Forecast Verification in the Atmospheric Sciences and Beyond

Forecast verification is a dynamic and rapidly evolving field. As computing power grows, more forecast models are available with increased complexity and greater resolution, and are updated more frequently. New observations to verify forecasts are available from satellites, aircraft, and automobiles, and an increasing array of surface-based instruments. New information technology is available to directly use forecasts in decision-making processes.

In addition, new types of forecasts have been created, including seasonal forecasts, climate forecasts, forecasts with probabilistic information and forecasts created for specific users such as the aviation and transportation communities.

The Colloquium will address the many facets of forecast verification and evaluation. Invited lecturers will discuss verification from the perspective of the meteorologist and climatologist, the statistician, the scientist and the decision maker. Speakers from the fields of meteorology, statistics, economics and health sciences will share a wide range of perspectives. To provide students with an opportunity to implement ideas from the lectures, students will work in groups on small, well-defined research projects.

Projects will be motivated by real users of forecast verification information. Results from each project will be presented at the end of the second week of the colloquium.

This colloquium is designed for Graduate students who have completed at least one year of studies in meteorology and climatology or computer science, economics or statistics with an interest in weather and climate are encouraged to apply. ASP will fund travel and local expenses for about 25 student participants during the Summer Colloquium.

Organizers: Matt Pocernich, Barbara Brown (NCAR Research Applications Laboratory), Mike Baldwin (Purdue University), Harold Brooks (NOAA/National Severe Storms Laboratory)

For more information and how to apply, see the NCAR Advanced Study Program website: www.asp.ucar.edu/colloquium/summer_colloquia.php