

Experimental SPC Probabilistic Day 3-8 Fire Weather Outlooks
Product Description Document (PDD)

Part I - Mission Connection

a. Product Description – This product provides a daily probabilistic forecast of critical fire weather conditions for dry thunderstorms and/or strong winds, low relative humidity, and warm temperatures across the continental U.S. during the Day 3-8 period.

b. Purpose - Operationally, the SPC produces daily categorical forecasts of critical fire weather conditions from dry thunderstorms through Day 3, and from strong winds, low relative humidity, and warm temperatures through Day 8. Predictive Services and NWS WFO meteorologists along with users in the fire weather community have expressed continued interest in utilizing our longer range outlooks for planning. The experimental probabilistic forecasts will provide individual daily web graphics for days 3 through 8 to better communicate forecast uncertainty information to decision makers. Area delineation of marginal areas will occur when potential for critical fire weather exists, but predictability is too low to yet warrant a categorical critical area designation. This will provide additional lead time in the graphical depiction of potential critical fire weather events.

c. Audience - The target audience includes NWS and Predictive Services meteorologists. The product may be useful to anyone in the fire weather community, emergency management, media, and the general public to adequately prepare several days in advance for the potential of critical fire weather conditions

d. Presentation Format – The experimental probabilistic outlooks will be presented as six web-based graphics. A graphic for each individual day (day 3, 4, 5, 6, 7, 8) will include the probability of dry thunderstorms with dry fuels (contoured at 10% and 40%), and the probability of strong winds, low RH, and warm temperatures concurrent for at least 3 hours with dry fuels (contoured at 40% and 70%). These six web graphics will be included along with the operational Day 3-8 categorical outlook graphic and text discussion.

e. Feedback Method - Web feedback from the broader community will be sought via an NWS customer survey link on the SPC webpage beginning on June 5, 2012 and ending on January 30, 2013, at which time a decision to proceed with testing, revise the test, or to continue on the path to operational production will be made.

Comments may also be provided to:
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Part II - Technical Description

a. Format and Science Basis – The experimental probabilistic outlooks will consist of a web graphic for each day (days 3, 4, 5, 6, 7, and 8) that will include:

- 1) Probability of dry thunderstorms with dry fuels within 12 miles of a point during the 24 hour period of the indicated day (two contours)
 - Within 10% contour - Marginal Area
 - Within 40% contour - Critical Area

- 2) Probability of strong winds, low RH, and warm temperatures concurrent for at least 3 hours with dry fuels within 12 miles of a point during the indicated day (two contours)
 - Within 40% contour - Marginal Area
 - Within 70% contour - Critical Area

This product can be accessed along with the operational Day 3-8 categorical outlook on the SPC webpage at the following URL: http://www.spc.noaa.gov/products/exper/fire_wx/

b. Availability – The experimental probabilities will be issued daily by 2200 UTC, in conjunction with the issuance of the operational Day 3-8 categorical outlook graphic and text discussion.

c. Additional Information – None.

NWS Product Definition Document (PDD) for:
Experimental SPC Probabilistic Day 3-8 Fire Weather Outlooks

Submitted 3 May 2012

Approval:

_____ Director, Storm Prediction Center

_____ OCWWS Fire Weather Program Leader

_____ Director, National Centers for Environmental Prediction