
Subject: Re: How to draw IDLgrPlots over IDLgrImages?
Posted by [David Fanning](#) on Thu, 27 Aug 2009 16:06:55 GMT
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nata writes:

> I know that the IDLgrModel is a container, so the objects are drawn in
> the order of the container. Right? If I don't want to use the Move
> method of the IDL_Container to place the IDLgrPlots at the end of the
> model, what can I do to plot the IDLgrPlots over the images?

I'm always confused when people reject the solution
a priori. :-)

Cheers,

David

--

David Fanning, Ph.D.
Coyote's Guide to IDL Programming (www.dfanning.com)
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: How to draw IDLgrPlots over IDLgrImages?
Posted by [natha](#) on Thu, 27 Aug 2009 16:17:37 GMT
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I would really appreciate to learn about DEPTH_TEST or something like
ZVALUE. I don't know if that can help me but I don't want to move the
plots each time I draw another IDLgrImage over all.

nata

Subject: Re: How to draw IDLgrPlots over IDLgrImages?
Posted by [David Fanning](#) on Thu, 27 Aug 2009 16:30:51 GMT
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nata writes:

> I would really appreciate to learn about DEPTH_TEST or something like
> ZVALUE. I don't know if that can help me but I don't want to move the
> plots each time I draw another IDLgrImage over all.

Why don't you describe exactly what you are trying
to do, and we can maybe suggest a solution.

Cheers,

David

--

David Fanning, Ph.D.

Coyote's Guide to IDL Programming (www.dfanning.com)

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: How to draw IDLgrPlots over IDLgrImages?

Posted by [natha](#) on Thu, 27 Aug 2009 16:55:33 GMT

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I'm trying to plot some IDLgrPlots above an IDLgrImage. I draw the plots firstly and then the image. The image can change.

If I don't do anything, the image is drawn over the plots and I don't want that.

I'm trying to use the ZVALUE property of the IDLgrPlot but I didn't succeed. My idea is plot the IDLgrPlots using a different Z value, more closer to the EYE of the viewer. If I can do that, my problem will disappear.

The View uses an ortogonal projection by default, the Znear and Zfar are set to [-1,1] and the eye is in the position 4.

So, in theory, using the following declaration, all should work

```
plot=OBJ_NEW('IDLgrPlot', COLOR=..., DATAX=INDGEN(10), DATAY=INTARR(10), ZVALUE=0.5, /USE_ZVALUE)
```

But, the plot is always under the image. Can you help now ?

Thanks,

natha

Subject: Re: How to draw IDLgrPlots over IDLgrImages?

Posted by [David Fanning](#) on Thu, 27 Aug 2009 20:03:01 GMT

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natha writes:

> I'm trying to plot some IDLgrPlots above an IDLgrImage. I draw the
> plots firstly and then the image. The image can change.
> If I don't do anything, the image is drawn over the plots and I don't
> want that.
>

> I'm trying to use the ZVALUE property of the IDLgrPlot but I didn't
> succeed. My idea is plot the IDLgrPlots using a different Z value,
> more closer to the EYE of the viewer. If I can do that, my problem
> will disappear.
>
> The View uses an ortogonal projection by default, the Znear and Zfar
> are set to [-1,1] and the eye is in the position 4.
> So, in theory, using the following declaration, all should work
>
> plot=OBJ_NEW('IDLgrPlot', COLOR=..., DATAX=INDGEN(10),DATAY=INTARR
> (10),ZVALUE=0.5, /USE_ZVALUE)
>
> But, the plot is always under the image. Can you help now ?

When you say "above", do you mean "in front of". And
when you say "below", do you mean "behind"? Otherwise,
I'm not sure I understand this conversation. I presume
these positions are in relationship to the eye as you
look at the viewplane rectangle.

If you want the image to be "behind" the plots, it should be
drawn first. This means it needs to be the first object drawn
in whatever model you are putting it into. You can put it in
that position when you add it:

```
mymodel -> Add, myimage, POSITION=0
```

This is how the image and plot, for example, are drawn in
XImage, and it works great.

<http://www.dfanning.com/programs/ximage.pro>

Cheers,

David

--

David Fanning, Ph.D.
Coyote's Guide to IDL Programming (www.dfanning.com)
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: How to draw IDLgrPlots over IDLgrImages?
Posted by [Robbie](#) on Mon, 07 Sep 2009 03:54:37 GMT
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The IDL manual says something like:

Disabling the depth test function allows all primitives to be drawn on the screen without testing their depth.
When the depth test is disabled, the last item drawn at a location is the item that is on top.

I think that if you are using depth testing then you must be aware that objects might disappear if they fall out of the clipping range. For example the default value of the ZCLIP property of IDLgrView is [-1,1]. You may also find the clipping to be graphics card dependant.

It's far simpler to avoid depth testing if at all possible when drawing a 2D scene.
That being said, I still have a tendency to 'hack' scenes using depth testing.

Robbie
