Formation of Subgroups and Subgroup Discussions

IROWG-10

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Coordination Group for Meteorological Satellites

IROWG INTERNATIONAL RADIO OCCULTATION WORKING GROUP

CGMS

Topics

- Modifications to the High-Level Priority Plan
- Use cases for the IROWG PBL Recommendation
- CGMS risk assessment for RO
- ROMEX results: expected outcomes for future CGMS briefing
- BUFR format updates – already covered by Hui
- Release of Commercial Best Practices document (CGMS)
- Space weather topics: ROMEX and Space Weather Coordination Group
- Other topics
  - AI/ML and cloud use cases
  - Disaggregated constellations
  - Review current draft of the best practices document for climate monitoring
  - Frequency of IROWG workshops

Modifications to the HLPP

CGMS HIGH LEVEL PRIORITY PLAN (HLPP) – 2024 – 2028

1.2.9 Advance the atmospheric radio occultation constellation, with the long-term goal of providing 20000 occultations per day with uniform spatial and local time coverage on a sustained basis;

Commented [MR4]: IROWG and WG-III proposes this rewording

Coordination Group for Meteorological Satellites

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Use cases for the IROWG PBL Recommendation

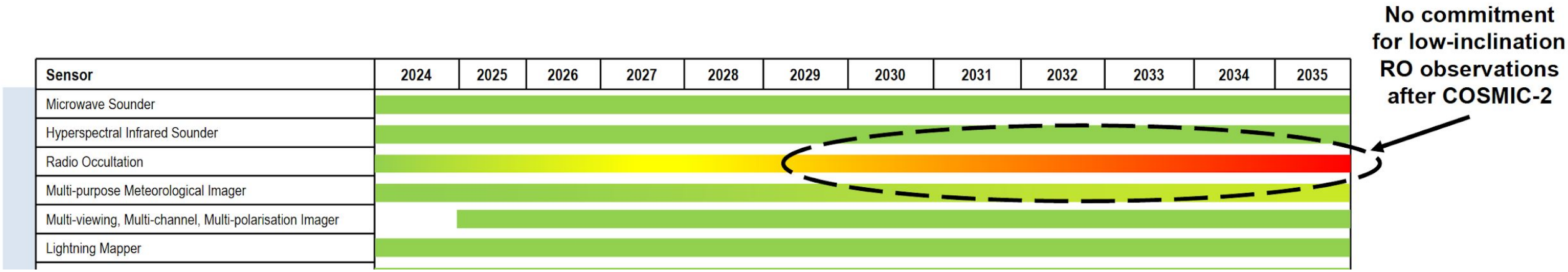
NWP, Climate and New Techniques subgroups

IROWG recommendation: IROWG encourages technology and retrieval developments for improving planetary boundary layer profiling from GNSS-RO and their utilization in NWP data assimilation as well as the further exploitation of RO-derived water vapor.

- Action: In the NWP subgroup, discuss specific examples of such developments so that the NWP centers can take action.

CGMS Risk Assessment For RO

- The ‘Baseline’ constitutes the commitments and plans of CGMS members to provide particular observations and services
- Long-term goal is 20,000/day – well distributed
- ROMEX may influence this goal and ultimately the commitment



From “Key Outcomes of the 6th CGMS Risk Assessment”, Presented to CGMS-52 Plenary June 2024

Coordination Group for Meteorological Satellites

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CGMS Risk Assessment For RO

?

From “Key Outcomes of the 6th CGMS Risk Assessment”, Presented to CGMS-52 Plenary June 2024

ROMEX Results

NWP and Space Weather subgroups

- Results presented and discussed here are of great interest to CGMS
- Likely presented at CGMS WGII and Plenary meetings in 2025

Release of Commercial Best Practices document

- BP.01 Ensure that international data policies are upheld, especially pertaining to the free and unrestricted sharing of government earth observations data.
- BP.02: Include language to purchase unique data sets when purchasing commercial data.
- BP.03. Ensure service standards. (reliable and high-quality services)
- BP.04 Facilitate interoperability between private and public sector data.
- BP.05: When procuring commercial data, consider using standard open data licenses to define any restrictions on use.
- BP.06 CGMS Members should communicate their commercial space policy to other CGMS Members.
- BP.07 Ensure the best value when deciding whether to enter into a contract.
- BP.08 Ensure a vibrant research enterprise. (data access for the research community)

Also discusses motivation for commercial purchases, and lessons learned

Space Weather Topics

Space Weather subgroup

- ROMEX for space weather?
  - Interest in, and discussion of, at CGMS-52
  - How should it be organized?
- Space Weather Coordination Group (SWCG)
  - Very active in ionospheric activities, including RO. Report available.
    - Task Group on Ionospheric RO optimization
  - Interactions with IROWG space weather subgroup. Discuss.

Other Topics

- AI/ML and cloud use cases
  - Do we want to highlight examples from the RO community?
- Hybrid (disaggregated) space observations architectures
  - Do we want to recommend RO approaches for such systems?
  - "We define a hybrid satellite architecture as one that combines reference platforms, small and other non-large satellites with different classes of instruments and procurement of commercial data." CGMS high level statement on the global hybrid architecture coordination, CGMS Plenary June 2024
- Review current draft of the best practices document for climate monitoring
- Frequency of IROWG workshops

BACKUP