Second Announcement

Cloud Retrieval Evaluation Workshop-4 (CREW-4)



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4-7 March 2014, Grainau, Germany, Europe

Organized by Deutscher Wetterdienst. Financially supported by EUMETSAT, the European Space Agency through the ESA Cloud CCI project and Deutscher Wetterdienst

Program Committee

Bryan Baum (co-chair), Rob Roebeling (co-chair), Ralf Bennartz, Ulrich Hamann, Andrew Heidinger, Jan Fokke Meirink, Martin Stengel, Andi Walther, Phill Watts, and Anke Thoss



Second Announcement

Cloud Retrieval Evaluation Workshop-4 (CREW-4)

4-7 March 2014, Grainau, Germany

From 4 till 7 March 2014 the 4th Cloud Retrieval Evaluation Workshop will be held in Grainau, Germany. CREW-4 is organized by Deutscher Wetterdienst (DWD). EUMETSAT is co-sponsor of the Cloud Retrieval Evaluation Workshops. Financial support for CREW-4 is also provided by ESA through the ESA Cloud CCI Project. The workshop aims at enhancing cloud parameter retrievals, assessing their associated errors, improving their use in nowcasting and forecasting activities, and improving the characterization of long-term cloud property datasets. We invite experts working with cloud parameter retrieval schemes from passive imagers (e.g. SEVIRI, AVHRR and MODIS), passive microwave (e.g. AMSR), and active lidar and radar observations (e.g. CloudSat, CALIPSO) to participate in the workshop and to contribute to the cloud parameter comparison and validation activity that is connected to the workshop. More information on registration and submitting abstracts is provided later in this announcement.

Background

The Fourth Cloud Retrieval Evaluation Workshop (CREW-4) is a continuation of three earlier Workshops that were held in Norrköping, Sweden (2006), Locarno, Switzerland (2009), and Madison, Wisconsin, USA (2011). Algorithms for cloud parameter retrievals were discussed at these workshops, with product comparisons facilitated by providing cloud parameter retrievals from different providers in a common database. This database comprises cloud parameter retrievals from SEVIRI, MODIS, AVHRR, POLDER and/or AIRS for a number of "golden days". A very important integral part of the CREW workshops are the discussions on cloud parameter comparison and validation studies performed with the data from the common database. In this way knowledge is gained on the behavior of the different retrieval schemes for different cloud conditions.

The main recommendations of the CREW in Madison were to:

- Establish CREW as working group under the umbrella of an international forum;
- Address the focal points of the GEWEX-Cloud Assessment;
- Address research questions on level-2 cloud retrieval methods:
 - multiple layer cloud detection methods;
 - infrared-only cloud parameter retrieval methods;
 - microphysical properties of ice cloud models;
- Assessment of level-2 cloud property retrievals and their error estimates;
- Discuss level-2 aggregation approaches to improve level-3 cloud products;
- Enhance traceability and uniformity of level-3 cloud products;
- Establish sub-working groups addressing specific research topics;
- Involve other space agencies as well as participants from Asia and Australia

Cloud Retrieval Evaluation Workshop-4

Based on the results and recommendations of the previous workshops, EUMETSAT decided to co-sponsor the CREW-4 Workshop. Financial support for CREW-4 is also given by the ESA Cloud CCI project. Similar to the previous workshops, CREW-4 will continue the effort to compare cloud parameter retrievals between different groups and sensors, and validate them through comparison with the active sensors (CALIPSO and CloudSat) from the A-Train constellation. Besides, CREW-4 evaluation will address two new elements: (1) the assessment of cloud parameter error estimates, and (2) the evaluation of methods to derive level-3 products from level-2 products.

Algorithm providers are invited to provide instantaneous (level-2) cloud properties retrievals, either new datasets or updates of existing datasets, for the golden days (13, 17, 18, 22 June 2008 and 3 July 2008). The provided datasets will be included in the common database of cloud properties retrievals. This database currently provides the cloud properties datasets from 15 different algorithms. The providers of cloud properties datasets have the option, at any time, to:

- 1. update their algorithm descriptions;
- 2. update of their cloud properties dataset for the golden days;
- 3. submit new cloud properties datasets for the golden days;
- 4. submit monthly cloud properties products (level-3) derived from one month of MODIS level-2 cloud properties.

The goal is to use the level-2 datasets to facilitate comparison of cloud property retrievals and their error estimates between the various providers for both polar and geostationary sensors (SEVIRI, AVHRR onboard NOAA 18 and MODIS). As independent validation datasets, the main sources of information will be the cloud properties obtained from CLOUDSAT and/or CALIPSO observations and Cloud Liquid Water Path observations from passive microwave instruments (e.g. AMSR).

In addition, algorithm providers are invited to derive, and provide, level-3 cloud properties products using a one-month reference dataset of MODIS level-2 cloud retrievals that can be downloaded from the common database. The aim is to compare the level-3 cloud properties products to quantify the uncertainties due to the transition from level-two cloud retrievals to level-three cloud products.

The CREW-4 workshop is organized by DWD and financially supported by EUMETSAT and ESA. The workshop venue is Hotel am Badersee in Grainau, Germany. Please note that the workshop is subject to a small fee, which will be charged as part of the price of the hotel room.

More information on the 4th Cloud Retrieval Evaluation Workshop can be found at:

http://www.icare.univ-lille1.fr/crew

Workshop Topics

Topic 1: Cloud parameter retrieval methods (retrieval parameterizations, optimal estimation, combined retrievals, and error estimates)

Topic 2: Cloud parameter retrieval evaluations

(validation (against active sensors, in-situ observations), inter-comparisons, uncertainty estimate assessments, and sensitivity analysis)

Topic 3: Cloud parameters for nowcasting and forecasting applications (severe weather, aviation, early warning, and data assimilation)

Topic 4: Cloud parameter datasets for climate and weather research (aggregation methods, CMIPS comparison, dataset stability and trend analysis, reanalysis verification, evaluation of model parameterizations, and satellite simulators)

Submission of Abstracts

To register for the workshop, please fill the **Registration Form** and the **Abstract Form** enclosed at the end of this invitation, and send them to Martin Stengel (*martin.stengel@dwd.de*) with a copy (cc) to Rob Roebeling (*rob.roebeling@eumetsat.int*).

The deadline for submitting abstracts is:

Before 1 November 2013

There will be oral and poster sessions at the workshop. The authors are kindly requested to indicate if they prefer an oral presentation. After the submission deadline the CREW program committee will confirm that we received your forms. Before the end of 2014 the program committee will take a decision on the oral and poster program and inform the participant on the outcome. **Please note that the number of participants is limited.**

Hotel Reservations

The workshop will be held at the Hotel am Badersee in Grainau, Germany, from 4 March 2014 (morning) till 7 March 2014 (noon). The website of the conference centre is http://www.hotelambadersee.de/en/. A block booking has been made at the hotel which is valid till 15 January 2014. Please make your hotel booking via Telephone (+49(0)-8821821-0) or Email (info@hotelambadersee.de) only! It is necessary to use the code "Crew-4" when booking to access the block-booked rooms and prices. Please neither use the hotel's online booking facilities nor any other online portal. For workshop participants the price for a single room is $105 \in p/d$ and $142 \in p/d$ for a double room during the workshop. These room prices already include breakfast buffet, lunch, W-LAN and the use of the SPA facilities of the hotel. The workshop fee of $15 \in p/d$ is also already included in the costs above, thus the workshop fee will be charged to you directly through the hotel costs. It is therefore IMPORTANT that you make the booking as indicated above. Please make your booking before:

15 January 2014

Travel Information

More information on traveling to and from the workshop venue will be provided to you through the CREW website soon.

Further Information

Program Committee:

Bryan Baum, Univ. of Wisconsin	: bryan.baum@ssec.wisc.edu
Rob Roebeling, EUMETSAT	: rob.roebeling@eumetsat.int
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Phil Watts, EUMETSAT	: phil.watts@eumetsat.int

Local organization:

Martin Stengel, DWD	: martin.stengel@dwd.de
Patricia Willing, DWD	: patricia.willing@dwd.de

Location:

Venue	: Hotel am Badersee, Grainau, Germany.
Website	: http://www.hotelambadersee.de/
Hotel block booking:	: 80 rooms have been block-booked
	(105 € single room / night, 142 € double room/night).
Booking though	: Please make your hotel booking via
	Telephone (+49(0)-8821821-0) or
	Email (info@hotelambadersee.de)
	It is necessary to use the code "Crew-4" when
	booking to access the block-booked rooms and
	prices. Please neither use the hotel's online booking
	facilities nor any other online portal.

Note:

For your information, in the week after the CREW-4 Workshop the EUMETSAT Satellite Application Facility on Climate Monitoring (CM SAF) hosts its 4th user workshop in the same venue in Grainau, Germany.

Access to the Common Database

Now, a dedicated FTP space is available for the CREW project on the ftp server of the University of Lille 1.

ftp://ftpush.icare.univ-lille1.fr/

(thanks to Jerome Riedi, ICARE, and the University of Lille 1).

To be able to use the ftp site, you have to register on ICARE through the following form: *http://www.icare.univ-lille1.fr/register/register.php* When asked for a *"short description of your project"*, please fill: *Account request for the Cloud Retrieval Evaluation Workshop (CREW)*

Once registered, you automatically become a member of the *CREW Working Group*, which gives you ftp access to the following hidden directory: *ftp://ftpush.icare.univ-lille1.fr/crew*

This directory is available to the group only and it is hidden so it won't show up on '*Is*' but you can directly go to the folder with: *cd* /*crew*

If you like upload your algorithm description and/or updated/extended your dataset, please use the upload folder for your algorithm:

/crew/upload/<Algorithm-Acronym>

(The Algorithm-Acronyms are listed on the following webpage:)

(http://www.icare.univ-lille1.fr/crew/index.php/CREW_Data_Set)

For questions and comments related to access and use of the FTP site, the website, and the ICARE resources please send an email to Ulrich Hamann (*ulrich.hamann@knmi.nl*) and Jerome Riedi (*jerome.riedi@univ-lille1.fr*).

For other ICARE services and resources please check the ICARE website: *http://www.icare.univ-lille1.fr/*

Registration Form (Page 1/2) Fourth Cloud Retrieval Evaluation Workshop 4-7 March 2014, Grainau, Germany

Name	
Affiliation	
Address	
Address	
Telephone	
Fax	
Email	

Abstract Title (max 30 words)			
Authors			
Preferred session:			
Presentation Preference	🗌 Oral	Poster	

Registration Form (Page 2/2) Fourth Cloud Retrieval Evaluation Workshop

4-7 March 2014, Grainau, Germany

Abstract (max 250 words)	

Please return the registration form for the CREW-4 workshop per email to *martin.stengel@dwd.de* (cc to rob.roebeling@eumetsat.int) before **1 November 2013**.