

Subject: Re: Reading data with structures
Posted by [sjt](#) on Fri, 11 Nov 1994 10:04:55 GMT
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Tony Mannucci (tonym@lurleen.jpl.nasa.gov) wrote:

: I am having problems reading FORTRAN unformatted data
: with idl arrays.
: For example, the following works fine:

```

: data = replicate ( structure template, nrecords )

```

```

: for i=0L, long (nrecords-1) do begin
:   readu, unit, structure_template
:   data (i) = structure_template
: endfor

```

```
: But the following doesn't:
```

```

* .....
* |.....|
: readu,unit,data
* .....
* |.....|

```

: In this case, I get an "End of file encountered" error.

: What gives?

: -Tony Mannucci

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The clue is in the explanation at the top: Fortran Unformatted Data

Because fortran is an ancient language, (1957 or thereabouts) it assumes all i/o is record oriented, even on stream-type devices. In order to impose this pseudo-record structure on a Unix box, a number of extra bytes are written indicating the length of record in a fortran unformatted write. IDL handles this transparently when the file is opened with the F77_UNFORMATTED key, but it can only read one pseudo-record at a time and if you try to read more than the record length it will get confused. (I would expect similar behaviour from the real records of a VMS spanned file).

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| "If all else fails--read the instructions!" | |
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