
Subject: Re: Basics of SHADE_VOLUME

Posted by [David Fanning](#) on Thu, 07 Apr 2005 21:41:19 GMT

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Leslie Welser writes:

> Actually, I don't think your 3-d scatter plot will work for me in this
> case (although I have used it before on another project, and it worked
> great!). The reason is that what I have is actually a 3-d array which
> represents a wavefunction in space, $\phi = \text{dblarr}(192,192,192)$. It is 3-d
> because at each $\{x,y,z\}$ point, there is a magnitude for ϕ . So I
> guess the problem is really that I'm trying to represent a 4-d surface
> (3 dimensions for the x,y,z and 1 for the actual value of the array).
> I thought that using `shade_volume` would work for this, since it accepts
> a 3-d array as input. But the result looks about how you described it.
> I noticed that on your website, you have an example (MRI images) where
> you said to choose an isosurface of 50 and then you said that "the
> surface will enclose the volume values greater than 50". That's where
> I got the crazy idea to set the isosurface value as the minimum value
> of my dataset. But I think there is still something that I'm
> missing....

Well, I'm still unclear what it is you hope to visualize, too. How about putting the volume into something like SLICE3? Then you could look at slices through the volume. Or, you could treat this as we do with medical image volumes and look at the three orthogonal slices in three separate windows.

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
