

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration National Weather Service National Centers for Environmental Prediction Storm Prediction Center 120 David L Boren Blvd, Suite 2301 Norman, Oklahoma 73072 Telephone: 405-325-2456

We are pleased to announce the 2022 *virtual* **Spring Forecasting Experiment** (SFE), part of the Experimental Forecast Program (EFP) of the NOAA Hazardous Weather Testbed (HWT), hosted by the Storm Prediction Center (SPC) and the National Severe Storms Laboratory (NSSL). We invite you to participate in the experimental online activities that are planned for this spring during the five-week period of May 2-June 3. Information about the overall goals of the HWT can be found here: <u>https://hwt.nssl.noaa.gov/</u>.

NWS forecaster participation in the HWT SFE is essential to facilitate meaningful interactions between the development and operational communities that will accelerate research-to-operations transitions. In particular, this provides opportunities for forecasters to provide feedback to ensure that new guidance products and visualization approaches meet their needs. This is a unique opportunity to see and influence the future of NWS forecasting tools for high impact weather. Here is more information about the 2022 SFE:

- The focus of the experiment is directly aligned with NWS FACETs and Warn-on Forecast (WoF) programs, including examination of real-time forecasts from a prototype WoF ensemble system.
- Activities are formulated to provide evidence-based information on how best to design convection-allowing models and ensemble systems (the operational HREF evolved from these efforts), and to explore innovative ways to extract relevant information and create calibrated probabilistic hazard guidance for high-impact weather events.
- These efforts also directly support the evolution toward a probabilistic NBM to better represent and account for forecast uncertainty.
- To accomplish these goals, the SFE brings together major model development organizations in the US (EMC, GSL, NSSL, GFDL, and NCAR) to work collaboratively in improving community modeling for future implementation into NWS operations.
- The SFE efforts support NOAA plans to develop a simplified, unified forecast system (UFS) centered on the FV3 dynamic core. Multiple versions of the FV3 run at 3-km will be tested to assess the ability of the FV3 to provide storm-scale guidance.

For those who want to be on the cutting-edge of NWS science developments, please consider participating virtually in the innovative, exciting SFE activities for *one week* during the May 2-June 3 period by filling out the 2022 HWT SFE Google Form by March 7.

Sincerely, Israel Jirak (SPC) and Adam Clark (NSSL)

