Subject: Re: error reading a large number of binary files
Posted by Mark Branson on Wed, 25 Apr 2007 22:47:18 GMT
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** UPDATE ON MY PROBLEM STATUS **

I decided to reprocess the original grib files with wgrib again but this time with the -nh switch turned on, which eliminates the f77-style header record. Then in the IDL read routine I just had to turn off the /f77_unformatted switch. Well, this has worked flawlessly in the numerous tests I have tried -- not a single error!!!

That made me wonder if my problem was with IDL reading ANY fortran-style binary files, or just the ones created by wgrib. So I wrote a fortran-90 program to generate roughly the same size and number of binary files but just writing random numbers to the files, and then a simple readbin.pro IDL routine. Sure enough, it crashes in random places just like my previous set of ECWMF binary files with f77 headers did. Here's some sample output from a few trials -- these random number file are just named x001.bin, x002.bin, ..., x520.bin.

```
>>> x062.bin
>>> x063.bin
>>> x064.bin
% READU: Corrupted f77 unformatted file detected. Unit: 100, File:
x064.bin
% Execution halted at: READBIN2          10 /Users/mark/Datasets/
era40/testbin/readbin2.pro
%                       $MAIN$
```

```
>>> x300.bin
>>> x301.bin
>>> x302.bin
>>> x303.bin
% READU: Corrupted f77 unformatted file detected. Unit: 100, File:
x303.bin
% Execution halted at: READBIN2          10 /Users/mark/Datasets/
era40/testbin/readbin2.pro
%                       $MAIN$
```

AND the problem seems to only occur once I make the files very large. i.e., when i just wrote out 520 files of arrays of size 5, it flies through all of those with no problems. I have no idea why that would make a difference.

Thanks for the suggestions and ideas. You guys always think of things to try that never occur to me.

Cheers,
Mark