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Availability of CLIMAT and CLIMAT TEMP reports at MTN centres

(Submitted by the Secretariat)

Summary and Purpose of Document

The Secretariat analysed the monitoring results concerning CLIMAT and CLIMAT TEMP provided by several MTN centres. This document contains the analysis of the October 2002 and 2003 exercises of the Annual Global Monitoring of the WWW.

Action Proposed

The ICT is invited to take note of these monitoring results when formulating appropriate recommendations to CBS.

Appendix: Analysis of the presentation of the CLIMAT and CLIMAT TEMP bulletins

Availability of CLIMAT and CLIMAT TEMP reports at MTN centres

1. The Annual Global Monitoring (AGM) of the WWW is a monitoring exercise carried out by about 90 centres, including 14 MTN centres, once a year from 1 to 15 October. Information on the AGM is available on the WMO server under http://www.wmo.ch/web/www/ois/monitor/monitor-home.htm.

2. The Secretariat analysed the monitoring results concerning CLIMAT and CLIMAT TEMP reports for the October 2002 and 2003 exercises of the AGM. The numbers of reports received by MTN centres during the monitoring exercise were compared to the numbers of reports expected from the RBCNs. Tables A and B provide detailed results by Region. They include the numbers of stations included in the RBCNs. The two charts given in the following pages show the locations from which reports were received or not in October 2003. Further detailed information on the analysis of the AGM exercises is available in the WMO server under:
http://www.wmo.int/web/www/ois/monitor/agm/agm2002.htm
http://www.wmo.int/web/www/ois/monitor/agm/agm2003.htm

3. The MTN centres received in total:

- 62 per cent of the CLIMAT reports expected from the RBCNs in October 2002 and 2003;
- 71 per cent of the CLIMAT TEMP reports expected from the RBCNs in October 2002 and 67 per cent in October 2003.

4. The analysis of the AGM results shows that the availability of CLIMAT and CLIMAT TEMP reports is not satisfactory. The density of reports received is particularly low in Region I for CLIMAT (26%) and CLIMAT TEMP reports (54%), and in Region IV for CLIMAT TEMP reports (45%). For these two Regions I and IV, there were major changes in the composition of the RBCNs for CLIMAT TEMP reports between 2002 and 2003.

Table A – CLIMAT reports

Regions	Number of stations in the RBCNs in October 2002	Reports received by MTN centres in October 2002	Number of stations in the RBCNs in October 2003	reports received by MTN centres in October 2003
I	616	31%	637	26%
II	593	65%	593	63%
III	344	68%	325	73%
IV	242	80%	298	73%
V	188	77%	192	76%
VI	520	82%	520	84%
Antarctic	72	29%	30	73%
Total	2575	62%	2695	62%

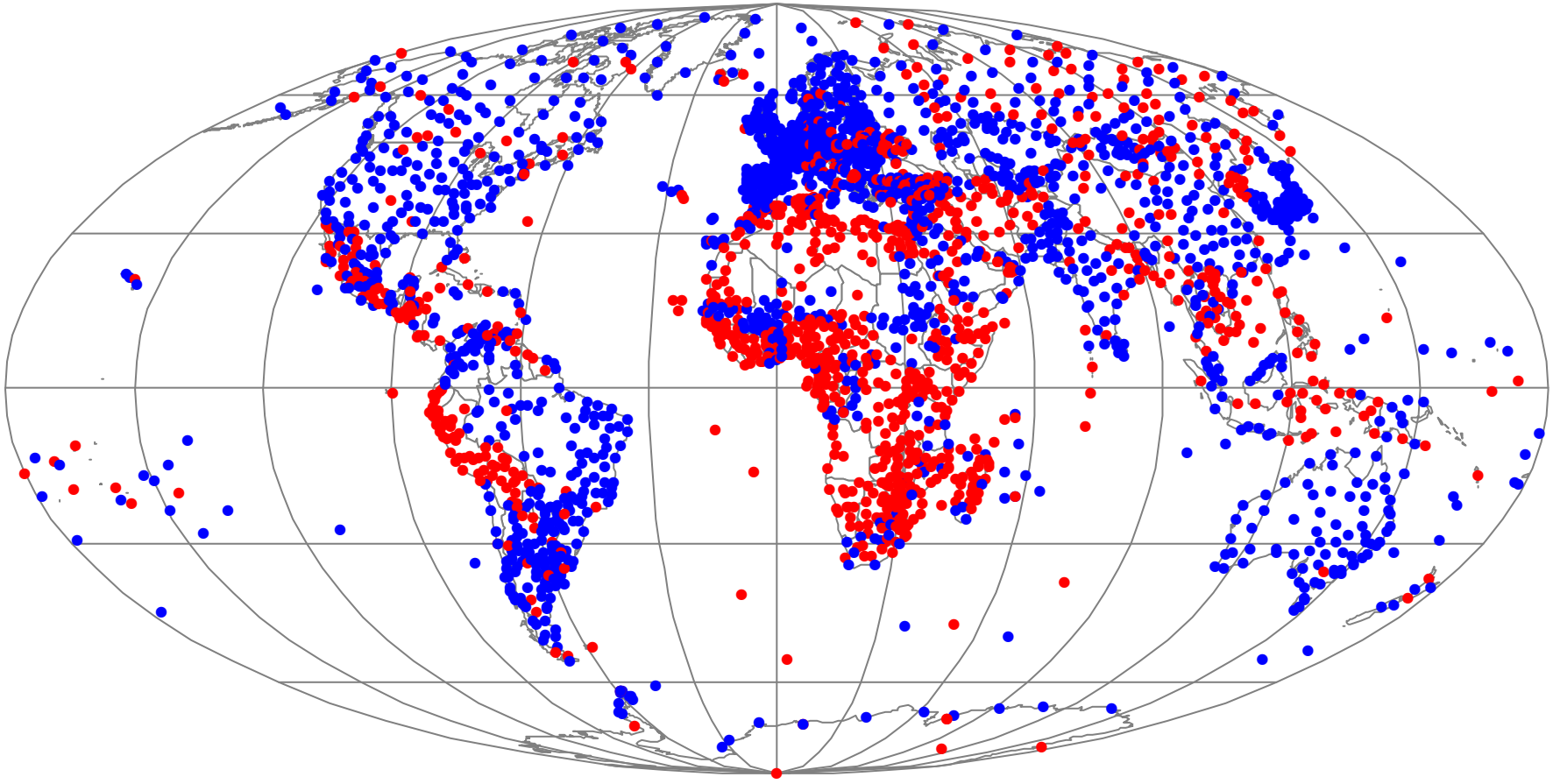
Table B – CLIMAT TEMP reports

Regions	Number of stations in the RBCNs in October 2002	Reports received by MTN centres in October 2002	Number of stations in the RBCNs in October 2003	reports received by MTN centres in October 2003
I	19	63%	28	54%
II	194	61%	194	64%
III	49	59%	49	63%
IV	72	75%	58	45%
V	74	85%	77	83%
VI	91	84%	93	77%
Antarctic	12	71%	13	85%
Total	511	71%	512	67%

5. The Special MTN Monitoring (SMM) is a monitoring exercise carried out by several MTN centres four times a year. Information on the SMM is available on the WMO server under http://www.wmo.ch/web/www/ois/monitor/monitor-home.htm. The analysis of the July 2004 SMM monitoring results is available on the WMO server under http://www.wmo.ch/web/www/ois/monitor/smm/sm047.htm. The analysis shows lower figures for the availability of the CLIMAT and CLIMAT TEMP reports at MTN centres for the SMM exercises than for the AGM exercises. This is mainly due to the fact that the AGM statistics include the availability of the reports at 14 MTN centres instead of three for the SMM, and that the pre-analysis of the SMM raw data made by Cairo systematically rejects the reports for which the format of presentation is not conform to the WMO standards. The monitoring of the exchange of CLIMAT and CLIMAT TEMP bulletins on the GTS shows major deficiencies in the application of WMO standards for the presentation of CLIMAT and CLIMAT TEMP bulletins. The WMO Secretariat investigated deficiencies in the application of WMO standards in the presentation of CLIMAT and CLIMAT TEMP bulletins. A summary of the analysis of the presentation of CLIMAT and CLIMAT TEMP bulletins is given in Appendix. The WMO Secretariat informed the WMO Member countries of the deficiencies found for each country and invited them to take action in order to eliminate the deficiencies. The results of the action taken will be further monitored during the next periods of the Special MTN monitoring.

Availability of CLIMAT reports from RBCN stations

Monitoring period: 1 to 15 October 2003



- reports received (1599)
- no reports received (996)

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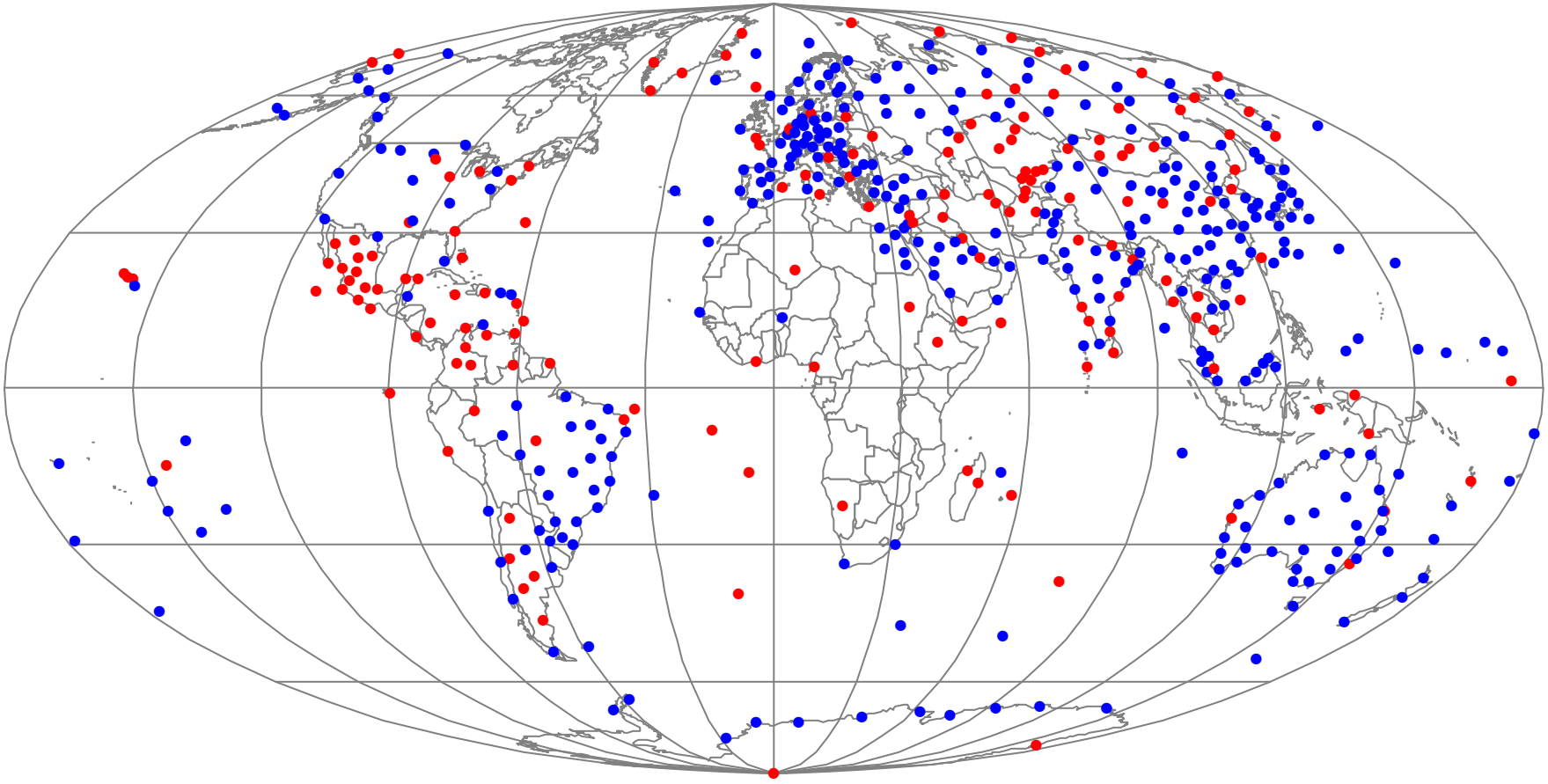
Availability of CLIMAT TEMP reports from RBCN stations

Monitoring period: 1 to 15 October 2003



- reports received (343)
- no reports received (169)

WMO Secretariat

Appendix

Analysis of the presentation of the CLIMAT and CLIMAT TEMP bulletins

Introduction

1. The monitoring of the exchange of CLIMAT and CLIMAT TEMP bulletins on the GTS revealed deficiencies in the application of WMO standards for the form and format of CLIMAT and CLIMAT TEMP bulletins. The relevant standard are the procedures and practices included in the Manual on the GTS for the presentation of GTS bulletins (see ftp://www.wmo.ch/wmo-ddbs/To_Jen/gts/VolumeI/TEM/Contents.html#Pt2) and in the Manual on Codes for the presentation of CLIMAT and CLIMAT TEMP reports, i.e. code forms FM 71-XII CLIMAT and FM 75-XII CLIMAT TEMP (see http://www.wmo.int/web/www/DPS/NewCodesTables/WMO306vol-I-1PartA.pdf).

Reference material

2. The analysis of the presentation of the CLIMAT and CLIMAT TEMP bulletins is based on the information available from the April 2004 exercise of the Special MTN Monitoring (SMM), in particular:

- The raw data provided by Toulouse: the bulletins shown in Tables A-4 and B-4 are the March 2004 CLIMAT and CLIMAT TEMP bulletins received by Toulouse during the monitoring period 1 to15 April 2004;
- The analysis made by Cairo and the WMO Secretariat of the raw data provided by Cairo, Melbourne and Toulouse was used to identify anomalies in the presentation of the bulletins.

Further information on the SMM are available in the WMO server: general information from http://www.wmo.ch/web/www/ois/monitor/monitor-home.htm - SMM and the results of the analysis of the April 2004 SMM from http://www.wmo.ch/web/www/ois/monitor/smm/sm044.htm

Results of the analysis

3. The analysis focuses on the bulletins containing reports issued from stations included in the Antarctic and Regional Basic Climatological Networks (ABSN/RBSNs). The list of stations included in the ABSN/RBSNs and the numbers of reports received during the October 2003, January and April 2004 SMM were given in Tables A-1and B-1 sent to each country.

4. The abbreviated headings TTAAii CCCC of the CLIMAT and CLIMAT TEMP bulletins, with the list of stations included in each bulletin, should be published in the WMO Publication No. 9, Volume C1 – Catalogue of meteorological bulletins. The analysis of the SMM shows that CLIMAT and CLIMAT TEMP reports were received within bulletins, the abbreviated headings of which are not in the catalogue of meteorological bulletins or are different from the abbreviated headings published in the catalogue. For each WMO Member, the possible examples of such inconsistencies were given in Table A-2 and B-2 sent to each country.

5. In accordance with the Manual on the GTS - Volume I -Part II - paragraph 2.3.2.2, the bulletins containing reports from stations included in the RBCNs shall be compiled into bulletins with digits ii of the abbreviated heading TTAAii CCCC in the series 01 to 19. The analysis of the SMM shows that CLIMAT and CLIMAT TEMP reports issued by ABCN/RBCNs were received within bulletins with digits ii of the abbreviated heading TTAAii CCCC in the series above 19. For each WMO Member, the possible examples were given in Table A-3and B-3 sent to each country. The WMO Members are invited to review the content of the WMO Publication No. 9 - Volume C1 - Catalogue of meteorological bulletins, and to send relevant required amendments to the MTN centre responsible to maintain the relevant part of the catalogue

6. The list of types of errors found in the text of the CLIMAT and CLIMAT TEMP bulletins is given in paragraph 7. For each WMO Member, the possible examples of such errors were given in Table A-4 and B-4 sent to each country , together with the suggested corrections.

7. *Statistics on the deficiencies observed as at 5 June 2004*

Reports not received during SMM exercises		
	CLIMAT reports not received	CLIMAT TEMP reports not received
1-15 October 2003	1213 out of 2595 expected reports (47 %)	214 out of 512 expected reports (42%)
1-15 January 2004	1282 out of 2595 expected reports (49%)	235 out of 511 expected reports (46%)
1-15 April 2004	1145 out of 2605 expected reports (44%)	214 out of 511 expected reports (42%)

Reports received by SMM centres in bulletins that are not included in the WMO Publication No. 9 - Volume C1 - Catalogue of meteorological bulletins or included in the catalogue with an incorrect list of stations		
	Number of CLIMAT reports	Number of CLIMAT TEMP reports
	612	85

Reports received within bulletins with digits ii of the abbreviated heading TTAAii CCCC in the series above 19		
	Number of CLIMAT reports	Number of CLIMAT TEMP reports
	82	0

Bulletins received with errors in the text			
		Number of bulletins with errors	
Error Flag	Error Type Description	CLIMAT bulletins	CLIMAT TEMP bulletins
F1	Misspelling or omitting the code name CLIMAT or CLIMAT TEMP in the first line of the text	12	27
F2	Repeating the code name CLIMAT or CLIMAT TEMP in the same bulletin	10	7
F3	Unexpected string of characters such as “PARTI”, “PARTII”.	19	17
F4	Repeating MMJJJ in the same bulletin	14	12
F5	Incorrect or omitted group MMJJJ	32	15
F6	Number 50 added to the MM in the group MMJJJ of the CLIMAT bulletins	0	-
F7	Incorrect sequence of the groups MMJJJ and Iiiii	1	0
F8	Station index IIiii is not in the beginning of the line or repeated	1	0
F9	Incorrect section group (ex.111), repeated nor omitted	1	0
F10	No space between section group and group with data	0	1
F11	Section group is incorrect, omitted or incorrectly placed	16	0
F12	No space between adjacent groups	0	1

F13	There is a space inside a group	0	0
F14	Sign End of Report "=" is omitted	3	1
F15	Sign End of Report "=" repeated after each section	0	0
F16	Sign End of Bulletin is omitted	0	0
F17	CLIMAT report has been inserted into a CLIMAT TEMP bulletin	0	2
F18	The structure of presentation of the data is not that of code forms FM 71-XII or FM 75-XII	17	4
F19	The group CLIMAT MMJJJ has been inserted into a NIL bulletin	4	0
F20	BBB group missing in the abbreviated heading	15	4
Total number of bulletins received with at least one error		80 out of 398 bulletins received	57 out of 196 bulletins received

Action proposed

8. The WMO Members were invited to take the following action as soon as possible with a view to eliminating the deficiencies shown in Tables A-1, A-2, A-3, A-4, B-1, B-2, B-3, and B- 4 sent to each country.

Deficiencies	**Action proposed**
Deficiencies shown in Tables A-1 and B-1	The WMO Members should ensure that the reports are prepared for each station and inserted into the GTS between the first and fifth day of each month.
Deficiencies shown in Tables A-2 and B-2	The WMO Members should ensure that the bulletins containing CLIMAT and CLIMAT TEMP reports are included in the WMO Publication No. 9 - Volume C1 - Catalogue of meteorological bulletins with an updated list of stations. The WMO Members are invited to review the abbreviated headings of the bulletins used to compile CLIMAT and CLIMAT TEMP bulletins, to review the content of the Catalogue of meteorological bulletins, and to send relevant required amendments to the MTN centre responsible to maintain the relevant part of the catalogue (see list in Appendix A).
Deficiencies shown in Tables A-3 and B-3	The WMO Members should ensure that the bulletins containing reports from stations included in the Regional Basic Climatological Networks (RBCNs) are compiled into bulletins with ii in the series 01 to 19.The WMO Members are invited to review the abbreviated headings of the bulletins used to compile CLIMAT and CLIMAT TEMP bulletins, to review the content of the WMO Publication No. 9 - Volume C1 - Catalogue of meteorological bulletins, and to send relevant required amendments to the MTN centre responsible to maintain the relevant part of the catalogue.
Deficiencies shown in Tables A-4 and B-4	The WMO Members are invited to consider the corrections to the text of CLIMAT and CLIMAT TEMP bulletins and to implement those corrections.

9. The results of the action taken will be monitored during the future periods of the Special MTN monitoring, starting by analysing the results of the July 2004 SMM exercise.