

climate change initiative

→ CMUG NEWSLETTER

CMUG Recent News & Science Highlights

- The CMUG Integration Meeting was held on 4-5th Oct 2021, this facilitated numerous useful discussions and renewed contacts between CMUG and CCI ECV projects. It also generated dialogue around plans for CCI+ Phase 2 and how CMUG might evolve further.
- A CMUG Progress Meeting was held on 10th Feb 2022.
- ESMValTool v2.5 was released on 14th March 2022, this included new ESA CCI ECVs and associated diagnostics implemented by CMUG (WV, SSS, OC, GHGs (XCH₄), and LST).
- An internal Met Office seminar was held in Feb 2022 to present recent CMUG work on biophysical feedback experiments assimilating ocean colour.
- UKRI-STFC began a contract with CMUG working on adding CCI ECVs to Obs4MIPs. This will run for one year from Feb 2022.
- CMUG representation at the 2nd Technical ESMValTool Workshop on 23-25 Nov 2021.

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Upcoming: CSWG April 2022

CMUG is organising its next Climate Science Working Group (CSWG) meeting on 4th April, 13:00 – 16:00 (UK time) / 14:00 – 17:00 (Central European Time). This CSWG meeting will focus on progress updates since the Integration Meeting in Oct 2021, as well as on proposals for next phase (CCI+ Phase 2) experiments. The invitation is extended to all CCI project members and CMUG partners. The agenda is presented on the following page and can also be accessed directly [here](#). The link to join the Teams meeting is on the agenda document and is also linked [here](#).

Previous: CSWG May 2021

CMUG's previous CSWG meeting was held on 7th May 2021 and focused on three ECVs: Lakes, Snow, and Permafrost. The previous CSWG Newsletter for May 2021 can be found [here](#) and the minutes from this CSWG meeting can be found [here](#).

Previous: CMUG Integration Meeting October 2021

The CMUG Integration Meeting was held on 4-5th October 2021. The meeting included a session showcasing science highlights since the Integration Meeting before that (Nov 2019) and also included two sessions which focused on discussing ideas for CCI+ Phase 2. The newsletter for this meeting can be found [here](#) and its webpage with further details and presentations [here](#).

CSWG April 2022, Focus on Progress Updates & Next Phase ExperimentsMonday 4th April, 13:00-16:00 UK Time / 14:00-17:00 Central European Time**Agenda** (time below given in UK time):

1. Update on CMUG Progress since previous Integration Meeting (Oct 2021) – 45 mins (13:00-13:45)
 - a. Introduction – *Amy Doherty* 5 mins
 - b. WP3: Quality Assessment of CCI Datasets – *Jean-Christophe Calvet* 10 mins
 - c. WP4: Model Intercomparison Experiments – *Andrews Wernecke* 10 mins
 - d. WP5: ESMValTool Development – *Lisa Bock for Axel Lauer* 10 mins
 - e. Discussion – 10 mins
2. Coffee Break: Join [wonder.me](#) discussion room on Firefox browser – 20 mins (13:45-14:05)
3. Breakout Rooms Session – 40 mins (14:05-14:45)
 1. Ocean assimilation, led by **David/Pablo/Andrews**
 2. Polar sea ice/high altitude, led by **Ulrika/Jean-Christophe**
 3. AER/Cloud reanalysis and machine learning, led by **Enza/Angela**
 4. Phenology, led by **Debbie/Jean-Christophe**
 5. Casual connections between ECVs, led by **Lisa/Dirk**
 6. High resolution modelling, led by **Dirk/Pablo**
 7. Variability, led by **Dirk/Ulrika**
4. Coffee Break: Join [wonder.me](#) discussion room on Firefox browser – 20 mins (14:45-15:05)
5. Breakout Rooms Session: Continued, same as above – 40 mins (15:05-15:45)
6. Wrap up – 15 mins (15:45-16:00)

CMUG ECV Data UseFollow this [link](#) to a document which shows which ECVs are used in which WPs with detailed WP descriptions.**CMUG Key Contacts per CMUG Partner***Met Office*

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Météo France

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SMHI

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CEDA

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Publications

The below publications have been added to CMUG's list of publications since the Integration Meeting (October 2021):

1. Acosta Navarro, J.C., J. García-Serrano, V. Lapin, P. Ortega (Submitted) Added value of assimilating springtime Arctic sea ice concentration in summer-fall climate predictions, *Environmental Research Letters*.
2. Klose, M., Jorba, O., Gonçalves Ageitos, M., Escribano, J., Dawson, M. L., Obiso, V., Di Tomaso, E., Basart, S., Montané Pinto, G., Macchia, F., Ginoux, P., Guerschman, J., Prigent, C., Huang, Y., Kok, J. F., Miller, R. L., and Pérez García-Pando, C.: Mineral dust cycle in the Multiscale Online Nonhydrostatic Atmosphere Chemistry model (MONARCH) Version 2.0, *Geosci. Model Dev.*, 14, 6403–6444, <https://doi.org/10.5194/gmd-14-6403-2021>, 2021.

CMUG Partner Contact per ECV

Below is a table that shows the corresponding CMUG Partner Contact information for each ECV project, including listed institutions and emails.

ECV	Currently using	Institution	Website
Aerosols	Angela Benedetti	ECMWF	www.ecmwf.int
	Enza Di Tomaso	BSC	www.bsc.es
Biomass/AGB	Debbie Hemming	Met Office	www.metoffice.gov.uk
Clouds	Pablo Ortega	BSC	www.bsc.es
	Axel Lauer	DLR	www.dlr.de
	Ulrika Willen	SMHI	www.smhi.se
Fire/Burnt area	Pablo Ortega	BSC	www.bsc.es
	Etienne Tourigny	BSC	www.bsc.es
Glaciers	No CMUG contact - contact Amy Doherty CMUG project manager with queries		N/A
Greenhouse Gases	Axel Lauer	DLR	www.dlr.de
Ice sheets	No CMUG contact – contact Amy Doherty CMUG project manager with queries		N/A
Lakes	Richard Jones	Met Office	www.metoffice.gov.uk
	Erasmus Buonomo	Met Office	www.metoffice.gov.uk
	Grace Redmond	Met Office	www.metoffice.gov.uk
Land cover	Jean-Christophe Calvet	Météo France	www.meteofrance.com
	Enza Di Tomaso	BSC	www.bsc.es
	Frédérique Cheruy	IPSL	cmc.ipsl.fr
	Debbie Hemming	Met Office	www.metoffice.gov.uk
LST	Rob King	Met Office	www.metoffice.gov.uk
	Dirk Notz	MPI-M	www.mpimet.mpg.de
	Jean-Christophe Calvet	Météo France	www.meteofrance.com
	Frédérique Cheruy	IPSL	cmc.ipsl.fr
	Andreas Wernecke	MPI-M	www.mpimet.mpg.de
Ocean Colour	David Ford	Met Office	www.metoffice.gov.uk
	Pablo Ortega	BSC	www.bsc.es
Ozone	Angela Benedetti	ECMWF	www.ecmwf.int
Permafrost	Jean-Christophe Calvet	Météo France	www.meteofrance.com
	Pablo Ortega	BSC	www.bsc.es
Sea ice	David Ford	Met Office	www.metoffice.gov.uk
	Dirk Notz	MPI-M	www.mpimet.mpg.de
	Andreas Wernecke	MPI-M	www.mpimet.mpg.de
	David Ford	Met Office	www.metoffice.gov.uk
Sea level	Pablo Ortega	BSC	www.bsc.es
	David Ford	Met Office	www.metoffice.gov.uk
Sea State	David Ford	Met Office	www.metoffice.gov.uk
	David Ford	Met Office	www.metoffice.gov.uk
Sea surface salinity	Dirk Notz	MPI-M	www.mpimet.mpg.de
	Pablo Ortega	BSC	www.bsc.es
SST	Andreas Wernecke	MPI-M	www.mpimet.mpg.de
	David Ford	Met Office	www.metoffice.gov.uk
	Pablo Ortega	BSC	www.bsc.es
	Dirk Notz	MPI-M	www.mpimet.mpg.de
	Andreas Wernecke	MPI-M	www.mpimet.mpg.de
	Ulrika Willen	SMHI	www.smhi.se
Snow	Jean-Christophe Calvet	Météo-France	www.meteofrance.com
	Frédérique Cheruy	IPSL	cmc.ipsl.fr
	Dirk Notz	MPI-M	www.mpimet.mpg.de
	Andreas Wernecke	MPI-M	www.mpimet.mpg.de
Soil Moisture	Frédérique Cheruy	IPSL	cmc.ipsl.fr
	Debbie Hemming	Met Office	www.metoffice.gov.uk
	Jean-Christophe Calvet	Météo France	www.meteofrance.com
Water Vapour	Angela Benedetti	ECMWF	www.ecmwf.int
	Axel Lauer	DLR	www.dlr.de