Working Group on Seasonal-to-Interannual Prediction: Seasonal and Sub-Seasonal Research Activates

Arun KUMAR Climate Prediction Center, NOAA Washington DC, USA <u>arun.kumar@noaa.gov</u>

Under the purview of World Climate Research Programme (WCRP), the Working Group on Seasonal-to-Interannual Prediction (WGSIP) is tasked to

- Develop a programme of numerical experimentation for seasonal-to-interannual variability and predictability, paying special attention to assessing and improving predictions;
- Develop appropriate data assimilation, model initialization and forecasting procedures for seasonal-to-interannual predictions, considering such factors as observing system evaluation, use of ensemble and probabilistic methods and statistical and empirical enhancements, and measures of forecast skill;
- Advise on the on the status of seasonal to interannual forecasting and on the adequacy of the CLIVAR observing system, and liaise with other WCRP panels on modeling and numerical experimentation.

Activities of WGSIP focus on research to advance seasonal-to-interannual (SI) prediction and can be thought to complement the operational activities of Global Producing Centers (GPCs) of long-range predictions. Research advances made as an outcome of WGSIP efforts should inform operational activities, while research needs of operational community should be communicated to the research community via WGSIP.

One of the core projects coordinated by WGSIP is the Climate Historical Forecast Project (CHFP). The aim of CHFP is to collect seasonal hindcast data from different operational and research forecast system, and to make it available to research community to advance efforts in understanding and sources of predictability; skill assessments; understanding interactions among various components of the Earth System; and to develop seamless prediction capability from weekly-to-decadal time-scales. WGSIP also coordinates focused numerical experiments to understand predictability associated with individual components of the Earth System, e.g., interaction between stratosphere and troposphere. More information about WGSIP can be found at:

http://www.wcrp-climate.org/wgsip/index.shtml