

WORLD METEOROLOGICAL ORGANIZATION

CBS/GCOS LC/INF. 4
(30.X.2009)

**CBS LEAD CENTRES FOR GCOS
COORDINATION MEETING**

ITEM: 5

GENEVA, SWITZERLAND
10-12 NOVEMBER 2009

Original: ENGLISH

REPORT FROM CBS LEAD CENTRES

Germany

(Submitted by Christiana Lefebvre, Deutscher Wetterdienst)

Summary and Purpose of Document

This document provides information on activities carried out by the CBS Lead Centre, Deutscher Wetterdienst during the year 2008

ACTION PROPOSED

The meeting is invited to take into account the information provided in the document when discussing 'Reports from CBS Lead Centres' under agenda item 5

DWD activities during year 2008 related to its role as CBS Lead Center for GCOS for the WMO RA VI

Deutscher Wetterdienst (DWD)
Offenbach am Main, Germany, 09.04.2009

Background

DWD receives and archives global CLIMAT data since 1949/1950. The DWD marine climatology unit uses the global CLIMAT data continuously since 1954 as input for the temperature and precipitation analyses and data tables in its global climate review "Die Witterung in Übersee". Since 1989 the DWD hosts the Global Precipitation Climatology Center (GPCC). GPCC routinely uses global GTS data (SYNOP, CLIMAT) as input for its near-realtime precipitation analyses. Thus GPCC and other DWD entities routinely check availability and quality of GTS data. National meteorological and hydrological services are contacted by DWD staff in case of GTS problems, esp. concerning missing or erroneous CLIMAT bulletins. DWD formally serves since January 1999 as GSN Monitoring Center (GSNMC) with special emphasis on precipitation.

On 15 December 2006 DWD has been nominated by the WMO Secretary General to act as CBS Lead Center for GCOS data for the WMO RA VI region. As DWD routinely uses global CLIMAT data as data source for GPCC, its Lead Center activities to contact NMHSs concerning CLIMAT data availability and quality were focussed on, but not restricted to WMO RA VI.

Summary of DWD Lead Center activities and results in year 2008:

- DWD uses the GCOS focal point list of the WMO WWW <http://www.wmo.ch/web/www/ois/rbsn-rbcn/FocalPointsGCOS.doc> for contacting focal points in RA VI and outside in case of missing or incorrect CLIMAT bulletins. Feedback to the GCOS Secretariat on detected focal point problems and (if available) suggested corrections of the GCOS focal point addresses has been provided. The RA VI members without a GCOS focal point (Iceland, Serbia, and Montenegro) were asked to consider nomination of a GCOS focal point and followed up accordingly. Now all RA VI member countries have a focal point for GCOS and related climatological data;
- DWD supported the GCOS Secretariat in the production of a "Practical help for compilation of CLIMAT reports" (published in March 2009 as GCOS-127). It is expected, that this guide will contribute to a significant reduction of erroneous CLIMAT messages;
- 3 DWD colleagues (Mrs. K. Hansen, Mr. G. Asmussen and Mr. J. Kallies) acquire and receive CLIMAT bulletins from countries all around the world via email or airmail (in order to overcome temporal GTS network problems). CLIMAT bulletins received via email within 6 months after end of a month are inserted by DWD into GTS. DWD continuously tries to improve CLIMAT reception by email (e.g. using the WWW GCOS focal point list provided some new contacts):
 - during 2008, DWD staff has been in (regular/sporadic) email contact with national GCOS focal points and received CLIMAT bulletins from about 40 countries (Kyrgyzstan, Mozambique, New Zealand, Bosnia, South Africa, Colombia, Chile, St. Helena, Benin, Slovakia, Sri Lanka, Malta, Mauritius, Philippines, Seychelles, Costa Rica, Ecuador, Moldova (new in 2008!), El Salvador (new in 2008!), Macedonia (new in 2008!), Namibia (new in 2008!), Malawi (new in 2008!), Luxembourg, Croatia, Iran, Mongolia, Tunisia, Morocco, Ethiopia, Kenya, Nigeria, Bermuda, Bahamas, Belize, Peru, Bolivia, Papua New Guinea). These email contacts helped to acquire missing or to correct erroneous GTS CLIMAT bulletins;
 - some countries did not reply or follow up DWD emails in 2008 concerning missing or erroneous CLIMATS. These countries include: Uzbekistan, Madagascar, Guyana, Ireland;

- DWD receives regularly from GSNMC Japan CLIMAT bulletins, which were not directly received at DWD. This comprises esp. data from Indonesia, Bermudas, Nepal;
- DWD receives regularly from UK Met Office CLIMAT bulletins, which were not directly received at DWD. This comprises esp. data from Malaysia, Maldives, and Afghanistan;
- DWD receives regularly via airmail CLIMAT bulletins of Jordan, Sudan, Curacao, Chile, Ethiopia (these data are digitised and then inserted into GTS, if received within 6 months after a CLIMAT month);
- Based on GSNMC DWD monitoring results, the countries with most urgent CLIMAT format problems in 2008 were: Italy, Mozambique, Georgia, Syria, Mongolia, Laos, Algeria, South Africa, Honduras, Nicaragua, Indonesia. Contacts to the NMHSs were either not successful or did not lead to significant CLIMAT quality improvement;
- Contact to the GCOS focal point of several European Met. Services not having at least one GSN station lead to nomination and approval (from January 2009 onwards) of new GSN stations in Luxembourg, Belgium (Uccle), Croatia (Zagreb), and Albania (Tirana). Bulgaria and Slovenia were also contacted concerning nomination of a GSN station, however they did not suggest a suitable station;

Specific Lead Center communication and actions during year 2008:

- Contact to the Swiss GCOS focal point concerning minor CLIMAT format errors. Within short time the Swiss CLIMAT production procedures were adjusted. Since then their CLIMAT is correct;
- Contact to Albania lead to the nomination of a GCOS focal point and to the nomination of a station, which is part of GSN since January 2009. Since January 2009, CLIMAT messages from GSN station Tirana are regularly provided via email;
- Contact (several times) to the GCOS focal point in Portugal concerning severe problems with GUAN station 08508 Lajes and GSN station 08512 Ponta Delgada. Communication with Portugal has been very slow. There has been success concerning the Acores station 08512: This station is included in the national CLIMAT bulletin since June 2008. However the problem concerning GUAN station 08508 remains: there is only one ascent per day at 12 UTC. And there is a new problem with Acores GSN stations: 8506 Horta is not received at GSNMC since Feb 2008. The GCOS focal point in Portugal has been contacted concerning both issues;
- Greece includes the GSN stations 16723 and 16743 in its CLIMAT bulletins from January 2008 onwards following up Lead Center contacts during year 2007;
- Moldova and Macedonia provide CLIMAT bulletins since March 2008 regularly via email following up Lead Center contacts during 2007 and 2008;
- Contact to INM Spain lead to the nomination and approval (from January 2009 onwards) of a new GUAN station in NW Spain (La Coruna);
- Oman and Azerbaijan corrected some CLIMAT format errors after Lead Center contacts to Met Service representatives during visits at DWD in July 2008;
- Contact to the GCOS focal point in Botswana concerning CLIMAT provision from GSN station Maun. So far no success, but Botswana raised its intention, that Maun CLIMAT might be provided from May 2009 onwards;
- Contact to the GCOS focal point in Denmark concerning potential inclusion of Greenland Summit AWS in GSN. Denmark can not promise continuous operation of the station, therefore an inclusion of this station in GSN might not be recommended;
- Contact to the GCOS focal point of Russia concerning silent GSN station 22602 and potential new station in Russian Arctic region. GCOS Sec followed up with Russia on both issues;

- Contact to the GCOS focal point of Sweden concerning silent GSN station 02287. It was found out, that the station was reporting CLIMAT, but under erroneous WMO number 02288. Error has been corrected by Sweden;
- Contact to the Internet LLC company (Mr. Danny Foster), which is managing the GCOS Technical Support Center for the Caribbean, Central America, Mexico and South America. Our provision of information on CLIMAT reception and quality problems in these regions was used by Mr. Foster as basis for bilateral contacts with NMHSs in the region in order to improve CLIMAT availability and quality;
- Contact to NCDC (USA) lead to an update of the GSNMC info provided via GOSIC.

Suggestions for AOPC recommendations/actions:

- The GCOS focal point list is very useful for DWD. However, further update (correction of errors, addition of focal points from countries currently not included) of this list might be encouraged. This encouragement should be also conveyed to WMO members, who might be invited to inform WWW or GCOS as soon as GCOS focal points (or their contact coordinates) have changed;
- Further improvement of the RBCN station list and completion of the harmonisation of RBCN and GSN lists (all GSN stations should also be part of RBCN) is still needed and might require AOPC action;
- Data quality (erroneous CLIMAT bulletin format) is still an issue and might need be pointed out to the NMHSs. Major errors are erroneous bulletin headers and the omission of essential bulletin parts (instead of using "/" for missing columns). GCOS-127 might help to improve CLIMAT quality, therefore taking note of and use of this guide should be encouraged;
- Moreover the CBS Lead Center for GCOS at DWD has concerns, that the change to Table Driven Code Forms (in case of CLIMAT -> BUFR) might significantly increase the number of erroneous CLIMAT data from developing countries. AOPC might discuss this issue and consider feedback to WMO;
- Enhancement of the temporary use of email for submitting CLIMAT bulletins of countries, from which GTS submission is not working or not stable, might further be explored and encouraged. DWD offers to insert CLIMAT bulletins received via email into GTS, if they are received 6 within months after end a month.

T. Fuchs, G. Asmussen, J. Kallies, C. Lefebvre, U. Schneider
Deutscher Wetterdienst
Business Unit: Climate and Environment (KU)
D-63004 Offenbach a.M.
Germany
Email: tobias.fuchs@dwd.de