



GCOS Global Climate Observing System (GCOS) Statement to SBSTA62, 2025

GCOS, the Global Climate Observing System, is expressing its significant alarm as to the current status of systematic climate observation programs.

The global system for collecting, storing, preserving and distributing observations of the Earth's changing climate is under substantial pressure. In-situ networks, Earth observation satellite missions, and climate data repositories are all facing a reduction in investments. At the same time, as shown in the last WMO's State of the Global Climate report, global warming is increasing with ever more evident and substantial impacts on our planet and societies.

We are not only losing measurements, but also critical expertise, undermining the management and maintenance of an effective global monitoring system. Urgently building in redundancies in support mechanisms across the whole system to ensure it is robust against single point of failure is essential to ensure resilience and sustainability of systematic observation programs including data management and provision to users.

Taking robust and reliable observations is not an exercise for its own sake, but a fundamental action needed to provide the data and information that build trust in research results, provide evidence for informed decisions, and support the achievement of several commitments by Parties of the UNFCCC and the Paris Agreement, including – amongst others – the Enhanced Transparency Framework (ETF), the Global Stocktake (GST), the Global Goal on Adaptation (GGA), the Nationally Determined Contributions (NDC), and the National Adaptation Plans (NAP).

A sustained and robust global observing system for climate is needed now more than ever. Instead, we currently face the risk of networks declining, reduced data availability, and consequent knowledge gaps.

GCOS, on behalf of the systematic observation community, and in the interest of future generations, calls for all the Parties' urgent and sustained support to ensure the long-term continuity of systematic observations that fundamentally underpins so many aspects of scientific research.
