
Subject: Re: problem with reading formatted file
Posted by [David Foster](#) on Fri, 10 Oct 1997 07:00:00 GMT
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Martin Schultz wrote:

```
>
> Pavel Eiges wrote:
>>
>> Hello!
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>> i'm new in IDL programming so my question may be very
>> dumb/simple/funny/etc but i cant solve this problem by myself.
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>> i have a formatted file like this:
>> =====
>> 1877383765 1.778
>> 1877384765 1.685
>> 1877385765 1.599
>> 1877386765 1.599
>> 1877387765 1.685
>> =====
>> and i need to load it into two arrays. the first array is LONG-type,
>> the second one - FLOAT-type. How i can do this?
>> ("READF, file, Time, Data" does not work).
>>
```

Here's a real easy and efficient way to do this. First, create a structure{} containing the variables from one row, and then you can either:

1. If you know the number of lines in the file, create an array of structures and read the file in one read;

```
st = {time: 0L, data: 0.0}
st_array = replicate( st, n_lines )
openr, unit, Filename, /get_lun
readf, unit, st_array
free_lun, unit
```

2. Otherwise, read the file one line at a time, testing for EOF.

```
st = {time: 0L, data: 0.0}
st_array = replicate( st, 1000 )
openr, unit, Filename, /get_lun
temp1 = 0L
temp2 = 0.0
i = 0
while (not EOF(unit)) do begin
```

3. Or alternatively you could use some of my routines as follows:

This is a useful technique if the data-file has delimiting characters. In this case you just have to increment POS to pass over the delimiter. Alternatively, you can read each variable as a string, using the delimiter (in this case either ',' or ';') to define the fields:

You can download FILE_STRARR.PRO and GET_TOKEN.PRO from:

Hope this helps.

—

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Subject: Re: problem with reading formatted file
Posted by [Martin Schultz](#) on Fri, 10 Oct 1997 07:00:00 GMT
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> %-\\ HELP!  
>  
> Pavel Eiges
```

You must specify a format='(...)' statement with the READF command. In your case thi swoul db something like

```
READF,file, time, data, format='(3X,i10,f9.3)'
```

Also, because time is a long variable, you may have to assign it to a long value before you call READF, e.g. time=0L (well, you don't have to: IDL converts it into a float if you don't. But this way you can save it as a long variable if you like to).

Cheers,
Martin.

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Subject: Re: problem with reading formatted file
Posted by [rivers](#) on Sat, 11 Oct 1997 07:00:00 GMT

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In article <343f0158.1848870@news-server>, ccampo1@nospamsan.nospamrr.com (Chris and Cathy Campo) writes:

> On Fri, 10 Oct 1997 19:25:54 +0300, Pavel Eiges <eiges@chat.ru> wrote:

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>

> try this:

> n=5

> time = lonarr(n)

> data = fltarr(n)

> for i = 0, n-1 do begin

> readf,file, time(i), data(i)

> endfor

No, this will not work!!! You cannot read into a subscripted array element, because time(i) is passed by "value" rather by "reference" to readf.

The simplest way to solve the problem is as follows:

n=5

time = lonarr(n)

data = fltarr(n)

temp = fltarr(2, n)

readf, file, temp

```
time(*) = temp(0,*)
data(*) = temp(1,*)
```

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Posted by [ccampo1](#) on Sat, 11 Oct 1997 07:00:00 GMT
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try this:

```
n=5
```

```
time = lonarr(n)
```

```
data = fltarr(n)
```

```
for i = 0, n-1 do begin
```

```
  readf,file, time(i), data(i)
```

```
endfor
```

Subject: Re: problem with reading formatted file
Posted by [Clemens v. Mann](#) on Thu, 16 Oct 1997 07:00:00 GMT
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Hi

there is an other possibility for the problem,
when the float has no dot (format problem) :

```
str_chr = { str_chr, L:", F:"}  
str_chr_arr = replicate( { str_chr}, lines)
```

```
// read in as characters  
readf, fd, str_chr_arr, format = '(A15, A8)'
```

```
str = { str, L:0L, F:0.0}  
str_arr = replicate( { str}, lines)
```

```
// no needed loop !  
str_arr.L = str_chr_arr.L  
str_arr.F = str_chr_arr.F
```

Clemens
