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S2S Real Time Pilot Workshop

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Presentation Title: Opportunities for interdisciplinary research to improve the evaluation of S2S forecasts

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Session Title: S2S RTP Achievements & next steps

Abstract:

The STS Real Time Pilot has been a successful collaboration bringing together projects with clear applications and established user partners to examine how forecast applications are developed and evaluated through user-researcher engagement. The project revealed major challenges around the evaluation of projects and forecasts including (1) difficulties in defining evaluation strategies and success indicators (both at the start of application development and sometimes at the end), and (2) detachment of users from the evaluation process. User buy-in, utility in decision making, and sustained support for S2S forecast applications all depend on understanding and measuring their value and impact. User-oriented evaluation means going well beyond traditional concepts like accuracy and timeliness to dimensions of user value that may encompass economic costs and losses, safety and wellbeing, and may have high levels of uncertainty.

The need for a logic model or theory of change informed by the user needs and building evaluation into the design of a project is critical. This also creates the potential to explore what is of value to the decision making and how this value might be propagated through the value chain, including when and why information is of value and the form and timing of its provision. The broader context of decision making and the myriad factors that temporally and spatially influence the value and use of information need to also be considered. The potential for interdisciplinary research and genuine partnership between physical and social sciences and early engagement with users will influence forecast application design, uptake and use and ultimately user value.

There are new opportunities to conduct interdisciplinary research to improve S2S forecast evaluation through the WWRP. The High Impact Weather project is integrating physical and social sciences to improve the effectiveness of early warnings, with its flagship Value Chain project having a special focus on evaluation. A new 5-year project on “S2S Applications for Agriculture and Environment” (SAGE) will include the development of applications and products that serve a variety of actors from a wide variety of countries and constituencies. The working group on Societal and Economic Research Applications (*SERA*) and the Joint Working Group on Forecast Verification Research (JWGFVR) will support SAGE by harnessing expertise in social science and verification methods that can be applied within the project. In our presentation we will offer some ideas for interdisciplinary research that could be conducted within the WWRP to improve the evaluation of S2S applications.