









Reviewing the ECV Observation Requirements: GCOS' 4th Assessment Cycle 2020–2022



Public Consultation - January 2020

Details on how to access the consultation will be available in January 2020 on the GCOS web pages gcos.wmo.int.

This is open to all and is the opportunity for the widest possible range of inputs to any update of the requirements. GCOS Expert Panels will consider all the comments received and in 2020 consolidate the views into a set of proposals that will be present ed for public review as part of an updated Implementation Plan.

Throughout 2019 experts have been considering the requirements for each ECV specified in the last Implementation Plan (GCOS-200). They have consulted their communities and in many cases are proposing small changes. In some cases there are more significant changes being proposed, both to the values of the requirements and the ECV products themselves.

PUBLIC CONSULTATION

JANUARY – MARCH 2020

ALL CONTRIBUTIONS WELCOME

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4th GCOS Review Cycle

GCOS regularly reviews the status of monitoring of Essential Climate Variables (ECV) and user needs. It produces a series of Status Reports and Implementation Plans that describe the observations that are needed and actions required to improve the observational systems and networks.

GCOS is now starting its 4th cycle by launching a public consultation on the ECV requirements in January 2020 followed by a Status Report in 2021 and Implementation Plan in 2022. All these outputs will be publicly reviewed to ensure that they capture as many views and needs as possible. The time line is shown below.

The revision will not aim to make radical changes, most will be minor, but in some areas clarification of the definitions and feedback from monitoring systems on what is feasible will need to be accounted for. Rather than a single value to be met this revision will present a range form the minimum needed to be useful for climate issues to the maximum resolution beyond which no benefits are expected. Intermediate values may also be presented which may be useful for specific applications.

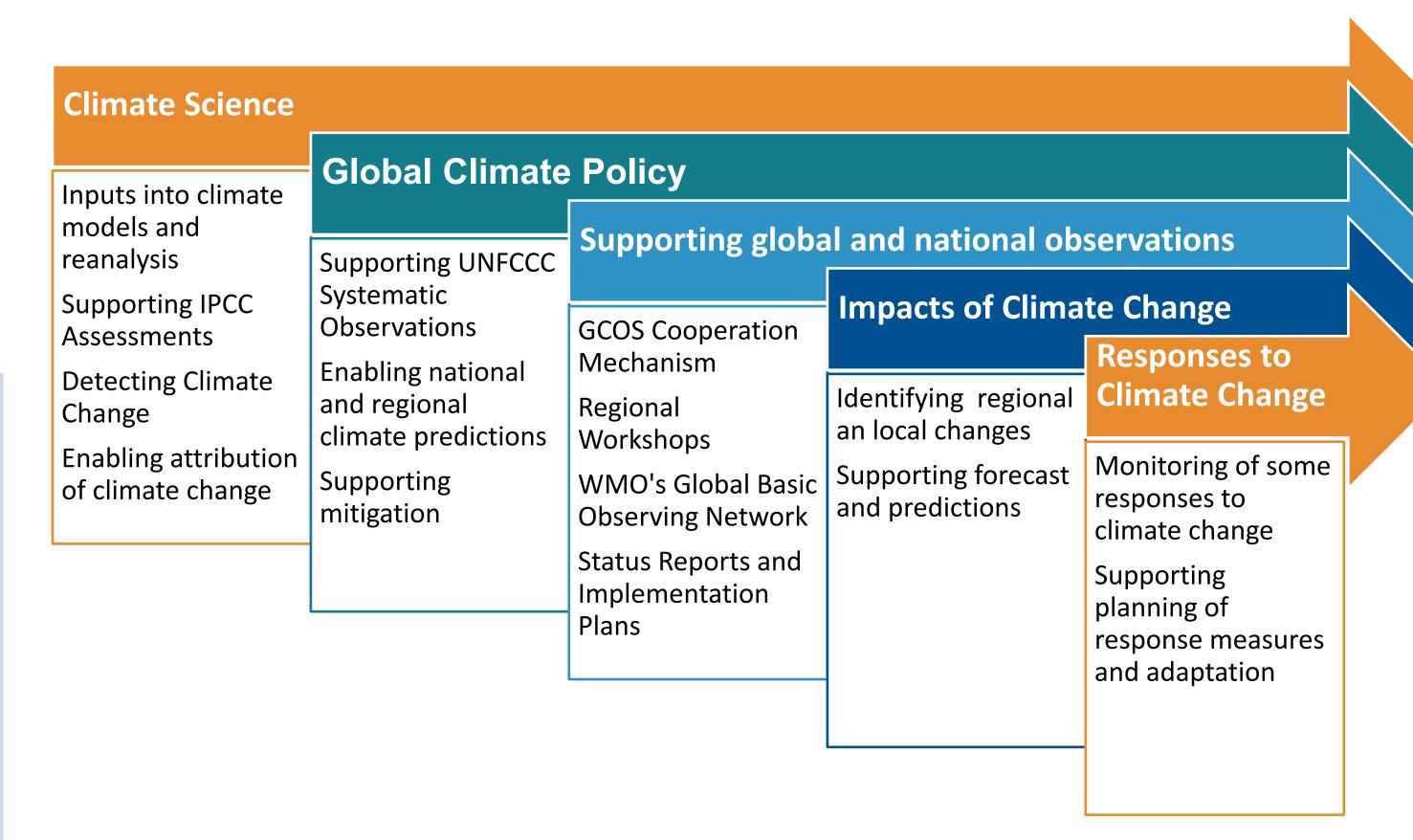
GCOS Planning OCTOBER 2021: OCTOBER: SC MARCH 2021: MARCH 2020: 2022 March Panel 2021: 4th Status Meeting: 4th Panel Meetings Panel Meetings Climate Agree revised Implementation Revise Requirements Meetings Report Observation Implementation Plan Plan published based on public published Conference (TBC) Agree revised review Status Report 2023 Jan Jan Jan Jan 2020 2021 2019 2022 Panels consider comments on Panels revise Panels plan for Panels draft IP4 requirements requirements review and Review planning until 2028 Panels draft SR4 SR4 & finalise ECV Stewards and IP Action rapporteurs update panels on progress, issues and gaps.

New Challenges

To date, GCOS has concentrated on climate monitoring that supports climate science and the assessments of the IPCC. Now that anthropogenic climate change is clear it is important for GCOS to ensure that other demands on global climate monitoring are met.

These include:

- Ensuring monitoring of the entire climate system, the Earth's carbon and water cycles and energy balance;
- Monitoring impacts of climate change, changes in means and extremes;
- Monitoring responses to climate change;
- Ensuring urban areas (where most people live) are adequately monitored.



The development of issues addressed by GCOS
From the GCOS Implementation Plan, 2016, adapted by Simon Eggleston, GCOS Secretariat

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