
Subject: Data to Device coordinates in Objects
Posted by [Gaurav](#) on Mon, 18 Jun 2007 10:13:28 GMT
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Hi Folks, I must be missing out something very fundamental-please bail me out. What I want to do is to get the device coordinates of a particular lat/lon value of a spherical object that is displayed in a object window concocted out of a Draw Widget. None of the procedures like COORD_CONV, CV_COORD etc. seem to be appropriate.

Cheers!

Subject: Re: Data to Device coordinates in Objects
Posted by [David Fanning](#) on Mon, 18 Jun 2007 15:19:25 GMT
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Gaurav writes:

> Hi Folks, I must be missing out something very fundamental-please bail
> me out. What I want to do is to get the device coordinates of a
> particular lat/lon value of a spherical object that is displayed in a
> object window concocted out of a Draw Widget. None of the procedures
> like COORD_CONV, CV_COORD etc. seem to be appropriate.

If spherical geometry seems "fundamental" to you, you are a better man than I, my friend. :-)

I *really* don't want to get in the middle of this, but I presume you "data" coordinate system is some kind of map projection set up with the MAP_PROJ_** routines, right? So you can go back and forth between 3D and 2D coordinates fairly easily. Otherwise, I'm not sure you have a prayer. I know I wouldn't.

Cheers,

David

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

Subject: Re: Data to Device coordinates in Objects

Posted by [Gaurav](#) on Tue, 19 Jun 2007 08:03:08 GMT

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Thanks for the reply Dr. Fanning, you wrote:

- > I **really** don't want to get in the middle of this, but
- > I presume you "data" coordinate system is some kind of
- > map projection set up with the MAP_PROJ_** routines, right?
- > So you can go back and forth between 3D and 2D coordinates
- > fairly easily. Otherwise, I'm not sure you have a prayer.
- > I know I wouldn't.

I don't know about being a better man, but things sure have turned out in a way that I need to solve this thing.

No, I never used MAP_PROJ*** routines. I simply designed a spherical 'object' that I am treating as the Earth by warping a satellite image of the Earth on it.

I am able to get the lat/lon of my current cursor position over the globe by using the PICKDATA routine on the object window by using the DEVICE COORDINATES as reference. This gives me my position in RECTANGULAR coordinate system which I convert to spherical coordinates using CV_COORD routine. Easy as that!

But the trouble is that there is no way to retrace these steps backwards. I can use CV_COORD to get back to rectangular coordinates but that only gives me corresponding coordinates for the spherical model and I simply have no way of knowing as to where that pixel is mapped in the DEVICE SPACE i.e. the DRAW WIDGET that I have used as my object window. No, COORD_CONV does NOT work- for it is made only to work in Direct Graphics.

Even a prayer does not appear to work. Help!
