
GSICS MW SubGroup

06 January 2016 – 1200 UTC

Wednesday, 6. January 2016; 13:00 | Europe Time (Berlin, GMT+01:00) | 2 hrs 30 mins

[Join WebEx meeting](#)

Meeting number: 950 510 988

Meeting password: gsics

Join by phone

0800-051-3810 Call-in toll-free number (UK)

+44-203-478-5289 Call-in toll number (UK)

Access code: 950 510 988

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Agenda for Today

1. Introduction, review of any ongoing/action items – [Ralph Ferraro \(15 min\)](#)
 - Engage GPM X-Cal Chair (Wes Berg) – [Ralph Ferraro](#)
 - Formalize joint CEOS and GSICS MW Activities and meetings?- [Cheng-Zhi Zou, Xialong Dong](#)
 - Continue to move forward on GSICS MW Products – [Manik Bali, Ralph](#)

2. Outcome of the GSICS Users Workshop/Microwave– [Tim, Manik \(10 min\)](#)

3. Science Updates
 - Microwave Calibration Standards – [David Walker \(30 min\)](#)
 - GPM X-Cal progress and upcoming plans - [Rachel Kroodsma \(on behalf of Wes Berg\) \(20 min\)](#)

4. Progress and path forward on MW Products – [Manik, Ralph \(15 min\)](#)

5. Participation/Preparation for GRDW/GDWG – [All \(15 min\)](#)
 - Focus Topics for 2016

6. Wrap up and Next meeting ([5 min](#))

Anticipated Focus Topics for 2016

- **Defining CLEAR PATH for **GSICS MW products****
 - Methodologies
 - Reference Standards
 - LUT/Correction Tables
 - Near real-time and climate

- **Tying together other groups/opportunities**
 - Engaging more closely GPM X-Cal
 - Formalizing linkages to CEOS MW subgroup
 - Expanding participation – India, others?

- **Participation at Upcoming Meetings of Interest and Relevance:**
 - *GSICS Meetings*
 - *GPM X-Cal Meetings*
 - *CEOS Meetings*
 - *Other science meetings – CALCON, AMS Sat. Met, EUMESAT Satellite, etc.*

Backup Slides

What is a GSICS MW Product?

- MW products differ from those from VIS or IR because there are not potential SI standards to consider
- MW products can come in two classes:
 - Retrospective type products (FCDR “components” – geolocation, scan biases, intersatellite corrections, etc.)
 - Forward looking (quasi-real time)
- A possible path forward:
 - Determine from users what specific MW products they would like to see from GSICS
 - Define a MW primary reference
 - WindSat or GMI for MW imagers?
 - ATMS for MW sounders?
 - A radiative transfer model like RTTOVS or CRTM?
 - Work with GDWG to define:
 - Data formats
 - Meta-data standards
 - Distribution mechanism
 - Work with the GCC to see how the products could be reviewed through the GPPA
- Two potential products?
 - AMSU-MSU (C-Z. Zou)
 - SSM/I (K. Fennig)

Scope of Microwave Sub-Group

- Understanding the users' requirements for inter-calibration products for microwave instruments
 - Imagers + sounders – passive only, initially?
 - Retrospective calibration
 - Forward looking calibration
- Identifying existing products that could meet those requirements, but first....
 - Need to define criteria...Reference standards (sensor(s), models, calibration methodologies....)
 - And then a process that adheres to GSICS principles
- Define data standards (jointly with GDWG)
- Encourage the creators of those products to submit them to the GSICS Procedure for Product Acceptance ([GPPA](#)), once its defined for MW
 - Candidates include Cheng-Zhi Zou (MSU-AMSU), Karsten Fennig (SSM/I)
- GSICS Products could be developed within the Microwave Sub-Group.
- Coordination with other groups (such as the CEOS Microwave Sub-Group) would also be required to generate standards and best practices for microwave radiometer calibration (and potentially microwave radars).

Members

Signed up as at 2015

- NOAA (and affiliates) - Ralph Ferraro (Chair), Huan Meng, Cheng-Zhi Zou, Manik Bali (Univ. Maryland), Isaac Moradi (Univ. Maryland), Hu ("Tiger) Yang (Univ. Maryland), WENZE Yang (Univ. Maryland), Jun Park (Univ. of Maryland)
- EUMETSAT (and affiliates) – Tim Hewison, Karsten Fennig, Viju John, Jörg Ackermann, Sabatino DiMichele, Sante Laviola, Vinia Mattoli, Sreerekha Thonippambal
- NASA (and affiliates) – Ed Kim, Linwood Jones (Univ. of Central Florida), Rachel Kroodsma (Univ. of Maryland), Wes Berg (Colorado State Univ.)
- NIST - David Walker
- CMA (and affiliates) - Songyan Gu, Qifeng Lu, Lin Cheng, Hu Yang, Xiaolong Dong
- KMA (and affiliates) – Jun Park, Dong-Bin Shin (Yonsei University, South Korea)
- JAXA (and affiliates) - Keiji Imaoka, Misako Kachi
- JMA – Masaya Takahashi
- IISC – Ran Ratan