Subject: Re: 3D Scatter Plot Posted by Jim Pendleton on Fri, 29 Aug 2014 03:39:04 GMT View Forum Message <> Reply to Message

```
On Thursday, August 28, 2014 3:38:34 PM UTC-6, Paul van Delst wrote:
> On 08/28/14 17:29, Paul van Delst wrote:
>> On 08/27/14 18:40, sjone7 wrote:
>>> How might one add error bars to a 3d scatter plot?
>>
>
   How about plotting the data as semi-transparent orbs where the
>>
>> dimensions of the orbs represent the error bar extents?
>>
   See David Fanning's example code at:
     http://www.idlcoyote.com/tip examples/scatter surface.pro
>>
   The original article is at:
>>
     http://www.idlcoyote.com/tips/scatter3d.html
>>
>
>
  I forgot to mention that you will have to define your own non-spherical
  orb object (the one that comes with the IDL example code is spherical).
>
>
  I guess it would be an "ellipsoid" object. Modifying the orb object
  shouldn't be too hard (he says!) since it's the degenerate case where
  the principal axes are all the same.
>
>
>
 It will be a interesting programming exercise.
>
>
 I wonder how fast it would render for, say, 10000 points?
```

The orb object can be scaled anisotropically to turn it into an ellipsoid, without modifying the orb class itself.

```
IDL> o = orb()
IDL> o.scale, 1., 1.5, 1.
IDL> xobjview, o
```