Subject: saving pointers in structures to FITS files?
Posted by Christopher Thom on Tue, 10 Feb 2009 23:30:55 GMT
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Hi all,

I have some code that uses to a structure to store a bunch of information.
In the structure, I need to hold an array whose size will be defined (and
modified) at run-time. I figured the easiest way was just to hold a
pointer in the structure, and populate the heap variable at runtime.

However...I'd like for the structure to be persistent between idl
sessions, and I'd like the on-disk file to be fairly portable between
collaborators/idl versions. I've tried all manifestations of FITS routines
for dumping this, but mwrfits seems to just convert the data to a regular
array, and I lose the ability to modify the length of the array when i
read it back in.

Does anyone have suggestions for drop-in replacements for the FITS binary
tables? I've had problems with save files across idl versions before. Are
there better alternatives? Or is there a magic keyword to mwrfits/mrdfits
that I should be specifying? Or do I just have to suck it up and use a
save file?

cheers
chris

Subject: Re: saving pointers in structures to FITS files?
Posted by R.Bauer on Tue, 24 Feb 2009 12:01:34 GMT
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Christopher Thom schrieb:
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Hi Christoper

no one has answered because you have to look for one who has run in the
same trouble so he can understood your problem.

I have no idea what FITS is.

But I can tell that you won't have problems with save files if you just
save your own variables and not everything.

If the problem is that the pointer is replaced by it's content why don't
you recreate the pointer again?

you can do this by
 http://www.fz-juelich.de/icg/icg-1/idl_icglib/idl_source/idl
_html/dbase/struct2ptr_struct_dbase.pro.html
 http://www.fz-juelich.de/icg/icg-1/idl_icglib/idl_source/idl _work/rb_lib/struct2ptr_struct.pro

struct={A:1,b:FINDGEN(10)}

HELP,struct,/str
** Structure <1052378>, 2 tags, length=44, refs=1:
A INT 1
B FLOAT Array[10]
result=struct2ptr_struct(struct)
HELP,result,/str
** Structure <10551e8>, 2 tags, length=8, refs=1:
A POINTER
B POINTER

Also you could save your data in an hdf SD or netCDF file. Those files
can be read by various programs/languagees so one can choose how to
operate with that data. It is always good to keep the dependencies low.

cheers
Reimar

Subject: Re: saving pointers in structures to FITS files?
Posted by Christopher Thom on Tue, 24 Feb 2009 22:47:36 GMT
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Hi Reimar,

Thanks for your tips. I'll look into netCDF...and in the meantime, I just defaulted to using .sav files. But maybe a quick wrapper to my FITS reader would do the trick. Will have to think about it some more...

cheers
chris

Quoth Reimar Bauer:

> Christopher Thom schrieb:
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_html/dbase/struct2ptr_struct_dbase.pro.html
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>
> HELP,struct,/str
> ** Structure <1052378>, 2 tags, length=44, refs=1:
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> cheers
> Reimar
>
>
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Subject: Re: saving pointers in structures to FITS files?
Posted by andersld on Wed, 25 Feb 2009 13:16:20 GMT
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Hi,
I'm not sure I understand your problem entirely, but maybe objects are the solution. You can create an object whose "self" structure contains all the information you wish to store, including the data pointer. Then you can write methods to do whatever you need, i.e. read in FITS tables, save to disk, or you can have this done automatically when the object is initialized. You can share the FITS file and the object code with collaborators.

If you haven't worked with objects before, here is some information to

get started: http://beauty.nascom.nasa.gov/~zarro/idl/objects/objects.htm l

-Loren

Subject: Re: saving pointers in structures to FITS files?
Posted by David Gell on Thu, 26 Feb 2009 13:15:24 GMT
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On Feb 10, 5:30 pm, Christopher Thom <ct...@oddjob.uchicago.edu>
wrote:
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Have you checked the GSFC IDL Astronomy User's Library. It contains a
large selection of routines to handle FITS files.

Subject: Re: saving pointers in structures to FITS files?
Posted by David Gell on Thu, 26 Feb 2009 13:17:07 GMT
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On Feb 26, 7:15 am, David Gell <david.g...@swri.org> wrote:
> On Feb 10, 5:30 pm, Christopher Thom <ct...@oddjob.uchicago.edu>
> wrote:
>
>
>

>
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I should have added the URL: http://idlastro.gsfc.nasa.gov/contents.html

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