Subject: Re: cgContour and NaN values Posted by limigt on Wed, 16 Oct 2013 02:54:49 GMT

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Hi David and Philip.

Thank you very much for your precisse assistance.

```
Lim
On Thursday, October 10, 2013 10:16:46 AM UTC-4, David Fanning wrote:
> Lim writes:
>
>
>> I am having some trouble using contour with data which has NaN values. My valid range of
data is -1 to 1. I have also change the NaN to -999. In that case the -999 appear as the same
color as -1. I would like that the NaN values appear as white. Please, Could you tell me what I am
doing wrong? (I am following a example I found at
http://www.idlcoyote.com/graphics_tips/contourcolors.php but Im sure i missed somthing)
>
>
>
  It is almost *never* a good idea to try filled contours with missing
>
  data. The results are always unsatisfactory. But, if you have to, you
>
>
  have to. I would try something like this.
>
>
  data = dist(192,145)
  data[50:60,75:79] = !Values.F_NaN
>
  minval=-1.
>
  maxval=1.
>
  nanIndices = Where(Finite(data) EQ 0, count)
>
  data=cgScaleVector(data, minval, maxval, /NaN)
  IF count GT 0 THEN data[nanIndices] = minval - 1
>
  cgWindow
>
> ncontours = 10
>
```

```
cgLoadCT, 22, /Brewer, /Reverse, NColors=ncontours+1, Bottom=2
> TVLCT, cgColor('white', /Triple), 1
  clevels = [minval-1, cgScaleVector(Findgen(ncontours+1), $
     minval, maxval)]
>
  colors = Bindgen(ncontours+1) + 1B
  cgContour, data, lons, lats, Levels=clevels, C_Colors=colors, /Fill, $
>
     missing=!Values.F_Nan, Position=[0.125, 0.125, 0.925, 0.8], /AddCmd
>
  cgColorbar, NColors=ncontours, Range=[minval,maxval], Divisions=10, $
     Bottom=2, Ticklen=0.001, /AddCmd
>
  END
>
>
>
> Cheers,
> David
  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.")
```