Subject: Re: Plotting 3D spheres
Posted by David Fanning on Fri, 18 Nov 2005 08:43:54 GMT
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PYJ writes:

> I have a lot of spheres(3D positions of centers and radius).
> XC,YC,ZC,RADIUS: these are arrays.
> I want to express these spheres on 3D space.
> Maybe, many spheres overlap each other. I don't care this.
> Actually, I hope to plot some irregular shape by overlapping many
> spheres.
> Color shading is better.
>
> I have studied the example of procedure "shade_volume" a little. But I
> can't overlap spheres.
>
> How can I do it?

In twenty-five words, or less, please. ;-)

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Plotting 3D spheres
Posted by Rick Towler on Fri, 18 Nov 2005 16:33:09 GMT
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```
pro plot_sphere

    nOrbs = 20
    s = systime(/seconds)
    c = randomu(s, 3, nOrbs) * 2.
    r = randomu(s, nOrbs)

    orbArray = objarr(nOrbs)
    for n=0, nOrbs-1 do $
       orbArray[n] = OBJ_NEW('orb', POS=c[*,n], RADIUS=r[n], $
          COLOR=randomu(s,3)*255, STYLE=2)

    oModel = OBJ_NEW('IDLgrModel')
    oModel -> Add, orbArray
```

```
    xobjview, oModel, /BLOCK

    obj_destroy, oModel

end
```

You'll find the source for orb__define.pro in $IDL_DIR\examples\visual.
The docs are in the header. You may want to play around with the DENSITY keyword depending on the # of spheres you need to plot and your hardware.

-Rick

PYJ wrote:
> Dear all,
>
> Hi~!
> I have a lot of spheres(3D positions of centers and radius).
> XC,YC,ZC,RADIUS: these are arrays.
> I want to express these spheres on 3D space.
> Maybe, many spheres overlap each other. I don't care this.
> Actually, I hope to plot some irregular shape by overlapping many
> spheres.
> Color shading is better.
>
> I have studied the example of procedure "shade_volume" a little. But I
> can't overlap spheres.
>
> How can I do it?
>
> Thank you~(^_^)
>
>
> (I love IDL! ^___^)
>

Subject: Re: Plotting 3D spheres
Posted by snfinder@naver.com on Sat, 19 Nov 2005 01:18:55 GMT
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Wow~ Wonderful~~ ^^
Thanks a THOUSAND MILLION BILLION~~~""Rick Towler"" ~~ ^_____^

OBJ? Wow~ I didn't know that there is beautiful method~
Um.. I have to get down to study that subject .

OK~

Thanks a lot again~ Rick

I love this group. It gives me very~~ big helps.

Park
