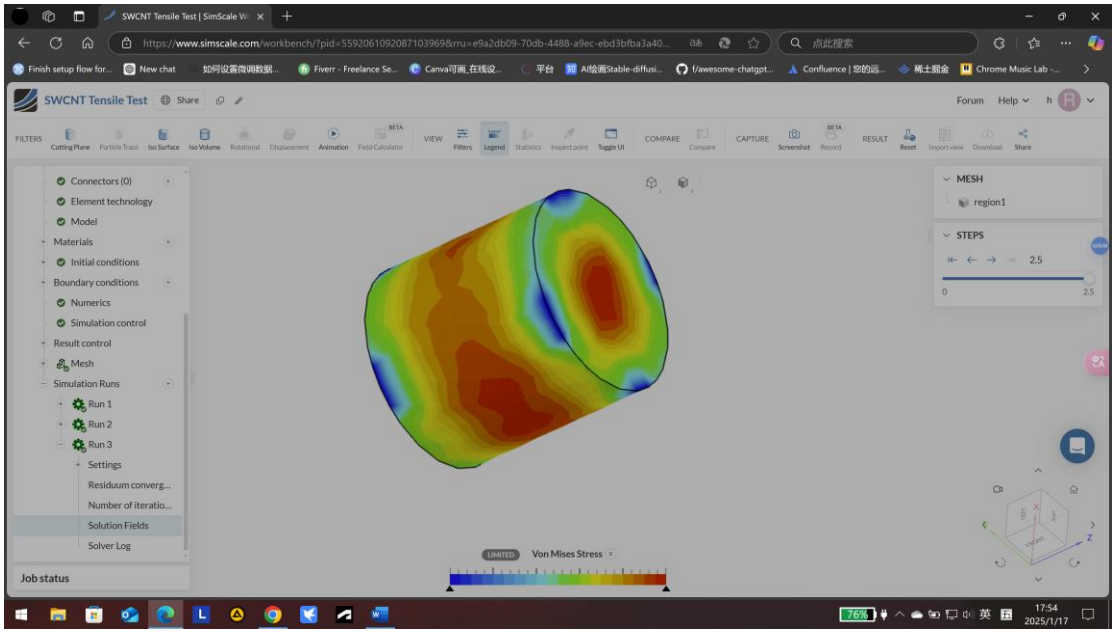
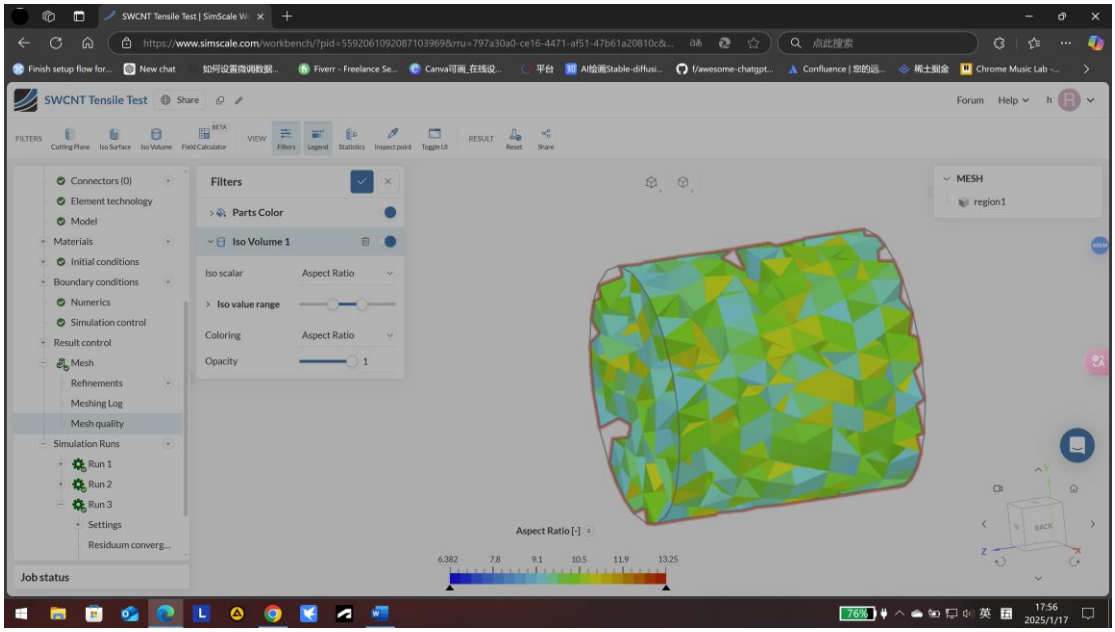


解决方案字段（上图）



网格质量（上图）

网格划分日志

****
****

Model import took 588.644056ms.

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

Absolute small feature tolerance: 0.009950000000000007 m.

Surface meshing took 88.343607ms.

Number of cells after 132.628566ms: 2357

Number of cells after 177.124076ms: 3884

Meshing took 190.754315ms. Starting mesh export.

Mesh quality metrics:

Non Orthogonality

Acceptable range: 0.0 to 88.0

- min: 0.0
- max: 55.5
- average: 25.4
- 99.99-th percentile: 55.5

Edge Ratio

Acceptable range: 0.0 to 100.0

- min: 1.1
- max: 3.2
- average: 1.7
- 99.99-th percentile: 3.2

Volume Ratio

Acceptable range: 0.0 to 100.0

- min: 1.0
- max: 3.0
- average: 1.4
- 99.99-th percentile: 3.0

Aspect Ratio

Acceptable range: 0.0 to 100.0

min: 6.4

max: 13.3

average: 10.0

99.99-th percentile: 13.3

Tetrahedral Aspect Ratio

Acceptable range: 0.0 to 100.0

min: 6.4

max: 13.3

average: 10.0

99.99-th percentile: 13.3

Skewness

Acceptable range: 0.0 to 100.0

min: 0.1

max: 0.8

average: 0.3

99.99-th percentile: 0.8

Min Edge Length : 0

Mesh export took 942.999188ms.

求解器日志

9.999999999999e-04.

[96%] Instant calculé : 2.41600e+00, dernier instant archivé : 2.41600e+00, au numéro d'ordre :

2416

Time of computation: 2.417000000000e+00

| 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 |

| 2.41700E+00 | 0 | 1.03796E-15 | 1.11022E-15 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 1.037956642671e-15 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 1.110223024625e-15 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.098 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1411.30 / 1404.36 / 856.95 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.417000000000e+00 for the sequence number 2417

Field stored SIEF_ELGA at time 2.417000000000e+00 for the sequence number 2417

Field stored VARI_ELGA at time 2.417000000000e+00 for the sequence number 2417

Field stored COMPORTEMENT at time 2.417000000000e+00 for the sequence number 2417

Field stored VITE at time 2.417000000000e+00 for the sequence number 2417

Field stored ACCE at time 2.417000000000e+00 for the sequence number 2417

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[96%] Instant calculé : 2.41700e+00, dernier instant archivé : 2.41700e+00, au numéro d'ordre :

2417

Time of computation: 2.418000000000e+00

| 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 |

| 2.41800E+00 | 0 | 7.26570E-16 | 7.77156E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.265696498697e-16 with the node and degree of

freedom N381 DX

The residue of the type RESI_GLOB_MAXI is worth 7.771561172376e-16 with the node and degree of

freedom N381 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1411.84 / 1404.83 / 857.49 / 211.64 (VmPeak / VmSize /

Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.418000000000e+00 for the sequence number 2418

Field stored SIEF_ELGA at time 2.418000000000e+00 for the sequence number 2418

Field stored VARI_ELGA at time 2.418000000000e+00 for the sequence number 2418

Field stored COMPORTEMENT at time 2.418000000000e+00 for the sequence number 2418

Field stored VITE at time 2.418000000000e+00 for the sequence number 2418

Field stored ACCE at time 2.418000000000e+00 for the sequence number 2418

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[96%] Instant calculé : 2.41800e+00, dernier instant archivé : 2.41800e+00, au numéro d'ordre :

2418

Time of computation: 2.419000000000e+00

| 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 |

| 2.41900E+00 | 0 | 8.82263E-16 | 9.43690E-16 |
| | TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.822631462704e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 9.436895709314e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1412.38 / 1405.41 / 858.02 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.419000000000e+00 for the sequence number 2419

Field stored SIEF_ELGA at time 2.419000000000e+00 for the sequence number 2419

Field stored VARI_ELGA at time 2.419000000000e+00 for the sequence number 2419

Field stored COMPORTEMENT at time 2.419000000000e+00 for the sequence number 2419

Field stored VITE at time 2.419000000000e+00 for the sequence number 2419

Field stored ACCE at time 2.419000000000e+00 for the sequence number 2419

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[96%] Instant calculé : 2.41900e+00, dernier instant archivé : 2.41900e+00, au numéro d'ordre :

2419

Time of computation: 2.420000000000e+00

| 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 |

| 2.42000E+00 | 0 | 7.78467E-16 | 8.32667E-16 |
| | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.097 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.057 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1412.93 / 1405.99 / 858.56 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.420000000000e+00 for the sequence number 2420

Field stored SIEF_ELGA at time 2.420000000000e+00 for the sequence number 2420

Field stored VARI_ELGA at time 2.420000000000e+00 for the sequence number 2420

Field stored COMPORTEMENT at time 2.420000000000e+00 for the sequence number 2420

Field stored VITE at time 2.420000000000e+00 for the sequence number 2420

Field stored ACCE at time 2.420000000000e+00 for the sequence number 2420

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[96%] Instant calculé : 2.42000e+00, dernier instant archivé : 2.42000e+00, au numéro d'ordre :

2420

Time of computation: 2.421000000000e+00

| 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 | |

| 2.42100E+00 | 0 | 9.86059E-16 | 1.05471E-15 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.860588105375e-16 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 1.054711873394e-15 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1413.47 / 1406.46 / 859.10 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.421000000000e+00 for the sequence number 2421

Field stored SIEF_ELGA at time 2.421000000000e+00 for the sequence number 2421

Field stored VARI_ELGA at time 2.421000000000e+00 for the sequence number 2421

Field stored COMPORTEMENT at time 2.421000000000e+00 for the sequence number 2421

Field stored VITE at time 2.421000000000e+00 for the sequence number 2421

Field stored ACCE at time 2.421000000000e+00 for the sequence number 2421

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[96%] Instant calculé : 2.42100e+00, dernier instant archivé : 2.42100e+00, au numéro d'ordre :

2421

Time of computation: 2.422000000000e+00

| 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 |

| 2.42200E+00 | 0 | 9.34161E-16 | 9.99201E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.341609784039e-16 with the

node and degree of

freedom N550 DX

The residue of the type RESI_GLOB_MAXI is worth 9.992007221626e-16 with the node and degree of

freedom N550 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1414.01 / 1407.04 / 859.64 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.422000000000e+00 for the sequence number 2422

Field stored SIEF_ELGA at time 2.422000000000e+00 for the sequence number 2422

Field stored VARI_ELGA at time 2.422000000000e+00 for the sequence number 2422

Field stored COMPORTEMENT at time 2.422000000000e+00 for the sequence number 2422

Field stored VITE at time 2.422000000000e+00 for the sequence number 2422

Field stored ACCE at time 2.422000000000e+00 for the sequence number 2422

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[96%] Instant calculé : 2.42200e+00, dernier instant archivé : 2.42200e+00, au numéro d'ordre :

2422

Time of computation: 2.423000000000e+00

| 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 |

| 2.42300E+00 | 0 | 9.34161E-16 | 9.99201E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.341609784039e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 9.992007221626e-16 with the

node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1414.57 / 1407.62 / 860.17 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.423000000000e+00 for the sequence number 2423

Field stored SIEF_ELGA at time 2.423000000000e+00 for the sequence number 2423

Field stored VARI_ELGA at time 2.423000000000e+00 for the sequence number 2423

Field stored COMPORTEMENT at time 2.423000000000e+00 for the sequence number 2423

Field stored VITE at time 2.423000000000e+00 for the sequence number 2423

Field stored ACCE at time 2.423000000000e+00 for the sequence number 2423

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[96%] Instant calculé : 2.42300e+00, dernier instant archivé : 2.42300e+00, au numéro d'ordre :

2423

Time of computation: 2.424000000000e+00

| 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 |

| 2.42400E+00 | 0 | 9.86059E-16 | 1.05471E-15 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.860588105375e-16 with the node and degree of

freedom N550 DX

The residue of the type RESI_GLOB_MAXI is worth 1.054711873394e-15 with the node and degree of

freedom N550 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1415.10 / 1408.09 / 860.71 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.424000000000e+00 for the sequence number 2424

Field stored SIEF_ELGA at time 2.424000000000e+00 for the sequence number 2424

Field stored VARI_ELGA at time 2.424000000000e+00 for the sequence number 2424

Field stored COMPORTEMENT at time 2.424000000000e+00 for the sequence number 2424

Field stored VITE at time 2.424000000000e+00 for the sequence number 2424

Field stored ACCE at time 2.424000000000e+00 for the sequence number 2424

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[96%] Instant calculé : 2.42400e+00, dernier instant archivé : 2.42400e+00, au numéro

d'ordre :

2424

Time of computation: 2.425000000000e+00

| 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 | |

| 2.42500E+00 | 0 | 7.78467E-16 | 8.32667E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.101 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.016 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1415.64 / 1408.67 / 861.25 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.425000000000e+00 for the sequence number 2425

Field stored SIEF_ELGA at time 2.425000000000e+00 for the sequence number 2425

Field stored VARI_ELGA at time 2.425000000000e+00 for the sequence number 2425

Field stored COMPORTEMENT at time 2.425000000000e+00 for the sequence number 2425

Field stored VITE at time 2.425000000000e+00 for the sequence number 2425

Field stored ACCE at time 2.425000000000e+00 for the sequence number 2425

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[96%] Instant calculé : 2.42500e+00, dernier instant archivé : 2.42500e+00, au numéro d'ordre :

2425

Time of computation: 2.426000000000e+00

| 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 |

| 2.42600E+00 | 0 | 8.30365E-16 | 8.88178E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.303653141368e-16 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 8.881784197001e-16 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.101 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.060 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.016 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1416.20 / 1409.25 / 861.78 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.426000000000e+00 for the sequence number 2426

Field stored SIEF_ELGA at time 2.426000000000e+00 for the sequence number 2426

Field stored VARI_ELGA at time 2.426000000000e+00 for the sequence number 2426

Field stored COMPORTEMENT at time 2.426000000000e+00 for the sequence number 2426

Field stored VITE at time 2.426000000000e+00 for the sequence number 2426

Field stored ACCE at time 2.426000000000e+00 for the sequence number 2426

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.42600e+00, dernier instant archivé : 2.42600e+00, au numéro d'ordre :

2426

Time of computation: 2.427000000000e+00

| 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 | | | |

| 2.42700E+00 | 0 | 9.86059E-16 | 1.05471E-15 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.860588105375e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 1.054711873394e-15 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.101 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.060 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.016 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.014 s

Mémoire (Mo) : 1416.73 / 1409.72 / 862.32 / 211.64 (VmPeak / VmSize /

Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.427000000000e+00 for the sequence number 2427

Field stored SIEF_ELGA at time 2.427000000000e+00 for the sequence number 2427

Field stored VARI_ELGA at time 2.427000000000e+00 for the sequence number 2427

Field stored COMPORTEMENT at time 2.427000000000e+00 for the sequence number 2427

Field stored VITE at time 2.427000000000e+00 for the sequence number 2427

Field stored ACCE at time 2.427000000000e+00 for the sequence number 2427

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.42700e+00, dernier instant archivé : 2.42700e+00, au numéro d'ordre :

2427

Time of computation: 2.428000000000e+00

| 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 |

| 2.42800E+00 | 0 | 7.26570E-16 | 7.77156E-16 |
| | TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.265696498697e-16 with the node and degree of

freedom N550 DX

The residue of the type RESI_GLOB_MAXI is worth 7.771561172376e-16 with the node and degree of

freedom N550 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.060 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1417.28 / 1410.30 / 862.86 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.428000000000e+00 for the sequence number 2428

Field stored SIEF_ELGA at time 2.428000000000e+00 for the sequence number 2428

Field stored VARI_ELGA at time 2.428000000000e+00 for the sequence number 2428

Field stored COMPORTEMENT at time 2.428000000000e+00 for the sequence number 2428

Field stored VITE at time 2.428000000000e+00 for the sequence number 2428

Field stored ACCE at time 2.428000000000e+00 for the sequence number 2428

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.42800e+00, dernier instant archivé : 2.42800e+00, au numéro d'ordre :

2428

Time of computation: 2.429000000000e+00

| 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 | | | | | |

| 2.42900E+00 | 0 | 9.34161E-16 | 9.99201E-16 |
| | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.341609784039e-16 with the node and degree of

freedom N383 DX

The residue of the type RESI_GLOB_MAXI is worth 9.992007221626e-16 with the node and degree of

freedom N383 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1417.82 / 1410.85 / 863.40 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.429000000000e+00 for the sequence number 2429

Field stored SIEF_ELGA at time 2.429000000000e+00 for the sequence number 2429

Field stored VARI_ELGA at time 2.429000000000e+00 for the sequence number 2429

Field stored COMPORTEMENT at time 2.429000000000e+00 for the sequence number 2429

Field stored VITE at time 2.429000000000e+00 for the sequence number 2429

Field stored ACCE at time 2.429000000000e+00 for the sequence number 2429

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.42900e+00, dernier instant archivé : 2.42900e+00, au numéro d'ordre :

2429

Time of computation: 2.430000000000e+00

| 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 | |

| 2.43000E+00 | 0 | 7.26570E-16 | 7.77156E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.265696498697e-16 with the node and degree of

freedom N550 DX

The residue of the type RESI_GLOB_MAXI is worth 7.771561172376e-16 with the node and degree of

freedom N550 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.016 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1418.38 / 1411.37 / 863.93 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.430000000000e+00 for the sequence number 2430

Field stored SIEF_ELGA at time 2.430000000000e+00 for the sequence number 2430

Field stored VARI_ELGA at time 2.430000000000e+00 for the sequence number 2430

Field stored COMPORTEMENT at time 2.430000000000e+00 for the sequence number 2430

Field stored VITE at time 2.430000000000e+00 for the sequence number 2430

Field stored ACCE at time 2.430000000000e+00 for the sequence number 2430

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.43000e+00, dernier instant archivé : 2.43000e+00, au numéro d'ordre :

2430

Time of computation: 2.431000000000e+00

| 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 |

| 2.43100E+00 | 0 | 9.34161E-16 | 9.99201E-16 | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.341609784039e-16 with the

node and degree of

freedom N383 DX

The residue of the type RESI_GLOB_MAXI is worth 9.992007221626e-16 with the node and degree of

freedom N383 DX

Temps CPU consommé dans ce pas de temps : 0.101 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1418.92 / 1411.95 / 864.47 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.431000000000e+00 for the sequence number 2431

Field stored SIEF_ELGA at time 2.431000000000e+00 for the sequence number 2431

Field stored VARI_ELGA at time 2.431000000000e+00 for the sequence number 2431

Field stored COMPORTEMENT at time 2.431000000000e+00 for the sequence number 2431

Field stored VITE at time 2.431000000000e+00 for the sequence number 2431

Field stored ACCE at time 2.431000000000e+00 for the sequence number 2431

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.43100e+00, dernier instant archivé : 2.43100e+00, au numéro d'ordre :

2431

Time of computation: 2.432000000000e+00

| 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 |

| 2.43200E+00 | 0 | 1.03796E-15 | 1.11022E-15 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 1.037956642671e-15 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 1.110223024625e-15 with the

node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1419.48 / 1412.53 / 865.01 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.432000000000e+00 for the sequence number 2432

Field stored SIEF_ELGA at time 2.432000000000e+00 for the sequence number 2432

Field stored VARI_ELGA at time 2.432000000000e+00 for the sequence number 2432

Field stored COMPORTEMENT at time 2.432000000000e+00 for the sequence number 2432

Field stored VITE at time 2.432000000000e+00 for the sequence number 2432

Field stored ACCE at time 2.432000000000e+00 for the sequence number 2432

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.43200e+00, dernier instant archivé : 2.43200e+00, au numéro d'ordre :

2432

Time of computation: 2.433000000000e+00

| 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 | | | | | |

| 2.43300E+00 | 0 | 7.26570E-16 | 7.77156E-16 | | | | |

| | |TANGENTE | | | | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.265696498697e-16 with the node and degree of

freedom N550 DX

The residue of the type RESI_GLOB_MAXI is worth 7.771561172376e-16 with the node and degree of

freedom N550 DX

Temps CPU consommé dans ce pas de temps : 0.113 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.073 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1420.01 / 1413.01 / 865.55 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.433000000000e+00 for the sequence number 2433

Field stored SIEF_ELGA at time 2.433000000000e+00 for the sequence number 2433

Field stored VARI_ELGA at time 2.433000000000e+00 for the sequence number 2433

Field stored COMPORTEMENT at time 2.433000000000e+00 for the sequence number 2433

Field stored VITE at time 2.433000000000e+00 for the sequence number 2433

Field stored ACCE at time 2.433000000000e+00 for the sequence number 2433

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.43300e+00, dernier instant archivé : 2.43300e+00, au numéro

d'ordre :

2433

Time of computation: 2.434000000000e+00

| 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 | |

| 2.43400E+00 | 0 | 9.86059E-16 | 1.05471E-15 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.860588105375e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 1.054711873394e-15 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.098 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.057 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.012 s

Mémoire (Mo) : 1420.54 / 1413.57 / 866.08 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.434000000000e+00 for the sequence number 2434

Field stored SIEF_ELGA at time 2.434000000000e+00 for the sequence number 2434

Field stored VARI_ELGA at time 2.434000000000e+00 for the sequence number 2434

Field stored COMPORTEMENT at time 2.434000000000e+00 for the sequence number 2434

Field stored VITE at time 2.434000000000e+00 for the sequence number 2434

Field stored ACCE at time 2.434000000000e+00 for the sequence number 2434

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.43400e+00, dernier instant archivé : 2.43400e+00, au numéro d'ordre :

2434

Time of computation: 2.435000000000e+00

| 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 | |

| 2.43500E+00 | 0 | 7.26570E-16 | 7.77156E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.265696498697e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 7.771561172376e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1421.08 / 1414.09 / 866.62 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.435000000000e+00 for the sequence number 2435

Field stored SIEF_ELGA at time 2.435000000000e+00 for the sequence number 2435

Field stored VARI_ELGA at time 2.435000000000e+00 for the sequence number 2435

Field stored COMPORTEMENT at time 2.435000000000e+00 for the sequence number 2435

Field stored VITE at time 2.435000000000e+00 for the sequence number 2435

Field stored ACCE at time 2.435000000000e+00 for the sequence number 2435

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.43500e+00, dernier instant archivé : 2.43500e+00, au numéro d'ordre :

2435

Time of computation: 2.436000000000e+00

| 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 | |

| 2.43600E+00 | 0 | 7.78467E-16 | 8.32667E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the node and degree of

freedom N378 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N378 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.016 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1421.64 / 1414.67 / 867.16 / 211.64 (VmPeak / VmSize /

Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.436000000000e+00 for the sequence number 2436

Field stored SIEF_ELGA at time 2.436000000000e+00 for the sequence number 2436

Field stored VARI_ELGA at time 2.436000000000e+00 for the sequence number 2436

Field stored COMPORTEMENT at time 2.436000000000e+00 for the sequence number 2436

Field stored VITE at time 2.436000000000e+00 for the sequence number 2436

Field stored ACCE at time 2.436000000000e+00 for the sequence number 2436

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.43600e+00, dernier instant archivé : 2.43600e+00, au numéro d'ordre :

2436

Time of computation: 2.437000000000e+00

| 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 |

| 2.43700E+00 | 0 | 8.30365E-16 | 8.88178E-16 |
| | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.303653141368e-16 with the node and degree of

freedom N550 DX

The residue of the type RESI_GLOB_MAXI is worth 8.881784197001e-16 with the node and degree of

freedom N550 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.016 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1422.20 / 1415.23 / 867.69 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.437000000000e+00 for the sequence number 2437

Field stored SIEF_ELGA at time 2.437000000000e+00 for the sequence number 2437

Field stored VARI_ELGA at time 2.437000000000e+00 for the sequence number 2437

Field stored COMPORTEMENT at time 2.437000000000e+00 for the sequence number 2437

Field stored VITE at time 2.437000000000e+00 for the sequence number 2437

Field stored ACCE at time 2.437000000000e+00 for the sequence number 2437

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.43700e+00, dernier instant archivé : 2.43700e+00, au numéro d'ordre :

2437

Time of computation: 2.438000000000e+00

| 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 | | | | | |

| 2.43800E+00 | 0 | 7.78467E-16 | 8.32667E-16 |
| | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the node and degree of

freedom N410 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N410 DX

Temps CPU consommé dans ce pas de temps : 0.098 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1422.75 / 1415.80 / 868.23 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.438000000000e+00 for the sequence number 2438

Field stored SIEF_ELGA at time 2.438000000000e+00 for the sequence number 2438

Field stored VARI_ELGA at time 2.438000000000e+00 for the sequence number 2438

Field stored COMPORTEMENT at time 2.438000000000e+00 for the sequence number 2438

Field stored VITE at time 2.438000000000e+00 for the sequence number 2438

Field stored ACCE at time 2.438000000000e+00 for the sequence number 2438

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.43800e+00, dernier instant archivé : 2.43800e+00, au numéro d'ordre :

2438

Time of computation: 2.439000000000e+00

| 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 | |

| 2.43900E+00 | 0 | 9.86059E-16 | 1.05471E-15 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.860588105375e-16 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 1.054711873394e-15 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1423.29 / 1416.28 / 868.77 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.439000000000e+00 for the sequence number 2439

Field stored SIEF_ELGA at time 2.439000000000e+00 for the sequence number 2439

Field stored VARI_ELGA at time 2.439000000000e+00 for the sequence number 2439

Field stored COMPORTEMENT at time 2.439000000000e+00 for the sequence number 2439

Field stored VITE at time 2.439000000000e+00 for the sequence number 2439

Field stored ACCE at time 2.439000000000e+00 for the sequence number 2439

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.43900e+00, dernier instant archivé : 2.43900e+00, au numéro d'ordre :

2439

Time of computation: 2.440000000000e+00

| 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 |

| 2.44000E+00 | 0 | 8.82263E-16 | 9.43690E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.822631462704e-16 with the

node and degree of

freedom N550 DX

The residue of the type RESI_GLOB_MAXI is worth 9.436895709314e-16 with the node and degree of

freedom N550 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1423.83 / 1416.86 / 869.31 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.440000000000e+00 for the sequence number 2440

Field stored SIEF_ELGA at time 2.440000000000e+00 for the sequence number 2440

Field stored VARI_ELGA at time 2.440000000000e+00 for the sequence number 2440

Field stored COMPORTEMENT at time 2.440000000000e+00 for the sequence number 2440

Field stored VITE at time 2.440000000000e+00 for the sequence number 2440

Field stored ACCE at time 2.440000000000e+00 for the sequence number 2440

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.44000e+00, dernier instant archivé : 2.44000e+00, au numéro d'ordre :

2440

Time of computation: 2.441000000000e+00

| 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 | |

| 2.44100E+00 | 0 | 8.82263E-16 | 9.43690E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.822631462704e-16 with the node and degree of

freedom N550 DX

The residue of the type RESI_GLOB_MAXI is worth 9.436895709314e-16 with the

node and degree of

freedom N550 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1424.38 / 1417.44 / 869.84 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.441000000000e+00 for the sequence number 2441

Field stored SIEF_ELGA at time 2.441000000000e+00 for the sequence number 2441

Field stored VARI_ELGA at time 2.441000000000e+00 for the sequence number 2441

Field stored COMPORTEMENT at time 2.441000000000e+00 for the sequence number 2441

Field stored VITE at time 2.441000000000e+00 for the sequence number 2441

Field stored ACCE at time 2.441000000000e+00 for the sequence number 2441

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.44100e+00, dernier instant archivé : 2.44100e+00, au numéro d'ordre :

2441

Time of computation: 2.442000000000e+00

| 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 |

| 2.44200E+00 | 0 | 7.26570E-16 | 7.77156E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.265696498697e-16 with the node and degree of

freedom N410 DX

The residue of the type RESI_GLOB_MAXI is worth 7.771561172376e-16 with the node and degree of

freedom N410 DX

Temps CPU consommé dans ce pas de temps : 0.098 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1424.92 / 1417.91 / 870.38 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.442000000000e+00 for the sequence number 2442

Field stored SIEF_ELGA at time 2.442000000000e+00 for the sequence number 2442

Field stored VARI_ELGA at time 2.442000000000e+00 for the sequence number 2442

Field stored COMPORTEMENT at time 2.442000000000e+00 for the sequence number 2442

Field stored VITE at time 2.442000000000e+00 for the sequence number 2442

Field stored ACCE at time 2.442000000000e+00 for the sequence number 2442

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.44200e+00, dernier instant archivé : 2.44200e+00, au numéro

d'ordre :

2442

Time of computation: 2.443000000000e+00

| 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 | |

| 2.44300E+00 | 0 | 1.08985E-15 | 1.16573E-15 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 1.089854474805e-15 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 1.165734175856e-15 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.098 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.057 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1425.46 / 1418.49 / 870.92 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.443000000000e+00 for the sequence number 2443

Field stored SIEF_ELGA at time 2.443000000000e+00 for the sequence number 2443

Field stored VARI_ELGA at time 2.443000000000e+00 for the sequence number 2443

Field stored COMPORTEMENT at time 2.443000000000e+00 for the sequence number 2443

Field stored VITE at time 2.443000000000e+00 for the sequence number 2443

Field stored ACCE at time 2.443000000000e+00 for the sequence number 2443

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.44300e+00, dernier instant archivé : 2.44300e+00, au numéro d'ordre :

2443

Time of computation: 2.444000000000e+00

| 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 | | | | |

| | | VALEUR | | RHO | | | |

| 2.44400E+00 | 0 | 6.74672E-16 | 7.21645E-16 | | | | |

| | | | | TANGENTE | | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.746718177362e-16 with the node and degree of

freedom N383 DX

The residue of the type RESI_GLOB_MAXI is worth 7.216449660064e-16 with the node and degree of

freedom N383 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1426.01 / 1419.07 / 871.45 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.444000000000e+00 for the sequence number 2444

Field stored SIEF_ELGA at time 2.444000000000e+00 for the sequence number 2444

Field stored VARI_ELGA at time 2.444000000000e+00 for the sequence number 2444

Field stored COMPORTEMENT at time 2.444000000000e+00 for the sequence number 2444

Field stored VITE at time 2.444000000000e+00 for the sequence number 2444

Field stored ACCE at time 2.444000000000e+00 for the sequence number 2444

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.44400e+00, dernier instant archivé : 2.44400e+00, au numéro d'ordre :

2444

Time of computation: 2.445000000000e+00

| 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 | | | |

| 2.44500E+00 | 0 | 8.82263E-16 | 9.43690E-16 | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.822631462704e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 9.436895709314e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1426.55 / 1419.54 / 871.99 / 211.64 (VmPeak / VmSize /

Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.445000000000e+00 for the sequence number 2445

Field stored SIEF_ELGA at time 2.445000000000e+00 for the sequence number 2445

Field stored VARI_ELGA at time 2.445000000000e+00 for the sequence number 2445

Field stored COMPORTEMENT at time 2.445000000000e+00 for the sequence number 2445

Field stored VITE at time 2.445000000000e+00 for the sequence number 2445

Field stored ACCE at time 2.445000000000e+00 for the sequence number 2445

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.44500e+00, dernier instant archivé : 2.44500e+00, au numéro d'ordre :

2445

Time of computation: 2.446000000000e+00

| 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 |

| 2.44600E+00 | 0 | 8.30365E-16 | 8.88178E-16 |
| | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.303653141368e-16 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 8.881784197001e-16 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1427.09 / 1420.12 / 872.53 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.446000000000e+00 for the sequence number 2446

Field stored SIEF_ELGA at time 2.446000000000e+00 for the sequence number 2446

Field stored VARI_ELGA at time 2.446000000000e+00 for the sequence number 2446

Field stored COMPORTEMENT at time 2.446000000000e+00 for the sequence number 2446

Field stored VITE at time 2.446000000000e+00 for the sequence number 2446

Field stored ACCE at time 2.446000000000e+00 for the sequence number 2446

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.44600e+00, dernier instant archivé : 2.44600e+00, au numéro d'ordre :

2446

Time of computation: 2.447000000000e+00

| 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 | | | | | |

| 2.44700E+00 | 0 | 7.78467E-16 | 8.32667E-16 |
| | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1427.64 / 1420.70 / 873.07 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.447000000000e+00 for the sequence number 2447

Field stored SIEF_ELGA at time 2.447000000000e+00 for the sequence number 2447

Field stored VARI_ELGA at time 2.447000000000e+00 for the sequence number 2447

Field stored COMPORTEMENT at time 2.447000000000e+00 for the sequence number 2447

Field stored VITE at time 2.447000000000e+00 for the sequence number 2447

Field stored ACCE at time 2.447000000000e+00 for the sequence number 2447

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.44700e+00, dernier instant archivé : 2.44700e+00, au numéro d'ordre :

2447

Time of computation: 2.448000000000e+00

| 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 | |

| 2.44800E+00 | 0 | 6.74672E-16 | 7.21645E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.746718177362e-16 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 7.216449660064e-16 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1428.19 / 1421.18 / 873.60 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.448000000000e+00 for the sequence number 2448

Field stored SIEF_ELGA at time 2.448000000000e+00 for the sequence number 2448

Field stored VARI_ELGA at time 2.448000000000e+00 for the sequence number 2448

Field stored COMPORTEMENT at time 2.448000000000e+00 for the sequence number 2448

Field stored VITE at time 2.448000000000e+00 for the sequence number 2448

Field stored ACCE at time 2.448000000000e+00 for the sequence number 2448

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.44800e+00, dernier instant archivé : 2.44800e+00, au numéro d'ordre :

2448

Time of computation: 2.449000000000e+00

| 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 |

| 2.44900E+00 | 0 | 9.86059E-16 | 1.05471E-15 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.860588105375e-16 with the

node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 1.054711873394e-15 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1428.74 / 1421.73 / 874.14 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.449000000000e+00 for the sequence number 2449

Field stored SIEF_ELGA at time 2.449000000000e+00 for the sequence number 2449

Field stored VARI_ELGA at time 2.449000000000e+00 for the sequence number 2449

Field stored COMPORTEMENT at time 2.449000000000e+00 for the sequence number 2449

Field stored VITE at time 2.449000000000e+00 for the sequence number 2449

Field stored ACCE at time 2.449000000000e+00 for the sequence number 2449

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.44900e+00, dernier instant archivé : 2.44900e+00, au numéro d'ordre :

2449

Time of computation: 2.450000000000e+00

| 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 | |

| 2.45000E+00 | 0 | 8.30365E-16 | 8.88178E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.303653141368e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 8.881784197001e-16 with the

node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1429.29 / 1422.32 / 874.68 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.450000000000e+00 for the sequence number 2450

Field stored SIEF_ELGA at time 2.450000000000e+00 for the sequence number 2450

Field stored VARI_ELGA at time 2.450000000000e+00 for the sequence number 2450

Field stored COMPORTEMENT at time 2.450000000000e+00 for the sequence number 2450

Field stored VITE at time 2.450000000000e+00 for the sequence number 2450

Field stored ACCE at time 2.450000000000e+00 for the sequence number 2450

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[97%] Instant calculé : 2.45000e+00, dernier instant archivé : 2.45000e+00, au numéro d'ordre :

2450

Time of computation: 2.451000000000e+00

| 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 |

| 2.45100E+00 | 0 | 8.30365E-16 | 8.88178E-16 | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.303653141368e-16 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 8.881784197001e-16 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1429.83 / 1422.86 / 875.21 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.451000000000e+00 for the sequence number 2451

Field stored SIEF_ELGA at time 2.451000000000e+00 for the sequence number 2451

Field stored VARI_ELGA at time 2.451000000000e+00 for the sequence number 2451

Field stored COMPORTEMENT at time 2.451000000000e+00 for the sequence number 2451

Field stored VITE at time 2.451000000000e+00 for the sequence number 2451

Field stored ACCE at time 2.451000000000e+00 for the sequence number 2451

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.45100e+00, dernier instant archivé : 2.45100e+00, au numéro

d'ordre :

2451

Time of computation: 2.452000000000e+00

| 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 | |

| 2.45200E+00 | 0 | 8.82263E-16 | 9.43690E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.822631462704e-16 with the node and degree of

freedom N377 DX

The residue of the type RESI_GLOB_MAXI is worth 9.436895709314e-16 with the node and degree of

freedom N377 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1430.39 / 1423.38 / 875.75 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.452000000000e+00 for the sequence number 2452

Field stored SIEF_ELGA at time 2.452000000000e+00 for the sequence number 2452

Field stored VARI_ELGA at time 2.452000000000e+00 for the sequence number 2452

Field stored COMPORTEMENT at time 2.452000000000e+00 for the sequence number 2452

Field stored VITE at time 2.452000000000e+00 for the sequence number 2452

Field stored ACCE at time 2.452000000000e+00 for the sequence number 2452

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.45200e+00, dernier instant archivé : 2.45200e+00, au numéro d'ordre :

2452

Time of computation: 2.453000000000e+00

| 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 |

| 2.45300E+00 | 0 | 8.82263E-16 | 9.43690E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.822631462704e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 9.436895709314e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1430.93 / 1423.96 / 876.29 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.453000000000e+00 for the sequence number 2453

Field stored SIEF_ELGA at time 2.453000000000e+00 for the sequence number 2453

Field stored VARI_ELGA at time 2.453000000000e+00 for the sequence number 2453

Field stored COMPORTEMENT at time 2.453000000000e+00 for the sequence number 2453

Field stored VITE at time 2.453000000000e+00 for the sequence number 2453

Field stored ACCE at time 2.453000000000e+00 for the sequence number 2453

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.45300e+00, dernier instant archivé : 2.45300e+00, au numéro d'ordre :

2453

Time of computation: 2.454000000000e+00

| 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 |

| 2.45400E+00 | 0 | 9.34161E-16 | 9.99201E-16 | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.341609784039e-16 with the node and degree of

freedom N383 DX

The residue of the type RESI_GLOB_MAXI is worth 9.992007221626e-16 with the node and degree of

freedom N383 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.014 s

Mémoire (Mo) : 1431.48 / 1424.54 / 876.83 / 211.64 (VmPeak / VmSize /

Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.454000000000e+00 for the sequence number 2454

Field stored SIEF_ELGA at time 2.454000000000e+00 for the sequence number 2454

Field stored VARI_ELGA at time 2.454000000000e+00 for the sequence number 2454

Field stored COMPORTEMENT at time 2.454000000000e+00 for the sequence number 2454

Field stored VITE at time 2.454000000000e+00 for the sequence number 2454

Field stored ACCE at time 2.454000000000e+00 for the sequence number 2454

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.45400e+00, dernier instant archivé : 2.45400e+00, au numéro d'ordre :

2454

Time of computation: 2.455000000000e+00

| 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 |

| 2.45500E+00 | 0 | 9.86059E-16 | 1.05471E-15 |
| | TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.860588105375e-16 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 1.054711873394e-15 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.101 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.016 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1432.02 / 1425.01 / 877.36 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.455000000000e+00 for the sequence number 2455

Field stored SIEF_ELGA at time 2.455000000000e+00 for the sequence number 2455

Field stored VARI_ELGA at time 2.455000000000e+00 for the sequence number 2455

Field stored COMPORTEMENT at time 2.455000000000e+00 for the sequence number 2455

Field stored VITE at time 2.455000000000e+00 for the sequence number 2455

Field stored ACCE at time 2.455000000000e+00 for the sequence number 2455

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.45500e+00, dernier instant archivé : 2.45500e+00, au numéro d'ordre :

2455

Time of computation: 2.456000000000e+00

| 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 | | | | | |

| 2.45600E+00 | 0 | 7.78467E-16 | 8.32667E-16 |
| | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1432.57 / 1425.57 / 877.90 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.456000000000e+00 for the sequence number 2456

Field stored SIEF_ELGA at time 2.456000000000e+00 for the sequence number 2456

Field stored VARI_ELGA at time 2.456000000000e+00 for the sequence number 2456

Field stored COMPORTEMENT at time 2.456000000000e+00 for the sequence number 2456

Field stored VITE at time 2.456000000000e+00 for the sequence number 2456

Field stored ACCE at time 2.456000000000e+00 for the sequence number 2456

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.45600e+00, dernier instant archivé : 2.45600e+00, au numéro d'ordre :

2456

Time of computation: 2.457000000000e+00

| 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 | |

| 2.45700E+00 | 0 | 9.86059E-16 | 1.05471E-15 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.860588105375e-16 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 1.054711873394e-15 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1433.12 / 1426.14 / 878.44 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.457000000000e+00 for the sequence number 2457

Field stored SIEF_ELGA at time 2.457000000000e+00 for the sequence number 2457

Field stored VARI_ELGA at time 2.457000000000e+00 for the sequence number 2457

Field stored COMPORTEMENT at time 2.457000000000e+00 for the sequence number 2457

Field stored VITE at time 2.457000000000e+00 for the sequence number 2457

Field stored ACCE at time 2.457000000000e+00 for the sequence number 2457

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.45700e+00, dernier instant archivé : 2.45700e+00, au numéro d'ordre :

2457

Time of computation: 2.458000000000e+00

| 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 |

| 2.45800E+00 | 0 | 8.30365E-16 | 8.88178E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.303653141368e-16 with the

node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 8.881784197001e-16 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.128 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.064 s (3 intégrations)

* Temps total factorisation matrice : 0.003 s (1 factorisations)

* Temps construction second membre : 0.016 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.010 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.032 s

Mémoire (Mo) : 1433.67 / 1426.72 / 878.98 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.458000000000e+00 for the sequence number 2458

Field stored SIEF_ELGA at time 2.458000000000e+00 for the sequence number 2458

Field stored VARI_ELGA at time 2.458000000000e+00 for the sequence number 2458

Field stored COMPORTEMENT at time 2.458000000000e+00 for the sequence number 2458

Field stored VITE at time 2.458000000000e+00 for the sequence number 2458

Field stored ACCE at time 2.458000000000e+00 for the sequence number 2458

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.45800e+00, dernier instant archivé : 2.45800e+00, au numéro d'ordre :

2458

Time of computation: 2.459000000000e+00

| 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 |

| 2.45900E+00 | 0 | 1.08985E-15 | 1.16573E-15 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 1.089854474805e-15 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 1.165734175856e-15 with the

node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1434.20 / 1427.20 / 879.51 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.459000000000e+00 for the sequence number 2459

Field stored SIEF_ELGA at time 2.459000000000e+00 for the sequence number 2459

Field stored VARI_ELGA at time 2.459000000000e+00 for the sequence number 2459

Field stored COMPORTEMENT at time 2.459000000000e+00 for the sequence number 2459

Field stored VITE at time 2.459000000000e+00 for the sequence number 2459

Field stored ACCE at time 2.459000000000e+00 for the sequence number 2459

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.45900e+00, dernier instant archivé : 2.45900e+00, au numéro d'ordre :

2459

Time of computation: 2.460000000000e+00

| 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 | | | | | |

| 2.46000E+00 | 0 | 7.78467E-16 | 8.32667E-16 | | | | |

| | |TANGENTE | | | | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1434.75 / 1427.78 / 880.05 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.460000000000e+00 for the sequence number 2460

Field stored SIEF_ELGA at time 2.460000000000e+00 for the sequence number 2460

Field stored VARI_ELGA at time 2.460000000000e+00 for the sequence number 2460

Field stored COMPORTEMENT at time 2.460000000000e+00 for the sequence number 2460

Field stored VITE at time 2.460000000000e+00 for the sequence number 2460

Field stored ACCE at time 2.460000000000e+00 for the sequence number 2460

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.46000e+00, dernier instant archivé : 2.46000e+00, au numéro

d'ordre :

2460

Time of computation: 2.461000000000e+00

| 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 | |

| 2.46100E+00 | 0 | 9.34161E-16 | 9.99201E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.341609784039e-16 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 9.992007221626e-16 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1435.30 / 1428.36 / 880.59 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.461000000000e+00 for the sequence number 2461

Field stored SIEF_ELGA at time 2.461000000000e+00 for the sequence number 2461

Field stored VARI_ELGA at time 2.461000000000e+00 for the sequence number 2461

Field stored COMPORTEMENT at time 2.461000000000e+00 for the sequence number 2461

Field stored VITE at time 2.461000000000e+00 for the sequence number 2461

Field stored ACCE at time 2.461000000000e+00 for the sequence number 2461

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.46100e+00, dernier instant archivé : 2.46100e+00, au numéro d'ordre :

2461

Time of computation: 2.462000000000e+00

| 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 |

| 2.46200E+00 | 0 | 1.03796E-15 | 1.11022E-15 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 1.037956642671e-15 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 1.110223024625e-15 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1435.85 / 1428.84 / 881.12 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.462000000000e+00 for the sequence number 2462

Field stored SIEF_ELGA at time 2.462000000000e+00 for the sequence number 2462

Field stored VARI_ELGA at time 2.462000000000e+00 for the sequence number 2462

Field stored COMPORTEMENT at time 2.462000000000e+00 for the sequence number 2462

Field stored VITE at time 2.462000000000e+00 for the sequence number 2462

Field stored ACCE at time 2.462000000000e+00 for the sequence number 2462

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.46200e+00, dernier instant archivé : 2.46200e+00, au numéro d'ordre :

2462

Time of computation: 2.463000000000e+00

| 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 | | | |

| 2.46300E+00 | 0 | 7.78467E-16 | 8.32667E-16 | | | | |

| | | TANGENTE | | | | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the node and degree of

freedom N550 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N550 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1436.40 / 1429.39 / 881.66 / 211.64 (VmPeak / VmSize /

Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.463000000000e+00 for the sequence number 2463

Field stored SIEF_ELGA at time 2.463000000000e+00 for the sequence number 2463

Field stored VARI_ELGA at time 2.463000000000e+00 for the sequence number 2463

Field stored COMPORTEMENT at time 2.463000000000e+00 for the sequence number 2463

Field stored VITE at time 2.463000000000e+00 for the sequence number 2463

Field stored ACCE at time 2.463000000000e+00 for the sequence number 2463

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.46300e+00, dernier instant archivé : 2.46300e+00, au numéro d'ordre :

2463

Time of computation: 2.464000000000e+00

| 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 |

| 2.46400E+00 | 0 | 6.74672E-16 | 7.21645E-16 |
| | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.746718177362e-16 with the node and degree of

freedom N410 DX

The residue of the type RESI_GLOB_MAXI is worth 7.216449660064e-16 with the node and degree of

freedom N410 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1436.95 / 1429.97 / 882.20 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.464000000000e+00 for the sequence number 2464

Field stored SIEF_ELGA at time 2.464000000000e+00 for the sequence number 2464

Field stored VARI_ELGA at time 2.464000000000e+00 for the sequence number 2464

Field stored COMPORTEMENT at time 2.464000000000e+00 for the sequence number 2464

Field stored VITE at time 2.464000000000e+00 for the sequence number 2464

Field stored ACCE at time 2.464000000000e+00 for the sequence number 2464

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.46400e+00, dernier instant archivé : 2.46400e+00, au numéro d'ordre :

2464

Time of computation: 2.465000000000e+00

| 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 | | | | | |

| 2.46500E+00 | 0 | 7.78467E-16 | 8.32667E-16 |
| | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.101 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.060 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1437.50 / 1430.55 / 882.74 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.465000000000e+00 for the sequence number 2465

Field stored SIEF_ELGA at time 2.465000000000e+00 for the sequence number 2465

Field stored VARI_ELGA at time 2.465000000000e+00 for the sequence number 2465

Field stored COMPORTEMENT at time 2.465000000000e+00 for the sequence number 2465

Field stored VITE at time 2.465000000000e+00 for the sequence number 2465

Field stored ACCE at time 2.465000000000e+00 for the sequence number 2465

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.46500e+00, dernier instant archivé : 2.46500e+00, au numéro d'ordre :

2465

Time of computation: 2.466000000000e+00

| 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 | | | | |

| 2.46600E+00 | 0 | 1.14175E-15 | 1.22125E-15 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 1.141752306938e-15 with the node and degree of

freedom N383 DX

The residue of the type RESI_GLOB_MAXI is worth 1.221245327088e-15 with the node and degree of

freedom N383 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1438.04 / 1431.03 / 883.27 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.466000000000e+00 for the sequence number 2466

Field stored SIEF_ELGA at time 2.466000000000e+00 for the sequence number 2466

Field stored VARI_ELGA at time 2.466000000000e+00 for the sequence number 2466

Field stored COMPORTEMENT at time 2.466000000000e+00 for the sequence number 2466

Field stored VITE at time 2.466000000000e+00 for the sequence number 2466

Field stored ACCE at time 2.466000000000e+00 for the sequence number 2466

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.46600e+00, dernier instant archivé : 2.46600e+00, au numéro d'ordre :

2466

Time of computation: 2.467000000000e+00

| 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 |

| 2.46700E+00 | 0 | 7.78467E-16 | 8.32667E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the

node and degree of

freedom N377 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N377 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1438.58 / 1431.61 / 883.81 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.467000000000e+00 for the sequence number 2467

Field stored SIEF_ELGA at time 2.467000000000e+00 for the sequence number 2467

Field stored VARI_ELGA at time 2.467000000000e+00 for the sequence number 2467

Field stored COMPORTEMENT at time 2.467000000000e+00 for the sequence number 2467

Field stored VITE at time 2.467000000000e+00 for the sequence number 2467

Field stored ACCE at time 2.467000000000e+00 for the sequence number 2467

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.46700e+00, dernier instant archivé : 2.46700e+00, au numéro d'ordre :

2467

Time of computation: 2.468000000000e+00

| 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 |

| 2.46800E+00 | 0 | 1.03796E-15 | 1.11022E-15 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 1.037956642671e-15 with the node and degree of

freedom N383 DX

The residue of the type RESI_GLOB_MAXI is worth 1.110223024625e-15 with the

node and degree of

freedom N383 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.014 s

Mémoire (Mo) : 1439.13 / 1432.18 / 884.35 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.468000000000e+00 for the sequence number 2468

Field stored SIEF_ELGA at time 2.468000000000e+00 for the sequence number 2468

Field stored VARI_ELGA at time 2.468000000000e+00 for the sequence number 2468

Field stored COMPORTEMENT at time 2.468000000000e+00 for the sequence number 2468

Field stored VITE at time 2.468000000000e+00 for the sequence number 2468

Field stored ACCE at time 2.468000000000e+00 for the sequence number 2468

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.46800e+00, dernier instant archivé : 2.46800e+00, au numéro d'ordre :

2468

Time of computation: 2.469000000000e+00

| 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 |

| 2.46900E+00 | 0 | 1.03796E-15 | 1.11022E-15 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 1.037956642671e-15 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 1.110223024625e-15 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1439.66 / 1432.66 / 884.88 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.469000000000e+00 for the sequence number 2469

Field stored SIEF_ELGA at time 2.469000000000e+00 for the sequence number 2469

Field stored VARI_ELGA at time 2.469000000000e+00 for the sequence number 2469

Field stored COMPORTEMENT at time 2.469000000000e+00 for the sequence number 2469

Field stored VITE at time 2.469000000000e+00 for the sequence number 2469

Field stored ACCE at time 2.469000000000e+00 for the sequence number 2469

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.46900e+00, dernier instant archivé : 2.46900e+00, au numéro

d'ordre :

2469

Time of computation: 2.470000000000e+00

| 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 | |

| 2.47000E+00 | 0 | 6.74672E-16 | 7.21645E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.746718177362e-16 with the node and degree of

freedom N516 DX

The residue of the type RESI_GLOB_MAXI is worth 7.216449660064e-16 with the node and degree of

freedom N516 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1440.21 / 1433.23 / 885.42 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.470000000000e+00 for the sequence number 2470

Field stored SIEF_ELGA at time 2.470000000000e+00 for the sequence number 2470

Field stored VARI_ELGA at time 2.470000000000e+00 for the sequence number 2470

Field stored COMPORTEMENT at time 2.470000000000e+00 for the sequence number 2470

Field stored VITE at time 2.470000000000e+00 for the sequence number 2470

Field stored ACCE at time 2.470000000000e+00 for the sequence number 2470

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.47000e+00, dernier instant archivé : 2.47000e+00, au numéro d'ordre :

2470

Time of computation: 2.471000000000e+00

| 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 |

| 2.47100E+00 | 0 | 8.30365E-16 | 8.88178E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.303653141368e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 8.881784197001e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1440.76 / 1433.82 / 885.96 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.471000000000e+00 for the sequence number 2471

Field stored SIEF_ELGA at time 2.471000000000e+00 for the sequence number 2471

Field stored VARI_ELGA at time 2.471000000000e+00 for the sequence number 2471

Field stored COMPORTEMENT at time 2.471000000000e+00 for the sequence number 2471

Field stored VITE at time 2.471000000000e+00 for the sequence number 2471

Field stored ACCE at time 2.471000000000e+00 for the sequence number 2471

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.47100e+00, dernier instant archivé : 2.47100e+00, au numéro d'ordre :

2471

Time of computation: 2.472000000000e+00

| 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 | |

| 2.47200E+00 | 0 | 7.78467E-16 | 8.32667E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1441.30 / 1434.29 / 886.50 / 211.64 (VmPeak / VmSize /

Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.472000000000e+00 for the sequence number 2472

Field stored SIEF_ELGA at time 2.472000000000e+00 for the sequence number 2472

Field stored VARI_ELGA at time 2.472000000000e+00 for the sequence number 2472

Field stored COMPORTEMENT at time 2.472000000000e+00 for the sequence number 2472

Field stored VITE at time 2.472000000000e+00 for the sequence number 2472

Field stored ACCE at time 2.472000000000e+00 for the sequence number 2472

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.47200e+00, dernier instant archivé : 2.47200e+00, au numéro d'ordre :

2472

Time of computation: 2.473000000000e+00

| 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 | |

| 2.47300E+00 | 0 | 1.03796E-15 | 1.11022E-15 |
| | TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 1.037956642671e-15 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 1.110223024625e-15 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1441.84 / 1434.87 / 887.03 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.473000000000e+00 for the sequence number 2473

Field stored SIEF_ELGA at time 2.473000000000e+00 for the sequence number 2473

Field stored VARI_ELGA at time 2.473000000000e+00 for the sequence number 2473

Field stored COMPORTEMENT at time 2.473000000000e+00 for the sequence number 2473

Field stored VITE at time 2.473000000000e+00 for the sequence number 2473

Field stored ACCE at time 2.473000000000e+00 for the sequence number 2473

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.47300e+00, dernier instant archivé : 2.47300e+00, au numéro d'ordre :

2473

Time of computation: 2.474000000000e+00

| 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 | | | | | |

| 2.47400E+00 | 0 | 9.34161E-16 | 9.99201E-16 |
| | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.341609784039e-16 with the node and degree of

freedom N550 DX

The residue of the type RESI_GLOB_MAXI is worth 9.992007221626e-16 with the node and degree of

freedom N550 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1442.39 / 1435.45 / 887.57 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.474000000000e+00 for the sequence number 2474

Field stored SIEF_ELGA at time 2.474000000000e+00 for the sequence number 2474

Field stored VARI_ELGA at time 2.474000000000e+00 for the sequence number 2474

Field stored COMPORTEMENT at time 2.474000000000e+00 for the sequence number 2474

Field stored VITE at time 2.474000000000e+00 for the sequence number 2474

Field stored ACCE at time 2.474000000000e+00 for the sequence number 2474

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.47400e+00, dernier instant archivé : 2.47400e+00, au numéro d'ordre :

2474

Time of computation: 2.475000000000e+00

| 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 | |

| 2.47500E+00 | 0 | 8.30365E-16 | 8.88178E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.303653141368e-16 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 8.881784197001e-16 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1442.93 / 1435.92 / 888.11 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.475000000000e+00 for the sequence number 2475

Field stored SIEF_ELGA at time 2.475000000000e+00 for the sequence number 2475

Field stored VARI_ELGA at time 2.475000000000e+00 for the sequence number 2475

Field stored COMPORTEMENT at time 2.475000000000e+00 for the sequence number 2475

Field stored VITE at time 2.475000000000e+00 for the sequence number 2475

Field stored ACCE at time 2.475000000000e+00 for the sequence number 2475

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[98%] Instant calculé : 2.47500e+00, dernier instant archivé : 2.47500e+00, au numéro d'ordre :

2475

Time of computation: 2.476000000000e+00

| 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 |

| 2.47600E+00 | 0 | 9.34161E-16 | 9.99201E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.341609784039e-16 with the

node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 9.992007221626e-16 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.016 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1443.47 / 1436.50 / 888.64 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.476000000000e+00 for the sequence number 2476

Field stored SIEF_ELGA at time 2.476000000000e+00 for the sequence number 2476

Field stored VARI_ELGA at time 2.476000000000e+00 for the sequence number 2476

Field stored COMPORTEMENT at time 2.476000000000e+00 for the sequence number 2476

Field stored VITE at time 2.476000000000e+00 for the sequence number 2476

Field stored ACCE at time 2.476000000000e+00 for the sequence number 2476

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.47600e+00, dernier instant archivé : 2.47600e+00, au numéro d'ordre :

2476

Time of computation: 2.477000000000e+00

| 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 |

| 2.47700E+00 | 0 | 9.34161E-16 | 9.99201E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.341609784039e-16 with the node and degree of

freedom N383 DX

The residue of the type RESI_GLOB_MAXI is worth 9.992007221626e-16 with the

node and degree of

freedom N383 DX

Temps CPU consommé dans ce pas de temps : 0.101 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.060 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.016 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1444.01 / 1437.02 / 889.18 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.477000000000e+00 for the sequence number 2477

Field stored SIEF_ELGA at time 2.477000000000e+00 for the sequence number 2477

Field stored VARI_ELGA at time 2.477000000000e+00 for the sequence number 2477

Field stored COMPORTEMENT at time 2.477000000000e+00 for the sequence number 2477

Field stored VITE at time 2.477000000000e+00 for the sequence number 2477

Field stored ACCE at time 2.477000000000e+00 for the sequence number 2477

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.47700e+00, dernier instant archivé : 2.47700e+00, au numéro d'ordre :

2477

Time of computation: 2.478000000000e+00

| 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 | |

| 2.47800E+00 | 0 | 9.34161E-16 | 9.99201E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.341609784039e-16 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 9.992007221626e-16 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.060 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1444.59 / 1437.64 / 889.72 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.478000000000e+00 for the sequence number 2478

Field stored SIEF_ELGA at time 2.478000000000e+00 for the sequence number 2478

Field stored VARI_ELGA at time 2.478000000000e+00 for the sequence number 2478

Field stored COMPORTEMENT at time 2.478000000000e+00 for the sequence number 2478

Field stored VITE at time 2.478000000000e+00 for the sequence number 2478

Field stored ACCE at time 2.478000000000e+00 for the sequence number 2478

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.47800e+00, dernier instant archivé : 2.47800e+00, au numéro

d'ordre :

2478

Time of computation: 2.479000000000e+00

| 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 | |

| 2.47900E+00 | 0 | 7.26570E-16 | 7.77156E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.265696498697e-16 with the node and degree of

freedom N377 DX

The residue of the type RESI_GLOB_MAXI is worth 7.771561172376e-16 with the node and degree of

freedom N377 DX

Temps CPU consommé dans ce pas de temps : 0.101 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.060 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.016 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1445.11 / 1438.12 / 890.26 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.479000000000e+00 for the sequence number 2479

Field stored SIEF_ELGA at time 2.479000000000e+00 for the sequence number 2479

Field stored VARI_ELGA at time 2.479000000000e+00 for the sequence number 2479

Field stored COMPORTEMENT at time 2.479000000000e+00 for the sequence number 2479

Field stored VITE at time 2.479000000000e+00 for the sequence number 2479

Field stored ACCE at time 2.479000000000e+00 for the sequence number 2479

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.47900e+00, dernier instant archivé : 2.47900e+00, au numéro d'ordre :

2479

Time of computation: 2.480000000000e+00

| 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 |

| 2.48000E+00 | 0 | 8.82263E-16 | 9.43690E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.822631462704e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 9.436895709314e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.101 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.060 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.016 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1445.68 / 1438.70 / 890.79 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.480000000000e+00 for the sequence number 2480

Field stored SIEF_ELGA at time 2.480000000000e+00 for the sequence number 2480

Field stored VARI_ELGA at time 2.480000000000e+00 for the sequence number 2480

Field stored COMPORTEMENT at time 2.480000000000e+00 for the sequence number 2480

Field stored VITE at time 2.480000000000e+00 for the sequence number 2480

Field stored ACCE at time 2.480000000000e+00 for the sequence number 2480

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.48000e+00, dernier instant archivé : 2.48000e+00, au numéro d'ordre :

2480

Time of computation: 2.481000000000e+00

| 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 | | | | |

| | | VALEUR | | RHO | | | |

| 2.48100E+00 | 0 | 7.78467E-16 | 8.32667E-16 | | | | |

| | TANGENTE | | | | | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1446.23 / 1439.28 / 891.33 / 211.64 (VmPeak / VmSize /

Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.481000000000e+00 for the sequence number 2481

Field stored SIEF_ELGA at time 2.481000000000e+00 for the sequence number 2481

Field stored VARI_ELGA at time 2.481000000000e+00 for the sequence number 2481

Field stored COMPORTEMENT at time 2.481000000000e+00 for the sequence number 2481

Field stored VITE at time 2.481000000000e+00 for the sequence number 2481

Field stored ACCE at time 2.481000000000e+00 for the sequence number 2481

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.48100e+00, dernier instant archivé : 2.48100e+00, au numéro d'ordre :

2481

Time of computation: 2.482000000000e+00

| 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 |

| 2.48200E+00 | 0 | 8.82263E-16 | 9.43690E-16 |
| | TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.822631462704e-16 with the node and degree of

freedom N378 DX

The residue of the type RESI_GLOB_MAXI is worth 9.436895709314e-16 with the node and degree of

freedom N378 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1446.76 / 1439.75 / 891.87 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.482000000000e+00 for the sequence number 2482

Field stored SIEF_ELGA at time 2.482000000000e+00 for the sequence number 2482

Field stored VARI_ELGA at time 2.482000000000e+00 for the sequence number 2482

Field stored COMPORTEMENT at time 2.482000000000e+00 for the sequence number 2482

Field stored VITE at time 2.482000000000e+00 for the sequence number 2482

Field stored ACCE at time 2.482000000000e+00 for the sequence number 2482

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.48200e+00, dernier instant archivé : 2.48200e+00, au numéro d'ordre :

2482

Time of computation: 2.483000000000e+00

| 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 | | | | | |

| 2.48300E+00 | 0 | 7.78467E-16 | 8.32667E-16 |
| | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.101 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1447.30 / 1440.33 / 892.40 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.483000000000e+00 for the sequence number 2483

Field stored SIEF_ELGA at time 2.483000000000e+00 for the sequence number 2483

Field stored VARI_ELGA at time 2.483000000000e+00 for the sequence number 2483

Field stored COMPORTEMENT at time 2.483000000000e+00 for the sequence number 2483

Field stored VITE at time 2.483000000000e+00 for the sequence number 2483

Field stored ACCE at time 2.483000000000e+00 for the sequence number 2483

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.48300e+00, dernier instant archivé : 2.48300e+00, au numéro d'ordre :

2483

Time of computation: 2.484000000000e+00

| 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 | | | | | |

| 2.48400E+00 | 0 | 8.30365E-16 | 8.88178E-16 | | | | |

| | |TANGENTE | | | | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.303653141368e-16 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 8.881784197001e-16 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.101 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.060 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1447.86 / 1440.91 / 892.94 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.484000000000e+00 for the sequence number 2484

Field stored SIEF_ELGA at time 2.484000000000e+00 for the sequence number 2484

Field stored VARI_ELGA at time 2.484000000000e+00 for the sequence number 2484

Field stored COMPORTEMENT at time 2.484000000000e+00 for the sequence number 2484

Field stored VITE at time 2.484000000000e+00 for the sequence number 2484

Field stored ACCE at time 2.484000000000e+00 for the sequence number 2484

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.48400e+00, dernier instant archivé : 2.48400e+00, au numéro d'ordre :

2484

Time of computation: 2.485000000000e+00

| 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 |

| 2.48500E+00 | 0 | 8.30365E-16 | 8.88178E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.303653141368e-16 with the

node and degree of

freedom N550 DX

The residue of the type RESI_GLOB_MAXI is worth 8.881784197001e-16 with the node and degree of

freedom N550 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.060 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1448.39 / 1441.38 / 893.48 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.485000000000e+00 for the sequence number 2485

Field stored SIEF_ELGA at time 2.485000000000e+00 for the sequence number 2485

Field stored VARI_ELGA at time 2.485000000000e+00 for the sequence number 2485

Field stored COMPORTEMENT at time 2.485000000000e+00 for the sequence number 2485

Field stored VITE at time 2.485000000000e+00 for the sequence number 2485

Field stored ACCE at time 2.485000000000e+00 for the sequence number 2485

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.48500e+00, dernier instant archivé : 2.48500e+00, au numéro d'ordre :

2485

Time of computation: 2.486000000000e+00

| 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 |

| 2.48600E+00 | 0 | 6.74672E-16 | 7.21645E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.746718177362e-16 with the node and degree of

freedom N570 DX

The residue of the type RESI_GLOB_MAXI is worth 7.216449660064e-16 with the

node and degree of

freedom N570 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.016 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1448.94 / 1441.96 / 894.02 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.486000000000e+00 for the sequence number 2486

Field stored SIEF_ELGA at time 2.486000000000e+00 for the sequence number 2486

Field stored VARI_ELGA at time 2.486000000000e+00 for the sequence number 2486

Field stored COMPORTEMENT at time 2.486000000000e+00 for the sequence number 2486

Field stored VITE at time 2.486000000000e+00 for the sequence number 2486

Field stored ACCE at time 2.486000000000e+00 for the sequence number 2486

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.48600e+00, dernier instant archivé : 2.48600e+00, au numéro d'ordre :

2486

Time of computation: 2.487000000000e+00

| 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 |

| 2.48700E+00 | 0 | 7.26570E-16 | 7.77156E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.265696498697e-16 with the node and degree of

freedom N550 DX

The residue of the type RESI_GLOB_MAXI is worth 7.771561172376e-16 with the node and degree of

freedom N550 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.016 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1449.49 / 1442.54 / 894.55 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.487000000000e+00 for the sequence number 2487

Field stored SIEF_ELGA at time 2.487000000000e+00 for the sequence number 2487

Field stored VARI_ELGA at time 2.487000000000e+00 for the sequence number 2487

Field stored COMPORTEMENT at time 2.487000000000e+00 for the sequence number 2487

Field stored VITE at time 2.487000000000e+00 for the sequence number 2487

Field stored ACCE at time 2.487000000000e+00 for the sequence number 2487

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.48700e+00, dernier instant archivé : 2.48700e+00, au numéro

d'ordre :

2487

Time of computation: 2.488000000000e+00

| 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 | |

| 2.48800E+00 | 0 | 6.74672E-16 | 7.21645E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.746718177362e-16 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 7.216449660064e-16 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1450.02 / 1443.02 / 895.09 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.488000000000e+00 for the sequence number 2488

Field stored SIEF_ELGA at time 2.488000000000e+00 for the sequence number 2488

Field stored VARI_ELGA at time 2.488000000000e+00 for the sequence number 2488

Field stored COMPORTEMENT at time 2.488000000000e+00 for the sequence number 2488

Field stored VITE at time 2.488000000000e+00 for the sequence number 2488

Field stored ACCE at time 2.488000000000e+00 for the sequence number 2488

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.48800e+00, dernier instant archivé : 2.48800e+00, au numéro d'ordre :

2488

Time of computation: 2.489000000000e+00

| 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 |

| 2.48900E+00 | 0 | 9.86059E-16 | 1.05471E-15 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.860588105375e-16 with the node and degree of

freedom N379 DX

The residue of the type RESI_GLOB_MAXI is worth 1.054711873394e-15 with the node and degree of

freedom N379 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1450.57 / 1443.59 / 895.63 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.489000000000e+00 for the sequence number 2489

Field stored SIEF_ELGA at time 2.489000000000e+00 for the sequence number 2489

Field stored VARI_ELGA at time 2.489000000000e+00 for the sequence number 2489

Field stored COMPORTEMENT at time 2.489000000000e+00 for the sequence number 2489

Field stored VITE at time 2.489000000000e+00 for the sequence number 2489

Field stored ACCE at time 2.489000000000e+00 for the sequence number 2489

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.48900e+00, dernier instant archivé : 2.48900e+00, au numéro d'ordre :

2489

Time of computation: 2.490000000000e+00

| 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 | |

| 2.49000E+00 | 0 | 7.26570E-16 | 7.77156E-16 | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.265696498697e-16 with the node and degree of

freedom N532 DX

The residue of the type RESI_GLOB_MAXI is worth 7.771561172376e-16 with the node and degree of

freedom N532 DX

Temps CPU consommé dans ce pas de temps : 0.098 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1451.12 / 1444.17 / 896.17 / 211.64 (VmPeak / VmSize /

Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.490000000000e+00 for the sequence number 2490

Field stored SIEF_ELGA at time 2.490000000000e+00 for the sequence number 2490

Field stored VARI_ELGA at time 2.490000000000e+00 for the sequence number 2490

Field stored COMPORTEMENT at time 2.490000000000e+00 for the sequence number 2490

Field stored VITE at time 2.490000000000e+00 for the sequence number 2490

Field stored ACCE at time 2.490000000000e+00 for the sequence number 2490

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.49000e+00, dernier instant archivé : 2.49000e+00, au numéro d'ordre :

2490

Time of computation: 2.491000000000e+00

| 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 |

| 2.49100E+00 | 0 | 7.78467E-16 | 8.32667E-16 |
| | TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1451.67 / 1444.64 / 896.70 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.491000000000e+00 for the sequence number 2491

Field stored SIEF_ELGA at time 2.491000000000e+00 for the sequence number 2491

Field stored VARI_ELGA at time 2.491000000000e+00 for the sequence number 2491

Field stored COMPORTEMENT at time 2.491000000000e+00 for the sequence number 2491

Field stored VITE at time 2.491000000000e+00 for the sequence number 2491

Field stored ACCE at time 2.491000000000e+00 for the sequence number 2491

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.49100e+00, dernier instant archivé : 2.49100e+00, au numéro d'ordre :

2491

Time of computation: 2.492000000000e+00

| 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 | | | | | |

| 2.49200E+00 | 0 | 7.78467E-16 | 8.32667E-16 |
| | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the node and degree of

freedom N377 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N377 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1452.21 / 1445.23 / 897.24 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.492000000000e+00 for the sequence number 2492

Field stored SIEF_ELGA at time 2.492000000000e+00 for the sequence number 2492

Field stored VARI_ELGA at time 2.492000000000e+00 for the sequence number 2492

Field stored COMPORTEMENT at time 2.492000000000e+00 for the sequence number 2492

Field stored VITE at time 2.492000000000e+00 for the sequence number 2492

Field stored ACCE at time 2.492000000000e+00 for the sequence number 2492

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.49200e+00, dernier instant archivé : 2.49200e+00, au numéro d'ordre :

2492

Time of computation: 2.493000000000e+00

| 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 |

| 2.49300E+00 | 0 | 8.82263E-16 | 9.43690E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.822631462704e-16 with the node and degree of

freedom N378 DX

The residue of the type RESI_GLOB_MAXI is worth 9.436895709314e-16 with the node and degree of

freedom N378 DX

Temps CPU consommé dans ce pas de temps : 0.098 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1452.75 / 1445.80 / 897.78 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.493000000000e+00 for the sequence number 2493

Field stored SIEF_ELGA at time 2.493000000000e+00 for the sequence number 2493

Field stored VARI_ELGA at time 2.493000000000e+00 for the sequence number 2493

Field stored COMPORTEMENT at time 2.493000000000e+00 for the sequence number 2493

Field stored VITE at time 2.493000000000e+00 for the sequence number 2493

Field stored ACCE at time 2.493000000000e+00 for the sequence number 2493

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.49300e+00, dernier instant archivé : 2.49300e+00, au numéro d'ordre :

2493

Time of computation: 2.494000000000e+00

| 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 |

| 2.49400E+00 | 0 | 6.74672E-16 | 7.21645E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.746718177362e-16 with the

node and degree of

freedom N443 DX

The residue of the type RESI_GLOB_MAXI is worth 7.216449660064e-16 with the node and degree of

freedom N443 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1453.29 / 1446.28 / 898.31 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.494000000000e+00 for the sequence number 2494

Field stored SIEF_ELGA at time 2.494000000000e+00 for the sequence number 2494

Field stored VARI_ELGA at time 2.494000000000e+00 for the sequence number 2494

Field stored COMPORTEMENT at time 2.494000000000e+00 for the sequence number 2494

Field stored VITE at time 2.494000000000e+00 for the sequence number 2494

Field stored ACCE at time 2.494000000000e+00 for the sequence number 2494

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.49400e+00, dernier instant archivé : 2.49400e+00, au numéro d'ordre :

2494

Time of computation: 2.495000000000e+00

| 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 |

| 2.49500E+00 | 0 | 8.30365E-16 | 8.88178E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.303653141368e-16 with the node and degree of

freedom N383 DX

The residue of the type RESI_GLOB_MAXI is worth 8.881784197001e-16 with the

node and degree of

freedom N383 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1453.85 / 1446.83 / 898.85 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.495000000000e+00 for the sequence number 2495

Field stored SIEF_ELGA at time 2.495000000000e+00 for the sequence number 2495

Field stored VARI_ELGA at time 2.495000000000e+00 for the sequence number 2495

Field stored COMPORTEMENT at time 2.495000000000e+00 for the sequence number 2495

Field stored VITE at time 2.495000000000e+00 for the sequence number 2495

Field stored ACCE at time 2.495000000000e+00 for the sequence number 2495

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.49500e+00, dernier instant archivé : 2.49500e+00, au numéro d'ordre :

2495

Time of computation: 2.496000000000e+00

| 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 |

| 2.49600E+00 | 0 | 7.78467E-16 | 8.32667E-16 | | |TANGENTE | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.784674820033e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 8.326672684689e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.098 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1454.39 / 1447.39 / 899.39 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.496000000000e+00 for the sequence number 2496

Field stored SIEF_ELGA at time 2.496000000000e+00 for the sequence number 2496

Field stored VARI_ELGA at time 2.496000000000e+00 for the sequence number 2496

Field stored COMPORTEMENT at time 2.496000000000e+00 for the sequence number 2496

Field stored VITE at time 2.496000000000e+00 for the sequence number 2496

Field stored ACCE at time 2.496000000000e+00 for the sequence number 2496

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.49600e+00, dernier instant archivé : 2.49600e+00, au numéro

d'ordre :

2496

Time of computation: 2.497000000000e+00

| 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 | |

| 2.49700E+00 | 0 | 6.74672E-16 | 7.21645E-16 | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.746718177362e-16 with the node and degree of

freedom N416 DX

The residue of the type RESI_GLOB_MAXI is worth 7.216449660064e-16 with the node and degree of

freedom N416 DX

Temps CPU consommé dans ce pas de temps : 0.097 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.058 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1454.95 / 1447.96 / 899.93 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.497000000000e+00 for the sequence number 2497

Field stored SIEF_ELGA at time 2.497000000000e+00 for the sequence number 2497

Field stored VARI_ELGA at time 2.497000000000e+00 for the sequence number 2497

Field stored COMPORTEMENT at time 2.497000000000e+00 for the sequence number 2497

Field stored VITE at time 2.497000000000e+00 for the sequence number 2497

Field stored ACCE at time 2.497000000000e+00 for the sequence number 2497

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.49700e+00, dernier instant archivé : 2.49700e+00, au numéro d'ordre :

2497

Time of computation: 2.498000000000e+00

| 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 | | | | |

| | | VALEUR | | RHO | | | |

| 2.49800E+00 | 0 | 7.26570E-16 | 7.77156E-16 | | | | |

| | | | | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.265696498697e-16 with the node and degree of

freedom N377 DX

The residue of the type RESI_GLOB_MAXI is worth 7.771561172376e-16 with the node and degree of

freedom N377 DX

Temps CPU consommé dans ce pas de temps : 0.098 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.057 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1455.49 / 1448.54 / 900.46 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.498000000000e+00 for the sequence number 2498

Field stored SIEF_ELGA at time 2.498000000000e+00 for the sequence number 2498

Field stored VARI_ELGA at time 2.498000000000e+00 for the sequence number 2498

Field stored COMPORTEMENT at time 2.498000000000e+00 for the sequence number 2498

Field stored VITE at time 2.498000000000e+00 for the sequence number 2498

Field stored ACCE at time 2.498000000000e+00 for the sequence number 2498

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

9.999999999999e-04.

[99%] Instant calculé : 2.49800e+00, dernier instant archivé : 2.49800e+00, au numéro d'ordre :

2498

Time of computation: 2.499000000000e+00

| 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 | | | |

| 2.49900E+00 | 0 | 8.82263E-16 | 9.43690E-16 | |TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.822631462704e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 9.436895709314e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.099 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1456.04 / 1449.03 / 901.00 / 211.64 (VmPeak / VmSize /

Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.499000000000e+00 for the sequence number 2499

Field stored SIEF_ELGA at time 2.499000000000e+00 for the sequence number 2499

Field stored VARI_ELGA at time 2.499000000000e+00 for the sequence number 2499

Field stored COMPORTEMENT at time 2.499000000000e+00 for the sequence number 2499

Field stored VITE at time 2.499000000000e+00 for the sequence number 2499

Field stored ACCE at time 2.499000000000e+00 for the sequence number 2499

Adaptation of the time step.

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

2.000000000000e-03.

On all the criteria of adaptation, the smallest time step is worth 2.000000000000e-03.

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

1.000000000164e-03.

[99%] Instant calculé : 2.49900e+00, dernier instant archivé : 2.49900e+00, au numéro d'ordre :

2499

Time of computation: 2.500000000000e+00

| 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 |

| 2.50000E+00 | 0 | 6.74672E-16 | 7.21645E-16 |
| | TANGENTE | | |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.746718177362e-16 with the node and degree of

freedom N449 DX

The residue of the type RESI_GLOB_MAXI is worth 7.216449660064e-16 with the node and degree of

freedom N449 DX

Temps CPU consommé dans ce pas de temps : 0.100 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.059 s (3 intégrations)

* Temps total factorisation matrice : 0.002 s (1 factorisations)

* Temps construction second membre : 0.015 s

* Temps total résolution K.U=F : 0.003 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.013 s

Mémoire (Mo) : 1456.59 / 1449.61 / 901.54 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 2.500000000000e+00 for the sequence number 2500

Field stored SIEF_ELGA at time 2.500000000000e+00 for the sequence number 2500

Field stored VARI_ELGA at time 2.500000000000e+00 for the sequence number 2500

Field stored COMPORTEMENT at time 2.500000000000e+00 for the sequence number 2500

Field stored VITE at time 2.500000000000e+00 for the sequence number 2500

Field stored ACCE at time 2.500000000000e+00 for the sequence number 2500

[100%] Instant calculé : 2.50000e+00, dernier instant archivé : 2.50000e+00, au numéro d'ordre :

2500

Temps CPU consommé dans le calcul : 4 min 21 s

dont temps CPU "perdu" dans les découpes : 0.000 s

* Nombre de pas de temps : 2500

* Nombre d'itérations de Newton : 2515

* Temps dans l'archivage : 4.379 s

* Temps dans le post-traitement : 0.003 s

* Temps total intégration comportement : 2 min 25 s (7530 intégrations)

* Temps total factorisation matrice : 5.217 s (2515 factorisations)

* Temps construction second membre : 37.998 s

* Temps total résolution K.U=F : 8.234 s (2515 résolutions)

* Temps assemblage matrice : 17.282 s

* Nombre d'itérations de recherche linéaire : 0

#1 Resolution des systemes lineaires CPU (USER+SYST/SYST/ELAPS): 13.15 0.01 13.41

#2 Calculs elementaires et assemblages CPU (USER+SYST/SYST/ELAPS): 196.72 17.38 196.87

#3 Dechargement de la memoire sur disque CPU (USER+SYST/SYST/ELAPS): 0.43 0.33 0.43

#4 Communications MPI CPU (USER+SYST/SYST/ELAPS): 3.46 0.34 3.57

Résultat commande #0017 (DYNA_NON_LINE): SIM ('<0000000f>') de type <NonLinearResult>

Dépend de :

- TIMELIST ('<0000000d>') de type <ListOfFloats>

- MATS ('<00000004>') de type <MaterialField>

- BC_0 ('<0000000a>') de type <MechanicalLoadReal>

- BC_1 ('<0000000b>') de type <MechanicalLoadFunction>

- BC_2 ('<0000000c>') de type <MechanicalDirichletBC>

- INSTLIST ('<0000000e>') de type <TimeStepper>

- MODEL ('<00000003>') de type <Model>

Mémoire (Mo) : 2111.22 / 2111.22 / 1524.49 / 211.64 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0017 user+syst: 234.70s (syst: 29.30s, elaps: 264.34s)

--

.. _stg1_txt274

--

Commande #0018 de fort.1, ligne 274

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'>

INIT_U <class 'libaster.FieldOnNodesReal'>

INIT_A <class 'libaster.FieldOnNodesReal'>

F_0 <class 'libaster.Formula'>

F_1 <class 'libaster.Formula'>

F_2 <class 'libaster.Formula'>

BC_0 <class 'libaster.MechanicalLoadReal'>

BC_1 <class 'libaster.MechanicalLoadFunction'>

BC_2 <class 'libaster.MechanicalDirichletBC'>

TIMELIST <class 'libaster.ListOfFloats'>

INSTLIST <class 'libaster.TimeStepper'>

SIM <class 'libaster.NonLinearResult'>

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 ‖ <I> <CATAMESS_89>
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‖

 ‖ 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 d'objets	Nombre de segments
TOTAL		1384.04	65305	77933
00000001	MATER_SDASTER	0.00	9	9
00000002	MAILLAGE_SDASTER	0.44	38	67
00000003	MODELE_SDASTER	0.19	9	14
00000004	CHAM_MATER	0.03	9	14
00000005	CHAM_NO_SDASTER	0.14	10	12
00000006	CHAM_NO_SDASTER	0.14	10	12

00000007	FORMULE	0.00	4	4
00000008	FORMULE	0.00	4	4
00000009	FORMULE	0.00	4	4
0000000a	CHAR_MECA	0.03	32	37
0000000b	CHAR_MECA	0.04	32	37
0000000c	CHAR_CINE_MECA	0.03	4	4
0000000d	LISTR8_SDASTER	0.02	6	6
0000000e	LIST_INST	0.02	9	9
0000000f	EVOL_NOLI	1352.96	65080	77594
&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 : 2103

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre total d'accès en lecture : 11713

Volume des accès en lecture : 9150.78 Mo.

Nombre total d'accès en écriture : 2420

Volume des accès en écriture : 1890.62 Mo.

Nombre d'identificateurs utilisés : 77943

Taille maximum du répertoire : 128000

Pourcentage d'utilisation du répertoire : 60 %

Nom de la base : VOLATILE

Nombre d'enregistrements utilisés : 160

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre total d'accès en lecture : 54592

Volume des accès en lecture : 42650.00 Mo.

Nombre total d'accès en écriture : 877

Volume des accès en écriture : 685.16 Mo.

Nombre d'identificateurs utilisés : 1100

Taille maximum du répertoire : 2000

Pourcentage d'utilisation du répertoire : 55 %

<I> <FIN> ARRET NORMAL DANS "FIN" PAR APPEL A "JEFINI".

<I> <FIN> MEMOIRE JEVEUX MINIMALE REQUISE POUR L'EXECUTION : 211.64 Mo

<I> <FIN> MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION : 1536.94 Mo

<I> <FIN> MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS LORS DE L'EXECUTION : 2123.62 Mo

<I> FERMETURE DES BASES EFFECTUEE

STATISTIQUES CONCERNANT L'ALLOCATION DYNAMIQUE :

TAILLE CUMULEE MAXIMUM : 1537 Mo.

TAILLE CUMULEE LIBEREE : 10893 Mo.

NOMBRE TOTAL D'ALLOCATIONS : 10263361

NOMBRE TOTAL DE LIBERATIONS : 10263341

APPELS AU MECANISME DE LIBERATION : 6

TAILLE MEMOIRE CUMULEE RECUPEREE : 1602 Mo.

VOLUME DES LECTURES : 36 Mo.

VOLUME DES ECRITURES : 1601 Mo.

MEMOIRE JEVEUX MINIMALE REQUISE POUR L'EXECUTION : 211.64 Mo

- IMPOSE DE NOMBREUX ACCES DISQUE

- RALENTIT LA VITESSE D'EXECUTION

MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION : 1536.94 Mo

- LIMITE LES ACCES DISQUE

- AMELIORE LA VITESSE D'EXECUTION

MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS : 2123.62 Mo

- COMPREND LA MEMOIRE CONSOMMEE PAR JEVEUX,

LE SUPERVISEUR PYTHON, LES LIBRAIRIES EXTERNES

<I> FIN D'EXECUTION LE : JE-16-JANV-2025 14:56:13

DeprecationWarning: PY_SSIZE_T_CLEAN will be required for '#' formats

libaster.jeveux_finalize(options)

Signature of pickled file :
654a92d6bc3cb74fac80ec058b9e77273302a8ad09c5903cc49e76feec1e46f7

Signature of info file :
cdd70caf7ed56c6f74c77870fc623b1b3967af91fa9558daa364aef8ee4343f0

Signature of Jeveux database:
c1ade56416f711b348cfd98cd0533125606d29c007420732872786108cf6eaad

****

* COMMAND : USER : SYSTEM : USER+SYS : ELAPSED *

****

* DEBUT : 0.04 : 0.16 : 0.20 : 0.19 *

* DEFI_MATERIAU : 0.00 : 0.00 : 0.00 : 0.01 *

* LIRE_MAILLAGE : 0.01 : 0.00 : 0.01 : 0.01 *

* DEFI_GROUP : 0.01 : 0.00 : 0.01 : 0.00 *

* AFFE_MODELE : 0.01 : 0.00 : 0.01 : 0.02 *

* AFFE_MATERIAU : 0.01 : 0.00 : 0.01 : 0.00 *

* CREA_CHAMP : 0.00 : 0.00 : 0.00 : 0.00

*

 * CREA_CHAMP : 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
*

 * FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*

 * AFFE_CHAR_MECA : 0.01 : 0.00 : 0.01 : 0.00
*

 * AFFE_CHAR_MECA_F : 0.01 : 0.00 : 0.01 : 0.01
*

 * AFFE_CHAR_CINE : 0.00 : 0.00 : 0.00 : 0.00
*

 * DEFI_LIST_REEL : 0.00 : 0.00 : 0.00 : 0.00 *

 * DEFI_LIST_INST : 0.01 : 0.00 : 0.01 : 0.00 *

 * DYNA_NON_LINE : 234.70 : 29.30 : 264.00 :
264.34 *

 * FIN : 0.30 : 0.20 : 0.50 : 0.49 *

 * . check syntax : 0.02 : 0.00 : 0.02 : 0.02 *

 * . fortran : 234.50 : 27.78 : 262.28 : 262.62 *

 ****

 * TOTAL_JOB : 235.11 : 29.66 : 264.77 : 265.10
*

 ****

Mémoire (Mo) : 2123.62 / 933.71 / 1536.94 / 211.64 (VmPeak / VmSize /
Optimum / Minimum)

Fin commande #0018 user+syst: 0.30s (syst: 0.20s, elaps:
0.49s)

```
# ------------------------------------------------------------------------
--------------------

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,
)
# Derived result calculation on nodes
SIM = CALC_CHAMP(
    CONTRAINTE=("SIGM_NOEU"),
    CRITERES=("SIEQ_NOEU"),
    DEFORMATION=("EPSG_NOEU"),
    GROUP_MA=("face1", "face2", "face3", "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 : Thu Jan 16 14:56:23 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 : 484.88 Mo

reste pour l'allocation dynamique : 119515.12 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 : 2103

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre d'identificateurs utilisés : 77943

Taille maximum du répertoire : 128000

Pourcentage d'utilisation du répertoire : 60 %

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'>

INIT_U <class 'libaster.FieldOnNodesReal'>

INIT_A <class 'libaster.FieldOnNodesReal'>

F_0 <class 'libaster.Formula'>

F_1 <class 'libaster.Formula'>

F_2 <class 'libaster.Formula'>

BC_0 <class 'libaster.MechanicalLoadReal'>

BC_1 <class 'libaster.MechanicalLoadFunction'>

BC_2 <class 'libaster.MechanicalDirichletBC'>

TIMELIST <class 'libaster.ListOfFloats'>

INSTLIST <class 'libaster.TimeStepper'>

SIM <class 'libaster.NonLinearResult'>

Mémoire (Mo) : 2075.48 / 2075.48 / 1542.24 / 199.03 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0001 user+syst: 0.48s (syst: 1.80s, elaps: 2.27s)

.. _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) : 2075.48 / 2075.46 / 1542.24 / 199.03 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0002 user+syst: 0.00s (syst: 0.00s, elaps: 0.00s)

.. _stg1_txt28

Commande #0003 de fort.1, ligne 28

```
SIM = CALC_CHAMP(CONTRAINTE='SIGM_NOEU',
                 CRITERE='RELATIF',
                 CRITERES='SIEQ_NOEU',
                 DEFORMATION='EPSG_NOEU',
                 GROUP_MA=('face1', 'face2', 'face3', 'region1'),
                 INFO=1,
                 PARALLELISME_TEMPS='NON',
                 PRECISION=1e-06,
                 RESULTAT=SIM,
                 reuse=SIM)
```

#2 Calculs elementaires et assemblages CPU (USER+SYST/SYST/ELAPS): 71.84 12.22 71.29

#3 Dechargement de la memoire sur disque CPU (USER+SYST/SYST/ELAPS): 4.66 3.74 4.70

Résultat commande #0003 (CALC_CHAMP): SIM ('<0000000f>') de type <NonLinearResult>

Dépend de :

- TIMELIST ('<0000000d>') de type <ListOfFloats>

- MATS ('<00000004>') de type <MaterialField>

- BC_0 ('<0000000a>') de type <MechanicalLoadReal>

- BC_1 ('<0000000b>') de type <MechanicalLoadFunction>

- BC_2 ('<0000000c>') de type <MechanicalDirichletBC>

- INSTLIST ('<0000000e>') de type <TimeStepper>

- MODEL ('<00000003>') de type <Model>

Mémoire (Mo) : 8225.65 / 2037.60 / 7484.29 / 231.07 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0003 user+syst: 135.72s (syst: 29.77s, elaps: 165.57s)

.. _stg1_txt38

Commande #0004 de fort.1, ligne 38

```
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 00000010 - IMPRESSIONS NIVEAU    1 ------------
ASTER 15.06.10 CONCEPT 00000010 CALCULE LE 16/01/2025 A 14:59:11 DE TYPE
MAILLAGE_SDASTER
NOMBRE DE NOEUDS                          848
NOMBRE DE MAILLES                        3884
                              TETRA4      3884
NOMBRE DE GROUPES DE MAILLES              1
                              region1     3884
```

```
-------------------------------------------------------------------------------
-----

 DeprecationWarning: PY_SSIZE_T_CLEAN will be required for '#' formats

   return libaster.call_oper(syntax, 0)

# Résultat commande #0004 (CREA_MAILLAGE): MESH_PP ('<00000010>') de type
<Mesh>

# Dépend de :

# - MESH ('<00000002>') de type <Mesh>

# Mémoire (Mo) :    8225.65 /    2038.04 /    7484.29 /     231.07 (VmPeak / VmSize /
Optimum / Minimum)

# Fin commande #0004      user+syst:              0.01s (syst:              0.00s, elaps:
0.01s)

# -------------------------------------------------------------------------------
---------------------

.. _stg1_txt46

# -------------------------------------------------------------------------------
---------------------

# Commande #0005 de fort.1, ligne 46

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 3884 mailles du maillage 00000010, on a demandé l'affectation de 3884, on a pu en affecter

3884.

Modélisation	Formulation	Type maille	Élément fini	Nombre
3D	_	TETRA4	MECA_TETRA4	3884

#2 Calculs elementaires et assemblages CPU (USER+SYST/SYST/ELAPS): 0.00 0.00 0.00

Résultat commande #0005 (AFFE_MODELE): MOD_PP ('<00000011>') de type <Model>

Dépend de :

- MESH_PP ('<00000010>') de type <Mesh>

Mémoire (Mo) : 8225.65 / 2039.95 / 7484.29 / 231.07 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0005 user+syst: 0.02s (syst: 0.00s, elaps: 0.02s)

.. _stg1_txt63

Commande #0006 de fort.1, ligne 63

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 00000012 CALCULE POUR 2501 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 !

! ... ! ... ! ... ! ... ! ... ! ... ! ... ! ... !

! 2500 ! 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 ! ! ! ! ! ! ! ! ! !

! ... ! ! ! ! ! ! ! ! ! !

! 2500 ! ! ! ! ! ! ! ! ! !

! ---------- !----------------!----------------!----------------!----------------!----------------!----------------!----------------!----------------!----------------!

! 0 ! K8 ! K8 ! K8 !
K24 ! R ! I ! R !
K24 ! R !

! ... ! ... ! ... ! ... ! ... !
... ! ... ! ... ! ... ! ... !

! 2500 ! K8 ! K8 ! K8 !
K24 ! R ! I ! R !
K24 ! R !

! ---------- !----------------!----------------!----------------!----------
----!----------------!----------------!----------------!----------------!----
----------!

#3 Dechargement de la memoire sur disque CPU
(USER+SYST/SYST/ELAPS): 0.31 0.23 0.31

Résultat commande #0006 (EXTR_RESU): SIM_PP ('<00000012>') de type
<NonLinearResult>

Dépend de :

- MOD_PP ('<00000011>') de type <Model>

Mémoire (Mo) : 8225.65 / 2101.21 / 7484.29 / 233.20 (VmPeak / VmSize /
Optimum / Minimum)

Fin commande #0006 user+syst: 52.03s (syst: 9.33s, elaps:
61.39s)

.. _stg1_txt75

Commande #0007 de fort.1, ligne 75

DETRUIRE(INFO=1,

NOM=(MESH, MODEL, SIM))

Suppression de la référence : 'MESH'

Suppression de la référence : 'MODEL'

Suppression de la référence : 'SIM'

Mémoire (Mo) : 8225.65 / 2101.21 / 7484.29 / 233.20 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0007 user+syst: 0.03s (syst: 0.00s, elaps: 0.03s)

.. _stg1_txt81

Commande #0008 de fort.1, ligne 81

```
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) : 8225.65 / 1627.03 / 7484.29 / 233.20 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0008 user+syst: 16.44s (syst: 1.72s, elaps:

18.21s)

```
# ------------------------------------------------------------------------
---------------------

.. _stg1_txt126

# ------------------------------------------------------------------------
---------------------

# Commande #0009 de fort.1, ligne 126

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'>

INIT_U                         <class 'libaster.FieldOnNodesReal'>

INIT_A                         <class 'libaster.FieldOnNodesReal'>

F_0                             <class 'libaster.Formula'>

F_1                             <class 'libaster.Formula'>

F_2                             <class 'libaster.Formula'>

BC_0                            <class 'libaster.MechanicalLoadReal'>

BC_1                            <class 'libaster.MechanicalLoadFunction'>

BC_2                            <class 'libaster.MechanicalDirichletBC'>

TIMELIST                       <class 'libaster.ListOfFloats'>
```

INSTLIST <class 'libaster.TimeStepper'>

MESH_PP <class 'libaster.Mesh'>

MOD_PP <class 'libaster.Model'>

SIM_PP <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		735.18	75336	87986
00000001	MATER_SDASTER	0.00	9	9
00000002	MAILLAGE_SDASTER	0.44	38	67
00000003	MODELE_SDASTER	0.19	9	14
00000004	CHAM_MATER	0.03	9	14
00000005	CHAM_NO_SDASTER	0.14	10	12
00000006	CHAM_NO_SDASTER	0.14	10	12
00000007	FORMULE	0.00	4	4
00000008	FORMULE	0.00	4	4
00000009	FORMULE	0.00	4	4
0000000a	CHAR_MECA	0.03	32	37
0000000b	CHAR_MECA	0.04	32	37
0000000c	CHAR_CINE_MECA	0.03	4	4
0000000d	LISTR8_SDASTER	0.02	6	6
0000000e	LIST_INST	0.02	9	9
00000010	MAILLAGE_SDASTER	0.41	38	

52

00000011 MODELE_SDASTER 0.17 9
14

00000012 EVOL_NOLI 703.52 75061
87578

&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

0000000f 0.00 3
3

-

Nom de la base : GLOBALE

Nombre d'enregistrements utilisés : 2920

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre total d'accès en lecture : 94748

Volume des accès en lecture : 74021.88 Mo.

Nombre total d'accès en écriture : 48191

Volume des accès en écriture : 37649.22 Mo.

Nombre d'identificateurs utilisés : 195627

Taille maximum du répertoire : 256000

Pourcentage d'utilisation du répertoire : 76 %

Nom de la base : VOLATILE

Nombre d'enregistrements utilisés : 13836

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre total d'accès en lecture : 20325

Volume des accès en lecture : 15878.91 Mo.

Nombre total d'accès en écriture : 26167

Volume des accès en écriture : 20442.97 Mo.

Nombre d'identificateurs utilisés : 49892

Taille maximum du répertoire : 64000

Pourcentage d'utilisation du répertoire : 77 %

<I> <FIN> ARRET NORMAL DANS "FIN" PAR APPEL A "JEFINI".

<I> <FIN> MEMOIRE JEVEUX MINIMALE REQUISE POUR L'EXECUTION : 233.20 Mo

<I> <FIN> MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION : 7484.29 Mo

<I> <FIN> MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS LORS DE L'EXECUTION : 8225.65 Mo

<I> FERMETURE DES BASES EFFECTUEE

STATISTIQUES CONCERNANT L'ALLOCATION DYNAMIQUE :

TAILLE CUMULEE MAXIMUM : 7484 Mo.

TAILLE CUMULEE LIBEREE : 14754 Mo.

NOMBRE TOTAL D'ALLOCATIONS : 10827334

NOMBRE TOTAL DE LIBERATIONS : 10827334

APPELS AU MECANISME DE LIBERATION : 6

TAILLE MEMOIRE CUMULEE RECUPEREE : 11733 Mo.

VOLUME DES LECTURES : 4 Mo.

VOLUME DES ECRITURES : 11363 Mo.

MEMOIRE JEVEUX MINIMALE REQUISE POUR L'EXECUTION : 233.20 Mo

- IMPOSE DE NOMBREUX ACCES DISQUE

- RALENTIT LA VITESSE D'EXECUTION

MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION : 7484.29 Mo

- LIMITE LES ACCES DISQUE

- AMELIORE LA VITESSE D'EXECUTION

MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS : 8225.65 Mo

- COMPREND LA MEMOIRE CONSOMMEE PAR JEVEUX,

LE SUPERVISEUR PYTHON, LES LIBRAIRIES EXTERNES

<I> FIN D'EXECUTION LE : JE-16-JANV-2025 15:00:37

DeprecationWarning: PY_SSIZE_T_CLEAN will be required for '#' formats

libaster.jeveux_finalize(options)

Signature of pickled file :
94b4a1eb510aa327d4e43729b8e1bcaaf6e575af02303c6e714b7db09110ab0d

Signature of info file :
cba846e47273652f0060dd7152a279cf112e55d8d1b86bd1253142eb6da760f4

Signature of Jeveux database:
9fa451bdad7f86df7b04753208e6f72eda7ea3b72f4e0df5a9abaf809052edf0

```
 ********************************************************************************
 * COMMAND                    :      USER :     SYSTEM :   USER+SYS :
ELAPSED *
 ********************************************************************************
 * POURSUITE                  :      0.48 :      1.80 :      2.28 :      2.27
*
 * MODI_MODELE                :      0.00 :      0.00 :      0.00 :
0.00 *
 * CALC_CHAMP                 :    135.72 :     29.77 :    165.49 :
165.57 *
 * CREA_MAILLAGE              :      0.01 :      0.00 :      0.01 :      0.01
*
 * AFFE_MODELE                :      0.02 :      0.00 :      0.02 :      0.02
*
 * EXTR_RESU                  :     52.03 :      9.33 :     61.36 :     61.39 *
 * DETRUIRE                   :      0.03 :      0.00 :      0.03 :      0.03 *
 * IMPR_RESU                  :     16.44 :      1.72 :     18.16 :     18.21
*
 * FIN                        :      0.27 :      0.29 :      0.56 :      0.59 *
 *    . check syntax          :      0.02 :      0.00 :      0.02 :      0.01 *
 *    . fortran               :    204.45 :     41.38 :    245.83 :    246.01 *
 ********************************************************************************
 * TOTAL_JOB                  :    205.41 :     48.80 :    254.21 :    254.42
*
```

```
 ********************************************************************************
# Mémoire (Mo) :    8225.65 /      926.28 /    7484.29 /      233.20 (VmPeak / VmSize / Optimum / Minimum)
# Fin commande #0009      user+syst:                0.27s (syst:                0.29s, elaps:                0.59s)
# ------------------------------------------------------------------------------------------------------
End of the Code_Aster execution
Code_Aster MPI exits normally
Exited
EXECUTION_CODE_ASTER_EXIT_12=0
```