
Subject: Re: Need help in IDLgrSurface and vertical exaggeration
Posted by [K. Bowman](#) on Thu, 16 Mar 2006 15:04:07 GMT
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In article <1142502700.236024.214300@v46g2000cww.googlegroups.com>, raval.chintan@gmail.com wrote:

> Hello,
>
> I am facing some problems with surface object in IDL.
>
> I have DEM Data for ALPS mountain range which I want to visualize as a
> surface and do a flythrough.
>
> Data dimensions are 800x800
> Pixel resolution is of 25 meters
> Minimum height in the data set is 0 meters
> Maximum height is 3500 meters.
>
> I have been able to create the surface out of this dataset but I do not
> get the proper depth perception.
>
> I have even set the projection property to 2 but the mountains
> certainly do not seem to be much of mountains.

The vertical exaggeration is a function of the data space into which you put the surface. Try this to see the effect of changing the vertical coordinate range:

```
IDL> z = 7.0*dist(800)
IDL> print, min(z), max(z)
      0.00000      3959.80
IDL> isurface, z
IDL> isurface, z, zrange = [0.0, 10000.0]
```

You will need to do something similar with whatever you are using to display the IDLgrsurface.

Ken Bowman
