### **SESSION: Plenary**

# (PL-09)

## **Research Needs for Advancing Operational S2D Forecasting Infrastructure**

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Advances in understanding of predictability of climate variability on sub-seasonal to decadal time scale has led to the establishment of operational infrastructure in support of providing routine predictions to interested stakeholders. This is highlighted by the designation of Global Producing Centers (GPCs) for seasonal and annual to decadal predictions under the purview of the World Meteorological Organization (WMO). The infrastructure of GPCs is further augmented by associated lead-centers that play the role of collecting, synthesizing and disseminating forecast information from individual GPCs. Despite tremendous advances in the development of operational forecasting on S2D time-scales, challenges remain that compromise the realization of inherent predictability as prediction skill. These challenges span considerations such as configuration of operational forecast systems, development and verification of forecast products, strategies for the communication of forecast information, etc. In this talk, research needs to address challenges for advancing operational S2D forecasting infrastructure will be discussed.