Subject: help IDL GRID3 problem
Posted by aa318 on Tue, 31 Jan 1995 18:14:42 GMT

I'm using IDL version 3.6.1a and I'm trying to use the GRID3 routine.
I keep getting the error message:

"Ill-conditioned matrix or all nodes co-planar"

Does anyone know what this means?
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Subject: Re: Help IDL
Posted by William Daffer on Mon, 22 Mar 1999 08:00:00 GMT

VU KHAC Tri <tvk@info.fundp.ac.be> writes:

> Hi folks,
> I want to write a IDL reader which can read a binary file created by a C
> application. This binary file contains structured data, for example:
>
> struct {
> double A;
> long B;
> short C;
> }
>
> How can I write the reader this file in IDL application ? Thanks for
> help.
> Best regards,
>
> --
> #+++ ++++++++#
> | VU KHAC TRI |

  I'm assuming you're on a Unix system. There are window's users here
  that will make the necessary corrections should this information be
  faulty for windows systems.

  The basic idea is to create the structure to mirror the C structure,
  making allowances for the short(C) -> int(IDL) mapping, and being
  aware that string data has to be fixed length, which doesn't appear
  to be a problem here. Then make an array of this structure that has

as many records as the file, or as many as you want to read at a time. The just call readu with that array of structures as the argument.

In idl

```
read_struct = { a:0.0d, b:0l, c:0}
openr, lun, your_filename_here,/get_lun,error=err
if err eq 0 then begin
  ff=fstat(lun)
  nrecs = ff.size/14 ;<- note, this is the sum of the data in
                 ; read_struct, NOT the result of
                 ; N_tags(read_struct,/length)=16, which pads structure.
  ; -- to read the whole file in one read
  recs=replicate(read_struct,nrecs)
  readu,lun,recs ; slurp whole file in one read
  free_lun,lun
endif else Message,!error_state.msg ;<- might have to change if
                        ; not using IDL 5.0 or greater
```

Or, if you only wanted to read, say, 100 records at a time, just replace 'nrecs' above with 100. But you'd have to iterate over the 100 record batches in the file.

If the file isn't too large, you should be able to read the whole thing in one fell swoop, and it is almost always faster to do this and then prune the data according to some data editting criteria.

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My mail address has been mangled by my mailer. Send replies to...
daffer@primenet.com

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Outside of a dog, a book is man's best friend
Inside of a dog, it's too dark to read.
  Groucho Marx.