

Bug overview

Title Unexpected changes to storage of local variables when compiling Fortran with OpenMP

Language Fortran 2003/2008

Code ONETEP (<http://www.onetep.org>)

Submission Attempted minimal working example (MWE) with example ONETEP output files

- ▶ One-time warning is output multiple times when compiled with OpenMP
- ▶ Warning should be suppressed after 1st time by setting a static variable
- ▶ Warning *is* suppressed when compiled without OpenMP
- ▶ Static variable uses implicit SAVE attribute via explicit initialization
- ▶ Occurs with Intel Fortran but not GFortran
- ▶ Adding explicit SAVE attribute solves the issue with OpenMP, *but why?*
- ▶ A MWE has so far proven elusive...