
Subject: Assimilating three files considering their DOY and overpassing time

Posted by [kim20026](#) on Thu, 09 Aug 2007 08:54:26 GMT

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G'day, Everyone...!

I made a souce code. It just runs without error messages, but it's not yet working properly.

What I am trying to do now is to assimilate two files based on its day of year (DOY) and overpassing time (Time). In order to do this... I...

0) prepared an array: `total_array = fltarr(13, num_MYD07)`

Column 1~9 : for MYD07

Column 10~11 : for MYD04

Column 12~13 : for MCD43

1) compared the DOY and overpassing time between three data files.

1.1) Read MYD07 first because this file has the largest number of lines

among three.

1.2) Then read MYD04 and compared DOY and Time between them.

- If the contents of DOY and Time of those two files were identical ->

then added MYD04 values into column 10 and 11.

- If the DOY and Time of MYD07 were not found in MYD04, then add -99.99 to each column.

1.3) Do the same for MCD43 into column 12 and 13.

2) made an output file.

I coded as shown below. Currently the biggest problem is that IDL is only printing the last line into the designated output file.

Please take a look at this code and give my any comments/suggestions. Thank you in advance.

Harry

```
pro Match_MYD_080907 ; using readcol
```

```
close, /all  
WorkDir = 'D:\OUTPUT\Site72\  
site_num = 72
```

```
for id=0, 3 do begin ;site_num-1 do begin
```

```
;------
```

```
;  
;=====
```

```
;Counting the number of lines
```

```
;=====
```

```
MYD07 = strcompress(WorkDir + 'MYD07_all_data_TEST_' + string(fix(id  
+1)) + '.txt',/remove_all)  
MYD04 = strcompress(WorkDir + 'MYD04_output0801_' + string(fix(id+1))  
+ '.txt',/remove_all)  
MCD43 = strcompress('D:\MODIS_ALL\MCD43_output_' + string(fix(id+1))  
+  
' .txt',/remove_all)
```

```
num_MYD07 = file_lines(MYD07)  
num_MYD04 = file_lines(MYD04)  
num_MCD43 = file_lines(MCD43)  
;output file  
MYD_match = strcompress('MYD_match_TEST' + string(fix(id+1)) +  
' .txt',/  
remove_all)
```

```
Readcol, MYD07, format='I, I, I, F, X, F, F, F, I', year, doy,  
time, Ta, OZ, PTOT, PWC, SOLZA, ClearPix  
Readcol, MYD04, format='A, F, F, F', FileName04, AOT1, AOT2, AOT3  
Readcol, MCD43, format='A, F, F', FileName43, bsa, wsa
```

```
; ===== The contents of each input file  
=====
```

```
; MYD07 -  
; year(int:0), doy(int:1), time(int:2), Ta(flt:3), Ea(flt:4),
```

```

oz(flt:
5), ptot(flt:6),pwc(flt:7),solza(flt:8), clearPix(9), $
; year(0, doy, time+900, Ta, Ea OZ, PTOT
PWC, SOLZA ClearPix
;
; MYD04 -
; filename(Str:0), AOT1(Flt:1), AOT1(Flt:2), AOT1(Flt:3)
;
;MCD43 -
; filename(Str:0), bsa(Flt:1), wsa(Flt:2)
;
;
=====
=====

```

```

total_array = fltarr(13, num_MYD07)
for i=0, num_MYD07-1 do begin
openw, write_lun, MYD_match, /Get_Lun
total_array[0, i] = year[i]
total_array[1, i] = DOY[i]
total_array[2, i] = time[i]
total_array[3, i] = Ta[i]
total_array[4, i] = Oz[i]
total_array[5, i] = PTOT[i]
total_array[6, i] = PWC[i]
total_array[7, i] = Solza[i]
total_array[8, i] = ClearPix[i]

```

```

check1 = 0
check2 = 0

```

```

for k=0, num_MYD04-1 do begin
if (DOY[i] eq strmid(FileName04[k],9,11)) and (Time[i] eq
(strmid(FileName04[k], 13, 16))+900) then begin
total_array[ 9,i] = AOT1[k]
total_array[10,i] = AOT2[k]
check1=1

endif
endifor
if check1 eq 0 then begin
total_array[ 9,i] = -99.99
total_array[10,i] = -99.99

```

```

endif
check1=0

for j = 0, num_MCD43-1 do begin
    if (DOY[i] eq strmid(FileName43[j],9,11)) and (Time[i] eq
(strmid(FileName43[j],13,16))+900) then begin
        total_array[11,i] = bsa[j]
        total_array[12,i] = wsa[j]
        check2=1

    endif
endfor
if check1 eq 0 then begin
    total_array[11,i] = -99.99
    total_array[12,i] = -99.99
endif
check2 = 0

; year(int:0), doy(int:1), time(int:2), ta(flt:3), oz(flt:4),
ptot(flt:
5),pwc(flt:6),solza(flt:7), clearPix(int:8), $
; aot1(flt:9),aot2(flt:10), bsa,(flt:11), wsa(flt:12)

    printf, write_lun, format='(3(F7.1, 2x), 5(F9.2, 2X), F3.1,
2x, 4(F8.2, 2X))', total_array[0:12,i]
    Free_lun, write_lun
endfor

endfor
print, "It's OK!"

end

```
