Subject: about 3-Dimensional animation

Posted by hyjeong on Tue, 07 May 2002 11:25:00 GMT

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I want to make 3-dim animation which deal with climatology data with idl.

I found the example in noaa homepage.

But i don't want to get fantastic results yet because i am beginner

I want to get the advice about 3-d plot and 3-d animation from you

I don't know how must I start about it .

I want a good example...

is it possible to realize 3-dim animaion with idl?

I want to look fantastic output

Subject: Re: about 3-Dimensional animation

Posted by Sean Dettrick on Wed, 08 May 2002 23:14:25 GMT

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I have some recent experiences:

Hardware and OS:

If you plan to use a PC with a very recent video card, then you may find it convenient to use a well supported operating system like Windows, and don't use Linux. I used a Radeon 8500 video card and an nVidia GeForce3 Ti200, and both of them have very poor support under linux. I found a 10 times speedup in graphics rendering when I switched from Linux to Windows. If you have an older video card Linux is OK (Radeon 7500 reputedly works well, so do older nVidia cards).

Direct graphics:

You can do basic animations with XINTERANIMATE. This is an IDL direct grahpics routine. Eventually you will want to use Object graphics which is much more powerful.

Object graphics:

You will need to learn how to use object graphics with 24-bit color. Better to start by using existing "widget" codes and "trackball" codes that you can find on the web, see e.g. dfanning.com

Recording or encoding results:

Easiest of all is to use the MPEG format. To write MPEG files in IDL, you need to request a (free) MPEG license by email from your IDL vendors. Once you have this license you can do basic, good quality animations with XINTERANIMATE and save the results directly as MPEG files. You can also WRITE_MPEG in object graphics.

You will probably find MPEG results have unwanted artifacts, i.e. are

ugly.

A very good format for storing scientific animations is the FLIC format. Unfortunately, it has only 8-bit color. For fantastic output you may want 24-bit color eventually. For this I suggest using the Quicktime format to make an animation out of a sequence of JPEG images. The result

is very portable and high quality with relatively small file size. A quicktime Pro license (required to make quicktime movies) costs about \$30.

Hope this helps.

Sean

"Ho-yong, Jeong" wrote:

>

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