

Use your favorite software to browse the contents of the **histday.nc** file

<http://ferret.pmel.noaa.gov/Ferret/documentation/users-guide/index-1/index>

ferret

| | |
|--|--|
| yes? use histday.nc | open histday.nc file |
| yes? sh data | show the data in this file I=longitude J=latitude K=levels of the model L=number of time steps |
| yes? shade/k=39 temp | 2D plot of temperature at the first level of the model |
| yes? go land | to plot continents on the figure |
| yes? plot/j=19/i=20 temp | plot a temperature profile over the point j=19,i=20 |
| yes? list/j=19/i=20 temp | list numerical values of temp |
| yes? shade temp[k=@ave];go land | 2D plot of mean temperature over altitude |
| yes? set view upper yes? shade/l=1 tsol | plots the figure in the upper part of the page |
| yes? set view lower | |
| yes? set view ul | plots the figure in the upper-left corner |
| yes? set view ur | plots the figure in the upper-right corner |
| yes? set view ll | |
| yes? set view lr | |
| yes? frame/file=my_figure.gif | to save last plots in a gif file |
| yes? cancel viewport | to go back to a "one plot on the page" version |
| yes? plot/vs/line/l=1/k=39 temp,pres/100. | plot temperature versus pressure |
| yes? plot/l=1 tsol[i=@ave];go land | plot longitudinal average of temperature |
| yes? plot/j=19/i=1/k=39/vlimits=298,5:302 temp | plot temperature of first level, with vertical limits 298,5-301,2 |
| yes? plot/j=19/i=1/o tsol | plot "over" tsol |
| yes? quit | |

This session produces a **ferret.jnl** file you can rename, modify and re-use later (with go ferret.jnl).

Ferret tutorial:

ferret
yes? go tutorial

Same commands for Grads ;

(the ↵ symbol means that you need to hit return of course !)

To erase the figure, it is necessary to use « clear » between two commands (or « c »)

grads

| | |
|--|---|
| sdlopen histday.nc | |
| q file x = longitude y = latitude z = model pressure levels t = time | |
| set z 1 ↵ d temp ↵ | |
| set mpdraw on | Or « set mpdraw off » |
| set x 20 ↵ set y 19 ↵ set z 1 39 ↵ d temp | |
| set gxout print ↵ d temp | |
| set lon -180 180 ↵ set lat -90 90 ↵ set z 1 ↵ d ave(temp,z=1,z=39) | |
| set vpage 0 6 0 8.5 ↵ set parea 0.5 6 4.5 8.5 ↵ set gxout shaded ↵ d tsol | See this page for more info |
| set parea 0.5 6 0 4 | Coordinates must be adjusted by hand |
| | |
| | |
| | |
| gxprint figure.pdf | |
| | |
| | Impossible using Grads unfortunately |
| d ave(tsol,lon=-180,lon=180) | |
| set lon -180 180 ↵ set y 19 ↵ set z 1 ↵ set vrange 298.5 301.2 ↵ d temp | |
| d tsol | Default behavior if « clear » is not used |
| quit | |

To have a white background and a clean page, start your session with :

set display color white
set grads off

More commands :

<http://cola.gmu.edu/grads/gadoc/users.html>