

## **The Atmospheric Observation Panel for Climate (AOPC) Terms of Reference**

The Atmospheric Observation Panel for Climate was established by the GCOS Steering Committee in recognition of the need for specific scientific and technical input concerning atmospheric observations for climate. The Joint Scientific Committee of the World Climate Research Programme (WCRP), recognizing the benefits of the AOPC, agreed in 1995 to co-sponsor the panel, which was therefore renamed as the GCOS/WCRP Atmospheric Observation Panel for Climate. It meets regularly to review progress and address identified issues with the global observing system for climate.

AOPC is supported, amongst others, by the WMO Integrated Global Observing System (WIGOS) – an integrated, comprehensive, and coordinated system that comprises in-situ and space-based observations of the present WMO global observing systems. WIGOS represents an integrated framework of existing WMO observing systems and aims at providing the data required for delivery of services for all regions around the globe in an effective and efficient manner.

The goal of the AOPC is to plan, monitor and promote the atmospheric component of GCOS.

### **Its specific Terms of Reference are as follows:**

1. To maintain and periodically review the list of GCOS Atmospheric Essential Climate Variables;
2. To liaise with relevant stakeholder bodies in order to determine and maintain the requirements for data to monitor, understand and predict the dynamical, physical and chemical state of the atmosphere and its interfaces on climate relevant time scales, on both global and regional levels;
3. To advocate for the establishment, re-establishment and maintenance of integrated observing systems to provide long-term, high-quality, consistent data and information to meet those requirements according GCOS monitoring principles;
4. To propose and promote the establishment of new systems, or enhancements to current systems and practices, to address identified deficiencies;
5. To review the current state and identify gaps and inadequacies of the atmospheric component of the global observing system;
6. To promote the maintenance of sustainable long-term observation networks and the use of best practices;
7. To promote the rehabilitation of relevant historical data sets;
8. To promote and review institutional arrangements to ensure that climate data and observations are:

- Of the highest quality based on agreed metrics;
- Collected in accordance with the highest standards of practice;
- Archived and accessible to the user community.

9. To instigate the establishment of working groups and other initiatives for pursuing AOPC goals;

10. To coordinate activities with the other GCOS panels, and to liaise with WCRP steering groups and other relevant entities, such as WMO Commissions, CGMS, CEOS and space agencies on atmospheric climate observing system issues;

11. Respond to assignments from the GCOS Steering Committee;

12. To report regularly to the GCOS Steering Committee and the Joint Scientific Committee of WCRP.

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