

Experimental SPC Day 4-8 Severe Weather Outlooks

Product Description Document (PDD)

Part I - Mission Connection

a. Product Description – The Storm Prediction Center (SPC) Day 4-8 Severe Weather Outlook is a single graphic with defined “Severe” areas for each day for the contiguous U.S. (CONUS). These areas are based on a 30 percent threshold of severe convection. Areas of lower probabilities of severe convection are often mentioned in the corresponding text product but not reflected in the graphic when the 30 percent probability is not reached. Two enhancements to the current Day 4-8 Severe Weather Outlook graphic are included in this Product Description Document (PDD):

- 1) The new experimental products will provide five separate outlook graphics, one for each day (D4, D5, D6, D7, and D8).
- 2) The current 30 percent threshold for denoting a "Severe" area in the Day 4 through 8 timeframe will be retained. Another probability, 15 percent, will be added for areas where organized severe weather is possible.

b. Purpose -- The addition of the 15 percent threshold will result in more consistency between the Day 4-8 graphics and corresponding text discussion. This will also bring better consistency to the risks communicated in SPC outlooks from the short-range Day 1 outlooks through the extended range Day 4-8 outlooks. The changes are being made based on customer feedback and to better meet their needs.

c. Audience -- The target audience includes NWS CONUS Weather Forecast Offices (WFOs), the public, media and emergency managers. The product is widely used to adequately prepare days in advance for the potential of severe convective weather.

d. Presentation Format -- The experimental products are only available as web graphics at <http://www.spc.noaa.gov/exper/dy4-8example/>. The operational SPC Day 4-8 Severe Weather Outlooks are available as web graphics with text discussion, Redbook Graphics, Points products, and NDFD grids.

e. Feedback Method - Web feedback from the broader community will be sought via an NWS customer survey link on the SPC webpage beginning around April 30 and ending June 17, 2014. At that 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 Storm Prediction Center (SPC) Day 4-8 Severe Weather Outlook will include five separate outlook graphics, one for each individual day. Currently, a single graphic for all five days is produced.

Areas will be delineated by a line labeled 15% where the total severe weather probabilities are at least 15 percent within 25 statute miles of any point. Areas will also be delineated by a line labeled 30% where the total severe weather probabilities are at least 30 percent within 25 statute miles of any point. Currently only areas of probabilities of 30% are available. The labels "D4", "D5", "D6", "D7", "D8" will no longer be used.

If these changes are approved for operations (September 2014 at the earliest), the following products will reflect these changes:

WMO Header	AWIPS ID	Description:
ACUS48 KWNS	SWOD48	Days 4-8 Convective Outlook Discussion
WUUS48 KWNS	PTSD48	Days 4-8 Convective Outlook Areal Outline
PGNW49 KWNS	RBG440	Day 4 Red Book Graphic Total Probability of Severe Thunderstorms
LDIZ48 KWNS		Day 4 NDFD Total Probability of Severe Thunderstorms
PGNW50 KWNS	RBG550	Day 5 Red Book Graphic Total Probability of Severe Thunderstorms
LDIZ58 KWNS		Day 5 NDFD Total Probability of Severe Thunderstorms
PGNW51 KWNS	RBG660	Day 6 Red Book Graphic Total Probability of Severe Thunderstorms
LDIZ68 KWNS		Day 6 NDFD Total Probability of Severe Thunderstorms
PGNW52 KWNS	RBG770	Day 7 Red Book Graphic Total Probability of Severe Thunderstorms
LDIZ78 KWNS		Day 7 NDFD Total Probability of Severe Thunderstorms
PGNW53 KWNS	RBG880	Day 8 Red Book Graphic Total Probability of Severe Thunderstorms
LDIZ88 KWNS		Day 8 NDFD Total Probability of Severe Thunderstorms

If these changes are approved for operations (September 2014 at the earliest), the following products will no longer be produced:

WMO Header	AWIPS ID	Description:
PGNM98 KWNS	RBG480	Days 4-8 Red Book Graphic Categorical Outlook
LDIZ47 KWNS		Day 4 NDFD

LDIZ57 KWNS Day 5 NDFD
LDIZ67 KWNS Day 6 NDFD
LDIZ77 KWNS Day 7 NDFD
LDIZ87 KWNS Day 8 NDFD

The "points" product (PTSD48) will include new labels of "0.15" (15 percent) and "0.30" (30 percent).

A more detailed description and examples of the Experimental SPC Day 4-8 Severe Weather Outlooks can be found at: <http://www.spc.noaa.gov/exper/dy4-8example/>

b. Availability – No changes to the issuance times of these products.

c. Additional Information – Experimental Example:

