2009
EUMETSAT
Meteorological
Satellite
Conference

Bath
United Kingdom
21 - 25 September

Poster Programme
**SESSION 1**

**Future Satellites and Applications**

1. **Meteosat Data Collection System - The past, present and future**
   Burns, Sean - EUMETSAT

2. **A Generic Environment for Calibration and Validation Analysis (GECA)**
   Busswell, Geoff – Logica, UK

3. **Sensitivity analysis of MTG-IRS L2 prototype processor**
   Calbet, Xavier - EUMETSAT

4. **Atmospheric Motion Vector (AMV) products for the future GOES-R Advanced Baseline Imager (ABI): Use of rapid-scan Meteosat-8 imagery to study the effects of target scene size and image temporal resolution on AMV product quality**
   Daniels, Jaime – NOAA/ NESDIS

5. **NPOESS satellites support demanding operational requirements**
   Day, Derrick - Northrop Grumman, USA

6. **NPOESS contributions to climate observations**
   Day, Derrick - Northrop Grumman, USA

7. **NPOESS Environmental Data Record (EDR) production**
   Grant, Kenny – Raytheon, USA

8. **NPOESS interface data processing segment architecture**
   Grant, Kenny – Raytheon, USA

9a. **A comparison between AVHRR, MODIS, and VIIRS**
   Grant, Kenny – Raytheon, USA

9b. **Concepts for future VIIRS enhancements**
   Puschell, Jeffery J. – Raytheon, USA

10. **Earth observation missions to monitor global climate change on Iridium NEXT**
    Gupta, Om P – Iridium Satellite LLC, USA

11. **Comparison of UNET ground-based and TRMM-LIS space-borne lightning observations with respect to MTG-LI**
    Höller, Hartmut – German Aerospace Center (DLR)

12. **In flight calibration of SEVIRI solar channels on board MSG platforms**
    Jolivet, Dominique – HYGEOS, France

13. **The NOAA unique CrIS/ATMS product processing system**
    King, Thomas – Perot Systems Government Services (PSGS), USA

14. **Developing a neural network algorithm to calculate TPW from GPM microwave imagery**
    Martinez, Miguel A. – Agencia Estatal Meteorología (AEMET), Spain

15. **NPOESS benefits McMurdo station, Antarctica**
    Paciarotti, Joseph – Raytheon, USA

16. **International Polar Orbiter Processing Package (IPOPP)**
    Reed, Bonnie - NPOESS Integrated Program Office

17. **A BUFR and GRIB tailoring system for NPP/NPOESS products**
    Song, Yi - I.M. Systems Group, Inc. (IMSG), USA

18. **NPOESS Command, Control, and Communications Segment (C3S)**
    Swaerengen, Joy – Raytheon

19. **NPOESS SafetyNet™ ground system provides low data latency**
    Swaerengen, Joy – Raytheon, USA

20. **A fast radiative transfer model for simulating radiances of the Stratospheric Wind Interferometer for Transport Studies satellite instrument**
    Tumer, David – Environment Canada

21. **Tools and strategies for instrument monitoring**
    Van Hees, Richard - Netherlands Institute for Space Research (SRON)
SESSION 2

Nowcasting

Stereo images using Meteosat 8 and Meteosat 9 data
Asmus Jörg - German Meteorological Service (DWD)

Validation of a daytime overland algorithm for computing convective cloud composites over the Iberian Peninsula and Balearic Islands (Spain)
Azorín-Molina, Cesar - The CEAM Foundation (Fundación Centro de Estudios Ambientales del Mediterráneo)

EUMETSAT Hydrology-SAF: the architecture of precipitation products suite at C.N.M.C.A, the Italian National Weather Centre
Biron, Daniele - Centro Nazionale di Meteorologia e Climatologia Aeronautica, Pratica di Mare, Italy

Automated cumulonimbus and towering cumulus detection based on satellite, radar, and ground-based observations
De Valk, Paul - Royal Netherlands Meteorological Institute (KNMI)

Microphysical and optical characteristics of frontal clouds (modeling of ice crystal transformation)
Dorman, Boris - Ukrainian Research Hydrometeorological Institute

Cross-verification of Meteosat-based thunderstorm nowcasting and in situ reports from the European Severe Weather Database (ESWD)
Forster, Caroline - German Aerospace Center (DLR)

COMETA: A Metadata Combination Framework in support of local nowcasting R&D activities
Giunta, Igor - MeteoSwiss

Towards satellite augmented fog climatology in Finland
Hyvärinen, Otto - Finnish Meteorological Institute (FMI)

The network of EUMETCast stations in Ukraine as a tool for providing real time meteorological data for forecasters
Kryvobok, Oleksiy - Ukrainian Hydrometeorological Institute (tbc)

Verification of global and regional instability indices across South Africa against sounding data
König, Marianne - EUMETSAT

SAF-NWC/MSG cloud products recent enhancements
Le Gleau, Herve - Météo France

Automatic fog detection algorithm with application of dynamic thresholds
Lee, J ung-Rim - Korea Meteorological Administration (KMA)

A new technique for the retrieval of fog/low stratus microphysical properties during night-time with MSG/SEVIRI - theoretical radiative transfer studies using libRadtran
Merk, Comelia - University of Marburg

Satellite data for hazardous phenomena prediction
Petrosyan, Zarmandukht - Amstatehdyromet, Armenia

Verification of satellite-based operational detection techniques of convective clouds
Putsay, Maria - Hungarian Meteorological Service

The use of nowcasting significant weather for the aviation industry over Ethiopia
Soboka, Tadesse - National Meteorological Agency of Ethiopia (NMA)

The impact of wind shear on accuracy of AMV
Sohn, Eun-Ha - Korea Meteorological Administration (KMA)

Contribution of remote sensing and geospatial information to hydro-meteorological risk management in Romania
Stancalie, Gheorghe - Romanian National Meteorological Administration

Using land surface characteristics to help predict convective initiation in the 1-6 hour time-frame
Walker, John - University of Alabama in Huntsville
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Wagner, Thomas - Max Planck Institute for Chemistry

Ozone profile retrieval from IASI thermal infrared radiance measurements
Wassmann, Andreas - Netherlands Institute for Space Research (SRON)

Long-term validation of SCIAMACHY LIMB profiles and total columns of ozone and nitrogen dioxide with other satellite data and ground data
Weber, Mark - University of Bremen

The retrieval of oxygenated volatile organic compounds by remote sensing techniques from space
Wittrock, Folkard - University of Bremen

Quantifying volcanic SO2 emissions using GOME-2 measurements
Wittrock, Folkard - University of Bremen
POSTER PROGRAMME – Poster Session II
WEDNESDAY 23 - THURSDAY 24 SEPTEMBER

Set-up as from Tuesday early evening, 22 September. Dismantling as from Thursday afternoon.

Panel numbers allocated to the posters are indicated below.

SESSION 4

**Land Surface**

1. A simple physically based model of diurnal cycles of land surface temperature
   Goettsche, Frank - Karlsruhe Institute of Technology

2. Validation of land surface temperatures obtained from Meteosat-MVIRI and SEVIRI with in-situ measurements
   Goettsche, Frank - Karlsruhe Institute of Technology

   Hautecoeur, Olivier - Météo-France

4. Merging flat/forest and mountainous snow recognition products for extended European area
   Lahtinen, Panu - Finnish Meteorological Institute (FMI)

5. Towards a global LST from AVHRR/Metop
   Monteiro, Isabel – Portuguese Institute of Meteorology (IM)

6. Preliminary results on the retrieval of Land Surface Temperature from MSG-SEVIRI data in Eastern Spain
   Niclos, Raquel - Fundacion Centro de Estudios Ambientales del Mediterraneo (CEAM, Mediterranean Centre for Environmental Studies)

7. The comparative analysis of RFE, NDVI, Gauge observation and moisture status for the agro met impact assessment for Kriemt season 2008
   Tadasse Jifar, Almaz - National Meteorological Agency of Ethiopia (NMA)

8. Evaluation and improvement of MSG-SEVIRI snowcover algorithm
   Terzago, Silvia - University of Turin

9. Monitoring of land surface temperatures based on SEVIRI/Meteosat-9 measurements
   Uspensky, Serge - SRC Planeta

10. Assessment of thermal conditions in urban areas with use of different satellite data and GIS
    Walawender, Jakub - Institute of Meteorology and Water Management, Krakow, Poland

SESSION 5

**Global Monitoring for Environment and Security Services (GMES)**

11. An integrated fire product for Portugal
    DaCamara, Carlos – University of Lisbon, CGUL, IDL

12. Pioneering the quality strategy for the GMES Atmospheric Service: An enlightening retrospective look at the PROMOTE QA/Val activities
    De Rudder, Anne - Belgian Institute for Space Aeronomy (IASB-BIRA)

13. The MACC Project - Engineering the GMES Atmospheric Core Service
    De Rudder, Anne - Belgian Institute for Space Aeronomy (IASB-BIRA)

14. Geoland2 - Towards an operational GMES Land Monitoring Core Service - Introduction to the Biogeophysical Parameter Core Mapping Service
    Lacaze, Roselyne – HYGEOS

15. Evaluation of GEMS/MACC stratospheric ozone simulations
    Lefever, Karolien - Belgian Institute for Space Aeronomy (IASB-BIRA)

16. Implementation of Water Frame Directive (WFD) 2000/60/EC in Romania-like an environment and security decision
    Popovici, Felicia - National Administration "Romanian Water"
SESSION 6
Monitoring Climate and Understanding Climate Processes with Satellites

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Long term trends in clouds over the continental United States derived from
Calipso and GOES
Alliss, Randall - Northrop Grumman / TASC, USA

18
Observed changes in liquid water path of marine boundary layer clouds
Barber, Claire - Environmental Systems Science Centre, University of Reading, UK

19
Solar radiation estimates using GOES and MSG2 VIS imagery with a simplified physical model
Ceballos, Juan, CPTEC/INPE, Brazil

20
Validation of the ERB High Resolution products
Clerbaux, Nicolas - Royal Meteorological Institute of Belgium (RMIB)

21
5 years of CM-SAF TOA flux products
De Paepe, Bart - Royal Meteorological Institute of Belgium (RMIB)

22
Wavelet analysis of the time series of transmittance and reflectance of an atmospheric column
Deneke, Hartwig - Royal Netherlands Meteorological Institute (KNMI)

23
Development of global cloud climatology from AVHRRs in the CM-SAF framework: First results
Devasthale, Abhay - Swedish Meteorological and Hydrological Institute (SMHI)

24
Validation of vegetation properties in the Met Office HadGEM2-ES earth system model
Doutriaux-Boucher, Marie - Met Office

25
Radiative transfer simulations for the validation of cloud products from MSG
Faure, Françoise - IPA/German Aerospace Centre (DLR)

26
A new approach to the detection and tracking of mesoscale convective systems using the multi-channel SEVIRI sensor on board Meteosat Second Generation
Fioleau, Thomas - Laboratoire de Météorologie Dynamique du CNRS

27
An overview on the operational procedures at the Satellite Application Facility on Climate Monitoring
Fuchs, Petra - German Meteorological Service (DWD)

28
Global climate data based on GNSS radio occultation measurements by the GRAS/METOP instrument
Gleisner, Hans - Danish Meteorological Institute (DMI)

29
Estimating daily sunshine duration over the UK from geostationary satellite observations
Good, Elizabeth - Met Office

30
Estimation and correction of diurnal sampling bias in HIRS radiances using geostationary satellite measurements
John, Viju - Met Office

31
A cloud climatology for the Antarctic peninsula based on AVHRR data
Kirchgaessner, Amelie - British Antarctic Survey

32
Preliminary results of Terra MODIS cloud detection validation with ASTER data
Kotarba, Andrzej - Jagiellonian University, Poland

33
The GRAS SAF project and radio occultation data
Lauritsen, Kent - Danish Meteorological Institute (DMI)

34
Determination of macro-physical cloud properties using GOME-2 measurements
Loyola, Diego - German Aerospace Center/Remote Sensing Technology Institute (DLR-IMF)

35
Improving the representation of the urban heat island in UK climate datasets using satellite and in-situ temperature observations
McCarthy, Mark - Met Office

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Inter-calibration of MTSAT-1R infrared channel with AIRS and IASI
Na, Sunmi - Korea Meteorological Administration (KMA)

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**SESSION 7**

**Hyperspectral sounding**

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| 48   | IASI L2 NRT product quality monitoring at EUMETSAT                        | Fiedler, Lars - EUMETSAT                                                                     |
| 49   | Radiometric and spectral performance characteristics of the CrIS flight model 1 | Glumb, Ronald - ITT Space Systems Division, USA                                               |
| 50   | An investigation into the performance of retrievals of temperature and humidity from IASI | Hilton, Fiona - Met Office                                                                    |

**SESSION 8**

**Numerical Weather Prediction applications**

| 51   | Recent advances in FPGA-based satellite data compression               | Huang, Bormin - University of Wisconsin-Madison                                                |
| 52   | Impact of spectral resolution and extent on remote sensing system information content Larar, Allen - NASA Langley Research Center |
| 53   | Initial IASI radiance assimilation experiments in the NASA global data assimilation system Liu, Emily (Huichun) - NASA Goddard Space Flight Center (GSC) |
| 54   | Assimilation of satellite data in the framework of the Concordiasi campaign Pangaud, Thomas - Météo-France |
| 55   | Towards the assimilation of infrared sounding radiances over land      | Pavelin, Edward - Met Office                                                                  |
| 56   | CrIS radiance Spectra/SDR end-to-end error modeling and assessment    | Pougatchev, Nikita - Space Dynamics Laboratory, USA                                            |
| 57   | Pre-launch instrument line shape and spectral characterization of the NPOESS CrIS FM1 instrument | Predina, Joe - ITT Space Systems Division, USA                                                |
| 58   | Global study of AIRS/MODIS cloud-clearing                             | Zhang, Hong - University of Wisconsin-Madison                                                  |
| 59   | Rapid production of global surface emissivity with satellite IR ultraspectral measurements Zhou, Daniel K. - NASA Langley Research Center |
| 60   | Verification of the Zambia rainfall seasonal forecasts using meteorological products from Meteosat | Aikayo, Ndui - Zambian Meteorological Department                                              |
| 61   | A regional OSSE for evaluating the potential impacts of ATMS/CrIS    | Anantharaj, Valentine - Mississippi State University                                           |
| 62   | AAPP enhancements for the EARS-IASI service                            | Atkinson, Nigel - Met Office                                                                  |
What can we learn from the NWP SAF atmospheric motion vector monitoring?
Forsythe, Mary - Met Office

Assimilation of observations in the boundary layer of the Met Office's NWP data assimilation system
Grey, William - Met Office

The impact of atmospheric motion vectors on the Northwest-Pacific tropical cyclone track forecasts
Ha, Hyegeyeong - Korea Meteorological Administration (KMA)

Use of Kalpana data
Kelly, Graeme - Met Office

Improved use of surface-sensitive microwave radiances over land and ECMWF
Krzeminski, Blazej - ECMWF

The Radio Occultation Processing Package (ROPP)
Lewis, Huw - Met Office

Assimilation of FY3A/VAS satellite data in GRAPES
Lu, Quifeng - National Satellite Meteorological Center, Chinese Meteorological Administration (NSMC/CMA)

Assimilating FY-3A MWRI+VIRR window channel data into Chinese land data assimilation system
Lu, Quifeng - National Satellite Meteorological Center, Chinese Meteorological Administration (NSMC/CMA)

NWP SAF software packages for high-resolution infrared sounder data
McNally, Anthony - ECMWF

How well do high resolution numerical models reproduce tropical convection?
Pearson, Kevin - University of Reading

Using satellite-derived snow cover data to implement a snow analysis in the Met Office global NWP model
Pullen, Samantha - Met Office

Impact of the IASI data on forecasting polar lows
Randriamampianina, Roger - Norwegian Meteorological Institute (DNMI)

Techniques for assimilating cloudy SEVIRI radiances into high-resolution Met Office NWP models
Tubbs, Robert - Met Office

Recent developments in the SeaWinds Data Processor
Vogelzang, J ur - Royal Netherlands Meteorological Institute (KNMI)