

ANSYS Class3 Error Report**ERROR NO:**

2012-05

Keywords:

MP ,DMPR MODAL DAMPING RATIO ENFORCED MOTION
MODCONT

Description of Error:

In a modal analysis using Block Lanczos, or Supernode (ANTYPE,MODAL with MODOPT,LANB or SNODE), the effective modal damping ratios based on the strain energies are incorrect when:

- a constant material damping is present (MP,DMPR), and
- enforced static modes are requested (MODCONT,ON,ON)

All other results are correct.

Typical GUI Path(s):

Main Menu>Preprocessor>Material Props>Material Models

Other Comments:**First Incorrect Version:**

Release 13.0

Corrected In:

Release 14.5

Suggested User Action For Running on Uncorrected Version:

Follow these three steps:

- (1) Run the modal analysis without requesting the enforced static modes to obtain the correct effective modal damping ratios.
- (2) Remove the constant material damping definitions (MP,DMPR) and run the modal analysis requesting the enforced static modes.
- (3) Run the mode-superposition analysis specifying the modal damping ratios obtained in (1) on the MDAMP command.

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