



Téléphone : 34 64 00
Télégrammes : METEOMOND GENÈVE

SECRETARIAT
GENÈVE - Suisse

Telex : 23 260
Case postale N° 5
CH - 1211 Genève 20

In reply refer to / Dans la réponse, mentionner
N° W/OIS

Geneva, 15 April 1983

Annexes: 5

Subject: Monthly letter on the operation of the World Weather Watch (WWW) and Marine Meteorological Services (MMS) (April 1983)

Action required: To be noted and brought to the attention of appropriate operational units

Dear Sir/Madam,

As you are aware, all the information on changes to the operation of the World Weather Watch (WWW) and Marine Meteorological Services (MMS) is being assembled and distributed by the Secretariat on a monthly basis to facilitate updating and follow-up action.

In this connection, please find attached the annexes providing the latest operational information on WWW and MMS. Those items and sub-items for which information is provided are listed below:

Annex 1 - Global Observing System

B. Changes in global or regional components of WWW plan

1. Basic synoptic networks

- 1.1 New stations
- 1.2 Deleted stations

C. Information on operational status of elements of the surface-based sub-system

1. Publication No. 9, Volume A - Stations

- 1.1 New stations
- 1.3 Changes to existing stations

4. ARGOS monthly status report

E. Integrated WWW system study

To: Permanent Representatives (or Directors of Meteorological or Hydro-meteorological Services) of Members of WMO (PR-3555)
Directors of Meteorological Services of non-Member countries (MC-2255)
Presidents and Vice-Presidents of Regional Associations (P.RA-1034)
Presidents and Vice-Presidents of Technical Commissions (P.TC-1104)
Chairmen of CBS Working Groups
Secretary-General of ICAO
Secretary of IOC
Director-General of ASECNA
Director of ECMWF

Annex II - Global Data-processing System

4. Output products of centres other than WMCs, RMCs and NMCs
 - 4.3 Changes to products

Annex III - Global Telecommunication System

- B. Updating of Manual on GTS in respect of the exchange lists
 1. Global exchange lists (Manual on the GTS, Volume 1, Part 1, Attachment 1-4)
 - 1.1 New stations
 - 1.2 Deleted stations
- C. Information on the operations of the GTS
 1. Catalogue of Meteorological Bulletins (Publication No. 9, Volume C, Chapter I)
 - 1.1 New bulletins
 - 1.2 Deleted bulletins
 2. Transmission schedules (Publication No. 9, Volume C, Chapter II)
 - 2.3 Changes in schedules/technical specifications

Annex IV - Codes

- B. Manual on Codes
 2. Regional practices

Annex V - Marine Meteorological Services (MMS) and related oceanographic activities

- C. Information on the operation of Marine Meteorological Services
 4. Collection and dissemination of marine information

Your co-operation in ensuring that the above information reaches the appropriate operational units of your service is greatly appreciated. If you wish to receive additional copies of the monthly circular letter, please inform me accordingly.

Yours faithfully,



for the Secretary-General
(G.K. Weiss)
Director
World Weather Watch Department

Date: 15 April 1983

B. Changes in global or regional components of WWW plan**1. Basic synoptic networks****1.1 New stations****Region III**

85141 RURRENABAQUE	(14°29'S, 67°29'W)	(surface observations)
85207 SAN IGNACIO DE VELAZCO	(16°22'S, 60°57'W)	(surface observations)
85283 SUCRE	(19°01'S, 65°16'W)	(surface observations)
85364 TARIJA	(21°32'S, 64°43'W)	(surface observations)

Region VI

40095 DARA'A	(32°36'N, 36°06'E)	(surface observations)
--------------	--------------------	------------------------

1.2 Deleted stations**Region III**

85152 SAN BORJA	(14°52'S, 66°45'W)
85196 CONCEPCION	(16°15'S, 62°06'W)
85205 TODOS SANTOS	(16°40'S, 65°08'W)
85247 SAN JOSE	(17°50'S, 60°45'W)

C. Information on operational status of elements of the surface-based sub-system**1. Publication No. 9, Volume A - Stations****1.1 New stations**

11127 OBERGURGL	4652N	1102E	1937	1938	850	HPA	. . . X	/
44203 RINCHINLHUMBE	5107N	9940E	1583	1583	X X X X X X X X	H00-24 /	
44213 BARJUNTURUJUN	4939N	9424E	1232	1232	X X X X X X X X	H00-24 /	
44215 LMNU-GOBI	4906N	9143E	1591	1590	X X X X X X X X	H00-24 /	
44225 TOSONTSENGEL	4844N	9817E	1723	1724	X X X X X X X X	H00-24 /	
44230 TARIJAN	4937N	10200E	1236	1235	X X X X X X X X	H00-24 /	
44237 ERDENEMANDAL	4832N	10123E	1510	1510	X X X X X X X X	H00-24 /	
44256 DASHBALBAR	4933N	11424E	705	706	X X X X X X X X	H00-24 /	
44265 BAITAG	4607N	9138E	1186	1186	X X X X X X X X	H00-24 /	
44275 BAYANBULAG	4650N	9805E	2255	2255	X X X X X X X X	H00-24 /	
44302 BAYAN-OVOD	4747N	11207E	926	926	X X X X X X X X	H00-24 /	
44313 KHALKH-GOL	4737N	11837E	688	689	X X X X X X X X	H00-24 /	
44336 SAIKHAN-OVOD	4527N	10354E	1316	1317	X X X X X X X X	H00-24 /	

1.3 Changes to existing stations

67221 MARRUPA	. X X X X . X . /
48330 PHRAE	X X X X X X X X /
48351 UTTARADIT	X X X X X X X X /
48376 TAK	X X X X X X X X /
44218 HOVDO /
44239 BULGAN /
44241 BARUNHARA /
44272 ULIASTAI /
44282 TSETSERLEG /
44341 MANDALGOVI /

4. ARGOS monthly status report

As of 23 March 1983 the ARGOS service was handling reports from 196 drifting buoys, 31 moored buoys, 16 balloons, 6 ships, 73 fixed stations and 42 miscellaneous platforms. On the same date, during a period of 24 hours, 606 DRIBU reports were transmitted to RTH Paris for insertion into the GTS.

E. Integrated WWW system study

An Expert Meeting on ISS Observing System Experiments was held in Geneva from 14 to 15 March 1983. The meeting developed recommendations for a series of activities and experiments, necessary for designing an improved global observing system which will be considered by CBS. The report of this meeting, which is available in English only, can be requested from the Secretariat.

4. Output products of centres other than WMCs, RMCs and NMCs

4.3 Changes to products

The European Centre for Medium Range Weather Forecasts (ECMWF) has been distributing a selection of its products via the Global Telecommunications System since 1 August 1981. These include surface pressure and 500 hPa geopotential height fields for Northern Hemispheric areas up to five forecast days, and for Southern Hemispheric areas up to four forecast days. Wind at 850 hPa and 200 hPa for tropical areas up to two forecast days are also included. Details concerning the bulletins are contained in WMO Publication No. 9, Volume C, Chapter I, Catalogue of Meteorological Bulletins. Information about or queries concerning ECMWF products may be addressed to:

The Director
ECMWF
Shinfield Park
Reading RG2 9AX
England

4.3.2 New ECMWF forecasting system

In May 1983, it is planned to make important changes to the ECMWF forecasting system. A spectral model will replace the current grid point model, and an improved model orography will be introduced at the same time. These changes will lead to improved forecast quality; the bulletins will remain unchanged with respect to format etc.

4.3.3 The new forecast model

An extensive intercomparison of a total of 53 forecasts, described in ECMWF Technical Report No. 32 by Girard and Jarraud (1982), and much subsequent experimentation has shown that use of a spectral model gives an improvement in forecast quality over that achieved by the Centre's current operational model. Although the operational and spectral models often gave very similar forecasts, some clear differences in overall performance were found.

4.3.4 The new "envelope" orography

Diagnostic and barotropic model studies reported by Wallace et al. (1983) have suggested that the use of a grid-square mean orography significantly underestimates the orographic forcing of the synoptic and larger-scale flow in the operational ECMWF forecast model. Prediction experiments, some of which are described by Wallace et al., have been carried out using a series of "envelope" orographies formed by adding to the mean orography 1.4 times the standard deviation of the actual orography over the grid square, this being computed from a very high resolution data set. Some significant improvements in the accuracy of forecasts have been found, amounting in the mean to an increase in medium-range predictability of at least six hours. The growth of some systematic errors has also been substantially reduced.

B. Updating of Manual on GTS in respect of exchange lists

1. Global exchange lists (Manual on the GTS, Volume I, Part I, Attachment I-4).

1.1 New stations

SYNOPSIS:

67221 at 06,12,18 GMT

PILOT:

62306 at 00 GMT

62378 at 00 GMT

62414 at 00 GMT

1.2 Deleted stations

TEMP:

62306 at 00 GMT

62378 at 00 GMT

62414 at 00 GMT

C. Information on the operations of the GTS

1. Catalogue of Meteorological Bulletins (Publication No. 9, Volume C, Chapter I)

1.1 New bulletins

GPXA98	EGRR	87700	00,12	(32.5°N - 75°N 35°W - 00°),	GRID (2.5° x 2.5°)
GPXB98	EGRR	87701	"	"	"
GPXC98	EGRR	87702	"	"	"
GPXD98	EGRR	87703	"	"	"
GPXE98	EGRR	87704	"	"	"
GPXF98	EGRR	87705	"	"	"
GPXG98	EGRR	87706	"	"	"
GPYA98	EGRR	87707	00,12	(32.5°N - 75°N 35°E - 00°),	GRID (2.5° x 2.5°)
GPYB98	EGRR	87708	"	"	"
GPYC98	EGRR	87709	"	"	"
GPYD98	EGRR	87710	"	"	"
GPYE98	EGRR	87711	"	"	"
GPYF98	EGRR	87712	"	"	"
GPYG98	EGRR	87713	"	"	"
GEXB98	EGRR	87715	00,12	(32.5°N - 75°N 35°W - 00°),	GRID (2.5° x 2.5°)
GEXC98	EGRR	87716	"	"	"
GEXD98	EGRR	87717	"	"	"
GEXE98	EGRR	87718	"	"	"
GEXF98	EGRR	87719	"	"	"
GEXG98	EGRR	87720	"	"	"
GEYB98	EGRR	87722	00,12	(32.5°N - 75°N 35°E - 00°),	GRID (2.5° x 2.5°)
GEYC98	EGRR	87723	"	"	"
GEYD98	EGRR	87724	"	"	"
GEYE98	EGRR	87725	"	"	"
GEYF98	EGRR	87726	"	"	"
GEYG98	EGRR	87727	"	"	"
GHXA85	EGRR	87728	00,12	(32.5°N - 75°N 35°W - 00°),	GRID (2.5° x 2.5°)
GHXB85	EGRR	87729	"	"	"
GHXC85	EGRR	87730	"	"	"
GHXD85	EGRR	87731	"	"	"
GHXE85	EGRR	87732	"	"	"
GHXF85	EGRR	87733	"	"	"
GHXG85	EGRR	87734	"	"	"
GHYA85	EGRR	87735	00,12	(32.5°N - 75°N 35°E - 00°),	GRID (2.5° x 2.5°)
GHYB85	EGRR	87736	"	"	"
GHYC85	EGRR	87737	"	"	"
GHYD85	EGRR	87738	"	"	"
GHYE85	EGRR	87739	"	"	"
GHYF85	EGRR	87740	"	"	"

GHYG85	EGRR	87741	"	"	"	"	"
GHXA50	EGRR	87742	00,12	(32.5°N - 75°N	35°W - 00°),	GRID (2.5° x 2.5°)	"
GHXB50	EGRR	87743	"	"	"	"	"
GHXC50	EGRR	87744	"	"	"	"	"
GHXD50	EGRR	87745	"	"	"	"	"
GHXE50	EGRR	87746	"	"	"	"	"
GHXF50	EGRR	87747	"	"	"	"	"
GHXG50	EGRR	87748	"	"	"	"	"
GHYA50	EGRR	87749	00,12	(32.5°N - 75°N	35°E - 00°),	GRID (2.5° x 2.5°)	"
GHYB50	EGRR	87750	"	"	"	"	"
GHYC50	EGRR	87751	"	"	"	"	"
GHYD50	EGRR	87752	"	"	"	"	"
GHYE50	EGRR	87753	"	"	"	"	"
GHYF50	EGRR	87754	"	"	"	"	"
GHYG50	EGRR	87755	"	"	"	"	"
GNXA85	EGRR	87756	00,12	(32.5°N - 75°N	35°W - 00°),	GRID (2.5° x 2.5°)	"
GNXB85	EGRR	87757	"	"	"	"	"
GNXC85	EGRR	87758	"	"	"	"	"
GNXD85	EGRR	87759	"	"	"	"	"
GNXE85	EGRR	87760	"	"	"	"	"
GNXF85	EGRR	87761	"	"	"	"	"
GNXG85	EGRR	87762	"	"	"	"	"
GNYA85	EGRR	87763	00,12	(32.5°N - 75°N	35°E - 00°),	GRID (2.5° x 2.5°)	"
GNYB85	EGRR	87764	"	"	"	"	"
GNYC85	EGRR	87765	"	"	"	"	"
GNYD85	EGRR	87766	"	"	"	"	"
GNYE85	EGRR	87767	"	"	"	"	"
GNYF85	EGRR	87768	"	"	"	"	"
GNYG85	EGRR	87769	"	"	"	"	"
GNXA50	EGRR	87770	00,12	(32.5°N - 75°N	35°W - 00°),	GRID (2.5° x 2.5°)	"
GNXB50	EGRR	87771	"	"	"	"	"
GNXC50	EGRR	87772	"	"	"	"	"
GNXD50	EGRR	87773	"	"	"	"	"
GNXE50	EGRR	87774	"	"	"	"	"
GNXF50	EGRR	87775	"	"	"	"	"
GNXG50	EGRR	87776	"	"	"	"	"
GNYA50	EGRR	87777	00,12	(32.5°N - 75°N	35°E - 00°),	GRID (2.5° x 2.5°)	"
GNYB50	EGRR	87778	"	"	"	"	"
GNYC50	EGRR	87779	"	"	"	"	"
GNYD50	EGRR	87780	"	"	"	"	"
GNYE50	EGRR	87781	"	"	"	"	"
GNYF50	EGRR	87782	"	"	"	"	"
GNYG50	EGRR	87783	"	"	"	"	"
GTXA85	EGRR	87784	00,12	(32.5°N - 75°N	35°W - 00°),	GRID (2.5° x 2.5°)	"
GTXB85	EGRR	87785	"	"	"	"	"
GTXC85	EGRR	87786	"	"	"	"	"
GTXD85	EGRR	87787	"	"	"	"	"
GTXE85	EGRR	87788	"	"	"	"	"
GTXF85	EGRR	87789	"	"	"	"	"
GTXG85	EGRR	87790	"	"	"	"	"
GTYA85	EGRR	87791	00,12	(32.5°N - 75°N	35°E - 00°),	GRID (2.5° x 2.5°)	"
GTYB85	EGRR	87792	"	"	"	"	"
GTYC85	EGRR	87793	"	"	"	"	"
GTYD85	EGRR	87794	"	"	"	"	"
GTYE85	EGRR	87795	"	"	"	"	"
GTYF85	EGRR	87796	"	"	"	"	"
GTYG85	EGRR	87797	"	"	"	"	"
GTXA50	EGRR	87601	00,12	(32.5°N - 75°N	35°W - 00°),	GRID (2.5° x 2.5°)	"
GTXB50	EGRR	87602	"	"	"	"	"
GTXC50	EGRR	87603	"	"	"	"	"
GTXD50	EGRR	87604	"	"	"	"	"
GTXE50	EGRR	87605	"	"	"	"	"
GTXF50	EGRR	87606	"	"	"	"	"
GTXG50	EGRR	87630	"	"	"	"	"
GTYA50	EGRR	87631	00,12	(32.5°N - 75°N	35°E - 00°),	GRID (2.5° x 2.5°)	"
GTYB50	EGRR	87632	"	"	"	"	"
GTYC50	EGRR	87633	"	"	"	"	"
GTYD50	EGRR	87634	"	"	"	"	"
GTYE50	EGRR	87635	"	"	"	"	"
GTYF50	EGRR	87636	"	"	"	"	"

GTYG50	EGRR	87637	"	"	"	"
GPOM98	EGRR	87800	00,12	(25°N - 75°N	45°E - 00°),	GRID (2.5° x 2.5°)
GP0098	EGRR	87801	"	"	"	"
GHOC50	EGRR	87802	"	"	"	"
GHOM50	EGRR	87803	"	"	"	"
GH0050	EGRR	87804	"	"	"	"
GHOC30	EGRR	87805	"	"	"	"
GHOF30	EGRR	87806	"	"	"	"
GHOG30	EGRR	87807	"	"	"	"
GHOA10	EGRR	87808	"	"	"	"
GHOC10	EGRR	87809	"	"	"	"
GHOD10	EGRR	87810	"	"	"	"
GHOE10	EGRR	87811	"	"	"	"
GHOF10	EGRR	87812	"	"	"	"
GHOG10	EGRR	87813	"	"	"	"
GWOC85	EGRR	87814	"	"	"	"
GWOD85	EGRR	87815	"	"	"	"
GWOE85	EGRR	87816	"	"	"	"
GWOG85	EGRR	87817	"	"	"	"
GWOC70	EGRR	87818	"	"	"	"
GWOC50	EGRR	87819	"	"	"	"
GWOA30	EGRR	87820	"	"	"	"
GWOC30	EGRR	87821	"	"	"	"
GWOD30	EGRR	87822	"	"	"	"
GWOE30	EGRR	87823	"	"	"	"
GWOF30	EGRR	87824	"	"	"	"
GWOG30	EGRR	87825	"	"	"	"
GWOD25	EGRR	87826	"	"	"	"
GWOE25	EGRR	87827	"	"	"	"
GWOA10	EGRR	87828	"	"	"	"
GWOC10	EGRR	87829	"	"	"	"
GWOD10	EGRR	87830	"	"	"	"
GWOE10	EGRR	87831	"	"	"	"
GWOF10	EGRR	87832	"	"	"	"
GWOG10	EGRR	87833	"	"	"	"
GPNM98	EGRR	87834	00,12	(25°N - 75°N	45°W - 00°),	GRID (2.5° x 2.5°)
GPNO98	EGRR	87835	"	"	"	"
GHNC50	EGRR	87836	"	"	"	"
GHNM50	EGRR	87837	"	"	"	"
GHNO50	EGRR	87838	"	"	"	"
GHNC30	EGRR	87839	"	"	"	"
GHNF30	EGRR	87840	"	"	"	"
GHNG30	EGRR	87841	"	"	"	"
GHNA10	EGRR	87842	"	"	"	"
GHNC10	EGRR	87843	"	"	"	"
GHND10	EGRR	87844	"	"	"	"
GHNE10	EGRR	87845	"	"	"	"
GHNF10	EGRR	87846	"	"	"	"
GHNG10	EGRR	87847	"	"	"	"
GWNC85	EGRR	87848	"	"	"	"
GWNC70	EGRR	87849	"	"	"	"
GWNC50	EGRR	87850	"	"	"	"
GWNA30	EGRR	87851	"	"	"	"
GWNC30	EGRR	87852	"	"	"	"
GWND30	EGRR	87853	"	"	"	"
GWNE30	EGRR	87854	"	"	"	"
GWNF30	EGRR	87855	"	"	"	"
GWNG30	EGRR	87856	"	"	"	"
GWND25	EGRR	87857	"	"	"	"
GWNE25	EGRR	87858	"	"	"	"
GWNA10	EGRR	87859	"	"	"	"
GWNC10	EGRR	87860	"	"	"	"
GWND10	EGRR	87861	"	"	"	"
GWNE10	EGRR	87862	"	"	"	"
GWNF10	EGRR	87863	"	"	"	"
GWNG10	EGRR	87864	"	"	"	"

1.2 Deleted bulletins

GHNC50	EGRR	87695	00,12	(25°N - 75°N 45°W - 00°),	GRID (2.5° x 2.5°)
GHOC50	EGRR	87696	00,12	(25°N - 75°N 45°E - 00°),	GRID (2.5° x 2.5°)

2. Transmission schedules (Publication No. 9, Volume C, Chapter II)

2.3 Changes in schedules/technical specifications

(i) changes in schedules

- V-iii WELLINGTON radio-facsimile broadcast changes.
- VI-iii OFFENBACH/MAIN-MAINFLINGEN (DCF54) radio-facsimile broadcast effective 12 April 1983 chart nos. 3, 5, 7, 11, 12, 17, 18, 44, 45, 52, 53, 58 and 59 are transmitted with new drum speed/index of co-operation 240/576, at 0230, 0310, 0348, 0448, 0459, 0630, 0650, 1424, 1444, 1659, 1710, 1830 and 1850 GMT as in the present schedule.

(ii) changes in technical specifications

- V-iii WELLINGTON radio-facsimile broadcast replace 9410 kHz by 9459 kHz.
-

B. Manual on codes

2. Regional practices

Region I:

Regional coding procedures for FM 35-V TEMP and FM 36-V TEMP SHIP

Implementation with effect from 1 July 1983, as contained in WMO circular letter no. W/SY/CO of 25 March 1983 (AFR-413).

Region VI:

(1) Regional coding procedures for FM 35-V TEMP and FM 36-V TEMP SHIP

(2) Regional code for general aviation forecasts in Europe

Implementation with effect from 1 July 1983, as contained in WMO circular letter no. W/SY/CO of 7 April 1983 (EUR-466).

Annex V - Marine Meteorological Services (MMS)
and related oceanographic activities

Date: 15 April 1983

C. Information on the operation of Marine Meteorological Services

4. Collection and dissemination of marine information

A Meeting of Experts on the Use of INMARSAT was held at the WMO Headquarters from 11 to 15 April 1983. It reviewed the present status and use of INMARSAT, the existing and planned network of INMARSAT coast earth stations, a tentative plan for weather reporting through this network and the cost aspect. The report will be considered by CBS and CMM. The report may be obtained from the Secretariat on request.
