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OBSERVATIONS, PLANS AND REQUIREMENTS BRANCH

Quality Evaluation Section

FORTY-FIRST QUARTERLY REPORT

ON DRIFTING BUOYS

IN THE NORTH ATLANTIC

JANUARY TO MARCH 1997

Produced By : P.M. Ellis
Meteorological Office,
Met O (OPR),
Room 129,
London Road,
Bracknell,
Berkshire, RG12 2SZ,
United Kingdom

Tel : 01344 854446

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21st April 1997

This report has not been published.
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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. GENERAL PERFORMANCE

The following few sub-sections describe the general performance of the drifting buoys throughout the quarter.

(a) Location Accuracy

The location accuracy was very good with 75 out of 81 of the buoys reporting having a '% of observations with acceptable positions' greater than 95% (compared to 61 out of 63 last quarter).

(b) Data timeliness

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

Timeliness	Last quarter.	This quarter
Very Good	23	32
Good	17	14
Satisfactory	7	12
Poor	7	11
Very poor	9	12
Total no. of buoys	63	81

(c) 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	--	--	14	15
Good	2	5	3	9
Satisfactory	13	21	6	6
Poor	8	10	17	13
Very Poor	--	1	--	1

The total number of buoy days in the quarter was 5,268 [obtained by summing the number of reporting days for each buoy] (last quarter the total was 4,353) and the number of 'buoy hours' with at least one observation was 75,827 (compared with 60,953 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 14.39 (last quarter the figure was 14.00).

3. SUMMARY OF PRESSURE PERFORMANCE

(a) Buoy deployments, etc.

North of 50deg N

There were 32 buoys reporting pressure at the beginning of the period. This figure includes buoy 47541 which was not included in the last report and buoy 62508 which drifted north of 50 degN during this quarter. 27 buoys were reporting at the end of the period. 12 new buoys were deployed (44608, 44613, 44624, 44768, 44775, 44917, 62697, 62803, 62804, 64562, 65593 and 65594). (Buoy 65594 was reporting on the last day of the last quarter but failed to report until 3/1.) 17 buoys ceased reporting (42624, 44616, 44763, 44765, 44766, 44772, 44778, 44849, 44850, 44910, 44918, 44919, 44923, 44924, 46764, 47541 and 65562).

South of 50deg N

There were 21 buoys reporting pressure at the beginning of the period. This figure includes buoys 13903 and 13911 which were not included in the last report. 26 buoys were reporting at the end of the period. 16 new buoys were deployed (44601, 44603, 44604, 44605, 44606, 44607, 44742, 44762, 44779, 61529, 61530, 61531, 62712, 62713, 62714 and 62927). 11 buoys ceased reporting (44601, 44603, 44604, 44617, 61522, 61527, 62504, 62510, 62513, 62517 and 62714). (Buoy 44601 ceased reporting pressure on 20/3, but continued to report other elements until the end of the reporting period.)

(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:-

- 44601 - Pressure data became erratic towards the end of the period and were subsequently removed from the GTS on 20/3.
- 44603 - Data became erroneous on 6/2 and were subsequently removed from the GTS.
- 44605 - Data showed a slightly larger than normal scatter throughout the reporting period.
- 44606 - Data showed a slightly larger than normal scatter throughout the reporting period.
- 44607 - Pressure data showed a slight bias of +0.6 hPa throughout the period.
- 44613 - Data showed a larger than normal scatter throughout the reporting period.
- 44617 - This buoy reported briefly from 1/1 to 4/1, when all data were erroneous.
- 44764 - Data from this buoy became totally erratic towards the end of the reporting period. It also produced a large number of gross errors during the quarter.
- 44778 - Pressure data became erroneous towards the end of the buoy's life on 10/3.
- 44779 - Data showed a slightly larger than normal scatter throughout the reporting period.
- 44849 - Pressure data were totally erratic from the start of the period until the end of the buoy's life on 30/1.

- 44850 - Pressure data were totally erratic from the start of the period until the end of the buoy's life on 30/1.
- 44917 - Data were slightly erratic from the start of the buoy's on 17/3 until the end of the reporting period. However, only 87 reports were received from this buoy.
- 44923 - Data showed a larger than normal scatter from the start of the period until the end of the buoy's life on 4/3.
- 46764 - Pressure data were totally erratic from the start of the period until the end of the buoy's life on 30/1.
- 61527 - Pressure data showed a slight bias of -0.4 hPa from the start of the period until 12/2 when it became totally erroneous. The buoy subsequently ceased reporting on 24/2.
- 65594 - Data showed a larger than normal scatter throughout the reporting period.
- 65596 - Pressure data showed a bias of -0.8 hPa and a larger than normal scatter throughout the report period.
- 65598 - Data showed a larger than normal scatter throughout the reporting period.

Biases

8 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
44919	W of SOBA	+0.6	-1.1	01/01 - 05/02
47541	W of SOBA	-0.6	+0.9	01/01 - 28/02
61522	S of Italy	-0.9	-1.1	01/01 - 08/03
61531	W of Italy	-0.8	-1.0	08/03 - 31/03
62508	W of Ireland	+0.6	-0.8	01/01 - 31/03
62513	SCOS	+0.6	-1.0	01/01 - 16/02
62927	N of SCOS	+1.3	-0.7	28/02 - 31/03
65562	SE of SOBA	-0.8	-0.4	01/01 - 14/01

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.

(4) 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
13903	---	---	---	0.0(-0.9)	0.4(2.0)	320 (49)
13911	---	---	---	0.6(-1.0)	0.4(3.6)	300 (97)
41529	-0.4(-0.5)	1.2(1.8)	702 (220)	---	---	---
41530	-0.1(-0.3)	1.0(2.1)	689 (155)	0.1(-0.6)	0.5(5.6)	769 (140)
42624	-0.2(0.1)	1.0(7.6)	110 (111)	-0.1(0.1)	0.8(2.6)	129 (108)
44513	-0.4(1.4)	1.0(10.4)	816 (127)	-0.1(-0.5)	0.9(2.0)	925 (116)
44601	---	---	---	1.6(0.2)	1.3(5.5)	926 (148)
44603	---	---	---	1.8(0.2)	1.5(5.6)	752 (140)
44604	---	---	---	0.6(0.1)	1.1(5.9)	183 (121)
44605	---	---	---	0.0(0.1)	0.8(5.9)	593 (123)
44606	---	---	---	-0.3(-0.6)	0.5(2.1)	831 (116)
44607	---	---	---	-0.4(-0.2)	0.6(2.0)	797 (76)
44608	---	---	---	-0.1(-0.2)	1.0(2.3)	719 (62)

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
44613	0.8(2.4)	2.0(13.7)	456 (45)	0.4(-0.4)	0.9(2.8)	503 (45)
44614	5.8(1.9)	4.9(7.4)	3202 (49)	0.2(-0.1)	1.6(1.5)	3292 (38)
44616	0.5(0.9)	1.1(3.6)	1220 (900)	0.6(0.3)	1.3(4.3)	1287 (614)
44617	---	---	---	-0.7(-0.2)	0.1(1.6)	16 (152)
44624	3.4(1.0)	4.7(3.8)	2032 (950)	-0.4(-0.3)	1.1(2.6)	2429 (50)
44726	1.5(1.3)	2.7(7.3)	2434 (44)	-0.2(0.0)	1.0(1.3)	2527 (72)
44728	-0.3(5.7)	1.6(18.3)	2996 (45)	0.2(0.0)	1.5(1.6)	3056 (37)
44742	0.0(1.4)	0.9(10.3)	1215 (131)	1.0(-0.4)	0.8(1.9)	1283 (119)
44743	---	---	---	-0.9(0.0)	1.5(1.6)	1762 (125)
44760	-0.1(0.2)	1.4(1.4)	984 (225)	-0.7(-2.4)	1.1(4.8)	1322 (261)
44762	-0.2(0.2)	0.8(1.9)	1147 (144)	0.8(-0.4)	0.3(1.9)	594 (129)
44763	1.5(1.3)	2.8(9.4)	4063 (93)	-1.4(0.0)	2.9(1.7)	3401 (78)
44764	-0.3(1.4)	1.9(9.3)	2791 (35)	0.1(0.4)	1.3(1.0)	2897 (32)
44765	0.3(1.9)	1.8(7.5)	1280 (48)	5.6(-0.1)	0.9(1.5)	79 (38)
44766	7.0(1.0)	0.8(2.3)	349 (370)	0.0(-0.3)	1.0(3.1)	2065 (350)
44767	0.4(1.1)	1.5(9.4)	4947 (92)	0.3(0.0)	1.3(1.7)	5157 (81)
44768	9.4(1.7)	1.2(11.2)	301 (64)	-0.5(0.2)	0.3(1.5)	320 (65)
44770	0.2(-0.2)	1.6(3.1)	1669 (509)	-0.2(-2.5)	1.6(5.9)	1725 (502)

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
44772	-0.8(0.8)	1.2(2.9)	2890 (148)	-0.8(0.5)	1.9(5.7)	1836 (133)
44775	0.2(6.7)	0.7(18.1)	334 (23)	-0.4(0.4)	0.5(1.2)	359 (18)
44776	23.6(2.1)	18.2(12.6)	8 (99)	-0.1(0.3)	1.5(1.3)	2548 (94)
44777	---	---	---	-0.4(-0.2)	1.4(2.7)	2982 (112)
44778	-0.1(1.0)	1.8(9.1)	2073 (99)	0.6(0.1)	1.3(1.6)	2174 (90)
44779	---	---	---	-0.7(-0.1)	0.4(5.4)	1479 (147)
44780	-0.2(1.1)	0.8(9.5)	1464 (158)	-0.4(-0.1)	0.5(2.4)	1579 (143)
44849	---	---	---	---	---	---
44850	---	---	---	---	---	---
44910	---	---	---	---	---	---
44911	---	---	---	---	---	---
44917	---	---	---	0.5(1.1)	0.2(2.8)	95 (23)
44918	---	---	---	---	---	---
44919	---	---	---	---	---	---
44923	---	---	---	---	---	---
44924	---	---	---	---	---	---
46764	---	---	---	---	---	---
47541	---	---	---	---	---	---
61521	0.9(1.9)	2.3(2.6)	1702 (347)	0.4(0.6)	3.2(3.6)	1897 (332)

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
61522	0.8(2.0)	2.5(2.6)	887 (349)	-0.8(0.5)	2.4(3.7)	1117 (328)
61527	0.5(0.9)	3.2(2.3)	537 (179)	-2.5(0.1)	3.8(5.1)	682 (165)
61529	2.8(2.1)	4.2(2.3)	638 (420)	0.2(-0.1)	0.4(3.1)	537 (387)
61530	2.5(2.3)	2.1(2.6)	613 (489)	0.0(0.4)	0.3(1.6)	793 (409)
61531	1.2(1.9)	2.0(2.8)	603 (354)	0.0(0.5)	0.3(3.6)	774 (331)
62503	---	---	---	0.1(-0.3)	0.3(3.2)	1706 (380)
62504	---	---	---	0.1(-0.1)	0.2(2.2)	147 (349)
62507	---	---	---	-0.1(-0.2)	0.3(2.1)	1078 (311)
62508	---	---	---	---	---	---
62510	---	---	---	0.3(-0.3)	0.3(3.0)	580 (439)
62513	---	---	---	0.1(-0.2)	0.2(2.5)	528 (315)
62515	---	---	---	-0.3(-0.3)	0.2(3.1)	1132 (466)
62517	0.1(1.4)	0.8(4.2)	1023 (478)	-0.1(-0.2)	0.2(3.1)	1600 (449)
62518	---	---	---	0.0(-0.2)	0.2(2.5)	1638 (317)
62551	---	---	---	-0.1(-0.2)	0.3(2.9)	885 (572)
62697	-0.3(3.9)	1.9(15.7)	2814 (63)	0.4(-0.1)	1.3(2.0)	2893 (54)
62712	---	---	---	-0.5(-0.1)	1.0(2.0)	741 (68)
62713	---	---	---	-0.6(-0.5)	1.0(1.8)	1237 (130)
62714	0.1(0.3)	0.7(2.1)	579 (174)	0.5(-0.6)	0.6(2.1)	614 (148)

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
62803	0.0(3.8)	1.6(15.7)	4240 (63)	0.2(-0.1)	0.7(1.3)	4263 (55)
62804	0.0(1.9)	0.9(10.8)	1231 (138)	0.9(0.1)	0.5(1.8)	889 (133)
62927	---	---	---	-0.1(0.0)	0.4(1.6)	174 (172)
64561	12.0(3.2)	8.9(9.2)	419 (30)	0.2(0.3)	1.6(1.1)	2957 (24)
64562	-0.3(1.1)	6.1(8.2)	3891 (212)	-0.1(-0.1)	1.0(1.4)	2846 (43)
65562	6.6(1.1)	6.1(8.2)	54 (212)	-0.3(0.1)	0.4(2.4)	71 (199)
65593	-0.1(5.5)	1.8(17.9)	965 (47)	-0.3(-0.1)	1.6(1.5)	532 (37)
65594	0.2(3.2)	1.4(13.3)	4921 (56)	-0.2(-0.1)	0.7(1.4)	5119 (50)
65595	-0.1(1.5)	2.2(10.4)	4711 (77)	-0.2(0.0)	1.1(1.8)	3002 (66)
65596	1.5(2.6)	3.0(7.8)	1446 (22)	-0.2(1.3)	1.6(4.2)	882 (15)
65598	0.0(2.0)	3.3(7.7)	4456 (45)	0.0(-0.1)	1.1(1.5)	2889 (35)
65599	0.1(3.4)	1.6(16.1)	3502 (60)	0.3(-0.2)	1.4(2.2)	2132 (51)

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

Buoys 44726(1.5), 44766(7.0), 44768(9.4), 61529(2.8), 61530(2.5), 61531(1.2), 64561(12.0) and 65562(6.6) all showed significant air temperature biases.

Data from buoy 44614(5.8) showed a worsening bias throughout the period, with data becoming quite erratic towards the end of the quarter. Data became erratic from buoys 44624 (3.4), 44763(1.5) and 65596(1.5) midway through the period. Only 8 reports were received from buoy 44776, all of which were erroneous.

Buoys 44601(1.6), 44603(1.8), 44742(1.0), 44765(5.6) and 61527 (-2.5) (data for this buoy showed quite a large scatter) all showed a significant sea surface temperature bias.

Data from buoy 44763(-1.4) became erratic midway through the period.

(5) 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.

(Note : Buoy 44613 reported occasional wind speeds of 0 knots and occasional wind directions without wind speeds. Wind speed observations from buoy 44617 appeared to be consistently reporting as 40 knots and were not accompanied by wind direction reports. Buoy 62712 had 17.7% of wind speeds present, but no wind directions. Subsequently, no analysis was carried out on any of the above mentioned buoys.)

WMO No.	Period	Wind Speed (kn)		Wind Direction (deg)		No. of Obs
		Mean	St. Dev.	Mean	St. Dev.	
41529	01/01 - 31/03	-7.9(3.1)	5.7(6.7)	-4.1(-1.9)	22.6(32.9)	402 (233)
41530	01/01 - 31/03	-4.0(4.1)	5.0(7.1)	5.3(-1.7)	19.3(35.9)	631 (168)
42624	01/01 - 09/01	-3.5(2.3)	5.9(6.2)	23.6(-5.9)	38.3(29.3)	107 (113)
44513	01/01 - 31/03	-9.3(2.8)	7.2(8.4)	-7.6(-2.3)	67.2(37.3)	723 (132)
44624	05/01 - 31/03	-2.6(1.9)	5.9(7.3)	19.8(0.1)	29.1(24.4)	1587 (35)
44726	01/01 - 31/03	-3.0(1.2)	5.9(9.8)	0.5(-0.2)	29.3(28.9)	1925 (40)
44742	09/01 - 31/03	-1.8(3.0)	5.2(8.0)	-9.4(-4.2)	22.0(37.3)	823 (141)
44762	09/01 - 31/03	-1.9(3.6)	4.1(7.9)	-7.0(-5.4)	21.2(36.9)	798 (165)
62518	01/01 - 31/03	-0.3(4.2)	3.8(7.0)	-11.6(-5.0)	20.1(30.2)	976 (342)
62551	01/01 - 31/03	-0.1(4.2)	4.9(7.7)	3.5(-2.9)	27.9(24.9)	805 (565)
62697	08/01 - 31/03	-3.0(-2.2)	6.7(11.8)	28.0(1.5)	82.5(19.0)	970 (20)
62803	08/01 - 31/03	-8.5(-0.5)	8.2(11.1)	5.3(-0.9)	28.2(19.9)	2427 (27)

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

Buoys 41529, 41530, 42624, 44513, 44624, 44726, 62697 and 62803 all showed a significant negative wind speed bias.

Buoys 42624, 44624, 44742, 44762 and 62518 all showed a significant wind direction bias. Data from buoy 44513 became erratic during March and data from buoy 62697 was totally erratic during the first half of the report period.

6. 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 = maximum drift speed = 1/4 knot
 t = 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).

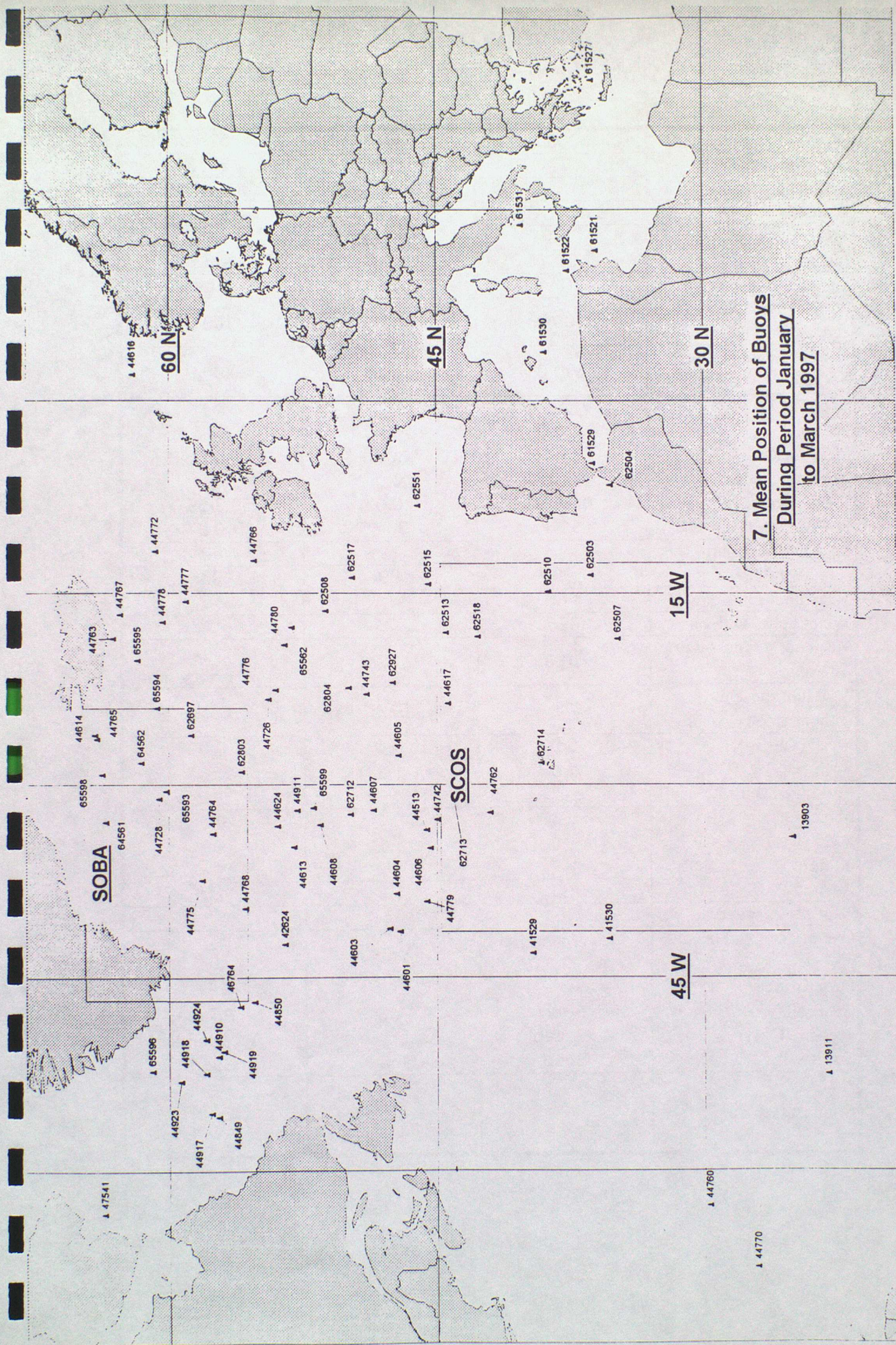
9. The performance categories are defined in the table below.

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



7. Mean Position of Buoys
During Period January
to March 1997

SOBA

SCOS

ANNEX A - TABLE OF STATISTICS

Wmo No./Country	13903/??	13911/??	41529/US
Argos Id.No.	????	????	????
Period within area	01/01 - 31/03	01/01 - 31/03	01/01 - 31/03
Area	S of SCOS	SW of SCOS	W of SCOS
Mean Latitude	25.0	23.0	39.6
Mean Longitude	-34.1	-52.5	-43.1
No. of obs received	1034	1013	782
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	100.0	100.0	100.0
% of Present			
Pressure	100.0	100.0	93.5
P. Tendency	31.4	30.6	0.0
Air Temperature	0.0	0.0	93.1
Wind Speed/Dir.	0.0/0.0	0.0/0.0	59.3/59.3
Sea-surface Temp.	31.4	30.6	0.0
Median delay(min)	88	72	62
Number of days	90	90	90
Mean no. of obs/day	11.5	11.3	8.7
No. of hours with obs	925	921	734
Mean no. of hours/day with obs	10.3	10.2	8.2
% of hour periods without an ob	57.1	57.5	65.8
Mean (Ob-Bg)	0.3	0.4	0.3
RMS (Ob-Bg)	1.0	1.2	1.6
unflagged data			
Mean (Ob-Bg)	0.3	0.4	0.3
RMS (Ob-Bg)	1.0	1.2	1.7
all data			
Revised RMS (Ob-Bg)	1.0	1.2	1.7
% of data flagged	15	15	7
Operating at end of period	YES	YES	YES
Performance			
Availability	Poor	Poor	Poor
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Good	Good	Good
Comments			

ANNEX A - Cont.

Wmo No./Country	41530/US	42624/US	44513/US
Argos Id.No.	????	????	????
Period within area	01/01 - 31/03	01/01 - 09/01	01/01 - 31/03
Area	W of SCOS	S of SOBA	N of SCOS
Mean Latitude	35.3	53.6	45.6
Mean Longitude	-42.0	-42.4	-33.5
No. of obs received	761	125	883
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable positions	100.0	100.0	100.0
% of Present			
Pressure	93.6	95.2	96.7
P. Tendency	0.0	92.0	0.0
Air Temperature	93.6	94.4	96.4
Wind Speed /Dir.	91.7/91.7	94.4/95.2	95.4/95.8
Sea-surface Temp.	93.6	96.8	97.3
Median delay(Min)	30	21	10
Number of days	90	9	90
Mean no. of obs/day	8.5	13.9	9.8
No. of hours with obs	718	114	847
Mean no. of hours/day with obs	8.0	12.7	9.4
% of hour periods without an ob	66.7	47.1	60.8
Mean (Ob-Bg)	0.2	-0.3	-0.3
RMS (Ob-Bg)	1.2	2.1	1.8
unflagged data			
Mean (Ob-bg)	0.2	-0.3	-0.3
RMS (Ob-Bg)	1.2	2.2	1.9
all data			
Revised RMS (Ob-Bg)	1.2	2.2	1.9
% of data flagged	6	20	5
Operating at end of period	YES	NO	YES
Performance			
Availability	Poor	Poor	Poor
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Very Good	Very Good	Very Good
Comments			

ANNEX A - Cont.

Wmo No./Country	44601/F	44603/F	44604/F
Argos Id.No.	5569	5571	????
Period within area	17/01 - 31/03	17/01 - 27/02	22/01 - 04/02
Area	NW of SCOS	NW of SCOS	N of SCOS
Mean Latitude	47.1	47.7	47.3
Mean Longitude	-41.4	-41.2	-38.5
No. of obs received	1627	1129	246
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	99.4	96.2	99.2
% of Present			
Pressure	84.1	72.0	54.9
P. Tendency	0.0	0.0	74.8
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.	57.2	66.2	74.8
Median delay(min)	260	415	231
Number of days	74	42	14
Mean no. of obs/day	22.0	26.9	17.6
No. of hours with obs	1110	738	205
Mean no. of hours/day with obs	15.0	17.6	14.6
% of hour periods without an ob	37.5	26.7	39.2
Mean (Ob-Bg)	0.3	0.1	0.5
RMS (Ob-Bg)	2.3	1.9	1.3
unflagged data			
Mean (Ob-bg)	0.7	9.4	0.5
RMS (Ob-Bg)	5.2	21.8	1.4
all data			
Revised RMS (Ob-Bg)	4.3	6.6	1.4
% of data flagged	45	58	26
Operating at end of period	YES	NO	NO
Performance			
Availability	Satisfactory	Good	Satisfactory
Pressure Quality	Suspect	Suspect	Acceptable
Timeliness	Very Poor	Very Poor	Poor
Comments			

ANNEX A - Cont.

Wmo No./Country	44605/F	44606/F	44607/F
Argos Id.No.	27933	27936	27937
Period within area	16/02 - 31/03	20/01 - 31/03	28/01 - 31/03
Area	N of SCOS	N of SCOS	N of SCOS
Mean Latitude	47.2	45.4	48.6
Mean Longitude	-37.7	-34.9	-32.0
No. of obs received	910	1421	1316
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable positions	100.0	100.0	99.9
% of Present			
Pressure	100.0	100.0	100.0
P. Tendency	67.1	61.0	62.8
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.	67.1	61.0	62.8
Median delay(Min)	185	45	90
Number of days	43	71	63
Mean no. of obs/day	21.2	20.0	20.9
No. of hours with obs	708	1140	1027
Mean no. of hours/day with obs	16.5	16.1	16.3
% of hour periods without an ob	31.3	32.9	32.1
Mean (Ob-Bg)	0.3	0.2	0.6
RMS (Ob-Bg)	2.2	2.0	2.2
unflagged data			
Mean (Ob-bg)	0.3	0.3	0.6
RMS (Ob-Bg)	2.4	2.1	2.4
all data			
Revised RMS (Ob-Bg)	2.3	2.1	2.4
% of data flagged	34	31	34
Operating at end of period	YES	YES	YES
Performance			
Availability	Satisfactory	Satisfactory	Satisfactory
Pressure Quality	Suspect	Suspect	Suspect
Timeliness	Poor	Very Good	Good
Comments			

ANNEX A - Cont.

Wmo No./Country	44608/F	44613/UK	44614/UK
Argos Id.No.	27938	3306	1256
Period within area	13/02 - 31/03	03/03 - 31/03	01/01 - 31/03
Area	N of SCOS	S of SOBA	SOBA
Mean Latitude	51.6	53.1	64.2
Mean Longitude	-33.1	-34.8	-26.1
No. of obs received	959	563	3420
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	99.8	78.5	99.5
% of Present			
Pressure	99.9	84.5	95.9
P. Tendency	77.3	80.1	81.0
Air Temperature	0.0	84.7	95.5
Wind Speed/Dir.	0.0/0.0	9.6/49.2	0.0/0.0
Sea-surface Temp.	77.3	86.1	96.5
Median delay(min)	52	140	144
Number of days	47	29	90
Mean no. of obs/day	20.4	19.4	38.0
No. of hours with obs	790	363	1668
Mean no. of hours/day with obs	16.8	12.5	18.5
% of hour periods without an ob	30.0	47.9	22.9
Mean (Ob-Bg)	0.0	-0.4	0.1
RMS (Ob-Bg)	2.4	1.9	1.8
unflagged data			
Mean (Ob-bg)	0.0	0.5	0.0
RMS (Ob-Bg)	2.4	4.5	4.5
all data			
Revised RMS (Ob-Bg)	2.4	4.3	1.8
% of data flagged	25	55	61
Operating at end of period	YES	YES	YES
Performance			
Availability	Satisfactory	Satisfactory	Very Good
Pressure Quality	Acceptable	Suspect	Acceptable
Timeliness	Very Good	Satisfactory	Satisfactory
Comments			

ANNEX A - Cont.

Wmo No./Country	44616/UK	44617/UK	44624/UK
Argos Id.No.	3318	1255	2958
Period within area	01/01 - 31/01	01/01 - 04/01	05/01 - 31/03
Area	W of Norway	SCOS	S of SOBA
Mean Latitude	62.1	44.4	54.0
Mean Longitude	2.0	-23.6	-33.2
No. of obs received	1270	23	2477
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable positions	94.8	95.7	99.2
% of Present			
Pressure	99.1	26.1	96.9
P. Tendency	94.9	73.9	86.2
Air Temperature	98.5	0.0	83.7
Wind Speed /Dir.	0.0/0.0	17.4/0.0	71.5/70.1
Sea-surface Temp.	99.4	65.2	97.7
Median delay(Min)	251	21	19
Number of days	31	4	86
Mean no. of obs/day	40.1	5.8	28.8
No. of hours with obs	518	19	1338
Mean no. of hours/day with obs	16.7	4.8	15.6
% of hour periods without an ob	30.4	80.0	35.0
Mean (Ob-Bg)	0.5	-	-0.4
RMS (Ob-Bg)	1.4	-	2.1
unflagged data			
Mean (Ob-bg)	0.1	-166.1	-0.6
RMS (Ob-Bg)	7.4	166.1	5.0
all data			
Revised RMS (Ob-Bg)	1.6	146.3	2.3
% of data flagged	66	100	56
Operating at end of period	NO	NO	YES
Performance			
Availability	Very Good	Poor	Good
Pressure Quality	Acceptable	Suspect	Acceptable
Timeliness	Very Poor	Very Good	Very Good
Comments			

ANNEX A - Cont.

Wmo No./Country	44763/UK	44764/UK	44765/NL
Argos Id.No.	3098	1259	4178
Period within area	01/01 - 17/03	01/01 - 31/03	01/01 - 26/01
Area	S of Iceland	SOBA	SOBA
Mean Latitude	63.2	57.6	64.1
Mean Longitude	-18.6	-33.8	-26.4
No. of obs received	4112	2967	1384
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	97.5	99.0	99.9
% of Present			
Pressure	99.3	96.4	94.1
P. Tendency	96.9	84.3	90.5
Air Temperature	99.2	96.0	94.1
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface Temp.	83.5	97.6	5.6
Median delay(min)	26	21	96
Number of days	76	90	26
Mean no. of obs/day	54.1	33.0	53.2
No. of hours with obs	1523	1535	509
Mean no. of hours/day with obs	20.0	17.1	19.6
% of hour periods without an ob	16.7	28.8	18.3
Mean (Ob-Bg)	-0.1	-0.4	-0.3
RMS (Ob-Bg) unflagged data	2.0	2.1	1.5
Mean (Ob-bg)	-0.9	-2.7	-0.2
RMS (Ob-Bg) all data	4.2	9.9	2.1
Revised RMS (Ob-Bg)	2.8	5.0	1.8
% of data flagged	74	62	72
Operating at end of period	NO	YES	NO
Performance			
Availability	Very Good	Good	Very Good
Pressure Quality	Acceptable	Suspect	Acceptable
Timeliness	Very Good	Very Good	Good
Comments			

ANNEX A - Cont.

Wmo No./Country	44766/D	44767/UK	44768/UK
Argos Id.No.	1298	3013	26746
Period within area	01/01 - 25/03	01/01 - 31/03	19/03 - 31/03
Area	W of Ireland	E of SOBA	SOBA
Mean Latitude	55.3	62.8	55.8
Mean Longitude	-12.5	-16.7	-39.6
No. of obs received	3289	5224	320
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable positions	99.5	98.9	98.8
% of Present			
Pressure	97.2	99.0	95.9
P. Tendency	95.0	96.1	90.6
Air Temperature	10.7	98.9	96.6
Wind Speed /Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface Temp.	63.4	99.3	97.8
Median delay(Min)	26	133	20
Number of days	84	90	13
Mean no. of obs/day	39.2	58.0	24.6
No. of hours with obs	1337	1880	200
Mean no. of hours/day with obs	15.9	20.9	15.4
% of hour periods without an ob	33.8	12.9	35.8
Mean (Ob-Bg)	-0.5	0.2	-0.5
RMS (Ob-Bg)	1.9	1.9	2.0
unflagged data			
Mean (Ob-bg)	-0.7	0.3	-0.4
RMS (Ob-Bg)	3.4	5.3	2.1
all data			
Revised RMS (Ob-Bg)	2.3	3.0	2.1
% of data flagged	68	73	50
Operating at end of period	NO	YES	YES
Performance			
Availability	Very Good	Very Good	Good
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Very Good	Satisfactory	Very Good
Comments			

ANNEX A - Cont.

Wmo No./Country	44917/US	44918/US	44919/US
Argos Id.No.	????	????	????
Period within area	17/03 - 31/03	01/01 - 07/02	01/01 - 05/02
Area	W of SOBA	W of SOBA	W of SOBA
Mean Latitude	57.7	58.0	57.0
Mean Longitude	-55.5	-52.4	-50.7
No. of obs received	87	387	272
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	98.9	100.0	100.0
% of Present			
Pressure	57.5	100.0	100.0
P. Tendency	0.0	0.0	0.0
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.	97.7	0.0	0.0
Median delay(min)	47	177	51
Number of days	15	38	36
Mean no. of obs/day	5.8	10.2	7.6
No. of hours with obs	65	336	238
Mean no. of hours/day with obs	4.3	8.8	6.6
% of hour periods without an ob	82.1	63.3	72.5
Mean (Ob-Bg)	0.5	-0.4	0.6
RMS (Ob-Bg)	1.6	1.9	1.8
unflagged data			
Mean (Ob-bg)	3.7	-0.5	0.6
RMS (Ob-Bg)	8.7	2.0	1.8
all data			
Revised RMS (Ob-Bg)	3.4	2.0	1.8
% of data flagged	27	15	13
Operating at end of period	YES	NO	NO
Performance			
Availability	Poor	Poor	Poor
Pressure Quality	Suspect	Acceptable	Suspect
Timeliness	Very Good	Satisfactory	Very Good
Comments			

ANNEX A - Cont.

Wmo No./Country	44923/??	44924/??	46764/??
Argos Id.No.	????	????	????
Period within area	01/01 - 04/03	01/01 - 02/02	01/01 - 30/01
Area	W of SOBA	W of SOBA	W of SOBA
Mean Latitude	59.4	58.0	56.1
Mean Longitude	-53.0	-49.8	-47.3
No. of obs received	261	245	235
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	100.0	100.0	100.0
% of Present			
Pressure	100.0	100.0	100.0
P. Tendency	0.0	0.0	0.0
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.	0.0	0.0	0.0
Median delay(min)	157	189	148
Number of days	63	33	30
Mean no. of obs/day	4.1	7.4	7.8
No. of hours with obs	201	214	203
Mean no. of hours/day with obs	3.2	6.5	6.8
% of hour periods without an ob	86.7	72.9	71.7
Mean (Ob-Bg)	0.3	0.4	-2.1
RMS (Ob-Bg)	1.7	1.9	4.1
unflagged data			
Mean (Ob-bg)	-3.6	0.4	-4.0
RMS (Ob-Bg)	17.9	2.1	12.2
all data			
Revised RMS (Ob-Bg)	4.3	2.0	11.0
% of data flagged	61	17	59
Operating at end of period	NO	NO	NO
Performance			
Availability	Very Poor	Poor	Poor
Pressure Quality	Suspect	Acceptable	Suspect
Timeliness	Satisfactory	Poor	Satisfactory
Comments			

ANNEX A - Cont.

Wmo No./Country	47541/??	61521/US	61522/US
Argos Id.No.	????	????	7207
Period within area	01/01 - 28/02	01/01 - 31/03	01/01 - 08/03
Area	W of SOBA	S of Italy	S of Italy
Mean Latitude	63.7	36.0	37.6
Mean Longitude	-63.3	11.8	10.2
No. of obs received	561	2370	1162
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	98.4	98.6	100.0
% of Present			
Pressure	100.0	96.9	97.6
P. Tendency	0.0	0.0	0.0
Air Temperature	0.0	96.1	96.2
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface Temp.	0.0	82.1	97.4
Median delay(min)	142	227	397
Number of days	59	90	67
Mean no. of obs/day	9.5	26.3	17.3
No. of hours with obs	521	1842	928
Mean no. of hours/day with obs	8.8	20.5	13.9
% of hour periods without an ob	63.3	14.6	42.1
Mean (Ob-Bg)	-0.6	0.4	-0.9
RMS (Ob-Bg)	1.5	1.1	1.3
unflagged data			
Mean (Ob-bg)	-0.6	0.3	-1.0
RMS (Ob-Bg)	1.5	1.7	1.7
all data			
Revised RMS (Ob-Bg)	1.5	1.1	1.7
% of data flagged	17	23	23
Operating at end of period	NO	YES	NO
Performance			
Availability	Poor	Good	Satisfactory
Pressure Quality	Suspect	Acceptable	Suspect
Timeliness	Satisfactory	Poor	Very Poor
Comments			

ANNEX A - Cont.

Wmo No./Country	61527/US	61529/??	61530/??
Argos Id.No.	????	????	????
Period within area	01/01 - 24/02	08/03 - 31/03	08/03 - 31/03
Area	S of Greece	S of Spain	E of Spain
Mean Latitude	36.2	36.2	38.9
Mean Longitude	25.2	-4.9	3.8
No. of obs received	727	796	806
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	100.0	100.0	100.0
% of Present			
Pressure	96.7	96.9	98.4
P. Tendency	0.0	0.0	0.0
Air Temperature	96.0	98.1	97.8
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface Temp.	95.3	99.4	100.0
Median delay(min)	739	472	347
Number of days	55	24	24
Mean no. of obs/day	13.2	33.2	33.6
No. of hours with obs	649	561	561
Mean no. of hours/day with obs	11.8	23.4	23.4
% of hour periods without an ob	50.8	2.4	2.5
Mean (Ob-Bg)	-0.4	-0.2	-0.1
RMS (Ob-Bg)	1.2	1.2	0.8
unflagged data			
Mean (Ob-bg)	-1.4	-0.3	-0.2
RMS (Ob-Bg)	4.8	1.2	0.8
all data			
Revised RMS (Ob-Bg)	2.8	1.2	0.8
% of data flagged	22	25	26
Operating at end of period	NO	YES	YES
Performance			
Availability	Poor	Good	Good
Pressure Quality	Suspect	Acceptable	Acceptable
Timeliness	Very Poor	Very Poor	Very Poor
Comments			

ANNEX A - Cont.

Wmo No./Country	61531/??	62503/F	62504/F
Argos Id.No.	????	14427	14428
Period within area	08/03 - 31/03	01/01 - 31/03	01/01 - 13/01
Area	W of Italy	SCOS	S of Spain
Mean Latitude	40.2	36.3	35.2
Mean Longitude	13.8	-13.6	-6.6
No. of obs received	794	1691	199
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	100.0	100.0	100.0
% of Present			
Pressure	99.4	97.9	93.5
P. Tendency	0.0	92.4	85.9
Air Temperature	98.5	0.0	0.0
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface Temp.	99.5	98.0	95.0
Median delay(min)	347	16	182
Number of days	24	90	13
Mean no. of obs/day	33.1	18.8	15.3
No. of hours with obs	557	1290	161
Mean no. of hours/day with obs	23.2	14.3	12.4
% of hour periods without an ob	3.3	40.4	48.3
Mean (Ob-Bg)	-0.8	-0.1	-0.5
RMS (Ob-Bg)	1.3	1.0	1.5
unflagged data			
Mean (Ob-bg)	-0.9	-0.1	-0.6
RMS (Ob-Bg)	1.3	1.0	1.5
all data			
Revised RMS (Ob-Bg)	1.3	1.0	1.5
% of data flagged	27	32	28
Operating at end of period	YES	YES	NO
Performance			
Availability	Good	Satisfactory	Satisfactory
Pressure Quality	Suspect	Acceptable	Acceptable
Timeliness	Very Poor	Very Good	Poor
Comments			

ANNEX A - Cont.

Wmo No./Country	62507/F	62508/F	62510/F
Argos Id. No.	5793	????	5797
Period within area	01/01 - 31/03	01/01 - 31/03	01/01 - 21/03
Area	SCOS	W of Ireland	SCOS
Mean Latitude	34.8	51.3	38.7
Mean Longitude	-18.6	-16.4	-14.9
No. of obs received	1786	2030	998
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	100.0	100.0	100.0
% of Present			
Pressure	99.9	100.0	100.0
P. Tendency	61.5	66.3	59.1
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.	61.6	0.0	59.3
Median delay(min)	136	70	194
Number of days	90	90	80
Mean no. of obs/day	19.8	22.6	12.5
No. of hours with obs	1417	1556	772
Mean no. of hours/day with obs	15.7	17.3	9.7
% of hour periods without an ob	34.6	27.9	59.6
Mean (Ob-Bg)	0.3	0.6	0.0
RMS (Ob-Bg)	1.1	1.7	1.0
unflagged data			
Mean (Ob-bg)	0.3	0.6	-0.2
RMS (Ob-Bg)	1.1	1.7	3.6
all data			
Revised RMS (Ob-Bg)	1.1	1.7	1.0
% of data flagged	26	29	33
Operating at end of period	YES	YES	NO
Performance			
Availability	Satisfactory	Satisfactory	Poor
Pressure Quality	Acceptable	Suspect	Acceptable
Timeliness	Satisfactory	Good	Poor
Comments			

ANNEX A - Cont.

Wmo No./Country	62513/F	62515/F	62517/F
Argos Id.No.	5798	14426	10118
Period within area	01/01 - 16/02	01/01 - 31/03	01/01 - 19/03
Area	SCOS	N of SCOS	N of SCOS
Mean Latitude	44.5	45.5	49.8
Mean Longitude	-18.1	-14.3	-13.8
No. of obs received	866	1866	1611
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	100.0	100.0	100.0
% of Present			
Pressure	100.0	100.0	96.2
P. Tendency	62.6	62.1	90.5
Air Temperature	0.0	0.0	65.3
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface Temp.	62.6	62.0	97.1
Median delay(min)	34	152	1255
Number of days	47	90	78
Mean no. of obs/day	18.4	20.7	20.7
No. of hours with obs	717	1486	1160
Mean no. of hours/day with obs	15.3	16.5	14.9
% of hour periods without an ob	36.3	31.3	37.9
Mean (Ob-Bg)	0.6	0.1	0.2
RMS (Ob-Bg)	1.3	1.1	1.5
unflagged data			
Mean (Ob-bg)	0.6	0.0	0.2
RMS (Ob-Bg)	1.3	5.0	1.5
all data			
Revised RMS (Ob-Bg)	1.3	1.1	1.5
% of data flagged	26	26	36
Operating at end of period	NO	YES	NO
Performance			
Availability	Satisfactory	Satisfactory	Satisfactory
Pressure Quality	Suspect	Acceptable	Acceptable
Timeliness	Very Good	Satisfactory	Very Poor
Comments			

ANNEX A - Cont.

Wmo No./Country	62518/F	62551/??	62697/UK
Argos Id.No.	15534	????	2959
Period within area	01/01 - 31/03	01/01 - 31/03	08/01 - 31/03
Area	SCOS	W of France	SOBA
Mean Latitude	42.7	46.1	58.8
Mean Longitude	-18.4	-8.2	-26.1
No. of obs received	1992	1614	2957
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	100.0	100.0	98.7
% of Present			
Pressure	30.7	99.9	97.1
P. Tendency	0.0	55.8	81.3
Air Temperature	0.0	0.0	96.4
Wind Speed/Dir.	71.9/72.1	55.8/55.6	72.2/36.4
Sea-surface Temp.	93.1	55.8	97.5
Median delay(min)	220	323	29
Number of days	90	90	83
Mean no. of obs/day	22.1	17.9	35.6
No. of hours with obs	1902	1472	1438
Mean no. of hours/day with obs	21.1	16.4	17.3
% of hour periods without an ob	12.1	31.7	27.9
Mean (Ob-Bg)	-0.2	0.3	0.4
RMS (Ob-Bg)	2.0	1.0	2.0
unflagged data			
Mean (Ob-bg)	-0.2	0.3	0.2
RMS (Ob-Bg)	2.0	1.0	6.3
all data			
Revised RMS (Ob-Bg)	2.0	1.0	2.0
% of data flagged	1	8	60
Operating at end of period	YES	YES	YES
Performance			
Availability	Satisfactory	Satisfactory	Very Good
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Poor	Very Poor	Very Good
Comments			

ANNEX A - Cont.

Wmo No./Country	62712/UK	62713/UK	62714/UK
Argos Id.No.	3188	3185	26750
Period within area	28/01 - 31/03	14/01 - 31/03	14/01 - 06/03
Area	N of SCOS	SCOS	SCOS
Mean Latitude	49.9	44.1	39.1
Mean Longitude	-32.3	-30.8	-28.3
No. of obs received	1284	1574	591
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	99.5	99.6	99.3
% of Present			
Pressure	96.4	98.2	97.6
P. Tendency	0.0	75.1	94.9
Air Temperature	0.0	0.0	98.6
Wind Speed/Dir.	17.7/0.0	0.0/0.0	0.0/0.0
Sea-surface Temp.	59.4	77.9	98.5
Median delay(min)	175	68	1054
Number of days	63	77	52
Mean no. of obs/day	20.4	20.4	11.4
No. of hours with obs	921	1014	499
Mean no. of hours/day with obs	14.6	13.2	9.6
% of hour periods without an ob	39.2	45.0	60.0
Mean (Ob-Bg)	-0.1	0.3	0.0
RMS (Ob-Bg) unflagged data	2.0	1.6	1.0
Mean (Ob-bg)	-0.1	0.3	-0.1
RMS (Ob-Bg) all data	2.0	3.1	1.0
Revised RMS (Ob-Bg)	2.0	1.9	1.0
% of data flagged	39	48	18
Operating at end of period	YES	YES	NO
Performance			
Availability	Satisfactory	Satisfactory	Poor
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Satisfactory	Good	Very Poor
Comments			

ANNEX A - Cont.

Wmo No./Country	62803/UK	62804/UK	62927/??
Argos Id.No.	3209	26743	????
Period within area	08/01 - 31/03	09/01 - 31/03	28/02 - 31/03
Area	SOBA	N of SCOS	N of SCOS
Mean Latitude	56.0	50.0	47.5
Mean Longitude	-29.0	-22.4	-22.0
No. of obs received	4325	1301	148
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	98.7	98.9	100.0
% of Present			
Pressure	99.0	96.4	100.0
P. Tendency	97.1	91.5	0.0
Air Temperature	98.8	96.0	0.0
Wind Speed/Dir.	73.3/71.3	0.0/0.0	0.0/0.0
Sea-surface Temp.	99.1	66.6	100.0
Median delay(min)	137	33	185
Number of days	83	82	32
Mean no. of obs/day	52.1	15.9	4.6
No. of hours with obs	1582	990	136
Mean no. of hours/day with obs	19.1	12.1	4.3
% of hour periods without an ob	20.4	49.6	82.1
Mean (Ob-Bg)	-0.4	-0.3	1.3
RMS (Ob-Bg)	2.0	1.9	2.0
unflagged data			
Mean (Ob-bg)	-0.5	-0.3	1.3
RMS (Ob-Bg)	4.2	2.7	2.0
all data			
Revised RMS (Ob-Bg)	2.2	1.9	2.0
% of data flagged	70	32	8
Operating at end of period	YES	YES	YES
Performance			
Availability	Very Good	Satisfactory	Very Poor
Pressure Quality	Acceptable	Acceptable	Suspect
Timeliness	Satisfactory	Very Good	Poor
Comments			

ANNEX A - Cont.

Wmo No./Country	64561/UK	64562/D	65562/N
Argos Id.No.	1247	9307	????
Period within area	01/01 - 31/03	03/01 - 31/03	01/01 - 14/01
Area	SOBA	SOBA	SE of SOBA
Mean Latitude	63.6	61.6	53.3
Mean Longitude	-32.9	-28.3	-17.7
No. of obs received	3116	4058	104
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	92.5	86.4	100.0
% of Present			
Pressure	95.2	95.4	100.0
P. Tendency	79.2	73.7	98.1
Air Temperature	16.2	96.1	52.9
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface Temp.	96.1	71.2	62.5
Median delay(min)	211	13	49
Number of days	90	88	14
Mean no. of obs/day	34.6	46.1	7.4
No. of hours with obs	1685	1618	87
Mean no. of hours/day with obs	18.7	18.4	6.2
% of hour periods without an ob	22.1	23.3	74.2
Mean (Ob-Bg)	-0.2	-0.2	-0.8
RMS (Ob-Bg)	1.8	2.0	1.3
unflagged data			
Mean (Ob-bg)	-0.4	-0.6	-0.8
RMS (Ob-Bg)	4.8	5.5	1.6
all data			
Revised RMS (Ob-Bg)	1.9	2.9	1.6
% of data flagged	60	69	23
Operating at end of period	YES	YES	NO
Performance			
Availability	Good	Very Good	Poor
Pressure Quality	Acceptable	Acceptable	Suspect
Timeliness	Poor	Very Good	Very Good
Comments			

ANNEX A - Cont.

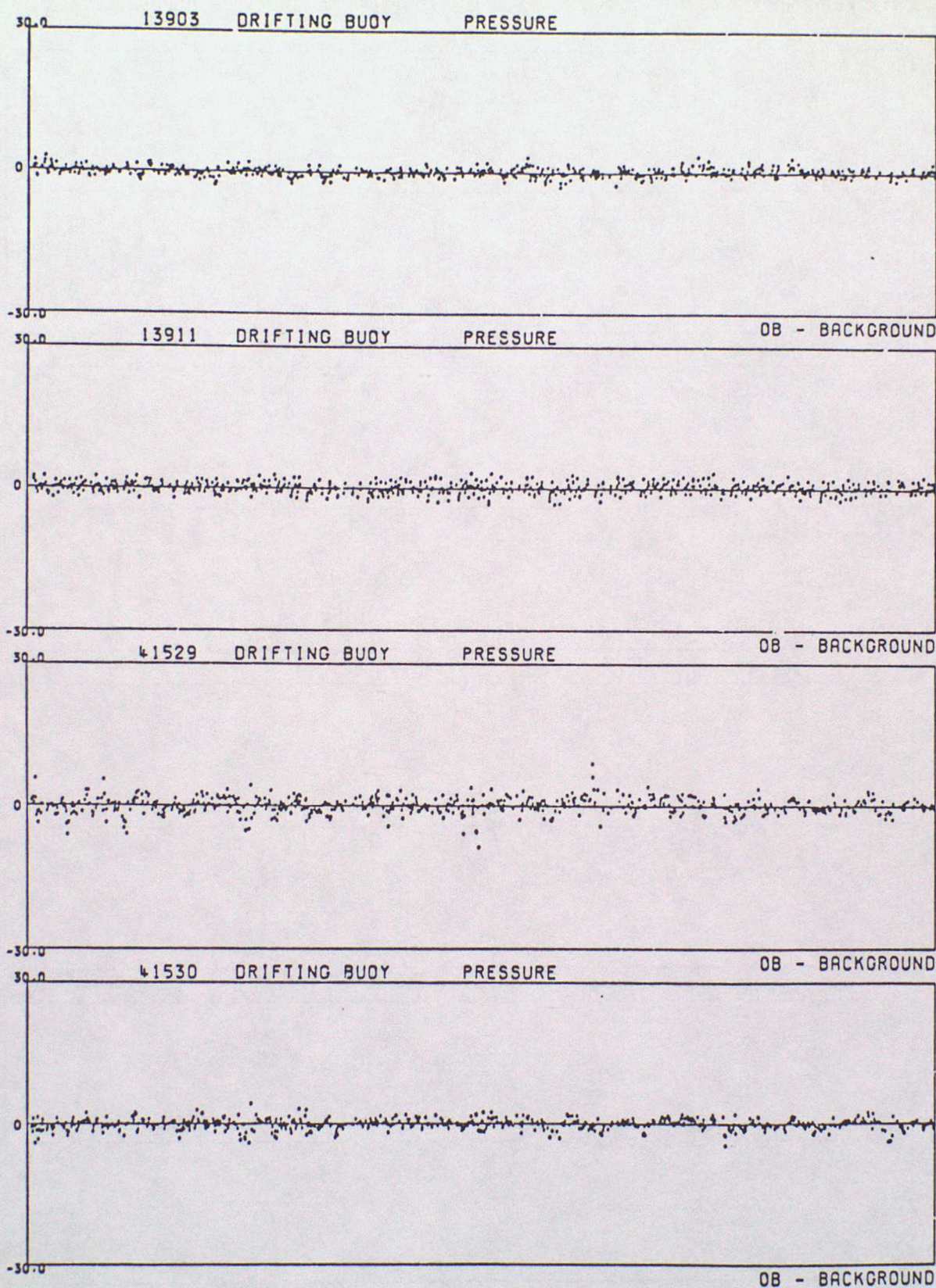
Wmo No./Country	65593/IR	65594/UK	65595/IR
Argos Id.No.	3039	1252	3038
Period within area	03/01 - 31/03	03/01 - 31/03	01/01 - 31/03
Area	SOBA	SOBA	E of SOBA
Mean Latitude	60.2	60.7	61.8
Mean Longitude	-30.5	-24.0	-20.3
No. of obs received	1033	5202	4890
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	86.9	99.7	99.5
% of Present			
Pressure	98.4	98.8	97.0
P. Tendency	64.8	96.3	93.7
Air Temperature	98.1	98.4	97.0
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface Temp.	53.5	98.8	62.6
Median delay(min)	21	133	94
Number of days	88	90	90
Mean no. of obs/day	11.7	57.8	54.3
No. of hours with obs	730	1767	1745
Mean no. of hours/day with obs	8.3	19.6	19.4
% of hour periods without an ob	65.4	18.3	19.2
Mean (Ob-Bg)	-0.2	0.3	-0.2
RMS (Ob-Bg)	2.0	1.9	2.0
unflagged data			
Mean (Ob-bg)	-0.8	-0.5	-0.3
RMS (Ob-Bg)	12.1	6.5	3.1
all data			
Revised RMS (Ob-Bg)	3.0	3.9	2.1
% of data flagged	40	73	71
Operating at end of period	YES	YES	YES
Performance			
Availability	Poor	Very Good	Very Good
Pressure Quality	Acceptable	Suspect	Acceptable
Timeliness	Very Good	Satisfactory	Good
Comments			

ANNEX A - Cont.

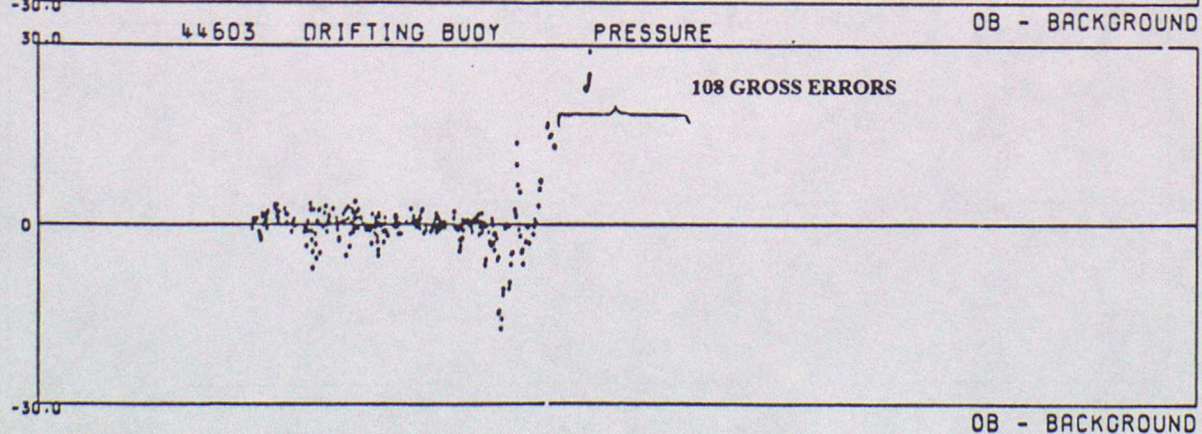
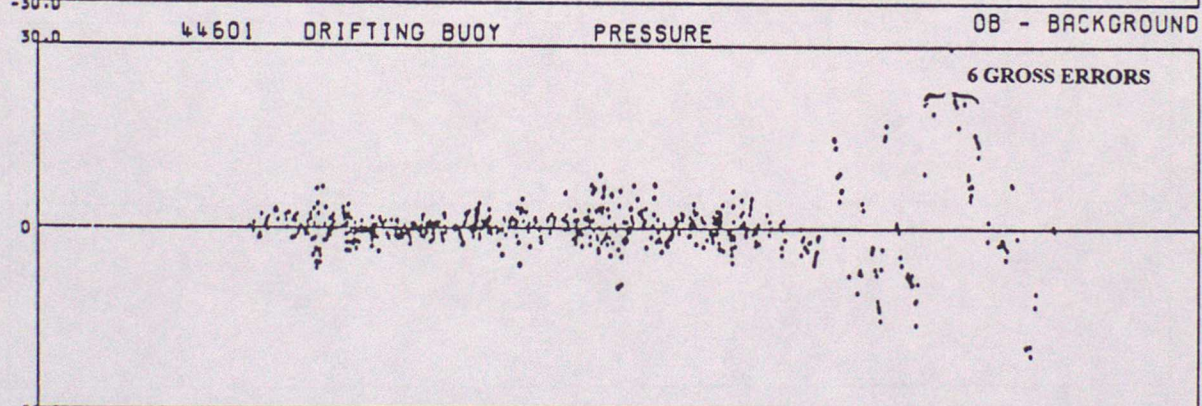
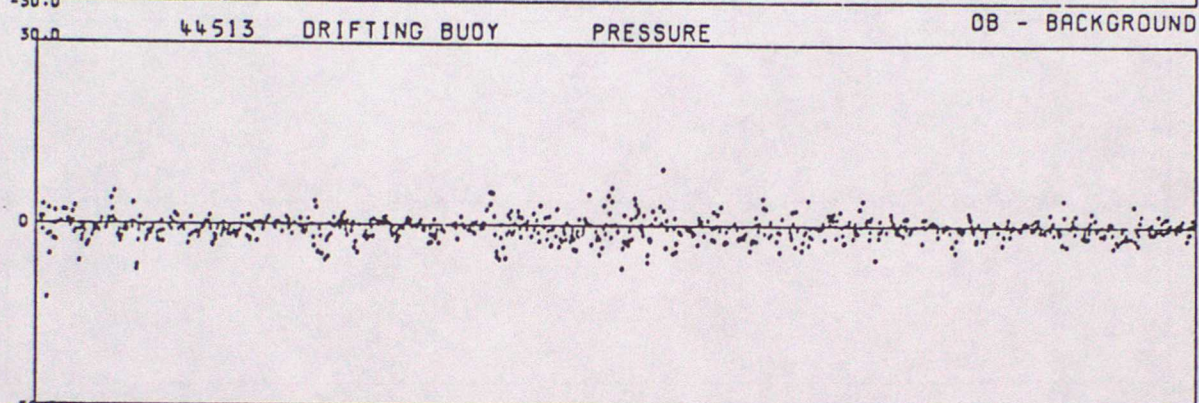
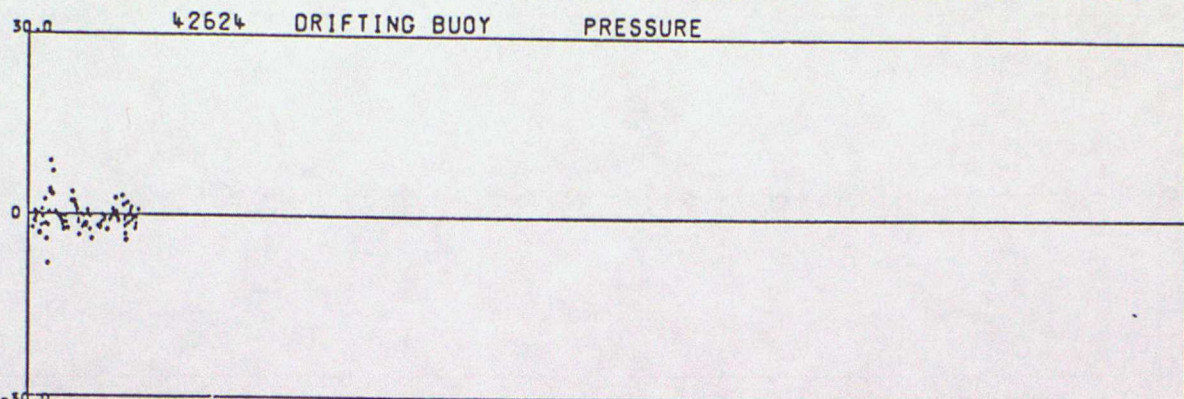
Wmo No./Country	65596/NL	65598/N	65599/D
Argos Id.No.	3036	3678	9308
Period within area	01/01 - 31/03	01/01 - 31/03	01/01 - 31/03
Area	W of SOBA	SOBA	S of SOBA
Mean Latitude	61.0	63.8	52.0
Mean Longitude	-52.2	-29.2	-31.8
No. of obs received	1751	4784	3634
% of obs with valid Time and Date	100.0	100.0	100.0
% of obs with acceptable position	85.8	98.5	96.4
% of Present			
Pressure	91.1	94.9	97.7
P. Tendency	55.8	89.0	94.8
Air Temperature	86.6	93.9	97.3
Wind Speed/Dir.	0.0/0.0	0.0/0.0	0.0/0.0
Sea-surface Temp.	53.2	61.8	59.6
Median delay(min)	50	24	186
Number of days	90	90	90
Mean no. of obs/day	19.5	53.2	40.4
No. of hours with obs	1000	1762	1492
Mean no. of hours/day with obs	11.1	19.6	16.6
% of hour periods without an ob	53.8	18.3	30.8
Mean (Ob-Bg)	-0.8	-0.2	-0.4
RMS (Ob-Bg)	2.0	2.0	2.2
unflagged data			
Mean (Ob-bg)	-1.8	-0.7	-0.4
RMS (Ob-Bg)	5.0	5.0	3.2
all data			
Revised RMS (Ob-Bg)	4.7	3.5	2.4
% of data flagged	58	72	67
Operating at end of period	YES	YES	YES
Performance			
Availability	Satisfactory	Very Good	Very Good
Pressure Quality	Suspect	Suspect	Acceptable
Timeliness	Very Good	Very Good	Poor
Comments			

ANNEX B - TIME SERIES PLOTS OF PRESSURE

DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

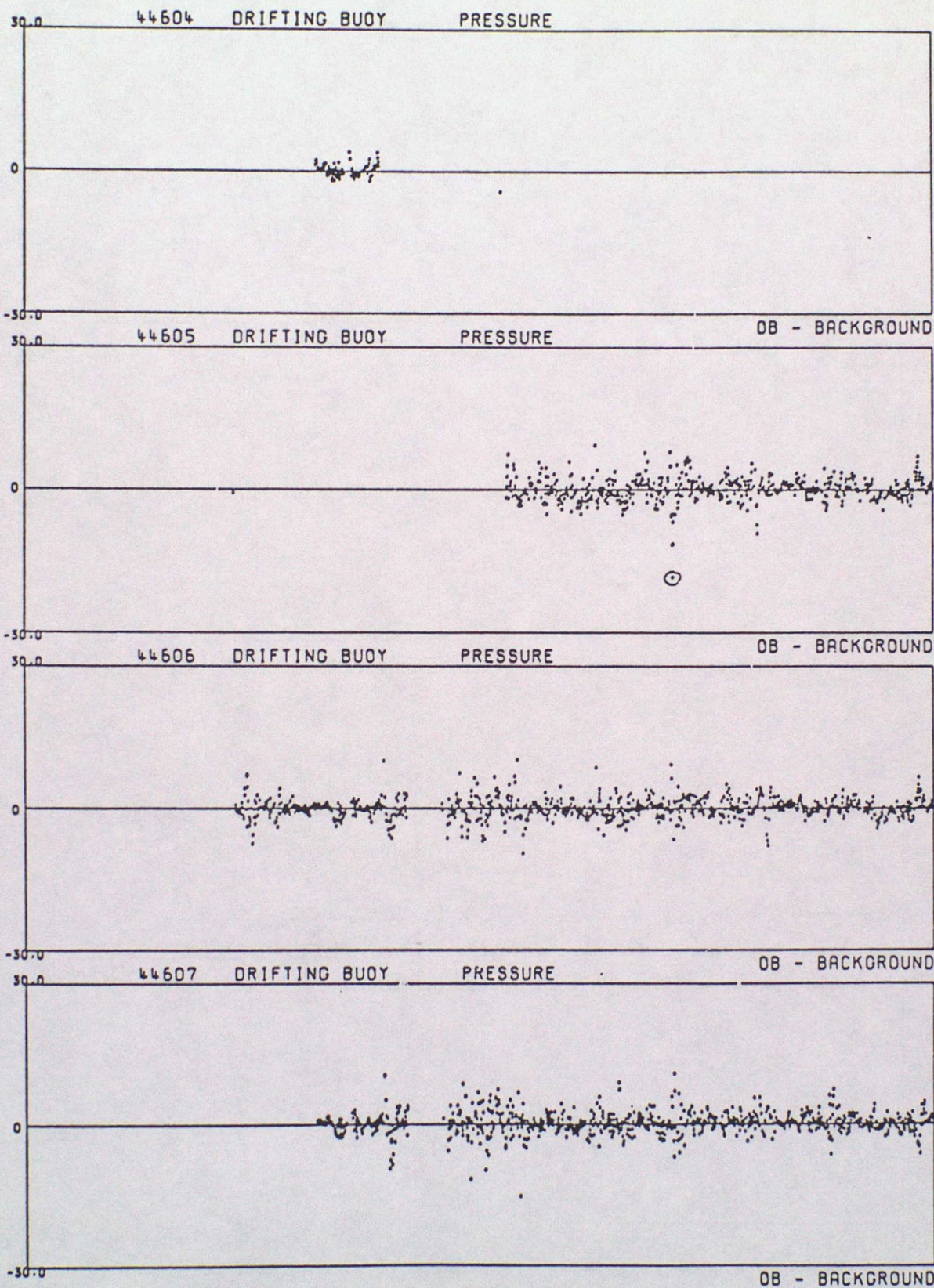


DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

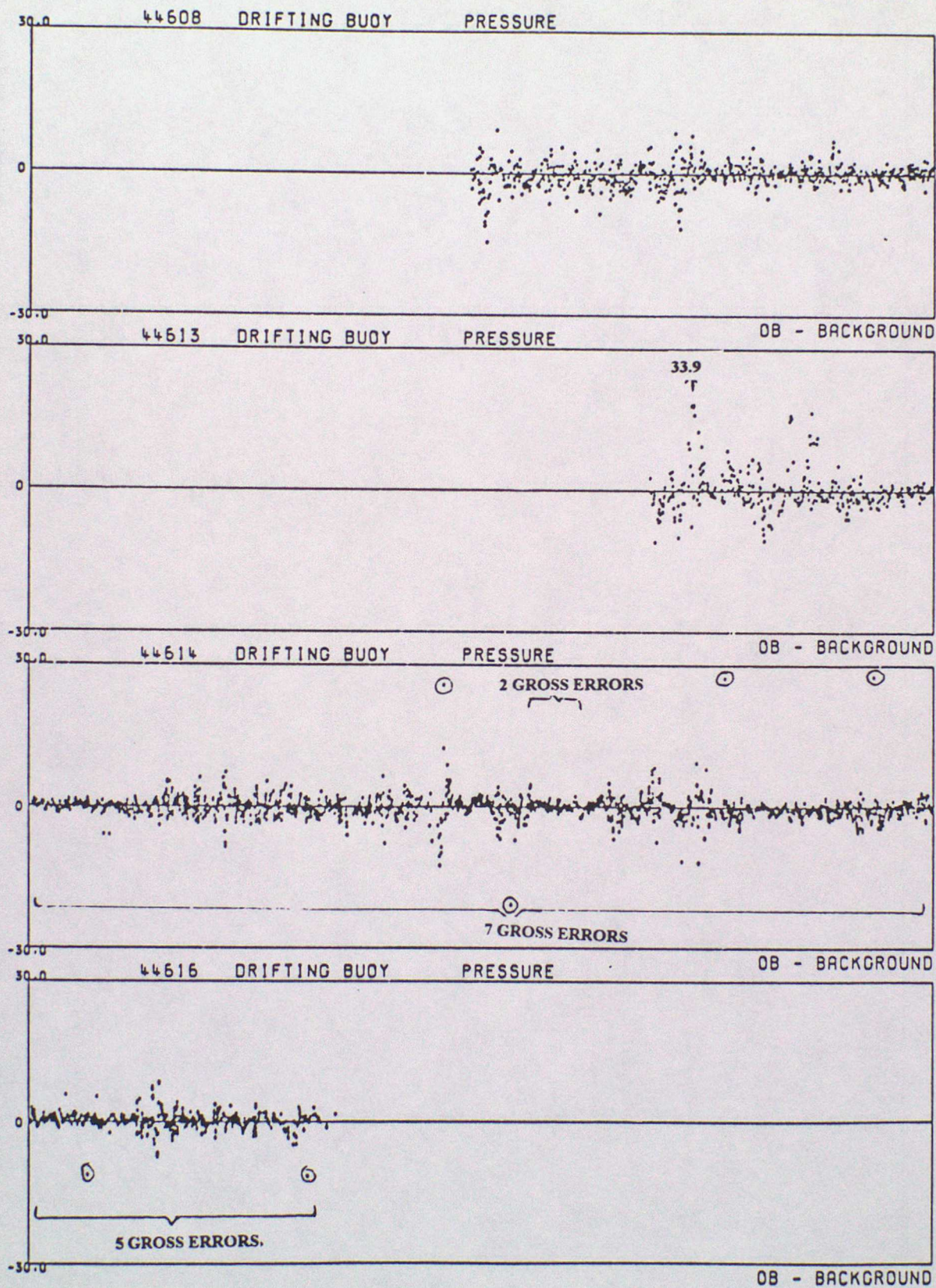


OB - BACKGROUND

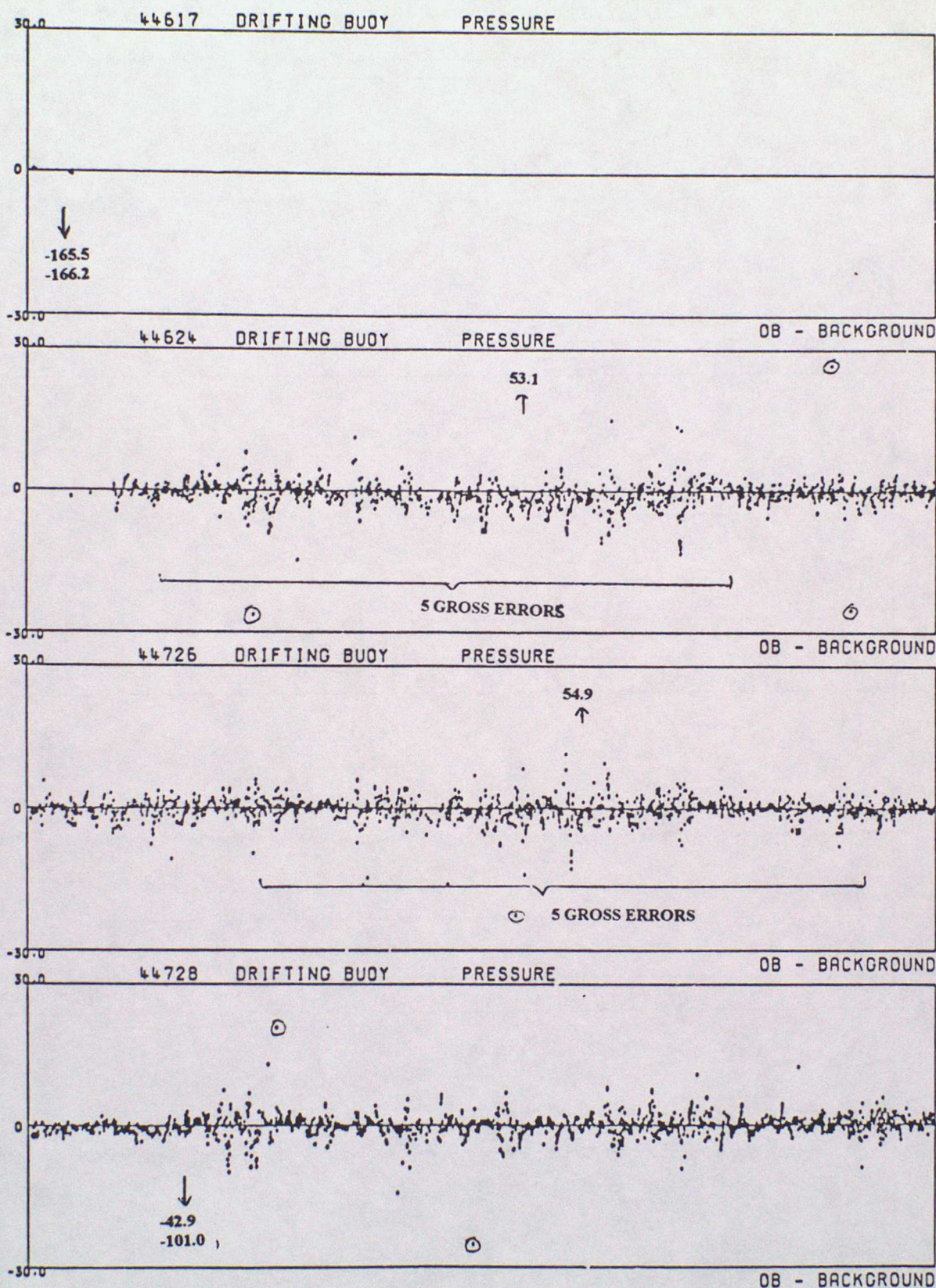
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



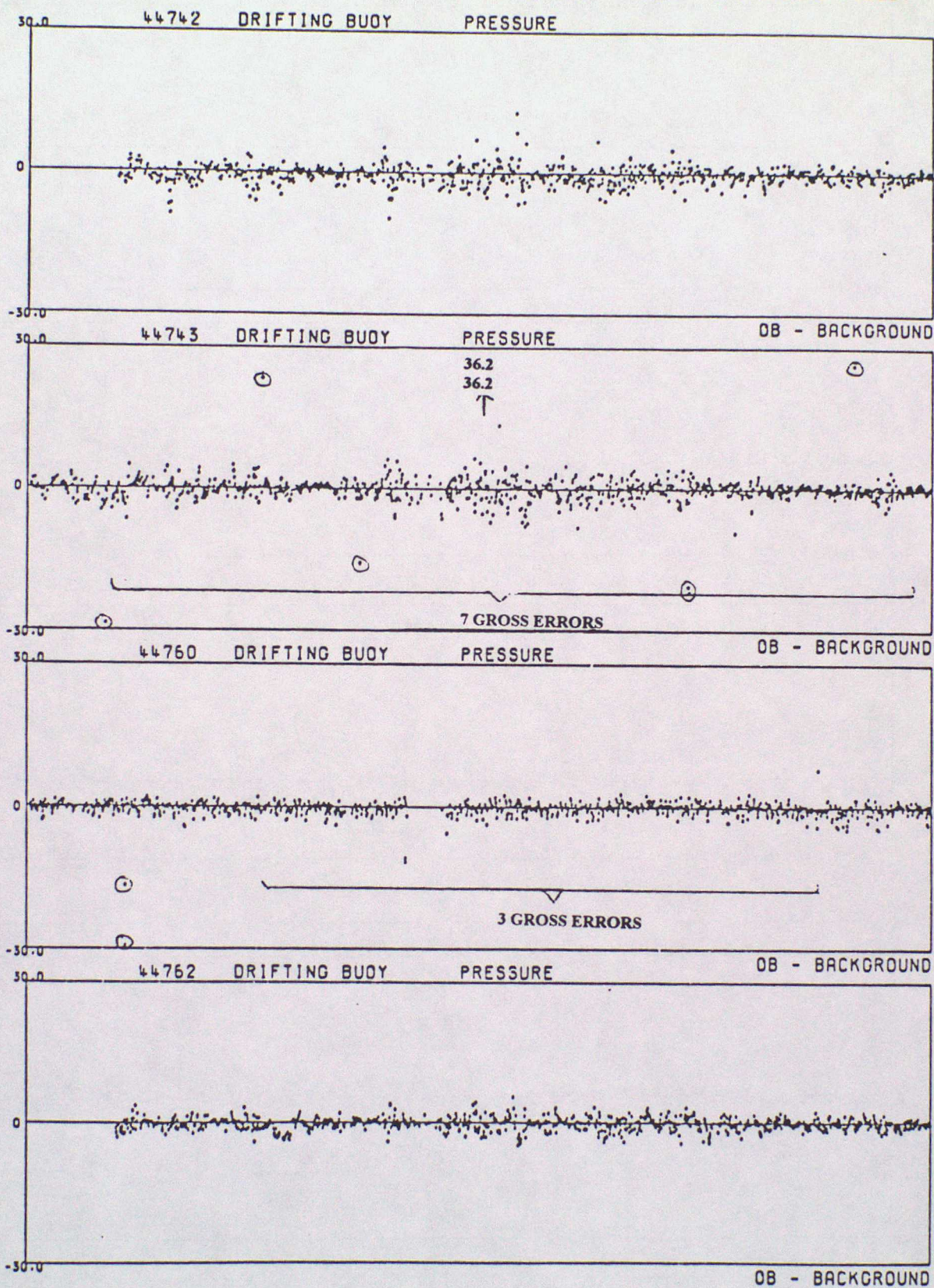
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



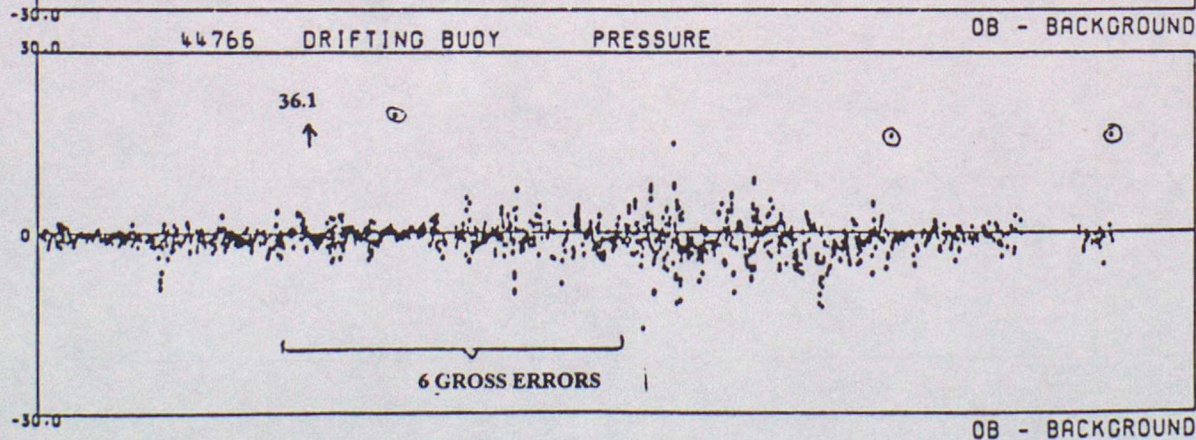
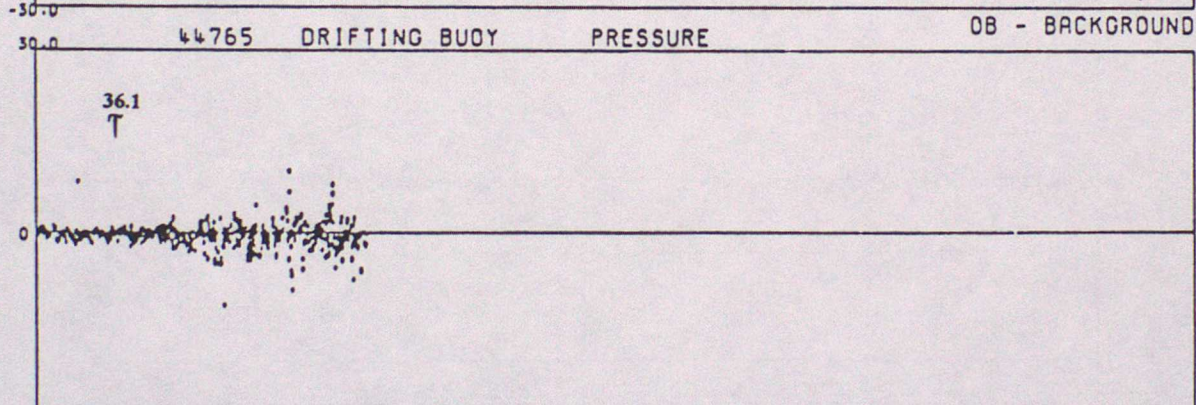
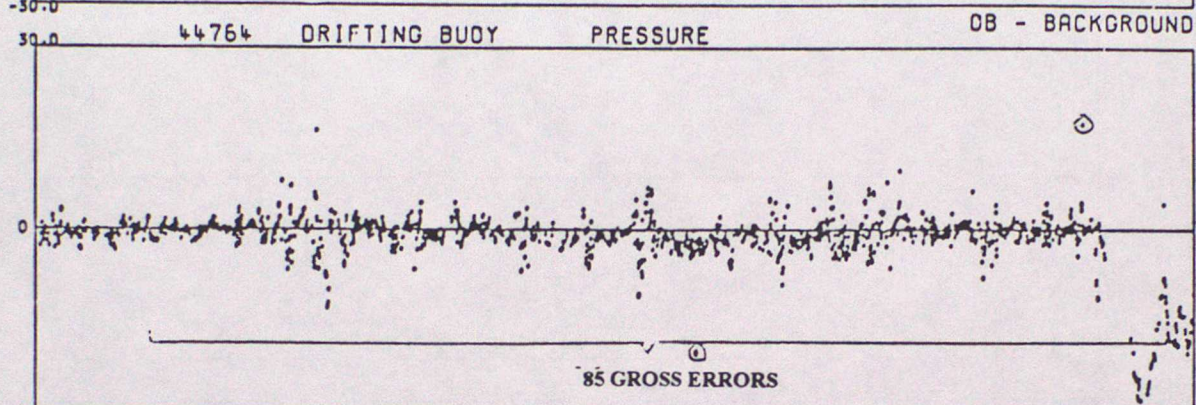
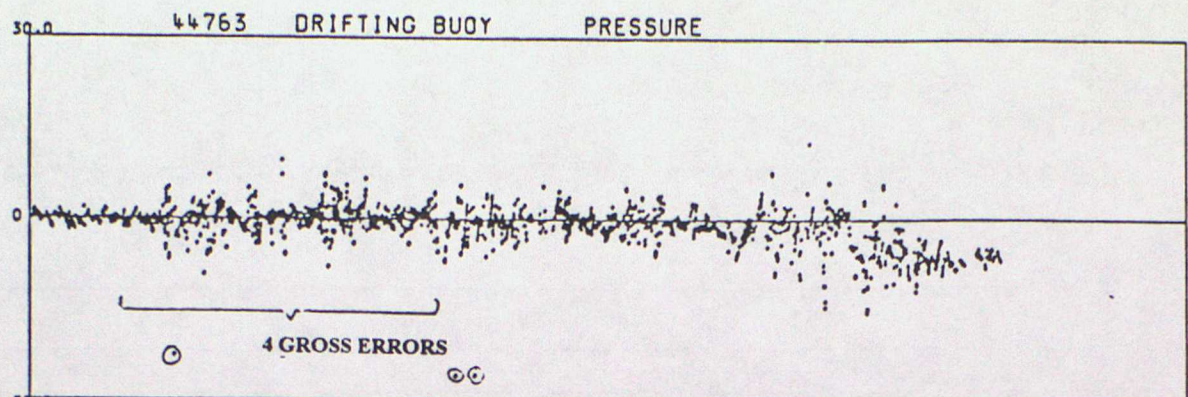
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



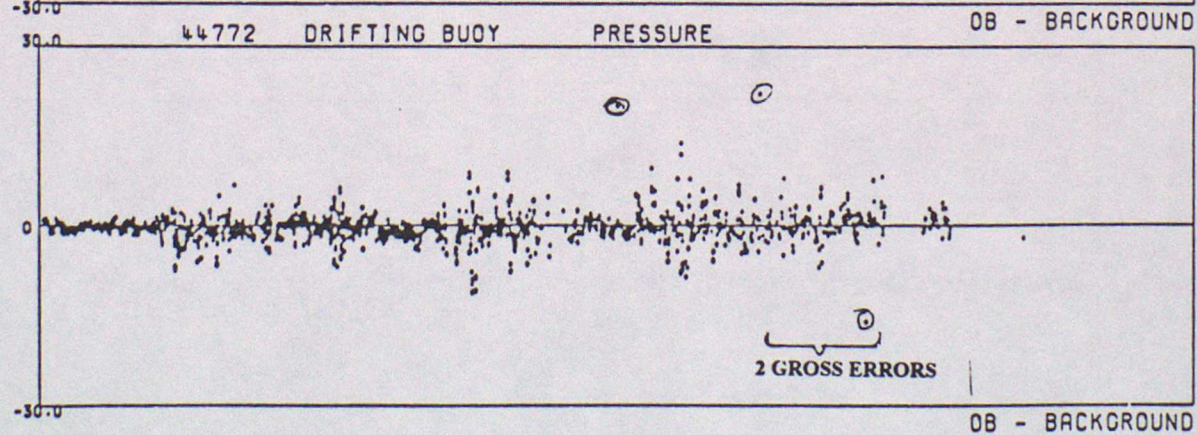
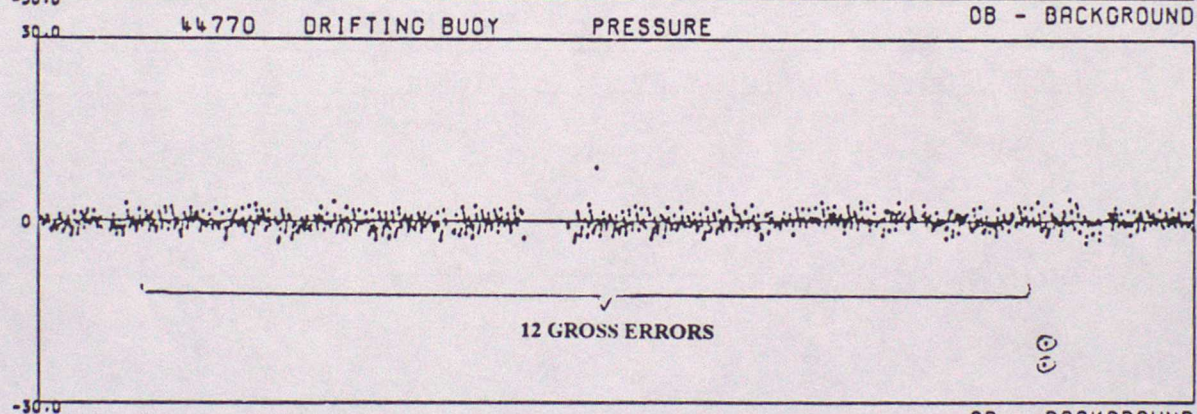
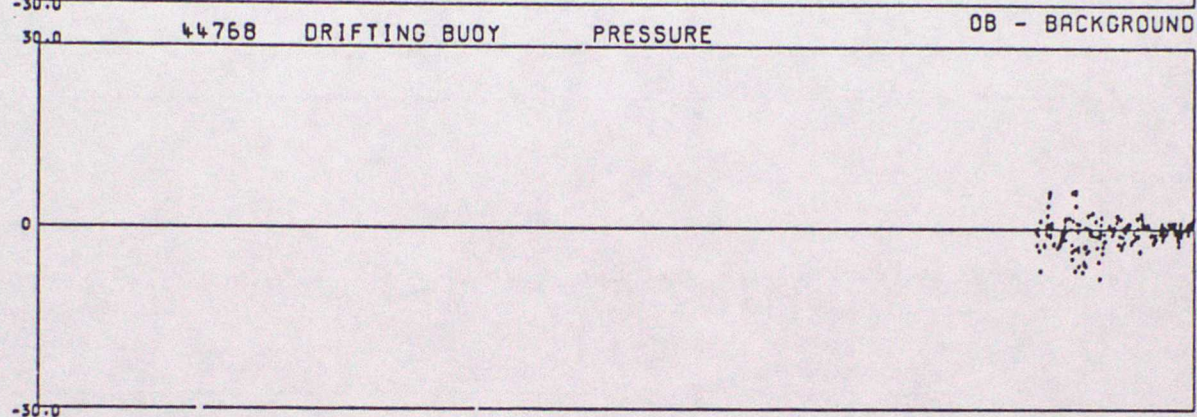
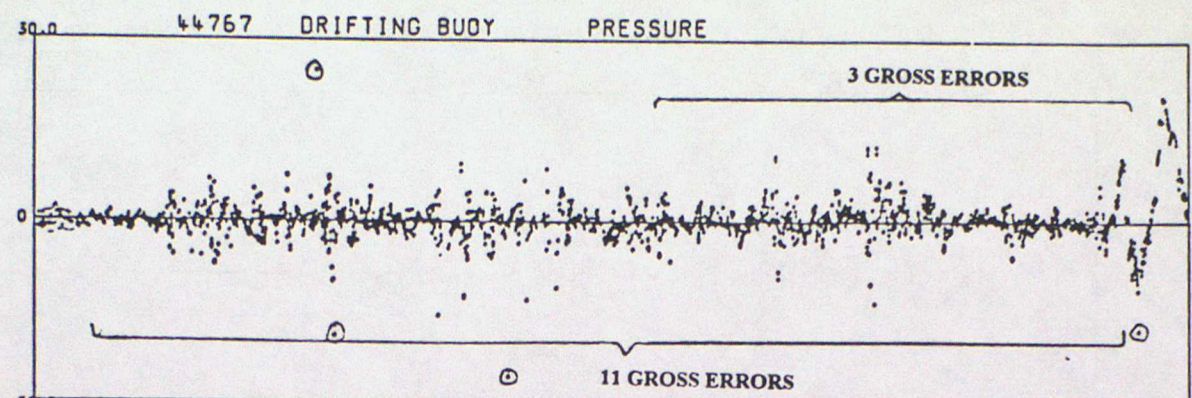
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



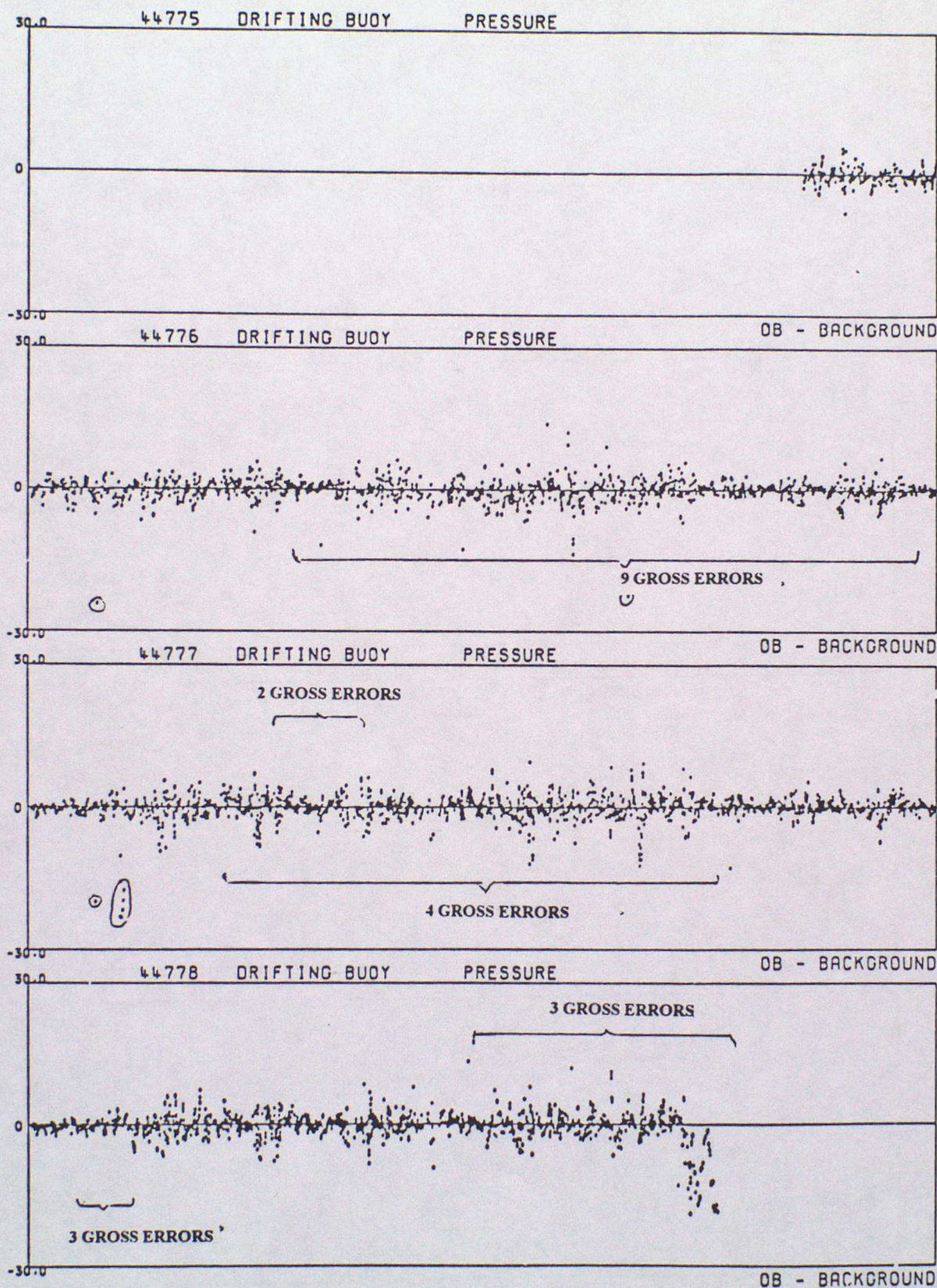
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



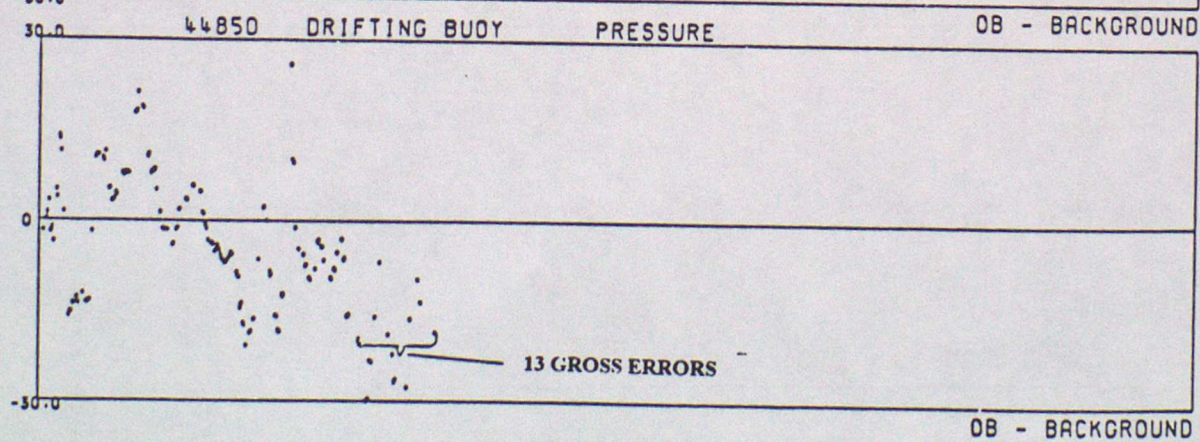
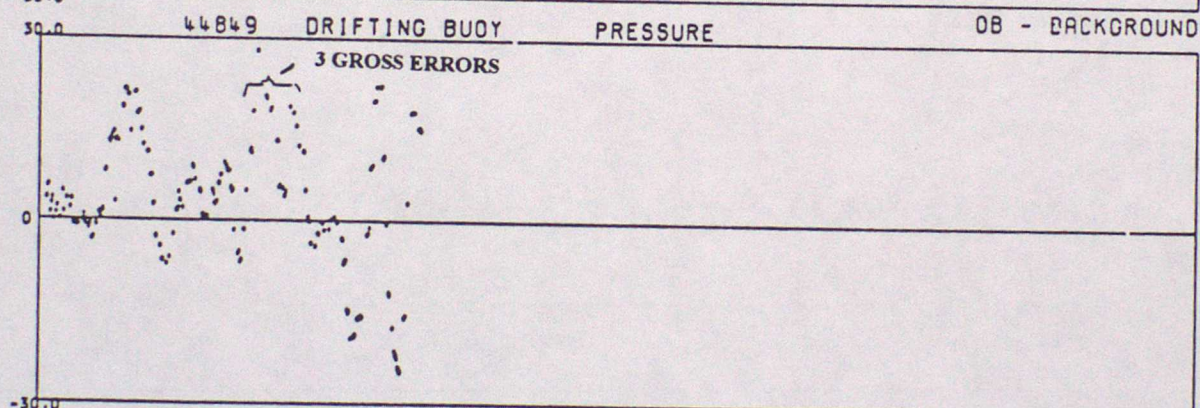
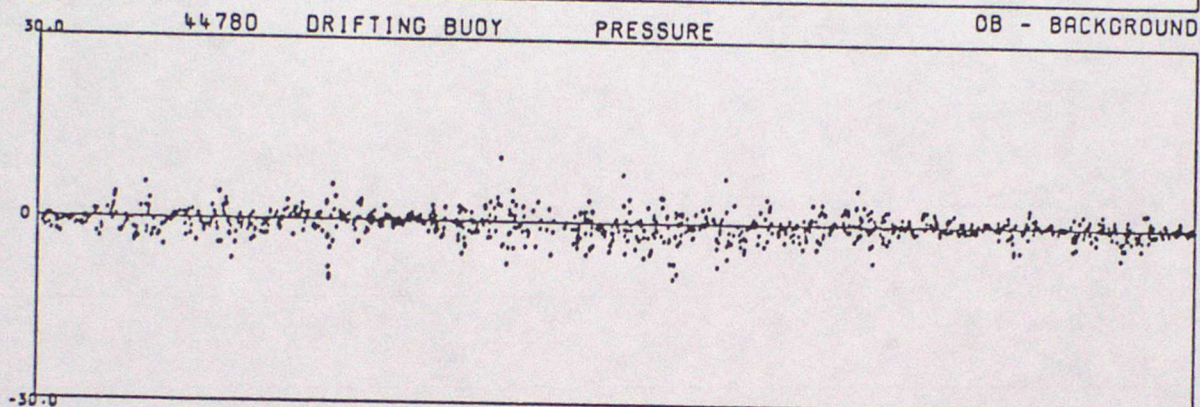
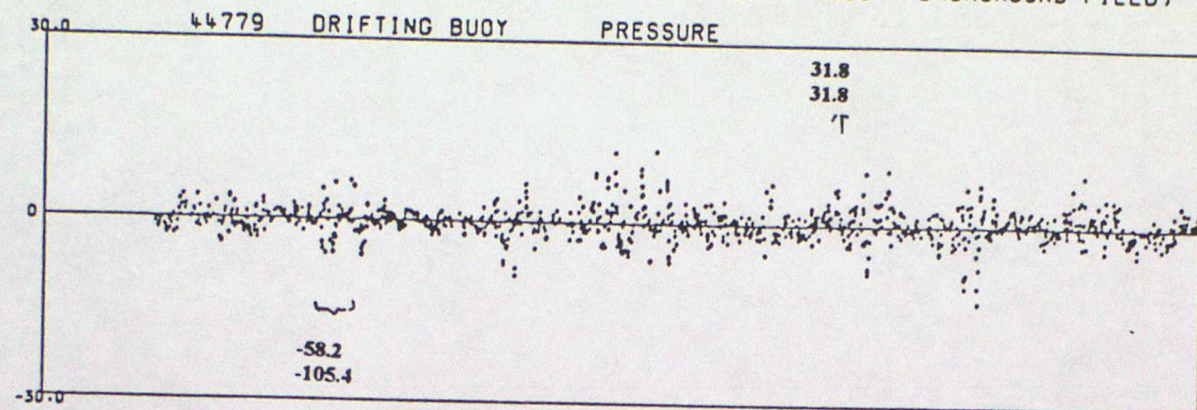
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



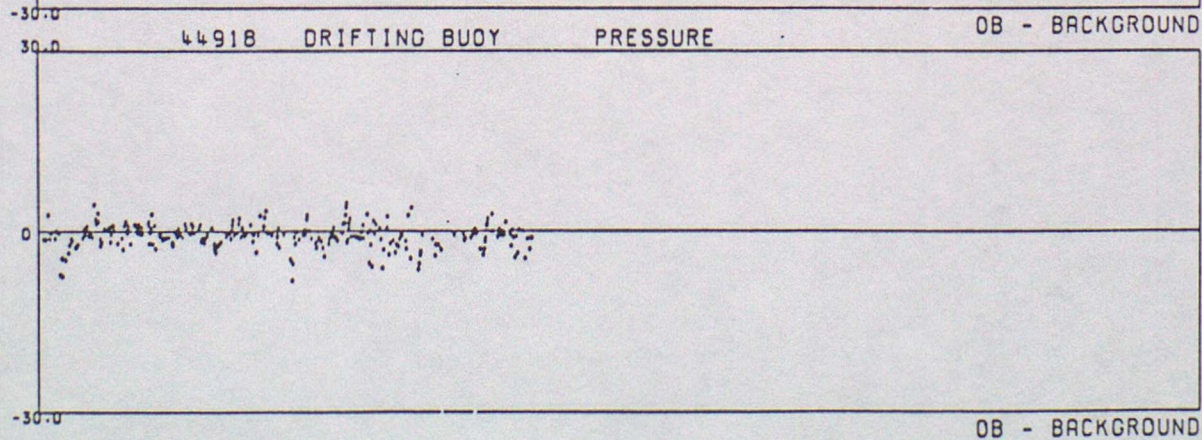
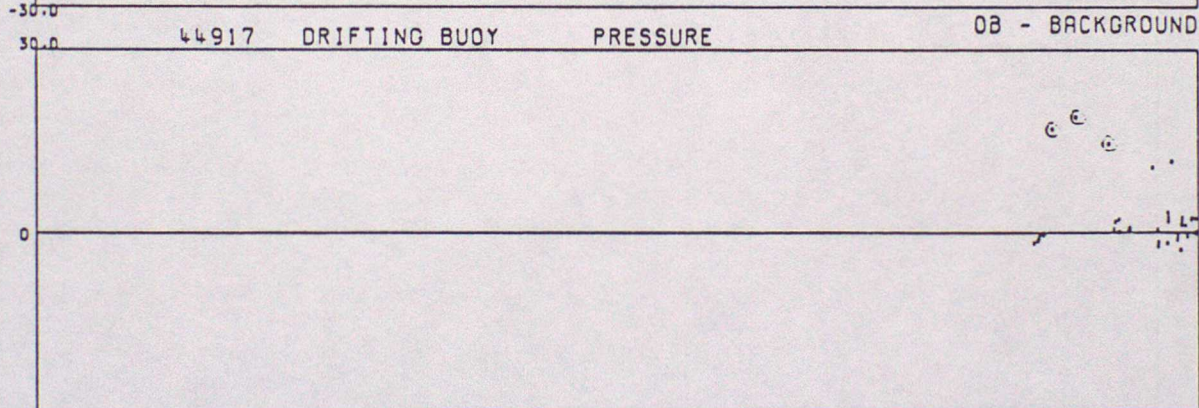
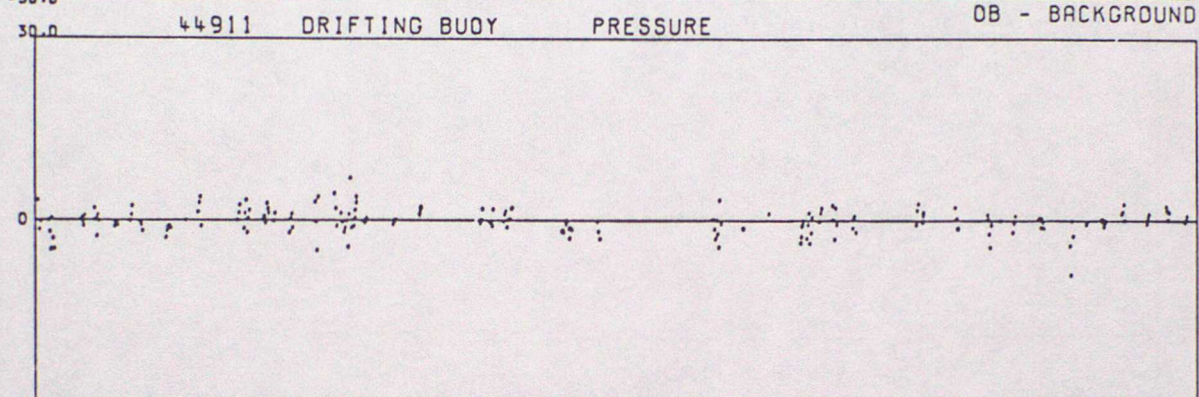
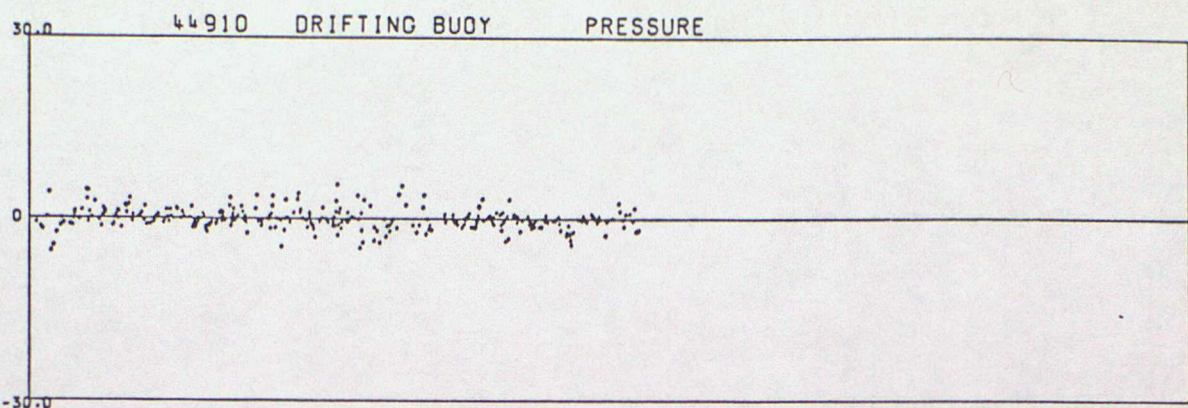
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



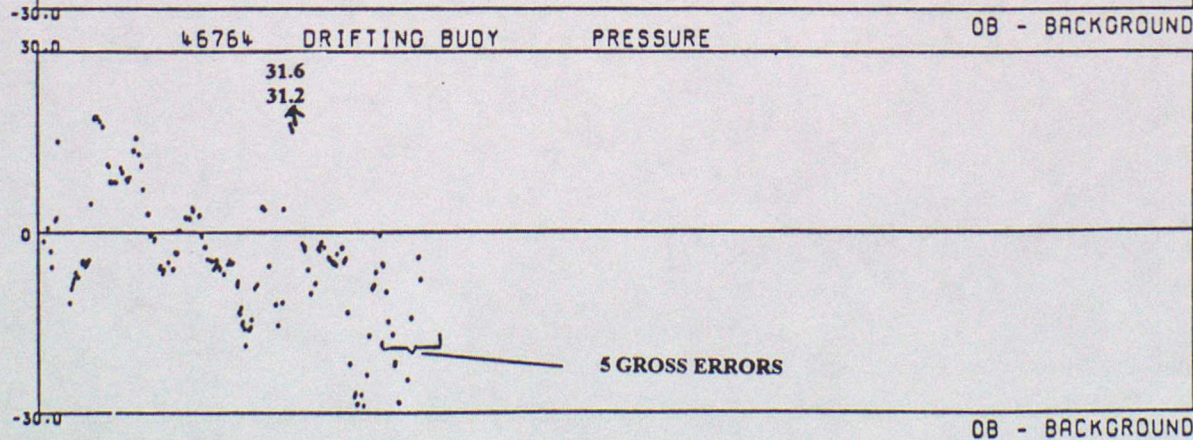
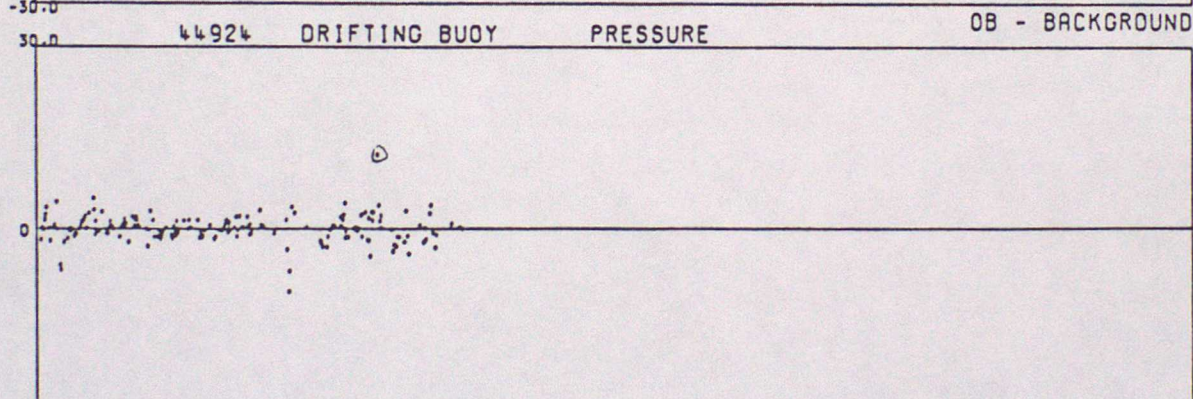
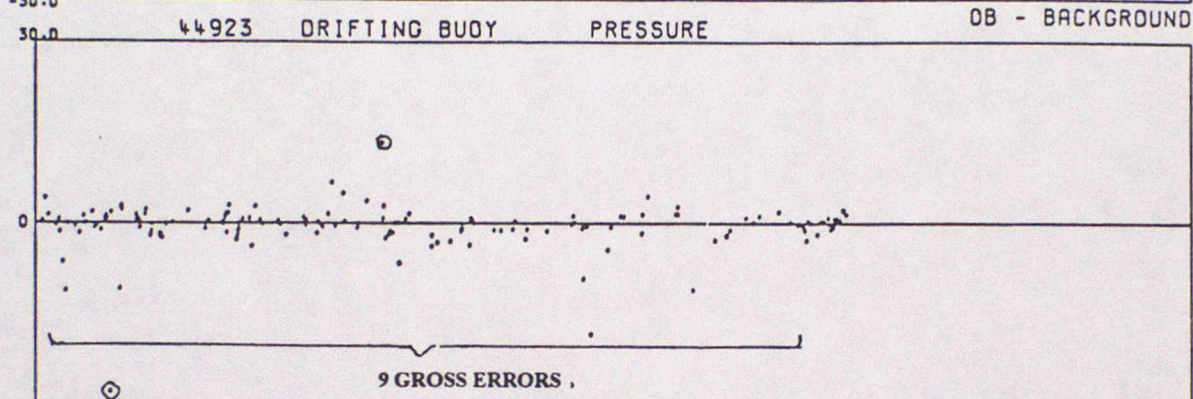
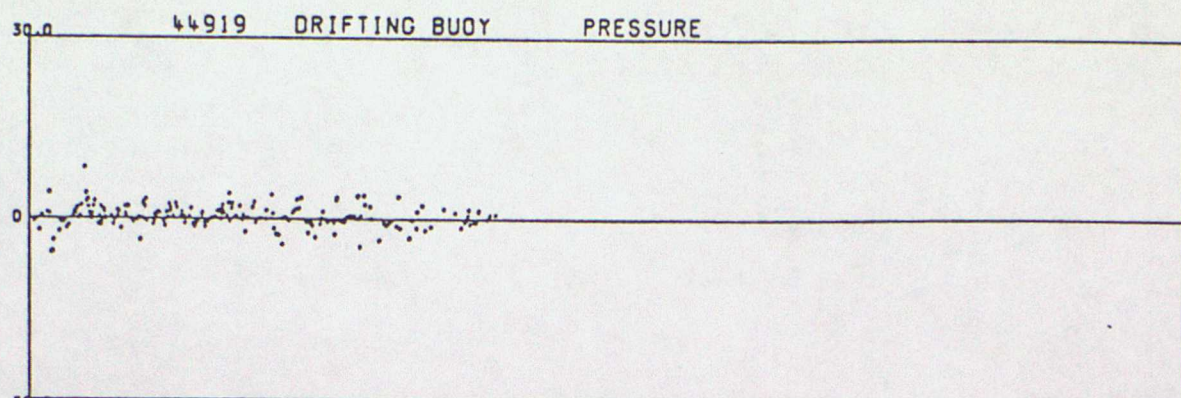
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

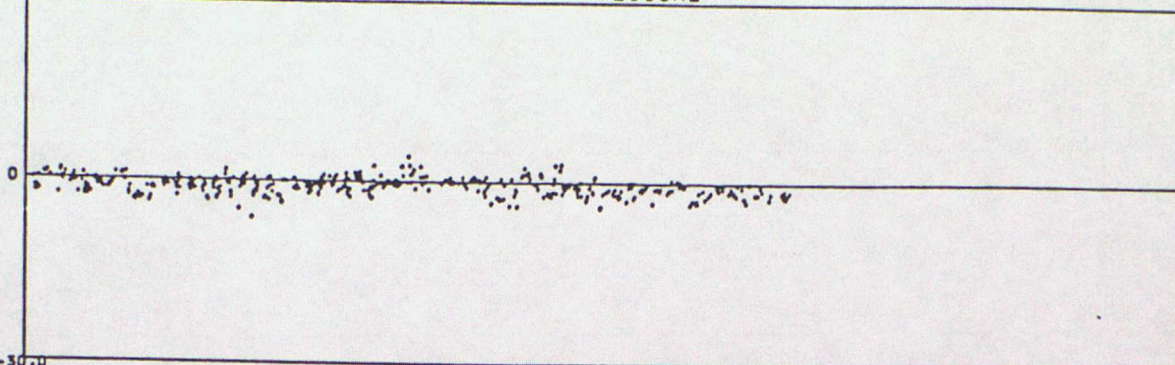


DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

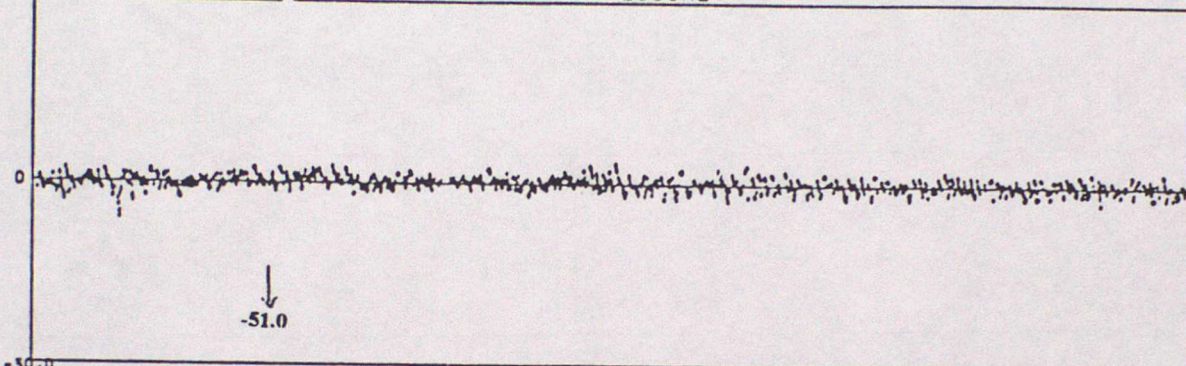


DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

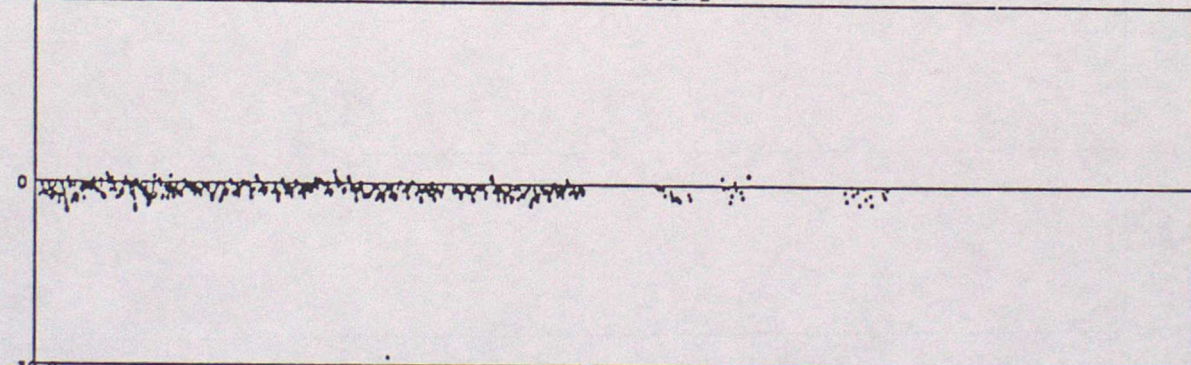
30.0 47541 DRIFTING BUOY PRESSURE



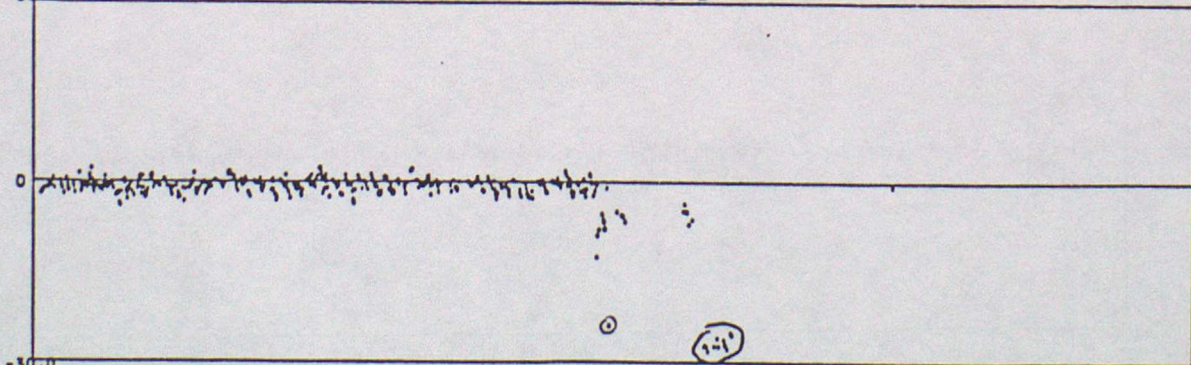
30.0 61521 DRIFTING BUOY PRESSURE OB - BACKGROUND



30.0 61522 DRIFTING BUOY PRESSURE OB - BACKGROUND

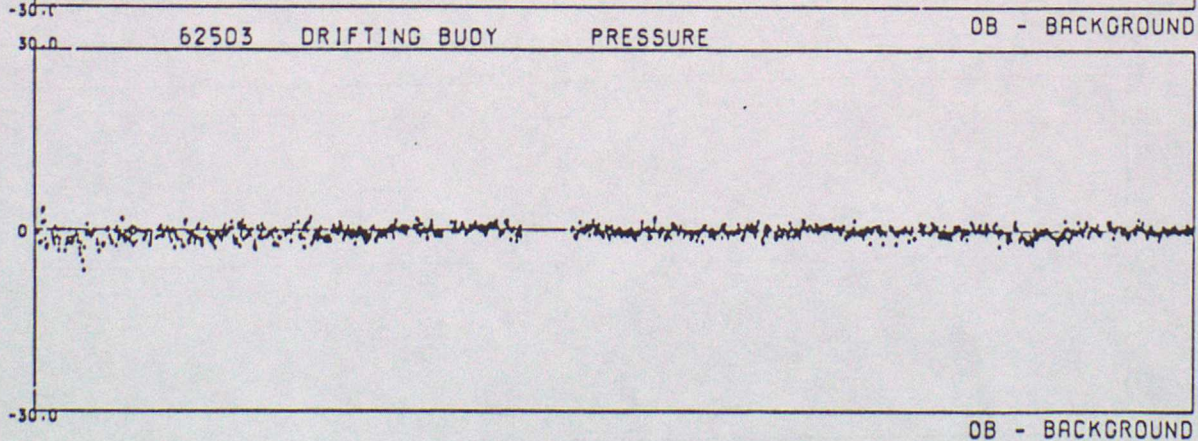
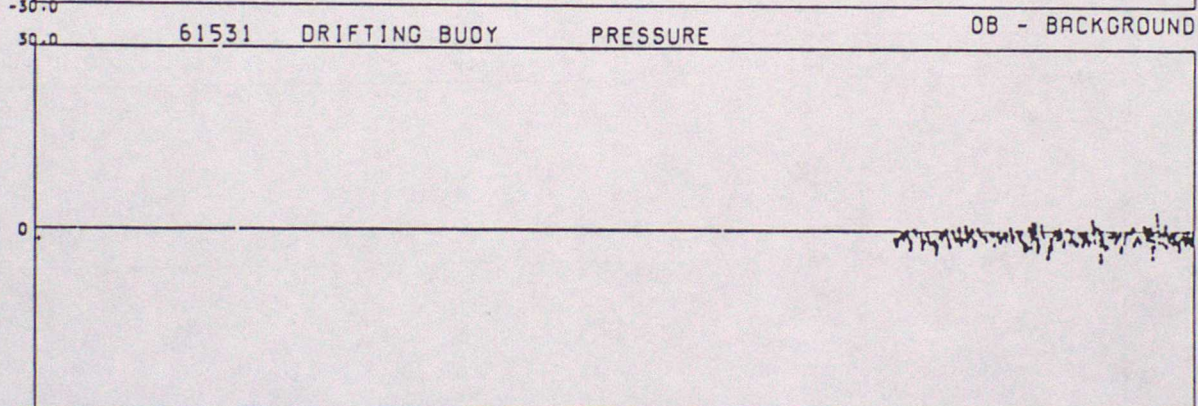
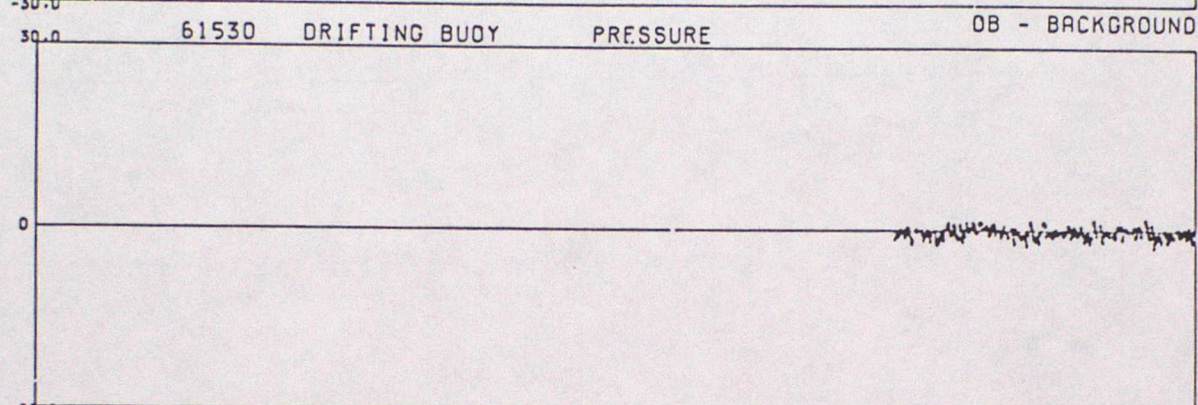
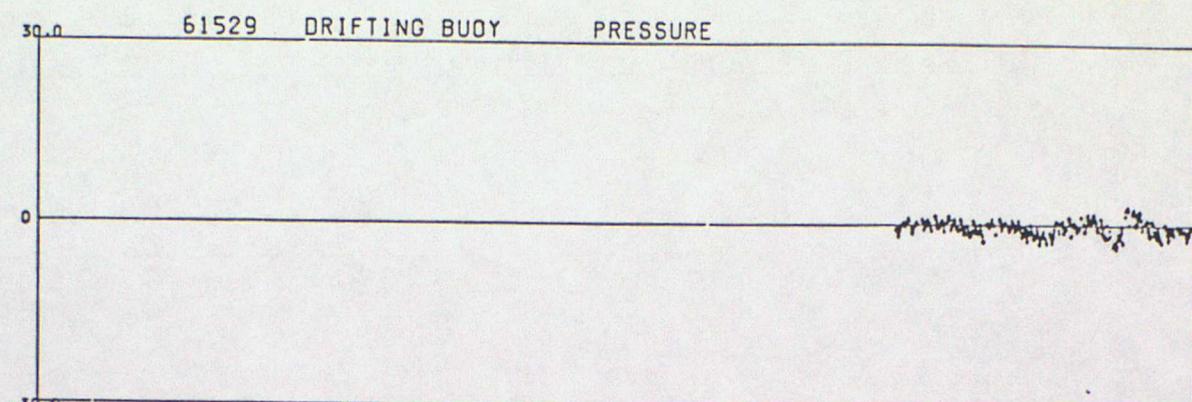


30.0 61527 DRIFTING BUOY PRESSURE OB - BACKGROUND

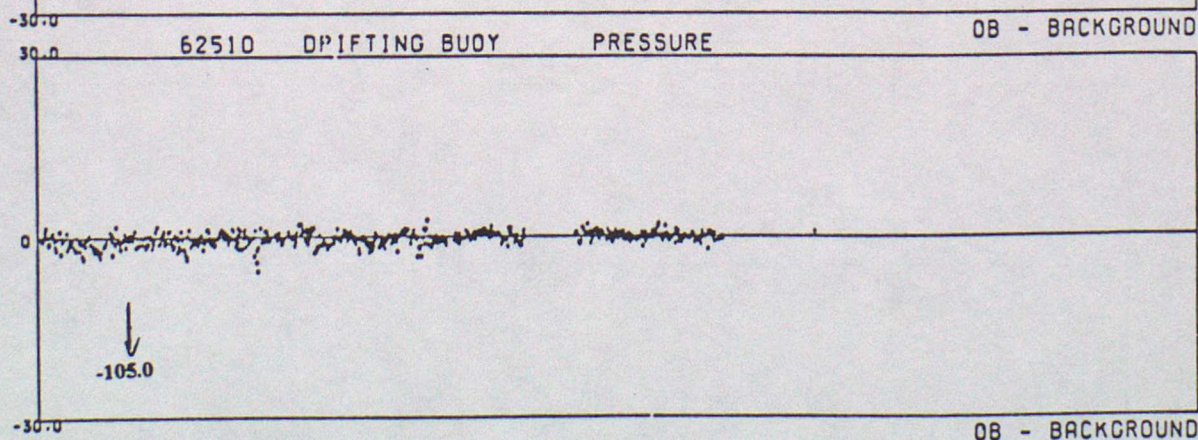
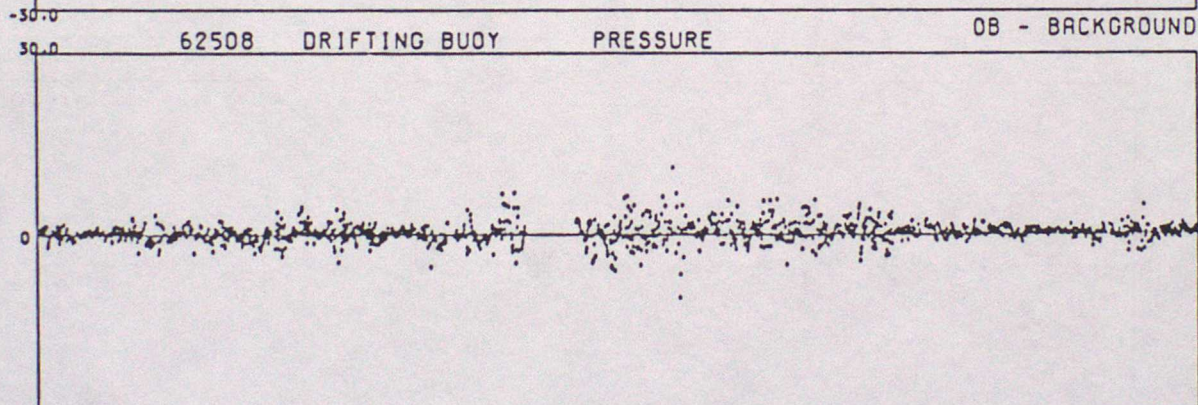
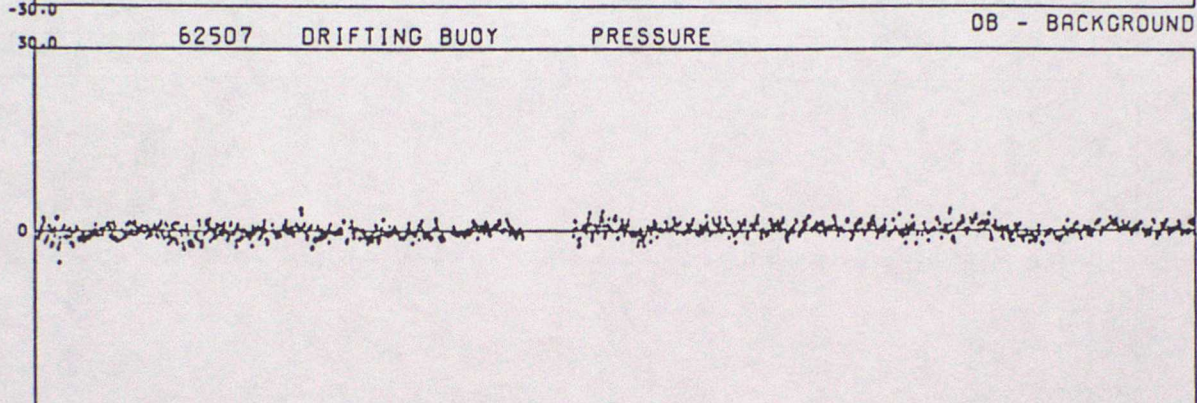
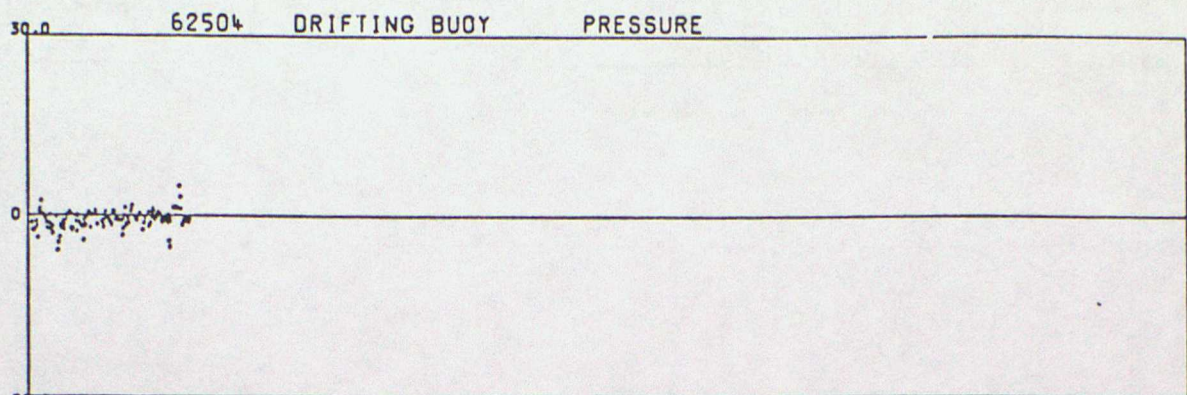


OB - BACKGROUND

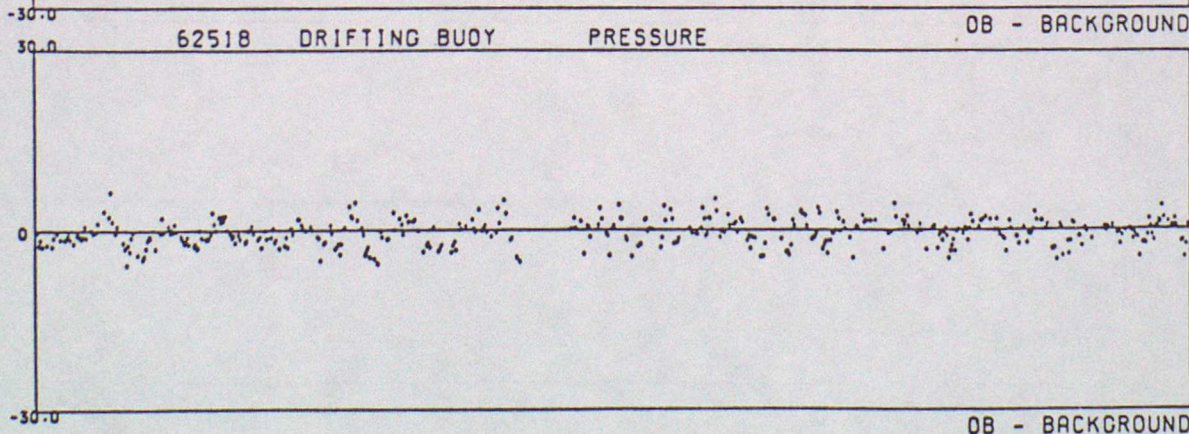
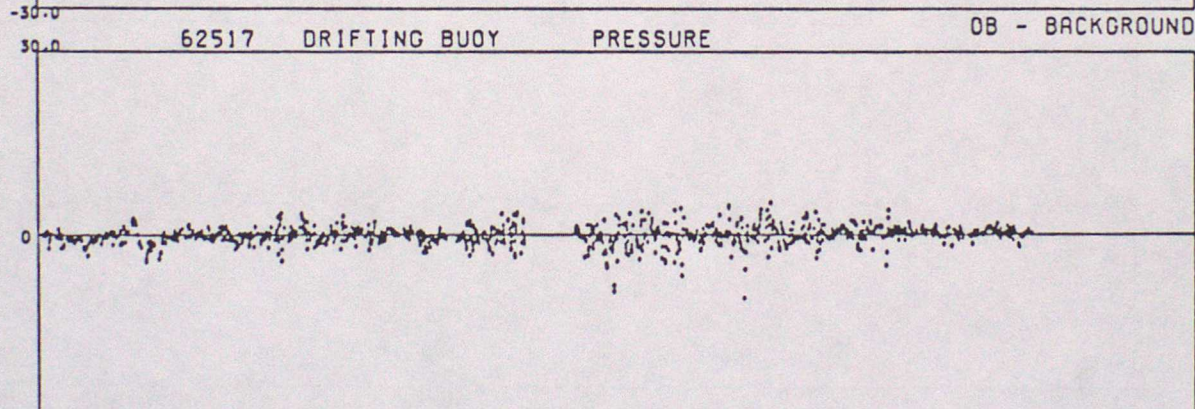
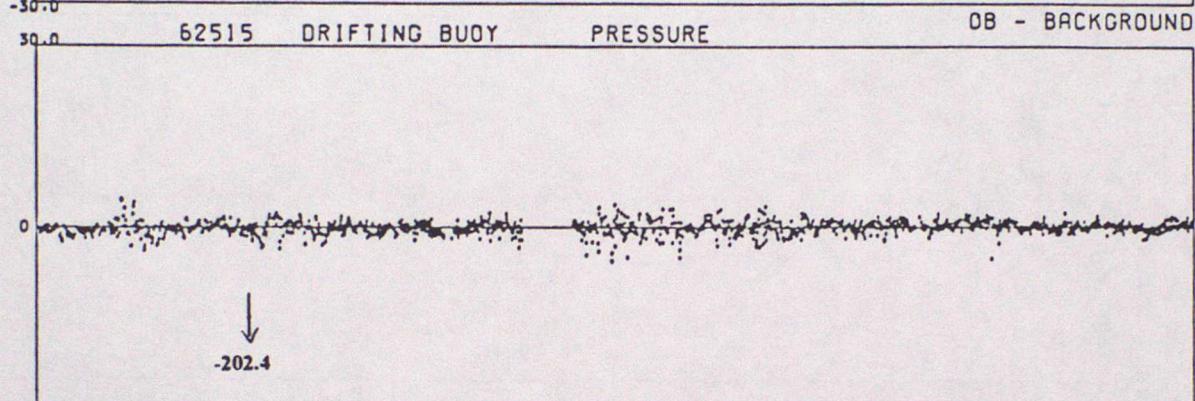
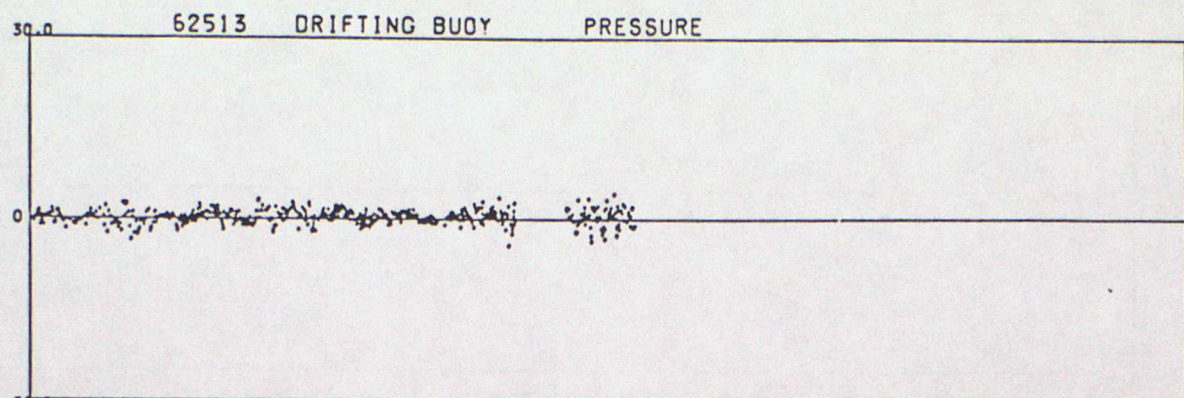
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



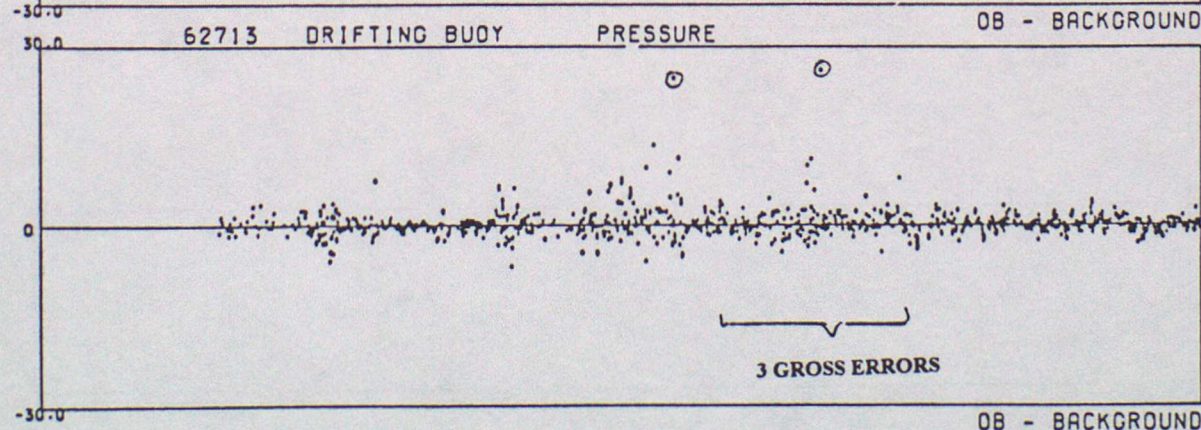
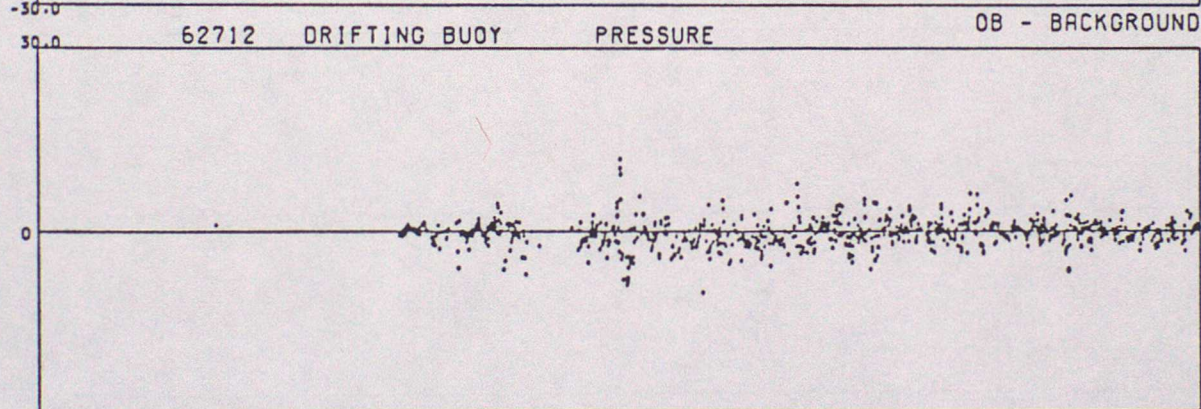
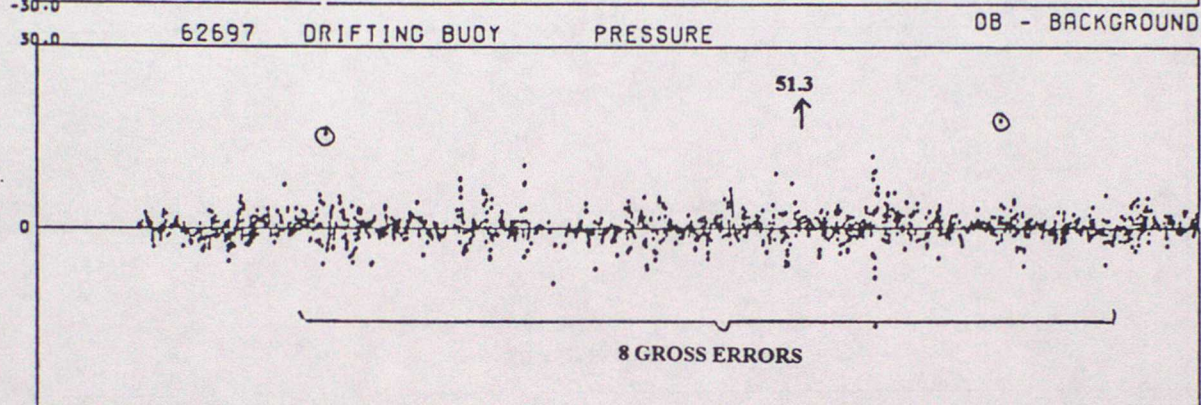
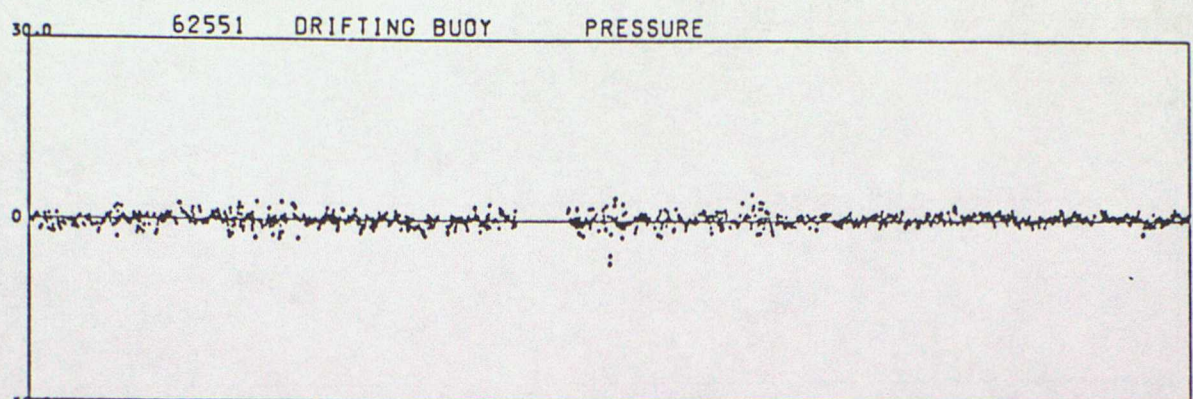
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



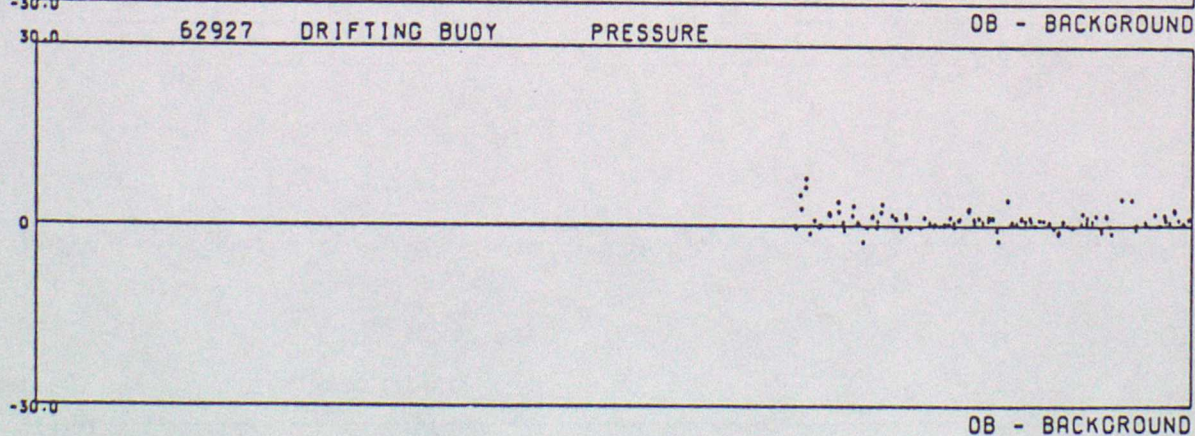
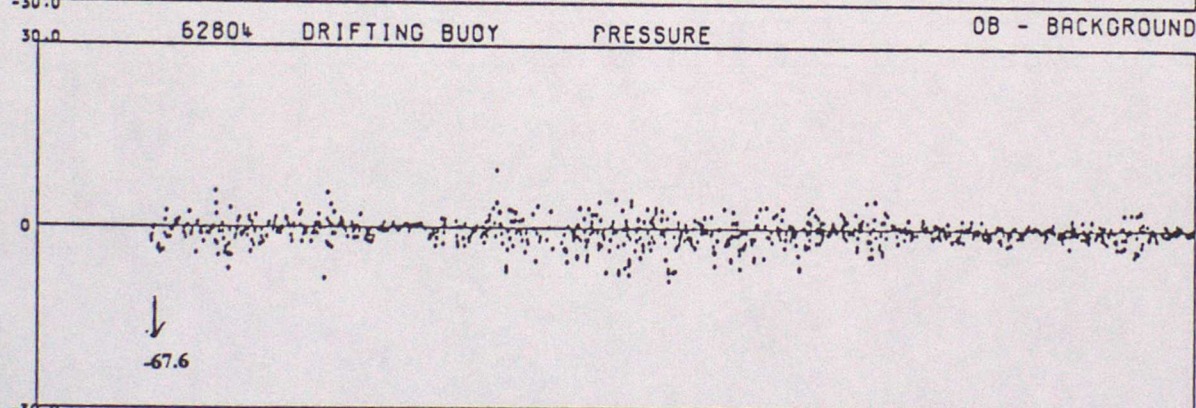
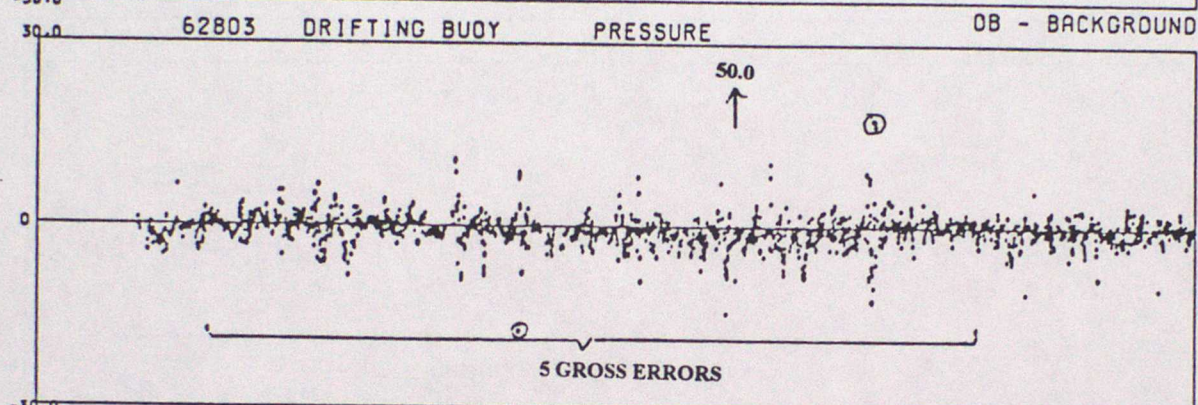
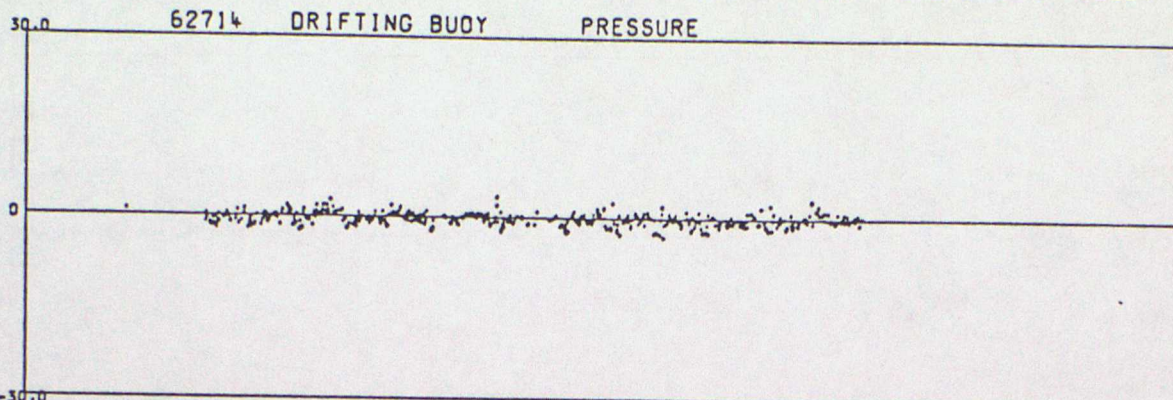
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



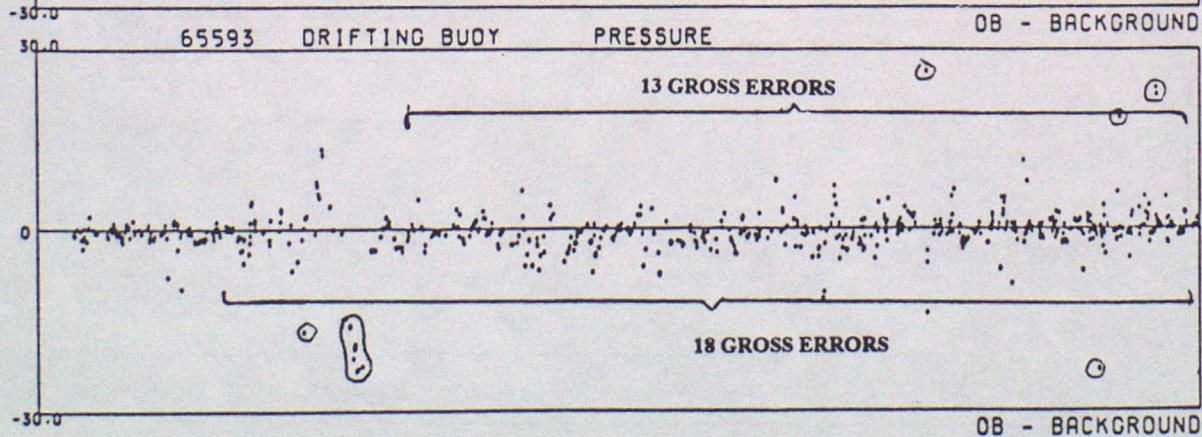
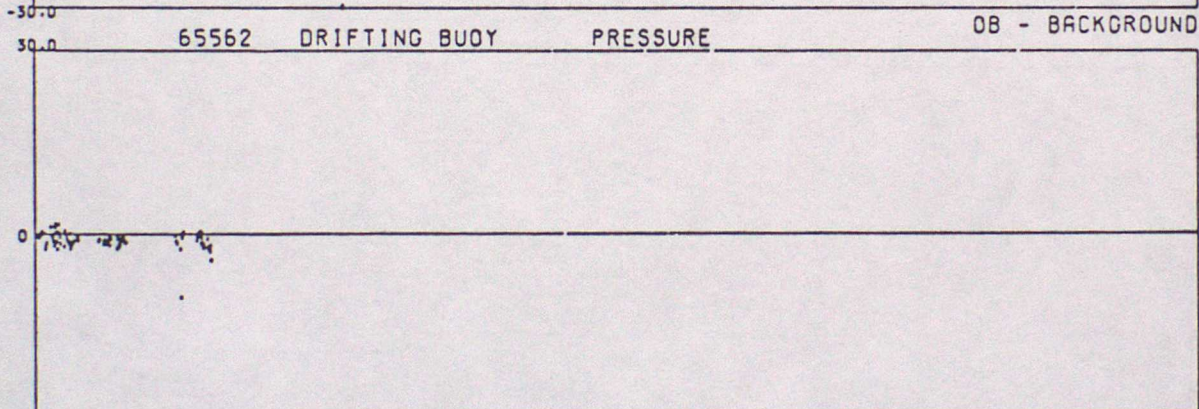
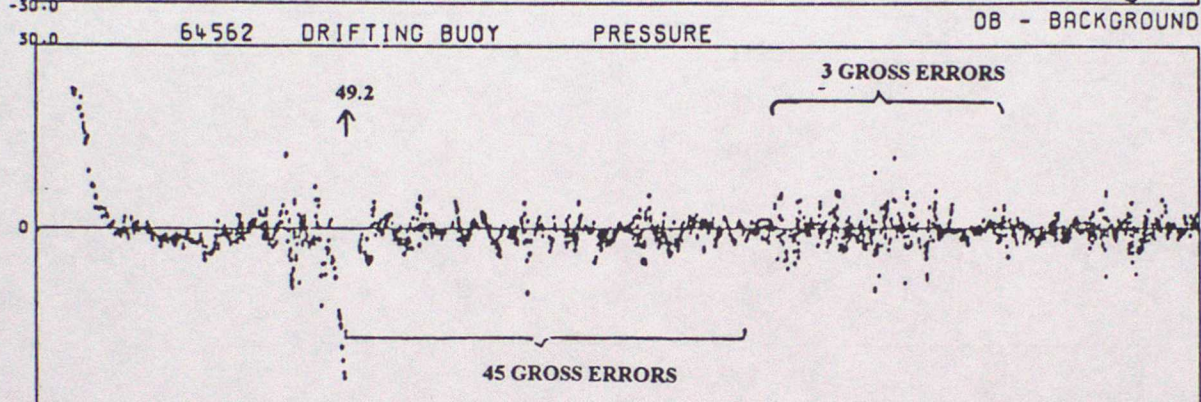
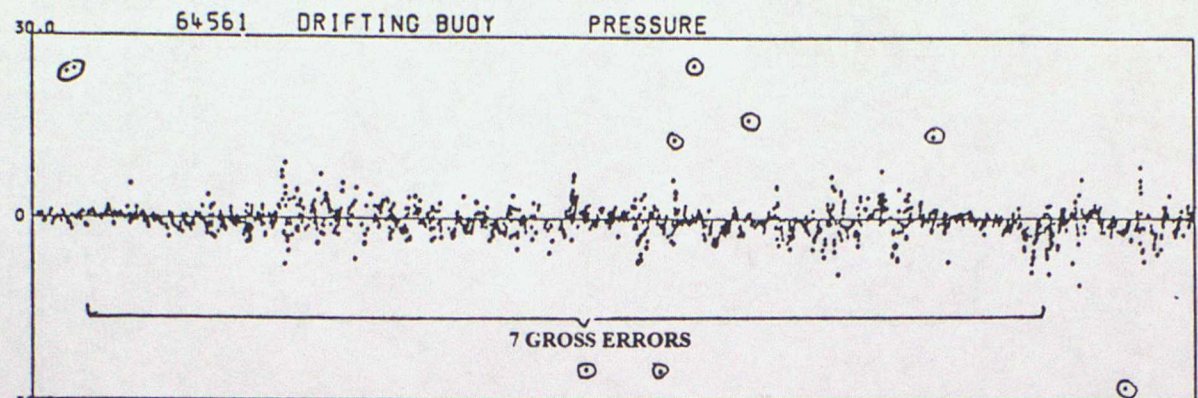
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



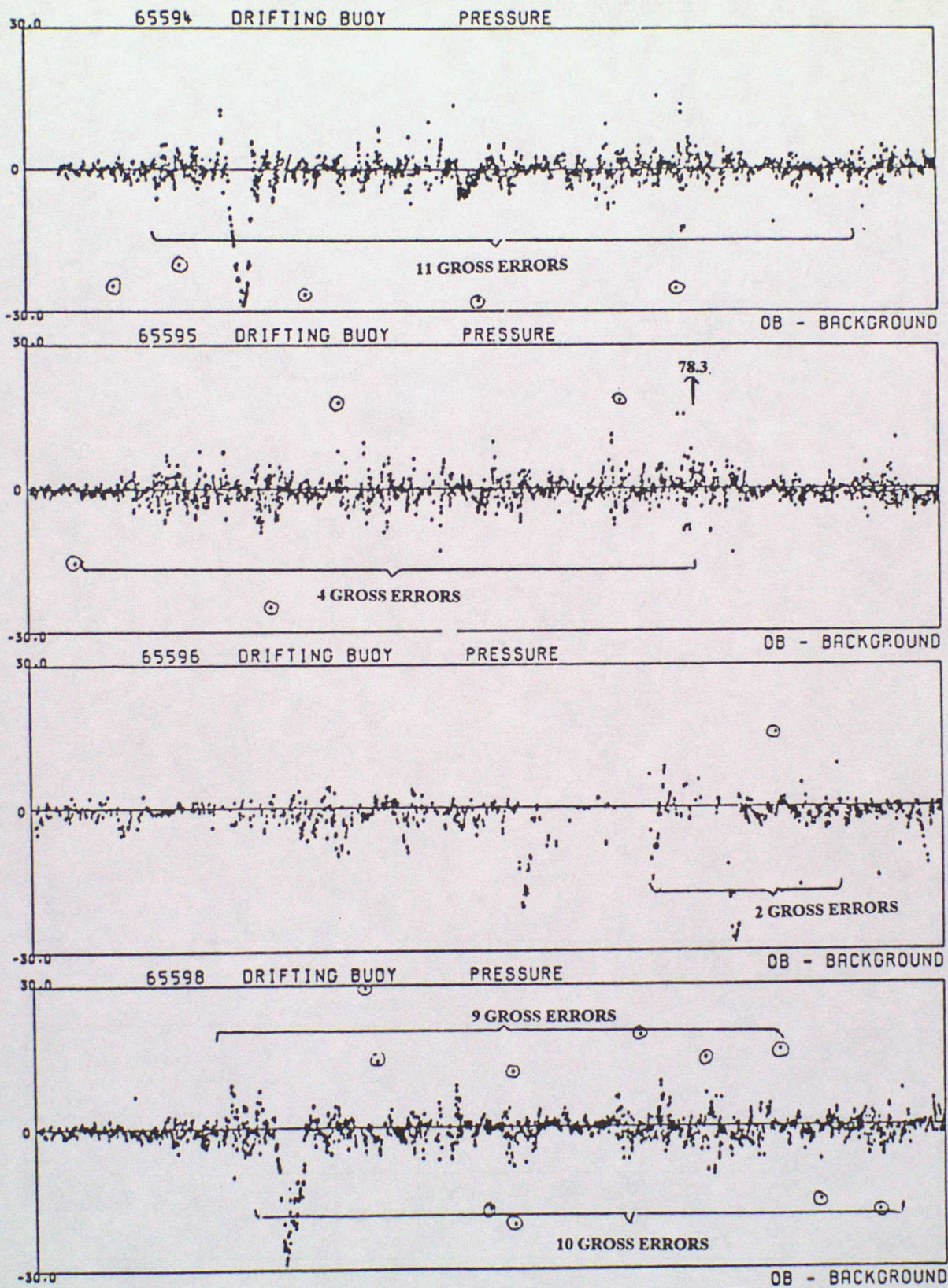
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

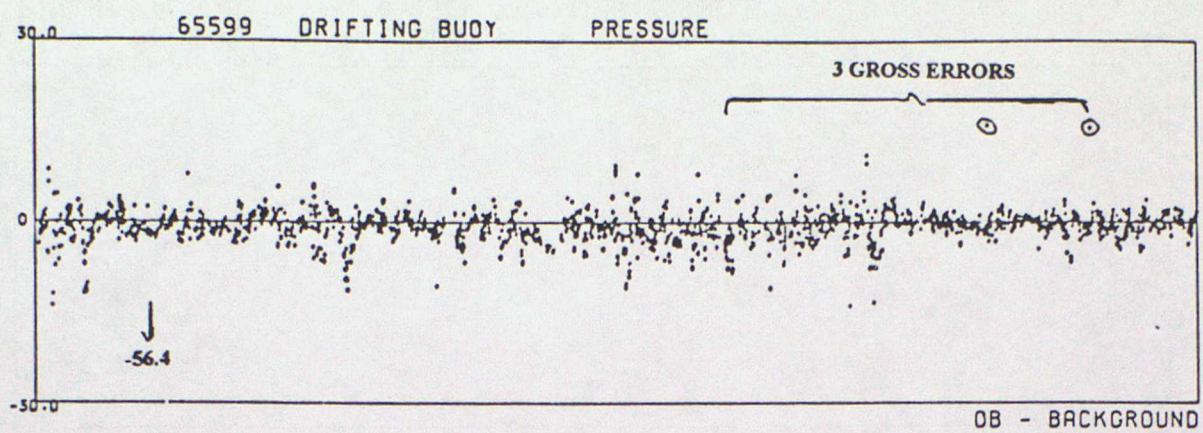


DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



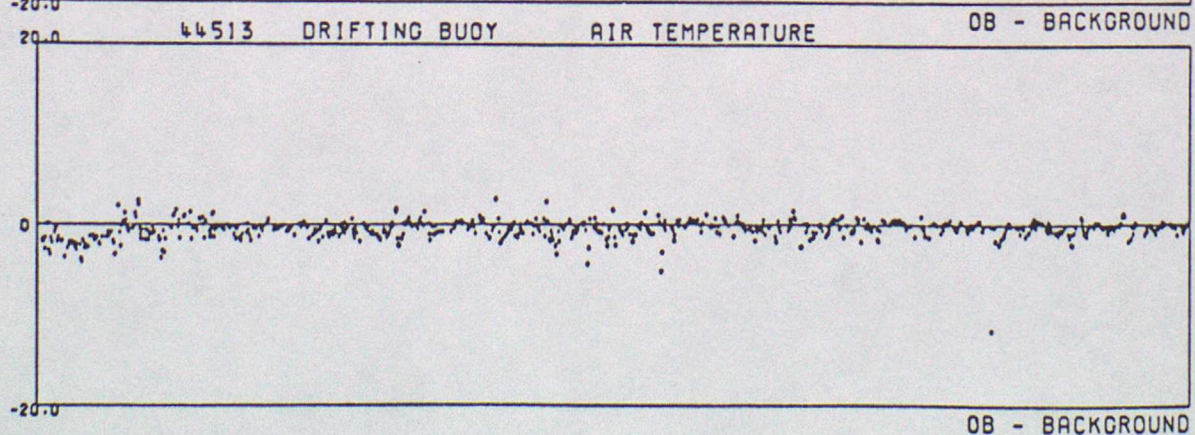
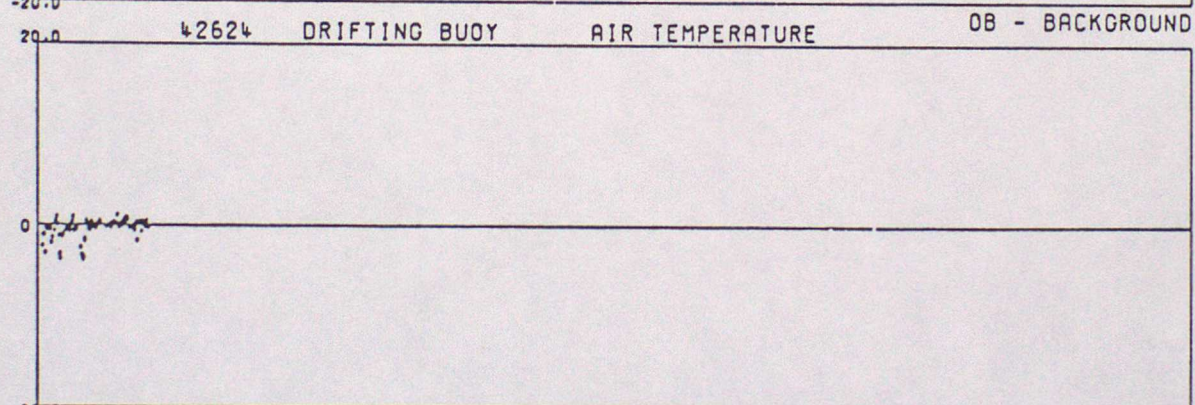
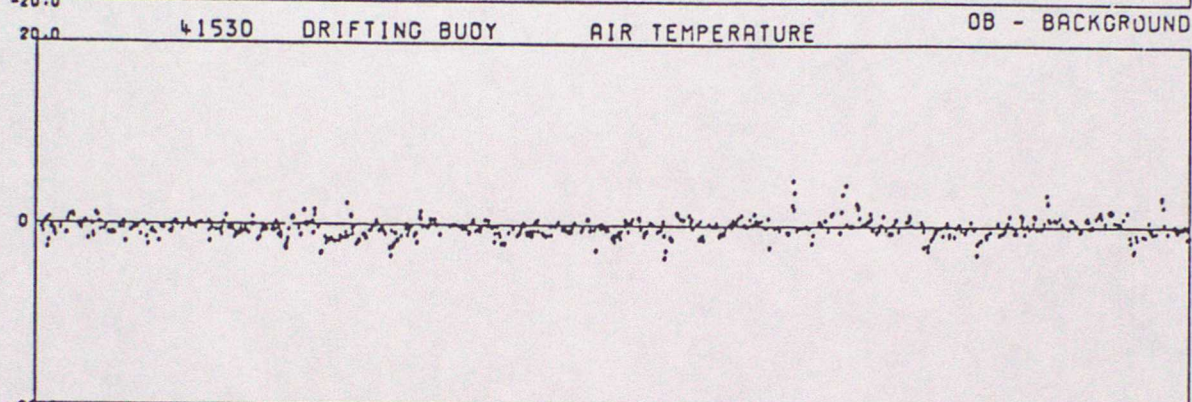
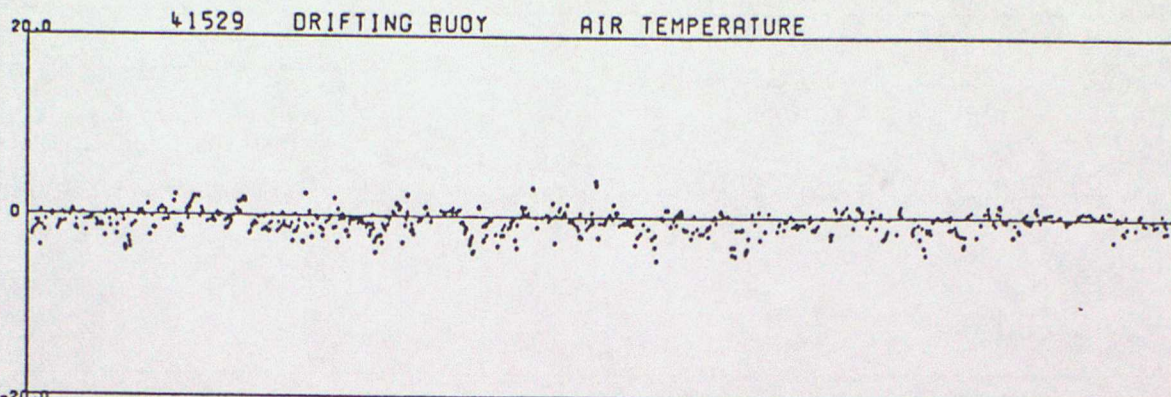
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



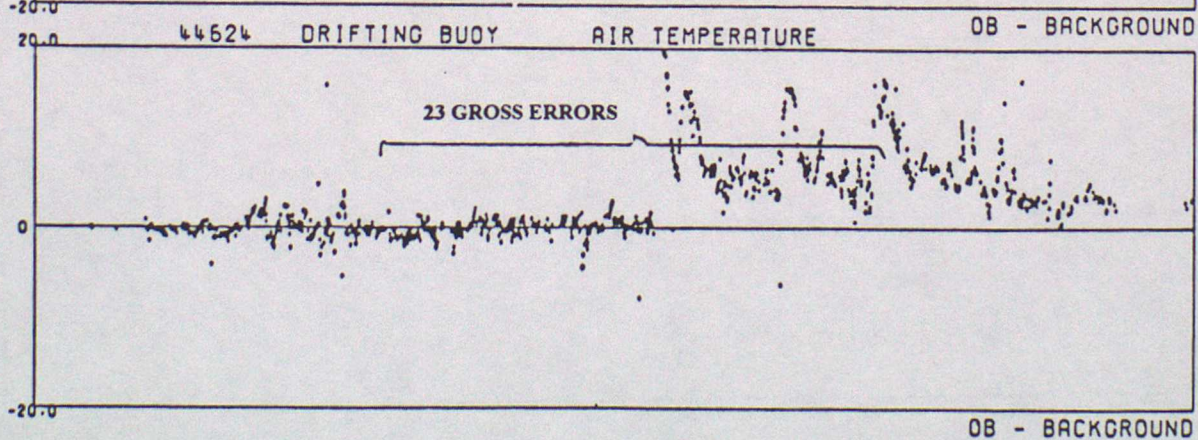
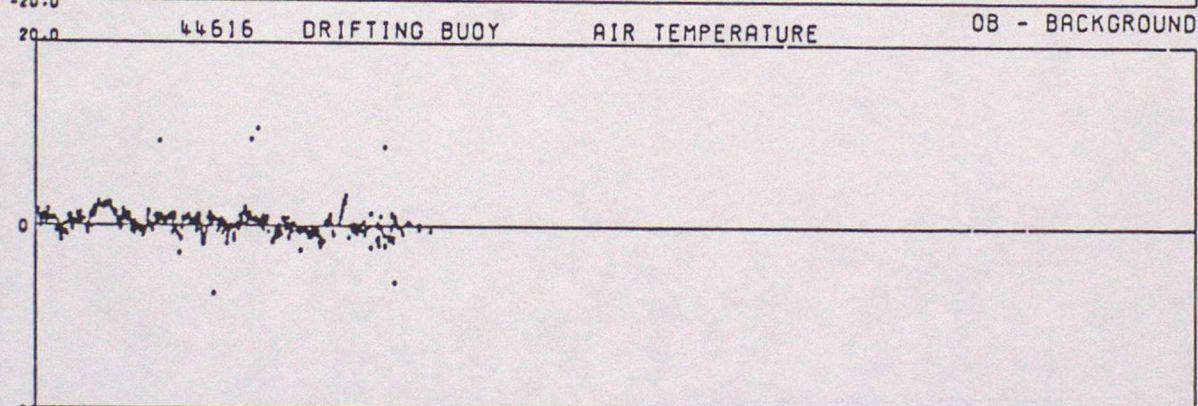
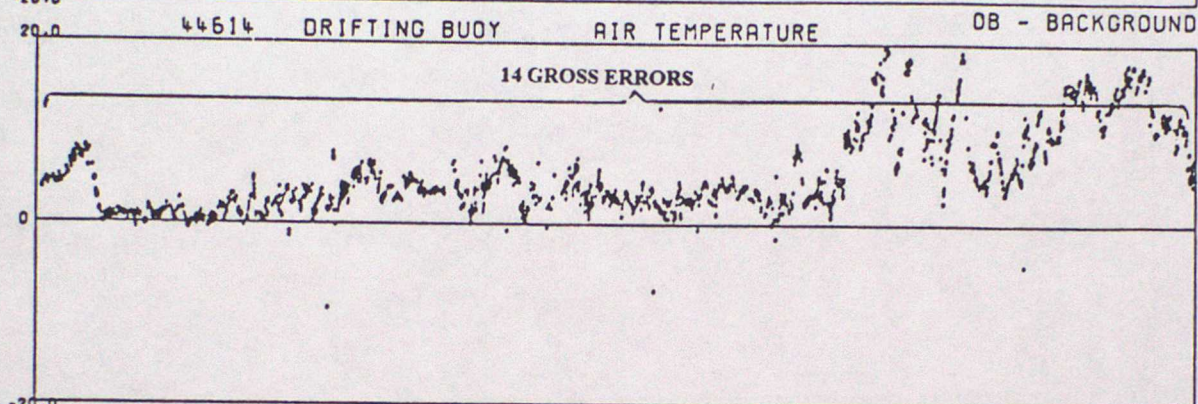
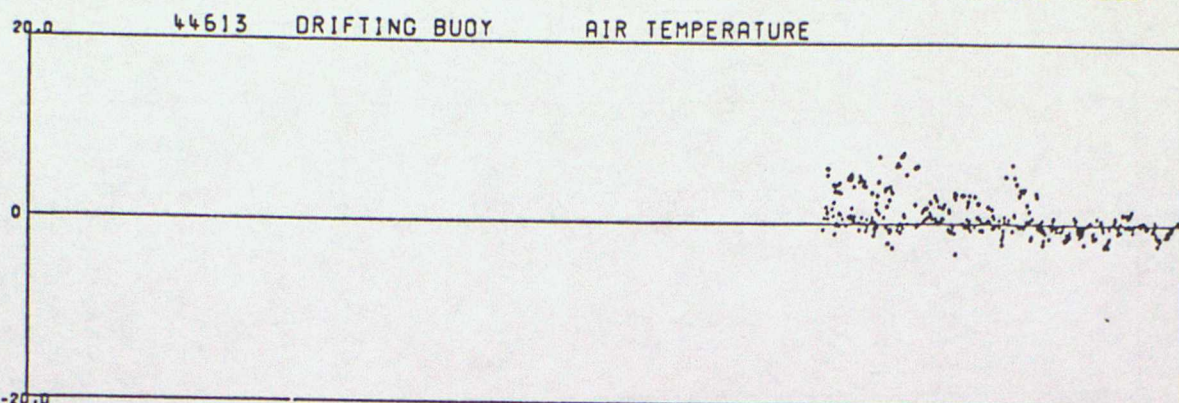


ANNEX C - TIME SERIES PLOTS OF AIR TEMPERATURE

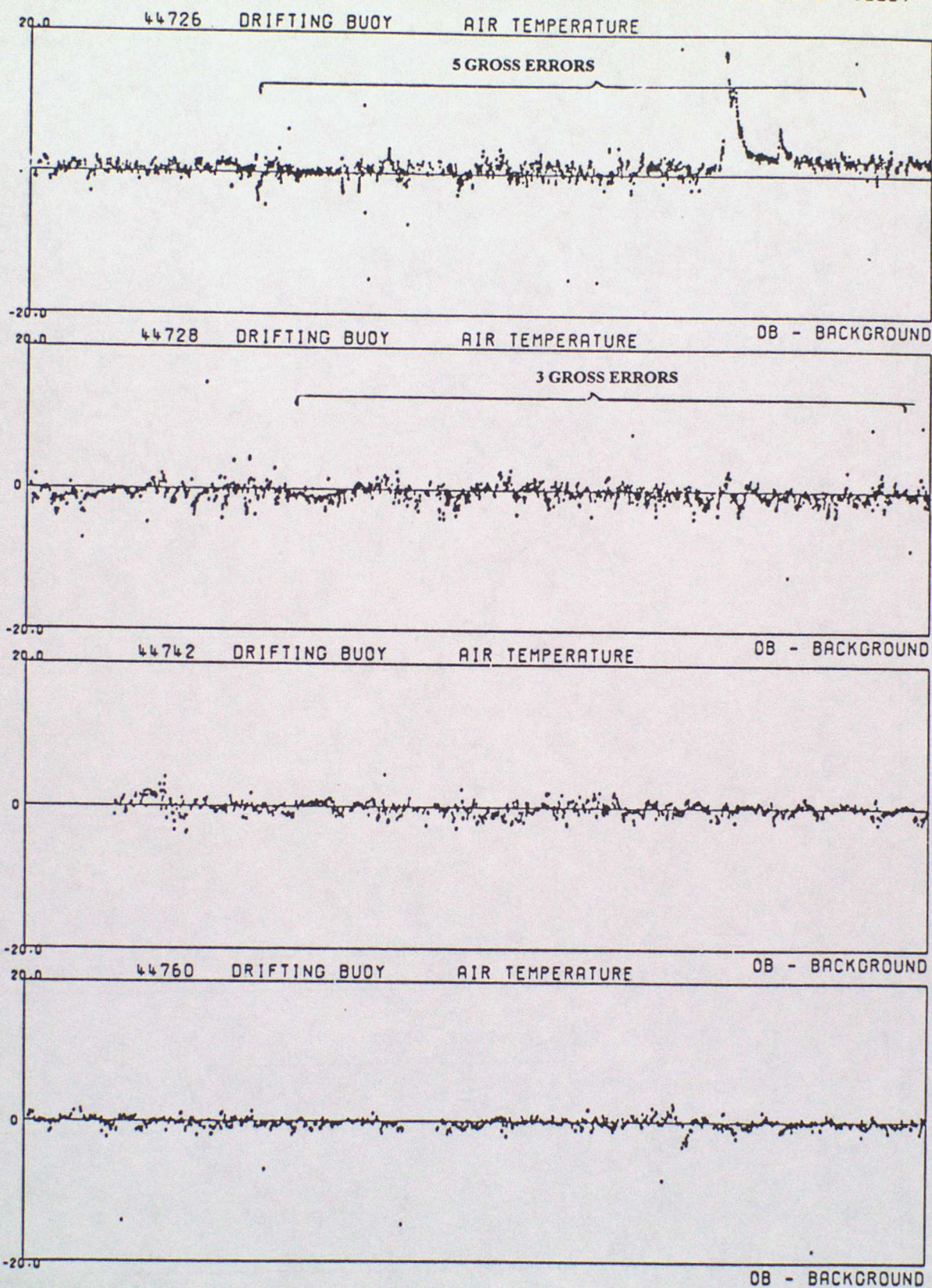
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



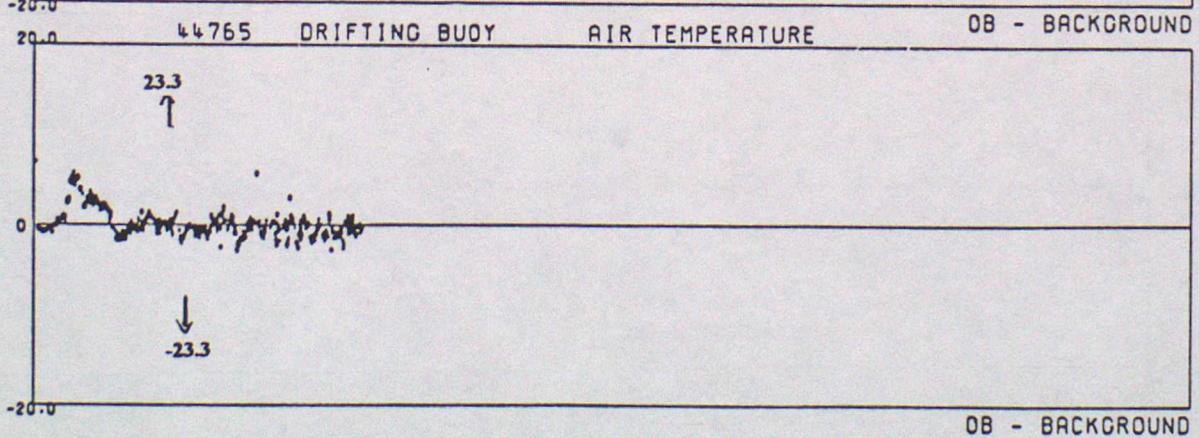
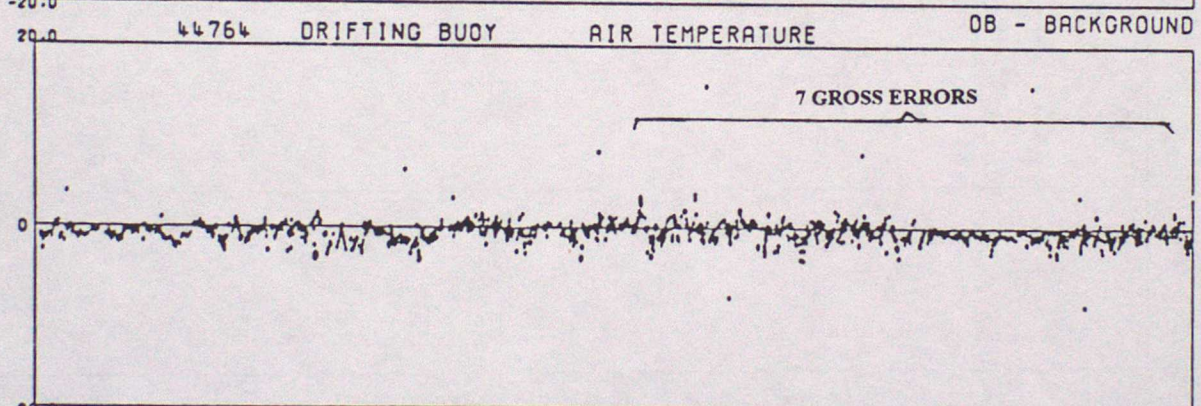
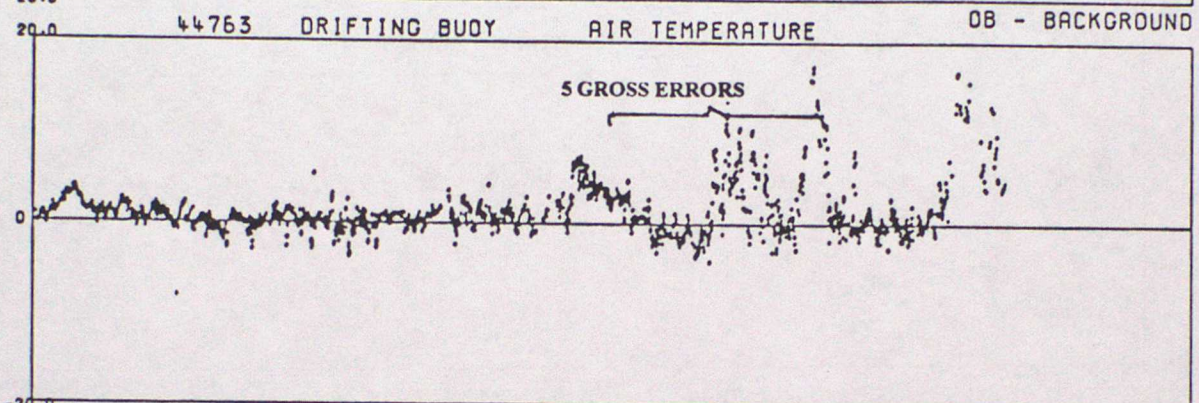
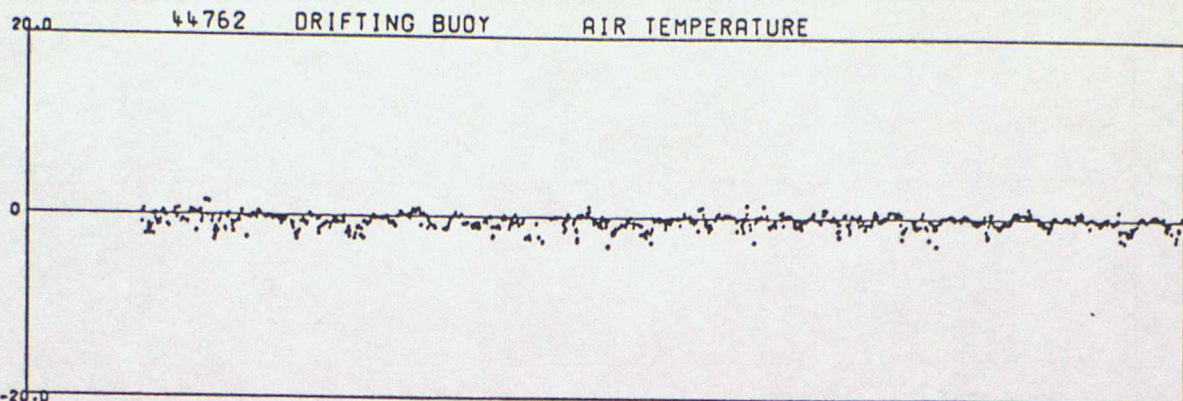
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



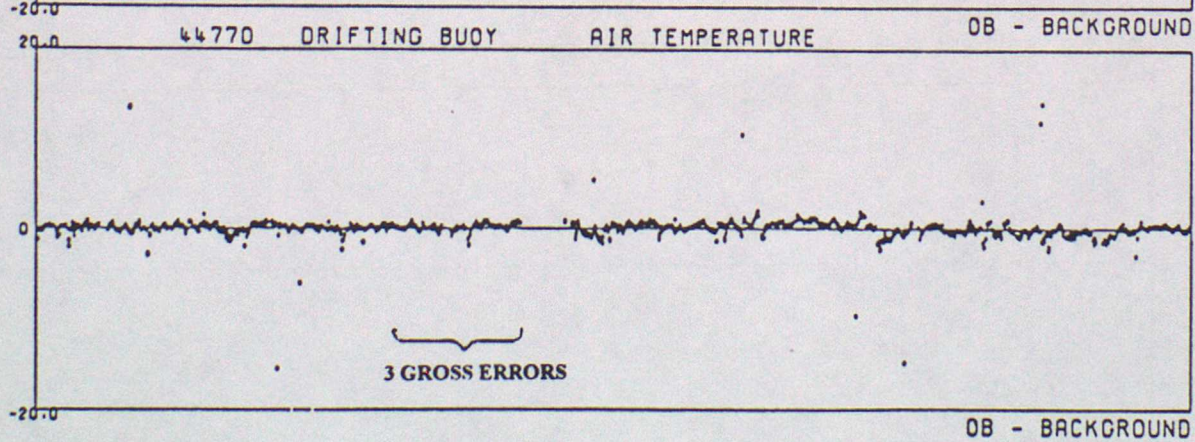
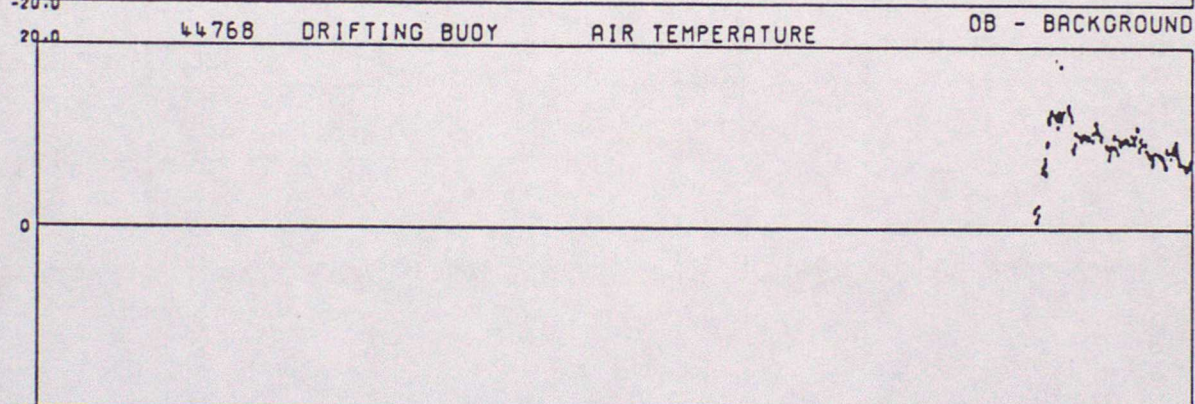
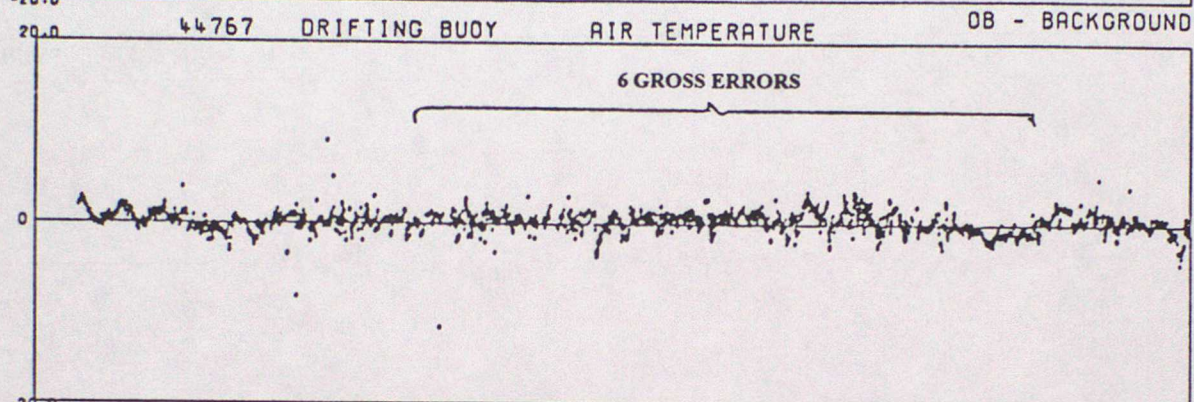
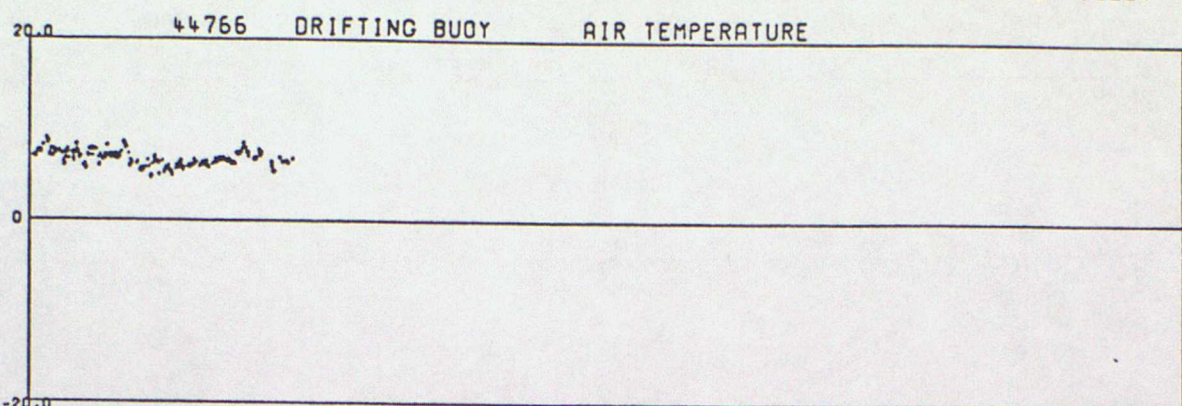
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



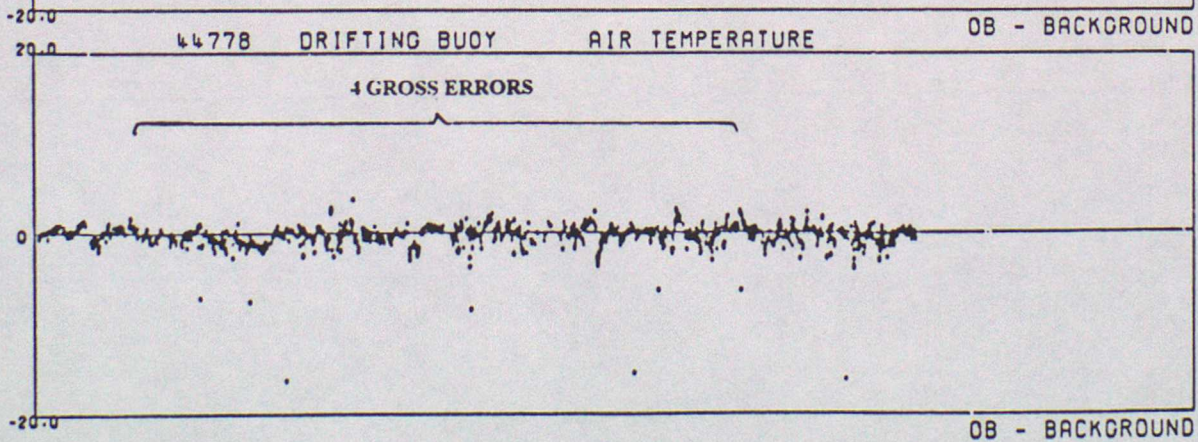
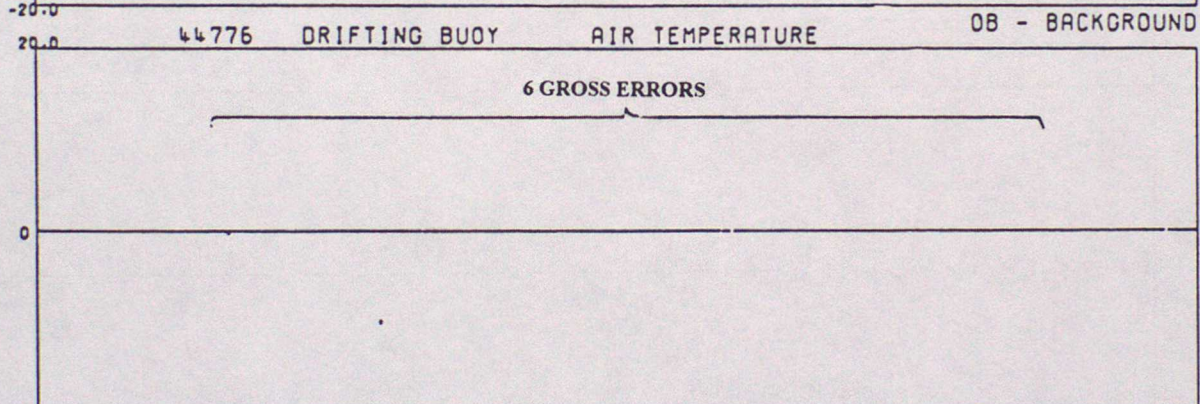
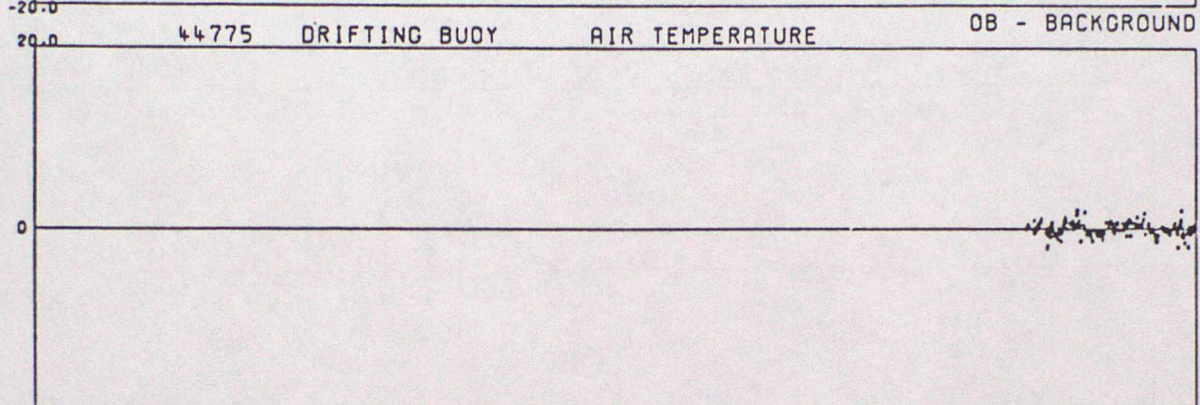
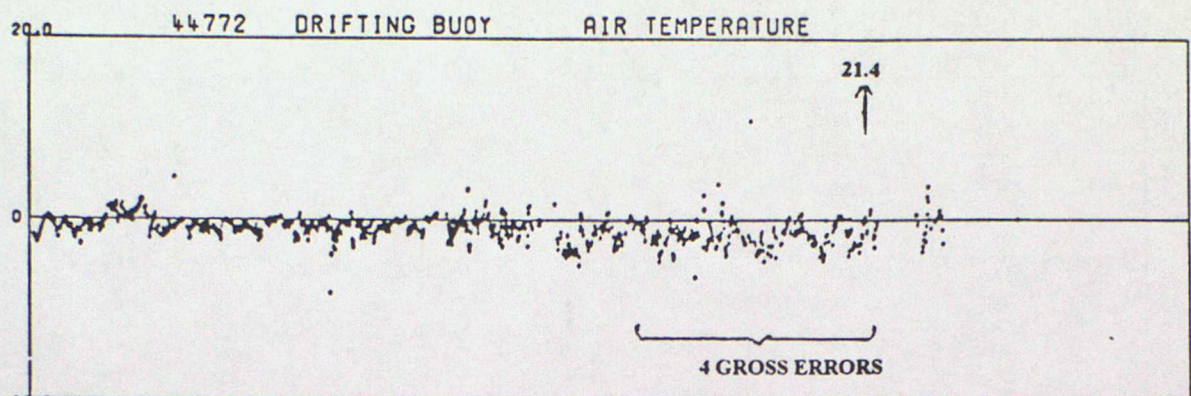
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



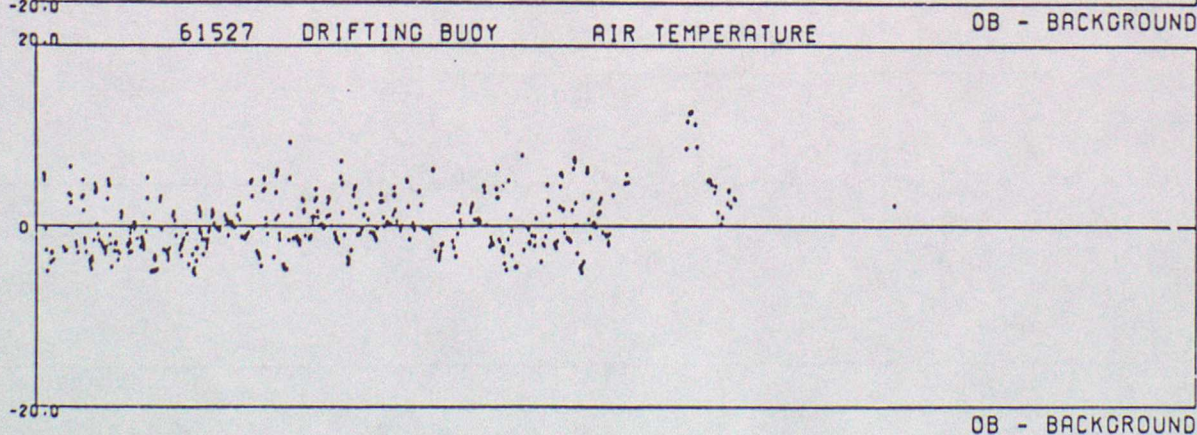
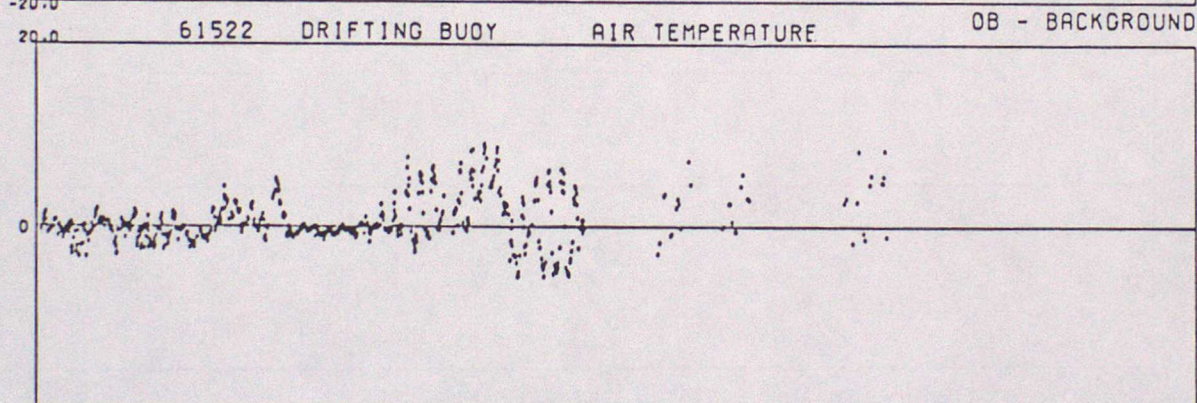
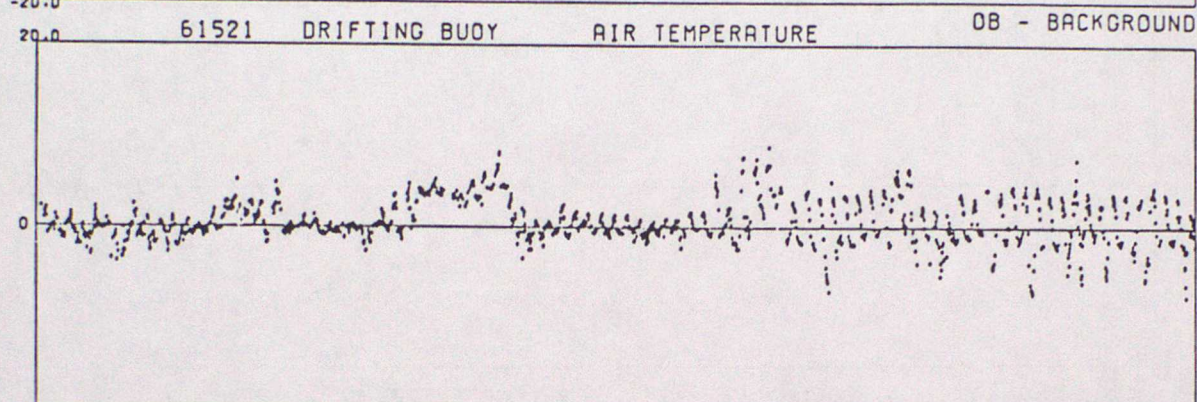
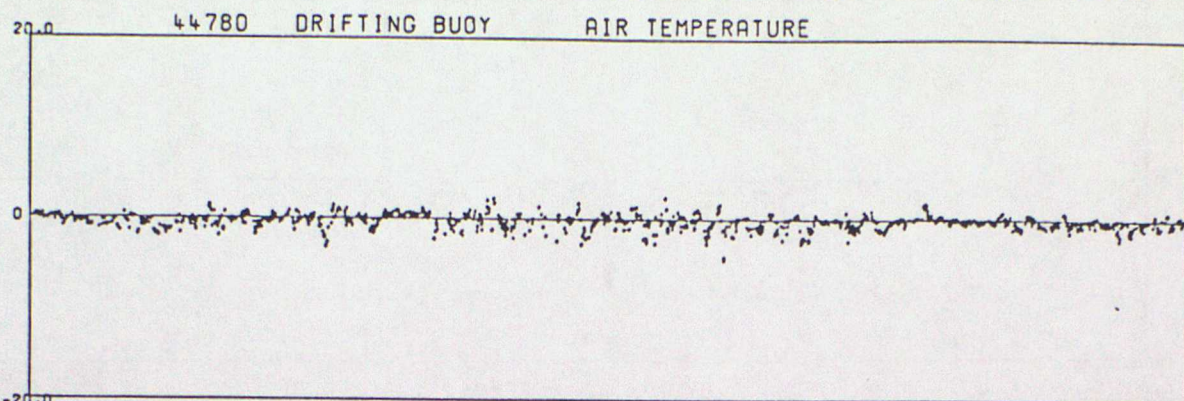
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

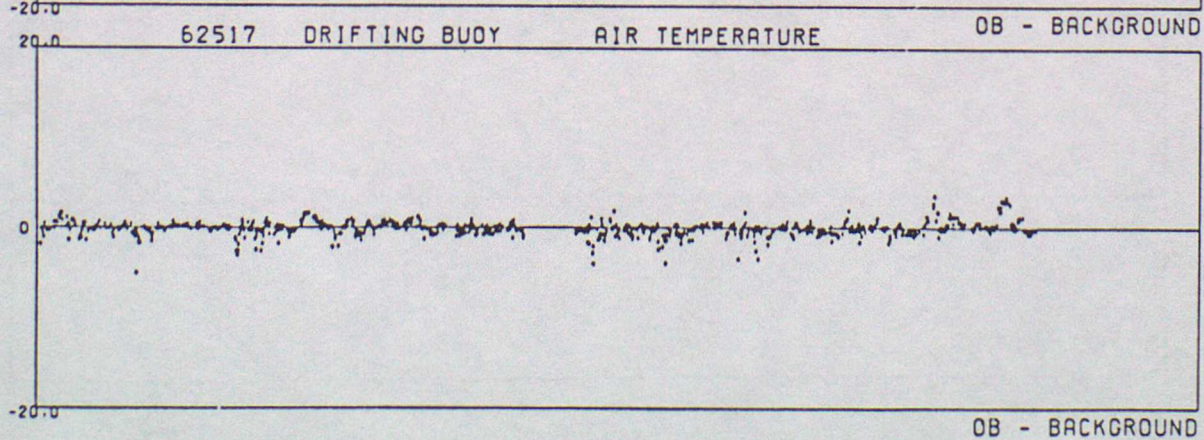
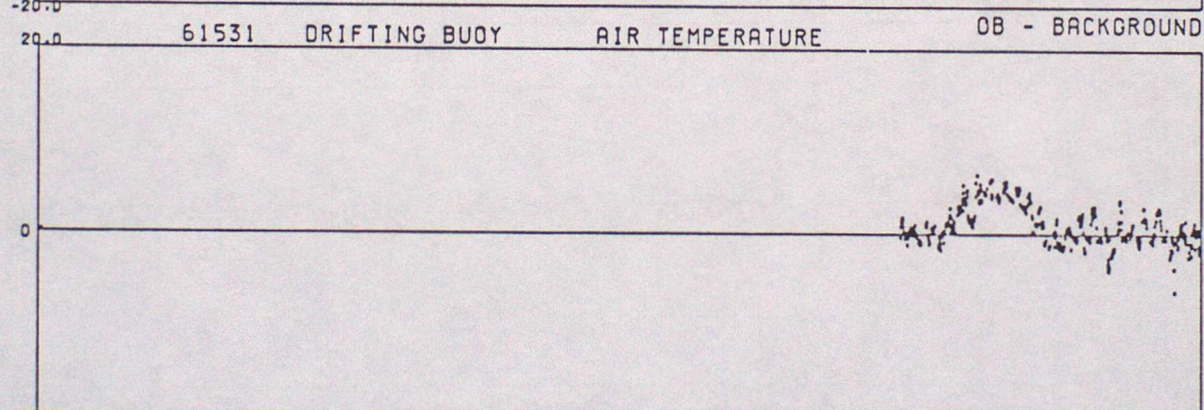
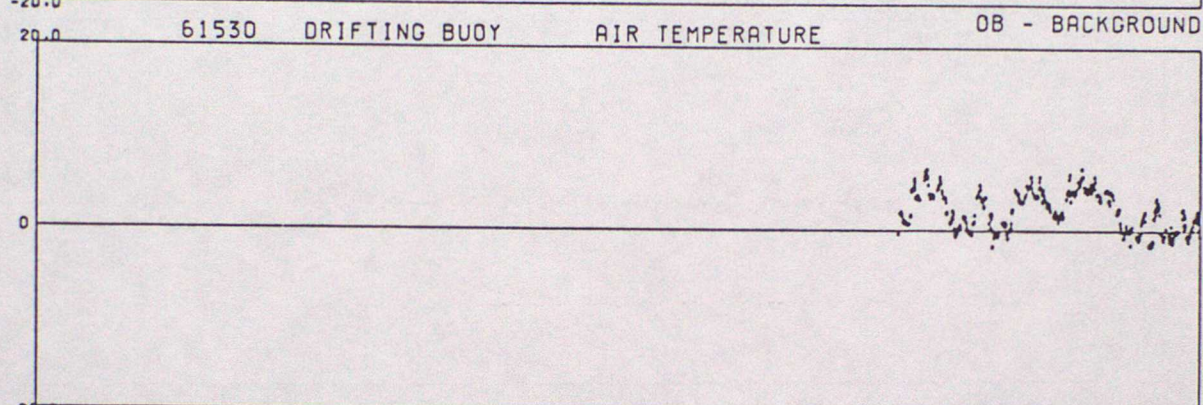
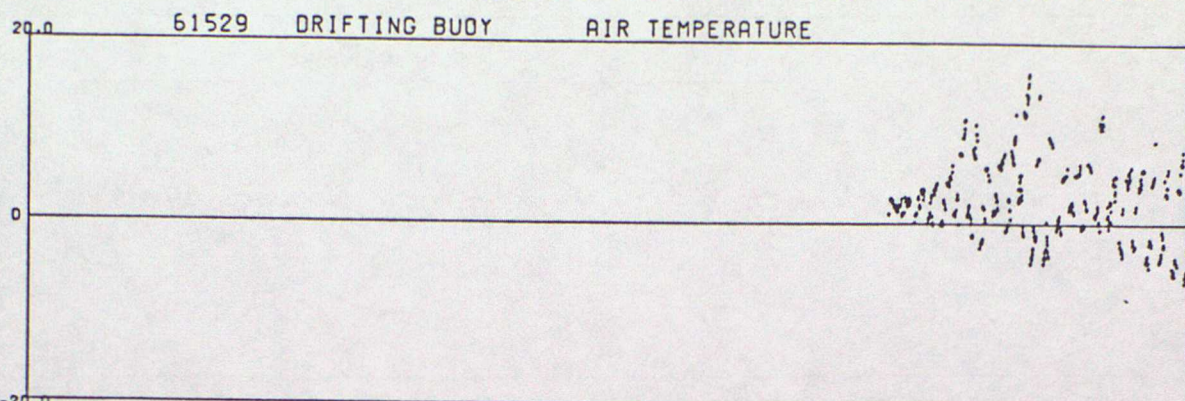


DATA FROM 00Z ON 01/01/1997 TO 00Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

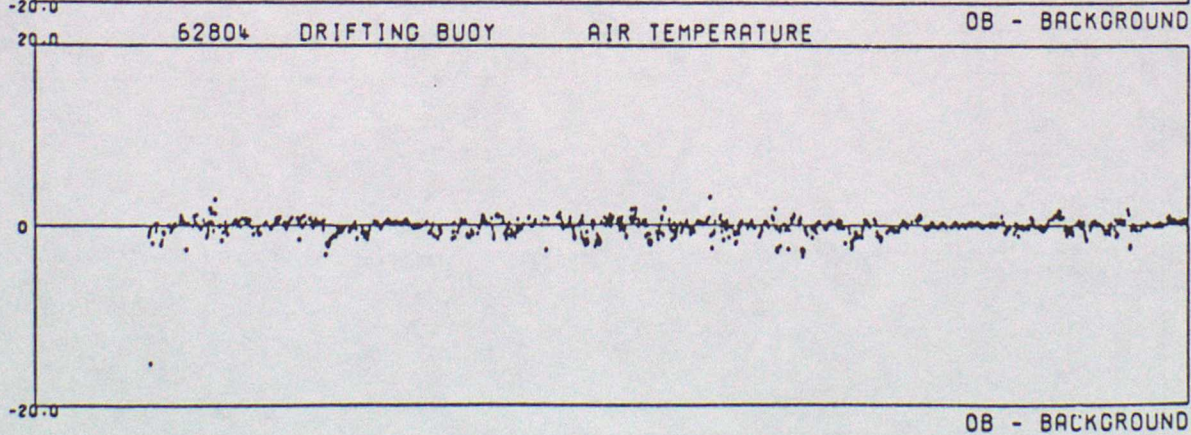
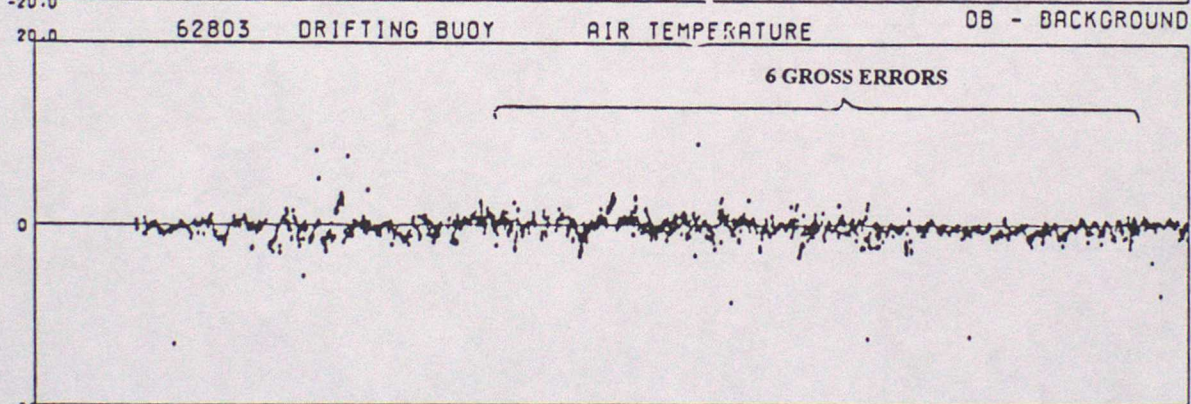
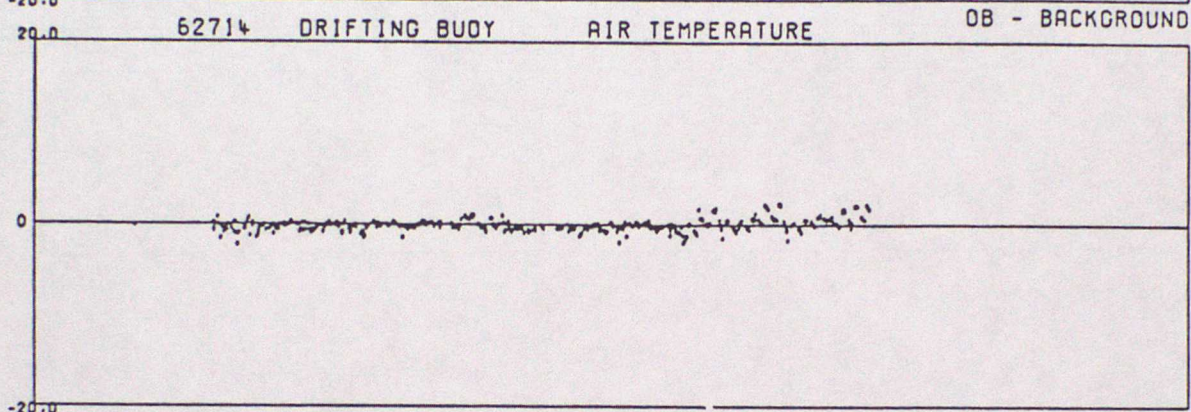
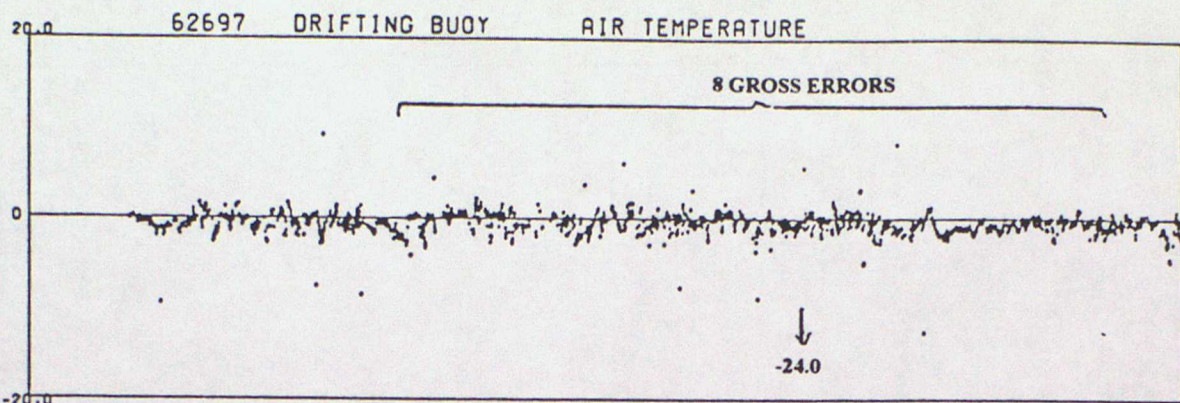


OB - BACKGROUND

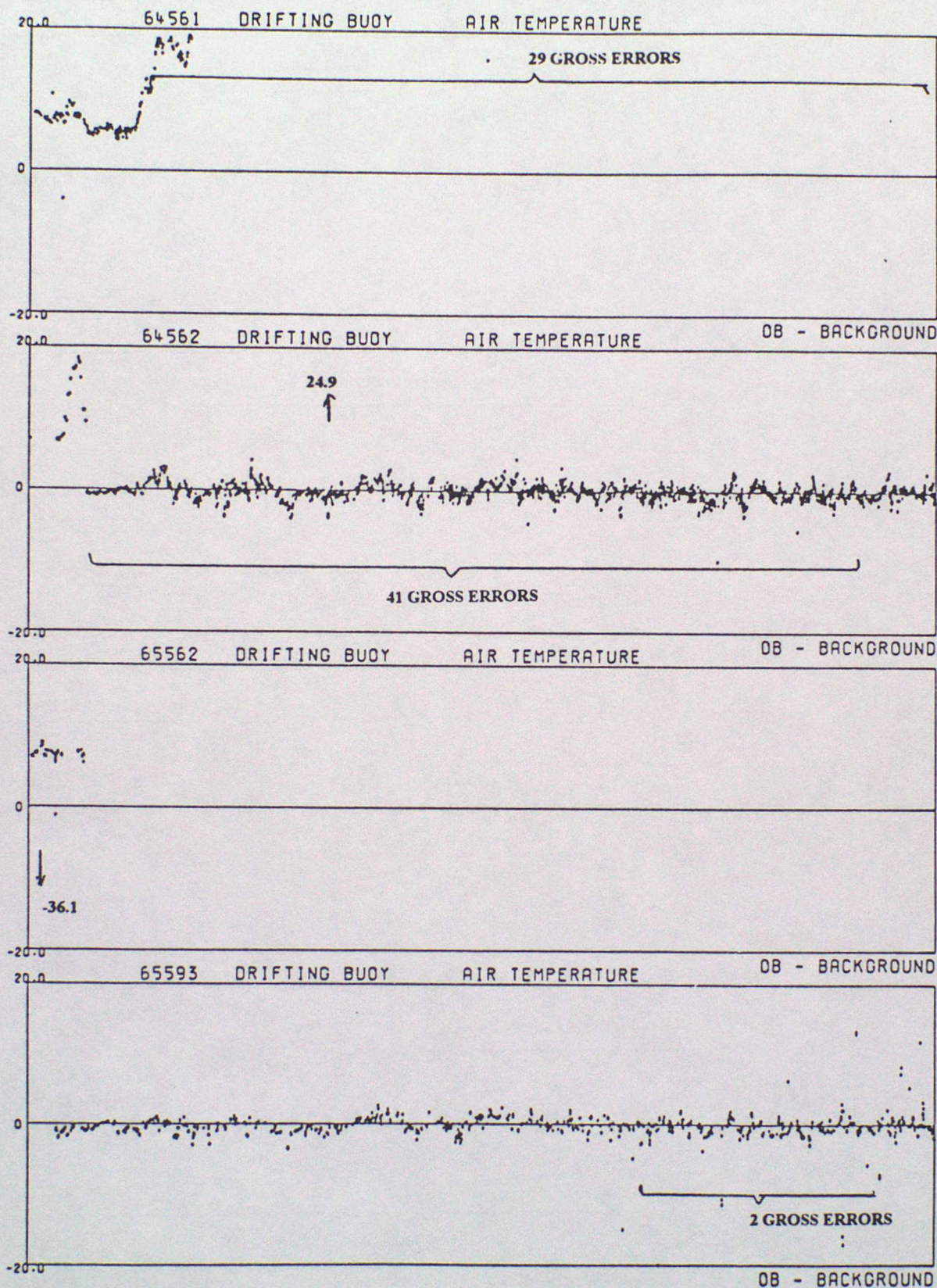
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



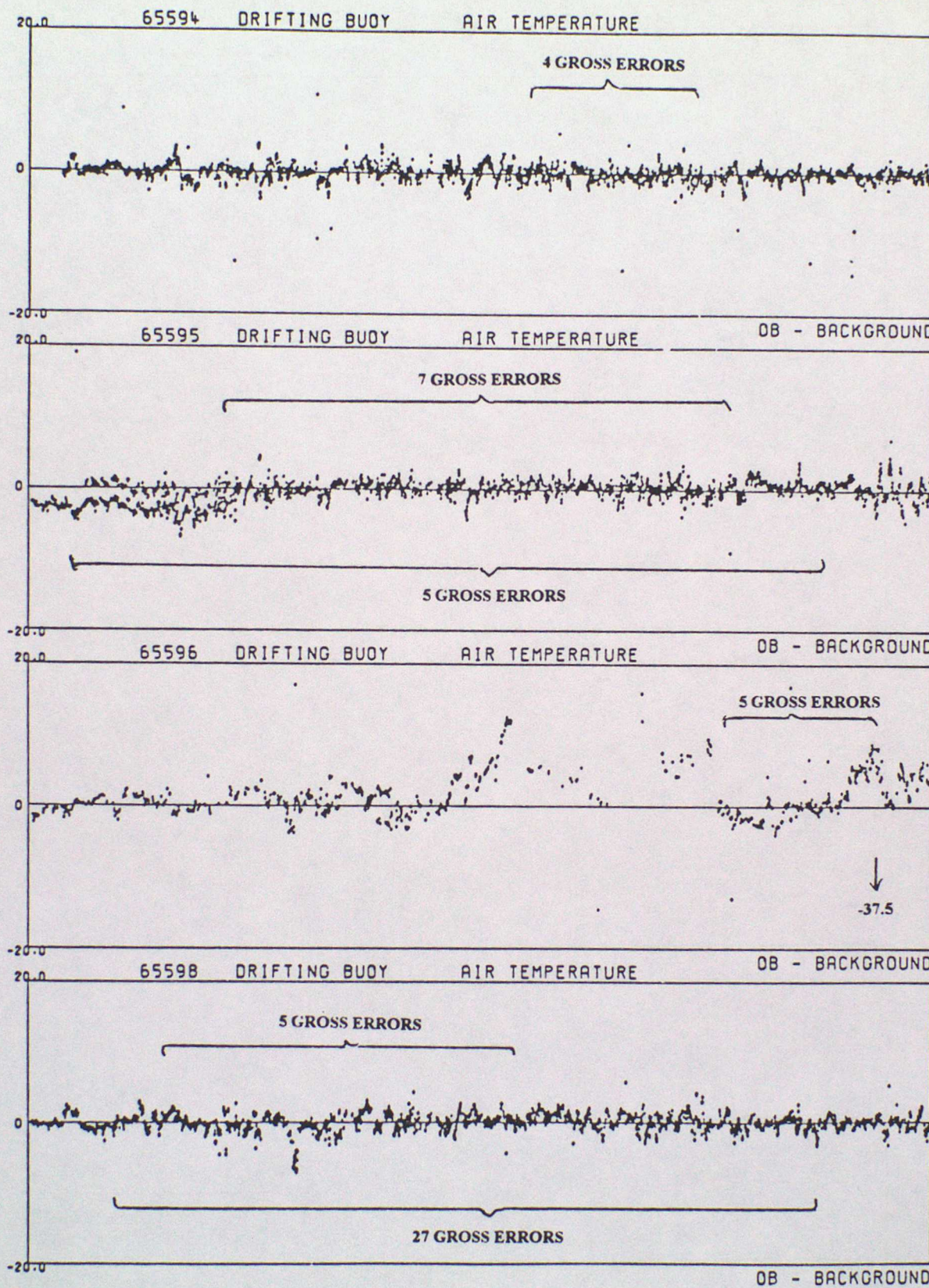
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

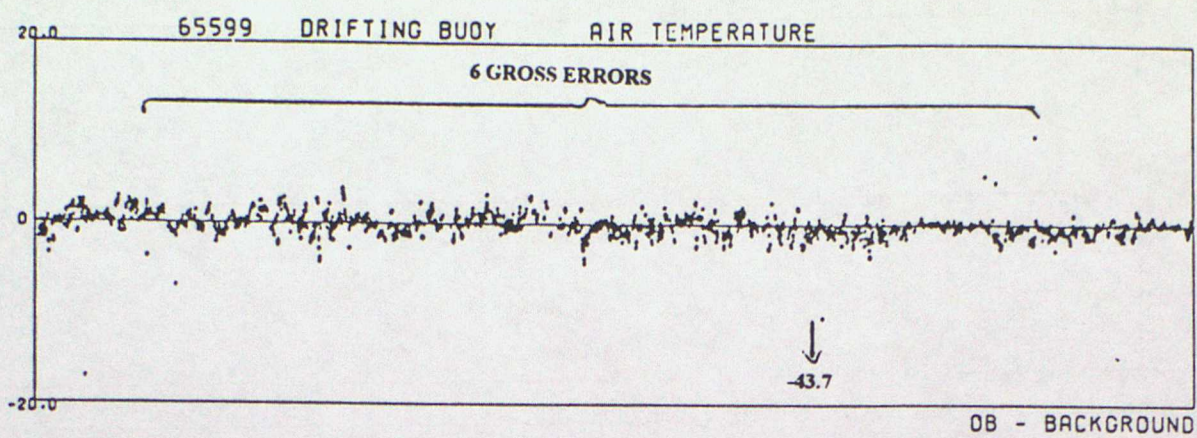


DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



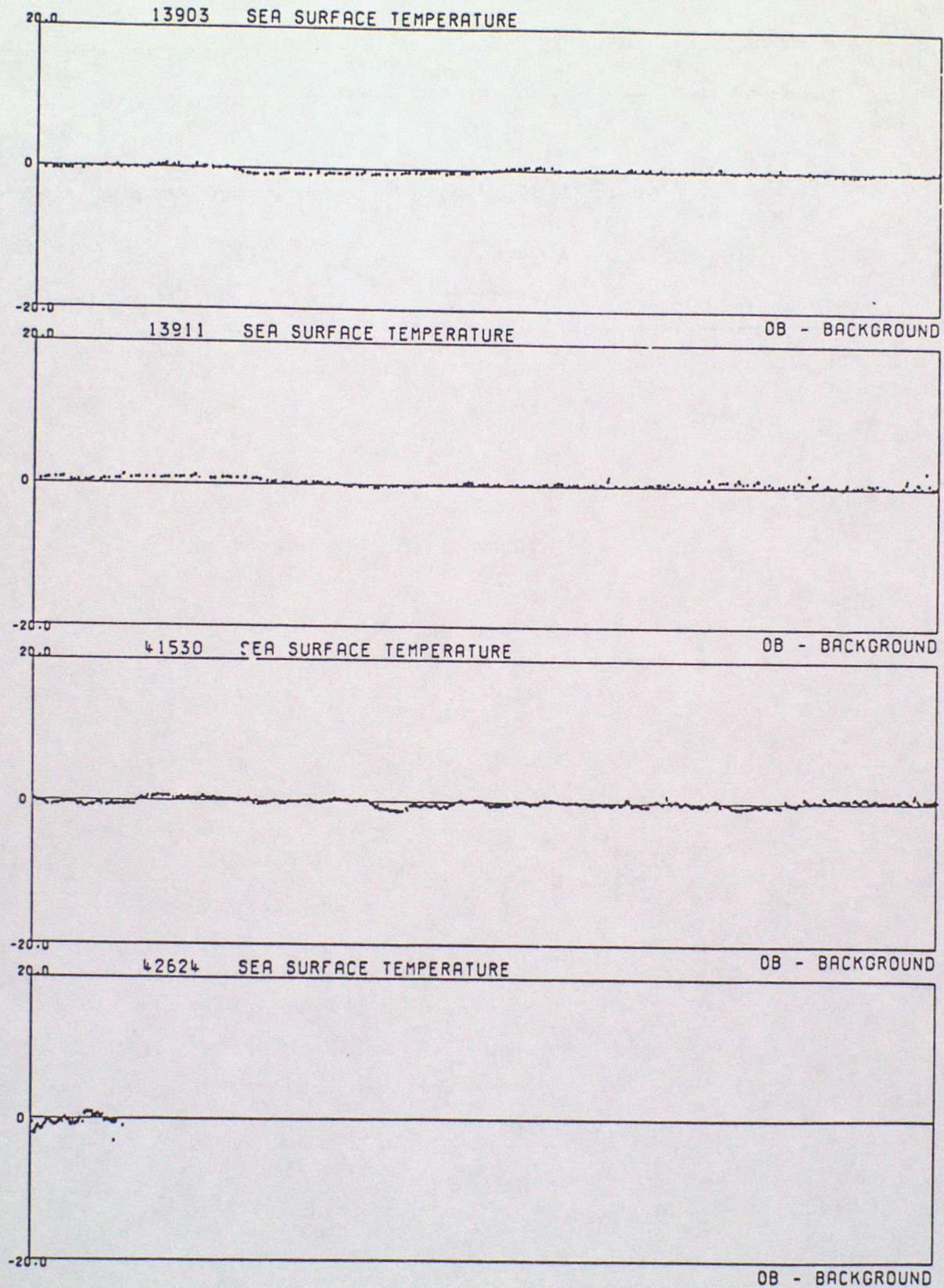
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)





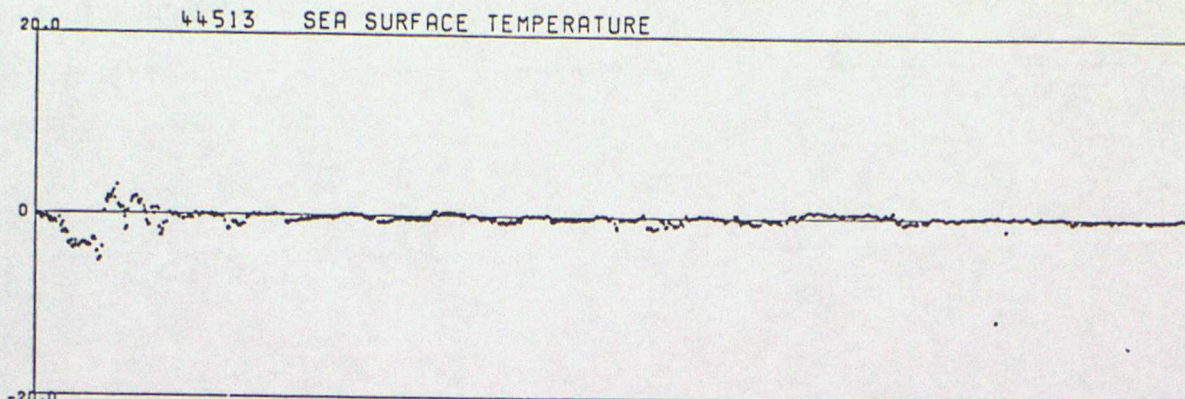
ANNEX D - TIME SERIES PLOTS OF SEA SURFACE TEMPERATURE 1

DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



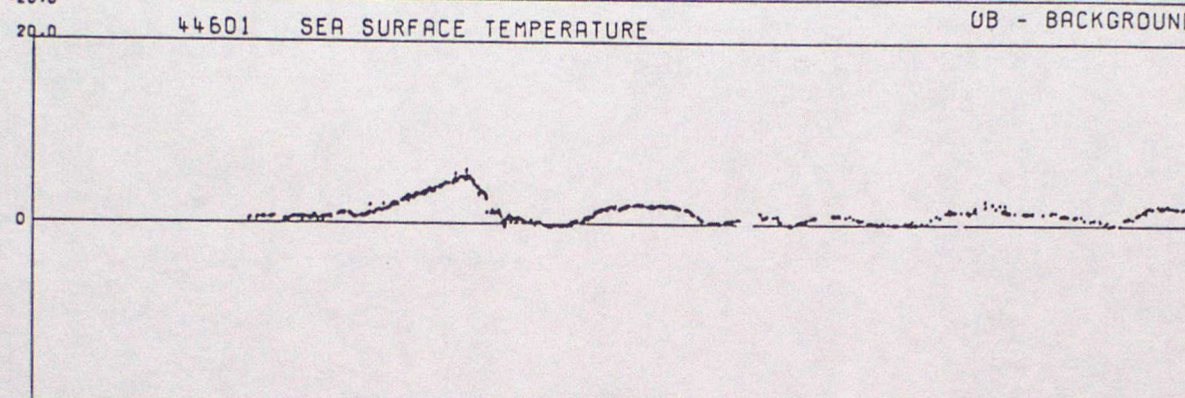
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

44513 SEA SURFACE TEMPERATURE



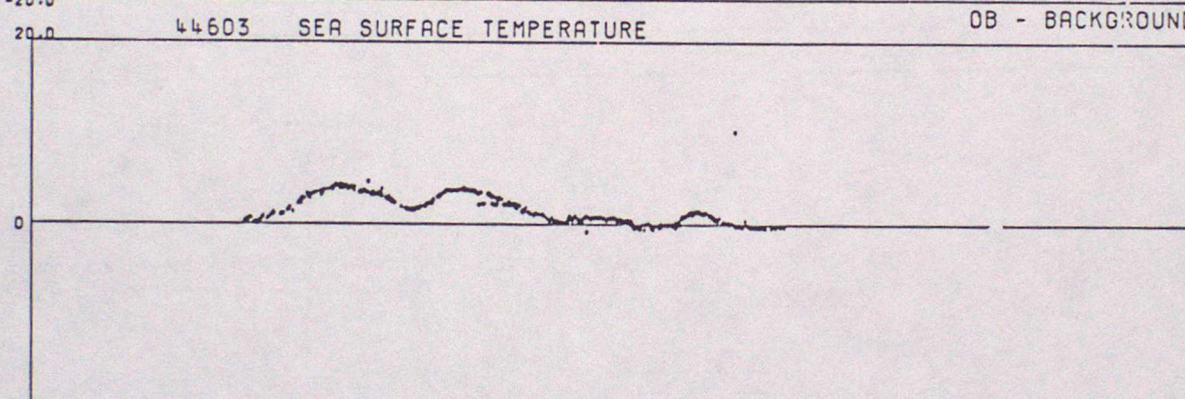
44601 SEA SURFACE TEMPERATURE

OB - BACKGROUND



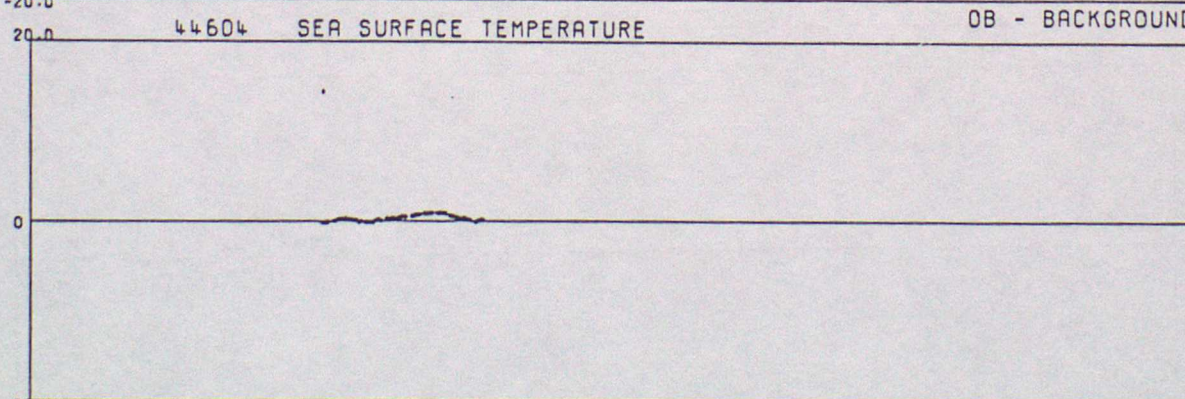
44603 SEA SURFACE TEMPERATURE

OB - BACKGROUND



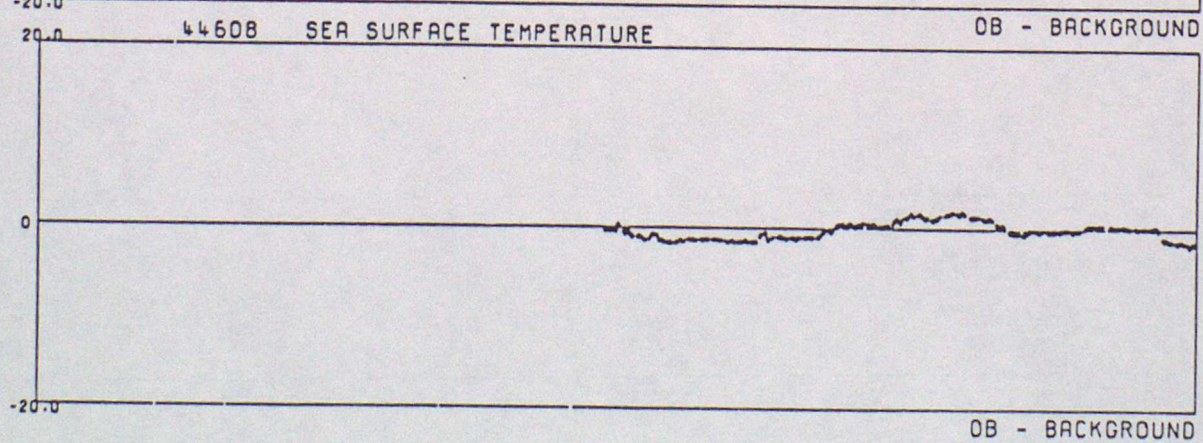
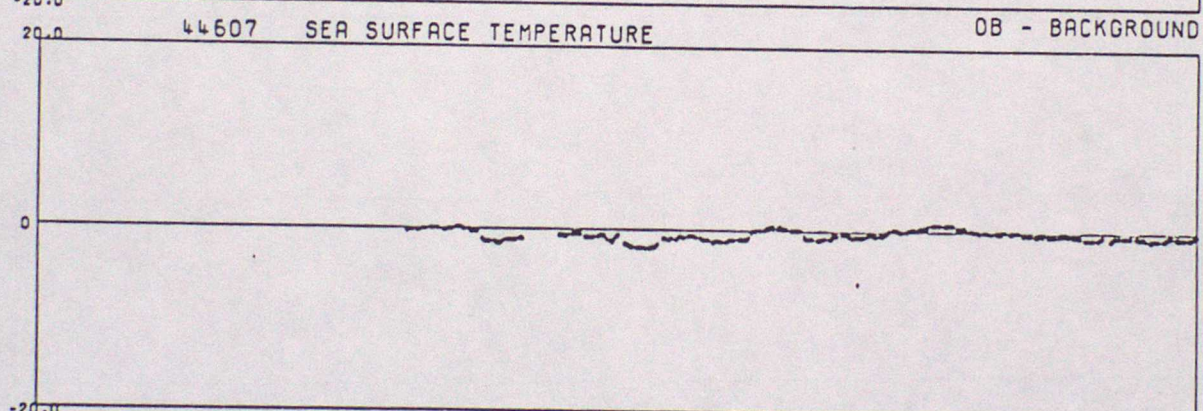
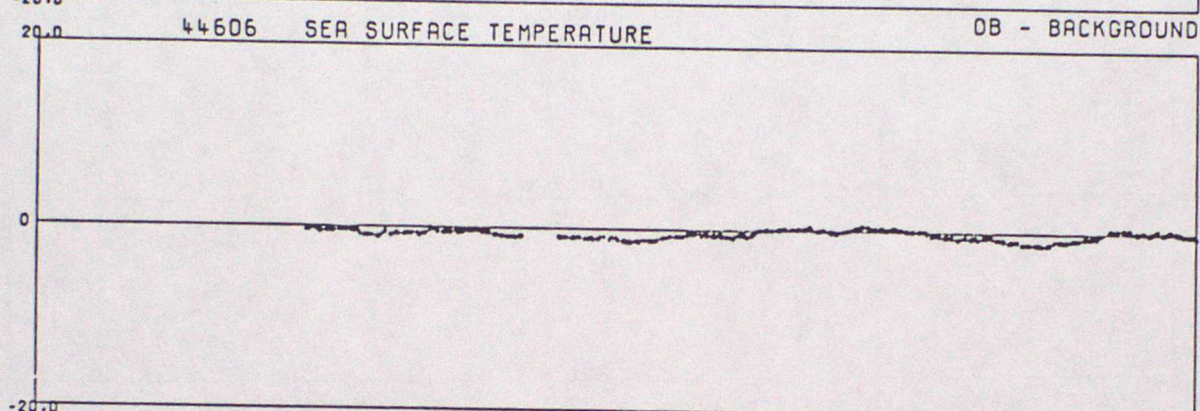
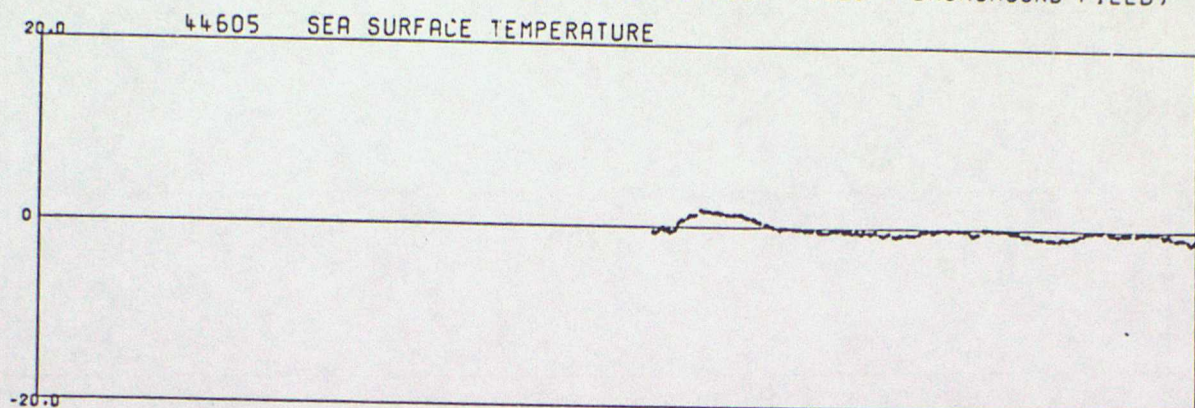
44604 SEA SURFACE TEMPERATURE

OB - BACKGROUND

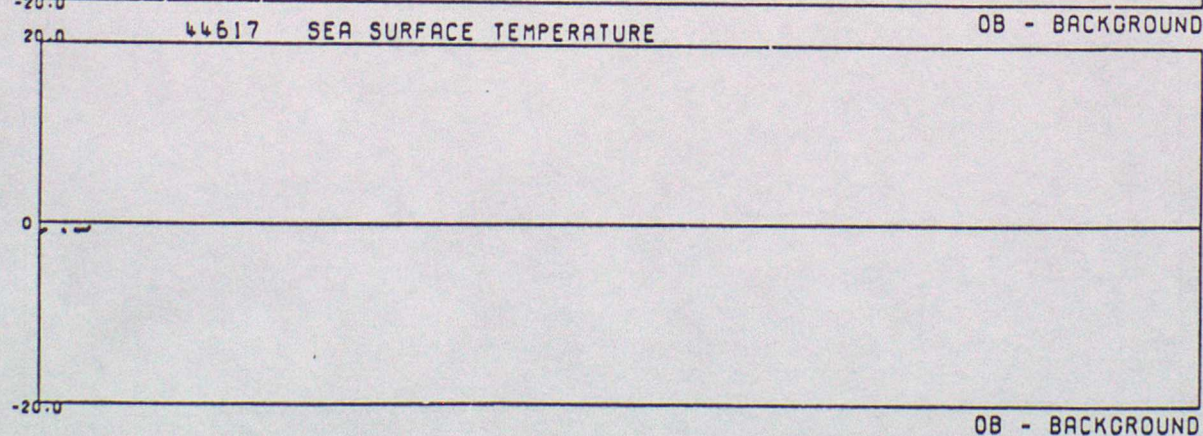
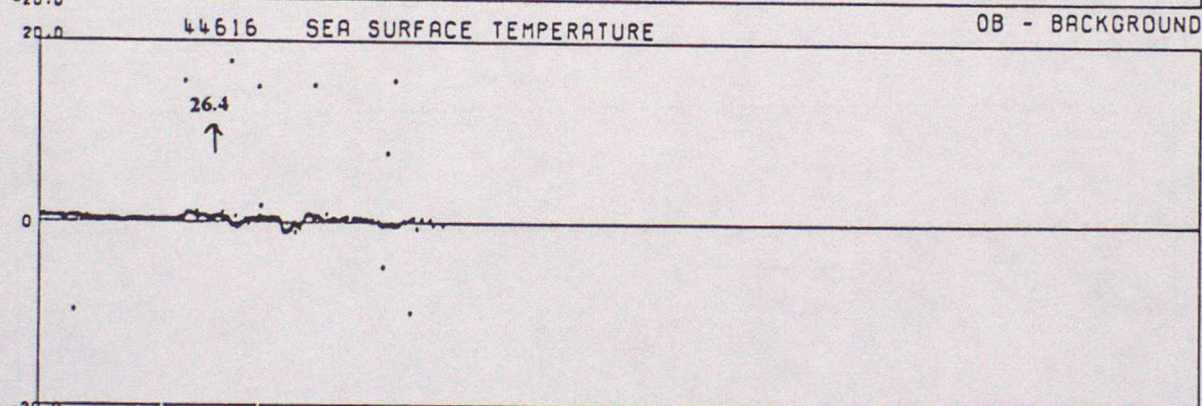
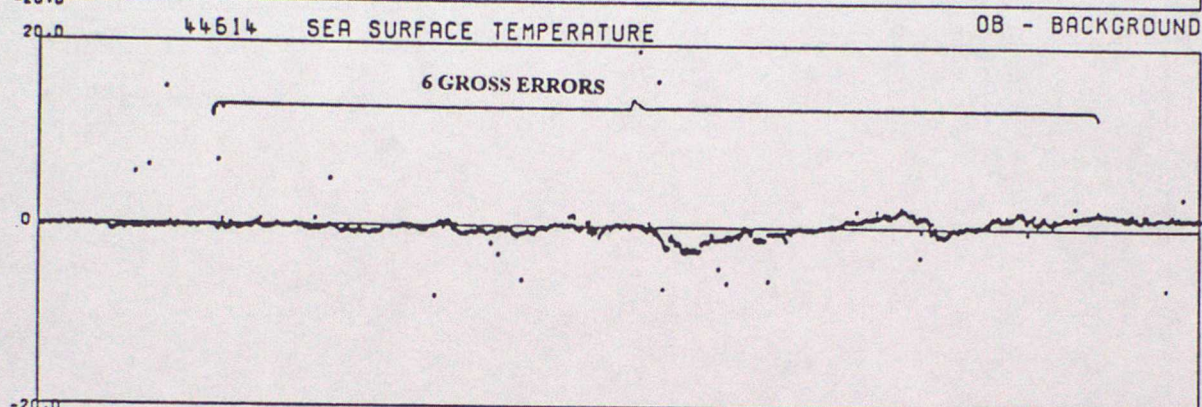
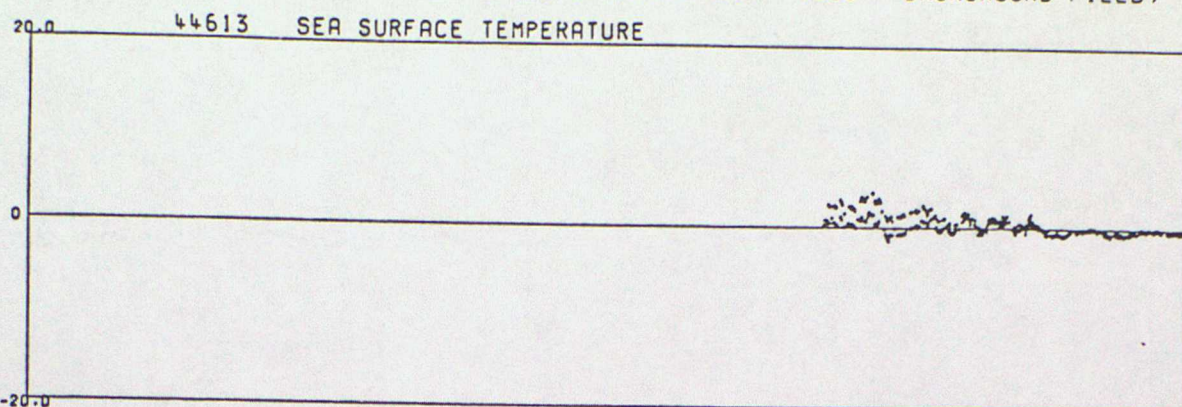


OB - BACKGROUND

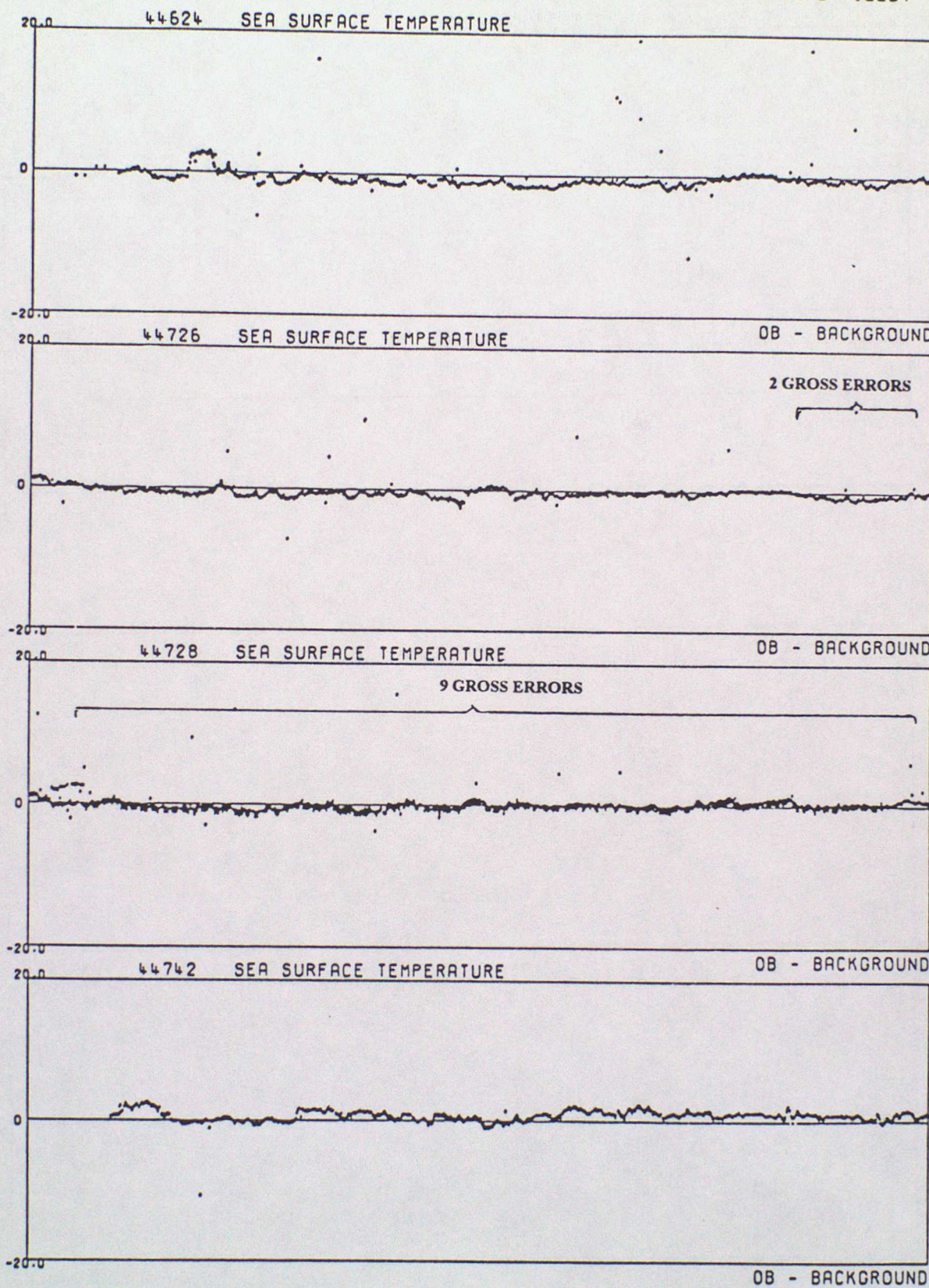
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



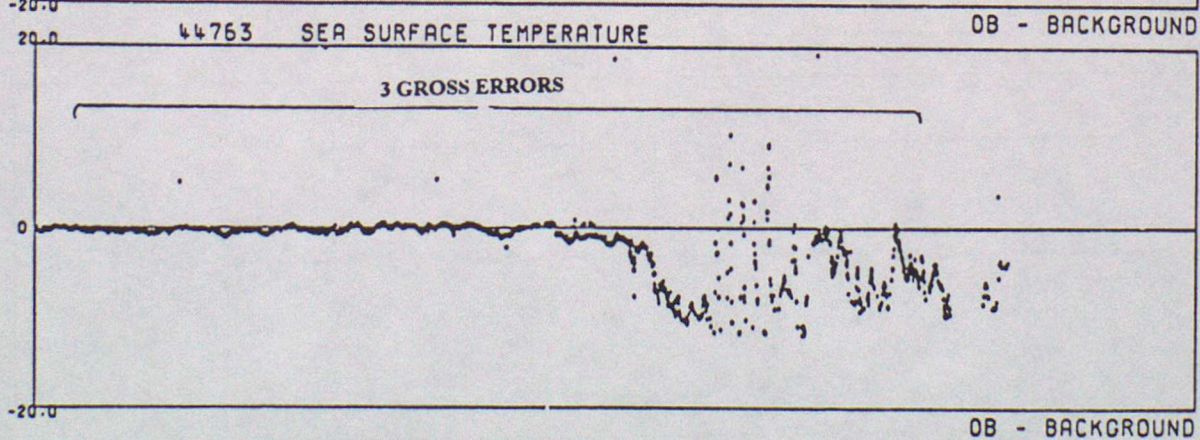
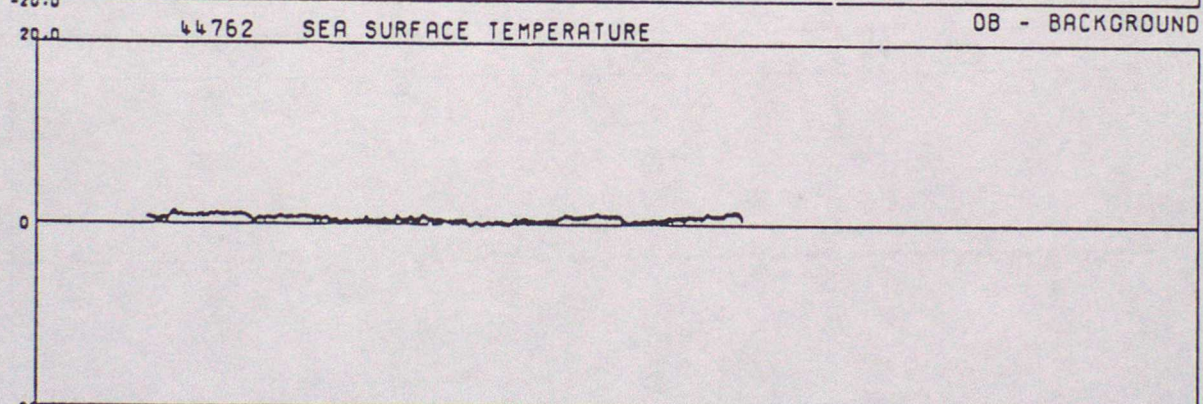
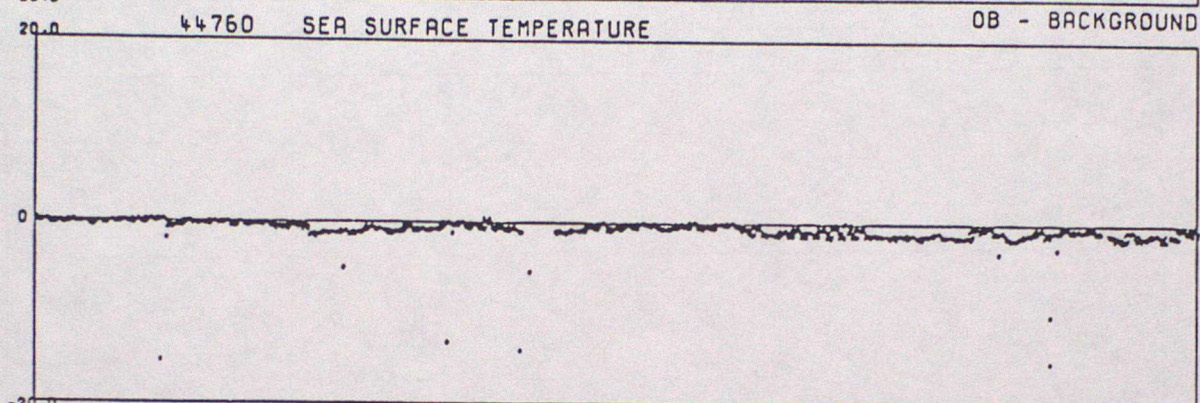
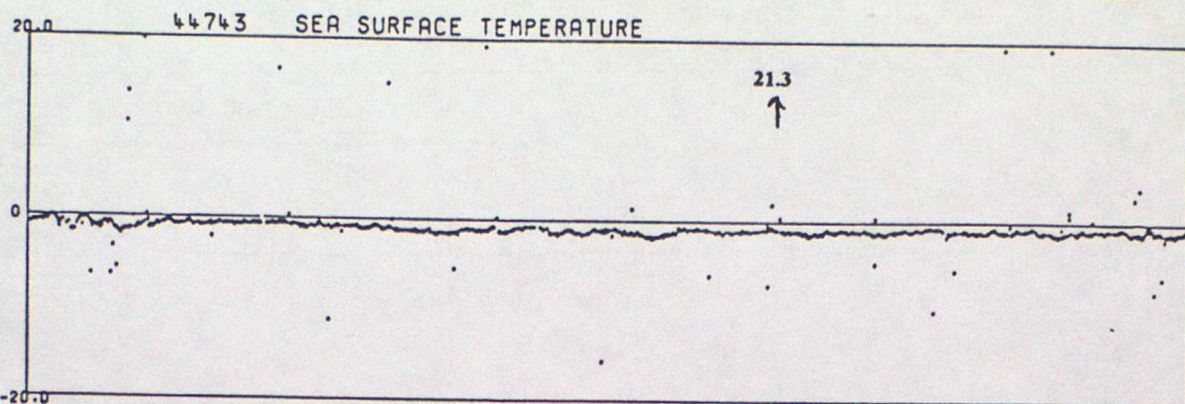
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



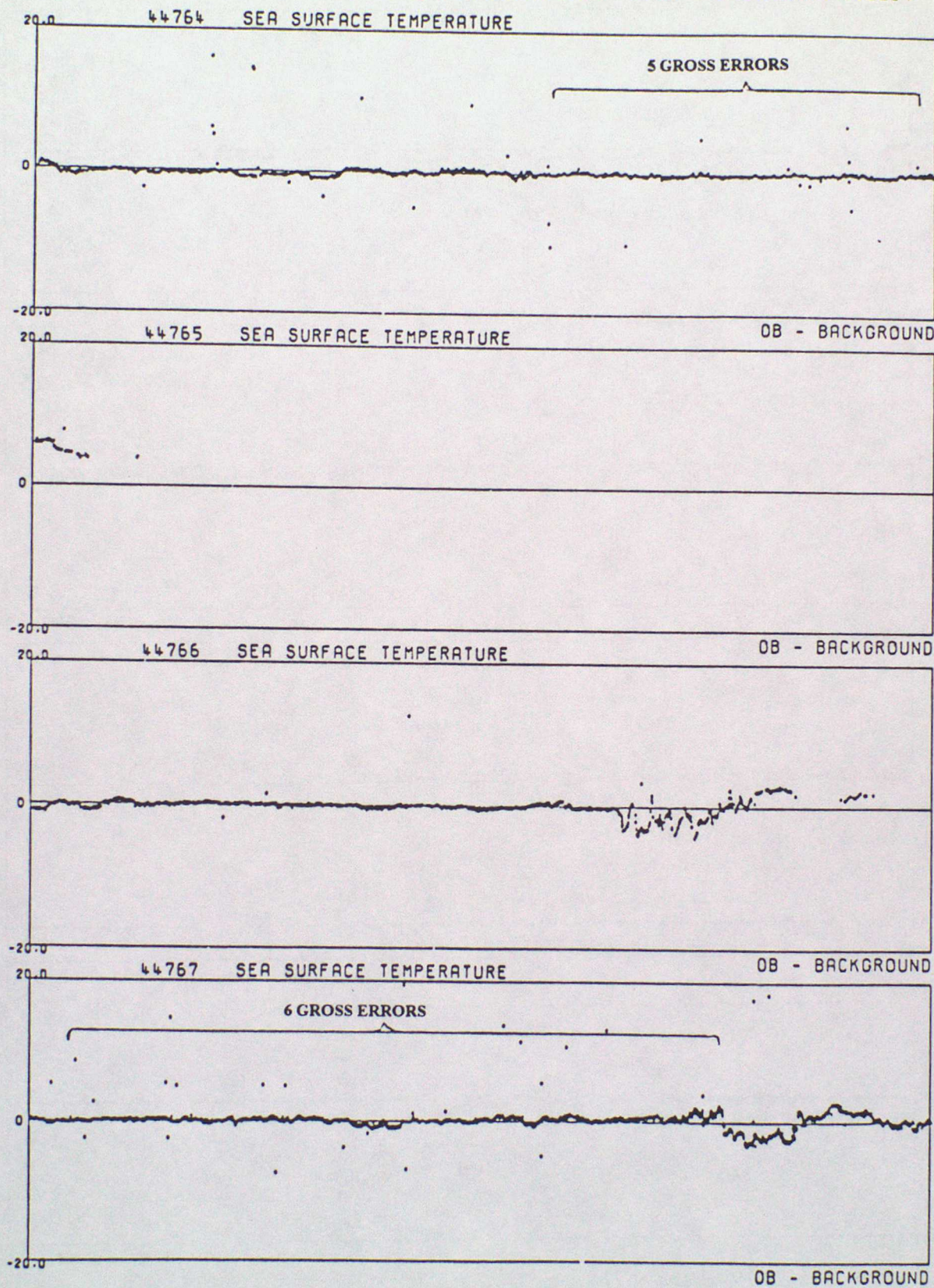
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



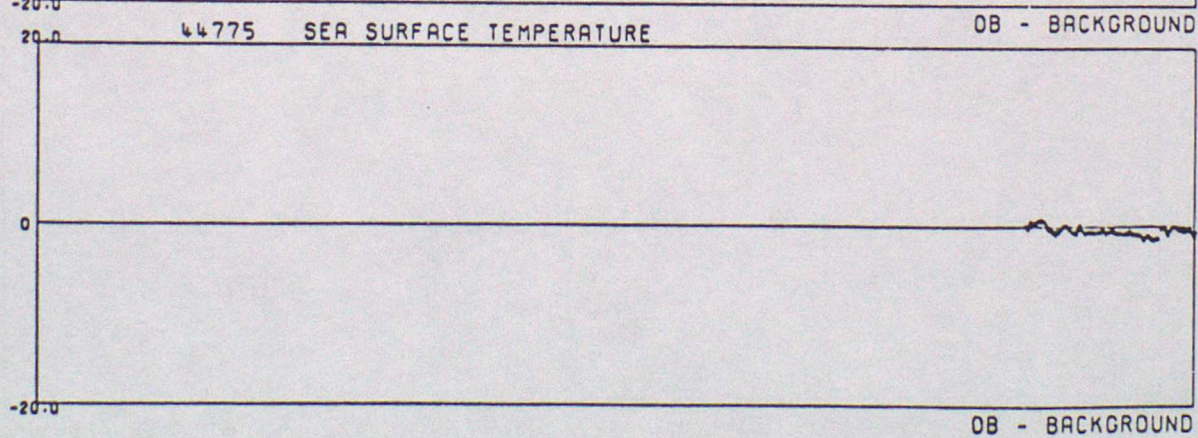
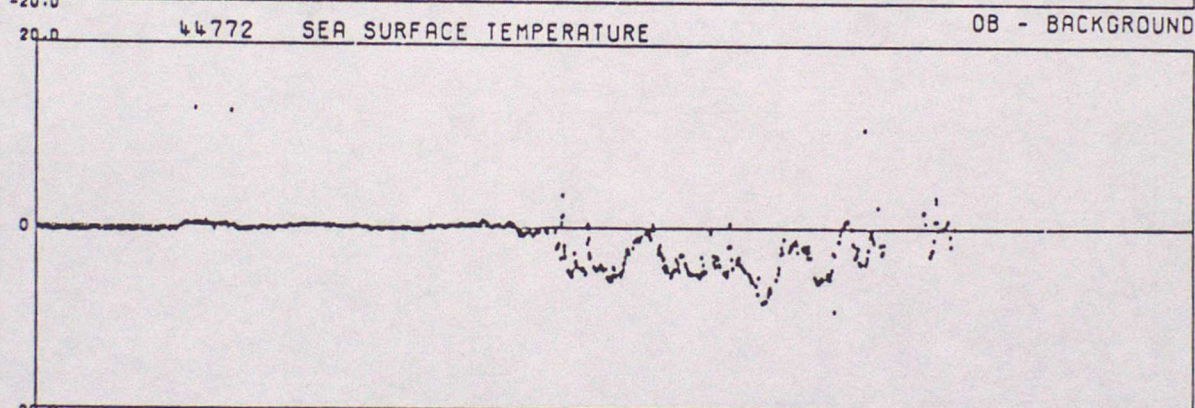
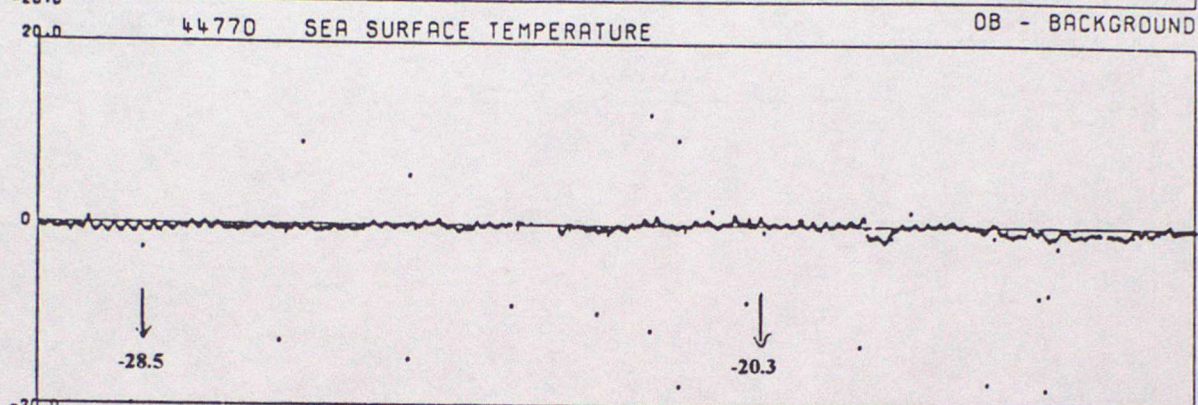
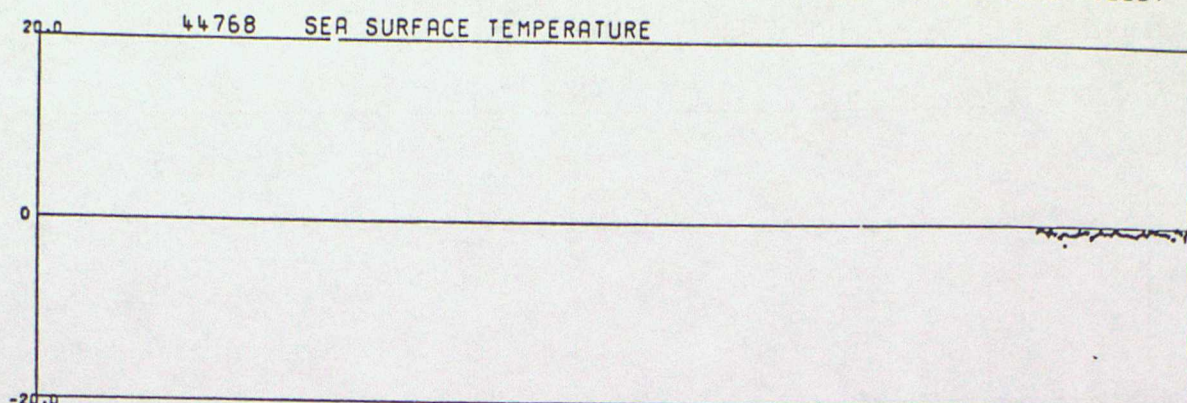
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



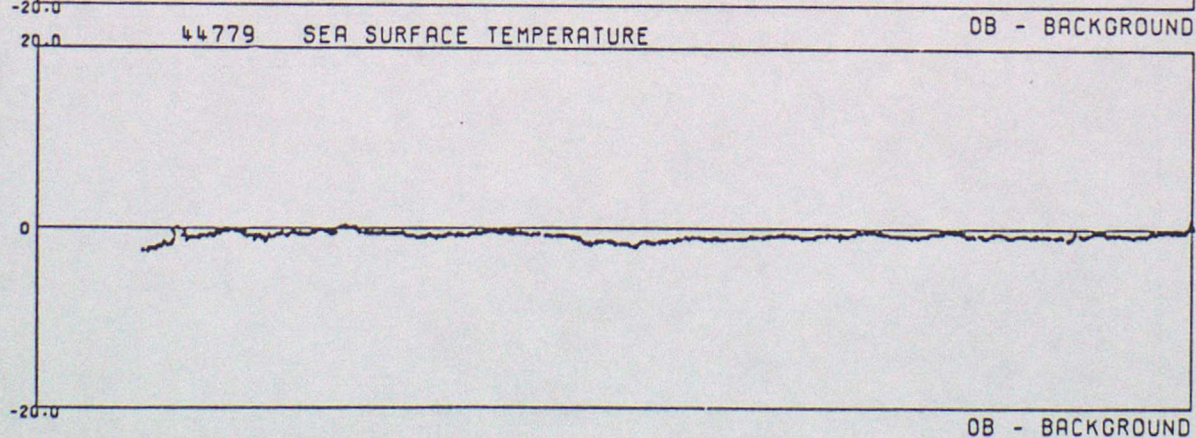
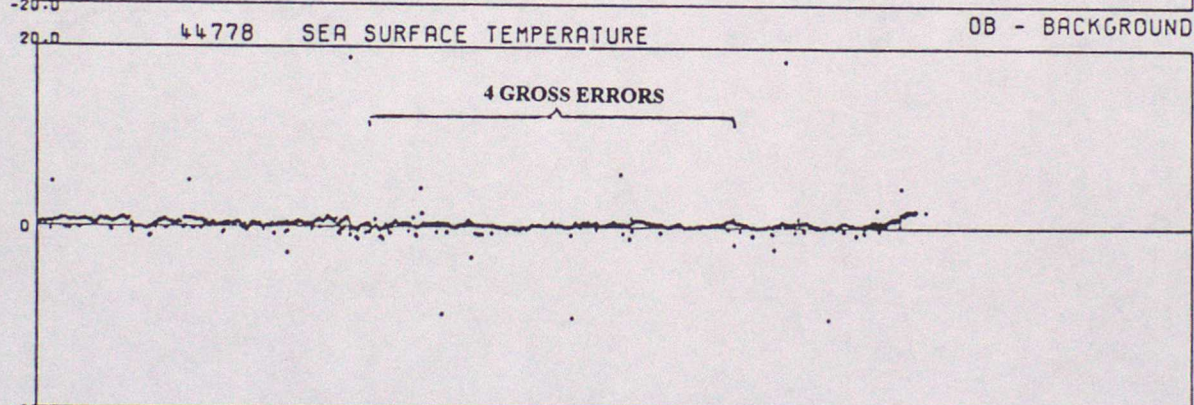
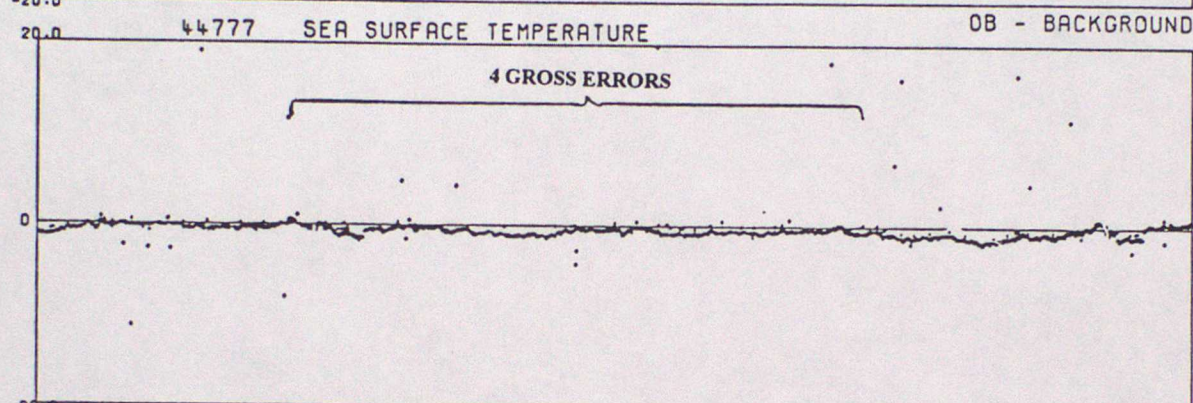
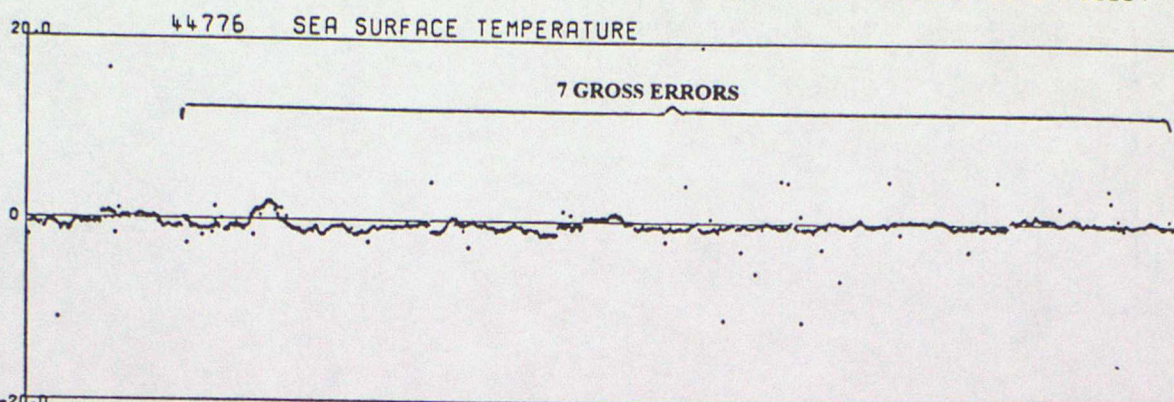
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



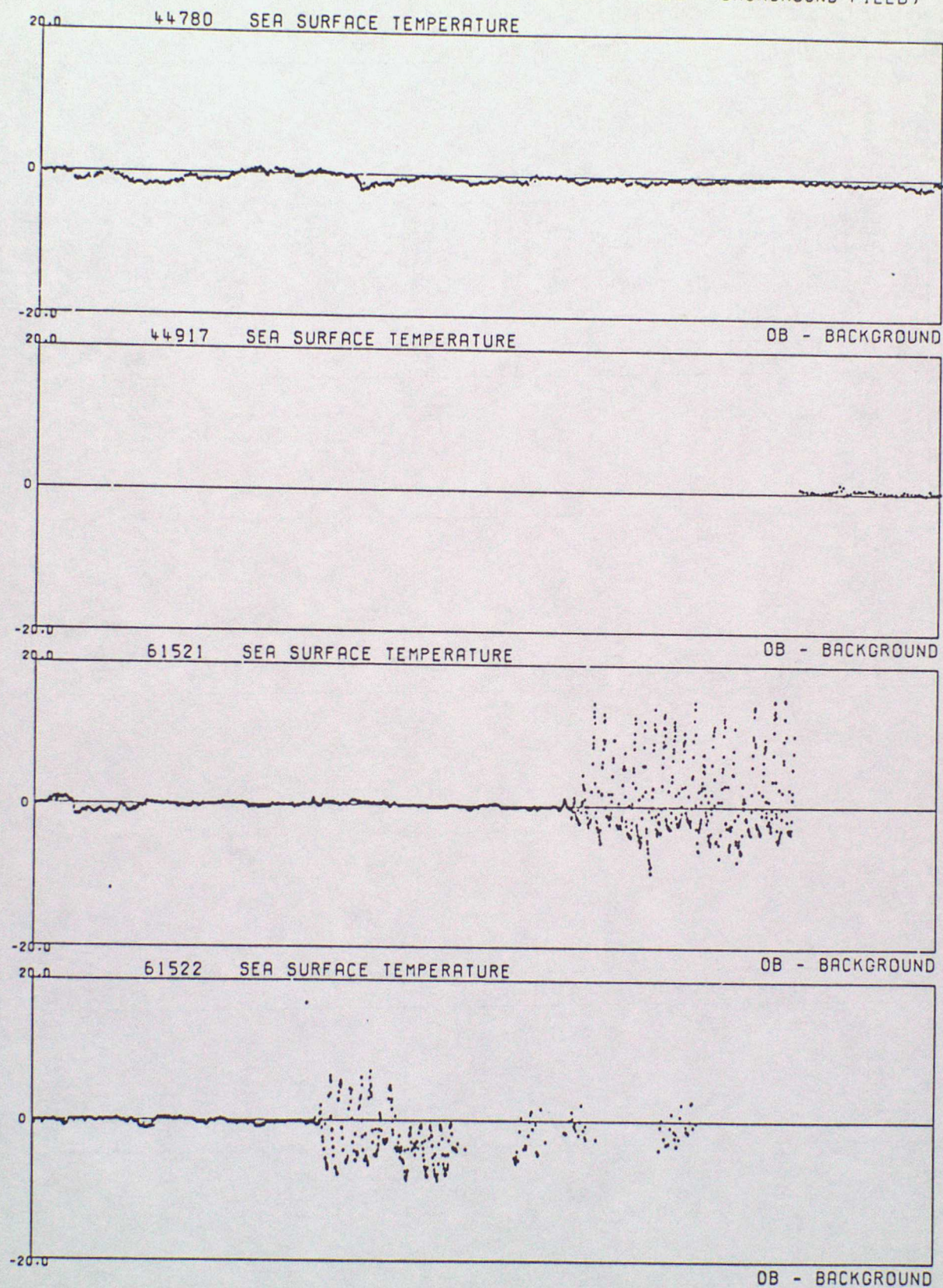
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

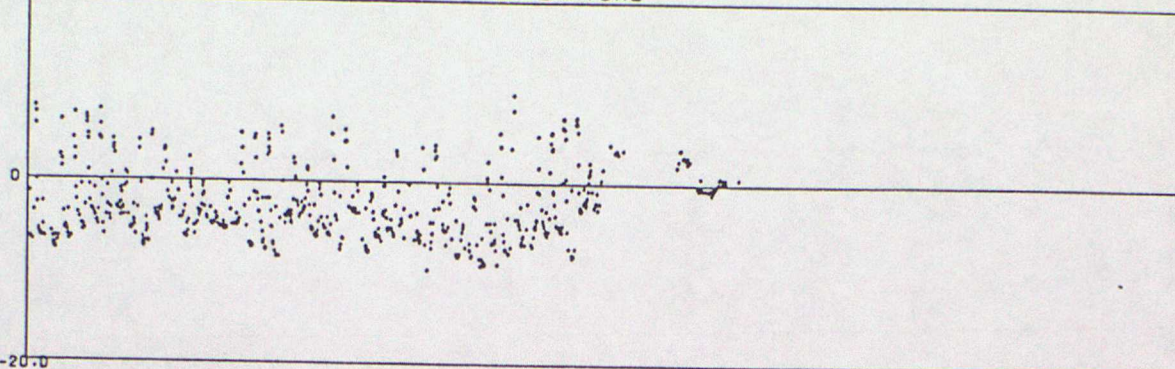


DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



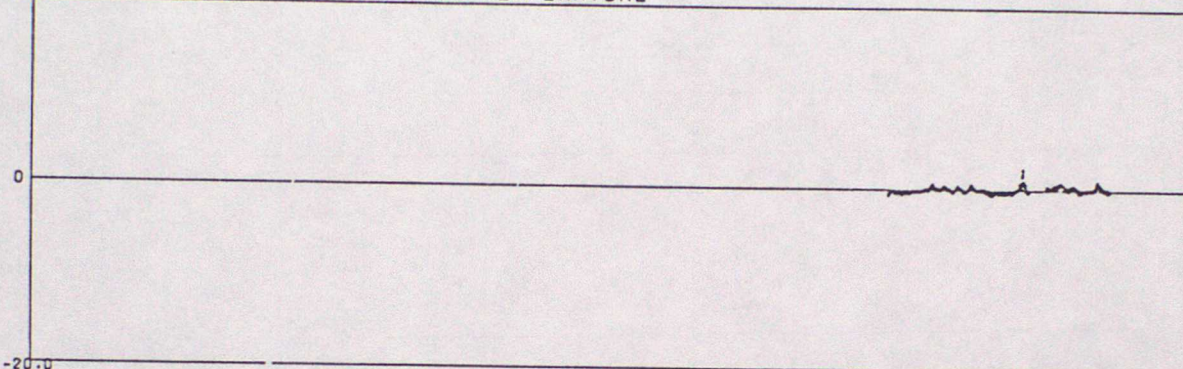
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

20.0 61527 SEA SURFACE TEMPERATURE



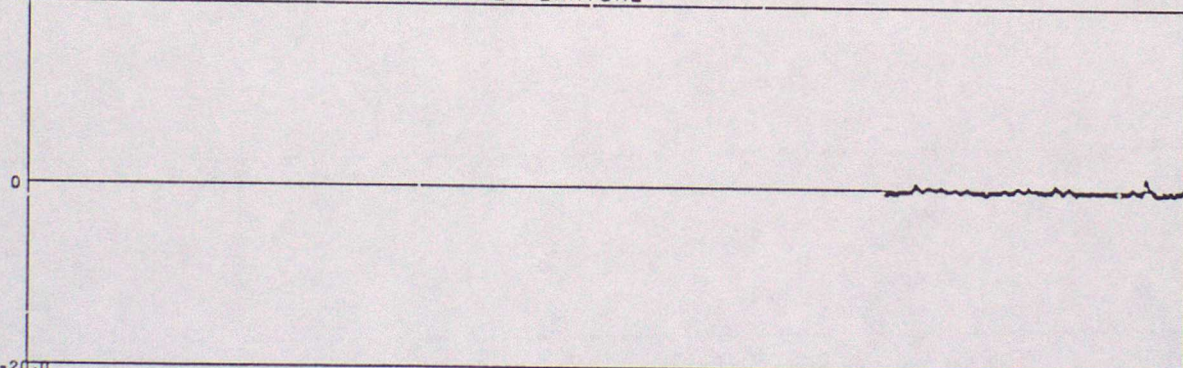
20.0 61529 SEA SURFACE TEMPERATURE

OB - BACKGROUND



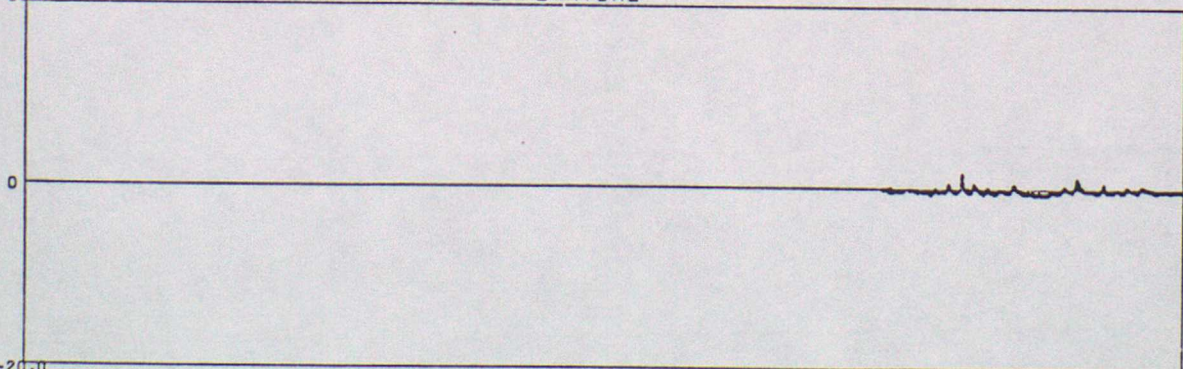
20.0 61530 SEA SURFACE TEMPERATURE

OB - BACKGROUND



20.0 61531 SEA SURFACE TEMPERATURE

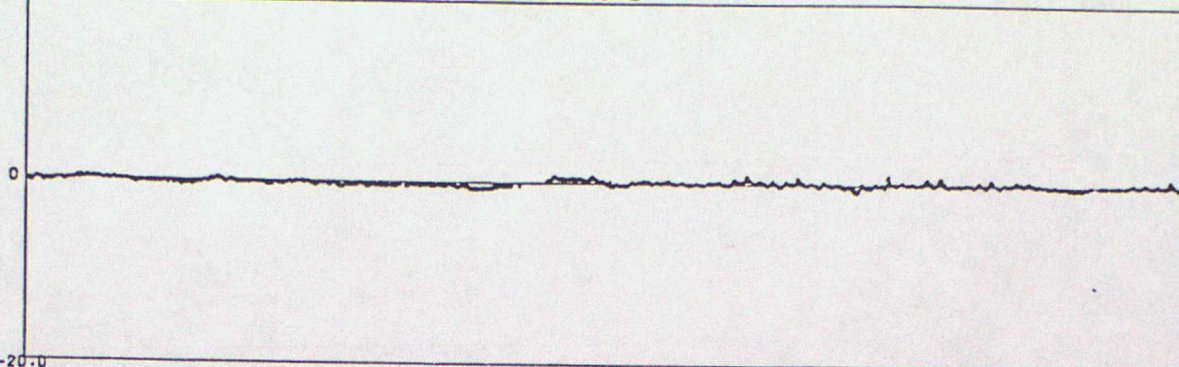
OB - BACKGROUND



OB - BACKGROUND

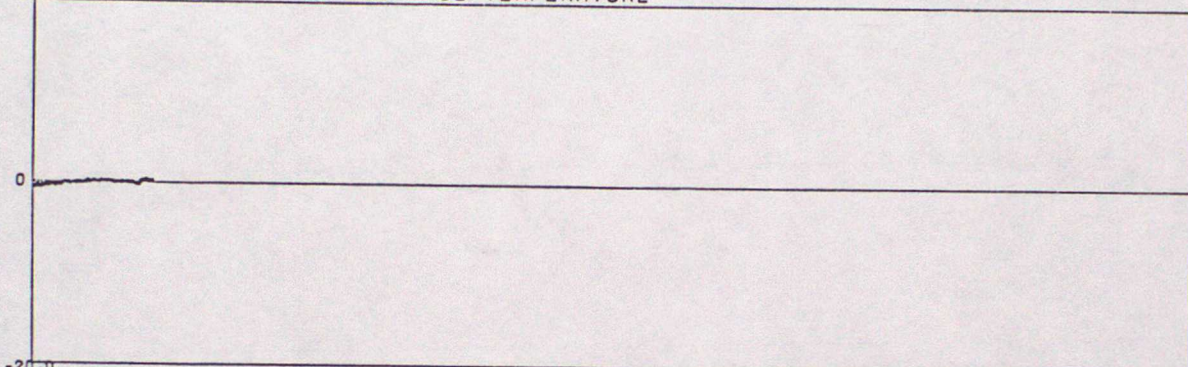
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

20.0 62503 SEA SURFACE TEMPERATURE



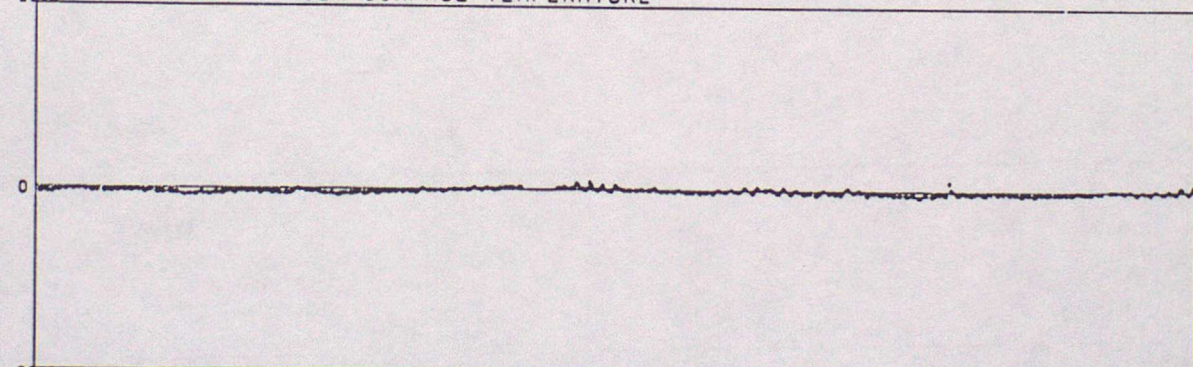
-20.0 20.0 62504 SEA SURFACE TEMPERATURE

OB - BACKGROUND



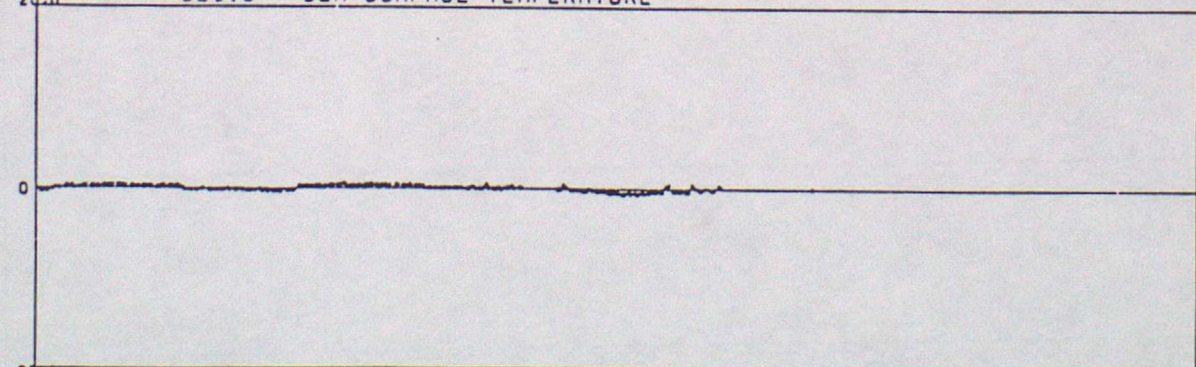
-20.0 20.0 62507 SEA SURFACE TEMPERATURE

OB - BACKGROUND



-20.0 20.0 62510 SEA SURFACE TEMPERATURE

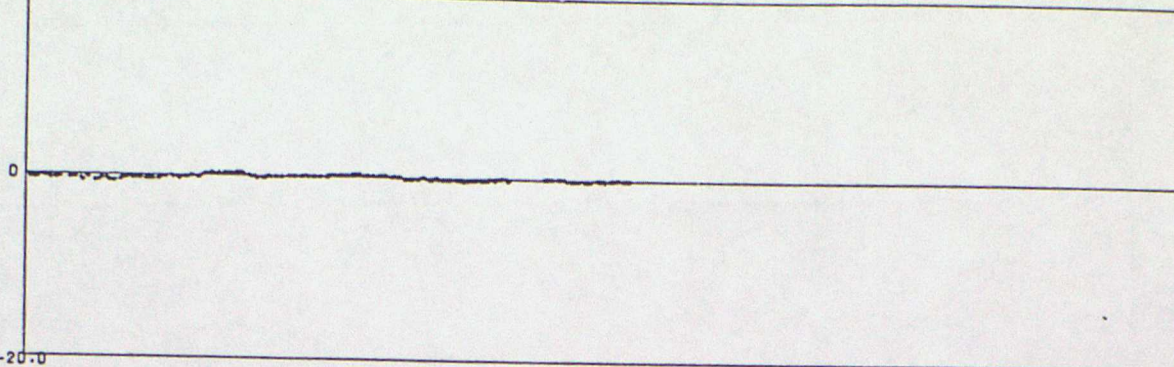
OB - BACKGROUND



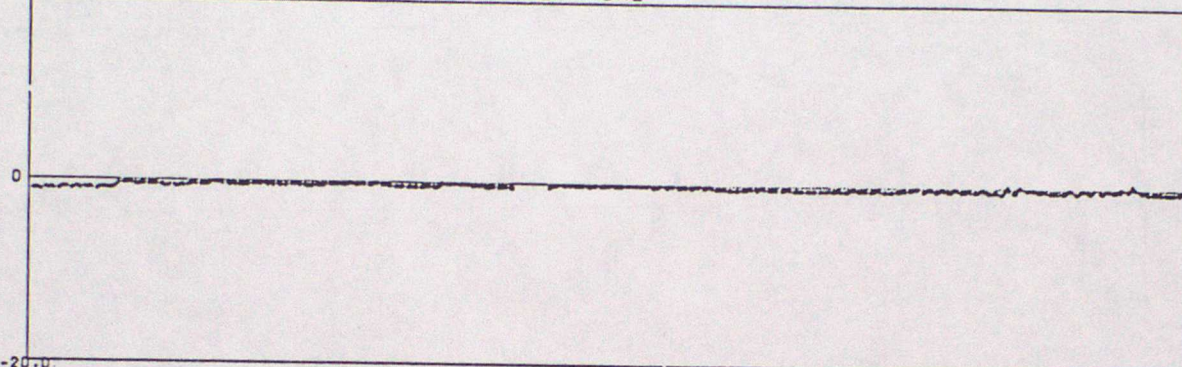
OB - BACKGROUND

DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

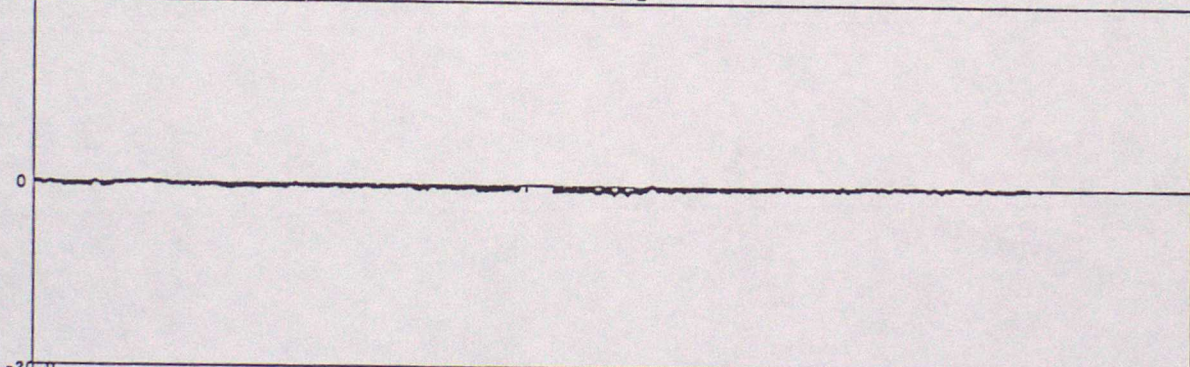
20.0 62513 SEA SURFACE TEMPERATURE



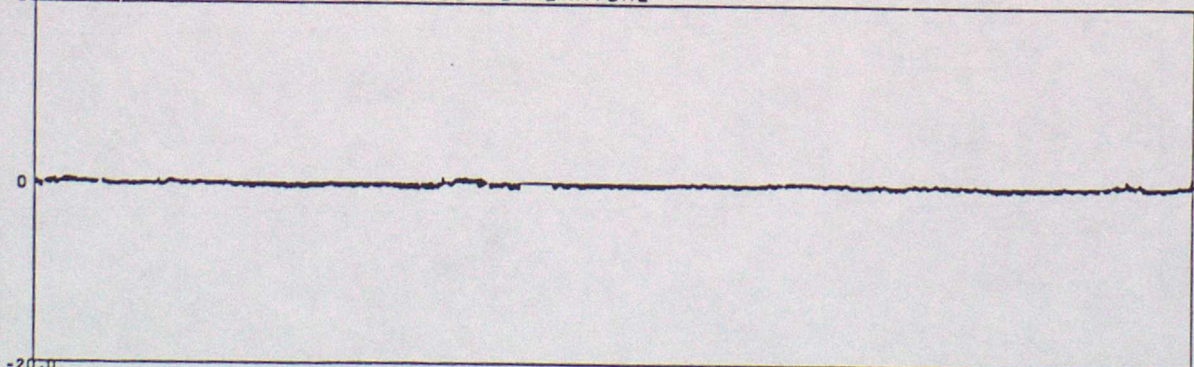
20.0 62515 SEA SURFACE TEMPERATURE OB - BACKGROUND



20.0 62517 SEA SURFACE TEMPERATURE OB - BACKGROUND

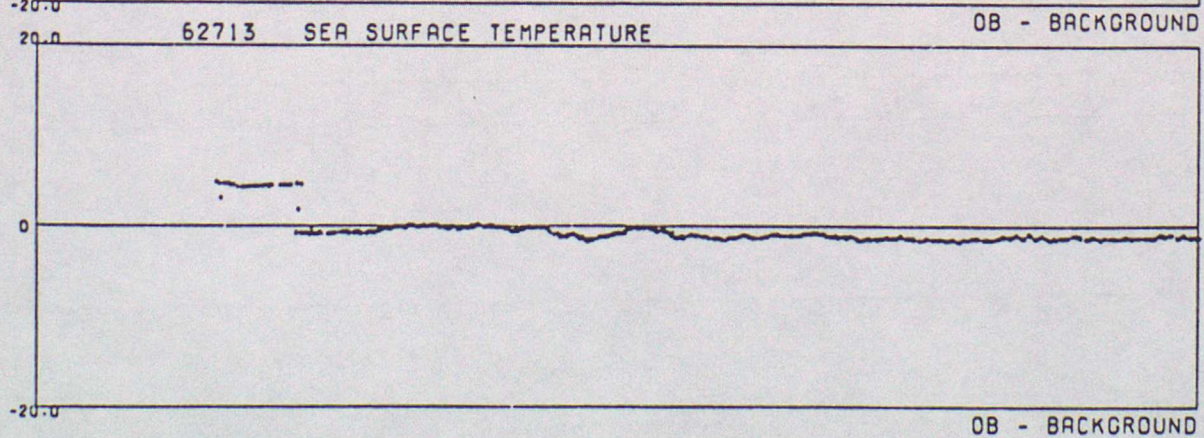
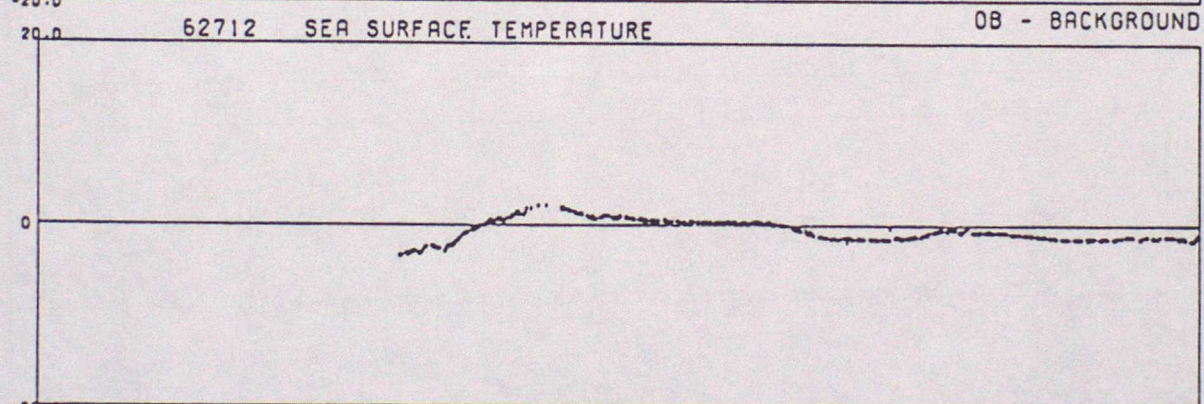
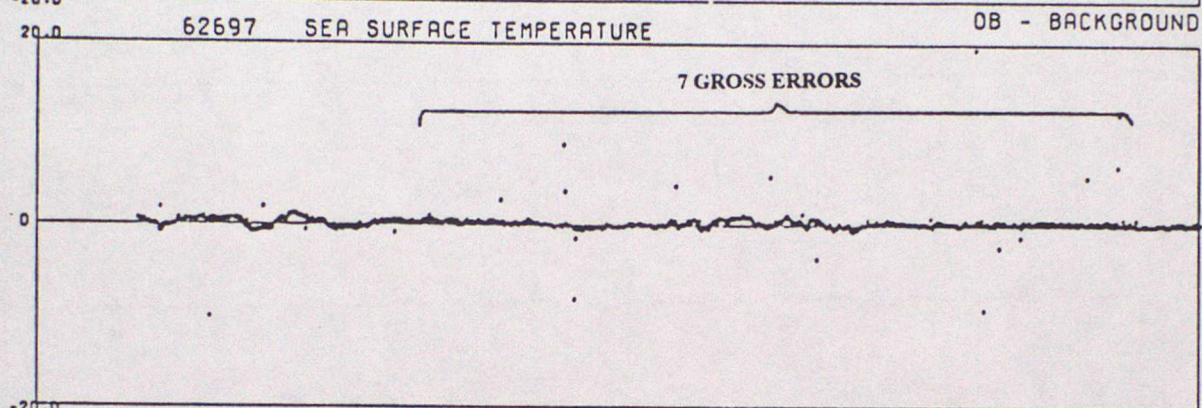
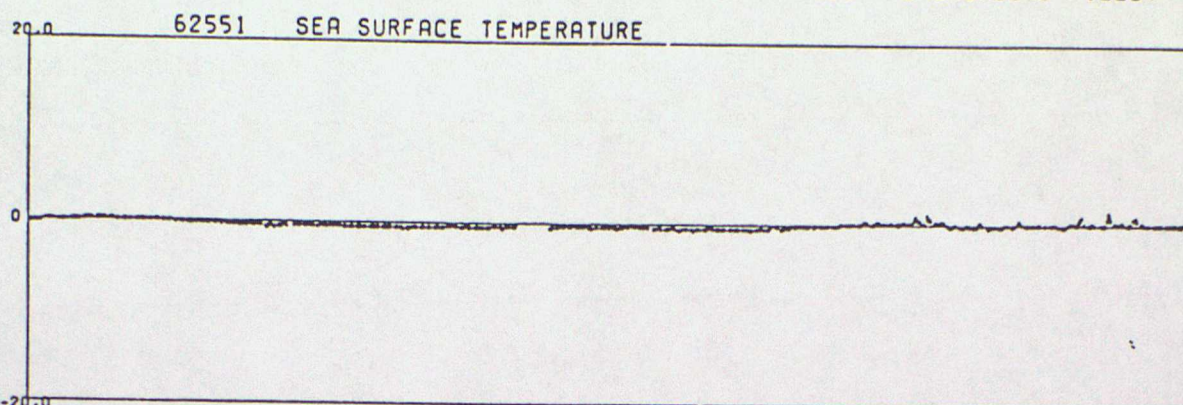


20.0 62518 SEA SURFACE TEMPERATURE OB - BACKGROUND

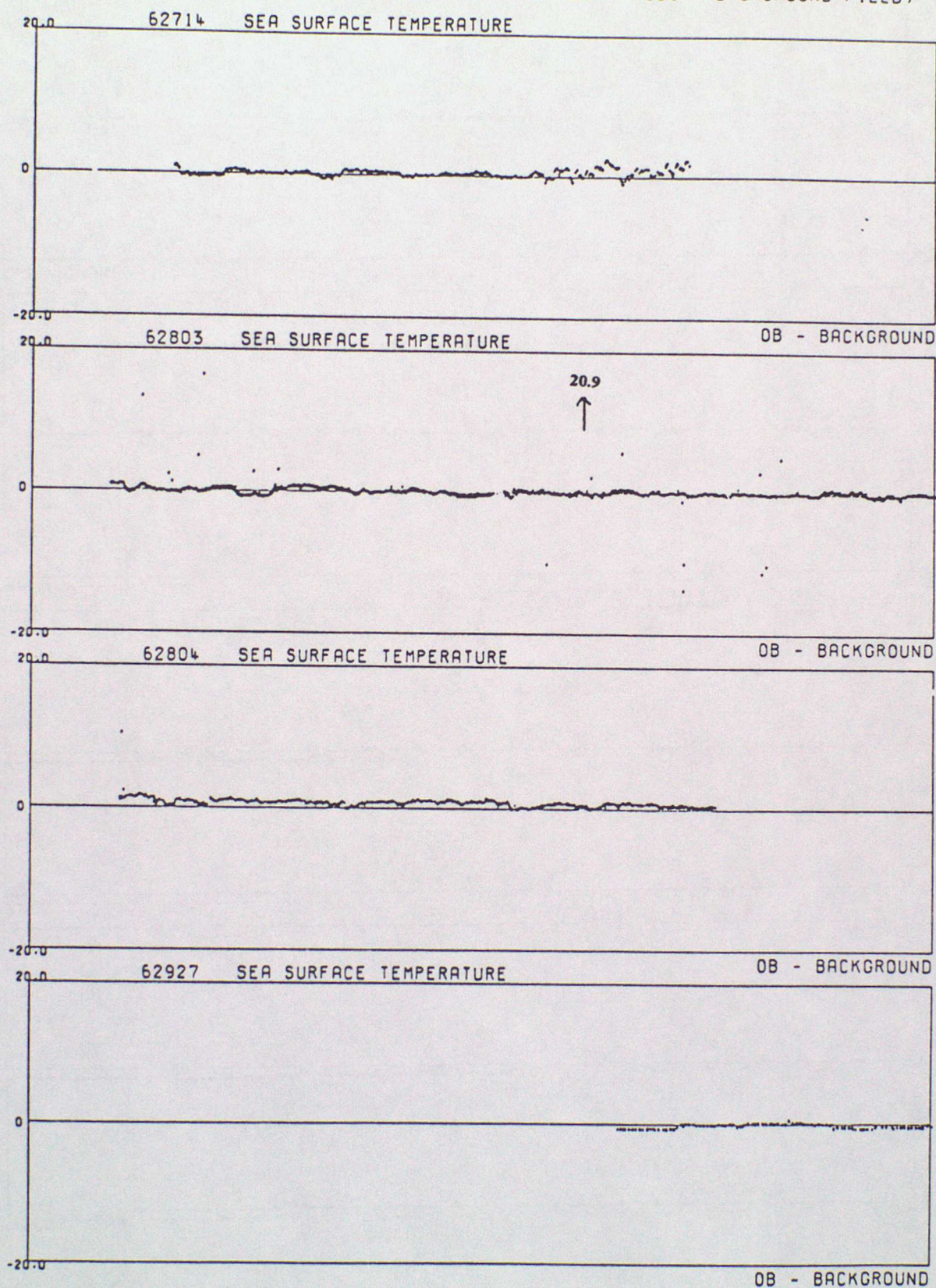


OB - BACKGROUND

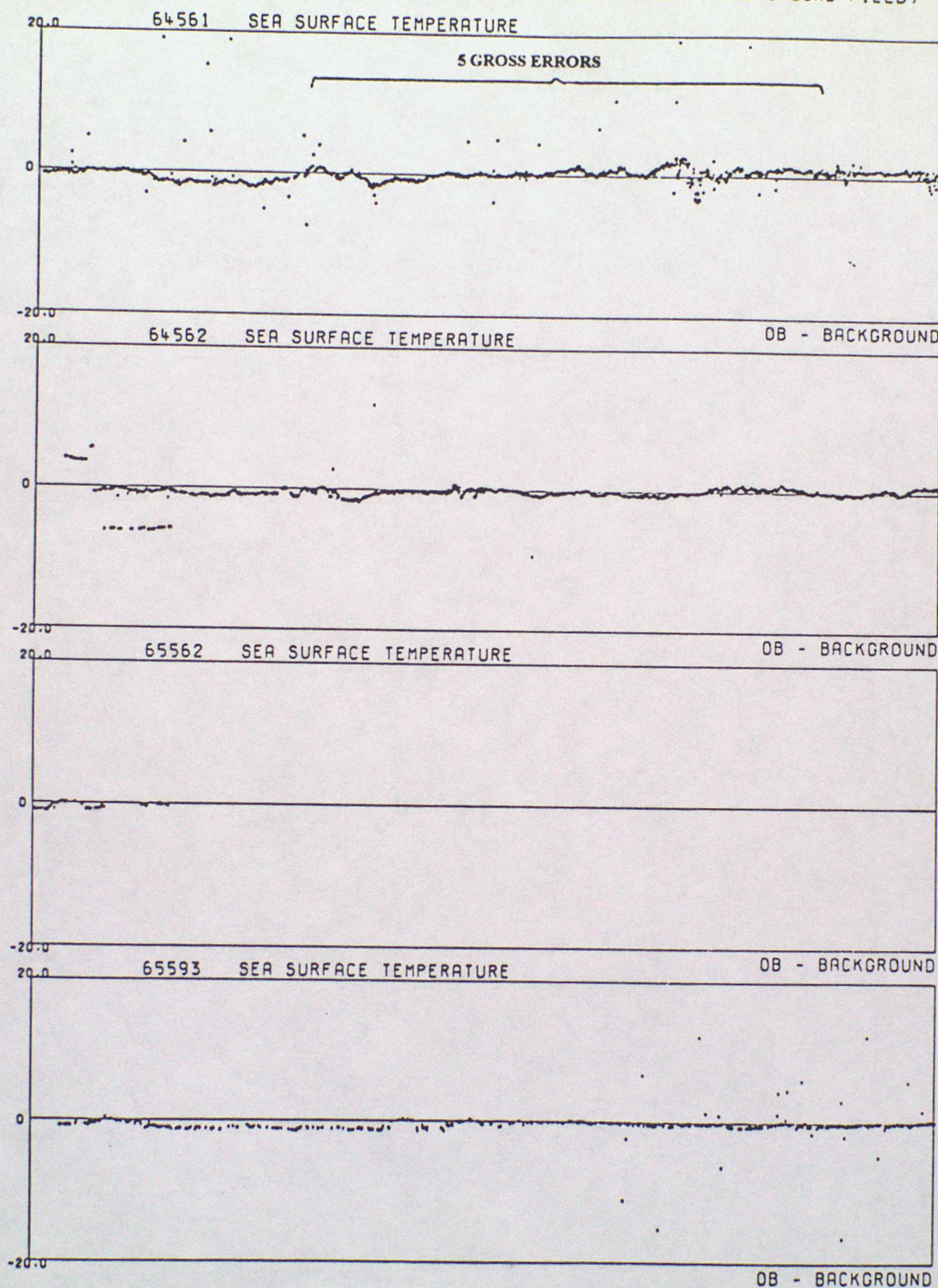
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



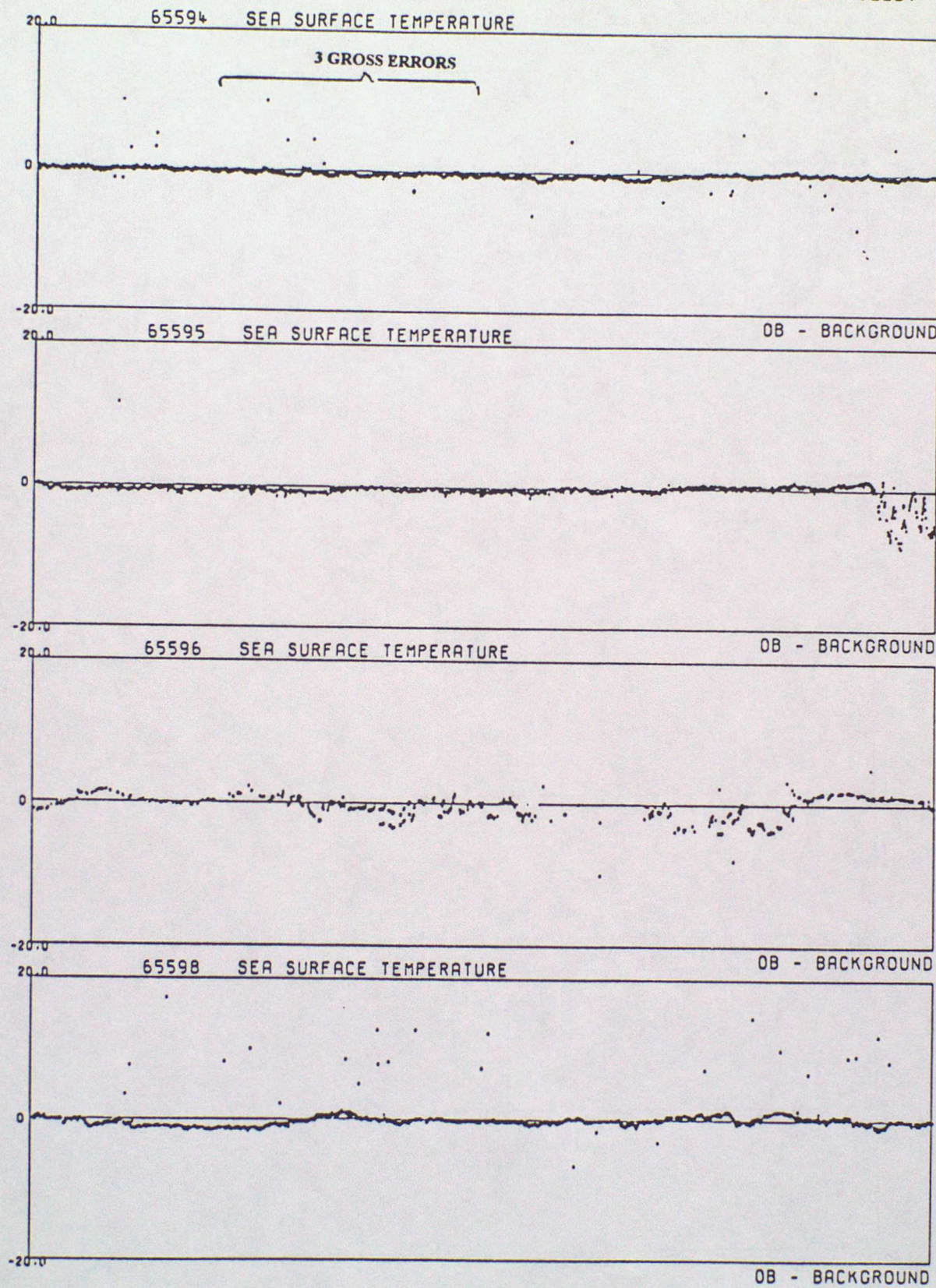
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

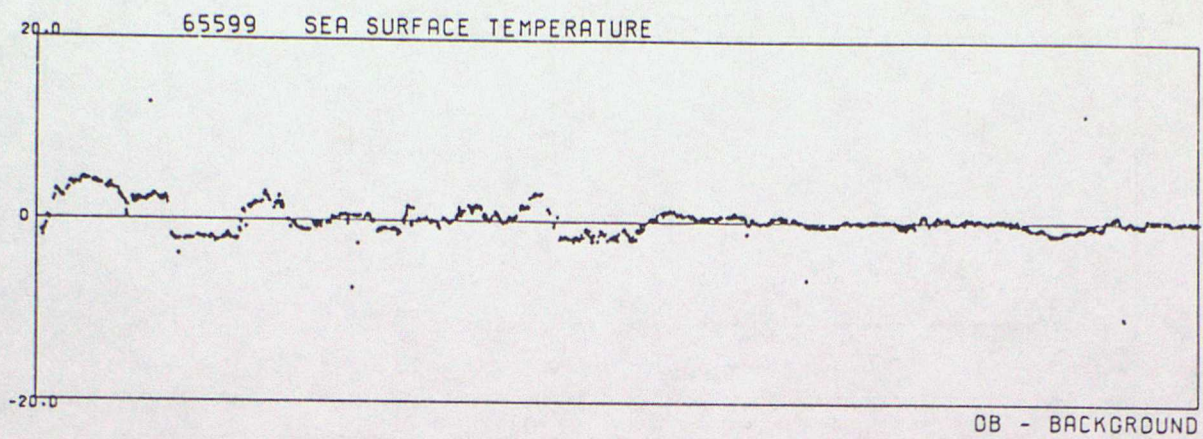


DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



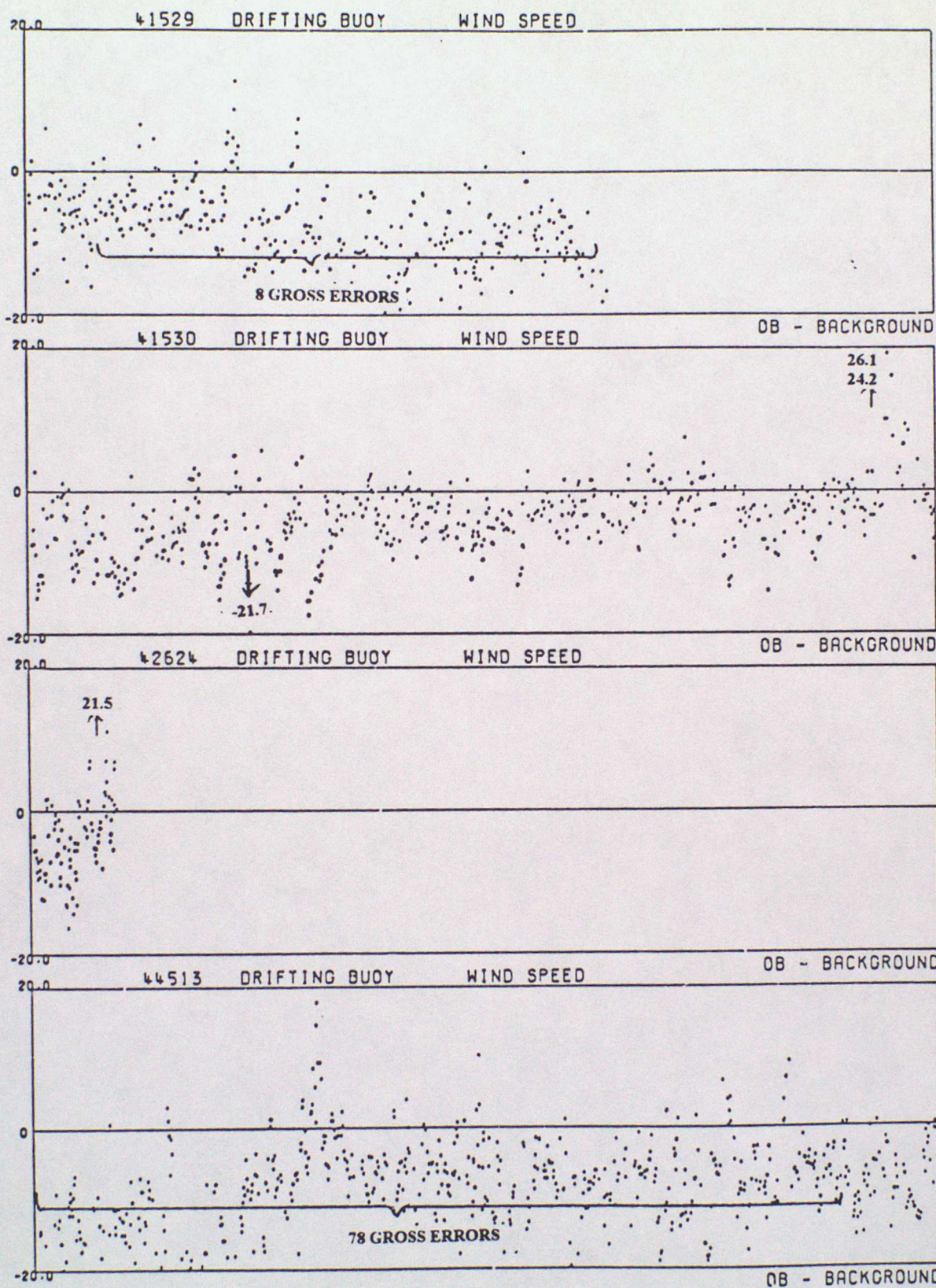
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



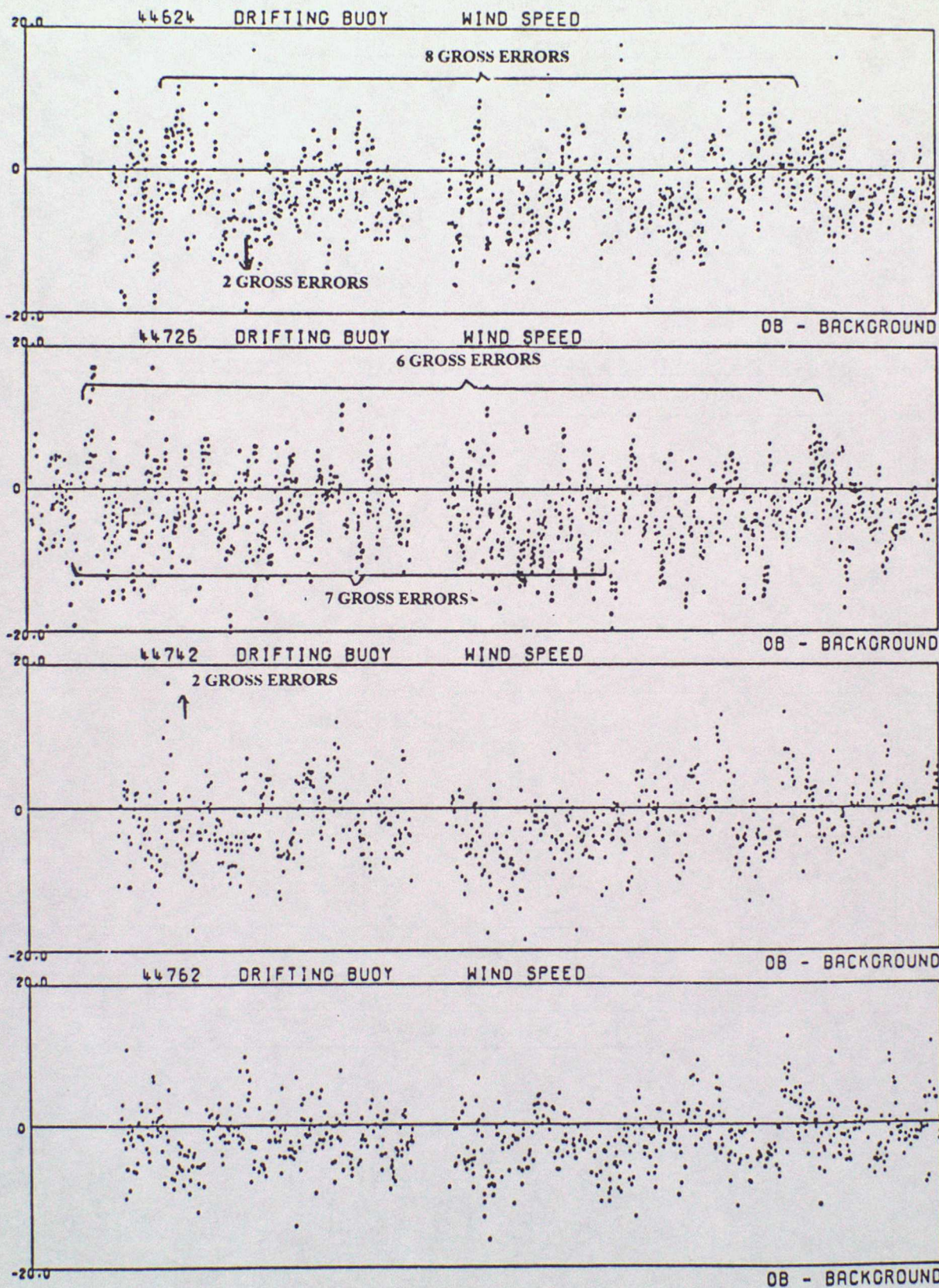


ANNEX E - TIME SERIES PLOTS OF WIND SPEED

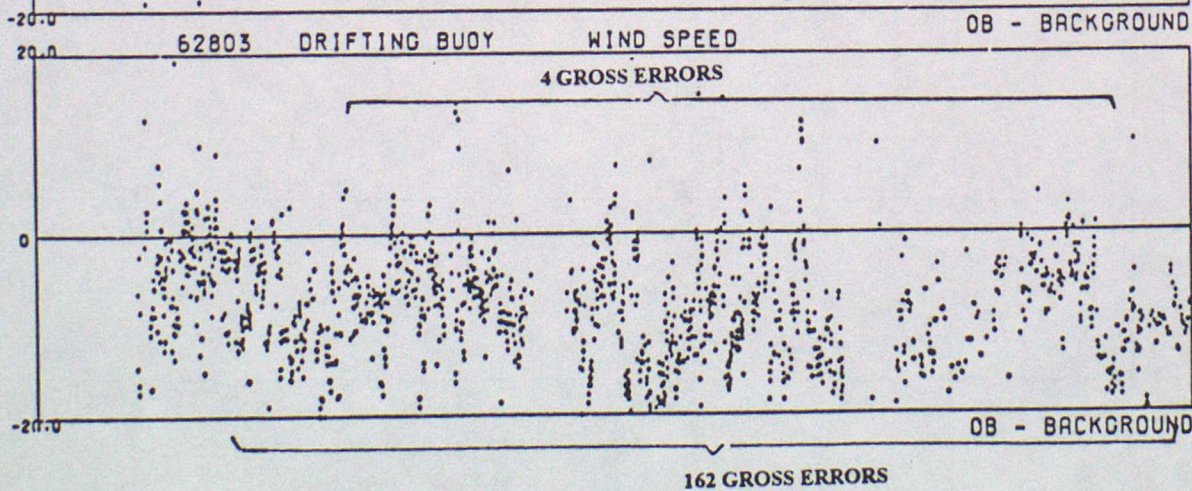
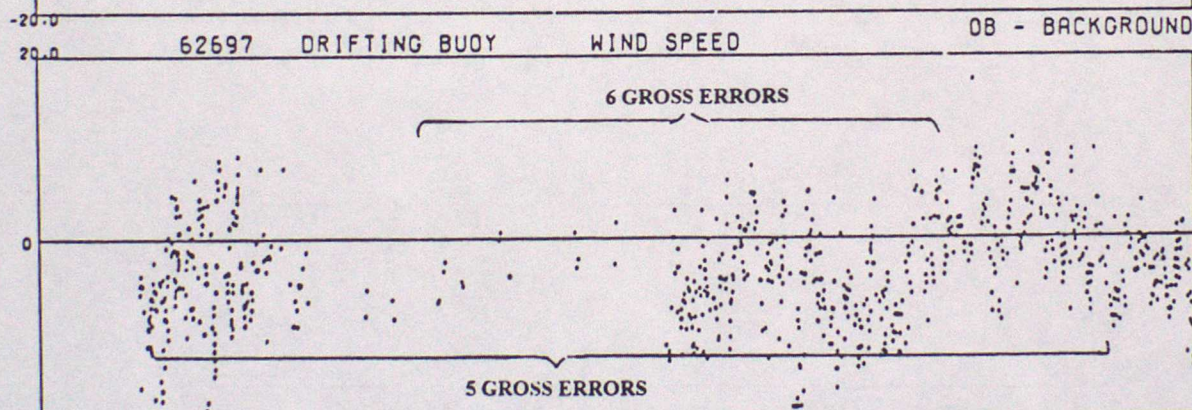
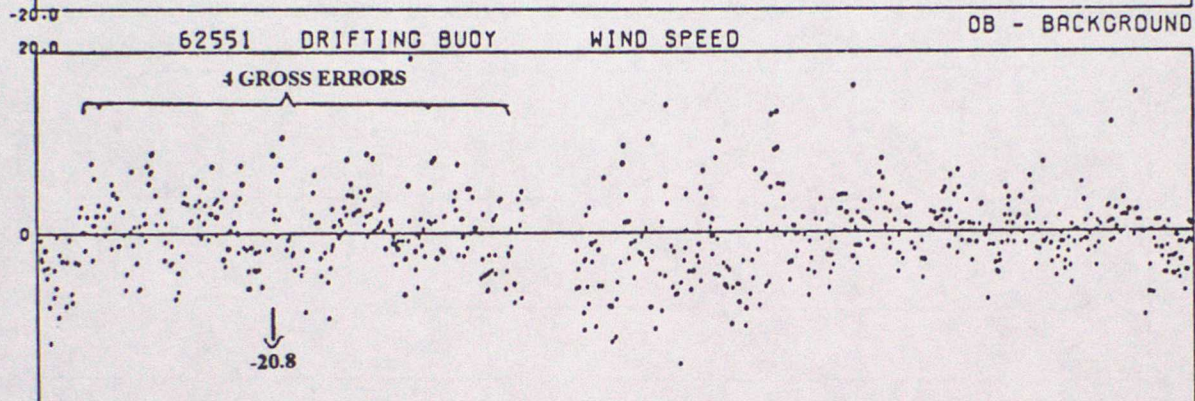
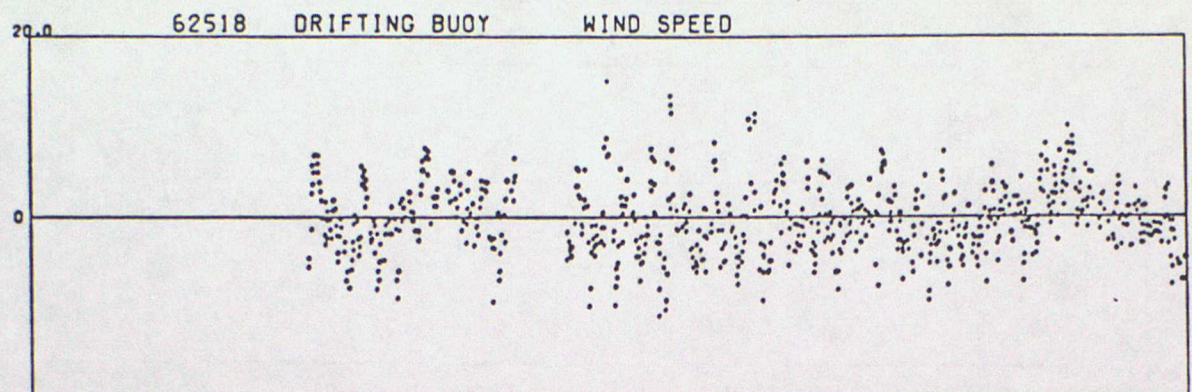
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

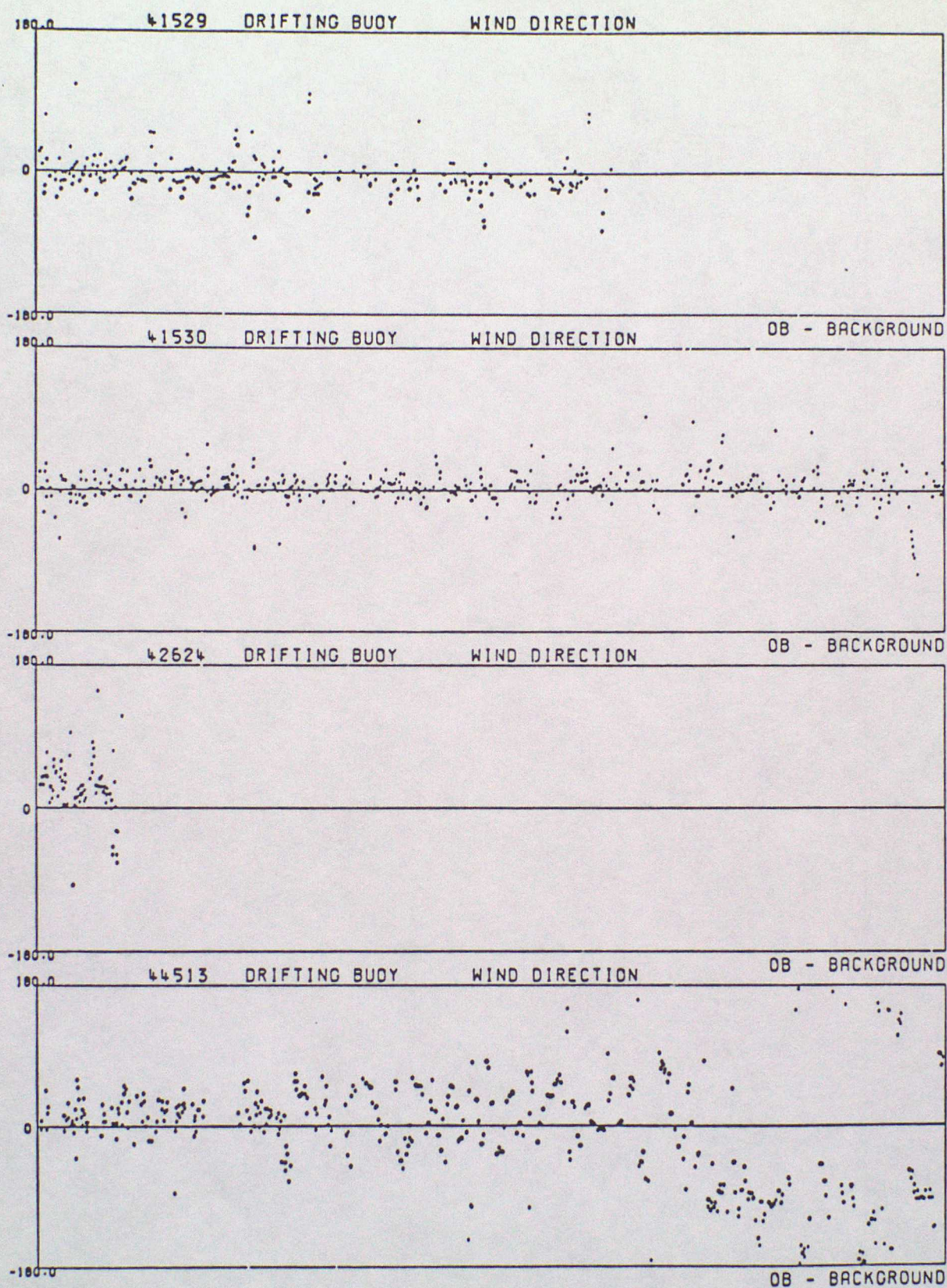


DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)

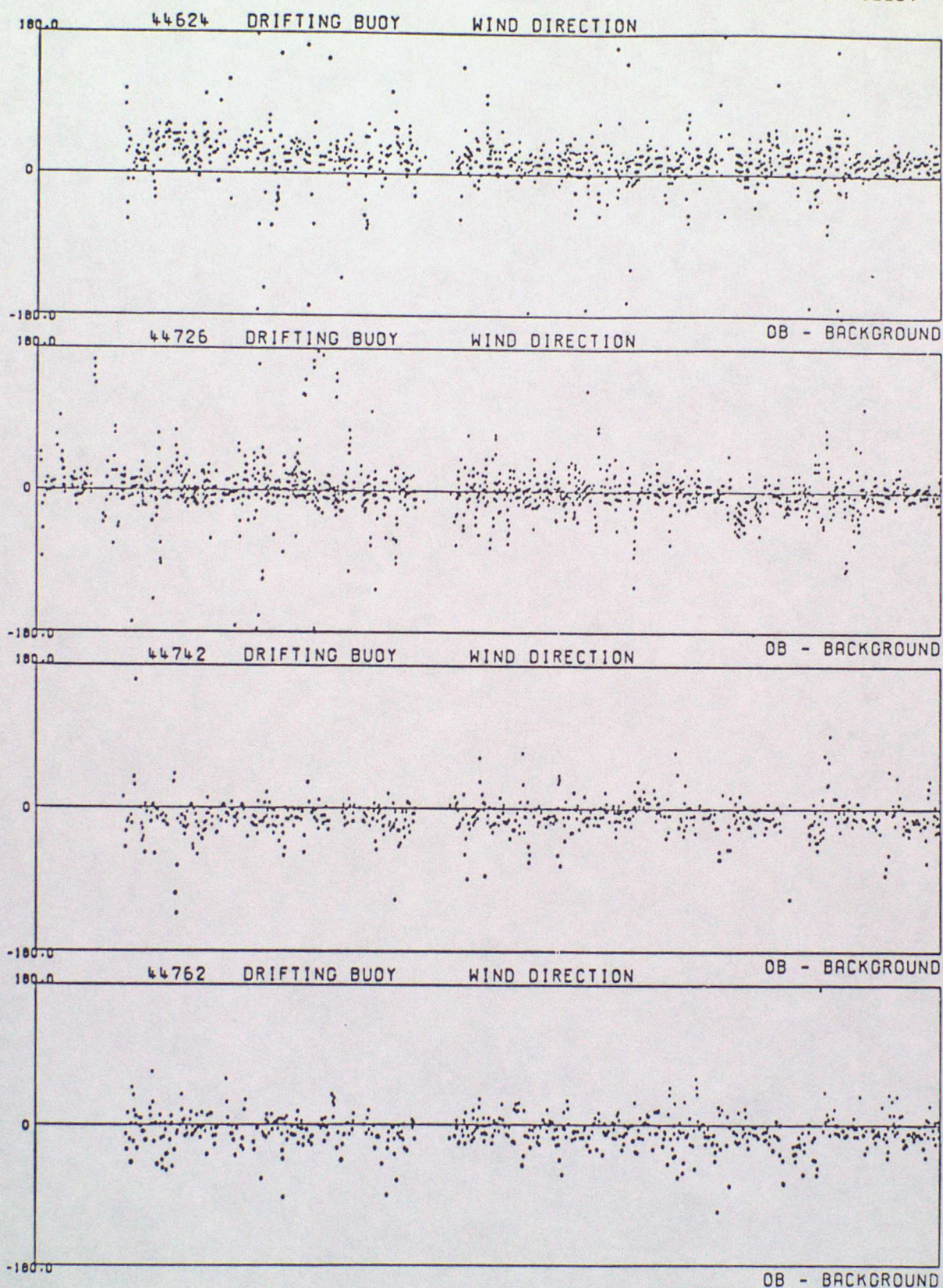


ANNEX F - TIME SERIES PLOTS OF WIND DIRECTION

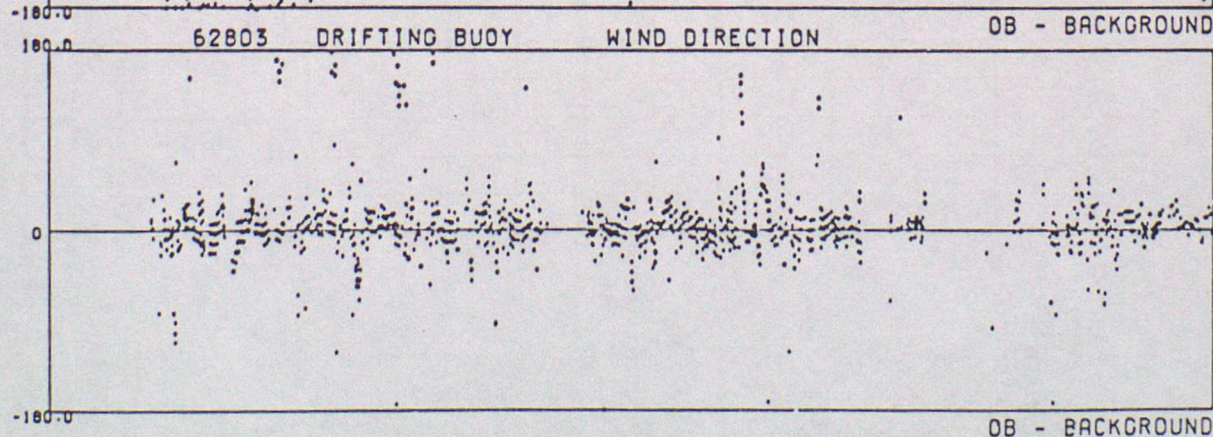
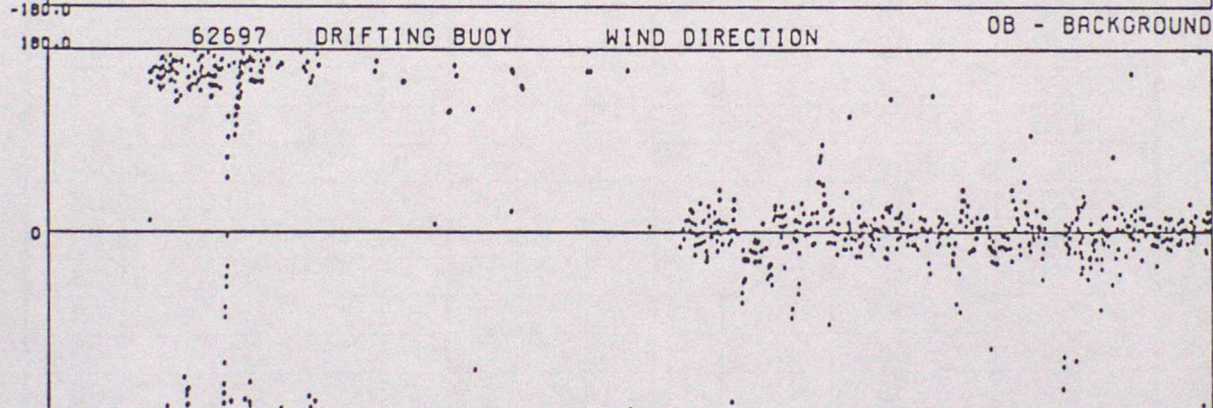
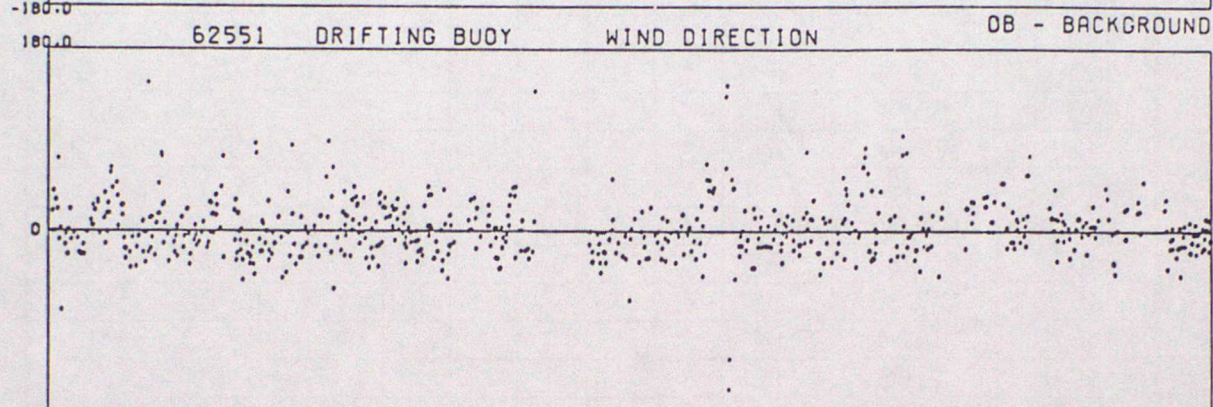
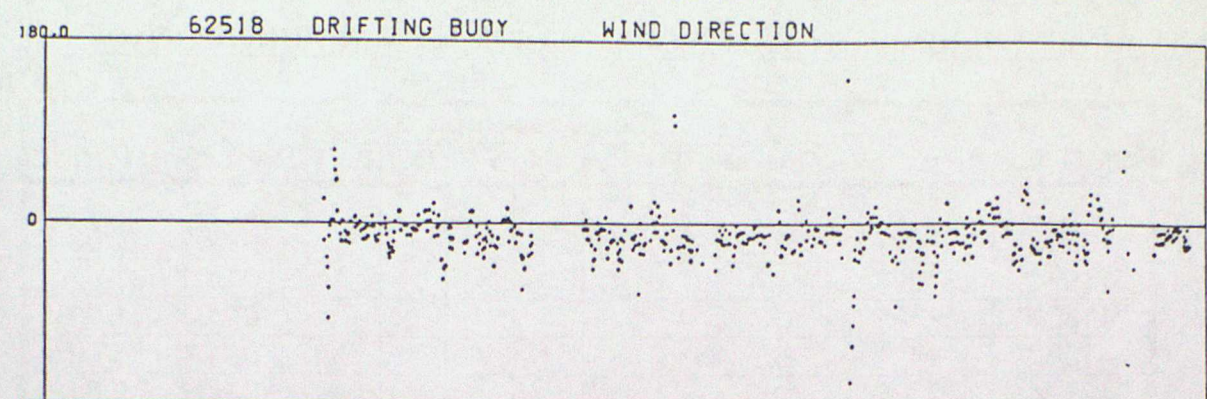
DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (OBS - BACKGROUND FIELD)



DATA FROM 00Z ON 01/01/1997 TO 23Z ON 31/03/1997 (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	
13903	????	??	*	*				*	01/01 - 31/03
13911	????	??	*	*				*	01/01 - 31/03
41529	????	US	*		*	*	*		01/01 - 31/03
41530	????	US	*		*	*	*	*	01/01 - 31/03
42624	????	US	*	*	*	*	*	*	01/01 - 09/01
44513	????	US	*		*	*	*	*	01/01 - 31/03
44601	5569	F	*					*	17/01 - 31/03 +
44603	5571	F	*					*	17/01 - 27/02
44604	????	F	*	*				*	22/01 - 04/02
44605	27933	F	*	*				*	16/02 - 31/03
44606	27936	F	*	*				*	20/01 - 31/03
44607	27937	F	*	*				*	28/01 - 31/03
44608	27938	F	*	*				*	13/02 - 31/03
44613	3306	UK	*	*	*	*	*	*	03/03 - 31/03
44614	1256	UK	*	*	*			*	01/01 - 31/03
44616	3318	UK	*	*	*			*	01/01 - 31/01
44617	1255	UK	*	*		*		*	01/01 - 04/01
44624	2958	UK	*	*	*	*	*	*	05/01 - 31/03
44726	2955	UK	*	*	*	*	*	*	01/01 - 31/03
44728	1254	UK	*	*	*			*	01/01 - 31/03
44742	26753	UK	*	*	*	*	*	*	09/01 - 31/03
44743	1248	UK	*	*				*	01/01 - 31/03
44760	2947	UK	*	*	*			*	01/01 - 31/03
44762	26754	UK	*	*	*	*	*	*	09/01 - 31/03
44763	3098	UK	*	*	*			*	01/01 - 17/03
44764	1259	UK	*	*	*			*	01/01 - 31/03
44765	4178	NL	*	*	*			*	01/01 - 26/01
44766	1298	D	*	*	*			*	01/01 - 25/03
44767	3013	UK	*	*	*			*	01/01 - 31/03
44768	26746	UK	*	*	*			*	19/03 - 31/03
44770	3035	UK	*	*	*			*	01/01 - 31/03
44772	6667	D	*	*	*			*	01/01 - 12/03

KEY

PP - Pressure

Pt - Pressure tendency

TT - Air Temperature

FF - Wind Speed

DD - Wind Direction

SST - Sea Surface Temperature

+ - Pressure ceased reporting before the end of the period
but other elements continued to report.

ANNEX G - Cont.

WMO No.	Argos No.	Owner	Elements Reported						Reporting Period
			PP	Pt	TT	FF	DD	SST	
44775	1260	UK	*	*	*			*	18/03 - 31/03
44776	2957	UK	*	*	*			*	01/01 - 31/03
44777	1249	UK	*	*				*	01/01 - 31/03
44778	1258	UK	*	*	*			*	01/01 - 10/03
44779	3186	UK	*	*				*	08/01 - 31/03
44780	1257	UK	*	*	*			*	01/01 - 31/03
44849	????	??	*						01/01 - 30/01
44850	????	??	*						01/01 - 30/01
44910	????	??	*						01/01 - 16/02
44911	466	US	*						01/01 - 31/03
44917	????	US	*					*	17/03 - 31/03
44918	????	US	*						01/01 - 07/02
44919	????	US	*						01/01 - 05/02
44923	????	??	*						01/01 - 04/03
44924	????	??	*						01/01 - 02/02
46764	????	??	*						01/01 - 30/01
47541	????	??	*						01/01 - 28/02
61521	????	US	*		*			*	01/01 - 31/03
61522	7207	US	*		*			*	01/01 - 08/03
61527	????	US	*		*			*	01/01 - 24/02
61529	????	??	*		*			*	08/03 - 31/03
61530	????	??	*		*			*	08/03 - 31/03
61531	????	??	*		*			*	08/03 - 31/03
62503	14427	F	*	*				*	01/01 - 31/03
62504	14428	F	*	*				*	01/01 - 13/01
62507	5793	F	*	*				*	01/01 - 31/03
62508	????	F	*	*					01/01 - 31/03
62510	5797	F	*	*				*	01/01 - 21/03
62513	5798	F	*	*				*	01/01 - 16/02
62515	14426	F	*	*				*	01/01 - 31/03
62517	10118	F	*	*	*			*	01/01 - 19/03

KEY

PP - Pressure

TT - Air Temperature

DD - Wind Direction

Pt - Pressure tendency

FF - Wind Speed

SST - Sea Surface Temperature

+ - Pressure ceased reporting before the end of the period
but other elements continued to report.

ANNEX G - Cont.

WMO No.	Argos No.	Owner	Elements Reported						Reporting Period
			PP	Pt	TT	FF	DD	SST	
62518	15534	F	*			*	*	*	01/01 - 31/03
62551	????	??	*	*		*	*	*	01/01 - 31/03
62697	2959	UK	*	*	*	*	*	*	08/01 - 31/03
62712	3188	UK	*			*		*	28/01 - 31/03
62713	3185	UK	*	*				*	14/01 - 31/03
62714	26750	UK	*	*	*			*	14/01 - 06/03
62803	3209	UK	*	*	*	*	*	*	08/01 - 31/03
62804	26743	UK	*	*	*			*	09/01 - 31/03
62927	????	??	*					*	28/02 - 31/03
64561	1247	UK	*	*	*			*	01/01 - 31/03
64562	9307	D	*	*	*			*	03/01 - 31/03
65562	????	N	*	*	*			*	01/01 - 14/01
65593	3039	IR	*	*	*			*	03/01 - 31/03
65594	1252	UK	*	*	*			*	03/01 - 31/03
65595	3038	IR	*	*	*			*	01/01 - 31/03
65596	3036	NL	*	*	*			*	01/01 - 31/03
65598	3678	N	*	*	*			*	01/01 - 31/03
65599	9308	D	*	*	*			*	01/01 - 31/03

KEY

PP - Pressure

Pt - Pressure tendency

TT - Air Temperature

FF - Wind Speed

DD - Wind Direction

SST - Sea Surface Temperature

+ - Pressure ceased reporting before the end of the period
but other elements continued to report.

