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Subject: Re: problem with subset one image by another

Posted by [negra](#) on Sat, 29 Mar 2008 01:54:37 GMT

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> negra wrote:  
>> On 27 ÍÁÒ, 21:56, Jean H <jghas...@DELTHIS.ucalgary.ANDTHIS.ca> wrote:  
>>> negra wrote:  
>>>> Without more details about what you want to do it is difficult,  
>>>> bordering upon impossible, for us to give you any useful advice about  
>>>> how to do it.  
>>>> here is idl routine what I written. The beginning of it, is working.  
>>>> pro spat\_subset  
>>>> cd, 'C:\Scandata\L1a'  
>>>> HKMfiles = FILE\_SEARCH('MOD02HKM.\*.img',count=numfiles)  
>>>> PRINT, '# NDSI files:',N\_ELEMENTS(FILE\_SEARCH('MOD02HKM.\*.img'))  
>>>> print,FILE\_SEARCH(HKMfiles)  
>>>> for j=0,numfiles-1 DO BEGIN  
>>>> HKM\_name = HKMfiles[j]  
>>>> print,HKM\_name  
>>>> ;first restore all base save files  
>>>> ;  
>>>> envi, /restore\_base\_save\_files  
>>>> ;  
>>>> ;Initialize ENVI and send all errors and warnings to the file  
>>>> batch.txt  
>>>> ;  
>>>> envi\_batch\_init, log\_file='batch.txt'  
>>>> ;  
>>>> ;Open the input files  
>>>> ;kz\_hkm mask file  
>>>> envi\_open\_file, 'C:\Scandata\L1A\mask\kz\_hkm', r\_fid=file1\_fid  
>>>> if (file1\_fid eq -1) then begin  
>>>>     envi\_batch\_exit  
>>>>     return  
>>>>     endif  
>>>>     envi\_open\_file,'C:\Scandata\L1A\'+ HKMfiles[j], r\_fid=file1\_fid  
>>>>     if (file1\_fid eq -1) then begin  
>>>>         envi\_batch\_exit  
>>>>         return  
>>>>         endif  
>>>>     envi\_file\_query, file1\_fid, dims=file1\_dims, ns=file1\_ns, nl=file1\_nl,  
>>>>     nb=file1\_nb  
>>>>     file1\_dims = [-1L,0,file1\_ns-1,0,file1\_nl-1]  
>>>>     file1\_mapinfo = envi\_get\_map\_info(fid=file1\_fid)  
>>>>     print, file1\_mapinfo  
>>>>     file1\_xf = [0,file1\_ns-1]  
>>>>     file1\_yf = [0,file1\_nl-1]

```

>>> envi_convert_file_coordinates, file1_fid, file1_xf, file1_yf,
>>> file1_xmap, file1_ymap, /to_map
>>> print, 'UL corner:',file1_xmap[0],file1_ymap[0]
>>> print, 'LR corner:',file1_xmap[1],file1_ymap[1]
>>> ;Longitude 44.39011111 - 88.38219444
>>> ;Latitude 36.20264722 - 56.35832500
>>> ;subset #1
>>> envi_file_query, file_fid, dims=file_dims, ns=file_ns, nl=file_nl,
>>> nb=file_nb
>>> file_dims = [-1L,0,file_ns-1,0,file_nl-1]
>>> file_mapinfo = envi_get_map_info(fid=file_fid)
>>> print, file_mapinfo
>>> pos = lindgen(file_nb)
>>> out_namea = HKMfiles[j]+subset.img'
>>> file_mapinfo = envi_get_map_info(fid=file_fid)
>>> _xfactor = file1_mapinfo.ps[0]/file_mapinfo.ps[0]
>>> _yfactor = file1_mapinfo.ps[1]/file_mapinfo.ps[1]
>>> print, [_xfactor, _yfactor]
>>> file_xf = [0,file_ns-1]
>>> file_yf = [0,file_nl-1]
>>> envi_convert_file_coordinates, file_fid, file_xf, file_yf, file_xmap,
>>> file_ymap, /to_map
>> you have to do the opposite: take the projected coordinates of the mask
>> image, and convert it to the Cartesian coordinate of the image to subset.
>
>>> then, don't do the "resize", as you are just changing the pixel size and
>> not the covered area. do subset =
>> image[maskXmin:maskXmax,maskYmin:maskYmax]
>
>>> Jean
>
>>> print, 'UL corner:',file_xmap[0],file_ymap[0]
>>> print, 'LR corner:',file_xmap[1],file_ymap[1]
>>> ;Longitude 63.29925556 - 106.42788056
>>> ;Latitude 42.01251944 - 64.14574167
>>> ; I have coordinates of image corners
>
>> It's write that something wrong but I don't know how will be right.
>> Where is mistake?
>
>> pos = lindgen(file_nb)
>> input = ENVI_GET_DATA(fid=file_fid, dims=file_dims, POS=pos)
>> ;
>> subset = input[file1_xf[0]:file1_xf[1], file1_yf[0]:file1_yf[1]]
>
>> This will not work, as file1_xf contains the Cartesian coordinate of the
>> mask.
>> first, do

```

```
>
> envi_convert_file_coordinates, subset_fid, subset_xf, subset_yf,
> Mask_xmap, Mask_ymap
>
> so with the above, you have, with respect to the subset image, the
> Cartesian coordinates of the Mask corners.
>
> Then do
> subset = input[subset_xf[0]:subset_xf[1],subset_yf[0]:subset_yf[1]]
>
>> out_names = 'subset.img'
>> ENVI_WRITE_ENVI_FILE, subset, DATA_TYPE=4 , OUT_NAME=out_names,
>> R_FID=s_fid
>
> ENVI_WRITE_ENVI_FILE requires the other following keywords:
> NB=integer | NL=integer | NS=integer
> OFFSET=value
>
>
```

I tried to do as you suggested, but it was unsuccessful.

May be it must look like this?

min\_x = max(file1\_xmap[0], file\_xmap[0]); Attempt to store into an  
expression: <DOUBLE ( 63.295452)>.

```
max_x = min(file1_xmap[1], file_xmap[1])
min_y = max(file1_ymap[0], file_ymap[0])
max_y = min(file1_ymap[1], file_ymap[1])
subset = input[min_x:max_x, min_y:max_y]
```

But it give me mistake on the first line.

Do you know where is mistake?

Gulshat

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