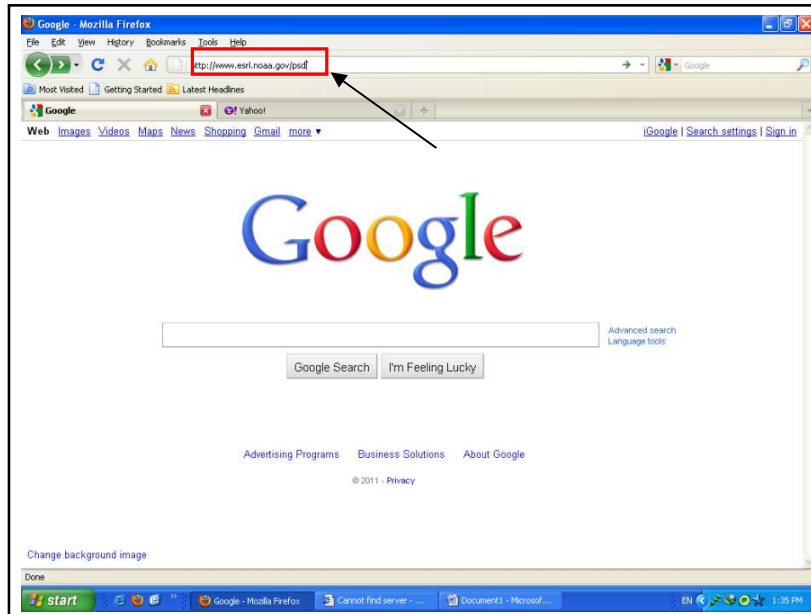


آموزش گام به گام نحوه دریافت داده های NCEP/NCAR

۱- ابتدا آدرس زیر را در موتور جستجو تایپ کرده:

<http://www.esrl.noaa.gov/psd>



۲- در صفحه باز شده بر روی گزینه **reanalysis datasets** کلیک می کنیم:

U.S. Department of Commerce | National Oceanic & Atmospheric Administration | NOAA Research

Earth System Research Laboratory
Physical Sciences Division

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Physical Sciences Division

Conducting weather and climate research to observe & understand Earth's physical environment, and to improve weather and climate predictions on global-to-local scales.

Quick Links

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- Publications
- Seminars
- Contributions
- CIRES

Data Access & Plotting

- Reanalysis Datasets**
- Climate Research Data
- Interactive Plotting & Analysis
- Climate/Weather Data FAQ

Balloon launch from the R/V Knorr during N. Atlantic research cruise (Photo by Duane Hazen)

Recent News

25 January 2011
Gil Compo & colleagues publish "Climate Time Machine" article outlining atmospheric dataset going back to 1871

20 January 2011
NOAA to lead Winter Storms & Pacific Atmospheric Rivers (WISPAR) Experiment

Our Branches

- Climate Analysis Branch
- Water Cycle Branch
- Weather & Climate Physics Branch

۳- در این صفحه با توجه به اهداف تحقیق نوع داده اعم از ... & daily, sub-daily را مشخص می نماییم:

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Climate Datasets: By Category

- All
- Sub-daily**
- Daily
- Monthly
- Surface
- Multi-level
- Land
- Ocean
- Radiation
- Arctic
- Reanalysis
- Climate Indices

Search Datasets 🔍

New Datasets

- 20th Century Reanalysis

Popular Datasets

Reanalysis Datasets at PSD

PSD maintains a collection of reanalysis datasets for use in climate diagnostics and attribution. Reanalysis created by assimilating ("inputting") climate observations using the same climate model throughout the period in order to reduce the affects of modeling changes on climate statistics. Observations are from many sources including ships, satellites, ground stations, RAOBS, and radar. Currently, PSD makes available reanalysis datasets to the public in our standard netCDF format.

For more information and discussion of various atmospheric and oceanic reanalyses, see the "Reanalysis Intercomparison and Observations Wiki" at <http://reanalyses.org>.

- **NCEP/NCAR Reanalysis I (1948-present)**

This reanalysis was the first of it's kind for NOAA. NCEP used the same climate model that were initialized with a wide variety of weather observations: ships, planes, RAOBS, station data, satellite observations and many more. By using the same model, scientists can examine climate/weather statistics and dynamic processes without the complication that model changes can cause. The dataset is kept current using near real-time observations.

۴- در صفحه باز شده تراز مورد نظر برای استخراج داده را مشخص می نماییم:

Climate Datasets: By Category

- All
- Sub-daily
- Daily
- Monthly
- Surface
- Multi-level
- Land
- Ocean
- Radiation
- Arctic
- Reanalysis
- Climate Indices

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New Datasets

- 20th Century Reanalysis

Popular Datasets

- ICOADS
- NCEP/NCAR Reanalysis
- N. American Regional Reanalysis

Plotting & Analysis

- Basic Plots
- Analysis Tools

NCEP/NCAR Reanalysis 1: Summary

Go To: [Temporal Coverage](#) | [Spatial Coverage](#) | [Levels](#) | [Update Schedule](#) | [Downloads/Plot Data](#) | [Restrictions](#) | [Details](#) | [Caveats](#) | [File Naming](#) | [Citation](#) | [References](#) | [Original Source](#) | [Contact](#)

One-Line Description:

- NCEP/NCAR Reanalysis 1

Temporal Coverage:

- 4-times daily, daily and monthly values for 1948/01/01 to present
- Long term monthly means, derived from data for years 1968 - 1996

Spatial Coverage:

- Global Grids

Levels:

- 17 Pressure level and 28 sigma levels. N/A

Update Schedule:

- Daily

We have separated the data documentation into seven sections:

- **Pressure level**
- **Surface**
- **Surface Fluxes**
- Other Fluxes
- Transpare

۵- در این صفحه نوع داده های مورد نیاز را (NCEP/NCAR Reanalysis) مشخص می نماییم:

Climate Datasets by Category

- All
- Sub-daily
- Daily
- Monthly
- Surface
- Multi-level
- Land
- Ocean
- Radiation
- Arctic
- Reanalysis
- Climate Indices
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- 20th Century Reanalysis
- Popular Datasets**
- ICOADS
- NCEP/NCAR Reanalysis
- N. American Regional Reanalysis
- Plotting & Analysis**
- Basic Plots
- Analysis Tools
- Access**
- FTP Access
- OpenDAP Access
- Software Resources**

PSD Gridded Climate Datasets: Daily

Descriptions | Summary Attributes

Datasets	Description	OPeNDAP Catalog
CPC .25x.25 Daily US Unified Precipitation	US high resolution gridded precipitation (from station data) for 1948 to 1998.	Catalog
GFS Model Output	A dataset of historical weather forecasts generated with a fixed numerical model. Daily forecasts are comprised of a 15 day, 15-member ensemble and include surface and pressure level variables.	N/A
ICOADS	Global surface marine data from 1800 to near the present summarized in monthly gridded formats (2°x2° boxes, or 1°x1° boxes from 1960 forward), and offering a variety of statistics.	Catalog
Kaplan SST	Gridded global SST anomalies from 1856-present derived from UK Met Office SST data which has had sophisticated statistical techniques applied to it to fill in gaps.	Catalog
MSU	Two Microwave Sounding Unit tropospheric temperatures and daily average precipitation available in a global grid (2.5°x2.5°).	Catalog
North American Regional Reanalysis (NARR)	NCEP's high resolution combined model and assimilated dataset. It covers 1979 to near present and is provided 8-times daily, daily and monthly on a Northern Hemisphere Lambert Conformal Conic grid for all variables.	Catalog
NOAA High-resolution Blended Analysis of Daily SST and Ice	NOAA High-resolution Blended Analysis of Daily SST and Ice. Data is from 1985 and is on a 1/4 deg global grid.	Catalog
NCEP/NCAR Reanalysis	A state-of-the-art analysis/forecast system is used to perform data assimilation using data from 1948 to the present.	Catalog
PSD Derived NCEP/NCAR Reanalysis Products	A subset of the NCEP/NCAR Reanalysis has been processed to create monthly means of the original data, and in some cases, derived variables or other statistics.	Catalog
NCEP/DOE Reanalysis II	A state-of-the-art analysis/forecast system is used to perform data assimilation using data from 1979 through 2003. A large subset of this data is available from PSD in its	Catalog

۶- در صفحه باز شده بر روی پارامتر مورد نظر (برای مثال Relative humidity) کلیک می کنیم:

FTP Access

OpenDAP Access

Software Resources

Complete Data Resources

About NetCDF

Reading Data in NetCDF Format

FAQ

Other Data Resources

Acronyms

How to Cite

Feedback

Download/Plot Data:

Variable	Statistic	Level	Download File	Create Plot/Subset
Air Temperature	4-times Daily	Pressure	see list	
Air Temperature	Daily	Pressure	see list	
Air Temperature	Monthly Mean	Pressure	air.mon.mean.nc	
Geopotential Height	4-times Daily	Pressure	see list	
Geopotential Height	Daily	Pressure	see list	
Geopotential Height	Monthly Mean	Pressure	hgt.mon.mean.nc	
Relative Humidity	4-times Daily	Pressure	see list	
Relative Humidity	Daily	Pressure	see list	
Relative Humidity	Monthly Mean	Pressure	rhum.mon.mean.nc	
Specific Humidity	4-times Daily	Pressure	see list	

۷- بار دیگر بر روی نماد نقشه کلیک می کنیم:

U.S. Department of Commerce | National Oceanic & Atmospheric Administration | NOAA Research

Earth System Research Laboratory
Physical Sciences Division

Search PSD:

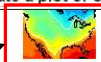
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Search Results

NCEP Reanalysis Daily Averages Pressure Level

Relative humidity

Create a plot or subset.	Statistic	Start Date	End Date	Level	Link t
 Make plot or subset	Daily Mean	1948/1/1	2011/3/1	Multiple levels	See

 Search all of PSD's public gridded climate data.

۸- در صفحه باز شده اطلاعات مورد نظر را وارد می کنیم و در آخر بر روی آیکن **Create Plot or Subset of Data** کلیک نموده تا نقشه مورد نظر ترسیم گردد:

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- Weather & Climate Physics

ESRL Divisions

Program Links

Visualize NCEP Reanalysis Daily Averages Pressure Level Data (dimension values)

Select the  for additional help. **If you find that the plotting process only produces a blank page:** Commonly, this problem is caused by requesting too large a subset. The process for making the subset has to work on one year's file at a time, and HTTP protocol is limited in how long, so the web browser is left with nothing to display (hence, the blank page). The solution is to break the request into small pieces, usually easiest to do this along the time axis. If you need to concatenate the pieces back together on your end, the tool "ncrcat" suite of NetCDF operators will help (<http://mco.sourceforge.net/>).

Selected file: `:/Datasets/incep_reanalysis_dailyavgs/pressure/rhum.1948.nc_rhum.%y4.nc.23071`
Variable: `rhum (Relative humidity)`
Variable units: %
Statistic: `Mean`

Axis Dimensions:

lat: Begin: End:
lon: Begin: End:

Other dimension value(s):
 Select one value to show a slice at that value; select two values to identify a range to be averaged.

1000.00 millibar time: Range: 1948 Jan 1 (Daily)
 925.00 millibar Begin: 1948 Jan 1
 850.00 millibar time: Range: 2011 Mar 1
 700.00 millibar End: 1948 Jan 1
 level: 600.00 millibar

Output options:
 Create a plot. Create a subset without making a plot.

Plot output options:
 Plot on a black background. Plot on a white background. GIF (PNG default)
 Color Plot Reverse Color Table Fill/Shade
 Polar Stereographic Remove Zonal Mean Smooth data
 Remove Contour Labels Override Default Contour Interval:
 Contour range to
 Generate Postscript output

Scale plot: 100%

Create Plot or Subset of Data Reset

۹- در پایان بر روی نقشه راست کلیک کرده و گزینه **Save image as** را می زنیم و با دادن مسیر دلخواه نقشه را ذخیره می نماییم.

