

Remote sensing of atmospheric aerosol, clouds, and aerosol-cloud interactions

16-19 December 2013

Haus der Wissenschaft, Sandstrasse 4, 28195 Bremen

<http://www.hausderwissenschaft.de/>

scientific organizing committee

Alexander A. Kokhanovsky, Johannes Quaas, Gerrit de Leeuw, Stefan Kinne

ground-based aerosol remote sensing

Fan Comparison of column-integrated aerosol optical and physical properties in Beijing and Xianghe

Mazzola Development of first moon photometric measurements in Arctic stations

satellite retrievals of aerosol

Duan Simultaneous retrieval of aerosol optical depth and surface albedo over land: a cloud shadow method

Kolmonen AATSR dual view algorithm: current status and applications

Lang Retrieval of aerosol properties from cloudy scenes using METOP

Penning de Vries Combining SCIAMACHY limb and nadir aerosol measurements: sulfate aerosols from Nabro volcano

Povey A joint aerosol and sea surface temperature retrieval from AATSR

- Sayer** Recent developments in NASA 'Deep Blue' aerosol datasets
- Sogocheva (de Leeuw)** Lessons learned from 3 years ESA Climate Change Initiative on improving aerosol retrieval algorithms
- Stap** Aerosol retrievals in partially cloudy scenes
- Thomas** The Oxford-RAL aerosol/cloud algorithm for (A)ATSR and SEVIRI
- Xue** The algorithm developments of multi-scale aerosol remote sensing in China

recent aerosol trends

- Yoon** Changes in atmospheric AOT retrieved from MODIS, MISR and SeaWiFS during the past decade

aerosol direct (radiative) effects

- Arola** Estimate of the radiative effect of brown carbon using AERONET products
- Doppler** Direct radiative impact of aerosol above clouds
- Kinne** Simplifying the aerosol representation in global modeling to address aerosol direct and indirect radiative effects
- Sundström** On the use of satellite remote sensing to determine aerosol direct radiative effect over land: a case study over China
- Tomasi** Direct aerosol radiative effects

satellite retrievals of cloud properties

Hollmann European Cloud CCI Project

Lelli Oxygen A-band spectrometry of cloud fields: recent advances

Grosvenor The effect of solar zenith angle on MODIS cloud microphysical retrievals

Sihler 3D radiative transfer in clouds

aerosol interactions and indirect effects

Chang A global modeling study on aerosol cloud interactions with the chemistry climate model EMAC

Costantino Satellite analysis of aerosol direct and indirect effect on stratocumulus clouds over South-East Atlantic

Devasthale The large-scale changes in cloud top temperatures over Europe: a possible link to aerosol effect on cloud height

Neubauer The representation of stratocumulus clouds and anthropogenic aerosol effect

Quaas A review on approaches to observe the anthropogenic aerosol indirect effect

Rosenfeld Remote sensing of aerosol interactions with marine stratocumulus: cloud radiative effects or forcing?

Wagner Investigation of trace gas to aerosol relationships over biomass burning areas using daily satellite observations

new concepts in satellite remote sensing

- Breon** The use of directional and polarized signatures in the reflectances for aerosol and cloud monitoring
- Davis** Aerosol and cloud remote sensing using AerMSPI
- Di Noia** Polarimetric aerosol remote sensing using neural networks
- Hasekamp** Polarimetric remote sensing of atmospheric aerosols: POLDER and beyond
- Litvinov** Optimization of aerosol retrieval from space: achievements and limitations
- Marbach** The multi-viewing -channel -polarization imaging (3MI) mission of the EUMETSAT Polar System Second Generation (EPS-SG) dedicated to aerosol
- Sano** Aerosol observations using the S-GLI sensor