
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=file_fid

>>>> if (file_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[jj]+'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
