



## **CCLM-CLM: A new tool to investigate biosphere-atmosphere interactions**

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The newly-developed CCLM-CLM regional climate model combines two existing models: the climate version of the COSMO-model (CCLM) and the NCAR Community Land Model (CLM). The goal of this coupling is to improve the representation of land surface processes for regional climate simulations, by accounting for both biogeophysical and biogeochemical processes within vegetation and soil. These processes are indeed important in shaping the exchanges of energy, water and trace gases between the land and the atmosphere. By comparing CCLM-CLM simulations with those from the standard CCLM, I will quantitatively illustrate how the simulated European climate is affected by a more complete representation of land surface processes.