

Discussion Session

17 September 2004

Issues/Topics: Verification applications

- Increasing the use of confidence intervals and significance tests when reporting verification statistics
- Explaining more complex approaches (and their use) to users and forecasters (e.g., LEPS)
- Getting away from use of single measures and scoring rules
- Use of cross-validation
- Choice of reference forecasts, especially for ensemble forecasts

Issues/Topics: Verification applications

- Choosing a reasonable/meaningful scoring matrix
- Comparison of forecasts on different grids – can/should it be done?
- Testing of new verification approaches
- Benefits of real-time verification systems
 - what they should include
 - who they should serve

Issues/Topics:

Verification method development

- Methods for quantifying the uncertainty in verification measures
- Methods for verifying forecasts of extreme/rare events
- How to represent the “true” skill of forecasts, given
 - Low frequency of events (e.g., Göber)
 - Under-observation of events (e.g., Chadwick)
 - Observational uncertainty (e.g., Pocerlich/Briggs)
- Incorporation of measurement/observation error into verification analyses and skill scores

Issues/Topics:

Verification method development

- Verification of probability distributions
- Coping with large variability in high-resolution forecasts
- Definition of terminology in spatial forecast verification (e.g., event, entity, object)
- Use of knowledge and experience from other disciplines (e.g., medical)
- Use of multivariate statistical methods (e.g., to simultaneously compare several attributes)

Issues/Topics:

Verification method development

- Direct use of statistical (temporal-spatial) models for evaluation of spatial forecasts
- Incorporation of scaling methods into verification processes
- Definition of observations and methods that match the use of the forecast and users' information needs
 - Customer-dependent approaches

Issues/Topics:

Verification method development

- Dealing with textual forecasts that include forecast details that are difficult to decode
- Verification methods that provide meaningful information for studies of forecast value

Issues/Topics: Misc

- Incompatibility of equitability and propriety
- Impact of changing climate on standards of comparison and skill scores
- Verification as a scientific endeavor

Feedback on Workshop

- Comments?
 - What was good – bad – otherwise
- Future workshops
 - When?
 - Where?
- Other opportunities
- bgb@ucar.edu

Appreciation

- Laurie Wilson – Organization, Facilities
- MSC staff – Millie Cayo and others
- WMO – WWRP, WGNE/WCRP
- Speakers and participants



"That's all Folks!"