

**Western Iceland Sea
- Greenland Sea Project -**

**Moored Current Meter Data
Greenland - Jan Mayen
Denmark Strait
and
Kolbeinsey Ridge
September 1990 to September 1991**

by

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Icelandic summary

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Þessi skýrsla inniheldur straummælingagögn frá Íslandshafi vestanverðu. Þau eru straumar, bæði eiginlegir hafstraumar og sjávarfallastraumar, og stundum hiti og selta mæld allt að árlangt frá september 1990 til september 1991. Mælingar fóru fram með síritandi straummælum sem lagt var við dufl á hinum ýmsu stöðum. Íslendingar og Danir áttu samvinnu um þessar rannsóknir. Þær eru hluti af alþjóðlegum hafrannsóknnum 1987-1991 sem ganga undir heitinu "Greenland Sea Project".

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1. Introduction.

In 1987 the international **Greenland Sea Project** under the sponsorship of the Arctic Ocean Sciences Board started having the overall goal to achieve a better understanding of the large scale, long term interactions of air, sea, ice and biota in the Greenland Sea.

A joint Danish-Icelandic contribution to the project has been focusing on the southern limit of the Greenland Sea i.e. the western Iceland Sea, Fig. 1.

The first cruise to the area took place in September 1987 on board the Icelandic research vessel "**Bjarni Sæmundsson**". The cruise was followed up by four similar cruises in September the four following years, ending in September 1991. Based on the knowledge of the water mass distribution obtained during the 1987 cruise eight current meter moorings with a total of 27 current meters were deployed during the second cruise in September 1988 (see *Aken et al.*, 1992). In September 1989 five of the eight current meter moorings were redeployed with a total of 16 current meters. In September 1990 four current meter moorings were redeployed and in addition two new current meter moorings sites were occupied, comprising a total of 20 current meters, Fig. 1, Fig. 2 and Table 1. Three current meter moorings in Denmark Strait were redeployed in September 1991 by the **Nordic WOCE** group.

The six moorings deployed in September 1990 were successfully recovered during the fifth and last Danish-Icelandic GSP cruise in September 1991.

Current meters were kindly made available to the project by:

Fisheries Laboratory, MAFF, Lowestoft, England. (United Kingdom)
Marine Research Institute, Reykjavík.
Geophysical Institute, University of Copenhagen.
Institute of Marine Research, University of Hamburg.

The results of the September 1990 to September 1991 measurements are presented in this report.

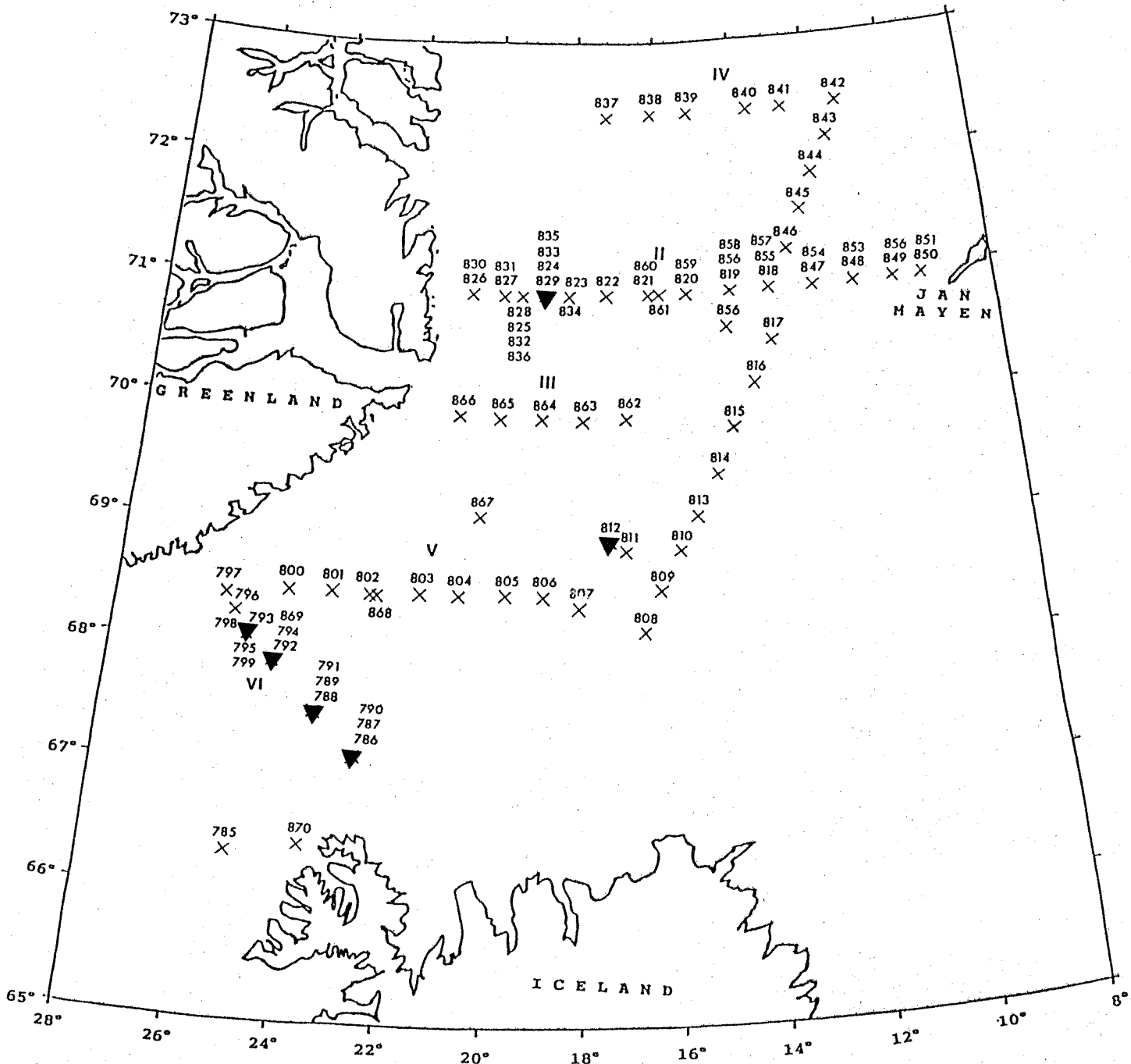


Figure 1. Location of CTD stations in September 1990 and current meter moorings (▼) from September 1990 to September 1991 / Greenland - Jan Mayen, Denmark Strait sections and Kolbeinsey Ridge Stations.

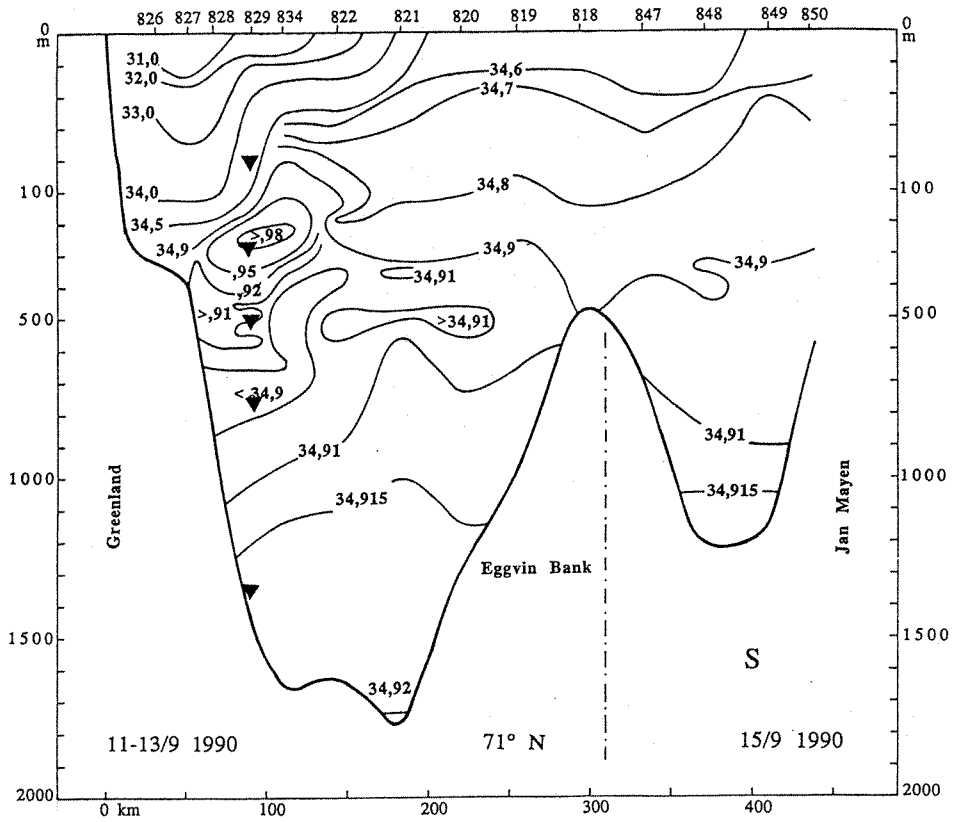
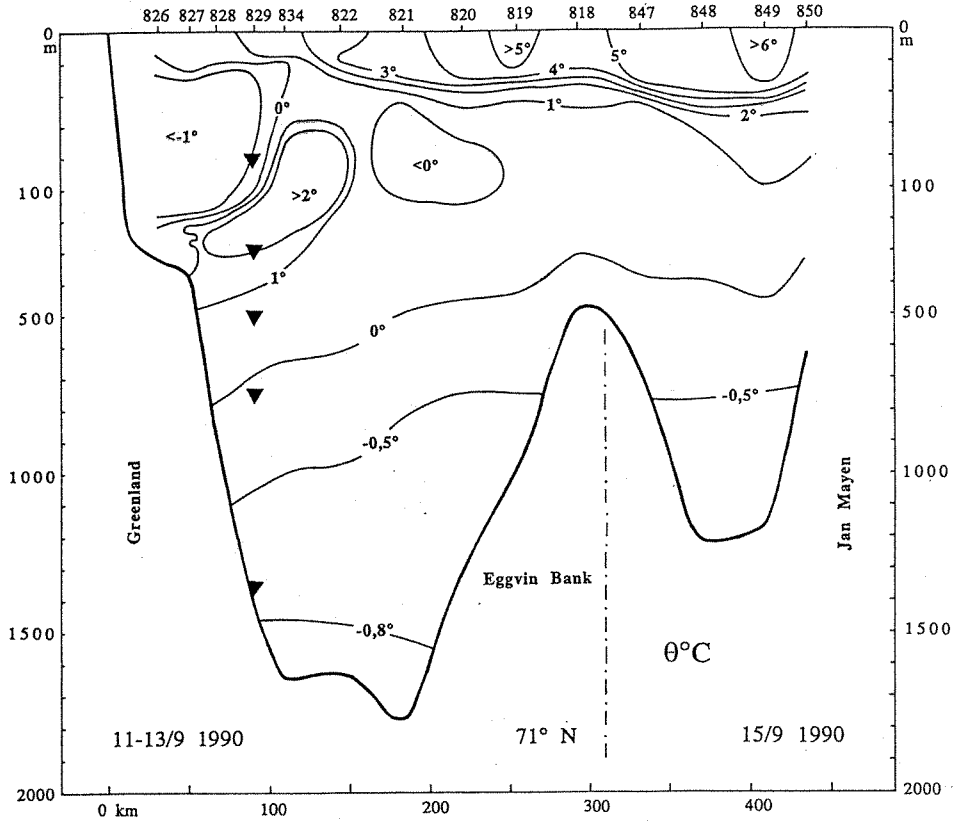


Figure 2a. Potential temperature and salinity from the Greenland - Jan Mayen section, $71^{\circ} 00' \text{N}$ in September 1990 and location of current meters deployed during the period September 1990 - September 1991.

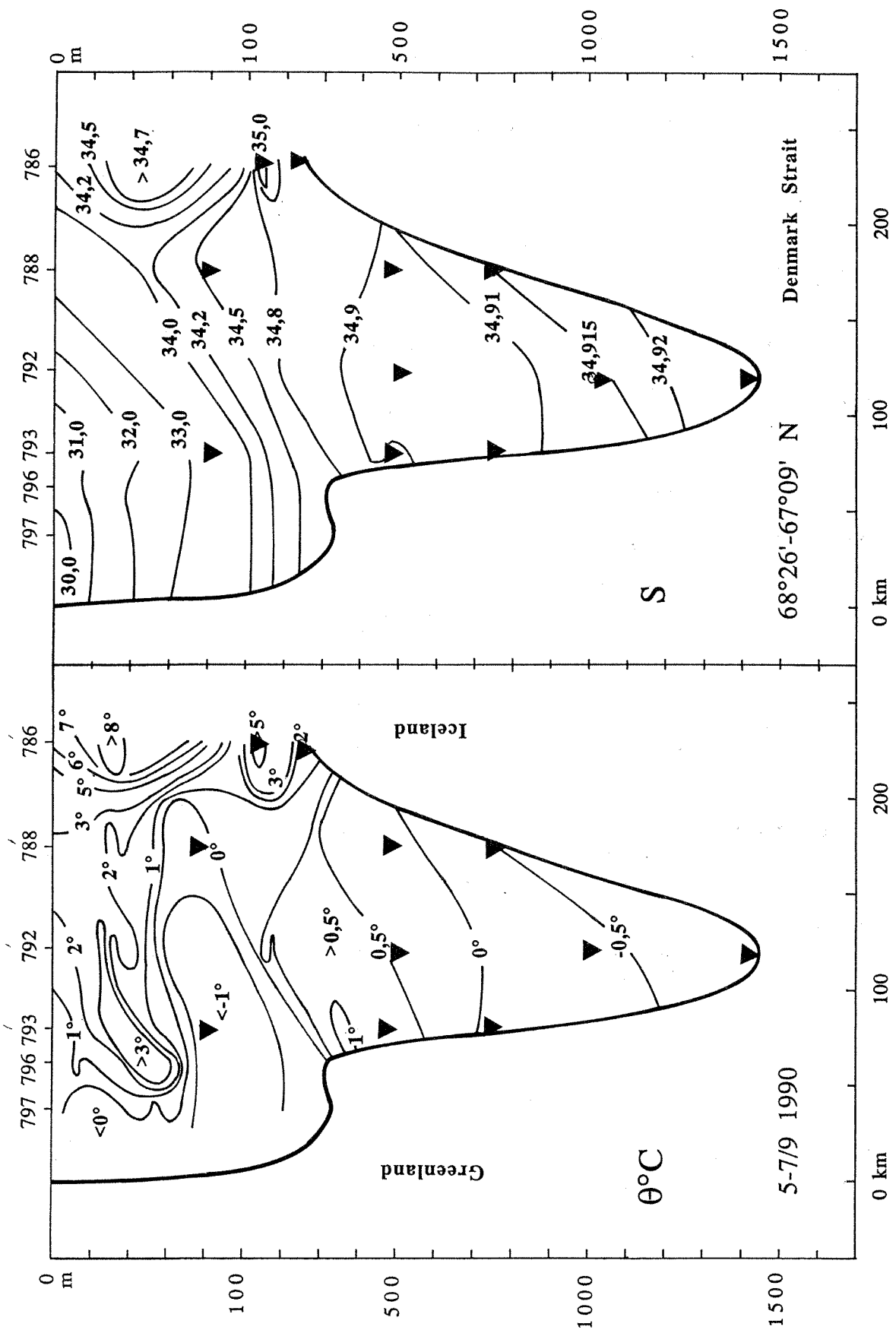


Figure 2b. Potential temperature and salinity from the Denmark Strait section in September 1990 and location of current meters deployed during the period September 1990 - September 1991.

2. Technical description of the current meters.

During the 1990-1991 measuring period only one type of current meter were used:

20 Aanderaa model RCM4, RCM5 and RCM7.

6 of the Aanderaa current meters had a pressure sensor and 5 a conductivity sensor. The sampling interval was 60 minutes.

Technical specifications of the Aanderaa current:

Velocity:	Range:	2.0 - 250cm/s
	Accuracy:	+/- 1 cm/s, or 2% of actual value, whichever is greatest.
	Starting velocity:	1.5 cm/s
Direction:	Range:	0 - 360°
	Resolution:	0.35°
	Accuracy:	+/- 7.5° for velocity within 2.5 - 5 cm/s or 100 - 200 cm/s, +/- 5° for velocity within 5 - 100 cm/s.
Temperature:	Range:	-2.46 to 21.48°C
	Resolution:	0.1% of range
	Accuracy:	+/- 0.05°C
Conductivity:	Range:	0 - 77 mmho/cm
	Resolution:	0.1% of range
	Accuracy:	+/- 0.025 mmho/cm
Depth:	Range:	variable
	Resolution:	0.1% of range
	Accuracy:	+/- 1% of range

3. Data processing.

After recovery of the moored instruments the current meter data (speed, direction, temperature, conductivity and pressure as applicable) were processed in the following way:

1. Raw data were converted to scientific values and checked for errors. In the few instances of erroneous spikes a linear interpolation was performed.
2. A 2×25 hour running mean filter has been applied (Bartlett filter) to the time series for smoothing. From these low passed values, the following were prepared:
3. Tables of monthly mean values and their standard deviations were calculated for the velocity components (U and V), temperature and salinity.
4. Progressive vector diagrams were plotted, based on monthly means with dots denoting the beginning of each month. The start is always at (0,0) and the vertical axis denotes north-south displacement and the horizontal axis east-west displacement in kilometres.
5. Graphs were made of filtered velocity components (U and V), temperature and salinity as a function of time (day number with respect to the year 1990).
6. Frequency histograms were made of filtered speed, direction, temperature and salinity.
7. The smoothed version of the velocity components was sub-sampled every 12 hours to create stick diagrams, i.e. the current vector was plotted as a function of time every 12 hours. The stick diagrams are shown for every month of observation and the velocity scale is shown in the figures.
8. Frequency spectra of the velocity components, temperature and salinity were calculated from the raw data and then smoothed (modified Daniell, span = 11) and plotted. The power spectrum is in decibels ($10 \cdot \log_{10}(\text{power})$) $(\text{cm/s})^2$ as a function of cycles per hour (cph). Vertical lines have been inserted to indicate for reference the frequency of the inertial (f), semi-diurnal principal lunar (M_2), diurnal luni-solar (K_1), and fortnightly luni-solar (M_{SF}).
9. Harmonic analysis of current utilizing *Foreman's* [1978] program on the raw data have been performed. The tables show all tidal components with major axes of tidal ellipses greater than 1 cm/sec. G: Greenwich phase of the current-vector for each constituents and its positively (G+) and negatively (G-) rotating components. Rotation direction: anticlockwise when $B > 0$, clockwise when $B < 0$. INC the angle of inclination of the major axis (measured in degrees anticlockwise from east).

In the following, tables (1a,b,c) are presented to give information on the measurements: mooring location, deployment depths, start time, length of observation period and variables measured by the instruments. Secondly, tables (2a,b,c) of mean filtered values and standard deviations are presented and thirdly, tables (3a,b,c) of tidal current ellipse and phases for three major tidal constituents (K_1 , M_2 and S_2) are presented.

Finally, the data are display for every instrument according to the description (2-9) above.

Note that experience has shown that salinity values from the instruments have to be taken with great reservation.

The above methods were applied to current meters that recorded every 60 minutes.

4. Acknowledgments

The joint Danish - Icelandic contribution to the Greenland Sea Project was made possible with contribution from the Icelandic Althing, the Danish National Science Council, the Danish Council for Scientific and Industrial Research and the Commission for Scientific Research in Greenland. We wish to thank the captain and the crew of RV Bjarni Sæmundsson for the support and also participating colleagues. Prof. Jens Meincke at the University of Hamburg and Dr. Robert R. Dickson at the Fisheries Laboratory (Marine Research Institute) in Lowestoft are especially thanked for providing current meters for the project. We further acknowledge funding support form NorFA and the Icelandic Council of Science.

5. References

Aken, H. v., J. Briem, E. Buch, S. S. Kristmannsson, S. A. Malmberg, and S. Ober, Western Iceland Sea, Greenland Sea Project, Moored Current Meter Data, Greenland - Jan Mayen and Denmark Strait, September 1988 to September 1989, *Hafrannsóknastofnun Fjölrít nr. 30*, 1992.

Foreman, M.G.G., Manual for Tidal Currents analysis and Prediction, Pacific Marine Science Report 78-6, Institute of Ocean Sciences, Patricia Bay, Victoria, B.C. 70pp., "Unpublished Manuscript", 1978.

Table 1a: GSP: 71°N section 1990-1991. Instruments, Locations, Depths, Deployment Times and Variables measured.

Site	Latitude °N	Longitude °W	Bottom Depth, m	Record number	Meter Depth, m	Start Time	Duration hrs	Data meas.
IS3	70 59	18 50	1400	AA685103	80	September 13, 1990	8481	u,α,T,p
IS3	70 59	18 50	1400	AA733203	300	September 13, 1990	8481	u,α,T,S
IS3	70 59	18 50	1400	AA004601	500	September 13, 1990	8478	u,α,T
IS3	70 59	18 50	1400	AA018201	750	September 13, 1990	8481	u,α,T
IS3	70 59	18 50	1400	AA074301	1350	September 13, 1990	8480	u,α,T

Table 1b: GSP: Denmark Strait section 1990-1991. Instruments, Locations, Depths, Deployment Times and Variables measured.

Site	Latitude °N	Longitude °W	Bottom Depth, m	Record number	Meter Depth, m	Start Time	Duration hrs	Data meas.
IS6	68 09	25 12	800	AA874404	80	September 8, 1990	8772	u,α,T,p
IS6	68 09	25 12	800	AA007301	475	September 8, 1990	4301	u,α,T
IS6*	68 09	25 12	800	AA088601	750	September 8, 1990	8835	u,α,T
IS7	67 32	23 43	800	AA790210	80	September 6, 1990	8560	u,α,T,p,S
IS7	67 32	23 43	800	AA017801	475	September 6, 1990	8560	u,α,T
IS7	67 32	23 43	800	AA064401	750	September 6, 1990	8562	u,α,T
IS8	67 09	22 54	250	AA874307	125	September 5, 1990	6765	u,α,T,p,S
IS8	67 09	22 54	250	AA693407	200	September 5, 1990	6500	u,α,T
IS9	67 53	24 37	1500	AA012401	500	September 7, 1990	8792	u,α,T
IS9	67 53	24 37	1500	AA056201	1000	September 7, 1990	8791	u,α,T
IS9	67 53	24 37	1500	AA017204	1450	September 7, 1990	8791	u,α,T

* NOTICE. During the deployment period, clock problems were noticed for the current meter (AA088601).

Based on a linear calculation it was estimated to be in excess of 11 minutes per day (24 hours).

Despite this malfunction the data were analysed without any correction in time.

Table 1c: GSP: 69°00'N, 17°20'W 1990-1991. Instruments, Locations, Depths, Deployment Times and Variables measured.

Site	Latitude °N	Longitude °W	Bottom Depth, m	Record number	Meter Depth, m	Start Time	Duration hrs	Data meas.
IS10	69 00	17 20	1500	AA693311	80	September 10, 1990	241	u,α,T,p,S
IS10	69 00	17 20	1500	AA790307	500	September 10, 1990	4797	u,α,T,p,S
IS10	69 00	17 20	1500	AA684608	750	September 10, 1990	7169	u,α,T
IS10	69 00	17 20	1500	AA089801	1450	September 10, 1990	8489	u,α,T

Table 2a: GSP: 71°N section 1990-1991. Means and deviations of filtered current velocity, temperature and salinity.

Site	Meter Depth, m	U, east comp. m/s mean (st.dev)	V, north comp. m/s mean (st.dev)	Temperature °C mean (st.dev)	Salinity psu mean (st.dev.)
IS3	80	-0.025 (0.054)	-0.201 (0.073)	-0.12 (1.12)	35.01 (0.02)
IS3	300	-0.021 (0.033)	-0.140 (0.058)	1.45 (0.40)	
IS3	500	-0.023 (0.023)	-0.104 (0.043)	0.36 (0.20)	
IS3	750	-0.044 (0.023)	-0.082 (0.039)	-0.19 (0.10)	
IS3	1350	-0.020 (0.022)	-0.054 (0.037)	-0.80 (0.08)	

The table is not based on the same time intervals.

Table 2b: GSP: Denmark Strait section 1990-1991. Means and deviations of filtered current velocity, temperature and salinity.

Site	Meter Depth, m	U, east comp. m/s mean (st.dev)	V, north comp. m/s mean (st.dev)	Temperature °C mean (st.dev)	Salinity psu mean (st.dev.)
IS6	80	-0.038 (0.157)	-0.081 (0.164)	-1.50 (0.33)	
IS6	475	-0.041 (0.072)	-0.027 (0.083)	0.96 (0.37)	
IS6	750	-0.042 (0.048)	-0.033 (0.061)	0.11 (0.29)	
IS7	80	-0.085 (0.065)	-0.092 (0.062)	1.47 (1.07)	34.69 (0.13)
IS7	475	-0.058 (0.043)	-0.058 (0.035)	0.06 (0.07)	
IS7	750	-0.051 (0.042)	-0.004 (0.034)	-0.49 (0.04)	
IS8	125	0.149 (0.134)	-0.002 (0.064)	4.35 (1.23)	35.20 (0.13)
IS8	200	0.137 (0.109)	-0.026 (0.047)	3.24 (1.62)	
IS9	500	-0.012 (0.072)	-0.014 (0.062)	0.94 (0.40)	
IS9	1000	-0.008 (0.040)	-0.014 (0.044)	-0.14 (0.12)	
IS9	1450	-0.009 (0.045)	-0.019 (0.051)	-0.61 (0.04)	

The table is not based on the same time intervals.

Table 2c: GSP: 69°00'N, 17°20'W 1990-1991. Means and deviations of filtered current velocity, temperature and salinity.

Site	Meter Depth, m	U, east comp. m/s mean (st.dev)	V, north comp. m/s mean (st.dev)	Temperature °C mean (st.dev)	Salinity psu mean (st.dev.)
IS10	80	-	-	-	-
IS10	500	-0.001 (0.017)	-0.019 (0.018)	0.01 (0.09)	34.71 (0.01)
IS10	750	-0.005 (0.011)	-0.007 (0.009)	-0.44 (0.05)	
IS10	1450	-0.003 (0.032)	0.004 (0.019)	-0.71 (0.02)	

The table is not based on the same time intervals.

Table 3a: The principal tidal component K1, 1990-91.

Site	Latitude °N	Longitude °W	Meter Depth, m	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
IS3	70 59	18 50	80	1.1	0.6	177.1	19.1	202.0	196.2
IS3	70 59	18 50	300	1.1	0.7	11.5	217.2	205.7	228.7
IS3	70 59	18 50	500	1.0	0.6	17.6	226.1	208.5	243.6
IS3	70 59	18 50	750	1.2	0.7	9.0	236.5	227.5	245.6
IS3	70 59	18 50	1350	1.1	0.5	41.1	264.1	222.7	305.6
IS6	68 09	25 12	80	4.2	-1.5	128.7	241.8	113.1	10.6
IS6	68 09	25 12	475	2.0	0.3	125.2	202.4	77.3	327.6
IS6	68 09	25 12	750	1.3	0.4	166.1	180.1	13.9	346.2
IS7	67 32	23 43	80	2.8	0.5	26.6	239.3	212.7	265.9
IS7	67 32	23 43	475	2.5	0.3	31.6	262.9	231.3	294.5
IS7	67 32	23 43	780	2.3	0.6	20.9	249.2	228.3	270.1
IS8	67 09	22 54	125	2.6	0.6	175.8	57.9	242.1	233.7
IS8	67 09	22 54	200	2.3	0.1	178.1	76.8	258.8	254.9
IS9	67 53	24 37	500	2.5	1.0	51.7	229.1	177.4	280.8
IS9	67 53	24 37	1000	2.8	1.2	65.5	230.0	164.5	295.5
IS9	67 53	24 37	1450	3.3	1.3	67.0	225.1	158.1	292.1
IS10	69 00	17 20	80	-	-	-	-	-	-
IS10	69 00	17 20	500	1.0	0.2	9.8	220.3	210.5	230.1
IS10	69 00	17 20	750	-	-	-	-	-	-
IS10	69 00	17 20	1450	1.2	0.1	35.3	239.2	203.9	274.5

Table 3b: The principal tidal component M2, 1990-91.

Site	Latitude °N	Longitude °W	Meter Depth, m	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
IS3	70 59	18 50	80	3.5	-0.7	159.7	334.7	175.0	134.4
IS3	70 59	18 50	300	2.3	1.0	133.8	314.1	180.2	87.9
IS3	70 59	18 50	500	2.3	0.8	96.1	282.2	186.2	18.3
IS3	70 59	18 50	750	3.5	0.2	63.0	268.0	205.0	331.1
IS3	70 59	18 50	1350	3.1	-0.2	65.6	255.2	189.6	320.8
IS6	68 09	25 12	80	12.2	2.0	11.4	259.2	247.8	270.7
IS6	68 09	25 12	475	8.3	1.6	35.6	291.7	256.1	327.3
IS6	68 09	25 12	750	5.1	1.1	68.1	312.2	244.1	20.3
IS7	67 32	23 43	80	13.2	2.3	23.8	278.3	254.5	302.1
IS7	67 32	23 43	475	14.0	-1.1	36.4	328.9	292.5	5.3
IS7	67 32	23 43	750	11.4	0.3	28.5	306.3	277.8	334.8
IS8	67 09	22 54	125	21.1	-2.9	15.4	294.3	278.9	309.7
IS8	67 09	22 54	200	12.3	-1.0	14.6	359.3	344.7	13.9
IS9	67 53	24 37	500	9.0	0.9	47.1	312.9	265.8	360.0
IS9	67 53	24 37	1000	10.3	2.6	41.0	302.4	261.5	343.4
IS9	67 53	24 37	1450	11.5	3.1	25.9	276.0	250.1	302.0
IS10	69 00	17 20	80	-	-	-	-	-	-
IS10	69 00	17 20	500	3.6	0.2	14.8	277.6	262.9	292.4
IS10	69 00	17 20	750	2.6	-0.2	20.1	279.5	259.4	299.6
IS10	69 00	17 20	1450	3.1	0.3	47.7	331.3	283.7	19.0

Table 3c: The principal tidal component S2, 1990-91.

Site	Latitude °N	Longitude °W	Meter Depth, m	Major axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
IS3	70 59	18 50	80	1.1	0.3	31.2	251.7	220.5	282.9
IS3	70 59	18 50	300	1.0	0.5	86.4	308.8	222.3	35.2
IS3	70 59	18 50	500	1.1	0.2	78.9	303.5	224.7	22.4
IS3	70 59	18 50	750	1.1	0.3	76.6	318.7	242.2	35.3
IS3	70 59	18 50	1350	1.2	0.1	73.1	301.7	228.6	14.8
IS6	68 09	25 12	80	5.6	-0.2	11.9	303.4	291.5	315.2
IS6	68 09	25 12	475	3.8	0.9	38.5	337.4	298.9	16.0
IS6	68 09	25 12	750	2.5	1.0	59.5	348.3	288.8	47.7
IS7	67 32	23 43	80	6.0	-0.4	36.7	332.1	295.4	8.8
IS7	67 32	23 43	475	4.8	0.0	36.0	9.6	333.6	45.6
IS7	67 32	23 43	750	4.5	0.1	27.1	341.4	314.2	8.5
IS8	67 09	22 54	125	8.0	-1.2	17.5	334.8	317.3	352.4
IS8	67 09	22 54	200	4.5	0.0	16.0	28.0	12.0	43.9
IS9	67 53	24 37	500	3.0	0.5	42.5	344.7	302.3	27.2
IS9	67 53	24 37	1000	4.3	0.8	39.0	341.1	302.1	20.1
IS9	67 53	24 37	1450	4.9	0.5	33.1	322.8	289.7	355.9
IS10	69 00	17 20	80	-	-	-	-	-	-
IS10	69 00	17 20	500	2.5	-0.9	11.8	316.2	304.4	328.1
IS10	69 00	17 20	750	1.4	-0.2	27.9	331.0	303.1	358.8
IS10	69 00	17 20	1450	1.1	0.2	45.0	7.2	322.1	52.2

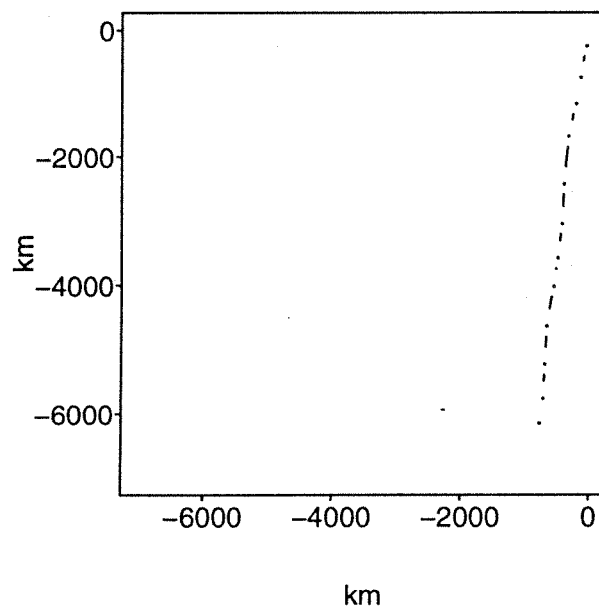
GREENLAND - JAN MAYEN
71°N

AA685103
IS3 - 80m

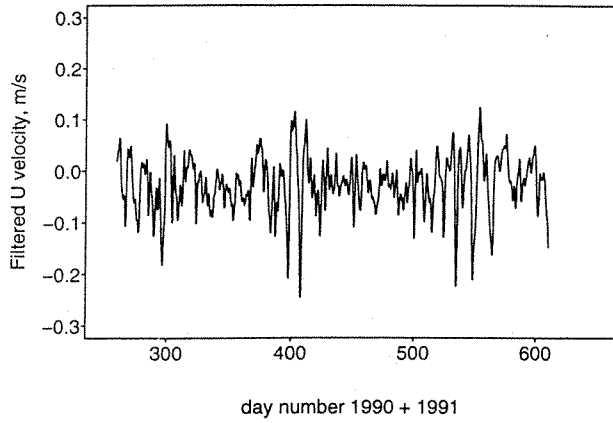
GSP-IS3-80m, 71°N section, 15/9/90-1/9/91. Means and deviations of filtered current and temperature

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)
Total:	-0.025 (0.054)	-0.201 (0.073)	-0.12 (1.12)
Sep 90	-0.011(0.050)	-0.143(0.086)	1.84(0.71)
Oct 90	-0.038(0.064)	-0.185(0.081)	0.62(1.20)
Nov 90	-0.027(0.038)	-0.162(0.042)	1.24(0.73)
Dec 90	-0.042(0.025)	-0.193(0.037)	-0.13(0.86)
Jan 91	-0.028(0.060)	-0.278(0.053)	0.05(0.86)
Feb 91	-0.013(0.082)	-0.255(0.056)	-0.45(0.74)
Mar 91	-0.024(0.031)	-0.199(0.046)	0.07(0.81)
Apr 91	-0.026(0.025)	-0.171(0.029)	-0.59(1.00)
May 91	-0.041(0.037)	-0.229(0.072)	-0.63(0.64)
Jun 91	-0.013(0.067)	-0.227(0.069)	-0.95(0.52)
Jul 91	-0.011(0.077)	-0.199(0.092)	-1.42(0.48)
Aug 91	-0.020(0.036)	-0.149(0.062)	-0.21(0.46)

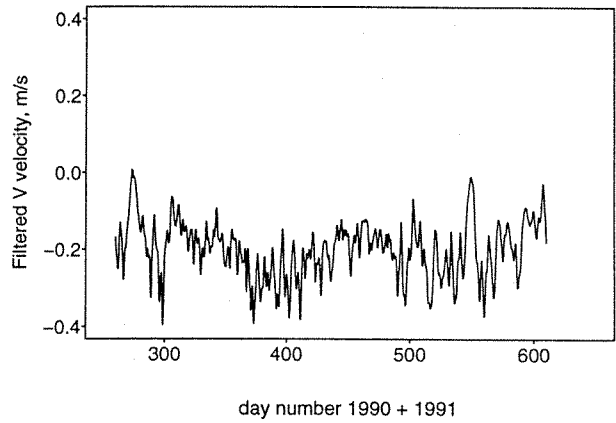
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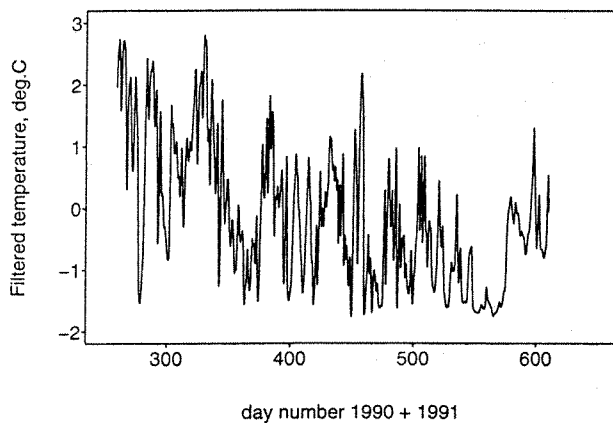
GSP90-IS3-80m



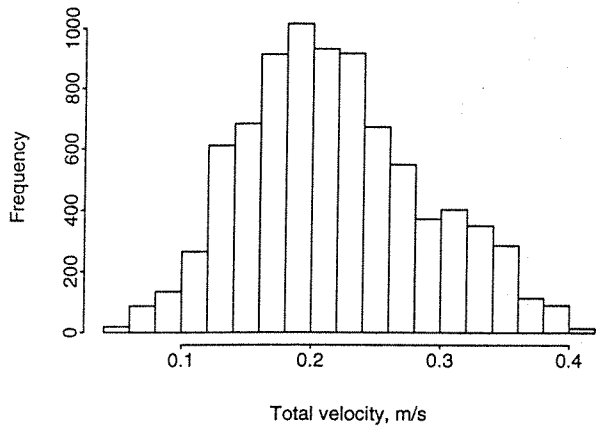
GSP90-IS3-80m



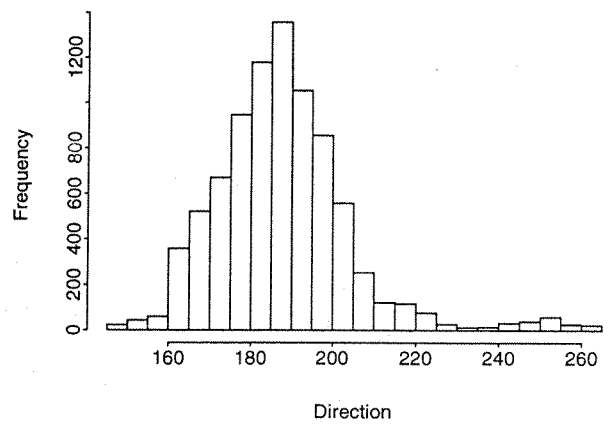
GSP90-IS3-80m



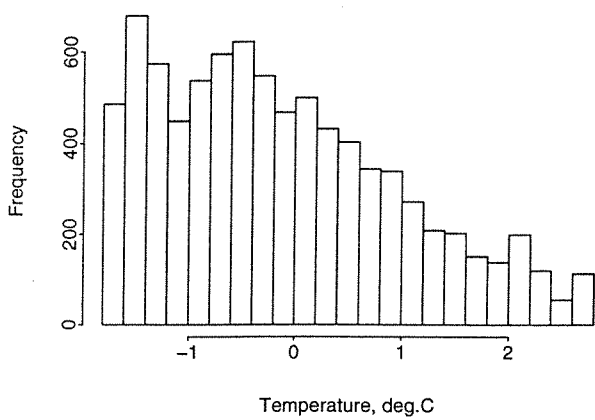
GSP90-IS3-80m



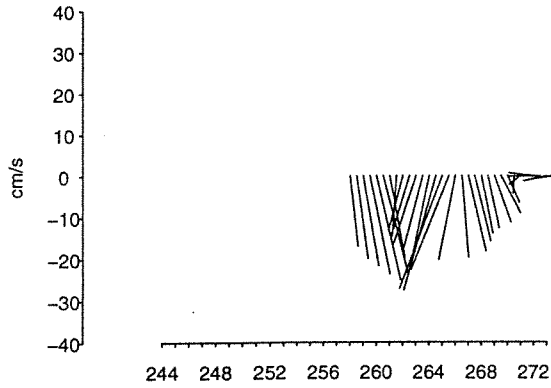
GSP90-IS3-80m



GSP90-IS3-80m

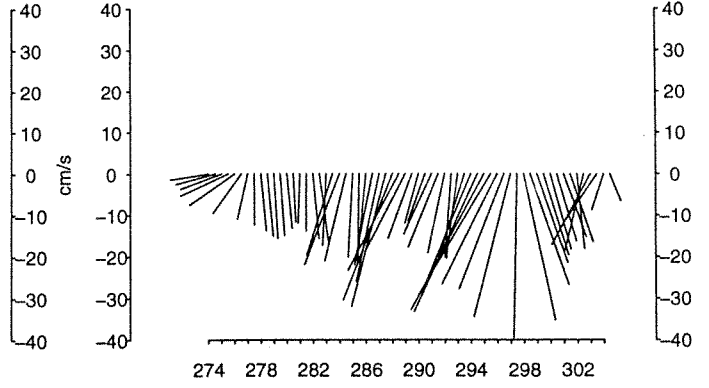


GSP90-IS3-80m, SEPTEMBER 1990



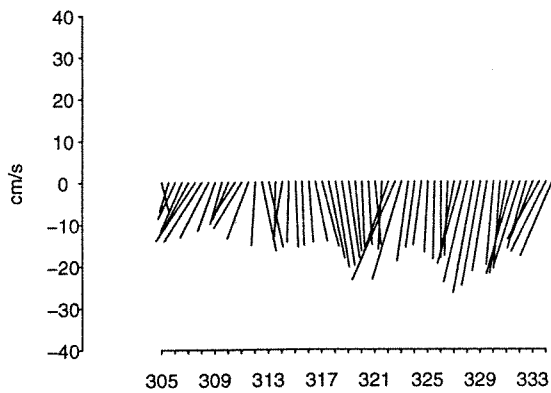
Day number 1990

GSP90-IS3-80m, OCTOBER 1990



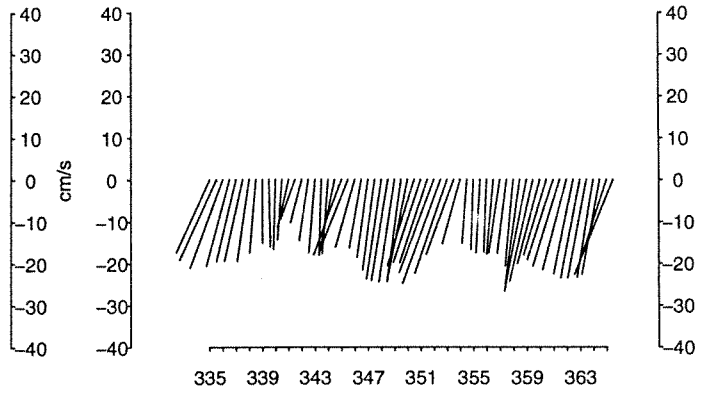
Day number 1990

GSP90-IS3-80m, NOVEMBER 1990



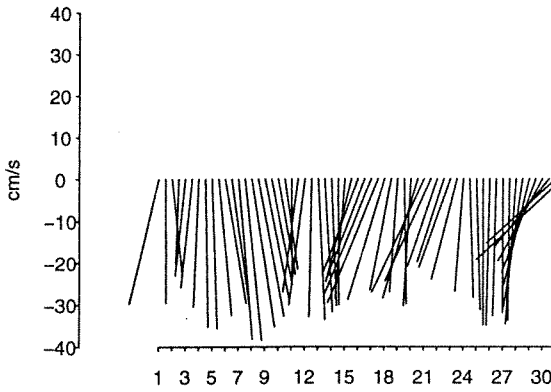
Day number 1990

GSP90-IS3-80m, DECEMBER 1990



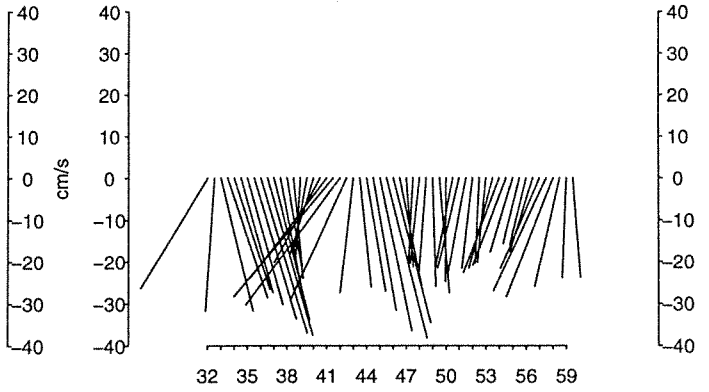
Day number 1990

GSP90-IS3-80m, JANUARY 1991



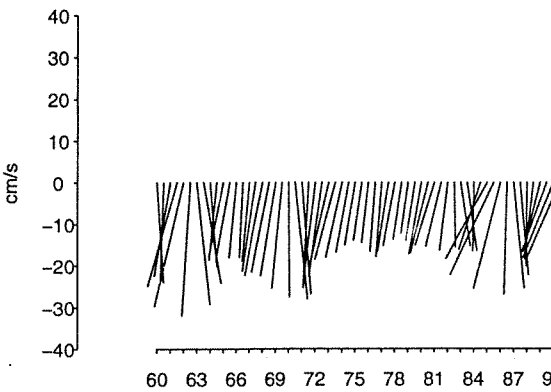
Day number 1991

GSP90-IS3-80m, FEBRUARY 1991



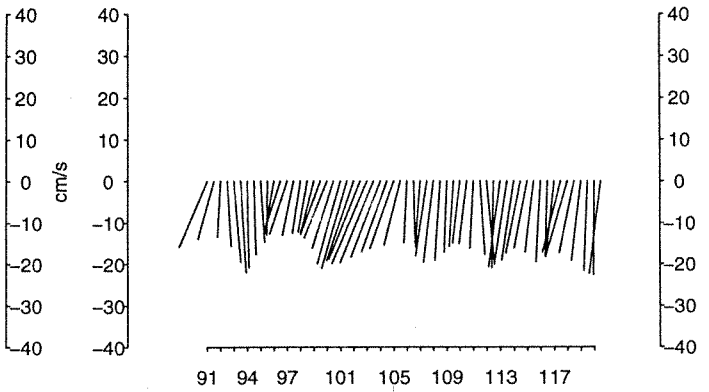
Day number 1991

GSP90-IS3-80m, MARCH 1991



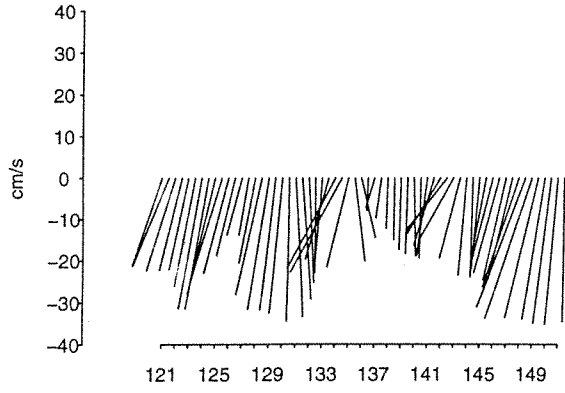
Day number 1991

GSP90-IS3-80m, APRIL 1991



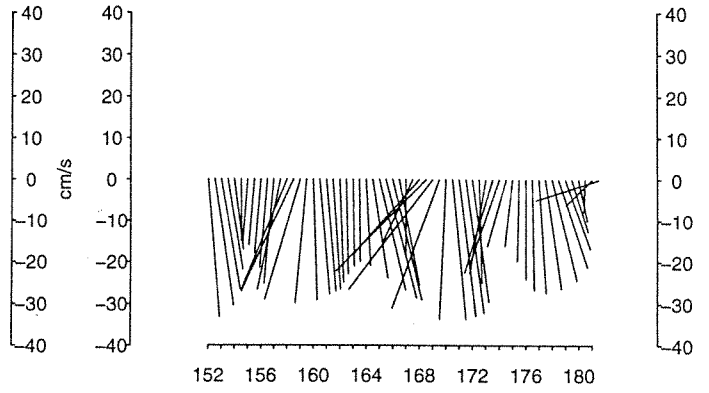
Day number 1991

GSP90-IS3-80m, MAY 1991



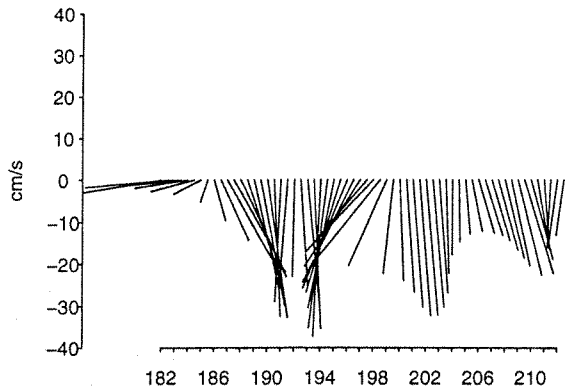
Day number 1991

GSP90-IS3-80m, JUNE 1991



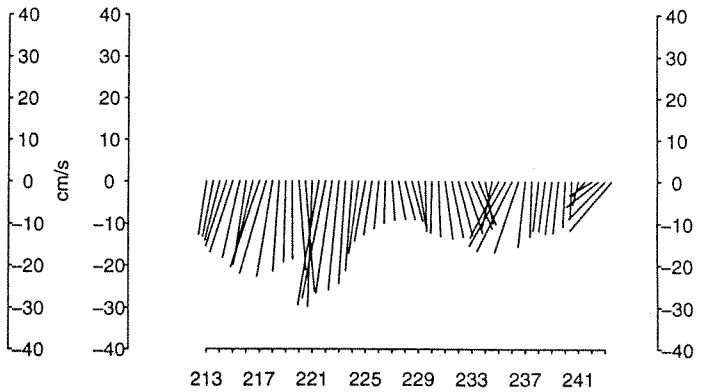
Day number 1991

GSP90-IS3-80m, JULY 1991



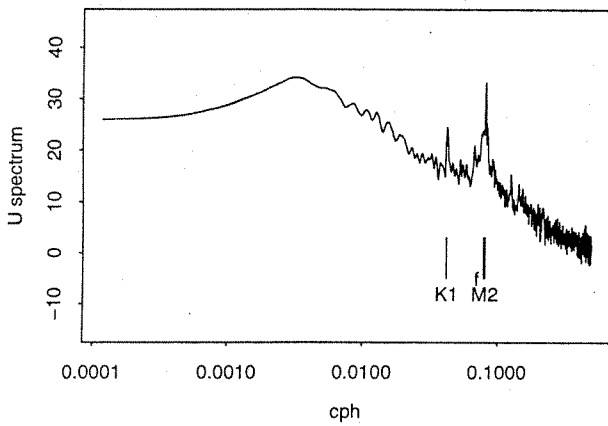
Day number 1991

GSP90-IS3-80m, AUGUST 1991

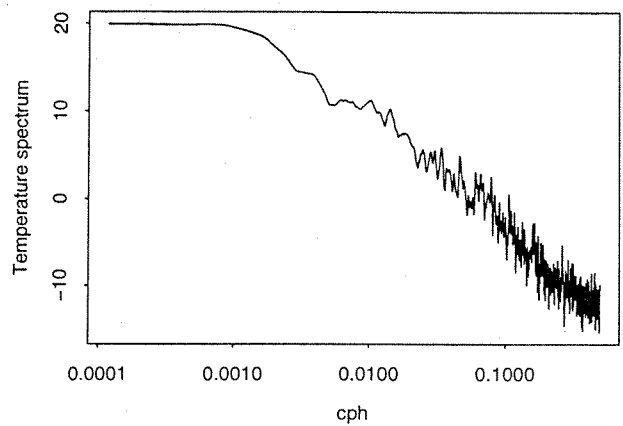


Day number 1991

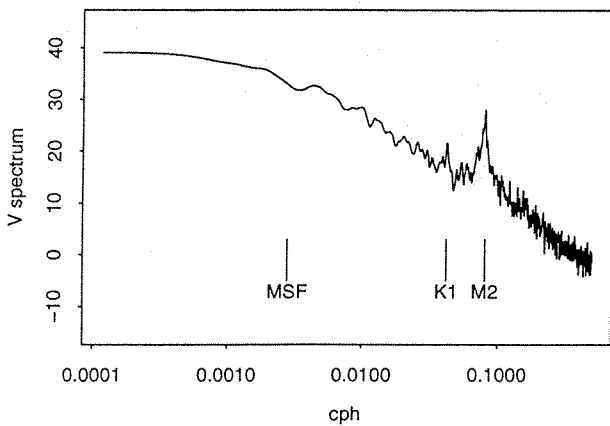
GSP90-IS3-80m



GSP90-IS3-80m



GSP90-IS3-80m



GSP-IS3-80m, 71°N section, 13/9/90-2/9/91. Harmonic analysis of currents, showing the significant tidal constituents.

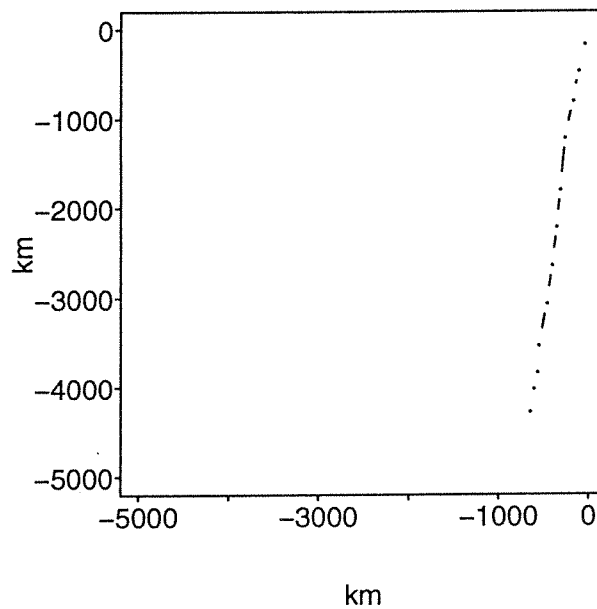
Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	20.2	0.0	82.8	180.0	97.2	262.8
SSA	.00022816	3.4	0.6	98.2	32.2	294.0	130.3
MSM	.00130978	1.7	0.8	64.1	103.7	39.6	167.8
MM	.00151215	2.1	0.5	106.6	286.8	180.2	33.5
MSF	.00282193	1.4	-0.3	67.1	149.0	82.0	216.1
K1	.04178075	1.1	0.6	177.1	19.1	202.0	196.2
M2	.08051140	3.5	-0.7	159.7	334.7	175.0	134.4
S2	.08333334	1.1	0.3	31.2	251.7	220.5	282.9

AA733203
IS3 - 300m

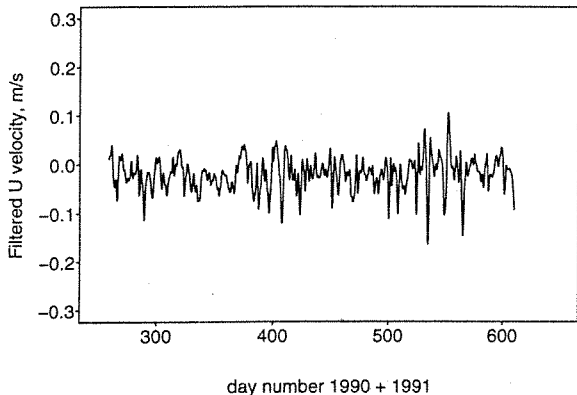
GSP-IS3-300m, 71°N section, 15/9/90-1/9/91. Means and deviations of filtered current, temperature and salinity

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)	Salinity psu mean(st.dev.)
Total:	-0.021 (0.033)	-0.140 (0.058)	1.45 (0.40)	35.01 (0.02)
Sep 90	-0.010(0.029)	-0.099(0.065)	1.07(0.37)	35.00(0.02)
Oct 90	-0.026(0.027)	-0.110(0.046)	1.63(0.27)	35.03(0.02)
Nov 90	-0.024(0.027)	-0.131(0.044)	1.72(0.34)	35.03(0.02)
Dec 90	-0.034(0.017)	-0.155(0.029)	1.98(0.19)	35.05(0.01)
Jan 91	-0.022(0.037)	-0.216(0.038)	1.45(0.37)	35.01(0.01)
Feb 91	-0.017(0.043)	-0.173(0.024)	1.16(0.37)	34.99(0.01)
Mar 91	-0.019(0.023)	-0.159(0.034)	1.18(0.17)	35.00(0.01)
Apr 91	-0.022(0.024)	-0.165(0.034)	1.43(0.26)	35.01(0.01)
May 91	-0.034(0.027)	-0.173(0.037)	1.43(0.23)	35.02(0.01)
Jun 91	-0.007(0.045)	-0.116(0.060)	1.44(0.31)	35.01(0.02)
Jul 91	-0.015(0.049)	-0.068(0.051)	1.59(0.32)	35.00(0.03)
Aug 91	-0.015(0.024)	-0.098(0.038)	1.17(0.48)	35.00(0.03)

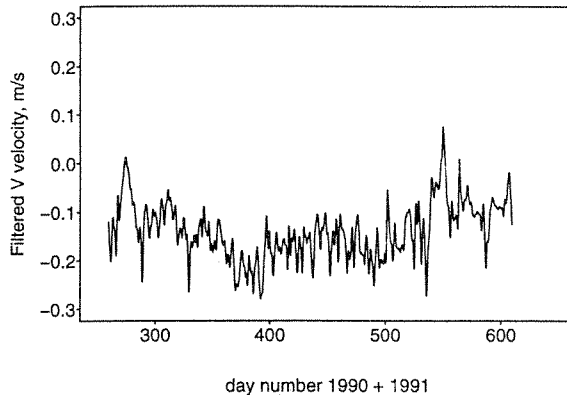
Prog.Vector GSP90-IS3-300m



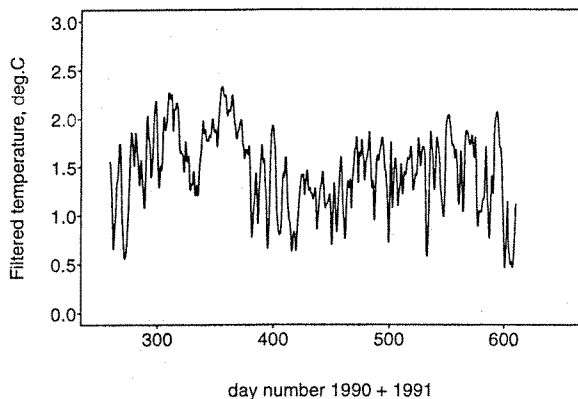
GSP90-IS3-300m



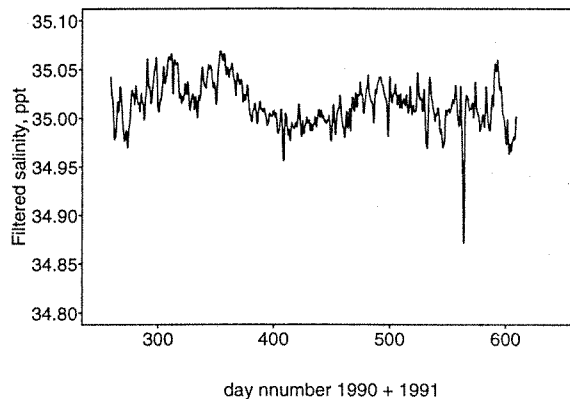
GSP90-IS3-300m



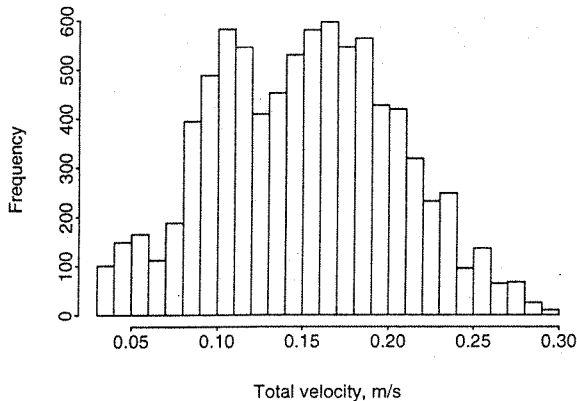
GSP90-IS3-300m



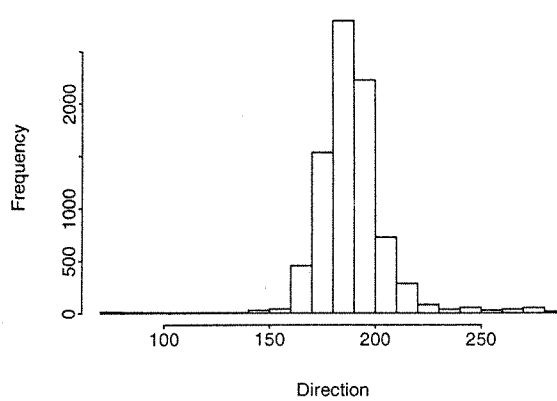
GSP90-IS3-300m



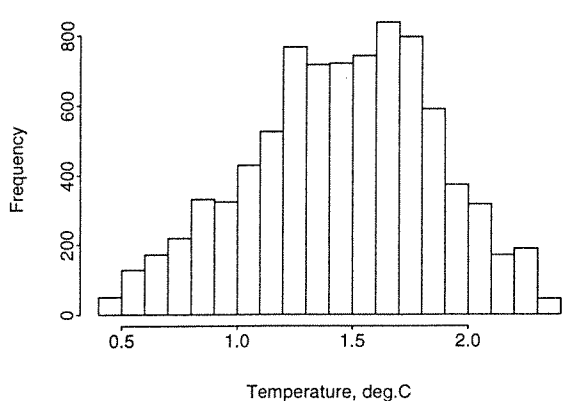
GSP90-IS3-300m



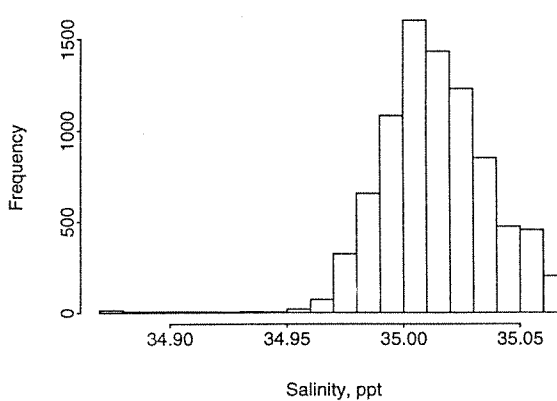
GSP90-IS3-300m



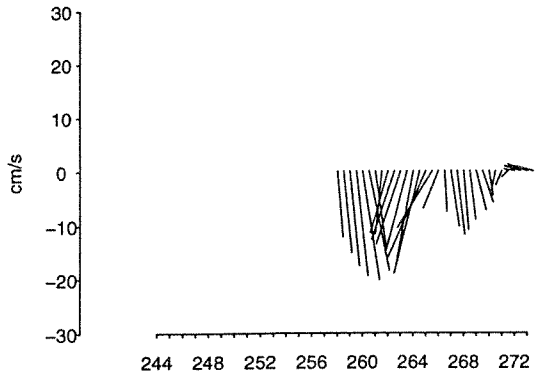
GSP90-IS3-300m



GSP90-IS3-300m

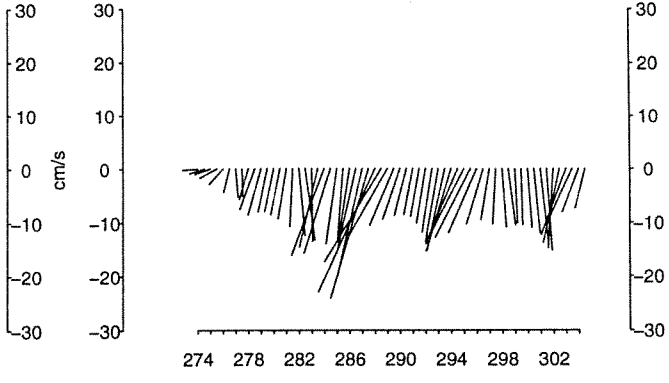


GSP90-IS3-300m, SEPTEMBER 1990



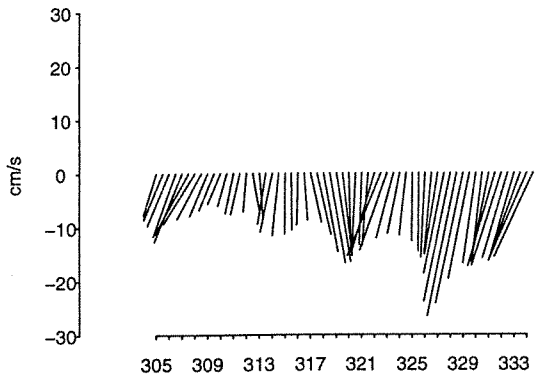
Day number 1990

GSP90-IS3-300m, OCTOBER 1990



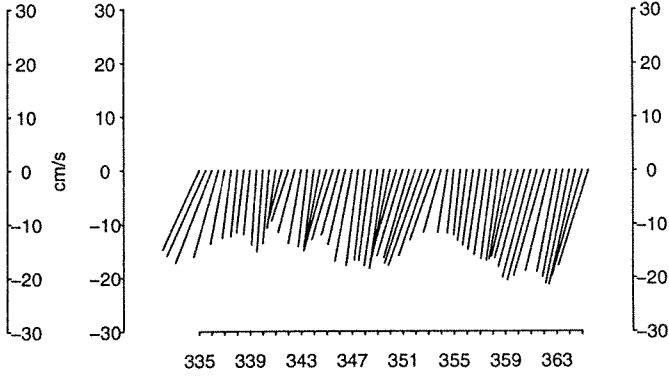
Day number 1990

GSP90-IS3-300m, NOVEMBER 1990



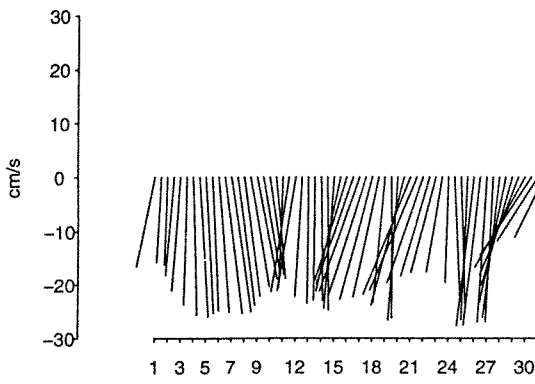
Day number 1990

GSP90-IS3-300m, DECEMBER 1990



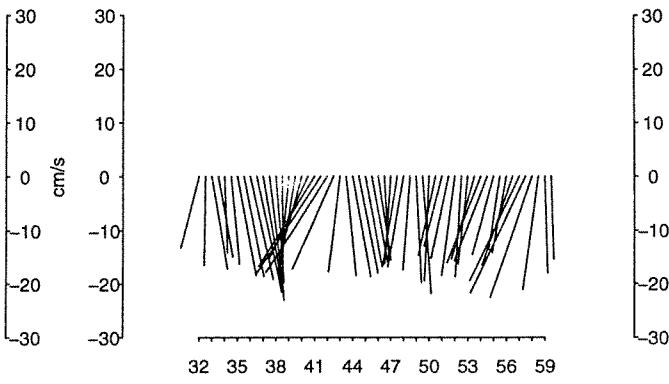
Day number 1990

GSP90-IS3-300m, JANUARY 1991



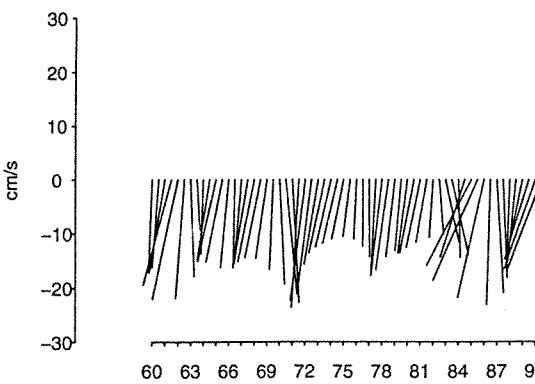
Day number 1991

GSP90-IS3-300m, FEBRUARY 1991



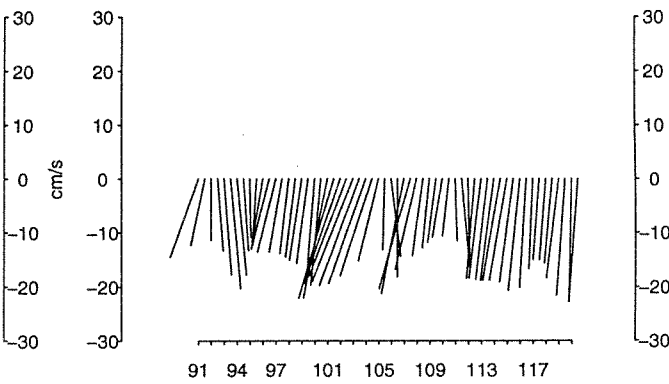
Day number 1991

GSP90-IS3-300m, MARCH 1991



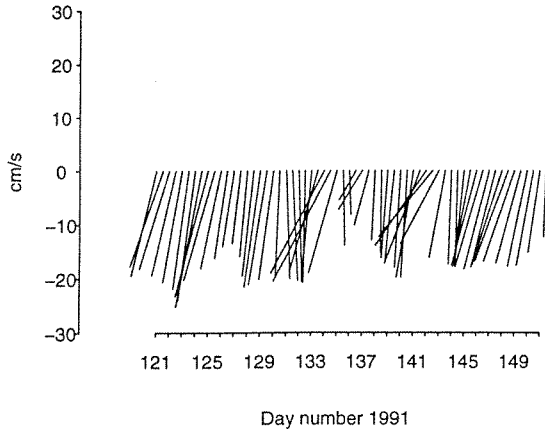
Day number 1991

GSP90-IS3-300m, APRIL 1991

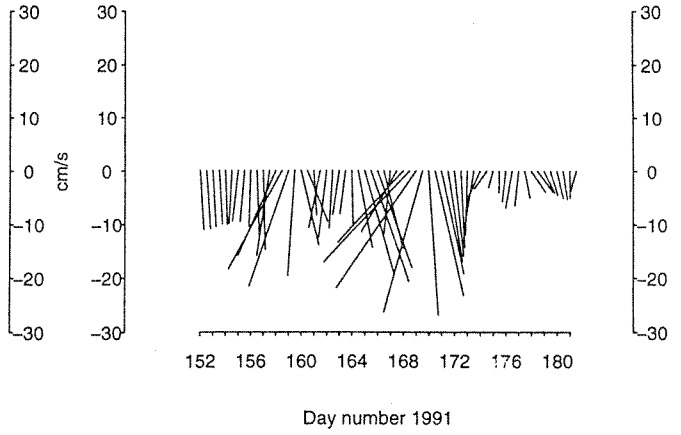


Day number 1991

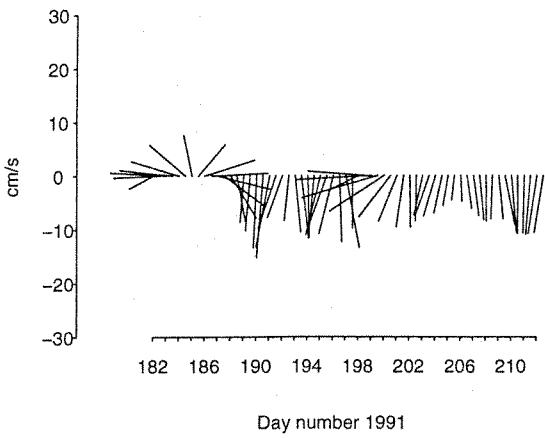
GSP90-IS3-300m, MAY 1991



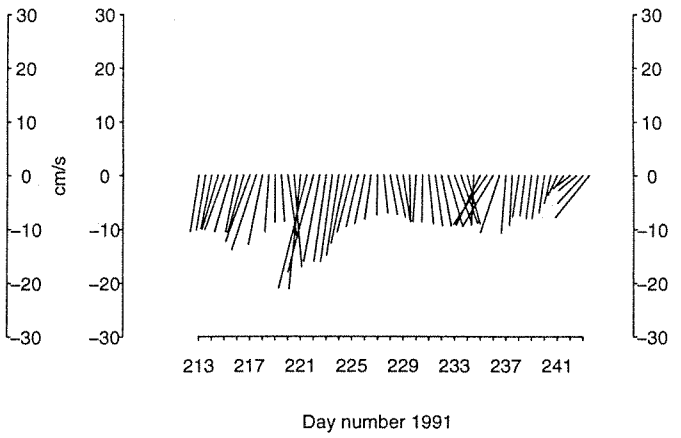
GSP90-IS3-300m, JUNE 1991



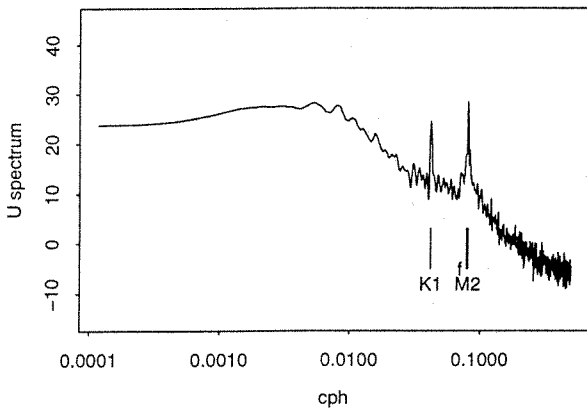
GSP90-IS3-300m, JULY 1991



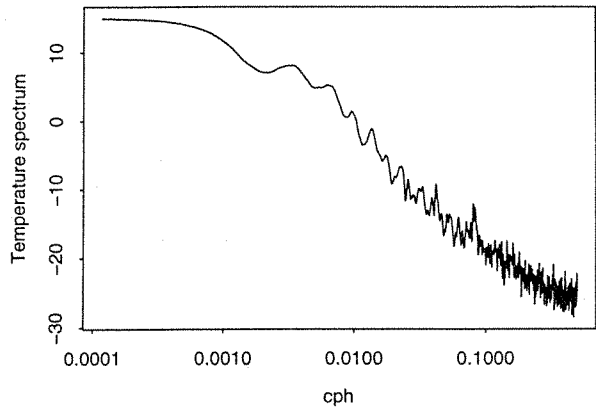
GSP90-IS3-300m, AUGUST 1991



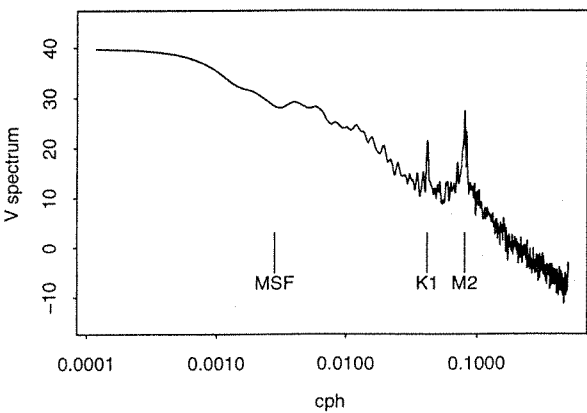
GSP90-IS3-300m



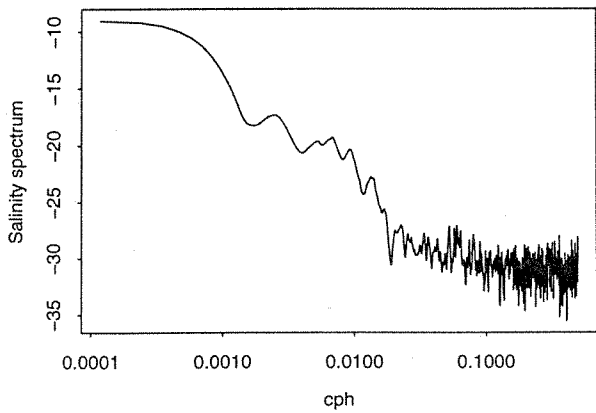
GSP90-IS3-300m



GSP90-IS3-300m



GSP90-IS3-300m



GSP-IS3-300m, 71°N section, 13/9/90-2/9/91. Harmonic analysis of current, showing the significant tidal constituents.

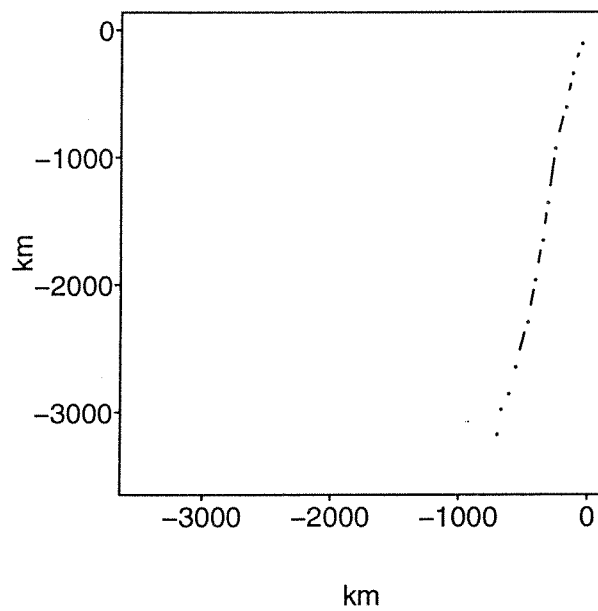
Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	14.1	0.0	81.5	180.0	98.5	261.5
MM	.00151215	1.3	0.6	89.2	245.7	156.5	334.9
MSF	.00282193	1.1	-0.2	69.2	120.9	51.7	190.2
K1	.04178075	1.1	0.7	11.5	217.2	205.7	228.7
M2	.08051140	2.3	1.0	133.8	314.1	180.2	87.9
S2	.08333334	1.0	0.5	86.4	308.8	222.3	35.2

AA004601
IS3 - 500m

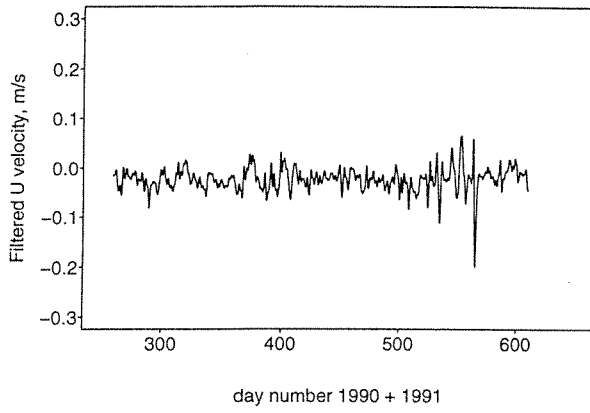
GSP-IS3-500m, 71°N section, 15/9/90-1/9/91. Means and deviations of filtered current and temperature

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)
Total:	-0.023 (0.023)	-0.104 (0.043)	0.36 (0.20)
Sep 90	-0.021(0.015)	-0.062(0.048)	0.17(0.14)
Oct 90	-0.028(0.016)	-0.087(0.032)	0.36(0.11)
Nov 90	-0.021(0.017)	-0.101(0.028)	0.45(0.21)
Dec 90	-0.031(0.013)	-0.121(0.022)	0.47(0.07)
Jan 91	-0.022(0.024)	-0.160(0.031)	0.28(0.14)
Feb 91	-0.017(0.022)	-0.121(0.017)	0.20(0.20)
Mar 91	-0.021(0.012)	-0.116(0.019)	0.29(0.10)
Apr 91	-0.023(0.014)	-0.128(0.022)	0.38(0.15)
May 91	-0.036(0.018)	-0.131(0.025)	0.44(0.14)
Jun 91	-0.020(0.029)	-0.080(0.032)	0.44(0.17)
Jul 91	-0.023(0.047)	-0.046(0.038)	0.54(0.25)
Aug 91	-0.011(0.016)	-0.073(0.031)	0.20(0.21)

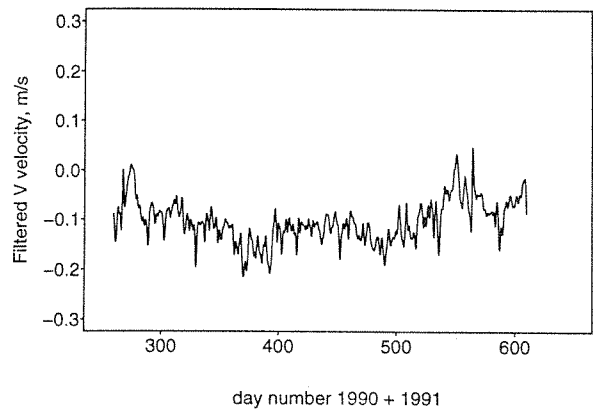
Prog.Vector GSP90-IS3-500m



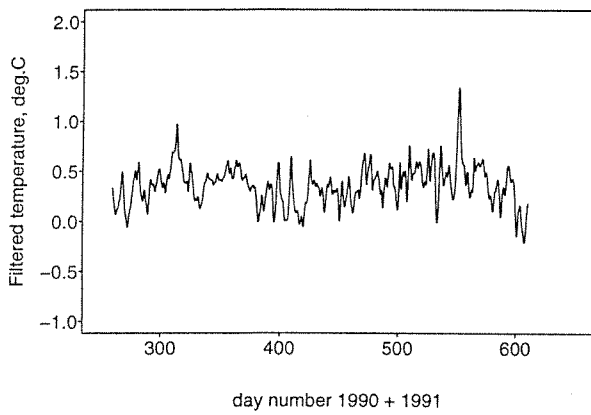
GSP90-IS3-500m



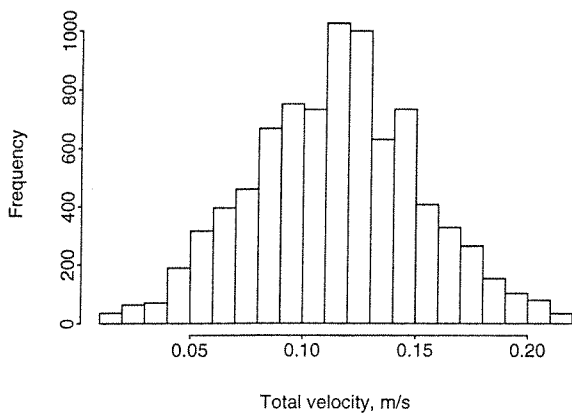
GSP90-IS3-500m



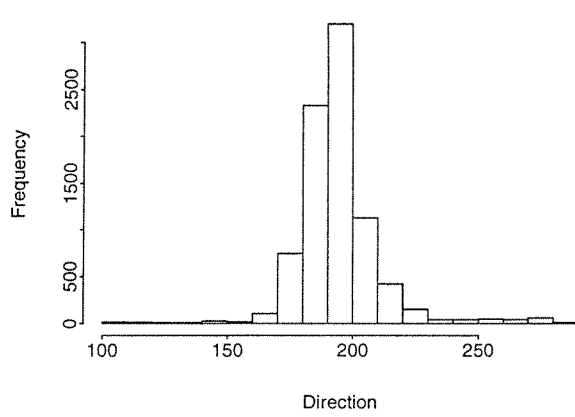
GSP90-IS3-500m



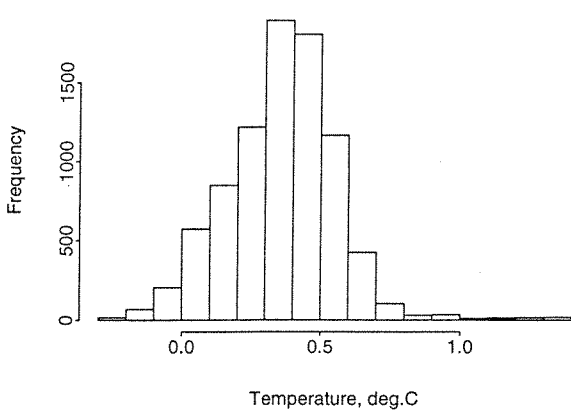
GSP90-IS3-500m



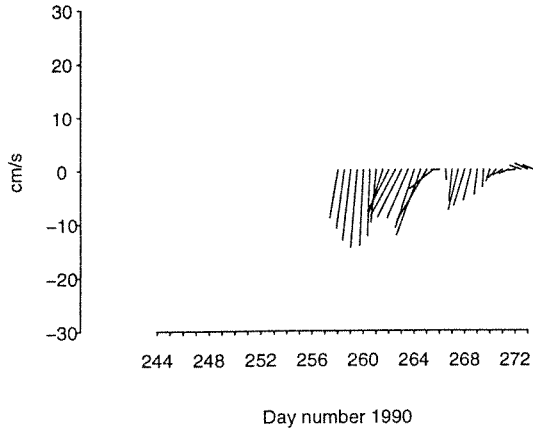
GSP90-IS3-500m



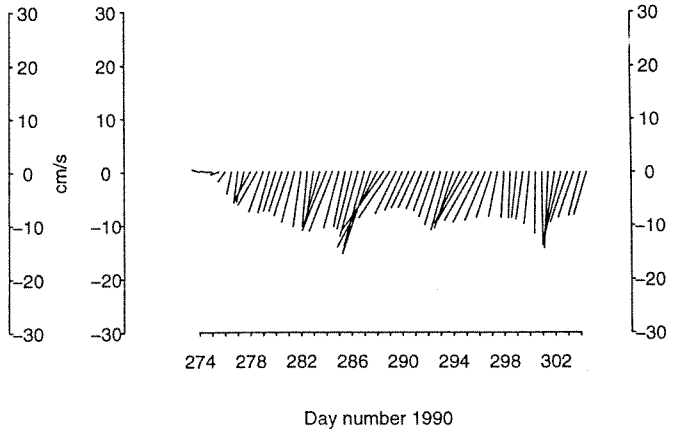
GSP90-IS3-500m



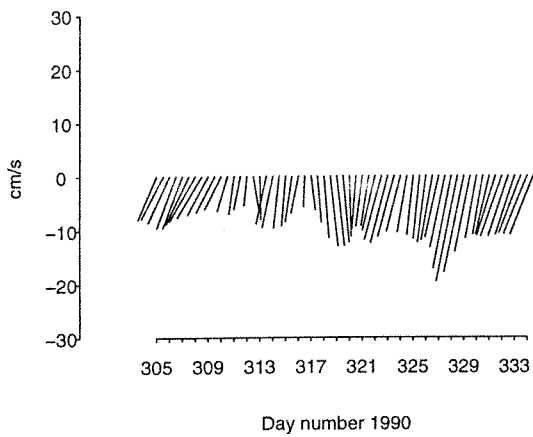
GSP90-IS3-500m, SEPTEMBER 1990



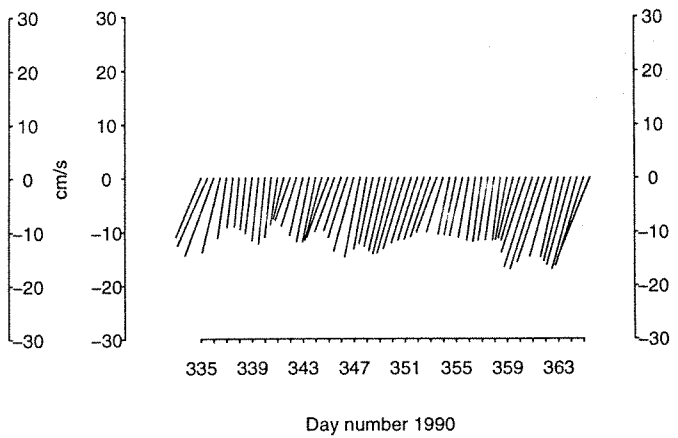
GSP90-IS3-500m, OCTOBER 1990



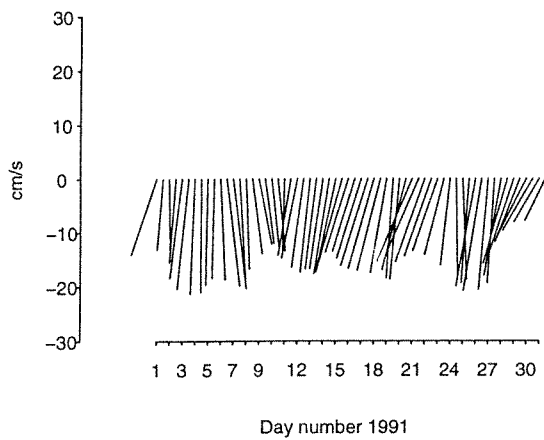
GSP90-IS3-500m, NOVEMBER 1990



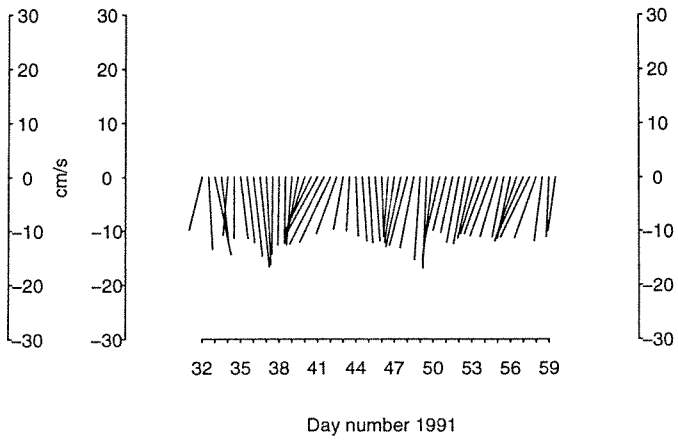
GSP90-IS3-500m, DECEMBER 1990



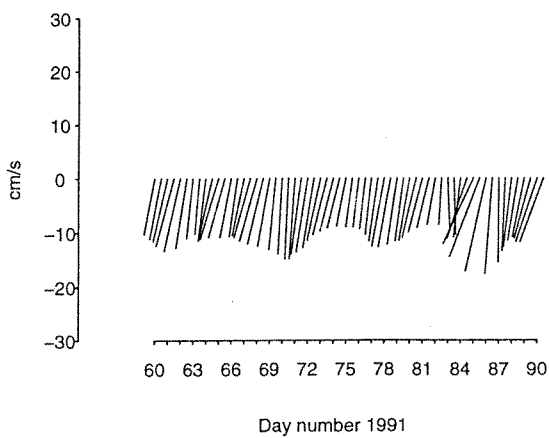
GSP90-IS3-500m, JANUARY 1991



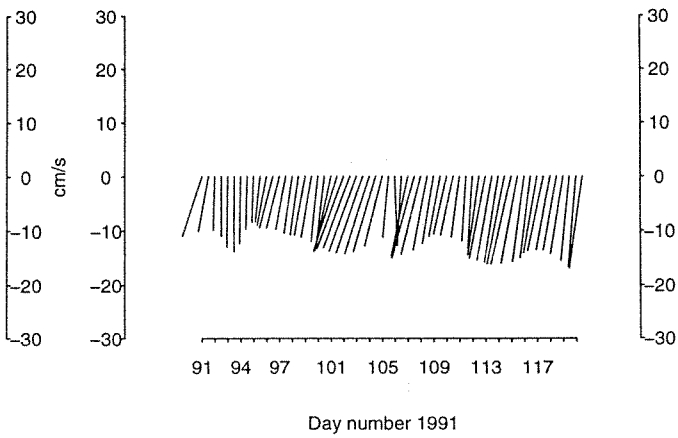
GSP90-IS3-500m, FEBRUARY 1991



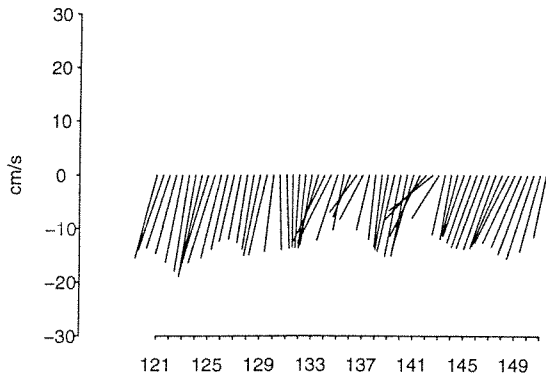
GSP90-IS3-500m, MARCH 1991



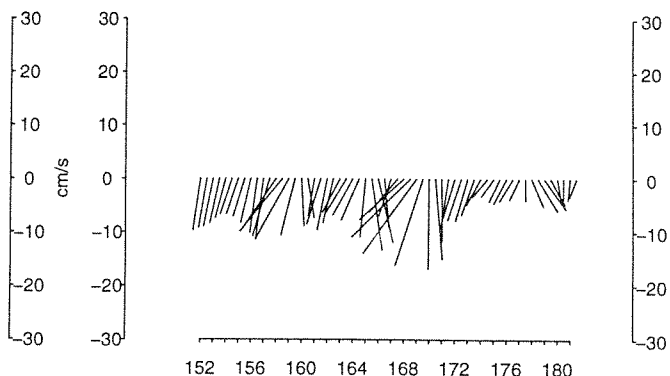
GSP90-IS3-500m, APRIL 1991



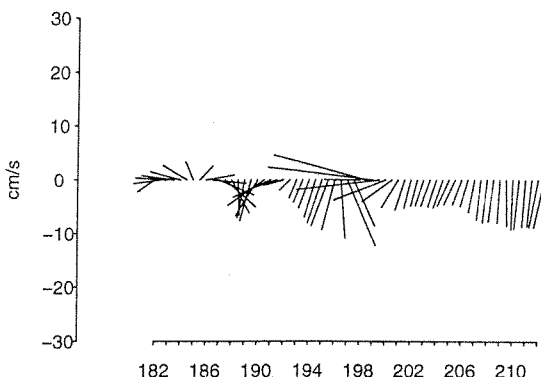
GSP90-IS3-500m, MAY 1991



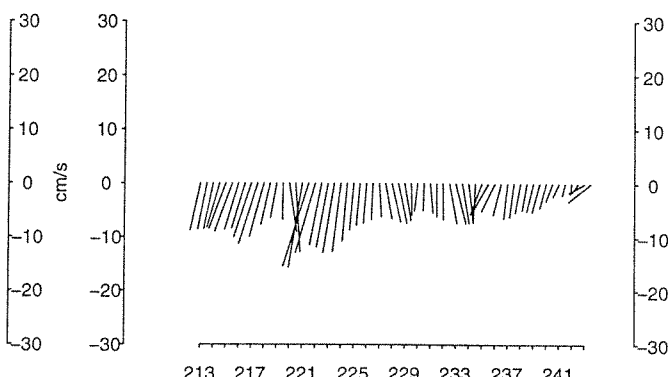
GSP90-IS3-500m, JUNE 1991



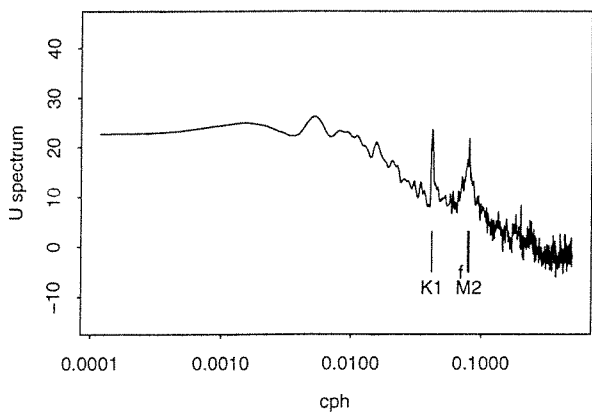
GSP90-IS3-500m, JULY 1991



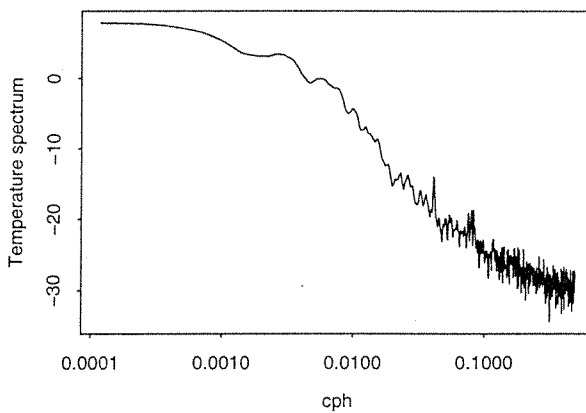
GSP90-IS3-500m, AUGUST 1991



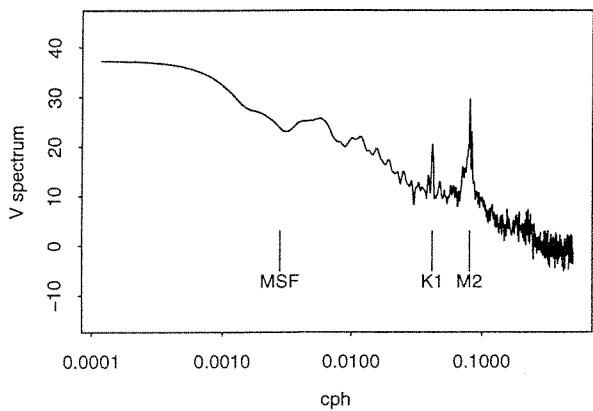
GSP90-IS3-500m



GSP90-IS3-500m



GSP90-IS3-500m



GSP-IS3-500m, 71°N section, 13/9/90-2/9/91. Harmonic analysis of currents, showing the significant tidal constituents.

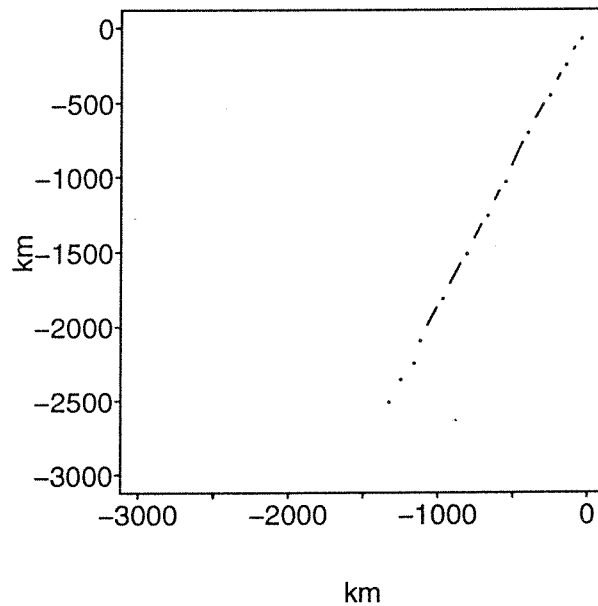
Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	10.5	0.0	77.5	180.0	102.5	257.5
K1	.04178075	1.0	0.6	17.6	226.1	208.5	243.6
M2	.08051140	2.3	0.8	96.1	282.2	186.2	18.3
S2	.08333334	1.1	0.2	78.9	303.5	224.7	22.4

AA018201
IS3 - 750m

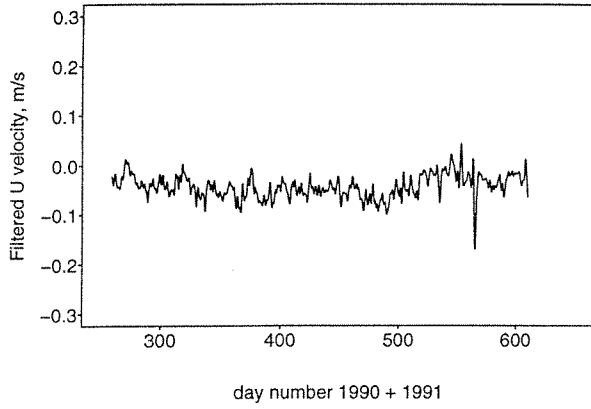
GSP-IS3-750m, 71°N section, 15/9/90-1/9/91. Means and deviations of filtered current and temperature

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)
Total:	-0.044 (0.023)	-0.082 (0.039)	-0.19 (0.10)
Sep 90	-0.021(0.019)	-0.038(0.047)	-0.25(0.11)
Oct 90	-0.038(0.013)	-0.065(0.030)	-0.15(0.08)
Nov 90	-0.042(0.019)	-0.078(0.020)	-0.13(0.11)
Dec 90	-0.056(0.017)	-0.095(0.019)	-0.14(0.07)
Jan 91	-0.057(0.020)	-0.122(0.033)	-0.21(0.10)
Feb 91	-0.049(0.014)	-0.094(0.023)	-0.27(0.10)
Mar 91	-0.052(0.012)	-0.094(0.017)	-0.21(0.05)
Apr 91	-0.062(0.017)	-0.116(0.025)	-0.17(0.07)
May 91	-0.056(0.019)	-0.106(0.025)	-0.17(0.06)
Jun 91	-0.017(0.018)	-0.057(0.032)	-0.14(0.09)
Jul 91	-0.033(0.034)	-0.041(0.044)	-0.15(0.13)
Aug 91	-0.030(0.015)	-0.058(0.022)	-0.30(0.09)

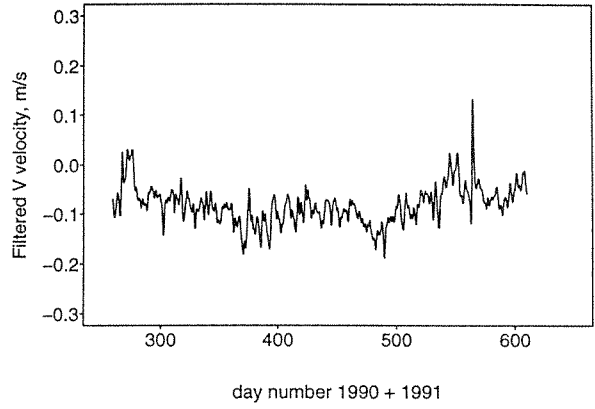
Prog.Vector GSP90-IS3-750m



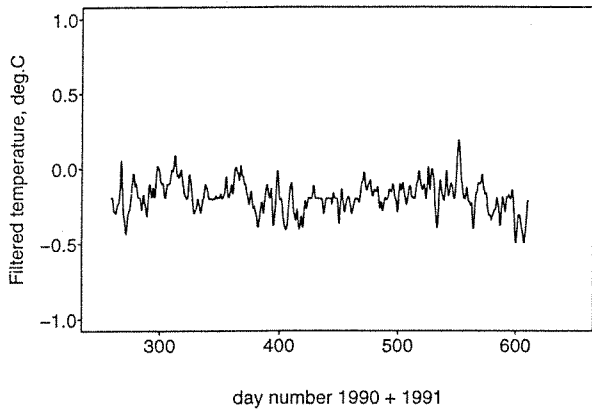
GSP90-IS3-750m



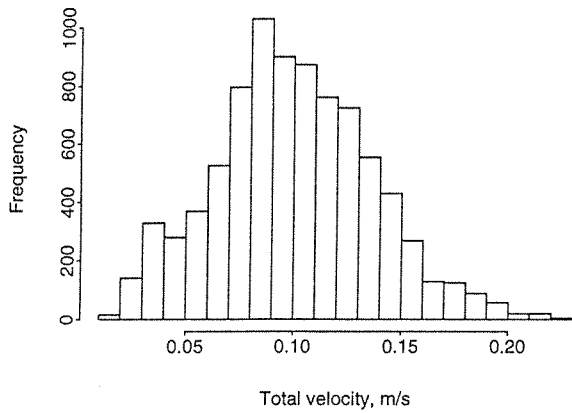
GSP90-IS3-750m



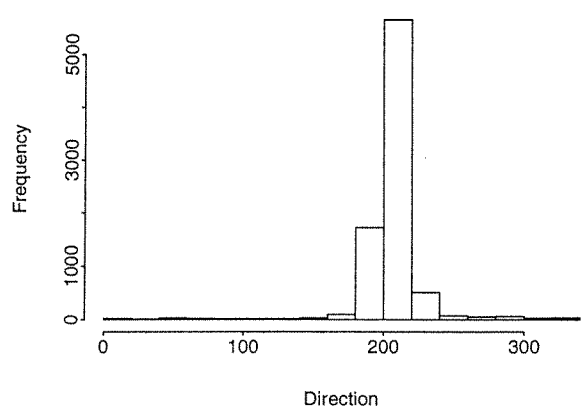
GSP90-IS3-750m



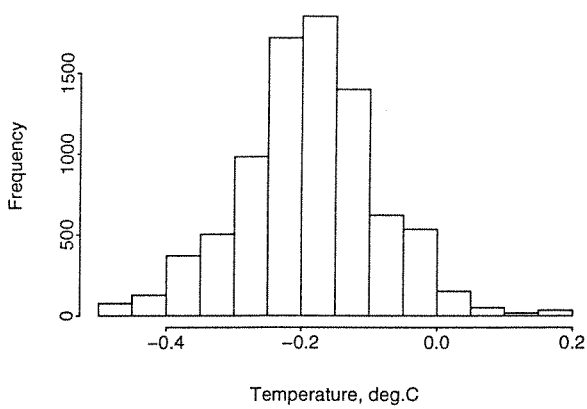
GSP90-IS3-750m



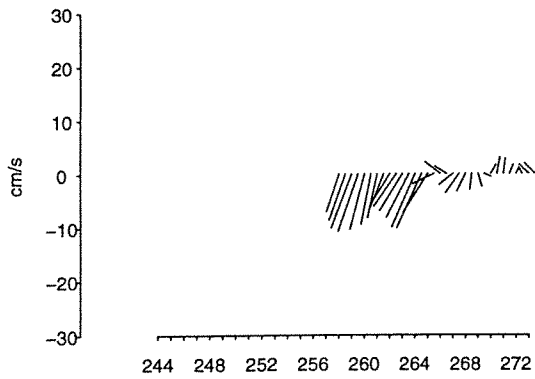
GSP90-IS3-750m



GSP90-IS3-750m

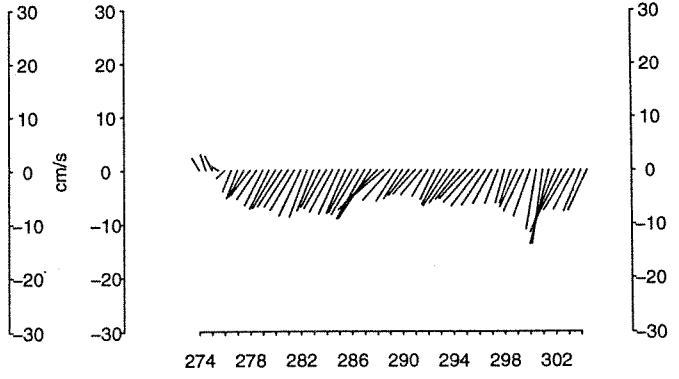


GSP90-IS3-750m, SEPTEMBER 1990



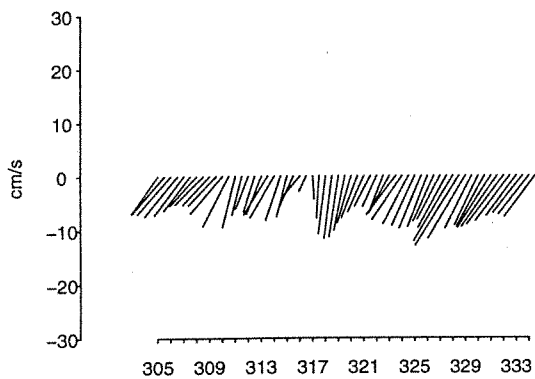
Day number 1990

GSP90-IS3-750m, OCTOBER 1990



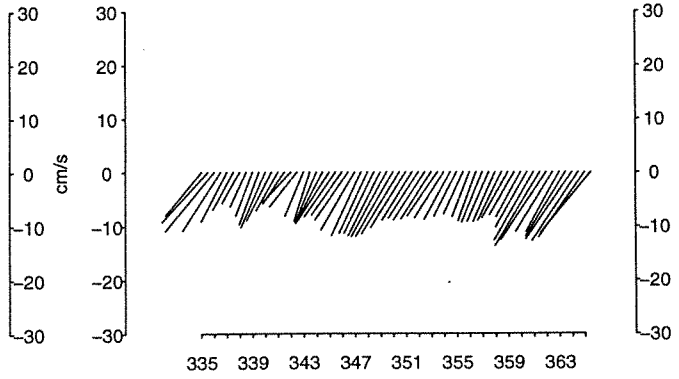
Day number 1990

GSP90-IS3-750m, NOVEMBER 1990



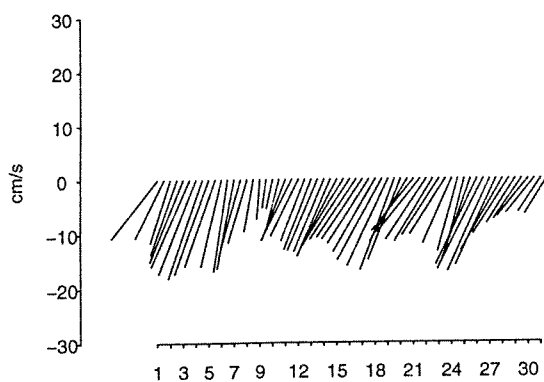
Day number 1990

GSP90-IS3-750m, DECEMBER 1990



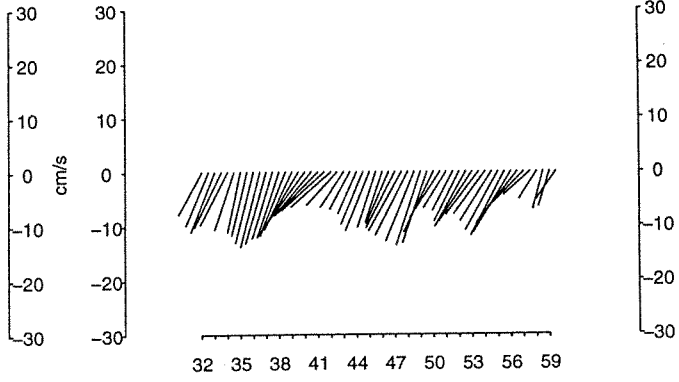
Day number 1990

GSP90-IS3-750m, JANUARY 1991



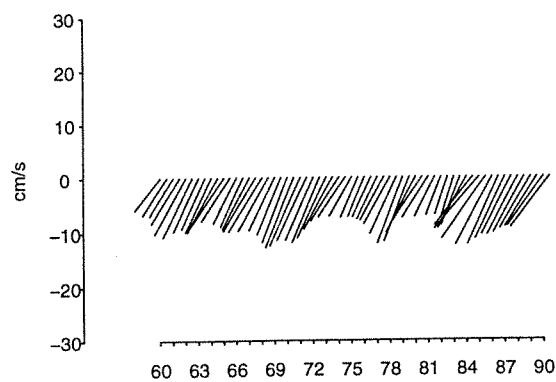
Day number 1991

GSP90-IS3-750m, FEBRUARY 1991



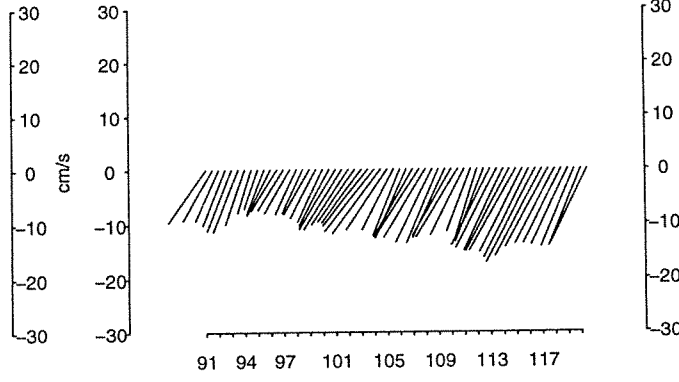
Day number 1991

GSP90-IS3-750m, MARCH 1991



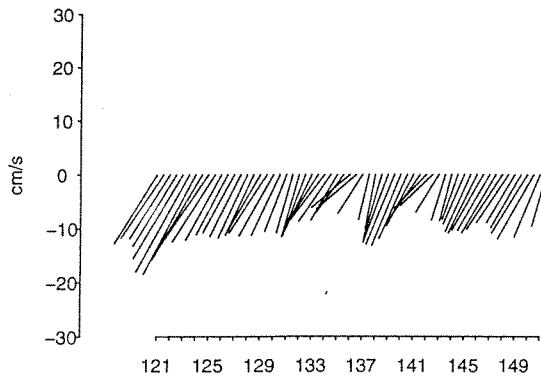
Day number 1991

GSP90-IS3-750m, APRIL 1991



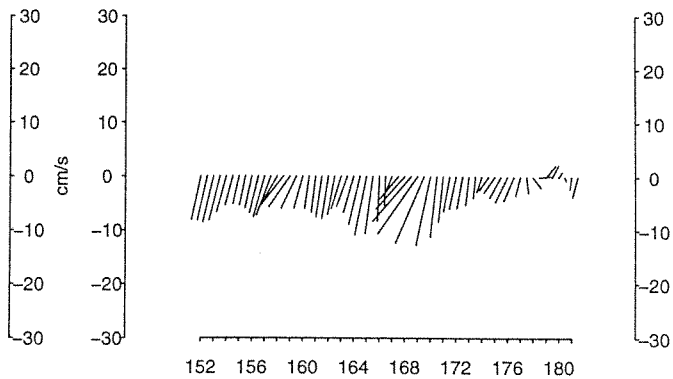
Day number 1991

GSP90-IS3-750m, MAY 1991



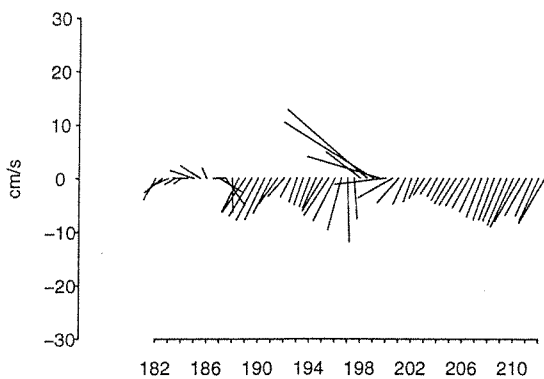
Day number 1991

GSP90-IS3-750m, JUNE 1991



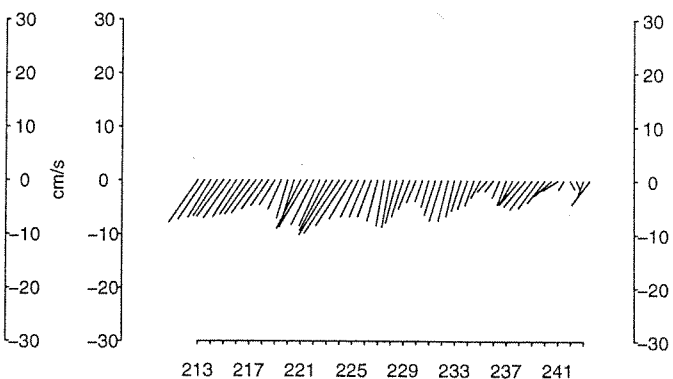
Day number 1991

GSP90-IS3-750m, JULY 1991



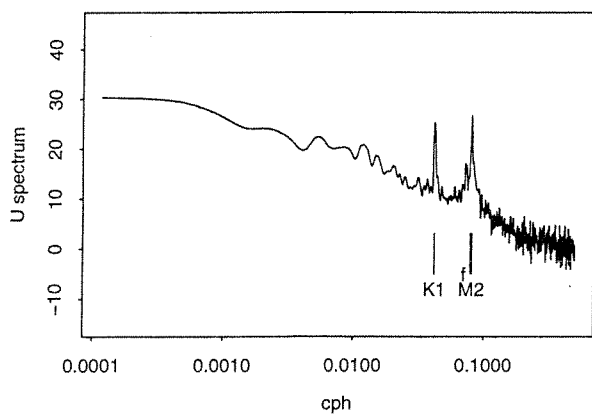
Day number 1991

GSP90-IS3-750m, AUGUST 1991

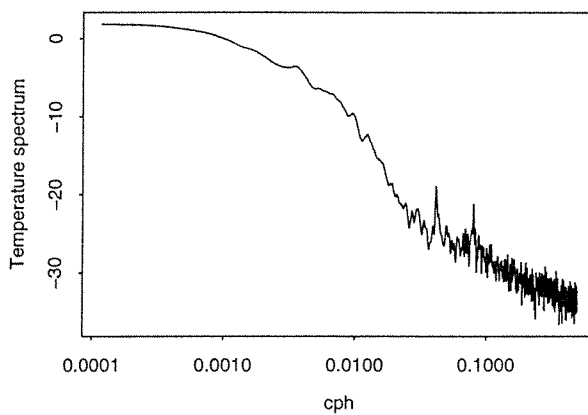


Day number 1991

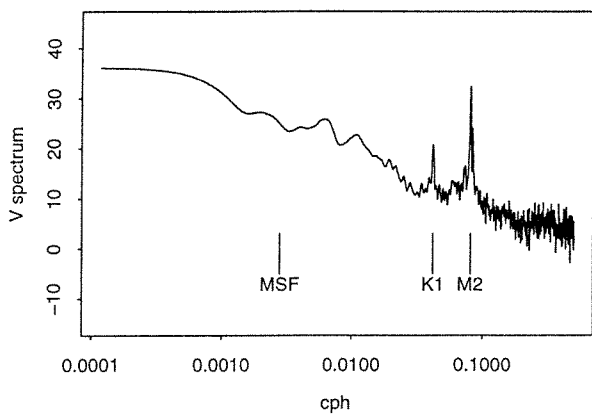
GSP90-IS3-750m



GSP90-IS3-750m



GSP90-IS3-750m



GSP-IS3-750m, 71°N section, 14/9/90-2/9/91. Harmonic analysis of currents, showing the significant tidal constituents.

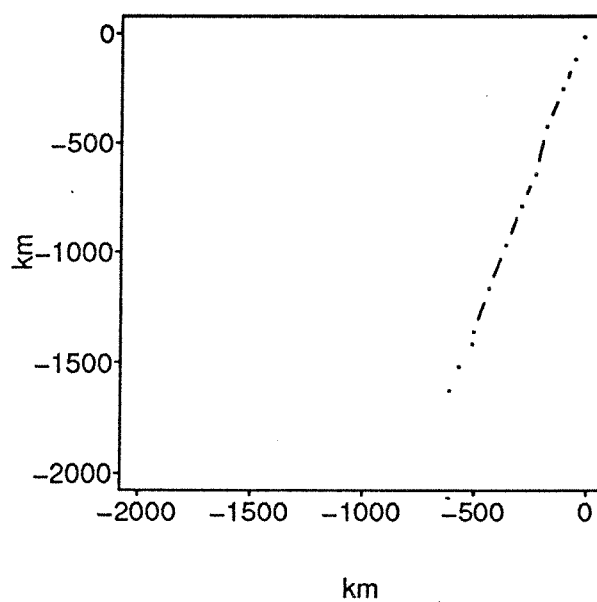
Name	Frequency cph	Major axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	9.2	0.0	62.0	180.0	118.0	242.0
K1	.04178075	1.2	0.7	9.0	236.5	227.5	245.6
M2	.08051140	3.5	0.2	63.0	268.0	205.0	331.1
S2	.08333334	1.1	0.3	76.6	318.7	242.2	35.3

AA074301
IS3 - 1350m

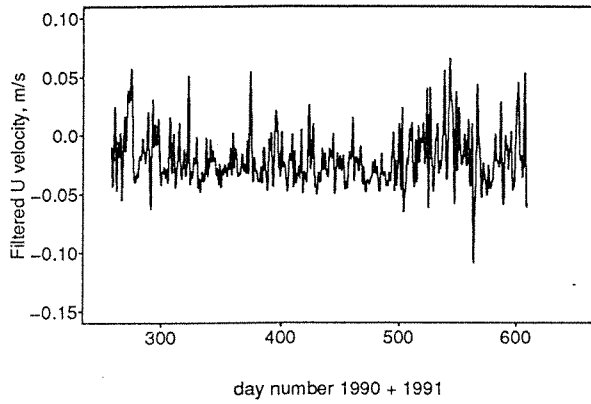
GSP-IS3-1350m, 71°N section, 15/9/90-1/9/91. Means and deviations of filtered current and temperature

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)
Total:	-0.020 (0.022)	-0.054 (0.037)	-0.80 (0.08)
Sep 90	-0.006(0.026)	-0.014(0.035)	-0.93(0.06)
Oct 90	-0.015(0.024)	-0.037(0.036)	-0.76(0.06)
Nov 90	-0.022(0.019)	-0.053(0.024)	-0.77(0.08)
Dec 90	-0.026(0.010)	-0.064(0.021)	-0.74(0.04)
Jan 91	-0.019(0.021)	-0.080(0.036)	-0.80(0.07)
Feb 91	-0.025(0.015)	-0.072(0.024)	-0.81(0.07)
Mar 91	-0.027(0.013)	-0.067(0.024)	-0.78(0.02)
Apr 91	-0.029(0.013)	-0.077(0.027)	-0.74(0.06)
May 91	-0.025(0.019)	-0.072(0.034)	-0.76(0.04)
Jun 91	-0.003(0.028)	-0.021(0.032)	-0.82(0.08)
Jul 91	-0.023(0.028)	-0.040(0.037)	-0.87(0.06)
Aug 91	-0.015(0.025)	-0.039(0.032)	-0.89(0.04)
Sep 91	-0.060(0.001)	-0.088(0.002)	-0.87(0.00)

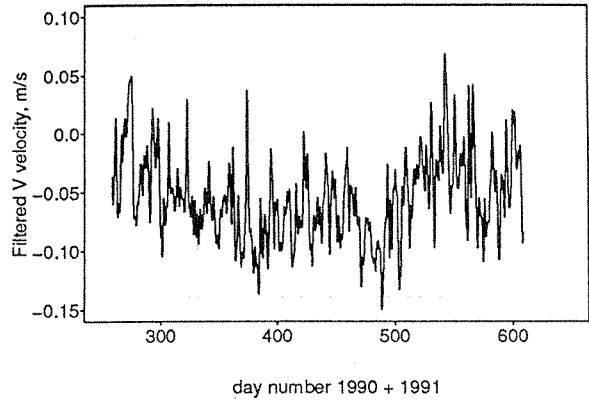
Prog.Vector GSP90-IS3-1350m



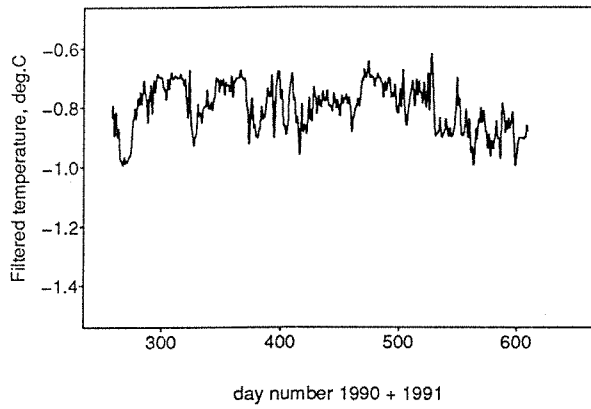
GSP90-IS3-1350m



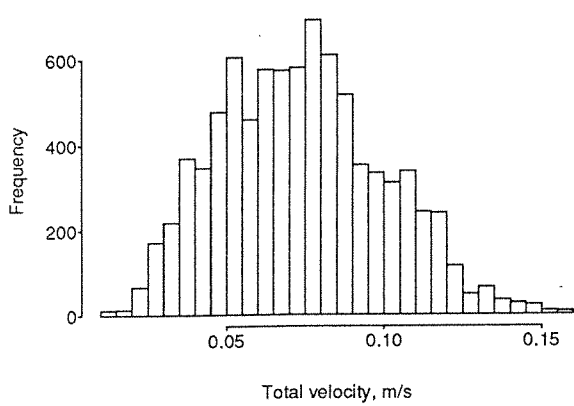
GSP90-IS3-1350m



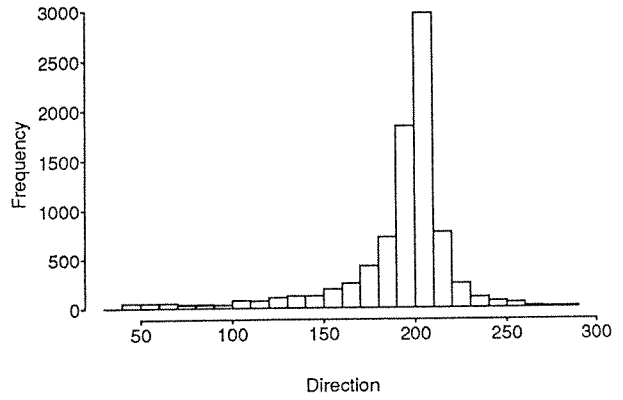
GSP90-IS3-1350m



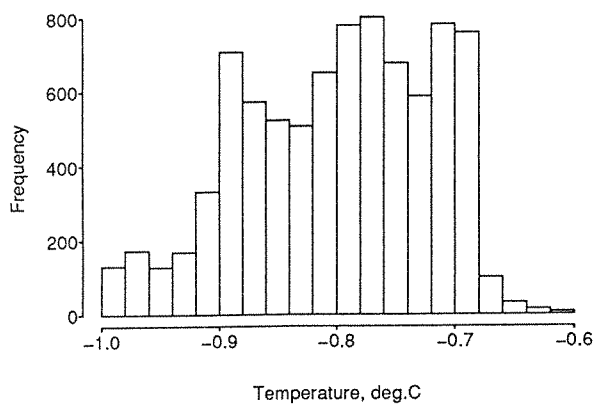
GSP90-IS3-1350m



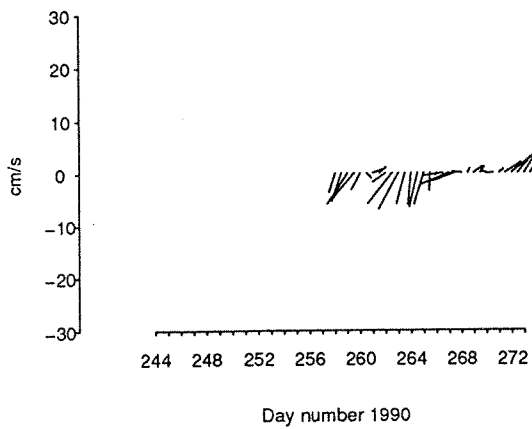
GSP90-IS3-1350m



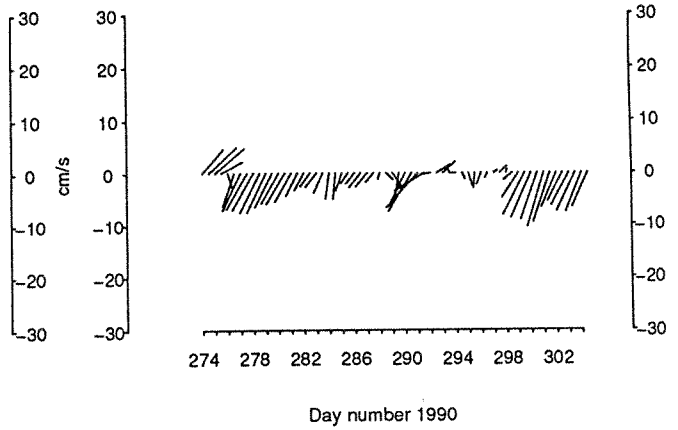
GSP90-IS3-1350m



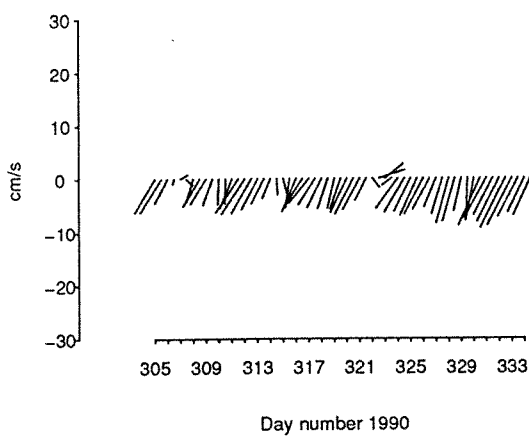
GSP90-IS3-1350m, SEPTEMBER 1990



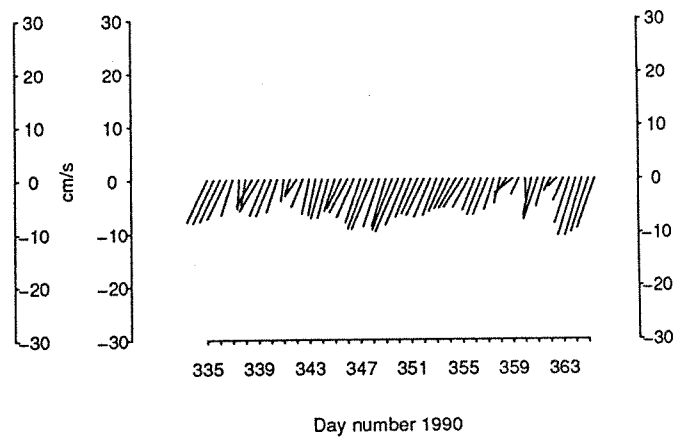
GSP90-IS3-1350m, OCTOBER 1990



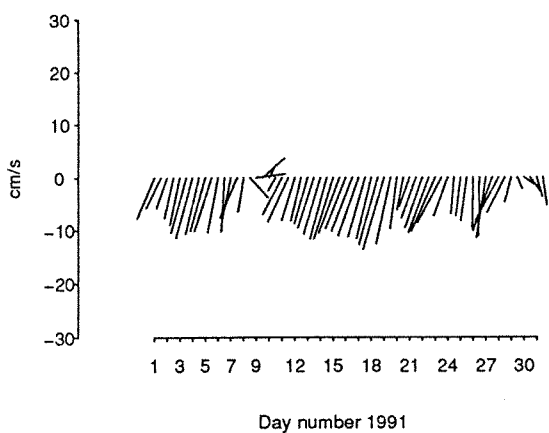
GSP90-IS3-1350m, NOVEMBER 1990



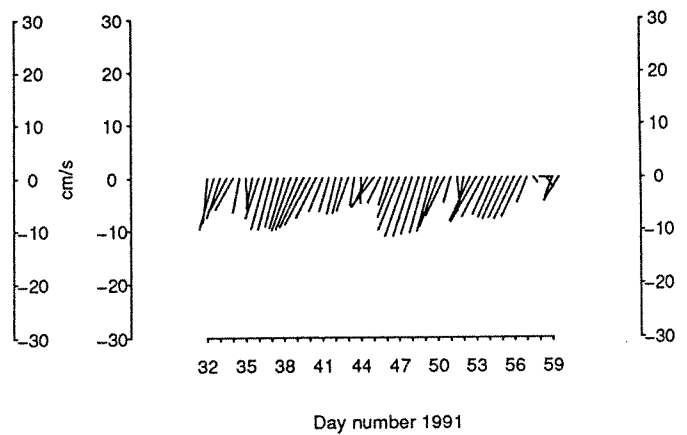
GSP90-IS3-1350m, DECEMBER 1990



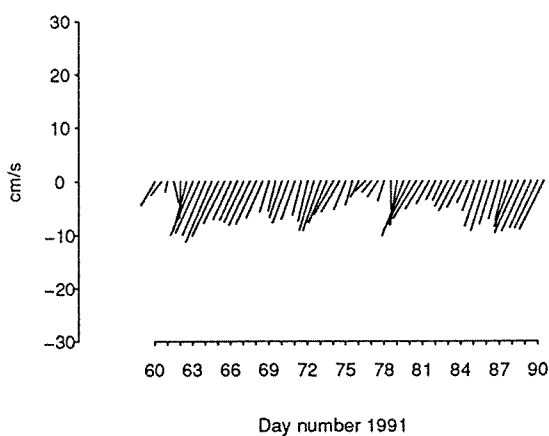
GSP90-IS3-1350m, JANUARY 1991



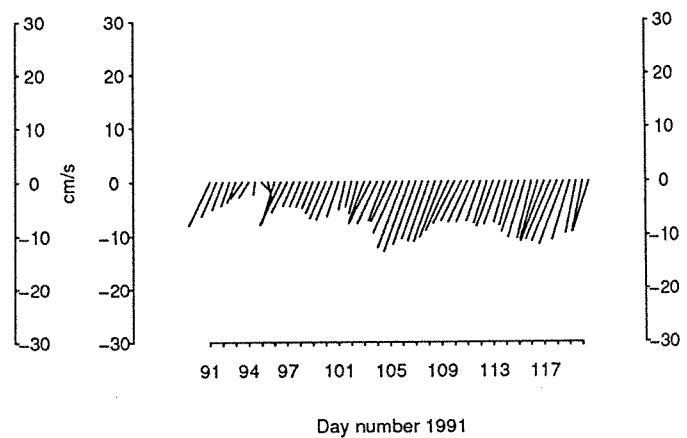
GSP90-IS3-1350m, FEBRUARY 1991



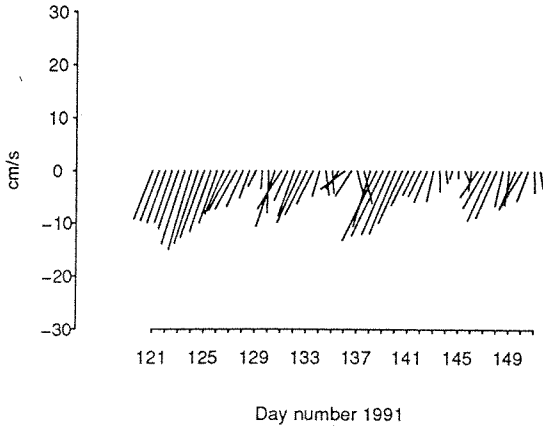
GSP90-IS3-1350m, MARCH 1991



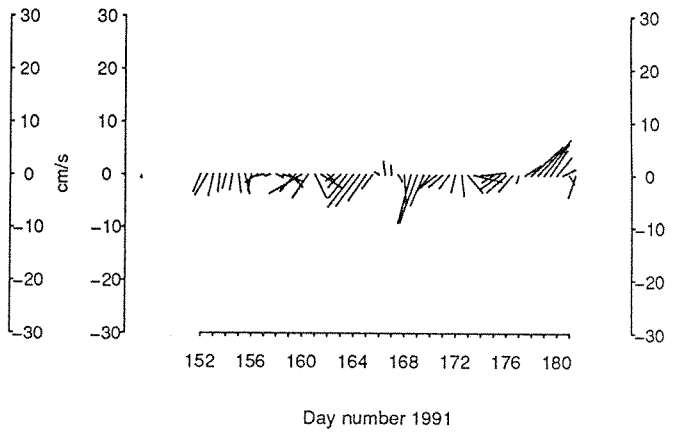
GSP90-IS3-1350m, APRIL 1991



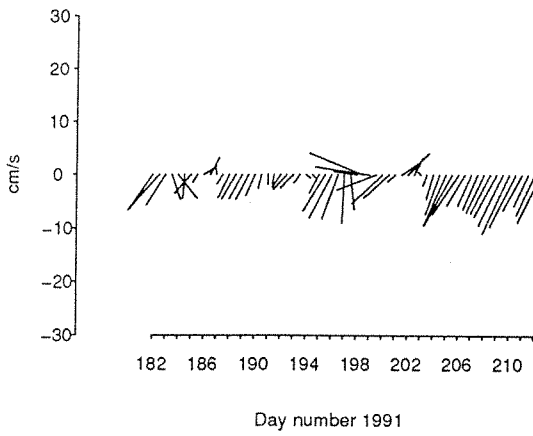
GSP90-IS3-1350m, MAY 1991



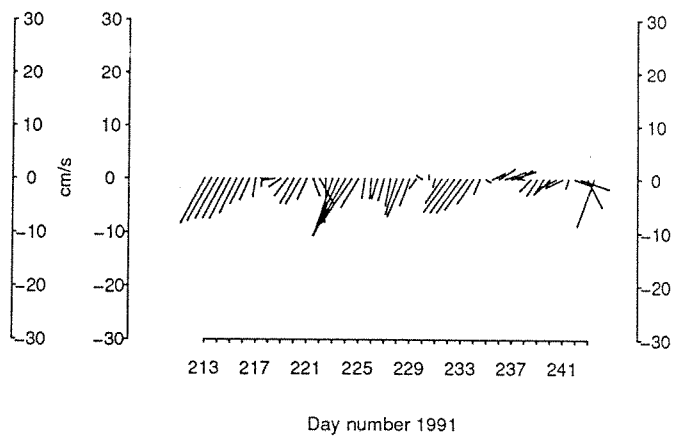
GSP90-IS3-1350m, JUNE 1991



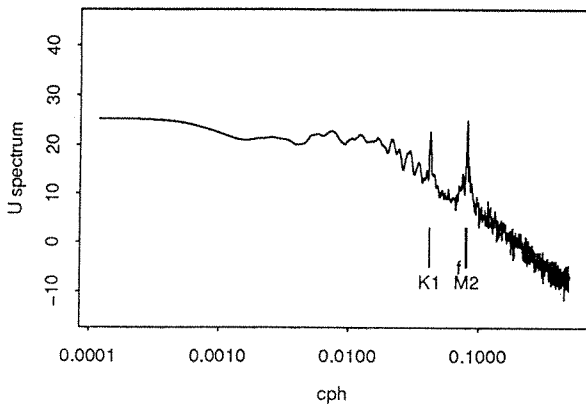
GSP90-IS3-1350m, JULY 1991



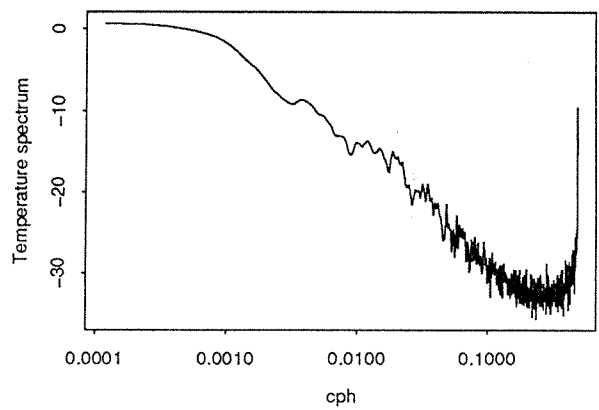
GSP90-IS3-1350m, AUGUST 1991



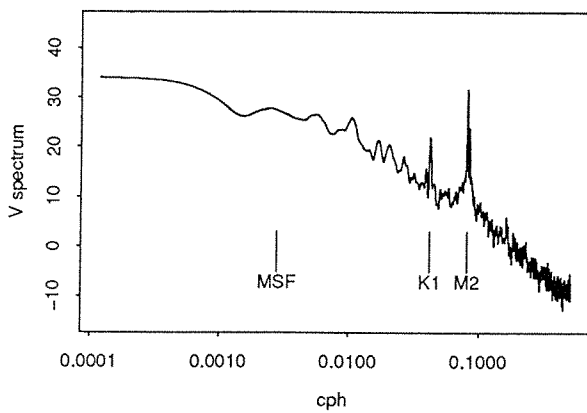
GSP90-IS3-1350m



GSP90-IS3-1350m



GSP90-IS3-1350m



GSP-IS3-1350m, 71°N section, 14/9/90-2/9/91. Harmonic analysis of currents, showing the significant tidal constituents.

Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	5.8	0.0	69.6	180.0	110.4	249.6
K1	.04178075	1.1	0.5	41.4	264.1	222.7	305.6
M2	.08051140	3.1	-0.2	65.6	255.2	189.6	320.8
S2	.08333334	1.2	0.1	73.1	301.7	228.6	14.8

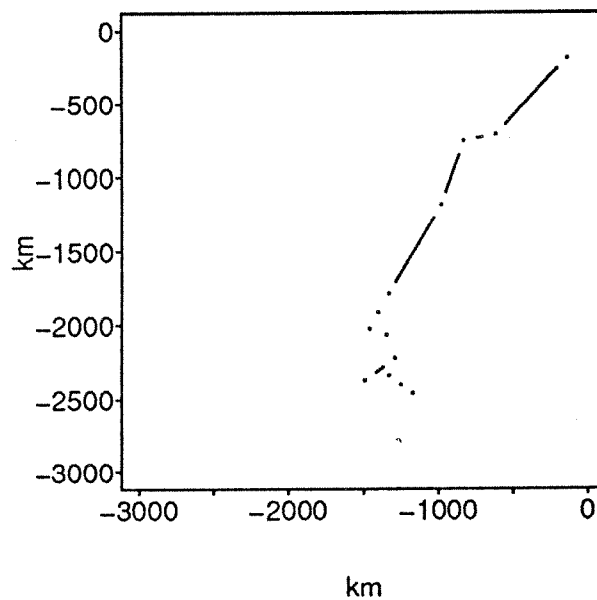
DENMARK - STRAIT

AA874404
IS6 - 80m

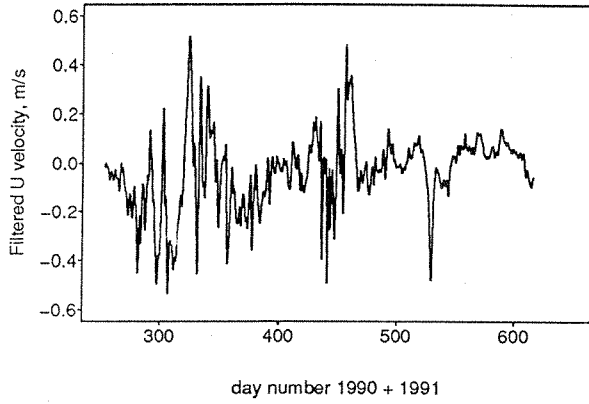
GSP-IS6-80m, Denmark Strait section, 10/9/90-8/9/91. Means and deviations of filtered current and temperature

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)
Total:	-0.038 (0.157)	-0.081 (0.164)	-1.50 (0.33)
Sep 90	-0.070(0.053)	-0.106(0.050)	-1.07(0.32)
Oct 90	-0.179(0.161)	-0.194(0.087)	-0.86(0.28)
Nov 90	-0.083(0.295)	-0.017(0.248)	-1.35(0.28)
Dec 90	-0.057(0.167)	-0.162(0.168)	-1.38(0.35)
Jan 91	-0.133(0.090)	-0.225(0.093)	-1.69(0.06)
Feb 91	-0.028(0.053)	-0.051(0.114)	-1.67(0.15)
Mar 91	-0.022(0.172)	-0.041(0.255)	-1.68(0.21)
Apr 91	0.042(0.162)	-0.017(0.159)	-1.76(0.08)
May 91	0.022(0.046)	-0.058(0.127)	-1.74(0.04)
Jun 91	-0.077(0.128)	-0.058(0.116)	-1.63(0.08)
Jul 91	0.061(0.032)	0.012(0.128)	-1.51(0.11)
Aug 91	0.058(0.031)	-0.045(0.028)	-1.54(0.09)
Sep 91	-0.063(0.021)	-0.108(0.020)	-1.54(0.07)

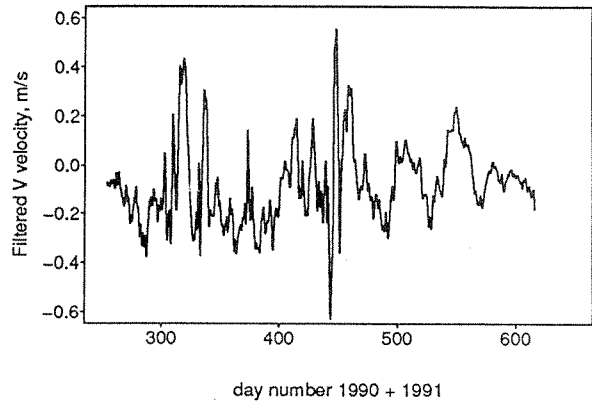
Prog.Vector GSP90-IS6-80m



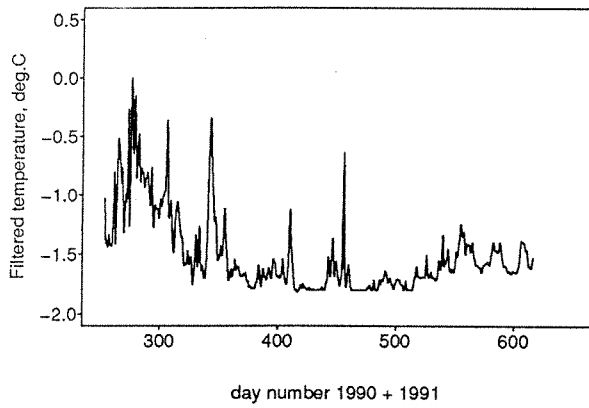
GSP90-IS6-80m



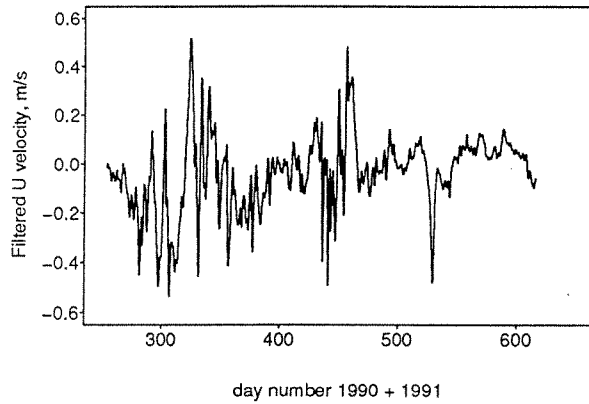
GSP90-IS6-80m



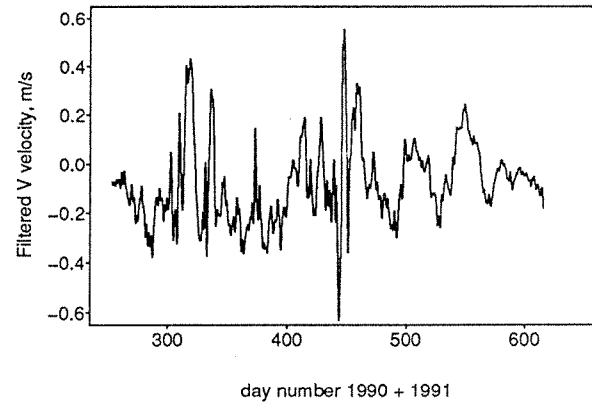
GSP90-IS6-80m



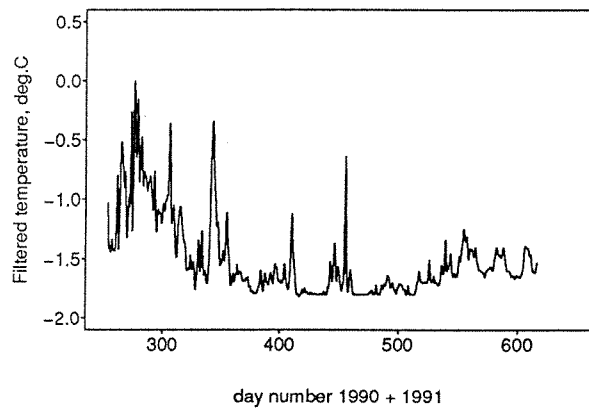
GSP90-IS6-80m



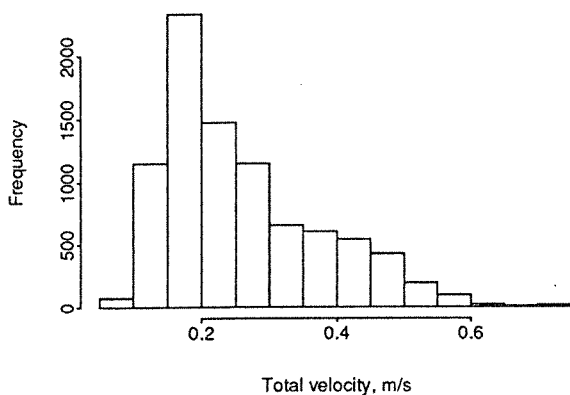
GSP90-IS6-80m



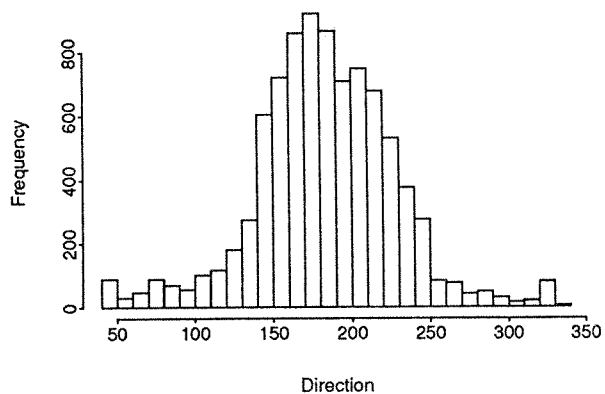
GSP90-IS6-80m



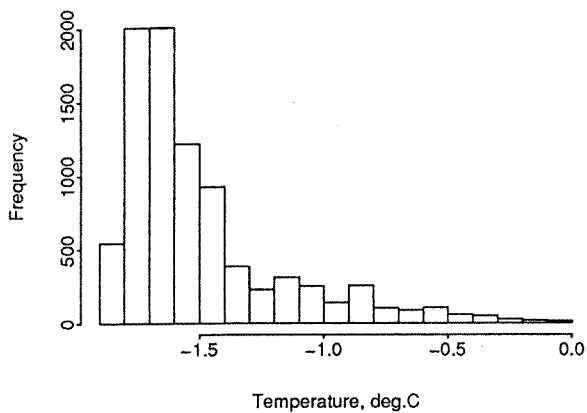
GSP90-IS6-80m



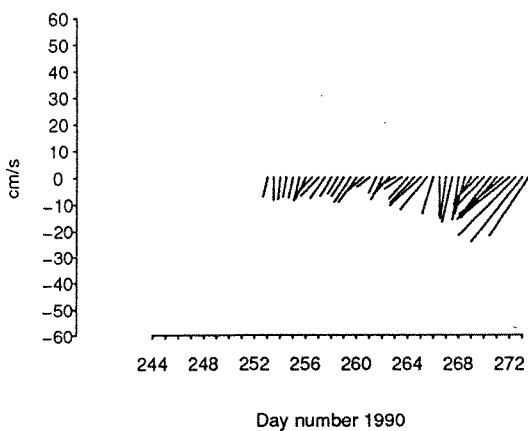
GSP90-IS6-80m



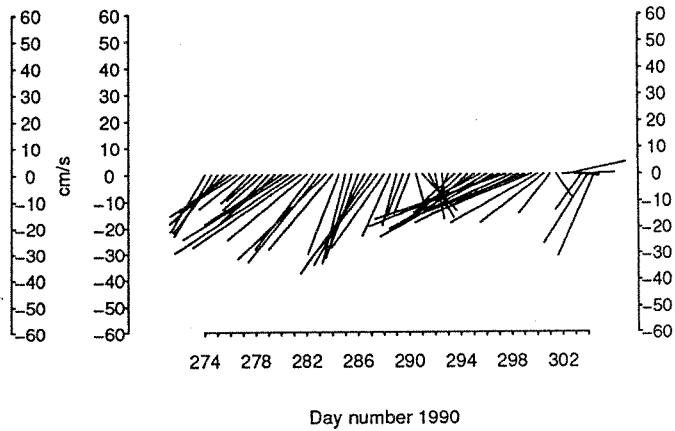
GSP90-IS6-80m



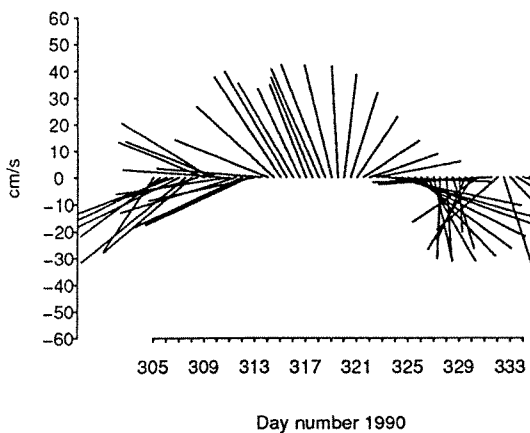
GSP90-IS6-80m, SEPTEMBER 1990



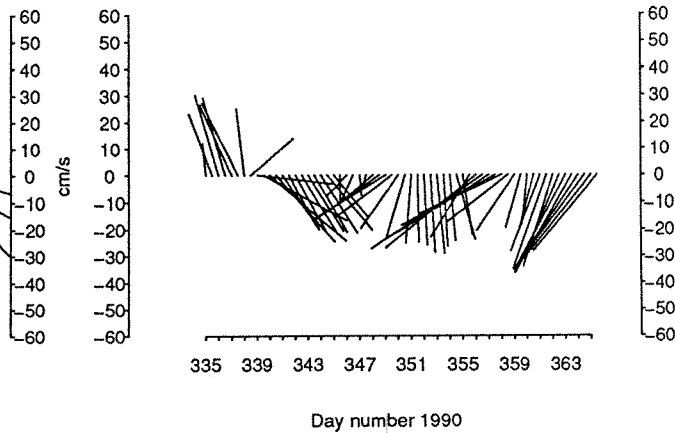
GSP90-IS6-80m, OCTOBER 1990



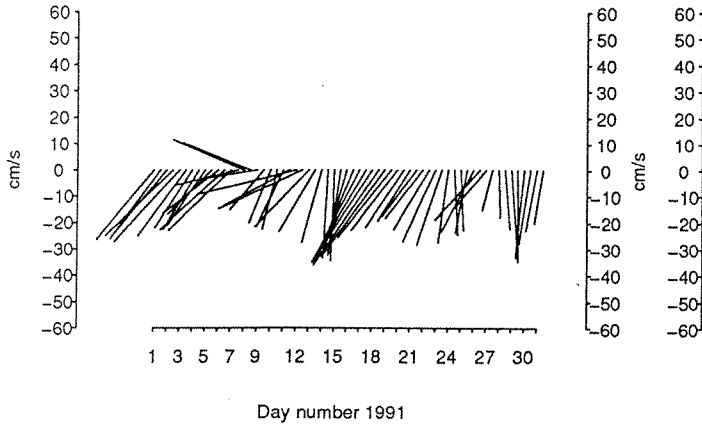
GSP90-IS6-80m, NOVEMBER 1990



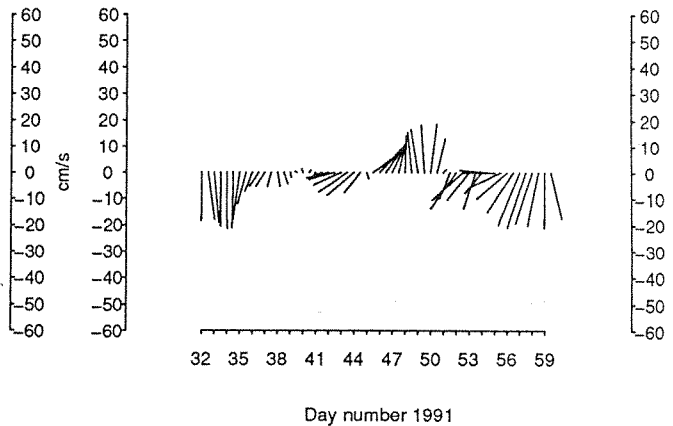
GSP90-IS6-80m, DECEMBER 1990



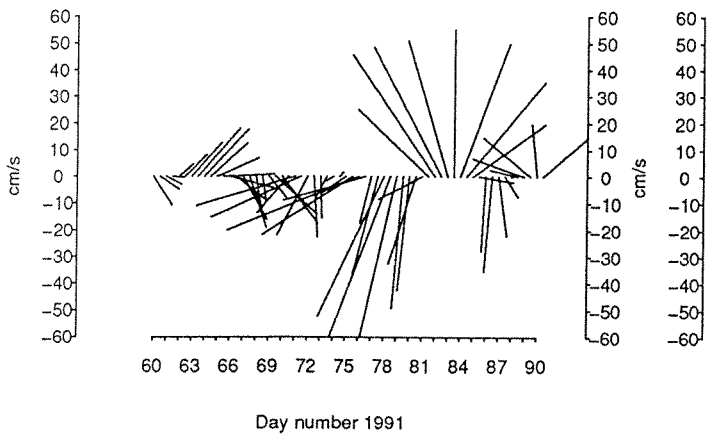
GSP90-IS6-80m, JANUARY 1991



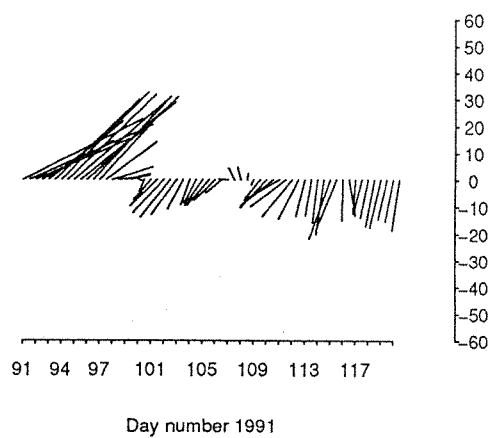
GSP90-IS6-80m, FEBRUARY 1991



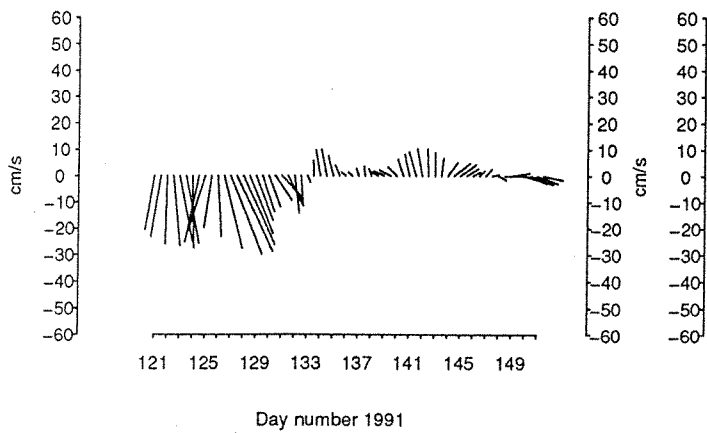
GSP90-IS6-80m, MARCH 1991



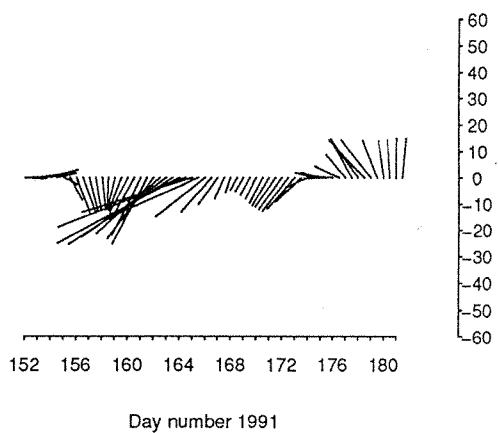
GSP90-IS6-80m, APRIL 1991



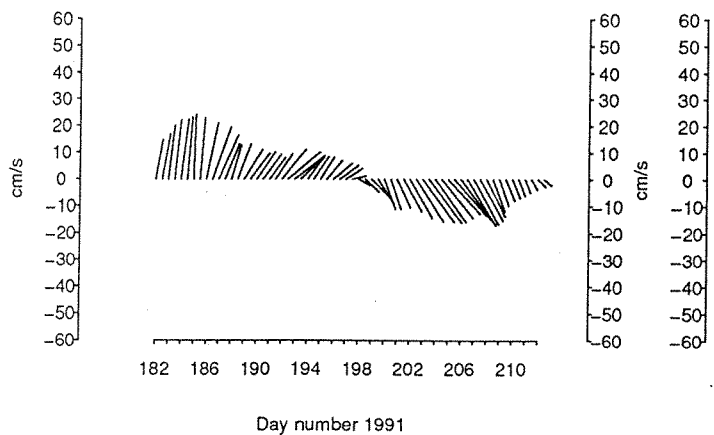
GSP90-IS6-80m, MAY 1991



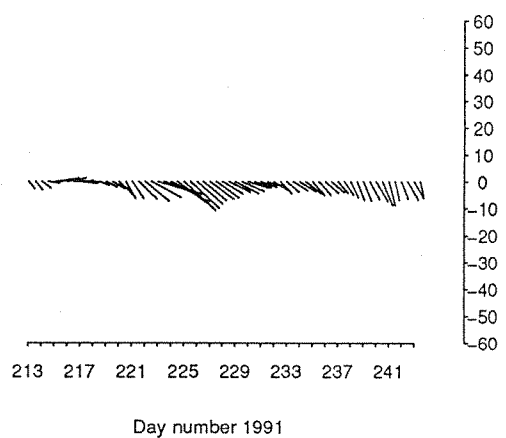
GSP90-IS6-80m, JUNE 1991



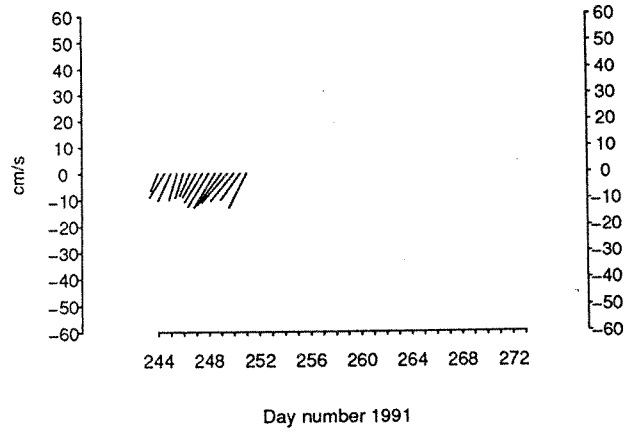
GSP90-IS6-80m, JULY 1991



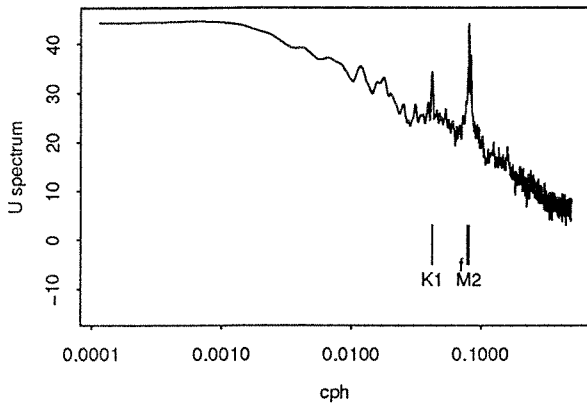
GSP90-IS6-80m, AUGUST 1991



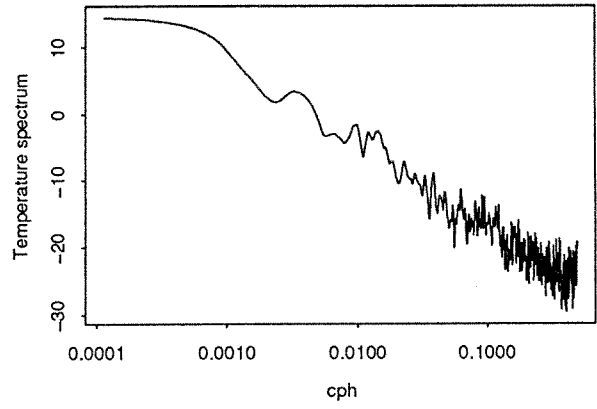
GSP90-IS6-80m, SEPTEMBER 1991



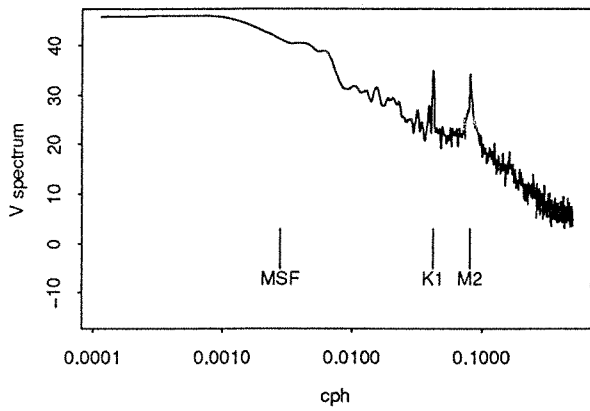
GSP90-IS6-80m



GSP90-IS6-80m



GSP90-IS6-80m



GSP-IS6-80m, Denmark Strait section, 9/9/90-9/9/91. Harmonic analysis of currents, showing the significant tidal constituents.

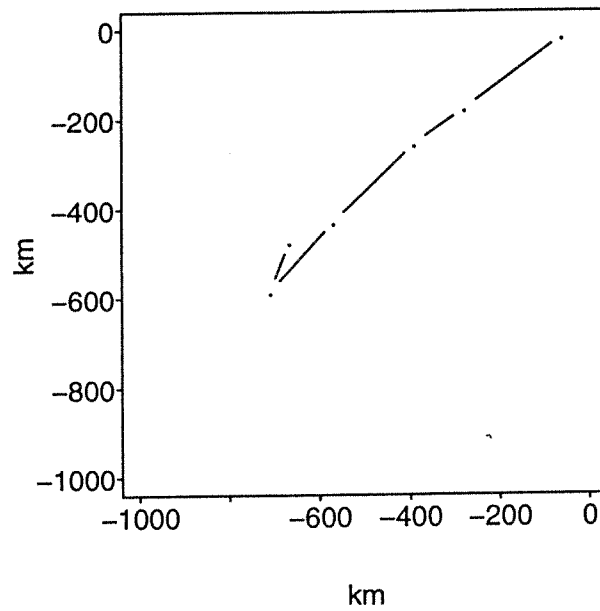
Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	8.9	0.0	64.8	180.0	115.2	244.8
SA	.00011407	8.9	1.0	44.1	147.7	103.6	191.8
SSA	.00022816	3.0	0.6	167.3	89.7	282.4	257.0
MSM	.00130978	4.5	-1.0	175.9	105.5	289.6	281.4
MM	.00151215	6.6	-2.2	23.3	147.3	123.9	170.6
MF	.00300509	2.3	0.2	77.1	77.5	0.3	154.6
O1	.03873065	1.3	-1.1	148.2	193.9	45.7	342.2
P1	.04155259	1.8	-0.2	143.0	234.6	91.5	17.6
S1	.04166667	1.5	-0.4	158.4	67.3	268.9	225.8
K1	.04178075	4.2	-1.5	128.7	241.8	113.1	10.6
PSI1	.04189482	1.3	-0.4	116.2	92.9	336.7	209.1
PHI1	.04200891	1.1	-0.2	161.7	149.9	348.1	311.6
N2	.07899925	2.9	-0.1	12.1	233.0	220.9	245.1
H1	.08039733	1.0	-0.6	151.8	11.8	220.0	163.6
M2	.08051140	12.2	2.0	11.4	259.2	247.8	270.7
H2	.08062547	1.3	-1.0	133.3	159.5	26.3	292.8
LDA2	.08182118	1.4	-1.3	108.6	64.4	315.8	173.0
S2	.08333334	5.6	-0.2	11.9	303.4	291.5	315.2
K2	.08356149	1.6	-0.4	29.2	312.3	283.2	341.5

AA007301
IS6 - 475m

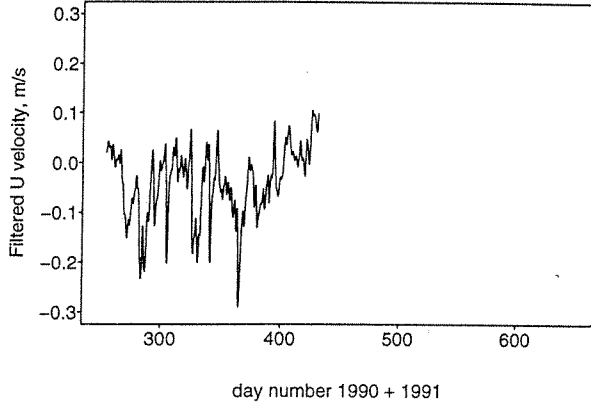
GSP-IS6-475m, Denmark Strait section, 10/9/90-6/3/91. Means and deviations of filtered current and temperature

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)
Total:	-0.041 (0.072)	-0.027 (0.083)	0.96 (0.37)
Sep 90	-0.029(0.063)	-0.009(0.070)	0.46(0.06)
Oct 90	-0.082(0.073)	-0.060(0.079)	0.61(0.09)
Nov 90	-0.044(0.069)	-0.030(0.080)	0.80(0.11)
Dec 90	-0.067(0.074)	-0.065(0.084)	1.00(0.24)
Jan 91	-0.053(0.045)	-0.058(0.055)	1.44(0.20)
Feb 91	0.018(0.031)	0.046(0.033)	1.29(0.09)

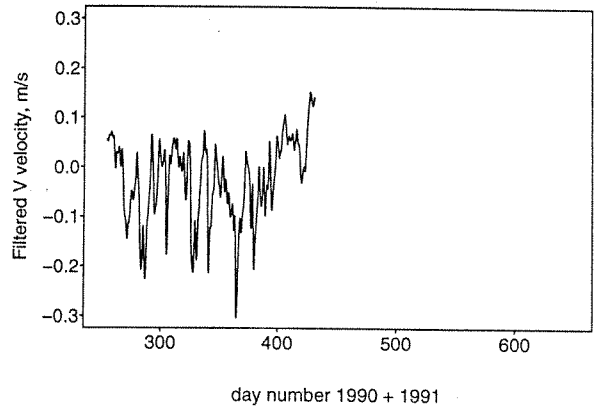
Prog.Vector GSP90-IS6-475m



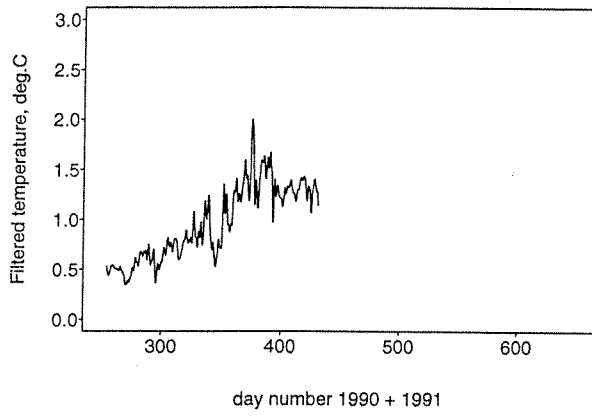
GSP90-IS6-475m



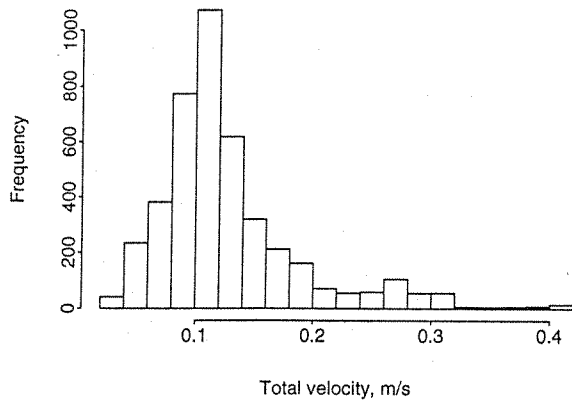
GSP90-IS6-475m



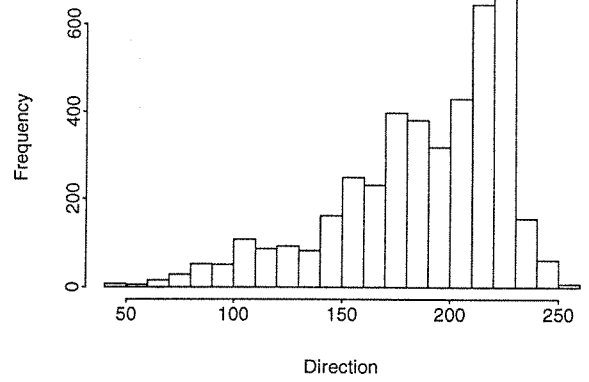
GSP90-IS6-475m



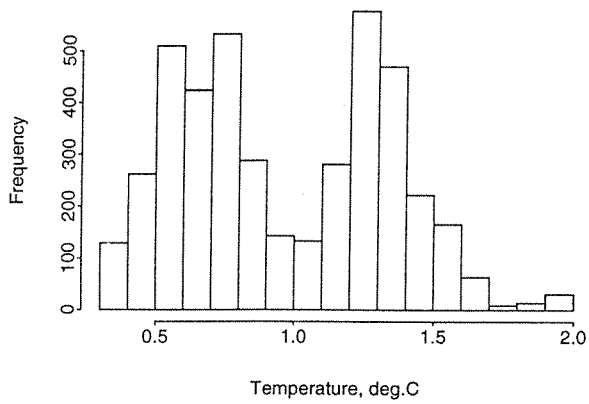
GSP90-IS6-475m



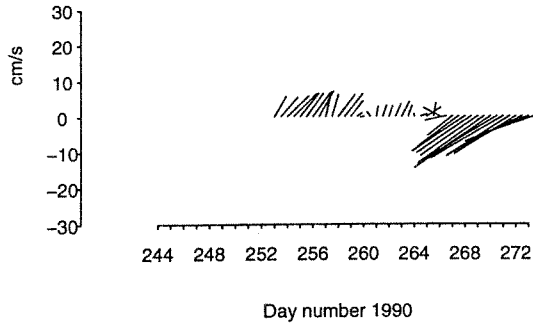
GSP90-IS6-475m



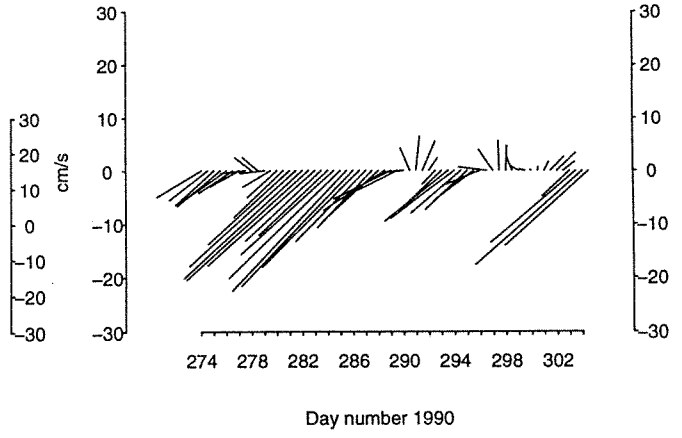
GSP90-IS6-475m



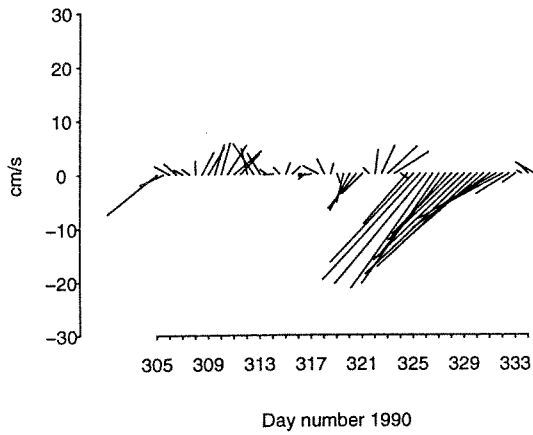
GSP90-IS6-475m, SEPTEMBER 1990



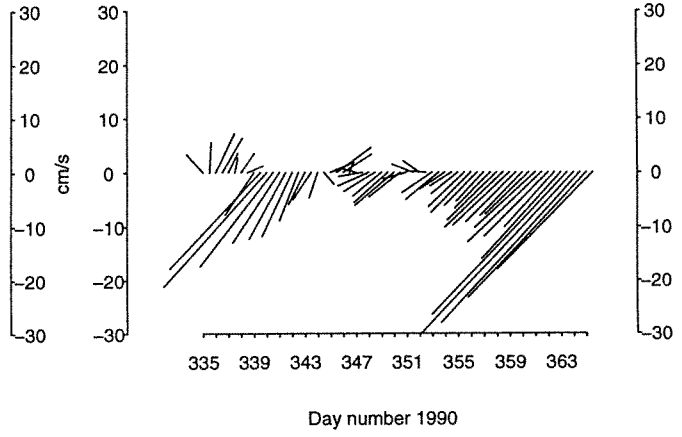
GSP90-IS6-475m, OCTOBER 1990



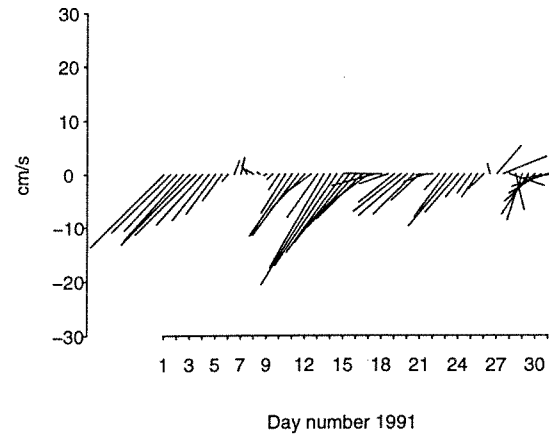
GSP90-IS6-475m, NOVEMBER 1990



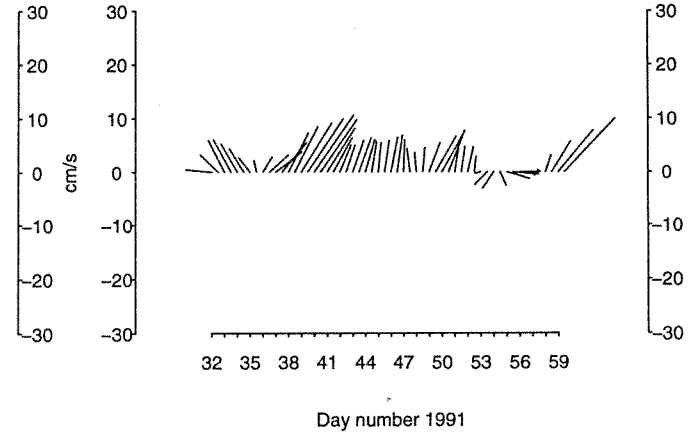
GSP90-IS6-475m, DECEMBER 1990



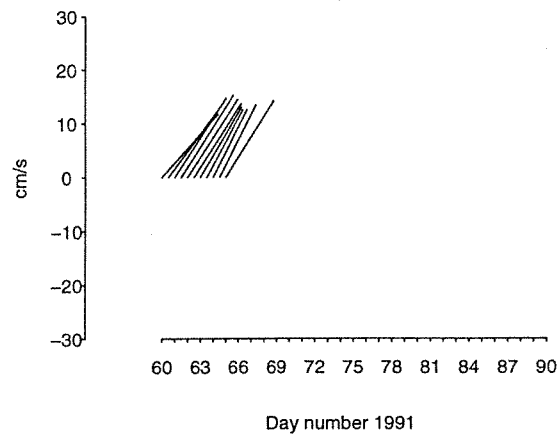
GSP90-IS6-475m, JANUARY 1991

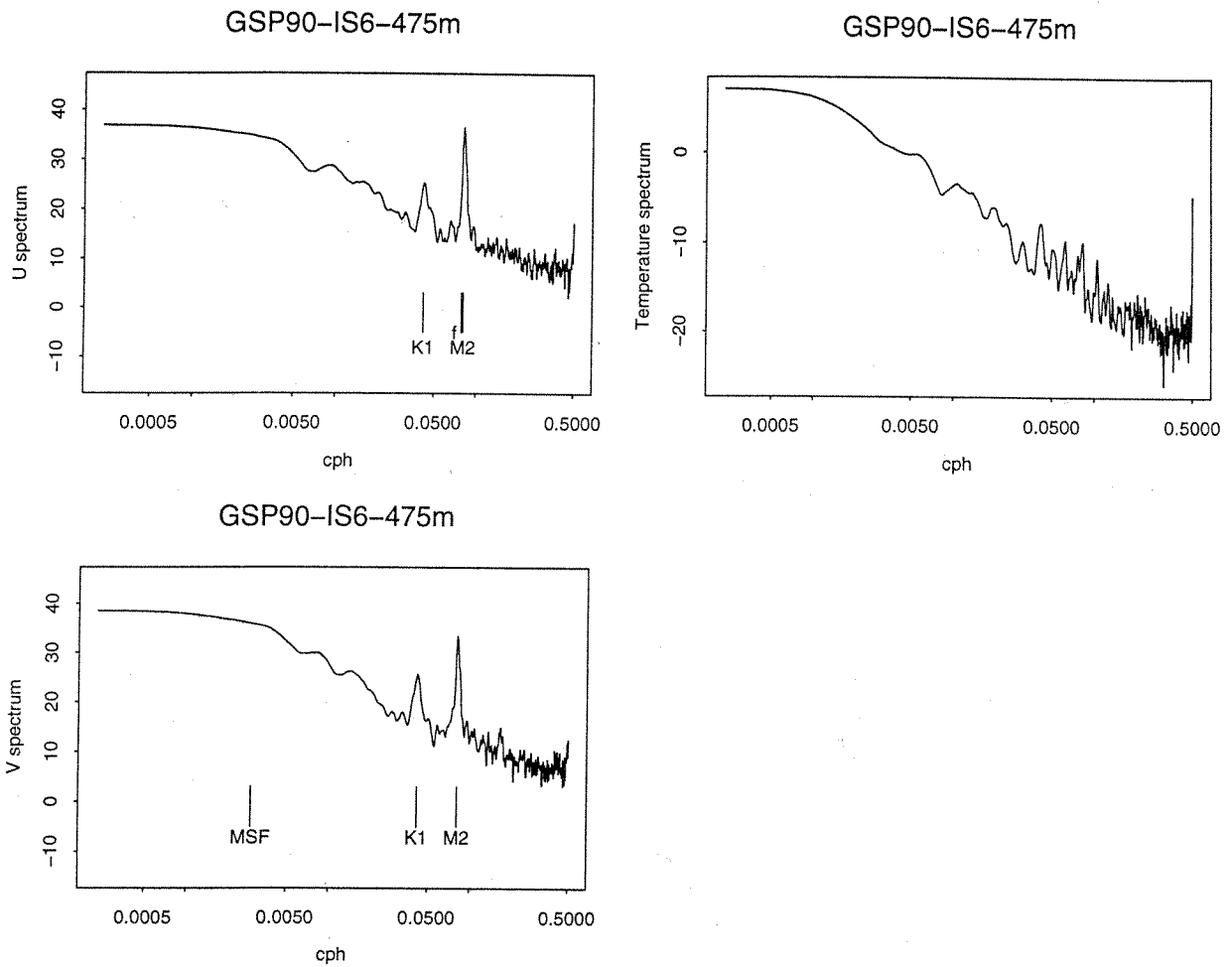


GSP90-IS6-475m, FEBRUARY 1991



GSP90-IS6-475m, MARCH 1991





GSP-IS6-475m, Denmark Strait section, 8/9/90-7/3/91. Harmonic analysis of currents, showing the significant tidal constituents.

Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	4.8	0.0	33.0	180.0	147.0	213.0
MM	.00151215	3.7	0.1	42.6	109.8	67.2	152.4
MSF	.00282193	1.4	0.2	69.5	38.6	329.1	108.2
K1	.04178075	2.0	0.3	125.2	202.4	77.3	327.6
N2	.07899925	2.1	0.0	47.0	277.2	230.2	324.2
M2	.08051140	8.3	1.6	35.6	291.7	256.1	327.3
S2	.08333334	3.8	0.9	38.5	337.4	298.9	16.0

AA088601
IS6 - 750m

GSP-IS6-750m, Denmark Strait section, 10/9/90-11/9/91. Means and deviations of filtered current and temperature.*

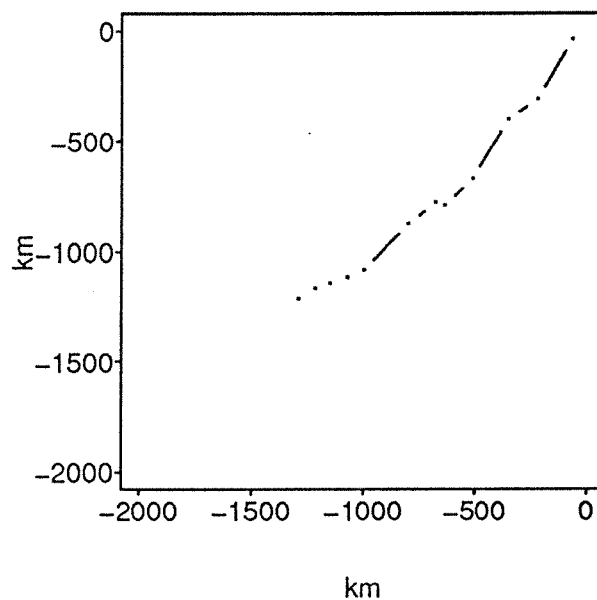
Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)
Total:	-0.042 (0.048)	-0.033 (0.061)	0.11 (0.29)
Sep 90	-0.030(0.032)	-0.021(0.042)	-0.01(0.04)
Oct 90	-0.059(0.055)	-0.061(0.069)	0.17(0.20)
Nov 90	-0.051(0.055)	-0.037(0.065)	0.17(0.21)
Dec 90	-0.060(0.052)	-0.061(0.067)	0.28(0.33)
Jan 91	-0.047(0.050)	-0.044(0.065)	0.66(0.42)
Feb 91	-0.017(0.037)	0.005(0.045)	-0.01(0.14)
Mar 91	-0.046(0.050)	-0.036(0.063)	-0.17(0.15)
Apr 91	-0.077(0.051)	-0.080(0.070)	0.10(0.23)
May 91	-0.027(0.052)	-0.013(0.060)	0.10(0.12)
Jun 91	-0.031(0.043)	-0.010(0.051)	-0.02(0.07)
Jul 91	-0.024(0.018)	-0.008(0.022)	-0.03(0.05)
Aug 91	-0.029(0.017)	-0.019(0.029)	-0.02(0.03)
Sep 91	-0.039(0.012)	-0.030(0.014)	0.07(0.03)

* NOTICE. During the deployment period, clock problems were noticed for the current meter (AA088601).

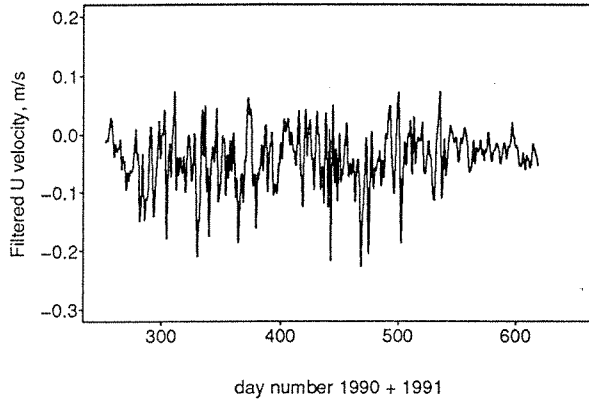
Based on a linear calculation it was estimated to be in excess of 11 minutes per day (24 hours).

Despite this malfunction the data were analysed without any correction in time.

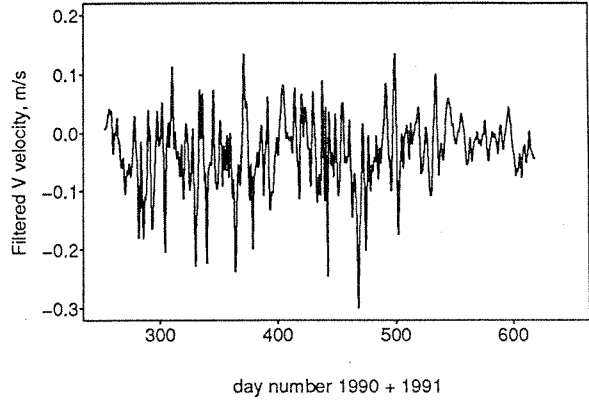
Prog. Vector GSP90-IS6-750m



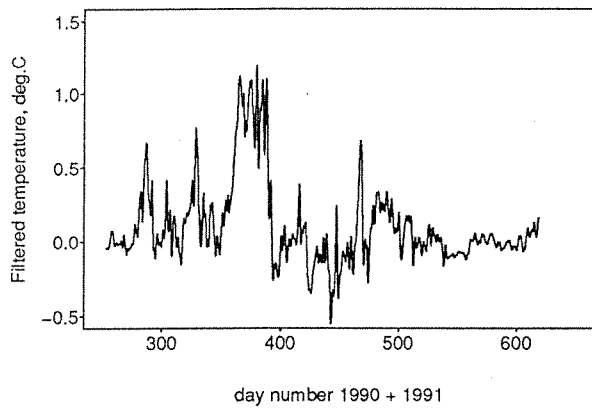
GSP90-IS6-750m



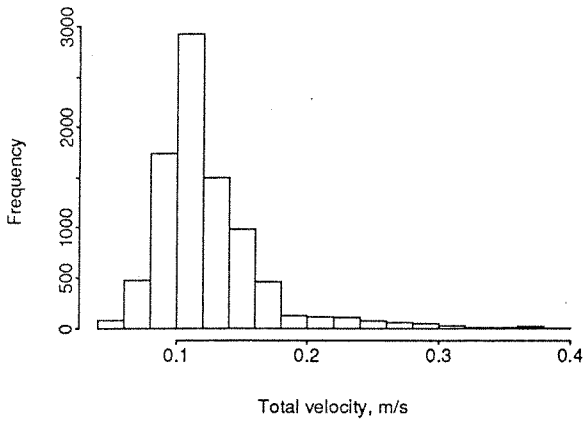
GSP90-IS6-750m



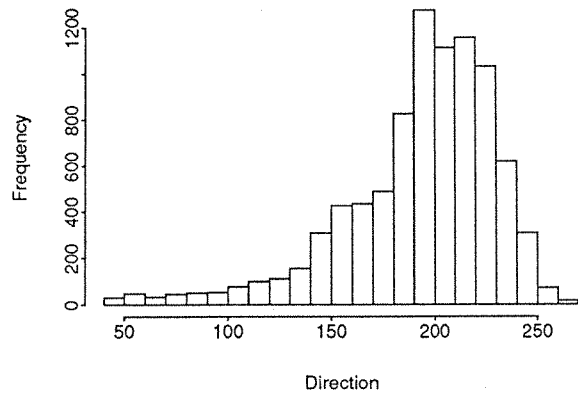
GSP90-IS6-750m



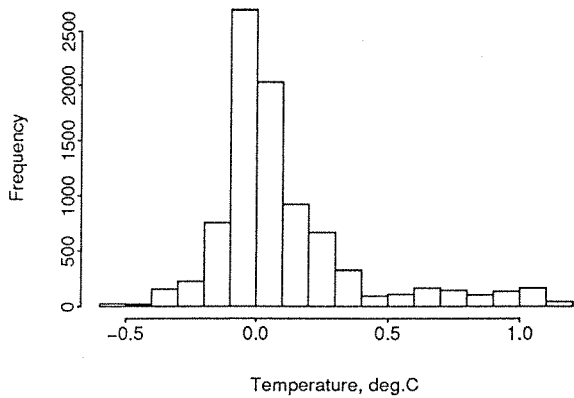
GSP90-IS6-750m



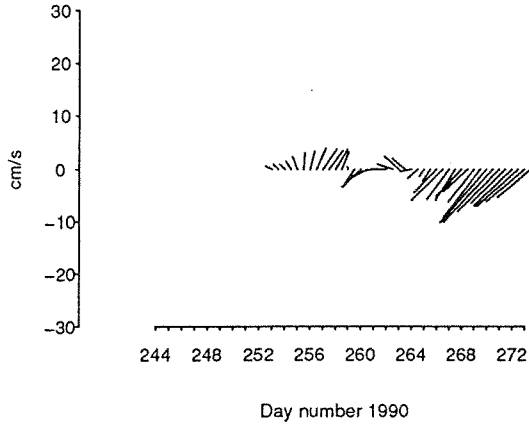
GSP90-IS6-750m



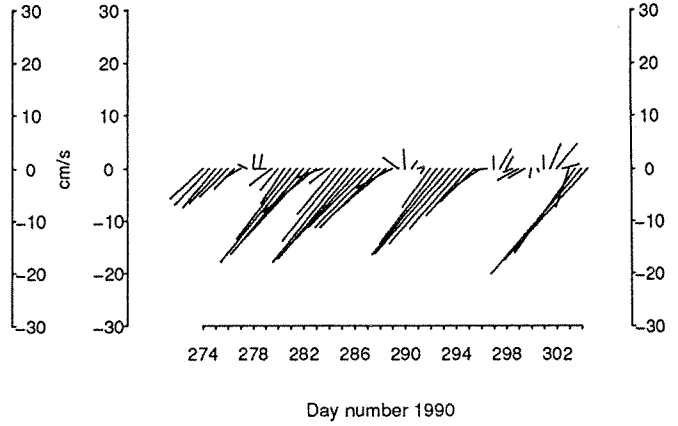
GSP90-IS6-750m



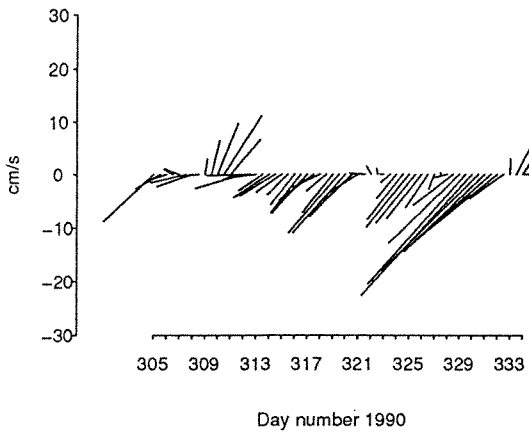
GSP90-IS6-750m, SEPTEMBER 1990



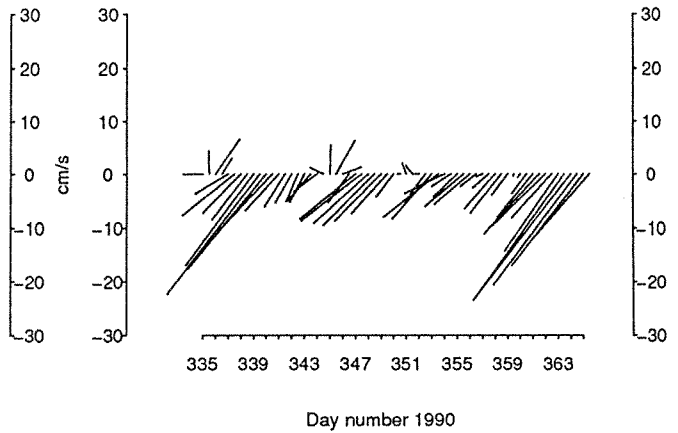
GSP90-IS6-750m, OCTOBER 1990



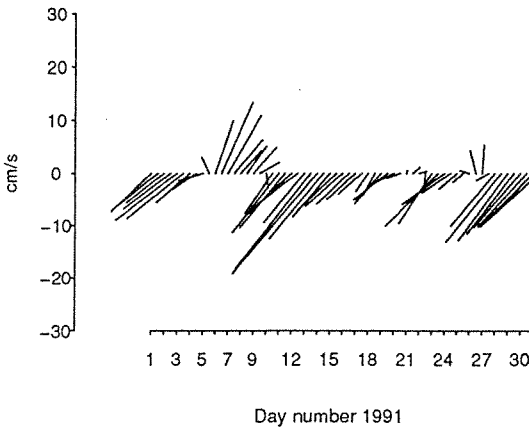
GSP90-IS6-750m, NOVEMBER 1990



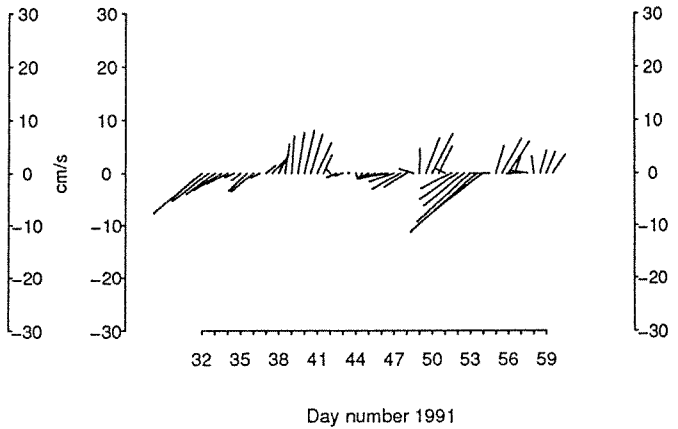
GSP90-IS6-750m, DECEMBER 1990



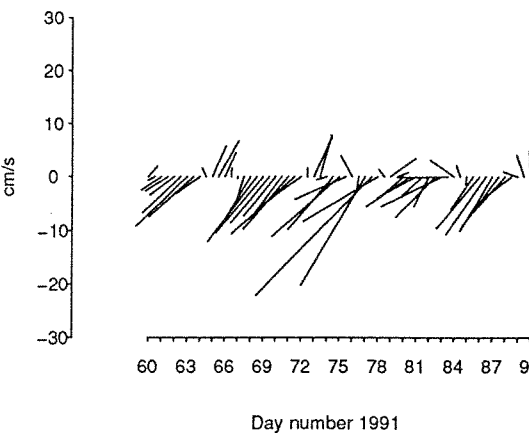
GSP90-IS6-750m, JANUARY 1991



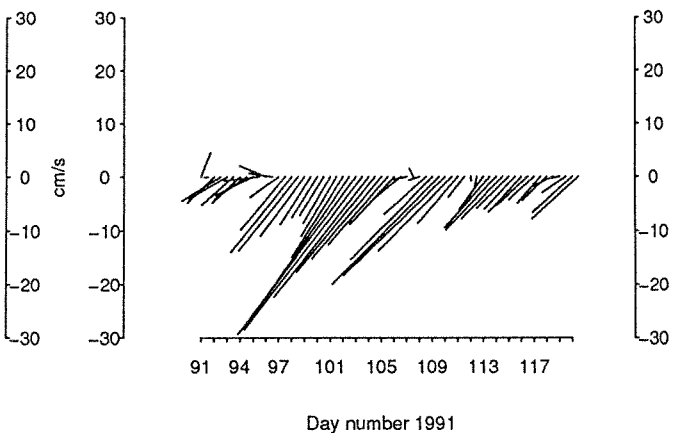
GSP90-IS6-750m, FEBRUARY 1991



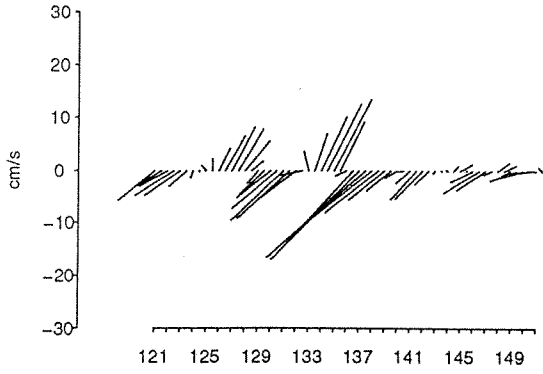
GSP90-IS6-750m, MARCH 1991



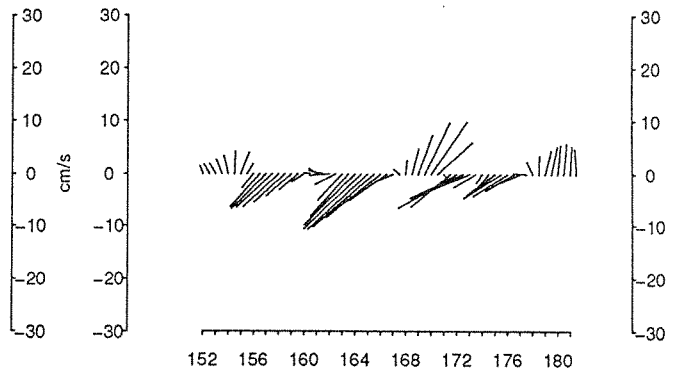
GSP90-IS6-750m, APRIL 1991



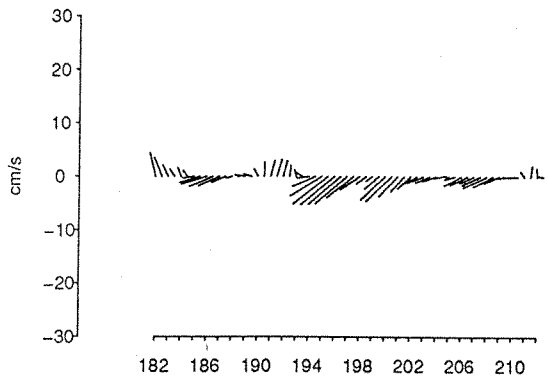
GSP90-IS6-750m, MAY 1991



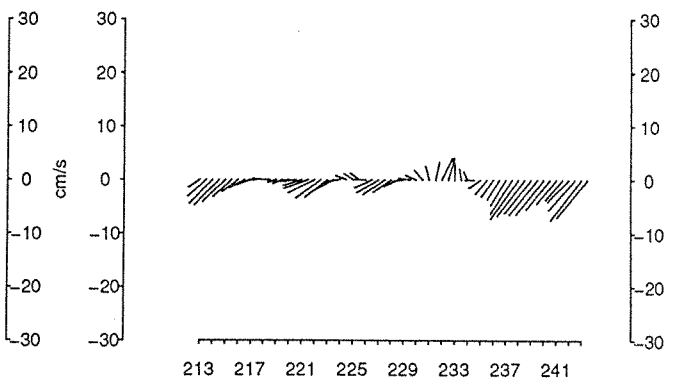
GSP90-IS6-750m, JUNE 1991



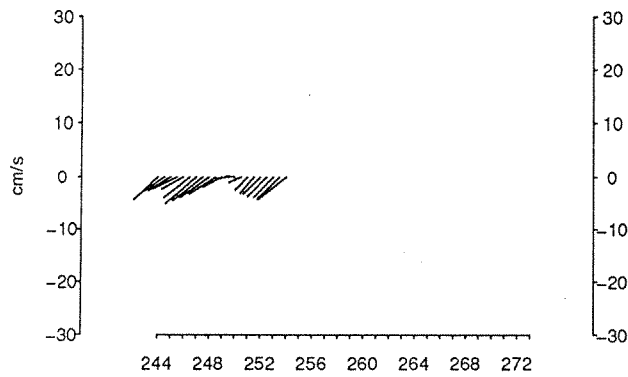
GSP90-IS6-750m, JULY 1991



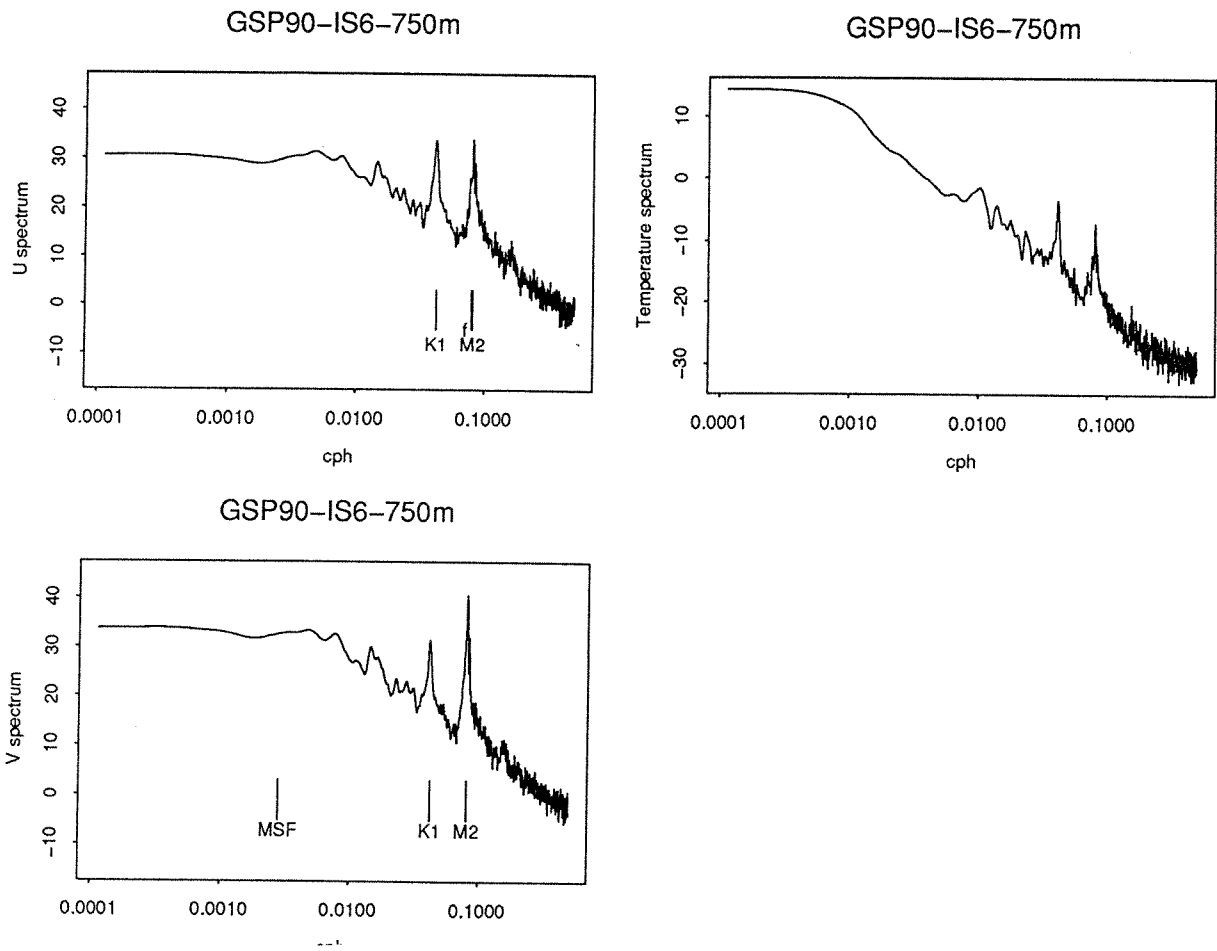
GSP90-IS6-750m, AUGUST 1991



GSP90-IS6-750m, SEPTEMBER 1991



Day number 1991



GSP-IS6-750m, Denmark Strait section, 9/9/90-12/9/91. Harmonic analysis of currents, showing the significant tidal constituents.

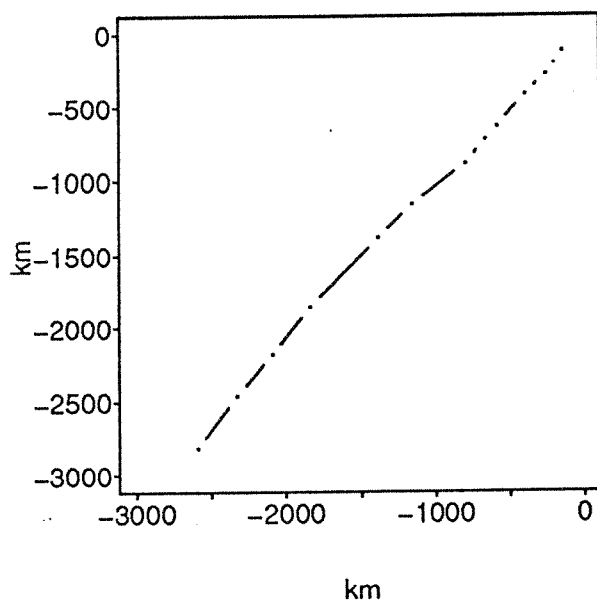
Name	Frequency cph	Major axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	5.3	0.0	37.9	180.0	142.1	217.9
SA	.00011407	1.8	-0.1	56.3	179.0	122.7	235.2
SSA	.00022816	2.0	-0.1	52.4	250.1	197.7	302.5
MM	.00151215	1.4	-0.2	48.4	144.4	96.0	192.8
MSF	.00282193	1.0	-0.2	53.5	150.4	97.0	203.9
TAU1	.03895881	1.2	0.4	29.3	181.0	151.7	210.3
PI1	.04143851	1.1	0.7	2.0	128.7	126.7	130.7
S1	.04166667	2.0	1.2	155.1	238.5	83.4	33.5
K1	.04178075	1.3	0.4	166.1	180.1	13.9	346.2
PSI1	.04189482	1.0	0.9	6.3	125.5	119.2	131.8
N2	.07899925	1.3	0.1	52.9	286.0	233.2	338.9
NU2	.07920162	1.4	-0.1	74.3	70.2	355.9	144.6
H1	.08039733	4.8	1.1	66.8	137.9	71.1	204.7
M2	.08051140	5.1	1.1	68.1	312.2	244.1	20.3
H2	.08062547	2.5	0.2	63.4	302.5	239.1	5.9
T2	.08321926	1.6	0.3	56.9	353.9	297.0	50.8
S2	.08333334	2.5	1.0	59.5	348.3	288.8	47.7

AA790210
IS7 - 80m

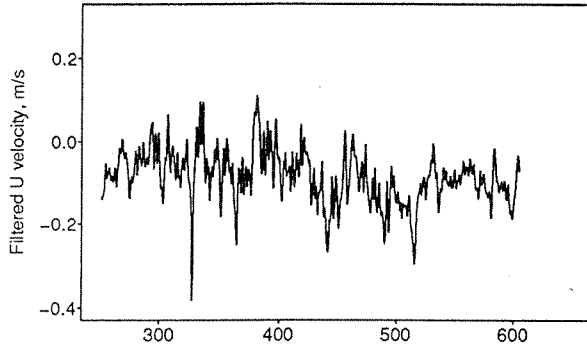
GSP-IS7-80m, Denmark Strait section, 8/9/90-28/8/91. Means and deviations of filtered current, temperature and salinity

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)	Salinity psu mean(st.dev.)
Total:	-0.085 (0.065)	-0.092 (0.062)	1.47 (1.07)	34.69 (0.13)
Sep 90	-0.067(0.036)	-0.064(0.055)	2.07(0.96)	34.75(0.09)
Oct 90	-0.047(0.047)	-0.057(0.043)	2.60(1.03)	34.58(0.17)
Nov 90	-0.055(0.082)	-0.053(0.045)	2.74(0.70)	34.65(0.08)
Dec 90	-0.071(0.065)	-0.080(0.049)	1.36(0.67)	34.65(0.11)
Jan 91	-0.030(0.064)	-0.035(0.060)	1.41(0.48)	34.72(0.05)
Feb 91	-0.055(0.038)	-0.067(0.042)	0.58(0.19)	34.67(0.04)
Mar 91	-0.136(0.059)	-0.101(0.056)	1.80(0.63)	34.86(0.08)
Apr 91	-0.088(0.052)	-0.088(0.042)	1.52(0.49)	34.81(0.07)
May 91	-0.169(0.051)	-0.177(0.050)	0.07(0.67)	34.56(0.09)
Jun 91	-0.098(0.035)	-0.125(0.038)	0.63(0.98)	34.66(0.12)
Jul 91	-0.089(0.023)	-0.105(0.032)	1.40(0.93)	34.71(0.08)
Aug 91	-0.112(0.043)	-0.148(0.054)	1.62(0.87)	34.65(0.11)

Prog.Vector GSP90-IS7-80m

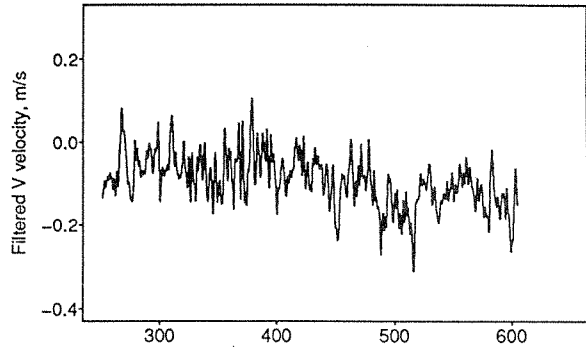


GSP90-IS7-80m



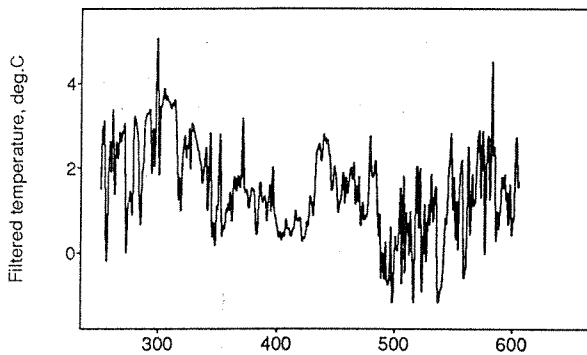
day number 1990 + 1991

GSP90-IS7-80m



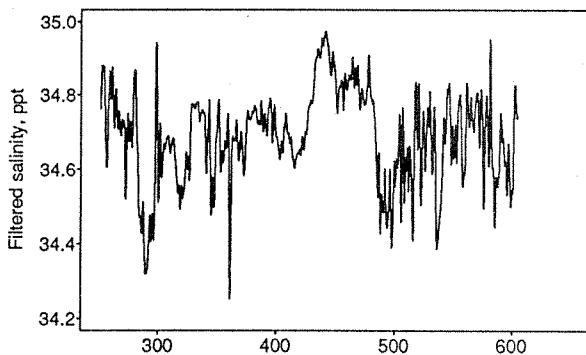
day number 1990 + 1991

GSP90-IS7-80m



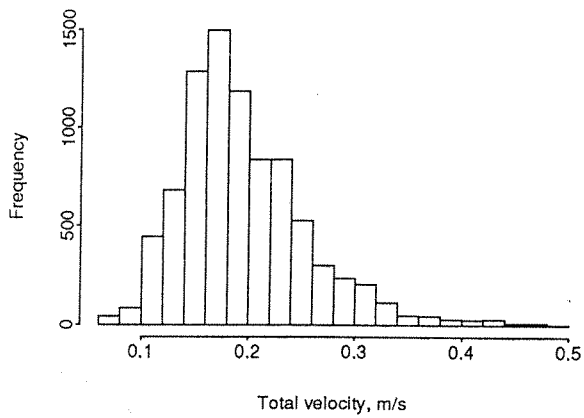
day number 1990 + 1991

GSP90-IS7-80m



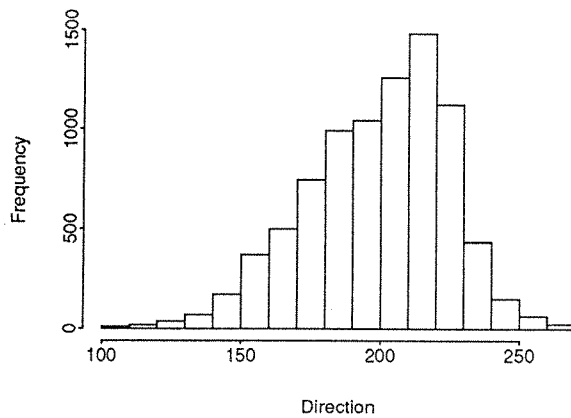
day number 1990 + 1991

GSP90-IS7-80m



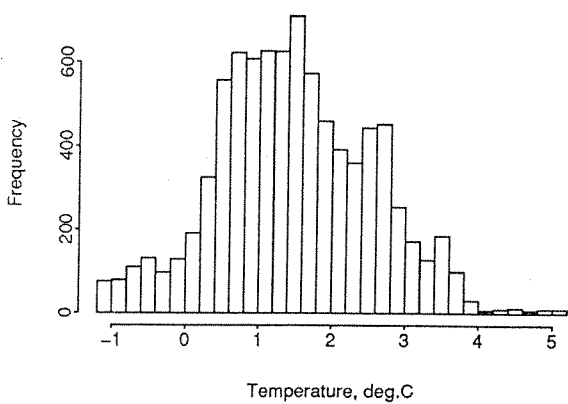
Total velocity, m/s

GSP90-IS7-80m



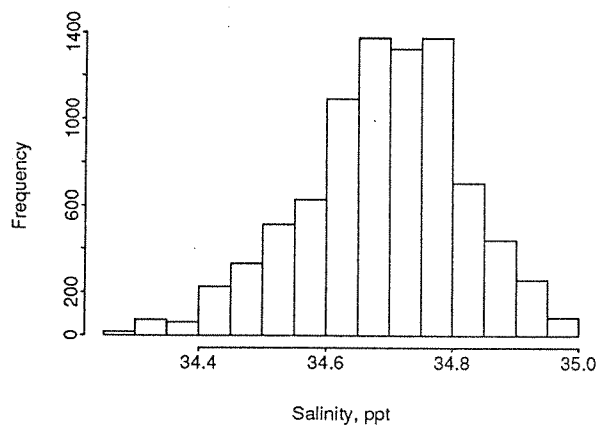
Direction

GSP90-IS7-80m



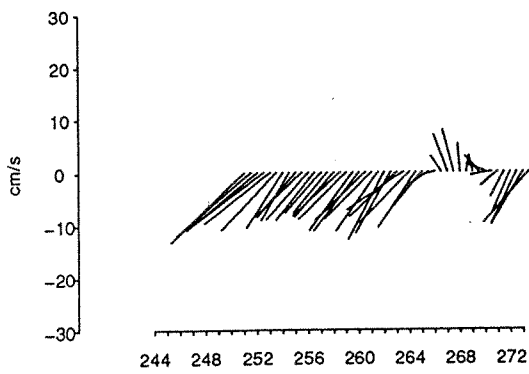
Temperature, deg.C

GSP90-IS7-80m



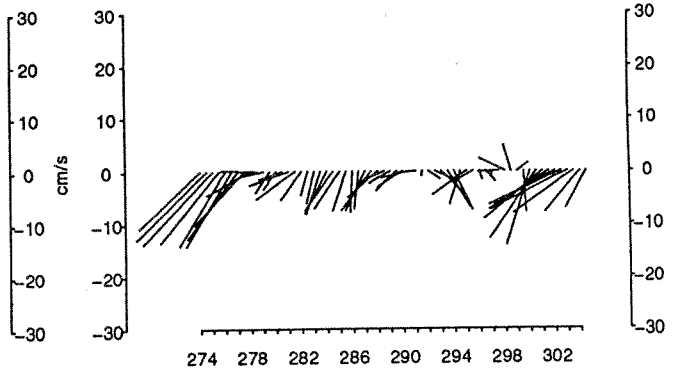
Salinity, ppt

GSP90-IS7-80m, SEPTEMBER 1990



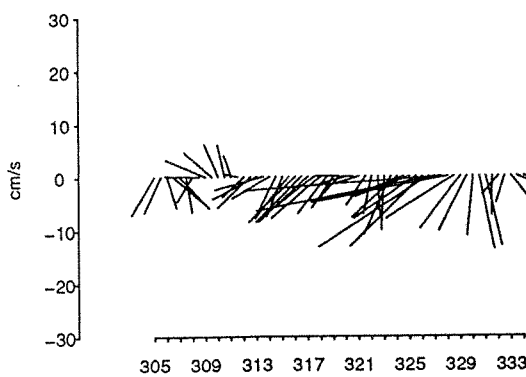
Day number 1990

GSP90-IS7-80m, OCTOBER 1990



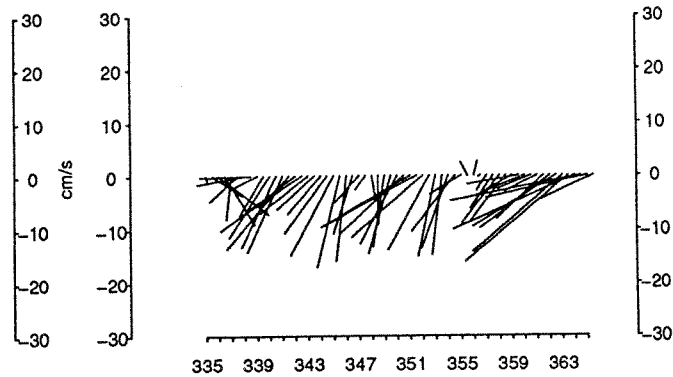
Day number 1990

GSP90-IS7-80m, NOVEMBER 1990



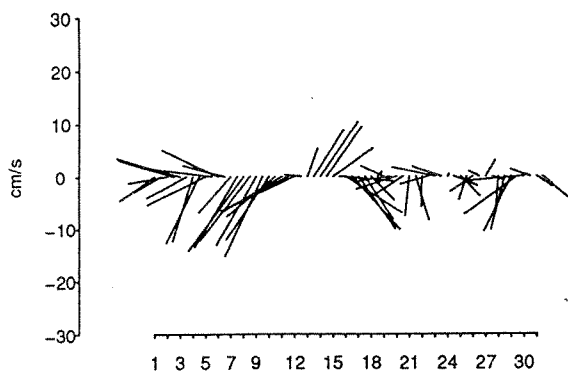
Day number 1990

GSP90-IS7-80m, DECEMBER 1990



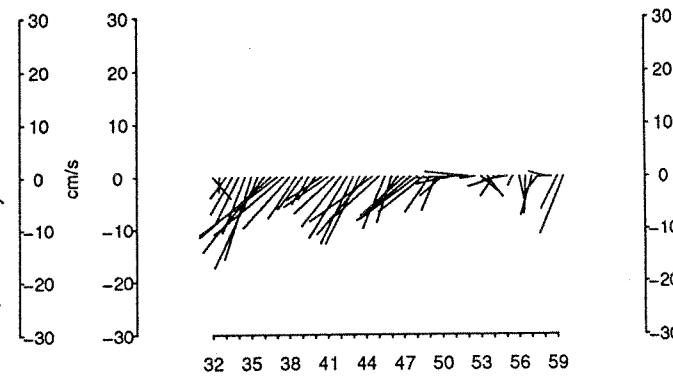
Day number 1990

GSP90-IS7-80m, JANUARY 1991



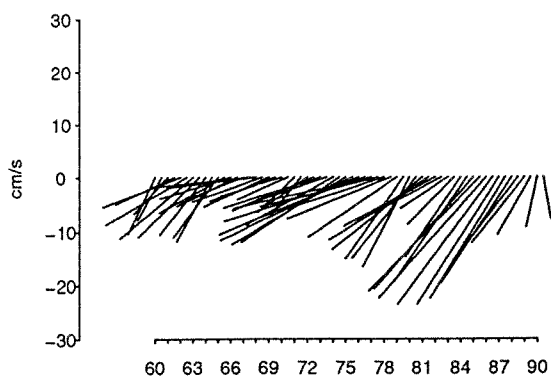
Day number 1991

GSP90-IS7-80m, FEBRUARY 1991



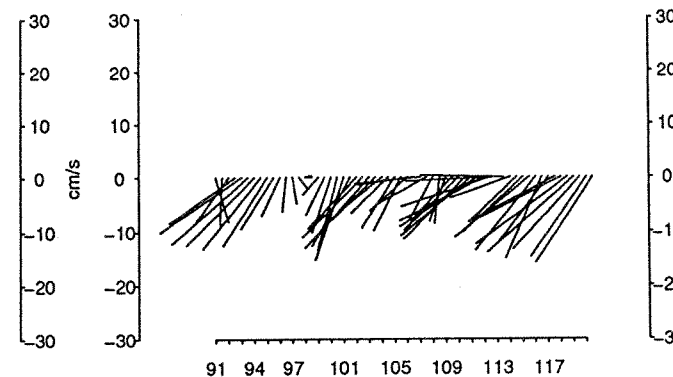
Day number 1991

GSP90-IS7-80m, MARCH 1991



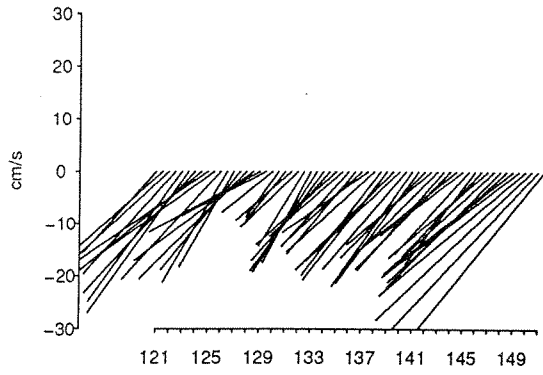
Day number 1991

GSP90-IS7-80m, APRIL 1991

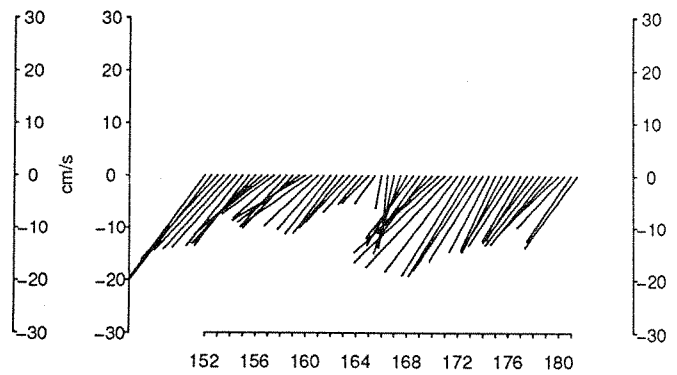


Day number 1991

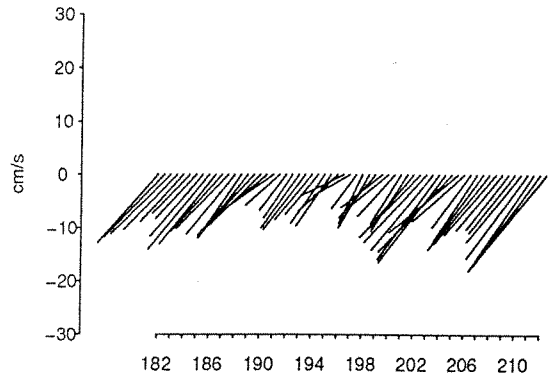
GSP90-IS7-80m, MAY 1991



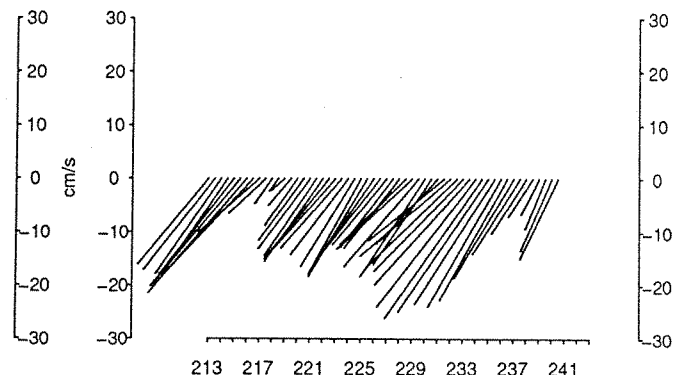
GSP90-IS7-80m, JUNE 1991



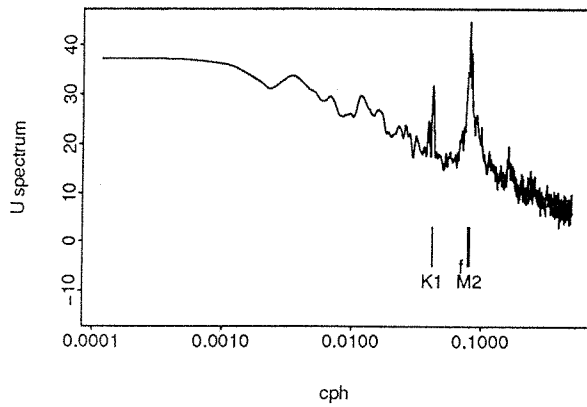
GSP90-IS7-80m, JULY 1991



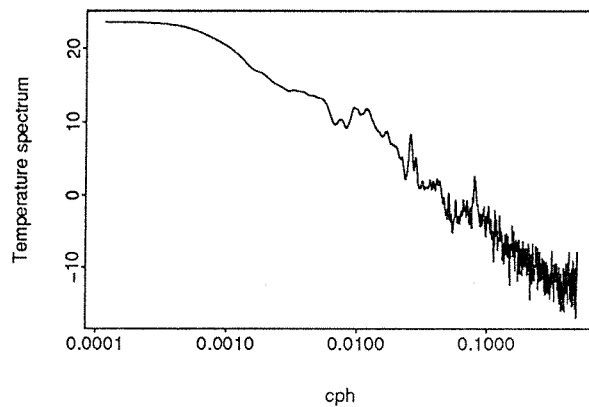
GSP90-IS7-80m, AUGUST 1991



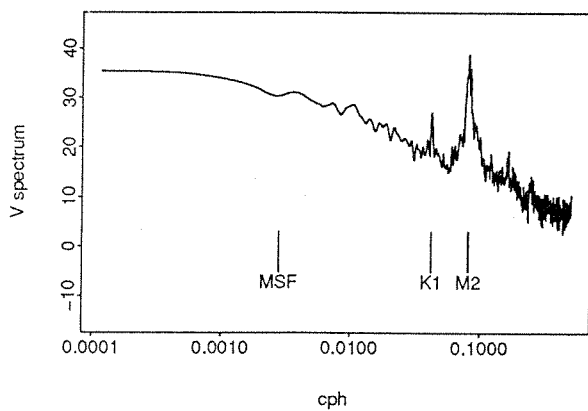
GSP90-IS7-80m



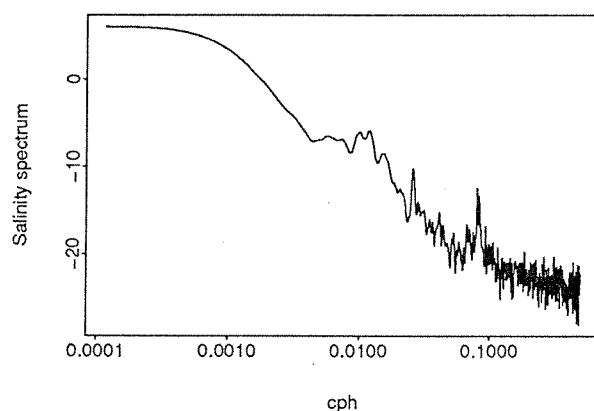
GSP90-IS7-80m



GSP90-IS7-80m



GSP90-IS7-80m



GSP-IS7-80m, Denmark Strait section, 7/9/90-29/8/91. Harmonic analysis of currents, showing the significant tidal constituents.

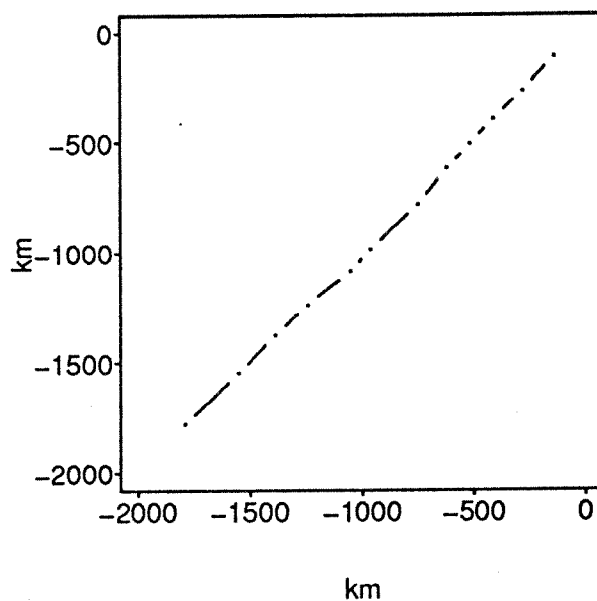
Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	12.5	0.0	47.2	180.0	132.8	227.2
SSA	.00022816	1.0	0.7	44.0	294.6	250.6	338.6
MSM	.00130978	1.0	0.1	55.9	329.0	273.1	24.9
MM	.00151215	1.5	-0.2	59.8	344.5	284.7	44.3
MF	.00305009	1.2	0.1	64.6	147.7	83.0	212.3
O1	.03873065	1.1	0.3	34.5	247.4	212.9	281.9
K1	.04178075	2.8	0.5	26.6	239.3	212.7	265.9
MU2	.07768947	1.1	-0.5	39.1	249.4	210.3	288.5
N2	.07899925	3.6	-0.3	50.7	284.4	233.7	335.2
M2	.08051140	13.2	2.3	23.8	278.3	254.5	302.1
LDA2	.08182118	1.3	-0.8	57.1	303.8	246.7	0.8
S2	.08333334	6.0	-0.4	36.7	332.1	295.4	8.8
K2	.08356149	2.2	-0.5	31.8	327.1	295.3	358.9

AA017801
IS7 - 475m

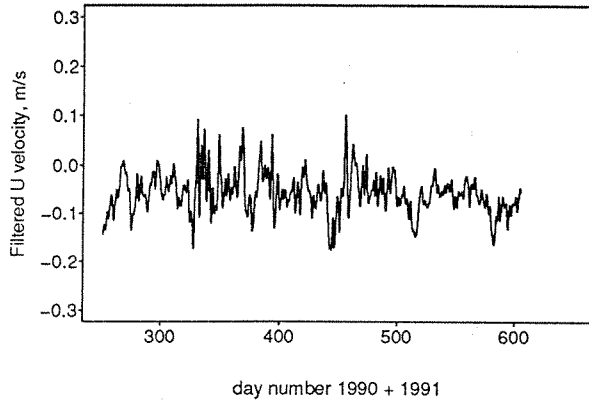
GSP-IS7-475m, Denmark Strait section, 8/9/90-29/8/91. Means and deviations of filtered current and temperature

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)
Total:	-0.058 (0.043)	-0.058 (0.035)	0.06 (0.07)
Sep 90	-0.065(0.043)	-0.055(0.031)	-0.02(0.04)
Oct 90	-0.054(0.033)	-0.058(0.039)	0.02(0.04)
Nov 90	-0.051(0.048)	-0.049(0.044)	-0.01(0.05)
Dec 90	-0.039(0.043)	-0.044(0.041)	0.06(0.08)
Jan 91	-0.040(0.055)	-0.040(0.037)	0.09(0.10)
Feb 91	-0.053(0.026)	-0.068(0.031)	0.09(0.03)
Mar 91	-0.080(0.054)	-0.075(0.032)	0.12(0.05)
Apr 91	-0.035(0.039)	-0.040(0.026)	0.03(0.03)
May 91	-0.071(0.039)	-0.057(0.022)	0.10(0.04)
Jun 91	-0.056(0.022)	-0.053(0.017)	0.09(0.04)
Jul 91	-0.061(0.019)	-0.064(0.021)	0.09(0.04)
Aug 91	-0.097(0.028)	-0.092(0.031)	0.09(0.05)

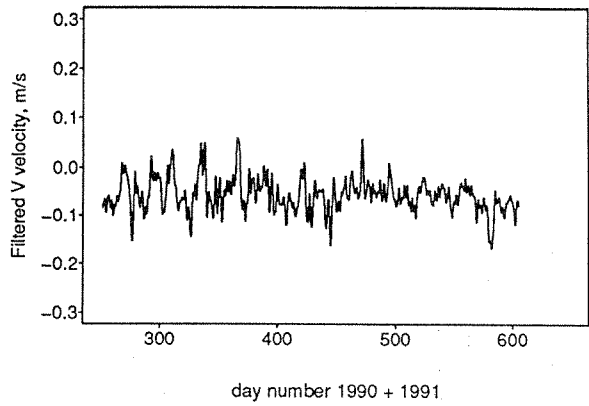
Prog.Vector GSP90-IS7-475m



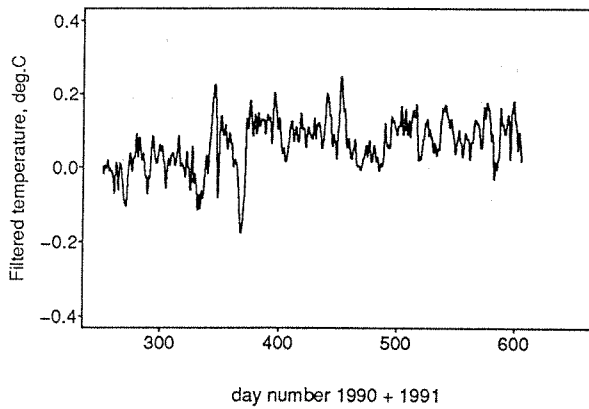
GSP90-IS7-475m



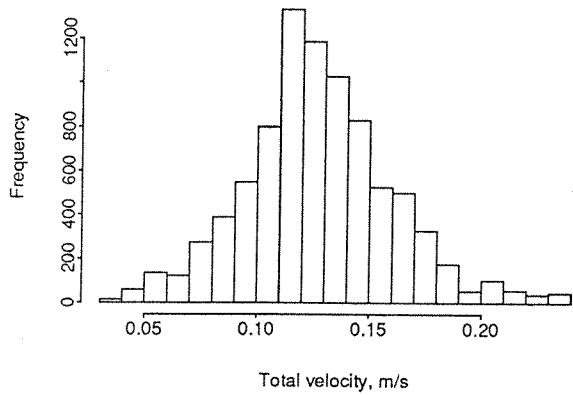
GSP90-IS7-475m



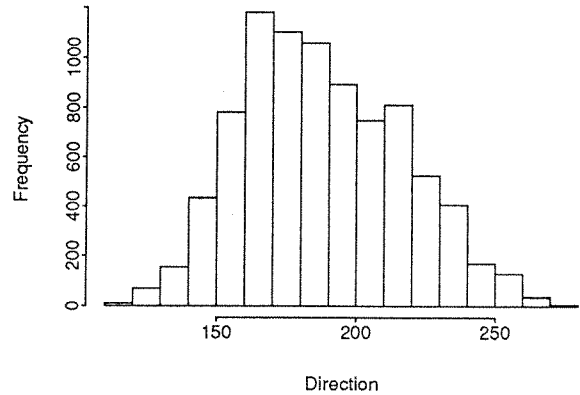
GSP90-IS7-475m



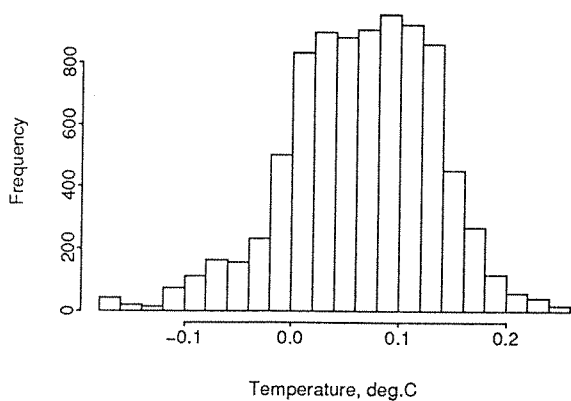
GSP90-IS7-475m



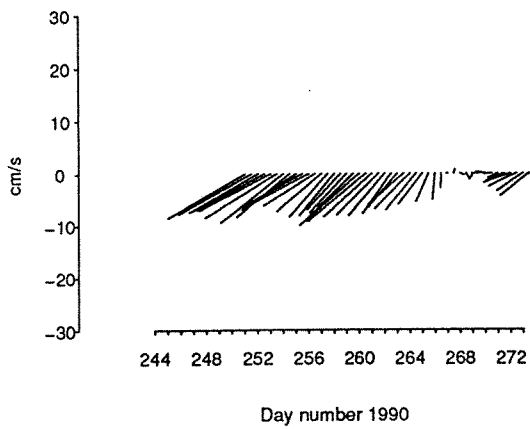
GSP90-IS7-475m



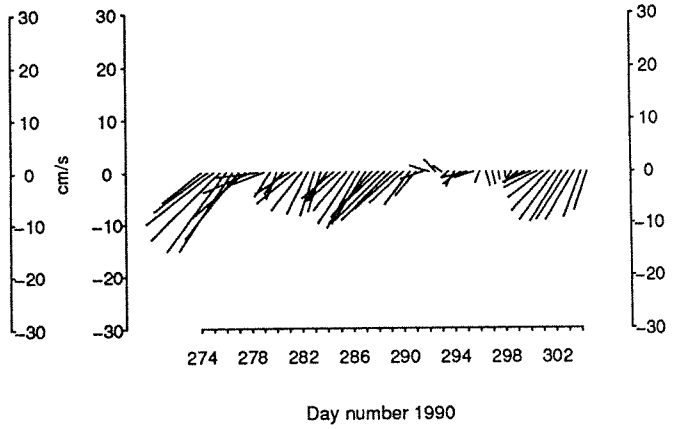
GSP90-IS7-475m



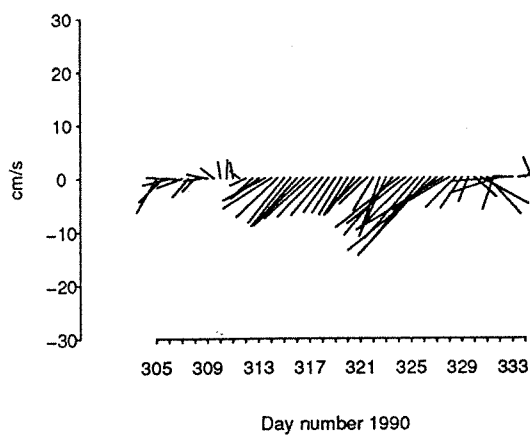
GSP90-IS7-475m, SEPTEMBER 1990



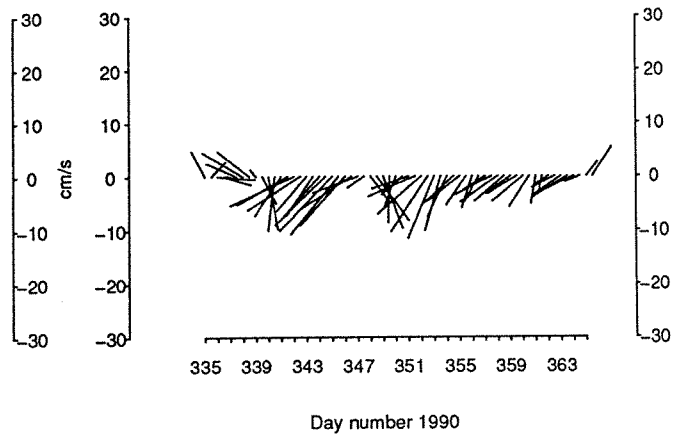
GSP90-IS7-475m, OCTOBER 1990



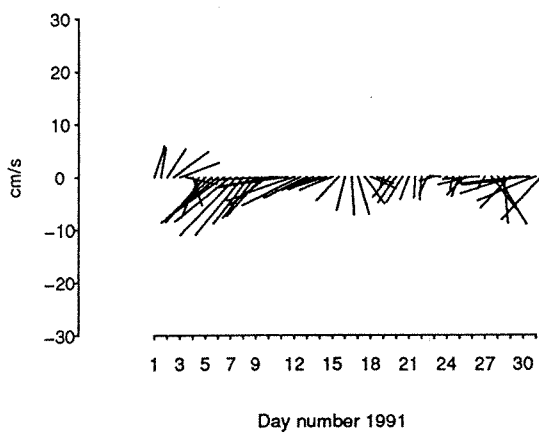
GSP90-IS7-475m, NOVEMBER 1990



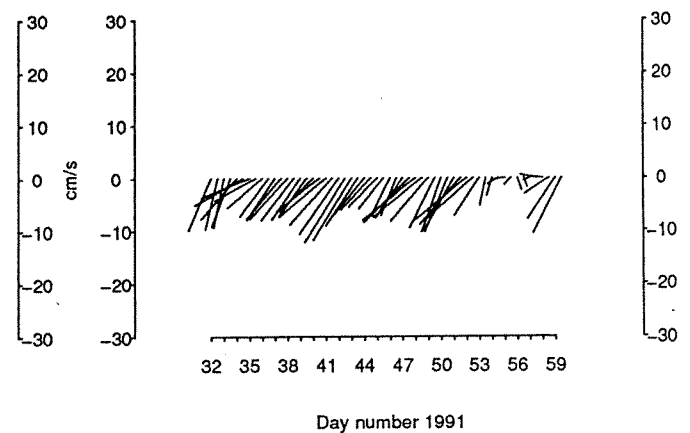
GSP90-IS7-475m, DECEMBER 1990



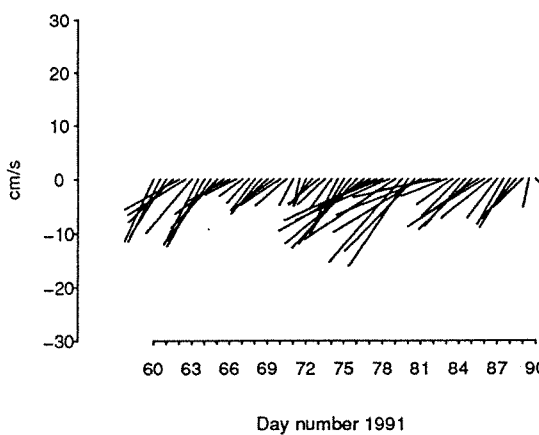
GSP90-IS7-475m, JANUARY 1991



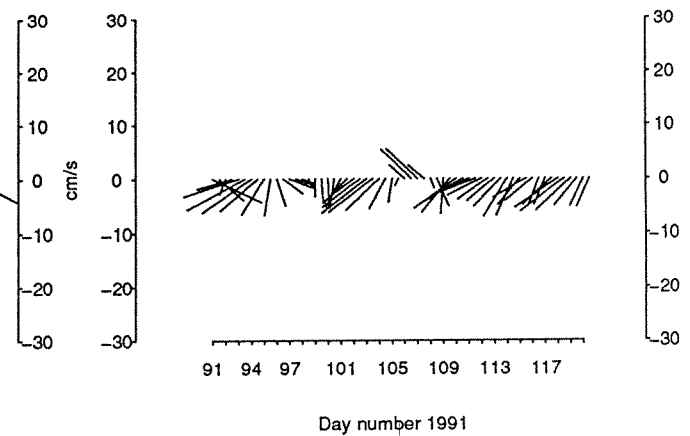
GSP90-IS7-475m, FEBRUARY 1991



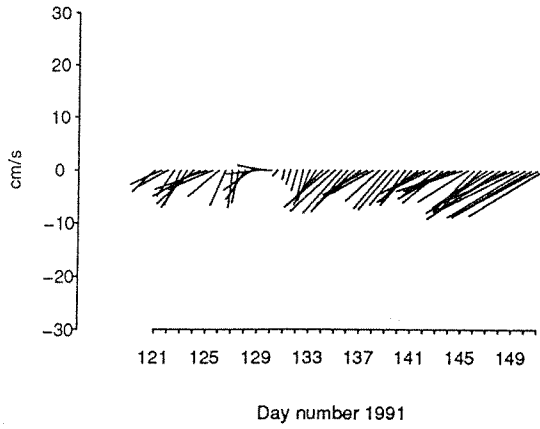
GSP90-IS7-475m, MARCH 1991



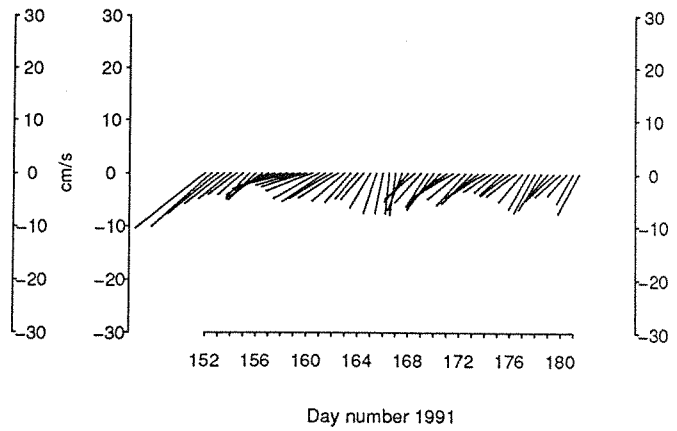
GSP90-IS7-475m, APRIL 1991



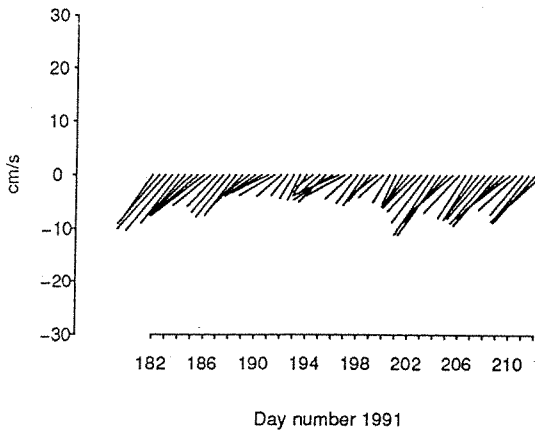
GSP90-IS7-475m, MAY 1991



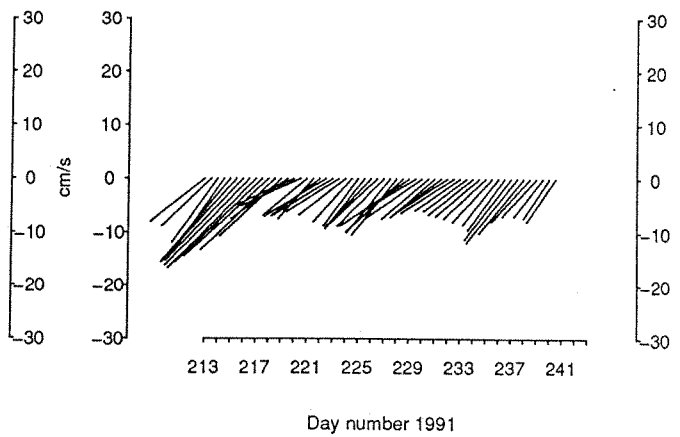
GSP90-IS7-475m, JUNE 1991



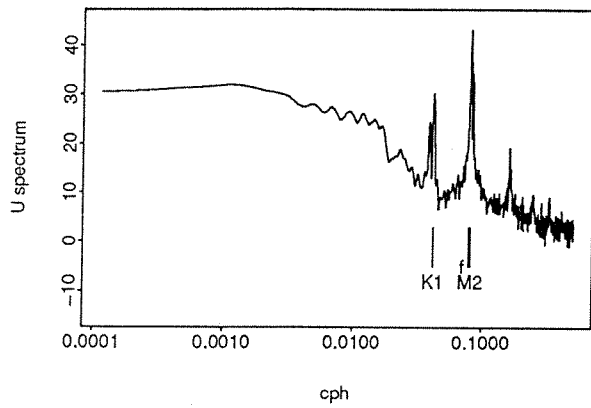
GSP90-IS7-475m, JULY 1991



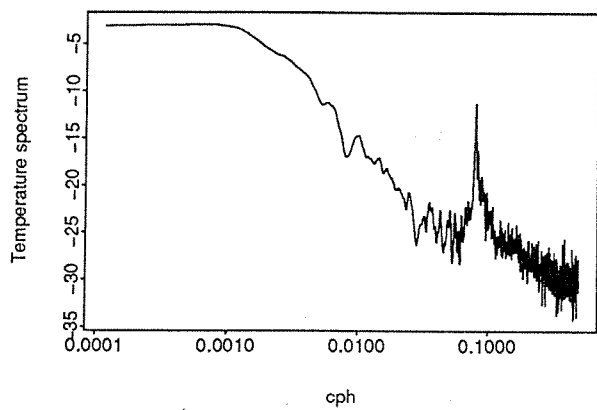
GSP90-IS7-475m, AUGUST 1991



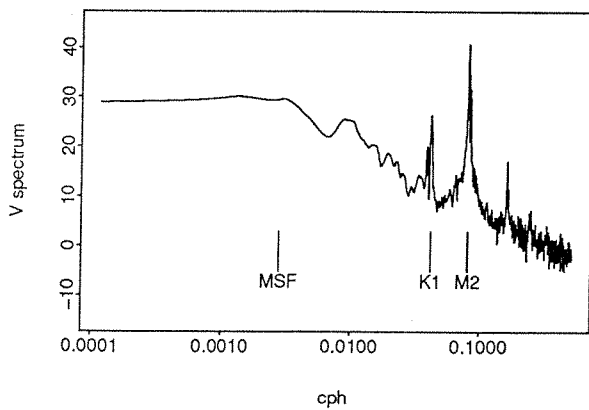
GSP90-IS7-475m



GSP90-IS7-475m



GSP90-IS7-475m



GSP-IS7-475m, Denmark Strait section, 7/9/90-29/8/91. Harmonic analysis of currents, showing the significant tidal constituents.

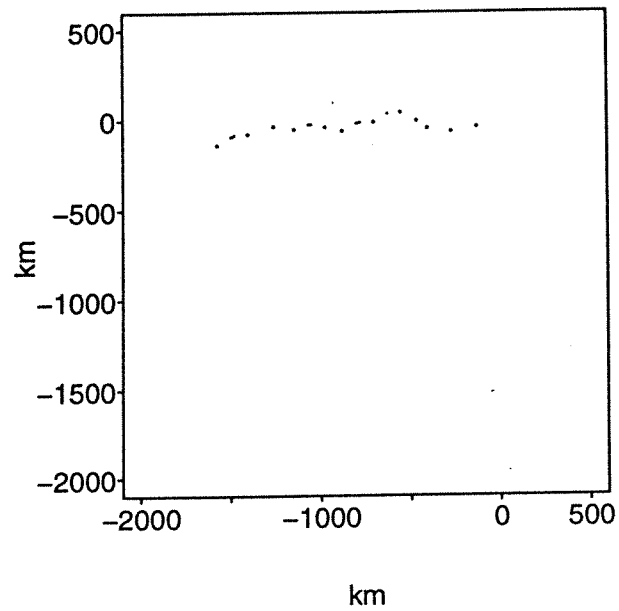
Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	8.2	0.0	44.7	180.0	135.3	224.7
SSA	.00022816	1.6	-0.1	51.7	118.3	66.6	170.0
MSM	.00130978	1.8	0.2	42.7	340.4	297.7	23.1
MF	.00305009	1.0	-0.4	74.8	168.6	93.8	243.4
O1	.03873065	1.2	0.4	27.9	268.7	240.8	296.5
K1	.04178075	2.5	0.3	31.6	262.9	231.3	294.5
N2	.07899925	2.9	-0.4	29.6	298.5	268.9	328.2
M2	.08051140	14.0	-1.1	36.4	328.9	292.5	5.3
S2	.08333334	4.8	0.0	36.0	9.6	333.6	45.6
K2	.08356149	1.5	0.1	35.5	3.7	328.2	39.3

AA064401
IS7 - 750m

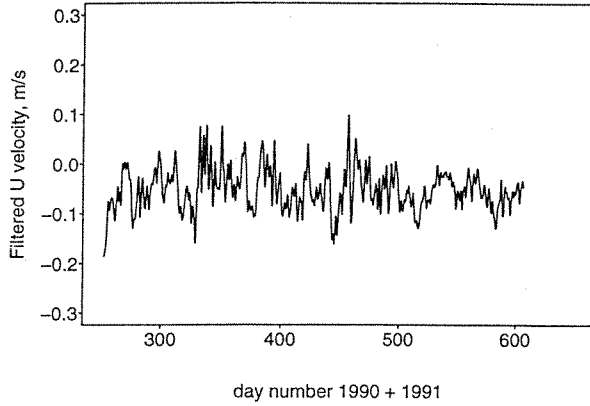
GSP-IS7-750m, Denmark Strait section, 8/9/90-29/8/91. Means and deviations of filtered current and temperature

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)
Total:	-0.051 (0.042)	-0.004 (0.034)	-0.49 (0.04)
Sep 90	-0.065(0.050)	-0.012(0.027)	-0.53(0.04)
Oct 90	-0.053(0.037)	-0.009(0.039)	-0.52(0.02)
Nov 90	-0.051(0.051)	0.007(0.046)	-0.52(0.02)
Dec 90	-0.023(0.037)	0.016(0.040)	-0.51(0.01)
Jan 91	-0.032(0.048)	0.017(0.034)	-0.48(0.03)
Feb 91	-0.062(0.035)	-0.022(0.035)	-0.50(0.02)
Mar 91	-0.065(0.051)	-0.018(0.025)	-0.45(0.03)
Apr 91	-0.037(0.041)	0.008(0.029)	-0.47(0.03)
May 91	-0.065(0.035)	-0.004(0.020)	-0.45(0.03)
Jun 91	-0.044(0.024)	0.006(0.016)	-0.49(0.02)
Jul 91	-0.053(0.022)	-0.016(0.026)	-0.48(0.03)
Aug 91	-0.071(0.024)	-0.025(0.021)	-0.50(0.02)

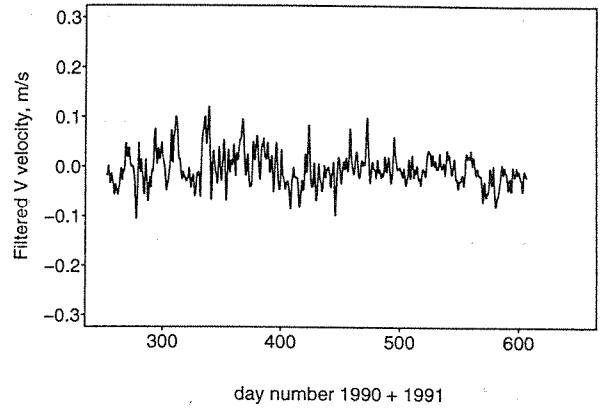
Prog.Vector GSP90-IS7-750m



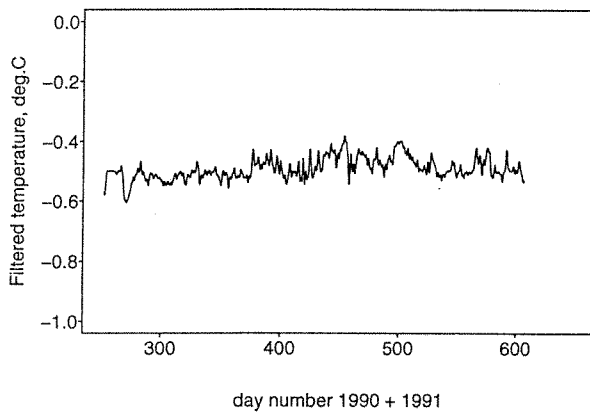
GSP90-IS7-750m



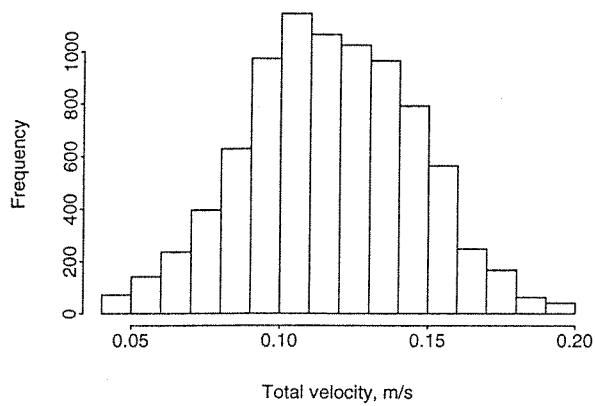
GSP90-IS7-750m



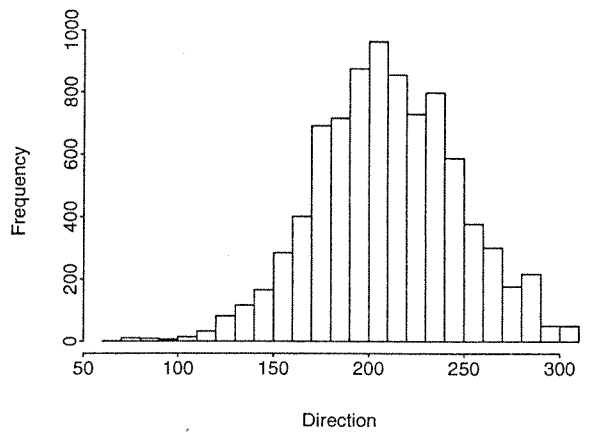
GSP90-IS7-750m



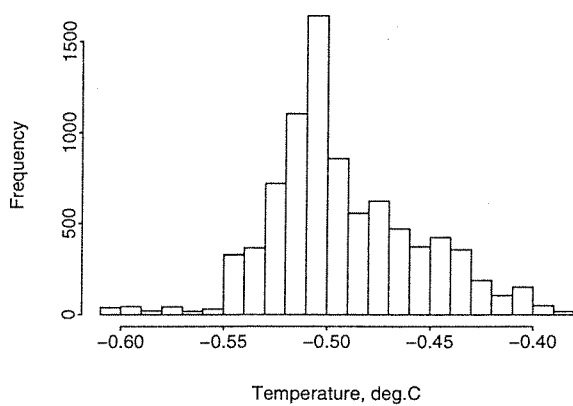
GSP90-IS7-750m



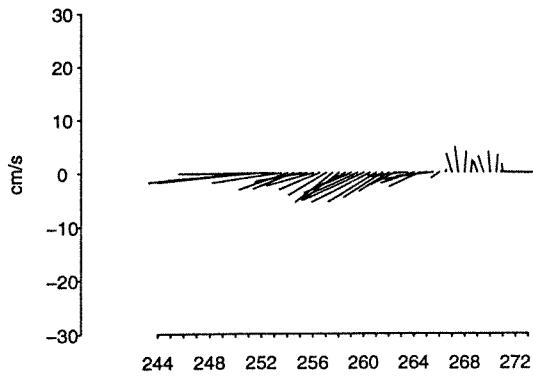
GSP90-IS7-750m



GSP90-IS7-750m

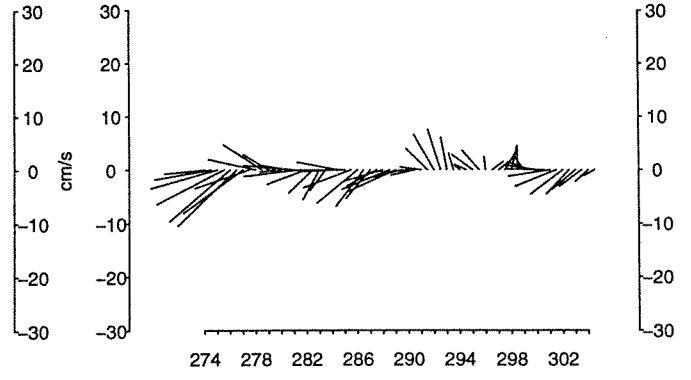


GSP90-IS7-750m, SEPTEMBER 1990



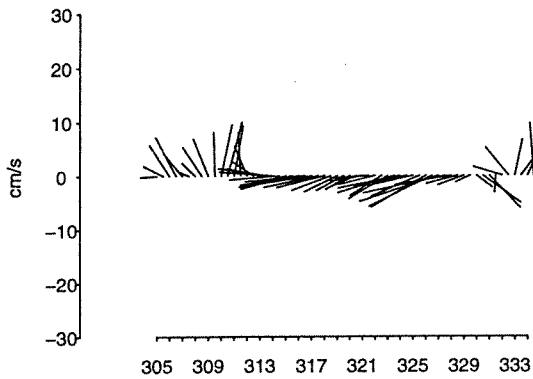
Day number 1990

GSP90-IS7-750m, OCTOBER 1990



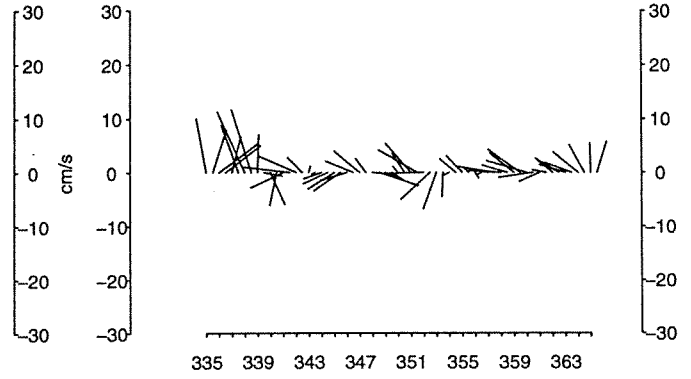
Day number 1990

GSP90-IS7-750m, NOVEMBER 1990



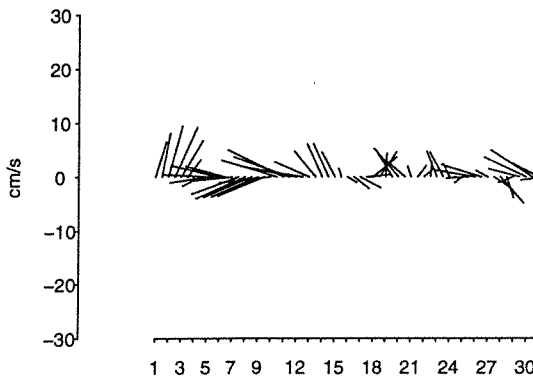
Day number 1990

GSP90-IS7-750m, DECEMBER 1990



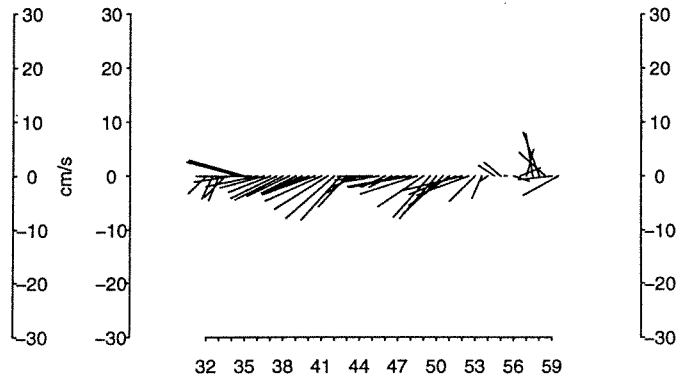
Day number 1990

GSP90-IS7-750m, JANUARY 1991



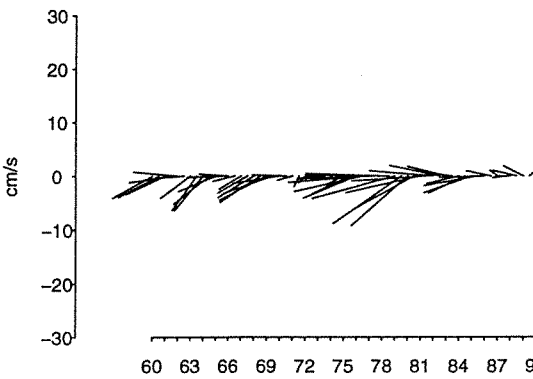
Day number 1991

GSP90-IS7-750m, FEBRUARY 1991



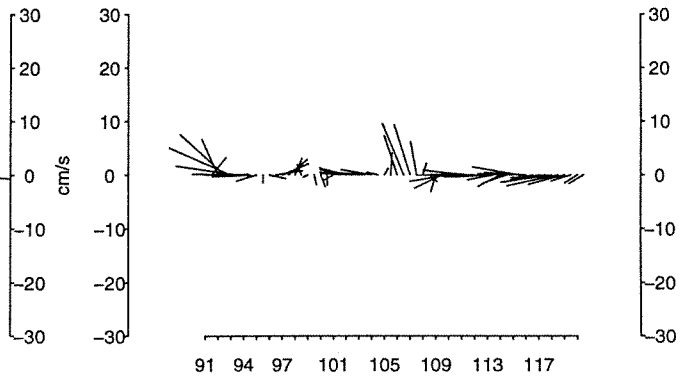
Day number 1991

GSP90-IS7-750m, MARCH 1991



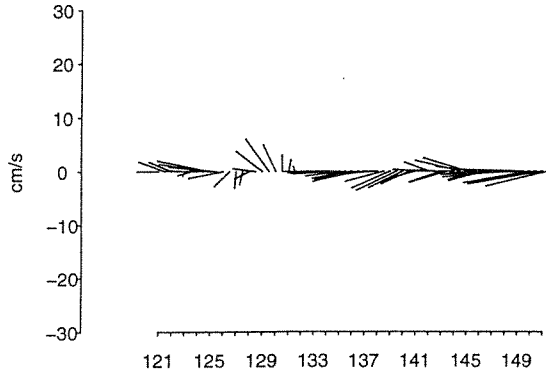
Day number 1991

GSP90-IS7-750m, APRIL 1991



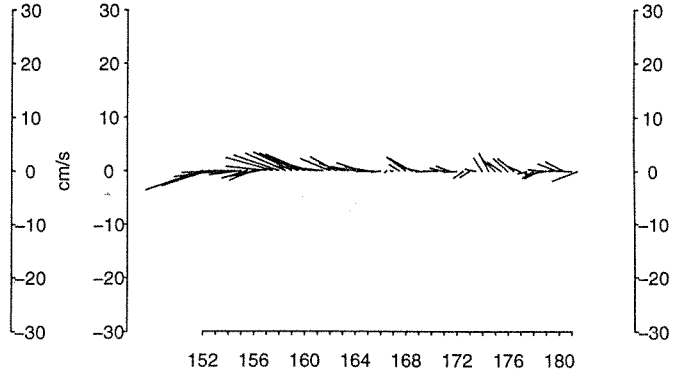
Day number 1991

GSP90-IS7-750m, MAY 1991



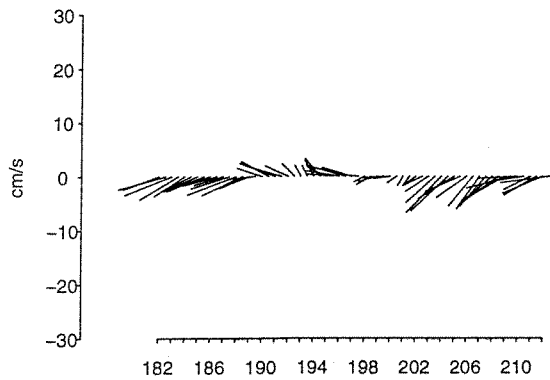
Day number 1991

GSP90-IS7-750m, JUNE 1991



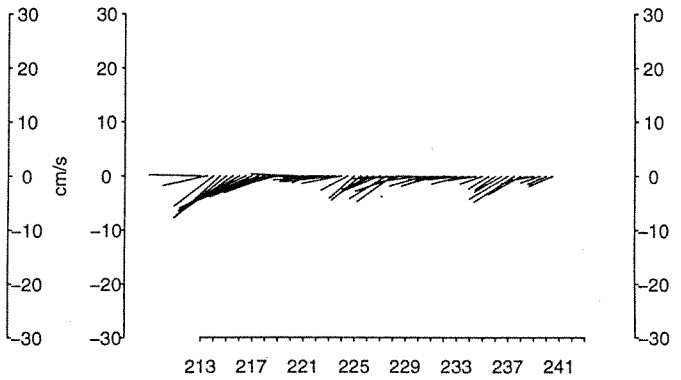
Day number 1991

GSP90-IS7-750m, JULY 1991



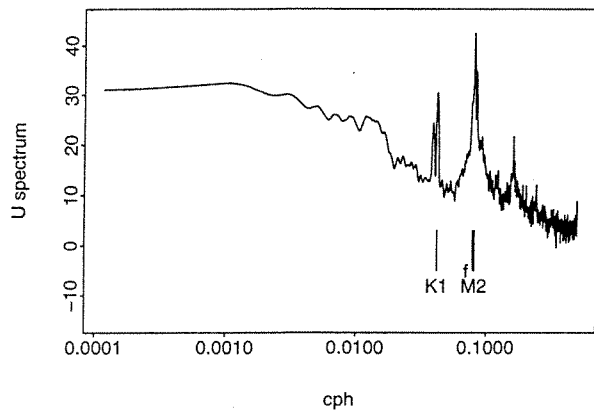
Day number 1991

GSP90-IS7-750m, AUGUST 1991

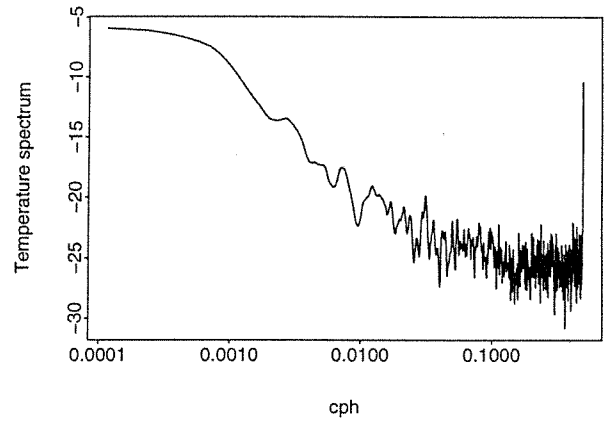


Day number 1991

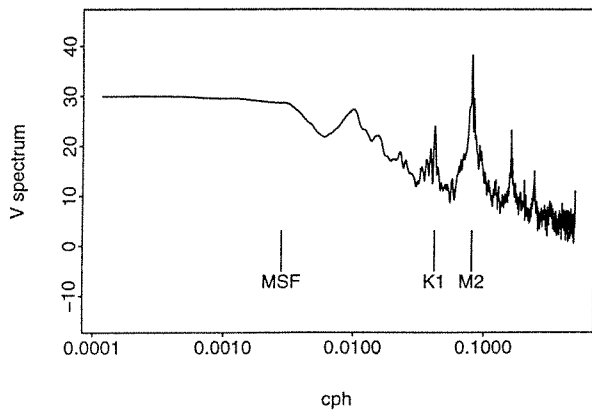
GSP90-IS7-750m



GSP90-IS7-750m



GSP90-IS7-750m



GSP-IS7-750m, Denmark Strait section, 6/9/90-29/8/91. Harmonic analysis of currents, showing the significant tidal constituents.

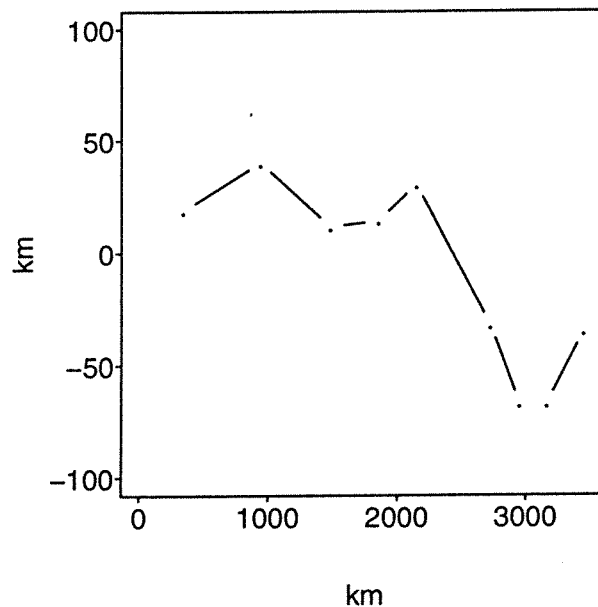
Name	Frequency cph	Major axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	5.2	0.0	4.5	180.0	175.5	184.5
SSA	.00022816	1.7	-0.3	52.7	137.5	84.8	190.2
MSM	.00130978	1.6	0.1	38.1	342.1	304.0	20.2
MF	.00282193	1.1	0.4	49.7	358.8	309.1	48.5
O1	.03873065	1.0	0.6	175.3	62.2	247.0	237.5
K1	.04178075	2.3	0.6	20.9	249.2	228.3	270.1
N2	.07899925	2.1	0.2	26.6	279.1	252.6	305.7
NU2	.07920162	1.1	-0.6	22.7	269.2	246.4	291.9
M2	.08051140	11.4	0.3	28.5	306.3	277.8	334.8
S2	.08333334	4.5	0.1	27.1	341.4	314.2	8.5
K2	.08356149	1.3	0.2	14.6	323.3	308.7	337.9
M4	.16102280	1.2	0.0	133.3	228.7	95.4	1.9

AA874307
IS8 - 125m

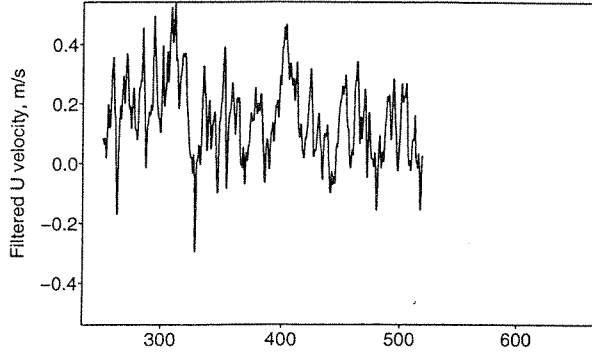
GSP-IS8-125m, Denmark Strait section, 7/9/90-2/6/91. Means and deviations of filtered current, temperature and salinity

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)	Salinity psu mean(st.dev.)
Total:	0.149 (0.134)	-0.002 (0.064)	4.35 (1.23)	35.20 (0.13)
Sep 90	0.165(0.120)	0.009(0.080)	4.68(1.02)	35.24(0.10)
Oct 90	0.224(0.108)	0.008(0.063)	5.70(0.90)	35.29(0.10)
Nov 90	0.210(0.195)	-0.011(0.060)	5.35(0.69)	35.25(0.07)
Dec 90	0.139(0.108)	0.001(0.090)	4.35(1.43)	35.16(0.12)
Jan 91	0.111(0.086)	0.006(0.057)	3.93(0.99)	35.15(0.09)
Feb 91	0.237(0.123)	-0.026(0.041)	4.25(0.94)	35.21(0.10)
Mar 91	0.084(0.103)	-0.013(0.046)	4.48(0.58)	35.29(0.03)
Apr 91	0.082(0.109)	-0.000(0.059)	3.24(0.77)	35.17(0.07)
May 91	0.109(0.108)	0.012(0.059)	3.29(0.81)	35.02(0.12)
Jun 91	-0.006(0.026)	0.017(0.010)	2.11(0.05)	34.84(0.05)

Prog.Vector GSP90-IS8-125m

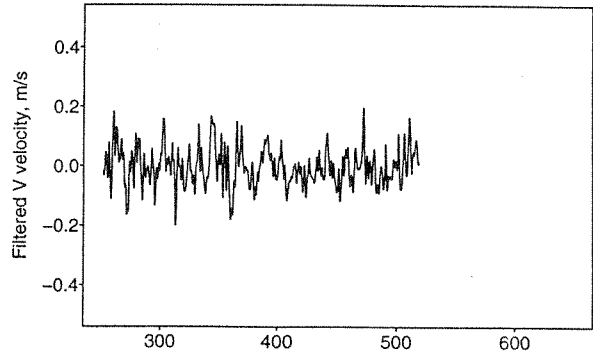


GSP90-IS8-125m



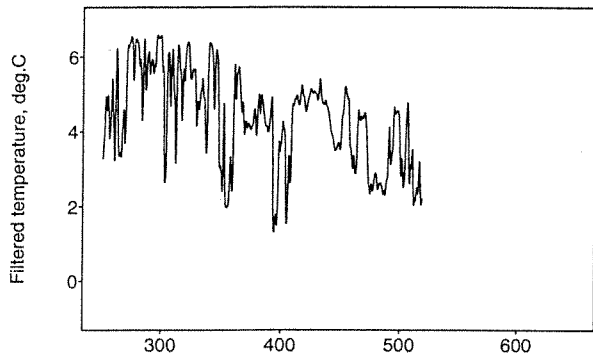
day number 1990 + 1991

GSP90-IS8-125m



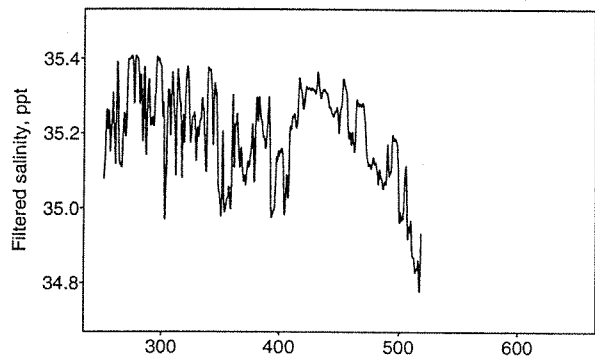
day number 1990 + 1991

GSP90-IS8-125m



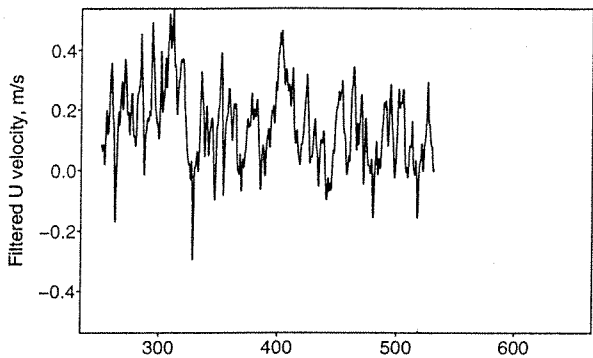
day number 1990 + 1991

GSP90-IS8-125m



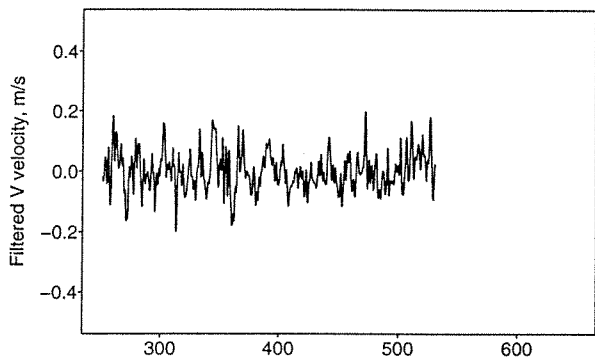
day number 1990 + 1991

GSP90-IS8-125m



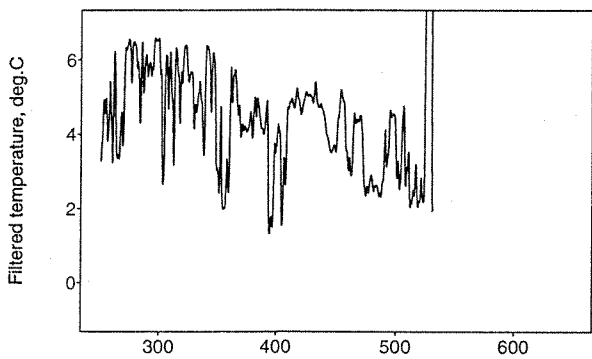
day number 1990 + 1991

GSP90-IS8-125m



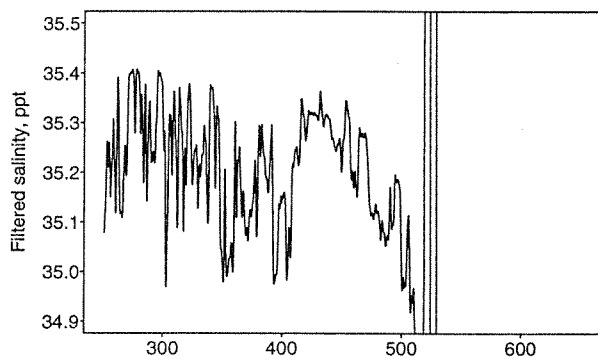
day number 1990 + 1991

GSP90-IS8-125m



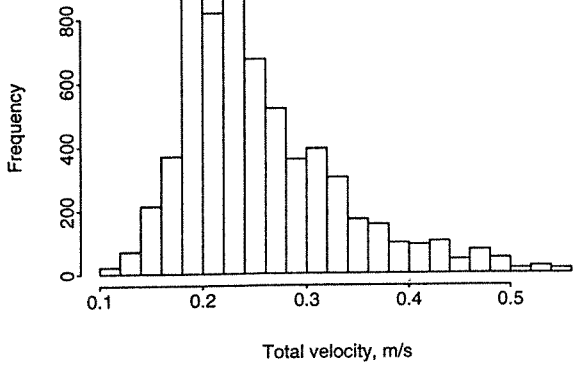
day number 1990 + 1991

GSP90-IS8-125m

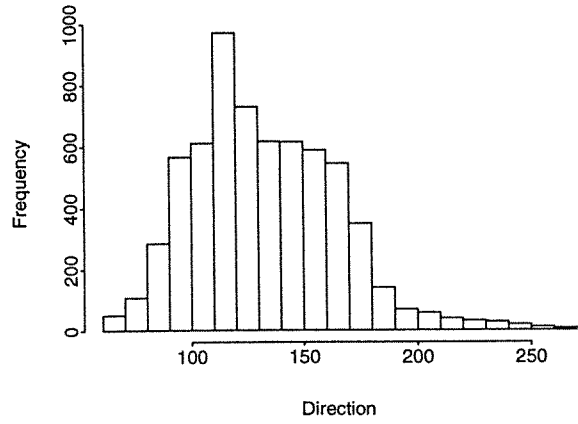


day number 1990 + 1991

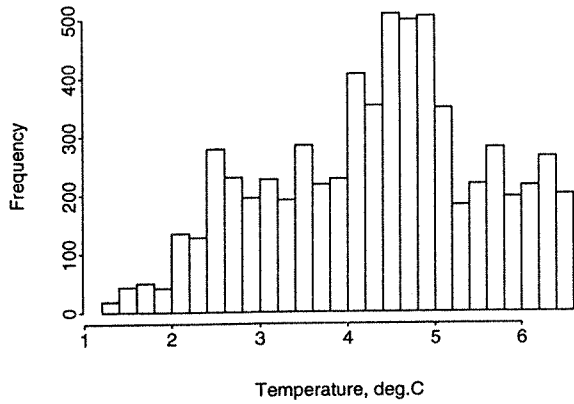
GSP90-IS8-125m



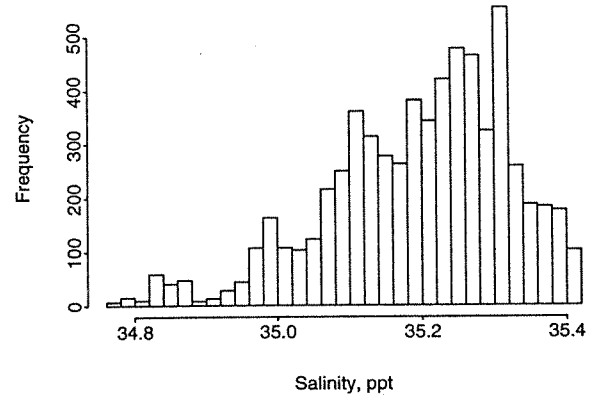
GSP90-IS8-125m



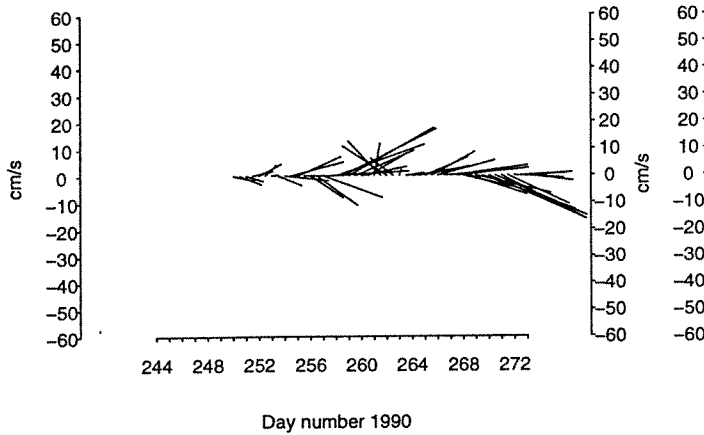
GSP90-IS8-125m



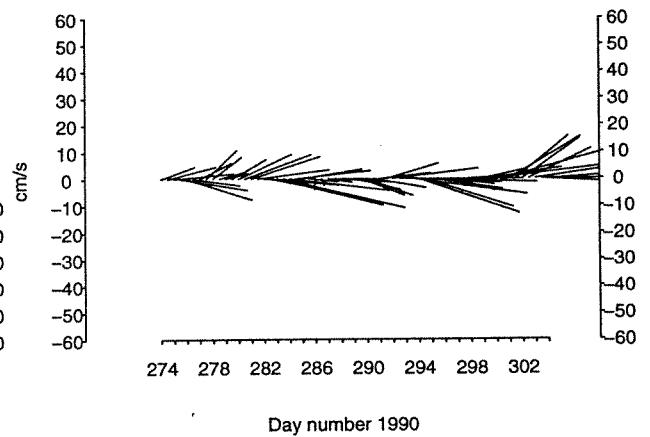
GSP90-IS8-125m



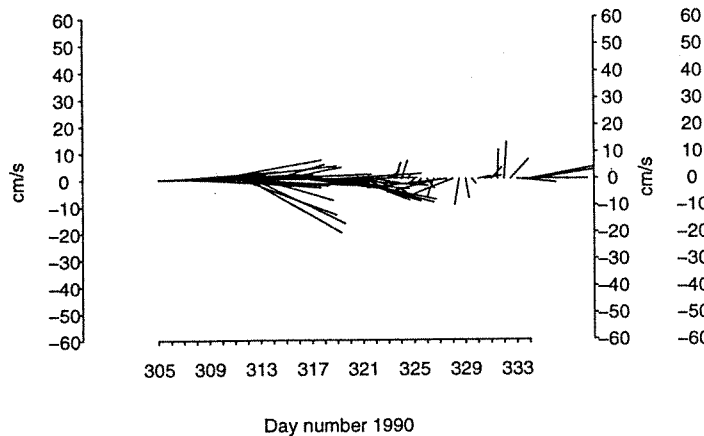
GSP90-IS8-125m, SEPTEMBER 1990



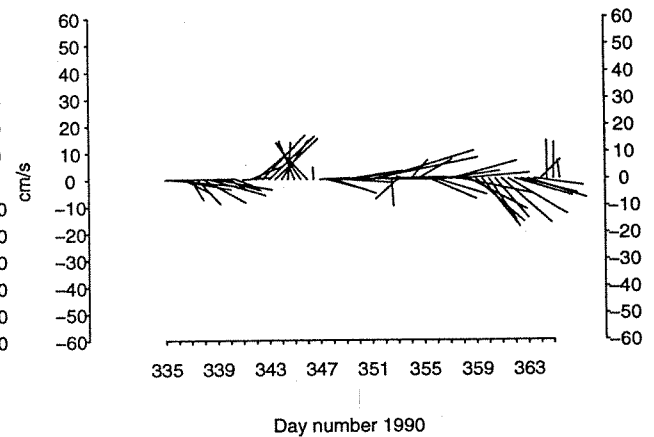
GSP90-IS8-125m, OCTOBER 1990



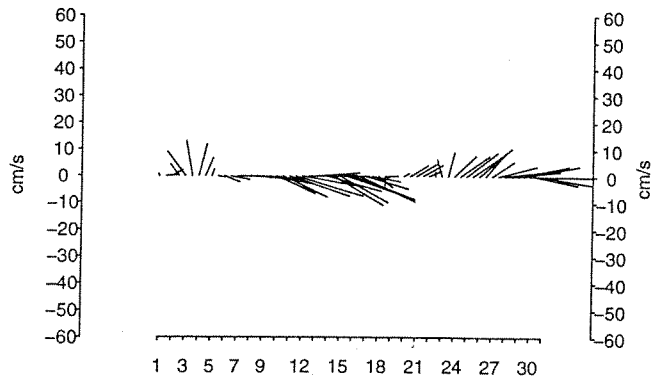
GSP90-IS8-125m, NOVEMBER 1990



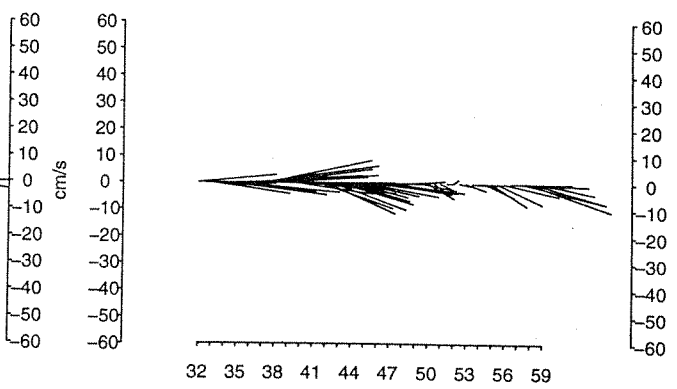
GSP90-IS8-125m, DECEMBER 1990



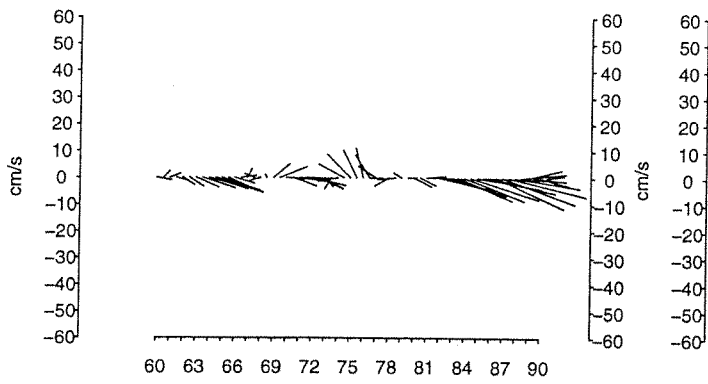
GSP90-IS8-125m, JANUARY 1991



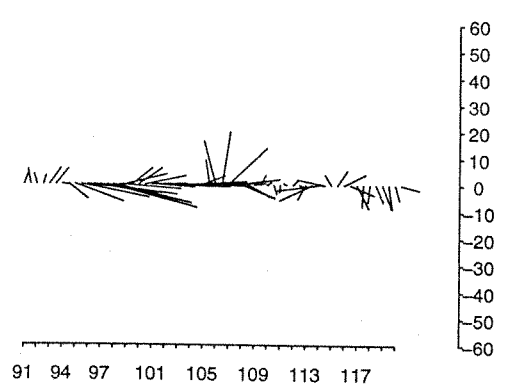
GSP90-IS8-125m, FEBRUARY 1991



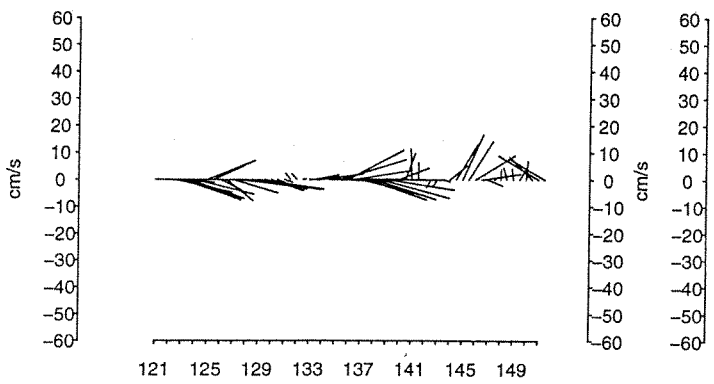
GSP90-IS8-125m, MARCH 1991



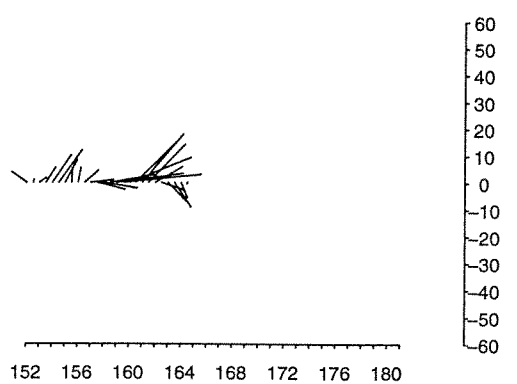
GSP90-IS8-125m, APRIL 1991

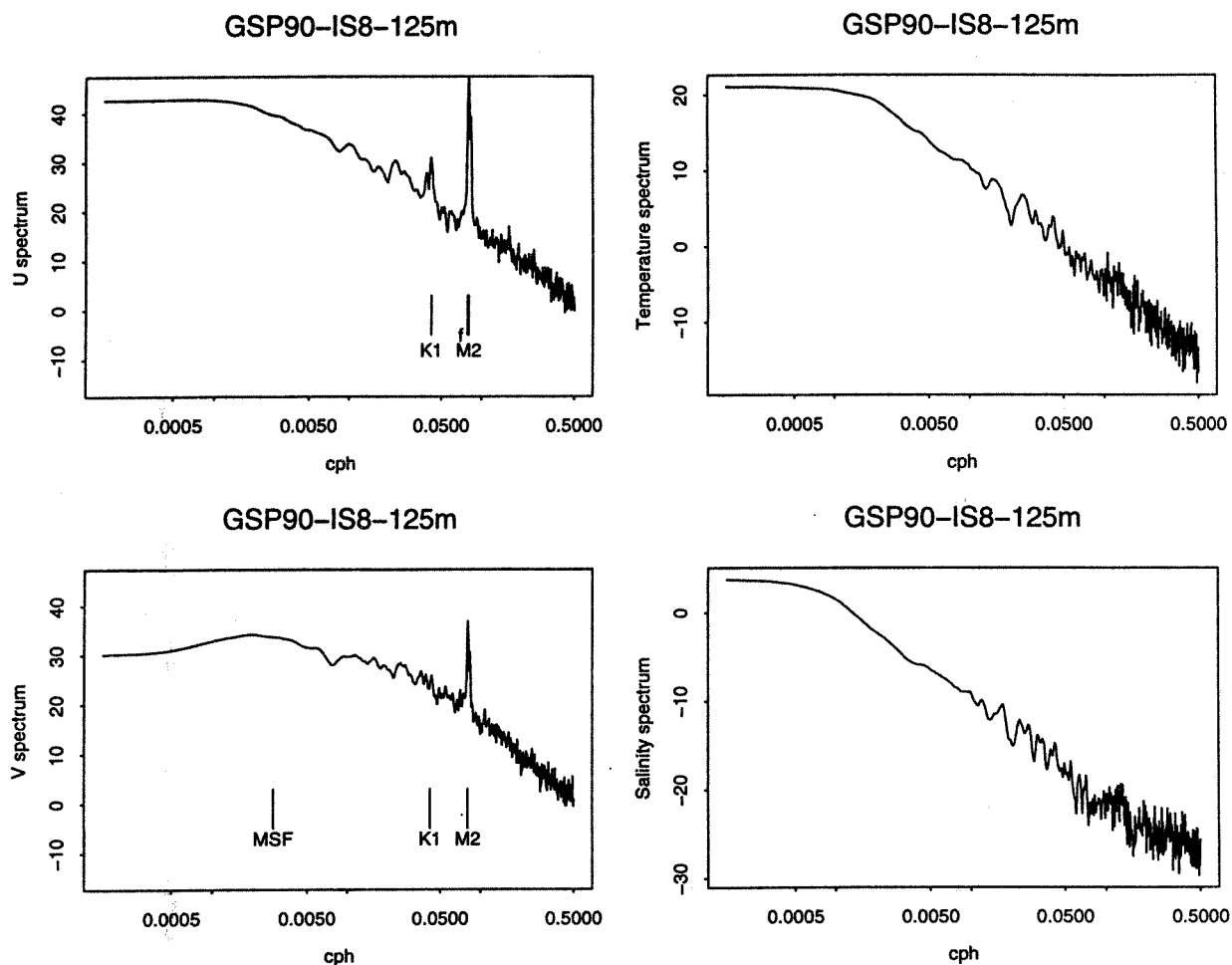


GSP90-IS8-125m, MAY 1991



GSP90-IS8-125m, JUNE 1991





GSP-IS8-125m, Denmark Strait section, 5/9/90-14/6/91. Harmonic analysis of currents, showing the significant tidal constituents.

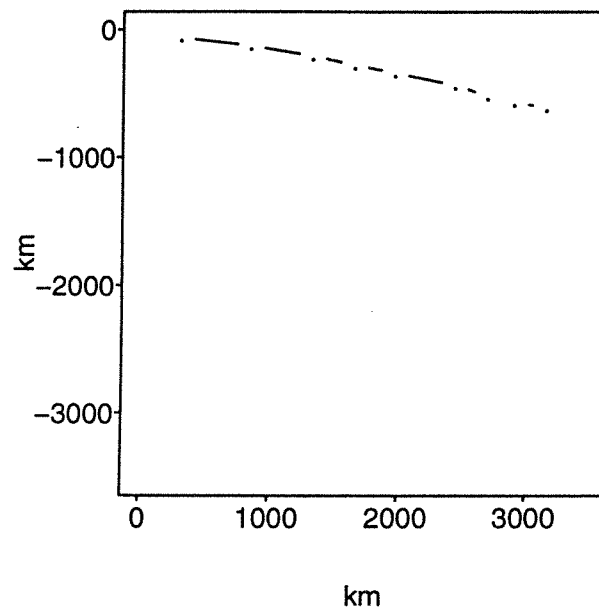
Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	14.5	0.0	180.0	180.0	0.0	360.0
SSA	.00022816	2.0	0.6	156.2	178.3	22.2	334.5
MSM	.00130978	4.5	-0.1	6.3	29.4	23.1	35.8
MM	.00151215	2.2	-0.9	179.4	291.9	112.6	111.3
MSF	.00282193	2.9	0.2	171.5	82.3	270.8	253.8
MF	.00300509	3.4	-1.1	155.4	343.0	187.6	138.4
SIG1	.03590872	1.0	-0.6	104.4	309.6	205.2	54.1
O1	.03873065	1.7	-0.2	156.0	61.3	265.4	217.3
NO1	.04026860	1.0	-0.3	24.7	353.4	328.7	18.0
K1	.04178075	2.6	0.6	175.8	57.9	242.1	233.7
N2	.07899925	4.1	-0.5	12.9	274.7	261.7	287.6
NU2	.07920162	1.2	-0.6	33.1	295.6	262.4	328.7
M2	.08051140	21.1	-2.9	15.4	294.3	278.9	309.7
S2	.08333334	8.0	-1.2	17.5	334.8	317.3	352.4
K2	.08356149	2.1	-0.2	17.9	325.9	307.9	343.8

AA693407
IS8 - 200m

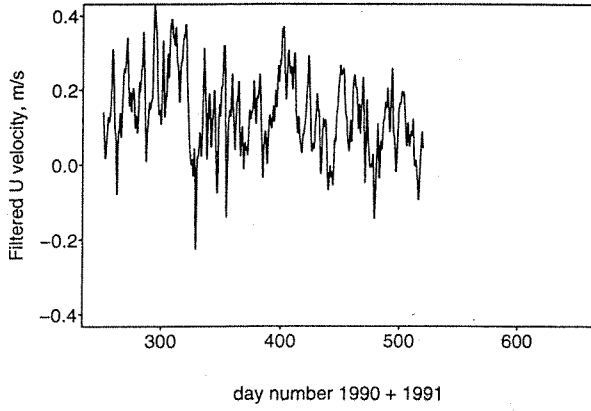
GSP-IS8-200m, Denmark Strait section, 7/9/90-2/6/91. Means and deviations of filtered current and temperature

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)
Total:	0.137 (0.109)	-0.026 (0.047)	3.24 (1.62)
Sep 90	0.150(0.097)	-0.030(0.060)	2.69(1.69)
Oct 90	0.202(0.093)	-0.024(0.038)	4.42(1.32)
Nov 90	0.185(0.157)	-0.031(0.050)	4.52(1.18)
Dec 90	0.122(0.095)	-0.026(0.060)	3.02(1.73)
Jan 91	0.117(0.071)	-0.023(0.042)	2.84(1.25)
Feb 91	0.196(0.096)	-0.039(0.035)	3.92(1.24)
Mar 91	0.096(0.093)	-0.033(0.033)	3.97(0.58)
Apr 91	0.081(0.091)	-0.019(0.050)	1.73(1.47)
May 91	0.093(0.082)	-0.014(0.044)	2.05(0.95)

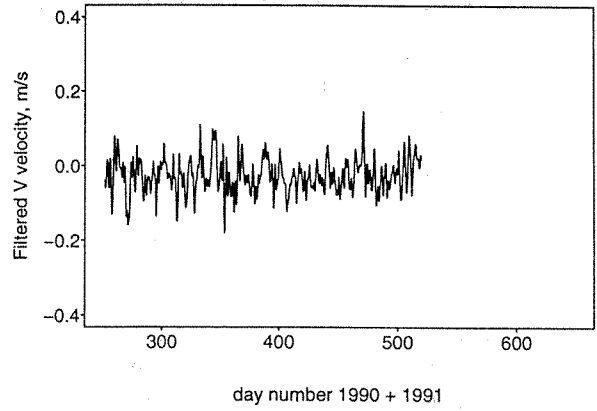
Prog.Vector GSP90-IS8-200m



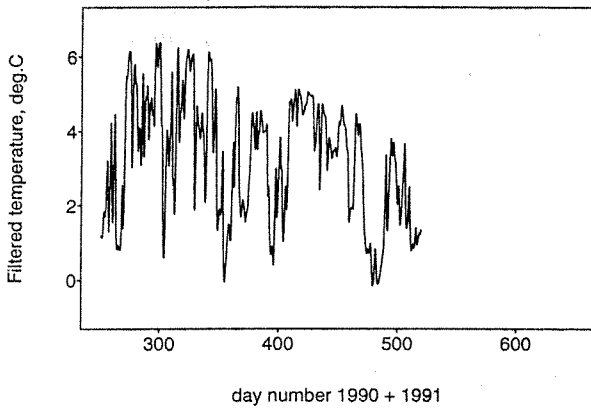
GSP90-IS8-200m



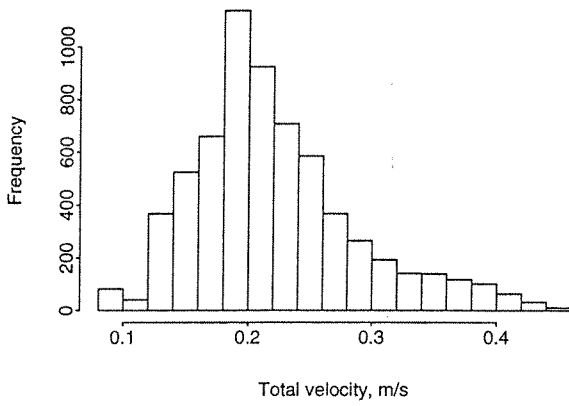
GSP90-IS8-200m



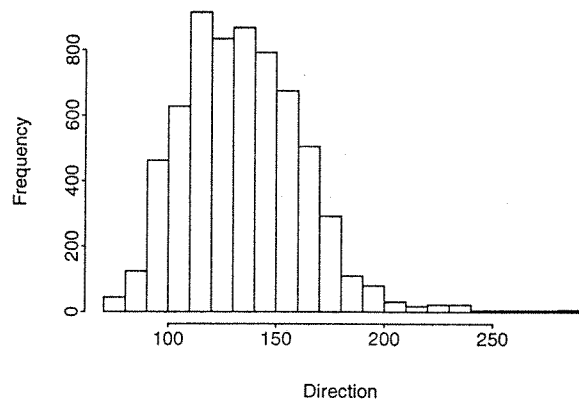
GSP90-IS8-200m



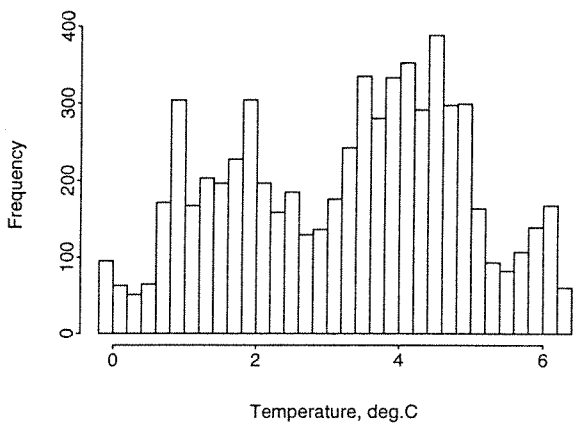
GSP90-IS8-200m



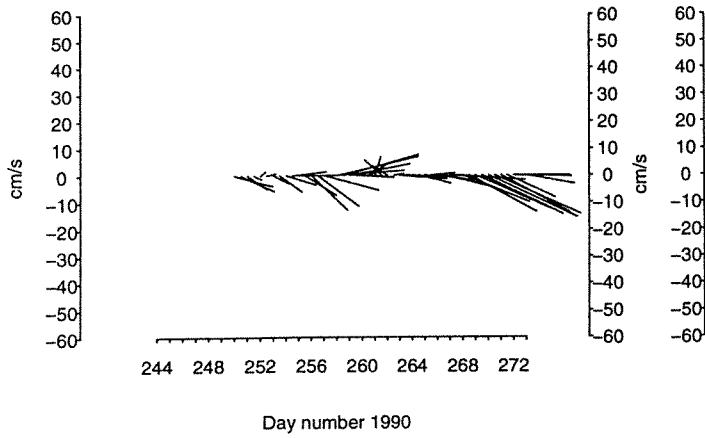
GSP90-IS8-200m



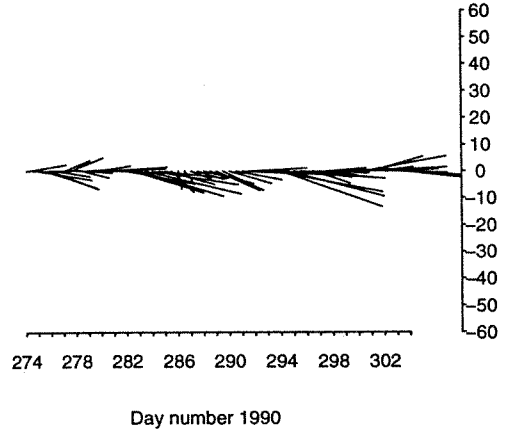
GSP90-IS8-200m



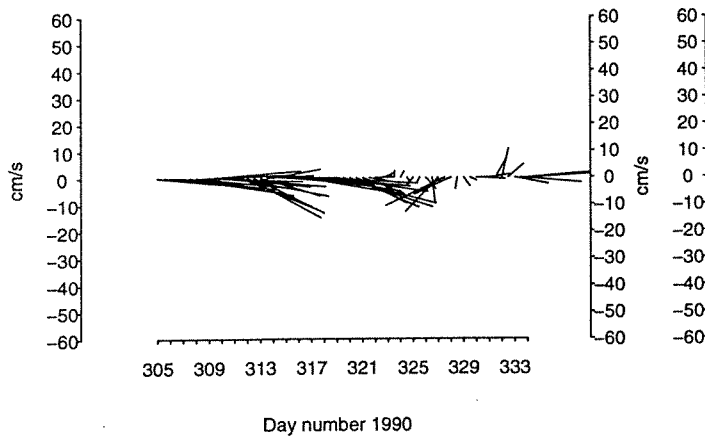
GSP90-IS8-200m, SEPTEMBER 1990



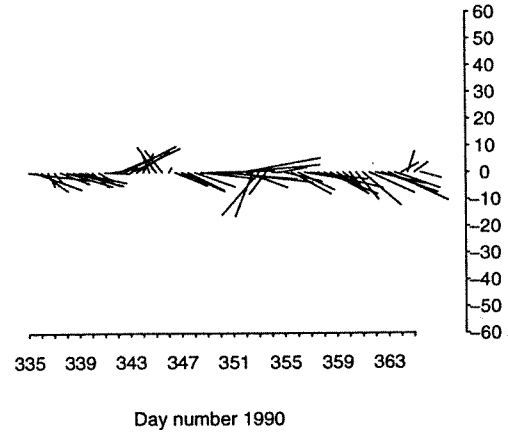
GSP90-IS8-200m, OCTOBER 1990



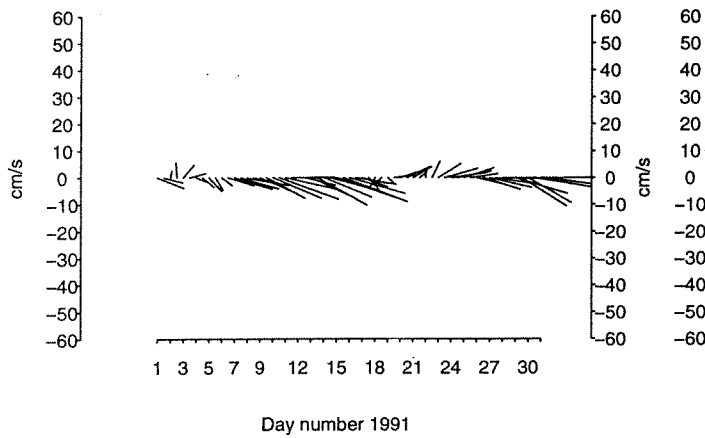
GSP90-IS8-200m, NOVEMBER 1990



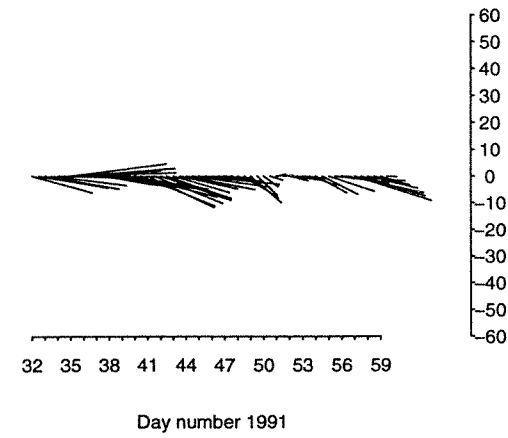
GSP90-IS8-200m, DECEMBER 1990



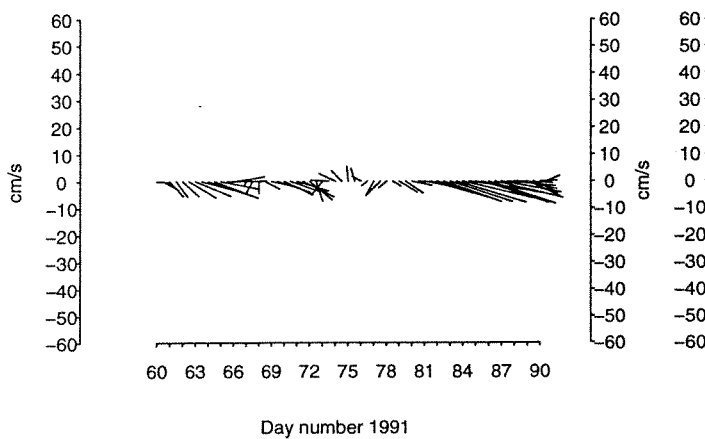
GSP90-IS8-200m, JANUARY 1991



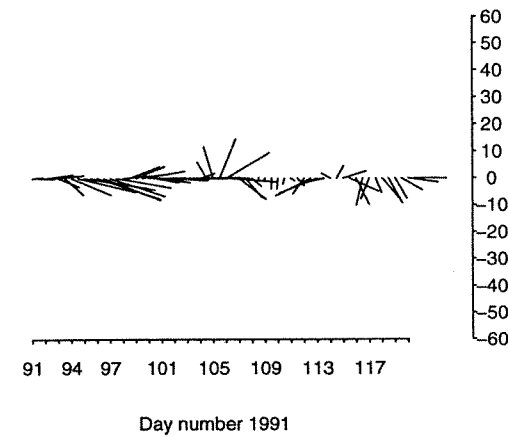
GSP90-IS8-200m, FEBRUARY 1991



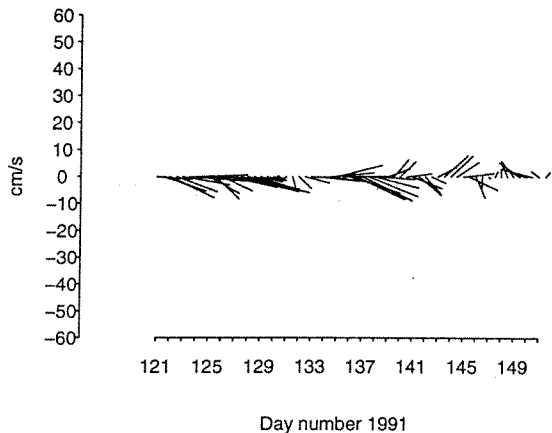
GSP90-IS8-200m, MARCH 1991



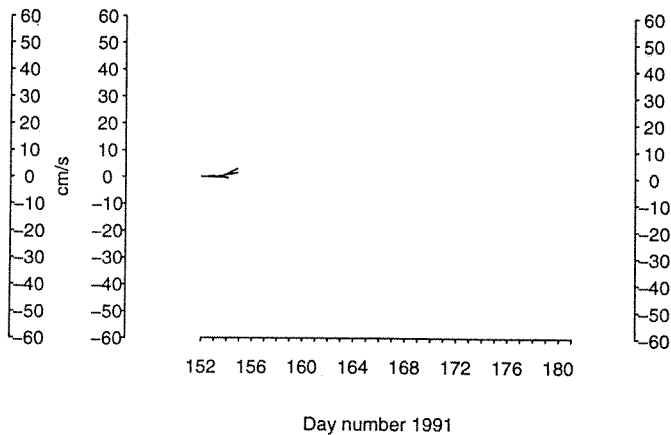
GSP90-IS8-200m, APRIL 1991



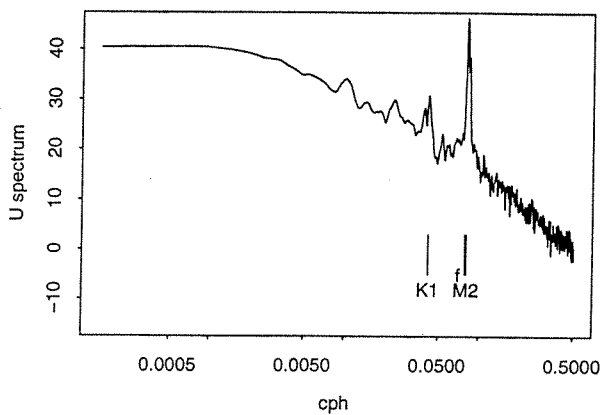
GSP90-IS8-200m, MAY 1991



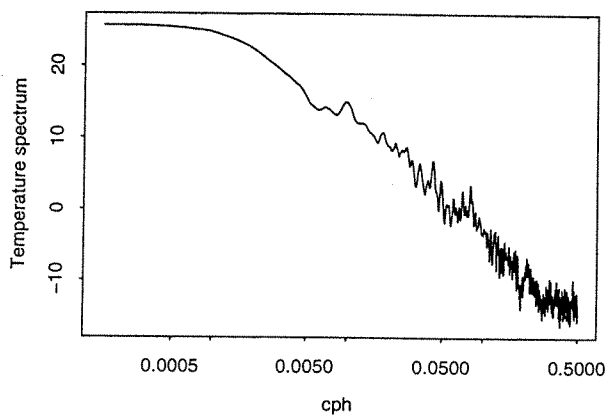
GSP90-IS8-200m, JUNE 1991



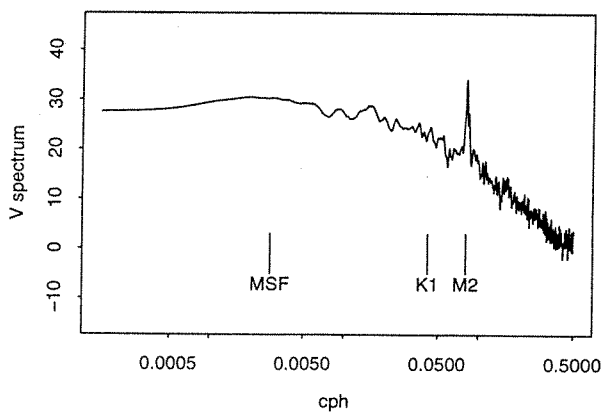
GSP90-IS8-200m



GSP90-IS8-200m



GSP90-IS8-200m



GSP-IS8-200m, Denmark Strait section, 5/9/90-3/6/91. Harmonic analysis of currents, showing the significant tidal constituents.

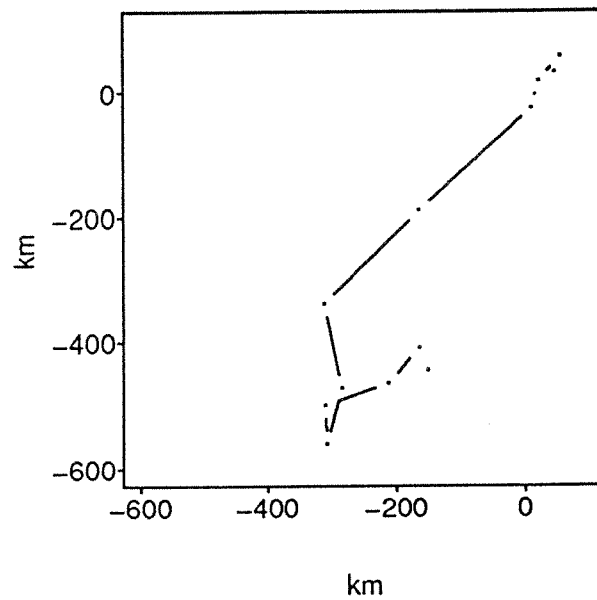
Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	13.8	0.0	169.1	180.0	10.9	349.1
SSA	.00022816	1.7	0.4	158.4	168.7	10.4	327.1
MSM	.00130978	3.6	-0.0	3.3	21.9	18.6	25.2
MM	.00151215	2.3	-0.5	173.5	283.9	110.3	97.4
MSF	.00282193	2.5	0.2	169.7	87.0	277.4	256.7
MF	.00300509	3.3	-0.7	153.6	339.7	186.1	133.3
O1	.03873065	1.6	-0.1	161.6	99.1	297.5	260.7
P1	.04155259	1.3	0.3	155.0	79.0	284.0	234.0
K1	.04178075	2.3	0.1	178.1	76.8	258.8	254.9
N2	.07899925	2.9	-0.1	15.9	335.1	319.2	351.1
M2	.08051140	12.3	-1.0	14.6	359.3	344.7	13.9
MKS2	.08073956	4.9	-0.1	8.7	22.7	14.1	31.4
LDA2	.08182118	1.6	-0.1	18.5	320.9	302.5	339.4
L2	.08202255	1.2	-0.1	8.7	2.6	353.9	11.2
S2	.08333334	4.5	0.0	16.0	28.0	12.0	43.9
K2	.08356149	3.3	0.1	11.6	24.8	13.2	36.4

AA012401
IS9 - 500m

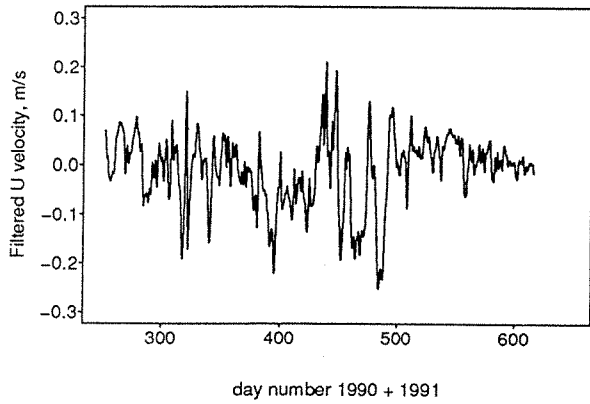
GSP-IS9-500m, Denmark Strait section, 9/9/90-8/9/91. Means and deviations of filtered current and temperature

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)
Total:	-0.012 (0.072)	-0.014 (0.062)	0.94 (0.40)
Sep 90	0.026(0.039)	0.017(0.038)	0.46(0.03)
Oct 90	0.003(0.049)	0.009(0.031)	0.61(0.05)
Nov 90	-0.013(0.075)	-0.015(0.069)	0.91(0.19)
Dec 90	-0.004(0.051)	-0.016(0.051)	0.98(0.25)
Jan 91	-0.066(0.063)	-0.061(0.044)	1.17(0.17)
Feb 91	-0.061(0.032)	-0.062(0.043)	1.14(0.21)
Mar 91	0.010(0.099)	-0.050(0.067)	0.90(0.62)
Apr 91	-0.090(0.098)	-0.034(0.089)	0.27(0.47)
May 91	-0.001(0.088)	0.023(0.084)	1.18(0.18)
Jun 91	0.038(0.025)	0.013(0.032)	1.22(0.18)
Jul 91	0.018(0.032)	0.021(0.029)	1.23(0.13)
Aug 91	0.005(0.019)	-0.013(0.028)	1.04(0.11)
Sep 91	-0.002(0.005)	-0.013(0.015)	0.89(0.12)

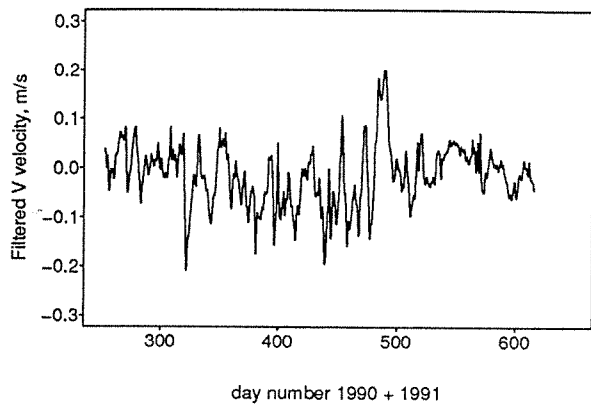
Prog.Vector GSP90-IS9-500m



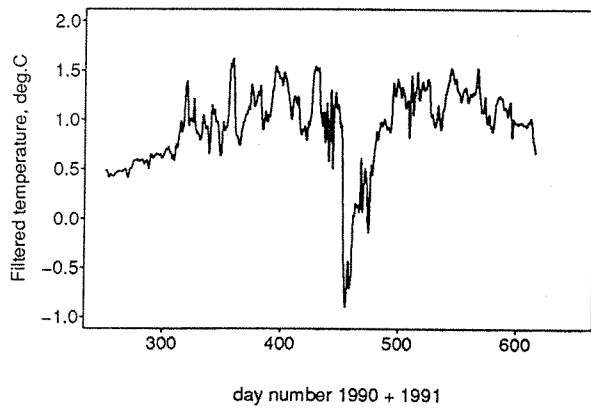
GSP90-IS9-500m



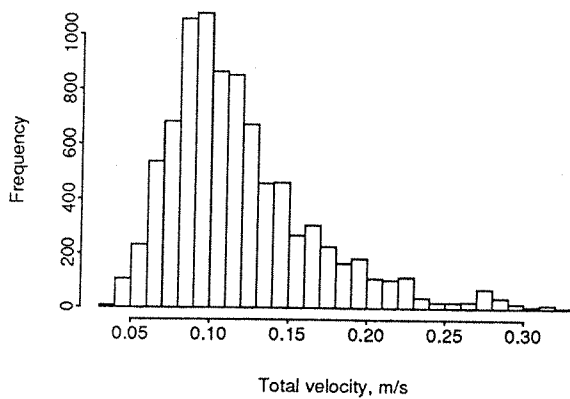
GSP90-IS9-500m



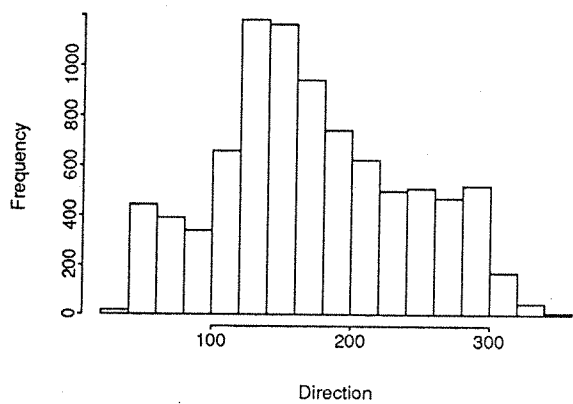
GSP90-IS9-500m



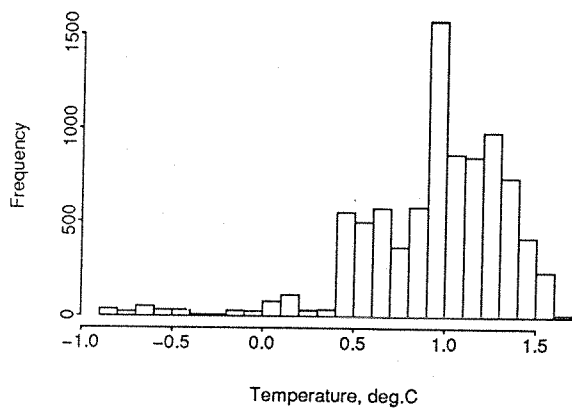
GSP90-IS9-500m



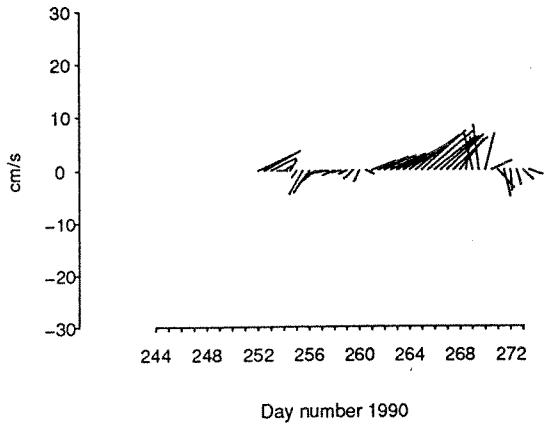
GSP90-IS9-500m



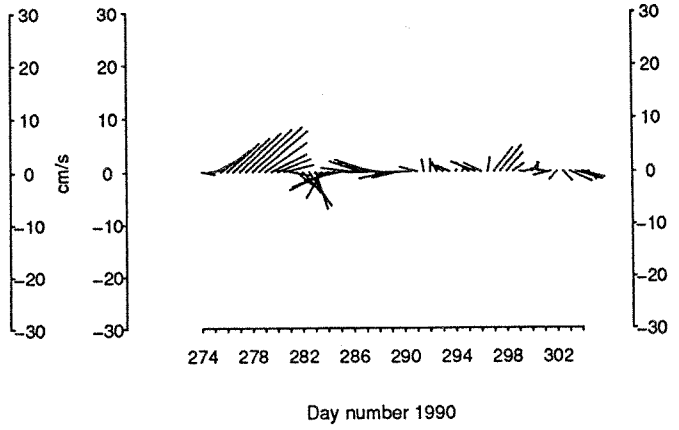
GSP90-IS9-500m



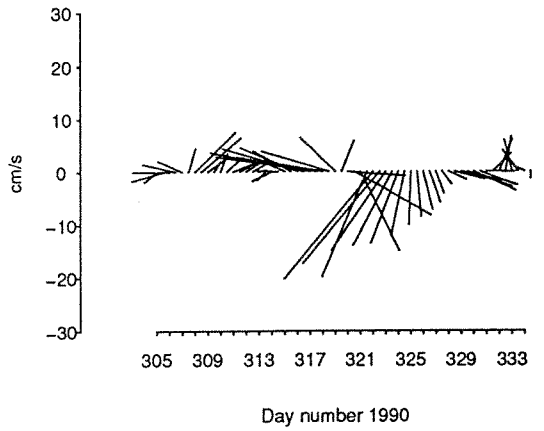
GSP90-IS9-500m, SEPTEMBER 1990



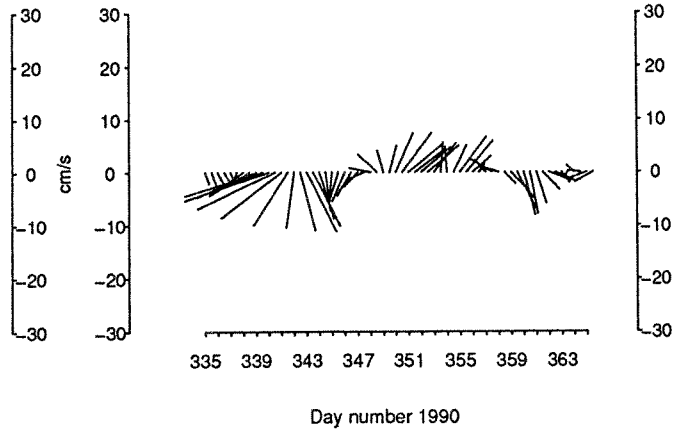
GSP90-IS9-500m, OCTOBER 1990



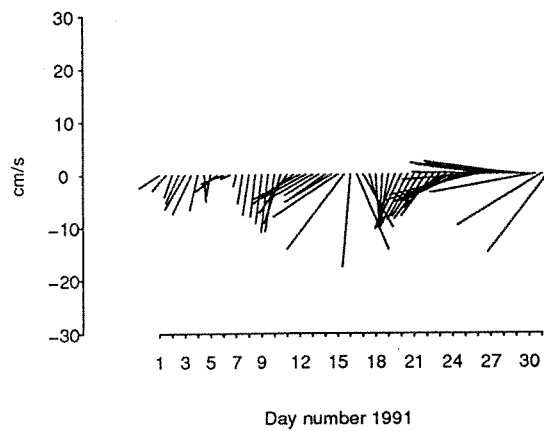
GSP90-IS9-500m, NOVEMBER 1990



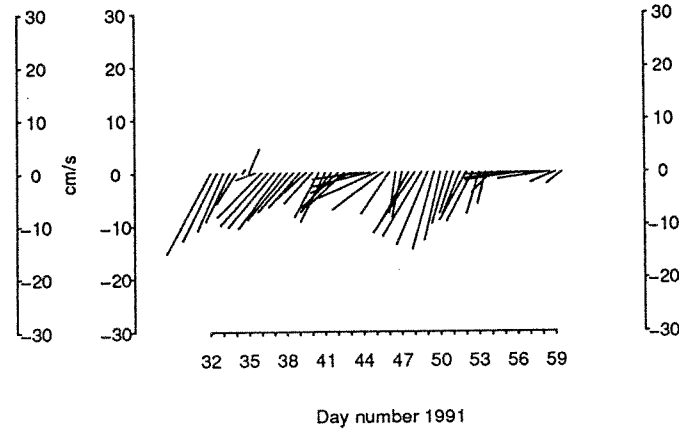
GSP90-IS9-500m, DECEMBER 1990



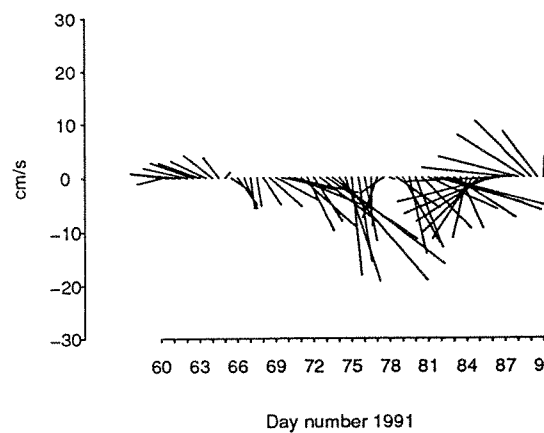
GSP90-IS9-500m, JANUARY 1991



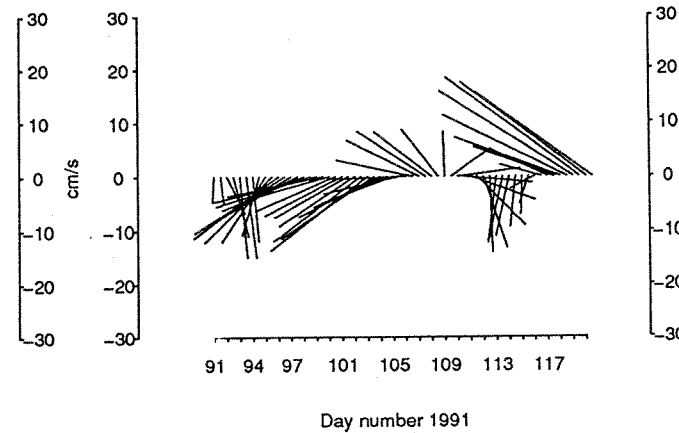
GSP90-IS9-500m, FEBRUARY 1991



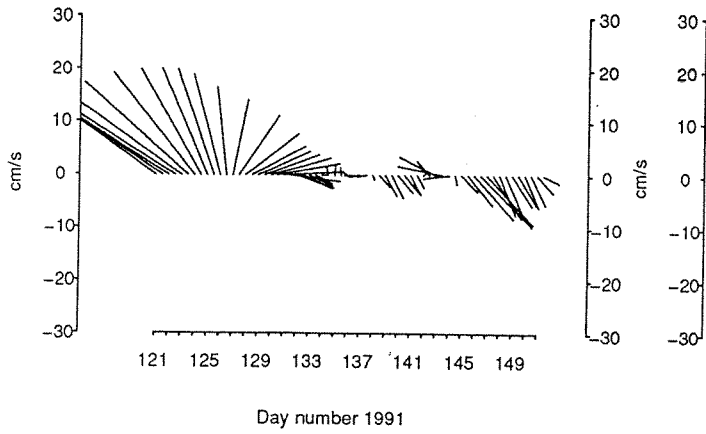
GSP90-IS9-500m, MARCH 1991



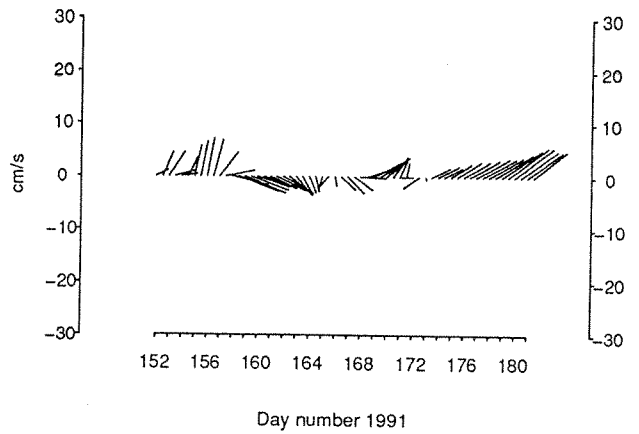
GSP90-IS9-500m, APRIL 1991



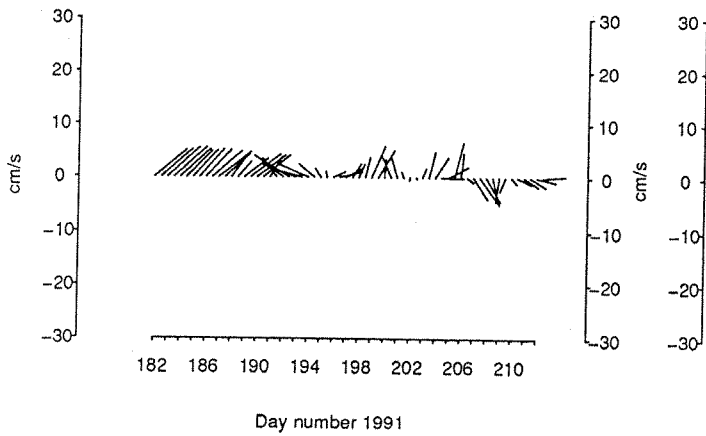
GSP90-IS9-500m, MAY 1991



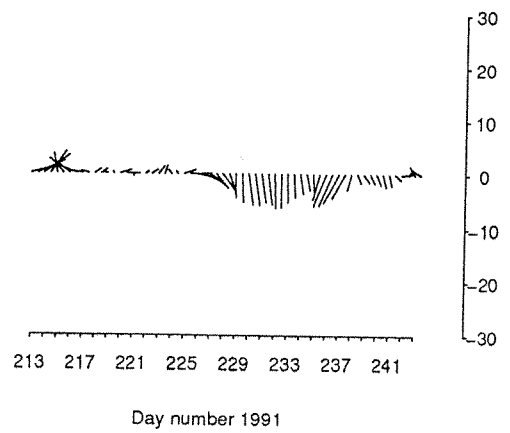
GSP90-IS9-500m, JUNE 1991



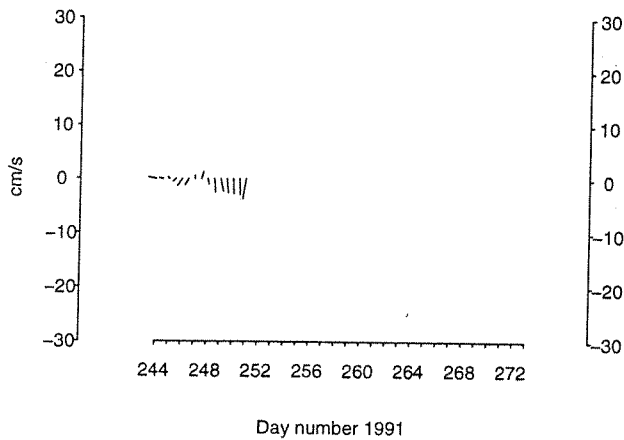
GSP90-IS9-500m, JULY 1991

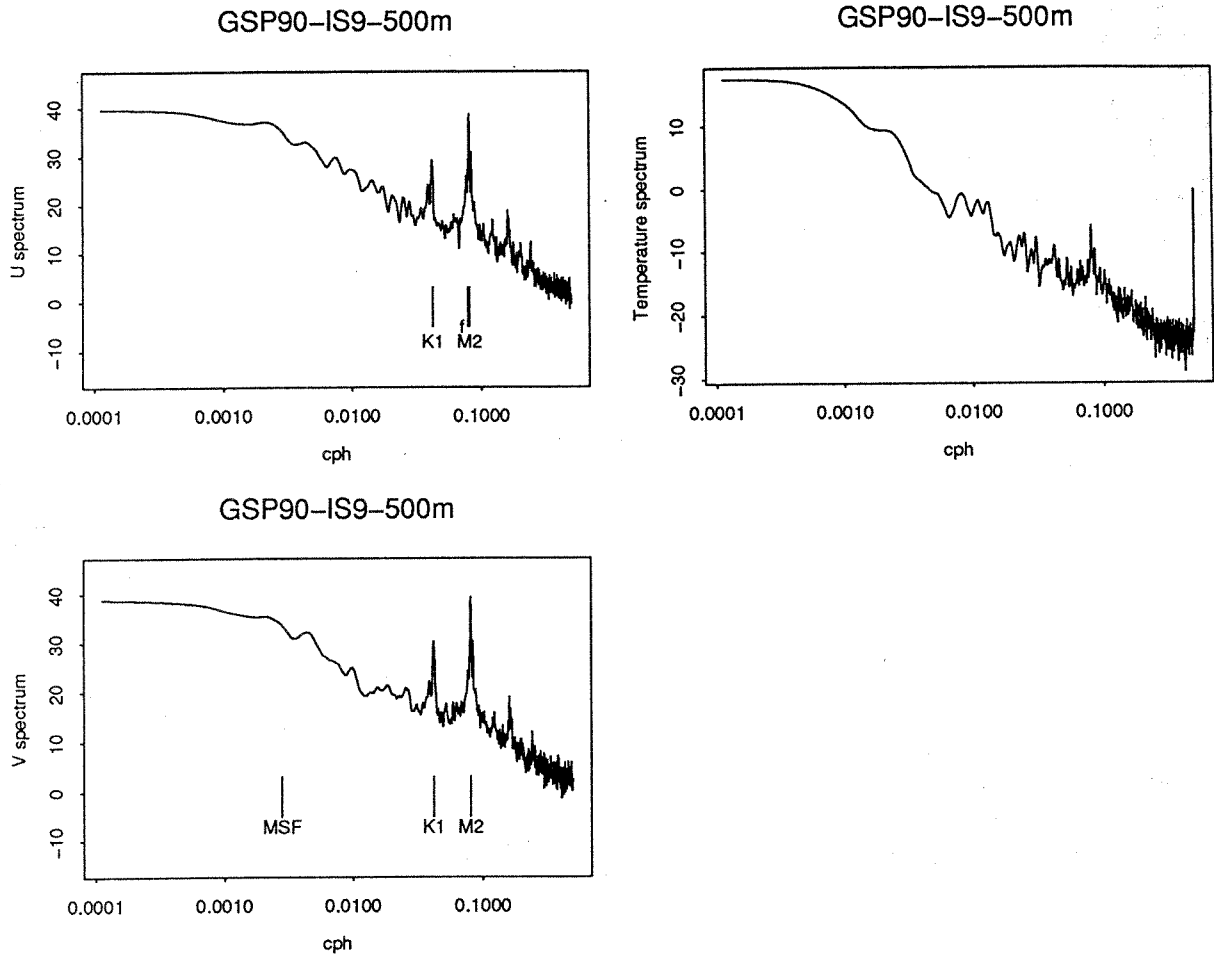


GSP90-IS9-500m, AUGUST 1991



GSP90-IS9-500m, SEPTEMBER 1991





GSP-IS9-500m, Denmark Strait section, 8/9/90-9/9/91. Harmonic analysis of currents, showing the significant tidal constituents.

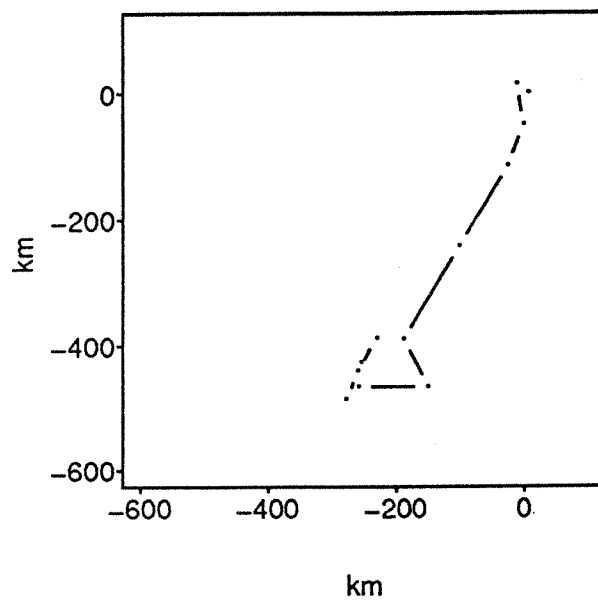
Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	1.8	0.0	52.4	180.0	127.6	232.4
SA	.00011407	4.9	-0.6	43.4	215.3	171.9	258.7
SSA	.00022816	2.0	-0.9	73.8	119.8	46.0	193.6
MSM	.00130978	2.6	-0.4	116.5	283.2	166.7	39.7
MM	.00151215	2.3	-0.3	167.7	91.6	283.9	259.3
MSF	.00282193	1.2	-0.4	9.6	140.2	130.5	149.8
NO1	.04026860	1.0	0.0	46.0	242.3	196.2	288.3
P1	.04155259	1.1	0.5	45.4	224.1	178.7	269.4
K1	.04178075	2.5	1.0	51.7	229.1	177.4	280.8
N2	.07899925	2.2	-0.3	42.5	285.7	243.2	328.2
H1	.08039733	1.3	-0.5	43.3	57.0	13.7	100.2
M2	.08051140	9.0	0.9	47.1	312.9	265.8	360.0
H2	.08062547	1.3	-0.1	41.5	328.5	287.0	10.0
S2	.08333334	3.0	0.5	42.5	344.7	302.3	27.2

AA056201
IS9 - 1000m

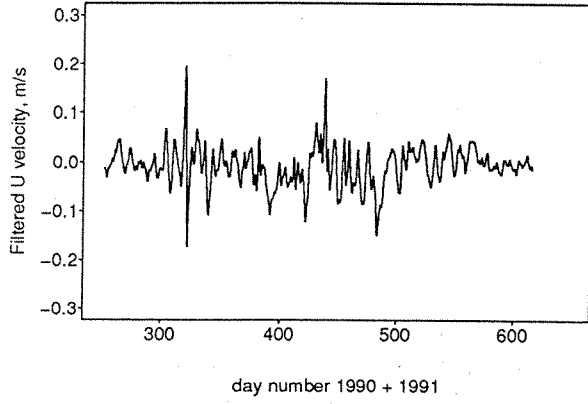
GSP-IS9-1000m, Denmark Strait section, 9/9/90-8/9/91. Means and deviations of filtered current and temperature

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)
Total:	-0.008 (0.040)	-0.014 (0.044)	-0.14 (0.12)
Sep 90	0.005(0.021)	0.001(0.034)	-0.30(0.04)
Oct 90	-0.005(0.022)	0.005(0.016)	-0.26(0.03)
Nov 90	0.004(0.061)	-0.025(0.076)	-0.13(0.06)
Dec 90	-0.009(0.034)	-0.024(0.031)	-0.11(0.05)
Jan 91	-0.029(0.037)	-0.047(0.032)	-0.12(0.06)
Feb 91	-0.036(0.027)	-0.061(0.023)	-0.12(0.08)
Mar 91	0.014(0.053)	-0.029(0.048)	-0.03(0.15)
Apr 91	-0.042(0.045)	-0.000(0.033)	0.05(0.11)
May 91	-0.007(0.035)	-0.008(0.037)	-0.07(0.06)
Jun 91	0.007(0.031)	0.018(0.027)	-0.21(0.06)
Jul 91	0.011(0.019)	0.020(0.039)	-0.18(0.03)
Aug 91	-0.009(0.009)	-0.015(0.021)	-0.21(0.02)
Sep 91	-0.002(0.009)	-0.013(0.016)	-0.23(0.03)

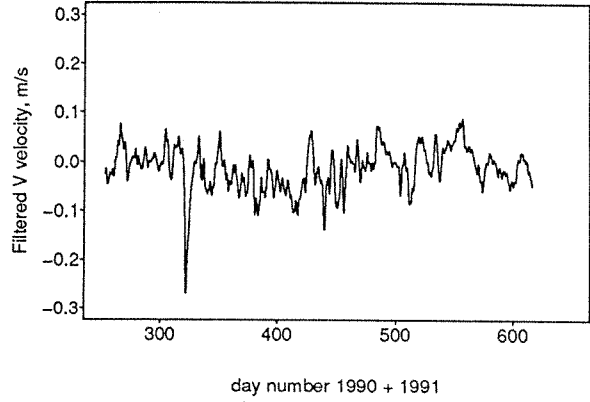
Prog.Vector GSP90-IS9-1000m



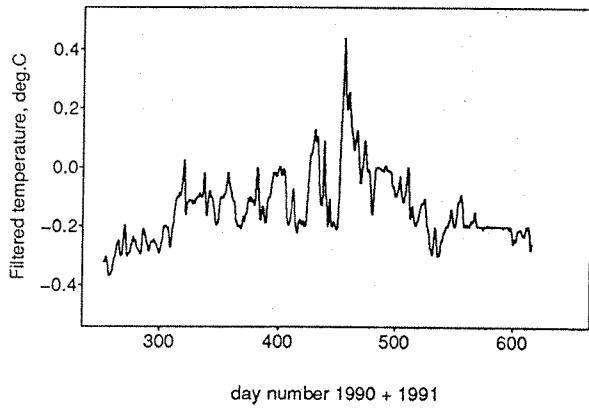
GSP90-IS9-1000m



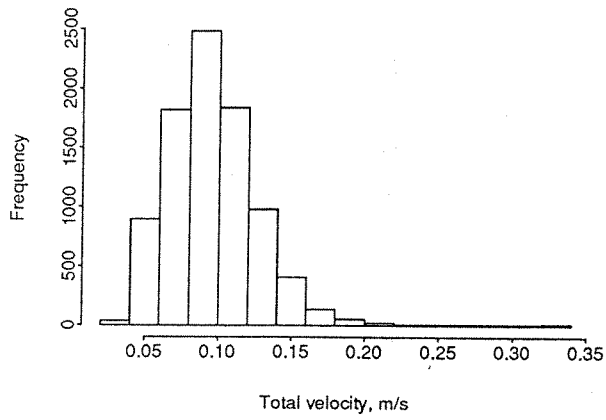
GSP90-IS9-1000m



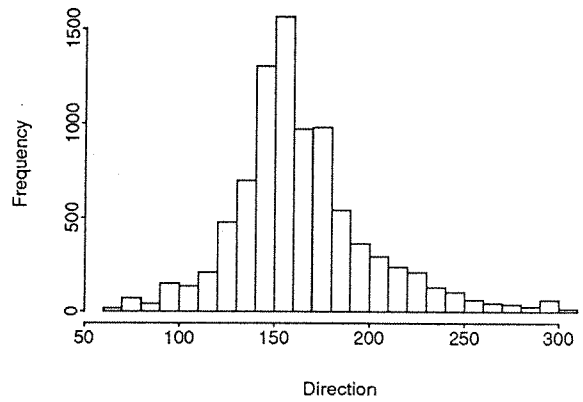
GSP90-IS9-1000m



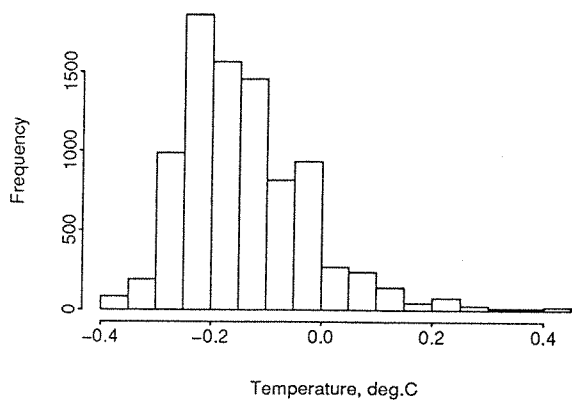
GSP90-IS9-1000m



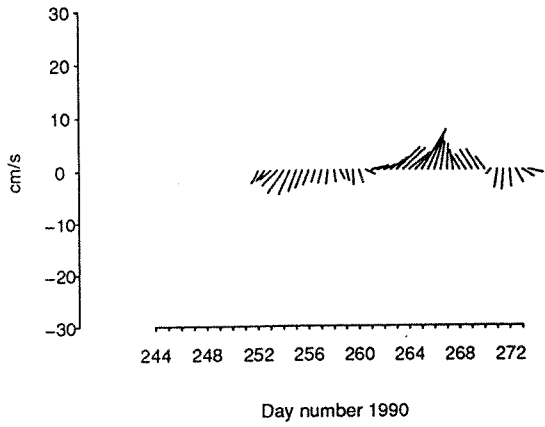
GSP90-IS9-1000m



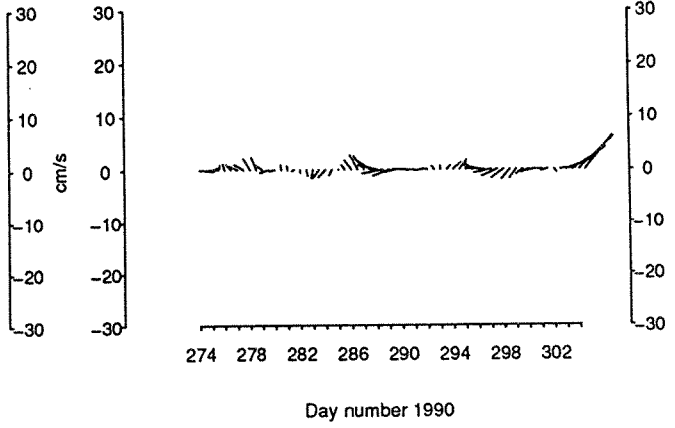
GSP90-IS9-1000m



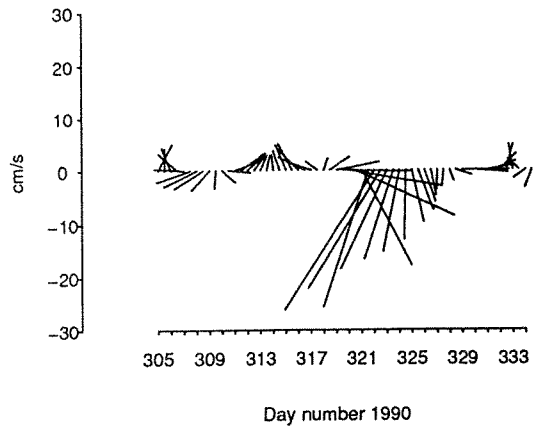
GSP90-IS9-1000m, SEPTEMBER 1990



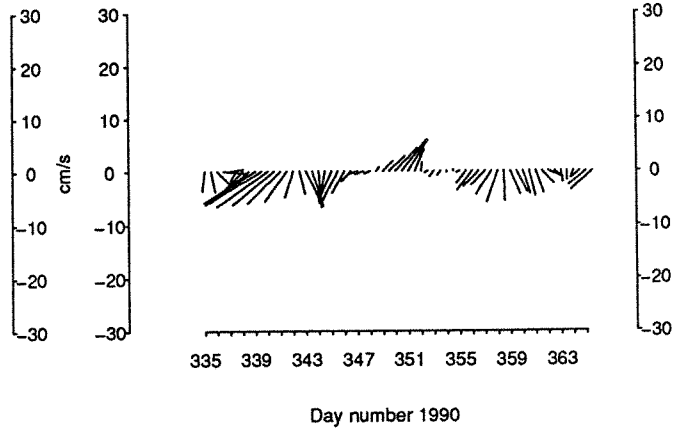
GSP90-IS9-1000m, OCTOBER 1990



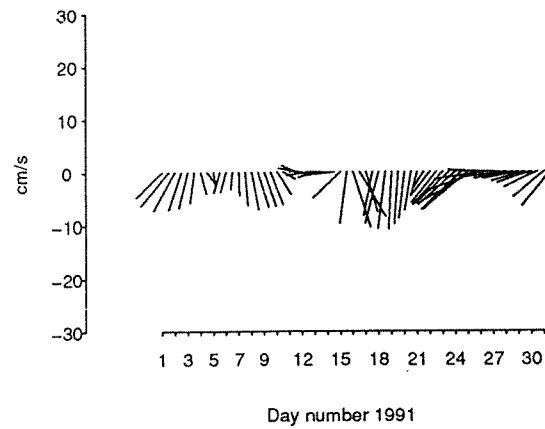
GSP90-IS9-1000m, NOVEMBER 1990



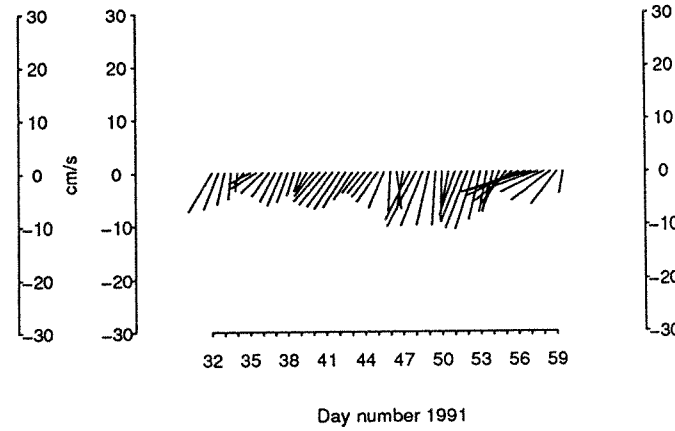
GSP90-IS9-1000m, DECEMBER 1990



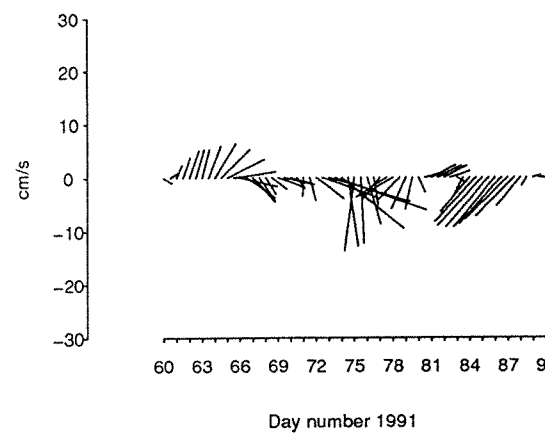
GSP90-IS9-1000m, JANUARY 1991



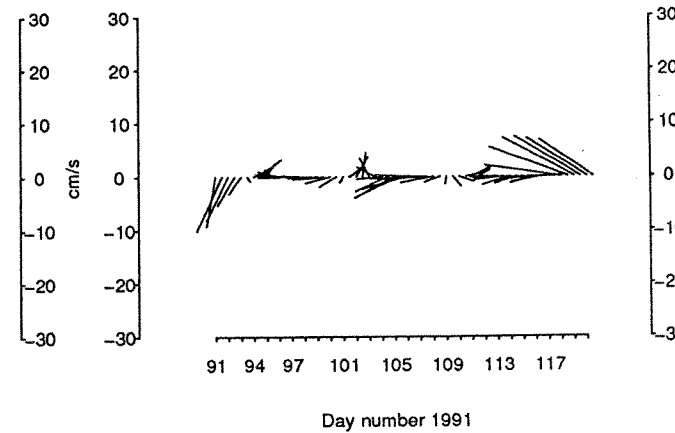
GSP90-IS9-1000m, FEBRUARY 1991



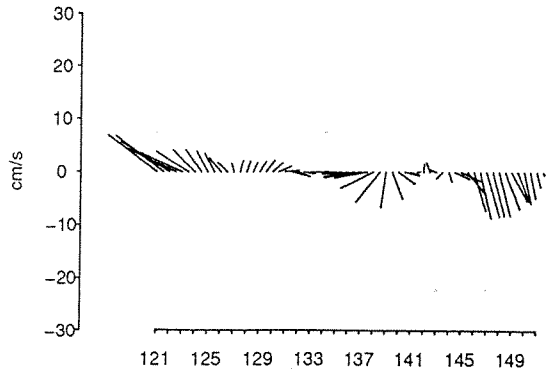
GSP90-IS9-1000m, MARCH 1991



GSP90-IS9-1000m, APRIL 1991

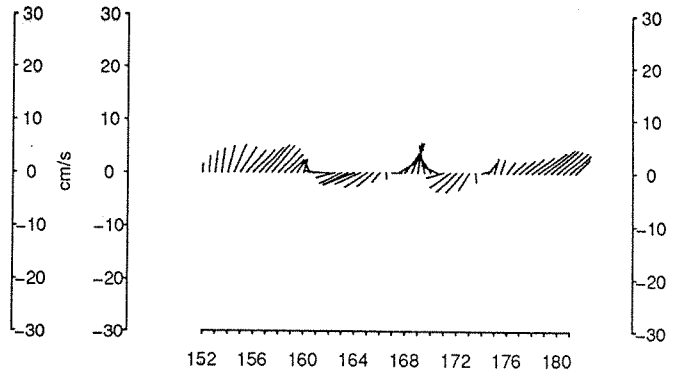


GSP90-IS9-1000m, MAY 1991



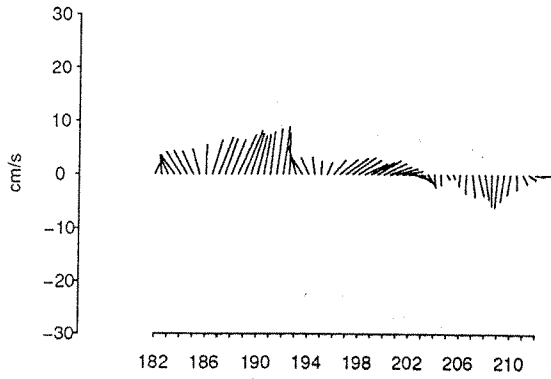
Day number 1991

GSP90-IS9-1000m, JUNE 1991



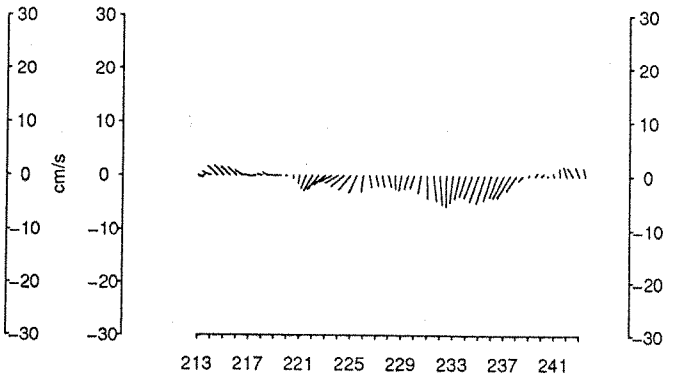
Day number 1991

GSP90-IS9-1000m, JULY 1991



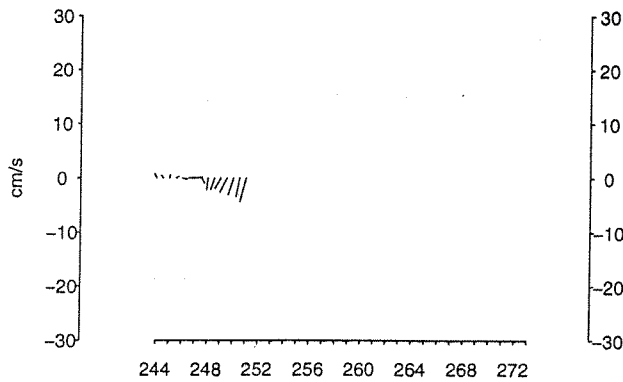
Day number 1991

GSP90-IS9-1000m, AUGUST 1991

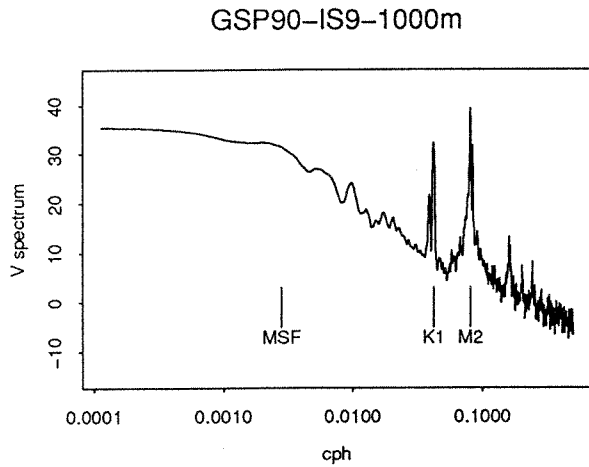
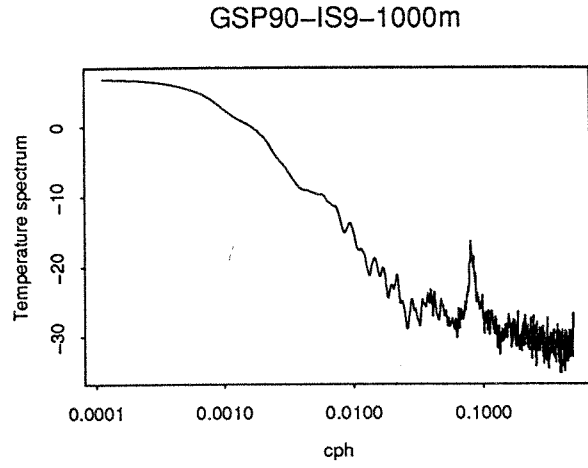
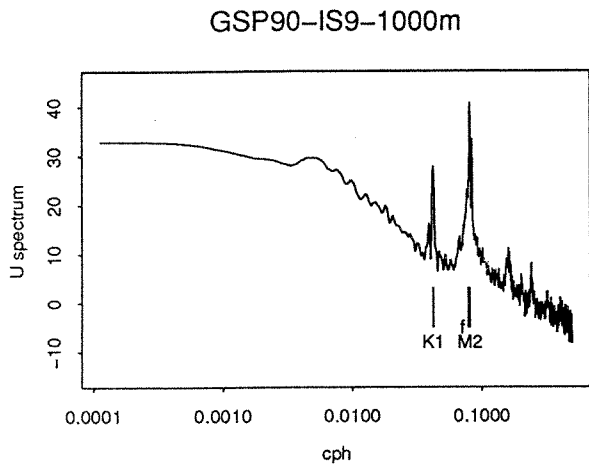


Day number 1991

GSP90-IS9-1000m, SEPTEMBER 1991



Day number 1991



GSP-IS9-1000m, Denmark Strait section, 8/9/90-9/9/91. Harmonic analysis of currents, showing the significant tidal constituents.

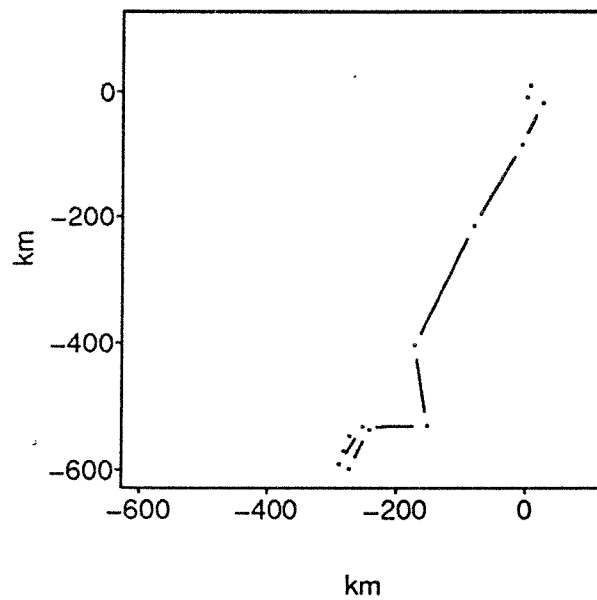
Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	1.6	0.0	61.3	180.0	118.7	241.3
SA	.00011407	2.8	-0.7	66.2	201.3	135.1	267.5
SSA	.00022816	1.3	-0.4	85.4	106.0	20.5	191.4
MSM	.00130978	1.6	-0.7	86.4	327.7	241.3	54.1
MM	.00151215	1.2	-0.1	2.7	206.0	203.3	208.6
P1	.04155259	1.0	0.4	74.6	230.6	156.0	305.2
K1	.04178075	2.8	1.2	65.5	230.0	164.5	295.5
N2	.07899925	1.9	0.6	53.8	291.7	237.9	345.4
M2	.08051140	10.3	2.6	41.0	302.4	261.5	343.4
S2	.08333334	4.3	0.8	39.0	341.1	302.1	20.1
K2	.08356149	1.3	0.2	43.6	341.5	297.9	25.1

AA017204
IS9 - 1450m

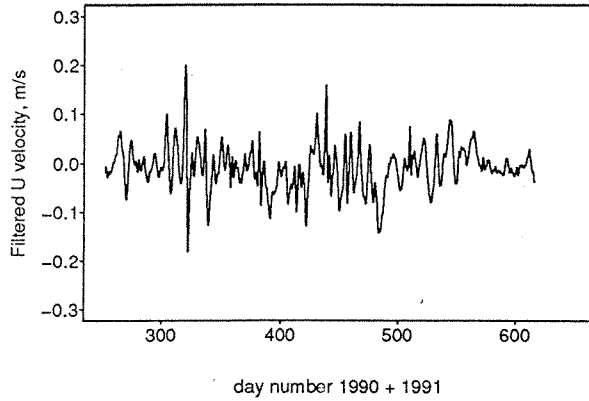
GSP-IS9-1450m, Denmark Strait section, 9/9/90-8/9/91. Means and deviations of filtered current and temperature

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)
Total:	-0.009 (0.045)	-0.019 (0.051)	-0.61 (0.04)
Sep 90	0.002(0.036)	-0.005(0.037)	-0.69(0.01)
Oct 90	0.002(0.029)	0.007(0.020)	-0.69(0.02)
Nov 90	0.007(0.067)	-0.011(0.088)	-0.63(0.04)
Dec 90	-0.012(0.041)	-0.025(0.036)	-0.60(0.03)
Jan 91	-0.028(0.039)	-0.048(0.042)	-0.59(0.03)
Feb 91	-0.038(0.034)	-0.078(0.033)	-0.58(0.03)
Mar 91	0.007(0.053)	-0.047(0.056)	-0.60(0.02)
Apr 91	-0.038(0.056)	-0.001(0.039)	-0.58(0.02)
May 91	-0.014(0.035)	-0.022(0.035)	-0.59(0.02)
Jun 91	0.006(0.047)	0.017(0.038)	-0.60(0.03)
Jul 91	0.012(0.026)	0.004(0.038)	-0.59(0.02)
Aug 91	-0.012(0.008)	-0.023(0.027)	-0.60(0.00)
Sep 91	0.002(0.018)	-0.010(0.026)	-0.60(0.01)

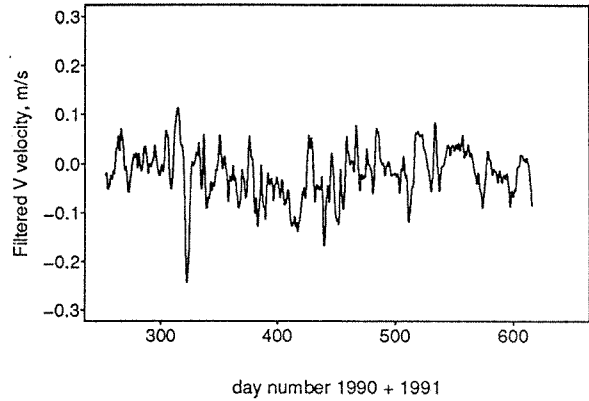
Prog.Vector GSP90-IS9-1450m



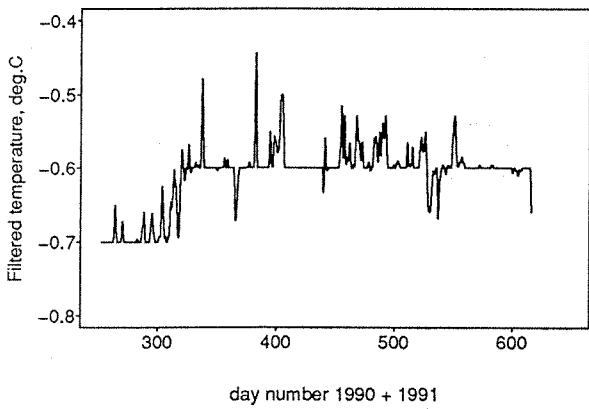
GSP90-IS9-1450m



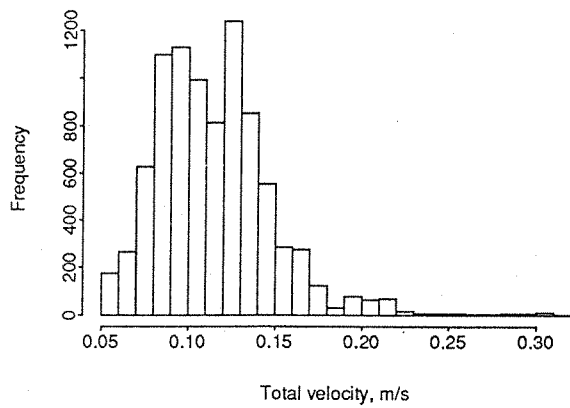
GSP90-IS9-1450m



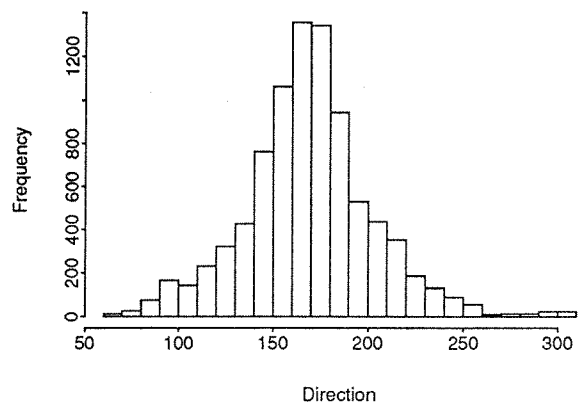
GSP90-IS9-1450m



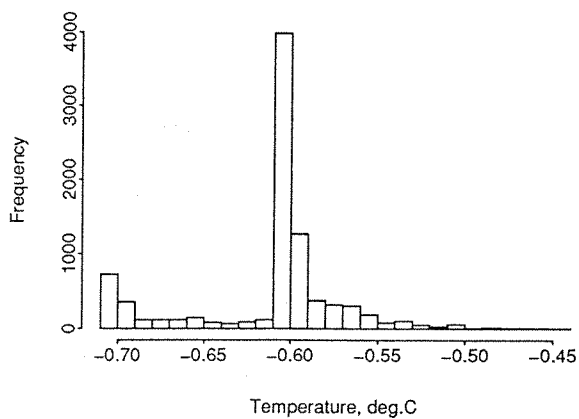
GSP90-IS9-1450m



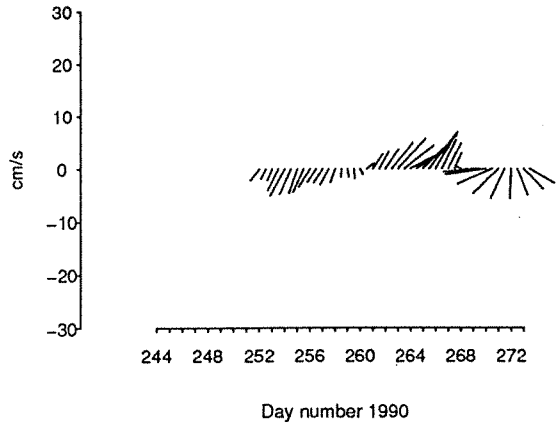
GSP90-IS9-1450m



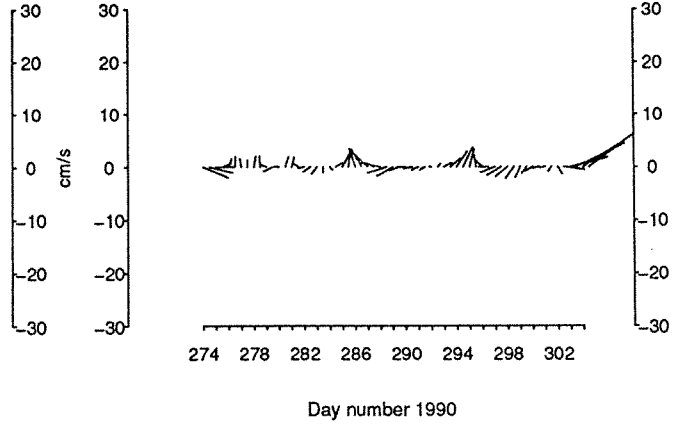
GSP90-IS9-1450m



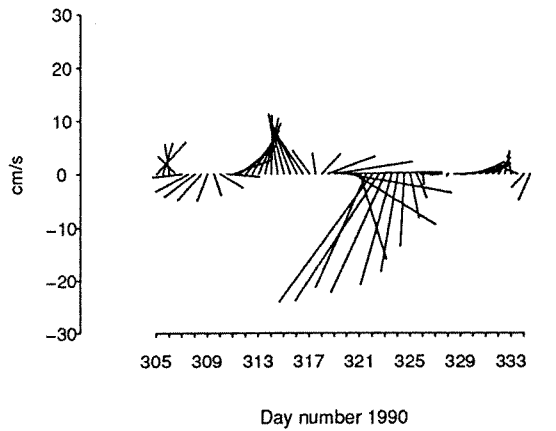
GSP90-IS9-1450m, SEPTEMBER 1990



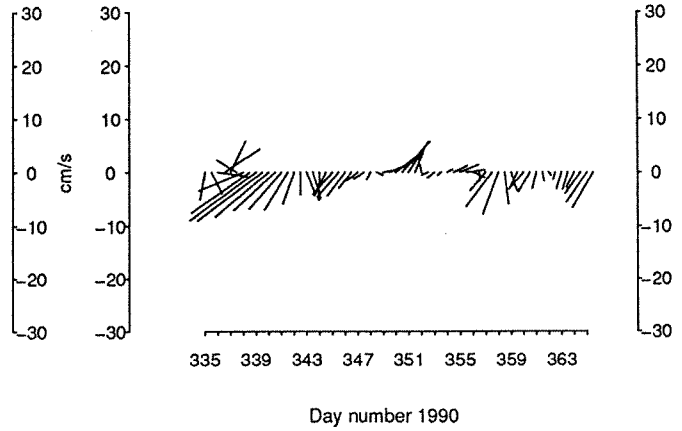
GSP90-IS9-1450m, OCTOBER 1990



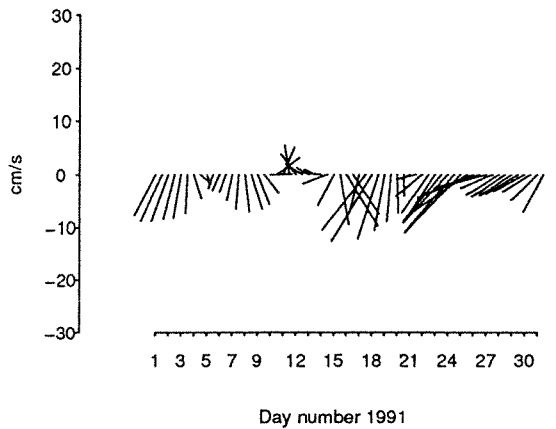
GSP90-IS9-1450m, NOVEMBER 1990



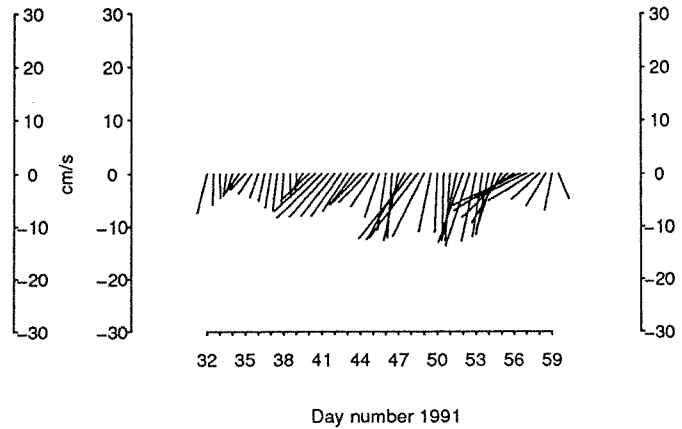
GSP90-IS9-1450m, DECEMBER 1990



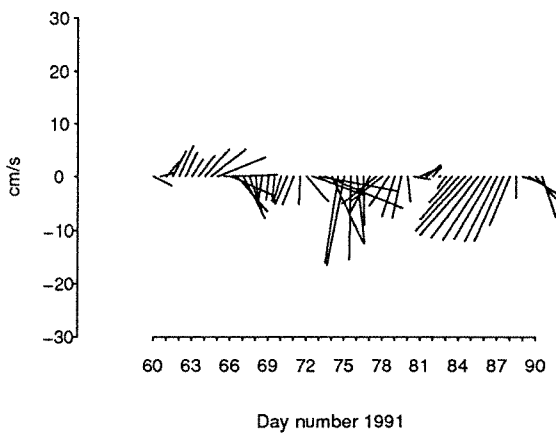
GSP90-IS9-1450m, JANUARY 1991



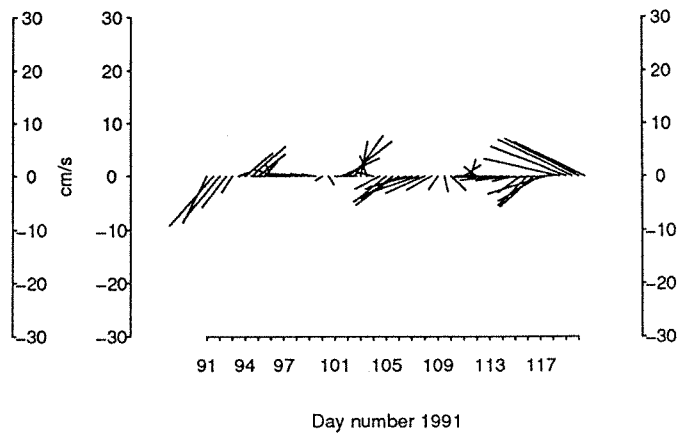
GSP90-IS9-1450m, FEBRUARY 1991



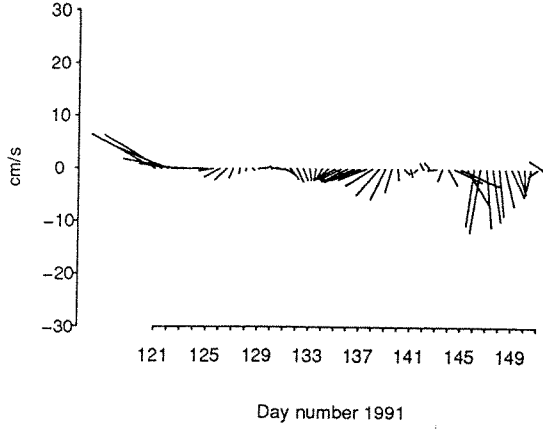
GSP90-IS9-1450m, MARCH 1991



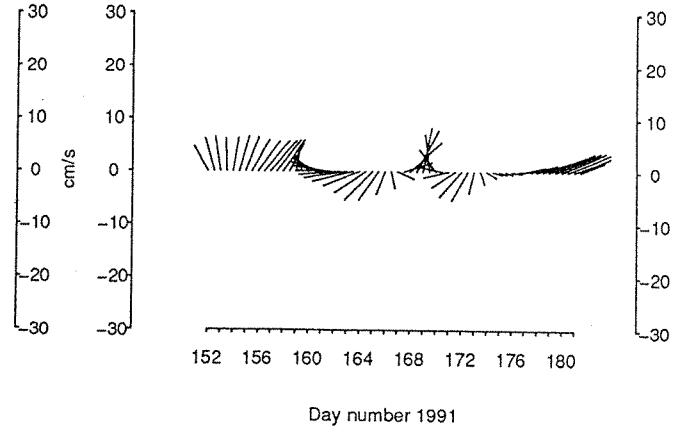
GSP90-IS9-1450m, APRIL 1991



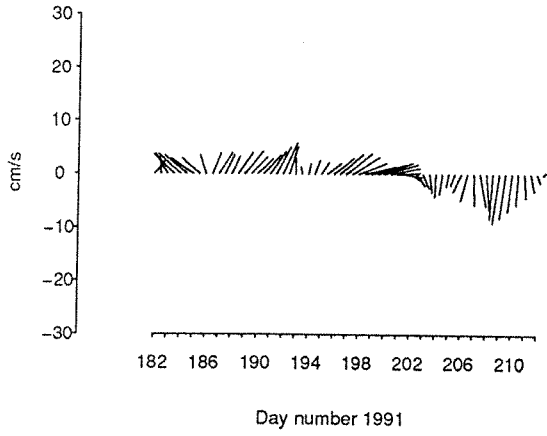
GSP90-IS9-1450m, MAY 1991



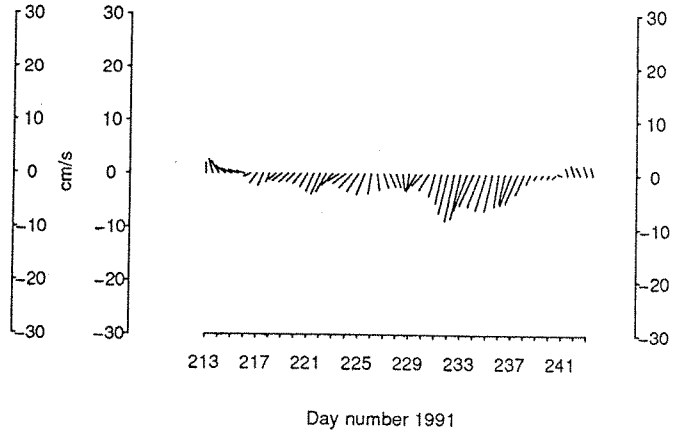
GSP90-IS9-1450m, JUNE 1991



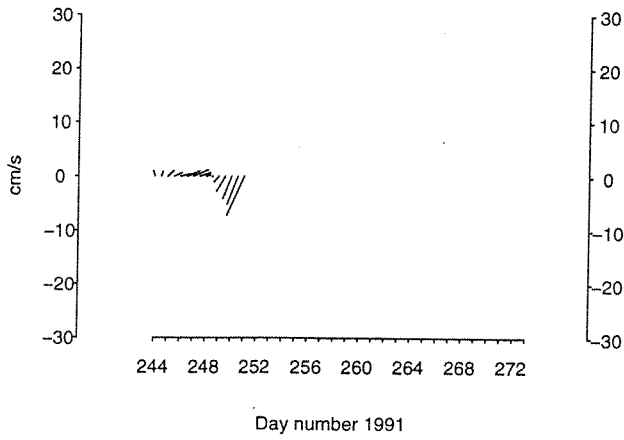
GSP90-IS9-1450m, JULY 1991



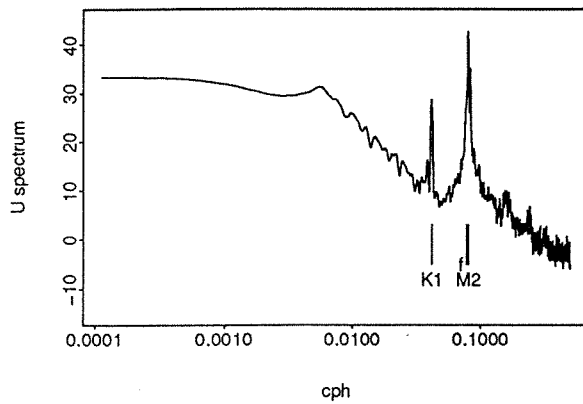
GSP90-IS9-1450m, AUGUST 1991



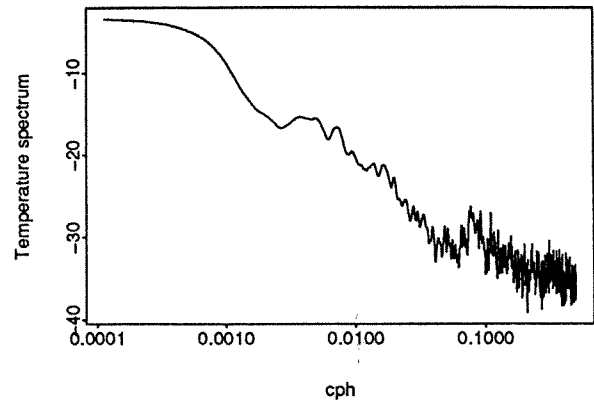
GSP90-IS9-1450m, SEPTEMBER 1991



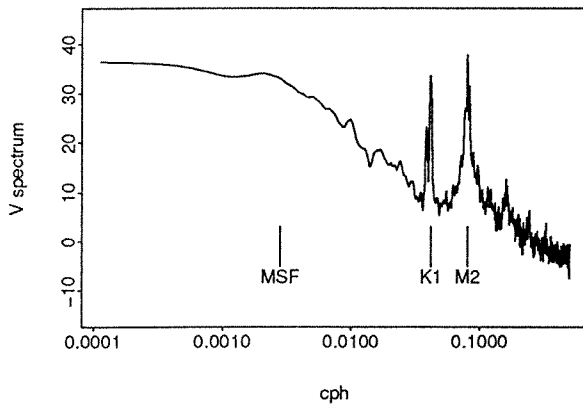
GSP90-IS9-1450m



GSP90-IS9-1450m



GSP90-IS9-1450m



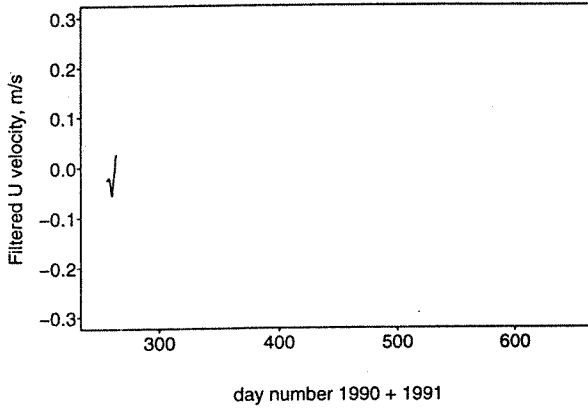
GSP-IS9-1450m, Denmark Strait section, 8/9/90-9/9/91. Harmonic analysis of currents, showing the significant tidal constituents.

Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	2.1	0.0	66.4	180.0	113.6	246.4
SA	.00011407	2.9	-0.6	60.4	219.9	159.5	280.3
SSA	.00022816	2.0	-0.3	85.3	109.3	24.0	194.6
MSM	.00130978	1.5	-0.7	73.0	339.6	266.6	52.6
MM	.00151215	1.2	-0.3	8.3	188.2	179.9	196.4
MSF	.00282193	1.1	-0.1	78.0	178.3	100.3	256.2
MF	.00305009	1.3	0.1	27.4	6.3	338.9	33.8
P1	.04155259	1.1	0.4	71.4	220.2	148.8	291.6
K1	.04178075	3.3	1.3	67.0	225.1	158.1	292.1
N2	.07899925	2.1	0.8	3.0	231.5	228.5	234.6
M2	.08051140	11.5	3.1	25.9	276.0	250.1	302.0
S2	.08333334	4.9	0.5	33.1	322.8	289.7	355.9
K2	.08356149	1.3	0.2	43.9	327.3	283.4	11.3

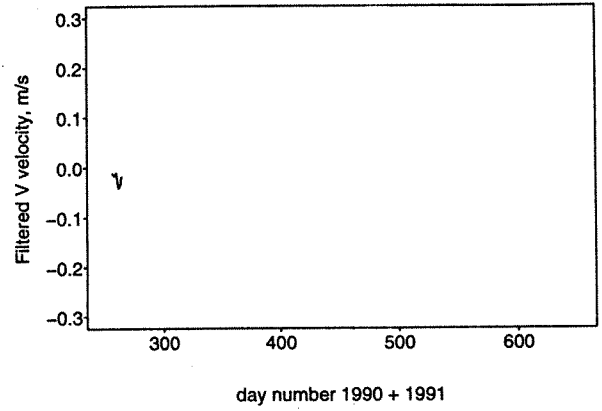
KOLBEINSEY RIDGE

AA693311
IS10 - 80m

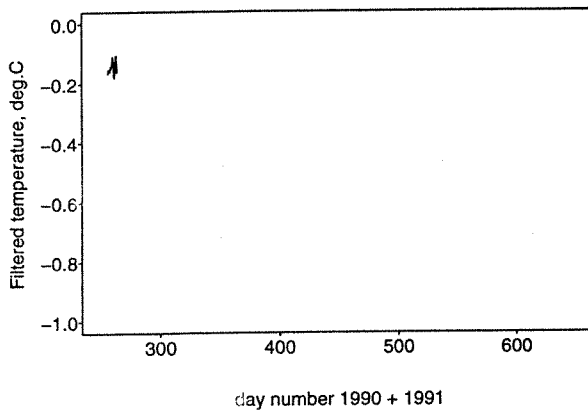
GSP90-IS10-80m



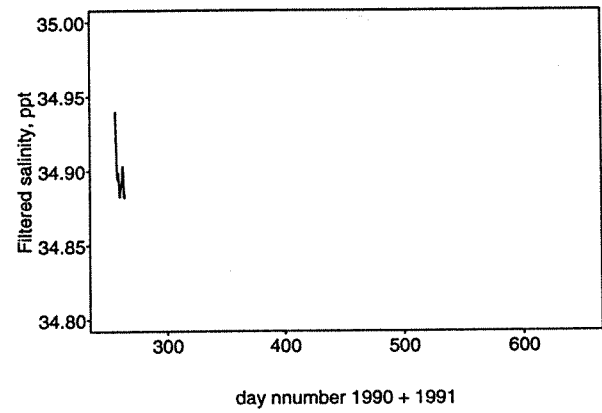
GSP90-IS10-80m



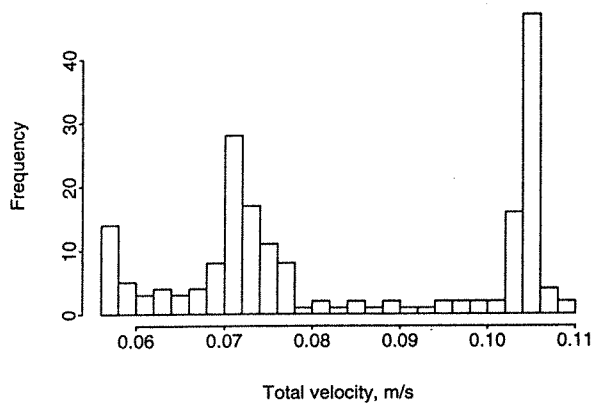
GSP90-IS10-80m



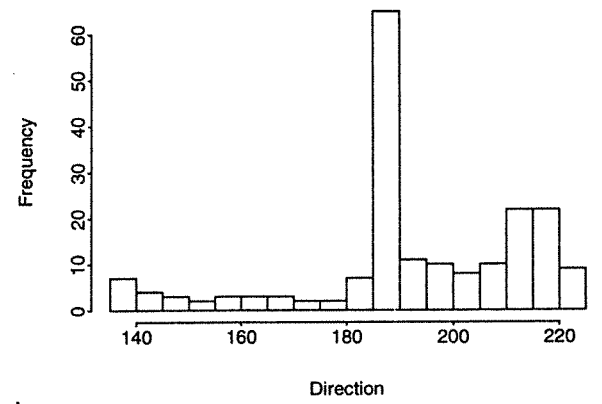
GSP90-IS10-80m



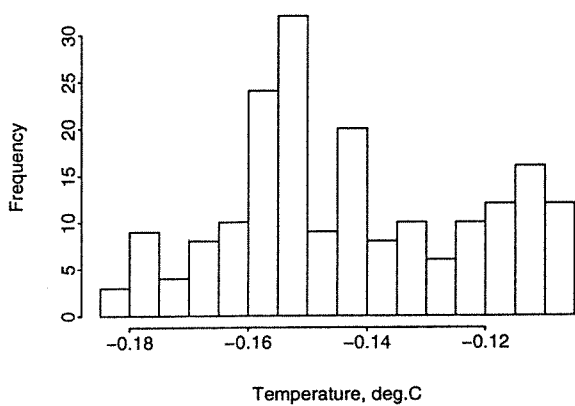
GSP90-IS10-80m



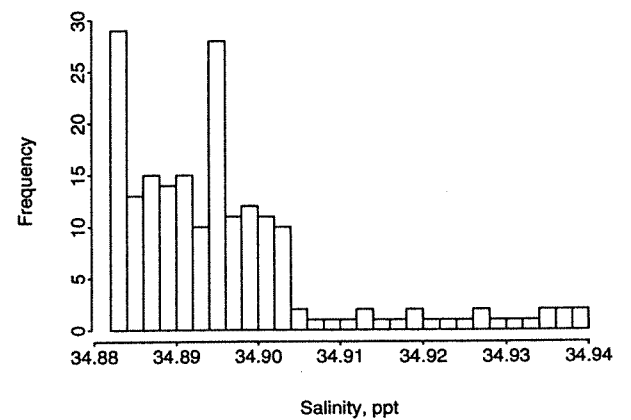
GSP90-IS10-80m



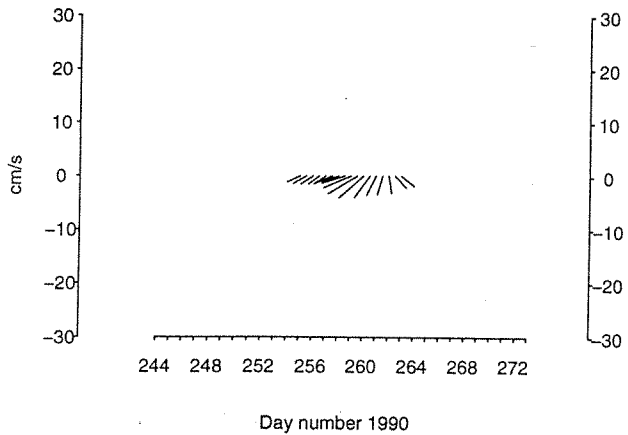
GSP90-IS10-80m



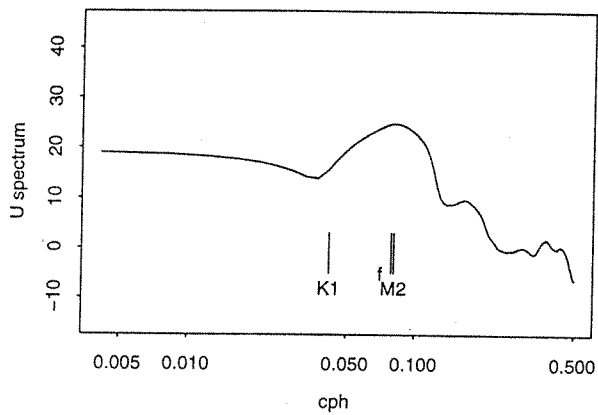
GSP90-IS10-80m



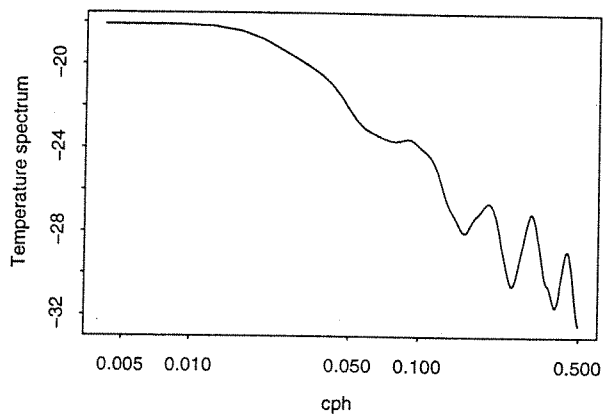
GSP90-IS10-80m, SEPTEMBER 1990



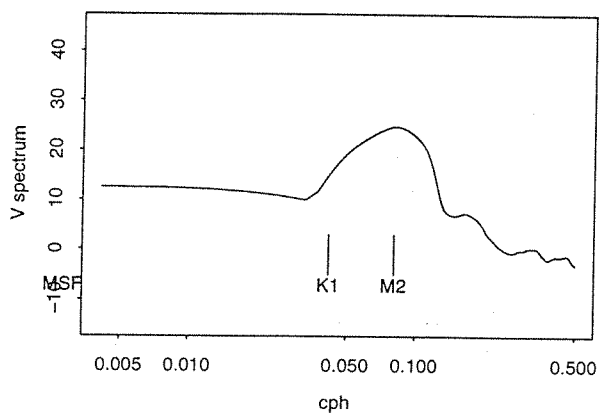
GSP90-IS10-80m



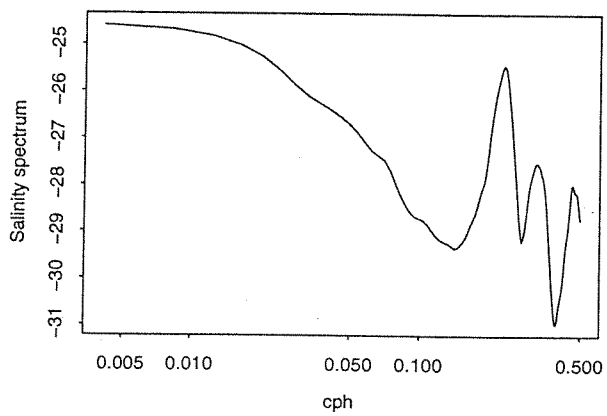
GSP90-IS10-80m



GSP90-IS10-80m



GSP90-IS10-80m

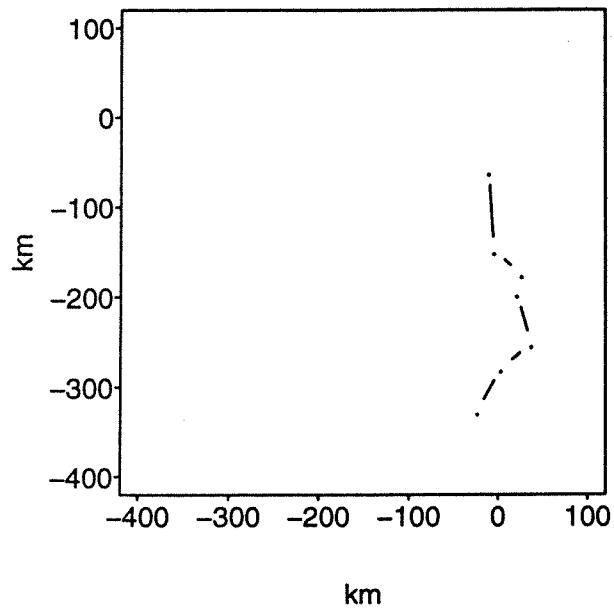


AA790307
IS10 - 500m

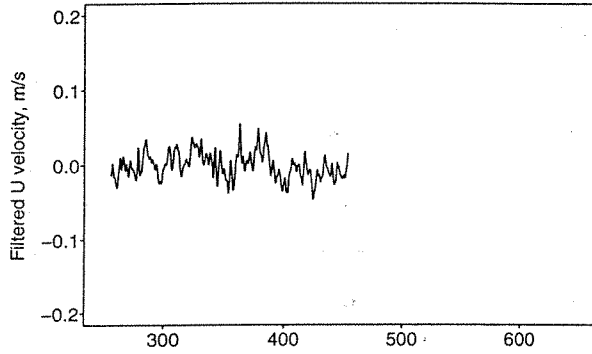
GSP-IS10-500m, 69°00'N, 17°20'W, 12/9/90-28/3/91. Means and deviations of filtered current, temperature and salinity

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)	Salinity psu mean(st.dev.)
Total:	-0.001 (0.017)	-0.019 (0.018)	0.01 (0.09)	34.71 (0.01)
Sep 90	-0.006(0.010)	-0.037(0.019)	-0.04(0.05)	34.72(0.02)
Oct 90	0.002(0.015)	-0.033(0.017)	0.10(0.06)	34.71(0.01)
Nov 90	0.012(0.013)	-0.010(0.010)	0.16(0.04)	34.70(0.01)
Dec 90	-0.002(0.019)	-0.008(0.017)	-0.01(0.04)	34.70(0.01)
Jan 91	0.006(0.019)	-0.021(0.017)	-0.06(0.05)	34.71(0.01)
Feb 91	-0.014(0.015)	-0.011(0.010)	-0.08(0.02)	34.71(0.01)
Mar 91	-0.011(0.010)	-0.020(0.014)	-0.03(0.04)	34.71(0.01)

Prog.Vector GSP90-IS10-500m

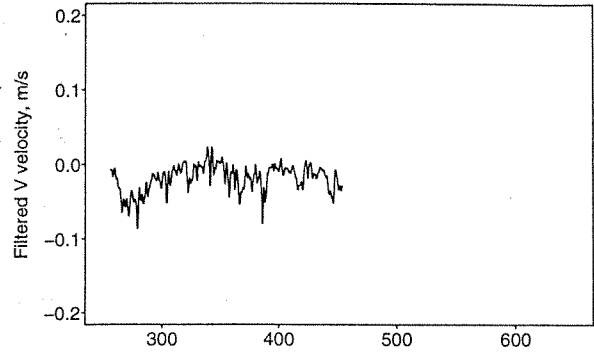


GSP90-IS10-500m



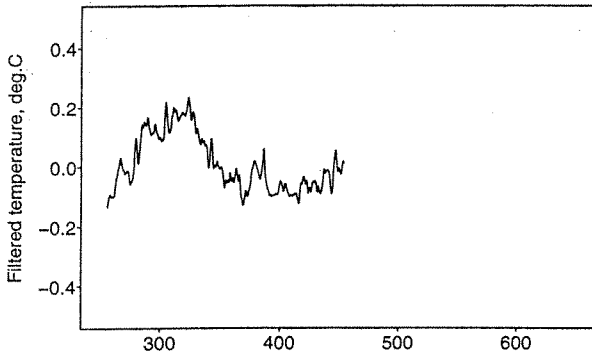
day number 1990 + 1991

GSP90-IS10-500m



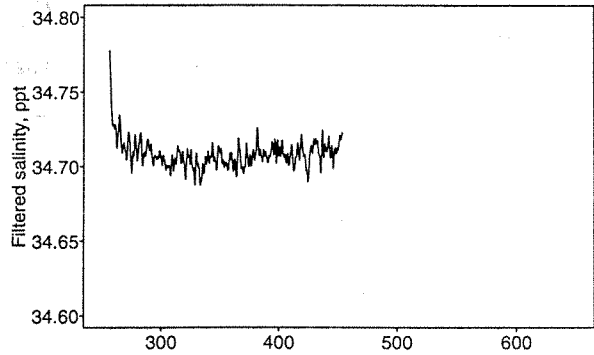
day number 1990 + 1991

GSP90-IS10-500m



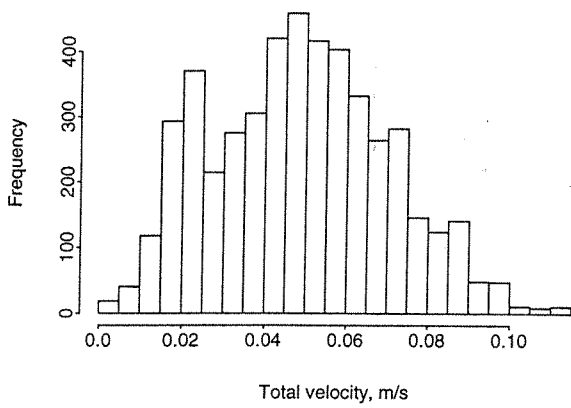
day number 1990 + 1991

GSP90-IS10-500m



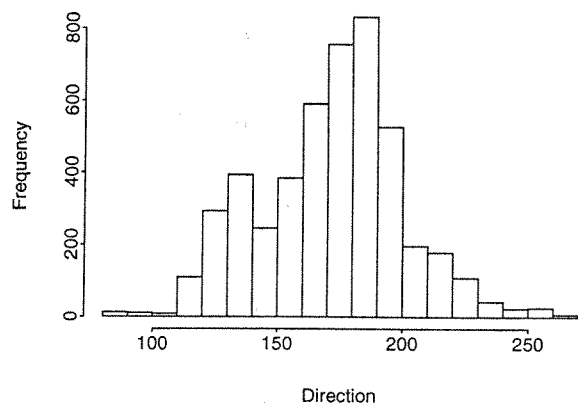
day number 1990 + 1991

GSP90-IS10-500m



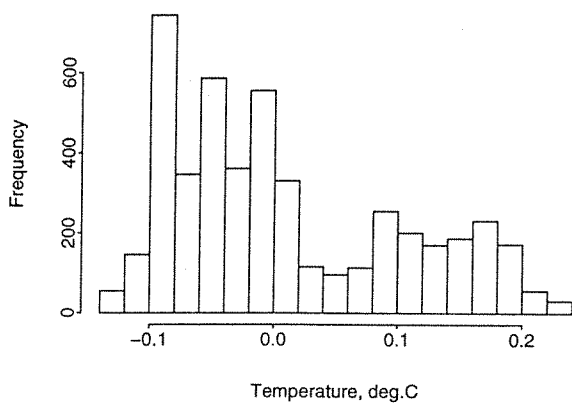
Total velocity, m/s

GSP90-IS10-500m



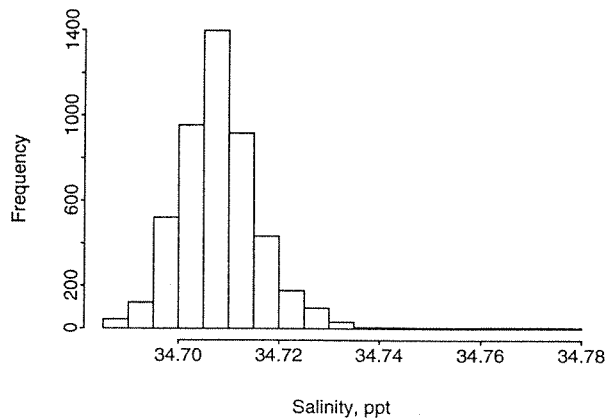
Direction

GSP90-IS10-500m



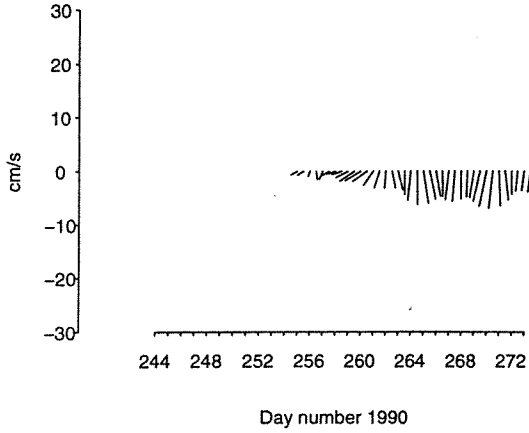
Temperature, deg.C

GSP90-IS10-500m

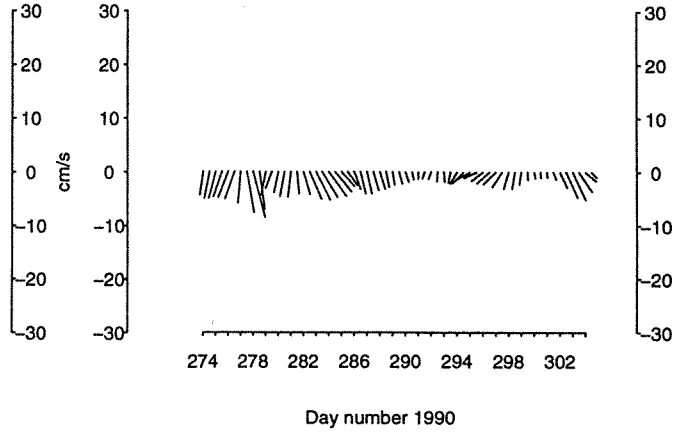


Salinity, ppt

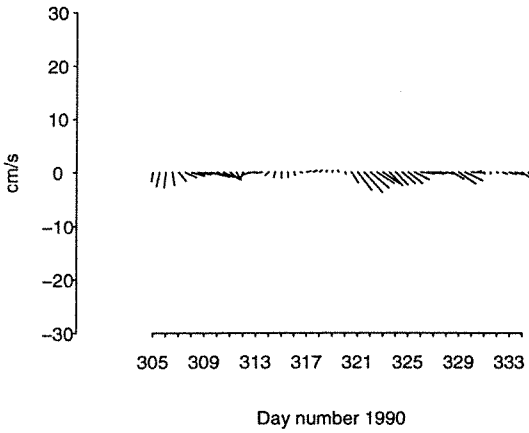
GSP90-IS10-500m, SEPTEMBER 1990



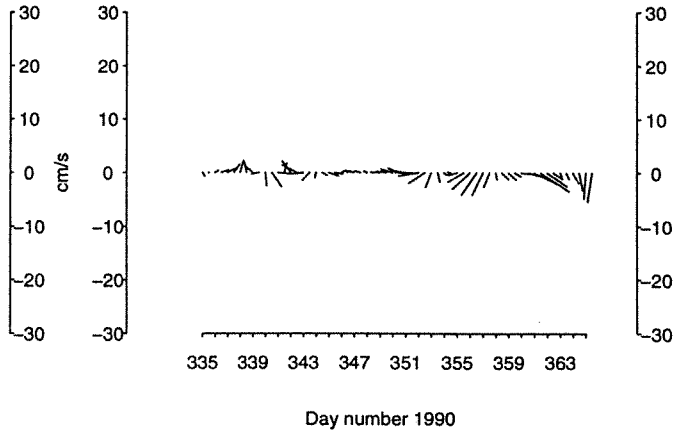
GSP90-IS10-500m, OCTOBER 1990



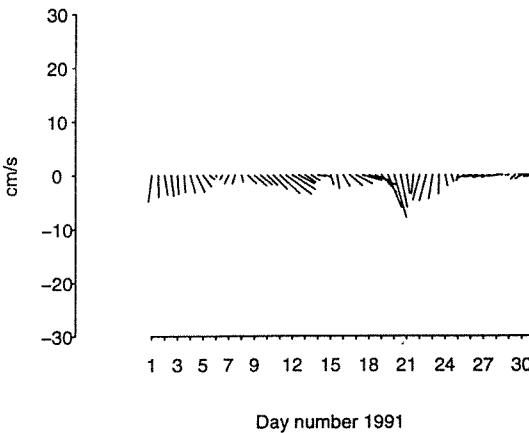
GSP90-IS10-500m, NOVEMBER 1990



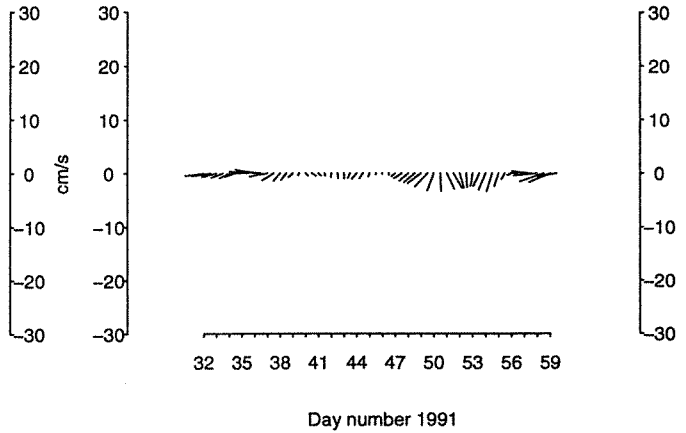
GSP90-IS10-500m, DECEMBER 1990



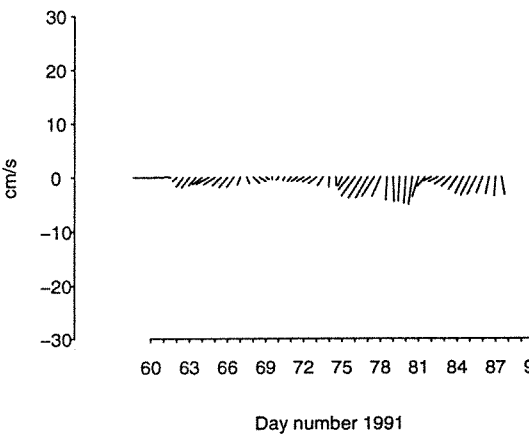
GSP90-IS10-500m, JANUARY 1991

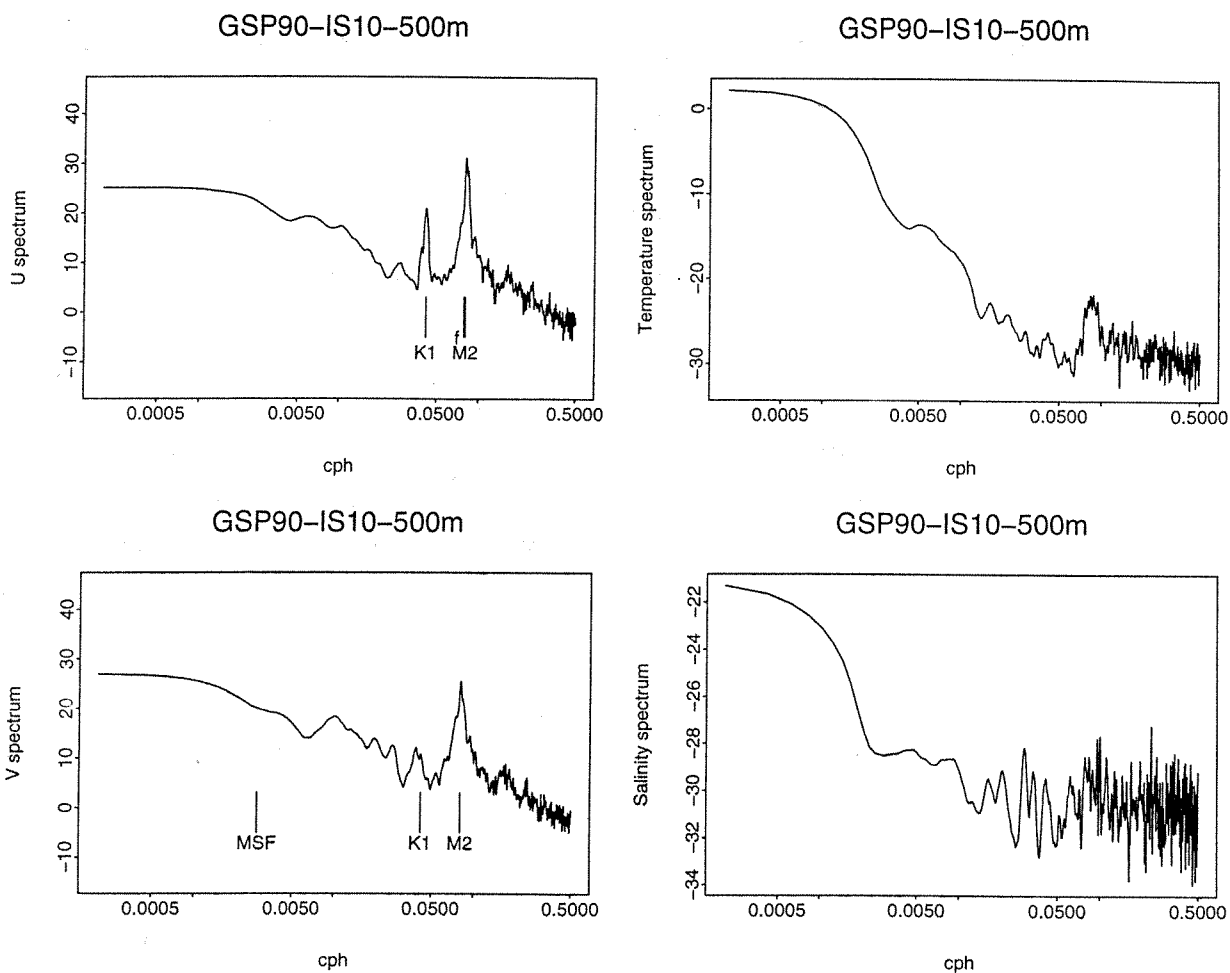


GSP90-IS10-500m, FEBRUARY 1991



GSP90-IS10-500m, MARCH 1991





GSP-IS10-500m, 69°00'N, 17°20'W, 10/9/90-29/3/91. Harmonic analysis of currents, showing the significant tidal constituents.

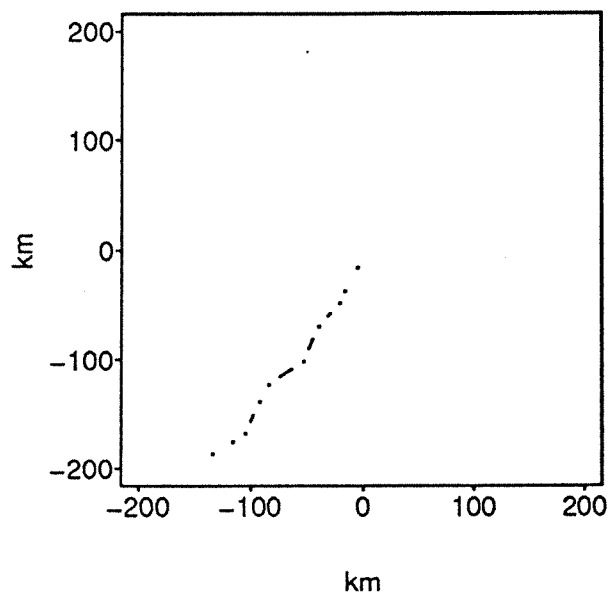
Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	1.8	0.0	88.6	180.0	91.4	268.6
SSA	.00022816	1.2	0.7	44.5	160.0	115.5	204.6
K1	.04178075	1.0	0.2	9.8	220.3	210.5	230.1
M2	.08051140	3.6	0.2	14.8	277.6	262.9	292.4
S2	.08333334	2.5	-0.9	11.8	316.2	304.4	328.1

AA684608
IS10 - 750m

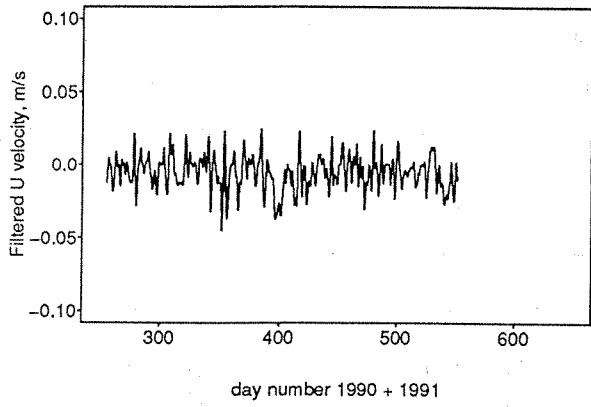
GSP-IS10-750m, 69°00'N, 17°20'W, 12/9/90-5/7/91. Means and deviations of filtered current and temperature

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)
Total:	-0.005 (0.011)	-0.007 (0.009)	-0.44 (0.05)
Sep 90	-0.003(0.007)	-0.010(0.008)	-0.47(0.03)
Oct 90	-0.004(0.010)	-0.008(0.013)	-0.39(0.05)
Nov 90	-0.002(0.010)	-0.004(0.006)	-0.37(0.03)
Dec 90	-0.007(0.015)	-0.008(0.012)	-0.42(0.03)
Jan 91	-0.005(0.013)	-0.012(0.013)	-0.45(0.04)
Feb 91	-0.013(0.013)	-0.009(0.008)	-0.49(0.03)
Mar 91	-0.003(0.009)	-0.006(0.006)	-0.45(0.04)
Apr 91	-0.005(0.010)	-0.011(0.009)	-0.41(0.03)
May 91	-0.004(0.008)	-0.003(0.003)	-0.47(0.03)
Jun 91	-0.007(0.011)	-0.004(0.004)	-0.50(0.01)
Jul 91	-0.013(0.008)	-0.003(0.002)	-0.50(0.00)

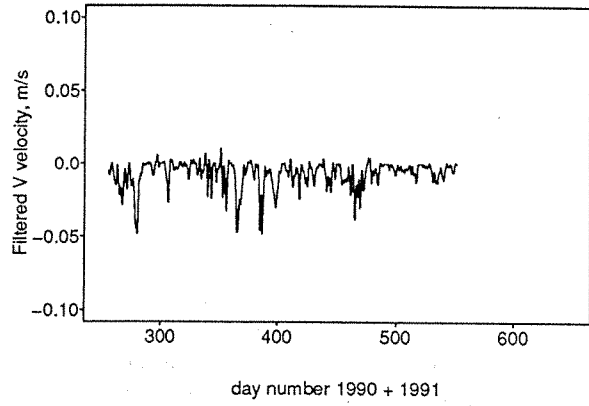
Prog.Vector GSP90-IS10-750m



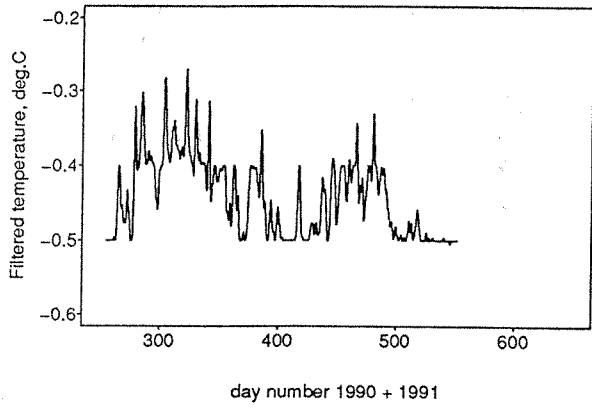
GSP90-IS10-750m



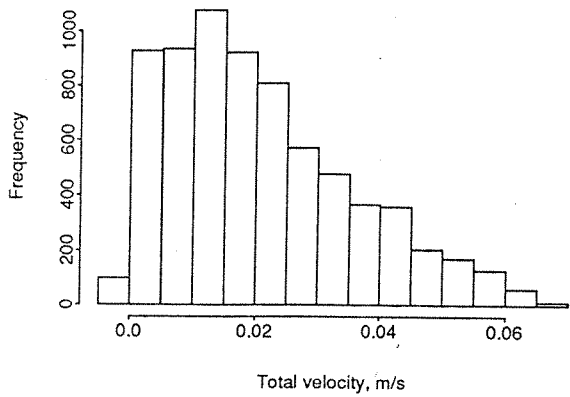
GSP90-IS10-750m



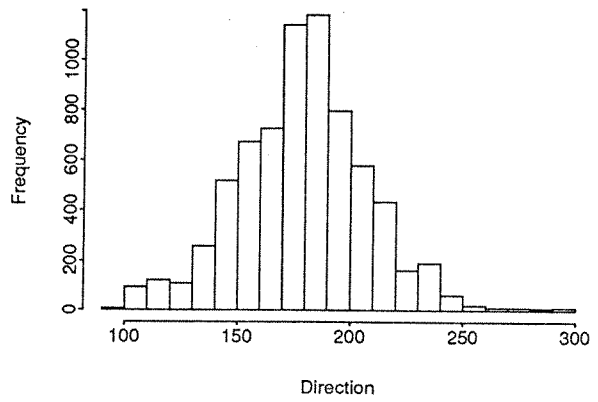
GSP90-IS10-750m



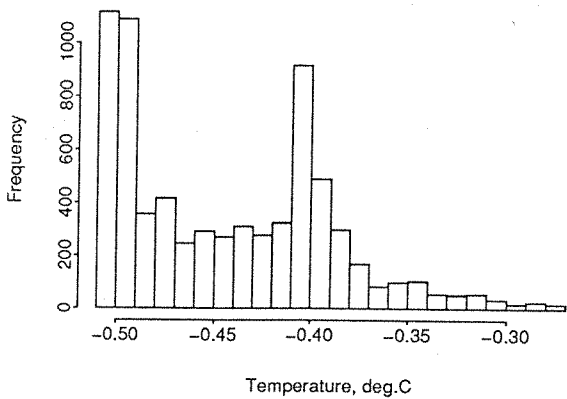
GSP90-IS10-750m



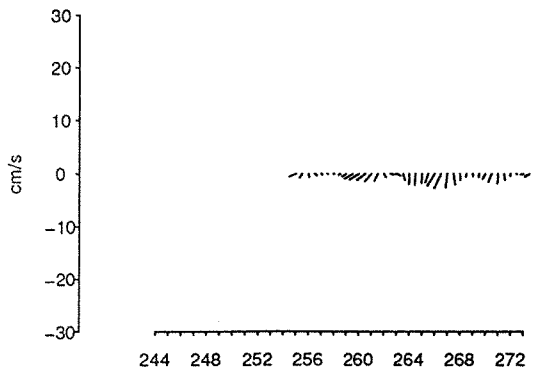
GSP90-IS10-750m



GSP90-IS10-750m

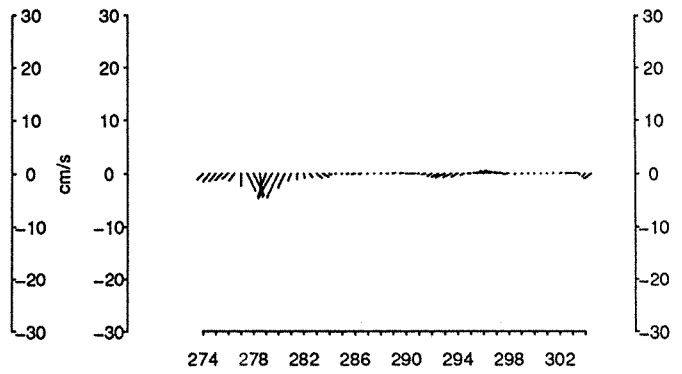


GSP90-IS10-750m, SEPTEMBER 1990



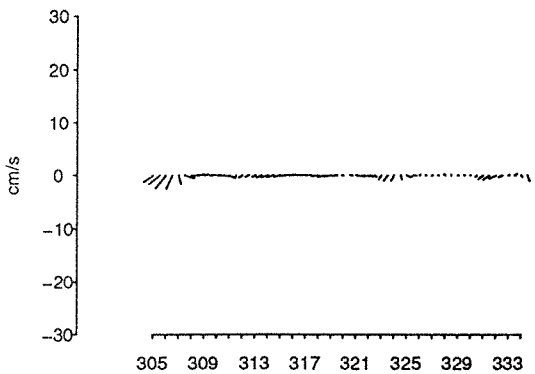
Day number 1990

GSP90-IS10-750m, OCTOBER 1990



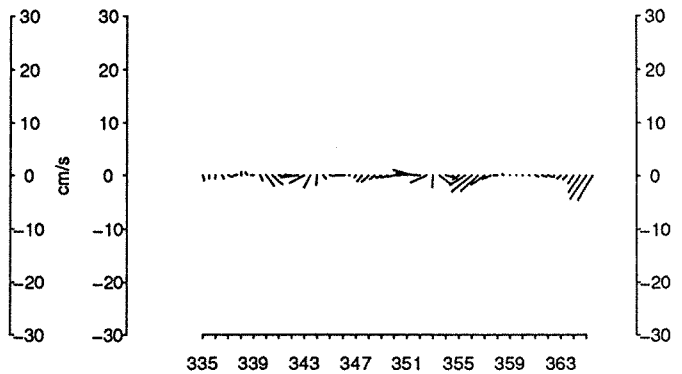
Day number 1990

GSP90-IS10-750m, NOVEMBER 1990



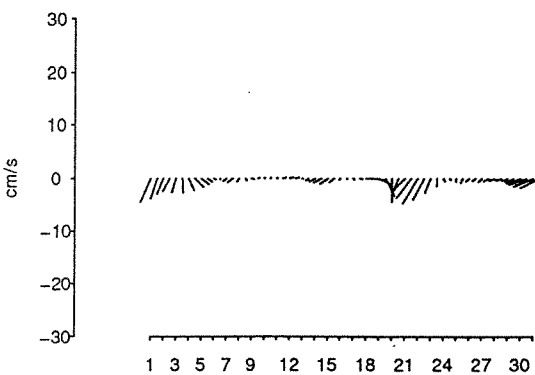
Day number 1990

GSP90-IS10-750m, DECEMBER 1990



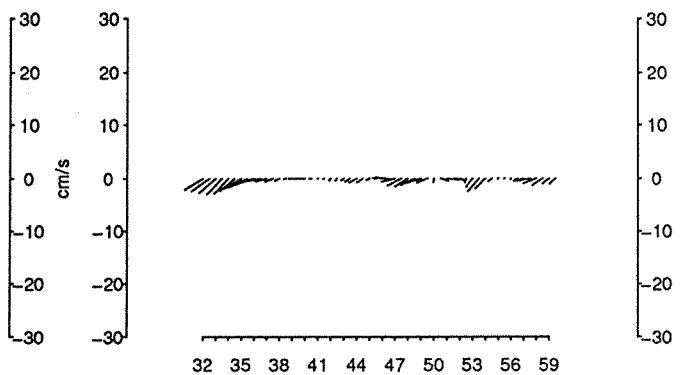
Day number 1990

GSP90-IS10-750m, JANUARY 1991



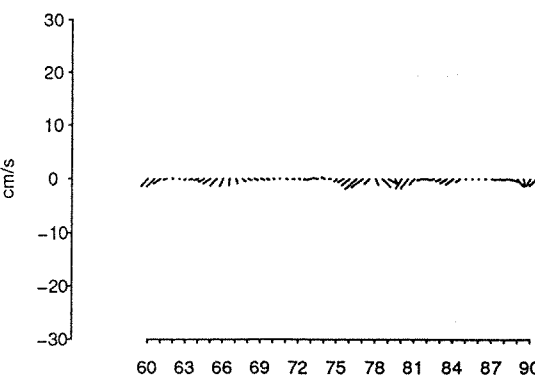
Day number 1991

GSP90-IS10-750m, FEBRUARY 1991



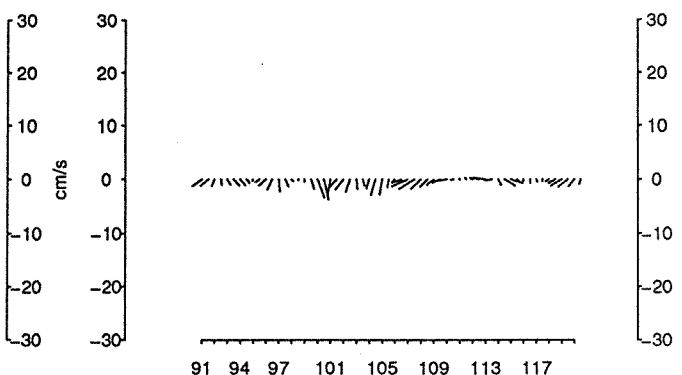
Day number 1991

GSP90-IS10-750m, MARCH 1991



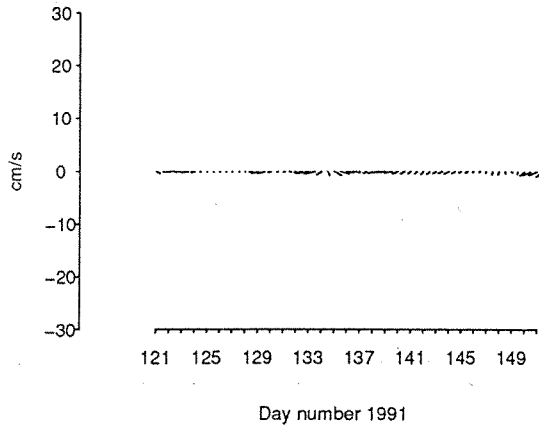
Day number 1991

GSP90-IS10-750m, APRIL 1991

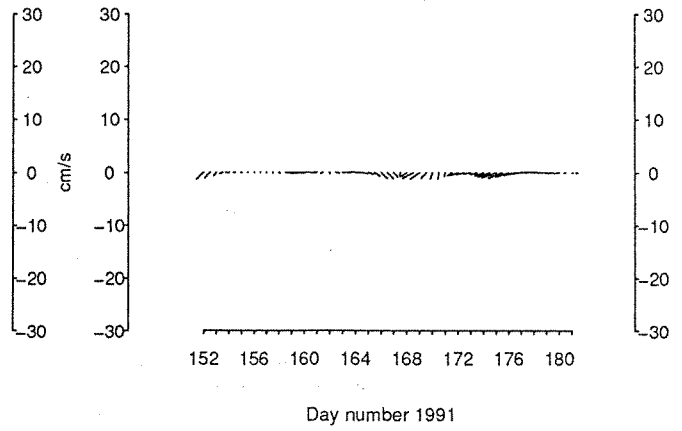


Day number 1991

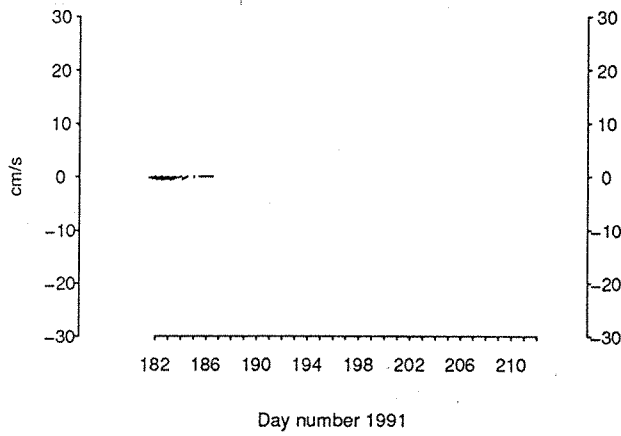
GSP90-IS10-750m, MAY 1991



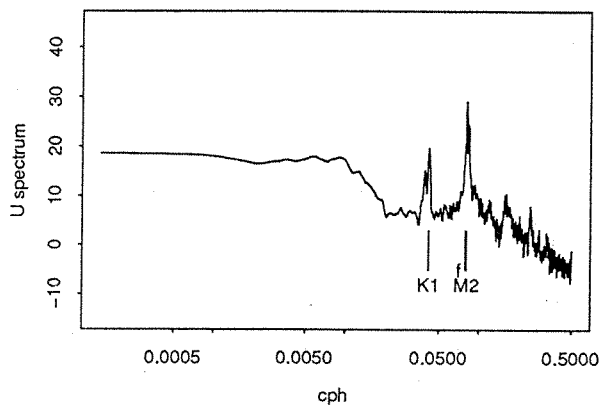
GSP90-IS10-750m, JUNE 1991



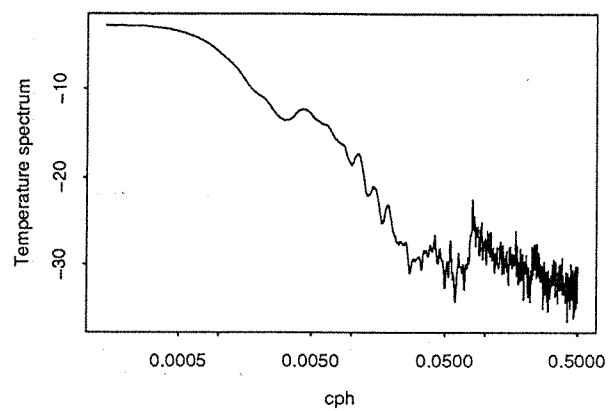
GSP90-IS10-750m, JULY 1991



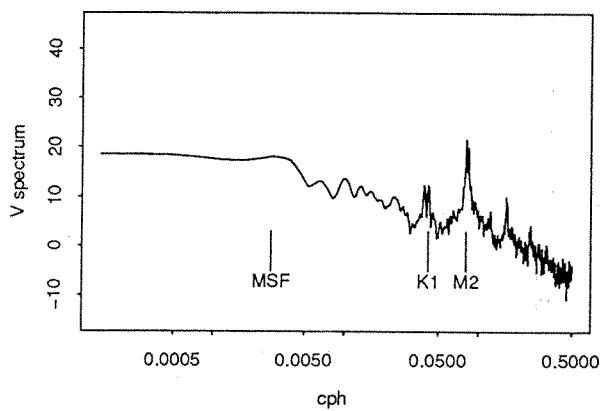
GSP90-IS10-750m



GSP90-IS10-750m



GSP90-IS10-750m



GSP-IS10-750m, 69°00'N, 17°20'W, 11/9/90-6/7/91. Harmonic analysis of currents, showing the significant tidal constituents.

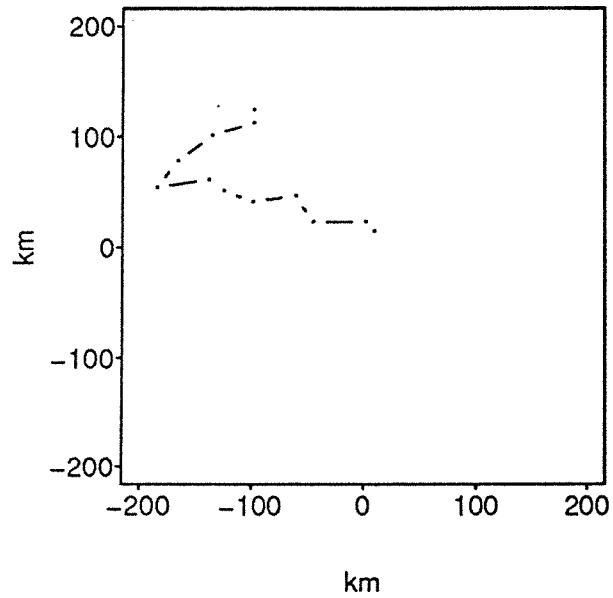
Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	1.0	0.0	52.5	180.0	127.5	232.5
M2	.08051140	2.6	-0.2	20.1	279.5	259.4	299.6
S2	.08333334	1.4	-0.2	27.9	331.0	303.1	358.8

AA089801
IS10 - 1450m

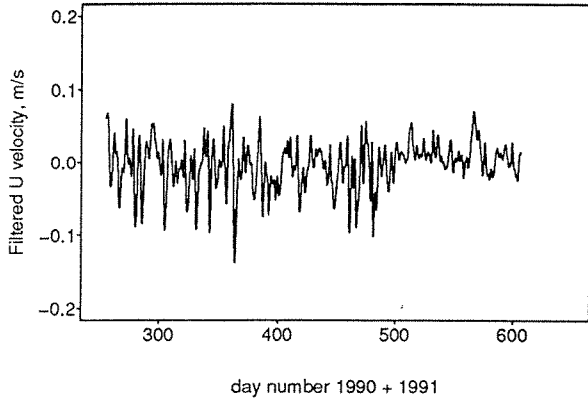
GSP-IS10-1450m, 69°00'N, 17°20'W, 12/9/90-29/8/91. Means and deviations of filtered current and temperature

Period (month)	U, east comp. m/s mean(st.dev.)	V, north comp. m/s mean(st.dev.)	Temperature °C mean(st.dev.)
Total:	-0.003 (0.032)	0.004 (0.019)	-0.71 (0.02)
Sep 90	0.006(0.035)	0.009(0.018)	-0.72(0.03)
Oct 90	-0.003(0.040)	0.003(0.023)	-0.71(0.02)
Nov 90	-0.018(0.029)	-0.000(0.021)	-0.71(0.02)
Dec 90	-0.006(0.048)	0.009(0.025)	-0.71(0.02)
Jan 91	-0.014(0.030)	-0.002(0.020)	-0.71(0.02)
Feb 91	-0.011(0.027)	0.004(0.015)	-0.70(0.00)
Mar 91	-0.005(0.024)	0.004(0.015)	-0.72(0.02)
Apr 91	-0.018(0.040)	-0.003(0.026)	-0.71(0.02)
May 91	0.007(0.021)	0.009(0.011)	-0.73(0.02)
Jun 91	0.012(0.012)	0.009(0.008)	-0.71(0.02)
Jul 91	0.014(0.023)	0.004(0.015)	-0.70(0.01)
Aug 91	0.000(0.015)	0.005(0.011)	-0.70(0.00)

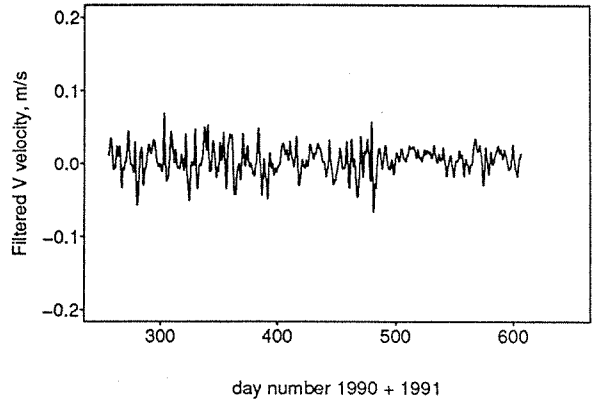
Prog. Vector GSP90-IS10-1450m



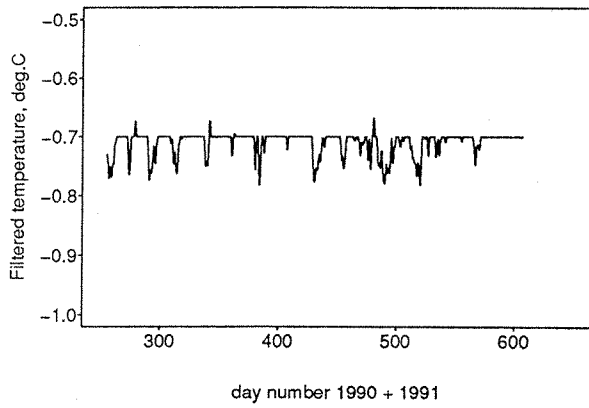
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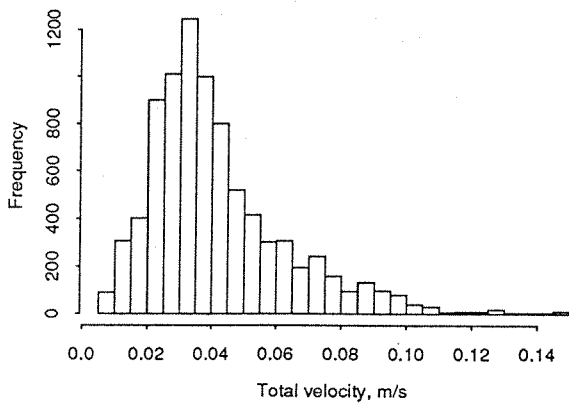
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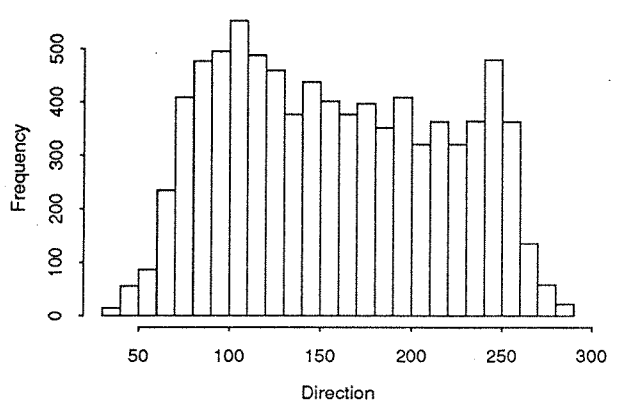
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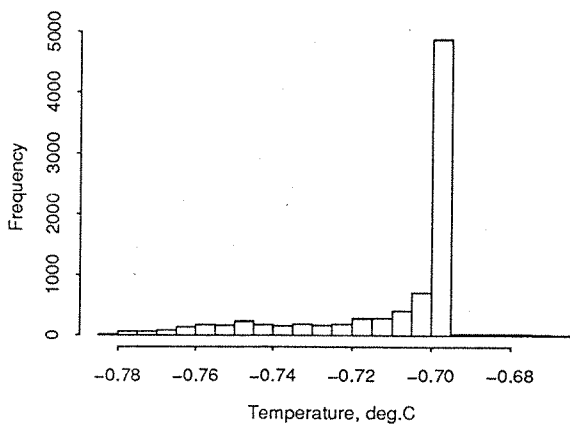
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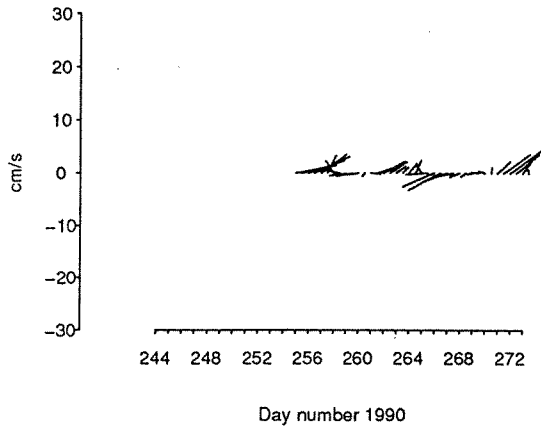
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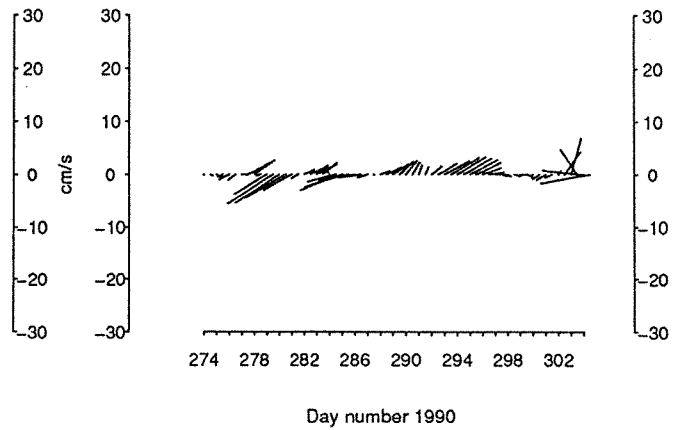
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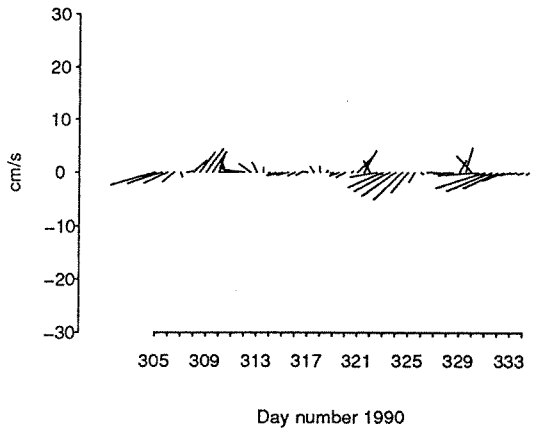
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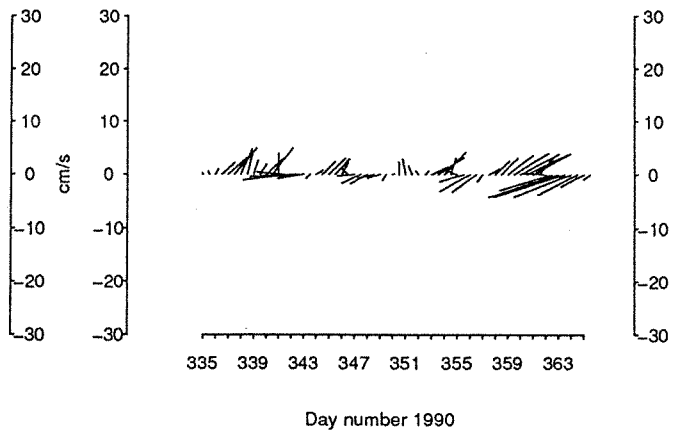
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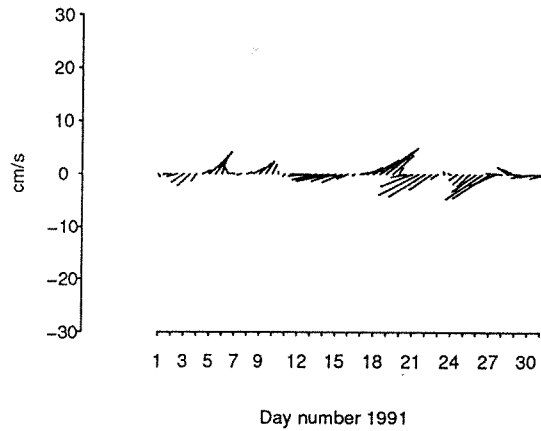
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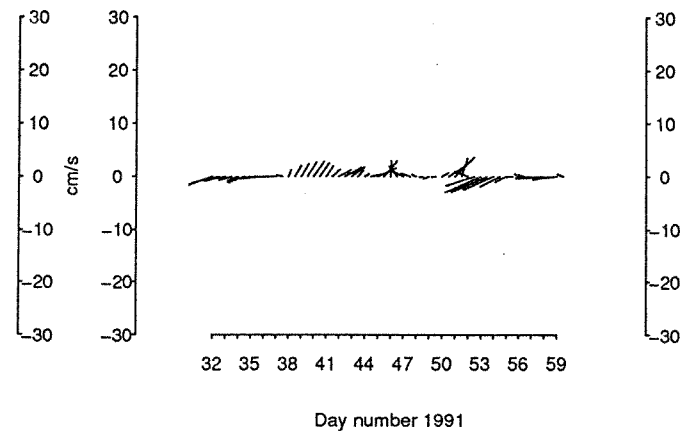
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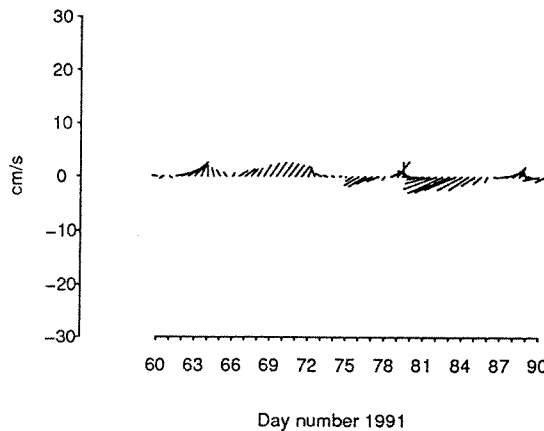
GSP90-IS10-1450m, JANUARY 1991



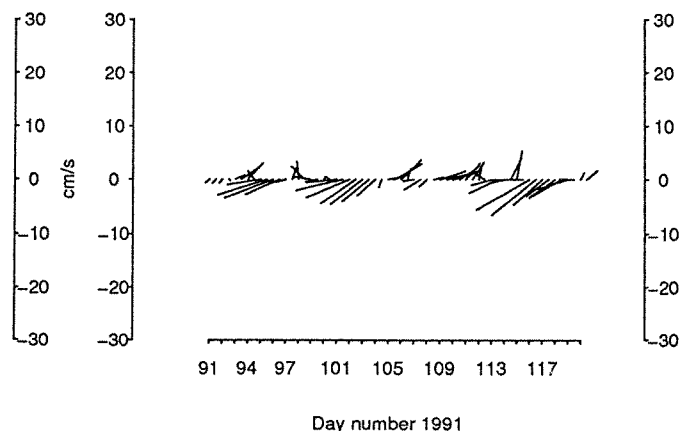
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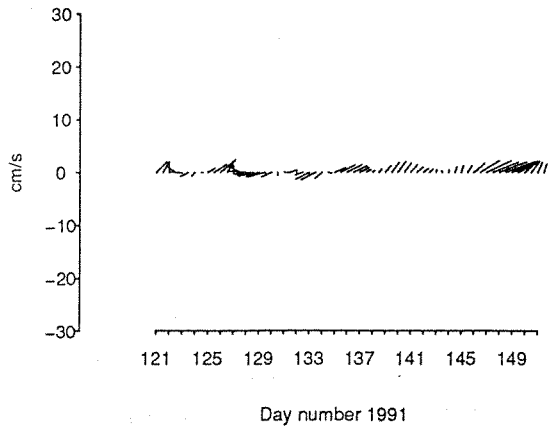
GSP90-IS10-1450m, MARCH 1991



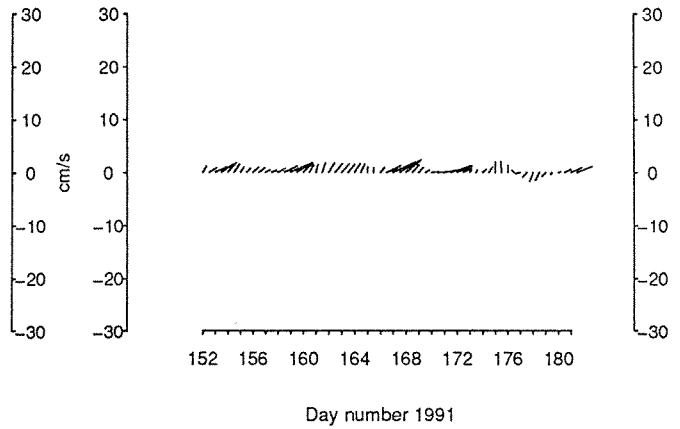
GSP90-IS10-1450m, APRIL 1991



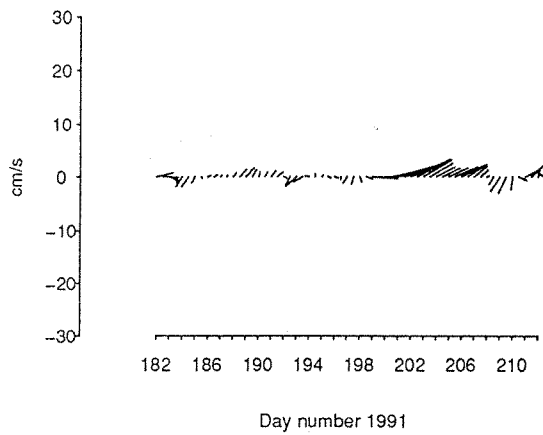
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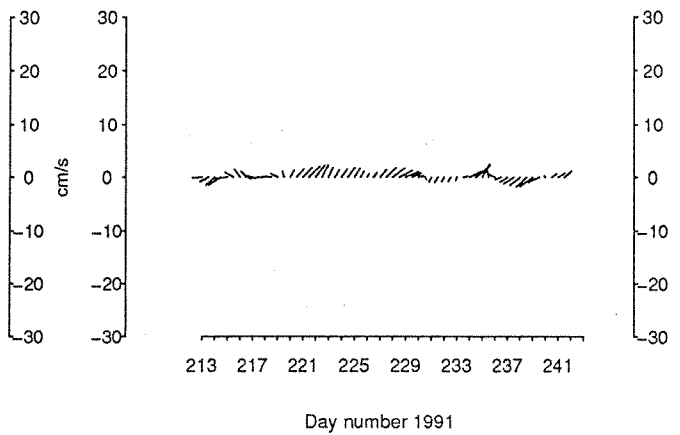
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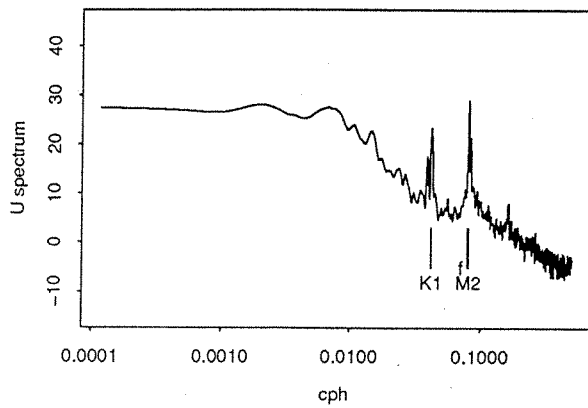
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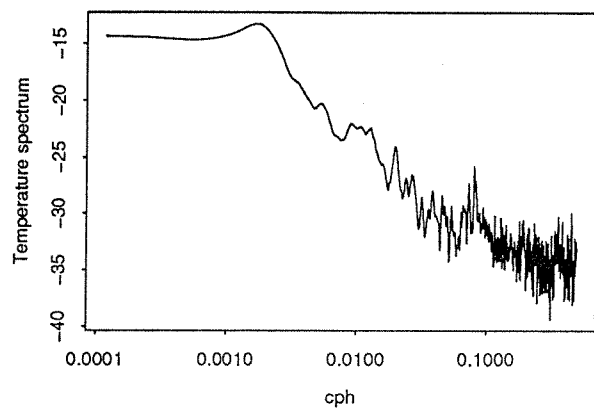
GSP90-IS10-1450m, AUGUST 1991



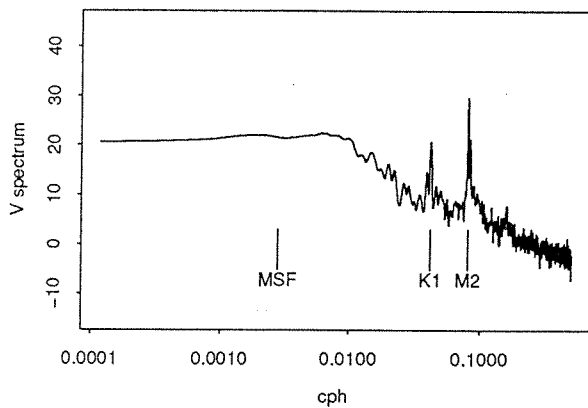
GSP90-IS10-1450m



GSP90-IS10-1450m



GSP90-IS10-1450m



GSP-IS10-1450m, 69°00'N, 17°20'W, 11/9/90-30/8/91. Harmonic analysis of currents, showing the significant tidal constituents.

Name	Frequency cph	Mayor axis A cm/s	Minor axis B cm/s	INC °	G °	G+ °	G- °
Z0	.00000000	0.5	0.0	127.1	0.0	232.9	127.1
K1	.04178075	1.2	0.1	35.3	239.2	203.9	274.5
M2	.08051140	3.1	0.3	47.7	331.3	283.7	19.0
S2	.08333334	1.1	0.2	45.0	7.2	322.1	52.2

