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 ,                           [l_Kn]
        ◊ TITLE = titr ,                                [l_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 meshs 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',)
```