
Subject: MOD43B3 Col.4 Processing. unexpected error message. why?

Posted by [kim20026](#) on Mon, 09 Jul 2007 17:46:19 GMT

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Good day, everyone. Even though I am still in the swamp and my previous question on MOD04 is left unsolved, I have to process MOD43B3 albedo product. I am trying to make image files from MOD43B3 hdf files now.

I did this way so far.

0. Variable (initialization/declaration)

1. Get hdf file info.

2. Input map info (sin projection)

3. Convert SIN to TM Korea

There was no problem in making images with one variable (black sky albedo), and then I added another similar variable, white sky albedo, in my new simulation. (This part is commented out and labeled as part1 and part2)

However, I got unexpected error messages shown below.

Envi retrieve data: An error has occurred during processing.

Error: "Array dimensions must be greater than 0". The result may be invalid.

These messages are too broad for me and I don't know how to handle this. In addition, the 'Envi_retrieve_data' must be an internal function... something like that. I cannot find this function in ENVI help.

Any suggestions?

Harry

PRO MOD43B3_MakeImage_1km_03

; 0. Variable (initialization/declaration)

WorkDir = 'd:\MODIS_TSrad\MODIS_ALL\'

WorkDirOut = 'd:\MODIS_TSrad\MODIS43\Processed\'

batch_st = strcompress(WorkDir + 'batch_MOD43_TSrad.txt', /remove_all)

WorkDirSat = 'D:\MODIS_TSrad\MODIS43\MOD43\'

StrMOD = 'MOD43'

```

OpenR, lun, batch_st, /Get_Lun
numdates =file_lines(batch_st)
Dates = StrArr(numdates)

; Read input dates from batch file

OpenR, lun, batch_st, /Get_lun
ReadF, lun, Dates

Free_Lun, lun, /force

close, /all

FOR j = 0L, numDates-1 DO BEGIN

    ;-----
    ----

    print, "Now processing MOD43 data from date: ", Dates[j], '
File ', j+1, ' out of ', numDates, $
        ' overpassing time. '

; 0. Get hdf file info.

    Filename    = WorkdirSat+Dates[j]
    FileID      = HDF_OPEN(filename, /Read)
    sdFileID    = HDF_SD_Start(filename, /Read) ;The returned
value of this function is the SD ID of the HDF file
    sdsID_albedo = HDF_SD_Select(sdFileID, 0) ; Albedo
    sdsID_qc     = HDF_SD_Select(sdFileID, 1) ; QC

    hdf_sd_getdata, sdsID_albedo, albedo
    hdf_sd_getdata, sdsID_qc, qc

;print, 'j = ', j
;help, albedo, qc

    albedo_black = fltarr(1200, 1200)
    albedo_white = fltarr(1200, 1200)
    qc1 = ulonarr(1200, 1200)
    qc2 = ulonarr(1200, 1200)

    albedo_black[*,*]=albedo[0, 9, *,*]
    albedo_white[*,*]=albedo[1, 9, *,*]

    qc1[*,*] = qc[0,*,*]
    qc2[*,*] = qc[1,*,*]

```

```
;help, albedo_black, albedo_white, qc1, qc2
```

[illegible]

; 1. Input map information (SIN)

```
mc=[0.5, 0.5, 11119968.509D, 4447338.766D]
ps=[926.6254331D, 926.6254331D]
units =envi_translate_projection_units('Meters')
params1=[6371007.181D, 0, 0, 0]
Projection_Name1 = 'SIN_MODIS'
map_info = ENVI_MAP_INFO_CREATE(type=16, name=Projection_Name1,
params=params1, $
    UNITS = units, MC = mc, PS = ps)
```

```
ENVI_WRITE_ENVI_FILE, albedo_black,
out_name='albedo_black_map_4.img', map_info=map_info, out_dt=4,$
r_fid=albedo_black_map, sensor_type=32
```

```
envi_file_query, albedo_black_map, ns=ns, nl=nl, nb=nb
dims = [-1, 0, ns-1, 0, nl-1]
pos_albedo_black = lindgen(nb)
```

```

;
=====
=====
; Part 1
; ENVI_WRITE_ENVI_FILE, albedo_white,
out_name='albedo_white_map_4.img', map_info=map_info, out_dt=4,$
; r_fid=albedo_white_map, sensor_type=32
;
;
; envi_file_query, albedo_white_map, ns=ns, nl=nl, nb=nb
; dims = [-1, 0, ns-1, 0, nl-1]
; pos_albedo_white = lindgen(nb)
;
;
=====
=====
; 2. Convert SIN to TM Korea
; Names of MODIS products

```

```

; MOD43B3.A2002177.h28v05.004.2003246195929.hdf

StrDate = STRMID(Dates[jj], 9, 7)
StrSat = STRMID(Dates[jj], 0, 7)

out_name_albedo_black = WorkDirOut+StrSat+'\'+StrDate+'\'+StrDate
+'_albedo_black_1km_4'+'.img'
out_name_albedo_white = WorkDirOut+StrSat+'\'+StrDate+'\'+StrDate
+'_albedo_white_1km_4'+'.img'

DATUM = 'Tokyo mean'
Projection_Name2= 'Korea - TM (Middle)'
Params2 = [6377397.2, 6356079.0, 38.000000D, 127.002890D,
200000.0, 500000.0, 1.000000]

OUT_Proj = ENVI_PROJ_CREATE(type=3, name=Projection_Name2,
datum=Datum, params=Params2)

envi_convert_file_map_projection, fid=albedo_black_map,
pos=pos_albedo_black, dims=dims, o_proj=OUT_Proj, $
o_pixel_size=[1000, 1000], out_name=out_name_albedo_black,
warp_method=2, r_fid=albedo_black_TM, $
resampling=0, background=0

envi_file_query, albedo_black_TM, ns=ns, nl=nl, nb=nb
dims = [-1, 0, ns-1, 0, nl-1]
pos_albedo_black_TM = lindgen(nb)

;
=====
=====
; part 2
; envi_convert_file_map_projection, fid=albedo_white_map,
pos=pos_albedo_white, dims=dims, o_proj=OUT_Proj, $
; o_pixel_size=[1000, 1000], out_name=out_name_albedo_white,
warp_method=2, r_fid=albedo_white_TM, $
; resampling=0, background=0

; envi_file_query, albedo_white_TM, ns=ns, nl=nl, nb=nb
; dims = [-1, 0, ns-1, 0, nl-1]
; pos_albedo_white_TM = lindgen(nb)
;
=====
=====

;-----
; Cleaning memory
;envi_file_mng, id= albedo_black_map, /remove

```

```
;envi_file_mng, id= albedo_white_map, /remove  
;-----  
; Done with SDS, close the interface  
HDF_SD_ENDACCESS, SDSID_albedo
```

```
HDF_SD_END, sdFileID  
HDF_Close, FileID
```

```
Close, /all, /force
```

```
ENDFOR  
print, "C'est si bon! C'est fini!!!"  
Free_Lun, lun, /force  
close, /all
```

```
END
```
