



Subsidiary Body for Scientific and Technological Advice

Fifty-ninth session

United Arab Emirates, 30 November to 6 December 2023

Agenda item 6

Research and systematic observation

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Draft conclusions proposed by the Chair

1. The Subsidiary Body for Scientific and Technological Advice (SBSTA) recognized the vital importance of robust Earth observation systems and related long-term data records for enhanced understanding of changes in the global climate system and their attribution, mitigation and adaptation action, and early warning systems.
2. The SBSTA noted with appreciation the information reported in the statements delivered at the joint opening plenary of SB 59 by representatives of the Committee on Earth Observation Satellites and Coordination Group for Meteorological Satellites Joint Working Group on Climate, the Global Climate Observing System, the Intergovernmental Panel on Climate Change, the World Climate Research Programme and the World Meteorological Organization (WMO).¹
3. The SBSTA took note of the WMO *Provisional State of the Global Climate in 2023* report² and the 2023 WMO Greenhouse Gas Bulletin³ and expressed alarm and utmost concern about the state of the global climate system, with record high greenhouse gas concentrations in 2022, and 2023 on track to be the warmest individual year on record. Furthermore, it welcomed the outcomes of the 19th session of the World Meteorological Congress.⁴
4. The SBSTA took note of the informal summary report on Earth Information Day 2022.⁵ It expressed appreciation to the SBSTA Chair and Vice-Chair and the secretariat for organizing Earth Information Day 2023⁶ and for its innovative new format, which aimed to provide an opportunity for direct engagement between the systematic observation community and end users of climate data and information. It thanked the representatives of the participating organizations and programmes for their valuable contributions and requested the SBSTA Chair, with the assistance of the secretariat, to prepare an informal summary report on the event.

¹ The statements are available at <https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx> (in the search field, type “SBSTA59”).

² WMO. 2023. *Provisional State of the Global Climate in 2023*. Geneva: WMO. Available at <https://wmo.int/resources/publications/provisional-state-of-global-climate-2023>.

³ WMO. 2023. *The State of Greenhouse Gases in the Atmosphere Based on Global Observations through 2022*. WMO Greenhouse Gas Bulletin No. 19. Geneva: WMO. Available at <https://library.wmo.int/idurl/4/68532>.

⁴ See <https://library.wmo.int/records/item/67177->.

⁵ Available at <https://unfccc.int/event/earth-information-day-2022>.

⁶ See <https://unfccc.int/event/earth-information-day-2023>.

5. The SBSTA noted the significant progress of the systematic observation community as presented at Earth Information Day 2023. It recognized the importance of sustained, long-term observations of the Earth system and the need to address data gaps, including in the atmosphere, hydrosphere, cryosphere, ocean and coastal regions, tropical forests, desert and mountain regions.

6. The SBSTA noted the new Global Greenhouse Gas Watch initiative, aimed at establishing sustained, routine global monitoring of greenhouse gas concentrations and fluxes. It recognized that this initiative is intended to improve the quantification of both natural and anthropogenic greenhouse gas sources and sinks, and to complement emission inventories, noting that reporting and greenhouse gas inventory guidelines are as adopted under the Convention and the Paris Agreement.

7. The SBSTA emphasized the urgent need to maintain and expand systematic observations in support of adaptation, as well as deliver Early Warnings for All, a key global initiative for protecting those most vulnerable to the impacts of extreme weather and climate events.

8. The SBSTA emphasized the continued need to address gaps in systematic observations globally and noted with appreciation the support being provided for addressing gaps in systematic observations in developing countries and noted the continued efforts of the Systematic Observations Financing Facility. It encouraged Parties and relevant organizations to further strengthen their provision of support to the systematic observation community.

9. The SBSTA invited Parties and relevant organizations to submit views on possible themes for and ways to organize Earth Information Day 2024, to be held in conjunction with SBSTA 61 (November 2024), via the submission portal⁷ by 31 August 2024.

⁷ <https://www4.unfccc.int/sites/submissionsstaging/Pages/Home.aspx>.