
Subject: Re: XDR format files

Posted by [Helder Marchetto](#) on Mon, 22 Oct 2012 09:19:58 GMT

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On Monday, October 22, 2012 10:50:09 AM UTC+2, sid wrote:

> Hi all,
>
> Please let me know how to open a xdr format file.
>
> I dont know the data type and size of the file. So I couldnt use the READU command.
>
> Please do help out in this regard.
>
> thanking you in advance.
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> sid

Hi,

as far as I could see, xrd file are ascii files for x-ray diffraction with a header and the last line contains the "0 0 0" reflection.

Then you have at least two options:

1) you loop until you find the end line or the end of the file. The header lines start with a "[" and the data lines are composed of four numbers: hkl (Miller indices) and intensity. After you define the Line variable as a string (line="), you may read each line with the command:

readf, Lun, Line

Then check for the "[" character. If present, then it's header, otherwise not.

2) The other option is to count the number of header lines and the number of lines in the file by using the FILE_LINES(File Name) function. Then you can create an array or structure with the correct dimensions. Something like:

Reflex = REPLICATE({h:0,k:0,l:0,Intensity:0.0},FILE_LINES(XRD_FileName)-nHeaderLines-1)

And then you fill in the values.

Once you read a line, you can use the STRSPLIT(Line, /EXTRACT) function to get an array of four elements where the first three are Miller indices and the fourth is an intensity.

I hope this helps.

Cheers,
Helder

Subject: Re: XDR format files

Posted by [sid](#) on Tue, 23 Oct 2012 09:29:37 GMT

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On Monday, October 22, 2012 2:49:58 PM UTC+5:30, Helder wrote:

> On Monday, October 22, 2012 10:50:09 AM UTC+2, sid wrote:

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> I hope this helps.
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> Cheers,
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> Helder

Hello sir,

The file which I am having is XDR(external data representation) files. Please let me know
how to open this kind of file.

thank you

sid

Subject: Re: XDR format files

Posted by [wlandsman](#) on Tue, 23 Oct 2012 13:01:07 GMT

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You can open it using the /XDR keyword to OPENU

But XDR merely specifies the byte order (big endian but using a minimum of 4 bytes for every
data type). It doesn't tell you anything about how the file is organized, or what its contents are.

You need to know (or tell us) more about the file to read it. --Wayne

On Tuesday, October 23, 2012 5:29:37 AM UTC-4, sid wrote:

> On Monday, October 22, 2012 2:49:58 PM UTC+5:30, Helder wrote:

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Subject: Re: XDR format files

Posted by [David Fanning](#) on Tue, 23 Oct 2012 13:40:12 GMT

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wlandsman writes:

> But XDR merely specifies the byte order (big endian but using a minimum of 4 bytes for every data type). It doesn't tell you anything about how the file is organized, or what its contents are. You need to know (or tell us) more about the file to read it.

If you really don't know anything about what is inside an unformatted data file, then Fervent Prayer is about your only option.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thue. ("Perhaps thos speakest truth.")

Subject: Re: XDR format files

Posted by [Craig Markwardt](#) on Wed, 24 Oct 2012 05:24:52 GMT

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On Tuesday, October 23, 2012 9:40:12 AM UTC-4, David Fanning wrote:

> If you really don't know anything about what is inside an
> unformatted data file, then Fervent Prayer is about your
> only option.

I'm trying to find that in my distribution. Is Fervent Prayer new with IDL 8.2?

Craig

Subject: Re: XDR format files

Posted by [Helder Marchetto](#) on Wed, 24 Oct 2012 08:39:55 GMT

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On Tuesday, October 23, 2012 11:29:37 AM UTC+2, sid wrote:

> On Monday, October 22, 2012 2:49:58 PM UTC+5:30, Helder wrote:

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> sid

Ups, I got that one completely wrong... My browser auto-corrects the inputs depending on my usual research field queries!

Anyway, if you want to switch to xrd files, they seem easier to read :-)

Cheers,

h

h
