



# climate change initiative

# → CMUG NEWSLETTER

# **CMUG News & Science Highlights**

- CMUG held its CCI+ Phase 2 Kick-off Meeting on 18<sup>th</sup> September 2023. Phase 2 will run for three years (2023-2026) and include contributions to ESMValTool, to allow CCI data to be easily used in model comparisons, and several cross-ECV scientific Studies, with topics including machine learning, vegetation phenology, land cover, ocean biogeochemistry, clouds and aerosols, snow dynamics, ice sheets, and wetland methane emissions.
- CMUG welcomes new partners Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC)
  who bring expertise in the use of land surface models and vegetation; Danish Meteorological
  Institute (DMI) who provide expertise in ice sheets and polar meteorology; and NCEO (University
  of Leicester and University of Edinburgh), experts in GHG.
- CMUG's next Integration Meeting will be held on 8-9th November 2023, following the CCI Colocation Meeting. These will be held at ESA's new ECSAT conference facility, Harwell, Oxfordshire, UK.
- The CMUG website has been updated to reflect the next project phase. Study descriptions have been added for each Study <a href="https://example.com/here">here</a>. An updated overview of the CMUG team can be found <a href="https://example.com/here">here</a>.

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# **Upcoming: CMUG Integration Meeting November 2023**

CMUG is organising its next Integration Meeting on 8-9<sup>th</sup> November 2023 at ECSAT, Harwell, UK. The ESA web page for this event, with further details on its location, can be accessed <u>here</u>. CMUG's Integration Meeting will have hybrid capabilities via Webex.

The Integration Meeting will follow the CCI Colocation Meeting.

Day 1 (8th) will begin in the afternoon and consist of several sessions on observation and model intercomparison. Day 2 (9th) will consist of an official introduction to the Integration Meeting and an overview of CMUG CCI+ Phase 2 with a presentation of CMUG plans for this phase. Then there will be a breakout session for Science Studies to hold kick-off meetings attended by relevant ECV projects followed by a discussion on linking observations with models in CLIMATE-SPACE and finally concluding remarks.

The agenda is presented on the following page and can also be directly accessed here.

# **Previous: CMUG Integration Meeting October 2022**

CMUG's 2022 Integration Meeting was held on 24-25<sup>th</sup> October 2022 in Italy. The newsletter for that meeting can be found <u>here</u> and the event webpage <u>here</u>.



# CCI Colocation Meeting 7-8<sup>th</sup> November 2023 Agenda webpage link

ECSAT, Harwell, Oxfordshire, UK

## **Tuesday 7 November**

09:00-09:30 Registration at ECSAT Conference Centre

09:30-12:30 Session 1: Opening and Welcome

12:45-14:00 Lunch

14:00-17:30 Session 2: Cross-ECVs

17:30 Welcome Drinks reception at Oxford University Museum of Natural History

#### **Wednesday 8 November**

09:30-12:30 Session 3: Emerging Topics

12:30-14:30 Lunch

# CMUG Integration Meeting First Day – 8<sup>th</sup> November 2023 Agenda webpage link

ECSAT, Harwell, Oxfordshire, UK

# Wednesday 8 November

14:30-17:30 Session 4: Joint CCI / CMUG Session:
Observations / Model Intercomparison

- ESMValTool Latest Updates
- ESA Approach to Obs4MIPs
- CMUG Work Package on Future Evolution of Obs4MIPs
- Recent Developments in Cloud Computing for Climate Observations
- CMIP/CORDEX Discussion

17:30-20:30 Poster Session

# **CMUG Integration Meeting Second Day – 9<sup>th</sup> November** 2023

# **Thursday 9 November**

09:00-09:30 Introduction to Integration Meeting
09:30-10:00 Overview of CMUG CCI+ Phase 2 and

Presentation of CMUG Plans for CCI+ Phase 2

#### Breakout Sessions by Scientific Study:

#### 10:00-11:00

- WP5.1: Machine Learning to Advance Climate Model Evaluation and Process Understanding
  - ECVs required to attend: Cloud, SST, WV, LST, SM, LC, Snow, Permafrost
- WP5.8: Using Machine Learning to Evaluate and Understand our Capability to Model Tropical Wetland Methane Emissions
  - ECVs required to attend: GHG, SM, LST, LC

# 11:00-12:00

- WP5.3: Impact of Integrating CCU LC in the ISBA Land Surface Models
  - o ECVs required to attend: LC, Snow, SM, LST
- WP5.6: Snow Dynamics Impacts on Temperate / High Latitude Climate
  - o ECVs required to attend: Snow, LC, Fire, AGB
- WP5.7: Atmospheric Drivers and Feedback Processes Affecting the Greenland and Antarctic Ice-sheets in Observations and Regional Climate Models
  - ECVs required to attend: Ice Sheets (Greenland and Antarctica), LST, WV, Cloud

12:00-12:30 Discussion on Linking Observations with Models in CLIMATE-SPACE

12:30-13:00 Meeting Close

# **CMUG Key Contacts per CMUG Partner**

# **Met Office**

- Amy Doherty (Project Manager)
- Richard Jones (Science Lead)
- Hannah Griffith (Comms)
- David Ford (Ocean biogeochemistry)
- Debbie Hemming (Vegetation phenology)
- Rob King (Vegetation phenology)
- Nic Gedney (Methane emissions)

#### **DLR**

- Axel Lauer (ESMValTool / Cloud and aerosols / Machine learning)
- Lisa Bock (Machine Learning)
- Veronika Eyring (Machine learning)

#### **ECMWF**

- Angela Benedetti (Cloud and aerosols)
- Kirsti Salonen (Cloud and aerosols)

# DMI

- Shuting Yang (Ice sheets)
- Ruth Mottram (Ice sheets)

#### **BSC**

- Pablo Ortega (Ocean biogeochemistry)
- Jeronimo Escribano (Cloud and aerosols)

# **UKRI-STFC** (CEDA)

• Alison Waterfall (Obs4MIPs)

# *IPSL*

- Philippe Peylin (Snow dynamics)
- Catherine Ottle (Snow dynamics)

# Météo France

Jean-Christophe Calvet (Land surface data in ISBA model)

#### **SMHI**

• Ulrika Willén (Ice sheets)

#### **CMCC**

• Daniele Peano (Vegetation phenology)

# NCEO (University of Leicester)

- Robert Parker (Methane emissions)
- Cristina Ruiz Villena (Methane emissions)

# NCEO (University of Edinburgh)

• Paul Palmer (Methane emissions)

