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Public Information Statement 24-31 Updated National Weather Service Headquarters Silver Spring MD 900 AM EDT Wed Apr 16 2025

To: Subscribers:

-NOAA Weather Wire Service

-Emergency Managers Weather Information Network

-NOAAPort

Other NWS Partners, Users and Employees

From: Stephen W. Bieda III, Ph.D, Chief

Severe, Fire, Public, and Winter Weather Services

Branch

Subject: Updated: Soliciting Comments on Experimental HeatRisk Grids in the National Digital Forecast Database (NDFD) and WPC HeatRisk CONUS Viewer through September 30, 2025

Updated to extend the comment period.

The NWS is seeking user feedback on experimental HeatRisk grids in the National Digital Forecast Database (NDFD) and the WPC HeatRisk contiguous U.S. (CONUS) Viewer through September 30, 2025.

The experimental NWS HeatRisk is a consistent, science-based approach that leverages generalized heat-health science with local climatology and heat-health statistics to produce a daily value of expected heat risk for each 24-hour period within any upcoming 7-day forecast period. This expected heat risk is not only based on afternoon heat, but also on the effects of overnight temperature in terms of how it either mitigates or augments the effects of daytime heat.

Real-time access to the experimental HeatRisk product can be obtained through the NDFD webpage:

https://digital.weather.gov/

An interactive viewer of the experimental HeatRisk is also available from the following URL:

https://www.wpc.ncep.noaa.gov/heatrisk/

Geographic Information System (GIS) Representation State Transfer (REST) services are available from the following URL:

 $\frac{\text{https://mapservices.weather.noaa.gov/experimental/rest/services/NWS HeatR}}{\text{isk/ImageServer}}$

The experimental HeatRisk risk-based categorization framework is a straightforward numeric (0-4) color-based (green/yellow/orange/red/magenta) system. This type of messaging framework provides the public and NWS partners with an uncomplicated manner of risk-based heat-related categorizations to aid in decision-making.

Enhancements to the experimental HeatRisk that were added in early 2025 are as follows:

- Changed magenta (extreme) days to be primarily generated from a 3-day duration of 95th percentile highs and lows,
- Implemented a new dynamic diurnal range modifier process to better account for real-time humidity, using both the climatology of a location along with the daily forecast differences between the MaxT and MinT values to calculate HeatRisk,
- Applied a noise reduction algorithm to remove random pixelation noise.

The experimental HeatRisk will be updated at least every six hours at approximately 0000 Coordinated Universal Time (UTC), 0600 UTC, 1200 UTC, and 1800 UTC.

Please see the NWS Product Description Document (PDD) for more details:

https://nsdesk.servicenowservices.com/api/g noa/nwspc/res2/e949d2a91beca2
140d690f67624bcb82

Users are encouraged to provide feedback on this experimental service by using the brief survey and comment form available online at:

https://www.surveymonkey.com/r/ExpNWSHeatRisk 2025

Questions related to the experimental HeatRisk can be directed to:

Public Weather Services Program
NOAA/NWS/Analyze, Forecast and Support Office
Silver Spring, MD
Email: public.program@noaa.gov

National Public Information Statements are online at:

https://www.weather.gov/notification/

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