
Subject: Re: subset an image by roi in idl
Posted by [gis_learner](#) on Tue, 26 Sep 2006 11:45:44 GMT
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Dear Jeff,

Thank you very much for the quick answer.

I saw that there are three main issues in your mail

1) the file name issue.... it is corrected

2) the r_fid issue.. I hope you can verify that it is correct at below

```
name='C:\RSI\IDL61\subset_via_roi\bhtmref_roi1.roi'
envi_restore_rois,name
roi_ids = envi_get_roi_ids(fid=fid)
roi_addr=envi_get_roi(roi_ids)
```

```
print, 'ROI: ', name, n_elements(roi_addr)
print,'name=',name, ' roi_ids=',roi_ids
```

```
roi_data=envi_get_roi_data(roi_ids,fid=fid,pos=[0])
envi_get_roi_information,roi_ids,ns=ns,nl=nl
print, 'ns= ',ns, '**nl=',nl
roi_adresses=envi_get_roi(roi_ids)
```

```
out_data = intarr(ns,nl)
out_data [roi_adresses]=roi_data
envi_write_envi_file,
out_data,ns=ns,nl=nl,out_name='out_name',map_info=map_info
```

3) as you said the roi's are as big as the original image. I tried to define ROI from the subsetted images so that I can use in the original ones.. But the result is terrible. I may appreciate any help

Best Regards

Jeff N. yazdi:

```
> The first thing I'd suggest doing would be to clean up your code.
> That's the easiest way to spot mistakes, and there are a few here you
> should fix. First, you assign the filename for can_tmr.img to the
> variable 'img_file', but then in the next line you try to open
> 'image_file' - see the difference? Also, i'm surprised this code is
> even running b/c of this line:
>
> roi_ids = envi_get_roi_ids(fid=r_fid)
>
> The variable r_fid is undefined, as I see it. Once you get past these
> things I think you'll be in a much better position to figure out for
```

> yourself why your code isn't doing what you think it should. You
> might, for example, examine the values that are stored in ns and nl.
> Are they the same dimensions as your input image? If they are, then
> that's the reason that your 'subset' image ends up with the same
> dimensions as the input :)
>
> Cheers,
> Jeff
>
>
> gis_learner wrote:
>> Dear All,
>>
>> I am a new comer to IDL world. Moreover I am not that good at coding.
>> Thus I need your advices,
>>
>> I want to subset images via the same roi. Images are updated every 10
>> minutes or so.
>>
>> I walked through the previous answers. And they worked fine, how ever
>> the subseted image is as big as the first one.
>>
>> I will paste the code that I combined from web.
>> Any help is appreciated
>>
>> Best REgards
>>
>> pro sbst_ia_v2
>> envi, /restore_base_save_files
>> envi_batch_init, log_file='batch.txt'
>>
>> ; define the image to be opened
>> ; pixel size is a function of selevted file
>> img_file= 'C:\RSI\IDL61\products\ENVI41\data\can_tmr.img'
>> envi_open_file,image_file, r_fid=fid
>> ;print,'r_fid=',r_fid,'fid=',fid
>> print,'fid=',fid
>>
>> name='C:\RSI\IDL61\subset_via_roi\roi1.roi'
>> envi_restore_rois,name
>> roi_ids = envi_get_roi_ids(fid=r_fid)
>> roi_addr=envi_get_roi(roi_ids)
>>
>> print, 'ROI: ', name, n_elements(roi_addr)
>> ; check the roi element number
>> ;print,'name=',name, ' roi_ids=',roi_ids
>>
>> ;for j=0,0 Do begin

```
>>  roi_data=envi_get_roi_data(roi_ids,fid=fid,pos=[0])
>>  ; print, 'roi_data'
>>  ;print, roi_data
>>  envi_get_roi_information,roi_ids,ns=ns,nl=nl
>>  print, 'ns= ',ns, '**nl=',nl
>>  roi_adresses=envi_get_roi(roi_ids)
>>
>>  out_data = intarr(ns,nl)
>>  out_data [roi_adresses]=roi_data
>>  ;print, roi_adresses
>>  ; define the area to map out
>>  ;yz_data=out_data[195:362,88:173]
>>  envi_write_envi_file,
>>  out_data,ns=ns,nl=nl,out_name='out_name',map_info=map_info
>>  ;endfor
>>  ;envi_batch_exit
>>
>>
>>
>>  end
```
