
Subject: Re: Hovmoller

Posted by [Jim Pendleton](#) on Thu, 28 Dec 2017 02:52:42 GMT

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On Wednesday, December 27, 2017 at 1:30:05 PM UTC-7, laura...@gmail.com wrote:

> No disrespect intended, but what if we want to make said plot without using Coyote graphics?

>

>

> On Friday, July 25, 2014 at 1:49:02 PM UTC-7, David Fanning wrote:

>> 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(lonIndices), 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

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>> --  
>> 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.")
```

IDL has a built-in CONTOUR function that doesn't rely on the David's Coyote library.

<https://www.harrisgeospatial.com/docs/contour.html>
