



Actor groups, related needs, and challenges at the climate downscaling interface

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At the climate downscaling interface, numerous downscaling techniques and different philosophies compete on being the best method in their specific terms. Thereby, it remains unclear to what extent and for which purpose these downscaling techniques are valid or even the most appropriate choice. A common validation framework that compares all the different available methods was missing so far. The initiative VALUE closes this gap with such a common validation framework.

An essential part of a validation framework for downscaling techniques is the definition of appropriate validation measures. The selection of validation measures should consider the needs of the stakeholder: some might need a temporal or spatial average of a certain variable, others might need temporal or spatial distributions of some variables, still others might need extremes for the variables of interest or even inter-variable dependencies. Hence, a close interaction of climate data providers and climate data users is necessary. Thus, the challenge in formulating a common validation framework mirrors also the challenges between the climate data providers and the impact assessment community.

This poster elaborates the issues and challenges at the downscaling interface as it is seen within the VALUE community. It suggests three different actor groups: one group consisting of the climate data providers, the other two groups being climate data users (impact modellers and societal users). Hence, the downscaling interface faces classical transdisciplinary challenges. We depict a graphical illustration of actors involved and their interactions. In addition, we identified four different types of issues that need to be considered: i.e. data based, knowledge based, communication based, and structural issues. They all may, individually or jointly, hinder an optimal exchange of data and information between the actor groups at the downscaling interface. Finally, some possible ways to tackle these issues are discussed.