Subject: Error in reading large Fortran unformatted files
Posted by OM on Wed, 16 Feb 2011 12:00:23 GMT

Hello everyone,

I'm new to this group, but I hope I won't look too silly...
I've recently started doing calculations in Fortran that result in
files containing an n^3 real (single precision) array. As long as n
was up to 512, everything worked fine, and I could read the result
file with IDL just fine. As long as I switched to n=1024, though...
(array sizes must be powers of 2, for the FFT that is yet to come).
I can open the file, and I can assign an array of the proper size, but
as soon as I try to read the file into the array, I get the error:
% READU: Corrupted f77 unformatted file detected. Unit: 2

I checked, and according to here (http://www.physics.nyu.edu/grierlab/
idl_html_help/files10.html) the size of the file should be within
limits (it's too big for 32 bit systems, but I made sure that I'm
running a 64 bit version of IDL on a 64 bit machine). It's not a
question of endianess, since I'm running the same Fortran code on the
same dataset, and the only thing that changes is the size of the grid.
Just to be sure of that point, I also made sure I can read the result
file correctly with Fortran and tried opening the file with the /
SWAP_ENDIAN and /SWAP_IF_LITTLE_ENDIAN keywords (not at the same time,
of course), and I still get the same error.
I'm out of ideas by this point... I'll really appreciate any kind of
help.

Thanks,
Ofer.