

Briefing on the potential role of World Meteorological Organisation in Space Weather

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Background

- In 2007, ISES chairman asked WMO to consider potential collaborations given the thematic link and that various RWC's (including NOAA/SWPC, Fin, Russia, Australia) are managed by national meteorological organisations.
- The fifteenth World Meteorological Congress (May 2007) requested the WMO Space Programme office to *"consider activities in the area of Space Weather, since it had a direct impact on meteorological satellite operations"*.
- Informal meeting took place in January 2008.
- A WMO report was produced in April 2008 (cf www.wmo.int).

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- Noted that several WMO Members have placed Space Weather activities under the authority of their National Meteorological or Hydrological Services and are encouraging WMO to engage in this field, in partnership with relevant international organizations.
- Noted that no United Nations organization is currently responsible for international coordination in Space Weather.
- Recognised that the main international coordination mechanism for Space Weather is currently the International Space Environment Service (ISES).
- Considered that the WMO framework would be appropriate to enhance international cooperation on operational aspects of Space Weather.
- Relevancy of Space Weather to WMO activities:
 - primarily because it has a strong impact on environmental satellites, which are key components of the Global Observing System (GOS), and on radiocommunications, which are operational components of the WMO Information System (WIS).
 - also, Space Weather affects important economic activities such as aviation, spacecraft operations, satellite positioning and energy distribution, which involve major users of meteorological services, there is a potential for synergy between the emerging operational activities in the area of Space Weather and current WMO activities regarding meteorological services delivery.

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- Possible synergy:
 - Comparability of measurements (quality harmonisation)
 - sharing of space and ground based observing platforms
 - delivery of routine information through the WMO Information System
 - issuance of Space Weather warnings within a multi-hazard approach,
 - interactions with operational users in general.
- There is **no significant internal resources**. External resources could be mobilized to initiate coordination activity at a level enabling significant achievements and benefits. Such activity, if agreed in principle, could be implemented in the context of the Observation and Information Systems Department, more precisely within the Space Programme Office, in close collaboration with the Weather and Disaster Risk Reduction Services Department, in particular the Aeronautical Meteorology Programme Office.
- It is **suggested**:
 - to investigate possibilities to initiate such an activity on a pilot mode in the short term if external resources can be made available, and to task the Commission for Basic Systems (CBS) and Commission for Aeronautical Meteorology, in close cooperation with ISES and with the relevant working groups of ICAO such as the International Airways Volcanic Watch Operations Group (IAVWOPSG),
 - to review the detailed objectives, possible implementation arrangements and timeline for a longer term involvement of WMO in that area for the benefit of the global community.

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Next step

- The Sixtieth Executive Council of the WMO is to meet 18-27 June 2008 and consider the question of formal inclusion of space weather into the auspices of the WMO.
- Point of the Agenda:
 - 9.2 - Future challenges: potential role of WMO in relation to Space Weather
- Issues:
 - Relationship with ICSU/FAGS involvement.
 - ISES members not affiliated to national weather organisations
 - Other space weather centres not affiliated to ISES