Participant Call April 30

Participants: Johannes Bieser, Donna Schwede, Jesse Bash, Stefano Galmarini, Aura Lupascu, Jon Pleim, Paul Makar, Christian Hogrefe

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

- Activity 1
  - Status updates - see table below for most recent feedback.
    - Aura: need guidance on how to map "herbaceous wetland" category to AQMEII4 categories. Christian and Paul to follow up with Aura.
    - Paul: based on initial analysis of GEM-MACH results, may need to consider adjustments to the planned postprocessing of deposition diagnostics to not lose information. Paul will follow up with specific concerns and suggested adjustments
  - Interpolation from native grids to common lat/lon grid
    - Proposal from previous call: Mass / concentrations / fluxes use mass conservative approach for interpolation, diagnostic variables (deposition velocities, LU fractions, conductances, etc.) use nearest neighbor
    - No disagreement from participants was received, meaning that the proposed approach will be adopted
  - 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
  - JRC/Enviroware contract status
    - Stefano: A contract has been sent to Roberto, should be signed by Monday, after that Roberto's JRC computer access will have to be restored. Contract will be for two years. Items to be addressed:
      - Update Canadian obs data
      - Create TSDs for receptor data
      - Minor edits for existing TSDs/src files for gridded case
      - Christian to reach out to Roberto, Stefano and Paul to schedule a follow-up call
- Activity 2
  - No AQMEII4.A2 planning team call was held over the past month
  - Christian sent 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.
  - Only limited feedback was received:
    - FMI (Rotislav Kouznetsov): interested and provided required met variables
    - UPM (Roberto San Jose): interested and provided required met variables
    - IASS (Aura Lupascu): interested and provided required met variables
    - MetNo (David Simpson): potentially interested, asked question
    - Aristotle University (Dimitris Melas): not interested
    - NUI-Galway (Rong-Ming Hu): unlikely to be able to participate
  - Christian to summarize feedback and facilitate AQMEII4.A2 planning team discussion on whether/how to proceed with the activity

- Activity 3
  - Second participant call was held April 22 - call notes are posted on github
  - GoAnywhere site has been set up where all the observational data is stored and where model output will be submitted. The documents on the github site include instructions on how to get access to the GoAnywhere site.
  - Donna shared draft csh and fortran wrapper code for modelers to drive their model with observational data
  - 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 - asked for feedback by May 15.
  - 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. The next Activity 3 call will be May 19 10 am EDST. A new activity 3 email list was created. If you are not on that list but are interested in receiving AQMEII4.A3 communications, please contact Donna or Christian.

- HTAP virtual workshop April 22 - 24: Christian provided an AQMEII4 overview during the HTAP virtual workshop. During the call, Christian also shared a copy of the draft HTAP workshop summary sent by Terry Keating. While there is interest in AQMEII4 results from an ozone vegetation impact perspective and potentially from a deposition mapping / model-measurement fusion perspective (addressed through WMO GTAD-MMF effort), there isn't any need to adjust AQMEII4 workplans to meet these intererests.

- AQMEII4 Timeline: Johannes asked about updates to the AQMEII4 timeline given recent delays experienced by some groups due to the COVID situation and other commitments. Based on feedback received from participants, it seems reasonable to expect that the full set of simulations will not be submitted before the end of the year, even though a number of groups likely will submit their results earlier. The group then also revisited last month's discussion about creating a special issue and working towards an introductory technical note. The group felt that the following summary from last month's call minutes still reflects the goals and timing: "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."

The next monthly AQMEII4 participant call will be held May 28.

Contact	Institution	Model	Continent(s)	Date of Last Update	Status
Alma Hodzic	NCAR	WRF/Chem	NA	4/2/2020	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	4/30/2020	Finished simulations, working on postprocessing and LU mapping now.
Christian Hogrefe	U.S. EPA	WRF/CMAQ	NA	4/2/2020	Finished 2016 simulations with both STAGE and M3DRY dry deposition schemes, also perfomed 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 Hopes to finish 2010 runs by mid June.
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	4/23/2020	Simulations not started and busy with other mandatory projects through August 31, but still interested in participating (activity 1 and/or 3) if time allows
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	4/30/2020	Finished meteorological simulations for NA domain About to start NA simulations, but experiencing some system/setup issues. Expects to take about 2 weeks for running per year.
Marta Garcia Vivanco	CIEMAT	Chimere	EU	4/3/2020	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	4/3/2020	Transitioned to new computer system, delayed due to current situation, expect to start May - June
Paul Makar	Environment and Climate Change Canada	GEM-MACH	NA	4/30/2020	Performed 5 2016 simulations, 2 of these were reruns of earlier simulations. May submit up to 4 2016 runs and ~2 2010 runs. Takes 2-3 weeks per run. One sensitivity compares the Zhang deposition code to the Robichaud code. Plans to present initial GEM-MACH results at EGU virtual meeting early May, will circulate draft for comments.
Pedro Jimenez Guerrero	University of Murcia	WRF/Chem	EU/NA	4/2/2020	May participate if coordination with other WRF/Chem groups is possible
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	4/7/2020	Recently made offers to two post-docs who would be working on this project, but due to the current COVID situation expects that they wouldn't start before July at the earliest.
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	4/7/2020	Simulations not started. Delayed by a few months, i.e. plan to start simulations May - June. Plan to submit gridded concentrations and depositions but no LU-specific resistances.
Ulas Im	Aarhus University	WRF/DEHM	EU	4/3/2020	Discussing with colleagues before making final decision on participating.