
Subject: RE: RE trying to export pixel data from .dat files, based on coordinate loc
Posted by [Snow53](#) on Tue, 13 Jul 2010 18:40:38 GMT

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Ok, I modified the code to just run off IDL (not calling ENVI) to get around the need for .hdr and everything is working, but with one problem. It runs great with up to six files. but then runs out of luns after that. I'm wondering if the problem lies in the file array (since 1000 files are named in the array). Any advice for how to fix this problem?

Thanks once again.

```
pro extractpixel_2
```

```
;define path
```

```
cd, 'X:\MERRA\HDF_Output_Lena\Surf_Pressure\'
```

```
;open first envi file, with associated .hdr, and gets pixel  
coordinates based on user input geographic lat long coordinates.
```

```
envi_open_file, 'Surf_MERRA300.prod.assim.tavg1_2d_flux_Nx.  
20030101.SUB.dat', r_fid=fid, /NO_REALIZE
```

```
;convert x,y map coordinates to corresponding pixel coordinates. note  
that xmap and ymap can be single values or arrays if  
needed to extract info for multiple pixels.
```

```
XMap=[126.30]
```

```
YMap=[72.22]
```

```
ENVI_CONVERT_FILE_COORDINATES, fid, XF, YF, XMap, YMap
```

```
XF_out=Round(XF)
```

```
YF_out=Round(YF)
```

```
;print, 'x pix', XF_out ; use this to check output location  
coordinates. remember that IDL starts at 0,0 for map coordinates,  
while envi uses 1,1.
```

```
;print, 'y pix', YF_out
```

```
envi_file_mng, delete
```

```
;generates a list of the .dat files in the folder
```

```
file_array=file_search('*.dat', count=num_file)
```

```
file=file_array
```

```
print, num_file
```

```
;print, file
```

```
; loops through and extracts pixel data based on the above-determined  
pixel location.
```

```
for i=0, num_file-1 do begin  
  data_array = fltarr(89, 56, 1)  
  openr, lun1, file[i], /get_lun  
  readu, lun1, data_array  
  close, lun1  
  free_lun, lun1
```

```
  pixel = data_array[XF_out, YF_out, 0]
```

```
;open text file to write data to. modify this to use write_csv  
(although this can only write 8 columns-decide if this might be  
;problem for future application.
```

```
OPENU, U, 'Lena_surf_pressure.csv', /get_lun, /append  
;write data  
printf, U, pixel  
;close LUN  
close, U
```

```
endfor  
end
```
