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Assessement of user needs for climate change scenarios in Switzerland

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In the framework of the recently founded National Center for Climate Services (NCCS) new climate change scenarios for Switzerland are currently under development that will be released in 2018 ("CH2018 scenarios"). An important component herein is the consideration of user needs in order to ensure that the new scenarios are user tailored and hence find a wide applicability in different sectors in Switzerland.

A comprehensive market research was conducted to get a better overview of who the users of climate scenarios are and what they need. The survey targeted the most climate relevant sectors, and involved representatives from administration, research and private companies across Switzerland. The survey comprised several qualitative group interviews with key stakeholders, as well as a written questionaire, answered by more than one hundred users. Additionally, two workshops were organized to gather the needs in dissemination of climate scenarios.

The results of the survey show the necessity to classify the users according to the level of usage of the climate scenarios: "intensive users" are mainly researchers who handle large climate scenario data for further use in subsequent impact studies; "extensive users" are usually from administrations or consulting companies and perform simple calculations for specific questions or use provided graphics and tables; "facilitators" are usually from media, NGOs or schools and process and disseminate scenario information for a specific target group. The less intensive the usage of the climate scenarios is, the more important becomes the need of comprehensibility, clarity and support when disseminating new climate scenarios.

The survey reveals strongest needs for quantitative information on changes in extremes, an aspect that was handled in a qualitative way only in the predecessor climate scenario suite CH2011. Another cross-sectoral need are physically consistent data in time, space and between several variables. For instance, in agriculture the combination of heat and dryness is an important aspect, while the same is true in the energy sector for the combination of wind speed and global radiation. The majority of interviewees appreciates to have the new scenarios with respect to the same reference period as in CH2011 due to comparability purposes. The survey also investigated the incorporation of provided uncertainty into the applications of the users. The survey shows that this largely depends on the type of user: while intensive users often can handle uncertainties, there are a lot of other users that either cannot or purposely do not make use of the uncertainty. Further results of the user survey will be presented and the consequences for the next generation of Swiss climate change scenarios are discussed.