Task 1: Implementation of TERRA_URB in ICON

- First implementation of TERRA_URB in ICON is available.
- Including:
  - New Namelist switches
  - New fields for urban canopy parameters with harmonised nomenclature
  - Modifications in TERRA: Heat capacity and thermal conductivity modified according to TERRA_URB

- The new implementation compiles successfully.
- Buildbot tests were successful, on CPU and also GPU platforms.
- First tests are carried out, they look reasonable.

- Next: Adress effect of TERRA_URB in the turbulence scheme.

Task 2: External parameters

Subtask 2.2: New urban external parameters in EXTPAR for ICON(-LAM)

- An extensive survey on the existing land use datasets for urban modelling was carried out.
- Result: **ECOCLIMAP-SG** seems to be the most promising dataset for our purposes. First tests look good.
- Advantages:
  - It has a global coverage at a resolution of 300 m x 300 m.
  - It contains 10 urban land use classes, from these all needed urban canopy parameters can be derived. Besides this it contains 23 natural classes.
- The dataset was converted from geotiff with ArcGIS and provided in NetCDF.
- The definition of look-up tables for the urban parameters is proceeding.
- The implementation in EXTPAR will start soon.