Subject: Binary Files

Posted by Mike Garrett on Wed, 28 Feb 2001 23:09:44 GMT

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Hey all,

I am trying to read some binary files that I created using the unformatted write in fortran90. The only problem is that these are the REAL variable type and I don't know how to read these in IDL. I looked for some documentation on the lenght of this data type but I didn't have any luck. Has anyone else already done this?

Thanks

Mike

Subject: Re: Binary Files

Posted by Craig Markwardt on Thu, 01 Mar 2001 01:08:05 GMT

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Mike Garrett <hiss@eagle.cc.ukans.edu> writes:

> Hey all,

>

- > I am trying to read some binary files that I created using the unformatted
- > write in fortran90. The only problem is that these are the REAL variable
- > type and I don't know how to read these in IDL. I looked for some
- > documentation on the length of this data type but I didn't have any luck.
- > Has anyone else already done this?

I know that OPENR has a fortran-specific keyword. And of course READU can read unformatted real data directly. Have you checked these out?

In IDL, FLOAT is 4 bytes, and DOUBLE is 8 bytes.

Craig

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

Subject: Re: Binary Files

Posted by Nigel Wade on Thu, 01 Mar 2001 09:55:51 GMT

On 28/02/01, 23:09:44, Mike Garrett <hiss@eagle.cc.ukans.edu> wrote regarding Binary Files:

- > Hey all,
- > I am trying to read some binary files that I created using the unformatted
- > write in fortran90. The only problem is that these are the REAL variable
- > type and I don't know how to read these in IDL. I looked for some
- > documentation on the length of this data type but I didn't have any luck.
- > Has anyone else already done this?
- > Thanks
- > Mike

I'm assuming here that FORTRAN90 works the same as FORTRAN77. I've never used it myself.

Reading F77 unformatted data is usually pretty straight forward. Look in the

help system index (idhlhelp) for "FORTRAN" and this should put you on the right

track to reading FORTRAN unformatted data. IDL float should equate to FORTRAN

REAL*4, and IDL double to REAL*8. The size of the plain REAL and DOUBLE PRECISION

in FORTRAN may depend on whether your OS is 32 or 64 bits.

This should work for the supported UNIX systems. However, if you have transferred

the FORTRAN unformatted file from another platform which has a different endianness then you will have more fun to come.

I have no idea what will happen on Windows. BSOD probably, that seems to be it's

usual response ;-)

--

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