AQMEII-4 Activity 3 Participant Call – March 22,2022

Attendees: Roberto San Jose, Paul Makar, Jesse Bash, Holly Nowell, Olivia Clifton, Laurens Ganzeveld, Kiran Alapaty, Jon Pleim, Chris Holmes, Johannes Fleming, Lisa Emberson, Limei Ran

- Model runs
    - Inputs are supposed to be identical for all models - this helps clarify process level differences
        - Do we need to unify the environmental conditions better or stay true to the regional models?
            - Leaf wetness
                - M3DRY is using a different parameterization for missing values and is setting limits
                - Post mtg note - Harvard only has 24 h precipitation in reality but has been divided evenly across all hours of the day
                - 85% rule - observationalists proposed alternatives for their sites where missing
            - Specify just soil type or specify soil moisture parameters (field capacity, etc)?
            - Roughness length - need to specify for modelers
            - Temperature parameters for Jarvis stomatal resistance? Do we specify these?
            - CO2 data - make sure all are using the same
            - Soil moisture depths - need to specify root zone and surface for each site
            - LAI
                - Modelers should use observed values or tabulated as used in the models; use time series
                - WRF-Chem doesn't use LAI as an input; only used to get roughness length
        - Standardize what we can standardize in terms of inputs as the paper Olivia is working on needs models run with the same inputs to analyze process level differences
        - Olivia needs model descriptions so she can see
    - Questions also on observational data - some have issues/uncertainties
- Deadline for special issue will be extended
- Papers
    - Olivia - overview of process level differences; model inputs as consistent as possible
    - Jesse - STAGE
    - Jon & Limei- M3DRY and PSN model
    - Paul - effective flux vs effective conductance

- Laurens? - Stomatal differences across models
- Roberto - WRF-Chem performance
- ??? - comparison of models as implemented in regional models (use of more tabulated values, etc)