

GSICS MW SubGroup

16 September 2016, 1100 UTC

GSICS Microwave Subgroup web meeting

Wednesday, 16. September 2015

13:00 | Europe Summer Time (Berlin, GMT+02:00) | 3 hrs

Join WebEx meeting

Meeting number: 957 632 366

Meeting password: gsics

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Global call-in numbers:

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Agenda for Today

1. Introduction, review of any ongoing/action items – [Ralph Ferraro \(20 min\)](#)
 - Joint CEOS and GSICS Activities and meetings?- [Cheng-Zhi Zou and Xialong Dong](#)
 - Where do we stand on GSICS MW products? – [Manik Bali, Tim Hewison, and Ralph](#)

2. Planning for the GSICS User's Workshop (at EUMETSAT Satellite Conference)
– [Manik, Tim, etc. \(20 min\)](#)
 - Questionnaire/responses
 - Expectations from users

3. Science Updates ([15 min each](#))
 - GPM X-Cal and GMI Calibration - [Rachel Kroodsmma](#)
 - ATMS and SAPHIR Comparisons - [Isaac Moradi](#)

4. High points from the 183 GHz workshop in Paris - ([Vinia Mattioli](#)) ([10 min](#))

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

Old Actions to Discuss

- Joint CEOS and GSICS Activities and Future Meetings – Cheng-Zhi and Xialong
 - Any meetings of interest to report
 - Any joint meetings envisioned/status
- Status of GSICS MW Products – Manik, Tim, Ralph
 - Two types of products envisioned
 - Corrections for real-time uses of MW sensors
 - Corrections for retrospective data (e.g., FCDR's)
 - Any progress from the 2015 GRWG/GDWG

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)

Backup Slides

Anticipated Focus Topics for 2015

- **Moving ahead with GSICS MW products/new opportunities:**
 - Continue to move forward on the NOAA MSU/AMSU product/methodology once the GDWG clearly defines generic standards for MW products
 - Move forward with the EUMETSAT SSM/I (MW Imager) product/methodology
 - Develop splinter group on bringing in SMMR data to MW imager time series
- **Tying together other groups/opportunities**
 - JAXA's participation with MW/imagers (e.g., AMSR-E and AMSR-2)
 - Engaging more closely GPM X-Cal
 - Linkages to CEOS MW subgroup - future meeting in China and get China involvement in GSICS?
- **Upcoming Meetings of Interest and Relevance:**
 - *GPM X-Cal – June 3-4 2015, Fort Collins, CO, USA*
 - *GSICS Users Meeting – September 2015, Toulouse, France*

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).

Potential Actions/Topics from 2015 Annual GRWG/GDWG meeting

- JAXA to correspond with Microwave Sub-Group to consider whether GSICS products could/should be generated for active instruments such as DPR. (Keiji Imaoka)
- It was agreed that the UV and Microwave Sub-Groups should be encouraged to consider running sessions in parallel with the IR and VIS/NIR sessions respectively at the next annual meeting. (JMA/JAXA to host)
- NOAA to provide templates of proposed WMO file name and the content of the MW GSICS product on the GSICS wiki. (Manik, Ralph?)

Members

Signed up as at 2015-1-13

- 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
- 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
- KMA (and affiliates) – Jun Park, Dong-Bin Shin (Yonsei University, South Korea)
- JAXA - Keiji Imaoka, Misako Kachi