6- TO 10-DAY AND 8- TO 14-DAY EXCESSIVE HEAT OOUTLOOKS

Part 1 - Mission Connection

1. Product/Service Description:

The Climate Prediction Center (CPC) issues 6- to 10-Day and 8- to 14-Day excessive heat outlooks in probabilistic format for the Contiguous U.S.

2. Purpose/Intented Use:

This product is intended for planning for potential cumulative heat exposure that could cause significant health risks, especially for a number of the most vulnerable cities.

3. Audience:

The product is for use by health officials and local emergency managers.

4. Presentation Format:

CPC presents the outlooks as charts sent over NWS dissemination systems in red book graphic format and on the CPC web site.

5. Feedback Method:

 $\label{eq:constraint} E\text{-mail both Robert.Leffler} @noaa.gov \ and \ Barbara.Mayes @noaa.gov.$

Part 2 - Technical

1. Format and Science Basis:

CPC will issue outlooks of the probability (in percent) of the average calendar day heat index exceeding three different thresholds ($\geq 85 \,^{\circ}$ F for $\geq 3 \,^{\circ}$ days; $\geq 90 \,^{\circ}$ F for $\geq 2 \,^{\circ}$ days; $\geq 95 \,^{\circ}$ F for $\geq 1 \,^{\circ}$ day) during the valid period. The heat index formula is described in NWS Instruction 10-705 (WFO Non-precipitation Weather Products Specification). CPC will also indicate climatological mean probabilities of exceeding the thresholds on the charts.

CPC will plot solid probability isoline contours. CPC will overlay dashed isolines of the climatological normal probability of exceeding the thresholds.

URLs for 6- 10-Day excessive heat outlooks

 $\geq 85\,^{\rm o}{\rm F}$ for $\geq 3~{\rm days}$ http://www.cpc.ncep.noaa.gov/products/predictions/610day/gifs/appt_maps.08.35.a.gif

 $\geq 90\,^{\circ}F$ for $\geq 2~days$ http://www.cpc.ncep.noaa.gov/products/predictions/610day/gifs/appt_maps.08.25.a.gif

 $\geq 95\,^{\circ}\mathrm{F}$ for $\geq 1~\mathrm{day}$

http://www.cpc.ncep.noaa.gov/products/predictions/610day/gifs/appt_maps.08.15.a.gif

URLs for 8- 14-Day excessive heat outlooks

 $\geq 85 \,^{\circ}$ F for $\geq 3 \,^{\circ}$ days http://www.cpc.ncep.noaa.gov/products/predictions/814day/gifs/appt_maps.11.37.a.gif

 \geq 90 °F for \geq 2 days http://www.cpc.ncep.noaa.gov/products/predictions/814day/gifs/appt_maps.11.27.a.gif

 $\geq 95\,^{\rm o}{\rm F}$ for $\geq 1~{\rm day}$ http://www.cpc.ncep.noaa.gov/products/predictions/814day/gifs/appt_maps.11.17.a.gif

2. Availability:

These are scheduled products issued daily around 4:00 p.m. Eastern Local Time from May 1 through September 30. CPC does not issue updates or amendments. They will issue corrections as needed. They are issued on NWS dissemination systems under the following product IDs:

Average Daily	6-to10-Day		8-to14-Day	
Heat Index threshold	WMO Heading	AWIPS ID	WMO Heading	AWIPS ID
$\geq 85 ^{\circ}\text{F}$ for $\geq 3 \text{days}$	PTAS90 KWNC	RBGHI4	PTAT90 KWNC	RBGHI7
$\geq 90^{\circ}$ F for ≥ 2 days	PTAS95 KWNC	RBGHI5	PTAT95 KWNC	RBGHI8
$\ge 95^{\circ}\mathrm{F}$ for ≥ 1 day	PTAS00 KWNC	RBGHI6	PTAT00 KWNC	RBGHI9

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

3. Additional Information:

- <u>Valid Time</u>: The valid time is the 6- to 10-day or 8- to 14-day period after issuance.
- Product Expiration Time: The outlooks expire 24 hours later with issuance of the next 6- to 10-Day or 8- to 14-Day Excessive Heat Outlooks.
- <u>Creation Software</u>: CPC uses the General Meteorological Package (GEMPAK) software as an input into National Center Advanced Weather Interactive Processing System (NAWIPS).