Session: B1 Oral presentation

Linking weather and climate

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Phenomena bridging time scales between short-term weather variability (periods of approximately 1 week) and climate variations of a season or longer profoundly influence society and the environment. A few recent examples include the 2010 Russian heat wave, which contributed to large increases in death rates, extensive fires and crop losses, and persistent, strong Euro-Atlantic blocking later in the year that led to severe cold and snow over much of Europe and adjacent regions with wide-ranging impacts. While research on weather-climate connections has produced impressive advances, it has also illuminated areas where significant gains can be made. Achieving optimal progress will require strengthening collaborations between weather and climate science communities. This presentation summarizes recommendations by an international team of scientists associated with the WWRP and WCRP on priorities for advancing predictions linking weather and climate and achieving a more unified understanding of phenomena and processes across time scales. These efforts will serve as a vital component in an overall research strategy to improve understanding and predictions of the integrated earth system.