
Subject: Re: Apply a shapefile to raster images in IDL

Posted by [envi35](#) on Fri, 08 Oct 2004 18:23:47 GMT

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Hi Everyone,

Thank you very much for your reply. I've taken Lorenzo's suggestion, and it works really well. This is a great group, especially to a novice... Though just began to use IDL a couple of weeks ago, I found it is a golden mine, worthy to dig hard :-).

Best Regards to all!

Jenny

lbusett@yahoo.it (Lorenzo Busetto) wrote in message
news:<e4da268.0410070408.60d07040@posting.google.com>...

> Hi Jenny,

>

> If your images are all of the same size I think that you can solve
> your problem simply by using ENVI.

>

> 1: Open one of your images and load it in a display

> 2: Convert your shapefile to an ENVI vector file (EVF) by clicking

>> Vector > Open Vector File > Shapefile

> 3: Load your vector on the display where you have loaded your

> image (In the "available vectors list" select the vector, then click

> on "load" and then on "Display# (your_display)"

> 4: In the "Vector Parameters" window that appears, select "File >

> Export active layer to ROI"

> 5: Select "basic tools > masking > build mask" and select your

> display

> 6: Select "Options > Import ROIS", then select the ROI you created
> from your vector and click on "OK". Next, choose a name for the mask

> file that you want to create and click on "Apply". Now, in the

> "available bands list" you should see a new image, which has value 0

> outside the vector and 1 inside it.

> 7: Now, you can use this "0-1" image as a mask for your image. Go

> to Basic tools > apply mask. Select one of the images that you want to

> mask, then click on "Select mask band" and select the mask image.

> Click on "OK".

>

> If you have many images and you don't want to repeat n-times the
> last step you can use an IDL procedure that automatically opens the
> images and apply the mask on each one.

> I think that something like this should work: it's a simple

> modification of the example program that you can find on the ENVI

> User's guide.

>

> pro multiple_mask

```

>
> ; Select input files (Select all your images)
>
> files_list = dialog_pickfile(/READ,title ='Select input$
> files',/multiple_files)
>
> ; Select the mask File
>
> mask_file = dialog_pickfile(/read, title = 'Select Mask File')
> envi_open_file, mask_file, r_fid=m_fid
>
> ; Count the number of files
>
> num_files = N_elements (files_list)
>
> for count = 0, num_files-1 do begin
>
> ; Selects the n- file. Output file name is
> "input_file_name"+"-masked"
>
> in_file = files_list [count]
> out_file =files_list [count]+'-masked'
> envi_open_file, in_file, r_fid=fid
> if (fid eq -1 or m_fid eq -1) then return
>
>
> ; get some useful information and set the output filename.
> envi_file_query, fid, ns=ns, nl=nl, nb=nb, bname=bname
>
> ; Set the keyword parameters
> dims = [-1l, 0, ns-1, 0, nl-1]
> pos = lindgen(nb)
> m_pos = [0]
>
> ; Call the 'doit' to apply the mask
>
> envi_mask_apply_doit, fid=fid, pos=pos, dims=dims,m_fid=m_fid,$
> m_pos=m_pos, value=0, out_name=out_file, in_memory=0, $
> r_fid=r_fid
>
> endfor
>
> end
>
> I hadn't fully tested it, but it should work.
>
> Hope this helps,
>

```

> Lorenzo
