
Subject: Re: multi-surfaces on shade_surf
Posted by [davidf](#) on Thu, 29 Oct 1998 08:00:00 GMT
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Lisa Bryan (lbryan@arete-az.com) writes:

> I've been trying to plot 2 surfaces on the same shade_surf plot and
> have not had success. My goal is to represent two (or more) surfaces
> with no connections between surfaces. I can produce two surfaces
> using David Fannings Scatter3d, but the resulting image is undesirably
> pixelated. The shade_surf result is more aesthetically pleasing for
> one surface, but I haven't been able to get two surfaces to work
> (I've been trying the noerase keyword). I'm probably missing
> something obvious (as usual) and would appreciate a kick in the right
> direction.
>
> IDL> surf1 = dist(100)
> IDL> surf2 = intarr(100,100)
> IDL> surf2(*) = 100
> IDL> shade_surf,surf1,zrange = [0,100]
> IDL> shade_surf,surf2,/noerase,zrange = [0,100]

I'm not quite sure I have the whole picture here. (To tell you the truth, I don't even know what the Scatter3D plot does.) But I *think* this has to be done in the Z Graphics Buffer if you are going to be successful.

Here are a few modifications to your code. Is this more what you have in mind?

```
thisDevice = !D.Name
Set_Plot, 'Z'
Device, Set_Resolution=[400,400]
surf1 = dist(100)
surf2 = intarr(100,100)
surf2(*) = 100
shade_surf,surf1,zrange = [0,100]
shade_surf,surf2,/noerase,zrange = [0,100]
snapshot = TVRD()
Set_Plot, thisDevice
Window, XSize=400, YSize=400
TV, snapshot
```

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Note: A copy of this article was e-mailed to the original poster.

Subject: multi-surfaces on shade_surf
Posted by [lbryanNOSPAM](#) on Fri, 30 Oct 1998 08:00:00 GMT
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Hello all,

I've been trying to plot 2 surfaces on the same shade_surf plot and have not had success. My goal is to represent two (or more) surfaces with no connections between surfaces. I can produce two surfaces using David Fannings Scatter3d, but the resulting image is undesirably pixelated. The shade_surf result is more aesthetically pleasing for one surface, but I haven't been able to get two surfaces to work (I've been trying the noerase keyword). I'm probably missing something obvious (as usual) and would appreciate a kick in the right direction.

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```

Thanks

Lisa Bryan

Arete Associates
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Subject: Re: multi-surfaces on shade_surf
Posted by [Struan Gray](#) on Mon, 02 Nov 1998 08:00:00 GMT
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In article <71d982\$mpe\$1@nnrp1.dejanews.com> ,
mirko_vukovic@notes.mrc.sony.com writes:

- > Struan (Grey?) has an absolutely great write-up on
- > plotting multiple surfaces. Sorry, but I don't
- > have the www link to it anymore.

http://www.sljus.lu.se/stm/IDL/Surf_Tips/

Thanks for the plug. The tutorial is still only for direct graphics, but I hope to update it reasonably soon to include some object graphics too. These days I prefer to use object graphics because of the consistent way it handles colour and because displaying multiple surfaces with user-editable display styles is much, much easier. That said, combining mesh and shaded/coloured plots to show surface curvature is *still* tricky because of the limited number of display styles for polygons in object graphics. Plus ca change...

Struan (Gray)
