

DUPLICATE ALSO



THIRTY FOURTH QUARTERLY REPORT

ON DRIFTING BUOYS

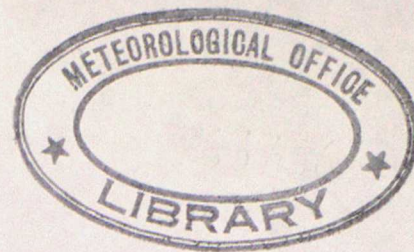
IN THE NORTH ATLANTIC

25-60 deg N, 60 deg W to 10 deg E

APRIL TO JUNE 1995

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Produced by

P.Ellis
Meteorological Office,
Met O (OPR) 3a, Room 129,
London Road,
Bracknell,
Berkshire, RG12 2SZ,
United Kingdom.

Tel - 01344 - 854446

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This report has not been published.
Permission to quote from it should be obtained from the
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1. INTRODUCTION

Drifting buoys operated by European countries, the United States, Canada and E.G.O.S. (European Group on Ocean Stations) provide valuable meteorological data in the North Atlantic Ocean. This report is a summary of the performance of these buoys giving information on the number of buoys operating, the accuracy of reported locations and data quality, timeliness and availability. It is compiled by looking at observations received in the Met. Office Meteorological Data Bank (Met.D.B.) and by comparisons of observations with background fields from the Met. Office forecast model. Additional information on buoy operations and data quality is extracted from E.G.O.S. Technical Secretariat reports.

2. SUMMARY OF PRESSURE PERFORMANCE

(a) Buoy deployments, etc.

SPECIAL NOTE :

Due to a data storage problem, pressure data from buoys 44764, 62805 and 65562 are missing for the first few days of the report period (see graphs in Annex B).

North of 50deg N

There were 16 buoys reporting pressure at the beginning of the period and 16 at the end. (NB. This 16 at the beginning includes buoy 25565 which, although not included in the last report was reporting on the first day of this report period. Buoy 65592 stopped reporting on the last day of the last quarter and is not included. Buoy 44624 which had a mean position north of 50 degN last quarter has drifted south this quarter and is included in the statistics below. The 16 at the end excludes buoy 62805 which ceased reporting pressure on 2/5 but continued to report other elements throughout the period.) 11 new buoys were deployed during the period (44613, 44742, 44770, 62673, 62675, 64575, 64576, 64577, 64588, 64589 and 65571). 10 buoys ceased reporting (44614, 44766, 44770, 44776, 64528, 64529, 64546, 64588, 64589 and 65571).

South of 50deg N

There were 9 buoys reporting pressure at the beginning of the period and 8 at the end. 3 new buoys were deployed (44777, 44779 and 62511). 4 buoys ceased reporting (61542, 61543, 61544, and 62515).

(b) Location Accuracy

The location accuracy was an improvement on last quarter with 35 out of 39 of the buoys reporting having a '% of observations with acceptable positions' greater than 95% (compared to 34 out of 40 last quarter). There were 11 gross errors in location during the quarter, compared with 6 last quarter (see under Data Quality).

(c) Data timeliness

(see note 9 of section 5 for definition of terms.)

Timeliness	Last quarter.	This quarter
Very Good	12	13
Good	7	7
Satisfactory	6	6
Poor	4	--
Very poor	11	13
Total no. of buoys	40	39

(d) Data availability

(see note 9 of section 5 for definition of terms.)

Availability	South of 50 deg N		North of 50 deg N	
	Previous Quarter	Present Quarter	Previous Quarter	Present Quarter
Very Good	--	1	13	16
Good	--	--	8	4
Satisfactory	8	7	1	3
Poor	5	4	5	3
Very Poor	--	--	--	1

The total number of buoy days in the quarter was 2,563 [obtained by summing the number of reporting days for each buoy] (last quarter the total was 2,233) and the number of 'buoy hours' with at least one observation was 41,100 (compared with 30,993 last quarter). Thus, the mean number of hours per day, for days with at least one observation (averaged over all buoys operating in the area) was 16.04 (last quarter the figure was 13.88).

(e) Data Quality - Pressure

Revised RMS Differences

The technique used to assess the quality of pressure data in this report is based on the Revised RMS differences between the observations and the background field from the Global Forecast Model (see note 8 in Explanatory Notes). For buoys south of 50 degN the Revised RMS differences should be less than 2.0 hPa and for buoys north of 50 degN they should be below 3.0 hPa. The buoys whose revised RMS difference were found to lie outside these limits have had their performance described as 'suspect' and are included in the section below. Examination of the time-series plots (see Annex B) indicates the performance of these buoys:-

- 44770 - This buoy only reported 7 pressure observations during the period, all of which showed large biases when compared with the background field.
- 62805 - Pressure data were totally erratic from the beginning of the period until the element ceased to be reported on 2/5.

Biases

4 buoys (excluding those mentioned in the previous section) showed pressure biases greater than 0.5 hPa (pressure biases are determined using the mean value for unflagged data from Annex A). Those buoys whose pressure data showed a bias of greater than 0.5 hPa have also had their performance described as 'suspect'.

WMO No.	Position	Buoy bias (hPa)	Ship bias (hPa)	Period of reports
44616	S of SOBA	+0.7	-0.4	01/04 - 30/06
44726	SE of SOBA	+0.7	-0.4	01/04 - 30/06
64546	E of SOBA	-1.3	-0.9	01/04 - 19/04
64589	SOBA	+1.9	-0.4	13/04 - 18/05

The ship bias represents the mean pressure biases reported from ships within a radius of 500 nautical miles of the mean position of each buoy.

Gross errors

The observations which appear to lie outside the expected distribution - the 'gross' errors (see Time-series graphs) - have been ringed. (The erroneous observations which occurred during the life of buoys 44770 and 62805 have not been included in this section.) The observations have been individually examined to see whether the errors lie with the pressure, location or the background field. Out of 201 occasions the results are as follows -

ERROR	NUMBER LAST QUARTER	NUMBER THIS QUARTER	COLLECTING CENTRE
bg field	0	0	-----
location	4	4	Oslo
location	0	2	Sondre Stromfjord
location	0	5	Paris
location	2	0	Unknown
pressure	76	149	Oslo
pressure	15	3	Sondre Stromfjord
pressure	16	38	Paris
pressure	0	0	US Air Force
pressure	28	0	Unknown
Total no. of buoy hours	30,993	41,100	

During the quarter 190 gross pressure errors were transmitted as compared to 135 last quarter. The number of gross location errors from the Local User Terminals was similar to last quarter (11 compared to 6 last quarter).

(3) Air Temperatures and Sea Surface Temperatures

The following table shows the mean and standard deviation of observation minus background differences for air temperatures and sea surface temperatures. Figures in brackets are for the observations from voluntary observing ships within a radius of about 500 nautical miles of the mean position of each buoy.

(Note : The calculations below include gross errors. Therefore, in some instances, the figures may be slightly misleading.)

WMO No.	Air Temperature			Sea Surface Temperature		
	Mean	St. Dev	No. of Obs	Mean	St. Dev.	No. of Obs
25565	2.4(1.5)	2.0(1.7)	2038 (44)	----	----	----
44613	0.6(2.5)	2.2(1.1)	2104 (14)	0.1(0.5)	1.4(2.8)	1836 (217)
44614	13.1(0.6)	7.3(2.8)	1599 (1361)	1.5(0.1)	3.6(2.2)	2204 (1072)
44616	0.5(-0.1)	1.6(1.7)	4959 (77)	-0.2(0.0)	0.9(1.4)	4285 (48)
44624	0.7(0.9)	1.6(2.9)	4107 (1323)	-0.2(0.0)	0.9(5.1)	3748 (1006)
44726	0.8(1.0)	6.5(2.1)	4926 (564)	0.2(0.2)	1.7(7.8)	4554 (392)
44728	0.2(0.6)	1.6(1.5)	4669 (48)	0.1(0.1)	0.7(1.6)	4017 (30)
44742	6.0(1.4)	4.8(1.6)	3708 (18)	-0.1(0.4)	0.6(2.0)	4616 (5)
44764	0.2(0.6)	1.7(4.4)	4963 (289)	-0.4(-0.1)	0.6(1.9)	5041 (174)
44766	0.4(0.9)	1.0(2.7)	946 (1408)	-0.3(0.1)	0.7(5.2)	534 (1044)
44770	-18.6(0.5)	28.3(3.3)	6 (1666)	2.4(0.0)	2.8(4.5)	4 (1181)
44776	0.4(0.6)	1.3(2.9)	4091 (937)	0.3(0.0)	0.8(1.6)	3861 (750)
44777	---	---	---	0.2(0.0)	0.4(1.6)	355 (518)
44779	---	---	---	-0.3(0.1)	0.5(1.3)	360 (481)
44780	26.7(0.8)	5.0(2.5)	780 (1013)	-0.1(0.1)	0.7(5.9)	4681 (722)
61542	0.5(1.1)	2.0(3.1)	428 (1660)	0.5(0.0)	0.6(2.4)	489 (1278)
61543	0.7(1.3)	2.0(2.6)	566 (1201)	0.1(0.0)	0.6(2.6)	644 (929)
61544	0.2(1.4)	1.2(2.4)	311 (1021)	0.0(-0.2)	0.4(3.5)	369 (856)
62511	---	---	---	0.1(0.0)	1.8(4.8)	213 (1286)

Statistics of (ob-bg) differences for buoys reporting this
quarter and all ships within 500 nautical miles

WMO No.	Air Temperature			Sea Surface Temperature		
	Mean	St. Dev	No. of Obs	Mean	St. Dev.	No. of Obs
62515	---	---	---	-0.3(0.0)	0.2(5.0)	166 (1091)
62517	---	---	---	0.2(0.3)	0.4(6.8)	1875 (513)
62518	---	---	---	-0.3(0.0)	0.5(5.0)	1772 (1089)
62519	---	---	---	-0.5(0.2)	0.7(7.3)	1943 (441)
62524	11.4(0.3)	5.6(1.2)	1422 (461)	0.4(0.0)	0.5(1.3)	1737 (277)
62673	-0.7(1.1)	1.1(1.5)	1480 (99)	1.0(0.0)	0.4(2.3)	1459 (40)
62675	-0.3(1.1)	1.4(1.5)	1304 (154)	0.7(0.8)	0.4(7.2)	1281 (83)
62805	-2.4(1.2)	1.7(1.6)	4 (53)	-0.2(0.3)	0.5(2.9)	4919 (18)
64528	-0.1(0.5)	1.2(3.1)	1355 (846)	0.0(0.1)	1.5(1.8)	905 (639)
64529	0.0(0.7)	4.5(1.3)	2300 (24)	-0.1(-1.0)	1.1(1.9)	1361 (11)
64544	0.4(0.7)	1.0(1.6)	1116 (36)	0.2(0.2)	0.3(1.5)	1060 (20)
64546	---	---	---	0.2(-0.5)	1.0(2.0)	300 (44)
64575	-0.5(0.8)	1.4(1.5)	1591 (15)	1.0(-1.1)	0.4(2.0)	1561 (10)
64576	-0.3(0.4)	1.3(2.6)	1564 (43)	0.9(-0.5)	0.4(3.0)	1554 (24)
64577	-0.1(0.6)	1.2(1.7)	1470 (80)	1.2(-0.4)	0.5(1.8)	1512 (58)
64588	0.4(1.1)	1.3(1.5)	807 (51)	-0.2(1.0)	0.2(3.0)	806 (14)
64589	0.9(1.0)	2.0(1.7)	340 (10)	-0.3(0.1)	0.4(2.3)	377 (4)
65562	-1.4(0.6)	1.6(1.3)	4940 (28)	-0.4(-1.1)	0.7(1.7)	2986 (14)
65571	-14.1(0.5)	24.5(3.1)	1173 (952)	-0.1(0.1)	1.5(1.7)	426 (725)

Statistics of (ob-bg) differences for buoys reporting this
quarter and all ships within 500 nautical miles

WMO No.	Air Temperature			Sea Surface Temperature		
	Mean	St. Dev	No. of Obs	Mean	St. Dev.	No. of Obs
65581	0.5(0.5)	1.4(1.6)	4058 (19)	0.0(0.7)	0.6(2.2)	2157 (4)

Buoys 25565 (2.4), 44614 (13.1), 44742 (6.0), 44780 (26.7) and 62524 (11.4) all showed significant air temperature biases. Air temperature data from buoys 44770 and 62805 showed a bias of -18.6°C and -2.4°C respectively, but this was only using a limited number of reports. Data from buoy 65571 were of a satisfactory standard until 14/4 when there was a significant deterioration.

Buoys 62673 (1.0), 64575 (1.0) and 64577 (1.2) all showed significant sea surface temperature (SST) biases. 44770 (2.4) also showed a significant bias but only 4 SST observations were received from this buoy. Data from buoy 44614 were erratic until the element ceased to be reported on 15/5.

(4) Winds

The following table shows the mean and standard deviation of observation minus background differences for wind speed and direction. Figures in brackets are for the observations from voluntary observing ships within a radius of about 500 nautical miles of the mean position of each buoy (Note - it is not known what proportion of the ships' winds were measured rather than estimated visually using the Beaufort Scale). The statistics for this report can be compared with those for ships and the relative quality of the wind data from each buoy can be assessed.

WMO No.	Period	Wind Speed (kn)		Wind Direction (deg)		No. of Obs
		Mean	St. Dev.	Mean	St. Dev.	
44613	07/04-30/06	-1.4(2.7)	4.7(7.8)	26.0(-7.9)	22.8(20.7)	1867 (247)
44742	07/04-30/06	-5.3(0.2)	6.0(7.0)	26.7(-8.3)	16.8(42.7)	3246 (18)
44764	01/04-30/06	-5.8(1.7)	5.3(5.3)	-8.8(-9.1)	24.0(31.3)	2709 (258)
44776	01/04-07/06	-1.4(1.9)	4.1(5.0)	-8.1(-5.3)	71.9(29.9)	2785 (797)
62518	01/04-30/06	0.2(1.3)	3.0(5.3)	0.5(-4.1)	15.8(29.2)	1930 (1257)
62519	01/04-30/06	0.0(0.3)	5.6(5.3)	-7.1(-3.2)	18.7(29.9)	1802 (592)
64588	13/04-12/06	5.9(-2.2)	4.7(5.9)	59.0(-14.2)	113.0(48.3)	9 (46)
64589	13/04-18/05	-4.1(-2.1)	1.4(3.3)	127.2(-9.1)	6.9(41.2)	6 (10)

Statistics of (ob-bg) differences for buoys reporting this quarter and all ships within 500 nautical miles

Buoys 44742 (-5.3), 44764 (-5.8), 64588 (5.9) and 64589 (-4.1) all showed significant wind speed biases. However, only 9 observations were received from buoy 64588 and 6 observations from buoy 64589.

Buoys 44613 (26.0), 44742 (26.7), 64588 (59.0) and 64589 (127.2) all showed a significant wind direction bias. Again however, only a limited number of observations were received from buoys 64588 and 64589. Buoy 44776 (71.9) showed a larger than normal standard deviation of wind direction.

5 EXPLANATORY NOTES:

1. Buoy owners are as follows,

CA	- Canada	P	- Portugal
F	- France	UK	- United Kingdom
D	- Germany	US	- United States
N	- Norway	IC	- Iceland
NL	- Netherlands	EG	- EGOS
IR	- Ireland	??	- unknown

2. Number of observations received is the number received at Bracknell in the Meteorological Data Bank (Met.DB). If identical reports are received which have originated at different Collecting Centres, the earliest one received at Bracknell is stored in the Met.DB.

3. An observation with valid Time and Date is one that contains no coding errors in the Date/Time group.

4. An acceptable position for an observation is within a distance d of the last acceptable position where $d=vt$ and,

$$v = \text{maximum drift speed} = 1/4 \text{ knot}$$
$$t = \text{time between observations.}$$

5. The percentage of elements present is calculated from the total number of observations received.

6. The delay is (Time of Receipt at Bracknell) - (Time of Observation).

7. The mean number of observations per day is calculated from the total number of observations received divided by the number of days in the period. It therefore includes 'quasi-identical' observations, i.e. those made within a few minutes of one another. For this reason the mean number of hours per day with at least one observation and the % of hour periods without an observation has been included, where an 'hour period' is defined as the period from HH-30 to HH+29 minutes.

8. Mean (OB-BG) is the mean value of (Observation-Background) Pressure, where the Background is the 6-hour forecast from the Global Forecast Model. RMS (OB-BG) is the Root Mean Square value of (Observation-Background) Pressure differences.

Unflagged data are those data used in model analyses.

Flagged data (i.e. unused observations) are those observations of suspect quality and all observations reported by a buoy at a frequency greater than 5 times every 6 hours, with accepted observations being at least one hour apart. Thus, those buoys which report most frequently have a higher percentage of flagged data.

The Mean calculated over Unflagged Data gives an indication of the instrument bias, since any gross errors have been excluded from the calculation.

The Revised RMS is based on all data except for the few that contain gross errors (as indicated on the time-series graphs - see Annex B).

9. The performance categories are defined in the table below.

Performance	Availability (mean no. of obs/day)	Timeliness (median delay in mins)
Very Good	> 35	< 60
Good	25 - 35	60 - 119
Satisfactory	15 - 24	120 - 179
Poor	5 - 14	180 - 239
Very Poor	< 5	> 240

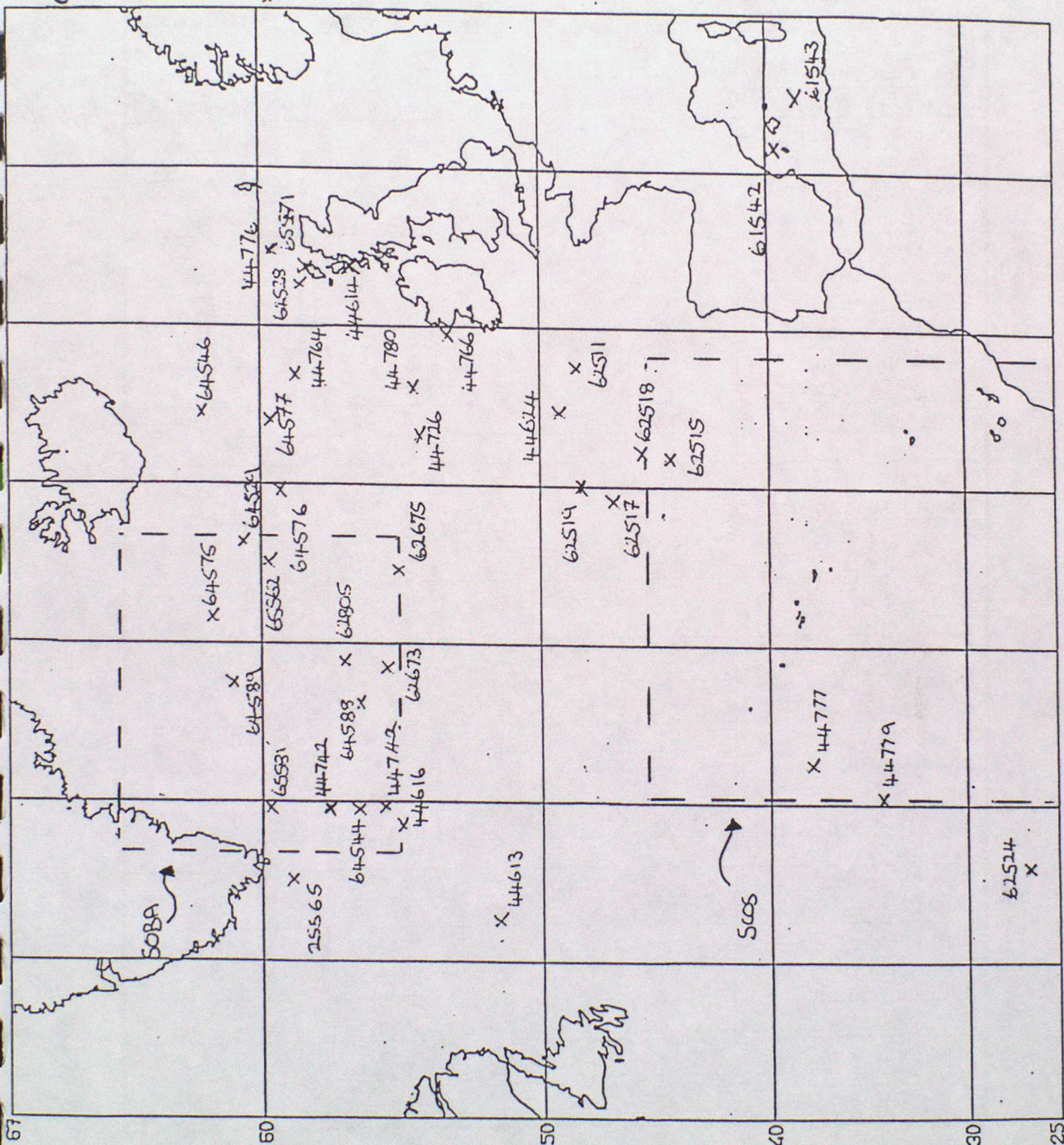
(N.B. WMO requirements state the need for only 4 observations per day from marine stations.)

The pressure quality is assessed from the Revised RMS and the Mean (for unflagged data).

Performance	Pressure Quality (in hPa)			
	North of 50 degN		South of 50 degN	
	RMS	MEAN	RMS	MEAN
Acceptable	< 3.0	< 0.5	< 2.0	< 0.5
Suspect	> 3.0	> 0.5	> 2.0	> 0.5

MEAN POSITION
OF BUOYS DURING
PERIOD APRIL TO
JUNE 1995

6.



ANNEX A - TABLE OF STATISTICS

Wmo No./ Country ¹	25565/UK	44613/UK	44614/UK
Argos Id No.	1639	????	6294
Period within area	01/04-30/06	07/04-30/06	01/04-15/05
Area	W of SOBA	SW of SOBA	E of SOBA
Mean Latitude	59.1	51.5	56.9
Mean Longitude	-44.7	-47.5	-5.9
No. of obs received ²	2081	2076	2019
% of obs with valid Time and Dates	100.0	100.0	100.0
% of obs with acceptable Positions ⁴	100.0	81.8	99.7
% of Presents			
Pressure	92.7	99.7	99.5
P. Tendency	89.9	93.0	96.8
Air Temperature	92.7	99.8	71.0
Wind Speed/Dir.	0.0/0.0	95.5/96.5	0.0/0.0
Sea-surface temp.	0.0	99.8	99.5
Median delay (min) ⁶	27.0	25.0	20.0
Number of days	91.0	85.0	45.0
Mean no. of obs/day	22.9	24.4	44.9
No. of hours with obs	1472.0	1191.0	737.0
Mean no. of hours/day with obs	16.2	14.0	16.4
% of hour periods without an ob ⁷	32.5	41.7	31.7
Mean (Ob-Bg)	-0.3	-0.2	0.1
RMS (Ob-Bg)	1.5	1.3	1.1
unflagged data			
Mean (Ob-Bg)	-0.3	-0.2	0.2
RMS (Ob-Bg)	1.6	1.7	1.3
all data			
Revised RMS (Ob-Bg) ⁸	1.6	1.6	1.1
% of data flagged ⁸	40.0	51.0	70.0
Operating at end of period	YES	YES	NO
Performance ⁹			
Availability	Satisfactory	Satisfactory	Very Good
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Very Good	Very Good	Very Good
Comments			

Wmo No./ Country ¹	44616/UK	44624/UK	44726/UK
Argos Id No.	3318	6292	6296
Period within area	01/04-30/06	01/04-30/06	01/04-30/06
Area	S of SOBA	N of SCOS	SE of SOBA
Mean Latitude	55.0	49.2	54.3
Mean Longitude	-41.6	-15.2	-17.1
No. of obs received ²	4729	3896	4822
% of obs with valid Time and Dates ³	100.0	100.0	100.0
% of obs with acceptable Positions ⁴	99.9	99.7	99.2
% of Presents			
Pressure	99.3	99.1	99.1
P. Tendency	94.8	95.4	95.9
Air Temperature	99.2	98.9	99.0
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface temp.	99.3	99.4	99.1
Median delay (min) ⁶	16.0	132.0	111.0
Number of days	91.0	91.0	91.0
Mean no. of obs/day	52.0	42.8	53.0
No. of hours with obs	1679.0	1551.0	1693.0
Mean no. of hours/day with obs	18.5	17.0	18.6
% of hour periods without an ob ⁷	22.9	29.2	22.5
Mean (Ob-Bg)	0.7	0.0	0.7
RMS (Ob-Bg) unflagged datas	1.7	1.0	1.3
Mean (Ob-bg)	0.7	-0.1	0.7
RMS (Ob-Bg) all datas	2.6	3.6	3.6
Revised RMS (Ob-Bg) ⁸	1.7	1.0	1.4
% of data flagged ⁸	71.0	65.0	70.0
Operating at end of period	YES	YES	YES
Performances ⁹			
Availability	Very Good	Very Good	Very Good
Pressure Quality	Suspect	Acceptable	Suspect
Timeliness	Very Good	Satisfactory	Good
Comments			

Wmo No./ Country ¹	44728/UK	44742/UK	44764/UK
Argos Id No.	3024	2953	6306
Period within area	01/04-30/06	07/04-30/06	01/04-30/06
Area	SOBA	SOBA	E of SOBA
Mean Latitude	55.6	57.4	59.0
Mean Longitude	-40.5	-40.5	-13.0
No. of obs received ²	4472	5305	5274
% of obs with valid Time and Dates	100.0	100.0	100.0
% of obs with acceptable Positions ⁴	99.8	99.6	99.8
% of Presents			
Pressure	98.7	99.4	99.2
P. Tendency	94.3	95.7	95.8
Air Temperature	98.8	75.8	99.2
Wind Speed/Dir.	0.0/0.0	94.1/86.1	70.0/70.0
Sea-surface temp.	99.0	99.4	99.3
Median delay (min) ⁶	78.0	16.0	18.0
Number of days	91.0	85.0	91.0
Mean no. of obs/day	49.1	62.4	58.0
No. of hours with obs	1643.0	1717.0	1783.0
Mean no. of hours/day with obs	18.1	20.2	19.6
% of hour periods without an ob ⁷	24.6	15.8	18.3
Mean (Ob-Bg)	0.0	0.0	0.3
RMS (Ob-Bg) unflagged data	1.4	1.3	1.2
Mean (Ob-bg)	-0.1	-0.3	0.2
RMS (Ob-Bg) all data	4.7	1.5	2.0
Revised RMS (Ob-Bg) ⁸	1.5	1.1	1.1
% of data flagged ⁸	69.0	74.0	73.0
Operating at end of period	YES	YES	YES
Performance ⁹			
Availability	Very Good	Very Good	Very Good
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Good	Very Good	Very Good
Comments			

Wmo No./ Country ¹	44766/UK	44770/UK	44776/UK
Argos Id No.	4274	3039	6305
Period within area	01/04-18/04	16/04-19/06	01/04-07/06
Area	W of Ireland	Norway	N of Scotland
Mean Latitude	53.2	59.0	59.4
Mean Longitude	-10.6	10.1	-5.4
No. of obs received ²	669	8	3882
% of obs with valid Time and Dates	100.0	100.0	100.0
% of obs with acceptable Positions ⁴	100.0	0.0	99.5
% of Presents			
Pressure	99.3	87.5	99.5
P. Tendency	97.3	37.5	95.4
Air Temperature	99.1	87.5	99.3
Wind Speed/Dir.	0.0/0.0	0.0/0.0	72.7/72.7
Sea-surface temp.	61.7	50.0	99.6
Median delay (min) ⁶	87.0	29.0	148.0
Number of days	18.0	65.0	68.0
Mean no. of obs/day	37.2	0.1	57.1
No. of hours with obs	235.0	7.0	1270.0
Mean no. of hours/day with obs	13.1	0.1	18.7
% of hour periods without an ob ⁷	45.4	99.6	22.1
Mean (Ob-Bg)	0.1	-	0.2
RMS (Ob-Bg)	1.1	-	1.1
unflagged datas			
Mean (Ob-bg)	0.0	-17.0	0.2
RMS (Ob-Bg)	4.1	38.0	2.0
all datas			
Revised RMS (Ob-Bg) ⁸	1.1	24.8	1.1
% of data flagged ⁸	70.0	100.0	73.0
Operating at end of period	NO	NO	NO
Performance ⁹			
Availability	Very Good	Very Poor	Very Good
Pressure Quality	Acceptable	Suspect	Acceptable
Timeliness	Good	Very Good	Satisfactory
Comments			

Wmo No./ Country ¹	44777/UK	44779/UK	44780/UK
Argos Id No.	14733	14737	1250
Period within area	17/05-30/06	16/05-30/06	01/04-30/06
Area	SCOS	SCOS	SE of SOBA
Mean Latitude	38.0	34.1	54.4
Mean Longitude	-37.4	-39.9	-13.7
No. of obs received ²	795	823	4858
% of obs with valid Time and Dates ³	100.0	100.0	100.0
% of obs with acceptable Positions ⁴	99.1	100.0	99.6
% of Presents			
Pressure	100.0	100.0	99.2
P. Tendency	56.1	56.5	95.2
Air Temperature	0.0	0.0	15.6
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface temp.	56.1	56.5	99.2
Median delay (min) ⁶	392.0	137.0	118.0
Number of days	45.0	46.0	91.0
Mean no. of obs/day	17.7	17.9	53.4
No. of hours with obs	637.0	655.0	1680.0
Mean no. of hours/day with obs	14.2	14.2	18.5
% of hour periods without an ob ⁷	40.8	40.8	22.9
Mean (Ob-Bg)	-0.1	0.2	0.1
RMS (Ob-Bg) unflagged datas	1.1	0.9	1.0
Mean (Ob-bg)	-0.1	0.2	0.1
RMS (Ob-Bg) all datas	1.1	1.0	2.5
Revised RMS (Ob-Bg) ⁸	1.1	1.0	1.1
% of data flagged ⁸	24.0	23.0	71.0
Operating at end of period	YES	YES	YES
Performance ⁹			
Availability	Satisfactory	Satisfactory	Very Good
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Very Poor	Satisfactory	Good
Comments			

Wmo No./ Country ¹	61542/US	61543/US	61544/US
Argos Id No.	15380	15386	16344
Period within area	01/04-24/05	01/04-11/06	01/04-12/05
Area	E of Spain	E of Spain	E of Spain
Mean Latitude	39.7	38.8	35.5
Mean Longitude	1.6	4.3	12.0
No. of obs received ²	456	645	336
% of obs with valid Time and Dates	100.0	100.0	100.0
% of obs with acceptable Positions ⁴	100.0	99.8	99.7
% of Presents			
Pressure	95.2	92.1	92.6
P. Tendency	0.0	0.0	0.0
Air Temperature	95.4	91.5	92.3
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface temp.	96.5	93.2	93.2
Median delay (min) ⁶	264.0	22.0	41.0
Number of days	54.0	72.0	42.0
Mean no. of obs/day	8.4	9.0	8.0
No. of hours with obs	448.0	615.0	320.0
Mean no. of hours/day with obs	8.3	8.5	7.6
% of hour periods without an ob ⁷	65.4	64.6	68.3
Mean (Ob-Bg)	-0.4	0.1	0.2
RMS (Ob-Bg) unflagged datas	1.1	1.0	1.0
Mean (Ob-bg)	-0.4	0.2	0.2
RMS (Ob-Bg) all datas	1.1	1.0	1.0
Revised RMS (Ob-Bg) ⁸	1.1	1.0	1.0
% of data flagged ⁸	1.0	1.0	3.0
Operating at end of period	NO	NO	NO
Performance ⁹			
Availability	Poor	Poor	Poor
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Very Poor	Very Good	Very Good
Comments			

Wmo No./ Country ¹	62511/F	62515/F	62517/F
Argos Id No.	14423	14422	10120
Period within area	11/06-30/06	01/04-16/05	01/04-30/06
Area	N of SCOS	SCOS	N of SCOS
Mean Latitude	48.5	44.3	46.9
Mean Longitude	-12.1	-18.0	-20.9
No. of obs received ²	438	314	2196
% of obs with valid Time and Date ³	100.0	100.0	100.0
% of obs with acceptable Positions ⁴	79.2	99.4	100.0
% of Presents			
Pressure	100.0	100.0	97.1
P. Tendency	64.2	56.1	87.6
Air Temperature	0.0	0.0	0.0
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface temp.	64.2	56.1	96.9
Median delay (min) ⁶	295.0	545.0	29.0
Number of days	20.0	46.0	91.0
Mean no. of obs/day	21.9	6.8	24.1
No. of hours with obs	342.0	297.0	1529.0
Mean no. of hours/day with obs	17.1	6.5	16.8
% of hour periods without an ob ⁷	28.8	72.9	30.0
Mean (Ob-Bg)	0.5	0.3	0.5
RMS (Ob-Bg)	1.0	0.9	1.1
unflagged datas			
Mean (Ob-bg)	0.7	0.3	0.4
RMS (Ob-Bg)	2.5	1.0	1.1
all datas			
Revised RMS (Ob-Bg) ⁸	1.7	1.0	1.0
% of data flagged ⁸	38.0	15.0	41.0
Operating at end of period	YES	NO	YES
Performances ⁹			
Availability	Satisfactory	Poor	Satisfactory
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Very Poor	Very Poor	Very Good
Comments			

Wmo No./ Country ¹	62518/F	62519/F	62524/UK
Argos Id. No.	14419	14421	4625
Period within area	01/04-30/06	01/04-30/06	01/04-30/06
Area	N of SCOS	N of SCOS	W of SCOS
Mean Latitude	45.3	48.2	26.6
Mean Longitude	-17.8	-20.0	-43.9
No. of obs received ²	2069	2219	2153
% of obs with valid Time and Date ³	100.0	100.0	100.0
% of obs with acceptable Positions ⁴	100.0	100.0	79.6
% of Presents			
Pressure	97.3	97.9	99.8
P. Tendency	89.7	90.4	67.9
Air Temperature	0.0	0.0	61.1
Wind Speed/Dir.	96.7/96.6	81.3/80.8	0.0/0.0
Sea-surface temp.	96.8	97.7	89.7
Median delay (min) ⁶	136.0	502.0	22.0
Number of days	91.0	91.0	91.0
Mean no. of obs/day	22.7	24.4	23.7
No. of hours with obs	1510.0	1555.0	1244.0
Mean no. of hours/day with obs	16.6	17.1	13.7
% of hour periods without an ob ⁷	30.8	28.8	42.9
Mean (Ob-Bg)	-0.3	0.0	0.1
RMS (Ob-Bg) unflagged data	1.4	1.1	1.1
Mean (Ob-bg)	-0.4	-0.3	0.0
RMS (Ob-Bg) all data	1.4	3.0	2.6
Revised RMS (Ob-Bg) ⁸	1.4	1.0	1.3
% of data flagged ⁸	38.0	40.0	58.0
Operating at end of period	YES	YES	YES
Performance ⁹			
Availability	Satisfactory	Satisfactory	Satisfactory
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Satisfactory	Very Poor	Very Good
Comments			

Wmo No./ Country ¹	62673/US	62675/US	62805/UK
Argos Id No.	5259	6120	2927
Period within area	11/05-30/06	18/05-30/06	01/04-30/06
Area	SOBA	SOBA	SOBA
Mean Latitude	55.4	55.2	57.2
Mean Longitude	-31.2	-25.5	-31.0
No. of obs received ²	1791	1535	5301
% of obs with valid Time and Dates	100.0	100.0	100.0
% of obs with acceptable Positions ⁴	99.8	99.8	99.8
% of Presents			
Pressure	97.1	96.7	25.4
P. Tendency	0.0	0.0	75.6
Air Temperature	97.5	97.9	1.4
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface temp.	98.7	99.3	99.2
Median delay (min) ⁶	386.0	274.0	12.0
Number of days	51.0	44.0	91.0
Mean no. of obs/day	35.1	34.9	58.3
No. of hours with obs	1175.0	994.0	1751.0
Mean no. of hours/day with obs	23.0	22.6	19.2
% of hour periods without an ob ⁷	4.2	5.8	20.0
Mean (Ob-Bg)	0.5	0.3	0.7
RMS (Ob-Bg)	1.2	1.1	2.5
unflagged data⁸			
Mean (Ob-bg)	0.5	0.3	-15.3
RMS (Ob-Bg)	1.2	1.1	22.8
all data⁸			
Revised RMS (Ob-Bg) ⁸	1.2	1.1	20.6
% of data flagged ⁸	41.0	40.0	88.0
Operating at end of period	YES	YES	YES
Performances			
Availability	Very Good	Good	Very Good
Pressure Quality	Acceptable	Acceptable	Suspect
Timeliness	Very Poor	Very Poor	Very Good
Comments			

Wmo No./ Country ¹	64528/NL	64529/N	64544/US
Argos Id No.	9306	3037	14631
Period within area	01/04-02/05	01/04-28/06	01/04-30/06
Area	W of Scotland	SOBA	SOBA
Mean Latitude	58.6	60.3	56.7
Mean Longitude	-7.4	-23.8	-40.3
No. of obs received ²	1100	2502	1231
% of obs with valid Time and Dates ³	100.0	100.0	100.0
% of obs with acceptable Positions ⁴	99.8	97.5	100.0
% of Presents			
Pressure	99.0	87.4	93.3
P. Tendency	96.3	84.3	0.0
Air Temperature	98.7	85.9	92.9
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface temp.	70.1	56.6	93.3
Median delay (min) ⁶	138.0	90.0	349.0
Number of days	32.0	89.0	91.0
Mean no. of obs/day	34.4	28.1	13.5
No. of hours with obs	482.0	1023.0	1079.0
Mean no. of hours/day with obs	15.1	11.5	11.9
% of hour periods without an ob ⁷	37.1	52.1	50.4
Mean (Ob-Bg)	-0.1	0.1	0.2
RMS (Ob-Bg)	1.3	1.3	1.3
unflagged datas			
Mean (Ob-bg)	0.0	-3.5	0.2
RMS (Ob-Bg)	1.3	18.8	1.3
all datas			
Revised RMS (Ob-Bg) ⁸	1.2	1.4	1.3
% of data flagged ⁸	64.0	69.0	18.0
Operating at end of period	NO	NO	YES
Performance ⁹			
Availability	Good	Good	Poor
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Satisfactory	Good	Very Poor
Comments			

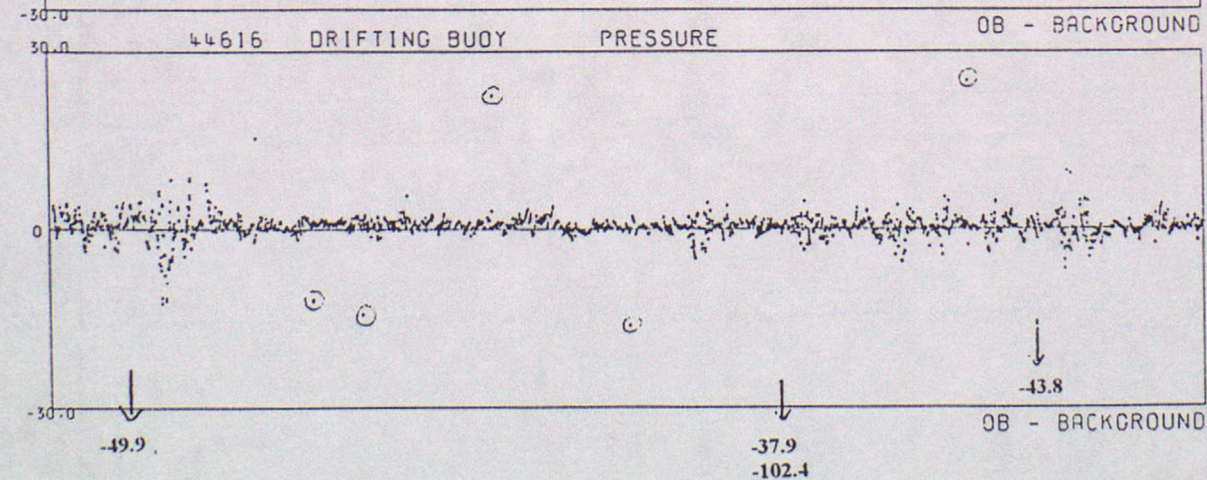
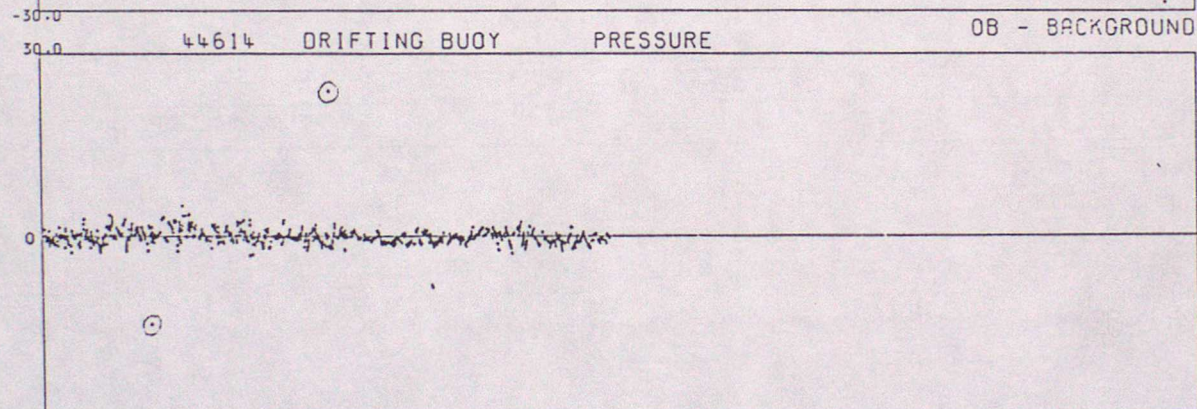
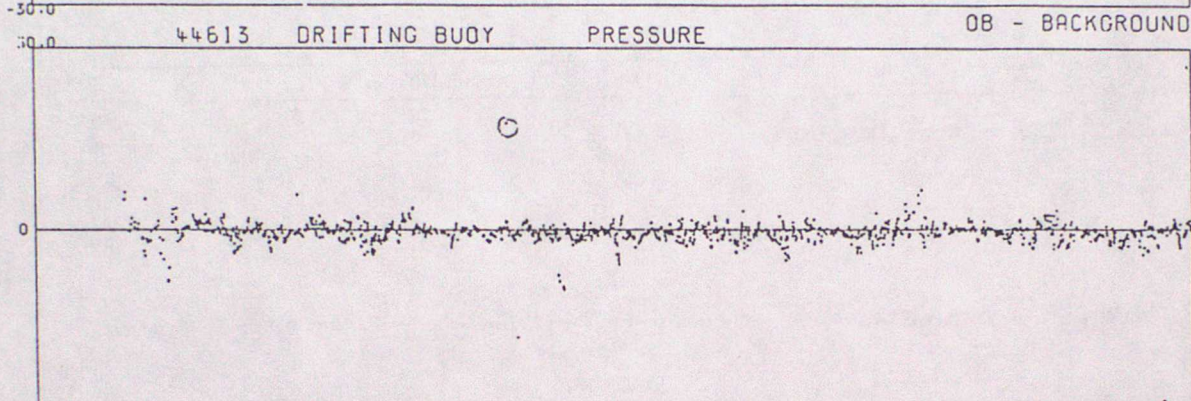
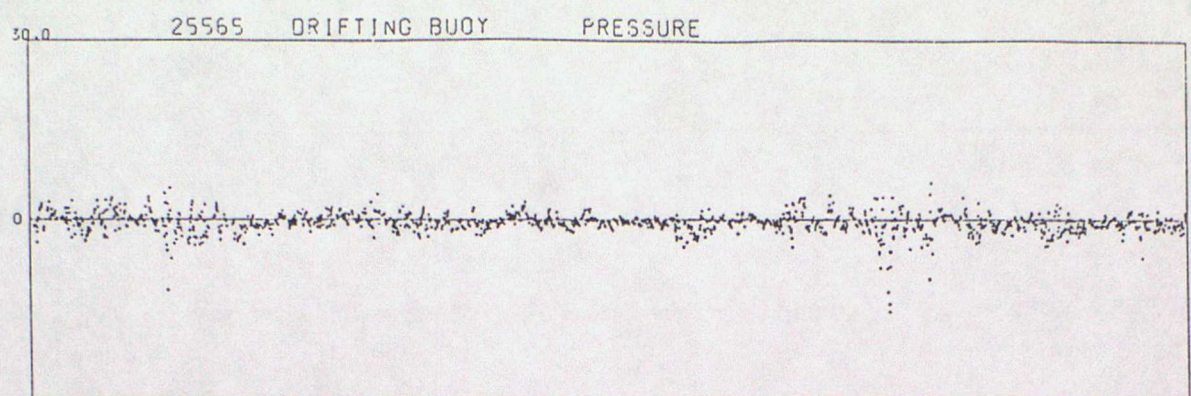
Wmo No./ Country ¹	64546/US	64575/US	64576/US
Argos Id No.	11227	5399	5522
Period within area	01/04-19/04	11/05-30/06	11/05-30/06
Area	E of SOBA	SOBA	E of SOBA
Mean Latitude	61.6	61.3	59.3
Mean Longitude	-15.9	-28.3	-20.1
No. of obs received ²	253	1914	1881
% of obs with valid Time and Dates ³	100.0	100.0	100.0
% of obs with acceptable Positions ⁴	99.2	100.0	99.8
% of Presents			
Pressure	89.3	98.1	98.1
P. Tendency	0.0	0.0	0.0
Air Temperature	0.0	98.2	99.1
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface temp.	91.7	99.5	99.7
Median delay (min) ⁶	501.0	444.0	364.0
Number of days	19.0	51.0	51.0
Mean no. of obs/day	13.3	37.5	36.9
No. of hours with obs	210.0	1221.0	1196.0
Mean no. of hours/day with obs	11.1	23.9	23.5
% of hour periods without an ob ⁷	53.8	0.4	2.1
Mean (Ob-Bg)	-1.3	0.4	0.2
RMS (Ob-Bg)	1.9	0.9	0.9
unflagged datas			
Mean (Ob-bg)	-1.4	0.4	0.2
RMS (Ob-Bg)	2.1	0.9	0.9
all datas			
Revised RMS (Ob-Bg) ⁸	2.0	0.9	0.9
% of data flagged ⁸	27.0	43.0	42.0
Operating at end of period	NO	YES	YES
Performance ⁹			
Availability	Poor	Very Good	Very Good
Pressure Quality	Suspect	Acceptable	Acceptable
Timeliness	Very Poor	Very Poor	Very Poor
Comments			

Wmo No./ Country ¹	64577/US	64588/US	64589/US
Argos Id No.	5523	16338	16374
Period within area	11/05-30/06	13/04-12/06	13/04-18/05
Area	E of SOBA	SOBA	SOBA
Mean Latitude	59.8	56.7	60.8
Mean Longitude	-16.1	-33.4	-32.8
No. of obs received ²	1818	981	466
% of obs with valid Time and Date ³	100.0	100.0	100.0
% of obs with acceptable Positions ⁴	100.0	100.0	100.0
% of Presents			
Pressure	96.3	90.8	85.6
P. Tendency	0.0	0.0	0.0
Air Temperature	96.9	91.9	85.4
Wind Speed/Dir.	0.0/0.0	1.5/1.5	2.1/2.1
Sea-surface temp.	98.7	92.9	89.3
Median delay (min) ⁶	469.0	281.0	66.0
Number of days	51.0	61.0	36.0
Mean no. of obs/day	35.6	16.1	12.9
No. of hours with obs	1158.0	816.0	398.0
Mean no. of hours/day with obs	22.7	13.4	11.1
% of hour periods without an ob ⁷	5.4	44.2	53.8
Mean (Ob-Bg)	-0.1	0.2	1.9
RMS (Ob-Bg)	0.9	1.2	2.2
unflagged datas			
Mean (Ob-bg)	-0.1	0.2	1.9
RMS (Ob-Bg)	1.0	1.2	2.1
all datas			
Revised RMS (Ob-Bg) ⁸	1.0	1.2	2.1
% of data flagged ⁸	41.0	22.0	17.0
Operating at end of period	YES	NO	NO
Performance ⁹			
Availability	Very Good	Satisfactory	Poor
Pressure Quality	Acceptable	Acceptable	Suspect
Timeliness	Very Poor	Very Poor	Good
Comments			

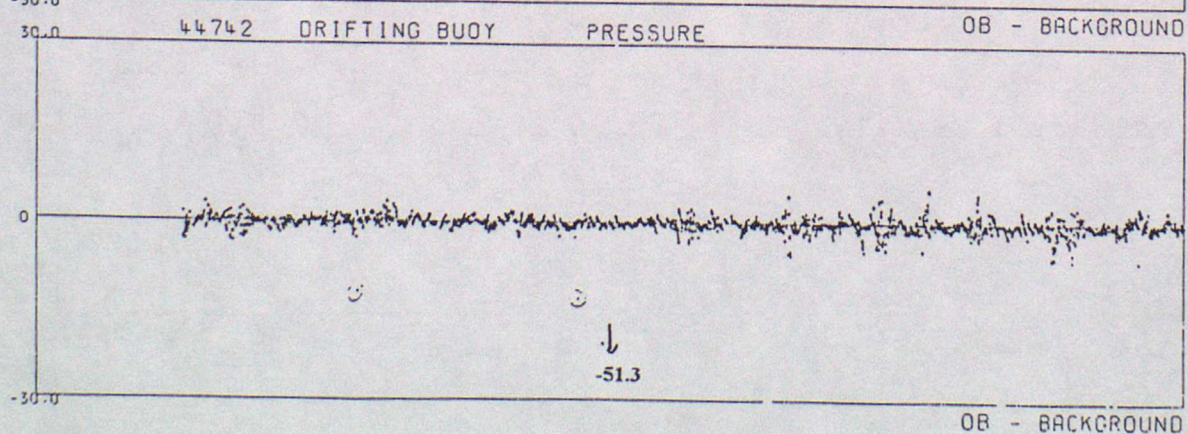
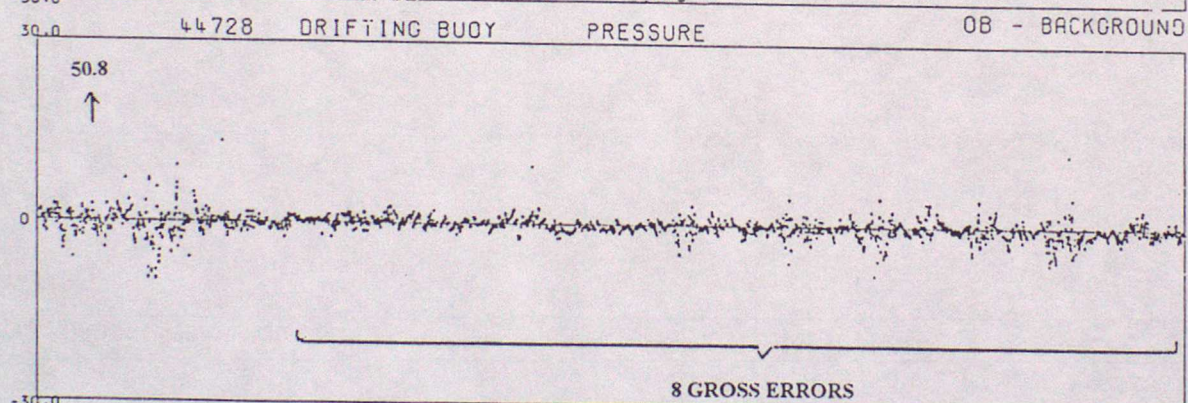
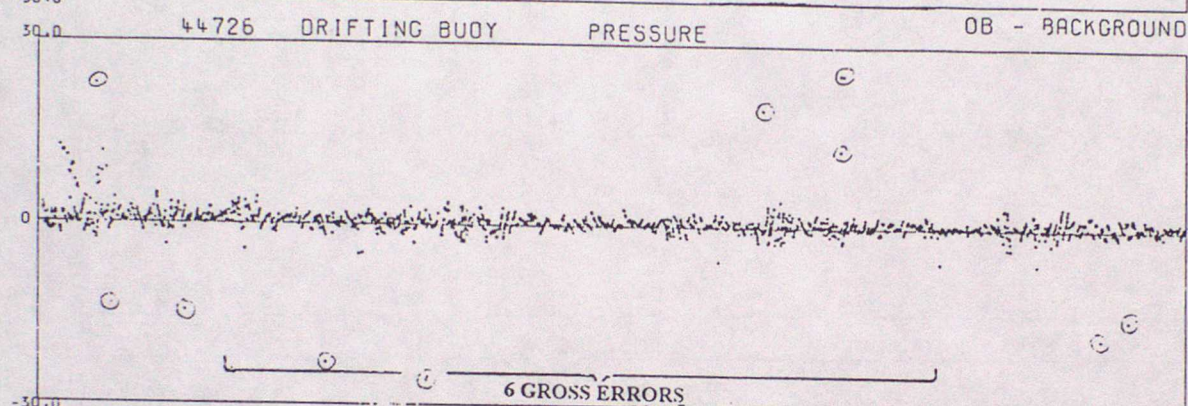
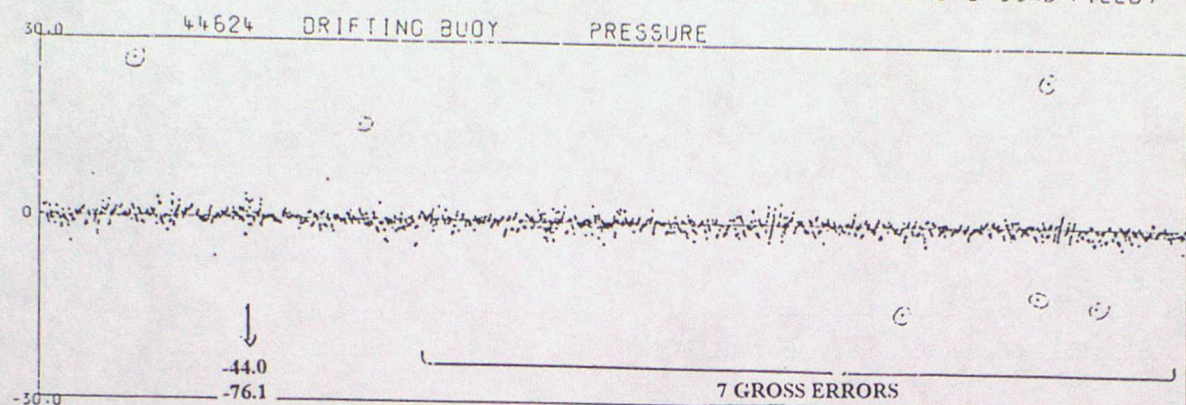
Wmo No./ Country ¹	65562/N	65571/N	65581/IC
Argos Id.No.	1298	3676	1299
Period within area	01/04-30/06	01/04-09/05	18/04-30/06
Area	SOBA	W of Scotland	SOBA
Mean Latitude	59.8	58.4	58.9
Mean Longitude	-24.7	-6.4	-40.2
No. of obs received ²	5259	1348	4187
% of obs with valid Time and Dates	100.0	100.0	100.0
% of obs with acceptable Positions ⁴	99.0	100.0	99.7
% of Presents			
Pressure	98.9	97.8	97.4
P. Tendency	95.7	93.3	92.7
Air Temperature	98.8	67.7	97.2
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface temp.	62.1	20.5	60.9
Median delay (min) ⁶	131.0	24.0	96.0
Number of days	91.0	39.0	74.0
Mean no. of obs/day	57.8	34.6	56.6
No. of hours with obs	1797.0	552.0	1438.0
Mean no. of hours/day with obs	19.7	14.2	19.4
% of hour periods without an ob ⁷	17.9	40.8	19.2
Mean (Ob-Bg)	0.0	-0.1	-0.2
RMS (Ob-Bg)	1.3	1.5	1.1
unflagged datas			
Mean (Ob-bg)	0.0	-0.5	-0.3
RMS (Ob-Bg)	1.3	4.3	1.6
all datas			
Revised RMS (Ob-Bg) ⁸	1.2	1.8	1.1
% of data flagged ⁸	72.0	68.0	72.0
Operating at end of period	YES	NO	YES
Performances ⁹			
Availability	Very Good	Good	Very Good
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Satisfactory	Very Good	Good
Comments			

ANNEX B - TIME-SERIES PLOTS OF PRESSURE

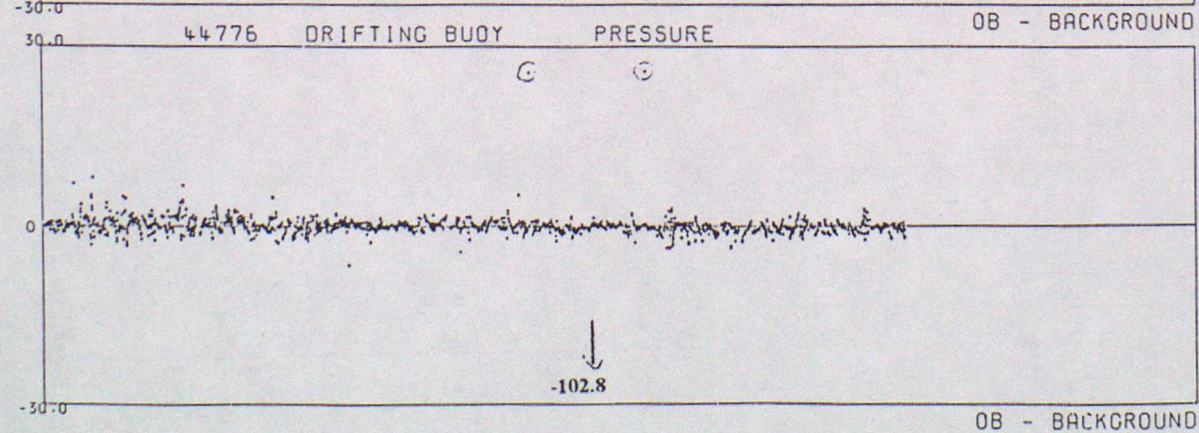
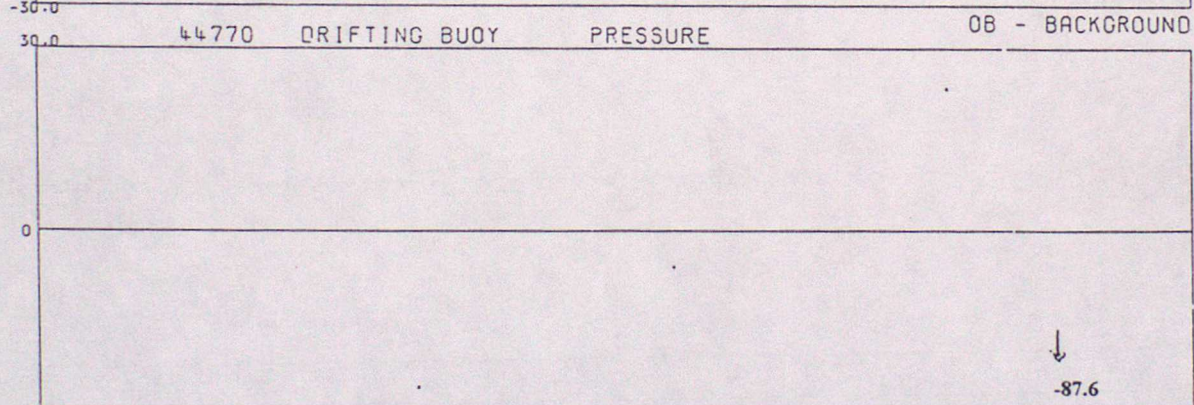
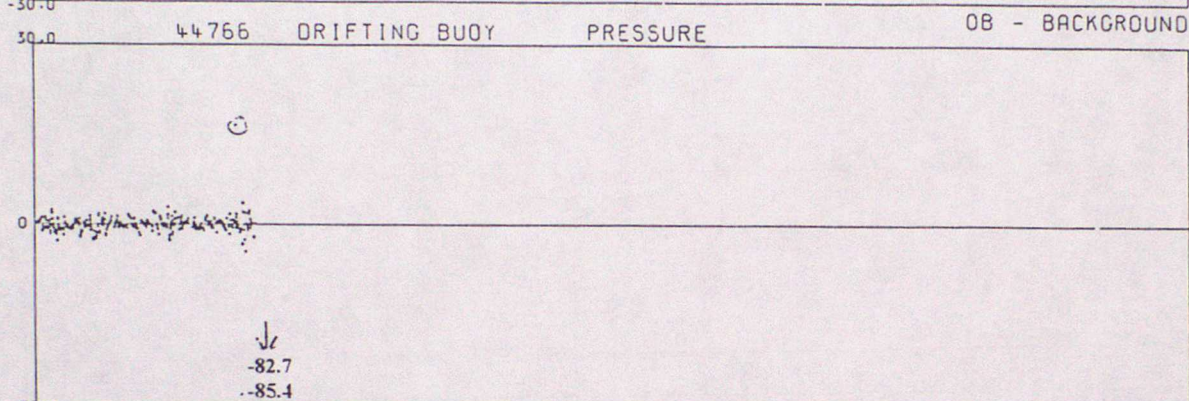
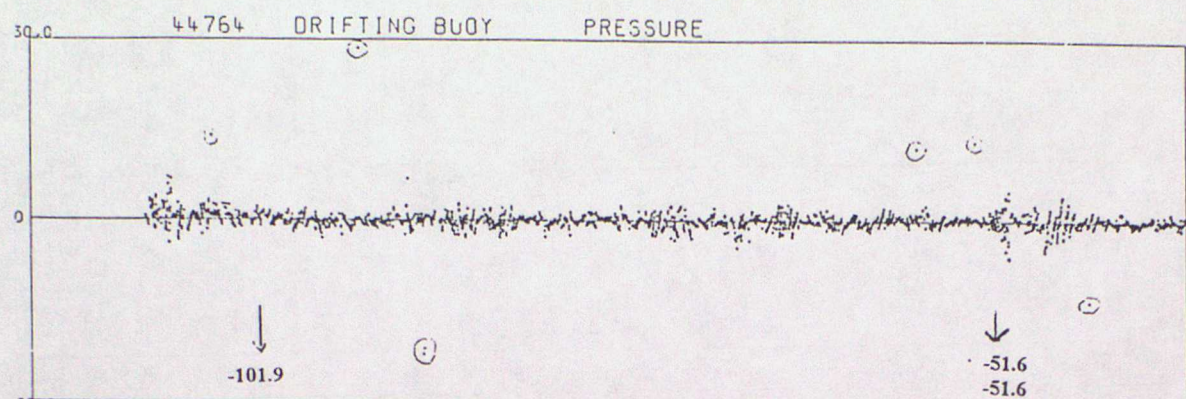
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



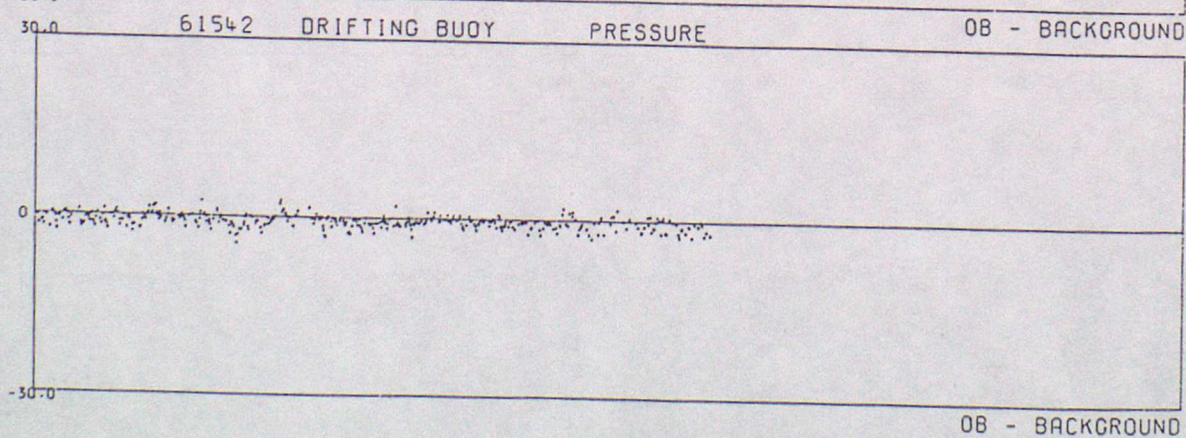
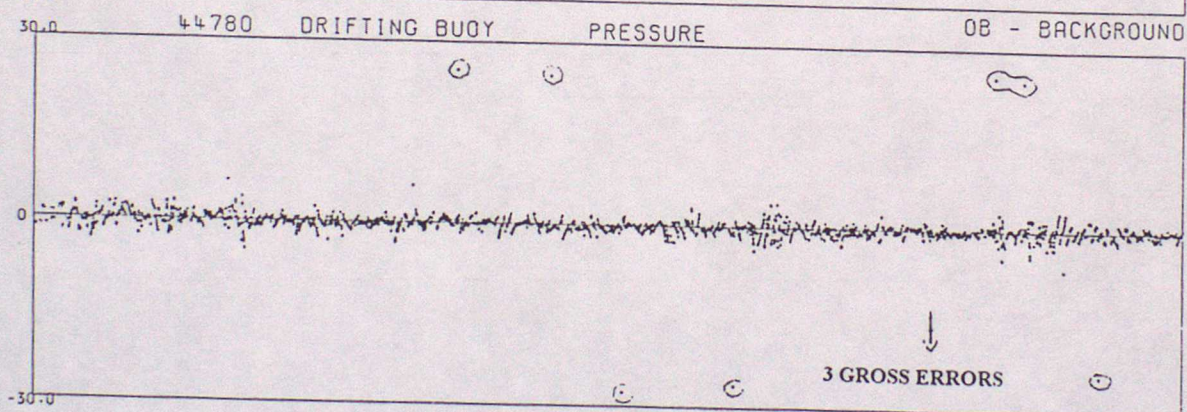
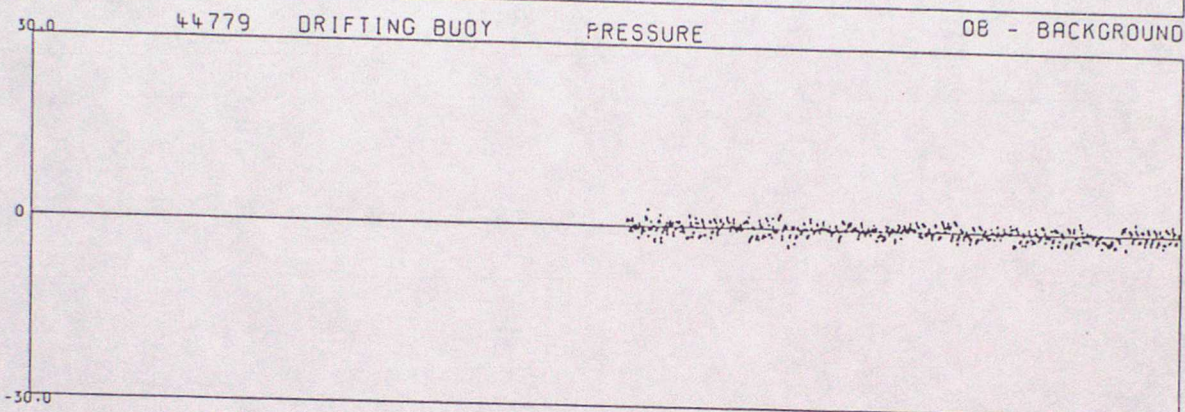
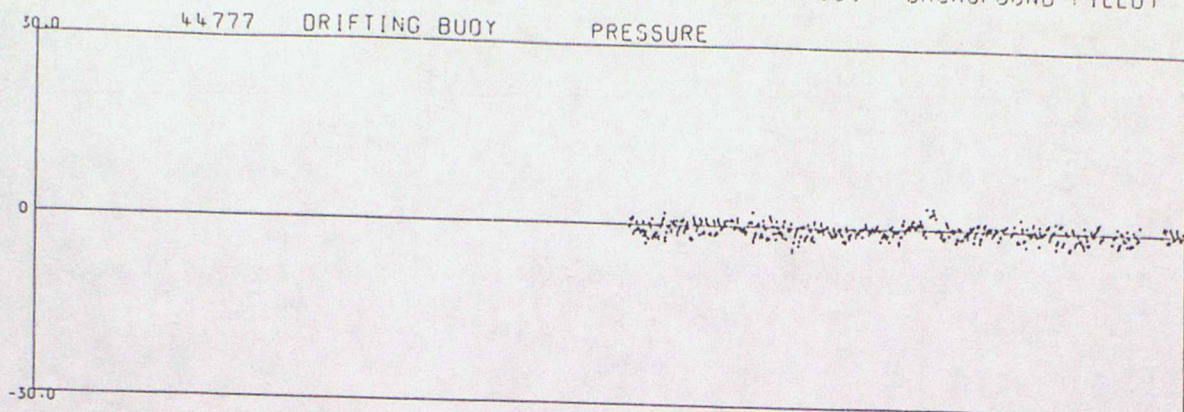
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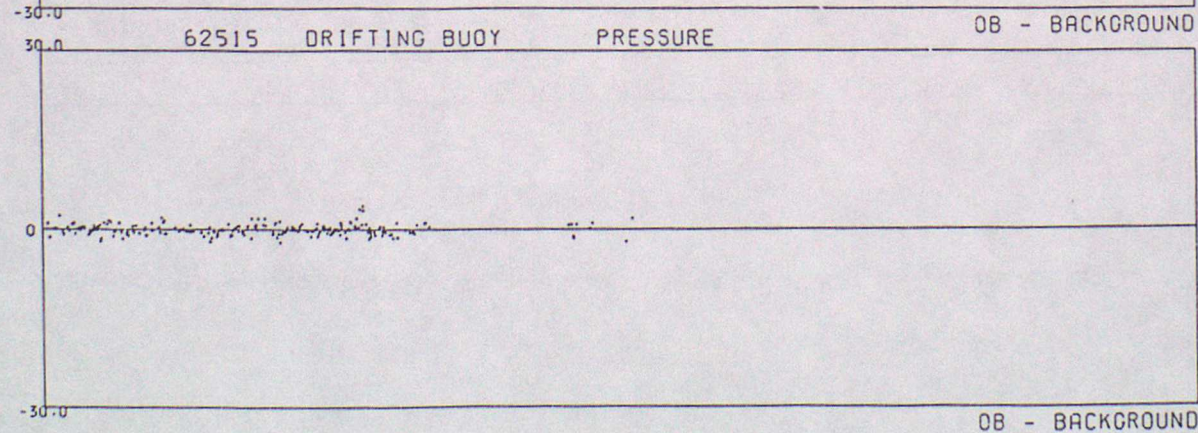
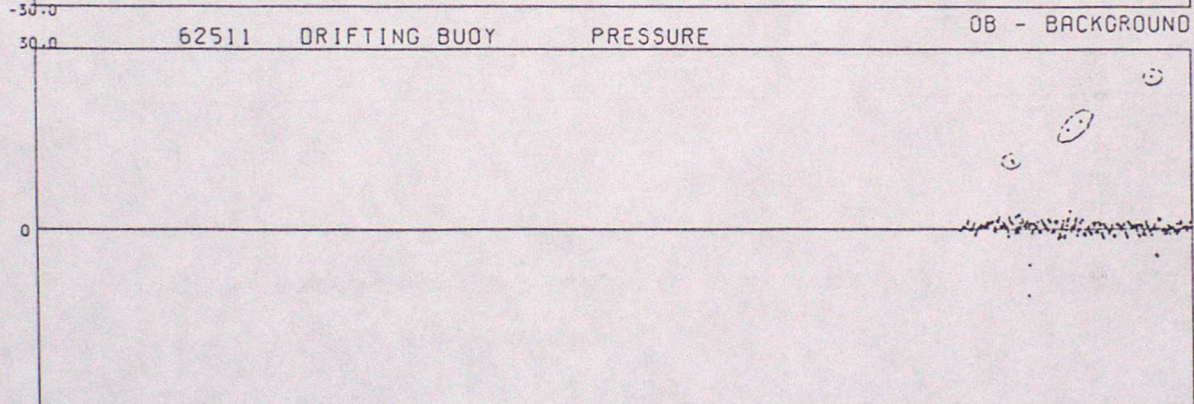
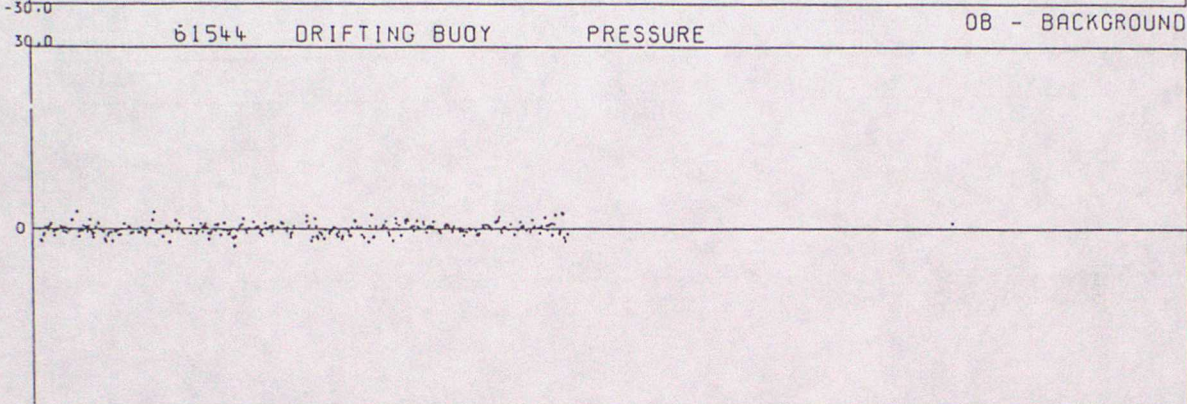
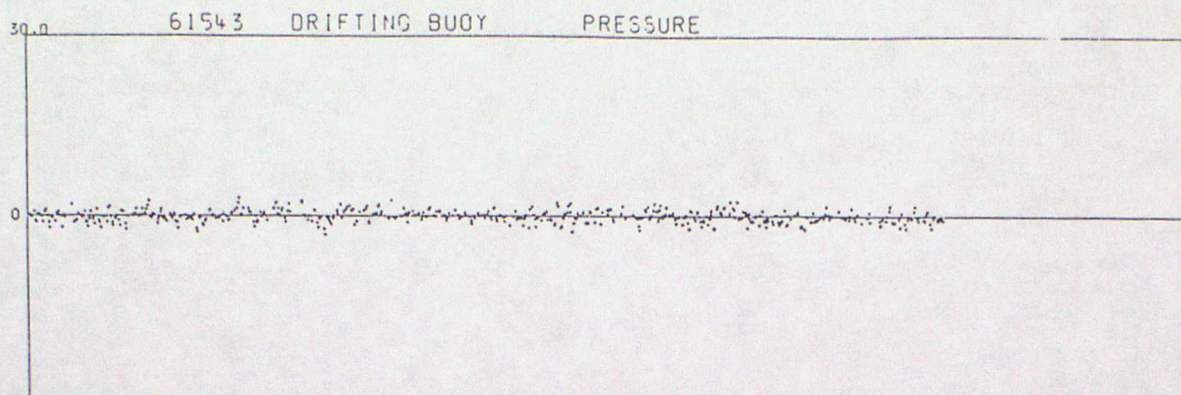
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



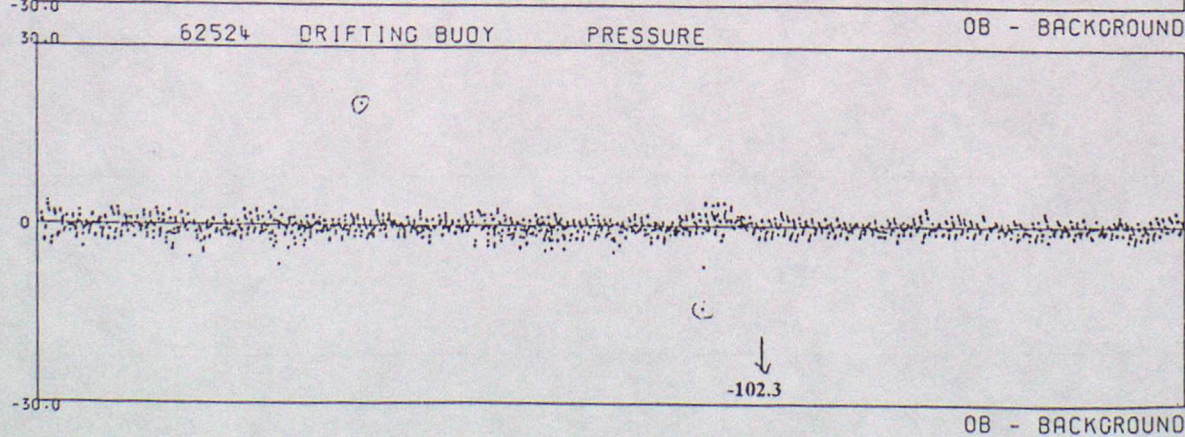
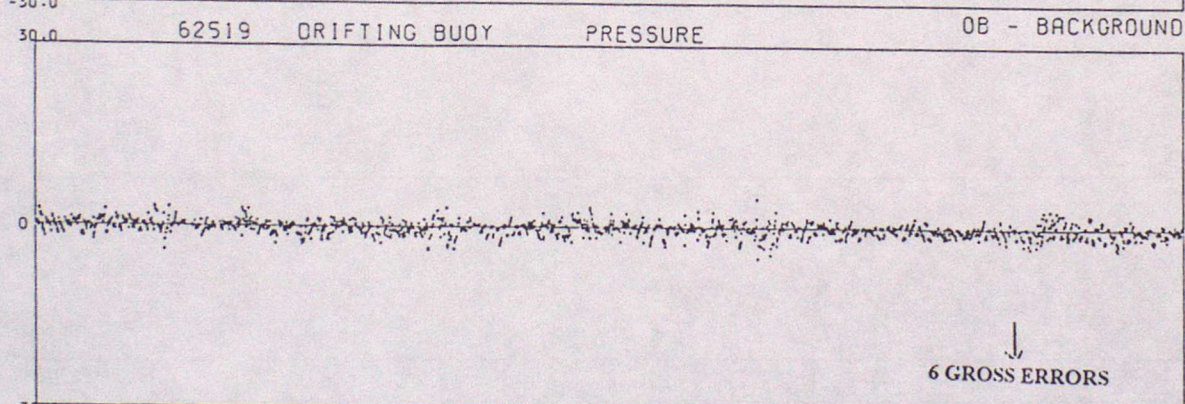
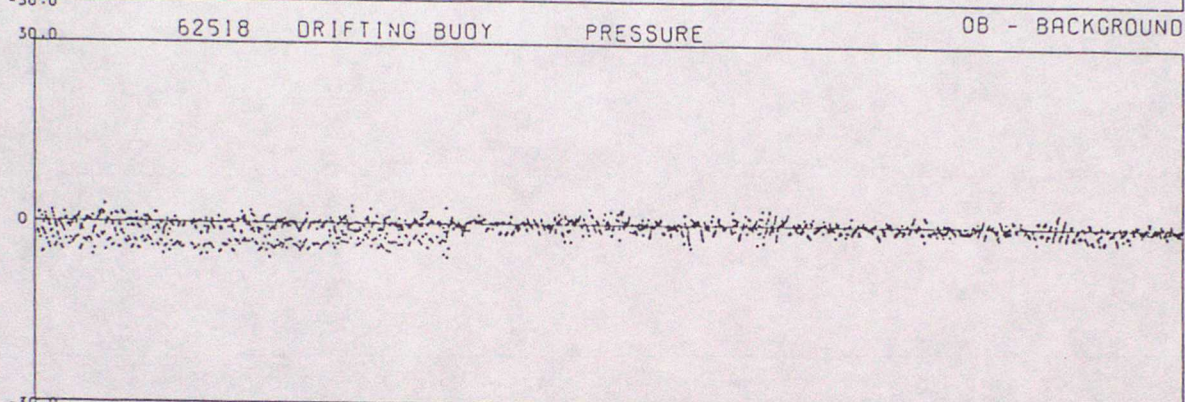
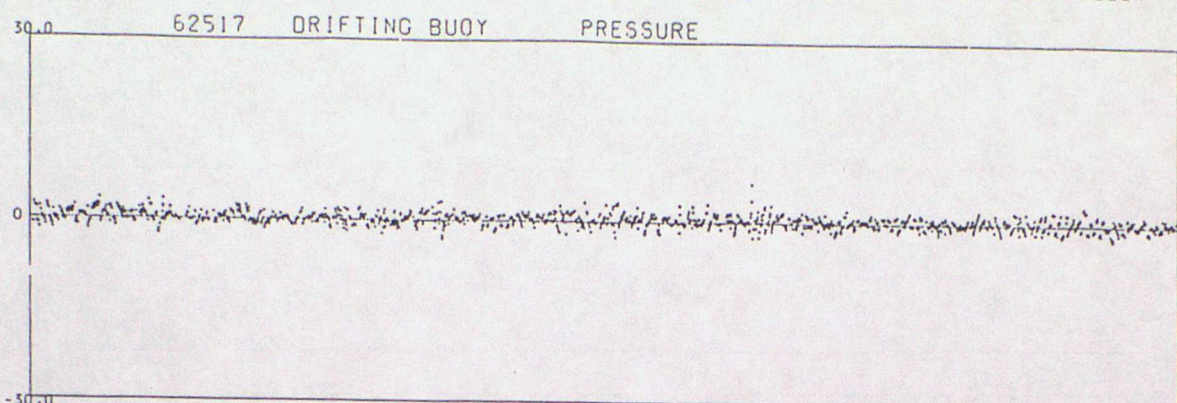
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



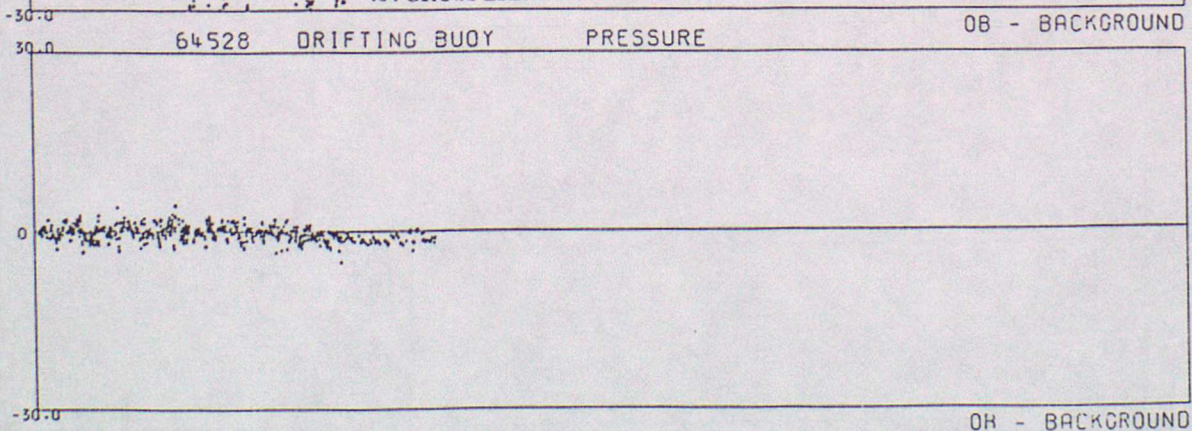
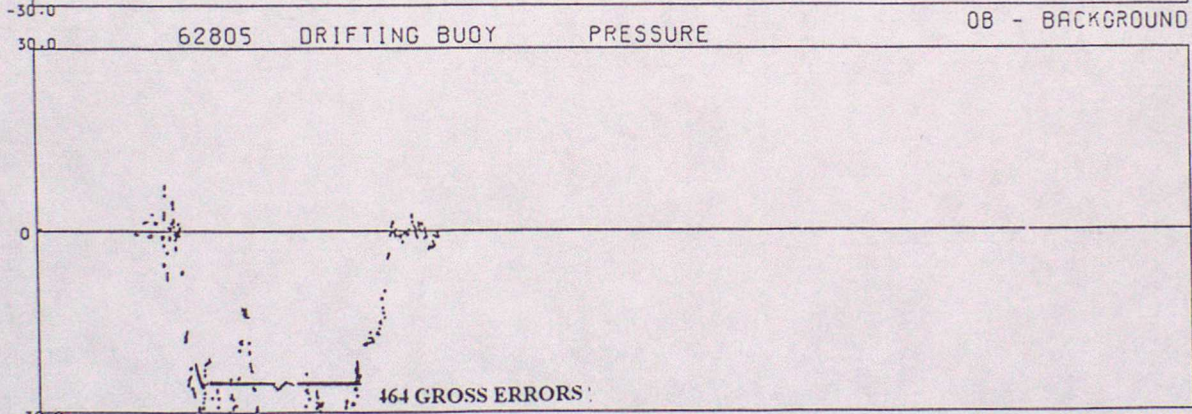
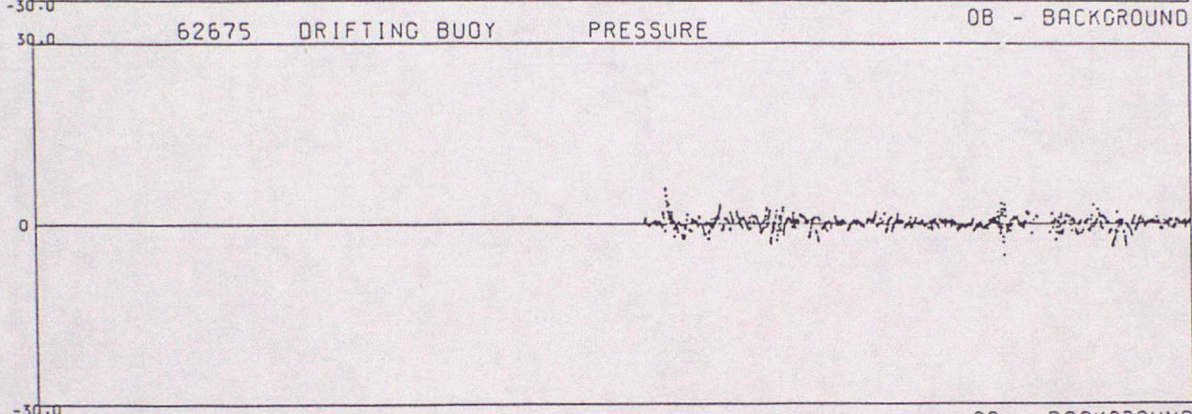
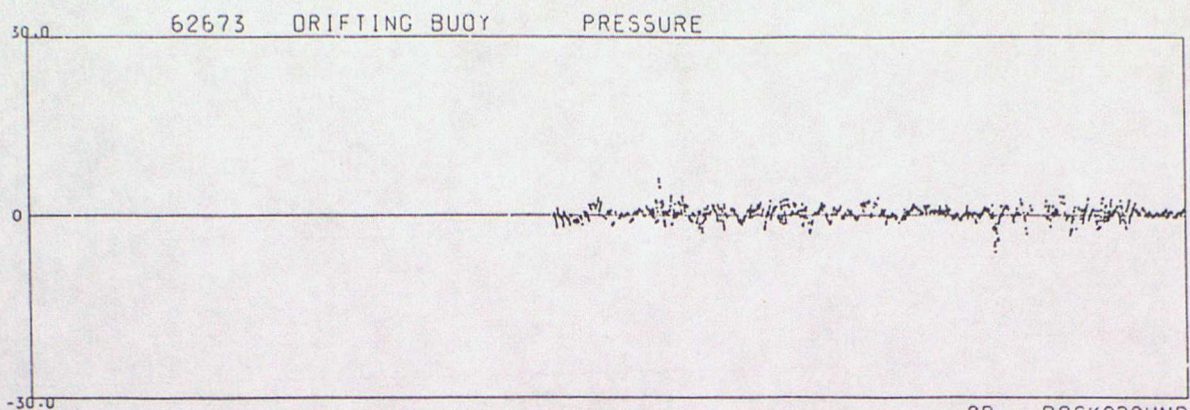
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



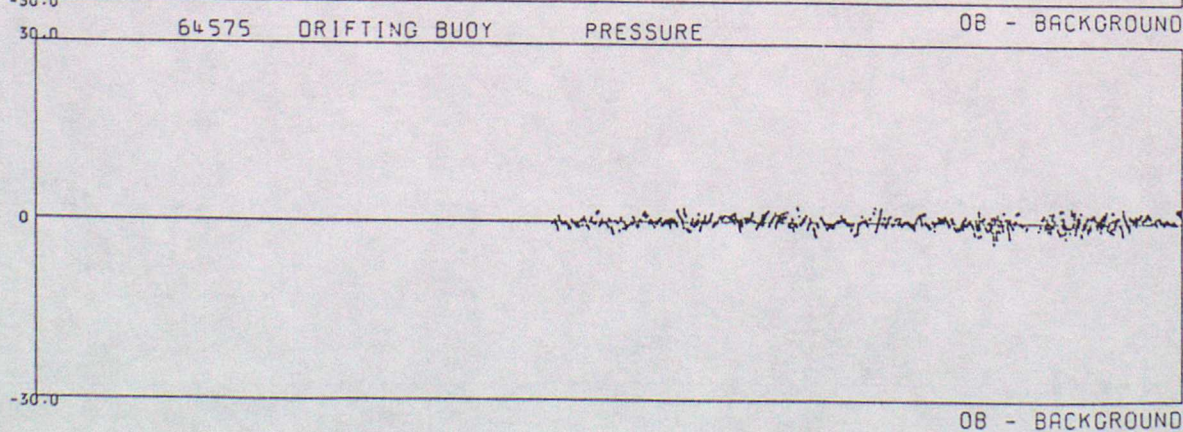
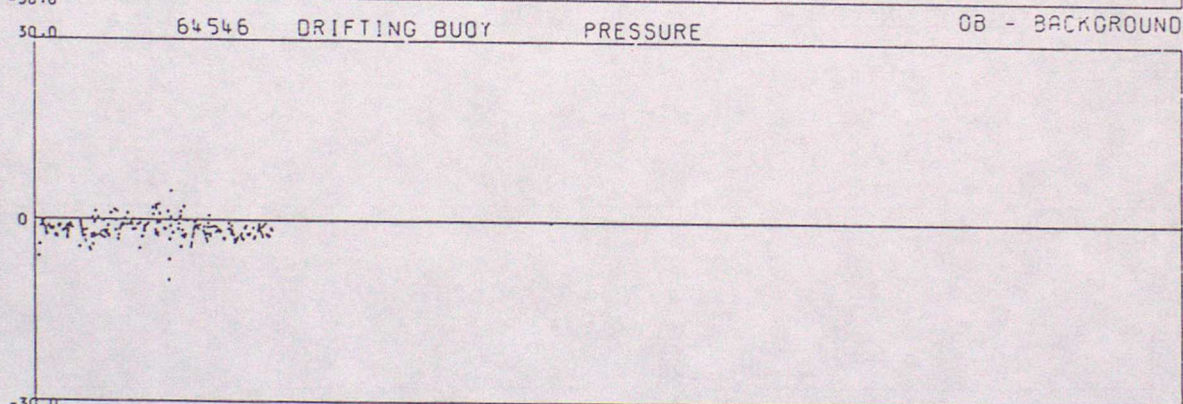
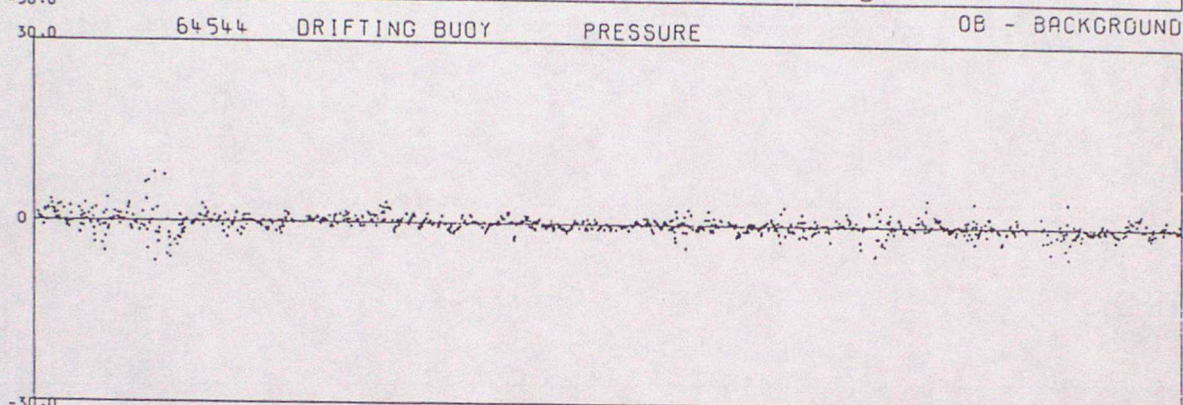
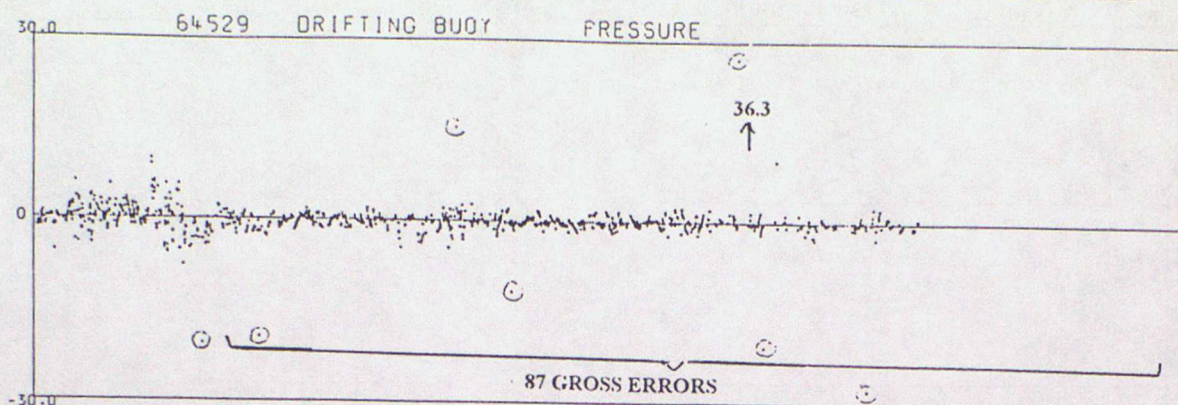
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



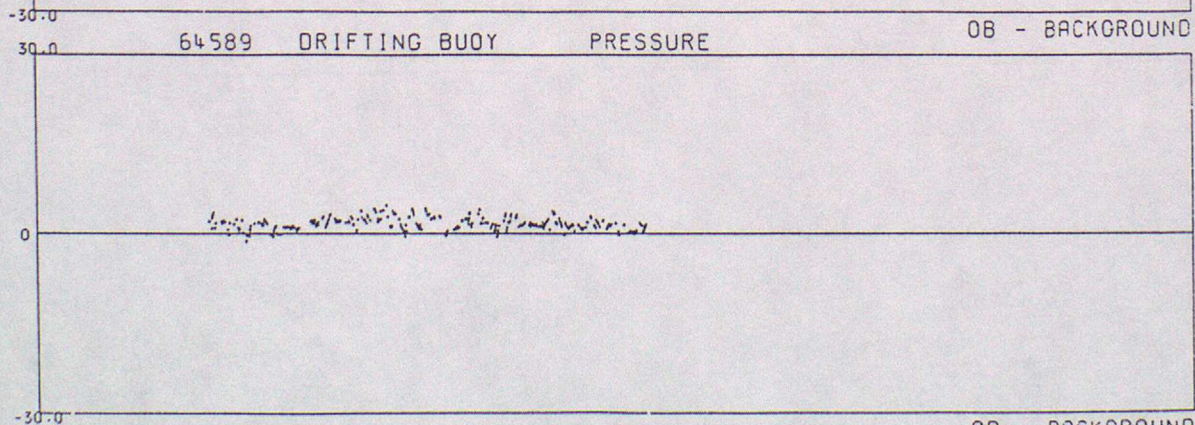
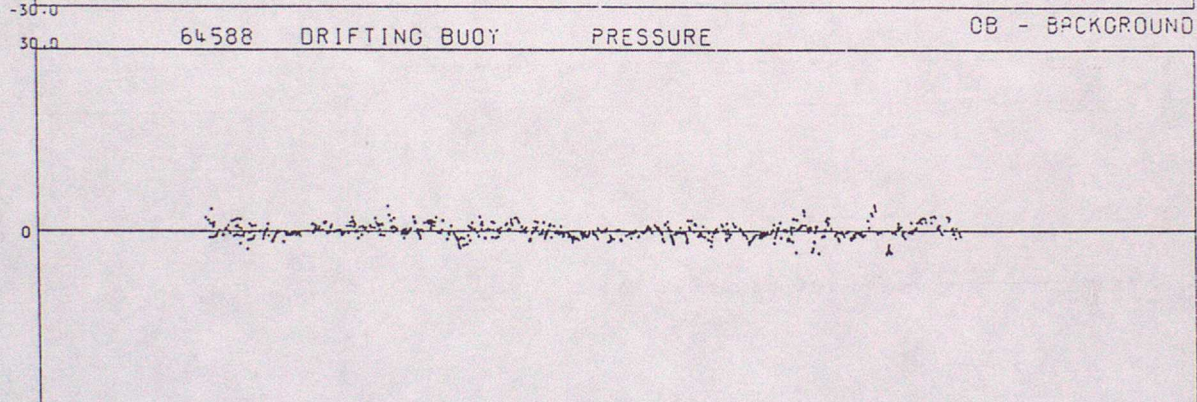
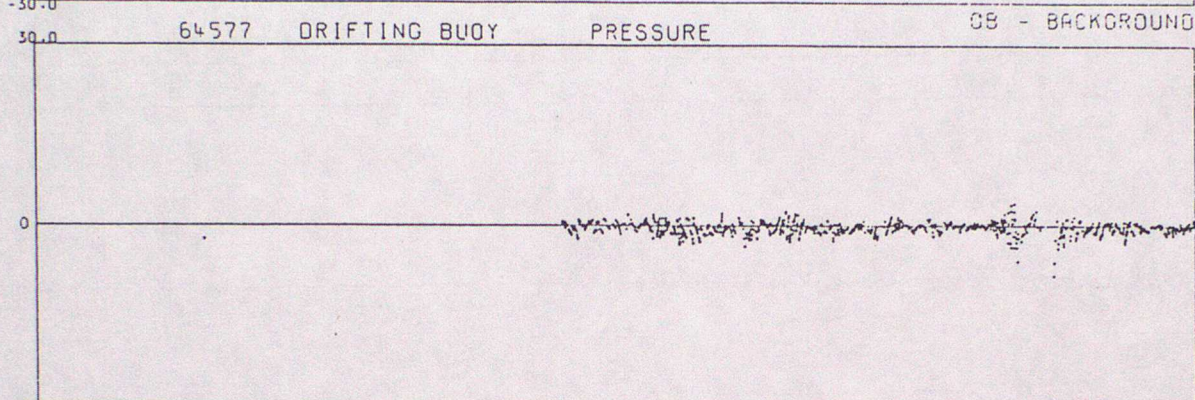
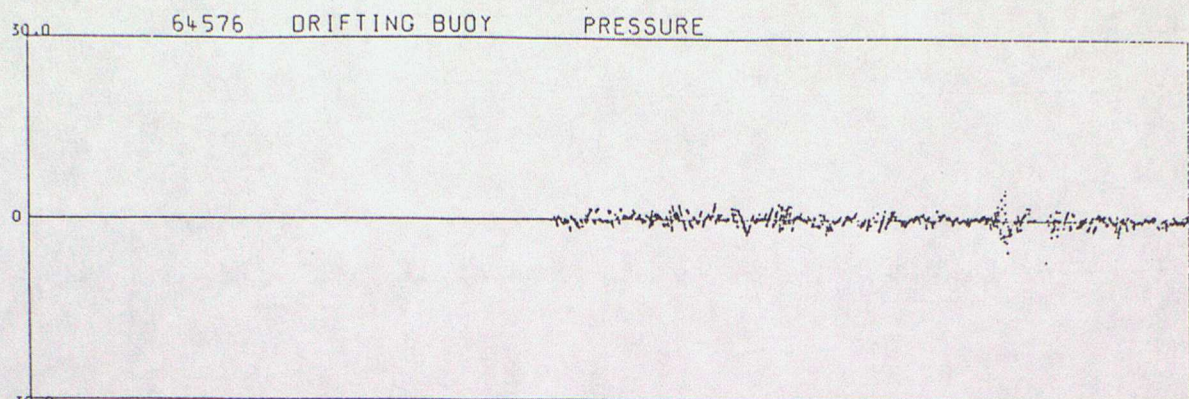
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)

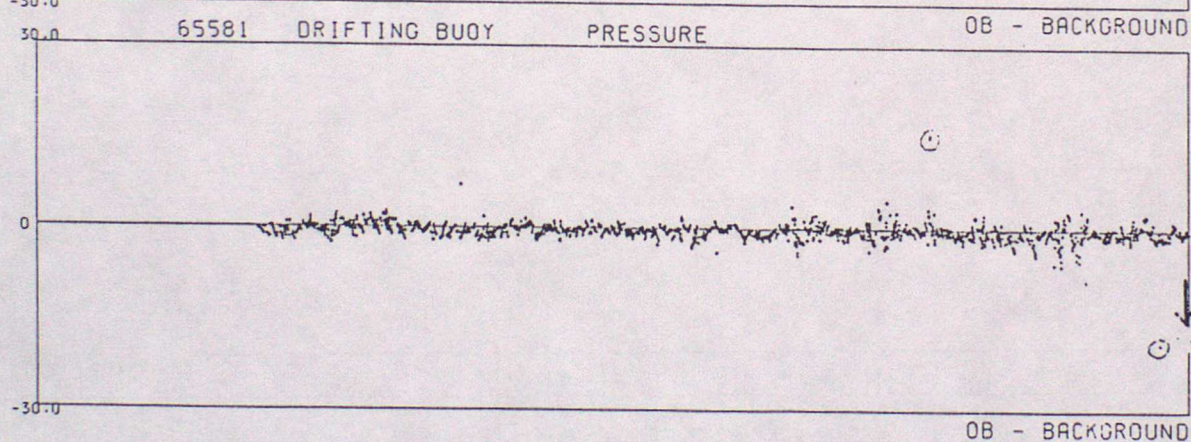
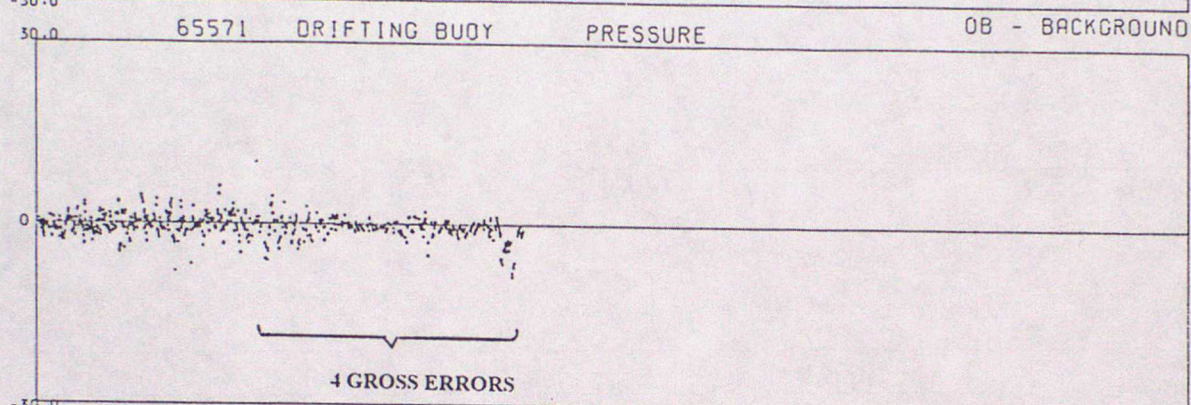
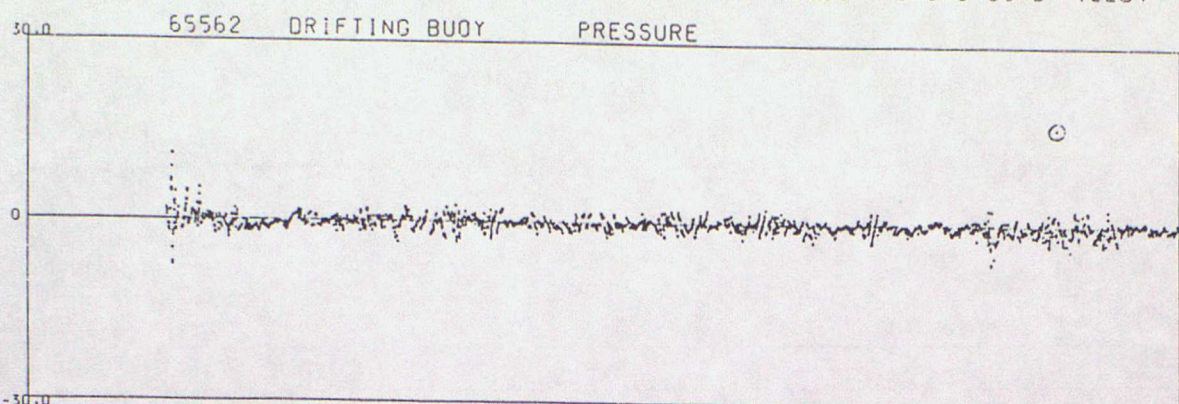


DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



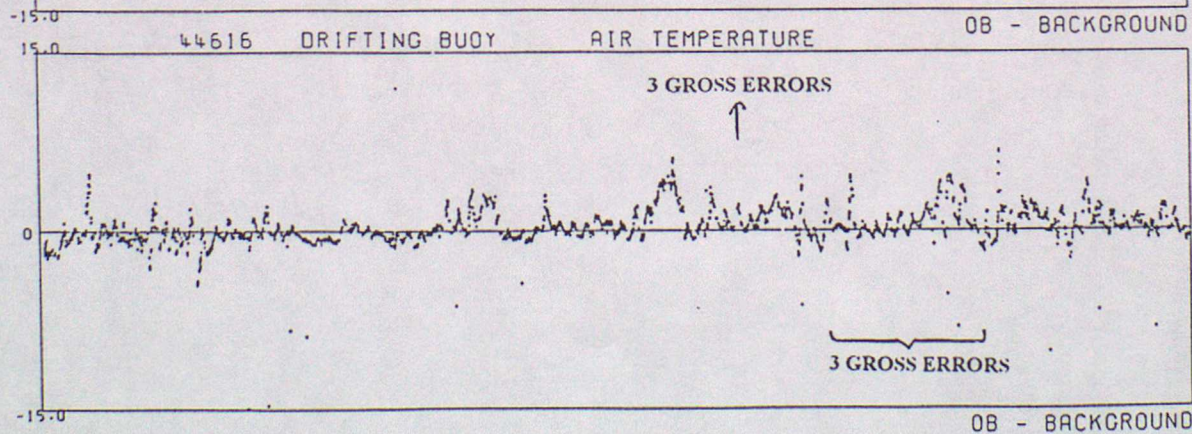
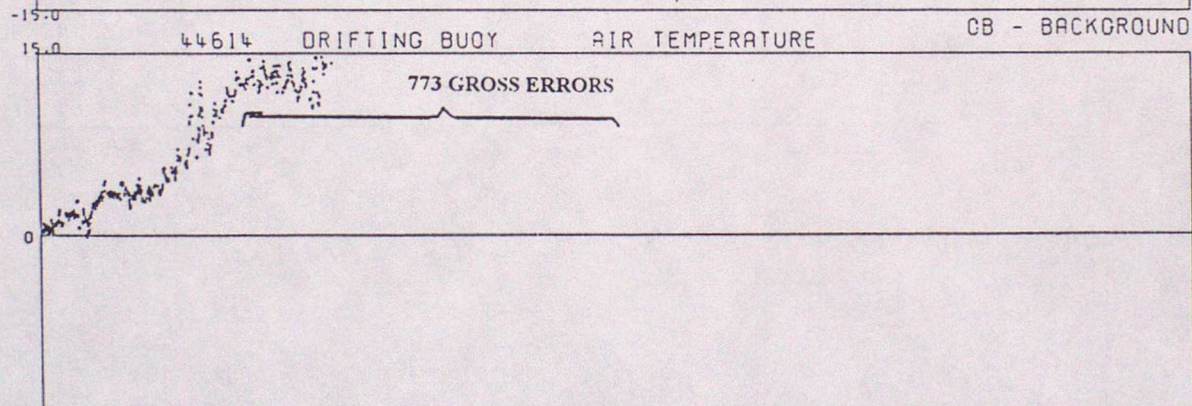
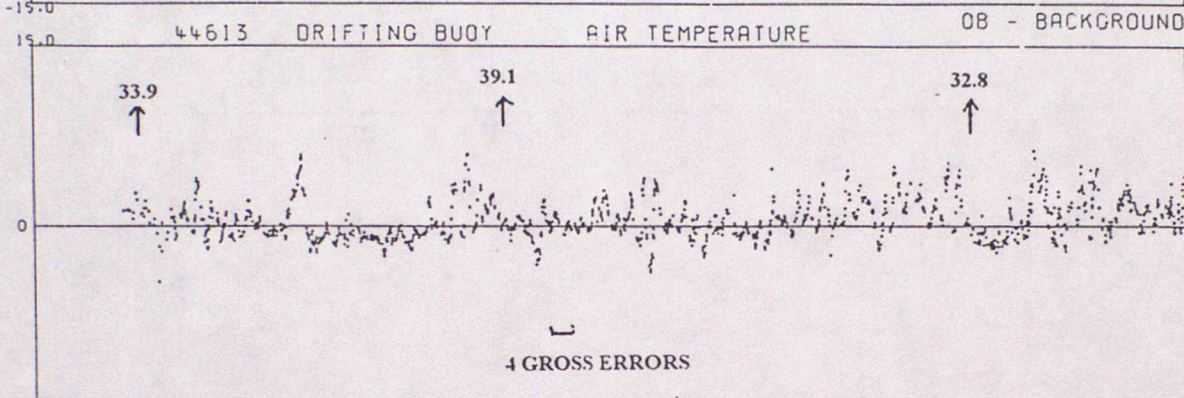
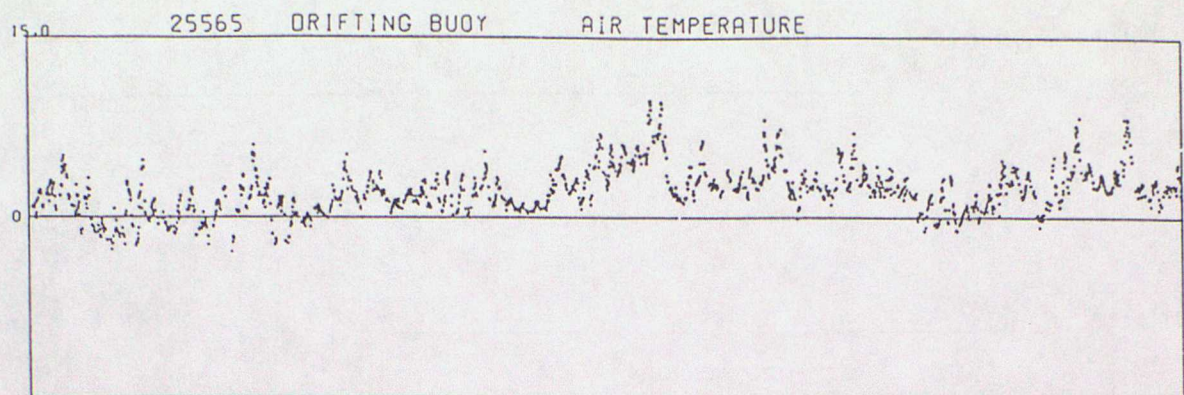
OB - BACKGROUND

DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)

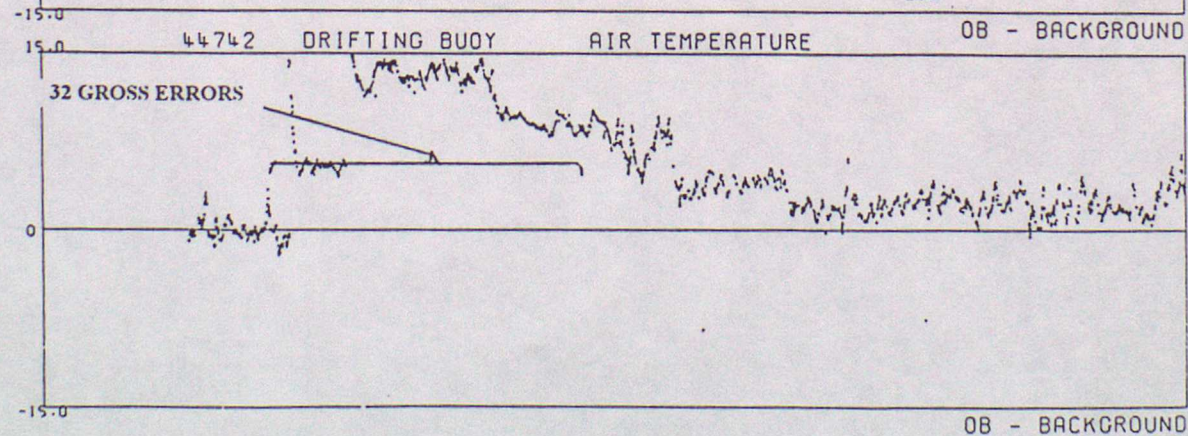
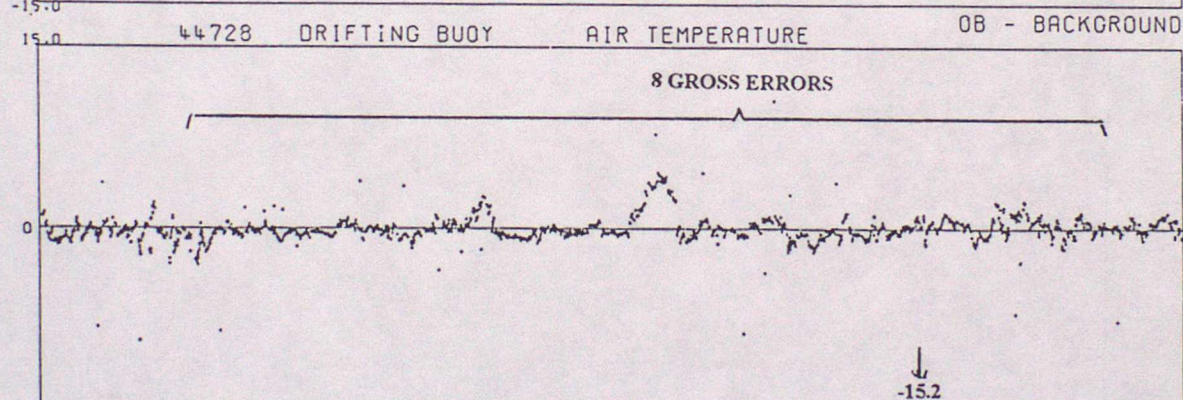
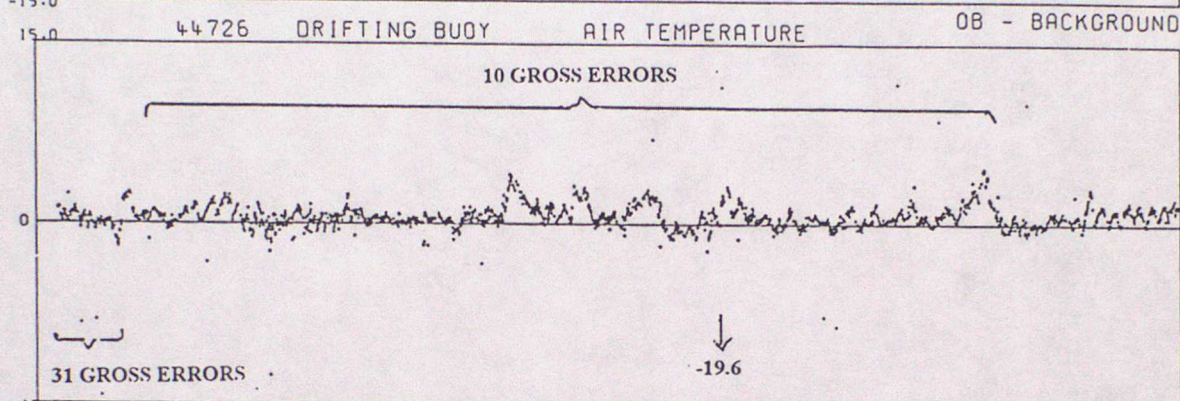
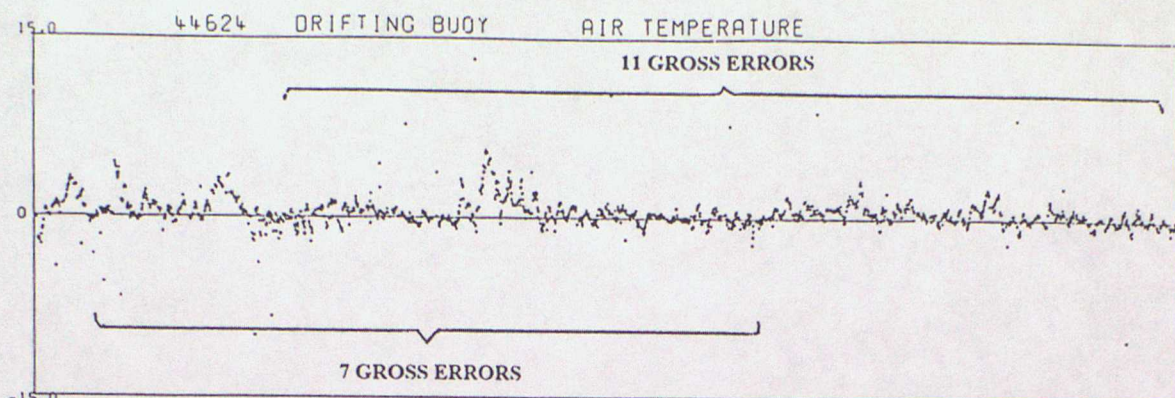


ANNEX C - TIME SERIES PLOTS OF AIR TEMPERATURE

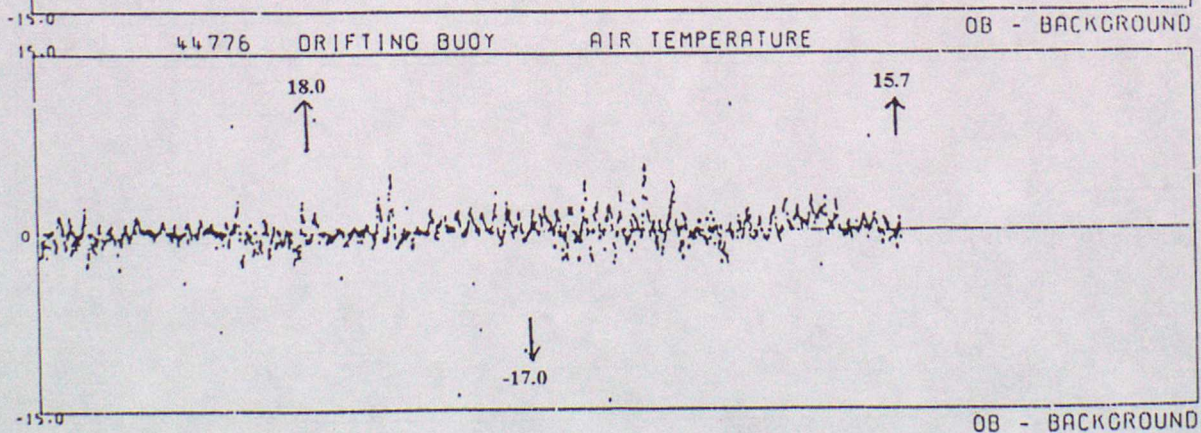
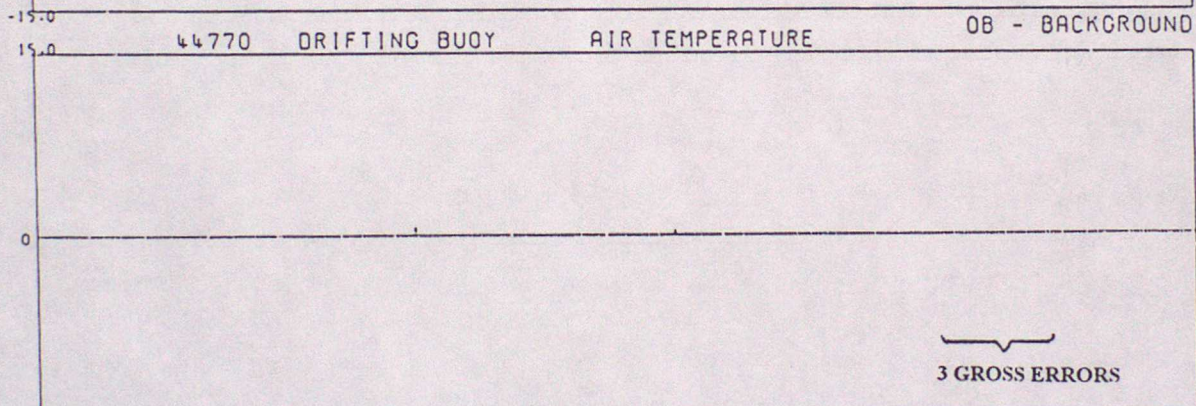
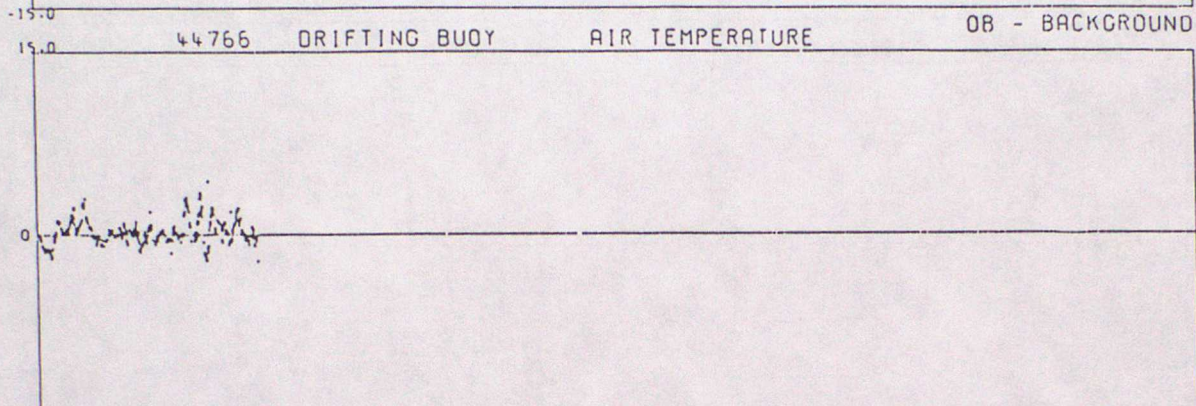
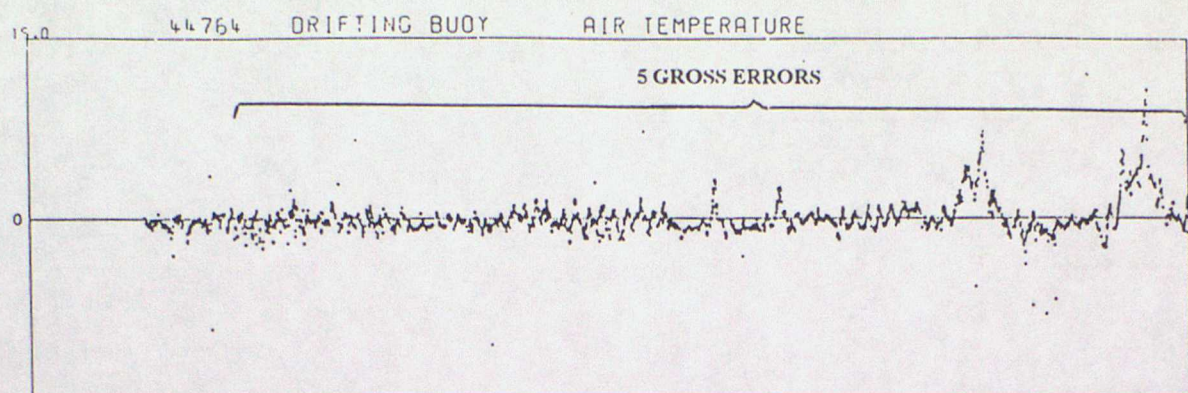
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



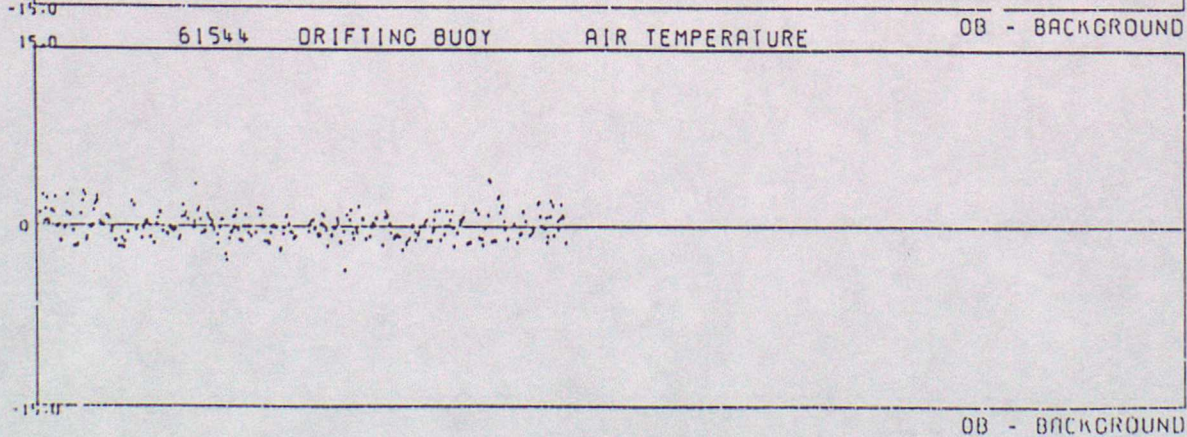
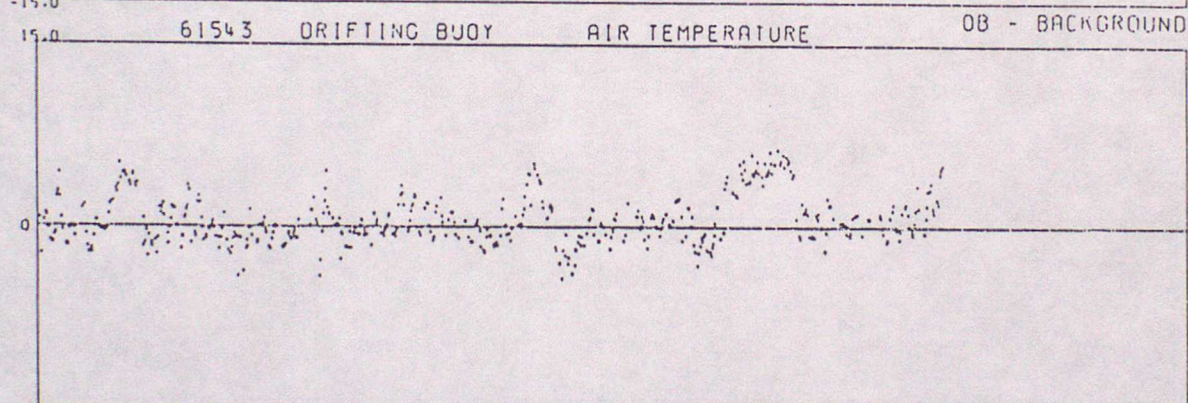
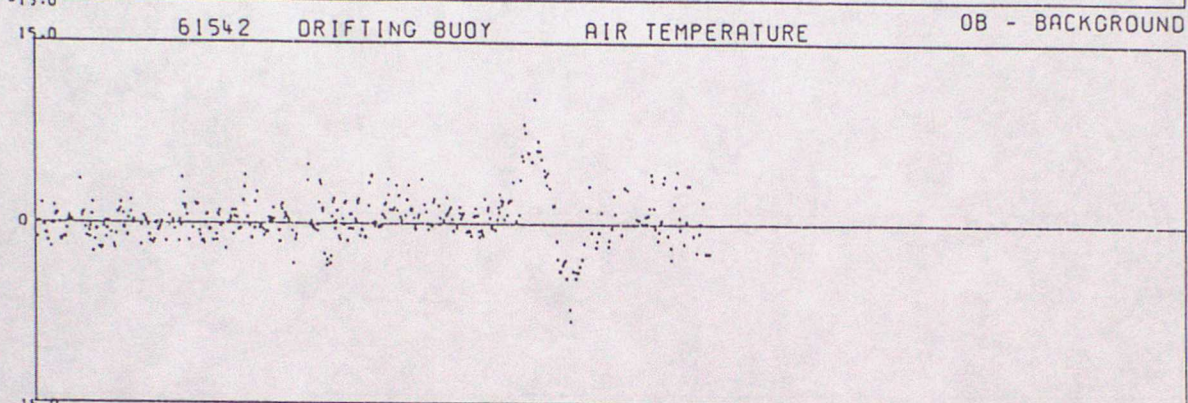
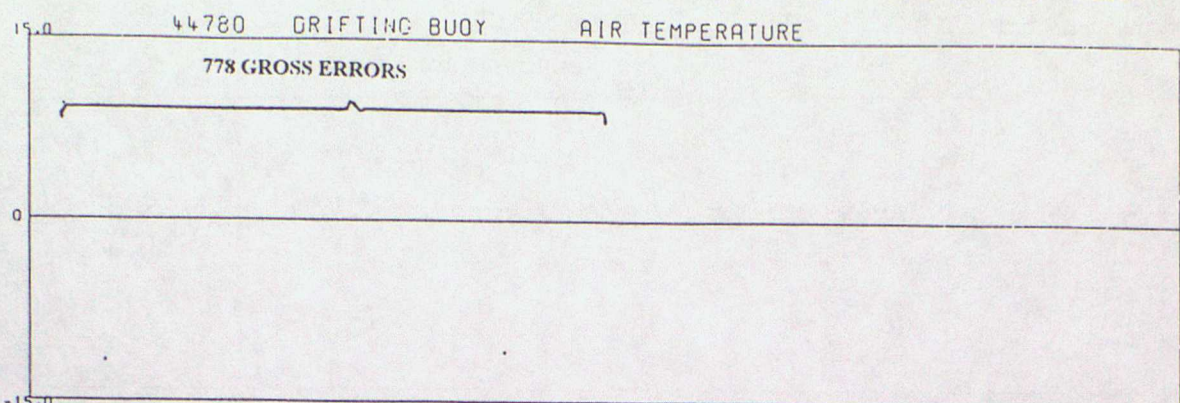
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



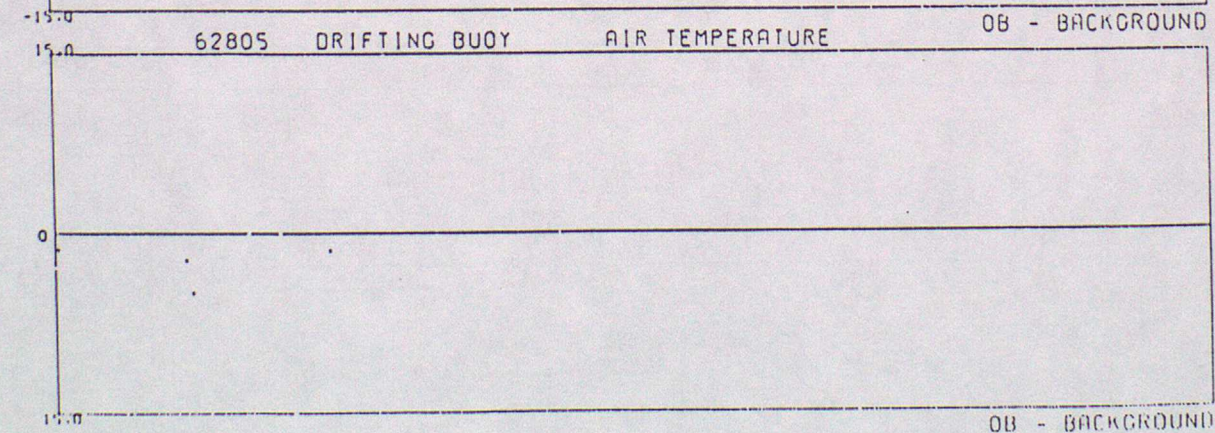
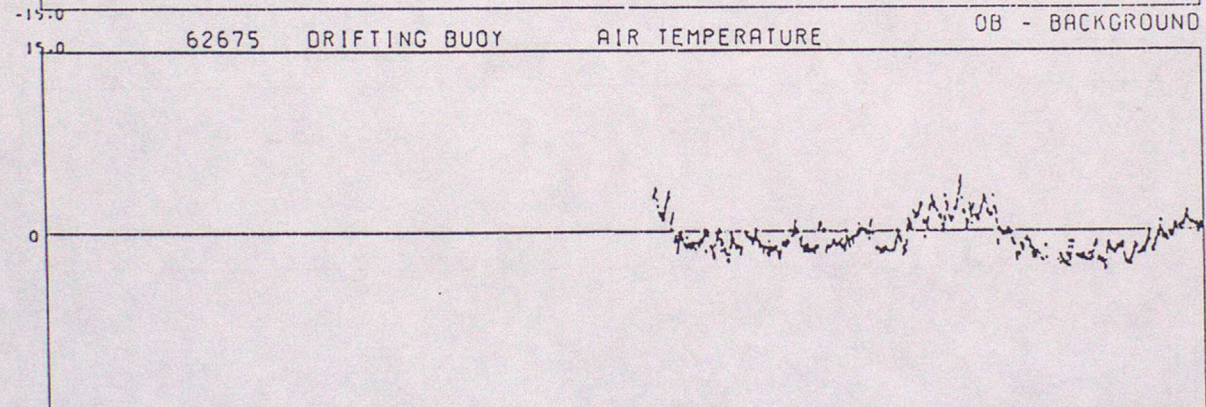
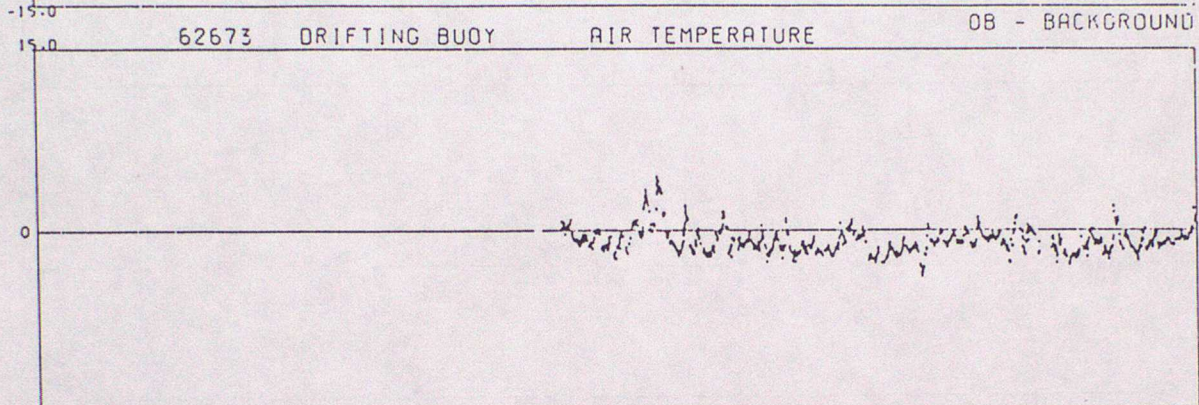
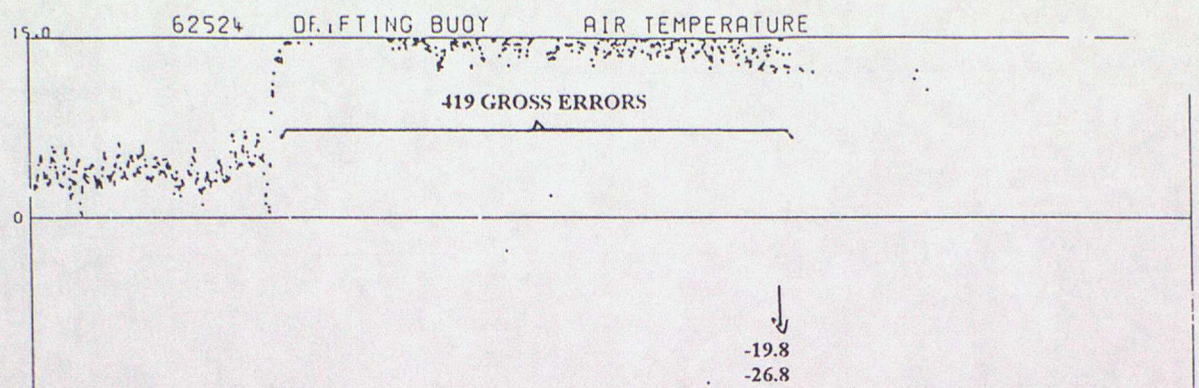
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



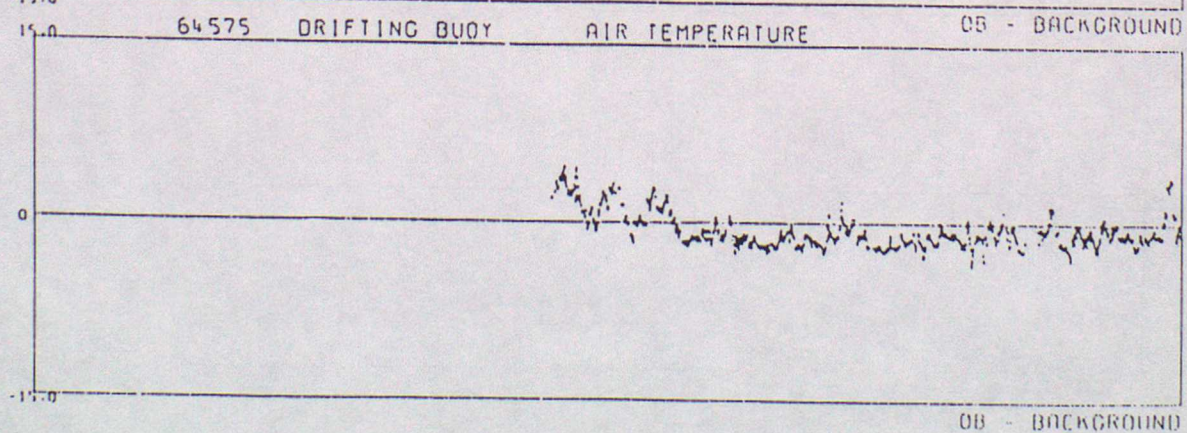
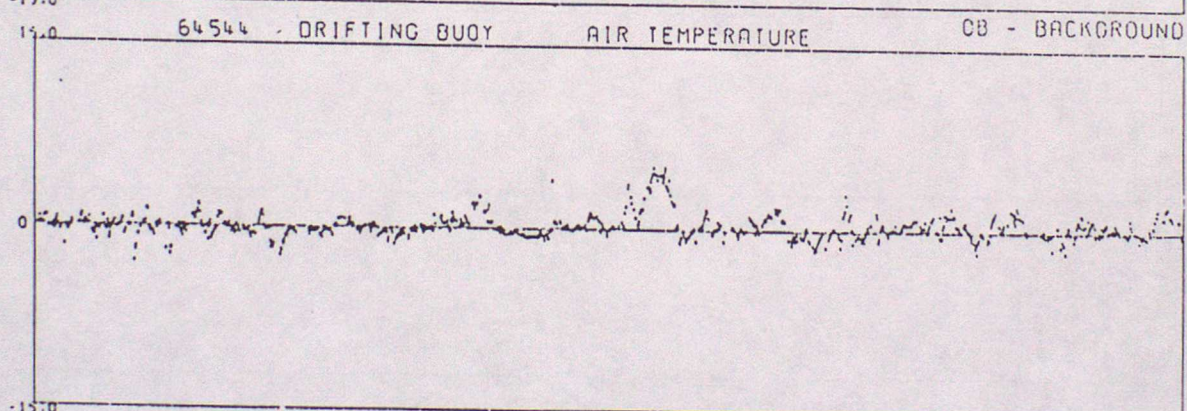
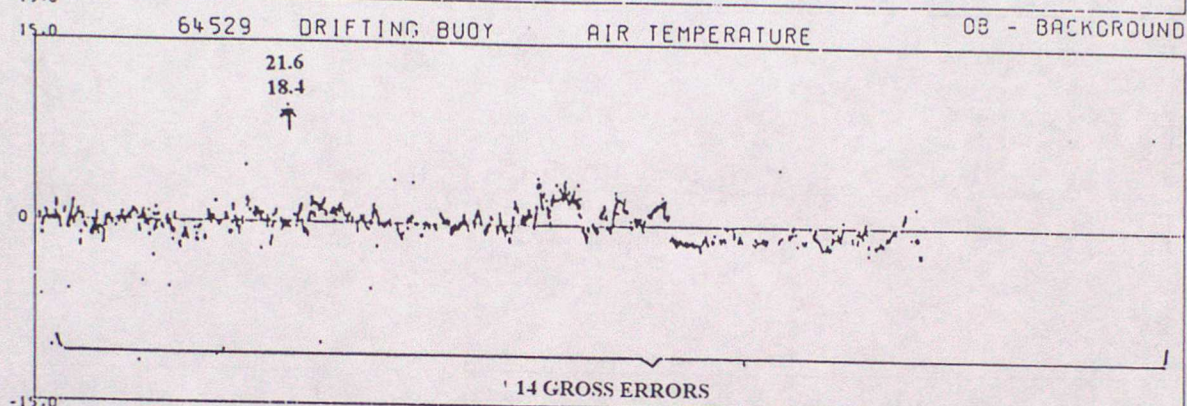
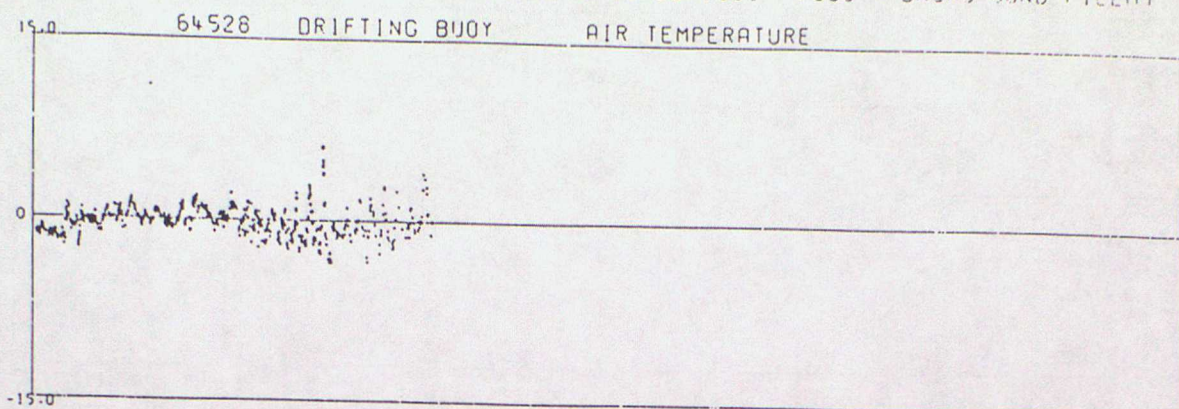
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



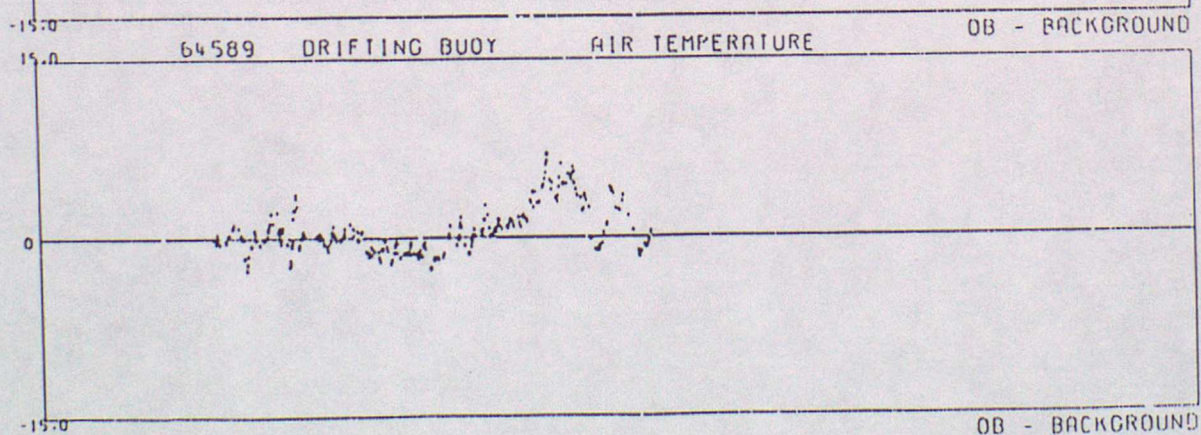
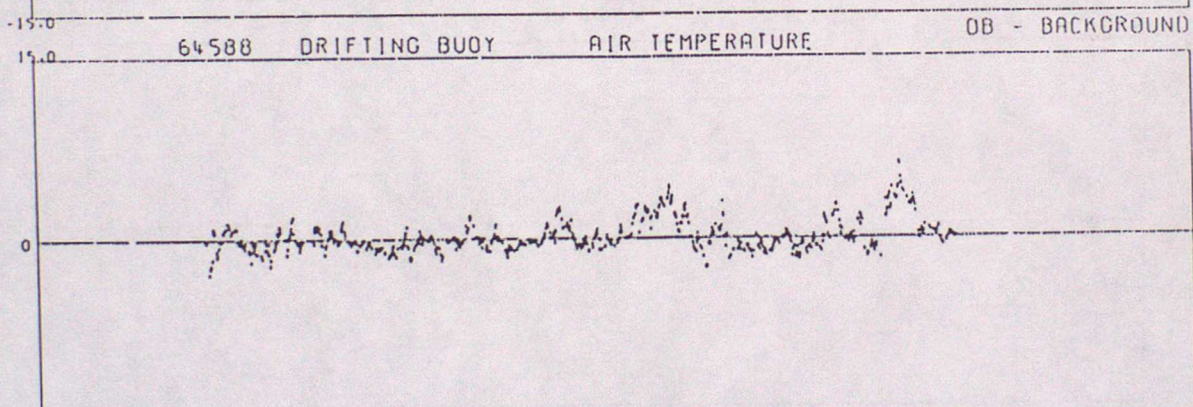
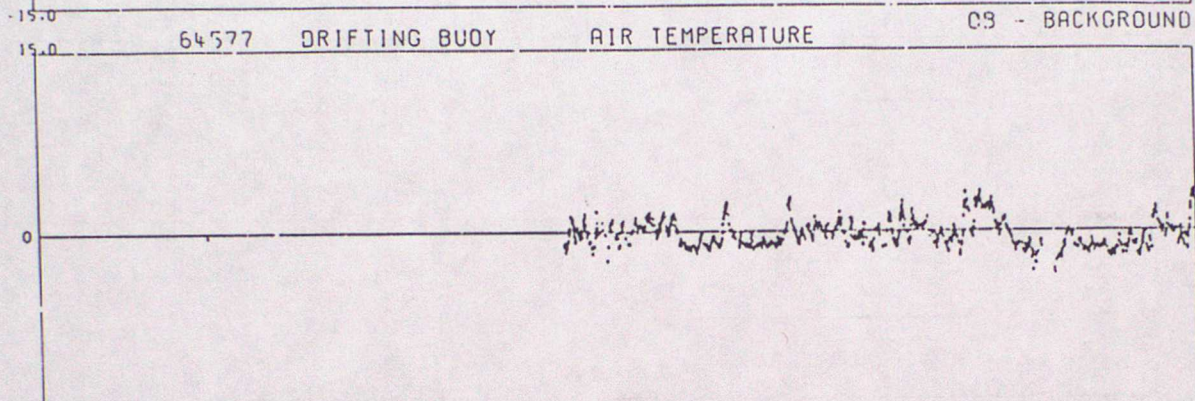
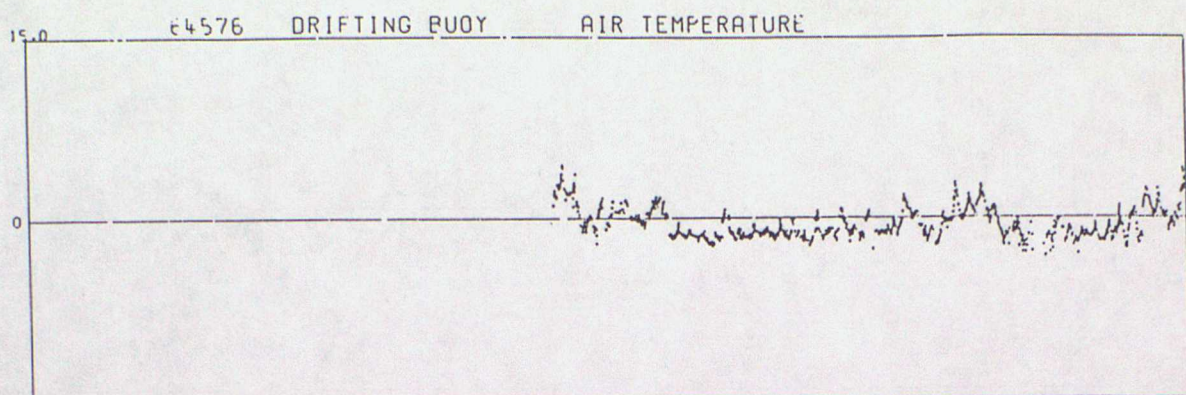
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



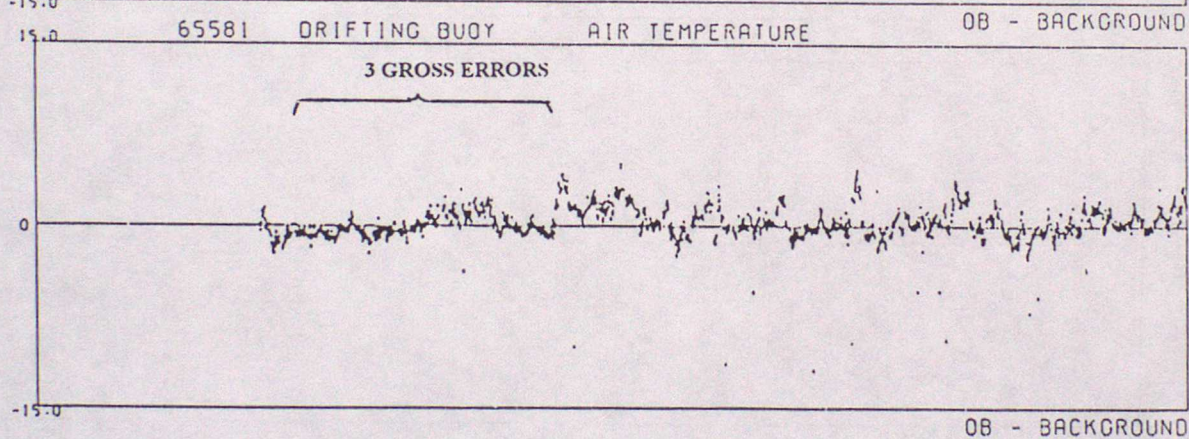
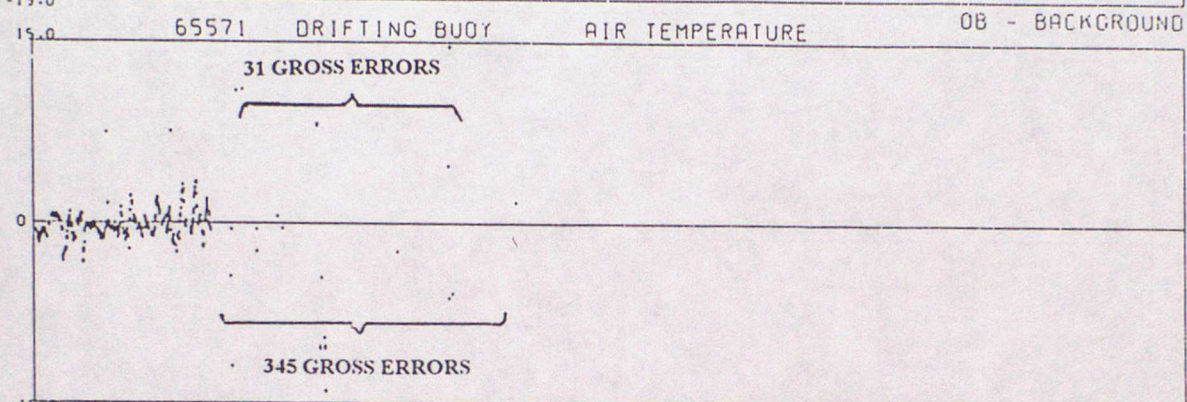
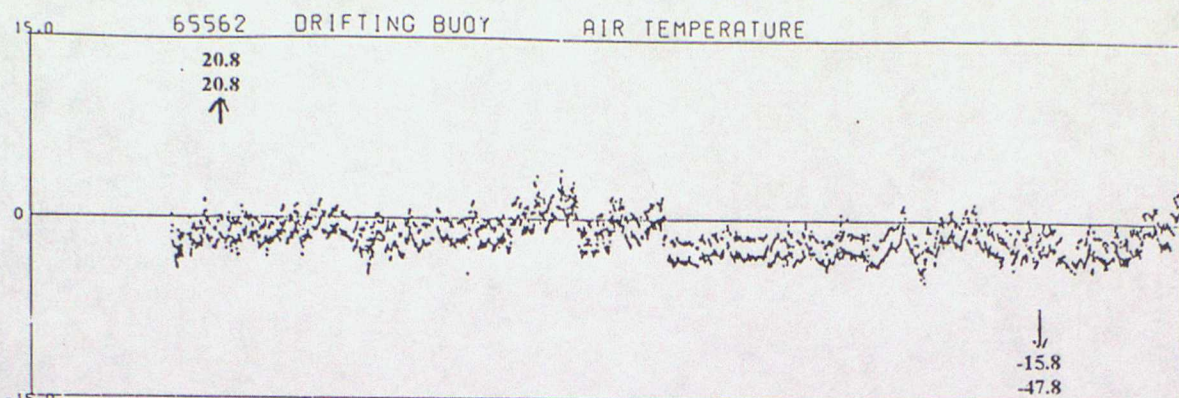
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)

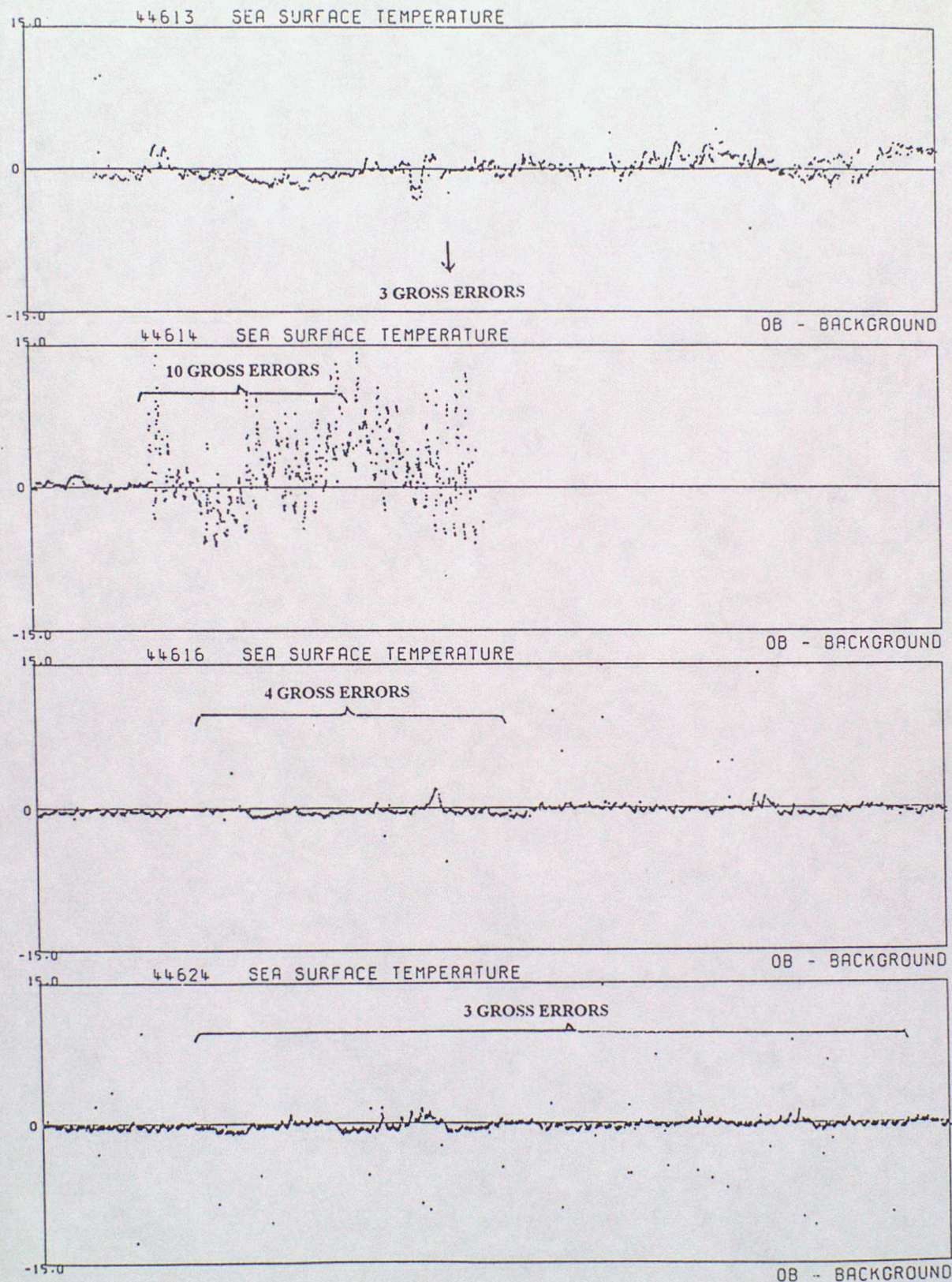


DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)

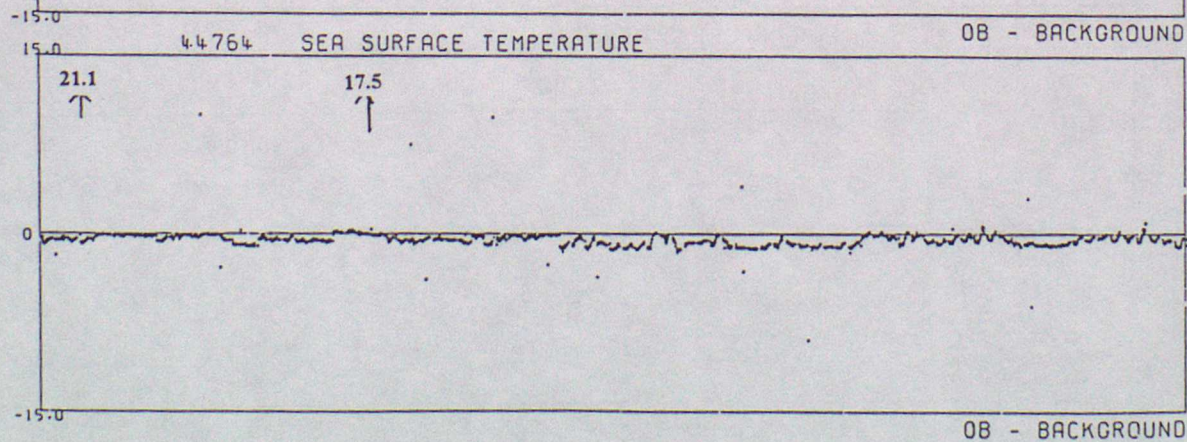
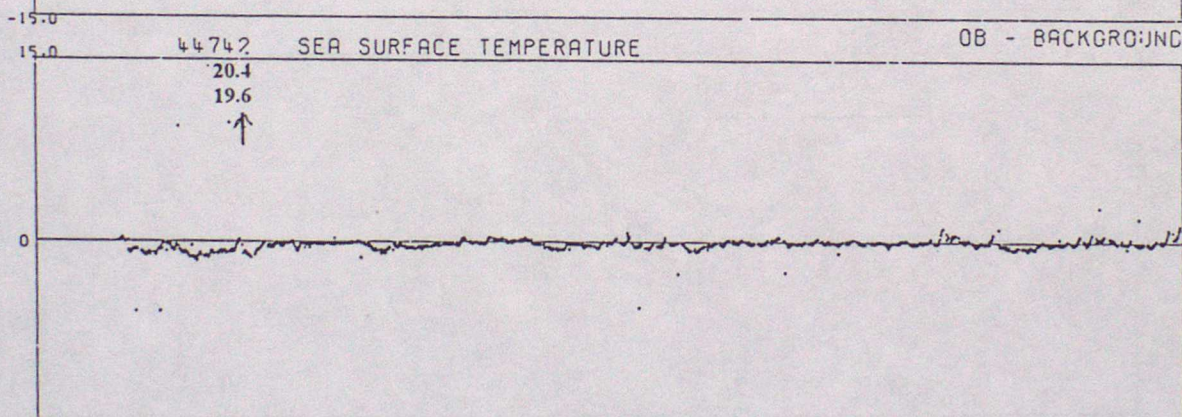
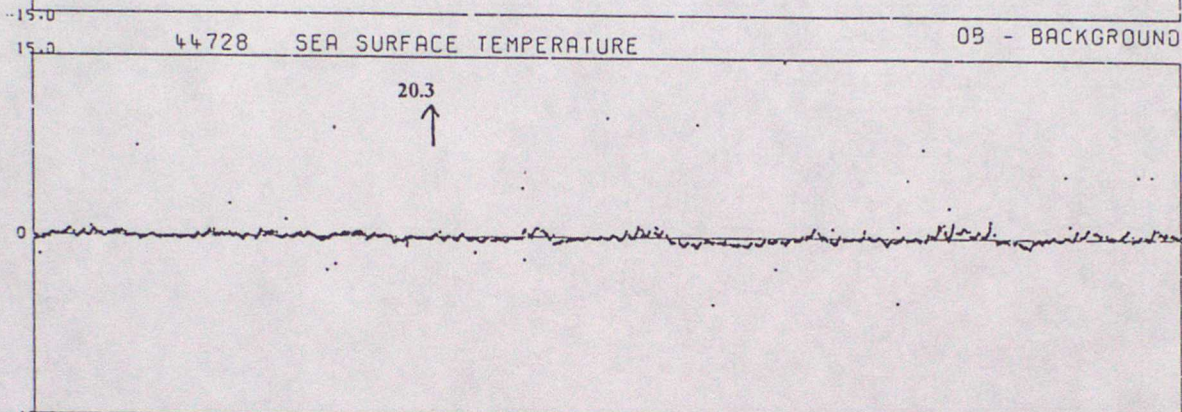
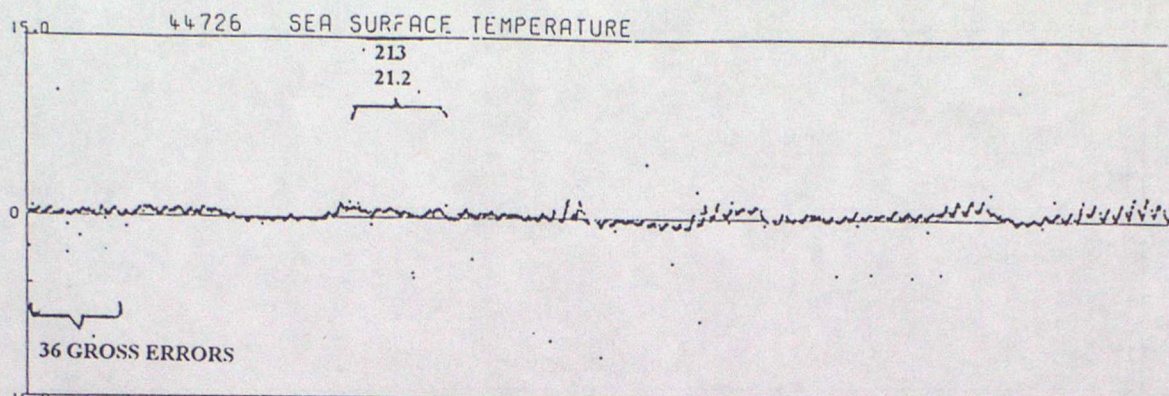


ANNEX D - TIME SERIES PLOTS OF SEA SURFACE TEMPERATURE

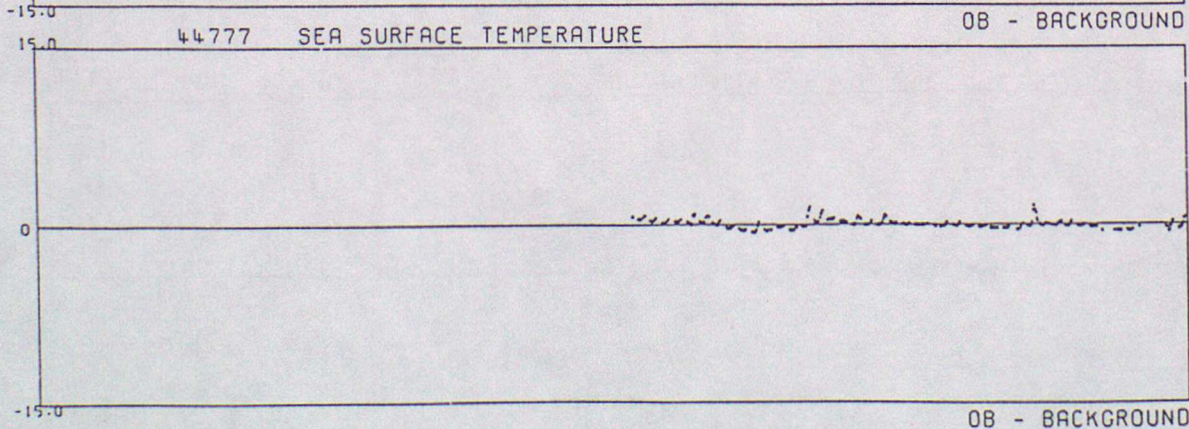
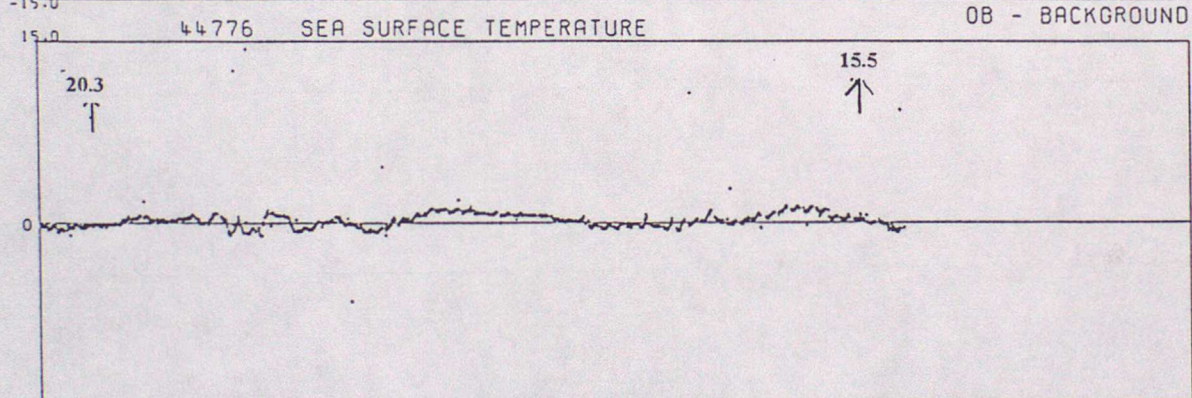
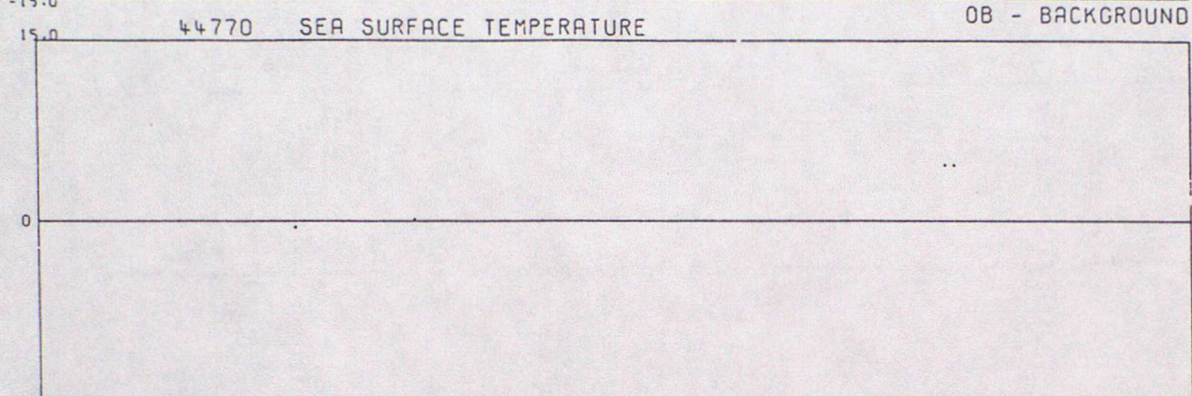
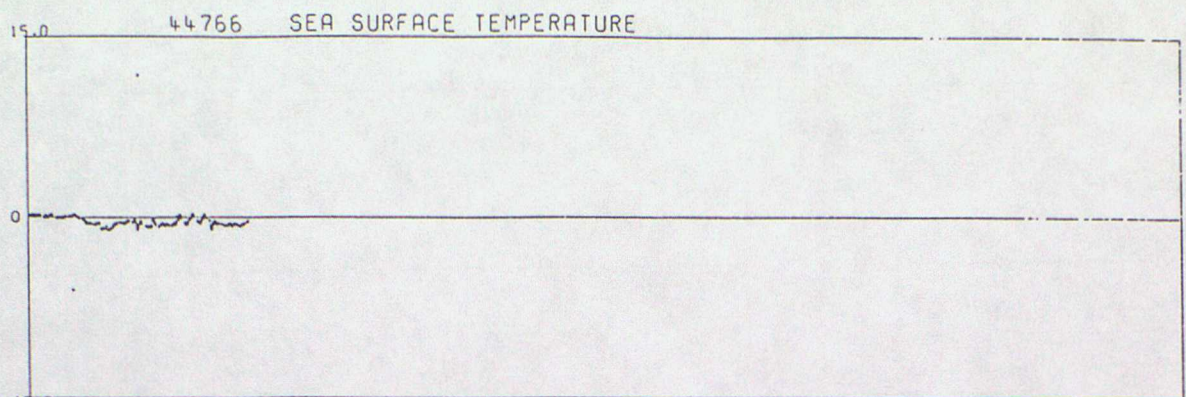
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



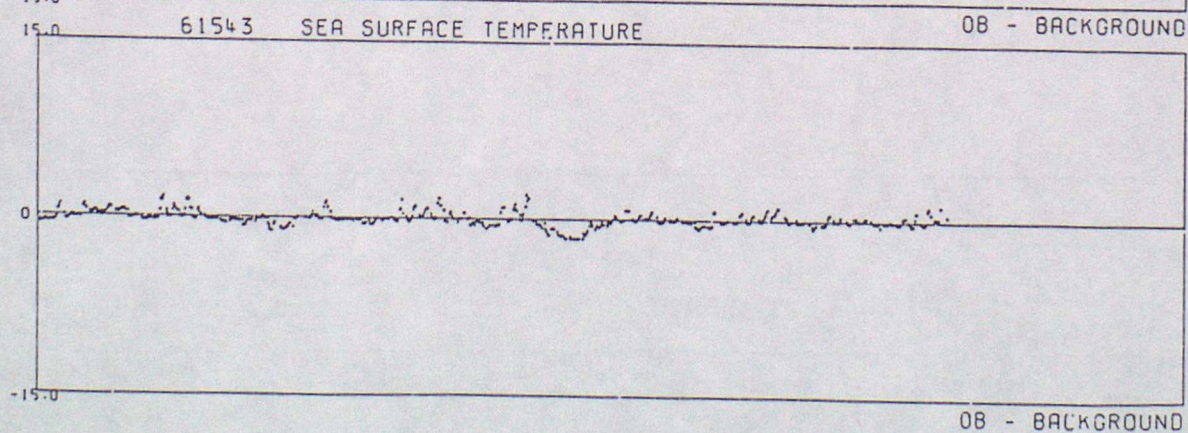
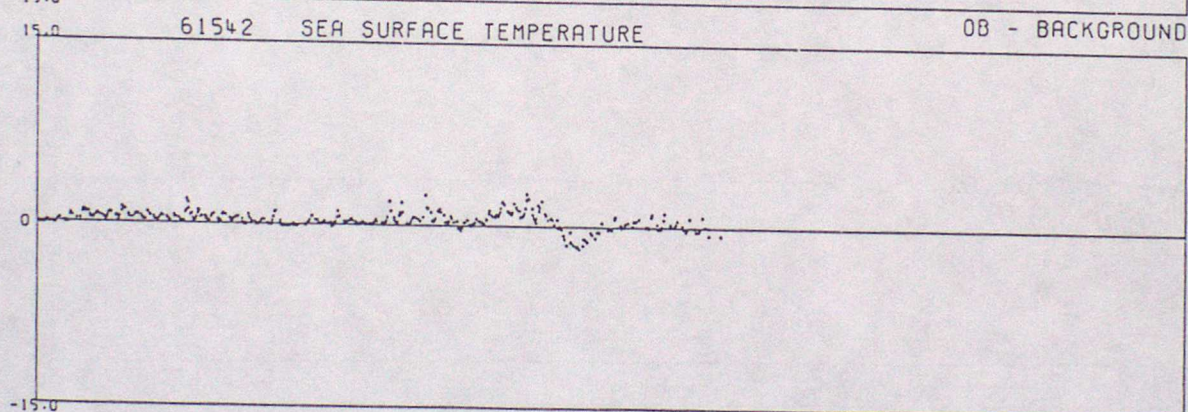
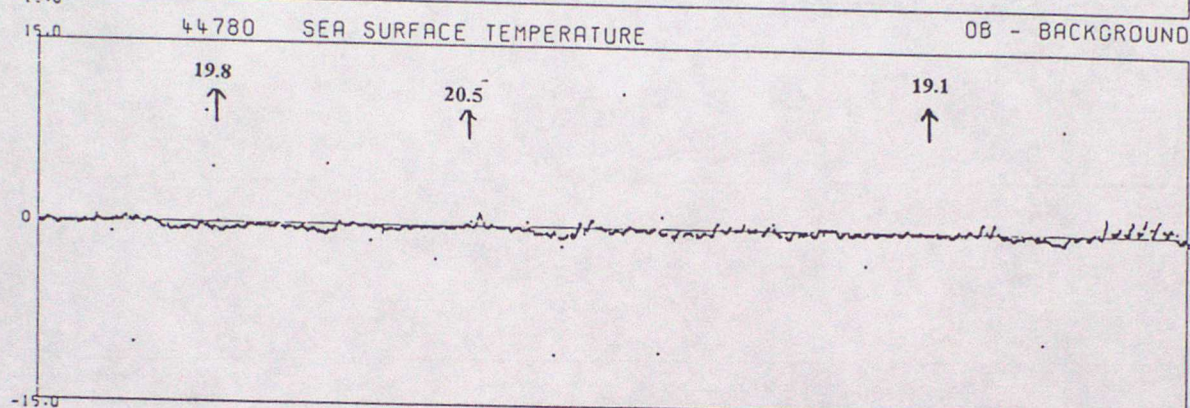
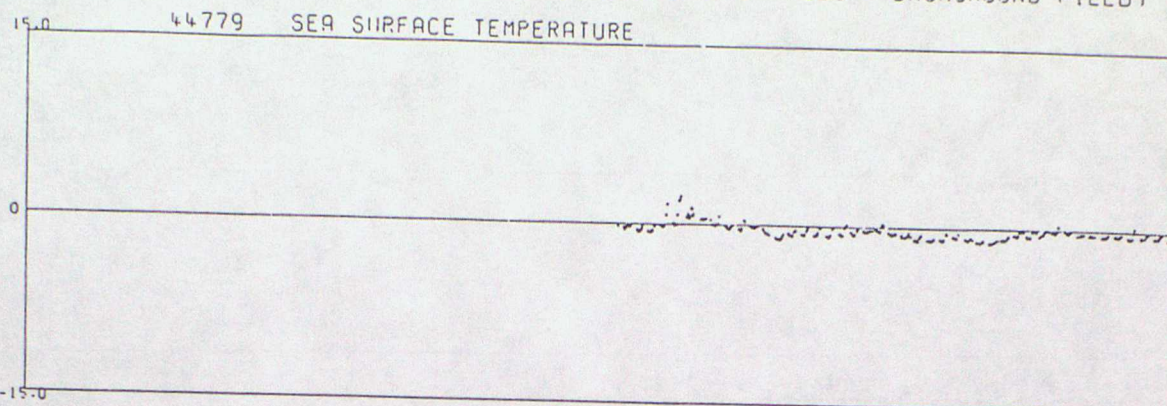
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (065 - BACKGROUND FIELD)



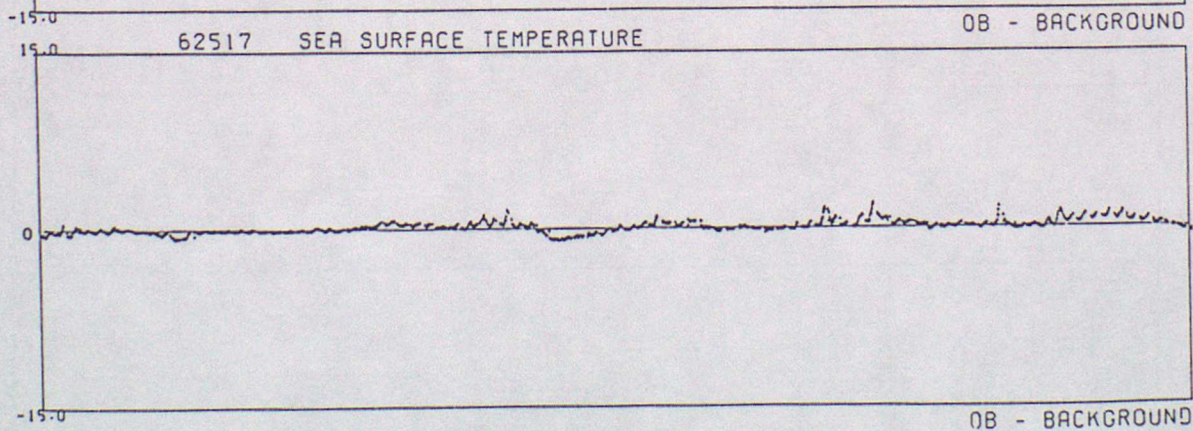
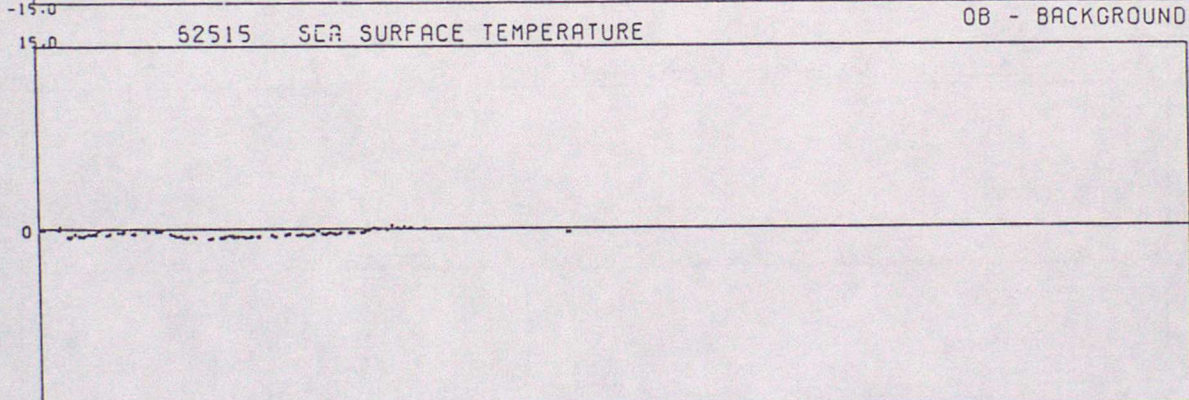
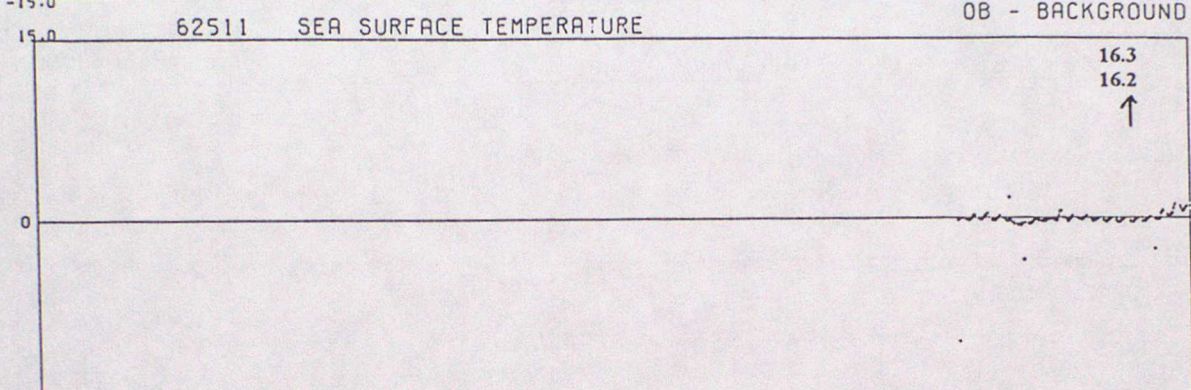
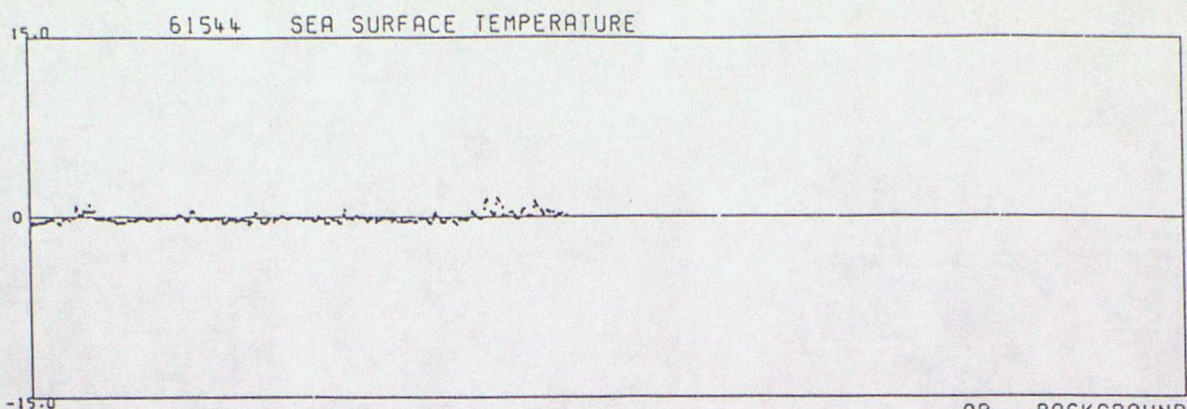
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



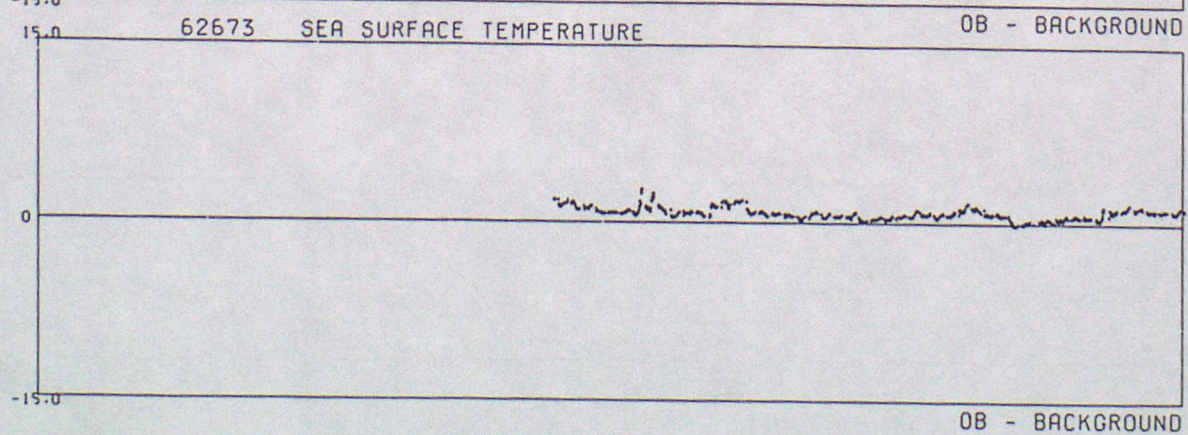
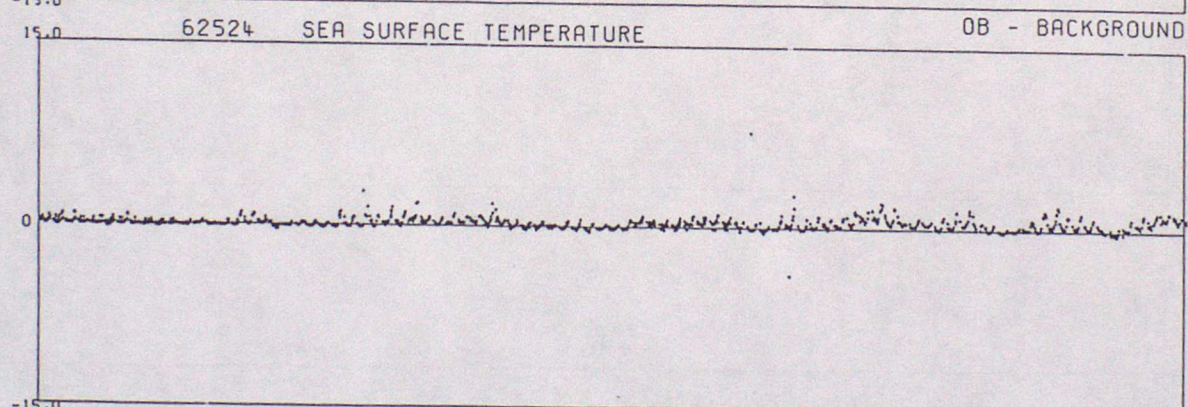
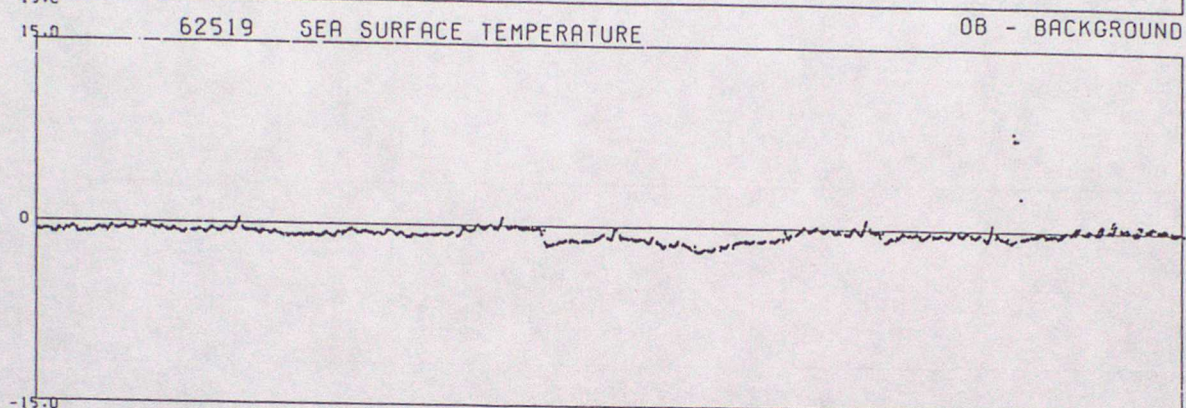
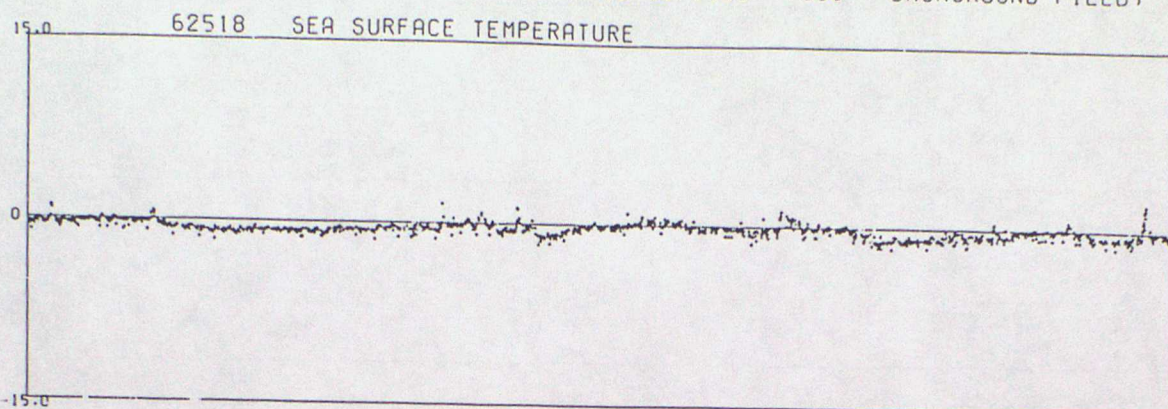
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



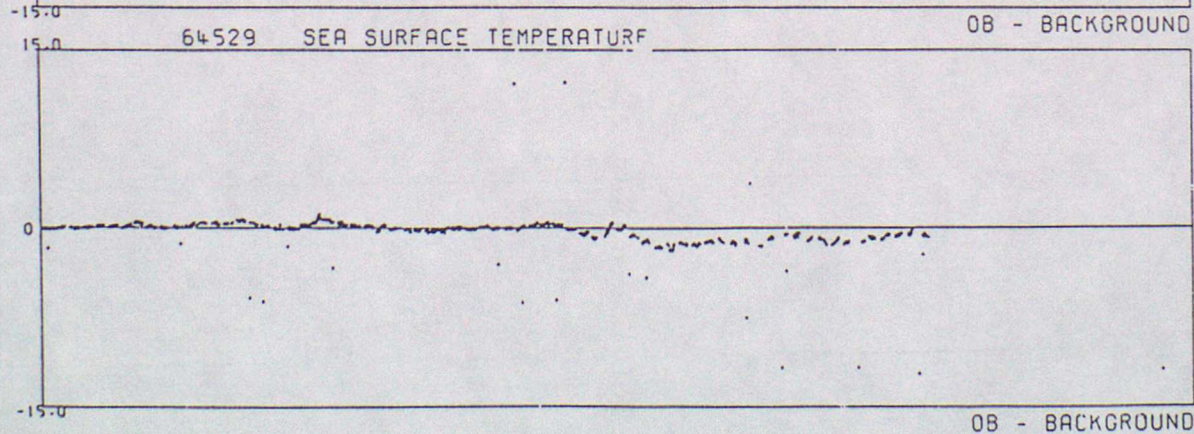
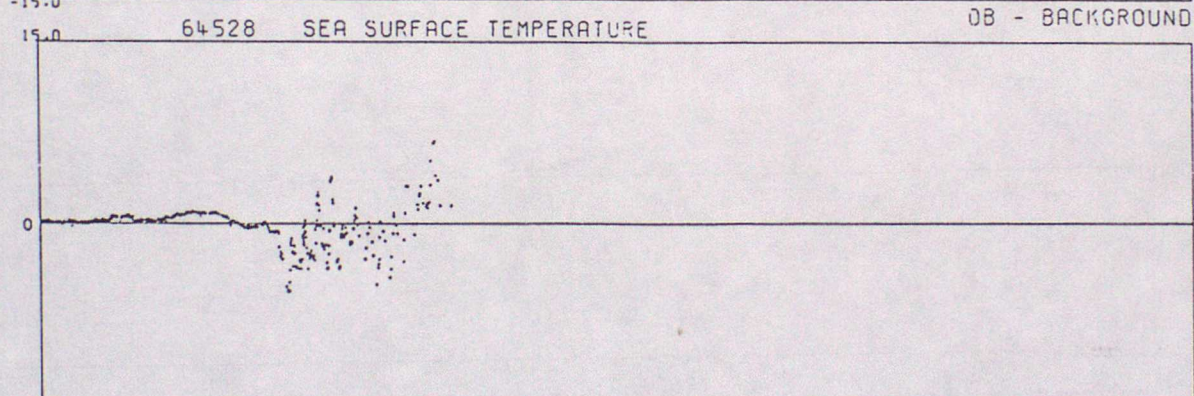
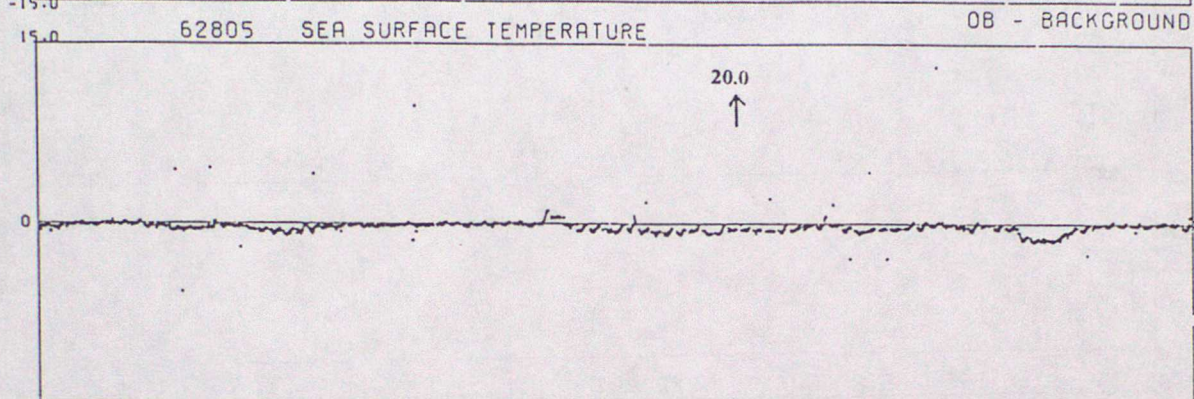
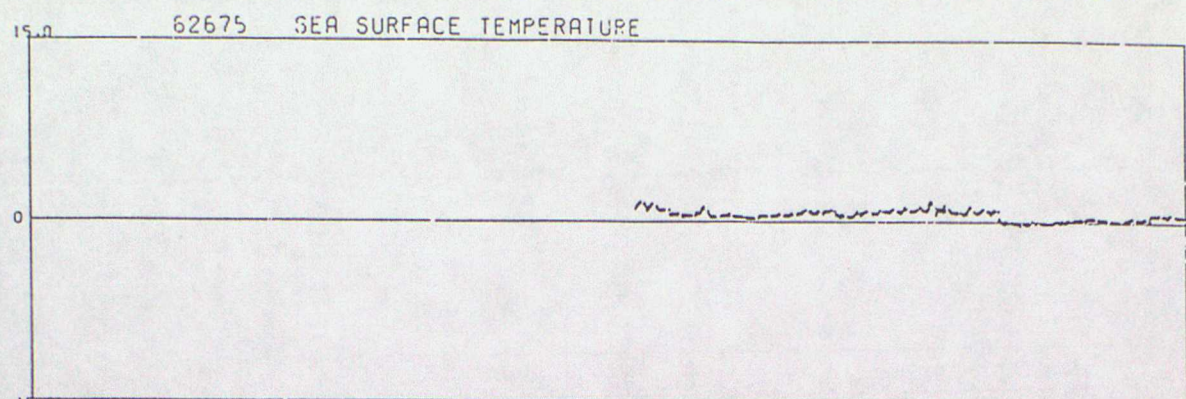
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)

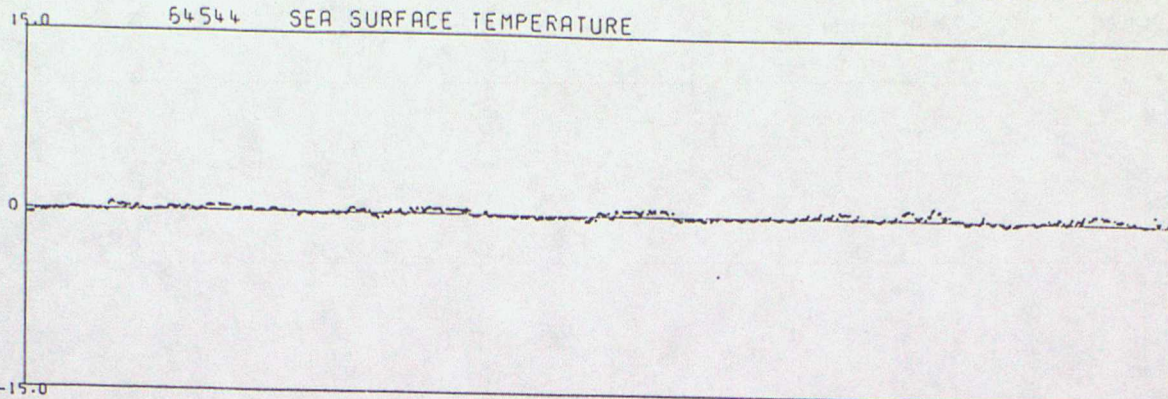


DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



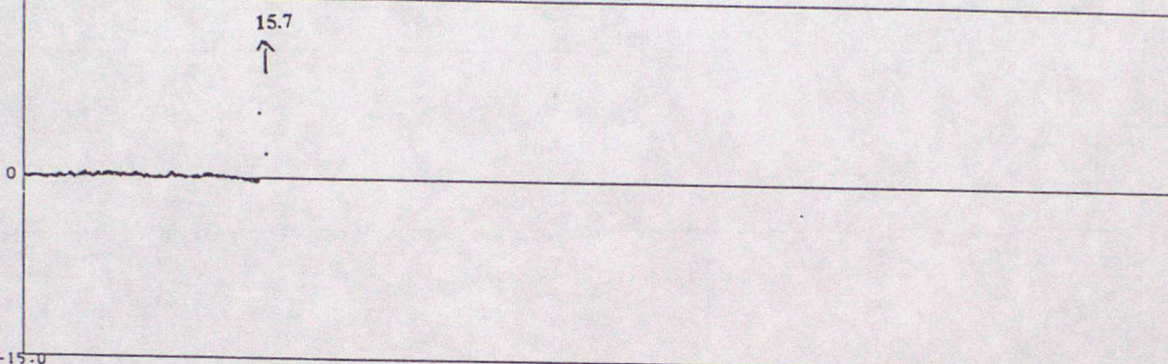
DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (083 - BACKGROUND FIELD)

64544 SEA SURFACE TEMPERATURE



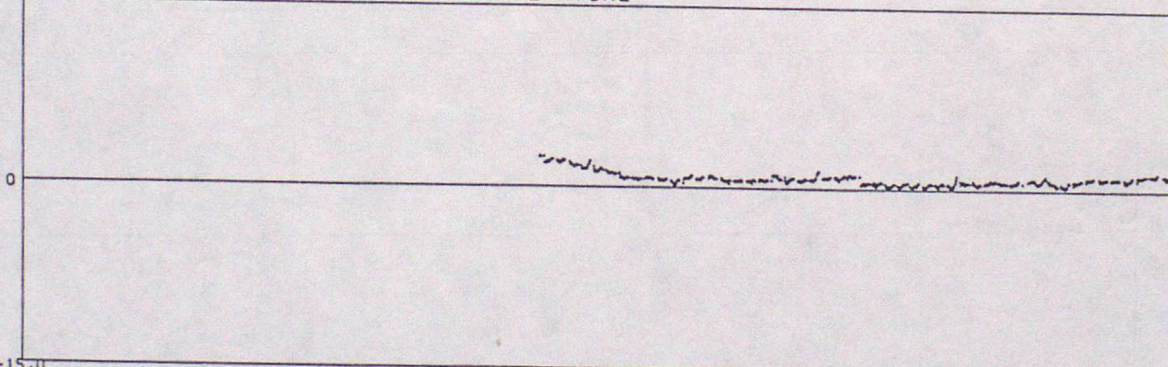
64546 SEA SURFACE TEMPERATURE

08 - BACKGROUND



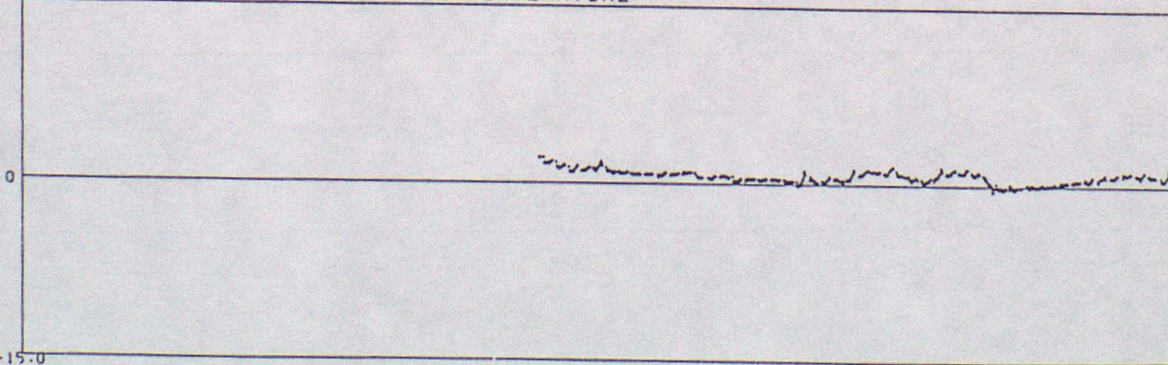
64575 SEA SURFACE TEMPERATURE

08 - BACKGROUND



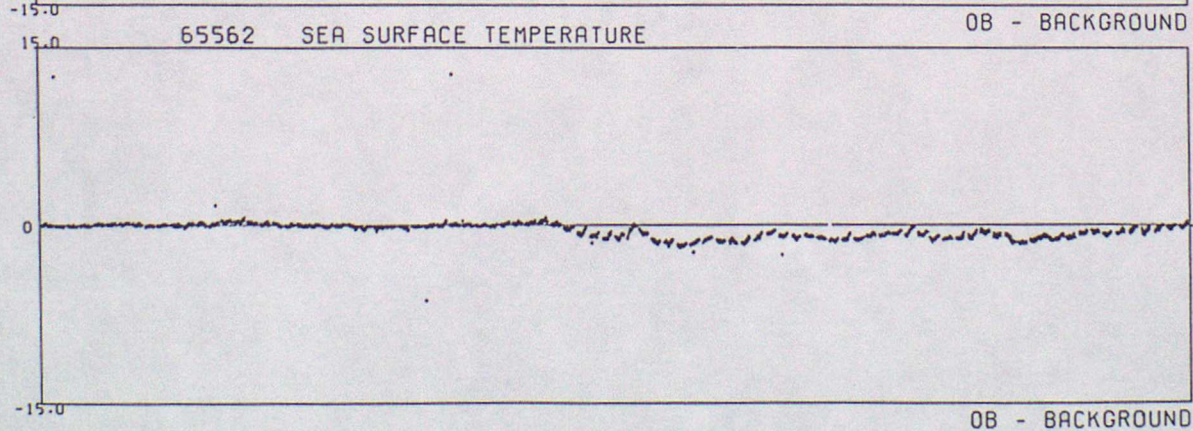
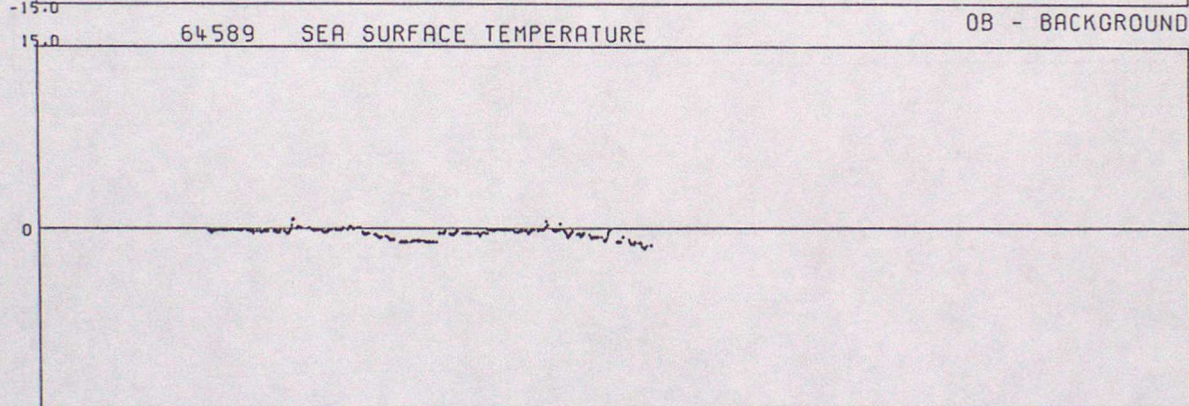
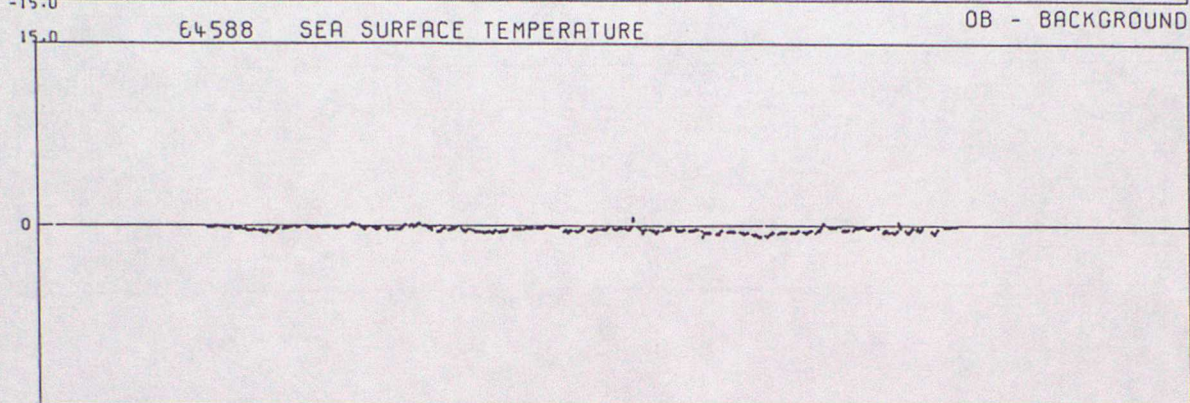
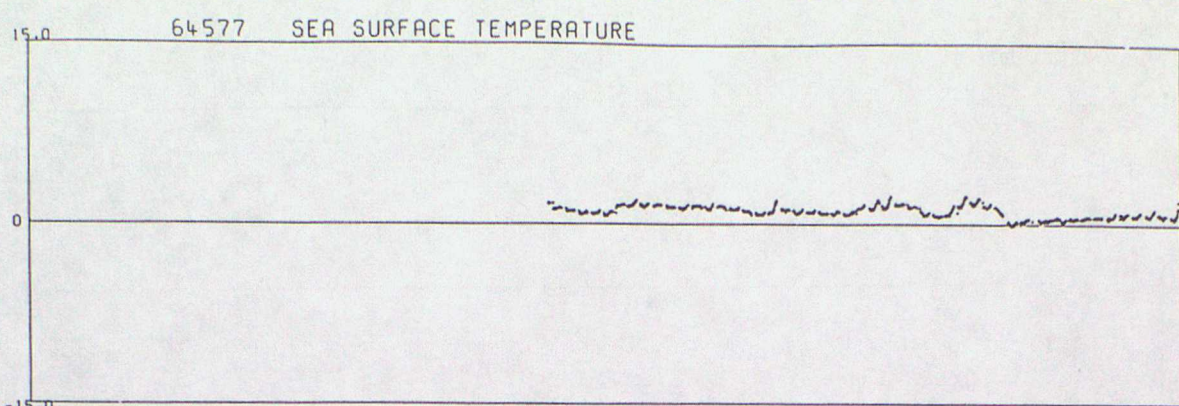
64576 SEA SURFACE TEMPERATURE

08 - BACKGROUND

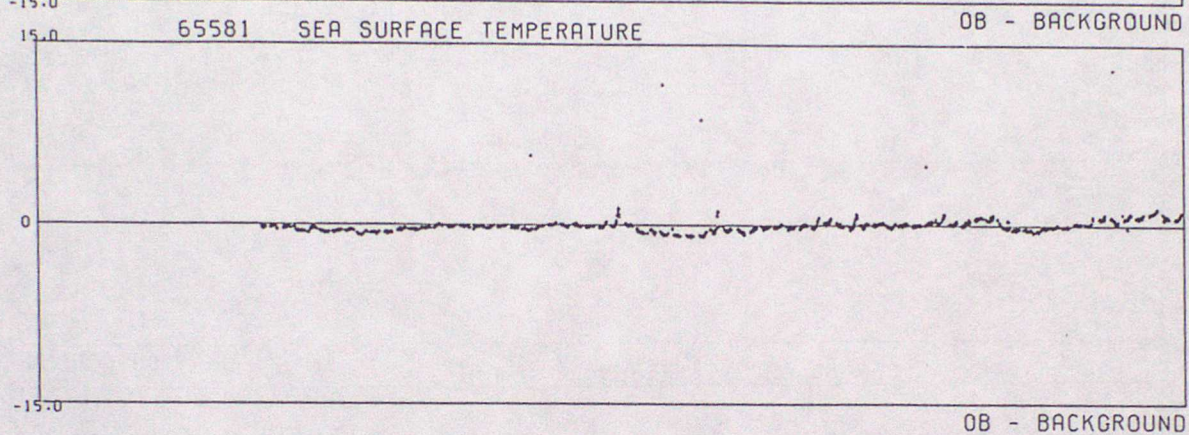
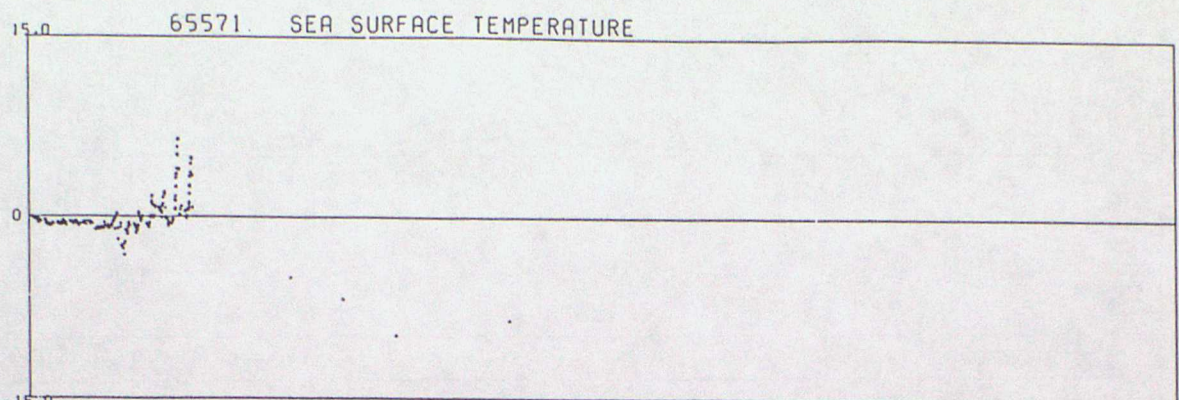


08 - BACKGROUND

DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)

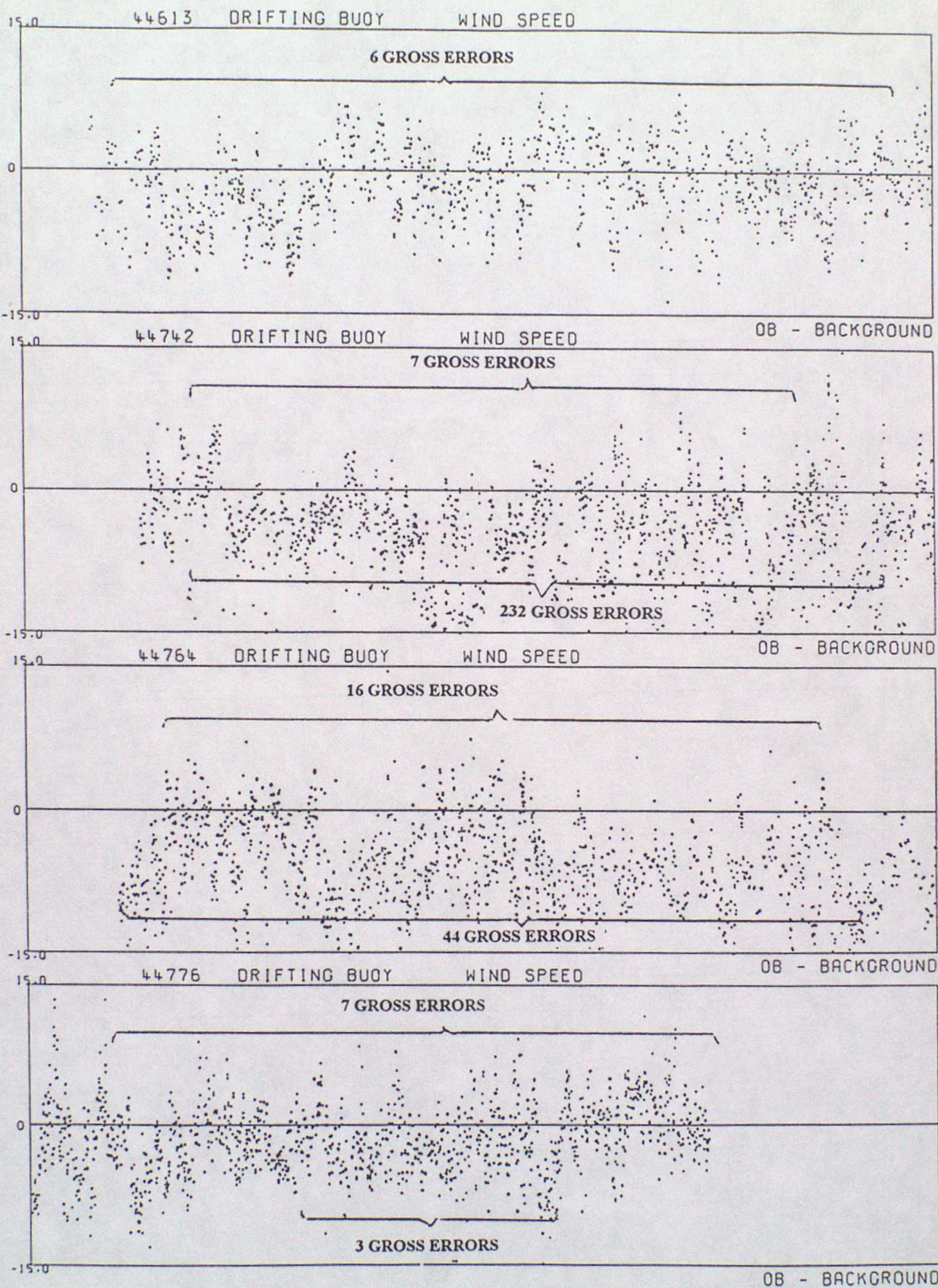


OB - BACKGROUND

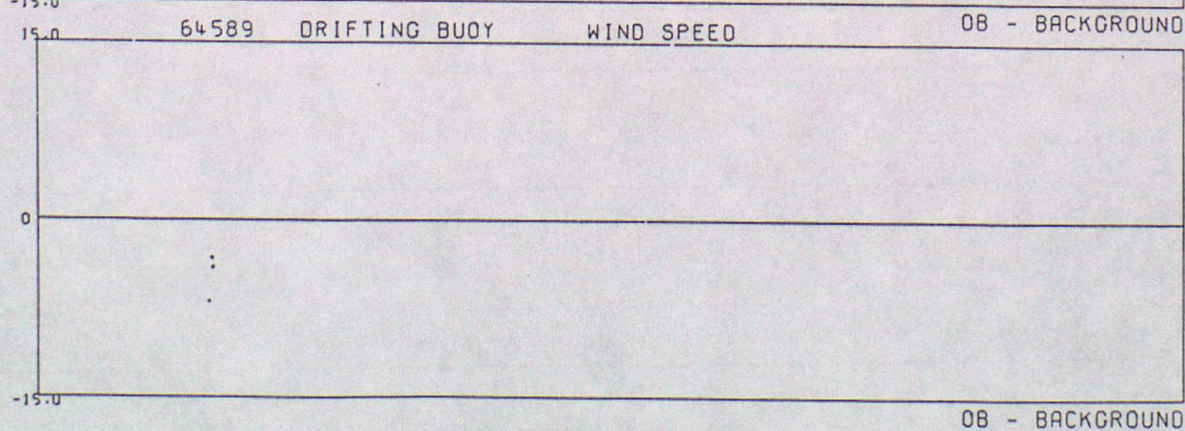
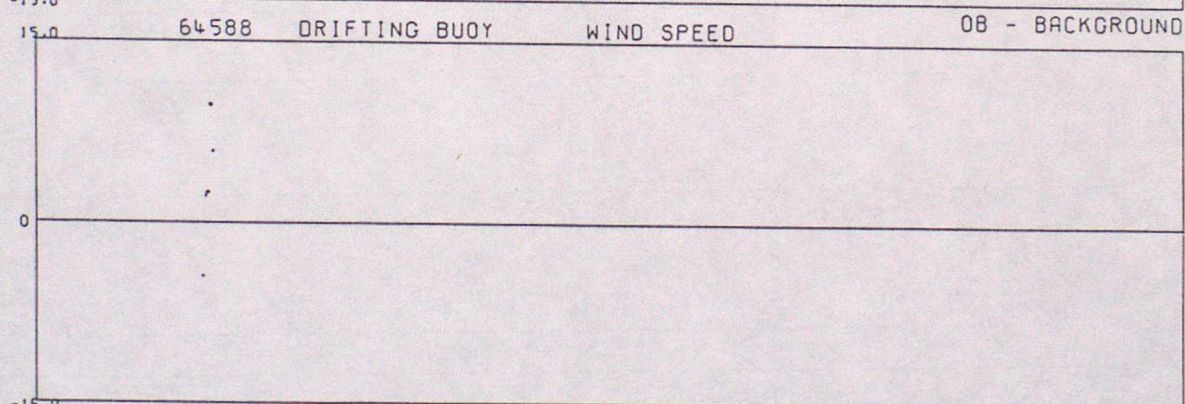
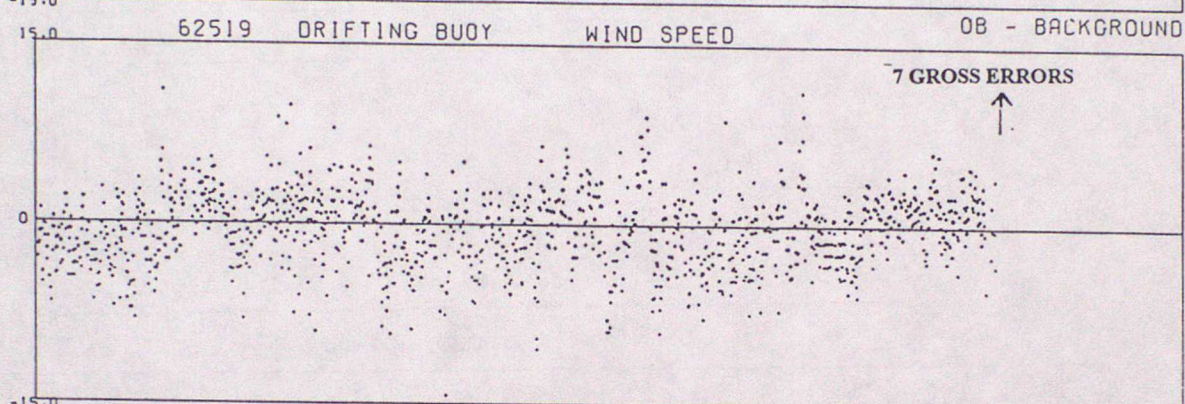
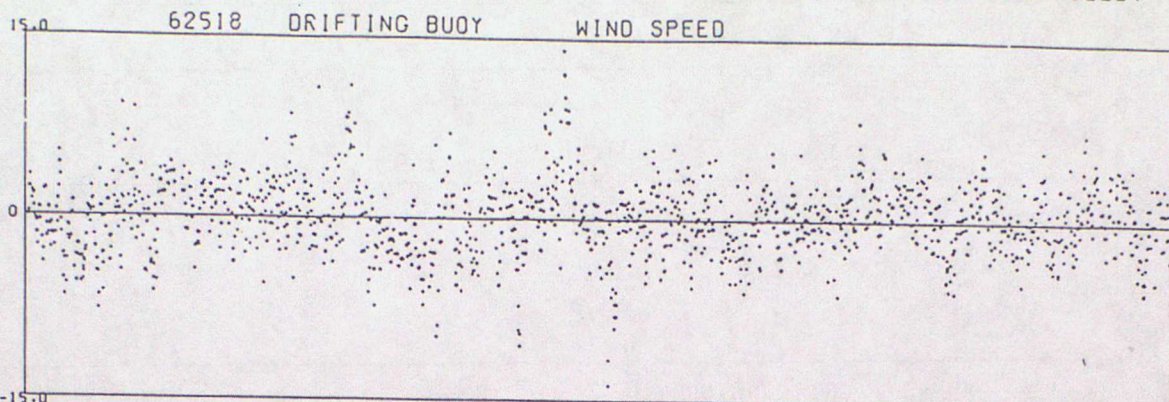


ANNEX E - TIME SERIES PLOTS OF WIND SPEED

DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/J6/1995 (OBS - BACKGROUND FIELD)

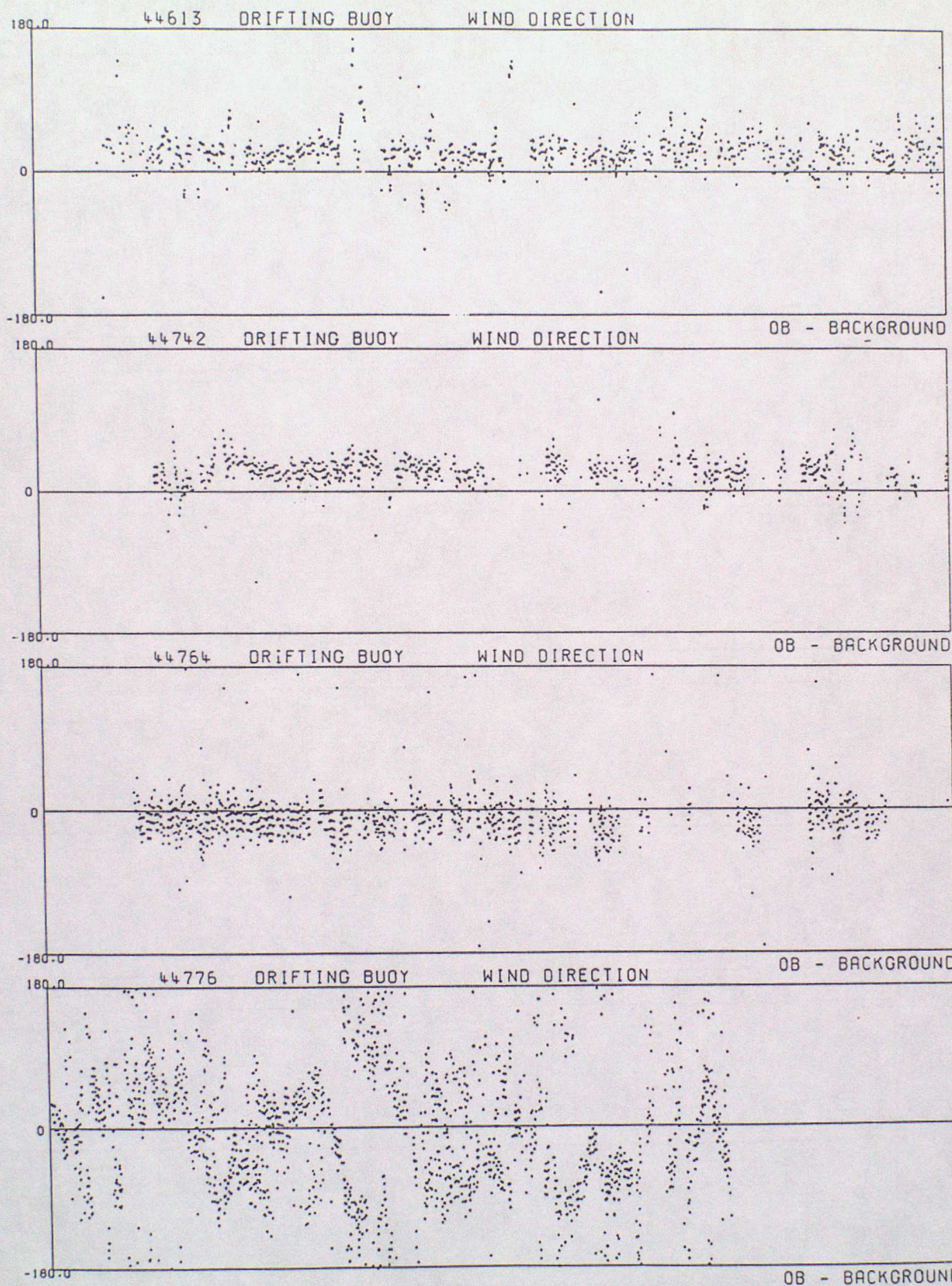


DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)

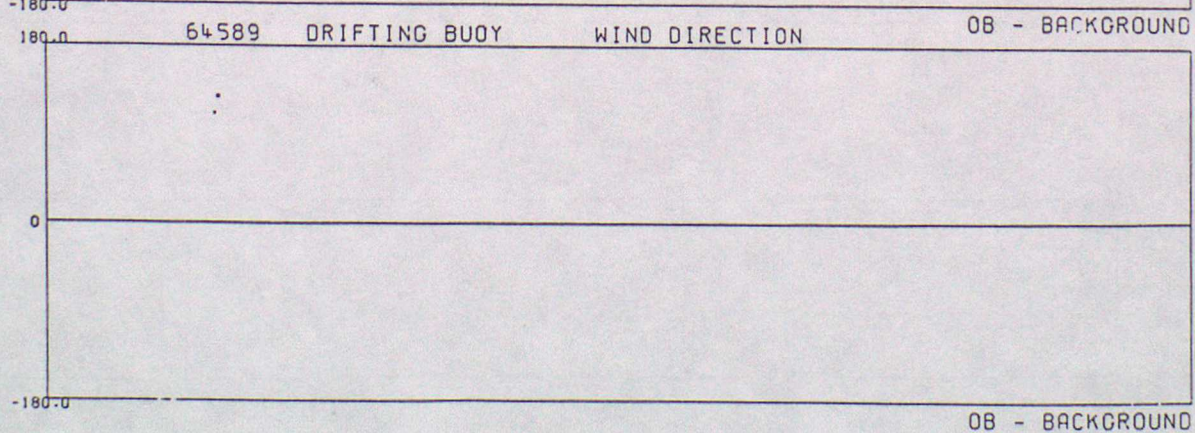
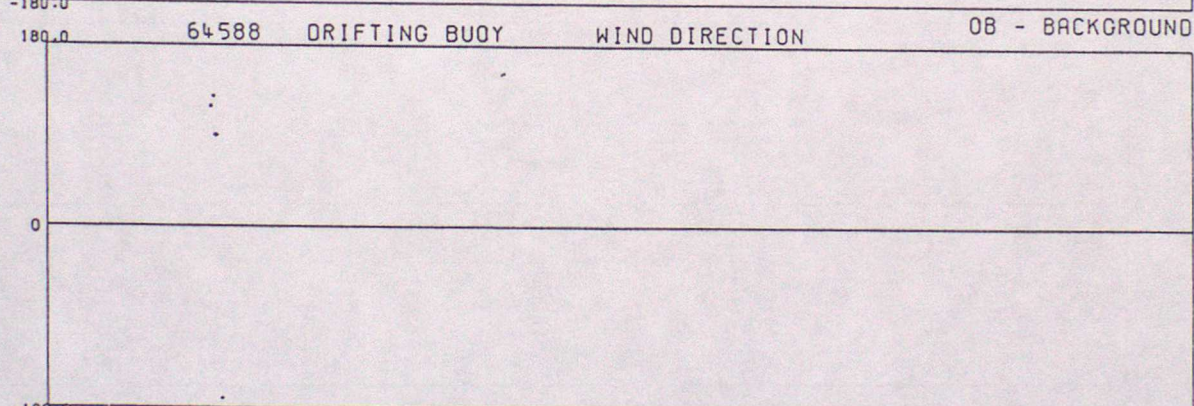
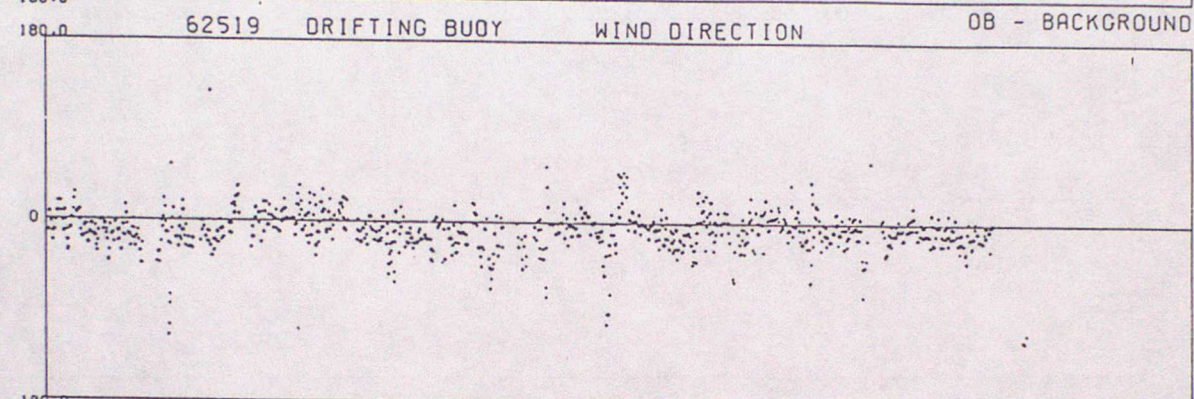
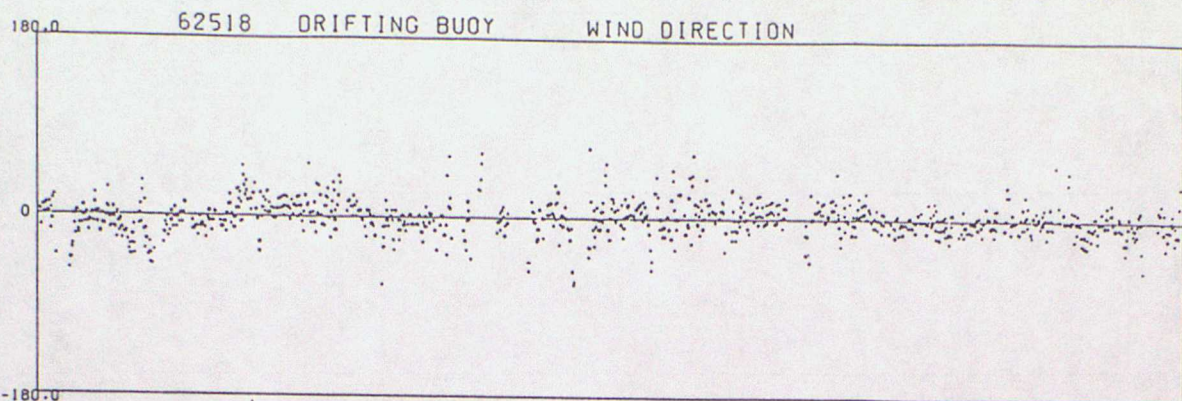


ANNEX F - TIME SERIES PLOTS OF WIND DIRECTION

DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



DATA FROM 00Z ON 01/04/1995 TO 23Z ON 30/06/1995 (OBS - BACKGROUND FIELD)



ANNEX G - SUMMARY TABLE OF OPERATIONAL DRIFTING BUOYS

WMO No.	Argos No.	Owner	Elements Reported						Reporting Period
			PP	Pt	TT	FF	DD	SST	
25565	1639	UK.	*	*	*				01/04 - 30/06
44613	????	UK.	*	*	*	*	*	*	07/04 - 30/06
44614	6294	UK.	*	*	*			*	01/04 - 15/05
44616	3318	UK.	*	*	*			*	01/04 - 30/06
44624	6292	UK.	*	*	*			*	01/04 - 30/06
44726	6296	UK.	*	*	*			*	01/04 - 30/06
44728	3024	UK.	*	*	*			*	01/04 - 30/06
44742	2953	UK.	*	*	*	*	*	*	07/04 - 30/06
44764	6306	UK.	*	*	*	*	*	*	01/04 - 30/06
44766	4274	UK.	*	*	*			*	01/04 - 18/04
44770	3039	UK.	*	*	*			*	16/04 - 19/06
44776	6305	UK.	*	*	*	*	*	*	01/04 - 07/06
44777	14733	UK.	*	*				*	17/05 - 30/06
44779	14737	UK.	*	*				*	16/05 - 30/06
44780	1250	UK.	*	*	*			*	01/04 - 30/06
61542	15380	US.	*		*			*	01/04 - 24/05
61543	15386	US.	*		*			*	01/04 - 11/06
61544	16344	US.	*		*			*	01/04 - 12/05
62511	14423	F.	*	*				*	11/06 - 30/06
62515	14422	F.	*	*				*	01/04 - 16/05
62517	10120	F.	*	*				*	01/04 - 30/06
62518	14419	F.	*	*		*	*	*	01/04 - 30/06
62519	14421	F.	*	*		*	*	*	01/04 - 30/06
62524	4625	UK.	*	*	*			*	01/04 - 30/06
62673	5259	US.	*		*			*	11/05 - 30/06
62675	6120	US.	*		*			*	18/05 - 30/06
62805	2927	UK.	*	*	*			*	01/04 - 30/06 +
64528	9306	NL.	*	*	*			*	01/04 - 02/05
64529	3037	N.	*	*	*			*	01/04 - 28/06
64544	14631	US.	*		*			*	01/04 - 30/06

KEY

PP - Pressure Pt - Pressure tendency TT - Air temperature
 FF - Wind speed DD - Wind direction SST - Sea surface temperature

+ - This buoy stopped reporting pressure before the end of the quarter but continued to report other elements.

WMO No.	Argos No.	Owner	Elements Reported						Reporting Period
			PP	Pt	TT	FF	DD	SST	
64546	11227	US.	*					*	01/04 - 19/04
64575	5399	US.	*		*			*	11/05 - 30/06
64576	5522	US.	*		*			*	11/05 - 30/06
64577	5523	US.	*		*			*	11/05 - 30/06
64588	16338	US.	*		*	*	*	*	13/04 - 12/06
64589	16374	US.	*		*	*	*	*	13/04 - 18/05
65562	1298	N.	*	*	*			*	01/04 - 30/06
65571	3676	N.	*	*	*			*	01/04 - 09/05
65581	1299	IC.	*	*	*			*	18/04 - 30/06

KEY

PP - Pressure Pt - Pressure tendency
FF - Wind speed DD - Wind direction

TT - Air temperature
SST - Sea surface
temperature

