

GCOS Surface Reference Network (GSRN)

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GCOS Steering Committee (SC-27)

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**GLOBAL CLIMATE
OBSERVING SYSTEM**

KEEPING WATCH OVER OUR CLIMATE



WMO



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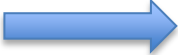
International
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1. GCOS and the WMO Integrated Global Observing System (WIGOS) both recommend that networks should be part of a tiered system: reference, baseline and comprehensive networks. This tiered network concept is included in the Manual on WIGOS.
2. In 2017, AOPC agreed on the creation of a task-team to scope a potential Global Surface Reference Network (GSRN), which was then endorsed during the GCOS Steering Committee at its twenty-fifth Session. The GSRN is the surface equivalent of the GCOS Upper Air Reference Network (GRUAN), which at the 17th Session of the WMO Congress (Cg-17) was recognized as a WIGOS implementation project.
3. The Commission of Climatology expressed an interest in the GSRN and the 17th Session of the Commission for Instruments and Methods of Observation stated its support to the GSRN.
4. The report produced by the GSRN Task Team was approved by GCOS and published in 2019 (GCOS-226). It provides a proposal for the establishment of a GSRN, with the support of the GCOS programme, relevant programmes at WMO and the Bureau International des Poids et Mesures (BIPM).

Recommendation from GCOS-226

To proceed to implementation, the following are required:

- Approval of the proposed GSRN by relevant WMO programmes, the GCOS programme and other sponsors, leading to the adoption of an agreed governance structure.
- Establishment of a Lead Center  An offer to host and staff appropriately the proposed Lead Centre.
- Offers of suitable sites for an initial GSRN. (Initial implementation is aimed at six core atmospheric surface Essential Climate Variables (ECV): Air temperature, wind speed and direction, water vapour, pressure, precipitation and surface radiation budget components)
- Regular meetings during the first phase of implementation to develop and fully articulate and document concepts of operation and certification procedures.

Draft Decision 8.3 (SC-27)

1. The GCOS Steering Committee emphasizes the importance of implementing the GSRN report.
2. The GCOS Steering Committee asks the GCOS Secretariat to:
 - a. Present the proposed GSRN for approval to relevant WMO programmes and to the Bureau International des Poids et mesures (BIPM)
(– the intergovernmental organization through which Member States act together on matters related to measurement science and measurement standards.)
 - b. Work with the relevant WMO programme and with the PR of countries to identify one or more offers to host and staff appropriately the proposed Lead Centre
 - c. Work with the relevant WMO programme and with the PR of countries to identify a list of suitable sites for an initial GSRN
 - d. Present a draft decision to the upcoming 72nd session WMO Executive Council, in June