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# The Community Land Model contribution to ISIMIP2b

Wim Thiery (1,2) and Sonia I. Seneviratne (1)

(1) ETH Zurich, Institute for Atmospheric and Climate Science, Zurich, Switzerland (wim.thiery@env.ethz.ch), (2) Vrije Universiteit Brussel, Department of Hydrology and Hydraulic Engineering, Brussels, Belgium

The aim of the Inter-Sectoral Impact Model Intercomparison Project (ISIMIP) is to better understand climate impacts across sectors using a multi-impact model framework. The second phase of this international effort (ISIMIP2b) is designed to provide robust information about the impacts of 1.5°C and 2°C global warming, as solicited by the IPCC's special report on this topic. Here we present the ISIMIP2b simulations conducted with version 4.5 of the Community Land Model (CLM). Bias-corrected output from four global climate models contributing to phase five of the Coupled Model Intercomparison Project (CMIP5) is used to drive CLM at 0.5° resolution. Land cover information is obtained through the second phase of the Land Use Harmonization project (LUH2). Besides complementing the vast – and continuously growing – data base of publicly-available ISIMIP output, a key advantage of the CLM data set is that it provides information relevant for several sectors through one consistent set of simulations. This implies that climate and land use change impacts on agriculture, biomes, lakes, water and permafrost can now be assessed with consistent climate forcing as well as consistent model physics.