**United States Average Monthly or Annual Maximum Temperature, 1971-2000**

Metadata also available as

**Metadata:**

* [Identification\_Information](http://www.prism.oregonstate.edu/docs/meta/tmax_30s_meta.htm#1)
* [Data\_Quality\_Information](http://www.prism.oregonstate.edu/docs/meta/tmax_30s_meta.htm#2)
* [Spatial\_Data\_Organization\_Information](http://www.prism.oregonstate.edu/docs/meta/tmax_30s_meta.htm#3)
* [Spatial\_Reference\_Information](http://www.prism.oregonstate.edu/docs/meta/tmax_30s_meta.htm#4)
* [Entity\_and\_Attribute\_Information](http://www.prism.oregonstate.edu/docs/meta/tmax_30s_meta.htm#5)
* [Distribution\_Information](http://www.prism.oregonstate.edu/docs/meta/tmax_30s_meta.htm#6)
* [Metadata\_Reference\_Information](http://www.prism.oregonstate.edu/docs/meta/tmax_30s_meta.htm#7)

*Identification\_Information:*

*Citation:*

*Citation\_Information:*

*Originator:* The PRISM Climate Group at Oregon State University.

*Publication\_Date:* 061206

*Title:*

United States Average Monthly or Annual Maximum Temperature, 1971-2000

*Geospatial\_Data\_Presentation\_Form:* raster digital data

*Publication\_Information:*

*Publication\_Place:* Corvallis, Oregon, USA

*Publisher:* The PRISM Climate Group at Oregon State University.

*Description:*

*Abstract:*

This data set contains spatially gridded average monthly and annual maximum temperature for the climatological period 1971-2000. Distribution of the point measurements to a spatial grid was accomplished using the PRISM model, developed and applied by Chris Daly of the PRISM Climate Group at Oregon State University.

*Purpose:*

Display and/or analyses requiring spatially distributed monthly or annual maximum temperature for the climatological period 1971-2000.

*Supplemental\_Information:*

There are many methods of interpolating climate from monitoring stations to grid points. Some provide estimates of acceptable accuracy in flat terrain, but few have been able to adequately explain the extreme, complex variations in climate that occur in mountainous regions. Significant progress in this area has been achieved through the development of PRISM (Parameter-elevation Regressions on Independent Slopes Model). PRISM is an analytical model that uses point data and an underlying grid such as a digital elevation model (DEM) or a 30 yr climatological average (e.g. 1971- 2000 average) to generate gridded estimates of monthly and annual precipitation and temperature (as well as other climatic parameters). PRISM is well suited to regions with mountainous terrain, because it incorporates a conceptual framework that addresses the spatial scale and pattern of orographic processes. Grids were modeled on a monthly basis. Annual grids of temperature are produced by averaging the monthly grids, and summing for precipitation.

*Time\_Period\_of\_Content:*

*Time\_Period\_Information:*

*Range\_of\_Dates/Times:*

*Beginning\_Date:* 19710101

*Ending\_Date:* 20001231

*Currentness\_Reference:*

Climatological period from which the point observations were taken.

*Status:*

*Progress:* Complete

*Maintenance\_and\_Update\_Frequency:* As needed

*Spatial\_Domain:*

*Bounding\_Coordinates:*

*West\_Bounding\_Coordinate:* -125.02083333

*East\_Bounding\_Coordinate:* -66.47916667

*North\_Bounding\_Coordinate:* 49.9375

*South\_Bounding\_Coordinate:* 24.0625

*Keywords:*

*Theme:*

*Theme\_Keyword\_Thesaurus:* None

*Theme\_Keyword:* None

*Place:*

*Place\_Keyword:* raster data

*Stratum:*

*Stratum\_Keyword:* maximum temperature

*Temporal:*

*Temporal\_Keyword:* grid cell

*Access\_Constraints:* Access pursuant to license agreement

*Use\_Constraints:*

Acknowledgement of the following agencies in products derived from these data: The PRISM Climate Group at Oregon State University.

*Point\_of\_Contact:*

*Contact\_Information:*

*Contact\_Person\_Primary:*

*Contact\_Person:* Wayne Gibson

*Contact\_Address:*

*Address\_Type:* mailing address

*Address:* The PRISM Climate Group, Oregon State University, 2001 Kelley Engineering Center

*City:* Corvallis

*State\_or\_Province:* Oregon

*Postal\_Code:* 97331-2209

*Country:* USA

*Contact\_Voice\_Telephone:* (541) 737-2531

*Contact\_Electronic\_Mail\_Address:* gibson@nacse.org

*Security\_Information:*

*Security\_Classification\_System:* None

*Security\_Classification:* Unclassified

*Security\_Handling\_Description:* None

*Native\_Data\_Set\_Environment:*

Microsoft Windows XP Version 5.1 (Build 2600) Service Pack 2; ESRI ArcCatalog 9.1.0.780

*Data\_Quality\_Information:*

*Logical\_Consistency\_Report:*

All data were based on the same averaging period (1971-2000). Similar quality assurance procedures were used with all input data sets.

*Completeness\_Report:*

Point estimates of temperature originated from some or all of the following sources: 1) National Weather Service (NWS) Cooperative (COOP) stations, 2) Natural Resources Conservation Service (NRCS) SNOTEL, 3) United States Forest Service (USFS) and Bureau of Land Management (BLM) RAWS Stations, 4) Bureau of Reclemation (AGRIMET) stations, 5) California Data Exchange Center (CDEC) stations, 6) Storage guages, 7) NRCS Snowcourse stations, 8) Other State and local station networks, 9) Estimated station data, 0) Canadian stations, 10) Upper air stations, and 11) NWS/Federal Aviation Administration (FAA) Automated surface observation stations (ASOS). All COOP station data were subjected to quality control checks by the National Climatic Data Center (NCDC). All COOP, SNOTEL and other data were subjected to further quality control checks by the PRISM Climate Group.

*Positional\_Accuracy:*

*Horizontal\_Positional\_Accuracy:*

*Horizontal\_Positional\_Accuracy\_Report:*

Accuracy of this data set is based on the original specification of the Defense Mapping Agency (DMA) 1 degree digital elevation models (DEM). The stated accuracy of the original DEMs are 130 m circular error with 90% probability.

*Quantitative\_Horizontal\_Positional\_Accuracy\_Assessment:*

*Horizontal\_Positional\_Accuracy\_Value:* 130 m with 90% probability.

*Horizontal\_Positional\_Accuracy\_Explanation:* The broad DMA production objective for 1-degree DEM's.

*Lineage:*

*Source\_Information:*

*Source\_Citation:*

*Citation\_Information:*

*Originator:* National Climatic Data Center (NCDC)

*Publication\_Date:* 2006

*Title:* United States Summary of the Day Cooperative, (DSI-3200)

*Publication\_Information:*

*Publication\_Place:* Asheville, NC, USA

*Publisher:* National Climatic Data Center (NCDC)

*Type\_of\_Source\_Media:* digital files

*Source\_Time\_Period\_of\_Content:*

*Time\_Period\_Information:*

*Range\_of\_Dates/Times:*

*Beginning\_Date:* 19710101

*Ending\_Date:* 20001231

*Source\_Currentness\_Reference:* ground condition

*Source\_Citation\_Abbreviation:* DSI3200

*Source\_Contribution:*

Location and values of known average monthly and annual maximum temperature

*Spatial\_Data\_Organization\_Information:*

*Direct\_Spatial\_Reference\_Method:* Raster

*Raster\_Object\_Information:*

*Raster\_Object\_Type:* Grid Cell

*Row\_Count:* 3105

*Column\_Count:* 7025

*Vertical\_Count:* 1

*Spatial\_Reference\_Information:*

*Horizontal\_Coordinate\_System\_Definition:*

*Geographic:*

*Latitude\_Resolution:* 0.008333

*Longitude\_Resolution:* 0.008333

*Geographic\_Coordinate\_Units:* Decimal degrees

*Planar:*

*Planar\_Coordinate\_Information:*

*Planar\_Coordinate\_Encoding\_Method:* row and column

*Coordinate\_Representation:*

*Abscissa\_Resolution:* 0.008333

*Ordinate\_Resolution:* 0.008333

*Geodetic\_Model:*

*Horizontal\_Datum\_Name:* North American Datum of 1983

*Ellipsoid\_Name:* Geodetic Reference System 80

*Semi-major\_Axis:* 6378137.000000

*Denominator\_of\_Flattening\_Ratio:* 298.257000

*Entity\_and\_Attribute\_Information:*

*Detailed\_Description:*

*Entity\_Type:*

*Entity\_Type\_Label:* average maximum temperature grid cell value

*Entity\_Type\_Definition:* ASCII values

*Entity\_Type\_Definition\_Source:* Self-evident

*Attribute:*

*Attribute\_Definition:* spatially gridded average maximum temperature

*Attribute\_Definition\_Source:*

Daly, C., W. P. Gibson, G.H. Taylor, G. L. Johnson, P. Pasteris. 2002. A knowledge-based approach to the statistical mapping of climate. Climate Research, 22, 99-113, 2002

*Attribute\_Domain\_Values:*

*Range\_Domain:*

*Range\_Domain\_Minimum:* -1250

*Range\_Domain\_Maximum:* 4659

*Attribute\_Units\_of\_Measure:* Degrees C times 100

*Distribution\_Information:*

*Distributor:*

*Contact\_Information:*

*Contact\_Person\_Primary:*

*Contact\_Person:* Wayne Gibson

*Contact\_Organization:* The PRISM Climate Group

*Contact\_Address:*

*Address\_Type:* mailing address

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*City:* Corvallis

*State\_or\_Province:* OR

*Postal\_Code:* 97331

*Country:* USA

*Contact\_Voice\_Telephone:* (541) 737-2531

*Contact\_Electronic\_Mail\_Address:* gibson@nacse.org

*Resource\_Description:* Downloadable Data

*Distribution\_Liability:*

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*Standard\_Order\_Process:*

*Digital\_Form:*

*Digital\_Transfer\_Information:*

*Format\_Name:* ARC/INFO ASCII Grid

*Transfer\_Size:* 91.297

*Metadata\_Reference\_Information:*

*Metadata\_Date:* 20061116

*Metadata\_Contact:*

*Contact\_Information:*

*Contact\_Person\_Primary:*

*Contact\_Person:* Wayne Gibson

*Contact\_Organization:*

The PRISM Climate Group, Oregon State University

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*Address\_Type:* mailing and physical address

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*City:* Corvallis

*State\_or\_Province:* OR

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*Metadata\_Standard\_Name:* FGDC Content Standards for Digital Geospatial Metadata

*Metadata\_Standard\_Version:* FGDC-STD-001-1998

*Metadata\_Time\_Convention:* local time

*Metadata\_Security\_Information:*

*Metadata\_Security\_Classification\_System:* none

*Metadata\_Security\_Classification:* Unclassified

*Metadata\_Security\_Handling\_Description:* None

*Metadata\_Extensions:*

*Online\_Linkage:* [<http://www.esri.com/metadata/esriprof80.html>](http://www.esri.com/metadata/esriprof80.html)

*Profile\_Name:* ESRI Metadata Profile