

Participant Call September 17, 2020

Participants: Rohit Mathur, Jesse Bash, Aura Lupascu, Christian Hogrefe, Paul Makar, Jon Pleim, Olivia Clifton

- Activity 1
 - Revisions to enform code, TSDs, and metafiles
 - Computer access issues for Roberto Bianconi have been resolved over the past week and work is starting to finalize the TSDs and metafiles
 - Updates will be sent as new information becomes available
 - Reminders:
 - The enform Fortran code has already been finalized:
https://github.com/AQMEII4/enform_aqmeii4, can test with existing zip files for meta files and TSDs posted <https://github.com/AQMEII4/Activity-1-AQMEII-style-runs>
 - Groups ready to start post-processing their model outputs can contact Stefano to obtain a model code to be used for enform and enform_aqr postprocessing, but see bullet above about expected updates to the enform code and some TSDs and src files
 - Access to the JRC ftp site for data upload will be provided by Stefano later
 - Participant status updates and questions
 - Aura: no updates since August; noted that the maximum grid dimensions for enform_aq need to be increased to at least 721 x 361 to process the EU domain. The current maximum values were set to accommodate the somewhat smaller NA domain. After the call, Christian followed up and issued a github pull request with this change. Roberto Bianconi reviewed the change and merged it into the main branch so that the change is included for anyone obtaining the enform code from the link above. The revised larger maximum values can be used for both the EU and NA domains since the code will always obtain the actual domain dimensions used for reading and processing the gridded data from the metafiles.
 - Paul: no updates since August - next step will be to postprocess model output. Finished 6 runs (3 configurations, 2 years), considering to add one more updated configuration
 - Christian: 4 runs (2 configurations, 2 years), worked on some initial analysis of these runs, will present results at the CMAS conference at the end of October
 - Discussion on sharing of initial results. Should this be part of the monthly calls (like Activity 3), or done in separate online technical group meetings? The goals for sharing initial results are to stimulate analysis, potentially motivate groups currently not running to participate, and scope out papers. Decision: initially use parts of the the monthly calls to show and discuss results.
 - Since the last call, a few groups have dropped out due to other competing priorities: Aveiro (CHIMERE), FMI (Silam), Aristotle University (CAMx), LMU (WRF/Chem). The table below shows the current list of activity 1 participants, with “tentative” spanning a range of recent engagement levels and likelihoods of performing model simulations.

Institution	Model	Continent(s)	Status
NCAR	WRF/Chem	NA	Tentative
IASS Potsdam	WRF/Chem	EU/NA	Confirmed
U.S. EPA	WRF/CMAQ	NA	Confirmed
Norwegian Meteorological Institute	EMEP	EU	Tentative
University of Patras	WRF/CAMx	EU/NA	Tentative
Helmholtz-Zentrum Geesthacht	CCLM/CMAQ	EU/NA	Confirmed
CIEMAT	Chimere	EU	Tentative
Istanbul Technical University	WRF/CMAQ	EU	Tentative
Environment and Climate Change Canada	GEM-MACH	NA	Confirmed
Leibniz Institute for Tropospheric Research	COSMO-MUSCAT	EU	Confirmed
University of Hertfordshire	WRF/CMAQ	EU	Tentative
TNO	LOTOS/EUROS	EU	Confirmed
Technical University of Madrid	WRF/Chem	EU/NA	Confirmed

- Rohit: For the eventual ensemble analysis of grid cell net deposition fluxes, may want to consider including deposition results from previous AQMEII phases in the analysis.
- Activity 3
 - Participants held call on September 15, notes for this call will be posted at the AQMEII3.A3 github site (<https://github.com/AQMEII4/Activity-3-Point-Intercomparison-runs>) which also contains notes for prior calls
 - Participants have started running their boxmodels with the different data sets and presented some of their results during the recent call
 - Jesse Bash ran STAGE at all sites
 - Jon Pleim started running M3DRY, focusing on Borden Forest and the Bugacpuszta site for now
 - Roberto San Jose ran WRF/Chem Wesely, focusing on Borden Forest
 - Agreement between observations and model runs varied between sites which is somewhat expected given that the sites represent a wide range of location settings and conditions

- The next call likely will take place during the week of October 19, contact Donna Schwede (schwede.donna@epa.gov) if you are interested in participating and are not currently receiving call invitations
- Paul: It may be worth polling groups who dropped out of Activity 1 due to resource constraints associated with conducting annual runs with the full AQM whether they might have the resources and interest to still participate in the point intercomparison activity - Christian to follow up with Donna about whether and how to reach out to such groups.
- Special Issue
 - ACP opened the AQMEII4 special issue on August 21 (https://www.atmospheric-chemistry-and-physics.net/special_issues/schedule.html)
 - The special issue will be open for submissions through August 2022
 - Coordinators: Alex Guenther and Joshua Fu
 - Work has begun to prepare technical notes for Activity 1 and Activity 3 with the goal of submitting these technical notes towards the end of this year or early next year.
 - May include documentation of dry deposition schemes as supplemental information, Paul may take the lead on
- Next call October 15, 9:00 EDT / 15:00 CEST