GCOS

GLOBAL CLIMATE OBSERVING SYSTEM

Contribute to improving systematic observations

Capacity Development through the GCOS Cooperation Mechanism

Parties and organizations are invited to take part in and contribute to the GCOS Cooperation Mechanism (GCM). Following decision 19/CP.22, GCOS wishes to revitalise the GCM. In 2003, Parties to the UNFCCC helped establish the GCM. Decision 11/CP.9 welcomed the GCM which identifies and implements cost-effective improvements to climate observing systems in developing countries. It enables them to collect, exchange, and utilize data on a continuing basis supporting adaptation, mitigation and reporting to the UNFCCC. Since 2005, the GCM has received and distributed over 3 million USD in support of the GCOS networks, primarily in the atmospheric domain through the GCOS Surface Network (GSN) and GCOS Upper-Air Network (GUAN). As is evident from the examples below, the support provided has been wide-ranging and covers all aspects of the observing system life-cycle.

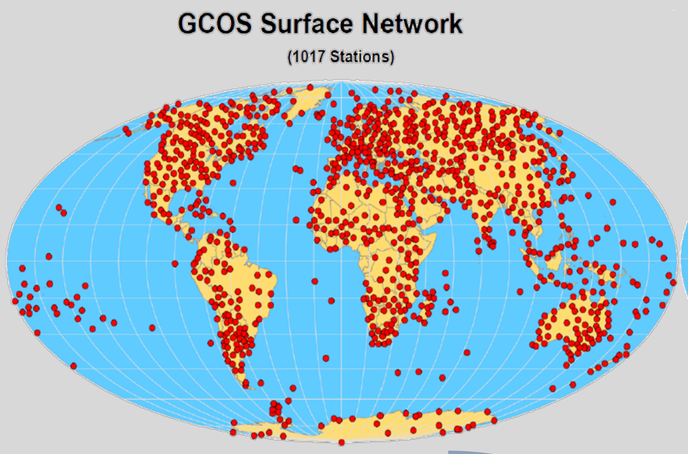
CONSULTATION AND REQUIREMENTS

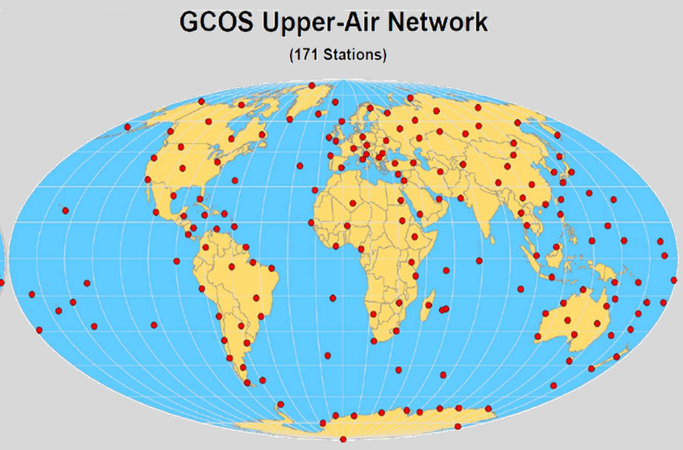
The GCOS Implementation Manager manages the GCM and provides a link between the sponsors and the recipients.

All projects are only implemented following local user consultation and are in line with the UNFCCC approved GCOS climate monitoring principles and requirements.

DESIGN AND PLANNING

Surface and upper-air networks designed to meet the minimum climate requirements are actively managed and used to identify priority areas for GCM support.



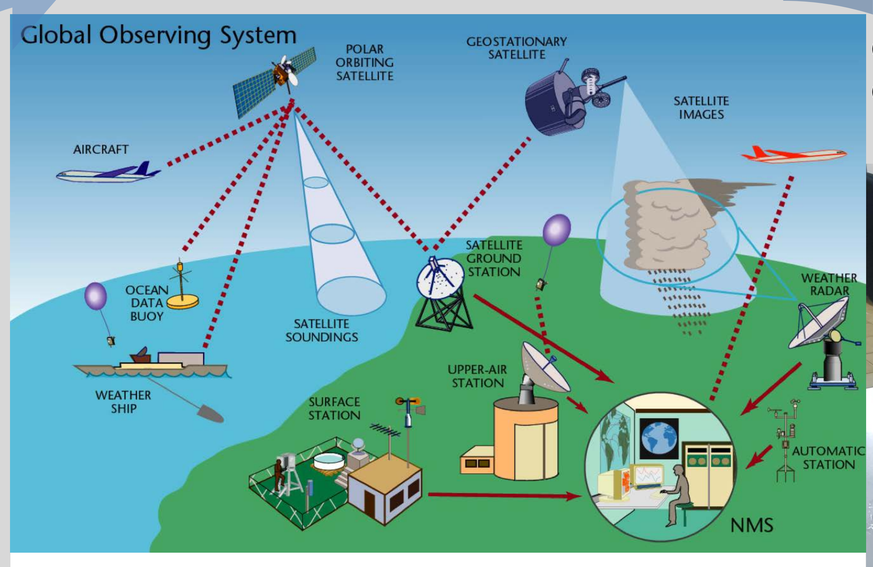


CAPACITY DEVELOPEMENT

All GCM projects include capacity development, through workshops or direct manufacturer/ expert engagement at the observing station. In Windhoek, Namibia (2007), a radiosonde training workshop for Region 1 was attended by 30 participants, representing 19 African countries. Training covered all aspects of radiosonde operations, data monitoring and the user benefits of high-quality upper-air data.

REVIEW

The performance of the GCOS networks are monitored on a regular basis and reported back to the observational panels and other WMO bodies. This ensures that the networks remain 'fit for purpose' and that their owners are aware of and understand their responsibility.



OBSERVING SYSTEM LIFE CYCLE

IMPLEMENTATION

Nairobi, Kenya (2016) – New radiosonde ground equipment installed and operational as a component of a two-year supply of consumables.

QUALITY MANAGEMENT

Bi-annual workshop for the CBS lead centers for GCOS, supported by GCM. The primary aim of the workshop is quality management training, focusing on network monitoring, fault diagnostics, communication and data benefits.

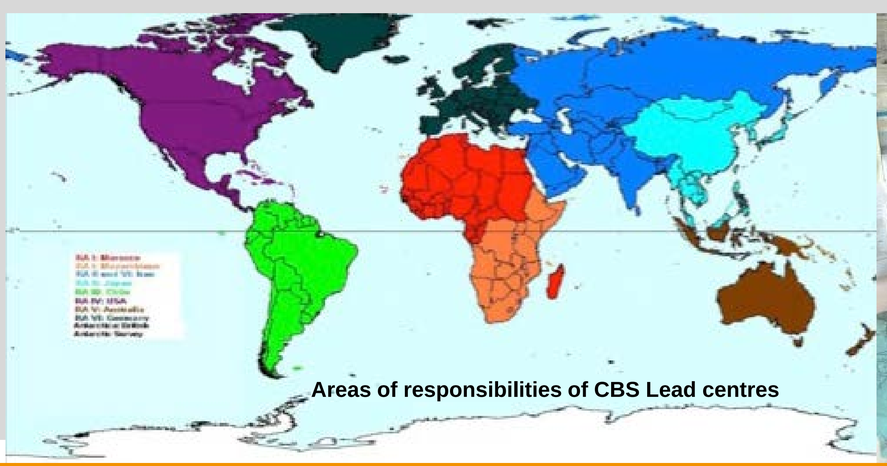
DATA ROUTING AND STORAGE

A fundamental requirement is the international exchange of observations to ensure the full benefit of the data. In Zambia (2012), a GCOS project helped improve the national data communications so that more surface observations were available internationally. (Below) Demonstration on sending observations by SMS using the GSM Desktop Phone at Kabwe Station.

OPERATIONS AND MAINTENANCE

Madagascar (2012) – Project to install Automatic Weather Stations (AWS) at 11 existing climate sites, including procurement, installation, management of network and use of data.

(Below) Training local engineers in the configuration and maintenance of the equipment



And it doesn't stop here! There is an ongoing and increasing need for support to the climate observing networks.

We need a greater focus on sustainable, multi-purpose observations at the national level, covering all the Essential Climate Variables.