

DRAFT TEXT

on

SBSTA 51 agenda item 7(b) Research and systematic observation

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Draft conclusions proposed by the Chair

1. The Subsidiary Body for Scientific and Technological Advice (SBSTA) noted with appreciation the activities and information reported in the statements delivered at this session by representatives of the European Organisation for the Exploitation of Meteorological Satellites on behalf of the Committee on Earth Observation Satellites and the Coordination Group for Meteorological Satellites, the Global Climate Observing System (GCOS), the Intergovernmental Oceanographic Commission (IOC) of the United Nations Educational, Scientific and Cultural Organization, the Intergovernmental Panel on Climate Change (IPCC), the World Climate Research Programme (WCRP) and the World Meteorological Organization (WMO).¹
2. The SBSTA also noted with appreciation the following submissions by WMO for this session: the *WMO Provisional Statement on the State of the Global Climate in 2019*; the *Greenhouse Gas Bulletin*; the *2019 State of Climate Services* report; and the update on GCOS, WCRP, WMO and Global Framework for Climate Services activities.²
3. [The SBSTA [noted][noted with appreciation] the release of the IPCC Special Report on Climate Change and Land³ and the IPCC Special Report on the Ocean and Cryosphere in a Changing Climate.⁴ It also noted the SBSTA–IPCC special events held on these reports at this session.⁵]
4. The SBSTA noted the submissions from Parties on Earth Information Day 2019.⁶ It also noted the information note prepared by its Chair to provide an overview of the event in advance of this session.⁷
5. The SBSTA expressed its appreciation to the secretariat for organizing Earth Information Day 2019,⁸ held on 3 December 2019 in conjunction with this session. It also expressed its appreciation to Parties and all participating organizations and programmes and their representatives for their contributions to the Earth Information Day. The SBSTA welcomed the diverse and informative presentations, posters and dialogue, and the value of the rich exchange of information during the day.
6. The SBSTA requested its Chair to prepare a summary report on Earth Information Day 2019, to be made available prior to SBSTA 52 (June 2020).
7. [The SBSTA noted with concern the state of the global climate system, as conveyed in the *WMO Provisional Statement on the State of the Climate in 2019* and the IPCC special reports (see paras. 2 and 3 above) and during the Earth Information Day 2019.
- 7 bis The SBSTA requested its Chair to prepare, with the assistance of the secretariat, a summary report on knowledge gaps in climate science, to be made available prior to SBSTA 52.

¹ Available at <https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx> and <https://unfccc.int/node/820>.

² As footnote 1 above.

³ IPCC. 2019. *IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems*. Available at <https://www.ipcc.ch/report/srccl/>.

⁴ IPCC. 2019. *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate*. Available at <https://www.ipcc.ch/srocc/home/>.

⁵ See <https://unfccc.int/event/srccl-special-event> and <https://unfccc.int/event/srocc-special-event>.

⁶ As footnote 1 above.

⁷ Available at

https://unfccc.int/sites/default/files/resource/COP25_EarthInformationDay_Informationnote.pdf.

⁸ See <https://unfccc.int/node/200761>.

8. The SBSTA recognized the importance of sustained, systematic observations, both in situ and remote sensing, for monitoring changes in the ocean to advance understanding of the role of the ocean in the climate system and to support adaptation in communities exposed to ocean changes.

9. The SBSTA also recognized the importance of systematic observation data for both integrating into earth system models and other climate models (for reanalysis) and further developing global climate models (so as to improve reanalysis and projections) in support of the global stocktake.

10. The SBSTA encouraged Parties and relevant organizations to maintain, strengthen and enhance systematic observation, and address systematic observation gaps, needs and challenges, including in monitoring the ocean and mountain areas, as well as extreme events and loss and damage, particularly in relation to the most vulnerable regions and countries including African States.

11. The SBSTA welcomed the work of the scientific community and Parties in collecting, managing and openly sharing data and processed data products for addressing climate change and future climate risk, including the examples presented at Earth Information Day 2019. The SBSTA urged Parties and relevant organizations to continue to establish and support full and open data sharing, and the development of open, accessible, relevant and comprehensible data products, particularly for supporting and monitoring adaptation and related services.

12. The SBSTA noted the progress in the implementation of the GCOS implementation plan,⁹ and the plans of GCOS to provide an overview of the status of the global observing system for climate in 2021, address gaps and set new requirements for the system, and publish an update to the GCOS implementation plan in 2022.¹⁰ The SBSTA encouraged Parties, WMO and relevant organizations to actively engage in the review of the GCOS status and to support the development of the revised GCOS implementation plan.

13. The SBSTA welcomed, as an outcome of the regional GCOS/WIGOS workshops,¹¹ held in the Pacific Islands (in 2017), East Africa (in 2018) and in the Caribbean (in Belize City from 10 to 12 July 2019), the development of the Global Basic Observing Network by WMO, which will provide the minimum data needed to support global numerical weather prediction and climate modelling, forecasts and projections.¹² It noted the key messages identified from the most recent workshop in Belize¹³ and the need to continue to hold such workshops in other regions.

14. Recalling the conclusions of SBSTA 47,¹⁴ the SBSTA welcomed the continued work of the Joint CEOS/CGMS Working Group on Climate in response to the GCOS implementation plan.¹⁵ It recognized the constellation architecture for monitoring CO₂ and CH₄ from space,¹⁶ which uses a systems approach combining satellite, in-situ and modelling components for emission estimates. The SBSTA welcomed the provision by space agencies and service providers of full, free and open access to the top-down data and derived information, which are available for use by all Parties. It encouraged meaningful engagement among the space agencies, modellers and Parties in the implementation and use of the system for preparing national inventories and for the global stocktake.

15. The SBSTA emphasized the ongoing requirement to secure funding to meet the essential needs for global climate observation under the Convention on a long-term basis.

⁹ See <https://gcos.wmo.int/en/gcos-implementation-plan>.

¹⁰ Discussed at the GCOS joint panels meeting, held in Marrakech, Morocco, in March 2019; see <https://gcos.wmo.int/en/gcos-joint-panels-meeting>.

¹¹ <https://gcos.wmo.int/en/regional-workshops>.

¹² See <https://www.wmo.int/pages/prog/www/wigos/GBON.html>.

¹³ See <https://gcos.wmo.int/en/wmo-gcoswigos-caribbean-workshop-observations-climate-and-meteorology>.

¹⁴ FCCC/SBSTA/2017/7, para. 59.

¹⁵ See http://ceos.org/document_management/Meetings/COP-21/COP-21_2015/Strategy-Towards-Architecture-for-Climate-Monitoring-from-Space.pdf.

¹⁶ As described in http://ceos.org/document_management/Virtual_Constellations/ACC/Documents/CEOS_AC-VC_GHG_White_Paper_Publication_Draft2_20181111.pdf.

16. The SBSTA invited Parties and relevant organizations to submit their views on possible themes for the next Earth Information Day, to be held in conjunction with SBSTA 53 (November 2020), via the submission portal¹⁷ by 14 August 2020.]

¹⁷ https://unfccc.int/submissions_and_statements.