

ZZZZ258 - Validation of key word ETAT_INIT of STAT_NON_LINE

Summarized:

This test validates the behavior of the code when one “continues” a nonlinear computation by imposing an initial state to him (key word `ETAT_INIT`).

In particular, it is checked that certain alarms are emitted when one changes behavior on certain elements.

Note: The code must also emit a fatal error when the behavioral change is prohibited. This is checked in the test `erreur07` (v1.01.260).

1 Principle of the test

This test is a data-processing test. It is used to validate the programming of the processing of key word `ETAT_INIT` and more particularly the routine `vrcomp.f`

to define the initial state of a nonlinear computation, the user has two possibilities: either

- it indicates a data structure `evol_noli` and a "time" in this `evol_noli` (key keys `EVOL_NOLI + INST`) or
- it gives 3 fields "isolated" from displacement, stresses and local variables (key keys `DEPL`, `SIGM` and `VARI`)

the programming is different to treat these two cases. This is why they are tested both.

The difficulty which one seeks to test here is that of a pursuit for which, one or more elements of the model "changes" behavior.

More precisely, the following situations are tested:

- the addition of new elements in the model
- the removal of elements in the model
- the following possibilities of changing behavior: "vmis"
 - `_cine_line` - > `"vmis _cine_line" "vmis`
 - `_cine_line` - > `"nothing " (removal of elements`
`"vmis`
 - `_cine_line` - > `"vmis _cine_line" "vmis`
 - `_isot_trac` - > `"vmis _isot_line" "vmis`
 - `_isot_trac` - > `"elas " "vmis`
 - `_isot_line` - > `"vmis _isot_trac" "elas`
 - `" - > "vmis _cine_line" "nothing`
 - `" - > "vmis _cine_line" (addition of elements)`
`"nothing`
 - `" - > "vmis _cine_line" (addition of elements)`