Subject: Please help with color contour

Posted by zdng on Thu, 13 Oct 1994 01:56:10 GMT

View Forum Message <> Reply to Message

Hi, there

Could some one help me on the color contour. I used the following command to plot the color contour with contour levels, but PV-wave tells me that

% POLYCONTOUR: Warning: Unclosed contour ignored.

What this means?

LABELS = [1,1,1,1,1,1,1,1,1,1,1] INTERVALS=[1.,3.,5.,7.,9.,11.,13.,15.,18.,21.]*1E1

contour,/spline, P,X,Y,\$
c_label=labels, levels=intervals,\$
PATH_FILENAME='cpaths.dat',\$
xstyle=1,ystyle=1,xrange=[0,10],yrange=[0,20]

POLYCONTOUR, 'cpaths.dat', color_index = sci

contour,/spline, P,X,Y,\$
c_label=labels, levels=intervals,\$
PATH_FILENAME='cpaths.dat', \$
xstyle=1,ystyle=1,xrange=[0,10],yrange=[0,20],/noerase

Thank you.

John Z. Ding

zdng@troi.cc.rochester.edu

Subject: Re: Please help with color contour Posted by andy on Thu, 13 Oct 1994 13:31:28 GMT

View Forum Message <> Reply to Message

In article <1994Oct13.015610.24061@galileo.cc.rochester.edu>, zdng@laforge.cc.rochester.edu (Zhong Ding) writes:

> Hi, there

>

> Could some one help me on the color contour. I used the following

```
command to plot the color contour with contour levels, but PV-wave
tells me that
% POLYCONTOUR: Warning: Unclosed contour ignored.
What this means?
```

I remember back in the old days (when I was programming in the old country) that one was encouraged to specifically close all contours around the boundary of one's data. If one had a 5x5 array with x and y axes ranging from 1 to 5 one would create a 7x7 array, place the 5x5 array in the middle, assign a value of 1.e-30 to values along the outer rows and columns of the new array, assign values of .9999, 1, 2, 3, 4, 5, 5.0001 to xnew, ynew, then contour the new array over xnew, ynew.

We don't do this anymore since IDL (by RSI) has added some useful keywords like /close, /fill, and now /cell.

```
,__o Andrew F. Loughe (Mail Code 971) voice: (301) 286-5899 -\_<, NASA Goddard Space Flight Center fax: (301) 286-0240 (*)/'(*) Greenbelt, MD 20771 email: andy.loughe@gsfc.nasa.gov
```

Subject: Re: Please help with color contour Posted by landers on Tue, 18 Oct 1994 19:53:06 GMT View Forum Message <> Reply to Message

In article <1994Oct13.015610.24061@galileo.cc.rochester.edu>, zdng@laforge.cc.rochester.edu (Zhong Ding) writes:

[snip] |>

|> % POLYCONTOUR: Warning: Unclosed contour ignored.

|> [snip]

As has been mentioned already, you need to pad your data with a 'border' of at least one cell on each side, to force the contours to close (an open contour is one that disappears off the edge of the plot, and does not enscribe a complete closed path). I prefer to pad with 2 cells on each side and do some interpolation stuff so that the closure of the contours doesn't look so strange (move the closure away from the real data a bit more).

However, be careful of POLYCONTOUR. I have noticed that it's not too smart at arranging the contours. If you have a local maxima inside a larger minima, it'll get lost (blotted out).

If you can, it's better to use something based on TV to make an image of your data, and then overlay contours on that. Check out IMAGE_CONT.

;Dave