

ERREU07 - Error messages during a prohibited behavioral change

Summary:

This test validates the emission of an error message when one “continues” a non-linear calculation by changing law of behavior on certain elements.

Note: Some behavioral changes are authorized. This is checked in the test `zzzz258` (v1.01.258).

1 Principle of the test

This test is a data-processing test. It is used to validate the programming of the treatment of the keyword `ETAT_INIT` and more particularly the routine `vrcomp.F`.

To define the initial state of a non-linear calculation, the user has two possibilities:

- either it indicates a structure of data `evol_noli` and a "moment" in this `evol_noli` (keywords `EVOL_NOLI + INST`)
- either it gives 3 fields "isolated" from displacement, constraints and variables internal (keywords `DEPL`, `SIGM` and `VARI`)

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

The test emits the two following errors:

```
! -----!  
! <EXCEPTION> <CALCULEL5_42>                                     !  
!                                                                 !  
! incompatible behaviors: VMIS_CINE_LINE and VMIS_ISOT_TRAC for the mesh M1!  
! -----!  
  
! -----!  
! <EXCEPTION> <CALCULEL3_49>                                     !  
!                                                                 !  
! Error of use:                                               !  
! You want "to continue" a non-linear calculation (STAT_NON_LINE or DYNA_NON_LINE).           !  
! For that, you specify an initial state (keyword ETAT_INIT/VARI=chvari).                       !  
! For the calculation of the 1st step of time, the field of the internal variables used for the beginning  
of the step!  
! is "chvari".                                               !  
! For the element carried by the M1 mesh, this field of internal variables does not have the same number  
of !  
! internal variables (7) that the number expected by the behavior chosen for calculation (2).           !  
!                                                                 !  
! There is thus a behavioral change for the M1 mesh           !  
! The code accepts behavioral change only in some very particular cases:           !  
! - LEMAITRE <-> VMIS_ISOT_XXXX                               !  
! - ELAS <-> XXXX                                           !  
! It does not seem that you are in this case. The execution is stopped.           !  
!                                                                 !  
! Risks & advices:                                           !  
! Check the affected behavior on this mesh.                       !  
! -----!
```