

Probability of Exceedence Outlook for Center Probability Distribution (50 percent).

Part 1 - Mission Connection

a. Product/Service Description. The Climate Prediction Center (CPC) issues a series of thirteen three-month graphical outlooks for the 50 percent probability of exceedence (or center probability distribution) for temperature and precipitation across the contiguous U.S.

b. 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 economic and business planning, particularly when used with Base Period Means.

c. Audience. The audience is primarily decision makers with some technical background in weather and climate sensitive activities sensitive to inter-seasonal and inter-annual climate variation (e.g. weather risk management, energy/utilities, agriculture, hydrology, etc.).

d. Presentation Format. CPC presented the charts over NWS dissemination systems in “red book graphic” format and on the CPC web site.

d. Feedback. Go to: <http://www.cpc.ncep.noaa.gov/NWS-feedback-form.html>

Part 2 - Technical

a. Format and Science Basis. CPC provides precipitation and mean temperatures with a 50 percent (or center) probability of exceedence for a three-month valid time. These outlooks are consistent with the Three-Month Outlooks.

CPC plots solid contours of the temperature and precipitation anomaly values from climatology using the 102 climate outlook divisional values assigned to the central points within the divisions. CPC uses a contour interval in tenths of a degree Fahrenheit (or multiples thereof) and tenths of inches of precipitation (or multiples thereof). CPC also plots the climatological amounts for the center probability of exceedence using intervals of 5 degrees Fahrenheit (or multiples thereof) and one inch (or multiples thereof).

URLs for 50 percent POE outlooks:

Precipitation: <http://www.cpc.ncep.noaa.gov/products/predictions/90day/lead01/poep.html>

Temperature: <http://www.cpc.ncep.noaa.gov/products/predictions/90day/lead01/poe.html>

b. Availability. These are scheduled products. CPC issues these 13 outlooks simultaneously once a month on the third Thursday of the month around 8:30 a.m. Eastern local time. CPC does not issue updates or amendments. They will issue corrections as needed. CPC issues the products on NWS dissemination systems under the following product IDs:

Lead time is indicated by the number in the WMO heading and last letter in the AWIPS ID. (i.e. 01 and A have a lead time of 0.5 month, 02 and B have a lead time of 1.5 months, etc.)

| Temperature | | Precipitation | |
|------------------|-------------|------------------|------------|
| WMO Heading | AWIPS ID | WMO Heading | AWIPS ID |
| PTNV(01-13) KWNC | RBGCTA(A-M) | PENV(01-13) KWNC | RBGCP(A-M) |

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

c. Other information

Valid Time. CPC will issue the 13 outlooks with lead times from 0.5 months to 12.5 months. For example, in mid-January, CPC will issue Three-Month Outlooks for February through April, March through May, April through June, and so on to February through April of the following year.

Product Expiration Time. The 0.5 month lead time outlook expires at the beginning of the valid time of that outlook. The other outlooks expire when the next set of outlooks are issued (i.e. on the third Thursday of the following month).

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