



## **Towards integrated and interactive climate services: Examples and experiences from European research projects**

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For decision-makers concerned with climate change impacts information on climate change is only one component of the overall assessment process. Often climate change is not even the most dynamic component. Economic, demographic and land-use changes have and will most likely continue to change much more rapidly. Thus what is needed are integrated climate services that offer observation data and projections on all of these aspects. Furthermore, users should be able to select those data that are most relevant for their particular use case and then relate them to each other. In other words, climate services need to go beyond mere data provision and offer users interactive tools for data exploration.

This paper brings together examples and experiences from three European research projects: the Climate Information Portal for Copernicus (CLIPC), Service for Water Indicators in Climate Change Adaptation (SWICCA) and Advancing Quality of Climate services for European Water (AQUACLEW). These projects contained extensive user involvement in developing online portals, including user surveys, workshops and focus group discussions. The paper will reflect on these co-development processes and showcase some of the resulting innovative functionalities. For example, how users can actively explore datasets, how they can link different datasets with each other and thus create new composite indicators, which can then be visualised on the fly or downloaded e.g. for inclusion in a report or further data processing.