## Subject: Re: Map to data coordinate conversion Posted by PMan on Thu, 18 Apr 2013 15:27:57 GMT

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On Thursday, April 18, 2013 11:12:16 AM UTC-4, Chris Torrence wrote:
> On Thursday, April 18, 2013 8:19:48 AM UTC-6, Paul Mallas wrote:
>
>> Hello all,
>>
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>
>>
>> I am looking to convert, given a geotff image with map info, the lat/lon data to a pixel location
in an image.
>
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>>
>> What I want to do seems pretty easy, but I am having a hard time coding it in IDL for some
reason. I must be missing something.
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>>
>> Using the ENVI() API, this was straight forward:
>
>>
>
>>
>
>>
>
     oEnvi = envi(/headless)
>
>>
>
     eMask = oEnvi->openRaster(file)
>>
>>
```

```
>
     fid = ENVIRasterToFID(eMask)
>>
>
>>
>
     envi_convert_file_coordinates, fid, xf, yf, lon, lat
>>
>
>>
>>
>
>>
>
>> with lon, lat being my predefined input and xf, yf being my desired output.
>>
>
>>
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>
>> The analogous way to do this in IDL is (I think):
>>
>
>>
>
>>
>
>> img = image(file, /buffer)
>>
>> xy = img->convertcoord(lon, lat, /to_data)
>
>>
>
>>
>
>>
>> however the image() function won't read the geotiff properly (but ENVI() accepts it just fine).
Perhaps my geotiff tag is not properly formed or something. Ideas on another way?
>
>
>
> Hi Paul,
>
```

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>
>
  I think you want to use the MapForward method. Something like this:
>
>
  i = image(FILEPATH('boulder.tif',SUBDIR=['examples','data']))
>
  print, i.mapforward(-105,40)
>
>
> The ConvertCoord is just for converting between screen/normalized/data coordinates, and not
between lat/lon and data.
>
  Hope this helps.
 -Chris
> ExelisVIS
```

Great - that's what I am thinking of.

I am encountering a problem with image() though - my geotiff won't load with correctly. I get this error:

IMAGE: Unable to invoke method on NULL object reference: <OBJREF (<NullObject>)>.

This same image works just fine with the ENVI API - perhaps there is some deficiency in my geotiff values.