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Some Eulerian current measurements and XBT-sections
from the North East Atlantic
October 1980 - March 1982

A data report

by

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1. Introduction

In 1980 Kiel University started the special research programme "Warmwassersphäre" which aims to study the general circulation and related mesoscale processes in the warm water sphere ($T > 10^{\circ}\text{C}$) of the Atlantic Ocean. Part of the programme - in continuation of IfM-Kiel NEADS (North East Atlantic Dynamic Studies) activities - is the experimental investigation of the recirculation regime in the Canary Basin by means of hydrographic sections, satellite tracked drifters and long term mooring sites.

This report mainly compiles the set of current meter data from three mooring sites along a line between the Canary Islands and the Azores which have been obtained between October 1980, July 1981 and March 1982 (see figure 1 and table 1) during METEOR cruises 56/1, 57/1 and 60/3. Also shown is the complete set of an XBT, SST and SSS section from the Gulf of Biscay via the Canaries towards the Azores (figure 1), obtained during METEOR-57/1 in July 1981.

Part of the XBT section is discussed in detail together with XCP* measurements (Sanford and Spain, 1982) by Käse et al., (1983)[†]. First results from METEOR-60/3 and POSEIDON-87 cruises in March/April 1982 concerning the structure of the oceanic subtropical front in this area have been published by Käse and Siedler (1982).

Previous data are available from mooring position NEADS Site 1, shortly N1, which already had been occupied from January 1977 - December 1977 and from March 1980 - October 1980 (Müller, 1981). In addition to current meters during the October 1980 - March 1982 campagne, two 50m Aanderaa thermistor chains recorded parts of the vertical temperature gradient in the upper thermocline.

* Expendable Current Profiler

[†] Käse, R.H., W. Zenk, T.B. Sanford, and W. Hiller, 1983: Currents, fronts and eddy fluxes in the Canary Basin (in preparation).

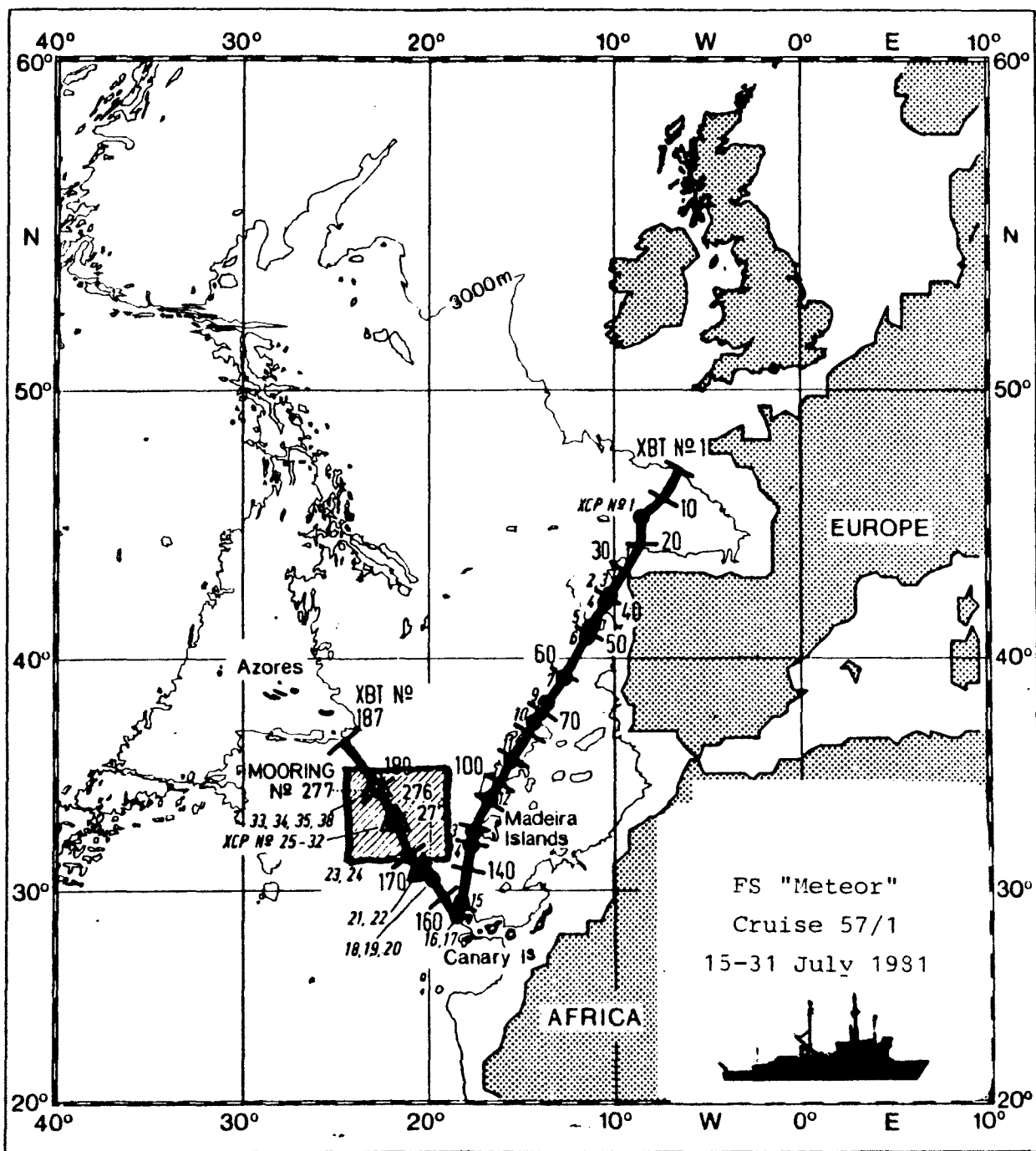


Fig. 1: Track lines of FS "Meteor", cruise 57/1, July 1981 (Azores-Canary Islands, Canary-Islands-Bay of Biscaya). On both sections surface temperature and salinity observations (SST, SSS), expendable bathythermograph (XBT) and expendable current profiler data (XCP) were collected. Mooring sites N1(276), N11(277) and N12(278) as parts of the international North Eastern Atlantic Dynamic Studies were located in the central Canary Basin. The shaded area indicates CTD and drifter studies in April 1982 reported by Käse and Siedler (1982).

Positions N11 and N12 accomplish a non-coherent section across the recirculation regime between the Canaries and the Azores.

The presentation of current meter data is split up into two parts: first the statistics and high frequency spectra ($\omega > 1/512$ cph) of pressure, temperature, salinity, and rotary velocity components of unfiltered data at the original sampling rate are shown. They are followed by statistics and time series plots including progressive vector diagrams of low-pass filtered data ($\omega < 48$ cph).

A detailed data index of the graphics is given in the out-fold of the last page.

2. Data processing

Data processing for both moored instruments and XBTs was more or less standard and is reviewed briefly in the following sections.

2.1. Current meters and thermistor chains

2.1.1. Quality control

All but one current meters and all thermistor-chains (50 m length with 11 sensors each) were of Aanderaa-type. Also, one acoustically measuring current meter manufactured by Neil Brown Instruments (ACM-2) was deployed in a region of weak mean current (N1, 276207, 1665 m).

After decoding the recorded tapes and converting raw data to physical units using manufacturer's or our own coefficients, each record was inspected for correct time base, and spikes were removed. The instrument depths were corrected using pressure records, and temperature and salinity were compared to our own CTDs at the start and end of records as well as with historical IGY-data (deep ocean >3000 m only, Fuglister, 1960).

Thus the mean values for temperatures and salinities in the statistics may not be independent from other measurements. The tables preceeding the graphics for each mooring inform about all corrections in detail.

With the exception of the ACM-2 instrument, accuracies in temperature and salinity seem to be ± 0.05 K and $\pm 0.1 \cdot 10^{-3}$, respectively, for depths down to 1700 m. Some trends in salinity are still obvious. Below 1700 m no salinity records are available, and temperature has been recorded with a resolution of 8 mK. After offset correction here the accuracy may be better then 0.05 K. For all moorings the time series of low-pass filtered pressure records indicate strong mooring motion which undoubtedly influences strongly temperature and salinity records at least down to 1700 m. At this stage no attempt for correction has been made. Its influence on the rotor speed measured by Aanderaa current meters seems to be small. Assuming a worst case with a vertical elevation of 60 m (which is typically double the standard deviation of the non-filtered hourly pressure record) and back again within a semidiurnal tidal period at 5000 m nominal bottom distance one estimates less then 2 cm/s overspeeding of the rotor. In fact this worst case was never observed.

2.1.2. High frequency analysis

For each record some statistical calculations are shown as print-outs, which are based on the total record length of unfiltered data at original sampling interval. For definitions and formulas used see Appendix 3.

Instead of time series frequency spectra of energy density are presented for non-filtered data. In order to distinguish between the diurnal tide and the

local inertial period, north and east components of the velocity vector are transformed to rotary components according to Willebrand et al. (1977), (see Appendix 2). The spectra were calculated by detrending pieces of 512 hours length, estimating spectral values for each piece, averaging in frequency range to result in not more than 20 estimates per decade and finally averaging over all pieces of the record. The frequency range thus is from 1/2 cph to 1/512 cph. 95% confidence intervals are included. Note that the spectra of the ACM-2 do not significantly differ from Aanderaa instruments at the same position and similar depths for frequencies below the "white noise" frequency of the latter.

2.1.3. Low frequency analysis

According to the main aim of the research programme an attempt was made to extract very low frequency motions from the original signals. The original time series were low-pass filtered with a response of more than 98% for frequencies less 1/48 cph, 50% at about 1/30 cph and less than 2% for frequencies higher 1/24 cph. With these characteristics the cut-off range of the filter lies within the frequency range where the energy density spectra described in the foregoing section show the typical gap between inertial and mesoscale motion. For filter weights see Appendix 1. From the filtered data daily means were calculated, which then built the base for low-frequency statistics, progressive vector diagrams and time series plots.

2.2. XBT, SST and SSS

During METEOR 57/1, together with XBT-profiles sea surface temperature (SST) and salinity (SSS) were measured at the ship's hull using a continuously recording thermosalinograph on a course from the northern Bay of Biscay towards the Canaries and then to the Azores (trackline see figure 1). For control bucket temperature and salinity data were taken.

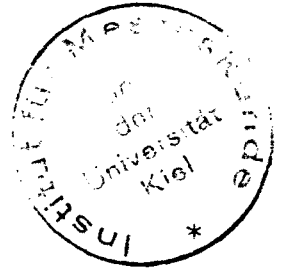
XBT-traces as well as SST and SSS-graphs were digitized manually. The profiles are shown in uncorrected form together with the control measurements and bottom topography.

Acknowledgements

Thanks go to the crew of F.S. METEOR and to the IfM-data-processing group. The research program "Warmwassersphäre" (SFB 133) is supported by the Deutsche Forschungsgemeinschaft.

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- Willebrand, J., P. Müller and D.J. Olbers, 1977: Inverse analysis of the Trimooored Internal Wave Experiment (IWEX), Part 1. Ber. Inst. Meereskd. Univ. Kiel, Nr. 20a, 117 pp.



Graphical presentation: Overview (see also outfold)

The graphics are ordered according to moorings starting with N1, Oct 80 - Jul 81 followed by N1, Jul 81 - Mar 82, N11 and N12, followed by the sections.

For each mooring a table with details about the records precedes, followed by a sketch of the mooring design, statistics, high-frequency spectra, low-frequency statistics and time series plots.

13

276100

N1

17 OCT 1981 - 27 JUL 1981
- (3 MAR 1982)

NEADS site 1, 33° 10'N, 21° 51'W, 5295 m bottom depth

IfM mooring No 276100

Deployed: 17 Oct 1980, Meteor 56/1

Recovered: 27 Jul 1981, upper part including instrument 276110
during Meteor 57/1

03 Mar 1982, instrument 276111, Meteor 60/3

Start of record: 17 Oct 1980, 20000Z.

End of record: 27 Jul 1981, 1200Z.

Recording interval: 60 min except thermistor-chains (120 min)

Time base check: ok with exceptions

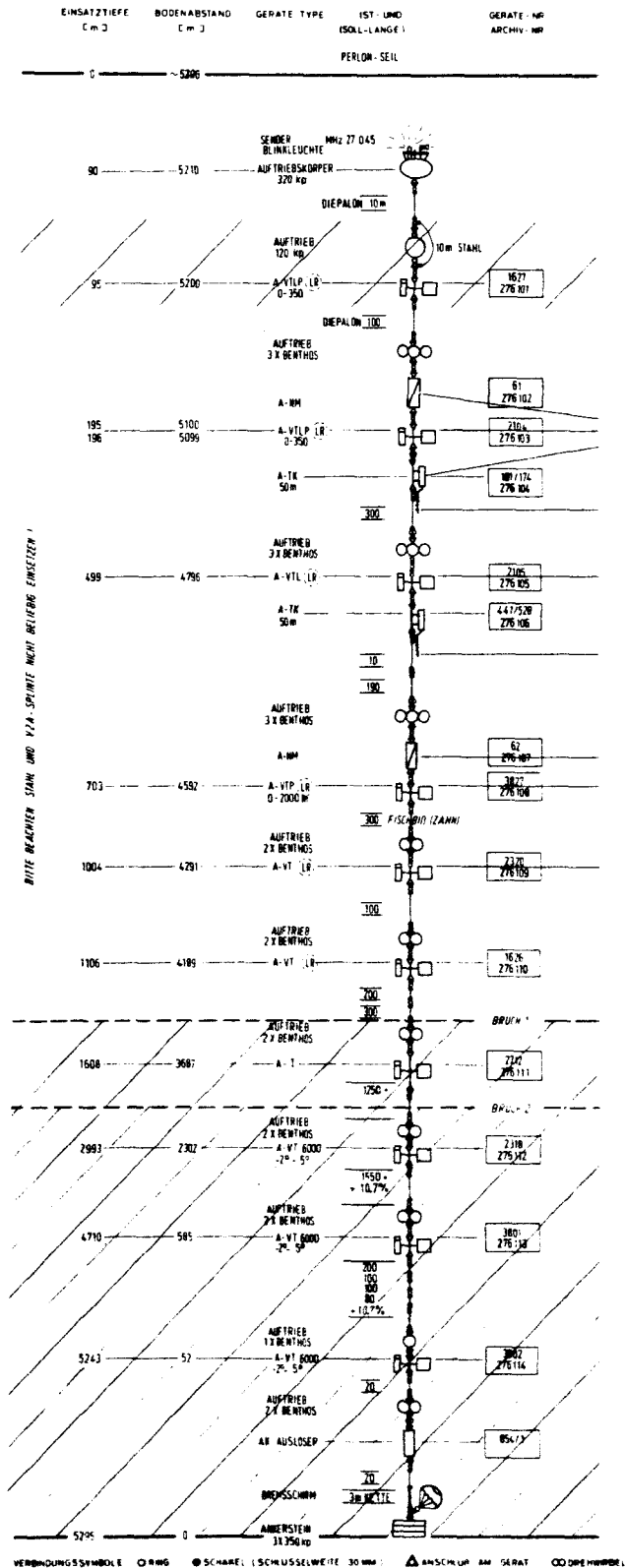
276108: 1 cycle interpolated

276109: 20 cycles interpolated at bad part of tape

Identification	depth (m)	Parameters and corrections					Remarks
		P	T	S	$\left \begin{matrix} \rightarrow \\ u \end{matrix} \right $	ϕ	
276101	95	-	-	-	-	-	lost
102	195	x	-	-	-	-	inclinometer, poor data
103	196	x	x	lin	x	x	$S=S+0.41+(7.5 \text{ E-}5)*\text{cycle}$
104	197	-	x	-	-	-	11 thermistors 197m-242m
105	499	-	x	lin	x	x	$S=S+0.54+(2.1 \text{ E-}4)*\text{cycle}$
106	501	-	x	-	-	-	11 thermistors 501-546
107	702	-	-	-	-	-	as 276102
108	703	x	x	-	x	x	
109	1004	-	0.43	-	x	x	
110	1106	-	x	-	x	x	
111	1608	-	x	-	x	x	renamed 276A11 until 27Jul 81
112)
113) lost
114)

Symbols see page 143

Values for linear corrections are included.



NEADS N1, 33° 10' N, 21° 51' W
 IfM mooring No 276100
 deployed 17 Oct. 1980
 recovered 27 Jul. 1981

FILE: HEADS 276103R0 -14 MOORING ID: 276103 START-CYCLE: 1. STOP-CYCLE: 6785. NUMBER OF VALUES: 6785.

TIME RANGE: 17.10.1980 20: 0: 0: 0/27. 7.1981 12: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 196 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 PRES	[DBAR]	0.1932E+03	0.2379E+03	0.1983E+03	0.5818E-01	0.2295E+02	0.4791E+01	0.2371E+01	0.1208E+02
2 TEMP	[DEG.C]	0.1398E+02	0.1792E+02	0.1630E+02	0.1112E-01	0.8384E+00	0.9157E+00	-0.2138E+00	0.2192E+01
3 SAL	[PPT]	0.3488E+02	0.3759E+02	0.3627E+02	0.2915E-02	0.5767E-01	0.2401E+00	-0.4250E+00	0.4652E+01
4 UC	[CM/S]	-0.2273E+02	0.2458E+02	0.2188E+01	0.9154E-01	0.5685E+02	0.7540E+01	0.7881E-01	0.2541E+01
5 VC	[CM/S]	-0.3504E+02	0.2650E+02	0.4010E+00	0.1133E+00	0.8706E+02	0.9331E+01	-0.3412E+00	0.3033E+01
6 S10T	[]	0.2545E+02	0.2774E+02	0.2666E+02	0.2093E-02	0.2803E-01	0.1674E+00	0.1232E+01	0.9185E+01

PAIR VECTOR-MEAN VECTOR-VAR STDVECMAN VECEMERR DIR-MEAN

4 5 0.2224E+01 0.7186E+02 0.9483E+01 0.1030E+00 79.61

FILE: HEADS 276104 /XX MOORING ID: 276104 START-CYCLE: 1. STOP-CYCLE: 3393. NUMBER OF VALUES: 3393.

TIME RANGE: 17.10.1980 20: 0: 0: 0/27. 7.1981 12: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.120000+03 197-242 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 TEMP	[DEG.C]	0.1427E+02	0.1802E+02	0.1636E+02	0.1588E-01	0.8560E+00	0.9252E+00	-0.7285E-01	0.1881E+01
2 TEMP	[DEG.C]	0.1418E+02	0.1802E+02	0.1625E+02	0.1602E-01	0.8706E+00	0.9331E+00	-0.1772E-01	0.1965E+01
3 TEMP	[DEG.C]	0.1406E+02	0.1799E+02	0.1610E+02	0.1591E-01	0.8684E+00	0.9285E+00	0.2934E-01	0.2089E+01
4 TEMP	[DEG.C]	0.1382E+02	0.1797E+02	0.1596E+02	0.1557E-01	0.8226E+00	0.9070E+00	0.6029E-01	0.2197E+01
5 TEMP	[DEG.C]	0.1384E+02	0.1794E+02	0.1583E+02	0.1511E-01	0.7751E+00	0.8804E+00	0.7415E-01	0.2349E+01
6 TEMP	[DEG.C]	0.1375E+02	0.1785E+02	0.1567E+02	0.1457E-01	0.7204E+00	0.8489E+00	0.6678E-01	0.2473E+01
7 TEMP	[DEG.C]	0.1365E+02	0.1767E+02	0.1551E+02	0.1398E-01	0.6627E+00	0.8141E+00	0.2874E-01	0.2571E+01
8 TEMP	[DEG.C]	0.1361E+02	0.1770E+02	0.1541E+02	0.1337E-01	0.6062E+00	0.7786E+00	-0.3846E-01	0.2631E+01
9 TEMP	[DEG.C]	0.1351E+02	0.1755E+02	0.1527E+02	0.1282E-01	0.5578E+00	0.7469E+00	-0.1091E+00	0.2639E+01
10 TEMP	[DEG.C]	0.1344E+02	0.1755E+02	0.1516E+02	0.1232E-01	0.5152E+00	0.7178E+00	-0.1846E+00	0.2631E+01
11 TEMP	[DEG.C]	0.1337E+02	0.1745E+02	0.1504E+02	0.1191E-01	0.4816E+00	0.6940E+00	-0.2634E+00	0.2629E+01

PAIR VECTOR-MEAN VECTOR-VAR STDVECMAN VECEMERR DIR-MEAN

3 4 0.1478E+01 0.3743E+02 0.6118E+01 0.7427E-01 69.63

FILE: HEADS 276105R0 -14 MOORING ID: 276105 START-CYCLE: 1. STOP-CYCLE: 6785. NUMBER OF VALUES: 6785.

TIME RANGE: 17.10.1980 20: 0: 0: 0/27. 7.1981 12: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 499 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 TEMP	[DEG.C]	0.1137E+02	0.1270E+02	0.1207E+02	0.3064E-02	0.6369E-01	0.2624E+00	-0.5688E+00	0.2497E+01
2 SAL	[PPT]	0.3621E+02	0.3675E+02	0.3644E+02	0.1083E-02	0.7955E-02	0.8919E-01	0.5119E+00	0.2200E+01
3 UC	[CM/S]	-0.1682E+02	0.2412E+02	0.1325E+01	0.6477E-01	0.2847E+02	0.8335E-01	0.2535E+00	0.5059E+01
4 VC	[CM/S]	-0.2720E+02	0.1966E+02	0.6567E+00	0.8269E-01	0.4639E+02	0.6811E+01	-0.5845E+00	0.2897E+01
5 S10T	[]	0.2677E+02	0.2718E+02	0.2694E+02	0.7651E-03	0.3971E-02	0.6302E-01	0.7279E+00	0.3232E+01

PAIR VECTOR-MEAN VECTOR-VAR STDVECMAN VECEMERR DIR-MEAN

3 4 0.1478E+01 0.3743E+02 0.6118E+01 0.7427E-01 69.63

FILE: HEADS 276106 /E3 MOORING ID: 276106 START-CYCLE: 3393. STOP-CYCLE: 3393. NUMBER OF VALUES: 3393.

TIME RANGE: 17.10.1980 20: 0: 0: 0/27. 7.1981 12: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.120000+03 501-546 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STDEVM	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 TEMP	(DEG.C)	0.1130E+02	0.1259E+02	0.1199E+02	0.4231E-02	0.6075E-01	0.2466E+00	-0.5882E+00	0.2484E+01
2 TEMP	(DEG.C)	0.1127E+02	0.1264E+02	0.1196E+02	0.4174E-02	0.6911E-01	0.2431E+00	-0.5626E+00	0.2486E+01
3 TEMP	(DEG.C)	0.1126E+02	0.1247E+02	0.1190E+02	0.4089E-02	0.5873E-01	0.2382E+00	-0.5499E+00	0.2474E+01
4 TEMP	(DEG.C)	0.1118E+02	0.1233E+02	0.1184E+02	0.4015E-02	0.5470E-01	0.2399E+00	-0.5497E+00	0.2460E+01
5 TEMP	(DEG.C)	0.1118E+02	0.1230E+02	0.1192E+02	0.3989E-02	0.5342E-01	0.2311E+00	-0.5357E+00	0.2441E+01
6 TEMP	(DEG.C)	0.1116E+02	0.1230E+02	0.1179E+02	0.3904E-02	0.5172E-01	0.2274E+00	-0.5339E+00	0.2447E+01
7 TEMP	(DEG.C)	0.1111E+02	0.1228E+02	0.1174E+02	0.3826E-02	0.4972E-01	0.2230E+00	-0.5129E+00	0.2418E+01
8 TEMP	(DEG.C)	0.1111E+02	0.1223E+02	0.1173E+02	0.3787E-02	0.4865E-01	0.2206E+00	-0.5019E+00	0.2404E+01
9 TEMP	(DEG.C)	0.1111E+02	0.1219E+02	0.1170E+02	0.3726E-02	0.4710E-01	0.2170E+00	-0.4907E+00	0.2396E+01
10 TEMP	(DEG.C)	0.1108E+02	0.1212E+02	0.1163E+02	0.3651E-02	0.4522E-01	0.2126E+00	-0.4835E+00	0.2382E+01
11 TEMP	(DEG.C)	0.1104E+02	0.1205E+02	0.1161E+02	0.3603E-02	0.4410E-01	0.2100E+00	-0.4647E+00	0.2363E+01

FILE: HEADS 2761080 -14 MOORING ID: 276108 START-CYCLE: 6785. STOP-CYCLE: 6785. NUMBER OF VALUES: 6785.

TIME RANGE: 17.10.1980 20: 0: 0: 0/27. 7.1981 12: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 703 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STDEVM	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 PRES	(DBAR)	0.8897E+09	0.7769E+09	0.7219E+09	0.1825E+00	0.2259E+03	0.1503E+02	0.1092E+01	0.5939E+01
2 TEMP	(DEG.C)	0.1007E+02	0.1099E+02	0.1059E+02	0.1956E-02	0.2597E-01	0.1611E+00	-0.3183E+00	0.2442E+01
3 UC	(CM/S)	-0.1314E+02	0.1677E+02	0.2678E+00	0.5570E-01	0.2105E+02	0.4588E+01	0.1960E+00	0.2743E+01
4 VC	(CM/S)	-0.2069E+02	0.2294E+02	0.7405E+00	0.7040E-01	0.3363E+02	0.5799E+01	-0.2365E+00	0.3217E+01
PAIR	VECTOR-MEAN	VECTOR-VAR	STDVECMAN	VECMANERR	DIR-MEAN				
3	4	0.1211E+01	0.2734E+02	0.6229E+01	0.6349E-01	52.29			

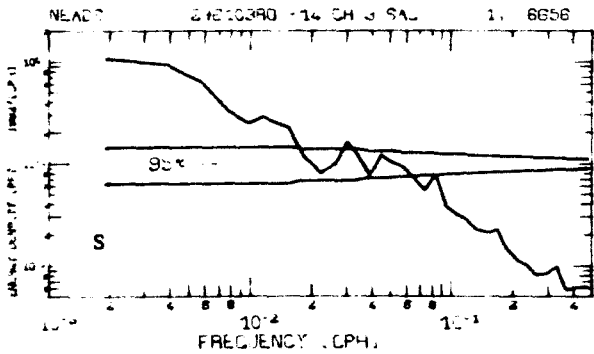
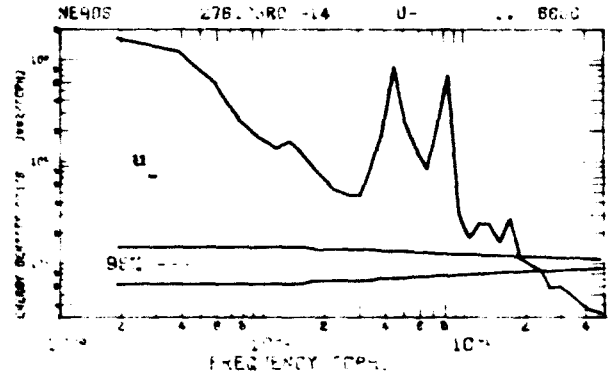
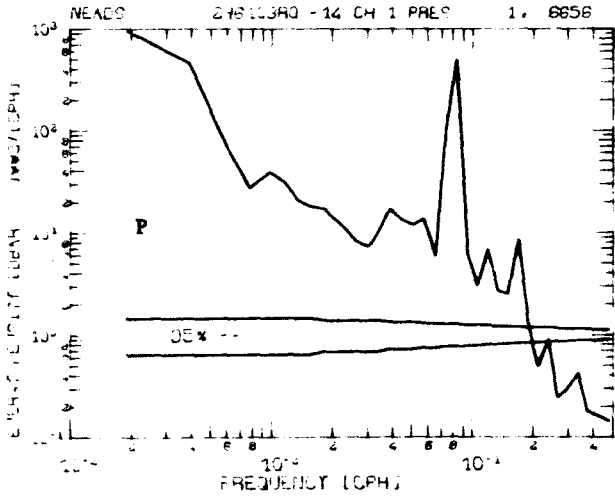
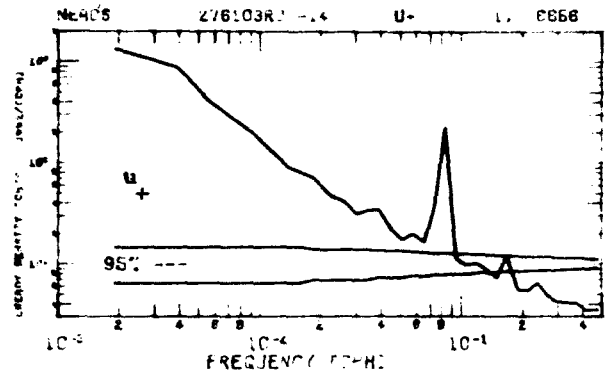
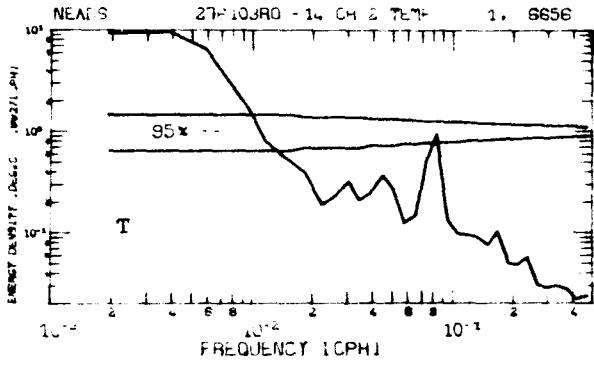
FILE: HEADS 2761090 -14 MOORING ID: 276109 START-CYCLE: 6785. STOP-CYCLE: 6785. NUMBER OF VALUES: 6785.

TIME RANGE: 17.10.1980 20: 0: 0: 0/27. 7.1981 12: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 1004 m

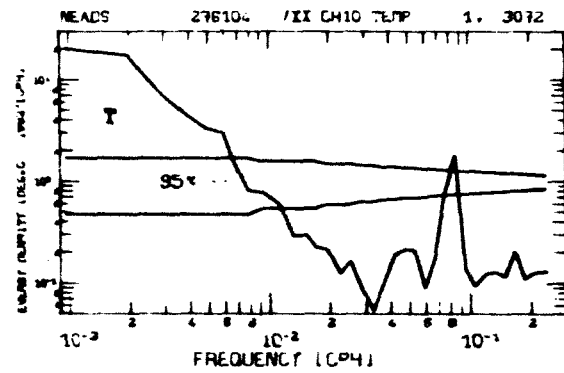
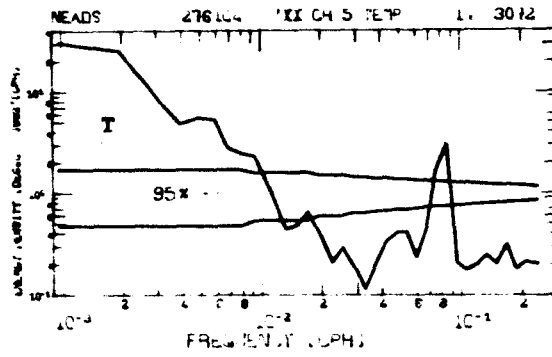
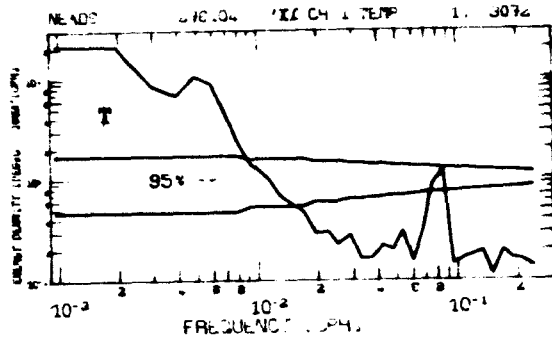
VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STDEVM	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 TEMP	(DEG.C)	0.8588E+01	0.1157E+02	0.9470E+01	0.5400E-02	0.1979E+00	0.4448E+00	0.1266E+01	0.4831E+01
2 UC	(CM/S)	-0.1458E+02	0.1656E+02	0.2089E+00	0.5290E-01	0.1899E+02	0.4358E+01	0.9534E-01	0.2971E+01
3 VC	(CM/S)	-0.1756E+02	0.2623E+02	0.1290E+01	0.7225E-01	0.3542E+02	0.5952E+01	0.6416E+00	0.3896E+01
PAIR	VECTOR-MEAN	VECTOR-VAR	STDVECMAN	VECMANERR	DIR-MEAN				
2	3	0.1306E+01	0.2721E+02	0.5216E+01	0.6332E-01	9.20			

FILE: HEADS 278110R0 -14 MOORING ID: 278110 START-CYCLE: 1. STOP-CYCLE: 6785. NUMBER OF VALUES: 6785.
 TIME RANGE: 17.10.1980 20: 0: 0: 0/27. 7.1981 12: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.60000+02 1106 m
 VARIABLE UNITS MINIMUM MAXIMUM MEAN STERMEAN VARIANCE STADDEV SKEWNESS KURTOSIS
 1 TEMP (DEG.C) 0.7804E+01 0.1019E+02 0.8612E+01 0.5546E-02 0.2087E+00 0.4588E+00 0.8980E+00 0.3227E+01
 2 UC (CM/S) -0.1285E+02 0.1464E+02 -0.2457E-01 0.4558E-01 0.1410E+02 0.3756E+01 0.4451E-01 0.2867E+01
 3 VC (CM/S) -0.1430E+02 0.1999E+02 0.1138E+01 0.6038E-01 0.2473E+02 0.4873E+01 0.3619E+00 0.5263E+01
 PAIR VECTOR-MEAN VECTOR-VAR STDVECMAN VECMEANRR DIR-MEAN
 2 3 0.1138E+01 0.1942E+02 0.4408E+01 0.5349E-01 358.76

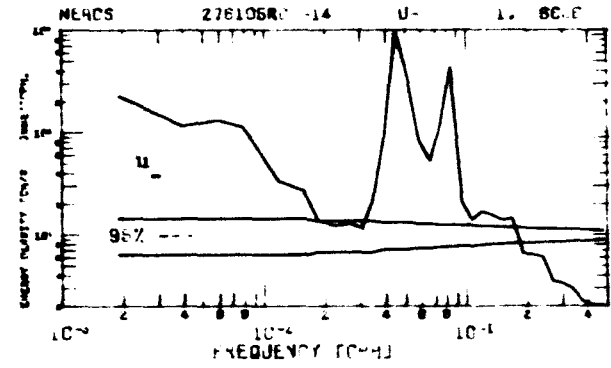
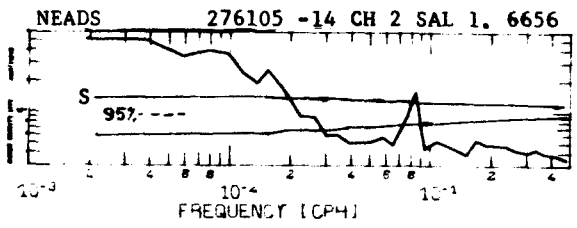
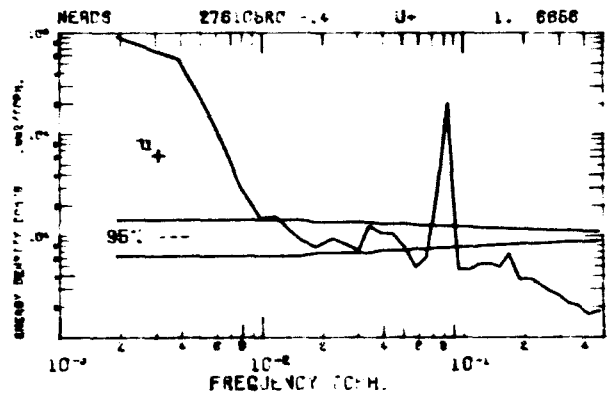
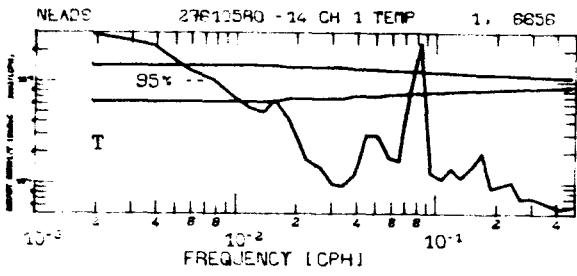
FILE: HEADS 278A11 MOORING ID: 278111 START-CYCLE: 1. STOP-CYCLE: 6785. NUMBER OF VALUES: 6785.
 TIME RANGE: 17.10.1980 20: 0: 0: 0/27. 7.1981 12: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.60000+02 1608 m
 VARIABLE UNITS MINIMUM MAXIMUM MEAN STERMEAN VARIANCE STADDEV SKEWNESS KURTOSIS
 1 TEMP (DEG.C) 0.5253E+01 0.6483E+01 0.5706E+01 0.2488E-02 0.4132E-01 0.2033E+00 0.2832E+00 0.2793E+01
 2 UC (CM/S) -0.1088E+02 0.8120E+01 -0.5588E+00 0.3444E-01 0.6047E+01 0.2837E+01 -0.7862E-01 0.2646E+01
 3 VC (CM/S) -0.1106E+02 0.1092E+02 0.2333E+00 0.3913E-01 0.1038E+02 0.3224E+01 -0.1007E+00 0.2607E+01
 PAIR VECTOR-MEAN VECTOR-VAR STDVECMAN VECMEANRR DIR-MEAN
 2 3 0.6037E+00 0.8218E+01 0.3038E+01 0.3886E-01 292.74



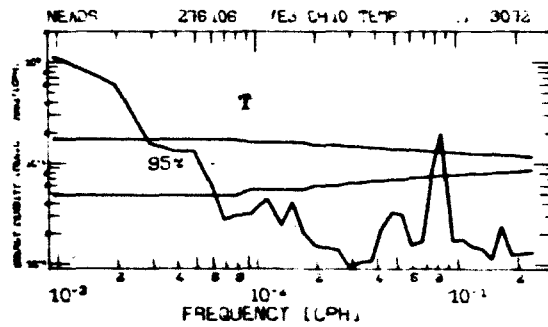
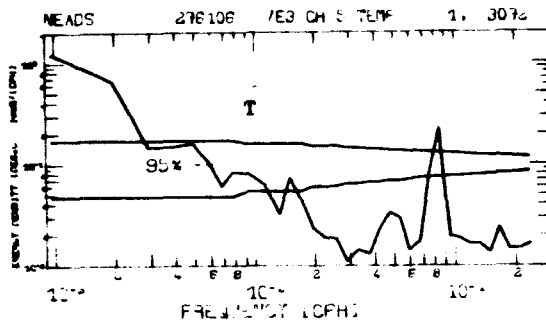
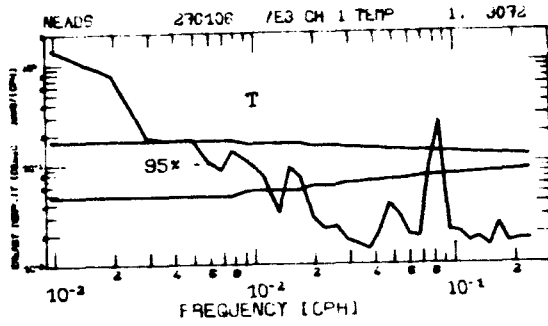
276103, 196m



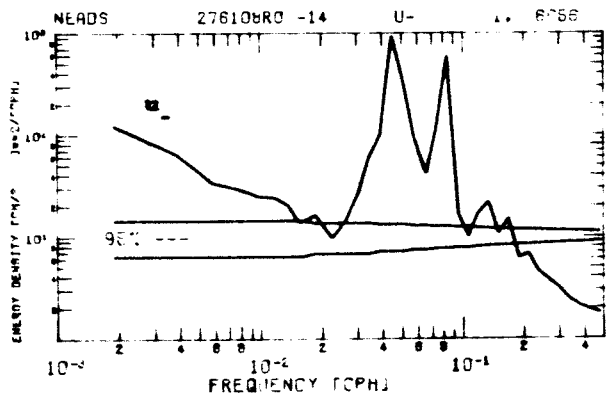
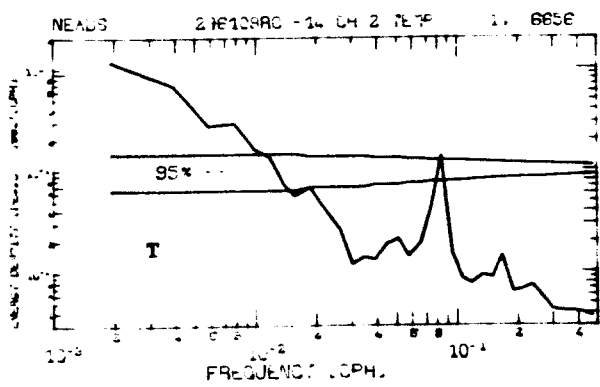
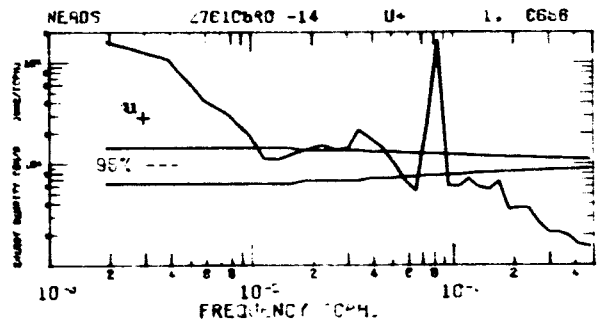
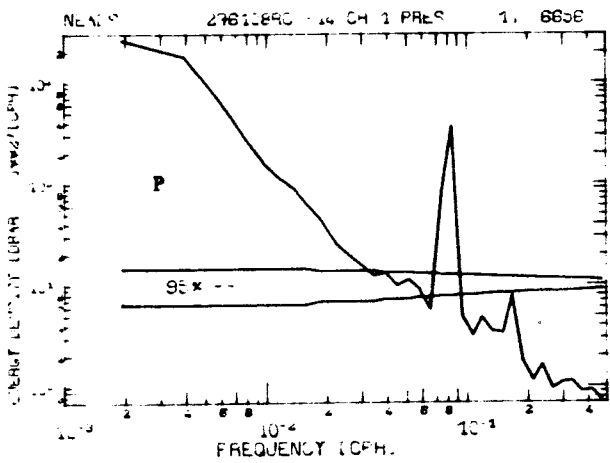
276104, 197m
220m
242m



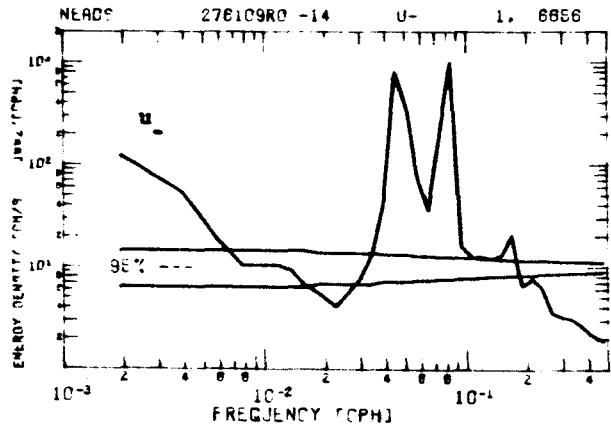
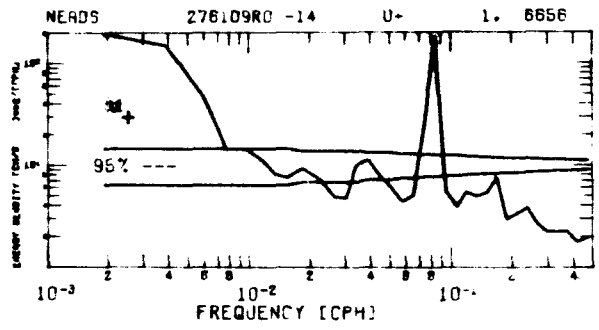
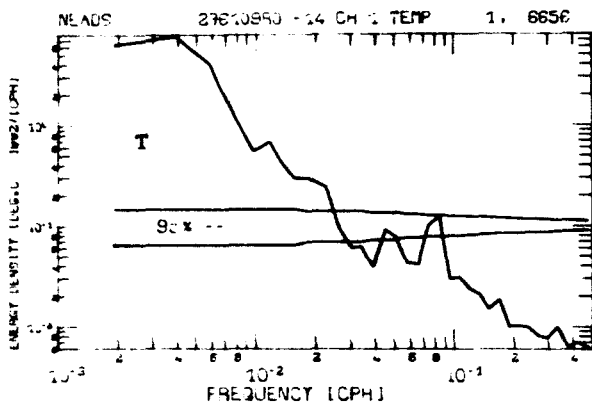
276105,499m



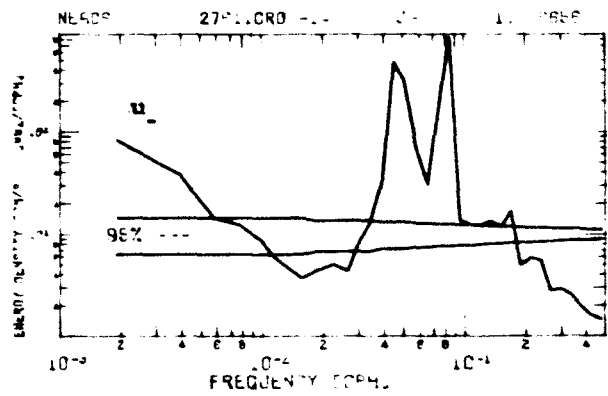
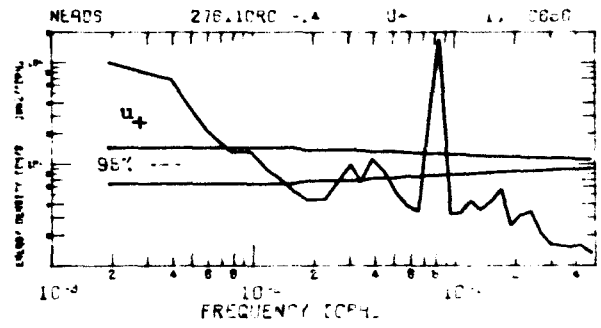
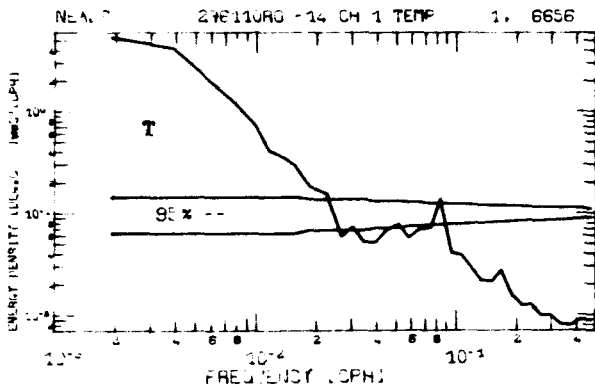
276106, 501m
 221m
 546m



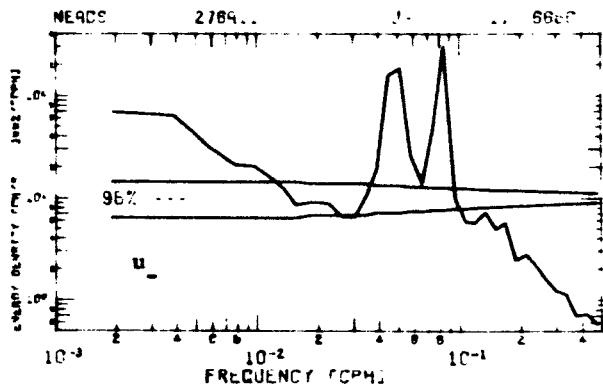
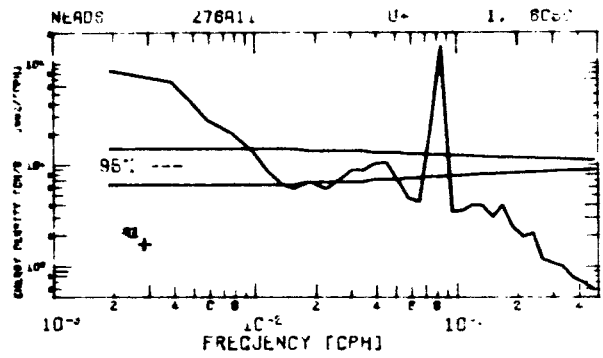
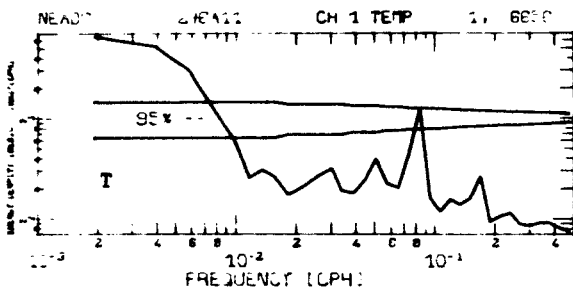
276108, 703m



276109,1004m



276110, 1106m



276A11,1608m

FILE: HEADS 278103/A 024 MOORING ID: 276103 START-CYCLE: 277. NUMBER OF VALUES: 277.

TIME RANGE: 21.10.1980 1:30: 0: 0/24. 7.1981 1:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 196 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 PRES	(OVAR)	0.1940E+03	0.2138E+03	0.1982E+03	0.2348E+00	0.1525E+02	0.3906E+01	0.1520E+01	0.5965E+01
2 TEMP	(DEO.C)	0.1429E+02	0.1777E+02	0.1631E+02	0.6388E-01	0.8042E+00	0.8868E+00	-0.2388E+00	0.2121E+01
3 SAL	(PPT)	0.3567E+02	0.3680E+02	0.3627E+02	0.1305E-01	0.4719E-01	0.2172E+00	-0.4643E+00	0.3043E+01
4 UC	(CH/S)	-0.1369E+02	0.1813E+02	0.2184E+01	0.3862E+00	0.4131E+02	0.6427E+01	0.3015E+00	0.2488E+01
5 VC	(CH/S)	-0.2289E+02	0.2037E+02	0.5400E+00	0.5157E+00	0.7388E+02	0.8584E+01	-0.3457E+00	0.3035E+01
6 STOT	()	0.2626E+02	0.2720E+02	0.2666E+02	0.8368E-02	0.1940E-01	0.1393E+00	0.1366E+01	0.5520E+01

VARIABLES

	COVAR	CORCOEFF	VARCORAL	STOVCOV	STEARCOV
1 PRES	-0.1508E+01	-0.4907E+00	0.2574E+05	0.1604E+03	0.8638E+01
2 TEMP	-0.2662E+00	-0.3362E+00	0.1773E+05	0.1332E+03	0.8000E+01
3 SAL	0.5841E+01	0.2327E+00	0.1637E+07	0.1280E+04	0.7688E+02
4 UC	-0.2842E+01	-0.8478E-01	0.2982E+07	0.1727E+04	0.1038E+03
5 VC	0.1350E+00	0.2488E+00	0.1301E+06	0.1141E+03	0.6854E+01
6 STOT	0.1444E+00	0.7413E+00	0.1242E+04	0.3628E+02	0.2119E+01
1 TEMP	-0.1040E-01	-0.1805E+00	0.1112E+05	0.1064E+03	0.8935E-01
2 TEMP	0.1914E+01	0.2357E+00	0.1812E+05	0.1346E+03	0.8088E+01
3 SAL	-0.7639E-01	-0.6116E+00	0.5130E+03	0.2265E+02	0.1361E+01
4 UC	-0.1334E+00	-0.8556E-01	0.6442E+05	0.2333E+03	0.1487E+02
5 VC	0.6761E+00	0.3626E+00	0.9611E+05	0.3100E+03	0.1863E+02
6 STOT	0.2340E-02	0.7734E-01	0.6332E+02	0.7857E+01	0.4781E+00
1 TEMP	-0.1754E+02	-0.3180E+00	0.1684E+04	0.4080E+02	0.2451E+01
2 TEMP	0.1423E+00	0.1590E+00	0.2938E+05	0.1714E+03	0.1030E+02
3 SAL	0.1015E+00	0.8491E-01	0.5252E+05	0.2292E+03	0.1377E+02

PAIR	VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANRR	DIR-MEAN
4 5	0.2250E+01	0.5749E+02	0.7583E+01	0.4558E+00	76.12

FILE: HEADS 278104/A 012 MOORING ID: 276104 START-CYCLE: 277. NUMBER OF VALUES: 277.

TIME RANGE: 21.10.1980 1: 0: 0: 0/24. 7.1981 1: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 197-242 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 TEMP	(DEO.C)	0.1467E+02	0.1788E+02	0.1637E+02	0.5421E-01	0.8141E+00	0.9023E+00	-0.1371E+00	0.1798E+01
2 TEMP	(DEO.C)	0.1455E+02	0.1778E+02	0.1626E+02	0.5438E-01	0.8192E+00	0.9051E+00	-0.1201E+00	0.1854E+01
3 TEMP	(DEO.C)	0.1441E+02	0.1768E+02	0.1611E+02	0.5384E-01	0.7970E+00	0.8928E+00	-0.1280E+00	0.1905E+01
4 TEMP	(DEO.C)	0.1431E+02	0.1751E+02	0.1597E+02	0.5214E-01	0.7529E+00	0.8677E+00	-0.1576E+00	0.1958E+01
5 TEMP	(DEO.C)	0.1406E+02	0.1724E+02	0.1567E+02	0.5035E-01	0.7021E+00	0.8378E+00	-0.1868E+00	0.2025E+01
6 TEMP	(DEO.C)	0.1406E+02	0.1724E+02	0.1567E+02	0.4848E-01	0.6505E+00	0.8065E+00	-0.2367E+00	0.2088E+01
7 TEMP	(DEO.C)	0.1384E+02	0.1702E+02	0.1552E+02	0.4851E-01	0.5931E+00	0.7740E+00	-0.2841E+00	0.2148E+01
8 TEMP	(DEO.C)	0.1388E+02	0.1698E+02	0.1542E+02	0.4457E-01	0.5502E+00	0.7418E+00	-0.3438E+00	0.2227E+01
9 TEMP	(DEO.C)	0.1377E+02	0.1688E+02	0.1527E+02	0.4289E-01	0.5106E+00	0.7145E+00	-0.3865E+00	0.2302E+01
10 TEMP	(DEO.C)	0.1369E+02	0.1675E+02	0.1517E+02	0.4140E-01	0.4788E+00	0.6881E+00	-0.4328E+00	0.2371E+01
11 TEMP	(DEO.C)	0.1361E+02	0.1667E+02	0.1506E+02	0.4014E-01	0.4462E+00	0.6680E+00	-0.4824E+00	0.2414E+01

FILE: HEADS 276105/A 024 MOORING ID: 276105 START-CYCLE: 277. NUMBER OF VALUES: 277.

TIME RANGE: 21.10.1980 1:30: 0: 0/24. 7.1981 1:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 499 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDEV	SKEWNESS	KURTOSIS
1 TEMP	(DEG.C)	0.1149E+02	0.1246E+02	0.1207E+02	0.1494E-01	0.5694E-01	0.2396E+00	-0.7396E+00	0.2421E+01
2 SAL	(PPT)	0.3531E+02	0.3562E+02	0.3544E+02	0.507E-02	0.7168E-02	0.4467E-01	0.5374E+00	0.2146E+01
3 UC	(CH/S)	-0.5691E+01	0.1760E+02	0.1306E+01	0.2637E+00	0.1783E+02	0.4223E+01	0.8135E+00	0.3666E+01
4 VC	(CM/S)	-0.1845E+02	0.1115E+02	0.7881E+00	0.3565E+00	0.3514E+02	0.5929E+01	-0.7612E+00	0.2952E+01
5 S1OT	[)	0.2885E+02	0.2709E+02	0.2693E+02	0.3433E-02	0.3265E-02	0.5714E-01	0.7314E+00	0.3198E+01

VARIABLES	COVAR	VARGCORAL	STDEVCOV	STERRCOV
1 TEMP	0.1089E-01	0.8141E+02	0.9023E+01	0.5421E+00
2 SAL	-0.5918E-01	0.2688E+04	0.5085E+02	0.3055E+01
3 UC	0.5854E+00	0.4936E+04	0.7028E+02	0.4221E+01
4 VC	-0.2739E-02	0.4000E+02	0.6325E+01	0.3800E+00
5 S1OT	0.2126E+00	0.5946E+05	0.1498E+03	0.5999E+01
1 TEMP	0.2913E-01	0.4404E+05	0.2098E+03	0.1261E+02
2 SAL	0.3528E-02	0.7292E+00	0.4008E+01	0.2408E+00
3 UC	-0.4970E+01	0.1516E+03	0.2742E+02	0.1647E+01
4 VC	-0.9249E-01	0.2552E+05	0.1139E+03	0.6941E+01
5 S1OT	-0.5249E-01	0.2731E+00	0.1597E+03	0.8598E+01

PAIR	VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANR	DIR-MEAN
3 4	0.1625E+01	0.2649E+02	0.5147E+01	0.3092E+00	58.88

FILE: HEADS 276106/A 012 MOORING ID: 276106 START-CYCLE: 277. NUMBER OF VALUES: 277.

TIME RANGE: 21.10.1980 1: 0: 0: 0/24. 7.1981 1: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 501-546 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDEV	SKEWNESS	KURTOSIS
1 TEMP	(DEG.C)	0.1142E+02	0.1236E+02	0.1198E+02	0.1402E-01	0.5442E-01	0.2399E+00	-0.7674E+00	0.2409E+01
2 TEMP	(DEG.C)	0.1140E+02	0.1234E+02	0.1195E+02	0.1383E-01	0.5296E-01	0.2301E+00	-0.7665E+00	0.2407E+01
3 TEMP	(DEG.C)	0.1136E+02	0.1228E+02	0.1190E+02	0.1363E-01	0.5071E-01	0.2252E+00	-0.7627E+00	0.2398E+01
4 TEMP	(DEG.C)	0.1131E+02	0.1220E+02	0.1184E+02	0.1329E-01	0.4998E-01	0.2213E+00	-0.7592E+00	0.2392E+01
5 TEMP	(DEG.C)	0.1131E+02	0.1217E+02	0.1182E+02	0.1313E-01	0.4777E-01	0.2196E+00	-0.7496E+00	0.2389E+01
6 TEMP	(DEG.C)	0.1128E+02	0.1213E+02	0.1178E+02	0.1291E-01	0.4618E-01	0.2149E+00	-0.7392E+00	0.2382E+01
7 TEMP	(DEG.C)	0.1125E+02	0.1208E+02	0.1174E+02	0.1264E-01	0.4424E-01	0.2103E+00	-0.7238E+00	0.2330E+01
8 TEMP	(DEG.C)	0.1125E+02	0.1205E+02	0.1170E+02	0.1250E-01	0.4325E-01	0.2080E+00	-0.7194E+00	0.2317E+01
9 TEMP	(DEG.C)	0.1122E+02	0.1201E+02	0.1170E+02	0.1228E-01	0.4178E-01	0.2044E+00	-0.7105E+00	0.2311E+01
10 TEMP	(DEG.C)	0.1114E+02	0.1194E+02	0.1163E+02	0.1204E-01	0.4015E-01	0.2004E+00	-0.7020E+00	0.2300E+01
11 TEMP	(DEG.C)	0.1113E+02	0.1191E+02	0.1161E+02	0.1189E-01	0.3909E-01	0.1977E+00	-0.6857E+00	0.2269E+01

FILE: HEADS 276108/A 024 MOORING ID: 276108 START-CYCLE: 1. STOP-CYCLE: 277. NUMBER OF VALUES: 277.

TIME RANGE: 21.10.1980 1:30: 0: 0/24. 7.1981 1:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 703 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKENNESS	KURTOSIS
1 PRES	[OBAR]	0.6984E+03	0.7692E+03	0.7217E+03	0.8978E+00	0.1944E+03	0.1394E+02	0.9799E+00	0.6309E+01
2 TEMP	[DEG.C]	0.1026E+02	0.1086E+02	0.1059E+02	0.8493E-02	0.1893E-01	0.1412E+00	-0.3730E+00	0.2334E+01
3 UC	[CH/S]	-0.4503E+01	0.8394E+01	0.9380E+00	0.1919E+00	0.1020E+02	0.3193E+01	0.5983E+00	0.2383E+01
4 VC	[CH/S]	-0.1118E+02	0.1160E+02	0.8691E+00	0.1750E+00	0.2106E+02	0.4690E+01	-0.3582E+00	0.2711E+01

VARIABLES	COVAR	CORCOEFF	VARCORR1	STDEVCOV	STERRCOV
1 PRES	-0.4407E+00	-0.2239E+00	0.2501E+08	0.1581E+03	0.9602E+01
1 PRES	-0.6164E+01	-0.1384E+00	0.5218E+07	0.2284E+04	0.1372E+03
1 PRES	0.2316E+02	0.3618E+02	0.1091E+08	0.3503E+04	0.1985E+03
2 TEMP	-0.9897E-01	-0.2195E+00	0.1145E+04	0.3383E+02	0.2033E+01
2 TEMP	0.1496E+00	0.2308E+00	0.2358E+04	0.4856E+02	0.2910E+01
3 UC	-0.6344E-01	-0.4329E-02	0.3395E+03	0.1843E+02	0.1107E+01

PAIR	VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3 4	0.1279E+01	0.1863E+02	0.3954E+01	0.2375E+00	47.18

FILE: HEADS 276109/A 024 MOORING ID: 276109 START-CYCLE: 1. STOP-CYCLE: 277. NUMBER OF VALUES: 277.

TIME RANGE: 21.10.1980 1:30: 0: 0/24. 7.1981 1:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 1004 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKENNESS	KURTOSIS
1 TEMP	[DEG.C]	0.9717E+01	0.1127E+02	0.9476E+01	0.2692E-01	0.1861E+00	0.4914E+00	0.1243E+01	0.4887E+01
2 UC	[CH/S]	-0.3908E+01	0.1067E+02	0.1886E+00	0.1553E+00	0.6685E+01	0.2585E+01	0.1092E+01	0.4278E+01
3 VC	[CH/S]	-0.9140E+01	0.2014E+02	0.1389E+01	0.2788E+00	0.2168E+02	0.4657E+01	0.1411E+01	0.6413E+01

VARIABLES	COVAR	CORCOEFF	VARCORR1	STDEVCOV	STERRCOV
1 TEMP	0.2377E+00	0.3131E+00	0.6441E+03	0.2839E+02	0.1625E+01
1 TEMP	0.6457E+00	0.3214E+00	0.2204E+04	0.4695E+02	0.2821E+01
2 UC	0.4248E+01	0.3529E+00	0.7313E+03	0.2704E+02	0.1625E+01

PAIR	VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
2 3	0.1411E+01	0.1418E+02	0.3766E+01	0.2263E+00	7.72

FILE: HEAD8 276110/A 024 MOORING ID: 276110 START-CYCLE: 1. STOP-CYCLE: 277. NUMBER OF VALUES: 277.

TIME RANGE: 21.10.1980 1:30: 0: 0/24. 7.1981 1:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 1106 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STADDEV	SKEMNESS	KURTOSIS
1 TEMP	[DED.C]	0.7766E+01	0.9847E+01	0.8616E+01	0.2681E-01	0.1991E+00	0.4462E+00	0.8606E+00	0.3058E+01
2 UC	[CM/S]	-0.3913E+01	0.6596E+01	-0.3957E-01	0.1213E+00	0.4077E-01	0.2019E+01	0.7691E+00	0.3225E+01
3 VC	[CM/S]	-0.7660E+01	0.1611E+02	0.1232E+01	0.2215E+00	0.1359E+02	0.3686E+01	0.8125E+00	0.4988E+01

VARIABLES	COVAR	CORCOEFF	VARCORR	STDEVCOV	STERRCOV
1 TEMP	2 UC	-0.1951E-01	0.3108E+03	0.1763E+02	0.1059E-01
1 TEMP	3 VC	0.2118E+00	0.1298E+00	0.3272E+02	0.1966E-01
2 UC	3 VC	0.1730E+01	0.2325E+00	0.1939E+03	0.8367E+00

PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMEANERR	DIR-MEAN
2 3	0.1232E+01	0.8631E+01	0.2972E+01	0.1786E+00	358.16

FILE: HEAD8 276111/A 024 MOORING ID: 276111 START-CYCLE: 1. STOP-CYCLE: 277. NUMBER OF VALUES: 277.

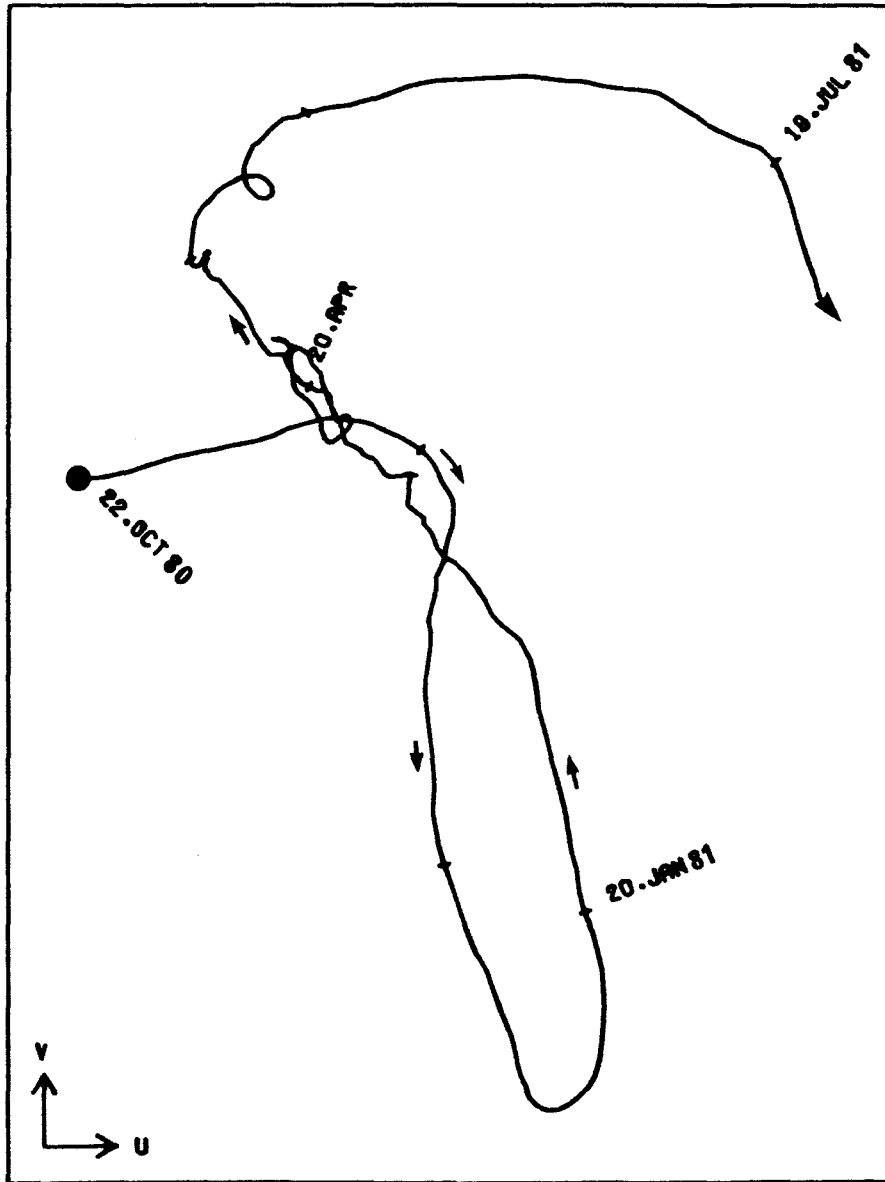
TIME RANGE: 21.10.1980 1:30: 0: 0/24. 7.1981 1:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 1608 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STADDEV	SKEMNESS	KURTOSIS
1 TEMP	[DED.C]	0.5335E+01	0.6219E+01	0.5710E+01	0.1097E-01	0.3333E-01	0.1826E+00	0.2479E+00	0.2873E+01
2 UC	[CM/S]	-0.4943E+01	0.3743E+01	-0.5913E+00	0.1132E+00	0.3547E-01	0.1863E+01	-0.4600E-01	0.2223E+01
3 VC	[CM/S]	-0.5695E+01	0.4766E+01	0.2949E+00	0.1319E+00	0.4817E+01	0.2195E+01	-0.3555E+00	0.2564E+01

VARIABLES	COVAR	CORCOEFF	VARCORR	STDEVCOV	STERRCOV
1 TEMP	2 UC	-0.1656E+00	0.4915E+00	0.1079E+02	0.6485E+00
1 TEMP	3 VC	0.4840E-01	0.1208E+00	0.1242E+02	0.7461E+00
2 UC	3 VC	-0.7075E+00	-0.1712E+00	0.3697E+01	0.2221E+00

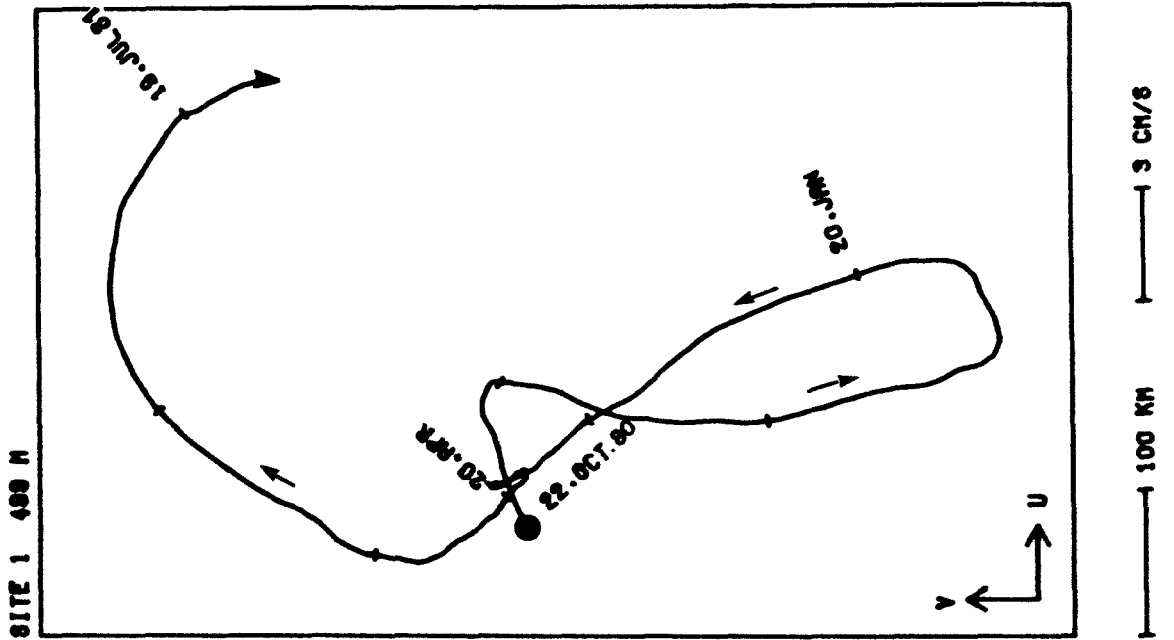
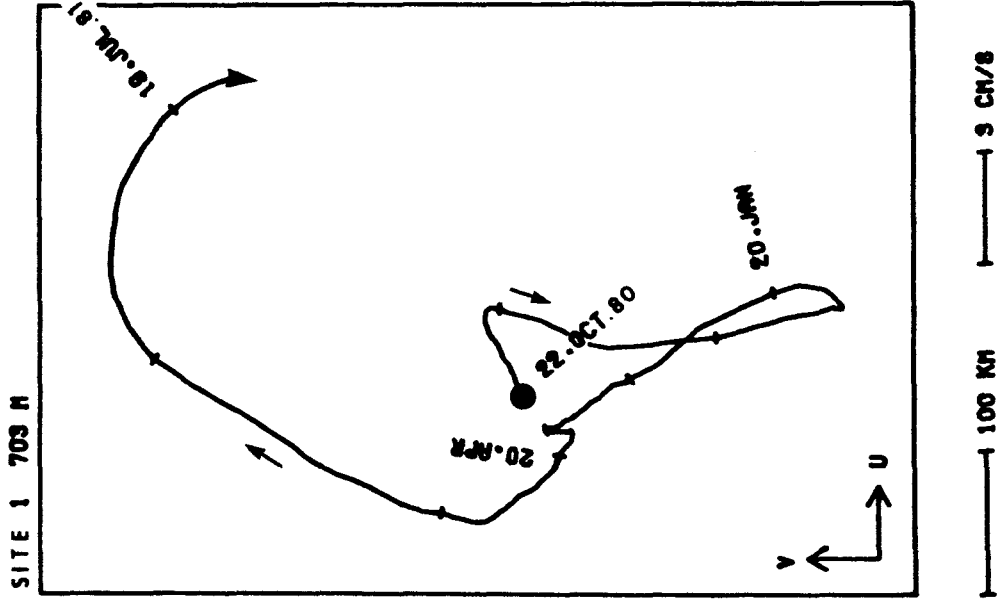
PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMEANERR	DIR-MEAN
2 3	0.6519E+00	0.4182E+01	0.2045E+01	0.1229E+00	296.90

SITE 1 196 M

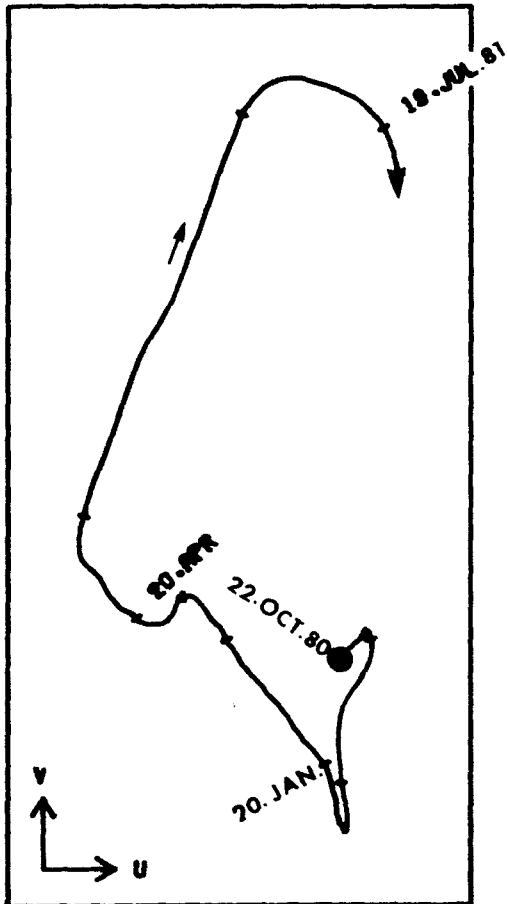


150 KM

5 CM/S

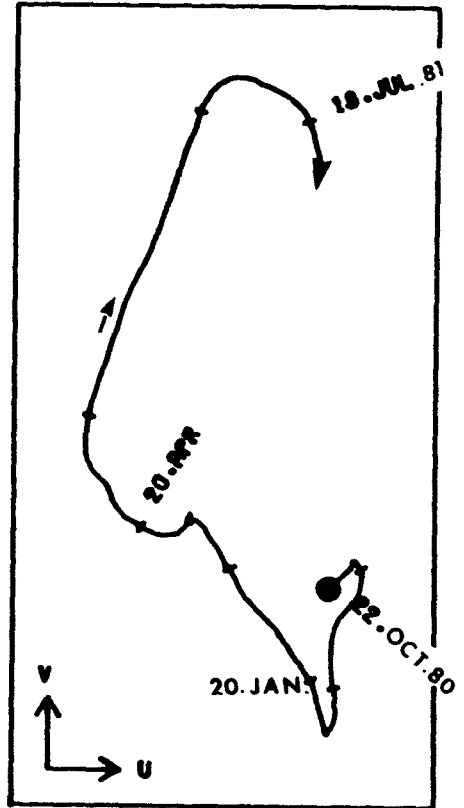


SITE 1 1004 M



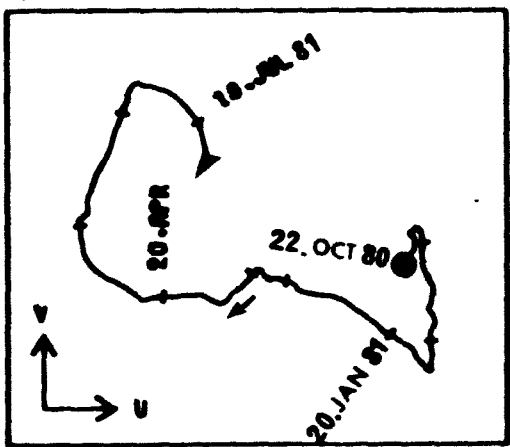
100 KM 3 CM/S

SITE 1 1106 M

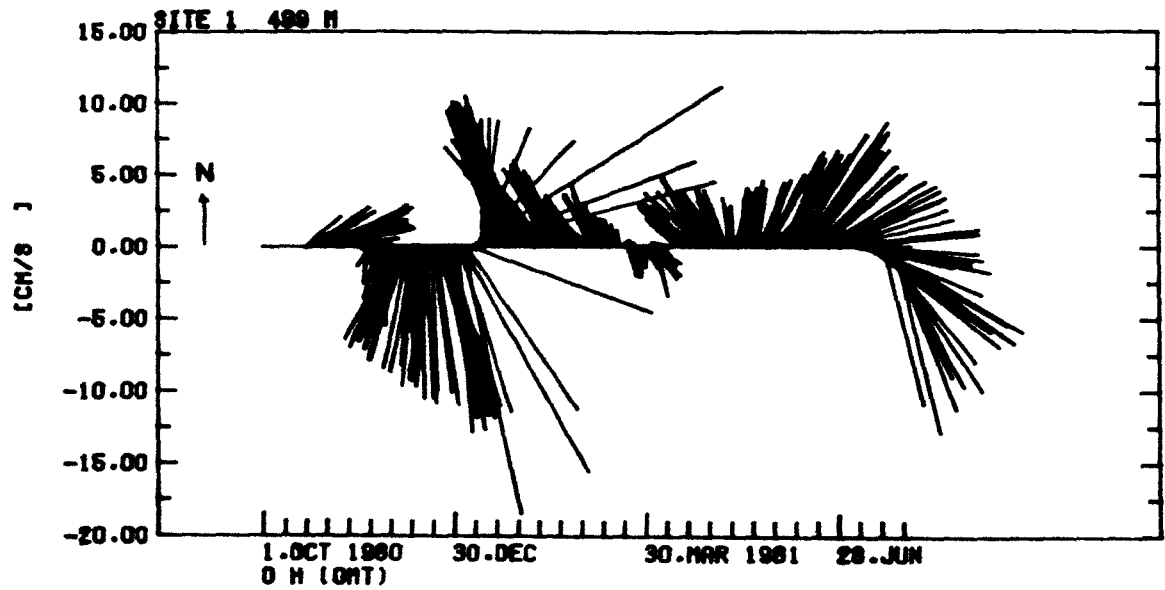
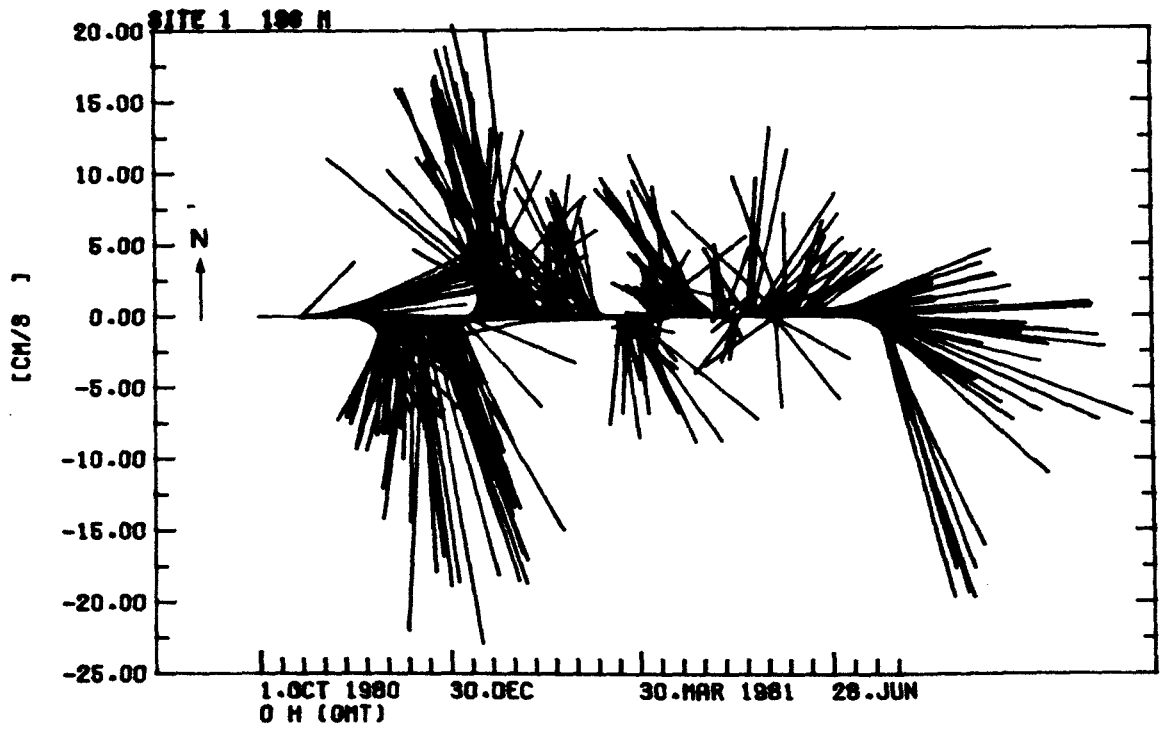


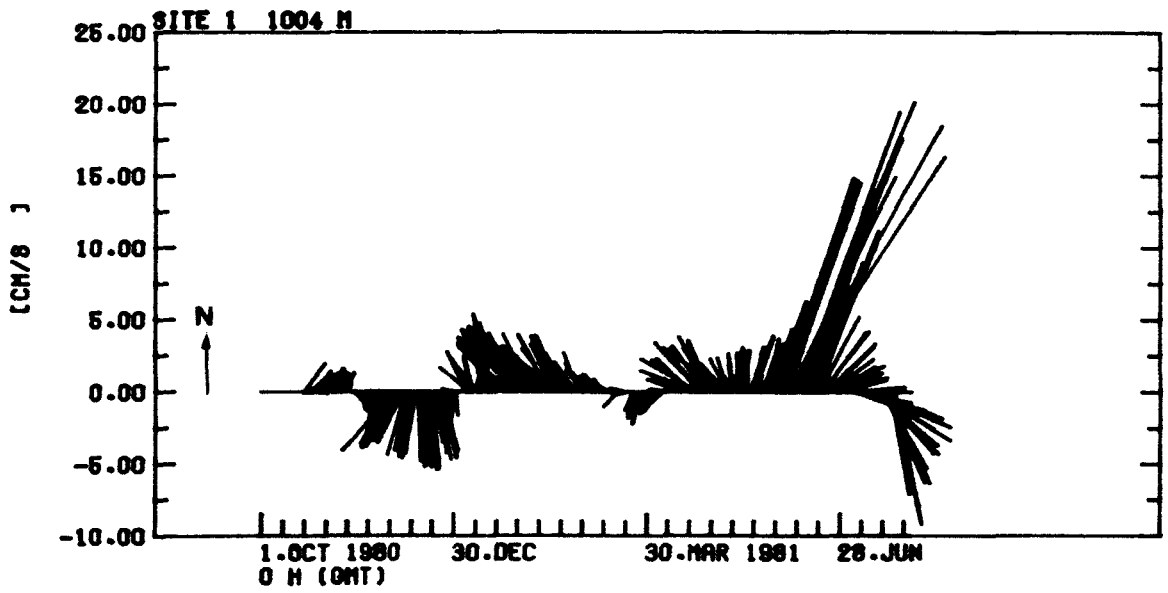
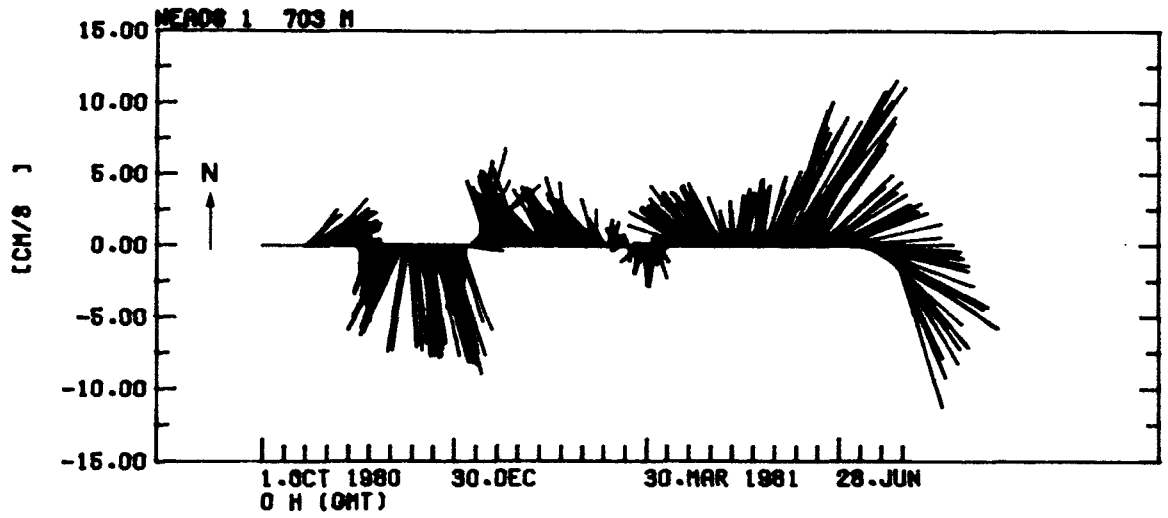
50 KM 1 CM/S

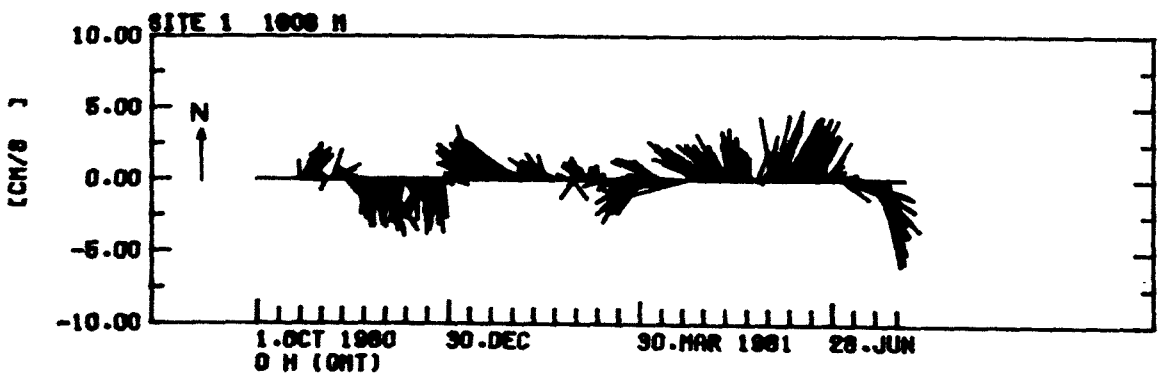
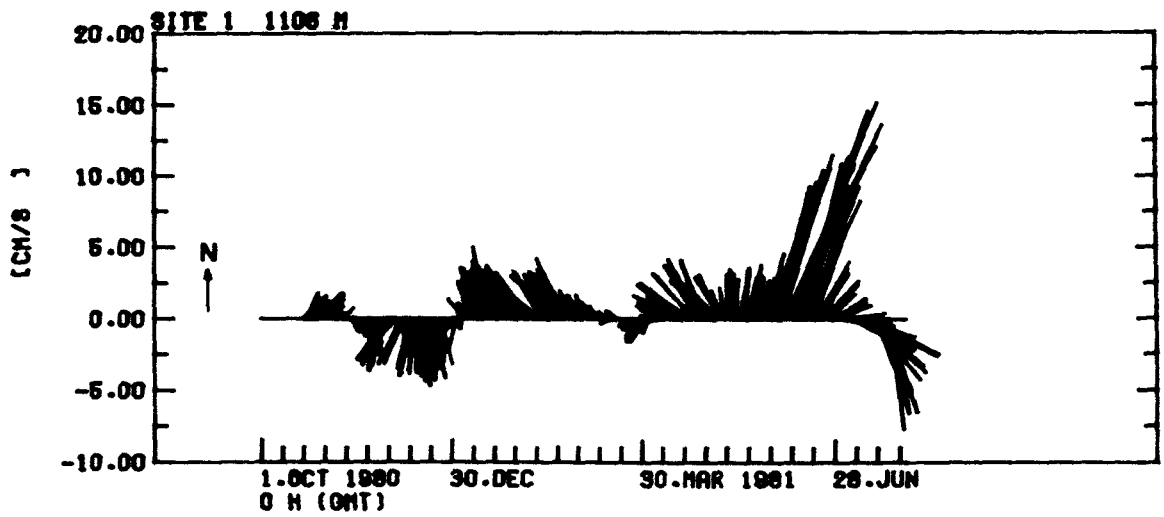
SITE 1 1008 M

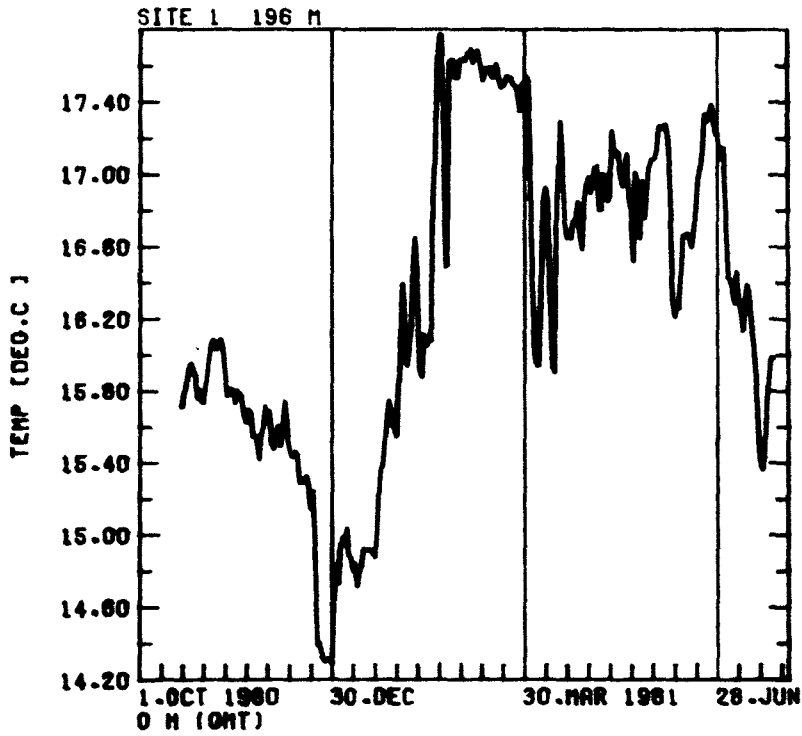
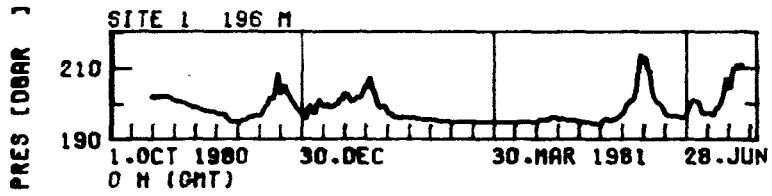


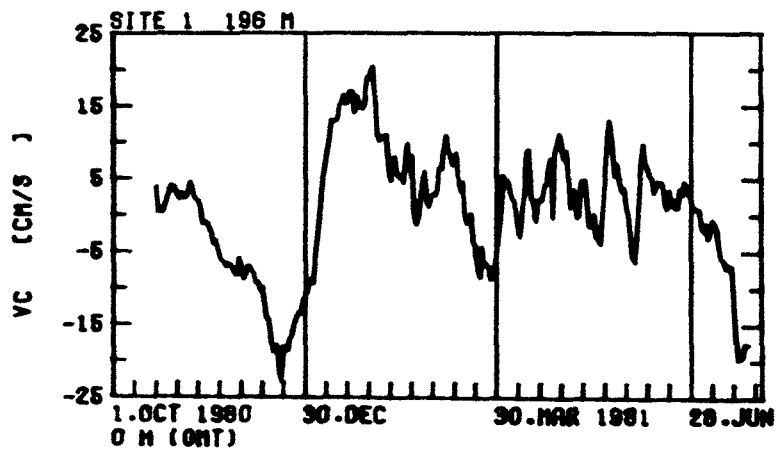
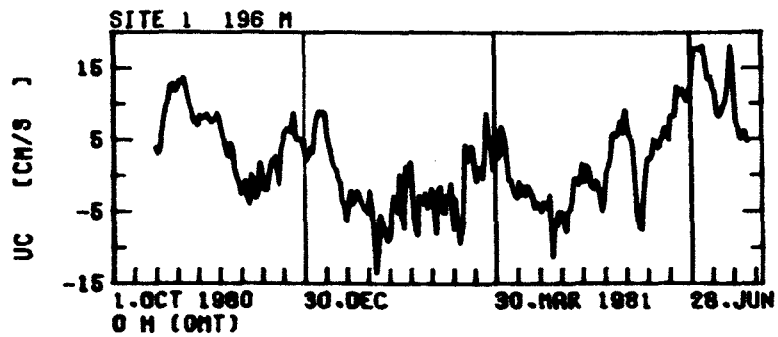
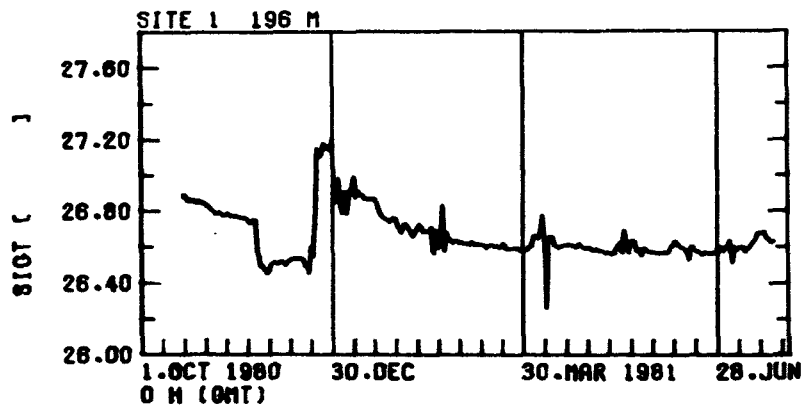
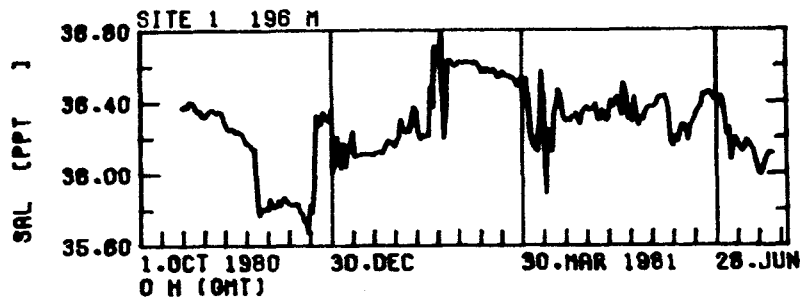
100 KM 3 CM/S

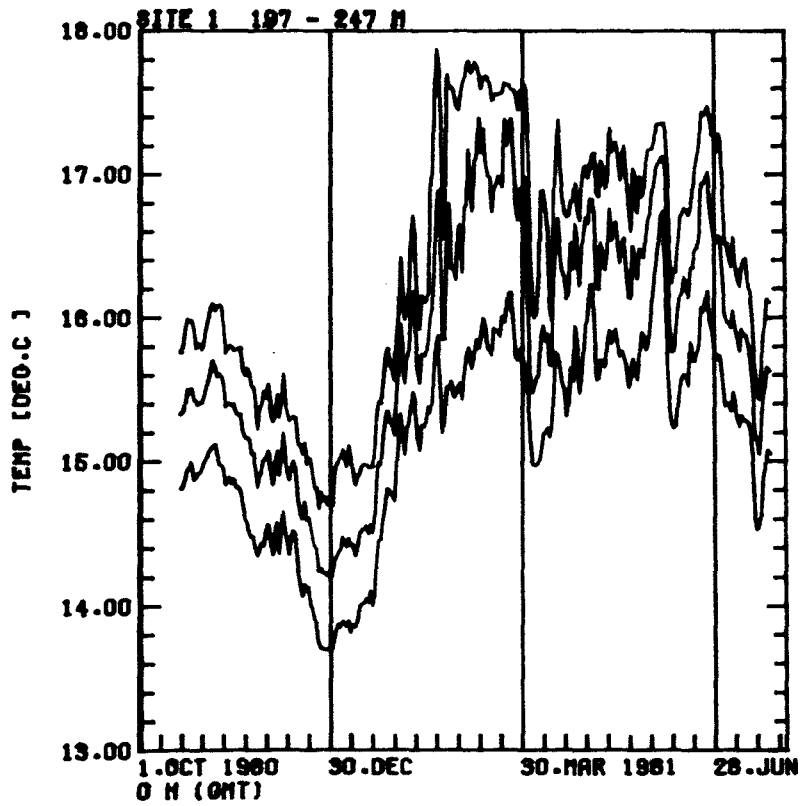


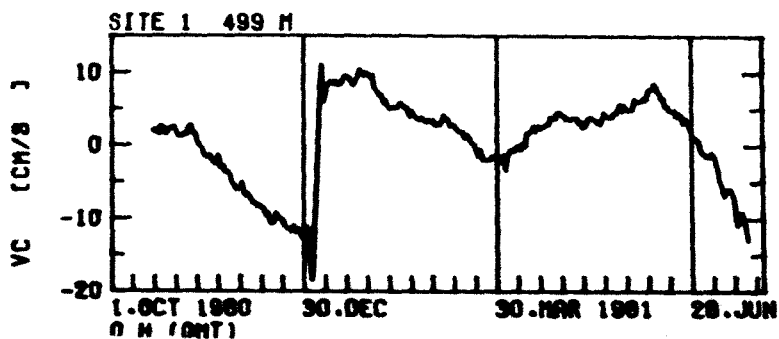
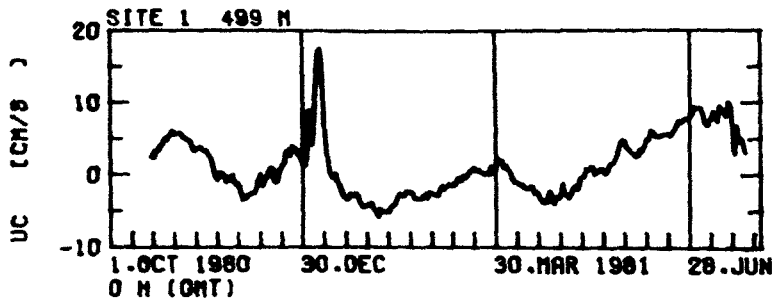
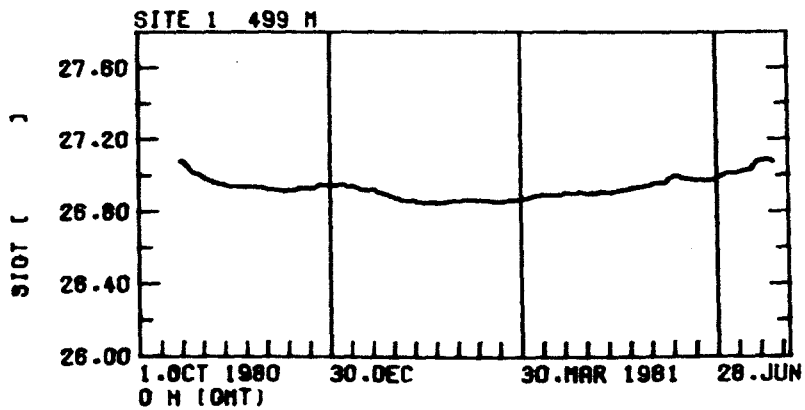
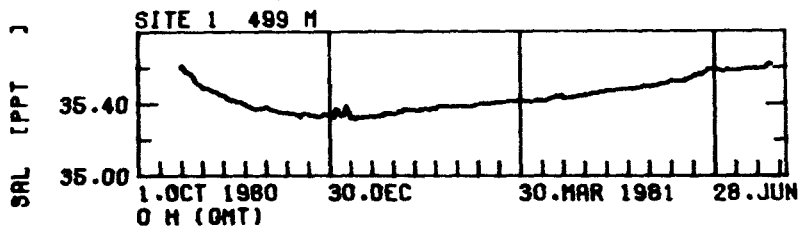
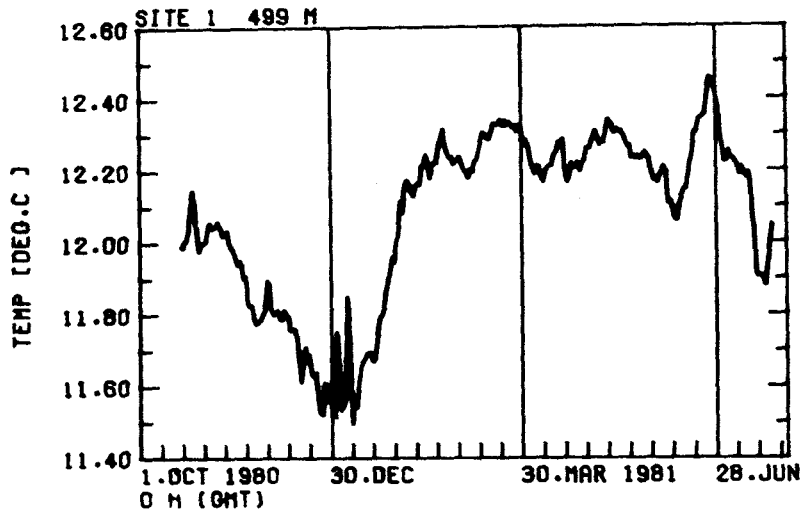


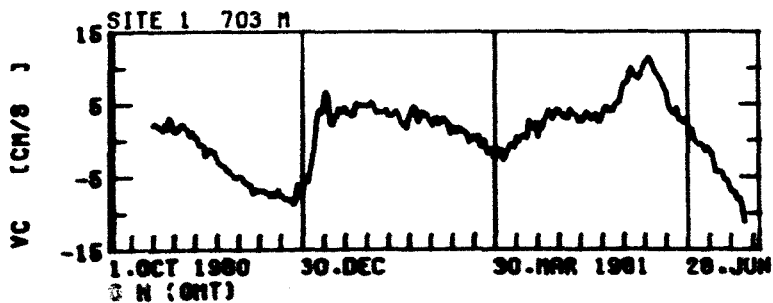
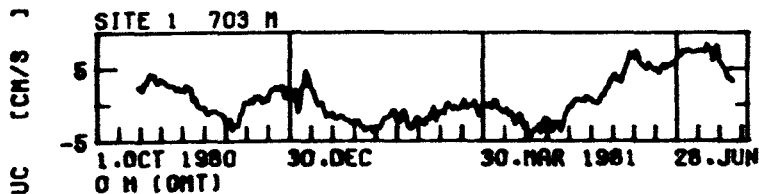
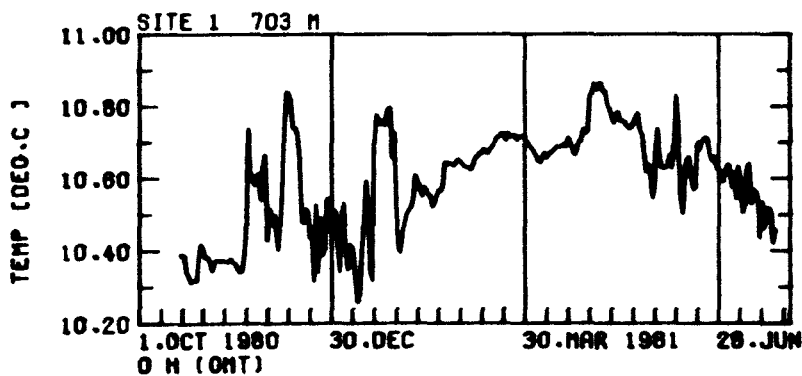
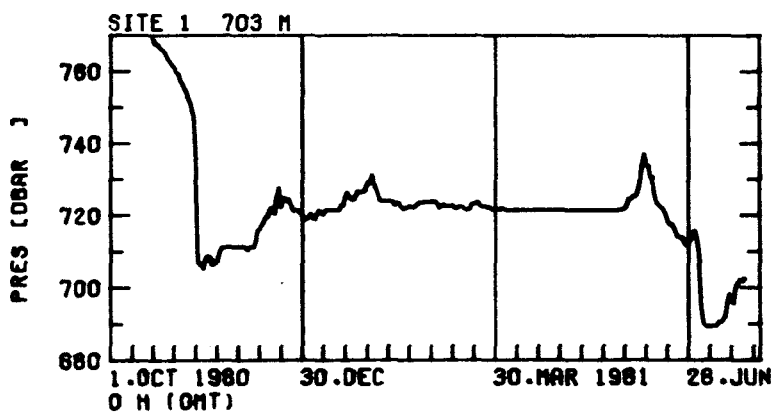
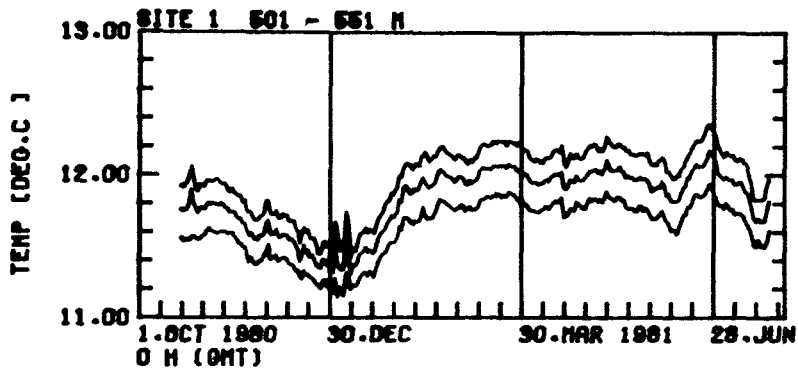


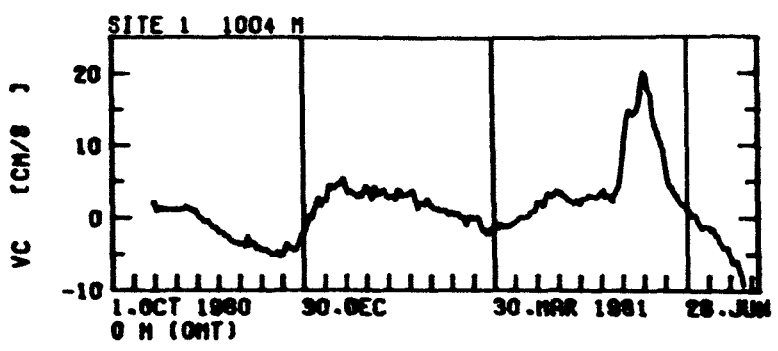
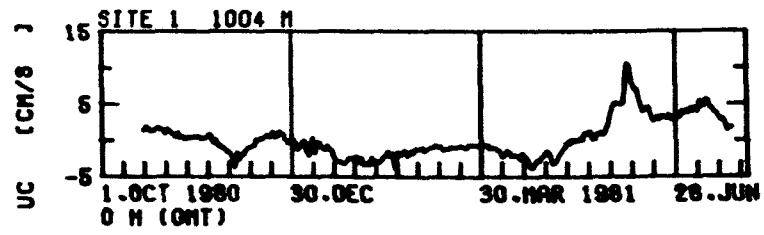
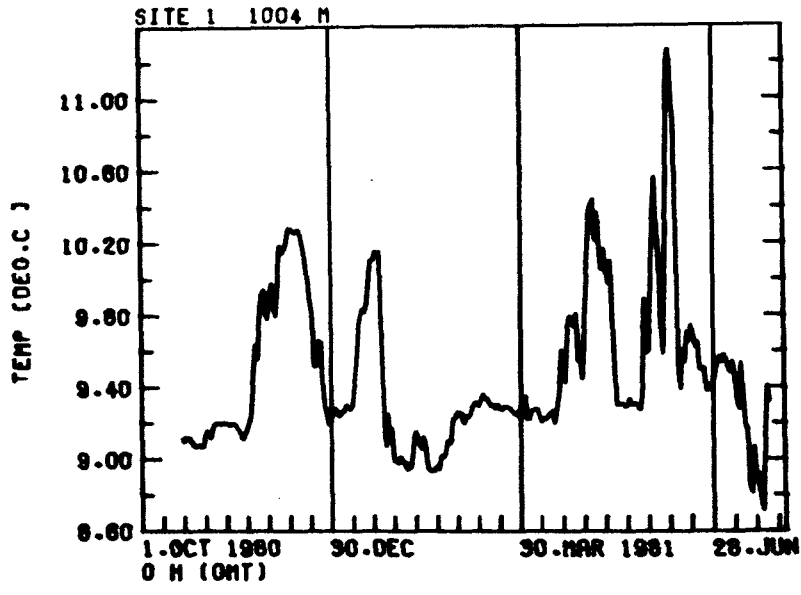


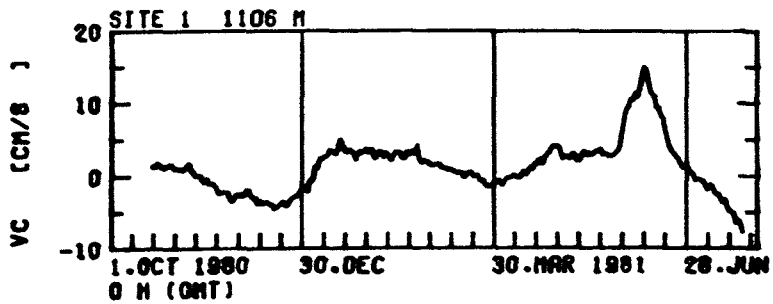
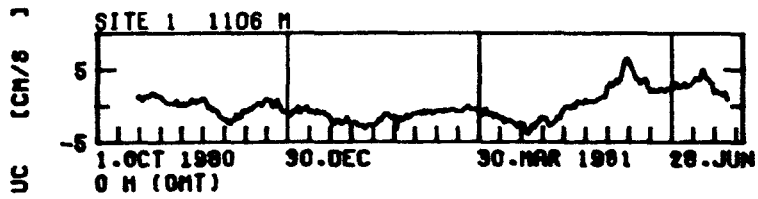
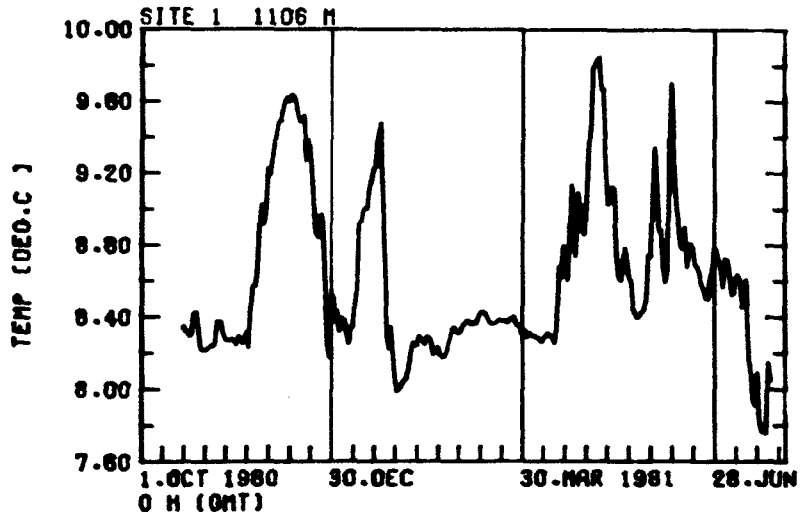


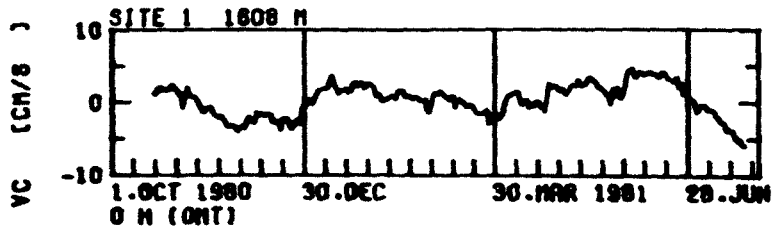
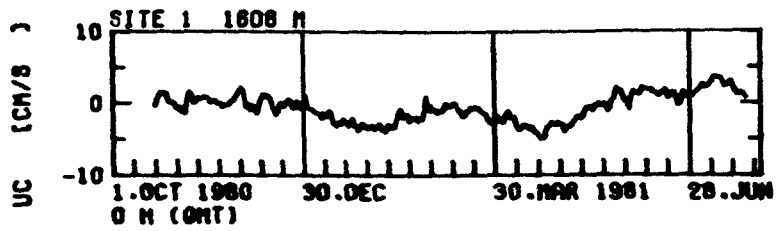
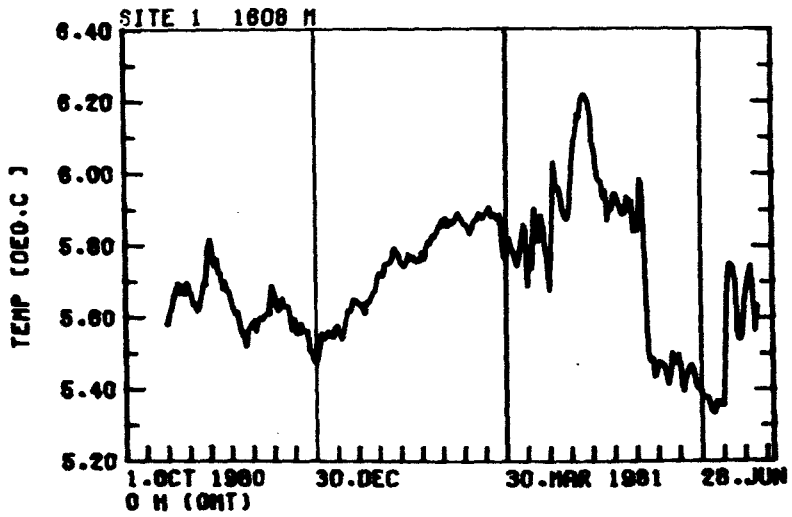












45

276200

N1

27 JUL 1981 - 2 MAR 1982

NEADS site 1, 33° 05'N, 21° 53'W, 5290 m bottom depth

IfM mooring No 276200

Deployed: 27 Jul 1981, Meteor 57/1

Recovered: 02 Mar 1982, Meteor 60/3

Start of record: 28 Jul 1981, 0400Z.

End of record: 02 Mar 1982, 1200Z.

Recording interval: Aanderaa current meters: 60 min

Aanderaa thermistor chains: 120 min

Neil Brown acoustic current meter (ACM-2): 1 min

Time base check: ok with exceptions of short records and 276204

(4 cycles interpolated)

Identifi- fication	depth (m)	Parameters and Corrections					Remarks
		P	T	S	$\left \vec{u} \right $	ϕ	
276201	245	-1	x	x	x	x	
202	248	-	x	-	-	-	10 thermistors 252m-293m
203	550	-	+1.44	x	x	x	697 hours record only
204	553	-	x	-	-	-	11 thermistors 553m-598m Corrections:+0.09 No 7 -0.04 No 11
205	755	x	x	-	x	x	no record in last month (Feb 1982)
206	1160	-	x	-	x	x	
207	1665	-	x	-	x	x	ACM-2, battery bad after 4216 hours, Temp. bad after 3439 hours Temp.resolution inadequate
276B11	1760	-	x	-	x	x	rest of 276111 after 27 Jul 1981, greater depth, stop after 3337 hours included for comparison with ACM-2
276208	3020	-	0.18	-	x	x	

Symbols see page 143

Values for linear corrections are included.

FILE: NEADS 276201R0 /E1 MOORING ID: 276201 START-CYCLE: 1. STOP-CYCLE: 5217. NUMBER OF VALUES: 5217.

TIME RANGE: 28. 7.1981 4: 0: 0: 0 / 2. 3.1982 12: 0: 0: 0 / SAMPLING INTERVAL (MINUTES) : 0.600000*02 245 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 PRES	[DBAR]	0.2341E+03	0.3812E+03	0.2462E+03	0.3908E+00	0.7989E+03	0.2823E+02	0.3240E+01	0.1218E+02
2 TEMP	[DEG.C]	0.1263E+02	0.1876E+02	0.1538E+02	0.9895E-02	0.4904E+00	0.7003E+00	-0.1313E+01	0.5111E+01
3 SAL	[PPT]	0.3540E+02	0.3888E+02	0.3688E+02	0.1752E-02	0.1601E-01	0.1285E+00	-0.3492E+00	0.5586E+01
4 UC	[CH/S]	-0.1881E+02	0.2508E+02	0.5496E+01	0.8238E-01	0.3539E+02	0.5949E+01	-0.1995E+00	0.3285E+01
5 VC	[CM/S]	-0.2632E+02	0.2108E+02	-0.2464E+01	0.1027E+00	0.5504E+02	0.7418E+01	-0.4113E+00	0.2958E+01
6 STOT	[]	0.2618E+02	0.2740E+02	0.2673E+02	0.1789E-02	0.1670E-01	0.1292E+00	0.3909E+00	0.5499E+01

PAIR VECTOR-MEAN VECTOR-VAR STOVECMEAN VECHEMERR DIR-MEAN

4 5 0.6018E+01 0.4522E+02 0.6724E+01 0.9310E-01 114.06

FILE: NEADS 276202 /TR MOORING ID: 276202 START-CYCLE: 1. STOP-CYCLE: 2608. NUMBER OF VALUES: 2608.

TIME RANGE: 28. 7.1981 4: 0: 0: 0 / 2. 3.1982 12: 0: 0: 0 / SAMPLING INTERVAL (MINUTES) : 0.120000*03 252-293 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 TEMP	[DEG.C]	0.1248E+02	0.1647E+02	0.1508E+02	0.1348E-01	0.4728E+00	0.6878E+00	-0.1303E+01	0.5131E+01
2 TEMP	[DEG.C]	0.1243E+02	0.1642E+02	0.1501E+02	0.1330E-01	0.4617E+00	0.6795E+00	-0.1312E+01	0.5148E+01
3 TEMP	[DEG.C]	0.1243E+02	0.1635E+02	0.1493E+02	0.1309E-01	0.4470E+00	0.6886E+00	-0.1324E+01	0.5179E+01
4 TEMP	[DEG.C]	0.1234E+02	0.1629E+02	0.1484E+02	0.1293E-01	0.4363E+00	0.6805E+00	-0.1339E+01	0.5207E+01
5 TEMP	[DEG.C]	0.1224E+02	0.1609E+02	0.1474E+02	0.1274E-01	0.4232E+00	0.6505E+00	-0.1340E+01	0.5225E+01
6 TEMP	[DEG.C]	0.1222E+02	0.1603E+02	0.1468E+02	0.1259E-01	0.4135E+00	0.6431E+00	-0.1348E+01	0.5260E+01
7 TEMP	[DEG.C]	0.1212E+02	0.1591E+02	0.1457E+02	0.1241E-01	0.4018E+00	0.6339E+00	-0.1363E+01	0.5288E+01
8 TEMP	[DEG.C]	0.1208E+02	0.1586E+02	0.1449E+02	0.1223E-01	0.3902E+00	0.6248E+00	-0.1373E+01	0.5330E+01
9 TEMP	[DEG.C]	0.1203E+02	0.1578E+02	0.1438E+02	0.1206E-01	0.3792E+00	0.6158E+00	-0.1380E+01	0.5398E+01
10 TEMP	[DEG.C]	0.1198E+02	0.1569E+02	0.1434E+02	0.1190E-01	0.3683E+00	0.6077E+00	-0.1384E+01	0.5375E+01

FILE: HEADS 276203RD /E1 HOURNO JO: 276203 START-CYCLE: 697. STOP-CYCLE: 697. NUMBER OF VALUES: 697.

TIME RANGE: 28. 7.1981 4: 0: 0: 0/26. 8.1981 4: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 550 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 TEMP	[DEG.C]	0.1106E+02	0.1180E+02	0.1133E+02	0.8145E-02	0.4624E-01	0.2150E+00	0.4861E+00	0.1987E+01
2 SAL	[PPT]	0.3513E+02	0.3667E+02	0.3541E+02	0.3885E-02	0.3466E-02	0.9730E-01	0.9528E-02	0.2874E+01
3 UC	[CM/S]	-0.2723E+01	0.2188E+01	0.7254E+01	0.1984E+00	0.2745E+02	0.5239E+01	0.3854E+00	0.2389E+01
4 VC	[CM/S]	-0.3128E+02	-0.1732E+00	0.1658E+02	0.2556E+00	0.4447E+02	0.6668E+01	0.1585E+00	0.2294E+01
5 STOT	[]	0.2682E+02	0.2725E+02	0.2705E+02	0.2687E-02	0.5031E-02	0.7093E-01	-0.2582E+00	0.3421E+01
PAIR VECTOR-MEAN	VECTOR-VAR	STOVECMAN	VECMANERR	DIA-MEAN					
3 4	0.1809E+02	0.3588E+02	0.5987E+01	0.2271E+00	158.36				

FILE: HEADS 276204 /XX HOURNO ID: 276204 START-CYCLE: 2609. STOP-CYCLE: 2609. NUMBER OF VALUES: 2609.

TIME RANGE: 28. 7.1981 4: 0: 0: 0/ 2. 3.1982 12: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.120000+03 553-598 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 TEMP	[DEG.C]	0.1077E+02	0.1205E+02	0.1156E+02	0.5024E-02	0.6564E-01	0.2566E+00	-0.8342E+00	0.3704E+01
2 TEMP	[DEG.C]	0.1074E+02	0.1200E+02	0.1155E+02	0.4936E-02	0.6103E-01	0.2470E+00	-0.7529E+00	0.3535E+01
3 TEMP	[DEG.C]	0.1072E+02	0.1200E+02	0.1153E+02	0.4724E-02	0.5822E-01	0.2413E+00	-0.6677E+00	0.3364E+01
4 TEMP	[DEG.C]	0.1072E+02	0.1198E+02	0.1150E+02	0.4544E-02	0.5388E-01	0.2321E+00	-0.5720E+00	0.3177E+01
5 TEMP	[DEG.C]	0.1053E+02	0.1191E+02	0.1145E+02	0.4255E-02	0.5110E-01	0.2260E+00	-0.5242E+00	0.3130E+01
6 TEMP	[DEG.C]	0.1060E+02	0.1186E+02	0.1138E+02	0.4255E-02	0.4745E-01	0.2178E+00	-0.4290E+00	0.2954E+01
7 TEMP	[DEG.C]	0.1062E+02	0.1177E+02	0.1131E+02	0.4027E-02	0.4231E-01	0.2057E+00	-0.3622E+00	0.2818E+01
8 TEMP	[DEG.C]	0.1067E+02	0.1182E+02	0.1135E+02	0.3847E-02	0.4065E-01	0.2016E+00	-0.2861E+00	0.2706E+01
9 TEMP	[DEG.C]	0.1067E+02	0.1175E+02	0.1130E+02	0.3867E-02	0.3901E-01	0.1975E+00	-0.2174E+00	0.2574E+01
10 TEMP	[DEG.C]	0.1060E+02	0.1165E+02	0.1122E+02	0.3785E-02	0.3698E-01	0.1923E+00	-0.1726E+00	0.2521E+01
11 TEMP	[DEG.C]	0.1061E+02	0.1164E+02	0.1121E+02	0.3688E-02	0.3649E-01	0.1894E+00	-0.1537E+00	0.2472E+01

FILE: HEADS 276205RD /TR HOURNO ID: 276205 START-CYCLE: 4578. STOP-CYCLE: 4578. NUMBER OF VALUES: 4578.

TIME RANGE: 28. 7.1981 4: 0: 0: 0/ 3. 2.1982 21: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 755 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 PRES	[DBAR]	0.7554E+03	0.9286E+03	0.7884E+03	0.4804E+00	0.9704E+03	0.3115E+02	0.9095E+01	0.1151E+02
2 TEMP	[DEG.C]	0.8721E+01	0.1188E+02	0.1027E+02	0.6708E-02	0.2060E+00	0.4539E+00	0.2394E+01	0.8162E+01
3 UC	[CM/S]	-0.1422E+02	0.2604E+02	0.2692E+01	0.7759E-01	0.2756E+02	0.5250E+01	0.8131E+00	0.5121E+01
4 VC	[CM/S]	-0.3746E+02	0.1180E+02	-0.3302E+01	0.1339E+00	0.8130E+02	0.9017E+01	-0.1786E+01	0.5880E+01
PAIR VECTOR-MEAN	VECTOR-VAR	STOVECMAN	VECMANERR	DIA-MEAN					
3 4	0.4198E+01	0.5443E+02	0.7378E+01	0.1080E+00	141.86				

FILE: HEADS 2762080 /TR HOORING ID: 276208 START-CYCLE: 1. STOP-CYCLE: 5217. NUMBER OF VALUES: 5217.

TIME RANGE: 28. 7.1981 4: 0: 0: / 2. 3.1982 12: 0: 0: / SAMPLING INTERVAL (MINUTES) : 0.600000+02 1160 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERNEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 TEMP	[DEG.C]	0.7678E+01	0.1071E+02	0.8373E+01	0.8490E-02	0.2198E+00	0.4888E+00	0.1832E+01	0.7973E+01
2 UC	[CM/S]	-0.3752E+02	0.3197E+02	0.1110E+01	0.5658E-01	0.1612E+02	0.4015E+01	0.4574E+00	0.7343E+01
3 VC	[CM/S]	-0.2428E+02	0.9877E+01	-0.1248E+01	0.7457E-01	0.2901E+02	0.5388E+01	-0.1633E+01	0.6136E+01

PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMEANERR	DIR-MEAN
2 3	0.1689E+01	0.2257E+02	0.4750E+01	0.6577E-01	138.30

FILE: HEADS ROM UV 276207/A 006 HOORING ID: 276207 START-CYCLE: 1. STOP-CYCLE: 4216. NUMBER OF VALUES: 4216.

TIME RANGE: 28. 7.1981 4:25: 0: /19. 1.1982 19:25: 0: / SAMPLING INTERVAL (MINUTES) : 0.600000+02 1665 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERNEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 TEMP	[DEG.C]	0.2050E+01	0.5250E+01	0.4727E+01	0.5695E-02	0.1363E+00	0.3691E+00	-0.3345E+01	0.1669E+02
2 UC	[CM/S]	-0.1817E+02	0.1314E+02	0.1427E+01	0.7934E-01	0.2654E+02	0.5151E+01	-0.7144E+00	0.3237E+01
3 VC	[CM/S]	-0.1291E+02	0.1522E+02	0.3597E+00	0.7314E-01	0.2255E+02	0.4749E+01	-0.1164E+00	0.2234E+01

PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMEANERR	DIR-MEAN
2 3	0.1472E+01	0.2454E+02	0.4854E+01	0.7630E-01	75.95

FILE: HEADS 276811 HOORING ID: 276111 START-CYCLE: 1. STOP-CYCLE: 3337. NUMBER OF VALUES: 3337.

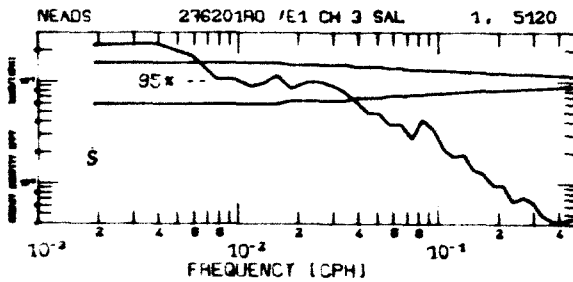
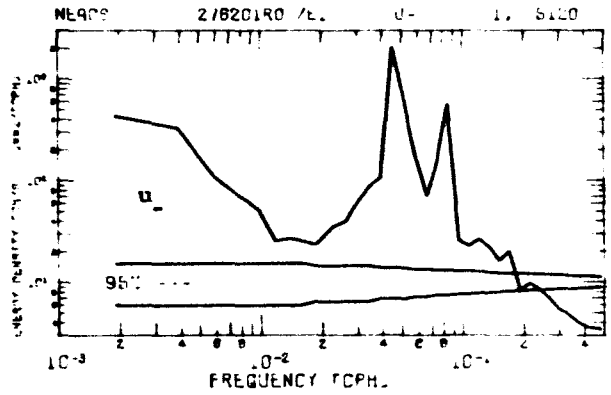
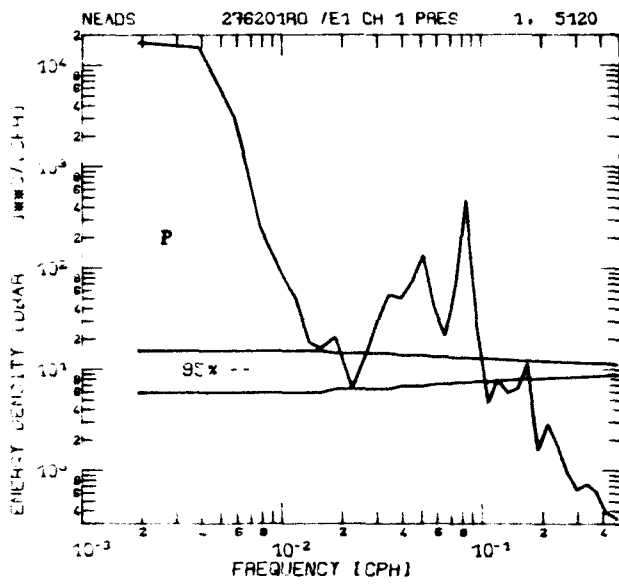
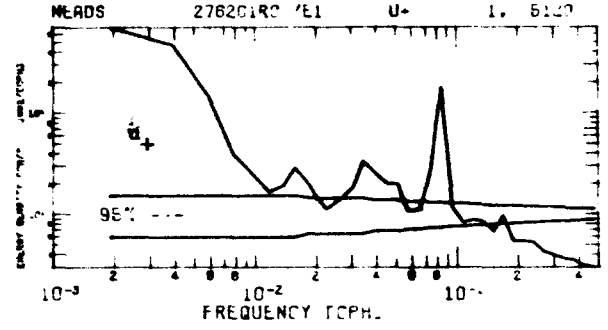
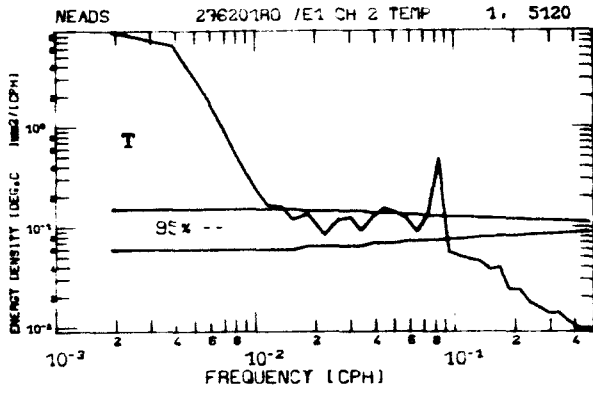
TIME RANGE: 27. 7.1981 16: 0: 0: /19.12.1981 16: 0: 0: / SAMPLING INTERVAL (MINUTES) : 0.600000+02 1760 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERNEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 TEMP	[DEG.C]	0.4384E+01	0.5093E+01	0.4817E+01	0.1716E-02	0.9825E-02	0.9912E-01	-0.6570E+00	0.3807E+01
2 UC	[CM/S]	-0.6210E+01	0.9685E+01	0.9187E+00	0.3961E-01	0.5235E+01	0.2288E+01	0.2268E+00	0.5165E+01
3 VC	[CM/S]	-0.1172E+02	0.3353E+02	-0.6264E+00	0.5101E-01	0.8682E+01	0.2947E+01	-0.2552E+00	0.6921E+01

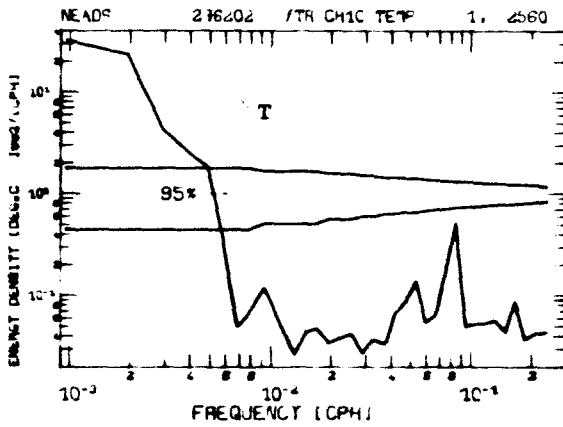
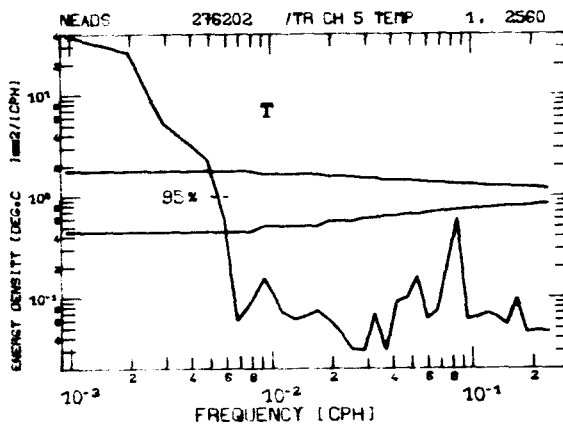
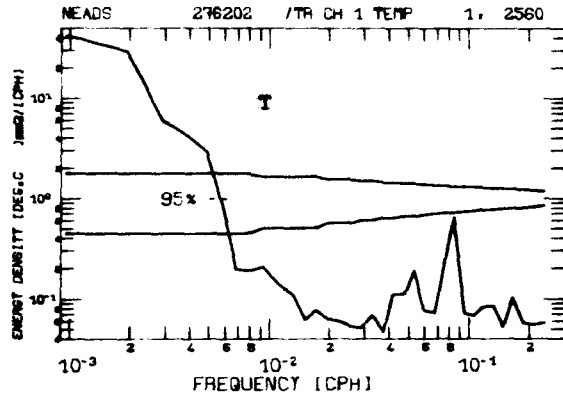
PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMEANERR	DIR-MEAN
2 3	0.1112E+01	0.6859E+01	0.2638E+01	0.4567E-01	124.29

FILE: HEADS 2742000 /IR M00RINO J0: 270200 START-CYCLE: 1. STOP-CYCLE: 5217. NUMBER OF VALUES: 5217.

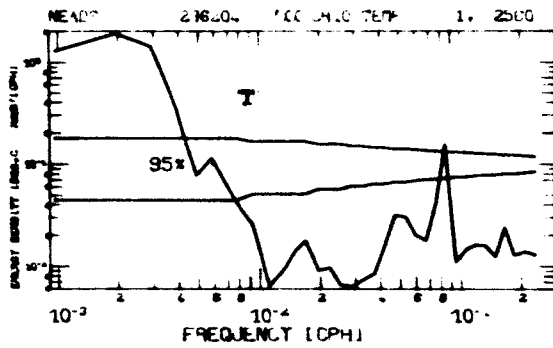
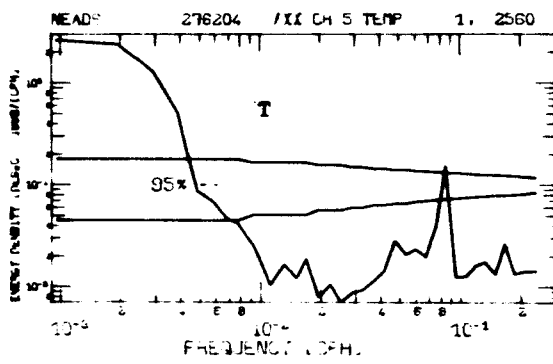
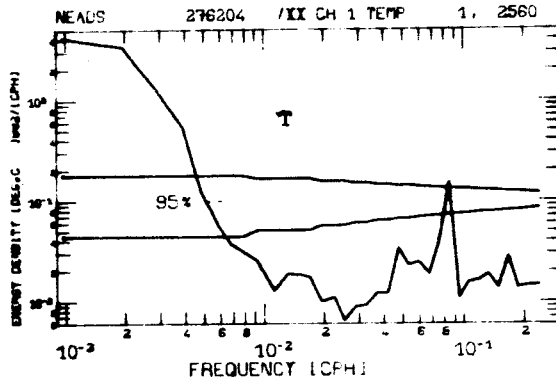
TIME RANGE:	28. 7.1981	4: 0: 0:	0/ 2. 3.1982	12: 0: 0:	0/ SAMPLING INTERVAL	(MINUTES):	0.600000+02	3020 m	
VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 TEMP	{ (C/D.C)	0.2784E+01	0.2918E+01	0.2849E+01	0.2369E-03	0.2900E-03	0.1703E-01	0.3965E+00	0.2855E+01
2 UC	{ (CH/S)	-0.8066E+01	0.1117E+02	0.4664E-01	0.3540E-01	0.6598E+01	0.2657E+01	-0.1163E+00	0.3069E+01
3 VC	{ (CH/S)	-0.9350E+01	0.8718E+01	-0.4163E-01	0.5539E-01	0.5812E+01	0.2411E+01	-0.1767E+00	0.3493E+01
PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMAN	VECMANERR	DIR-MEAN				
2	3	0.6252E-01	0.6175E+01	0.2485E+01	0.3440E-01				131.75



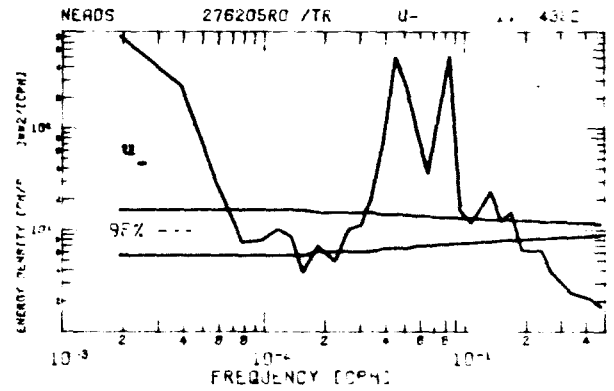
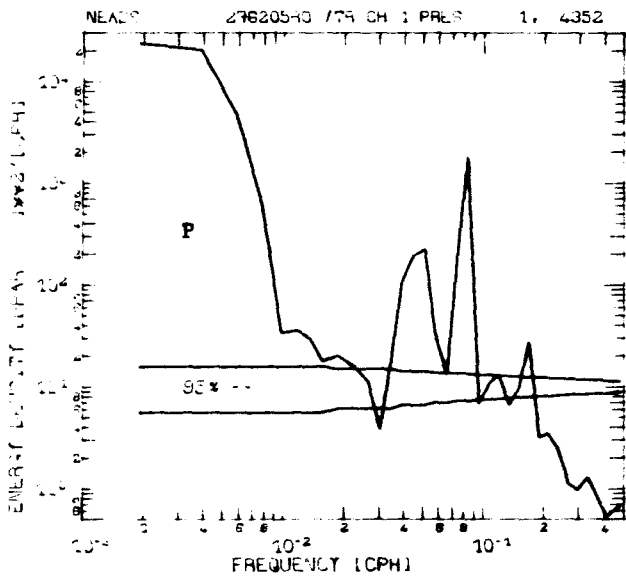
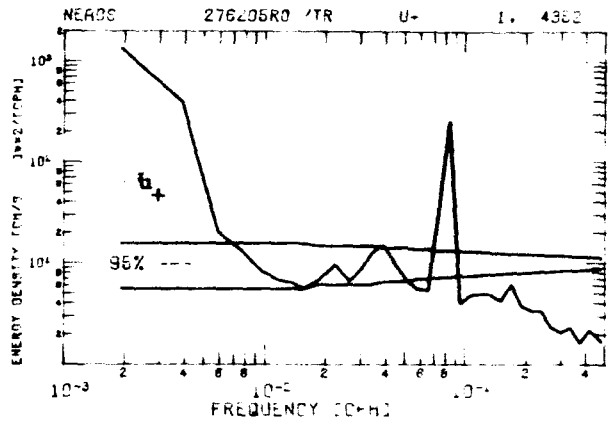
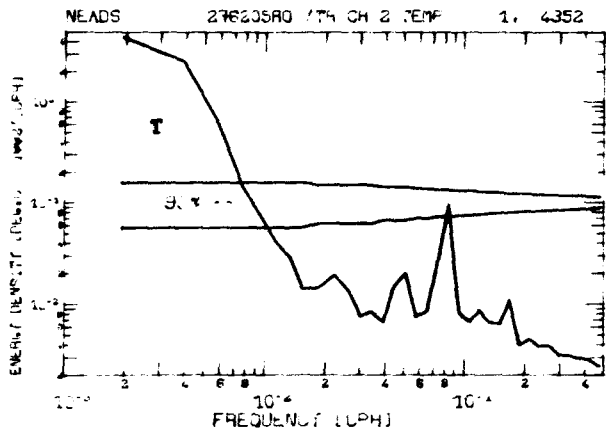
276201, 245m



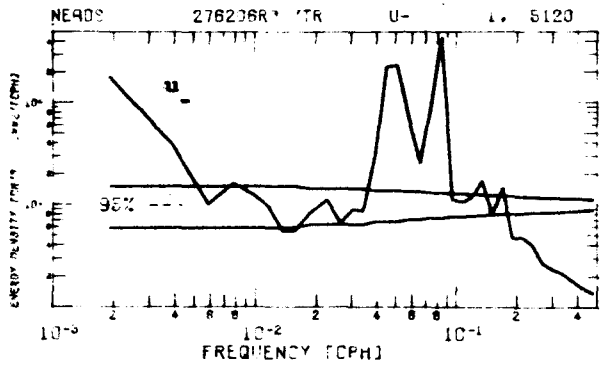
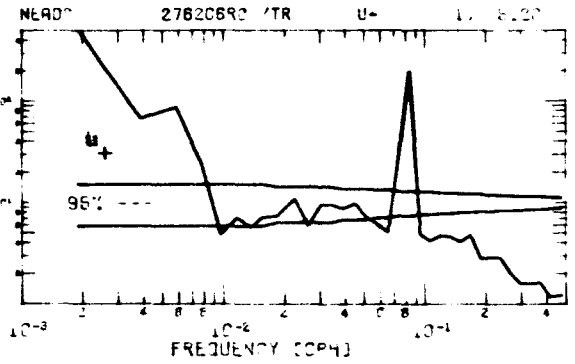
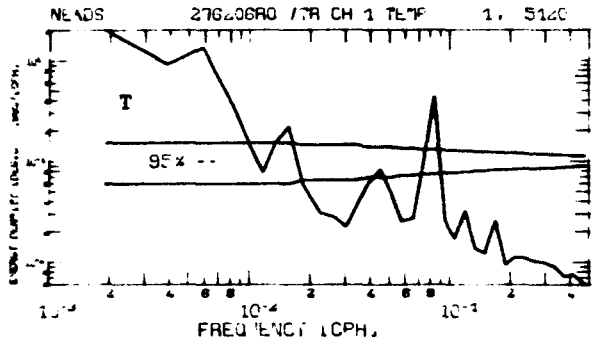
276202, 252m
 271m
 293m



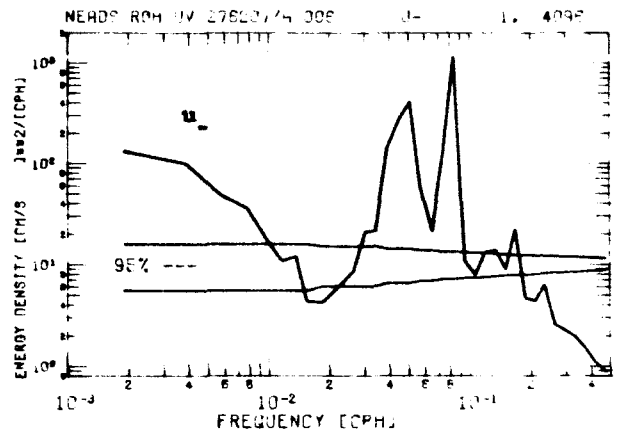
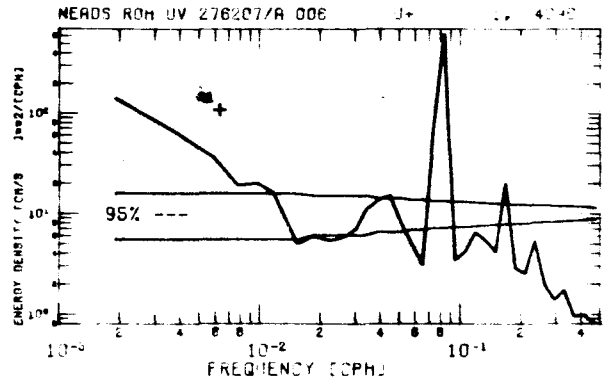
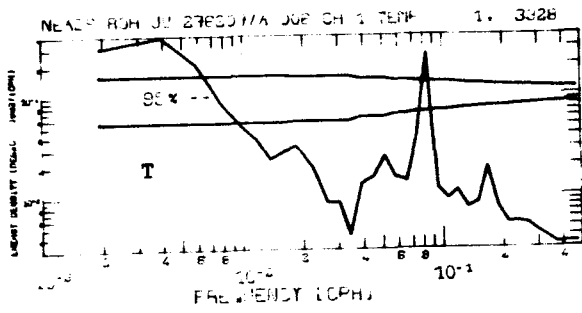
276204, 553m
576m
598m



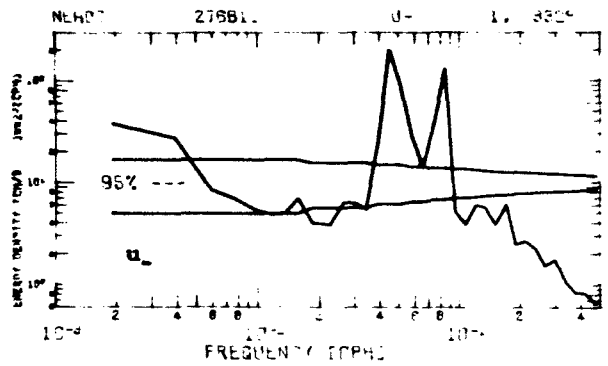
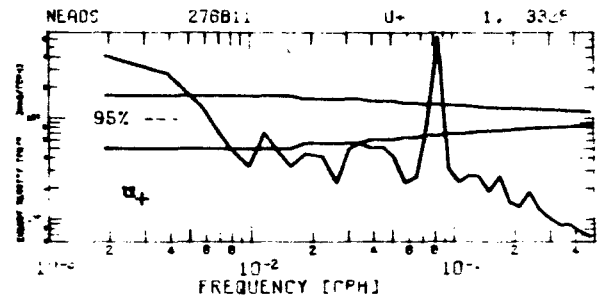
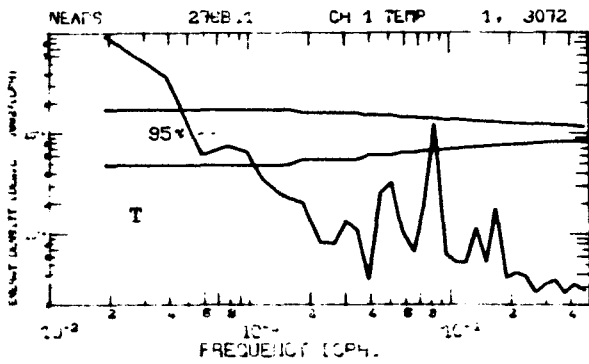
276205,755m



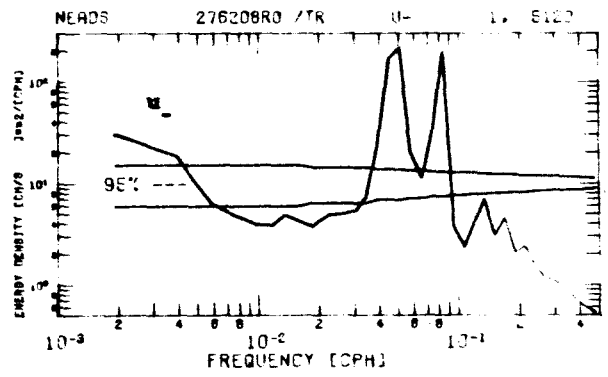
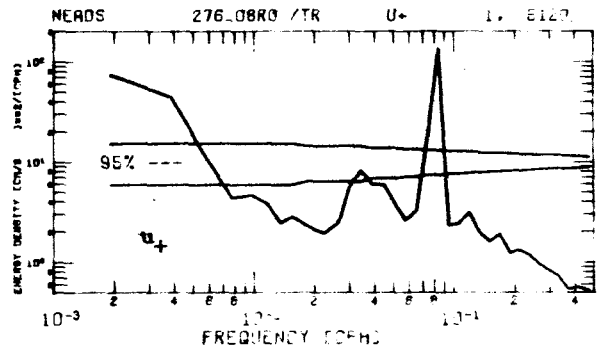
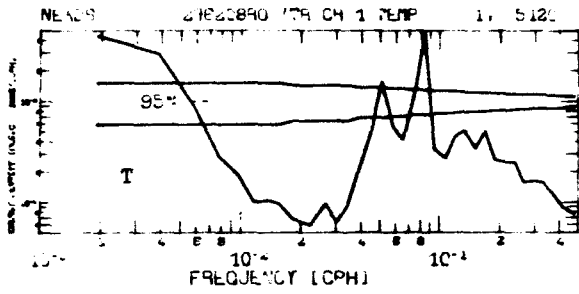
276206, 1160m



276207, 1665m



276B11, 1760m



276208, 3020m

FILE: NEADS 276201/A 024 MOORING ID: 276201 START-CYCLE: 1. STOP-CYCLE: 211. NUMBER OF VALUES: 211.

TIME RANGE: 31. 7.1981 9:30: 0: 0/26. 2.1982 9:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 24.5 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STADDEV	SKEWNESS	KURTOSIS
1 PRES	(DBAR)	0.2348E+03	0.3604E+03	0.2453E+03	0.1955E+01	0.8088E+03	0.2840E+02	0.3152E+01	0.1148E+02
2 TEMP	(DEG.C)	0.1305E+02	0.1640E+02	0.1377E+02	0.4786E-01	0.4784E+00	0.6824E+00	-0.1355E+01	0.5003E+01
3 SAL	(PPT)	0.3569E+02	0.3629E+02	0.3608E+02	0.6377E-02	0.9680E-02	0.9263E-01	-0.8694E+00	0.4237E-01
4 UC	(CM/S)	-0.3254E+01	0.1732E+02	0.5486E+01	0.3063E+00	0.1978E+02	0.4448E+01	0.5120E-01	0.2388E-01
5 VC	(CM/S)	-0.1985E+02	0.1111E+02	-0.2238E+01	0.4140E+00	0.3616E+02	0.6013E+01	-0.1005E+01	0.3580E+01
6 S1OT	()	0.2643E+02	0.2707E+02	0.2673E+02	0.7166E-02	0.1084E-01	0.1041E+00	0.3885E+00	0.4762E+01

VARIABLES

	COVARIANCE	VARCORR	STDEVCOV	STERRCOV
1 PRES	-0.1585E+02	0.7973E+05	0.2715E+03	0.1869E+02
1 PRES	-0.1482E+01	0.1015E+07	0.1007E+04	0.6934E+02
1 PRES	0.1367E+02	0.1245E+07	0.1116E+04	0.7882E+02
1 PRES	-0.1218E+03	0.3147E+07	0.1774E+04	0.1221E+03
1 TEMP	0.2264E+01	0.7658E+00	0.7859E+03	0.5410E+02
2 TEMP	0.5173E-01	0.8086E+00	0.2608E+02	0.1785E-01
2 TEMP	-0.7227E+00	0.2346E+00	0.6848E+02	0.4714E+01
2 TEMP	0.2058E+01	0.4943E+00	0.8758E+02	0.6028E+01
2 SAL	-0.6589E-01	0.8157E+00	0.1715E+02	0.1180E-01
3 SAL	-0.1221E+00	0.2983E+00	0.1603E+03	0.1104E+02
3 SAL	0.1523E+00	0.2734E+00	0.2165E+03	0.1490E+02
3 SAL	-0.4838E-02	0.5017E+00	0.3293E+01	0.2267E+00
4 UC	-0.8274E+01	0.3099E+00	0.4978E+02	0.3427E+01
4 UC	0.6784E-01	0.1465E+00	0.1188E+03	0.8181E+01
5 VC	-0.9301E+00	0.5274E+00	0.1615E+03	0.1112E+02

PAIR VECTOR-MEAN VECTOR-VAR STOVECMAN VECMEANRR DIR-MEAN

4 5 0.5924E+01 0.2798E+02 0.5289E+01 0.3641E+00 112.18

FILE: NEADS 276202/A 012 MOORING ID: 276202 START-CYCLE: 1. STOP-CYCLE: 211. NUMBER OF VALUES: 211.

TIME RANGE: 31. 7.1981 9: 0: 0: 0/26. 2.1982 9: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 25.2-29.3 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STADDEV	SKEWNESS	KURTOSIS
1 TEMP	(DEG.C)	0.1285E+02	0.1611E+02	0.1507E+02	0.4948E-01	0.4660E+00	0.6753E+00	-0.1362E+01	0.4991E+01
2 TEMP	(DEG.C)	0.1281E+02	0.1601E+02	0.1500E+02	0.4594E-01	0.4453E+00	0.6673E+00	-0.1373E+01	0.5014E+01
3 TEMP	(DEG.C)	0.1278E+02	0.1590E+02	0.1493E+02	0.4523E-01	0.4317E+00	0.6570E+00	-0.1388E+01	0.5045E+01
4 TEMP	(DEG.C)	0.1289E+02	0.1581E+02	0.1483E+02	0.4469E-01	0.4214E+00	0.6492E+00	-0.1402E+01	0.5079E+01
6 TEMP	(DEG.C)	0.1283E+02	0.1588E+02	0.1473E+02	0.4400E-01	0.4084E+00	0.6391E+00	-0.1406E+01	0.5101E+01
6 TEMP	(DEG.C)	0.1288E+02	0.1561E+02	0.1457E+02	0.4347E-01	0.3988E+00	0.6315E+00	-0.1418E+01	0.5146E+01
7 TEMP	(DEG.C)	0.1248E+02	0.1549E+02	0.1428E+02	0.4284E-01	0.3873E+00	0.6223E+00	-0.1435E+01	0.5191E+01
8 TEMP	(DEG.C)	0.1245E+02	0.1539E+02	0.1448E+02	0.4224E-01	0.3764E+00	0.6135E+00	-0.1442E+01	0.5214E+01
9 TEMP	(DEG.C)	0.1239E+02	0.1524E+02	0.1439E+02	0.4164E-01	0.3659E+00	0.6043E+00	-0.1451E+01	0.5235E+01
10 TEMP	(DEG.C)	0.1238E+02	0.1517E+02	0.1434E+02	0.4110E-01	0.3563E+00	0.5969E+00	-0.1464E+01	0.5281E+01

FILE: HEADS		276203/A 024		MOORING ID: 276203		START-CYCLE: 1.		STOP-CYCLE: 23.		NUMBER OF VALUES: 23.	
TIME RANGE: 31. 7.1981 9:30: 0: 0/22. 8.1981 9:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 550 m											
VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS		
1 TEMP	(DEG.C)	0.1109E+02	0.1155E+02	0.1125E+02	0.2940E-01	0.1989E-01	0.1410E+00	0.7068E+00	0.2277E+01		
2 SAL	(PPT)	0.3629E+02	0.3836E+02	0.3539E+02	0.1274E-01	0.3734E-02	0.6111E-01	0.6868E+00	0.3498E+01		
3 UC	(CM/S)	0.2287E+00	0.1866E+02	0.7902E+01	0.1066E+01	0.2566E+02	0.5066E+01	0.4848E-01	0.1748E+01		
4 VC	(CM/S)	-0.2629E+02	-0.8060E+01	-0.1845E+02	0.1096E+01	0.2764E+02	0.5558E+01	0.4036E+00	0.2421E+01		
5 S1OT	()	0.2886E+02	0.2714E+02	0.2705E+02	0.6876E-02	0.1812E-02	0.4256E-01	-0.2624E+00	0.2836E+01		
VARIABLES											
		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERCOV					
1 TEMP	2 SAL	0.3999E-02	0.4525E+00	0.2954E+02	0.5349E+01	0.1114E+01					
1 TEMP	3 UC	-0.2107E+00	-0.2949E+00	0.3204E+04	0.5661E+02	0.1180E+02					
1 TEMP	4 VC	0.8255E+00	0.7098E+00	0.3341E+04	0.5780E+02	0.1205E+02					
2 SAL	3 UC	-0.6617E-03	-0.1102E+00	0.1439E+02	0.3794E+01	0.3711E+00					
2 SAL	4 VC	0.3091E-01	0.2160E+00	0.3209E+06	0.1791E+03	0.3735E+02					
3 UC	4 VC	0.2178E-02	0.8622E-01	0.3468E+06	0.1862E+03	0.3882E+02					
3 UC	5 S1OT	0.8205E+01	0.8365E+00	0.9169E+01	0.3028E+01	0.6314E+00					
4 VC	5 S1OT	-0.1300E-01	-0.6039E-01	0.7512E+04	0.8667E+02	0.1807E+02					
		-0.7367E-01	-0.3292E+00	0.2033E+06	0.1426E+03	0.2873E+02					
PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMAN	VECMANERR	DJR-MEAN						
3 4	0.2007E+02	0.2665E+02	0.5163E+01	0.1076E+01	156.82						
FILE: HEADS 276204/A 012 MOORING ID: 276204 START-CYCLE: 1. STOP-CYCLE: 211. NUMBER OF VALUES: 211.											
TIME RANGE: 31. 7.1981 9: 0: 0: 0/26. 2.1982 9: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 553-598 m											
VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS		
1 TEMP	(DEG.C)	0.1082E+02	0.1192E+02	0.1156E+02	0.1710E-01	0.6173E-01	0.2486E+00	-0.3349E+00	0.3787E+01		
2 TEMP	(DEG.C)	0.1085E+02	0.1190E+02	0.1155E+02	0.1644E-01	0.5706E-01	0.2388E+00	-0.8373E+00	0.3556E+01		
3 TEMP	(DEG.C)	0.1086E+02	0.1187E+02	0.1153E+02	0.1586E-01	0.5388E-01	0.2321E+00	-0.7484E+00	0.3361E+01		
4 TEMP	(DEG.C)	0.1085E+02	0.1184E+02	0.1150E+02	0.1592E-01	0.4954E-01	0.2276E+00	-0.6381E+00	0.3147E+01		
5 TEMP	(DEG.C)	0.1081E+02	0.1177E+02	0.1145E+02	0.1486E-01	0.4661E-01	0.2159E+00	-0.5669E+00	0.3013E+01		
6 TEMP	(DEG.C)	0.1078E+02	0.1171E+02	0.1139E+02	0.1424E-01	0.4280E-01	0.2069E+00	-0.4581E+00	0.2824E+01		
7 TEMP	(DEG.C)	0.1074E+02	0.1162E+02	0.1131E+02	0.1396E-01	0.3765E-01	0.1940E+00	-0.3705E+00	0.2659E+01		
8 TEMP	(DEG.C)	0.1080E+02	0.1165E+02	0.1135E+02	0.1312E-01	0.3630E-01	0.1805E+00	-0.2857E+00	0.2545E+01		
9 TEMP	(DEG.C)	0.1078E+02	0.1160E+02	0.1130E+02	0.1274E-01	0.3425E-01	0.1851E+00	-0.2212E+00	0.2418E+01		
10 TEMP	(DEG.C)	0.1074E+02	0.1152E+02	0.1122E+02	0.1295E-01	0.3219E-01	0.1794E+00	-0.1760E+00	0.2336E+01		
11 TEMP	(DEG.C)	0.1076E+02	0.1151E+02	0.1121E+02	0.1214E-01	0.3109E-01	0.1763E+00	-0.1537E+00	0.2251E+01		

FILE: HEADS 276206R0 -13 MOORING ID: 276206 START-CYCLE: 1. STOP-CYCLE: 195. NUMBER OF VALUES: 195.

TIME RANGE: 31. 7.1981 9:30: 0: 0/31. 1.1982 9:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 755 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 PRES	[DBAR]	0.7561E+03	0.9964E+03	0.7886E+03	0.2291E+01	0.9706E+03	0.3115E+02	0.2899E+01	0.1025E+02
2 TEMP	[DEG.C]	0.9873E+01	0.1182E+02	0.1027E+02	0.3352E-01	0.2078E+00	0.4559E+00	0.2425E+01	0.8148E+01
3 UC	[CM/S]	-0.7566E+01	0.1961E+02	0.2850E+01	0.3128E+00	0.1610E+02	0.4254E+01	0.1772E+01	0.9499E+01
4 VC	[CM/S]	-0.3274E+02	0.9658E+01	-0.3210E+01	0.6250E+00	0.7227E+02	0.0650E+01	-0.2200E+01	0.7092E+01

VARIABLES	COVAR	CORCOEFF	VARCORR	STDEVCOV	STERRCOV
1 PRES	2 TEMP	0.1320E+02	0.8988E+06	0.6976E+03	0.5128E+02
1 PRES	3 UC	0.5009E+02	0.3780E+00	0.1245E+08	0.2894E+03
1 PRES	4 VC	-0.2500E+03	-0.9438E+00	0.7270E+04	0.5345E+03
2 TEMP	3 UC	0.4882E+00	0.2517E+00	0.4705E+02	0.3459E+01
2 TEMP	4 VC	-0.3498E+01	-0.9019E+00	0.8753E+02	0.7171E+01
3 UC	4 VC	-0.1255E+02	-0.3470E+00	0.9114E+02	0.6701E+01

PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMEANRR	DIR-MEAN
3 4	0.4175E+01	0.4518E+02	0.6722E+01	0.4942E+00	140.42

FILE: HEADS 276206R0 -13 MOORING ID: 276206 START-CYCLE: 1. STOP-CYCLE: 211. NUMBER OF VALUES: 211.

TIME RANGE: 31. 7.1981 9:30: 0: 0/26. 2.1982 9:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 1160 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 TEMP	[DEG.C]	0.7707E+01	0.1022E+02	0.8975E+01	0.3164E-01	0.2112E+00	0.4596E+00	0.1704E+01	0.6932E+01
2 UC	[CM/S]	-0.5960E+01	0.1351E+02	0.1179E+01	0.1993E+00	0.8301E+01	0.2881E+01	0.2026E+01	0.9118E+01
3 VC	[CM/S]	-0.1860E+02	0.6413E+01	-0.1142E+01	0.3308E+00	0.2306E+02	0.4802E+01	-0.2401E+01	0.8486E+01

VARIABLES	COVAR	CORCOEFF	VARCORR	STDEVCOV	STERRCOV
1 TEMP	2 UC	0.5528E+00	0.4175E+00	0.2884E+02	0.1894E+01
1 TEMP	3 VC	-0.1808E+01	-0.8645E+00	0.4537E+02	0.3123E+01
2 UC	3 VC	-0.5344E+01	-0.3663E+00	0.1018E+04	0.2187E+01

PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMEANRR	DIR-MEAN
2 3	0.1642E+01	0.1568E+02	0.3960E+01	0.2725E+00	134.09

FILE: HEADS ROM UV 276207/A 024 MOORING ID: 276207 START-CYCLE: 1. STOP-CYCLE: 170. NUMBER OF VALUES: 170.

TIME RANGE: 31. 7.1981 9:55: 0: 0/16. 1.1982 9:55: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 1665 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 TEMP	(DEG-C)	0.3384E+01	0.5010E+01	0.4780E+01	0.2037E-01	0.7058E-01	0.2658E+00	-0.2891E+01	0.1154E+02
2 UC	(CM/S)	-0.4652E+01	0.6749E+01	0.1498E+01	0.2300E+00	0.6980E+01	0.2888E+01	-0.3204E+00	0.1884E+01
3 VC	(CM/S)	-0.6831E+01	0.5498E+01	0.4161E+00	0.2201E+00	0.8233E+01	0.2869E+01	-0.7092E+00	0.2727E+01

VARIABLES COVAR CORCOEFF VARCHORRL STDEVCOV STERRCOV

1 TEMP	2 UC	0.4334E+00	0.5442E+00	0.1984E+03	0.1408E+02	0.1090E+01
1 TEMP	3 VC	-0.3224E-02	-0.4230E-02	0.1891E+03	0.1375E+02	0.1055E+01
2 UC	3 VC	0.7365E+00	0.8582E-01	0.7154E+02	0.8468E+01	0.6487E+00

PAIR VECTOR-MEAN VECTOR-VAR STDVECMEAN VECMEANERR DIR-MEAN

2 3	0.1555E+01	0.8611E+01	0.2934E+01	0.2251E+00	74.47
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FILE: HEADS 278811/A 024 MOORING ID: 278811 START-CYCLE: 1. STOP-CYCLE: 133. NUMBER OF VALUES: 133.

TIME RANGE: 30. 7.1981 21:30: 0: 0/ 9.12.1981 21:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 1760 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 TEMP	(DEG-C)	0.4588E+01	0.4982E+01	0.4819E+01	0.6458E-02	0.5543E-02	0.7445E-01	-0.1038E+01	0.4161E+01
2 UC	(CM/S)	-0.1851E+01	0.5387E+01	0.9648E+00	0.1228E+00	0.5010E+01	0.1418E+01	0.6918E+00	0.3631E+01
3 VC	(CM/S)	-0.7378E+01	0.2662E+01	-0.5553E+00	0.1985E+00	0.5292E+01	0.2301E+01	-0.1257E+01	0.3821E+01

VARIABLES COVAR CORCOEFF VARCHORRL STDEVCOV STERRCOV

1 TEMP	3 UC	-0.4063E-01	-0.3849E+00	0.4516E+02	0.6720E+01	0.5827E+00
1 TEMP	3 VC	0.4411E-01	0.2575E+00	0.1204E+03	0.1087E+02	0.8514E+00
2 UC	3 VC	-0.2138E+01	-0.6558E+00	0.3889E+02	0.6073E+01	0.5266E+00

PAIR VECTOR-MEAN VECTOR-VAR STDVECMEAN VECMEANERR DIR-MEAN

2 3	0.1104E+01	0.3651E+01	0.1911E+01	0.1657E+00	120.19
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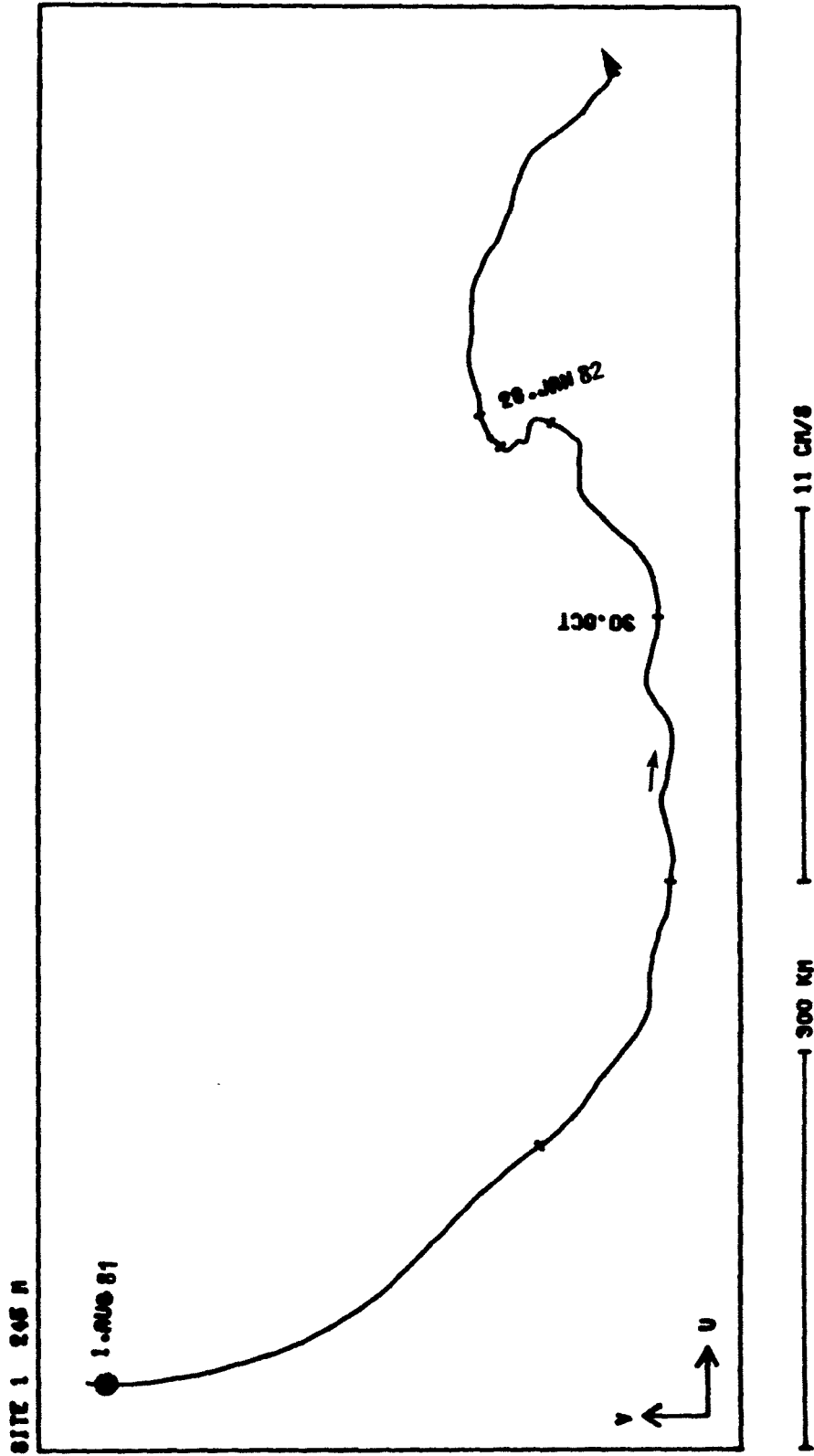
FILE: MEADS 276208/A 024 MODRINO ID: 276208 START-CYCLE: 1. STOP-CYCLE: 211. NUMBER OF VALUES: 211.

TIME RANGE: 31. 7.1981 9:30: 0: 0/26. 2.1982 9:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400+04 3020 m

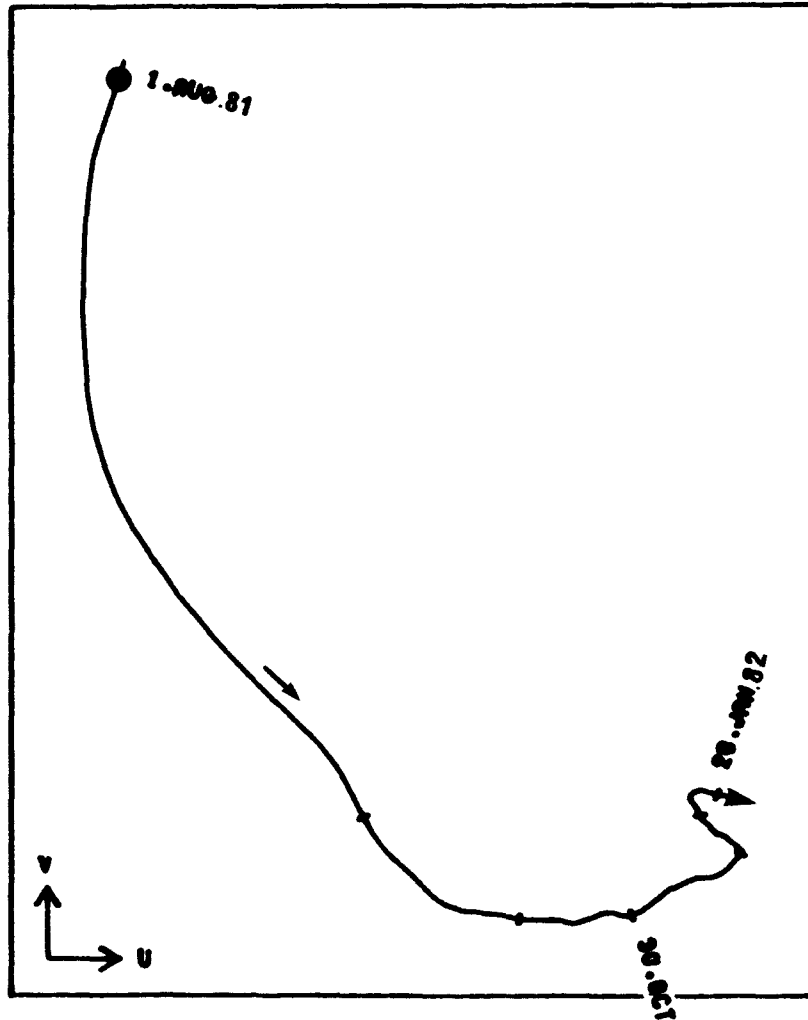
VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 TEMP	[DEG.C]	0.2838E+01	0.2885E+01	0.2848E+01	0.7624E-03	0.1227E-03	0.1107E-01	0.6852E+00	0.2253E+01
2 UC	[CM/S]	-0.3926E+01	0.5771E+01	0.1998E-01	0.1124E+00	0.2867E+01	0.1633E+01	0.4377E+00	0.3810E+01
3 VC	[CM/S]	-0.5741E+01	0.2709E+01	0.3891E-02	0.9112E-01	0.1752E+01	0.1324E+01	-0.1356E+01	0.6769E+01

VARIABLES	COVAR	CORCOEFF	VARCORRL	STDEYCOV	STERRCOV
1 TEMP	-0.4729E-02	-0.2614E+00	0.2180E+02	0.4669E+01	0.3214E+00
2 UC	-0.8689E-02	-0.3920E+00	0.1426E+02	0.3778E+01	0.2599E+00
3 VC	-0.6010E+00	-0.2781E+00	0.6236E+01	0.2497E+01	0.1719E+00

PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECHEAN	VECHERR	DIR-MEAN
2 3	0.2036E-01	0.2209E+01	0.1486E+01	0.1023E+00	76.98

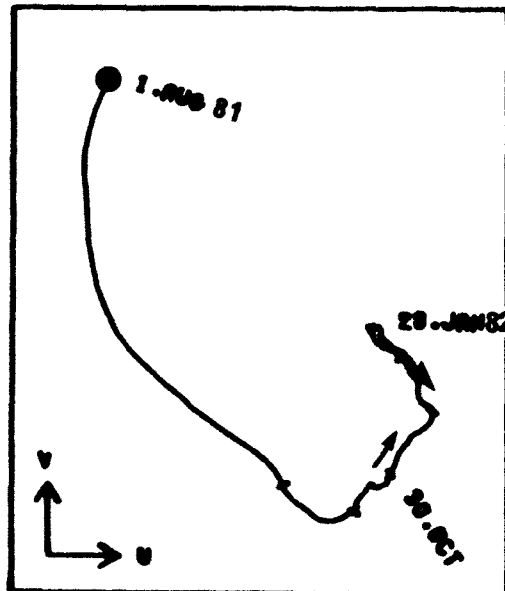


SITE 1 785 N



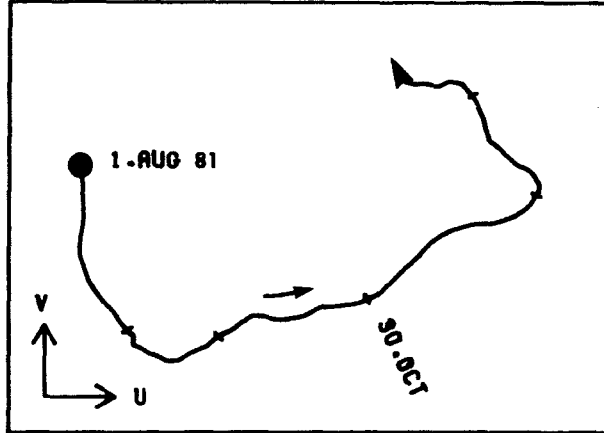
150 NM 5 CM/S

SITE 1 1100 N



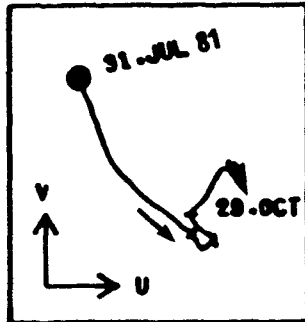
100 NM 3 CM/S

SITE 1 1665 M



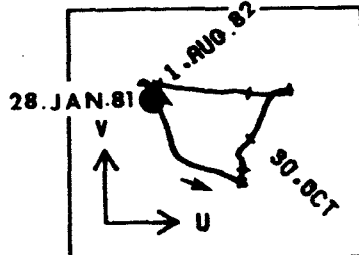
100 KM 3 CM/S

SITE 1 1760 M

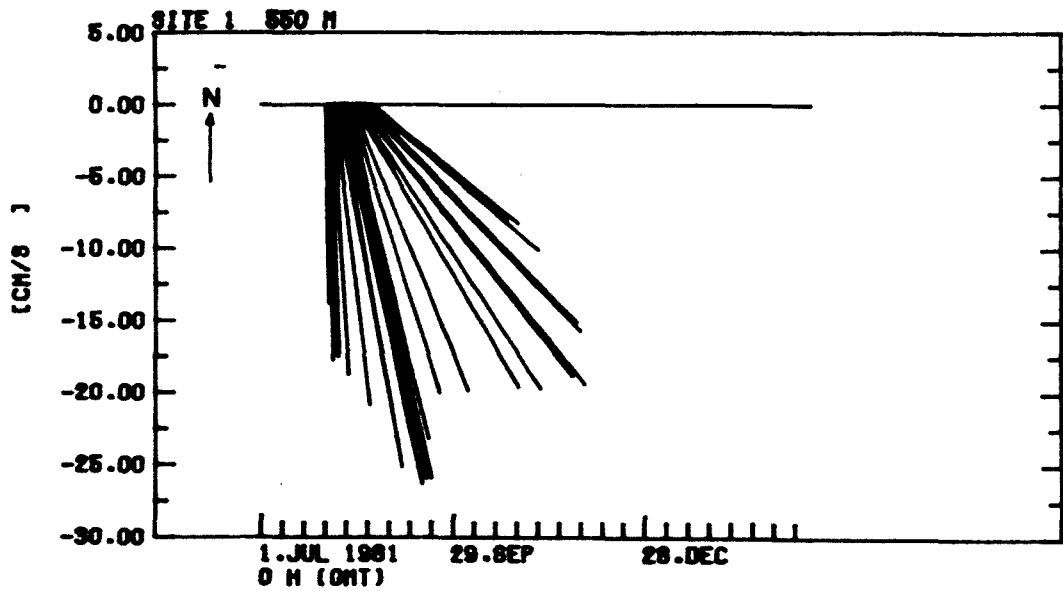
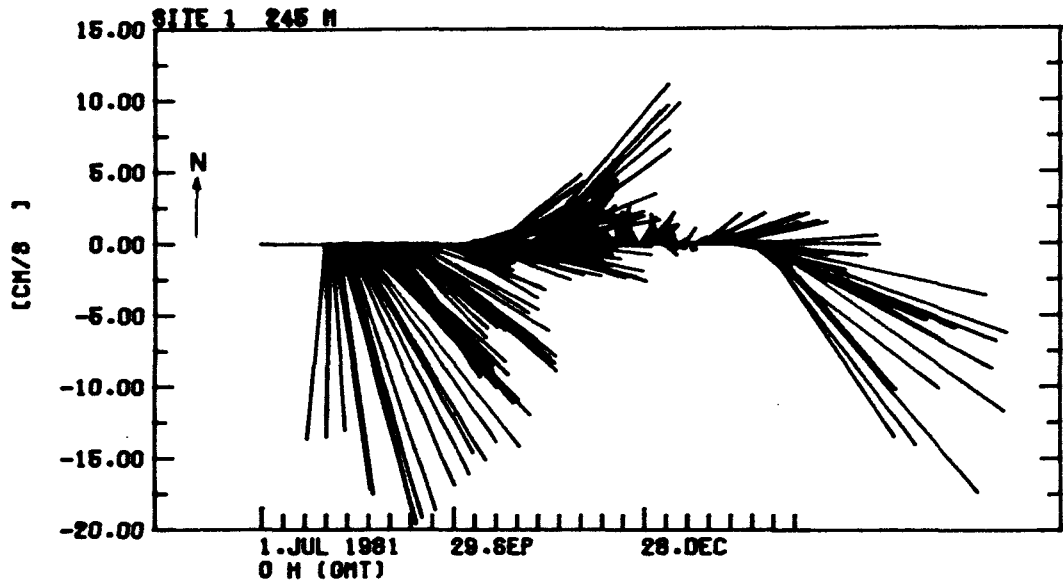


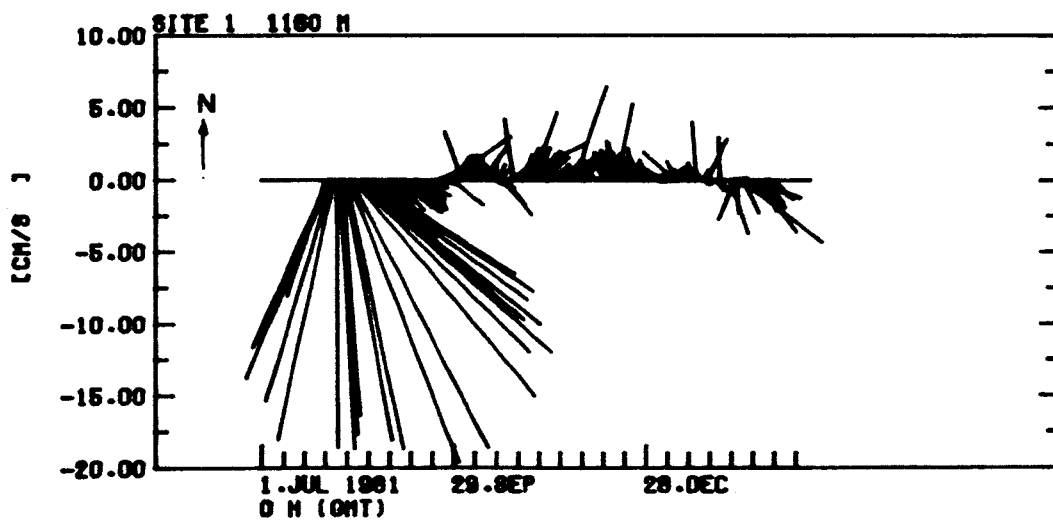
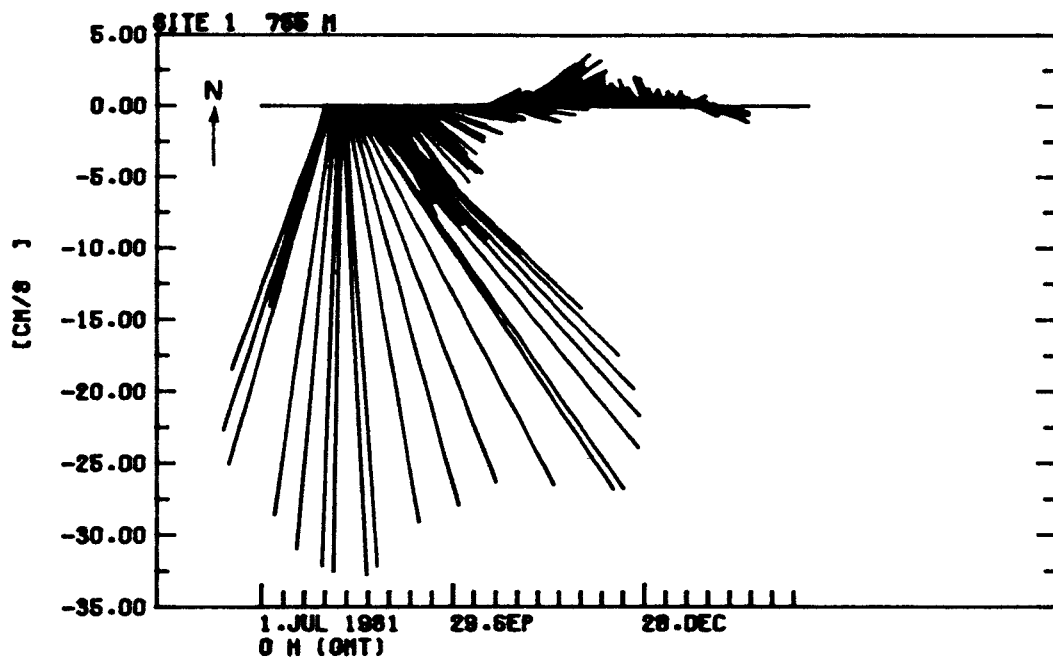
50 KM 1 CM/S

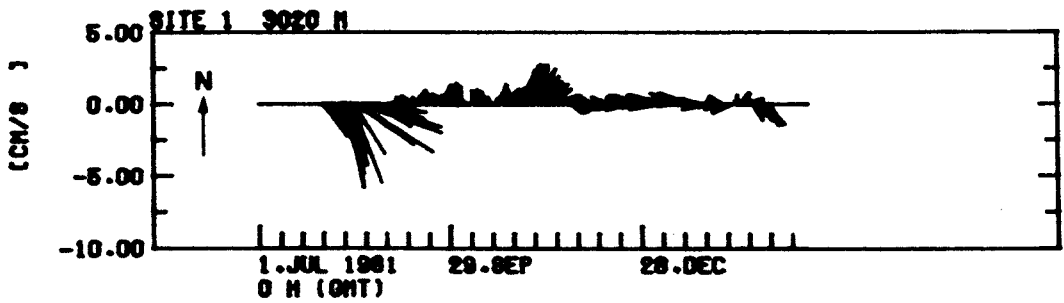
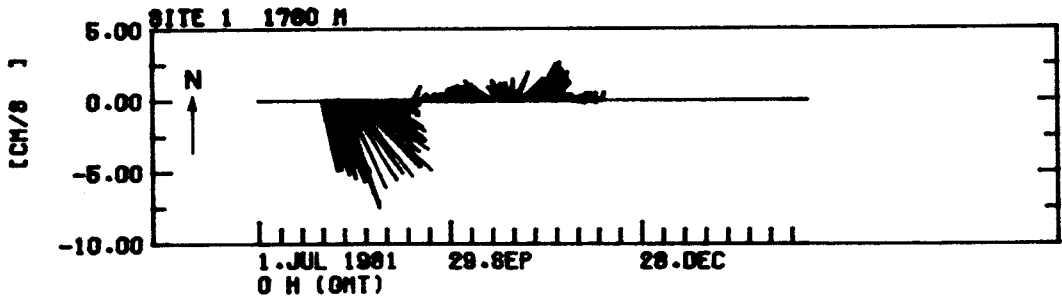
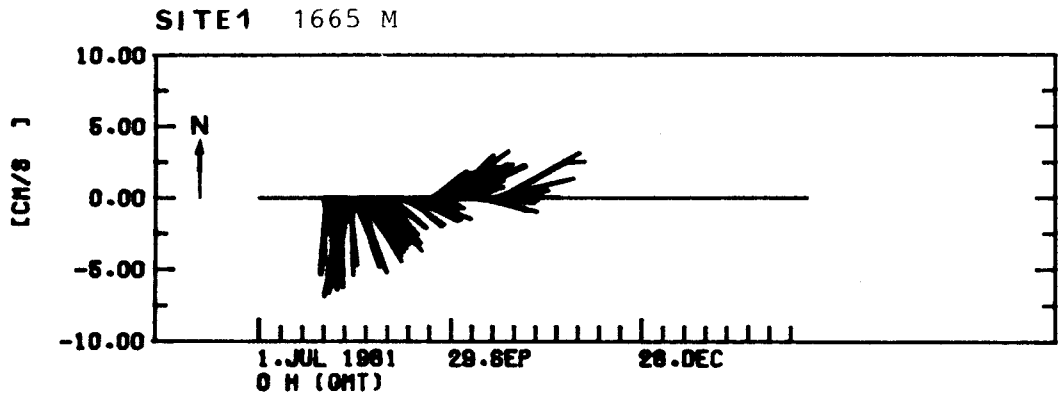
SITE 1 3020 M

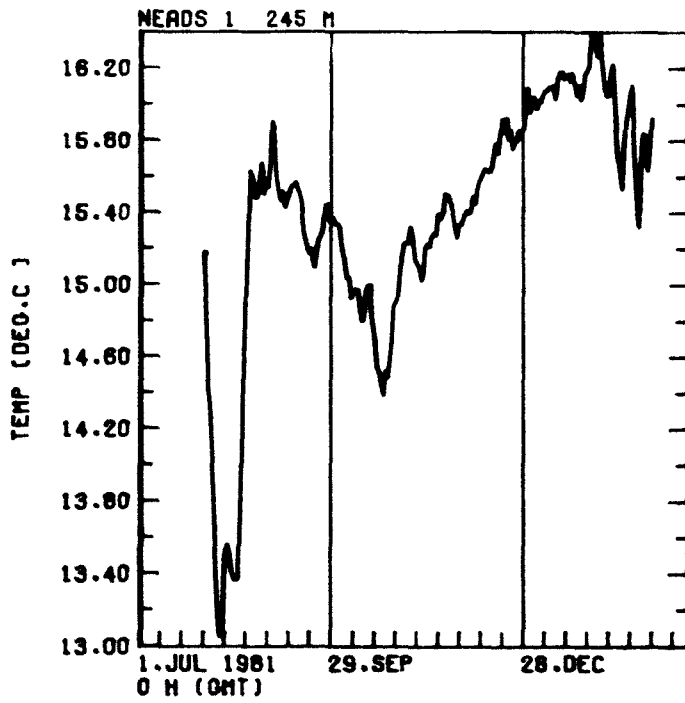
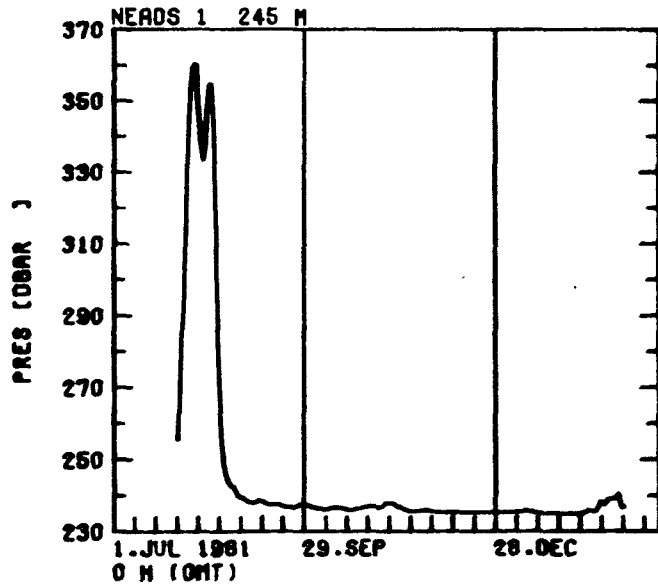


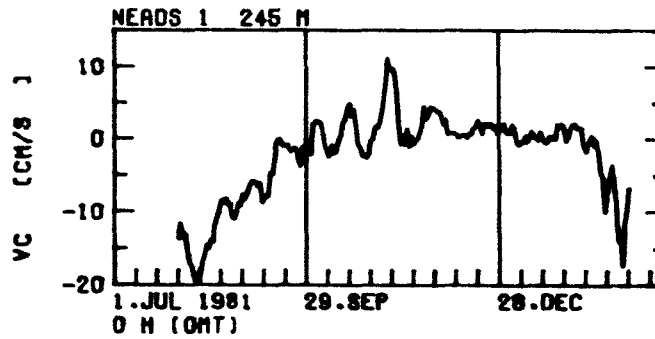
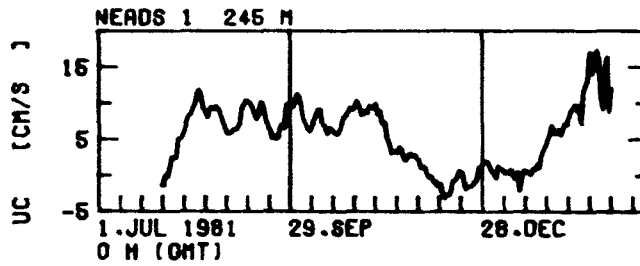
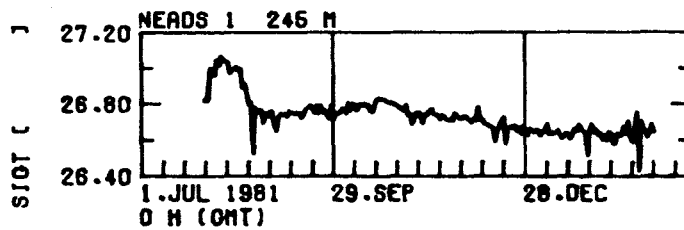
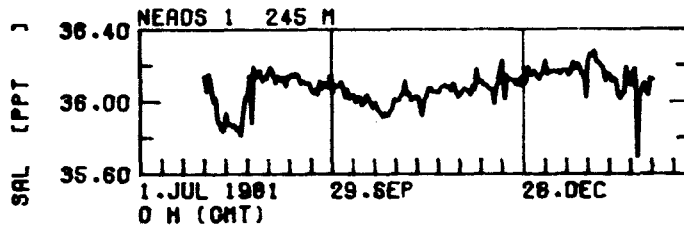
50 KM 1 CM/S

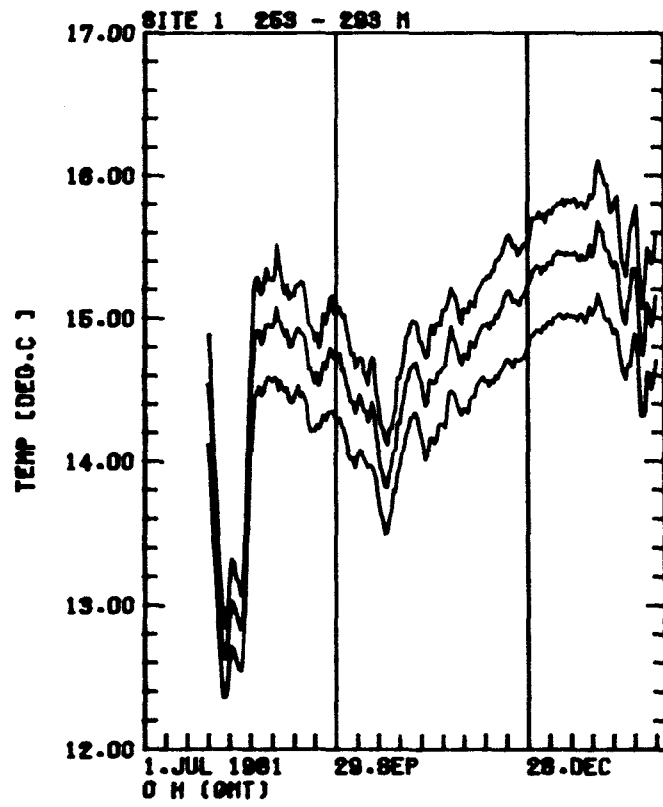


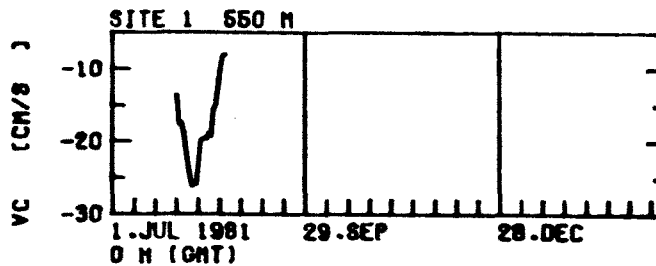
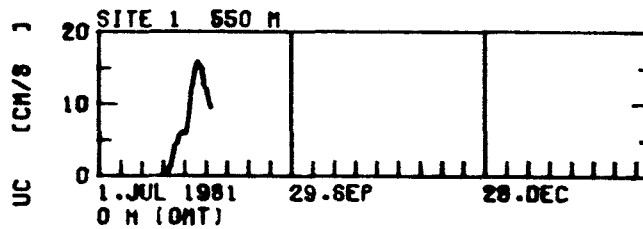
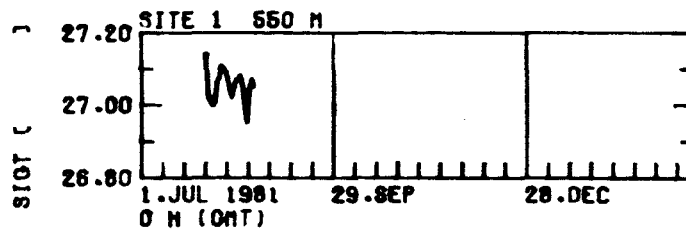
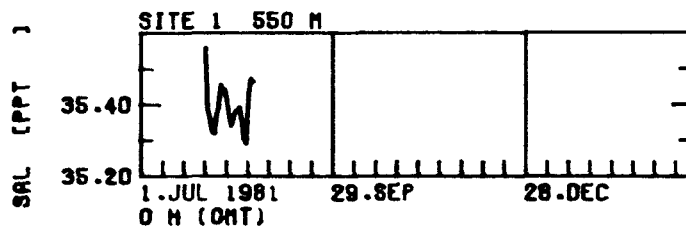
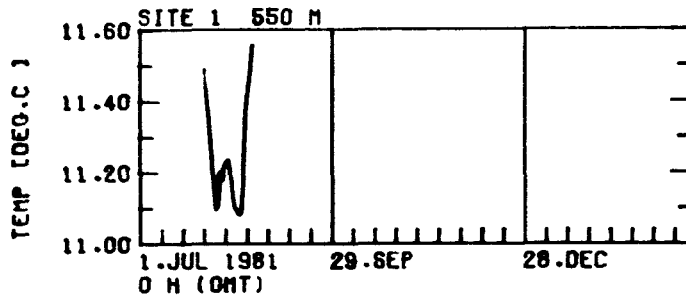


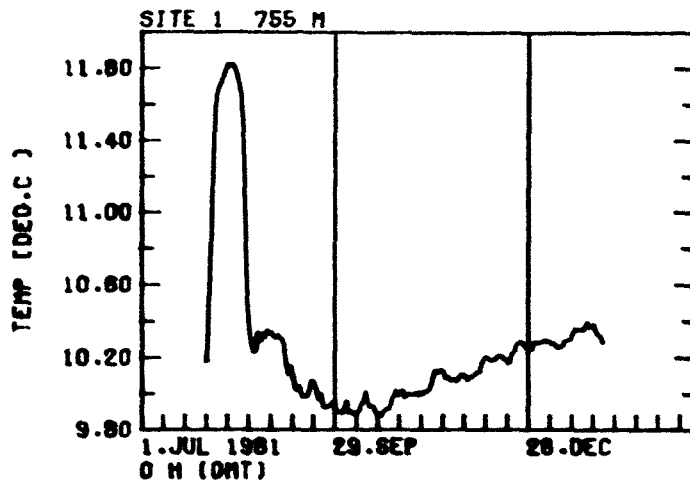
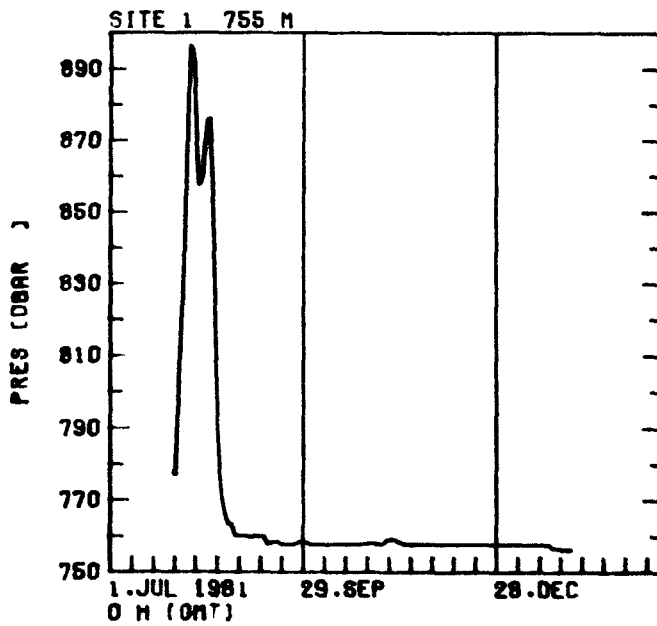
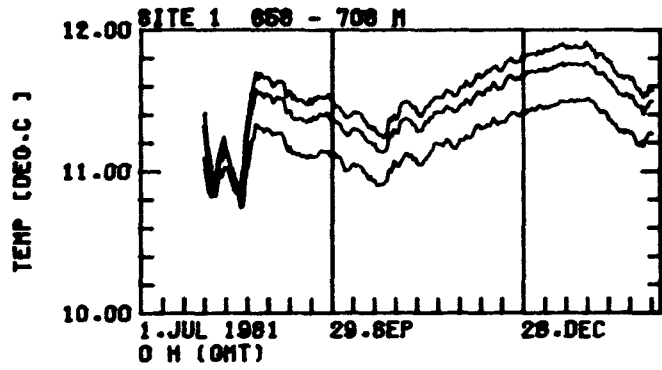


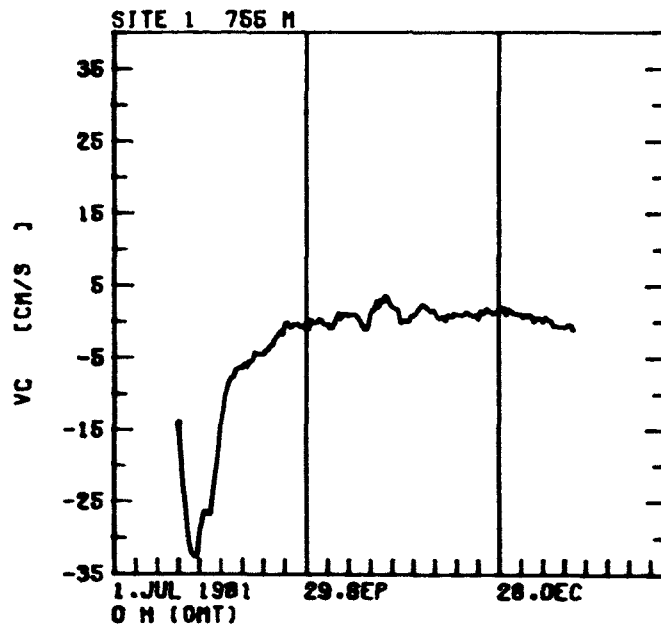
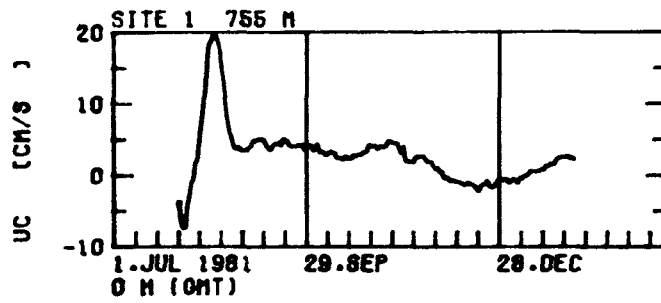


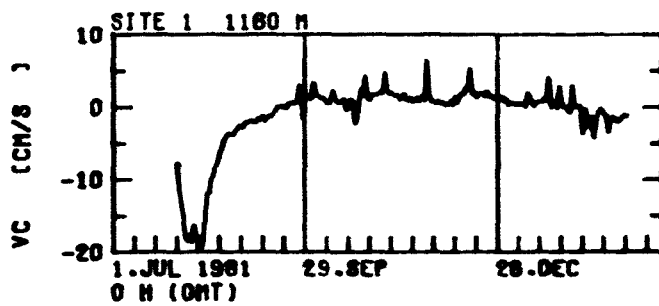
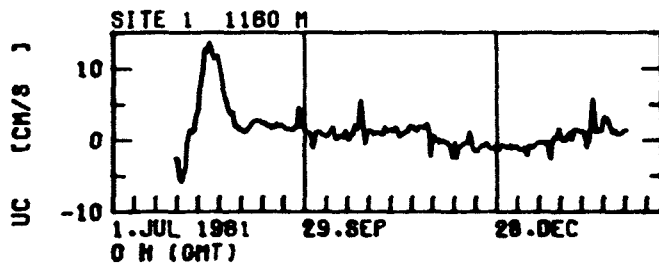
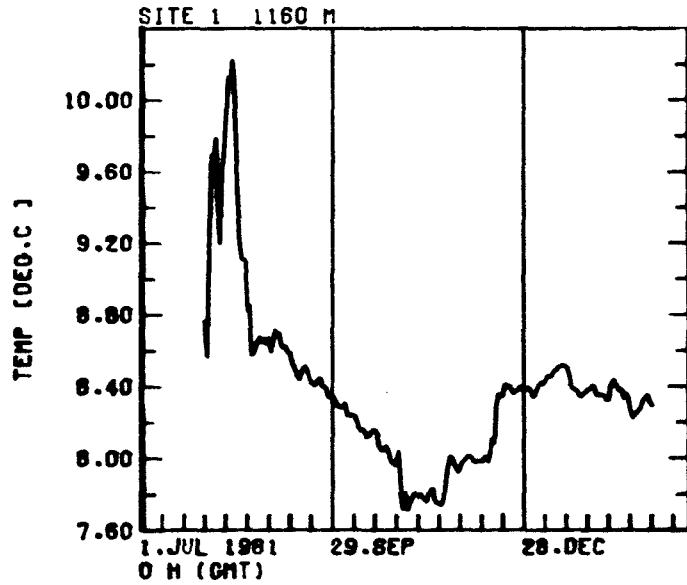


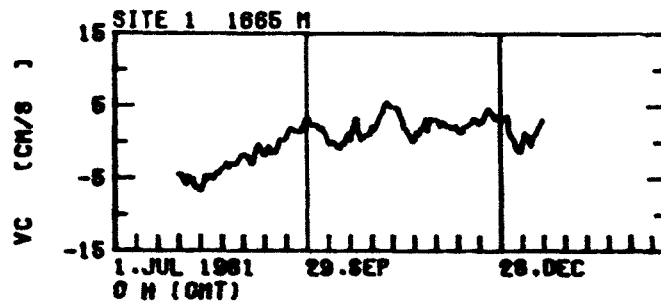
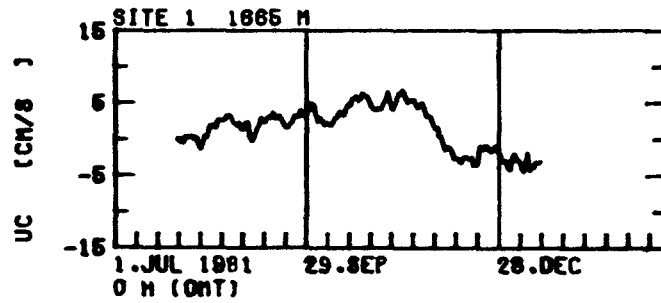
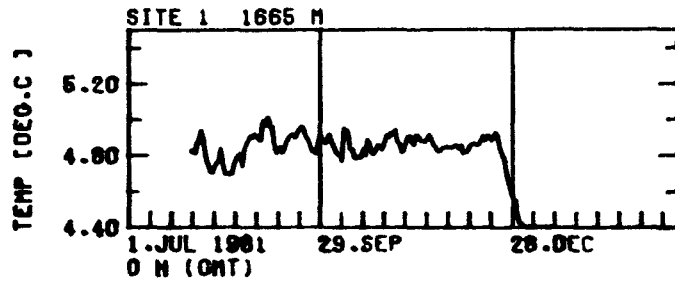


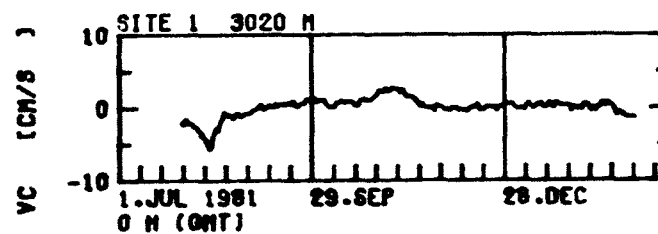
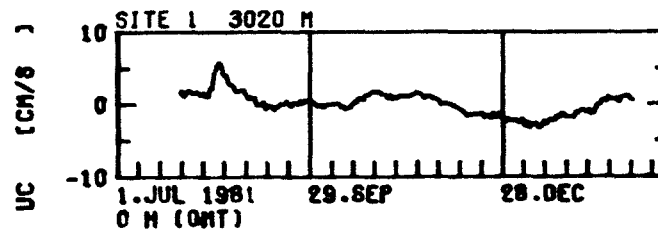
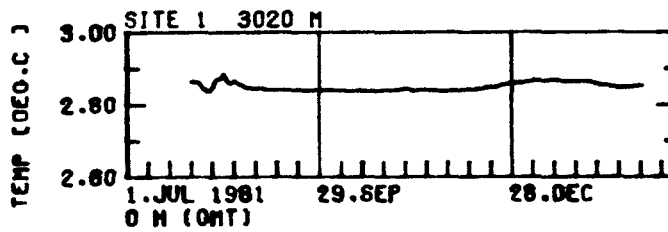
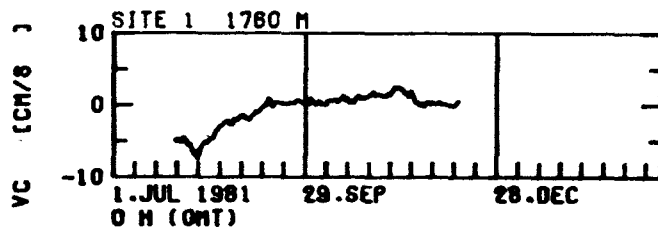
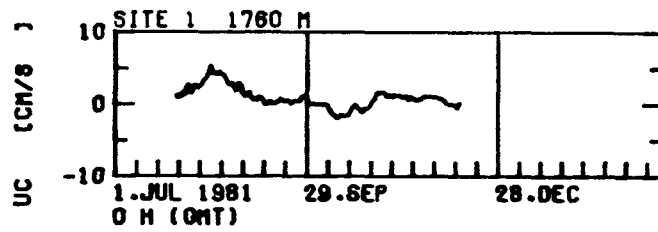
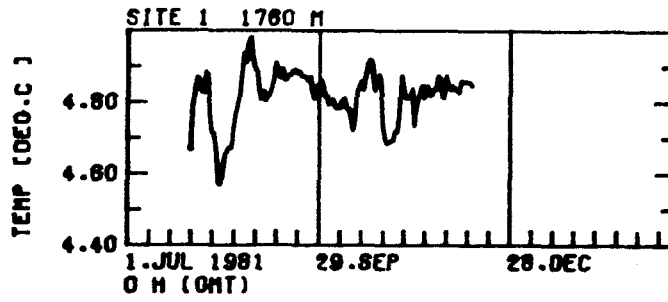












81

277200

N 11

29 JUL 1981 - 7 MAR 1982

NEADS site 11, 34° 48'N, 23° 05'W, 5155 m bottom depth

IfM mooring No 277200

Deployed: 29 Jul 1981, Meteor 57/1

Recovered: 07 Mar 1982, Meteor 60/3

Start of record: 29 Jul 1981, 2000Z.

End of record: 07 Mar 1982, 0600Z.

Recording interval: All instruments 60 min

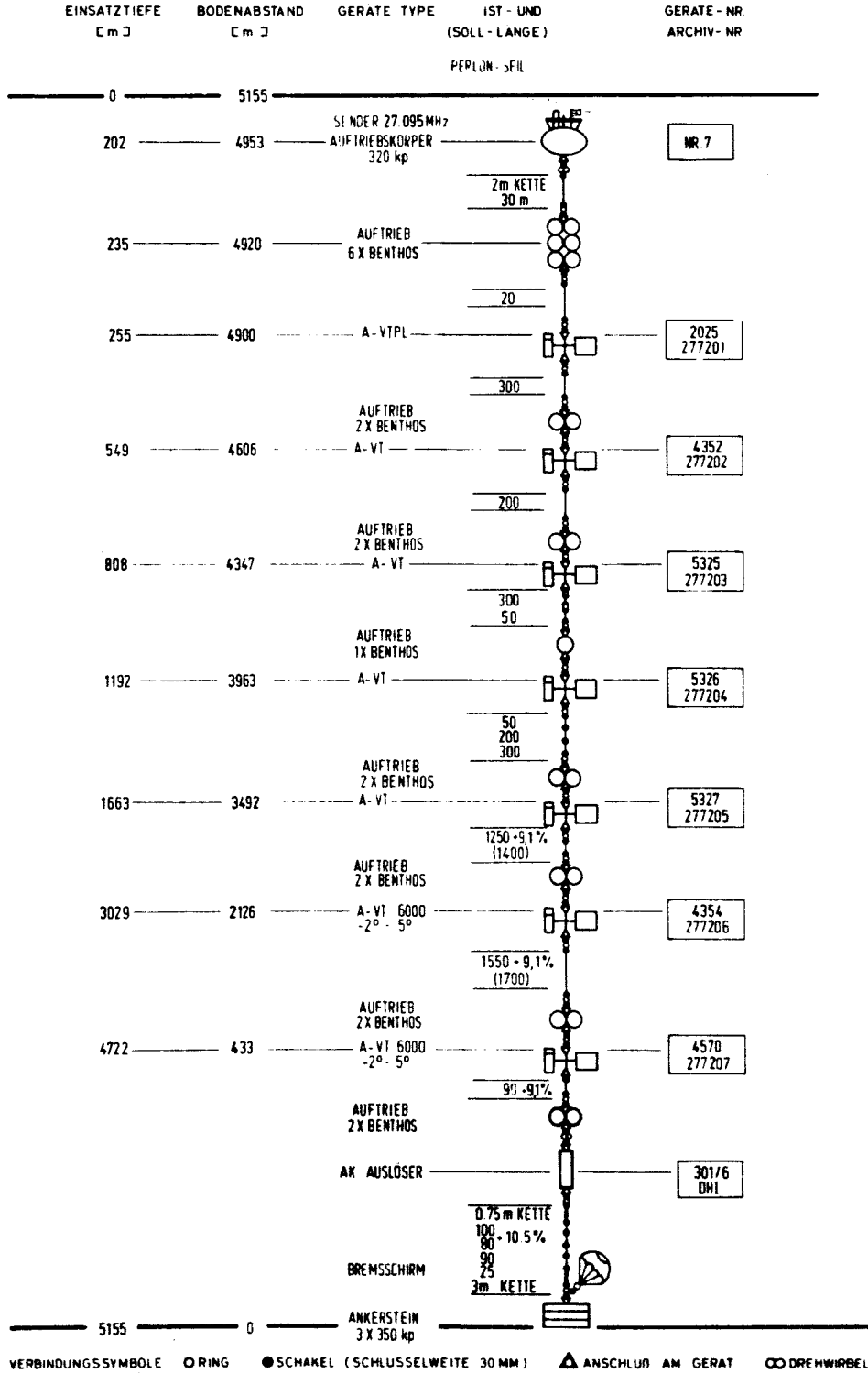
Time base check: ok with exceptions

277205 and 277206, 1 cycle interpolated each

Identifi- fication	depth (m)	Parameters and Corrections					Remarks
		P	T	S	\vec{u}	ϕ	
277201	255	x	x	+0,78	x	x	
202	549	+10	x	+0.09	x	x	
203	808	+48	x	-	x	-	direction measurement failed
204	1192	+84	x	-	x	x	
205	1663	+15	x	-	x	x	
206	3029	-	+0.18	-	x	x	
207	4722	-	+0.08	-	x	x	

Symbols see page 143

Values for linear corrections are included.



NEADS N11, 34° 48' N, 23° 05' W
IfM mooring No 277200
deployed 29 Jul. 1981
recovered 07 Mar. 1982

FILE: HEADS SITE11 277201R0 /E1 HOORING ID: 277201 START-CYCLE: 5291. STOP-CYCLE: 5291. NUMBER OF VALUES: 5291.

TIME RANGE: 29. 7.1981 20: 0: 0: 0/ 7. 3.1982 6: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000*02 255 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 PRES	(DBAR)	0.2492E+03	0.3663E+03	0.2938E+03	0.4193E+00	0.9267E+03	0.3043E+02	0.2186E+01	0.6667E+01
2 TEMP	(DEG.C)	0.1182E+02	0.1537E+02	0.1369E+02	0.6935E-02	0.2645E+00	0.5045E+00	-0.6950E+00	0.3807E+01
3 SAL	(PPT)	0.3534E+02	0.3877E+02	0.3596E+02	0.2842E-02	0.4276E-01	0.2088E+00	0.6594E+00	0.3127E+01
4 UC	(CM/S)	-0.2569E+02	0.1870E+02	-0.1115E+01	0.8635E-01	0.3854E+02	0.6206E+01	-0.2091E+00	0.3478E+01
5 VC	(CM/S)	-0.2810E+02	0.2449E+02	-0.4271E+01	0.1051E+00	0.5840E+02	0.7642E+01	-0.9159E-01	0.2971E+01
6 STOT	()	0.2653E+02	0.2746E+02	0.2689E+02	0.1760E-02	0.1639E-01	0.1280E+00	-0.2880E+00	0.2575E+01

PAIR VECTOR-MEAN VECTOR-VAR STOVECMEAN VECMEANERR DIR-MEAN

4 5 0.4415E+01 0.4847E+02 0.6962E+01 0.8571E-01 194.63

FILE: HEADS SITE11 277202R0 /E1 HOORING ID: 277202 START-CYCLE: 5291. STOP-CYCLE: 5291. NUMBER OF VALUES: 5291.

TIME RANGE: 29. 7.1981 20: 0: 0: 0/ 7. 3.1982 6: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000*02 549 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 PRES	(DBAR)	0.5512E+03	0.7129E+03	0.6091E+03	0.4823E+00	0.1231E+04	0.3508E+02	0.1886E+01	0.5192E+01
2 TEMP	(DEG.C)	0.1076E+02	0.1248E+02	0.1129E+02	0.2604E-02	0.3587E-01	0.1894E+00	0.1970E-01	0.6980E+01
3 SAL	(PPT)	0.3539E+02	0.3838E+02	0.3556E+02	0.1158E-02	0.7092E-02	0.8422E-01	0.3200E+01	0.1741E+02
4 UC	(CM/S)	-0.3992E+02	0.2076E+02	-0.3200E+01	0.3678E-01	0.4854E+02	0.6967E+01	-0.1029E+01	0.5182E+01
5 VC	(CM/S)	-0.3686E+02	0.1957E+02	-0.3173E+01	0.1046E+00	0.5778E+02	0.7801E+01	-0.8640E+00	0.4843E+01
6 STOT	()	0.2889E+02	0.2776E+02	0.2717E+02	0.6277E-03	0.2084E-02	0.4566E-01	0.2663E+01	0.2376E+02

PAIR VECTOR-MEAN VECTOR-VAR STOVECMEAN VECMEANERR DIR-MEAN

4 5 0.4507E+01 0.5316E+02 0.7291E+01 0.1002E+00 225.24

FILE: HEADS SITE11 277203UVC/TR HOORING ID: 277203 START-CYCLE: 1. STOP-CYCLE: 5291. NUMBER OF VALUES: 5291.

TIME RANGE: 29. 7.1981 20: 0: 0: 0/ 7. 3.1982 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 808 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKENNESS	KURTOSIS
1 PAES (DBAR)		0.7972E+03	0.9804E+03	0.8166E+03	0.4120E+00	0.9018E+03	0.3003E+02	0.2195E+01	0.6671E+01
2 TEMP (DEG.C)		0.9820E+01	0.1286E+02	0.1066E+02	0.1016E-01	0.5457E+00	0.7397E+00	0.1648E+01	0.4344E+01

FILE: HEADS SITE11 277204RD /TR HOORING ID: 277204 START-CYCLE: 1. STOP-CYCLE: 5291. NUMBER OF VALUES: 5291.

TIME RANGE: 29. 7.1981 20: 0: 0: 0/ 7. 3.1982 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 1192 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKENNESS	KURTOSIS
1 PAES (DBAR)		0.1204E+04	0.1390E+04	0.1223E+04	0.4531E+00	0.1086E+04	0.3295E+02	0.2101E+01	0.6599E+01
2 TEMP (DEG.C)		0.7694E+01	0.1140E+02	0.9013E+01	0.1090E-01	0.6356E+00	0.7973E+00	0.1462E+01	0.4254E+01
3 UC (CH/S)		-0.2704E+02	0.1783E+02	-0.2027E+01	0.7888E-01	0.3292E+02	0.5737E+01	-0.1131E+01	0.6020E+01
4 VC (CH/S)		-0.2992E+02	0.2316E+02	-0.2366E+01	0.8712E-01	0.4016E+02	0.6337E+01	-0.6727E+00	0.5563E+01
PAIR VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMERR	DIR-MEAN					
3	4	0.3115E+01	0.3654E+02	0.8045E+01	0.8310E-01	220.59			

FILE: HEADS SITE11 277205RD /TR HOORING ID: 277205 START-CYCLE: 1. STOP-CYCLE: 5291. NUMBER OF VALUES: 5291.

TIME RANGE: 29. 7.1981 20: 0: 0: 0/ 7. 3.1982 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 1663 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKENNESS	KURTOSIS
1 PAES (DBAR)		0.1675E+04	0.1890E+04	0.1687E+04	0.3433E+00	0.6237E+03	0.2497E+02	0.2456E+01	0.8811E+01
2 TEMP (DEG.C)		0.4707E+01	0.5985E+01	0.5242E+01	0.3067E-02	0.4944E-01	0.2224E+00	0.5930E+00	0.3064E+01
3 UC (CH/S)		-0.2884E+02	0.2089E+02	-0.5554E+00	0.6868E-01	0.2494E+02	0.4894E+01	-0.9465E+00	0.8558E+01
4 VC (CH/S)		-0.2846E+02	0.2599E+02	-0.8748E+00	0.7039E-01	0.2821E+02	0.5120E+01	-0.4321E+00	0.7673E+01
PAIR VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMERR	DIR-MEAN					
3	4	0.1038E+01	0.2558E+02	0.5057E+01	0.6953E-01	212.41			



FILE: HEADS SITE11 2772090 /TR MOORING ID: 277208 START-CYCLE: 1. STOP-CYCLE: 5291. NUMBER OF VALUES: 5291.

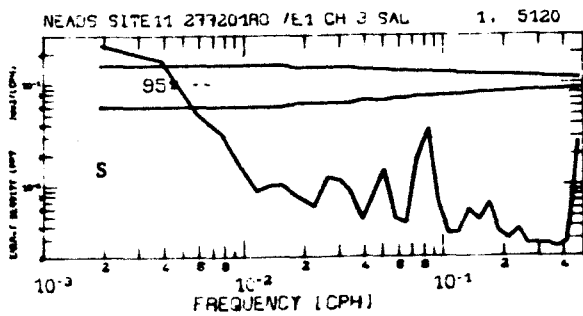
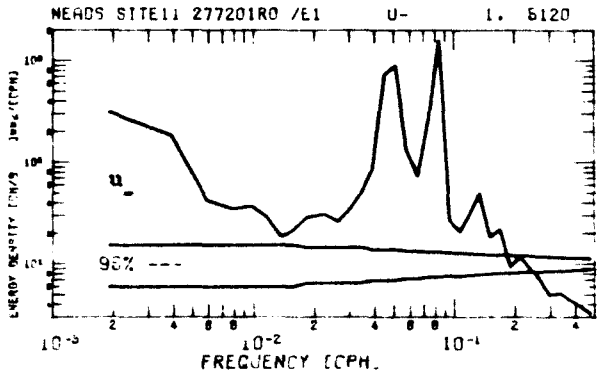
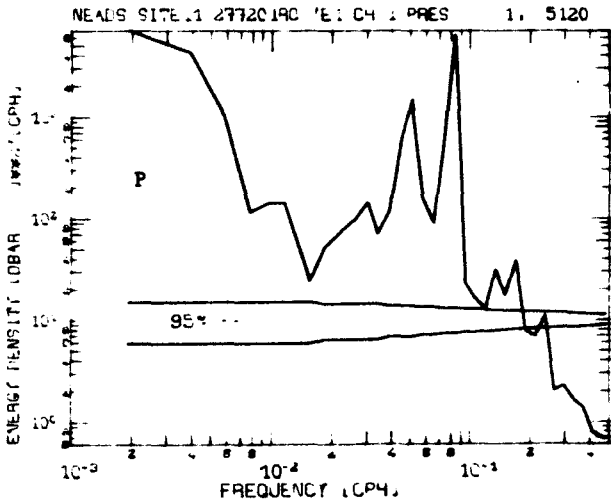
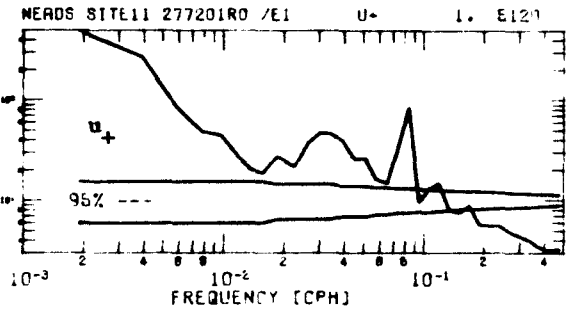
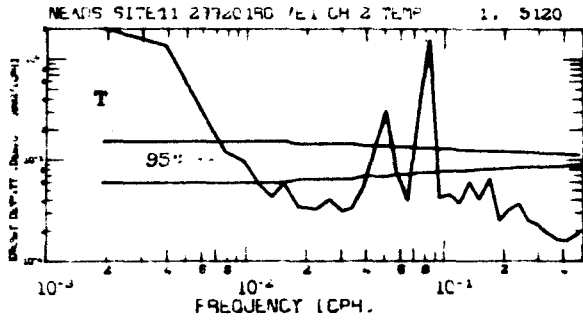
TIME RANGE: 29. 7.1981 20: 0: 0: 0/ 7. 3.1982 6: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.60000D+02 3029 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 TEMP	[DEG-C]	0.2731E+01	0.2879E+01	0.2801E+01	0.2888E-03	0.4414E-03	0.2101E-01	0.3464E+00	0.3029E+01
2 UC	[CH/S]	-0.7866E+01	0.7053E+01	0.4120E+00	0.2650E-01	0.3440E+01	0.1855E+01	0.8659E-01	0.4162E+01
3 VC	[CH/S]	-0.6442E+01	0.7418E+01	0.3878E+00	0.2688E-01	0.3823E+01	0.1955E+01	0.2054E+00	0.3648E+01
PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMERNR	DIR-MEAN				
2 3	0.5656E+00	0.3632E+01	0.1906E+01	0.2620E-01	46.75				

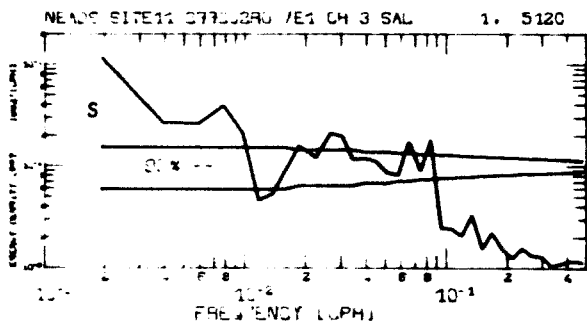
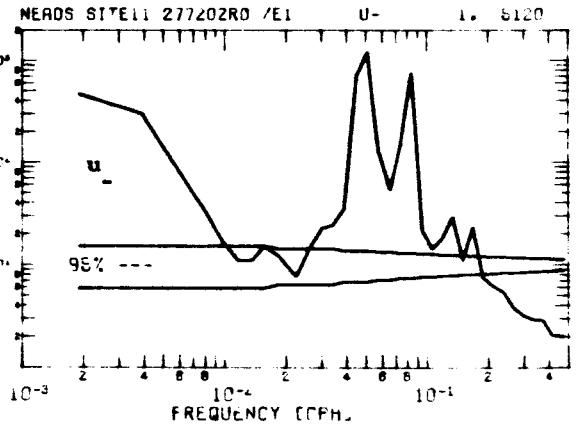
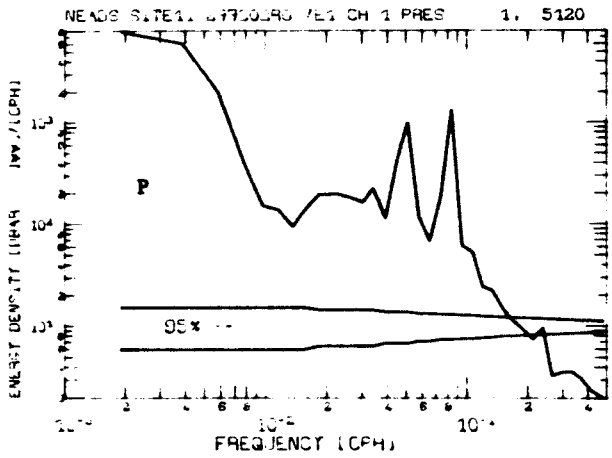
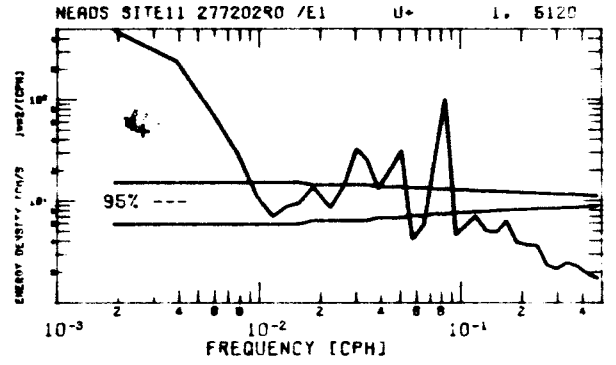
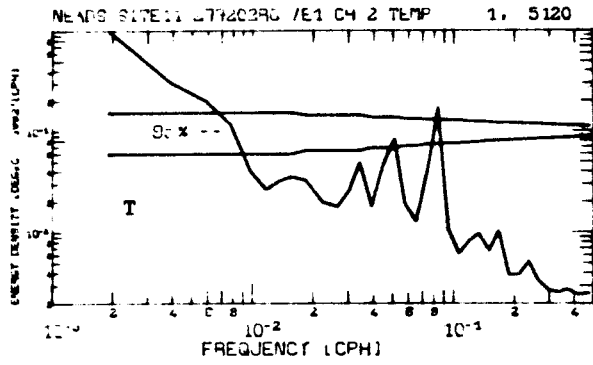
FILE: HEADS SITE11 2772070 /TR MOORING ID: 277207 START-CYCLE: 1. STOP-CYCLE: 5291. NUMBER OF VALUES: 5291.

TIME RANGE: 29. 7.1981 20: 0: 0: 0/ 7. 3.1982 6: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.60000D+02 4722 m

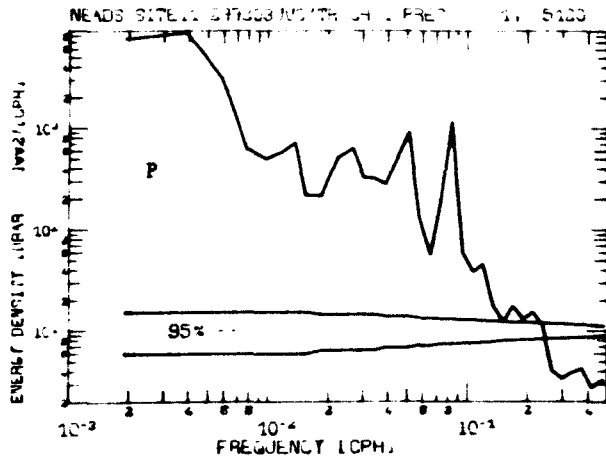
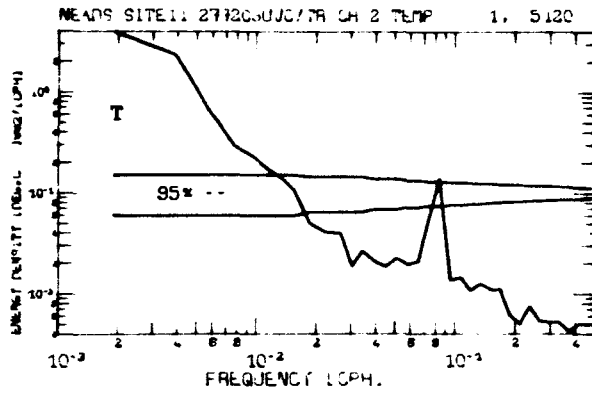
VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 TEMP	[DEG-C]	0.2337E+01	0.2478E+01	0.2446E+01	0.1744E-03	0.1609E-03	0.1259E-01	-0.3095E+01	0.2791E+02
2 UC	[CH/S]	-0.6265E+01	0.1363E+02	0.2237E+01	0.3809E-01	0.7679E+01	0.2771E+01	0.3826E+00	0.3506E+01
3 VC	[CH/S]	-0.5655E+01	0.1451E+02	0.2124E+01	0.3969E-01	0.8333E+01	0.2897E+01	0.5421E+00	0.3090E+01
PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMERNR	DIR-MEAN				
2 3	0.3085E+01	0.8006E+01	0.2829E+01	0.3890E-01	46.48				



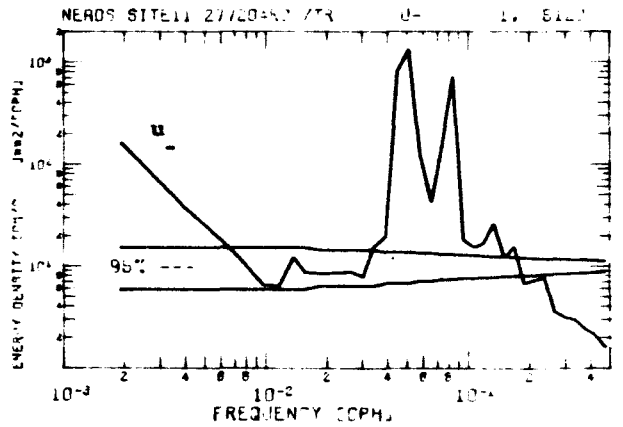
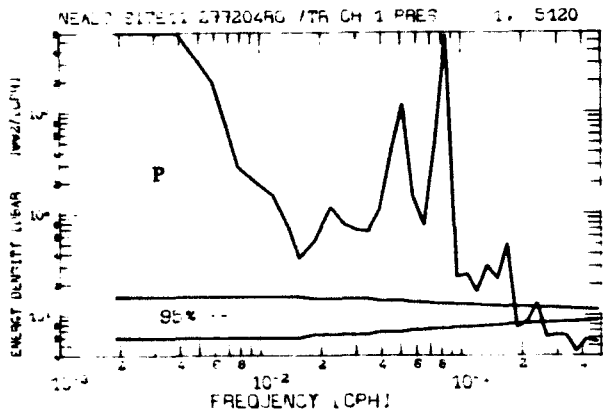
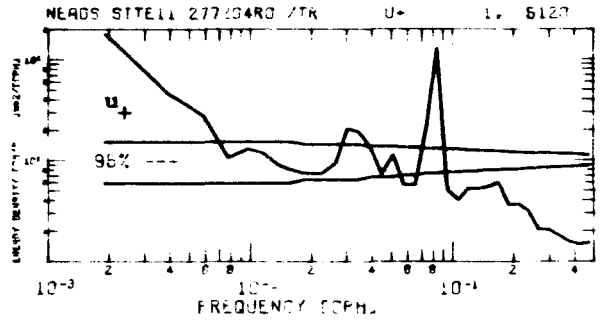
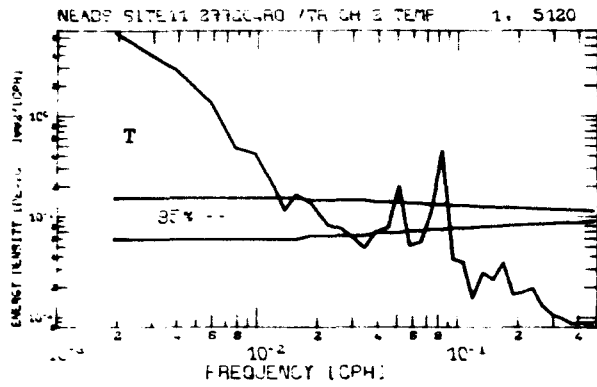
277201, 255m



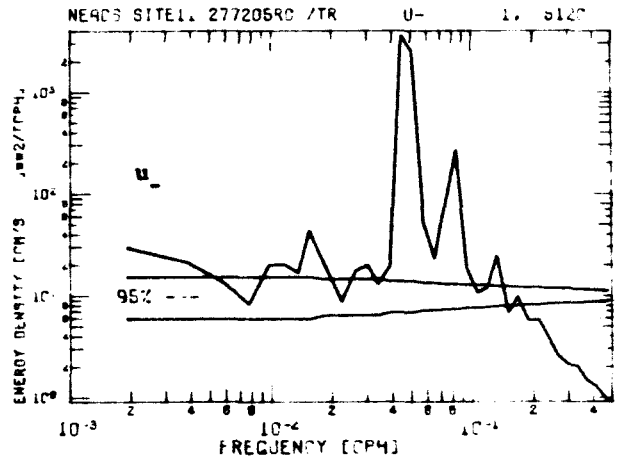
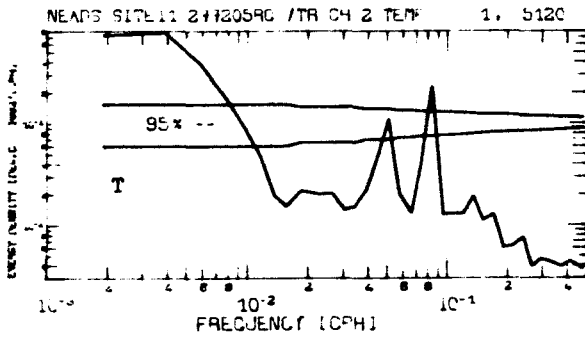
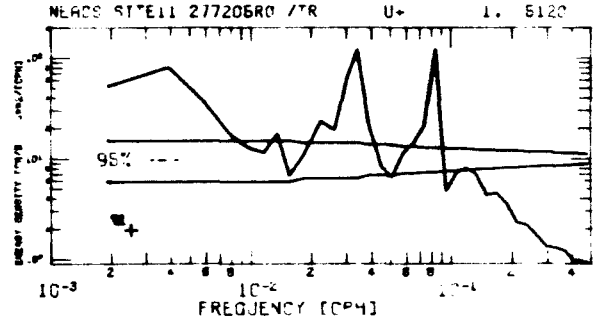
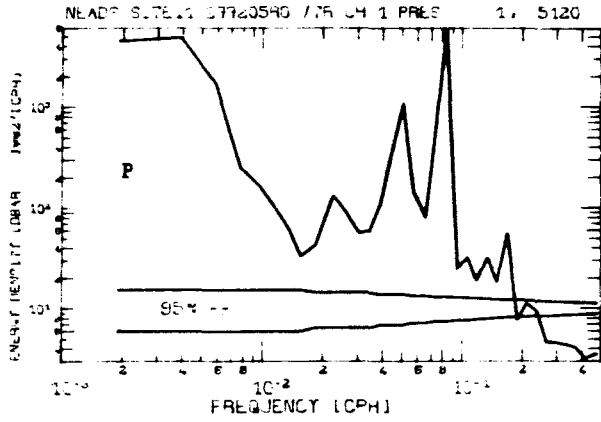
277202, 549m



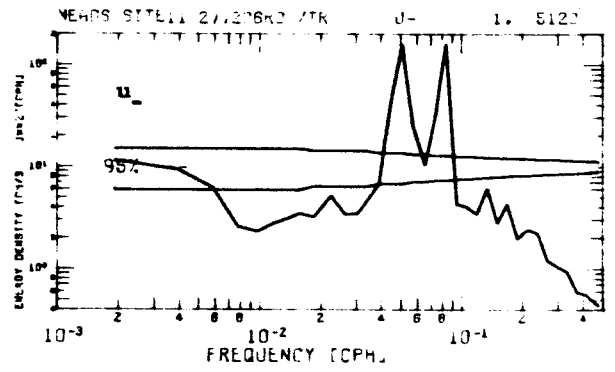
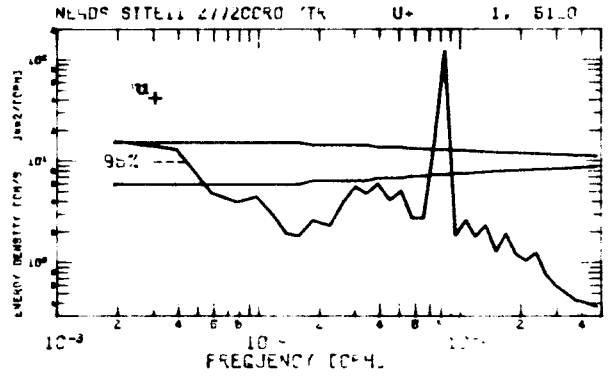
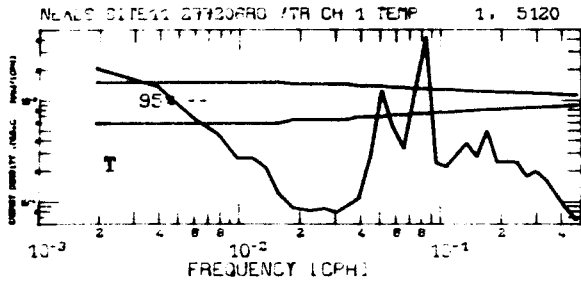
277203, 808m



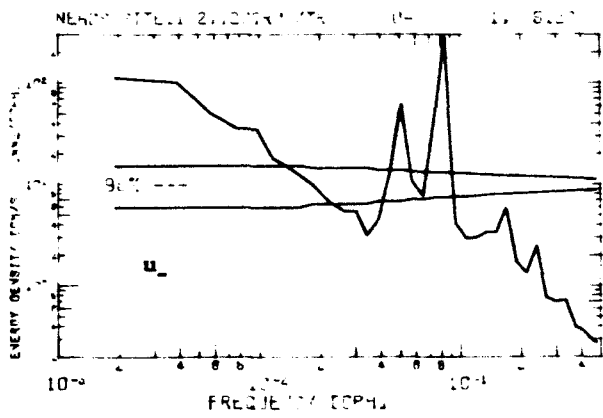
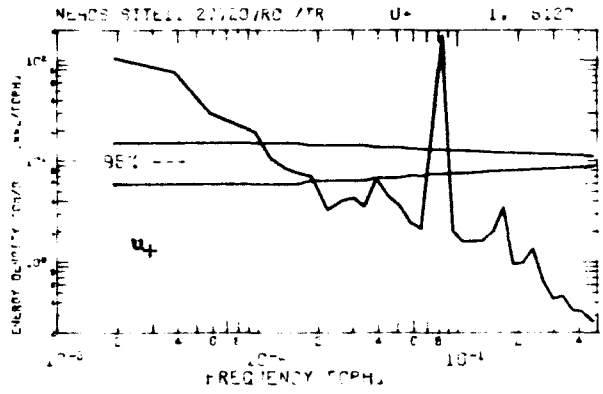
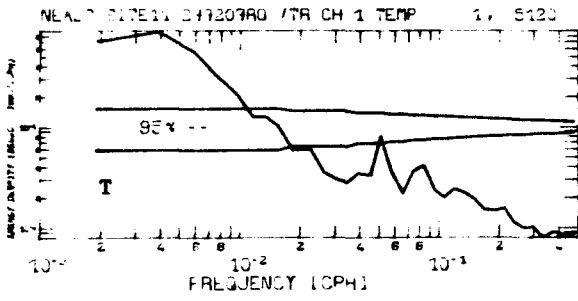
277204, 1192m



277205, 1663m



277206, 3029m



277207,4722m

FILE: NEAR8 SITE11 277201/A 024 MOORING ID: 277201 START-CYCLE: 1. STOP-CYCLE: 214. NUMBER OF VALUES: 214.

TIME RANGE: 2. 8.1981 1:30: 0: 0/ 3. 3.1982 1:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 255 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 PRES	COBAR	0.2482E+03	0.3575E+03	0.2841E+03	0.2007E+01	0.8624E+03	0.2937E+02	0.1875E+01	0.4976E+01
2 TEMP	COEO.C	0.1284E+02	0.1468E+02	0.1388E+02	0.3156E-01	0.2131E+00	0.4816E+00	-0.7305E+00	0.3378E+01
3 SAL	CPPT	0.3547E+02	0.3635E+02	0.3586E+02	0.1311E-01	0.3878E-01	0.1918E+00	0.7816E+00	0.2976E+01
4 UC	CGH/S	-0.1140E+02	0.1225E+02	-0.1344E+01	0.2733E+00	0.1599E+02	0.3998E+01	0.2966E+00	0.4066E+01
5 VC	CGH/S	-0.2003E+02	0.7004E+01	-0.4068E+01	0.4342E+00	0.4035E+02	0.6352E+01	-0.6332E+00	0.2742E+01
6 STOT	[0.2800E+02	0.2711E+02	0.2889E+02	0.7640E-02	0.1249E-01	0.1118E+00	-0.4156E+00	0.2488E+01

VARIABLES

PAIR	VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
4 5	0.4284E+01	0.28017E+02	0.5307E+01	0.3828E+00	198.28

VARIABLES	COVAR	CONCOEFF	VARCORAL	STDVECOV	STERRCOV
1 PRES	-0.1088E+02	-0.8011E+00	0.8835E+05	0.2972E+03	0.2032E+02
2 TEMP	-0.2459E+01	-0.4368E+00	0.1057E+07	0.1028E+04	0.7027E+02
3 SAL	-0.2044E+02	-0.1741E+00	0.1250E+07	0.1118E+04	0.7642E+02
4 UC	-0.5738E+02	-0.3078E+00	0.3381E+07	0.1839E+04	0.1257E+03
5 VC	0.3557E+00	0.1084E+00	0.6320E+06	0.7860E+03	0.5434E+02
6 STOT	0.5746E-01	0.6491E+00	0.3989E+03	0.1841E+02	0.1288E+01
1 TEMP	0.6274E+00	0.3399E+00	0.3037E+04	0.5511E+02	0.3767E+01
2 TEMP	-0.2543E+00	-0.8672E-01	0.7769E+04	0.8814E+02	0.6025E+01
3 SAL	0.2088E+00	0.2724E+00	0.1573E+03	0.1254E+02	0.8574E+00
4 UC	-0.4952E+00	-0.4085E+00	0.2038E+05	0.1428E+03	0.9780E+01
5 VC	-0.1623E-01	-0.1596E+00	0.5203E+05	0.2281E+03	0.1559E+02
6 STOT	0.1362E+02	-0.3964E+00	0.7404E+02	0.8604E+01	0.5882E+00
1 UC	0.2889E-01	0.6484E-01	0.9759E+03	0.3124E+02	0.2138E+01
2 UC	-0.3230E+00	-0.4550E+00	0.1148E+05	0.1071E+03	0.7325E+01
3 UC			0.2927E+05	0.1711E+03	0.1170E+02

FILE: HEADS SITE11 277202/A 024 MORNING ID: 277202 START-CYCLE: 214. STOP-CYCLE: 214. NUMBER OF VALUES: 214.

TIME RANGE: 2. 8.1981 1:30: 0: 0/ 3. 3.1982 1:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 549 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STDEMEAN	VARIANCE	STADDEV	SKEWNESS	KURTOSIS
1 PRES	[OBAR]	0.5611E+03	0.6739E+03	0.5693E+03	0.2398E+01	0.1231E+04	0.3509E+02	0.1789E+01	0.4650E+01
2 TEMP	[DEG.C]	0.1090E+02	0.1202E+02	0.1128E+02	0.1197E-01	0.3085E-01	0.1751E+00	0.2065E+01	0.8080E+01
3 SAL	[PPT]	0.3649E+02	0.3588E+02	0.3556E+02	0.5152E-02	0.5880E-02	0.7537E-01	0.2850E+01	0.1176E+02
4 UC	[CM/S]	-0.2347E+02	0.1162E+02	-0.3353E+01	0.3998E+00	0.9285E+02	0.6703E+01	-0.1237E+01	0.5281E+01
5 VC	[CM/S]	-0.2465E+02	0.7860E+01	-0.3029E+01	0.4661E+00	0.4650E+02	0.6919E+01	-0.1385E+01	0.4912E+01
6 STOT	[]	0.2712E+02	0.2738E+02	0.2718E+02	0.2331E-02	0.1163E-02	0.3410E-01	0.2207E+01	0.9842E+01

VARIABLES COVAR CORCOEFF VARCHORR STDEYCOV STERRCOV

1 PRES	2 TEMP	0.3497E+01	0.5694E+00	0.2189E+06	0.4679E+03	0.3198E+02
1 PRES	3 SAL	0.2097E+01	0.7931E+00	0.1264E+07	0.1286E+04	0.9791E+02
1 PRES	4 UC	-0.9702E+02	-0.4849E+00	0.1277E+08	0.3574E+04	0.2443E+03
1 PRES	5 VC	-0.1611E+03	-0.6316E+00	0.1883E+08	0.4339E+04	0.2866E+03
1 TEMP	6 STOT	0.9707E+00	0.8115E+00	0.9433E+06	0.9712E+03	0.6639E+02
2 TEMP	3 SAL	0.1144E-01	0.8669E+00	0.4909E+02	0.7008E+01	0.4789E+00
2 TEMP	4 UC	-0.5879E+00	-0.5882E+00	0.4366E+04	0.6607E+02	0.4517E+01
2 TEMP	5 VC	-0.3919E+00	-0.3262E+00	0.6019E+04	0.7758E+02	0.6303E+01
3 SAL	6 STOT	0.3129E-02	0.5242E+00	0.2482E+02	0.4982E+01	0.3406E+00
3 SAL	4 UC	-0.2649E+00	-0.6164E+00	0.4143E+05	0.2036E+03	0.1391E+02
3 SAL	5 VC	-0.2260E+00	-0.5176E+00	0.6906E+06	0.2430E+03	0.1661E+02
4 UC	6 VC	0.2259E-02	0.9789E+00	0.1007E+02	0.3173E+01	0.2169E+00
4 UC	6 STOT	-0.5701E+01	-0.1723E+00	0.3678E+04	0.5983E+02	0.4080E+01
5 VC	6 STOT	-0.9513E-01	-0.4892E+00	0.2410E+06	0.1553E+03	0.1061E+02
5 VC	6 STOT	-0.1330E+00	-0.5718E+00	0.3445E+05	0.1858E+03	0.1269E+02
PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMEANRR	DIR-MEAN	
4 5	0.4518E+01	0.3981E+02	0.6286E+01	0.4297E+00	227.91	

FILE: HEADS SITE11 277203/A 024 MORNING ID: 277203 START-CYCLE: 214. STOP-CYCLE: 214. NUMBER OF VALUES: 214.

TIME RANGE: 2. 8.1981 1:30: 0: 0/ 3. 3.1982 1:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 808 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STADDEV	SKEWNESS	KURTOSIS
1 PRES	[OBAR]	0.7872E+03	0.8234E+03	0.8188E+03	0.2042E+01	0.8923E+03	0.2987E+02	0.1971E+01	0.5682E+01
2 TEMP	[DEG.C]	0.8921E+01	0.1273E+02	0.1068E+02	0.5058E-01	0.5475E+00	0.7398E+00	0.1641E+01	0.4236E+01

VARIABLES COVAR CORCOEFF VARCHORR STDEYCOV STERRCOV

1 PRES	2 TEMP	0.2022E+02	0.9149E+00	0.8848E+06	0.9407E+03	0.6430E+02
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FILE: NEA08 SITE11 277204/A 024 MOORING ID: 277204 START-CYCLE: 1. STOP-CYCLE: 214. NUMBER OF VALUES: 214.

TIME RANGE: 2. 8.1981 1:30: 0: 0/ 3. 3.1982 1:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 1192 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 PRES	[DBAR]	0.1204E+04	0.1324E+04	0.1223E+04	0.2203E+01	0.1039E+04	0.3223E+02	0.1823E+01	0.4867E+01
2 TEMP	[DEG.C]	0.7840E+01	0.1125E+02	0.9029E+01	0.5379E-01	0.6191E+00	0.7868E+00	0.1481E+01	0.4141E+01
3 UC	[CM/S]	-0.1887E+02	0.1180E+02	-0.2107E+01	0.3047E+00	0.1987E+02	0.4458E+01	-0.1320E+01	0.6189E+01
4 VC	[CM/S]	-0.1963E+02	0.7750E+01	-0.2324E+01	0.3479E+00	0.2590E+02	0.5089E+01	-0.1672E+01	0.6287E+01

VARIABLES COVAR CORCOEFF VARCHRRL STDEVCV STERRCV

1 PRES	2 TEMP	0.2204E+02	0.8891E+00	0.1584E+07	0.1259E+04	0.8604E+02
1 PRES	3 UC	-0.4097E+02	-0.2852E+00	0.3197E+08	0.5854E+04	0.3865E+03
1 PRES	4 VC	-0.1169E+03	-0.7127E+00	0.4340E+08	0.6588E+04	0.4503E+03
2 TEMP	3 UC	-0.1641E+01	-0.4677E+00	0.2231E+04	0.4723E+02	0.3229E+01
2 TEMP	4 VC	-0.1988E+01	-0.4669E+00	0.2704E+04	0.5200E+02	0.3585E+01
3 UC	4 VC	-0.7534E+01	-0.3321E+00	0.1069E+04	0.3289E+02	0.2235E+01

PAIR VECTOR-MEAN VECTOR-VAR STOVECMEAN VECMEANERR DIR-MEAN

3 4	0.3137E+01	0.2288E+02	0.4784E+01	0.3270E+00	222.19
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FILE: NEA08 SITE11 277205/A 024 MOORING ID: 277205 START-CYCLE: 1. STOP-CYCLE: 214. NUMBER OF VALUES: 214.

TIME RANGE: 2. 8.1981 1:30: 0: 0/ 3. 3.1982 1:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 1663 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 PRES	[DBAR]	0.1674E+04	0.1765E+04	0.1687E+04	0.1621E+01	0.5821E+03	0.2371E+02	0.1922E+01	0.5277E+01
2 TEMP	[DEG.C]	0.4798E+01	0.5732E+01	0.5241E+01	0.1380E-01	0.4133E-01	0.2093E+00	0.6323E+00	0.2957E+01
3 UC	[CM/S]	-0.6336E+01	0.6032E+01	-0.5632E+00	0.1042E+00	0.2324E+01	0.1524E+01	-0.9321E+00	0.6619E+01
4 VC	[CM/S]	-0.7500E+01	0.1350E+01	-0.8400E+00	0.1003E+00	0.2152E+01	0.1467E+01	-0.1503E+01	0.5881E+01

VARIABLES COVAR CORCOEFF VARCHRRL STDEVCV STERRCV

1 PRES	2 TEMP	0.3170E+01	0.6577E+00	0.1922E+06	0.4384E+03	0.2997E+02
1 PRES	3 UC	-0.1458E+02	-0.4027E+00	0.8860E+07	0.2619E+04	0.1790E+03
1 PRES	4 VC	-0.1928E+02	-0.5545E+00	0.6416E+07	0.2533E+04	0.1731E+03
2 TEMP	3 UC	-0.1159E+00	-0.3741E+00	0.7196E+02	0.8483E+01	0.5788E+00
2 TEMP	4 VC	-0.5824E-02	-0.1986E-01	0.6180E+02	0.7861E+01	0.5374E+00
3 UC	4 VC	-0.2884E+00	-0.1290E+00	0.8139E+01	0.2853E+01	0.1950E+00

PAIR VECTOR-MEAN VECTOR-VAR STOVECMEAN VECMEANERR DIR-MEAN

3 4	0.1011E+01	0.2238E+01	0.1496E+01	0.1023E+00	213.84
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FILE: MEAD8 SITE11 277206R0 -14 MOORING ID: 277206 START-CYCLE: 1. STOP-CYCLE: 214. NUMBER OF VALUES: 214.

TIME RANGE: 2. 8.1981 1:30: 0: 0/ 3. 3.1982 1:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 3029 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDEV	SKEWNESS	KURTOSIS
1 TEMP	[DEG.C]	0.2772E+01	0.2836E+01	0.2801E+01	0.1175E-02	0.2955E-03	0.1719E-01	0.3832E+00	0.2078E+01
2 UC	[CH/S]	-0.2231E+01	0.2787E+01	0.4475E+00	0.5886E-01	0.7439E+00	0.8625E+00	-0.2825E+00	0.3847E+01
3 VC	[CH/S]	-0.1337E+01	0.1744E+01	0.4063E+00	0.3964E-01	0.3346E+00	0.5784E+00	-0.3052E+00	0.2924E+01

VARIABLES	COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1 TEMP	2 UC	-0.6042E-02	0.4075E+00	0.5844E+01	0.2417E+01
1 TEMP	3 VC	-0.4015E-02	0.4038E+00	0.2628E+01	0.1621E+01
2 UC	3 VC	0.3802E+00	0.7621E+00	0.5840E+00	0.7642E-01

PAIR	VECTOR-MEAN	VECTOR-VAR	STDVECMAN	VECMANERR	DIR-MEAN
2 3	0.6038E+00	0.5392E+00	0.7343E+00	0.5020E-01	47.84

FILE: MEAD8 SITE11 277207R0 -14 MOORING ID: 277207 START-CYCLE: 1. STOP-CYCLE: 214. NUMBER OF VALUES: 214.

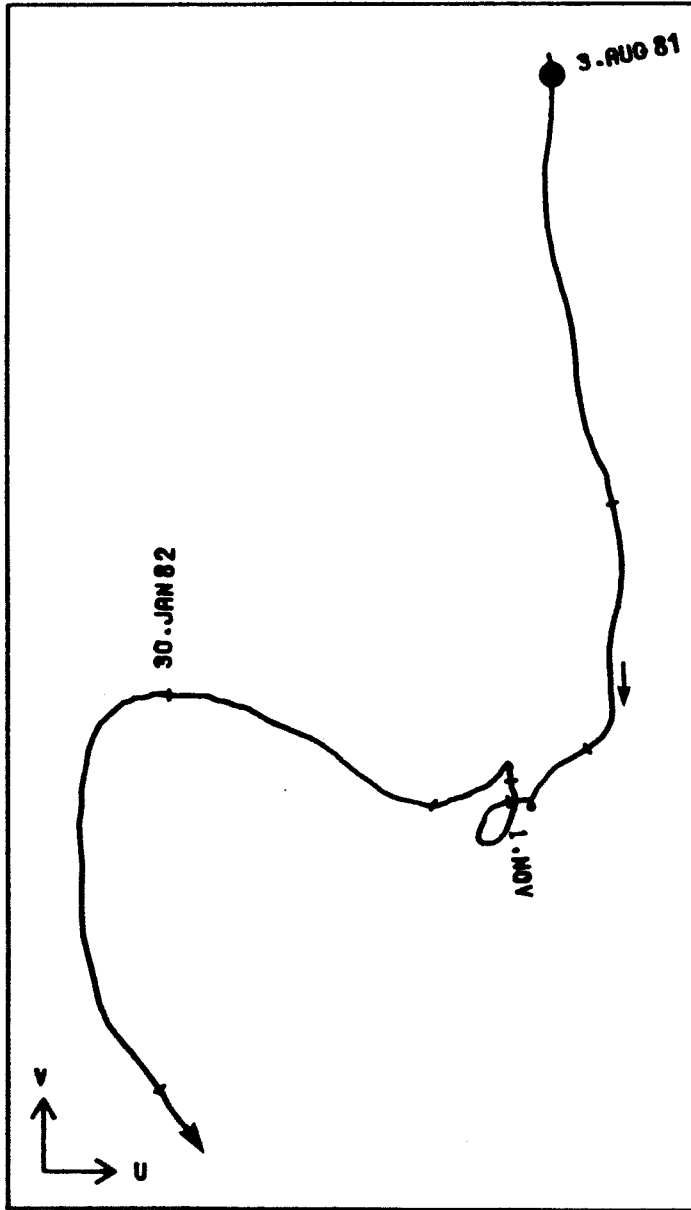
TIME RANGE: 2. 8.1981 1:30: 0: 0/ 3. 3.1982 1:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 4722 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDEV	SKEWNESS	KURTOSIS
1 TEMP	[DEG.C]	0.2348E+01	0.2486E+01	0.2448E+01	0.8057E-03	0.1989E-03	0.1179E-01	-0.2619E+01	0.2342E+02
2 UC	[CH/S]	-0.2748E+01	0.8043E+01	0.2277E+01	0.1467E+00	0.4540E+01	0.2131E+01	0.6853E+00	0.3456E+01
3 VC	[CH/S]	-0.1034E+01	0.9490E+01	0.2202E+01	0.1414E+00	0.4278E+01	0.2088E+01	0.1503E+01	0.5191E+01

VARIABLES	COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1 TEMP	2 UC	0.5872E-02	0.2338E+00	0.2734E+02	0.5228E+01
1 TEMP	3 VC	0.4801E-02	0.1887E+00	0.2574E+02	0.5074E+01
2 UC	3 VC	0.3410E+01	0.7737E+00	0.2190E+03	0.1480E+02

PAIR	VECTOR-MEAN	VECTOR-VAR	STDVECMAN	VECMANERR	DIR-MEAN
2 3	0.3167E+01	0.4409E+01	0.2100E+01	0.1435E+00	45.96

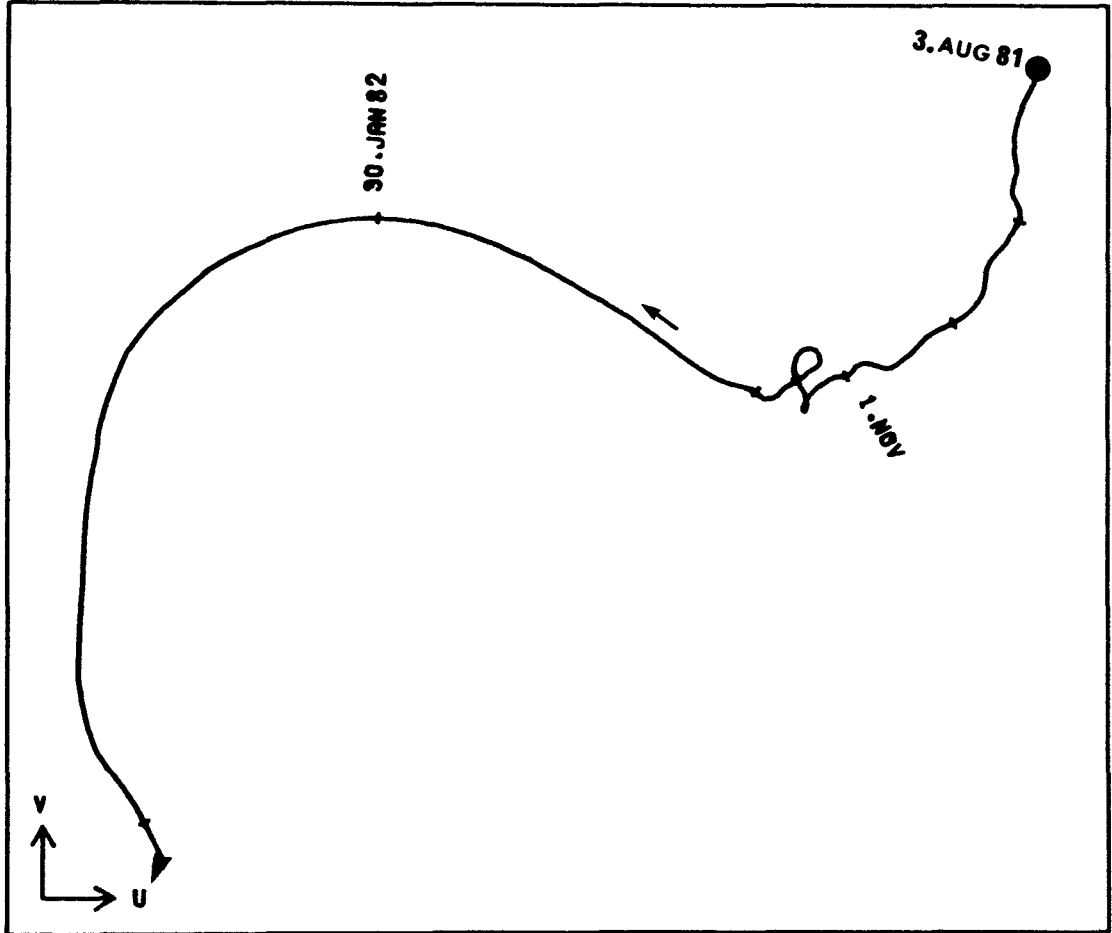
SITE 11 255 M



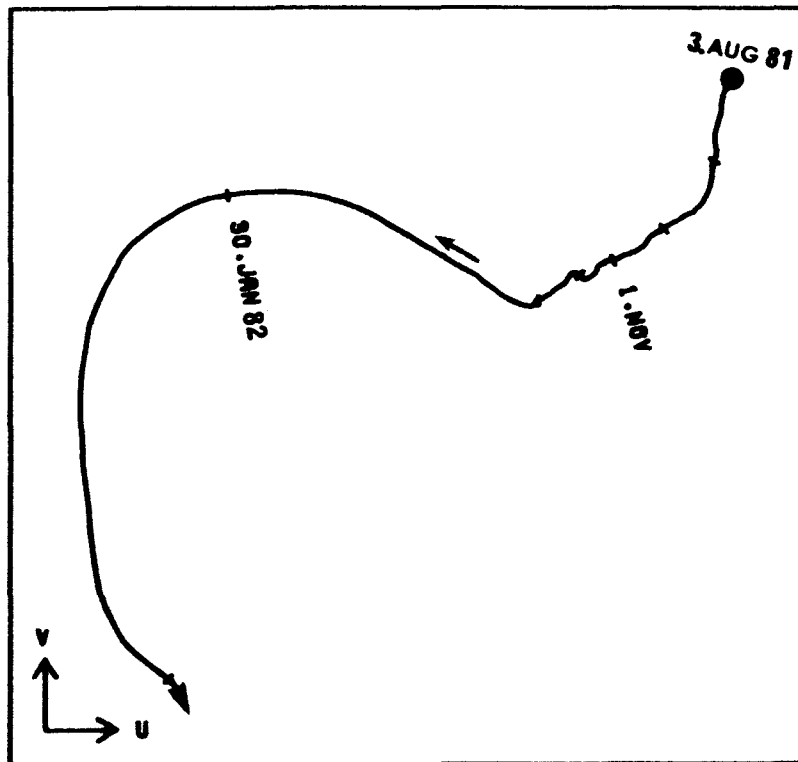
100 KM

3 CM/S

SITE 11 549 M



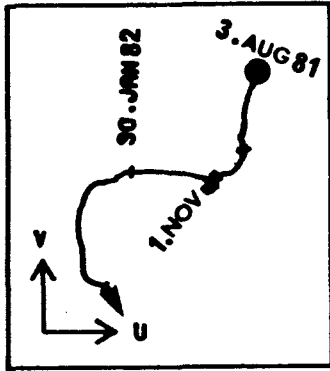
SITE 11 1102 M



150 KM

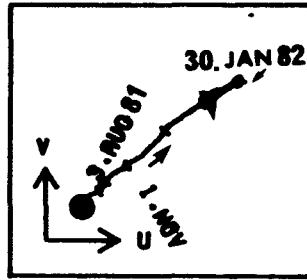
5 CM/S

SITE 11 1883 M



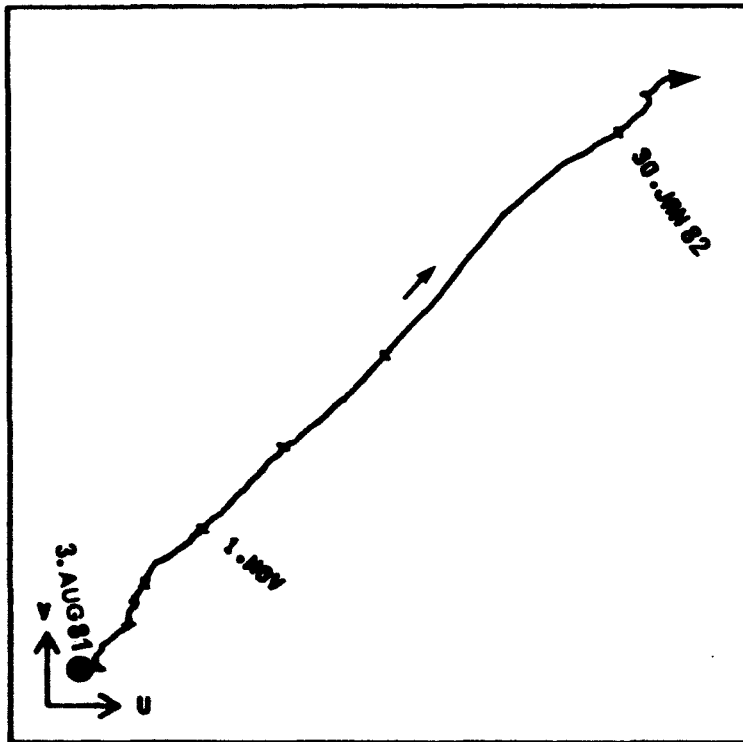
50 KM 1 CM/S

SITE 11 3029 M

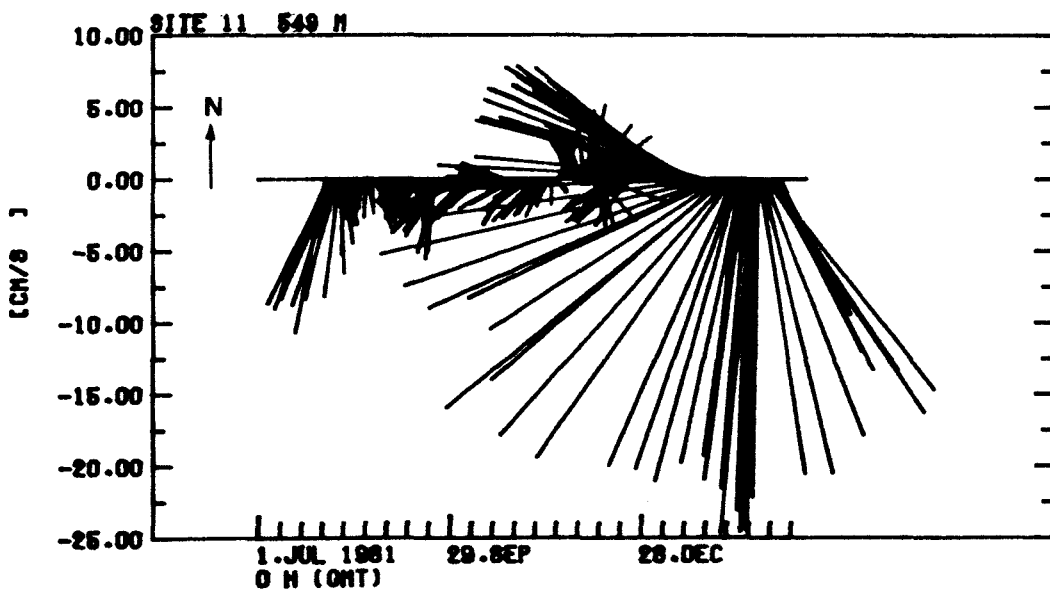
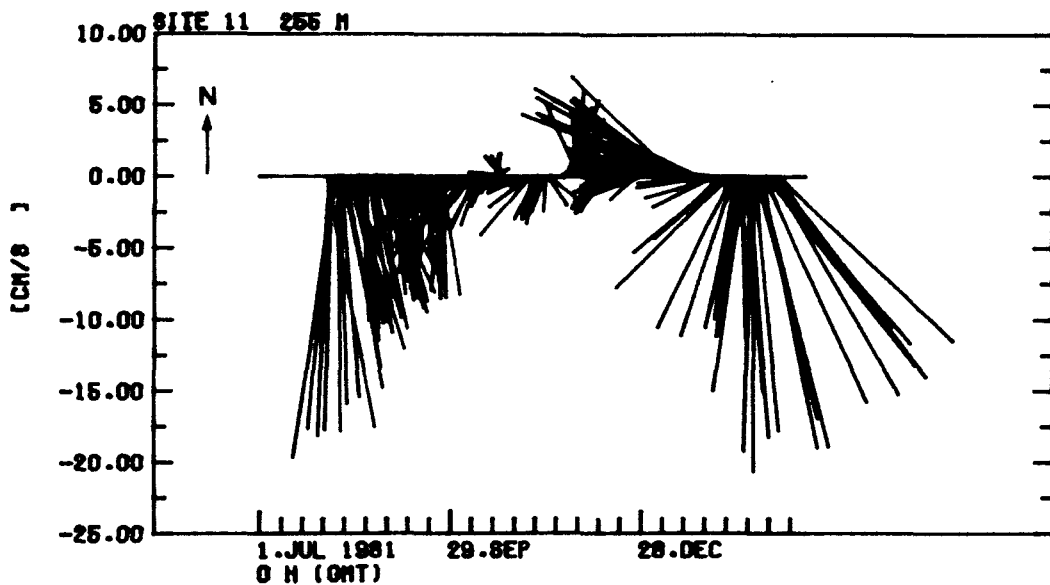


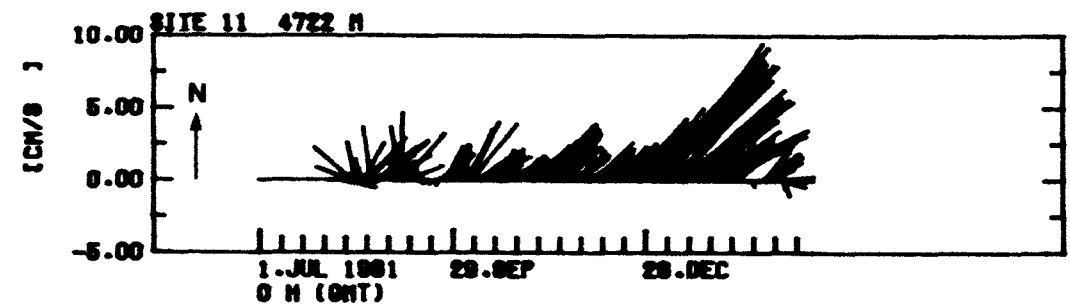
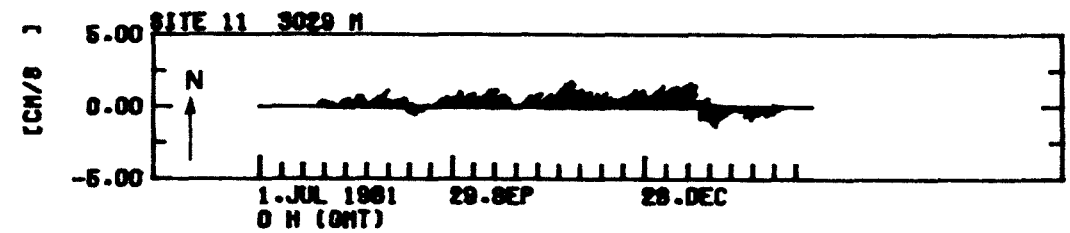
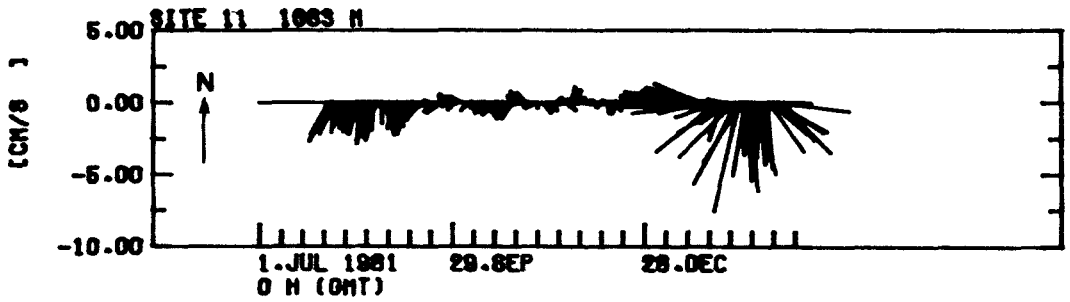
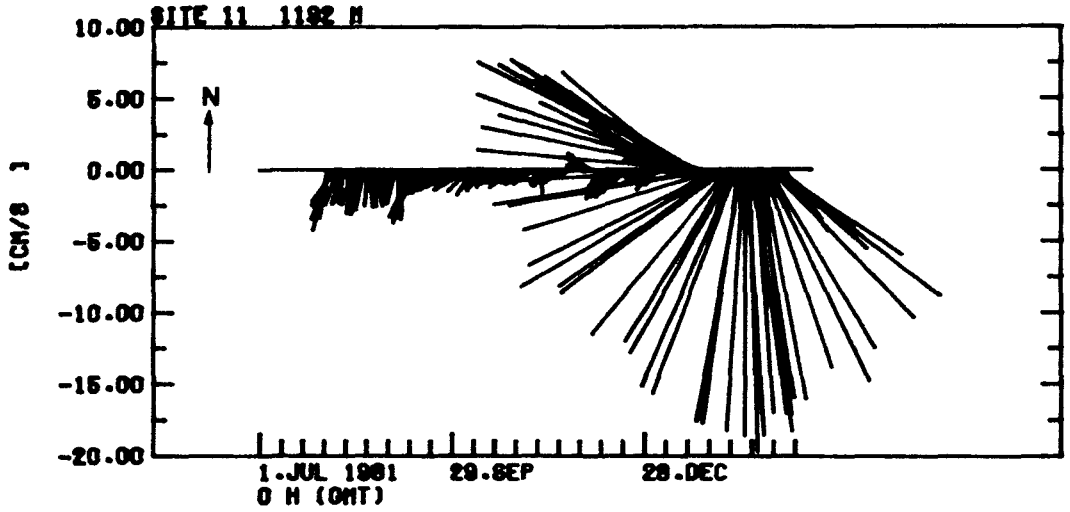
50 KM 1 CM/S

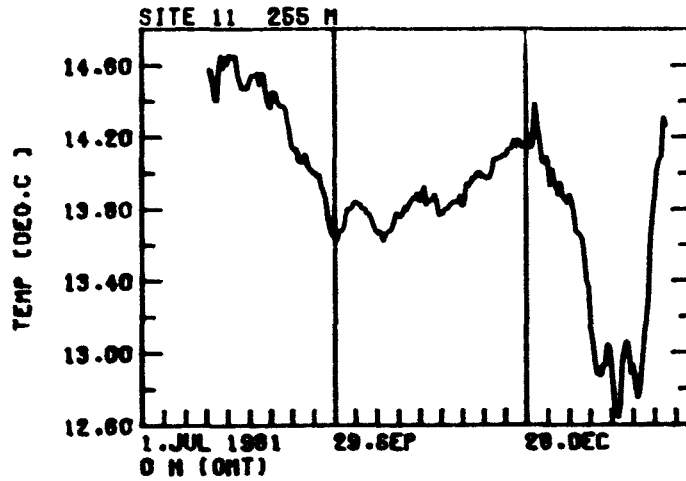
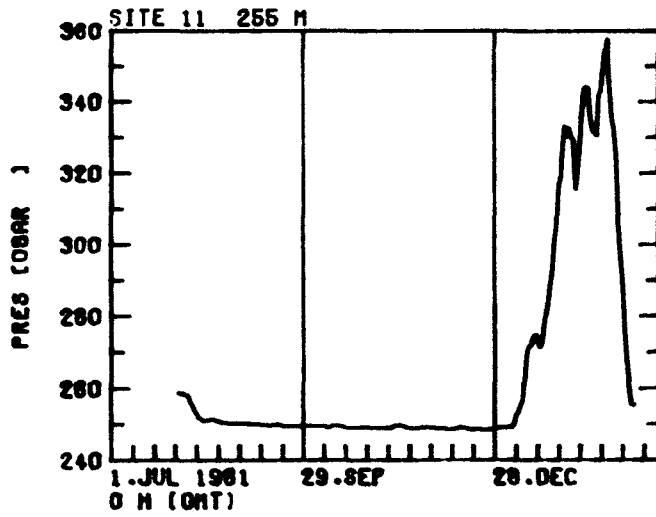
SITE 11 4722 M

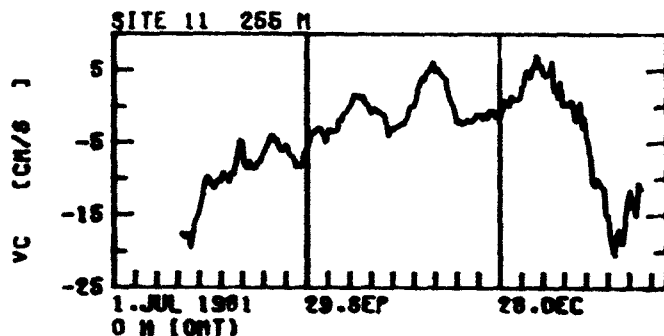
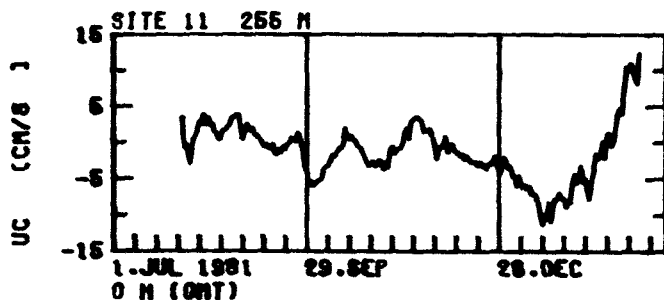
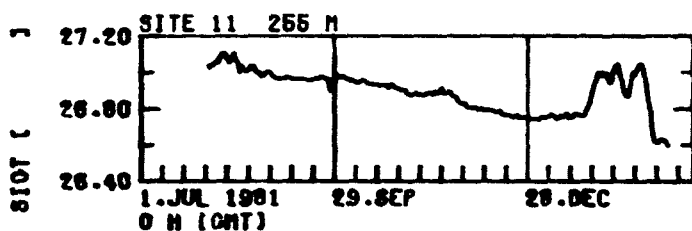
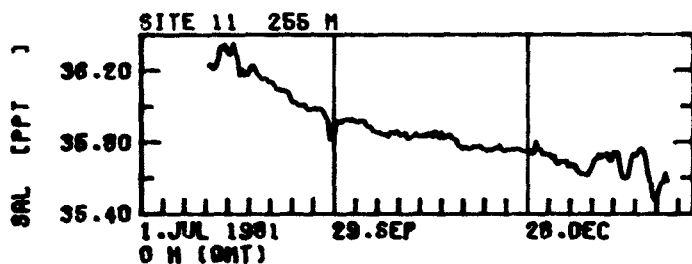


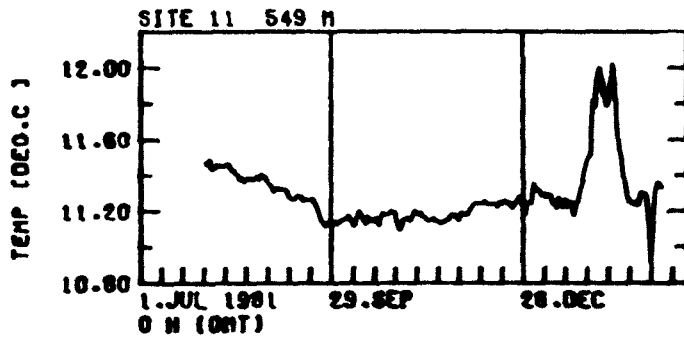
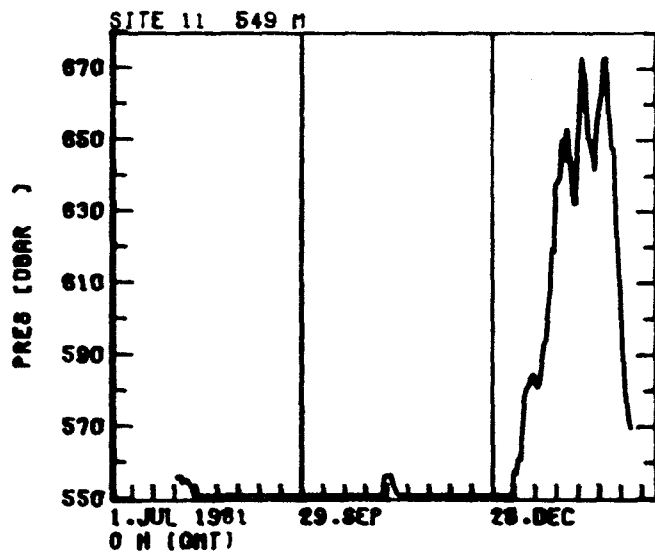
150 KM 5 CM/S

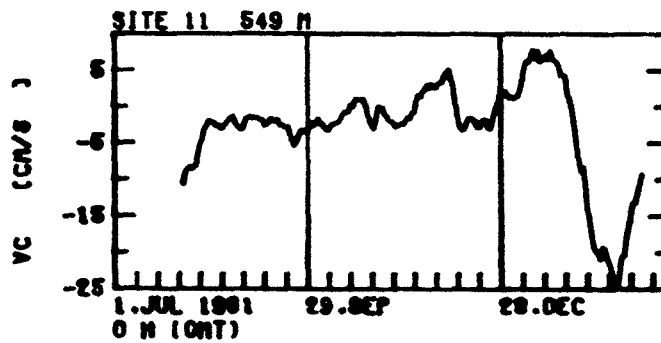
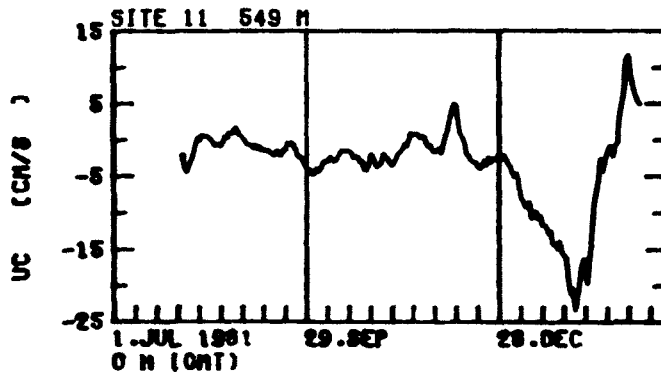
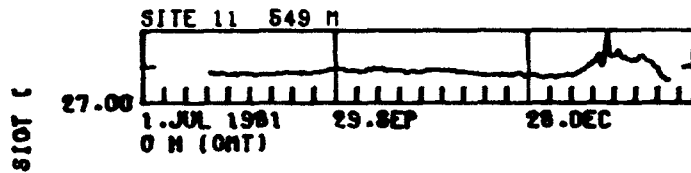
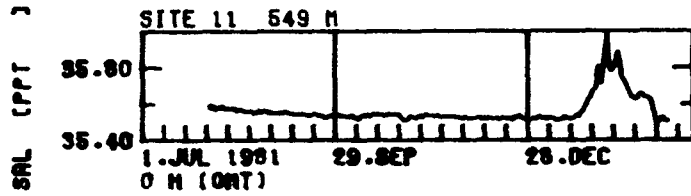


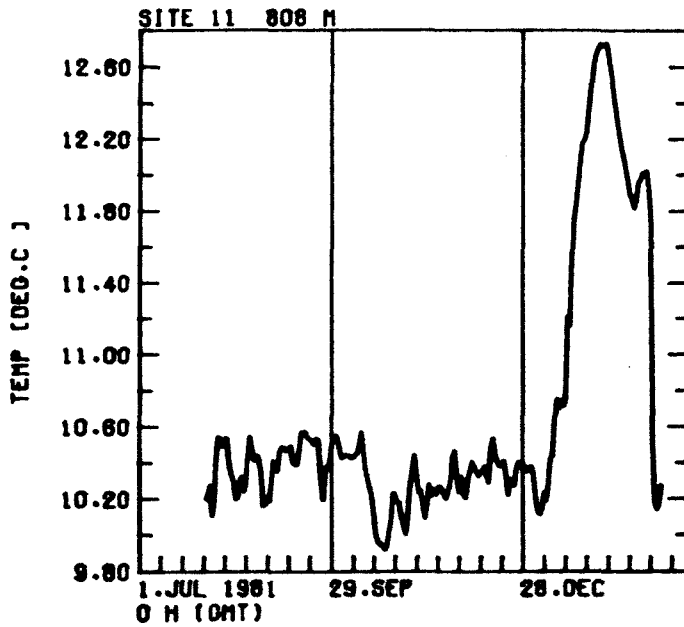
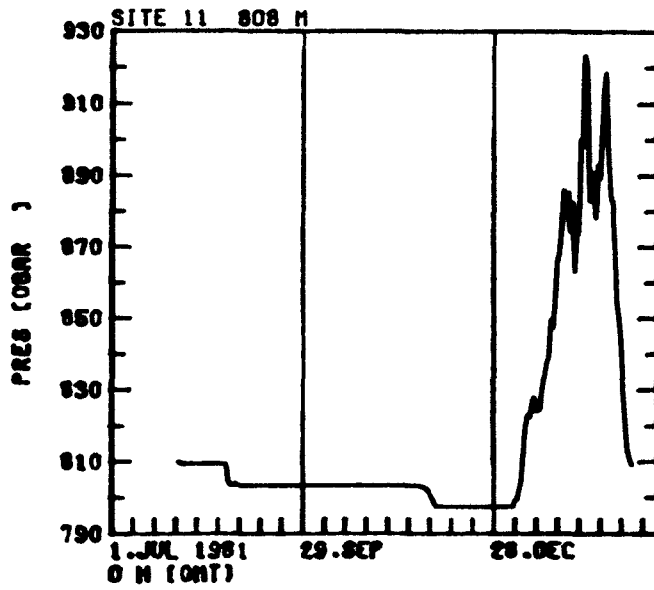


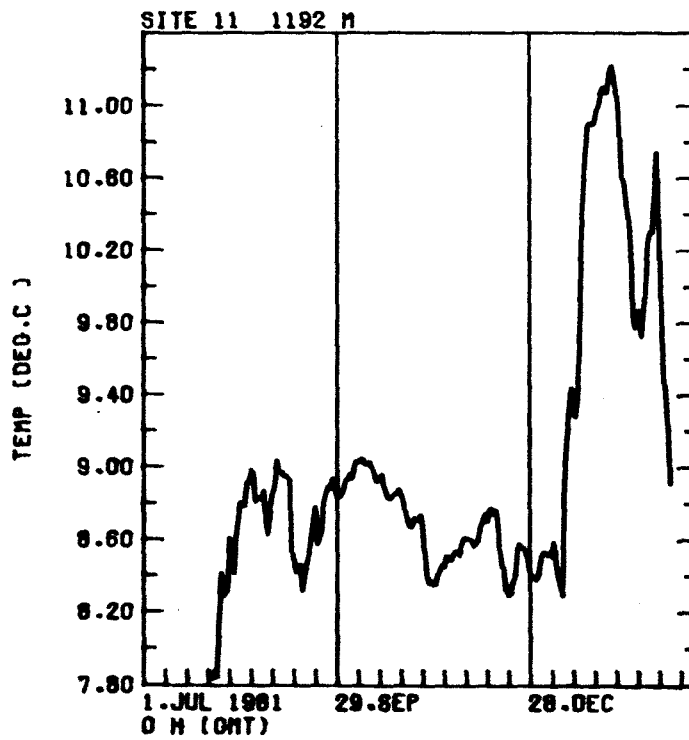
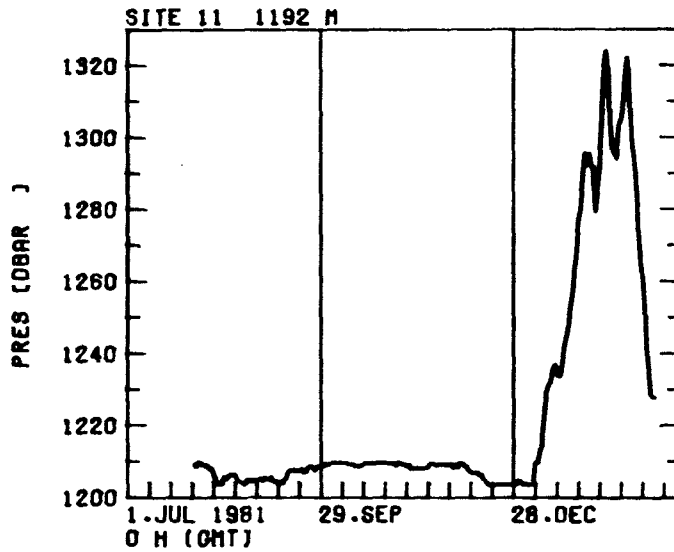


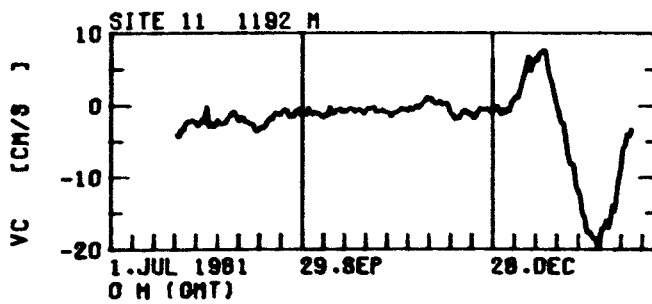
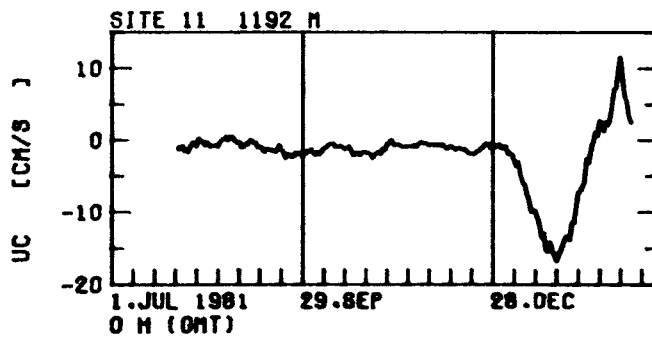


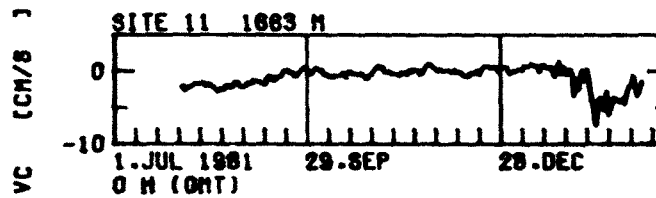
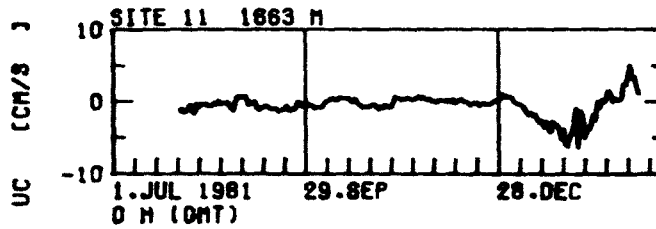
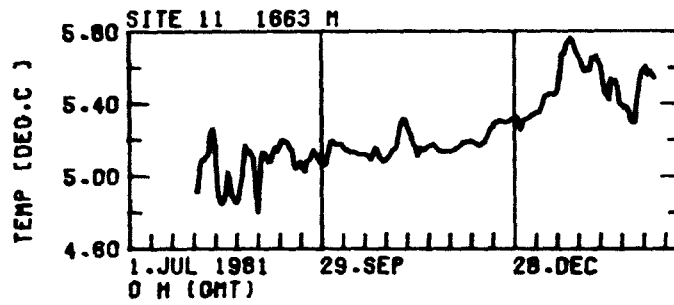
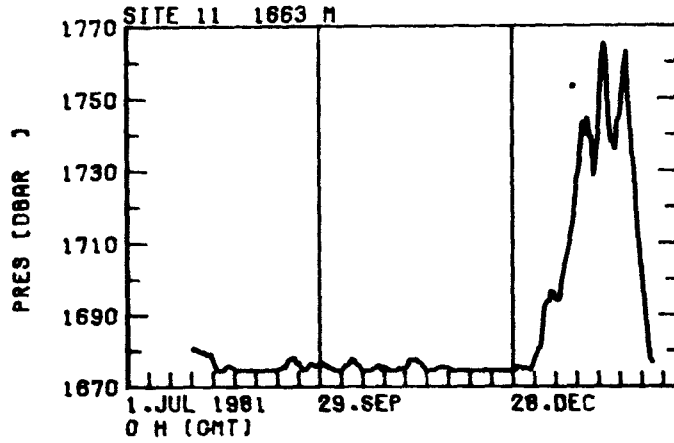


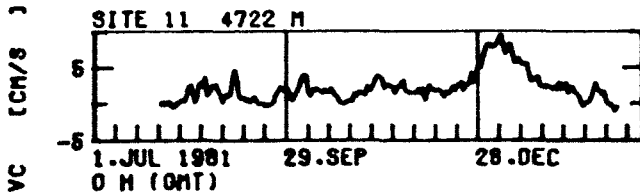
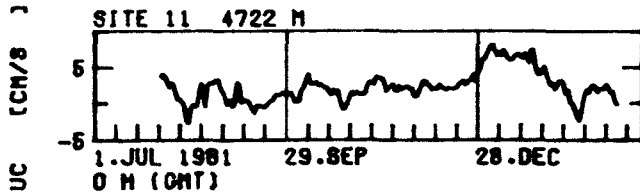
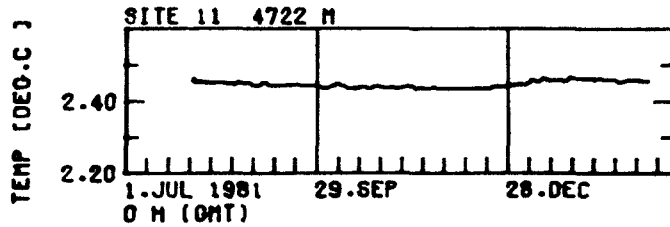
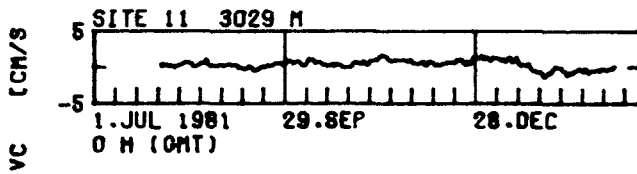
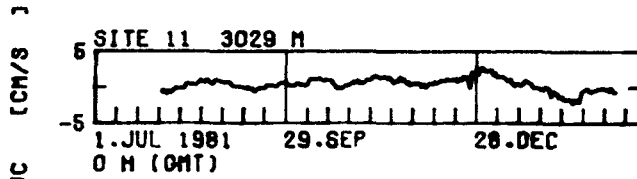
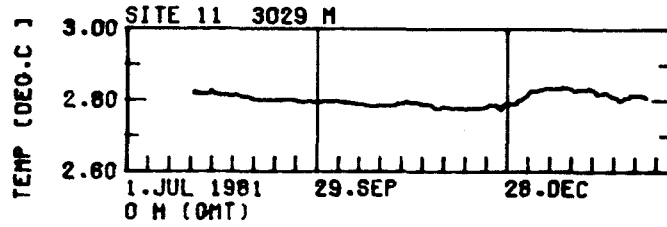












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278200

N12

25 JUL 1981 - 1 MAR 1982

NEADS site 12 31° 00'N, 20° 30'W, 4850 m bottom depth

IfM mooring No 278 200

Deployed: 25 Jul 1981, Meteor 57/1

Recovered: 01 Mar 1982, Meteor 60/3

Start of record: 25 Jul 1981, 1400Z.

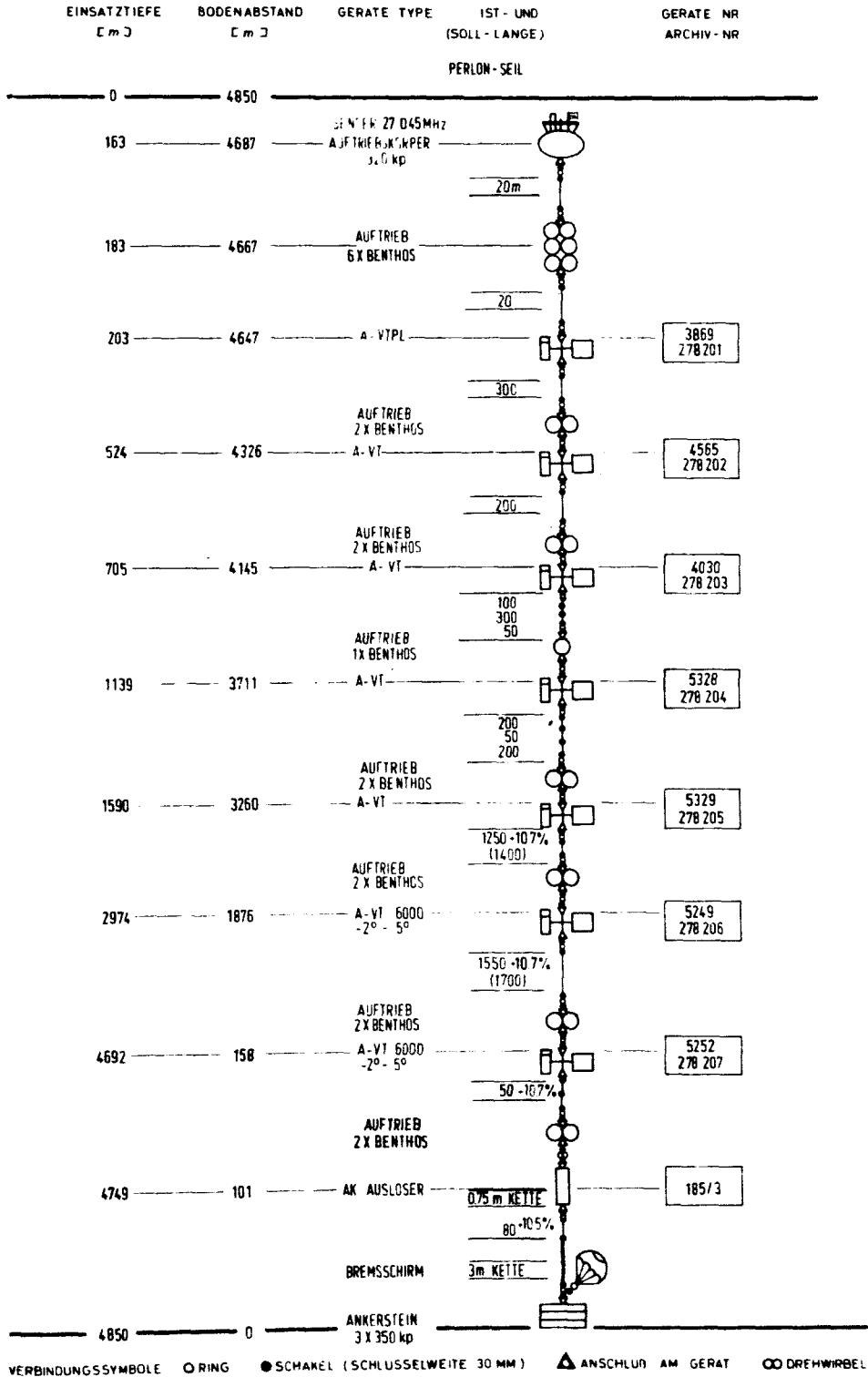
End of record: 01 Mar 1982, 1300Z.

Time base check: ok

Identi- fication	depth (m)	Parameters and Corrections					Remarks
		P	T	S	\vec{u}	ϕ	
278201	203	-7	x	x	x	x	velocity bad after 2928 hours
202	524	21	x	-0.16	x	x	
203	705	-	x	x	x	x	
204	1139	15	x	-	x	x	
205	1590	-51	0.45	-	x	x	Stop after 162 hours
206	2974	-	0.10	-	x	x	
207	4692	-	0.05	-	x	x	

Symbols see page 143

Values for linear corrections are included.



NEADS N12, 31°00'N, 20° 30' W
IfM mooring No 278200
deployed 25 Jul. 1981
recovered 01 Mar. 1982

FILE: HEADS SITE12 278201UVC/E1 MOORING ID: 278201 START-CYCLE: 1. STOP-CYCLE: 5256. NUMBER OF VALUES: 5256.

TIME RANGE: 25. 7.1981 14: 0: 0: / 1. 3.1982 13: 0: 0: / SAMPLING INTERVAL (MINUTES) : 0.600000+02 203 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 PRES	[DBAR]	0.1985E+03	0.2185E+03	0.2069E+03	0.4934E-01	0.1290E+02	0.3577E+01	-0.6443E+00	0.4326E+01
2 TEMP	[DEG.C]	0.1548E+02	0.1745E+02	0.1657E+02	0.5151E-02	0.1394E+00	0.3734E+00	-0.1670E+00	0.2411E+01
3 SAL	[PPT]	0.3560E+02	0.3782E+02	0.3628E+02	0.3092E-02	0.5024E-01	0.2241E+00	0.1471E+01	0.9663E+01
4 STOT	[]	0.2598E+02	0.2782E+02	0.2662E+02	0.2350E-02	0.2903E-01	0.1704E+00	0.1352E+01	0.9731E+01

FILE: HEADS SITE12 278201RO /TR MOORING ID: 278201 START-CYCLE: 1. STOP-CYCLE: 2928. NUMBER OF VALUES: 2928.

TIME RANGE: 25. 7.1981 14: 0: 0: / 0/24.11.1981 13: 0: 0: / SAMPLING INTERVAL (MINUTES) : 0.600000+02 203 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 UC	[CH/S]	-0.1578E+02	0.1729E+02	0.8243E+00	0.8288E-01	0.2010E+02	0.4483E+01	-0.1302E-01	0.3272E+01
2 VC	[CH/S]	-0.1412E+02	0.1639E+02	-0.3805E+00	0.9254E-01	0.2509E+02	0.5008E+01	0.4186E+00	0.2964E+01
PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMEANR	DIR-MEAN				
1	2	0.8079E+00	0.2289E+02	0.4753E+01	0.8789E-01	114.78			

FILE: HEADS SITE12 278202RO /E1 MOORING ID: 278202 START-CYCLE: 1. STOP-CYCLE: 5256. NUMBER OF VALUES: 5256.

TIME RANGE: 25. 7.1981 14: 0: 0: / 1. 3.1982 13: 0: 0: / SAMPLING INTERVAL (MINUTES) : 0.600000+02 524 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 PRES	[DBAR]	0.5178E+03	0.5354E+03	0.5258E+03	0.3908E-01	0.9027E+01	0.2833E+01	0.6834E+00	0.1555E+01
2 TEMP	[DEG.C]	0.1161E+02	0.1248E+02	0.1200E+02	0.1586E-02	0.1322E-01	0.1150E+00	0.6765E-01	0.3164E+01
3 SAL	[PPT]	0.3554E+02	0.3570E+02	0.3562E+02	0.3942E-03	0.8166E-03	0.2858E-01	0.5799E-01	0.2456E+01
4 UC	[CH/S]	-0.1230E+02	0.1485E+02	0.1889E+01	0.4888E-01	0.1312E+02	0.3622E+01	-0.2759E-01	0.3041E+01
5 VC	[CH/S]	-0.1251E+02	0.1447E+02	0.3587E+00	0.5188E-01	0.1415E+02	0.3762E+01	0.8721E-01	0.2988E+01
6 STOT	[]	0.2701E+02	0.2717E+02	0.2709E+02	0.3789E-03	0.7546E-03	0.2747E-01	-0.1561E-01	0.2665E+01
PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMEANR	DIR-MEAN				
4	5	0.1723E+01	0.1363E+02	0.3693E+01	0.5093E-01	77.98			

FILE: HEADS SITE12 278203RD /E1 HOORING ID: 278203 START-CYCLE: 1. STOP-CYCLE: 5256. NUMBER OF VALUES: 5256.

TIME RANGE: 25. 7.1991 14: 0: 0: / 1. 3.1982 13: 0: 0: O/ SAMPLING INTERVAL (MINUTES) : 0.600000*02 705 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STEAMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 TEMP	(DEG.C)	0.1029E+02	0.1199E+02	0.1074E+02	0.1685E-02	0.1492E-01	0.1221E+00	0.1814E+01	0.1261E+02
2 SAL	(PPT)	0.3528E+02	0.3842E+02	0.3589E+02	0.5458E-02	0.1565E+00	0.3956E+00	0.3574E+01	0.1705E+02
3 UC	(CM/S)	-0.1076E+02	0.1772E+02	0.2219E+01	0.5327E-01	0.1491E+02	0.3862E+01	0.1385E+00	0.3135E+01
4 VC	(CM/S)	-0.1018E+02	0.1441E+02	0.4937E+00	0.5418E-01	0.1542E+02	0.3927E+01	0.3024E-01	0.2417E+01
5 S10T	()	0.2703E+02	0.2937E+02	0.2738E+02	0.4122E-02	0.8932E-01	0.2989E+00	0.3524E+01	0.1666E+02

PAIR VECTOR-MEAN VECTOR-VAR STOVECMEAN VECMEANERR DIR-MEAN

3	4	0.2271E+01	0.1517E+02	0.3894E+01	0.5372E-01	77.70
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FILE: HEADS SITE12 278204RD /TR HOORING ID: 278204 START-CYCLE: 1. STOP-CYCLE: 5256. NUMBER OF VALUES: 5256.

TIME RANGE: 25. 7.1991 14: 0: 0: / 1. 3.1982 13: 0: 0: O/ SAMPLING INTERVAL (MINUTES) : 0.600000*02 1139 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STEAMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 PRES	(DBAR)	0.1149E+04	0.1167E+04	0.1155E+04	0.1823E-01	0.1746E+01	0.1321E+01	-0.2048E+01	0.2250E+02
2 TEMP	(DEG.C)	0.7267E+01	0.8730E+01	0.8089E+01	0.4188E-02	0.3087E-01	0.3014E+00	-0.1889E+00	0.2711E+01
3 UC	(CM/S)	-0.1167E+02	0.1646E+02	0.2059E+01	0.5018E-01	0.1324E+02	0.3638E+01	0.1898E+00	0.3237E+01
4 VC	(CM/S)	-0.1180E+02	0.1338E+02	0.5588E+00	0.4834E-01	0.1228E+02	0.3505E+01	0.1605E-01	0.2888E+01

PAIR VECTOR-MEAN VECTOR-VAR STOVECMEAN VECMEANERR DIR-MEAN

3	4	0.2134E+01	0.1276E+02	0.3672E+01	0.4927E-01	74.82
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FILE: HEAD8 SITE12 278206R0 /TR HOORING ID: 278205 START-CYCLE: 1. STOP-CYCLE: 162. NUMBER OF VALUES: 162.

TIME RANGE: 25. 7.1981 14: 0: 0: 0/ 1. 8.1981 7: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 1590 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	PAES (DAR)	0.1647E+04	0.1659E+04	0.1650E+04	0.2373E+00	0.3120E+01	0.3020E+01	0.3381E+00	0.1457E+01
2	TEMP (DEG.C)	0.6785E+01	0.6948E+01	0.6861E+01	0.4787E-02	0.3728E-02	0.6108E-01	-0.6754E-01	0.1780E+01
3	UC (CH/S)	-0.6624E+01	0.5364E+01	-0.2080E+00	0.2189E+00	0.7762E+01	0.2788E+01	-0.2346E+00	0.2377E+01
4	VC (CH/S)	-0.5194E+01	0.5686E+01	0.4504E+00	0.1929E+00	0.5418E+01	0.2328E+01	0.1828E-01	0.2349E+01
PAIR	VECTOR-MEAN	VECTOR-VAR	STDVECMAN	VECMANERR	DIR-MEAN				
3	4	0.4965E+00	0.6590E+01	0.2567E+01	0.2017E+00	336.10			

FILE: HEAD8 SITE12 278206R0 /TR HOORING ID: 278206 START-CYCLE: 1. STOP-CYCLE: 5256. NUMBER OF VALUES: 5256.

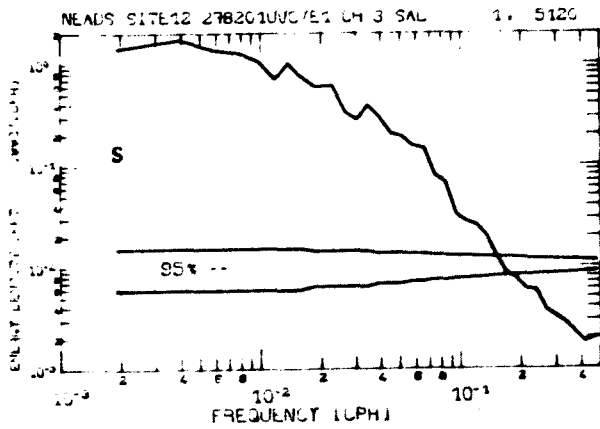
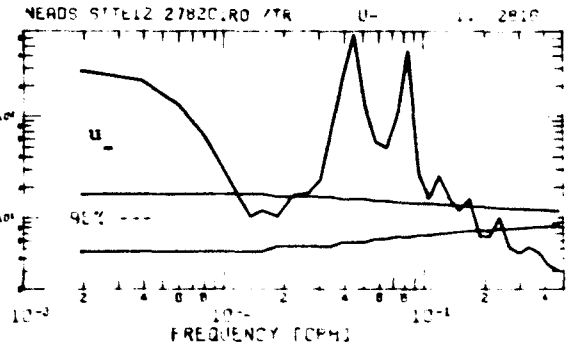
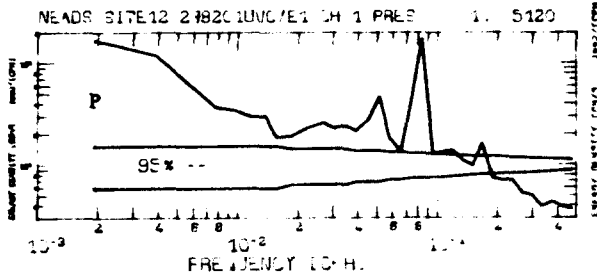
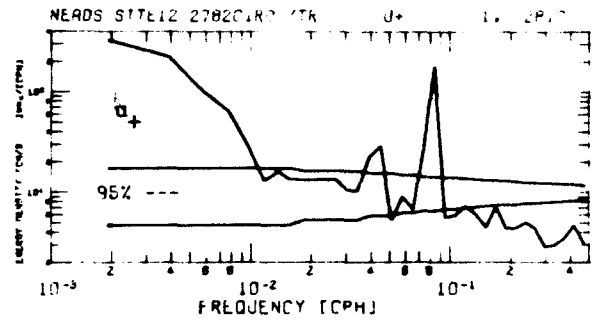
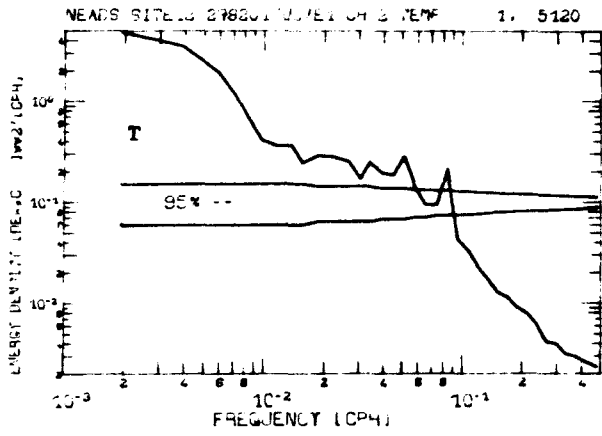
TIME RANGE: 25. 7.1981 14: 0: 0: 0/ 1. 3.1982 13: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 2974 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP (DEG.C)	0.2795E+01	0.2950E+01	0.2853E+01	0.3448E-03	0.6249E-03	0.2500E-01	0.4819E+00	0.2889E+01
2	UC (CH/S)	-0.7881E+01	0.7383E+01	0.1388E+00	0.3183E-01	0.5328E+01	0.2308E+01	-0.8835E-01	0.3112E+01
3	VC (CH/S)	-0.7793E+01	0.8428E+01	-0.7081E-01	0.3653E-01	0.7015E+01	0.2649E+01	0.5487E-01	0.2792E+01
PAIR	VECTOR-MEAN	VECTOR-VAR	STDVECMAN	VECMANERR	DIR-MEAN				
2	3	0.1559E+00	0.6171E+01	0.2484E+01	0.3428E-01	117.05			

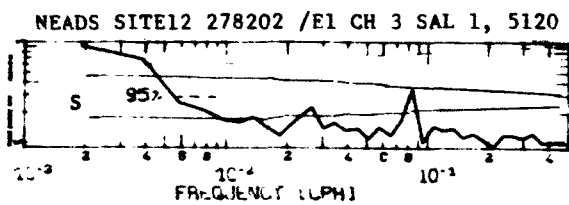
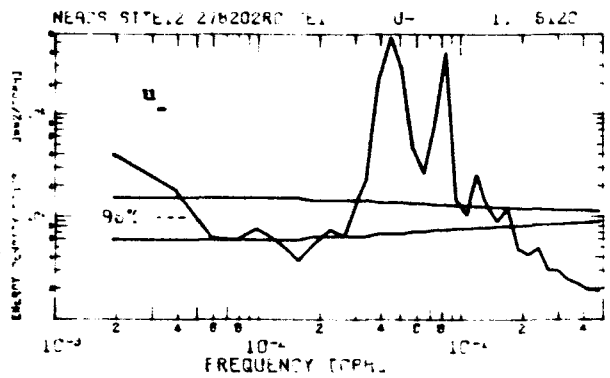
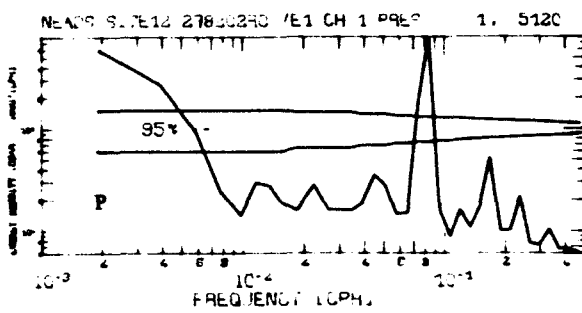
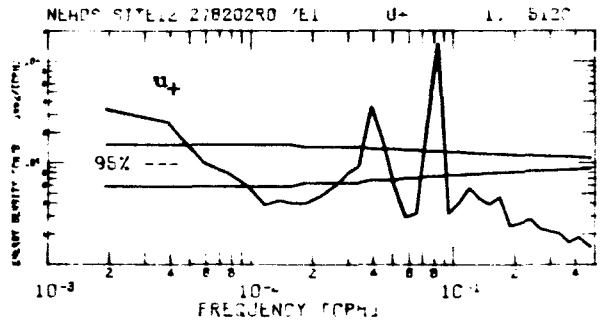
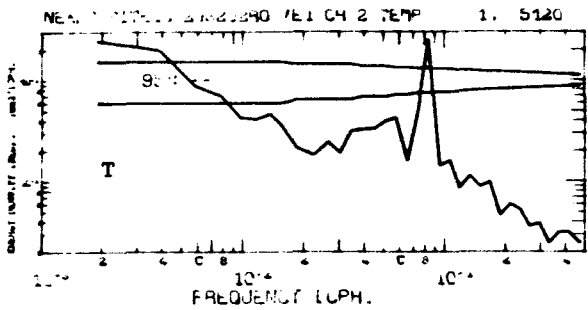
FILE: HEAD8 SITE12 278207R0 /TR HOORING ID: 278207 START-CYCLE: 1. STOP-CYCLE: 5256. NUMBER OF VALUES: 5256.

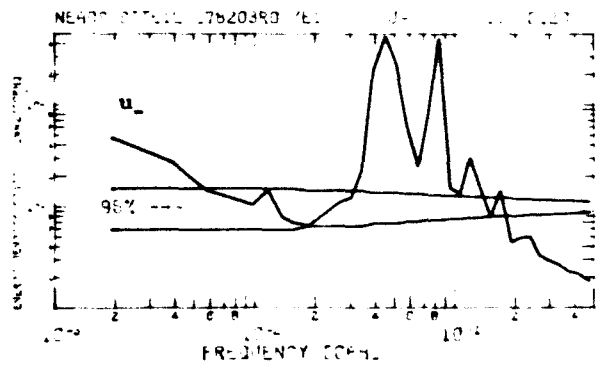
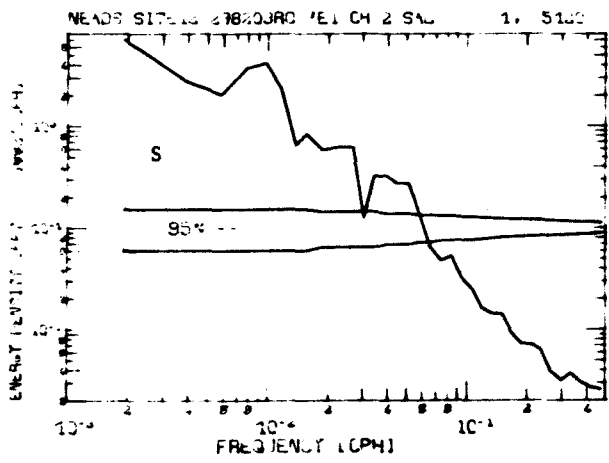
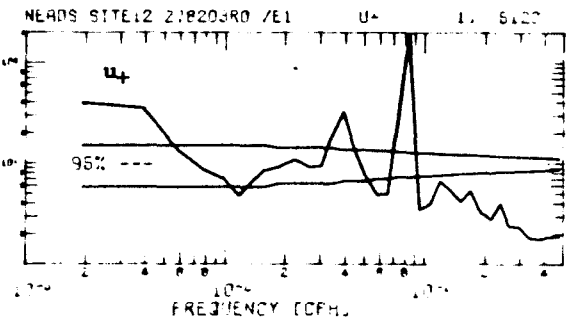
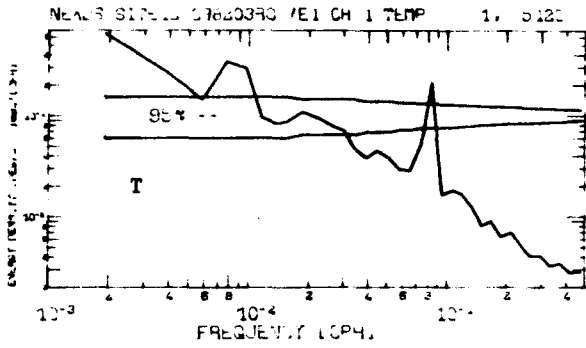
TIME RANGE: 25. 7.1981 14: 0: 0: 0/ 1. 3.1982 13: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 4692 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP (DEG.C)	0.2452E+01	0.2476E+01	0.2459E+01	0.4336E-04	0.9882E-05	0.2144E-02	-0.1352E+01	0.4580E+01
2	UC (CH/S)	-0.7162E+01	0.6502E+01	0.3709E+00	0.2992E-01	0.4704E+01	0.2189E+01	0.2089E-01	0.3128E+01
3	VC (CH/S)	-0.7876E+01	0.7979E+01	-0.2378E+00	0.3699E-01	0.7191E+01	0.2682E+01	0.3313E-01	0.2665E+01
PAIR	VECTOR-MEAN	VECTOR-VAR	STDVECMAN	VECMANERR	DIR-MEAN				
2	3	0.4406E+00	0.5947E+01	0.2439E+01	0.3364E-01	122.66			

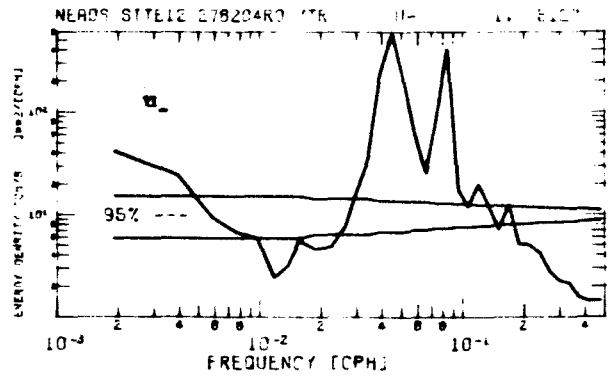
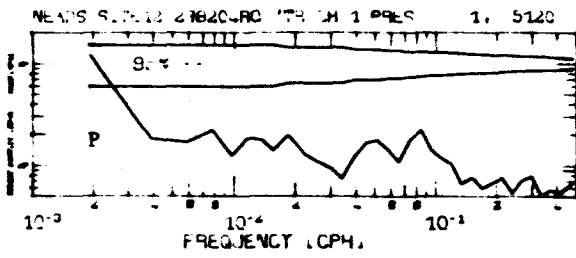
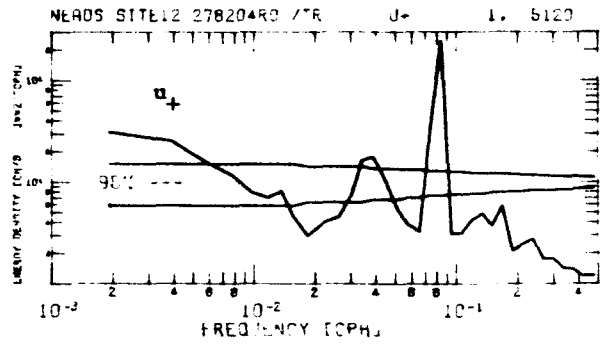
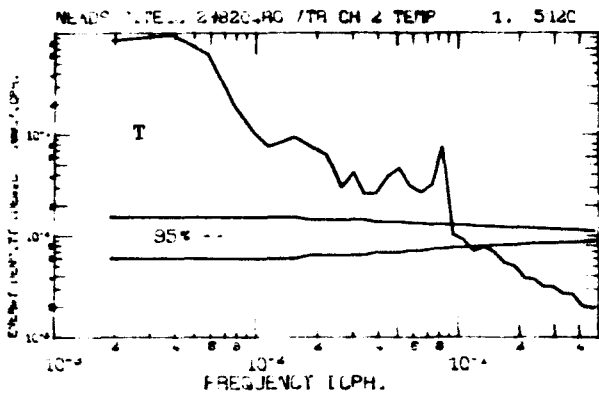


278201, 203m

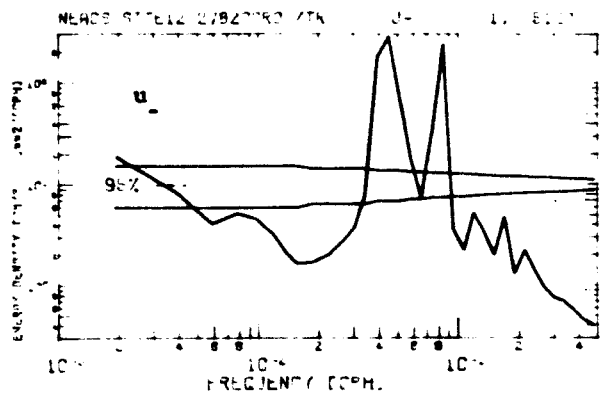
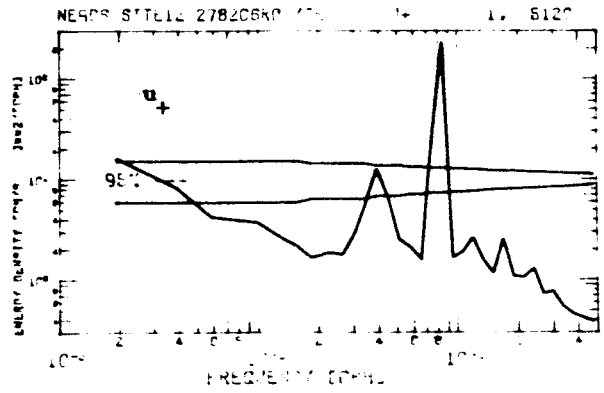
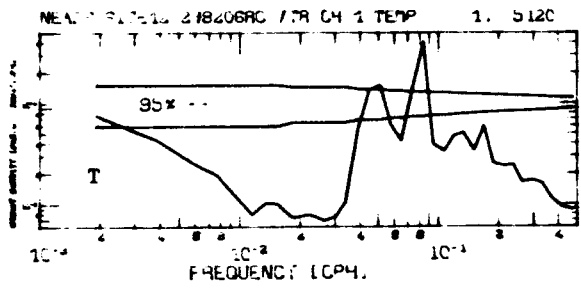




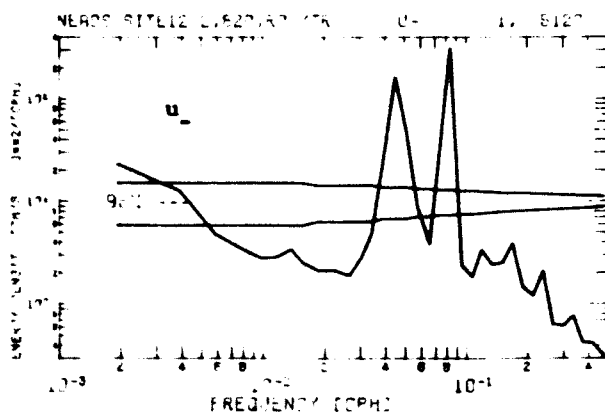
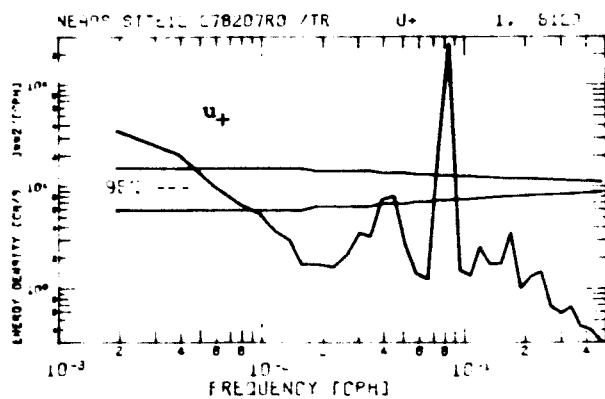
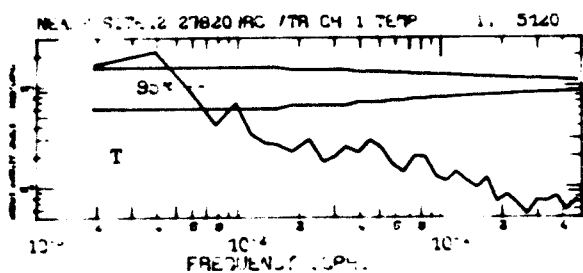
278203, 705m



278204, 1139m



278206, 2974m



278207,4692m

FILE: HEADS SITE12 278201/A 024 MOORING JO: 278201 START-CYCLE: 213. STOP-CYCLE: 213. NUMBER OF VALUES: 213.

TIME RANGE: 28. 7.1981 19:30: 0: 0/25. 2.1982 19:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000*04 203 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 PRES	[OSAR]	0.1977E+03	0.2120E+03	0.2055E+03	0.1710E+00	0.6226E+01	0.2498E+01	0.1041E+00	0.3320E+01
2 TEMP	[DEG.C]	0.1679E+02	0.1729E+02	0.1657E+02	0.2300E-01	0.1215E+00	0.3486E+00	-0.2346E+00	0.2340E+01
3 SAL	[PPT]	0.3591E+02	0.3747E+02	0.3620E+02	0.1223E-01	0.3180E-01	0.1786E+00	0.1874E+01	0.1194E+02
4 S10T	[]	0.2635E+02	0.2748E+02	0.2662E+02	0.5337E-02	0.1481E-01	0.1217E+00	0.2230E+01	0.1504E+02

VARIABLES	COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1 PRES	0.1815E-01	0.1857E-01	0.6982E+04	0.8356E+02	0.5726E+01
2 TEMP	0.2129E-01	0.4776E-01	0.9874E+04	0.8937E+02	0.6809E+01
3 SAL	0.1249E-01	0.4114E-01	0.5170E+04	0.7191E+02	0.4927E+01
4 S10T	0.2983E-01	0.4761E+00	0.2043E+03	0.1429E+02	0.8793E+00
1 PRES	0.5900E-02	-0.1391E+00	0.8502E+02	0.9221E+01	0.6318E+00
2 TEMP	0.1748E-01	0.8046E+00	0.7666E+02	0.8756E+01	0.5989E+00
3 SAL					
4 S10T					

FILE: HEADS SITE12 278201/A 024 MOORING JO: 278201 START-CYCLE: 116. STOP-CYCLE: 116. NUMBER OF VALUES: 116.

TIME RANGE: 28. 7.1981 19:30: 0: 0/20.11.1981 19:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000*04 203 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1 UC	[CM/S]	-0.8181E+01	0.8159E+01	0.7337E+00	0.2901E+00	0.9762E+01	0.3124E+01	-0.3510E+00	0.3120E+01
2 VC	[CM/S]	-0.6173E+01	0.9020E+01	-0.3987E+00	0.3615E+00	0.1433E+02	0.3786E+01	0.7823E+00	0.2560E+01

VARIABLES	COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1 UC	-0.4901E+01	-0.4143E+00	0.1376E+03	0.11173E+02	0.1089E+01

PAIR	VECTOR-MEAN	VECTOR-VAR	STDEVCOV	VECMEANERR	DIR-MEAN
1 2	0.8351E+00	0.1205E+02	0.3471E+01	0.3223E+00	118.52

FILE: HEADS SITE12 278202/A 024 HOURING ID: 278202 START-CYCLE: 1. STOP-CYCLE: 213. NUMBER OF VALUES: 213.

TIME RANGE: 28. 7.1981 19:30: 0: 0/25. 2.1982 19:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 524 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDEV	SKENNESS	KURTOSIS
1 PRES	(DBAR)	0.5233E+03	0.5296E+03	0.5255E+03	0.1721E+00	0.6306E-01	0.2511E+01	0.7522E+00	0.1783E+01
2 TEMP	(DEG.C)	0.1178E+02	0.1220E+02	0.1200E+02	0.6611E-02	0.8708E-02	0.8189E-01	-0.2676E+00	0.3055E+01
3 SAL	(PPT)	0.3559E+02	0.3562E+02	0.3562E+02	0.9908E-03	0.2091E-03	0.1446E-01	0.2952E+00	0.2207E+01
4 UC	(CM/S)	-0.2396E+01	0.8115E+01	0.1777E+01	0.1351E+00	0.3886E-01	0.1971E+01	0.8654E-01	0.2169E+01
5 VC	(CM/S)	-0.2647E+01	0.6759E+01	0.3634E+00	0.1671E+00	0.5288E-01	0.2293E+01	0.6068E+00	0.2202E+01
6 S10T	()	0.2706E+02	0.2712E+02	0.2709E+02	0.1128E-02	0.2710E-03	0.1646E-01	0.2914E-01	0.1989E+01

VARIABLES COVAR CORCOEFF VARCHORRL STDEVCOV STERRCOV

1 PRES	2 TEMP	0.1066E+00	0.5138E+00	0.4094E+04	0.6398E+02	0.4384E+01
1 PRES	3 SAL	-0.1264E-01	-0.3481E+00	0.7583E+04	0.8708E+01	0.5966E+01
1 PRES	4 UC	0.1050E+01	0.2122E+00	0.1079E+07	0.1039E+04	0.7116E+02
1 PRES	5 VC	-0.1732E+01	-0.3008E+00	0.1446E+07	0.1202E+04	0.8239E+02
1 TEMP	6 S10T	-0.3017E-03	-0.7299E+00	0.3840E+04	0.6197E+02	0.4246E+01
2 TEMP	3 SAL	0.3482E-03	0.2940E+00	0.8836E+01	0.2972E+01	0.2037E+00
2 TEMP	4 UC	0.7424E-01	0.4599E+00	0.6646E+03	0.2376E+02	0.1620E+01
2 TEMP	5 VC	-0.4732E-01	-0.2520E+00	0.7633E+03	0.2745E+02	0.1881E+01
3 SAL	6 S10T	-0.1023E-02	-0.7688E+00	0.4296E+01	0.2073E+01	0.1420E+00
3 SAL	4 UC	0.6654E-02	0.2054E+00	0.4932E+04	0.7023E+02	0.4812E+01
3 SAL	5 VC	-0.3197E-02	-0.9640E-01	0.6673E+04	0.8169E+02	0.5597E+01
4 UC	6 S10T	0.9509E-04	0.3884E+00	0.6808E+00	0.8251E+00	0.5654E-01
4 UC	6 VC	-0.1398E+01	-0.3092E+00	0.2411E+02	0.4910E+01	0.3364E+00
5 VC	6 S10T	-0.9788E-02	-0.3016E+00	0.2850E+04	0.5339E+02	0.3658E+01
5 VC	6 S10T	0.6605E-02	0.1750E+00	0.3861E+04	0.6213E+02	0.4257E+01

PAIR VECTOR-MEAN VECTOR-VAR STDVECMAN VECMEANRR DIR-MEAN

4 5	0.1814E+01	0.4572E+01	0.2138E+01	0.1465E+00	78.44
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FILE: HEADS SITE12 278203/A 024 MOORING ID: 278203 START-CYCLE: 213. STOP-CYCLE: 213. NUMBER OF VALUES: 213.

TIME RANGE: 28. 7.1981 19:30: 0: 0/25. 2.1982 19:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 705 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STDEVMAN	VARIANCE	STRODEV	SKENNESS	KURTOSIS
1 TEMP	[DEG.C]	0.1059E+02	0.1139E+02	0.1074E+02	0.6035E-02	0.7757E-02	0.8907E-01	0.3044E+01	0.1893E+02
2 SAL	[PPT]	0.3647E+02	0.3773E+02	0.3689E+02	0.2585E-01	0.1423E+00	0.3772E+00	0.3444E+01	0.1545E+02
3 UC	[CM/S]	-0.2799E-01	0.7284E+01	0.2312E+01	0.1537E+00	0.5031E+01	0.2243E+01	0.3607E+00	0.2394E+01
4 VC	[CM/S]	-0.3974E-01	0.6685E+01	0.4891E+00	0.1846E+00	0.7280E+01	0.2694E+01	0.4389E+00	0.1903E+01
5 S10T	[]	0.2721E+02	0.2889E+02	0.2738E+02	0.1944E-01	0.8047E-01	0.2837E+00	0.3380E+01	0.1495E+02

VARIABLES	COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1 TEMP	2 SAL	0.2114E-01	0.6363E+00	0.6818E+01	0.4833E+00
1 TEMP	3 UC	-0.3987E-01	-0.2018E+00	0.6742E+03	0.1646E+01
1 TEMP	4 VC	0.1508E-01	0.2974E+00	0.2905E+02	0.1991E+01
1 TEMP	5 S10T	0.1601E-01	0.6019E+00	0.4863E+01	0.3401E+00
2 SAL	3 UC	-0.2068E+00	-0.2446E+00	0.7988E+02	0.8473E+01
2 SAL	4 VC	0.8663E+00	0.5464E+00	0.9674E+02	0.6629E+01
2 SAL	5 S10T	0.1069E+00	0.9980E+00	0.2081E+02	0.1426E+01
3 UC	4 VC	-0.1772E+01	-0.2832E+00	0.6775E+01	0.4642E+00
3 UC	5 S10T	-0.1639E+00	-0.2419E+00	0.6129E+02	0.4189E+01
4 VC	5 S10T	0.4194E+00	0.5487E+00	0.7420E+02	0.5084E+01

PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMANERR	DIR-MEAN
3 4	0.2382E+01	0.6145E+01	0.2479E+01	0.1699E+00	78.20

FILE: HEADS SITE12 278204/A 024 MOORING ID: 278204 START-CYCLE: 213. STOP-CYCLE: 213. NUMBER OF VALUES: 213.

TIME RANGE: 28. 7.1981 19:30: 0: 0/25. 2.1982 19:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 1139 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STDEVMAN	VARIANCE	STRODEV	SKENNESS	KURTOSIS
1 PRES	[OBAR]	0.1151E+04	0.1159E+04	0.1155E+04	0.4773E-01	0.4853E+00	0.6967E+00	-0.5000E+01	0.2822E+02
2 TEMP	[DEG.C]	0.7394E+01	0.8617E+01	0.8086E+01	0.2031E-01	0.8787E-01	0.2364E+00	-0.1452E+00	0.2689E+01
3 UC	[CM/S]	-0.1635E-01	0.7109E+01	0.2125E+01	0.1262E+00	0.3337E+01	0.1827E+01	0.8947E+00	0.3534E+01
4 VC	[CM/S]	-0.3934E-01	0.4695E+01	0.5855E+00	0.1444E+00	0.4442E+01	0.2109E+01	0.1261E+00	0.2154E+01

VARIABLES	COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1 PRES	2 TEMP	-0.1440E-01	-0.6971E-01	0.3421E+03	0.2344E+02
1 PRES	3 UC	0.3510E+00	0.2758E+00	0.4453E+07	0.2110E+04
1 PRES	4 VC	0.9892E-03	0.6737E-03	0.5929E+07	0.1668E+03
2 TEMP	3 UC	-0.1597E+00	-0.2949E+00	0.2106E+03	0.1451E+02
2 TEMP	4 VC	-0.1936E+00	-0.3099E+00	0.2809E+03	0.9943E+00
3 UC	4 VC	-0.1173E+01	-0.3045E+00	0.2551E+02	0.3461E+00

PAIR	VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMANERR	DIR-MEAN
3 4	0.2199E+01	0.3890E+01	0.1972E+01	0.1351E+00	75.10

FILE: HEADS SITE12 278206/A 024 MORNING ID: 278206 START-CYCLE: 1. STOP-CYCLE: 213. NUMBER OF VALUES: 213.

TIME RANGE: 28. 7.1981 19:30: 0: 0/25. 2.1982 19:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 2974 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 TEMP	[C/0.C]	0.2822E+01	0.2899E+01	0.2853E+01	0.1473E-02	0.4624E-03	0.2150E-01	0.5027E+00	0.2228E+01
2 UC	[CM/S]	-0.1831E+01	0.2585E+01	0.1588E+00	0.7876E-01	0.1355E+01	0.1164E+01	0.3427E+00	0.2085E+01
3 VC	[CM/S]	-0.2189E+01	0.2012E+01	-0.7531E-01	0.7621E-01	0.1237E+01	0.1112E+01	0.8612E-02	0.1894E+01

VARIABLES

COVAR	CORCOEFF	VARCORR	STDEVCOV	STERRCOV		
1 TEMP	2 UC	0.3844E-02	0.1536E+00	0.1104E+02	0.3322E+01	0.2276E+00
1 TEMP	3 VC	0.1023E-01	0.4277E+00	0.1012E+02	0.3181E+01	0.2179E+00
2 UC	3 VC	-0.2704E+00	-0.2086E+00	0.1344E+01	0.1159E+01	0.7943E-01

PAIR VECTOR-MEAN VECTOR-VAR STDEVCOV DIR-MEAN

2 3	0.1757E+00	0.1296E+01	0.1138E+01	0.7801E-01	115.38
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FILE: HEADS SITE12 278207/A 024 MORNING ID: 278207 START-CYCLE: 1. STOP-CYCLE: 213. NUMBER OF VALUES: 213.

TIME RANGE: 28. 7.1981 19:30: 0: 0/25. 2.1982 19:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 4692 m

VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1 TEMP	[C/0.C]	0.2452E+01	0.2484E+01	0.2459E+01	0.1539E-03	0.5046E-05	0.2246E-02	-0.1372E+01	0.4153E+01
2 UC	[CM/S]	-0.2131E+01	0.3211E+01	0.3679E+00	0.8998E-01	0.1725E+01	0.1313E+01	0.2657E+00	0.2243E+01
3 VC	[CM/S]	-0.2543E+01	0.2812E+01	-0.2246E+00	0.8797E-01	0.1649E+01	0.1284E+01	0.1056E+00	0.2113E+01

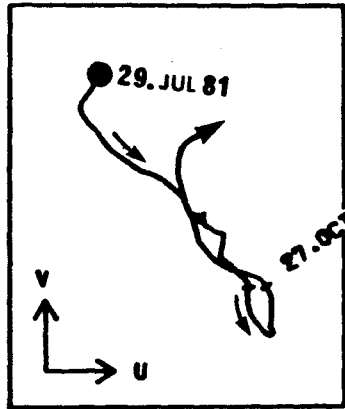
VARIABLES

COVAR	CORCOEFF	VARCORR	STDEVCOV	STERRCOV		
1 TEMP	2 UC	0.8982E-03	0.2183E+00	0.1043E+02	0.3229E+01	0.2213E+00
1 TEMP	3 VC	0.7803E-03	0.2740E+00	0.8965E+01	0.3157E+01	0.2163E+00
2 UC	3 VC	-0.2939E+00	-0.1743E+00	0.3224E+01	0.1795E+01	0.1230E+00

PAIR VECTOR-MEAN VECTOR-VAR STDEVCOV DIR-MEAN

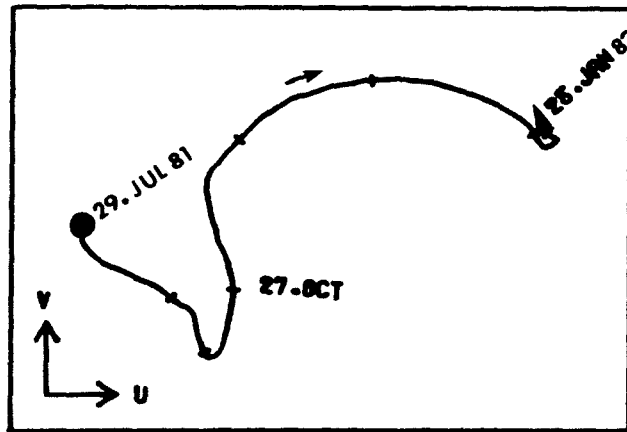
2 3	0.4310E+00	0.1687E+01	0.1289E+01	0.8898E-01	121.41
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SITE 12 203 N



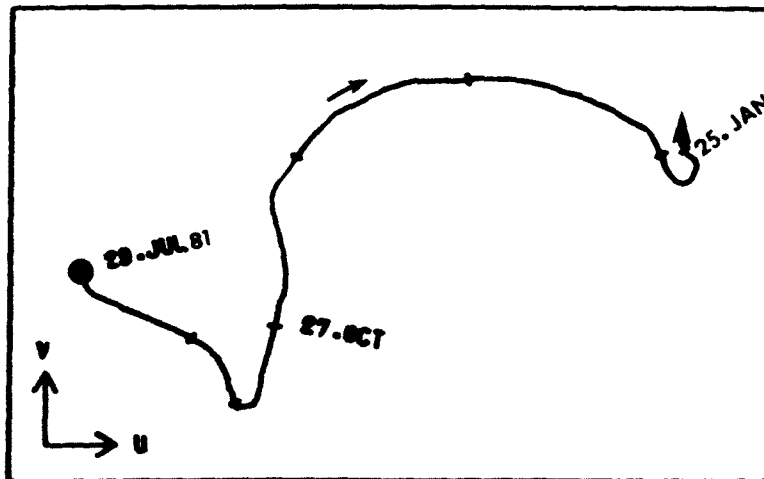
100 KM 1 CM/S

SITE 12 524 N



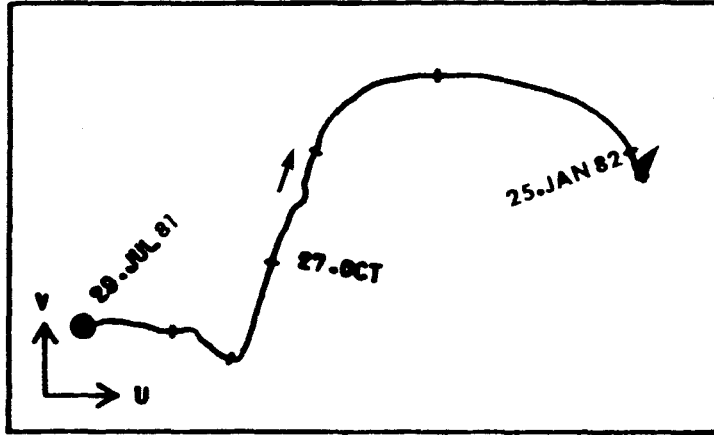
100 KM 3 CM/S

SITE 12 705 N



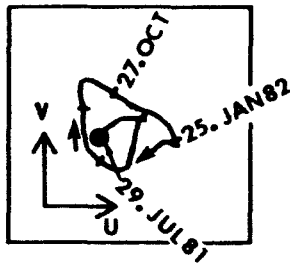
100 KM 5 CM/S

SITE 12 1130 M



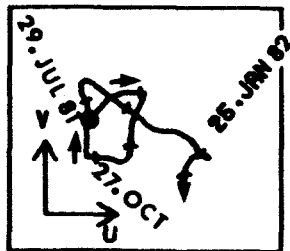
100 KM 3 CM/S

SITE 12 2874 M

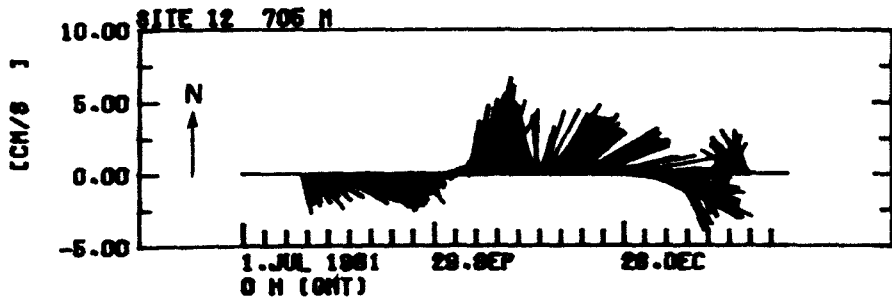
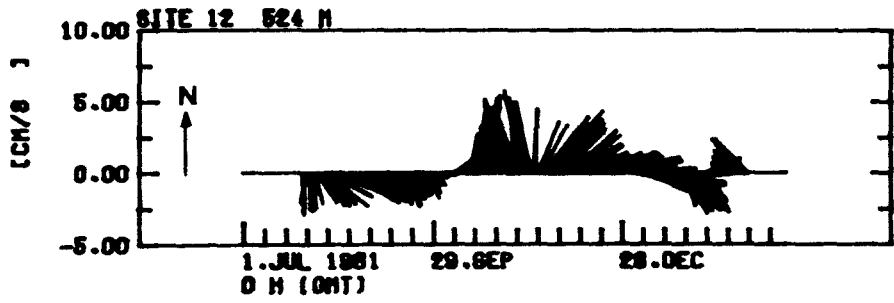
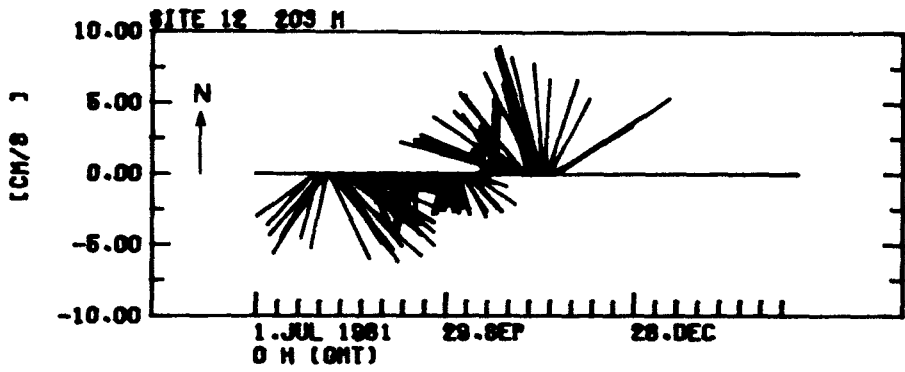


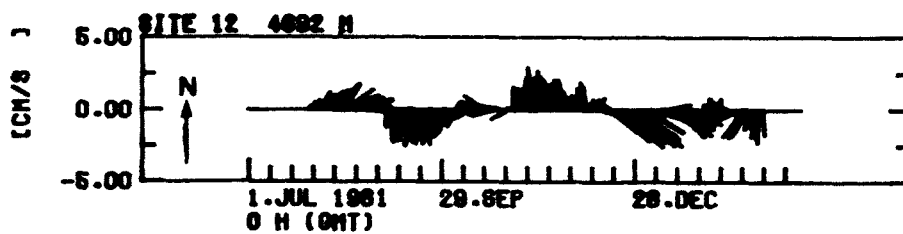
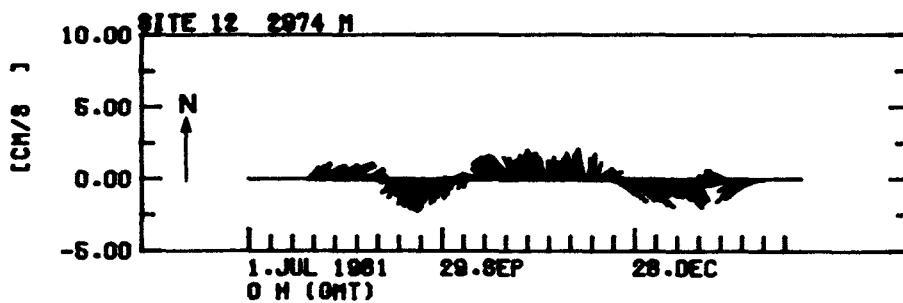
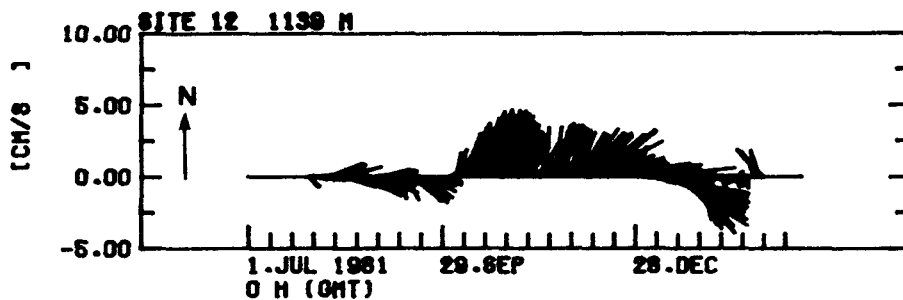
50 KM 1 CM/S

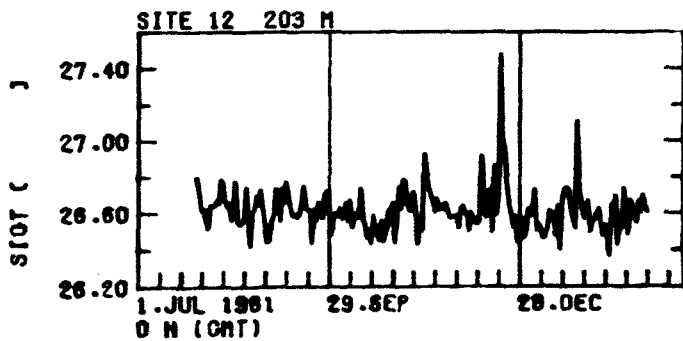
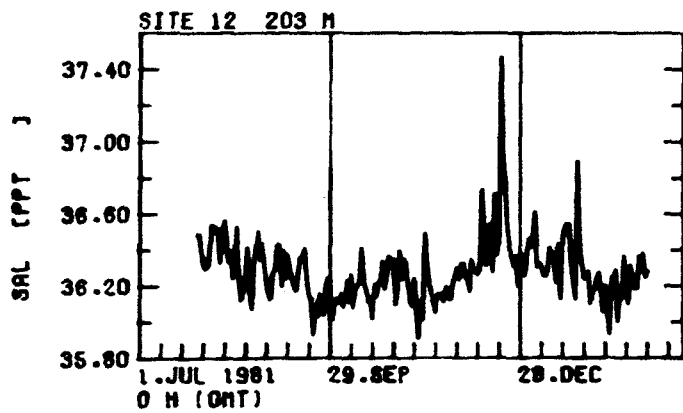
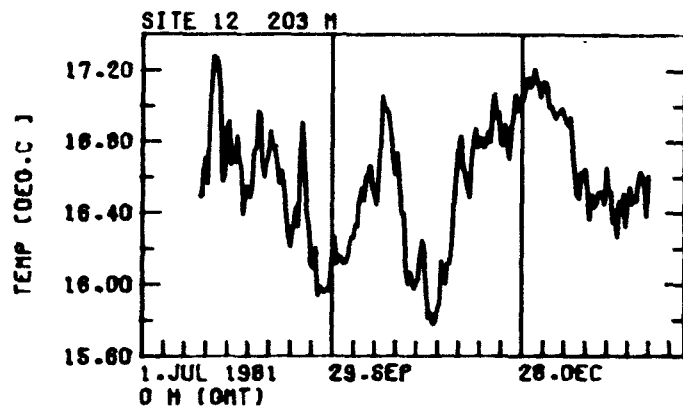
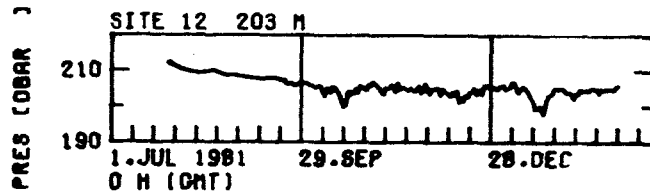
SITE 12 4692 M

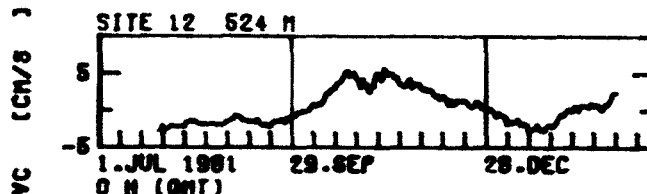
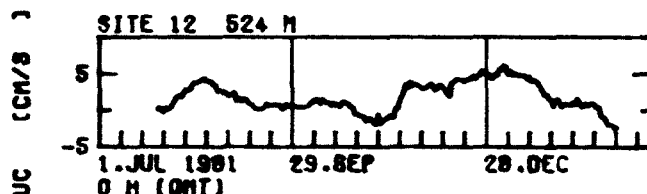
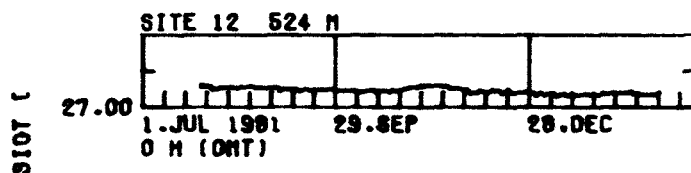
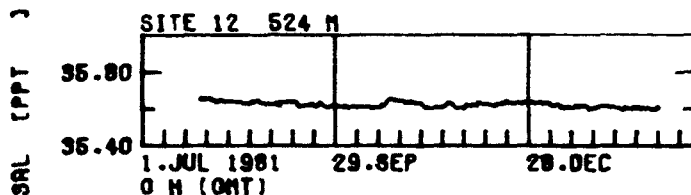
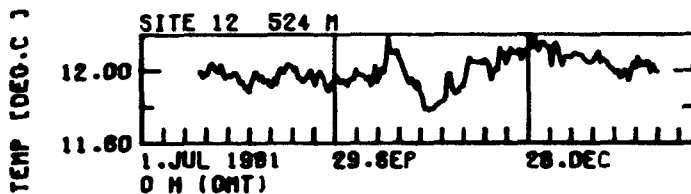
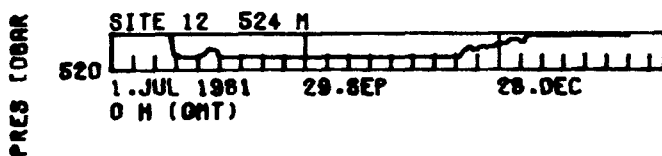
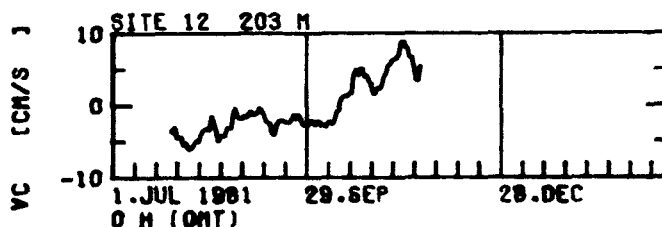
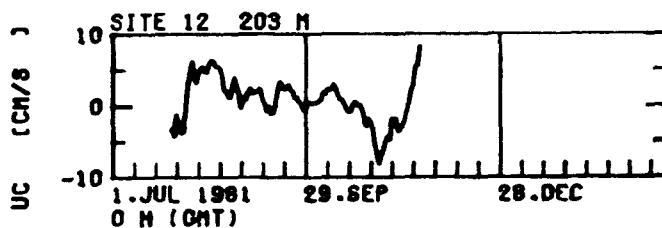


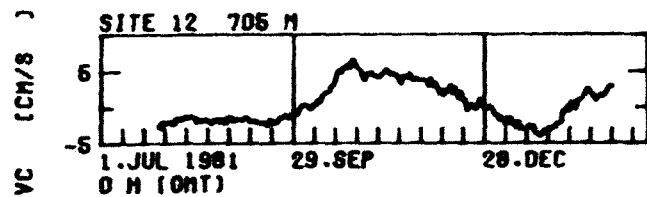
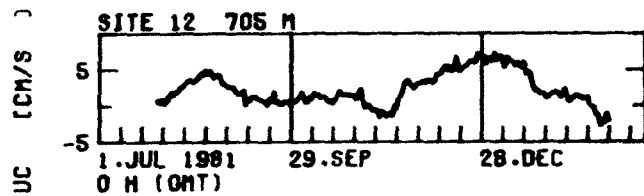
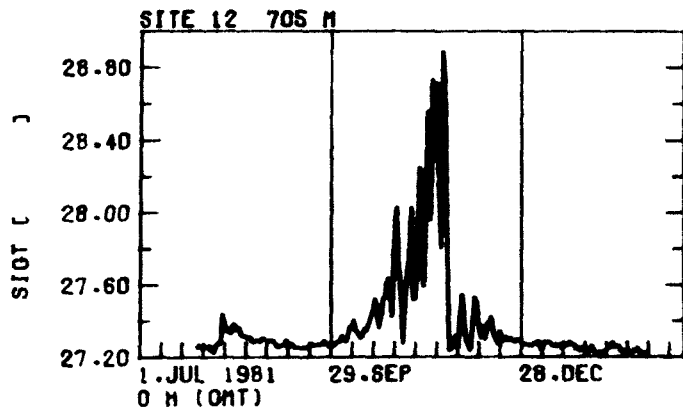
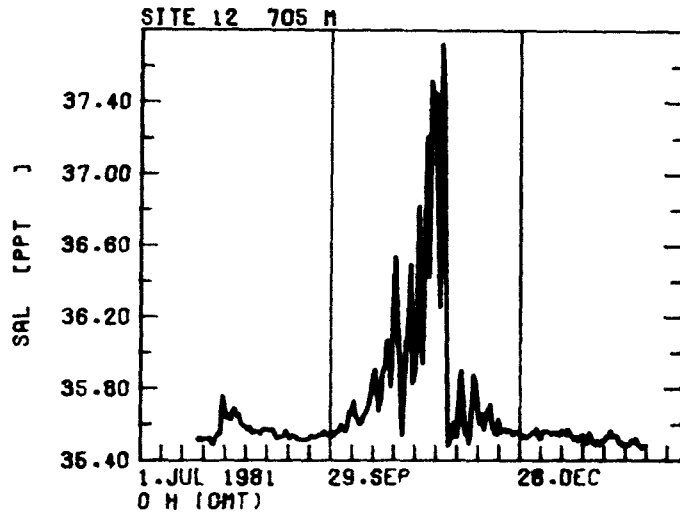
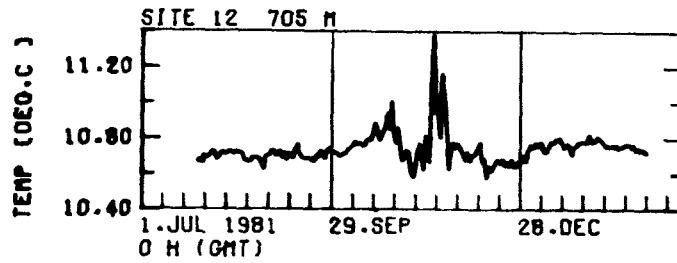
50 KM 1 CM/S

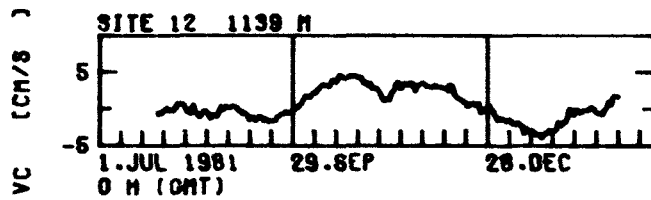
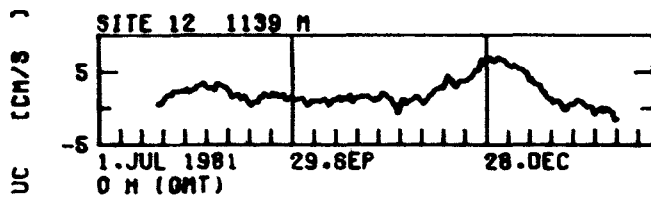
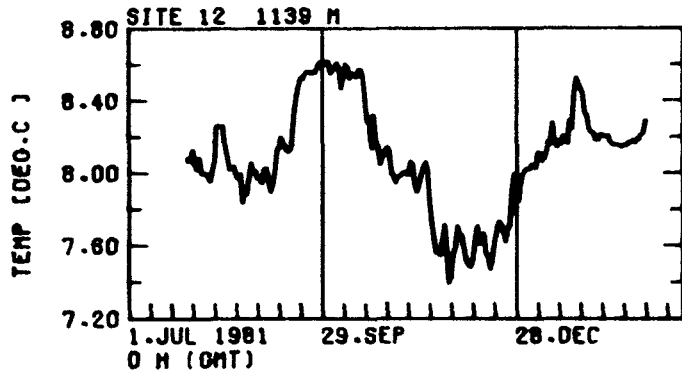
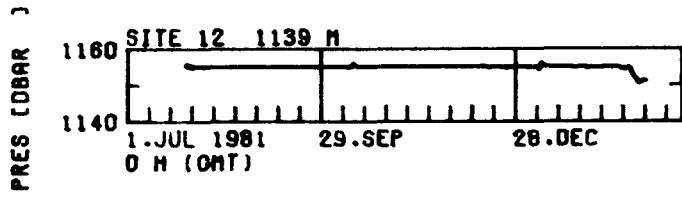


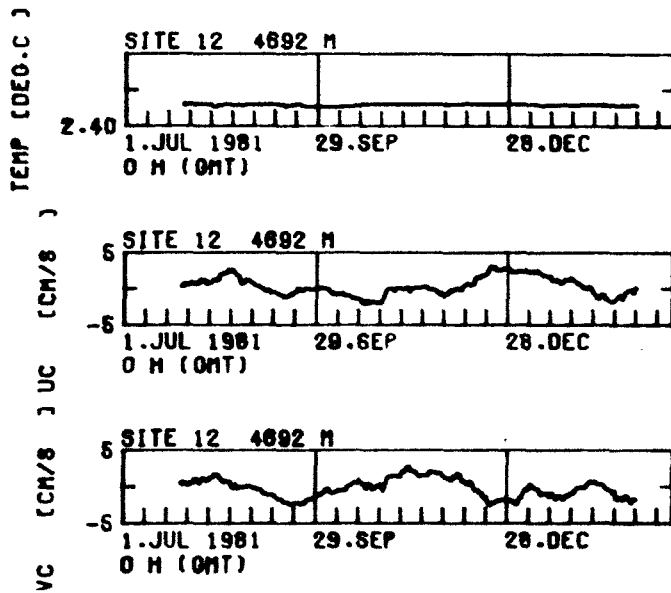
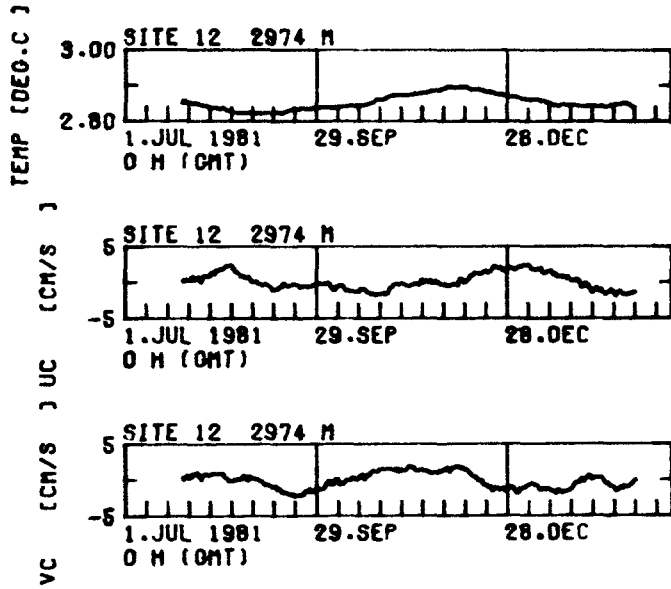












SECTIONS

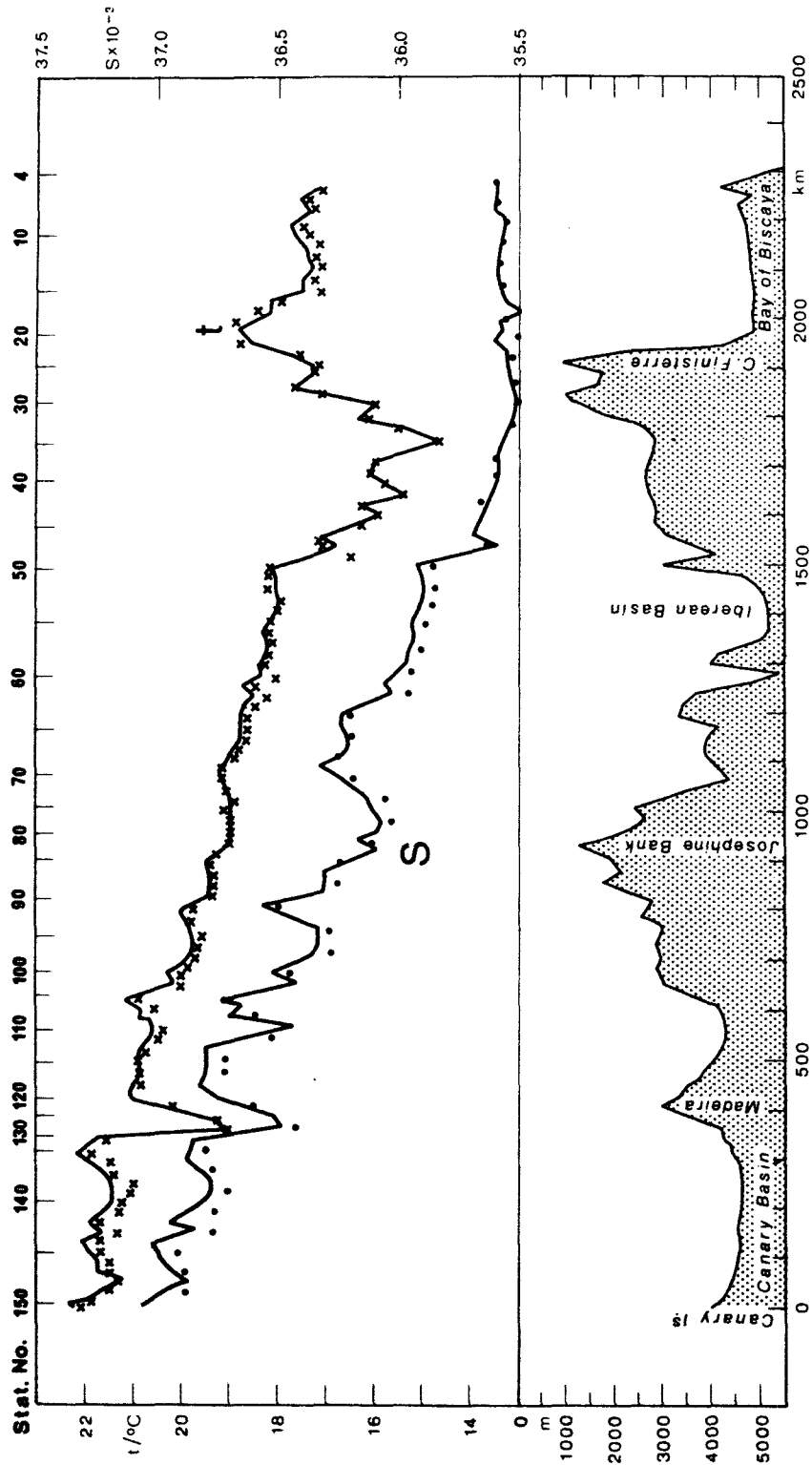


FIG. 51 TEMPERATURE AND SALINITY DISTRIBUTION AT THE SEA SURFACE (TOP) ON A SECTION CANARY ISLAND (LEFT) - BAY OF BISCAY (RIGHT). CROSSES AND DOTS INDICATE REFERENCE VALUES OBTAINED BY BUCKET TEMPERATURES AND SELECTED SALINOMETER CHECK VALUES. THE BATHYMETRIC PROFILE IS DEPICTED AT THE BOTTOM OF THE GRAPH.

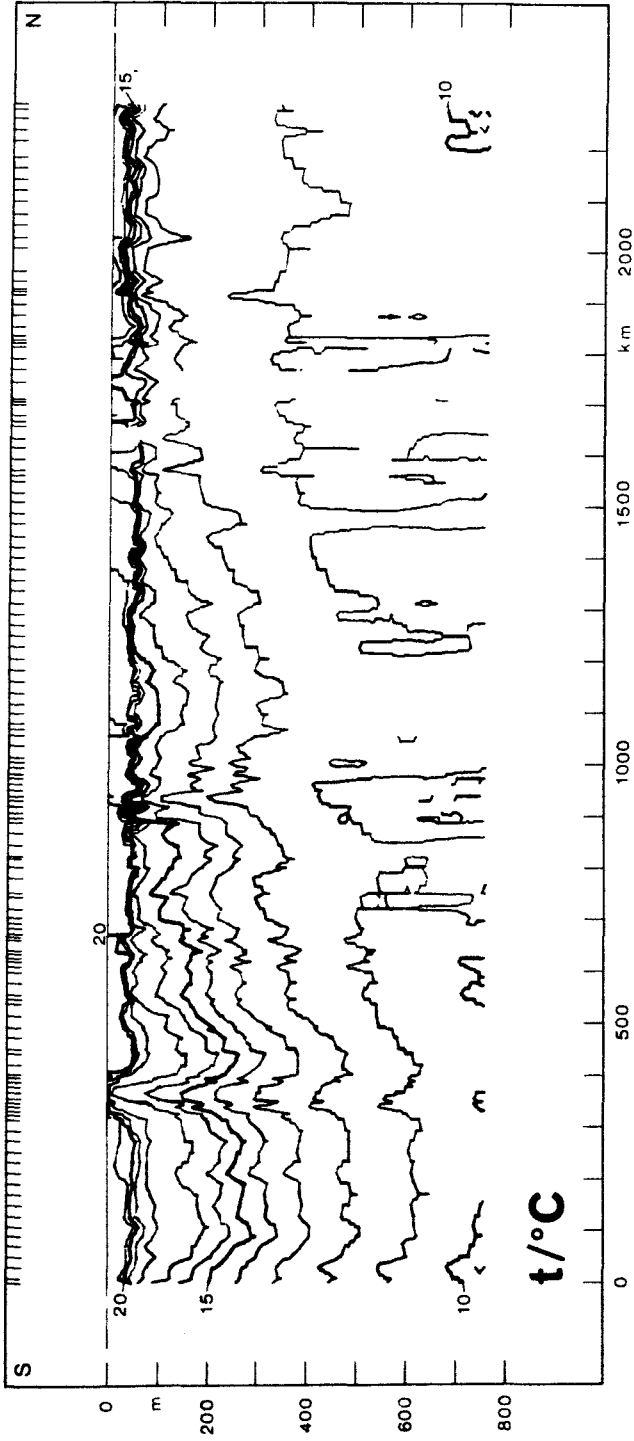


FIG. S2 VERTICAL TEMPERATURE DISTRIBUTION ON A XBT-SECTION, SIMULTANEOUSLY COLLECTED WITH SURFACE DATA IN FIG. S1. FOR DETAILS SEE TRACK LINE. DATA WERE GATHERED DURING METEOR-CRUISE 57/I IN JULY 1981.

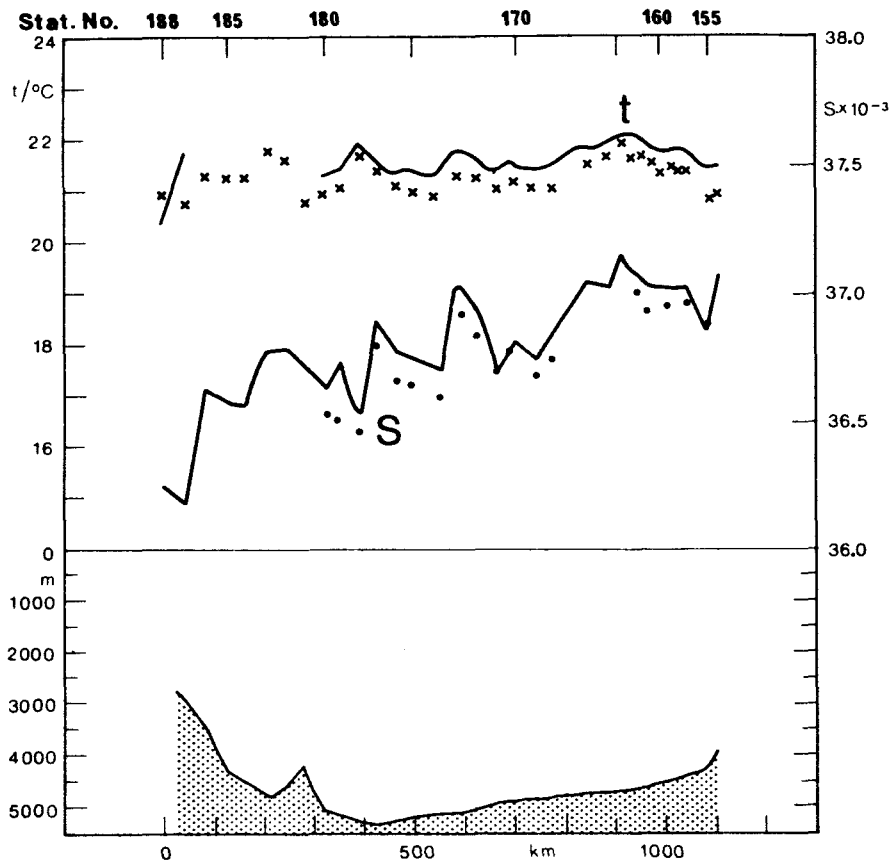
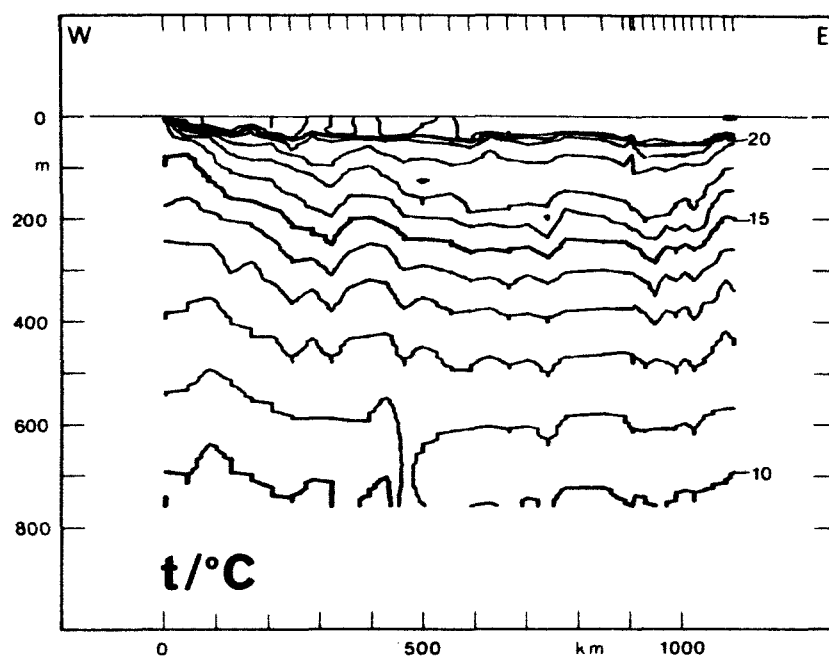


FIG. S3 TEMPERATURE AND SALINITY DISTRIBUTION AND BOTTOM TOPOGRAPHY ON THE AZORES (LEFT) - CANARY ISLAND (RIGHT) SECTION (TOP) TOGETHER WITH THE XBT INFERRED TEMPERATURE DISTRIBUTION (BOTTOM). FOR FURTHER EXPLANATIONS SEE TRACK LINE CHART AND FIG. S1 AND S2. NOTE THAT MOORING POSITIONS N11, N1 AND N12 WERE EQUALLY DISTRIBUTED ON THIS CROSS SECTION (JULY 1981, METEOR 57/1).



List of symbols

Press, P	Pressure (dbar)
Temp, T, t	Temperature (C)
Sal, S	Salinity (10^{-3})
Sigt	Density parameter (kg m^{-3})
UC, VC	East and North component of velocity vector (cm/s)
u_+ , u_-	rotary components of velocity vector (cm/s), clock/anticlockwise
$ \vec{u} $	current speed (cm/s)
ϕ	current direction (TC north)

Appendix 1: Lanczos Taper:

The following filter weights have been used for low pass filtering:

$$w(i) = \frac{m}{\pi(i-1)} \sin\left(\frac{\pi(i-1)}{m}\right) \quad i = 2, 3, \dots, m; \quad m = 67$$

Appendix 2: Rotary components

According to Willebrand et al. (1977) rotary components u_+ and u_- may be defined by

$$u_{\pm} = \sqrt{1/2} (uc \pm i vc)$$

with uc and vc as East- and North-components of the velocity

vector and $i = \sqrt{-1}$. The autospectra E_+ and E_- are related to the autospectra E_{uu} and E_{vv} and the quadrature spectrum Q_{uv} of the Cartesian components uc , vc by

$$E_{\pm}(\omega) = 1/2 (E_{uu}(\omega) + E_{vv}(\omega) \pm 2 Q_{uv}(\omega)); \quad \omega > 0$$

Appendix 3: Statistical Formulas

```

C C THE FOLLOWING QUANTITIES ARE COMPUTED:
C C (LEAST SQUARES PROGRAM PRINTOUT)
C C 1) FOR EACH VARIABLE OF THE SUBSET
C C
C C MAXIMUM      I MAXIMUM      KOVARIANZ
C C MINIMUM      I MINIMUM      KORRELATIONSKOEFFIZIENT
C C MEAN         I MEAN         VARIANZ DER KORRELATION
C C VARIANCE     I VARIANCE     STANDARDABWEICHUNG DER KORRELATION
C C STDDEV      I STDDEV      STANDARDABWEICHUNG DER VARIANZ
C C SKWERRM     I SKWERRM     STANDARD ERROR OF COVARIANCE
C C SKEWNESS    I SKEWNESS    MITTL. FEHLER DER KOVARIANZ
C C KURTOSIS    I KURTOSIS    DEFINITIONS UND FORMELN:
C C              I              (X,Y) PAIR OF VARIABLES
C C              I              N = NUMBER OF DATA POINTS OF SAMPLE
C C              I              SX = SUM OVER ALL VALUES OF SERIES X
C C              I              SXY = SUM OVER ALL VALUES OF SERIES X*Y
C C              I              SXX = SUM OVER ALL VALUES OF SERIES X*X
C C              I              SXY = SUM OVER ALL VALUES OF SERIES X*Y*Y
C C              I              MX = SX/N
C C              I              MY = SY/N
C C              I              DX = SQRT(VX)
C C              I              MYMIN I MIN (X(I)), I=1..N
C C              I              MYMAX I MAX (X(I)), I=1..N
C C              I              MEAN  I MX
C C              I              VAR   I VX
C C              I              STDDEV I DX
C C              I              SKWERRM I SQRT(VX/N)
C C              I              SKEWNESS I (SXXX/N-3*MX*SXX/N-2*(MX**3))/(DX**3)
C C              I              KURTOSIS I ((SXXX-4*MX*SXX+6*MX**2*SXX)/N-3*(MX**4))/(VX**2)
C C              I              VECTOR-MEAN I SQRT(MX**2+MY**2)
C C              I              VECTOR-VAR. I VV=(VX+YY)/2
C C              I              STDDEVMEAN I SQRT(VV)
C C              I              VECMEANRR I SORT(VV/N)
C C              I              COVAR  I CXY=(SXY/N-MX*MY)
C C              I              CORCOEFF I CXY/(SQRT(VX*YY))
C C              I              VARCORR I VC=(SXX*Y-N*SX*SY)/(N*MY)
C C              I              STDDEVCOV I SQRT(VC)
C C              I              SKWERRMCOV I SQRT(VC/N)
C C
C C 2) IN CASE THE SUBSET CONTAINS PAIRS (UIC , VC , VC')
C C I.E. PAIRS OF INSTANTANEOUS COMPONENTS OF HORIZONTAL CURRENT:
C C
C C VECTOR-MEAN I VECTOR-MEAN      VEKTOR-MITTEL
C C VECTOR-VAR. I VECTOR VARIANCE  VEKTOR-VARIANZ
C C              I MEASURE OF TOTAL KINETIC ENERGY
C C STDDEVMEAN I STANDARD DEVIATION OF VECTOR MEAN
C C              I STAND. ABWEICHUNG VEKTOR MITTEL
C C              I (A MEASURE OF RMS AMPLITUDE)
C C VECMEANRR  I STANDARD ERROR OF VECTOR MEAN
C C              I MITTL. FEHLER DES VEKTORMITTELS
C C DIR-MEAN   I MEAN DIRECTION OF VECTOR, MITTLERE RICHTUNG DES VEKTORS
    
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DATA INDEX

A. Moored data

Mooring identification	Sampling depth	At sampling rate		Low pass filtered daily means				
		Stat.	Spec.	Time series plots				
				Stat.	PVD	Sticks	others	parameters
276100 N1 Oct 80-Jul81	196	16	19	27	31	34	37,38	P,T,S, σ_t ,u,v
	197-242	16	20	27	-	-	39	T
	499	16	21	28	32	34	40	T,S, σ_t ,u,v
	501-546	17	22	28	-	-	41	T
	703	17	23	29	32	35	41	P,T,u,v,
	1004	17	24	29	33	35	42	T,u,v,
	1106	18	25	30	33	36	43	T,u,v
1608	18	26	30	33	36	44	T,u,v	
276200 N1 Jul81-Mar82	245	48	52	60	65	68	71,72	P,T,S, σ_t ,u,v
	252-293	48	53	60	-	-	73	T
	550	49	-	61	-	68	74	T,S, σ_t ,u,v
	553-598	49	54	61	-	-	75	T,
	755	49	55	62	66	69	75,76	P,T,u,v
	1160	50	56	62	66	69	77	T,u,v
	1665	50	57	63	67	70	78	T,u,v
1760	50	58	63	67	70	79	T,u,v	
3020	51	59	64	67	70	79	T,u,v	
277200 N11 Jul81-Mar82	255	84	87	94	98	101	103,104	P,T,S, σ_t ,u,v
	549	84	88	95	99	101	105,106	P,T,S, σ_t ,u,v
	808	85	89	95	-	-	107	P,T
	1192	85	90	96	99	102	108,109	P,T,u,v
	1663	85	91	96	100	102	110	P,T,u,v
	3029	86	92	97	100	102	111	T,u,v
	4722	86	93	97	100	102	111	T,u,v
278200 N12 Jul81-Mar82	203	116	119	125	129	131	133,134	P,T,S, σ_t ,u,v
	524	116	120	126	129	131	134	P,T,S, σ_t ,u,v
	705	117	121	127	129	131	135	P,S, σ_t ,u,v
	1139	117	122	127	130	132	136	P,T,u,v
	1590	118	-	-	-	-	-	-
	2974	118	123	128	130	132	137	T,u,v
	4692	118	124	128	130	132	137	T,u,v

Abbreviations: Stat. Statistics
 Spec. Spectra
 PVD Progressive Vector Diagramme
 Sticks Vector Time Series

B: Sections: pages 140-142