

Operator RECU_TABLE

1 Goal

Allows to recover in a table the values of a parameter of a structure of data result, or, to extract a table contained in another structure of data for those which allow it.

The table created can then be used in other orders (`IMPR_TABLE` for example).

Product a structure of data of the type `table` .

2 Syntax

```
table = RECU_TABLE (
    ♦ CO = nomsd , [ * ]
    ♦ / NOM_TABLE = nomtab, [KN]
    / NOM_PARA = will lpara , [1_Kn]
    ♦ TITLE = titr , [1_K80]
)
```

3 Operands

- ♦ CO = nomsd,
Name of the structure of data in which one wants to extract a table.
- ♦ / NOM_TABLE = nomtab,
Name of the table stored in the structure of data.

Aujourd' today, the Structures of data containing a table which one can extract by RECU_TABLE / NOM_TABLE are the following ones:

- a structure of data of the type evol_noli obtained by STAT_NON_LINE or DYNA_NON_LINE, the name of table is then 'OBSERVATION',
- a structure of data of the type grid. The name of the table is then 'CARA_GEOM',
- a structure of data of the type cabl_precont obtained by the order DEFI_CABLE_BP. The name of the table is then 'CABLE_BP',
- a structure of data of the type melasflu obtained by the order CALC_FLUI_STRU; the name of the table is then 'MATR_GENE'.
- structures of data of the type evol_elas and evol_noli containing the calculated total estimators of error by CALC_ERREUR. The name of the table is then 'ESTI_GLOB'.
- a structure of data of the type evol_noli obtained by STAT_NON_LINE, DYNA_NON_LINE or of type evol_elas obtained by DYNA_VIBRA on physical basis a table contains of name 'PARA_CALC' comprising the list of the really calculated moments and, if the user activates his calculation, the energy balance. The table contains 7 columns:
 - INST : moment of calculation,
 - TRAV_EXT : work of the external efforts,
 - ENER_CIN : kinetic energy,
 - ENER_TOT : total deformation energy,
 - TRAV_AMOR : energy dissipated by damping,
 - TRAV_LIAI : energy dissipated and/or stored by the connections,
 - DISS_SCH : energy dissipated by the digital diagram.
- ♦ / NOM_PARA = will lpara,
List of the names of the parameters to be extracted from SD RESULT nomsd.

This functionality makes it possible to extract in the form of a table the evolution from certain parameters from one SD RESULT, for example the parameter of piloting ETA_PILOTAGE in the case of one SD of type evol_noli. The extracted parameters must be of type whole, real or complex, excluding from this fact the character strings. The first column of the produced table contains the sequence numbers (NUME_ORDRE) and the following ones contain the evolution of the parameters will lpara.

- ♦ TITLE = titr,
Title which one wants to give to the table result.

4 Examples

- recovery of some geometrical characteristics of a grid:

```
cargeo = RECU_TABLE (CO = grid , NOM_TABLE = 'CARA_GEOM' ,)
```

- recovery of the values “observed” in the order DYNA_NON_LINE

The order DYNA_NON_LINE [U4.53.01] allows to choose a set of meshes or of nodes for which one wishes to observe one or more components of certain fields (keyword OBSERVATION).

```
dynl = DYNA_NON_LINE (...OBSERVATION = _F (...)...)
```

```
tabobs = RECU_TABLE (CO = dynl, NOM_TABLE = 'OBSERVATION',)
```

- recovery of the parameter of piloting of one SD of type evol_noli

```
stnl = STAT_NON_LINE (...PILOTING = _F (...)...)
```

```
etapilo = RECU_TABLE (CO = stnl , NOM_PARA = 'ETA_PILOTAGE',)
```