Participant Call June 25

Participants: Christian Hogrefe, Richard Kranenburg, Donna Schwede, Jon Pleim, Aura Lupascu, Jesse Bash, Roberto San Jose, Rohit Mathur, Carla Silva, Paul Makar

Activity 1

- Status updates
 - Richard: 2009-2010 model runs are finished, working on post-processing. Considering running for NA
 - Aura: waiting for post-processing updates. Using nco/cdo tools for remapping is fairly slow, using Fortran tool for remapping instead
 - Roberto: Completed 2009 EU simulation. Started first NA simulation, ran out of computer time on BSC, now receiving lower priority (non-priority) for continuation. If starting in July, four months later 3 simulations (NA that was started, plus one more EU or NA simulation) should be done. Alternate supercomputer in Madrid may be an option, but isn't as powerful
 - Paul: 2010 base case and 2016 base case and Zhang runs completed. 2010 Zhang run 3/4 completed. Setup of operational runs is being finalized
 - Carla: WRF completed, working on code modifications for CHIMERE, no timeline on completion of simulations
 - o Christian: 2010 M3DRY and STAGE done, 2016 M3DRY and STAGE ongoing
- Revisions to enform code, TSDs, and metafiles
 - Work group (Stefano, Roberto Bianconi, Paul, Christian) updated enform code:
 - Updated treatment of missing model data when creating time-aggregated (daily, monthly, monthly diurnal, quarterly, or annual) metrics (means, medians, integrals) for gridded model data. Missing data may occur for deposition diagnostics when certain land use types are not present in certain grid cells, certain pathways may shut off under certain conditions, etc.
 - The revised code requires 75% data completeness for a given time window (daily, monthly, monthly diurnal, quarterly, or annual) to return non-missing values
 - The previous version of the code returned a missing value whenever a single missing data point was present for a given time window
 - Introduced ability to compute monthly diurnal median values for diagnostics rather than computing monthly diurnal average values
 - Due to large variation in max resistance values between participating models, inverts
 resistances to conductances (RES-AERO, RES-SURF, RES-STOM, RES-MESO, RES-CUT, RESQLST, RES-QLCT, RES-QLSL, RES-QLLC, and RES-CONV) before encoding no need for
 participants to change their post-processing or inputs to enform
 - Updated enform code is available from github: https://github.com/AQMEII4/enform_aqmeii4
 - Work group also made minor adjustments to spreadsheets which define all variables and time-aggregation instructions for enform
 - Replaced monthly diurnal average with monthly diurnal median for deposition diagnostics
 - Added conductance-weighted deposition fluxes

- Added aerosol water to list of requested PM species (if available from participating models)
- Roberto Bianconi is now using these updated spreadsheets to create the final set of TSDs and metafiles
- Generation of final set of TSDs and metafiles for gridded cases is expected to be completed first
- Generation of final set of TSDs and metafiles for receptor cases requires Roberto to access JRC computing systems which was still pending as of June 19

• Reminders:

- 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 ftp site for data upload will be provided later

Activity 2

No updates - keep open the activity for now, get Activity 1 runs done, then revisit once we know
how much extra work would be needed. As "backstop", once Activity 3 work moves to
sensitivity simulations, include variations in LU/site characteristics besides variations in
meteorology in these sensitivity simulations.

Activity 3

- Planning team held call on June 23
- Donna: several updates were made to the datasets. Continue to reach out to data providers for additional data (latent heat flux, soil moisture, CO2 flux)
- Some groups already did a first pass of runs through all datasets which helped to identify data gaps
- Call notes will be posted to the AQMEII3.A3 github site (https://github.com/AQMEII4/Activity-3-Point-Intercomparison-runs)
- Next call scheduled for end of July, contact Donna Schwede if interested in participating and not currently receiving call invitations

Special Issue

- Stefano received feedback on a proposal for an AQMEII4 special issue in ACP
- The procedure for special issues has recently changed:
 - There are no guest editors the peer review process will be handled by the large slate of regular ACP editorial board members. The long list of proposed guest editors shown in the last AQMEII4 call minutes will not be utilized
 - There will be two special issue coordinators, and both need to be regular ACP editorial board members. One editorial board member ready to serve as coordinator should be proposed by the special issue proponents for approval by the ACP executive editors, who nominate the second coordinator.
 - These two coordinators should not be closely involved in the activities from which the special issue arises. They are not expected to guide the review process of all submissions, but instead are expected to oversee the special issue in exchange with the ACP executive editors, to liaise with co-organizers from the special issue community, and to handle submissions that are not picked up in the regular editor assignment process

- There also will be 1-3 co-organizers of the special issue. They are expected to facilitate the
 exchange with the scientific community of the special issue but cannot interfere in the
 editorial handling and peer review of the submissions.
- Stefano, Paul, Olivia and Christian reviewed the list of ACP editorial board members to identify potential SI coordinators and then approached Alex Guenther to see if he would be willing to serve in that role. He agreed to be nominated as the proposed SI coordinator.
- A revised proposal was submitted on June 25. Key points of the revised proposal:
 - Proposed SI coordinator: Alex Guenther
 - Activity organizers (max 3, but suggesting 5): Stefano Galmarin , Christian Hogrefe, Paul Makar,
 Olivia Clifton , Donna Schwede
 - SI covers all aspects of AQMEII4
 - o Open for submissions from September 2020 September 2022
- Next call: July 23 at 10:00 EDST / 14:00 GMT / 16:00 CEST