
Subject: [Q] readf into an array error

Posted by [Iarla Kilbane-Dawe](#) on Fri, 02 Feb 1996 08:00:00 GMT

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Hello,

why does IDL give me an error when I try to do?

```
a=fltarr(10)
i = 0
readf,unit,a(i)
```

Many thanks,

Iarla.

Iarla Kilbane-Dawe Email: iarla@atm.ch.cam.ac.uk
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Subject: Re: [Q] readf into an array error

Posted by [Ken Knighton](#) on Fri, 02 Feb 1996 08:00:00 GMT

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```
> why does IDL give me an error when I try to do?
>
> a=fltarr(10)
> i = 0
> readf,unit,a(i)
>
```

I'm not sure why IDL gives you an error, but

```
readf, unit,a(i)
```

is not going to read anything. `a(i)` is an expression rather than a variable. The `readf` statement requires a named variable in order to read anything. Try using

```
a=fltarr(10)
i=0
b=0.0
readf, unit, b
```

a(i)=b

This is actually mentioned somewhere in the i/o chapter of the user's manual.

Also, you might want to look at the ASSOC() function and associated i/o. Because you are reading an array, this might be a better solution.

Ken Knighton knighton@gav.gat.com knighton@cts.com
General Atomics
San Diego, CA

Subject: Re: [Q] readf into an array error
Posted by [peter](#) on Fri, 02 Feb 1996 08:00:00 GMT
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Iarla Kilbane-Dawe (iarla@atm.ch.cam.ac.uk) wrote:

: Hello,

: why does IDL give me an error when I try to do?

: a=fltarr(10)
: i = 0
: readf,unit,a(i)

This is due to the argument passing mechanism used in IDL. If an array is passed to a function, it is passed by reference. If a subarray is passed, it is passed by value, and thus cannot be overwritten.

To accomplish what you want, you need to do

```
temp = a(i)
readf,unit,temp
a(i) = temp
```

It is ugly! The syntax gives no clue what is happening, and the manual is exceptionally obscure.

Peter

Peter Webb, HP Labs Medical Dept
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Phone: (415) 813-3756

Subject: Re: [Q] readf into an array error
Posted by [M.W.Gardner](#) on Fri, 02 Feb 1996 08:00:00 GMT
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Iarla Kilbane-Dawe <iarla@atm.ch.cam.ac.uk> wrote:

```
> why does IDL give me an error when I try to do?
>
> a=fltarr(10)
> i = 0
> readf,unit,a(i)
>
```

Iarla, what error do you get and what exactly are you attempting to do ?

if you haven't defined the unit you get "% READF: Variable is undefined: UNIT"

if unit is defined (eg given a number say 1) and has not been defined in an open statement you get "% READF: File unit is not open: 1"

If you are trying to read from a file a ten element array then open you file, read in the data, and close the file like so :

```
a=fltarr(10)
open,unit,'filename',/get_lun
read,unit,a
close,unit
free_lun,unit
```

and that should do it. If you don't want to do this then ignore all that and let me know what you want to do !

Anyway, I hope that helps, if not provide some more info if I have missed the point.

Matt

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opinions are mine - <http://www.uea.ac.uk/~e449>
