Sustaining the Global Climate Observing System

Draft for Parties and organizations

The COP31 Presidency,

Recognizing that systematic climate observations provide the evidence to track a changing climate, understand its sensitivity to greenhouse gases and assess progress towards agreed goals, underpin forecasts and early warnings from days to seasonal outlooks, help identify longer-term threats and support adaptation through preparedness and response, even if early warnings cannot eliminate all risks;

Welcoming the 2027 Status Report of the Global Climate Observing System (GCOS), now in open review, and its assessment of risks across climate variables, observing infrastructure and data systems, alongside achievements and gaps;

Noting with deep concern its findings of increasing fragility, declining key capabilities and potential interruptions, with short-term funding, dependence on individual providers, insecure archives and persistent geographical gaps putting continuity and equitable access at risk, and ocean observations particularly exposed;

Noting also the accompanying GCOS High-Priority Action Plan, also in open review, which identifies a small set of immediate priorities to protect key end-user applications, close emerging and long-standing critical gaps, and avoid single points of failure;

Recognizing further that weather and climate observations deliver full public value only as a coherent global system, with data combined and used across borders, and that GCOS, the Global Ocean Observing System, the World Meteorological Organization and the relevant observing and data-exchange coordination functions across the UN system provide the architecture and international coordination that turn measurements made by many countries and institutions into comparable, interoperable and accessible information for forecasts and climate assessments;

Concerned also that this coordination capacity is itself at risk, and noting the High-Priority Action Plan's estimates of a recurring coordination gap of approximately USD 10 million a year and a requirement of USD 500 million annually for the observation actions identified;

Calls upon governments and public- and private-sector partners to mobilize support for three connected priorities identified by GCOS:

1. **Secure international coordination** through predictable, multi-year contributions, including through the GCOS Trust Fund and to partner organizations, to sustain scientific and technical capacity, common requirements, standards and performance assessment;
2. **Protect essential observing capabilities** by sustaining threatened networks and satellite measurements, with particular attention to basic atmospheric and ocean observations, tropical buoy arrays and Atlantic circulation monitoring, funding long-term operations and maintenance, and investing in skilled personnel;
3. **Close gaps and safeguard data** by strengthening atmospheric, freshwater and carbon observations, particularly in under-observed and vulnerable regions, supporting national institutions, open data exchange and independent backup arrangements for irreplaceable climate records.