Participant Call December 3, 2019

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

- EU emission temporal and height profile
  - Obtained from TNO
  - Shared with participants - Aura, Ralf, Ana: yes
- ECMWF CAMS fields for larger NA domain requested by ECCC, new files are being generated
  - Only needed by ECCC - yes
  - Will not be downloaded by EPA and copied to CMAS data warehouse? - confirmed
  - Any other problems with CAMS?
    - Aura did not start yet - looking for approaches to map aerosols from CAMS to WRF-Chem (sectional approach)
    - Paul can share approach for mapping CAMS to GEM-MACH sectional aerosol representation
    - Ana's group also has not done this step yet
    - Ralf's group has completed this step
- Ralf: Implementation of lightning emissions is a problem for COSMO-MUSCAT - does not currently allow emissions in upper layers. Would require modifications to code, may not finish before Christmas when the group would like to start their simulations.
  - Christian could share monthly (rather than hourly) gridded files and ASCII file with diurnal profiles
  - Ralf will continue to try to implement these emissions in COSMO-MUSCAT
- CMAQ coordination (U.S. EPA, Helmholtz, Istanbul Technical University, University of Hertfordshire) to continue
  - CAMS boundary condition processing - identified inconsistency in third moment calculations between existing utility code and CMAQ, waiting for model developers for guidance on resolving them
  - Modification of STAGE code to generate requested variables and aggregate land use inline (expected end of year or early next year)
  - Development of M3DRY "MOSAIC" post-processing utility to generate requested variables by land use type offline
- GEM-MACH updates - see slides
  - https://github.com/AQMEII4/Activity-1-AQMEII-style-runs/blob/master/OverarchingDocuments/Activity1.md#appendix-3
  - Share similar plots from other models / groups? GitHub? Done – see https://github.com/AQMEII4/Activity-1-AQMEII-style-runs/blob/master/OverarchingDocuments/Activity1.md#appendix-3
  - Expect to perform short 1-month test runs for model evaluation shortly
  - Start full runs early next year
- EGU conference May 2020: session on acid deposition (M. Kanakidou) - participation from AQMEII groups? Abstracts are due in January (?)
- Box model intercomparison update (Donna)
  - Data providers confirmed:
    - Ramat Hanadiv (Israel) (shrub)

        - Ispra (Italy) (mediterranean forest)
        - Hyytiälä (Finland) (boreal coniferous forest)
        - Grignon (France) (agriculture)
        - Borden Forest (Canada) (mixed deciduous forest)
    - Also requested:
        - Bugacpuszta (Hungary) (grassland)
        - Amazon Tall Tower Observatory (ATTO) (Brazil) (tropical forest)
        - Harvard Forest (USA) (temperate deciduous forest)
        - Auchencorth Moss (Scotland) (peatland)
    - Developed data format (csv) and list of requested variables when contacting observation groups
    - Data sharing via EPA GoAnywhere site
    - Develop driver to provide model-ready obs data data to box models
    - Hope to be ready for modeling by spring