

Participant Call April 2, 2020

Participants: Donna Schwede, Christian Hogrefe, Ana Ascenso, Richard Kranenburg, Aura Lupascu, Jesse Bash, Chris Holmes, Paul Makar, Ana Miranda, Jon Pleim, Ralf Wolke

Call notes (follow-up items are highlighted in yellow)

Agenda:

- Status updates from annual regional-scale grid modeling participants (activity 1)
 - Updated the table below with status updates provided by call participants
 - Christian will follow up via email with some of the groups not able to join the call, especially those who had previously said that their runs had started or were about to start soon.
 - Christian described an example approach for interpolating from native grids to common lat/lon grids using NCO - the example was added to the github page (<https://github.com/AQMEII4/Activity-1-AQMEII-style-runs/blob/master/OverarchingDocuments/RegriddingExamples/README.md>)
 - Paul: do we use mass-conservative approach vs. nearest neighbor?
 - Proposal: Mass / concentration / flux variables use mass conservative approach for interpolation, diagnostic variables (deposition velocities, LU fractions, conductances, etc.) use nearest neighbor
 - Ask participants for feedback - if no disagreement, go with proposal
 - Groups ready to start postprocessing gridded output should contact Stefano to obtain model code
 - Hold off on uploading output from enform to JRC ftp site for now
 - Creation of TSDs/src files for post-processing of model output at receptor and profile locations
 - Will need JRC contract with Roberto back in place before this can be handled
 - Stefano may approach ACP about creating a special issue within the next few months. While common analysis manuscripts are not expected until sometime next year given that some groups do not plan to finish their simulations until last this year, opening the issue earlier (e.g. this summer/fall) would allow groups already finished with their simulations to potentially start submitting manuscripts (e.g. sensitivity runs and/or diagnostic analysis of individual models). It would also be good to start thinking about preparing an introductory technical note that would describe the overall AQMEII4 effort, the setup and planned analysis of the grid simulation (e.g. definition of diagnostic variables, harmonization of LU classes, documentation of dry dep diagrams for different models?), and corresponding "background" technical information for activities 2 and 3.
- Status update on single-hour regional-scale grid modeling (activity 2)

- Planning team call was held March 30 - continuing to explore structure of the activity. Issue that needs to be worked out more is to understand the input required by the dry deposition schemes - some just use atmospheric data, others are more tightly coupled to LSM
- Christian will send email to all AQMEII4 participants providing a status update and requesting feedback whether groups are still interested in this activity and which meteorological inputs are needed by their dry deposition module.
- Status update on box model intercomparison (activity 3)
 - First participant call was held March 26 -call notes are posted at <https://github.com/AQMEII4/Activity-3-Point-Intercomparison-runs/blob/master/ParticipantCallNotes/ListOfCalls.md>
 - During the call, the activity was described to participants.
 - Call participants were asked to review the list of available observational data. If additional data is needed by their dry deposition code, they were asked to communicate that to Donna and Olivia so they can compile a consolidated list of additional needs before approaching the experimentalists
 - Donna prepared draft csh and fortran wrapper code for modelers to drive their model with observational data
 - The group plans to hold monthly activity 3 calls while the monthly "activity 1" / "whole group" call (i.e. the call documented in these minutes) will continue to serve as coordination forum for now, covering updates from all three activities
 - May at some point transition the monthly "activity 1" / "whole group" call to focus only on activity 1 to allow for more in-depth discussion of technical details and analysis questions.

The next monthly AQMEII4 participant call will be held April 30 at 9:00 EDST / 13:00 UTC / 14:00 BST / 15:00 CEST.

Contact	Institution	Model	Continent(s)	Date of Last Update	Status
Alma Hodzic	NCAR	WRF/Chem	NA	2/26/2020	Started simulations
Ana Ascenso	University of Aveiro	Chimere	EU	4/2/2020	WRF simulations are finished and have been evaluated, plan to start Chimere in late April, early May but timing may be affected by Covid-19 situation

Aura Lupascu	IASS Potsdam	WRF/Chem	EU/NA	4/2/2020	Finished simulations for EU. Finished NA 2010, encountering problems with September 2016 model crashes, investigating issues in the upper atmosphere
Christian Hogrefe	U.S. EPA	WRF/CMAQ	NA	4/2/2020	Finished 2016 simulations with both STAGE and M3DRY dry deposition schemes, also performed several sensitivity simulations with both schemes. Working on postprocessing of results as well as creating M3DRY post-processor to estimate LU-specific fluxes and diagnostic variables
Christoph Knote	LMU Munich	WRF/Chem	EU	2/27/2020	Simulations not started, on leave through May 1, still expects to perform simulations
David Simpson	Norwegian Meteorological Institute	EMEP	EU	2/27/2020	Simulations not started and busy with other mandatory projects, may not be able to participate
Dimitris Melas	Aristotle University Thessaloniki	WRF/CAMx	EU/NA	2/27/2020	Simulations not started Upload results for EU 2010 and NA 2016 by the end of summer Upload results for EU 2009 and NA 2010 by the end of the year
Ioannis Kioutsioukis	University of Patras	WRF/CAMx	EU/NA	2/27/2020	Simulations not started Upload results for EU 2010 and NA 2016 by the end of summer

					Upload results for EU 2009 and NA 2010 by the end of the year
Johannes Bieser	Helmholtz-Zentrum Geesthacht	CCLM/CMAQ	EU/NA	2/25/2020	Finished meteorological simulations for NA domain
Marta Garcia Vivanco	CIEMAT	Chimere	EU	3/3/2020	Delayed by transition to new machine and new Chimere version which had several bugs and is causing delays in other projects. Still plans to participate in AQMEII4 simulations. Additional code updates (LU-specific deposition) still need to be implemented.
Metin Baykara	Istanbul Technical University	WRF/CMAQ	EU	2/21/2020	Transitioned to new computer system, expect to start CMAQ simulations in April
Paul Makar	Environment and Climate Change Canada	GEM-MACH	NA	4/2/2020	Performed 3 2016 simulations, 3/4 of another run. Also will use operational version for 2016. May submit 4-5 2016 runs and ~2 2010 runs. Takes 2-3 weeks per run. Will try sensitivity with Zhang deposition code instead of Robicheaud code
Pedro Jimenez Guerrero	University of Murcia	WRF/Chem	EU/NA		
Ralf Wolke	Leibniz Institute for Tropospheric Research	COSMO-MUSCAT	EU	4/2/2020	Currently running October 2009, hope to finish by Easter. Did not start postprocessing, expect to start with

					that after returning to the office.
Ranjeet Sokhi	University of Hertfordshire	WRF/CMAQ	EU	2/18/2020	Recently made offers to two post-docs, expects that it'll be several months before candidates start and can begin working on the project
Richard Kranenburg	TNO	LOTOS/EUROS	EU	4/2/2020	Finish within a week from now, then proceed with postprocessing.
Roberto San Jose	Technical University of Madrid	WRF/Chem	EU/NA	4/1/2020	Setting up emissions for EU 2010 simulations
Rotislav Kouznetsov	FMI	SILAM	EU	3/3/2020	Simulations not started. Plan to start simulations in late March and submit data by late May. Plans to submit gridded concentrations and depositions but no LU-specific resistances.
Ulas Im	Aarhus University	WRF/DEHM	EU		