

AeroCom

workshop at Ispra/Italy March 10-12, 2004

hosted by JRC/IES

program preparation

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Objective

The goals of this workshop are to examine initial results of the AeroCom activities, to discuss current critical issues (for modeling and for model evaluations) and to define the strategy of AeroCom for the near and extended future. This will also include the role of AeroCom in the upcoming IPCC report.

Preparatory Material

We encourage the participants to look at the work-in-progress web interface to the AEROCOM results:

<http://nansen.ipsl.jussieu.fr/AEROCOM/DATA/surfobs.html>

http://nansen.ipsl.jussieu.fr/AEROCOM/DATA/aerocom_work.html

(note: access to these interfaces requires 'user' **aerocom** and 'password' **aerocom03**)

On these web-sites you will be directed to plots of simulated fields and lists of budgets or global averages. In addition, comparisons to data in form of time-series and scatter-plots are provided. To better navigate through the different choices, just recently Michael has added several overview tables.

Only a limited number of comparisons can be visualized at a particular time via that standardized web- interface. Thus, we will distribute (by email) to all (model-) participants synthesizing graphs and material a few days before the workshop, so that you will be better prepared to comment on your model. We will provide the opportunity to discuss your model performance prior to workshop (in the morning of March 10) if you arrive early.

Workshop Format

The workshop will feature several 'blocks' with a couple a key-speakers followed by an extended discussion section. If you were not approached to give a presentation, it does not mean that we do not value your efforts or results. In fact, we strongly encourage all participants to bring any relevant and interesting material. During the discussion sessions, there will be opportunities to illustrate relevant results and ideas (power-point format or overhead slide is preferred).

Agenda

Block 0 *Wednesday 10 March AM 10:00-12:00:* Chairs: Guibert / Textor

Analysis of results

- Textor: introduction on completed comparisons
- Guibert: introduction to the web-based analysis tool
(only for participants/groups who have already submitted data & have arrived)

12:30-13:30 lunch at the Ispra cafeteria

Opening Remarks

Block 1 *Wednesday 10 March PM 14:00-18:00* Chairs: Textor / Schulz

AeroCom first results

- Textor: first analysis in component modeling
- Guibert : first comparisons to groundbased data
- Schulz: statistical approaches to quantify model performance
- Kinne: on the use of satellite data in model evaluations

- discussion

19:00 ...optional get-together in Ancera in arestaurant

Block 2 *Thursday 11 March AM 9:00-12:00* Chairs: Wilson / Kinne

Data

- aerosol ground

- Wilson / Kinne: briefing on the 'aot' DAVOS workshop
- Putaud (van Dingenen): Climatology of size distribution data
- Wilson: in-situ optical properties

- aerosol satellite

- Kaufman: MODIS - use of fine fraction towards anthropogenic contributions
- Kahn: MISR - quality and capabilities beyond aot
- Pinnock: ESA – Earth Observing Program

- hydrological cycle

- Lang: water vapor data from space (with GOME)

- Kinne: cloud (and aerosol) satellite data
- Feijt: cloud (and aerosol) ground data (at Cabauw, NL)

- discussion

12:30-13:30 lunch at the Ispra cafeteria

Block 3 *Thursday 11 March PM 14:00-17:00* Chair: Dentener

Modeling

- sources

- Dentener: prescribed sources (yr 2000)
- Gong: sea-salt emissions
- Van der Werf: biomass burning emissions
- Kupianinen: BC/OC emissions (co-authored by Tami Bond Janusz Cofala)

- issues

- Carslaw: "Aerosol size distributions in a bin-resolving global aerosol model"
- De Meij : Aerosol water
- Iverson: modeling convection
- Chin: aerosol absorption and intercontinental transport

- discussion

19:00 – 21:00 workshop dinner

Block 4 *Friday AM 9:00-12:00* Chair: Schulz

Future Activities

- AeroCom work-up

- Schulz: Phase (A)-B and beyond

- data assimilation

- Fillmore: MODIS and modeling with NCAR Match

- indirect effect

- Takemura : Simulations of the aerosol indirect effect
- Quaas: Aerosol indirect effect in satellite observations and the LMDZ
- Menon: modeling the indirect aerosol effect

- discussion

12:30-13:15 (short!) lunch at the Ispra cafeteria

Block 5 *Friday PM 13:45-15:45*

Chair: Boucher

IPCC

- Boucher: What is expected from IPCC+RF estimates from POLDER and LMDZ
- Kaufman: Assessment of ‘measured’ aerosol radiative forcing at ToA and surface
- Takemura: Japanese efforts on (aerosol) climate change research for IPCC AR4

discussion

Block 6 *Friday PM 16:00-17:00*

Chair: Schulz / Kinne

Summary

- assign tasks
- set near-term goals (publication, PR, funding)
- next meeting

Participant list

Arnout Feijt / KNMI / NL
Bas Henzing / KNMI / NL
Christiane Textor / LSCE / F
David Fillmore / NCAR / USA
Dorothy Koch / GISS / USA
Eric De Meij / JRC / I
Frank Dentener / JRC / I
Frank Raes / JRC / I
Glenn Lesins / Dalhousie Univ. / CAN
Guido van der Werf / NASA / USA
Gunnar Myhre / Univ of Oslo / N
Hans Feichter / MPI_Met / D
Ina Tegen / MPI-Biogeochem / D
Johannes Hendricks / DLR / D
Johannes Quaas / LMD / F
Jon Egill Kristjansson / Univ of Oslo / N
Joyce Penner / UMI / USA
Julian Wilson / JRC / I
Kirsty Pringle / Univ Leeds / UK
Mian Chin / NASA / USA
Michael Schulz / LSCE / F
Olivier Boucher / LOA / F
Oyvind Seland / Univ of Oslo / N
Ralph Kahn / JPL / USA
Rita v.Dingenen / JRC / I
Ruediger Lang / MPI-Chemie / D
Sarah Guibert / LSCE / F
Stefan Kinne / MPI-Met / D
Simon Pinnok / ESRIN / I
Sunling Gong / Met Service Canada / CAN
Surabi Menon / NASA / USA
Sylvia Generoso / LSCE / F
Toshihiko Takemura / Kyushu Univ. / JP
Trond Iversen / Univ of Oslo / N
Veronica Montanaro / Univ. Aquila / I
Yoram Kaufman / NASA / USA