Subject: Re: ENVI_CONVERT_FILE_MAP_PROJECTION processing times
Posted by Martin Landsfeld on Thu, 08 Sep 2011 02:07:38 GMT
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On Sep 3, 5:35 am, "devin.wh...@gmail.com" <devin.wh...@gmail.com>
wrote:

>
> The main issue I see with your code is the DIMS keyword usage and your
> lack of the GRID keyword. Your call should look like this:
>
> ENVI_CONVERT_FILE_MAP_PROJECTION, fid=gcov_fid, $
> pos=pos, dims=dims, o_proj=srtm_proj, $
> o_pixel_size=srtm_pix_size, $
> out_name=out_name, warp_method=2, $
> resampling=2, background=0, $
> grid=[50,50]
>
> You can't rely on the API to know that it only needs the first five
> elements of whatever array you pass it. Some routines do check to
> make sure the DIMS array has only five elements. The next time you
> run interactive reprojection with Triangulation, note the number of
> grid points it uses in X and Y and supply those to your call. I
> *think* the interactive defaults are [50,50], but I don't recall what
> the API defaults are. If they are higher than that, it would go a
> long way towards explaining the increased processing time (denser grid
> = longer processing time). FYI: WARP_METHOD=3 will always give you
> the best results, but it is definitely the slowest option.
>

Thanks Devin,

It turns out that the grid parameter is crucial to the processing
times I was getting. The grid default for the API is 25x25, whereas
the default for ENVI batch is 10x10. On my smallest test case,
10000x10000 pixels, I ran the following tests:

grid=[10,10], time = 176 sec
grid=[15,15], time = 55 sec
grid=[20,20], time = 18 sec
grid=[50,50], time = 5 sec

Obviously the 10 pixel spacing default of control points for the
warping is too fine for large files!