Subject: Re: shading/outlining on surface plot Posted by chris_torrence@NOSPAM on Fri, 18 Jan 2013 05:27:12 GMT View Forum Message <> Reply to Message

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On Thursday, January 17, 2013 11:09:38 AM UTC-7, David Fanning wrote:
> Bob Plano writes:
>
>> Sorry if this is a dumb question, but....
>
>>
>
>> I'd like to make a surface or shade_surf plot, and outline areas on
>> the surface. The basic idea is here:
>>
>
>>
>
>>
>> make_2d_gaussian,arr,xx,yy
                                        ;xx and yy are 2D
>> grid point arrays
>
>>
>
>> shade_surf, arr,xx,yy,shades=whatever
>>
>> keep=where( arr gt .5*max(arr) and arr lt .7*max(arr) )
>
>>
>>
>>
>
>>
>> Is there a relatively easy way to do this?
>
```

```
>
 No, there are no easy ways to do this, I don't believe, although maybe
>
 this is a case where function graphics can come to the rescue. One
>
  problem is writing on the surface. It is very difficult to know,
>
  unfortunately, where the actual surface *is*, due to round-off errors,
>
> mostly.
>
>
  You might try drawing a contour line on top of an image, then using that
  to drape over the surface, but I don't expect good results. :-(
>
>
>
>
  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.")
Hi Bob,
How about something like the following:
; Sample data, stored in the "elev" variable
RESTORE, FILEPATH('marbells.dat', $
 SUBDIRECTORY=['examples', 'data'])
s = SURFACE(elev, COLOR='brown')
Give two colors so we fill in between the contour level and the top.
```

 $c = CONTOUR(elev, \, C_VALUE = 3800, \, PLANAR = 0, \, /OVERPLOT, \, /FILL, \, \$$ C_COLOR=['white','white'], RGB_TABLE=0)

; Turn off labels, which are on by default.

c = CONTOUR(elev, C_VALUE=3800, PLANAR=0, /OVERPLOT, \$ C_COLOR=0, RGB_TABLE=0, C_LABEL_SHOW=0, C_THICK=4)

Cheers, Chris

ExelisVIS