

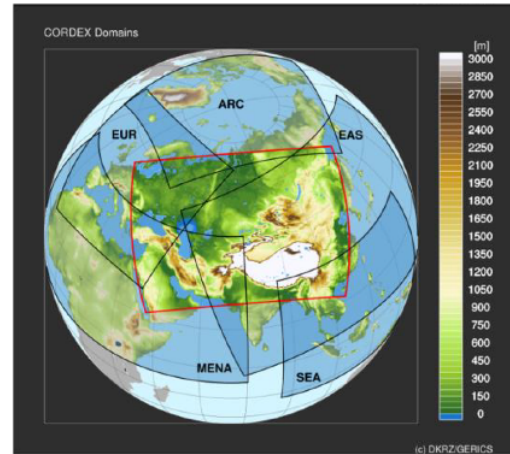


## *The new set of high-resolution climate simulations for the CORDEX Central Asia domain*

Over some parts of the world plenty of regional climate simulations have been carried out, while in other regions hardly any high-resolution climate information is available. The CORDEX Central Asia domain is one of these regions (delineated by red contour). Within the AFTER project, the coordinated model set-up, multi-model-multi- scenario experiments with high-spatial resolution up to 25 km and systematic model evaluation has been performed. Two regional climate models ALARO-0 (RMI) and REMO (HZG-GERICS) have been used.

These newly designed simulations build the basis for investigating climate change impacts on forest ecosystems, crop yields, phenological processes of the crops and quality and quantity of the crop yields.

The climate data produced by both models are freely available at the ESGF data nodes: <http://esgf.llnl.gov/>



The main goal of the AFTER project (2018 – 2021) - <https://www.projectafter.net> - is impact assessment of observed and future climate and subsequent changes in climate extremes on agriculture and forestry in the Europe-Russia-Turkey Region. The project has been selected for funding by “ERA. Net RUS Plus Call 2017 to foster research cooperation between Russia, the European Union and Turkey. The Consortium represents the following top class research institutes Scientific Foundation “Nansen International Environmental and Remote Sensing Centre” (Russia) ; Ghent University (Belgium) ; Climate Service Center Germany (GERICS); Latvian Environment, Geology and Meteorology Centre ; VITO (Belgium); Iskenderun Technical University (Turkey).

### **Read more:**

1. A new project AFTER investigates the impacts of climate change in the Europe-Russia-Turkey region, Climate Services, Volume 12, 2018; <https://doi.org/10.1016/j.cliser.2018.11.003>
2. Wheat Yield Estimation from NDVI and Regional Climate Models in Latvia. Remote Sens. 2020, 12, 2206; doi:10.3390/rs12142206
3. Evaluation of regional climate models ALARO-0 and REMO2015 at 0.22° resolution over the CORDEX Central Asia domain; Geosci. Model Dev., 14, 1267–1293, 2021  
<https://doi.org/10.5194/gmd-14-1267-2021>
4. Evaluation of ALARO-0 and REMO Regional Climate Models over Iran Focusing on Building Material Degradation Criteria; Buildings 2021, 11(8), 376; <https://doi.org/10.3390/buildings11080376>

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