

Extract relating to codes and format from WMO documents

COMMISSION FOR BASIC SYSTEMS
ABRIDGED FINAL REPORT
OF THE
NINTH SESSION
Geneva, 25 January – 5 February 1988
WMO - No. 699

GENERAL SUMMARY OF THE WORK OF THE SESSION

6.4 WWW Data Management (DM) (including codes) (agenda item 6.4)

6.4.34 The Commission considered proposals by the seventh session of the Working Group on Codes and agreed on new procedures including guidance to regional associations in order to meet these requirements as follows:

(a) Snow-depth data

The Commission endorsed the Working Group's proposal to include in the regulations related to Group 4E'sss, Section 3 of SYNOP, the mandatory character of reporting data on actual snow cover (E'). It further agreed that, in accordance with a regional decision, snow depth may be included in the report. The Commission was informed that the standardization of measurement procedures presently being undertaken by CIMO would soon be completed;

(b) Precipitation data

The Commission agreed with the Working Group's proposals and recommended amendments to global regulations of SYNOP. It requested that regional associations should be invited to amend regional regulations with respect to use of groups 6RRRt_R in Sections 1 and 3 and group (7....) in Section 3 so that the group 6RRRt_R in section 1 of SYNOP reports could be related to precipitation data in time periods which are multiples of six

hours at main standard times, and that the group 6RRRt_R in Section 3 of SYNOP reports could be related to precipitation data over the preceding three hours or other periods required for regional exchange. It agreed that the group 7R₂₄R₂₄R₂₄R₂₄ could, by regional decision, be related to precipitation data over the preceding 24 hours;

(c) Daily amount of evaporation (evapotranspiration), net-radiation and sunshine data

The Commission agreed with the Working Group's proposals and recommended amendments to global regulations and specifications of SYNOP. It requested that regional associations should be invited to amend regional regulations and specifications with respect to the use of the group (5j₁j₂j₃j₄(j₅j₆j₇j₈j₉)) so that their forms 5EEEi_E s_nF_nF_nF_nF_n and 55SSS could be used to report daily evaporation (evapotranspiration) in tenths of millimetres, net radiation in joules per square centimetre and duration of sunshine in hours and tenths.

The Commission noted that agricultural meteorological stations were required to measure global as well as net radiation. The Commission considered that the requirements for other types of solar-radiation data – e.g. global short-wave radiation – should be referred back to other commissions, including CAgM, and that the Working Group on Data Management should be invited to develop the code in the light of further requirements.

6.4.35 Recommendation 12 (CBS-IX) was adopted.

RECOMMENDATIONS

Rec. 12 (CBS-IX) – PROPOSED MODIFICATIONS TO REGULATIONS OF FM 12-VIII EXT. SYNOP AND FM 13-VIII EXT. SHIP TO MEET ADDITIONAL DATA REQUIREMENTS

THE COMMISSION FOR BASIC SYSTEMS,
NOTING:

- (1) Resolution 6 (CBS-VIII) – Working Group on Codes,
- (2) The abridged final report of EC-XXXVI, general summary, paragraph 3.1.3.4,
- (3) The abridged final report of CBS-Ext. (85), general summary, paragraph 7.2.7 to 7.2.12,

CONSIDERING that there is an expressed requirement by CAgM for precipitation and snow-depth data for global exchange and evaporation (evapotranspiration), net-radiation and duration of bright sunshine data for regional exchange,

RECOMMENDS:

- (1) That the amendments to the global regulations and associated code table of FM 12-VIII Ext. SYNOP and FM 13-VIII Ext. SHIP given in the annex to this recommendation be adopted for use as from 1 November 1989;
- (2) That regional associations be invited to amend, where appropriate, regional regulations with respect to the SYNOP/SHIP code in accordance with given in the annex to this recommendation, for use as from 1 November 1989;

REQUESTS the Secretary-General to arrange for the inclusion of these amendments in Volume I of the Manual on Codes.

Annex to Recommendation 12 (CBS-IX)
PROPOSED MODIFICATIONS TO REGULATIONS OF FM 12-VIII Ext. SYNOP AND
FM 13-VIII Ext. SHIP TO MEET ADDITIONAL DATA REQUIREMENTS

REGULATIONS

1. Snow-depth data

Regional associations are invited to specify regulations to the effect that snow-depth data (group 4E'sss) should be reported by all stations capable of doing so, and included at least once daily at specified times.

2. Precipitation data

- Amend Regulation 12.2.5.1 to read:

“When precipitation data are to be exchanged in time periods of 6 hours at main standard times (i.e. to report the amount of precipitation over the preceding 6, 12, 18 and 24 hours), this group shall be included in Section 1.”

- Amend Regulation 12.2.5.2 to read:

“When precipitation data are to be exchanged in time periods of 3 hours or other periods required for regional exchange this group shall be included in Section 3.”

- Amend Regulation 12.4.8.2 to read:

“The decision to implement Regulation 12.2.5.2 shall be taken at the regional level.”

- Regional associations are invited to:

- (a) Amend regional regulations with respect to group 6RRRt_R (Section 1) to the effect that:

“This group shall be included in Section 1 of the synoptic report at the main standard times 00 GMT, 06 GMT; 12 GMT and 18 GMT.”;

- (b) Amend regulations with respect to group 6RRRt_R (Section 3) to the effect that:

- (i) This group shall be included in Section 3 of the synoptic report at least at the intermediate standard times, and at the main standard times, as required;

- (ii) RRR shall indicate the amount of precipitation during the 3-hour period preceding the

time of observation or during other periods required for regional exchange;

(c) Amend regulations with respect to group (7....) to the effect that:

(i) This group shall be used in the form $7R_{24}R_{24}R_{24}R_{24}$;

(ii) The group $7R_{24}R_{24}R_{24}R_{24}$ may, by regional decision, be reported by all stations capable of doing so, and included at least once daily at either 00 GMT, 06 GMT, 12 GMT or 18 GMT.

- Amend specification for t_R to read as follows:

“Duration of period of reference for amount of precipitation, ending at the time of the report (code table 4019).”

3. Daily amount of evaporation (evapotranspiration), net-radiation and duration of sunshine data

- Amend Regulation 12.4.7.1.1 to read as follows:

“When the group $5j_1j_2j_3j_4$ is used in the form of $5EEEi_E$, the supplementary group $j_5j_6j_7j_8j_9$ shall be added in the form of $s_nF_nF_nF_nF_n$ when relevant data are available. The latter group shall not be used in association with other symbolic expressions of the group $5j_1j_2j_3j_4$.”

Note: If data for the group $5EEEi_E$ is not available, the group shall be included as $5////$ whenever the supplementary group $s_nF_nF_nF_nF_n$ is included.

- Amend Regulation 12.4.7.1.2 (a) to read as follows:

“ $5EEEi_E s_nF_nF_nF_nF_n$

to report the daily amount of either evaporation or evapotranspiration, and the daily amount of net-radiation;”.

- Amend Regulation 12.4.7.1.2 (c) to read as follows:

“5SSS to report the daily hours of sunshine”.

- Amend Regulation 12.4.7.2 to read as follows:

“12.4.7.2 Daily evaporation or evapotranspiration, and daily net-radiation

12.4.7.2.1 the symbolic expression $5EEEi_E$ shall be used to report either daily evaporation or evapotranspiration, and the supplementary symbolic expression $s_nF_nF_nF_nF_n$ shall be used to report the daily net-radiation, when available.

12.4.7.2.2 EEE shall indicate the amount of either evaporation or evapotranspiration, in tenths of millimetres, during the preceding 24 hours at either 00 GMT, 06 GMT or 12GMT.

12.4.7.2.3 $F_n F_n F_n F_n$ shall indicate the absolute value of the amount of net-radiation, in joules per square centimetre, during the preceding 24 hours at either 00 GMT, 06 GMT or 12 GMT.”.

- Amend Regulation 12.4.7.4 through 12.4.7.4.2, as follows:

12.4.7.4

Duration of sunshine

12.4.7.4.1

The symbolic expression SSS shall be used to report the daily hours of sunshine in hours and tenths.

12.4.7.4.2

in the form 55SSS, this group shall, by regional decision, be reported by all stations capable of doing so and included at either 00 GMT, 06 GMT, 12 GMT or 18 GMT.

- Regional associations are invited to amend regulations with respect to group (5j₁j₂j₃j₄(j₅j₆j₇j₈j₉)) to the effect that:

(i) “In the form 5EEEi_E s_nF_nF_nF_nF_n and 55SSS, these groups shall be included by all stations capable of doing so, when appropriate.

Note: Other forms of these groups may be included by all stations capable of doing so, when appropriate.”

SPECIFICATION OF SYMBOLIC LETTERS AND CODE TABLES

- Add new specifications and code tables as follows:

EEE Amount of either evaporation or evapotranspiration, in tenths of millimetres, during the preceding 24 hours

i_E Indicator of type of instrumentation for evaporation measurement or type of crop for which evapotranspiration is reported. (Code table 1806)

$F_n F_n F_n F_n$ Amount of net-radiation, in joules per square centimetre, over a 24-hour period
 SSS Duration of sunshine in hours and tenths

- Add new code table:

1806

i_E - Indicator of type of instrumentation for evaporation measurement or type of crop for which evapotranspiration is reported

Code figure	Instrumentation or crop type	Type of data
0	USA open pan evaporimeter (without cover)	Evaporation
1	USA open pan evaporimeter (mesh-cover)	Evaporation
2	GGI – 3000 evaporimeter (sunken)	Evaporation
3	20 m ² tank	Evaporation
4	Others	Evaporation
5	Rice	Evapotranspiration
6	Wheat	Evapotranspiration
7	Maize	Evapotranspiration
8	Sorghum	Evapotranspiration
9	Other crops	Evapotranspiration

- Add as a first specification to Code table 1819 as follows:

i_E - Indicator for inclusion or omission of precipitation data

Code figure	Precipitation data are reported:	Group 6RRRt _R is:
0	In Sections 1 and 3	Included in both sections

- Add new code table:

4019

t_R - Duration of period f reference of amount of precipitation ending at time of report

Code figure

1	Total precipitation during the 6 hours preceding the observation
2	Total precipitation during the 12 hours preceding the observation
3	Total precipitation during the 18 hours preceding the observation
4	Total precipitation during the 24 hours preceding the observation
5	Total precipitation during the 1 hours preceding the observation
6	Total precipitation during the 2 hours preceding the observation
7	Total precipitation during the 3 hours preceding the observation
8	Total precipitation during the 9 hours preceding the observation
9	Total precipitation during the 15 hours preceding the observation

Notes:

- (1) If the duration of the period of reference is not covered by code table 4019 or the period does not end at the time of the report, t_R shall be coded 0.
- (2) Members are recommended to avoid any deviations from international practices which require the use of code figure 0. The specification of code figure 0 should be indicated in Volume II under National coding procedures.