

INTERMOUNTAIN WEST CLIMATE SUMMARY



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The Climate Prediction Center's U.S. Temperature and Precipitation Trend Maps

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Seasonal temperature and precipitation trends for the Continental U.S. are available on the National Weather Service Climate Prediction Center's (CPC) web page: <http://www.cpc.ncep.noaa.gov/charts.shtml>. This page displays maps of temperature and precipitation trends for 3-month time periods (e.g., January–February–March or February–March–April) as well as for a full year (Figure 1).

CPC uses monthly average temperature and total precipitation data for 102 climate regions across the country to determine trends relative to a multi-year average. Each climate region is comprised of 1 or more of the 344 climate divisions; this serves to both smooth over small-scale anomalies and to divide the country into regions of approximately equal area (at least compared to the wide array of traditional climate division sizes). For instance, Maryland is divided into 8 climate divisions while California is divided into 7; also, the 344 divisions all respect state boundaries while the 102 regions here do not.

For temperature, the trends are compared to the average temperatures for each 3-month period and each climate division from 1941 to 1975. For precipitation, the trends are compared to total precipitation for each month and each climate division from 1931 to 1975. The trend value itself is calculated from 1976 to 2005. Temperature changes are displayed as °F per decade, and precipitation changes are displayed as inches per decade.

Several studies show that the place-to-place and season-to-season variations in the temperature and precipitation trends are statistically significant and can be extrapolated into the near future, i.e. the next year or two (see On the Web Box for links to references). The CPC cautions that these trends cannot be used for longer time-period extrapolations because the trends do not represent or describe physical climate processes (e.g., El Niño), rather they are only approximate linear trends.

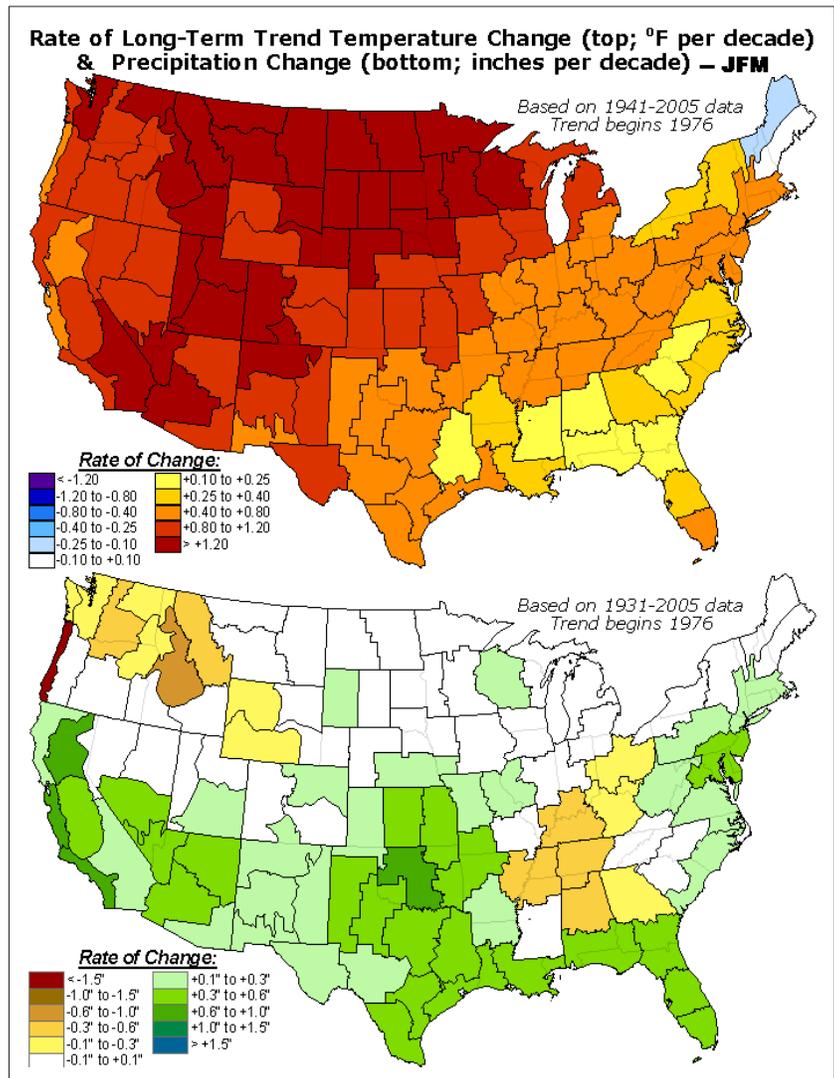


Figure 1: Temperature and precipitation trends for the January–March season shown for each climate division in the Continental U.S. Trends depict average changes per decade since 1976.

On the Web:

- For more information about the CPC seasonal trends, contact Richard Tinker of the NOAA Climate Prediction Center at Rich.Tinker@noaa.gov.
- For descriptions, limitations, and technical details about the CPC Seasonal Trends, go to: http://www.cpc.ncep.noaa.gov/trend_text.shtml#details
- For graphs depicting temperature and precipitation trends, go to: <http://www.cpc.ncep.noaa.gov/charts.shtml>

