Subject: 3D rendering procedures

Posted by hsiacc on Wed, 29 Nov 1995 08:00:00 GMT

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Does anybody know of efficient 3D rendering/ray-tracing procedure(s) for IDL? We currently use render.pro from Lawrence Livermore Nat'l Labs to do 3D rendering/reconstructions. It works great for small arrays (200x200x40), but runs out of memory for larger arrays (640x480x10), and slows down dramatically (the original author warned against using the routine on a big data set). Our volume set is at least 200x200x100 with volume fraction of around 0.30 and lots of irregular-internal surfaces. Thanks.

Andy H.

Subject: Re: 3D rendering

Posted by Robert Moss on Tue, 23 Apr 1996 07:00:00 GMT

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Ferranti Wong wrote:

>

- > I have a set of 3D tomography data. I want to display the rendered surfaces using two different
- > thresholds and different colour tables. Instead of displaying it as two separarte images, I
- > would like to have one image superimposed onto another.

>

> I would appreciate some help if someone has got any idea of how to do it.

> Ferranti

The VOXEL_RROJ function and its associated RGBO keyword are just the thing you are looking for here. It is relatively straightforward to use. However, getting the proper values for the RGBO array are highly data dependant and will require some experimentaion. There are some simple examples in the online help for VOXEL_PROJ, and you may also want to look at the docs for the Z-buffer pseudo device. If you have looked at these docs and have more specific questions, I'll try to help out if I can.

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