PT AEVUS2 meeting 18 March 2020

P. Mercogliano, E. Bucchignani, V. Garbero, M. Milelli, J.-P. Shultz, F. Bassani, M. Varentsov, M. Demuzere, C. Apreda, A. Reder

Agenda:

- 1. Update about external parameters based on local climate zone (Matthias Demuzere)
- 2. Discussion about the sensitivities analysis to be included in the paper on PT_AEVUS 2
- 3. Introduction of the colleagues of CMCC in PT_AEVUS2 and ongoing activities

Presentation (See the ppt already sent my Matthias) of the work performed by Matthias on the definition external parameter database, based on local climate zone (LCZ). Valeria and Mikhail introduced the problem of the double counting effect on the current implemented external parameters. Valeria takes the action to send to Matthias and to the other people of the task a brief note explaining in details this double counting problems. Additionally, it is decided that Matthias will take the lead of the action concerning the update of the urban field currently used in EXTPAR (ISA and AHF). Matthias in the next days will contact Jean Marie in order to establish a contact with the people working on EXTPAR and then to have information about the requirements and the format with which the new parameters need to be provided in order to be included in EXTPAR.

The second point discussed during the meeting is the definition of the sensitivity analysis to be performed over the 3 test cases of the task (Moscow, Turin and Naples) for the paper in preparation. It is also decided the Valeria will be the first author of the paper. It is decided that the paper will have a CTRL run with TERRA_URB parameters switched off. The other sensitivity runs have switched on TERRA_URB parameterization and will investigate the performance of the new skin temperature parameterization (itype_canopy 1 and 2) and the use of the scheme turbulence (oldtur true or false). Mikhail also suggests investigating in the paper also other parameters. In the next Mikhail will send to Valeria the different proposals for the additional parameters to be investigated. A comparison of the namelists adopted the two test cases (Moscow and Turin) will be also done to establish the differences and to understand the differences between the best configurations selected for each test case. Valeria will also send to Edoardo the namelist for the different sensitivities analysis to be performed for the paper; to align all the 3 test cases.

CMCC, involved in the COSMO consortium from a few months, has presented some slides presenting its ongoing activities on urban parameterization and in particular on urban external parameters.