Subject: Re: question for contour on a shpere
Posted by airy.jiang on Wed, 06 Jun 2007 02:30:49 GMT
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On 6 4 , 8 24 , y...@spaceweather.ac.cn wrote:
> Hi, could you help me?
>
> I want to plot contours on a sphere's surface, how to do it?
>
> My data is full three-dimensional, that is (r, theta, phi, Var)
>
> I attached one example with this email.

I think you can try to use the IDLgrContour object.You can set the vertex data to keyword "GEOMZ",and set the connectivity of the vertex to the keyword "Polygon".But you need to make sure the connectivity of your vertex are all right .Because the key of the right display for the result is the proper connectivity to suit the data.So,if you have computed the one and only connectivity of your data,or you have already got a certain connectivity,you can obtained what you want with that object.
By the way,to compute the connectivity of the vertex data is difficult.Make sure you have already knowing some geometry algorithm,unless that you may find that is really diffifult thing to put the three dimension coordinates data on a contour.

Subject: Re: question for contour on a shpere
Posted by kishore1818 on Thu, 07 Jun 2007 18:56:40 GMT
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On Jun 4, 8:24 am, y...@spaceweather.ac.cn wrote:
> Hi, could you help me?
>
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Hi Friend,

recently I plotted a contour on sphere. I used like this,
lvls1=(min(pv1)-10.)+findgen(20)*(max(pv1)+5.-min(pv1))/20.
;lvls1=fix(lvls1)
;clrs1=fix(5+findgen(20)*(264-0)/20)
clrs1=fix(2+findgen(20)*(255-0)/20)

```
x1=0.05 & x2=0.55
y1=0.5 & y2=0.9
limt=[15,0,90,360]
pos1=[x1,y1,x2,y2]
MAP_SET, /STEREO, 90, 0,limit=limt,position=pos1, $
  /ISOTROPIC,/noborder,latdel=15,londel=30, $
  TITLE='JRA-25 Potential Vorticity',charsize=1.0
CONTOUR, pv1, lon, lat,position=pos1,c_colors=clrs1,levels=lvls1, $
  /OVERPLOT, /cell_FILL,/noerase,/follow

lons = [-180,-150,-120, -90, -60, -30, 0, 30, 60, 90, 120, 150, 180]
lonnames = strtrim(lons, 1)
MAP_GRID, limit=limt,latdel=15,lonalign=.5, $
  londel=30,glinestyle=0,thick=1,label=2

MAP_CONTINENTS, limit=limt,thick=2,/label

;***temperature contour
tem1=smooth(tem1,10)
lvls2=190.+findgen(11)*(245.-190.)/11.
print,lvls2
ct_color
CONTOUR, tem1, lon,
lat,position=pos1,levels=lvls2,color=295,c_charthick=1.2, $
  c_linestyle=(lvls2 lt 0.0),thick=5,c_charsize=1.2,/noerase,/follow,/
overplot
```