Best Practices for Quantifying Improvements in Predictions

Arun Kumar Climate Prediction Center College Park, MD arun.kumar@noaa.gov

Considerable resources are devoted to improving infrastructure for long-range prediction systems. Quantifying resulting improvements in prediction skill from advances in observing platforms, data assimilation and prediction systems, however, are difficult. Issues arise due divergence in methodologies that are employed in quantifying prediction skill, and span a wide array of choices that can be made in the evaluation of prediction skill. These choices include verification measures, verification period and verification datasets, ensemble size, cross validation etc. In this presentation an overview of factors influencing quantification of prediction skill, and thoughts on developing best practices, will be discussed.