ECMWF
Global Data Monitoring Report

January 2026

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 31 (Dec 25) – Due to decommissioning of NOAA-15 and NOAA-18 AMSU-A in 2025,
Figure 9.3 becomes Figure 8 (METOP-B ATOVS : AMSU-A)
Figure 9.2 becomes Figure 9 (METOP-C ATOVS : AMSU-A)
Removed Figure 9.1

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	Dec	Jan	Ident	Time	Dec	Jan
02185	(00)	28	5	20046	(00)	16	28
02591	(00)	31	9	26629	(12)	17	30
02591	(12)	31	8	30557	(00)	19	31
26629	(00)	15	0	41169	(12)	0	14
31538	(12)	22	0	42369	(12)	0	31
32389	(00)	11	0	42399	(00)	12	31
32477	(12)	18	0	42867	(00)	9	29
37259	(12)	13	0	42867	(12)	7	30
40738	(12)	30	11	43192	(00)	0	25
40766	(00)	22	6	43466	(00)	1	25
40809	(12)	31	12	43466	(12)	2	26
40811	(12)	18	6	47600	(00)	9	30
40841	(12)	30	12	47600	(12)	8	32
40856	(00)	30	8	61052	(00)	0	30
41169	(00)	31	16	61052	(12)	0	31
42971	(12)	31	17	70219	(00)	0	18
48327	(00)	26	4	74006	(00)	0	11
48378	(00)	26	0	78384	(00)	0	25
48381	(00)	31	14	78384	(12)	0	23
48431	(00)	21	0	78988	(00)	0	17
48480	(00)	24	7	78988	(12)	0	14
48500	(00)	26	6	89504	(12)	5	32
48811	(00)	31	18	-	-	-	-
48820	(00)	29	15	-	-	-	-
48820	(12)	31	17	-	-	-	-
48845	(00)	30	18	-	-	-	-
48855	(00)	30	18	-	-	-	-
48855	(12)	31	18	-	-	-	-
62306	(00)	19	7	-	-	-	-
62378	(12)	21	7	-	-	-	-
64870	(12)	14	0	-	-	-	-
78970	(12)	29	17	-	-	-	-
80094	(12)	22	11	-	-	-	-
82244	(00)	20	3	-	-	-	-
82244	(12)	31	14	-	-	-	-
83840	(00)	29	13	-	-	-	-
89625	(12)	29	6	-	-	-	-
91643	(00)	22	0	-	-	-	-
96996	(00)	26	11	-	-	-	-
98444	(12)	31	6	-	-	-	-

2.2 Drifting Buoys

Surface pressure observations from **1159** 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

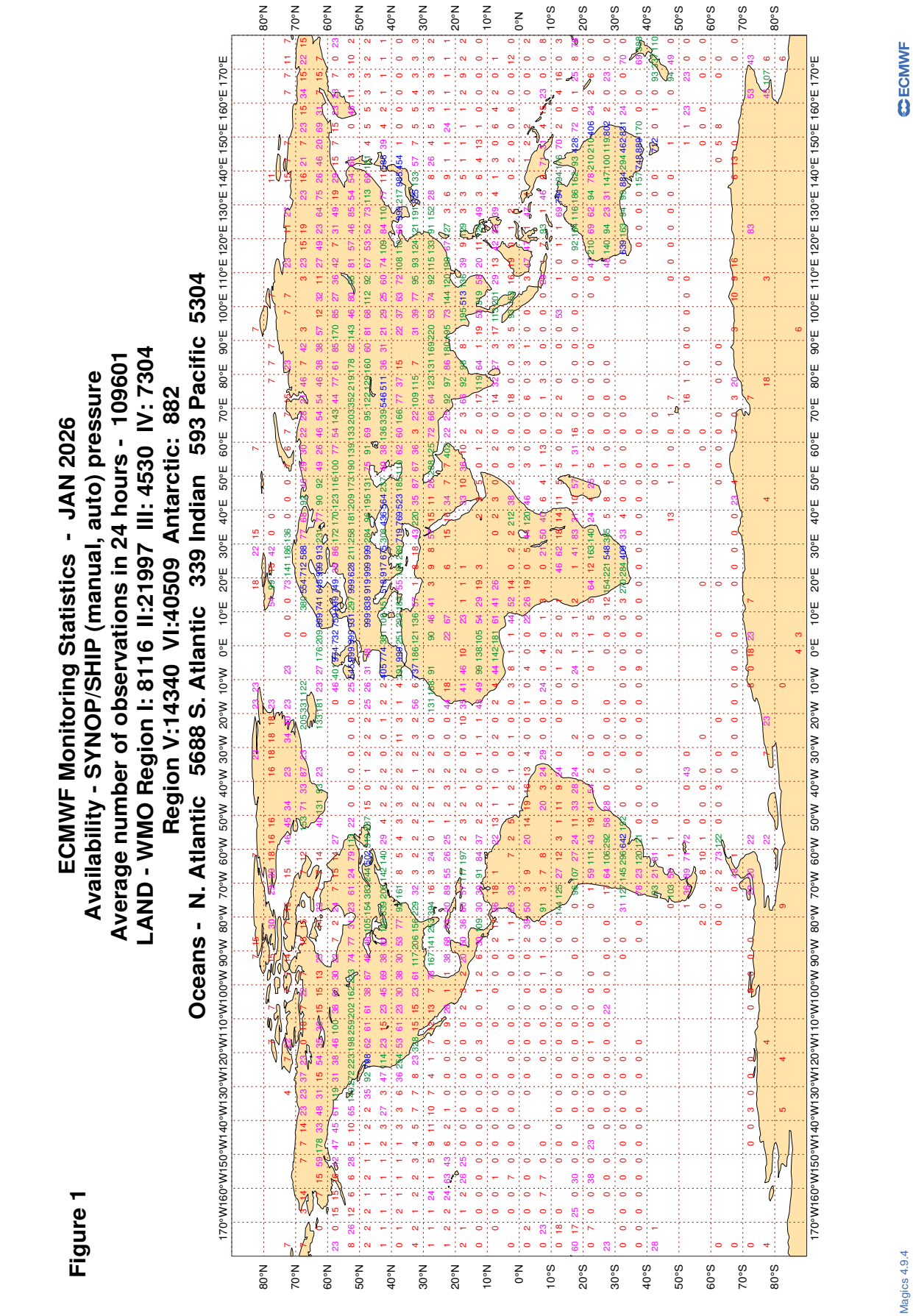


Figure 1

3.2.2 Figure 2 - Availability - DRIFTER PRESSURE

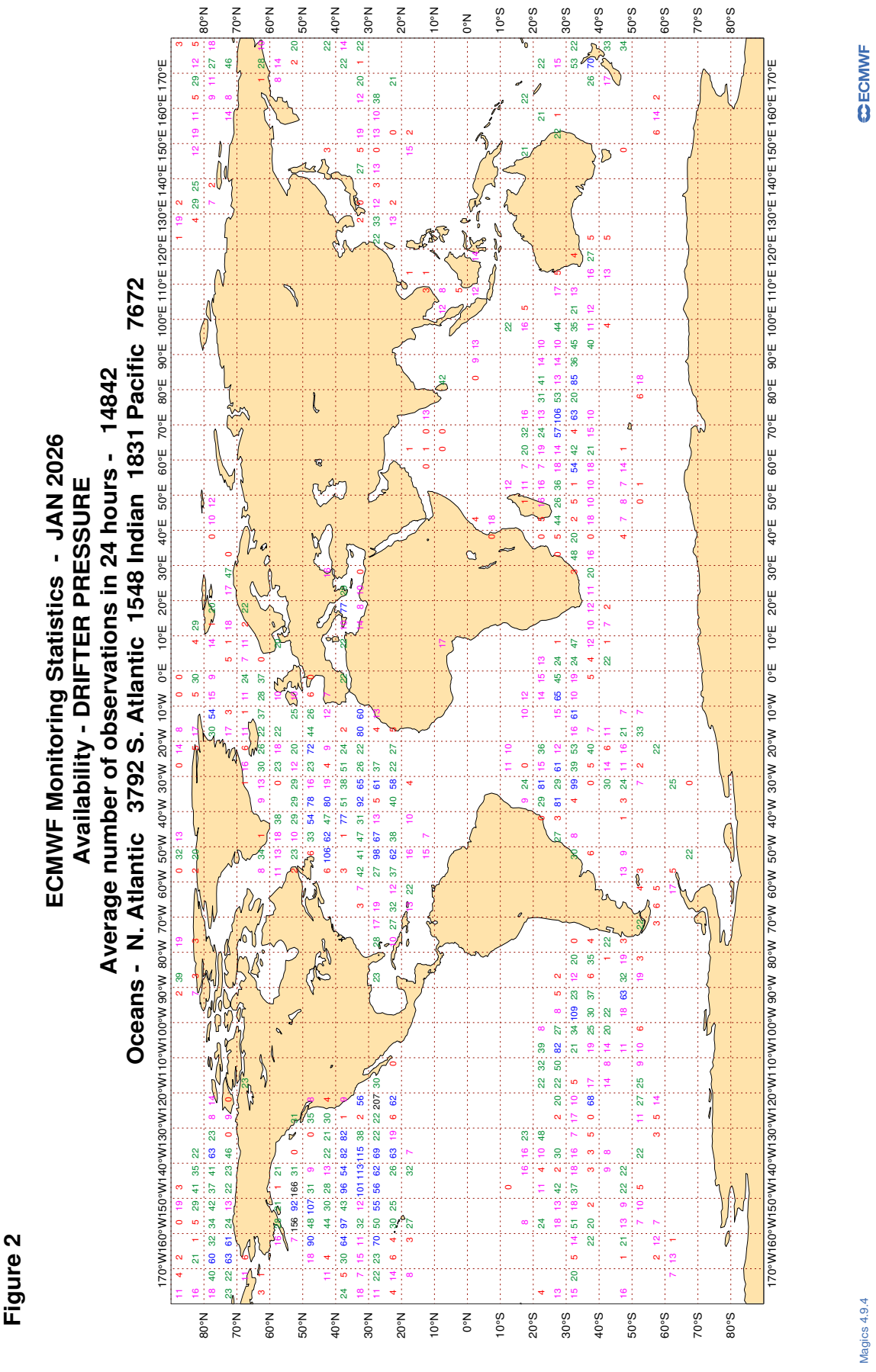


Figure 2

3.2.3 Figure 3 - Availability - TEMP 500 hPa geopotential

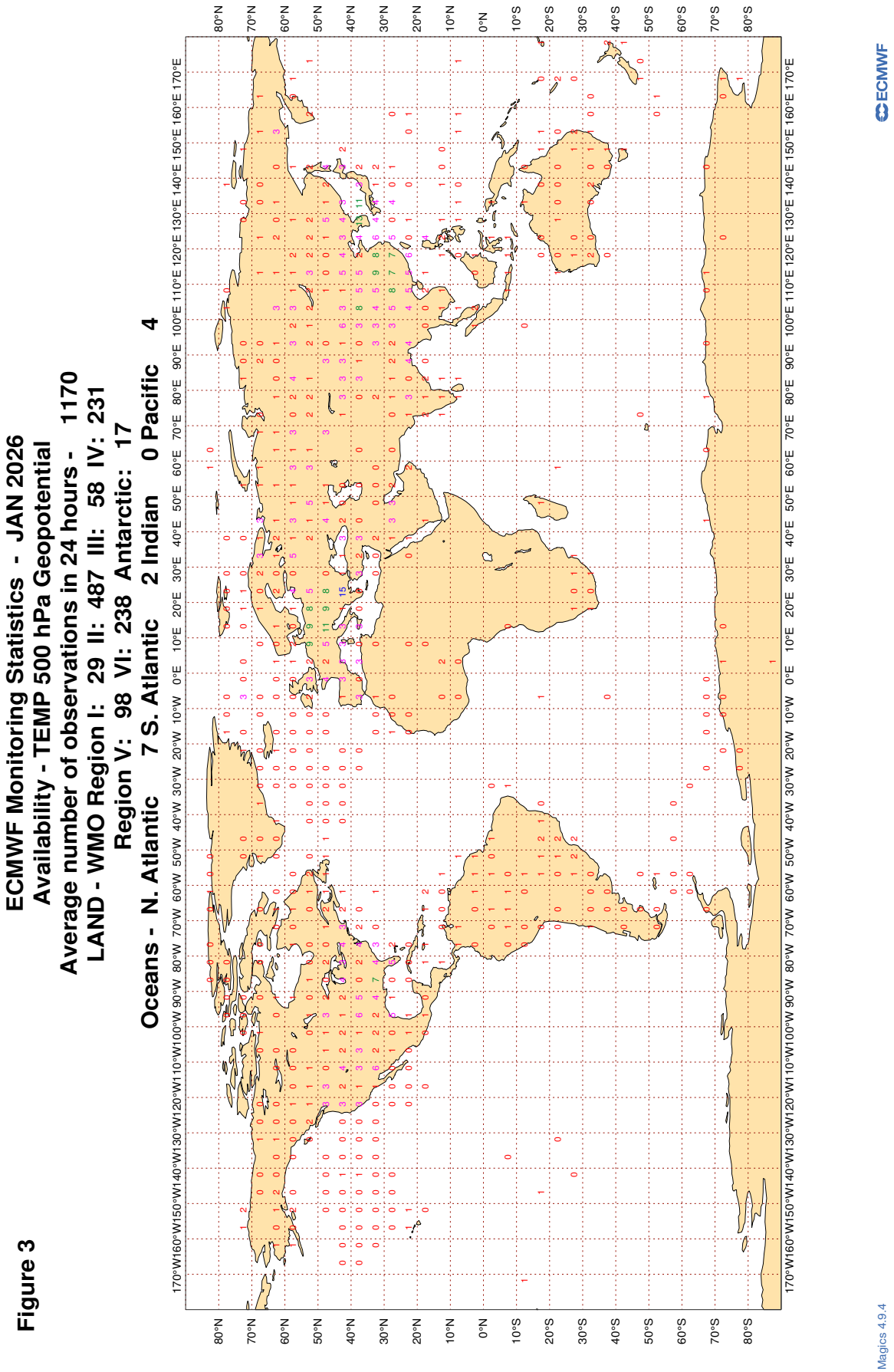
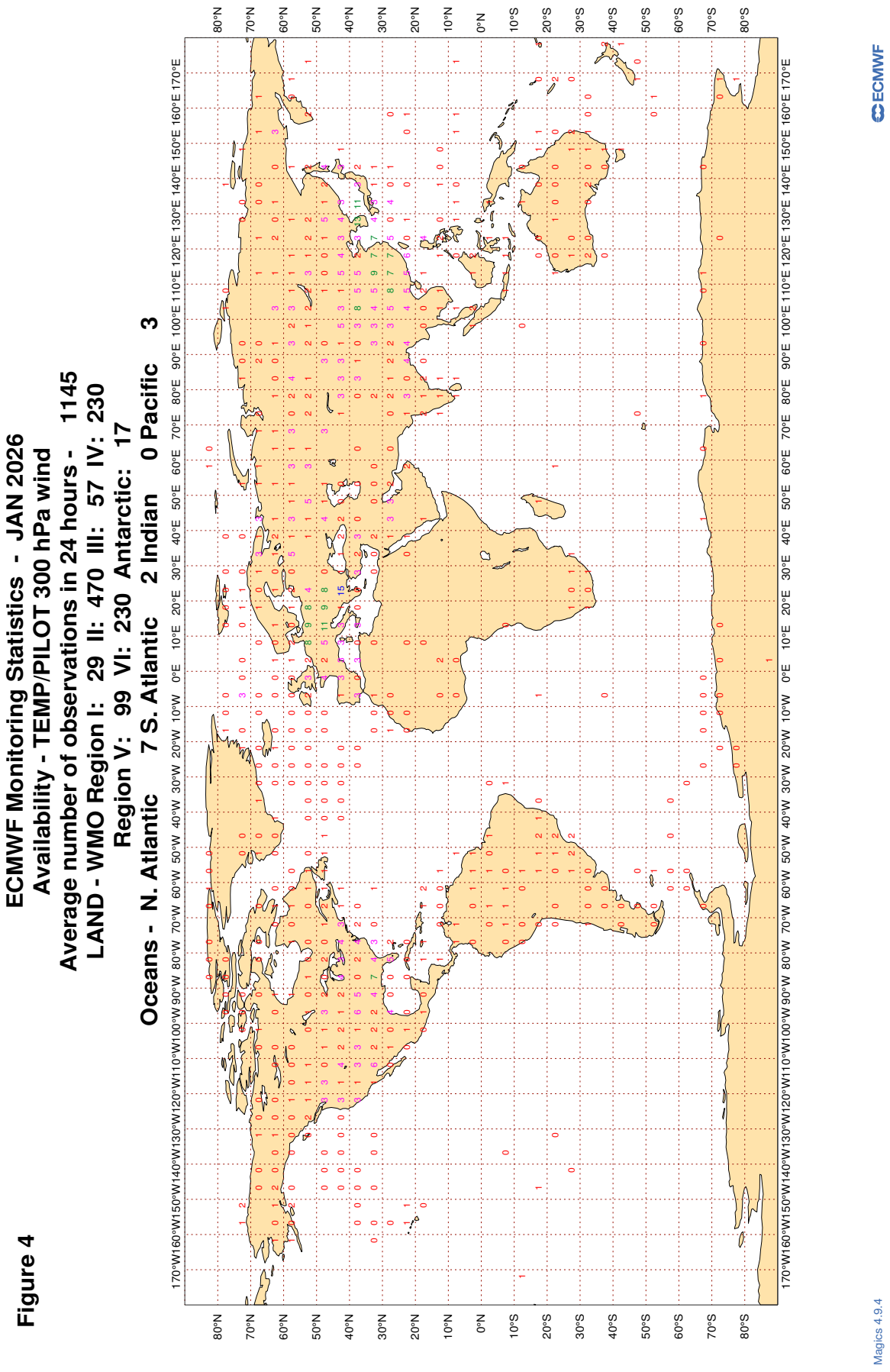


Figure 3

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



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

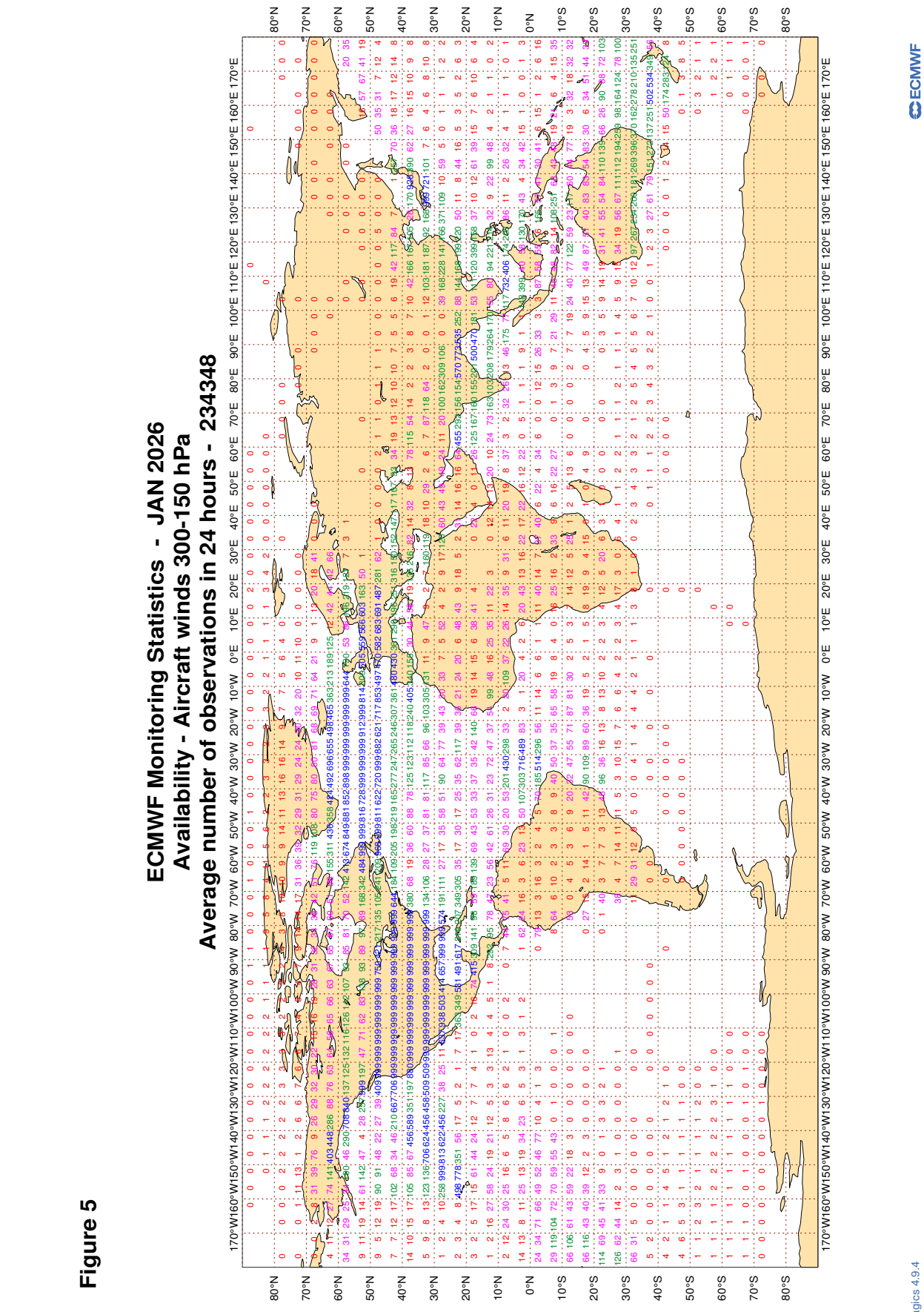
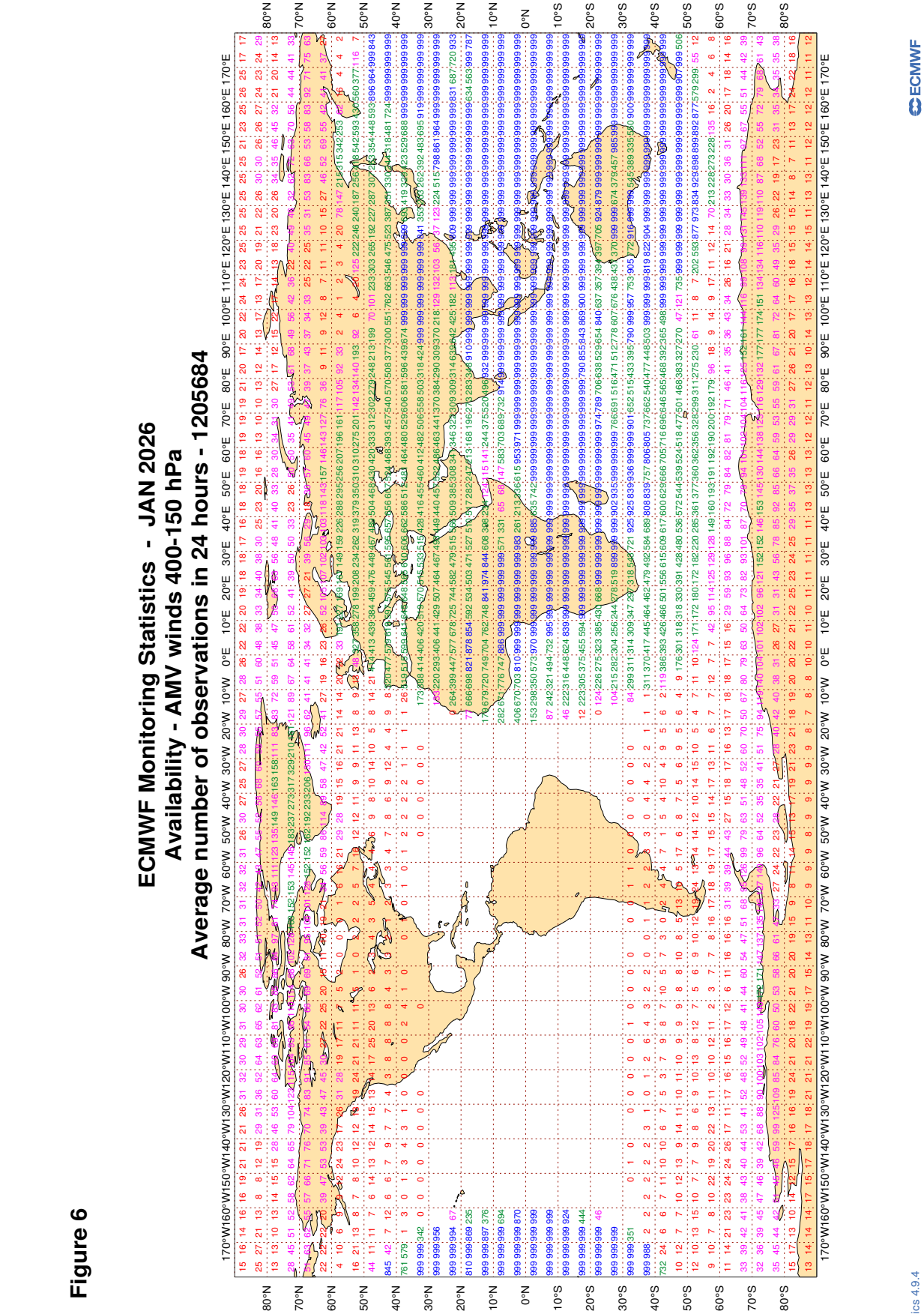


Figure 5

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

Figure 6



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

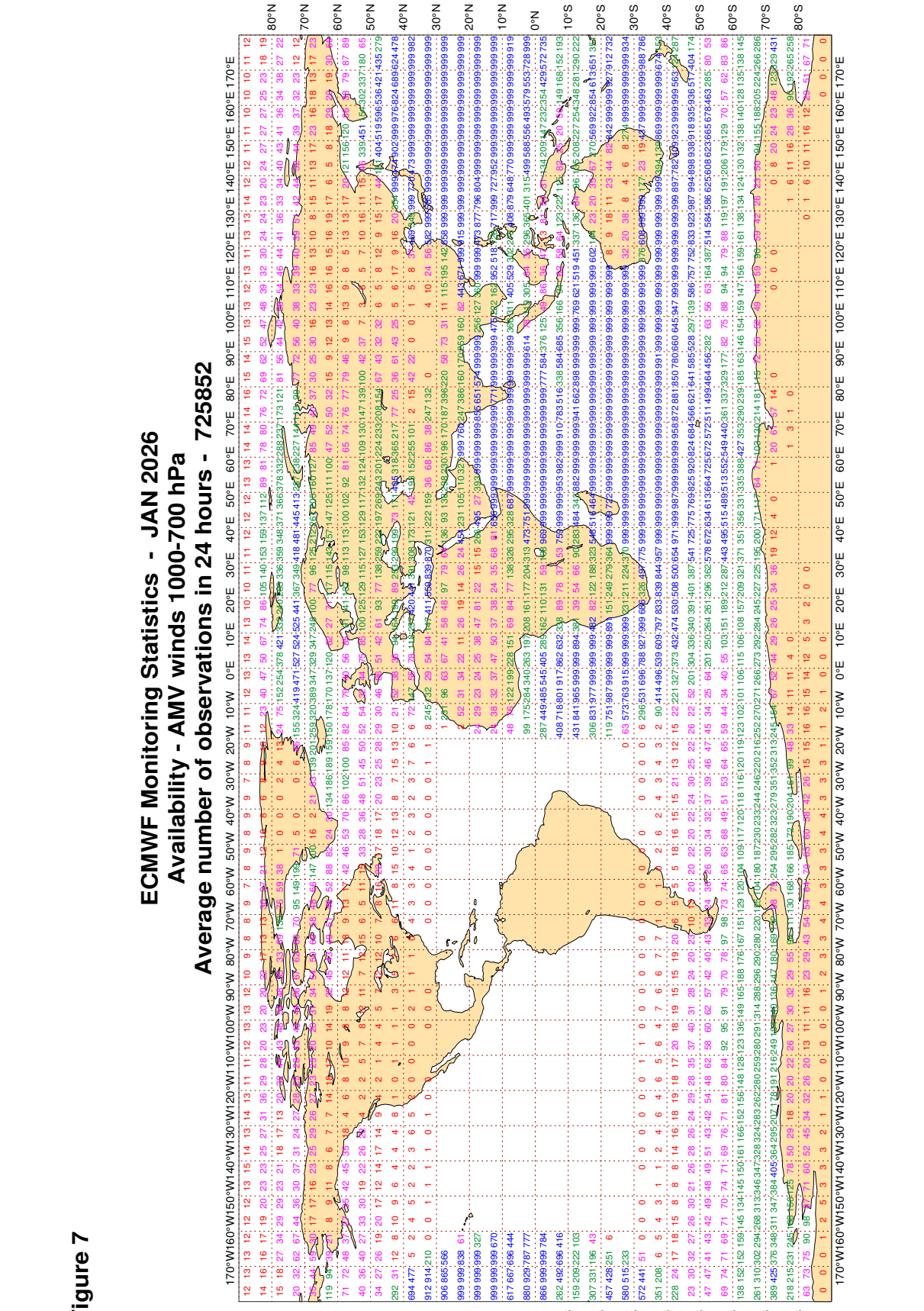


Figure 7

3.2.8 Figure 8 - Availability - METOP-B ATOVS : AMSU-A

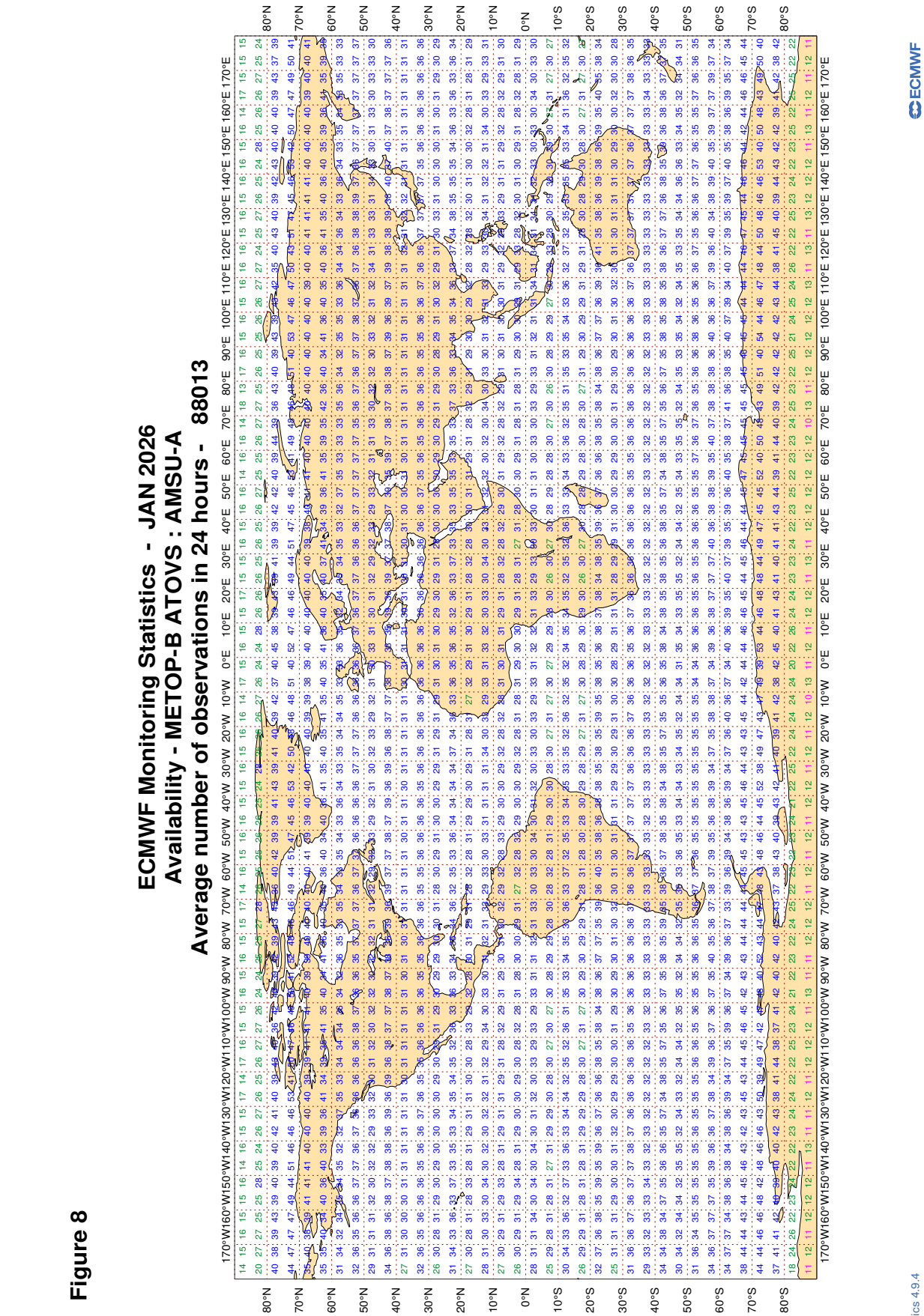


Figure 8

3.2.9 Figure 9 - Availability - METOP-C ATOVS : AMSU-A

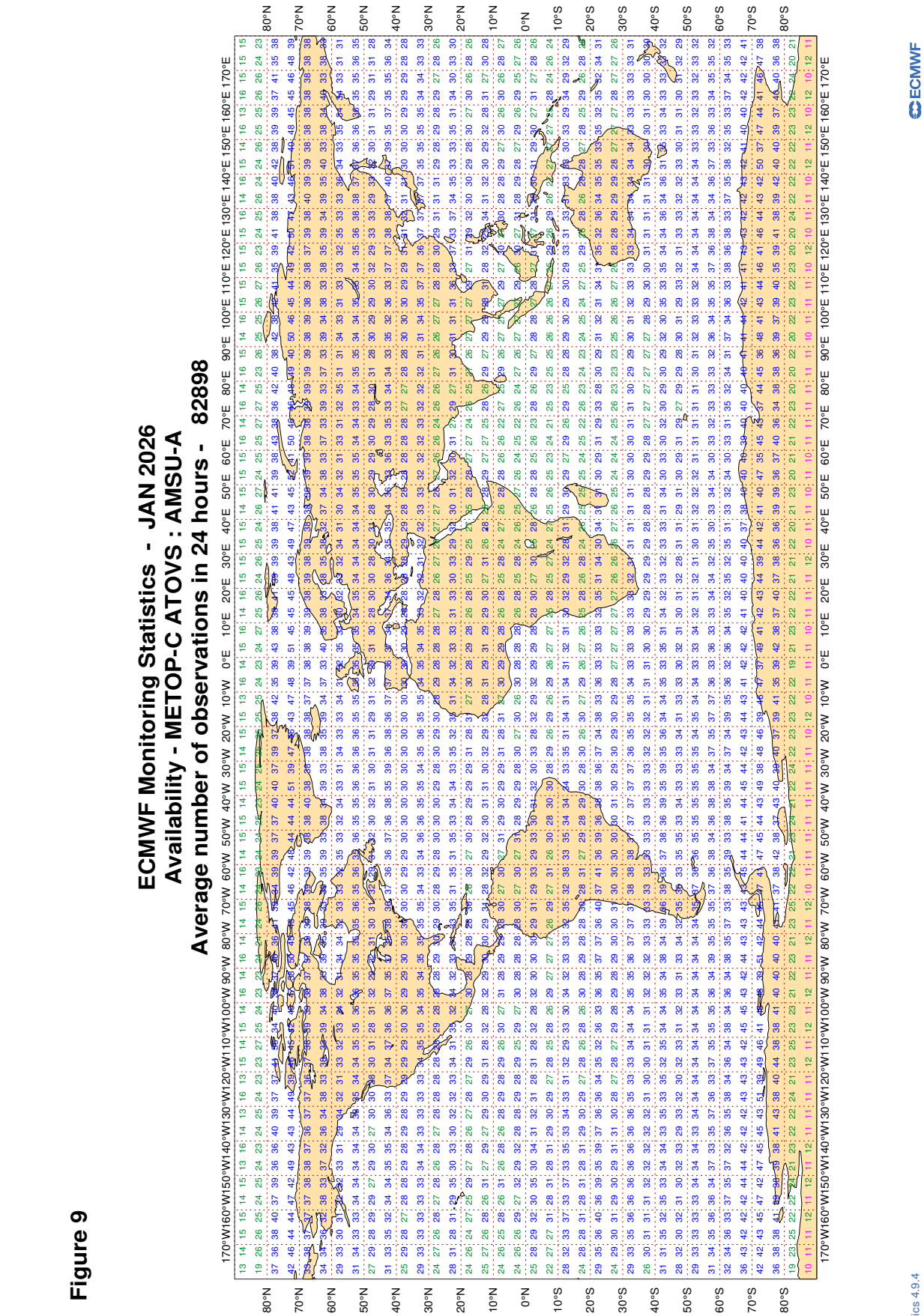


Figure 9

3.2.10 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                : JAN 2026
                    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
2FRK7	99	P	SUR	15	0	3.5	4.1	5.3
3E2032	99	P	SUR	36	0	0.9	-3.8	3.9
3E3566	99	P	SUR	52	0	1.2	6.4	6.6
3E4612	99	P	SUR	28	0	1.3	3.7	3.9
3E5193	99	P	SUR	74	0	0.4	3.2	3.2
3EBY2	99	P	SUR	20	14	0.9	14.0	14.0
3ERG5	99	P	SUR	81	0	0.8	5.1	5.2
3FOS8	99	P	SUR	16	0	0.4	-3.1	3.2
5LOH5	99	P	SUR	24	0	2.7	4.5	5.2
7JUN	99	P	SUR	19	0	1.3	-3.1	3.4
8VEUMXY	99	P	SUR	101	12	5.4	0.6	5.5
9BEUB6Y	99	P	SUR	112	38	2.7	-0.5	2.7
9HA3062	99	P	SUR	20	0	0.8	-5.2	5.3
9HA4777	99	P	SUR	71	0	1.9	4.1	4.5
9HA4902	99	P	SUR	23	0	0.8	10.2	10.2
9HA5209	99	P	SUR	65	35	0.5	14.2	14.2
9HA5682	99	P	SUR	35	3	5.6	-0.3	5.7
9HA5782	99	P	SUR	17	0	1.9	-3.3	3.8
9HJB9	99	P	SUR	30	0	2.5	3.4	4.3
9HJD9	99	P	SUR	59	0	0.8	-3.4	3.5
9V5456	99	P	SUR	42	0	0.9	8.8	8.9
9V7629	99	P	SUR	64	1	1.5	6.2	6.3
9V8191	99	P	SUR	49	0	1.4	-3.6	3.9
9V9375	99	P	SUR	19	0	2.2	-3.1	3.8
9VMY3	99	P	SUR	99	1	2.8	10.7	11.1
C6CA7	99	P	SUR	92	0	1.2	4.9	5.0
C6CX3	99	P	SUR	39	0	0.4	3.7	3.7
C6PT7	99	P	SUR	108	0	0.6	4.8	4.8
CGHL	99	P	SUR	118	64	5.8	-0.8	5.9
CGSB	99	P	SUR	101	12	5.4	0.6	5.5
CZJG	99	P	SUR	112	38	2.7	-0.5	2.7
D5UC5	99	P	SUR	20	0	3.0	-4.3	5.2

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
KPSJ	99	P	SUR	37	0	0.6	6.1	6.1
LAIG7	99	P	SUR	22	0	1.0	3.2	3.3
LAJF7	99	P	SUR	35	0	1.9	4.9	5.2
LAMP5	99	P	SUR	34	0	1.8	-3.1	3.6
LAPD7	99	P	SUR	36	0	1.0	3.5	3.6
LAPE7	99	P	SUR	73	0	1.2	4.2	4.3
LAQO7	99	P	SUR	46	0	2.2	3.3	4.0
LAZV5	99	P	SUR	18	0	2.3	-3.8	4.5
LOCW	99	P	SUR	25	0	1.9	-4.9	5.3
NBTM	99	P	SUR	53	3	1.7	-3.3	3.7
OBMT	99	P	SUR	26	0	3.2	3.5	4.7
OWHX2	99	P	SUR	16	0	1.0	-3.2	3.3
UCFT	99	P	SUR	19	0	2.0	-9.1	9.3
UCQX	99	P	SUR	19	19	0.0	0.0	0.0
UHOM	99	P	SUR	26	0	1.8	-3.1	3.6
V7A4788	99	P	SUR	91	0	3.2	3.5	4.7
V7A6073	99	P	SUR	90	1	2.9	5.6	6.3
V7A6082	99	P	SUR	81	1	3.0	6.5	7.1
V7A6440	99	P	SUR	31	0	2.8	6.6	7.1
V7A6573	99	P	SUR	57	0	1.0	-4.1	4.2
V7UU4	99	P	SUR	94	29	2.4	-11.3	11.6
VRGO2	99	P	SUR	23	0	1.7	4.4	4.7
VRGO6	99	P	SUR	48	0	1.5	-7.0	7.1
VRJT5	99	P	SUR	27	0	1.2	3.2	3.4
VRVO9	99	P	SUR	32	0	1.3	5.5	5.7
VRVP3	99	P	SUR	20	0	0.9	9.1	9.1
VRWP5	99	P	SUR	15	0	1.1	-6.2	6.3
WDF7122	99	P	SUR	52	0	0.5	3.2	3.2
WGEB	99	P	SUR	117	0	2.1	5.7	6.1
WMKQ	99	P	SUR	111	0	0.6	-5.4	5.5
WSAF	99	P	SUR	80	0	0.9	-4.5	4.6
XXX	99	P	SUR	55	2	6.2	-3.0	6.9
YBVEWGM	99	P	SUR	118	64	5.8	-0.8	5.9
YDDP2	99	P	SUR	24	0	0.7	-3.7	3.8
ZGFY4	99	P	SUR	26	0	0.7	-8.8	8.8

3.2.11 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                : JAN 2026
                    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
46181	99	SPEED	SUR	49	0	0	3.5	4.4	5.7

3.2.12 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                : JAN 2026
                    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
46066	99	DIRN	SUR	44	4	0	66.1	55.6	86.4
46092	99	DIRN	SUR	76	0	0	30.0	38.5	48.8
46184	99	DIRN	SUR	104	0	0	13.4	33.5	36.1
46204	99	DIRN	SUR	88	0	0	17.2	44.1	47.3

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

```
          LIST OF SUSPECT STATIONS         : DRIFTER
                    MONITORING CENTRE      : ECMWF
                    ELEMENT MONITORED      : SURFACE PRESSURE (HPA)
                    AREA                   : GLOBAL
                    PERIOD                 : JAN 2026
                    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
1701678	99	P	SUR	-35	76	430	119	3.5	-5.0	6.1
2302627	99	P	SUR	11	73	430	224	5.3	-8.3	9.8
2501555	99	P	SUR	79	-180	22	21	0.0	-11.3	11.3
2501557	99	P	SUR	75	171	708	708	0.0	0.0	0.0
2501559	99	P	SUR	81	-169	744	687	1.0	-13.0	13.0
2501586	99	P	SUR	77	-143	744	744	0.0	0.0	0.0
2501587	99	P	SUR	75	-149	744	744	0.0	0.0	0.0
2501590	99	P	SUR	70	170	744	502	4.6	-8.1	9.3
2501591	99	P	SUR	71	180	744	160	6.8	0.2	6.8
2601526	99	P	SUR	72	-169	744	209	8.4	1.0	8.5
2601548	99	P	SUR	75	-157	182	136	2.9	-10.5	10.9
2601549	99	P	SUR	75	-155	744	304	6.8	-5.5	8.8
2802016	99	P	SUR	65	-176	456	132	2.9	11.6	11.9
3401636	99	P	SUR	-32	-98	671	0	0.4	-7.8	7.8
3801567	99	P	SUR	-3	119	278	278	0.0	0.0	0.0
4101867	99	P	SUR	6	81	733	128	4.2	-4.2	5.9
4701555	99	P	SUR	64	-22	20	0	0.5	-5.9	5.9
4701558	99	P	SUR	79	-18	62	0	0.5	-4.4	4.4
4701599	99	P	SUR	72	-164	583	583	0.0	0.0	0.0
4801639	99	P	SUR	70	-127	295	278	1.0	13.2	13.2
4801763	99	P	SUR	62	-4	744	0	1.1	-10.3	10.4
4802582	99	P	SUR	64	-18	621	0	0.6	-10.1	10.1
4804182	99	P	SUR	-60	172	273	126	1.5	1.2	1.9
5501735	99	P	SUR	-38	-106	735	735	0.0	0.0	0.0
5801971	99	P	SUR	-4	116	179	179	0.0	0.0	0.0
5802091	99	P	SUR	-28	60	312	312	0.0	0.0	0.0
5802228	99	P	SUR	50	-58	740	739	0.0	13.5	13.5
6203818	99	P	SUR	-30	-50	679	555	7.1	-6.2	9.4
6301517	99	P	SUR	86	-156	743	743	0.0	0.0	0.0
6301528	99	P	SUR	60	170	743	328	5.2	-0.3	5.2
6301635	99	P	SUR	80	11	106	68	6.4	-7.4	9.8
6301636	99	P	SUR	72	-13	248	69	6.9	-1.5	7.1

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
7801693	99	P	SUR	22	165	732	0	0.0	-13.2	13.2
7894570	99	P	SUR	49	-38	257	55	6.4	-5.2	8.2

3.2.14 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                : JAN 2026
                    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
4804181	99	SPEED	SUR	-16	150	719	0	0	3.8	-6.3	7.4

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

```
          LIST OF SUSPECT STATIONS         : DRIFTER
                    MONITORING CENTRE      : ECMWF
                    ELEMENT MONITORED      : WIND DIRECTION (DEGREES)
                    PERIOD                 : JAN 2026
                    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
1000047	99	DIRN	SUR	41	-70	35	0	0	125.8	-27.1	128.7
2200193	99	DIRN	SUR	38	124	667	0	0	17.1	36.7	40.5
2300014	99	DIRN	SUR	2	67	154	0	0	24.0	-25.2	34.9
2300456	99	DIRN	SUR	18	67	113	0	0	53.9	34.2	63.8
2300460	99	DIRN	SUR	7	88	152	0	0	67.6	-27.0	72.8
23099	99	DIRN	SUR	13	80	142	0	0	26.6	-33.6	42.8
23456	99	DIRN	SUR	18	67	106	0	0	54.7	33.0	63.9
23460	99	DIRN	SUR	7	88	156	0	0	66.5	-26.3	71.5
23491	99	DIRN	SUR	12	93	146	0	0	28.0	79.2	84.0
23497	99	DIRN	SUR	10	72	84	0	0	75.1	63.6	98.4
4600066	99	DIRN	SUR	53	-155	1602	108	0	70.9	49.5	86.5
4600092	99	DIRN	SUR	37	-122	426	0	0	23.7	40.5	46.9
4600120	99	DIRN	SUR	48	-122	371	0	0	17.4	29.9	34.6
4600184	99	DIRN	SUR	54	-139	637	0	0	12.5	32.5	34.8
4600204	99	DIRN	SUR	51	-129	528	0	0	19.0	44.3	48.2
4600304	99	DIRN	SUR	49	-123	325	0	0	28.7	29.6	41.2
46066	99	DIRN	SUR	53	-155	267	20	0	68.6	49.6	84.6
46092	99	DIRN	SUR	37	-122	410	0	0	24.1	40.9	47.5
46120	99	DIRN	SUR	48	-122	102	0	0	19.2	26.3	32.5
46184	99	DIRN	SUR	54	-139	635	0	0	13.5	32.3	35.0
46204	99	DIRN	SUR	51	-129	531	0	0	20.2	43.5	48.0
46303	99	DIRN	SUR	49	-123	368	0	0	21.2	21.2	29.9
46304	99	DIRN	SUR	49	-123	347	0	0	25.7	28.7	38.5
6100281	99	DIRN	SUR	40	0	511	0	0	60.1	-130.3	143.5
6301003	99	DIRN	SUR	74	24	614	0	0	21.7	21.3	30.4
6600022	99	DIRN	SUR	54	14	163	0	0	54.4	25.8	60.2

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

```
          LIST OF SUSPECT STATIONS        : RADIOSONDES
                    MONITORING CENTRE     : ECMWF
                    ELEMENT MONITORED     : GEOPOTENTIAL HEIGHT (METRES)
                    AREA                  : GLOBAL
                    PERIOD                : JAN 2026
                    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	29	0	5.4	73.1	73.3
01400	00	Z	1000	57	3	30	0	5.4	73.1	73.3
23933	00	Z	300	61	69	26	0	23.6	-71.1	74.9
23933	12	Z	300	61	69	27	0	17.8	-74.6	76.7
25403	00	Z	250	66	151	31	1	71.4	-51.3	87.9
25403	12	Z	300	66	151	31	0	49.3	-56.5	75.0
30054	00	Z	150	59	113	10	0	70.9	-62.5	94.5
60760	12	Z	925	34	8	20	0	26.7	14.1	30.2
76644	12	Z	850	21	-90	17	0	13.6	34.3	36.9
91680	00	Z	925	-18	177	31	0	2.6	33.4	33.5
91680	12	Z	1000	-18	177	24	0	8.6	33.1	34.2
XKQLWQ	12	Z	1000	44	-6	11	0	34.2	-20.9	40.1

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

```
          LIST OF SUSPECT STATIONS        : RADIOSONDES
                    MONITORING CENTRE     : ECMWF
                    ELEMENT MONITORED     : WIND (M/S)
                    AREA                  : GLOBAL
                    PERIOD                : JAN 2026
                    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
48407	00	V	1000	15	105	16	5	-8.5	8.8	18.6

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

```
          LIST OF SUSPECT STATIONS        : RADIOSONDES
                    MONITORING CENTRE     : ECMWF
                    ELEMENT MONITORED     : WIND DIRECTION (DEGREES)
                    AREA                  : GLOBAL
                    PERIOD                : JAN 2026
                    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	00	DD	47	40	16	-10.6	3.5	8.2
48568	00	DD	7	101	12	-12.2	2.9	10.7

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

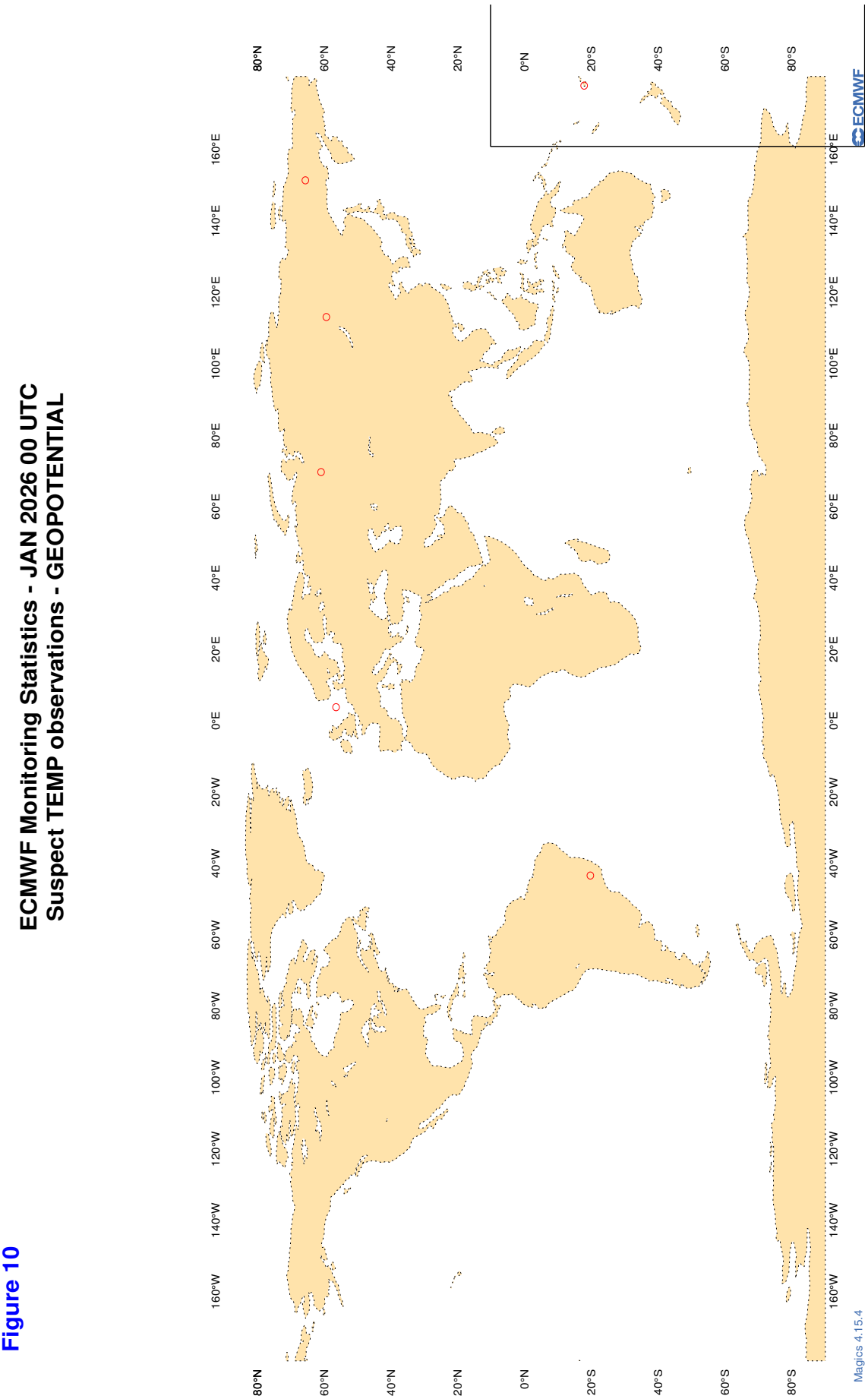
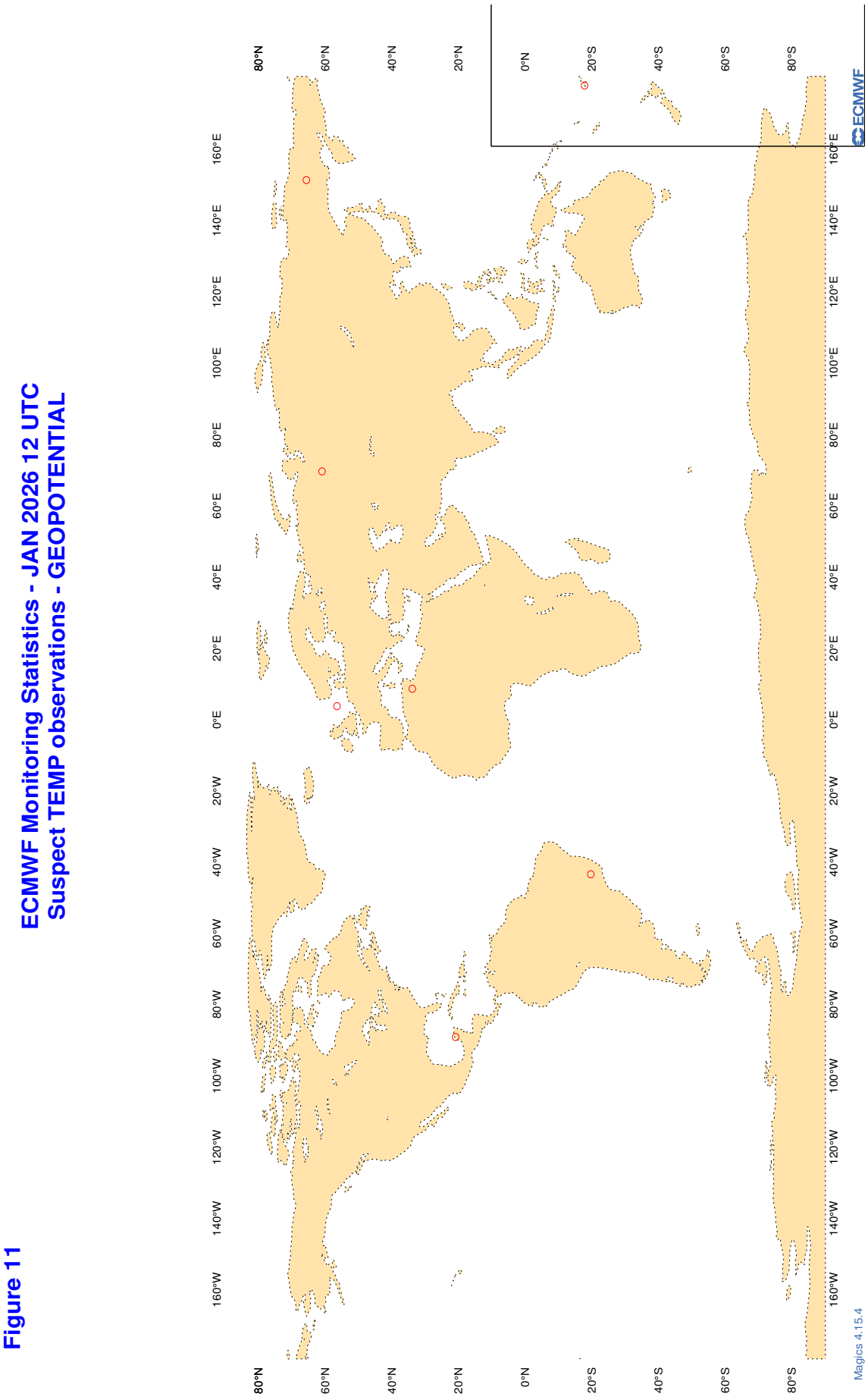
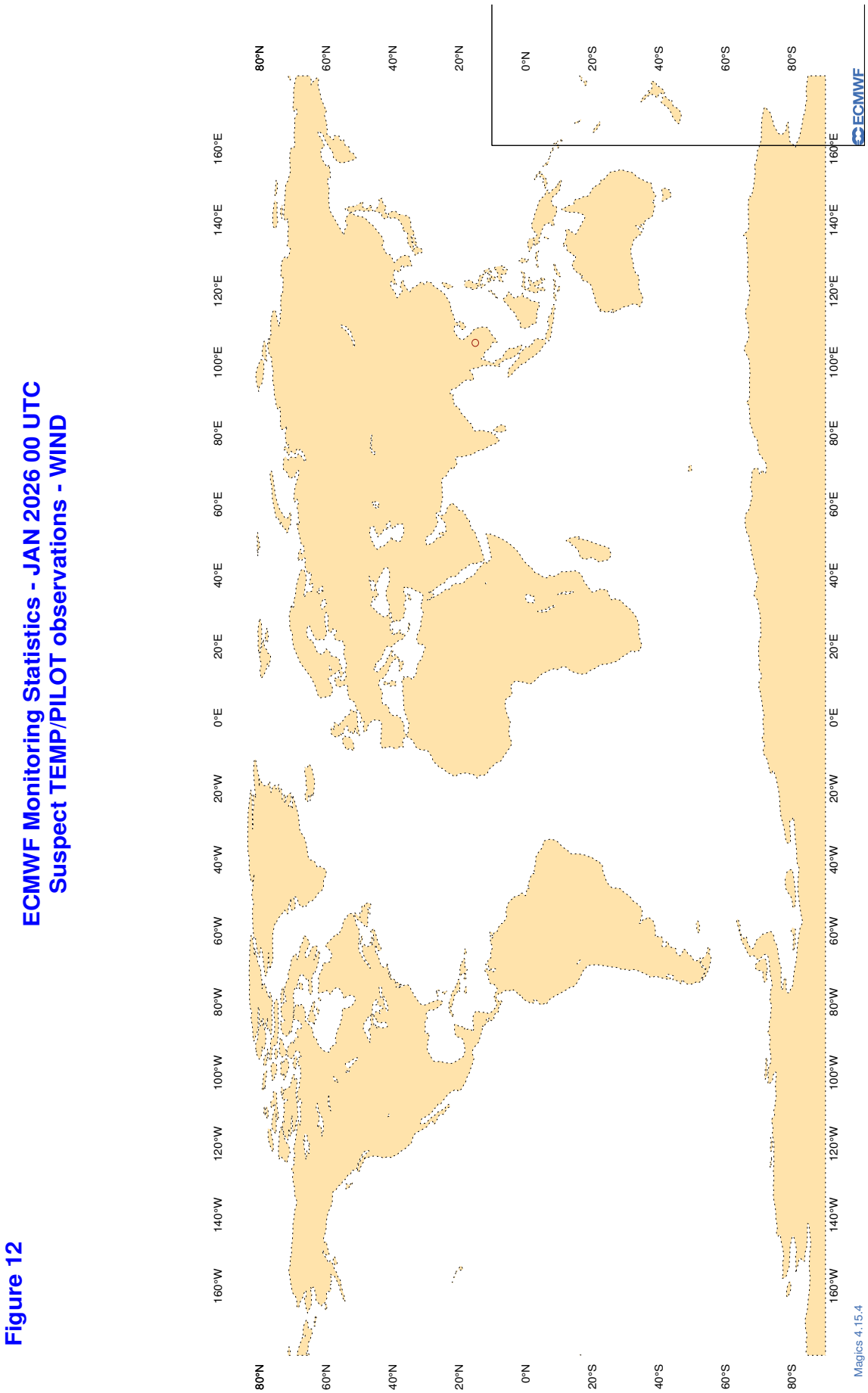


Figure 10

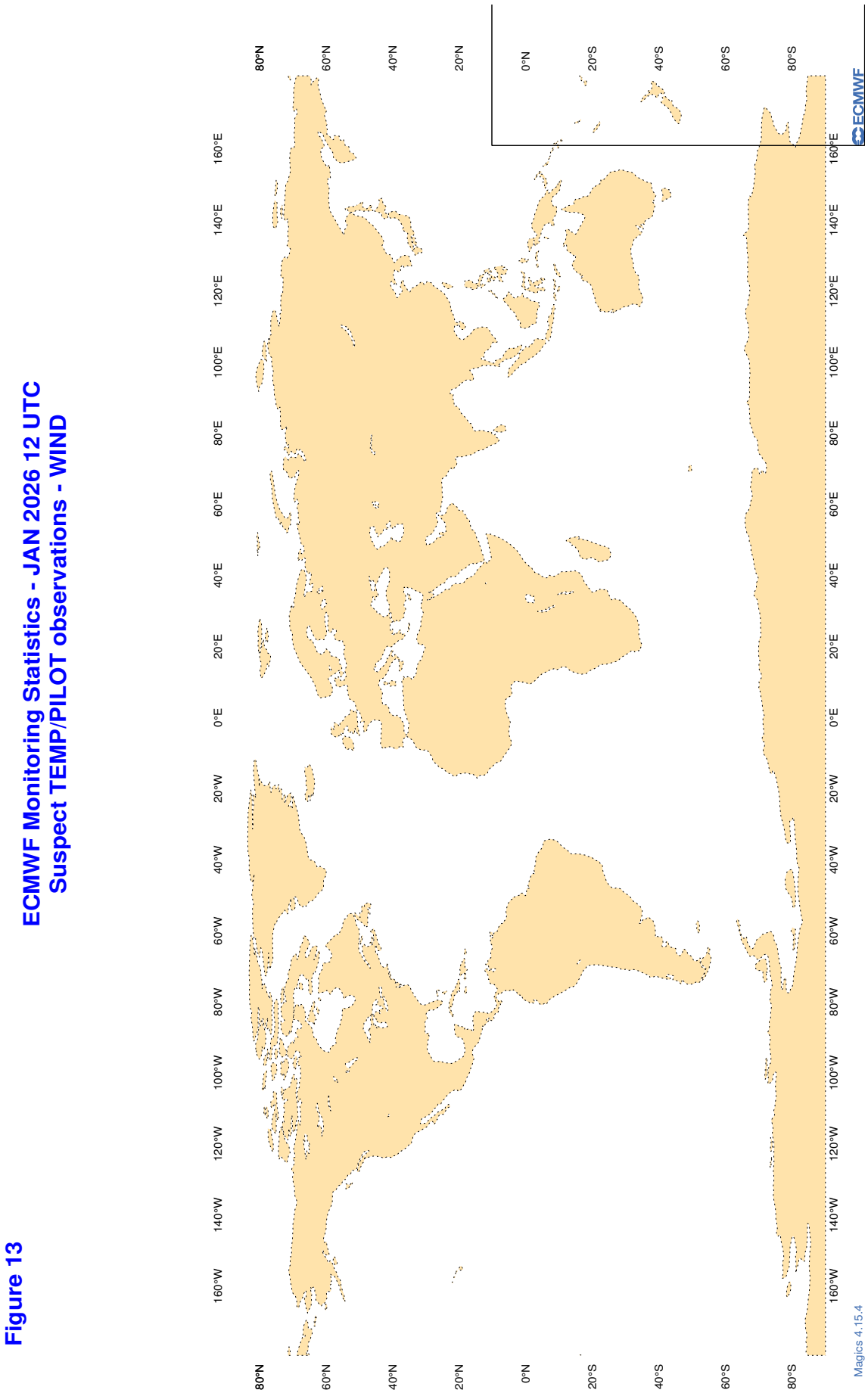
3.2.20 Figure 11 - Suspect TEMP observations - geopotential : 12 UTC



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



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



3.2.23 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                : JAN 2026
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
2TDJJ8	12	Z	100	28	15.9	14.7
7JUNA4	12	Z	100	4	42.3	30.8
7JUNA4	00	Z	100	4	9.8	3.6
9ZT9MR	12	Z	100	7	25.9	-25.2
9ZT9MR	00	Z	100	4	18.8	-17.8
ASDE09	12	Z	100	0	0.0	0.0
ATGU3F	00	Z	100	2	16.4	-5.0
ATGU3F	12	Z	100	2	20.6	-20.5
DEN	12	Z	100	1	188.1	188.1
DEN	00	Z	100	0	0.0	0.0
JNKN7J	12	Z	100	9	25.6	23.9
JNKN7J	00	Z	100	9	28.8	27.0
JPBN	12	Z	100	3	6.0	5.4
JPBN	00	Z	100	3	6.2	-0.2
KJJF9X	12	Z	100	0	0.0	0.0
KJJF9X	00	Z	100	0	0.0	0.0
KMPLHP	12	Z	100	6	29.2	6.8
KMPLHP	00	Z	100	5	8.9	0.8
LAGY8	12	Z	100	3	38.8	-38.7
LAGZ8	12	Z	100	3	68.7	46.7
LAR	12	Z	100	2	50.5	48.4
LAR	00	Z	100	1	120.2	120.2
LRYQE3	12	Z	100	8	25.6	20.9
LRYQE3	00	Z	100	10	13.9	-10.3
TLH	12	Z	100	2	149.8	148.5
TLH	00	Z	100	0	0.0	0.0
USALY	00	Z	100	3	49.0	-23.9
USCLL	00	Z	100	6	12.1	4.7
USCOU	00	Z	100	2	9.1	-4.4
USOSU	00	Z	100	6	15.5	13.4
USSIO	00	Z	100	1	4.4	-4.4
USSOM	00	Z	100	2	0.0	0.0
USTAC	12	Z	100	10	21.3	-12.4
USTAC	00	Z	100	13	19.9	-17.8
USVPI	00	Z	100	0	0.0	0.0
WDK38H	12	Z	100	5	9.2	-8.9
WFF	12	Z	100	1	173.1	173.1
WFF	00	Z	100	0	0.0	0.0
XKQLWQ	12	Z	100	11	35.4	8.7

RADIOSONDE MONITORING STATISTICS (SHIPS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
YLV96W	00	Z	100	7	47.4	28.3
YLV96W	12	Z	100	6	56.8	38.0
ZVQEQC	12	Z	100	6	11.6	7.3

3.2.24 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                : JAN 2026
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OB TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
2TDJJ8	12	V	100	27	2.6	-0.4	-0.3
7JUNA4	12	V	100	4	3.0	-0.2	1.1
7JUNA4	00	V	100	4	2.7	0.2	0.3
9ZT9MR	12	V	100	7	3.1	-0.2	1.1
9ZT9MR	00	V	100	4	2.9	-0.4	1.4
ASDE09	12	V	100	0	0.0	0.0	0.0
ATGU3F	00	V	100	2	3.0	1.4	0.6
ATGU3F	12	V	100	2	2.0	-0.9	1.3
DEN	12	V	100	1	5.0	-3.4	3.7
DEN	00	V	100	0	0.0	0.0	0.0
JNKN7J	12	V	100	9	3.0	0.7	0.8
JNKN7J	00	V	100	9	3.8	0.0	-0.4
JPBN	12	V	100	3	3.6	-2.7	1.3
JPBN	00	V	100	3	3.3	2.1	-2.2
KJJF9X	12	V	100	0	0.0	0.0	0.0
KJJF9X	00	V	100	0	0.0	0.0	0.0
KMPLHP	12	V	100	6	2.9	0.6	0.8
KMPLHP	00	V	100	5	4.1	1.1	0.9
LAGY8	12	V	100	3	1.9	-0.5	1.3
LAGZ8	12	V	100	3	1.7	1.0	-0.8
LAR	12	V	100	2	6.0	3.0	-1.5
LAR	00	V	100	1	5.4	1.3	5.2
LRYQE3	12	V	100	8	2.5	-0.1	0.9
LRYQE3	00	V	100	10	3.8	0.1	1.3
TLH	12	V	100	2	1.8	-0.6	-0.6
TLH	00	V	100	0	0.0	0.0	0.0
USALY	00	V	100	3	6.8	2.3	0.2
USCLL	00	V	100	3	2.1	-1.1	0.3
USCOU	00	V	100	1	3.6	1.4	3.3
USOSU	00	V	100	4	2.4	-1.6	0.4
USSIO	00	V	100	1	1.3	1.2	0.6
USSOM	00	V	100	1	1.4	-1.2	0.7
USTAC	12	V	100	5	3.1	0.2	-1.5
USTAC	00	V	100	8	5.7	-0.4	1.8
USVPI	00	V	100	0	0.0	0.0	0.0
WDK38H	12	V	100	4	3.2	-0.6	-0.7
WFF	12	V	100	1	6.4	-6.2	-1.5
WFF	00	V	100	0	0.0	0.0	0.0
XKQLWQ	12	V	100	11	2.6	0.5	-0.4

RADIOSONDE MONITORING STATISTICS (SHIPS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
YLV96W	00	V	100	7	3.8	-1.3	0.4
YLV96W	12	V	100	6	3.0	0.5	0.5
ZVQEQC	12	V	100	6	5.6	3.6	1.3

3.2.25 Figure 14 - SATOB Winds: 700-1000hPa

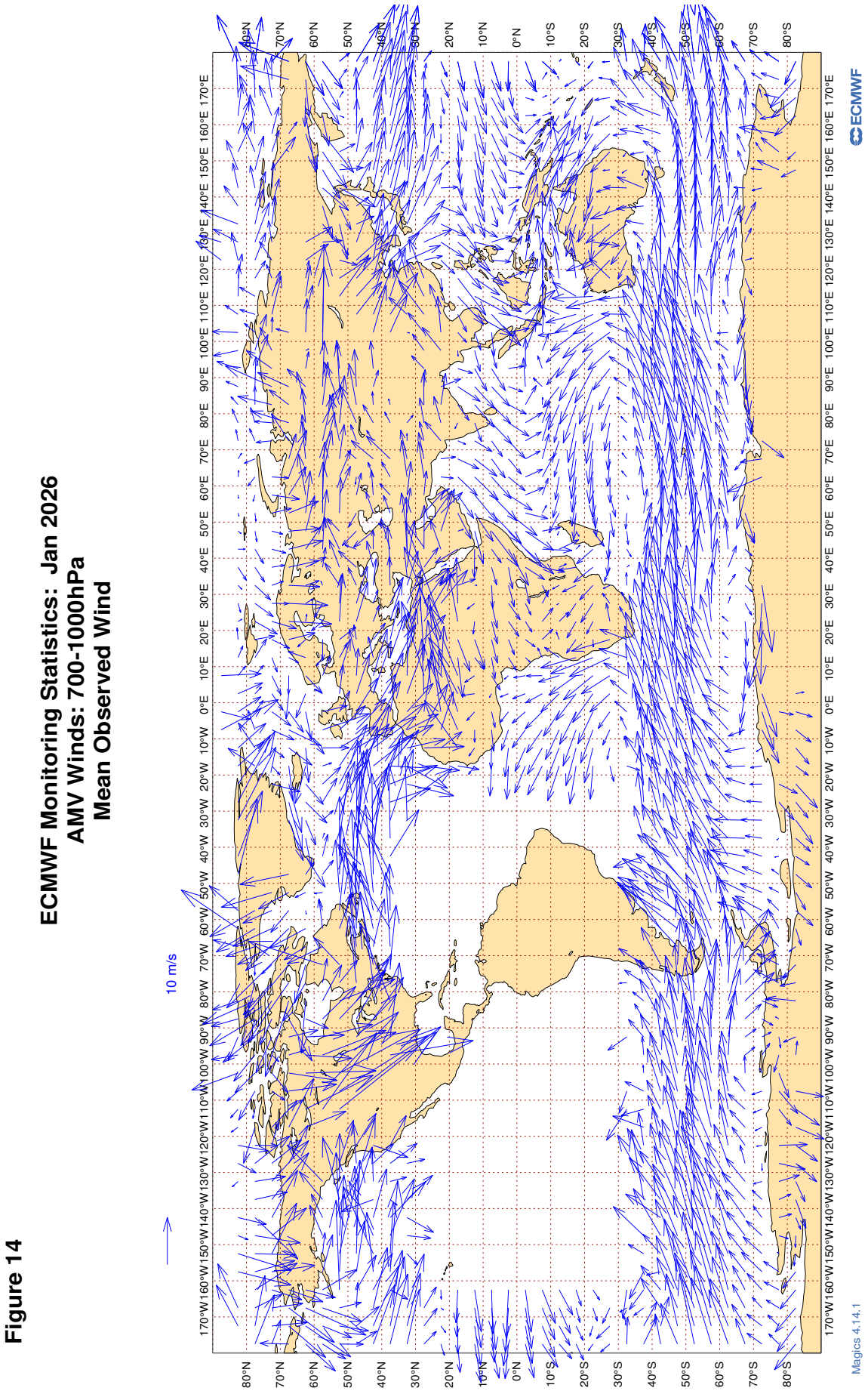


Figure 14

3.2.26 Figure 15 - SATOB Winds: 150- 400hPa

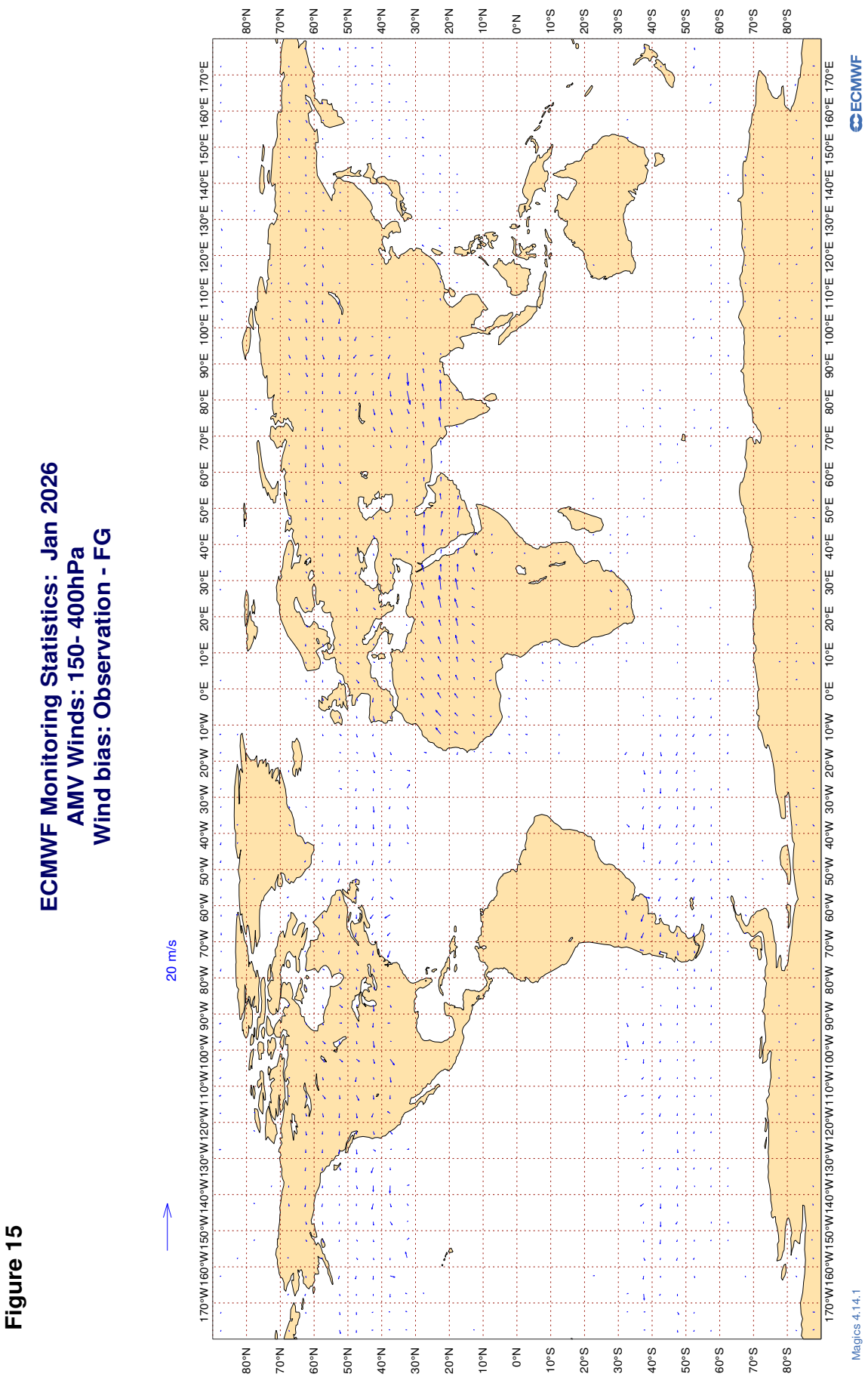


Figure 15

3.2.27 Figure 16 - SATOB Winds: 700-1000hPa

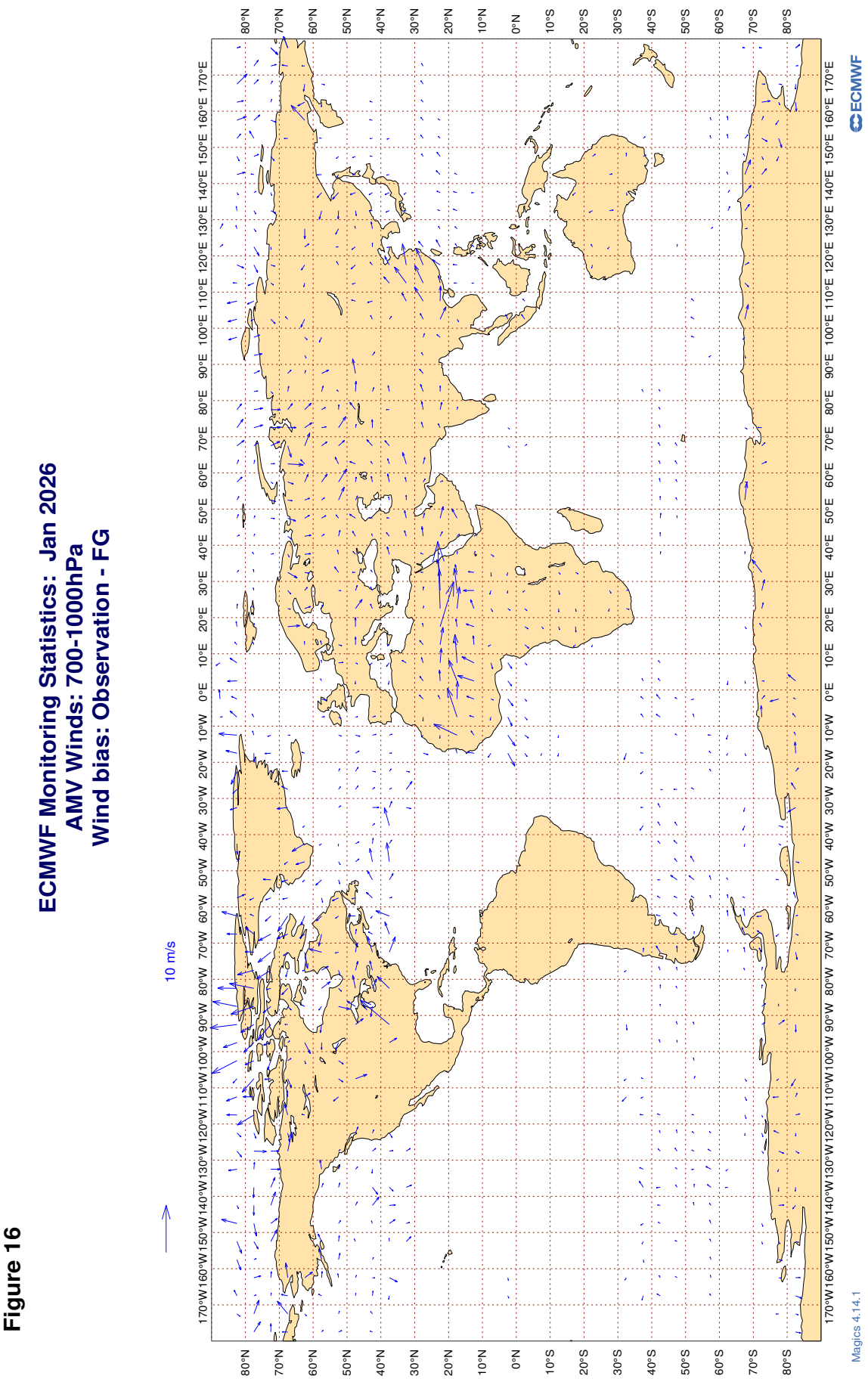


Figure 16

3.2.28 Figure 17 - SATOB Winds: 150- 400hPa

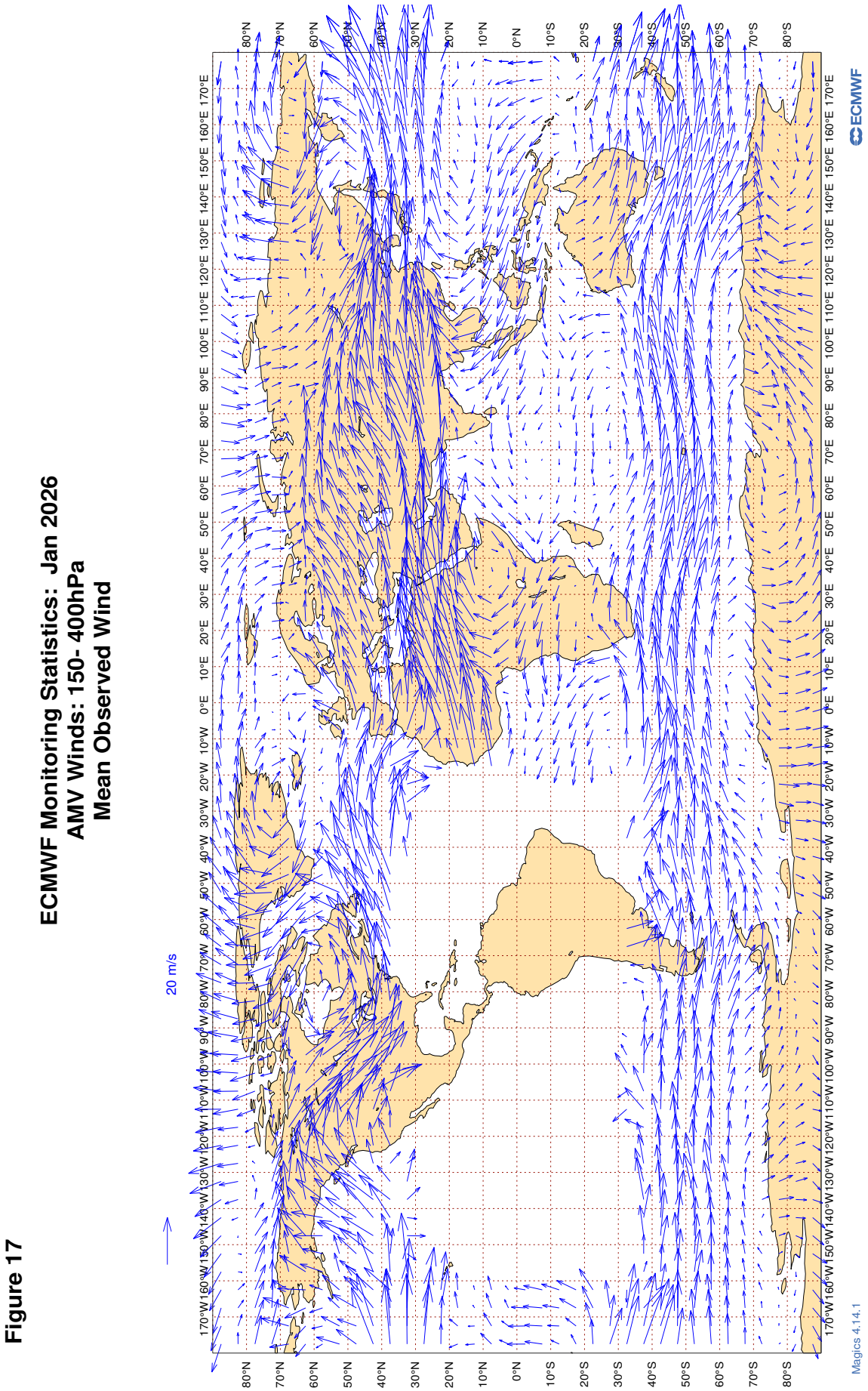


Figure 17

3.2.29 Figure 18 - AIRCRAFT Winds: 150- 300hPa

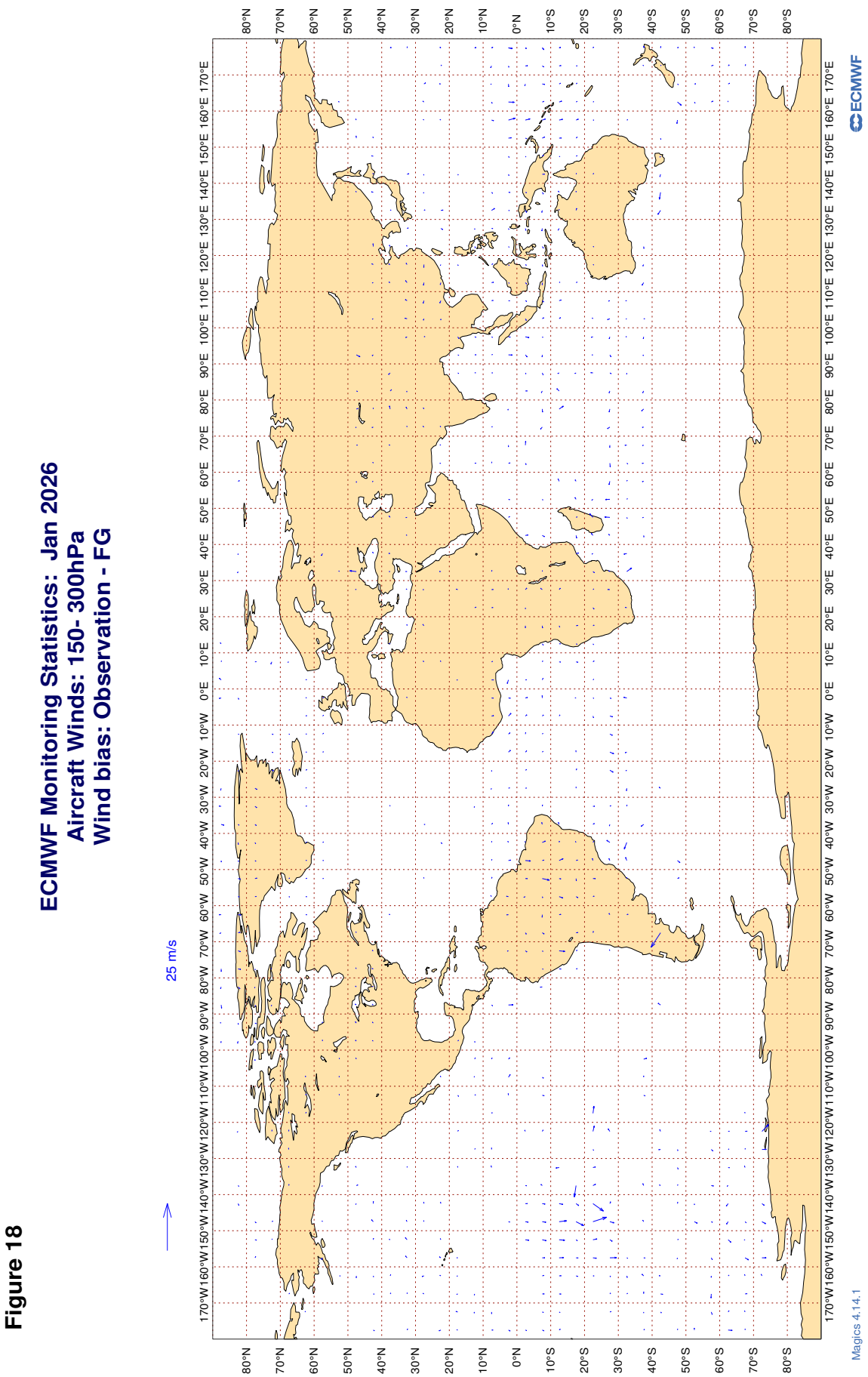


Figure 18

3.2.30 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 : JAN 2026
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
AAE	99	V	300-150	249	0	0	3.1	1.0
AAL	99	V	300-150	30998	3	0	5.7	0.1
ABD	99	V	300-150	656	0	0	3.8	-0.5
ABY	99	V	300-150	95	0	0	2.9	0.1
ACA	99	V	300-150	22636	2	0	5.3	0.0
ACI	99	V	300-150	691	0	0	3.9	0.4
ADS	99	V	300-150	57	0	0	3.8	-0.9
ADY	99	V	300-150	34	0	0	2.1	0.5
AEA	99	V	300-150	275	0	0	3.8	0.5
AFR	99	V	300-150	33046	0	0	4.0	0.1
AIC	99	V	300-150	6124	2	0	5.2	0.0
AIH	99	V	300-150	177	0	0	3.8	-0.9
AIZ	99	V	300-150	544	0	0	3.8	0.5
AJT	99	V	300-150	91	0	0	4.1	0.3
ALK	99	V	300-150	524	0	0	2.8	0.5
AMX	99	V	300-150	4566	7	0	7.4	-0.1
ANA	99	V	300-150	111	6	0	5.1	0.1
ANZ	99	V	300-150	17513	0	0	4.2	0.3
AOJ	99	V	300-150	228	0	0	3.5	0.7
ASA	99	V	300-150	1150	0	1	5.4	0.1
ASL	99	V	300-150	521	0	0	3.5	0.5
ASP	99	V	300-150	60	0	0	4.2	1.1

AIREP MONITORING STATISTICS FOR AIRLINE CARRIERS
(CONTINUED)

IDENT	OBS TIME	ELM	LEVEL	NUM OBS	% GROSS	% CALM	VECTOR RMS	SPEE D BIAS
ATC	99	V	300-150	21	10	0	2.3	0.6
ATN	99	V	300-150	481	0	3	4.8	-0.4
AUA	99	V	300-150	3497	2	0	4.9	0.0
AVA	99	V	300-150	904	2	0	5.5	0.0
AWC	99	V	300-150	107	0	0	3.3	-0.3
AXB	99	V	300-150	47	0	0	2.5	0.0
AXY	99	V	300-150	76	0	0	3.1	-0.3
AZG	99	V	300-150	922	0	0	3.3	-0.4
BAF	99	V	300-150	45	0	0	3.3	-0.1
BAW	99	V	300-150	44586	2	0	5.0	0.1
BBB	99	V	300-150	26	0	0	3.8	-0.8
BBC	99	V	300-150	346	7	0	8.3	0.0
BCS	99	V	300-150	1035	0	0	3.2	0.0
BEL	99	V	300-150	587	0	0	3.7	0.3
BLU	99	V	300-150	82	0	0	3.6	0.2
BLX	99	V	300-150	816	5	0	7.5	0.0
BOX	99	V	300-150	4752	0	0	3.4	0.0
BOX	99	V	300-150	63	0	0	3.9	-0.3
BRJ	99	V	300-150	52	0	0	3.0	-0.2
BRK	99	V	300-150	49	0	0	8.7	-0.7
BTX	99	V	300-150	30	0	0	3.5	1.2
BVR	99	V	300-150	20	0	0	3.2	-0.2
CAL	99	V	300-150	1079	0	0	3.3	0.3
CAO	99	V	300-150	263	0	0	2.6	-0.3
CBJ	99	V	300-150	234	0	0	2.9	0.1
CCA	99	V	300-150	582	2	0	3.2	0.1
CEB	99	V	300-150	488	0	0	2.5	0.1
CES	99	V	300-150	1841	0	0	3.5	0.2
CFC	99	V	300-150	309	0	0	4.0	0.3
CFG	99	V	300-150	5778	0	0	3.5	0.3
CHG	99	V	300-150	471	0	0	4.0	-0.5
CHH	99	V	300-150	483	4	0	3.7	-0.2
CJT	99	V	300-150	218	0	0	4.2	0.1
CKS	99	V	300-150	639	0	0	3.5	0.2
CLF	99	V	300-150	49	0	0	3.7	0.5
CLX	99	V	300-150	4375	0	0	3.8	-0.5
CLY	99	V	300-150	57	0	0	4.1	0.2
CMB	99	V	300-150	797	0	0	3.9	-0.3
CND	99	V	300-150	394	0	0	4.1	0.2
CNK	99	V	300-150	30	0	0	3.0	-0.2
CNV	99	V	300-150	102	0	0	3.2	-0.3
COP	99	V	300-150	33	0	0	3.7	1.3
CPA	99	V	300-150	3881	0	0	3.3	0.0

AIREP MONITORING STATISTICS FOR AIRLINE CARRIERS
(CONTINUED)

IDENT	OBS TIME	ELM	LEVEL	NUM OBS	% GROSS	% CALM	VECTOR RMS	SPEE D BIAS
CRL	99	V	300-150	1052	0	0	3.9	0.4
CSC	99	V	300-150	754	0	0	2.8	0.1
CSG	99	V	300-150	55	0	0	3.3	0.2
CSN	99	V	300-150	527	2	0	3.5	0.2
CSS	99	V	300-150	22	0	0	4.4	-0.8
CSZ	99	V	300-150	61	0	0	3.4	0.2
CTM	99	V	300-150	139	0	0	3.1	0.4
CXA	99	V	300-150	23	0	4	2.8	-0.9
DAH	99	V	300-150	825	0	0	3.6	0.2
DAL	99	V	300-150	43247	0	0	3.6	0.2
DCS	99	V	300-150	41	0	0	4.6	1.7
DCW	99	V	300-150	35	0	0	3.2	0.0
DGX	99	V	300-150	63	0	0	4.2	-0.2
DHK	99	V	300-150	2966	0	0	3.8	-0.3
DHX	99	V	300-150	102	0	0	3.3	1.4
DJT	99	V	300-150	1650	0	0	3.8	0.3
DLH	99	V	300-150	22429	1	0	4.5	0.0
DSO	99	V	300-150	72	0	0	3.0	0.3
DWC	99	V	300-150	71	0	0	5.9	0.5
EAU	99	V	300-150	33	0	0	4.3	0.1
EDW	99	V	300-150	1755	0	0	3.9	0.1
EIN	99	V	300-150	14350	0	0	3.3	0.2
EJM	99	V	300-150	752	0	0	3.7	0.3
ELY	99	V	300-150	4857	5	0	7.0	0.1
ESW	99	V	300-150	27	0	0	3.9	-0.1
ETD	99	V	300-150	10549	3	0	5.9	0.0
ETH	99	V	300-150	5260	3	0	5.4	0.1
EUK	99	V	300-150	1058	0	0	3.5	0.5
EVA	99	V	300-150	852	3	0	5.4	0.7
EVE	99	V	300-150	265	0	0	3.5	0.3
EXS	99	V	300-150	4960	0	0	3.5	0.0
EXV	99	V	300-150	22	0	0	3.0	-0.5
EZY	99	V	300-150	265	0	0	3.7	-0.3
FAD	99	V	300-150	98	0	0	2.6	-0.1
FAZ	99	V	300-150	37	0	0	3.2	-0.6
FBU	99	V	300-150	2059	0	0	3.7	0.0
FDX	99	V	300-150	7506	0	0	3.5	0.0
FIN	99	V	300-150	3142	0	0	3.3	0.0
FJI	99	V	300-150	2686	0	0	4.0	0.4
FJO	99	V	300-150	207	0	0	3.4	0.5
FWI	99	V	300-150	2679	0	0	3.6	0.3
FYG	99	V	300-150	75	0	0	4.0	-0.5
GAF	99	V	300-150	195	0	0	3.7	0.7

AIREP MONITORING STATISTICS FOR AIRLINE CARRIERS
(CONTINUED)

IDENT	OBS TIME	ELM	LEVEL	NUM OBS	% GROSS	% CALM	VECTOR RMS	SPEE D BIAS
GBG	99	V	300-150	85	0	0	3.4	0.3
GCK	99	V	300-150	132	0	1	3.2	-0.1
GEC	99	V	300-150	639	0	0	3.4	0.2
GES	99	V	300-150	96	0	0	4.2	1.4
GFA	99	V	300-150	1433	8	0	8.2	0.0
GIA	99	V	300-150	620	0	0	3.2	0.4
GJE	99	V	300-150	30	0	0	2.8	0.1
GJW	99	V	300-150	69	0	3	3.6	0.2
GLJ	99	V	300-150	46	0	0	3.7	-0.6
GNJ	99	V	300-150	29	0	0	4.2	0.9
GSM	99	V	300-150	94	0	0	4.0	0.7
GTI	99	V	300-150	2236	0	0	3.6	-0.1
GTR	99	V	300-150	244	0	0	3.8	0.5
HCR	99	V	300-150	33	0	0	3.0	0.3
HIM	99	V	300-150	34	0	0	2.6	0.2
HKC	99	V	300-150	291	0	1	4.3	0.2
HRT	99	V	300-150	30	0	0	3.3	-0.4
HTT	99	V	300-150	93	0	0	14.0	4.5
HUE	99	V	300-150	112	0	0	4.2	1.0
HVN	99	V	300-150	1539	4	0	5.3	0.5
HYS	99	V	300-150	330	0	0	3.6	0.2
HZA	99	V	300-150	65	0	0	3.2	0.5
HZS	99	V	300-150	50	0	0	4.2	0.0
IAM	99	V	300-150	46	0	0	3.0	-0.2
IBE	99	V	300-150	4575	0	0	3.4	0.2
ICE	99	V	300-150	9181	0	0	3.3	0.2
ICL	99	V	300-150	427	0	0	4.0	0.0
ICV	99	V	300-150	152	0	0	4.6	-0.9
IFA	99	V	300-150	577	0	0	3.9	0.0
IFC	99	V	300-150	58	0	0	3.0	0.0
IGA	99	V	300-150	99	0	1	3.3	0.3
IGO	99	V	300-150	30	3	0	29.3	28.3
IJM	99	V	300-150	101	0	0	3.7	0.3
IRL	99	V	300-150	46	0	0	5.2	0.8
ITY	99	V	300-150	3742	0	0	3.3	0.3
IXR	99	V	300-150	64	0	0	3.7	0.0
JAL	99	V	300-150	644	5	0	5.8	-0.1
JAS	99	V	300-150	193	12	0	12.2	0.4
JBD	99	V	300-150	38	0	0	3.4	0.5
JBU	99	V	300-150	5340	0	0	3.7	0.3
JCO	99	V	300-150	53	0	0	3.2	-0.1
JDI	99	V	300-150	79	0	0	3.7	0.2
JME	99	V	300-150	64	0	0	3.7	0.9

AIREP MONITORING STATISTICS FOR AIRLINE CARRIERS
(CONTINUED)

IDENT	OBS TIME	ELM	LEVEL	NUM OBS	% GROSS	% CALM	VECTOR RMS	SPEE D BIAS
JNY	99	V	300-150	35	0	0	5.0	1.7
JST	99	V	300-150	1945	0	0	3.9	0.3
JVW	99	V	300-150	26	0	0	3.7	0.0
JZR	99	V	300-150	26	0	0	2.2	0.0
KAC	99	V	300-150	2226	1	0	3.2	0.2
KAF	99	V	300-150	34	0	0	5.0	0.3
KAI	99	V	300-150	148	0	0	5.3	0.7
KAL	99	V	300-150	589	4	0	2.8	0.2
KAY	99	V	300-150	94	0	0	3.5	0.1
KCE	99	V	300-150	33	0	0	3.6	-0.3
KIW	99	V	300-150	21	0	0	5.3	2.8
KLM	99	V	300-150	18619	3	0	5.7	0.1
KPO	99	V	300-150	71	0	0	2.9	-0.7
KQA	99	V	300-150	163	2	0	8.4	-0.5
LCO	99	V	300-150	569	0	0	4.1	-0.8
LDX	99	V	300-150	49	0	0	3.0	0.3
LEX	99	V	300-150	24	0	0	4.4	-0.2
LNI	99	V	300-150	222	0	0	2.7	0.6
LNX	99	V	300-150	21	0	0	3.3	1.2
LOT	99	V	300-150	3712	6	0	7.6	0.0
LRQ	99	V	300-150	20	0	0	2.5	0.3
LUA	99	V	300-150	103	0	0	5.0	-0.5
LUC	99	V	300-150	37	0	0	3.8	0.3
LVL	99	V	300-150	1548	0	0	3.7	0.4
LXA	99	V	300-150	33	0	0	3.2	0.3
LXJ	99	V	300-150	640	0	0	3.4	0.4
MAS	99	V	300-150	5697	0	0	3.1	0.3
MED	99	V	300-150	93	0	0	2.9	0.0
MFX	99	V	300-150	148	5	0	6.9	1.5
MJF	99	V	300-150	41	0	0	3.5	0.2
MLM	99	V	300-150	101	0	0	3.2	0.6
MMD	99	V	300-150	352	0	0	3.5	0.2
MMF	99	V	300-150	122	0	0	4.2	0.7
MNB	99	V	300-150	932	0	0	3.4	0.3
MPH	99	V	300-150	434	0	0	3.2	-0.2
MRS	99	V	300-150	23	0	0	3.5	0.3
MSR	99	V	300-150	2165	4	0	5.3	-0.1
MVJ	99	V	300-150	22	0	0	3.4	1.4
MXD	99	V	300-150	606	0	0	2.9	0.3
NBT	99	V	300-150	977	8	0	7.3	0.2
NCR	99	V	300-150	642	0	0	3.8	0.0
NEW	99	V	300-150	119	0	2	3.8	0.4
NJE	99	V	300-150	580	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
NJM	99	V	300-150	32	0	0	9.1	0.1
NOJ	99	V	300-150	55	0	0	3.2	0.3
NOS	99	V	300-150	1508	4	0	6.3	0.1
OAE	99	V	300-150	314	0	0	3.8	-0.5
OCN	99	V	300-150	4374	0	0	3.7	0.3
OMA	99	V	300-150	1572	7	0	8.7	0.0
PAL	99	V	300-150	1470	0	0	2.7	0.1
PAN	99	V	300-150	25	0	0	5.2	1.9
PEX	99	V	300-150	61	0	0	3.2	0.0
PGQ	99	V	300-150	28	0	0	3.9	0.2
PIA	99	V	300-150	121	0	0	2.7	0.4
PUE	99	V	300-150	253	0	0	3.1	0.2
PVA	99	V	300-150	232	0	0	3.7	0.5
QFA	99	V	300-150	5540	1	0	5.4	0.2
QFX	99	V	300-150	98	0	0	4.9	1.4
QNT	99	V	300-150	282	0	0	2.8	-0.3
QQE	99	V	300-150	395	0	0	3.5	0.4
QTR	99	V	300-150	21023	1	0	4.6	0.1
RAM	99	V	300-150	1055	8	0	4.9	0.2
RBA	99	V	300-150	243	2	0	7.8	-0.2
RCH	99	V	300-150	2912	0	0	4.6	0.3
RCR	99	V	300-150	60	0	0	3.2	0.7
RHH	99	V	300-150	31	0	0	7.8	-1.4
RJA	99	V	300-150	2064	8	0	9.2	-0.1
RJR	99	V	300-150	50	0	0	4.6	-0.6
RKK	99	V	300-150	71	0	0	3.2	-0.2
RPP	99	V	300-150	21	0	0	3.1	0.8
RRR	99	V	300-150	314	0	0	3.9	0.4
RSF	99	V	300-150	37	0	0	3.7	0.8
RYR	99	V	300-150	546	0	0	3.8	0.1
RZO	99	V	300-150	359	0	0	3.8	0.3
SAM	99	V	300-150	123	0	0	3.9	-1.3
SAS	99	V	300-150	5381	0	0	3.5	0.2
SAZ	99	V	300-150	58	0	0	3.0	0.5
SCX	99	V	300-150	85	0	1	6.3	0.4
SIA	99	V	300-150	14761	0	0	4.0	0.3
SIO	99	V	300-150	65	0	0	3.6	0.3
SJE	99	V	300-150	23	0	0	3.2	-0.6
SKV	99	V	300-150	39	0	0	3.7	0.1
SLM	99	V	300-150	143	0	0	3.7	0.0
SNO	99	V	300-150	63	0	0	3.3	-0.1
SON	99	V	300-150	30	0	3	2.7	-0.2
SPA	99	V	300-150	117	0	0	3.8	0.3

AIREP MONITORING STATISTICS FOR AIRLINE CARRIERS
(CONTINUED)

IDENT	OBS TIME	ELM	LEVEL	NUM OBS	% GROSS	% CALM	VECTOR RMS	SPEE D BIAS
SRR	99	V	300-150	258	0	0	3.3	0.3
SSG	99	V	300-150	37	0	0	2.9	0.0
SVA	99	V	300-150	6253	3	0	5.8	0.0
SVI	99	V	300-150	25	0	0	2.1	0.3
SVW	99	V	300-150	431	0	0	3.3	0.0
SWR	99	V	300-150	11563	0	0	3.9	0.3
SWW	99	V	300-150	20	0	0	4.1	1.3
SYB	99	V	300-150	115	0	0	4.0	0.1
TAM	99	V	300-150	53	0	0	2.8	1.0
TAP	99	V	300-150	4029	0	0	3.7	0.1
TAR	99	V	300-150	366	0	0	3.4	0.4
TAX	99	V	300-150	702	0	0	2.8	0.2
TAY	99	V	300-150	321	0	0	3.6	-0.2
TCJ	99	V	300-150	46	0	0	3.3	0.9
TFF	99	V	300-150	86	0	0	4.5	0.5
TFL	99	V	300-150	1665	4	0	5.8	0.3
TGW	99	V	300-150	1256	5	0	8.7	0.3
THA	99	V	300-150	5566	1	0	3.8	0.3
THT	99	V	300-150	2301	5	0	7.8	0.1
THY	99	V	300-150	23048	2	0	4.7	0.1
TMN	99	V	300-150	421	0	0	4.2	1.1
TOM	99	V	300-150	4594	4	0	6.4	0.1
TSC	99	V	300-150	5488	0	0	3.6	0.4
TUA	99	V	300-150	167	0	0	2.6	0.2
TUG	99	V	300-150	37	0	0	2.4	0.3
TUR	99	V	300-150	31	0	0	6.3	-3.1
TVR	99	V	300-150	154	0	0	3.1	0.3
TWY	99	V	300-150	719	0	0	3.7	0.2
UAE	99	V	300-150	18706	0	0	3.4	0.1
UAF	99	V	300-150	96	0	0	5.5	0.3
UAL	99	V	300-150	63203	2	1	5.4	0.0
UBT	99	V	300-150	1401	6	0	5.2	0.0
ULC	99	V	300-150	175	0	0	3.5	0.5
UPS	99	V	300-150	5256	0	0	3.6	-0.3
UZB	99	V	300-150	721	3	0	7.8	0.4
VCG	99	V	300-150	54	0	0	4.7	1.3
VCJ	99	V	300-150	59	0	0	3.3	-0.4
VIR	99	V	300-150	18560	2	0	4.9	0.1
VJC	99	V	300-150	135	0	0	3.0	0.1
VJH	99	V	300-150	232	0	0	4.7	0.2
VJT	99	V	300-150	1812	0	0	3.7	0.4
VKG	99	V	300-150	564	0	0	3.3	0.2
VLZ	99	V	300-150	20	0	0	4.5	-0.3

AIREP MONITORING STATISTICS FOR AIRLINE CARRIERS
(CONTINUED)

IDENT	OBS TIME	ELM	LEVEL	NUM OBS	% GROSS	% CALM	VECTOR RMS	SPEE D BIAS
VOZ	99	V	300-150	1198	0	0	3.3	0.3
VSV	99	V	300-150	325	0	0	2.6	0.4
VXS	99	V	300-150	23	0	0	3.7	0.6
WFL	99	V	300-150	599	0	0	3.5	0.2
WGN	99	V	300-150	28	0	0	2.6	-0.7
WJA	99	V	300-150	1175	6	1	8.2	0.1
WWI	99	V	300-150	50	0	0	4.3	1.2
XAX	99	V	300-150	1296	0	0	3.0	0.2
XRO	99	V	300-150	45	0	0	5.7	0.0
YZR	99	V	300-150	21	0	0	2.6	0.0

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 $10\,°$N - $90\,°$N, $70\,°$W - $40\,°$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 $10\,°$N - $90\,°$N, $70\,°$W - $40\,°$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)

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RADIOSONDE MONITORING STATISTICS (EUCOS)
         MONITORING CENTRE     : ECMWF
         ELEMENT MONITORED     : GEOPOTENTIAL HEIGHT (METRES)
         LEVEL                 :  50 HPA
         AREA                  : 0 - 90N, 100W - 40E
         PERIOD                : JAN 2026
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
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WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
01001	12	Z	50	31	6.1	-0.3
01001	00	Z	50	30	12.9	9.9
01028	12	Z	50	29	5.5	2.0
01028	00	Z	50	31	4.5	0.5
01400	00	Z	50	29	74.7	73.7
01400	12	Z	50	27	72.0	71.1
01415	00	Z	50	29	6.8	3.6
01415	12	Z	50	29	7.8	1.5
02591	00	Z	50	4	9.6	7.1
02591	12	Z	50	8	26.0	-6.8
02836	00	Z	50	31	7.0	-1.8
02836	12	Z	50	33	7.7	-2.6
02963	12	Z	50	32	7.0	-2.0
02963	00	Z	50	31	7.5	-1.3
03005	00	Z	50	27	8.2	-3.8
03005	12	Z	50	28	8.0	-4.0
03238	12	Z	50	1	6.1	-6.1
03238	00	Z	50	30	11.1	-1.4
03808	00	Z	50	29	7.5	1.4
03808	12	Z	50	29	8.4	1.4
03918	12	Z	50	2	9.2	5.9
03918	00	Z	50	27	15.6	-6.6
03953	00	Z	50	31	28.6	-13.4
03953	12	Z	50	31	22.0	-3.2
04018	00	Z	50	30	7.7	2.6
04018	12	Z	50	27	8.3	0.5
04220	12	Z	50	30	10.5	-6.6
04220	00	Z	50	28	10.4	-2.2
04270	00	Z	50	25	16.8	-11.5
04270	12	Z	50	26	26.8	-24.0
04320	12	Z	50	29	8.4	4.9
04320	00	Z	50	31	8.2	5.5
04339	00	Z	50	26	18.3	-13.4
04339	12	Z	50	26	19.3	-13.3
04360	00	Z	50	29	35.8	-33.3
04360	12	Z	50	25	41.5	-39.2
06011	12	Z	50	27	22.0	-20.3
06260	00	Z	50	31	30.1	4.1
06260	12	Z	50	6	7.1	1.5

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
06610	00	Z	50	31	11.4	3.6
06610	12	Z	50	31	11.7	4.4
07110	00	Z	50	29	19.5	-15.7
07110	12	Z	50	30	20.0	-16.5
07510	12	Z	50	27	10.4	0.2
07510	00	Z	50	28	17.8	-4.4
07645	00	Z	50	23	26.1	-2.7
07645	12	Z	50	29	21.5	8.7
07761	00	Z	50	29	23.5	-21.1
07761	12	Z	50	30	28.3	-21.8
08001	00	Z	50	29	10.3	0.9
08001	12	Z	50	31	10.2	-0.5
08221	00	Z	50	31	9.1	6.7
08221	12	Z	50	29	11.7	4.3
08302	00	Z	50	23	11.6	-4.8
08302	12	Z	50	27	9.0	-1.1
08508	12	Z	50	31	26.8	-4.2
08522	12	Z	50	28	8.4	-1.0
10035	00	Z	50	31	8.4	-0.8
10035	12	Z	50	31	9.5	-0.8
10393	12	Z	50	31	9.2	-0.8
10393	00	Z	50	31	10.6	-2.5
10410	12	Z	50	30	10.0	-2.2
10410	00	Z	50	31	6.4	1.1
10739	00	Z	50	30	15.6	-9.1
10739	12	Z	50	30	15.3	-8.2
11035	00	Z	50	27	11.7	-4.9
11035	12	Z	50	30	15.1	-6.3
12982	00	Z	50	30	9.6	-1.4
12982	12	Z	50	30	9.5	3.5
16245	12	Z	50	31	6.6	-1.0
16245	00	Z	50	29	7.1	-0.5
16429	00	Z	50	24	11.1	4.9
16429	12	Z	50	29	10.6	2.6
16622	00	Z	50	4	8.3	-7.1
16754	00	Z	50	18	22.2	-18.6
17607	12	Z	50	28	10.1	-3.3
26435	12	Z	50	6	3.8	2.0
60018	00	Z	50	30	8.3	5.0
60018	12	Z	50	31	9.3	1.4
7JUNA4	12	Z	50	4	92.8	78.2
7JUNA4	00	Z	50	4	15.5	6.4
9ZT9MR	12	Z	50	6	26.1	-25.2

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
9ZT9MR	00	Z	50	3	16.9	-16.0
ASDE09	12	Z	50	0	0.0	0.0
ATGU3F	00	Z	50	2	27.8	-6.6
ATGU3F	12	Z	50	2	14.1	-14.0
JNKN7J	12	Z	50	9	24.7	22.5
JNKN7J	00	Z	50	9	32.9	31.5
KJJF9X	12	Z	50	0	0.0	0.0
KJJF9X	00	Z	50	0	0.0	0.0
KMPLHP	12	Z	50	5	77.1	41.0
KMPLHP	00	Z	50	4	10.2	4.1
LRYQE3	12	Z	50	8	74.8	63.1
LRYQE3	00	Z	50	10	16.9	-11.0
TLH	12	Z	50	2	327.6	324.8
TLH	00	Z	50	0	0.0	0.0
USALY	00	Z	50	0	0.0	0.0
USCLL	00	Z	50	0	0.0	0.0
USCOU	00	Z	50	0	0.0	0.0
USSOM	00	Z	50	2	0.0	0.0
USVPI	00	Z	50	0	0.0	0.0
WDK38H	12	Z	50	4	9.1	-7.7
WFF	12	Z	50	1	368.1	368.1
WFF	00	Z	50	0	0.0	0.0
XKQLWQ	12	Z	50	11	41.2	23.2
YLV96W	00	Z	50	7	46.2	24.3
YLV96W	12	Z	50	3	89.1	84.2
ZVQEQC	12	Z	50	6	12.5	8.3

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                : JAN 2026
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
01001	12	V	50	30	3.3	0.0	0.2
01001	00	V	50	27	2.8	-0.1	-0.5
01028	12	V	50	26	2.8	0.4	-0.1
01028	00	V	50	29	2.9	-0.1	0.1
01400	00	V	50	26	3.7	0.6	0.0
01400	12	V	50	27	3.4	-0.3	-0.6
01415	00	V	50	26	3.0	-0.5	-0.2
01415	12	V	50	29	3.2	0.4	0.0
02591	00	V	50	2	3.6	-1.5	1.3
02591	12	V	50	7	3.3	0.2	-1.5
02836	00	V	50	0	0.0	0.0	0.0
02836	12	V	50	4	1.3	-0.3	0.4
02963	12	V	50	22	3.1	0.0	0.0
02963	00	V	50	0	0.0	0.0	0.0
03005	00	V	50	23	3.5	-0.5	-0.5
03005	12	V	50	28	3.3	0.0	0.3
03238	12	V	50	1	2.6	1.7	2.0
03238	00	V	50	28	3.7	0.6	-0.9
03808	00	V	50	26	3.8	0.1	-0.4
03808	12	V	50	29	3.9	-0.3	-0.5
03918	12	V	50	2	5.2	-3.5	1.8
03918	00	V	50	22	3.9	0.8	0.5
03953	00	V	50	30	3.8	0.0	-0.1
03953	12	V	50	31	3.3	0.0	-0.4
04018	00	V	50	25	4.8	0.4	-1.5
04018	12	V	50	27	3.3	0.1	-1.0
04220	12	V	50	30	3.5	-0.4	-0.8
04220	00	V	50	27	2.7	0.4	-0.6
04270	00	V	50	25	4.0	-1.0	-0.5
04270	12	V	50	26	3.8	0.3	0.1
04320	12	V	50	29	3.2	0.3	-0.5
04320	00	V	50	31	4.0	-0.7	-1.2
04339	00	V	50	25	3.6	0.1	-0.5
04339	12	V	50	26	3.3	0.1	-1.1
04360	00	V	50	28	3.0	-0.2	-0.2
04360	12	V	50	25	3.3	0.1	0.4
06011	12	V	50	27	3.9	-1.1	-0.5
06260	00	V	50	31	3.7	0.2	-0.9
06260	12	V	50	6	3.3	0.9	-0.2

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
06610	00	V	50	31	4.1	-0.2	-0.3
06610	12	V	50	31	3.8	-0.1	0.5
07110	00	V	50	25	2.9	0.0	-0.2
07110	12	V	50	30	3.2	-0.5	-0.3
07510	12	V	50	27	4.2	0.9	-0.2
07510	00	V	50	24	3.3	0.6	-0.2
07645	00	V	50	23	3.7	1.3	-0.8
07645	12	V	50	29	4.1	0.0	-0.1
07761	00	V	50	28	3.3	-0.1	-0.6
07761	12	V	50	30	3.7	0.5	0.4
08001	00	V	50	27	4.2	0.6	-0.7
08001	12	V	50	31	3.8	0.4	-0.3
08221	00	V	50	29	3.9	-0.7	0.3
08221	12	V	50	29	3.7	-0.2	-0.4
08302	00	V	50	20	3.4	-0.1	0.3
08302	12	V	50	26	3.9	-0.2	-0.3
08508	12	V	50	31	3.2	0.2	0.2
08522	12	V	50	27	3.4	0.3	0.3
10035	00	V	50	31	3.7	-0.5	-0.3
10035	12	V	50	31	3.4	-0.1	-0.8
10393	12	V	50	25	2.8	-0.4	-0.5
10393	00	V	50	25	3.3	0.2	-0.8
10410	12	V	50	29	3.5	0.4	-0.2
10410	00	V	50	31	3.3	0.9	-0.1
10739	00	V	50	27	3.2	-0.8	0.4
10739	12	V	50	30	3.2	0.0	-0.2
11035	00	V	50	24	3.9	-0.2	-0.1
11035	12	V	50	30	3.2	0.8	-0.6
12982	00	V	50	28	3.1	0.5	-0.2
12982	12	V	50	30	2.9	0.2	-0.6
16245	12	V	50	31	3.5	0.4	-0.7
16245	00	V	50	29	4.3	0.9	0.8
16429	00	V	50	24	5.0	-0.8	0.0
16429	12	V	50	29	4.7	-1.6	-0.9
16622	00	V	50	4	4.0	2.6	-0.7
16754	00	V	50	18	4.0	-0.2	0.0
17607	12	V	50	28	5.2	0.7	0.1
26435	12	V	50	4	2.6	-0.5	2.0
60018	00	V	50	27	3.5	-0.2	0.1
60018	12	V	50	31	3.5	-0.3	0.8
7JUNA4	12	V	50	4	4.8	2.3	2.9
7JUNA4	00	V	50	4	1.7	0.6	0.6
9ZT9MR	12	V	50	6	3.4	1.0	0.4

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
9ZT9MR	00	V	50	3	4.4	-0.2	-1.5
ASDE09	12	V	50	0	0.0	0.0	0.0
ATGU3F	00	V	50	2	2.5	0.8	1.8
ATGU3F	12	V	50	2	2.4	-1.3	-0.8
JNKN7J	12	V	50	9	4.4	1.3	-1.0
JNKN7J	00	V	50	9	3.7	-0.4	0.1
KJJF9X	12	V	50	0	0.0	0.0	0.0
KJJF9X	00	V	50	0	0.0	0.0	0.0
KMPLHP	12	V	50	5	3.0	-1.6	1.0
KMPLHP	00	V	50	4	8.7	2.2	3.2
LRYQE3	12	V	50	8	2.6	0.8	0.0
LRYQE3	00	V	50	10	3.4	-1.0	-0.4
TLH	12	V	50	2	2.9	0.2	0.7
TLH	00	V	50	0	0.0	0.0	0.0
USALY	00	V	50	0	0.0	0.0	0.0
USCLL	00	V	50	0	0.0	0.0	0.0
USCOU	00	V	50	0	0.0	0.0	0.0
USSOM	00	V	50	1	8.3	-3.9	7.3
USVPI	00	V	50	0	0.0	0.0	0.0
WDK38H	12	V	50	3	2.6	-1.5	-0.4
WFF	12	V	50	1	5.2	5.2	-0.2
WFF	00	V	50	0	0.0	0.0	0.0
XKQLWQ	12	V	50	11	4.5	1.8	0.1
YLV96W	00	V	50	7	3.7	2.2	0.3
YLV96W	12	V	50	3	2.6	0.6	0.8
ZVQEQC	12	V	50	6	4.1	-0.1	1.1

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                : JAN 2026
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
01001	12	Z	100	31	5.4	-1.3
01001	00	Z	100	30	10.4	8.2
01028	12	Z	100	30	4.3	0.4
01028	00	Z	100	31	5.8	-1.4
01400	00	Z	100	30	72.5	71.6
01400	12	Z	100	28	70.6	70.0
01415	00	Z	100	29	4.1	2.1
01415	12	Z	100	29	5.0	0.8
02591	00	Z	100	6	10.6	8.5
02591	12	Z	100	8	24.5	-7.4
02836	00	Z	100	31	6.4	-1.7
02836	12	Z	100	33	5.1	-1.1
02963	12	Z	100	32	6.8	-1.5
02963	00	Z	100	31	5.3	-1.7
03005	00	Z	100	27	6.6	-4.7
03005	12	Z	100	29	5.7	-3.4
03238	12	Z	100	1	14.0	-14.0
03238	00	Z	100	30	6.8	-1.7
03808	00	Z	100	29	6.0	-0.3
03808	12	Z	100	30	6.4	-0.5
03918	12	Z	100	2	9.0	-0.3
03918	00	Z	100	29	11.0	-5.5
03953	00	Z	100	31	28.8	-16.4
03953	12	Z	100	31	22.1	-5.4
04018	00	Z	100	30	6.7	2.1
04018	12	Z	100	29	7.1	-1.6
04220	12	Z	100	31	9.0	-6.8
04220	00	Z	100	29	9.6	-4.0
04270	00	Z	100	29	17.5	-14.2
04270	12	Z	100	29	24.8	-22.3
04320	12	Z	100	30	5.9	2.5
04320	00	Z	100	31	5.5	3.8
04339	00	Z	100	30	12.2	-9.3
04339	12	Z	100	27	14.5	-11.7
04360	00	Z	100	30	32.4	-24.6
04360	12	Z	100	29	36.5	-34.3
06011	12	Z	100	30	20.4	-18.9
06260	00	Z	100	31	30.0	4.9
06260	12	Z	100	6	6.7	-0.2

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
06610	00	Z	100	31	8.2	-1.3
06610	12	Z	100	32	8.8	1.7
07110	00	Z	100	30	15.7	-13.5
07110	12	Z	100	30	16.9	-14.9
07510	12	Z	100	30	13.1	0.9
07510	00	Z	100	30	14.4	-3.8
07645	00	Z	100	27	19.4	-5.5
07645	12	Z	100	30	16.7	1.6
07761	00	Z	100	31	21.7	-19.5
07761	12	Z	100	30	28.1	-21.4
08001	00	Z	100	31	9.9	-1.8
08001	12	Z	100	31	7.3	-1.4
08221	00	Z	100	31	7.3	2.1
08221	12	Z	100	29	9.4	1.1
08302	00	Z	100	23	13.2	-8.9
08302	12	Z	100	27	9.1	-2.6
08508	12	Z	100	31	24.4	-0.7
08522	12	Z	100	29	8.8	2.5
10035	00	Z	100	31	7.6	-2.3
10035	12	Z	100	31	8.4	-2.8
10393	12	Z	100	31	5.7	-0.5
10393	00	Z	100	31	5.2	-2.1
10410	12	Z	100	31	6.4	-2.0
10410	00	Z	100	31	6.4	-1.6
10739	00	Z	100	31	12.4	-10.5
10739	12	Z	100	30	10.8	-8.6
11035	00	Z	100	30	8.8	-5.1
11035	12	Z	100	32	12.2	-5.1
12982	00	Z	100	30	7.1	-3.0
12982	12	Z	100	31	6.5	2.3
16245	12	Z	100	31	7.2	-0.6
16245	00	Z	100	31	5.1	-0.3
16429	00	Z	100	26	9.6	3.5
16429	12	Z	100	29	7.3	1.3
16622	00	Z	100	11	14.1	-11.3
16754	00	Z	100	27	19.2	-16.4
17607	12	Z	100	29	7.7	-1.5
26435	12	Z	100	8	4.0	-2.4
60018	00	Z	100	31	9.0	5.8
60018	12	Z	100	31	8.6	3.0
7JUNA4	12	Z	100	4	42.3	30.8
7JUNA4	00	Z	100	4	9.8	3.6
9ZT9MR	12	Z	100	7	25.9	-25.2

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
9ZT9MR	00	Z	100	4	18.8	-17.8
ASDE09	12	Z	100	0	0.0	0.0
ATGU3F	00	Z	100	2	16.4	-5.0
ATGU3F	12	Z	100	2	20.6	-20.5
JNKN7J	12	Z	100	9	25.6	23.9
JNKN7J	00	Z	100	9	28.8	27.0
KJJF9X	12	Z	100	0	0.0	0.0
KJJF9X	00	Z	100	0	0.0	0.0
KMPLHP	12	Z	100	6	29.2	6.8
KMPLHP	00	Z	100	5	8.9	0.8
LRYQE3	12	Z	100	8	25.6	20.9
LRYQE3	00	Z	100	10	13.9	-10.3
TLH	12	Z	100	2	149.8	148.5
TLH	00	Z	100	0	0.0	0.0
USALY	00	Z	100	3	49.0	-23.9
USCLL	00	Z	100	6	12.1	4.7
USCOU	00	Z	100	2	9.1	-4.4
USSOM	00	Z	100	2	0.0	0.0
USVPI	00	Z	100	0	0.0	0.0
WDK38H	12	Z	100	5	9.2	-8.9
WFF	12	Z	100	1	173.1	173.1
WFF	00	Z	100	0	0.0	0.0
XKQLWQ	12	Z	100	11	35.4	8.7
YLV96W	00	Z	100	7	47.4	28.3
YLV96W	12	Z	100	6	56.8	38.0
ZVQEQC	12	Z	100	6	11.6	7.3

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                : JAN 2026
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
01001	12	V	100	30	3.0	-0.6	0.0
01001	00	V	100	27	3.0	0.0	-0.5
01028	12	V	100	29	2.8	0.6	-0.5
01028	00	V	100	30	2.6	-0.2	-0.4
01400	00	V	100	29	2.9	0.1	-0.1
01400	12	V	100	28	3.3	1.0	0.3
01415	00	V	100	29	2.9	0.5	0.5
01415	12	V	100	29	2.5	0.3	0.2
02591	00	V	100	5	4.7	-0.1	-0.1
02591	12	V	100	8	2.4	-0.2	0.5
02836	00	V	100	4	2.0	0.4	-0.9
02836	12	V	100	12	2.8	0.3	-0.1
02963	12	V	100	26	3.4	-0.4	-0.8
02963	00	V	100	0	0.0	0.0	0.0
03005	00	V	100	27	2.8	-0.1	-0.5
03005	12	V	100	28	2.9	0.7	-0.1
03238	12	V	100	1	6.6	5.7	3.3
03238	00	V	100	29	3.2	-0.1	-0.4
03808	00	V	100	29	2.7	-0.3	1.2
03808	12	V	100	30	3.7	0.5	0.0
03918	12	V	100	2	3.8	-0.2	2.6
03918	00	V	100	27	3.3	-0.2	-0.6
03953	00	V	100	30	3.0	0.7	0.0
03953	12	V	100	31	3.5	0.1	1.0
04018	00	V	100	30	3.5	0.4	-0.1
04018	12	V	100	29	3.0	0.0	0.1
04220	12	V	100	31	2.9	0.3	0.1
04220	00	V	100	28	3.7	-0.6	0.4
04270	00	V	100	29	2.5	-0.2	0.0
04270	12	V	100	29	3.1	-0.1	0.0
04320	12	V	100	30	2.7	0.5	0.2
04320	00	V	100	31	3.2	0.1	-0.1
04339	00	V	100	30	3.4	-0.4	-0.8
04339	12	V	100	27	3.2	0.3	-0.7
04360	00	V	100	30	2.6	-0.2	-0.1
04360	12	V	100	29	2.9	-0.5	0.0
06011	12	V	100	30	3.0	0.0	-0.5
06260	00	V	100	31	3.1	0.2	0.0
06260	12	V	100	6	3.0	-0.4	-0.1

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
06610	00	V	100	31	3.5	0.4	-0.6
06610	12	V	100	31	3.4	0.7	-0.8
07110	00	V	100	30	2.9	-0.3	-0.4
07110	12	V	100	30	3.5	0.4	-0.2
07510	12	V	100	30	7.7	-1.7	-1.0
07510	00	V	100	28	2.9	-0.7	0.0
07645	00	V	100	26	3.2	0.5	0.1
07645	12	V	100	30	3.3	0.6	0.7
07761	00	V	100	31	3.9	0.0	0.5
07761	12	V	100	30	4.3	0.9	-0.2
08001	00	V	100	31	3.3	0.2	-0.7
08001	12	V	100	31	3.6	0.5	-0.2
08221	00	V	100	31	3.2	0.4	-0.5
08221	12	V	100	29	3.2	-0.2	1.1
08302	00	V	100	22	3.6	0.4	0.7
08302	12	V	100	27	3.9	0.2	-0.4
08508	12	V	100	30	3.5	-0.6	-0.5
08522	12	V	100	28	3.4	0.0	-0.8
10035	00	V	100	31	3.0	0.2	0.4
10035	12	V	100	31	2.8	0.1	-0.2
10393	12	V	100	30	2.2	0.3	-0.1
10393	00	V	100	30	2.4	-0.3	0.4
10410	12	V	100	31	2.7	-0.4	-0.2
10410	00	V	100	31	2.9	1.1	-0.6
10739	00	V	100	28	3.4	0.4	-0.5
10739	12	V	100	30	2.9	-0.2	-0.1
11035	00	V	100	28	3.0	0.3	0.4
11035	12	V	100	31	3.3	0.4	0.0
12982	00	V	100	30	3.3	0.0	-0.5
12982	12	V	100	31	3.0	0.0	-0.1
16245	12	V	100	31	4.1	1.1	0.0
16245	00	V	100	31	3.8	0.0	0.8
16429	00	V	100	26	3.7	0.6	-0.6
16429	12	V	100	29	3.2	0.0	0.5
16622	00	V	100	11	4.5	-0.1	-1.8
16754	00	V	100	24	4.0	-0.3	0.2
17607	12	V	100	28	4.8	0.7	-0.4
26435	12	V	100	8	3.5	0.0	-0.6
60018	00	V	100	31	4.6	0.8	0.2
60018	12	V	100	31	4.0	-0.1	-0.5
7JUNA4	12	V	100	4	3.0	-0.2	1.1
7JUNA4	00	V	100	4	2.7	0.2	0.3
9ZT9MR	12	V	100	7	3.1	-0.2	1.1

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
9ZT9MR	00	V	100	4	2.9	-0.4	1.4
ASDE09	12	V	100	0	0.0	0.0	0.0
ATGU3F	00	V	100	2	3.0	1.4	0.6
ATGU3F	12	V	100	2	2.0	-0.9	1.3
JNKN7J	12	V	100	9	3.0	0.7	0.8
JNKN7J	00	V	100	9	3.8	0.0	-0.4
KJJF9X	12	V	100	0	0.0	0.0	0.0
KJJF9X	00	V	100	0	0.0	0.0	0.0
KMPLHP	12	V	100	6	2.9	0.6	0.8
KMPLHP	00	V	100	5	4.1	1.1	0.9
LRYQE3	12	V	100	8	2.5	-0.1	0.9
LRYQE3	00	V	100	10	3.8	0.1	1.3
TLH	12	V	100	2	1.8	-0.6	-0.6
TLH	00	V	100	0	0.0	0.0	0.0
USALY	00	V	100	3	6.8	2.3	0.2
USCLL	00	V	100	3	2.1	-1.1	0.3
USCOU	00	V	100	1	3.6	1.4	3.3
USSOM	00	V	100	1	1.4	-1.2	0.7
USVPI	00	V	100	0	0.0	0.0	0.0
WDK38H	12	V	100	4	3.2	-0.6	-0.7
WFF	12	V	100	1	6.4	-6.2	-1.5
WFF	00	V	100	0	0.0	0.0	0.0
XKQLWQ	12	V	100	11	2.6	0.5	-0.4
YLV96W	00	V	100	7	3.8	-1.3	0.4
YLV96W	12	V	100	6	3.0	0.5	0.5
ZVQEQC	12	V	100	6	5.6	3.6	1.3

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                : JAN 2026
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
01001	12	Z	500	32	5.1	2.1
01001	00	Z	500	30	11.5	10.7
01028	12	Z	500	30	2.7	1.4
01028	00	Z	500	31	3.1	1.8
01400	00	Z	500	30	73.0	72.5
01400	12	Z	500	29	72.0	71.7
01415	00	Z	500	29	4.6	3.7
01415	12	Z	500	29	4.4	3.3
02591	00	Z	500	9	7.1	6.4
02591	12	Z	500	8	8.4	8.0
02836	00	Z	500	31	3.7	1.2
02836	12	Z	500	33	2.9	1.9
02963	12	Z	500	31	4.1	2.0
02963	00	Z	500	31	3.3	1.5
03005	00	Z	500	27	3.0	0.1
03005	12	Z	500	29	2.8	0.4
03238	12	Z	500	1	4.6	4.6
03238	00	Z	500	31	3.9	2.2
03808	00	Z	500	29	5.4	4.6
03808	12	Z	500	30	3.9	2.3
03918	12	Z	500	2	4.2	1.6
03918	00	Z	500	30	6.2	-0.2
03953	00	Z	500	31	16.6	-6.3
03953	12	Z	500	32	12.0	-2.1
04018	00	Z	500	30	5.7	4.4
04018	12	Z	500	29	6.0	3.1
04220	12	Z	500	31	4.5	-0.8
04220	00	Z	500	31	5.9	-0.3
04270	00	Z	500	31	11.1	-9.1
04270	12	Z	500	31	14.8	-10.9
04320	12	Z	500	30	5.8	4.7
04320	00	Z	500	31	6.5	5.4
04339	00	Z	500	31	7.4	-4.8
04339	12	Z	500	30	9.3	-4.8
04360	00	Z	500	30	13.4	-11.1
04360	12	Z	500	31	17.2	-15.4
06011	12	Z	500	31	5.8	-2.9
06260	00	Z	500	31	5.9	1.7
06260	12	Z	500	6	3.3	1.8

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
06610	00	Z	500	32	3.4	1.8
06610	12	Z	500	33	3.5	2.6
07110	00	Z	500	31	4.8	-1.0
07110	12	Z	500	30	5.6	-2.2
07510	12	Z	500	33	8.9	4.4
07510	00	Z	500	34	8.4	4.4
07645	00	Z	500	32	6.6	-1.1
07645	12	Z	500	35	14.4	4.2
07761	00	Z	500	31	7.2	-5.3
07761	12	Z	500	31	9.2	-5.4
08001	00	Z	500	31	5.2	2.5
08001	12	Z	500	31	4.5	2.7
08221	00	Z	500	31	4.3	3.6
08221	12	Z	500	29	4.2	3.4
08302	00	Z	500	23	8.5	-7.5
08302	12	Z	500	27	5.2	-4.1
08508	12	Z	500	31	28.5	7.7
08522	12	Z	500	29	6.7	4.5
10035	00	Z	500	32	5.2	0.5
10035	12	Z	500	31	4.2	-0.4
10393	12	Z	500	31	3.0	0.1
10393	00	Z	500	31	2.3	1.2
10410	12	Z	500	31	2.2	-0.9
10410	00	Z	500	32	3.1	1.4
10739	00	Z	500	31	7.1	-6.3
10739	12	Z	500	31	7.9	-7.3
11035	00	Z	500	32	4.7	-0.8
11035	12	Z	500	34	5.5	0.7
12982	00	Z	500	32	5.0	1.6
12982	12	Z	500	31	3.8	1.9
16245	12	Z	500	31	5.7	4.1
16245	00	Z	500	31	4.9	3.8
16429	00	Z	500	26	6.1	5.5
16429	12	Z	500	29	6.2	5.4
16622	00	Z	500	28	5.2	3.1
16754	00	Z	500	29	9.6	-6.3
17607	12	Z	500	29	5.1	4.0
26435	12	Z	500	16	1.8	0.6
60018	00	Z	500	31	6.5	4.5
60018	12	Z	500	31	7.1	3.9
7JUNA4	12	Z	500	4	5.7	1.2
7JUNA4	00	Z	500	5	4.6	2.5
9ZT9MR	12	Z	500	8	11.8	-9.3

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
9ZT9MR	00	Z	500	5	17.8	-16.0
ASDE09	12	Z	500	1	33.1	33.1
ATGU3F	00	Z	500	3	11.2	-6.6
ATGU3F	12	Z	500	2	9.1	-8.5
JNKN7J	12	Z	500	9	41.7	40.7
JNKN7J	00	Z	500	9	36.2	36.0
KJJF9X	12	Z	500	0	0.0	0.0
KJJF9X	00	Z	500	0	0.0	0.0
KMPLHP	12	Z	500	6	6.5	2.5
KMPLHP	00	Z	500	5	11.1	7.8
LRYQE3	12	Z	500	10	8.2	-0.6
LRYQE3	00	Z	500	10	7.1	-3.5
TLH	12	Z	500	5	31.0	29.1
TLH	00	Z	500	2	17.9	16.8
USALY	00	Z	500	5	35.6	18.4
USCLL	00	Z	500	4	4.0	1.0
USCOU	00	Z	500	3	3.2	-0.7
USSOM	00	Z	500	0	0.0	0.0
USVPI	00	Z	500	2	23.5	-7.1
WDK38H	12	Z	500	9	10.8	-10.4
WFF	12	Z	500	4	17.8	16.2
WFF	00	Z	500	3	16.7	16.2
XKQLWQ	12	Z	500	11	35.6	-8.7
YLV96W	00	Z	500	9	49.9	30.2
YLV96W	12	Z	500	7	60.7	43.8
ZVQEQC	12	Z	500	7	6.7	2.3

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                : JAN 2026
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
01001	12	V	500	31	2.4	0.2	0.1
01001	00	V	500	30	2.1	-0.1	-0.6
01028	12	V	500	30	2.4	-0.1	0.0
01028	00	V	500	31	1.9	0.1	-0.3
01400	00	V	500	30	3.0	0.6	0.7
01400	12	V	500	29	2.7	-0.1	-0.4
01415	00	V	500	29	2.3	-0.1	-0.2
01415	12	V	500	29	2.6	-0.3	-0.1
02591	00	V	500	9	3.1	-0.5	0.6
02591	12	V	500	8	3.4	0.5	0.0
02836	00	V	500	29	2.9	0.0	0.6
02836	12	V	500	30	2.2	0.3	-0.3
02963	12	V	500	31	2.0	0.0	-0.8
02963	00	V	500	30	1.7	-0.1	0.2
03005	00	V	500	27	2.4	0.2	-0.1
03005	12	V	500	28	3.2	0.8	0.0
03238	12	V	500	1	2.0	-1.7	1.1
03238	00	V	500	30	2.5	-0.1	-0.7
03808	00	V	500	29	2.9	-0.1	0.4
03808	12	V	500	30	2.6	0.1	-0.5
03918	12	V	500	2	3.1	0.0	-1.3
03918	00	V	500	30	2.3	-0.4	0.0
03953	00	V	500	31	3.2	0.0	0.1
03953	12	V	500	31	3.5	0.0	0.5
04018	00	V	500	30	2.6	0.4	0.0
04018	12	V	500	29	3.3	0.0	-0.1
04220	12	V	500	31	3.2	0.4	0.5
04220	00	V	500	30	3.6	-0.1	-0.4
04270	00	V	500	31	4.8	-1.2	-0.3
04270	12	V	500	31	4.1	-0.5	0.0
04320	12	V	500	30	2.4	0.0	-0.4
04320	00	V	500	31	3.0	-0.4	0.2
04339	00	V	500	31	3.4	0.6	0.1
04339	12	V	500	30	3.6	0.3	-0.4
04360	00	V	500	30	2.4	-0.7	0.4
04360	12	V	500	31	3.2	-0.4	1.4
06011	12	V	500	31	3.0	1.0	0.0
06260	00	V	500	31	2.4	0.5	0.3
06260	12	V	500	6	3.2	0.9	0.3

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
06610	00	V	500	31	2.8	0.3	-0.4
06610	12	V	500	31	2.3	-0.1	-0.5
07110	00	V	500	31	3.0	0.1	-0.4
07110	12	V	500	30	2.9	0.2	-0.4
07510	12	V	500	31	3.0	0.3	0.2
07510	00	V	500	31	3.9	-0.1	0.0
07645	00	V	500	30	3.4	-0.2	0.7
07645	12	V	500	31	2.7	0.0	0.3
07761	00	V	500	31	2.7	-0.1	0.0
07761	12	V	500	31	3.3	0.2	-0.5
08001	00	V	500	31	3.5	0.4	-0.5
08001	12	V	500	31	3.1	0.6	0.4
08221	00	V	500	31	2.6	0.2	0.0
08221	12	V	500	29	2.9	-0.2	-0.4
08302	00	V	500	23	2.9	-0.3	0.1
08302	12	V	500	27	2.2	-0.2	-0.4
08508	12	V	500	31	3.0	0.7	-0.8
08522	12	V	500	29	2.5	0.2	0.1
10035	00	V	500	31	2.1	0.2	-0.3
10035	12	V	500	31	2.3	0.0	0.2
10393	12	V	500	31	1.9	0.2	-0.1
10393	00	V	500	31	2.1	0.4	-0.1
10410	12	V	500	31	2.1	-0.1	-0.3
10410	00	V	500	31	2.2	0.0	-0.1
10739	00	V	500	28	2.4	-0.1	0.0
10739	12	V	500	30	2.1	0.3	-0.2
11035	00	V	500	30	2.5	0.1	0.2
11035	12	V	500	31	2.6	0.1	0.0
12982	00	V	500	31	2.8	0.1	-0.7
12982	12	V	500	31	2.3	0.1	0.0
16245	12	V	500	31	2.8	0.2	0.0
16245	00	V	500	31	3.1	-0.4	-0.6
16429	00	V	500	26	3.5	0.2	0.0
16429	12	V	500	29	3.5	0.5	-0.4
16622	00	V	500	28	2.6	-0.3	-0.2
16754	00	V	500	27	2.6	0.8	-0.4
17607	12	V	500	29	2.5	0.1	0.3
26435	12	V	500	15	2.0	0.2	-1.0
60018	00	V	500	31	2.1	0.1	0.1
60018	12	V	500	31	2.0	0.9	0.0
7JUNA4	12	V	500	4	3.3	0.4	-0.8
7JUNA4	00	V	500	5	3.1	-0.6	-1.8
9ZT9MR	12	V	500	8	3.6	-0.5	-1.0

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
9ZT9MR	00	V	500	5	3.8	1.8	-1.1
ASDE09	12	V	500	1	3.6	3.5	0.7
ATGU3F	00	V	500	3	1.5	0.6	0.9
ATGU3F	12	V	500	2	4.5	-0.2	-2.2
JNKN7J	12	V	500	9	2.8	-0.2	0.4
JNKN7J	00	V	500	9	4.0	0.8	-0.4
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	6	3.6	1.1	-0.3
KMPLHP	00	V	500	5	3.0	-0.8	-0.2
LRYQE3	12	V	500	10	2.7	-0.8	0.7
LRYQE3	00	V	500	10	4.0	-0.6	-1.3
TLH	12	V	500	5	4.1	2.0	0.3
TLH	00	V	500	2	3.4	1.3	2.5
USALY	00	V	500	4	4.0	1.2	0.0
USCLL	00	V	500	3	2.5	-0.8	1.2
USCOU	00	V	500	2	2.0	-0.3	0.8
USSOM	00	V	500	0	0.0	0.0	0.0
USVPI	00	V	500	2	4.7	-2.2	4.0
WDK38H	12	V	500	9	1.8	1.0	-0.1
WFF	12	V	500	4	4.2	0.5	0.6
WFF	00	V	500	3	1.0	0.5	-0.2
XKQLWQ	12	V	500	11	2.9	0.5	0.4
YLV96W	00	V	500	9	3.0	-1.1	-0.3
YLV96W	12	V	500	7	2.5	0.6	1.1
ZVQEQC	12	V	500	7	4.7	-0.9	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                : JAN 2026
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
01001	12	Z	850	32	3.8	1.1
01001	00	Z	850	30	10.2	9.4
01028	12	Z	850	30	2.3	1.1
01028	00	Z	850	31	3.0	1.2
01400	00	Z	850	30	74.1	74.0
01400	12	Z	850	29	73.5	73.2
01415	00	Z	850	29	4.4	3.6
01415	12	Z	850	29	4.6	3.8
02591	00	Z	850	9	9.1	8.8
02591	12	Z	850	8	9.1	8.8
02836	00	Z	850	31	3.7	2.7
02836	12	Z	850	33	3.8	3.0
02963	12	Z	850	31	2.7	2.1
02963	00	Z	850	32	2.6	1.1
03005	00	Z	850	27	2.2	1.3
03005	12	Z	850	29	2.1	0.6
03238	12	Z	850	1	3.4	3.4
03238	00	Z	850	31	3.3	2.7
03808	00	Z	850	29	4.4	4.1
03808	12	Z	850	30	4.7	3.4
03918	12	Z	850	2	2.9	-1.3
03918	00	Z	850	30	4.9	0.5
03953	00	Z	850	31	3.0	-0.2
03953	12	Z	850	32	6.6	2.0
04018	00	Z	850	30	3.4	2.2
04018	12	Z	850	30	4.3	1.8
04220	12	Z	850	31	6.0	-2.9
04220	00	Z	850	31	6.4	-4.1
04270	00	Z	850	31	8.7	-7.1
04270	12	Z	850	30	8.1	-6.9
04320	12	Z	850	31	4.8	1.8
04320	00	Z	850	31	3.4	1.4
04339	00	Z	850	31	11.0	-9.4
04339	12	Z	850	30	11.3	-7.3
04360	00	Z	850	30	11.0	-9.4
04360	12	Z	850	31	12.2	-9.3
06011	12	Z	850	31	2.8	-1.4
06260	00	Z	850	31	5.2	-0.4
06260	12	Z	850	6	1.7	0.0

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
06610	00	Z	850	32	2.0	0.7
06610	12	Z	850	33	2.6	-0.1
07110	00	Z	850	31	3.2	2.4
07110	12	Z	850	31	3.1	2.2
07510	12	Z	850	33	5.8	3.1
07510	00	Z	850	35	5.7	1.8
07645	00	Z	850	32	4.1	-1.4
07645	12	Z	850	35	3.4	-0.8
07761	00	Z	850	31	3.9	-3.5
07761	12	Z	850	31	3.4	-2.5
08001	00	Z	850	31	3.1	2.1
08001	12	Z	850	31	3.3	0.6
08221	00	Z	850	31	2.9	2.1
08221	12	Z	850	29	3.9	3.1
08302	00	Z	850	23	9.4	-9.1
08302	12	Z	850	27	7.6	-7.0
08508	12	Z	850	31	9.8	2.4
08522	12	Z	850	31	3.6	2.7
10035	00	Z	850	32	4.1	-0.1
10035	12	Z	850	31	3.7	-0.2
10393	12	Z	850	31	2.3	-0.2
10393	00	Z	850	31	1.7	-0.3
10410	12	Z	850	31	1.8	-0.5
10410	00	Z	850	32	2.2	0.3
10739	00	Z	850	31	8.0	-7.2
10739	12	Z	850	31	8.5	-7.8
11035	00	Z	850	32	4.4	-2.3
11035	12	Z	850	34	3.6	-0.6
12982	00	Z	850	32	2.7	1.5
12982	12	Z	850	31	2.7	1.6
16245	12	Z	850	31	3.1	2.2
16245	00	Z	850	31	3.7	2.9
16429	00	Z	850	27	3.5	2.3
16429	12	Z	850	29	3.3	1.8
16622	00	Z	850	30	5.8	3.3
16754	00	Z	850	30	5.5	-4.7
17607	12	Z	850	29	2.9	0.9
26435	12	Z	850	16	2.2	-0.4
60018	00	Z	850	31	3.1	0.3
60018	12	Z	850	31	3.5	-0.4
7JUNA4	12	Z	850	5	6.4	3.0
7JUNA4	00	Z	850	6	6.9	4.3
9ZT9MR	12	Z	850	8	11.5	-11.3

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	BIAS
9ZT9MR	00	Z	850	5	12.9	-12.5
ASDE09	12	Z	850	1	41.1	41.1
ATGU3F	00	Z	850	5	10.2	-7.4
ATGU3F	12	Z	850	3	8.8	-8.1
JNKN7J	12	Z	850	9	46.8	46.2
JNKN7J	00	Z	850	9	40.6	40.3
KJJF9X	12	Z	850	0	0.0	0.0
KJJF9X	00	Z	850	0	0.0	0.0
KMPLHP	12	Z	850	6	7.9	5.6
KMPLHP	00	Z	850	5	7.6	4.4
LRYQE3	12	Z	850	10	9.8	0.1
LRYQE3	00	Z	850	10	7.7	-2.2
TLH	12	Z	850	5	17.3	-4.8
TLH	00	Z	850	3	9.2	0.3
USALY	00	Z	850	5	30.7	16.9
USCLL	00	Z	850	4	1.7	-0.9
USCOU	00	Z	850	3	3.8	-2.7
USSOM	00	Z	850	1	0.0	0.0
USVPI	00	Z	850	2	27.4	-7.1
WDK38H	12	Z	850	9	13.0	-12.7
WFF	12	Z	850	5	20.9	-16.1
WFF	00	Z	850	6	15.7	-14.4
XKQLWQ	12	Z	850	11	37.8	-17.0
YLV96W	00	Z	850	9	44.2	26.5
YLV96W	12	Z	850	11	52.4	30.1
ZVQEQC	12	Z	850	7	3.0	-1.5

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

```
RADIOSONDE MONITORING STATISTICS (EUCOS)
         MONITORING CENTRE     : ECMWF
         ELEMENT MONITORED     : WIND (M/S)
         LEVEL                 : 850 HPA
         AREA                  : 0 - 90N, 100W - 40E
         PERIOD                : JAN 2026
         STANDARD OF COMPARISON: FIRST-GUESS FIELD
```

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
01001	12	V	850	31	3.5	-0.5	0.6
01001	00	V	850	30	3.0	-0.7	-0.4
01028	12	V	850	30	3.0	0.6	-0.4
01028	00	V	850	31	3.1	-0.5	-0.9
01400	00	V	850	30	2.3	0.3	0.2
01400	12	V	850	29	2.7	0.4	0.0
01415	00	V	850	29	4.0	-0.1	-1.2
01415	12	V	850	29	3.1	0.0	-0.2
02591	00	V	850	9	3.7	0.8	0.8
02591	12	V	850	8	3.0	0.6	-1.1
02836	00	V	850	30	2.2	0.4	0.1
02836	12	V	850	31	2.1	0.0	0.2
02963	12	V	850	31	2.2	-0.1	-0.6
02963	00	V	850	30	2.3	-0.5	-0.1
03005	00	V	850	27	2.5	0.1	0.0
03005	12	V	850	28	2.5	-0.1	0.7
03238	12	V	850	1	1.1	0.4	-1.0
03238	00	V	850	30	2.5	-0.4	-0.1
03808	00	V	850	29	2.7	0.7	0.1
03808	12	V	850	30	2.8	0.0	-0.3
03918	12	V	850	2	1.5	1.2	-0.5
03918	00	V	850	30	2.6	0.4	-0.7
03953	00	V	850	31	2.9	0.5	0.4
03953	12	V	850	31	3.7	0.6	0.6
04018	00	V	850	30	2.5	0.1	0.4
04018	12	V	850	30	2.6	-0.2	0.3
04220	12	V	850	31	4.8	0.5	0.3
04220	00	V	850	30	4.8	-0.1	-0.6
04270	00	V	850	31	6.9	1.6	0.8
04270	12	V	850	30	6.4	1.4	-0.2
04320	12	V	850	31	2.9	-0.2	0.3
04320	00	V	850	31	3.0	0.0	0.3
04339	00	V	850	31	4.6	0.6	-0.8
04339	12	V	850	30	4.8	0.5	0.7
04360	00	V	850	30	8.0	3.6	-0.1
04360	12	V	850	31	7.1	2.5	-0.5
06011	12	V	850	31	2.6	-0.1	0.2
06260	00	V	850	31	1.7	0.1	-0.4
06260	12	V	850	6	1.7	-0.2	-0.2

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
06610	00	V	850	31	2.9	0.2	0.6
06610	12	V	850	31	3.0	0.5	0.5
07110	00	V	850	31	2.6	0.1	-0.4
07110	12	V	850	30	3.3	0.1	-0.4
07510	12	V	850	31	2.8	-0.1	-0.4
07510	00	V	850	31	2.8	0.3	-0.2
07645	00	V	850	30	4.3	0.0	0.5
07645	12	V	850	31	3.6	-1.1	1.2
07761	00	V	850	31	3.8	1.1	-1.1
07761	12	V	850	31	3.3	0.0	-0.5
08001	00	V	850	31	3.5	-0.2	-0.4
08001	12	V	850	31	3.1	0.2	-0.4
08221	00	V	850	31	3.1	0.2	-0.4
08221	12	V	850	29	2.9	-0.1	-0.3
08302	00	V	850	23	3.1	0.3	-0.1
08302	12	V	850	27	3.2	0.2	0.3
08508	12	V	850	31	3.5	0.5	-0.7
08522	12	V	850	31	3.6	-0.1	0.2
10035	00	V	850	31	2.4	0.3	0.2
10035	12	V	850	31	2.9	0.2	-0.1
10393	12	V	850	31	2.5	0.1	-0.2
10393	00	V	850	31	2.6	-0.1	-0.4
10410	12	V	850	31	1.9	0.0	-0.1
10410	00	V	850	31	2.3	0.3	-0.2
10739	00	V	850	28	3.1	0.2	-0.1
10739	12	V	850	30	3.9	-0.9	-0.8
11035	00	V	850	30	2.5	-0.7	0.7
11035	12	V	850	31	2.3	0.3	0.0
12982	00	V	850	31	3.1	0.2	-0.6
12982	12	V	850	31	3.0	0.5	-0.7
16245	12	V	850	31	3.7	0.8	-0.4
16245	00	V	850	31	3.0	0.0	0.3
16429	00	V	850	27	3.4	-0.4	-0.2
16429	12	V	850	29	3.2	0.0	-0.1
16622	00	V	850	30	2.8	0.5	0.0
16754	00	V	850	28	4.0	-0.5	-0.8
17607	12	V	850	29	3.5	-0.1	-0.2
26435	12	V	850	15	2.7	-0.4	-0.1
60018	00	V	850	31	4.0	-1.4	-0.5
60018	12	V	850	31	4.1	-0.3	-0.9
7JUNA4	12	V	850	5	2.5	0.9	0.9
7JUNA4	00	V	850	6	2.7	-1.0	0.2
9ZT9MR	12	V	850	8	2.8	-0.2	-0.6

RADIOSONDE MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	OBS RECD	RMS	UBIAS	VBIAS
9ZT9MR	00	V	850	5	2.8	0.4	-0.3
ASDE09	12	V	850	1	3.2	-1.8	2.6
ATGU3F	00	V	850	5	2.5	0.2	-0.7
ATGU3F	12	V	850	3	1.5	-0.3	-0.4
JNKN7J	12	V	850	9	2.3	-0.7	-0.3
JNKN7J	00	V	850	9	3.3	-0.5	-1.3
KJJF9X	12	V	850	0	0.0	0.0	0.0
KJJF9X	00	V	850	0	0.0	0.0	0.0
KMPLHP	12	V	850	6	2.5	-0.1	0.5
KMPLHP	00	V	850	5	3.6	2.1	-1.8
LRYQE3	12	V	850	10	2.4	0.5	-0.8
LRYQE3	00	V	850	10	3.0	-0.1	-0.8
TLH	12	V	850	5	2.1	1.2	-0.1
TLH	00	V	850	3	2.8	-1.8	-1.0
USALY	00	V	850	4	2.9	0.6	-0.1
USCLL	00	V	850	3	1.9	1.3	1.1
USCOU	00	V	850	2	3.0	1.4	-1.1
USSOM	00	V	850	1	4.9	-4.8	-0.7
USVPI	00	V	850	2	4.0	-2.0	-0.1
WDK38H	12	V	850	9	2.4	0.6	0.2
WFF	12	V	850	5	3.1	-0.3	-0.9
WFF	00	V	850	6	2.6	0.0	0.7
XKQLWQ	12	V	850	11	2.6	0.6	-0.5
YLV96W	00	V	850	9	2.2	-0.5	0.2
YLV96W	12	V	850	10	2.7	-0.1	-0.2
ZVQEQC	12	V	850	7	3.0	-1.0	-1.1

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

```
DRIFTER MONITORING STATISTICS (EUCOS)
         MONITORING CENTRE      : ECMWF
         ELEMENT MONITORED      : SURFACE PRESSURE (HPA)
         AREA                   : 10N - 90N, 70W - 40E
         PERIOD                 : JAN 2026
         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
1300008	99	P	SUR	15	-38	616	0	0.3	0.1	0.3
1300130	99	P	SUR	28	-16	743	0	0.3	0.1	0.3
1300131	99	P	SUR	28	-17	743	0	0.3	0.1	0.3
1301622	99	P	SUR	34	-43	744	0	1.6	0.2	1.7
1301718	99	P	SUR	32	-50	175	0	0.3	0.0	0.3
1301726	99	P	SUR	27	-55	732	0	0.3	-0.1	0.3
1301773	99	P	SUR	28	-49	732	0	0.3	0.0	0.3
1301778	99	P	SUR	21	-58	732	0	0.3	-0.1	0.3
1301782	99	P	SUR	47	-22	732	0	0.5	0.0	0.5
1301784	99	P	SUR	31	-14	732	0	0.3	-0.1	0.3
1301785	99	P	SUR	33	-23	731	0	0.3	0.0	0.3
1301805	99	P	SUR	64	-23	732	0	0.6	0.4	0.7
1301806	99	P	SUR	50	-46	732	0	0.9	0.3	0.9
1301808	99	P	SUR	63	-11	710	0	0.5	0.4	0.6
1301809	99	P	SUR	50	-48	731	0	0.7	0.3	0.8
1301810	99	P	SUR	28	-35	732	0	0.2	-0.2	0.3
1301814	99	P	SUR	27	-32	732	0	0.2	0.2	0.3
1301819	99	P	SUR	24	-52	732	0	0.3	-0.4	0.5
1301822	99	P	SUR	24	-48	606	0	0.3	0.2	0.3
1301823	99	P	SUR	27	-51	732	0	0.3	0.0	0.3
1801670	99	P	SUR	51	-13	670	0	0.6	0.3	0.6
1801671	99	P	SUR	45	-5	9	0	0.1	-0.4	0.5
1801672	99	P	SUR	29	-20	134	0	0.3	-0.5	0.6
1801675	99	P	SUR	56	-20	600	0	0.5	0.3	0.6
1801695	99	P	SUR	51	-46	732	4	0.7	-0.3	0.8
1801711	99	P	SUR	37	19	252	0	0.4	0.2	0.5
1801716	99	P	SUR	27	-46	732	0	0.6	0.7	0.9
1801732	99	P	SUR	45	-24	732	0	0.5	-0.2	0.6
1801777	99	P	SUR	35	-34	743	0	0.4	0.2	0.4
1801778	99	P	SUR	50	-32	744	0	0.7	-0.2	0.7
1801945	99	P	SUR	45	-49	394	0	0.7	0.6	1.0
1801946	99	P	SUR	45	-38	323	0	0.8	0.4	0.9
2801968	99	P	SUR	50	-11	504	0	0.5	0.1	0.5
2801970	99	P	SUR	30	-13	732	0	0.3	-0.3	0.5
2801979	99	P	SUR	61	-50	732	1	0.8	-0.1	0.8
2801980	99	P	SUR	59	-42	732	1	0.6	0.2	0.7

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
2802007	99	P	SUR	22	-49	732	0	0.4	0.3	0.5
2802008	99	P	SUR	65	-40	602	0	0.7	-0.1	0.7
2802010	99	P	SUR	19	-58	711	0	1.1	1.5	1.9
2802011	99	P	SUR	42	-28	732	0	0.6	-0.4	0.7
2802021	99	P	SUR	37	19	715	0	0.4	0.0	0.4
2802022	99	P	SUR	32	-38	732	0	0.3	-0.1	0.3
2802100	99	P	SUR	70	-2	696	0	0.5	0.5	0.7
2802124	99	P	SUR	26	-36	638	0	0.3	0.2	0.3
2802242	99	P	SUR	45	-51	464	12	4.3	3.3	5.4
2802244	99	P	SUR	51	-42	581	45	2.3	0.5	2.4
2802245	99	P	SUR	44	-54	163	0	0.8	2.3	2.4
3801571	99	P	SUR	41	-24	617	0	0.5	0.2	0.5
3801574	99	P	SUR	33	-17	624	0	0.3	-0.1	0.3
3801575	99	P	SUR	59	-8	699	0	0.4	0.1	0.4
3801596	99	P	SUR	31	-46	732	0	0.3	-0.3	0.4
3801598	99	P	SUR	38	-45	36	0	0.4	-0.1	0.5
3801612	99	P	SUR	26	-53	732	0	0.3	0.0	0.3
3801620	99	P	SUR	38	15	637	0	0.6	0.1	0.6
3801625	99	P	SUR	19	-52	732	0	0.4	0.8	0.9
3801676	99	P	SUR	79	16	669	0	1.0	0.0	1.0
3801703	99	P	SUR	56	-57	488	8	2.3	-0.3	2.3
3801825	99	P	SUR	50	-54	709	0	0.6	-0.2	0.6
3801834	99	P	SUR	42	-37	741	0	0.5	0.2	0.5
3801835	99	P	SUR	41	-44	742	0	0.5	0.2	0.6
3801838	99	P	SUR	46	-47	628	0	0.7	0.2	0.7
3801839	99	P	SUR	47	-43	630	0	1.1	0.3	1.2
3801840	99	P	SUR	45	-49	628	0	0.6	0.8	0.9
4100043	99	P	SUR	21	-65	4464	0	0.3	-0.5	0.5
4100044	99	P	SUR	22	-59	4464	0	0.3	-0.4	0.5
4100046	99	P	SUR	24	-68	4464	0	0.3	-0.1	0.3
4100049	99	P	SUR	28	-62	4464	0	0.3	-0.7	0.7
4100052	99	P	SUR	18	-65	3707	0	0.2	-0.8	0.8
4100053	99	P	SUR	18	-66	3713	0	0.3	-0.6	0.7
4100056	99	P	SUR	18	-65	3614	0	0.2	-0.6	0.6
4101725	99	P	SUR	18	-63	731	0	0.2	-0.1	0.3
4101727	99	P	SUR	33	-60	743	0	0.4	0.1	0.4
4101728	99	P	SUR	32	-28	743	0	1.1	0.5	1.2
4101729	99	P	SUR	31	-58	466	0	0.3	0.1	0.3
4101845	99	P	SUR	78	38	3	0	1.4	1.7	2.2
4101861	99	P	SUR	35	-45	732	0	0.5	0.3	0.5
4101870	99	P	SUR	25	-59	732	0	0.3	-0.1	0.3
4101873	99	P	SUR	30	-38	732	0	0.3	-0.1	0.3
4101875	99	P	SUR	21	-34	732	0	0.2	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
4101877	99	P	SUR	30	-17	732	0	0.3	0.0	0.3
4101878	99	P	SUR	30	-16	732	0	0.2	0.0	0.2
41043	99	P	SUR	21	-65	744	0	0.3	-0.5	0.6
41044	99	P	SUR	22	-59	744	0	0.3	-0.4	0.5
41046	99	P	SUR	24	-68	744	0	0.3	-0.1	0.3
41049	99	P	SUR	28	-62	744	0	0.3	-0.7	0.7
41052	99	P	SUR	18	-65	266	0	0.2	-0.7	0.8
41053	99	P	SUR	19	-66	527	0	0.3	-0.7	0.7
41056	99	P	SUR	18	-66	48	0	0.2	-0.6	0.7
4200060	99	P	SUR	16	-63	4464	0	0.2	-0.3	0.4
4200085	99	P	SUR	18	-67	3712	0	0.3	-0.5	0.6
42060	99	P	SUR	16	-63	744	0	0.2	-0.3	0.4
42085	99	P	SUR	18	-67	261	0	0.3	-0.5	0.6
4400008	99	P	SUR	40	-69	4464	0	0.6	-0.6	0.8
4400011	99	P	SUR	41	-67	4464	0	0.6	0.1	0.6
4400027	99	P	SUR	44	-67	3162	0	0.6	-1.1	1.3
4400137	99	P	SUR	42	-62	744	0	0.7	0.0	0.7
4400139	99	P	SUR	44	-57	743	0	0.6	-0.3	0.7
4400150	99	P	SUR	43	-64	742	0	0.6	-0.3	0.7
4400258	99	P	SUR	45	-63	737	0	0.6	-0.2	0.6
4400488	99	P	SUR	45	-61	737	0	0.6	0.0	0.7
4400489	99	P	SUR	45	-61	742	0	0.6	0.0	0.6
44008	99	P	SUR	41	-69	744	0	0.6	-0.6	0.9
44011	99	P	SUR	41	-67	744	0	0.7	0.1	0.7
4401582	99	P	SUR	46	-30	744	0	1.0	0.4	1.1
4401588	99	P	SUR	69	15	717	0	0.4	-0.1	0.5
4402676	99	P	SUR	35	-43	250	0	0.3	0.0	0.3
44027	99	P	SUR	44	-67	528	0	0.7	-1.1	1.3
4402730	99	P	SUR	33	-39	670	0	0.4	-0.1	0.4
4402737	99	P	SUR	58	-50	732	28	2.3	-0.8	2.4
4402743	99	P	SUR	47	-20	732	0	0.5	-1.3	1.3
4402744	99	P	SUR	34	-58	732	0	0.3	0.0	0.3
4402749	99	P	SUR	69	7	733	0	0.4	0.1	0.4
4402750	99	P	SUR	55	-18	732	0	0.5	-0.4	0.7
4403568	99	P	SUR	32	-33	744	0	0.5	0.2	0.5
44078	99	P	SUR	60	-40	743	0	0.7	-0.4	0.8
44137	99	P	SUR	42	-62	744	0	0.7	0.0	0.7
44139	99	P	SUR	44	-57	743	0	0.7	-0.3	0.7
44150	99	P	SUR	43	-64	742	0	0.6	-0.3	0.7
44258	99	P	SUR	45	-63	737	0	0.6	-0.2	0.6
44488	99	P	SUR	45	-61	739	0	0.7	-0.1	0.7
44489	99	P	SUR	46	-61	742	0	0.6	0.0	0.6
4601782	99	P	SUR	34	-33	732	0	1.4	0.5	1.5

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
4701527	99	P	SUR	67	-9	744	0	0.4	0.0	0.4
4701546	99	P	SUR	70	-17	514	0	1.2	-0.4	1.3
4701548	99	P	SUR	78	-11	667	0	0.5	0.0	0.5
4701555	99	P	SUR	64	-22	20	0	0.5	-5.9	5.9
4701558	99	P	SUR	79	-18	62	0	0.5	-4.4	4.4
4801763	99	P	SUR	62	-4	744	0	1.1	-10.3	10.4
4802582	99	P	SUR	64	-18	621	0	0.6	-10.1	10.1
4802594	99	P	SUR	67	-5	744	0	0.3	-0.3	0.5
4802664	99	P	SUR	83	-54	743	0	0.5	0.1	0.5
4803997	99	P	SUR	47	-24	700	0	0.6	-0.2	0.6
4804003	99	P	SUR	47	-46	677	0	0.7	0.1	0.7
4804044	99	P	SUR	36	18	715	0	0.4	0.1	0.4
4804127	99	P	SUR	31	-37	708	0	0.3	0.2	0.3
4804130	99	P	SUR	15	-39	702	0	0.3	-0.4	0.5
4804178	99	P	SUR	84	-43	72	0	0.5	0.1	0.5
4804271	99	P	SUR	45	-53	386	0	0.6	0.1	0.6
5801972	99	P	SUR	34	-19	731	0	0.4	-0.3	0.5
5802011	99	P	SUR	19	-46	732	0	0.3	0.2	0.3
5802026	99	P	SUR	38	-12	733	0	0.4	-0.2	0.4
5802033	99	P	SUR	23	-44	731	0	0.8	1.2	1.4
5802060	99	P	SUR	84	-31	735	0	0.5	-0.3	0.6
5802095	99	P	SUR	50	-49	709	0	0.7	0.0	0.7
5802112	99	P	SUR	21	-48	699	0	0.3	0.2	0.4
5802118	99	P	SUR	25	-41	581	0	0.2	0.2	0.3
5802227	99	P	SUR	44	-51	743	55	0.6	0.2	0.6
5802228	99	P	SUR	50	-58	740	739	0.0	13.5	13.5
5802253	99	P	SUR	46	-37	738	24	3.1	0.3	3.1
6100001	99	P	SUR	43	8	741	0	0.4	-0.3	0.5
6100002	99	P	SUR	42	5	741	0	0.4	-0.1	0.5
6100196	99	P	SUR	42	4	743	0	0.4	0.3	0.5
6100197	99	P	SUR	40	4	743	0	0.4	0.4	0.6
6100198	99	P	SUR	37	-2	743	0	0.6	-0.2	0.6
6100280	99	P	SUR	41	1	742	0	0.5	-0.1	0.5
6100281	99	P	SUR	40	0	743	0	0.6	-0.1	0.6
6100417	99	P	SUR	38	0	743	0	0.5	0.0	0.5
6100430	99	P	SUR	40	2	743	0	0.4	0.2	0.5
6101031	99	P	SUR	42	8	743	0	0.3	0.0	0.3
6101032	99	P	SUR	42	10	692	0	0.3	0.2	0.4
6101033	99	P	SUR	43	8	743	0	0.4	0.1	0.4
6101034	99	P	SUR	42	5	743	0	0.4	-0.3	0.5
6101035	99	P	SUR	41	7	743	0	0.4	0.1	0.4
6101036	99	P	SUR	42	7	743	0	0.4	-0.1	0.4
6200001	99	P	SUR	45	-5	743	0	0.4	0.1	0.4

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
6200024	99	P	SUR	44	-3	744	0	0.6	-0.1	0.6
6200025	99	P	SUR	44	-6	742	0	0.6	-0.1	0.6
6200029	99	P	SUR	49	-12	742	0	0.5	-0.2	0.5
6200050	99	P	SUR	50	-4	738	0	0.4	0.0	0.4
6200081	99	P	SUR	51	-13	730	0	0.6	-0.2	0.6
6200082	99	P	SUR	44	-8	743	0	0.6	-0.2	0.7
6200083	99	P	SUR	43	-9	22	0	0.2	0.5	0.6
6200084	99	P	SUR	42	-9	743	0	0.5	0.1	0.5
6200085	99	P	SUR	36	-7	693	0	0.5	0.0	0.5
6200087	99	P	SUR	55	7	367	0	0.5	-0.7	0.9
6200091	99	P	SUR	53	-5	744	0	0.4	-0.1	0.4
6200092	99	P	SUR	51	-11	744	0	0.5	-0.1	0.5
6200093	99	P	SUR	55	-10	744	0	0.5	-0.1	0.5
6200094	99	P	SUR	52	-7	743	0	0.6	-0.2	0.6
6200095	99	P	SUR	53	-16	744	0	0.5	-0.2	0.5
6200103	99	P	SUR	50	-3	735	0	0.4	0.1	0.4
6200163	99	P	SUR	47	-8	740	0	0.5	-0.1	0.5
6200442	99	P	SUR	49	-16	730	1	0.5	-0.3	0.6
6201065	99	P	SUR	54	7	492	0	0.3	1.2	1.2
6201066	99	P	SUR	55	7	424	0	0.3	0.4	0.5
6202598	99	P	SUR	32	-48	524	11	2.0	0.8	2.1
6202599	99	P	SUR	45	-46	534	0	0.6	0.6	0.8
62029	99	P	SUR	49	-13	1487	0	0.5	-0.2	0.5
62030	99	P	SUR	50	-4	1488	0	0.4	-0.1	0.4
6203615	99	P	SUR	33	-32	739	4	3.5	-0.4	3.5
6203625	99	P	SUR	34	-37	743	0	0.5	0.1	0.5
6203632	99	P	SUR	39	-30	744	0	1.1	0.5	1.2
6203639	99	P	SUR	33	-37	744	0	0.5	0.3	0.6
6203662	99	P	SUR	75	-19	744	0	0.6	0.0	0.6
6203666	99	P	SUR	57	-43	744	62	4.1	-0.8	4.2
6203668	99	P	SUR	80	14	741	0	0.5	-0.5	0.7
6203672	99	P	SUR	21	-49	744	0	0.3	0.3	0.4
6203674	99	P	SUR	56	-29	744	0	0.6	0.0	0.6
6203675	99	P	SUR	51	-25	658	107	1.0	0.1	1.0
6203676	99	P	SUR	59	-32	743	0	0.4	0.5	0.6
6203677	99	P	SUR	34	-16	744	0	0.4	-0.1	0.4
6203679	99	P	SUR	28	-29	744	0	0.2	0.1	0.3
6203680	99	P	SUR	66	-7	529	46	5.1	0.8	5.1
6203682	99	P	SUR	21	-28	744	0	0.3	0.4	0.5
6203683	99	P	SUR	22	-23	744	0	0.3	0.5	0.5
6203684	99	P	SUR	46	-15	743	0	0.5	0.1	0.5
6203686	99	P	SUR	23	-53	744	0	0.3	0.1	0.4
6203687	99	P	SUR	19	-66	744	0	0.2	0.0	0.2

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
6203689	99	P	SUR	77	9	741	0	0.6	0.0	0.6
6203773	99	P	SUR	30	-37	689	0	0.3	-0.6	0.7
6203829	99	P	SUR	71	26	640	0	0.5	-0.5	0.7
6203831	99	P	SUR	71	23	725	0	0.9	0.2	1.0
6203834	99	P	SUR	70	21	722	0	0.4	0.0	0.4
6203836	99	P	SUR	64	-27	731	0	0.6	0.5	0.8
6203849	99	P	SUR	41	-27	732	0	0.4	-0.1	0.4
6203854	99	P	SUR	71	10	732	0	0.4	0.5	0.6
6204523	99	P	SUR	44	-51	744	0	0.5	0.4	0.7
6204524	99	P	SUR	41	-52	229	0	0.6	0.6	0.9
6204525	99	P	SUR	43	-54	744	0	0.6	0.5	0.8
6204526	99	P	SUR	41	-48	742	7	2.1	0.8	2.2
6204527	99	P	SUR	44	-44	744	0	0.7	0.5	0.9
6204528	99	P	SUR	48	-38	744	0	1.7	-0.3	1.7
6204529	99	P	SUR	42	-40	743	0	0.5	0.3	0.6
6204530	99	P	SUR	47	-36	551	66	2.7	-0.3	2.7
6204531	99	P	SUR	45	-39	744	30	3.3	-0.7	3.4
6204532	99	P	SUR	45	-38	742	0	1.6	0.0	1.6
6204533	99	P	SUR	43	-51	743	0	0.6	0.2	0.6
6204534	99	P	SUR	41	-54	743	0	0.5	0.2	0.5
6204535	99	P	SUR	45	-41	541	0	0.8	0.4	0.9
6204536	99	P	SUR	44	-55	744	10	2.3	0.5	2.3
6204537	99	P	SUR	44	-53	744	0	0.6	0.5	0.8
62050	99	P	SUR	50	-4	1484	0	0.4	0.0	0.5
62081	99	P	SUR	51	-13	1488	0	0.6	-0.2	0.6
62091	99	P	SUR	53	-5	740	0	0.4	-0.1	0.4
62092	99	P	SUR	51	-11	740	0	0.5	-0.1	0.5
62093	99	P	SUR	55	-10	740	0	0.5	-0.1	0.5
62094	99	P	SUR	52	-7	739	0	0.6	-0.2	0.6
62095	99	P	SUR	53	-16	740	0	0.5	-0.2	0.5
62102	99	P	SUR	58	2	1488	0	1.1	1.2	1.6
62103	99	P	SUR	50	-3	1488	0	0.4	0.1	0.4
62104	99	P	SUR	57	1	1482	0	0.6	0.4	0.7
62105	99	P	SUR	55	-13	1488	0	0.6	-0.2	0.7
62107	99	P	SUR	50	-6	1488	0	0.5	-0.4	0.6
62112	99	P	SUR	58	0	1486	0	0.4	0.4	0.6
62113	99	P	SUR	58	0	1488	0	0.6	-0.3	0.7
62114	99	P	SUR	58	0	1486	0	0.5	0.3	0.6
62115	99	P	SUR	58	-3	152	0	0.5	0.0	0.5
62116	99	P	SUR	58	1	1326	0	0.5	0.4	0.6
62118	99	P	SUR	58	1	1482	0	0.5	0.3	0.5
62119	99	P	SUR	57	2	1485	0	0.5	-0.2	0.5
62120	99	P	SUR	56	2	1433	0	0.5	-0.3	0.6

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
62121	99	P	SUR	54	3	1439	0	0.5	0.2	0.6
62122	99	P	SUR	57	2	1122	0	0.7	-0.4	0.8
62124	99	P	SUR	54	-4	1488	0	0.5	0.2	0.6
62127	99	P	SUR	54	1	1483	0	0.4	0.1	0.4
62129	99	P	SUR	58	0	998	0	0.4	-0.4	0.6
62130	99	P	SUR	59	1	1488	0	0.4	-0.6	0.7
62131	99	P	SUR	54	1	1485	0	0.6	0.8	1.0
62132	99	P	SUR	56	2	1485	0	0.7	0.3	0.8
62133	99	P	SUR	57	1	1485	0	0.9	0.9	1.2
62134	99	P	SUR	58	1	1488	0	0.4	0.1	0.4
62138	99	P	SUR	54	0	1471	0	0.5	0.2	0.5
62140	99	P	SUR	57	1	1486	0	0.4	0.3	0.5
62143	99	P	SUR	58	2	1486	0	0.5	0.7	0.8
62144	99	P	SUR	53	2	1481	0	0.4	0.0	0.4
62145	99	P	SUR	53	3	1485	0	0.4	0.1	0.4
62146	99	P	SUR	57	2	1476	0	0.4	0.2	0.5
62148	99	P	SUR	54	2	1481	0	0.6	0.1	0.6
62149	99	P	SUR	54	1	1485	0	0.4	0.3	0.5
62151	99	P	SUR	57	2	1485	0	0.8	1.0	1.2
62152	99	P	SUR	57	2	1487	0	0.4	0.2	0.5
62153	99	P	SUR	57	2	1248	0	0.5	0.3	0.6
62154	99	P	SUR	56	2	834	0	1.1	0.6	1.2
62155	99	P	SUR	58	1	1486	0	0.4	0.2	0.5
62157	99	P	SUR	58	0	1488	0	0.4	-0.3	0.5
62160	99	P	SUR	57	2	1483	0	0.5	0.6	0.8
62161	99	P	SUR	58	1	1098	0	0.5	-0.6	0.8
62162	99	P	SUR	57	1	1487	0	0.4	0.0	0.4
62163	99	P	SUR	48	-9	1484	0	0.5	-0.1	0.5
62164	99	P	SUR	57	1	1488	0	0.3	0.4	0.5
62165	99	P	SUR	54	1	1485	0	0.6	0.3	0.7
62168	99	P	SUR	58	1	1486	0	0.4	-0.2	0.5
62170	99	P	SUR	51	2	1488	0	0.4	-0.4	0.5
62302	99	P	SUR	61	-2	1464	0	0.5	-0.1	0.5
62304	99	P	SUR	51	2	1485	0	0.4	-0.1	0.4
62305	99	P	SUR	50	0	1488	0	0.4	-0.2	0.5
62442	99	P	SUR	49	-16	1488	2	0.5	-0.4	0.6
6301003	99	P	SUR	74	24	744	0	0.4	-0.3	0.5
6301004	99	P	SUR	72	20	726	0	0.4	0.0	0.4
6301583	99	P	SUR	60	-53	742	0	0.8	0.3	0.8
6301584	99	P	SUR	79	-15	743	0	0.6	0.5	0.8
6301587	99	P	SUR	86	-52	743	0	0.4	0.5	0.6
6301634	99	P	SUR	75	-15	742	0	0.4	0.2	0.5
6301635	99	P	SUR	80	11	106	68	6.4	-7.4	9.8

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
6301636	99	P	SUR	72	-13	248	69	6.9	-1.5	7.1
6301638	99	P	SUR	85	-5	744	0	0.5	0.5	0.7
6301641	99	P	SUR	86	-25	744	0	0.4	0.4	0.6
63055	99	P	SUR	61	2	1488	0	0.4	-0.2	0.5
63056	99	P	SUR	60	2	1378	0	0.6	0.6	0.8
63057	99	P	SUR	59	2	1486	0	0.4	-0.3	0.5
63058	99	P	SUR	53	2	997	0	0.4	0.0	0.4
63059	99	P	SUR	58	-1	1488	0	0.5	0.1	0.5
63102	99	P	SUR	61	1	1484	0	0.5	-0.2	0.5
63108	99	P	SUR	61	2	1487	0	0.4	-0.3	0.5
63109	99	P	SUR	60	2	1480	0	0.5	-0.5	0.7
63110	99	P	SUR	60	2	1480	0	0.6	0.3	0.7
63111	99	P	SUR	61	2	1439	0	0.5	-0.2	0.6
63112	99	P	SUR	61	1	1488	0	0.4	-0.3	0.5
63115	99	P	SUR	62	1	1487	0	0.7	0.0	0.7
63118	99	P	SUR	57	2	1485	0	0.4	-0.4	0.6
6400045	99	P	SUR	59	-12	741	0	0.5	0.1	0.5
6400046	99	P	SUR	61	-4	729	0	0.4	-0.2	0.4
6401599	99	P	SUR	85	-54	744	0	0.4	0.5	0.7
6401601	99	P	SUR	81	-9	744	0	0.6	0.2	0.6
6401602	99	P	SUR	84	-25	744	0	0.6	0.5	0.8
6402616	99	P	SUR	30	-52	674	0	0.3	0.1	0.3
6402617	99	P	SUR	33	-46	671	0	0.4	0.3	0.5
6402621	99	P	SUR	28	-51	687	0	0.3	0.5	0.5
6402629	99	P	SUR	37	9	3	0	0.0	-2.6	2.6
6402630	99	P	SUR	37	8	242	0	0.3	0.1	0.3
6402631	99	P	SUR	36	14	732	0	0.4	0.2	0.4
6402632	99	P	SUR	37	-1	732	0	0.4	0.2	0.5
6402633	99	P	SUR	38	8	732	0	0.5	0.3	0.5
6402635	99	P	SUR	33	13	451	0	0.4	-0.4	0.6
6402637	99	P	SUR	37	7	74	0	0.5	-3.4	3.4
64041	99	P	SUR	61	-3	1488	0	0.4	0.0	0.4
64045	99	P	SUR	59	-12	1482	0	0.6	0.1	0.6
64046	99	P	SUR	61	-4	1484	0	0.4	-0.1	0.4
6600021	99	P	SUR	55	14	406	0	0.3	-1.1	1.1
6600022	99	P	SUR	54	14	167	0	0.4	-0.7	0.8
6600024	99	P	SUR	55	13	436	0	0.3	-1.5	1.5
6801771	99	P	SUR	45	-12	726	0	0.4	-0.1	0.5
6801789	99	P	SUR	12	-49	728	0	0.3	0.0	0.3
6801791	99	P	SUR	42	-39	732	0	0.5	0.1	0.5
6801822	99	P	SUR	37	17	712	0	0.4	0.1	0.4
6801824	99	P	SUR	38	21	506	0	0.5	-2.0	2.1
6801879	99	P	SUR	20	-59	744	0	0.4	0.1	0.4

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
6801907	99	P	SUR	68	-3	701	0	0.4	0.4	0.5
6801929	99	P	SUR	23	-37	665	0	0.3	0.2	0.3
6802060	99	P	SUR	50	-42	740	0	0.7	0.2	0.8
7801572	99	P	SUR	20	-66	731	0	0.3	-0.1	0.3
7801593	99	P	SUR	62	-35	732	1	0.5	0.1	0.5
7801594	99	P	SUR	61	-5	732	0	1.0	1.0	1.4
7801616	99	P	SUR	19	-41	496	0	0.5	0.8	0.9
7801627	99	P	SUR	19	-54	720	0	0.4	0.4	0.6
7801633	99	P	SUR	37	18	710	0	0.3	0.0	0.3
7801645	99	P	SUR	34	22	514	0	0.4	-0.1	0.4
7801647	99	P	SUR	29	-49	732	0	0.3	-0.1	0.3
7801697	99	P	SUR	29	-28	743	0	0.3	-0.1	0.3
7801699	99	P	SUR	41	-41	744	21	2.7	0.0	2.7
7801722	99	P	SUR	68	-27	510	0	0.4	-0.5	0.6
7801723	99	P	SUR	79	-13	731	0	0.6	0.4	0.8
7801742	99	P	SUR	24	-38	669	0	0.3	0.2	0.3
7801755	99	P	SUR	19	-32	616	0	0.3	0.0	0.3
7810095	99	P	SUR	51	-33	732	0	0.7	0.1	0.7
7810096	99	P	SUR	47	-49	727	0	0.7	0.2	0.7
7810097	99	P	SUR	44	-54	732	0	0.6	0.1	0.7
7810098	99	P	SUR	48	-37	732	0	0.6	-0.1	0.6
7810099	99	P	SUR	47	-22	732	0	0.5	-0.6	0.8
7810258	99	P	SUR	38	21	244	0	0.4	0.0	0.4
7810260	99	P	SUR	42	17	540	0	0.4	-0.3	0.5
7810262	99	P	SUR	39	20	640	0	0.4	-0.4	0.5
7810263	99	P	SUR	42	-59	332	0	0.6	-0.8	1.0
7810264	99	P	SUR	43	-47	360	0	0.7	-0.1	0.7
7810265	99	P	SUR	43	-45	370	0	0.6	0.2	0.6
7810266	99	P	SUR	42	-57	309	0	0.6	0.7	0.9
7810268	99	P	SUR	19	-28	732	0	0.3	0.2	0.4
7810290	99	P	SUR	35	-53	732	0	0.4	-0.2	0.5
7810310	99	P	SUR	34	-26	732	0	0.3	-0.1	0.3
7810312	99	P	SUR	38	-31	731	0	0.4	-0.1	0.5
7810442	99	P	SUR	49	-46	718	0	0.7	0.0	0.7
7810445	99	P	SUR	48	-48	718	0	0.7	0.4	0.8
7810446	99	P	SUR	45	-48	723	0	0.6	0.5	0.8
7810608	99	P	SUR	36	-49	739	0	0.5	0.3	0.5
7810609	99	P	SUR	36	-60	742	0	0.4	0.0	0.5
7810611	99	P	SUR	35	-39	741	0	0.5	-0.2	0.5
7810612	99	P	SUR	38	-43	741	0	0.5	0.2	0.5
7810614	99	P	SUR	35	-44	737	0	0.5	0.1	0.5
7810615	99	P	SUR	41	-42	748	0	0.5	-0.2	0.5
7810616	99	P	SUR	40	-47	732	0	0.5	0.4	0.6

DRIFTER MONITORING STATISTICS (EUCOS)
(CONTINUED)

WMO IDENT	OBS TIME	ELM	LEVEL	MEAN LAT	MEAN LONG	NUM OBS	NUM GROSS	SD	BIAS	RMS
7810617	99	P	SUR	38	18	186	0	0.4	0.2	0.5
7810618	99	P	SUR	37	19	162	0	0.4	0.5	0.6
7894568	99	P	SUR	50	-37	346	42	5.1	-0.9	5.1
7894569	99	P	SUR	50	-37	737	1	1.6	0.2	1.6
7894570	99	P	SUR	49	-38	257	55	6.4	-5.2	8.2
9193264	99	P	SUR	41	-38	5	0	0.6	-0.7	0.9
9908310	99	P	SUR	47	-58	3	0	0.6	-2.5	2.6

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                : JAN 2026
                   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
1300008	99	SPEED	SUR	15	-38	616	0	0	0.9	0.0	0.9
1300130	99	SPEED	SUR	28	-16	742	0	0	1.6	-0.1	1.6
1300131	99	SPEED	SUR	28	-17	720	0	0	2.1	1.2	2.4
4100043	99	SPEED	SUR	21	-65	4462	0	0	1.1	0.1	1.1
4100044	99	SPEED	SUR	22	-59	4462	0	0	1.2	0.1	1.2
4100046	99	SPEED	SUR	24	-68	4459	0	0	1.1	0.6	1.3
4100049	99	SPEED	SUR	28	-62	4462	0	0	1.3	0.1	1.3
4100052	99	SPEED	SUR	18	-65	3707	0	0	0.9	0.2	0.9
4100053	99	SPEED	SUR	18	-66	3719	0	0	1.5	0.5	1.6
4100056	99	SPEED	SUR	18	-65	3614	0	0	1.2	0.0	1.2
4100300	99	SPEED	SUR	16	-57	742	0	0	0.9	-0.3	0.9
41043	99	SPEED	SUR	21	-65	744	0	0	1.2	-0.3	1.2
41044	99	SPEED	SUR	22	-59	743	0	0	1.4	-0.4	1.5
41046	99	SPEED	SUR	24	-68	744	0	0	1.2	0.1	1.2
41049	99	SPEED	SUR	28	-62	744	0	0	1.5	-0.3	1.5
41052	99	SPEED	SUR	18	-65	267	0	0	1.1	0.0	1.1
41053	99	SPEED	SUR	19	-66	529	0	0	1.6	-0.4	1.7
41056	99	SPEED	SUR	18	-66	48	0	0	1.4	-0.7	1.5
4200060	99	SPEED	SUR	16	-63	4463	0	0	0.9	0.1	0.9
4200085	99	SPEED	SUR	18	-67	3648	0	0	1.3	0.1	1.3
42060	99	SPEED	SUR	16	-63	744	0	0	1.1	-0.4	1.1
42085	99	SPEED	SUR	18	-67	256	0	0	1.2	0.3	1.2
4400008	99	SPEED	SUR	40	-69	4446	0	0	1.4	-0.2	1.4
4400011	99	SPEED	SUR	41	-67	4464	0	0	1.6	-0.2	1.6
4400027	99	SPEED	SUR	44	-67	3160	0	0	1.4	0.1	1.4
4400033	99	SPEED	SUR	44	-69	1523	0	0	1.8	0.4	1.8
4400034	99	SPEED	SUR	44	-68	3923	0	0	1.7	0.4	1.7
4400137	99	SPEED	SUR	42	-62	744	0	0	1.9	-0.3	1.9
4400139	99	SPEED	SUR	44	-57	743	0	0	1.8	-0.5	1.9
4400150	99	SPEED	SUR	43	-64	742	0	0	1.7	-0.3	1.7
4400258	99	SPEED	SUR	45	-63	737	0	0	1.4	0.5	1.5
4400488	99	SPEED	SUR	45	-61	720	1	0	1.8	1.4	2.3
4400489	99	SPEED	SUR	45	-61	734	1	0	1.8	2.3	2.9
44008	99	SPEED	SUR	41	-69	741	0	0	1.5	-1.0	1.8

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
44011	99	SPEED	SUR	41	-67	744	0	0	1.7	-0.9	2.0
44027	99	SPEED	SUR	44	-67	526	0	0	1.4	-0.4	1.5
44033	99	SPEED	SUR	44	-69	517	0	0	1.8	-0.4	1.8
44034	99	SPEED	SUR	44	-68	397	0	0	1.8	-0.1	1.8
44078	99	SPEED	SUR	60	-40	740	0	0	2.5	-2.3	3.4
44137	99	SPEED	SUR	42	-62	744	0	0	2.1	-1.0	2.3
44139	99	SPEED	SUR	44	-57	743	0	0	2.0	-1.2	2.3
44150	99	SPEED	SUR	43	-64	742	0	0	1.8	-0.9	2.0
44258	99	SPEED	SUR	45	-63	737	0	0	1.5	0.0	1.5
44488	99	SPEED	SUR	45	-61	722	1	0	1.9	1.6	2.5
44489	99	SPEED	SUR	46	-61	734	1	0	1.9	2.1	2.8
6100001	99	SPEED	SUR	43	8	741	0	0	1.8	0.9	2.0
6100002	99	SPEED	SUR	42	5	741	0	0	1.9	1.3	2.3
6100196	99	SPEED	SUR	42	4	730	0	0	1.8	-0.5	1.9
6100197	99	SPEED	SUR	40	4	735	0	0	1.5	-1.0	1.8
6100198	99	SPEED	SUR	37	-2	733	0	0	1.8	0.0	1.8
6100280	99	SPEED	SUR	41	1	726	0	0	1.6	-0.7	1.8
6100281	99	SPEED	SUR	40	0	715	0	0	2.4	1.3	2.7
6100417	99	SPEED	SUR	38	0	738	0	0	1.6	-0.5	1.6
6100430	99	SPEED	SUR	40	2	741	0	0	1.6	-0.8	1.8
6101031	99	SPEED	SUR	42	8	743	0	0	1.5	1.1	1.9
6101032	99	SPEED	SUR	42	10	658	0	0	1.6	1.1	1.9
6101033	99	SPEED	SUR	43	8	743	0	0	1.6	0.9	1.9
6101034	99	SPEED	SUR	42	5	743	0	0	1.7	1.4	2.2
6101035	99	SPEED	SUR	41	7	743	0	0	1.8	1.2	2.2
6101036	99	SPEED	SUR	42	7	743	0	0	1.2	0.6	1.4
6200001	99	SPEED	SUR	45	-5	743	0	0	1.5	0.3	1.6
6200024	99	SPEED	SUR	44	-3	739	0	0	2.2	0.0	2.2
6200025	99	SPEED	SUR	44	-6	742	0	0	1.7	-0.6	1.8
6200029	99	SPEED	SUR	49	-12	742	0	0	1.4	0.2	1.4
6200050	99	SPEED	SUR	50	-4	735	0	0	1.6	-0.3	1.6
6200081	99	SPEED	SUR	51	-13	730	0	0	1.6	-0.2	1.6
6200082	99	SPEED	SUR	44	-8	743	0	0	1.6	-1.5	2.2
6200083	99	SPEED	SUR	43	-9	22	0	0	1.1	-1.3	1.7
6200084	99	SPEED	SUR	42	-9	742	0	0	1.7	-1.7	2.4
6200085	99	SPEED	SUR	36	-7	692	0	0	1.5	-0.7	1.6
6200087	99	SPEED	SUR	55	7	372	0	0	1.6	1.4	2.1
6200091	99	SPEED	SUR	53	-5	744	0	0	1.2	0.8	1.4
6200092	99	SPEED	SUR	51	-11	744	0	0	1.5	-0.7	1.7
6200093	99	SPEED	SUR	55	-10	744	0	0	1.4	0.4	1.5
6200094	99	SPEED	SUR	52	-7	743	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
6200095	99	SPEED	SUR	53	-16	744	0	0	1.5	0.4	1.6
6200103	99	SPEED	SUR	50	-3	733	0	0	1.4	0.1	1.4
6200163	99	SPEED	SUR	47	-8	740	0	0	1.7	-0.3	1.7
6200442	99	SPEED	SUR	49	-16	730	0	0	1.5	0.0	1.5
6201065	99	SPEED	SUR	54	7	492	0	0	1.4	-0.5	1.5
6201066	99	SPEED	SUR	55	7	424	0	0	2.0	0.4	2.1
62029	99	SPEED	SUR	49	-13	1487	0	0	1.5	-0.4	1.6
62050	99	SPEED	SUR	50	-4	1478	0	0	1.6	-0.3	1.6
62081	99	SPEED	SUR	51	-13	1488	0	0	1.6	-0.3	1.7
62091	99	SPEED	SUR	53	-5	740	0	0	1.3	1.1	1.7
62092	99	SPEED	SUR	51	-11	740	0	0	1.6	-0.7	1.7
62093	99	SPEED	SUR	55	-10	740	0	0	1.5	0.5	1.5
62094	99	SPEED	SUR	52	-7	739	0	0	1.2	-0.4	1.3
62095	99	SPEED	SUR	53	-16	740	0	0	1.5	0.5	1.6
62102	99	SPEED	SUR	58	2	1486	0	0	1.9	1.0	2.1
62103	99	SPEED	SUR	50	-3	1482	0	0	1.4	-0.1	1.4
62104	99	SPEED	SUR	57	1	1478	0	0	1.4	-1.0	1.7
62105	99	SPEED	SUR	55	-13	1482	0	0	1.6	0.3	1.6
62112	99	SPEED	SUR	58	0	1072	0	0	1.9	-0.7	2.0
62113	99	SPEED	SUR	58	0	1488	0	0	1.6	-0.8	1.8
62114	99	SPEED	SUR	58	0	1484	0	0	1.5	0.5	1.6
62118	99	SPEED	SUR	58	1	1480	0	0	1.6	0.7	1.7
62120	99	SPEED	SUR	56	2	1423	0	0	1.9	-0.5	2.0
62121	99	SPEED	SUR	54	3	1433	0	0	1.5	-0.9	1.8
62122	99	SPEED	SUR	57	2	1472	0	0	1.6	0.0	1.6
62129	99	SPEED	SUR	58	0	998	0	0	1.5	0.0	1.5
62133	99	SPEED	SUR	57	1	1183	0	0	3.5	-3.2	4.7
62134	99	SPEED	SUR	58	1	1488	0	0	1.4	-1.5	2.0
62143	99	SPEED	SUR	58	2	1486	0	0	1.9	-0.6	2.0
62144	99	SPEED	SUR	53	2	1479	0	0	2.3	-0.8	2.4
62145	99	SPEED	SUR	53	3	1437	0	0	1.5	0.5	1.6
62146	99	SPEED	SUR	57	2	1474	0	0	1.7	0.2	1.8
62148	99	SPEED	SUR	54	2	1481	0	0	1.4	-0.3	1.5
62149	99	SPEED	SUR	54	1	1485	0	0	1.7	-0.1	1.7
62152	99	SPEED	SUR	57	2	1487	0	0	1.6	0.2	1.6
62154	99	SPEED	SUR	56	2	1483	0	0	1.6	-0.1	1.6
62155	99	SPEED	SUR	58	1	1478	0	0	1.5	0.5	1.6
62163	99	SPEED	SUR	48	-9	1484	0	0	1.7	-0.3	1.7
62164	99	SPEED	SUR	57	1	1488	0	0	1.6	-1.6	2.2
62165	99	SPEED	SUR	54	1	1485	0	0	1.6	-0.5	1.7
62170	99	SPEED	SUR	51	2	1488	0	0	1.5	0.9	1.7

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
62304	99	SPEED	SUR	51	2	1485	0	0	1.6	1.0	1.9
62305	99	SPEED	SUR	50	0	1488	0	0	1.5	0.8	1.7
62442	99	SPEED	SUR	49	-16	1488	2	0	1.5	0.0	1.5
6301003	99	SPEED	SUR	74	24	744	0	0	1.6	-0.5	1.6
6301004	99	SPEED	SUR	72	20	726	0	0	1.6	0.2	1.7
63056	99	SPEED	SUR	60	2	1472	0	0	1.6	0.0	1.6
63057	99	SPEED	SUR	59	2	1124	1	0	2.2	0.1	2.2
63058	99	SPEED	SUR	53	2	992	0	0	1.4	-0.5	1.5
63108	99	SPEED	SUR	61	2	1487	0	0	1.9	-0.4	2.0
63109	99	SPEED	SUR	60	2	1480	0	0	1.5	0.0	1.5
63110	99	SPEED	SUR	60	2	1472	0	0	1.5	0.0	1.5
63112	99	SPEED	SUR	61	1	1488	0	0	1.7	-0.8	1.9
63115	99	SPEED	SUR	62	1	1463	0	0	1.6	-1.0	1.9
6400046	99	SPEED	SUR	61	-4	730	0	0	1.5	0.7	1.7
64041	99	SPEED	SUR	61	-3	1482	0	0	1.4	-0.8	1.6
64046	99	SPEED	SUR	61	-4	1486	0	0	1.5	0.6	1.6
6600021	99	SPEED	SUR	55	14	406	0	0	1.2	0.5	1.3
6600022	99	SPEED	SUR	54	14	167	0	0	1.4	0.2	1.4
6600024	99	SPEED	SUR	55	13	434	0	0	1.2	1.5	1.9
9193264	99	SPEED	SUR	41	-38	11	0	0	2.2	0.7	2.3
9908310	99	SPEED	SUR	47	-58	3	0	0	0.4	3.2	3.2

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

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DRIFTER MONITORING STATISTICS (EUCOS)
         MONITORING CENTRE     : ECMWF
         ELEMENT MONITORED     : WIND DIRECTION (DEGREES)
         AREA                  : 10N - 90N, 70W - 40E
         PERIOD                : JAN 2026
         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
1000047	99	DIRN	SUR	41	-70	35	0	0	125.8	-27.1	128.7
1300008	99	DIRN	SUR	15	-38	616	0	0	7.4	2.6	7.8
1300130	99	DIRN	SUR	28	-16	599	0	0	17.2	6.2	18.3
1300131	99	DIRN	SUR	28	-17	320	0	0	23.8	-6.2	24.6
4100002	99	DIRN	SUR	32	-75	3677	0	0	16.5	12.3	20.6
4100004	99	DIRN	SUR	33	-79	3577	0	0	24.9	7.0	25.9
4100008	99	DIRN	SUR	31	-81	3178	0	0	21.7	6.6	22.7
4100009	99	DIRN	SUR	29	-80	257	0	0	15.2	6.0	16.3
4100013	99	DIRN	SUR	33	-78	3507	0	0	23.7	9.5	25.5
4100024	99	DIRN	SUR	34	-78	315	0	0	15.2	7.0	16.7
4100025	99	DIRN	SUR	35	-75	4231	0	0	15.8	7.5	17.5
4100029	99	DIRN	SUR	33	-80	503	0	0	18.8	6.2	19.8
4100033	99	DIRN	SUR	32	-80	519	0	0	20.0	5.8	20.8
4100037	99	DIRN	SUR	34	-77	606	0	0	23.1	4.3	23.5
4100038	99	DIRN	SUR	34	-78	481	0	0	17.8	4.6	18.4
4100043	99	DIRN	SUR	21	-65	3879	0	0	13.9	8.6	16.3
4100044	99	DIRN	SUR	22	-59	3579	0	0	18.5	7.9	20.1
4100046	99	DIRN	SUR	24	-68	4283	0	0	16.2	2.8	16.4
4100049	99	DIRN	SUR	28	-62	3613	0	0	19.0	8.3	20.8
4100052	99	DIRN	SUR	18	-65	3427	0	0	16.2	4.4	16.8
4100053	99	DIRN	SUR	18	-66	2178	0	0	16.0	-4.3	16.6
4100056	99	DIRN	SUR	18	-65	3272	0	0	14.6	3.2	15.0
4100064	99	DIRN	SUR	34	-77	615	0	0	23.9	-12.3	26.9
4100066	99	DIRN	SUR	33	-80	572	0	0	26.8	2.7	27.0
4100068	99	DIRN	SUR	28	-80	568	0	0	24.2	-2.7	24.4
4100069	99	DIRN	SUR	29	-81	486	0	0	18.8	8.2	20.5
4100083	99	DIRN	SUR	36	-75	3473	0	0	17.3	-12.1	21.1
41002	99	DIRN	SUR	32	-75	603	0	0	17.7	12.9	21.9
4100300	99	DIRN	SUR	16	-57	725	0	0	12.7	0.2	12.7
41004	99	DIRN	SUR	33	-79	594	0	0	25.3	6.5	26.2
41008	99	DIRN	SUR	31	-81	531	0	0	23.1	6.5	24.0
41009	99	DIRN	SUR	29	-80	46	0	0	14.4	3.4	14.8

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
41013	99	DIRN	SUR	33	-78	594	0	0	24.2	10.3	26.3
41024	99	DIRN	SUR	34	-79	278	0	0	16.4	6.5	17.6
41025	99	DIRN	SUR	35	-75	703	0	0	16.5	7.8	18.2
41029	99	DIRN	SUR	33	-80	500	0	0	19.0	5.7	19.8
41033	99	DIRN	SUR	32	-80	511	0	0	22.6	6.6	23.5
41037	99	DIRN	SUR	34	-77	601	0	0	23.1	3.6	23.4
41038	99	DIRN	SUR	34	-78	463	0	0	19.4	4.5	19.9
41043	99	DIRN	SUR	21	-65	629	0	0	13.5	8.6	16.0
41044	99	DIRN	SUR	22	-59	595	0	0	19.0	7.6	20.5
41046	99	DIRN	SUR	24	-68	709	0	0	16.4	2.5	16.6
41049	99	DIRN	SUR	28	-62	592	0	0	19.3	8.6	21.1
41052	99	DIRN	SUR	18	-65	233	0	0	19.0	5.3	19.7
41053	99	DIRN	SUR	19	-66	352	0	0	17.2	-4.0	17.7
41056	99	DIRN	SUR	18	-66	40	0	0	19.7	6.9	20.9
41064	99	DIRN	SUR	34	-77	614	0	0	24.6	-12.0	27.4
41066	99	DIRN	SUR	33	-80	151	0	0	30.3	9.2	31.7
41068	99	DIRN	SUR	28	-80	567	0	0	22.0	-2.2	22.1
41069	99	DIRN	SUR	29	-81	474	0	0	24.8	8.2	26.1
41083	99	DIRN	SUR	36	-75	569	0	0	17.9	-12.4	21.8
4200013	99	DIRN	SUR	27	-83	1047	0	0	17.5	-3.4	17.9
4200022	99	DIRN	SUR	28	-84	66	0	0	25.7	-0.1	25.8
4200023	99	DIRN	SUR	26	-83	1139	0	0	16.8	-3.3	17.1
4200026	99	DIRN	SUR	25	-83	1092	0	0	14.4	-4.8	15.2
4200036	99	DIRN	SUR	29	-85	3673	0	0	18.3	9.0	20.4
4200056	99	DIRN	SUR	20	-85	3997	0	0	13.0	2.6	13.3
4200057	99	DIRN	SUR	17	-82	4276	0	0	12.6	1.8	12.7
4200058	99	DIRN	SUR	15	-75	4306	0	0	9.1	4.6	10.2
4200060	99	DIRN	SUR	16	-63	4022	0	0	9.4	5.9	11.1
4200085	99	DIRN	SUR	18	-67	3009	0	0	19.2	6.6	20.3
42013	99	DIRN	SUR	27	-83	525	0	0	17.9	-2.7	18.2
42022	99	DIRN	SUR	28	-84	65	0	0	17.3	-2.7	17.5
42023	99	DIRN	SUR	26	-83	264	0	0	15.8	-2.7	16.0
42026	99	DIRN	SUR	25	-84	549	0	0	14.6	-4.1	15.2
42036	99	DIRN	SUR	29	-85	601	0	0	18.5	9.0	20.6
42056	99	DIRN	SUR	20	-85	666	0	0	13.7	2.3	13.9
42057	99	DIRN	SUR	17	-82	714	0	0	12.9	1.4	13.0
42058	99	DIRN	SUR	15	-75	716	0	0	9.6	3.7	10.3
42060	99	DIRN	SUR	16	-63	668	0	0	9.6	5.4	11.0
42085	99	DIRN	SUR	18	-67	171	0	0	20.9	5.9	21.7
4400007	99	DIRN	SUR	44	-70	3100	0	0	15.9	1.2	15.9
4400008	99	DIRN	SUR	40	-69	4093	0	0	16.2	4.0	16.7

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
4400009	99	DIRN	SUR	38	-75	3796	0	0	17.3	2.0	17.4
4400011	99	DIRN	SUR	41	-67	4076	0	0	14.7	8.5	17.0
4400013	99	DIRN	SUR	42	-71	4139	0	0	13.7	6.1	15.0
4400014	99	DIRN	SUR	37	-75	3979	0	0	16.5	4.8	17.2
4400020	99	DIRN	SUR	41	-70	3863	0	0	17.1	6.2	18.2
4400025	99	DIRN	SUR	40	-73	4123	0	0	12.0	5.1	13.0
4400027	99	DIRN	SUR	44	-67	2970	0	0	13.6	9.7	16.7
4400029	99	DIRN	SUR	43	-71	3694	0	0	12.8	3.3	13.3
4400030	99	DIRN	SUR	43	-70	3550	0	0	17.2	1.6	17.2
4400033	99	DIRN	SUR	44	-69	1297	0	0	20.4	-2.6	20.5
4400034	99	DIRN	SUR	44	-68	3644	0	0	16.7	4.0	17.1
4400042	99	DIRN	SUR	38	-76	3575	0	0	27.7	2.0	27.7
4400058	99	DIRN	SUR	38	-76	4097	1	0	26.9	3.2	27.1
4400062	99	DIRN	SUR	39	-76	2719	0	0	27.0	3.8	27.2
4400065	99	DIRN	SUR	40	-74	4167	0	0	17.0	6.9	18.3
4400072	99	DIRN	SUR	37	-76	4102	0	0	23.2	2.6	23.3
4400073	99	DIRN	SUR	43	-71	2057	0	0	22.8	-9.0	24.5
4400079	99	DIRN	SUR	36	-75	3360	0	0	14.7	-14.0	20.3
4400080	99	DIRN	SUR	39	-77	643	0	0	26.0	-1.9	26.1
4400137	99	DIRN	SUR	42	-62	688	0	0	18.7	0.8	18.7
4400139	99	DIRN	SUR	44	-57	697	0	0	18.1	0.4	18.1
4400150	99	DIRN	SUR	43	-64	687	0	0	18.0	-6.6	19.1
4400258	99	DIRN	SUR	45	-63	695	0	0	14.2	-1.8	14.3
4400488	99	DIRN	SUR	45	-61	649	1	0	14.6	6.8	16.1
4400489	99	DIRN	SUR	45	-61	629	1	0	16.1	-4.7	16.8
44007	99	DIRN	SUR	44	-70	513	0	0	16.8	2.7	17.0
44008	99	DIRN	SUR	41	-69	680	0	0	16.4	4.1	16.9
44009	99	DIRN	SUR	39	-75	627	0	0	17.9	2.2	18.1
44011	99	DIRN	SUR	41	-67	673	0	0	14.5	8.1	16.6
44013	99	DIRN	SUR	42	-71	687	0	0	14.4	3.3	14.8
44014	99	DIRN	SUR	37	-75	660	0	0	16.7	4.1	17.2
44020	99	DIRN	SUR	42	-70	641	0	0	18.4	5.9	19.3
44025	99	DIRN	SUR	40	-73	685	0	0	12.7	4.4	13.4
44027	99	DIRN	SUR	44	-67	494	0	0	14.1	9.2	16.8
44029	99	DIRN	SUR	43	-71	334	0	0	13.1	3.2	13.4
44030	99	DIRN	SUR	43	-70	332	0	0	21.0	1.7	21.1
44033	99	DIRN	SUR	44	-69	432	0	0	21.0	-7.0	22.2
44034	99	DIRN	SUR	44	-68	364	0	0	17.1	3.2	17.4
44042	99	DIRN	SUR	38	-76	482	0	0	25.5	1.2	25.6
44058	99	DIRN	SUR	38	-76	526	0	0	28.1	3.4	28.3
44062	99	DIRN	SUR	39	-76	360	0	0	25.8	5.6	26.4

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
44065	99	DIRN	SUR	40	-74	686	0	0	16.8	6.2	17.9
44072	99	DIRN	SUR	37	-76	543	0	0	23.1	3.5	23.4
44073	99	DIRN	SUR	43	-71	347	0	0	26.0	-8.4	27.3
44078	99	DIRN	SUR	60	-40	667	0	0	13.5	-17.3	21.9
44079	99	DIRN	SUR	36	-75	546	0	0	14.9	-14.6	20.8
44080	99	DIRN	SUR	39	-77	184	0	0	22.3	-5.6	23.0
44137	99	DIRN	SUR	42	-62	681	0	0	18.6	-0.7	18.6
44139	99	DIRN	SUR	44	-57	695	0	0	18.5	-0.3	18.5
44150	99	DIRN	SUR	43	-64	685	0	0	18.6	-7.4	20.0
44258	99	DIRN	SUR	45	-63	694	0	0	14.3	-2.3	14.5
44488	99	DIRN	SUR	45	-61	647	1	0	14.8	6.1	16.1
44489	99	DIRN	SUR	46	-61	632	1	0	15.8	-4.5	16.4
6100198	99	DIRN	SUR	37	-2	562	0	0	18.5	12.7	22.4
6100281	99	DIRN	SUR	40	0	511	0	0	60.1	-130.3	143.5
6100417	99	DIRN	SUR	38	0	565	0	0	17.5	9.0	19.7
6200001	99	DIRN	SUR	45	-5	715	0	0	13.9	4.4	14.6
6200024	99	DIRN	SUR	44	-3	628	0	0	22.6	7.9	23.9
6200025	99	DIRN	SUR	44	-6	636	0	0	18.8	-9.1	20.9
6200029	99	DIRN	SUR	49	-12	721	0	0	12.7	-0.9	12.7
6200050	99	DIRN	SUR	50	-4	687	0	0	16.2	5.2	17.0
6200081	99	DIRN	SUR	51	-13	702	0	0	18.5	-3.4	18.9
6200082	99	DIRN	SUR	44	-8	708	0	0	15.3	-6.2	16.5
6200083	99	DIRN	SUR	43	-9	17	0	0	17.6	15.0	23.1
6200084	99	DIRN	SUR	42	-9	676	0	0	13.4	3.7	13.9
6200085	99	DIRN	SUR	36	-7	579	0	0	15.6	-7.4	17.3
6200091	99	DIRN	SUR	53	-5	729	0	0	9.9	6.5	11.8
6200092	99	DIRN	SUR	51	-11	692	0	0	17.4	4.5	18.0
6200093	99	DIRN	SUR	55	-10	703	0	0	13.8	8.9	16.4
6200094	99	DIRN	SUR	52	-7	713	0	0	14.8	1.1	14.8
6200095	99	DIRN	SUR	53	-16	683	0	0	15.4	6.7	16.8
6200103	99	DIRN	SUR	50	-3	710	0	0	15.5	15.6	22.0
6200163	99	DIRN	SUR	47	-8	718	0	0	19.6	1.7	19.7
6200442	99	DIRN	SUR	49	-16	715	0	0	12.9	-2.1	13.1
62029	99	DIRN	SUR	49	-13	1448	0	0	13.1	-1.3	13.2
62050	99	DIRN	SUR	50	-4	1383	0	0	16.6	5.6	17.5
62081	99	DIRN	SUR	51	-13	1433	0	0	19.6	-2.8	19.8
62091	99	DIRN	SUR	53	-5	725	0	0	10.3	6.1	12.0
62092	99	DIRN	SUR	51	-11	683	0	0	17.9	3.6	18.3
62093	99	DIRN	SUR	55	-10	698	0	0	14.6	8.4	16.8
62094	99	DIRN	SUR	52	-7	705	0	0	14.9	0.6	14.9
62095	99	DIRN	SUR	53	-16	672	0	0	15.3	6.2	16.5

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
62103	99	DIRN	SUR	50	-3	1438	0	0	16.1	15.6	22.4
62105	99	DIRN	SUR	55	-13	1429	0	0	17.3	-3.6	17.6
62112	99	DIRN	SUR	58	0	1032	0	0	12.7	1.8	12.8
62114	99	DIRN	SUR	58	0	1440	0	0	8.9	0.8	8.9
62163	99	DIRN	SUR	48	-9	1435	0	0	20.3	1.7	20.4
62305	99	DIRN	SUR	50	0	1437	0	0	14.3	6.2	15.6
62442	99	DIRN	SUR	49	-16	1462	2	0	13.4	-2.0	13.6
6400046	99	DIRN	SUR	61	-4	715	0	0	14.7	1.9	14.8
64041	99	DIRN	SUR	61	-3	1447	0	0	10.6	8.8	13.8
64046	99	DIRN	SUR	61	-4	1455	0	0	16.1	1.6	16.2
9193264	99	DIRN	SUR	41	-38	10	0	0	18.4	2.0	18.5
9908310	99	DIRN	SUR	47	-58	3	0	0	3.4	17.6	17.9

4.12 Table 24 - List of Assimilated BUFR Encoded Radiosonde Stations

ASDE09	ATGU3FT	JNKN7JF	JPBN	KJJF9XN	KMPLHPW	LAGY8	LAGZ8	Leopolds
LRYQE3U	USCLL	USOSU	USSIO	USSOM	USTAC	WDK38HS	XKQLWQB	YLV96WM
ZVQEQCM	2TDJJ8J	7JUNA4N	9ZT9MRK	01001	01004	01010	01028	01241
01400	01415	01492	02185	02591	02836	02963	03005	03023
03238	03354	03502	03743	03808	03882	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	15420	15614	16045	16064	16113	16144	16245	16332
16429	16546	16622	16716	16754	17030	17064	17095	17196
17220	17240	17351	17607	20046	20292	20674	21824	22008
22217	22522	22820	22845	23078	23205	23330	23472	23884
23921	23955	24266	24641	24688	24908	24947	26038	26075
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
37055	40179	40186	42056	42079	42101	42111	42123	42182
42339	42348	42410	42516	42623	42634	42647	42675	42874
42886	43049	43063	43128	43150	43185	43295	43346	43353
43466	45004	47102	47104	47138	47155	47169	47186	47230
47269	47401	47412	47418	47582	47600	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	60096	60155	60253	60715	60760	61901
61980	61998	65344	66160	67083	68263	68424	68816	68842
70026	70219	70231	70261	70273	70316	70326	70350	70361
70398	71043	71081	71082	71109	71119	71603	71722	71802
71811	71815	71816	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	72261	72265	72274	72293
72305	72317	72318	72327	72340	72357	72363	72364	72365
72376	72388	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	78866	78897	78954	78970	78988	80001
81405	82022	82026	82099	82107	82193	82244	82332	82411
82532	82705	82824	82917	82965	83208	83378	83525	83554
83566	83612	83649	83768	83779	83827	83840	83899	83928
83937	84372	84516	84622	84754	85442	85586	85799	85934
87155	87344	87418	87585	87623	87715	87860	88889	89002
89022	89055	89062	89504	89564	89571	89592	89611	89625
89642	89662	91165	91212	91285	91334	91348	91376	91408

91413	91592	91765	91925	91938	91948	91958	93112	93417
93844	94001	94005	94113	94170	94203	94299	94302	94312
94326	94332	94403	94430	94461	94510	94578	94610	94637
94653	94659	94672	94711	94767	94775	94802	94821	94865
94910	94995	94996	94998	95282	95527	96413	96441	96471
96481	96996							

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

ASDE09	ATGU3FT	DEN	JNKN7JF	KJJF9XN	KMPLHPW	LAGY8	LAGZ8	LAR
Leopolds		LRYQE3U	TLH	uscou	USSOM	WDK38HS	WFF	XKQLWQB
YLV96WM	ZVQEQCM	2TDJJ8J	7JUNA4N	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
14015	17607	40186	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	60096	60253	66160	67083	72413	76743	76903
89002	89504	89642	91925	91938	91948	91958	94001	94005
94113	94653	94767	94865					

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.