

Third Announcement

2nd Workshop CGMS International Cloud Working Group



29 October - 2 November 2018, Madison, Wisconsin, USA

Organized by the Space Science and Engineering Center of the University of Wisconsin – Madison
Financially supported by EUMETSAT and NOAA

Program Committee

Andrew Heidinger (co-chair), Rob Roebeling (co-chair), Dong Wu (Rapporteur), and Ralf Bennartz (local organizer)

CGMS Advisory Panel

Kerry Meyer (NASA, USA), Stefan Bojinski (WMO, Switzerland), Sung-Rae Chung (KMA Korea), Lu Feng (CMA, China), Andrew Heidinger (NOAA, USA), N. Puviarasan (IMD, India), Rob Roebeling (EUMETSAT, Germany), Alexei Rublev (Roshydromet, Russia), and Daisaku Uesawa (JMA, Japan)



Third Announcement

2nd Workshop CGMS International Cloud Working Group

From 29 October - 2 November 2018 the 2nd Workshop of the International Cloud Working Group (ICWG) will be held in Madison, Wisconsin, USA. The local organization of the workshop is led by the Space Science and Engineering Center of the University of Wisconsin – Madison. The workshop aims at enhancing cloud retrieval schemes and their applicability and a better characterization of their validity. We invite experts working with cloud parameter retrieval schemes from passive imagers, passive microwave, and lidar and radar observations to participate in the workshop and to contribute to the workshop's cloud parameter inter-comparison and validation activities.

Background

The 2nd Workshop of the International Cloud Working Group (ICWG) within the Coordinated Group for Meteorological Satellites (CGMS) is a continuation of four earlier workshops that were organized under the name of Cloud Retrieval Evaluation Workshops (CREWs), and the 1st Workshop of the ICWG. The four earlier Workshops were held in Norrköping, Sweden (2006), Locarno, Switzerland (2009), Madison, USA (2011), and Grainau, Germany (2014). The 1st Workshop of the ICWG was held in Lille, France (2016). During these workshops, algorithms for cloud parameter retrievals were discussed and a common database with cloud parameter retrievals from different product providers was set-up. This database comprises cloud parameter retrievals from MSG, MODIS, AVHRR, POLDER and/or AIRS for a number of "golden days". A very important integral part of these past workshops were the discussions on inter-comparison and validation studies done with the data from the common database. In this way knowledge was gained on the behavior of the different retrieval schemes over different cloud conditions.

The main recommendations of the ICWG-1 in Lille, France were to:

- Facilitate level-2 cloud assessments for near-real-time applications and level-3 cloud assessments for regional and climate applications.
- Standardize requirements and terminology for cloud products;
- Enhance the use of satellite cloud products in tandem with non-satellite data;
- Stimulate dialogue with cloud product users, such as the IWWG, and integrate their requirements in the cloud retrieval algorithms;
- Use heritage sensors to develop cloud climate data records (CDRs) that better characterize calibration errors, dependence on ancillary data, and orbital drift;
- Generate sub-sampled level-1 products from historical, present, and future satellite missions to facilitate CDR reprocessing;
- Include uncertainty estimates and associated quality indicators to level-2 cloud properties, and evaluate these in future ICWG assessments;
- Maintain use of current, and plan for future, space borne lidar/radar measurements for long-term satellite cloud validation;

2nd Workshop of the ICWG

In the framework of the ICWG-2, we will create semi-permanent Sub-Working Groups that provide the focus and continuity necessary for addressing past and future recommendations and key research topics. Each Sub-Working Group will be led by a chair and a rapporteur (still to be chosen). At the biennial meeting, the Sub-Working Group chairs will present their results, discuss the focal points to be addressed in breakout sessions, and report on these focal points at the plenary final discussion. The Sub-Working Groups may address different topics at each workshop. The Sub-Working Groups will encapsulate the Topical Groups that were established at previous meetings. The semi-permanent Sub-Working Groups, and the Topical Groups that are active during the time frame 2016-2018, are listed given below:

- **Algorithms**
 - *Cloud Detection, including detection of Arctic/Antarctic clouds (Karl-Goran Karlsson)*
 - *Use of Combined Sensors for Cloud Retrievals (Bryan Baum)*
 - *Microwave Cloud Remote Sensing (Ralf Bennartz)*
- **Assessments (chair Andi Walther)**
 - *Assessment of level-2 Cloud Parameter Retrievals (Yong-Sang Choi)*
- **Climate Applications**
 - *Cloud Parameter Data Records for Climate Studies (Martin Stengel)*
- **Weather Applications**
 - *Severe Weather Applications (Mike Pavolonis)*
 - *Cloud Height for Wind Applications (Andrew Heidinger)*

The ICWG-2 workshop is organized by the Space Science and Engineering Center of the University of Wisconsin – Madison, and is financially supported by EUMETSAT and NOAA. The workshop will be held from 29 October - 2 November 2018 in Madison, Wisconsin, USA. Please note that participation of workshop is subject to a registration fee of \$125 until 22 October 2018, and of \$150 after 22 October 2018.

More information on the 2nd Workshop of the ICWG can be found on the ICWG Wiki:

http://www.icare.univ-lille1.fr/crew/index.php/Meetings#CGMS_ICWG_workshop_2

Workshop Sessions

The workshop will cover a wide range of sessions concerning cloud parameter retrievals, their applications and related issues. The primary focus of the sessions will be on the topics that are addressed by the Topical Groups as these cover the most active research questions in our community. The Workshop Sessions for this meeting include:

- **Algorithms**
(including single and multiple sensor retrievals, such as , synergistic use of cloud products from microwave and visible infrared imager, radiative transfer modelling, methods to propagate and provide uncertainty estimates)
- **Assessments**
(including assessment of level-2 products from polar orbiting and geostationary satellites for comparison days 13 June 2008, 19 August 2015 and 21 July 2016)
- **Climate Applications**
(including assessments of level-3 climate data records of cloud amount and cloud radiative and physical parameters, aggregation methods, link to international activities such as GEWEX DAP and Obs4MIPS)
- **Weather Applications**
(including the use of cloud products in numerical weather prediction, atmospheric motion winds, precipitation retrievals, severe weather and other applications of high spatial and temporal resolution cloud products from advanced geostationary imagers)

Submission of Data for the Assessments

Information on submitting data for the assessments will follow in a separate mail.

Submission of Abstracts

If you wish to give an oral or poster presentation at ICWG-2, **please submit your abstract before the Friday, August 31, 2018**, and indicate whether you would prefer an oral or poster presentation. As the participation tends to increase with every workshop, participants will be allowed at most one oral presentation. We will also have a poster session. We aim to publish the draft program by October 2018. The abstract submission portion of registration becomes available after contact information has been provided at:

http://www.ssec.wisc.edu/register/index.php?action=view_form&mid=883355&fid=88335501

Reports from other CGMS working groups about the status of their activities and their relationship to the ICWG will be covered through dedicated oral presentations given by the representatives of these CGMS working groups.

After the workshop, an electronic copy of the Working Group Report and Proceedings will be published on the internet. Your oral and poster presentations, submitted to us in electronic form, will be made viewable on the ICWG web site as pdf files after the workshop.

Registration

Registration to the workshop will be possible starting early May 2018 from the workshop website. Please note that participation of workshop is subject to a registration fee of \$125 until 22 October 2018, and of \$150 after 22 October 2018. Registered can participants use the link in their original email confirmation to access their unique registration form to make the payment via credit card. Participants that cannot locate their original confirmation, or have not registered yet, can contact Maria Vasys maria.vasys@ssec.wisc.edu.

The conference fee includes: Logistics and Catering (breaks, Poster Reception with cash bar, and Banquet with cash bar). The Poster Reception will be held on Monday, 29 Oct 2018. The Banquet will take place on Thursday, 1 Nov 2018. Lunches on own.

<http://cimss.ssec.wisc.edu/icwg/index.html>

Accommodation and Conference Venue

The conference will be held at the Pyle Center of the University of Wisconsin - Madison, co-sponsored by SSEC, EUMETSAT, and NOAA.

Attendees are strongly encouraged to book their hotel room as soon as possible. Please pay close attention to hotel reservation deadlines and cancellation policies, which are slightly different for each hotel. Both hotels include a hot breakfast buffet. Detailed information about hotel bookings is given on the webpage of the workshop host, i.e.:

<http://cimss.ssec.wisc.edu/icwg/hotels.html>

Further Information

CGMS Advisory Panel

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Location:

Place: Madison, Wisconsin, USA
Conference: 29 October - 2 November 2018