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Operational climate services for the water sector

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In order to meet the ambitious targets of the Paris agreement, an extremely rapid transition to a low carbon economy is required. This implicitly implies a steep improvement in our societal ability to deal with natural resources and environmental stressors. Whilst climate informations are increasingly needed as an input into both tactical and strategic decisions, the research community is not necessarily well prepared to cope with the new requirements such setup implies. This represents one of the key reasons why the operationalisation of climate services is rapidly becoming a high priority for our society.
Considering the important role that the water cycle plays in controlling the climate of the planet as well as most of our activities, is not at all surprising that the hydrological community -in the broadest sense of the word- has been one of the principle beneficiaries of what we would now call climate services. This has also generated a vibrant community of intermediate users, knowledge brokers and downstream service providers who can play a pivotal role in climate change adaptation especially at local level. However, in order for this adaptation to be effective, it is essential to ensure free and unrestricted operational provision of a number of high-quality datasets and associated services. Starting from the most recent developments in land-surface and hydrological modelling and building upon the implementation of the Copernicus Services we present our strategy for an operational climate service provision for the water sector.