
Subject: ENVI_CONVERT_FILE_MAP_PROJECTION processing times

Posted by [Martin Landsfeld](#) on Fri, 02 Sep 2011 21:23:28 GMT

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Hello,

I am remapping some GeoCover imagery to conform to our SRTM data. The GeoCover is in the UTM projection at 28.5 meters and the SRTM is in a Geographic projection at 0.0008333 degree resolution. I can do the conversion interactively in ENVI and it takes about 67 seconds. The files are large with:

SRTM at 7208 x 9608 pixels

GeoCover at 26857x19517 pixels

I would like to run the conversions in IDL using the batch ENVI function ENVI_CONVERT_FILE_MAP_PROJECTION but when I do, it takes nearly 2 hours to process the same files on the same machine, a Windows 2008 Server with 4, 2.2GHz. Quad-Core processors and 32GB RAM.

Has anyone else noticed this slowdown when using ENVI batch?

I ran some other tests by subsetting the GeoCover file and got these results:

time for 10000x10000 subset = 290 s, 4.8 min

time for 15000x15000 subset = 1648.2 s, 27 min

time for entire 26857x19517 = 6336.2 seconds, 105 min

I don't think there is anything wrong with my code as the output looks fine. I'll throw that up anyway.

Thanks!

```
init_time = SYSTIME(/sec)

ENVI_OPEN_FILE, srtm_file_path, R_FID=srtm_fid
if (srtm_fid eq -1) then message, 'SRTM file not found'

ENVI_FILE_QUERY, srtm_fid, DIMS=dims, NB=nb, $
  DATA_TYPE=data_type, NS=ns, NL=nl

srtm_proj = ENVI_GET_PROJECTION(fid = srtm_fid,
pixel_size=srtm_pix_size)
ENVI_FILE_MNG, ID=srtm_fid, /REMOVE

ENVI_OPEN_FILE, gcov_file_path, R_FID=gcov_fid
if (gcov_fid eq -1) then message, 'GeoCover file not found'
```

```
ENVI_FILE_QUERY, gcov_fid, DIMS=dims, NB=nb  
pos = LINDGEN(nb)
```

```
ENVI_CONVERT_FILE_MAP_PROJECTION, fid=gcov_fid, $  
pos=pos, dims=[dims,dims,dims], o_proj=srtm_proj, $  
o_pixel_size=srtm_pix_size, $  
out_name=out_name, warp_method=2, $  
resampling=2, background=0
```

```
PRINT, 'processing time = ', SYSTIME(/sec) - init_time, format='(a,  
f6.1)'  
ENVI_FILE_MNG, ID=gcov_fid, /REMOVE
```
