
Subject: Problem with ENVI_CONVERT_File_COORDINATES

Posted by [Wasit.Weather](#) on Sun, 24 Feb 2008 16:14:47 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi,

I am having trouble to retrieve a pixel value by geographic long lats.
Following is the code. two values obtained by sample/line coordinate
and geographic long lats are different. What is wrong with my code?
Thanks

```
;=====
;Open a file using envi batch

envi_open_file, fNameInput, r_fid=fid
if (fid eq -1) then begin
    envi_batch_exit
    return
endif
;
; Open the file to read in array
OpenR, Lun, fNameInput,/Get_Lun

; Setup the values for the keywords

envi_file_query, fid, ns=ns, nl=nl, nb=nb, data_type=data_type,$
    interleave=interleave, dims=dims

Image=Make_Array(ns,nl,nb); create an array to get the values of the
image
readu, lun, Image; read the image pixel values into the array
Free_Lun, Lun

;print a pixel value by sample and rows
print, image[1040, 404, *] ;this prints pixel values for 6 bands
; this fine, correct

.....
;Retrieve a pixel value by geographic long lats
;get coordinates for image and convert to lat/lon
xcoord=116.521
ycoord= 40.1455

;change from lat/long coordinates to pixel values

ENVI_CONVERT_File_COORDINATES, fid, xF, yF,xcoord, ycoord
for nb=0, nb-1 do begin ;read multi band data
    data = ENVI_GET_DATA(fid=fid, dims=dims, pos=nb); pos is the
name of the band, 0=1st band, 5=6th band
```


> On Feb 25, 10:10 am, Pete <peter.e...@shaw.ca> wrote:
>> I would check the usage of:
>>
>>> ENVI_CONVERT_File_COORDINATES, fid, xF, yF,xcoord, ycoord
>> If I understand correctly, you are trying to get the xF and yF values
>> from the hard coded Xmap and Ymap coordinates. Therefore you would
>> use:
>>
>> output=data[xF,yF,*]
>>
>> Not sure if you need a "+" or "-" for your Degree coordinates
>> indicating North/South(Latitude) or East/West(Longitude).
>>
>> Hope this helps.
>>
>> Pete
>

Subject: Re: Problem with ENVI_CONVERT_File_COORDINATES
Posted by [Wasit.Weather](#) on Wed, 27 Feb 2008 01:04:50 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi all,
It worked. Thanks. To get pixel values by long/lats, one need to
change the coordinate to map coordinate first by calling
ENVI_CONVERT_PROJECTION_COORDINATES
then use
ENVI_CONVERT_File_COORDINATES, fid, xF, yF,xcoord, ycoord

output=data[xF,yF,*]

On Feb 26, 9:21 am, Chris Jengo <cje...@gmail.com> wrote:
> You may also want to check out ENVI_GET_SLICE, since it will allow you
> to retrieve values for all bands for a single pixel (or row of pixels)
> without having to read the entire cube into memory.
>
> Chris
