### **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 combined with low relative humidity 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 and low relative humidity 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 additional information with dry thunderstorm areal delineations through Day 8. In addition, areal 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 two graphics on the SPC webpage. They 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 April 19, 2011 and ending on 30 November 2011, 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: Russell Schnieder or Jeremy Grams NWS Storm Prediction Center 120 David L. Boren Blvd. Suite 2330 Norman, OK 73072 405-325-2066 Russell.Schneider@noaa.gov jeremy.grams@noaa.gov

#### **Part II - Technical Description**

- a. Format and Science Basis The experimental probabilistic outlooks will consist of two graphics highlighting the:
  - 1) Probability of dry thunderstorms with dry fuels within 12 miles of a point
  - 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.

The probabilities will be depicted with a closed line and a label indicating the day(s) of the expected threat. For the probability of dry thunderstorms, a scalloped (dashed) line will imply a 40% or greater (10-39%) probability of dry thunderstorms occurring during the 24 hour period of the indicated day. For the probability of strong winds, low RH, and warm temperatures, a solid (dashed) line will imply a 70% or greater (40-69%) probability of those conditions being concurrent for at least 3 hours during the 24 hour period of the indicated day.

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:

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### Submitted 12 March 2011

Approval:	
	Director, Storm Prediction Center
	OCWWS Fire Weather Program Leader
	Director National Centers for Environmental Prediction