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Four Year Plan for WMO Space Weather Activities 2020-2023

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The World Meteorological Organisation (WMO) established an Inter-Programme Coordination Team on Space Weather (ICTSW) in 2010. This was as a result of the growing recognition of the need for a coordinated effort to address the observation and service requirements for protection against the hazards of space weather, as well as to support the work carried out with the International Civil Aviation Organisation (ICAO) on operational space weather services for international air navigation. With rapid development of Space Weather related activities in the framework of the WMO, the Inter-Programme Team on Space Weather Information, Systems and Services (IPT-SWeISS) replaced the ICTSW in 2016. The IPT-SWeISS aims to increase the synergy between space weather and meteorology, coordinate the observation and service requirements for space weather, enhance the exchange of data between centres and improve models and methods used in the production of operational space weather services.

IPT-SWeISS activities are broken down into thematic tasks, including space weather basic systems, space weather science, space weather applications and space weather aviation services. Achievements to date include:
(1) updating a rolling review of requirements for space weather observations, an associated gap analysis and recommendations for future observational developments (Statement of Guidance);
(2) incorporating space-based, and some surface-based, observation metadata into the WMO Observing Systems Capability Analysis and Review Tool (OSCAR);
(3) auditing of potential candidates responsible for providing space weather information for aeronautical navigation;
(4) regular participation of Space Weather Experts in Met Panel of ICAO
(5) creation of an inventory of relevant radio frequency-based space weather observations to enable steps towards possible spectrum protection, in collaboration with the International Telecommunication Union (ITU)

The IPT-SWeISS has developed its next four year plan that is up for approval at the next WMO Congress in June 2019. Accordingly, in this presentation we summarise these activities and outline IPT-SWeISS plans for the 2020-2023 period. Planned activities include applying WMO procedures to improve the availability of space weather observations, improving data standardisation, quality and inter-operability, and enhancing the visibility of space weather-related topics in WMO documentation. There will also be a strong focus on using the best possible science, and exploiting synergies between space weather and meteorology, when developing new operational services, which will be underpinned by enhanced training and capacity building activities.