
Subject: Re: trigrid + triangulate -> zero values -> ignore zeros on cgcontour

Posted by [Phillip Bitzer](#) on Wed, 29 Jan 2014 16:17:29 GMT

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Well, there's always RTFM :-)

"Ignoring" values is simple. Simple start your levels at a value greater than the one you want to ignore. Case in point:

```
n=101 ;number of grid pts
```

```
;define the grid
```

```
x = findgen(n)/(n-1) & y = findgen(n)/(n-1)
```

```
xGrid = x # REPLICATE(1., n)
```

```
yGrid = REPLICATE(1., n) # y
```

```
z = SQRT(xGrid^2 + yGrid^2) ;make some data
```

```
levels = [0., 0.25, 0.5, 0.75, 1.]
```

```
;levels = [0.25, 0.5, 0.75, 1.] ;uncomment this out to "ignore" < 0.25
```

```
nLevels = N_ELEMENTS(levels)
```

```
cgLOADCT, 33, RGB_TABLE=rgb ;get a palette, but don't load the table
```

```
colorInd = cgSCALEVECTOR(LINDGEN(nLevels), 0, 255) ;select some colors from the palette  
rgbNew = rgb[colorInd, *] ;get *just* these colors
```

```
cgContour, z, x, y, LEVELS=levels, PALETTE=rgbNew, /CELL_FILL ;plot with only the colors you want
```

```
tNames = [STRCOMPRESS(levels, /REMOVE), ' '] ;get some ticknames
```

```
;plot the colorbar, with your palette
```

```
cgCOLORBAR, PALETTE=rgbNew, Divisions = nLevels, /FIT, TICKNAMES=tNames, /DISCRETE
```

Notice I don't actually load any color tables. There's no need.

Using the palette as I do above allows you to be a little more explicit with the colors you send to (cg)Contour and cgColorBar. I prefer to do these sort of plots in this manner. I also rarely need a continuous color bar - my work is usually much better suited for discrete cb's - so this allows me to ensure the colors match in the contour and cb.
