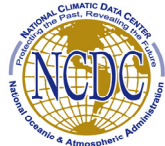


# NOAA's National Climatic Data Center



## News Highlights



### A Message From the NCDC Director, Thomas Karl

#### Greetings Data Users:

At NOAA's National Climatic Data Center, we are focused on responding to the needs of our constituents. At the NESDIS Data Users' Workshop June 2003 you told us you wanted to be informed of new products and significant accomplishments at the Center. We are excited to send you the first of our quarterly newsletters. You will see that we have produced several new products and we hope these are consistent with your needs. We continue to strive to make more of our data archive readily available to you at the least possible expense. We look forward to hearing from you regarding the usefulness of these products in your businesses and personal lives. You may contact our customer services representatives or online store for additional information and to order these products. We look forward to continuing the working relationships we have established.

#### Historical Publications Now Online to the Public:

The National Climatic Data Center (NCDC) has placed thousands of previously inaccessible publications online to the public. The Serial Publications web system now includes the Climatological Data, Storm Data, Monthly Climatic Data for the World, and Hourly Precipitation Data Publications; for the full period of record for each publication. Thanks to Climate Data Modernization Program (CDMP) efforts, publications from as far back as the late 1800's can now be easily retrieved and viewed or printed by any user with web access. This system will continue to be expanded to include additional publications, scanned images, etc.

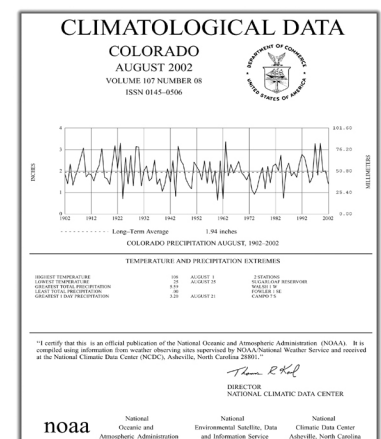
#### The system URL is:

<http://www7.ncdc.noaa.gov/SerialPublications/index.html>

#### Global Hourly Climate Data Online, Now Updated Weekly:

Global Integrated Surface Hourly (ISH) data available through the Climate Data On-line (CDO) system are now being operationally updated on a weekly basis. Weekly files are being operationally processed through an automated quality control system and added to the online database as soon as received. The typical time lag will have Sunday through Saturday global data normally available online around mid to late week. This will provide users with timely updates to a global database of hourly and synoptic data for nearly 10,000 active stations, including over 1,500 U.S. stations. Elements such as temperature, dew point, wind speed/direction, pressure, precipitation, visibility, cloud amounts, etc. are included. It is the result of cross-agency collaboration between NCDC and the Air Force Combat Climatology Center (AFCCC). The online system now includes recent years' data, and is being populated with the full period of record (as early as 1901 to present) to be online during the next several months. The CDO system provides data access by country, state, station, time period, and climatic element; includes a GIS-based map interface; and provides a choice of several output formats. Pricing begins at \$3, with a sliding scale based on volume of data ordered. Also, the full period of record dataset is available via FTP.

The system URL is: <http://cdo.ncdc.noaa.gov/>



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The National Climatic Data Center's News Highlights is a quarterly publication for NCDC data users. Address comments or article suggestions to  
[ncdc-outreach@noaa.gov](mailto:ncdc-outreach@noaa.gov)

## New Monthly Station Climate Summaries (CLIM20) for 1971-2000:

The Climatology of the United States No. 20 (CLIM20), Monthly Station Climate Summaries for the 1971-2000 period of record have been completed and are now online. These station summaries are of particular interest to agriculture, industry, and engineering applications and include a variety of statistics for temperature, precipitation, snow, and degree day elements for 4,273 stations. The new CLIM20's update and expand on the previous version (1879 stations) which was last published in 1985 and covered the period 1951-1980. The types of statistics include means, medians (precipitation and snow elements), extremes, mean number of days exceeding threshold values, and probabilities for monthly precipitation and freeze data. There is also a table for each station with heating, cooling, and growing degree days for various temperature bases. The summaries can be ordered by individual station (\$2), by State (\$6), or subscription (\$50) via NCDC's On-line Store. A CLIM20 CD-ROM product will be available in the Fall of 2004.

| Main |      | Temperature (°F) |      |       |      |       |      |            |      |       |                     |       |      |       |
|------|------|------------------|------|-------|------|-------|------|------------|------|-------|---------------------|-------|------|-------|
| Stat | Stat | Extremes         |      |       |      |       |      | Paper Days |      |       | Mean Number of Days |       |      |       |
| Year | Year | Max              | Min  | Max   | Min  | Max   | Min  | Max        | Min  | Max   | Min                 | Max   | Min  | Max   |
| 1971 | 1972 | 107.3            | 37.7 | 107.3 | 37.7 | 107.3 | 37.7 | 107.3      | 37.7 | 107.3 | 37.7                | 107.3 | 37.7 | 107.3 |
| 1973 | 1974 | 107.3            | 37.7 | 107.3 | 37.7 | 107.3 | 37.7 | 107.3      | 37.7 | 107.3 | 37.7                | 107.3 | 37.7 | 107.3 |
| 1975 | 1976 | 107.3            | 37.7 | 107.3 | 37.7 | 107.3 | 37.7 | 107.3      | 37.7 | 107.3 | 37.7                | 107.3 | 37.7 | 107.3 |
| 1977 | 1978 | 107.3            | 37.7 | 107.3 | 37.7 | 107.3 | 37.7 | 107.3      | 37.7 | 107.3 | 37.7                | 107.3 | 37.7 | 107.3 |
| 1979 | 1980 | 107.3            | 37.7 | 107.3 | 37.7 | 107.3 | 37.7 | 107.3      | 37.7 | 107.3 | 37.7                | 107.3 | 37.7 | 107.3 |
| 1981 | 1982 | 107.3            | 37.7 | 107.3 | 37.7 | 107.3 | 37.7 | 107.3      | 37.7 | 107.3 | 37.7                | 107.3 | 37.7 | 107.3 |
| 1983 | 1984 | 107.3            | 37.7 | 107.3 | 37.7 | 107.3 | 37.7 | 107.3      | 37.7 | 107.3 | 37.7                | 107.3 | 37.7 | 107.3 |
| 1985 | 1986 | 107.3            | 37.7 | 107.3 | 37.7 | 107.3 | 37.7 | 107.3      | 37.7 | 107.3 | 37.7                | 107.3 | 37.7 | 107.3 |
| 1987 | 1988 | 107.3            | 37.7 | 107.3 | 37.7 | 107.3 | 37.7 | 107.3      | 37.7 | 107.3 | 37.7                | 107.3 | 37.7 | 107.3 |
| 1989 | 1990 | 107.3            | 37.7 | 107.3 | 37.7 | 107.3 | 37.7 | 107.3      | 37.7 | 107.3 | 37.7                | 107.3 | 37.7 | 107.3 |
| 1991 | 1992 | 107.3            | 37.7 | 107.3 | 37.7 | 107.3 | 37.7 | 107.3      | 37.7 | 107.3 | 37.7                | 107.3 | 37.7 | 107.3 |
| 1993 | 1994 | 107.3            | 37.7 | 107.3 | 37.7 | 107.3 | 37.7 | 107.3      | 37.7 | 107.3 | 37.7                | 107.3 | 37.7 | 107.3 |
| 1995 | 1996 | 107.3            | 37.7 | 107.3 | 37.7 | 107.3 | 37.7 | 107.3      | 37.7 | 107.3 | 37.7                | 107.3 | 37.7 | 107.3 |
| 1997 | 1998 | 107.3            | 37.7 | 107.3 | 37.7 | 107.3 | 37.7 | 107.3      | 37.7 | 107.3 | 37.7                | 107.3 | 37.7 | 107.3 |
| 1999 | 2000 | 107.3            | 37.7 | 107.3 | 37.7 | 107.3 | 37.7 | 107.3      | 37.7 | 107.3 | 37.7                | 107.3 | 37.7 | 107.3 |

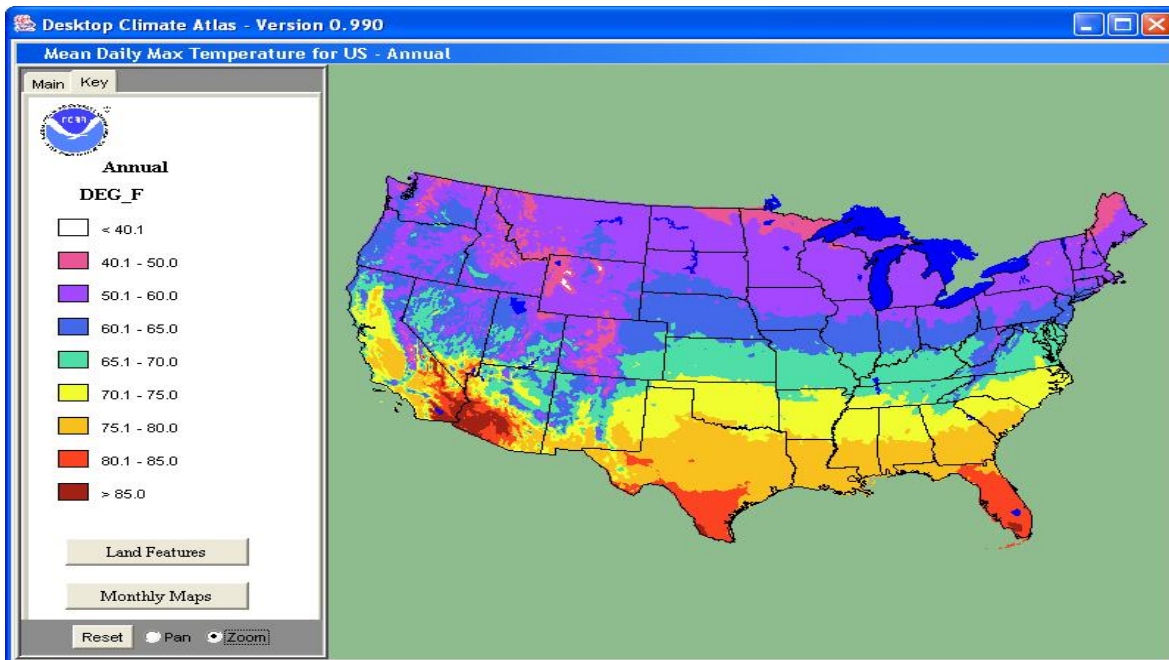
The system URL is: <http://www5.ncdc.noaa.gov/cgi-bin/climatenormals/climatenormals.pl>

## NOAA's OnLine Climate Atlas (OLCA):

OLCA is a downloadable java application that displays Climate Atlas shape files, which are stored on NCDC's ftp server. The shape files are read in-place from the server, and displayed on the client PC; they are not downloaded. Only the java interface program is downloaded to the client PC. Java Web Start allows java applications to be launched over the web. Beginning with java 1.4.x, Java Network Launch Protocol allowed applications to be distributed over the web, and updates to be automatically distributed the next time the client launches the application.

NOAA has tested OLCA on **Netscape 7.1** and **Internet Explorer 6.0**. Older browser versions may not support web start technology.

To access OLCA, point your browser to <http://www.ncdc.noaa.gov/olca/> and follow the instructions.



## New and Improved Map Services for CDO:

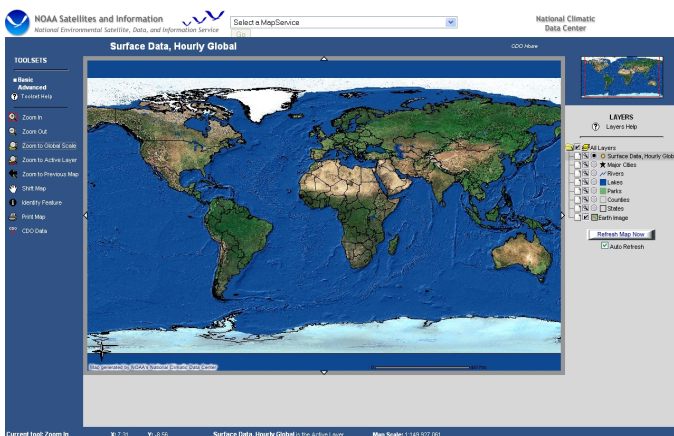
A new and improved Geographic Information System (GIS) map service interface for the NOAA National Data Center Climate Data Online (CDO) system is now online. The new version replaces a previous GIS interface which went online last year. It's more user-friendly with some additional features, and provides a direct interface to all CDO datasets. The datasets now included are:

- Global Climate Observing System (GCOS) global monthly data.
- Global monthly data from CLIMAT bulletins.
- Global hourly and synoptic data from the Integrated Surface Hourly dataset.
- U.S. daily data from National Weather Service cooperative and first order stations.
- U.S. monthly data from National Weather Service cooperative and first order stations.
- U.S. hourly precipitation data from National Weather Service cooperative and first order stations.
- U.S. 15-minute precipitation data from National Weather Service cooperative and first order stations.

Collectively, this includes data from over 50,000 observing stations worldwide. Monthly, daily, and hourly refer to the time resolution of the data –e.g., “monthly” includes data such as mean temperature and total precipitation for each month of available data. A variety of climatic elements are available for each dataset, with temperature and precipitation data being the most common; but many other parameters such as visibility, wind speed and direction, dew point, pressure, snowfall, snow depth, cloud data, etc, are available for some of the stations.

The interface provides basic and advanced options, with additional features available in the “advanced” menu. Once a station is selected, the user is then directed into the CDO system to select the desired time period and retrieve the data. Additional features, layers, datasets, and options will continue to be added to the system over the next year. This is part a NOAA National Virtual Data System (NVDS) coordinated effort to provide user-friendly access to NOAA data and products.

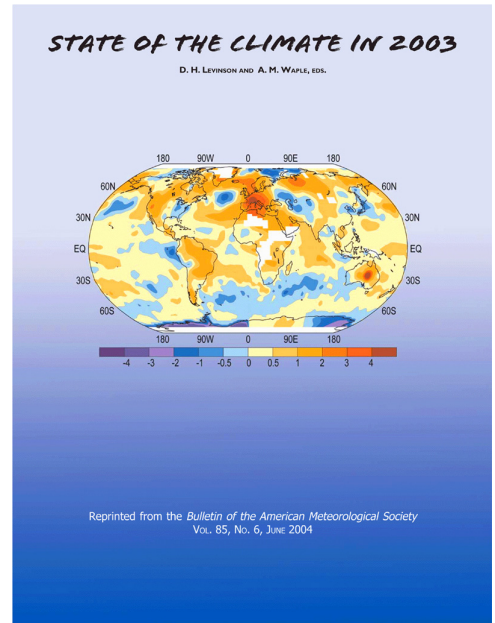
The system URL is: <http://cdo.ncdc.noaa.gov/>



## State of the Climate for 2003:

The State of the Climate for 2003 was published in the June issue of the Bulletin of the American Meteorological Society and contained contributions from numerous international and domestic sources. It is the 4th consecutive year that NOAA's National Climatic Data Center has taken the lead in its development and production and the fourteenth year of its existence, formerly being led by authors at NOAA's Climate Prediction Center. Seeking to place the annual global climate into a long-term perspective, the State of the Climate article contains detailed analysis and information on most regions of the globe, in addition to the general global conditions. Highlights for 2003 include: the second warmest annual global average temperature on record based on NCDC's long-term temperature archive; a moderate El Niño at the beginning of 2003 gave way to neutral ENSO conditions for the remainder of the year; the Atlantic hurricane season was very active with five tropical systems making landfall in the U.S.; a major summer heatwave occurred in Europe, leading to thousands of heat-related deaths; and a near record extent of the Antarctic Ozone hole was measured in September. The full text of the State of the Climate for 2003 can be found at :

<http://www.ncdc.noaa.gov/oa/climate/research/2003/ann/annsum.pdf>

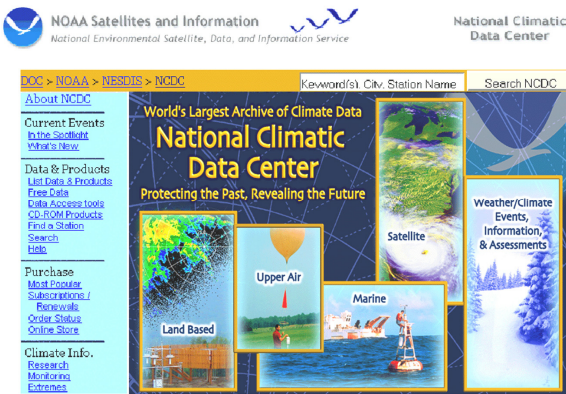


## NCDC New Homepage Unveiled:

NCDC has replaced its WWW homepage with a new/enhanced homepage, with easier access to online products and systems. The homepage features a new look and feel with left-side navigation, and links to various types of data (e.g., land-based) across the center of the page. This is the result of a year-long effort of the NCDC Web Committee, and includes the incorporation of input provided at the NESDIS Data User's Workshop in June 2003, and the NCDC Web Workshop in November 2003. Some of the new features include a data/products search system, which allows searching by data type (e.g., snow), location (U.S. vs. global), and time resolution (e.g., hourly):

<http://www.ncdc.noaa.gov/oa/mppsearch.html>

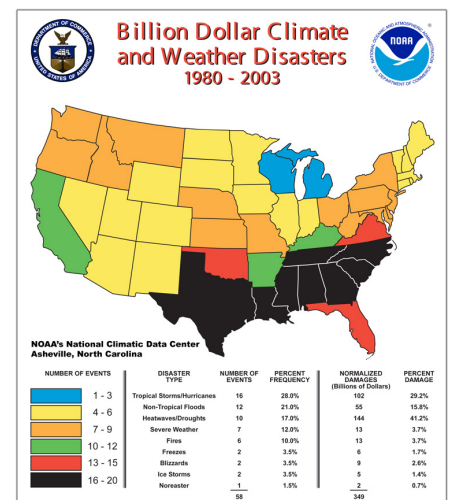
Work is continuing on the 2<sup>nd</sup>-level and lower level pages, to improve consistency throughout the site and to improve overall data and information access. Also, major efforts are planned for improved metadata and GIS map server access to data and products. The new page can be viewed at the following site: <http://www.ncdc.noaa.gov>



## Billion Dollar Climate and Weather Disasters:

The National Climatic Data Center (NCDC) is the "Nation's Scorekeeper" in terms of addressing severe weather events in their historical perspective. As part of its responsibility of "monitoring and assessing the climate," NCDC tracks and evaluates climate events in the U.S. and globally that have great economic and societal impacts. The U.S. has sustained 58 weather-related disasters over the past 24 years in which overall damages/costs reached or exceeded \$1 billion. Forty-nine of these disasters occurred during the 1988-2003 period with total unadjusted (for inflation) damages/costs of nearly \$220 billion. See the following web page for a detailed report with maps and graphics:

<http://www.ncdc.noaa.gov/oa/reports/billionz.html>



## Upcoming Events

### Ad Hoc Science Working Group Meeting:

The Climate Reference Network (CRN) Ad Hoc Science Working Group (SWG) will meet on December 2, 2004 to review the CRN program. The group provides individual recommendations regarding the science goals and activities of the program. The SWG venue for review includes, but is not limited to, station siting requirements, instrumentation, observational methodologies, quality control methods, interactions with other observing networks, metadata, and archiving and dissemination of the data. Furthermore, the SWG examines the CRN as its activities relate to other observing networks, both within and outside of NOAA, to help ensure the full and efficient integration of the CRN with other candidate networks such as the Modernized Cooperative Network.

### Fourth Annual Data Access Workshop:

Fiscal year 2005 will mark the sixth year for the Climate Database Modernization Program (CDMP). Data once restricted to file cabinets and basement storage are becoming accessible via the World Wide Web. The CDMP supports all NOAA line organizations with services intended to make climate and environmental data and information more accessible and easier to utilize. This would include data rescue tasks that may once have been submitted to ESDIM. The biggest difference is that the bulk of the funding would go to a CDMP contractor to perform the work. Whether you are a veteran with past projects supported by CDMP, or even if you are just now learning of the program, we invite you to take part in the FY 2005 Data Access Workshop. The Fourth Annual Data Access Workshop is set for November 8-9, 2004, at the National Climatic Data Center in Asheville, North Carolina. The Workshop will give each agency the opportunity to present their proposals for continuing multi-year projects currently being funded, and any new projects for consideration under the FY 05 CDMP program.

Additional information including the guideline booklet is available at:

[www.ncdc.noaa.gov/oa/climate/cdmp/proposals.html](http://www.ncdc.noaa.gov/oa/climate/cdmp/proposals.html)

