WMO OMM



World Metec Organisation Оrganización Всемирная أرصاد الجوية 世界气象组络

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Fifty-Seventh Session of the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space

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WMO Statement (check against delivery)

Agenda Item 11. Space Weather

Madam Chair,

On behalf of the World Meteorological Organization (WMO), I would like to congratulate you on your election as chair of the subcommittee for the period 2020-2021.

WMO is looking forward to continuing contributing to the important work of the subcommittee under your able guidance and leadership.

Madam Chair, Distinguished Delegates,

WMO would like to take this opportunity to update the Committee on its space weather related work:

In 2008, the WMO Executive Council noted the considerable impact of space weather on meteorological infrastructure and important human activities. It acknowledged the potential synergy between meteorological and space weather services for operational users and agreed that WMO should support international coordination of space weather activities.

This was confirmed in 2015 by the 17th World Meteorological Congress, which decided that WMO should undertake international coordination of operational space weather monitoring and forecasting with a view to supporting the protection of life, property and critical infrastructure, and affected economic activities.

In 2016, following-on from activities undertaken by a space weather coordination team, WMO established the Inter-Programme Team on Space Weather Information, Systems and Services (IPT-SWeISS) to lead the space weather-related work of WMO. It involves experts from 23 member states and six international organizations. In collaboration with the International Civil Aviation Organization (ICAO), the Inter-Programme Team provided assistance to the evaluation and auditing of candidate Provider States leading to the

establishment of the Space Weather Information Service for International Air Navigation, which became operational on 7 November 2019.

IPT-SWeISS held its third meeting at the Royal Observatory of Belgium in November 2019, back to back with the 2019 Annual Meeting of the International Space Environment Service (ISES)¹, is now revising its workplan in line with the "Four-Year Plan for WMO Activities Related to Space Weather 2020-2023", which was approved by the 18th World Meteorological Congress in its Resolution 53 (Cg-18)².

A focus of the four-year plan is to update the WMO technical and regulatory framework to include space- and surface-based space weather observations and to integrate them into the WMO Integrated Global Observing System (WIGOS), which was declared operational from 1 January 2020. WMO aims to have all space weather observing stations recorded in its Observing Systems Capability Analysis and Review Tool (OSCAR³). To this end WMO works closely with ISES members and with the Space Weather Coordination Group of the Coordination Group for Meteorological Satellites (CGMS).

In the field of training and capacity building for space weather, WMO has signed a cooperation agreement with the Committee on Space Research (COSPAR).

Madam Chair, Distinguished Delegates,

WMO is closely following the space weather discussions in the Committee on the Peaceful Uses of Outer Space. At its recent meeting, IPT-SWeISS reviewed the Committee's space weather-related Guidelines B.6 and B.7 for the Long-term Sustainability of Outer Space Activities⁴. Guideline B.6 on the sharing of operational space weather data and forecasts is highly correlated to WMO principles of open data sharing. As part of the WMO, IPT-SWeISS considers concrete steps to contribute to the implementation of these guidelines in its new workplan.

With regards to a proposed international space weather warning network, WMO has also been addressing this issue through the WMO Global Multi-Hazard Alert System framework (GMAS), which makes use of the Common Alerting Protocol (CAP) and whose further development has been decided by the 18th World Meteorological Congress in Resolution 13 (Cg-18)⁵. To address the impact of space weather related disasters, the World Meteorological Congress adopted Resolution 12 (Cg-18) on the WMO Methodology for Cataloguing Hazardous Weather, Climate and Space Weather Events⁶.

On the issue of radio frequency coordination that may impact space weather observations, WMO is working with the Space Frequency Coordination Group (SFCG) and with the International Telecommunications Union (ITU).

⁵ See <u>https://library.wmo.int/doc_num.php?explnum_id=9827%23page=69</u>.

¹ See https://community.wmo.int/meetings/ipt-sweiss-3.

² See <u>https://library.wmo.int/doc_num.php?explnum_id=9827%23page=184</u>.

³ See <u>https://www.wmo-sat.info/oscar/</u>.

⁴ See "A/74/20 Report of the Committee on the Peaceful Uses of Outer Space, Annex II Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee on the Peaceful Uses of Outer Space" at : <u>https://cms.unov.org/dcpms2/api/finaldocuments?Language=en&Symbol=A/74/20</u>.

⁶ See <u>https://library.wmo.int/doc_num.php?explnum_id=9827%23page=64</u>.

WMO has also noted the Draft "Space2030" agenda and implementation plan⁷ and welcomes that the proposed overarching objective 3 includes considerations to "improve the international coordination of space weather-related activities, including outreach, communication and capacity-building".

Towards this important goal, WMO will be actively participating in the work and contributing to the discussions of the relevant groups and initiatives to help assure appropriate and effective coordination of international space weather related activities.

Madam Chair, Distinguished delegates,

Thank you very much for your attention.