

Decision -/CP.27

Implementation of the Global Climate Observing System

The Conference of the Parties,

Recalling Article 4, paragraph 1(g–h), and Article 5 of the Convention,

Also recalling decisions 8/CP.3, 14/CP.4, 5/CP.5, 11/CP.9, 5/CP.10, 9/CP.15, 19/CP.22,

Further recalling Article 7 of the Paris Agreement,

Noting the important role of the Global Climate Observing System in meeting the need for climate observation and climate services under the Convention,

Noting that reporting and greenhouse gas inventory guidelines are as adopted under the UNFCCC and the Paris Agreement,

Recognizing the importance of and continued need for capacity-building to support systematic observation,

1. *Recognizes* the vital importance of robust Earth observation systems and related long-term data records for enhanced understanding of the global climate system and its changes, and for adaptation and mitigation action;
2. *Welcomes* the 2022 Global Climate Observing System Implementation Plan¹ and the 2022 Global Climate Observing System essential climate variables requirements² and *encourages* Parties and relevant organizations, as appropriate, to work towards the implementation of the 2022 Global Climate Observing System Implementation Plan;
3. *Emphasizes* the need to address systematic observation gaps, particularly in developing countries and for ocean, mountain, desert and polar regions and the cryosphere in order to improve understanding of climate change, climate-related risks and tipping points, and adaptation limits and to ensure enhanced delivery of climate services and early warning systems;
4. *Notes* with concern the existing gaps in the global climate observing system and *recognizes* the need to enhance the coordination of activities by the systematic observation community and improve its ability to provide useful and actionable climate information for mitigation, adaptation and early warning systems, as well as information to enable understanding of adaptation limits and of attribution of extreme events.

¹ See WMO. 2022. *The 2022 GCOS Implementation Plan*. Geneva: WMO. Available at https://library.wmo.int/doc_num.php?explnum_id=11317.

² See WMO. 2022. *The 2022 GCOS ECVs Requirements*. Geneva: WMO. Available at https://library.wmo.int/doc_num.php?explnum_id=11318.