11th AeroCom workshop Final remarks

Michael Schulz; Stefan Kinne; Mian Chin

AeroCom Infrastructure

- Database quality check (Michael, Bjorn, Nick, Mian, Jan, Stefan)
- Regular working group updates via aerocommodeller email list (request to "report" will come)
- CF checker for new upload of data
- wcs and/or opendap server to link wih interactive extraction tools
- ACP special issue to combine previous and new AeroCom papers

Consolidating phase II

- Prescribed forcing Experiment !!!!
- Last minute forcing fields => 1 November
 3D cloud fields, cod, cloud fraction, lwc
- Combining Forcing, prescribed forcing, and other model insight , *Gunnar, Philip, Bjorn*
- Hindcast dataset, extending up to 2010? ++ PNNL, GeosCHEM-APM, ECHAM-HAM, OsloCTM, +?? *Mian* More evaluation of trends???
- BC surface absorption and EC in Europe
 Michael&Elisabetta

... extension to Improve, trends, extinction?

Consolidating phase II

- AeroCom overview paper for BAMS (Michael, Stefan, Mian & Gunnar et al)
- Aeronet & satellite data evaluation (*Michael&Stefan*)
- Sulfate evaluation (*Cathrine Myhre, Wenche Aas*, NILU)
- Caliop II (*Brigitte, Francois-Marie, Dave*) link to HSRL data ?? Rich
- Size evaluation *Graham* et al.

Indirect effect evaluation

- Proposed experiments shall be sent to Steve
- Common diagnostics proposal by <u>Steve</u> with Susanne, Trude, Philip, Yi, Joyce, Xiahong, Stefan, Johannes Based on AeroCom, ACCMIP, CMIP5, COSP simulators; which temporal resolution? preprocessing during model run?
- Naming of experiments proposal
- Which data testbeds can be developed? Vocals, South Atlantic?

Open subjects (I)

- Nitrate and Ammonium evaluation (Didier Hauglustaine, Huisheng Bian, ++)
- All-sky-clear-sky RH growth recommendations and clarifications Kai, Alf, Mian, Michael
- Biomass burning height 2008 experiments? MISR injection heights, Maria, Mikael Sofiev
- Dust transport out of N-Africa (Dongchul Kim)
- Dust source revision, Anthropogenic dust, Paul, Yves
- Emulators for other problems and models?

Open subjects (II)

- BC deposition on snow, Mark Flanner
- BCMMR profiles vs HIPPO Shuka Schwarz
- BCMMR profiles vs AFORCE, Yutaka Kondo
- Consistent BC global distribution?
- Secondary organic aerosol constraints, recommendations for modelling
- Parameterization of marine POC

Open subjects (III)

- Shall we explore future scenario with higher aerosol loads? Is that done in HTAP?
- Preindustrial aerosol emission estimates and implications for forcing Can we construct a preindustrial emission dataset consistent with ice core data Simulations of preindustrial transport to arctic and antarctic?

Open subjects (IV)

- Climate model response to idealized aerosol forcing fields (direct+indirect) Hemispheric aerosol effect on shift in precip, Monsoon, Range of response for SLCF, detection of aerosol effect in historic simulations
 - Michael, Philip, Nick, Björn, Sandrine, Drew,
 Nicolas ++

Recommendations for model development

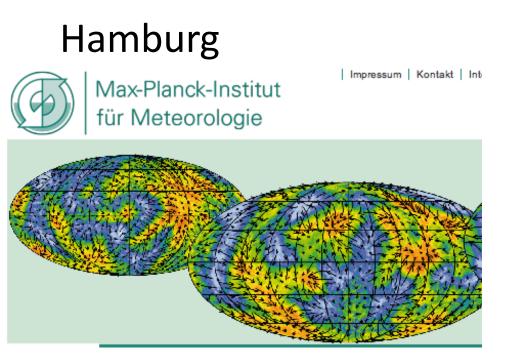
- Secondary aerosol and nitrate should be included in model
- Include all AeroCom diagnostics as standard option
- Clarify all-sky and clear-sky AOD calculation

12th AeroCom workshop

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12th AeroCom workshop

10 years AeroCom end of Sept 2013



Including the AOD prediction contest Model, Satellite, Expert Versus Microtops measurement



Oslo