been corrected by adding: -6.0

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

Bin no.	Depth m	Height m	Speed mm/s	Vel mm/s	Dir deg	Good ppt
1	448	42	263	20	327	992
2	423	67	272	12	330	991
3	398	92	270	5	355	991
4	373	117	270	3	100	990
5	348	142	279	7	112	990
6	323	167	290	12	104	991
7	298	192	305	17	97	990
8	273	217	318	19	91	987
9	248	242	330	22	86	972
10	223	267	338	25	89	945
11	198	292	344	26	91	910
12	173	317	349	25	92	864
13	148	342	352	22	101	802
14	123	367	359	27	103	737
15	98	392	370	38	98	656

IFRE2006 ADCP 1644

Frequency of high speeds.

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

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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	180	
1 448	899	649	356	150	49	13	2	0	0	0	0	0	0	0	0	0	0	0	0
2 423	911	672	380	170	55	14	3	1	0	0	0	0	0	0	0	0	0	0	0
3 398	905	663	373	165	55	14	3	1	0	0	0	0	0	0	0	0	0	0	0
4 373	901	659	378	168	58	15	4	1	0	0	0	0	0	0	0	0	0	0	0
5 348	907	680	399	187	70	21	4	1	0	0	0	0	0	0	0	0	0	0	0
6 323	918	704	433	212	87	26	6	0	0	0	0	0	0	0	0	0	0	0	0
7 298	923	731	471	248	107	36	8	1	0	0	0	0	0	0	0	0	0	0	0
8 273	926	747	501	279	131	48	13	2	0	0	0	0	0	0	0	0	0	0	0
9 248	914	752	521	307	153	59	17	3	0	0	0	0	0	0	0	0	0	0	0
10 223	891	739	525	317	166	67	21	5	0	0	0	0	0	0	0	0	0	0	0
11 198	860	718	515	318	168	73	24	6	1	0	0	0	0	0	0	0	0	0	0
12 173	818	688	495	309	165	74	26	7	1	0	0	0	0	0	0	0	0	0	0
13 148	760	641	466	293	159	73	28	8	1	0	0	0	0	0	0	0	0	0	0
14 123	700	589	434	280	156	76	31	11	3	1	0	0	0	0	0	0	0	0	0
15 98	622	529	395	261	151	78	38	16	5	2	1	1	0	0	0	0	0	0	0

IFRE2006 ADCP 1644

Harmonic constants for constituent M2 for deployment IFRE2006.

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	448	224	250	176	199	259	118	34	233	A
02	423	231	260	206	207	278	137	40	238	A
03	398	224	267	218	214	280	139	44	242	A
04	373	220	273	228	220	283	141	47	245	A
05	348	221	278	240	223	290	149	49	247	A
06	323	226	283	252	225	298	161	51	249	A
07	298	234	286	267	227	310	173	52	250	A
08	273	240	288	278	228	320	181	53	250	A
09	248	245	288	286	228	326	187	54	250	A
10	223	249	289	288	227	329	191	54	250	A
11	198	250	289	290	227	331	192	54	250	A
12	173	248	288	293	227	333	191	54	249	A
13	148	249	288	293	228	334	190	54	250	A
14	123	248	288	292	229	335	186	54	251	A
15	98	252	288	291	228	335	190	53	251	A

Harmonic constants for constituent S2 for deployment IFRE2006.

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	448	84	286	65	238	98	41	34	270	A
02	423	87	297	77	247	105	48	40	276	A
03	398	85	304	83	254	108	50	44	280	A
04	373	82	308	83	258	106	49	45	282	A
05	348	79	311	84	260	104	50	47	283	A
06	323	79	315	87	263	106	51	49	286	A
07	298	79	318	90	265	108	53	51	286	A
08	273	81	321	93	266	110	55	51	288	A
09	248	83	323	95	267	112	58	51	290	A
10	223	84	325	96	268	113	60	52	291	A
11	198	86	327	98	270	115	62	52	293	A
12	173	86	326	99	270	116	60	52	292	A
13	148	86	324	102	271	119	58	53	291	A
14	123	89	324	103	273	123	58	51	294	A
15	98	85	321	108	276	128	51	54	292	A

IFRE2006 ADCP 1644

Harmonic constants for constituent N2 for deployment IFRE2006.

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	448	31	228	26	199	39	10	39	216	A
02	423	36	235	29	196	44	15	38	220	A
03	398	37	244	33	199	46	19	41	224	A
04	373	40	252	40	201	51	25	46	226	A
05	348	46	258	49	202	59	31	47	228	A
06	323	52	262	56	202	66	39	49	228	A
07	298	54	266	59	204	68	41	50	230	A
08	273	54	269	59	204	68	43	51	231	A
09	248	54	268	58	205	68	42	49	233	A
10	223	56	268	58	204	69	42	48	233	A
11	198	57	267	60	203	70	44	48	233	A
12	173	59	265	59	201	71	44	45	233	A
13	148	55	265	60	204	70	41	50	230	A
14	123	56	264	62	202	72	42	51	228	A
15	98	59	264	64	201	75	45	51	228	A

Harmonic constants for constituent O1 for deployment IFRE2006.

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	448	37	7	23	275	37	23	177	189	A
02	423	37	3	24	267	37	24	173	188	A
03	398	37	2	23	268	37	23	177	183	A
04	373	36	1	23	270	36	23	178	183	A
05	348	36	2	24	272	36	24	180	182	A
06	323	36	4	24	270	36	24	175	187	A
07	298	37	8	25	268	38	24	168	196	A
08	273	38	6	26	268	38	25	170	192	A
09	248	38	4	26	269	38	25	174	188	A
10	223	38	2	26	268	38	26	175	185	A
11	198	40	1	25	263	40	24	172	186	A
12	173	40	0	28	263	40	28	170	187	A
13	148	38	4	30	265	39	29	163	197	A
14	123	36	2	28	268	36	28	171	189	A
15	98	33	350	24	266	33	24	9	343	A

IFRE2006 ADCP 1644

Harmonic constants for constituent K1 for deployment IFRE2006.

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	448	39	261	22	175	39	22	4	258	A
02	423	38	257	22	167	38	22	0	257	A
03	398	38	255	22	162	38	22	177	77	A
04	373	38	256	23	161	38	23	176	78	A
05	348	38	256	24	161	38	24	174	80	A
06	323	38	255	25	160	38	25	174	79	A
07	298	37	257	26	160	37	26	170	84	A
08	273	38	259	27	157	39	26	164	90	A
09	248	39	260	28	159	40	27	166	90	A
10	223	40	261	27	153	41	25	161	93	A
11	198	40	259	29	154	41	27	161	92	A
12	173	36	260	28	153	38	26	157	96	A
13	148	33	264	29	155	36	25	146	109	A
14	123	37	264	32	155	41	28	147	109	A
15	98	36	265	37	150	44	28	133	119	A

