
Subject: Re: subset an image by coordinates

Posted by [Alvaro Paredes L.](#) on Sun, 20 Sep 2009 17:00:11 GMT

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On 20 sep, 10:24, Robert <robert.m...@gmail.com> wrote:

> On Sep 20, 8:12 am, Jeremy Bailin <astroco...@gmail.com> wrote:

>

>

>

>

>

>> On Sep 19, 11:14 pm, "Alvaro Paredes L." <alvaropared...@gmail.com>

>> wrote:

>

>>> Hi all

>

>>> I was searching on the web, but i didn't find an answer to my problem.

>>> I need to make a subset on an image using

>

>>> coordinates, but i can't find a way to do it. I see this method

>

>>> http://groups.google.es/group/comp.lang.idl-pvwave/browse_frm/thread/...

>>> and this other (very

>

>>> similar) <http://www.mombu.com/programming/idl/t-subset-an-image-by-roi-in-idl-...>,

>>> but don't use

>

>>> coordinates, use an evf file.

>

>>> IDL/ENVI has a widget that use only two coordinates to cut (upper-left

>>> and lower-right coordinate), but it isn't

>

>>> fully automatically.

>

>>> Is there any function to cut the image with set coordinates and save

>>> it in a new file?

>

>>> I really hope you can help me... I'm not a programmer and this

>>> sometimes it's very hard

>

>>> Thanks!

>

>>> Alvaro

>

>> Do you mean like:

>

>> newimage = oldimage[x0:x1,y0:y1]

>

```

>> ?
>
>> -Jeremy.
>
> If the original author is looking to subset by map coordinates, he
> needs to use the procedure
>
> ENVI_CONVERT_FILE_COORDINATES, FID, XF, YF, XMap, YMap
>
> to convert the corners of his image in map coordinates to file
> coordinates. Once he has the proper file coordinates, he can subset
> the image. If you give us a little more specifics of what you are
> trying to do, we can probably provide more information.
>
> r

```

Thanks for the quick help. I have an image with degrees coordinates and with the function that Robert suggested (ENVI_CONVERT_FILE_COORDINATES) i can transform coord to pixel value without problems (as the script i show below). But i try to do that Jeremy suggest, but i don't know if is it properly working (image=img_file[XF,YF]??)

```

forward_function ENVI_CONVERT_FILE_COORDINATES
pro SUBSET
envi, /restore_base_save_files
envi_batch_init, log_file='batch.txt'

```

```

; define the image to be opened
img_file='F:\IMAGE\NDVI-HDF\try\NDVI_2008_03_02.img'
envi_open_file, img_file, r_fid=fid
print, 'fid=', fid

```

```

; define coordinates to make the subset
YMap=[-32.6030694, -32.9797194]
XMap=[-71.0580916, -70.5006694]

```

```

ENVI_CONVERT_FILE_COORDINATES, FID, XF, YF, XMap, YMap

```

```

; rounds the pixel value to its closest integer.
XF=ROUND(XF)
YF=ROUND(YF)

```

```

; verify the conversion
print, 'X pixel ', XF
print, 'Y pixel ', YF

```

```
;making the subset?????  
image=img_file[XF,YF]
```

```
; Exit Envi  
envi_batch_exit  
end
```

Finally, and maybe this is a basic question, how i save this "subset"
in a .img file?

Thanks!

Alvaro
