
Subject: Re: Shape to raster

Posted by [David Fanning](#) on Wed, 26 Oct 2011 17:02:21 GMT

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Fabzou writes:

- > My apologies if this question has been posted before.
- >
- > I have a polygon vector file from which I know the coordinates within a
- > grid (subpixel precision) and I would like to make a mask from this
- > information (within the polygon = 1, outside = 0).
- >
- > The only idea I have to make this would be to use the polyfill command
- > and use the produced image as a mask. This would be easy to do, but I am
- > worried about the precision I would reach by doing so (I am concerned
- > about the line thickness, for example, and all the things that make of
- > POLYFILL and DRAW_ROI a plot routine and not a "shape to raster" routine).
- >
- > Maybe there is an IDL equivalent to the ENVI "Build mask from a ROI" tool?

I wouldn't worry about it. I'd put my polygon into an IDLanROI object and use the ComputeMask method to create the mask. I'm pretty sure this is exactly what ENVI does, or pretty close to it. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Shape to raster

Posted by [Fabzou](#) on Thu, 27 Oct 2011 09:40:55 GMT

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On 10/26/2011 07:02 PM, David Fanning wrote:

- >>
- >> Maybe there is an IDL equivalent to the ENVI "Build mask from a ROI" tool?
- >
- > I wouldn't worry about it. I'd put my polygon
- > into an IDLanROI object and use the ComputeMask
- > method to create the mask. I'm pretty sure this

> is exactly what ENVI does, or pretty close to it. :-)
>

Wow, I am just starting to realize that this IDLanROI object is going to change a lot of things in my programs!

But, as far as I understand the documentation, it only stores one entity. So, if I have many entities (often the case in my shapefiles), I have to instance many IDLanROI objects, generate a mask for all of them and then combine the masks together? Or did I miss something again?

Thanks!

Subject: Re: Shape to raster

Posted by [David Fanning](#) on Thu, 27 Oct 2011 12:30:35 GMT

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Fabzou writes:

> Wow, I am just starting to realize that this IDLanROI object is going to
> change a lot of things in my programs!
>
> But, as far as I understand the documentation, it only stores one
> entity. So, if I have many entities (often the case in my shapefiles), I
> have to instance many IDLanROI objects, generate a mask for all of them
> and then combine the masks together? Or did I miss something again?

No, you can do all this with one IDLanROI object. Simply use the MASK_IN keyword to the Compute_Mask method to pass in and modify the mask from previous polygons.

Yes, the IDLanROI object is one of those game changers in IDL, once you learn of its existence. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Shape to raster

Posted by [MarioIncandenza](#) on Thu, 27 Oct 2011 16:55:07 GMT

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On Oct 26, 12:52 pm, Fabzou <fabien.mauss...@tu-berlin.de> wrote:

> Dear IDLers,

>

> My apologies if this question has been posted before.

>

> I have a polygon vector file from which I know the coordinates within a

> grid (subpixel precision) and I would like to make a mask from this

> information (within the polygon = 1, outside = 0).

I have a routine INSIDE.PRO which does this. I don't remember where it came from, and I'm not in front of my computer to check the file, but it does the job without any ENVI nonsense.

Do a web search for it, and if it doesn't turn up, repost to this thread and I'll turn up the provenance.

--Edward H.

Subject: Re: Shape to raster

Posted by [Fabzou](#) on Mon, 31 Oct 2011 14:18:24 GMT

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Hi again,

On 10/27/2011 02:30 PM, David Fanning wrote:

> Fabzou writes:

>> But, as far as I understand the documentation, it only stores one

>> entity. So, if I have many entities (often the case in my shapefiles), I

>> have to instance many IDLanROI objects, generate a mask for all of them

>> and then combine the masks together? Or did I miss something again?

>

> No, you can do all this with one IDLanROI object. Simply

> use the MASK_IN keyword to the Compute_Mask method to

> pass in and modify the mask from previous polygons.

I ended up using IDLanROIgroup. It crashes (fatal error!) when there are too many entities (thousands of them) but this was just for a test and everything works fine in "normal" cases.

I have an other question though. How will the IDLanROI object "understand" the XY coordinates [0.5,0.5]? In my conception, these coordinates correspond to the center of the first down left pixel, but my first tests tend to show that this may not be the case...

Thanks!
