

Participant Call April 8, 2021

Participants: Paul Makar, Donna Schwede, Christian Hogrefe, Rohit Mathur, Jesse Bash, Ummugulsum Alyuz Ozdemir, Richard Kranenburg, Stefano Galmarini, Chris Holmes, Saurabh Kumar, Jon Pleim, Roberto San Jose, Ralf Wolke, Olivia Clifton

- Grid intercomparison (Activity 1)
 - Participant updates on postprocessing and data upload
 - After the last call, Stefano reached out to five groups who have not been able to participate in recent calls to ask about the status of their simulations and to inform them that the deadline for uploading data has been set for the beginning of June. These groups were Helmholtz (Johannes B.), NCAR (Alma), TROPOS (Ralf), University of Hertfordshire (Ranjeet), and CIEMAT (Marta). Christian participated in a subsequent call with the University of Hertfordshire group to provide guidance on CMAQ simulations for the EU domain and later shared tools and scripts used for the EPA NA domain simulations. No response was received from the other four groups, but a colleague of Ralf Wolke reached out to Roberto Bianconi and Stefano with an informal question
 - Paul focused on the technical note, all runs are done, postprocessed, and uploaded (for the grid cases).
 - Stefano will meet with Iannis on April 9 to develop a strategy for the collective analysis, please share suggestions with Stefano
 - Separate analysis between gridded (model-to-model) and receptor (model evaluation)?
 - Stefano will introduce Iannis to the setup of the data (what's available, how is it organized, etc.)
 - Will follow up during the next call
 - Christian / EPA group: no new analysis over the last month, tested new receptor processing tool (see below)
 - Ummugulsum: University of Hertfordshire will run WRF-CMAQ and WRF/Chem. Started WRF. Question on which analysis fields to use for met runs – ECMWF? Answer: the choice is up to individual groups. Will update Stefano and Christian via email with an estimate on the timing of data delivery
 - Richard: No updates since last time. Still working on post-processing the resistances and conductances. Will upload when ready
 - Roberto: Preparing new scripts and programs to extract WRF/Chem outputs. Finished estimating PM variables, LU specific resistances and conductances, now testing wet and dry deposition fluxes, then will start "production" post-processing. Expect several weeks to complete this process.
 - Ralf: Wolfram Schroeder has started to upload the data to the JRC ftp site. Starting with concentrations and meteorology. Working on resistances and conductances now, working through the documentation in COSMOS and MUSCAT. Expect to complete the data upload by the end of May. Will not participate in the point intercomparison (activity 2).
 - Preparation of receptor processing tool:

- Roberto Bianconi has developed a prototype of the first module of a new processing tool suite. The suite consists of two modules to pair data from already generated gridded ensemble format files with observations at a list of stations. Initial testing of the prototype has been performed by Christian and the code has been revised based on testing feedback. Roberto is now working on the second module that will be used to compute model performance metrics. Once finalized, this new code will be shared with participants, along with documentation.
- Point intercomparison (Activity 2)
 - Last call March 31, notes have been posted to the github site
 - Discussed performing sensitivity analysis not just for ozone but also other trace gases and potentially aerosols. Currently still considering whether or not aerosols should be included
 - Olivia is currently working on the technical note to get it ready for the steering committee. Need to resolve whether aerosol analysis will be included in Activity 2 since it would require some specific additions to the technical note. Also, currently there is some "imbalance" in the level of detail with which different observation sites are described, but the thinking is that this can be resolved once the note is shared with the observationalists.
 - Should multi-year means be calculated for sites with < 3 years of data (Auchencorth Moss, Bugacpuszta, Ramat Hanadiv)? Group provided feedback - keep means, but modify to convey information on how many years were used for the multi-year mean at a given site.
 - Keep focus of the evaluation discussion on O3 even though SO2 observations are available at one site
- Technical notes
 - The SI editors - Joshua Fu and Alex Guenther - have finalized their guidance on the submission of these technical notes and now agree that they indeed should be submitted as "technical note" rather than "overview paper".
 - Activity 1 technical note. EPA and ECCC internal reviewer comments received and addressed. Paul revised diagrams for consistency and clarity. Stefano and Christian will finalize the latest version and submit.
 - Point intercomparison / Activity 2 technical note: See above summary in Activity 2 discussion
- Upcoming meetings:
 - NADP May 11 meeting - overview of AQMEII4, Paul was asked to give a presentation. Meeting website: <http://nadp.slh.wisc.edu/meetings/spring2021/>
 - The 38th International Technical Meeting on Air Pollution Modelling and its Application (ITM) is scheduled to take place 18 – 22 October 2021 in Barcelona, Spain. Abstracts deadline extended to April 15, 2021. Website says in-person expected, but no guarantees. Meeting website: <https://itm2021.vito.be/en>
 - MAC-MAQ September 15-17, UC Davis. Hybrid format. Call for abstracts now open: <https://macmaq.agrc.ucdavis.edu/>
- Next call May 6, 9:00 EDST / 15:00 CEST