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FIFTY-SIXTH QUARTERLY REPORT ON DRIFTING BUOYS IN THE NORTH ATLANTIC

By Sue Holton
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31st May 2001

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 Base (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

76 out of 78 of the buoys reporting, gave a '% of observations with acceptable positions' greater than 95% (75 out of 78 last quarter).

(b) Data timeliness

(see note 9 of section 6 for definition of terms.)

Timeliness	Last quarter.	This quarter
Very Good	37	30
Good	33	36
Satisfactory	3	9
Poor	0	0
Very poor	5	3
Total no. of buoys	78	78

(c) Data availability

(see note 9 of section 6 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	9	11	16	12
Good	3	7	4	2
Satisfactory	20	17	11	9
Poor	14	19	0	1
Very Poor	0	0	1	0

The total number of buoy days in the quarter was 5667 [obtained by summing the number of reporting days for each buoy] (last quarter the total was 5746) and the number of 'buoy hours' with at least one observation was 104434 (compared with 101682 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 18.43 (last quarter the figure was 17.70).

3. SUMMARY OF PRESSURE PERFORMANCE

(a) Buoy deployments, etc.

North of 50deg N

There were 24 buoys reporting pressure at the beginning of the period. 20 buoys were operating at the end of the period. 4 buoys were deployed during the period (44546, 63662, 65662 and 65663). 4 buoys ceased reporting pressure (44730, 44767, 64521 and 65599).

South of 50deg N

There were 39 buoys reporting pressure at the beginning of the period. 32 buoys were reporting at the end of the period.

15 buoys were deployed during the period (44548, 47744, 44775, 44776, 44778, 62751, 62752, 62753, 62756, 62757, 62759, 62841, 62842, 62754 and 62758).

22 buoys ceased reporting pressure (41571, 44617, 44726, 44513, 44626, 44764, 56542, 61523, 62512, 62516, 62520, 62751, 62752, 62753, 62754, 62756, 62757, 62758, 62759, 62841, 62852 and 64546).

(b) 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°N the Revised RMS differences should be less than (or equal to) 2.0 hPa and for buoys north of 50°N they should be below (or equal to) 3.0 hPa. The buoys whose revised RMS differences were found to lie outside these limits have had their performances described as 'suspect' and are included in the section below. Examination of the time-series plots (see Annex B) indicates the performances of these buoys:-

- 44513 - Data from this buoy showed a bias of 1.3 hPa during the period it was reporting pressure (from 20/10/00 to 25/11/00).
- 44548 - Data from this buoy was occasional erratic during the period it was reporting, from 06/12/00 to the end of the period.
- 44764 - Data from this buoy showed a larger than normal scatter for the two days it was reporting, at the beginning of the quarter.

- 56542 - Data from this buoy showed a negative bias of – 4.7 hPa during the few days it was reporting, from the beginning of the quarter until 03/10/00.
- 62513 - Data from this buoy was occasionally erratic during the quarter.
- 64546 - Data from this buoy showed a larger than normal scatter during the few days it was reporting pressure from the beginning of the quarter until 13/10/00 and from 05/12/00, until it ceased reporting altogether on 11/12/00.
- 64699 - Data from this buoy became erratic towards the end of the quarter.

Biases

23buoys (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 had their performance described as 'suspect'.

WMO No.	Buoy bias (hPa)	Period of reports
41505	-1.0	01/10 – 31/12
44546	0.7	04/12 – 31/12
44611	0.6	01/10 – 31/12
44723	-0.6	01/10 – 31/12
44727	-0.7	01/10 – 31/12
44772	-0.6	01/10 – 31/12
44774	-0.8	12/10 – 31/12
61522	-0.8	01/10 – 31/12
61523	-1.2	01/10 – 17/10
62519	-0.9	01/10 – 31/12
62753	-0.7	22/10 – 02/11
62754	-1.0	23/10 – 15/11
62756	-0.7	23/10 – 17/11
64517	-0.7	01/10 – 31/12
64521	-0.6	01/10 – 16/11
64548	-0.8	01/10 – 31/12
64698	-0.7	01/10 – 31/12
65593	-0.8	01/10 – 31/12
65600	-0.9	01/10 – 31/12
65601	-0.7	01/10 – 31/12
65602	-0.7	01/10 – 31/12
65662	-0.8	17/11 – 31/12
65663	-1.1	17/11 – 31/12

Summary of Pressure Performance

Pressure Summary	Last Quarter	This Quarter
Acceptable	62	48
Suspect – RMS	21	7
Suspect – Bias	14	23
Total no. of buoys	78	78

(4) Air Temperatures

The following table shows the mean and standard deviation of observation minus background differences for air temperatures.

(Note : The calculations below exclude the majority of gross errors. However, gross errors within +/-20 °C of the background value are included. Therefore, in some instances, the figures may be slightly misleading.)

Air Temperature				Air Temperature			
WMO No.	Mean	St. Dev	No. of Obs	WMO No.	Mean	St. Dev	No. of Obs
41521	-0.10	0.89	888	44613	0.38	0.82	2094
44626	-0.05	1.33	2825	44628	-0.04	1.40	3214
44743	1.20	-0.02	3254	44765	0.01	1.51	1784
44772	0.02	1.03	3199	44774	0.12	1.04	2694
56542	7.93	2.45	30	62508	-0.30	0.72	1702
62508	-0.30	0.72	1702	63662	-7.66	6.72	185
64546	-0.54	1.03	2905	64548	-0.25	0.99	4187
65593	-0.54	0.98	5779	65600	-0.22	0.89	5675
65601	0.01	0.95	4145	65602	-0.11	0.97	4427
65662	-0.15	0.58	562	65663	-0.27	0.58	618

Summary

Buoys 44743 (1.20), 56542 (7.93) and 63662 (-7.66) all showed significant air temperature bias. Also buoy 63662 (6.72) showed a significant standard deviation.

Buoy 56542 only reported for a few days from the start of the period until 03/10/00.

(5) Winds

The following table shows the mean and standard deviation of observation minus background differences for wind speed and direction.

WMO No.	Wind Speed (kt)			Wind Direction (deg)		
	Mean	St. Dev.	No. of Obs	Mean	St. Dev.	No. of Obs
41505	-3.55	9.14	329	9.10	43.45	120
41521	-3.22	4.29	179	-13.36	20.70	164
41523	2.13	5.10	1011	7.22	70.34	852
44743	-2.32	3.72	3888	1.68	22.39	3774
62508	-0.60	2.81	2133	-6.90	16.95	1944

Summary

All Buoys with the exception of 62508 showed a significant **wind speed** bias throughout their reporting lives. Buoy 41505 (9.14) also showed a significant standard deviation for **wind speed**.

Buoys 41521 (13.36) showed a significant **wind direction** bias and buoy 41523 (70.34) showed a significant standard deviation for **wind direction**.

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		

2. Number of observations received is the number received at Bracknell in the Meteorological Data Base (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).

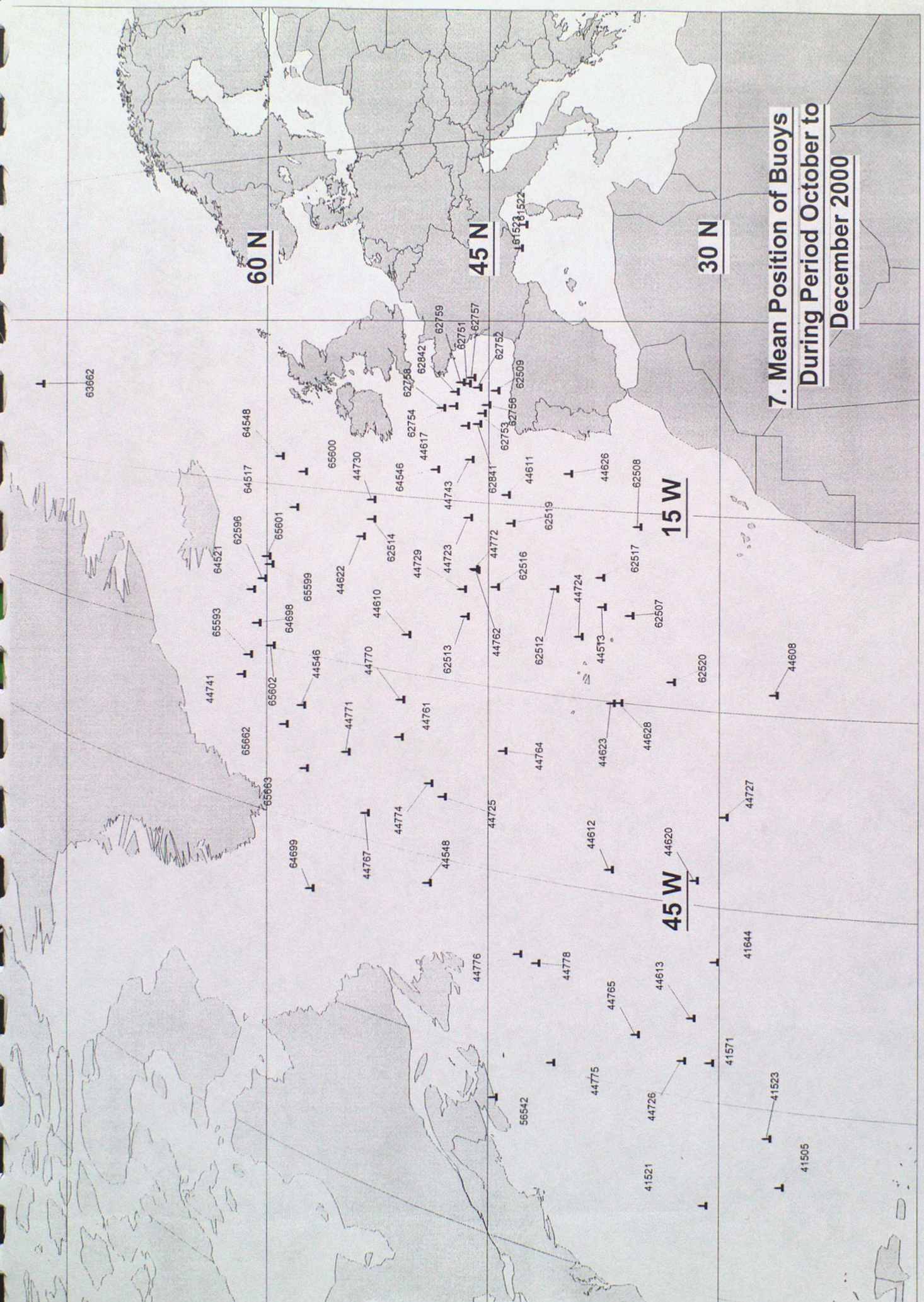
9. The performance categories are defined in the table below.

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 October to
December 2000

Annex A - TABLE OF STATISTICS

WMO No./Country	41505	41521	41523
Argos Id No.	??	??	??
Period Within Area	01/10 - 31/12	01/10 - 31/12	01/10 - 31/12
Mean Latitude	26.1	31.0	26.9
Mean Longitude	-65.8	-68.1	-62.2
No. of Obs Received	1025	933	1204
% of obs with Acceptable Position	100.0	100.0	100.0
% of Present Pressure	60.8	96.2	91.4
P. Tendency	0.0	0.0	0.0
Air Temperature	0.0	95.9	0.0
Wind Speed/Dir	65.5/ 55.0	20.0/ 94.7	88.9/ 89.1
Sea-Surface Temp.	74.6	96.2	91.6
Median delay (min)	25	21	24
Number of days	92	92	92
Mean No. of obs/day	11.1	10.1	13.1
No. of Hours with obs	826	833	783
Mean no. of hours/day with obs	9.0	9.1	8.5
% of hour periods without an ob	62.6	62.3	64.4
Mean (Ob-Bg)	-1.0	0.1	-0.2
RMS (Ob-Bg) unflagged data	1.4	0.9	0.8
Mean (Ob-Bg)	-1.0	0.0	-0.3
RMS (Ob-Bg) all data	1.4	1.5	0.8
Revised RMS (Ob-Bg)	1.5	1.0	0.8
% of data flagged	26	18	38
Operating at end of period	YES	YES	YES
Performance			
Availability	Poor	Poor	Poor
Pressure Quality	Suspect	Acceptable	Acceptable
Timeliness	Very Good	Very Good	Very Good
Comments			

Annex A - cont'd

WMO No./Country	41571	41644	44513
Argos Id No.	??	??	??
Period Within Area	01/10 - 30/12	01/10 - 31/12	01/10 - 29/11
Mean Latitude	30.6	30.3	37.6
Mean Longitude	-57.0	-49.2	-22.6
No. of Obs Received	803	1182	628
% of obs with Acceptable Position	100.0	100.0	100.0
% of Present Pressure	99.0	91.6	59.7
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.	99.0	92.8	99.7
Median delay (min)	127	25	21
Number of days	91	92	60
Mean No. of obs/day	8.8	12.8	10.5
No. of Hours with obs	803	808	565
Mean no. of hours/day with obs	8.8	8.8	9.4
% of hour periods without an ob	63.0	63.3	60.5
Mean (Ob-Bg)	0.1	-0.1	1.3
RMS (Ob-Bg) unflagged data	0.7	0.8	1.6
Mean (Ob-Bg)	0.1	0.0	0.2
RMS (Ob-Bg) all data	0.7	1.3	14.0
Revised RMS (Ob-Bg)	0.7	1.3	2.2
% of data flagged	0	34	18
Operating at end of period	NO	YES	NO
Performance Availability	Poor	Poor	Poor
Pressure Quality	Acceptable	Acceptable	Suspect
Timeliness	Acceptable	Very Good	Very Good
Comments			

Annex A - cont'd

WMO No./Country	44546/UK	44548/UK	44608/F
Argos Id No.	25374	27617	14540
Period Within Area	04/12 - 31/12	06/12 - 31/12	01/10 - 31/12
Mean Latitude	57.7	49.1	26.5
Mean Longitude	-34.6	-47.3	-28.4
No. of Obs Received	707	627	8542
% of obs with Acceptable Position	100.0	100.0	100.0
% of Present Pressure	88.4	87.9	63.9
P. Tendency	88.1	86.6	63.9
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.	88.4	88.0	63.9
Median delay (min)	71.5	107	155
Number of days	28	26	92
Mean No. of obs/day	25.3	24.1	92.8
No. of Hours with obs	658	599	2165
Mean no. of hours/day with obs	23.5	23.0	23.5
% of hour periods without an ob	1.6	3.5	1.9
Mean (Ob-Bg)	0.7	0.6	0.2
RMS (Ob-Bg) unflagged data	1.4	1.9	0.6
Mean (Ob-Bg)	1.0	1.0	0.1
RMS (Ob-Bg) all data	3.0	3.9	1.6
Revised RMS (Ob-Bg)	1.7	2.3	0.6
% of data flagged	2	3	88
Operating at end of period	YES	YES	YES
Performance			
Availability	Good	Acceptable	Very Good
Pressure Quality	Suspect	Suspect	Acceptable
Timeliness	Good	Good	Acceptable
Comments			

Annex A - cont'd

WMO No./Country	44610/F	44611/UK	44612/UK
Argos Id No.	12734	27616	27619
Period Within Area	01/10 - 31/12	01/10 - 31/12	01/10 - 31/12
Mean Latitude	50.5	43.9	37.1
Mean Longitude	-26.7	-14.2	-43.2
No. of Obs Received	6971	2226	2195
% of obs with Acceptable Position	100.0	100.0	100.0
% of Present Pressure	71.2	87.9	95.7
P. Tendency	71.0	87.5	95.6
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.	71.3	87.5	95.5
Median delay (min)	135	84	79
Number of days	92	92	92
Mean No. of obs/day	75.8	24.2	23.9
No. of Hours with obs	2146	2127	2145
Mean no. of hours/day with obs	23.3	23.1	23.3
% of hour periods without an ob	2.8	3.7	2.9
Mean (Ob-Bg)	-0.3	0.6	0.1
RMS (Ob-Bg) unflagged data	1.4	1.1	0.9
Mean (Ob-Bg)	-0.2	0.7	0.1
RMS (Ob-Bg) all data	3.3	1.8	1.0
Revised RMS (Ob-Bg)	1.6	1.2	1.0
% of data flagged	76	1	1
Operating at end of period	YES	YES	YES
Performance			
Availability	Very Good	Acceptable	Acceptable
Pressure Quality	Acceptable	Suspect	Acceptable
Timeliness	Acceptable	Good	Good
Comments			

Annex A - cont'd

WMO No./Country	44613/UK	44617/UK	44620/UK
Argos Id No.	28467	27621	27622
Period Within Area	01/10 - 31/12	01/10 - 11/12	01/10 - 31/12
Mean Latitude	31.8	46.6	31.6
Mean Longitude	-53.8	-8.7	-43.1
No. of Obs Received	2196	2283	2210
% of obs with Acceptable Position	100.0	100.0	100.0
% of Present Pressure	97.0	84.7	93.1
P. Tendency	94.4	84.1	93.1
Air Temperature	96.7	0.0	0.0
Wind Speed/Dir	0.0/ 0.0	0.0/ 0.0	0.0/ 0.0
Sea-Surface Temp.	0.0	84.2	93.2
Median delay (min)	35	92	96
Number of days	92	72	92
Mean No. of obs/day	23.9	31.7	24.0
No. of Hours with obs	1320	1650	2141
Mean no. of hours/day with obs	14.3	22.9	23.3
% of hour periods without an ob	40.1	3.7	3.0
Mean (Ob-Bg)	-0.1	0.4	0.1
RMS (Ob-Bg) unflagged data	0.8	1.0	0.8
Mean (Ob-Bg)	-0.1	0.3	0.1
RMS (Ob-Bg) all data	1.6	1.6	1.1
Revised RMS (Ob-Bg)	0.8	1.0	0.8
% of data flagged	47	25	1
Operating at end of period	YES	NO	YES
Performance			
Availability	Acceptable	Good	Acceptable
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Very Good	Good	Good
Comments			

Annex A - cont'd

WMO No./Country	44622/UK	44623/UK	44626/UK
Argos Id No.	27623	27624	12284
Period Within Area	01/10 - 31/12	01/10 - 31/12	01/10 - 13/12
Mean Latitude	53.6	37.0	39.8
Mean Longitude	-18.8	-30.1	-12.2
No. of Obs Received	2277	2222	2935
% of obs with Acceptable Position	100.0	100.0	96.7
% of Present Pressure	88.8	90.9	98.2
P. Tendency	88.8	90.6	94.3
Air Temperature	0.0	0.0	97.8
Wind Speed/Dir	0.0/ 0.0	0.0/ 0.0	0.0/ 0.0
Sea-Surface Temp.	88.9	90.7	98.0
Median delay (min)	60	87	20
Number of days	92	92	74
Mean No. of obs/day	24.8	24.2	39.7
No. of Hours with obs	2145	2136	1140
Mean no. of hours/day with obs	23.3	23.2	15.4
% of hour periods without an ob	2.9	3.3	35.1
Mean (Ob-Bg)	0.0	0.4	0.3
RMS (Ob-Bg) unflagged data	1.1	1.0	0.8
Mean (Ob-Bg)	0.0	0.4	-0.1
RMS (Ob-Bg) all data	1.2	1.3	6.3
Revised RMS (Ob-Bg)	1.2	1.1	0.8
% of data flagged	0	1	68
Operating at end of period	YES	YES	NO
Performance			
Availability	Acceptable	Acceptable	Very Good
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Good	Good	Very Good
Comments			

Annex A - cont'd

WMO No./Country	44628/UK	44723/NL	44724/UK
Argos Id No.	12287	16392	27922
Period Within Area	01/10 - 31/12	01/10 - 31/12	01/10 - 31/12
Mean Latitude	36.5	46.4	39.1
Mean Longitude	-30.0	-16.3	-25.1
No. of Obs Received	3367	2083	2448
% of obs with Acceptable Position	95.7	100.0	100.0
% of Present Pressure	97.4	90.5	88.8
P. Tendency	92.8	90.1	88.4
Air Temperature	97.0	0.0	0.0
Wind Speed/Dir	0.0/ 0.0	0.0/ 0.0	0.0/ 0.0
Sea-Surface Temp.	97.4	7.3	88.7
Median delay (min)	19	108.5	114
Number of days	92	92	92
Mean No. of obs/day	36.6	22.6	26.6
No. of Hours with obs	1457	1712	2135
Mean no. of hours/day with obs	15.8	18.6	23.2
% of hour periods without an ob	33.9	22.3	3.3
Mean (Ob-Bg)	0.0	-0.6	0.0
RMS (Ob-Bg) unflagged data	0.8	1.1	0.8
Mean (Ob-Bg)	-0.4	-0.7	0.0
RMS (Ob-Bg) all data	7.0	1.6	0.9
Revised RMS (Ob-Bg)	1.1	1.6	0.9
% of data flagged	64	20	10
Operating at end of period	YES	YES	YES
Performance			
Availability	Very Good	Acceptable	Good
Pressure Quality	Acceptable	Suspect	Acceptable
Timeliness	Very Good	Good	Good
Comments			

Annex A - cont'd

WMO No./Country	44725/UK	44726/UK	44727/UK
Argos Id No.	27923	27924	27925
Period Within Area	01/10 - 31/12	01/10 - 18/12	01/10 - 31/12
Mean Latitude	48.1	32.4	29.7
Mean Longitude	-39.8	-57.2	-38.0
No. of Obs Received	2169	2778	2236
% of obs with Acceptable Position	99.4	100.0	100.0
% of Present Pressure	87.4	92.5	87.9
P. Tendency	87.0	92.3	87.5
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.	87.0	27.7	50.9
Median delay (min)	87	105	96
Number of days	92	79	92
Mean No. of obs/day	23.6	35.2	24.3
No. of Hours with obs	2087	1823	2118
Mean no. of hours/day with obs	22.7	23.1	23.0
% of hour periods without an ob	5.5	3.2	4.1
Mean (Ob-Bg)	-0.5	0.0	-0.7
RMS (Ob-Bg) unflagged data	1.2	0.8	0.9
Mean (Ob-Bg)	-0.5	0.0	-0.7
RMS (Ob-Bg) all data	1.2	0.8	0.9
Revised RMS (Ob-Bg)	1.2	0.8	1.0
% of data flagged	0	36	2
Operating at end of period	YES	NO	YES
Performance			
Availability	Acceptable	Very Good	Acceptable
Pressure Quality	Acceptable	Acceptable	Suspect
Timeliness	Good	Good	Good
Comments			

Annex A - cont'd

WMO No./Country	44729/UK	44730/UK	44741/UK
Argos Id No.	25375	25378	25373
Period Within Area	01/10 - 31/12	01/10 - 12/12	01/10 - 31/12
Mean Latitude	46.8	52.9	61.9
Mean Longitude	-22.3	-15.5	-33.1
No. of Obs Received	2232	2899	2344
% of obs with Acceptable Position	100.0	100.0	100.0
% of Present Pressure	87.0	91.9	83.9
P. Tendency	86.6	91.8	83.7
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.	86.8	91.8	83.9
Median delay (min)	84	84	57
Number of days	92	73	92
Mean No. of obs/day	24.3	39.7	25.5
No. of Hours with obs	2123	1694	2159
Mean no. of hours/day with obs	23.1	23.2	23.5
% of hour periods without an ob	3.8	2.3	2.2
Mean (Ob-Bg)	0.2	0.1	-0.1
RMS (Ob-Bg) unflagged data	1.2	1.1	1.0
Mean (Ob-Bg)	0.2	0.1	-0.1
RMS (Ob-Bg) all data	1.4	1.4	1.0
Revised RMS (Ob-Bg)	1.3	1.4	1.0
% of data flagged	1	40	1
Operating at end of period	YES	NO	YES
Performance			
Availability	Acceptable	Very Good	Good
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Good	Good	Very Good
Comments			

Annex A - cont'd

WMO No./Country	44743/UK	44761/UK	44762/UK
Argos Id No.	12414	27615	19073
Period Within Area	01/10 - 31/12	01/10 - 31/12	01/10 - 31/12
Mean Latitude	46.3	51.0	45.9
Mean Longitude	-11.5	-35.5	-20.6
No. of Obs Received	4172	2248	2499
% of obs with Acceptable Position	98.6	100.0	99.4
% of Present Pressure	97.4	91.2	59.6
P. Tendency	93.5	91.0	59.2
Air Temperature	79.0	0.0	0.0
Wind Speed/Dir	96.0/ 95.7	0.0/ 0.0	0.0/ 0.0
Sea-Surface Temp.	79.4	91.1	59.7
Median delay (min)	19	65	138
Number of days	92	92	92
Mean No. of obs/day	45.3	24.4	27.2
No. of Hours with obs	1523	2149	1945
Mean no. of hours/day with obs	16.6	23.4	21.1
% of hour periods without an ob	30.8	2.7	11.8
Mean (Ob-Bg)	0.4	-0.5	0.1
RMS (Ob-Bg)	1.0	1.1	1.0
unflagged data			
Mean (Ob-Bg)	-0.1	-0.4	0.1
RMS (Ob-Bg)	7.0	1.3	3.7
all data			
Revised RMS (Ob-Bg)	1.0	1.3	1.0
% of data flagged	70	1	18
Operating at end of period	YES	YES	YES
Performance			
Availability	Very Good	Acceptable	Good
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Very Good	Good	Acceptable
Comments			

Annex A - cont'd

WMO No./Country	44764/UK	44765/UK	44767/UK
Argos Id No.	21541	28466	21580
Period Within Area	01/10 - 02/10	01/10 - 31/12	01/10 - 10/11
Mean Latitude	44.1	35.4	53.3
Mean Longitude	-35.1	-55.8	-42.7
No. of Obs Received	43	1869	864
% of obs with Acceptable Position	100.0	89.1	99.8
% of Present Pressure	93.0	97.9	72.3
P. Tendency	81.4	94.5	71.6
Air Temperature	0.0	97.4	0.0
Wind Speed/Dir	0.0/ 0.0	0.0/ 0.0	0.0/ 0.0
Sea-Surface Temp.	76.7	0.0	72.2
Median delay (min)	69.5	16	112.5
Number of days	2	92	41
Mean No. of obs/day	21.5	20.3	21.1
No. of Hours with obs	40	1066	762
Mean no. of hours/day with obs	20.0	11.6	18.6
% of hour periods without an ob	9.1	51.6	21.5
Mean (Ob-Bg)	-0.4	-0.1	0.2
RMS (Ob-Bg) unflagged data	2.8	1.0	1.1
Mean (Ob-Bg)	-2.0	-0.7	0.3
RMS (Ob-Bg) all data	7.4	8.0	1.8
Revised RMS (Ob-Bg)	7.4	0.9	1.1
% of data flagged	20	51	2
Operating at end of period	NO	YES	NO
Performance			
Availability	Acceptable	Acceptable	Acceptable
Pressure Quality	Suspect	Acceptable	Acceptable
Timeliness	Good	Very Good	Good
Comments			

Annex A - cont'd

WMO No./Country	44770/UK	44771/UK	44772/UK
Argos Id No.	21627	25377	12412
Period Within Area	01/10 - 31/12	01/10 - 31/12	01/10 - 31/12
Mean Latitude	50.9	54.6	46.0
Mean Longitude	-32.3	-37.8	-20.5
No. of Obs Received	2264	2118	4255
% of obs with Acceptable Position	100.0	100.0	99.3
% of Present Pressure	87.2	82.0	97.5
P. Tendency	87.0	82.0	94.6
Air Temperature	0.0	0.0	76.3
Wind Speed/Dir	0.0/ 0.0	0.0/ 0.0	0.0/ 0.0
Sea-Surface Temp.	87.4	82.2	31.5
Median delay (min)	79	100	19
Number of days	92	92	92
Mean No. of obs/day	24.6	23.0	46.3
No. of Hours with obs	2136	2001	1554
Mean no. of hours/day with obs	23.2	21.8	16.9
% of hour periods without an ob	3.3	9.4	29.4
Mean (Ob-Bg)	-0.2	-0.1	-0.6
RMS (Ob-Bg) unflagged data	1.1	1.2	1.1
Mean (Ob-Bg)	-0.1	-0.1	-0.9
RMS (Ob-Bg) all data	1.3	1.3	6.7
Revised RMS (Ob-Bg)	1.3	1.3	1.2
% of data flagged	1	1	70
Operating at end of period	YES	YES	YES
Performance			
Availability	Acceptable	Acceptable	Very Good
Pressure Quality	Acceptable	Acceptable	Suspect
Timeliness	Good	Good	Very Good
Comments			

Annex A - cont'd

WMO No./Country	44774/UK	44775/UK	44776/UK
Argos Id No.	12286	25372	25371
Period Within Area	12/10 - 31/12	23/10 - 31/12	25/10 - 31/12
Mean Latitude	49.0	40.9	43.1
Mean Longitude	-38.9	-59.5	-51.4
No. of Obs Received	2854	1694	1646
% of obs with Acceptable Position	99.7	100.0	100.0
% of Present			
Pressure	96.5	94.2	93.6
P. Tendency	93.8	93.8	93.0
Air Temperature	96.4	0.0	0.0
Wind Speed/Dir	0.0/ 0.0	0.0/ 0.0	0.0/ 0.0
Sea-Surface Temp.	86.1	93.7	93.3
Median delay (min)	19	75	74
Number of days	81	70	68
Mean No. of obs/day	35.2	24.2	24.2
No. of Hours with obs	1347	1633	1584
Mean no. of hours/day with obs	16.6	23.3	23.3
% of hour periods without an ob	30.4	2.7	2.7
Mean (Ob-Bg)	-0.8	-0.2	0.2
RMS (Ob-Bg) unflagged data	1.3	1.1	1.3
Mean (Ob-Bg)	-1.0	-0.2	0.0
RMS (Ob-Bg) all data	4.3	1.3	6.0
Revised RMS (Ob-Bg)	1.4	1.3	1.3
% of data flagged	60	1	1
Operating at end of period	YES	YES	YES
Performance			
Availability	Very Good	Acceptable	Acceptable
Pressure Quality	Suspect	Acceptable	Acceptable
Timeliness	Very Good	Good	Good
Comments			

Annex A - cont'd

WMO No./Country	44778/UK	56542	61522
Argos Id No.	25370	??	??
Period Within Area	26/10 - 31/12	01/10 - 03/10	01/10 - 31/12
Mean Latitude	41.9	44.7	42.8
Mean Longitude	-51.8	-63.6	7.9
No. of Obs Received	1590	31	1015
% of obs with Acceptable Position	100.0	100.0	100.0
% of Present Pressure	93.5	96.8	96.7
P. Tendency	92.7	100.0	0.0
Air Temperature	0.0	96.8	0.0
Wind Speed/Dir	0.0/ 0.0	0.0/ 0.0	0.0/ 0.0
Sea-Surface Temp.	93.2	93.5	98.2
Median delay (min)	78	13	24
Number of days	67	3	92
Mean No. of obs/day	23.7	10.3	11.0
No. of Hours with obs	1538	26	898
Mean no. of hours/day with obs	23.0	8.7	9.8
% of hour periods without an ob	3.5	48.0	59.2
Mean (Ob-Bg)	0.3	-4.7	-0.8
RMS (Ob-Bg) unflagged data	1.2	4.8	1.3
Mean (Ob-Bg)	0.4	-5.1	-0.8
RMS (Ob-Bg) all data	1.6	5.1	1.4
Revised RMS (Ob-Bg)	1.3	5.1	1.4
% of data flagged	1	60	19
Operating at end of period	YES	NO	YES
Performance			
Availability	Acceptable	Poor	Poor
Pressure Quality	Acceptable	Suspect	Suspect
Timeliness	Good	Very Good	Very Good
Comments			

Annex A - cont'd

WMO No./Country	61523	62507/F	62508/F
Argos Id No.	??	10111	5822
Period Within Area	01/10 - 17/10	01/10 - 31/12	01/10 - 31/12
Mean Latitude	43.1	35.8	35.3
Mean Longitude	6.0	-23.1	-16.1
No. of Obs Received	185	3359	2550
% of obs with Acceptable Position	100.0	100.0	100.0
% of Present Pressure	97.3	96.8	95.0
P. Tendency	0.0	89.8	87.3
Air Temperature	0.0	0.0	69.2
Wind Speed/Dir	0.0/ 0.0	0.0/ 0.0	88.5/ 87.7
Sea-Surface Temp.	99.5	97.5	95.3
Median delay (min)	22	21	25
Number of days	17	92	92
Mean No. of obs/day	10.9	36.5	27.7
No. of Hours with obs	161	1759	1674
Mean no. of hours/day with obs	9.5	19.1	18.2
% of hour periods without an ob	58.7	20.3	24.2
Mean (Ob-Bg)	-1.2	-0.2	-0.4
RMS (Ob-Bg) unflagged data	1.5	0.7	1.4
Mean (Ob-Bg)	-1.2	-0.3	-0.4
RMS (Ob-Bg) all data	1.5	3.0	1.5
Revised RMS (Ob-Bg)	1.5	0.8	1.5
% of data flagged	20	58	44
Operating at end of period	NO	YES	YES
Performance			
Availability	Poor	Very Good	Good
Pressure Quality	Suspect	Acceptable	Acceptable
Timeliness	Very Good	Very Good	Very Good
Comments			

Annex A - cont'd

WMO No./Country	62509/F	62512/F	62513/F
Argos Id No.	14537	12730	12731
Period Within Area	01/10 - 31/12	01/10 - 29/12	01/10 - 31/12
Mean Latitude	44.6	40.7	46.6
Mean Longitude	-5.7	-21.5	-24.5
No. of Obs Received	3924	2483	3107
% of obs with Acceptable Position	100.0	100.0	100.0
% of Present Pressure	89.5	85.4	85.2
P. Tendency	89.2	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.	89.6	43.4	44.4
Median delay (min)	100	481	448
Number of days	92	90	92
Mean No. of obs/day	42.7	27.6	33.8
No. of Hours with obs	2122	1365	1643
Mean no. of hours/day with obs	23.1	15.2	17.9
% of hour periods without an ob	3.9	36.2	25.6
Mean (Ob-Bg)	-0.4	0.3	-0.5
RMS (Ob-Bg) unflagged data	1.1	0.9	1.8
Mean (Ob-Bg)	-0.4	0.3	-0.2
RMS (Ob-Bg) all data	1.7	0.9	2.2
Revised RMS (Ob-Bg)	1.2	0.9	2.1
% of data flagged	46	40	41
Operating at end of period	YES	NO	YES
Performance Availability	Very Good	Good	Good
Pressure Quality	Acceptable	Acceptable	Suspect
Timeliness	Good	Very Poor	Very Poor
Comments			

Annex A - cont'd

WMO No./Country	62514/F	62516/F	62517/F
Argos Id No.	7119	7445	18674
Period Within Area	01/10 - 31/12	01/10 - 19/12	01/10 - 31/12
Mean Latitude	52.9	44.6	37.7
Mean Longitude	-17.2	-21.8	-20.3
No. of Obs Received	2273	1997	2214
% of obs with Acceptable Position	100.0	100.0	100.0
% of Present			
Pressure	83.5	82.5	88.9
P. Tendency	82.6	81.3	88.9
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.	83.3	68.0	88.8
Median delay (min)	76	93.5	96
Number of days	92	80	92
Mean No. of obs/day	24.7	25.0	24.1
No. of Hours with obs	2115	1816	2123
Mean no. of hours/day with obs	23.0	22.7	23.1
% of hour periods without an ob	4.2	4.8	3.8
Mean (Ob-Bg)	0.2	-0.3	-0.3
RMS (Ob-Bg) unflagged data	1.5	1.1	0.8
Mean (Ob-Bg)	0.5	-0.4	-0.3
RMS (Ob-Bg) all data	2.9	2.6	0.8
Revised RMS (Ob-Bg)	1.9	1.1	0.8
% of data flagged	4	5	0
Operating at end of period	YES	NO	YES
Performance			
Availability	Acceptable	Good	Acceptable
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Good	Good	Good
Comments			

Annex A - cont'd

WMO No./Country	62519/F	62520/F	62596/NL
Argos Id No.	18693	14431	16391
Period Within Area	01/10 - 31/12	01/10 - 20/12	01/10 - 31/12
Mean Latitude	43.6	33.1	60.4
Mean Longitude	-16.5	-28.0	-23.8
No. of Obs Received	2206	3240	1999
% of obs with Acceptable Position	100.0	96.0	100.0
% of Present Pressure	87.9	97.7	88.3
P. Tendency	87.4	90.4	88.0
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.	87.6	97.1	88.0
Median delay (min)	92	18	76
Number of days	92	81	92
Mean No. of obs/day	24.0	40.0	21.7
No. of Hours with obs	2107	1531	1938
Mean no. of hours/day with obs	22.9	18.9	21.1
% of hour periods without an ob	4.5	20.8	12.1
Mean (Ob-Bg)	-0.9	-0.4	-0.5
RMS (Ob-Bg) unflagged data	1.2	0.8	1.1
Mean (Ob-Bg)	-0.9	-0.5	-0.5
RMS (Ob-Bg) all data	1.2	3.2	1.1
Revised RMS (Ob-Bg)	1.2	0.8	1.1
% of data flagged	0	61	1
Operating at end of period	YES	NO	YES
Performance			
Availability	Acceptable	Very Good	Acceptable
Pressure Quality	Suspect	Acceptable	Acceptable
Timeliness	Good	Very Good	Good
Comments			

Annex A - cont'd

WMO No./Country	62751	62752	62753
Argos Id No.	??	??	??
Period Within Area	10/10 - 27/11	23/10 - 15/11	22/10 - 02/11
Mean Latitude	46.5	45.8	45.5
Mean Longitude	-5.2	-5.5	-7.6
No. of Obs Received	360	172	80
% of obs with Acceptable Position	100.0	100.0	100.0
% of Present Pressure	99.4	100.0	100.0
P. Tendency	99.4	100.0	100.0
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.	99.4	100.0	100.0
Median delay (min)	123.5	107	129
Number of days	49	24	12
Mean No. of obs/day	7.3	7.2	6.7
No. of Hours with obs	360	172	80
Mean no. of hours/day with obs	7.3	7.2	6.7
% of hour periods without an ob	68.9	69.6	68.0
Mean (Ob-Bg)	-0.2	-0.3	-0.7
RMS (Ob-Bg) unflagged data	0.7	0.7	1.0
Mean (Ob-Bg)	-0.2	-0.3	-0.7
RMS (Ob-Bg) all data	0.8	0.7	1.0
Revised RMS (Ob-Bg)	0.8	0.7	1.0
% of data flagged	1	1	1
Operating at end of period	NO	NO	NO
Performance			
Availability	Poor	Poor	Poor
Pressure Quality	Acceptable	Acceptable	Suspect
Timeliness	Acceptable	Good	Acceptable
Comments			

Annex A - cont'd

WMO No./Country	62754	62756	62757
Argos Id No.	??	??	??
Period Within Area	23/10 - 15/11	23/10 - 17/11	23/10 - 15/11
Mean Latitude	47.4	45.2	46.2
Mean Longitude	-7.1	-6.9	-4.7
No. of Obs Received	173	189	173
% of obs with Acceptable Position	100.0	100.0	100.0
% of Present			
Pressure	100.0	100.0	100.0
P. Tendency	100.0	100.0	100.0
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.	100.0	100.0	100.0
Median delay (min)	104	112	127
Number of days	24	26	24
Mean No. of obs/day	7.2	7.3	7.2
No. of Hours with obs	173	189	173
Mean no. of hours/day with obs	7.2	7.3	7.2
% of hour periods without an ob	69.2	68.9	69.4
Mean (Ob-Bg)	-1.0	-0.7	-0.1
RMS (Ob-Bg) unflagged data	1.2	0.9	0.6
Mean (Ob-Bg)	-1.0	-0.7	-0.1
RMS (Ob-Bg) all data	1.2	1.0	0.6
Revised RMS (Ob-Bg)	1.2	1.0	0.6
% of data flagged	2	2	1
Operating at end of period	NO	NO	NO
Performance			
Availability	Poor	Poor	Poor
Pressure Quality	Suspect	Suspect	Acceptable
Timeliness	Good	Good	Acceptable
Comments			

Annex A - cont'd

WMO No./Country	62758	62759	62841
Argos Id No.	??	??	??
Period Within Area	23/10 - 05/12	23/10 - 15/11	23/10 - 15/11
Mean Latitude	48.2	46.9	45.8
Mean Longitude	-7.3	-5.1	-8.5
No. of Obs Received	319	171	177
% of obs with Acceptable Position	100.0	100.0	100.0
% of Present Pressure	100.0	100.0	100.0
P. Tendency	100.0	100.0	100.0
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.	100.0	100.0	100.0
Median delay (min)	104	115	126
Number of days	44	24	24
Mean No. of obs/day	7.3	7.1	7.4
No. of Hours with obs	319	171	177
Mean no. of hours/day with obs	7.3	7.1	7.4
% of hour periods without an ob	69.3	69.6	68.7
Mean (Ob-Bg)	-0.4	0.0	-0.3
RMS (Ob-Bg) unflagged data	0.8	0.6	0.7
Mean (Ob-Bg)	-0.4	0.0	-0.3
RMS (Ob-Bg) all data	0.8	0.6	0.7
Revised RMS (Ob-Bg)	0.8	0.6	0.7
% of data flagged	2	2	0
Operating at end of period	NO	NO	NO
Performance			
Availability	Poor	Poor	Poor
Pressure Quality	Acceptable	Acceptable	Acceptable
Timeliness	Good	Good	Acceptable
Comments			

Annex A - cont'd

WMO No./Country	62842	63662	64517/F
Argos Id No.	??	??	14178
Period Within Area	23/10 - 15/11	11/11 - 31/12	01/10 - 31/12
Mean Latitude	47.3	77.3	58.2
Mean Longitude	-5.9	-7.2	-16.9
No. of Obs Received	176	347	4136
% of obs with Acceptable Position	100.0	99.4	100.0
% of Present Pressure	100.0	88.2	86.7
P. Tendency	100.0	0.0	86.6
Air Temperature	0.0	55.3	0.0
Wind Speed/Dir	0.0/ 0.0	0.0/ 0.0	0.0/ 0.0
Sea-Surface Temp.	100.0	0.0	86.8
Median delay (min)	107.5	138	85.5
Number of days	24	51	92
Mean No. of obs/day	7.3	6.8	45.0
No. of Hours with obs	176	315	2142
Mean no. of hours/day with obs	7.3	6.2	23.3
% of hour periods without an ob	68.8	73.8	3.0
Mean (Ob-Bg)	-0.1	0.3	-0.7
RMS (Ob-Bg) unflagged data	0.7	1.4	1.2
Mean (Ob-Bg)	-0.1	0.3	-0.7
RMS (Ob-Bg) all data	0.7	1.7	1.3
Revised RMS (Ob-Bg)	0.7	1.7	1.3
% of data flagged	1	5	48
Operating at end of period	NO	YES	YES
Performance Availability	Poor	Poor	Very Good
Pressure Quality	Acceptable	Acceptable	Suspect
Timeliness	Good	Acceptable	Good
Comments			

Annex A - cont'd

WMO No./Country	64521/F	64546/N	64548/IR
Argos Id No.	23620	3675	1153
Period Within Area	01/10 - 16/11	01/10 - 11/12	01/10 - 31/12
Mean Latitude	61.2	48.6	59.2
Mean Longitude	-25.0	-12.5	-12.4
No. of Obs Received	2880	3010	4665
% of obs with Acceptable Position	100.0	98.2	98.4
% of Present Pressure	85.3	17.6	92.0
P. Tendency	0.0	37.6	88.9
Air Temperature	0.0	97.9	91.1
Wind Speed/Dir	0.0/ 0.0	0.0/ 0.0	0.0/ 0.0
Sea-Surface Temp.	43.9	76.7	76.4
Median delay (min)	427	17	17
Number of days	47	72	92
Mean No. of obs/day	61.3	41.8	50.7
No. of Hours with obs	1025	1100	1595
Mean no. of hours/day with obs	21.8	15.3	17.3
% of hour periods without an ob	7.3	35.8	27.5
Mean (Ob-Bg)	-0.6	3.2	-0.8
RMS (Ob-Bg) unflagged data	1.4	3.9	1.3
Mean (Ob-Bg)	-0.6	6.2	-0.9
RMS (Ob-Bg) all data	1.4	8.5	2.8
Revised RMS (Ob-Bg)	1.4	8.3	1.6
% of data flagged	55	83	73
Operating at end of period	NO	NO	YES
Performance			
Availability	Very Good	Very Good	Very Good
Pressure Quality	Suspect	Suspect	Suspect
Timeliness	Very Poor	Very Good	Very Good
Comments			

Annex A - cont'd

WMO No./Country	64698/F	64699/F	65593/NL
Argos Id No.	29867	29868	4228
Period Within Area	01/10 - 31/12	01/10 - 31/12	01/10 - 31/12
Mean Latitude	60.8	57.1	61.4
Mean Longitude	-28.0	-50.8	-31.1
No. of Obs Received	3732	3680	6042
% of obs with Acceptable Position	100.0	100.0	92.3
% of Present Pressure	90.2	92.6	97.1
P. Tendency	90.2	92.4	62.6
Air Temperature	0.0	0.0	97.2
Wind Speed/Dir	0.0/ 0.0	0.0/ 0.0	0.0/ 0.0
Sea-Surface Temp.	90.1	92.6	80.3
Median delay (min)	42	42	16
Number of days	92	92	92
Mean No. of obs/day	40.6	40.0	65.7
No. of Hours with obs	2168	2156	1749
Mean no. of hours/day with obs	23.6	23.4	19.0
% of hour periods without an ob	1.8	2.4	20.7
Mean (Ob-Bg)	-0.7	-0.3	-0.8
RMS (Ob-Bg)	1.1	1.3	1.5
unflagged data			
Mean (Ob-Bg)	-0.7	0.9	-0.7
RMS (Ob-Bg)	1.2	4.7	3.5
all data			
Revised RMS (Ob-Bg)	1.2	4.7	2.9
% of data flagged	40	45	77
Operating at end of period	YES	YES	YES
Performance			
Availability	Very Good	Very Good	Very Good
Pressure Quality	Suspect	Suspect	Suspect
Timeliness	Very Good	Very Good	Very Good
Comments			

Annex A - cont'd

WMO No./Country	65599/UK	65600/N	65601/D
Argos Id No.	28477	3676	3039
Period Within Area	01/10 - 12/12	01/10 - 31/12	01/10 - 31/12
Mean Latitude	59.9	57.6	60.1
Mean Longitude	-22.4	-13.6	-21.7
No. of Obs Received	4578	5913	4470
% of obs with Acceptable Position	99.4	99.0	98.6
% of Present Pressure	96.9	97.8	95.0
P. Tendency	91.0	67.8	92.9
Air Temperature	0.0	97.5	94.4
Wind Speed/Dir	0.0/ 0.0	0.0/ 0.0	0.0/ 0.0
Sea-Surface Temp.	96.8	79.3	84.3
Median delay (min)	17	16	17
Number of days	73	92	92
Mean No. of obs/day	62.7	64.3	48.6
No. of Hours with obs	1285	1707	1599
Mean no. of hours/day with obs	17.6	18.6	17.4
% of hour periods without an ob	26.4	22.5	27.4
Mean (Ob-Bg)	-0.3	-0.9	-0.7
RMS (Ob-Bg) unflagged data	1.1	1.5	1.2
Mean (Ob-Bg)	-0.7	-0.8	-0.8
RMS (Ob-Bg) all data	8.4	3.0	3.1
Revised RMS (Ob-Bg)	1.0	1.5	1.4
% of data flagged	77	77	71
Operating at end of period	NO	YES	YES
Performance			
Availability	Very Good	Very Good	Very Good
Pressure Quality	Acceptable	Suspect	Suspect
Timeliness	Very Good	Very Good	Very Good
Comments			

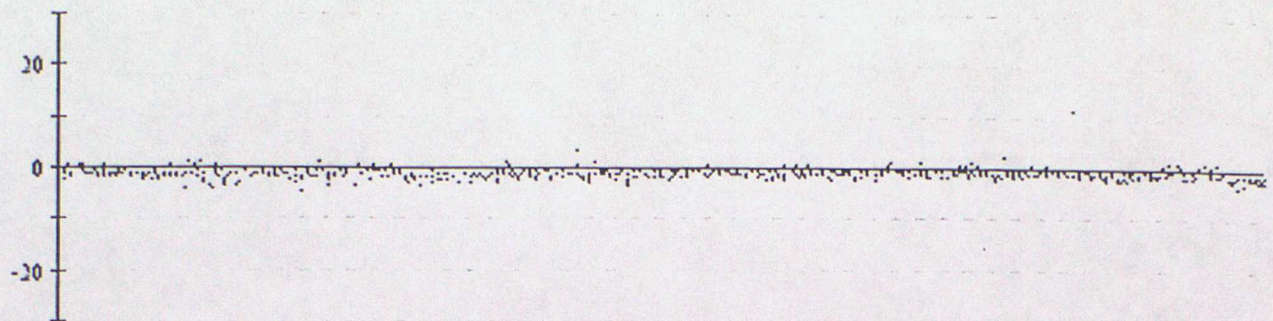
Annex A - cont'd

WMO No./Country	65602/IR	65662/D	65663/D
Argos Id No.	6667	9307	9308
Period Within Area	01/10 - 31/12	17/11 - 31/12	17/11 - 31/12
Mean Latitude	59.8	58.9	57.5
Mean Longitude	-29.8	-36.7	-40.2
No. of Obs Received	4807	703	731
% of obs with Acceptable Position	98.5	100.0	100.0
% of Present Pressure	94.7	85.1	88.4
P. Tendency	92.3	81.4	85.0
Air Temperature	94.1	84.5	88.9
Wind Speed/Dir	0.0/ 0.0	0.0/ 0.0	0.0/ 0.0
Sea-Surface Temp.	84.7	80.4	83.7
Median delay (min)	16	23	22
Number of days	92	45	45
Mean No. of obs/day	52.3	15.6	16.2
No. of Hours with obs	1655	530	564
Mean no. of hours/day with obs	18.0	11.8	12.5
% of hour periods without an ob	24.9	49.9	47.5
Mean (Ob-Bg)	-0.7	-0.8	-1.1
RMS (Ob-Bg) unflagged data	1.3	1.1	1.6
Mean (Ob-Bg)	-0.8	-0.8	-1.1
RMS (Ob-Bg) all data	2.8	1.1	1.5
Revised RMS (Ob-Bg)	1.4	1.1	1.5
% of data flagged	73	36	35
Operating at end of period	YES	YES	YES
Performance			
Availability	Very Good	Acceptable	Acceptable
Pressure Quality	Suspect	Suspect	Suspect
Timeliness	Very Good	Very Good	Very Good
Comments			

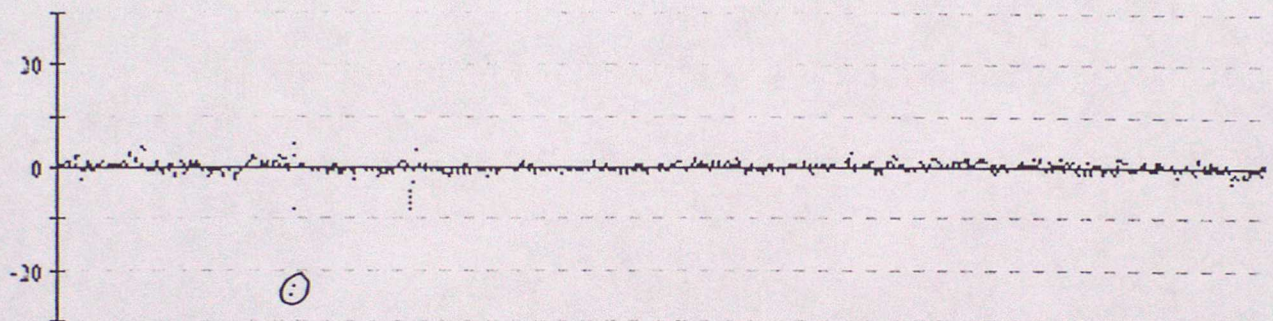
ANNEX B - TIME SERIES PLOTS OF PRESSURE

Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

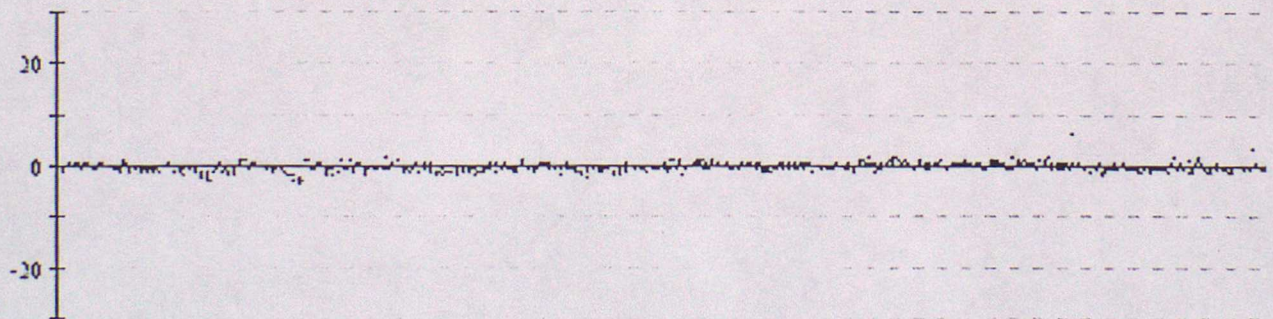
41505 Pressure



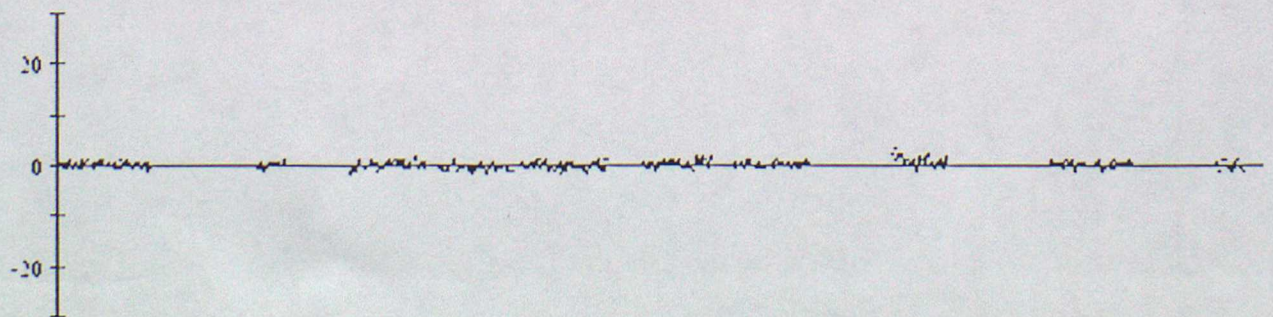
41521 Pressure



41523 Pressure

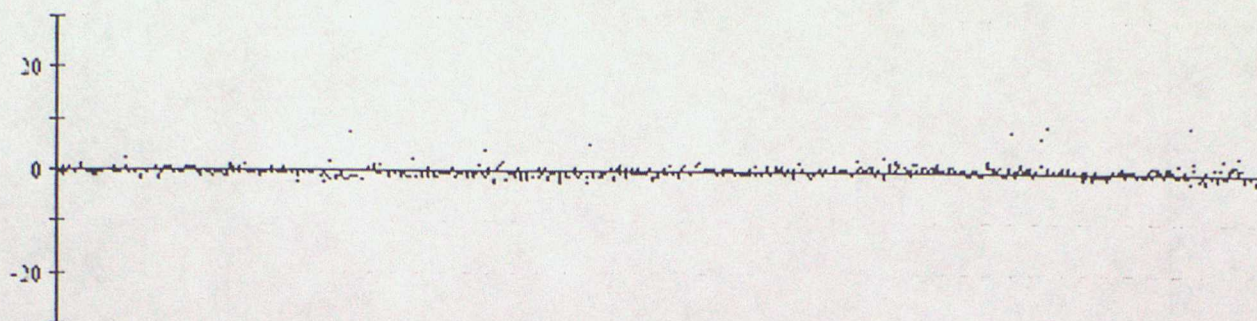


41571 Pressure

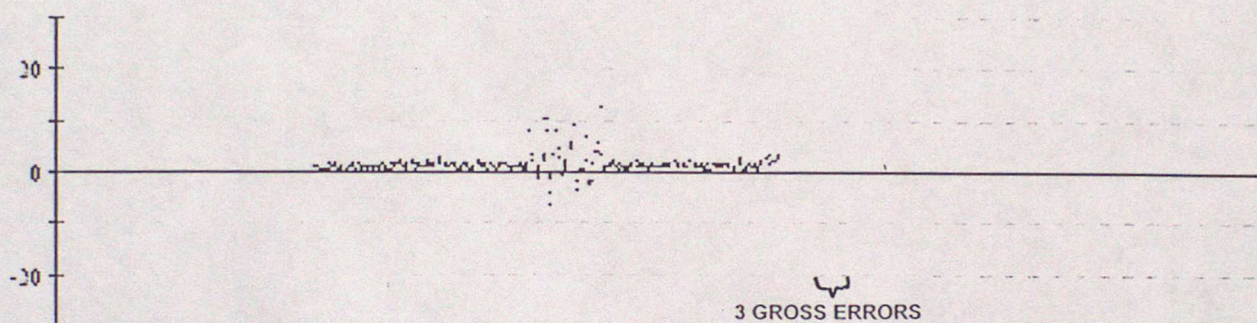


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

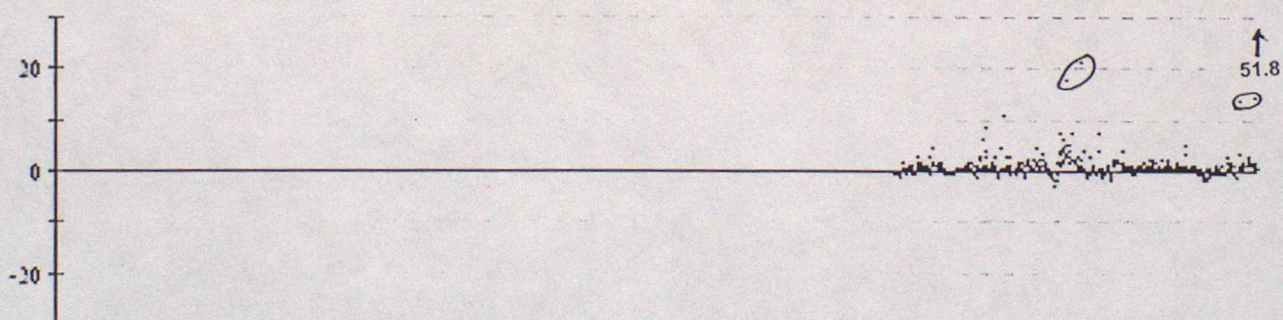
41644 Pressure



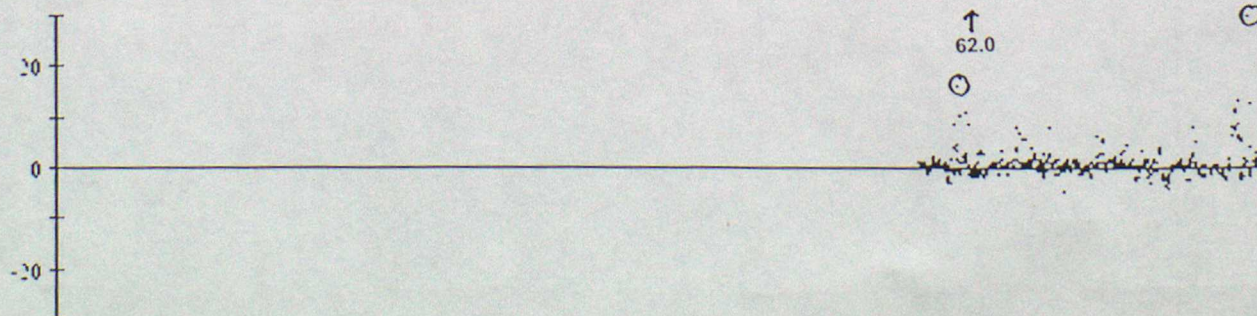
44513 Pressure



44546 Pressure

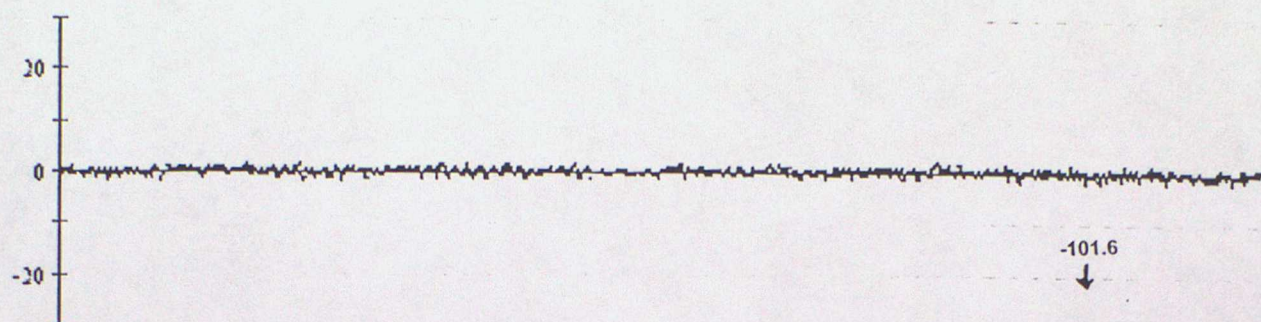


44548 Pressure

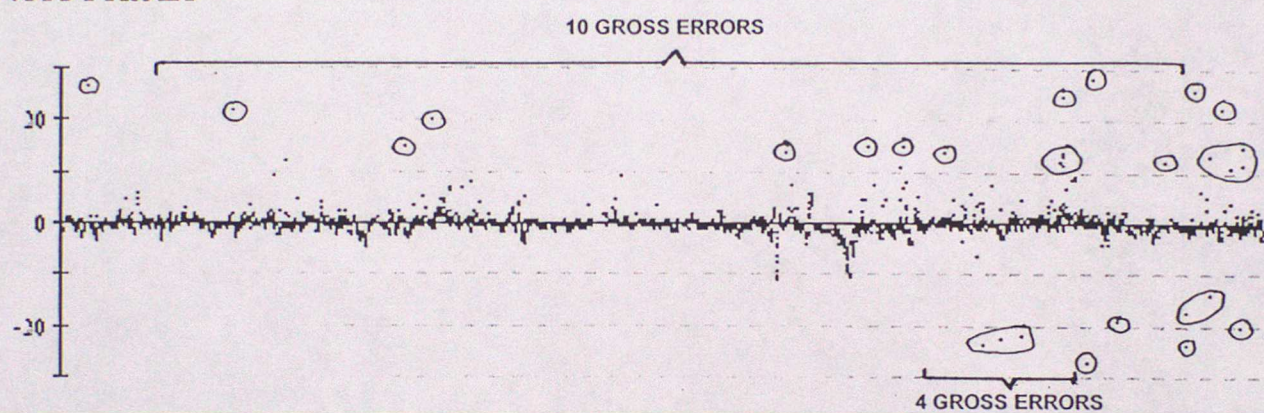


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

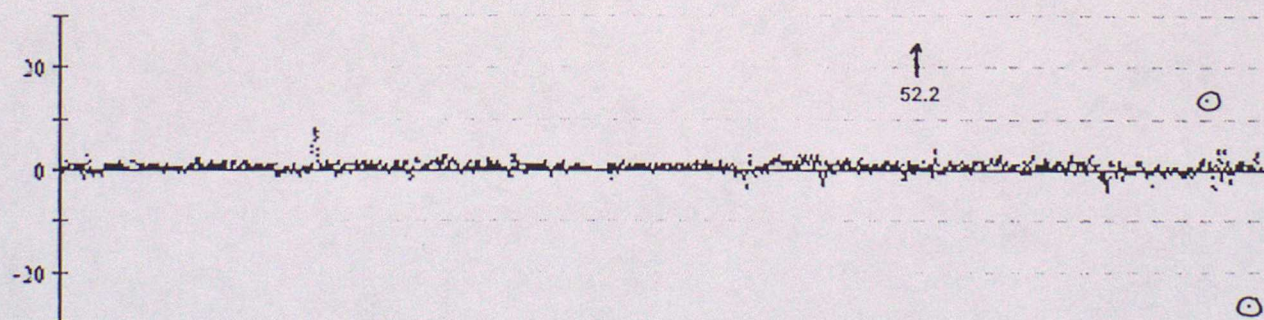
44608 Pressure



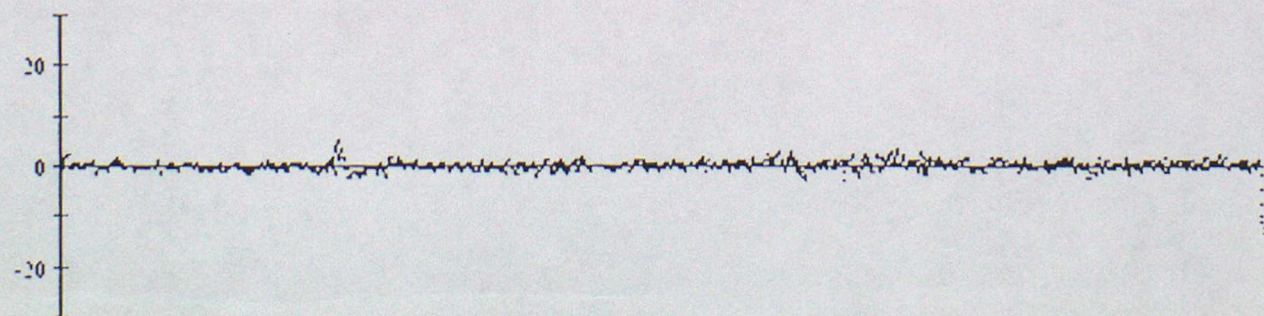
44610 Pressure



44611 Pressure

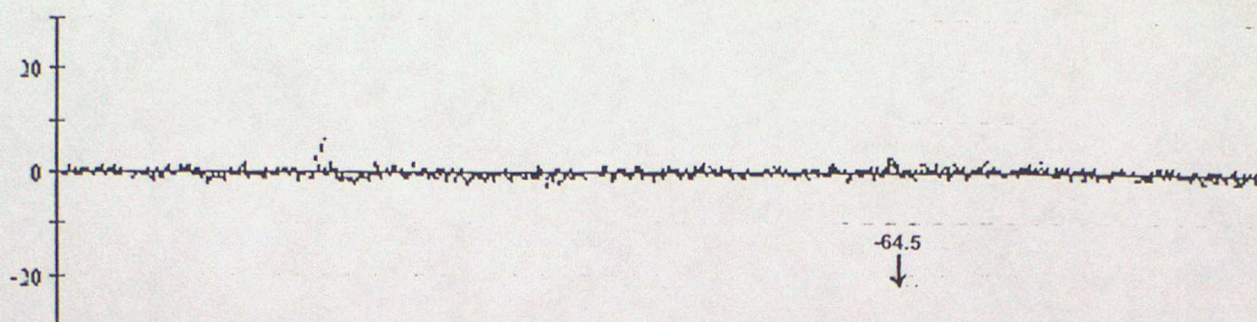


44612 Pressure

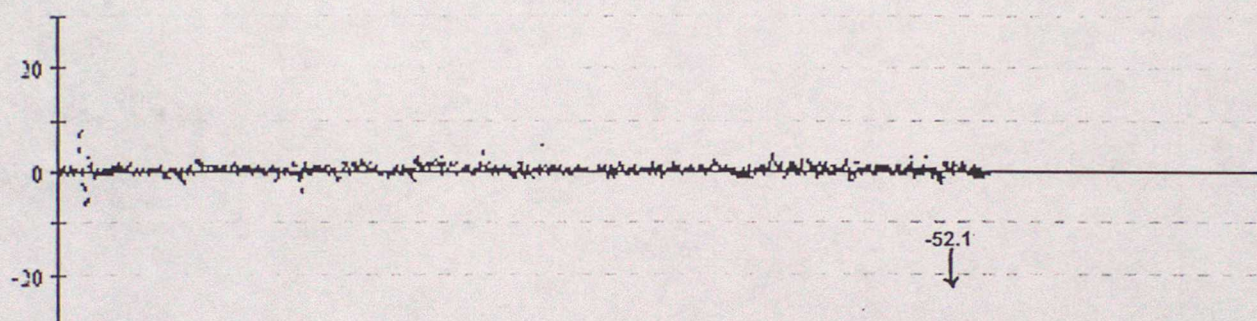


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

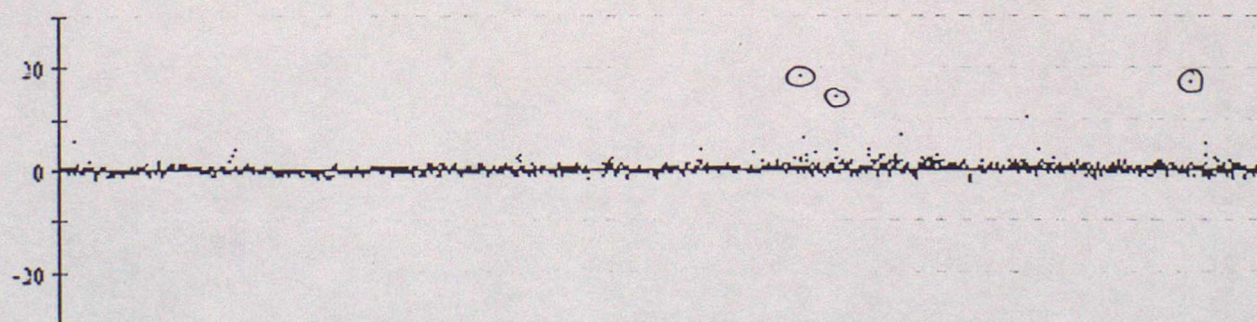
44613 Pressure



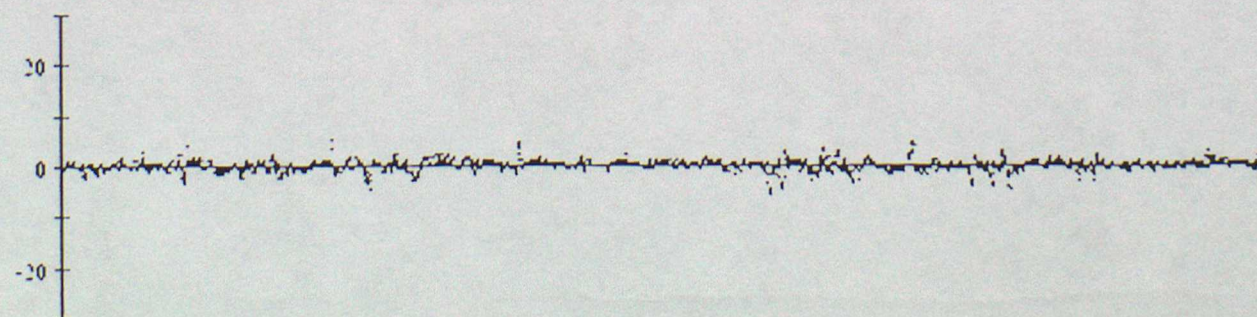
44617 Pressure



44620 Pressure

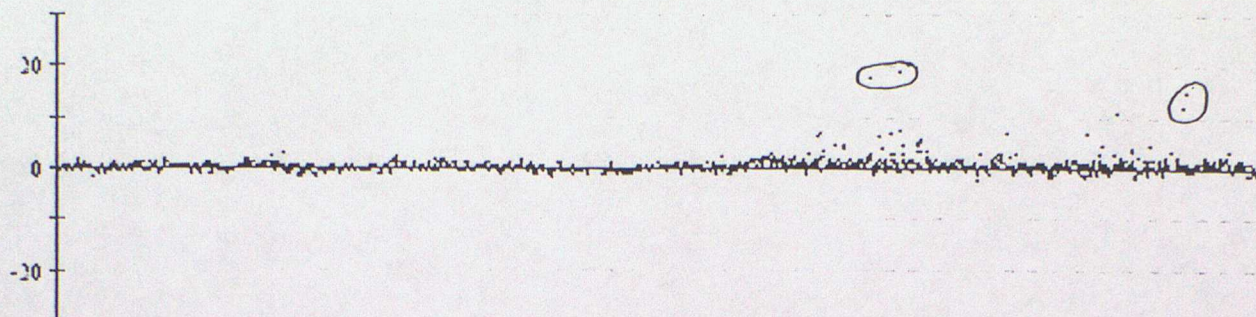


44622 Pressure

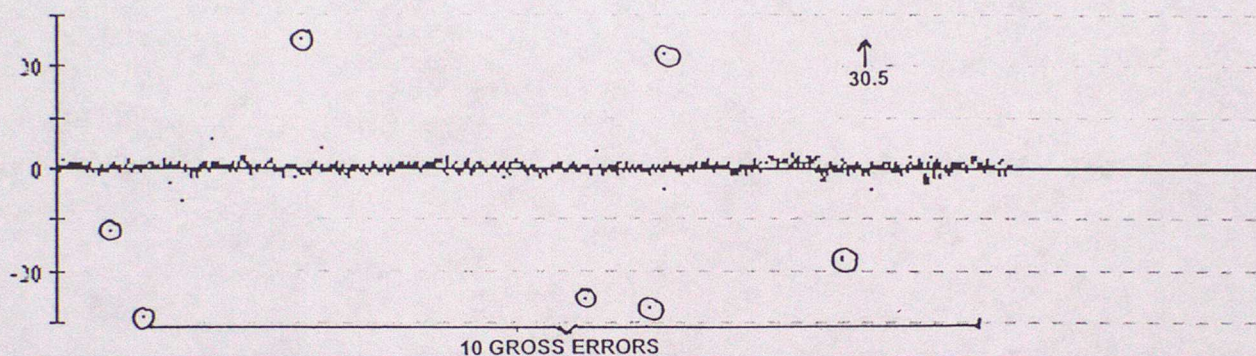


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

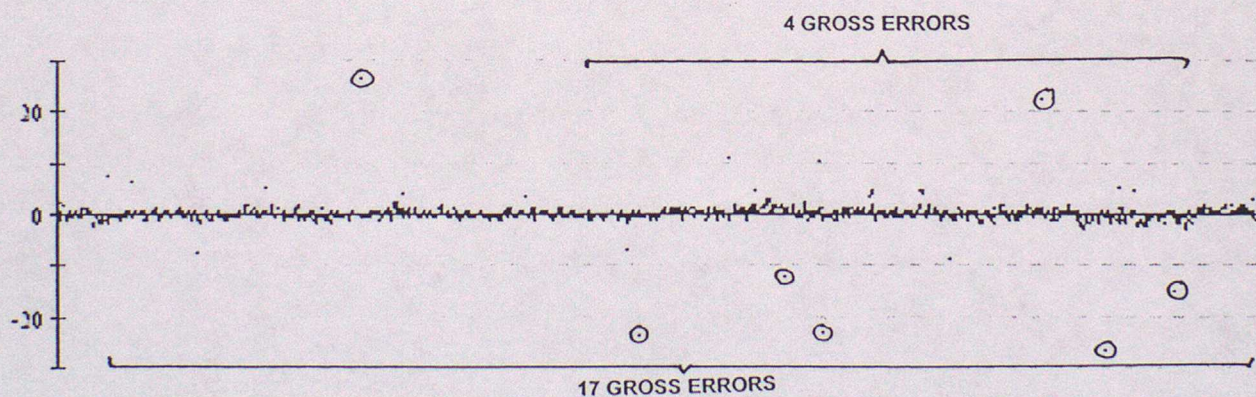
44623 Pressure



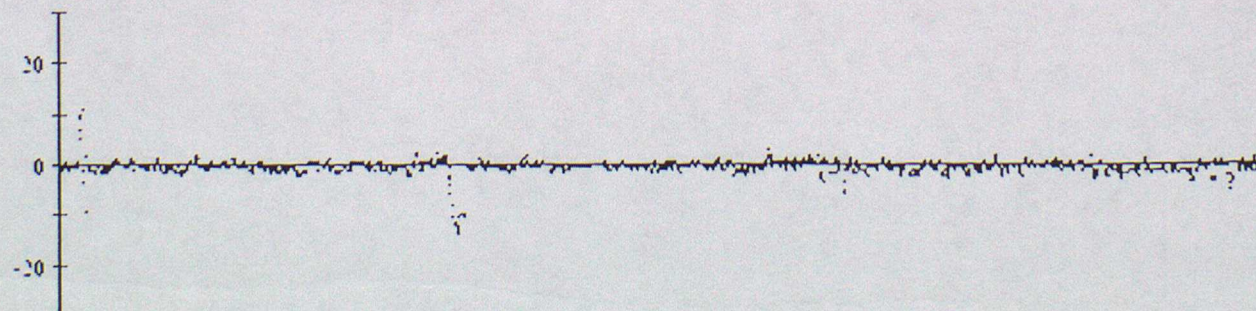
44626 Pressure



44628 Pressure

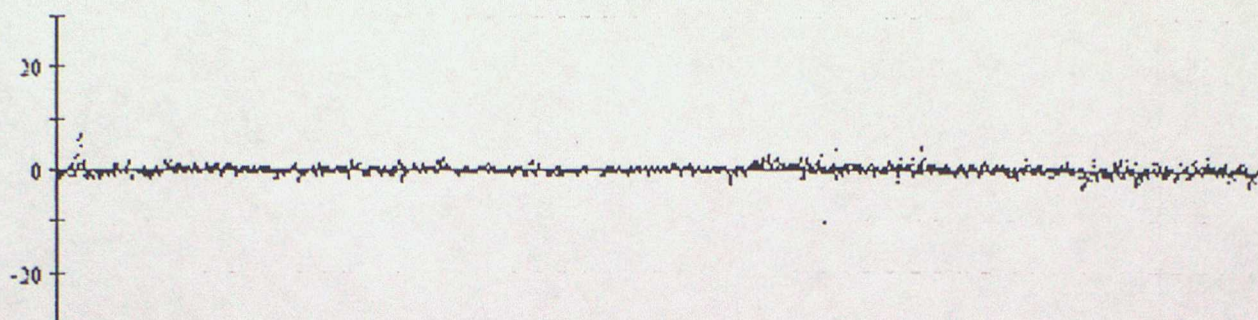


44723 Pressure

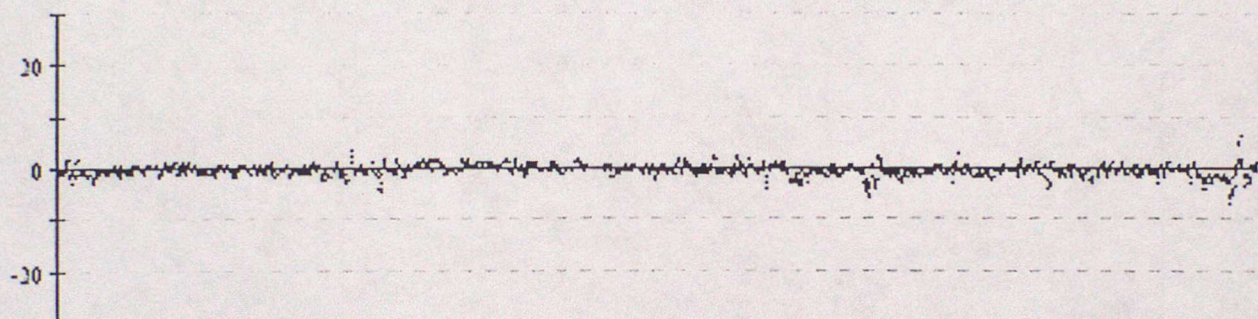


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

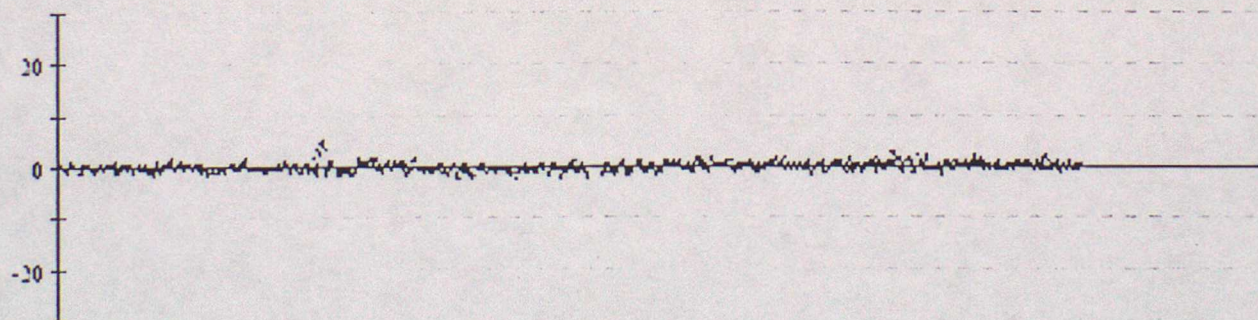
44724 Pressure



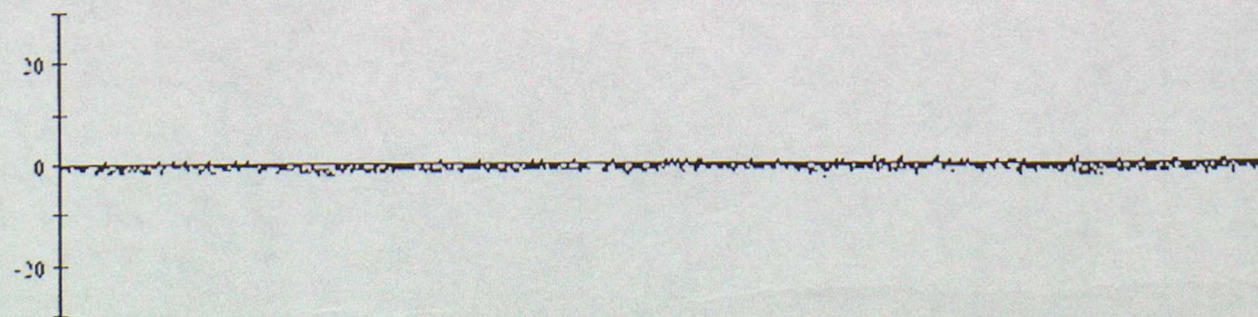
44725 Pressure



44726 Pressure

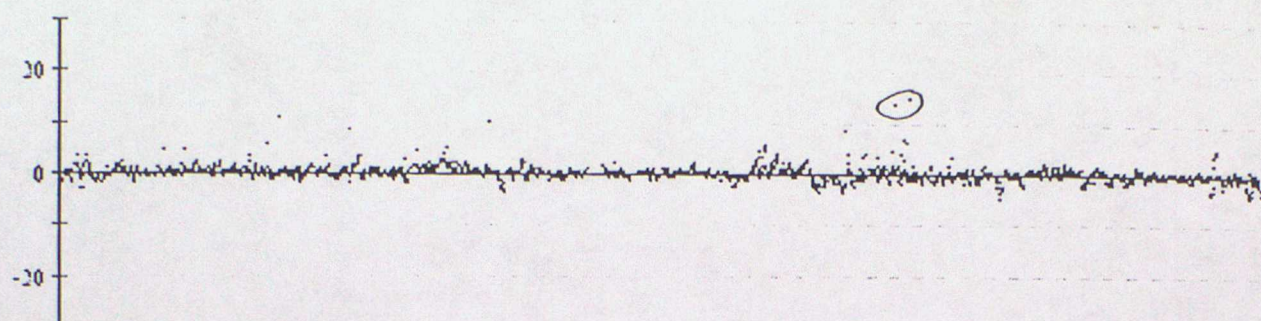


44727 Pressure

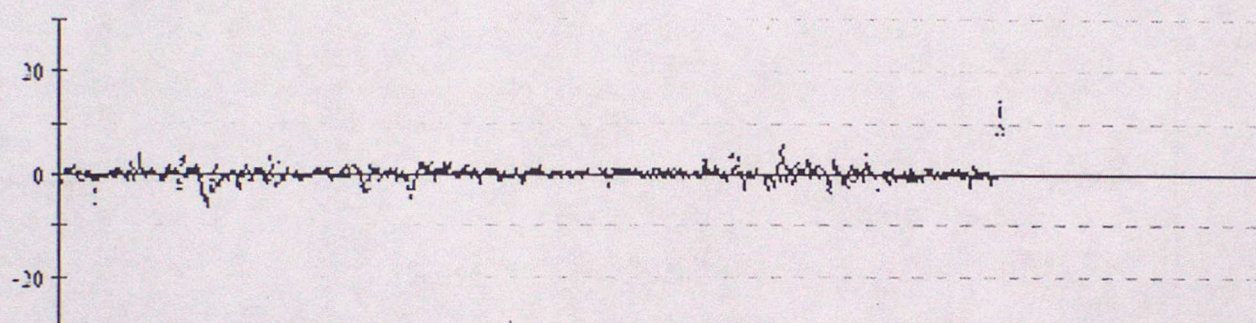


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

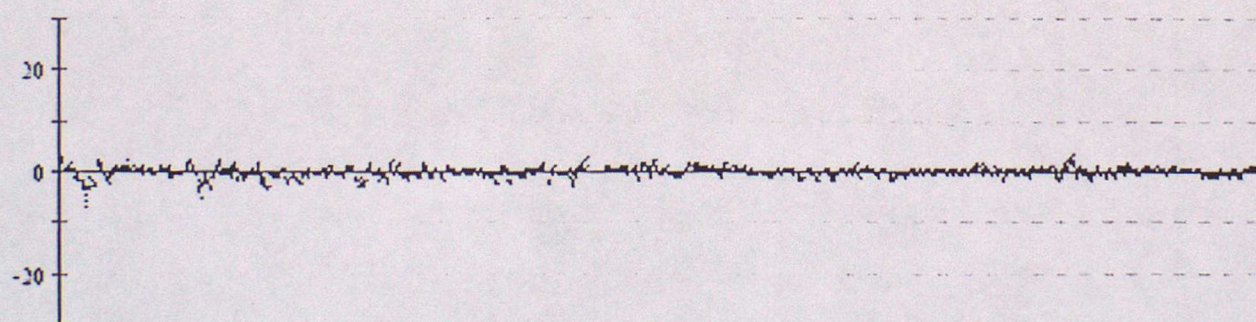
44729 Pressure



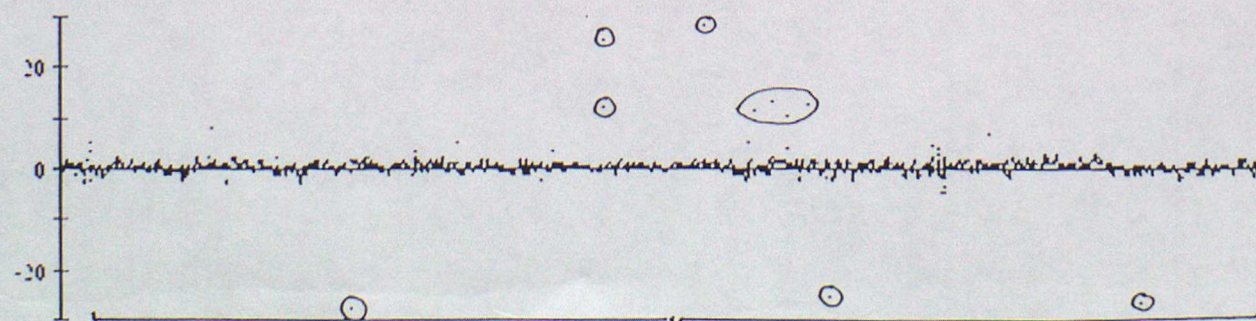
44730 Pressure



44741 Pressure



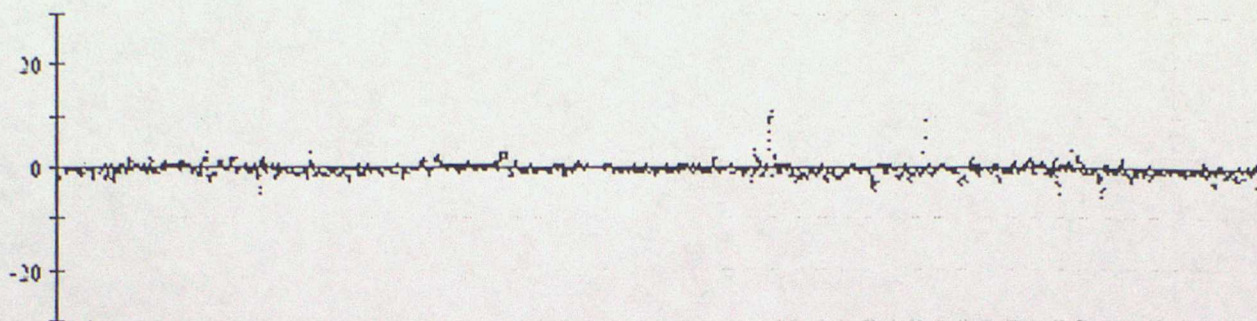
44743 Pressure



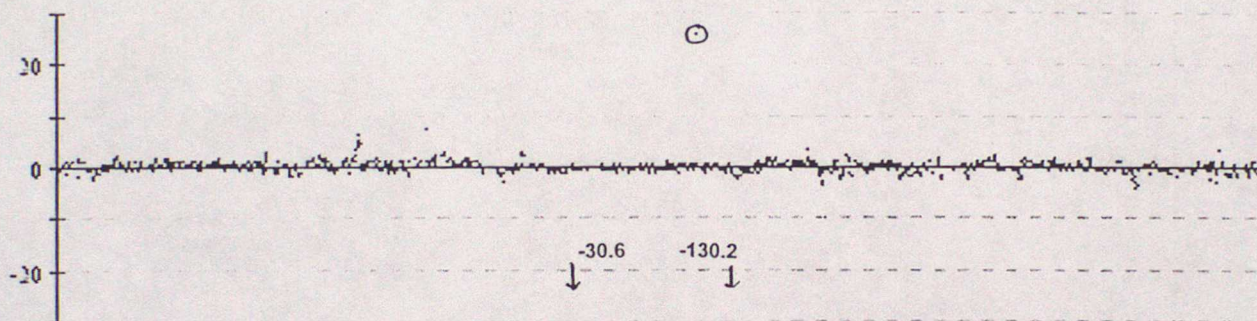
23 GROSS ERRORS

Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

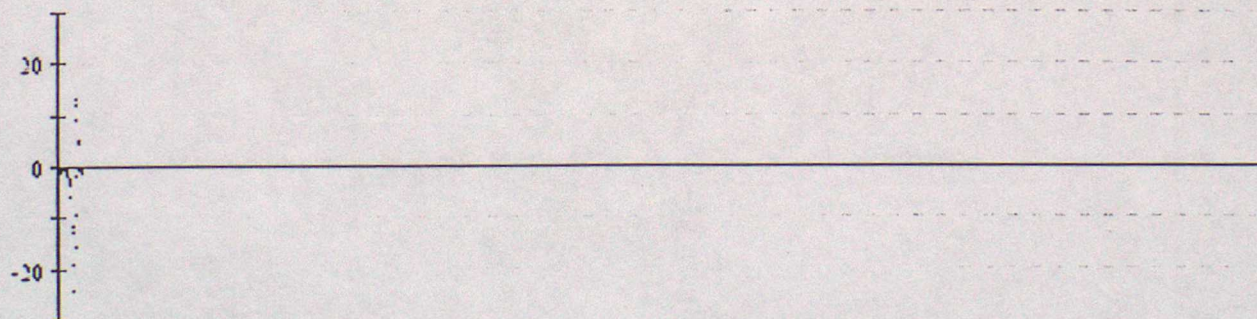
44761 Pressure



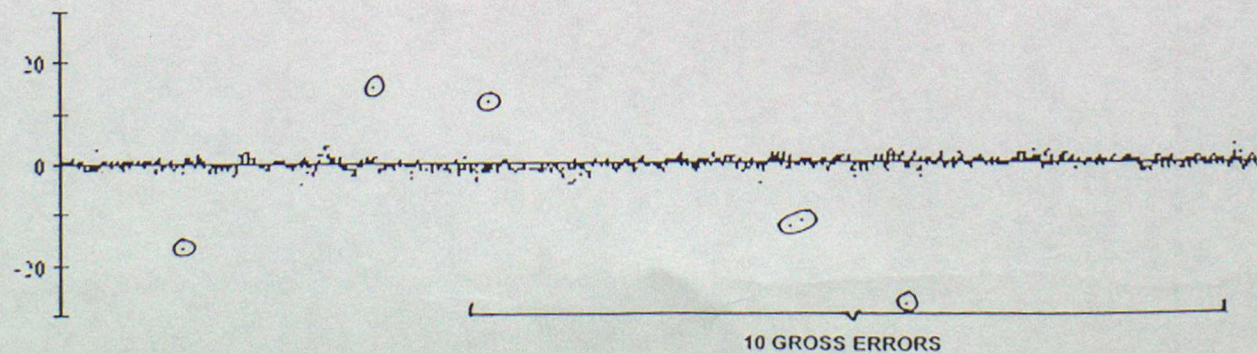
44762 Pressure



44764 Pressure

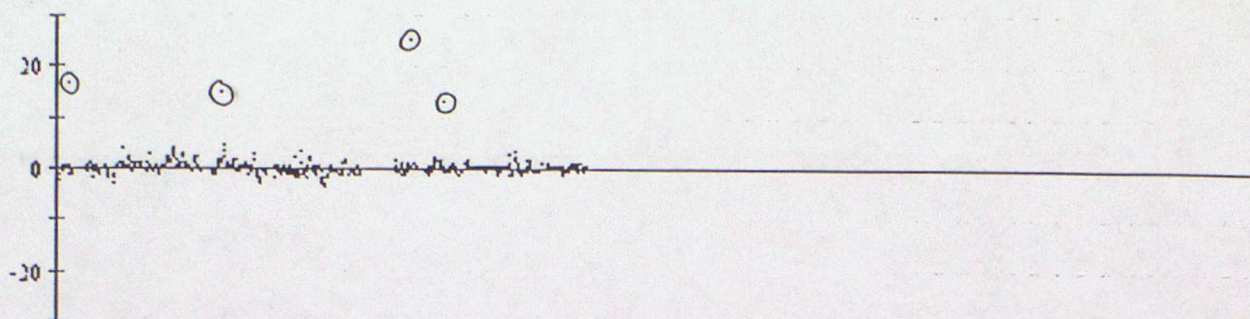


44765 Pressure

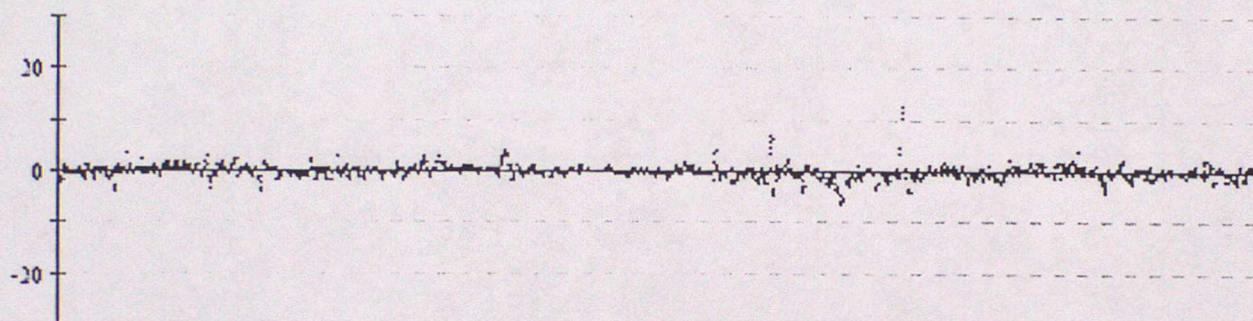


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

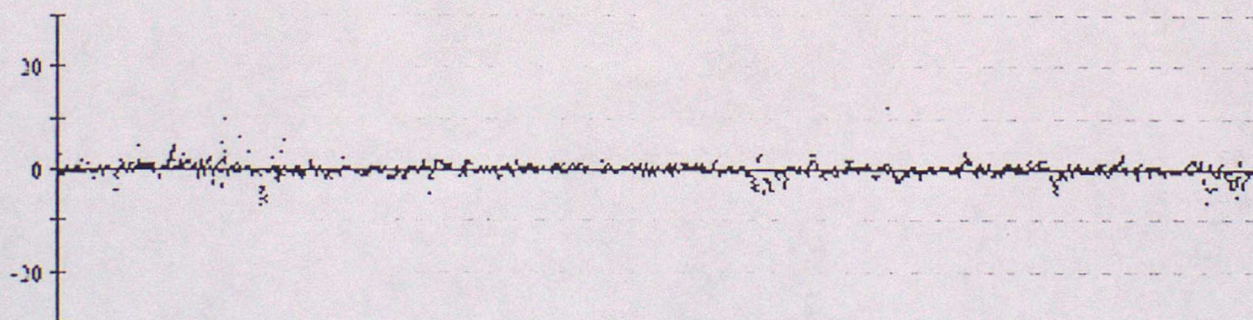
44767 Pressure



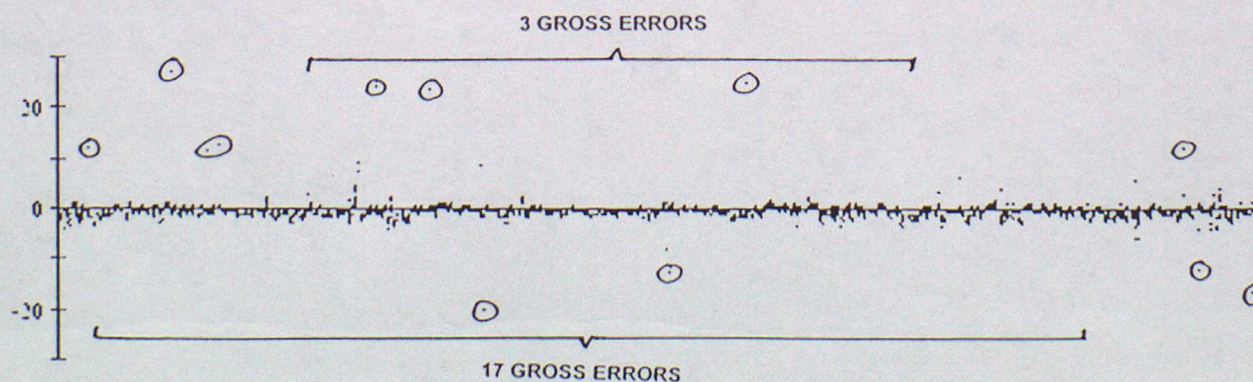
44770 Pressure



44771 Pressure

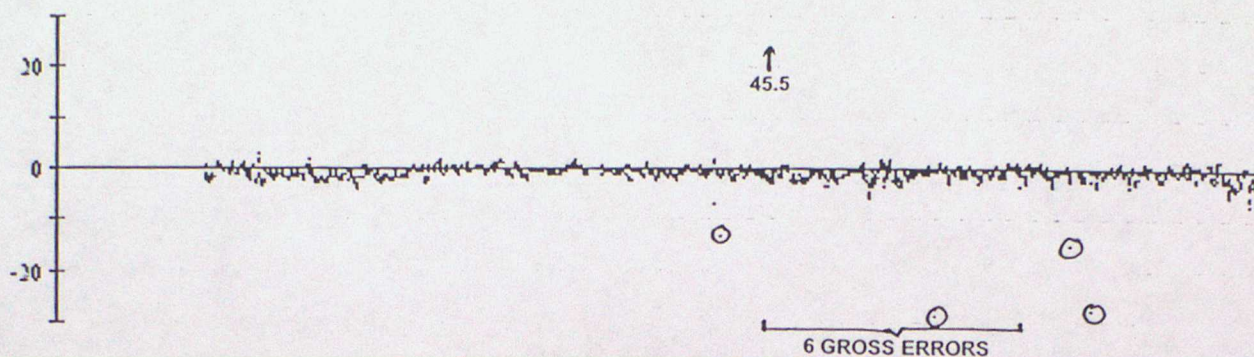


44772 Pressure

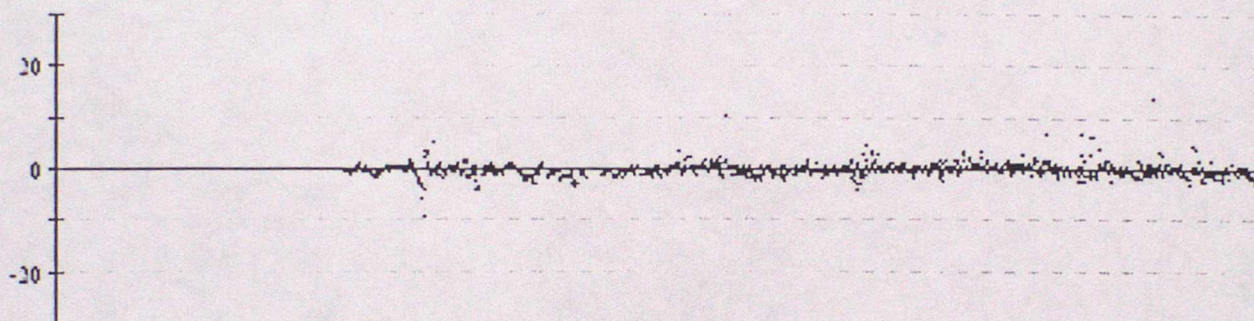


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

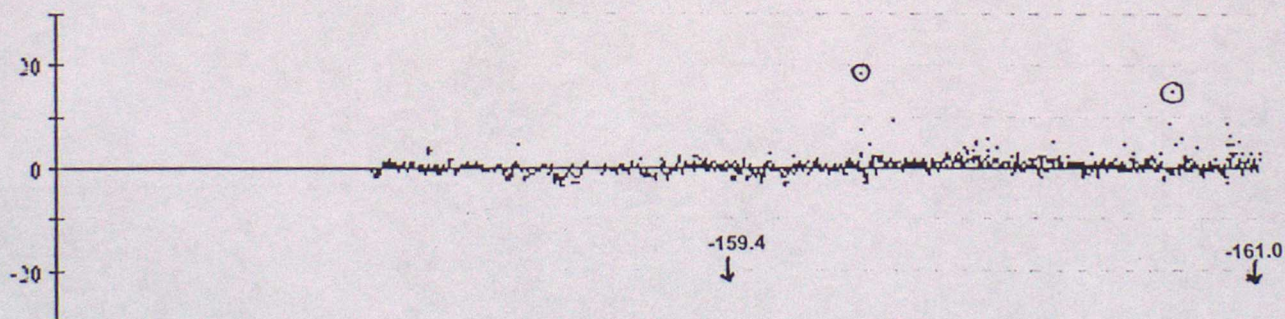
44774 Pressure



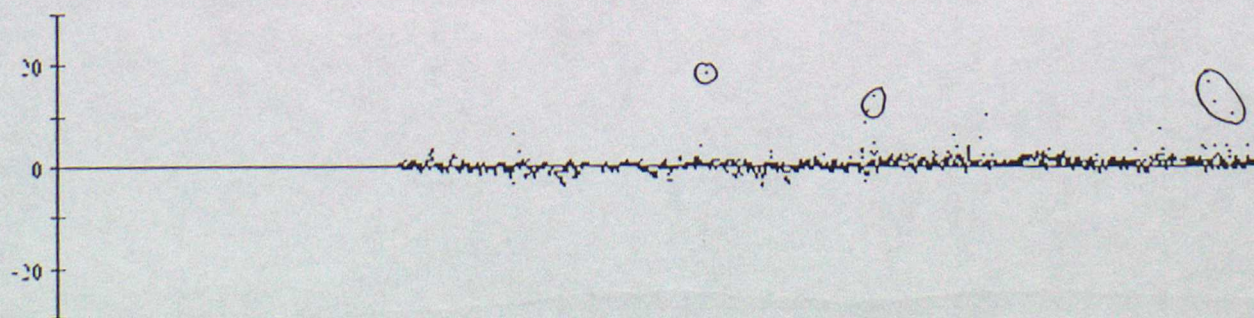
44775 Pressure



44776 Pressure

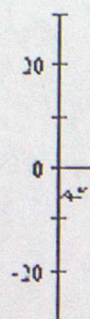


44778 Pressure

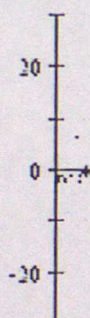


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

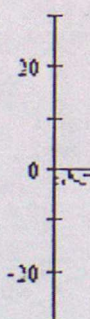
56542 Pressure



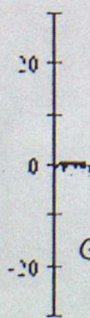
61522 Pressure



61523 Pressure

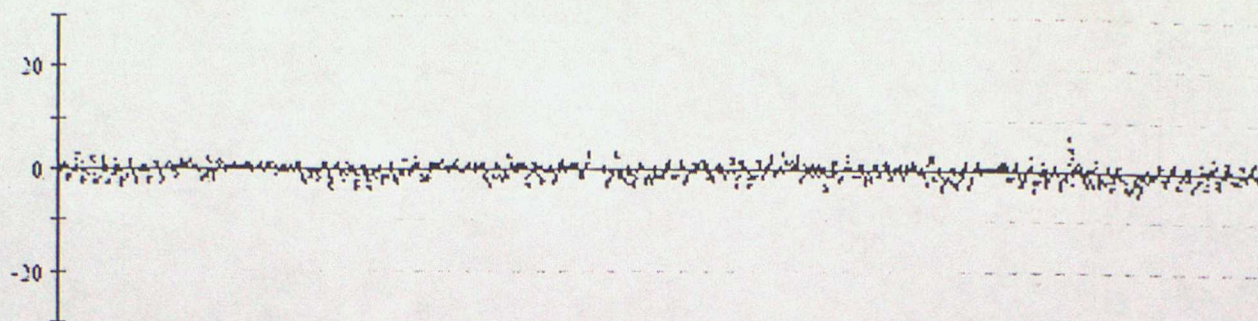


62507 Pressure

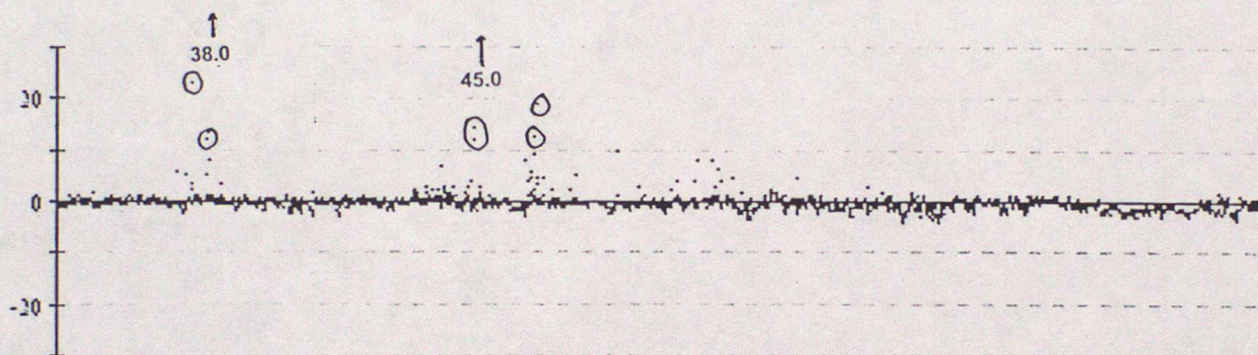


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

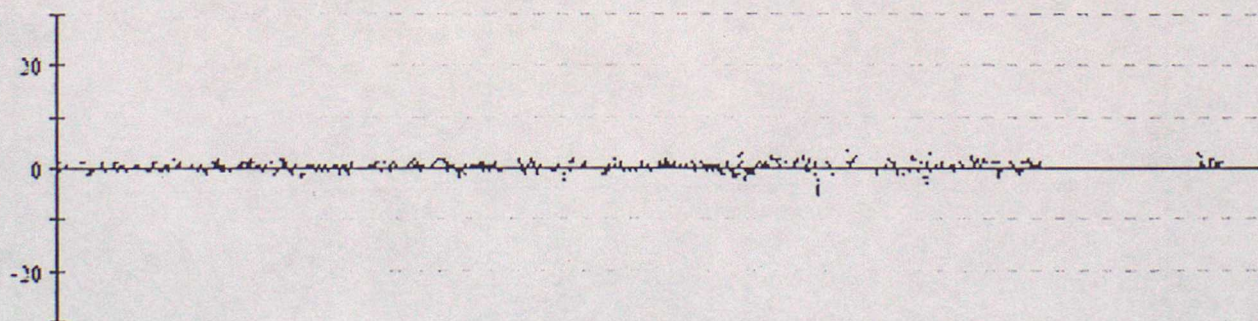
62508 Pressure



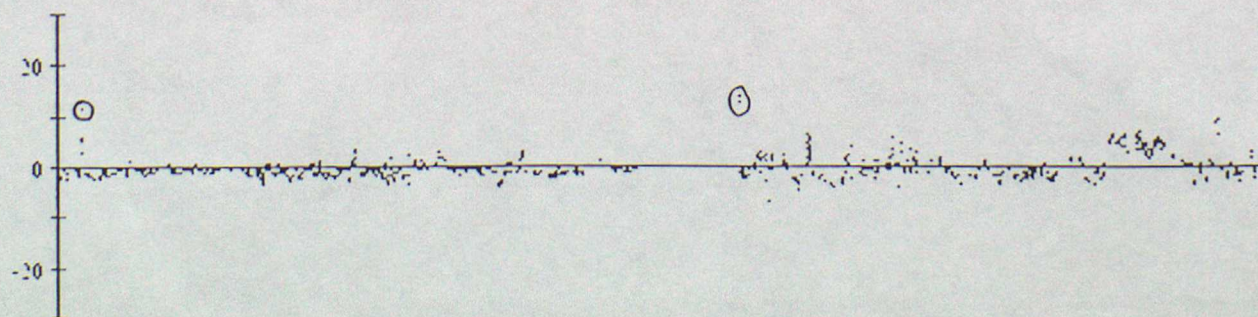
62509 Pressure



62512 Pressure

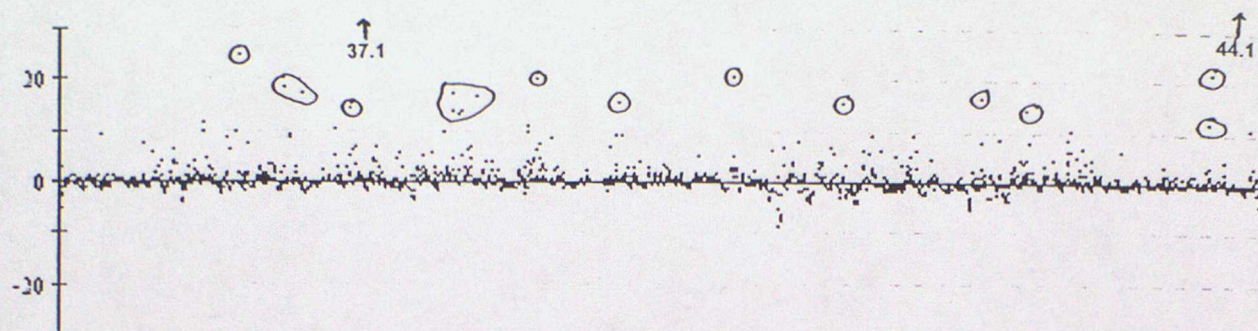


62513 Pressure

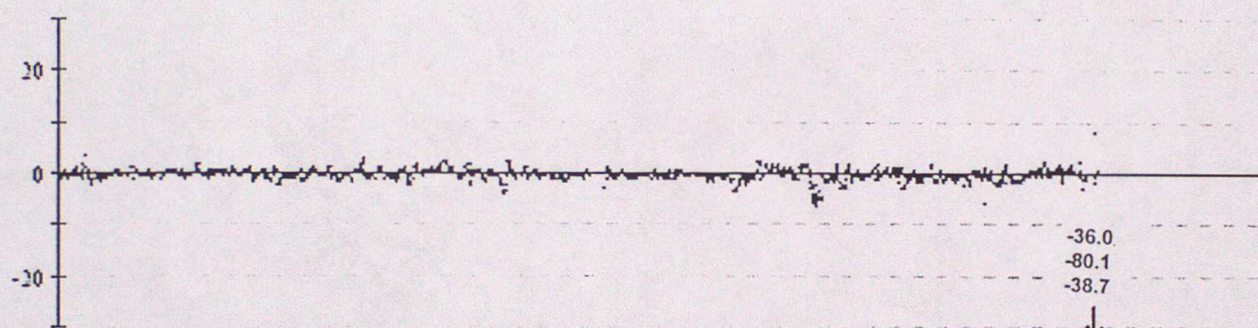


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

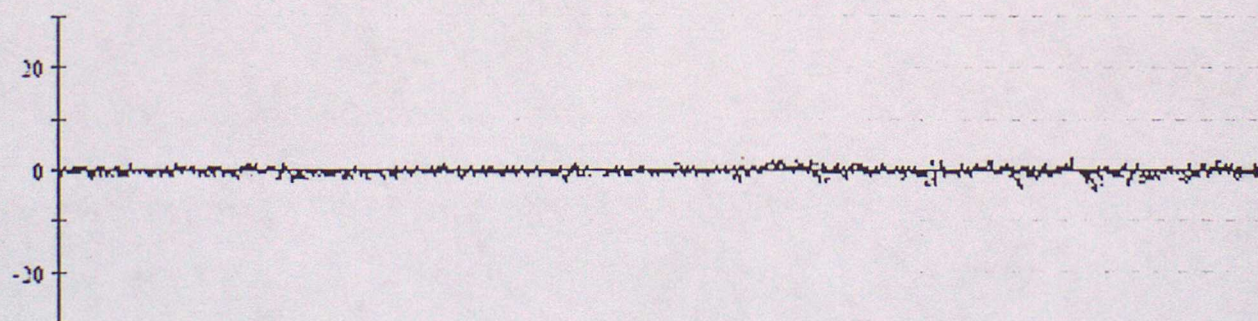
62514 Pressure



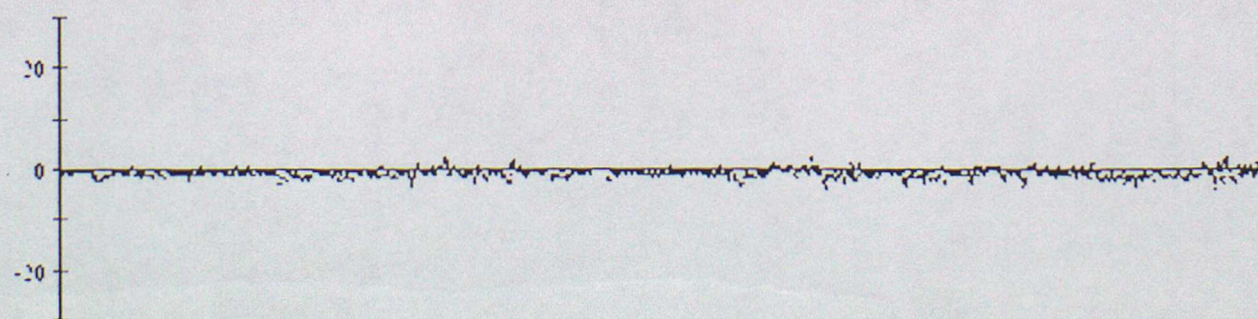
62516 Pressure



62517 Pressure

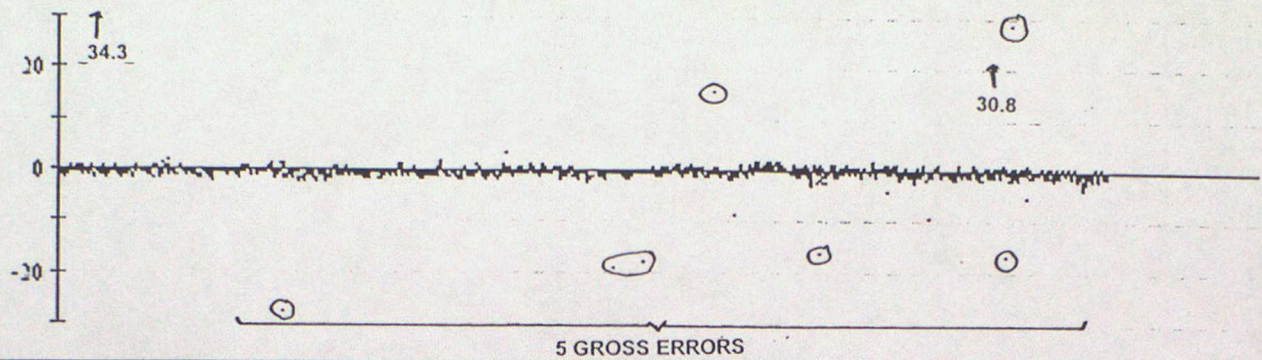


62519 Pressure

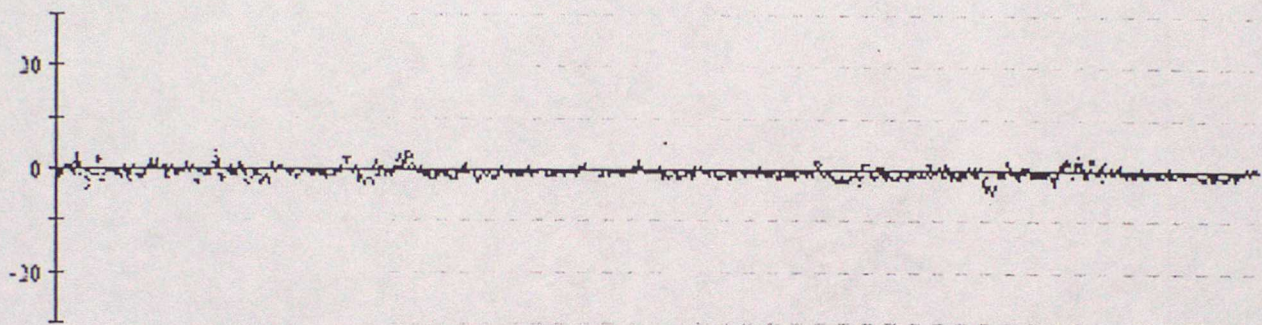


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

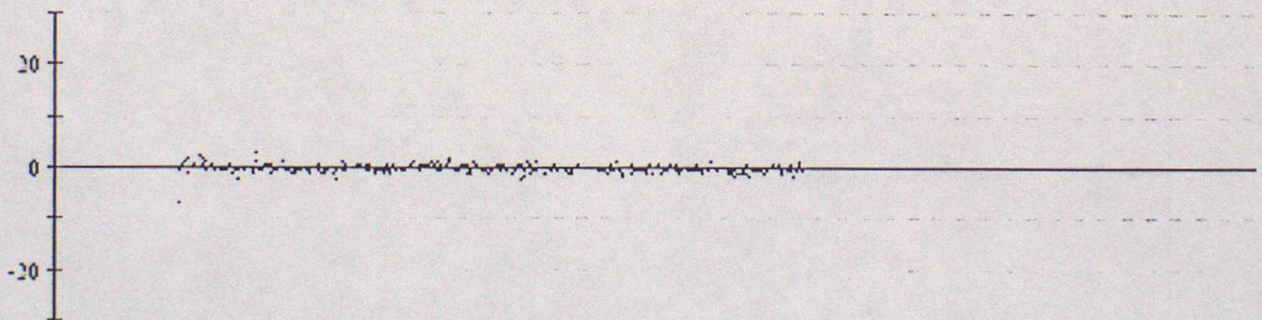
62520 Pressure



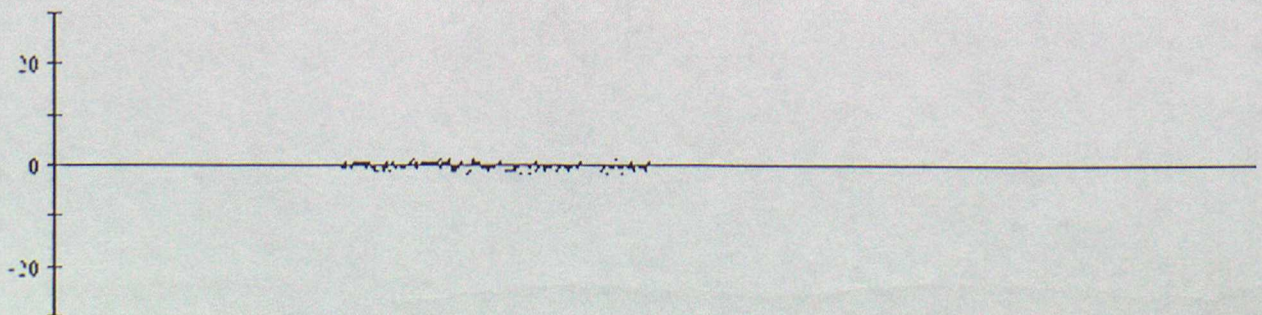
62596 Pressure



62751 Pressure

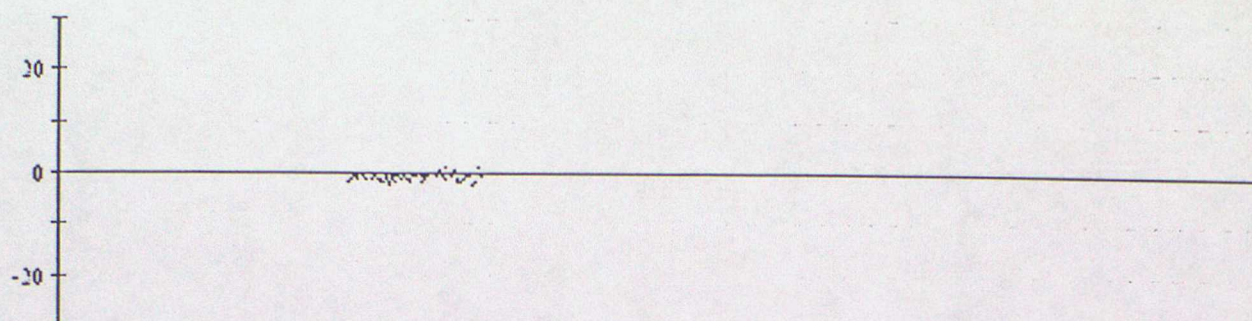


62752 Pressure

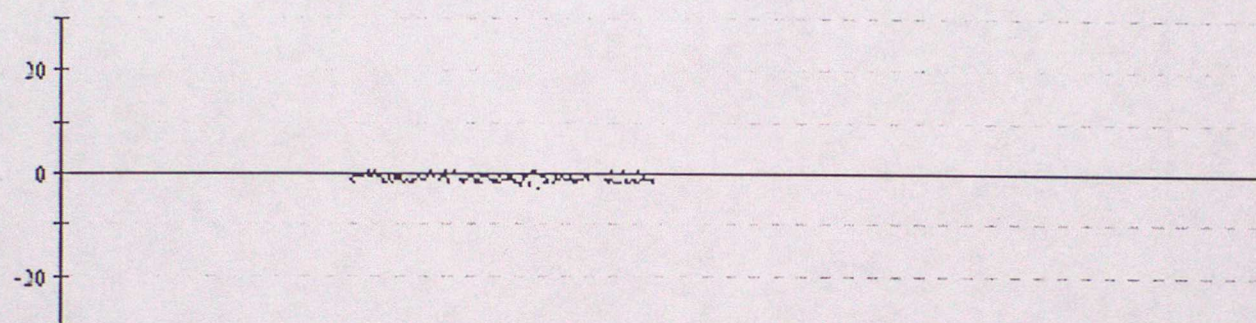


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

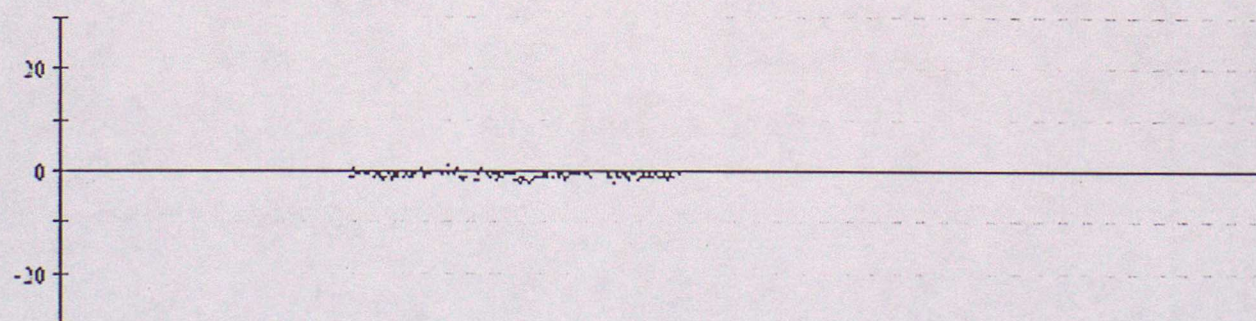
62753 Pressure



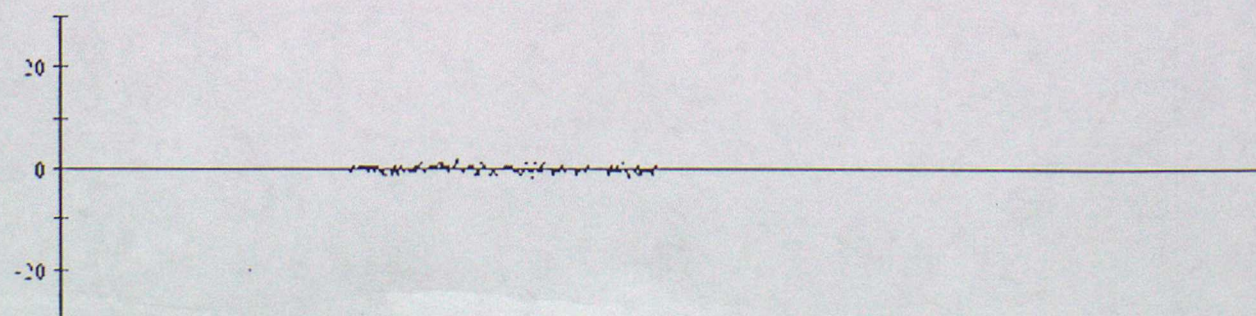
62754 Pressure



62756 Pressure

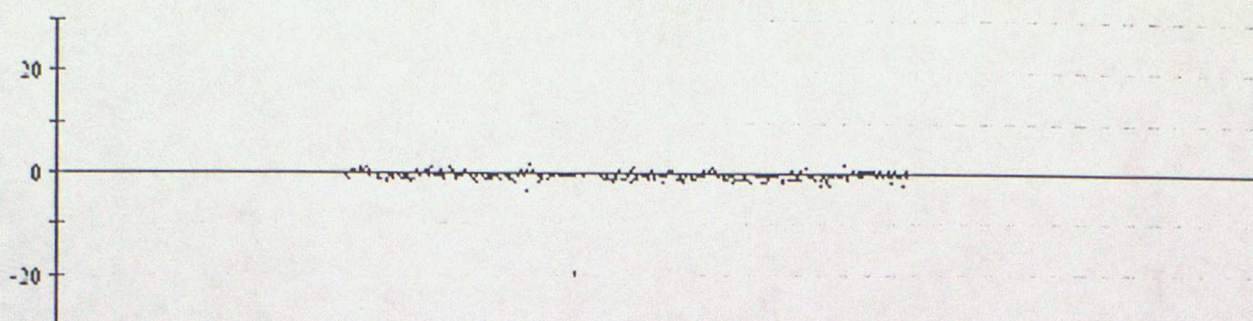


62757 Pressure

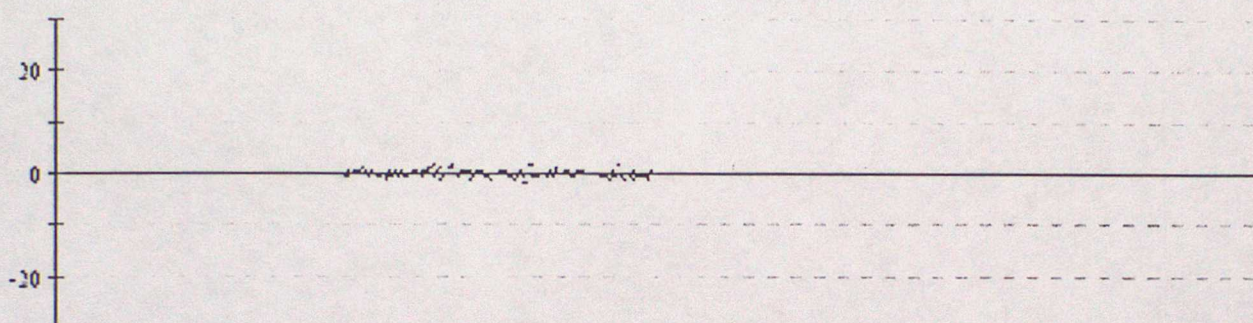


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

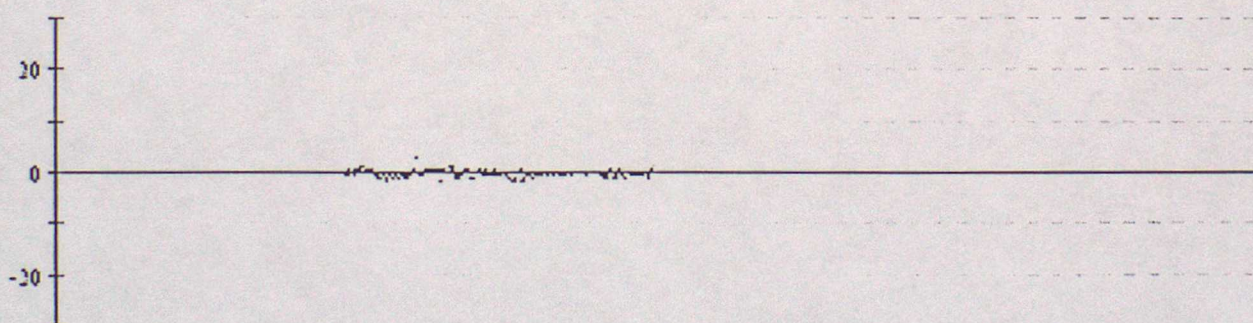
62758 Pressure



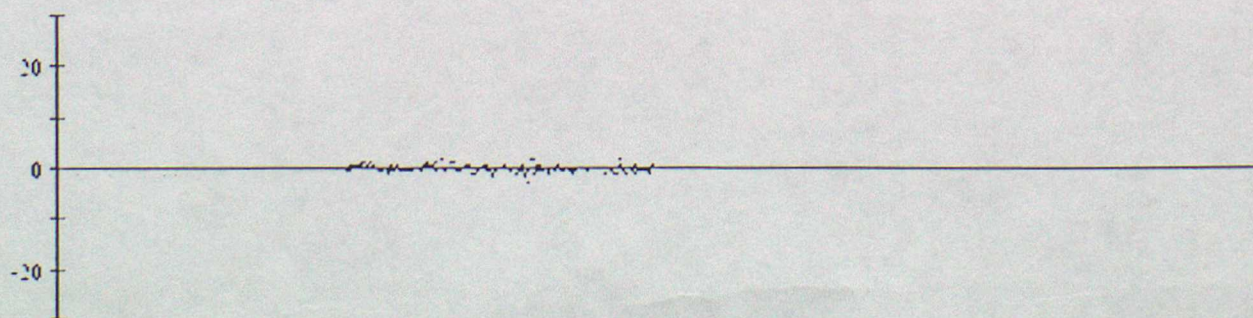
62759 Pressure



62841 Pressure

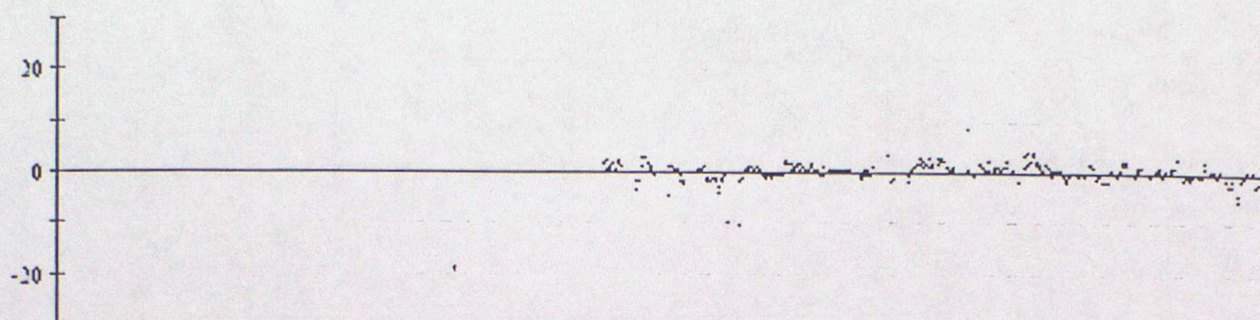


62842 Pressure

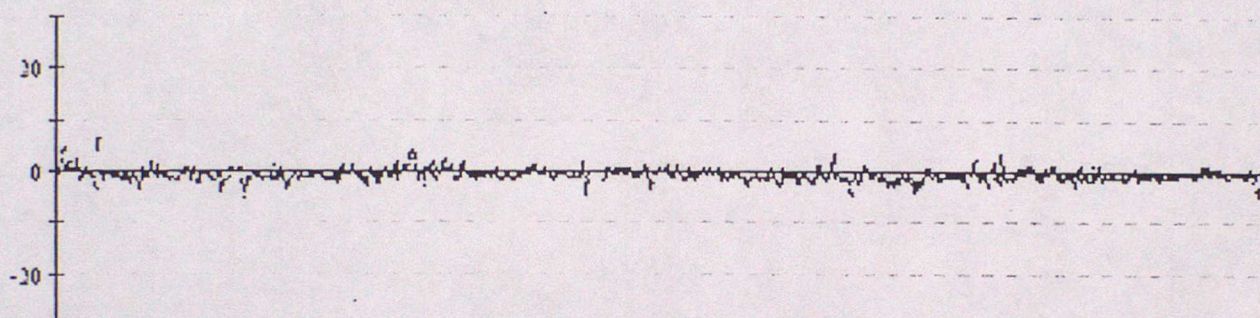


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

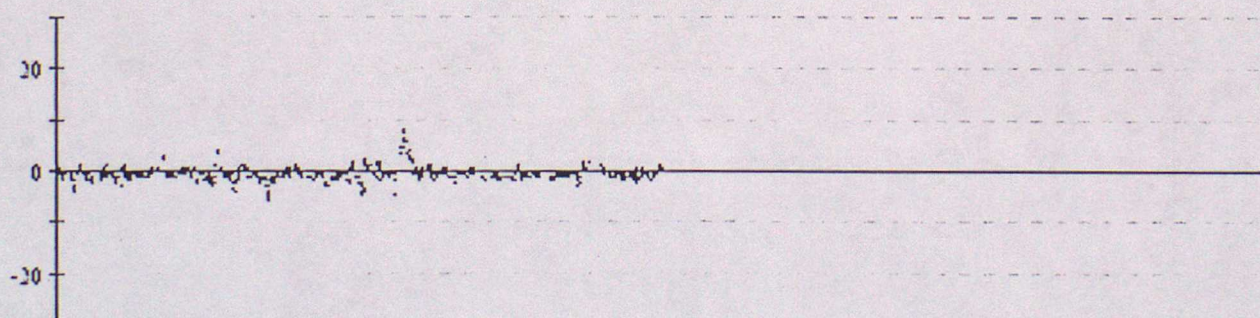
63662 Pressure



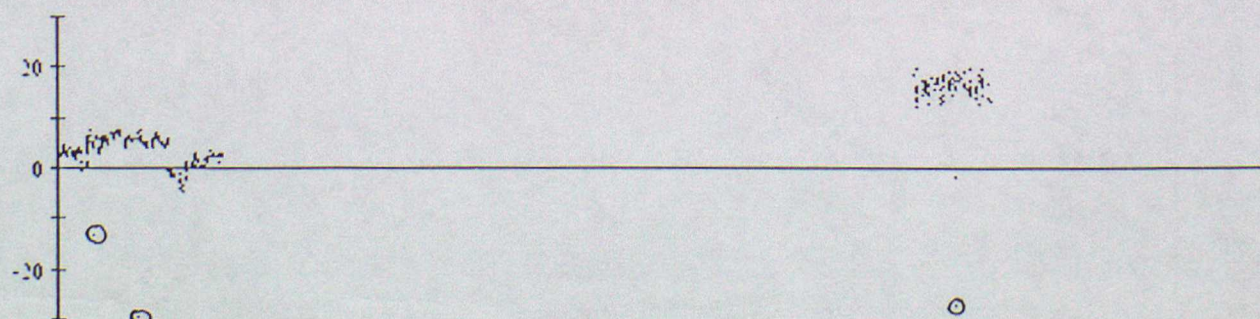
64517 Pressure



64521 Pressure

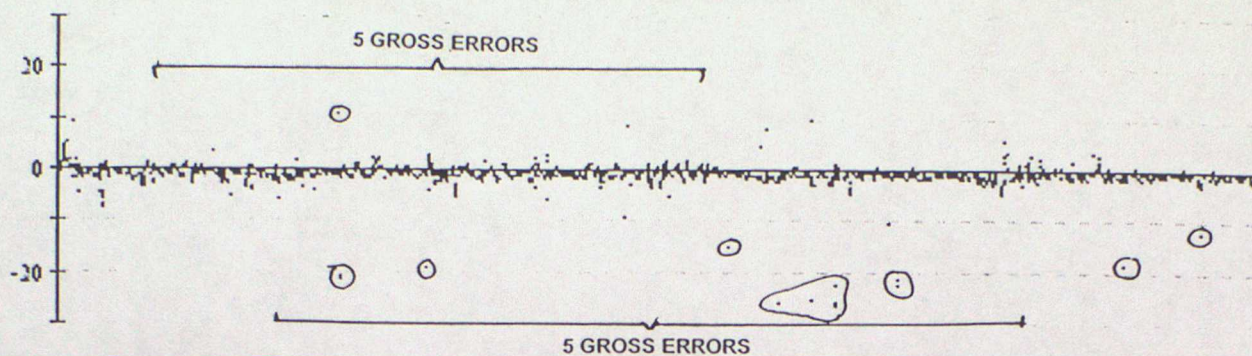


64546 Pressure

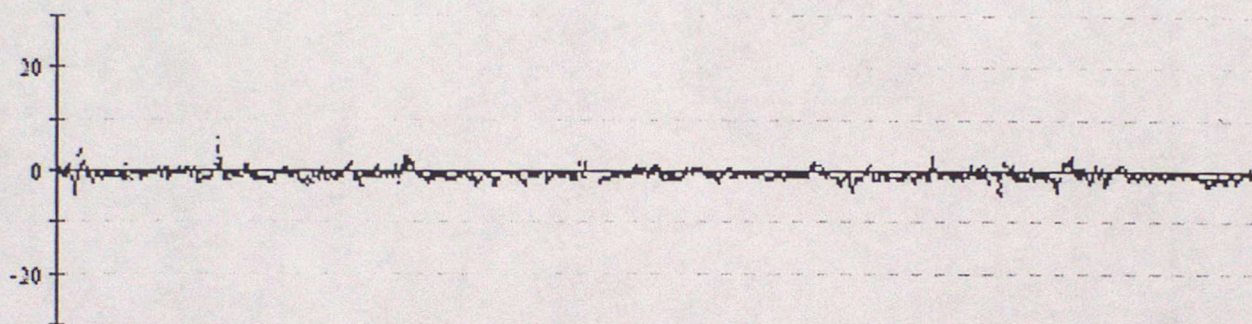


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

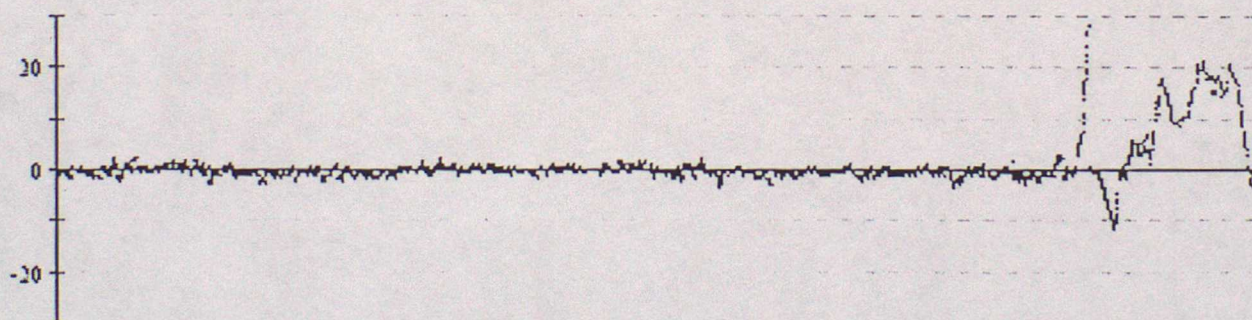
64548 Pressure



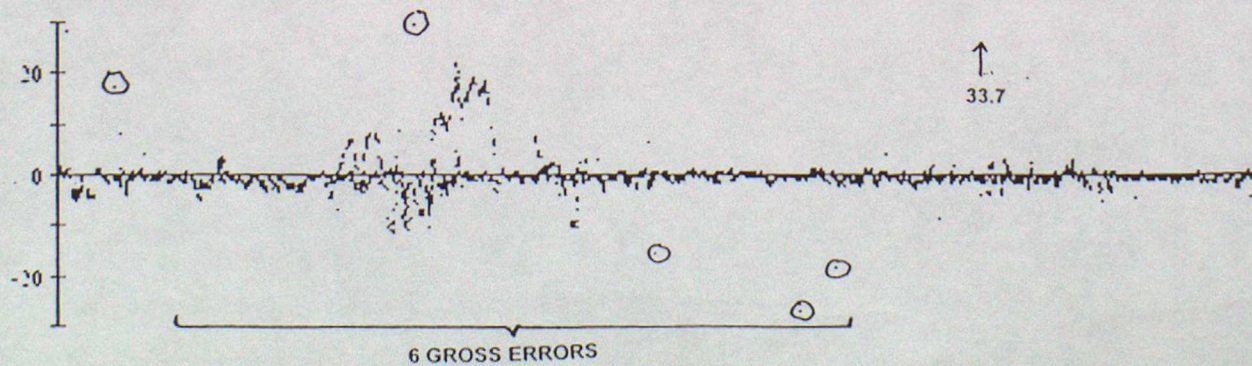
64698 Pressure



64699 Pressure

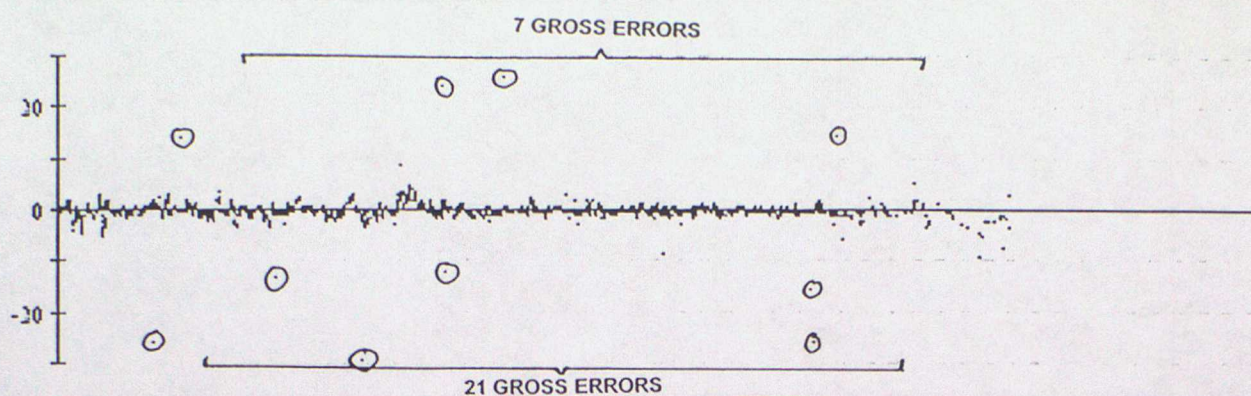


65593 Pressure

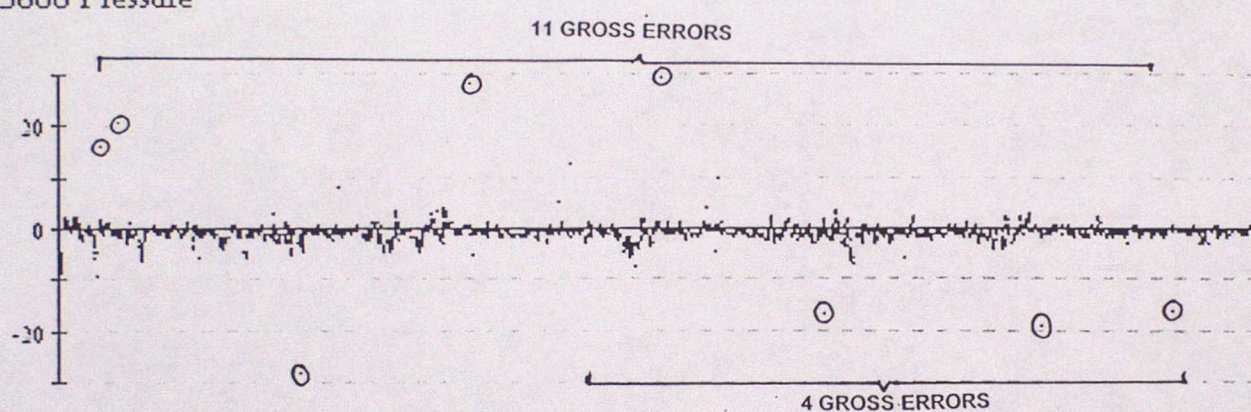


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

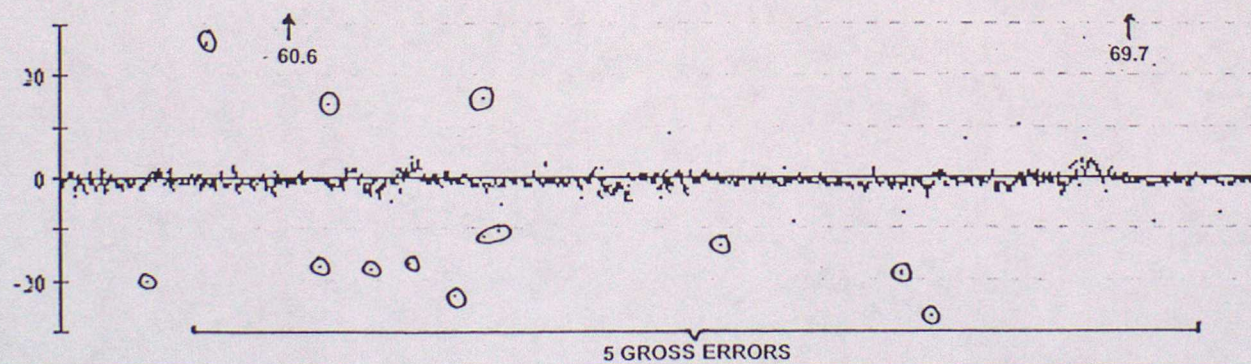
65599 Pressure



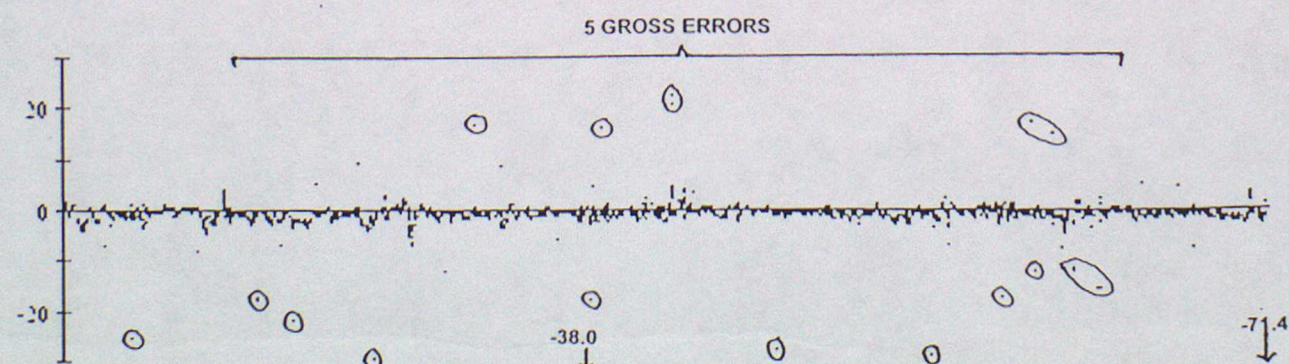
65600 Pressure



65601 Pressure

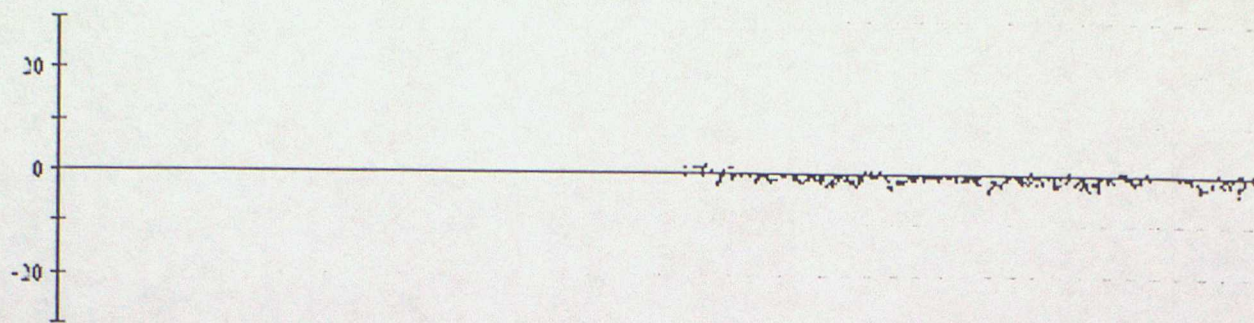


65602 Pressure

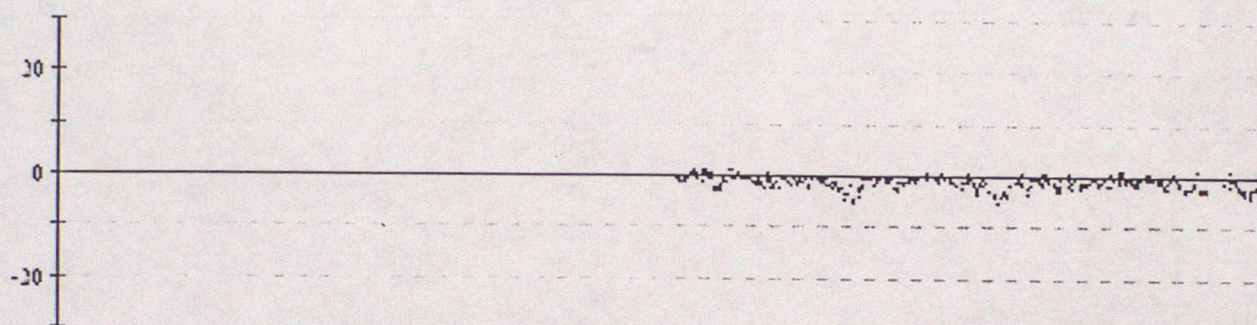


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

65662 Pressure



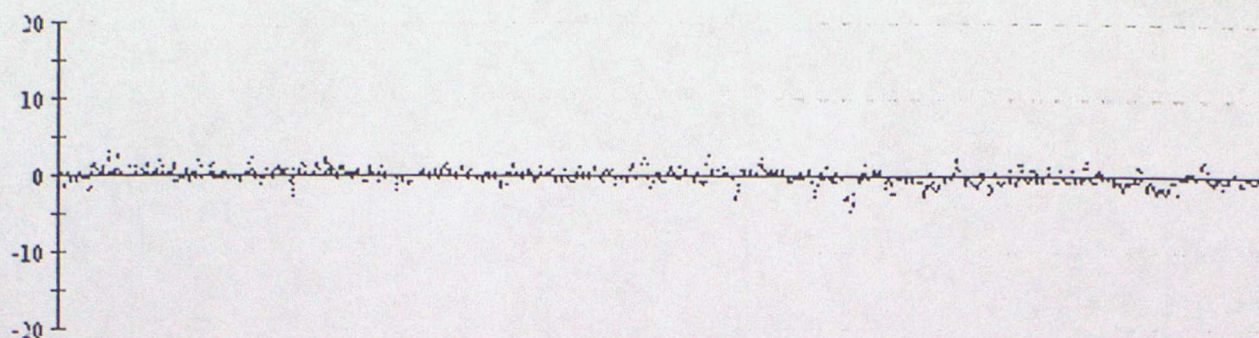
65663 Pressure



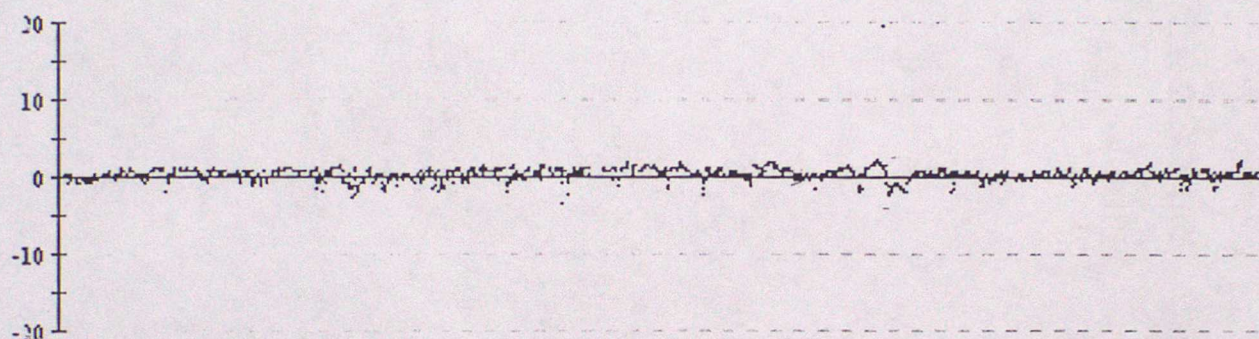
ANNEX C - TIME SERIES PLOTS OF AIR TEMPERATURE

Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

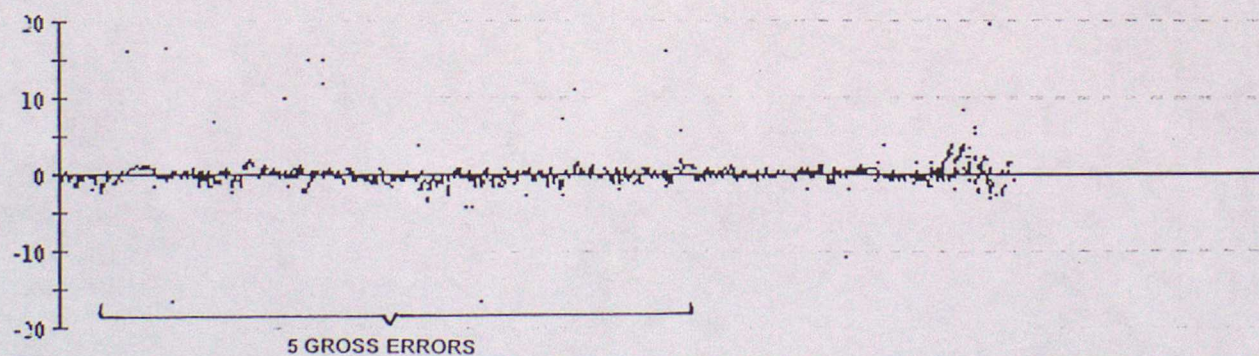
41521 Air Temperature



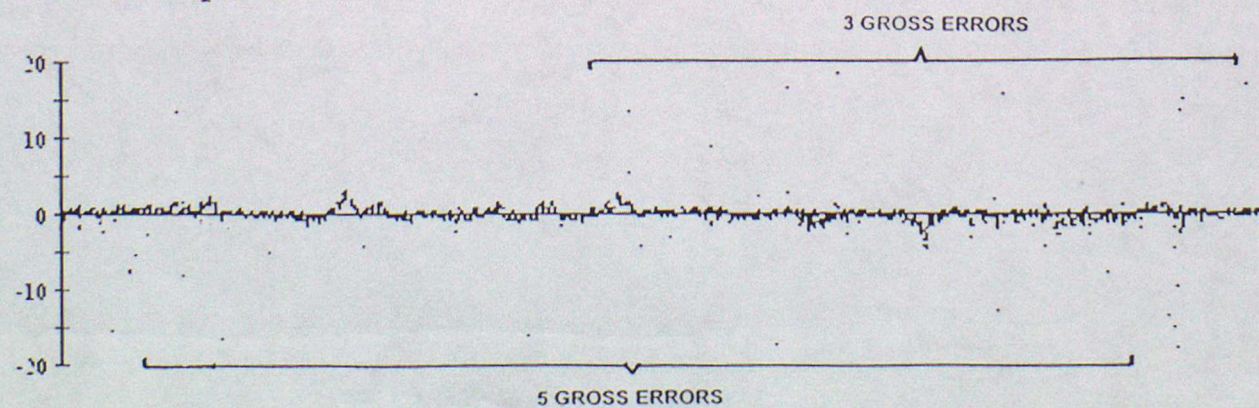
44613 Air Temperature



44626 Air Temperature

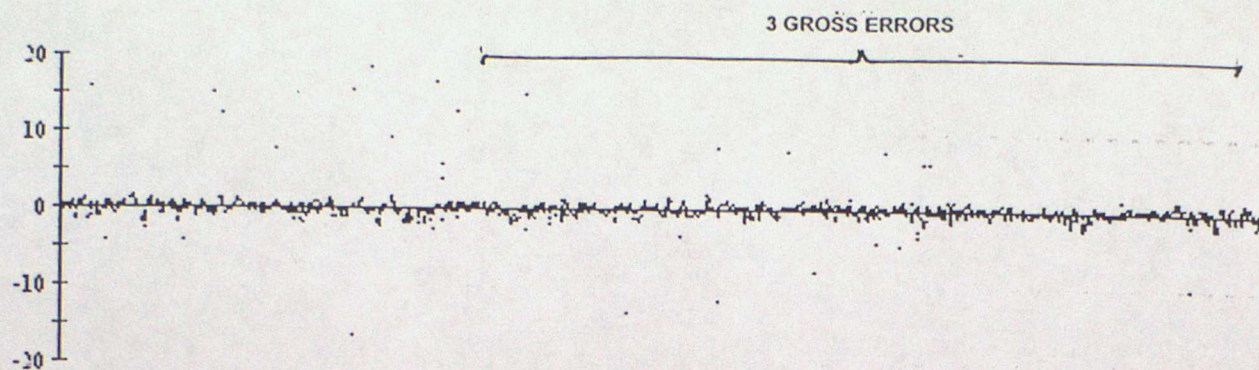


44628 Air Temperature

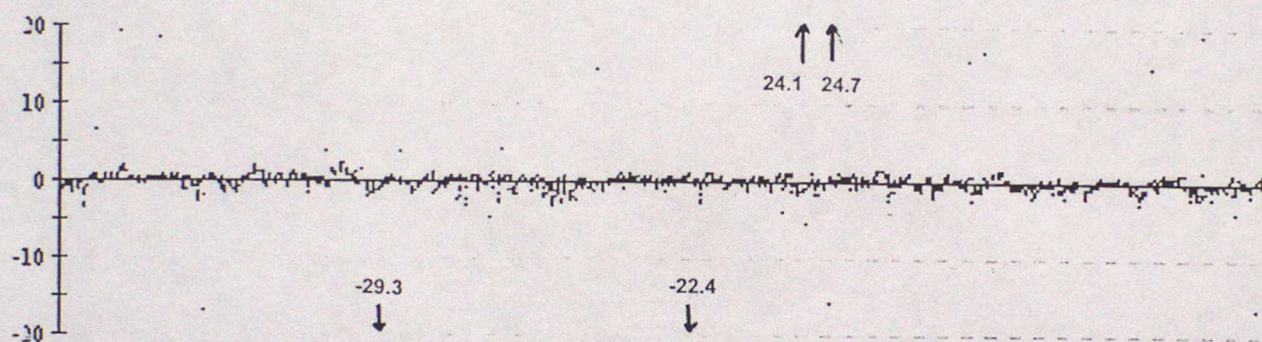


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

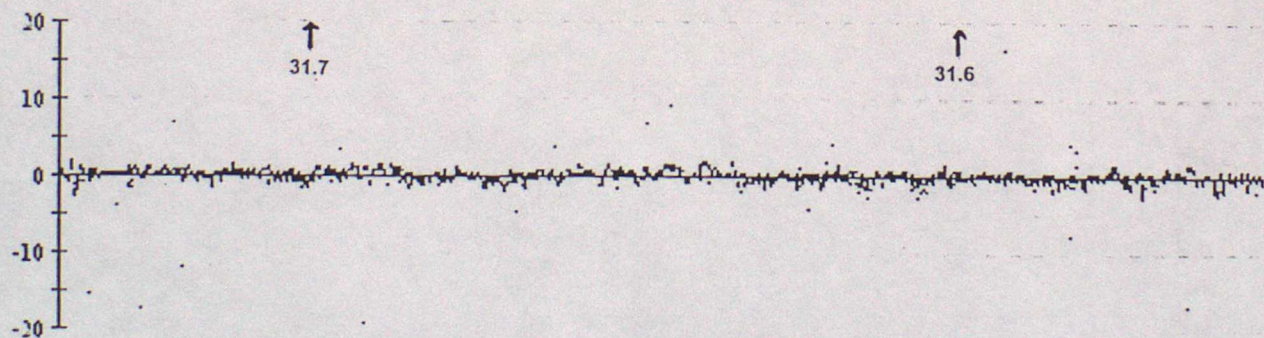
44743 Air Temperature



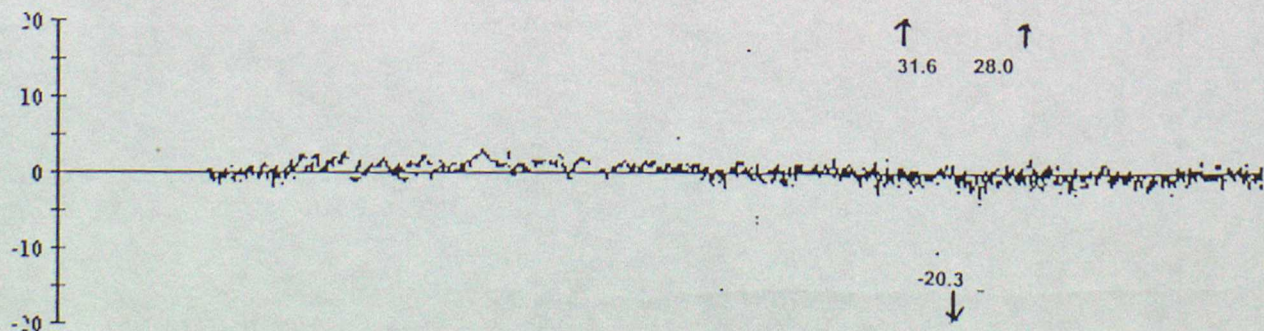
44765 Air Temperature



44772 Air Temperature

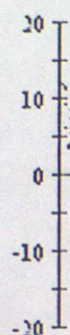


44774 Air Temperature

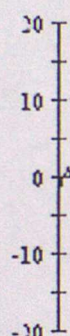


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

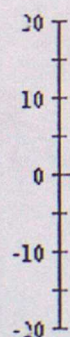
56542 Air Temperature



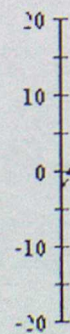
62508 Air Temperature



63662 Air Temperature



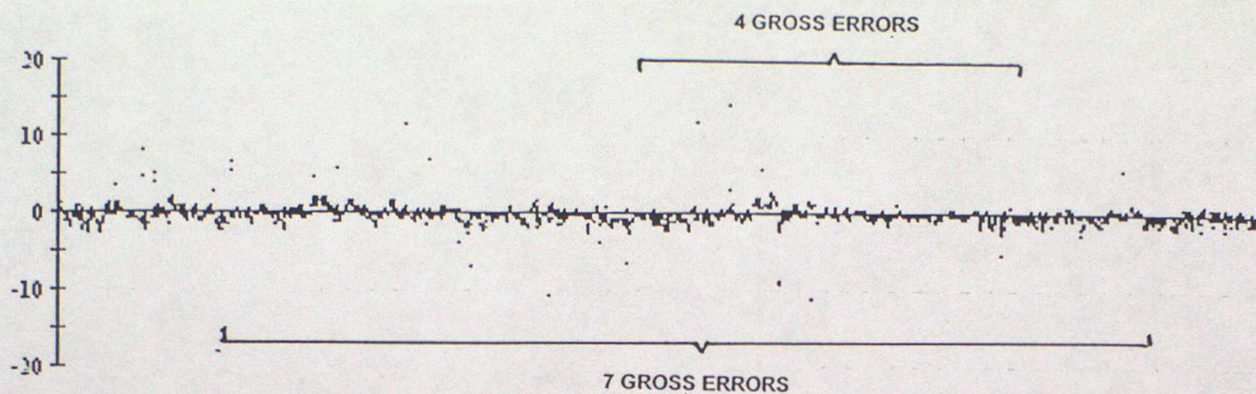
64546 Air Temperature



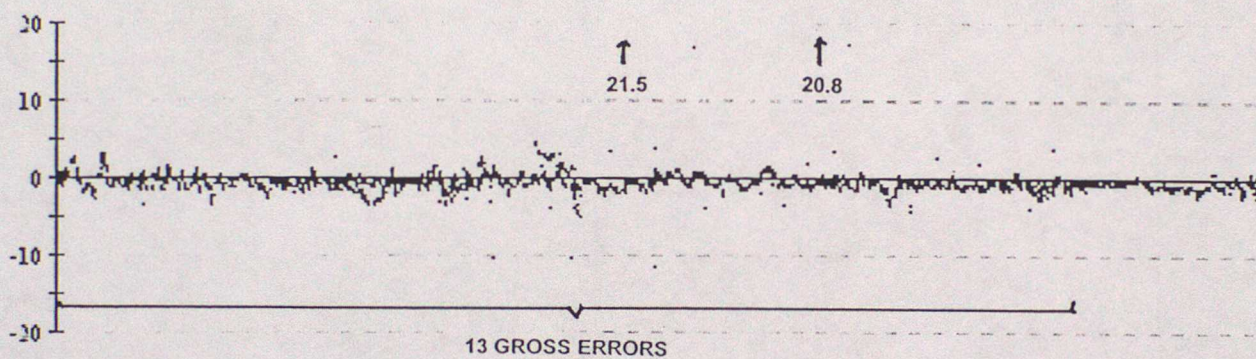
11 GROSS ERRORS

Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

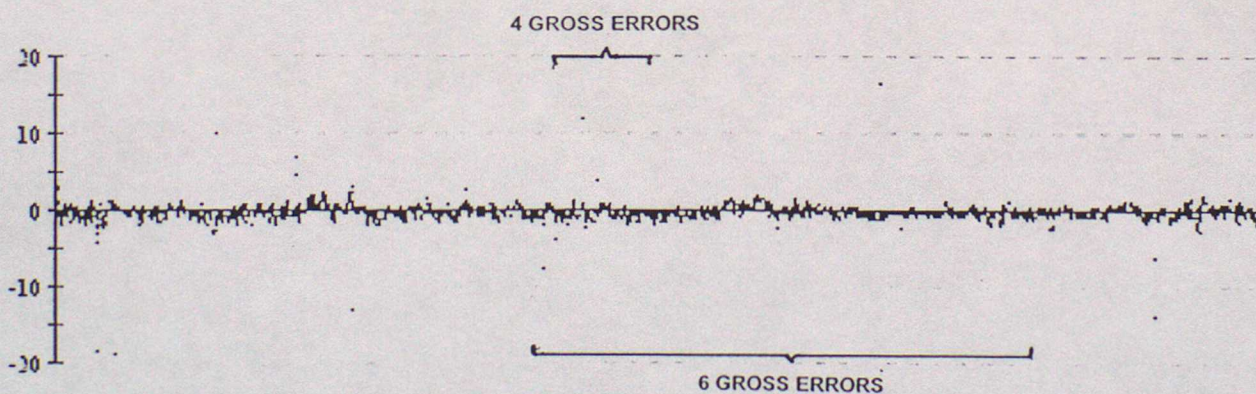
64548 Air Temperature



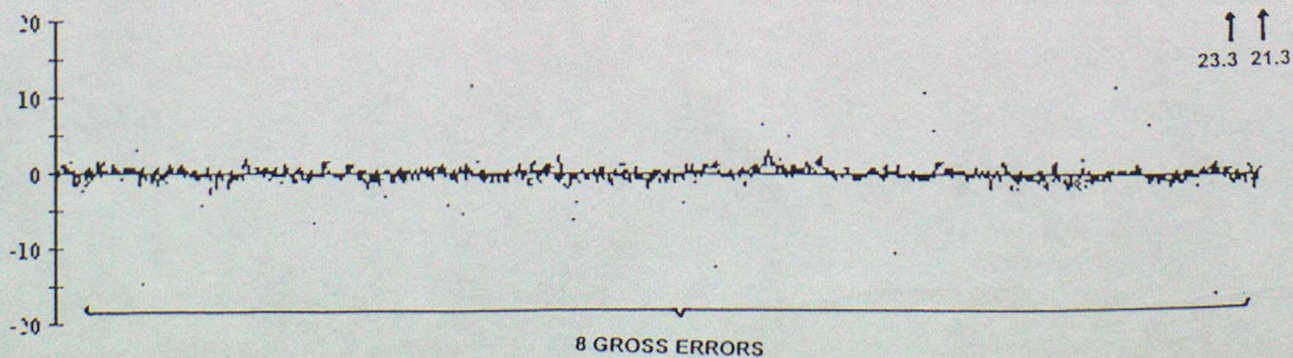
65593 Air Temperature



65600 Air Temperature

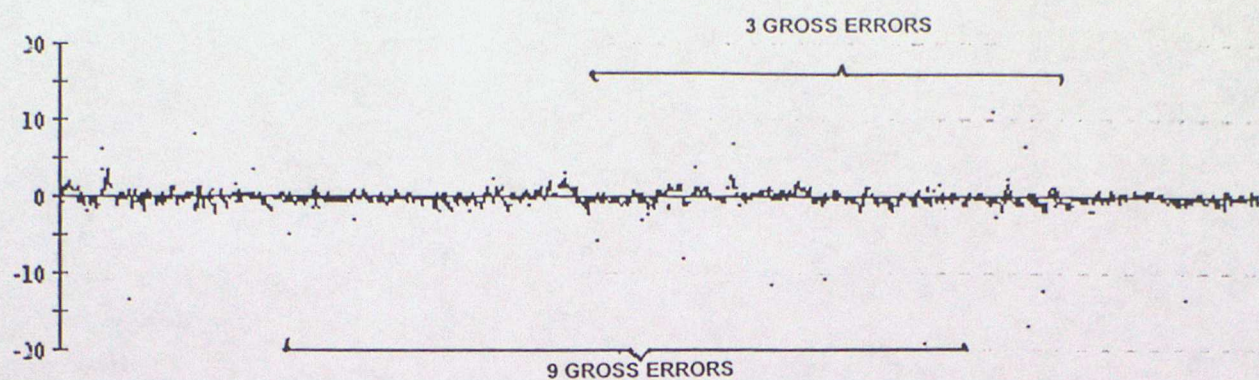


65601 Air Temperature

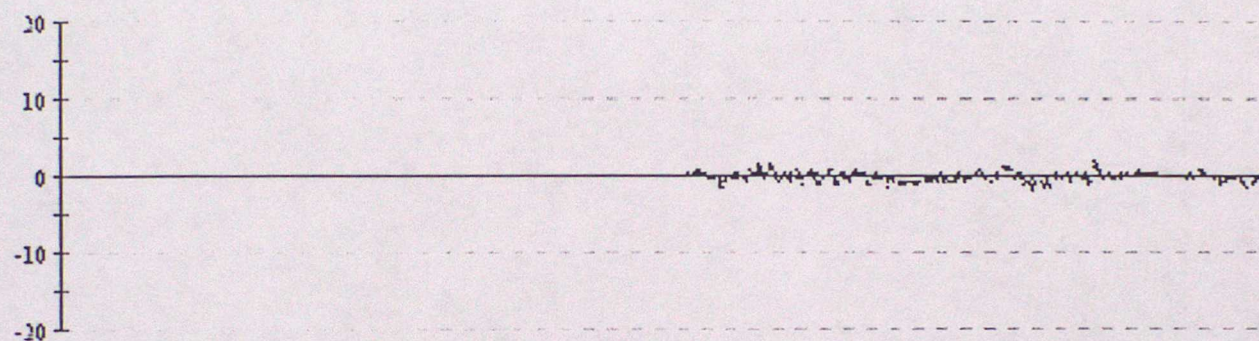


Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

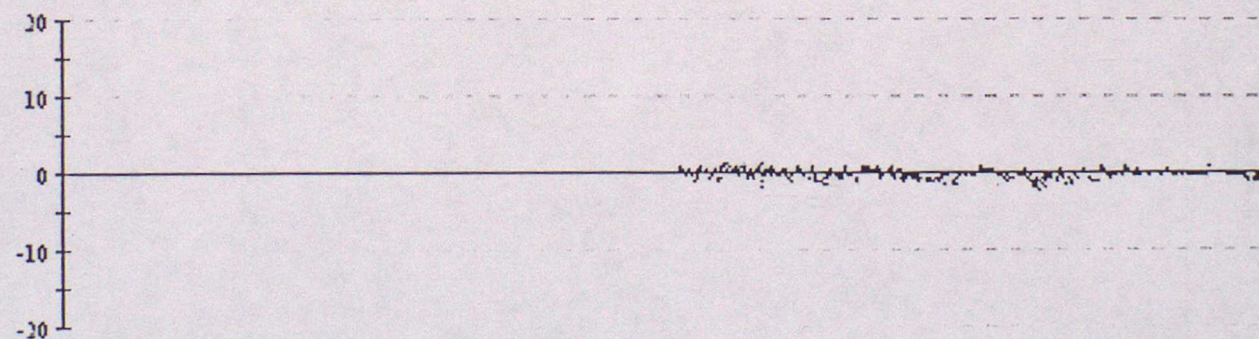
65602 Air Temperature



65662 Air Temperature



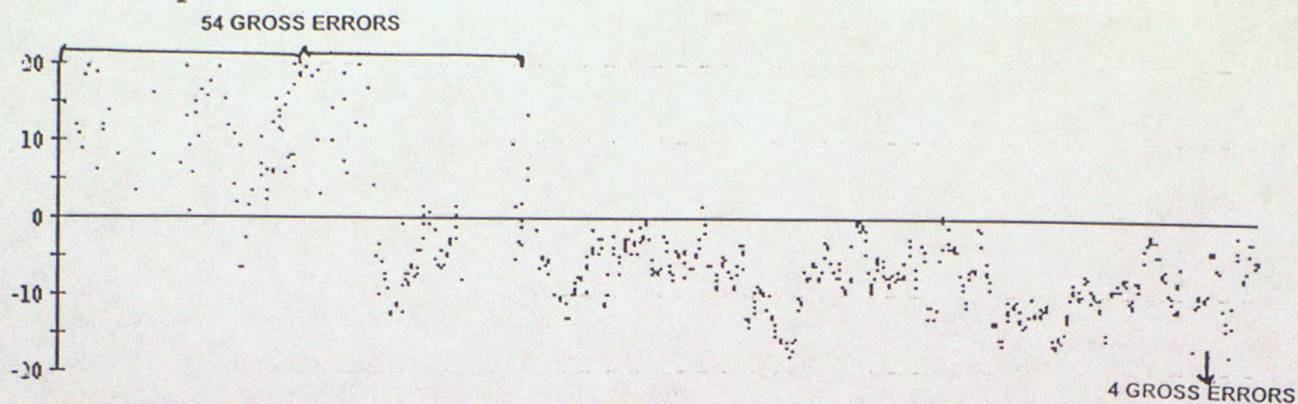
65663 Air Temperature



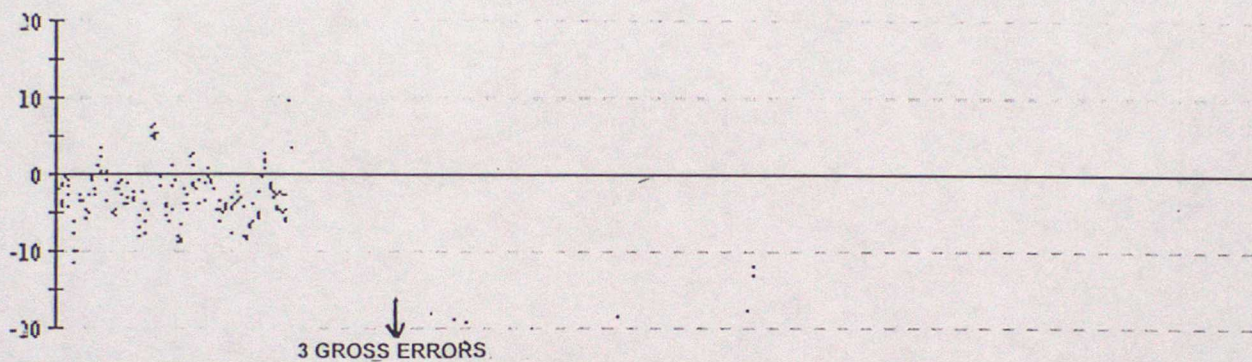
ANNEX D - TIME SERIES PLOTS OF WIND SPEED

Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

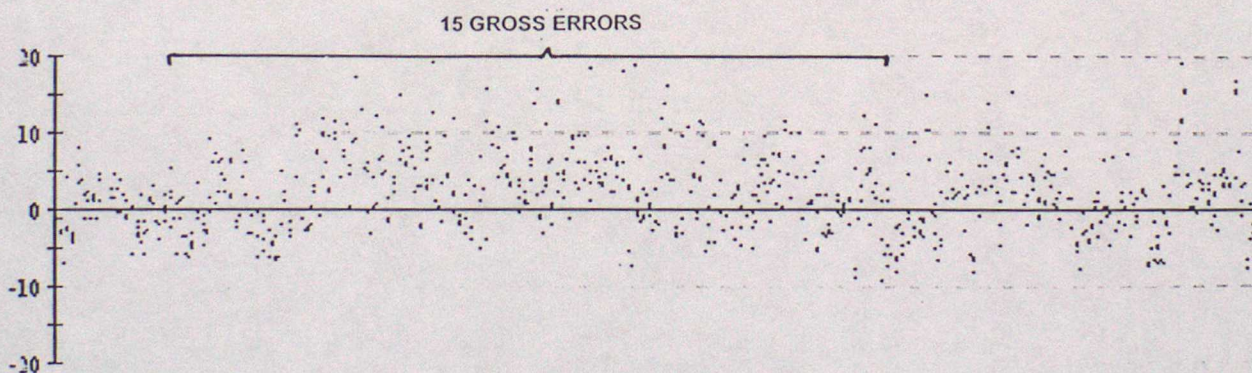
41505 Wind speed



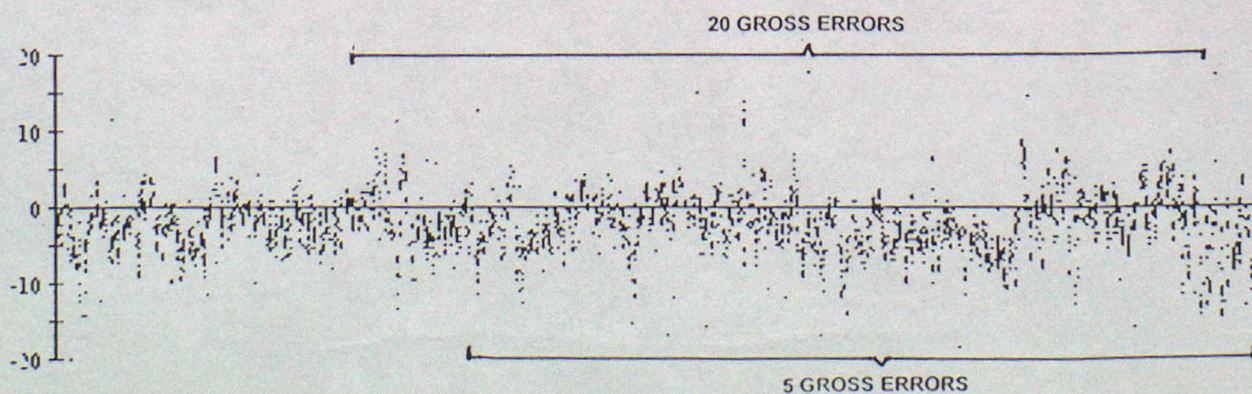
41521 Wind speed



41523 Wind speed

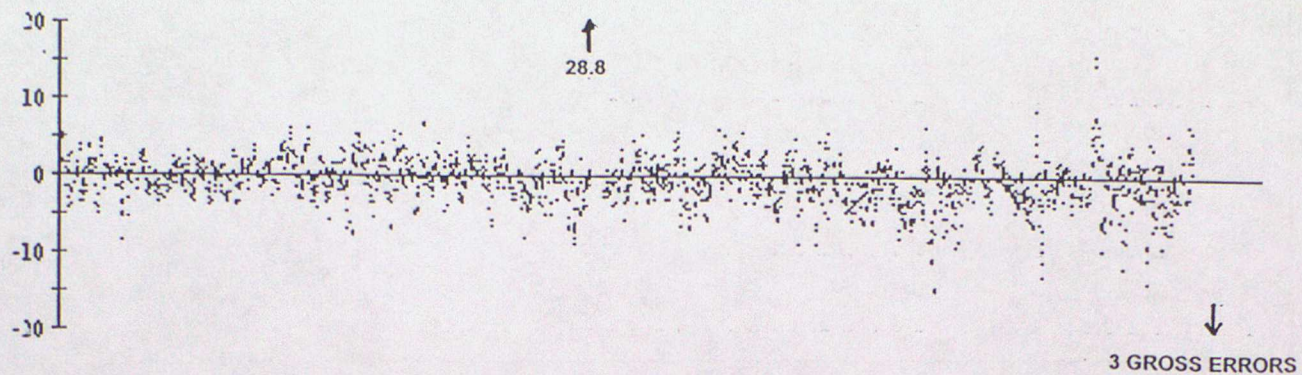


44743 Wind speed



Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

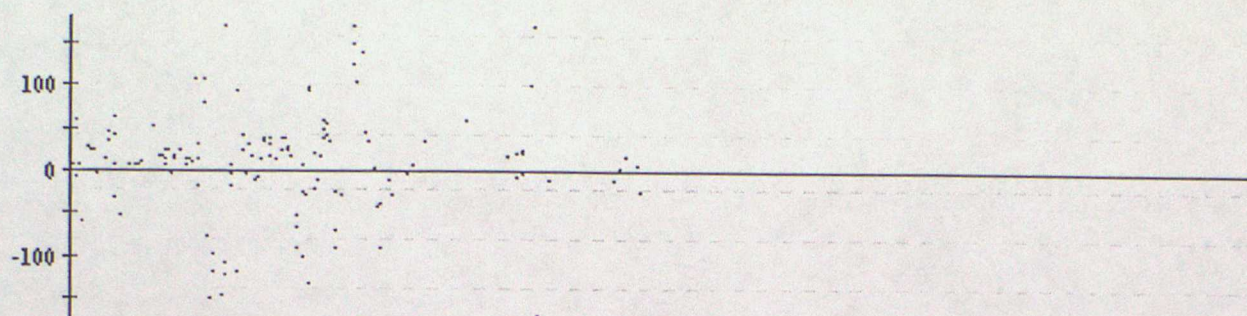
62508 Wind speed



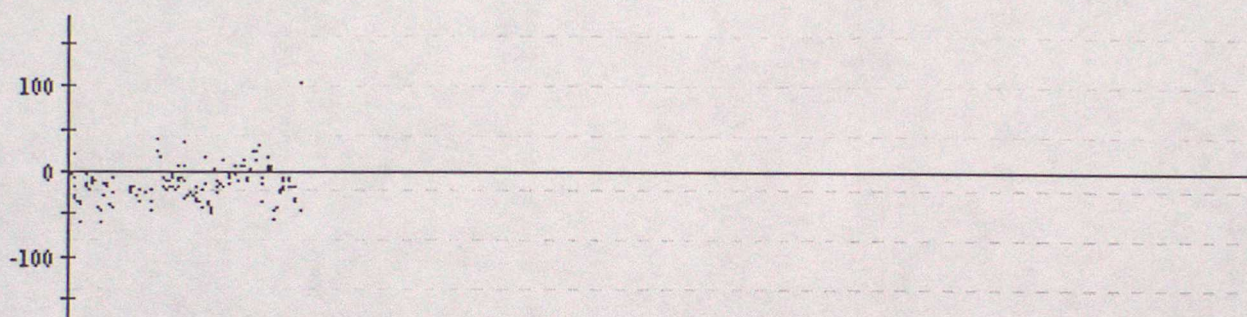
ANNEX E - TIME SERIES PLOTS OF WIND DIRECTION

Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

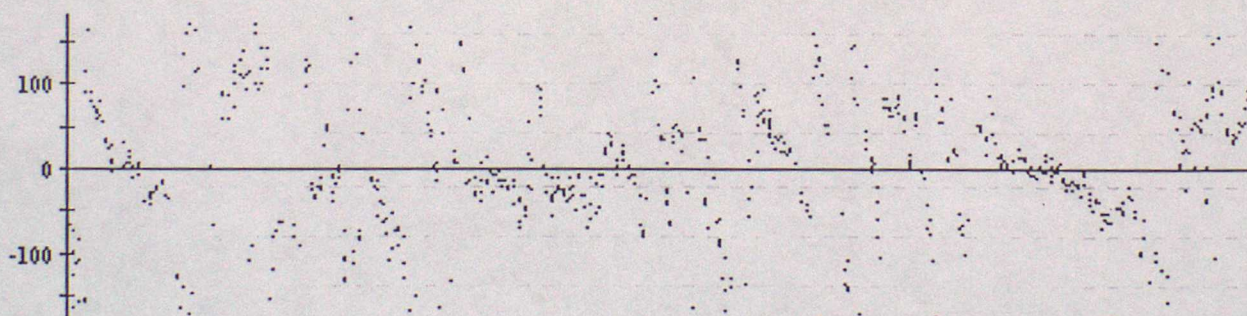
41505 Wind direction



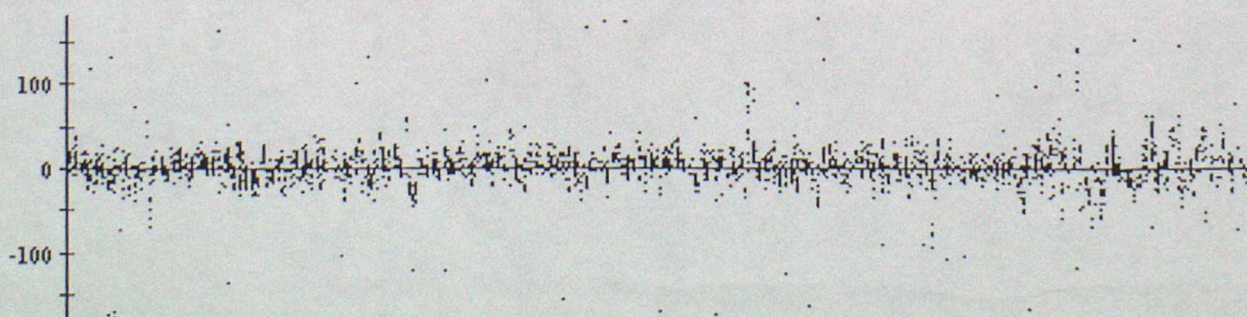
41521 Wind direction



41523 Wind direction

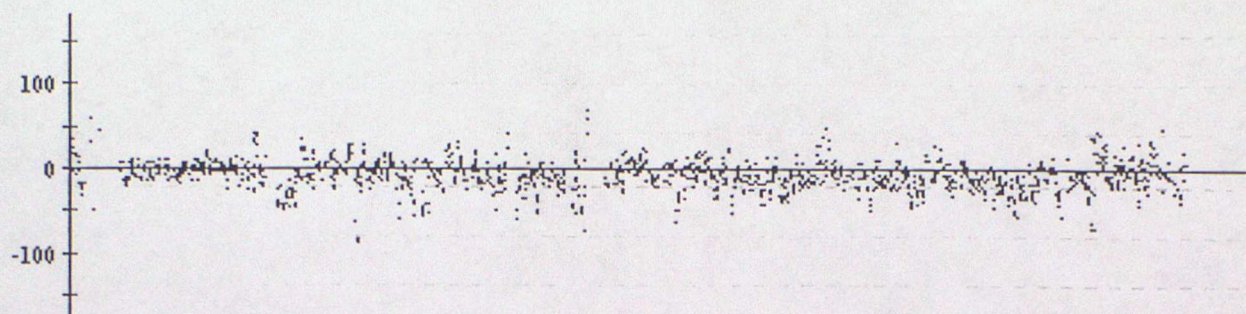


44743 Wind direction



Data from 00z on 01/10/2000 to 23z on 31/12/2000 (OBS - Background field)

62508 Wind direction



ANNEX F - SUMMARY TABLE OF OPERATIONAL DRIFTING BUOYS

WMO No.	Argos No.	Owner	Elements Reported						Reporting Period
			PP	Pt	TT	FF	DD	SST	
41505			*			*	*	*	01/10 - 31/12
41521			*		*	*	*	*	01/10 - 31/12
41523			*			*	*	*	01/10 - 31/12
41571			*					*	01/10 - 30/12
41644			*					*	01/10 - 31/12
44513			*					*	01/10 - 29/11
44546	25374	UK	*	*				*	04/12 - 31/12
44548	27617	UK	*	*				*	06/12 - 31/12
44608	14540	F	*	*				*	01/10 - 31/12
44610	12734	F	*	*				*	01/10 - 31/12
44611	27616	UK	*	*				*	01/10 - 31/12
44612	27619	UK	*	*				*	01/10 - 31/12
44613	28467	UK	*	*	*				01/10 - 31/12
44617	27621	UK	*	*				*	01/10 - 11/12
44620	27622	UK	*	*				*	01/10 - 31/12
44622	27623	UK	*	*				*	01/10 - 31/12
44623	27624	UK	*	*				*	01/10 - 31/12
44626	12284	UK	*	*	*			*	01/10 - 13/12
44628	12287	UK	*	*	*			*	01/10 - 31/12
44723	16392	NL	*	*				*	01/10 - 31/12
44724	27922	UK	*	*				*	01/10 - 31/12
44725	27923	UK	*	*				*	01/10 - 31/12
44726	27924	UK	*	*				*	01/10 - 18/12
44727	27925	UK	*	*				*	01/10 - 31/12
44729	25375	UK	*	*				*	01/10 - 31/12
44730	25378	UK	*	*				*	01/10 - 12/12
44741	25373	UK	*	*				*	01/10 - 31/12
44743	12414	UK	*	*	*	*	*	*	01/10 - 31/12
44761	27615	UK	*	*				*	01/10 - 31/12
44762	19073	UK	*	*				*	01/10 - 31/12
44764	21541	UK	*	*				*	01/10 - 02/10
44765	28466	UK	*	*	*				01/10 - 31/12
44767	21580	UK	*	*				*	01/10 - 10/11
44770	21627	UK	*	*				*	01/10 - 31/12
44771	25377	UK	*	*				*	01/10 - 31/12
44772	12412	UK	*	*	*			*	01/10 - 31/12

ANNEX F - CONT'd

WMO No.	Argos No.	Owner	Elements Reported						Reporting Period
			PP	Pt	TT	FF	DD	SST	
44774	12286	UK	*	*	*			*	12/10 - 31/12
44775	25372	UK	*	*				*	23/10 - 31/12
44776	25371	UK	*	*				*	25/10 - 31/12
44778	25370	UK	*	*				*	26/10 - 31/12
56542			*	*	*			*	01/10 - 03/10
61522			*					*	01/10 - 31/12
61523			*					*	01/10 - 17/10
62507	10111	F	*	*				*	01/10 - 31/12
62508	5822	F	*	*	*	*	*	*	01/10 - 31/12
62509	14537	F	*	*				*	01/10 - 31/12
62512	12730	F	*					*	01/10 - 29/12
62513	12731	F	*					*	01/10 - 31/12
62514	7119	F	*	*				*	01/10 - 31/12
62516	7445	F	*	*				*	01/10 - 19/12
62517	18674	F	*	*				*	01/10 - 31/12
62519	18693		*	*				*	01/10 - 31/12
62520	14431		*	*				*	01/10 - 20/12
62596	16391		*	*				*	01/10 - 31/12
62751			*	*				*	10/10 - 27/11
62752			*	*				*	23/10 - 15/11
62753			*	*				*	22/10 - 02/11
62754			*	*				*	23/10 - 15/11
62756			*	*				*	23/10 - 17/11
62757			*	*				*	23/10 - 15/11
62758			*	*				*	23/10 - 05/12
62759			*	*				*	23/10 - 15/11
62841			*	*				*	23/10 - 15/11
62842			*	*				*	23/10 - 15/11
63662			*		*				11/11 - 31/12
64517	14178	F	*	*				*	01/10 - 31/12
64521	23620	F	*					*	01/10 - 16/11
64546	3675	N	*	*	*			*	01/10 - 11/12
64548	1153	IR	*	*	*			*	01/10 - 31/12
64698	29867	F	*	*				*	01/10 - 31/12
64699	29868	F	*	*				*	01/10 - 31/12
65593	4228	NL	*	*	*			*	01/10 - 31/12

ANNEX F - CONT'd

[illegible]

