
Subject: Re: Read & write data files b/w IDL & Fortran 90
Posted by [Paul Van Delst\[1\]](#) on Thu, 08 Apr 2004 21:45:16 GMT
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bridgemat wrote:

> As someone who knows just the basics of IDL and the basics plus a bit
> more of Fortran 90, I'm sure this is just some rookie mistake, so
> hopefully someone out there can help me out.
>
> I'm trying to write an idl array to a file, read the file in Fortran
> 90, manipulate the Fortran array, and then write that new array to a
> file that I then read into IDL. Here's how I write the original array
> to a file:
>
> test=indgen(3,4,5)
> openw,lun,'testidl.dat',/get_lun
> writeu,lun,test
> free_lun,lun

Hello,

You need to use the `/f77_unformatted` keyword on the IDL open. This will stick the 4-byte delimiter at the beginning and end of each output record. Alternatively, you can specify direct access with a set record length in your f90 OPEN statement.

> Another issue: array dimensions! My IDL book tells me that both IDL
> and Fortran arrays are column-major. Although I've been using Fortran
> longer than IDL, I haven't done much w/ multi-dimensional arrays, so I
> looked in my Fortran book, and it says that Fortran is row-major!
> Ack!!! So does that mean my Fortran array should be declared as
> DIMENSION(5,4,3) in this case? I tried that, too, but got the same
> error...

No. Declare the IDL and Fortran arrays the same way. I can never remember what the hell column- or row-major means. I just remember that IDL is same as Fortran, and C is the opposite.

paulv
