
Subject: Re: Visualizing a 3D volume

Posted by [Chunguang Jia](#) on Tue, 20 May 1997 07:00:00 GMT

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Paal Berg wrote:

> Visualizing a 3D volume
>
> I'm relatively new to IDL so I haven't the needed experience for this
> problem:
> I want to visualize a 3D volume given by a (n x n x n)-matrix. The
> entries in
> the matrix is either 1 or 0 and I want to plot the volume spanned by
> the ones. The polyshade and shade_volume routines are not useful,
> because it is not an isosurface I have and shade_volume doesn't give
> me a useful figure. I wonder if there exists some routines that will
> plot the surface of my volume or if there exists some other way of
> visualizing a 3D volume.
> All suggests are welcome!
>
> Paal Berg

I'm not sure, but you can try the VOXEL_PROJ or PROJECT_VOL function.

JCG

Subject: Re: Visualizing a 3D volume

Posted by [David Foster](#) on Tue, 20 May 1997 07:00:00 GMT

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the surface of my volume or if there exists some other way of visualizing a 3D volume.

I would suggest starting with IDL's Slicer tool. It gives a "fair-to-poor" 3D rendering, at least of NMR images. At the least, it might provide a model for setting something up yourself. We converted a volume created from a series of NMR slices of the human brain into a 0's-and-1's map, and Slicer still gave a rendering similar to the original volume. Perhaps this would work for your data.

It's generally accepted, I believe, that IDL's 3D rendering capabilities are pretty limited.

Dave

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David S. Foster      Univ. of California, San Diego  
Programmer/Analyst   Brain Image Analysis Laboratory  
foster@bial1.ucsd.edu   Department of Psychiatry  
(619) 622-5892      8950 Via La Jolla Drive, Suite 2200  
La Jolla, CA 92037  
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"I have this theory that if we're told we're bad,
then that's the only idea we'll ever have.
But maybe if we are surrounded in beauty,
someday we will become what we see." - Jewel Kilcher
