

3RD GCOS JOINT PANELS MEETING, ECMWF, BONN, GERMANY, 26-30 JUNE 2023

Cross Panel Group "Climate Indicators"

Session 1: Tuesday 27-June – 11:00-13:00

Session 2: Thursday 29 June - 09:00-10:30

Lead(s): Karina von Schuckmann (OOPC) + Martin Herold (TOPC)

Secretariat Support: Belén Martín Míguez (GCOS) and Antonio Bombelli (GCOS)

Background

Address Decision GCOS SC-30/4: The Steering Committee decides that GCOS Secretariat works with WMO/Climate Services to explore the adoption of additional climate indicators, such as the earth energy imbalance or covering new domains (e.g. biosphere)

Background Material:

- Information Document 1 → [CPG Indicators Inf Doc 1](#)

Importance of cross-panel work

The question of whether there is a need to change the current list of climate indicators requires of a cross-panel discussion to ensure all domains are properly represented and the resulting list is the most appropriate. This also implies keeping the list as short as possible.

Expected Outcomes

In Bonn:

- Definition of GCOS Climate Indicator.
- List of Climate Indicators Criteria revisited.
- Proposal of 2-4 Climate Indicators that (1) comply with the GCOS Indicator criteria (2) allow for a refined description of climate change with respect to the major Earth system cycles (3) to include climate impacts on the Biosphere and/or Climate Extremes.

Longer term (tentative – to be discussed in Bonn):

Prepare a GCOS document with a proposal to discuss with WMO Climate Services and consult with stakeholders before presenting it in scientific for a/publishing.

Running of the session

Session Tuesday, 27 June 2023, 11:00-13:00

11h00-11h05 – Welcome, and general overview on the sessions during the GCOS all panel meeting (Karina von Schuckmann)

11h05-11h20 – A short history of the GCOS global climate indicator framework , GCOS SC tasks, their use and comment on the rationale for launching the dialogue (Belén Martín Míguez, Antonio Bombelli)

11h20-11h40 – Climate indicators: Definition, GCOS Climate Indicators criteria and current activities including science-policy nexus (Karina von Schuckmann)

11h40-12h40 – Interactive workshop on the definition and criteria for indicators (facilitators: Karina von Schuckmann, Belén Martín Míguez, Antonio Bombelli)

Participants will write answers to the following question on sticky notes:

How do you define a global climate indicator? (10 minutes)

Assess the outcome: identify from the notes overarching themes to cluster the answers, and develop a definition for global climate indicators together (20 minutes)

Participants will write answers to the following question on sticky notes:

Is there any important aspect missing in the current criteria for the GCOS climate indicators? (10 minutes)

Assess the outcome: identify from the notes overarching themes to cluster the answers, and develop major priorities for criteria of global climate indicators (20 minutes)

12h40-13h00 – Common discussion on the outcome: refinement of the new definition, and discussion on refinement of existing GCOS indicator criteria with the existing ones (facilitators: Karina von Schuckmann, Belén Martín Míguez, Antonio Bombelli)

Session Thursday, 29. June 2023, 09:00-10:30

09h00-09h05 – Welcome, organization and general overview on outcomes of session 1 (Karina von Schuckmann)

09h05-09h20: Proposed new indicators by the Terrestrial Observation Panel for Climate (TOPC) (Martin Herold)

09h20-09h30: Discussion with the audience

09h30-09h45: Proposed new indicators by the Atmospheric Observation Panel for Climate (AOPC) (TBC)

09h45-09h55: Discussion with the audience.

09h55-10h10: Proposed new indicators by the Ocean Observations Physics and Climate Panel (OOPC) (Sabrina Speich, Lijing Cheng, Karina von Schuckmann)

10h10-10h20: Discussion with the audience.

10h20-10h30: Wrap-up & collection of markers (scoring of the indicators).

