SCOPE-CM

Minutes of the

9th Executive Panel Meeting

3 March 2014

EUMETSAT, Darmstadt Germany

**

Draft version 1.0

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Document Change Record

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| Issue / Revision | Date | Changed Pages / Paragraphs |
| 1.0 | 04 March 2014 | First draft submitted to the SEP09 participants for review |
|  |  |  |

# Welcome and Introduction

John Bates opened the meeting and welcomed the participants, in particular the hosting EUMETSAT and the SCOPE-CM secretariat for the preparation of the meeting. Lothar Schüller introduced Marie Doutriaux-Boucher as his successor as the SCOPE-CM secretariat. John Bates thanked Lothar Schueller for his work as a SCOPE-CM secretariat.

John Bates stressed the successfulness of the SCOPE-CM Phase-2 project call for proposals, with a good number of projects participating.

# Approval of the SEP meeting agenda

The agenda of the meeting was approved.

# Overall SCOPE-CM status: Recall of Phase 2 concept, status and approach (L. Schüller)

Lothar Schüller gave a presentation to summarize SCOPE-CM project. He recalled the SCOPE-CM concept. He stressed that the Phase 1 of the project was successfully completed. He presented the Phase 2 of the project that will use the concept of a Maturity Matrix to organize development and sustain CDRs into initial, moderate and high maturity to better characterize CDRs for the user community. He reported that 10 projects in total were submitted that is just the right number for being handled within the SCOPE-CM initiative. He reminded that additional participation is welcome for the phase 2.

John Bates raised the question that SCOPE\_CM could move to have some role/support in the interim climate data record generation.

Joerg Schultz highlighted the fact that in the context of the maturity matrix development, some tools need to be developed to help choosing the right dataset that could serve best the user requirements.

# SCM-Projects: Presentation of the SCM projects content, plan and activities

The 10 projects participating in SCOPE-CM were presented by the project leader except SCM-04 that was not presented. Project leaders presented the project plan also expressing the various dependencies with other projects/activities (SCOPE-CM and others) among their projects. A complete description of each of the ten projects can be found at http:// http://www.scope-cm.org/projects/.

SEP emphasize that within the SCOPE-CM project, an effort could be made to

* reinforce the interactions between the different projects,
* ensure that each project leader provides an assessment of its project based on the maturity matrix system,
* federate the dataset generation (format, ...),
* address the releases mode.

## SCM-01 Sustained generations of upper tropospheric humidity Climate Data Records from multiple sensors with multi-agency cooperation

John Bates presented the SCM-01 project. SEP questioned about the possible dependencies with other projects (e. g. what are the interactions if any with the SCM-08 project).

## SCM-02 Albedo polar orbiters

This project was presented by T. Manninen. A good description of the dependencies was presented. T. Manninen clarifies the fact that the BRDF that will be used will be an empirical one based on a high number of observations from AVHRR. The processing could be done at DWD but this is not clear yet. SEP emphasized that contact should be made between SCM-02 and SCM-05 as there is clear partial overlap.

## SCM-03 Land Surface Albedo from geostationary satellites

The project was presented by A. Lattanzio. A clear project plan was presented for 2014. Link with other international project was presented: this project needs input from GSICS and SCM-06.

T. Kurino stressed the importance of estimating the fraction diffuse/direct to the total downwards flux density. At the moment there is no plan to produce fractions (direct and diffuse) but as this is computed in the algorithm, this could be included in the product with some efforts.

## SCM-04 Utility of satellite derived winds for monsoon and cyclone studies over Indian region

This project is still under consideration by partners at IMD, and no details were presented to the session.

## SCM-05 AVHRR FCDR (K.-G. Karlsson)

K.-G Karlsson presented the project. The project did not start. The SEP-09 meeting was the starting point of the project.

SEP suggested organising rapidly a workshop with GSICS to discuss AVHRR issues and how to GSICS standards and acceptance procedure.

SCM-05 should correspond with SCM-02. SCM-02 is invited to send their requirement to SCM-05.

## SCM-06 Inter-calibration of passive imager observations from time-series of Geostationary satellites (IOGEO)

The project was presented by V. John on the behalf of R. Roebelingwho could not attend the meeting. It was remind to SCM-06 that the original plan was that GSICS provides coefficients and SCOPE-CM project will use it to produce data. If SCM-06 provides coefficients, it has to be sure that it is consistent with the GSICS approach. However, correction coefficients provided by GSICS are for the current sensors derived in near-real time. SCM-06 will compute GSICS corrections for historical data applying GSICS methodology in a slightly different manner (using the concept of future observation instead of only using a backward window). A mechanism could be put in place to allow SCM-06 to feedback to GSICS how correction coefficients suitable for climate data records are best achieved. SEP recommended to SCM-06 to apply correction coefficients to the data and to append the coefficients to the data (in order to enable a reversibility of the correction process).

## SCM-07 liquid water path and rain water path climatologies in the GPM era

The project was presented by M. Schröder on behalf of R. Bennartz. The project should make the bridge between the heritage MW imager and the GPM era. Some delays may be experienced in the project due to delay in data availability (e.g. MODIS collection 6 products).

The project informed that the GPM core mission was launched successfully on the 27 February 2014.

SEP expressed some concern because this project is more research oriented compare to the other projects. It was confirmed that format and documentation have been discussed; netcdf-CF will be used for the provided dataset. SEP advised to produce a flow-diagram to identify various contributions to the project and to point out input/outputs.

## SCM-08 Radio Occultation based gridded climate data sets (RO-Clim)

The project was presented by A. von Engeln. It was announced that the project lead could be transferred from EUMETSAT to the ROM SAF later on.

John Bates announced that NOAA budget allows for COSMIC-2.

## SCM-09 Sustained production of the International Satellite Cloud Climatology Project (ISCCP) cloud products

The project was presented by J. Bates on the behalf of K. Knapp. B. Rossow’s software was recently transferred to NCDC. Some test data should be available to users for verification/validation purposes. A more detailed plan should be delivered by K. Knapp by the end of April 2014.

SEP emphasized the fact that discussion could take place with SCM-05 in order to produce full-coverage cloud product (leo+geo).

## SCM-10 Atmospheric Motion Vectors and Clear/All Sky Radiances from historical meteorological satellites in geostationary and polar orbit (T. Kurino)

The project was presented by T. Kurino on the behalf of K. Bessho. A clear schedule plan was presented for 2014. First results of reprocessing will be presented at the next International Wind Workshop in June 2014.

T. Kurino announced that CIMSS has reprocessed 18-19 years of GOES AMVs.

# Interaction with GSICS

T. Hewison presented GSICS and its interactions with SCOPE-CM projects.

GSICS data are organised used a THREDDS-based system. SEP suggested that SCOPE-CM could investigate the possibility of using similar system.

SEP suggested that a table presenting possible/potential interaction between SCOPE-CM and GSICS should be provided.

CSA representative stressed the importance of the continuity in the reference instrument used for the inter-calibration.

# SCOPE-CM and project organisation, e.g., reporting and application of Maturity Matrix

J. Schulz reports on monitoring completeness/progress of climate data record generation. He presented the maturity matrix concept status from the last CORE-CLIMAX meeting in January 2014.

# Discussion of cross-cutting issues, e.g. potential project deliverable dependencies, etc.

## follow up discussions

Maturity assessment

SEP pointed out the importance of the maturity assessment of the produced climate data record. Each product should get more and more mature during the lifetime of the project. SEP recommended having the maturity assessment done very close to the CDR release. As SCOPE-CM has no funding, the assessment should be a self-assessment done individually by each project. SEP meetings could be used as a checkpoint where each project reports on its maturity status.

A table could be produced with the current maturity status of each project.

Interactions

SEP underlined the usefulness to have a clear view on cross-interactions between SCOPE-CM projects. An interaction matrix should be generated. Dependencies between SCOPE-CM and other international projects/groups (e.g. GSICS, CEOS, CGMS VC, SAFs, CCI) are very important. An overall dependency diagram should be produced.

Contribution to the ECV inventory database

SEP decided that every project should contribute to the ECV inventory (<http://ecv-inventory.com/>).

## Summary of actions

| **Action Number** | **Actionee** | **Action** |
| --- | --- | --- |
| **ACTION-SEP-09-01** | All | Assess product maturity |
| **ACTION-SEP-09-02** | Secretariat | To collect and generate an interaction matrix between projects. To generate an overall dependency diagram between SCOPE-CM and others (GSICS, CEOS, CGMS VC, SAFs, CCI) |
| **ACTION-SEP-09-03** | All | To contribute to the ECV inventory database |
| **ACTION-SEP-09-04** | All | To federate dataset generation and address the release mode |
| **ACTION-SEP-09-05** | Secretariat | To update website |
| **ACTION-SEP-09-05** | All | Inquire from SCM projects on usage/plans to use THREDDS. |
| Action specific to project | | |
| **ACTION-SEP-09-06** | SCM-01 | Interaction with SCM-08 |
| **ACTION-SEP-09-07** | SCM-02/SCM-05 | To collaborate. SCM-02 to give its requirements to SCM-05 |
| **ACTION-SEP-09-08** | SCM-03 | To investigate the possibility to include the direct/diffuse fraction to the downward flux density in the albedo product. |
| **ACTION-SEP-09-09** | SCM-05 | To organise a workshop with GSICS |
| **ACTION-SEP-09-10** | SCM-06 | Investigate how to put in place a to allow the project to feedback GSICS |
| **ACTION-SEP-09-11** | SCM-07 | To produce a flow-diagram to identify various contributions to the project and to point out input/outputs |
| **ACTION-SEP-09-12** | SCM-08 | To inform secretariat in case of lead’s change |
| **ACTION-SEP-09-13** | SCM-09 | To provide an update on the project plan. To investigate the possibility of a ‘global’ product (LEO + GEO) interaction with SCM-05 |

# Internal Matters

## SEP Chairperson and Representation of member organisations

Change in SCOPE-CM executive panel members

* T. Kurino as SEP member replacing Tahara
* L. Schüller as SEP member replacing Sarlo
* Rob Husband as GCOS space rapporteur replacing Jean-Louis Fellous

SEP chair

John Bates informed the Panel on his intention to step down as Chair, given his co-chairmanship of the newly formed Joint CEOS/CGMS Working Group Climate and potential reporting and timing conflicts associated with this new role. The Panel expressed its deep appreciation for Dr Bates' leadership as chair of the SCOPE-CM Executive Panel over the past five years.

John Bates agreed to inform the SCOPE-CM secretariat and WMO in writing about his resignation as chair of SEP, and if possible propose a successor.

T. Kurino was offered the chair of the group. JMA understand the importance of SCOPE-CM but T. Kurino will be very busy with the close launch of HIMAWARI8 and 9 in the near future and could not accept. He could become a vice-chair if agreed by JMA.

## Action review from Previous Meetings

This section provides an overview of the action status.

### Actions from previous meetings with status “open” at SEP08 Geneva February 2013

| **Action Number** | **Actionee** | **Action** | **Status at SEP09** | **Remarks** |
| --- | --- | --- | --- | --- |
| **ACTION-SEP-06-01** | Pilot Project 3 | consolidate with potential users the need and the specific requirement for a GSA Level 3 product (in particular spatial and temporal composition) | Closed | SCM-Project 03 in Phase 2 includes a consolidation of a Level 3 products including interaction with potential users on their needs and specific requirements. |
| **ACTION-SEP-06-04** | Secretariat | The Secretariat to request the specific input from the Pilot Project Chairs to an updated SoN and to compile the updated document. Once consolidated, the new SoN version shall be submitted to GSICS via the Research Working Group Chair | Closed | New Action was proposed at SEP-09-02 |
| **ACTION-SEP-07-01** | Secretariat | Secretariat to ensure that SCM Projects proposals document their dependencies and distributed responsibilities in form of high level data flow diagrams. Due date: issue of SCM-Project proposal call. | Closed | SCM Projects were asked to reflect the dependencies and distributed responsibilities in their contributions to the SEP09 meeting. |
| **ACTION-SEP-07-02** | Pilot Project 2 leader (CM SAF) | CM SAF to take a lead to develop a SCM-project proposal on SSM/I and SSMIS FCDR, integrating the CM SAF, CDR-Programme and X-CAL activities. | Open | No related LoI submitted. Leave it open until next year. |
| **ACTION-SEP-07-03** | Pilot Project 3 leader (EUMETSAT) | Pilot Project Leader (EUMETSAT) to provide the update on the JMA processing status information in the SEP 07 Pilot Project Progress report. | Closed | SEP07 Pilot Project Progress Report updated accordingly. |
| **ACTION SEP-07-04** | Secretariat and SEP chair | Generate a close-out document on the achievements of SCOPE-CM Phase 1 in relation to its original objectives (IP 1.3) and the accomplishments of the Pilot Projects. The draft will be iterated also with the Pilot Projects. The final version will be submitted to the SEP for adoption. | Closed | Document generated in time for presentation to CGMS-41. Document submitted to SEP09 for formal approval. |
| **ACTION SEP-07-05** | Secretariat | Secretariat to collect links to the SCOPE-CM Pilot Project activities in order to be able to promote the achievements (e.g. presentations and web pages). | Open | Planned to be done in the context of the SCOPE-CM web page update. |
| **ACTION SEP-07-06** | Secretariat with GSICS | Secretariat with GSICS (Tim) to organise a joint meeting after review of proposals, to inform GSICS community and to address common issue. | Closed | Teleconference held 11 September 2013 with SCOPE-CM Status presentation. |
| **ACTION SEP-07-13** | Secretariat | Secretariat to develop slides on the new SCOPE-CM concept (1-slide, 3-slides, 10-slides version) to be used at different occasions/Presentations | Closed | Different version of SCOPE-CM Standard presentation available at the SCOPE-CM Web page. |

### Actions from SEP08

| **Action Number** | **Actionee** | **Action** | **Status at SEP08** | **Remarks** |
| --- | --- | --- | --- | --- |
| **ACTION SEP-08-01** | Secretariat | Secretariat with SEP chair to investigate a publication of the SCOPE-CM Phase 2 concept and the first SCM-projects as “Meeting summary” e.g. EOS transactions of the American Geophysical Union. | Open | It is proposed to provide a “Meeting Summary” of SEP09, having now a clearer status of the SCM projects actually started. |
| **ACTION SEP-08-02** | WMO Space Programme | WMO SP to provide the contacts details of relevant CGMS Working Groups chairs/co-chairs to the Secretariat in order to include them in the SCOPE-CM general coordination stream. | Closed | Contact details provided 22 February 2014. |
| **ACTION SEP-08-03** | Secretariat | Secretariat to communicate the project leaders the outcome of the LoI assessment by SEP and to request updated project documents to be submitted to SEP before 24 April 2013 | Closed | Done |
| **ACTION SEP-08-04** | Secretariat | Secretariat to collect assessment feedback by SEP on updated SCM-Project documentation. | Closed | Done |
| **ACTION SEP-08-05** | Secretariat | Secretariat to report to CGMS 41st meeting on the status of SCOPE-CM Phase 2 and the implementation of the SCM-Projects. | Closed | Done |

## SCOPE-CM Secretariat

The responsibility to run the SCOPE-CM Secretariat at EUMETSAT was transferred to a different division inside EUMETSAT in the context of a major reorganisation of EUMETSAT. The *User Support and Climate Services Division* (USC) takes over the Secretariat function for SCOPE-CM, with Marie Doutriaux-Boucher as the responsible staff.

SEP members thanked L. Schüller for his work as a secretariat from the start of the SCOPE-CM project.

## SCOPE-CM Webpage

The new SCOPE-CM webpage: <http://www-scope-cm.org> was presented. The use of the *Wordpress* software package was found to be the best and most pragmatic solution for this type of website. This solution is totally adequate for the needs of the SCOPE-CM web presence and interaction. For the moment, three EUMETSAT persons have an editor role at EUMETSAT and can update pages as requested. Various pages are under development and are still 'private' pages. Each project leader will be able to update relevant parts of the website in the future. WMO SCOPE-CM webpage has been updated and is now linked accordingly as well as the CGMS page on SCOPE-CM.

## SCOPE-CM Interaction with the Joint WGClimate

J. Bates reported on the JWG Climate. JWG Climate has a coordination function. The chaiman of SCOPE-CM will need to interact with the chaiman of CGMS climate working group.

WG has a "workplan" and there are elements of the workplan that are relative to SCOPE-CM.

# Any other business

No any other business.

# Date and Place of the next meeting

The SEP plans to have its 10th meeting within a year. Preferably it should be collocated with other relevant meetings and/or conferences. A potential candidate would be the climate from space week in Geneva in 2014 but other places like Asia could be a suitable candidate.

1. Agenda

|  |  |
| --- | --- |
| ***SCOPE-CM 9th Executive Panel Meeting***  ***EUMETSAT Headquarter, Room, Darmstadt, Germany*** | |
| **Monday, 3 March 2014 (09:00 – 17:00)** | |
|  | **Welcome and Introduction** (Bates) |
|  | **Approval of the SEP meeting agenda** (Secretariat) SCOPE-CM\_SEP09\_01 |
|  | **Overall SCOPE-CM status: Recall of Phase 2 concept, status and approach** (L. Schüller) |
|  | **SCM-Projects: Presentation of the SCM-projects content, plan and activities** |
|  | 4.1 – SCM-01 Tropospheric Humidity (J. Bates) |
|  | 4.2 – SCM-02 Albedo Polar Orbiters (T. Manninen) |
|  | 4.3 – SCM-03 Albedo Geostationary (A. Lattanzio) |
|  | 4.4 – SCM-04Utility of Satellite derived winds for Monsoon and Cyclone studies over Indian region |
|  | 4.5 – SCM-05 AVHRR FCDR (K.-G. Karlsson) |
|  | *Coffee break* |
|  | 4.6 – SCM-06 Inter-calibration of Passive Imager Observations from time-series of GEO Stationary Satellites (J. Schulz) |
|  | 4.7 – SCM-07 Liquid Water Path and Rain Water Path Climatologies in the GPM era |
|  | 4.8 – SCM-08 Radio occultation based gridded climate data sets (A. von Engeln) |
|  | 4.9 – SCM-09 Sustained production of the International Satellite Cloud Climatology Project (ISCCP) cloud products |
|  | 4.10 – SCM-10 Atmospheric Motion Vectors and Clear/All Sky Radiances from historical meteorological satellites in geostationary and polar orbit (T. Kurino) |
|  | *Lunch break* |
| **5** | **Interaction with GSICS** (T. Hewison) |
| **6.** | **Discussion of cross-cutting issues, e.g. potential project deliverable dependencies, etc.** |
| **7.** | **SCOPE-CM and project organisation, e.g., reporting and application of Maturity Matrix** |
| **8.** | **Internal Matters**  **8.1** – SEP Chairperson and Representation of member organisations  **8.2 –** Action Review from previous meetings  **8.3** – SCOPE-CM Secretariat  **8.4** – SCOPE-CM Webpage  8.5 – SCOPE-CM Interaction with the Joint WGClimate |
| **9.** | **Any other business** |
| **10.** | **Date and Place of the next meeting** |
|  | *Adjourn / social event* |

1. SEP 09 Participants

Members and Observers:

John Bates, NOAA/NCDC, SEP chair

Toshiyuki Kurino, JMA

Stephan Bojinski, WMO Space Programme

Jörg Schulz, GEWEX/EUMETSAT

Espen Volden, GEO

Pascal Lecomte, ESA - ECSAT, Head of Climate Office

Stella Melo, CSA

Other Participants:

Terhikki Manninen, FMI/CM-SAF

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