

ZZZZ266 - Validation of option COOR_ELGA of Summarized

CALC_CHAM_ELEM:

This test validates in 2D and 3D the computation of the coordinates of the Gauss point using command CALC_CHAM_ELEM.

Modelization a:

the principle is to read the mesh with command LIRE_MAILLAGE, to affect a model using the command AFFE_MODELE and of the command to calculate the coordinates of the Gauss point using option COOR_ELGA CALC_CHAM_ELEM. There is thus no uncertainty on the results to obtain:

- For discrete of type "POI1" the Gauss point is with the same position as the node.
- For discrete of type "SEG2" the Gauss point is in the middle of the segment.

Modelization b:

It acts of the same approach but for different modelizations:

- For elements in plane strains.
- For elements in plane stresses.
- For the edge elements in three-dimensional modelization (sides and segments).

This documentation is voluntarily brief.