
Subject: Re: draw spheres in 3D space

Posted by [Junum](#) on Tue, 07 Jun 2011 04:26:23 GMT

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On Jun 6, 6:15 pm, Paulo Penteado <pp.pente...@gmail.com> wrote:

> On Jun 6, 4:19 pm, David Fanning <n...@idlcoyote.com> wrote:

>

>> Paulo Penteado writes:

```
>>> xyz=[[0,0,0],[2,0,0],[-2,0,0],[0,2,0],[0,-2,0],[0,0,2],[0,0, -2]]
```

```
>>> p=plot3d(xyz[0,*],xyz[1,*],xyz[2,*],sym_object=orb(),/
```

```
>>> undocumented,linestyle='none')
```

>

>> I admit that's pretty cool. But what does a "radius

>> of one" mean in this context? For example, here are

>> orb objects with a radius of 5, but clearly this

>> radius has nothing whatsoever to do with the axes:

>

```
>> p=plot3d(xyz[0,*],xyz[1,*],xyz[2,*], $
```

```
>>   sym_object=orb(radius=5),/ undocumented,$
```

```
>>   linestyle='none')
```

>

> Yes, I had not noticed that a "hard" radius was intended. Those sizes

> are unrelated to the data space because the spheres are taken as plot

> symbols, and as such have "soft" sizes. You can see that if you change

> the size of the window: the symbols will remain the same size, while

> the axes will change.

>

> Borrowing from Mike's example, this could be done with iplot

> (similarly with plot3d()) by making a bunch o spheres with the proper

> sizes and positions in a model, then putting that model into the

> plot's data space:

>

```
> xyz=[[0,0,0],[2,0,0],[-2,0,0],[0,2,0],[0,-2,0],[0,0,2],[0,0, -2]]
```

```
> model = obj_new('IDLgrModel')
```

```
> for i=0,6 do model->add,obj_new('orb',pos=xyz[* ,i],radius=1.,color=[255, 215, 0])
```

>

```
> iplot,xyz,/scale_isotropic,/scatter,sym_index=0
```

```
> id=itgetcurrent(tool=ot)
```

```
> oplot3d=ot->getbyidentifier(ot->findidentifiers('* /PLOT3D',/
```

```
> visualization))
```

```
> oplot3d->add,model
```

Thank very much Paulo.

It helps me a lot.

Jun
