
Subject: Re: Reading and using GrADS format binary data in IDL
Posted by [Rick Towler](#) on Tue, 07 Oct 2003 15:30:53 GMT
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"Maura Hannenberger" wrote ...

> How do you read in and then call up data in binary format. It is in the
> type that is used in GrADS...

A good place to start would be here:

http://gmao.gsfc.nasa.gov/data_stuff/formatPages/grads.html

It looks like grads is a 32bit float binary flat file which should be pretty easy to read (at least their example leads one to believe this).

In IDL take a look at the OPENR and READU procedures. Keep in mind that multi-byte binary data has an order, or endian-ness. x86 machines assume that the low byte comes first (little-endian) and (most of) the rest of the world assumes the high byte comes first. This matters when you are sharing data between these platforms, say when you run your model on that trusty alpha in the corner but process data on your windows PC. OPENR has keywords to help deal with endian-ness.

To read in the single level 144x91 example give on the above webpage you would do something like:

```
data = FLTARR(144,91)
OPENR, lun, 'mytestfile.grads', /GET_LUN
READU, lun, data
FREE_LUN, lun
```

Hope this helps.

-Rick
