



Subsidiary Body for Scientific and Technological Advice

Forty-seventh session

Bonn, 6–15 November 2017

Agenda item 8

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 statements delivered by representatives of the Intergovernmental Panel on Climate Change (IPCC) and the World Meteorological Organization (WMO) at the opening ceremony of the twenty-third session of the Conference of the Parties (COP).¹
2. The SBSTA also noted with appreciation the statements delivered at its first meeting by representatives of the European Union on behalf of the Committee on Earth Observation Satellites (CEOS) and the Coordination Group for Meteorological Satellites (CGMS), the Global Climate Observing System (GCOS), the IPCC, the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization, the World Climate Research Programme and WMO.²
3. The SBSTA welcomed the summary report prepared by its Chair on the Earth Information Day held during COP 22.³
4. The SBSTA further welcomed the following submissions:
 - (a) The outcomes of the sixty-ninth session of the WMO Executive Council with respect to scientific advice to the UNFCCC and implementation of the Paris Agreement;⁴
 - (b) The WMO greenhouse gas bulletin on the state of greenhouse gases in the atmosphere based on global observations through 2016;⁵
 - (c) The WMO statement on the state of the global climate in 2017;⁶
 - (d) The report⁷ from the GCOS secretariat on progress made on the implementation of the GCOS implementation plan, *The Global Observing System for Climate: Implementation Needs*⁸ (hereinafter referred to as the GCOS IP);

¹ Available at <https://cop23.unfccc.int/cop23/opening-statements>.

² Available at <http://unfccc.int/7528> and <http://unfccc.int/5900>.

³ Available at <http://unfccc.int/9949>.

⁴ Available at http://unfccc.int/files/science/workstreams/systematic_observation/application/pdf/wmo_submission_sbsta_47.pdf.

⁵ Available at http://unfccc.int/files/science/workstreams/systematic_observation/application/pdf/ghg_bulletin_13_en.pdf.

⁶ Available at http://www.wmo.int/pages/prog/wcp/wcdmp/CA_2.php.



(e) The comprehensive space agency response to the GCOS IP, and its executive summary, by the Joint CEOS/CGMS Working Group on Climate.⁹

5. The SBSTA noted with concern the information reported in the submissions referred to in paragraph 4(b) and (c) above.

6. The SBSTA noted the efforts by GCOS and the wider science community on the development of climate indicators,¹⁰ including global surface temperature, global atmospheric CO₂ and glacier change, and by WMO on the categorization of extreme events.¹¹ The SBSTA invited GCOS and WMO to report to it on progress, as appropriate, and noted the relevance of their work in the context of decision 4/CP.22, paragraph 4(c). It welcomed the inclusion of information in the statement by WMO referred to in paragraph 4(c) above on observed impacts, including economic, health and agricultural impacts.

7. The SBSTA noted the importance of ocean-related climate indicators, including ocean heat content, ocean acidification, sea level rise, and Arctic and Antarctic sea ice extent for informing on the state of the global climate.¹² It encouraged Parties to sustain observations underpinning these indicators. It also noted the Ocean Conference 2017¹³ and the importance of systematic observations related to the oceans.

8. Recalling its conclusions from SBSTA 45,¹⁴ the SBSTA:

(a) Noted the joint GCOS/WMO Integrated Global Observing System workshop for Pacific small island developing States in Nadi, Fiji, from 9 to 12 October 2017 and the development of a Pacific region observing network plan;¹⁵

(b) Further noted that GCOS plans to hold the next regional workshop in Africa in 2018;

(c) Encouraged Parties and relevant organizations to take advantage of support available via the operating entities of the Financial Mechanism as well as other relevant organizations and channels, as appropriate, to support the GCOS regional workshops and projects identified in the resulting implementation plans.

9. The SBSTA recognized the progress made by the satellite community (see para. 4(e) above), in close collaboration with GCOS, in the development of the essential climate variable inventory.¹⁶ It noted the usefulness of the essential climate variable inventory for climate services. It invited CEOS and CGMS to report on progress at future sessions of the SBSTA, as appropriate.

10. The SBSTA noted with appreciation the information provided in the submission referred to in paragraph 4(a) above on the Global Framework for Climate Services (GFCS).¹⁷ It invited WMO to report on progress in implementing the GFCS at future sessions of the SBSTA, as appropriate.

⁷ Available at http://unfccc.int/files/science/workstreams/systematic_observation/application/pdf/gcos_submission_sbsta_47.pdf.

⁸ Available at <https://gcos.wmo.int>.

⁹ Available at http://unfccc.int/files/science/workstreams/systematic_observation/application/pdf/space_agency_response_to_gcos_ip_v2.0.pdf.

¹⁰ See the information note by the Chair of the SBSTA on systematic observation at SBSTA 47, figure 1, available at http://unfccc.int/files/science/workstreams/systematic_observation/application/pdf/so_2017_1_informationnote_29.10.17.pdf.

¹¹ See WMO decision 7 (EC-69) on WMO support for the implementation of the Paris Agreement, which recalls WMO resolution 9 (Cg-17) on identifiers for cataloguing extreme weather, water and climate events; the latter is available at https://library.wmo.int/opac/doc_num.php?explnum_id=3138, pp.254–255.

¹² As footnote 10 above.

¹³ See the information note referred to in footnote 10 above.

¹⁴ FCCC/SBSTA/2016/4, paragraph 39.

¹⁵ See box 1 in the information note referred to in footnote 10 above.

¹⁶ See <http://climatemonitoring.info/ecvinventory>.

¹⁷ See <http://www.wmo.int/gfcs>. The GFCS five priority areas are agriculture and food security, disaster risk reduction, energy, health and water.

11. The SBSTA invited the UNFCCC secretariat to communicate with the WMO secretariat, including with regional centres, to inform work on climate services.

12. The SBSTA noted the increasing capability to systematically monitor greenhouse gas concentrations and emissions, through in situ as well as satellite observations, and its relevance in support of the Paris Agreement.¹⁸

13. The SBSTA also noted the needs and the challenges of sustaining systematic observations, particularly in developing countries, including upper air observations.¹⁹ It encouraged Parties and relevant organizations to work towards sustaining such observations.

14. The SBSTA encouraged Parties and relevant organizations to enhance systematic observations related to the monitoring of GCOS essential climate variables and the understanding and prediction of extreme events and slow onset events.

¹⁸ See the section titled “Decision 51 - IG3IS Implementation Plan” in the WMO submission, referred to in paragraph 4(a) above, and the summary report on the Earth Information Day, paragraphs 30 and 31 and 73–86, referred to in paragraph 3 above.

¹⁹ As footnote 16 above.