

# GSICS MW SubGroup

## 13 May 2015, 1100 UTC

**GRWG Microwave Sub-Group Web Meeting**  
**Wednesday, 13. May 2015**  
**13:00 | Europe Summer Time (Berlin, GMT+02:00) | 3 hrs**

**Join WebEx meeting**  
**Meeting number:**  
**958 827 146**  
**Meeting password:**  
**gsics**

**Join by phone**  
**Global call-in numbers:**  
<https://eumetsat.webex.com/eumetsat/globalcallin.php>  
**0800-051-3810 Call-in toll-free number (UK)**  
**+44-203-478-5289 Call-in toll number (UK)**  
**Access code: 958 827 146**

# Agenda for Today

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- Introduction, review of any old action items - **Ralph (10 min)**
  - SMMR L1 Archive - **Ralph**
  - GSCICS MW Products – **Tim**
- Updates from the Annual GRWG/GDWG Meeting – **Tim (10 min)**
- Ongoing/Emerging GSICS Topics – **ALL (60 min)**
  - Linkages to CEOS MW subgroup - **Cheng-Zhi**
  - Interactions with India Institute of Science - **Manik**
  - GDWG MW products and standards – **Manik**
  - JAXA's role in leading active MW – **Keiji**
  - Updates from WGCV Plenary Meeting – **Tim, Dong?**
  - Anything else?
- Science Report – GMI Calibration – **Rachel (15 min)**
- Preparation for GSICS Users Meeting – **All (10 min)**
- Next meeting and wrap up **(5 min)**

# Scope of Microwave Sub-Group

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- 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).

# Anticipated Focus Topics for Upcoming Year

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- **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*

# Potential Actions/Topics from 2015 Annual GRWG/GDWG meeting

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- 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?)

# What is a GSICS MW Product?

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- 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

# Members

Signed up as at 2015-1-13

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- 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