Activity 3 Participant Call January 12, 2021

Attendees: Christian, Paul, Jesse, Jon, Johannes, Sam, Roberto, Chris

- Data updates
  - Corrections to data sets
    - Details are in change log - made in December
    - Particularly Auchencorth Moss updates
      - Corrected errors introduced by Excel
      - Changed units of vd to m/s
    - Harvard Forest - correction to units; added in water vapor fluxes; units added to data set
    - Easter Bush
      - Fixed Excel errors
      - Soil moisture values will be changing
    - Bugacpuszta
      - Corrected missing data value
  - Data screening and flagging for bad values/outliers
    - Sam: Powerpoint slides on flagging/outliers
      - Johannes: we need to consider meteorology and deposition velocity - how do we do that?
        - Sam - so far only keying on vd
      - Jesse - met dat flagging
      - Should data be flagged or deleted?
        - Mask data -
      - Negative vd's will be kept
      - Johannes - problem with missing meteorological data
        - Vd will be missing for hours with missing met data - no filling
    - Olivia - in TN, flagged value approach is being detailed for each site
    - Johannes in favor of strict flagging
    - Paul - will the filtering happen to inputs or filter after running? Who does the filtering - each individual or one filtering across the data sets?
      - Jesse filters the data when he reads it in - in his wrapper
      - Jesse suggests an "AQMEII flag" that would indicate what we consider valid for this project
- Modeling updates
  - Johannes
    - Still a few potential data issues in current data
    - Model results
      - Harvard Forest - values seem higher in later years - is this true or an artifact of some kind
  - Roberto
    - How should stomatal resistance be defined for archival - with or without the diffusivity term? Should be accounted for in effective conductance. Technical specification document calls for chemical specific stomatal resistance so it would include the diffusivity
  - Jon

- Also noted that the Hungarian data indicated that the wetness flag was wet all of the time and that caused a problem with getting reasonable results. Jon assumed it was 0 if less than 0.01 and then did a separate calculation of wetness based on precipitation and evaporation.
    - Olivia has talked with PI and they relayed that the canopy is never really dry but also the wetness sensor is very sensitive
  - For TN, Olivia is trying to determine how wetness is translated to a wetness scale from measurements
  - Ispra has top of canopy wetness and also on shrub understory - would that be useful
  - Paul - models have different methods for treating the wetness
  - LAI - one-sided or 2-sided - need to clarify that for all sites
- Update on Technical Notes for Activity 1 and Activity 3
- Publication plans