Subject: Re: Cropping of IDLgrVolume?
Posted by Karl Schultz on Fri, 31 Jan 2003 18:08:15 GMT
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"Sebastian" <s@visita2.die.upm.es> wrote in message
news:Pine.LNX.4.44.0301311717440.9316-100000@visita2.die.upm .es...
> Hi all,
>
> does anybody know how to crop an IDLgrVolume?

The CUTTING_PLANES property.
As of 5.6, the CLIPPING_PLANES property.

> What I would like to do is this:
> Suppose your volume is a cube, then you can subdivide it into 8 equally
> sized sub-cubes.
> I would like to blend off one of these cubes.

You can use the CUTTING_PLANES property to cut the volume so that only one
of the eight sub-cubes are displayed.
I don't think that you can restrict the extent of the planes to do selective
cutting that might let you remove one sub-cube, leaving the seven others.
Is this what you want?

> And, more advanced, blend off the region of a small cube I position
> somewhere in my original volume.

The planes can be positioned anywhere.

> In vtk, for example, I can define 6 cropping planes (one parallel to each
> surface), thus subdividing the volume in 27 rectangular sub-volumes, and
> switch on or or arbitrary combinations of sub-volumes.

I don't know about being completely arbitrary, but you can certainly do
something like this with the understanding that each cutting plane defines a
half-space and successive cutting planes cut the volume in terms of
half-spaces.

Subject: Re: Cropping of IDLgrVolume?
Posted by s[1] on Mon, 03 Feb 2003 09:17:34 GMT
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On Fri, 31 Jan 2003, Karl Schultz wrote:

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> "Sebastian" <s@visita2.die.upm.es> wrote in message
> news:Pine.LNX.4.44.0301311717440.9316-100000@visita2.die.upm .es...

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That's exactly what I want. The only way to do this seem to store the
volume data, create a cut-off mask of the same size as the volume, and
create a temporary cut volume by multiplying the original volume with the
cut-off mask.
Not very elegant, but works (I was surprised how fast the multiplication
is).
BTW, what I wanted to render is something like this:
http://www.uke.uni-hamburg.de/institute/imdm/idv/forschung/v
m/images/brainbloodsupplyareas.gif

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> something like this with the understanding that each cutting plane defines a
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> half-spaces.
>
Thats just the problem with cutting planes: They always cut the volumes in
half spaces because you cannot restrict their size.

>
>

>