## Subject: reading binary file with READ\_BINARY Posted by mishooax on Thu, 17 Oct 2013 12:00:10 GMT

View Forum Message <> Reply to Message

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/smoothma p.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

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 View Forum Message <> Reply to Message

3 17

mishooax@gmail.com writes:

> 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/smoothma p.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. > > 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 View Forum Message <> Reply to Message 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,

```
On Thursday, October 17, 2013 8:00:10 AM UTC-4, mish...@gmail.com wrote:
> 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/smoothma p.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!
```