Subject: Re: Locate pixels that fall within other pixel-geo search
Posted by tegus on Sat, 11 Sep 2010 13:07:10 GMT
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On Sep 9, 4:07 pm, Snow53 <jennifer_wa...@hotmail.com> wrote:
> Hi,
>
> I have two images with slightly different dimensions, but the same
> projection. Image 1 has coarse resolution. Image 2 has fine
> resolution.
>
> For each coarse pixel in Image 1, I need to find all fine resolution
> pixels that fall within that pixel (based on the condition that they
> fall within the same geographic extent of that coarse pixel).
>
> I'm reading in the file with envi_open_file, so the files should have
> all the geographic info needed.
>
> Has anyone done something similar? Could anyone suggest a good way to
> do this selection?
>
> Thanks!

Hi!

In IDL you could do this using J.D. Smith's Hist_nd histogram routine
which is available on David Fanning's website (dfanning.com). While on
David's website you'll also want to check out JD Smith's HISTOGRAM:
The Breathless Horror and Disgust.
The way I work this problem is to rebin the fine resolution image
(i.e., 2D histogram) to match the resolution (binning) of the coarse
image (coverage and projection of the two images need to coincide).
The key is to create a reverse index array using the REVERSE_INDICES
keyword of Hist_nd. The reverse index allows you to look up the
contents of each bin in the new histogram, based on the finer
resolution, at the coarser resolution.

Bill