Subject: 3D rotations in IDL

Posted by Aurangzeb Agha on Fri, 07 Jun 1996 07:00:00 GMT

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I don't know what the hec I've got myself involved in. I have to write code in IDL to perform 3D rotations on huge datasets. Each MRI image is 102MB!! The SUN has got 256MB of RAM and it still can't give the response time required.

Any suggestions?

One idea I had was to take the images and covert them to a different format like jpeg or gif. Is that possible? Can IDL handle something like that?

If you could eMail me personally, I would be very appreciative.

Thanks, Aurangzeb Agha aagha@cis.ohio-state.edu

Subject: Re: 3D rotations in IDL

Posted by Liam Gumley on Mon, 10 Jun 1996 07:00:00 GMT

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Aurangzeb Agha wrote:

- > I don't know what the hec I've got myself involved in. I have to
- > write code in IDL to perform 3D rotations on huge datasets. Each MRI
- > image is 102MB!! The SUN has got 256MB of RAM and it still can't give
- > the response time required.

Some basic comments:

You probably won't be able to achieve real-time (i.e. on-the-fly) rotations in IDL. The only way to do this would be to use specialized graphics hardware and graphics library routines (outside of IDL).

However you can always precompute the images and store them in sequence. Once all the images are created, you can create a movie (see the help for XINTERANIMATE).

Also, keep in mind that although your MRI image data may be at very high resolution (thousands of pixels wide and high), your IDL graphics display is limited in the number of pixels it can display. So before doing 3D transforms on your images, resample them to a size appropriate for your display resolution (see the help for CONGRID).

Cheers, Liam.

PS - For the group: Has anyone written an interface from IDL to, say, SGI OpenGL?