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Best practises and lessons learnt from AQUACLEW

Christiana Photiadou¹, Lorna Little¹, Peter Berg¹, Rafael Pimentel², Maria Jose Polo², Torben Sonnenborg³, Ernesto Pasten-Zapata³, Vazken Andréassian⁴, Johaness Lückenkötter⁵, Philip Kruse⁵, David Leidinger⁶, Andreas Huber⁷, Stefan Achleitner⁷, Andrea Lira Loarca⁸, and Berit Arheimer¹

¹SMHI, Swedish Meteorological and Hydrological Institute, Norrköping, Sweden (christiana.photiadou@smhi.se)

²University of Cordoba, Cordoba, Spain

³Geological Survey of Denmark and Greenland, Copenhagen, Denmark

⁴Institute for Agricultural Research, Paris, France

⁵Technical University of Dortmund, Dortmund, Germany

⁶University of Innsbruck, Innsbruck, Austria

⁷University of Natural Resources and Life Sciences, Vienna, Austria

⁸University of Granada, Granada, Spain

AQUACLEW (Advancing Data Quality for European Water Services) is an ERA4CS project with the overall goal to improve quality of climate services. The project brings together nine European organisations, with different experience and expertise in developing climate services, providing data and collaborating with users. The project aims to investigate how to increase user uptake in a broad community using general information from a web interface, as well as tailored user-specific decision-support in seven case studies across Europe. Additionally, we track our 'climate friendliness' throughout the project.

AQUACLEW uses innovative research techniques and integrated co-development with users to advance the quality and usability of climate services for a number of water related sectors. We pose the following research questions: 1) how do we improve co-development to better incorporate multiple user feedbacks along the entire climate service production chain, from research to production, service use and decision making? 2) How should data, quality-assurance metrics and guidance be tailored along the whole data-production chain to closer meet user requirements, including resolution and precision?

Firstly, initial results show that the iterative approach between providers and users of data, demands confidence building through active engagement and involvement of experts to think on different pathways of action for users to interact with climate services and to integrate climate projections into their practice. To facilitate this interaction a number of online activities were designed: a guided-tour for the climate service, feedback loops, and game-like activities were included in the meetings with focus groups.

Secondly we focused on investigating how data, quality-assurance metrics and guidance could be tailored along the whole data-production chain to closer meet user requirements, through three

different experiments following different protocols. Protocols were developed for differentiated split sample testing in hydrological models and bias adjustment methods, and an expert elicitation. All three protocols were applied across four of seven case studies that had common factors to test the improvements of data production. The protocols had a strong impact through improved data quality in impact assessments for climate change adaptation in water management, thus decision-making can be better supported.

Lastly, we found preliminarily that 'climate friendly' efforts have provoked regular discussions within the consortium, suggestions for new ways to be climate friendly, challenges to travel by train and to find online solutions.