

Manual on Codes

International Codes

Volume I.1

Annex II to the WMO Technical Regulations

Part A – Alphanumeric Codes

WMO-No.306, 2019 Edition

FM 12 SYNOP, FM 13 SHIP, FM 14 SYNOP MOBIL

The code form is divided into a number of sections as follows:

Section number

Symbolic figure group

Contents

0	—	Data for reporting identification (type, ship's call sign/buoy identifier, date, time, location) and units of wind speed used
1	—	Data for global exchange which are common to the SYNOP, SHIP and SYNOP MOBIL code forms
2	222	Maritime data for global exchange pertaining to a sea, or to a coastal station
3	333	Data for regional exchange
4	444	Data for national use for clouds with base below station level, included by national decision
5	555	Data for national use

SECTION 3 333 (0) (1s_nT_xT_xT_x) (2s_nT_nT_nT_n) (3Ejjj) (4E' sss) (5j₁j₂j₃j₄ (j₅j₆j₇j₈j₉))
(6RRRtr) (7R₂₄R₂₄R₂₄R₂₄) (8N_sCh_{sh}s) (9SpSPSpSp)
(80000 (0) (1))

Minimum and Maximum Temperature:

Section 3

Groups (1s_nT_xT_xT_x), (2s_nT_nT_nT_n)

The period of time covered by the maximum and the minimum temperature and the synoptic hour at which these temperatures are reported shall be determined by regional decision.

T_xT_xT_x Maximum air temperature, in tenths of degrees Celsius, its sign being given by s_n.
(FM 12, FM 13, FM 14)

T_nT_nT_n Minimum air temperature, in tenths of degrees Celsius, its sign being given by s_n.
(FM 12, FM 13, FM 14)

Precipitation

Section 1

Group 6RRR^{t_R}

12.2.5.1 When precipitation data are to be exchanged in time periods of six 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.

^{t_R} *Duration of period of reference for amount of precipitation, ending at the time of the 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 hour 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

Section 3

Group (7R₂₄R₂₄R₂₄R₂₄)

Total amount of precipitation during the 24-hour period ending at the time of observation, in tenths of millimetres (coded 9998 for 999.8 mm or more, and coded 9999 for trace).

(FM 12, FM 14)

This group shall be used to report the total amount of precipitation during the 24-hour period ending at the time of observation, in

Snow

Section 3

Group (4E[´]sss)

12.4.6.1 The measurement shall include snow, ice and all other forms of solid precipitation on the ground at the time of observation.

12.4.6.2 When the depth is not uniform, the average depth over a representative area shall be reported.