
Subject: reading binary file with READ_BINARY
Posted by [mishooax](#) on Thu, 17 Oct 2013 12:00:10 GMT
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Folks,

I am trying to read a binary file in IDL containing a simple 2D array of 360x180 values. For reference, the binary file can be found here:

<http://transcom.project.asu.edu/download/transcom03/smoothmap.fix.2.bin>

Here is what the readme for this .bin says:

The file 'smoothmap.fix.2.bin' contains a single real, binary array dimensioned 360 x 180. The array contains the numbers 1 through 22, denoting each of the 22 basis functions in the TransCom 3 experiment. This file was written on an SGI Origin 2000 hosting UNIX.

And my code:

```
GET_LUN, fstart  
OPENR, fstart, FFilename
```

```
mask_data = READ_BINARY(fstart, DATA_DIMS=[360,180], DATA_TYPE=4) ; float data
```

Now mask_data contains only junk values:

```
print, mask_data[0:100] gives  
-2.24089e-038  0.000000  0.000000  0.000000  ....
```

Why would that be?

Also, I've noticed the .bin file size is 259208 bytes, aka 8 bytes more than the space required to store a 360x180 float array. I've been looking at this for an hour now and I'm stumped. Played around with endian-ness settings but that did not help.

How can I read in this file correctly?

Thank you!

Subject: Re: reading binary file with READ_BINARY
Posted by [David Fanning](#) on Thu, 17 Oct 2013 13:46:16 GMT
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mishooax@gmail.com writes:

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> through 22, denoting each of the 22 basis functions in the
> TransCom 3 experiment. This file was written on an SGI Origin
> 2000 hosting UNIX.

>

> How can I read in this file correctly?

I would read it like this.

```
file = 'smoothmap.fix.2.bin
OpenR, lun, file, /Get, /Swap_If_Little_Endian
data = FltArr(260, 180)
ReadU, lun, data
Free_Lun, lun
```

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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

Subject: Re: reading binary file with READ_BINARY
Posted by [zzhaoch](#) on Wed, 17 Dec 2014 22:32:57 GMT
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Hi,

You can read in the follow way,

```
Data = read_binary('smoothmap.fix.2.bin',DATA_TYPE=4,ENDIAN='big');
Data = Data[1:64800]
Data = reform(Data,[360,180])
```

Best,

Zhao

On Thursday, October 17, 2013 8:00:10 AM UTC-4, mish...@gmail.com wrote:

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