

## Operator POST\_CHAM\_XFEM

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### 1 Goal

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To create a SD Résultat containing the fields post-to treat method X-FEM.

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

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

Product a concept of the type `resultat_sdaster`.

The order `POST_MAIL_XFEM` [U4.82.21] which makes it possible to generate the fissured grid is essential before the use of `POST_CHAM_XFEM`.

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## 3 Syntax

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```
resu2 [resultat_sdaster] = POST_CHAM_XFEM (  
  
    ♦ RESULT      =  resu,                                [sd_evol_elas]  
                                                         [sd_evol_noli]  
                                                         [sd_mode_meca]  
                                                         [sd_evol_ther]  
    ♦ MODELE_VISU =  Mo,                                [modele_sdaster]  
  
)
```

## 4 Operands

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- ♦ MODELE\_VISU  
Name of the model of visualization based on the grid of visualization, produced by the order POST\_MAIL\_XFEM [U4.82.21].
- ♦ RESULT  
Name of the concept result resulting beforehand from MECA\_STATIQUE, STAT\_NON\_LINE, of an operator of modal calculation (MODE\_ITER\_\*) or of THER\_LINEAIRE. In the case of a concept result resulting from MECA\_STATIQUE or of STAT\_NON\_LINE fields post-treaties are 'DEPL', 'VARI\_ELGA', 'SIEF\_ELGA' (provided the fields exist in the structure of data result). In the case of a concept result resulting from one MODE\_ITER\_\* L only the field 'DEPL' can be post-treaty. In the case of a concept result resulting from THER\_LINEAIRE, only the field 'TEMP' can be post-treaty  
If the concept result as starter contains the map of the behavior, this one is also transferred in the result at exit. This map is sometimes essential post-to treat fields (such as for example the field DERA\_ELGA )

Caution: the concept result product by POST\_CHAM\_XFEM does not contain by the material field (sd\_cham\_mater). However certain options of postprocessing (like EPSI\_ELGA) need a material field. It is thus sometimes necessary to recreate a material field starting from the grid resulting from POST\_MAIL\_XFEM.

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

## 5 Examples of use

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

#### 5.1.1 Visualization of the field displacement obtained by POST\_CHAM\_XFEM

