
Subject: Re: FLOAT images instead of BYTE ones from IDL Object graphics ?

Posted by [Gianluca Li Causi](#) on Fri, 23 Jan 2009 12:47:59 GMT

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On Jan 22, 3:59 pm, David Fanning <n...@dfanning.com> wrote:

> Gianluca Li Causi writes:

>> I'm working with 3D object rendering and I see that the oWindow ->

>> GetProperty, IMAGE_DATA=Img always returns a BYTE-type image, while I

>> need a FLOAT-type one, not quantized in the 256 levels.

>

>> How can I do?

>

>> I need this because I always need a 0_to_255 grayscale image of a

>> volumetric data, while, for any values of the Opacity, I cannot

>> produce a final image with a maximum gray greater than 100 (in fact

>> the final gray levels depends on both the volume data, the opacity and

>> the number of elements of the volume array).

>> If I scale up the final byte image I get a very bad image with

>> quantized grayscale...

>

>> Someone can help?

>

> It seems to me you are confusing data *display* with the

> actual data. The IMAGE_DATA keyword doesn't so much return

> a BYTE-type image as it returns a true-color rendition

> of what you displayed in the graphics window. What you displayed

> is NOT your data, it is a representation of your data, and

> that is exactly what you are getting back.

No David, I'm not confusing: I just need a 16bit/channel display instead of an 8bit/channel display, i.e. I want a float-type image representation of my 3d data.

If this is not possible, how can I always get a well-visible image of my volume?

In fact the final grayscale depends on the volume sampling, volume data and volume opacity: it is the same problem of visualizing an image with TV, that is solved with TVSCL: how can I get a TVSCL-like view of an emission volume, or automatically set the OPACITY_TABLE0 in order to always span the full grayscale range?

Thanks
Gianluca
