



Submission by Austria and the European Commission on behalf of the European Union and its Member States

Views on the organization of subsequent Earth Information Days, taking into account progress on the implementation of the GCOS IP 2016

Vienna, 24 July 2018

Subject: Research and systematic Observation

Invitation by the SBSTA to consider inviting the secretariat to organize further Earth Information Day events during the implementation of the GCOS IP 2016, based on submissions from Parties. (FCCC/ SBSTA/ 2016/ 04, §44 on page 13)

I. Summary of key points

- 1) The Earth Information Day at COP22 was an informative event highlighting systematic observation developments and their importance for adaptation and mitigation decision making.
- 2) The EU would welcome annual Earth Information Day events taking place during COPs, starting at COP25. Ahead of this the EU would be open to updated information on the status of the global climate system being provided at COP24 if time permits.

II. Introduction

- 3) Parties individually and collectively have made significant investments in the development of the Global Climate Observation System (GCOS). Data on Essential Climate Variables (ECVs)¹ provided by GCOS is central to our understanding of the rate and extent of ongoing climate change across atmospheric and terrestrial domains, ocean and the cryosphere.
- 4) Updated analyses of these data are provided by the WMO and other international bodies annually and complement the work of the IPCC in its assessments of climate science which are published on a 5-7 year basis. The EU welcomes the work of IPCC and is looking forward to its Special Report on Global Warming of 1.5°C, to be released in October 2018, as well as to the Special Reports due in 2019 on Climate Change and Land and on the Ocean and Cryosphere in a Changing Climate.
- 5) The information on key elements of the climate system is systematically or operationally collected by a multitude of scientific and government agencies and institutions around the world on a regular basis and on a much finer time scales than IPCC reports. This is vital information for Parties as they determine and implement mitigation and adaptation measures under the framework of the Paris Agreement. Regular information on the most recent evolution of ECVs is essential for assessing the collective effects of these measures. However, gaps in the GCOS remain and these also need to be discussed in an Earth Information Day.

¹ An Essential Climate Variable is a physical, chemical or biological variable that is critical to characterizing Earth's climate, and for which global observation is currently feasible and that satisfies the requirements of the UNFCCC and broader user communities. ECVs are listed in the GCOS 2016 Implementation Plan (GCOS-200).

III. GCOS developments

- 6) The GCOS 2016 Implementation Plan² has been welcomed by Decision 19/CP.22 and Parties have been invited “to work towards the full implementation of the implementation plan and to consider what actions they can take to contribute towards its implementation. It also emphasized, with regard to the implementation plan, the need to maintain, strengthen and build capacities for climate observations, monitoring and data management, including data rescue, digitization, analysis, archiving and sharing”, as well the “need to build capacity in developing countries through existing relevant mechanisms, including the Global Climate Observing System Cooperation Mechanism”.
- 7) The SBSTA agenda item on “research and systematic observation” allows consideration of the implementation of UNFCCC Article 5 and related articles of the Paris Agreement as well as progress of implementation of the GCOS.
- 8) So far only one aspect of the agenda item, i.e. research, is addressed during an in-session event, the Research Dialogue³. But no dedicated space has been established for information from systematic observation. It is important to be informed about ongoing (continued or improved), forthcoming and planned climate observation efforts at global, regional and local scales as well as their integration into existing data records and added value for climate monitoring, understanding, and modelling.
- 9) The Earth Information Day at COP22 provided a comprehensive update, focusing on current observations and knowledge and on developments and opportunities. The EU found the first Earth Information Day to be very successful and informative and values its importance for informing the global response to climate change and the implementation of the Paris Agreement.

² https://library.wmo.int/opac/doc_num.php?explnum_id=3417

³ So far ten such Research Dialogues have been conducted:
<https://unfccc.int/topics/science/workstreams/research/research-dialogue>

IV. Views of the EU on the future process

- 10) The EU would welcome further Earth Information Day events organized by the SBSTA as in-session events when systematic observation is addressed by the SBSTA agenda item on “research and systematic observation”. The 2016 Earth Information Day at COP22 was a full day event with a rich agenda, fittingly for the first such event. For future events, the EU considers that these could be half-day events similar in form, format and duration to the Research Dialogue.
- 11) The EU considers that the next official Earth Information Day should take place during COP25 but is also open to having updates on the status of the global climate system being presented at COP24 if time permits.
- 12) The EU proposes to address the following elements at the Earth Information Day:
 - Updates on the Global Climate Observation System (GCOS), including on gaps and needs, and including atmosphere, ocean, terrestrial and cryosphere observations across global, regional and local scales.
 - Updates and information on climate indicators⁴
 - Information on the state of the climate⁵
 - Information on measurements of greenhouse gasses and other radiatively active species in the atmosphere
 - Q&A between scientists and Parties

V. Conclusion

13. Climate observation is key to adequately respond to the challenges that climate change poses. It provides fundamental knowledge to underpin appropriate decisions at global, regional, national and local levels.

14. The full implementation of the Climate Change Convention and, consequently, the Paris Agreement, ultimately will have to lead to measurable systematic and long-lasting positive changes in key climate indicators as a proof of success. Therefore, a COP24 decision should be taken to establish the Earth Information Day as an annual half-day in-session SBSTA event from COP25 onwards informing Parties on latest observational findings related to climate change.

⁴ See for motivation and background in [GCOS-206](#) or at <https://public.wmo.int/en/programmes/global-climate-observing-system/global-climate-indicators>

⁵ Including WMO's state of the climate report