

An Introduction to the Data Library



IRD

Koen Verbist
UNESCO-IHP

Walter Baethgen
Remi Cousin



International Research Institute
for Climate and Society
EARTH INSTITUTE | COLUMBIA UNIVERSITY

Course Expectations

What do we want to achieve?

- Understand the maproom – data library connection
- Know how to transfer new data sets to the Data Library
- Know how to create maps in the Data library
- Know how to implement maps in the maproom

What does it mean in practice?



Objectives

What do we need?

Day 1

- Become familiar with the organization of the Data Library
- Learn how to find datasets and select spatial and temporal domains
- See how to perform simple arithmetic analyses
- See how to create customized maps and graphs
- Understand how ‘Ingrid’ works (‘Stack Management’)
- Learn how to download data and images

Objectives

What do we need?

Day 2

- Understand the basic structure of a maproom
- Know how to edit text in the maproom
- Know how to add/change maps to the maproom
- Know how to add data to the data library
- Define which additional training is needed
- Define follow-up activities

[Link to presentation online](#) (dropbox)

The IRI Data Library is a...

- Data repository
 - >300 datasets covering all aspects of climate-related characteristics
- Data analysis tool
 - Arithmetic operations →
Temporal averaging,...
- Data visualization tool
 - Time series, maps, cross-sections
- Data download resource
 - Free access to text, binary, GIS-compatible, etc. data files

<http://iridl.ldeo.columbia.edu>

<http://www.climatedatalibrary.cl>

Two versions of the Data Library

<http://iridl.ldeo.columbia.edu>

<http://www.climatedatalibrary.cl>

Find The 7 differences...

The IRI/LDEO Climate Data Library contains over 300 datasets from a variety of earth science disciplines and climate-related topics. It is a powerful tool that offers the following capabilities at no cost to the user:

- access any number of datasets;
- create analyses of data ranging from simple averaging to more advanced EOF analyses using the Ingrid Data Analysis Language;
- monitor present climate conditions with maps and analyses in the [Maproom](#);
- create visual representations of data, including animations;
- download data in a variety of commonly-used [formats](#), including GIS-compatible formats.

Are you new to the world of climate data? Check out our [Introduction to Climate Data](#) page.

What's New

GPCC Full Data Product Version 6 Precipitation Analysis The Global Precipitation Climatology Centre (GPCC) Full Data Product Version 6 monthly precipitation based upon station precipitation data has been added.
Published: Thu, 14 Mar 2013 18:04:14 GMT

The IRI/LDEO Climate Data Library contains over 300 datasets from a variety of earth science disciplines and climate-related topics. It is a powerful tool that offers the following capabilities at no cost to the user:

- access any number of datasets;
- create analyses of data ranging from simple averaging to more advanced EOF analyses using the Ingrid Data Analysis Language;
- monitor present climate conditions with maps and analyses in the [Maproom](#);
- create visual representations of data, including animations;
- download data in a variety of commonly-used [formats](#), including GIS-compatible formats.

Are you new to the world of climate data? Check out our [Introduction to Climate Data](#) page.

What's New

NOAA ESRL 20th Century Reanalysis Version 2 (extended) NOAA ESRL 20th Century Reanalysis Version 2 six-hourly data for 1871–2008. The analysis is performed with the Ensemble Filter as described in Compo et al. (2006) based on the method of Whitaker and Hamill (2002). Observations of surface pressure and sea level pressure from the International Surface Pressure Databank station component version 2 (Gleason et al. 2008),

Data Library Home Page



Data Library
expert
Finding Datasets
—
By Category
By Source
By Search
—
Help Resources
—
Tutorial
Questions and Answers
help@iri

IRI/LDEO Climate Data Library

The IRI/LDEO Climate Data Library contains over 300 datasets from a variety of earth science disciplines and climate-related topics. It is a powerful tool that offers the following capabilities at no cost to the user:

- access any number of datasets;
- create analyses of data ranging from simple averaging to more advanced EOF analyses;
- monitor present climate conditions with maps and analyses in the [Maproom](#);
- create visual representations of data, including animations;
- download data in a variety of commonly-used [formats](#), including GIS-compatible formats.

Are you new to the world of climate data? Check out our [Introduction to Climate Data](#) page.

What's New

Mar 08 - Shapes for [climate zones in Sri Lanka](#) have been added as a new Features data set

Mar 08 - A new "International Federation" Map Room has been added to the IRI Map Rooms and is accessible from the [Map Room front page](#). It contains a forecast precipitation map tool developed in collaboration with the International Federation of Red Cross and Red Crescent Societies that features analyses to provide context for global precipitation forecasts.

Mar 08 - A new "linked pdf" image option has been added to the Figure Viewer pages of the Data Library. Clicking on the "linked pdf" button will produce a clickable PDF version of the image you are viewing that links back to the Figure Viewer page for the image in the Data Library. The following link provides an example: [February 2008 SSTA](#)

Feb 08 - A k-means cluster analysis named [k-means136](#) has been added to the Data Library as a new function

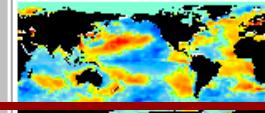
Finding Data

[Datasets by Category](#)[Datasets by Source](#)[Dataset Search](#)[Browse/Search Datasets](#)[Browse/Search Maproom](#)

Help Resources

[Introductory Tutorial](#)[Statistical Analysis Tutorial](#)[Ingrid Function Documentation](#)[Questions and Answers](#)

Monitoring Global Climate



Map Room

A collection of maps and analyses used to monitor climate conditions. Click on any of the maps to modify the figures or access the source data.

Climate Information Digest

A monthly publication covering global climate events, their impacts and the seasonal forecast.

ENSO Web

Information about El Niño-Southern Oscillation.

Climate Highlights

Finding Datasets



Red Hat Network Training Support Software Hardware Developers Embedded Search Documentation Downloads

>>



Data Library

expert

Finding Datasets

By Category
By Source
By Search

Help Resources

Tutorial

Questions and Answers
help@iri

IRI/LDEO Climate Data Library

The IRI/LDEO Climate Data Library contains over 300 datasets from a variety of earth science disciplines and climate-related topics. It is a powerful tool that offers the following capabilities at no cost to the user:

- access any number of datasets;
- create analyses of data ranging from simple averaging to more advanced EOF analyses;
- monitor present climate conditions with maps and analyses in the [Maproom](#);
- create visual representations of data, including animations;
- download data in a variety of commonly-used [formats](#), including GIS-compatible formats.

Are you new to the world of climate data? Check out our [Introduction to Climate Data](#) page.

What's New

Mar 08 - Shapes for [climate zones in Sri Lanka](#) have been added as a new Features data set

Mar 08 - A new "International Federation" Map Room has been added to the IRI Map Rooms and is accessible from the [Map Room front page](#). It contains a forecast precipitation map tool developed in collaboration with the International Federation of Red Cross and Red Crescent Societies that features analyses to provide context for global precipitation forecasts.

Mar 08 - A new "linked pdf" image option has been added to the Figure Viewer pages of the Data Library. Clicking on the "linked pdf" button will produce a clickable PDF version of the image you are viewing that links back to the Figure Viewer page for the image in the Data Library. The following link provides an example: [February 2008 SSTA](#)

Feb 08 - A k-means cluster analysis named [k-means136](#) has been added to the Data Library as a new function

Finding Data

[Datasets by Category](#)

[Datasets by Source](#)

[Dataset Search](#)

[Browse/Search Datasets](#)

[Browse/Search Maproom](#)

Help Resources

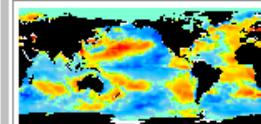
[Introductory Tutorial](#)

[Statistical Analysis Tutorial](#)

[Ingrid Function Documentation](#)

[Questions and Answers](#)

Monitoring Global Climate



Map Room

A collection of maps and analyses used to monitor climate conditions. Click on any of the maps to modify the figures or access the source data.

Climate Information Digest

A monthly publication covering global climate events, their impacts and the seasonal forecast.

ENSO Web

Information about El Niño-Southern Oscillation.

Climate Highlights

Finding
DatasetsBy Category
By Source
By Search

help@iri

Datasets By Category

The links below direct you to a brief description of each dataset along with its spatial and temporal limits and resolution. If you can not find data that meets your needs in the categories below, then you may wish to search for it via either the Dataset Searches or Datasets by Source discovery methods (links shown in navigation banner to the left).

[Air-Sea
Interface](#)

Datasets focusing on the boundary between the atmosphere and the ocean.
- Includes sea surface temperature (SST) and wind stress data variables, among others.

[Atmosphere](#)

Datasets focusing on parameters describing the atmosphere. Includes surface weather observations (e.g. temperature, precipitation, etc.) and gridded

- Air-Sea Interface
- Atmosphere
- Climate Indices
- Cloud Characteristics and Radiation Budget
- Fisheries
- Forecasts
- Historical Model Simulations
- Hydrology
- Ice
- Oceanography
- Topographic and Land Characteristics



Finding Datasets

By Category
By Source
By Search

help@iri

Atmospheric Data in the IRI Data Library

| Dataset Name | Spatial Resolution (Lon/Lat) / Number of Stations | Spatial Extent | Time Period | Temporal Resolution |
|--|--|-------------------------|---|---------------------|
| ANEEL prcp sta | 13179 STATIONS | [90W,30W], [60S,15N] | 1 Jan 1897,31 Dec 2004 | DAILY |
| | Description: Precipitation station data for South America, primarily Brazil . | | | |
| CDIAC msu | 2.5x2.5 | GLOBAL, [58.75S,58.75N] | 1 Jan 1979,31 May 1994 | DAILY |
| | Description: MSU-measured precipitation from CDIAC . | | | |
| CDIAC tr051 | 5x4 | GLOBAL, [62S,86N] | Dec 1850 - Feb 1851,Sep-Nov 1989 | SEASONAL |
| | Description: Comprehensive precipitation anomaly data set for global land areas . | | | |
| DEKLIM VASclimO PrcpClim | 0.5x0.5, 1.0x1.0; 2.5x2.5 | GLOBAL [59.75S,84.75N] | Jan 1951,Dec 2000 | MONTHLY |
| | Description: Precipitation climatology from the Variability Analysis of Surface Climate Observations (VASclimO) project - a joint project of the German Weather Service (DWD/GPCC)and the Johann Wolfgang Goethe-University Frankfurt. | | | |
| ITM | 7 REGIONS, 29 SUBDIVISIONS | [65E,98E], [5N,35N] | Jan 1871,Dec 2002; Jan 1901,Dec 1990 | MONTHLY |
| | Description: Subdivision-, region-, and country-level precipitation and temperature data for India. | | | |
| INIA | 5 stations | [65W,45W], [45S,25S] | 1 Jul 1965, Present | DAILY, MONTHLY |
| | Description: Daily and monthly meteorological observations in Uruguay from the INIA. | | | |
| IRI Analyses ENSO-RP | 0.5x0.5, 2.5x2.5 | GLOBAL | Dec - Feb,Nov - Jan | SEASONAL |
| | Description: Probabilistic precipitation anomalies associated with ENSO. | | | |

Finding Datasets in the Chilean DL

Datasets ONLY available through Search by SOURCE

The screenshot shows a web browser window with the following details:

- Address Bar:** dataset: SOURCES
- Toolbar:** www.climatedatalibrary.cl/SOURCES/
- Search Bar:** Google
- Page Content:**
 - SOURCES options** (highlighted in red)
 - Help**
 - Expert Mode**
 - SOURCES** (highlighted in red)
 - SOURCES** (Section header)
 - SOURCES: the IRI/LDEO collection of climate data.**
 - Documents**
 - overview** (link to outline showing sub-datasets of this dataset)
- Left Sidebar (Data Library):**
 - IRI logo
 - Data Library
 - Finding Data
 - Tutorial
 - Questions & Answers
 - Function Documentation
 - help (link)
- Bottom Left Sidebar:** A vertical list of links in red:
 - CAZALAC
 - ceaza
 - Chile
 - Features
 - IRI
 - IRI-ARCS
 - IRI_local
 - ISCCP
 - NOAA
 - NOAA_OLD
 - UEA
 - USGS
 - VITO

Datasets and variables

- CAZALAC: Centro del Agua para Zonas Aridas y Semiáridas de América Latina y el Caribe.
- ceaza: ceaza[interanuales interanuales_wrf simulacioneswrf proyectada pronosticoswrf wrf_operacional reanalysis2 pronostico3dnubes dodtest pronostico3d]
- Chile: Chile[DMC Analysis INIA DGA]
- Features: Features[Agricultural Epidemiological Climatological Political Hydrological]
- IRI: IRI: International Research Institute for Climate and Society.
- IRI-ARCS: IRI-ARCS: International Research Institute/Applied Research Centers.
- IRI_local: IRI_local[MD]
- ISCCP: Cloudiness and solar radiation data from the International Satellite Cloud Climatology Project.
- NOAA: NOAA: National Oceanic and Atmospheric Administration.
- NOAA_OLD: National Oceanic and Atmospheric Administration.
- UEA: University of East Anglia.
- USGS: USGS: United States Geological Survey.
- VITO: Flemish Institute for Technological Research.

Dataset Page Contents and Structure

Gridded Datasets

Datasets By Category - Atmospheric Data - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Stop Print Home

Address http://iridl.ideo.columbia.edu/docfind/databrief/cat-atmos.html

Go Links

| | | | | |
|--|---|--------------------------|--|----------------|
| | Description: Daily and monthly meteorological observations in Uruguay from the INIA. | | | |
| IRI Analyses ENSO-RP | 0.5x0.5, 2.5x2.5 | GLOBAL | Dec - Feb, Nov - Jan | SEASONAL |
| | Description: Probabilistic precipitation anomalies associated with ENSO. | | | |
| IRI Analyses SPI | 2.5x2.5; 0.5x0.5 | GLOBAL | Various: 1901-Present | MONTHLY |
| | Description: Standardized Precipitation Index analyses of multiple global precipitation datasets. | | | |
| Indices india | NA | NA | Jun-Sep 1813, Jun-Sep 1998 | MONTHLY |
| | Description: Summer monsoon rainfall data from India. | | | |
| NASA GPCP V1DD | 1x1 | GLOBAL | 1 Oct 1996, 31 Dec 2005 | DAILY |
| | Description: 1-degree daily combination precipitation estimates. | | | |
| NASA GPCP V2 | 2.5x2.5 | GLOBAL | Jan 1979, Feb 2006 | MONTHLY |
| | Description: Combined satellite-gauge precipitation estimates and error estimates from the Global Precipitation Climatology Project. | | | |
| NASA GSFC TOMS EPTOMS | 1.25x1 | GLOBAL | Aug 1996 to Present | DAILY, MONTHLY |
| | Description: Aerosol index and erythemal UV irradiance data from the Earth Probe TOMS instrument. | | | |
| NASA GSFC TOMS NIMBUS7 | 1.25x1 | GLOBAL | 1 Nov 1978, 6 May 1993; Jan 1980, Apr 1993 | DAILY, MONTHLY |
| | Description: Aerosol index and erythemal UV irradiance data from the Nimbus-7 TOMS instrument. | | | |
| NASA msu | 2.5x2.5 | GLOBAL, [58.75S, 58.75N] | 1 Jan 1979, 31 May 1994 | DAILY |
| | Description: Gridded oceanic rainfall data from the Microwave Sounding Unit. | | | |
| NOAA NCDC CIRS ClimateDivision | 344 STATIONS | [125W, 65W], [15N, 55N] | Jan 1895, May 2006 | MONTHLY |
| | Description: Time bias corrected temperature, precipitation, and drought index data for United States climate divisions from the National Climatic Data Center. | | | |

1500 STATIONS START 1 1000 21 D 1000 DATA



Internet



Data Library

Finding Data

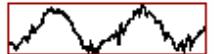
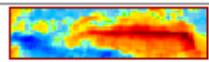
Tutorial

Questions & Answers

NASA GPCP V1DD documentation

help@iri

NASA GPCP V1DD options

[Help](#)[Expert Mode](#)

Data Selection

Data Downloads & Files

Data Tables

served from [IRI/LDEO Climate Data Library](#)[SOURCES](#) [NASA](#) [GPCP](#) [V1DD*](#)

NASA GPCP V1DD

NASA GPCP V1DD: 1-degree daily combination precipitation estimates.

Documents

[outline](#)

an outline showing all sub-datasets and variables contained in this dataset

[dataset documentation](#)

Datasets and variables

[precipitation](#) NASA GPCP V1DD prcp[X Y | T]

Dataset and Variables
-Access to variables or lower-level datasets

Grids

Time grid: /T (days since 1996-10-01 12:00:00) ordered (1 Oct 1996) to (31 Dec 2005) by 1. N= 3379 pts :grid

Longitude grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid

Latitude grid: /Y (degree_north) ordered (89.5N) to (89.5S) by 1. N= 180 pts :grid



Data Library

Finding Data

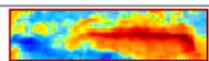
Tutorial

Questions & Answers

NASA GPCP V1DD documentation

help@iri

NASA GPCP V1DD options

[Help](#)[Expert Mode](#)

Data

Selection

[Data Downloads & Files](#)[Data Tables](#)served from [IRI/LDEO Climate Data Library](#)[SOURCES](#) [NASA](#) [GPCP](#) [V1DD*](#)

NASA GPCP V1DD

NASA GPCP V1DD: 1-degree dai

Documents

[outline](#)

an outline showing all sub-

[dataset documentation](#)

Datasets and variables

[precipitation](#) NASA GPCP V1DD prcp[X Y | T]

Grids (Independent Variables)

- Information about grids on which data is dependent
- Latitude (Y)
- Longitude (X)
- Time (T)
- Others (height/depth, ensemble member, etc.)

Grids

Time grid: /T (days since 1996-10-01 12:00:00) ordered (1 Oct 1996) to (31 Dec 2005) by 1. N= 3379 pts :grid

Longitude grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid

Latitude grid: /Y (degree_north) ordered (89.5N) to (89.5S) by 1. N= 180 pts :grid



Data Library

Finding Data

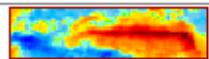
Tutorial

Questions & Answers

NASA GPCP V1DD documentation

help@iri

NASA GPCP V1DD options

[Help](#)[Expert Mode](#)

Data Selection

Data Downloads & Files

Data Tables

served from [IRI/LDEO Climate Data Library](#)[SOURCES](#) [NASA](#) [GPCP](#) [V1DD*](#)

NASA GPCP V1DD

NASA GPCP V1DD: 1-degree daily combination precipitation estimates.

Documents

[outline](#)

an outline showing all sub-datasets and variables contained in this dataset

[dataset documentation](#)

Datasets and variables

[precipitation](#) NASA GPCP V1DD prcp[X Y | T]

Grids

Time grid: /T (days since 1996-10-01 12:00:00) ordered (1 Oct 1996) to (31 Dec 2005) by 1. N= 3379 pts :grid

Longitude grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid

Latitude grid: /Y (degree_north) ordered (89.5N) to (89.5S) by 1. N= 180 pts :grid



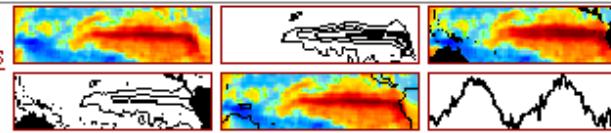
Data Library

[Finding Data](#)
[Tutorial](#)
[Questions & Answers](#)[NASA GPCP V1DD documentation](#)

help@iri

NASA GPCP V1DD prcp options

NEW Views



old Viewer

[Help](#)[Expert Mode](#)[Data Selection](#)[Filters](#)[Data Files](#)[Tables](#)served from [IRI/LDEO Climate Data Library](#)[SOURCES](#) [NASA](#) [GPCP](#) [V1DD*](#) [precipitation](#)

NASA GPCP V1DD prcp: precipitation data

precipitation from NASA GPCP V1DD: 1-degree daily combination precipitation estimates.

Grids

Time grid: /T (days since 1996-10-01 12:00:00) ordered (1 Oct 1996) to (31 Dec 2005) by 1. N= 3379 pts :grid

Longitude

grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid

Latitude

grid: /Y (degree_north) ordered (89.5N) to (89.5S) by .. N= 180 pts :grid

Other Info

bufferwordsize

4

datatype

realarraytype

missing_value

0.0000

Note new information

- Selected variable shown in Source Bar
- Datasets and variables heading gone
- More information about variable below





Finding Data
Tutorial
Questions &
Answers

NASA GPCP
V1DD
documentation

help@iri

served from [IRI/LDEO Climate Data Library](#)

SOURCES NASA GPCP V1DD* precipitation

NASA GPCP V1DD prcp: precipitation data

precipitation from NASA GPCP V1DD: 1-degree daily combination precipitation estimates.

Grids

Time grid: /T (days since 1996-10-01 12:00:00) ordered (1 Oct 1996) to (31 Dec 2005) by 1. N= 3379 pts :grid

Longitude

grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid

Latitude

grid: /Y (degree_north) ordered (89.5N) to (89.5S) by 1. N= 180 pts :grid

Other Info

bufferwordsizer

4

datatype

realarraytype

missing_value

-99999.

plotfirst

null

plotlast

null

pointwidth

0.0

units mm /day

Important information about variable
-Missing value indicator
-Units

[File](#) [Edit](#) [View](#) [Favorites](#) [Tools](#) [Help](#)[Back](#) [Forward](#) [Stop](#) [Home](#) [Search](#) [Favorites](#) [Media](#) [Clock](#) [Downloads](#) [New](#) [Open](#) [Save](#) [Print](#)Address <http://iridl.ldeo.columbia.edu/SOURCES/.NASA/.GPCP/.V1DD/.prcp/figviewer.html?map.url=X+Y+fig+colors+> Go Links

IRI

Data
LibraryNASA GPCP V1DD
precipitation0 -
090S -
90NOct 1996 - Dec
2005

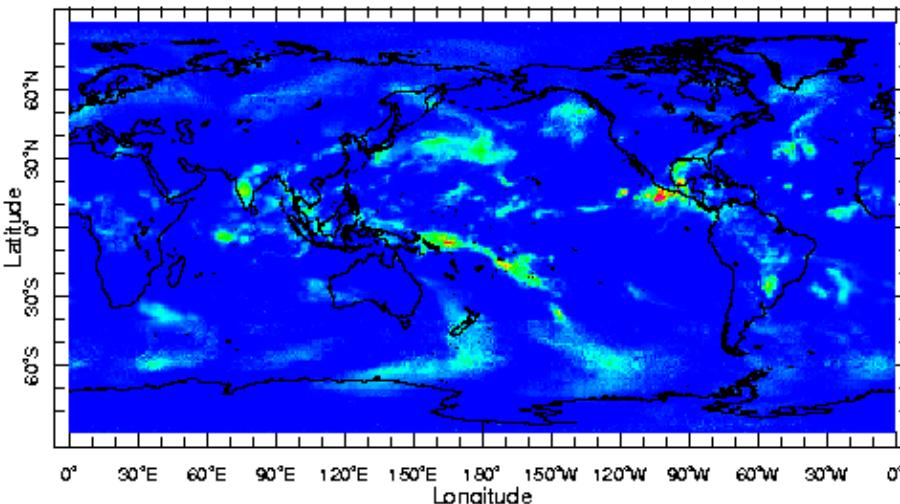
Longitude/Latitude

Time:

1 Oct 1996

2 Oct 1996

89.5N

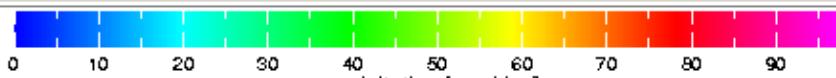


89.5S

1 Oct 1996

0

0



0.0

97.62288

Longitude

Latitude

draw coasts

colors

[Get Data](#)[Entire Dataset](#)[data.in.view](#)[Edit](#) [plot](#)



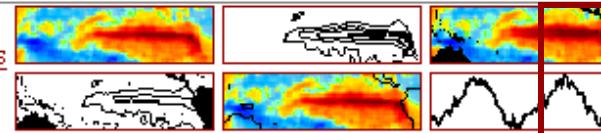
Data Library

[Finding Data](#)
[Tutorial](#)
[Questions & Answers](#)[NASA GPCP V1DD documentation](#)

help@iri

NASA GPCP V1DD prcp options

NEW Views

[Help](#)[Expert Mode](#)[Data Selection](#)[Filters](#)[Data Files](#)[Tables](#)

old Viewer

served from [IRI/LDEO Climate Data Library](#)[SOURCES](#) [NASA](#) [GPCP](#) [V1DD*](#) [precipitation](#)

NASA GPCP V1DD prcp: precipitation data

precipitation from NASA GPCP V1DD: 1-degree daily combination precipitation estimates.

Grids

Data Selection -Data domain selection

Time grid: /T (days since 1996-10-01 12:00:00) ordered (1 Oct 1996) to (31 Dec 2005) by 1. N= 3379 pts :grid
Longitude

grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid

Latitude

grid: /Y (degree_north) ordered (89.5N) to (89.5S) by 1. N= 180 pts :grid

Other Info

bufferwordsizes

4

datatype

realarraytype

missing_value

0.0000

NASA GPCP V1DD prcp data selection - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Links

Address http://iridl.ideo.columbia.edu/SOURCES/.NASA/.GPCP/.V1DD/.prcp/?help+dataselection Go

 NASA GPCP V1DD prcp[X Y | T]

Data Selection

You can interactively pick out the data you would like with the [Data Viewer](#).

You can reduce the amount of data by restricting the range of the grids.

The current settings for the grids are

- grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid
- grid: /Y (degree_north) ordered (89.5N) to (89.5S) by 1. N= 180 pts :grid
- grid: /T (days since 1996-10-01 12:00:00) ordered (1 Oct 1996) to (31 Dec 2005) by 1. N= 3379 pts :grid

If this is what you want, choose **Stop Selecting**

Setting Ranges

If you want to restrict the range along a grid, choose here.

| name | range |
|-------------|---------------------------|
| X Longitude | 0.5E to 0.5W |
| Y Latitude | 89.5N to 89.5S |
| T Time | 1 Oct 1996 to 31 Dec 2005 |

Restrict Ranges

[Chile?](#)

Done Internet



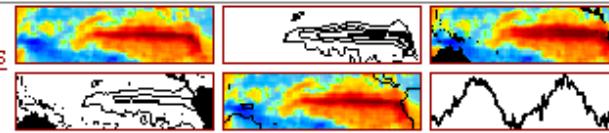
Data Library

[Finding Data](#)
[Tutorial](#)
[Questions & Answers](#)[NASA GPCP V1DD documentation](#)

help@iri

NASA GPCP V1DD prcp options

NEW Views



old Viewer

Help

Expert Mode

Data Selection

Filters

Data Files

Tables

served from IRI/LDEO Climate Data Library

[SOURCES](#) [NASA](#) [GPCP](#) [V1DD*](#) [precipitation](#)

NASA GPCP V1DD prcp: precipitation data

precipitation from NASA GPCP V1DD: 1-degree daily combination precipitation estimates.

Grids

Filters

-Common data manipulation tools

Time grid: /T (days since 1996-10-01 12:00:00)

9 pts :grid

Longitude

grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid

Latitude

grid: /Y (degree_north) ordered (89.5N) to (89.5S) by 1. N= 180 pts :grid

Other Info

bufferwordsizes

4

datatype

realarraytype

missing_value

0.0000

NASA GPCP V1DD prcp filters - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address http://iridl.ldeo.columbia.edu/SOURCES/.NASA/.GPCP/.V1DD/.prcp/?help+filters

Filters

Here are some filters that are useful for manipulating data. There are actually many more available, but they have to be entered manually. See [General Ingrid Help](#) for more information.

[Monthly Climatology](#) calculates a monthly climatology by averaging over all years.
[anomalies](#) calculates the difference between the (above) monthly climatology and the original data.
Integrate along [X Y T](#)
Differentiate along [X Y T](#)
Take differences along [X Y T](#)

Average over [X Y T](#) | [X Y X T Y T](#) | [X Y T](#)
RMS (root mean square with mean *not* removed) over [X Y T](#) | [X Y X T Y T](#) | [X Y T](#)
RMSA (root mean square with mean removed) over [X Y T](#) | [X Y X T Y T](#) | [X Y T](#)
Maximum over [X Y T](#) | [X Y X T Y T](#) | [X Y T](#)
Minimum over [X Y T](#) | [X Y X T Y T](#) | [X Y T](#)
Detrend (best-fit-line) over [X Y T](#) | [X Y X T Y T](#) | [X Y T](#)

Convert units from mm/day to

[Note on units](#)

- Monthly Climatology/Anomaly
- Average over any ind. variable
- Root mean square
- Find max/min values over any ind. variable

[XY Average Chile?](#)



Data Library

Finding Data

Tutorial

Questions &

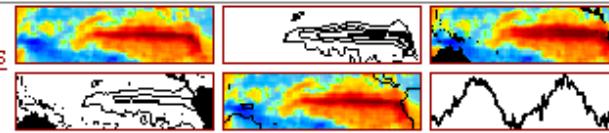
Answers

NASA GPCP
V1DD
documentation

help@iri

NASA GPCP V1DD prcp options

NEW Views



old Viewer

Help

Expert Mode

Data Selection

Filters Data Files Tables

served from IRI/LDEO Climate Data Library

[SOURCES](#) [NASA](#) [GPCP](#) [V1DD*](#) [precipitation](#)

NASA GPCP V1DD prcp: precipitation data

precipitation from NASA GPCP V1DD: 1-degree daily combination precipitation estimates.

Grids

Data Files -Access to data downloads

Time grid: /T (days since 1996-10-01 12:00:00) ordered (1 Oct 1996) to (31 Dec 2005) by 1. N= 3379 pts :grid

Longitude

grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid

Latitude

grid: /Y (degree_north) ordered (89.5N) to (89.5S) by 1. N= 180 pts :grid

Other Info

bufferwordsizes

4

datatype

realarraytype

missing_value

0.0000

NASA GPCP V1DD prcp data files - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Links

Address http://iridl.ldeo.columbia.edu/SOURCES/.NASA/.GPCP/.V1DD/.prcp/?help+datafiles Go



NASA GPCP V1DD prcp Data Files

This dataset has 8.7583680E08 bytes (835.26306MB) of data in it, which should give you a rough idea of the size of any file that you ask for.

Data Library

Finding Data

[Tutorial](#)
[Questions & Answers](#)

NASA GPCP V1DD prcp dataset

help@iri

Download Data To Specific Software

| | |
|-------------------------|---|
| ingrid | The Postscript-based software on which the Data Library is built. |
| CPT | Climate Predictability Tool More information |
| ferret | Interactive computer visualization and analysis software. More information |
| GrADS | Grid Analysis and Display System More information |
| matlab | Data analysis and visualization software. More information |
| NCL | NCAR Command Language More information |
| WinDisp | A public domain software package for the display and analysis of satellite images, maps and associated databases, with an emphasis on early warning for food security. More information |

Other Available File Formats

Full Information Formats

These files contain all of the available metadata.

| | |
|---|--|
| OPeNDAP | A system which downloads data directly to software, such as matlab, Ferret, GrADS, etc. Specific instructions are available in the table above. Note: OPeNDAP was formally known as DODS (Distributed Oceanographic Data System). More Information |
| netCDF (network Common Data Form) | A commonly supported self-describing data format. More Information |



Data Library

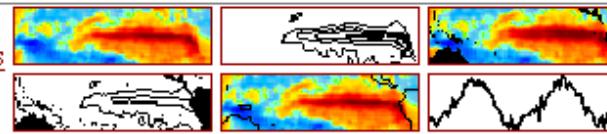
Finding Data
Tutorial
Questions &
Answers

NASA GPCP
V1DD
documentation

help@iri

NASA GPCP V1DD prcp options

NEW Views



Help

Expert Mode

[Data Selection](#)[Filters](#)[Data File](#)[Tables](#)

served from IRI/LDEO Climate Data Library

[SOURCES](#) [NASA](#) [GPCP](#) [V1DD*](#) [precipitation](#)

NASA GPCP V1DD prcp: precipitation data

precipitation from NASA GPCP V1DD: 1-degree daily combination precipitation estimates

Grids

Tables**-Access to tabular data for Excel, etc.**

Time grid: /T (days since 1996-10-01 12:00:00) ordered (1 Oct 1996) to (31 Dec 2005) by 1. N= 3379 pts :grid

Longitude

grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid

Latitude

grid: /Y (degree_north) ordered (89.5N) to (89.5S) by 1. N= 180 pts :grid

Other Info

bufferwordsizes

4

datatype

realarraytype

missing_value

0.0000



Back



Forward



Stop



Search



Favorites



Media



Email



Word



Folder



Help



Address

<http://iridl.ldeo.columbia.edu/SOURCES/.NASA/.GPCP/.V1DD/.prcp/T/%2831%20Dec%202005%29VALUE>

Go

Links



?



Data Library

Finding Data
Tutorial
Questions &
Answers

NASA GPCP
V1DD prcp
dataset

help@iri

NASA GPCP V1DD precipitation 31 Dec 2005 data tables

Rectangular array of data

The following list lets you specify the top and side grids of the table.

[Y X Table](#)
[X Y Table](#)

2D Tab-Separated Tables

The above table is also available as a tab-separated-values file. The following list lets you specify the top and side grids of the table.

[Y X Table](#)
[X Y Table](#)

Columnar Tables

The NASA GPCP V1DD precipitation 31 Dec 2005 data are available as a [columnar table](#), i.e. as multiple columns of data, intended primarily to be read. However, if you have other intentions for this table, or simply do not like the default choices, you may want to choose from the [columnar tables with options](#).



Data Library

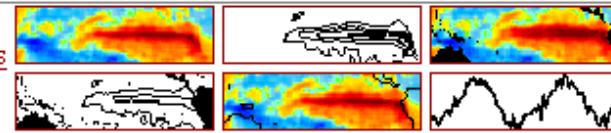
Finding Data
Tutorial
Questions &
Answers

NASA GPCP
V1DD
documentation

help@iri

NASA GPCP V1DD prcp options

NEW Views



old Viewer

Help

Expert Mode

Data Selection

Filters Data Files

Tables

served from IRI/LDEO Climate Data Library

[SOURCES](#) [NASA](#) [GPCP](#) [V1DD*](#) [precipitation](#)

NASA GPCP V1DD prcp: precipitation data

precipitation from NASA GPCP V1DD: 1-degree daily combination precipitation estimates.

Grids

Expert mode

-Manually enter Ingrid code

Time grid: /T (days since 1996-10-01 12:00:00) ordered (1 Oct 1996) to (31 Dec 2005) by 1. N= 3379 pts :grid

Longitude

grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid

Latitude

grid: /Y (degree_north) ordered (89.5N) to (89.5S) by 1. N= 180 pts :grid

Other Info

bufferwordsizes

4

datatype

realarraytype

missing_value

0.0000



T X Y

NASA GPCP V1DD prcp [X Y | T] M M M

expert
SOURCES .NASA .GPCP .V1DD .prcp

NEW Views

old Viewer

Data Selection Filters Data Files Tables

served from [IRI/LDEO Climate Data Library](#)

SOURCES NASA GPCP V1DD* precipitation

NASA GPCP V1DD prcp: precipitation data

precipitation from NASA GPCP V1DD: 1-degree daily combination precipitation estimates.

Grids

Time grid: /T (days since 1996-10-01 12:00:00) ordered (1 Oct 1996) to (31 Dec 2005) by 1. N= 3379 pts :grid
Longitude

grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid
Latitude

grid: /Y (degree_north) ordered (89.5N) to (89.5S) by 1. N= 180 pts :grid

Other Info

bufferwordsizes

Dataset Page Contents and Structure

Station Datasets



NOAA NCDC GHCN v2beta options

[Help](#) [Expert Mode](#)

[Data Selection](#) [Data Downloads & Files](#) [Data Tables](#)

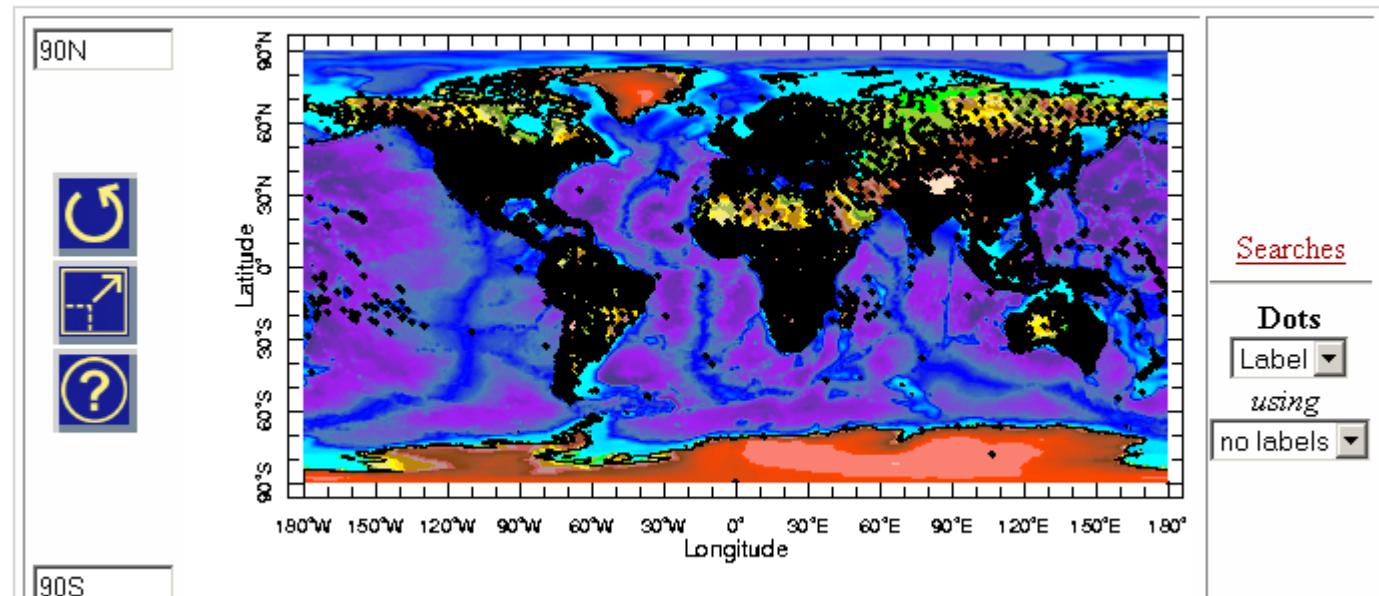
served from [IRI/LDEO Climate Data Library](#)

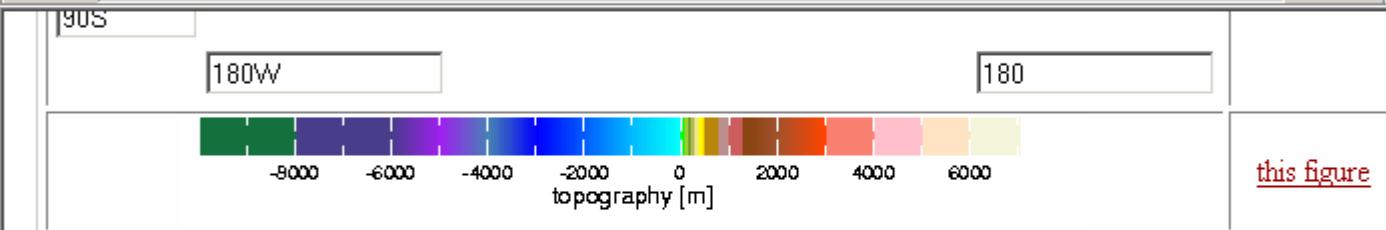
[SOURCES](#) [NOAA](#) [NCDC](#) [GHCN](#) [beta version 2 \(prcp\) \[map\]](#)

NOAA NCDC GHCN beta

Three key differences
1. Maps displaying stations

NOAA NCDC GHCN beta version 2 (prcp): Monthly weather station precipitation data from the Global Historical Climate Network.





[List of stations in current view](#)

Click on map to select data; change the **Zoom** menu to zoom in as well.

Documents

[outline](#) an outline showing all sub-datasets and variables contained in
[agreement](#)

Datasets and variables

| | |
|-------------------------------|--------------------|
| elev | NOAA NCDC GHCN v2b |
| latitude | NOAA NCDC GHCN v2b |
| longitude | NOAA NCDC GHCN v2b |
| Name | NOAA NCDC GHCN v2b |
| precipitation | NOAA NCDC GHCN v2b |

Three key differences

1. Map displays station locations
2. Station ids in grid info
3. “Extra” variables provide station information

A word of caution...

The time grid information represents the full extent of the dataset. This does NOT mean that all of the stations in the dataset have data for the full time period.

Grids

```
station grid: /IWMO (ids) ordered [ (1001000) (1005000) (1008000) ... (98851001)] N= 20590 pts :grid
time grid: /T (months since 1960-01-01) ordered (Jan 1697) to (May 2006) by 1. N= 3713 pts :grid
```

Selecting Data Domain

Gridded Datasets



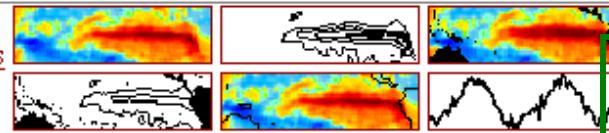
Data Library

[Finding Data](#)
[Tutorial](#)
[Questions & Answers](#)[NASA GPCP V1DD documentation](#)

help@iri

NASA GPCP V1DD prcp options

NEW Views

[Help](#)[Expert Mode](#)[Data Selection](#)[Filters](#)[Data Files](#)[Tables](#)

old Viewer

served from [IRI/LDEO Climate Data Library](#)[SOURCES](#) [NASA](#) [GPCP](#) [V1DD*](#) [precipitation](#)

NASA GPCP V1DD prcp: precipitation data

precipitation from NASA GPCP V1DD: 1-degree daily combination precipitation estimates.

Grids

Data Selection -Data domain selection

Time grid: /T (days since 1996-10-01 12:00:00) ordered (1 Oct 1996) to (31 Dec 2005) by 1. N= 3379 pts :grid
Longitude

grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid

Latitude

grid: /Y (degree_north) ordered (89.5N) to (89.5S) by 1. N= 180 pts :grid

Other Info

bufferwordsizes

4

datatype

realarraytype

missing_value

0.0000



NASA GPCP V1DD prcp data selection - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://iridl.ldeo.columbia.edu/SOURCES/.NASA/.GPCP/.V1DD/.prcp/?help+dataselection Go Links

IRI

[Data Selection](#)

[Data Library](#)

[Finding Data](#)

[Tutorial](#)

[Questions &](#)

[Answers](#)

**NASA GPCP
V1DD prcp
dataset**

help@iri

[NASA GPCP V1DD prcp\[X Y | T\]](#)

Data Selection

You can interactively pick out the data you would like with the [Data Viewer](#).

You can reduce the amount of data by restricting the range of the grids.

The current settings for the grids are

- grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid
- grid: /Y (degree_north) ordered (89.5N) to (89.5S) by 1. N= 180 pts :grid
- grid: /T (days since 1996-10-01 12:00:00) ordered (1 Oct 1996) to (31 Dec 2005) by 1. N= 3379 pts :grid

If this is what you want, choose **Stop Selecting**

Setting Ranges

If you want to restrict the range along a grid, choose here.

| name | range |
|-------------|---------------------------|
| X Longitude | 0.5E to 0.5W |
| Y Latitude | 89.5N to 89.5S |
| T Time | 1 Oct 1996 to 31 Dec 2005 |

Restrict Ranges

Done Internet

Data Selection

Step 1. Change text in Setting Ranges boxes using same syntax as text already there.

Step 2. Click **Restrict Ranges** button.

Step 3. When satisfied information in top box represents desired domain, click the **Stop Selecting** button.

File Edit View Favorites Tools Help

Back Search Favorites Media Links

Address http://iridl.ldeo.columbia.edu/SOURCES/.NASA/.GPCP/.V1DD/.prcp/T/%281%20Oct%201996%29%2831%2C

Go Links



Example

Time (T)

1 Oct 1996 to 31 Jan 1997

Latitude (Y)

60S to 60N

Setting Ranges

to restrict the range along a grid, choose here.

| range | | |
|-------|-----------|---------------------------|
| X | Longitude | 0.5E to 0.5W |
| Y | Latitude | 60S to 60N |
| T | Time | 1 Oct 1996 to 31 Jan 1997 |



NASA GPCP V1DD prcp options

[Help](#) [Expert Mode](#)

[NEW Views](#)
 [old Viewer](#)

served from [IRI/LDEO Climate Data Library](#)

[SOURCES](#) [NASA](#) [GPCP](#) [V1DD*](#) [precipitation](#) [T \(1 Oct 1996\)](#)
[\(31 Jan 1997\)](#) [RANGEEDGES](#) [Y \(60S\) \(60N\)](#) [RANGEEDGES](#) [Y \(60S\) \(60N\)](#) [RANGEEDGES](#)

Note: New data domain now represented in Source Bar and grid information.

PCP V1DD prcp: precipitation data

Precipitation from NASA GPCP V1DD: 1-degree daily combination precipitation

Grids

Time grid: /T (days since 1996-10-01 12:00:00) ordered (1 Oct 1996) to (31 Jan 1997) by 1. N= 123 pts :grid
Longitude

grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid

Latitude

grid: /Y (degree_north) ordered (59.5S) to (59.5N) by 1. N= 120 pts :grid

Other Info

bufferwordsizes

4

datatype

Selecting Data Domain

Station Datasets



NOAA NCDC GHCN v2beta options

[Help](#) [Expert Mode](#)

[Data Selection](#) [Data Downloads & Files](#) [Data Tables](#)

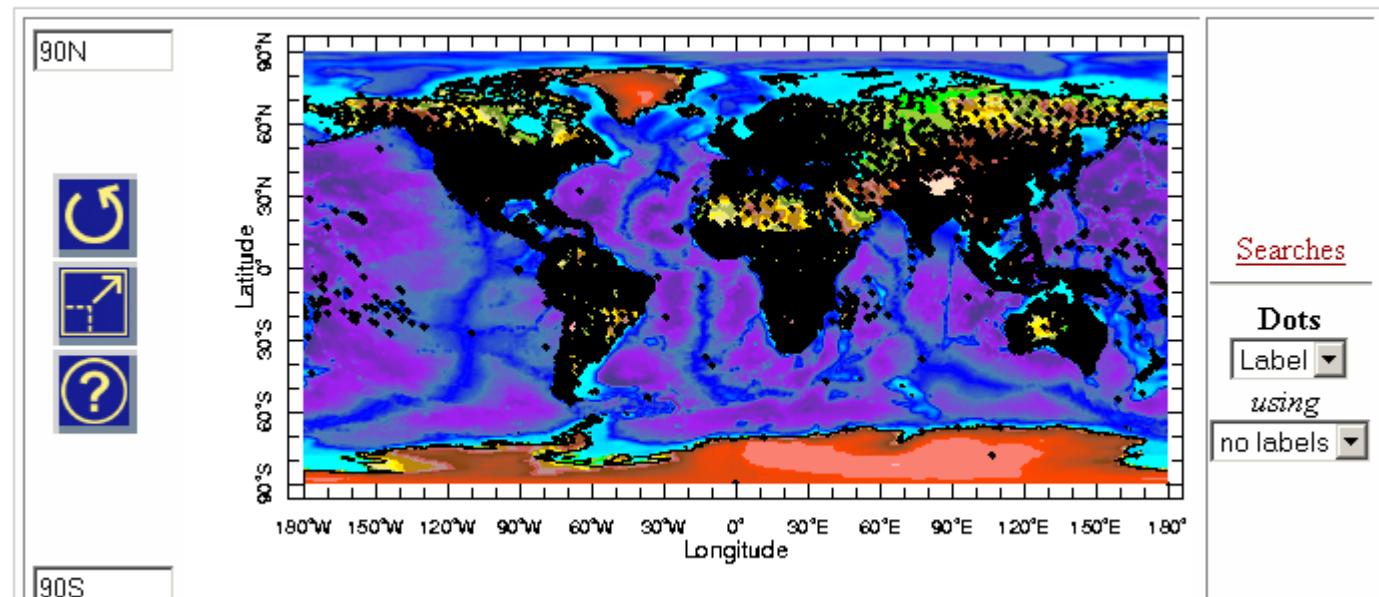
served from [IRI/LDEO Climate Data Library](#)

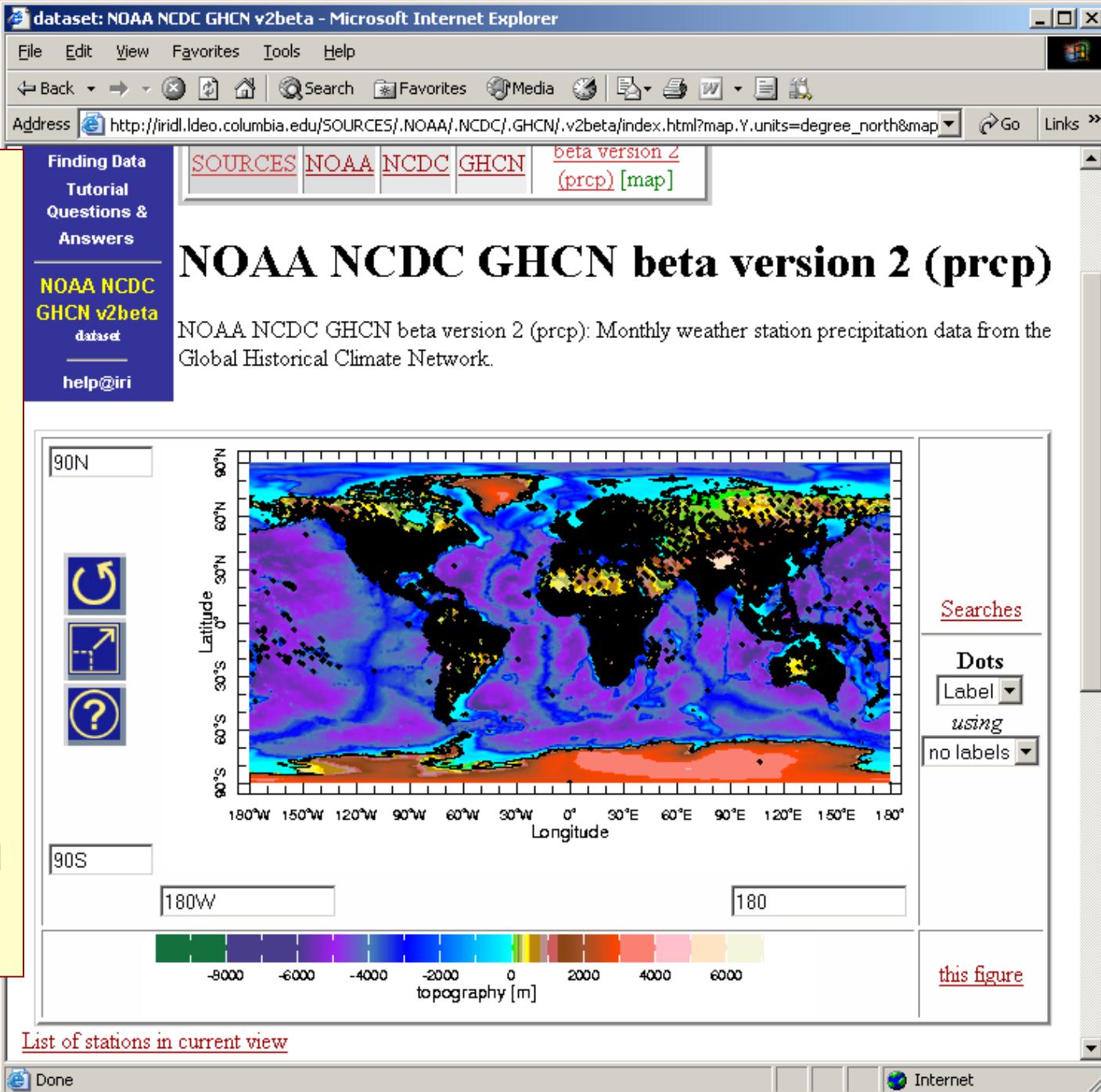
[SOURCES](#) [NOAA](#) [NCDC](#) [GHCN](#) [beta version 2 \(prcp\) \[map\]](#)

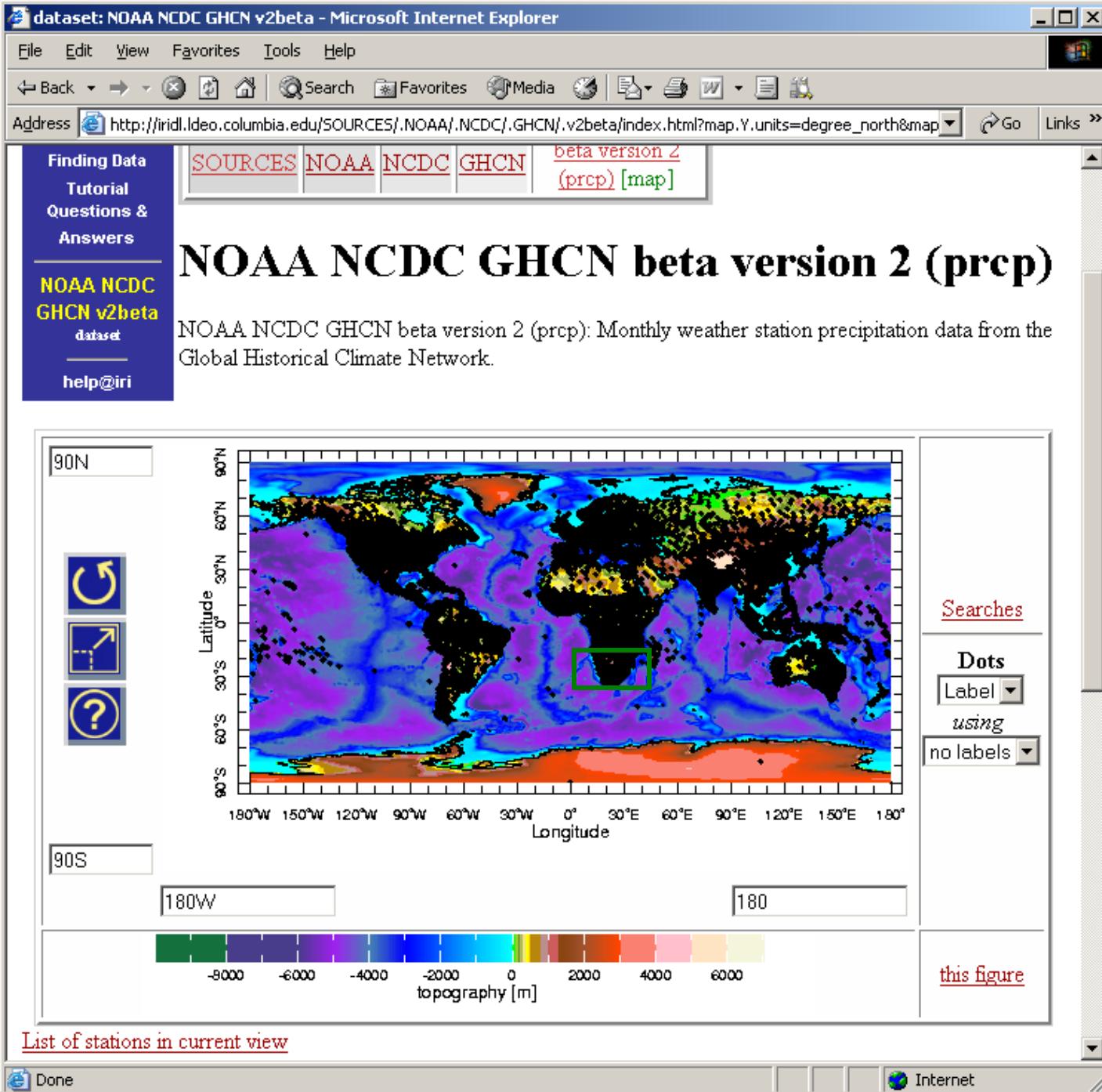
NOAA NCDC GHCN beta

Key difference
1. Selecting station(s)

NOAA NCDC GHCN beta version 2 (prcp): Monthly weather station precipitation data from the Global Historical Climate Network.







Example

Select stations in southern tip of Africa

Searches in NOAA NCDC GHCN v2beta - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Links

Address http://iridl.ideo.columbia.edu/SOURCES/.NOAA/.NCDC/.GHCN/.v2beta/searches.html?searchpar.lon.low=11.66666 Go

Searches in NOAA NCDC GHCN beta version 2 (prec)

Specify station

You can specify a single station here, otherwise use the searches below.

Get IWMOD

Searches

Specify ranges and the words or (sub)strings you would like to match: anything left blank will not restrict the search. In particular, you can specify a lower limit without specifying an upper limit (and vice versa).

| Name | longitude | latitude | elev |
|----------------------|-------------------------|---------------------|-------------------------|
| <input type="text"/> | 11.66666 to 35.83332 | -38 to -27.49999 | <input type="text"/> to |

Search NOAA NCDC GHCN v2beta

[Dataset \(and map\) with all data found in search](#)

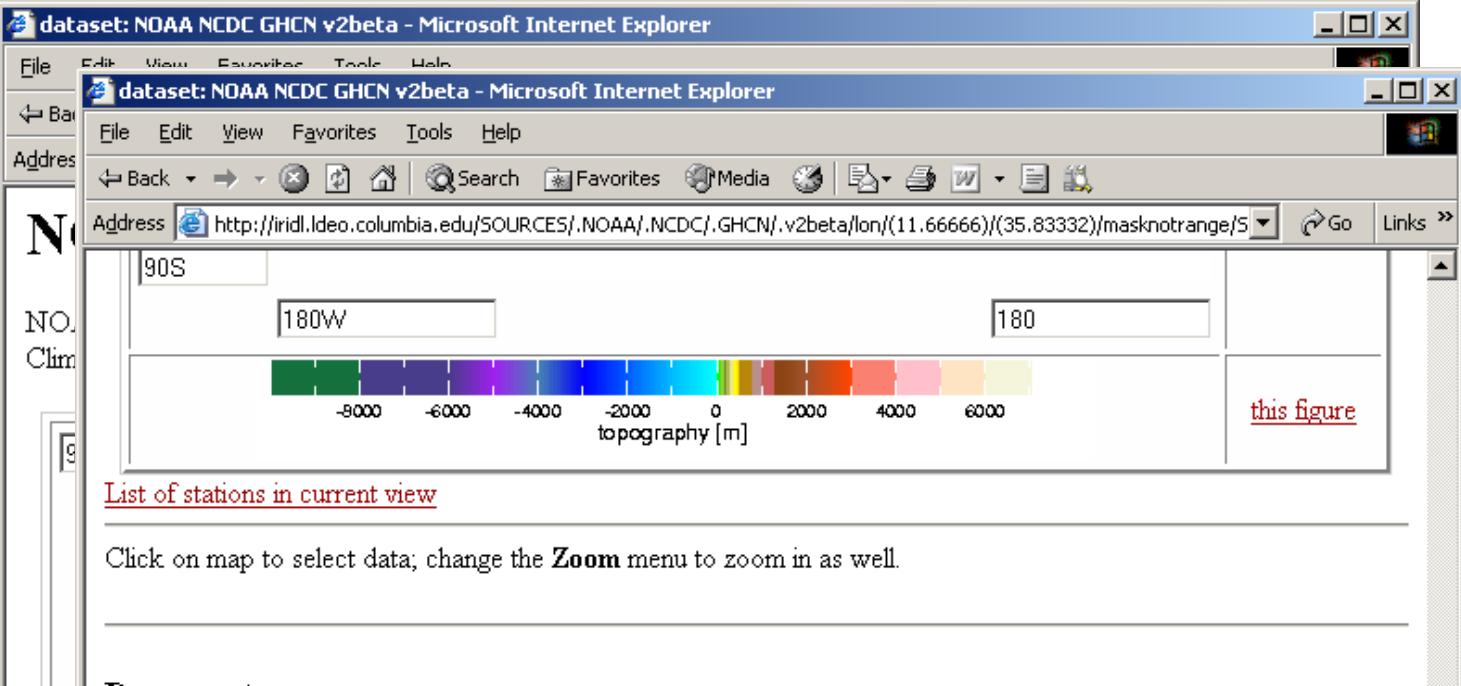
Page 1

| station | Name | longitude | latitude | elev |
|--------------------------|-----------------------------|-------------|--------------|-------|
| ids | ids | degree_east | degree_north | m |
| 68336001 | CHRISTIANA (TNK) SOUTH AFRI | 25.17E | 27.92S | 1204. |
| 68336002 | WARRENTON (MUN) SOUTH AFRI | 24.85E | 28.12S | 1181. |

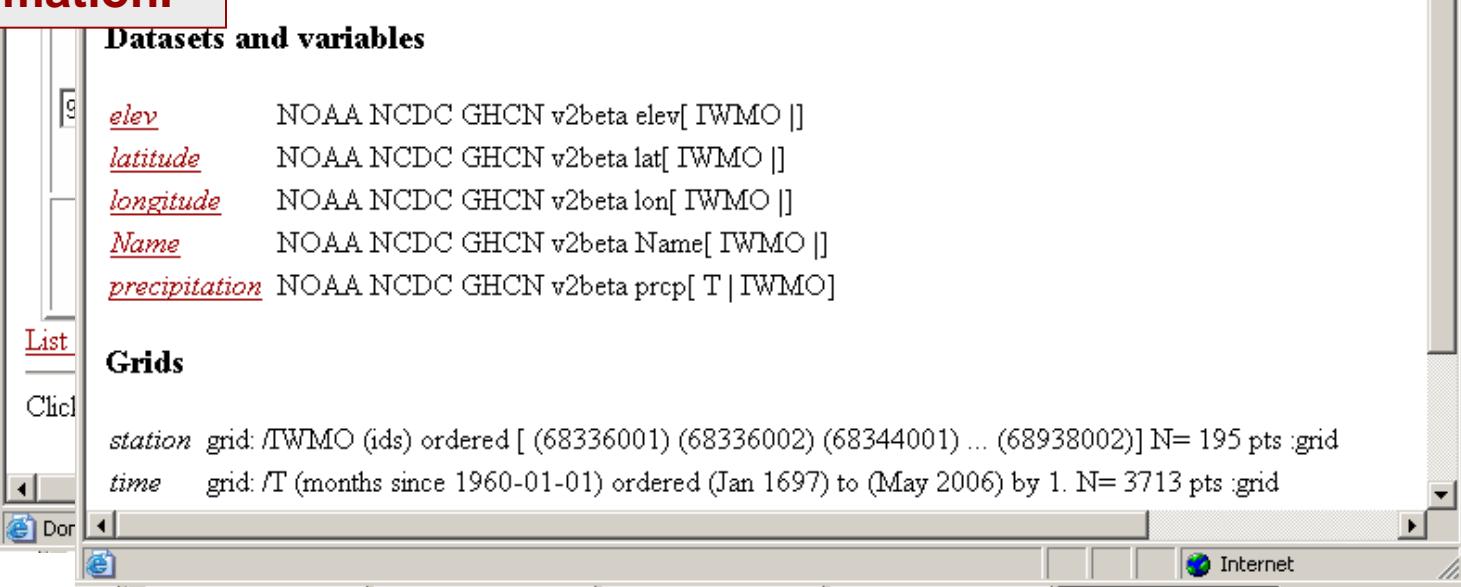
International Research Institute for Climate and Society Internet

Example

Select stations in southern tip of Africa



Note: New data domain now represented in Source Bar, map, and grid information.



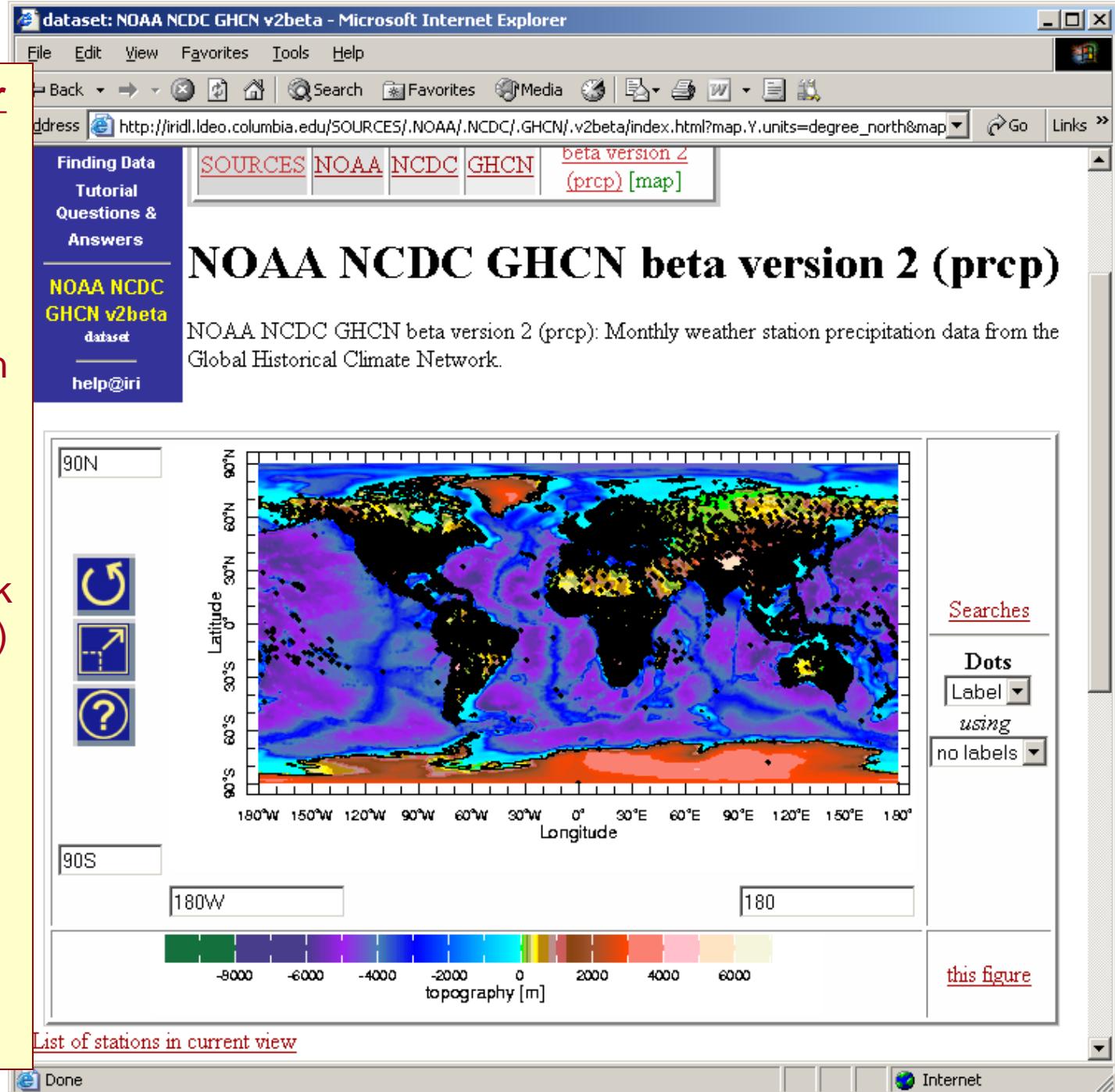
Option 2: Search for a particular station

Step 1. Click on the **Searches** link.

Step 2. Enter location of interest and click on the **Search [Dataset Name]** button.

Step 3. To select all matched stations, click the Dataset (and map) with all data found in search link.

To select one or more of the matched stations, select the appropriate check boxes and click the **Get Marked Stations** button.



Searches in NOAA NCDC GHCN v2beta - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address http://iridl.ldeo.columbia.edu/SOURCES/.NOAA/.NCDC/.GHCN/.v2beta/searches.html?searchpar.Name.value=WII

Answers

NOAA NCDC
GHCN v2beta

dataset

help@iri

Searches

Specify ranges and the words or (sub)strings you would like to match: anything left blank will not restrict the search. In particular, you can specify a lower limit without specifying an upper limit (and vice versa).

| Name | longitude | latitude | elev |
|----------|-------------------|-----------------|------|
| WINDHOEK | -180 to 180 | -90 to 90 | |

Search NOAA NCDC GHCN v2beta

Example
Select station(s) in
Windhoek, Namibia

[Dataset \(and map\) with all data found in search](#)

Page 1

| station | Name | longitude | latitude | elev |
|-----------------------------------|--------------------|-------------|--------------|-------|
| ids | ids | degree_east | degree_north | m |
| <input type="checkbox"/> 68110000 | WINDHOEK NAMIBIA | 17.1E | 22.6S | 1700. |
| <input type="checkbox"/> 68110008 | WINDHOEK-A NAMIBIA | 17.1E | 22.6S | 1660. |
| <input type="checkbox"/> 68110009 | WINDHOEK-B NAMIBIA | 17.1E | 22.6S | 1740. |

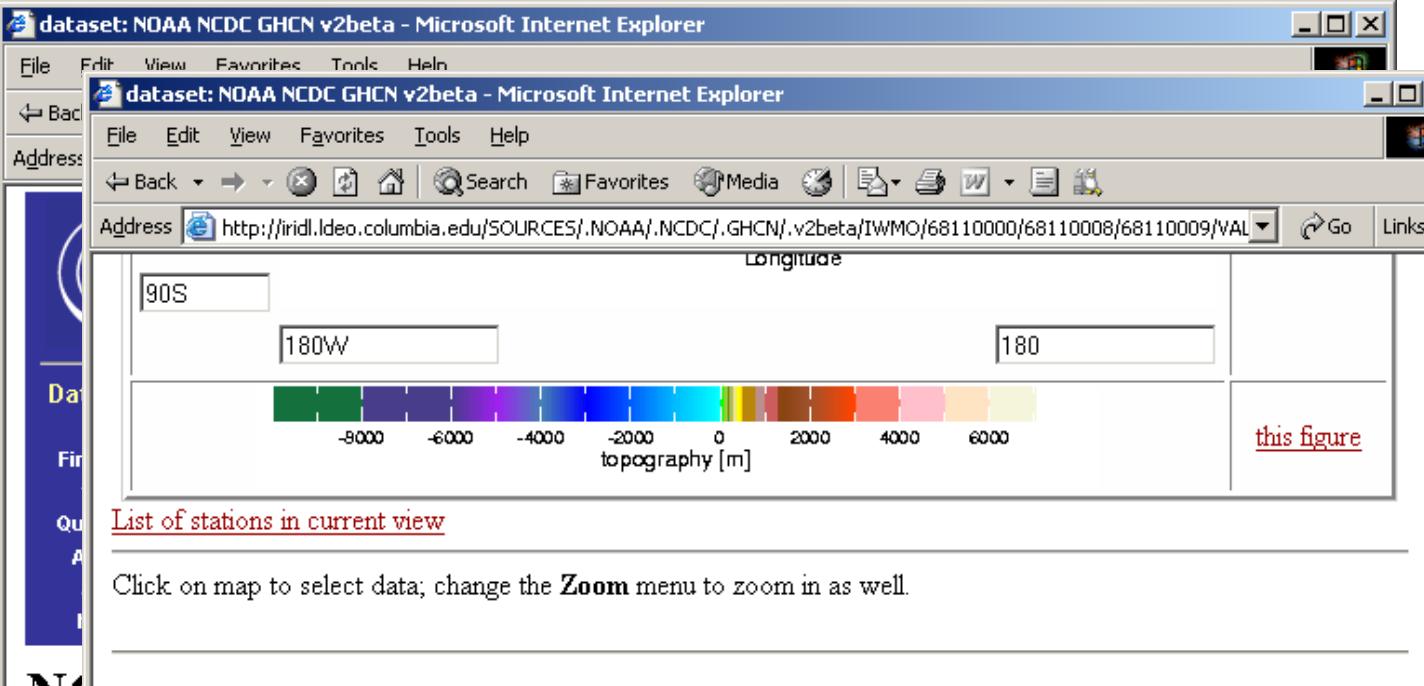
Entries 1 to 3 of 3

Get Page

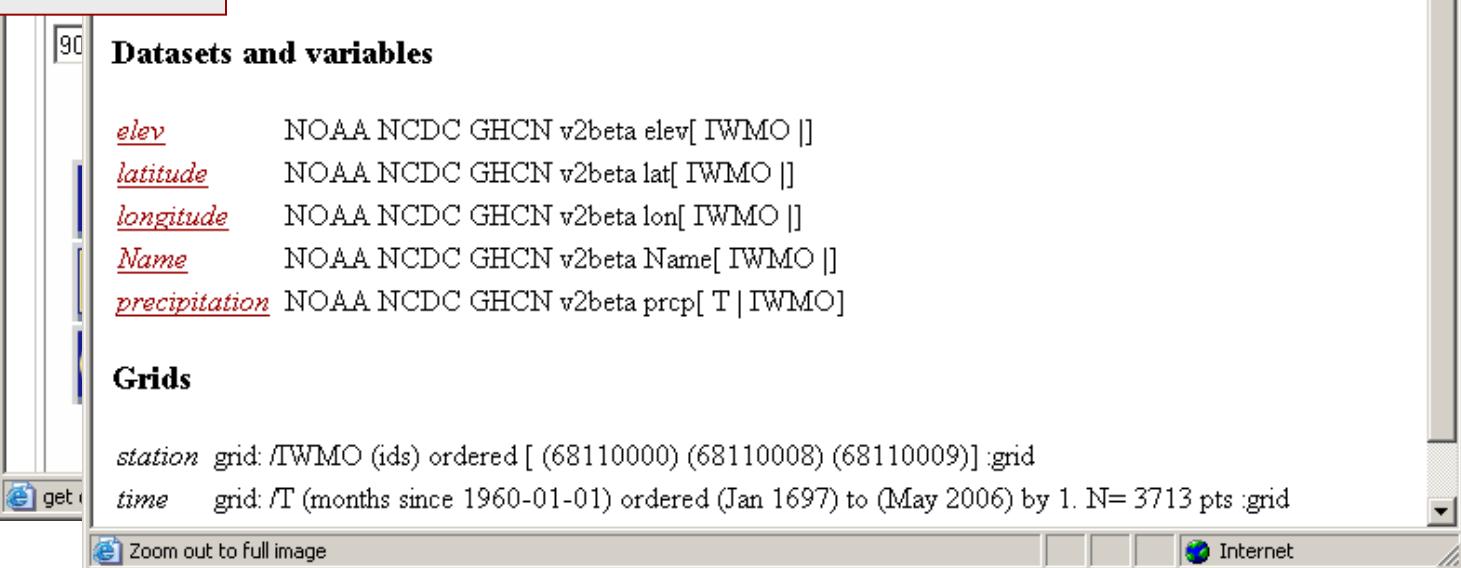
Get Marked Stations

Done

Internet



Note: New data domain now represented in Source Bar, map, and grid information.



Group Examples

Group Example 1

- Use Datasets by Category catalog to find a data set with the following characteristics:
 1. Includes observed sea surface temperatures
 2. Monthly temporal resolution
 3. Spatial resolution at least $1^{\circ}\text{x}1^{\circ}$
 4. Includes 60°S - 60°N in spatial domain
 5. Includes 1985-2005 in temporal domain

Group Example 1: Result

The screenshot shows a vintage-style Netscape browser window titled "dataset: NOAA NCEP EMC CMB GLOBAL - Netscape". The address bar displays the URL: <http://iridl.ldeo.columbia.edu/SOURCES/.NOAA/.NCEP/.EMC/.CMB/.GLOBAL/>. The main content area features the IRI logo and navigation links for "Data Library", "Finding Data", "Tutorial", "Questions & Answers", and "help@iri". The title "NOAA NCEP EMC CMB GLOBAL" is prominently displayed, along with a subtitle: "NOAA NCEP EMC CMB GLOBAL: Global SST data from Reynolds and Smith." Below the title, there are sections for "Datasets and variables" and "Documents". Under "Datasets and variables", two entries are listed: "Reyn_SmithOIv1" (Sea surface temperature fields blended from ship, buoy and bias-corrected satellite data, Reynolds and Smith 1994) and "Reyn_SmithOIv2" (SST fields updated from version 1 with more COADS data, new sea-ice to SST conversion algorithm, and 1971-2000 climatology). A footer note states: "Last updated: Tue, 09 Mar 2004 22:00:18 GMT". The bottom of the browser window includes a toolbar with icons for back, forward, search, and other functions, and a status bar that says "Expert Mode: even more options".

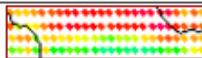
Group Example 2:

Select the station-observed precipitation in Central-Chile
(in the Chilean DL)

- From the SOURCES .Chile .DGA .meteorological .regionIV .station .daily dataset...
 - Search for stations between 30°S and 39°S
 - Select precipitation variable

Group Example 2: Result

Chile DGA meteorological Precipitation options [Help](#) [Expert Mode](#)

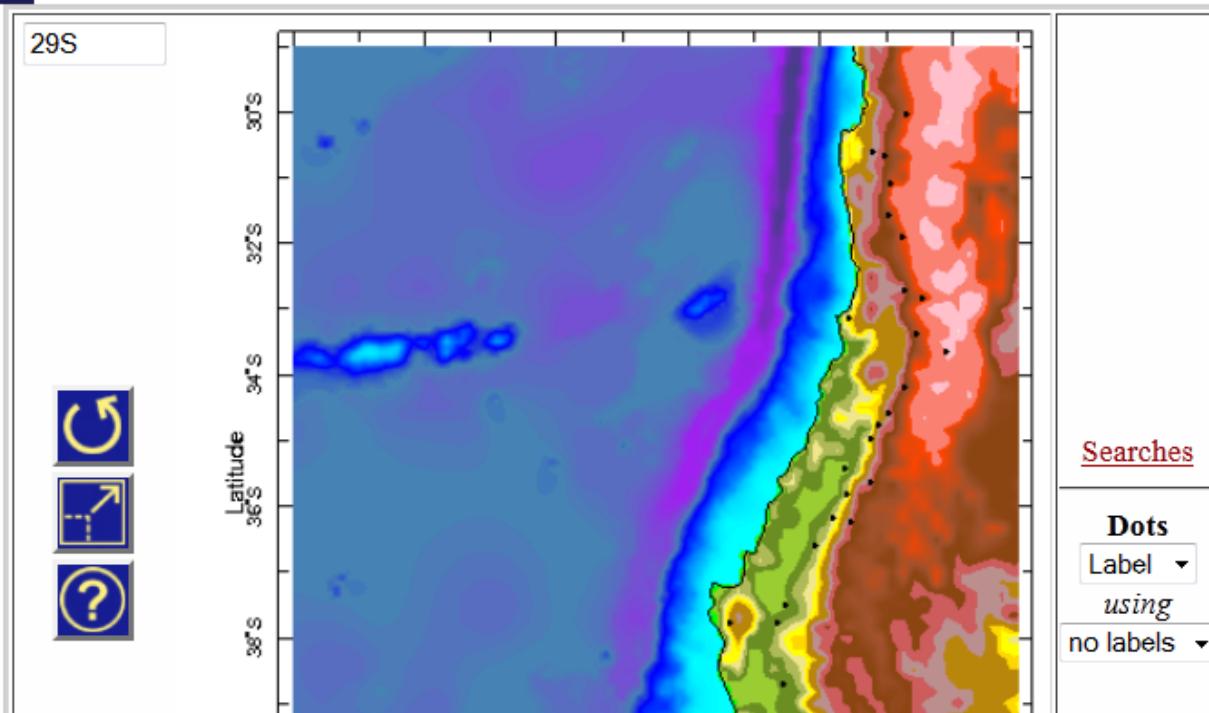
 [Data Selection](#) [Data Downloads & Files](#) [Download](#)

served from [www.climaportal.org](#)

SOURCES [Chile](#) Dirección General de Aguas meteorological [Precipitation \[map\]](#) latitud (-39) (-30.0) masknotrange [SELECT](#)

Chile DGA meteorological Precipitation

Chile DGA meteorological Precipitation.



Group Example 3:

Prepare spatially averaged monthly SSTs in the Tropical Pacific region for 1986-2005 for use in Excel

- From the Reyn_SmithOlv2 monthly data... [START HERE](#)
 - Select the Sea Surface Temperature variable
 - Select Jan 1986 – Dec 2005 time period
 - Select region in Tropical Atlantic (10°S - 10°N , 140°E - 300°E)
 - Calculate spatial average (XY link on Filters page)
 - View Ingrid in Expert Mode
 - View data in data viewer
 - Download for use in Excel

Group Example 3: Result

data: mean [NOAA NCEP EMC CMB GLOBAL Reyn_SmithOlv2 monthly sst] - Netscape

File Edit View Go Bookmarks Tools Window Help

http://iridl.ldeo.columbia.edu/expert/SOURCES/.NOAA/.NCEP/.EMC/.CMB/.GLOBAL/.Reyn_SmithOIv2/monthly/sst

views: NOAA NCEP EMC CMB GLO... data: mean [NOAA NCEP EMC CM...

IRI
Data Library
Finding Data
Tutorial
Questions & Answers
NOAA NCEP
EMC CMB
GLOBAL
Reyn_SmithOlv2
monthly
documentation
help@iri

mean [NOAA NCEP EMC CMB GLOBAL Reyn_SmithOlv2 monthly sst][! T] M

expert
SOURCES .NOAA .NCEP .EMC .CMB .GLOBAL
.Reyn_SmithOlv2 .monthly .sst
X (-30) (-10) RANGEEDGES
T (Jan 1986) (Dec 2005) RANGEEDGES
Y (10S) (10N) RANGEEDGES
[X Y] average

NEW Views old Viewer Data Selection Filters Data Files Tables

served from IRI/LDEO Climate Data Library

... GLOBAL Reyn_SmithOlv2 monthly* Sea Surface Temperature X (-30) (-10) RANGEEDGES T (Jan 1986) (Dec 2005) RANGEEDGES Y (10S) (10N) RANGEEDGES [X Y] 0.0 average

mean [NOAA NCEP EMC CMB GLOBAL Reyn_SmithOlv2 monthly sst]: Sea Surface Temperature data

monthly sst sst sst sst Sea Surface Temperature from NOAA NCEP EMC CMB GLOBAL Reyn_SmithOlv2: SST fields updated from version 1 with more COADS data, new sea-ice to SST conversion algorithm, and 1971-2000 climatology.

Grids

Time
grid: /T (months since 1960-01-01) ordered (Jan 1986) to (Dec 2005) by 1. N= 240 pts :grid

Other Info

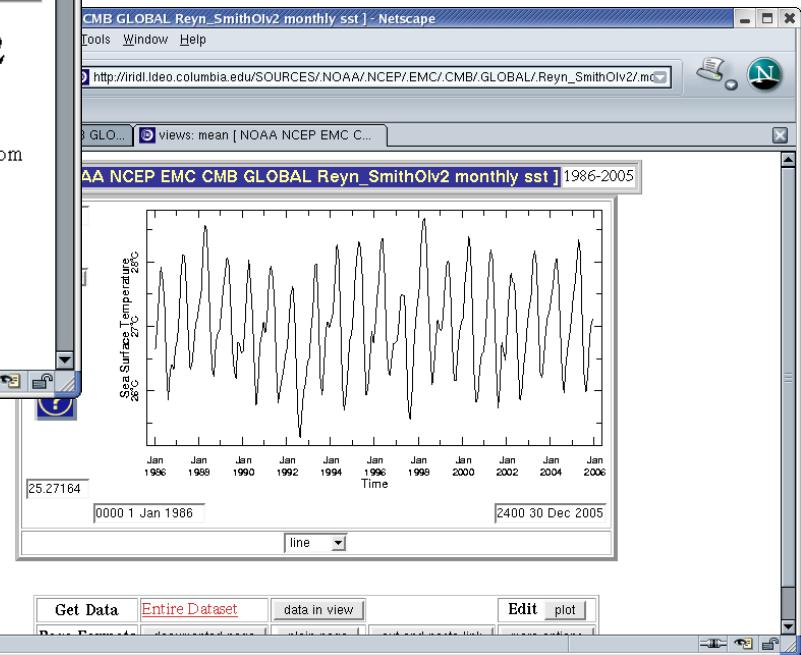
25.27164

0000 1 Jan 1986 2400 30 Dec 2005

line

VIEW RESULT

To download data:
Click on Tables, select
tsv or csv file type, and
click Get Table button.



Visualizing Data: Making maps and graphs



Data Library

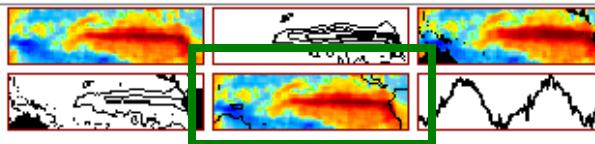
[Finding Data](#)
[Tutorial](#)
[Questions & Answers](#)
[NASA GPCP](#)
[V1DD](#)
[documentation](#)

help@iri

NASA GPCP V1DD prcp options

[Help](#)[Expert Mode](#)

NEW Views



old Viewer

served from [IRI/LDEO Climate Data Library](#)

| | | | | | | | | | | |
|-------------------------|----------------------|----------------------|-----------------------|-------------------------------|--------------------------------|-------------------------------|-------------------------------|----------------------------|-------------------------------|----------------------------|
| SOURCES | NASA | GPCP | V1DD* | precipitation | T (1 Oct 1996) | (31 Jan 1997) | Y (60S) (60N) | RANGEEDGES | Y (60S) (60N) | RANGEEDGES |
|-------------------------|----------------------|----------------------|-----------------------|-------------------------------|--------------------------------|-------------------------------|-------------------------------|----------------------------|-------------------------------|----------------------------|

NASA GPCP V1DD prcp: precipitation data

prcp prcp prcp precipitation from NASA GPCP V1DD: 1-degree daily combination precipitation estimates.

Grids

Time grid: /T (days since 1996-10-01 12:00:00) ordered (1 Oct 1996) to (31 Jan 1997) by 1. N= 123 pts :grid
Longitude

grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid

Latitude

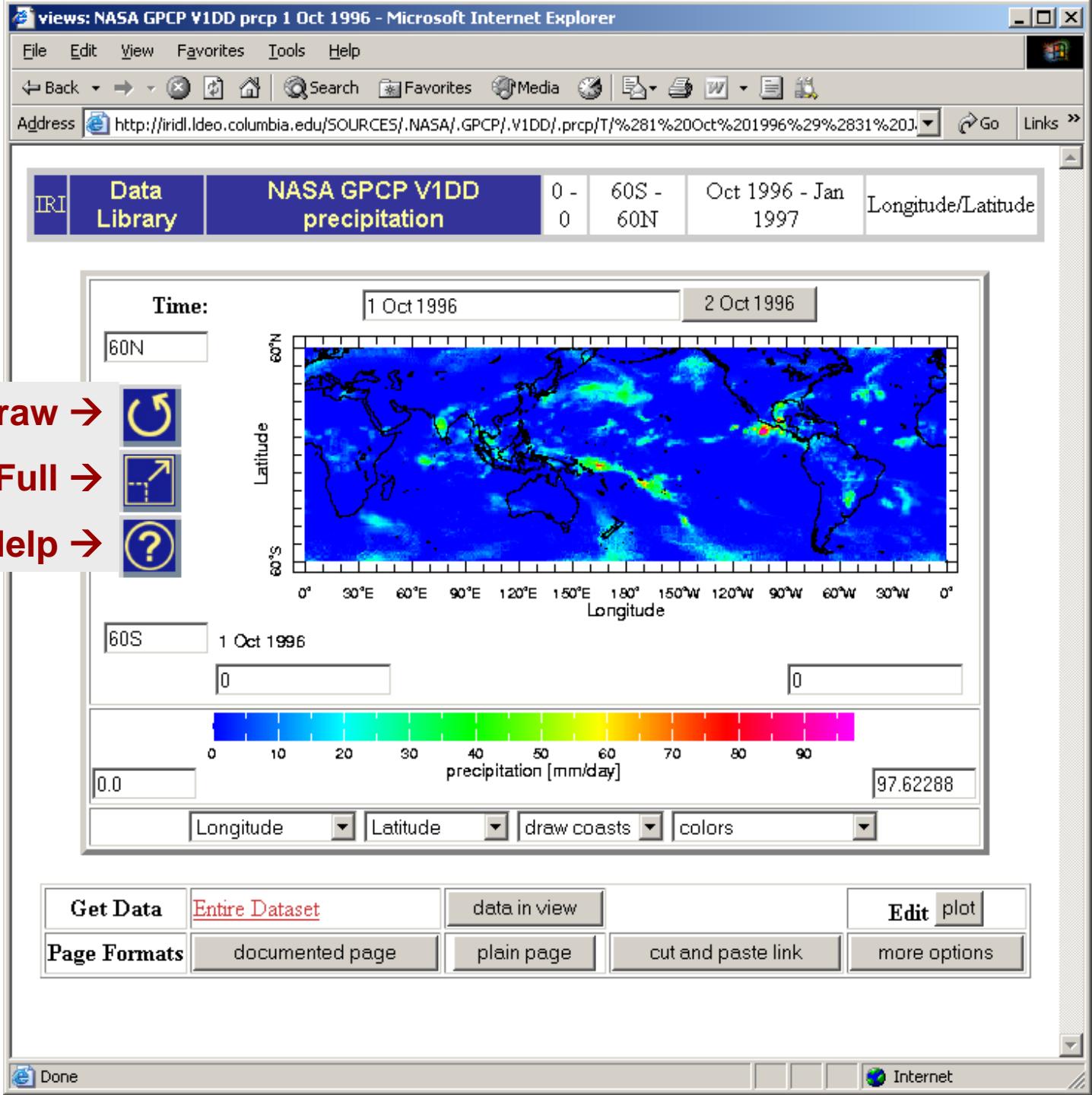
grid: /Y (degree_north) ordered (59.5S) to (59.5N) by 1. N= 120 pts :grid

Other Info

bufferwordsizes

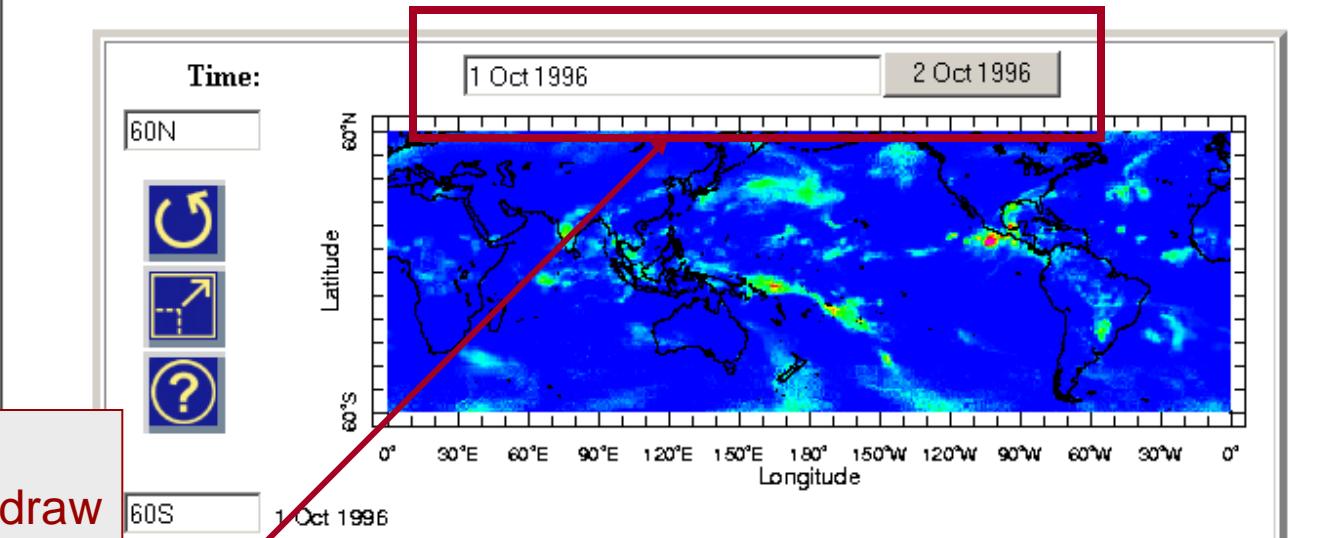
4

datatype





IRI Data Library NASA GPCP V1DD precipitation 0 - 60S - Oct 1996 - Jan 1997 Longitude/Latitude
0 60N 60N 1997



Change Time

- Change text and redraw
- Select button with adjacent date

Make Animation

- Enter range of dates (date1 "to" date2) and redraw

60S 1 Oct 1996 0 0

0 10 20 30 40 50 60 70 80 90

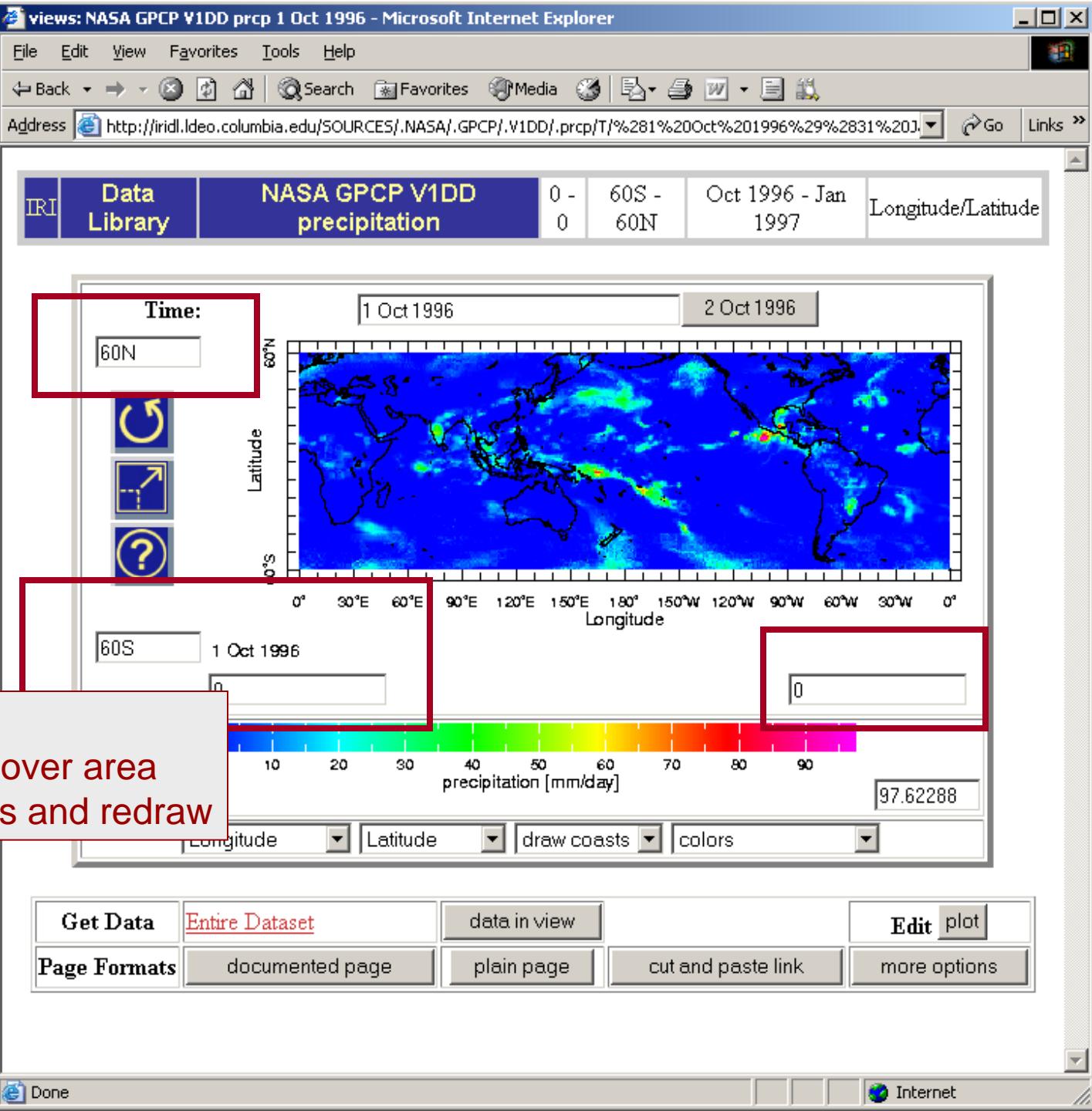
precipitation [mm/day]

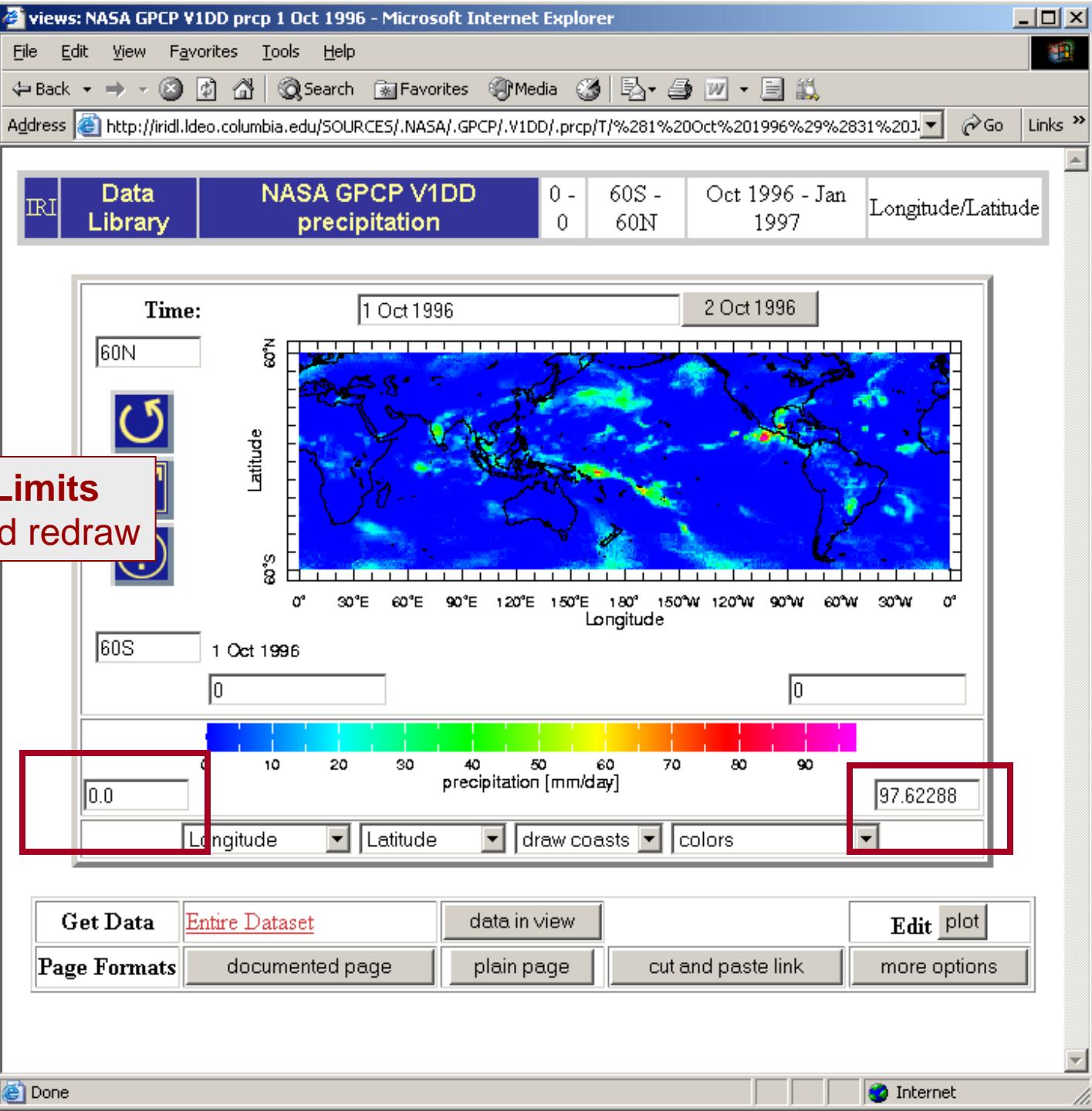
1.0 97.62288

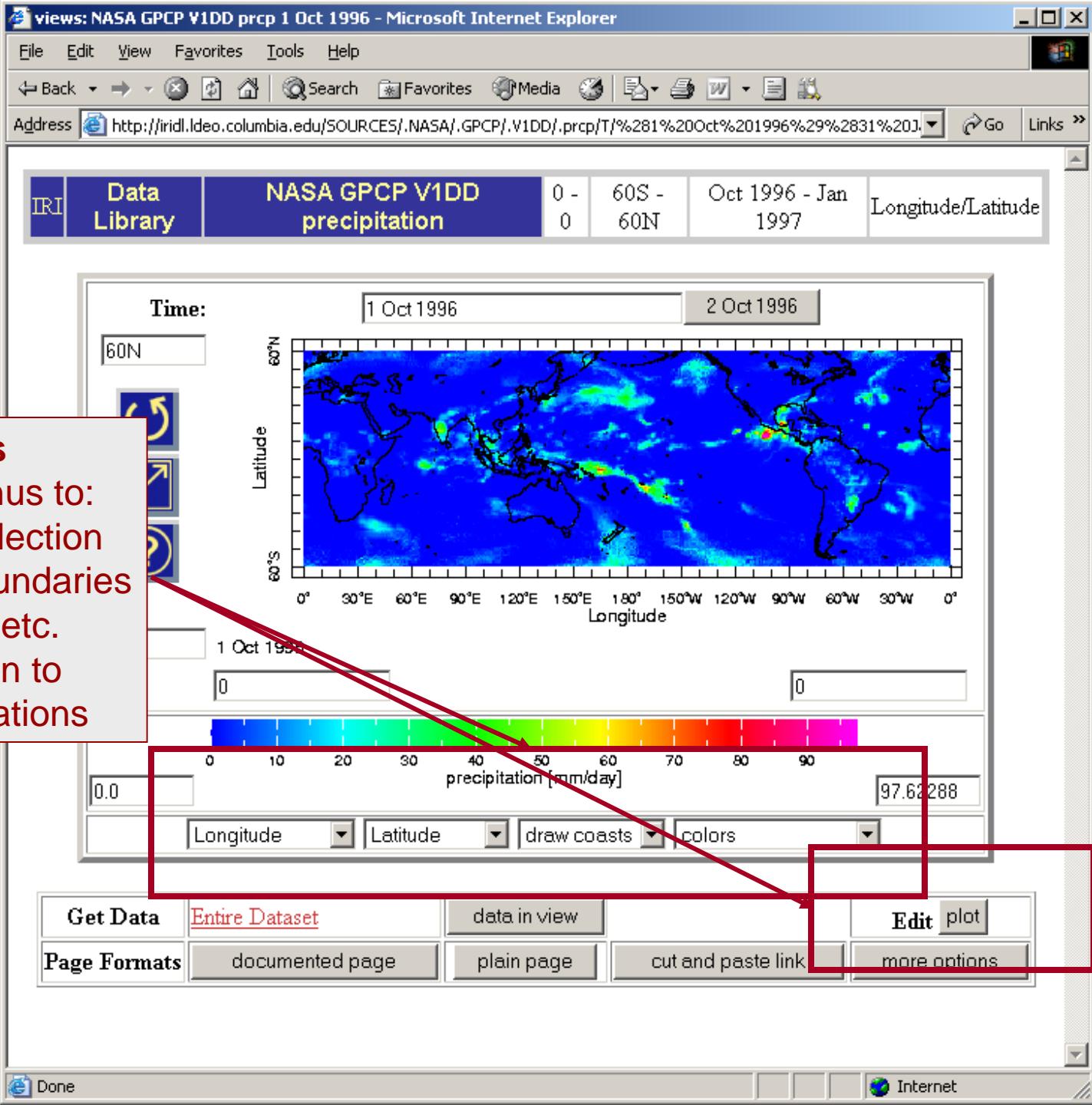
Longitude Latitude draw coasts colors

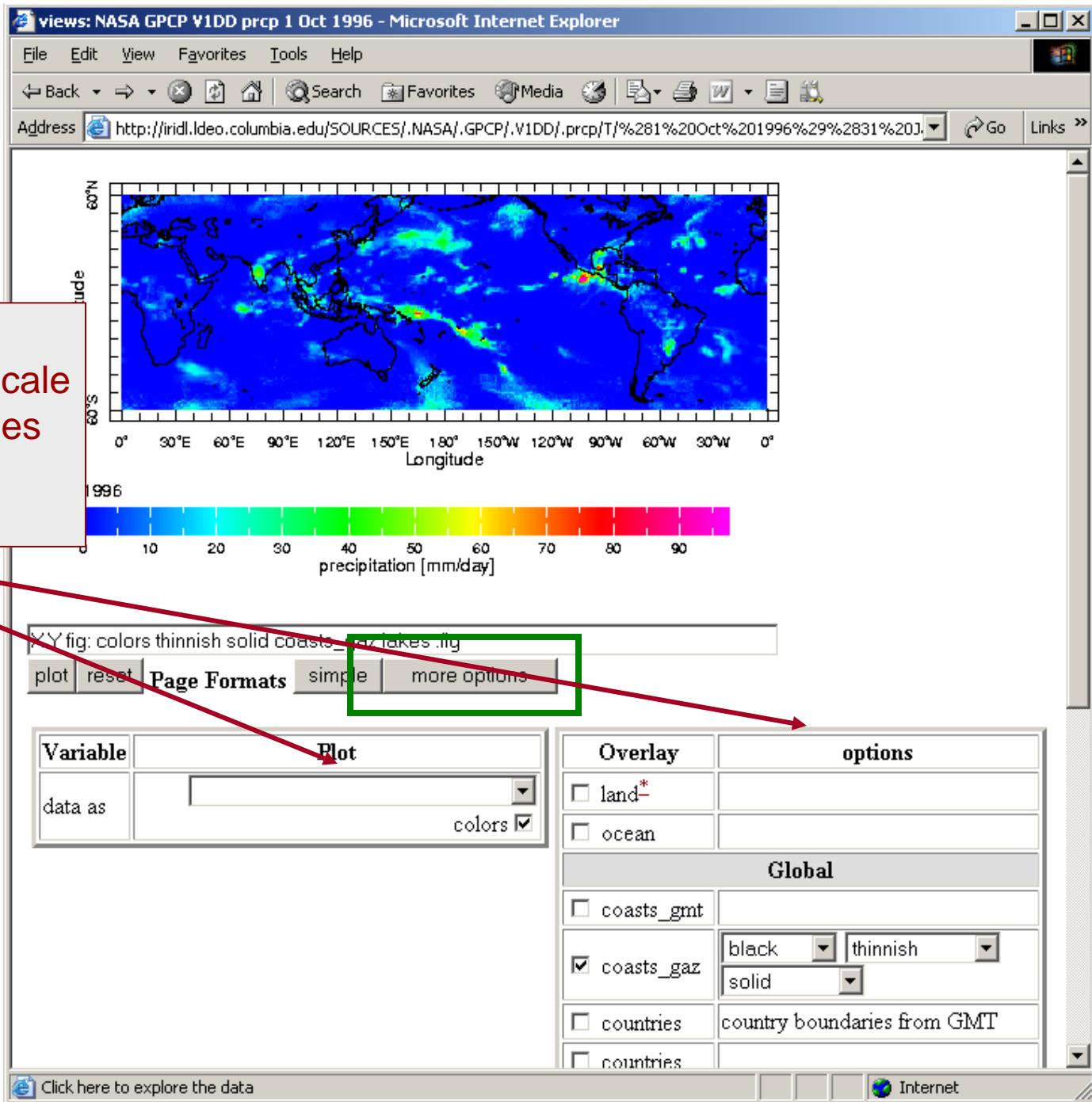
Data Entire Dataset data in view Edit plot

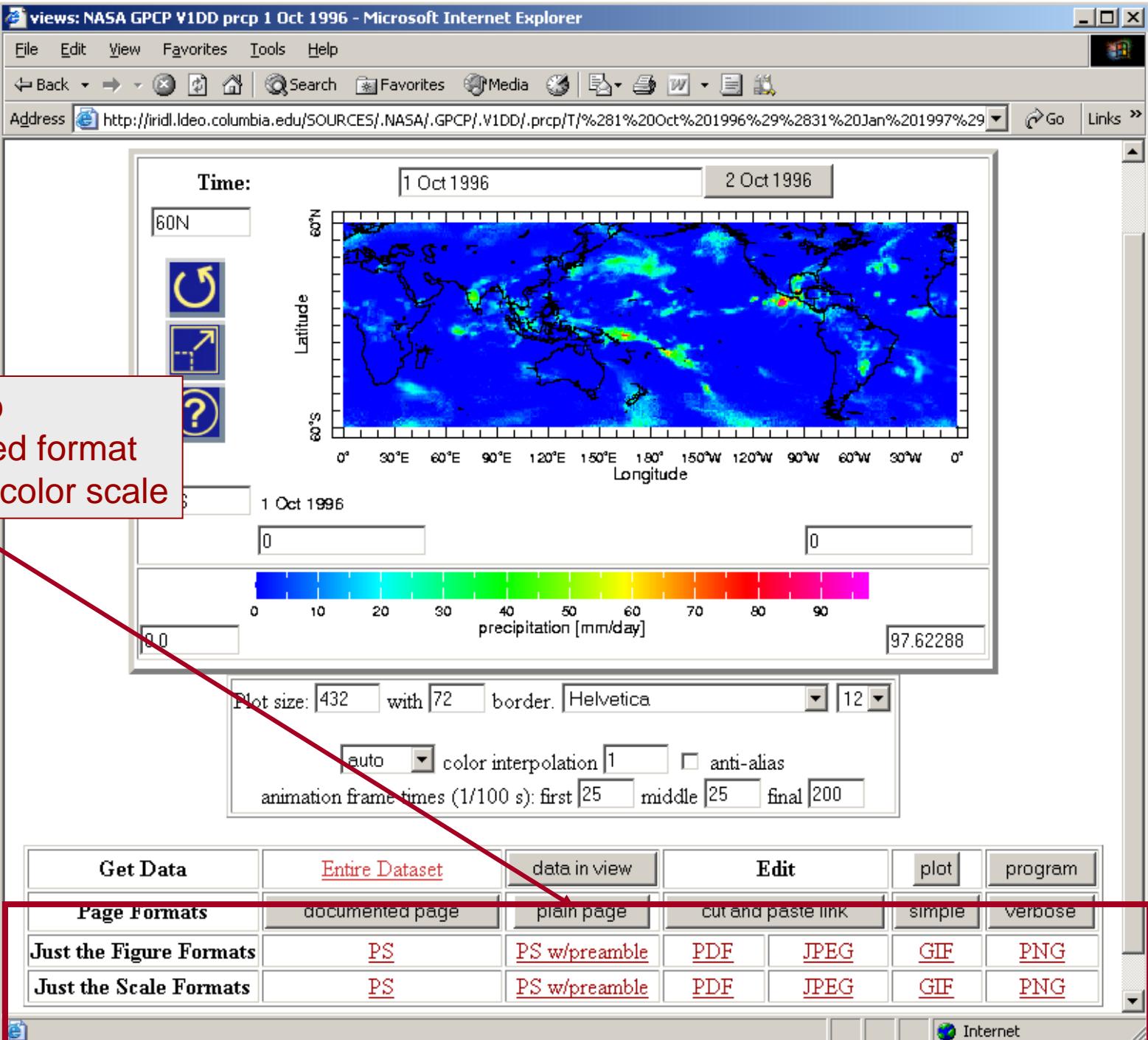
Formats documented page plain page cut and paste link more options

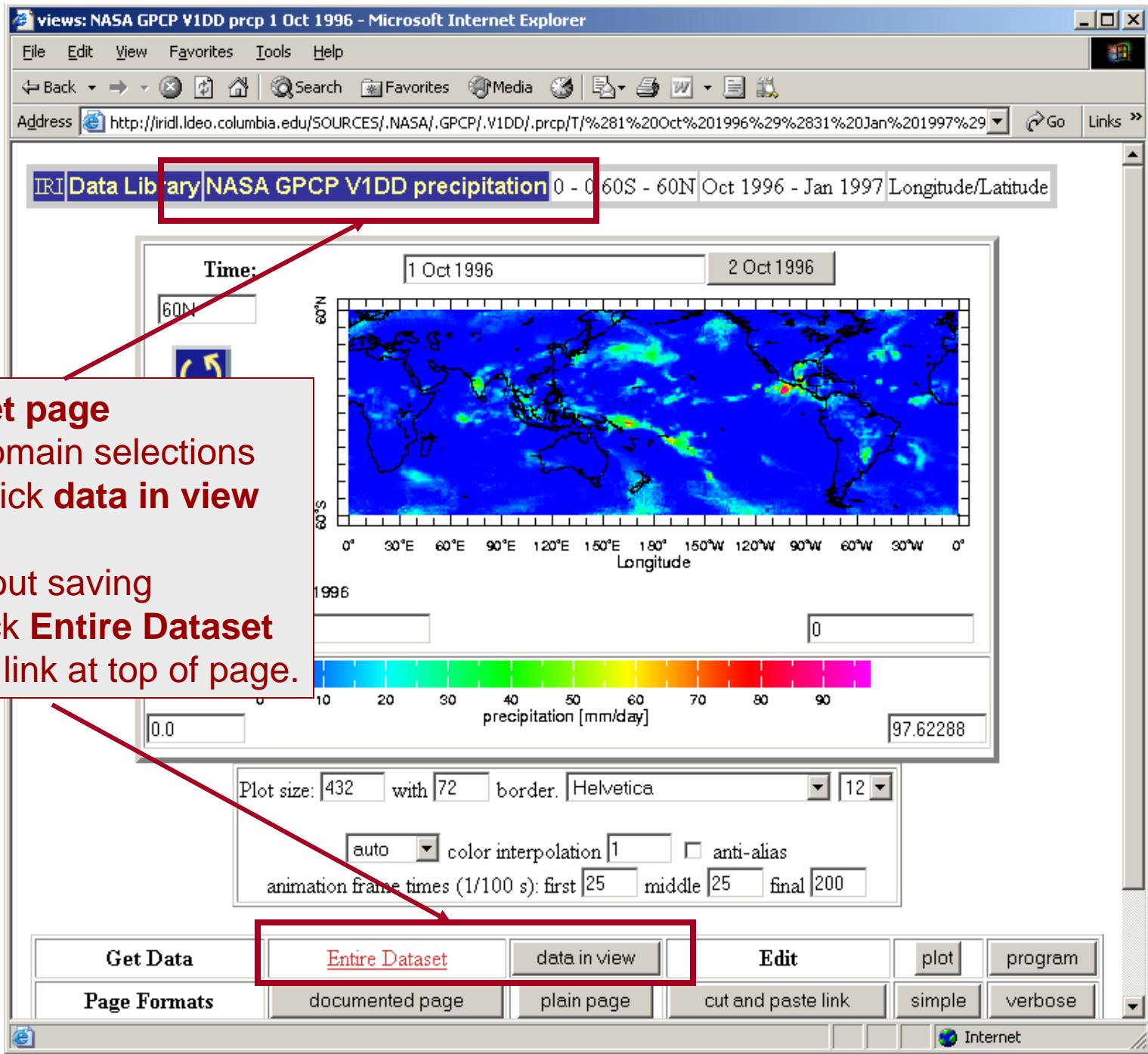








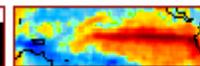
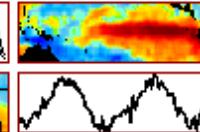
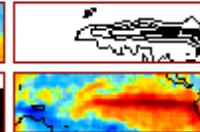
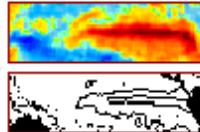




Downloading Data Files



NASA GPCP V2 satellite-gauge prcp options

[Help](#)[Expert Mode](#)[NEW Views](#)[Data Selection](#)[Filters](#)[Data Files](#)[Tables](#)[old Viewer](#)served from [IRI/LDEO Climate Data Library](#)[SOURCES](#) [NASA](#) [GPCP](#) [V2*](#) [satellite-gauge](#) [precipitation](#)

NASA GPCP V2 satellite-gauge precipitation data

Satellite-gauge precipitation from NASA GPCP: Combined satellite-gauge precipitation estimates and error estimates from the Global Precipitation Climatology Project.

Grids

Time grid: /T (months since 1960-01-01) ordered (Jan 1979) to (Feb 2006) by 1. N= 326 pts /grid
Longitude

grid: /X (degree_east) periodic (1.25E) to (1.25W) by 2.5 N= 144 pts /grid
Latitude

grid: /Y (degree_north) ordered (88.75N) to (88.75S) by 2.5 N= 72 pts /grid

Other Info



File Edit View Favorites Tools Help



← Back

Address

File Edit View Favorites Tools Help

← Back



Address http://iridl.ldeo.columbia.edu/SOURCES/.NASA/.GPCP/.V2/.satellite-gauge/.prcp/?help+datafiles



Go

Links >

Partial Information Formats

These files contain only some of the available metadata.

| | |
|--|---|
| Columnar Table | A table with separate columns of numbers for each independent variable (i.e., grids) and for the data. This is an inefficient format, so you would have gotten a HUGE file for dataset of this size. This file will be approximately 54079488 bytes, with 4 columns of 3379968 numbers. |
| 2-Dimensional Tab-Separated Tables Y X Table X Y Table | Tab-separated-values (tsv) file with information about the independent variables (i.e., grids). The list to the left allows you to specify the format of the table. Note: The variable running across the top of the table (identifying columns) is listed first and the variable running down the side of the table (identifying rows) is listed second. |

GIS-Compatible Formats

There are three GIS-compatible formats available.

| | |
|-------------------------------------|--|
| 2-Dimensional Table | A 2-dimensional ascii file that includes an ArcInfo Header. |
| IDA Image | File(s) in the Image Display and Analysis format. Typically used with WinDisp. |
| LAN Image | File(s) in the ERDAS LAN format. Typically used with various GIS programs, including ArcView and HealthMapper. |

Data Only Formats

These files contain just the data without any of the available metadata.

| | |
|---|--|
| Binary direct access | A big-endian, ieee single-precision file in floating-point format. Also known as a binary random access file. This is a random-access file; it is purely data with no record-structuring information. The data is structured to correspond to the independent variables (i.e., grids) in X Y T order, with the first grid varying the fastest. |
| DEC ALPHA direct access | Same as the binary random/direct access format above except that it is byte-swapped for DEC ALPHA's and PC's (little-endian). |

Other

Full The

OP

net Dat

e Internet

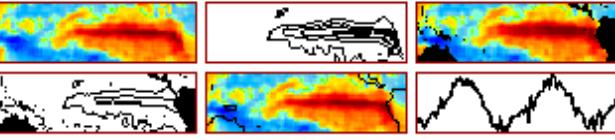
data: NASA GPCP V2 satellite-gauge prcp - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media W Links

Address http://iridl.ldeo.columbia.edu/SOURCES/.NASA/.GPCP/.V2/.satellite-gauge/.prcp/ Go Links

NASA GPCP V2 satellite-gauge prcp options

NEW Views 

old Viewer 

Help Expert Mode

Data Selection Filters Data File Tables

Download Tables

served from [IRI/LDEO Climate Data Library](#)

NASA GPCP V2 satellite-gauge precipitation data

Download Tables

Step 1. Select **Tables** link.

Step 2. Select link for desired format.

v2 satellite-gauge precipitation from NASA GPCP: Combined satellite-gauge precipitation estimates and error estimates from the Global Precipitation Climatology Project.

Grids

Time grid: /T (months since 1960-01-01) ordered (Jan 1979) to (Feb 2006) by 1. N= 326 pts :grid
Longitude

grid: /X (degree_east) periodic (1.25E) to (1.25W) by 2.5 N= 144 pts :grid
Latitude

grid: /Y (degree_north) ordered (88.75N) to (88.75S) by 2.5 N= 72 pts :grid

Other Info



Data Library

Finding Data
Tutorial
Questions &
Answers

NASA GPCP
V2 satellite-
gauge prcp
dataset

[help@iri](#)

NASA GPCP V2 satellite-gauge precipitation Dec 2005 data tables

Rectangular array of data

The following list lets you specify the top and side grids of the table.

[Y X Table](#)
[X Y Table](#)

2D Tab-Separated Tables

The above table is also available as a tab-separated-values file. The following list lets you specify the top and side grids of the table.

[Y X Table](#)
[X Y Table](#)

Columnar Tables

The NASA GPCP V2 satellite-gauge precipitation Dec 2005 data are available as a [columnar table](#), i.e. as multiple columns of data, intended primarily to be read. However, if you have other intentions for this table, or simply do not like the default choices, you may want to choose from the [columnar tables with options](#).



Data Table - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites Media Go Links

Address: http://iridl.ldeo.columbia.edu/expert/SOURCES/.NASA/.GPCP/.V2/.satellite-gauge/.prcp/T/%28Dec%2020

Data Table

The table will include the following columns:

X
Y
NASA GPCP V2 satellite-gauge prcp

This table is intended primarily to be read. However, you may have other intentions for this table, so we provide a number of options below so that you may generate as useful a table as possible.

Get Table

Option

Note: If planning to import into Excel, select tsv format from columnar tables with options page.

Column 1 Column 2 Column 3

Missing Data Missing Data Marker File Type End-of-Line Marker

blankNaN LF (unix)

html
tsv
csv
igor.tsv
latex
free

Options not understood can be left unchanged.

Column 1 ... 3

Numeric gives both the grid values and the data values as numbers; text gives times as month-year while continuing to give the data as numbers.

Missing Data

You have the choice of skipping (i.e. omitting) all lines that contain missing data, blanking missing data (i.e. there will still be a line), or marking missing data. The **Missing Data Marker** lets you specify the missing data marker in that marking case.

Done Internet

Group Example 4:

Make a map of seasonal global SSTAs for Jan 1982 – Dec 2005

- From the Reyn_SmithOlv2 monthly data... [START HERE](#)
 - Select the Sea Surface Temperature variable (Ignore the existing SSTA variable – we’re going calculate it)
 - Select the Jan 1982-Dec 2005 time period
 - Select anomalies link from Filters page
 - View Ingrid in Expert Mode
 - In Expert Mode enter the following text, then click OK.
T 3 runningAverage
- View data in data viewer
- Select a color scale appropriate for SSTA

Group Example 4: Result

data: NOAA NCEP EMC CMB GLOBAL Reyn_SmithOl2 monthly sst anomalies - Netscape
 File Edit View Go Bookmarks Tools Window Help
 http://iri.ideo.columbia.edu/expert/SOURCES/NOAA/NCEP/EMC/CMB/GLOBAL/Reyn_Smith...

Manipulating Data

NOAA NCEP EMC CMB GLOBAL Reyn_SmithOl2 monthly sst anomalies [X Y | T] M M M

expert
 SOURCES NOAA_NCEP_EM.CMB_GLOBAL
 Reyn_SmithOl2_monthly.sst
 T (Jan 1982) (Dec 2005) RANGEEDGES
 yearly-anomalies
 T 3 runningAverage

NEW Views old Viewer Data Selection Filters

CMB GLOBAL Reyn_SmithOl2 monthly* Sea Surface Temperature T (Jan 1982) (Dec 2005) yearly-anomalies RANGEEDGES

NOAA NCEP EMC CMB GLOBAL Reyn_SmithOl2 monthly sst anomalies: Sea Surface Temperature data

monthly sst sst sst Sea Surface Temperature from NOAA NCEP EMC CMB GLOBAL Reyn_SmithOl2: SST fields version 1 with more COADS data, new sea-ice to SST conversion algorithm, and 1971-2000 climatology.

Grids

Time
 grid: /T (months since 1960-01-01) ordered (Jan-Mar 1982) to (Oct-Dec 2005) by 1. N= 286 pts :grid

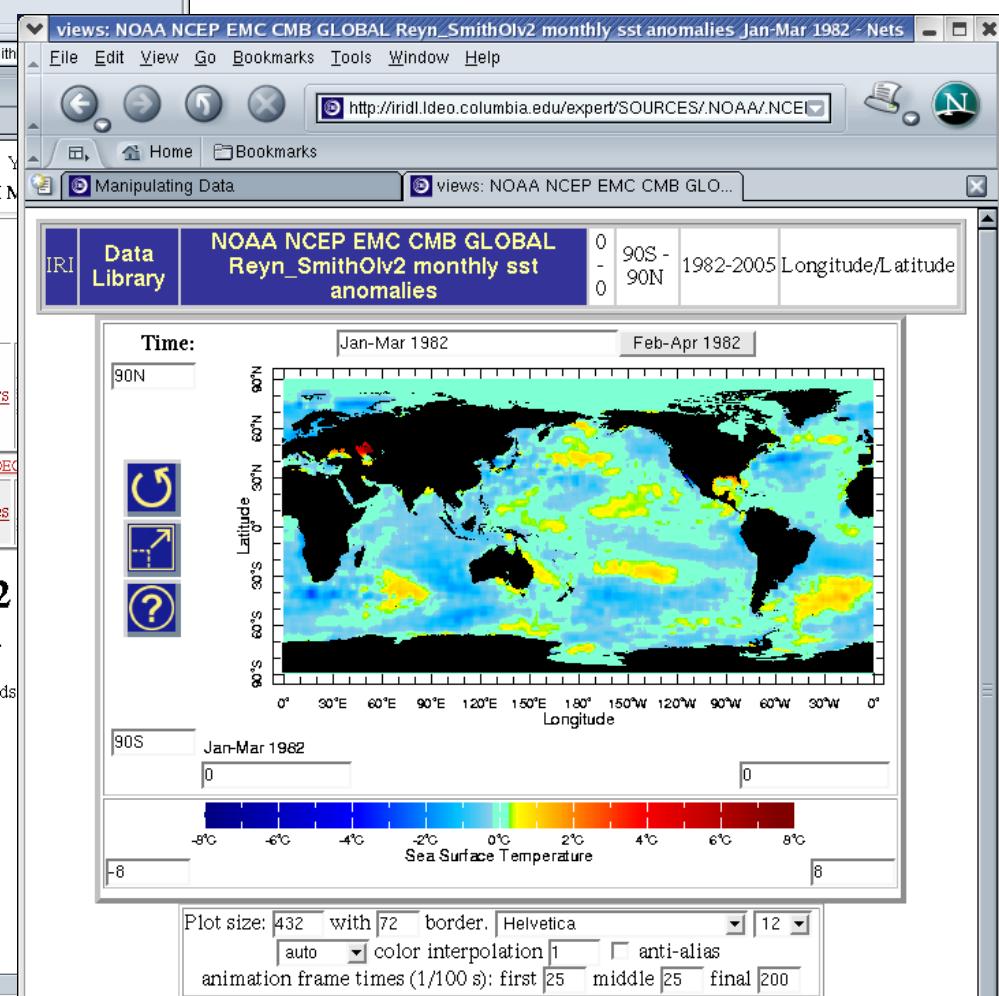
Longitude
 grid: /X (degree_east) periodic (0.5E) to (0.5W) by 1. N= 360 pts :grid

Latitude
 grid: /Y (degree_north) ordered (89.5S) to (89.5N) by 1. N= 180 pts :grid

Other Info

monthly sst sst Sea Surface Temperature from NOAA NCEP EMC CMB GLOBAL Reyn_SmithOl2: SST fields updated fr...

[VIEW RESULT](#)



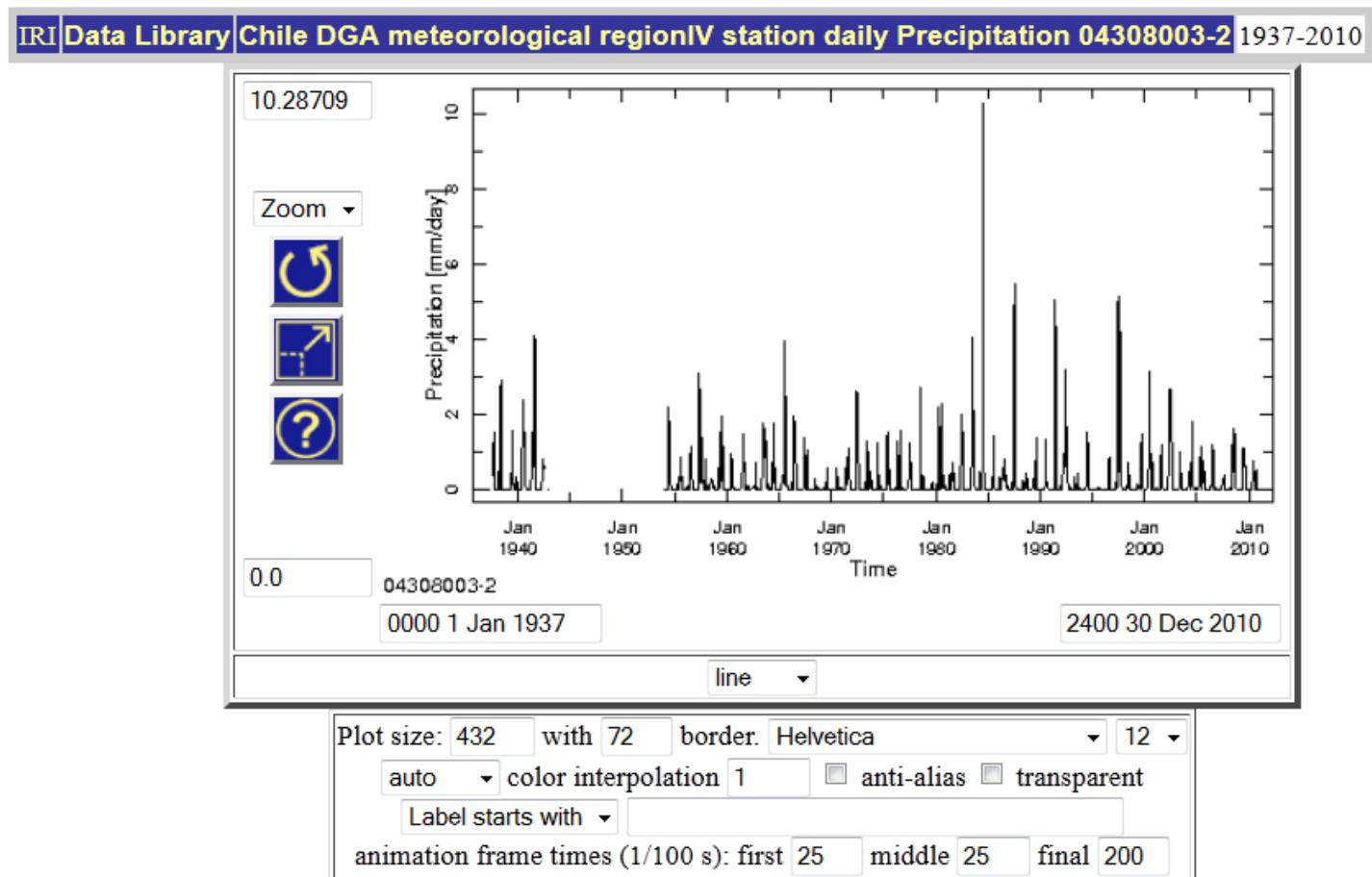
| | | | | | |
|---|---------------------------------|-------------------------------|------------------------------------|------------------------|-------------------------|
| Get Data | Entire Dataset | data in view | Edit | plot | program |
| Page Formats | documented page | plain page | cut and paste link | simple | verbose |
| Just the Figure Formats | PS | PS w/preamble | PDF | JPEG | GIF |
| Just the Scale Formats | PS | PS w/preamble | PDF | JPEG | GIF |

Group Example 5:

Make a time series of monthly station-observed precipitation in Chile

- From the SOURCES .Chile .DGA .meteorological .regionIV .station .daily dataset...
 - Search for a station
 - Select precipitation variable
 - Make a monthly average of the daily data with *monthlyAverage*
 - View data in data viewer
 - Adjust time period in data viewer to focus on available data

Group Example 5: Result



[VIEW RESULTS](#)

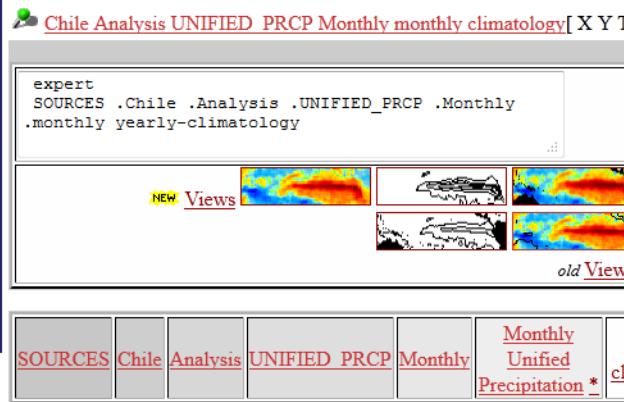
| | | | | | | |
|---|---------------------------------|-------------------------------|----------------------------|------------------------------------|------------------------|-------------------------|
| Get Data | Entire Dataset | data in view | Export | Edit | plot | program |
| Page Formats | documented page | plain page | linked pdf | cut and paste link | simple | verbose |
| Just the Figure Formats | PS | PS w/preamble | PDF | JPEG | GIF | PNG |

Group Example 6:

Make an animated map of monthly climatological temperature in Chile, including provincial boundaries and major rivers

- Locate the UNIFIED_PRCP dataset (NOAA/CPC)
SOURCES/.Chile/.Analysis/.UNIFIED_PRCP/.Monthly/
 - Select a climatology base period (1980-2000)
 - Select Monthly Climatology link from Filters page
 - View Ingrid in Expert Mode
 - View data in data viewer
 - Select a color scale for precipitation and add state and river overlays
 - Animate map by entering “Jan to Dec” in time text box

Group Example 6: Result



Chile Analysis UNIFIED_PRCP Monthly monthly Unified Precipitation data

Chile Analysis UNIFIED_PRCP Monthly monthly Monthly Unified Precipitation from SOU data.

Independent Variables (Grids)

Time

grid: /T (months since 01-Jan) periodic (Jan) to (Dec) by 1.0 N= 12 pts :grid

Longitude

grid: /X (degree_east) ordered (79.75W) to (65.25W) by 0.5 N= 30 pts :grid

Latitude

grid: /Y (degree_north) ordered (58.75S) to (15.25S) by 0.5 N= 88 pts :grid

RESULTS

