Subject: Re: how to get pixel data corresponding to some coordinates' points? Posted by Jean H. on Sat, 13 Oct 2007 17:21:08 GMT

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## highstone wrote:

- > I have a point vector file(.shp) containing a lot of weather
- > stations, how can I get corresponding pixel data from a '.img' file
- > with least works? 3q!

>

if you have envi too, you can use envi\_convert\_file\_coordinates

Jean

Subject: Re: how to get pixel data corresponding to some coordinates' points? Posted by highstone on Sun, 14 Oct 2007 01:03:08 GMT

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On Oct 14, 1:21 am, "Jean H." < jghas...@DELTHIS.ucalgary.ANDTHIS.ca> wrote:

- > highstone wrote:
- >> I have a point vector file(.shp) containing a lot of weather
- >> stations, how can I get corresponding pixel data from a '.img' file
- >> with least works? 3q!

>

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>

> Jean

to Jean,

I look up the help of ENVI, find the role of

"envi\_convert\_file\_coordinates" is to "Use this procedure to convert x,y pixel coordinates to their corresponding map coordinates". Maybe I didn't have said clearly. My vector file and raster file had the same coordinates, what I want to get is the pixels' data corresponding to these points in vector file as soon as possible.so I don't know why to use this procedure?

please forgive me for my poor knowledge,3q.

Subject: Re: how to get pixel data corresponding to some coordinates' points? Posted by Jean H. on Sun, 14 Oct 2007 01:22:00 GMT

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## highstone wrote:

- > On Oct 14, 1:21 am, "Jean H." < jghas...@DELTHIS.ucalgary.ANDTHIS.ca>
- > wrote:

- >> highstone wrote:
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- >> Jean
- > to Jean,
- > I look up the help of ENVI, find the role of
- > "envi convert file coordinates" is to "Use this procedure to convert
- > x,y pixel coordinates to their corresponding map coordinates".

By pixel coordinate, they mean the row and column number, by map coordinate, they mean the geographical coordinate (lat-long or else)

## Maybe I

- > didn't have said clearly. My vector file and raster file had the same
- > coordinates, what I want to get is the pixels' data corresponding to
- > these points in vector file as soon as possible.so I don't know why to
- > use this procedure?
- > please forgive me for my poor knowledge,3q.

Yes, the idea is, if you want to program it (maybe there is a built-in tool... I don't know... ArcGis has one for sure):

- 1)open your shape file
- 2)get the coordinates (let's say, lat-long) of each point in an array
- 3) open your image to gets its FID
- 4)call envi\_convert\_file\_coordinates, fid, X,Y, lat,long (with NO

keyword), which will change your lat-long to the corresponding pixel row and column on your image

5) extract the pixels values, using image[X,Y]

the help file for envi's function is terrible and often needs a few dozen reading before to get the code working well!

Jean

Subject: Re: how to get pixel data corresponding to some coordinates' points? Posted by d.poreh on Mon, 15 Oct 2007 07:04:46 GMT

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On Oct 14, 3:22 am, "Jean H." < jghas...@DELTHIS.ucalgary.ANDTHIS.ca> wrote:

- > highstone wrote:
- >> On Oct 14, 1:21 am, "Jean H." < ighas...@DELTHIS.ucalgary.ANDTHIS.ca>
- >> wrote:

<sup>&</sup>quot;and vice-versa"

```
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>>>> I have a point vector file(.shp) containing a lot of weather
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>>> with least works? 3q!
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>>> Jean
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> "and vice-versa"
> By pixel coordinate, they mean the row and column number, by map
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> and column on your image
> 5)extract the pixels values, using image[X,Y]
> the help file for envi's function is terrible and often needs a few
> dozen reading before to get the code working well!
>
> Jean
Hi:
There is an easy way to do this. But Jean's way is robust. Just read
your data in ENVI and follow this direction: file->save image as-
> image file. In the opened window go to *spatial subset*and choose
*map* you can easily subset your data based on lat-long or pixel base.
It is so easy.
ciao
```

Subject: Re: how to get pixel data corresponding to some coordinates' points? Posted by fanxing\_gis on Mon, 15 Oct 2007 14:48:16 GMT View Forum Message <> Reply to Message

there is an another way to resolve it, overlay your shape file on image in ENVI, then convert the active layer (your shape file) to pointed ROI and then export the ROI to ASCII, here, the pixel row and column numbers corresponding to the shape point could be found in the ASCii file.

regard	S
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fanxing