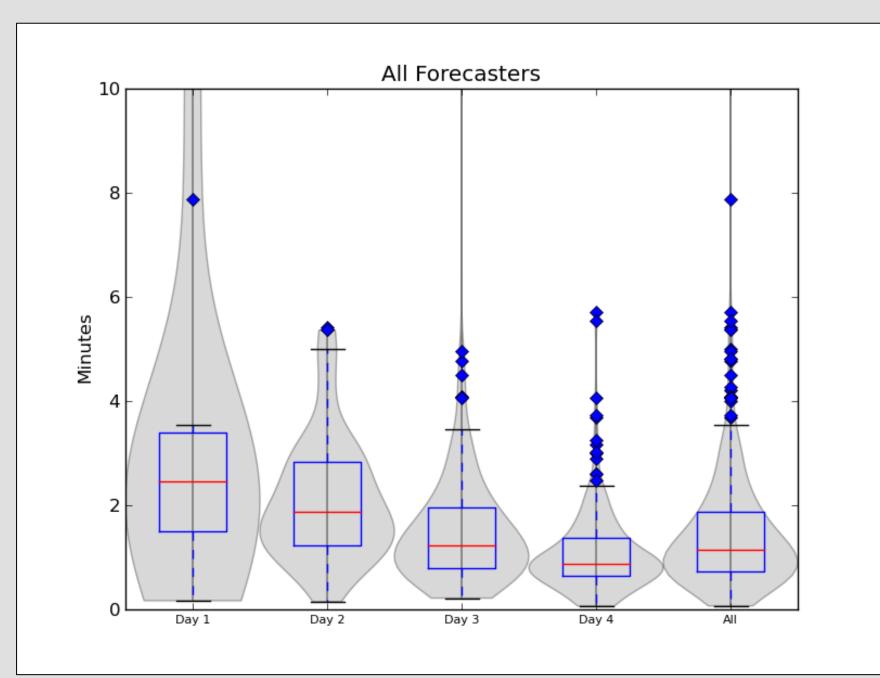
Prototype Development for Creating Probabilistic Hazard Information (PHI) for Severe Convective Weather

Christopher Karstens, Lans Rothfusz, Greg Stumpf, Travis Smith

Probabilistic Hazard Information (PHI) Information describing the probability for a given hazardous weather phenomenon within a defined spatial and temporal range & Guidance Response **Probabilities** Active Threats: T: 0 M: 0 W: 0 L: 0 Probability Time: 09 Aug 2009 15:14:53 Z Slider: 09 Aug 2009 15:14:30 Z

2014 HWT Experiment Findings (EWP)

Forecast Creation Times

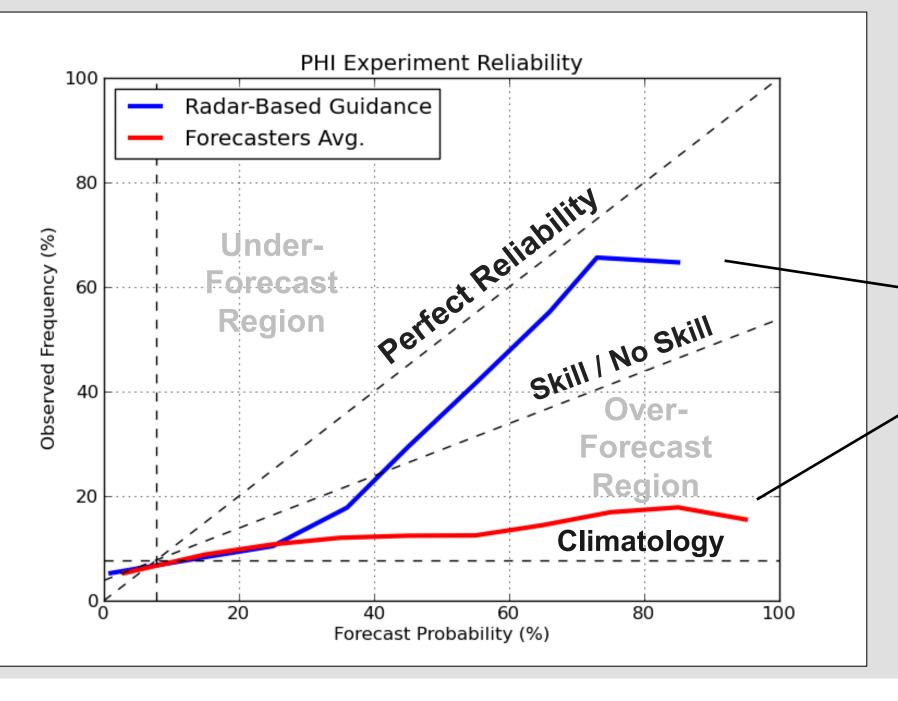


Forecasters found the prototype concepts *intuitive*

Decreasing amount of time to generate forecasts throughout the week

Quickly grasped new abilities (e.g., low probability forecasts with extended lead-time)

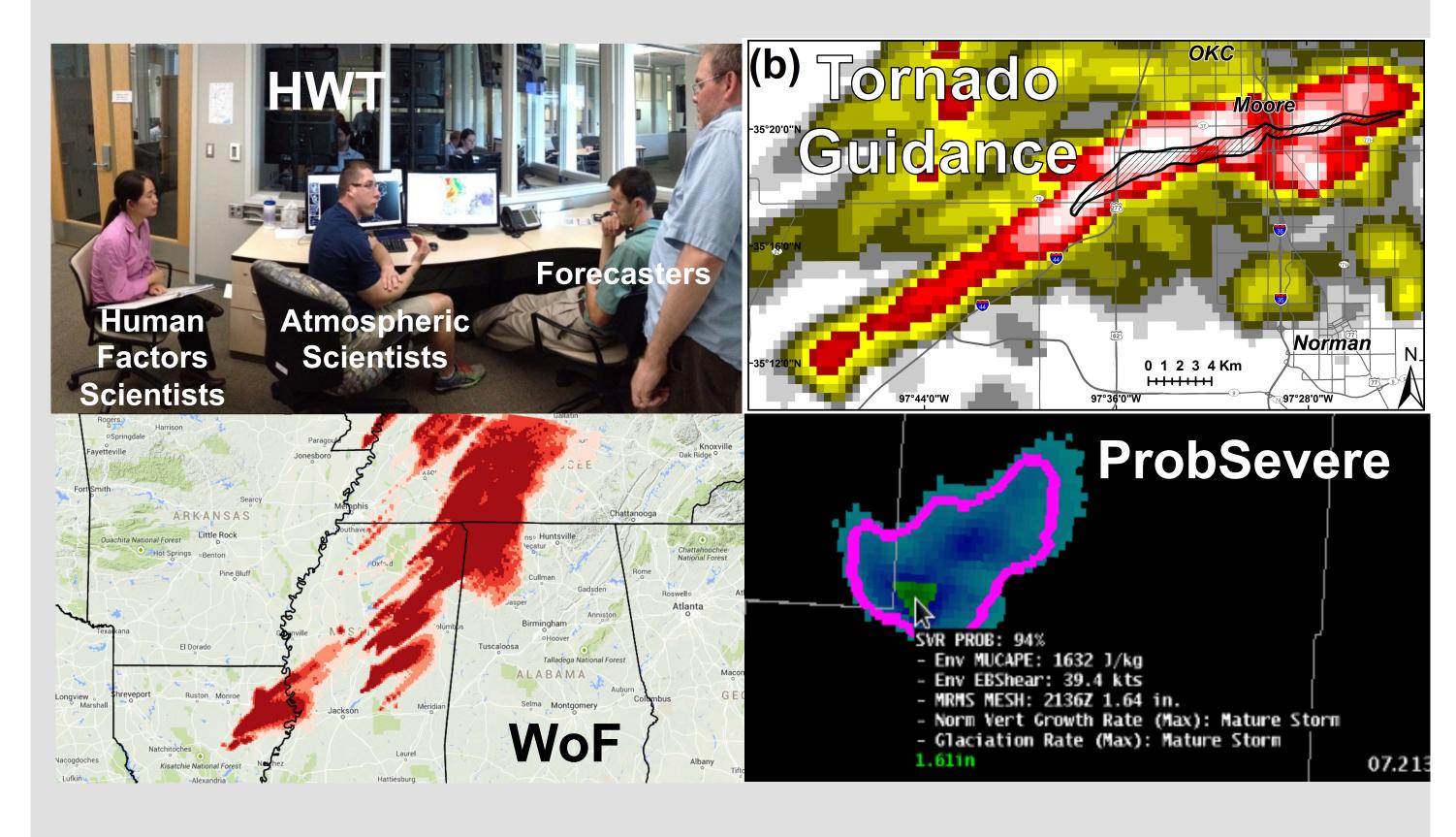
Forecast Reliability



Need for incorporating reliable 1st guess guidance in forecast decisionmaking

Future Plans

- HWT Experiments
 - Infusion of radar- and satellite-based algorithms
 - Simultaneous experiment with Emergency Managers
 - Warn-on-Forecast



- Research To Operations (R2O)
 - Collaboration with NOAA/GSD Hazard Services development group
 - Operational forecasting support for the PECAN field project (Summer 2015)

