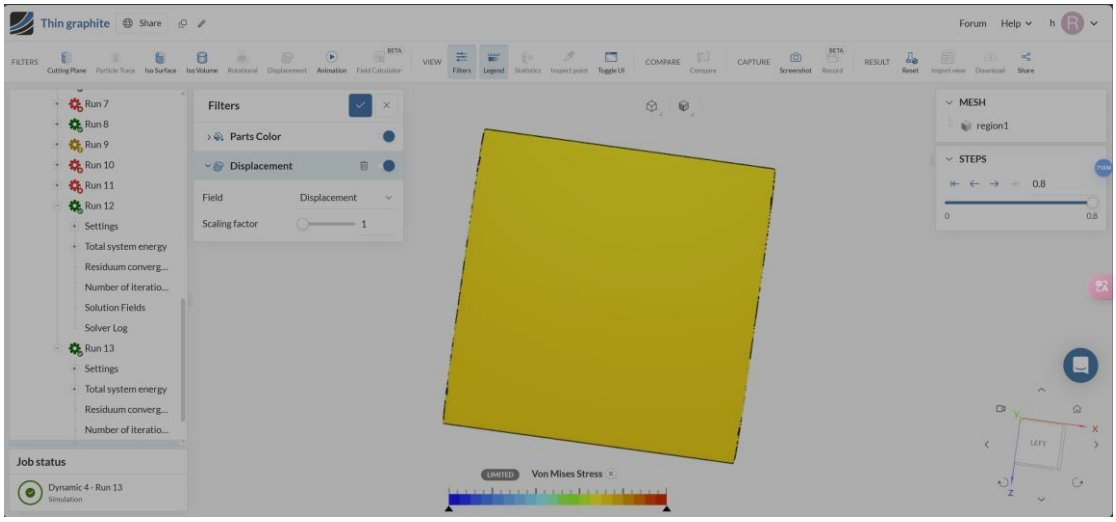
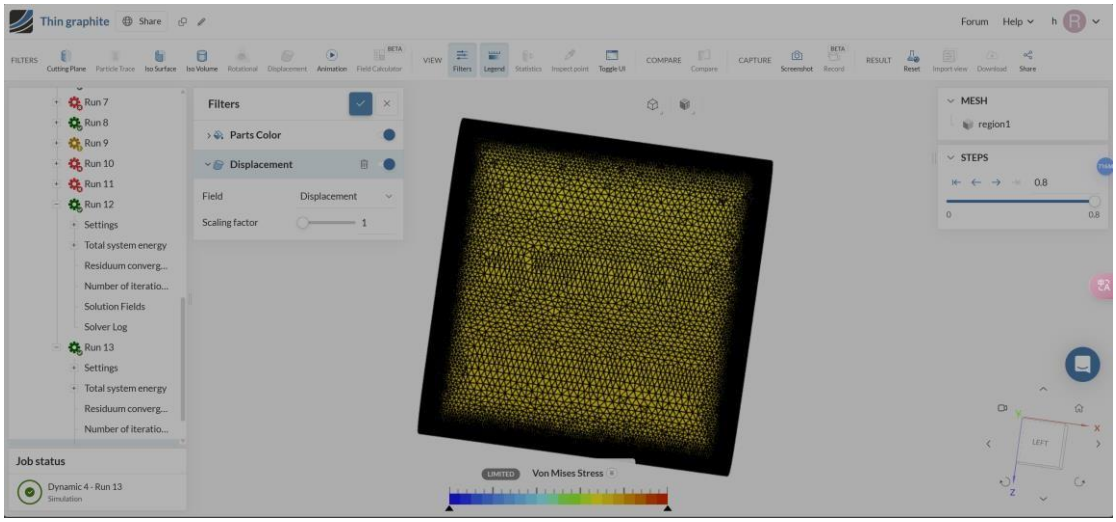
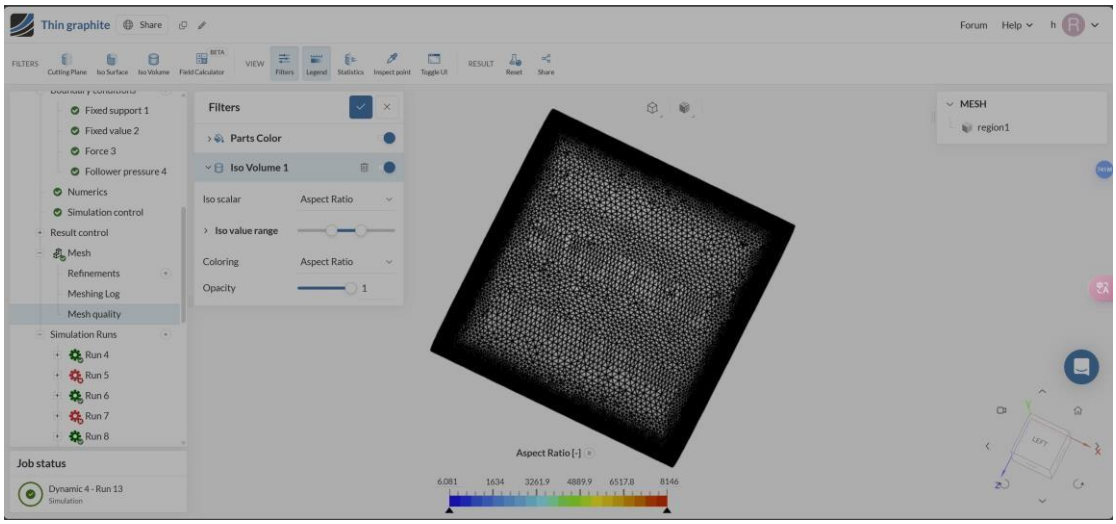




Solution fields(Above)



Mesh quality(Above)

Grid logs

****

Model import took 1.892128698s.

Maximum precision of model and its entities: 1e-08 m.

Absolute small feature tolerance: 0.0014746820023864063 m.

Surface meshing took 18.608131788s.

Number of cells after 27.921363608s: 387078

Number of cells after 37.224467151s: 289085

Number of cells after 46.529465959s: 288826

Number of cells after 55.832329769s: 288856 Meshing

took 58.492155183s. Starting mesh export.

Mesh quality metrics:

Non Orthogonality

Acceptable range: 0.0 to 88.0

min: 4.8

max: 90.0

average: 33.0

99.99-th percentile: 90.0

Edge Ratio

Acceptable range: 0.0 to 100.0

min: 1.0

max: 86.9

average: 1.8

99.99-th percentile: 86.9

Volume Ratio Acceptable

range: 0.0 to 100.0

min: 1.0

max: 3036.0

average: 2.1

99.99-th percentile: 3036.0

Aspect Ratio Acceptable

range: 0.0 to 100.0

min: 6.1

max: 8145.7

average: 11.2

99.99-th percentile: 8145.7

Tetrahedral Aspect Ratio Acceptable

range: 0.0 to 100.0

min: 6.1

max: 8145.7

average: 11.2

99.99-th percentile: 8145.7

Skewness

Acceptable range: 0.0 to 100.0

min: 0.0

max: 27.6

average: 0.3

99.99-th percentile: 27.6

Min Edge Length : 0

Mesh export took 13.349878358s.

Solver logs

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 4.65000E-01 | 0 | 6.22805E-18 | 5.74813E-22 |
| |TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -3.8529E-31 | -3.1562E-19 | 0.0000E+00 | 3.1562E-19 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.228049060458e-18 with the node and degree of freedom N78505 DY

The residue of the type RESI_GLOB_MAXI is worth 5.748133814387e-22 with the node and degree of freedom N78505 DY

Temps CPU consommé dans ce pas de temps : 24.547 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.666 s (3 intégrations)

* Temps total factorisation matrice : 3.544 s (1 factorisations)

* Temps construction second membre : 5.636 s

* Temps total résolution K.U=F : 0.134 s (1 résolutions)

* Temps assemblage matrice : 0.974 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.593 s

Mémoire (Mo) : 5871.68 / 5070.12 / 5342.91 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.650000000000e-01 for the sequence number 93

Field stored SIEF_ELGA at time 4.650000000000e-01 for the sequence number 93

Field stored VARI_ELGA at time 4.650000000000e-01 for the sequence number 93

Field stored COMPORTEMENT at time 4.650000000000e-01 for the sequence number 93

Field stored VITE at time 4.650000000000e-01 for the sequence number 93

Field stored ACCE at time 4.650000000000e-01 for the sequence number 93

Field stored FORC_AMOR at time 4.650000000000e-01 for the sequence number 93

Field stored FORC_LIAI at time 4.650000000000e-01 for the sequence number 93

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[58%] Instant calculé : 4.65000e-01, dernier instant archivé : 4.65000e-01, au numéro d'ordre :

93

Time of computation: 4.700000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 4.70000E-01 | 0 | 9.54984E-18 | 8.81396E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -2.6374E-31 | -2.1579E-19 | 0.0000E+00 |
2.1579E-19 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.549839478799e-18 with the

node and degree of freedom

N82016 DX

The residue of the type RESI_GLOB_MAXI is worth 8.813956777986e-22 with the node and degree of freedom N82016 DX

Temps CPU consommé dans ce pas de temps   : 24.540 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.623 s (3 intégrations)

* Temps total factorisation matrice   : 3.527 s (1 factorisations)

* Temps construction second membre   : 5.640 s

* Temps total résolution K.U=F   : 0.133 s (1 résolutions)

* Temps assemblage matrice   : 0.976 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.642 s

Mémoire (Mo) : 5871.68 / 5115.55 / 5342.91 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.700000000000e-01 for the sequence number 94

Field stored SIEF_ELGA at time 4.700000000000e-01 for the sequence number 94

Field stored VARI_ELGA at time 4.700000000000e-01 for the sequence number 94

Field stored COMPORTEMENT at time 4.700000000000e-01 for the sequence number 94

Field stored VITE at time 4.700000000000e-01 for the sequence number 94

Field stored ACCE at time 4.700000000000e-01 for the sequence number 94

Field stored FORC_AMOR at time 4.700000000000e-01 for the sequence number 94

Field stored FORC_LIAI at time 4.700000000000e-01 for the sequence number 94

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[58%] Instant calculé : 4.70000e-01, dernier instant archivé : 4.70000e-01, au numéro d'ordre :

94

Time of computation: 4.750000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 4.75000E-01 | 0 | 7.51879E-18 | 6.93941E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.8049E-31 | -1.4750E-19 | 0.0000E+00 | 1.4750E-19 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.518785860637e-18 with the node and degree of freedom N82043 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.939410211628e-22 with the node and degree of freedom N82043 DZ

Temps CPU consommé dans ce pas de temps : 24.571 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.639 s (3 intégrations)

* Temps total factorisation matrice : 3.518 s (1 factorisations)

* Temps construction second membre : 5.644 s

* Temps total résolution K.U=F : 0.134 s (1 résolutions)

* Temps assemblage matrice : 0.988 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.647 s

Mémoire (Mo) : 5871.68 / 5160.98 / 5342.91 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.750000000000e-01 for the sequence number 95

Field stored SIEF_ELGA at time 4.750000000000e-01 for the sequence number 95

Field stored VARI_ELGA at time 4.750000000000e-01 for the sequence number 95 Field stored COMPORTEMENT at time 4.750000000000e-01 for the sequence number 95

Field stored VITE at time 4.750000000000e-01 for the sequence number 95

Field stored ACCE at time 4.750000000000e-01 for the sequence number 95

Field stored FORC_AMOR at time 4.750000000000e-01 for the sequence number 95

Field stored FORC_LIAI at time 4.750000000000e-01 for the sequence number 95

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[59%] Instant calculé : 4.75000e-01, dernier instant archivé : 4.75000e-01, au numéro d'ordre :

95

Time of computation: 4.800000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 4.80000E-01 | 0 | 7.56424E-18 | 6.98136E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.2349E-31 | -1.0080E-19 | 0.0000E+00 |
1.0080E-19 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.564241281315e-18 with the node and degree of freedom N85043 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.981362970527e-22 with the node and degree of freedom N85043 DZ

Temps CPU consommé dans ce pas de temps   : 24.638 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.604 s (3 intégrations)

* Temps total factorisation matrice   : 3.507 s (1 factorisations)

* Temps construction second membre   : 5.667 s

* Temps total résolution K.U=F   : 0.148 s (1 résolutions)

* Temps assemblage matrice   : 0.990 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.723 s

Mémoire (Mo) : 5871.68 / 5206.41 / 5342.91 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.800000000000e-01 for the sequence number 96

Field stored SIEF_ELGA at time 4.800000000000e-01 for the sequence number 96

Field stored VARI_ELGA at time 4.800000000000e-01 for the sequence number 96

Field stored COMPORTEMENT at time 4.800000000000e-01 for the sequence number 96

Field stored VITE at time 4.800000000000e-01 for the sequence number 96

Field stored ACCE at time 4.800000000000e-01 for the sequence number 96

Field stored FORC_AMOR at time 4.800000000000e-01 for the sequence number 96

Field stored FORC_LIAI at time 4.800000000000e-01 for the sequence number 96

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[60%] Instant calculé : 4.80000e-01, dernier instant archivé : 4.80000e-01, au numéro d'ordre :

96

Time of computation: 4.850000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 4.85000E-01 | 0 | 7.88901E-18 | 7.28110E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -8.4468E-32 | -6.8872E-20 | 0.0000E+00 | 6.8872E-20 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.889006630247e-18 with the node and degree of freedom N81897 DX

The residue of the type RESI_GLOB_MAXI is worth 7.281102851478e-22 with the node and degree of freedom N81897 DX

Temps CPU consommé dans ce pas de temps : 24.823 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.791 s (3 intégrations)

* Temps total factorisation matrice : 3.535 s (1 factorisations)

* Temps construction second membre : 5.690 s

* Temps total résolution K.U=F : 0.138 s (1 résolutions)

* Temps assemblage matrice : 0.998 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.670 s

Mémoire (Mo) : 5871.68 / 5251.84 / 5342.91 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.850000000000e-01 for the sequence number 97

Field stored SIEF_ELGA at time 4.850000000000e-01 for the sequence number 97

Field stored VARI_ELGA at time 4.850000000000e-01 for the sequence number 97

Field stored COMPORTEMENT at time 4.850000000000e-01 for the sequence number 97

Field stored VITE at time 4.850000000000e-01 for the sequence number 97

Field stored ACCE at time 4.850000000000e-01 for the sequence number 97

Field stored FORC_AMOR at time 4.850000000000e-01 for the sequence number 97

Field stored FORC_LIAI at time 4.850000000000e-01 for the sequence number 97

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[60%] Instant calculé : 4.85000e-01, dernier instant archivé : 4.85000e-01, au numéro d'ordre :

97

Time of computation: 4.900000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 4.90000E-01 | 0 | 7.02335E-18 | 6.48215E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -5.7764E-32 | -4.7047E-20 | 0.0000E+00 |
4.7047E-20 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.023353721387e-18 with the node and degree of freedom

N85441 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.482154624090e-22 with the node and degree of freedom N85441 DZ

Temps CPU consommé dans ce pas de temps   : 24.476 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.592 s (3 intégrations)

* Temps total factorisation matrice   : 3.506 s (1 factorisations)

* Temps construction second membre   : 5.631 s

* Temps total résolution K.U=F   : 0.135 s (1 résolutions)

* Temps assemblage matrice   : 0.977 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.635 s

Mémoire (Mo) : 5871.68 / 5297.27 / 5342.91 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.900000000000e-01 for the sequence number 98

Field stored SIEF_ELGA at time 4.900000000000e-01 for the sequence number 98

Field stored VARI_ELGA at time 4.900000000000e-01 for the sequence number 98

Field stored COMPORTEMENT at time 4.900000000000e-01 for the sequence number 98

Field stored VITE at time 4.900000000000e-01 for the sequence number 98

Field stored ACCE at time 4.900000000000e-01 for the sequence number 98

Field stored FORC_AMOR at time 4.900000000000e-01 for the sequence number 98

Field stored FORC_LIAI at time 4.900000000000e-01 for the sequence number 98

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[61%] Instant calculé : 4.90000e-01, dernier instant archivé : 4.90000e-01, au numéro d'ordre :

98

Time of computation: 4.950000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 4.95000E-01 | 0 | 7.78817E-18 | 7.18803E-22 |
| | |TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR
| DISS_SCH |

| PAS COURANT | 0.0000E+00 | -3.9494E-32 | -3.2132E-20 | 0.0000E+00 |
3.2132E-20 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.788167321993e-18 with the

node and degree of freedom N81701 DY

The residue of the type RESI_GLOB_MAXI is worth 7.188033925405e-22 with the

node and degree of freedom N81701 DY

Temps CPU consommé dans ce pas de temps : 24.570 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.580 s (3 intégrations)

* Temps total factorisation matrice : 3.530 s (1 factorisations)

* Temps construction second membre : 5.665 s

* Temps total résolution K.U=F : 0.137 s (1 résolutions)

* Temps assemblage matrice : 0.985 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.674 s

Mémoire (Mo) : 5871.68 / 5342.70 / 5342.91 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.950000000000e-01 for the sequence number 99

Field stored SIEF_ELGA at time 4.950000000000e-01 for the sequence number 99

Field stored VARI_ELGA at time 4.950000000000e-01 for the sequence number 99 Field stored COMPORTEMENT at time 4.950000000000e-01 for the sequence number 99

Field stored VITE at time 4.950000000000e-01 for the sequence number 99

Field stored ACCE at time 4.950000000000e-01 for the sequence number 99

Field stored FORC_AMOR at time 4.950000000000e-01 for the sequence number 99

Field stored FORC_LIAI at time 4.950000000000e-01 for the sequence number 99

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[61%] Instant calculé : 4.95000e-01, dernier instant archivé : 4.95000e-01, au numéro d'ordre :

99

Time of computation: 5.000000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.00000E-01 | 0 | 9.69498E-18 | 8.94791E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -2.6996E-32 | -2.1941E-20 | 0.0000E+00 |

2.1941E-20 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.694979989265e-18 with the node and degree of freedom N84889 DY

The residue of the type RESI_GLOB_MAXI is worth 8.947913185193e-22 with the node and degree of freedom N84889 DY

Temps CPU consommé dans ce pas de temps : 24.585 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.666 s (3 intégrations)

* Temps total factorisation matrice : 3.547 s (1 factorisations)

* Temps construction second membre : 5.636 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 0.981 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.624 s

Mémoire (Mo) : 5871.68 / 5388.12 / 5342.91 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.000000000000e-01 for the sequence number 100

Field stored SIEF_ELGA at time 5.000000000000e-01 for the sequence number 100

Field stored VARI_ELGA at time 5.000000000000e-01 for the sequence number 100

Field stored COMPORTEMENT at time 5.000000000000e-01 for the sequence number 100

Field stored VITE at time 5.000000000000e-01 for the sequence number 100

Field stored ACCE at time 5.000000000000e-01 for the sequence number 100

Field stored FORC_AMOR at time 5.000000000000e-01 for the sequence number 100

Field stored FORC_LIAI at time 5.000000000000e-01 for the sequence number 100

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[62%] Instant calculé : 5.00000e-01, dernier instant archivé : 5.00000e-01, au numéro d'ordre :

100

Time of computation: 5.050000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |

NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |

| RHO | | VALEUR |

| 5.05000E-01 | 0 | 8.34976E-18 | 7.70635E-22 |

| |TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |

DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.8450E-32 | -1.4979E-20 | 0.0000E+00 |

1.4979E-20 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |

2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.349761342387e-18 with the

node and degree of freedom N85230 DZ

The residue of the type RESI_GLOB_MAXI is worth 7.706353153023e-22 with the

node and degree of freedom N85230 DZ

Temps CPU consommé dans ce pas de temps : 24.508 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.571 s (3 intégrations)

* Temps total factorisation matrice : 3.507 s (1 factorisations)

* Temps construction second membre : 5.669 s

* Temps total résolution K.U=F : 0.134 s (1 résolutions)

* Temps assemblage matrice : 0.979 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.650 s

Mémoire (Mo) : 5871.68 / 5434.32 / 5342.91 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.050000000000e-01 for the sequence number 101

Field stored SIEF_ELGA at time 5.050000000000e-01 for the sequence number 101

Field stored VARI_ELGA at time 5.050000000000e-01 for the sequence number 101

Field stored COMPORTEMENT at time 5.050000000000e-01 for the sequence number 101

Field stored VITE at time 5.050000000000e-01 for the sequence number 101

Field stored ACCE at time 5.050000000000e-01 for the sequence number 101

Field stored FORC_AMOR at time 5.050000000000e-01 for the sequence number 101

Field stored FORC_LIAI at time 5.050000000000e-01 for the sequence number 101

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-

02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[63%] Instant calculé : 5.05000e-01, dernier instant archivé : 5.05000e-01, au numéro d'ordre :

101

Time of computation: 5.100000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.10000E-01 | 0 | 8.28699E-18 | 7.64842E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.2606E-32 | -1.0224E-20 | 0.0000E+00 | 1.0224E-20 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.286990456631e-18 with the node and degree of freedom N82016 DX

The residue of the type RESI_GLOB_MAXI is worth 7.648419208143e-22 with the node and degree of freedom N82016 DX

Temps CPU consommé dans ce pas de temps : 24.518 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.614 s (3 intégrations)

* Temps total factorisation matrice : 3.503 s (1 factorisations)

* Temps construction second membre : 5.622 s

* Temps total résolution K.U=F : 0.134 s (1 résolutions)

* Temps assemblage matrice : 0.978 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.667 s

Mémoire (Mo) : 5871.68 / 5479.75 / 5342.91 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.100000000000e-01 for the sequence number 102

Field stored SIEF_ELGA at time 5.100000000000e-01 for the sequence number 102

Field stored VARI_ELGA at time 5.100000000000e-01 for the sequence number 102

Field stored COMPORTEMENT at time 5.100000000000e-01 for the sequence number 102

Field stored VITE at time 5.100000000000e-01 for the sequence number 102

Field stored ACCE at time 5.100000000000e-01 for the sequence number 102

Field stored FORC_AMOR at time 5.100000000000e-01 for the sequence number 102

Field stored FORC_LIAI at time 5.100000000000e-01 for the sequence number 102

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[63%] Instant calculé : 5.10000e-01, dernier instant archivé : 5.10000e-01, au numéro d'ordre :

102

Time of computation: 5.150000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.15000E-01 | 0 | 7.81104E-18 | 7.20914E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -8.6115E-33 | -6.9774E-21 | 0.0000E+00 |
6.9774E-21 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.811038078839e-18 with the

node and degree of freedom N84660 DX

The residue of the type RESI_GLOB_MAXI is worth 7.209142328615e-22 with the node and degree of freedom N84660 DX

Temps CPU consommé dans ce pas de temps   : 24.490 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.569 s (3 intégrations)

* Temps total factorisation matrice   : 3.549 s (1 factorisations)

* Temps construction second membre   : 5.626 s

* Temps total résolution K.U=F   : 0.134 s (1 résolutions)

* Temps assemblage matrice   : 0.975 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.638 s

Mémoire (Mo) : 5871.68 / 5525.18 / 5342.91 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.150000000000e-01 for the sequence number 103 Field stored SIEF_ELGA at time 5.150000000000e-01 for the sequence number 103

Field stored VARI_ELGA at time 5.150000000000e-01 for the sequence number 103

Field stored COMPORTEMENT at time 5.150000000000e-01 for the sequence number 103

Field stored VITE at time 5.150000000000e-01 for the sequence number 103

Field stored ACCE at time 5.150000000000e-01 for the sequence number 103

Field stored FORC_AMOR at time 5.150000000000e-01 for the sequence number 103

Field stored FORC_LIAI at time 5.150000000000e-01 for the sequence number 103

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[64%] Instant calculé : 5.15000e-01, dernier instant archivé : 5.15000e-01, au numéro d'ordre :

103

Time of computation: 5.200000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.20000E-01 | 0 | 8.97135E-18 | 8.28004E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -5.8815E-33 | -4.7608E-21 | 0.0000E+00 | 4.7608E-21 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.971345730783e-18 with the node and degree of freedom N85188 DY

The residue of the type RESI_GLOB_MAXI is worth 8.280040066332e-22 with the node and degree of freedom N85188 DY

Temps CPU consommé dans ce pas de temps : 24.450 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.514 s (3 intégrations)

* Temps total factorisation matrice : 3.520 s (1 factorisations)

* Temps construction second membre : 5.652 s

* Temps total résolution K.U=F : 0.133 s (1 résolutions)

* Temps assemblage matrice : 0.977 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.653 s

Mémoire (Mo) : 5904.97 / 5570.61 / 5376.11 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.200000000000e-01 for the sequence number 104

Field stored SIEF_ELGA at time 5.200000000000e-01 for the sequence number 104

Field stored VARI_ELGA at time 5.200000000000e-01 for the sequence number 104

Field stored COMPORTEMENT at time 5.200000000000e-01 for the sequence number 104

Field stored VITE at time 5.200000000000e-01 for the sequence number 104

Field stored ACCE at time 5.200000000000e-01 for the sequence number 104

Field stored FORC_AMOR at time 5.200000000000e-01 for the sequence number 104

Field stored FORC_LIAI at time 5.200000000000e-01 for the sequence number 104

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[65%] Instant calculé : 5.20000e-01, dernier instant archivé : 5.20000e-01, au numéro d'ordre :

104 ----------

Time of computation: 5.250000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.25000E-01 | 0 | 7.17501E-18 | 6.62213E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -4.0162E-33 | -3.2478E-21 | 0.0000E+00 |
3.2478E-21 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.175013104581e-18 with the node and degree of freedom N85441 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.622127578758e-22 with the node and degree of freedom N85441 DZ

Temps CPU consommé dans ce pas de temps   : 24.519 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.636 s (3 intégrations)

* Temps total factorisation matrice   : 3.519 s (1 factorisations)

* Temps construction second membre   : 5.645 s

* Temps total résolution K.U=F   : 0.134 s (1 résolutions)

* Temps assemblage matrice   : 0.988 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.597 s

Mémoire (Mo) : 5950.40 / 5616.04 / 5421.51 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.250000000000e-01 for the sequence number 105

Field stored SIEF_ELGA at time 5.250000000000e-01 for the sequence number 105

Field stored VARI_ELGA at time 5.250000000000e-01 for the sequence number 105

Field stored COMPORTEMENT at time 5.250000000000e-01 for the sequence number 105

Field stored VITE at time 5.250000000000e-01 for the sequence number 105

Field stored ACCE at time 5.250000000000e-01 for the sequence number 105

Field stored FORC_AMOR at time 5.250000000000e-01 for the sequence number 105

Field stored FORC_LIAI at time 5.250000000000e-01 for the sequence number 105

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[65%] Instant calculé : 5.25000e-01, dernier instant archivé : 5.25000e-01, au numéro d'ordre :

105

Time of computation: 5.300000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.30000E-01 | 0 | 6.98353E-18 | 6.44540E-22 |
| | |TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -2.7419E-33 | -2.2152E-21 | 0.0000E+00 | 2.2152E-21 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.983531680005e-18 with the node and degree of freedom N81882 DX

The residue of the type RESI_GLOB_MAXI is worth 6.445401152754e-22 with the node and degree of freedom N81882 DX

Temps CPU consommé dans ce pas de temps : 24.600 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.609 s (3 intégrations)

* Temps total factorisation matrice : 3.537 s (1 factorisations)

* Temps construction second membre : 5.667 s

* Temps total résolution K.U=F : 0.134 s (1 résolutions)

* Temps assemblage matrice : 1.011 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.642 s

Mémoire (Mo) : 5995.83 / 5661.47 / 5466.91 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.300000000000e-01 for the sequence number 106

Field stored SIEF_ELGA at time 5.300000000000e-01 for the sequence number 106

Field stored VARI_ELGA at time 5.300000000000e-01 for the sequence number 106

Field stored COMPORTEMENT at time 5.300000000000e-01 for the sequence number 106

Field stored VITE at time 5.300000000000e-01 for the sequence number 106

Field stored ACCE at time 5.300000000000e-01 for the sequence number 106

Field stored FORC_AMOR at time 5.300000000000e-01 for the sequence number 106

Field stored FORC_LIAI at time 5.300000000000e-01 for the sequence number 106

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[66%] Instant calculé : 5.30000e-01, dernier instant archivé : 5.30000e-01, au numéro d'ordre :

Time of computation: 5.350000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.35000E-01 | 0 | 7.75244E-18 | 7.15506E-22 |
| |TANGENTE | | ---

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.8716E-33 | -1.5107E-21 | 0.0000E+00 |
1.5107E-21 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.752443850211e-18 with the node and degree of freedom N77911 DZ

The residue of the type RESI_GLOB_MAXI is worth 7.155063199881e-22 with the node and degree of freedom N77911 DZ

Temps CPU consommé dans ce pas de temps   : 24.594 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.579 s (3 intégrations)

* Temps total factorisation matrice   : 3.575 s (1 factorisations)

* Temps construction second membre   : 5.646 s

* Temps total résolution K.U=F   : 0.142 s (1 résolutions)

* Temps assemblage matrice   : 0.978 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.674 s

Mémoire (Mo) : 6041.26 / 5706.90 / 5512.31 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.350000000000e-01 for the sequence number 107

Field stored SIEF_ELGA at time 5.350000000000e-01 for the sequence number 107

Field stored VARI_ELGA at time 5.350000000000e-01 for the sequence number 107

Field stored COMPORTEMENT at time 5.350000000000e-01 for the sequence number 107

Field stored VITE at time 5.350000000000e-01 for the sequence number 107

Field stored ACCE at time 5.350000000000e-01 for the sequence number 107

Field stored FORC_AMOR at time 5.350000000000e-01 for the sequence number 107

Field stored FORC_LIAI at time 5.350000000000e-01 for the sequence number 107

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[66%] Instant calculé : 5.35000e-01, dernier instant archivé : 5.35000e-01, au numéro d'ordre :

107

Time of computation: 5.400000000000e-01

INCREMENT | NEWTON | RESIDU | RESIDU | RECH. LINE. |

RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |

| RHO | | VALEUR |

| 5.40000E-01 | 0 | 7.94475E-18 | 7.33255E-22 |
| | |TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.2773E-33 | -1.0300E-21 | 0.0000E+00 |
1.0300E-21 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.944749638402e-18 with the

node and degree of freedom N87527 DX

The residue of the type RESI_GLOB_MAXI is worth 7.332550466451e-22 with the

node and degree of freedom N87527 DX

Temps CPU consommé dans ce pas de temps : 24.604 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.613 s (3 intégrations)

* Temps total factorisation matrice : 3.552 s (1 factorisations)

* Temps construction second membre : 5.659 s

* Temps total résolution K.U=F : 0.135 s (1 résolutions)

* Temps assemblage matrice : 0.979 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.666 s

Mémoire (Mo) : 6086.69 / 5752.33 / 5557.72 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.400000000000e-01 for the sequence number 108

Field stored SIEF_ELGA at time 5.400000000000e-01 for the sequence number 108

Field stored VARI_ELGA at time 5.400000000000e-01 for the sequence number 108

Field stored COMPORTEMENT at time 5.400000000000e-01 for the sequence number 108

Field stored VITE at time 5.400000000000e-01 for the sequence number 108

Field stored ACCE at time 5.400000000000e-01 for the sequence number 108

Field stored FORC_AMOR at time 5.400000000000e-01 for the sequence number 108

Field stored FORC_LIAI at time 5.400000000000e-01 for the sequence number 108

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[67%] Instant calculé : 5.40000e-01, dernier instant archivé : 5.40000e-01, au numéro d'ordre :

108

Time of computation: 5.450000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.45000E-01 | 0 | 8.35337E-18 | 7.70969E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -8.7152E-34 | -7.0221E-22 | 0.0000E+00 |

7.0221E-22 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.353373471811e-18 with the node and degree of freedom N80641 DX

The residue of the type RESI_GLOB_MAXI is worth 7.709686942317e-22 with the node and degree of freedom N80641 DX

Temps CPU consommé dans ce pas de temps : 24.629 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.672 s (3 intégrations)

* Temps total factorisation matrice : 3.520 s (1 factorisations)

* Temps construction second membre : 5.666 s

* Temps total résolution K.U=F : 0.138 s (1 résolutions)

* Temps assemblage matrice : 0.984 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.649 s

Mémoire (Mo) : 6132.12 / 5797.76 / 5603.12 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.450000000000e-01 for the sequence number 109

Field stored SIEF_ELGA at time 5.450000000000e-01 for the sequence number 109

Field stored VARI_ELGA at time 5.450000000000e-01 for the sequence number 109

Field stored COMPORTEMENT at time 5.450000000000e-01 for the sequence number 109

Field stored VITE at time 5.450000000000e-01 for the sequence number 109

Field stored ACCE at time 5.450000000000e-01 for the sequence number 109

Field stored FORC_AMOR at time 5.450000000000e-01 for the sequence number 109

Field stored FORC_LIAI at time 5.450000000000e-01 for the sequence number 109

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[68%] Instant calculé : 5.45000e-01, dernier instant archivé : 5.45000e-01, au numéro d'ordre :

109

Time of computation: 5.500000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.50000E-01 | 0 | 6.86864E-18 | 6.33936E-22 |
| |TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -5.9456E-34 | -4.7863E-22 | 0.0000E+00 |
4.7863E-22 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.868639351663e-18 with the

node and degree of freedom N78471 DY

The residue of the type RESI_GLOB_MAXI is worth 6.339362091221e-22 with the

node and degree of freedom N78471 DY

Temps CPU consommé dans ce pas de temps : 24.552 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.612 s (3 intégrations)

* Temps total factorisation matrice : 3.516 s (1 factorisations)

* Temps construction second membre : 5.645 s

* Temps total résolution K.U=F : 0.135 s (1 résolutions)

* Temps assemblage matrice : 0.980 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.664 s

Mémoire (Mo) : 6177.55 / 5843.19 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.500000000000e-01 for the sequence number 110

Field stored SIEF_ELGA at time 5.500000000000e-01 for the sequence number 110 Field stored VARI_ELGA at time 5.500000000000e-01 for the sequence number 110

Field stored COMPORTEMENT at time 5.500000000000e-01 for the sequence number 110

Field stored VITE at time 5.500000000000e-01 for the sequence number 110

Field stored ACCE at time 5.500000000000e-01 for the sequence number 110

Field stored FORC_AMOR at time 5.500000000000e-01 for the sequence number 110

Field stored FORC_LIAI at time 5.500000000000e-01 for the sequence number 110

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-

02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[68%] Instant calculé : 5.50000e-01, dernier instant archivé : 5.50000e-01, au numéro d'ordre :

110

Time of computation: 5.550000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR | ----------

| 5.55000E-01 | 0 | 8.74311E-18 | 8.06939E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -4.0554E-34 | -3.2619E-22 | 0.0000E+00 | 3.2619E-22 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.743111268818e-18 with the node and degree of freedom N79907 DX

The residue of the type RESI_GLOB_MAXI is worth 8.069392684513e-22 with the node and degree of freedom N79907 DX

Temps CPU consommé dans ce pas de temps : 24.742 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.607 s (3 intégrations)

* Temps total factorisation matrice : 3.598 s (1 factorisations)

* Temps construction second membre : 5.655 s

* Temps total résolution K.U=F : 0.142 s (1 résolutions)

* Temps assemblage matrice : 1.137 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.604 s

Mémoire (Mo) : 6177.55 / 2944.13 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.550000000000e-01 for the sequence number 111

Field stored SIEF_ELGA at time 5.550000000000e-01 for the sequence number 111

Field stored VARI_ELGA at time 5.550000000000e-01 for the sequence number 111

Field stored COMPORTEMENT at time 5.550000000000e-01 for the sequence number 111

Field stored VITE at time 5.550000000000e-01 for the sequence number 111

Field stored ACCE at time 5.550000000000e-01 for the sequence number 111

Field stored FORC_AMOR at time 5.550000000000e-01 for the sequence number 111

Field stored FORC_LIAI at time 5.550000000000e-01 for the sequence number 111

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[69%] Instant calculé : 5.55000e-01, dernier instant archivé : 5.55000e-01, au numéro d'ordre :

111

Time of computation: 5.600000000000e-01 ----------

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.60000E-01 | 0 | 1.07514E-17 | 9.92290E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -2.7657E-34 | -2.2226E-22 | 0.0000E+00 |
2.2226E-22 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 1.075136616622e-17 with the

node and degree of freedom N84662 DX

The residue of the type RESI_GLOB_MAXI is worth 9.922897332858e-22 with the node and degree of freedom N84662 DX

Temps CPU consommé dans ce pas de temps   : 24.469 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.570 s (3 intégrations)

* Temps total factorisation matrice   : 3.571 s (1 factorisations)

* Temps construction second membre   : 5.602 s

* Temps total résolution K.U=F   : 0.134 s (1 résolutions)

* Temps assemblage matrice   : 0.987 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.605 s

Mémoire (Mo) : 6177.55 / 2989.56 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.600000000000e-01 for the sequence number 112

Field stored SIEF_ELGA at time 5.600000000000e-01 for the sequence number 112

Field stored VARI_ELGA at time 5.600000000000e-01 for the sequence number 112

Field stored COMPORTEMENT at time 5.600000000000e-01 for the sequence number 112

Field stored VITE at time 5.600000000000e-01 for the sequence number 112

Field stored ACCE at time 5.600000000000e-01 for the sequence number 112

Field stored FORC_AMOR at time 5.600000000000e-01 for the sequence number 112

Field stored FORC_LIAI at time 5.600000000000e-01 for the sequence number 112

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[70%] Instant calculé : 5.60000e-01, dernier instant archivé : 5.60000e-01, au numéro d'ordre :

112

Time of computation: 5.650000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.65000E-01 | 0 | 7.36270E-18 | 6.79535E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.8858E-34 | -1.5143E-22 | 0.0000E+00 | 1.5143E-22 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.362701677019e-18 with the node and degree of freedom N85229 DX

The residue of the type RESI_GLOB_MAXI is worth 6.795353418717e-22 with the node and degree of freedom N85229 DX

Temps CPU consommé dans ce pas de temps : 24.495 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.522 s (3 intégrations)

* Temps total factorisation matrice : 3.594 s (1 factorisations)

* Temps construction second membre : 5.621 s

* Temps total résolution K.U=F : 0.134 s (1 résolutions)

* Temps assemblage matrice : 0.986 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.639 s

Mémoire (Mo) : 6177.55 / 3034.99 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.650000000000e-01 for the sequence number 113

Field stored SIEF_ELGA at time 5.650000000000e-01 for the sequence number 113

Field stored VARI_ELGA at time 5.650000000000e-01 for the sequence number 113

Field stored COMPORTEMENT at time 5.650000000000e-01 for the sequence number 113

Field stored VITE at time 5.650000000000e-01 for the sequence number 113

Field stored ACCE at time 5.650000000000e-01 for the sequence number 113

Field stored FORC_AMOR at time 5.650000000000e-01 for the sequence number 113

Field stored FORC_LIAI at time 5.650000000000e-01 for the sequence number 113

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[70%] Instant calculé : 5.65000e-01, dernier instant archivé : 5.65000e-01, au numéro d'ordre :

113

Time of computation: 5.700000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.70000E-01 | 0 | 1.14919E-17 | 1.06064E-21 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.2856E-34 | -1.0315E-22 | 0.0000E+00 |
1.0315E-22 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 1.149188866484e-17 with the node and degree of freedom N83055 DX

The residue of the type RESI_GLOB_MAXI is worth 1.060635733346e-21 with the node and degree of freedom N83055 DX

Temps CPU consommé dans ce pas de temps   : 23.707 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.222 s (3 intégrations)

* Temps total factorisation matrice   : 3.457 s (1 factorisations)

* Temps construction second membre   : 5.439 s

* Temps total résolution K.U=F   : 0.130 s (1 résolutions)

* Temps assemblage matrice   : 0.950 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.508 s

Mémoire (Mo) : 6177.55 / 3080.42 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.700000000000e-01 for the sequence number 114

Field stored SIEF_ELGA at time 5.700000000000e-01 for the sequence number 114

Field stored VARI_ELGA at time 5.700000000000e-01 for the sequence number 114

Field stored COMPORTEMENT at time 5.700000000000e-01 for the sequence number 114

Field stored VITE at time 5.700000000000e-01 for the sequence number 114

Field stored ACCE at time 5.700000000000e-01 for the sequence number 114

Field stored FORC_AMOR at time 5.700000000000e-01 for the sequence number 114

Field stored FORC_LIAI at time 5.700000000000e-01 for the sequence number 114

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[71%] Instant calculé : 5.70000e-01, dernier instant archivé : 5.70000e-01, au numéro d'ordre :

114

Time of computation: 5.750000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |

NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.75000E-01 | 0 | 8.66315E-18 | 7.99559E-22 |

| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -8.7629E-35 | -7.0253E-23 | 0.0000E+00 | 7.0253E-23 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.663146904106e-18 with the node and degree of freedom N85230 DZ

The residue of the type RESI_GLOB_MAXI is worth 7.995590139882e-22 with the node and degree of freedom N85230 DZ

Temps CPU consommé dans ce pas de temps : 23.752 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.216 s (3 intégrations)

* Temps total factorisation matrice : 3.483 s (1 factorisations)

* Temps construction second membre : 5.441 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 0.960 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.520 s

Mémoire (Mo) : 6177.55 / 3125.85 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.750000000000e-01 for the sequence number 115

Field stored SIEF_ELGA at time 5.750000000000e-01 for the sequence number 115

Field stored VARI_ELGA at time 5.750000000000e-01 for the sequence number 115

Field stored COMPORTEMENT at time 5.750000000000e-01 for the sequence number 115

Field stored VITE at time 5.750000000000e-01 for the sequence number 115

Field stored ACCE at time 5.750000000000e-01 for the sequence number 115

Field stored FORC_AMOR at time 5.750000000000e-01 for the sequence number 115

Field stored FORC_LIAI at time 5.750000000000e-01 for the sequence number 115

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[71%] Instant calculé : 5.75000e-01, dernier instant archivé : 5.75000e-01, au numéro d'ordre :

Time of computation: 5.800000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.80000E-01 | 0 | 9.62514E-18 | 8.88345E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -5.9721E-35 | -4.7841E-23 | 0.0000E+00 |
4.7841E-23 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.625138711965e-18 with the node and degree of

freedom N84894 DX

The residue of the type RESI_GLOB_MAXI is worth 8.883453672465e-22 with the node and degree of freedom N84894 DX

Temps CPU consommé dans ce pas de temps : 23.780 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.319 s (3 intégrations)

* Temps total factorisation matrice : 3.424 s (1 factorisations)

* Temps construction second membre : 5.421 s

* Temps total résolution K.U=F : 0.130 s (1 résolutions)

* Temps assemblage matrice : 0.959 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.527 s

Mémoire (Mo) : 6177.55 / 3171.28 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.800000000000e-01 for the sequence number 116

Field stored SIEF_ELGA at time 5.800000000000e-01 for the sequence number 116

Field stored VARI_ELGA at time 5.800000000000e-01 for the sequence number 116

Field stored COMPORTEMENT at time 5.800000000000e-01 for the sequence number 116

Field stored VITE at time 5.800000000000e-01 for the sequence number 116

Field stored ACCE at time 5.800000000000e-01 for the sequence number 116

Field stored FORC_AMOR at time 5.800000000000e-01 for the sequence number 116

Field stored FORC_LIAI at time 5.800000000000e-01 for the sequence number 116

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[72%] Instant calculé : 5.80000e-01, dernier instant archivé : 5.80000e-01, au numéro d'ordre :

116

Time of computation: 5.850000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.85000E-01 | 0 | 9.03460E-18 | 8.33842E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR
| DISS_SCH |

| PAS COURANT | 0.0000E+00 | -4.0694E-35 | -3.2574E-23 | 0.0000E+00 |
3.2574E-23 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.034598475397e-18 with the

node and degree of freedom N85167 DZ

The residue of the type RESI_GLOB_MAXI is worth 8.338418739436e-22 with the

node and degree of freedom N85167 DZ

Temps CPU consommé dans ce pas de temps : 23.688 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.235 s (3 intégrations)

* Temps total factorisation matrice : 3.462 s (1 factorisations)

* Temps construction second membre : 5.410 s

* Temps total résolution K.U=F : 0.133 s (1 résolutions)

* Temps assemblage matrice : 0.949 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.499 s

Mémoire (Mo) : 6177.55 / 3216.71 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.850000000000e-01 for the sequence number 117

Field stored SIEF_ELGA at time 5.850000000000e-01 for the sequence number 117

Field stored VARI_ELGA at time 5.850000000000e-01 for the sequence number 117

Field stored COMPORTEMENT at time 5.850000000000e-01 for the sequence number 117

Field stored VITE at time 5.850000000000e-01 for the sequence number 117

Field stored ACCE at time 5.850000000000e-01 for the sequence number 117

Field stored FORC_AMOR at time 5.850000000000e-01 for the sequence number 117

Field stored FORC_LIAI at time 5.850000000000e-01 for the sequence number 117

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-

02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[73%] Instant calculé : 5.85000e-01, dernier instant archivé : 5.85000e-01, au numéro d'ordre :

117

Time of computation: 5.900000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.90000E-01 | 0 | 7.49125E-18 | 6.91400E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -2.7725E-35 | -2.2176E-23 | 0.0000E+00 | 2.2176E-23 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.491249938056e-18 with the node and degree of freedom N84664 DY

The residue of the type RESI_GLOB_MAXI is worth 6.913996126710e-22 with the node and degree of freedom N84664 DY

Temps CPU consommé dans ce pas de temps : 23.768 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.263 s (3 intégrations)

* Temps total factorisation matrice : 3.478 s (1 factorisations)

* Temps construction second membre : 5.434 s

* Temps total résolution K.U=F : 0.133 s (1 résolutions)

* Temps assemblage matrice : 0.957 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.504 s

Mémoire (Mo) : 6177.55 / 3262.14 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.900000000000e-01 for the sequence number 118

Field stored SIEF_ELGA at time 5.900000000000e-01 for the sequence number 118

Field stored VARI_ELGA at time 5.900000000000e-01 for the sequence number 118

Field stored COMPORTEMENT at time 5.900000000000e-01 for the sequence number 118

Field stored VITE at time 5.900000000000e-01 for the sequence number 118

Field stored ACCE at time 5.900000000000e-01 for the sequence number 118

Field stored FORC_AMOR at time 5.900000000000e-01 for the sequence number 118

Field stored FORC_LIAI at time 5.900000000000e-01 for the sequence number 118

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[73%] Instant calculé : 5.90000e-01, dernier instant archivé : 5.90000e-01, au numéro d'ordre :

118

Time of computation: 5.950000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 5.95000E-01 | 0 | 9.55589E-18 | 8.81954E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.8886E-35 | -1.5095E-23 | 0.0000E+00 |
1.5095E-23 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.555892322145e-18 with the node and degree of freedom N84934 DY

The residue of the type RESI_GLOB_MAXI is worth 8.819543206927e-22 with the node and degree of freedom N84934 DY

Temps CPU consommé dans ce pas de temps   : 23.882 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.333 s (3 intégrations)

* Temps total factorisation matrice   : 3.459 s (1 factorisations)

* Temps construction second membre   : 5.432 s

* Temps total résolution K.U=F   : 0.135 s (1 résolutions)

* Temps assemblage matrice   : 0.953 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.571 s

Mémoire (Mo) : 6177.55 / 3307.57 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.950000000000e-01 for the sequence number 119

Field stored SIEF_ELGA at time 5.950000000000e-01 for the sequence number 119

Field stored VARI_ELGA at time 5.950000000000e-01 for the sequence number 119

Field stored COMPORTEMENT at time 5.950000000000e-01 for the sequence number 119

Field stored VITE at time 5.950000000000e-01 for the sequence number 119

Field stored ACCE at time 5.950000000000e-01 for the sequence number 119

Field stored FORC_AMOR at time 5.950000000000e-01 for the sequence number 119

Field stored FORC_LIAI at time 5.950000000000e-01 for the sequence number 119

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[74%] Instant calculé : 5.95000e-01, dernier instant archivé : 5.95000e-01, au numéro d'ordre :

119

Time of computation: 6.000000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.00000E-01 | 0 | 7.28486E-18 | 6.72351E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.2863E-35 | -1.0273E-23 | 0.0000E+00 | 1.0273E-23 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.284857881037e-18 with the node and degree of freedom N85194 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.723508037992e-22 with the node and degree of freedom N85194 DZ

Temps CPU consommé dans ce pas de temps : 23.741 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.225 s (3 intégrations)

* Temps total factorisation matrice : 3.449 s (1 factorisations)

* Temps construction second membre : 5.421 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 0.960 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.554 s

Mémoire (Mo) : 6177.55 / 3353.00 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.000000000000e-01 for the sequence number 120

Field stored SIEF_ELGA at time 6.000000000000e-01 for the sequence number 120

Field stored VARI_ELGA at time 6.000000000000e-01 for the sequence number 120

Field stored COMPORTEMENT at time 6.000000000000e-01 for the sequence number 120

Field stored VITE at time 6.000000000000e-01 for the sequence number 120

Field stored ACCE at time 6.000000000000e-01 for the sequence number 120

Field stored FORC_AMOR at time 6.000000000000e-01 for the sequence number 120

Field stored FORC_LIAI at time 6.000000000000e-01 for the sequence number 120

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[75%] Instant calculé : 6.00000e-01, dernier instant archivé : 6.00000e-01, au numéro d'ordre :

120

Time of computation: 6.050000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.05000E-01 | 0 | 9.18272E-18 | 8.47513E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -8.7597E-36 | -6.9911E-24 | 0.0000E+00 |
6.9911E-24 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.182724987668e-18 with the node and degree of freedom N84749 DX

The residue of the type RESI_GLOB_MAXI is worth 8.475131055881e-22 with the node and degree of freedom N84749 DX

Temps CPU consommé dans ce pas de temps : 23.744 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.295 s (3 intégrations)

* Temps total factorisation matrice : 3.425 s (1 factorisations)

* Temps construction second membre : 5.420 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 0.953 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.519 s

Mémoire (Mo) : 6177.55 / 3398.43 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.050000000000e-01 for the sequence number 121 Field stored SIEF_ELGA at time 6.050000000000e-01 for the sequence number 121

Field stored VARI_ELGA at time 6.050000000000e-01 for the sequence number 121

Field stored COMPORTEMENT at time 6.050000000000e-01 for the sequence number 121

Field stored VITE at time 6.050000000000e-01 for the sequence number 121

Field stored ACCE at time 6.050000000000e-01 for the sequence number 121

Field stored FORC_AMOR at time 6.050000000000e-01 for the sequence number 121

Field stored FORC_LIAI at time 6.050000000000e-01 for the sequence number 121

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[75%] Instant calculé : 6.05000e-01, dernier instant archivé : 6.05000e-01, au numéro d'ordre :

121

Time of computation: 6.100000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.10000E-01 | 0 | 8.74488E-18 | 8.07102E-22 |
| | |TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -5.9644E-36 | -4.7568E-24 | 0.0000E+00 | 4.7568E-24 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.744878161557e-18 with the node and degree of freedom N81750 DX

The residue of the type RESI_GLOB_MAXI is worth 8.071023425665e-22 with the node and degree of freedom N81750 DX

Temps CPU consommé dans ce pas de temps : 23.789 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.308 s (3 intégrations)

* Temps total factorisation matrice : 3.441 s (1 factorisations)

* Temps construction second membre : 5.414 s

* Temps total résolution K.U=F : 0.134 s (1 résolutions)

* Temps assemblage matrice : 0.949 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.543 s

Mémoire (Mo) : 6177.55 / 3443.86 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.100000000000e-01 for the sequence number 122

Field stored SIEF_ELGA at time 6.100000000000e-01 for the sequence number 122

Field stored VARI_ELGA at time 6.100000000000e-01 for the sequence number 122

Field stored COMPORTEMENT at time 6.100000000000e-01 for the sequence number 122

Field stored VITE at time 6.100000000000e-01 for the sequence number 122

Field stored ACCE at time 6.100000000000e-01 for the sequence number 122

Field stored FORC_AMOR at time 6.100000000000e-01 for the sequence number 122

Field stored FORC_LIAI at time 6.100000000000e-01 for the sequence number 122

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[76%] Instant calculé : 6.10000e-01, dernier instant archivé : 6.10000e-01, au numéro d'ordre :

122 ----------

Time of computation: 6.150000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.15000E-01 | 0 | 6.14312E-18 | 5.66975E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -4.0605E-36 | -3.2362E-24 | 0.0000E+00 |
3.2362E-24 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.143121351208e-18 with the node and degree of freedom N87269 DY

The residue of the type RESI_GLOB_MAXI is worth 5.669750386034e-22 with the node and degree of freedom N87269 DY

Temps CPU consommé dans ce pas de temps   : 23.708 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.262 s (3 intégrations)

* Temps total factorisation matrice   : 3.441 s (1 factorisations)

* Temps construction second membre   : 5.419 s

* Temps total résolution K.U=F   : 0.130 s (1 résolutions)

* Temps assemblage matrice   : 0.945 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.510 s

Mémoire (Mo) : 6177.55 / 3489.29 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.150000000000e-01 for the sequence number 123

Field stored SIEF_ELGA at time 6.150000000000e-01 for the sequence number 123

Field stored VARI_ELGA at time 6.150000000000e-01 for the sequence number 123

Field stored COMPORTEMENT at time 6.150000000000e-01 for the sequence number 123

Field stored VITE at time 6.150000000000e-01 for the sequence number 123

Field stored ACCE at time 6.150000000000e-01 for the sequence number 123

Field stored FORC_AMOR at time 6.150000000000e-01 for the sequence number 123

Field stored FORC_LIAI at time 6.150000000000e-01 for the sequence number 123

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[76%] Instant calculé : 6.15000e-01, dernier instant archivé : 6.15000e-01, au numéro d'ordre :

123

Time of computation: 6.200000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.20000E-01 | 0 | 8.02947E-18 | 7.41075E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -2.7640E-36 | -2.2014E-24 | 0.0000E+00 |
2.2014E-24 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.029472707639e-18 with the

node and degree of freedom N80311 DX

The residue of the type RESI_GLOB_MAXI is worth 7.410745023754e-22 with the

node and degree of freedom N80311 DX

Temps CPU consommé dans ce pas de temps : 23.749 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.239 s (3 intégrations)

* Temps total factorisation matrice : 3.441 s (1 factorisations)

* Temps construction second membre : 5.427 s

* Temps total résolution K.U=F : 0.140 s (1 résolutions)

* Temps assemblage matrice : 0.960 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.542 s

Mémoire (Mo) : 6177.55 / 3534.72 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.200000000000e-01 for the sequence number 124

Field stored SIEF_ELGA at time 6.200000000000e-01 for the sequence number 124

Field stored VARI_ELGA at time 6.200000000000e-01 for the sequence number 124

Field stored COMPORTEMENT at time 6.200000000000e-01 for the sequence number 124

Field stored VITE at time 6.200000000000e-01 for the sequence number 124

Field stored ACCE at time 6.200000000000e-01 for the sequence number 124

Field stored FORC_AMOR at time 6.200000000000e-01 for the sequence number 124

Field stored FORC_LIAI at time 6.200000000000e-01 for the sequence number 124

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[77%] Instant calculé : 6.20000e-01, dernier instant archivé : 6.20000e-01, au numéro d'ordre :

124

Time of computation: 6.250000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.25000E-01 | 0 | 7.39525E-18 | 6.82539E-22 |
| |TANGENTE | | ---

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.8812E-36 | -1.4972E-24 | 0.0000E+00 | 1.4972E-24 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.395247650495e-18 with the node and degree of freedom N84866 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.825391494661e-22 with the node and degree of freedom N84866 DZ

Temps CPU consommé dans ce pas de temps : 23.704 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.282 s (3 intégrations)

* Temps total factorisation matrice : 3.424 s (1 factorisations)

* Temps construction second membre : 5.416 s

* Temps total résolution K.U=F : 0.131 s (1 résolutions)

* Temps assemblage matrice : 0.959 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.493 s

Mémoire (Mo) : 6177.55 / 3580.15 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.250000000000e-01 for the sequence number 125

Field stored SIEF_ELGA at time 6.250000000000e-01 for the sequence number 125

Field stored VARI_ELGA at time 6.250000000000e-01 for the sequence number 125

Field stored COMPORTEMENT at time 6.250000000000e-01 for the sequence number 125

Field stored VITE at time 6.250000000000e-01 for the sequence number 125

Field stored ACCE at time 6.250000000000e-01 for the sequence number 125

Field stored FORC_AMOR at time 6.250000000000e-01 for the sequence number 125

Field stored FORC_LIAI at time 6.250000000000e-01 for the sequence number 125

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[78%] Instant calculé : 6.25000e-01, dernier instant archivé : 6.25000e-01, au numéro d'ordre :

125

Time of computation: 6.300000000000e-01

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INCREMENT | NEWTON | RESIDU | RESIDU | RECH. LINE. |

RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.30000E-01 | 0 | 9.03970E-18 | 8.34313E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.2802E-36 | -1.0182E-24 | 0.0000E+00 |
1.0182E-24 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.039703251013e-18 with the node and degree of freedom N80641 DX

The residue of the type RESI_GLOB_MAXI is worth 8.343130155972e-22 with the node and degree of freedom N80641 DX

Temps CPU consommé dans ce pas de temps   : 23.753 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.260 s (3 intégrations)

* Temps total factorisation matrice   : 3.448 s (1 factorisations)

* Temps construction second membre   : 5.426 s

* Temps total résolution K.U=F   : 0.135 s (1 résolutions)

* Temps assemblage matrice   : 0.947 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.538 s

Mémoire (Mo) : 6177.55 / 3625.58 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.300000000000e-01 for the sequence number 126

Field stored SIEF_ELGA at time 6.300000000000e-01 for the sequence number 126

Field stored VARI_ELGA at time 6.300000000000e-01 for the sequence number 126

Field stored COMPORTEMENT at time 6.300000000000e-01 for the sequence number 126

Field stored VITE at time 6.300000000000e-01 for the sequence number 126

Field stored ACCE at time 6.300000000000e-01 for the sequence number 126

Field stored FORC_AMOR at time 6.300000000000e-01 for the sequence number 126

Field stored FORC_LIAI at time 6.300000000000e-01 for the sequence number 126

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[78%] Instant calculé : 6.30000e-01, dernier instant archivé : 6.30000e-01, au numéro d'ordre :

126

Time of computation: 6.350000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.35000E-01 | 0 | 7.21696E-18 | 6.66084E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -8.7105E-37 | -6.9237E-25 | 0.0000E+00 | 6.9237E-25 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.216956054445e-18 with the node and degree of freedom N80206 DX

The residue of the type RESI_GLOB_MAXI is worth 6.660838527572e-22 with the node and degree of freedom N80206 DX

Temps CPU consommé dans ce pas de temps : 23.756 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.299 s (3 intégrations)

* Temps total factorisation matrice : 3.416 s (1 factorisations)

* Temps construction second membre : 5.421 s

* Temps total résolution K.U=F : 0.131 s (1 résolutions)

* Temps assemblage matrice : 0.950 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.540 s

Mémoire (Mo) : 6177.55 / 3671.01 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.350000000000e-01 for the sequence number 127

Field stored SIEF_ELGA at time 6.350000000000e-01 for the sequence number 127

Field stored VARI_ELGA at time 6.350000000000e-01 for the sequence number 127

Field stored COMPORTEMENT at time 6.350000000000e-01 for the sequence number 127

Field stored VITE at time 6.350000000000e-01 for the sequence number 127

Field stored ACCE at time 6.350000000000e-01 for the sequence number 127

Field stored FORC_AMOR at time 6.350000000000e-01 for the sequence number 127

Field stored FORC_LIAI at time 6.350000000000e-01 for the sequence number 127

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[79%] Instant calculé : 6.35000e-01, dernier instant archivé : 6.35000e-01, au numéro d'ordre :

Time of computation: 6.400000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.40000E-01 | 0 | 6.84575E-18 | 6.31823E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -5.9261E-37 | -4.7074E-25 | 0.0000E+00 |
4.7074E-25 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.845745257664e-18 with the node and degree of freedom N81964 DX

The residue of the type RESI_GLOB_MAXI is worth 6.318232149149e-22 with the node and degree of freedom N81964 DX

Temps CPU consommé dans ce pas de temps : 23.693 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.249 s (3 intégrations)

* Temps total factorisation matrice : 3.402 s (1 factorisations)

* Temps construction second membre : 5.431 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 0.945 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.534 s

Mémoire (Mo) : 6177.55 / 3716.44 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.400000000000e-01 for the sequence number 128

Field stored SIEF_ELGA at time 6.400000000000e-01 for the sequence number 128 Field stored VARI_ELGA at time 6.400000000000e-01 for the sequence number 128

Field stored COMPORTEMENT at time 6.400000000000e-01 for the sequence number 128

Field stored VITE at time 6.400000000000e-01 for the sequence number 128

Field stored ACCE at time 6.400000000000e-01 for the sequence number 128

Field stored FORC_AMOR at time 6.400000000000e-01 for the sequence number 128

Field stored FORC_LIAI at time 6.400000000000e-01 for the sequence number 128

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[80%] Instant calculé : 6.40000e-01, dernier instant archivé : 6.40000e-01, au numéro d'ordre :

128

Time of computation: 6.450000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |

| RHO | | VALEUR | ----------

| 6.45000E-01 | 0 | 7.62346E-18 | 7.03602E-22 |
| | |TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -4.0312E-37 | -3.2001E-25 | 0.0000E+00 |
3.2001E-25 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.623464020102e-18 with the
node and degree of freedom N78487 DX

The residue of the type RESI_GLOB_MAXI is worth 7.036022178268e-22 with the
node and degree of freedom N78487 DX

Temps CPU consommé dans ce pas de temps : 23.687 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.231 s (3 intégrations)

* Temps total factorisation matrice : 3.445 s (1 factorisations)

* Temps construction second membre : 5.417 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 0.950 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.513 s

Mémoire (Mo) : 6177.55 / 3761.87 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.450000000000e-01 for the sequence number 129

Field stored SIEF_ELGA at time 6.450000000000e-01 for the sequence number 129

Field stored VARI_ELGA at time 6.450000000000e-01 for the sequence number 129

Field stored COMPORTEMENT at time 6.450000000000e-01 for the sequence number 129

Field stored VITE at time 6.450000000000e-01 for the sequence number 129

Field stored ACCE at time 6.450000000000e-01 for the sequence number 129

Field stored FORC_AMOR at time 6.450000000000e-01 for the sequence number 129

Field stored FORC_LIAI at time 6.450000000000e-01 for the sequence number 129

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[80%] Instant calculé : 6.45000e-01, dernier instant archivé : 6.45000e-01, au numéro d'ordre :

129

Time of computation: 6.500000000000e-01 ----------

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.50000E-01 | 0 | 7.85357E-18 | 7.24839E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -2.7418E-37 | -2.1752E-25 | 0.0000E+00 |
2.1752E-25 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.853566497130e-18 with the node and degree of freedom N85188 DY

The residue of the type RESI_GLOB_MAXI is worth 7.248393631373e-22 with the node and degree of freedom N85188 DY

Temps CPU consommé dans ce pas de temps : 23.740 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.221 s (3 intégrations)

* Temps total factorisation matrice : 3.438 s (1 factorisations)

* Temps construction second membre : 5.424 s

* Temps total résolution K.U=F : 0.134 s (1 résolutions)

* Temps assemblage matrice : 0.951 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.573 s

Mémoire (Mo) : 6177.55 / 3807.30 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.500000000000e-01 for the sequence number 130

Field stored SIEF_ELGA at time 6.500000000000e-01 for the sequence number 130

Field stored VARI_ELGA at time 6.500000000000e-01 for the sequence number 130

Field stored COMPORTEMENT at time 6.500000000000e-01 for the sequence number 130

Field stored VITE at time 6.500000000000e-01 for the sequence number 130

Field stored ACCE at time 6.500000000000e-01 for the sequence number 130

Field stored FORC_AMOR at time 6.500000000000e-01 for the sequence number 130

Field stored FORC_LIAI at time 6.500000000000e-01 for the sequence number 130

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[81%] Instant calculé : 6.50000e-01, dernier instant archivé : 6.50000e-01, au numéro d'ordre :

130

Time of computation: 6.550000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.55000E-01 | 0 | 8.39792E-18 | 7.75080E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.8646E-37 | -1.4784E-25 | 0.0000E+00 |
1.4784E-25 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.397915994487e-18 with the

node and degree of freedom N80419 DY

The residue of the type RESI_GLOB_MAXI is worth 7.750797148466e-22 with the

node and degree of freedom N80419 DY

Temps CPU consommé dans ce pas de temps : 23.915 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.294 s (3 intégrations)

* Temps total factorisation matrice : 3.448 s (1 factorisations)

* Temps construction second membre : 5.435 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 1.008 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.599 s

Mémoire (Mo) : 6177.55 / 3852.73 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.550000000000e-01 for the sequence number 131

Field stored SIEF_ELGA at time 6.550000000000e-01 for the sequence number 131

Field stored VARI_ELGA at time 6.550000000000e-01 for the sequence number 131

Field stored COMPORTEMENT at time 6.550000000000e-01 for the sequence number 131

Field stored VITE at time 6.550000000000e-01 for the sequence number 131

Field stored ACCE at time 6.550000000000e-01 for the sequence number 131

Field stored FORC_AMOR at time 6.550000000000e-01 for the sequence number 131

Field stored FORC_LIAI at time 6.550000000000e-01 for the sequence number 131

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[81%] Instant calculé : 6.55000e-01, dernier instant archivé : 6.55000e-01, au numéro d'ordre :

131

Time of computation: 6.600000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.60000E-01 | 0 | 8.38611E-18 | 7.73990E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.2679E-37 | -1.0047E-25 | 0.0000E+00 |
1.0047E-25 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.386105387689e-18 with the node and degree of freedom N85220 DY

The residue of the type RESI_GLOB_MAXI is worth 7.739896632486e-22 with the node and degree of freedom N85220 DY

Temps CPU consommé dans ce pas de temps : 23.958 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.298 s (3 intégrations)

* Temps total factorisation matrice : 3.461 s (1 factorisations)

* Temps construction second membre : 5.447 s

* Temps total résolution K.U=F : 0.134 s (1 résolutions)

* Temps assemblage matrice : 1.008 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.610 s

Mémoire (Mo) : 6177.55 / 3898.16 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.600000000000e-01 for the sequence number 132

Field stored SIEF_ELGA at time 6.600000000000e-01 for the sequence number 132

Field stored VARI_ELGA at time 6.600000000000e-01 for the sequence number 132

Field stored COMPORTEMENT at time 6.600000000000e-01 for the sequence number 132

Field stored VITE at time 6.600000000000e-01 for the sequence number 132

Field stored ACCE at time 6.600000000000e-01 for the sequence number 132

Field stored FORC_AMOR at time 6.600000000000e-01 for the sequence number 132

Field stored FORC_LIAI at time 6.600000000000e-01 for the sequence number 132

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[82%] Instant calculé : 6.60000e-01, dernier instant archivé : 6.60000e-01, au numéro d'ordre :

132

Time of computation: 6.650000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |

NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.65000E-01 | 0 | 8.93959E-18 | 8.25073E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -8.6207E-38 | -6.8269E-26 | 0.0000E+00 |
6.8269E-26 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.939587918578e-18 with the

node and degree of freedom N87473 DX

The residue of the type RESI_GLOB_MAXI is worth 8.250729418258e-22 with the

node and degree of freedom N87473 DX

Temps CPU consommé dans ce pas de temps : 23.700 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.253 s (3 intégrations)

* Temps total factorisation matrice : 3.437 s (1 factorisations)

* Temps construction second membre : 5.432 s

* Temps total résolution K.U=F : 0.131 s (1 résolutions)

* Temps assemblage matrice : 0.956 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.490 s

Mémoire (Mo) : 6177.55 / 3943.59 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.650000000000e-01 for the sequence number 133

Field stored SIEF_ELGA at time 6.650000000000e-01 for the sequence number 133

Field stored VARI_ELGA at time 6.650000000000e-01 for the sequence number 133

Field stored COMPORTEMENT at time 6.650000000000e-01 for the sequence number 133

Field stored VITE at time 6.650000000000e-01 for the sequence number 133

Field stored ACCE at time 6.650000000000e-01 for the sequence number 133

Field stored FORC_AMOR at time 6.650000000000e-01 for the sequence number 133

Field stored FORC_LIAI at time 6.650000000000e-01 for the sequence number 133

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[83%] Instant calculé : 6.65000e-01, dernier instant archivé : 6.65000e-01, au numéro d'ordre :

133

Time of computation: 6.700000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.70000E-01 | 0 | 8.56433E-18 | 7.90439E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -5.8605E-38 | -4.6384E-26 | 0.0000E+00 | 4.6384E-26 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.564333580357e-18 with the node and degree of

freedom N82016 DX

The residue of the type RESI_GLOB_MAXI is worth 7.904391081873e-22 with the node and degree of freedom N82016 DX

Temps CPU consommé dans ce pas de temps : 23.663 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.245 s (3 intégrations)

* Temps total factorisation matrice : 3.420 s (1 factorisations)

* Temps construction second membre : 5.441 s

* Temps total résolution K.U=F : 0.131 s (1 résolutions)

* Temps assemblage matrice : 0.955 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.471 s

Mémoire (Mo) : 6177.55 / 3989.02 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.700000000000e-01 for the sequence number 134

Field stored SIEF_ELGA at time 6.700000000000e-01 for the sequence number 134

Field stored VARI_ELGA at time 6.700000000000e-01 for the sequence number 134

Field stored COMPORTEMENT at time 6.700000000000e-01 for the sequence number 134

Field stored VITE at time 6.700000000000e-01 for the sequence number 134

Field stored ACCE at time 6.700000000000e-01 for the sequence number 134

Field stored FORC_AMOR at time 6.700000000000e-01 for the sequence number 134

Field stored FORC_LIAI at time 6.700000000000e-01 for the sequence number 134

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[83%] Instant calculé : 6.70000e-01, dernier instant archivé : 6.70000e-01, au numéro d'ordre :

134

Time of computation: 6.750000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.75000E-01 | 0 | 7.16633E-18 | 6.61411E-22 |
| |TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR
| DISS_SCH |

| PAS COURANT | 0.0000E+00 | -3.9836E-38 | -3.1511E-26 | 0.0000E+00 |
3.1511E-26 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.166327153882e-18 with the

node and degree of freedom N84646 DY

The residue of the type RESI_GLOB_MAXI is worth 6.614110942018e-22 with the node and degree of freedom N84646 DY

Temps CPU consommé dans ce pas de temps   : 23.773 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.305 s (3 intégrations)

* Temps total factorisation matrice   : 3.446 s (1 factorisations)

* Temps construction second membre   : 5.426 s

* Temps total résolution K.U=F   : 0.138 s (1 résolutions)

* Temps assemblage matrice   : 0.955 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.504 s

Mémoire (Mo) : 6177.55 / 4034.45 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.750000000000e-01 for the sequence number 135

Field stored SIEF_ELGA at time 6.750000000000e-01 for the sequence number 135

Field stored VARI_ELGA at time 6.750000000000e-01 for the sequence number 135

Field stored COMPORTEMENT at time 6.750000000000e-01 for the sequence number 135

Field stored VITE at time 6.750000000000e-01 for the sequence number 135

Field stored ACCE at time 6.750000000000e-01 for the sequence number 135

Field stored FORC_AMOR at time 6.750000000000e-01 for the sequence number 135

Field stored FORC_LIAI at time 6.750000000000e-01 for the sequence number 135

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[84%] Instant calculé : 6.75000e-01, dernier instant archivé : 6.75000e-01, au numéro d'ordre :

135

Time of computation: 6.800000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.80000E-01 | 0 | 7.92152E-18 | 7.31111E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -2.7075E-38 | -2.1405E-26 | 0.0000E+00 | 2.1405E-26 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.921516673822e-18 with the node and degree of freedom N80427 DX

The residue of the type RESI_GLOB_MAXI is worth 7.311107766175e-22 with the node and degree of freedom N80427 DX

Temps CPU consommé dans ce pas de temps : 23.727 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.261 s (3 intégrations)

* Temps total factorisation matrice : 3.449 s (1 factorisations)

* Temps construction second membre : 5.419 s

* Temps total résolution K.U=F : 0.133 s (1 résolutions)

* Temps assemblage matrice : 0.960 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.504 s

Mémoire (Mo) : 6177.55 / 4079.88 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.800000000000e-01 for the sequence number 136

Field stored SIEF_ELGA at time 6.800000000000e-01 for the sequence number 136

Field stored VARI_ELGA at time 6.800000000000e-01 for the sequence number 136

Field stored COMPORTEMENT at time 6.800000000000e-01 for the sequence number 136

Field stored VITE at time 6.800000000000e-01 for the sequence number 136

Field stored ACCE at time 6.800000000000e-01 for the sequence number 136

Field stored FORC_AMOR at time 6.800000000000e-01 for the sequence number 136

Field stored FORC_LIAI at time 6.800000000000e-01 for the sequence number 136

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[85%] Instant calculé : 6.80000e-01, dernier instant archivé : 6.80000e-01, au numéro d'ordre :

136

Time of computation: 6.850000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.85000E-01 | 0 | 7.99334E-18 | 7.37739E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.8400E-38 | -1.4538E-26 | 0.0000E+00 |
1.4538E-26 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.993337750114e-18 with the node and degree of freedom N80206 DX

The residue of the type RESI_GLOB_MAXI is worth 7.377394520376e-22 with the node and degree of freedom N80206 DX

Temps CPU consommé dans ce pas de temps   : 23.740 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.208 s (3 intégrations)

* Temps total factorisation matrice   : 3.446 s (1 factorisations)

* Temps construction second membre   : 5.444 s

* Temps total résolution K.U=F   : 0.131 s (1 résolutions)

* Temps assemblage matrice   : 0.947 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.564 s

Mémoire (Mo) : 6177.55 / 4125.30 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.850000000000e-01 for the sequence number 137

Field stored SIEF_ELGA at time 6.850000000000e-01 for the sequence number 137

Field stored VARI_ELGA at time 6.850000000000e-01 for the sequence number 137

Field stored COMPORTEMENT at time 6.850000000000e-01 for the sequence number 137

Field stored VITE at time 6.850000000000e-01 for the sequence number 137

Field stored ACCE at time 6.850000000000e-01 for the sequence number 137

Field stored FORC_AMOR at time 6.850000000000e-01 for the sequence number 137

Field stored FORC_LIAI at time 6.850000000000e-01 for the sequence number 137

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[85%] Instant calculé : 6.85000e-01, dernier instant archivé : 6.85000e-01, au numéro d'ordre :

137

Time of computation: 6.900000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.90000E-01 | 0 | 7.79720E-18 | 7.19637E-22 |
| | |TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.2503E-38 | -9.8734E-27 | 0.0000E+00 | 9.8734E-27 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.797204554387e-18 with the node and degree of freedom N82156 DX

The residue of the type RESI_GLOB_MAXI is worth 7.196374775102e-22 with the node and degree of freedom N82156 DX

Temps CPU consommé dans ce pas de temps : 23.656 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.233 s (3 intégrations)

* Temps total factorisation matrice : 3.418 s (1 factorisations)

* Temps construction second membre : 5.402 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 0.947 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.524 s

Mémoire (Mo) : 6177.55 / 4170.73 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.900000000000e-01 for the sequence number 138

Field stored SIEF_ELGA at time 6.900000000000e-01 for the sequence number 138

Field stored VARI_ELGA at time 6.900000000000e-01 for the sequence number 138

Field stored COMPORTEMENT at time 6.900000000000e-01 for the sequence number 138

Field stored VITE at time 6.900000000000e-01 for the sequence number 138

Field stored ACCE at time 6.900000000000e-01 for the sequence number 138

Field stored FORC_AMOR at time 6.900000000000e-01 for the sequence number 138

Field stored FORC_LIAI at time 6.900000000000e-01 for the sequence number 138

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[86%] Instant calculé : 6.90000e-01, dernier instant archivé : 6.90000e-01, au numéro d'ordre :

Time of computation: 6.950000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 6.95000E-01 | 0 | 8.60872E-18 | 7.94536E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -8.4949E-39 | -6.7047E-27 | 0.0000E+00 |
6.7047E-27 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.608719343827e-18 with the node and degree of freedom N82016 DZ

The residue of the type RESI_GLOB_MAXI is worth 7.945356608220e-22 with the node and degree of freedom N82016 DZ

Temps CPU consommé dans ce pas de temps : 23.684 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.219 s (3 intégrations)

* Temps total factorisation matrice : 3.416 s (1 factorisations)

* Temps construction second membre : 5.420 s

* Temps total résolution K.U=F : 0.131 s (1 résolutions)

* Temps assemblage matrice : 0.969 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.530 s

Mémoire (Mo) : 6177.55 / 4216.16 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.950000000000e-01 for the sequence number 139 Field stored SIEF_ELGA at time 6.950000000000e-01 for the sequence number 139

Field stored VARI_ELGA at time 6.950000000000e-01 for the sequence number 139

Field stored COMPORTEMENT at time 6.950000000000e-01 for the sequence number 139

Field stored VITE at time 6.950000000000e-01 for the sequence number 139

Field stored ACCE at time 6.950000000000e-01 for the sequence number 139

Field stored FORC_AMOR at time 6.950000000000e-01 for the sequence number 139

Field stored FORC_LIAI at time 6.950000000000e-01 for the sequence number 139

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[86%] Instant calculé : 6.95000e-01, dernier instant archivé : 6.95000e-01, au numéro d'ordre :

139

Time of computation: 7.000000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.00000E-01 | 0 | 8.25825E-18 | 7.62189E-22 |
| | |TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -5.7711E-39 | -4.5524E-27 | 0.0000E+00 |
4.5524E-27 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.258245685137e-18 with the
node and degree of freedom N84925 DY

The residue of the type RESI_GLOB_MAXI is worth 7.621889424675e-22 with the
node and degree of freedom N84925 DY

Temps CPU consommé dans ce pas de temps : 23.736 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.246 s (3 intégrations)

* Temps total factorisation matrice : 3.440 s (1 factorisations)

* Temps construction second membre : 5.418 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 0.958 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.542 s

Mémoire (Mo) : 6177.55 / 4261.59 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.000000000000e-01 for the sequence number 140

Field stored SIEF_ELGA at time 7.000000000000e-01 for the sequence number 140

Field stored VARI_ELGA at time 7.000000000000e-01 for the sequence number 140

Field stored COMPORTEMENT at time 7.000000000000e-01 for the sequence number 140

Field stored VITE at time 7.000000000000e-01 for the sequence number 140

Field stored ACCE at time 7.000000000000e-01 for the sequence number 140

Field stored FORC_AMOR at time 7.000000000000e-01 for the sequence number 140

Field stored FORC_LIAI at time 7.000000000000e-01 for the sequence number 140

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[87%] Instant calculé : 7.00000e-01, dernier instant archivé : 7.00000e-01, au numéro d'ordre :

140 ----------

Time of computation: 7.050000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.05000E-01 | 0 | 7.59478E-18 | 7.00955E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -3.9202E-39 | -3.0908E-27 | 0.0000E+00 |
3.0908E-27 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |

2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.594779117442e-18 with the node and degree of freedom N84889 DY

The residue of the type RESI_GLOB_MAXI is worth 7.009547650315e-22 with the node and degree of freedom N84889 DY

Temps CPU consommé dans ce pas de temps   : 23.735 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.242 s (3 intégrations)

* Temps total factorisation matrice   : 3.420 s (1 factorisations)

* Temps construction second membre   : 5.446 s

* Temps total résolution K.U=F   : 0.131 s (1 résolutions)

* Temps assemblage matrice   : 0.959 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.536 s

Mémoire (Mo) : 6177.55 / 4307.02 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.050000000000e-01 for the sequence number 141

Field stored SIEF_ELGA at time 7.050000000000e-01 for the sequence number 141

Field stored VARI_ELGA at time 7.050000000000e-01 for the sequence number 141

Field stored COMPORTEMENT at time 7.050000000000e-01 for the sequence number 141

Field stored VITE at time 7.050000000000e-01 for the sequence number 141

Field stored ACCE at time 7.050000000000e-01 for the sequence number 141

Field stored FORC_AMOR at time 7.050000000000e-01 for the sequence number 141

Field stored FORC_LIAI at time 7.050000000000e-01 for the sequence number 141

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[88%] Instant calculé : 7.05000e-01, dernier instant archivé : 7.05000e-01, au numéro d'ordre :

141

Time of computation: 7.100000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.10000E-01 | 0 | 7.89505E-18 | 7.28668E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -2.6627E-39 | -2.0982E-27 | 0.0000E+00 |
2.0982E-27 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.895048511632e-18 with the
node and degree of freedom N84894 DX

The residue of the type RESI_GLOB_MAXI is worth 7.286679163155e-22 with the
node and degree of freedom N84894 DX

Temps CPU consommé dans ce pas de temps : 23.740 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.252 s (3 intégrations)

* Temps total factorisation matrice : 3.424 s (1 factorisations)

* Temps construction second membre : 5.425 s

* Temps total résolution K.U=F : 0.133 s (1 résolutions)

* Temps assemblage matrice : 0.955 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.551 s

Mémoire (Mo) : 6177.55 / 4352.45 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.100000000000e-01 for the sequence number 142

Field stored SIEF_ELGA at time 7.100000000000e-01 for the sequence number 142

Field stored VARI_ELGA at time 7.100000000000e-01 for the sequence number 142

Field stored COMPORTEMENT at time 7.100000000000e-01 for the sequence number 142

Field stored VITE at time 7.100000000000e-01 for the sequence number 142

Field stored ACCE at time 7.100000000000e-01 for the sequence number 142

Field stored FORC_AMOR at time 7.100000000000e-01 for the sequence number 142

Field stored FORC_LIAI at time 7.100000000000e-01 for the sequence number 142

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[88%] Instant calculé : 7.10000e-01, dernier instant archivé : 7.10000e-01, au numéro d'ordre :

142

Time of computation: 7.150000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.15000E-01 | 0 | 8.19098E-18 | 7.55981E-22 |
| | TANGENTE | | ---

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.8083E-39 | -1.4243E-27 | 0.0000E+00 | 1.4243E-27 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.190977939232e-18 with the node and degree of freedom N85349 DX

The residue of the type RESI_GLOB_MAXI is worth 7.559805134539e-22 with the node and degree of freedom N85349 DX

Temps CPU consommé dans ce pas de temps : 23.837 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.350 s (3 intégrations)

* Temps total factorisation matrice : 3.449 s (1 factorisations)

* Temps construction second membre : 5.431 s

* Temps total résolution K.U=F : 0.133 s (1 résolutions)

* Temps assemblage matrice : 0.955 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.520 s

Mémoire (Mo) : 6177.55 / 4397.88 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.150000000000e-01 for the sequence number 143

Field stored SIEF_ELGA at time 7.150000000000e-01 for the sequence number 143

Field stored VARI_ELGA at time 7.150000000000e-01 for the sequence number 143

Field stored COMPORTEMENT at time 7.150000000000e-01 for the sequence number 143

Field stored VITE at time 7.150000000000e-01 for the sequence number 143

Field stored ACCE at time 7.150000000000e-01 for the sequence number 143

Field stored FORC_AMOR at time 7.150000000000e-01 for the sequence number 143

Field stored FORC_LIAI at time 7.150000000000e-01 for the sequence number 143

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[89%] Instant calculé : 7.15000e-01, dernier instant archivé : 7.15000e-01, au numéro d'ordre :

143

Time of computation: 7.200000000000e-01

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INCREMENT | NEWTON | RESIDU | RESIDU | RECH. LINE. |

RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.20000E-01 | 0 | 8.53593E-18 | 7.87818E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.2280E-39 | -9.6668E-28 | 0.0000E+00 |
9.6668E-28 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.535931174328e-18 with the node and degree of freedom N79852 DY

The residue of the type RESI_GLOB_MAXI is worth 7.878177282187e-22 with the node and degree of freedom N79852 DY

Temps CPU consommé dans ce pas de temps   : 23.856 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.422 s (3 intégrations)

* Temps total factorisation matrice   : 3.415 s (1 factorisations)

* Temps construction second membre   : 5.416 s

* Temps total résolution K.U=F   : 0.133 s (1 résolutions)

* Temps assemblage matrice   : 0.949 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.521 s

Mémoire (Mo) : 6177.55 / 4443.31 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.200000000000e-01 for the sequence number 144

Field stored SIEF_ELGA at time 7.200000000000e-01 for the sequence number 144

Field stored VARI_ELGA at time 7.200000000000e-01 for the sequence number 144

Field stored COMPORTEMENT at time 7.200000000000e-01 for the sequence number 144

Field stored VITE at time 7.200000000000e-01 for the sequence number 144

Field stored ACCE at time 7.200000000000e-01 for the sequence number 144

Field stored FORC_AMOR at time 7.200000000000e-01 for the sequence number 144

Field stored FORC_LIAI at time 7.200000000000e-01 for the sequence number 144

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[90%] Instant calculé : 7.20000e-01, dernier instant archivé : 7.20000e-01, au numéro d'ordre :

144

Time of computation: 7.250000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.25000E-01 | 0 | 8.46944E-18 | 7.81681E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -8.3381E-40 | -6.5605E-28 | 0.0000E+00 | 6.5605E-28 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.469443181086e-18 with the node and degree of freedom N81701 DY

The residue of the type RESI_GLOB_MAXI is worth 7.816812659254e-22 with the node and degree of freedom N81701 DY

Temps CPU consommé dans ce pas de temps : 23.768 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.266 s (3 intégrations)

* Temps total factorisation matrice : 3.464 s (1 factorisations)

* Temps construction second membre : 5.423 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 0.952 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.531 s

Mémoire (Mo) : 6177.55 / 4488.74 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.250000000000e-01 for the sequence number 145

Field stored SIEF_ELGA at time 7.250000000000e-01 for the sequence number 145

Field stored VARI_ELGA at time 7.250000000000e-01 for the sequence number 145

Field stored COMPORTEMENT at time 7.250000000000e-01 for the sequence number 145

Field stored VITE at time 7.250000000000e-01 for the sequence number 145

Field stored ACCE at time 7.250000000000e-01 for the sequence number 145

Field stored FORC_AMOR at time 7.250000000000e-01 for the sequence number 145

Field stored FORC_LIAI at time 7.250000000000e-01 for the sequence number 145

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[90%] Instant calculé : 7.25000e-01, dernier instant archivé : 7.25000e-01, au numéro d'ordre :

145

Time of computation: 7.300000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.30000E-01 | 0 | 7.59181E-18 | 7.00681E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -5.6610E-40 | -4.4520E-28 | 0.0000E+00 |
4.4520E-28 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.591809193719e-18 with the node and degree of freedom N79708 DY

The residue of the type RESI_GLOB_MAXI is worth 7.006806580228e-22 with the node and degree of freedom N79708 DY

Temps CPU consommé dans ce pas de temps : 23.714 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.232 s (3 intégrations)

* Temps total factorisation matrice : 3.459 s (1 factorisations)

* Temps construction second membre : 5.410 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 0.958 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.524 s

Mémoire (Mo) : 6177.55 / 4534.17 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.300000000000e-01 for the sequence number 146

Field stored SIEF_ELGA at time 7.300000000000e-01 for the sequence number 146 Field stored VARI_ELGA at time 7.300000000000e-01 for the sequence number 146

Field stored COMPORTEMENT at time 7.300000000000e-01 for the sequence number 146

Field stored VITE at time 7.300000000000e-01 for the sequence number 146

Field stored ACCE at time 7.300000000000e-01 for the sequence number 146

Field stored FORC_AMOR at time 7.300000000000e-01 for the sequence number 146

Field stored FORC_LIAI at time 7.300000000000e-01 for the sequence number 146

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[91%] Instant calculé : 7.30000e-01, dernier instant archivé : 7.30000e-01, au numéro d'ordre :

146

Time of computation: 7.350000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |

| RHO | | VALEUR | ----------

| 7.35000E-01 | 0 | 6.64628E-18 | 6.13414E-22 |
| | |TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -3.8431E-40 | -3.0208E-28 | 0.0000E+00 |
3.0208E-28 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.646280338878e-18 with the

node and degree of freedom N81698 DX

The residue of the type RESI_GLOB_MAXI is worth 6.134137413651e-22 with the

node and degree of freedom N81698 DX

Temps CPU consommé dans ce pas de temps : 23.840 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.338 s (3 intégrations)

* Temps total factorisation matrice : 3.454 s (1 factorisations)

* Temps construction second membre : 5.430 s

* Temps total résolution K.U=F : 0.134 s (1 résolutions)

* Temps assemblage matrice : 0.955 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.529 s

Mémoire (Mo) : 6177.55 / 4579.60 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.350000000000e-01 for the sequence number 147

Field stored SIEF_ELGA at time 7.350000000000e-01 for the sequence number 147

Field stored VARI_ELGA at time 7.350000000000e-01 for the sequence number 147

Field stored COMPORTEMENT at time 7.350000000000e-01 for the sequence number 147

Field stored VITE at time 7.350000000000e-01 for the sequence number 147

Field stored ACCE at time 7.350000000000e-01 for the sequence number 147

Field stored FORC_AMOR at time 7.350000000000e-01 for the sequence number 147

Field stored FORC_LIAI at time 7.350000000000e-01 for the sequence number 147

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[91%] Instant calculé : 7.35000e-01, dernier instant archivé : 7.35000e-01, au numéro d'ordre :

147

Time of computation: 7.400000000000e-01 ----------

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.40000E-01 | 0 | 7.70065E-18 | 7.10726E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -2.6087E-40 | -2.0496E-28 | 0.0000E+00 |
2.0496E-28 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.700652854304e-18 with the node and degree of freedom N79262 DY

The residue of the type RESI_GLOB_MAXI is worth 7.107263066652e-22 with the node and degree of freedom N79262 DY

Temps CPU consommé dans ce pas de temps : 23.719 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.218 s (3 intégrations)

* Temps total factorisation matrice : 3.433 s (1 factorisations)

* Temps construction second membre : 5.435 s

* Temps total résolution K.U=F : 0.131 s (1 résolutions)

* Temps assemblage matrice : 0.950 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.552 s

Mémoire (Mo) : 6177.55 / 4625.03 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.400000000000e-01 for the sequence number 148

Field stored SIEF_ELGA at time 7.400000000000e-01 for the sequence number 148

Field stored VARI_ELGA at time 7.400000000000e-01 for the sequence number 148

Field stored COMPORTEMENT at time 7.400000000000e-01 for the sequence number 148

Field stored VITE at time 7.400000000000e-01 for the sequence number 148

Field stored ACCE at time 7.400000000000e-01 for the sequence number 148

Field stored FORC_AMOR at time 7.400000000000e-01 for the sequence number 148

Field stored FORC_LIAI at time 7.400000000000e-01 for the sequence number 148

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[92%] Instant calculé : 7.40000e-01, dernier instant archivé : 7.40000e-01, au numéro d'ordre :

148

Time of computation: 7.450000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.45000E-01 | 0 | 6.40197E-18 | 5.90865E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.7706E-40 | -1.3905E-28 | 0.0000E+00 | 1.3905E-28 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.401969027958e-18 with the node and degree of freedom N80572 DY

The residue of the type RESI_GLOB_MAXI is worth 5.908652017839e-22 with the node and degree of freedom N80572 DY

Temps CPU consommé dans ce pas de temps : 23.749 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.222 s (3 intégrations)

* Temps total factorisation matrice : 3.464 s (1 factorisations)

* Temps construction second membre : 5.417 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 0.956 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.558 s

Mémoire (Mo) : 6177.55 / 4670.46 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.450000000000e-01 for the sequence number 149

Field stored SIEF_ELGA at time 7.450000000000e-01 for the sequence number 149

Field stored VARI_ELGA at time 7.450000000000e-01 for the sequence number 149

Field stored COMPORTEMENT at time 7.450000000000e-01 for the sequence number 149

Field stored VITE at time 7.450000000000e-01 for the sequence number 149

Field stored ACCE at time 7.450000000000e-01 for the sequence number 149

Field stored FORC_AMOR at time 7.450000000000e-01 for the sequence number 149

Field stored FORC_LIAI at time 7.450000000000e-01 for the sequence number 149

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[93%] Instant calculé : 7.45000e-01, dernier instant archivé : 7.45000e-01, au numéro d'ordre :

149

Time of computation: 7.500000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.50000E-01 | 0 | 7.10152E-18 | 6.55430E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.2017E-40 | -9.4323E-29 | 0.0000E+00 |
9.4323E-29 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.101521327488e-18 with the node and degree of freedom N80206 DX

The residue of the type RESI_GLOB_MAXI is worth 6.554298863074e-22 with the node and degree of freedom N80206 DX

Temps CPU consommé dans ce pas de temps : 23.719 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.296 s (3 intégrations)

* Temps total factorisation matrice : 3.408 s (1 factorisations)

* Temps construction second membre : 5.433 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 0.952 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.498 s

Mémoire (Mo) : 6177.55 / 4715.89 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.500000000000e-01 for the sequence number 150

Field stored SIEF_ELGA at time 7.500000000000e-01 for the sequence number 150

Field stored VARI_ELGA at time 7.500000000000e-01 for the sequence number 150

Field stored COMPORTEMENT at time 7.500000000000e-01 for the sequence number 150

Field stored VITE at time 7.500000000000e-01 for the sequence number 150

Field stored ACCE at time 7.500000000000e-01 for the sequence number 150

Field stored FORC_AMOR at time 7.500000000000e-01 for the sequence number 150

Field stored FORC_LIAI at time 7.500000000000e-01 for the sequence number 150

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[93%] Instant calculé : 7.50000e-01, dernier instant archivé : 7.50000e-01, au numéro d'ordre :

150

Time of computation: 7.550000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |

NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.55000E-01 | 0 | 7.40333E-18 | 6.83285E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -8.1546E-41 | -6.3979E-29 | 0.0000E+00 |
6.3979E-29 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.403328707122e-18 with the

node and degree of freedom N79811 DY

The residue of the type RESI_GLOB_MAXI is worth 6.832849848699e-22 with the

node and degree of freedom N79811 DY

Temps CPU consommé dans ce pas de temps : 23.782 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.313 s (3 intégrations)

* Temps total factorisation matrice : 3.449 s (1 factorisations)

* Temps construction second membre : 5.419 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 0.975 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.494 s

Mémoire (Mo) : 6177.55 / 4761.32 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.550000000000e-01 for the sequence number 151

Field stored SIEF_ELGA at time 7.550000000000e-01 for the sequence number 151

Field stored VARI_ELGA at time 7.550000000000e-01 for the sequence number 151

Field stored COMPORTEMENT at time 7.550000000000e-01 for the sequence number 151

Field stored VITE at time 7.550000000000e-01 for the sequence number 151

Field stored ACCE at time 7.550000000000e-01 for the sequence number 151

Field stored FORC_AMOR at time 7.550000000000e-01 for the sequence number 151

Field stored FORC_LIAI at time 7.550000000000e-01 for the sequence number 151

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[94%] Instant calculé : 7.55000e-01, dernier instant archivé : 7.55000e-01, au numéro d'ordre :

151

Time of computation: 7.600000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.60000E-01 | 0 | 8.86081E-18 | 8.17802E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -5.5333E-41 | -4.3393E-29 | 0.0000E+00 | 4.3393E-29 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.860806141936e-18 with the node and degree of

freedom N85230 DY

The residue of the type RESI_GLOB_MAXI is worth 8.178018334919e-22 with the node and degree of freedom N85230 DY

Temps CPU consommé dans ce pas de temps : 23.674 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.231 s (3 intégrations)

* Temps total factorisation matrice : 3.433 s (1 factorisations)

* Temps construction second membre : 5.427 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 0.958 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.493 s

Mémoire (Mo) : 6177.55 / 4806.75 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.600000000000e-01 for the sequence number 152

Field stored SIEF_ELGA at time 7.600000000000e-01 for the sequence number 152

Field stored VARI_ELGA at time 7.600000000000e-01 for the sequence number 152

Field stored COMPORTEMENT at time 7.600000000000e-01 for the sequence number 152

Field stored VITE at time 7.600000000000e-01 for the sequence number 152

Field stored ACCE at time 7.600000000000e-01 for the sequence number 152

Field stored FORC_AMOR at time 7.600000000000e-01 for the sequence number 152

Field stored FORC_LIAI at time 7.600000000000e-01 for the sequence number 152

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[95%] Instant calculé : 7.60000e-01, dernier instant archivé : 7.60000e-01, au numéro d'ordre :

152

Time of computation: 7.650000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.65000E-01 | 0 | 7.60860E-18 | 7.02230E-22 |
| |TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR
| DISS_SCH |

| PAS COURANT | 0.0000E+00 | -3.7543E-41 | -2.9429E-29 | 0.0000E+00 |
2.9429E-29 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.608599785333e-18 with the

node and degree of freedom N84668 DZ

The residue of the type RESI_GLOB_MAXI is worth 7.022303337958e-22 with the node and degree of freedom N84668 DZ

Temps CPU consommé dans ce pas de temps   : 23.667 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.225 s (3 intégrations)

* Temps total factorisation matrice   : 3.419 s (1 factorisations)

* Temps construction second membre   : 5.417 s

* Temps total résolution K.U=F   : 0.130 s (1 résolutions)

* Temps assemblage matrice   : 0.970 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.505 s

Mémoire (Mo) : 6177.55 / 4852.18 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.650000000000e-01 for the sequence number 153

Field stored SIEF_ELGA at time 7.650000000000e-01 for the sequence number 153

Field stored VARI_ELGA at time 7.650000000000e-01 for the sequence number 153

Field stored COMPORTEMENT at time 7.650000000000e-01 for the sequence number 153

Field stored VITE at time 7.650000000000e-01 for the sequence number 153

Field stored ACCE at time 7.650000000000e-01 for the sequence number 153

Field stored FORC_AMOR at time 7.650000000000e-01 for the sequence number 153

Field stored FORC_LIAI at time 7.650000000000e-01 for the sequence number 153

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[95%] Instant calculé : 7.65000e-01, dernier instant archivé : 7.65000e-01, au numéro d'ordre :

153

Time of computation: 7.700000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.70000E-01 | 0 | 8.40187E-18 | 7.75445E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -2.5470E-41 | -1.9956E-29 | 0.0000E+00 | 1.9956E-29 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.401874195243e-18 with the node and degree of freedom N82097 DZ

The residue of the type RESI_GLOB_MAXI is worth 7.754450341848e-22 with the node and degree of freedom N82097 DZ

Temps CPU consommé dans ce pas de temps : 23.859 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.314 s (3 intégrations)

* Temps total factorisation matrice : 3.455 s (1 factorisations)

* Temps construction second membre : 5.415 s

* Temps total résolution K.U=F : 0.133 s (1 résolutions)

* Temps assemblage matrice : 0.953 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.589 s

Mémoire (Mo) : 6177.55 / 4897.61 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.700000000000e-01 for the sequence number 154

Field stored SIEF_ELGA at time 7.700000000000e-01 for the sequence number 154

Field stored VARI_ELGA at time 7.700000000000e-01 for the sequence number 154

Field stored COMPORTEMENT at time 7.700000000000e-01 for the sequence number 154

Field stored VITE at time 7.700000000000e-01 for the sequence number 154

Field stored ACCE at time 7.700000000000e-01 for the sequence number 154

Field stored FORC_AMOR at time 7.700000000000e-01 for the sequence number 154

Field stored FORC_LIAI at time 7.700000000000e-01 for the sequence number 154

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[96%] Instant calculé : 7.70000e-01, dernier instant archivé : 7.70000e-01, au numéro d'ordre :

154

Time of computation: 7.750000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.75000E-01 | 0 | 8.73772E-18 | 8.06441E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.7278E-41 | -1.3532E-29 | 0.0000E+00 |
1.3532E-29 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.737715362971e-18 with the node and degree of freedom N77874 DY

The residue of the type RESI_GLOB_MAXI is worth 8.064412571391e-22 with the node and degree of freedom N77874 DY

Temps CPU consommé dans ce pas de temps   : 23.817 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.271 s (3 intégrations)

* Temps total factorisation matrice   : 3.454 s (1 factorisations)

* Temps construction second membre   : 5.445 s

* Temps total résolution K.U=F   : 0.134 s (1 résolutions)

* Temps assemblage matrice   : 0.958 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.555 s

Mémoire (Mo) : 6177.55 / 4943.04 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.750000000000e-01 for the sequence number 155

Field stored SIEF_ELGA at time 7.750000000000e-01 for the sequence number 155

Field stored VARI_ELGA at time 7.750000000000e-01 for the sequence number 155

Field stored COMPORTEMENT at time 7.750000000000e-01 for the sequence number 155

Field stored VITE at time 7.750000000000e-01 for the sequence number 155

Field stored ACCE at time 7.750000000000e-01 for the sequence number 155

Field stored FORC_AMOR at time 7.750000000000e-01 for the sequence number 155

Field stored FORC_LIAI at time 7.750000000000e-01 for the sequence number 155

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[96%] Instant calculé : 7.75000e-01, dernier instant archivé : 7.75000e-01, au numéro d'ordre :

155

Time of computation: 7.800000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.80000E-01 | 0 | 8.98875E-18 | 8.29610E-22 |
| | |TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR | DISS_SCH |

| PAS COURANT | 0.0000E+00 | -1.1720E-41 | -9.1746E-30 | 0.0000E+00 | 9.1746E-30 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 | 2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.988748693159e-18 with the node and degree of freedom N79892 DY

The residue of the type RESI_GLOB_MAXI is worth 8.296102007325e-22 with the node and degree of freedom N79892 DY

Temps CPU consommé dans ce pas de temps : 23.851 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.304 s (3 intégrations)

* Temps total factorisation matrice : 3.434 s (1 factorisations)

* Temps construction second membre : 5.447 s

* Temps total résolution K.U=F : 0.132 s (1 résolutions)

* Temps assemblage matrice : 0.964 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.569 s

Mémoire (Mo) : 6177.55 / 4988.47 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.800000000000e-01 for the sequence number 156

Field stored SIEF_ELGA at time 7.800000000000e-01 for the sequence number 156

Field stored VARI_ELGA at time 7.800000000000e-01 for the sequence number 156

Field stored COMPORTEMENT at time 7.800000000000e-01 for the sequence number 156

Field stored VITE at time 7.800000000000e-01 for the sequence number 156

Field stored ACCE at time 7.800000000000e-01 for the sequence number 156

Field stored FORC_AMOR at time 7.800000000000e-01 for the sequence number 156

Field stored FORC_LIAI at time 7.800000000000e-01 for the sequence number 156

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[97%] Instant calculé : 7.80000e-01, dernier instant archivé : 7.80000e-01, au numéro d'ordre :

Time of computation: 7.850000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.85000E-01 | 0 | 8.58360E-18 | 7.92217E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -7.9488E-42 | -6.2200E-30 | 0.0000E+00 |
6.2200E-30 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.583600809184e-18 with the node and degree of freedom N80427 DX

The residue of the type RESI_GLOB_MAXI is worth 7.922173634396e-22 with the node and degree of freedom N80427 DX

Temps CPU consommé dans ce pas de temps : 23.769 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.284 s (3 intégrations)

* Temps total factorisation matrice : 3.459 s (1 factorisations)

* Temps construction second membre : 5.442 s

* Temps total résolution K.U=F : 0.133 s (1 résolutions)

* Temps assemblage matrice : 0.953 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.498 s

Mémoire (Mo) : 6177.55 / 5033.90 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.850000000000e-01 for the sequence number 157 Field stored SIEF_ELGA at time 7.850000000000e-01 for the sequence number 157

Field stored VARI_ELGA at time 7.850000000000e-01 for the sequence number 157

Field stored COMPORTEMENT at time 7.850000000000e-01 for the sequence number 157

Field stored VITE at time 7.850000000000e-01 for the sequence number 157

Field stored ACCE at time 7.850000000000e-01 for the sequence number 157

Field stored FORC_AMOR at time 7.850000000000e-01 for the sequence number 157

Field stored FORC_LIAI at time 7.850000000000e-01 for the sequence number 157

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth

1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth

5.000000000000e-03.

[98%] Instant calculé : 7.85000e-01, dernier instant archivé : 7.85000e-01, au numéro d'ordre :

157

Time of computation: 7.900000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.90000E-01 | 0 | 7.97722E-18 | 7.36252E-22 |
| | |TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -5.3907E-42 | -4.2166E-30 | 0.0000E+00 |
4.2166E-30 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.977224527416e-18 with the

node and degree of freedom N82016 DX

The residue of the type RESI_GLOB_MAXI is worth 7.362522935495e-22 with the

node and degree of freedom N82016 DX

Temps CPU consommé dans ce pas de temps : 23.710 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.205 s (3 intégrations)

* Temps total factorisation matrice : 3.435 s (1 factorisations)

* Temps construction second membre : 5.421 s

* Temps total résolution K.U=F : 0.133 s (1 résolutions)

* Temps assemblage matrice : 0.953 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.562 s

Mémoire (Mo) : 6177.55 / 5079.33 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.900000000000e-01 for the sequence number 158

Field stored SIEF_ELGA at time 7.900000000000e-01 for the sequence number 158

Field stored VARI_ELGA at time 7.900000000000e-01 for the sequence number 158

Field stored COMPORTEMENT at time 7.900000000000e-01 for the sequence number 158

Field stored VITE at time 7.900000000000e-01 for the sequence number 158

Field stored ACCE at time 7.900000000000e-01 for the sequence number 158

Field stored FORC_AMOR at time 7.900000000000e-01 for the sequence number 158

Field stored FORC_LIAI at time 7.900000000000e-01 for the sequence number 158

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 5.000000000000e-03.

[98%] Instant calculé : 7.90000e-01, dernier instant archivé : 7.90000e-01, au numéro d'ordre :

158 ----------

Time of computation: 7.950000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 7.95000E-01 | 0 | 9.22385E-18 | 8.51309E-22 |
| |TANGENTE | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -3.6556E-42 | -2.8582E-30 | 0.0000E+00 |
2.8582E-30 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |

2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.223851840552e-18 with the node and degree of freedom N85230 DZ

The residue of the type RESI_GLOB_MAXI is worth 8.513088793762e-22 with the node and degree of freedom N85230 DZ

Temps CPU consommé dans ce pas de temps   : 23.727 s

* Nombre d'itérations de Newton   : 1

* Temps total intégration comportement   : 10.283 s (3 intégrations)

* Temps total factorisation matrice   : 3.445 s (1 factorisations)

* Temps construction second membre   : 5.420 s

* Temps total résolution K.U=F   : 0.132 s (1 résolutions)

* Temps assemblage matrice   : 0.954 s

* Nombre d'itérations de recherche linéaire   : 3

* Temps autres opérations   : 3.492 s

Mémoire (Mo) : 6177.55 / 5124.76 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 7.950000000000e-01 for the sequence number 159

Field stored SIEF_ELGA at time 7.950000000000e-01 for the sequence number 159

Field stored VARI_ELGA at time 7.950000000000e-01 for the sequence number 159

Field stored COMPORTEMENT at time 7.950000000000e-01 for the sequence number 159

Field stored VITE at time 7.950000000000e-01 for the sequence number 159

Field stored ACCE at time 7.950000000000e-01 for the sequence number 159

Field stored FORC_AMOR at time 7.950000000000e-01 for the sequence number 159

Field stored FORC_LIAI at time 7.950000000000e-01 for the sequence number 159

Adaptation of the time step.

For the method of adaptation of the type FIXE, the computed time step is worth 1.000000000000e-02.

On all the criteria of adaptation, the smallest time step is worth 1.000000000000e-02.

After best fit on the compulsory points of transition, the smallest time step is worth 4.999999999999e-03.

[99%] Instant calculé : 7.95000e-01, dernier instant archivé : 7.95000e-01, au numéro d'ordre :

159

Time of computation: 8.000000000000e-01

| INCREMENT | NEWTON | RESIDU | RESIDU |
RECH. LINE. | RECH. LINE. | OPTION | NEWTON |

| INSTANT | ITERATION | RELATIF | ABSOLU |
NB. ITER | COEFFICIENT | ASSEMBLAGE | TEMPS CALCUL |

| | | RESI_GLOB_RELA | RESI_GLOB_MAXI |
| RHO | | VALEUR |

| 8.00000E-01 | 0 | 9.17727E-18 | 8.47010E-22 |
| | TANGENTE | | |

| BILAN D'ENERGIE | TRAV_EXT | ENER_TOT | ENER_CIN | TRAV_AMOR |
DISS_SCH |

| PAS COURANT | 0.0000E+00 | -2.4788E-42 | -1.9373E-30 | 0.0000E+00 |
1.9373E-30 |

| TOTAL | 2.9387E-07 | 4.0994E-21 | -1.5263E-10 | 0.0000E+00 |
2.9403E-07 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.177274650902e-18 with the
node and degree of freedom N80419 DY

The residue of the type RESI_GLOB_MAXI is worth 8.470100706128e-22 with the
node and degree of freedom N80419 DY

Temps CPU consommé dans ce pas de temps : 23.895 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 10.445 s (3 intégrations)

* Temps total factorisation matrice : 3.415 s (1 factorisations)

* Temps construction second membre : 5.418 s

* Temps total résolution K.U=F : 0.130 s (1 résolutions)

* Temps assemblage matrice : 0.961 s

* Nombre d'itérations de recherche linéaire : 3

* Temps autres opérations : 3.526 s

Mémoire (Mo) : 6177.55 / 5170.19 / 5648.52 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 8.000000000000e-01 for the sequence number 160

Field stored SIEF_ELGA at time 8.000000000000e-01 for the sequence number 160

Field stored VARI_ELGA at time 8.000000000000e-01 for the sequence number 160

Field stored COMPORTEMENT at time 8.000000000000e-01 for the sequence number 160

Field stored VITE at time 8.000000000000e-01 for the sequence number 160

Field stored ACCE at time 8.000000000000e-01 for the sequence number 160

Field stored FORC_AMOR at time 8.000000000000e-01 for the sequence number 160

Field stored FORC_LIAI at time 8.000000000000e-01 for the sequence number 160

[100%] Instant calculé : 8.00000e-01, dernier instant archivé : 8.00000e-01, au numéro d'ordre :

160

Temps CPU consommé dans le calcul : 1 h 8 min 35 s dont

temps CPU "perdu" dans les découpes : 0.000 s * Nombre

de pas de temps : 160

* Nombre d'itérations de Newton : 161

* Temps dans l'archivage : 11.626 s

* Temps dans le post-traitement : 3 min 31 s

* Temps total intégration comportement : 28 min 0 s (485 intégrations)

* Temps total factorisation matrice : 9 min 22 s (161 factorisations)

* Temps construction second membre : 14 min 46 s

* Temps total résolution K.U=F : 21.546 s (161 résolutions)

* Temps assemblage matrice : 2 min 36 s

* Nombre d'itérations de recherche linéaire : 480

#1 Resolution des systemes lineaires CPU
(USER+SYST/SYST/ELAPS): 585.02 53.67 585.06

#2 Calculs elementaires et assemblages CPU
(USER+SYST/SYST/ELAPS): 3283.03 120.33 3283.24

#3 Dechargement de la memoire sur disque CPU
(USER+SYST/SYST/ELAPS): 5.57 5.36 5.57

#4 Communications MPI CPU
(USER+SYST/SYST/ELAPS): 0.01 0.00 0.03

Résultat commande #0047 (DYNA_NON_LINE): SIM ('<0000002c>') de type
<NonLinearResult>

Dépend de :

- TIMELIST ('<0000002a>') de type <ListOfFloats>

- MATS ('<00000004>') de type <MaterialField>

- BC_0 ('<00000026>') de type <MechanicalDirichletBC>

- BC_1 ('<00000027>') de type <MechanicalDirichletBC>

- BC_2 ('<00000028>') de type <MechanicalLoadFunction>

- BC_3 ('<00000029>') de type <MechanicalLoadFunction>

- INSTLIST ('<0000002b>') de type <TimeStepper>

- MODEL ('<00000003>') de type <Model>

Mémoire (Mo) : 8542.03 / 8542.03 / 8012.21 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0047 user+syst: 3894.19s (syst: 251.71s, elaps: 4146.44s)

--

.. _stg1_txt583

--

Commande #0048 de fort.1, ligne 583

FIN(INFO_RESU='NON',

  PROC0='OUI',

RETASSAGE='NON')

Saving objects...

pi <class 'float'> e

<class 'float'> tau <class 'float'>

inf <class 'float'> nan

<class 'float'>

MAT_0 <class 'libaster.Material'>

MESH <class 'libaster.Mesh'>

MODEL <class 'libaster.Model'>

MATS <class 'libaster.MaterialField'>

F_4 <class 'libaster.FieldOnNodesReal'>

F_0 <class 'libaster.Formula'>

F_1 <class 'libaster.Formula'>

F_2 <class 'libaster.Formula'>

F_3 <class 'libaster.FieldOnNodesReal'> INIT_D

<class 'libaster.FieldOnNodesReal'>

F_9 <class 'libaster.FieldOnNodesReal'>

F_5 <class 'libaster.Formula'>

F_6 <class 'libaster.Formula'>

F_7 <class 'libaster.Formula'>

F_8 <class 'libaster.FieldOnNodesReal'> INIT_U

<class 'libaster.FieldOnNodesReal'>

F_14 <class 'libaster.FieldOnNodesReal'>

F_10 <class 'libaster.Formula'>

F_11 <class 'libaster.Formula'>

F_12 <class 'libaster.Formula'>

F_13 <class 'libaster.FieldOnNodesReal'>

INIT_A <class 'libaster.FieldOnNodesReal'>

F_22 <class 'libaster.FieldOnNodesReal'>

F_23 <class 'libaster.FieldOnCellsReal'>

F_15 <class 'libaster.Formula'>

F_16 <class 'libaster.Formula'>

F_17 <class 'libaster.Formula'>

F_18 <class 'libaster.Formula'>

F_19 <class 'libaster.Formula'>

F_20 <class 'libaster.Formula'>

F_21 <class 'libaster.FieldOnCellsReal'>

F_24 <class 'libaster.FieldOnCellsReal'>

INIT_S <class 'libaster.FieldOnCellsReal'>

F_25 <class 'libaster.Formula'>

F_26 <class 'libaster.Formula'>

F_27 <class 'libaster.Formula'>

F_28 <class 'libaster.Formula'>

BC_0 <class 'libaster.MechanicalDirichletBC'>

BC_1 <class 'libaster.MechanicalDirichletBC'>

BC_2 <class 'libaster.MechanicalLoadFunction'> BC_3

<class 'libaster.MechanicalLoadFunction'>

TIMELIST <class 'libaster.ListOfFloats'>

INSTLIST <class 'libaster.TimeStepper'>

SIM <class 'libaster.NonLinearResult'>

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 ‖ <I> <CATAMESS_89> ‖

 ‖ ‖

 ‖ List of warnings emitted during the execution of computation.

‖

 ‖ ‖

 ‖ Warnings which you chose to ignore of are preceded by (*).

‖

 ‖ Number of occurrences for each warning:

‖

 ‖ no warning ‖

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-

 Concepts de la base: G

 Nom Type Taille (Mo) Nombre Nombre de

d'objets segments

 TOTAL 7919.76 5913 6871

00000001 MATER_SDASTER 0.00 9
9

00000002 MAILLAGE_SDASTER 41.90 38 89

00000003 MODELE_SDASTER 18.78 9 14

00000004 CHAM_MATER 2.20 9 14

00000005 CHAM_NO_SDASTER 2.02 5
5

00000006 FORMULE 0.00 4
4

00000007 FORMULE 0.00 4
4

00000008 FORMULE 0.00 4
4

00000009 CHAM_NO_SDASTER 10.10 10 12

0000000a CHAM_NO_SDASTER 10.10 10 12

0000000b CHAM_NO_SDASTER 2.02 5
5

0000000c FORMULE 0.00 4
4

0000000d FORMULE 0.00 4
4

0000000e FORMULE 0.00 4
4

0000000f CHAM_NO_SDASTER 10.10 10 12

00000010 CHAM_NO_SDASTER 10.10 10 12

00000011 CHAM_NO_SDASTER 2.02 5
5

00000012 FORMULE 0.00 4
4

00000013 FORMULE 0.00 4
4

00000014 FORMULE 0.00 4
4

00000015 CHAM_NO_SDASTER 10.10 10 12

00000016 CHAM_NO_SDASTER 10.10 10
12

00000017 CHAM_NO_SDASTER 2.02 5
5

00000018 CHAM_ELEM 30.28 5
5

00000019 FORMULE 0.00 4
4

0000001a FORMULE 0.00 4
4

0000001b FORMULE 0.00 4
4

0000001c FORMULE 0.00 4
4

0000001d FORMULE 0.00 4
4

0000001e FORMULE 0.00 4
4

0000001f CHAM_ELEM 182.26 5
5

00000020 CHAM_ELEM 182.26 5
5

00000021 CHAM_ELEM 22.06 5
5

00000022 FORMULE 0.00 4
4

00000023 FORMULE 0.00 4
4

00000024 FORMULE 0.00 4
4

00000025 FORMULE 0.00 4
4

00000026 CHAR_CINE_MECA 6.85 4
4

00000027 CHAR_CINE_MECA 6.85 4
4

00000028 CHAR_MECA 3.35 32
37

00000029 CHAR_MECA 1.14 32 37

0000002a LISTR8_SDASTER 0.00 6
6

0000002b LIST_INST 0.00 9 9

0000002c EVOL_NOLI 7323.12 5540 6354

&FOZERO 0.00 2

2

&&_NUM_C 0.00 1

1

&CATA.AC 0.00 2

4

&CATA.CL 0.62 1

3

&CATA.GD 0.19 4 11

&CATA.ME 0.22 2

4

&CATA.OP 0.32 4 19

&CATA.PH 0.00 1

1

&CATA.PR 0.00 2

4

&CATA.TE 28.61 17

42

&CATA.TH 0.01 2

4

&CATA.TM 0.01 7 11

-

Nom de la base : GLOBALE

Nombre d'enregistrements utilisés : 10915

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre total d'accès en lecture : 7210

Volume des accès en lecture : 5632.81 Mo.

Nombre total d'accès en écriture : 11152

Volume des accès en écriture : 8712.50 Mo.

Nombre d'identificateurs utilisés : 6859

Taille maximum du répertoire : 8000

Pourcentage d'utilisation du répertoire : 85 %

Nom de la base : VOLATILE

Nombre d'enregistrements utilisés : 3185

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre total d'accès en lecture : 24536

Volume des accès en lecture : 19168.75 Mo.

Nombre total d'accès en écriture : 6817

Volume des accès en écriture : 5325.78 Mo.

Nombre d'identificateurs utilisés : 1357

Taille maximum du répertoire : 2000

Pourcentage d'utilisation du répertoire : 67 %

<I> <FIN> ARRET NORMAL DANS "FIN" PAR APPEL A "JEFINI".

<I> <FIN> MEMOIRE JEVEUX MINIMALE REQUISE POUR L'EXECUTION :
1196.69 Mo

<I> <FIN> MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION : 8012.55 Mo

<I> <FIN> MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS LORS DE L'EXECUTION : 8542.27 Mo

<I> FERMETURE DES BASES EFFECTUEE

STATISTIQUES CONCERNANT L'ALLOCATION DYNAMIQUE :

TAILLE CUMULEE MAXIMUM : 8013 Mo.

TAILLE CUMULEE LIBEREE : 71852 Mo.

NOMBRE TOTAL D'ALLOCATIONS : 30945091

NOMBRE TOTAL DE LIBERATIONS : 30945071

APPELS AU MECANISME DE LIBERATION : 2 TAILLE MEMOIRE CUMULEE RECUPEREE : 9133 Mo.

VOLUME DES LECTURES : 2 Mo.

VOLUME DES ECRITURES : 9508 Mo.

MEMOIRE JEVEUX MINIMALE REQUISE POUR L'EXECUTION : 1196.69 Mo

- IMPOSE DE NOMBREUX ACCES DISQUE
- RALENTIT LA VITESSE D'EXECUTION

MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION : 8012.55 Mo

- LIMITE LES ACCES DISQUE
- AMELIORE LA VITESSE D'EXECUTION

MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS : 8542.27 Mo

- COMPREND LA MEMOIRE CONSOMMEE PAR JEVEUX,
  LE SUPERVISEUR PYTHON, LES LIBRAIRIES EXTERNES

<I> FIN D'EXECUTION LE : DI-19-JANV-2025 08:45:42 DeprecationWarning:

PY_SSIZE_T_CLEAN will be required for '#' formats libaster.jeveux_finalize(options)

Signature of pickled file :

25874a0a2da642a3f1d14693a85a1a403d8b4ba2250016659efaca884f0cbc25

Signature of info file :

d385a9a9c129be9a50e5ef4a3b59bf4c115982fffe4be2daa132b188e168a54e

Signature of Jeveux database:

0e8670e9bdc9da31d4381b9a77a4da7070348fc4389fa2e983971c4ff8fc03e4

****

* COMMAND : USER : SYSTEM : USER+SYS : ELAPSED *

****

* DEBUT : 0.06 : 0.22 : 0.28 : 0.39 *

* DEFI_MATERIAU : 0.00 : 0.00 : 0.00 : 0.02 *

* LIRE_MAILLAGE : 1.02 : 0.04 : 1.06 : 1.08 *

* DEFI_GROUP : 0.62 : 0.00 : 0.62 : 0.62

*

* MODI_MAILLAGE : 1.43 : 0.03 : 1.46 : 1.47

*

* AFFE_MODELE : 1.12 : 0.04 : 1.16 : 1.18

*

* AFFE_MATERIAU : 0.00 : 0.00 : 0.00 : 0.01

*

* CREA_CHAMP : 0.01 : 0.00 : 0.01 : 0.01

*

* FORMULE : 0.00 : 0.01 : 0.01 : 0.00

*

*

*

* FORMULE : 0.00 : 0.00 : 0.00 : 0.00

* FORMULE : 0.00 : 0.00 : 0.00 : 0.00

* CREA_CHAMP : 0.02 : 0.00 : 0.02 : 0.04
*
* CREA_CHAMP : 0.39 : 0.01 : 0.40 : 0.39
*
* CREA_CHAMP : 0.00 : 0.01 : 0.01 : 0.00
*
* FORMULE : 0.00 : 0.00 : 0.00 : 0.01
*
* FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
* FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
* CREA_CHAMP : 0.03 : 0.00 : 0.03 : 0.03
*
* CREA_CHAMP : 0.38 : 0.01 : 0.39 : 0.39
*
* CREA_CHAMP : 0.00 : 0.01 : 0.01 : 0.01
*

*

*

* FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
* FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
* FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
* CREA_CHAMP : 0.02 : 0.00 : 0.02 : 0.03
*
* CREA_CHAMP : 0.39 : 0.01 : 0.40 : 0.39
*
* CREA_CHAMP : 0.00 : 0.00 : 0.00 : 0.01

* CREA_CHAMP : 0.41 : 0.11 : 0.52 : 0.52

* FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
* FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
* FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
* FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*

*

*

* FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
* FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
* CREA_CHAMP : 2.32 : 0.42 : 2.74 : 2.74
*
* CREA_CHAMP : 15.55 : 0.68 : 16.23 :
16.23 *
* CREA_CHAMP : 1.56 : 0.29 : 1.85 : 1.85
*
* FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
* FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
* FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
* FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
* AFFE_CHAR_CINE : 0.30 : 0.01 : 0.31 : 0.30
*
* AFFE_CHAR_CINE : 0.30 : 0.00 : 0.30 : 0.30

*

*

* AFFE_CHAR_MECA_F : 0.73 : 0.05 : 0.78 : 0.78

* AFFE_CHAR_MECA_F : 16.82 : 0.23 : 17.05 : 17.05
*
* DEFI_LIST_REEL : 0.00 : 0.00 : 0.00 : 0.00 *
* DEFI_LIST_INST : 0.01 : 0.00 : 0.01 : 0.02 *
* DYNA_NON_LINE : 3894.19 : 251.71 : 4145.90 : 4146.44 *
* FIN : 0.91 : 2.11 : 3.02 : 3.02 *
* . check syntax : 0.08 : 0.00 : 0.08 : 0.07 *
* . fortran : 3938.34 : 253.17 : 4191.51 : 4192.27 *
****
* TOTAL_JOB : 3938.61 : 256.00 : 4194.61 : 4195.39
*
****
Mémoire (Mo) : 8542.27 / 533.61 / 8012.55 / 1196.69 (VmPeak / VmSize / Optimum / Minimum)
Fin commande #0048 user+syst: 0.91s (syst: 2.11s, elaps: 3.02s)

End of the Code_Aster execution

*

*

Code_Aster MPI exits normally

Exited

EXECUTION_CODE_ASTER_EXIT_12=0

```
# import code_aster import code_aster from

code_aster.Commands import * # import math

library for functions and formula from math

import *

# import simscale macros and utilities import

simscale_macros

# Input file start

POURSUITE(

    IGNORE_ALARM=("SUPERVIS_1", "ALGORITH11_87"),

    LANG="en",

) try:

    # reconstructing model for single-core post-processing

    MODEL = MODI_MODELE(

        DISTRIBUTION=_F(

            METHODE="CENTRALISE",

        ),

        MODELE=MODEL,

reuse=MODEL,

    )

    TAB_ENER = simscale_macros.GET_ENERGIE(

        NOM_CMP=("TRAV_EXT", "ENER_CIN", "ENER_TOT", "TRAV_AMOR",

"TRAV_LIAI", "DISS_SCH"),
```

```
        NOM_TABLE="PARA_CALC",
        RESULTAT=SIM,
    )
    DEFI_FICHIER(
        ACCES="NEW",
        ACTION="ASSOCIER",
        FICHIER="REPE_OUT/energy-plots",
        TYPE="ASCII",
        UNITE=30,
    )
    IMPR_TABLE(
        COMM_PARA="$$",
        FORMAT="TABLEAU",
        FORMAT_R="E12.5",
        NOM_PARA=("INST", "TRAV_EXT", "ENER_CIN", "ENER_TOT", "TRAV_AMOR",
"TRAV_LIAI", "DISS_SCH"),
        SEPARATEUR=",",
        TABLE=TAB_ENER,
        UNITE=30,
    )
    DEFI_FICHIER(
        ACTION="LIBERER",
        UNITE=30,
    )
```

```
# Derived result calculation on nodes
SIM = CALC_CHAMP(
    CONTRAINTE=("SIGM_NOEU"),
    CRITERES=("SIEQ_NOEU"),
    DEFORMATION=("EPSG_NOEU"),
    GROUP_MA=(
        "face1",
        "face10",
        "face11",
        "face12",
        "face13",
        "face14",
        "face2",
        "face3",
        "face4",
        "face5",
        "face6",
        "face7",
        "face8",
        "face9",
        "region1",
    ),
```

```
        RESULTAT=SIM,
reuse=SIM,
    )
    # Restricted mesh (only volume elements) for global fields printing
    MESH_PP = CREA_MAILLAGE(
        MAILLAGE=MESH,
        RESTREINT=_F(
            GROUP_MA=("region1"),
        ),
    )
    # Restricted model definition for global fields printing
    MOD_PP = AFFE_MODELE(
        AFFE=(
            _F(
                MODELISATION="3D",
                PHENOMENE="MECANIQUE",
                TOUT="OUI",
            ),
            _F(
                GROUP_MA=("region1"),
                MODELISATION="3D",
                PHENOMENE="MECANIQUE",
            ),
```

```
        ),
        MAILLAGE=MESH_PP,
    )
    # Restricted result for global fields printing
    SIM_PP = EXTR_RESU(
        ARCHIVAGE=_F(
            NOM_CHAM=("ACCE", "DEPL", "EPSG_NOEU", "SIEQ_NOEU",
"SIGM_NOEU", "VITE"),
            PAS_ARCH=1,
        ),
        RESTREINT=_F(
            MODELE=MOD_PP,
        ),
        RESULTAT=SIM,
    )
    # Destroying intermediate objects for global fields result restriction
    DETRUIRE(
        INFO=1,
        NOM=(MESH, MODEL, SIM),
    )
    # Solution fields in file
IMPR_RESU(
        FORMAT="MED",
```

```
RESU=(
    _F(
        NOM_CHAM="DEPL",
        NOM_CHAM_MED="displacement",
        NOM_CMP=("DX", "DY", "DZ"),
        RESULTAT=SIM_PP,
    ),
    _F(
        NOM_CHAM="SIGM_NOEU",
        NOM_CHAM_MED="cauchy stress",
        NOM_CMP=("SIXX", "SIYY", "SIZZ", "SIXY", "SIXZ", "SIYZ"),
        RESULTAT=SIM_PP,
    ),
    _F(
        NOM_CHAM="SIEQ_NOEU",
        NOM_CHAM_MED="von Mises stress",
        NOM_CMP=("VMIS"),
        RESULTAT=SIM_PP,
    ),
    _F(
        NOM_CHAM="EPSG_NOEU",
        NOM_CHAM_MED="total nonlinear strain",
        NOM_CMP=("EPXX", "EPYY", "EPZZ", "EPXY", "EPXZ", "EPYZ"),
```

```
            RESULTAT=SIM_PP,
        ),
        _F(
            NOM_CHAM="VITE",
            NOM_CHAM_MED="velocity",
            NOM_CMP=("DX", "DY", "DZ"),
            RESULTAT=SIM_PP,
        ),
        _F(
            NOM_CHAM="ACCE",
            NOM_CHAM_MED="acceleration",
            NOM_CMP=("DX", "DY", "DZ"),
            RESULTAT=SIM_PP,
        ),
    ),
    UNITE=80,
)
finally:
    # Input file end
    FIN(
        INFO_RESU="NON",
        PROC0="OUI",
        RETASSAGE="NON",
```

)

MPI_Init...

calling MPI_Init...

Ouverture en écriture du fichier ./vola.1

<INFO> Démarrage de l'exécution.

-- CODE_ASTER -- VERSION : CORRECTIVE AVANT STABILISATION (stable-updates) --

Version 15.6.10 modifiée le 14/12/2022

révision cf12489e9fcc - branche 'v15' Copyright EDF R&D 1991 - 2025

Exécution du : Sun Jan 19 08:46:11 2025

Type de processeur : x86_64

Langue des messages : en (UTF-8)

Version de Python : 3.8.10

Version de NumPy : 1.17.4

Parallélisme MPI : actif

Rang du processeur courant : 0

Nombre de processeurs utilisés : 1

Parallélisme OpenMP : actif

Nombre de processus utilisés : 1

Version de la librairie HDF5 : 1.10.3

Version de la librairie MED : 4.1.1

Version de la librairie MFront : 3.4.0

Version de la librairie MUMPS : 5.2.1

Version de la librairie PETSc : 3.12.3p0

Version de la librairie SCOTCH : 6.0.4

Mémoire limite pour l'exécution : 120000.00 Mo

consommée par l'initialisation : 484.90 Mo

reste pour l'allocation dynamique : 119515.10 Mo

Taille limite des fichiers d'échange : 2048.00 Go

<frozen importlib._bootstrap>:219: ImportWarning: can't resolve package from __spec__ or __package__, falling back on __name__ and __path__

DeprecationWarning: PY_SSIZE_T_CLEAN will be required for '#' formats

libaster.jeveux_init()

Found the comm-file: post.comm

Original directory for logging was found:

.. _stg1_txt125

Commande #0001 de ligne 125

```
POURSUITE(CODE='NON',
          DEBUG=_F(JEVEUX='NON',
                   JXVERI='NON',
                   SDVERI='NON',
```

```
                VERI_BASE_NB=125),
        IGNORE_ALARM=('SUPERVIS_1', 'ALGORITH11_87'),
        IMPR_MACRO='NON',
        INFO=1,
        LANG='en',
        MEMOIRE=_F(TAILLE_BLOC=800.0,
                   TAILLE_GROUP_ELEM=1000),
MESURE_TEMPS=_F(MOYENNE='NON',
                    NIVE_DETAIL=1),          RESERVE_CPU=_F(BORNE=900))
```

restarting from a previous execution...

Initial value of maximum time CPU = 35996400 second

Valeur of the maximum time CPU placed to the orders = 35995500 second

Réserve CPU envisaged = 900 seconds

Ouverture en lecture du fichier ./glob.1

Ajustement de la taille maximale des bases à 2048.00 Go.

Nom de la base : GLOBALE

Créée avec la version : 15.06.10

Nombre d'enregistrements utilisés : 10915

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre d'identificateurs utilisés : 6859

Taille maximum du répertoire : 8000

Pourcentage d'utilisation du répertoire : 85 %

Ouverture en lecture du fichier ./glob.1

Ouverture en écriture du fichier ./vola.1

End of reading (lasted 0.000002 S.)

DeprecationWarning: PY_SSIZE_T_CLEAN will be required for '#' formats

libaster.call_poursuite(syntax)

Restored objects:

pi <class 'float'> e

<class 'float'> tau <class 'float'>

inf <class 'float'> nan

<class 'float'>

MAT_0 <class 'libaster.Material'>

MESH <class 'libaster.Mesh'>

MODEL <class 'libaster.Model'>

MATS <class 'libaster.MaterialField'>

F_4 <class 'libaster.FieldOnNodesReal'>

F_0 <class 'libaster.Formula'>

F_1 <class 'libaster.Formula'>

F_2 <class 'libaster.Formula'>

F_3 <class 'libaster.FieldOnNodesReal'> INIT_D

<class 'libaster.FieldOnNodesReal'>

F_9 <class 'libaster.FieldOnNodesReal'>

F_5 <class 'libaster.Formula'>

F_6 <class 'libaster.Formula'>

F_7 <class 'libaster.Formula'>

F_8 <class 'libaster.FieldOnNodesReal'> INIT_U

<class 'libaster.FieldOnNodesReal'>

F_14 <class 'libaster.FieldOnNodesReal'>

F_10 <class 'libaster.Formula'>

F_11 <class 'libaster.Formula'>

F_12 <class 'libaster.Formula'>

F_13 <class 'libaster.FieldOnNodesReal'>

INIT_A <class 'libaster.FieldOnNodesReal'>

F_22 <class 'libaster.FieldOnNodesReal'>

F_23 <class 'libaster.FieldOnCellsReal'>

F_15 <class 'libaster.Formula'>

F_16 <class 'libaster.Formula'>

F_17 <class 'libaster.Formula'>

F_18 <class 'libaster.Formula'>

F_19 <class 'libaster.Formula'>

F_20 <class 'libaster.Formula'>

F_21 <class 'libaster.FieldOnCellsReal'>

F_24 <class 'libaster.FieldOnCellsReal'>

INIT_S <class 'libaster.FieldOnCellsReal'>

F_25 <class 'libaster.Formula'>

F_26 <class 'libaster.Formula'>

F_27 <class 'libaster.Formula'>

F_28 <class 'libaster.Formula'>

BC_0 <class 'libaster.MechanicalDirichletBC'>

BC_1 <class 'libaster.MechanicalDirichletBC'>

BC_2 <class 'libaster.MechanicalLoadFunction'>

BC_3 <class 'libaster.MechanicalLoadFunction'>

TIMELIST <class 'libaster.ListOfFloats'>

INSTLIST <class 'libaster.TimeStepper'>

SIM <class 'libaster.NonLinearResult'>

Mémoire (Mo) : 7979.60 / 7979.60 / 7485.74 / 198.00 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0001 user+syst: 0.17s (syst: 4.29s, elaps: 4.48s)

.. _stg1_txt19

Commande #0002 de fort.1, ligne 19

MODEL = MODI_MODELE(DISTRIBUTION=_F(METHODE='CENTRALISE'),

MODELE=MODEL, reuse=MODEL)

Résultat commande #0002 (MODI_MODELE): MODEL ('<00000003>') de type <Model>

Dépend de :

- MESH ('<00000002>') de type <Mesh>

Mémoire (Mo) : 7979.73 / 7979.73 / 7485.74 /   198.00 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0002 user+syst: 0.00s (syst: 0.00s, elaps: 0.00s)

--

.. _stg1_txt27

--

Commande #0003 de fort.1, ligne 27

GET_ENERGIE(NOM_CMP=('TRAV_EXT', 'ENER_CIN', 'ENER_TOT', 'TRAV_AMOR', 'TRAV_LIAI', 'DISS_SCH'),

        NOM_TABLE='PARA_CALC',

        RESULTAT=SIM)

Résultat commande #0003 (GET_ENERGIE): '<0000002e>' de type <Table>

Mémoire (Mo) : 7979.98 / 7979.86 / 7485.82 /   198.00 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0003 user+syst: 0.03s (syst: 0.00s, elaps: 0.03s)

--

.. _stg1_txt33

--

Commande #0006 de fort.1, ligne 33

```
DEFI_FICHIER(ACCES='NEW',
             ACTION='ASSOCIER',
             FICHIER='REPE_OUT/energy-plots',
             TYPE='ASCII',
             UNITE=30)
# Mémoire (Mo) :  7979.99 /  7979.99 /  7485.82 /   198.00 (VmPeak / VmSize /
Optimum / Minimum)
# Fin commande #0006    user+syst:        0.00s (syst:        0.00s, elaps:
0.00s)
# ------------------------------------------------------------------------
--------------------
.. _stg1_txt41
# ------------------------------------------------------------------------
--------------------
# Commande #0007 de fort.1, ligne 41
IMPR_TABLE(COMMENTAIRE='#',
COMM_PARA='$$',
           DEBUT_LIGNE='',
           FIN_LIGNE='\n',
           FIN_TABLE='',
           FORMAT='TABLEAU',
           FORMAT_R='E12.5',
           IMPR_FONCTION='NON',
           INFO=1,
```

NOM_PARA=('INST', 'TRAV_EXT', 'ENER_CIN', 'ENER_TOT', 'TRAV_AMOR', 'TRAV_LIAI', 'DISS_SCH'),

SEPARATEUR=',',

TABLE='<0000002e>',

UNITE=30)

Mémoire (Mo) : 7980.49 / 7980.49 / 7485.82 / 198.00 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0007 user+syst: 0.00s (syst: 0.00s, elaps: 0.00s)

--

.. _stg1_txt51

--

Commande #0008 de fort.1, ligne 51

DEFI_FICHIER(ACTION='LIBERER',

UNITE=30)

Mémoire (Mo) : 7980.49 / 7980.49 / 7485.82 / 198.00 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0008 user+syst: 0.01s (syst: 0.00s, elaps: 0.00s)

--

.. _stg1_txt57

--

```
# Commande #0009 de fort.1, ligne 57
SIM = CALC_CHAMP(CONTRAINTE='SIGM_NOEU',
                 CRITERE='RELATIF',
                 CRITERES='SIEQ_NOEU',
                 DEFORMATION='EPSG_NOEU',
                 GROUP_MA=('face1', 'face10', 'face11', 'face12', 'face13', 'face14', 'face2',
'face3', 'face4', 'face5', 'face6', 'face7', 'face8', 'face9', 'region1'),
                 INFO=1,
                 PARALLELISME_TEMPS='NON',
                 PRECISION=1e-06,
RESULTAT=SIM,                 reuse=SIM)
Ouverture en écriture du fichier ./vola.2
Ouverture en écriture du fichier ./vola.3
Ouverture en écriture du fichier ./vola.4
Ouverture en écriture du fichier ./vola.5
#2      Calculs elementaires et assemblages              CPU
(USER+SYST/SYST/ELAPS):    526.13     68.85     559.33
#3      Dechargement de la memoire sur disque            CPU
(USER+SYST/SYST/ELAPS):     35.89     30.00     122.03
Critère de destruction du fichier (1.00 %) associé à la base VOLATILE dépassé 2.55 %
 Nombre d'enregistrements utilisés : 68413
 Volume disque occupé              : 53448 Mo.
 Nombre maximum d'enregistrements  : 2684354
Ouverture en écriture du fichier ./vola.1
```

```
 DeprecationWarning: PY_SSIZE_T_CLEAN will be required for '#' formats

return libaster.call_oper(syntax, 0)

# Résultat commande #0009 (CALC_CHAMP): SIM ('<0000002c>') de type
<NonLinearResult>

# Dépend de :

# - TIMELIST ('<0000002a>') de type <ListOfFloats>

# - MATS ('<00000004>') de type <MaterialField>

# - BC_0 ('<00000026>') de type <MechanicalDirichletBC>

# - BC_1 ('<00000027>') de type <MechanicalDirichletBC>

# - BC_2 ('<00000028>') de type <MechanicalLoadFunction>

# - BC_3 ('<00000029>') de type <MechanicalLoadFunction>

# - INSTLIST ('<0000002b>') de type <TimeStepper>

# - MODEL ('<00000003>') de type <Model>

# Mémoire (Mo) : 48588.13 /  6762.79 / 48060.80 /   576.79 (VmPeak / VmSize /
Optimum / Minimum)

# Fin commande #0009   user+syst:     1302.85s (syst:      244.10s, elaps:     1633.27s)

# ----------------------------------------------------------------------
----------------------

.. _stg1_txt83

# ----------------------------------------------------------------------
----------------------

# Commande #0010 de fort.1, ligne 83

MESH_PP = CREA_MAILLAGE(INFO=1,

                        MAILLAGE=MESH,
```

RESTREINT=_F(GROUP_MA='region1',

TOUT_GROUP_MA='NON',

TOUT_GROUP_NO='NON'))

Vérification du maillage.

------------ MAILLAGE 0000002f - IMPRESSIONS NIVEAU 1 ------------ ASTER

15.06.10 CONCEPT 0000002f CALCULE LE 19/01/2025 A 09:13:30 DE TYPE

MAILLAGE_SDASTER

NOMBRE DE NOEUDS 88282

NOMBRE DE MAILLES 288857

TETRA4 288857 NOMBRE DE GROUPES DE MAILLES

1 region1 288857

Résultat commande #0010 (CREA_MAILLAGE): MESH_PP ('<0000002f>') de type <Mesh>

Dépend de :

- MESH ('<00000002>') de type <Mesh>

Mémoire (Mo) : 48588.13 / 6810.02 / 48060.80 / 576.79 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0010 user+syst: 1.59s (syst: 0.03s, elaps: 1.63s)

.. _stg1_txt91

Commande #0011 de fort.1, ligne 91

MOD_PP = AFFE_MODELE(AFFE=(_F(MODELISATION='3D',

PHENOMENE='MECANIQUE',

TOUT='OUI'),

_F(GROUP_MA='region1',

MODELISATION='3D',

PHENOMENE='MECANIQUE')),

DISTRIBUTION=_F(METHODE='SOUS_DOMAINE',

PARTITIONNEUR='METIS'),

INFO=1,

MAILLAGE=MESH_PP,

VERI_JACOBIEN='OUI',

VERI_NORM_IFS='OUI')

Sur les 288857 mailles du maillage 0000002f, on a demandé l'affectation de 288857, on a pu en affecter 288857.

Modélisation Formulation Type maille Élément fini Nombre

3D _ TETRA4 MECA_TETRA4 288857

#2 Calculs elementaires et assemblages CPU (USER+SYST/SYST/ELAPS): 0.14 0.02 0.13

Résultat commande #0011 (AFFE_MODELE): MOD_PP ('<00000030>') de type <Model>

Dépend de :

- MESH_PP ('<0000002f>') de type <Mesh>

Mémoire (Mo) : 48588.13 / 6847.59 / 48060.80 /   576.79 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0011 user+syst: 0.75s (syst: 0.04s, elaps: 0.79s)

--

.. _stg1_txt108

--

Commande #0012 de fort.1, ligne 108

```
SIM_PP = EXTR_RESU(ARCHIVAGE=_F(CRITERE='RELATIF',
                                NOM_CHAM=('ACCE', 'DEPL', 'EPSG_NOEU',
'SIEQ_NOEU', 'SIGM_NOEU', 'VITE'),
                                PAS_ARCH=1,
                                PRECISION=1e-06),
                   INFO=1,
                   RESTREINT=_F(MODELE=MOD_PP),
                   RESULTAT=SIM)
```

 STRUCTURE DU CONCEPT 00000031 CALCULE POUR   161 NUMEROS D'ORDRE

 LISTE DES NOMS SYMBOLIQUES:

```
 ! ---------- !----------------!----------------!----------------!----------------!----------------!----------------!
 ! NUME_ORDRE !      DEPL      !      VITE      !      ACCE      !
```

SIGM_NOEU ! SIEQ_NOEU ! EPSG_NOEU ! COMPORTEMENT !

! ---------- !----------------!----------------!----------------!------------

---!----------------!----------------!----------------!

! 0 ! DEPL_R ! DEPL_R ! DEPL_R !

SIEF_R ! SIEF_R ! EPSI_R ! COMPOR !

! ... ! ... ! ... ! ... ! ... !

... ! ... ! ... !

! 160 ! DEPL_R ! DEPL_R ! DEPL_R !

SIEF_R ! SIEF_R ! EPSI_R ! COMPOR !

! ---------- !----------------!----------------!----------------!------------

---!----------------!----------------!----------------!

LISTE DES NOMS DE VARIABLES D'ACCES:

INST DE TYPE R

LISTE DES NOMS DE PARAMETRES:

! ---------- !----------------!----------------!----------------!------------

---!----------------!----------------!----------------!----------------!-----

----------!

! NUME_ORDRE ! CARAELEM ! CHAMPMAT ! MODELE !

EXCIT ! ETA_PILOTAGE ! ITER_GLOB ! CHAR_MINI !

TRAN_GENE_NOLI ! INST_PREC !

! ---------- !----------------!----------------!----------------!------------

----!----------------!----------------!----------------!----------------!----

----------!

! 0 ! K8 ! K8 ! K8 !

K24 ! R ! I ! R !

K24 ! R !

! ... ! ... ! ... ! ... ! ... !

... ! ... ! ... ! ... ! ... !

! 160 ! K8 ! K8 ! K8 !

K24 ! R ! I ! R !

K24 ! R !

! ---------- !----------!----------!----------!----------

---!----------!----------!----------!----------!-----

----------!

Résultat commande #0012 (EXTR_RESU): SIM_PP ('<00000031>') de type <NonLinearResult>

Dépend de :

- MOD_PP ('<00000030>') de type <Model>

Mémoire (Mo) : 48588.13 / 12780.50 / 48060.80 / 576.79 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0012 user+syst: 531.13s (syst: 92.05s, elaps: 623.22s)

.. _stg1_txt120

Commande #0013 de fort.1, ligne 120

DETRUIRE(INFO=1,

  NOM=(MESH, MODEL, SIM))

Suppression de la référence : 'MESH'

Suppression de la référence : 'MODEL'

Suppression de la référence : 'SIM'

Mémoire (Mo) : 48588.13 / 12780.50 / 48060.80 / 576.79 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0013 user+syst: 0.04s (syst: 0.01s, elaps: 0.04s)

.. _stg1_txt126

Commande #0014 de fort.1, ligne 126

```
IMPR_RESU(FORMAT='MED',
          INFO=1,
          RESU=(_F(IMPR_NOM_VARI='OUI',
                   INFO_MAILLAGE='NON',
                   NOM_CHAM='DEPL',
                   NOM_CHAM_MED='displacement',
                   NOM_CMP=('DX', 'DY', 'DZ'),
                   RESULTAT=SIM_PP),
                 _F(IMPR_NOM_VARI='OUI',
                   INFO_MAILLAGE='NON',
                   NOM_CHAM='SIGM_NOEU',
                   NOM_CHAM_MED='cauchy stress',
                   NOM_CMP=('SIXX', 'SIYY', 'SIZZ', 'SIXY', 'SIXZ', 'SIYZ'),
                   RESULTAT=SIM_PP),
```

```
_F(IMPR_NOM_VARI='OUI',
   INFO_MAILLAGE='NON',
   NOM_CHAM='SIEQ_NOEU',
   NOM_CHAM_MED='von Mises stress',
   NOM_CMP='VMIS',
   RESULTAT=SIM_PP),
_F(IMPR_NOM_VARI='OUI',
   INFO_MAILLAGE='NON',
   NOM_CHAM='EPSG_NOEU',
   NOM_CHAM_MED='total nonlinear strain',
   NOM_CMP=('EPXX', 'EPYY', 'EPZZ', 'EPXY', 'EPXZ', 'EPYZ'),
   RESULTAT=SIM_PP),
_F(IMPR_NOM_VARI='OUI',
   INFO_MAILLAGE='NON',
   NOM_CHAM='VITE',
   NOM_CHAM_MED='velocity',
   NOM_CMP=('DX', 'DY', 'DZ'),
   RESULTAT=SIM_PP),
_F(IMPR_NOM_VARI='OUI',
   INFO_MAILLAGE='NON',
   NOM_CHAM='ACCE',
   NOM_CHAM_MED='acceleration',
   NOM_CMP=('DX', 'DY', 'DZ'),
```

RESULTAT=SIM_PP)),

UNITE=80,

VERSION_MED='3.3.1')

Création du fichier au format MED 3.3.1.

Mémoire (Mo) : 48588.13 / 12783.09 / 48060.80 / 576.79 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0014 user+syst: 17.71s (syst: 5.67s, elaps: 23.40s)

.. _stg1_txt171

Commande #0015 de fort.1, ligne 171

FIN(INFO_RESU='NON',

PROC0='OUI',

RETASSAGE='NON')

Saving objects...

pi <class 'float'> e

<class 'float'> tau <class 'float'>

inf <class 'float'> nan

<class 'float'>

MAT_0 <class 'libaster.Material'>

MATS <class 'libaster.MaterialField'>

F_4 <class 'libaster.FieldOnNodesReal'>

F_0 <class 'libaster.Formula'>

F_1 <class 'libaster.Formula'>

F_2 <class 'libaster.Formula'>

F_3 <class 'libaster.FieldOnNodesReal'> INIT_D

<class 'libaster.FieldOnNodesReal'>

F_9 <class 'libaster.FieldOnNodesReal'>

F_5 <class 'libaster.Formula'>

F_6 <class 'libaster.Formula'>

F_7 <class 'libaster.Formula'>

F_8 <class 'libaster.FieldOnNodesReal'> INIT_U

<class 'libaster.FieldOnNodesReal'>

F_14 <class 'libaster.FieldOnNodesReal'>

F_10 <class 'libaster.Formula'>

F_11 <class 'libaster.Formula'>

F_12 <class 'libaster.Formula'>

F_13 <class 'libaster.FieldOnNodesReal'>

INIT_A <class 'libaster.FieldOnNodesReal'>

F_22 <class 'libaster.FieldOnNodesReal'>

F_23 <class 'libaster.FieldOnCellsReal'>

F_15 <class 'libaster.Formula'>

F_16 <class 'libaster.Formula'>

F_17 <class 'libaster.Formula'>

F_18 <class 'libaster.Formula'>

F_19 <class 'libaster.Formula'>

F_20 <class 'libaster.Formula'>

F_21 <class 'libaster.FieldOnCellsReal'>

F_24 <class 'libaster.FieldOnCellsReal'>

INIT_S <class 'libaster.FieldOnCellsReal'>

F_25 <class 'libaster.Formula'>

F_26 <class 'libaster.Formula'>

F_27 <class 'libaster.Formula'>

F_28 <class 'libaster.Formula'>

BC_0 <class 'libaster.MechanicalDirichletBC'>

BC_1 <class 'libaster.MechanicalDirichletBC'>

BC_2 <class 'libaster.MechanicalLoadFunction'> BC_3 <class 'libaster.MechanicalLoadFunction'>

TIMELIST <class 'libaster.ListOfFloats'>

INSTLIST <class 'libaster.TimeStepper'>

TAB_ENER <class 'libaster.Table'>

MESH_PP <class 'libaster.Mesh'>

MOD_PP <class 'libaster.Model'>

SIM_PP <class 'libaster.NonLinearResult'>

```
 ‖ <I> <CATAMESS_89>                                                    ‖
 ‖                                                                      ‖
 ‖ List of warnings emitted during the execution of computation.
‖
 ‖                                                                      ‖
 ‖  Warnings which you chose to ignore of are preceded by (*).
‖
 ‖  Number of occurrences for each warning:
‖
 ‖           no warning                                                 ‖

 ╚═══════════════════════════════════════════════════════════════════════
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═══════════════════════════════════════════╝

 ------------------------------------------------------------------------
-
 Concepts de la base: G
                          Nom      Type            Taille (Mo)      Nombre     Nombre de
                                                                    d'objets   segments
   TOTAL                          15755.11        12787        14587
   00000001   MATER_SDASTER       0.00            9
9
   00000002   MAILLAGE_SDASTER    41.90           38           89
   00000003   MODELE_SDASTER      18.78           9            14
   00000004   CHAM_MATER          2.20            9            14
```

00000005 CHAM_NO_SDASTER 2.02 5
5

00000006 FORMULE 0.00 4
4

00000007 FORMULE 0.00 4
4

00000008 FORMULE 0.00 4
4

00000009 CHAM_NO_SDASTER 10.10 10 12

0000000a CHAM_NO_SDASTER 10.10 10 12

0000000b CHAM_NO_SDASTER 2.02 5
5

0000000c FORMULE 0.00 4
4

0000000d FORMULE 0.00 4
4

0000000e FORMULE 0.00 4
4

0000000f CHAM_NO_SDASTER 10.10 10 12

00000010 CHAM_NO_SDASTER 10.10 10 12

00000011 CHAM_NO_SDASTER 2.02 5
5

00000012 FORMULE 0.00 4
4

00000013 FORMULE 0.00 4
4

00000014 FORMULE 0.00 4
4

00000015 CHAM_NO_SDASTER 10.10 10
12

00000016 CHAM_NO_SDASTER 10.10 10 12

00000017 CHAM_NO_SDASTER 2.02 5
5

00000018 CHAM_ELEM 30.28 5
5

00000019 FORMULE 0.00 4
4

0000001a FORMULE 0.00 4
4

0000001b FORMULE 0.00 4
4

0000001c FORMULE 0.00 4
4

0000001d FORMULE 0.00 4
4

0000001e FORMULE 0.00 4
4

0000001f CHAM_ELEM 182.26 5
5

00000020 CHAM_ELEM 182.26 5
5

00000021 CHAM_ELEM 22.06 5
5

00000022 FORMULE 0.00 4
4

00000023 FORMULE 0.00 4
4

00000024 FORMULE 0.00 4
4

00000025 FORMULE 0.00 4
4

00000026 CHAR_CINE_MECA 6.85 4
4

00000027 CHAR_CINE_MECA 6.85 4
4

00000028 CHAR_MECA 3.35 32
37

00000029 CHAR_MECA 1.14 32 37

0000002a LISTR8_SDASTER 0.00 6
6

0000002b LIST_INST 0.00 9 9

0000002c EVOL_NOLI 10545.39 7487
8307

0000002e TABLE_SDASTER 0.02 19 19

00000031 EVOL_NOLI 4566.66 4861 5678

0000002f MAILLAGE_SDASTER 32.18 38 52

00000030 MODELE_SDASTER 14.21 9 14

&FOZERO 0.00 2
2

&&_NUM_C 0.00 1
1

&CATA.AC 0.00 2
4

&CATA.CL 0.62 1
3

&CATA.GD 0.19 4 11

&CATA.ME 0.22 2
4

&CATA.OP 0.32 4 19

&CATA.PH 0.00 1
1

&CATA.PR 0.00 2
4

&CATA.TE 28.61 17 42

&CATA.TH 0.01 2
4

&CATA.TM 0.01 7 11 ----------

-

Ouverture en écriture du fichier ./glob.2

Nom de la base : GLOBALE

Nombre d'enregistrements utilisés : 21839

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre total d'accès en lecture : 18962

Volume des accès en lecture : 14814.06 Mo.

Nombre total d'accès en écriture : 11173

Volume des accès en écriture : 8728.91 Mo.

Nombre d'identificateurs utilisés : 14599

Taille maximum du répertoire : 16000

Pourcentage d'utilisation du répertoire : 91 %

Nom de la base : VOLATILE

Nombre d'enregistrements utilisés : 107

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre total d'accès en lecture : 48913

Volume des accès en lecture : 38213.28 Mo.

Nombre total d'accès en écriture : 68894

Volume des accès en écriture : 53823.44 Mo.

Nombre d'identificateurs utilisés : 1332

Taille maximum du répertoire : 4000

Pourcentage d'utilisation du répertoire : 33 %

<I> <FIN> ARRET NORMAL DANS "FIN" PAR APPEL A "JEFINI".

<I> <FIN> MEMOIRE JEVEUX MINIMALE REQUISE POUR L'EXECUTION : 576.79 Mo

<I> <FIN> MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION :

48060.80 Mo

<I> <FIN> MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS LORS DE L'EXECUTION : 48588.13 Mo

<I> FERMETURE DES BASES EFFECTUEE

STATISTIQUES CONCERNANT L'ALLOCATION DYNAMIQUE :

TAILLE CUMULEE MAXIMUM : 48061 Mo.

TAILLE CUMULEE LIBEREE : 74523 Mo.

NOMBRE TOTAL D'ALLOCATIONS : 19731357

NOMBRE TOTAL DE LIBERATIONS : 19731357

APPELS AU MECANISME DE LIBERATION : 2 TAILLE MEMOIRE CUMULEE RECUPEREE : 80380 Mo.

VOLUME DES LECTURES : 4 Mo.

VOLUME DES ECRITURES : 55402 Mo.

MEMOIRE JEVEUX MINIMALE REQUISE POUR L'EXECUTION : 576.79 Mo

- IMPOSE DE NOMBREUX ACCES DISQUE
- RALENTIT LA VITESSE D'EXECUTION

MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION : 48060.80 Mo

- LIMITE LES ACCES DISQUE
- AMELIORE LA VITESSE D'EXECUTION

MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS : 48588.13 Mo

- COMPREND LA MEMOIRE CONSOMMEE PAR JEVEUX,
  LE SUPERVISEUR PYTHON, LES LIBRAIRIES EXTERNES

<I> FIN D'EXECUTION LE : DI-19-JANV-2025 09:24:23

DeprecationWarning: PY_SSIZE_T_CLEAN will be required for '#' formats
libaster.jeveux_finalize(options)

Signature of pickled file :
4bd28d47812c9bee9eeb21a87cd3b0d66ffd5388acaa3eb09fb0f9edf7d4c44a

Signature of info file :
2430df9d0b8b6d14052313012f791712f1f9d6516d988d3e0a59f744e2e260b5

Signature of Jeveux database:
735b95d4365506160e77925f6fd1fa867851f5d9853a230fbca163c2b2035016

```
********************************************************************************
*   COMMAND              :      USER :     SYSTEM :   USER+SYS :    ELAPSED *
********************************************************************************
*   POURSUITE            :      0.17 :      4.29 :      4.46 :      4.48
*
*   MODI_MODELE          :      0.00 :      0.00 :      0.00 :
0.00 *
*   GET_ENERGIE          :      0.03 :      0.00 :      0.03 :      0.03 *  *
    DEFI_FICHIER         :      0.00 :      0.00 :      0.00 :      0.00 *
*   IMPR_TABLE           :      0.00 :      0.00 :      0.00 :      0.00 *
*   DEFI_FICHIER         :      0.01 :      0.00 :      0.01 :      0.00 *
*   CALC_CHAMP           :   1302.85 :    244.10 :   1546.95 :   1633.27 *
*   CREA_MAILLAGE        :      1.59 :      0.03 :      1.62 :      1.63
*
*   AFFE_MODELE          :      0.75 :      0.04 :      0.79 :      0.79
*
*   EXTR_RESU            :    531.13 :     92.05 :    623.18 :    623.22
*
```

```
*   DETRUIRE                :       0.04 :       0.01 :       0.05 :       0.04 *
*   IMPR_RESU               :      17.71 :       5.67 :      23.38 :      23.40
*
*   FIN                     :       1.31 :       4.31 :       5.62 :       5.62 *
*   . check syntax          :       0.03 :       0.00 :       0.03 :       0.02 *
*   . fortran               :    1855.42 :     347.89 :    2203.31 :    2289.76 *
 ********************************************************************************
*   TOTAL_JOB               :    1855.59 :     350.86 :    2206.45 :    2292.86
*
 ********************************************************************************
# Mémoire (Mo) : 48588.13 /   530.16 / 48060.80 /   576.79 (VmPeak / VmSize /
Optimum / Minimum)
# Fin commande #0015   user+syst:        1.31s (syst:        4.31s, elaps:
5.62s)
# --------------------------------------------------------------------------
----------------------
End of the Code_Aster execution
Code_Aster MPI exits normally
Exited
EXECUTION_CODE_ASTER_EXIT_12=0
```

Follower pressure 50Pa The maximum time step is 0.005s