WORLD METEOROLOGICAL ORGANIZATION

CBS/GCOS LC/Doc. 8.2
(30.X.2009)

CBS LEAD CENTRES FOR GCOS COORDINATION MEETING

ITEM: 8

GENEVA, SWITZERLAND
10-12 NOVEMBER 2009

Original: ENGLISH

REPORTS FROM GCOS MONITORING CENTRES

Japan Meteorological Agency

(Submitted by Takifumi Umeda, Japan Meteorological Agency)

Summary and Purpose of Document

This document provides information on activities carried out by a GCOS Monitoring Centre, the Japan Meteorological Agency

ACTION PROPOSED

The meeting is invited to take into account the information provided in the document when discussing relevant agenda items

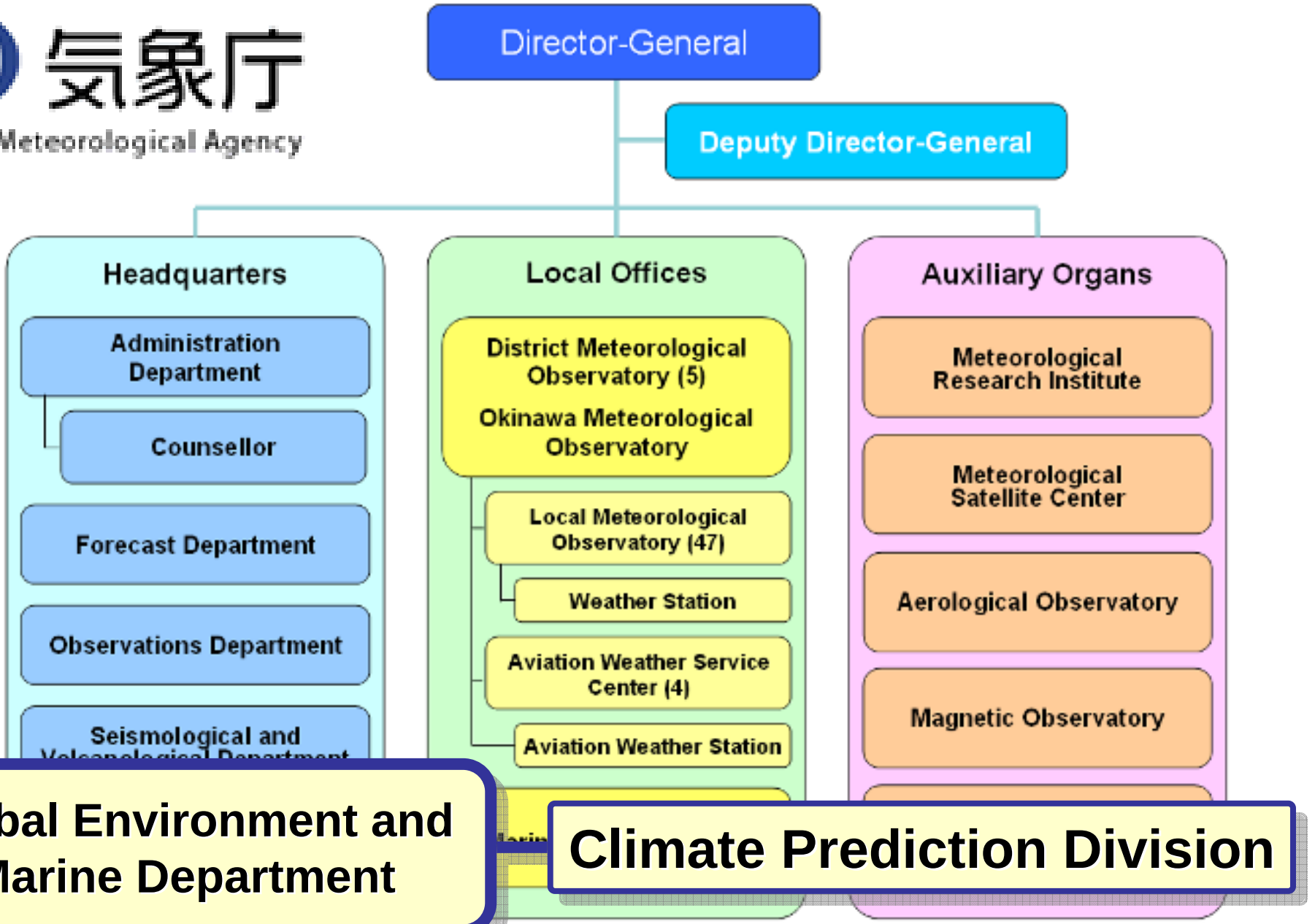
GSN Monitoring Centre

気象庁
Japan Meteorological Agency

Climate Prediction Division (CPD)
Japan meteorological Agency (JMA)
Takafumi Umeda

JMA Organization

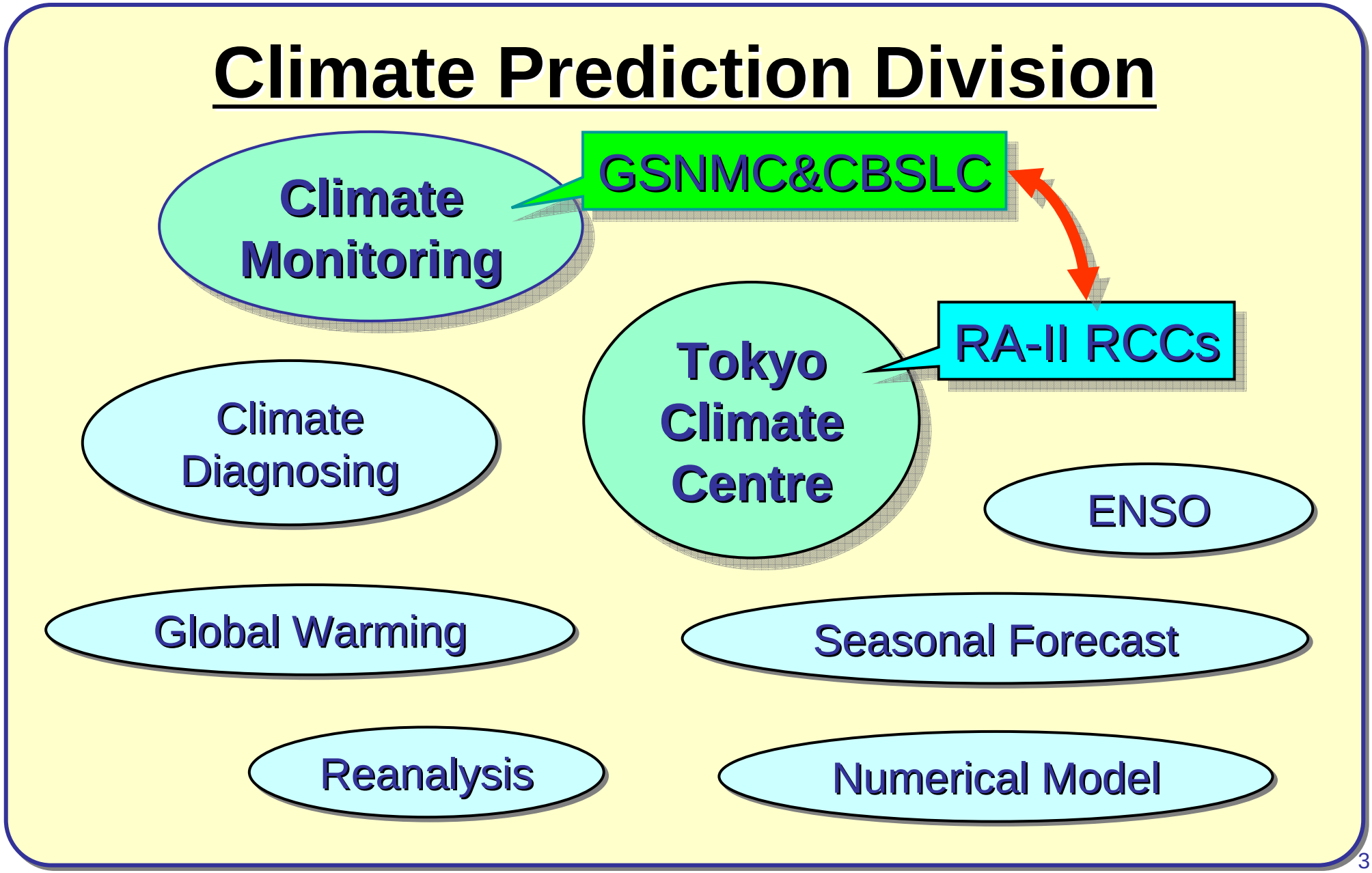
気象庁
Japan Meteorological Agency



Global Environment and Marine Department

Climate Prediction Division

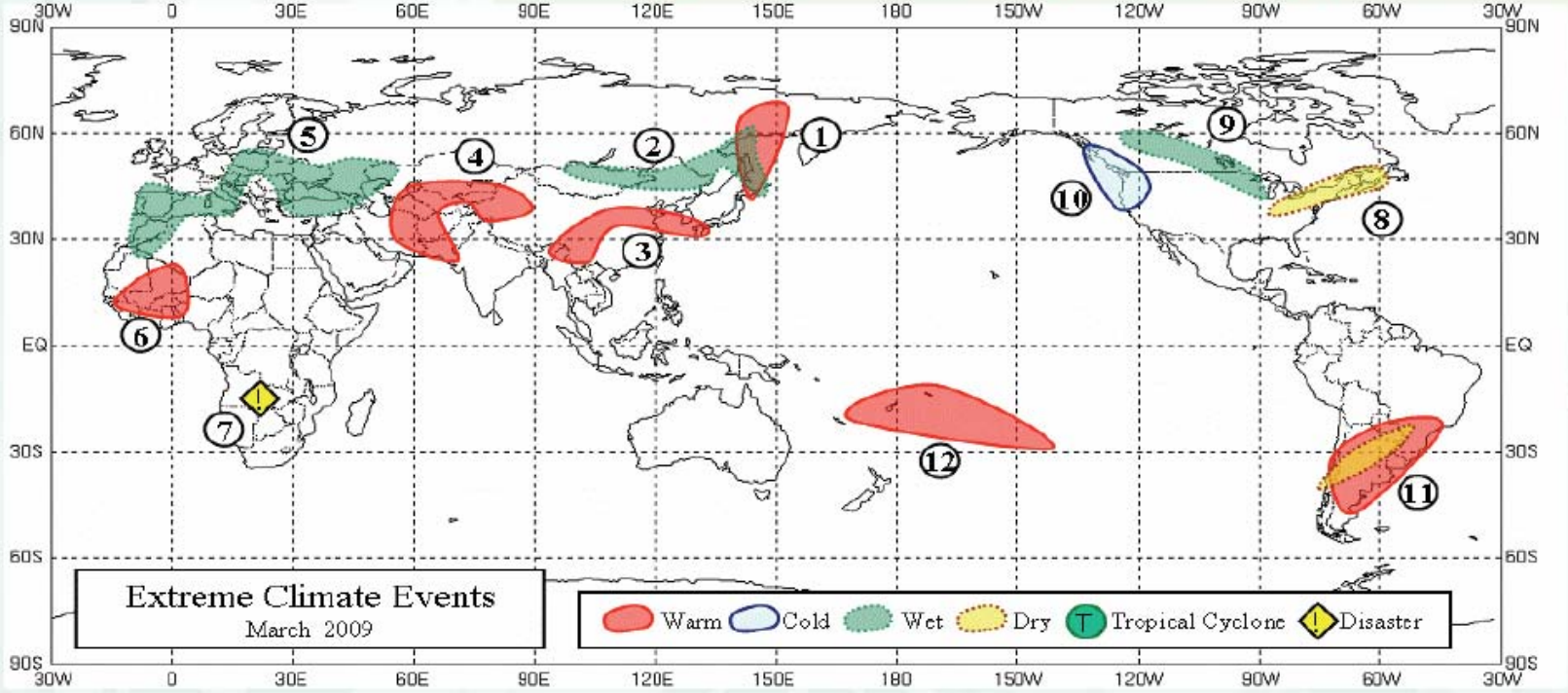
JMA Organization



Global Climate Monitoring (by TCC)

Weekly, Monthly, Seasonal and Annual Temperature/Precipitation
Hazardous Climatic Events (Flood / Drought / Tropical Cyclone)

Distribution of Monthly Extreme Climate (March 2009)



1. High temperatures from eastern Siberia to Northern Japan
2. Heavy precipitation from southeastern Siberia to northern Mongolia
3. High temperature from western Japan to southern China
4. High temperature from western China to eastern Iran
5. Heavy precipitation from western Kazakhstan to Morocco
6. High temperature around Mali
7. Torrential rain in southern Africa
8. Light precipitation around the northeastern USA
9. Heavy precipitation from central Canada to the west area of the Great Lakes
10. Low temperature from southwestern Canada to the northwestern USA
11. High temperature and light precipitation in southern South America
12. High temperature around southern Polynesia

http://ds.data.jma.go.jp/tcc/tcc/products/climate/index.html

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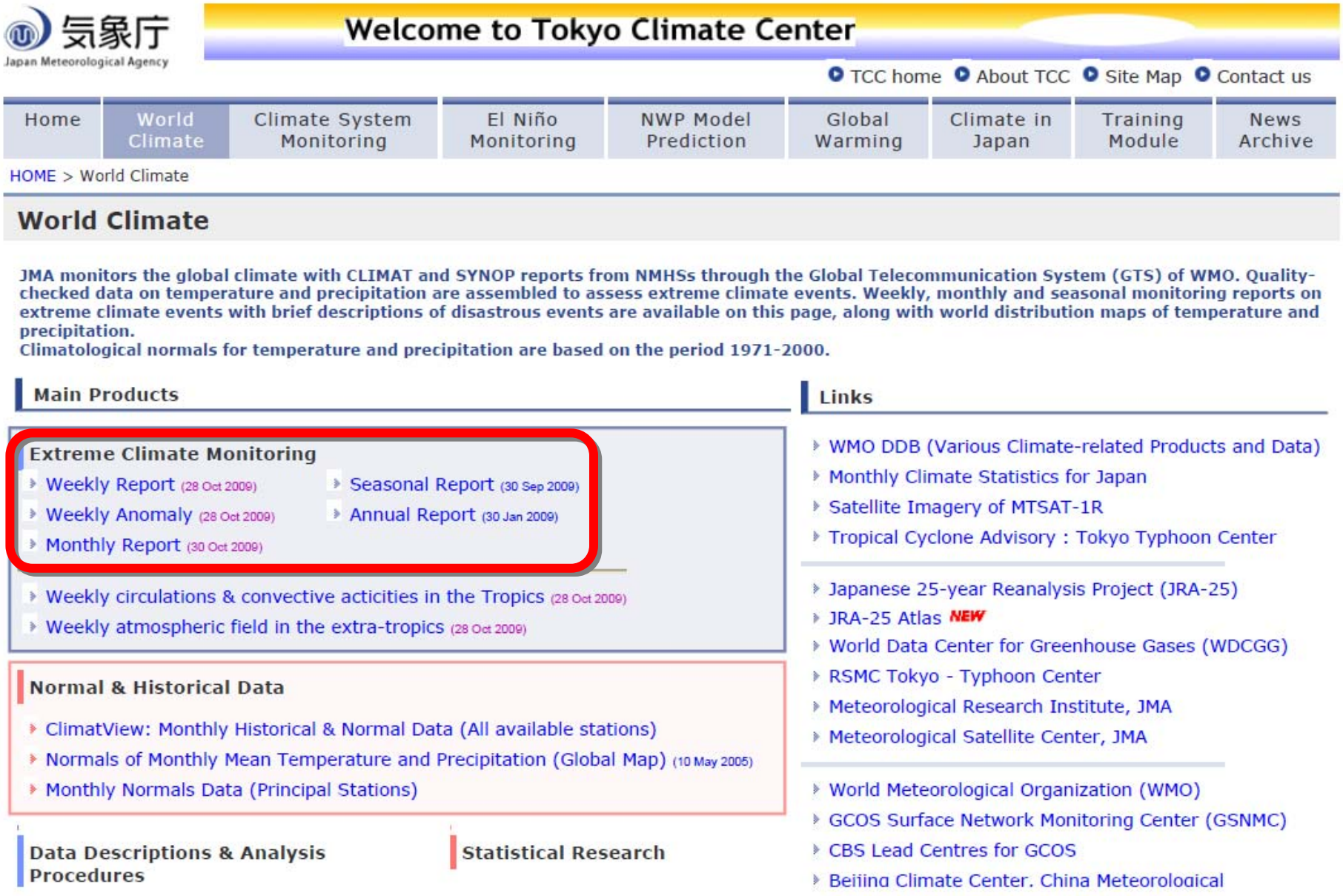
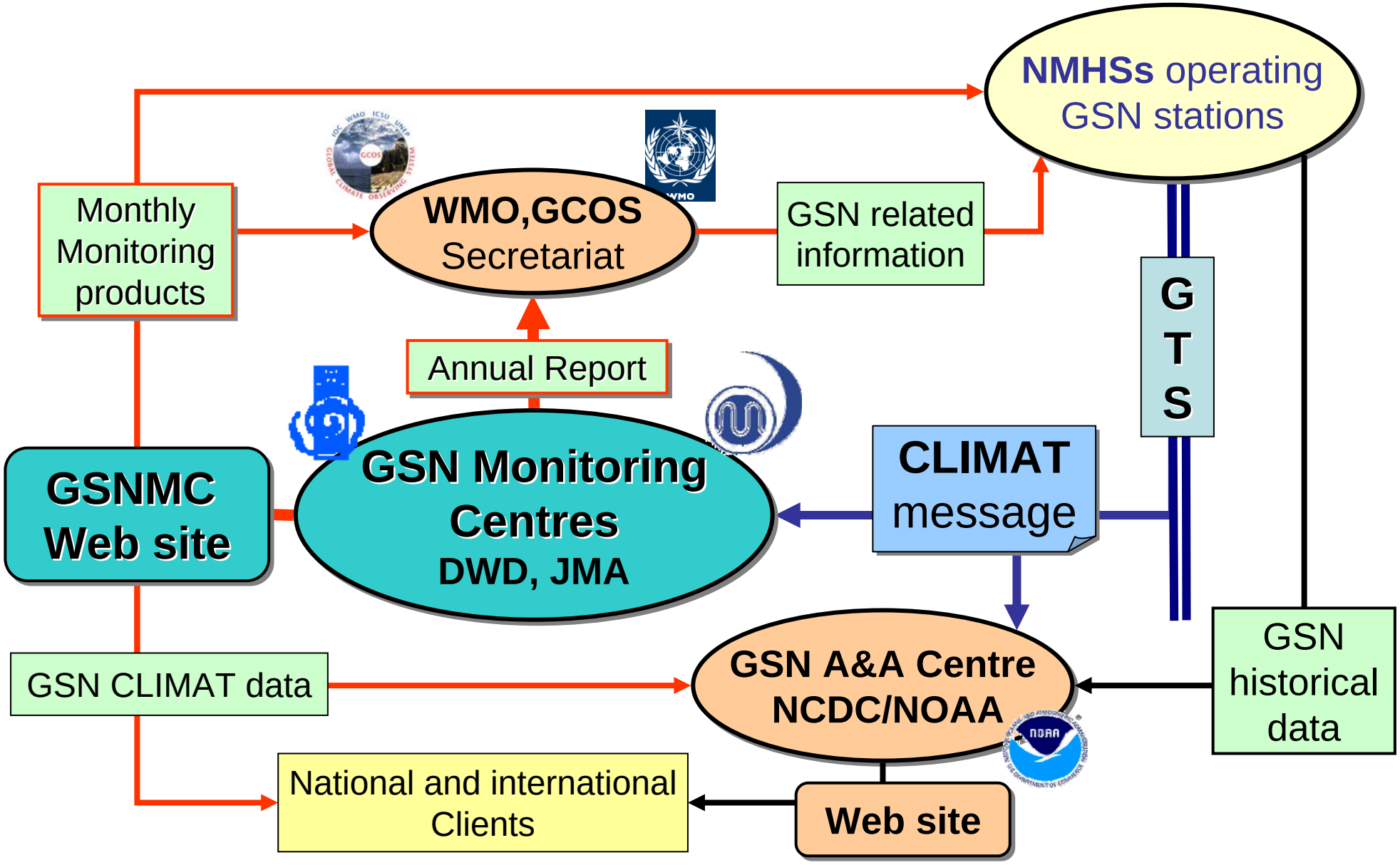


GSN Monitoring Centre

気象庁
Japan Meteorological Agency

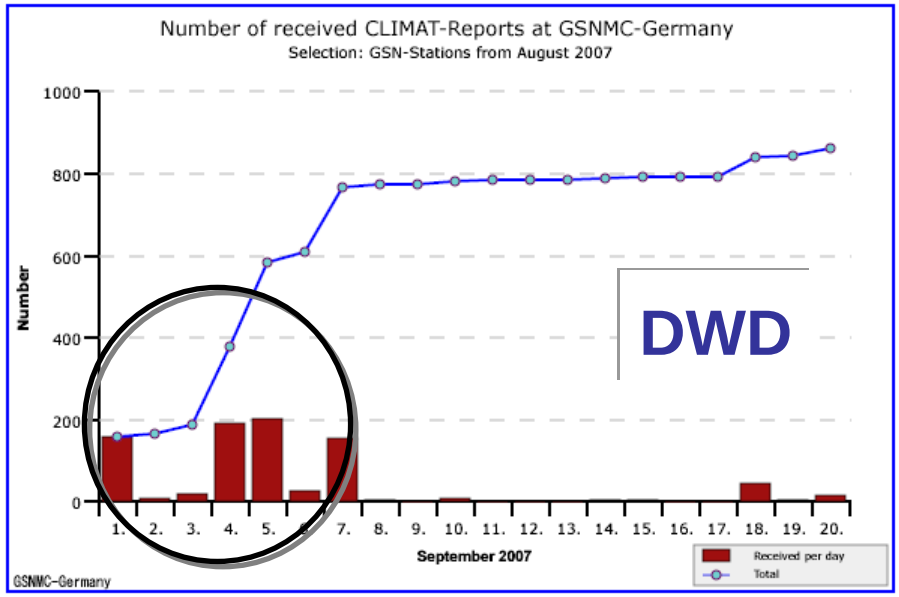
- ◆Outline
- ◆Difference of CLIMAT reception
- ◆Quality of temperature data in CLIMAT report
- ◆BUFR-CLIMAT report

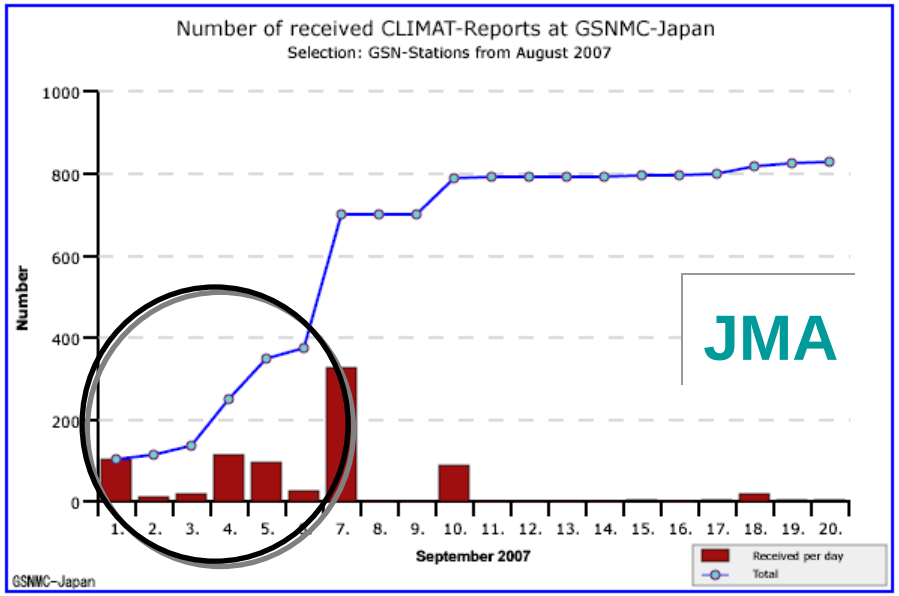
Outline of GSN Monitoring Centre



Difference of GSN-CLIMAT reception

- **Daily and total CLIMAT receptions are different between at DWD and JMA.**





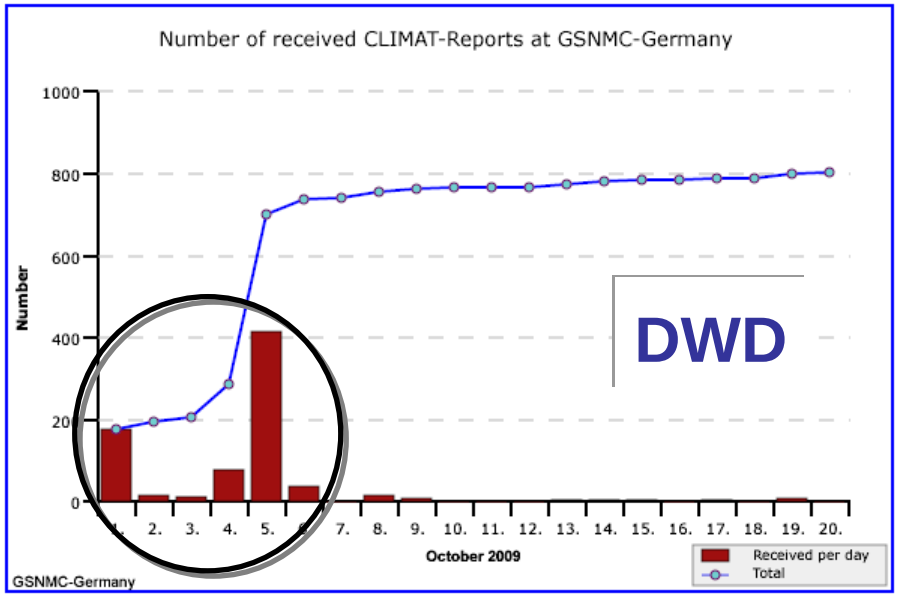
Receipt of the day — Total

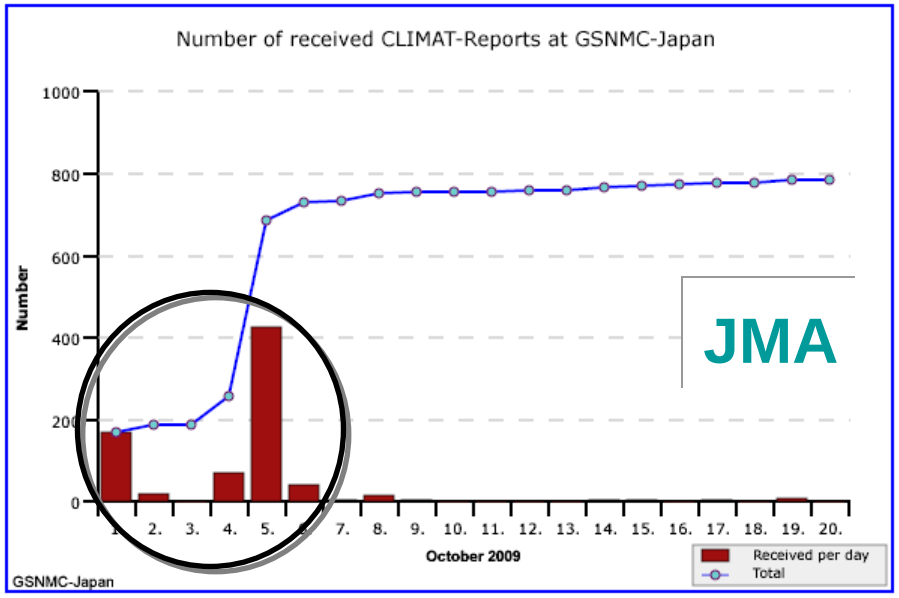
Receipt of the day — Total

Number of daily and total CLIMAT reception (September 2007)

Difference of GSN-CLIMAT reception

- **The differences have been reduced, but some are still remaining.**





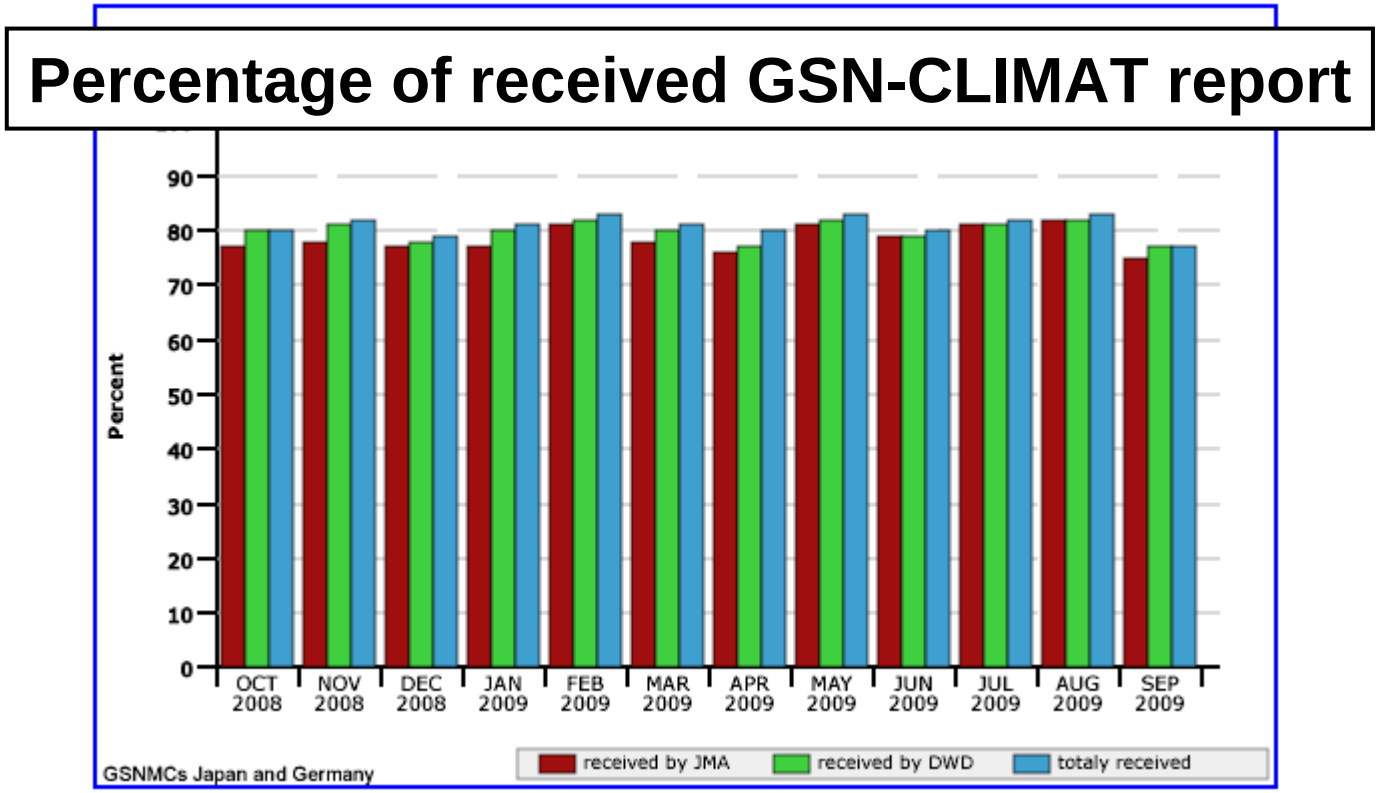
Receipt of the day — Total

Receipt of the day — Total

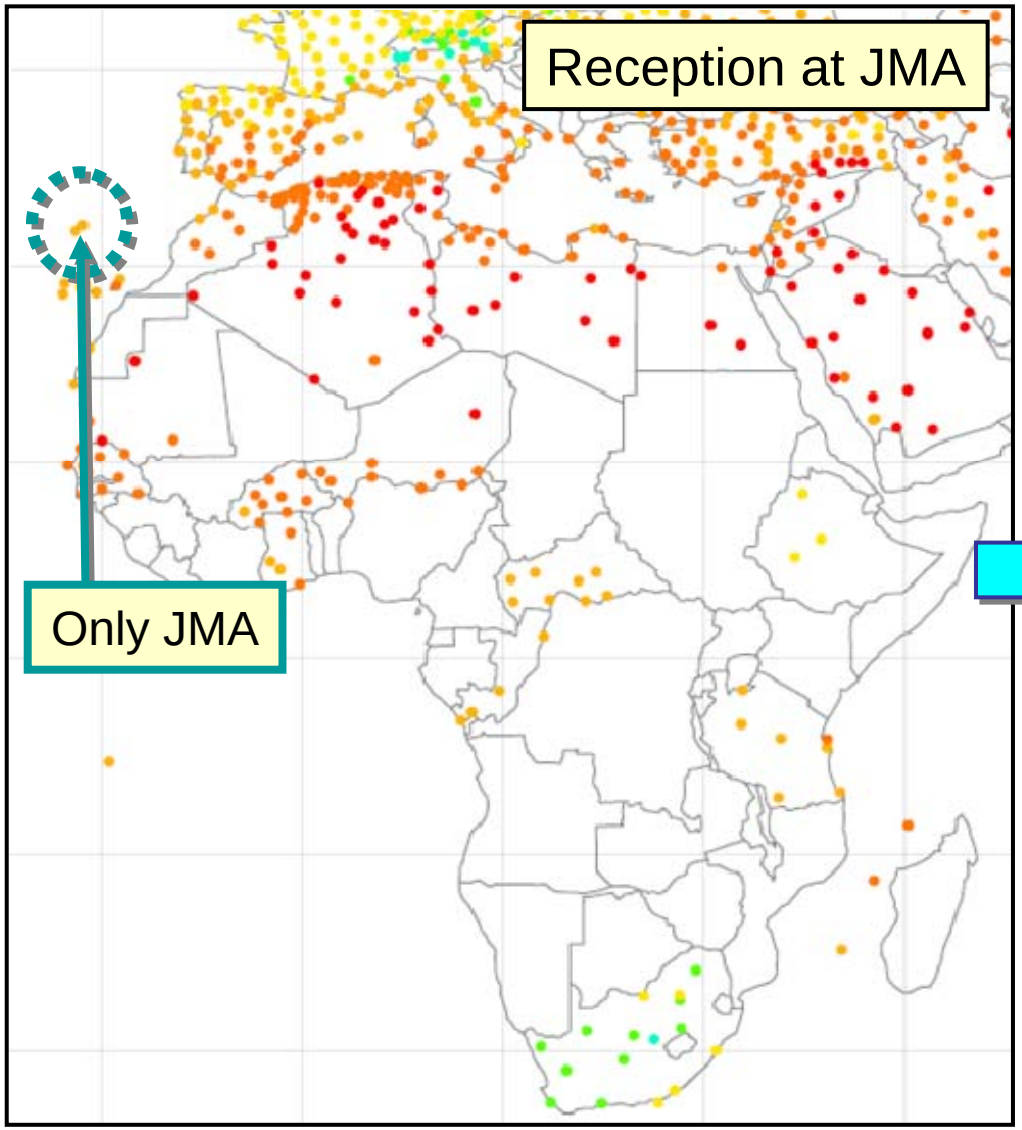
Number of daily and total CLIMAT reception (October 2009)

Difference of GSN-CLIMAT reception

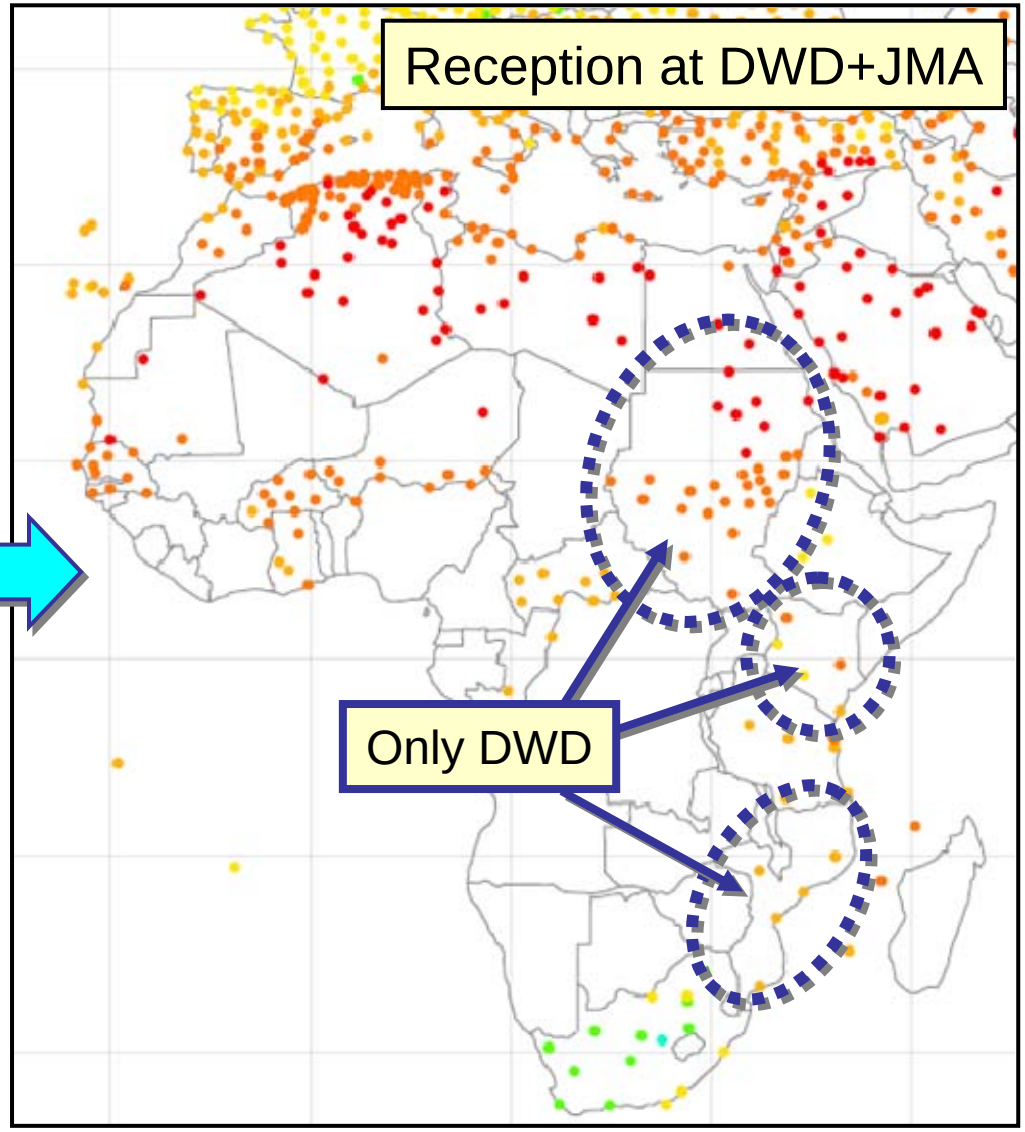
- The difference of GSN-CLIMAT reception between DWD and JMA has been improved, but still remains.



CLIMAT data harmonization

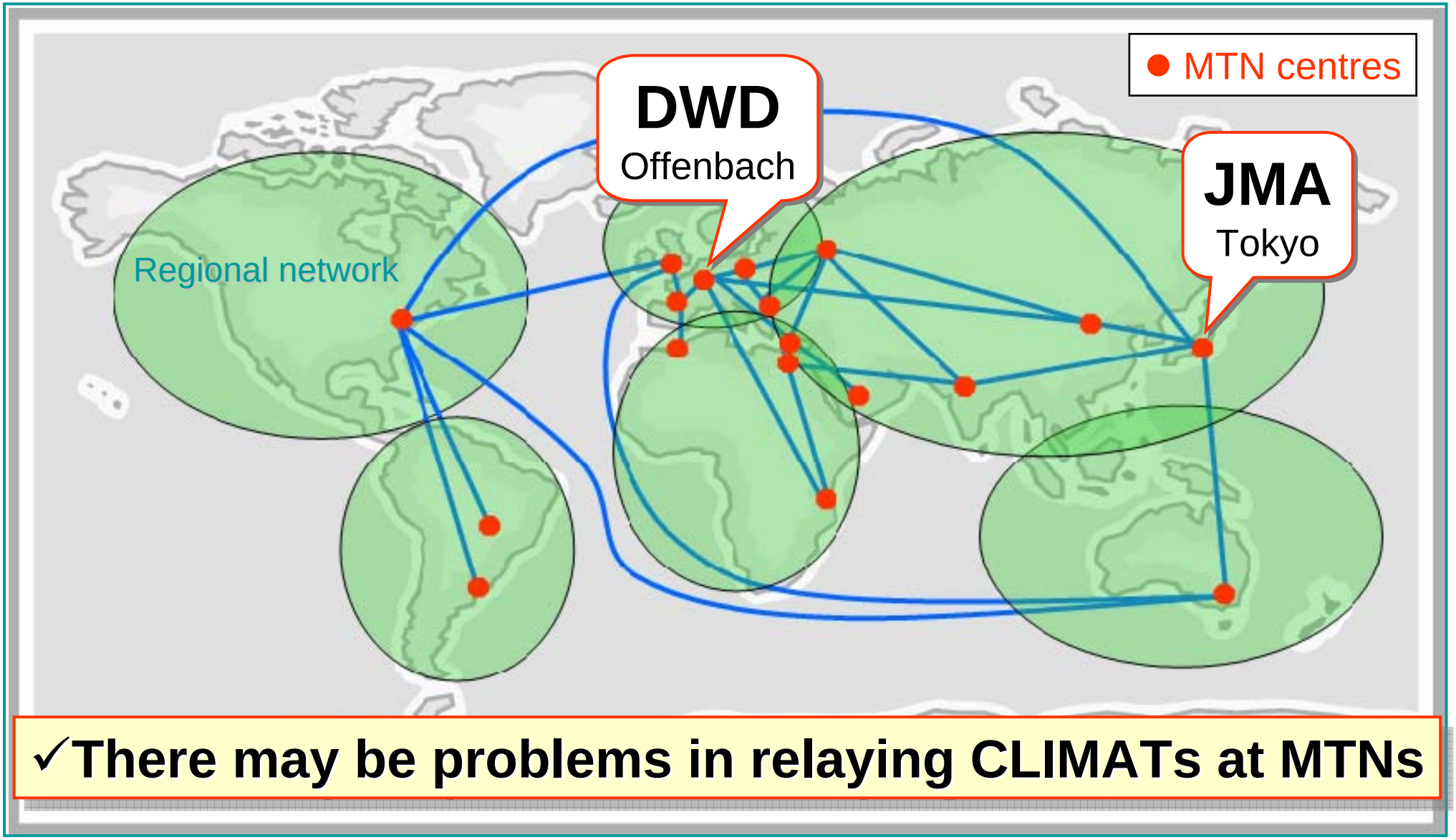


Updated on 14 Sep 2007



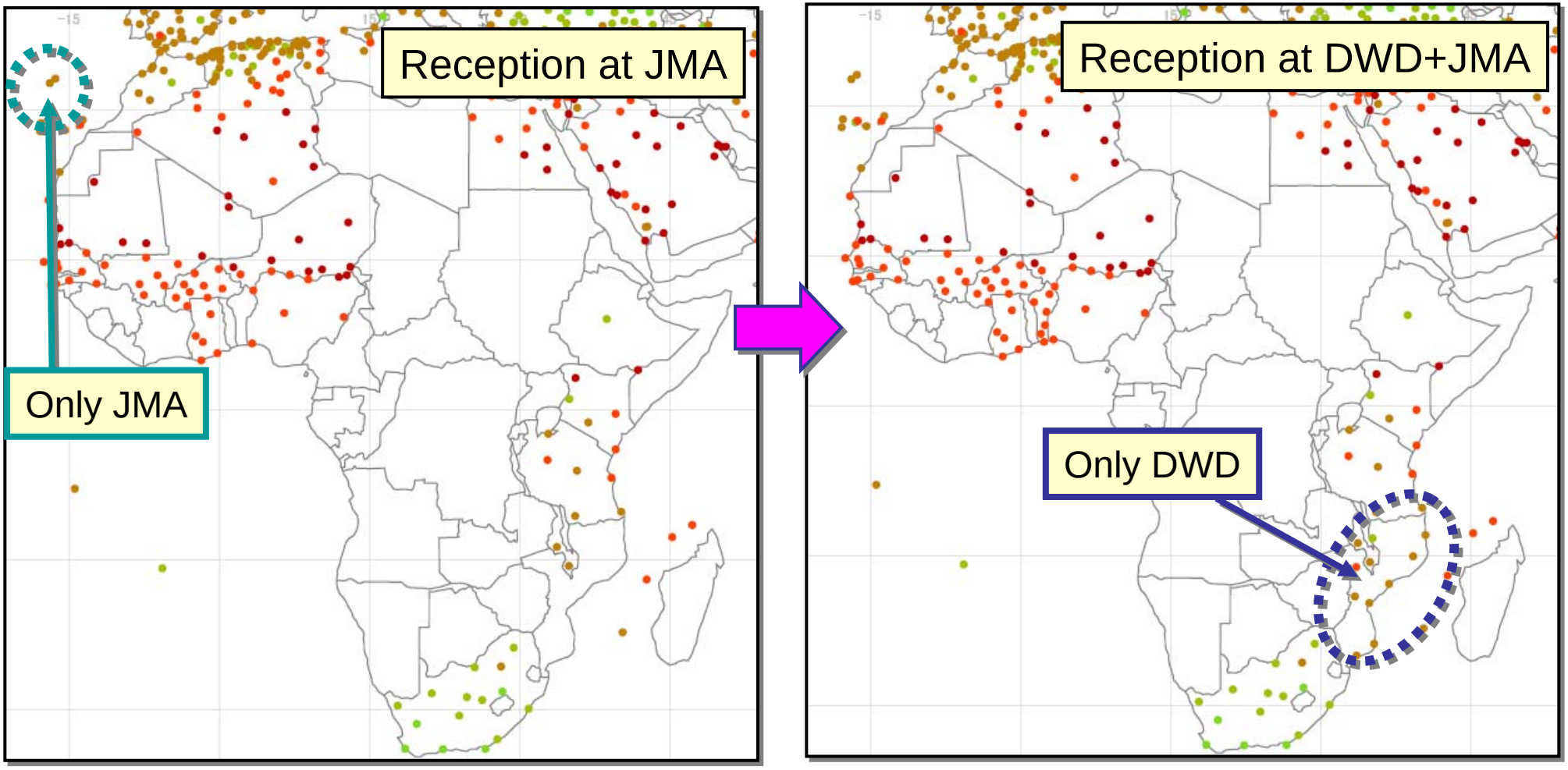
Updated on 30 Sep 2007

Main Telecommunication Network of GTS



✓There may be problems in relaying CLIMATs at MTNs

CLIMAT data harmonization



Updated on 16 Oct 2009

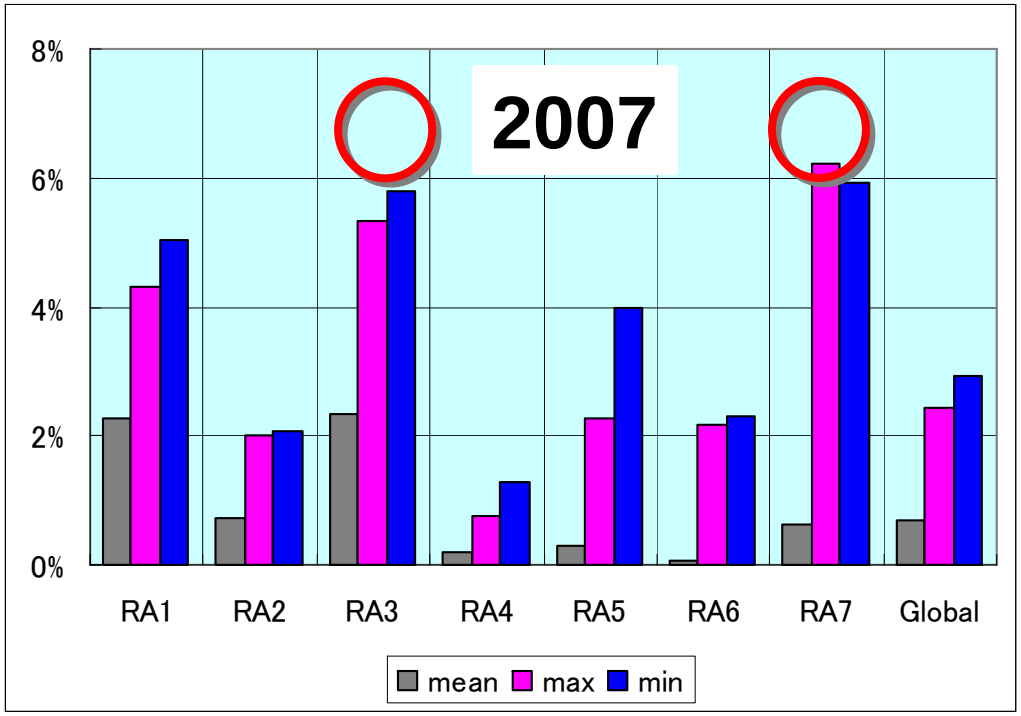
Updated on 30 Oct 2009

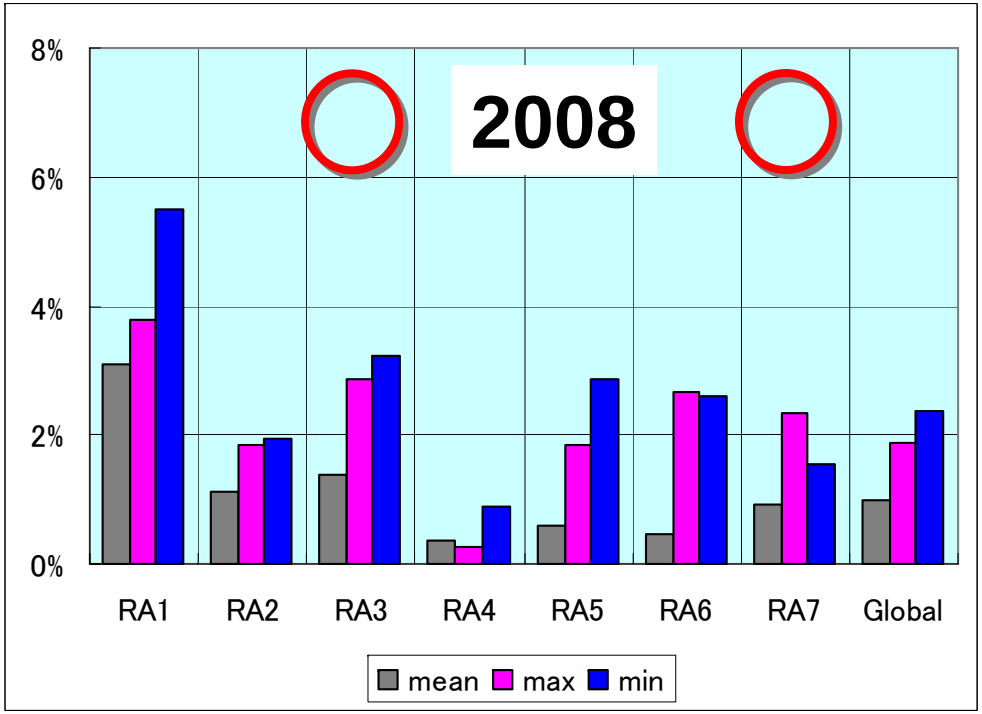
However, such situations do not always occur!

Report of GSNMC-JMA

➢ Quality of temperature data in CLIMAT report

✓The qualities of monthly mean daily maximum and minimum temperature are improved in RA-3 and Antarctica.





Erroneous temperature data rates in reported CLIMATs

Response to the Code Migration

Code Migration Schedule of BUFR-CLIMAT report

- November 2005 --- Operational exchange start
- November 2010 --- Migration complete

Recommendation of EMCGG-2 (2005)

(v) Taking into account the migration to table-driven codes (CREX and BUFR), CBS Lead Centres and GCOS Monitoring Centres coordinate monitoring exercise with the migration process.

GSNMC-JMA has started preparing to monitor both of A/N and BUFR-CLIMATs.

JMA has already started sending BUFR-CLIMAT since November 2005.

Activities of GSNMC-JMA

- **Trial monitoring of BUFR-CLIMAT (September 2009)**

✓It is reported that several NMHSs such as Czech started sending BUFR-CLIMAT to the GTS.

✓But JMA receives BUFR-CLIMATs only from China, France, and Algeria.

✓BUFR-CLIMATs may not be relayed at RTHs properly.

END…

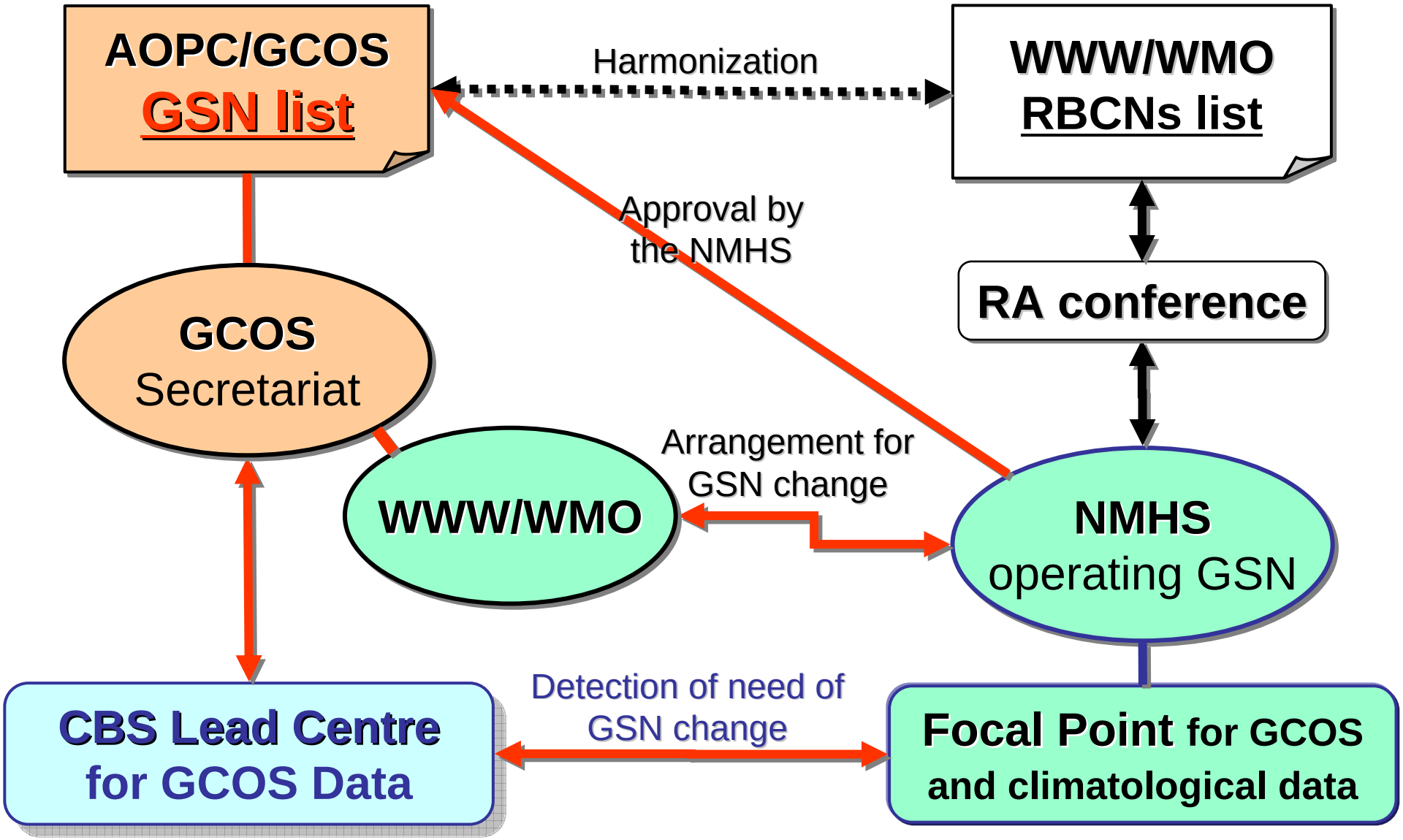
Changing and updating of GSN list

“GUIDE TO THE GSN AND GUAN” (GCOS – 73, p.15)

5. COMPOSITION OF THE NETWORKS

- ✓**Requests for additions to, or deletions from, the GSN should be made to the GCOS through the WMO.**
- ✓**Such requests will be considered by the AOPC in the context of the GSN as a whole.**
- ✓**AOPC proposals for modifications will be submitted for endorsement to the CBS and the RA Presidents concerned, since the GSN stations are to be included in the RBCN.**

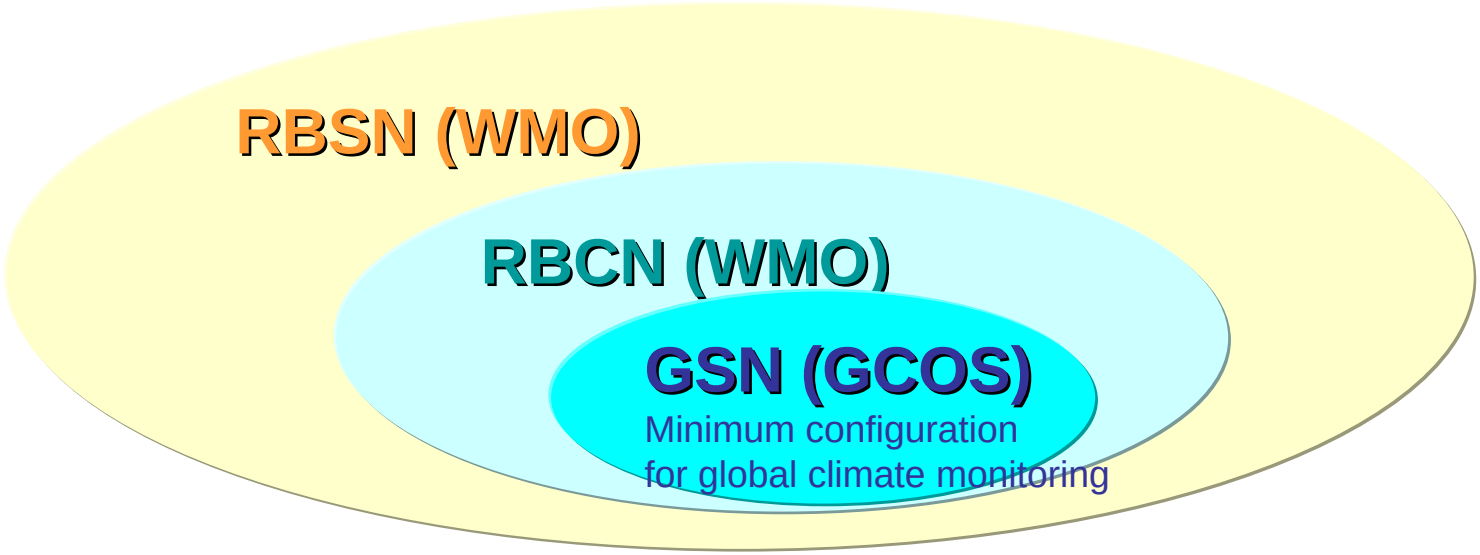
Changing and updating of GSN list



GSN and RBCN, RBSN

➢**RBSN**: Regional Basic Synoptic Networks of surface and upper-air stations adequate to meet the requirements of WMO Members and of the World Weather Watch

SYNOP message

➢**RBCN**: Regional Basic Climatological Networks necessary to provide a good representation of climate on the regional scale, in addition to global scale (**GSN**)

CLIMAT message