Subject: Z-range
Posted by Dr.Xiaoming XU on Tue, 14 Dec 1999 08:00:00 GMT
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Hi,

how can I set the Z range in the scale of x, y when use surface?
In other words, how the x,y,z be plotted in the same scale?

Thanks!

Xu

Subject: Re: Z-range
Posted by Ben Tupper on Wed, 15 Dec 1999 08:00:00 GMT
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Xiaoming XU wrote:

> Thank you Ben, I tried it. It dosnt work. I attached an image it produced.
> Whatï¿½ï¿½s can be wrong? Here is the code that I use.
>
> XM.
>

Ouch!

Well it was a thought. You might try two other things... switch to object graphics for 3d stuff ... or try the following:

Use the T3d procedure to enter the relative scaling values for each axis range.
T3d, Scale = [XYscaling[0], XYscaling[1], Zscaling[1]]

Then call Surface procedure with x and y provided as arguments and the t3d keyword set. I think this should yield and isotropic plot/surface (fingers crossed here!)
Surface, c,x,y, az = 0,/t3d

By the way, you must have a huge monitor!

window,/free,title='3D Model',xpos=0, ypos=0, xs=1000, ys=1000

Ben

Subject: Re: Z-range
Posted by davidf on Fri, 17 Dec 1999 08:00:00 GMT
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Xiaoming XU (xu@graz.at) writes:

> how can I set the Z range in the scale of x, y when use surface?
> In other words, how the x,y,z be plotted in the same scale?

As Ben Tupper points out, this is going to have to be done on object graphics. IDL's normal direct graphics system is really a "two-and-a-half-D" system. As such, it forces surface plots to have artificial limitations. For example, no matter how you rotate a surface plot in direct graphics, the Z-axis must be vertical. This makes is *impossible* to get correct axis scaling.

But the object graphics system is not so hard. You can start with this simple surface plot from my web page and most of the work will be done for you. :-)

ftp://ftp.dfanning.com/pub/dfanning/outgoing/idl_course/simp le_surface.pro

Cheers,

David
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