Subject: Re: !p.multi and /t3d weirdness
Posted by David Fanning on Thu, 05 May 2011 17:38:23 GMT
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FÖLDY Lajos writes:

> I am playing with !p.multi and /t3d and I do not understand the output.
> Try this simple example:
>
> surfr
> !p.multi=[0,2,2]
> for j=1,4 do plot, findgen(11), /t3d
>
> I expected four identical plots, but got two empty plots, one truncated
> and one correct plot. Why?

You are clipping your vectors at the very edge
of your viewplane. Set the NOCLIP keyword
and you will see what you expect.

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: !p.multi and /t3d weirdness
Posted by Foldy Lajos on Thu, 05 May 2011 18:05:09 GMT
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On Thu, 5 May 2011, David Fanning wrote:

> FÖLDY Lajos writes:
>
>> I am playing with !p.multi and /t3d and I do not understand the output.
>> Try this simple example:
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> You are clipping your vectors at the very edge
> of your viewplane. Set the NOCLIP keyword
> and you will see what you expect.

Thanks David, that helps.

Then am I correct that the clipping window is set up in device coordinates
and is not transformed by t3d? So it does not coincide with the plot data
window (the region enclosed by the X,Y axes) when t3d is used?

Normally I can clip against the plot data window, like in

```
!p.multi=[0,2,2]
for j=1,4 do plot, findgen(11), xrange=[3,7]
```

What can I do when t3d is set?

regards,
Lajos

Subject: Re: !p.multi and /t3d weirdness
Posted by David Fanning on Thu, 05 May 2011 18:18:58 GMT
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FÖLDY Lajos writes:

> Then am I correct that the clipping window is set up in device coordinates
> and is not transformed by t3d?

It's either device coordinates or there is a round-off
problem.

> So it does not coincide with the plot data
> window (the region enclosed by the X,Y axes) when t3d is used?

Well, as you say, it is weird. Now that I think about
it, maybe because it *is* done in device coordinates.
I never thought of that before. It is "mostly" normal
for line and contour plots. It's mostly crazy for surfaces.
But, then again, it would be if it was doing the rotations
in device coordinates. 2.5D surfaces, rotated in 3D device
coordinate space...yes, that would be weird. :-)

> Normally I can clip against the plot data window, like in
>

> !p.multi=[0,2,2]
> for j=1,4 do plot, findgen(11), xrange=[3,7]
>
> What can I do when t3d is set?

I've never had much of a problem with plots, except
for this near-the-edge clipping thing going on.

Cheers,

David

--
David Fanning, Ph.D.
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