

## ICWG-3 workshop - Oral presentations

updated on 2024/02/25

**Monday 26 February 2024**

08:00 - 08:45 Registration

08:45 - 09:00 Welcome address and logistics Martin Stengel, Kerry Meyer, Alessio Bozzo

### 09:00 - 10:30 Programmatic/overview

*Oral presentations: 15 minutes + 3 minutes Q&A*

*Session chair: Andy Heidinger*

Recent Cloud Algorithm Enhancements in the NASA SatCORPS	William Smith	NASA Langley
Update from the International Wind Working Group	Steve Wanzong	UW/SSEC/CIMSS
Cloud retrieval properties from SAFNWC	Emmanuel Fontaine	Meteo-France
The NASA MODIS/VIIRS CLDPROP continuity cloud products: Status and updates for Version 2	Kerry Meyer	NASA GSFC
Current and Future Cloud Products of the Japan Meteorological Agency	Yuuki Saeki	JMA

10:30 - 11:00 *Coffee/tea break and poster viewing*

### 11:00 - 13:00 Climate data records/analysis

*Oral presentations: 15 minutes + 3 minutes Q&A*

*Session chairs: Jian Liu, Hartwig Deneke*

CM SAF cloud datasets: past, present, future	Jan Fokke Meirink	KNMI
Lessons Learned from Transitioning the PATMOS-x Cloud Climatology into the VIIRS Era.	Michael Foster	UW
Time Series Analysis of the NASA MODIS and VIIRS Cloud Products	Steven Platnick	NASA GSFC
Lessons from using and comparing ISCCP, MODIS, VIIRS joint histograms and associated cloud regimes	Lazaros Oreopoulos	NASA GSFC
Climate variability and response to sea surface temperatures in global cloud climate data records	Abhay Devasthale	SMHI
Arctic low-level clouds – an intercomparison of satellite data and reanalyses	Irina Holtermann	DWD

13:00 - 14:00 *Lunch break*

### 14:00 - 15:45 Science analysis/applications

*Oral presentations: 15 minutes + 3 minutes Q&A*

*Session chairs: Claudia Stubenrauch, Daniel Miller*

Arctic cloud properties and its correlation with extreme sea ice anomalies	Jian Liu	CMA
Ship emission effects on clouds from the SEVIRI-based CLAAS-3 data record	Nikos Benas	KNMI
Low-level cloud life cycle assessment	Jan Cermak	KIT
Validating solar irradiance retrievals from Meteosat SEVIRI at improved spatial resolution against a dense network of ground-based observations	Job Wiltink	KNMI
Assessing the benefits of the improved spatiotemporal resolution of current geostationary imagers for surface solar irradiance retrievals based on the S2VSR campaign	Hartwig Deneke	TROPOS
Polarimetric Microphysical Retrievals as a Detection of Cloud Top Entrainment	Daniel Miller	NASA GSFC

15:45 - 16:15

Coffee/tea break and poster viewing

16:15 - 17:45 Geo-ring + assessment discussion

Oral presentations: 15 minutes + 3 minutes Q&amp;A

Session chairs: Colten Peterson, Rabindra Palikonda

Current and Future Plans for the International Satellite Cloud Climatology Project (ISCCP)	Hilawe Semunegus	NOAA
The NOAA Enterprise Cloud Products (aka PATMOS-x) applied to ISCCP-NG L1G	Andrew Heidinger	NOAA NESDIS
Global analysis of super-cooled liquid clouds from the current geo-ring of advanced VIS/IR imagers	Martin Stengel	DWD
L1g-based cloud products from the Geosatclim cloud algorithms (COMET) compared with CM SAF, CALIPSO and MODIS cloud datasets	Karl-Göran Karlsson	SMHI
Planning a ISCCP-NG L2 intercomparison	Jan Fokke Meirink + All	

17:45 - 18:45

Combined poster session &amp; Icebreaker

## Tuesday 27 February 2024

09:00 - 10:30 Retrieval/product development and evaluation

Oral presentations: 15 minutes + 3 minutes Q&amp;A

Session chairs: Nina Håkansson, Alessio Bozzo

Lessons learned from the updated GEWEX Cloud Assessment database	Claudia Stubenrauch	CNRS LMD
Validation and Comparison of Himawari cloud products (remote presentation)	Caroline Poulsen	BMA
MODIS and VIIRS L1b and L2 Monitoring Capabilities Developed by the University of Wisconsin Atmosphere SIPS	Zachary Griffith (presented by Kerry Meyer)	SSEC
An improved NASA MODIS/VIIRS Cloud Continuity Mask using collocated AIRS/CrIS observations	Dongwei Fu (presented by Paolo Veglio)	SSEC
A High Spatial Resolution Cloud Detection Algorithm based on the NASA Continuity MODIS/VIIRS Cloud Mask	Paolo Veglio	SSEC UW

10:30 - 11:00

Coffee/tea break and poster viewing

11:00 - 13:00 Retrieval/product development and evaluation cont'ed

Oral presentations: 15 minutes + 3 minutes Q&amp;A

Session chairs: Jan Cermak, Johanna Mayer

Research on summer Arctic cloud detection model based on FY-3D/MERSI-II infrared data	Xi Wang (presented by Jian Liu)	CMA
Retrieval of cloud bottom altitude from TROPOMI on Sentinel-5P	Luca Lelli	DLR
Evaluation of the MODIS/VIIRS Cloud Team's Pixel-Level Cloudy-Sky Radiative Flux Datasets using Ground- and Space-based Radiation Measurements	Colten Peterson	NASA GSFC / UMBC
Evaluating imager spectral cloud effective radius retrievals against multi-angle polarimetry and in situ cloud probes	Kerry Meyer	NASA GSFC
Hourly Global Cloud Property Composite Derived from Merged Geostationary and Sun-Synchronous Satellite data	David Painemal	NASA Langley
How ERA5 vertical resolutions and top-of-atmosphere cut-off impact simulated MTG/IRS infrared spectra	Xuemei Chen	CNRM, U. de Toulouse, Météo-France, CNRS

13:00 - 14:00 *Lunch break*

14:00 - 16:00 Retrieval/product development and evaluation cont'ed		
<i>Oral presentations: 15 minutes + 3 minutes Q&amp;A</i>		<i>Session chairs: Nikos Benas, NN</i>
Combination of solar and thermal retrievals of IWP from MSG and evaluation with DARDAR	Luca Bugliaro	DLR
Artificial intelligence technology to retrieve all-day cloud properties based on geostationary satellite measurements	Feng Zhang	Fudan University
Leveraging spatial textures, through machine learning, to identify aerosols and distinct cloud types from multispectral observations <i>(remote presentation)</i>	Willem Marais	SSEC
A probabilistic approach to determine the thermodynamic cloud phase using passive satellites	Johanna Mayer	DLR
Investigation of the cloud top thermodynamic phase from the synergistic use of polarimetric, multi-directional, and high temporal resolution observations. <i>(remote presentation)</i>	Jérôme Riedi	University of Lille
Enhancing cloud top phase and height estimates from geostationary imagers in multilayer conditions using a deep neural network	Christopher Yost	AMA

16:00 - 16:30 *Coffee/tea break and poster viewing*

16:30 - 17:45 Severe weather and lightning		
<i>Oral presentations: 15 minutes + 3 minutes Q&amp;A</i>		<i>Session chairs: Loredana Spezzi, Yuuki Saeki</i>
Cloud remote sensing coping with multiple natural hazards in tropical developing countries	Yong-Sang Choi	Ewha Womans University
Feature importance of imager cloud products, microwave radiometry, and atmospheric reanalysis variables in a deep neural network for estimating severe hail likelihood	Benjamin Scarino	NASA
Lightning Imager Level-1b and Level-2 commissioning status	Bartolomeo Viticchie	EUMETSAT
Monitoring of LI Level-1b and Level-2 product performance during routine operations and commissioning	Sven-Erik Enno	EUMETSAT

19:00 *Dinner at Braustuebl (provided by EUMETSAT)*

## Wednesday 28 February 2024

09:00 - 10:30 New missions		
<i>Oral presentations: 15 minutes + 3 minutes Q&amp;A</i>		<i>Session chairs: Anja Hüberlein, Shannon Mason</i>
First results of the MTG-FCI cloud mask and cloud analysis product at EUMETSAT and plans for future developments	Hans-Joachim Lutz	EUMETSAT
A first look at FCI L2 cloud retrieval products at EUMETSAT and plans for future developments	Alessio Bozzo	EUMETSAT
First impressions of MTG-I1 FCI in the context of continuing the CM SAF CLAAS cloud property record	Jan Fokke Meirink	KNMI
Cloud Detection and Characterization Based on Spectro-polarimetry – Operational Implementation for EPS-SG/3MI	Bertrand Fougnie	EUMETSAT
The Polarized Submillimeter Ice-Cloud Radiometer (PoSIR): Observing the diurnal cycle of ice clouds in the tropics and sub-tropics	Ralf Bennartz	Vanderbilt University

10:30 - 11:00

Coffee/tea break and poster viewing

11:00 - 13:00 New missions cont'd

*Oral presentations: 15 minutes + 3 minutes Q&A*

*Session chairs: Ralf Bennartz, Sarah Bedka*

Cloud and Precipitation Retrieval for EarthCARE's Doppler Cloud Profiling Radar

Kamil Mroz

University Of Leicester

ACM-CAP: EarthCARE's synergistic and unified retrieval of clouds, aerosols and precipitation

Shannon Mason

ECMWF

EarthCARE mission - an overview with regards to the cloud products from the multi-spectral imager and the sensor-synergy between imager and atmospheric lidar

Anja Hünerbein

TROPOS

Cloud products from the new NASA PACE mission  
*(remote presentation)*

Andrew Sayer

UMBC at NASA GSFC

An overview of the NASA AOS mission

Arlindo da Silva

NASA GSFC

Cloud products from the NASA AOS mission

Matt Lebsock  
(presented by Kerry Meyer)

JPL

13:00 - 14:00

Lunch break

Closing session

14:00 - 15:30

Including discussions about:

- Key outcomes of the workshop
- Actions/recommendation to/from CGMS
- Discussing/defining (maybe fewer) topical groups and how we can achieve a bit more inter-sessional momentum
- Ideas for the next meeting (content, place, dates...). Please let us know if you have some thoughts already....

16:00 the end