

WORLD METEOROLOGICAL ORGANIZATION

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REGIONAL ASSOCIATION II (ASIA)

ITEM 6.4

**WORKING GROUP ON PLANNING AND
IMPLEMENTATION OF THE WWW IN REGION II
FOURTH SESSION**

ENGLISH ONLY

MOSCOW, 10-13 SEPTEMBER 2003

**REGIONAL ASPECTS OF THE WWW COMPONENTS AND SUPPORT FUNCTIONS,
INCLUDING REPORTS BY THE RAPPORTEURS/COORDINATORS**

WWW Data Management (DM), including Codes

*(Submitted by Mr A. Shimazaki,
Rapporteur on the Regional Aspects of the
Data Management and Codes)*

Summary and purpose of document

This document provides information on the current reporting practice on precipitation and snow depth in Region II, including plans and proposals with a view to improving the practice.

ACTION PROPOSED

The group is invited to study this document and consider appropriate recommendations related to the current and future practice in the region.

- Appendices:**
- I. Regional Coding Procedure for 24-hour Precipitation
 - II. Regional Coding Procedure for 6- and 12-hour Precipitation
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DISCUSSION

1. The Regional Association II at its twelfth session (Seoul, Republic of Korea, 19-27 September 2000) re-established the Working Group on Planning and Implementation of the WWW in Region II (WG/PIW, hereafter), which consists of a Coordinator of Sub-group on Regional Aspects of GTS and Rapporteurs on Regional Aspects of GOS, GDPS, DM and PWS.
2. The meeting of the Advisory Working Group of the Regional Association for Asia (AWG, hereafter) held in November 2001 (Nanjing, China) approved the work plan of the WG/PIW. The tasks for the Rapporteur on DM defined in the work plan covers,
 - 1) Introducing new regional reporting practice on precipitation in Region II,
 - 2) Improvement of snow depth reporting in SYNOP,
 - 3) Coding samples for CLIMAT and CLIMAT TEMP with detailed instructions to promote correct coding,
 - 4) Requirement of additional data,
 - 5) Use of the Internet, and
 - 6) Use of BUFR and CREX for data representation.
3. Regarding the first three items on code matters, the Rapporteur distributed his study report to the Members of RA II (the Members, hereafter) on 12 June 2003. The scopes of the report are:
 - a. Modifying the regional coding procedures for precipitation in FM 12-XI Ext. SYNOP, FM 13-XI Ext. SHIP and FM 14-XI Ext. SYNOP MOBIL (SYNOPs, hereafter),
 - b. Improving availability of the snow depth data in SYNOPs, and
 - c. Promoting correct coding of FM 71-XII CLIMAT and FM 75-XII CLIMAT TEMP.
4. The report contained a questionnaire on current status and future plan of the Members on reporting practices of precipitation and snow depth data.
5. The XII-RA II noted with concern, that there were many errors found in CLIMAT and CLIMAT TEMP reports (CLIMATs, hereafter) in spite of the established regional coding procedures aiming at reducing coding errors in the CLIMATs. The session thus concluded that the circumstance would be more effectively improved by indication of coding samples in the manuals rather than applying more detailed regulations to the coding procedures.
6. The Rapporteur prepared coding samples for CLIMATs with detailed explanation. The Members are requested to take arrangements for correct coding of CLIMATs, if necessary, based on the coding samples.
7. The details of the coding procedures of CLIMATs have been described in the Guide to Climatological Practices (WMO Publication No.100), however, several coding instructions in the Guide especially for CLIMAT are now outdated and need to be updated. The Commission for Climatology (CCI) is currently preparing the new Guide (http://www.wmo.ch/web/wcp/ccl/CCIguide/app_sects3ed/appr_sec_rev_1.html), and the section related to coding of CLIMATs will be finalized and released in the near future. The new Guide will also contribute to correct coding of CLIMATs.
8. An amendment to the SYNOPs for reporting precipitation recommended by CBS Ext.(02) was approved at the fifty-fourth session of Executive Council (EC-LIV, Geneva, May 2003) and will come into force on 5 November 2003.
9. With this amendment, the reporting procedure for 24-hour precipitation will be unified globally, and consequently, our current regional coding procedures for 24-hour precipitation have to be amended. The Rapporteur drafted an amendment to the regional coding procedure, and it

was approved by the chairman of WG/PIW and the president of RA II for implementation as from 5 November 2003. The amendment is attached to this document (see Appendix I).

10. The Rapporteur conducted two surveys on;

- a. Codes issues
 - Amendment to the reporting procedures for precipitation
 - Operational status of snow depth reporting
- b. Other data management issues
 - Requirement for additional data
 - Use of the Internet
 - Current status on migration to Table Driven Code Forms (TDCSs)

11. The questionnaires were distributed to all Members in June and July 2003, and as of 31 July 2003, 16 in 34 Members kindly sent their responses to the Rapporteur for the first survey.

11. The CBS-XII recommended the Members to consider aligning their reporting practices so as to report precipitation for the preceding 6- and 12-hour periods in accordance with the global procedures (see paragraph 6.3.18 in the report of the session). Taking account of this recommendation, the Rapporteur drafted a proposal on the amendment of regional reporting procedures for the precipitation. With this amendment, the regional reporting practice on precipitation in the section 1 of SYNOPs becomes as follows:

00 UTC	Precipitation for preceding 12-hour period,
06 UTC	Precipitation for preceding 6-hour period,
12 UTC	Precipitation for preceding 12-hour period,
18 UTC	Precipitation for preceding 6-hour period and
03, 09, 15, 21 UTC	The period shall be determined by national decision.

12. The proposal was circulated to the Members to seek their comments. The result of the survey shows that:

- Fourteen in 16 Members (respondents) agreed with the proposal including applicable date (to be expected in November 2005), although 13 in 14 respondents have to alter their current reporting practice for precipitation at any rate.
- One respondent agreed with the proposal, but disagree with the applicable date due to the short period before proposed applicable date.
- One respondent represented current practice be continued in the nation regardless of the amendment.

13. The proposal, which was slightly modified according to the comments of the Members, is attached to this document (see appendix II) to seek the WG/PIW for submission to the next session of RA II.

14. Taking account of the requirements expressed by the GCOS (Global Climate Observing System), XII-RA II (Seoul, Sept. 2000) approved the amendment to the regional coding procedure for snow depth reporting in SYNOPs to facilitate global/regional exchange.

15. The Rapporteur studied the Member's contribution to snow depth reporting in the Region by a simple monitoring based on the SYNOP bulletins received at Tokyo. The result of the monitoring is summarized below, which shows there is no significant improvement in snow depth reporting in the Region through years 2001, 2002 and 2003.

	34 Members in total		1234 stations in total	
	Members who report SYNOP	Silent Members in SYNOP	Stations which report SYNOP	Silent stations in SYNOP
Feb. 2001	28 (including 4 snow depth reporting Members)	6	1053 (including 282 snow depth reporting stations)	181
Feb. 2002	29 (including 5 snow depth reporting Members)	5	1060 (including 288 snow depth reporting stations)	174
Jan. 2003	31 (including 5 snow depth reporting Members)	3	1114 (including 305 snow depth reporting stations)	120

16. Needless to say, the result of the monitoring contains a certain level of inaccuracy, because stations located in non-snow areas are not eliminated, and moreover it is based on the bulletins which observations were made at main standard times of observations and received only at RTH Tokyo. Therefore, the Rapporteur issued a questionnaire to know the current status and possibility of improvement of snow depth reporting in July 2003.

17. So far, 15 in 34 Members have sent replies to the questionnaire, however, 8 in 15 Members (respondents) are in non snow area, although two of them expressed their will to report snow depth when they have snow. The seven remainders have been already compliant with the regional procedures. According to the monitoring and operational check result, two Members who did not responded to the questionnaire were actually reporting snow depth, and several members seem to have reported snow depth at intermediate standard time of observations (03, 09, 15, 21 UTC).

18. Thus, the results of monitoring and questionnaire showed that currently more than nine Members are reporting snow depth in the Region, however, the monitoring and questionnaire also revealed a few problems on the reporting practices of snow depth data as follows.

- Some stations have been reporting snow depth data not at 00 UTC but intermediate standard time of observations.
- Some stations have been reporting E' (state of the ground), while sss (snow depth) is missing.
- Reports from some RBSN stations are included in the bulletins, which ii numbers of the abbreviated headings are above 19.

19. Even if snow depth observations were made and reported, there are possibilities that the data are not exchanged globally, especially when the ii numbers of the abbreviated headings are above 19 or the observations were made at intermediate standard time of observations. Therefore ***it is recommended that the snow depth data should be reported at the main standard times of observations (00, 06, 12 and 18UTC) in the bulletins, which ii numbers are up to 19 so as to ensure the global exchange.***

[Meetings]

20. During the inter-session period, the Rapporteur attended the following meetings of the CBS as an ex-officio member of RA II.

- a. Implementation/Coordination Team on Data Representation and Codes (ICT/DR&C)
The ICT/DR&C was established by the CBS at its extraordinary session (CBS Ext.(98), Karlsruhe, Sept.-Oct. 1998). The Rapporteur attended the meeting of the Team that was held at Geneva on 10-14 April 2000 as an ex-officio member. The report can be downloaded from following web page.
(<http://www.wmo.ch/web/www/reports/ICTDRCfinal.DOC>)

The major outcome of the meeting was a completion of FM 92-XII GRIB edition 2, which was recommended by the CBS twelfth session (CBS-XII, Geneva, Nov.-Dec.

2000) and fifty third session of EC (EC-LIII, Geneva, June 2001), and came into force on 7 November 2001.

- b. Implementation/Coordination Team on Information Systems and Services (ICT/ISS)
The ICT/ISS was established by the CBS-XII. The Rapporteur attended the meeting of the Team which was held at Geneva on 9 - 13 September 2002 as an ex-officio member. The report can be downloaded from following web page.
<http://www.wmo.ch/web/www/TEM/ICT-ISS2002/ICT-ISSreport.doc>

The major outcome of the meeting was a draft migration plan to TDCFs to be submitted to CBS Extraordinary session (CBS Ext.(02), Cairns, Dec. 2002) and the fourteenth World Meteorological Congress (Cg-XIV, Geneva, May 2003) for the approval.

Appendix I

Amendment to the Manual on Codes, Volume II - Regional coding procedures for 24-hour precipitation -

THE REGIONAL ASSOCIATION II (ASIA),

NOTING the modification to the Manual on Codes, Volume I approved by the Extraordinary Session of CBS (Cairns, Australia, 4 - 12 December 2002) and Fifty Fifth Session of Executive Council (Geneva, May 2003) to improve the reporting practice on precipitation in FM 12-XI Ext. SYNOP, FM 13-XI Ext. SHIP and FM 14-XI Ext. SYNOP MOBIL.

CONSIDERING that modifications to the regulations for RA II in the Manual on Codes, Volume II are requested as a result of the modifications to the Manual on Codes, Volume I.

DECIDES the modifications to the Manual on Codes, Volume II as attached to this Resolution will come into force on 5 November 2003.

REQUESTS THE SECRETARY-GENERAL

- (1) To arrange for the revision of the Manual on Codes, Volume II concerning the new reporting practice of precipitation.
- (2) To bring this modification to the attention of Members of RA II.

ANNEX

Amend the regulations 2/12.13.2 and 2/12.13.3 (underlined)

2/12.13 Group (7R₂₄R₂₄R₂₄R₂₄)

2/12.13.1 This group shall be used in Section 3 to report the amount of precipitation for 24 hours, in accordance with Regulation 12.4.9.

2/12.13.2 The inclusion of group 7R₂₄R₂₄R₂₄R₂₄ in Section 3 of the synoptic report shall be left to national decision.

2/12.13.3 If the group is included in the synoptic report, the precipitation amount for 24-hour period immediately preceding the time of the synoptic report in question shall be reported for R₂₄R₂₄R₂₄R₂₄. At 0000 UTC, this period shall correspond to the sum of the periods t_R for which the precipitation amount was reported in groups 6RRRt_R of Section 1 at the preceding 1200 UTC hour and the 0000 UTC hour in question.

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2/12.13 Group (7R₂₄R₂₄R₂₄R₂₄)

2/12.13.1 This group shall be used in Section 3 to report the amount of precipitation for 24 hours, in accordance with Regulation 12.4.9.

2/12.13.2 The precipitation amount for 24-hour period immediately preceding the time of the synoptic report in question shall be reported for R₂₄R₂₄R₂₄R₂₄. At 0000 UTC, this period shall correspond to the sum of the periods t_R for which the precipitation amount was reported in groups 6RRRt_R of Section 1 at the preceding 1200 UTC hour and the 0000 UTC hour in question.

Appendix II

Draft Amendment to the Manual on Codes, Volume II - Regional coding procedures for 6- and 12-hour precipitation -

THE REGIONAL ASSOCIATION II (ASIA),

NOTING the Abridged Final Report with Resolutions and Recommendations of the Twelfth Session of the Commission for the Basic Systems (WMO-No. 923), general summary paragraph 6.3.18.

CONSIDERING to align the regional reporting practices so as to report precipitation for the preceding 6- and 12-hour periods in accordance with the global procedures.

DECIDES the modifications to the Manual on Codes, Volume II as attached to this Resolution will come into force on 2 November 2005.

REQUESTS THE SECRETARY-GENERAL

- (1) To arrange for the revision of the Manual on Codes, Volume II concerning the new reporting practice of precipitation.
- (2) To bring this modification to the attention of Members of RA II.

ANNEX

Amend the regulation 2/12.4.4 (underlined)

2/12.4.4 At 0600 and 1800 UTC, as well as at intermediate observation times, the periods to which RRR refers shall be determined (in accordance with Regulation 2/12.4.1) by national decision and in accordance with specifications of Code table 4019(t_R).

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2/12.4.4 At 0600 and 1800 UTC, the precipitation amounts over the preceding 6-hour period should be reported for RRR.

2/12.4.5 At intermediate observation times, the periods to which RRR refers shall be determined (in accordance with Regulation 2/12.4.1) by national decision and in accordance with specifications of Code table 4019(t_R).
