Subject: Re: Locate pixels that fall within other pixel-geo search
Posted by rogass on Thu, 09 Sep 2010 20:41:11 GMT
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On 9 Sep., 22:07, 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!

Maybe you can use this routine or some ideas frome it:

```
function cr_get_tiles,im, wx,wy
 s = size(im,/dimensions)
 ;l = make_array(s,/index,/ulong)
 run1 = 0l
 run2 = 0l
 tilex  = round((s[0]   -   (s[0]   mod wx))/wx)
 tilexpart = round(float(s[0]    mod wx)/wx)
 tilex  += tilexpart
 tiley  = round((s[1]   -   (s[1]   mod wy))/wy)
 tileypart = round(float(s[1]    mod wy)/wy)
 tiley  += tileypart
; tiley = round((s[1]   -   (s[1]   mod wy))/wy     +   float(s[1]
mod wy)/wy)
    newim   =   make_array([wx,wy,s[2],tilex*tiley],type=size(im,/
type))
 for i=0l, tilex-1l do begin
  for j=0l, tiley-1l do begin
    if i eq (tilex-1l) && tilexpart gt 0 then $
     newim[0: s[0]-i*wx-1l  ,*,*,run1] = im[i*wx:*,j*wy:((j
+1l)*wy)-1l,*] else $
    if j eq (tiley-1l) && tileypart gt 0 then $
     newim[*,0:s[1]-j*wy-1l,*,run1]  = im[i*wx:((i
+1l)*wx)-1l,j*wy:*,*] else $
```

```
    newim[*,*,*,run1] = im[i*wx:((i+1l)*wx)-1l,j*wy:((j+1l)*wy)-1l,*]
   run1++
  endfor
 endfor
 undefine, im
return, newim
end
```

wx and wy is the ratio between coarse and fine image.

Hope it helps

CR
