
Subject: Re: Locate pixels that fall within other pixel-geo search

Posted by [rogass](#) on Sat, 11 Sep 2010 16:16:49 GMT

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On 11 Sep., 15:07, tegus <tegusbillhar...@gmail.com> wrote:

> On Sep 9, 4:07 pm, Snow53 <jennifer_wa...@hotmail.com> wrote:

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>> Hi,

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>> 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

Cool Way! Really.

Regards

Chris
