
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:

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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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"and vice-versa"

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

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> coordinates, what I want to get is the pixels' data corresponding to
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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>
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> 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

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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.

regards

fanxing
