#### **Coordination Group for Meteorological Satellites - CGMS**



# Space Weather Task Team Report to CGMS Plenary

**Presented to CGMS-44 Plenary** 

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**Coordination Group for Meteorological Satellites** 



#### Space Weather Task Team Objective

 To define the methodology by which we would implement space weather into CGMS in line with the CGMS Space Weather Activities Terms of Reference:

"The overarching goal of CGMS Space Weather activities is to support the continuity and integration of space-based observing capabilities for operational Space Weather products and services."

## Agenda from SWTT Intersessional Meeting

- 1. Review of the Terms of Reference for CGMS Space Weather Activities
- Translate the TOR into specific objectives for the HLPP and define next steps (A43.01)
- 2. Discussion of context with respect to other space weather initiatives
  - WMO 4-year plan for space weather coordination
  - COSPAR space weather roadmap
  - other efforts
- 3. Identification of high-level priorities for CGMS Space Weather activities
- 4. Identification of specific existing or future space missions to be considered for CGMS coordination, in particular for contingency planning
- 5. Discussion of CGMS SWTT interfacing to operational users of SW data and to the wider space weather community
- 6. Draft description for the CGMS Website on the Space Weather Task Team (<a href="http://www.cgms-info.org/index">http://www.cgms-info.org/index</a> .php/cgms/page?cat=ABOUT&page=Space+weather+task+team)
- 7. Review/update template for space weather related spacecraft anomalies
- 8. Discussion of agenda for Space Weather Task Team meeting at CGMS-44, Sunday June 4





### **Outcomes of SWTT Meetings**

- Validated that the current CGMS construct is wellsuited to allow implementation of space weather objectives
  - Identified and proposed Space Weather Task Team priorities for High Level Priority Plan (HLPP)
- Determined that engaging CGMS in Space Weather requires communication and integration internally and with various international groups
  - Identified need for buy-in from from leadership and colleagues across the space weather community
  - Propose workshop to engage expert leadership and community



### Space Weather Activities Within Current CGMS Framework

- Proposed Space Weather modifications to the HLPP validate that the current CGMS Working Group construct will effectively support the implementation of space weather objectives
  - Addition of seven new tasks to the HLPP
  - Modification of an additional four tasks
  - Note that this is a different conclusion than that proposed 2 years ago

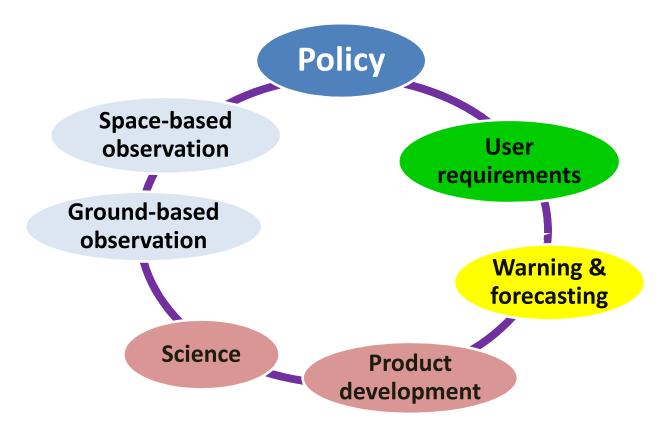


### **CGMS** Space Weather in Context

- Various groups are already dealing with space weather science or space weather operations, but none of these other entities can cover the coordination of spacebased space weather observing systems.
- WMO recognizes CGMS as the forum to coordinate space-based observations.
- CGMS would immediately contribute if it enables sustainment of required space weather observation capabilities (as identified in the WMO Vision for 2040).
- Need to establish buy in from leadership of those other entities and colleagues across the space weather community

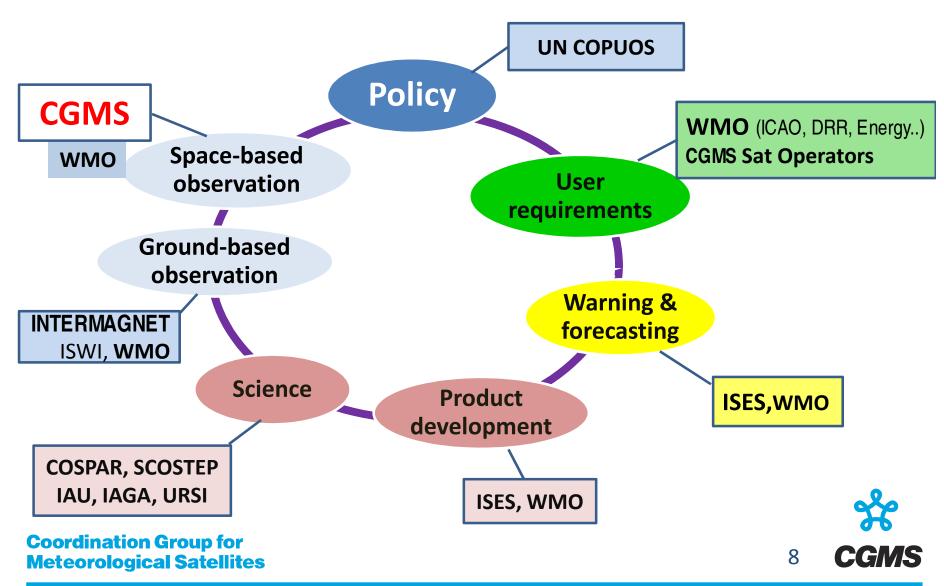
**Coordination Group for Meteorological Satellites** 

#### CGMS fills a necessary role





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### Recommended next step

- The SWTT recommendation is that SWTT in collaboration with WMO convene an integration meeting
  - With the leaders of the existing space weather international bodies (eg. ISES, ICTSW, COSPAR SW Panel,...)
  - This meeting would include all 4 CGMS WG Leaders
- The goal of the meeting
  - To initiate communication and interaction between CGMS and the space weather community.
  - To communicate the role of CGMS and articulate our CGMS Space weather objectives
  - To solicit community needs for space based space weather observations and discuss coordination function that CGMS could provide to the SpWx Community's benefit
- The outcome of the meeting
  - Determine the next steps required to sustain the interaction, whether through formalizing these meetings, establishing workshops or the establishment of a new thematic group



#### CGMS could play a unique role

- CGMS recognizes and responds to WMO requirements through a longstanding and successful partnership
- CGMS involves most if not all operators of space weather payloads used in operations
- The needed coordination of observational assets and plans to ensure interoperability and continuity of space weather observations is a unique strength of CGMS
- CGMS can bridge the gap between space weather forecasting and the tailored needs of spacecraft operators
- Decade-long experience of hosting space weather instruments on meteorological space craft
- Experience in GSICS, SCOPE-CM, Vlab, can either expand or inspire similar initiatives for space weather













#### Summary

- Request endorsement from Plenary to embrace HLPP additions to support the goal of inculcating space weather into CGMS.
- Enable and support Space Weather Task Team members to conduct the integration meeting to establish continuing dialog with science and operational user community.
- Recommend continuing the Space Weather Task Team as efforts mature and as coordination with international organizations progress.