Subject: Re: trajectory plot behind sphere
Posted by K. Bowman on Thu, 17 Feb 2005 15:44:36 GMT
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In article <37jpcoF4mbq4mU1@individual.net>,
Ralf Schaa <schaa@geo.uni-koeln.de> wrote:

> I am plotting a trajectory of a spacecraft orbit which is partially
> going behind a sphere (the planet). This part, which is actually behind
> the sphere is drawn right in front of the plot, but I like to have this
> part of the trajectory invisble.
> How can this be done?

The problem is that the X and WIN devices are 2-D devices and do not do hidden line processing. SURFACE and similar built-in "3-D" functions do their own hidden line removal, so they work with 2-D devices, but I don't think that most Direct Graphic procedures do. (I'm certain I'll be corrected if I'm wrong!)

I believe that you must either use the Z-buffer device or Object Graphics, both of which will remove hidden lines.

With the Z-buffer device, you set the device to "Z", draw your 3-D graphic, read the resulting bitmap with TVRD, then TV it to the screen (or print it). The downside is that the result is a bitmap. On the other hand, the downside of Object Graphics is the learning curve. ;-)

Ken Bowman