

Sustained Coordinated Processing of Environmental Satellite Data for Climate Monitoring

A Proposed Future Strategy for SCOPE-CM

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Context

Action from CGMS-46 (2018)

The WGII noted that the two most important things to achieve for SCOPE-CM in the near future are the successful conclusion of the ongoing projects including a successful delivery of data products and the establishment of a new strategy that takes the WGClimate into account and enables funded activities to maintain and establish efficient climate data records from multi agency mission data. Hence the following action was placed:

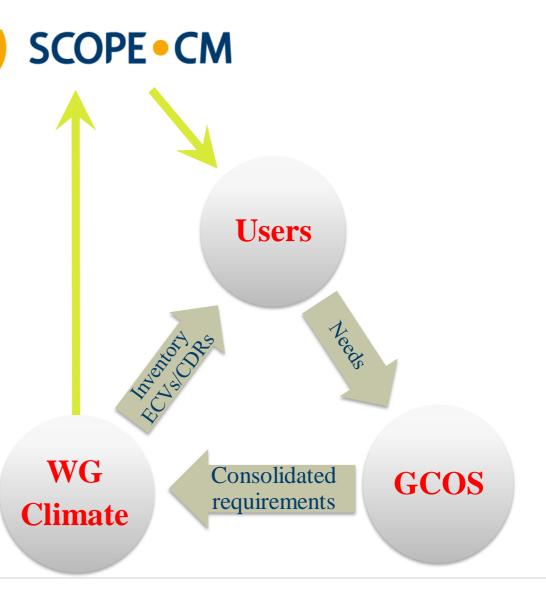
| CGMS-46 actions – WGII | | | | | |
|------------------------|--------|--------|---|------------|--------|
| Actionee | AGN | Action | Description | Deadline | Status |
| | item | # | | | |
| SCOPE- | WGII/5 | A46.09 | SCOPE-CM Executive Panel Chair to convene a strategy | First half | OPEN |
| CM | | | planning meeting with high-level representatives from | of 2019 | |
| EP Chair | | | SCOPE-CM members and other interested agencies, who | | |
| | | | are empowered to authorise resources, to agree on a | | |
| | | | revised strategy for SCOPE-CM and a new | | |
| | | | Implementation Plan, which shall be reported back to | | |
| | | | CGMS-47. (Ref. CGMS-46-WMO-WP-10) | | |



Envisioned as CDR Implementation Mechanism

Climate Data
Record
Coordination and

Sustainment





Phase II Projects

- 1. SCM-01: Upper tropospheric humidity CDRs from geostationary and polar satellites
- 2. SCM-02: Surface albedo demonstrator from polar satellites
- 3. SCM-03: Land surface albedo from geostationary satellites
- 4. SCM-05: AVHRR Fundamental CDR
- 5. SCM-06: Inter-calibration of passive imager observations from geostationary satellites
- 6. SCM-07: Liquid Water Path and Rain Water Path Climatologies in the GPM era
- 7. SCM-08: Radio occultation-based gridded climate data sets
- 8. SCM-09: Sustained International Satellite Cloud Climatology Project (ISCCP) cloud products
- 9. SCM-10: Atmospheric Motion Vectors and Clear/All Sky Radiances from geostationary and polar satellites



Recommended Strategy: Option 4 (Major Changes)

- Proposal for new strategy
 - Pivot focus from facilitating CDR development projects to coordinating space agency commitments for CDR sustainment: "From Sustainable to Sustained CDRs"
 - Three primary goals
 - Facilitate CDR-generation solutions to gaps identified in the WG-Climate Inventory
 - 2. Facilitate agency commitments to sustain existing production capabilities, and
 - 3. Facilitate CDR-generation more responsive to WMO user community needs (GCOS)



"From Sustainable to Sustained" CDRs



^{*} Optional, as possible or provided by others

- Implementation requires close organizational relationship with the WGClimate, such that SCOPE-CM might be considered a WGClimate implementation arm for CDRs;
- WGClimate monitors the current and planned future status of CDR availability, identifies
 gaps via a regularly updated ECV Inventory, and provides a coordinated action plan to
 CEOS and CGMS that contains actions to mitigate gaps;
- SCOPE-CM would complement and react to relevant WGClimate recommendations by coordinating sustained implementation of CDR-generation activities that fill the identified gaps or maintain current generation activities.



^{**} Provided by others

CGMS-47 Plenary Results, Next Steps

- Jorg presented to CGMS WGII; approved, sent to Plenary
- Plenary approved, levied Action A47.15 due at CGMS-48:
 - SCOPE-CM to <u>provide an implementation plan</u> based on the agreed new concept (ref. CGMS-47-SCOPE-CM-WP-01)
 - To contain the new organizational form and proposals for 1- to 2 activities, e.g.,
 - Continuation of IOGEO
 - ISCCP next generation (re. October 2019 workshop)
 - WGII to encourage participation of CGMS agencies in the implementation of the concept



Detailed Next Steps

- Develop new Terms of Reference
- Request participating agencies from CGMS, CEOS
- Draft Implementation Plan for CGMS-48 per Action

Later...

- Seek agency agreements to sustain existing CDRs
- Identify CDR gaps in sustainability, seek agency leadership in filling gap





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Thank You!