

Project: **374**

Project title: **Evaluierung neuer Modellversionen des CLM**

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Report period: **2023-11-01 to 2024-10-31**

In the last year the simulation results of previous ICON-CLM model versions and configurations have been compared with the results of the released model version icon_2024.07 using the configuration developed in the project COPAT (bg1155).

One highlight is the successful reduction of an overestimation of incoming solar radiation at the surface and of latent heat flux over water. At same time a slight reduction of the underestimation of near surface temperature was achieved. A series of publications summarizing the results for COSMO6 and ICON in CORDEX-EU domain (Geyer et al.) and the methodology applied (Petrov et al, Will et al) are in preparation.

The following figure shows the mean winter and summer for short-wave down radiation at the surface and 2m temperature for the first CLM configuration and model version icon_2.6.6 and the final configuration for icon_2024.07.

Figure 1: 2m temperature 2002-2008 for icon_2.6.6 (left) and icon_2024.07 (right)

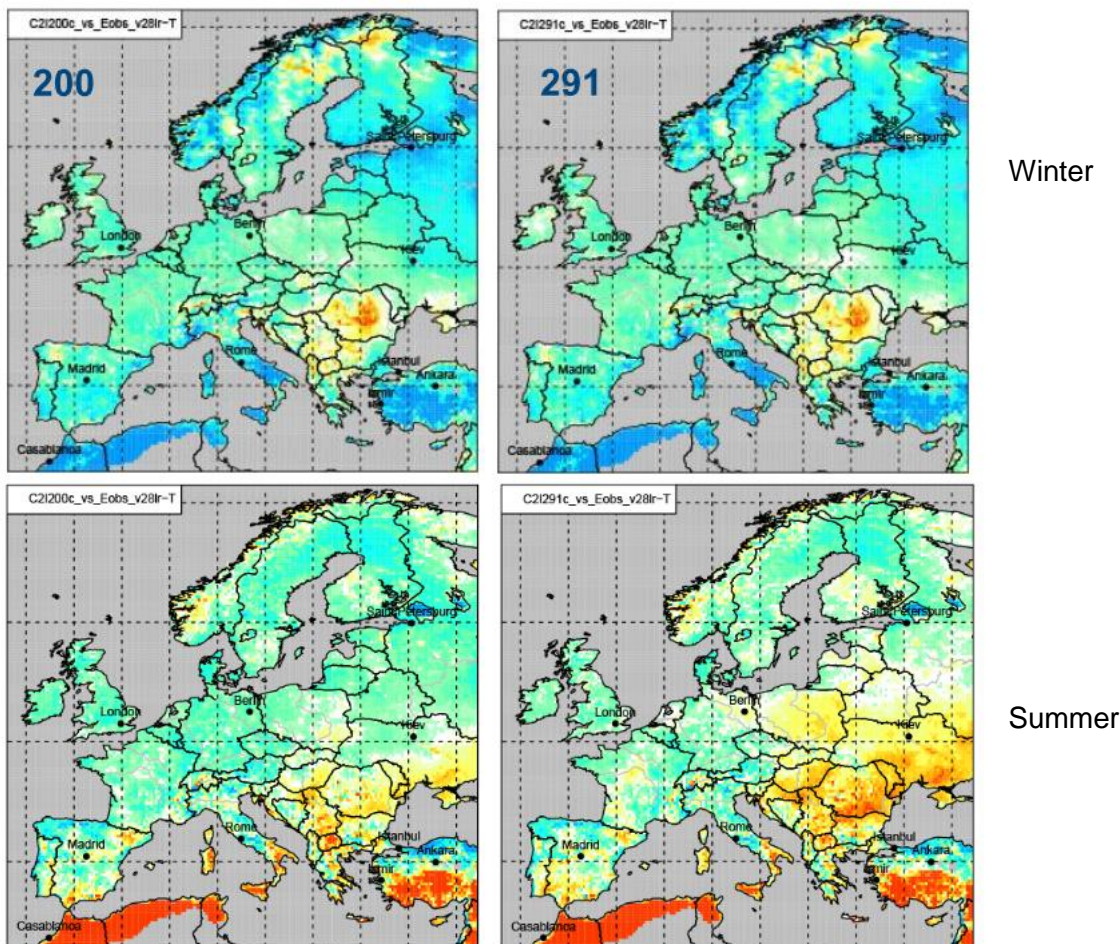


Figure 2: Short wave down radiation 2002-2008 for icon_2.6.6 (left) and icon_2024.07 (right)

