Subject: Re: iTools problem with setting isotropic in 8.0
Posted by Erik Rasmussen on Sun, 08 Aug 2010 01:54:14 GMT
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On Aug 7, 5:08 pm, Paulo Penteado <pp.pente...@gmail.com> wrote:
> On Aug 7, 3:30 pm, Erik Rasmussen <ra...@rasmsys.com> wrote:
>
>
>
>> It seems that something changed between 7.1 and 8.0 that is not
>> allowing a visualization to be isotropic in iTools.
>
>> My IDLitVisualization instance has /ISOTROPIC set, and this should
>> force the entire view hierarchy to be isotropic. It does not.
>
>> Further, in the IDLITSYS_CREATETOOL function I have tried using no
>> SCALE_ISOTROPIC keyword, which should default to zero for that
>> variable, which should honor the /ISOTROPIC request in my
>> visualization. I have also tried SCALE_ISOTROPIC=1, which should
>> force isotropic scaling in any situation, and I have tried
>> SCALE_ISOTROPIC=2, ANISOTROPIC_SCALE_3D = 1.0, which should trick the
>> iTool into isotropic scaling. None of these worked.
>
>> Gosh I would hate to have to do a kludge like a transparent cube to
>> trick IDL into thinking the Z range is the full range of the gridded
>> data, instead of the spatial range of only the isosurface being
>> plotted.
>
>> Hopefully this is me being bone-headed. If I figure this out in the
>> near-term, I will 'fess up and explain the error.
>
>> Anyone else notice this behavior or have any advice?
>
> There are the keywords aspect_ratio (y/x) and aspect_z (z/y).

Thanks Paulo. I have searched the documentation for those keywords,
and I don't see them in the iTools classes.

I have dug a little deeper into this issue. In stepping through the
initialization of the IDLitVisualization superclass in the debugger, I
can see where the ISOTROPIC property is set to 1, as expected. And I
can do a GET_PROPERTY, ISOTROPIC=it and print, it right after my
visualization draws, and confirm that ISOTROPIC=1.

But, with the iTool running, if I use the visualization browser to
look at the properties, I see that the Data Space that contains the
visualization has the Anisotropic 2D and Anisotropic 3D properties as
sensitive. This is all in contrast to the documentation (at least at

7.1, iTools User's Guide -> Visualization Properties) that says "If any visualization within the dataspace has its Isotropic scaling property set to True, the dataspace will be automatically set to isotropic, and the Anisotropic 2D/3D scale properties will be desensitized."

It still seems to me that something is not working the same in the 8.0 iTool framework as it was in the 7.1. But I continue to dig.....

Erik
