



SUSALPS

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Type: Oral presentation (9:10 AM - 4:10 PM)

## Keynote: Grassland ecosystem services in a changing climate –combining advisory guidelines and process-based modelling to support adaptation

*Tuesday 15 July 2025 13:10 (30 minutes)*

The National Climate for Climate Services (NCCS) is currently implementing a programme aimed at developing decision-making tools for dealing with climate change in Switzerland. As a contribution to “Ecosystem Services”, one of the projects included in the programme, Agroscope is setting up an interactive information platform that will allow users to display the projected impacts of climate change on grassland ecosystem services. Given the practical scope, it is important that the data displayed on the platform match the information already available for advising stakeholders. For instance, the current fertilisation recommendations in the official guidelines published by Agroscope target yield levels that reflect the empirical knowledge obtained from field trials and monitoring programmes. To ensure consistency with this information, a mixed approach was therefore selected to develop the new platform, in which empirical relations between elevation, climate and management deliver the basis for creating maps of current productivity levels, while simulations with a process-based model driven with climate change scenarios are conducted to chart the impacts of elevated CO<sub>2</sub> concentrations, rising temperatures and shifts in precipitation patterns on grassland productivity. This presentation will illustrate the steps involved in the development of the platform and provide initial impressions of the final product.

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