
Subject: Re: reading unformatted fortran

Posted by [Richard G. French](#) on Sun, 12 Dec 1999 08:00:00 GMT

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Morwenna Griffiths wrote:

>
> I'm having difficulty reading unformatted fortran in IDL. I think
> Can anyone help me, please?
>
> Morwenna

I think your problem is that you are asking IDL to read 2-byte integers and FORTRAN is writing 4 byte integers. Try setting

a=1L & b=1L etc and see if it works better.

Dick French

Subject: reading unformatted fortran

Posted by [Morwenna Griffiths](#) on Mon, 13 Dec 1999 08:00:00 GMT

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I'm having difficulty reading unformatted fortran in IDL. I think I am doing just what the manual tells me to, but I assume I'm not! Here's a sample program.

The fortran code to write the unformatted data:

```
program write_out
integer bb
real aa

write(6,*) 'in write_out now'
open(unit=15,file='t1',form='unformatted',status='unknown')
bb = 23
write(15) bb
close(unit=15)

open(unit=16,file='t2',form='unformatted',status='unknown')
aa=47.0
write(16) aa

close(unit=16)

stop
end
```

The IDL code that doesn't work:

```
a=1 & b=1 & c=1 & d=1 & e=1 & f=1 & aa=1.0
```

```
openr,1,'t1',/f77_unformatted  
readu,1,a  
close,1  
print,'should be',a ; gives an answer of 0
```

```
openr,1,'t1',f77_unformatted  
readu,1,a,b,c,d,e,f  
print,'but it is: ',a,b,c,d,e,f ; gives answers of 0 4 0 23 0 4, so the  
4th number is correct  
close,1
```

```
openr,2,'t2',f77_unformatted  
readu,2,aa  
print,'real number ',aa ; gives an answer of 5.60519e-45, no idea why!
```

```
close,/all
```

So it seems that IDL is reading some extra characters before and after the integer, and I have no idea what's happening with the real data.

I'm running both the fortran and IDL on the same machine (a silicon graphics).

Can anyone help me, please?

Morwenna
