

Activities of CBS Lead Centre for GCOS for the WMO RA VI in the year 2012

Deutscher Wetterdienst (DWD)
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1. Availability, completeness and correctness of CLIMAT reports world-wide

DWD continued its efforts to improve the availability and correctness of CLIMAT reports not only from GSN stations, but also from all CLIMAT stations included in the Regional Basic Climatological Network (RBCN) by applying a near-real-time quality control.

To ameliorate the availability of CLIMAT reports from countries having no working access to the WIS/GTS, DWD offers the ingestion of CLIMAT reports received via e-mail, which is used on a regular base by several countries, especially from Africa. It was very much appreciated, that the Republic of Sudan and Libya resumed the provision of CLIMAT reports in September resp. October via e-mail after having overcome political changes. Even CLIMATs for all precious months of 2012 were provided. The NMHS of Benin has sent all CLIMAT reports for 2011 in March 2012.

To point to missing GSN stations and format problems in FM71, DWD continued to distribute the monthly monitoring results of the CLIMAT reports received up to the 20th of a month via e-mail to the chairs of the CBS Lead Centres for their area of responsibility as well as to Mr Richard Thigpen, the former GCOS Implementation Project Manager and Mr Kelvin Wong, RTH Focal Point at WMC Melbourne and Chair of the Expert Team on WIS-GTS Operations and Implementation (ET-OI).

Monitoring results for GSN stations are also provided on the GOSIC website (<http://www.gosic.org/content/gsn-stations-performance-indicators>), including results from NOAA and the GCOS Surface Monitoring Centre at DWD (www.gsnmc.dwd.de),

In case of missing or erroneous data, NMHSs world-wide were informed by addressing directly to the telecommunication unit or by using the list of the 'National Focal Points for GCOS and related Climatological Data' (<http://www.wmo.int/pages/prog/www/ois/rbsn-rbcn/FocalPointsGCOS.doc>). Often, the NMHSs were thankful for the hints. But some ignored the information like the NMHS of Mongolia, which does not stop sending decadal climate data encoded as CLIMAT reports. Others could not receive the information due to invalid or missing e-mail addresses in the list of National Focal Points for GCOS and related climatological Data (RBCN), though this list is updated several times during the course of the year, which is very helpful.

On the occasion of a visit at DWD in Hamburg on 9 June 2012, the CBS Lead Centre informed a delegation of the Indonesian Meteorological Service about the format problems of their CLIMAT reports.

One of the most severe and often errors is an incorrect month-year indicator, which may lead to an incorrect storage or to the loss of data. Especially the turn of the year causes problems. The CLIMAT for December 2012 was partly encoded as December 2013. It also happened that the month-year indicator referred to the current month, but the content was from another month. This kind of error is difficult to detect.

DWD gave support to NMHSs for different questions e.g. the calculation of the standard deviation of the daily mean air temperatures (St. Helena).

Facing the switch from ASCII formatted CLIMAT to BUFR up to November 2014 (Extraordinary session of the WMO Commission for Basic Systems in Windhoek from 17 to 24 November 2010), a growing number of NMHS disseminated CLIMAT reports not only in ASCII but also in BUFR. From some countries, the content of the BUFR reports is more complete than that of the ASCII ones. Norway e.g. transmits only section 1 in ASCII format but all four sections in the BUFR forms.

2. Availability of GSN and GUAN stations in the RA VI

2.1 Availability of GSN-Stations

The number of GSN stations in RA VI was 139, one less than in the previous two years. The availability of CLIMAT reports of GSN stations was in the range of 93 to 94 (source: www.gsnmc.dwd.de). There were some stations that did not report for several months during the year. Station 13577 Lazaropole (Macedonia) did not send any report since March 2012.

Silent stations are:

Albania: 13615 Tirana since September 2010
Cyprus: 17600 Paphos since January 2010
Portugal: 08506 Horta since at least January 2009

DWD was not able to find out if the silent GSN stations will resume reporting, since there were no responds on this question.

2.2. Availability of GUAN-Stations

In 2012, the number of GUAN stations in RA VI was 24. Like in 2011, 22543 Arhangel'sk, Russia did not execute radiosoundings, while the stations 37789 Yerevan, Armenia and 15120 Cluj-Napoca, Romania were silent for several months during 2012. The stations 08508 Lajes, Azores, 15614 Sofia, Bulgaria and 17607 Athalassa, Cyprus continued to not start soundings at 00 UTC as well as 15120 Cluj-Napoca, Romania and 40265 Mafraq, Jordan at 12 UTC.

(http://www1.ncdc.noaa.gov/pub/data/gcos/GUAN_latest_six_months.txt, <http://gosic.org/content/guan-stations-upper-air-height-inventories>)

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