Subject: Re: subset an image by coordinates
Posted by Robert Moss, PhD on Mon, 21 Sep 2009 19:25:30 GMT
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On Sep 21, 10:51 am, "Alvaro Paredes L." <alvaropared...@gmail.com>
wrote:
> On 20 sep, 22:27, Jeremy Bailin <astroco...@gmail.com> wrote:
>
>
>
>
>
>> On Sep 20, 1:00 pm, "Alvaro Paredes L." <alvaropared...@gmail.com>
>> wrote:
>
>>> 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 asubseton animageusing
>
>>>> > > 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_fr m/thread/...
>>>> > > and this other (very
>
>>>> > > similar) http://www.mombu.com/programming/idl/t-subset-an-image-by-ro i-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 theimagewith 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 tosubsetby map coordinates, he
>>>> needs to use the procedure
>
>>>> ENVI_CONVERT_FILE_COORDINATES, FID, XF, YF, XMap, YMap
>
>>>> to convert the corners of hisimagein map coordinates to file
>>>> coordinates. Once he has the proper file coordinates, he cansubset
>>>> theimage. 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 quickly help. I have animagewith 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
>>> proSUBSET
>>> envi, /restore_base_save_files
>>> envi_batch_init,log_file='batch.txt'
>
>>> ; define theimageto 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 thesubset
>>> 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 thesubset??????
>>> 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
>
>>  Note the colons in my example. :-)=  Instead of
>
>>   image=img_file[XF,YF]
>
>>  you probably want:
>
>>   image=img_file[XF[0]:XF[1], YF[0]:YF[1]]
>
>>  -Jeremy.
>
> Well, thanks Jeremy. I tried to do what you say but i obtain this
> error:
> "Subscript range values of the form low:high must be >= 0, < size,
> with low <= high: IMG_FILE."
>
> I have verified the order min:max in [XF[0]:XF[1], YF[0]:YF[1]], and
> try with manual input of pixels values, and isn't working... there's
> something i'm doing bad... :(
>
> Alvaro.- Hide quoted text -
>
> - Show quoted text -
```

Check first to see if your coordinates are sane; i.e. do they actually
fall within your image? Are the file coordinates between zero and the
maximum number of lines or samples? Are your map coordinates in the
proper projection?

r