
Subject: Re: Axes etc. in XVOLUME

Posted by [Paul Sorenson](#) on Fri, 21 May 2004 20:45:19 GMT

[View Forum Message](#) <> [Reply to Message](#)

The NORMALIZE method has an optional keyword, ADJUST_AXES, that XVOLUME uses internally to mess with the axes. (The actual call to NORMALIZE is in `idlexvolviewwid__define.pro.`) With that keyword, axes are automatically adjusted to fit the rest of the graphics objects in the view. The IDLexVolView has several non-axes graphics objects in it such as contour lines, a polygonal surface, the actual volume itself, etc. If we move all of these graphics objects, say, 10 units in x, the axes will automatically adjust themselves to span that range. Here is an example moving the volume 10 units by just hardcoding it. A similar technique would have to be applied to all the other non-axes graphics objects in IDLexVolView. Maybe that could be done in the SetProperty method when the volume property is set.

```
oVol = obj_new('IDLgrVolume', $
    keyword_set(test) ? $
        congrid(bytscl(randomu((seed=0), 4, 4, 4)), 40, 40, 20) $
    : vol, $
    /zbuff, $
    interpolate=interpolate, $
    hints=2, $
    /no_copy, $
    xcoord_conv=[10,1], $ ;move volume 10 units in x.
    /zero_opacity_skip $
)
```

There are examples using the ADJUST_AXES keyword on my webpage at <http://www.paulsorenson.com/underthehood.html> .

-Paul Sorenson
www.paulsorenson.com

> Kenneth P. Bowman writes:

>> Thanks, but I don't have a Windows machine, so I cannot view the file.

> I originally thought this was a 5 minute job. I found the
> place where the code needed to be changed (in IDLexVolView__Define),
> but when I made the simple change the volume disappeared from
> the display! (Ah, well, object graphics after all.) Then I
> realized I was already 15 minutes into it and I could hear
> the big sucking noise already, so I backed off.

> Something odd is going on in the NORMALIZE method of that
> object. Perhaps Paul will explain. But that's where I would

> look for things to fix.

> Cheers,

> David

> --

> David Fanning, Ph.D.

> Fanning Software Consulting

> Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
