AQMEII4 Activity 2 Call Notes, 5/2/2023

Attendance: Olivia Clifton, Kenjiro Toyota, Colin Lee, Stefano Galmarini, Chris Holmes, Jon Pleim, Limei Ran, Jesse Bash, Christian Hogrefe

Estimating observation-based stomatal fluxes (Anam and Olivia): Anam was unable to join the call but sent an update to Olivia which Olivia shared. Anam and Olivia are using two approaches – one based on water vapor fluxes and one based on CO_2 fluxes – to calculate observation-based estimates of stomatal conductances at the point intercomparison sites. The two approaches are mostly but not completely independent of each other. Initial results will be included in Olivia's invited presentation at the 39th International Technical Meeting on Air Pollution Modeling and Its Application (May 22 – 26, Chapel Hill, NC). After finalizing the methodology, Olivia and Anam plan to focus on periods of dryness and may then design sensitivity simulations which the modelers would be asked to run with their box models. The focus of this analysis likely will be on daytime hours during non-winter months.

Using AQMEII4 point intercomparison data to refine STAGE parameters: Jesse has been using the observations at the eight AQMEII4 point intercomparison sites to refine parameters used in the STAGE soil and cuticular resistance calculations. Results from the work will be presented at the ITM in Chapel Hill.

Potential future work with HTAP: Olivia presented an update on AQMEII4 at the HTAP spring virtual workshop on April 20. Following her presentation, there was interest from several workshop attendees and HTAP coordinators in exploring how the diagnostics and analysis approaches employed in AQMEII4 could be used in future HTAP activities. There was some discussion during the AQMEII4 call on what form such future collaboration with HTAP might take but no concrete actions were identified.

Next call: June 6, 2023