
Subject: Re: ENVI_CONVERT_FILE_MAP_PROJECTION processing times
Posted by [Maxwell Peck](#) on Fri, 02 Sep 2011 23:23:12 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Sep 3, 7:23 am, Martin Landsfeld <mlandsf...@gmail.com> wrote:

> 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
```

I assume the resampling and warping methods are the same.. The other option is to use the layer stack doit function instead and see if it makes any difference (from memory I have seen significant improvements in using the layer stacker instead of straight out map conversion).

Max
