
Subject: Read ASCII time format question!!

Posted by [zolile mtumela](#) on Thu, 16 Oct 2014 17:48:05 GMT

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Hi all,

I have a problem with the time format, I can plot but When I am print the time I got a float values. I would like to get time like 16:10 (hh:mm).

I tried to use strsplit for time but I am not winning. My problem is to be able to do time right.

Any suggestion will be appreciated! thanks in advance.

```
File = Dialog_PickFile(Filter='*.txt')
```

```
nrows =file_lines(file)
```

```
Date_array = 0
```

```
time_array = 0
```

```
Bx_array = 0
```

```
By_array = 0
```

```
Bz_array = 0
```

```
str = "
```

```
openR, Lun, File,/Get_Lun
```

```
readf, Lun, str
```

```
while~eof(lun) do begin
```

```
readf,lun,str
```

```
readf,lun,date,time,Bx,By,Bz;
```

```
time_str =strsplit(str,"/extract)
```

```
time =strsplit(time_str(1),':',/extract)
```

```
hour=FIX(time(0)) & minutes=FIX(time(1)) & seconds=FIX(time(2))
```

```
print,hour
```

```
stop
```

```
;;FORMAT='(A10,1X,A12,3(16X,d0))'
```

```
;thabo
```

```
;time_str=strsplit(time,':',/extract)
```

```
;plittime = STRSPLIT(time[1], ':', /EXTRACT)
```

```
;print, splitime
```

```
;stop
```

```
;str1=strsplit(str,"/extract)
```

```
;time_str =strsplit(str1[1],':',/extract)
```

```

;time =float(time_str[0])+float(time_str[1])/60.+float(time_str[2] )/360.
;print,time

;print,date,time,Bx,By,Bz
;time_array =[time_array,time]

Bx_array = [Bx_array, Bx]
By_array = [By_array, By]
Bz_array = [Bz_array, Bz]
endwhile
free_lun,lun

    ;time_array=time_array[1:*]

    Bx_array=Bx_array[1:*]
    By_array=By_array[1:*]
    Bz_array=Bz_array[1:*]

    ;print,time_array,Bx_array
    ;plot,time_array,Bx_array
    stop

stop
;Nx = n_elements(Bx_array)
;time = findgen(Nx)
;time = time/(Nx/2)

;Ny = n_elements(By_array)
;time = findgen(Ny)
;time = time/(Ny/2)

;Nz = n_elements(Bz_array)
;time = findgen(Nz)
;time = time/(Nz/2)

Smoothed1 = smooth(Bx_array,3)
Smoothed2 = smooth(By_array,3)
Smoothed3 = smooth(Bz_array,3)

NN1=n_elements(smoothed1)
NN2=n_elements(smoothed2)
NN3=n_elements(smoothed3)
print, smoothed1
print, NN1,NN2,NN3

```

Data example

23-03-2002	16:11:33.000	1.57100	-8.41400	-4.89800
23-03-2002	16:11:49.000	1.57200	-8.60200	-4.59500
23-03-2002	16:12:05.000	1.00100	-8.48400	-5.06300
23-03-2002	16:12:21.000	0.806000	-8.38700	-5.26600

I would like to print it to file

Time Bx By Bz

16.10 1.57

Thankx

Subject: Re: Read ASCII time format question!!

Posted by [David Fanning](#) on Thu, 16 Oct 2014 21:02:08 GMT

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zolilemtumela@gmail.com writes:

> I have a problem with the time format, I can plot but When I am print the time I got a float values. I would like to get time like 16:10 (hh:mm).
> I tried to use strsplit for time but I am not winning. My problem is to be able to do time right.
> Any suggestion will be appreciated! thanks in advance.

Here is how I would do it. I put your example data into a file I named "time_test.txt".

```
,*****  
filename = 'time_test.txt'
```

```
; Read the data in the file into strings.  
rows = File_Lines(filename)  
data = StrArr(rows)  
OpenR, lun, filename, /Get_Lun  
ReadF, lun, data  
Free_Lun, lun
```

```
; Set up output data arrays.  
bx_array = FltArr(rows)  
by_array = FltArr(rows)  
bz_array = FltArr(rows)  
hour = IntArr(rows)  
minute = IntArr(rows)
```

```
; Parse each row and print it out in the correct format.  
FOR j=0,rows-1 DO BEGIN  
    date = StrMid(data[j], 0, 9)  
    time = StrMid(data[j], 11, 23)  
    subString = StrMid(data[j], 24)
```

```

ReadS, subString, bx, by, bz
parts = StrSplit(time,':', /Extract)
hour[j] = Fix(parts[0])
minute[j] = Fix(parts[1])
bx_array[j] = bx
by_array[j] = by
bz_array[j] = bz
Print, String(hour[j],Format='(I2.2)') + '.' + $
      String(minute[j],Format='(I2.2)'), $
      bx_array[j], by_array[j], bz_array[j], $
      FORMAT='(A5, 2x, 3(F0.5, 2x))'
ENDFOR

END
;*****

```

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: Read ASCII time format question!!

Posted by [zolile mtumela](#) on Fri, 17 Oct 2014 06:56:05 GMT

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On Thursday, October 16, 2014 7:48:07 PM UTC+2, zolile...@gmail.com wrote:

> Hi all,

>

> I have a problem with the time format, I can plot but When I am print the time I got a float values. I would like to get time like 16:10 (hh:mm).

>

> I tried to use strsplit for time but I am not winning. My problem is to be able to do time right.

>

> Any suggestion will be appreciated! thanks in advance.

>

>

>

> File = Dialog_PickFile(Filter='*.txt')

>

>

>

> nrows =file_lines(file)

>

```

>
>
> Date_array = 0
>
> time_array = 0
>
> Bx_array = 0
>
> By_array = 0
>
> Bz_array = 0
>
>
>
> str = "
>
>
>
> openR, Lun, File,/Get_Lun
>
> readf, Lun, str
>
> while~eof(lun) do begin
>
>
>
> readf,lun,str
>
> readf,lun,date,time,Bx,By,Bz;
>
> time_str =strsplit(str,"/extract)
>
> time =strsplit(time_str(1),':',/extract)
>
> hour=FIX(time(0)) & minutes=FIX(time(1)) & seconds=FIX(time(2))
>
>
>
> print,hour
>
> stop
>
>
>
>
>
> ;,FORMAT='(A10,1X,A12,3(16X,d0))'
>

```

```

>
>
> ;thabo
>
> ;time_str=strsplit(time,':',/extract)
>
>
>
>
>
> ;plittime = STRSPLIT(time[1], ':', /EXTRACT)
>
>
>
> ;print, splitime
>
> ;stop
>
> ;str1=strsplit(str, "/extract)
>
> ;time_str =strsplit(str1[1],':',/extract)
>
> ;time =float(time_str[0])+float(time_str[1])/60.+float(time_str[2] )/360.
>
> ;print,time
>
>
>
> ;print,date,time,Bx,By,Bz
>
> ;time_array =[time_array,time]
>
>
>
> Bx_array = [Bx_array, Bx]
>
> By_array = [By_array, By]
>
> Bz_array = [Bz_array, Bz]
>
> endwhile
>
> free_lun,lun
>
>
>
> ;time_array=time_array[1:*]
>

```

```
>
>
> Bx_array=Bx_array[1:*]
>
> By_array=By_array[1:*]
>
> Bz_array=Bz_array[1:*]
>
>
>
> ;print,time_array,Bx_array
>
> ;plot,time_array,Bx_array
>
> stop
>
>
>
>
> stop
>
> ;Nx = n_elements(Bx_array)
>
> ;time = findgen(Nx)
>
> ;time = time/(Nx/2)
>
>
>
>
> ;Ny = n_elements(By_array)
>
> ;time = findgen(Ny)
>
> ;time = time/(Ny/2)
>
>
>
> ;Nz = n_elements(Bz_array)
>
> ;time = findgen(Nz)
>
> ;time = time/(Nz/2)
>
>
>
> Smoothed1 = smooth(Bx_array,3)
>
```

```

> Smoothed2 = smooth(By_array,3)
>
> Smoothed3 = smooth(Bz_array,3)
>
>
>
> NN1=n_elements(smoothed1)
>
> NN2=n_elements(smoothed2)
>
> NN3=n_elements(smoothed3)
>
> print, smoothed1
>
> print, NN1,NN2,NN3
>
>
>
>
>
>
>
> Data example
>
> 23-03-2002 16:11:33.000  1.57100    -8.41400    -4.89800
>
> 23-03-2002 16:11:49.000  1.57200    -8.60200    -4.59500
>
> 23-03-2002 16:12:05.000  1.00100    -8.48400    -5.06300
>
> 23-03-2002 16:12:21.000  0.806000   -8.38700    -5.26600
>
>
>
> I would like to print it to file
>
> Time  Bx By Bz
>
> 16.10 1.57 ... ...
>
> Thankx
Thank you so much, It works, thanks again!!

```

Subject: Re: Read ASCII time format question!!
 Posted by [greg.addr](#) on Fri, 17 Oct 2014 08:24:05 GMT
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> I have a problem with the time format, I can plot but When I am print the time I got a float values. I would like to get time like 16:10 (hh:mm).

Here's an alternative solution using time format codes:

```
pro tmp_time
  f="d:\mydocs\tmp\time_test.txt"
  n=file_lines(f)

  t=0d
  b=fltarr(3)

  print,"Time  Bx By Bz"

  openr,1,f
  for i=0,n-1 do begin
    readf,1,t,b,format="(C(CDI,x,CMOI,x,CYI,x,CHI,x,CMI,x,CSF,x),3g0) )"
    print,t,b,format=('(C(CHI2,".",CMI2,x),3(f0.2,x))')
  endfor
  close,1

end
```

If you read time like this, you'll also solve your next problem... how to make a plot/calculation using the data.

cheers,
Greg
