Subject: Re: slicer3 for a series of plots
Posted by David Fanning on Fri, 08 Apr 2005 13:13:29 GMT
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David Jackson writes:

> I received a few responses to my question suggesting that perhaps I wasn't
> completely clear in my original post. Let me try to be a little clearer.

Well, as I understand it now, what you are after is an
effective way to *present* the information, not do some
science. That makes more sense to me. :-)
>
> Let's assume I have data for a 3-D trajectory in space and I use xplot3d to
> look at this space curve. Now assume I have several hundred of these
> trajectories and I use xplot3d to look at them. The result is a very nice
> 3-D plot that I can manipulate but because there are so many trajectories,
> it is somewhat difficult to see what's going on. Thus, I would LIKE to be
> able to essentially use a slicer type program to see where these
> trajectories intersect a moveable plane.
>
> The best I've been able to do is to use the plot command to make 2-D images
> for each of the separate planes and then animate them as if the slice was
> being "moved up the cube". This works really well but I would prefer that I
> have an actual cube with a slice that I can manipulate so that it
> demonstrates that these are really slices from a 3-D volume.

Ah, I see. How well do you know object graphics?
Here is a fairly simple program that illustrates
the concept I think you are after:

http://www.dfanning.com/misc/surf_contour.pro

It allows you to move a "slice" through a surface and
see the "contour" at that location.

You will want something similar, I think, and it may
pay to start with the XPLOT3D code itself. Add your
"slice", which will be a polygon, and use your 2D images
as texture maps on that polygon.

Assuming you can understand the XPLOT3D code (not
always a given with RSI-supplied code, although this
seems relatively straightforward to me), this could
be a fairly easy modification to make.

Cheers,

David

--
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