



Preliminary Program

**7-9 May 2007
ESA-ESTEC, The Netherlands
Conference Room "Newton"**

Monday, 7 May 2007

09:00 Workshop Registration and Placing of Posters

Welcome Session

10:00 Welcome and Introduction

R. Zobl

ESA-ESTEC, The Netherlands

10:10 Welcome and Introduction

C. Kawamoto

JAXA, Japan

10:20 EarthCARE Science Overview

A. Illingworth

University of Reading, U.K.

10:40 EarthCARE Technical and Programmatic Overview

A. Lefebvre

ESA-ESTEC, The Netherlands

11:00 EarthCARE and Global Environment Satellite Observation System in Japan

Kojima, M.¹; **Kumagai, H.**²; **Kimura, T.**¹

¹JAXA; ²NiCT

11:20 *Coffee & Tea*

The name of the presenting author is underlined.

Session A – The EarthCARE Mission

Chair: A. Illingworth, University of Reading, U.K.

- 11:40 *Key Note: Current Status of EarthCARE Studies in Japan*
Nakajima, T.
Center for Climate System Research, The University of Tokyo
- 12:10 Development of Cloud Profiling Radar for EarthCARE
*Ohno, Y.¹; Horie, H.¹; **Kumagai, H.**¹; Kimura, T.²; Okada, K.²; Iida, Y.²;
Kojima, M.²*
*¹National Institute of Information and Communications Technology; ²Japan
Aerospace Exploration Agency*
- 12:30 The Golden Age of Spaceborne Active Aerosol Remote Sensing? From
CALIPSO over ADM-Aeolus to EarthCARE
Ansmann, A.¹; Wandinger, U.²; Mattis, I.²; Müller, D.²,
¹Leibniz Institute for Tropospheric Research; ²IFT
- 12:50 End-to-End Simulations of the EarthCARE Mission
Donovan, D.P.; Voors, R.H.M
KNMI
- 13:10 *Lunch*

Session B.1 – Active Techniques for Cloud Observations – Radar

Chair: H. Kumagai, NiCT, Japan

- 14:10 *Key Note: Spaceborne Radar Observations of Clouds And Precipitation from
Space: A Perspective from Cloudsat and the A-Train*
Stephens, G.¹; Vane, D.²
¹Colorado State University; ²JPL
- 14:40 In-flight Performance of the CloudSat Radar
Im, E.; Tanelli, S.; Durden, S.; Pak, K.
Jet Propulsion Laboratory
- 15:00 Evaluation of CloudSat Level 1 Products Using Airborne Measurements and
Evidence of Multiple Scattering in Spaceborne Measurements
Bouniol, D.¹; Protat, A.²; Plana-Fattori, A.²
¹CNRM/CNRS; ²CETP/CNRS

The name of the presenting author is underlined.

- 15:20 Cloud Liquid Path and Drizzle Identification from CloudSat using the Attenuation of the Ocean Return
Smith, L D H; Illingworth, A J
University of Reading
- 15:40 Hydrometeor Detection using CloudSat - an Earth Orbiting 94 GHz Cloud Radar
Marchand, R. T.¹; Mace, G. G.²; Ackerman, T. P.¹; Stephens, G.³
¹University of Washington; ²University of Utah; ³Colorado State University
- 16:00 *Poster Viewing and Refreshments*
- 16:40 Evaluation of Doppler Velocity Bias with a Spaceborne Cloud Doppler Radar
Uematsu, A.¹; Ohno, Y.¹; Horie, H.¹; Kumagai, H.¹; Schutgens, N.²
¹National Institute of Information and Communications Technology, Japan;
²Center for Climate System Research, University of Tokyo, Japan
- 17:00 EarthCARE's Potential as a High Latitude Precipitation Observing System
L'Ecuyer, T S¹; Haynes, J M¹; Miller, S D²; Mitrescu, C²; Stephens, G L¹
¹Colorado State University; ²Naval Research Laboratory
- 17:20 Considerations for Spaceborne 94-GHz Doppler Radar Observations of Precipitation
Kollias, P.; Szyrmer, W.; Zawadski, I.
McGill University, Montreal
- 17:40 Observing Ice Clouds with a Ground-Based Doppler Radar
Plana-Fattori, A.¹; Protat, A.¹; Delanoë, J.²
¹Centre d'Etude des Environnements Terrestre et Planétaires (CETP);
²University of Reading
- 18:00 *Welcome Drink and Poster Viewing*
- 19:00 *Bus Departure to Noordwijk Hotels*

The name of the presenting author is underlined.

Tuesday, 8 May 2007

Session B.2 – Active Techniques for Cloud and Aerosol Observations – Lidar

Chair: J. Pelon, Service d'Aéronomie du CNRS, France

- 08:30 *Key Note: Status of CALIOP*
Winker, D.
NASA LaRC
- 09:00 *Cloud and Aerosol Climatology Analysis using Space Lidar Observations :
First Results from CALIPSO and Comparison with Analyses from the
SEVIRI Imager*
Sèze, G.¹; *Pelon, J.*²; *Vaughan, M.*³; *Winker, D.*³
¹*Laboratoire de Météorologie Dynamique, IPSL;* ²*Service d'Aéronomie
IPSL;* ³*NASA/LaRC*
- 09:20 *EARLINET Correlative Measurements for CALIPSO: First Comparisons*
Pappalardo, G.¹; *Bösenberg, J.*²; *Müller, D.*³; *Ansmann, A.*³; *Linnè, H.*²;
*Mona, L.*¹; *Amodeo, A.*¹; *Apituley, A.*⁴; *Chaikovsky, A.*⁵; *De Tomasi, F.*⁶;
*Freudenthaler, V.*⁷; *Giannakaki, E.*⁸; *Grigorov, I.*⁹; *Iarlori, M.*¹⁰; *Mamouri,
R.*¹¹; *Mattis, I.*³; *Mitev, V.*¹²; *Guerrero-Rascado, J. L.*¹³; *Sicard, M.*¹⁴;
*Spinelli, N.*¹⁵; *Wandinger, U.*³
¹*CNR-IMAA;* ²*Max-Planck-Institut für Meteorologie;* ³*Institut für
Troposphärenforschung;* ⁴*Rijksinstituut voor Volksgezondheid en Milieu;*
⁵*Institute of Physics, National Academy of Sciences of Belarus;* ⁶*Università di
Lecce;* ⁷*Meteorological Institute, University of Munich;* ⁸*Laboratory of
Atmospheric Physics, Aristotle University of Thessaloniki;* ⁹*Institute of
Electronics, Bulgarian Academy of Sciences;* ¹⁰*Università degli Studi
dell'Aquila;* ¹¹*National Technical University of Athens;* ¹²*Observatoire
Cantonal de Neuchâtel;* ¹³*Andalusian Center for Environmental Studies,
University of Granada;* ¹⁴*Universitat Politècnica de Catalunya;* ¹⁵*Consorzio
Nazionale Interuniversitario per le Scienze Fisiche della Materia*
- 09:40 *Movement of Mineral Dust and Air-pollution Aerosols in the East Asian
Region: Ground-Based Lidar Network Observations and the Use of
CALIPSO Data*
Sugimoto, N.¹; *Matsui, I.*¹; *Shimizu, A.*¹; *Nishizawa, T.*¹; *Uno, I.*²
¹*National Institute for Environmental Studies;* ²*Kyushu University*
- 10:00 *Towards a Global Climatology of Optically Thin Clouds Derived from
Networks of Ground-Based Lidars*
Haefelin, M.¹; *Morille, Y.*²; *Noel, V.*²
¹*Institut Pierre Simon Laplace;* ²*Laboratoire de Météorologie Dynamique*

The name of the presenting author is underlined.

- 10:20 SAMUM 2006: Dust Particle Properties from Airborne HSRL, Ground-based 355/532nm Raman Lidar and in situ Observations
Petzold, A.¹, Weinzierl, B.¹; Esselborn, M.¹; Ehret, G.¹; Fiebig, M.¹; Fix, A.¹; Kiemle, C.¹; Wirth, M.¹; Tesche, M.²; Ansmann, A.²
¹Institute of Atmospheric Physics/German Aerospace Center; ²Leibniz Institute for Tropospheric Research
- 10:40 *Coffee & Tea*
- 11:10 Observation of Winds and Clouds by Using a 3D-scanning Coherent Doppler Lidar
Fujiyoshi, Y., Yamashita, K.; Fujiwara, C.
Hokkaido University
- 11:30 Airborne High Spectral Resolution Lidar Aerosol Measurements
Hostetler, C.; Ferrare, R; Hair, J; Cook, A; Harper, D
NASA Langley Research Center
- 11:50 Development of Aerosol Retrieval Algorithm from Mie-Scattering Lidar and High-Spectral Resolution Lidar
Nishizawa, T.¹; Sugimoto, N.¹; Matsui, I.¹; Shimizu, A.¹; Tatarov, B.¹; Okamoto, H.²
¹National Institute for Environmental Studies; ²Tohoku university

Session B.3 – Satellite Imagery for Cloud and Aerosol Observations

Chair: Nakajima, T., The University of Tokyo, Japan

- 12:10 Horizontal and Vertical Inhomogeneity of the Cloud Microphysical Properties Retrieved from Satellite-borne Passive Sensors
Nakajima, T.Y.¹, Masunaga, H.²
¹Tokai University, ²Nagoya University
- 12:30 Synergy between PARASOL and MODIS on A-train
Tanre, D.¹; Riedi, J.¹; Deuze, J.-L.¹; Herman, M.¹; Gerard, B.¹; Goloub, P.¹; Parol, F.¹; Vanbaeue, C.¹; Seze, G.²; Viollier, M.²; Breon, F.-M.³, Lifermann, A.⁴
¹LOA; ²LMD; ³CEA/LSCE; ⁴CNES
- 12:50 Validation of MSG SEVIRI Cloud Fractional Cover Using CALIPSO Data
Reuter, M.¹, Thomas, W.¹; Karlsson, K.-G.²
¹DWD; ²SMHI
- 13:10 *Lunch*

The name of the presenting author is underlined.

- 14:10 Simulation of Extended Satellite Scenes for Validation Purposes
Mayer, B.¹; Bugliaro, L.¹; Zinner, T.²
¹Deutsches Zentrum für Luft- und Raumfahrt (DLR); ²NASA - Goddard
Space Flight Center

Session B.4 – Earth radiation budget satellite measurements

Chair: *E. Lopez-Baeza, E., University of Valencia, Spain*

- 14:30 *Key Note:* Experience with the GERB and CERES Broadband Radiometers
Dewitte, S.
RMIB
- 15:00 Achieving Broadband Climate Quality Calibration for CERES by
Application of a Rigorous Radiometric Validation Protocol
Priestley, K.¹, Thomas, S²; Matthews, G³
¹NASA LaRC, ²Science Systems and Applications, Incorporated; ³Analytical
Services and Materials
- 15:20 *Poster Viewing and Refreshments*
- 16:50 The Geostationary Earth Radiation Budget (GERB) Experiment: Status and
Results
Harries, J E¹; Russell, J E¹; Brindley, H E¹; Futyan, J²; Gimbert, V¹
¹Imperial College; ²Goddard Institute for Space Science
- 17:10 Improvement of Angular Dependence Models for the Broadband Radiometer
Onboard the ESA EarthCARE Mission
Lopez-Baeza, E.¹; Barker, H.W.²; Berger, F.H.³; Viollier, M.⁴; Bouvet, M.⁵;
Capderou, M.⁴; Domenech, C.¹; Donovan, D.⁶; Lorenz, A.⁷; Raberanto, P.⁴;
Velazquez, A.¹
¹University of Valencia / Climatology from Satellites Group; ²Meteorological
Service of Canada / Cloud Physics Research Division; ³Technische
Universität Dresden. IHM-Meteorology / German Meteorological Service.
Meteorological Observatory Lindenberg; ⁴Laboratoire de Meteorologie
Dynamique. Ecole Polytechnique; ⁵European Space Agency (ESA/ESTEC) /
Wave Interaction & Propagation Section; ⁶Royal Netherlands
Meteorological Institute / Climate Research and Seismology Department /
Atmospheric Research Division; ⁷Technische Universität Dresden. IHM-
Meteorology

The name of the presenting author is underlined.

- 17:30 Synergy between Active and Passive Sensors for Improving Retrieval Algorithms
Domenech, C.¹; Donovan, D. P.²; Barker, H. W.³; Bouvet, M.⁴; Lopez-Baeza, E.¹
¹University of Valencia; ²Royal Netherlands Meteorological Institute (KNMI); ³Meteorological Service of Canada (MSC); ⁴ESA/ESTEC
- 18:15 *Bus Departure to Social Event*

The name of the presenting author is underlined.

Wednesday, 9 May 2007

Session B.5 – Synergistic Exploitation of Active and Passive Observation Techniques

Chair: D. Donovan, KNMI, The Netherlands

- 08:30 Ice Microphysical Properties Derived using Lidar and Radar Data. From Ground-based to CloudSAT and Calipso Results
van Zadelhoff, G-J; Donovan, D.P.
KNMI
- 08:50 A Variational Cloud Retrieval Scheme Combining Radar, Lidar and Radiometer Observations
Delanoe, J.; Hogan, R. J.
University of Reading
- 09:10 Making the Bridge: the Combination of Satellite Radar-Lidar Instruments and Passive Imagers for the Improvement of the Liquid Water Cloud Retrievals
Placidi, S.¹; Roebeling, R.²; Donovan, D.²; Boers, R.²; Russchenberg, H.¹
¹Delft University of Technology; ²KNMI
- 09:30 Cloud Dynamical and Microphysical Retrieval by 95GHz Doppler Radar and Lidar: Implication to Satellite Platforms
Sato, K.¹; Okamoto, H.¹; Sugimoto, N.²; Nishizawa, T.²; Kumagai, H.³; Ohno, Y.³
¹Tohoku University; ²National Institute for Environmental Studies; ³National Institute of Information and Communications Technology
- 09:50 Synergetic Retrievals of Low-level Vertical Cloud Structure with Potential for Evaluating EarthCARE Satellite Products
Löhnert, U.²; Russchenberg, H.¹; Krasnov, O.¹; Crewell, S.²; O'Connor, E.³
¹Delft University of Technology; ²University of Cologne; ³University of Reading
- 10:10 Fast Lidar and Radar Multiple-Scattering Model for Use in Cloud Retrieval Schemes
Hogan, R. J.
University of Reading
- 10:30 Coffee & Tea

The name of the presenting author is underlined.

11:00 Aerosol remote sensing from passive and active sensors

Leon, J.-F.; Tanré, D.; Lallart, P.; Ducos, F.
CNRS-LOA

11:20 The Canadian CloudSat-CALIPSO Validation Project (C3VP)

Hudak, D.¹; Barker, H.¹; Rodriguez, P.¹; Strapp, W.¹; Donovan, D.²
¹MSC; ²KNMI

Open Discussion

Chair: S. Briggs, ESA-ESRIN, Italy

11:40 *Open Discussion:* Scientific Preparation for the EarthCARE Mission

13:00 *Lunch*

Session C – Modelling of Clouds, Aerosols and Radiation

Chair: A. Beljaars, ECMWF, U.K.

14:00 Radiative Transfer for Cloudy Atmospheres in Global Climate Models:
Where EarthCARE Can Help

Barker, H.¹; Cole, J.²
¹MSC; ²UBC

14:20 Evaluating Cloud Vertical Structure in Numerical Weather Prediction Models

Reinhardt, T.¹; Crewell, S.¹; Loehnert, U.¹; Ebell, K.¹; van Lipzig, N.²
¹University of Cologne; ²KU Leuven

14:40 Characterization of Cloud Microphysics and Evaluation of the Simulated
Cloud Signatures in the Climate Model

Okamoto, H.¹, Sato, K¹; Nishizawa, T²; Sugimoto, N²; Kumagai, H³; Takano,
T⁴; Takemura, T⁵; Nakajima, T⁶
¹Tohoku University; ²National Institute for Environmental Studies; ³National
Institute of Information and Communications Technology; ⁴Chiba; ⁵Kyushu
University; ⁶University of Tokyo

15:00 Assimilation of Cloud-related Observations in the ECMWF Model

Janiskova, M.; Benedetti, A.
ECMWF

15:20 *Coffee & Tea*

The name of the presenting author is underlined.

- 15:50 The GEWEX Cloud System Studies (GCSS) Modelling Strategy and the Use of Satellite Data: an Overview
Siebesma, A.P.¹, Jakob, C.²; Teixeira, J.³
¹KNMI, ²BMRC Melbourne; ³NURC, La Spezia
- 16:10 Evaluation of ECMWF Cloud Type Simulations at the ARM Southern Great Plains Site Using a New Cloud Type Climatology
Kollias, P.¹; Tselioudis, G.²
¹McGill University; ²NASA/GISS
- 16:30 Development of a CloudSat Simulator in the UK Met Office Model: First Comparisons with CloudSat Data
Bodas-Salcedo, A.¹; Brooks, M. E.²; Webb, M. J.¹
¹Met Office, Hadley Centre; ²Met Office

Final Discussion and Conclusions

- 16:50 Final Discussion & Preliminary Workshop Conclusions
- 17:30 *Bus Departure to Noordwijk Hotels*

The name of the presenting author is underlined.

Poster Presentations

Dedicated poster sessions will take place on Monday and Tuesday. Posters may remain on display until the end of the workshop. Please post your poster under the respective session letter (A, B.1, B.2, B.3, B.4, B.5, C) indicated on the poster boards.

Posters A – The EarthCARE Mission

Validation of Future EarthCARE Products

*Berger, F.; Engelbart, D.; Görsdorf, U.; Güldner, J.; Reichardt, J.; Behrens, K.
German Meteorological Service*

Determination of Wavelength Dependant Spectral Darkening Occurring on a Broadband Earth Observing Radiometer when Exposed to the Ram Direction: Application to Clouds and the Earths Radiant Energy System (CERES) and Implications for EarthCARE

*Matthews, G¹; Priestley, K²; Loeb, N²; Loukachine, K³
¹AS&M; ²NASA Langley; ³SSAI*

Definition of Mission Requirements for Clouds, Precipitation, Aerosol and Earth Radiation Budget for the follow-on EUMETSAT Polar System

*Phillips, P L; Schlüssel, P; Accadia, C J; Munro, R; Banfi, S
EUMETSAT*

Validation Strategies for Space-based Radar Observations with CESAR Observatory

*Russchenberg, H.
Delft University of Technology*

HALO with Lidar and Radar as Potential EarthCARE Airborne Simulator

*Schumann, U.; Ehret, G.; Hagen, M.; Mayer, B.; Ziereis, H.
Deutsches Zentrum für Luft- und Raumfahrt, Institut für Physik der Atmosphäre*

ECSIM: The Simulator Framework for EarthCARE

*Acarreta, J.¹; Donovan, D.²; Eisinger, M.³; Franco, R.³; Lajas, D.³; Moyano, R.¹;
Pirondini, F.¹; Ramos, J.¹; Voors, R.²; Wehr, T.³
¹Deimos-Space; ²KNMI; ³ESA-ESTEC*

Posters B.1 – Active Techniques for Cloud Observations – Radar

Multiple Scattering Effects Foreseen in the EarthCare Radar Observations

Battaglia, A.; Simmer, C.

University of Bonn

Combining Odin-SMR and CloudSat Cloud Ice Information

Eriksson, P.; Rydberg, B.; Ekström, M.; Murtagh, D.P.

Chalmers University of Technology

Satellite CPR Simulation using Airborne Cloud Radar

Horie, H.; Ohno, Y.; Kumagai, H.

NICT

Ground-base Cloud Observations by W-band Cloud Radar (SPIDER)

Ohno, Y.; Horie, H.; Kumagai, H.

NICT

The Search for Natural Calibration Sites for EarthCARE's Cloud Profiling Radar

Berry, Ph.¹; Bramer, S.¹; Testud, J.²; Bouniol, D.³; Rommen, B.⁴

¹De Montfort University; ²Novimet; ³CETP / Meteo France, ⁴ESA-ESTEC

Use of Radar Data to Generate an Ice Cloud Database for Retrievals from Sub-mm Emission Spectra

Rydberg, B.¹; Eriksson, P.¹; Buehler, S. A.²

¹Chalmers University of Technology, Dept. of Radio and Space Sci.; ²Lulea Technical University, Dept. of Space Sci.

Posters B.2 – Active Techniques for Cloud and Aerosol Observations – Lidar

CALIPSO and Long-Term Ground Based Multi-Wavelength Raman Lidar Observations

Mattis, I.; Mueller, D.; Ansmann, A.; Wandinger, U.

Leibniz Institute for Tropospheric Research

6 Years of Systematic Raman Lidar Measurements at CNR-IMAA, Potenza, Italy

Mona, L.; Amodeo, A.; Cornacchia, C.; D'Amico, G.; Madonna, F.; Pappalardo, G.

Istituto di Metodologie per l'Analisi Ambientale CNR-IMAA

Aerosol Optical Properties Obtained from Tropospheric Lidar and Sun Photometer Measurements in 2005 and 2006 at Alomar (69°N, 16°E)

Stebel, K.¹; Frioud, M.²; Myhre, C. L.³; Hansen, G.¹; Gausa, M.²; Mogo, S.²;

Rodriquez, E.³; de Frutos, A.³; Cachorro, V.³; Kristjansson, J. E.⁴
¹Norwegian Institute for Air Research; ²ALOMAR; ³GOA Group of Atmospheric Optics; ⁴Department of Geosciences, University of Oslo

Posters B.3 – Satellite Imagery for Cloud and Aerosol Observations

Comparison of Microwave and Optical Cloud Water Path Estimates from TMI, MODIS, and MISR

Horvath, A.¹, Davies, R.²

¹Rosenstiel School of Marine and Atmospheric Science, ²University of Auckland,

Comparison of MODIS and AERONET Derived Aerosol Products for Marine, Continental, and Sahara-Dust Particles

Santese, M.; Perrone, M. R.

Physics Department, University of Lecce

Validation of FRESCO Cloud Heights Using Lidar/Radar Measurements at the SGP/ARM Site

Wang, P.; Stammes, P.

Royal Netherlands Meteorological Institute (KNMI)

Airborne Cloud and Aerosol Imagery in Support of EarthCARE

Bovensmann, H.; Kokhanovsky, A.; Rozanov, V.; Burrows, J. P.

Institute of Environmental Physics, University of Bremen

AeroPro: Improving Passive Satellite Aerosol Remote Sensing using Aerosol Property Profiles Measured with Lidar

De Graaf, M.¹; Donovan, D.P.¹; Apituley, A.²; Wilson, K.M.²; Veeffkind, J.P.¹; De Leeuw, G.³

¹Royal Netherlands Meteorological Institute (KNMI); ²National Institute for Public Health and the Environment (RIVM); ³Finnish Meteorological Institute (FMI), Finland, TNO Physics and Electronics Laboratory

2 Years Climatology of PARASOL Products

LIFERMANN, A.¹; TANRE, D.²; RIEDI, J.²; DEUZE, J-L.²; HERMAN, M.²; GERARD, B.²; GOLOUB, Ph.²; PAROL, F.²; PAROL, F.²; VANBAUCE, C.²; DUCOS, F.²; THIEULEUX, F.²; SEZE, G.³; VIOLLIER, M.³; BREON, F-M.⁴

¹CNES; ²LOA; ³LMD; ⁴CEA/LSCE

Posters B.4 – Earth radiation budget satellite measurements

Validation of CERES Permanent Snow and Sea Ice Angular Distribution Models

Kato, S.¹, Loeb, N.²

¹Hampton University, ²NASA Langley Research Center

Validation of Broadband Radiation Balance Products at the Valencia and the Alacant Anchor Stations. GERB/CERES Ground Validation Campaigns

Lopez-Baeza, E.¹; Cano, A.¹; Domenech, C.¹; Estelles, V.²; Ferreira, A.G.¹; Narbon, C.¹; Sanchis, J.¹; Velazquez, A.¹; Vidal, S.¹; Smith, G.L.³; Szewczyk, Z.P.⁴; Labajo, A.⁵; Alonso, S.⁵; Harries, J.E.⁶; Russell, J.E.⁶; Clerbaux, N.⁷; Dewitte, S.⁷; Rius, T.⁸; Torrobella, J.⁸; Pino, D.⁹; Sanchez, J.J.¹⁰; Tarruella, R.¹⁰

¹University of Valencia / Climatology from Satellites Group; ²University of Valencia / Solar Radiation Group; ³NASA Langley Research Centre / National Institute for Aerospace; ⁴NASA Langley Research Centre / Science Applications International Corporation; ⁵Spanish Institute for Meteorology; ⁶Imperial College for Science, Technology and Medicine / Space and Atmospheric Physics Group; ⁷Royal Meteorological Institute of Belgium; ⁸Institute of Space Studies of Catalonia; ⁹Institute of Space Studies of Catalonia / Polytechnic University of Catalonia; ¹⁰Polytechnic University of Catalonia / Mining Engineering School of Manresa

Posters B.5 – Synergistic Exploitation of Active and Passive Observation Techniques

Sampling Errors in Fractional Cloud Cover from EarthCARE instruments

Astin, I.

University of Bath

Use of Radar Data to Train Cloud Ice Retrieval from Passive mm/sub-mm Measurements

Bühler, S.¹, Jimenez, C.¹; Eriksson, P.²; Rydberg, B.²

¹Lulea Technical University; ²Chalmers University of Technology

Xianghe Observatory: A Test-bed for Aerosol, Cloud and Radiation Study in Northern China

Chen, H.B.¹; Xia, X.A.¹; Wang, P.C.¹; Li, Z.Q.²; Lu, D.R.¹

¹Institute of Atmospheric Physics, Chinese Academy of Sciences; ²Department of Meteorological and Oceanic Sciences, University of Maryland

Supercooled Layer Retrievals Method from a Synergy of Ground-based Instruments for Satellite Retrievals Assessment

Dufournet, Y.; Unal, C. M. H.; Russchenberg, H. W. J.
TU DELFT - IRCTR

ICARE Data Centre : A-train Experience for EarthCare Preparation

DESCLOITRES, J.¹; BREON, F.-M.²; LIFERMANN, A.³
¹ICARE; ²CEA/LSCE; ³CNES

Radar-Lidar Synergy for Space-Based Retrievals of Water Cloud Parameters

Krasnov, O; Russchenberg, H
Delft University of Technology

Influence of Saharan Air Layer on Convective Development: The Lagrangian Approach

Horvath, A., Soden, B.
Rosenstiel School of Marine and Atmospheric Science

Posters C – Modelling of Clouds, Aerosols and Radiation

Use of Satellite Observation to Evaluate Cloud and Aerosol Schemes

Chaboureau, J.-P.
UPS/CNRS

Constraints on GCM Parameterizations of the Aerosol Indirect Effect from Multi-Instrument Satellite Data

Quaas, J.; Kinne, S.
Max Planck Institute for Meteorology

Assessing Aerosol-cloud Characteristics from Satellites: An Experimental Plan using the EarthCARE Simulator

Barker, H.¹; Loeb, N.²; Gabriel, P.³; Donovan, D.⁴; Marshak, A.²
¹MSC; ²NASA; ³CSU; ⁴KNMI