Subject: Re: ENVI IDL script stops running abruptly
Posted by raghuram on Fri, 16 Jan 2009 00:08:39 GMT
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On Jan 15, 3:35 pm, Raghu <raghuram.narasim...@gmail.com> wrote:
> Hi all,
>
> I am running an IDL script with ENVI routines to automatically read in
> daily (Day of year) MODIS tiles, import layers and mosaic them
> together. The script works fine for about 5-6 iterations but at the
> 7th or 8th iteration, the MOSAICKING part of the script stops
> abruptly. I thought it was a memory related issue, or something to do
> with the number of FIDs that are open. So, i used the envi_file_mng
> function to make sure i don't use FIDs when not required. But it
> doesn't seem to have solved the problem. **If i close the program and
> open it, the script works for about 5-6 iterations again. So, the
> problem doesn't seem to be with the files but maybe something to do
> with memory or some other issue i'm not able to figure out.
> In brief, I am importing 6 MODIS tiles using the convert_MODIS_data
> procedure, and then using georeference-based mosaic.
> In the following code, the FOR loop at the beginning sets the
> iteration starting from day of year (DOY) 088 and is supposed to end
> at 097. However, the script (the mosaic section) stops running at 095.
> The imports run without a problem. If i close the program and reset
> the start of FOR loop to 095 and end to 105, it runs till about 101
> and stops. Initially i thought it was a systematic error with 6 files
> running each time but there are cases when 7 files run. So, it is
> quite random.
>
> Here's my code. I have put in some comments which i hope will help
> locate where the problem is occuring.
>
> pro A_Z
> compile_opt idl2
>
> ENVI, /RESTORE_BASE_SAVE_FILES
> ENVI_BATCH_INIT
>
> startDOY=088
> finishDOY=097
>
> for date=startDOY,finishDOY do begin
> range=finishDOY-date
>
> ;print,'Processing MODIS images of DOY',date
>
> input_path='I:\MODIS_snow\2008_snowhdfs\'
> dir=input_path

```
>  cd,dir
>   files=FILE_SEARCH('MOD10A1*'+strtrim(string(date,format='(I0 3)'),
>  2)+'.h*.hdf',count=num_inputfiles)
>
>  ;print,numfiles
>  output_path = 'I:\ASR_outputs\'
>
>  ;MODIS grid file
>  format='MOD10A1.A2005145.h10v02.005.2008031132120.hdf'
>  ;START IMPORTING MODIS LAYERS
>  for i=0,num_inputfiles-1 do begin
>  grid_file=files[i]
>  output_rootname = 'snowinputs_'+strtrim((strmid(grid_file,
>  9,7)+'_'+strmid(grid_file,17,6)),2)+'_'
>  year=strmid(grid_file,9,4)
>  grid_name = 'MOD_Grid_Snow_500m'
>  sd_names = ['Fractional_Snow_Cover','Snow_Albedo_Daily_Tile']
>  out_method = 0
>  convert_modis_data,in_file=grid_file, $
>  out_path=output_path, out_root=output_rootname, $
>  /higher_product, /grid, gd_name=grid_name, sd_names=sd_names, $
>  out_method=out_method,background=255, fill_replace_value=255
>  endfor
>
>  cd,output_path
>   inputs=file_search('snowinputs*'+strtrim(string(date,format= '(I03)'),
>  2)+'*.img',count=inputfiles)
>  fids=lindgen(inputfiles)
>  print,'inputfiles',inputfiles
>  for i=0,inputfiles-1 do begin
>  envi_open_file,inputs[i],r_fid=afile
>  fids[i]=afile
>  endfor
>
>  numfiles=n_elements(fids)
>
>  ;**********************THE code stops at this
>  point*************************************
>  if numfiles eq 6 then begin
>  ;*******START MOSAIC
>  pos=[[0,1],[0,1],[0,1],[0,1],[0,1],[0,1]]
>  out_ps=[[463.31271653,463.31271653]]
>  use_see_through = [[1L],[1],[1],[1],[1],[1]]
>  see_through_val = [[0L],[0],[0],[0],[0],[0]]
>  bandnames=['Fractional snow cover','Snow albedo']
>  ;out_name=input_path+'mosaicking'+strtrim(date,2)+'.dat'
>
>  georef_mosaic_setup, fids=fids, out_ps=out_ps, dims=dims, xsize=xsize,
```

> ysize=ysize,$
> x0=x0, y0=y0, map_info=map_info
>
> envi_doit,'mosaic_doit',fid=fids,pos=pos,dims=dims,/
> in_memory,x0=x0,y0=y0,background=0,out_dt=2,map_info=map_inf o,/georef,
> $
> xsize=xsize,ysize=ysize,pixel_size=out_ps,see_through_val=se
e_through_val,u-se_see_through=use_see_through,out_bname=ba ndnames,r_fid=mosaic
>
> ;******REMOVE FIDS AND DELETE INPUTS
> for i=0,numfiles-1 do begin
> envi_file_mng,id=fids[i],/remove,/delete
> endfor
>
> endif
> print,'processing is done'
> end
>
> Please let me know if you need more information.
>
> Thanks,
> Raghu

Hello,

Sorry for the really long email. I solved the issue.
I had set the keyword /in_memory in the mosaic function. So obviously
accumulation of memory was the issue.

Thanks,
Raghu
