

NATIONAL WEATHER SERVICE PRODUCT/SERVICE DESCRIPTION DOCUMENT (PDD) TYPE: Official Product DATE: January 28, 2003

6-TO 10-DAY and 8-to 14-DAY OUTLOOKS (CONTIGIOUS U.S. and ALASKA)

Part 1 -Mission Connection

- 1 Product/Service Description: The Climate Prediction Center (CPC) issues 6-to 10-Day and 8-to 14-Day outlooks in probabilistic format for the Contiguous U.S. and Alaska.
- 2 Purpose/Intended Use: Since these outlooks pertain to the average temperature and total precipitation for the entire valid period and not to the variability within it, they will not help people planning events for specific dates or sub-periods. The outlooks will be of most use for business and economic planning, particularly when used with 30 year base period means.
- 3 Audience: The outlooks provide information to decision makers in weather and climate sensitive activities sensitive to intra monthly climate variation (e.g. weather risk management, energy/utilities, agriculture, hydrology, etc.).
- 4 Presentation Format: The outlooks are presented in charts sent over NWS dissemination systems in red book graphic format and on the CPC web site.
- 5 Feedback Method: <http://www.cpc.ncep.noaa.gov/comment-form.html>

Part 2 -Technical

1. Format and Science Basis: CPC will express the outlook in a 3-category probabilistic format as chances the mean temperature or total precipitation for the period will fall into the most likely of three classes: above, below, or near normal. CPC defines the classes as climatologically equally likely: the top 10 cases of a thirty year record define the above category (A), the middle 10 cases define the normal category (N), and the bottom 10 cases defining the below category (B). For the valid period, CPC uses the 30-year mean temperatures and 30-year mean total precipitation for the climatology and class limits. CPC smooths the temperature climatologies using a harmonic analysis with three harmonics retained. CPC smooths the precipitation climatologies using 11 and 15-point running means for the 6-to 10-days and 8-to 14-day outlooks, respectively. CPC updates this information once per decade.

CPC will indicate the probabilities for the most likely class with solid contour lines. They will label the centers of maximum probability with the letters A, N, or B to denote the most

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likely class. For example, if the probability for the above normal temperature class exceeds 50 percent for a given area and is the most likely class, then CPC will encircle the area by a probability contour of 50 percent on the temperature outlook chart and label the area with the letter A. CPC does not generally draw contours in regions designated as near normal. This is because that category has been shown to be unpredictable with any skill on a consistent basis.

CPC will use dashed isotherms of the 30-year mean temperatures for the outlook period on the temperature outlook chart and dashed isohyets of 30-year mean total precipitation for the outlook period on the precipitation outlook chart.

URL for 6-to 10-Day Outlooks:

<http://www.cpc.ncep.noaa.gov/products/predictions/610day/>

URL for 8-to 14-Day Outlooks:

<http://www.cpc.ncep.noaa.gov/products/predictions/814day/>

2. Availability: These are scheduled products issued daily around 3:00 p.m. Eastern Local Time. CPC does not issue updates or amendments. They will issue corrections as needed. CPC issues the outlooks on NWS dissemination systems under the following product IDs:

	Temperature		Precipitation	
	WMO Heading	AWIPS ID	WMO Heading	AWIPS ID
6-to 10-Day	PNNT51 KWBC	RBG96T	PEIY47 KWBC	RBG96E
8-to 14-Day	PTTU98 KWNC	RBG98T	PETT00 KWNC	RBG98E

They are also issued on the CPC web site at the URLs listed in section a.

3. Additional Information:

Valid Time: The valid time is the 6-to 10-day or 8-to 14-day period after issuance.

Product Expiration Time: The outlook expires 24 hours later with issuance of the next 6-to 10-Day or 8-to 14-Day Outlook.

Creation Software: CPC uses the General Meteorological Package (GEMPAK) software as an input into National Center Advanced Weather Interactive Processing System (NAWIPS).