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

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

Hope it helps

CR
