Subject: Re: using cgSurface to produce a scatter 3D plot with 4th dimension
Posted by David Fanning on Wed, 07 Mar 2012 13:19:28 GMT
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Sebastian Schäfer writes:

> I have a datacube like this and two arrays with the values for the 3
> axes
> L1 DOUBLE = Array[100]
> L2 DOUBLE = Array[100]
> SINF DOUBLE = Array[100]
> XI2MAP DOUBLE = Array[100, 100, 100]
>
> I select a number of points using where() and now want to create a 3D
> plot of these points and use the color to represent their value. I
> managed to do this with cgsurf:
>
> ...
>
> that's pretty much how David Fanning explained it in his traditional
> grafics book (pages 185-197). Now I am trying to get this working with
> cgsurface so I can rotate and zoom mi xi2 map. Is this even possible
> with cgsurface since it only accepts the data in 2D?

It is not possible with cgSurface, because that program was
put together for a specific purpose, and displaying a
scatter plot is not it. But, it doesn't take too much
effort to turn cgSurface into something that *can* do
what you want it to do.

In fact, here is an article, and some code at the end of
the article, that should get you started in the right
direction:

http://www.idlcoyote.com/tips/scatter3d.html

The second half of this article deals with the problem you
are facing.

This is a program that is just begging to be written.
Maybe you are the person to write it for us! :-)

Cheers,

David

--
David Fanning, Ph.D.

Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")