Subject: Re: Hovmoller Posted by David Fanning on Fri, 25 Jul 2014 20:49:02 GMT View Forum Message <> Reply to Message

tjc0010@uah.edu writes:

> Well I have about 20 files and will want to show eastward propagation with time

Ah, so you have more than one file. As Wesley says in the Princess Bride, "Why didn't you mention the wheelbarrow among our assets the first time?"

Presumably these files contain data points at different times. Perhaps you have 20 such times. Now we are getting somewhere!

What you have to do is build up a 2D array by selecting for longitude and saving the temperatures at those longitudes.

```
ntimes = 20
 ; Read the first file, just to see how big array has to be.
 ... read the data file, extract variables, etc.
 lonIndices = where(lons gt -25 and lons lt 40)
 ; Temperature at longitude and time
 data = FltArr(N_Elements(IonIndices), ntimes)
 temps = temps[lonIndices]
 times = FltArr(ntimes)
 ; Read the files in a loop and extract info for Hovmoller plot.
 for j=0,19 DO BEGIN
    ... Read file, extract variables, etc.
    times = time[0]
    data[*,j] = temps[lonIndices]
 endfor
Now, make your plot...
 cgContour, data, times, lons[lonIndices], ...; Hovmoller plot
Cheers,
David
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")
```