ECMWF
Global Data Monitoring Report

August 2025

European Centre for Medium-Range Weather Forecasts
Europäisches Zentrum für mittelfristige Wettervorhersage
Centre européen pour les prévisions météorologiques à moyen terme

Contents

Summary of Revisions (in reverse order)

Revision 30 (Nov 23) - Coverage charts for AIREP/AMDARs updated:
Added MODE-S and ADS-C to Figure 5 and Figure 18

Revision 29 (Dec 22) - Coverage charts for ATOVS AMSU-A updated:
METOP-C replaces Aqua-ATOVS (Figure 9.2)
METOP-B replaces METOP-ATOVS (Figure 9.3)
SATOB figures updated with METEOSAT-9, Dual-Metop,
METEOSAT-11, GOES-16, HIMAWARI-9, GOES-17 satellites

Revision 28 (Jun 15) - Monitoring of SYNOP and SYNOP-SHIPs now includes BUFR encoded observations for those which were assimilated as well as for those without TAC counterpart.

Revision 27 (Feb 15) - Selection criteria for SHIPs are modified as per SOT-7/Doc.9.1.1.
Different criteria applied to Manual and Automatic SHIPs.

Revision 26 (Dec 14) - Coverage chart for ATOVS AMSU-A for Noaa_16 removed

Revision 25 (Mar 13) - Monitoring of Radiosondes and ASAPs now includes BUFR encoded observations for those which were assimilated as well as for those without TAC counterpart.
Tables 24 and 25 are also added to show the identifiers of these BUFR observations separately.

Revision 24 (Aug 06) - North Atlantic Monitoring statistics replaced by EUCOS Area Monitoring Statistics (tables 13 to 23).
Airep tables removed from this section.

Revision 23 (Dec 00) - Coverage charts for Noaa_14 MSU replaced by ATOVS AMSU-A for Noaa_16.

Revision 22 (Aug 99) - Coverage charts for TOVS thickness 300-100 hPa replaced by (A)TOVS AMSU-A and MSU (Noaa_15 and Noaa_14).

Revision 21 (May 99) - Monitoring statistics ceased for Noaa_11 as satellite is no more available.

Revision 20 (Sep 98) - Changes to tables and annex to remove all mention about data usage. Two more levels (50 and 850 hPa) added to the COSNA statistics for Sondes.

Revision 19 (Jul 98) - From June 29th, 1998 ECMWF model assimilates temperature data instead of geopotential from radiosondes. As a consequence the number of used geopotential data drops to zero in tables 7, 10, 13 and 15.

Revision 18 (Apr 98) - Changes to tables and annex to introduce the usage of accepted numbers and observations instead of precentage of rejection.

1 Introduction

The ECMWF global data monitoring report is a monthly publication intended to give an overview of the availability and quality of observations from the Global Observing System within the World Weather Watch of the World Meteorological Organisation. It should be recognised that the statistics given in this report refer to data as received at ECMWF in time for the appropriate analysis. The annex of the report gives further explanations of the methods applied to compile the statistics and on the reference used to establish the quality of observations.

The information presented on data quality is based on differences between observations and the values of the most recent ECMWF forecast ("first guess") of the same parameter. Depending on the time of the observation, the forecast range is between 9 and 15 hours. It should be recognised that although the quality of the first-guess is of a generally high standard this is only true to a limited extent in certain areas, such as the tropics and data-sparse areas of both northern and southern hemispheres. The data quality results should therefore be used with care when assessing the absolute quality of a particular observing platform. Other indicators such as long-term trends of station performance, particularly in comparison with nearby stations, can be more useful in this respect.

The global monitoring results presented in this report are meant to serve a wider meteorological community as well as to support special WMO programmes such as TOGA and EUCOS. The contents of the report may therefore be adapted for special requirements as necessary.

As recommended at the ninth session of the Commission for Basic Systems at Geneva 1988, lead centres have been appointed for each main type of observation which should liaise with the participating centres and co-ordinate all the results, inform the WMO Secretariat immediately of obvious problems, and produce every six months a consolidated list of observations of that particular type believed to be of low quality. The presently nominated centres are: RSMC Exeter for marine surface observations; RSMC ECMWF for radiosonde and pilot observations; WMC Washington for aircraft and satellite observations.

ECMWF produces this monthly report as part of its routine monitoring activity in order to facilitate the exchange of monitoring information. Tables are presented according to the CBS recommended standards for the exchange of monitoring results. Copies of the report will be provided to major GDPS centres participating in data monitoring activities as initiated and recommended at the ninth session of the Commission for Basic Systems in Geneva 1988, and to the WMO Secretariat and the International TOGA office in Geneva.

Any comments on the contents and the format of the report are welcome and should be addressed to:

ECMWF
Attn. Head of Evaluation Section
Shinfield Park
Reading, Berkshire, RG2 9AX
United Kingdom

2 Data summary - History of events

2.1 Radiosondes

The following is a list of land-based stations showing a change in reporting frequency (of 500 hPa geopotential) of at least 10 observations compared with the average over the previous 3 months. The number of reports received at ECMWF for the current and previous month is shown in addition to the observation time.

Ident	Time	Jul	Aug	Ident	Time	Jul	Aug
10954	(00)	25	0	03693	(12)	0	16
11120	(12)	25	0	20674	(00)	16	29
24122	(00)	30	4	25703	(00)	16	31
24122	(12)	30	3	30715	(00)	14	25
27962	(00)	28	1	30715	(12)	14	25
27962	(12)	30	2	42182	(00)	15	30
28225	(12)	22	7	42182	(12)	9	29
28695	(00)	25	1	42667	(00)	0	12
28695	(12)	25	7	43014	(00)	4	29
30557	(00)	30	13	43279	(00)	12	30
30557	(12)	30	14	43279	(12)	4	31
31369	(00)	23	10	43466	(12)	0	16
32618	(00)	25	11	47418	(00)	14	30
40650	(00)	11	0	70350	(00)	0	27
40841	(12)	28	13	71907	(00)	4	29
42675	(00)	22	3	71907	(12)	4	31
42706	(00)	28	3	72562	(00)	0	17
43311	(00)	12	0	74005	(12)	9	20
43311	(12)	11	0	78016	(00)	0	12
48568	(12)	30	18	78866	(00)	0	14
68816	(00)	30	15	78866	(12)	0	14
68816	(12)	30	15	83554	(12)	7	28
70414	(00)	21	10	89664	(12)	0	15
70414	(12)	23	7	97230	(00)	6	30
76225	(12)	28	16	97230	(12)	7	31
82099	(00)	23	2	98646	(00)	12	24
82099	(12)	23	2	98646	(12)	12	24
82107	(00)	19	2	-	-	-	-
82193	(00)	23	4	-	-	-	-
82244	(00)	27	2	-	-	-	-
82332	(00)	31	4	-	-	-	-
82411	(00)	26	2	-	-	-	-
82532	(00)	31	5	-	-	-	-
82705	(00)	26	4	-	-	-	-
82824	(00)	29	5	-	-	-	-
83208	(00)	25	4	-	-	-	-
83378	(00)	31	5	-	-	-	-
83566	(00)	31	5	-	-	-	-
83612	(00)	26	5	-	-	-	-
83827	(00)	30	3	-	-	-	-
83840	(00)	31	5	-	-	-	-
83899	(00)	29	5	-	-	-	-
91285	(12)	29	18	-	-	-	-
91765	(00)	20	7	-	-	-	-
96147	(00)	23	0	-	-	-	-
96237	(00)	23	0	-	-	-	-
96581	(00)	25	0	-	-	-	-
96645	(00)	18	0	-	-	-	-
96805	(00)	24	0	-	-	-	-
97072	(00)	25	0	-	-	-	-
97980	(00)	25	0	-	-	-	-

2.2 Drifting Buoys

Surface pressure observations from **1290** drifting buoys were received during the month.

3 Global monitoring statistics

The following figures and tables provide information on both the availability and quality of various data types as received at ECMWF during the month. A brief description of each figure/table is given below. For a full explanation please refer to the Annex.

3.1 Data Availability

Figures 1-9 are global charts for each data type showing the average number of observations received in 24 hours in 5 degree boxes. The average daily number of observations (global) is also displayed with a breakdown, where appropriate, for each WMO region (figures 1, 3 and 4) and Ocean (figures 1-4).

Fig	Observation Type	Parameter	Level/Layer
1	SYNOP/SHIP	MSL Pressure	Surface
2	DRIFTER	MSL Pressure	Surface
3	TEMP	Geopotential	500 hPa
4	TEMP/PILOT	Wind	300 hPa
5	AIRCRAFT (AIREP/AMDAR etc.)	Wind	300-150 hPa
6	SATOB	Wind	400-150 hPa
7	SATOB	Wind	1000-700 hPa
9	TOVS (120 km) - NOAA14	Thickness	300-100 hPa

(Figure 1 includes data from fixed marine platforms e.g. moored buoys.)

3.2 Data Quality

Tables 1-8 contain lists of suspect stations in the format according to Recommendation 3 CBS-Ext(85).

Tab	Observation Type	Parameter	Level/Layer
1	SHIP	MSL Pressure	Surface
2	SHIP	Wind Speed	Surface
3	SHIP	Wind Direction	Surface
4	DRIFTER	MSL Pressure	Surface
5	DRIFTER	Wind Speed	Surface
6	DRIFTER	Wind Direction	Surface
7	TEMP	Geopotential	1000- 30 hPa
8	TEMP/PILOT	Wind	1000-100 hPa
9	TEMP/PILOT	Wind Direction	500-150 hPa

(SHIP tables include data from fixed marine platforms e.g. moored buoys.)

Figures 10-13 show the locations of suspect stations given in tables 7 and 8.

Fig	Observation Type	Parameter	Observation Time
10	TEMP	Geopotential	00 UTC
11	TEMP	Geopotential	12 UTC
12	TEMP/PILOT	Wind	00 UTC
13	TEMP/PILOT	Wind	12 UTC

Tables 10 and 11 provide quality statistics for all TEMPSHIPS and PILOTSHIPS received during the month.

Tab	Parameter	Observation Time
10	Geopotential	00 and 12 UTC
11	Wind	00 and 12 UTC

Figures 14–18 show global charts of SATOB and aircraft wind statistics in the form of wind vectors averaged over 5 degree boxes.

Fig	Parameter	Level/Layer
14	SATOB - Mean observed wind	1000-700 hPa
15	SATOB - Mean observed wind	400-150 hPa
16	SATOB - Mean observed minus first-guess wind	1000-700 hPa
17	SATOB - Mean observed minus first-guess wind	400-150 hPa
18	AIRCRAFT WIND - Mean observed minus first-guess	300-150 hPa

Table 12 provides quality statistics of aircraft wind observations stratified by airline carrier.

3.2.1 Figure 1 - Availability - SYNOP PRESSURE

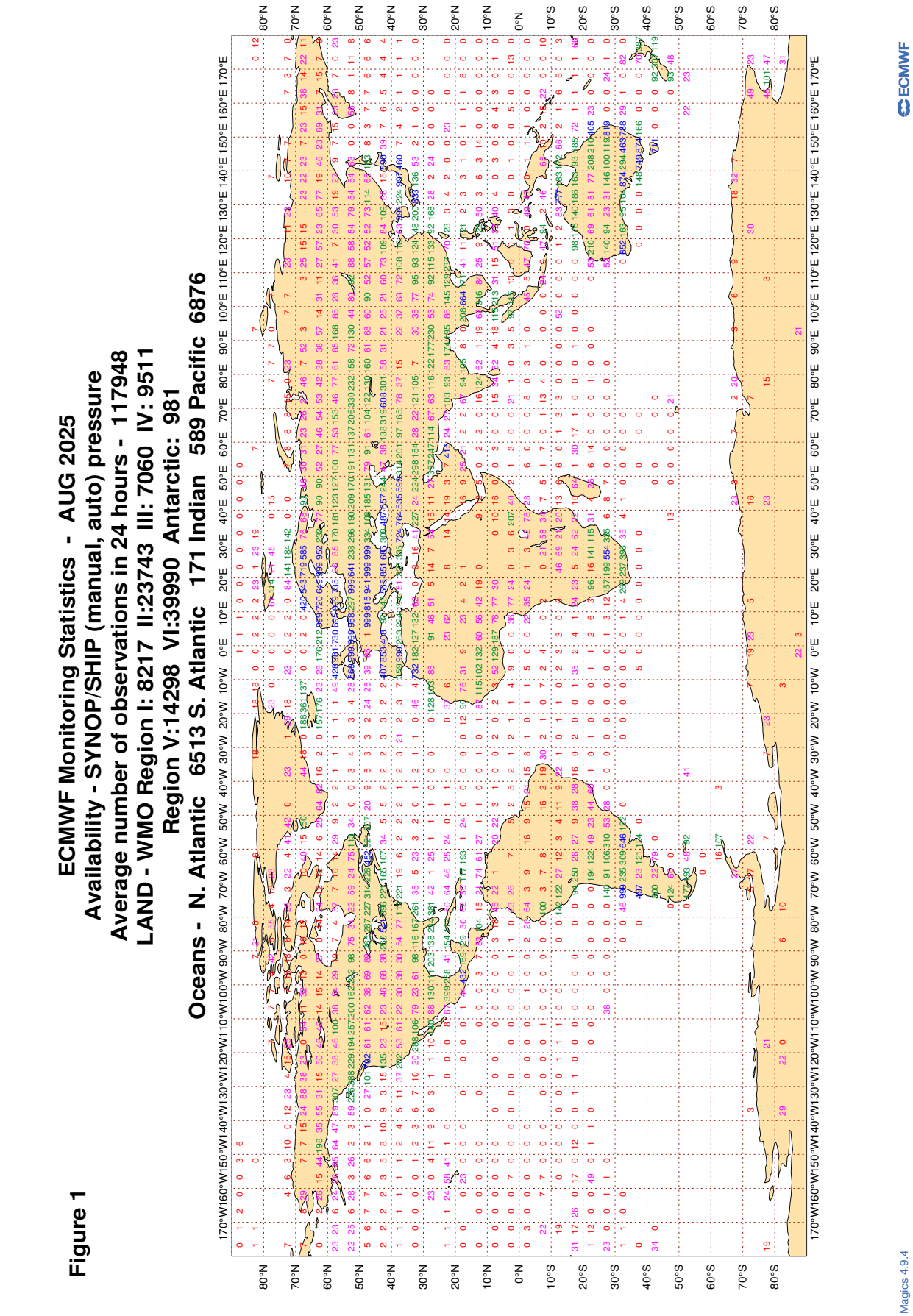


Figure 1

3.2.2 Figure 2 - Availability - DRIFTER PRESSURE

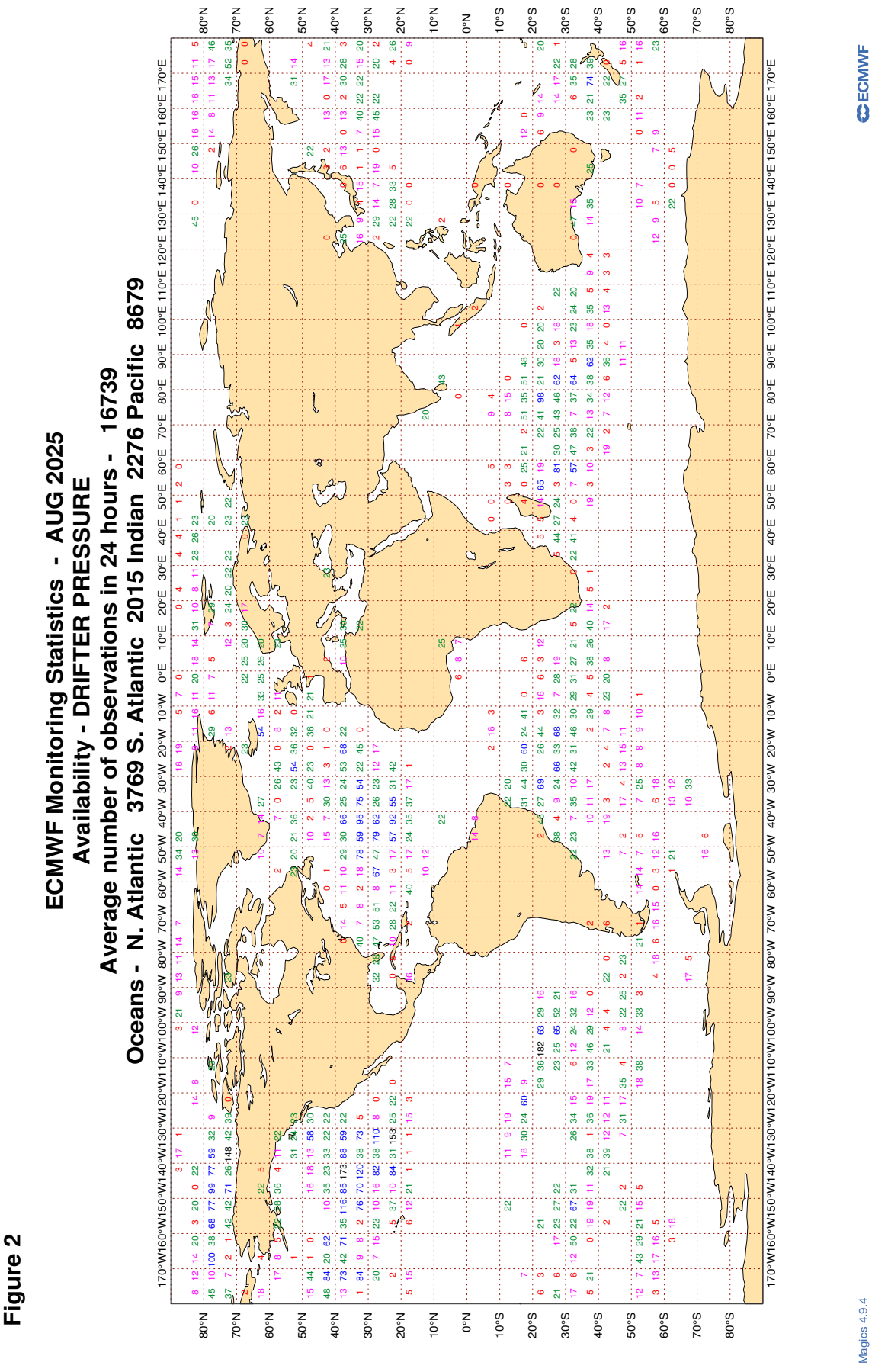
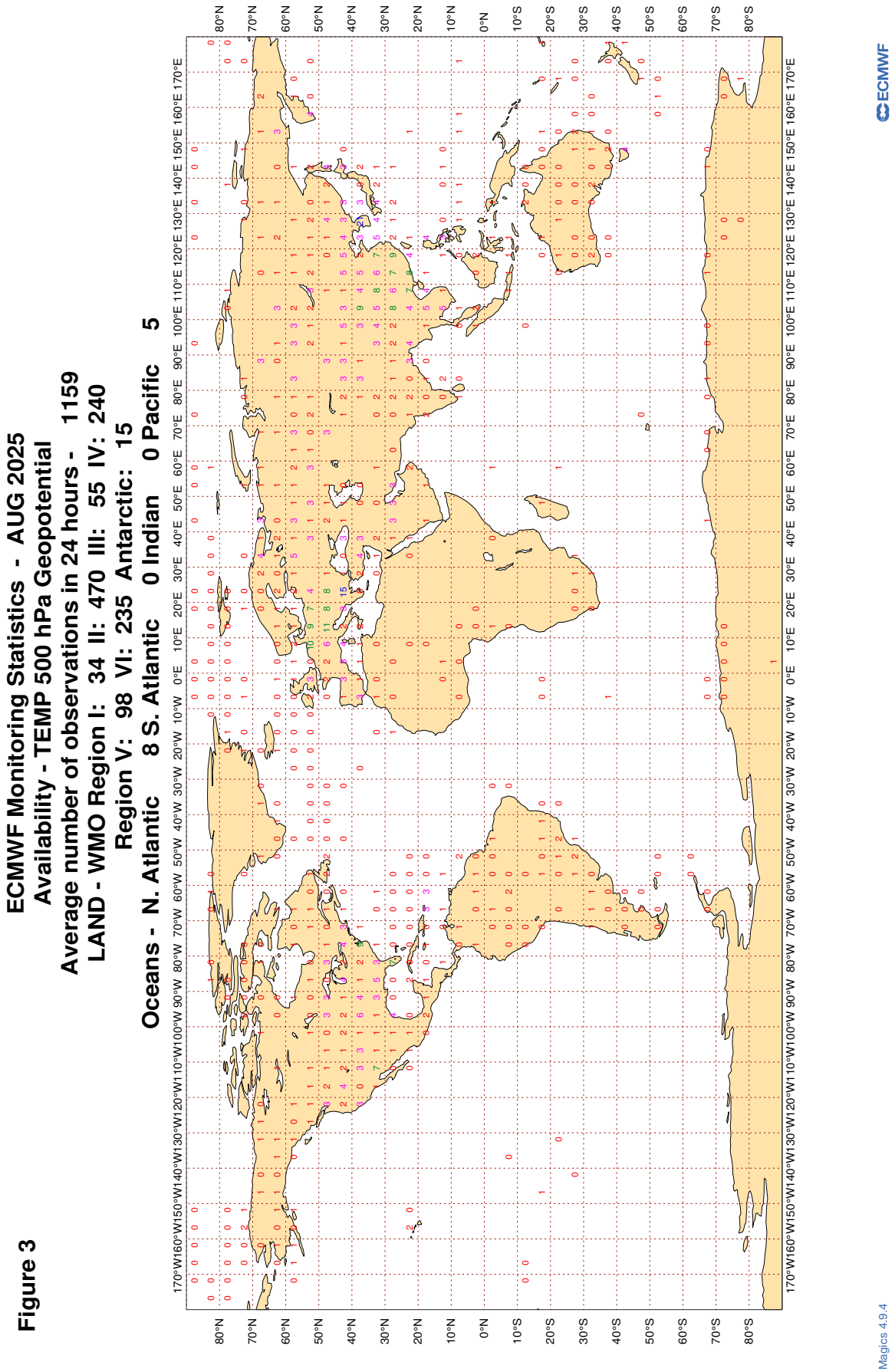
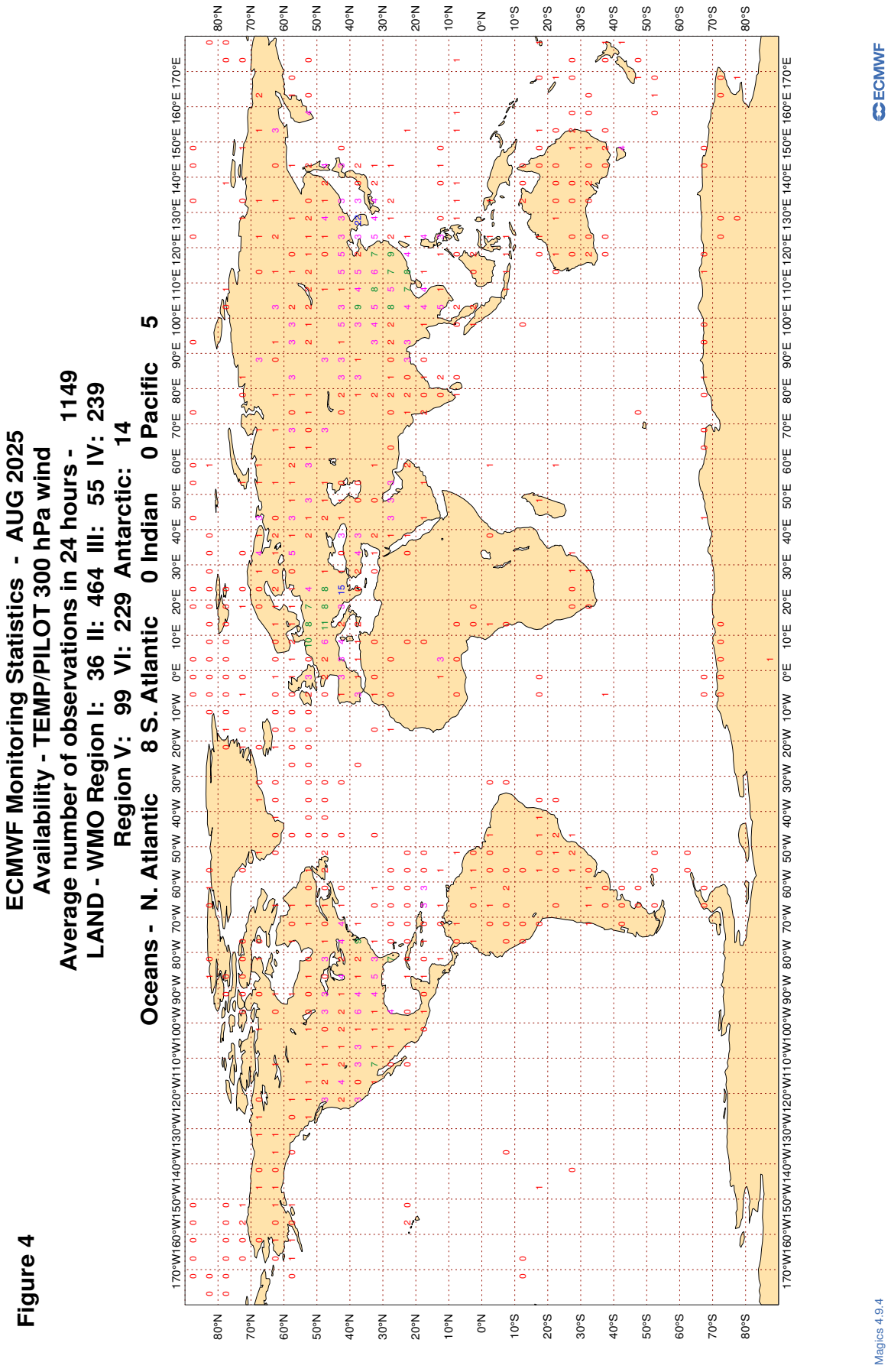


Figure 2

3.2.3 Figure 3 - Availability - TEMP 500 hPa geopotential



3.2.4 Figure 4 - Availability - TEMP/PILOT 300 hPa wind



3.2.5 Figure 5 - Availability - AIRCRAFT winds 300-150 hPa

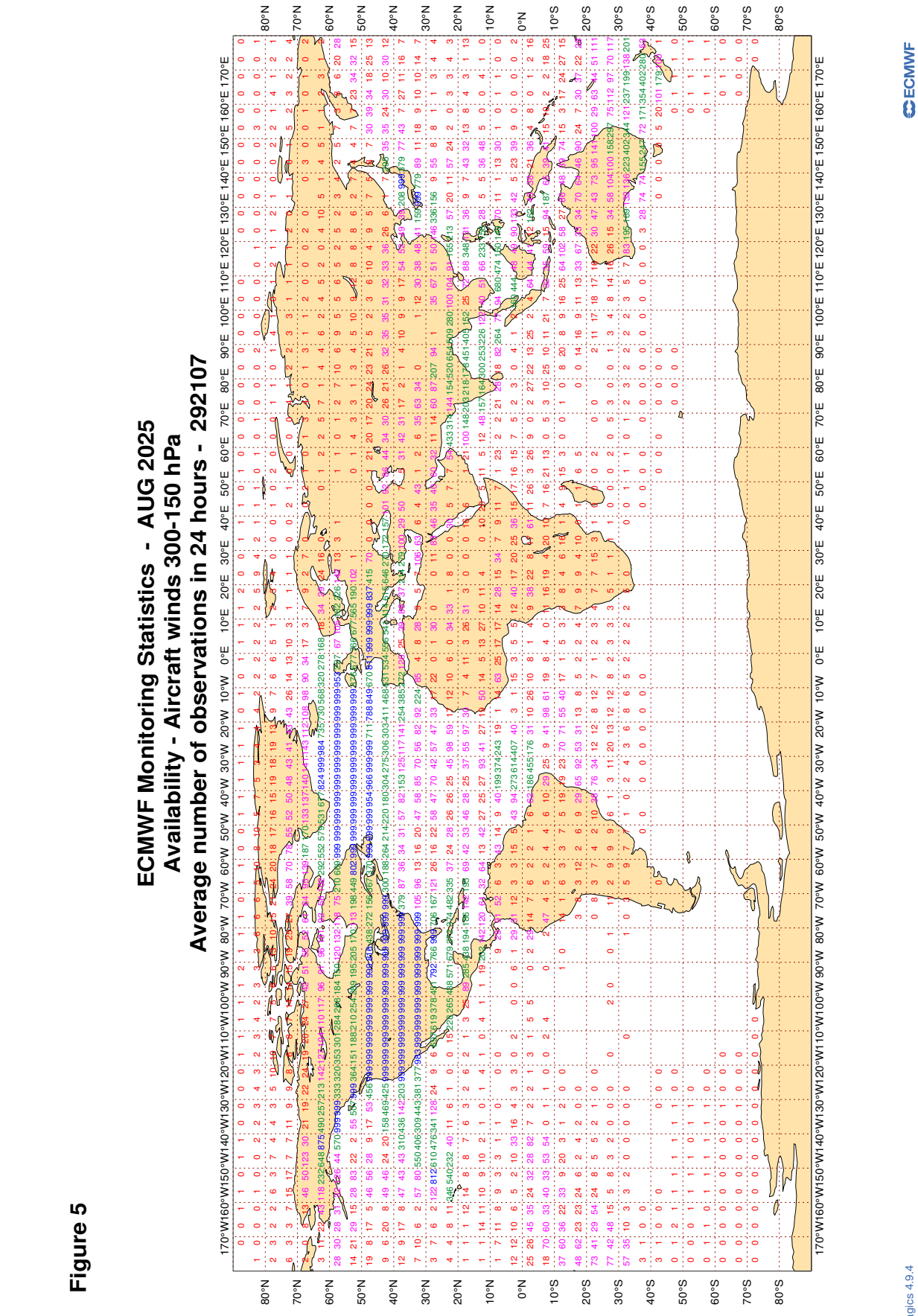


Figure 5

3.2.6 Figure 6 - Availability - SATOB winds 400-150 hPa

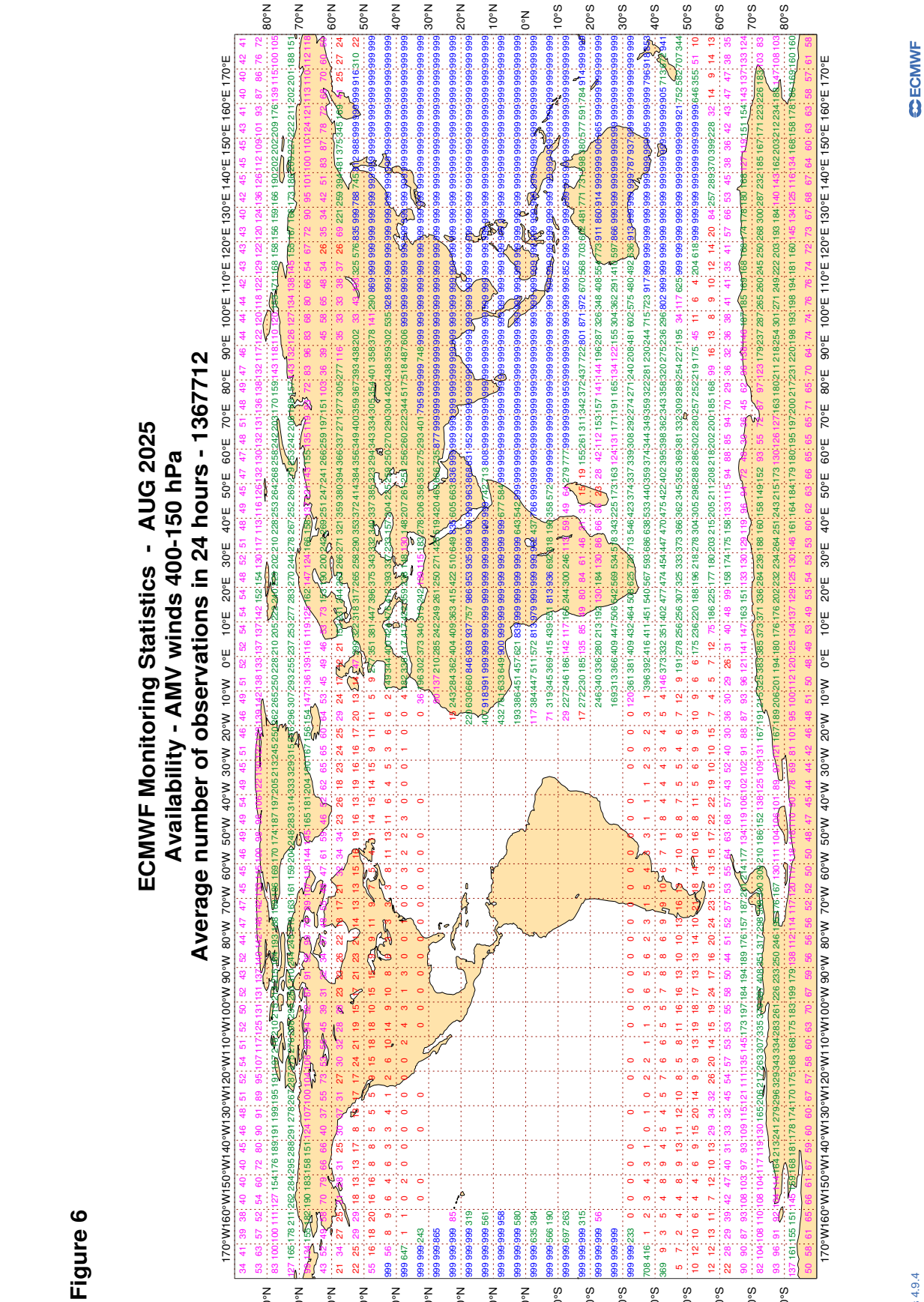


Figure 6

3.2.7 Figure 7 - Availability - SATOB winds 1000-700 hPa

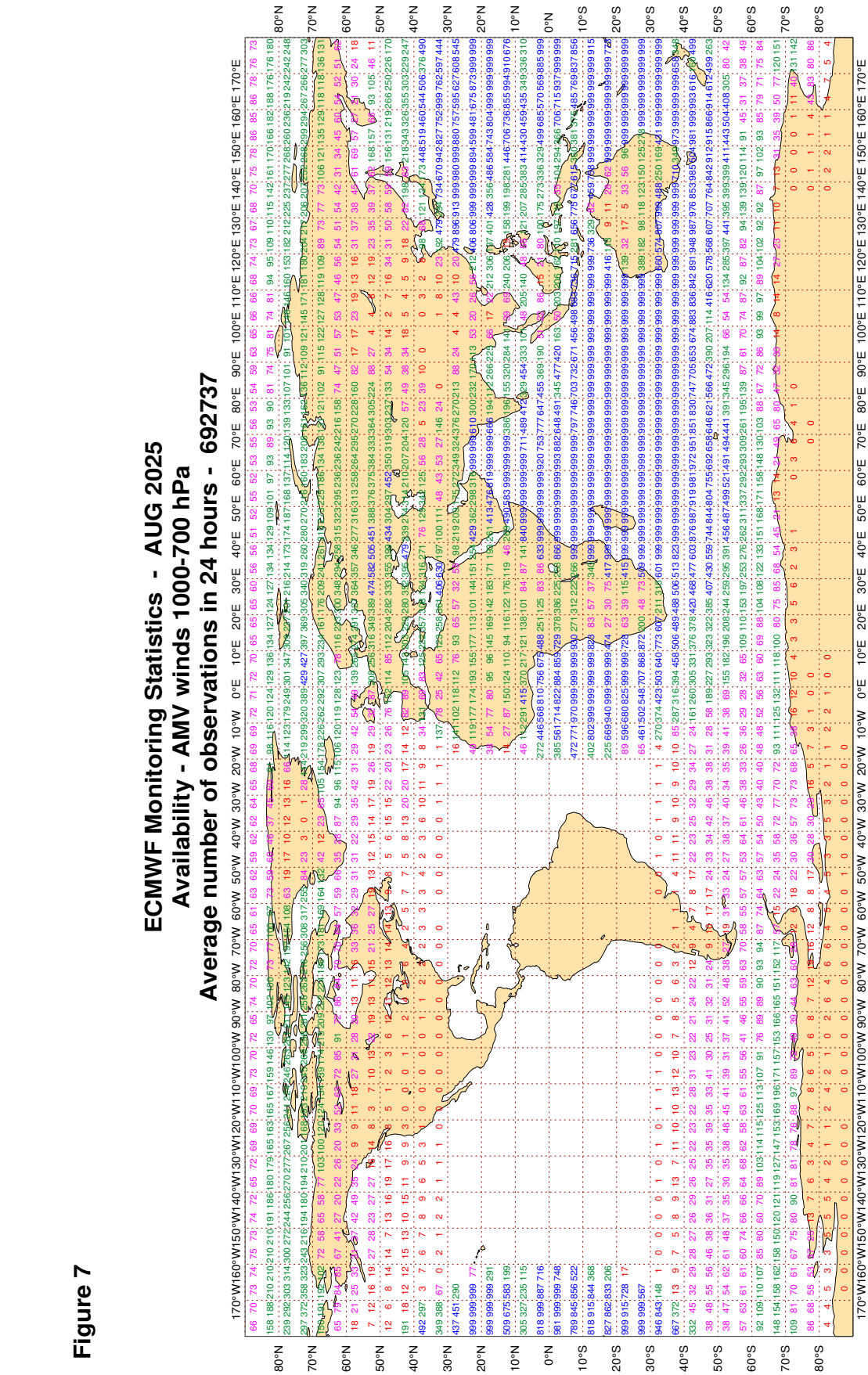


Figure 7

3.2.8 Figure 8 - Availability - NOAA15 ATOVS : AMSU-A

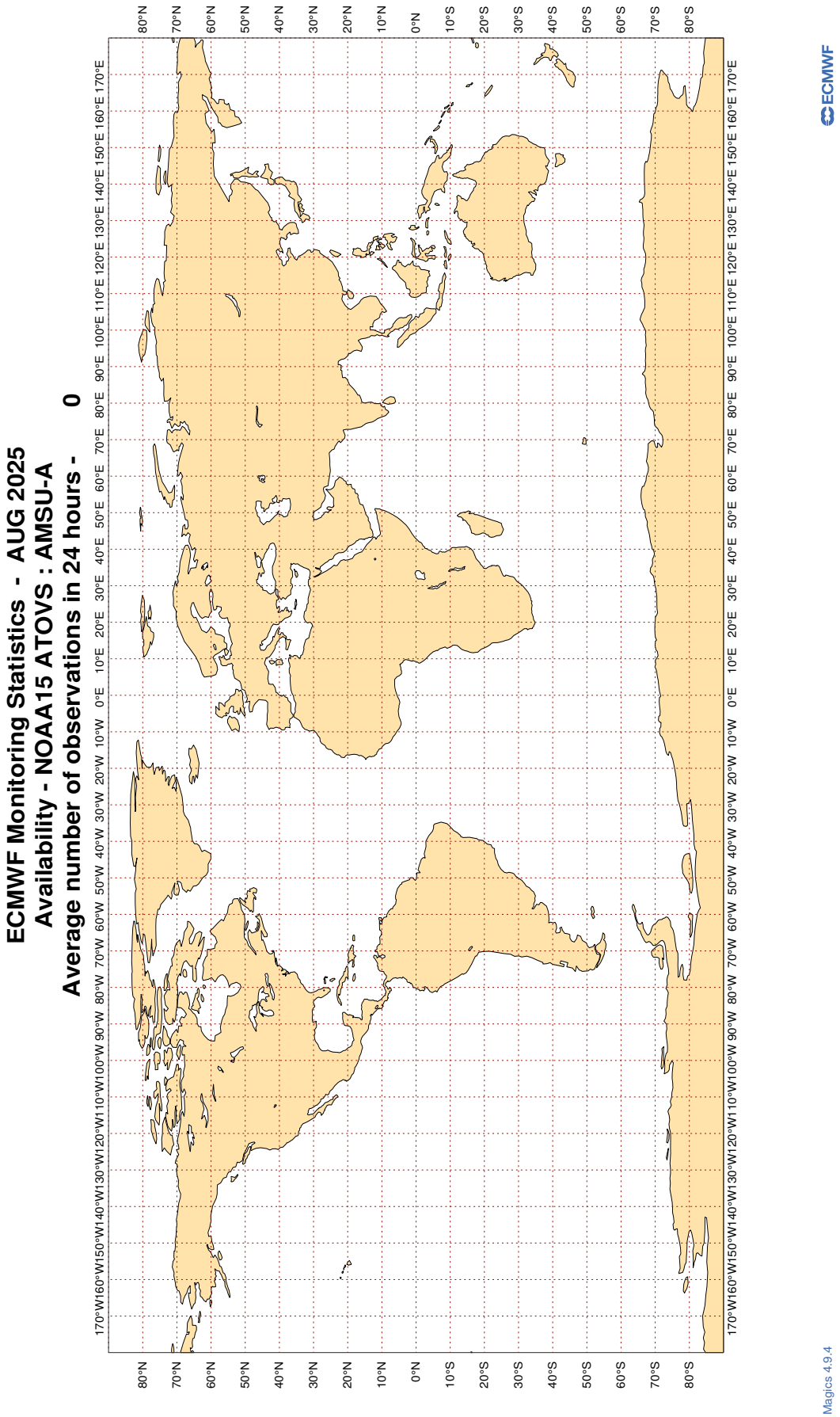


Figure 8

3.2.9 Figure 9.1 - Availability - NOAA18 ATOVS : AMSU-A

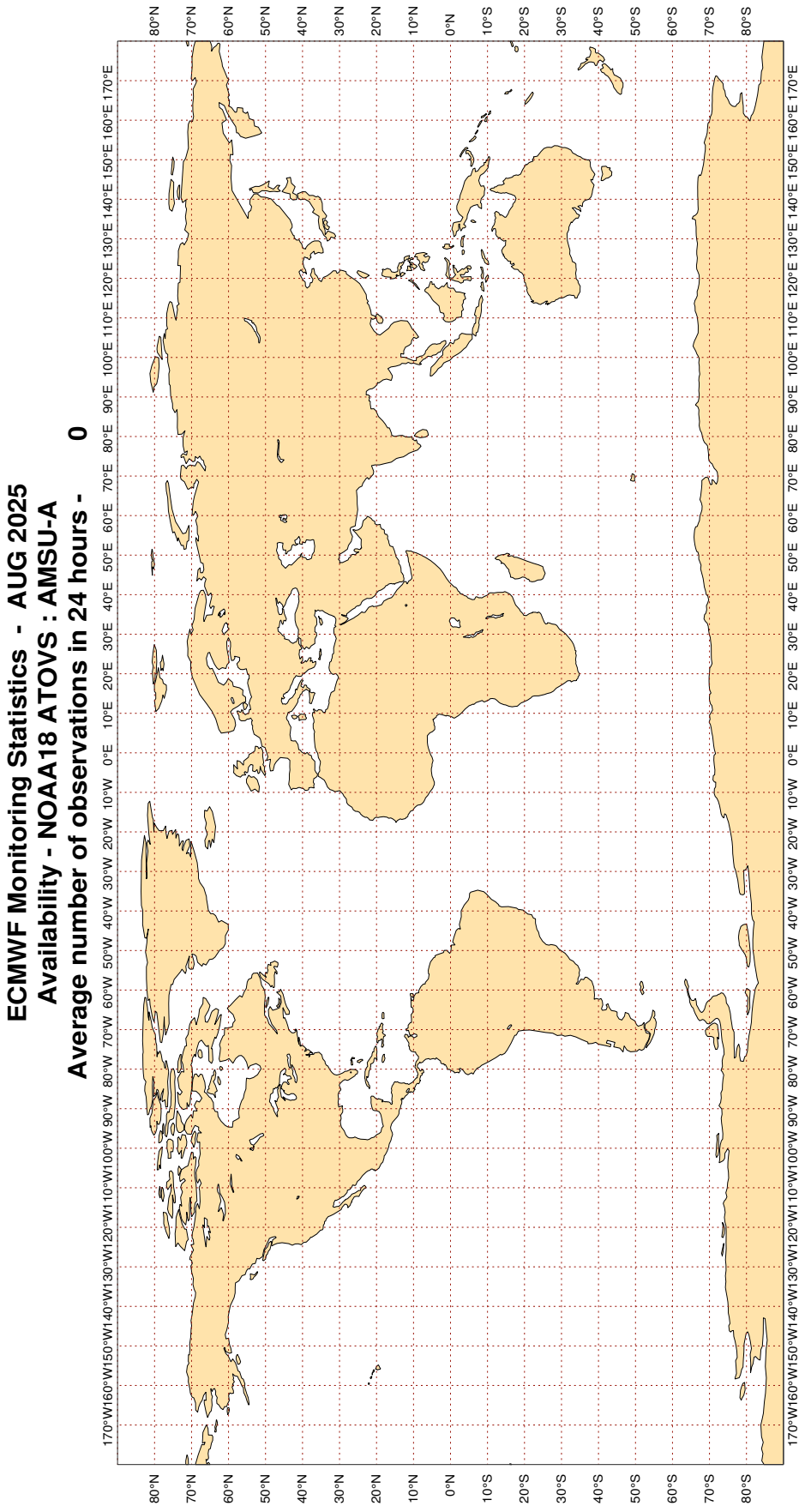


Figure 9.1

3.2.10 Figure 9.2 - Availability - AQUA ATOVS : AMSU-A

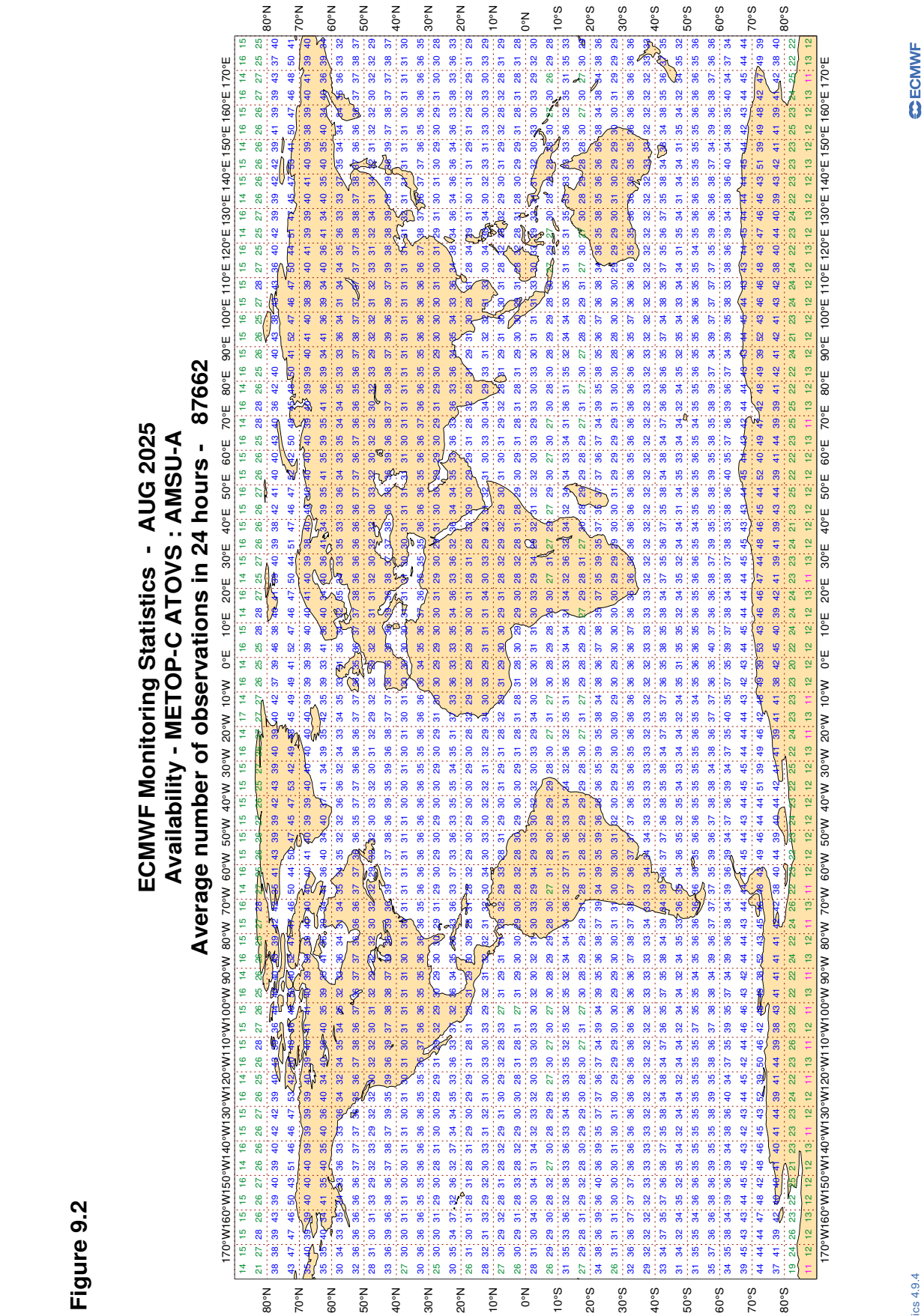
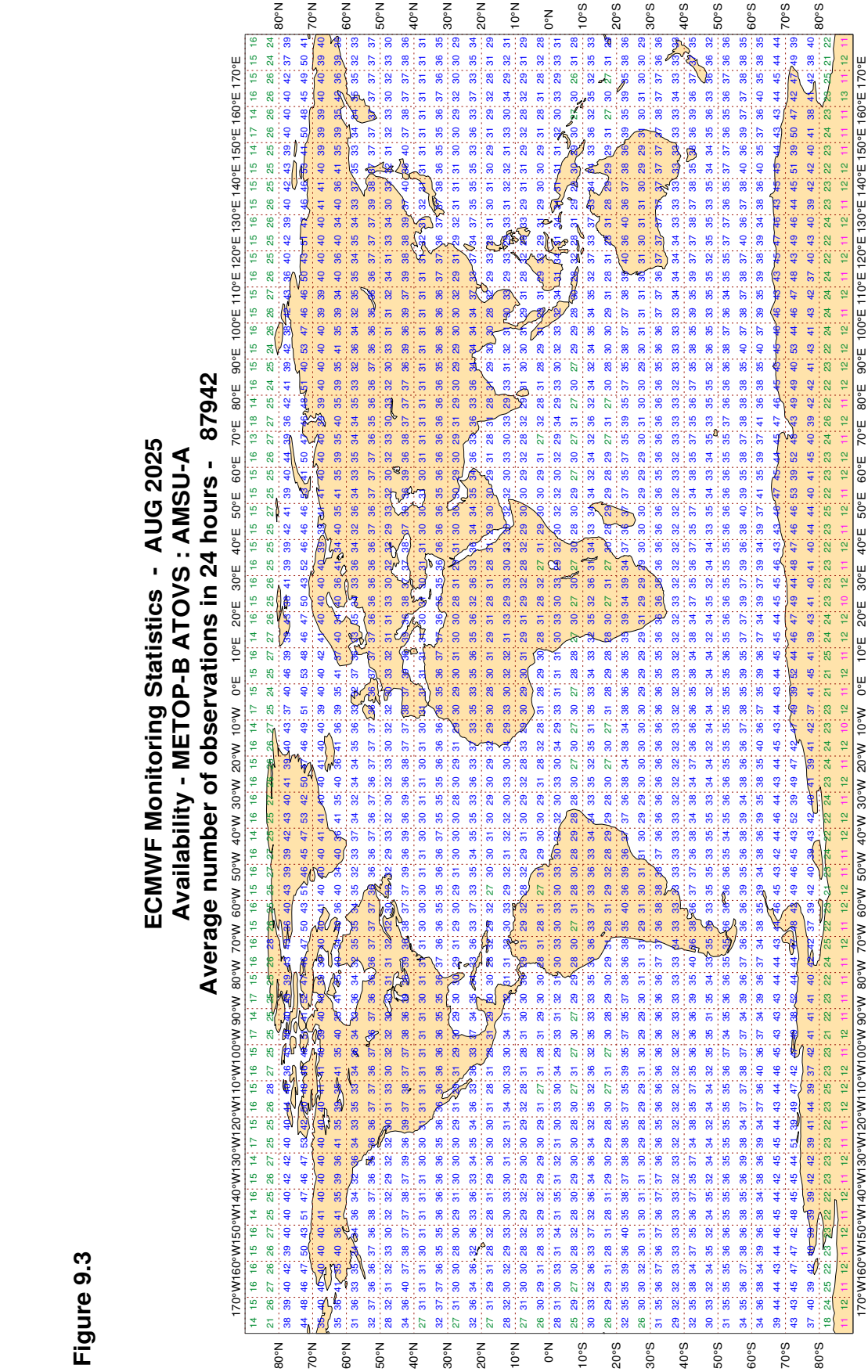


Figure 9.2

3.2.11 Figure 9.3 - Availability - METOP ATOVS : AMSU-A

Figure 9.3



3.2.12 Table 1 - Suspect ships and fixed marine platforms: Surface pressure - (hPa)

```
          LIST OF SUSPECT STATIONS         : SHIPS + FIXED MARINE PLATFORMS
                    MONITORING CENTRE      : ECMWF
                    ELEMENT MONITORED      : SURFACE PRESSURE (HPA)
                    AREA                   : GLOBAL
                    PERIOD                 : AUG 2025
                    STANDARD OF COMPARISON: FIRST-GUESS FIELD


SELECTION CRITERIA: NO. OF OBS.            >= 15(50), AND,
Manual (Automatic)  ABSOLUTE BIAS          >= 3(2) HPA, OR,
                    STANDARD DEVIATION     >= 5(4) HPA, OR,
                    % GROSS ERROR          >= 25(15)
                    (GROSS ERROR LIMIT = 15 HPA)

TIME = 99 => AVERAGE OF 00, 06, 12 AND 18 UTC OBSERVATIONS
```

WMO IDENT	OBS TIME	ELM	LEVEL	NUM OBS	NUM GROSS	SD	BIAS	RMS
2CYD8	99	P	SUR	24	0	0.8	-4.9	5.0
3E2032	99	P	SUR	30	0	0.9	-4.0	4.1
3E3566	99	P	SUR	30	0	1.2	6.2	6.3
3E4612	99	P	SUR	36	0	0.6	3.2	3.2
3E5193	99	P	SUR	71	0	0.5	3.5	3.5
3EBY2	99	P	SUR	38	32	1.0	13.7	13.8
3EFK6	99	P	SUR	35	0	1.9	-6.0	6.3
3ERG5	99	P	SUR	41	0	1.4	4.8	5.0
3ETR7	99	P	SUR	46	0	3.5	4.8	6.0
3FAE4	99	P	SUR	53	0	2.1	5.1	5.5
3FAR9	99	P	SUR	15	0	1.0	-3.4	3.5
3FEN2	99	P	SUR	32	0	1.4	3.5	3.7
3FWH8	99	P	SUR	33	3	4.6	10.8	11.7
45014	99	P	SUR	124	124	0.0	0.0	0.0
45161	99	P	SUR	113	0	0.6	9.6	9.6
45201	99	P	SUR	116	49	3.2	10.5	11.0
7GBN9QD	99	P	SUR	15	0	2.6	4.2	4.9
7KDA	99	P	SUR	32	0	1.5	-7.4	7.5
7KDP	99	P	SUR	16	1	0.9	-3.1	3.3
7KOA	99	P	SUR	21	0	1.0	5.1	5.2
9HA4048	99	P	SUR	17	6	0.5	14.2	14.2
9HA4777	99	P	SUR	57	0	3.5	5.0	6.2
9HA5209	99	P	SUR	17	0	2.1	5.7	6.1
9HA5782	99	P	SUR	28	0	1.8	-3.1	3.6
9HJD9	99	P	SUR	104	0	0.6	-3.2	3.2
9V3532	99	P	SUR	32	0	2.1	5.0	5.4
9V3913	99	P	SUR	102	3	6.4	-1.9	6.6
9V5456	99	P	SUR	32	0	4.9	5.0	7.0
9V6256	99	P	SUR	47	0	0.5	-4.1	4.1
9V7626	99	P	SUR	31	0	2.7	-7.7	8.2
9V8372	99	P	SUR	64	0	1.4	6.7	6.8
9V9404	99	P	SUR	22	0	1.0	3.3	3.4

LIST OF SUSPECT STATIONS : SHIPS + FIXED MARINE PLATFORMS
MONITORING CENTRE : ECMWF
ELEMENT MONITORED : SURFACE PRESSURE (HPA)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	NUM OBS	NUM GROSS	SD	BIAS	RMS
ATAH2	99	P	SUR	29	0	1.9	-4.1	4.5
AUTP	99	P	SUR	41	0	2.7	6.2	6.8
AVBC	99	P	SUR	29	0	1.8	3.8	4.2
C6CN5	99	P	SUR	15	0	1.5	-4.8	5.0
C6IA2	99	P	SUR	23	0	0.8	-3.9	4.0
C6TX6	99	P	SUR	18	0	1.9	4.2	4.6
H3JW	99	P	SUR	36	0	2.5	3.2	4.0
HOPW	99	P	SUR	17	0	1.7	-3.4	3.8
KPSJ	99	P	SUR	61	0	0.4	6.2	6.2
LAMP5	99	P	SUR	46	0	1.2	-3.1	3.4
LAQN7	99	P	SUR	26	0	1.2	3.9	4.1
LAQO7	99	P	SUR	19	0	3.0	4.5	5.4
LATL8	99	P	SUR	16	0	3.8	-5.4	6.6
OWLD2	99	P	SUR	46	0	2.6	3.0	4.0
S6LT3	99	P	SUR	31	0	1.3	-3.0	3.3
V7A6082	99	P	SUR	93	1	1.9	6.4	6.7
V7BZ9	99	P	SUR	34	0	2.2	9.1	9.4
V7DJ7	99	P	SUR	29	0	5.4	3.4	6.4
VGFJ	99	P	SUR	20	0	2.0	-4.6	5.1
VRFX8	99	P	SUR	30	0	0.7	4.8	4.8
VRGO2	99	P	SUR	24	0	2.4	7.4	7.7
VRQL9	99	P	SUR	31	0	5.3	4.6	7.0
VRRM5	99	P	SUR	16	0	2.5	3.2	4.0
VRSJ8	99	P	SUR	15	0	2.8	-4.1	4.9
VRWA8	99	P	SUR	16	0	2.4	-4.7	5.3
VRWP5	99	P	SUR	22	0	0.6	-6.3	6.3
WDA7827	99	P	SUR	97	0	1.2	-3.0	3.3
WGEB	99	P	SUR	121	0	0.4	6.3	6.4
WMKQ	99	P	SUR	88	0	0.6	-5.1	5.1
WSAF	99	P	SUR	120	0	1.0	-4.5	4.6
ZCHC8	99	P	SUR	16	0	1.8	3.1	3.5

3.2.13 Table 2 - Suspect ships and fixed marine platforms: Wind speed (m/s)

```
          LIST OF SUSPECT STATIONS        : SHIPS + FIXED MARINE PLATFORMS
                    MONITORING CENTRE     : ECMWF
                    ELEMENT MONITORED     : WIND SPEED (M/S)
                    AREA                  : GLOBAL
                    PERIOD                : AUG 2025
                    STANDARD OF COMPARISON: FIRST-GUESS FIELD


SELECTION CRITERIA: NO. OF OBS.           >= 15(50), AND,
Manual (Automatic)  ABSOLUTE BIAS         >= 4(4) M/S, OR,
                    % GROSS ERROR         >= 25(15)
                    (GROSS ERROR LIMIT FOR VECTOR WIND = 25 M/S)


TIME = 99 => AVERAGE OF 00, 06, 12 AND 18 UTC OBSERVATIONS
```

WMO IDENT	OBS TIME	ELM	LEVEL	NUM OBS	NUM GROSS	% GROSS	SD	BIAS	RMS

3.2.14 Table 3 - Suspect ships and fixed marine platforms: Wind direction (DEGREES)

```
          LIST OF SUSPECT STATIONS        : SHIPS + FIXED MARINE PLATFORMS
                    MONITORING CENTRE     : ECMWF
                    ELEMENT MONITORED     : WIND DIRECTION (DEGREES)
                    AREA                  : GLOBAL
                    PERIOD                : AUG 2025
                    STANDARD OF COMPARISON: FIRST-GUESS FIELD


SELECTION CRITERIA: NO. OF OBS.           >= 15(50) (WIND SPEEDS > 3M/S), AND ,
Manual (Automatic)  ABSOLUTE BIAS         >= 30(25) DEGREES, OR,
                    STANDARD DEVIATION    >= 70(50) DEGREES
                    (GROSS ERROR LIMIT FOR VECTOR WIND = 25 M/S)


TIME = 99 => AVERAGE OF 00, 06, 12 AND 18 UTC OBSERVATIONS
```

WMO IDENT	OBS TIME	ELM	LEVEL	NUM OBS	NUM GROSS	% GROSS	SD	BIAS	RMS
42067	99	DIRN	SUR	47	0	0	99.8	-30.3	104.3
45026	99	DIRN	SUR	77	0	0	25.9	36.6	44.8
45144	99	DIRN	SUR	91	0	0	54.8	116.3	128.5
45145	99	DIRN	SUR	93	0	0	157.6	1.2	157.6
45187	99	DIRN	SUR	60	0	0	38.2	36.8	53.1
45199	99	DIRN	SUR	88	0	0	33.0	-35.0	48.1
45205	99	DIRN	SUR	53	0	0	55.5	81.7	98.7
45207	99	DIRN	SUR	46	0	0	25.0	-30.8	39.6
46092	99	DIRN	SUR	63	0	0	11.7	38.7	40.4
46120	99	DIRN	SUR	29	0	0	18.3	40.7	44.7
46204	99	DIRN	SUR	84	0	0	22.4	36.3	42.7

3.2.15 Table 4 - Suspect drifters: Surface pressure (HPA)

```
          LIST OF SUSPECT STATIONS         : DRIFTER
                    MONITORING CENTRE      : ECMWF
                    ELEMENT MONITORED      : SURFACE PRESSURE (HPA)
                    AREA                   : GLOBAL
                    PERIOD                 : AUG 2025
                    STANDARD OF COMPARISON: FIRST-GUESS FIELD


SELECTION CRITERIA: NO. OF OBS.            >= 20, AND,
                    ABSOLUTE BIAS          >= 4 HPA, OR,
                    STANDARD DEVIATION     >= 6 HPA, OR,
                    % GROSS ERROR          >= 25
                    (GROSS ERROR LIMIT = 15 HPA)

TIME = 99 => AVERAGE OF ALL OBSERVATIONS
```

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
0022943	99	P	SUR	29	124	221	8	4.6	-4.2	6.2
1701664	99	P	SUR	-44	-131	733	196	4.0	-1.8	4.4
1701667	99	P	SUR	-49	-98	730	391	4.9	-7.5	8.9
2302627	99	P	SUR	11	73	658	638	2.6	-10.9	11.2
2501555	99	P	SUR	79	172	548	548	0.0	0.0	0.0
2501556	99	P	SUR	80	149	736	202	7.9	3.9	8.8
2501586	99	P	SUR	76	-154	739	213	0.3	0.0	0.3
2501589	99	P	SUR	71	176	739	478	0.4	0.6	0.7
2802016	99	P	SUR	59	-176	730	0	0.8	12.0	12.0
3401636	99	P	SUR	-31	-103	657	0	0.5	-6.3	6.3
4101867	99	P	SUR	6	81	733	0	0.4	-4.5	4.5
4500014	99	P	SUR	45	-88	1483	1483	0.0	0.0	0.0
4500029	99	P	SUR	43	-86	45	0	3.8	-6.3	7.4
4500161	99	P	SUR	43	-86	2011	0	0.4	9.6	9.6
4500201	99	P	SUR	42	83	4055	1662	3.3	10.5	11.0
45014	99	P	SUR	45	-88	744	744	0.0	0.0	0.0
45161	99	P	SUR	43	-86	681	0	0.6	9.6	9.6
45201	99	P	SUR	42	83	696	284	3.3	10.6	11.1
4602563	99	P	SUR	37	-162	730	436	7.2	1.6	7.4
4701543	99	P	SUR	72	-179	698	698	0.0	0.0	0.0
4701558	99	P	SUR	79	-18	62	0	0.3	-4.5	4.5
4801763	99	P	SUR	56	-33	744	0	0.7	-11.8	11.9
4802582	99	P	SUR	64	-18	739	118	4.2	-8.2	9.2
5501735	99	P	SUR	-39	-117	742	742	0.0	0.0	0.0
5802090	99	P	SUR	-12	51	314	314	0.0	0.0	0.0
5802091	99	P	SUR	-26	69	314	314	0.0	0.0	0.0
6203818	99	P	SUR	-30	-50	575	573	0.0	-12.7	12.7
6301517	99	P	SUR	81	-167	739	739	0.0	0.0	0.0
6301581	99	P	SUR	80	33	654	35	5.2	4.4	6.8
6801806	99	P	SUR	57	-170	90	0	0.6	-8.1	8.1
6801904	99	P	SUR	-15	57	313	313	0.0	0.0	0.0
6801908	99	P	SUR	-51	-97	138	138	0.0	0.0	0.0

LIST OF SUSPECT STATIONS : DRIFTER
MONITORING CENTRE : ECMWF
ELEMENT MONITORED : SURFACE PRESSURE (HPA)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	ME LEVEL	LAT	N LONG	N OBS	GROSS	SD	BIAS	RMS
6801948	99	P	SUR	53	-130	144	133	1.4	12.6	12.7
7801693	99	P	SUR	22	173	735	0	0.5	-11.4	11.4
7801750	99	P	SUR	21	-133	664	623	1.9	12.8	12.9
7801770	99	P	SUR	58	-153	725	706	1.2	13.7	13.7
9609639	99	P	SUR	43	154	24	3	2.0	8.4	8.6

3.2.16 Table 5 - Suspect drifters: Wind speed (m/s)

```
          LIST OF SUSPECT STATIONS        : DRIFTER
                    MONITORING CENTRE     : ECMWF
                    ELEMENT MONITORED     : WIND SPEED (M/S)
                    AREA                  : GLOBAL
                    PERIOD                : AUG 2025
                    STANDARD OF COMPARISON: FIRST-GUESS FIELD


SELECTION CRITERIA: NO. OF OBS.           >= 20, AND,
                    ABSOLUTE BIAS         >= 5 M/S, OR,
                    % GROSS ERROR         >= 25
                    (GROSS ERROR LIMIT FOR VECTOR WIND = 25 M/S)


TIME = 99 => AVERAGE OF ALL OBSERVATIONS
```

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	% GROSS	SD	BIAS	RMS

3.2.17 Table 6 - Suspect drifters: Wind direction (degrees)

```
          LIST OF SUSPECT STATIONS         : DRIFTER
                    MONITORING CENTRE      : ECMWF
                    ELEMENT MONITORED      : WIND DIRECTION (DEGREES)
                    PERIOD                 : AUG 2025
                    STANDARD OF COMPARISON: FIRST-GUESS FIELD


SELECTION CRITERIA: NO. OF OBS.            >= 20 (WIND SPEEDS > 3M/S), AND ,
                    ABSOLUTE BIAS          >= 20 DEGREES, OR,
                    STANDARD DEVIATION     >= 60 DEGREES
                    (GROSS ERROR LIMIT FOR VECTOR WIND = 25 M/S)


TIME = 99 => AVERAGE OF ALL OBSERVATIONS
```

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	% GROSS	SD	BIAS	RMS
1300131	99	DIRN	SUR	28	-17	326	0	0	40.4	82.4	91.8
2200108	99	DIRN	SUR	36	126	499	0	0	31.3	-21.2	37.8
2200185	99	DIRN	SUR	37	125	475	0	0	21.1	22.8	31.0
2200297	99	DIRN	SUR	34	125	465	0	0	29.6	38.3	48.4
2200309	99	DIRN	SUR	34	128	545	0	0	30.9	-22.6	38.3
2200310	99	DIRN	SUR	38	129	193	0	0	43.1	-23.2	48.9
2300456	99	DIRN	SUR	18	67	235	0	0	40.0	-68.0	78.9
23456	99	DIRN	SUR	18	67	227	0	0	43.1	-66.2	79.0
4200067	99	DIRN	SUR	30	-89	1716	0	0	102.4	-35.1	108.3
42067	99	DIRN	SUR	30	-89	285	0	0	101.6	-34.8	107.4
4500026	99	DIRN	SUR	42	-87	2418	0	0	31.3	36.0	47.7
4500168	99	DIRN	SUR	42	-86	2288	0	0	31.9	20.5	37.9
4500176	99	DIRN	SUR	42	-82	2307	0	0	26.3	-26.9	37.6
4500186	99	DIRN	SUR	42	-88	1324	0	0	37.7	23.4	44.3
4500187	99	DIRN	SUR	42	-88	2012	0	0	35.4	36.8	51.0
4500199	99	DIRN	SUR	43	-88	973	0	0	29.7	-32.6	44.1
4500205	99	DIRN	SUR	42	-82	1863	0	0	62.5	84.4	105.0
4500207	99	DIRN	SUR	42	-81	1761	0	0	24.4	-28.0	37.1
4500209	99	DIRN	SUR	43	-82	2597	0	0	26.1	-21.5	33.9
45026	99	DIRN	SUR	42	-87	448	0	0	32.5	36.8	49.1
45144	99	DIRN	SUR	53	-99	575	1	0	40.2	120.6	127.1
45145	99	DIRN	SUR	52	-97	543	2	0	156.5	17.4	157.4
45168	99	DIRN	SUR	42	-86	384	0	0	29.6	20.6	36.1
45176	99	DIRN	SUR	42	-82	439	0	0	31.5	-24.9	40.2
45186	99	DIRN	SUR	42	-88	249	0	0	38.7	24.2	45.7
45187	99	DIRN	SUR	43	-88	367	0	0	38.7	35.6	52.6
45199	99	DIRN	SUR	43	-88	533	0	0	32.1	-33.2	46.1
45205	99	DIRN	SUR	42	-82	311	0	0	61.9	82.4	103.1
45207	99	DIRN	SUR	42	-81	281	0	0	23.6	-28.8	37.2
45208	99	DIRN	SUR	42	-81	231	0	0	26.3	-20.3	33.2
45209	99	DIRN	SUR	43	-82	447	0	0	27.2	-21.0	34.4

LIST OF SUSPECT STATIONS : DRIFTER
MONITORING CENTRE : ECMWF
ELEMENT MONITORED : WIND DIRECTION (DEGREES)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	% GROSS	SD	BIAS	RMS
45221	99	DIRN	SUR	45	-73	41	0	0	49.8	23.9	55.2
4600087	99	DIRN	SUR	48	-125	589	0	0	21.7	26.3	34.1
4600092	99	DIRN	SUR	37	-122	444	0	0	12.9	44.4	46.2
4600120	99	DIRN	SUR	48	-122	956	0	0	24.1	41.5	48.0
4600304	99	DIRN	SUR	49	-123	325	0	0	30.1	25.8	39.7
46087	99	DIRN	SUR	49	-125	88	0	0	25.2	23.2	34.2
46092	99	DIRN	SUR	37	-122	385	0	0	12.7	39.8	41.8
46120	99	DIRN	SUR	48	-122	179	0	0	23.0	38.4	44.8
46204	99	DIRN	SUR	51	-129	515	0	0	17.7	37.7	41.7
46205	99	DIRN	SUR	54	-134	622	0	0	14.1	-24.0	27.9
46304	99	DIRN	SUR	49	-123	357	0	0	28.1	23.3	36.5
6100281	99	DIRN	SUR	40	0	30	0	0	22.6	-20.8	30.7
6200086	99	DIRN	SUR	55	7	153	0	0	11.4	26.1	28.5
9392781	99	DIRN	SUR	-20	35	69	0	0	64.6	-5.0	64.8

3.2.18 Table 7 - Suspect radiosondes: Geopotential height (metres)

```
          LIST OF SUSPECT STATIONS         : RADIOSONDES
                    MONITORING CENTRE      : ECMWF
                    ELEMENT MONITORED      : GEOPOTENTIAL HEIGHT (METRES)
                    AREA                   : GLOBAL
                    PERIOD                 : AUG 2025
                    STANDARD OF COMPARISON: FIRST-GUESS FIELD


SELECTION CRITERIA: AT LEAST 3 LEVELS WITH
                    10 OBS AND 100 M WEIGHTED RMS


ONLY THE WORST LEVEL IS SHOWN (WITH UNWEIGHTED RMS)
```

WMO IDENT	OBS TIME	ELM	LEV	LAT	LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
01400	12	Z	1000	57	3	30	0	4.0	80.4	80.5
01400	00	Z	1000	57	3	28	0	4.0	80.2	80.3
17351	12	Z	500	37	35	30	0	8.6	52.4	53.1
23933	00	Z	250	61	69	30	0	27.7	-101.8	105.5
23933	12	Z	250	61	69	30	0	28.2	-102.4	106.2
26477	00	Z	30	56	31	20	0	111.9	-147.7	185.3
30673	12	Z	150	54	120	14	0	51.9	-81.5	96.6
31770	00	Z	150	49	140	27	0	77.0	61.8	98.7
37860	12	Z	1000	41	50	19	1	22.2	24.8	33.3
38341	00	Z	200	43	71	15	5	99.6	-51.8	112.3
40811	12	Z	200	31	49	20	9	86.1	93.8	127.3
42726	00	Z	850	24	93	16	0	6.5	-34.9	35.5
47058	00	Z	70	39	126	22	0	43.2	180.8	185.9
47102	00	Z	50	38	125	27	0	97.5	-107.7	145.3
47102	12	Z	30	38	125	21	0	115.3	-196.1	227.5
55591	00	Z	30	30	91	20	0	98.4	177.9	203.3
55591	12	Z	50	30	91	19	0	87.0	158.6	180.9
65344	12	Z	1000	6	2	30	0	5.0	30.5	30.9
76644	12	Z	850	21	-90	21	0	3.8	36.3	36.5
76644	00	Z	925	21	-90	23	0	12.3	36.8	38.8
78988	12	Z	1000	12	-69	24	0	27.4	14.0	30.8
80371	12	Z	200	1	-78	11	2	84.8	193.1	210.9
91680	12	Z	1000	-18	177	29	0	7.5	31.2	32.1
91680	00	Z	1000	-18	177	30	0	3.5	31.2	31.4
KMPLHP	00	Z	1000	45	-58	11	0	28.1	16.5	32.6
YLV96W	00	Z	850	51	-17	10	0	39.2	41.7	57.2

3.2.19 Table 8 - Suspect radiosondes: Wind (m/s)

```
          LIST OF SUSPECT STATIONS        : RADIOSONDES
                    MONITORING CENTRE     : ECMWF
                    ELEMENT MONITORED     : WIND (M/S)
                    AREA                  : GLOBAL
                    PERIOD                : AUG 2025
                    STANDARD OF COMPARISON: FIRST-GUESS FIELD

SELECTION CRITERIA: AT LEAST 10 OBS AND 15 M/S RMS VECTOR WIND

STANDARD LEVEL (1000-100 HPA) WITH HIGHEST RMS IS SHOWN
```

WMO IDENT	OBS TIME	ELM	LEV	LAT	LONG	NUM OBS	NUM GROSS	UBIAS	VBIAS	RMS
27459	12	V	850	56	44	8	4	-0.7	-8.2	16.1
38341	12	V	500	43	71	19	3	0.7	-3.0	16.2
38341	00	V	200	43	71	14	1	-2.4	-5.3	17.3

3.2.20 Table 9 - Suspect radiosondes: Wind direction (degrees)

```
          LIST OF SUSPECT STATIONS        : RADIOSONDES
                    MONITORING CENTRE     : ECMWF
                    ELEMENT MONITORED     : WIND DIRECTION (DEGREES)
                    AREA                  : GLOBAL
                    PERIOD                : AUG 2025
                    STANDARD OF COMPARISON: FIRST-GUESS FIELD


SELECTION CRITERIA: OBSERVED/FORECAST WIND SPEEDS >= 5 M/S
                    NO. OF OBSERVATIONS   >= 5, AND,
                    ABSOLUTE BIAS         >= 10 DEGREES, WITH
                    STANDARD DEVIATION    <  30 DEGREES, AND,
                    VERTICAL SPREAD       < 10 DEGREES
                    (AVERAGE BETWEEN 500 AND 150 HPA)
```

WMO IDENT	OBS TIME	ELM	LAT	LONG	NUM OBS	BIAS	MAX SPREAD	SD
34731	12	DD	47	40	28	-10.2	2.4	7.4
48327	12	DD	19	99	22	-11.8	6.6	16.9
48327	00	DD	19	99	23	-11.8	7.8	15.3

3.2.21 Figure 10 - Suspect TEMP observations - geopotential : 00 UTC

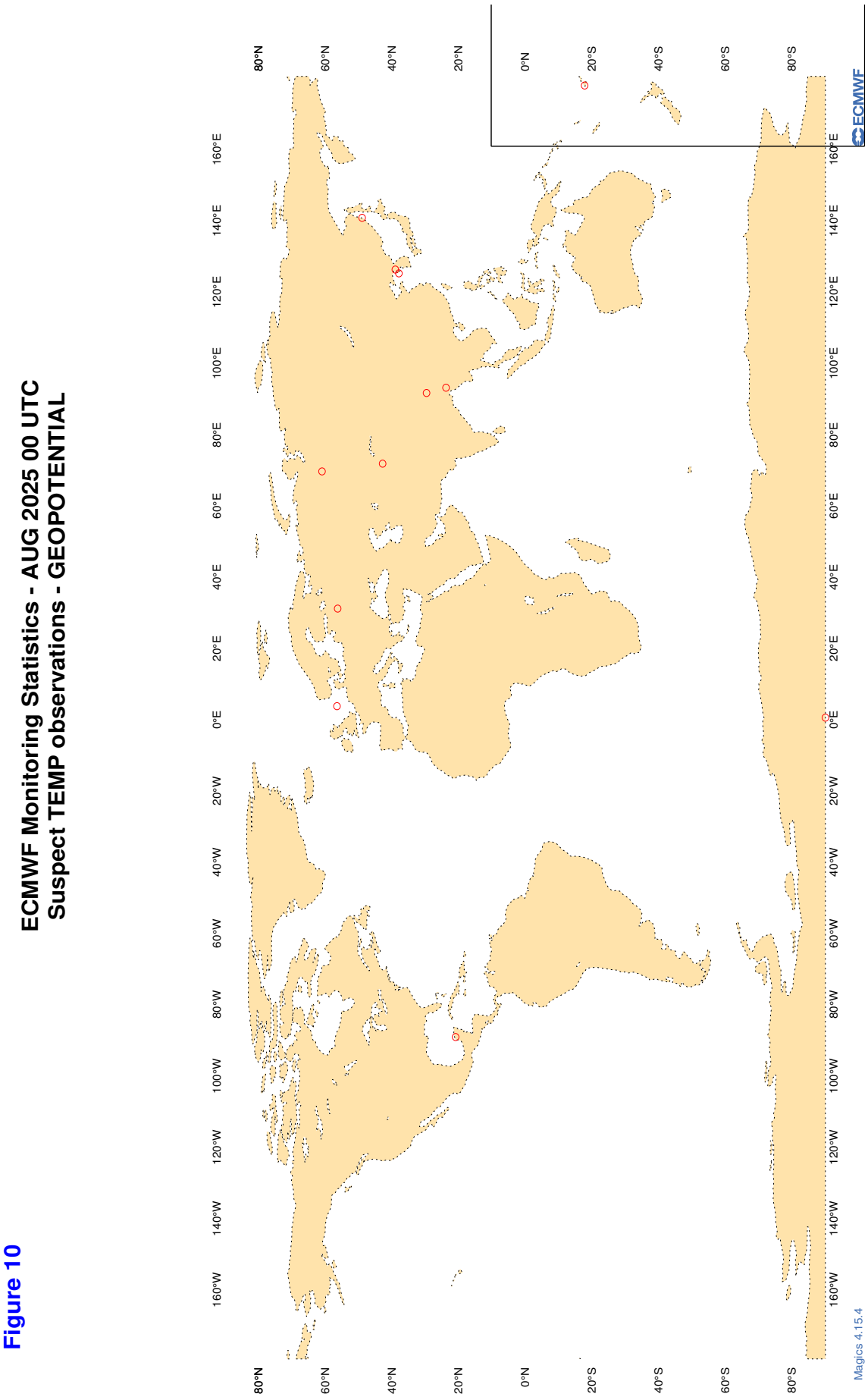
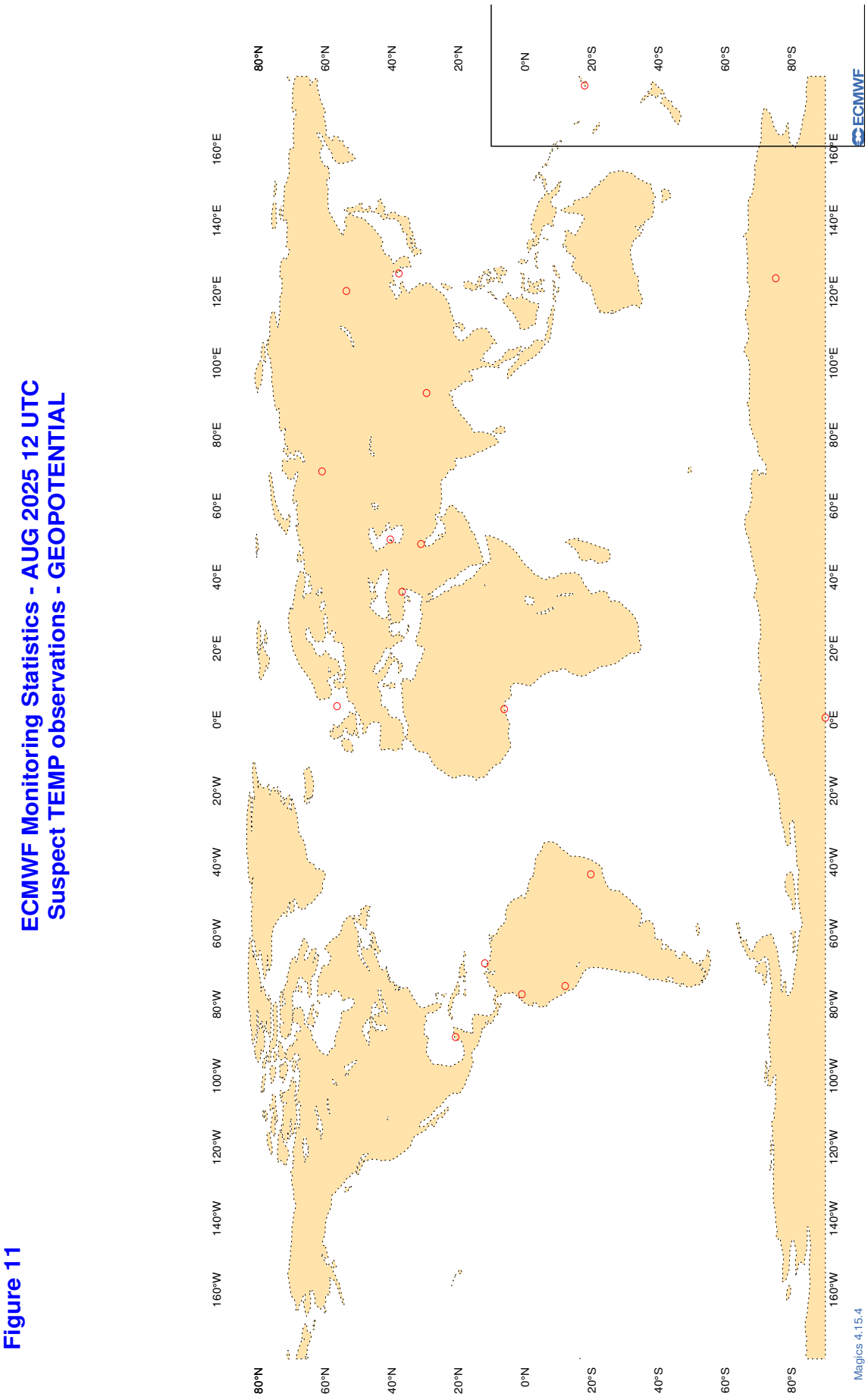
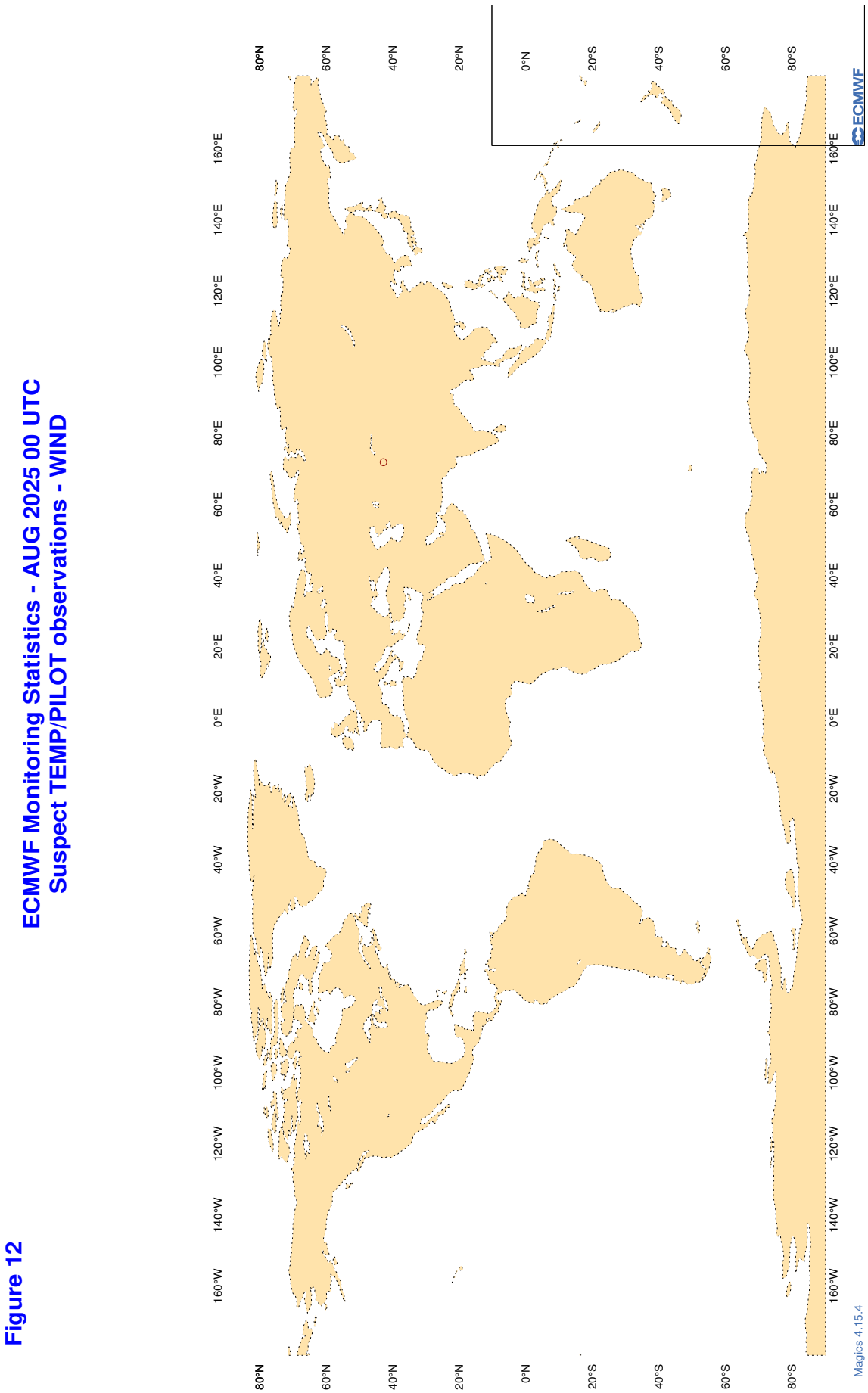


Figure 10

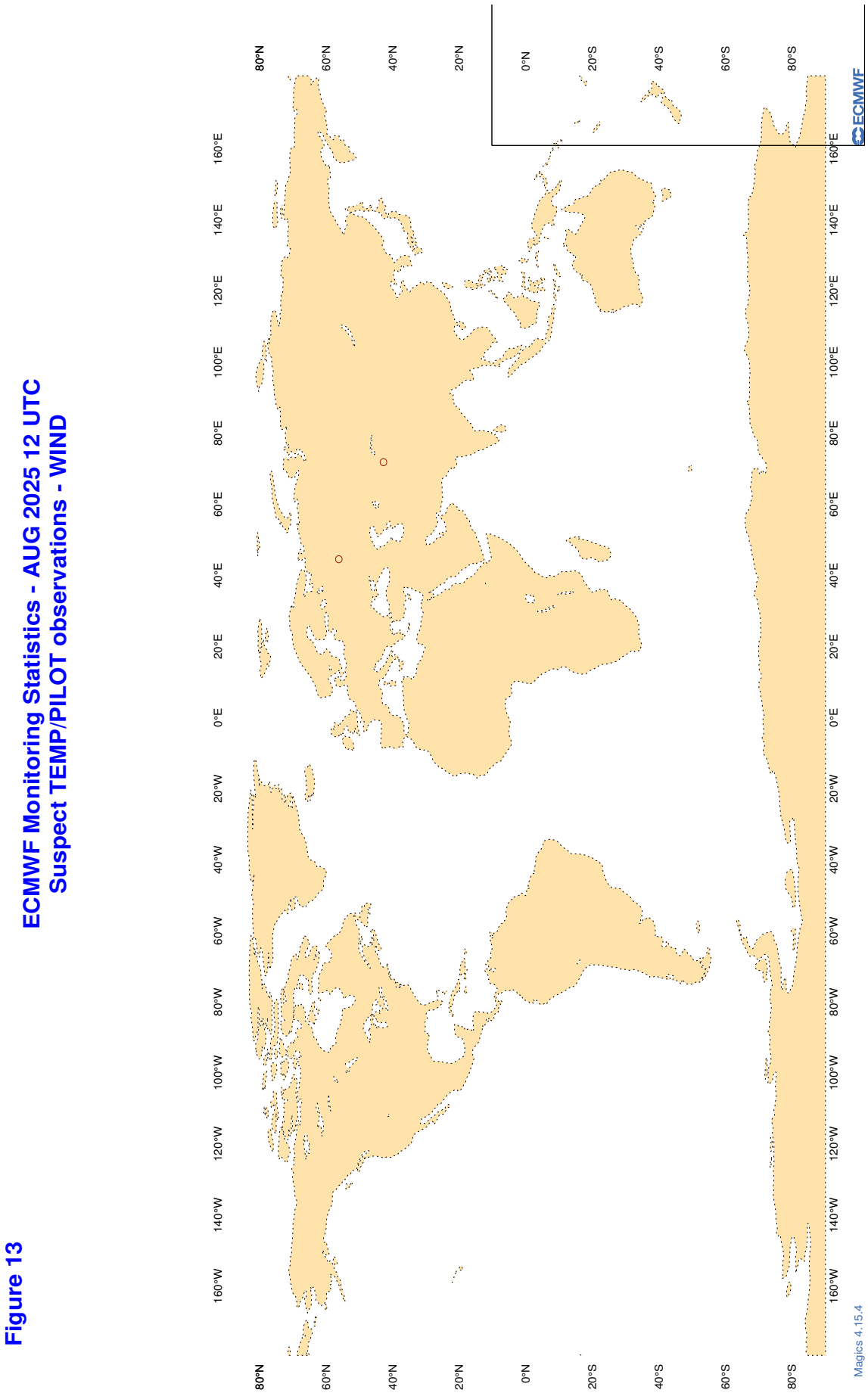
3.2.22 Figure 11 - Suspect TEMP observations - geopotential : 12 UTC



3.2.23 Figure 12 - Suspect TEMP/PILOT observations - wind : 00 UTC



3.2.24 Figure 13 - Suspect TEMP/PILOT observations - wind : 12 UTC



3.2.25 Table 10 - Radiosonde monitoring statistics (SHIPs): Geopotential height (metres)

```
RADIOSONDE MONITORING STATISTICS (SHIPS)
         MONITORING CENTRE     : ECMWF
         ELEMENT MONITORED     : GEOPOTENTIAL HEIGHT (METRES)
         LEVEL                 : 100 HPA
         AREA                  : GLOBAL
         PERIOD                : AUG 2025
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
2TDJJ8	00	Z	100	31	6.9	6.3
2TDJJ8	12	Z	100	31	5.4	4.2
7JUNA4	12	Z	100	7	16.5	-10.4
7JUNA4	00	Z	100	6	11.6	-6.4
7KPB	12	Z	100	6	5.5	1.4
7KPB	00	Z	100	3	1.8	-0.7
9ZT9MR	12	Z	100	2	29.9	-29.4
9ZT9MR	00	Z	100	3	35.1	-33.0
ASDE09	12	Z	100	1	24.8	24.8
ATGU3F	12	Z	100	3	27.5	-26.3
ATGU3F	00	Z	100	1	31.6	-31.6
DSQL7	12	Z	100	15	10.3	-7.1
DSQL7	00	Z	100	16	6.1	-4.1
FPUW5G	12	Z	100	3	8.3	-7.9
JNKN7J	12	Z	100	7	62.8	52.6
JNKN7J	00	Z	100	7	28.3	28.1
JPBN	12	Z	100	4	7.4	-4.5
JPBN	00	Z	100	3	2.9	-1.3
KJJF9X	12	Z	100	1	13.9	-13.9
KJJF9X	00	Z	100	1	31.5	-31.5
KMPLHP	12	Z	100	9	24.5	-7.7
KMPLHP	00	Z	100	11	25.5	8.1
LAGY8	12	Z	100	7	50.0	-45.8
LAGZ8	00	Z	100	3	46.2	46.1
LRYQE3	12	Z	100	6	52.4	47.6
LRYQE3	00	Z	100	5	9.7	-8.8
SMLQ	12	Z	100	19	8.7	-6.4
SMLQ	00	Z	100	19	7.1	-5.6
UXK5JT	12	Z	100	1	14.2	-14.2
UXK5JT	00	Z	100	0	0.0	0.0
WDK38H	12	Z	100	20	19.0	-18.3
XKQLWQ	12	Z	100	16	16.1	13.6
YLV96W	12	Z	100	8	70.8	46.7
YLV96W	00	Z	100	10	37.0	21.7
ZVQEQC	12	Z	100	3	1.9	1.6

3.2.26 Table 11 - Radiosonde monitoring statistics (SHIPs): Wind (m/s)

```
RADIOSONDE MONITORING STATISTICS (SHIPS)
         MONITORING CENTRE     : ECMWF
         ELEMENT MONITORED     : WIND (M/S)
         LEVEL                 : 100 HPA
         AREA                  : GLOBAL
         PERIOD                : AUG 2025
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OB TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
2TDJJ8	00	V	100	31	2.5	0.3	-0.5
2TDJJ8	12	V	100	31	2.4	0.7	0.4
7JUNA4	12	V	100	7	2.5	-0.2	-0.7
7JUNA4	00	V	100	6	3.0	0.2	0.7
7KPB	12	V	100	5	2.8	0.4	-0.8
7KPB	00	V	100	3	3.4	-0.6	0.1
9ZT9MR	12	V	100	2	3.6	2.8	1.1
9ZT9MR	00	V	100	3	2.3	0.4	-1.1
ASDE09	12	V	100	1	1.8	-1.3	1.2
ATGU3F	12	V	100	3	2.2	0.3	1.2
ATGU3F	00	V	100	1	3.3	-3.3	0.2
DSQL7	12	V	100	15	1.8	0.5	-0.4
DSQL7	00	V	100	14	2.5	-0.4	-0.1
FPUW5G	12	V	100	3	2.6	-0.4	0.4
JNKN7J	12	V	100	7	2.9	-0.6	0.5
JNKN7J	00	V	100	7	2.8	0.4	-0.2
JPBN	12	V	100	4	3.4	-0.1	-1.2
JPBN	00	V	100	3	3.6	1.2	-1.7
KJJF9X	12	V	100	1	2.6	2.4	-1.0
KJJF9X	00	V	100	1	1.5	-0.5	1.4
KMPLHP	12	V	100	9	2.9	-0.9	0.6
KMPLHP	00	V	100	11	4.1	0.0	0.3
LAGY8	12	V	100	7	1.7	-1.2	0.1
LAGZ8	00	V	100	3	2.6	0.9	-0.5
LRYQE3	12	V	100	6	2.5	0.1	-1.4
LRYQE3	00	V	100	5	1.7	-0.2	1.3
SMLQ	12	V	100	19	2.8	0.6	0.1
SMLQ	00	V	100	18	1.9	0.3	0.7
UXK5JT	12	V	100	1	2.8	0.9	2.7
UXK5JT	00	V	100	0	0.0	0.0	0.0
WDK38H	12	V	100	19	2.8	0.5	0.6
XKQLWQ	12	V	100	16	2.4	-0.2	-0.3
YLV96W	12	V	100	8	2.5	0.2	1.1
YLV96W	00	V	100	10	3.1	0.9	-0.6
ZVQEQC	12	V	100	3	2.4	1.4	0.9

3.2.27 Figure 14 - SATOB Winds: 700-1000hPa

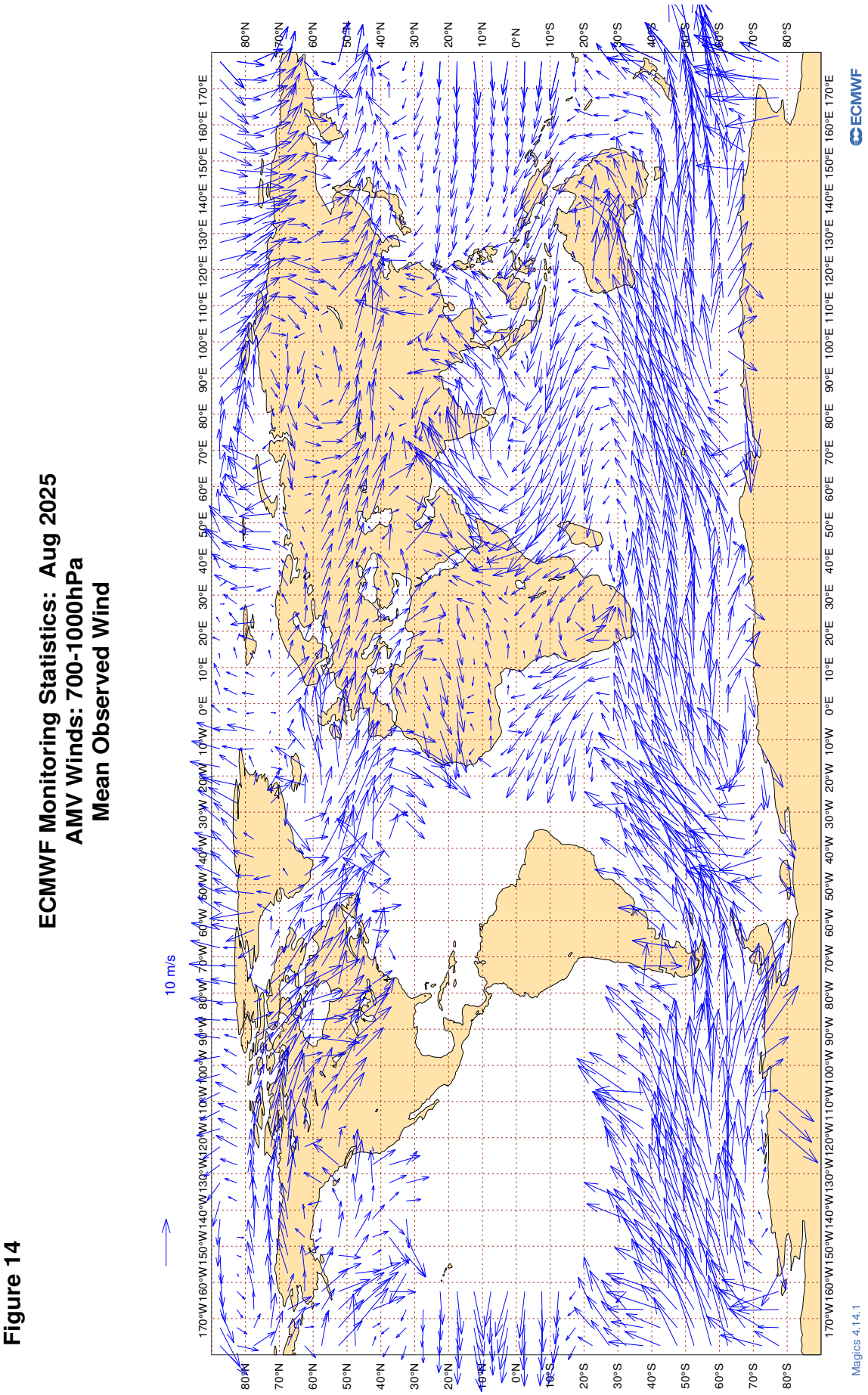


Figure 14

3.2.28 Figure 15 - SATOB Winds: 150- 400hPa

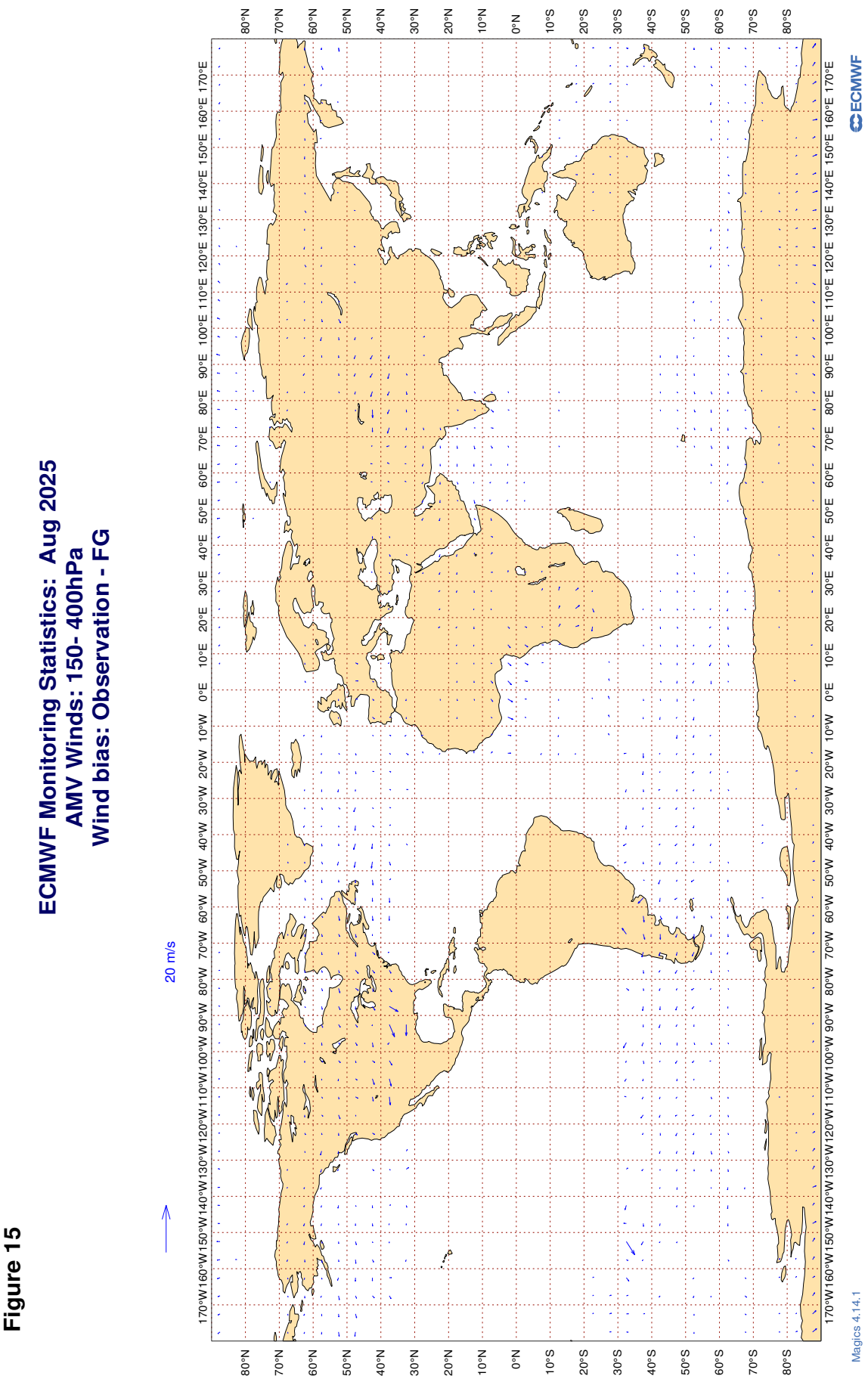


Figure 15

3.2.29 Figure 16 - SATOB Winds: 700-1000hPa

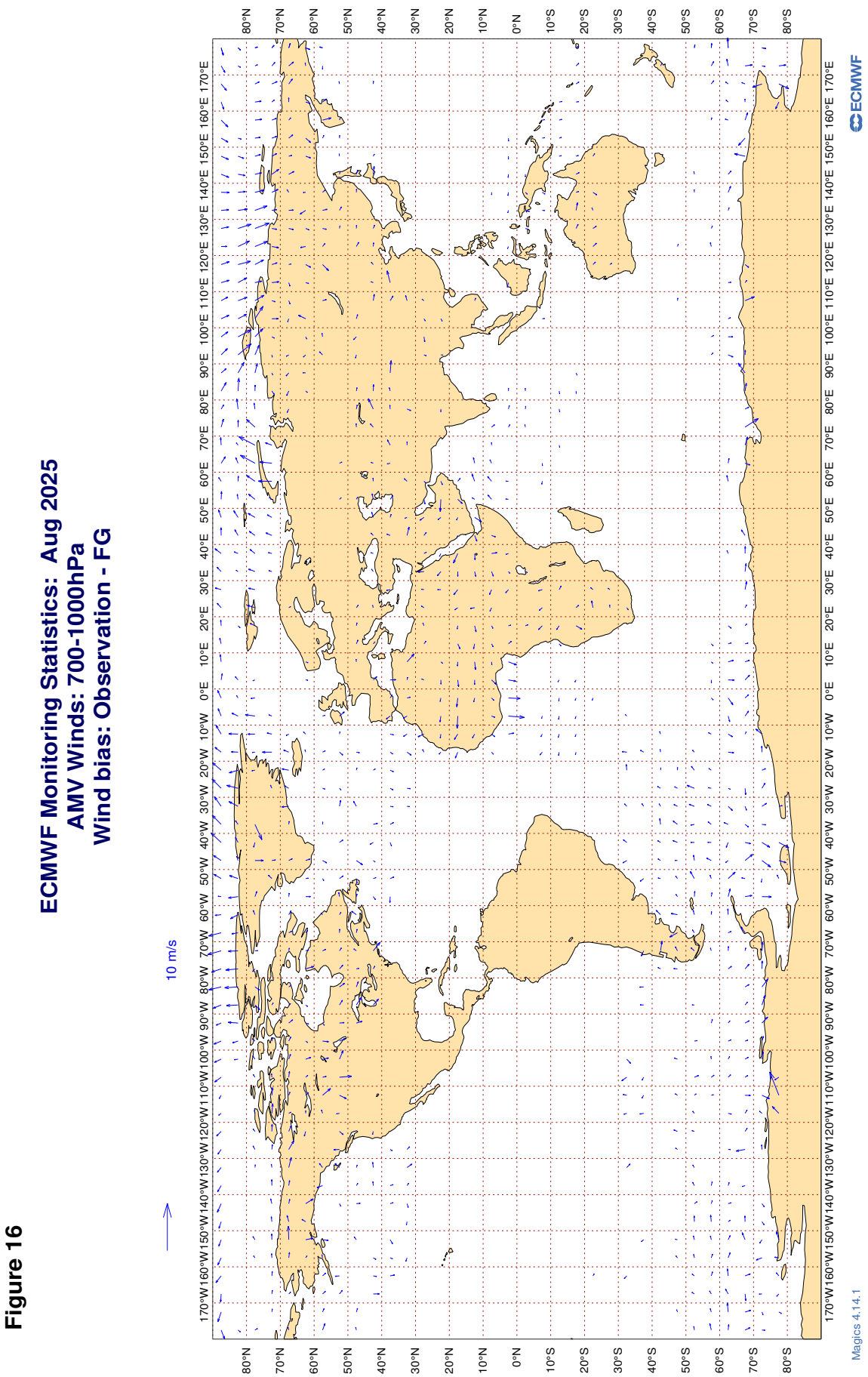


Figure 16

3.2.30 Figure 17 - SATOB Winds: 150- 400hPa

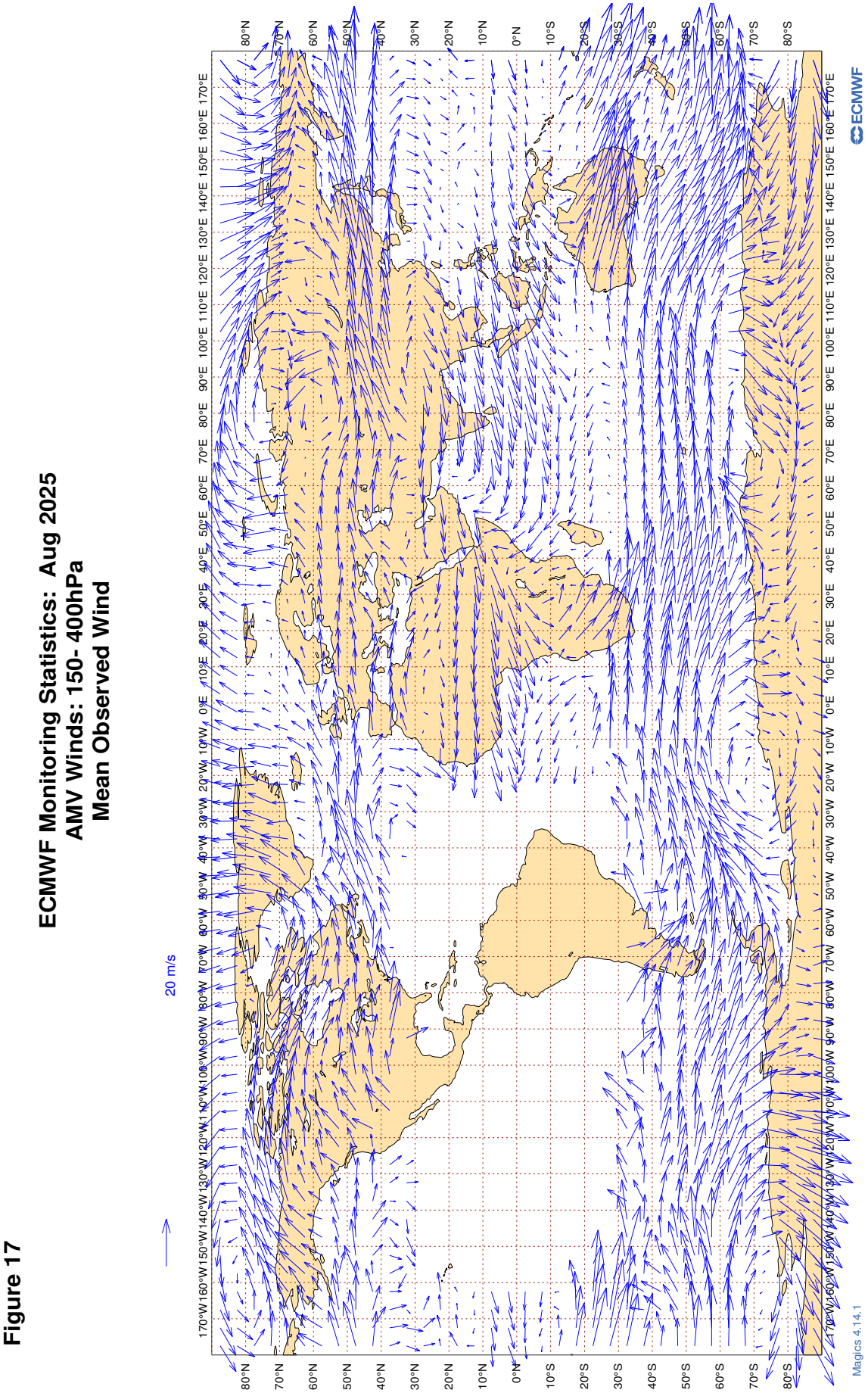


Figure 17

3.2.31 Figure 18 - AIRCRAFT Winds: 150- 300hPa

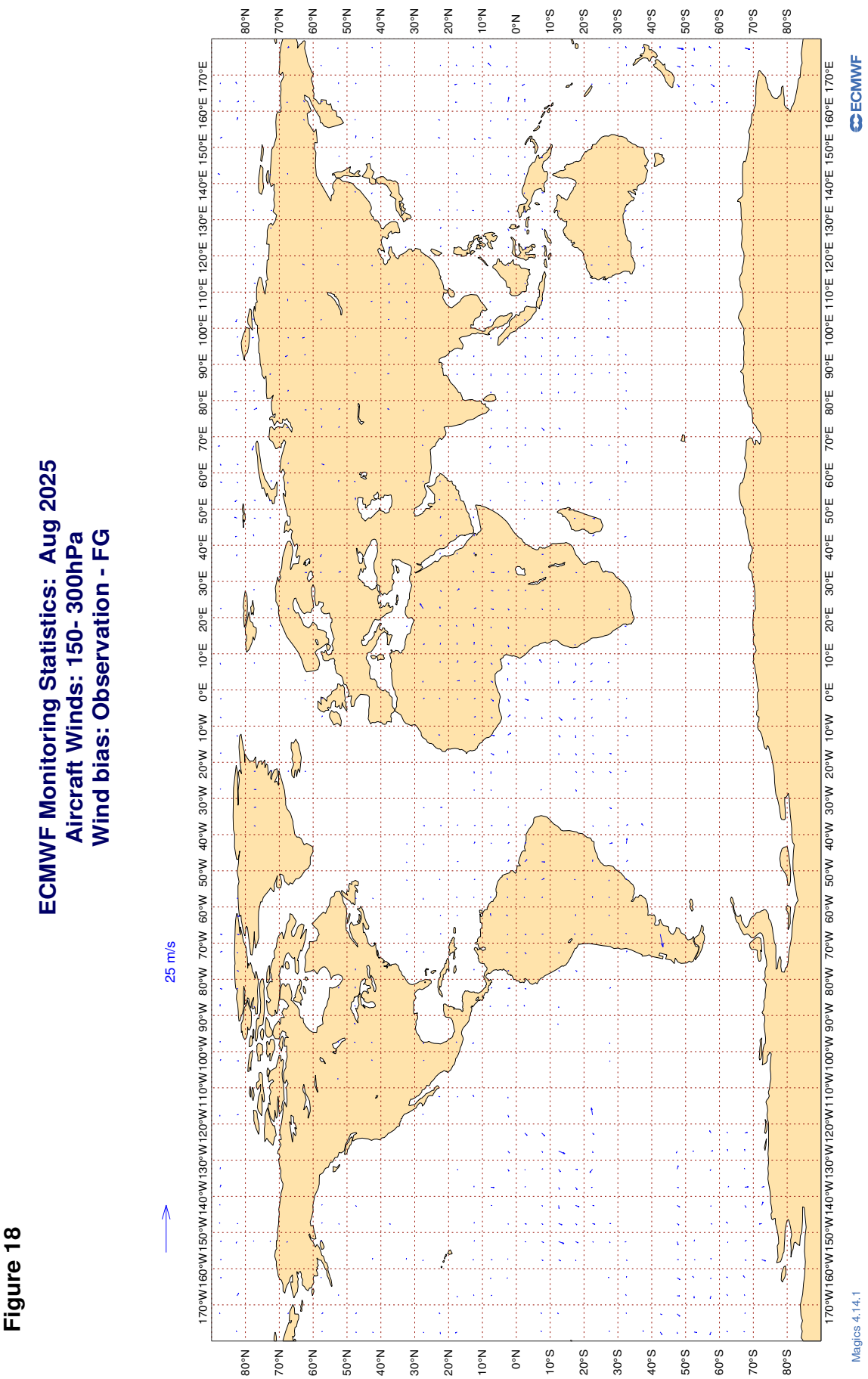


Figure 18

3.2.32 Table 12 - Airep Monitoring Statistics For Airline Carriers (Global)

AIREP MONITORING STATISTICS FOR AIRLINE CARRIERS
MONITORING CENTRE : ECMWF
ELEMENT MONITORED : VECTOR WIND (M/S)
AREA : GLOBAL
PERIOD : AUG 2025
STANDARD OF COMPARISON: FIRST-GUESS FIELD

SELECTION CRITERIA: NO. OF OBS. >= 20

TIME = 99 => AVERAGE OF ALL OBSERVATIONS
GROSS ERROR LIMIT ON VECTOR WIND = 40 M/S

IDENT	OBS TIME	ELM	LEVEL	NUM OBS	% GROSS	% CALM	VECTOR RMS	SPEE D BIAS
AAB	99	V	300-150	122	0	0	5.0	-0.3
AAL	99	V	300-150	63294	2	0	5.2	0.1
ABB	99	V	300-150	100	0	0	3.9	-0.6
ABD	99	V	300-150	613	0	0	4.0	-0.3
ABF	99	V	300-150	31	0	0	2.3	-0.1
ACA	99	V	300-150	38655	2	0	4.5	0.1
ACI	99	V	300-150	444	0	0	3.7	0.3
ADS	99	V	300-150	23	0	0	3.2	-0.8
ADY	99	V	300-150	39	0	0	4.3	0.2
AEA	99	V	300-150	811	8	0	6.7	0.0
AFR	99	V	300-150	45026	0	0	3.6	0.0
AIC	99	V	300-150	6844	0	0	4.2	0.1
AIH	99	V	300-150	194	0	0	3.7	-0.8
AIZ	99	V	300-150	705	0	0	3.4	0.5
AJT	99	V	300-150	116	0	0	3.7	0.3
ALK	99	V	300-150	875	0	0	4.6	0.6
AMQ	99	V	300-150	51	0	0	2.9	-0.1
AMX	99	V	300-150	5468	6	0	6.5	-0.2
ANA	99	V	300-150	240	0	0	5.0	0.1
ANZ	99	V	300-150	15490	0	0	3.8	0.4
AOJ	99	V	300-150	271	0	0	3.0	-0.1
ARL	99	V	300-150	25	0	0	4.8	1.1
ASL	99	V	300-150	1429	0	0	3.1	0.2

AIREP MONITORING STATISTICS FOR AIRLINE CARRIERS
(CONTINUED)

IDENT	OBS TIME	ELM	LEVEL	NUM OBS	% GROSS	% CALM	VECTOR RMS	SPEE D BIAS
ASP	99	V	300-150	95	0	0	3.0	0.1
ASY	99	V	300-150	41	0	0	3.2	0.2
ATC	99	V	300-150	28	0	0	3.9	-0.7
ATN	99	V	300-150	208	0	0	4.1	0.2
AUA	99	V	300-150	5224	1	0	4.3	-0.1
AVA	99	V	300-150	840	5	0	6.5	0.0
AXB	99	V	300-150	42	0	0	5.4	0.6
AXM	99	V	300-150	27	0	26	6.5	0.0
AXY	99	V	300-150	115	0	0	3.2	0.4
AZG	99	V	300-150	804	0	0	4.2	0.2
BAF	99	V	300-150	105	0	0	3.0	0.0
BAW	99	V	300-150	53056	1	0	4.5	0.1
BBB	99	V	300-150	35	0	0	3.3	-0.2
BBC	99	V	300-150	345	7	0	6.9	-0.4
BCS	99	V	300-150	1218	0	0	3.7	0.3
BEL	99	V	300-150	1607	0	0	3.0	0.1
BFF	99	V	300-150	32	0	0	3.3	0.8
BOX	99	V	300-150	5411	0	0	3.7	0.1
BOX	99	V	300-150	52	0	0	2.7	0.3
BQB	99	V	300-150	75	0	0	2.9	0.4
BRK	99	V	300-150	28	0	0	9.9	0.8
BTX	99	V	300-150	191	0	0	3.3	-0.1
CAL	99	V	300-150	1134	0	0	4.4	0.1
CAO	99	V	300-150	229	0	0	4.0	0.0
CBJ	99	V	300-150	289	0	0	4.8	-0.1
CCA	99	V	300-150	505	0	0	4.4	0.4
CEB	99	V	300-150	529	0	0	4.8	0.4
CES	99	V	300-150	1903	0	0	4.2	0.3
CFC	99	V	300-150	343	0	0	3.6	0.0
CFG	99	V	300-150	6597	0	0	3.0	0.3
CHG	99	V	300-150	597	0	0	3.5	-0.4
CHH	99	V	300-150	490	2	0	4.7	-0.4
CJT	99	V	300-150	88	0	0	3.7	-0.2
CKS	99	V	300-150	646	0	0	3.3	0.0
CLE	99	V	300-150	74	0	0	3.7	-1.0
CLX	99	V	300-150	4286	0	0	3.9	-0.2
CLY	99	V	300-150	67	0	0	3.2	0.5
CMB	99	V	300-150	1294	0	0	3.8	-0.3
CND	99	V	300-150	301	0	0	3.9	0.3
CNK	99	V	300-150	62	0	0	3.0	0.2
CNV	99	V	300-150	87	0	0	3.3	0.0
COO	99	V	300-150	32	0	0	5.2	0.5
CPA	99	V	300-150	3352	0	0	4.5	0.4

AIREP MONITORING STATISTICS FOR AIRLINE CARRIERS
(CONTINUED)

IDENT	OBS TIME	ELM	LEVEL	NUM OBS	% GROSS	% CALM	VECTOR RMS	SPEE D BIAS
CPJ	99	V	300-150	105	0	0	4.8	1.4
CRK	99	V	300-150	202	0	0	4.9	0.4
CRL	99	V	300-150	1140	0	0	3.0	0.3
CRV	99	V	300-150	30	0	0	4.2	0.5
CSC	99	V	300-150	796	0	0	4.3	-0.2
CSG	99	V	300-150	80	0	0	3.2	-0.3
CSN	99	V	300-150	370	0	0	4.3	0.4
CSS	99	V	300-150	110	0	0	4.5	0.9
CSZ	99	V	300-150	70	0	0	3.6	-0.5
CTM	99	V	300-150	181	0	0	3.3	0.0
CXA	99	V	300-150	32	0	0	4.0	0.0
CXF	99	V	300-150	20	0	0	3.1	0.5
DAH	99	V	300-150	1288	0	0	3.3	0.2
DAL	99	V	300-150	85736	0	0	3.2	0.1
DCS	99	V	300-150	64	0	0	2.7	-0.3
DGX	99	V	300-150	21	0	0	2.5	0.1
DHK	99	V	300-150	3256	0	0	3.5	-0.2
DHX	99	V	300-150	148	0	0	4.9	0.4
DJT	99	V	300-150	1778	0	0	3.3	0.3
DLH	99	V	300-150	31252	0	0	3.4	-0.1
DSO	99	V	300-150	83	0	0	3.6	0.0
DUB	99	V	300-150	75	0	0	4.2	0.0
DWC	99	V	300-150	100	7	0	5.6	0.2
EAL	99	V	300-150	45	0	0	3.6	0.4
EAU	99	V	300-150	94	0	0	2.9	0.7
EDW	99	V	300-150	2462	0	0	3.1	0.0
EIN	99	V	300-150	20593	0	0	3.1	0.3
EJM	99	V	300-150	690	0	0	3.2	0.5
ELY	99	V	300-150	6422	5	0	6.8	-0.1
ELZ	99	V	300-150	20	0	0	2.4	0.5
ESW	99	V	300-150	25	0	0	3.5	0.5
ETD	99	V	300-150	12280	1	0	5.0	0.2
ETH	99	V	300-150	6016	1	0	5.1	0.0
EUK	99	V	300-150	1861	0	0	2.9	0.3
EVA	99	V	300-150	970	0	0	4.9	0.7
EVE	99	V	300-150	331	0	0	4.2	0.1
EXS	99	V	300-150	4490	0	0	2.7	0.0
EZY	99	V	300-150	173	0	0	2.8	-0.5
FBU	99	V	300-150	4174	0	0	3.4	-0.1
FDX	99	V	300-150	7562	0	0	3.5	0.2
FGO	99	V	300-150	77	0	0	3.8	0.8
FIN	99	V	300-150	2209	0	0	4.2	0.4
FJI	99	V	300-150	2738	0	0	3.8	0.5

AIREP MONITORING STATISTICS FOR AIRLINE CARRIERS
(CONTINUED)

IDENT	OBS TIME	ELM	LEVEL	NUM OBS	% GROSS	% CALM	VECTOR RMS	SPEE D BIAS
FJO	99	V	300-150	181	0	0	2.8	0.0
FLA	99	V	300-150	76	0	0	4.0	0.4
FLJ	99	V	300-150	36	0	0	5.5	0.3
FPY	99	V	300-150	2903	0	0	2.9	0.2
FWI	99	V	300-150	2260	0	0	3.2	0.2
FYG	99	V	300-150	46	0	0	3.7	-0.7
GAF	99	V	300-150	351	0	0	3.4	0.6
GCK	99	V	300-150	47	0	0	3.3	0.5
GEC	99	V	300-150	913	0	0	3.3	0.0
GES	99	V	300-150	30	0	0	4.2	0.1
GFA	99	V	300-150	1268	0	0	5.3	0.4
GIA	99	V	300-150	1245	0	0	5.0	0.8
GJE	99	V	300-150	152	0	0	3.5	0.1
GJW	99	V	300-150	31	0	0	3.4	-0.3
GLJ	99	V	300-150	21	0	0	3.2	-0.7
GNJ	99	V	300-150	52	0	0	3.9	1.1
GRB	99	V	300-150	55	0	0	10.0	0.5
GRP	99	V	300-150	20	0	0	3.1	1.6
GSM	99	V	300-150	21	0	0	5.2	0.0
GTI	99	V	300-150	2809	0	0	3.8	0.0
GTR	99	V	300-150	193	0	0	3.4	0.4
HAL	99	V	300-150	436	0	0	3.6	0.5
HGO	99	V	300-150	59	0	0	4.0	1.0
HKC	99	V	300-150	157	0	0	5.0	0.1
HLF	99	V	300-150	67	0	0	3.2	0.3
HRT	99	V	300-150	91	0	0	3.6	0.3
HTT	99	V	300-150	163	0	1	7.6	1.4
HUE	99	V	300-150	71	0	0	4.7	-0.4
HUF	99	V	300-150	65	0	2	3.3	0.3
HVN	99	V	300-150	1047	1	0	5.1	0.2
HYS	99	V	300-150	697	0	0	3.1	0.2
IAM	99	V	300-150	70	0	0	2.9	0.3
IAW	99	V	300-150	24	0	0	4.1	0.8
IBE	99	V	300-150	10215	0	0	3.4	0.2
ICE	99	V	300-150	13494	0	0	3.2	0.2
ICL	99	V	300-150	168	0	0	3.6	0.0
ICV	99	V	300-150	329	0	0	3.7	-0.4
IFA	99	V	300-150	646	0	0	3.1	0.1
IGA	99	V	300-150	122	0	0	3.3	0.1
IGO	99	V	300-150	22	0	0	9.4	2.4
IJM	99	V	300-150	114	0	0	3.1	0.3
ITY	99	V	300-150	8424	0	0	3.1	0.2
IXR	99	V	300-150	34	0	0	3.4	0.5

AIREP MONITORING STATISTICS FOR AIRLINE CARRIERS
(CONTINUED)

IDENT	OBS TIME	ELM	LEVEL	NUM OBS	% GROSS	% CALM	VECTOR RMS	SPEE D BIAS
JAF	99	V	300-150	475	3	0	6.5	-0.1
JAL	99	V	300-150	577	0	0	5.0	0.3
JAS	99	V	300-150	163	0	0	3.7	0.2
JBD	99	V	300-150	31	0	0	2.7	0.3
JBU	99	V	300-150	13136	0	0	3.2	0.3
JCO	99	V	300-150	54	0	0	3.3	0.3
JCY	99	V	300-150	33	0	0	3.0	0.3
JET	99	V	300-150	35	0	0	3.7	0.9
JME	99	V	300-150	51	0	0	3.0	0.4
JST	99	V	300-150	1682	0	0	4.0	0.6
KAC	99	V	300-150	1697	0	0	3.9	0.2
KAF	99	V	300-150	45	0	0	4.4	0.3
KAI	99	V	300-150	143	0	0	5.7	0.5
KAL	99	V	300-150	406	0	0	5.1	0.9
KAY	99	V	300-150	222	0	0	3.3	0.1
KCE	99	V	300-150	35	0	0	2.8	0.3
KIW	99	V	300-150	55	0	0	4.3	-0.4
KLM	99	V	300-150	19808	2	0	4.7	0.1
KPO	99	V	300-150	62	0	0	3.3	0.6
KQA	99	V	300-150	403	5	0	5.0	0.1
KRH	99	V	300-150	22	0	0	2.6	0.0
KUG	99	V	300-150	35	0	0	3.0	0.5
LCO	99	V	300-150	757	0	0	3.4	-0.8
LDX	99	V	300-150	51	0	0	3.4	0.8
LEA	99	V	300-150	39	0	0	3.5	0.4
LMJ	99	V	300-150	45	0	0	3.1	0.6
LNI	99	V	300-150	459	0	0	4.5	0.7
LNX	99	V	300-150	70	0	0	4.5	0.5
LOT	99	V	300-150	5035	3	0	6.4	0.1
LRQ	99	V	300-150	25	0	0	3.2	0.7
LRT	99	V	300-150	28	0	0	3.5	-0.8
LVA	99	V	300-150	34	0	0	3.8	0.8
LXJ	99	V	300-150	1067	0	0	3.2	0.5
MAS	99	V	300-150	6434	0	0	5.2	0.7
MED	99	V	300-150	30	0	0	4.2	-0.5
MFX	99	V	300-150	68	0	0	4.5	0.8
MJE	99	V	300-150	36	0	0	5.8	1.5
MLM	99	V	300-150	65	0	0	4.5	-0.9
MMD	99	V	300-150	353	0	0	3.1	0.0
MMF	99	V	300-150	41	0	0	3.4	0.8
MNB	99	V	300-150	686	0	0	3.7	0.3
MPH	99	V	300-150	283	0	0	3.9	0.3
MRS	99	V	300-150	40	0	0	6.4	0.2

AIREP MONITORING STATISTICS FOR AIRLINE CARRIERS
(CONTINUED)

IDENT	OBS TIME	ELM	LEVEL	NUM OBS	% GROSS	% CALM	VECTOR RMS	SPEE D BIAS
MSR	99	V	300-150	2456	3	0	5.4	0.1
MVJ	99	V	300-150	88	0	0	3.7	0.5
MXD	99	V	300-150	655	0	0	4.8	0.6
NBT	99	V	300-150	5092	5	0	6.9	-0.1
NCR	99	V	300-150	547	0	0	5.1	-0.1
NJE	99	V	300-150	464	0	0	3.1	0.3
NOJ	99	V	300-150	27	0	0	3.1	0.5
NOS	99	V	300-150	1658	5	0	6.8	-0.1
NSP	99	V	300-150	99	0	0	3.5	0.0
NUM	99	V	300-150	35	0	0	3.9	0.1
OAE	99	V	300-150	353	0	0	4.0	0.1
OBS	99	V	300-150	113	0	0	3.6	0.6
OCN	99	V	300-150	5464	0	0	3.0	0.2
OMA	99	V	300-150	1841	0	0	5.8	0.8
ORF	99	V	300-150	33	0	0	3.2	0.8
PAL	99	V	300-150	1387	0	0	5.0	0.4
PAT	99	V	300-150	32	0	0	2.5	-0.2
PEX	99	V	300-150	24	0	0	3.2	-1.3
PIA	99	V	300-150	79	0	0	3.6	0.3
PJZ	99	V	300-150	62	0	0	2.9	-0.3
PVA	99	V	300-150	417	0	0	3.1	0.2
PVG	99	V	300-150	30	0	0	2.5	0.2
QFA	99	V	300-150	5043	2	0	5.0	0.2
QFX	99	V	300-150	47	0	0	3.5	0.7
QNT	99	V	300-150	103	0	0	5.0	0.5
QQE	99	V	300-150	484	0	0	3.5	0.4
QTR	99	V	300-150	27065	0	0	4.3	0.2
RAM	99	V	300-150	1407	8	0	7.2	0.0
RBA	99	V	300-150	361	0	0	5.5	0.9
RCH	99	V	300-150	3294	0	0	4.8	0.5
RCR	99	V	300-150	132	0	1	4.0	-0.1
RJA	99	V	300-150	3152	5	0	7.2	-0.1
RKK	99	V	300-150	49	0	0	3.6	0.9
ROJ	99	V	300-150	31	0	0	5.1	0.4
RRR	99	V	300-150	225	0	0	4.8	0.2
RYR	99	V	300-150	942	0	0	2.7	0.1
RZO	99	V	300-150	671	0	0	4.1	0.6
SAM	99	V	300-150	239	0	0	2.8	0.0
SAM	99	V	300-150	22	0	0	4.0	0.5
SAS	99	V	300-150	6979	0	0	2.9	0.3
SAZ	99	V	300-150	79	0	0	3.8	0.5
SCX	99	V	300-150	46	0	0	3.5	0.1
SIA	99	V	300-150	15264	0	0	5.1	0.4

AIREP MONITORING STATISTICS FOR AIRLINE CARRIERS
(CONTINUED)

IDENT	OBS TIME	ELM	LEVEL	NUM OBS	% GROSS	% CALM	VECTOR RMS	SPEE D BIAS
SIO	99	V	300-150	69	0	0	3.4	0.0
SKV	99	V	300-150	67	0	0	3.1	0.8
SLM	99	V	300-150	132	0	0	2.6	0.0
SMB	99	V	300-150	32	0	0	3.6	0.0
SON	99	V	300-150	67	0	0	3.1	0.3
SPA	99	V	300-150	52	0	0	3.9	-0.6
SPM	99	V	300-150	150	0	0	3.5	0.2
SRR	99	V	300-150	23	0	0	2.3	-0.1
SUI	99	V	300-150	35	0	0	3.8	0.7
SVA	99	V	300-150	7180	1	0	4.7	0.3
SVW	99	V	300-150	216	0	0	3.7	0.4
SWR	99	V	300-150	13469	0	0	3.3	0.2
SWW	99	V	300-150	49	0	2	3.1	0.5
SYB	99	V	300-150	240	0	0	3.5	-0.1
TAM	99	V	300-150	111	5	0	2.5	0.3
TAP	99	V	300-150	5248	0	0	3.8	0.4
TAR	99	V	300-150	544	0	0	3.1	0.1
TAX	99	V	300-150	186	0	0	5.0	-0.3
TAY	99	V	300-150	114	0	0	4.2	-1.4
TCJ	99	V	300-150	38	0	0	5.8	1.2
TEU	99	V	300-150	48	0	0	2.6	-0.2
TFF	99	V	300-150	65	0	0	3.2	0.4
TFL	99	V	300-150	1268	6	0	7.1	0.1
TGW	99	V	300-150	1549	0	0	5.3	0.5
THA	99	V	300-150	5677	0	0	4.8	0.3
THT	99	V	300-150	2920	1	0	5.2	0.0
THY	99	V	300-150	24616	2	0	5.4	0.1
TMN	99	V	300-150	423	0	0	3.7	0.8
TOM	99	V	300-150	5285	4	0	6.5	-0.1
TOR	99	V	300-150	50	0	0	2.8	0.3
TSC	99	V	300-150	25269	0	0	3.3	0.3
TUA	99	V	300-150	125	0	0	4.2	0.6
TVR	99	V	300-150	129	0	0	4.5	0.4
TVS	99	V	300-150	133	0	0	3.0	0.2
TWY	99	V	300-150	862	0	0	3.1	0.3
UAE	99	V	300-150	24621	0	0	4.3	0.2
UAF	99	V	300-150	89	0	0	3.1	-0.3
UAL	99	V	300-150	96130	1	1	4.7	0.0
UBT	99	V	300-150	3439	5	0	6.4	0.1
UKN	99	V	300-150	70	0	0	2.8	0.4
ULC	99	V	300-150	31	0	0	3.6	1.8
UNI	99	V	300-150	21	0	0	6.5	0.3
UPS	99	V	300-150	5843	0	0	3.7	-0.2

AIREP MONITORING STATISTICS FOR AIRLINE CARRIERS
(CONTINUED)

IDENT	OBS TIME	ELM	LEVEL	NUM OBS	% GROSS	% CALM	VECTOR RMS	SPEE D BIAS
USY	99	V	300-150	22	0	0	3.9	0.8
UZB	99	V	300-150	656	2	0	5.0	0.0
VAJ	99	V	300-150	28	0	0	4.2	-0.4
VCG	99	V	300-150	85	0	0	5.0	-0.2
VIR	99	V	300-150	24976	1	0	4.3	0.0
VJA	99	V	300-150	128	0	0	4.0	0.5
VJC	99	V	300-150	61	0	3	4.8	0.6
VJH	99	V	300-150	257	0	0	3.4	0.2
VJT	99	V	300-150	2380	0	0	3.5	0.5
VKG	99	V	300-150	35	0	0	3.0	0.4
VOZ	99	V	300-150	547	0	0	4.1	0.0
WFL	99	V	300-150	167	0	0	4.2	-0.4
WGN	99	V	300-150	209	0	0	3.1	0.4
WJA	99	V	300-150	9924	1	0	4.2	0.1
WMN	99	V	300-150	32	0	0	2.7	-0.7
WWI	99	V	300-150	126	0	0	4.1	0.4
XAX	99	V	300-150	1132	0	0	5.2	0.4
XFL	99	V	300-150	89	0	0	4.4	0.6
XGN	99	V	300-150	31	0	0	3.4	-0.7
XSR	99	V	300-150	42	0	0	2.4	0.3

4 EUCOS Area Monitoring Statistics

The following tables provide information on the quality of upper-air data and surface DRIFTER data over the EUCOS area as received at ECMWF during the month.

Tables 13, 14 (50 hPa level), 15, 16 (100 hPa level) 17, 18 (500 hPa level) 19 and 20 (850 hPa level) provide quality statistics for all TEMPSHIPS and PILOTSHIPS received during the month in the area $10\,^{\circ}$N - $90\,^{\circ}$N, $70\,^{\circ}$W - $40\,^{\circ}$E and for TEMPS and PILOTS from selected land stations within the same area. The statistics are in the same form as tables 10 and 11.
Tables 21-23 provides quality statistics of pressure and wind for all DRIFTER reports received in the area $10\,^{\circ}$N - $90\,^{\circ}$N, $70\,^{\circ}$W - $40\,^{\circ}$E. The statistics are in the same form as tables 4-6.

4.1 Table 13 - Radiosonde Monitoring Statistics (EUCOS): 50 hPa Geopotential height (metres)

```
RADIOSONDE MONITORING STATISTICS (EUCOS)
         MONITORING CENTRE     : ECMWF
         ELEMENT MONITORED     : GEOPOTENTIAL HEIGHT (METRES)
         LEVEL                 :  50 HPA
         AREA                  : 0 - 90N, 100W - 40E
         PERIOD                : AUG 2025
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
01001	12	Z	50	29	11.7	-10.2
01001	00	Z	50	31	8.9	0.2
01028	00	Z	50	31	7.4	-5.7
01028	12	Z	50	30	7.8	-5.8
01400	00	Z	50	25	81.0	80.7
01400	12	Z	50	25	80.2	77.6
01415	12	Z	50	30	7.7	-3.7
01415	00	Z	50	31	16.3	-2.9
02365	00	Z	50	22	5.3	-2.5
02365	12	Z	50	22	11.9	-10.8
02591	00	Z	50	11	16.3	3.5
02591	12	Z	50	18	5.8	-0.8
02836	00	Z	50	3	8.0	-6.9
02836	12	Z	50	4	8.8	-6.2
02963	12	Z	50	13	8.1	-6.5
02963	00	Z	50	4	5.9	-0.2
03005	00	Z	50	31	5.7	-1.8
03005	12	Z	50	30	13.0	-10.1
03238	00	Z	50	27	10.3	1.1
03238	12	Z	50	5	13.8	-11.3
03808	00	Z	50	28	5.6	1.1
03808	12	Z	50	29	8.2	-5.6
03918	12	Z	50	1	5.0	-5.0
03918	00	Z	50	31	8.5	-1.7
039186	12	Z	50	0	0.0	0.0
039188	00	Z	50	0	0.0	0.0
03953	00	Z	50	31	11.6	-8.2
03953	12	Z	50	30	13.0	-8.7
04018	12	Z	50	28	10.2	-7.3
04018	00	Z	50	24	7.6	-3.1
04220	12	Z	50	29	24.1	-15.6
04220	00	Z	50	30	26.3	-23.8
042207	12	Z	50	0	0.0	0.0
04270	00	Z	50	30	32.8	-22.6
04270	12	Z	50	31	24.7	-22.8
04320	00	Z	50	30	26.3	-17.7
04320	12	Z	50	31	24.8	-8.3
04339	00	Z	50	29	36.6	-32.2
04339	12	Z	50	28	18.3	-14.1

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
04360	00	Z	50	26	39.8	-36.2
04360	12	Z	50	26	34.8	-29.4
06011	12	Z	50	30	58.9	-58.2
06260	12	Z	50	6	10.6	-7.7
06260	00	Z	50	30	6.8	0.4
06610	00	Z	50	31	5.3	1.4
06610	12	Z	50	31	9.7	-7.3
07110	12	Z	50	31	21.2	-18.5
07110	00	Z	50	28	21.6	-18.7
07510	00	Z	50	31	11.0	2.3
07510	12	Z	50	29	17.5	-2.5
07645	00	Z	50	27	36.6	-35.3
07645	12	Z	50	28	39.0	-37.7
07761	12	Z	50	28	31.4	-26.8
07761	00	Z	50	26	22.1	-18.0
08001	12	Z	50	31	6.5	-3.6
08001	00	Z	50	30	5.5	3.7
08221	12	Z	50	31	5.6	-1.5
08221	00	Z	50	31	9.4	7.3
08302	12	Z	50	28	11.4	-9.5
08302	00	Z	50	21	4.7	-2.1
08508	12	Z	50	27	9.4	-7.2
08522	12	Z	50	30	6.4	-1.8
10035	12	Z	50	30	10.6	-9.4
10035	00	Z	50	31	5.1	1.5
10393	12	Z	50	31	7.4	-5.5
10393	00	Z	50	31	6.0	-0.5
10410	12	Z	50	31	9.9	-7.0
10410	00	Z	50	31	6.6	-1.1
10739	00	Z	50	31	8.8	5.2
10739	12	Z	50	31	5.5	-2.2
11035	00	Z	50	30	9.1	2.2
11035	12	Z	50	31	11.4	-5.3
12982	12	Z	50	31	6.0	-1.7
12982	00	Z	50	31	6.3	4.3
16245	12	Z	50	31	7.5	-3.6
16245	00	Z	50	30	7.1	4.4
16429	00	Z	50	31	8.8	7.7
16429	12	Z	50	29	6.0	-4.3
16622	00	Z	50	11	14.9	11.8
16754	00	Z	50	15	6.6	-4.3
17607	00	Z	50	8	6.7	6.0
17607	12	Z	50	20	4.6	-0.1

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
26435	12	Z	50	2	11.0	-9.1
2TDJJ8	00	Z	50	31	6.0	4.5
2TDJJ8	12	Z	50	31	4.9	2.3
60018	00	Z	50	30	8.2	6.5
60018	12	Z	50	31	6.8	-3.4
7JUNA4	12	Z	50	7	23.8	-15.3
7JUNA4	00	Z	50	6	9.4	-5.6
9ZT9MR	12	Z	50	2	32.0	-31.9
9ZT9MR	00	Z	50	3	36.5	-34.4
ASDE09	12	Z	50	1	25.6	25.6
ATGU3F	12	Z	50	5	40.2	-39.9
ATGU3F	00	Z	50	5	45.6	-44.2
FPUW5G	12	Z	50	3	10.4	-8.8
JNKN7J	12	Z	50	7	115.7	84.5
JNKN7J	00	Z	50	7	29.3	28.8
KJJF9X	12	Z	50	2	30.4	-23.9
KJJF9X	00	Z	50	1	35.8	-35.8
KMPLHP	12	Z	50	8	26.4	-11.7
KMPLHP	00	Z	50	11	25.4	9.1
LAGY8	12	Z	50	7	41.3	-35.5
LAGZ8	00	Z	50	3	45.3	45.2
LRYQE3	12	Z	50	5	113.0	111.1
LRYQE3	00	Z	50	4	14.6	-12.0
SMLQ	12	Z	50	16	9.7	-7.5
SMLQ	00	Z	50	17	7.8	-6.3
UXK5JT	12	Z	50	0	0.0	0.0
UXK5JT	00	Z	50	1	17.3	-17.3
WDK38H	12	Z	50	17	17.7	-17.2
XKQLWQ	12	Z	50	15	16.5	13.2
YLV96W	12	Z	50	7	123.7	86.8
YLV96W	00	Z	50	9	37.6	15.7
ZVQEQC	12	Z	50	3	4.3	-2.6

4.2 Table 14 - Radiosonde Monitoring Statistics (EUCOS): 50 hPa Wind (m/s)

```
RADIOSONDE MONITORING STATISTICS (EUCOS)
         MONITORING CENTRE     : ECMWF
         ELEMENT MONITORED     : WIND (M/S)
         LEVEL                 :  50 HPA
         AREA                  : 0 - 90N, 100W - 40E
         PERIOD                : AUG 2025
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
01001	12	V	50	29	2.5	0.2	0.2
01001	00	V	50	27	2.3	-0.5	0.2
01028	00	V	50	27	2.3	0.0	0.5
01028	12	V	50	30	2.3	-0.5	-0.2
01400	00	V	50	24	3.3	0.0	0.0
01400	12	V	50	25	2.8	0.0	-0.1
01415	12	V	50	30	3.2	1.1	-0.2
01415	00	V	50	29	3.3	0.4	0.0
02365	00	V	50	18	3.2	0.0	-0.6
02365	12	V	50	21	2.5	0.7	-0.5
02591	00	V	50	8	2.6	0.9	0.3
02591	12	V	50	17	3.0	-0.3	-0.5
02836	00	V	50	1	5.1	-0.5	-5.1
02836	12	V	50	3	5.5	3.6	-1.8
02963	12	V	50	8	8.0	2.9	-2.8
02963	00	V	50	2	2.0	0.4	-1.7
03005	00	V	50	27	2.8	-0.5	0.3
03005	12	V	50	30	2.7	-0.4	-0.3
03238	00	V	50	26	3.2	0.1	-0.2
03238	12	V	50	5	4.2	2.4	-1.2
03808	00	V	50	26	3.7	0.0	0.5
03808	12	V	50	29	3.7	-0.6	0.1
03918	12	V	50	1	4.3	0.3	4.3
03918	00	V	50	28	2.7	0.1	0.0
039186	12	V	50	0	0.0	0.0	0.0
039188	00	V	50	0	0.0	0.0	0.0
03953	00	V	50	27	3.2	0.2	-0.1
03953	12	V	50	30	2.8	-0.2	0.1
04018	12	V	50	27	2.8	0.1	0.2
04018	00	V	50	24	2.3	0.4	-0.5
04220	12	V	50	29	3.2	0.6	-1.1
04220	00	V	50	27	3.1	0.1	-0.5
042207	12	V	50	0	0.0	0.0	0.0
04270	00	V	50	28	2.7	0.7	0.1
04270	12	V	50	31	3.1	-0.1	-0.4
04320	00	V	50	26	2.3	-0.1	-0.3
04320	12	V	50	31	2.5	0.1	-0.5
04339	00	V	50	29	2.8	0.6	0.2
04339	12	V	50	28	2.3	0.5	0.3

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
04360	00	V	50	24	2.4	-0.4	0.3
04360	12	V	50	26	2.3	-0.2	0.2
06011	12	V	50	30	2.7	0.1	0.3
06260	12	V	50	6	2.1	0.2	-0.9
06260	00	V	50	29	3.2	-0.3	-0.2
06610	00	V	50	29	2.7	0.2	-0.3
06610	12	V	50	31	2.7	0.3	-0.1
07110	12	V	50	31	3.3	0.4	0.8
07110	00	V	50	24	3.3	-0.5	0.0
07510	00	V	50	28	2.7	-0.6	0.2
07510	12	V	50	29	3.0	0.1	-0.6
07645	00	V	50	25	3.4	-0.1	-0.4
07645	12	V	50	28	3.0	-0.2	0.3
07761	12	V	50	28	3.8	0.0	0.1
07761	00	V	50	23	3.7	-0.1	-0.1
08001	12	V	50	31	2.6	0.2	0.1
08001	00	V	50	26	2.8	-0.4	0.4
08221	12	V	50	31	3.1	0.1	0.2
08221	00	V	50	29	3.1	0.0	-0.5
08302	12	V	50	28	3.1	0.3	-0.8
08302	00	V	50	18	3.5	-1.2	-0.1
08508	12	V	50	27	2.8	0.4	-0.4
08522	12	V	50	30	3.0	-0.3	-0.3
10035	12	V	50	30	3.5	0.2	-0.6
10035	00	V	50	30	3.2	0.3	-0.6
10393	12	V	50	30	2.8	-0.1	0.3
10393	00	V	50	30	2.9	-0.4	0.0
10410	12	V	50	31	2.7	0.2	0.1
10410	00	V	50	31	3.1	0.1	-0.2
10739	00	V	50	31	3.3	-0.6	0.4
10739	12	V	50	31	3.4	-0.6	0.7
11035	00	V	50	24	3.5	-0.1	0.0
11035	12	V	50	31	3.0	-0.6	0.4
12982	12	V	50	31	2.6	0.1	-0.3
12982	00	V	50	29	3.6	-0.1	0.5
16245	12	V	50	31	3.6	-0.3	-0.2
16245	00	V	50	29	3.6	0.6	0.4
16429	00	V	50	29	2.8	0.1	0.3
16429	12	V	50	29	3.1	-0.4	0.0
16622	00	V	50	10	3.5	0.1	0.7
16754	00	V	50	14	3.2	-1.2	-0.8
17607	00	V	50	8	3.6	-0.2	0.8
17607	12	V	50	19	3.4	-0.4	-0.5

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
26435	12	V	50	0	0.0	0.0	0.0
2TDJJ8	00	V	50	31	2.9	0.0	0.6
2TDJJ8	12	V	50	31	2.4	-0.2	0.5
60018	00	V	50	26	3.5	-0.7	-0.2
60018	12	V	50	31	3.9	-1.1	-0.6
7JUNA4	12	V	50	7	2.9	0.7	-1.2
7JUNA4	00	V	50	6	2.6	1.3	-0.5
9ZT9MR	12	V	50	2	2.7	-0.2	2.4
9ZT9MR	00	V	50	3	2.3	-0.2	0.8
ASDE09	12	V	50	1	0.9	0.9	-0.2
ATGU3F	12	V	50	5	2.8	-1.1	1.1
ATGU3F	00	V	50	5	2.7	-1.0	0.6
FPUW5G	12	V	50	2	1.9	-0.9	0.8
JNKN7J	12	V	50	7	2.8	-0.1	0.6
JNKN7J	00	V	50	7	2.3	0.8	0.8
KJJF9X	12	V	50	2	1.7	-0.9	-1.3
KJJF9X	00	V	50	1	2.5	0.1	2.5
KMPLHP	12	V	50	8	4.3	1.8	2.3
KMPLHP	00	V	50	11	2.6	0.2	0.7
LAGY8	12	V	50	7	3.1	-0.4	-0.1
LAGZ8	00	V	50	3	2.3	-0.1	-0.4
LRYQE3	12	V	50	5	1.8	0.3	0.7
LRYQE3	00	V	50	4	2.7	-1.8	-0.4
SMLQ	12	V	50	15	2.2	-0.5	0.2
SMLQ	00	V	50	17	2.5	-0.2	0.2
UXK5JT	12	V	50	0	0.0	0.0	0.0
UXK5JT	00	V	50	1	4.8	-1.3	4.6
WDK38H	12	V	50	16	2.2	-0.1	-0.2
XKQLWQ	12	V	50	14	2.4	0.0	-0.4
YLV96W	12	V	50	7	3.5	-1.1	-0.3
YLV96W	00	V	50	9	3.6	-0.4	0.6
ZVQEQC	12	V	50	3	3.3	-1.9	-0.3

4.3 Table 15 - Radiosonde Monitoring Statistics (EUCOS): 100 hPa Geopotential height (metres)

```
RADIOSONDE MONITORING STATISTICS (EUCOS)
         MONITORING CENTRE     : ECMWF
         ELEMENT MONITORED     : GEOPOTENTIAL HEIGHT (METRES)
         LEVEL                 : 100 HPA
         AREA                  : 0 - 90N, 100W - 40E
         PERIOD                : AUG 2025
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
01001	12	Z	100	29	9.9	-8.6
01001	00	Z	100	31	5.8	-0.6
01028	00	Z	100	31	8.5	-7.2
01028	12	Z	100	30	8.1	-6.8
01400	00	Z	100	27	78.8	78.4
01400	12	Z	100	26	78.4	76.7
01415	12	Z	100	30	7.9	-3.3
01415	00	Z	100	31	12.2	-3.4
02365	00	Z	100	24	4.8	-1.4
02365	12	Z	100	23	10.9	-9.3
02591	00	Z	100	14	14.9	3.4
02591	12	Z	100	18	6.9	-1.3
02836	00	Z	100	7	47.7	-27.3
02836	12	Z	100	14	11.6	-10.3
02963	12	Z	100	18	8.0	-6.0
02963	00	Z	100	14	5.2	-2.3
03005	00	Z	100	31	5.4	-3.5
03005	12	Z	100	31	11.5	-8.7
03238	00	Z	100	27	8.1	-1.5
03238	12	Z	100	5	13.5	-8.9
03808	00	Z	100	28	5.2	0.2
03808	12	Z	100	29	5.6	-4.3
03918	12	Z	100	1	1.2	-1.2
03918	00	Z	100	31	8.1	-3.2
039186	12	Z	100	0	0.0	0.0
039188	00	Z	100	0	0.0	0.0
03953	00	Z	100	31	10.9	-8.5
03953	12	Z	100	31	10.7	-6.9
04018	12	Z	100	28	7.8	-6.0
04018	00	Z	100	25	6.3	-3.4
04220	12	Z	100	30	17.8	-13.6
04220	00	Z	100	30	19.2	-18.2
042207	12	Z	100	0	0.0	0.0
04270	00	Z	100	30	25.3	-23.0
04270	12	Z	100	30	20.2	-19.1
04320	00	Z	100	31	18.5	-12.7
04320	12	Z	100	31	21.2	-4.3
04339	00	Z	100	29	29.7	-27.0
04339	12	Z	100	28	18.0	-15.6

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
04360	00	Z	100	26	31.9	-29.7
04360	12	Z	100	27	29.2	-26.3
06011	12	Z	100	31	44.0	-43.2
06260	12	Z	100	6	8.5	-5.1
06260	00	Z	100	30	6.5	-0.7
06610	00	Z	100	31	4.9	1.3
06610	12	Z	100	31	7.4	-5.7
07110	12	Z	100	31	15.7	-14.2
07110	00	Z	100	29	16.2	-14.7
07510	00	Z	100	31	10.3	1.1
07510	12	Z	100	31	10.5	0.3
07645	00	Z	100	27	29.3	-28.5
07645	12	Z	100	30	31.2	-30.3
07761	12	Z	100	30	24.6	-21.6
07761	00	Z	100	29	19.7	-16.4
08001	12	Z	100	31	5.0	-1.9
08001	00	Z	100	31	5.7	2.1
08221	12	Z	100	31	5.3	-0.1
08221	00	Z	100	31	7.4	5.4
08302	12	Z	100	28	10.3	-9.2
08302	00	Z	100	21	4.9	-3.4
08508	12	Z	100	28	5.0	-2.0
08522	12	Z	100	31	4.8	2.4
10035	12	Z	100	30	9.6	-8.4
10035	00	Z	100	31	4.1	-1.5
10393	12	Z	100	31	6.6	-5.1
10393	00	Z	100	31	5.4	-1.6
10410	12	Z	100	31	9.2	-5.6
10410	00	Z	100	31	6.4	-2.8
10739	00	Z	100	31	6.1	3.0
10739	12	Z	100	31	3.3	-0.2
11035	00	Z	100	32	7.3	1.8
11035	12	Z	100	31	9.0	-4.9
12982	12	Z	100	31	3.8	-2.4
12982	00	Z	100	31	5.0	2.2
16245	12	Z	100	31	5.8	-4.4
16245	00	Z	100	31	6.4	4.6
16429	00	Z	100	31	7.8	6.4
16429	12	Z	100	30	5.3	-2.4
16622	00	Z	100	17	8.7	7.5
16754	00	Z	100	25	4.0	0.9
17607	00	Z	100	8	11.7	11.0
17607	12	Z	100	20	5.2	3.9

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
26435	12	Z	100	10	7.9	-5.8
2TDJJ8	00	Z	100	31	6.9	6.3
2TDJJ8	12	Z	100	31	5.4	4.2
60018	00	Z	100	31	9.0	8.1
60018	12	Z	100	31	4.0	1.3
7JUNA4	12	Z	100	7	16.5	-10.4
7JUNA4	00	Z	100	6	11.6	-6.4
9ZT9MR	12	Z	100	2	29.9	-29.4
9ZT9MR	00	Z	100	3	35.1	-33.0
ASDE09	12	Z	100	1	24.8	24.8
ATGU3F	12	Z	100	3	27.5	-26.3
ATGU3F	00	Z	100	1	31.6	-31.6
FPUW5G	12	Z	100	3	8.3	-7.9
JNKN7J	12	Z	100	7	62.8	52.6
JNKN7J	00	Z	100	7	28.3	28.1
KJJF9X	12	Z	100	1	13.9	-13.9
KJJF9X	00	Z	100	1	31.5	-31.5
KMPLHP	12	Z	100	9	24.5	-7.7
KMPLHP	00	Z	100	11	25.5	8.1
LAGY8	12	Z	100	7	50.0	-45.8
LAGZ8	00	Z	100	3	46.2	46.1
LRYQE3	12	Z	100	6	52.4	47.6
LRYQE3	00	Z	100	5	9.7	-8.8
SMLQ	12	Z	100	19	8.7	-6.4
SMLQ	00	Z	100	19	7.1	-5.6
UXK5JT	12	Z	100	1	14.2	-14.2
UXK5JT	00	Z	100	0	0.0	0.0
WDK38H	12	Z	100	20	19.0	-18.3
XKQLWQ	12	Z	100	16	16.1	13.6
YLV96W	12	Z	100	8	70.8	46.7
YLV96W	00	Z	100	10	37.0	21.7
ZVQEQC	12	Z	100	3	1.9	1.6

4.4 Table 16 - Radiosonde Monitoring Statistics (EUCOS): 100 hPa Wind (m/s)

```
RADIOSONDE MONITORING STATISTICS (EUCOS)
         MONITORING CENTRE     : ECMWF
         ELEMENT MONITORED     : WIND (M/S)
         LEVEL                 : 100 HPA
         AREA                  : 0 - 90N, 100W - 40E
         PERIOD                : AUG 2025
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
01001	12	V	100	29	2.5	0.4	0.4
01001	00	V	100	29	2.6	-0.2	-0.6
01028	00	V	100	29	2.6	0.6	-0.4
01028	12	V	100	30	2.5	0.3	-0.2
01400	00	V	100	26	2.8	0.1	-0.1
01400	12	V	100	25	3.0	0.4	0.1
01415	12	V	100	30	3.4	0.4	0.2
01415	00	V	100	30	3.0	0.0	-0.1
02365	00	V	100	23	2.8	0.4	-0.5
02365	12	V	100	23	3.2	1.2	-0.9
02591	00	V	100	12	4.3	-1.3	1.4
02591	12	V	100	18	3.4	-0.1	-0.5
02836	00	V	100	4	2.7	0.0	1.7
02836	12	V	100	7	2.6	0.0	0.3
02963	12	V	100	14	2.7	0.8	0.1
02963	00	V	100	11	4.2	0.0	-0.7
03005	00	V	100	30	2.8	-0.2	0.6
03005	12	V	100	30	2.8	1.0	0.0
03238	00	V	100	27	3.4	1.2	0.1
03238	12	V	100	5	3.4	1.8	-0.2
03808	00	V	100	28	3.5	0.4	-0.4
03808	12	V	100	29	3.5	-1.0	0.3
03918	12	V	100	1	0.8	0.2	0.8
03918	00	V	100	29	3.3	0.4	0.4
039186	12	V	100	0	0.0	0.0	0.0
039188	00	V	100	0	0.0	0.0	0.0
03953	00	V	100	28	3.3	0.3	-0.1
03953	12	V	100	30	2.9	0.2	-0.2
04018	12	V	100	28	2.8	-0.7	-0.1
04018	00	V	100	24	2.6	0.1	-0.5
04220	12	V	100	30	2.5	0.0	0.2
04220	00	V	100	29	2.1	0.2	0.2
042207	12	V	100	0	0.0	0.0	0.0
04270	00	V	100	30	2.6	-0.7	0.1
04270	12	V	100	30	2.8	0.0	0.0
04320	00	V	100	31	2.3	-0.2	-0.2
04320	12	V	100	31	2.4	0.1	0.3
04339	00	V	100	29	2.7	0.7	-0.4
04339	12	V	100	28	2.5	0.2	-0.9

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
04360	00	V	100	26	2.3	-0.1	0.4
04360	12	V	100	27	2.4	-0.1	0.1
06011	12	V	100	31	2.3	0.3	0.4
06260	12	V	100	6	3.2	-0.9	-0.3
06260	00	V	100	29	2.8	0.4	0.3
06610	00	V	100	31	3.0	0.1	0.3
06610	12	V	100	31	3.0	-0.5	-0.2
07110	12	V	100	31	5.6	-1.4	-0.1
07110	00	V	100	28	3.2	-0.2	0.0
07510	00	V	100	30	3.9	-0.3	-0.8
07510	12	V	100	30	3.3	0.2	-0.7
07645	00	V	100	26	3.3	-0.3	0.3
07645	12	V	100	30	3.3	0.5	-0.3
07761	12	V	100	30	3.5	-0.4	0.1
07761	00	V	100	28	3.5	-0.1	0.0
08001	12	V	100	31	3.2	-0.3	-0.3
08001	00	V	100	29	3.3	0.5	-0.3
08221	12	V	100	31	3.0	-0.5	0.0
08221	00	V	100	31	3.7	0.1	-0.1
08302	12	V	100	28	3.0	0.6	-0.5
08302	00	V	100	20	2.9	0.2	0.0
08508	12	V	100	28	3.6	0.5	0.0
08522	12	V	100	31	3.7	0.2	0.6
10035	12	V	100	30	3.0	0.3	-0.1
10035	00	V	100	31	2.4	0.7	0.0
10393	12	V	100	30	2.9	0.3	-0.4
10393	00	V	100	31	2.5	0.0	-0.2
10410	12	V	100	31	3.2	-0.8	-0.1
10410	00	V	100	31	3.0	0.1	-0.5
10739	00	V	100	31	2.6	-0.3	-0.3
10739	12	V	100	31	2.8	0.2	-0.4
11035	00	V	100	28	3.0	-0.1	0.7
11035	12	V	100	31	3.3	0.0	-0.7
12982	12	V	100	31	3.0	0.0	0.2
12982	00	V	100	31	3.5	-0.7	-0.7
16245	12	V	100	31	4.0	0.2	0.6
16245	00	V	100	30	3.8	-0.4	0.0
16429	00	V	100	31	3.6	-0.2	-0.2
16429	12	V	100	30	3.5	0.1	-0.1
16622	00	V	100	16	3.4	-0.5	0.6
16754	00	V	100	23	3.4	0.1	0.0
17607	00	V	100	8	3.0	0.0	0.6
17607	12	V	100	20	3.6	0.5	-1.0

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
26435	12	V	100	8	9.2	-1.8	-1.2
2TDJJ8	00	V	100	31	2.5	0.3	-0.5
2TDJJ8	12	V	100	31	2.4	0.7	0.4
60018	00	V	100	30	3.7	-0.3	0.0
60018	12	V	100	31	4.1	-0.8	-0.4
7JUNA4	12	V	100	7	2.5	-0.2	-0.7
7JUNA4	00	V	100	6	3.0	0.2	0.7
9ZT9MR	12	V	100	2	3.6	2.8	1.1
9ZT9MR	00	V	100	3	2.3	0.4	-1.1
ASDE09	12	V	100	1	1.8	-1.3	1.2
ATGU3F	12	V	100	3	2.2	0.3	1.2
ATGU3F	00	V	100	1	3.3	-3.3	0.2
FPUW5G	12	V	100	3	2.6	-0.4	0.4
JNKN7J	12	V	100	7	2.9	-0.6	0.5
JNKN7J	00	V	100	7	2.8	0.4	-0.2
KJJF9X	12	V	100	1	2.6	2.4	-1.0
KJJF9X	00	V	100	1	1.5	-0.5	1.4
KMPLHP	12	V	100	9	2.9	-0.9	0.6
KMPLHP	00	V	100	11	4.1	0.0	0.3
LAGY8	12	V	100	7	1.7	-1.2	0.1
LAGZ8	00	V	100	3	2.6	0.9	-0.5
LRYQE3	12	V	100	6	2.5	0.1	-1.4
LRYQE3	00	V	100	5	1.7	-0.2	1.3
SMLQ	12	V	100	19	2.8	0.6	0.1
SMLQ	00	V	100	18	1.9	0.3	0.7
UXK5JT	12	V	100	1	2.8	0.9	2.7
UXK5JT	00	V	100	0	0.0	0.0	0.0
WDK38H	12	V	100	19	2.8	0.5	0.6
XKQLWQ	12	V	100	16	2.4	-0.2	-0.3
YLV96W	12	V	100	8	2.5	0.2	1.1
YLV96W	00	V	100	10	3.1	0.9	-0.6
ZVQEQC	12	V	100	3	2.4	1.4	0.9

4.5 Table 17 - Radiosonde Monitoring Statistics (EUCOS): 500 hPa Geopotential height (metres)

```
RADIOSONDE MONITORING STATISTICS (EUCOS)
         MONITORING CENTRE     : ECMWF
         ELEMENT MONITORED     : GEOPOTENTIAL HEIGHT (METRES)
         LEVEL                 : 500 HPA
         AREA                  : 0 - 90N, 100W - 40E
         PERIOD                : AUG 2025
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
01001	12	Z	500	31	4.6	0.8
01001	00	Z	500	31	8.4	7.3
01028	00	Z	500	31	2.8	-0.9
01028	12	Z	500	31	2.7	-1.0
01400	00	Z	500	28	81.8	81.6
01400	12	Z	500	30	81.5	81.2
01415	12	Z	500	30	5.2	3.8
01415	00	Z	500	31	5.0	3.8
02365	00	Z	500	24	3.1	1.1
02365	12	Z	500	24	2.8	-0.8
02591	00	Z	500	20	9.6	9.3
02591	12	Z	500	21	8.7	8.2
02836	00	Z	500	31	13.5	-1.9
02836	12	Z	500	32	3.1	-1.2
02963	12	Z	500	30	3.5	2.0
02963	00	Z	500	30	5.2	3.5
03005	00	Z	500	31	2.3	-0.8
03005	12	Z	500	31	3.9	-1.5
03238	00	Z	500	27	5.1	4.1
03238	12	Z	500	5	7.2	-1.1
03808	00	Z	500	28	4.3	3.6
03808	12	Z	500	29	4.2	3.4
03918	12	Z	500	1	4.6	4.6
03918	00	Z	500	31	2.9	1.2
039186	12	Z	500	0	0.0	0.0
039188	00	Z	500	0	0.0	0.0
03953	00	Z	500	31	2.7	0.1
03953	12	Z	500	32	3.8	-0.5
04018	12	Z	500	28	2.6	0.7
04018	00	Z	500	26	3.9	1.8
04220	12	Z	500	30	5.0	-3.6
04220	00	Z	500	30	4.7	-3.0
042207	12	Z	500	0	0.0	0.0
04270	00	Z	500	30	12.4	-11.2
04270	12	Z	500	31	9.9	-8.8
04320	00	Z	500	31	12.7	3.6
04320	12	Z	500	31	18.6	6.1
04339	00	Z	500	31	13.3	-11.8
04339	12	Z	500	30	12.2	-9.3

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
04360	00	Z	500	26	11.4	-10.8
04360	12	Z	500	28	11.6	-10.3
06011	12	Z	500	31	13.3	-11.9
06260	12	Z	500	6	2.7	0.2
06260	00	Z	500	30	4.9	2.7
06610	00	Z	500	33	4.0	3.0
06610	12	Z	500	31	2.8	1.0
07110	12	Z	500	31	4.5	0.9
07110	00	Z	500	32	3.0	-0.1
07510	00	Z	500	32	7.6	7.0
07510	12	Z	500	31	9.9	9.2
07645	00	Z	500	31	13.0	-12.7
07645	12	Z	500	30	12.5	-12.0
07761	12	Z	500	32	11.2	-10.3
07761	00	Z	500	32	12.8	-11.6
08001	12	Z	500	31	4.1	3.7
08001	00	Z	500	31	5.0	4.4
08221	12	Z	500	31	4.7	4.4
08221	00	Z	500	31	5.0	4.2
08302	12	Z	500	29	7.0	-5.7
08302	00	Z	500	21	5.4	-4.9
08508	12	Z	500	28	3.6	2.6
08522	12	Z	500	31	6.1	5.7
10035	12	Z	500	30	2.4	0.5
10035	00	Z	500	31	2.6	1.8
10393	12	Z	500	31	2.4	1.6
10393	00	Z	500	31	2.8	1.9
10410	12	Z	500	31	2.2	1.0
10410	00	Z	500	31	2.9	1.7
10739	00	Z	500	31	5.9	5.7
10739	12	Z	500	31	5.2	4.9
11035	00	Z	500	32	4.0	2.3
11035	12	Z	500	32	5.2	4.5
12982	12	Z	500	31	2.5	1.7
12982	00	Z	500	31	3.3	2.7
16245	12	Z	500	31	2.9	1.6
16245	00	Z	500	31	4.8	3.2
16429	00	Z	500	31	6.1	5.7
16429	12	Z	500	31	3.9	3.4
16622	00	Z	500	30	7.1	6.7
16754	00	Z	500	26	3.6	-2.8
17607	00	Z	500	8	7.1	6.7
17607	12	Z	500	22	11.1	2.3

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
26435	12	Z	500	15	3.2	-1.3
2TDJJ8	00	Z	500	31	12.7	12.3
2TDJJ8	12	Z	500	31	13.1	12.9
60018	00	Z	500	31	4.7	4.0
60018	12	Z	500	31	4.9	4.3
7JUNA4	12	Z	500	7	7.4	0.6
7JUNA4	00	Z	500	7	8.2	-1.1
9ZT9MR	12	Z	500	2	18.8	-18.6
9ZT9MR	00	Z	500	3	20.2	-19.6
ASDE09	12	Z	500	1	13.1	13.1
ATGU3F	12	Z	500	1	21.4	-21.4
ATGU3F	00	Z	500	1	32.6	-32.6
FPUW5G	12	Z	500	4	1.8	0.9
JNKN7J	12	Z	500	8	36.9	36.3
JNKN7J	00	Z	500	7	40.1	39.8
KJJF9X	12	Z	500	0	0.0	0.0
KJJF9X	00	Z	500	0	0.0	0.0
KMPLHP	12	Z	500	9	26.6	11.3
KMPLHP	00	Z	500	11	31.3	13.0
LAGY8	12	Z	500	8	61.0	-59.6
LAGZ8	00	Z	500	3	71.8	71.3
LRYQE3	12	Z	500	7	9.0	1.0
LRYQE3	00	Z	500	5	6.0	-4.3
SMLQ	12	Z	500	20	3.8	-0.4
SMLQ	00	Z	500	19	2.5	0.5
UXK5JT	12	Z	500	0	0.0	0.0
UXK5JT	00	Z	500	0	0.0	0.0
WDK38H	12	Z	500	25	15.0	-14.4
XKQLWQ	12	Z	500	17	11.4	9.9
YLV96W	12	Z	500	8	50.5	38.3
YLV96W	00	Z	500	10	49.0	34.5
ZVQEQC	12	Z	500	3	8.6	7.2

4.6 Table 18 - Radiosonde Monitoring Statistics (EUCOS): 500 hPa Wind (m/s)

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RADIOSONDE MONITORING STATISTICS (EUCOS)
         MONITORING CENTRE     : ECMWF
         ELEMENT MONITORED     : WIND (M/S)
         LEVEL                 : 500 HPA
         AREA                  : 0 - 90N, 100W - 40E
         PERIOD                : AUG 2025
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
01001	12	V	500	31	2.0	0.2	0.1
01001	00	V	500	31	1.8	0.1	-0.1
01028	00	V	500	31	2.1	-0.1	-0.4
01028	12	V	500	31	2.1	0.1	0.6
01400	00	V	500	28	1.8	-0.4	-0.4
01400	12	V	500	30	2.0	-0.1	-0.1
01415	12	V	500	30	2.8	0.2	0.3
01415	00	V	500	31	1.9	0.2	0.3
02365	00	V	500	24	2.5	-0.1	0.6
02365	12	V	500	24	2.5	0.3	0.6
02591	00	V	500	20	2.4	0.6	-0.2
02591	12	V	500	21	2.1	0.4	-0.6
02836	00	V	500	30	2.5	0.5	-0.3
02836	12	V	500	29	2.1	0.2	0.1
02963	12	V	500	30	2.5	0.0	0.1
02963	00	V	500	30	2.2	0.6	-0.2
03005	00	V	500	31	1.8	-0.1	0.0
03005	12	V	500	30	2.5	0.4	0.3
03238	00	V	500	27	1.9	0.0	-0.1
03238	12	V	500	5	1.9	0.1	0.7
03808	00	V	500	28	2.1	0.2	0.2
03808	12	V	500	29	3.2	0.7	-0.7
03918	12	V	500	1	1.2	0.4	1.1
03918	00	V	500	31	2.3	0.0	0.2
039186	12	V	500	0	0.0	0.0	0.0
039188	00	V	500	0	0.0	0.0	0.0
03953	00	V	500	30	2.3	-0.4	0.0
03953	12	V	500	31	2.6	0.4	-0.1
04018	12	V	500	28	2.3	0.3	-0.1
04018	00	V	500	26	2.1	0.1	-0.6
04220	12	V	500	30	2.5	0.0	0.1
04220	00	V	500	29	2.5	-0.4	0.4
042207	12	V	500	0	0.0	0.0	0.0
04270	00	V	500	30	2.2	0.2	-0.1
04270	12	V	500	31	2.7	0.4	0.4
04320	00	V	500	31	2.1	0.1	-0.1
04320	12	V	500	31	2.1	-0.1	0.5
04339	00	V	500	31	2.7	0.0	0.2
04339	12	V	500	30	2.4	0.0	-0.3

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
04360	00	V	500	26	2.3	0.2	0.1
04360	12	V	500	27	2.6	0.1	0.3
06011	12	V	500	31	2.1	-0.2	-0.3
06260	12	V	500	6	2.0	0.9	-0.8
06260	00	V	500	30	2.0	0.1	-0.2
06610	00	V	500	31	2.6	-0.1	-0.3
06610	12	V	500	31	1.8	-0.2	0.1
07110	12	V	500	31	2.6	0.0	0.8
07110	00	V	500	31	2.2	0.3	-0.1
07510	00	V	500	31	2.5	-0.3	-0.1
07510	12	V	500	31	1.9	-0.2	-0.1
07645	00	V	500	31	3.3	-0.3	0.1
07645	12	V	500	30	1.7	0.3	0.0
07761	12	V	500	31	2.1	0.4	0.0
07761	00	V	500	31	2.6	0.8	-0.1
08001	12	V	500	31	1.8	0.3	0.0
08001	00	V	500	31	1.9	-0.3	-0.1
08221	12	V	500	31	1.7	0.4	-0.1
08221	00	V	500	31	2.7	-0.1	0.1
08302	12	V	500	28	2.0	0.0	-0.2
08302	00	V	500	21	2.0	0.5	0.0
08508	12	V	500	28	1.6	-0.1	0.3
08522	12	V	500	31	2.3	0.3	0.8
10035	12	V	500	30	1.9	-0.3	-0.2
10035	00	V	500	31	2.1	0.4	0.0
10393	12	V	500	31	2.2	-0.1	0.0
10393	00	V	500	31	2.2	0.2	0.1
10410	12	V	500	31	2.1	0.2	-0.4
10410	00	V	500	31	2.1	-0.1	0.1
10739	00	V	500	31	1.9	0.0	-0.2
10739	12	V	500	31	1.6	0.5	0.0
11035	00	V	500	29	2.2	0.2	-0.2
11035	12	V	500	31	1.9	-0.1	0.4
12982	12	V	500	31	2.3	0.1	0.2
12982	00	V	500	31	2.2	0.0	0.3
16245	12	V	500	31	2.3	0.2	-0.1
16245	00	V	500	30	3.7	0.0	0.5
16429	00	V	500	31	2.6	0.7	-0.1
16429	12	V	500	31	1.9	0.2	-0.1
16622	00	V	500	30	2.3	0.1	-0.5
16754	00	V	500	24	2.0	0.8	0.4
17607	00	V	500	8	2.9	1.5	1.1
17607	12	V	500	22	3.4	0.8	1.1

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
26435	12	V	500	15	4.0	-0.4	1.4
2TDJJ8	00	V	500	31	3.0	0.3	0.1
2TDJJ8	12	V	500	31	2.3	0.4	0.4
60018	00	V	500	31	2.1	-0.3	0.4
60018	12	V	500	31	2.2	0.4	-0.3
7JUNA4	12	V	500	7	3.6	0.8	0.2
7JUNA4	00	V	500	7	1.9	1.0	-0.2
9ZT9MR	12	V	500	2	2.5	1.9	-0.7
9ZT9MR	00	V	500	3	2.6	-1.6	-0.7
ASDE09	12	V	500	1	5.3	-1.1	-5.2
ATGU3F	12	V	500	1	1.0	0.7	-0.7
ATGU3F	00	V	500	1	1.3	0.6	-1.2
FPUW5G	12	V	500	4	1.7	-0.5	0.7
JNKN7J	12	V	500	8	2.6	-0.3	0.7
JNKN7J	00	V	500	7	3.8	-1.2	0.6
KJJF9X	12	V	500	0	0.0	0.0	0.0
KJJF9X	00	V	500	0	0.0	0.0	0.0
KMPLHP	12	V	500	9	1.8	0.6	0.1
KMPLHP	00	V	500	11	2.1	0.1	-0.5
LAGY8	12	V	500	8	3.5	-0.7	-1.0
LAGZ8	00	V	500	3	3.0	1.4	-0.9
LRYQE3	12	V	500	7	2.3	0.2	0.4
LRYQE3	00	V	500	5	2.0	-0.1	-0.6
SMLQ	12	V	500	20	2.3	-0.2	-0.8
SMLQ	00	V	500	19	2.5	0.1	1.0
UXK5JT	12	V	500	0	0.0	0.0	0.0
UXK5JT	00	V	500	0	0.0	0.0	0.0
WDK38H	12	V	500	25	2.8	-0.3	-0.9
XKQLWQ	12	V	500	17	1.9	0.2	0.2
YLV96W	12	V	500	8	2.1	-1.1	0.1
YLV96W	00	V	500	10	3.6	1.0	1.0
ZVQEQC	12	V	500	3	2.2	1.4	-1.0

4.7 Table 19 - Radiosonde Monitoring Statistics (EUCOS): 850 hPa Geopotential height (metres)

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RADIOSONDE MONITORING STATISTICS (EUCOS)
         MONITORING CENTRE     : ECMWF
         ELEMENT MONITORED     : GEOPOTENTIAL HEIGHT (METRES)
         LEVEL                 : 850 HPA
         AREA                  : 0 - 90N, 100W - 40E
         PERIOD                : AUG 2025
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
01001	12	Z	850	31	2.8	-0.3
01001	00	Z	850	31	8.1	7.1
01028	00	Z	850	31	2.2	0.9
01028	12	Z	850	31	2.2	-1.0
01400	00	Z	850	28	81.5	81.3
01400	12	Z	850	30	81.9	81.8
01415	12	Z	850	30	5.7	5.3
01415	00	Z	850	31	4.8	4.4
02365	00	Z	850	24	1.9	1.1
02365	12	Z	850	24	2.3	1.5
02591	00	Z	850	20	7.6	7.4
02591	12	Z	850	21	8.4	8.2
02836	00	Z	850	31	1.8	0.5
02836	12	Z	850	32	2.8	1.1
02963	12	Z	850	30	4.8	4.2
02963	00	Z	850	30	3.9	3.6
03005	00	Z	850	31	2.6	-1.1
03005	12	Z	850	31	2.9	-1.1
03238	00	Z	850	27	3.8	2.7
03238	12	Z	850	5	3.3	2.2
03808	00	Z	850	28	2.9	2.2
03808	12	Z	850	29	2.3	1.7
03918	12	Z	850	1	2.6	2.6
03918	00	Z	850	31	2.6	0.7
039186	12	Z	850	1	5.2	-5.2
039188	00	Z	850	1	0.0	0.0
03953	00	Z	850	31	1.7	0.0
03953	12	Z	850	32	3.2	-0.6
04018	12	Z	850	28	2.2	1.0
04018	00	Z	850	26	2.8	1.6
04220	12	Z	850	31	3.2	-1.6
04220	00	Z	850	30	3.0	-1.9
042207	12	Z	850	1	3.1	3.1
04270	00	Z	850	31	10.8	-10.4
04270	12	Z	850	31	10.1	-9.6
04320	00	Z	850	31	13.7	3.8
04320	12	Z	850	31	8.6	3.6
04339	00	Z	850	31	11.5	-11.0
04339	12	Z	850	30	11.3	-9.1

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
04360	00	Z	850	26	8.7	-8.2
04360	12	Z	850	28	8.1	-7.5
06011	12	Z	850	31	4.5	-2.9
06260	12	Z	850	6	2.0	0.9
06260	00	Z	850	30	2.4	1.2
06610	00	Z	850	33	2.3	1.4
06610	12	Z	850	31	2.4	2.0
07110	12	Z	850	32	2.1	0.2
07110	00	Z	850	32	1.9	-0.2
07510	00	Z	850	32	5.6	5.3
07510	12	Z	850	32	5.5	5.1
07645	00	Z	850	31	9.5	-9.1
07645	12	Z	850	30	9.7	-9.5
07761	12	Z	850	32	12.0	-11.8
07761	00	Z	850	32	11.6	-11.4
08001	12	Z	850	31	2.3	1.1
08001	00	Z	850	31	2.8	1.5
08221	12	Z	850	31	2.1	1.5
08221	00	Z	850	31	2.8	1.8
08302	12	Z	850	29	8.8	-8.4
08302	00	Z	850	21	7.4	-7.2
08508	12	Z	850	28	3.0	1.9
08522	12	Z	850	31	4.4	3.7
10035	12	Z	850	30	1.7	0.9
10035	00	Z	850	31	1.9	1.3
10393	12	Z	850	31	1.7	0.6
10393	00	Z	850	31	1.3	0.8
10410	12	Z	850	31	1.6	0.8
10410	00	Z	850	31	1.5	0.8
10739	00	Z	850	31	5.2	5.0
10739	12	Z	850	31	5.9	5.6
11035	00	Z	850	32	3.4	1.2
11035	12	Z	850	32	3.0	2.4
12982	12	Z	850	31	2.6	2.1
12982	00	Z	850	31	3.0	2.7
16245	12	Z	850	31	2.9	2.5
16245	00	Z	850	31	3.5	3.1
16429	00	Z	850	31	3.0	2.4
16429	12	Z	850	31	2.8	2.5
16622	00	Z	850	30	5.8	5.6
16754	00	Z	850	26	5.9	-5.6
17607	00	Z	850	8	3.7	3.5
17607	12	Z	850	24	2.9	1.3

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
26435	12	Z	850	15	2.0	0.5
2TDJJ8	00	Z	850	31	13.5	13.3
2TDJJ8	12	Z	850	31	12.9	12.5
60018	00	Z	850	31	2.5	0.6
60018	12	Z	850	31	2.0	0.2
7JUNA4	12	Z	850	7	5.4	3.0
7JUNA4	00	Z	850	7	6.3	0.2
9ZT9MR	12	Z	850	2	19.7	-19.2
9ZT9MR	00	Z	850	3	14.8	-14.4
ASDE09	12	Z	850	1	15.2	15.2
ATGU3F	12	Z	850	0	0.0	0.0
ATGU3F	00	Z	850	1	24.5	-24.5
FPUW5G	12	Z	850	4	1.1	0.5
JNKN7J	12	Z	850	8	38.4	37.8
JNKN7J	00	Z	850	7	42.6	42.2
KJJF9X	12	Z	850	0	0.0	0.0
KJJF9X	00	Z	850	1	9.7	-9.7
KMPLHP	12	Z	850	9	28.5	12.8
KMPLHP	00	Z	850	11	33.2	17.2
LAGY8	12	Z	850	8	60.5	-59.2
LAGZ8	00	Z	850	3	78.4	78.3
LRYQE3	12	Z	850	7	7.3	-2.2
LRYQE3	00	Z	850	6	5.8	-3.0
SMLQ	12	Z	850	21	3.1	0.6
SMLQ	00	Z	850	20	2.7	1.0
UXK5JT	12	Z	850	0	0.0	0.0
UXK5JT	00	Z	850	0	0.0	0.0
WDK38H	12	Z	850	25	13.5	-13.1
XKQLWQ	12	Z	850	18	6.4	2.7
YLV96W	12	Z	850	9	52.0	35.8
YLV96W	00	Z	850	10	57.2	41.7
ZVQEQC	12	Z	850	3	9.7	6.0

4.8 Table 20 - Radiosonde Monitoring Statistics (EUCOS): 850 hPa Wind (m/s)

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RADIOSONDE MONITORING STATISTICS (EUCOS)
         MONITORING CENTRE     : ECMWF
         ELEMENT MONITORED     : WIND (M/S)
         LEVEL                 : 850 HPA
         AREA                  : 0 - 90N, 100W - 40E
         PERIOD                : AUG 2025
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
01001	12	V	850	31	3.5	-0.4	-0.3
01001	00	V	850	31	2.5	-0.5	0.1
01028	00	V	850	31	2.4	-0.1	-0.3
01028	12	V	850	31	2.5	0.7	-0.4
01400	00	V	850	28	2.3	0.2	0.0
01400	12	V	850	30	2.1	0.0	0.4
01415	12	V	850	30	2.7	0.6	-0.1
01415	00	V	850	31	2.7	0.2	-0.2
02365	00	V	850	24	2.3	0.1	0.3
02365	12	V	850	24	2.8	0.3	-0.5
02591	00	V	850	20	2.1	0.7	0.2
02591	12	V	850	21	1.9	0.0	-0.2
02836	00	V	850	31	2.6	0.3	0.2
02836	12	V	850	31	2.1	0.1	-0.1
02963	12	V	850	30	2.1	-0.5	-0.1
02963	00	V	850	30	2.4	0.2	0.2
03005	00	V	850	31	2.6	-0.1	0.2
03005	12	V	850	30	2.1	0.2	0.5
03238	00	V	850	27	2.3	0.1	-0.5
03238	12	V	850	5	2.7	0.0	1.0
03808	00	V	850	28	2.4	0.0	-0.6
03808	12	V	850	29	2.7	0.2	0.6
03918	12	V	850	1	1.2	-0.5	-1.1
03918	00	V	850	31	2.3	0.1	-0.2
039186	12	V	850	1	3.1	-0.1	3.1
039188	00	V	850	1	22.5	8.3	20.9
03953	00	V	850	30	2.3	0.0	0.3
03953	12	V	850	31	2.5	-0.1	-0.1
04018	12	V	850	28	2.3	0.4	-0.1
04018	00	V	850	26	2.5	0.6	-0.3
04220	12	V	850	31	3.6	-0.3	-1.0
04220	00	V	850	29	3.0	0.6	-0.9
042207	12	V	850	1	4.5	-1.2	4.3
04270	00	V	850	31	2.8	0.7	0.3
04270	12	V	850	31	4.0	0.9	0.5
04320	00	V	850	31	2.6	-0.7	0.2
04320	12	V	850	31	2.2	-0.1	0.1
04339	00	V	850	31	4.2	0.7	0.9
04339	12	V	850	30	4.2	0.6	0.1

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
04360	00	V	850	26	3.3	1.1	0.9
04360	12	V	850	27	2.8	0.8	1.0
06011	12	V	850	31	2.7	-0.3	-0.2
06260	12	V	850	6	2.0	0.0	0.0
06260	00	V	850	30	2.8	0.5	-0.2
06610	00	V	850	31	3.5	0.9	0.1
06610	12	V	850	31	2.3	0.5	0.9
07110	12	V	850	31	2.1	-0.3	-0.4
07110	00	V	850	31	2.2	-0.1	0.2
07510	00	V	850	31	3.1	0.2	0.8
07510	12	V	850	31	2.5	-0.6	0.2
07645	00	V	850	31	2.9	-0.1	-0.1
07645	12	V	850	30	2.8	-0.6	0.3
07761	12	V	850	31	2.9	-0.5	0.5
07761	00	V	850	31	2.4	-0.3	-0.5
08001	12	V	850	31	2.5	0.5	-0.5
08001	00	V	850	31	2.4	-0.1	-0.4
08221	12	V	850	31	2.2	0.4	0.3
08221	00	V	850	31	3.1	0.8	0.4
08302	12	V	850	28	2.6	0.1	-0.6
08302	00	V	850	21	1.5	-0.1	-0.4
08508	12	V	850	28	2.7	0.3	-0.2
08522	12	V	850	31	3.0	-0.7	0.1
10035	12	V	850	30	2.3	0.3	-0.1
10035	00	V	850	31	2.0	0.0	0.0
10393	12	V	850	31	2.7	0.6	-0.6
10393	00	V	850	31	2.1	-0.1	-0.5
10410	12	V	850	31	2.2	0.1	-0.6
10410	00	V	850	31	2.9	0.3	-0.5
10739	00	V	850	31	2.4	0.3	0.0
10739	12	V	850	31	2.3	0.2	0.2
11035	00	V	850	29	2.4	-0.3	0.1
11035	12	V	850	31	2.8	1.2	0.0
12982	12	V	850	31	2.4	0.1	0.2
12982	00	V	850	31	2.5	0.8	0.7
16245	12	V	850	31	2.7	-0.3	0.4
16245	00	V	850	30	2.5	0.3	0.1
16429	00	V	850	31	2.2	0.0	0.4
16429	12	V	850	31	2.2	0.1	-0.1
16622	00	V	850	30	2.9	0.3	0.1
16754	00	V	850	24	1.8	-0.2	0.6
17607	00	V	850	8	2.2	-0.3	-0.1
17607	12	V	850	24	2.8	0.6	-0.5

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
26435	12	V	850	15	2.5	-0.1	-0.5
2TDJJ8	00	V	850	31	2.5	0.3	0.6
2TDJJ8	12	V	850	31	2.6	-0.3	-0.3
60018	00	V	850	31	3.4	1.4	0.4
60018	12	V	850	31	3.0	0.9	0.2
7JUNA4	12	V	850	7	1.5	-0.2	-0.9
7JUNA4	00	V	850	7	1.7	-0.3	0.0
9ZT9MR	12	V	850	2	2.3	1.0	-1.7
9ZT9MR	00	V	850	3	3.4	-0.4	0.3
ASDE09	12	V	850	1	1.8	1.4	-1.1
ATGU3F	12	V	850	0	0.0	0.0	0.0
ATGU3F	00	V	850	1	3.6	-3.6	0.5
FPUW5G	12	V	850	4	2.8	-0.7	-0.5
JNKN7J	12	V	850	8	2.3	-0.2	-0.9
JNKN7J	00	V	850	7	1.9	-0.1	0.6
KJJF9X	12	V	850	0	0.0	0.0	0.0
KJJF9X	00	V	850	1	2.3	-1.8	-1.4
KMPLHP	12	V	850	9	2.6	0.4	-0.2
KMPLHP	00	V	850	11	1.9	0.0	0.4
LAGY8	12	V	850	8	2.9	-0.8	-2.0
LAGZ8	00	V	850	3	1.5	0.0	0.5
LRYQE3	12	V	850	7	1.1	0.5	-0.4
LRYQE3	00	V	850	6	1.5	-0.4	-0.4
SMLQ	12	V	850	21	2.1	0.0	-0.2
SMLQ	00	V	850	20	3.3	-0.1	0.3
UXK5JT	12	V	850	0	0.0	0.0	0.0
UXK5JT	00	V	850	0	0.0	0.0	0.0
WDK38H	12	V	850	25	2.6	-0.2	0.6
XKQLWQ	12	V	850	17	2.6	-0.5	-0.3
YLV96W	12	V	850	9	2.2	-0.6	0.0
YLV96W	00	V	850	10	4.6	-2.6	0.0
ZVQEQC	12	V	850	3	0.9	0.1	-0.2

4.9 Table 21 - Drifter Monitoring Statistics (EUCOS): Surface pressure (hpa)

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          DRIFTER MONITORING STATISTICS (EUCOS)
                   MONITORING CENTRE     : ECMWF
                   ELEMENT MONITORED     : SURFACE PRESSURE (HPA)
                   AREA                  : 10N - 90N, 70W - 40E
                   PERIOD                : AUG 2025
                   STANDARD OF COMPARISON: FIRST-GUESS FIELD


TIME = 99 => AVERAGE OF ALL OBSERVATIONS
GROSS ERROR LIMIT = 15 HPA
```

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
1000044	99	P	SUR	55	10	88	0	0.3	-3.3	3.3
1300001	99	P	SUR	11	-23	616	0	0.4	0.1	0.5
1300008	99	P	SUR	15	-38	598	0	0.3	0.0	0.3
1300130	99	P	SUR	28	-16	744	0	0.4	0.2	0.4
1300131	99	P	SUR	28	-17	744	0	0.4	0.1	0.4
1301622	99	P	SUR	34	-51	743	0	0.3	0.0	0.3
1301718	99	P	SUR	31	-47	632	0	0.3	0.1	0.3
1301725	99	P	SUR	39	-29	728	0	1.4	-0.3	1.4
1301726	99	P	SUR	27	-55	734	0	0.3	0.1	0.3
1301769	99	P	SUR	27	-44	735	0	0.3	-1.2	1.2
1301773	99	P	SUR	25	-40	734	0	0.2	0.1	0.2
1301778	99	P	SUR	25	-54	735	0	0.3	0.0	0.3
1301782	99	P	SUR	51	-49	734	0	0.3	0.0	0.3
1301784	99	P	SUR	36	-17	735	0	0.3	0.1	0.3
1301785	99	P	SUR	31	-21	729	0	0.2	0.1	0.3
1301798	99	P	SUR	28	-53	729	0	0.4	0.4	0.5
1301799	99	P	SUR	30	-31	53	0	0.3	0.5	0.5
1301800	99	P	SUR	71	26	724	0	0.4	-1.1	1.1
1301804	99	P	SUR	63	-11	733	0	0.2	-0.8	0.8
1301810	99	P	SUR	28	-36	735	0	0.2	-0.1	0.2
1301814	99	P	SUR	31	-21	734	0	0.2	0.1	0.2
1301819	99	P	SUR	21	-36	733	0	0.2	-0.3	0.4
1301820	99	P	SUR	31	-34	735	0	0.2	-0.2	0.3
1301822	99	P	SUR	20	-41	734	0	0.2	0.1	0.3
1301823	99	P	SUR	24	-42	734	0	0.2	0.1	0.3
1801670	99	P	SUR	51	-18	719	0	0.4	0.2	0.5
1801671	99	P	SUR	45	-12	480	0	0.3	0.1	0.3
1801673	99	P	SUR	54	-29	719	1	3.1	2.2	3.8
1801675	99	P	SUR	54	-22	718	0	0.4	0.3	0.5
1801676	99	P	SUR	53	-20	628	0	1.5	-1.4	2.0
1801678	99	P	SUR	12	-51	722	0	0.3	0.4	0.5
1801716	99	P	SUR	22	-41	731	0	0.3	0.5	0.6
1801732	99	P	SUR	45	-41	730	0	0.5	0.0	0.5
1801777	99	P	SUR	37	-31	744	0	0.2	0.1	0.3
1801778	99	P	SUR	53	-43	744	0	0.3	-0.3	0.5
1801927	99	P	SUR	55	-56	742	0	0.4	0.2	0.4

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
2801968	99	P	SUR	48	-16	656	0	0.4	-0.1	0.4
2802007	99	P	SUR	20	-45	731	0	0.2	0.0	0.2
2802008	99	P	SUR	65	-40	705	0	0.4	-0.4	0.6
2802010	99	P	SUR	18	-44	732	0	0.5	0.6	0.8
2802011	99	P	SUR	40	-34	733	0	0.3	0.1	0.3
2802022	99	P	SUR	32	-40	732	0	0.3	-0.1	0.3
2802100	99	P	SUR	66	-5	716	0	0.3	0.2	0.4
2802124	99	P	SUR	27	-40	712	0	0.3	0.2	0.3
3801571	99	P	SUR	44	-32	721	0	0.4	0.2	0.5
3801575	99	P	SUR	53	-24	722	0	0.4	0.0	0.4
3801585	99	P	SUR	62	-15	559	0	0.3	0.1	0.3
3801596	99	P	SUR	30	-37	731	0	0.2	-0.2	0.3
3801598	99	P	SUR	35	-48	732	0	0.3	0.1	0.3
3801612	99	P	SUR	23	-41	729	0	0.2	0.2	0.3
3801625	99	P	SUR	21	-44	730	0	0.3	0.5	0.6
3801676	99	P	SUR	79	16	743	0	0.5	-0.1	0.5
3801703	99	P	SUR	60	-45	723	0	0.4	-0.3	0.5
3801825	99	P	SUR	52	-57	743	0	0.3	0.3	0.5
4100040	99	P	SUR	15	-53	4462	0	0.3	-0.1	0.3
4100043	99	P	SUR	21	-65	4461	0	0.3	-0.2	0.4
4100044	99	P	SUR	22	-59	4461	0	0.3	-0.2	0.3
4100046	99	P	SUR	24	-68	4460	0	0.4	0.1	0.4
4100049	99	P	SUR	28	-62	4460	0	0.3	-0.4	0.5
4100052	99	P	SUR	18	-65	4405	0	0.3	-1.1	1.1
4100053	99	P	SUR	18	-66	4407	0	0.3	-0.9	1.0
4100056	99	P	SUR	18	-65	4434	0	0.3	-0.9	1.0
4101665	99	P	SUR	71	24	657	0	0.3	-0.4	0.5
4101725	99	P	SUR	18	-63	740	0	0.3	-0.1	0.3
4101728	99	P	SUR	32	-36	744	0	0.2	0.3	0.4
4101729	99	P	SUR	29	-59	744	0	0.4	0.1	0.4
4101755	99	P	SUR	34	-62	744	0	0.4	0.2	0.4
4101851	99	P	SUR	27	-68	734	0	0.4	-1.3	1.3
4101861	99	P	SUR	32	-54	733	0	0.4	0.2	0.5
4101863	99	P	SUR	20	-61	733	0	0.4	0.1	0.4
4101870	99	P	SUR	24	-56	734	0	0.3	0.0	0.3
4101873	99	P	SUR	28	-33	733	0	0.2	0.0	0.2
4101875	99	P	SUR	25	-26	223	0	0.4	0.8	0.9
41040	99	P	SUR	15	-53	744	0	0.3	-0.1	0.3
41043	99	P	SUR	21	-65	744	0	0.3	-0.2	0.4
41044	99	P	SUR	22	-59	744	0	0.3	-0.2	0.4
41046	99	P	SUR	24	-68	744	0	0.4	0.1	0.4
41049	99	P	SUR	28	-62	744	0	0.3	-0.4	0.5
41052	99	P	SUR	18	-65	738	0	0.4	-1.0	1.1

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
41053	99	P	SUR	19	-66	738	0	0.3	-0.9	1.0
41056	99	P	SUR	18	-66	743	0	0.3	-0.9	1.0
4200060	99	P	SUR	16	-63	4461	0	0.3	-0.4	0.5
4200085	99	P	SUR	18	-67	4363	0	0.4	-0.8	0.9
42060	99	P	SUR	16	-63	744	0	0.3	-0.3	0.5
42085	99	P	SUR	18	-67	705	0	0.3	-0.8	0.9
4400008	99	P	SUR	40	-69	4461	0	0.4	-0.2	0.5
4400011	99	P	SUR	41	-67	4461	0	0.5	0.2	0.5
4400027	99	P	SUR	44	-67	4460	0	0.3	-0.8	0.8
4400488	99	P	SUR	45	-61	744	0	0.3	0.1	0.4
44008	99	P	SUR	41	-69	744	0	0.4	-0.2	0.4
44011	99	P	SUR	41	-67	744	0	0.4	0.2	0.5
4401582	99	P	SUR	32	-53	743	0	0.4	0.4	0.5
4401584	99	P	SUR	26	-66	744	0	0.4	0.3	0.5
4401588	99	P	SUR	69	15	570	0	0.3	0.0	0.3
4402676	99	P	SUR	31	-46	705	0	0.3	0.2	0.3
44027	99	P	SUR	44	-67	744	0	0.3	-0.8	0.8
4402730	99	P	SUR	30	-39	672	0	0.3	0.0	0.3
4402733	99	P	SUR	62	-7	463	0	0.9	-0.2	1.0
4402736	99	P	SUR	22	-61	185	0	0.3	0.2	0.4
4402737	99	P	SUR	63	-39	728	0	0.4	-0.3	0.5
4402743	99	P	SUR	39	-53	730	0	0.5	-1.3	1.4
4402744	99	P	SUR	37	-42	732	0	0.3	0.0	0.3
4402747	99	P	SUR	22	-27	733	0	0.3	0.0	0.3
4402749	99	P	SUR	66	1	735	0	0.3	0.0	0.3
4402750	99	P	SUR	56	-29	735	0	0.4	-0.5	0.6
4403568	99	P	SUR	34	-39	744	0	0.2	0.3	0.4
44078	99	P	SUR	60	-40	467	0	0.4	-0.4	0.5
44137	99	P	SUR	42	-62	743	0	0.5	0.4	0.6
44139	99	P	SUR	44	-57	743	0	0.4	0.0	0.4
44150	99	P	SUR	43	-64	742	0	0.4	0.1	0.4
44258	99	P	SUR	45	-63	744	0	0.3	0.0	0.3
44488	99	P	SUR	45	-61	744	0	0.3	0.1	0.4
4601782	99	P	SUR	33	-43	734	0	0.3	0.5	0.6
4701527	99	P	SUR	82	9	739	0	0.3	-0.2	0.4
4701546	99	P	SUR	87	-27	739	0	0.3	-0.6	0.7
4701547	99	P	SUR	85	-11	739	0	0.3	-0.1	0.3
4701548	99	P	SUR	87	-51	739	0	0.4	-0.2	0.4
4701558	99	P	SUR	79	-18	62	0	0.3	-4.5	4.5
4701561	99	P	SUR	66	-21	739	0	0.4	0.0	0.4
4801763	99	P	SUR	56	-33	744	0	0.7	-11.8	11.9
4802582	99	P	SUR	64	-18	739	118	4.2	-8.2	9.2
4802594	99	P	SUR	80	1	739	0	0.3	-0.5	0.6

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
4802608	99	P	SUR	77	-14	738	0	0.3	-0.2	0.4
4802664	99	P	SUR	83	-50	744	0	0.3	-0.4	0.5
4803997	99	P	SUR	47	-34	721	0	0.5	-0.1	0.5
4804003	99	P	SUR	56	-50	727	0	0.5	-0.1	0.5
4804016	99	P	SUR	19	-62	295	0	0.3	0.1	0.3
4804127	99	P	SUR	27	-32	715	0	0.2	0.3	0.4
4804130	99	P	SUR	12	-31	721	0	0.4	-0.7	0.8
4804178	99	P	SUR	85	-61	35	0	0.3	-0.3	0.4
5801972	99	P	SUR	38	-24	729	0	0.2	0.0	0.2
5801978	99	P	SUR	60	-40	721	0	1.5	-0.2	1.5
5802011	99	P	SUR	18	-36	733	0	0.3	0.2	0.3
5802026	99	P	SUR	44	-15	732	0	0.2	0.0	0.2
5802033	99	P	SUR	22	-40	731	0	0.4	0.5	0.7
5802060	99	P	SUR	86	-60	744	0	0.3	-0.5	0.6
5802070	99	P	SUR	76	32	742	0	0.3	-0.1	0.3
5802095	99	P	SUR	64	-54	719	0	0.4	-0.2	0.5
5802112	99	P	SUR	20	-40	711	0	0.3	0.2	0.3
5802118	99	P	SUR	18	-33	699	0	0.2	0.1	0.3
5802227	99	P	SUR	51	-55	743	0	0.3	0.1	0.4
5802228	99	P	SUR	55	-57	743	0	0.4	0.4	0.6
6100001	99	P	SUR	43	8	1	0	0.0	-11.1	11.1
6100002	99	P	SUR	42	5	1162	0	0.6	-0.1	0.6
6100196	99	P	SUR	42	4	744	0	0.5	0.6	0.7
6100197	99	P	SUR	40	4	744	0	0.3	0.7	0.8
6100198	99	P	SUR	37	-2	744	0	0.4	0.4	0.5
6100280	99	P	SUR	41	1	744	0	0.3	0.5	0.6
6100281	99	P	SUR	40	0	120	0	0.3	0.4	0.5
6100417	99	P	SUR	38	0	744	0	0.3	0.3	0.5
6100430	99	P	SUR	40	2	744	0	0.3	0.2	0.4
6101031	99	P	SUR	42	8	1163	0	0.6	0.1	0.6
6101032	99	P	SUR	42	10	743	0	0.3	0.2	0.3
6101033	99	P	SUR	43	8	1163	0	0.5	0.3	0.5
6101034	99	P	SUR	42	6	1163	0	0.6	0.0	0.6
6101035	99	P	SUR	40	7	1165	0	0.5	0.2	0.5
6200001	99	P	SUR	45	-5	743	0	0.3	-0.1	0.3
6200024	99	P	SUR	44	-3	744	0	0.4	0.2	0.5
6200025	99	P	SUR	44	-6	743	0	0.3	0.2	0.4
6200029	99	P	SUR	49	-12	742	0	0.3	-0.2	0.4
6200050	99	P	SUR	50	-4	741	0	0.3	0.0	0.3
6200081	99	P	SUR	51	-13	738	0	0.3	-0.1	0.3
6200082	99	P	SUR	44	-8	744	0	0.3	0.2	0.3
6200083	99	P	SUR	43	-9	743	0	0.4	0.2	0.5
6200084	99	P	SUR	42	-9	744	0	0.4	0.3	0.5

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
6200085	99	P	SUR	36	-7	744	0	0.3	0.5	0.5
6200086	99	P	SUR	55	7	162	0	0.2	-0.2	0.3
6200087	99	P	SUR	55	7	195	0	0.2	-0.2	0.3
6200091	99	P	SUR	53	-5	744	0	0.3	0.0	0.3
6200092	99	P	SUR	51	-11	744	0	0.3	-0.1	0.3
6200093	99	P	SUR	55	-10	655	0	0.3	0.0	0.3
6200094	99	P	SUR	52	-7	744	0	0.3	-0.1	0.3
6200095	99	P	SUR	53	-16	744	0	0.4	-0.1	0.5
6200103	99	P	SUR	50	-3	741	0	0.3	0.1	0.3
6200163	99	P	SUR	47	-8	743	0	0.3	-0.1	0.3
6200192	99	P	SUR	40	-10	697	0	0.3	-1.0	1.0
6200200	99	P	SUR	36	-8	693	0	0.3	0.8	0.8
6200442	99	P	SUR	49	-16	743	0	0.4	-0.2	0.4
6201065	99	P	SUR	54	7	716	0	0.2	1.2	1.2
6201066	99	P	SUR	55	7	737	0	0.2	0.3	0.4
6201081	99	P	SUR	38	-9	695	0	0.3	0.6	0.7
6202113	99	P	SUR	54	7	176	0	0.2	0.0	0.2
6202598	99	P	SUR	26	-46	744	0	0.3	0.1	0.3
62029	99	P	SUR	49	-13	1483	0	0.3	-0.2	0.3
6203615	99	P	SUR	36	-41	744	0	0.3	-0.1	0.3
6203625	99	P	SUR	33	-48	744	0	0.2	-0.2	0.3
6203632	99	P	SUR	36	-40	744	0	0.3	0.3	0.4
6203634	99	P	SUR	33	-44	744	0	0.3	0.3	0.4
6203639	99	P	SUR	30	-44	744	0	0.3	0.0	0.3
6203662	99	P	SUR	75	-17	744	0	0.4	-0.1	0.4
6203666	99	P	SUR	71	-21	138	0	5.0	1.9	5.3
6203668	99	P	SUR	80	14	744	0	0.3	-0.6	0.7
6203672	99	P	SUR	18	-36	744	0	0.2	0.2	0.3
6203674	99	P	SUR	53	-30	743	0	0.4	0.0	0.4
6203675	99	P	SUR	54	-35	743	0	0.4	0.1	0.4
6203676	99	P	SUR	55	-34	743	0	0.3	0.3	0.5
6203677	99	P	SUR	40	-24	744	0	0.3	0.0	0.3
6203679	99	P	SUR	26	-23	744	0	0.3	0.1	0.3
6203684	99	P	SUR	47	-27	743	0	0.4	0.2	0.4
6203686	99	P	SUR	23	-46	744	0	0.3	0.2	0.3
6203687	99	P	SUR	20	-45	744	0	0.2	-0.1	0.3
6203689	99	P	SUR	74	16	464	0	0.2	-0.1	0.3
6203753	99	P	SUR	58	-12	454	0	0.3	-0.3	0.4
6203772	99	P	SUR	39	-39	658	0	0.3	0.0	0.3
6203773	99	P	SUR	36	-24	688	0	0.2	-0.6	0.6
6203831	99	P	SUR	70	8	733	0	0.3	0.3	0.5
6203832	99	P	SUR	63	0	733	0	0.3	0.3	0.4
6203834	99	P	SUR	61	-5	730	0	0.3	0.2	0.3

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
6203835	99	P	SUR	62	3	732	0	0.3	0.2	0.4
6203836	99	P	SUR	62	-18	733	0	0.3	0.1	0.3
6203837	99	P	SUR	64	6	733	0	0.3	0.2	0.4
6203846	99	P	SUR	34	-41	734	0	0.2	-0.1	0.3
6203849	99	P	SUR	36	-43	729	0	0.5	-0.1	0.5
6203854	99	P	SUR	71	17	730	0	0.3	0.2	0.4
6203894	99	P	SUR	17	-53	734	0	0.3	-0.1	0.3
62050	99	P	SUR	50	-4	1485	0	0.3	0.0	0.3
62081	99	P	SUR	51	-13	1487	0	0.3	-0.1	0.3
62091	99	P	SUR	53	-5	743	0	0.3	0.0	0.3
62092	99	P	SUR	51	-11	743	0	0.3	-0.1	0.3
62093	99	P	SUR	55	-10	654	0	0.3	0.0	0.3
62094	99	P	SUR	52	-7	743	0	0.3	-0.1	0.3
62095	99	P	SUR	53	-16	743	0	0.4	-0.1	0.5
62102	99	P	SUR	58	2	1460	0	0.4	0.3	0.5
62103	99	P	SUR	50	-3	1477	0	0.3	0.1	0.3
62104	99	P	SUR	57	1	1488	0	0.3	0.1	0.3
62105	99	P	SUR	55	-13	1484	0	0.5	-0.3	0.6
62107	99	P	SUR	50	-6	1487	0	0.3	-0.4	0.5
62112	99	P	SUR	58	0	1487	0	0.3	0.5	0.5
62113	99	P	SUR	58	0	1488	0	0.6	0.2	0.7
62114	99	P	SUR	58	0	1016	0	0.5	0.4	0.6
62116	99	P	SUR	58	1	1488	0	0.4	0.2	0.4
62118	99	P	SUR	58	1	1464	0	0.3	0.5	0.6
62120	99	P	SUR	56	2	1435	0	0.3	0.0	0.3
62121	99	P	SUR	54	3	1485	0	0.4	0.4	0.6
62122	99	P	SUR	57	2	1447	0	0.3	0.3	0.5
62124	99	P	SUR	54	-4	1487	0	0.3	0.2	0.3
62127	99	P	SUR	54	1	1459	0	0.2	0.3	0.4
62129	99	P	SUR	58	0	1482	0	0.5	0.3	0.6
62130	99	P	SUR	59	1	1488	0	0.3	-0.1	0.4
62131	99	P	SUR	54	1	1487	0	0.3	0.6	0.6
62132	99	P	SUR	56	2	1479	0	0.4	0.7	0.8
62133	99	P	SUR	57	1	1487	0	0.4	0.3	0.5
62134	99	P	SUR	58	1	1446	0	0.4	0.4	0.6
62138	99	P	SUR	54	0	1481	0	0.3	0.5	0.6
62140	99	P	SUR	57	1	1482	0	0.3	0.2	0.4
62143	99	P	SUR	58	2	1488	0	0.5	0.9	1.1
62144	99	P	SUR	53	2	1453	0	0.3	0.3	0.4
62145	99	P	SUR	53	3	1485	0	0.3	0.3	0.4
62146	99	P	SUR	57	2	1485	0	0.6	0.4	0.7
62148	99	P	SUR	54	2	767	0	0.4	0.5	0.6
62149	99	P	SUR	54	1	1487	0	0.2	0.5	0.5

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
62151	99	P	SUR	57	2	1487	0	0.3	0.5	0.6
62152	99	P	SUR	57	2	1483	0	0.4	0.6	0.7
62153	99	P	SUR	57	2	1424	0	0.3	0.5	0.6
62154	99	P	SUR	56	2	1487	0	0.3	0.3	0.4
62155	99	P	SUR	58	1	1488	0	0.4	0.6	0.7
62157	99	P	SUR	58	0	1470	0	0.3	0.0	0.3
62160	99	P	SUR	57	2	1487	0	0.3	0.4	0.5
62161	99	P	SUR	58	1	1488	0	0.6	0.0	0.6
62162	99	P	SUR	57	1	1326	0	0.3	0.2	0.4
62163	99	P	SUR	48	-9	1482	0	0.3	-0.1	0.3
62164	99	P	SUR	57	1	1487	0	0.2	0.7	0.8
62165	99	P	SUR	54	1	1486	0	0.4	0.4	0.6
62168	99	P	SUR	58	1	1486	0	0.3	0.3	0.4
62170	99	P	SUR	51	2	1488	0	0.3	-0.3	0.4
62302	99	P	SUR	61	-2	1416	0	0.5	0.2	0.5
62304	99	P	SUR	51	2	1486	0	0.3	-0.2	0.4
62305	99	P	SUR	50	0	1488	0	0.3	-0.2	0.3
62442	99	P	SUR	49	-16	1487	0	0.4	-0.2	0.4
6301003	99	P	SUR	74	24	737	0	0.2	-0.2	0.3
6301004	99	P	SUR	72	20	727	0	1.7	-0.5	1.8
6301581	99	P	SUR	80	33	654	35	5.2	4.4	6.8
6301582	99	P	SUR	71	30	725	0	0.6	-0.2	0.6
6301583	99	P	SUR	80	-3	744	11	3.0	-1.0	3.1
6301584	99	P	SUR	83	-3	743	0	0.4	-0.1	0.4
6301588	99	P	SUR	81	36	744	5	3.8	1.4	4.0
6301635	99	P	SUR	80	39	742	3	4.2	1.8	4.5
6301636	99	P	SUR	82	-9	1	0	0.0	-1.7	1.7
6301637	99	P	SUR	82	30	742	0	0.3	0.1	0.3
63055	99	P	SUR	61	2	1488	0	0.4	0.2	0.4
63056	99	P	SUR	60	2	1488	0	0.5	0.6	0.8
63057	99	P	SUR	59	2	1486	0	0.3	-0.2	0.3
63058	99	P	SUR	53	2	963	0	0.3	0.2	0.3
63059	99	P	SUR	58	-1	1487	0	0.3	0.7	0.7
63102	99	P	SUR	61	1	1486	0	0.4	0.2	0.4
63108	99	P	SUR	61	2	1488	0	0.5	0.2	0.5
63109	99	P	SUR	60	2	1488	0	0.3	0.0	0.3
63110	99	P	SUR	60	2	1488	0	0.3	0.0	0.3
63111	99	P	SUR	61	2	1371	0	0.3	-0.1	0.3
63112	99	P	SUR	61	1	1487	0	0.3	-0.1	0.3
63115	99	P	SUR	62	1	1481	0	0.4	0.4	0.5
63118	99	P	SUR	60	6	880	0	0.4	0.1	0.4
6400045	99	P	SUR	59	-12	743	0	0.5	0.1	0.5
6400046	99	P	SUR	61	-4	742	0	0.7	-0.3	0.8

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
6401601	99	P	SUR	85	-56	744	0	0.3	-0.1	0.3
6401602	99	P	SUR	85	-57	744	0	0.3	-0.1	0.3
6401763	99	P	SUR	66	12	744	139	3.5	-2.4	4.2
6402615	99	P	SUR	28	-67	735	0	0.5	0.2	0.5
6402616	99	P	SUR	28	-57	735	0	0.4	0.2	0.4
6402617	99	P	SUR	33	-50	736	0	0.3	0.3	0.4
6402621	99	P	SUR	25	-46	676	0	0.3	0.5	0.6
6402622	99	P	SUR	26	-52	108	0	0.3	0.4	0.5
6402628	99	P	SUR	36	14	723	0	0.3	0.0	0.3
6402629	99	P	SUR	40	4	731	0	0.3	0.0	0.3
6402635	99	P	SUR	33	13	732	0	0.3	-0.4	0.5
6402637	99	P	SUR	39	7	548	0	0.2	-0.2	0.3
64041	99	P	SUR	61	-3	1447	0	0.3	0.3	0.4
64045	99	P	SUR	59	-12	1488	0	0.5	0.0	0.5
64046	99	P	SUR	61	-4	1486	0	0.7	-0.4	0.8
6600021	99	P	SUR	55	14	83	0	0.2	-0.9	1.0
6600022	99	P	SUR	54	14	203	0	0.3	-0.2	0.3
6600024	99	P	SUR	55	13	35	0	0.2	-1.2	1.2
6801771	99	P	SUR	45	-19	722	0	0.3	0.0	0.3
6801791	99	P	SUR	27	-47	733	0	0.3	0.5	0.6
6801811	99	P	SUR	38	-25	733	0	0.3	0.2	0.3
6801879	99	P	SUR	18	-44	744	0	0.3	0.0	0.3
6801897	99	P	SUR	84	-50	663	0	0.3	-0.5	0.7
6801907	99	P	SUR	66	-1	719	0	0.3	0.1	0.3
6801928	99	P	SUR	38	8	506	0	0.3	-0.3	0.4
6801929	99	P	SUR	19	-37	706	0	0.3	0.0	0.3
6801993	99	P	SUR	84	19	741	0	0.3	0.0	0.3
7801571	99	P	SUR	43	-37	527	16	4.1	1.9	4.5
7801572	99	P	SUR	22	-66	716	0	0.4	0.2	0.5
7801594	99	P	SUR	60	-10	701	0	0.5	0.2	0.5
7801616	99	P	SUR	21	-31	700	0	0.3	0.2	0.4
7801627	99	P	SUR	16	-43	732	0	0.5	0.7	0.8
7801647	99	P	SUR	24	-42	726	0	0.2	0.0	0.2
7801697	99	P	SUR	31	-30	743	0	0.2	-0.1	0.3
7801699	99	P	SUR	34	-53	744	0	0.6	0.4	0.7
7801722	99	P	SUR	83	-20	742	0	0.3	-0.8	0.9
7801723	99	P	SUR	85	-25	741	0	0.4	-0.2	0.4
7801742	99	P	SUR	24	-29	695	0	0.3	0.2	0.3
7801755	99	P	SUR	22	-27	722	0	0.3	-0.1	0.3
7810095	99	P	SUR	49	-48	734	0	0.3	0.0	0.3
7810097	99	P	SUR	55	-55	730	0	0.3	-0.1	0.3
7810098	99	P	SUR	54	-51	734	0	0.3	-0.2	0.3
7810099	99	P	SUR	47	-45	733	0	0.5	-0.5	0.7

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
7810290	99	P	SUR	32	-55	728	0	0.4	0.0	0.4
7810310	99	P	SUR	35	-32	690	0	0.3	0.0	0.3
7810312	99	P	SUR	46	-40	728	0	0.5	-0.1	0.5
7810323	99	P	SUR	30	-63	722	0	0.4	0.2	0.5
7810324	99	P	SUR	34	-68	705	0	1.4	2.4	2.8
7811008	99	P	SUR	82	31	452	0	0.3	-0.6	0.6
7811073	99	P	SUR	51	-57	743	0	0.3	0.2	0.4

4.10 Table 22 - Drifter Monitoring Statistics (EUCOS): Wind speed (m/s)

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          DRIFTER MONITORING STATISTICS (EUCOS)
                   MONITORING CENTRE     : ECMWF
                   ELEMENT MONITORED     : WIND SPEED (M/S)
                   AREA                  : 10N - 90N, 70W - 40E
                   PERIOD                : AUG 2025
                   STANDARD OF COMPARISON: FIRST-GUESS FIELD


TIME = 99 => AVERAGE OF ALL OBSERVATIONS


GROSS ERROR LIMIT FOR VECTOR WIND = 25 M/S
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WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	% GROSS	SD	BIAS	RMS
1000044	99	SPEED	SUR	55	10	88	0	0	1.4	1.9	2.4
1300001	99	SPEED	SUR	11	-23	709	0	0	1.9	-0.1	1.9
1300008	99	SPEED	SUR	15	-38	598	0	0	0.9	0.1	0.9
1300130	99	SPEED	SUR	28	-16	743	0	0	0.9	0.7	1.1
1300131	99	SPEED	SUR	28	-17	715	0	0	2.2	1.9	2.9
4100040	99	SPEED	SUR	15	-53	4462	0	0	0.8	-0.1	0.8
4100043	99	SPEED	SUR	21	-65	4460	0	0	1.0	-0.1	1.0
4100044	99	SPEED	SUR	22	-59	4458	0	0	1.0	-0.2	1.0
4100046	99	SPEED	SUR	24	-68	4452	0	0	1.2	-0.1	1.2
4100049	99	SPEED	SUR	28	-62	4456	0	0	1.1	-0.3	1.1
4100052	99	SPEED	SUR	18	-65	4408	0	0	1.0	0.2	1.1
4100053	99	SPEED	SUR	18	-66	4407	0	0	1.4	0.5	1.5
4100056	99	SPEED	SUR	18	-65	4437	0	0	1.2	-0.2	1.2
4100300	99	SPEED	SUR	16	-57	744	0	0	1.0	-0.3	1.0
41040	99	SPEED	SUR	15	-53	744	0	0	0.9	-0.5	1.1
41043	99	SPEED	SUR	21	-65	744	0	0	1.2	-0.5	1.3
41044	99	SPEED	SUR	22	-59	744	0	0	1.1	-0.7	1.3
41046	99	SPEED	SUR	24	-68	743	0	0	1.4	-0.6	1.5
41049	99	SPEED	SUR	28	-62	744	0	0	1.2	-0.5	1.3
41052	99	SPEED	SUR	18	-65	738	0	0	1.1	-0.1	1.1
41053	99	SPEED	SUR	19	-66	738	0	0	1.5	-0.6	1.6
41056	99	SPEED	SUR	18	-66	744	0	0	1.3	-0.6	1.5
4200060	99	SPEED	SUR	16	-63	4459	0	0	1.0	0.0	1.0
4200085	99	SPEED	SUR	18	-67	4375	0	0	1.3	0.1	1.3
42060	99	SPEED	SUR	16	-63	744	0	0	1.2	-0.4	1.2
42085	99	SPEED	SUR	18	-67	709	0	0	1.4	0.1	1.4
4400008	99	SPEED	SUR	40	-69	4436	0	0	1.2	0.2	1.3
4400011	99	SPEED	SUR	41	-67	4461	0	0	1.1	0.1	1.1
4400027	99	SPEED	SUR	44	-67	4460	0	0	1.1	-0.6	1.3
4400032	99	SPEED	SUR	44	-69	2595	0	0	1.3	-0.6	1.4
4400033	99	SPEED	SUR	44	-69	3115	0	0	1.3	-0.5	1.4
4400034	99	SPEED	SUR	44	-68	4055	0	0	1.4	-0.9	1.6
4400037	99	SPEED	SUR	43	-68	1834	0	0	1.0	0.1	1.0
4400488	99	SPEED	SUR	45	-61	744	0	0	1.4	0.8	1.6

DRIFTER MONITORING STATISTICS (EUCOS)
MONITORING CENTRE : ECMWF
ELEMENT MONITORED : WIND SPEED (M/S) (CONTINU

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	% GROSS	SD	BIAS	RMS
44008	99	SPEED	SUR	41	-69	741	0	0	1.4	-0.3	1.4
44011	99	SPEED	SUR	41	-67	744	0	0	1.1	-0.3	1.2
44027	99	SPEED	SUR	44	-67	744	0	0	1.3	-1.2	1.7
44032	99	SPEED	SUR	44	-69	400	0	0	1.4	-1.1	1.8
44033	99	SPEED	SUR	44	-69	453	0	0	1.5	-1.0	1.8
44034	99	SPEED	SUR	44	-68	417	0	0	1.5	-1.7	2.2
44037	99	SPEED	SUR	44	-68	327	0	0	1.1	-0.5	1.2
44078	99	SPEED	SUR	60	-40	468	0	0	1.2	-0.8	1.4
44137	99	SPEED	SUR	42	-62	743	0	0	1.3	-0.4	1.3
44139	99	SPEED	SUR	44	-57	743	0	0	1.0	-0.3	1.1
44150	99	SPEED	SUR	43	-64	742	0	0	1.3	-0.1	1.3
44258	99	SPEED	SUR	45	-63	744	0	0	1.3	0.0	1.3
44488	99	SPEED	SUR	45	-61	744	0	0	1.4	0.8	1.7
6100001	99	SPEED	SUR	43	8	145	0	0	1.0	-0.7	1.3
6100002	99	SPEED	SUR	42	5	1162	0	0	1.6	1.0	1.9
6100196	99	SPEED	SUR	42	4	737	0	0	1.7	-0.5	1.8
6100197	99	SPEED	SUR	40	4	680	0	0	1.2	-0.7	1.4
6100198	99	SPEED	SUR	37	-2	700	0	0	1.6	-0.8	1.8
6100280	99	SPEED	SUR	41	1	719	0	0	1.3	-0.4	1.4
6100281	99	SPEED	SUR	40	0	117	0	0	1.3	-0.2	1.3
6100417	99	SPEED	SUR	38	0	737	0	0	1.0	-0.2	1.1
6100430	99	SPEED	SUR	40	2	716	0	0	1.3	0.1	1.3
6101031	99	SPEED	SUR	42	8	1163	0	0	1.8	0.6	1.9
6101032	99	SPEED	SUR	42	10	743	0	0	1.5	0.5	1.6
6101033	99	SPEED	SUR	43	8	1163	0	0	1.7	0.7	1.8
6101034	99	SPEED	SUR	42	6	1163	0	0	1.7	0.7	1.8
6101035	99	SPEED	SUR	40	7	1165	0	0	1.7	0.7	1.9
6200001	99	SPEED	SUR	45	-5	743	0	0	1.0	0.7	1.2
6200024	99	SPEED	SUR	44	-3	722	0	0	1.4	-0.4	1.4
6200025	99	SPEED	SUR	44	-6	737	0	0	1.4	-0.8	1.6
6200029	99	SPEED	SUR	49	-12	742	0	0	1.0	0.5	1.1
6200050	99	SPEED	SUR	50	-4	741	0	0	1.3	0.0	1.3
6200081	99	SPEED	SUR	51	-13	738	0	0	1.1	0.0	1.1
6200082	99	SPEED	SUR	44	-8	736	0	0	1.0	-0.9	1.4
6200083	99	SPEED	SUR	43	-9	733	0	0	1.0	-1.0	1.4
6200084	99	SPEED	SUR	42	-9	736	0	0	1.3	-0.9	1.6
6200085	99	SPEED	SUR	36	-7	737	0	0	1.5	-0.6	1.6
6200086	99	SPEED	SUR	55	7	163	0	0	1.5	1.0	1.8
6200087	99	SPEED	SUR	55	7	193	0	0	1.3	1.0	1.6
6200091	99	SPEED	SUR	53	-5	744	0	0	1.3	0.2	1.3
6200092	99	SPEED	SUR	51	-11	744	0	0	1.2	-0.5	1.3

DRIFTER MONITORING STATISTICS (EUCOS)
MONITORING CENTRE : ECMWF
ELEMENT MONITORED : WIND SPEED (M/S) (CONTINU

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	% GROSS	SD	BIAS	RMS
6200093	99	SPEED	SUR	55	-10	655	0	0	1.2	-0.3	1.2
6200094	99	SPEED	SUR	52	-7	744	0	0	1.2	0.5	1.3
6200095	99	SPEED	SUR	53	-16	744	0	0	1.2	-0.3	1.2
6200103	99	SPEED	SUR	50	-3	741	0	0	1.1	-0.4	1.2
6200163	99	SPEED	SUR	47	-8	743	0	0	1.0	0.1	1.0
6200200	99	SPEED	SUR	36	-8	239	0	0	1.1	0.2	1.2
6200442	99	SPEED	SUR	49	-16	743	0	0	1.1	0.2	1.1
6201065	99	SPEED	SUR	54	7	716	0	0	1.5	-1.2	1.9
6201066	99	SPEED	SUR	55	7	737	0	0	1.3	0.2	1.3
6202113	99	SPEED	SUR	54	7	175	0	0	1.5	0.2	1.5
62029	99	SPEED	SUR	49	-13	1483	0	0	1.0	0.1	1.0
62050	99	SPEED	SUR	50	-4	1485	0	0	1.3	-0.1	1.3
62081	99	SPEED	SUR	51	-13	1487	0	0	1.1	0.0	1.1
62091	99	SPEED	SUR	53	-5	743	0	0	1.3	0.4	1.4
62092	99	SPEED	SUR	51	-11	743	0	0	1.2	-0.4	1.3
62093	99	SPEED	SUR	55	-10	654	0	0	1.2	-0.2	1.2
62094	99	SPEED	SUR	52	-7	743	0	0	1.3	0.5	1.4
62095	99	SPEED	SUR	53	-16	743	0	0	1.2	-0.1	1.2
62102	99	SPEED	SUR	58	2	1460	0	0	1.2	0.0	1.2
62103	99	SPEED	SUR	50	-3	1477	0	0	1.1	-0.5	1.3
62104	99	SPEED	SUR	57	1	1488	0	0	1.4	-0.2	1.4
62105	99	SPEED	SUR	55	-13	1484	0	0	1.1	0.1	1.1
62107	99	SPEED	SUR	50	-6	1487	0	0	1.4	0.1	1.4
62112	99	SPEED	SUR	58	0	1487	0	0	1.3	-0.5	1.4
62113	99	SPEED	SUR	58	0	1488	0	0	1.7	0.2	1.7
62114	99	SPEED	SUR	58	0	1016	0	0	1.7	0.8	1.9
62118	99	SPEED	SUR	58	1	1464	0	0	1.4	0.5	1.5
62120	99	SPEED	SUR	56	2	1431	0	0	1.2	-0.8	1.5
62122	99	SPEED	SUR	57	2	1447	0	0	1.1	-0.5	1.2
62129	99	SPEED	SUR	58	0	1482	0	0	1.5	0.3	1.6
62134	99	SPEED	SUR	58	1	1446	0	0	1.2	-1.2	1.7
62143	99	SPEED	SUR	58	2	1488	0	0	1.7	-0.5	1.7
62144	99	SPEED	SUR	53	2	1453	0	0	1.6	-1.0	1.9
62145	99	SPEED	SUR	53	3	1483	0	0	1.3	0.1	1.3
62146	99	SPEED	SUR	57	2	1485	0	0	1.0	0.1	1.0
62148	99	SPEED	SUR	54	2	767	0	0	1.3	-0.6	1.5
62149	99	SPEED	SUR	54	1	1487	0	0	1.1	0.1	1.1
62152	99	SPEED	SUR	57	2	1483	0	0	1.8	-1.3	2.2
62154	99	SPEED	SUR	56	2	1487	0	0	1.3	-0.2	1.4
62155	99	SPEED	SUR	58	1	1488	0	0	1.4	0.0	1.4
62163	99	SPEED	SUR	48	-9	1482	0	0	1.0	0.2	1.0

DRIFTER MONITORING STATISTICS (EUCOS)
MONITORING CENTRE : ECMWF
ELEMENT MONITORED : WIND SPEED (M/S) (CONTINU

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	% GROSS	SD	BIAS	RMS
62164	99	SPEED	SUR	57	1	1487	0	0	1.4	-1.2	1.9
62165	99	SPEED	SUR	54	1	1486	0	0	1.5	-0.8	1.7
62170	99	SPEED	SUR	51	2	1488	0	0	1.4	0.5	1.5
62304	99	SPEED	SUR	51	2	1484	0	0	1.4	0.7	1.6
62305	99	SPEED	SUR	50	0	1488	0	0	1.2	0.5	1.4
62442	99	SPEED	SUR	49	-16	1487	0	0	1.1	0.3	1.2
63055	99	SPEED	SUR	61	2	1488	0	0	1.1	-0.8	1.4
63056	99	SPEED	SUR	60	2	1488	0	0	1.3	0.2	1.3
63057	99	SPEED	SUR	59	2	1486	0	0	2.0	-1.0	2.3
63058	99	SPEED	SUR	53	2	963	0	0	1.3	-0.2	1.3
63108	99	SPEED	SUR	61	2	1488	0	0	1.5	-0.2	1.5
63109	99	SPEED	SUR	60	2	1488	0	0	1.2	0.0	1.2
63110	99	SPEED	SUR	60	2	1488	0	0	1.3	-0.3	1.4
63112	99	SPEED	SUR	61	1	1487	0	0	1.1	-0.4	1.2
63115	99	SPEED	SUR	62	1	1481	0	0	1.2	-0.4	1.3
6400046	99	SPEED	SUR	61	-4	742	0	0	1.0	0.3	1.1
64041	99	SPEED	SUR	61	-3	1447	0	0	1.2	-0.1	1.2
64046	99	SPEED	SUR	61	-4	1486	0	0	1.1	0.3	1.1
6600021	99	SPEED	SUR	55	14	83	0	0	1.1	0.2	1.1
6600022	99	SPEED	SUR	54	14	203	0	0	1.3	0.0	1.3
6600024	99	SPEED	SUR	55	13	33	0	0	0.9	1.3	1.5

4.11 Table 23 - Drifter Monitoring Statistics (EUCOS): Wind direction

```
DRIFTER MONITORING STATISTICS (EUCOS)
         MONITORING CENTRE     : ECMWF
         ELEMENT MONITORED     : WIND DIRECTION (DEGREES)
         AREA                  : 10N - 90N, 70W - 40E
         PERIOD                : AUG 2025
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

```
TIME = 99 => AVERAGE OF ALL OBSERVATIONS
GROSS ERROR LIMIT FOR VECTOR WIND = 25 M/S
WIND SPEEDS > 3M/S USED
```

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	% GROSS	SD	BIAS	RMS
1300001	99	DIRN	SUR	11	-23	440	0	0	27.3	2.7	27.5
1300008	99	DIRN	SUR	15	-38	527	0	0	12.4	4.6	13.2
1300130	99	DIRN	SUR	28	-16	732	0	0	7.5	0.9	7.5
1300131	99	DIRN	SUR	28	-17	326	0	0	40.4	82.4	91.8
4100001	99	DIRN	SUR	35	-72	3340	0	0	23.3	3.8	23.7
4100002	99	DIRN	SUR	32	-75	3545	0	0	26.3	10.9	28.5
4100004	99	DIRN	SUR	33	-79	3452	0	0	22.8	11.3	25.4
4100008	99	DIRN	SUR	31	-81	2988	0	0	28.3	6.6	29.1
4100009	99	DIRN	SUR	29	-80	2593	0	0	21.6	4.4	22.0
4100013	99	DIRN	SUR	33	-78	3548	0	0	22.0	7.4	23.2
4100024	99	DIRN	SUR	34	-78	525	0	0	28.8	6.4	29.5
4100025	99	DIRN	SUR	35	-75	3593	0	0	24.3	8.2	25.7
4100029	99	DIRN	SUR	33	-80	522	0	0	21.9	-7.2	23.0
4100033	99	DIRN	SUR	32	-80	517	0	0	24.2	0.8	24.2
4100037	99	DIRN	SUR	34	-77	533	0	0	22.7	4.3	23.1
4100038	99	DIRN	SUR	34	-78	548	0	0	27.1	-0.2	27.2
4100040	99	DIRN	SUR	15	-53	4265	0	0	11.3	9.6	14.9
4100043	99	DIRN	SUR	21	-65	4276	0	0	10.5	9.6	14.2
4100044	99	DIRN	SUR	22	-59	4275	0	0	12.3	11.3	16.7
4100046	99	DIRN	SUR	24	-68	3575	0	0	16.1	7.5	17.8
4100047	99	DIRN	SUR	28	-71	1281	8	0	21.4	2.4	21.5
4100049	99	DIRN	SUR	28	-62	2855	0	0	18.6	6.0	19.5
4100052	99	DIRN	SUR	18	-65	4339	0	0	13.6	6.8	15.2
4100053	99	DIRN	SUR	18	-66	3381	0	0	16.2	1.2	16.2
4100056	99	DIRN	SUR	18	-65	4249	0	0	14.2	6.6	15.7
4100064	99	DIRN	SUR	34	-77	573	0	0	22.0	-16.3	27.4
4100066	99	DIRN	SUR	33	-80	545	0	0	23.8	-8.9	25.4
4100068	99	DIRN	SUR	28	-80	393	0	0	25.3	-6.2	26.1
4100069	99	DIRN	SUR	29	-81	401	0	0	27.1	4.2	27.4
4100082	99	DIRN	SUR	36	-75	3371	0	0	16.9	-4.8	17.6
4100083	99	DIRN	SUR	36	-75	3413	0	0	21.0	-5.5	21.7
41001	99	DIRN	SUR	35	-72	556	0	0	23.6	4.3	24.0

DRIFTER MONITORING STATISTICS (EUCOS)
MONITORING CENTRE : ECMWF
ELEMENT MONITORED : WIND DIRECTION (DEGREES)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	% GROSS	SD	BIAS	RMS
41002	99	DIRN	SUR	32	-75	593	0	0	28.3	9.5	29.8
4100300	99	DIRN	SUR	16	-57	725	0	0	13.0	4.1	13.6
41004	99	DIRN	SUR	33	-79	571	0	0	23.5	10.9	25.9
41008	99	DIRN	SUR	31	-81	496	0	0	29.6	6.0	30.2
41009	99	DIRN	SUR	29	-80	432	0	0	22.2	5.5	22.9
41013	99	DIRN	SUR	33	-78	589	0	0	21.4	7.5	22.7
41024	99	DIRN	SUR	34	-79	544	0	0	29.1	6.7	29.8
41025	99	DIRN	SUR	35	-75	596	0	0	24.0	7.9	25.2
41029	99	DIRN	SUR	33	-80	527	0	0	23.5	-6.2	24.3
41033	99	DIRN	SUR	32	-80	518	0	0	25.1	1.3	25.2
41037	99	DIRN	SUR	34	-77	537	0	0	22.0	3.5	22.3
41038	99	DIRN	SUR	34	-78	553	0	0	25.8	0.6	25.8
41040	99	DIRN	SUR	15	-53	700	0	0	11.9	8.8	14.8
41043	99	DIRN	SUR	21	-65	707	0	0	11.3	8.8	14.3
41044	99	DIRN	SUR	22	-59	703	0	0	12.8	11.1	16.9
41046	99	DIRN	SUR	24	-68	577	0	0	15.2	7.8	17.1
41047	99	DIRN	SUR	28	-72	212	1	0	20.7	2.7	20.8
41049	99	DIRN	SUR	28	-62	460	0	0	18.7	6.7	19.8
41052	99	DIRN	SUR	18	-65	725	0	0	14.3	6.6	15.8
41053	99	DIRN	SUR	19	-66	570	0	0	18.2	1.8	18.3
41056	99	DIRN	SUR	18	-66	709	0	0	14.7	7.1	16.4
41064	99	DIRN	SUR	34	-77	583	0	0	22.8	-16.2	28.0
41066	99	DIRN	SUR	33	-80	553	0	0	23.5	-8.9	25.1
41068	99	DIRN	SUR	28	-80	392	0	0	27.6	-8.4	28.9
41069	99	DIRN	SUR	29	-81	415	0	0	27.7	3.6	27.9
41082	99	DIRN	SUR	36	-75	551	0	0	17.5	-4.4	18.1
41083	99	DIRN	SUR	36	-75	546	0	0	20.6	-6.3	21.6
4200013	99	DIRN	SUR	27	-83	678	0	0	27.0	-6.3	27.8
4200023	99	DIRN	SUR	26	-83	585	0	0	22.5	-3.2	22.8
4200026	99	DIRN	SUR	25	-83	592	0	0	26.6	-6.6	27.4
4200036	99	DIRN	SUR	29	-85	2533	0	0	25.2	5.9	25.9
4200056	99	DIRN	SUR	20	-85	3294	0	0	22.6	3.6	22.8
4200057	99	DIRN	SUR	17	-82	3473	0	0	13.7	1.9	13.8
4200058	99	DIRN	SUR	15	-75	4048	0	0	7.6	7.2	10.5
4200060	99	DIRN	SUR	16	-63	4211	0	0	13.2	9.2	16.0
4200085	99	DIRN	SUR	18	-67	4022	0	0	18.5	6.7	19.7
42013	99	DIRN	SUR	27	-83	343	0	0	26.7	-5.1	27.2
42022	99	DIRN	SUR	28	-84	43	0	0	27.1	-2.4	27.2
42023	99	DIRN	SUR	26	-83	227	0	0	25.4	-3.1	25.6
42026	99	DIRN	SUR	25	-84	284	0	0	27.9	-3.8	28.2
42036	99	DIRN	SUR	29	-85	401	0	0	24.2	6.5	25.1

DRIFTER MONITORING STATISTICS (EUCOS)
MONITORING CENTRE : ECMWF
ELEMENT MONITORED : WIND DIRECTION (DEGREES)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	% GROSS	SD	BIAS	RMS
42056	99	DIRN	SUR	20	-85	546	0	0	22.1	3.2	22.4
42057	99	DIRN	SUR	17	-82	571	0	0	13.7	1.5	13.8
42058	99	DIRN	SUR	15	-75	674	0	0	8.2	6.5	10.5
42060	99	DIRN	SUR	16	-63	696	0	0	14.5	8.3	16.7
42085	99	DIRN	SUR	18	-67	629	0	0	18.3	4.8	18.9
4400007	99	DIRN	SUR	44	-70	2549	0	0	16.0	5.1	16.8
4400008	99	DIRN	SUR	40	-69	3235	0	0	15.2	6.1	16.3
4400009	99	DIRN	SUR	38	-75	3154	0	0	16.9	3.1	17.1
4400011	99	DIRN	SUR	41	-67	3109	0	0	13.5	10.4	17.0
4400013	99	DIRN	SUR	42	-71	2947	0	0	17.5	7.0	18.8
4400014	99	DIRN	SUR	37	-75	3285	0	0	13.8	6.7	15.4
4400020	99	DIRN	SUR	41	-70	3712	0	0	15.1	3.2	15.4
4400025	99	DIRN	SUR	40	-73	3257	0	0	17.4	3.6	17.7
4400027	99	DIRN	SUR	44	-67	2614	0	0	18.6	11.7	22.0
4400029	99	DIRN	SUR	43	-71	2532	0	0	19.1	3.6	19.4
4400030	99	DIRN	SUR	43	-70	2207	0	0	17.5	3.2	17.8
4400032	99	DIRN	SUR	44	-69	1350	0	0	14.3	7.2	16.0
4400033	99	DIRN	SUR	44	-69	1262	0	0	18.5	6.3	19.6
4400034	99	DIRN	SUR	44	-68	1847	0	0	16.1	12.4	20.3
4400037	99	DIRN	SUR	43	-68	1296	0	0	16.7	4.2	17.2
4400042	99	DIRN	SUR	38	-76	3970	0	0	21.4	0.6	21.4
4400058	99	DIRN	SUR	38	-76	4097	0	0	26.0	4.6	26.4
4400062	99	DIRN	SUR	39	-76	3771	0	0	17.7	1.9	17.8
4400063	99	DIRN	SUR	39	-76	3364	0	0	21.2	1.8	21.3
4400065	99	DIRN	SUR	40	-74	3426	0	0	15.7	6.4	17.0
4400072	99	DIRN	SUR	37	-76	4290	0	0	28.0	2.6	28.1
4400073	99	DIRN	SUR	43	-71	1024	0	0	21.4	-10.2	23.7
4400079	99	DIRN	SUR	36	-75	3230	0	0	17.1	-11.0	20.3
4400080	99	DIRN	SUR	39	-77	950	0	0	17.7	5.5	18.5
4400488	99	DIRN	SUR	45	-61	554	0	0	19.6	10.2	22.1
44007	99	DIRN	SUR	44	-70	426	0	0	18.5	4.9	19.2
44008	99	DIRN	SUR	41	-69	546	0	0	15.4	5.8	16.4
44009	99	DIRN	SUR	39	-75	517	0	0	15.8	3.4	16.2
44011	99	DIRN	SUR	41	-67	509	0	0	14.9	10.7	18.4
44013	99	DIRN	SUR	42	-71	446	0	0	18.8	7.5	20.3
44014	99	DIRN	SUR	37	-75	550	0	0	14.7	6.2	16.0
44020	99	DIRN	SUR	42	-70	604	0	0	14.8	3.2	15.1
44025	99	DIRN	SUR	40	-73	536	0	0	19.0	3.3	19.3
44027	99	DIRN	SUR	44	-67	421	0	0	19.5	12.0	22.9
44029	99	DIRN	SUR	43	-71	238	0	0	18.0	3.6	18.4
44030	99	DIRN	SUR	43	-70	222	0	0	15.0	3.5	15.4

DRIFTER MONITORING STATISTICS (EUCOS)
MONITORING CENTRE : ECMWF
ELEMENT MONITORED : WIND DIRECTION (DEGREES)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	% GROSS	SD	BIAS	RMS
44032	99	DIRN	SUR	44	-69	214	0	0	16.9	7.0	18.3
44033	99	DIRN	SUR	44	-69	197	0	0	18.7	5.2	19.4
44034	99	DIRN	SUR	44	-68	188	0	0	18.3	10.9	21.3
44037	99	DIRN	SUR	44	-68	228	0	0	18.1	3.3	18.4
44042	99	DIRN	SUR	38	-76	503	0	0	21.9	0.0	21.9
44058	99	DIRN	SUR	38	-76	524	0	0	27.0	4.7	27.4
44062	99	DIRN	SUR	39	-76	499	0	0	18.0	2.8	18.2
44063	99	DIRN	SUR	39	-76	436	0	0	21.5	2.1	21.6
44065	99	DIRN	SUR	40	-74	569	0	0	17.5	6.5	18.7
44072	99	DIRN	SUR	37	-76	549	0	0	28.5	4.1	28.8
44073	99	DIRN	SUR	43	-71	174	0	0	23.4	-10.8	25.8
44078	99	DIRN	SUR	60	-40	379	0	0	13.1	-18.2	22.5
44079	99	DIRN	SUR	36	-75	531	0	0	19.0	-11.0	21.9
44080	99	DIRN	SUR	39	-77	303	0	0	20.5	6.1	21.4
44137	99	DIRN	SUR	42	-62	589	0	0	17.4	-0.5	17.4
44139	99	DIRN	SUR	44	-57	578	0	0	16.3	4.8	17.0
44150	99	DIRN	SUR	43	-64	501	0	0	15.6	-8.6	17.8
44258	99	DIRN	SUR	45	-63	572	0	0	17.1	-6.1	18.2
44488	99	DIRN	SUR	45	-61	537	0	0	18.9	9.5	21.2
4500003	99	DIRN	SUR	45	-83	3364	0	0	18.9	3.4	19.2
4500005	99	DIRN	SUR	42	-82	3275	0	0	23.9	1.7	23.9
4500008	99	DIRN	SUR	44	-82	3657	0	0	19.8	1.0	19.8
4500012	99	DIRN	SUR	44	-77	3110	0	0	19.3	4.1	19.8
4500132	99	DIRN	SUR	42	-81	565	0	0	22.8	-2.7	23.0
4500135	99	DIRN	SUR	44	-77	571	1	0	21.5	-3.1	21.7
4500137	99	DIRN	SUR	46	-81	617	0	0	19.4	2.4	19.6
4500139	99	DIRN	SUR	43	-80	440	0	0	23.6	-6.1	24.4
4500142	99	DIRN	SUR	43	-79	501	0	0	26.5	-2.4	26.6
4500143	99	DIRN	SUR	45	-81	616	0	0	23.3	-3.2	23.5
4500159	99	DIRN	SUR	44	-79	467	0	0	24.8	2.8	24.9
4500162	99	DIRN	SUR	45	-83	1454	0	0	22.3	2.8	22.5
4500163	99	DIRN	SUR	44	-84	1593	0	0	20.0	4.2	20.4
4500175	99	DIRN	SUR	46	-85	1243	0	0	35.8	-17.2	39.7
4500176	99	DIRN	SUR	42	-82	2307	0	0	26.3	-26.9	37.6
4500178	99	DIRN	SUR	45	-73	930	0	0	25.8	4.2	26.1
4500197	99	DIRN	SUR	42	-82	2134	0	0	30.0	10.2	31.7
4500200	99	DIRN	SUR	42	-83	1206	0	0	19.0	8.8	20.9
4500202	99	DIRN	SUR	42	-83	2134	0	0	24.3	12.0	27.1
4500203	99	DIRN	SUR	41	-83	1763	0	0	32.8	16.0	36.5
4500204	99	DIRN	SUR	42	-82	1439	0	0	22.7	10.3	25.0
4500205	99	DIRN	SUR	42	-82	1863	0	0	62.5	84.4	105.0

DRIFTER MONITORING STATISTICS (EUCOS)
MONITORING CENTRE : ECMWF
ELEMENT MONITORED : WIND DIRECTION (DEGREES)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	% GROSS	SD	BIAS	RMS
4500206	99	DIRN	SUR	42	-82	1801	0	0	28.7	-9.2	30.1
4500207	99	DIRN	SUR	42	-81	1761	0	0	24.4	-28.0	37.1
4500208	99	DIRN	SUR	42	-81	1391	0	0	28.1	-18.8	33.8
4500209	99	DIRN	SUR	43	-82	2597	0	0	26.1	-21.5	33.9
4500221	99	DIRN	SUR	45	-73	256	0	0	39.5	13.9	41.8
45003	99	DIRN	SUR	45	-83	550	0	0	19.0	3.7	19.3
45005	99	DIRN	SUR	42	-82	544	0	0	21.7	1.2	21.7
45008	99	DIRN	SUR	44	-82	602	0	0	20.4	0.5	20.4
45012	99	DIRN	SUR	44	-77	521	0	0	19.0	3.8	19.3
45132	99	DIRN	SUR	43	-81	547	0	0	23.5	-4.5	24.0
45135	99	DIRN	SUR	44	-77	552	1	0	22.0	-3.3	22.3
45137	99	DIRN	SUR	46	-81	610	0	0	19.2	1.8	19.3
45139	99	DIRN	SUR	43	-80	443	0	0	24.1	-5.6	24.8
45142	99	DIRN	SUR	43	-79	481	0	0	26.6	-3.3	26.8
45143	99	DIRN	SUR	45	-81	603	0	0	22.0	-4.4	22.4
45147	99	DIRN	SUR	42	-83	488	0	0	19.2	-5.0	19.8
45149	99	DIRN	SUR	44	-82	545	0	0	21.4	-3.9	21.7
45151	99	DIRN	SUR	45	-79	488	0	0	21.7	-6.2	22.5
45152	99	DIRN	SUR	46	-80	553	0	0	18.3	-2.6	18.5
45154	99	DIRN	SUR	46	-83	592	0	0	21.3	1.9	21.4
45159	99	DIRN	SUR	44	-79	429	0	0	24.2	2.1	24.3
45162	99	DIRN	SUR	45	-83	493	0	0	25.7	3.2	25.9
45163	99	DIRN	SUR	44	-84	524	0	0	19.7	4.2	20.2
45175	99	DIRN	SUR	46	-85	456	0	0	36.7	-18.5	41.1
45176	99	DIRN	SUR	42	-82	439	0	0	31.5	-24.9	40.2
45178	99	DIRN	SUR	45	-73	329	0	0	24.3	3.2	24.6
45197	99	DIRN	SUR	42	-82	354	0	0	32.0	9.9	33.5
45200	99	DIRN	SUR	42	-83	198	0	0	17.8	8.5	19.7
45202	99	DIRN	SUR	42	-83	386	0	0	25.0	12.4	27.9
45203	99	DIRN	SUR	41	-83	341	0	0	36.1	17.7	40.2
45204	99	DIRN	SUR	42	-82	308	0	0	23.4	11.5	26.0
45205	99	DIRN	SUR	42	-82	311	0	0	61.9	82.4	103.1
45206	99	DIRN	SUR	42	-82	325	0	0	31.5	-7.2	32.3
45207	99	DIRN	SUR	42	-81	281	0	0	23.6	-28.8	37.2
45208	99	DIRN	SUR	42	-81	231	0	0	26.3	-20.3	33.2
45209	99	DIRN	SUR	43	-82	447	0	0	27.2	-21.0	34.4
45221	99	DIRN	SUR	45	-73	41	0	0	49.8	23.9	55.2
6100198	99	DIRN	SUR	37	-2	455	0	0	13.9	2.9	14.2
6100281	99	DIRN	SUR	40	0	30	0	0	22.6	-20.8	30.7
6100417	99	DIRN	SUR	38	0	480	0	0	16.9	3.2	17.2
6200001	99	DIRN	SUR	45	-5	656	0	0	14.5	1.1	14.5

DRIFTER MONITORING STATISTICS (EUCOS)
MONITORING CENTRE : ECMWF
ELEMENT MONITORED : WIND DIRECTION (DEGREES)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	% GROSS	SD	BIAS	RMS
6200024	99	DIRN	SUR	44	-3	437	0	0	21.7	11.1	24.4
6200025	99	DIRN	SUR	44	-6	504	0	0	16.1	1.0	16.2
6200029	99	DIRN	SUR	49	-12	619	0	0	13.6	0.4	13.6
6200050	99	DIRN	SUR	50	-4	643	0	0	14.1	3.4	14.5
6200081	99	DIRN	SUR	51	-13	588	0	0	13.1	-4.5	13.9
6200082	99	DIRN	SUR	44	-8	549	0	0	12.9	1.8	13.1
6200083	99	DIRN	SUR	43	-9	493	0	0	14.2	4.2	14.8
6200084	99	DIRN	SUR	42	-9	554	0	0	13.7	8.8	16.3
6200085	99	DIRN	SUR	36	-7	428	0	0	15.4	8.2	17.5
6200091	99	DIRN	SUR	53	-5	576	0	0	16.0	7.2	17.6
6200092	99	DIRN	SUR	51	-11	612	0	0	12.4	0.6	12.4
6200093	99	DIRN	SUR	55	-10	484	0	0	12.7	11.4	17.1
6200094	99	DIRN	SUR	52	-7	665	0	0	12.8	1.9	13.0
6200095	99	DIRN	SUR	53	-16	659	0	0	11.3	7.8	13.8
6200103	99	DIRN	SUR	50	-3	622	0	0	15.5	15.9	22.2
6200163	99	DIRN	SUR	47	-8	574	0	0	21.1	-2.3	21.3
6200200	99	DIRN	SUR	36	-8	136	0	0	16.7	7.4	18.3
6200442	99	DIRN	SUR	49	-16	668	0	0	11.2	-2.2	11.4
62029	99	DIRN	SUR	49	-13	1245	0	0	14.0	0.6	14.0
62050	99	DIRN	SUR	50	-4	1286	0	0	13.9	3.6	14.4
62081	99	DIRN	SUR	51	-13	1190	0	0	13.6	-4.6	14.3
62091	99	DIRN	SUR	53	-5	556	0	0	16.6	6.7	17.9
62092	99	DIRN	SUR	51	-11	599	0	0	12.9	0.2	12.9
62093	99	DIRN	SUR	55	-10	474	0	0	12.7	11.0	16.8
62094	99	DIRN	SUR	52	-7	659	0	0	12.8	1.2	12.9
62095	99	DIRN	SUR	53	-16	646	0	0	11.7	7.3	13.8
62103	99	DIRN	SUR	50	-3	1243	0	0	15.6	15.8	22.2
62105	99	DIRN	SUR	55	-13	1239	0	0	12.8	-15.0	19.7
62107	99	DIRN	SUR	50	-6	1314	0	0	13.3	2.8	13.6
62112	99	DIRN	SUR	58	0	1397	0	0	11.0	3.5	11.6
62114	99	DIRN	SUR	58	0	960	0	0	11.2	-1.5	11.3
62163	99	DIRN	SUR	48	-9	1142	0	0	21.4	-2.3	21.5
62305	99	DIRN	SUR	50	0	1314	0	0	23.9	4.5	24.3
62442	99	DIRN	SUR	49	-16	1332	0	0	11.7	-2.1	11.9
6400046	99	DIRN	SUR	61	-4	680	0	0	10.8	1.5	10.9
64041	99	DIRN	SUR	61	-3	1334	0	0	10.7	5.1	11.9
64046	99	DIRN	SUR	61	-4	1364	0	0	11.2	1.8	11.3
9193264	99	DIRN	SUR	30	-72	4	0	0	22.0	-1.3	22.1

4.12 Table 24 - List of Assimilated BUFR Encoded Radiosonde Stations

ASDE09	ATGU3FT	DSQL7	FPUW5GN	JNKN7JF	JPBN	KJJF9XN	KMPLHPW	LAGY8
LAGZ8	LRYQE3U	SMLQ	UXK5JTU	WDK38HS	XKQLWQB	YLV96WM	ZVQEQCM	2TDJJ8J
7JUNA4N	7KPB	9ZT9MRK	01001	01004	01010	01028	01241	01400
01415	01492	02185	02365	02591	02836	02963	03005	03023
03238	03354	03502	03693	03743	03808	03918	03953	04018
04220	04270	04320	04339	04360	06011	06260	06458	06610
07110	07145	07510	07645	07761	08001	08023	08190	08221
08302	08383	08430	08508	08522	08536	10035	10113	10184
10238	10304	10393	10410	10548	10618	10739	10771	10868
10954	10962	11010	11035	11120	11240	11520	11747	11952
12120	12374	12425	12575	12843	12982	13275	13388	14015
14240	14430	15420	15614	16045	16064	16113	16144	16224
16245	16332	16429	16546	16622	16716	16754	17030	17064
17095	17196	17220	17240	17351	17516	17607	20292	20674
21824	22008	22522	22820	22845	23205	23330	23472	23884
23955	24266	24641	24688	24908	24947	26038	26435	26477
26629	26708	27459	27707	27713	27962	28225	28445	28661
28695	29572	29612	29698	30557	30673	30935	31004	31770
31873	31977	32540	34122	34172	34731	35121	40179	40186
42056	42079	42101	42111	42123	42314	42339	42348	42361
42399	42410	42622	42623	42647	42675	42706	42867	42874
42971	43041	43049	43063	43128	43150	43185	43243	43295
43346	43353	43466	45004	47102	47104	47138	47155	47169
47186	47230	47269	47401	47412	47418	47582	47646	47678
47741	47778	47807	47827	47909	47918	47945	47971	47991
48601	48615	48650	48657	48698	50527	50557	50774	50953
51076	51243	51431	51463	51644	51656	51709	51777	51828
51839	52203	52267	52323	52418	52533	52652	52681	52818
52836	52866	52983	53068	53463	53513	53543	53614	53772
53845	53915	54102	54135	54161	54218	54292	54340	54374
54511	54662	54727	54857	55299	55591	56029	56046	56080
56137	56146	56187	56492	56571	56651	56691	56739	56778
56964	56985	57083	57127	57131	57178	57245	57461	57494
57516	57541	57687	57749	57816	57957	57972	57993	58027
58150	58203	58238	58362	58424	58457	58606	58633	58665
58725	58847	59023	59134	59211	59265	59280	59293	59316
59431	59758	59981	60018	60155	60253	60715	60760	61901
61980	61998	65344	66160	67083	70026	70200	70219	70231
70261	70273	70308	70316	70326	70350	70361	70398	71043
71081	71082	71109	71119	71603	71722	71802	71811	71815
71816	71823	71845	71867	71906	71907	71908	71909	71913
71917	71924	71925	71926	71934	71945	71957	71964	72201
72202	72206	72208	72210	72215	72230	72233	72235	72240
72248	72249	72250	72251	72265	72274	72293	72305	72317
72318	72327	72340	72357	72363	72364	72365	72376	72388
72402	72403	72413	72426	72440	72451	72456	72476	72489
72493	72501	72518	72520	72528	72558	72562	72572	72582
72597	72632	72634	72645	72649	72659	72662	72672	72681
72694	72712	72747	72764	72768	72776	72786	72797	73033
73111	74389	74455	74560	76256	76394	76405	76458	76526
76595	76612	76644	76654	76679	76692	76743	76805	76903
78384	78397	78486	78583	78866	78897	78954	78988	80001
81405	82107	82193	82244	82332	82411	82532	82705	82824
82965	83208	83378	83525	83554	83566	83612	83649	83768
83827	83840	83899	83928	84372	84516	84622	84754	85442
85586	85799	85934	87155	87344	87418	87585	87623	87715
87860	88889	89002	89055	89062	89504	89564	89571	89592
89611	89625	89642	89859	91165	91212	91285	91334	91348
91376	91408	91413	91592	91765	91925	91938	91948	91958

93112	93417	93844	94001	94005	94113	94120	94155	94170
94203	94299	94302	94312	94326	94332	94403	94430	94461
94510	94578	94610	94637	94653	94659	94672	94711	94767
94775	94802	94821	94865	94866	94910	94995	94996	94998
95282	95527	95954	96413	96441	96471	96481	96996	

4.13 Table 25 - List of BUFR Encoded Radiosonde Stations with no TAC Counterpart

ASDE09	ATGU3FT	DSQL7	FPUW5GN	JNKN7JF	KJJF9XN	KMPLHPW	LAGY8	LAGZ8
LRYQE3U	SMLQ	UXK5JTU	WDK38HS	XKQLWQB	YLV96WM	ZVQEQCM	2TDJJ8J	7JUNA4N
7KPB	9ZT9MRK	01001	01004	01010	01028	01241	01400	01415
01492	02836	02963	06610	07110	07145	07510	07645	07761
08001	08023	08190	08221	08302	08383	08430	08508	08522
08536	11010	11035	11120	11240	12575	17607	40186	42622
47269	48698	50527	50557	50774	50953	51076	51243	51431
51463	51644	51656	51709	51777	51828	51839	52203	52267
52323	52418	52533	52652	52681	52818	52836	52866	52983
53068	53463	53513	53543	53614	53772	53845	53915	54102
54135	54161	54218	54292	54340	54374	54511	54662	54727
54857	55299	55591	56029	56046	56080	56137	56146	56187
56492	56571	56651	56691	56739	56778	56964	56985	57083
57127	57131	57178	57245	57461	57494	57516	57541	57687
57749	57816	57957	57972	57993	58027	58150	58203	58238
58362	58424	58457	58606	58633	58665	58725	58847	59023
59134	59211	59265	59280	59293	59316	59431	59758	59981
60253	60715	66160	67083	72413	72801	76743	76903	83554
89002	89504	89642	89859	91925	91938	91948	91958	94001
94005	94113	94653	94767	94865	99999			

5 Annex - Explanations of figures and tables

5.1 General

All information presented in this report is based on data received at ECMWF before the appropriate analysis. Approximate cut-off times (UTC) are shown below:

Analysis	Obs Time	Cut-off
0000	2101-0300	1530 (16 hours)
1200	0901-1500	1900 (7 hours)

5.2 Data Availability

For each observation type/parameter the average number of reports received per day is displayed in boxes of 5 degrees square. The numbers plotted are the nearest integer values - e.g. if 40 reports were received during the month then the average daily value plotted will be 1. If the average number is greater than 1000 then 999 will be plotted. If the average number is less than 0.5 then the digit 0 will be plotted. If no observations were received then the box will be left blank.

5.3 Data Quality

The information presented on data quality is based on differences between observations and the values of the most recent ECMWF forecast ("first guess") of the same parameter. Depending on the time of the observation, the forecast range is between 9 and 15 hours. The ability of a modern data assimilation system to provide the diagnostic facilities to monitor the performance of the observational network is demonstrated by A. Hollingsworth et. al., Monthly Weather Review, Vol 114, No. 5, May 1986.

It should be noted that:

(i) all results are based on software that may undergo further development;

(ii) although the quality of the ECMWF first-guess fields is of a generally high standard this is only true to a limited extent in the tropics, where small-scale processes such as convection are of much greater importance than in mid-latitudes, and the observations will sometimes not be representative of the scales of motion given by the first-guess;

(iii) the first-guess fields themselves will vary in accuracy depending on the density and quality of data, particularly in the upstream regions and over Antarctica and the southern hemisphere mid-latitudes. Direct comparisons between stations (or airlines) should preferably be restricted to observations in a reasonably homogeneous climatic region.

Tables 1-9 contain lists of SHIPs (including fixed marine platforms), DRIFTERs, TEMPs and TEMPs/PILOTs believed to have supplied suspect reports of surface pressure, geopotential height or wind during the month. The format of the tables is according to Recommendation 3 CBS-Ext(85) and the criteria for stations or data platforms to be classified as suspect are given at the top of each table. For tables 7 and 8 data for the worst

standard pressure level are shown. Units of RMS, standard deviation and bias are hPa in tables 1 and 4, m in table 7 and ms^{-1} in tables 2, 5 and 8. In tables 7 and 8 the station position is indicated; in the case of TEMPSHIPs and PILOTSHIPs this position is obtained from the first report of the month. The gross error limits for first-guess deviations of geopotential in table 7 are as follows:

Level	Geop
1000	100m
925	100m
850	100m
700	100m
500	150m
400	175m
300	200m
250	225m
200	250m
150	275m
100	300m
70	375m
50	400m
30	450m

The corresponding limits for wind (table 8) are:

Level	Wind
1000	$35ms^{-1}$
925	$35ms^{-1}$
850	$35ms^{-1}$
700	$40ms^{-1}$
500	$45ms^{-1}$
400	$50ms^{-1}$
300	$60ms^{-1}$
250	$60ms^{-1}$
200	$50ms^{-1}$
150	$50ms^{-1}$
100	$45ms^{-1}$

In table 7 the weighted RMS values at standard levels are calculated using the following weights:

Level	Weight
1000	3.70
925	3.55
850	3.40
700	2.90
500	2.20
400	1.90
300	1.60
250	1.50
200	1.37
150	1.19
100	1.00
70	0.87
50	0.80
30	0.64

Tables 10 and 11 provide geopotential and wind quality statistics (100 hPa level) for TEMPSHIPs and PILOTSHIPs received during the month. Units and display format are identical to those in tables 7 and 8 respectively. Tables 13, 14 (50 hPa), 15 and 16 (100 hPa), 17 and 18 (500hPa), 19 and 20 (850hPa) provide similar radiosonde statistics for the EUCOS area.

Tables 21-23 are similar to tables 4-6 with data coverage restricted to the EUCOS area.

Figures 14-18 show global charts of SATOB and aircraft wind quality, where the statistics have been averaged over latitude/longitude boxes of 5 degrees square, and the mean observed minus first-guess (or 'bias') wind vectors have been plotted. All observations in the specified layers have been used. For comparison the mean observed wind (from the SATOB reports only) for each layer is shown in figures 14 and 15. A reference value of wind speed is plotted in the top right corner of each figure. An arrow is only plotted if 10 or more observations have been received in that 5 degree square.

Table 12 provides quality statistics of aircraft wind observations in the layer 300-150 hPa stratified by airline carrier. The format and specifications of the table have been defined by NMC Washington, the lead centre for the monitoring of aircraft and satellite data.

Table 24 shows list of Assimilated BUFR Encoded Radiosonde Stations monitored within the month.

Table 25 shows list of BUFR Encoded Radiosonde Stations with no TAC Counterpart monitored within the month.