

Testbed and Prototype

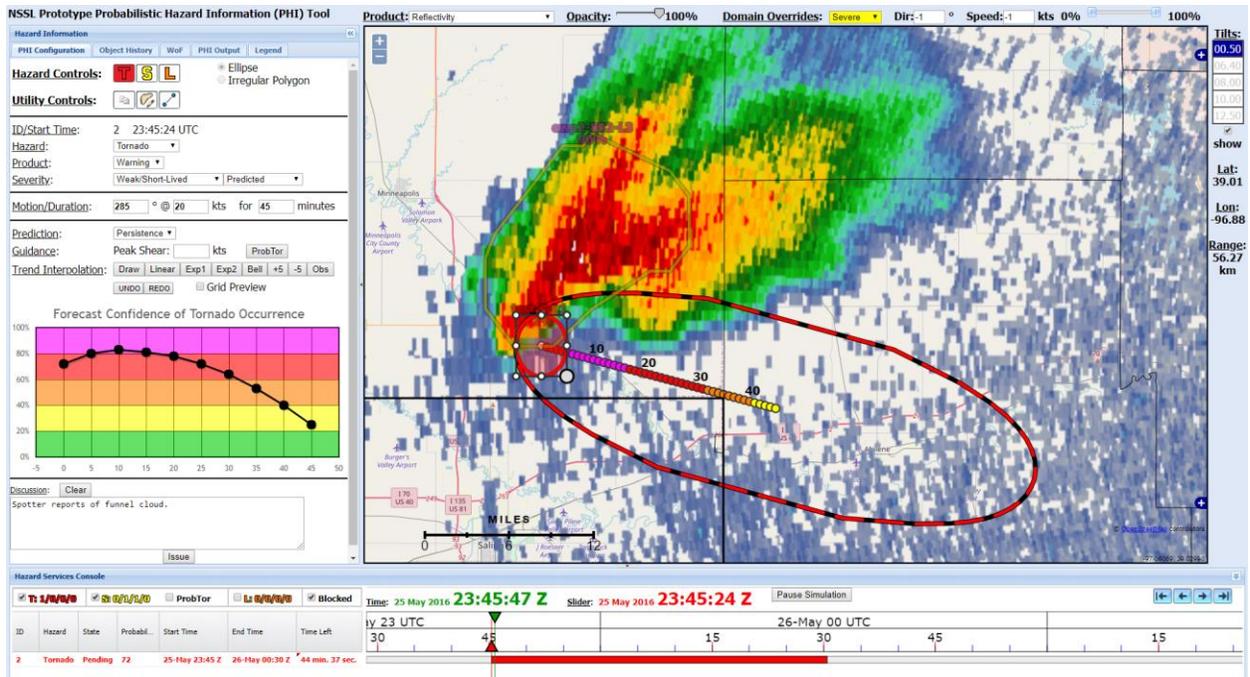
The Testbed Group helps design, plan, coordinate, and prepare experiments for the Experimental Warning Program (EWP) in NOAA's Hazardous Weather Testbed (HWT). The group aids in improving the nation's short-fused severe convective warning services by bringing together forecasters, researchers, broadcast meteorologists, trainers, technology specialists, developers, and other important stakeholders to test and evaluate new techniques, applications, observing platforms, and technologies. Forecasters are able to look at the latest research concepts and products within AWIPS-2 and web-based platforms to provide feedback to the researchers and developers creating a two-way street from research to operations and operations back to research.

HWT experiments supported include:

- **JPSS/GOES-R Convective Applications:** Forecasters assess recently developed experimental products and capabilities alongside their standard operational data and products. These experimental products are associated with the next generation series of geostationary (GOES-R) and polar orbiting (JPSS) satellites. Forecasters evaluate the products and provide feedback to the developers and National Weather Service.
- **Probabilistic Hazard Information (PHI) Prototype:** Forecasters assess a new tool using rapidly-updating high-resolution gridded PHI as the basis for next-generation severe weather warnings. Broadcast meteorologists and emergency managers use the PHI in a simulated work environment. Feedback from forecasters, broadcast meteorologists, and emergency managers is used to refine how the uncertainty information is generated and disseminated.
- **Hazard Services - Probabilistic Hazard Information (HS-PHI):** Forecasters assess a new tool using rapidly-updating high-resolution gridded PHI as the basis for next-generation severe weather warnings. The long-term goal of this effort is to move the refined concepts and methodologies that result from this experiment into Hazard Services, the next generation warning tool for the National Weather Service.
- **Multi-Radar Multi-Sensor Hydrometeorology Testbed - Hydro (HMT-Hydro):** Weather forecasters and hydrologists evaluate high-resolution precipitation forecasts and probabilistic hydrologic modeling output that could help convey the uncertainty of the flash flood threat. Feedback from participants identifies how these precipitation forecasts could influence the warning decision making process, including the potential for increased

warning lead time.





For further information please contact Travis Smith (tms@ou.edu).

Team Members

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