ANSYS Workbench Class3

Error Report

ERROR NO:
WB2013-01

Keywords:

AVERAGED CONTOUR RESULTS   UNAVERAGED CONTOUR RESULTS   SOLIDS
SHELLS

Description of Error:

Within the Mechanical Application User's Guide (at Using
Results> Result Definitions), the section titled Averaged vs.
Unaveraged Contour Results is incorrect for solids and shells. The
documentation (text and diagram) explaining the averaging of
element nodal results like stresses and strains (but not degree of
freedom results like displacements and temperatures) applies only
to line elements and is not applicable to solid and shell elements.
The text describes that the averaged value at the mid-side is the
average of the unaveraged values at the corners, which is only
correct for line elements. The diagram containing 2D solid elements
is misleading in that for the mid-side nodes, the averaged value is
actually the average of the averaged values at the corners.

Typical GUI Path(s):

// Mechanical Application User's Guide // Using Results // Result
Definitions // Averaged vs. Unaveraged Contour Results

Other Comments:

For solid and shell elements, the averaged value at the mid-side is
the average of the averaged values at the corners. Also note that
nodal averaging in post-processing may be done differently in ANSYS

Mechanical APDL.

First Incorrect Version:

Release 14.5

Corrected In:

Release 15.0

Suggested User Action For Running on Uncorrected Version:

See Other Comments section for description of averaging for shells and solids.

Author Signature:
 Tom Jones 1/15/2013

Reviewed By QA:
 Bill Bryan 1/17/2013

Approval:
 Dave Conover 1/16/2013