
Subject: Re: Display and Navigate Image in IDL 8.2
Posted by [lecacheux.alain](#) on Thu, 13 Sep 2012 07:20:39 GMT
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Le mercredi 12 septembre 2012 23:24:05 UTC+2, David Fanning a écrit :

> Chris Torrence writes:

>

>

>

>> Does this help?

>

>>

>

>> googleImage = Read_Image('googleimg.png')

>

>>

>

>> XRange = [-11711131d, -11688226d] ; (meters)

>

>> YRange = [4914254d, 4937159.5d] ; (meters)

>

>>

>

>> im = IMAGE(googleImage, /BOX_AXES, GRID_UNITS='meters', \$

>

>> IMAGE_LOCATION=[xrange[0],yrange[0]], \$

>

>> IMAGE_DIMENSIONS=[xrange[1]-xrange[0],yrange[1]-yrange[0]], \$

>

>> MAP_PROJECTION='Mercator', ELLIPSOID='WGS84')

>

>> m = im.mapprojection

>

>> lonlat = m.MapInverse(im.xrange, im.yrange)

>

>> m.limit = [lonlat[[1,0,3,2]]]

>

>>

>

>> At least with IDL 8.2.1, I'm getting an image in "meters", with a box grid. When I click on the image, and then move the mouse, it reports lat/lon position.

>

>

>

> Well, the last step has the effect of blurring the image, I think

>

> because it causes the image to be warped into the map projection

>

> space. To avoid blurring, you have to separate the display of
>
> the image from the map projection. Basically, you want to lay
>
> the map projection down "on top" of the image.

> See the end of this article for a further explanation:

> http://www.idlcoyote.com/ng_tips/mapnograd.php

> 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.")

For those who might be interested, my equation:

$$\text{res} = ((m.a + 135) * 2 * \text{dpi}) / 256 / 2^{\text{zoom}}$$
