

# Cooling Degree Days - Higher Emissions (2070-2099)

Raster Dataset



Tags

Cooling Degree Days, Temperature, Projections, Emissions Scenarios

## Summary

This raster dataset displays increasing numbers of cooling degree days: higher emissions (A2), 2070-2099.

## Description

These maps show projected average changes in cooling degree days for two future time periods: 2021-2050 and 2070-2099 (as compared to the period 1971-2000). The higher emissions scenario (A2) assumes climate change associated with continued increases in emissions of heat-trapping gases, while the lower emissions scenario (B1) assumes significant reductions. The projections show significant regional variations, with the greatest increases in the southern United States by the end of this century under the higher emissions scenario. Furthermore, population projections suggest continued shifts toward areas that require air conditioning in the summer, thereby increasing the impact of temperature changes on increased energy demand. (Figure source: NOAA NCDC / CICS-NC).

## Credits

NOAA NCDC / CICS-NC

## Use limitations

There are no access and use limitations for this item.

## Extent

West -116.125000 East -67.081069  
North 49.500000 South 25.187135

## Scale Range

Maximum (zoomed in) 1:5,000  
Minimum (zoomed out) 1:20,000,000

## ArcGIS Metadata ►

### Topics and Keywords ►

\* CONTENT TYPE Downloadable Data

Hide Topics and Keywords ▲

### Citation ►

TITLE Cooling Degree Days - Higher Emissions (2070-2099)  
CREATION DATE 2013-11-19 00:00:00  
PUBLICATION DATE 2013-11-19 00:00:00

PRESENTATION FORMATS \* digital map

Hide Citation ▲

## Citation Contacts ►

### RESPONSIBLE PARTY

ORGANIZATION'S NAME NOAA NCDC / CICS-NC

CONTACT'S ROLE owner

Hide Citation Contacts ▲

## Resource Details ▼

## Extents ►

### EXTENT

#### GEOGRAPHIC EXTENT

##### BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

\* WEST LONGITUDE -116.125000

\* EAST LONGITUDE -67.081069

\* NORTH LATITUDE 49.500000

\* SOUTH LATITUDE 25.187135

\* EXTENT CONTAINS THE RESOURCE Yes

### EXTENT IN THE ITEM'S COORDINATE SYSTEM

\* WEST LONGITUDE -12926975.868369

\* EAST LONGITUDE -7467430.403636

\* SOUTH LATITUDE 2898747.449160

\* NORTH LATITUDE 6360130.740921

\* EXTENT CONTAINS THE RESOURCE Yes

Hide Extents ▲

## Resource Points of Contact ►

### POINT OF CONTACT

ORGANIZATION'S NAME NOAA NCDC / CICS-NC

CONTACT'S ROLE owner

Hide Resource Points of Contact ▲

## Spatial Reference ►

### ARCGIS COORDINATE SYSTEM

\* TYPE Projected

\* GEOGRAPHIC COORDINATE REFERENCE GCS\_WGS\_1984

\* PROJECTION WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere

\* COORDINATE REFERENCE DETAILS

#### PROJECTED COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 102100

X ORIGIN -20037700

Y ORIGIN -30241100

XY SCALE 148923141.92838538

Z ORIGIN -100000

Z SCALE 10000

M ORIGIN -100000

M SCALE 10000

XY TOLERANCE 0.001

Z TOLERANCE 0.001

M TOLERANCE 0.001  
HIGH PRECISION true  
LATEST WELL-KNOWN IDENTIFIER 3857  
WELL-KNOWN TEXT PROJCS["WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere",GEOGCS  
["GCS\_WGS\_1984",DATUM["D\_WGS\_1984",SPHEROID  
["WGS\_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT  
["Degree",0.0174532925199433]],PROJECTION["Mercator\_Auxiliary\_Sphere"],PARAMETER  
["False\_Easting",0.0],PARAMETER["False\_Northing",0.0],PARAMETER  
["Central\_Meridian",0.0],PARAMETER["Standard\_Parallel\_1",0.0],PARAMETER  
["Auxiliary\_Sphere\_Type",0.0],UNIT["Meter",1.0],AUTHORITY["EPSG",3857]]

#### REFERENCE SYSTEM IDENTIFIER

\* VALUE 3857  
\* CODESPACE EPSG  
\* VERSION 8.2.6

[Hide Spatial Reference ▲](#)

## Spatial Data Properties ►

#### GEORECTIFIED GRID ►

\* NUMBER OF DIMENSIONS 2

#### AXIS DIMENSIONS PROPERTIES

DIMENSION TYPE column (x-axis)  
\* DIMENSION SIZE 347  
\* RESOLUTION 15733.560417 Meter

#### AXIS DIMENSIONS PROPERTIES

DIMENSION TYPE row (y-axis)  
\* DIMENSION SIZE 220  
\* RESOLUTION 15733.560417 Meter

\* CELL GEOMETRY area  
\* POINT IN PIXEL center

\* TRANSFORMATION PARAMETERS ARE AVAILABLE Yes

\* CHECK POINTS ARE AVAILABLE No

#### CORNER POINTS

\* POINT -12926975.868369 2898747.449160  
\* POINT -12926975.868369 6360130.740921  
\* POINT -7467430.403636 6360130.740921  
\* POINT -7467430.403636 2898747.449160

\* CENTER POINT -10197203.136003 4629439.095041

[Hide Georectified Grid ▲](#)

#### ARCGIS RASTER PROPERTIES ►

##### GENERAL INFORMATION

\* PIXEL DEPTH 32  
\* COMPRESSION TYPE None  
\* NUMBER OF BANDS 1  
\* RASTER FORMAT TIFF  
\* SOURCE TYPE continuous  
\* PIXEL TYPE floating point  
\* NO DATA VALUE -3.4028231e+038  
\* HAS COLORMAP No  
\* HAS PYRAMIDS Yes

[Hide ArcGIS Raster Properties ▲](#)

[Hide Spatial Data Properties ▲](#)

## Spatial Data Content ►

### IMAGE DESCRIPTION

\* TYPE OF INFORMATION image

### BAND INFORMATION

\* DESCRIPTION Band\_1  
\* MAXIMUM VALUE 1896.490967  
\* MINIMUM VALUE -999.000000  
\* NUMBER OF BITS PER VALUE 32

[Hide Spatial Data Content ▲](#)

## Distribution ►

### DISTRIBUTION FORMAT

\* NAME Raster Dataset

[Hide Distribution ▲](#)

## Metadata Details ►

\* METADATA LANGUAGE English (UNITED STATES)

SCOPE OF THE DATA DESCRIBED BY THE METADATA \* dataset

SCOPE NAME \* dataset

\* LAST UPDATE 2015-03-20

### ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0  
METADATA STYLE FGDC CSDGM Metadata  
STANDARD OR PROFILE USED TO EDIT METADATA FGDC

CREATED IN ARCGIS FOR THE ITEM 2015-03-11 12:39:42  
LAST MODIFIED IN ARCGIS FOR THE ITEM 2015-03-20 13:32:10

### AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes  
LAST UPDATE 2015-03-20 13:32:10

### ITEM LOCATION HISTORY

ITEM COPIED OR MOVED 2015-03-11 12:39:42  
FROM  
T:\EISPC\_Energy\_Zones\_Study\Data\Web\_Mercator\Transfer\_Web\_Data\1\_\_Staging\_Ready\20150311-a2\_2070\_2099\_chg\data\2\_2070\_2099.tif  
TO \\146.137.112.25\gis1  
\EISPC\_Energy\_Zones\_Study\Data\Web\_Mercator\Raster\Climate\Climate\2\_2070\_2099.tif

[Hide Metadata Details ▲](#)

## Metadata Contacts ►

### METADATA CONTACT

INDIVIDUAL'S NAME Kevin Hlava  
ORGANIZATION'S NAME Argonne National Laboratory  
CONTACT'S POSITION GIS Assistant/Specialist  
CONTACT'S ROLE user

CONTACT INFORMATION ►

PHONE

VOICE 630-252-0060

ADDRESS

TYPE both

DELIVERY POINT 9700 S. Cass Ave., B240

CITY Lemont

ADMINISTRATIVE AREA IL

POSTAL CODE 60439

COUNTRY US

E-MAIL ADDRESS [khlava@anl.gov](mailto:khlava@anl.gov)

[Hide Contact information ▲](#)

[Hide Metadata Contacts ▲](#)

Metadata Maintenance ►

MAINTENANCE

UPDATE FREQUENCY as needed

[Hide Metadata Maintenance ▲](#)

Thumbnail and Enclosures ►

THUMBNAIL

THUMBNAIL TYPE JPG

[Hide Thumbnail and Enclosures ▲](#)