Subject: Re: How do you color contour levels/ranges?
Posted by eddie haskell on Wed, 21 Oct 1998 07:00:00 GMT
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> I am trying to fill in different contour levels of a 3D plot. I have 10
> What I am trying to do is to shade a given "altitude range" with the same color.

as the previous reply mentioned, you can set an array of shades for use in your contour and surface calls. the following code snippet gives an example of this. you can use any levels you choose. this method requires that you allocate an additional array of the same size as your original data set. there probably is an better way of setting the contours array then through my use of a for loop but this works for this example. note: to make this more 'all purpose', you would have to account for data lt the min or gt the max of the specified levels and some checking would have to account for the possibility of a contour level containing no data, i.e., the where() function returning a -1.

```
  ;create sample data set
data = bytscl(exp(-((shift(dist(200,160), 100, 80))/50)^2))
data = bytscl(fix(shift(data, 60, 0)) + shift(data, -60, 0))/3b-194.

  ;load some colours into the colour table
for i=1,10 do $
  tvlct,255*(i mod 3 ne 2),255*(i mod 3 eq 1),255*(i mod 3 ne 0),i

levels=[-200,-190, -180, -170,-160,-150,-140,-130,-120,-110,-100]
contours = data
for i=0,n_elements(levels)-2 do $
  contours[where((data ge levels[i]) and (data lt levels[i+1]))]=i+1
surface,data,shades=contours,/save
contour,data,levels=levels,/follow,/t3d,/overplot
```

cheers,
eddie

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