

**Experimental SPC Probabilistic Day 3-8 Fire Weather Outlooks**  
Product Description Document (PDD)  
November 2014

**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 longer range outlooks for planning. The experimental probabilistic forecasts provide individual daily web graphics for days 3 through 8 to better communicate forecast uncertainty information to decision makers.

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 are presented as six web-based graphics. A graphic for each individual day (day 3, 4, 5, 6, 7, 8) include 1) The probability of dry thunderstorms with dry fuels (contoured at 10% and 40%), and 2) 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 are 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 October 21, 2014 and ending on September 29, 2015, 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 consists of a web graphic for each day (days 3, 4, 5, 6, 7, and 8) that includes:

- 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/](http://www.spc.noaa.gov/products/exper/fire_wx/)

b. Availability – The experimental probabilities are 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.