

# PRODUCT DESCRIPTION DOCUMENT

## 6- to 10-Day and 8- to 14-day Minimum Wind Chill Prediction (Contiguous U.S and Alaska). NWS Product Description Document (PDD)

### Part 1 - Mission Connection

- a. Product Description: The Climate Prediction Center (CPC) issues 6- to 10-Day and 8- to 14-Day minimum wind chill predictions in probabilistic format for the Contiguous U.S. and Alaska.
- b. Purpose: This product is intended for planning for potential cold exposure that could cause significant health risks.
- c. Audience: This product indicates potential severity of wind chill events for health officials.
- d. Presentation Format: CPC presents the outlooks for a number of U.S. cities on GIF chart maps at the CPC web site.
- e. Feedback Method: Go to <http://www.cpc.ncep.noaa.gov/comment-form.html>

### Part II - Technical Description

- a. Science and Format: CPC will issue maps indicating the probability (in percent) that the minimum wind chill value will in the below normal category and below seven specific thresholds: 32°F, 28°F, 20°F, 10°F, 0°F, -20°F, and -40°F. The wind chill index formula is described in [Instruction 10-513 \(WFO Winter Weather Products Specification\)](#).

There will be a map for each of eight criteria listed above for both the 6- to 10-day and 8- to 14-day periods. Overall there will be a total of 16 maps. Forecast probabilities on the maps will be contoured at 10 percent intervals and those between 50 and 100 percent will be shaded in blue.

In addition, CPC will indicate the climatological threshold for the below normal category, or the climatological probability of being below a certain threshold, in 10 percent intervals, using dashed black lines. The maps will also have tags as one moves over a city location, marked by a plus sign (+) on the maps. Clicking on these plus signs will give the user more information about the forecast.

b. Product Availability: CPC issues the products daily at around 3:00 p.m. Eastern local time from October 1 through March 31.

6- to 10-day wind chill outlooks are at:

[http://www.cpc.ncep.noaa.gov/products/predictions/short\\_range/cold/wc\\_610.html](http://www.cpc.ncep.noaa.gov/products/predictions/short_range/cold/wc_610.html)

8- to 14-day wind chill outlooks are at:

[http://www.cpc.ncep.noaa.gov/products/predictions/short\\_range/cold/wc\\_814.html](http://www.cpc.ncep.noaa.gov/products/predictions/short_range/cold/wc_814.html)

c. Additional information:

Valid Time. The valid times are for the 6- to 10-day period and 8- to 14-day period after issuance of the outlooks.

Product Expiration Time. The outlook expires with the next issuance of the product.

Creation Software. CPC will use GEMPAK software as an input into NAWIPS to create GIFs for the internet.