



Improving Predictions and Management of Hydrological Extremes

Janet Wijngaard (1), Felicity Liggins (2), Bart vd Hurk (1), David Lavers (3), Linus Magnusson (3), Laurens Bouwer (4), Albrecht Weerts (4), Erik Kjellström (5), Maria Mañez (6), Maria-Helena Ramos (7), Cedric Hananel (8), Ertug Ercin (9), Johannes Hunink (10), Bastian Klein (11), Laurent Pouget (12), and Hans de Moel (13)

(1) KNMI, Netherlands (janet.wijngaard@knmi.nl), (2) MetOffice, UK, (3) ECMWF, UK, (4) Delltares, Netherlands, (5) SMHI, Sweden, (6) HZG, Germany, (7) IRSTEA, France, (8) ARCTIK, Belgium, (9) WFN, Netherlands, (10) FW, Spain, (11) BfG, Germany, (12) CETAQUA, Spain, (13) VU Amsterdam, Netherlands

The EU Roadmap on Climate Services can be seen as a result of convergence between society's call for "actionable research" and the climate research community's provision of tailored data, information and knowledge.

Although weather and climate have distinct definitions, a strong link between weather and climate services does exist but, to date, this link has not been explored extensively. Stakeholders being interviewed in the context of the Roadmap consider changes in our climate as distant, long-term impacts that are difficult to consider in present-day decision making, a process usually dominated by their daily experience with handling adverse weather and extreme events. However, it could be argued that this experience is a rich source of inspiration to increase society's resilience to an unknown future.

The European research project, IMPREX, is built on the notion that "experience in managing present day weather extremes can help us anticipate the consequences of future climate variability and change". This presentation illustrates how IMPREX is building the link between the providers and users of information and services addressing both the weather and climate timescales. For different stakeholders in key economic sectors the needs and vulnerabilities in their daily practice are discussed, followed by an analysis of how weather and climate (W&C) services could contribute to the demands that arise from this. Examples of case studies showing the relevance of the tailored W&C information in users' operations will be included.