
Operator LIRE_CHAMP

1 Drank

Lira a field in a file with med format and to store it in a concept of type field.

The field is indicated in the file by its name and possibly by a temporal parameter.

The product concept is of the type corresponding to what was required.

3 Operands

3.1 Operand FORMAT

◇FORMAT = 'MED'

Choice of the format of the file containing the field to read.

Note:

Only med format is operational today. However, with the sequence of LIRE_TABLE then CREA_CHAMP/EXTR_TABLE one can read a field stored in an array with the Aster format

3.2 Operand TYPE_CHAM

◆TYPE_CHAM = "NOEU_TEMP_R",
/ "NOEU_DEPL_R",
/ "ELGA_SIEF_R",
/etc ...

One indicates the type of the concept here to be produced. The name of the type is built with usual logic Code_Aster. The first four characters are "NOEU", "ELEM", "ELNO", "ELGA" or "CART". One finds "_then". The following sequence defines the type of field: "TEMP", "DEPL", "SIEF", etc... the name ends in "_R", "_F" or "_C" according to the data-processing type of the values.

Example: "NOEU_TEMP_R", "NOEU_DEPL_R", "ELGA_SIEF_R" etc...

Attention:

There is no consistency check! One can create a concept temperature very well by reading again a field which was a displacement with the writing of the file.

Note:

It can happen that values read in the file are not affected in the final field. For example, if one reads a field of pressure on elements TETRA4 whereas it must be affected on meshes of edge (because it is its nature), one will be informed by this kind of alarm:

```
<A> <LIRE_RESU> <LRCEME>  
VALUES NON AFFECTED IN LE FIELD: 3699  
VALUES READ IN LE FICHIER : 3699
```

3.3 Operand MAILLAGE

◆MAILLAGE = my

Name of the Aster mesh on which the field to read will be expressed.

3.4 Operand NOM_MED

◆NOM_MED =nommed

Name according to convention MED of the field to read in the file. It is a character string of 32 characters.

3.5 MODEL operand

◇MODELE = Mo

Name of the model ASTER on which the field to read will be expressed. This operand is compulsory if the field to read is a field "by elements" (TYPE_CHAM=' ELxx_yyyy')

3.6 Operand PROL_ZERO

◇PROL_ZERO = "NON"/"OUI"

When one creates a field "by elements", the structure of this field is imposed by Aster. If for example, one 3D creates a stress field " ELNO" on a model, all the nodes of the elements must carry components SIXX, SIYY, ..., SIYZ. If the field MED which one reads does not have all the values expected not Aster, these missing values should "be invented". The "invented" value will be 0. if PROL_ZERO=' OUI', it will be "Not" (Not has Number) if PROL_ZERO=' NON'

3.7 Selection of temporal parameter NUME_ORDRE, NUME_PT, INST, CRITERE, accuracy

If the field were written in the file without reference to a temporal parameter, nothing is to be mentioned in this reading command. If not it is necessary to specify about which time it is. That is done by the designation of a sequence number, time step or a one time value of archiving. To refer to the document [U4.71.00] for the details on these key words.

3.8 Operand NOM_CMP_IDEM

◇/NOM_CMP_IDEM = "OUI"

Indicates that one must read in med file the components whose same name of the components appears in the list field within the meaning of *the Code_Aster*.

3.9 Operands NOM_CMP, NOM_CMP_MED

◇/◆NOM_CMP=lcmp ,
◆NOM_CMP_MED=lcmpmed ,

These two lists must be of the same length. One reads in med file the components listed in lcmpmed, then one affects them in the components within the meaning of *Code_Aster*, of the same row in the list lcmp.

3.10 Operand NOM_MAIL_MED

◇NOM_MAIL_MED = nomamed

If this operand is absent, one seeks the field related to the first mesh in the file. It is what occurs when the file contains one mesh.

If the file contains several meshes, one specifies here which is associated with the field that one wants to read.

3.11 Operand UNITE

◇UNITE =unite

Number of the logical unit of the file, corresponds to the value provided in astk or by means of command DEFI_FICHIER.

3.12 Operand INFO

```
◇INFO=/1 , [DEFAULT]  
/2 ,
```

If INFO is worth 2, some printings of débogage take place.
If not, nothing takes place

4 Example

```
temp2=LIRE_CHAMP (
    MAILLAGE=m2
    NOM_MED=' RESUUN__TEMP',
    NUME_ORDRE=2
    TYPE_CHAM=' NOEU_TEMP_R',
)
```

This command will create a field at nodes of name `temp2` and type `NOEU_TEMP_R`. The mesh support is `m2`. The values are those stored under name `RESUUN__TEMP` in med file provided on unit 81 with sequence number 2.