UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

OFFICE OF OCEANIC AND ATMOSPHERIC RESEARCH

National Severe Storms Laboratory
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December 2, 2022

Hazardous Weather Testbed Activities

The NOAA Hazardous Weather Testbed (HWT) at the National Weather Center (NWC) in Norman, Oklahoma, is seeking participants for ***one in-person experiment*** in early spring 2023. The testbed is a joint project of the National Weather Service Storm Prediction Center and the National Severe Storms Laboratory that provides a conceptual framework and physical space to foster collaboration between research and operations to test and evaluate emerging technologies and science. This year, we will be conducting the 2023 HWT activities ***virtually and in-person*** for ***18 weeks*** in total.

There will be ***six*** primary projects in the HWT during 2022. The details of the Tiny Threats-in-Motion experiment are listed on page 3.

Tiny Threats-in-Motion (TIM)	Feb 13-17, Feb 27- Mar 3 **Application Deadline: Jan 3**
Hazard Services - Threats-in-Motion (HS-TIM)	Apr 17-21, May 1-5, May 8-12
Probabilistic Hazard Information (PHI) Prototype	May 1-5, May 8-12, May 15-19
Spring Forecasting Experiment	May 1-5, May 8-12, May 15-19, May 22-26, May 29-Jun 2
Satellite Convective Applications	May 22-26, Jun 5-9, Jun 12-16
Watch-to-Warning	Fall 2023

*In-person participation will comply with DOC COVID-19 Workplace Safety Plan

All 2023 HWT activities will have virtual contingency plans using online resources such as Google Meet and AWIPS in the Cloud. Each project-specific application form (found in the project details selection below) will require from each candidate:

a. Name and organization (WFO, region HQ, etc.)
b. Forecaster position
c. Prior HWT experience
d. Interest statement (one paragraph, 200 words max)

e. Weeks available

The interest statements should include your motivation for evaluating future warning and/or forecast systems in the HWT and demonstrate why you would be a good fit for a particular experiment. Participants may include WFO or Region HQ staff, and participants are not required to have had prior HWT experience. We are seeking diversity among regions, warning and forecast experience, and HWT experience.

Any questions about these experiments should be directed to the EWP Coordinator, **Kodi Berry (kodi.berry@noaa.gov)**.

The deadline for the first round of applications is January 3, 2023. Candidates will be selected shortly thereafter. Any questions or concerns about the application process should be directed to **Alan Gerard (alan.e.gerard@noaa.gov)**.

We desire enthusiastic people who are interested in improving NWS warning and/or forecast decision-making technology, products, and services. We would be happy to provide more information about the HWT activities if requested.

Sincerely,
Alan Gerard
Hazardous Weather Testbed, National Severe Storms Laboratory

Tiny Threats-in-Motion (Tiny TIM)
Project Descriptions & Details

CLICK HERE TO APPLY
The deadline for applications is January 3, 2023. Candidates will be selected shortly thereafter.

WHEN – February 13-17, February 27- March 3

WHERE – Hazardous Weather Testbed, National Weather Center, Norman, OK
*In-person participation will comply with DOC COVID-19 Workplace Safety Plan

WHAT – The Hazard Services (HS) software includes a convective severe weather warning perspective which is slated to replace the WarnGen capability in AWIPS. The National Severe Storms Laboratory (NSSL), Global Systems Laboratory, and NWS Meteorological Development Laboratory have been developing a new functionality within HS - Convective that will allow severe thunderstorm and tornado warnings to be extended in both area and time for long-tracked storm hazards expected to last beyond the length of the initial warning duration. Currently, when a warning is updated, the expiration time cannot be extended, and the warned area can only be reduced. If the storm is still severe at the end of the warning, a second warning must be issued. By contrast, the new functionality will allow a single warning, with subsequent updates, to be used to track an entire storm's lifecycle from beginning to end. This capability to extend warning time and area is the first step toward a Threats-In-Motion (TIM) concept, and is known as "Tiny TIM". We will be evaluating this new functionality within the HWT during the winter/ spring of 2023.

WHY – We hope to extend the dialog on TIM as the concepts become closer to possible operational reality. In addition, we hope to collect the data necessary to make improvements to the HS software prior to a decision for operational implementation.

WHO – We would like geographic, experiential, and gender diversity in our forecaster pool. An interest in the evolution of forecast and warnings services is a must. Three forecasters will be chosen for each of the two weeks of the experiment. Completion of the Warning Decision Training Division's Radar Applications Course and some operational severe weather warning experience is desired.

For more information:
https://inside.nssl.noaa.gov/facets/2021/03/threats-in-motion/
Tiny TIM blog on the FACETs VLab Page