
Subject: Re: Batch ENVI Resize Data (Spatial/Spectral)
Posted by [Chris Jengo](#) on Fri, 04 Jun 2010 13:48:43 GMT
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RESIZE_DOIT (ENVI_DOIT, 'RESIZE_DOIT', ...) will do what you're looking for.

Subject: Re: Batch ENVI Resize Data (Spatial/Spectral)
Posted by [titan](#) on Fri, 04 Jun 2010 14:21:14 GMT
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On Jun 4, 3:48 pm, Chris Jengo <cje...@gmail.com> wrote:
> RESIZE_DOIT (ENVI_DOIT, 'RESIZE_DOIT', ...) will do what you're
> looking for.

could you please explain it better??
do I have to apply twice the 'RESIZE_DOIT' routine??

Subject: Re: Batch ENVI Resize Data (Spatial/Spectral)
Posted by [Chris Jengo](#) on Fri, 04 Jun 2010 14:34:57 GMT
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RESIZE_DOIT is the name of the procedure to look up in the ENVI help system. To call ENVI "DOIT" routines, you actually call the ENVI_DOIT procedure with the routine name (RESIZE_DOIT in this case) as an argument. The ENVI_DOIT procedure makes sure all the necessary routines are compiled, making the old-school calls to ENVI_CHECK_SAVE prior to running the DOIT routines unnecessary.

Subject: Re: Batch ENVI Resize Data (Spatial/Spectral)
Posted by [titan](#) on Fri, 04 Jun 2010 15:35:15 GMT
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Ah ok..now I understand but It seems that it doesn't work like the tab does

this is my code:

```
;; OPEN THE BIGGER IMAGE  
ENVI_OPEN_FILE, AMSRE_asc_fname, R_FID=amsre_asc_r_fid, /  
NO_INTERACTIVE_QUERY,/NO_REALIZE  
ENVI_FILE_QUERY,amsre_asc_r_fid, DIMS=amsre_asc_dims, NS=amsre_asc_ns,  
NL=amsre_asc_nl, NB=amsre_asc_nb
```

```
AMSRE_asc_img=ENVI_GET_DATA(FID=amsre_asc_r_fid,DIMS=amsre_asc_dims,  
POS=0)
```

```
AMSRE_asc_map_info=ENVI_GET_MAP_INFO(FID=amsre_asc_r_fid)
AMSRE_asc_proj=ENVI_GET_PROJECTION(FID=amsre_asc_r_fid,PIXEL
_SIZE=amsre_asc_ps)
output_pixel_size=[1000.000, 1000.000];
```

I want to resize the image where there is Italy; I did a first test using matrix inserting the sample and lines values obtained using the RESIZE tab function but the result is not correct because I find an image of 54x52x1 while using the tab resize function the file that I get is 1304x1278

```
;;----- Test using matrix: -----
AMSRE_italy=AMSRE_asc_img[715:768,72:123]
mc_italy_proj=[0.0D,0.0D,589086.84,5564990.5]
output_italy_proj = ENVI_MAP_INFO_CREATE(PROJ=AMSRE_asc_proj,
PS=output_pixel_size, MC=mc_italy_proj)
ENVI_ENTER_DATA,
AMSRE_italy,MAP_INFO=output_italy_proj,PIXEL_SIZE=output_pixel_size,$
BNAMES='AMSRE_Italy',R_FID=amsre_italy_r_fid
;;-----
```

```
italia_dims=LONG([-1,0,1303,0,1277])
italy_r_fact=[1.0,1.0]
ENVI_DOIT, 'RESIZE_DOIT', FID=amsre_asc_r_fid, DIMS=italia_dims,
POS=0,$
INTERP=0, RFACT=italy_r_fact, /IN_MEMORY,
R_FID=italy_resize_r_fid
```

Using the RESIZE DOIT how can I tell ENVI to take only the part that I need obtaining a file of 1304x1278??
I hope that I'm clear..

thank you

Subject: Re: Batch ENVI Resize Data (Spatial/Spectral)
Posted by [Chris Jengo](#) on Fri, 04 Jun 2010 18:31:28 GMT
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To subset using map coordinates, you first need to convert your map coordinates into pixel coordinates for the image of interest. Create an array containing the lat/lon coordinates for a box containing Italy (or whatever map subset you want), and push these through ENVI_CONVERT_FILE_COORDINATES to retrieve their respective pixel coordinates. Then construct your DIMS vector to RESIZE_DOIT by finding the min and max boundaries of the returned vertices (in pixel coordinates) that form a polygon.

Subject: Re: Batch ENVI Resize Data (Spatial/Spectral)

Posted by [titan](#) on Mon, 07 Jun 2010 14:52:21 GMT

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On Jun 4, 8:31 pm, Chris Jengo <cje...@gmail.com> wrote:

> To subset using map coordinates, you first need to convert your map
> coordinates into pixel coordinates for the image of interest. Create
> an array containing the lat/lon coordinates for a box containing Italy
> (or whatever map subset you want), and push these through
> ENVI_CONVERT_FILE_COORDINATES to retrieve their respective pixel
> coordinates. Then construct your DIMS vector to RESIZE_DOIT by
> finding the min and max boundaries of the returned vertices (in pixel
> coordinates) that form a polygon.

Maybe I found another way:

;; Matrix test

asc_proj=ENVI_GET_PROJECTION(FID=asc_r_fid,PIXEL_SIZE=asc_ps)

italy=asc_img[715:768,72:123]

italy_r_fact=[0.041397525,0.040697525]

output_pixel_size=[1000.000, 1000.000]

mc_italy_proj=[0.0D,0.0D,589086.84,5564990.5]

output_italy_proj = ENVI_MAP_INFO_CREATE(PROJ=asc_proj,

PS=output_pixel_size, MC=mc_italy_proj)

;; Enter the subset of Italy

ENVI_ENTER_DATA,

italy,MAP_INFO=output_italy_proj,PIXEL_SIZE=output_pixel_size,\$

BNAMES='Italy_file',R_FID=italy_r_fid

ENVI_FILE_QUERY,italy_r_fid,DIMS=italy_res_data_dims

; Resize_doit it in order to see it bigger

ENVI_DOIT, 'RESIZE_DOIT', FID=italy_r_fid, DIMS=italy_res_data_dims,

POS=0,\$

INTERP=0, RFACT=italy_r_fact,

OUT_BNAME='Italy',/IN_MEMORY, R_FID=italy_resize_r_fid

ENVI_FILE_QUERY,italy_resize_r_fid,DIMS=italy_resize_dims,

NS=italy_resize_ns, NL=italy_resize_nl, NB=italy_resize_nb

;;-----

so the trick was in the RFACT value!! setting the proper value I can
start from the 54x52 image and then I get the 1304x1278 image

It seems correct to me also comparing the result with the file that I
get manually..

What do you think?

PS In any case thanks for your support!!
