Procedure PRE_IDEAS

1 Drank

To convert mesh file “universal” format IDEAS with the Aster format . It can then be read by *Aster* via command LIRE_MAILLAGE.

Treated versions I-DEASTM are versions 4,5 and 6 as well as versions 1. , 2. , 3. , 4. , 5. , 6. , 7. , 8. , 9. , 10. , 11. and 12. NX Series.

2 Syntax

```
PRE_IDEAS

      (   ◊ UNITE_IDEAS=/19              ,            [DEFAULT]
                        /usuper          ,            [I]
          ◊ UNITE_MAILLAGE=/20           ,            [DEFAULT]
                        /uaster          ,            [I]
          ◊ CREA_GROUP_COUL=/        "OUI' ,
                        /   "NON"  ,          [DEFAULT]
      )
```

3 Operands

3.1 Operand UNITE_IDEAS

◊ UNITE_IDEAS

logical Number of unit of the file known as "universal" IDEAS. The value by default is 19. It is necessary to pay attention at the time of the declaration of mesh file of IDEAS in astk: one declares this file like input file with the corresponding logical unit (19, if one uses the value by default).

3.2 Operand UNITE_MAILLAGE

◊ UNITE_MAILLAGE=

logical Number of unit of the Aster mesh file . The value by default is 20.

3.3 Operand CREA_GROUP_COUL

```
◊ CREA_GROUP_COUL=/          "OUI' ,
                       /   "NON"  ,          [DEFAULT]
```

the user can ask for the creation of mesh groups and nodes gathering all meshes and of the same nodes color while indicating CREA_GROUP_COUL = "OUI' in command PRE_IDEAS. These groups are named COUL_n or N is the number of the color in IDEAS.

In order not to unnecessarily increase the number of mesh groups and nodes and consequently the size of mesh file, it is decided automatically not to create the mesh groups of the same color: CREA_GROUP_COUL = "NON" [DEFAULT].

Note:

1) *Command PRE_IDEAS treats only Cartesian coordinate systems.*
2) *Command PRE_IDEAS manages one Cartesian coordinate system.*
3) *During the conversion of the universal file IDEAS, command PRE_IDEAS check if the user defined several coordinate systems. If it is the case, an alarm message informs the user of it, to require of him to check that all the coordinate systems are identical.*

4 Use

On the level of the environment of use `astk`, the file known as “universal” IDEAS must be of .msup `type` or `.unv`.

The document [U3.03.01] described the principles of conversion of under files (**dated sets**) of the file IDEAS into subfiles *Aster* and the rules of development of the names of nodes, of meshes, of nodes groups and produced mesh groups, as well as the meaning of connectivity of meshes.

If, in the environment of use, one associated the file IDEAS with the logical unit 19 (default value for the file of the .unv/.msup type), one creates the concept Aster mesh as follows:

```
PRE_IDEAS ()
mail = LIRE_MAILLAGE ()
```