Subject: Irregularly Lat Lon Grid: Displaying Land Types
Posted by alonge on Mon, 13 Sep 2004 16:48:07 GMT
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Hello all,

I have vegetation type data (Integer 1-13) on a 12km grid and would like to display it on a map. I don't want to contour the data but rather just display the grid boxes colored according to the vegetation class. I can't use map_image (not a regular lat/lon grid). Any ideas or suggestions will be greatly appreciated.

Running IDL 5.4 on SGI IRIX

Subject: Re: Irregularly Lat Lon Grid: Displaying Land Types
Posted by Klaus Scipal on Thu, 16 Sep 2004 07:54:37 GMT
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In principle it depends on the grid you use. In global remote sensing for example, irregular grids are in fact often the product of a sinusoidal projection, i.e the number of gridpoints decreases with latitude to get equally sized cells.

Anyway, a quick and dirty way of doing the plotting is to define a usersymbol which is a filled circle and then use plots with the color keyword. Color must have the same size as your lon,lat files and it should contain the colorcodes of the parameter you want to display.

The code might look as follows

a=Findgen(32)*!pi/16.
r=0.1
UserSym,r*cos(a),r*sin(a),/Fill ; define a usersymbol which is a circle and has the radius r

Plots,lon,lat,Psym=8,Color=color

regards

Klaus

"Thundurstruck" <alonge@atmos.albany.edu> wrote in message

news:fd11a4c5.0409130848.5fbf26c4@posting.google.com...
> Hello all,
>
> I have vegetation type data (Integer 1-13) on a 12km grid and
> would like to display it on a map. I don't want to contour the data
> but rather just display the grid boxes colored according to the
> vegetation class. I can't use map_image (not a regular lat/lon grid).
> Any ideas or suggestions will be greatly appreciated.
>
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Subject: Re: Irregularly Lat Lon Grid: Displaying Land Types
Posted by K. Bowman on Mon, 20 Sep 2004 19:07:53 GMT
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In article <fd11a4c5.0409201045.719a894f@posting.google.com>,
alonge@atmos.albany.edu (Thundurstruck) wrote:

> The grid is output from NCEP's operational ETA forecast model on the
> Arakawa (rotated lat-lon) E-grid. The grid is staggered row by row,
> rotating wind and mass points, giving the the data a diamond type grid
> box.
>
> Here is a short example
>
> H V H V H V
> V H V H V H
> H V H V H V
>
> The grid is 606 in E-W or x direction and 1067 in the N-S or y
> direction.
>
> The SW corner is located at 3.441S , 148.799 W
> and the NW corner is located at 50.000N , 111.000 W
>
> Thanks,
> Chuck

If you know the lats and lons of the corners of the boxes, you can use
POLYFILL to draw polygons for each grid cell on any map projection.

IDL> map_set, /cont
IDL> polyfill, [0.0, 10.0, 20.0, 10.0, 0.0], [0.0, 10.0, 0.0, -10.0,
0.0], color = ...
