Minutes of the PT AEVUS2 Webex on
October 15th, 2019, 14:00 - 15:00

<u>Participants</u>: P. Mercogliano (CIRA), E. Bucchignani (CIRA), J.M. Bettems (Metoswiss), M. Milelli (ArpaP), V. Garbero (ArpaP), J.-P. Schulz (DWD), M. Varentsov (RHM), M. Demuzere (Ruhr University Bochum)

TOP 1.   Introduction

- Paola welcomes the participants, announces that PT AEVUS2 has been officially accepted and gives overview of the agenda. Further, she informs the participants that Edoardo is preparing the final report of AEVUS. The draft will be ready by the end of October (thanks to all the contributors).

TOP 2.   Presentation of the PT

- Paola informs that Israeli colleagues (Pavel) would have some FTE in this PT. We should modify the proposal and JM will send it to Dmitri. We can increase the total amount of FTE[1]

- Paola describes the subtasks in which the PT is organized.

- Paola provides logistic information about the next face-to-face meeting in Naples, it will be held in Naples on 12-13 December 2019 at ARPA CAMPANIA Via Vicinale S. Maria del Pianto - Centro Polifunzionale, Torre 1 – 80143. The meeting will start Thursday at 2 p.m. CEST and it will finish on Friday same time. Paola and Edoardo are available for providing logistic support (travel, hotels, etc.)

TOP 3.   Open discussion

- Task 1: JMB points that we have to finalize the COSMO code by the end of the year. Regarding the implementation of the possibility to use further canopy parameters (building heights, aspect ratio, etc). Mikhail says that he will add additional external parameters and test them on Moscow city. But what about other test cases? Mikhail has open datasets but on Moscow. The procedure is quite complicated to obtain data readable by COSMO. Matthias suggests starting from global datasets of building height data, from very generic datasets. Focus on area where many data are available.

- Task 2: Test using more detailed external datasets for specific cities. Alternatively, generic external datasets for all Europe. Matthias will provide this generic dataset. Tests will be performed considering both the approaches:
    - 1 test using more detailed external dataset for specific cities (to adapt information from Moscow)
    - 2 test using "generic" external dataset for all Europe (all relevant parameters for COSMO URB)

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[1] After the meeting, Pavel confirmed that he does not want to take officially part to the task but only to be informed by the activities performed. Then it is not necessary to change the current final version of the task.

- Task 3: Investigation of the sensitivity to several parameters defined in TUNING and INPUT_PHY. Focus on the canopy parameterization (itype_canopy). Mikhail recommends being careful with SKC parameter, small values for rural areas, high values for urban areas. It is not good to have these high values of SKC when using Terra-urb. Testing of the consistency of new external parameter dataset (itype_canopy 1-2), which avoids a problem of double counting. The sensitivity analysis will be performed with more "consistent" external parameters for itype_canopy=1-2.

TOP 4. Actions (to be performed before the F2F Meeting of December)

- Paola/Edoardo will keep Uli Schattler informed periodically about the development of the work, in order to have the latest version of Terra-Urb included into COSMO vsn. 6.
- Mikhail will provide his detailed external dataset for the city of Moscow, in order to verify the possibility to develop similar datasets for other cities and the insert it as default in Terra-Urb
- Matthias will provide an example of "generic" external dataset for all Europe.
- All the teams will perform further tests assuming itype_canopy = 2, in order to have more data for the calibration of the model using this scheme.
- Edoardo will update the PT AEVUS2 page on the website of COSMO, in order to have the correct FTEs distribution among partners.
- Paola will verify the possibility to have a webex connection for the next meeting in Naples (in order to allow remote participation of someone who cannot attend the meeting physically).
- Paola/Edoardo will ask Uli to provide the latest version of COSMO including Terra-Urb, in order to be sure that all the members are working on the same version. (in the last months there were several bug fixes, so it is possible that not all have the same version). JMB suggests also putting the project on GITHUB, in order to make easier the collaboration.

The Webex ends at 15:00 CEST.