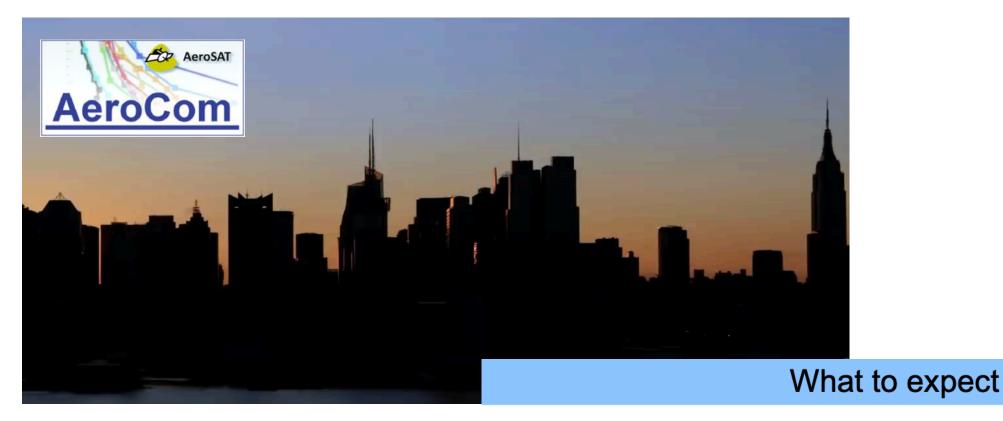
AeroCom / Aerosat 2020 /// New York City



- · Very easy access with direct flights from almost everywhere in the world.
- Block booking at a hotel, with discounted rates.
- · Great meeting facilities, eduroam.
- 24-hour subway service (the city that never sleeps).
- Excursion and conference dinner.
- Potential of science visits (CU, Lamont, GISS*).
- The usual AeroCom family!

fact checker:: AeroCom / Aerosat 2020 /// virtual



- Webex
 - latest technical info (send by email) and program (send by email and on web)
- 5 hours per day in all time zones (for early and late birds)
- With an attempt to better integrate AeroCom-Aerosat
- Scientific exchange across groups and generations is probably suffering from the format
 - ⇒lets use the tools to overcome that as best as possible
- Experimental format (feedback welcome)

Acknowledgment

AeroCom SSC: Mian Chin, Stefan Kinne, Kostas Tsigaridis, Bjørn Samset, Gunnar Myhre, Duncan Watson-Parris, Michael Schulz

Aerosat SSC: Thomas Popp, Ralph Kahn, Andrew Sayer, Larisa Sogacheva

AeroCom/Aerosat 2020 Presentation collection and organization: Stefan Kinne

Host 2020 and Webex: Mian Chin, Tom Kucsera, Jeff Herring, Tyeisha Philson, Kostas Tsigaridis

WG leads as on AeroCom wiki: Bjørn Samset, Wenying Su, Nick Schutgens, Betsy Andrews, Gunnar Myhre, Paul Ginoux, Dongchul Kim, Mian Chin, Duncan Watson-Parris, Huisheng Bian, Florent Malavelle, Daniel Partridge, Lindsay Lee, Xiaohua Pan, Jonas Gliss /Augustin Mortier /Michael Schulz

Website and interfaces, AeroCom user server, email list, wiki, AeroCom database, pyaerocom: Anna Benedictow, Jonas Gliss, Augustin Mortier, Jan Griesfeller

And all Moderators and Rapporteurs for AeroCom-Aerosat 2020

Status of AeroCom infrastucture

- AeroCom database and server up and running (45 TB of model data, 280 registered users)
- AeroCom web interfaces provide quicklook, in particular Gliss et al ACPD 2020, AP3-Ctrl 2019
 - Old:: https://aerocom.met.no/cgi-bin/surfobs_annualrs.pl?PROJECT=AEROCOM&MODELLIST=Phase-III-CTRL
 - New:: https://aerocom-evaluation.met.no//main.php?project=aerocom#
- Google sheet questionaries filled in by modelers have proven very useful (Gliss, Schutgens...)
- First attempts to transfer aerocom.met.no to a drupal based new website (combining, wiki, website, interfaces..)

Joint Publications AeroCom/AerChemMIP/RFMIP 2019/2020 very effective way to sort out science

Google scholar search with "aerocom aerosol" reveals for 2019+2020 => 815 articles

AeroCom models

Kim et al, Asian and Trans-Pacific Dust: A Multimodel and Multiremote Sensing Observation Analysis, JGR Atm, 2019

Myhre et al. Cloudy-sky contributions to the direct aerosol effect, ACP, 2020

Schutgens et al. An AeroCom/AeroSat study: Intercomparison of Satellite AOD Datasets for Aerosol Model Evaluation, ACP, 2020

Gliss et al. Multi-model evaluation of aerosol optical properties in the AeroCom phase III Control experiment, using ground and space based columnar

observations from AERONET, MODIS, AATSR and a merged satellite product as well as surface in-situ observations from GAW sites, ACPD, 2020

Burgos et al. A global model-measurement evaluation of particle light scattering coefficients at elevated relative humidity, ACP, 2020

Laj et al, A global analysis of climate-relevant aerosol properties retrieved from the network of Global Atmosphere Watch (GAW) near-surface observatories

AMT 2020

Aerocom & CMIP6 models

Bellouin et al, Bounding Global Aerosol Radiative Forcing of Climate Change Rev GeoPhys, 2019

Mortier et al. Evaluation of climate model aerosol trends with ground-based observations over the last two decades – an AeroCom and CMIP6 analysis, ACP, 2020

Gryspeerdt et al. Surprising similarities in model and observational aerosol radiative forcing estimates, ACP 2020

CMIP6 models

Smith et al. Effective radiative forcing and adjustments in CMIP6 models , ACP, 2020

Thornhill et al. Climate-driven chemistry and aerosol feedbacks in CMIP6 Earth system models, ACP, 2020

Thornhill et al. Effective Radiative forcing from emissions of reactive gases and aerosols – a multimodel comparison, ACP, 2020

Moseid et al. Bias in CMIP6 models compared to observed regional dimming and brightening trends (1961–2014), ACP, 2020

Allen et al. Climate and air quality impacts due to mitigation of non-methane near-term climate forcers, ACP, 2020

Zanis et al. Fast responses on pre-industrial climate from present-day aerosols in a CMIP6 multi-model study, ACP, 2020

Wilcox et al. Accelerated increases in global and Asian summer monsoon precipitation from future aerosol reductions, ACP, 2020

Turnock et al. Historical and future changes in air pollutants from CMIP6 models , ACP, 2020

Looking back at Barcelona 2019 - what was achieved, what was not achieved?

- Enlarged AeroCom and Aerosat Scientific Steering Committees and regular SSC meetings
- Next workshop planning with an attempt of more integration AeroCom Aerosat
- Special telecon and coordination of joint papers before IPCC 2019 deadline
- A suite of papers submitted by end of 2019
- Updated AeroCom P3 control experiment database and associated paper(s)
- AeroCom and CMIP6 model versions are more comparable
- AeroCom median and mean fields are available as reference (ask Jonas Gliss)
- New aerosol forcing estimates available (mainly through RFMIP and AerChemMIP)
- Aerosat merged AOD dataset was used to evaluate the AeroCom phase III CTRL

Looking back at Barcelona 2019 - what was achieved, what was not achieved?

- Website renovation
- More consistent evaluation of AeroCom and CMIP6 models together (trends, concentration, optical properties, loads, forcing, etc)
- PD+PI CTRL was not analysed
- Provide recommendations for modelling of the global aerosol
- Some projects have not been finished...
- Implement CO50 transport tracer, Pb210 tracer, land source tracers
- Benchmark dataset list?
- Dust-Aerosat provide synthesized dust dataset ?
- Clear sky All sky finding a common ground/approach
- Aerosol simulator for proper comparison between model and satellite data

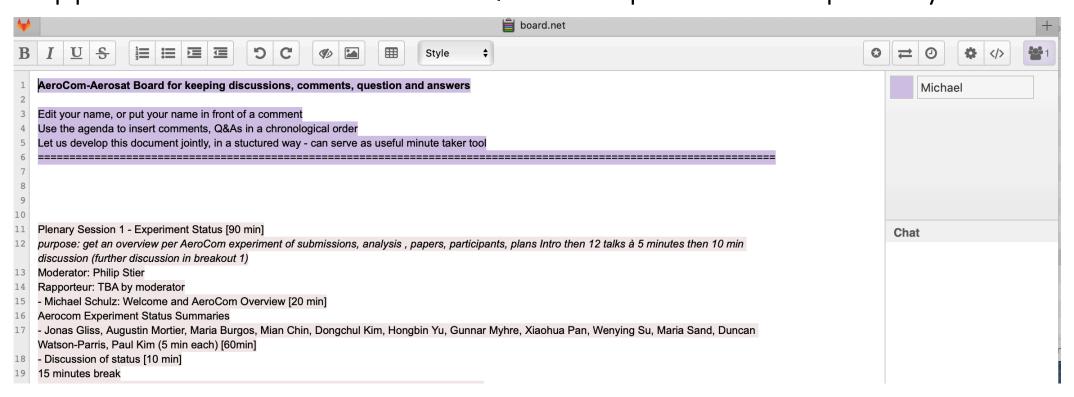
Functioning of virtual AeroCom Aerosat workshop

- See the technical info pdf
- Keep the time!
- Moderators are asked to share screen, presenters say "next" slide or agree with Moderator on any other procedure
- All presenters, moderators, rapporteurs are panelists for the week, other participansts need to contact host to say something; use webex chat to ask for oral intervention
- Keep all discussion and Q&A in board.net in a structured way
- Clarify things and Ask for technical help in board.net (see link in technical info pdf)

Commenting-Questions-Answers please use board.net links given in technical info pdf

One board.net document per day

Moderators and Rapporteurs are asked to monitor board.net Rapporteurs shall summarise Q&A to report back to plenary on friday



Technical problems: Use specific board.net document for help, "we" will have an eye on that.

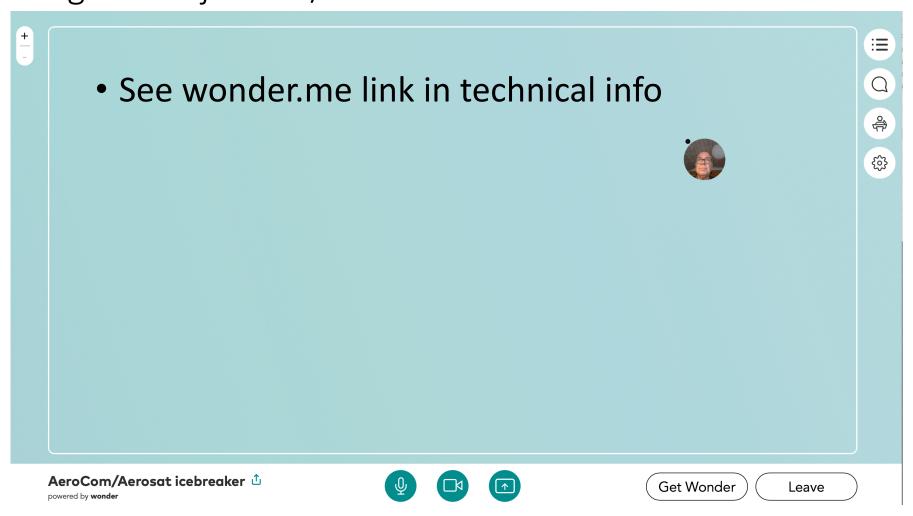
Online-audi-oral-live Discussion

WEBEX: Make sure the host has made you a panelist, if you want to comment orally, ask host in cas of doubt All presenters should be panelist already..

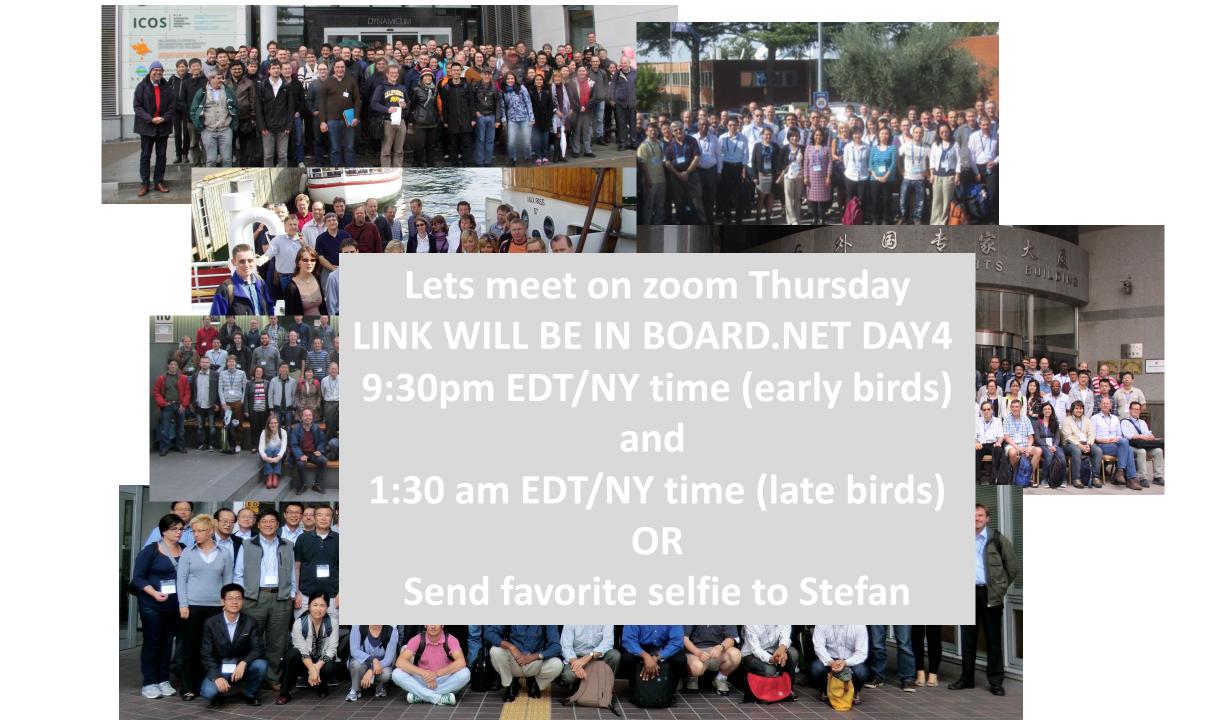
WEBEX CHAT: Put an exclamation point in the webex chat, if you want to speak up Then the moderator/rapporteur will give you the word (depending on time)

Other Discussions and Q&A: use board.net, last slide

Virtual Icebreaker Wednesday 2pm New York time (note, it's also open on other days, lets say at the same time) meet up by moving your avatar with the cursor to your old/young colleague and join his/her bubble







Have a good workshop