
Subject: Re: How to get an arbitrary sectional slice in 3D array ?

Posted by [airy.jiang](#) on Mon, 27 Aug 2007 09:09:06 GMT

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On 8 27 , 4 48 , Nianming Zuo <nianm...@gmail.com> wrote:

- > Dear all,
- >
- > I have a 3D image stored in a 3D array myimg(x, y, z).
- > How can I get an arbitrary sectional slice image from such a 3D array
- > (Not only along x-, y- or z- direction).
- > Namely, given an arbitrary plane with (point, normal_vector) in 3D
- > space, which indicates
- > that this plane goes through point "point" and normal vector is
- > "normal_vector",
- > we can easily get the image laid in this plane.
- >
- > Certainly, we can get the data in arbitrary plane by interpolation. I
- > only wonder if
- > there is an existing function in IDL ? (my version is 6.0)

So far as I know, IDL often defines the plane using the plane function like: $aX+bY=cZ+d=0$. If you want to use a plane to "cut" the 3D image array, you can try this method: Mesh_Clip. Maybe this link will be useful: <http://www.ownearth.net/Forum/view.asp?fid=3&id=85>. It's a Chinese page, but I think that demo may be useful to you, and the source code can be downloaded from that page. If you have any questions you can contact me with the email.
Good Luck!

Subject: Re: How to get an arbitrary sectional slice in 3D array ?

Posted by [Nianming Zuo](#) on Mon, 27 Aug 2007 09:33:59 GMT

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Airy,

Thank you for your quick reply, and I am really impressed by your cool demo from your forum. On the other side, I am also scared by the bunch of code... I will shrink it according to my requirement. Thank you!

Best,

Nico

On 8 27 , 5 09 , airy.ji...@gmail.com wrote:

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Subject: Re: How to get an arbitrary sectional slice in 3D array ?

Posted by [David Fanning](#) on Mon, 27 Aug 2007 12:50:18 GMT

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Nianming Zuo writes:

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Have a look at EXTRACT_SLICE.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

Sepore ma de ni thui. ("Perhaps thou speakest truth.")
