
Subject: Re: Question regarding Envi_convert_file_map_projection
Posted by [Robert Moss, PhD](#) on Sun, 22 Mar 2009 00:56:01 GMT
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On Mar 20, 4:42 pm, Raj <rbale...@gmail.com> wrote:

> Hi I am trying to change the projection of the file from EASE-Grid
> Equal Area cylindrical to geographic by using the following:
>
> o_proj = envi_proj_create(/geographic)
>
> envi_convert_file_map_projection, fid=fid, \$
> pos=pos, dims=[-1l, 0, 1382, 0, 585], o_proj=o_proj,
> \$;o_pixel_size=o_pixel_size,\$
> out_name=out_name
>
> Even though I am explicitly specifying the dims size, the number of
> samples and Lines changes from 1383, 586 to 1598, 754 in the output
> file.
>
> Is there a way to avoid this?
>
> Please Advise
>
> The header info of Input file is as follows
>
> ENVI
> description = {
> File Imported into ENVI.}
> samples = 1383
> lines = 586
> bands = 1
> header offset = 0
> file type = ENVI Standard
> data type = 12
> interleave = bsq
> sensor type = Unknown
> byte order = 0
> map info = {EASE-Grid Global, 1.5000, 1.5000, -17321659.7750,
> 7332251.0625, 2.5067525000e+04, 2.5067525000e+04, WGS-84,
> units=Meters}
> projection info = {99, 6371228.0, 6371228.0, 0.000000, 0.000000, 0.0,
> 0.0, 30.000000, EASE-Grid Global, WGS-84, User Proj Cylind Equal Area,
> units=Meters}
> wavelength units = Unknown
>
> The header info of output file is as follows
>
> ENVI

```
> description = {
>   File map projection conversion result.Method: 1st degree RST w/
>   nearest
>   neighbor [Fri Mar 20 15:48:40 2009]}
> samples = 1598
> lines   = 754
> bands   = 1
> header offset = 0
> file type = ENVI Standard
> data type = 12
> interleave = bsq
> sensor type = Unknown
> byte order = 0
> map info = {Geographic Lat/Lon, 1.0000, 1.0000, -179.99999578,
> 86.71674408, 2.2518540843e-001, 2.2670304577e-001, WGS-84,
> units=Degrees}
> wavelength units = Unknown
>
> Thanks & Regards,
> Rajesh
```

Well, I am pretty sure that the DIMS keyword to ENVI_CONVERT_FILE_MAP_PROJECTION is for specifying the region in the input file to be converted. After conversion the output may not (and often does not, depending on what projections are used) have the same number of pixels.

I also think the map info for the input file looks very strange. The way I read it, the map_info structure is saying that the pixel size for that image is 2.5067525000e+04, i.e. 25,067 meters. I suggest that may not be correct. In fact, given that oddity I am amazed you got a result that even remotely was sane. How did the image look?

Subject: Re: Question regarding Envi_convert_file_map_projection
Posted by [None\[1\]](#) on Mon, 23 Mar 2009 15:45:16 GMT
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On Mar 21, 8:56 pm, robert.m...@gmail.com wrote:

```
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>
>
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> result that even remotely was sane. How did the image look?
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Hi Robert,

Thanks for getting back to me. I am using the EASE-Grid Equal Area Cylindrical global dataset. Envi does not support this dataset so I found the support from the following link

<http://nsidc.org/data/ease/geolocate/index.html>

I can now open the image in Envi. But we are trying to automate the process. So we are trying to convert the projections from Equal area cylindrical(Now Envi has this support) to geographic. By using `envi_convert_file_map_projection` statement we are getting the output but the top and bottom part of the image is compressed and we are not getting the proper projection conversion. Is there a way to overcome this problem

Please Advise

Thanks & Regards,
Rajesh
