



### 4<sup>th</sup> GCOS Review Cycle

A new status report will be published in 2021 followed by an updated Implementation Plan in 2022.

The updated Implementation Plan will address issues noted in the status report. To make adoption of actions clearer and easier the report will focus on actions for networks and monitoring organisations.

### Timeline

- July 2021: *GCOS Status Report* Published
- July 2022: *Publication of GCOS Implementation Plan*



- Regional workshops in the Pacific, East Africa and Caribbean have identified local issues with monitoring such as funding, capacity, and planning for sustainability and regional collaboration.
- WMO's Global Basic Observing Network and the proposed Systematic Observations Financing Facility (SOFF) have been developed to address the issues explored in the Pacific Workshop.
- The GCOS Cooperation mechanism (GCM) provides practical support for maintaining and repairing equipment and ensuring the continued collection and distribution of data.
- The GCM welcomes financial contributions to continue its work.

## PUBLIC REVIEW OF NEXT GCOS STATUS REPORT

### February 2021

Details on how to access the consultation will be available in January 2020 on the GCOS web pages [gcos.wmo.int](http://gcos.wmo.int)

This is open to all. It is the opportunity for the widest possible range of interested parties to contribute and comment on the Status Report. GCOS Expert Panels will consider all the comments received.

There will be a public review of the next Implementation Plan in early 2022.

Since its inception in 1992 GCOS has produced a sequence of status reports and implementation plans.

### Main preliminary findings of current review

- Significant improvements to the observations of many ECVs,
  - e.g. satellite observations, ocean Argo floats and surface drifters.
- There have been significant improvements in the archiving and accessibility of climate data, including through the Joint CEOS/CGMS ECV Inventory, the EU's Copernicus and the US NCEI
- New methods to assess uncertainty and QA/QC, particularly of satellite observations have been developed and need to be fully implemented.
- Enhanced Data rescue, with outputs open and freely available, is needed to make historic archives available
- Observations are sparse in some areas such as Africa, the Pacific, and Southern Oceans and coastal areas.
- Some parts of the system remain fragile:
  - There remain concerns over the sustainability and long-term continuity of some networks and satellite missions such as AURA and Aeolus.
  - Ocean observations are based on research funding not sustained operational budgets
  - Some global data centres do not have long-term funding
- Not all data is freely exchanged and available.



### GCOS-WCRP Climate Observations Conference

12-14 October 2021

will assess how well the current global climate observing system supports current and near-term user needs for climate information. An input into the next GCOS implementation plan.

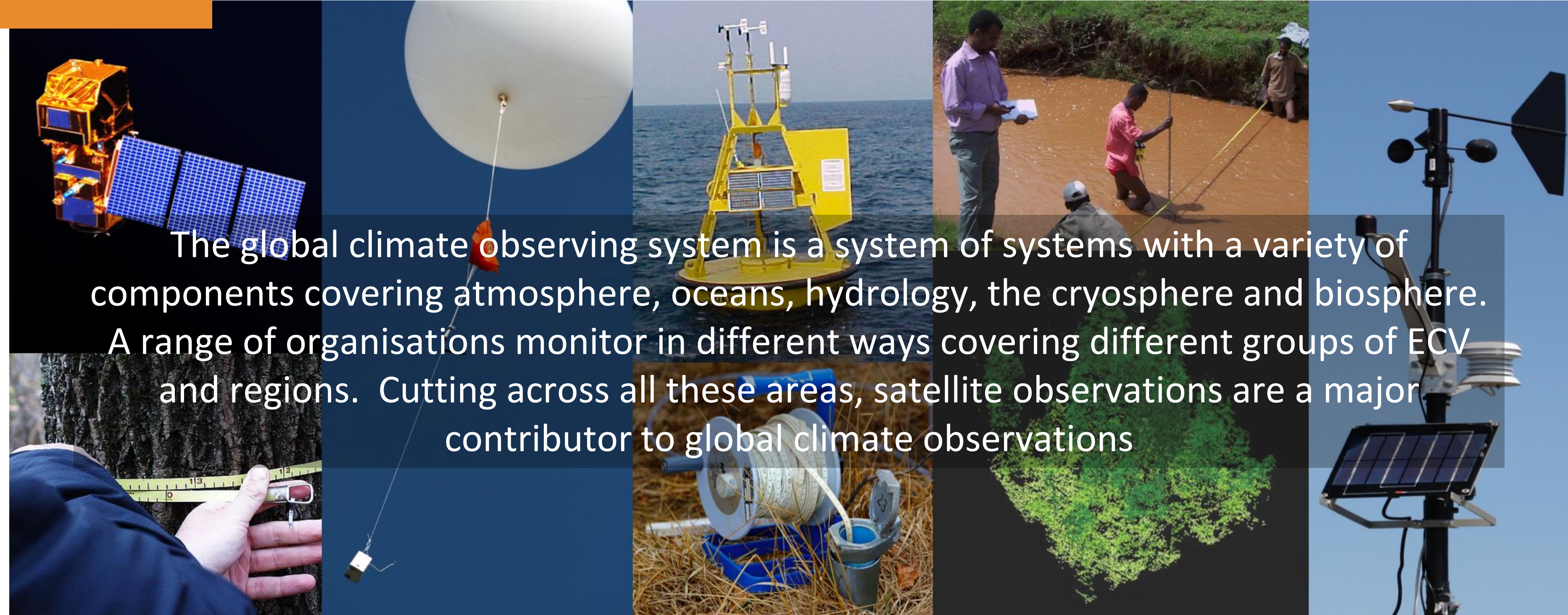
### GCOS Developments

- GCOS is now looking at the main climate cycle encouraging scientific review papers on the energy, carbon and water cycles and on the state of biomass. Looking at the cycles across the atmospheric, ocean and terrestrial domains in a holistic way, ensures consistency and identifies gaps in the observing system.
- Monitoring can both support the development of plans for adaptation and mitigation as well as monitoring its implementation. GCOS has established a Task Team that is exploring how a global observing system can support and monitor local adaptation and mitigation.

### GCOS Trust Fund

GCOS is funded by a trust fund that supports the scientific secretariat staff, meetings and travel for participants. WMO provides support for the Director and administrative support and office space for the Secretariat.

There have been significant contributions to the GCOS Trust Fund but additional support is needed, especially to support the broadest possible participation in GCOS and its reviews.



The global climate observing system is a system of systems with a variety of components covering atmosphere, oceans, hydrology, the cryosphere and biosphere. A range of organisations monitor in different ways covering different groups of ECV and regions. Cutting across all these areas, satellite observations are a major contributor to global climate observations