
Operator POST_CHAM_XFEM

1 Drank

To create a SD Result containing the fields with post-treating method X-FEM.

It makes it possible to generate the following fields in order to post-treat them on the cracked mesh:

- fields of displacements, stresses and local variables following the resolution of a mechanical problem
- field of temperature following the resolution of a thermal problem

Produces a concept of the resultat_sdaster type.

The command POST_MAIL_XFEM [U4.82.21] which makes it possible to generate the cracked mesh is essential before the use of POST_CHAM_XFEM.

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3 Syntax

```
resu2 [resultat_sdaster] =POST_CHAM_XFEM      (  
  
      ◆RESULTAT=resu                          ,          [sd_evol_elas]  
                                                    [sd_evol_noli]  
                                                    [sd_mode_meca]  
                                                    [sd_evol_ther]  
      ◆  MODELE_VISU=mo                        ,          [modele_sdaster]  
  
      )
```

4 Operands

◆MODELE_VISU

Name of the model of visualization based on the mesh of visualization, produces POST_MAIL_XFEM [U4.82.21] by the command.

◆RESULTAT

Name of the result concept resulting beforehand from MECA_STATIQUE, STAT_NON_LINE, of an operator of modal computation (MODE_ITER_*) or THER_LINEAIRE. In the case of a result concept resulting from MECA_STATIQUE or STAT_NON_LINE the fields post-treaties are "DEPL", "VARI_ELGA", "SIEF_ELGA" (provided the fields exist in data structure result). In the case of a result concept resulting from a MODE_ITER_* L only field "DEPL" can be post-treaty. In the case of a result concept resulting from THER_LINEAIRE, only field "TEMP" can be post-treaty

If the result concept in entry contains the card of the behavior, this one is also transferred as a result in output. This card is sometimes essential for post-treating fields (such as for example field DERA_ELGA)

Attention: the result concept produced by POST_CHAM_XFEM does not contain by the material field (sd cham_mater). However certain options of postprocessing (as EPSI_ELGA) need a material field. It is thus sometimes necessary to recreate a material field starting from the mesh resulting from POST_MAIL_XFEM.

For more details, to see [U2.05.02] which illustrates the implementation of a complete postprocessing after a computation X-FEM.

5 Examples of Bar

5.1 use fissured with X-FEM (treated by test SSNV173A)

5.1.1 Visualization of the field displacement obtained by POST_CHAM_XFEM

