

HAMMOZ workshop 2014

27-28 March, Oriel College, University of Oxford

Programme

Location: Harris Lecture Theatre, Oriel College, Oxford

Thursday, 27 March

Status

12:50 Philip Stier (Oxford): Welcome and logistics

13:00 Ulrike Lohmann (ETH Zürich): Overview and roadmap

13:15 Hauke Schmidt (MPI Hamburg): Status of ECHAM6

13:30 Isabelle Bey (ETH Zürich): Status of ECHAM6-HAM

13:45 Martin Schultz (Jülich): Status of HAMMOZ

14:00 Nick Schutzgens (Oxford): An evaluation of ECHAM6-HAM2 against remote sensing and in-situ measurements – the importance of co-location

14:15 Discussion

Emissions

14:30 Bernd Heinold (TROPOS Leipzig): Improvements in the Representation of Saharan Dust Emission in ECHAM6-HAM

14:45 Andreas Veira (MPI Hamburg): Advanced parameterizations of Fire Emission Heights in ECHAM6-HAM2: Requirements and Potential Benefits in the current release of HAM2

15:00 Coffee break (Harris Seminar Room)

15:30 Alexandra-Jane Henrot (Jülich): Modelling biogenic volatile organic compound emissions with ECHAM-HAMMOZ and MEGAN models.

15:45 Tomi Bergman (FMI Kuopio): The Process Based Emission Model of Isoprene and Monoterpene within ECHAM6-HAMMOZ

16:00 Tanja Stanelle (ETH Zürich): Impact of anthropogenic land cover changes on SOA and dust burden

16:15 Discussion

Aerosol microphysics, forcing and climate impact

16:30 Harri Kokkola (FMI Kuopio): The sectional aerosol microphysics module SALSA in ECHAM6.1-HAM2.2

16:45 Natalie Weigum (Oxford): Scales of spatial variability of black carbon aerosol plumes and its dependence on the resolution of ECHAM-HAM.

17:00 Nicolas Bellouin (Invited, Reading): Aerosol radiative forcing: uncertainties and fast adjustments

17:15 Muhammad Kaleem (Bonn): The direct effect of aerosols over decadal time scales

17:30 Johannes Quaas (Leipzig): The climate impact of reductions in black carbon and co-emitted aerosol species.

17:45 Thomas Kühn (FMI Kuopio): The climate impact of asian aerosols

18:00 Drinks (Senior Common Room)

19:00 Dinner (Hall)

Friday, 28 March

Aerosol-cloud interactions

9:00 Ulrike Lohmann (ETH Zürich): Importance of a ECHAM-generated 3D CCN climatology vs. full aerosol microphysics for the anthropogenic aerosol effect

9:15 Daniel Partridge (Oxford): Cloud Droplet Activation Parameterizations: Importance for aerosol indirect estimates in two GCMs

9:30 David Neubauer (ETH Zürich): Boundary layer clouds and the anthropogenic aerosol effect

9:45 Johannes Muelmenstaedt (Leipzig): An investigation of the aerosol-mediated regime change between open- and closed-cell stratocumulus over the subtropical oceans in ECHAM-HAM

10:00 Zak Kipling (Oxford): Using the Convective Cloud Field Model (CCFM) to investigate aerosol- convection interactions in ECHAM6-HAM.

10:15 Philip Stier (Oxford): Are remote-sensing retrieved aerosol radiative properties a suitable proxy for cloud condensation nuclei?

10:30 Discussion

10:45 Coffee break

Technical Notes

11:15 Sabine Schoeder (Jülich): Notes on compiling and error checking

11:30 Sylvaine Ferrachat (ETH Zurich): Running and Developing HAMMOZ: Rules, Advices and Community Recommendations

11:45 Discussion

12:00 Lunch (incl. SSC meeting)

Chemistry

13:30 *Martin Schultz (Jülich)*: Development status of gas-phase chemistry in HAMMOZ

13:45 *Sebastian Wahl (Geomar Kiel)*: Overview of modelling activities at GEOMAR with focus on atmosphere chemistry

14:00 *Discussion*

Stratospheric aerosol and geoengineering

14:15 *Hauke Schmidt (MPI Hamburg)*: Applications of the stratospheric version of ECHAM-HAMMOZ?

14:30 *Suvarna Fadnavis (Tropmet)*: The transport of aerosols in the upper troposphere and lower stratosphere during the Asian Summer Monsoon.

14:45 *Scott Osprey (Oxford)*: Climate impacts following the injection of aerosol into the tropical stratosphere

15:00 *Blaz Gasparini (ETH Zürich)*: The efficiency and climate responses of stratospheric sulphur injections in the Arctic

15:15 *Discussion*

15:30 *Coffee*

16:00 *End of meeting*

All information on https://redmine.hammoz.ethz.ch/projects/hammoz/wiki/2014_workshop