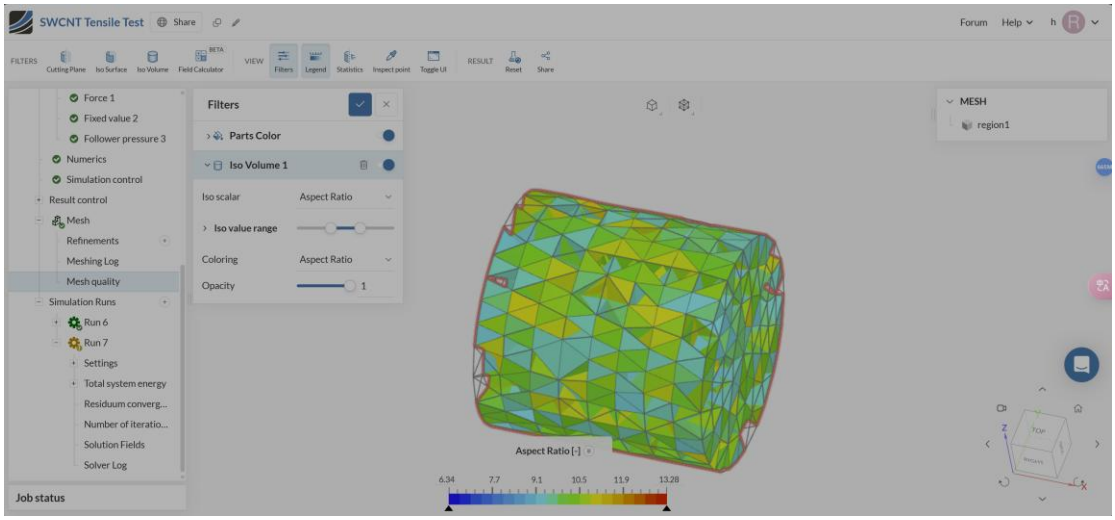
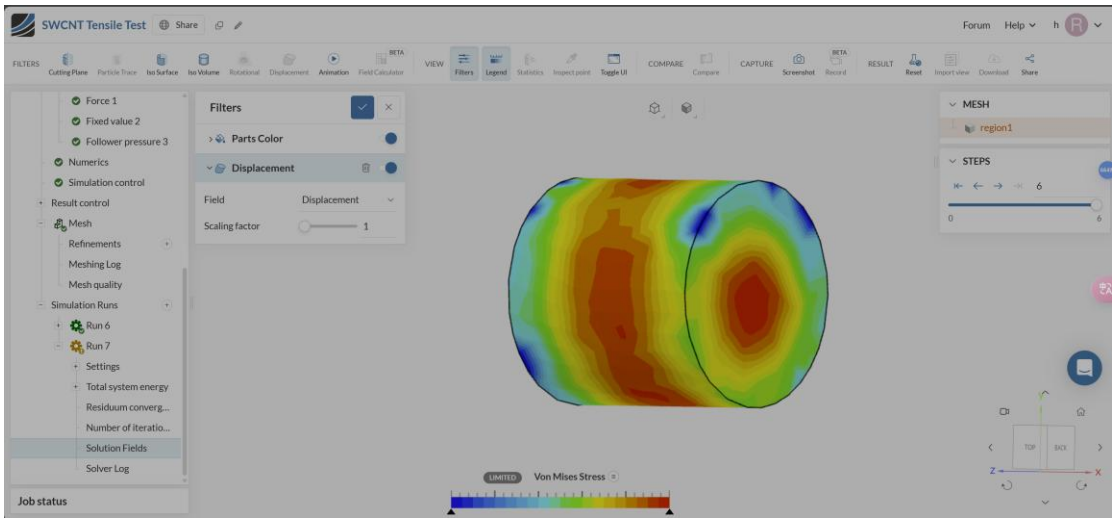
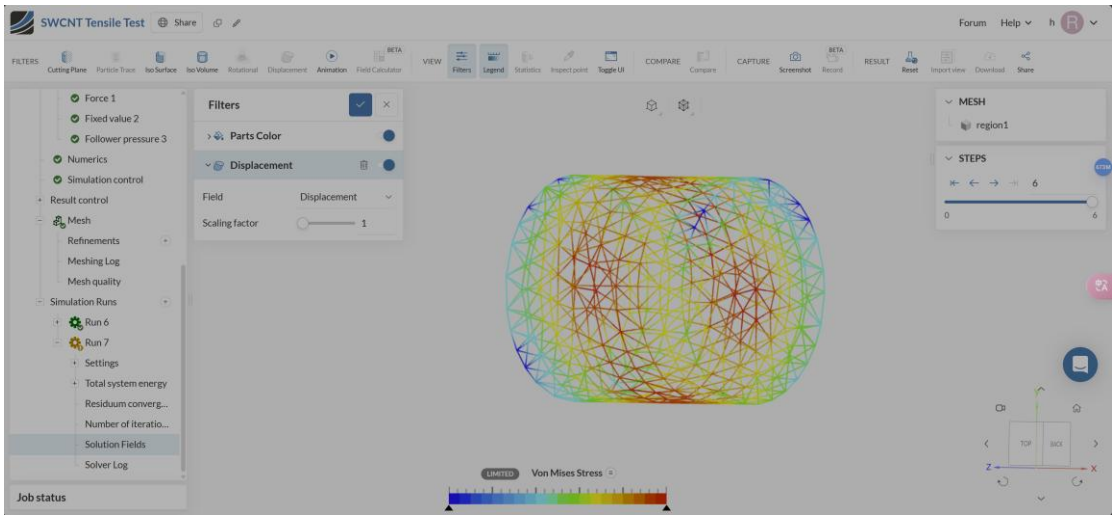


Mesh quality(Above)





Solution fields (Above)

Meshing log

****

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****

Model import took 380.359379ms.

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

Absolute small feature tolerance: 0.009950000000000007 m.

Surface meshing took 50.352364ms.

Number of cells after 76.511882ms: 1623

Number of cells after 101.77212ms: 3977

Number of cells after 126.948627ms: 4005

Meshing took 127.243577ms. Starting mesh export.

Mesh quality metrics:

Non Orthogonality

Acceptable range: 0.0 to 88.0

- min: 0.0
- max: 55.3
- average: 25.6
- 99.99-th percentile: 55.3

Edge Ratio

Acceptable range: 0.0 to 100.0

- min: 1.1
- max: 2.6
- average: 1.7
- 99.99-th percentile: 2.6

Volume Ratio

Acceptable range: 0.0 to 100.0

min: 1.0

max: 3.4

average: 1.4

99.99-th percentile: 3.4

Aspect Ratio

Acceptable range: 0.0 to 100.0

min: 6.3

max: 13.3

average: 10.1

99.99-th percentile: 13.3

Tetrahedral Aspect Ratio

Acceptable range: 0.0 to 100.0

min: 6.3

max: 13.3

average: 10.1

99.99-th percentile: 13.3

Skewness

Acceptable range: 0.0 to 100.0

min: 0.1

max: 0.8

average: 0.4

99.99-th percentile: 0.8

Min Edge Length : 0

Mesh export took 777.970928ms.

Solver logs

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

1.000000000000e-03.

[98%] Instant calculé : 5.93200e+00, dernier instant archivé : 5.93200e+00, au numéro d'ordre :

5932

Time of computation: 5.933000000000e+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 | | | | | |

| 5.93300E+00 | 0 | 8.57271E-16 | 6.93889E-16 | | | | |

| | TANGENTE | | | | | | |

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

| PAS COURANT | -1.6113E-24 | -1.6113E-24 | 7.9239E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.572712282553e-16 with the node and degree of

freedom N470 DY

The residue of the type RESI_GLOB_MAXI is worth 6.938893903907e-16 with the node and degree of

freedom N470 DY

Temps CPU consommé dans ce pas de temps : 0.172 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.100 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1921.06 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.933000000000e+00 for the sequence number 5933

Field stored SIEF_ELGA at time 5.933000000000e+00 for the sequence number

5933

Field stored VARI_ELGA at time 5.933000000000e+00 for the sequence number 5933

Field stored COMPORTEMENT at time 5.933000000000e+00 for the sequence number 5933

Field stored VITE at time 5.933000000000e+00 for the sequence number 5933

Field stored ACCE at time 5.933000000000e+00 for the sequence number 5933

Field stored FORC_AMOR at time 5.933000000000e+00 for the sequence number 5933

Field stored FORC_LIAI at time 5.933000000000e+00 for the sequence number 5933

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

1.000000000000e-03.

[98%] Instant calculé : 5.93300e+00, dernier instant archivé : 5.93300e+00, au numéro d'ordre :

5933

Time of computation: 5.934000000000e+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 |

| 5.93400E+00 | 0 | 7.54399E-16 | 6.10623E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6076E-24 | -1.6076E-24 | -6.6943E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.543986808646e-16 with the node and degree of

freedom N529 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.106226635438e-16 with the node and degree of

freedom N529 DZ

Temps CPU consommé dans ce pas de temps : 0.163 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.091 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1921.66 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.934000000000e+00 for the sequence number 5934

Field stored SIEF_ELGA at time 5.934000000000e+00 for the sequence number 5934

Field stored VARI_ELGA at time 5.934000000000e+00 for the sequence number 5934

Field stored COMPORTEMENT at time 5.934000000000e+00 for the sequence number 5934

Field stored VITE at time 5.934000000000e+00 for the sequence number 5934

Field stored ACCE at time 5.934000000000e+00 for the sequence number 5934

Field stored FORC_AMOR at time 5.934000000000e+00 for the sequence number 5934

Field stored FORC_LIAI at time 5.934000000000e+00 for the sequence number 5934

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

1.000000000000e-03.

[98%] Instant calculé : 5.93400e+00, dernier instant archivé : 5.93400e+00, au numéro d'ordre :

5934

Time of computation: 5.935000000000e+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 |

| 5.93500E+00 | 0 | 9.25853E-16 | 7.49401E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6021E-24 | -1.6021E-24 | 3.8981E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.258529265157e-16 with the node and degree of

freedom N535 DX

The residue of the type RESI_GLOB_MAXI is worth 7.494005416220e-16 with the node and degree of

freedom N535 DX

Temps CPU consommé dans ce pas de temps : 0.169 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.097 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1922.27 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.935000000000e+00 for the sequence number 5935

Field stored SIEF_ELGA at time 5.935000000000e+00 for the sequence number 5935

Field stored VARI_ELGA at time 5.935000000000e+00 for the sequence number 5935

Field stored COMPORTEMENT at time 5.935000000000e+00 for the sequence number 5935

Field stored VITE at time 5.935000000000e+00 for the sequence number 5935

Field stored ACCE at time 5.935000000000e+00 for the sequence number 5935

Field stored FORC_AMOR at time 5.935000000000e+00 for the sequence number 5935

Field stored FORC_LIAI at time 5.935000000000e+00 for the sequence number 5935

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

1.000000000000e-03.

[98%] Instant calculé : 5.93500e+00, dernier instant archivé : 5.93500e+00, au numéro d'ordre :

5935

Time of computation: 5.936000000000e+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 | | | | | |

| 5.93600E+00 | 0 | 8.57271E-16 | 6.93889E-16 | | | | |

| | TANGENTE | | | | | | |

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

| DISS_SCH |

| PAS COURANT | -1.6150E-24 | -1.6150E-24 | -1.0935E-45 | 0.0000E+00 | -1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.572712282553e-16 with the node and degree of

freedom N527 DY

The residue of the type RESI_GLOB_MAXI is worth 6.938893903907e-16 with the node and degree of

freedom N527 DY

Temps CPU consommé dans ce pas de temps : 0.171 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.099 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1922.88 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.936000000000e+00 for the sequence number 5936

Field stored SIEF_ELGA at time 5.936000000000e+00 for the sequence number 5936

Field stored VARI_ELGA at time 5.936000000000e+00 for the sequence number 5936

Field stored COMPORTEMENT at time 5.936000000000e+00 for the sequence number 5936

Field stored VITE at time 5.936000000000e+00 for the sequence number 5936

Field stored ACCE at time 5.936000000000e+00 for the sequence number 5936

Field stored FORC_AMOR at time 5.936000000000e+00 for the sequence number 5936

Field stored FORC_LIAI at time 5.936000000000e+00 for the sequence number 5936

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

1.000000000000e-03.

[98%] Instant calculé : 5.93600e+00, dernier instant archivé : 5.93600e+00, au numéro d'ordre :

5936

Time of computation: 5.937000000000e+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 |

| 5.93700E+00 | 0 | 7.88690E-16 | 6.38378E-16 |
| | |TANGENTE | |

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

| PAS COURANT | -1.6093E-24 | -1.6093E-24 | -1.5479E-45 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.886895299948e-16 with the node and degree of

freedom N439 DX

The residue of the type RESI_GLOB_MAXI is worth 6.383782391595e-16 with the node and degree of

freedom N439 DX

Temps CPU consommé dans ce pas de temps : 0.168 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.096 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1923.48 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.937000000000e+00 for the sequence number 5937

Field stored SIEF_ELGA at time 5.937000000000e+00 for the sequence number 5937

Field stored VARI_ELGA at time 5.937000000000e+00 for the sequence number 5937

Field stored COMPORTEMENT at time 5.937000000000e+00 for the sequence number 5937

Field stored VITE at time 5.937000000000e+00 for the sequence number 5937

Field stored ACCE at time 5.937000000000e+00 for the sequence number 5937

Field stored FORC_AMOR at time 5.937000000000e+00 for the sequence number 5937

Field stored FORC_LIAI at time 5.937000000000e+00 for the sequence number 5937

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

1.000000000000e-03.

[98%] Instant calculé : 5.93700e+00, dernier instant archivé : 5.93700e+00, au numéro d'ordre :

5937

Time of computation: 5.938000000000e+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 |

| 5.93800E+00 | 0 | 9.60144E-16 | 7.77156E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.5954E-24 | -1.5954E-24 | -2.0383E-46 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.601437756459e-16 with the node and degree of

freedom N404 DX

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

freedom N404 DX

Temps CPU consommé dans ce pas de temps : 0.163 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.091 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1924.08 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.938000000000e+00 for the sequence number 5938

Field stored SIEF_ELGA at time 5.938000000000e+00 for the sequence number 5938

Field stored VARI_ELGA at time 5.938000000000e+00 for the sequence number 5938

Field stored COMPORTEMENT at time 5.938000000000e+00 for the sequence number 5938

Field stored VITE at time 5.938000000000e+00 for the sequence number 5938

Field stored ACCE at time 5.938000000000e+00 for the sequence number 5938

Field stored FORC_AMOR at time 5.938000000000e+00 for the sequence number 5938

Field stored FORC_LIAI at time 5.938000000000e+00 for the sequence number 5938

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

1.000000000000e-03.

[98%] Instant calculé : 5.93800e+00, dernier instant archivé : 5.93800e+00, au numéro d'ordre :

5938

Time of computation: 5.939000000000e+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 |

| 5.93900E+00 | 0 | 6.51526E-16 | 5.27356E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6086E-24 | -1.6086E-24 | 2.3658E-45 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.515261334740e-16 with the node and degree of

freedom N551 DX

The residue of the type RESI_GLOB_MAXI is worth 5.273559366969e-16 with the node and degree of

freedom N551 DX

Temps CPU consommé dans ce pas de temps : 0.170 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.098 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1924.69 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.939000000000e+00 for the sequence number 5939

Field stored SIEF_ELGA at time 5.939000000000e+00 for the sequence number 5939

Field stored VARI_ELGA at time 5.939000000000e+00 for the sequence number

5939

Field stored COMPORTEMENT at time 5.939000000000e+00 for the sequence number 5939

Field stored VITE at time 5.939000000000e+00 for the sequence number 5939

Field stored ACCE at time 5.939000000000e+00 for the sequence number 5939

Field stored FORC_AMOR at time 5.939000000000e+00 for the sequence number 5939

Field stored FORC_LIAI at time 5.939000000000e+00 for the sequence number 5939

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

1.000000000000e-03.

[98%] Instant calculé : 5.93900e+00, dernier instant archivé : 5.93900e+00, au numéro d'ordre :

5939

Time of computation: 5.940000000000e+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 | |

| 5.94000E+00 | 0 | 8.91562E-16 | 7.21645E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6261E-24 | -1.6261E-24 | 1.8506E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.915620773855e-16 with the node and degree of

freedom N581 DX

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

freedom N581 DX

Temps CPU consommé dans ce pas de temps : 0.165 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.094 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1925.29 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.940000000000e+00 for the sequence number 5940

Field stored SIEF_ELGA at time 5.940000000000e+00 for the sequence number 5940

Field stored VARI_ELGA at time 5.940000000000e+00 for the sequence number 5940

Field stored COMPORTEMENT at time 5.940000000000e+00 for the sequence number 5940

Field stored VITE at time 5.940000000000e+00 for the sequence number 5940

Field stored ACCE at time 5.940000000000e+00 for the sequence number 5940

Field stored FORC_AMOR at time 5.940000000000e+00 for the sequence number 5940

Field stored FORC_LIAI at time 5.940000000000e+00 for the sequence number 5940

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

1.000000000000e-03.

[99%] Instant calculé : 5.94000e+00, dernier instant archivé : 5.94000e+00, au numéro d'ordre :

5940

Time of computation: 5.941000000000e+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 | | | | | |

| 5.94100E+00 | 0 | 6.85817E-16 | 5.55112E-16 | | | | |

| | |TANGENTE | | | | | |

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

| PAS COURANT | -1.6078E-24 | -1.6078E-24 | -5.9030E-45 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.858169826042e-16 with the node and degree of

freedom N535 DX

The residue of the type RESI_GLOB_MAXI is worth 5.551115123126e-16 with the

node and degree of

freedom N535 DX

Temps CPU consommé dans ce pas de temps : 0.165 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.094 s (3 intégrations)

* Temps total factorisation matrice : 0.023 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1925.89 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.941000000000e+00 for the sequence number 5941

Field stored SIEF_ELGA at time 5.941000000000e+00 for the sequence number 5941

Field stored VARI_ELGA at time 5.941000000000e+00 for the sequence number 5941

Field stored COMPORTEMENT at time 5.941000000000e+00 for the sequence number 5941

Field stored VITE at time 5.941000000000e+00 for the sequence number 5941

Field stored ACCE at time 5.941000000000e+00 for the sequence number 5941

Field stored FORC_AMOR at time 5.941000000000e+00 for the sequence number 5941

Field stored FORC_LIAI at time 5.941000000000e+00 for the sequence number 5941

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

1.000000000000e-03.

[99%] Instant calculé : 5.94100e+00, dernier instant archivé : 5.94100e+00, au numéro d'ordre :

5941

Time of computation: 5.942000000000e+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 |

| 5.94200E+00 | 0 | 7.54399E-16 | 6.10623E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6008E-24 | -1.6008E-24 | 4.5785E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.543986808646e-16 with the node and degree of

freedom N573 DY

The residue of the type RESI_GLOB_MAXI is worth 6.106226635438e-16 with the node and degree of

freedom N573 DY

Temps CPU consommé dans ce pas de temps : 0.170 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.098 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1926.50 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.942000000000e+00 for the sequence number 5942

Field stored SIEF_ELGA at time 5.942000000000e+00 for the sequence number 5942

Field stored VARI_ELGA at time 5.942000000000e+00 for the sequence number

5942

Field stored COMPORTEMENT at time 5.942000000000e+00 for the sequence number 5942

Field stored VITE at time 5.942000000000e+00 for the sequence number 5942

Field stored ACCE at time 5.942000000000e+00 for the sequence number 5942

Field stored FORC_AMOR at time 5.942000000000e+00 for the sequence number 5942

Field stored FORC_LIAI at time 5.942000000000e+00 for the sequence number 5942

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

1.000000000000e-03.

[99%] Instant calculé : 5.94200e+00, dernier instant archivé : 5.94200e+00, au numéro d'ordre :

5942

Time of computation: 5.943000000000e+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 | |

| 5.94300E+00 | 0 | 8.91562E-16 | 7.21645E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6066E-24 | -1.6066E-24 | -3.4019E-45 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.915620773855e-16 with the node and degree of

freedom N406 DX

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

freedom N406 DX

Temps CPU consommé dans ce pas de temps : 0.167 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1927.11 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.943000000000e+00 for the sequence number 5943

Field stored SIEF_ELGA at time 5.943000000000e+00 for the sequence number 5943

Field stored VARI_ELGA at time 5.943000000000e+00 for the sequence number 5943

Field stored COMPORTEMENT at time 5.943000000000e+00 for the sequence number 5943

Field stored VITE at time 5.943000000000e+00 for the sequence number 5943

Field stored ACCE at time 5.943000000000e+00 for the sequence number 5943

Field stored FORC_AMOR at time 5.943000000000e+00 for the sequence number 5943

Field stored FORC_LIAI at time 5.943000000000e+00 for the sequence number 5943

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

1.000000000000e-03.

[99%] Instant calculé : 5.94300e+00, dernier instant archivé : 5.94300e+00, au numéro d'ordre :

5943

Time of computation: 5.944000000000e+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 | | | | | |

| 5.94400E+00 | 0 | 9.25853E-16 | 7.49401E-16 | | | | |

| | |TANGENTE | | | | | |

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

| PAS COURANT | -1.6000E-24 | -1.6000E-24 | 2.1472E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.258529265157e-16 with the node and degree of

freedom N400 DY

The residue of the type RESI_GLOB_MAXI is worth 7.494005416220e-16 with the

node and degree of

freedom N400 DY

Temps CPU consommé dans ce pas de temps : 0.170 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.099 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1927.71 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.944000000000e+00 for the sequence number 5944

Field stored SIEF_ELGA at time 5.944000000000e+00 for the sequence number 5944

Field stored VARI_ELGA at time 5.944000000000e+00 for the sequence number 5944

Field stored COMPORTEMENT at time 5.944000000000e+00 for the sequence number 5944

Field stored VITE at time 5.944000000000e+00 for the sequence number 5944

Field stored ACCE at time 5.944000000000e+00 for the sequence number 5944

Field stored FORC_AMOR at time 5.944000000000e+00 for the sequence number 5944

Field stored FORC_LIAI at time 5.944000000000e+00 for the sequence number 5944

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

1.000000000000e-03.

[99%] Instant calculé : 5.94400e+00, dernier instant archivé : 5.94400e+00, au numéro d'ordre :

5944

Time of computation: 5.945000000000e+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 |

| 5.94500E+00 | 0 | 7.88690E-16 | 6.38378E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6259E-24 | -1.6259E-24 | 2.7670E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.886895299948e-16 with the node and degree of

freedom N559 DX

The residue of the type RESI_GLOB_MAXI is worth 6.383782391595e-16 with the node and degree of

freedom N559 DX

Temps CPU consommé dans ce pas de temps : 0.169 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.018 s

Mémoire (Mo) : 2056.25 / 1928.31 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.945000000000e+00 for the sequence number 5945

Field stored SIEF_ELGA at time 5.945000000000e+00 for the sequence number 5945

Field stored VARI_ELGA at time 5.945000000000e+00 for the sequence number

5945

Field stored COMPORTEMENT at time 5.945000000000e+00 for the sequence number 5945

Field stored VITE at time 5.945000000000e+00 for the sequence number 5945

Field stored ACCE at time 5.945000000000e+00 for the sequence number 5945

Field stored FORC_AMOR at time 5.945000000000e+00 for the sequence number 5945

Field stored FORC_LIAI at time 5.945000000000e+00 for the sequence number 5945

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

1.000000000000e-03.

[99%] Instant calculé : 5.94500e+00, dernier instant archivé : 5.94500e+00, au numéro d'ordre :

5945

Time of computation: 5.946000000000e+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 | |

| 5.94600E+00 | 0 | 7.54399E-16 | 6.10623E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.5919E-24 | -1.5919E-24 | -8.1341E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.543986808646e-16 with the node and degree of

freedom N581 DY

The residue of the type RESI_GLOB_MAXI is worth 6.106226635438e-16 with the node and degree of

freedom N581 DY

Temps CPU consommé dans ce pas de temps : 0.172 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.098 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.018 s

Mémoire (Mo) : 2056.25 / 1928.92 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.946000000000e+00 for the sequence number 5946

Field stored SIEF_ELGA at time 5.946000000000e+00 for the sequence number 5946

Field stored VARI_ELGA at time 5.946000000000e+00 for the sequence number 5946

Field stored COMPORTEMENT at time 5.946000000000e+00 for the sequence number 5946

Field stored VITE at time 5.946000000000e+00 for the sequence number 5946

Field stored ACCE at time 5.946000000000e+00 for the sequence number 5946

Field stored FORC_AMOR at time 5.946000000000e+00 for the sequence number 5946

Field stored FORC_LIAI at time 5.946000000000e+00 for the sequence number 5946

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

1.000000000000e-03.

[99%] Instant calculé : 5.94600e+00, dernier instant archivé : 5.94600e+00, au numéro d'ordre :

5946

Time of computation: 5.947000000000e+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 |

| 5.94700E+00 | 0 | 1.02873E-15 | 8.32667E-16 | |TANGENTE | |

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

| PAS COURANT | -1.6082E-24 | -1.6082E-24 | 1.1519E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 1.028725473906e-15 with the node and degree of

freedom N464 DZ

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

node and degree of

freedom N464 DZ

Temps CPU consommé dans ce pas de temps : 0.165 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.092 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.018 s

Mémoire (Mo) : 2056.25 / 1929.52 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.947000000000e+00 for the sequence number 5947

Field stored SIEF_ELGA at time 5.947000000000e+00 for the sequence number 5947

Field stored VARI_ELGA at time 5.947000000000e+00 for the sequence number 5947

Field stored COMPORTEMENT at time 5.947000000000e+00 for the sequence number 5947

Field stored VITE at time 5.947000000000e+00 for the sequence number 5947

Field stored ACCE at time 5.947000000000e+00 for the sequence number 5947

Field stored FORC_AMOR at time 5.947000000000e+00 for the sequence number 5947

Field stored FORC_LIAI at time 5.947000000000e+00 for the sequence number 5947

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

1.000000000000e-03.

[99%] Instant calculé : 5.94700e+00, dernier instant archivé : 5.94700e+00, au numéro d'ordre :

5947

Time of computation: 5.948000000000e+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 |

| 5.94800E+00 | 0 | 8.22980E-16 | 6.66134E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6094E-24 | -1.6094E-24 | -1.1941E-44 | 0.0000E+00 | 5.5101E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.229803791251e-16 with the node and degree of

freedom N435 DY

The residue of the type RESI_GLOB_MAXI is worth 6.661338147751e-16 with the node and degree of

freedom N435 DY

Temps CPU consommé dans ce pas de temps : 0.167 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.018 s

Mémoire (Mo) : 2056.25 / 1930.13 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.948000000000e+00 for the sequence number 5948

Field stored SIEF_ELGA at time 5.948000000000e+00 for the sequence number 5948

Field stored VARI_ELGA at time 5.948000000000e+00 for the sequence number

5948

Field stored COMPORTEMENT at time 5.948000000000e+00 for the sequence number 5948

Field stored VITE at time 5.948000000000e+00 for the sequence number 5948

Field stored ACCE at time 5.948000000000e+00 for the sequence number 5948

Field stored FORC_AMOR at time 5.948000000000e+00 for the sequence number 5948

Field stored FORC_LIAI at time 5.948000000000e+00 for the sequence number 5948

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

1.000000000000e-03.

[99%] Instant calculé : 5.94800e+00, dernier instant archivé : 5.94800e+00, au numéro d'ordre :

5948

Time of computation: 5.949000000000e+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 | |

| 5.94900E+00 | 0 | 8.22980E-16 | 6.66134E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6097E-24 | -1.6097E-24 | 1.1706E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.229803791251e-16 with the node and degree of

freedom N394 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.661338147751e-16 with the node and degree of

freedom N394 DZ

Temps CPU consommé dans ce pas de temps : 0.167 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1930.73 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.949000000000e+00 for the sequence number 5949

Field stored SIEF_ELGA at time 5.949000000000e+00 for the sequence number 5949

Field stored VARI_ELGA at time 5.949000000000e+00 for the sequence number 5949

Field stored COMPORTEMENT at time 5.949000000000e+00 for the sequence number 5949

Field stored VITE at time 5.949000000000e+00 for the sequence number 5949

Field stored ACCE at time 5.949000000000e+00 for the sequence number 5949

Field stored FORC_AMOR at time 5.949000000000e+00 for the sequence number 5949

Field stored FORC_LIAI at time 5.949000000000e+00 for the sequence number 5949

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

1.000000000000e-03.

[99%] Instant calculé : 5.94900e+00, dernier instant archivé : 5.94900e+00, au numéro d'ordre :

5949

Time of computation: 5.950000000000e+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 |

| 5.95000E+00 | 0 | 7.88690E-16 | 6.38378E-16 | |TANGENTE | |

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

| PAS COURANT | -1.6102E-24 | -1.6102E-24 | -1.1248E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.886895299948e-16 with the node and degree of

freedom N440 DY

The residue of the type RESI_GLOB_MAXI is worth 6.383782391595e-16 with the

node and degree of

freedom N440 DY

Temps CPU consommé dans ce pas de temps : 0.161 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.089 s (3 intégrations)

* Temps total factorisation matrice : 0.023 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1931.34 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.950000000000e+00 for the sequence number 5950

Field stored SIEF_ELGA at time 5.950000000000e+00 for the sequence number 5950

Field stored VARI_ELGA at time 5.950000000000e+00 for the sequence number 5950

Field stored COMPORTEMENT at time 5.950000000000e+00 for the sequence number 5950

Field stored VITE at time 5.950000000000e+00 for the sequence number 5950

Field stored ACCE at time 5.950000000000e+00 for the sequence number 5950

Field stored FORC_AMOR at time 5.950000000000e+00 for the sequence number 5950

Field stored FORC_LIAI at time 5.950000000000e+00 for the sequence number 5950

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

1.000000000000e-03.

[99%] Instant calculé : 5.95000e+00, dernier instant archivé : 5.95000e+00, au numéro d'ordre :

5950

Time of computation: 5.951000000000e+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 |

| 5.95100E+00 | 0 | 7.88690E-16 | 6.38378E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.5966E-24 | -1.5966E-24 | 7.7201E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.886895299948e-16 with the node and degree of

freedom N528 DX

The residue of the type RESI_GLOB_MAXI is worth 6.383782391595e-16 with the node and degree of

freedom N528 DX

Temps CPU consommé dans ce pas de temps : 0.166 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.094 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1931.94 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.951000000000e+00 for the sequence number 5951

Field stored SIEF_ELGA at time 5.951000000000e+00 for the sequence number 5951

Field stored VARI_ELGA at time 5.951000000000e+00 for the sequence number

5951

Field stored COMPORTEMENT at time 5.951000000000e+00 for the sequence number 5951

Field stored VITE at time 5.951000000000e+00 for the sequence number 5951

Field stored ACCE at time 5.951000000000e+00 for the sequence number 5951

Field stored FORC_AMOR at time 5.951000000000e+00 for the sequence number 5951

Field stored FORC_LIAI at time 5.951000000000e+00 for the sequence number 5951

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

1.000000000000e-03.

[99%] Instant calculé : 5.95100e+00, dernier instant archivé : 5.95100e+00, au numéro d'ordre :

5951

Time of computation: 5.952000000000e+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 | |

| 5.95200E+00 | 0 | 9.94435E-16 | 8.04912E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6090E-24 | -1.6090E-24 | -3.2135E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.944346247761e-16 with the node and degree of

freedom N435 DZ

The residue of the type RESI_GLOB_MAXI is worth 8.049116928532e-16 with the node and degree of

freedom N435 DZ

Temps CPU consommé dans ce pas de temps : 0.165 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.094 s (3 intégrations)

* Temps total factorisation matrice : 0.023 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1932.55 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.952000000000e+00 for the sequence number 5952

Field stored SIEF_ELGA at time 5.952000000000e+00 for the sequence number 5952

Field stored VARI_ELGA at time 5.952000000000e+00 for the sequence number 5952

Field stored COMPORTEMENT at time 5.952000000000e+00 for the sequence number 5952

Field stored VITE at time 5.952000000000e+00 for the sequence number 5952

Field stored ACCE at time 5.952000000000e+00 for the sequence number 5952

Field stored FORC_AMOR at time 5.952000000000e+00 for the sequence number 5952

Field stored FORC_LIAI at time 5.952000000000e+00 for the sequence number 5952

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

1.000000000000e-03.

[99%] Instant calculé : 5.95200e+00, dernier instant archivé : 5.95200e+00, au numéro d'ordre :

5952

Time of computation: 5.953000000000e+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 |

| 5.95300E+00 | 0 | 6.85817E-16 | 5.55112E-16 | |TANGENTE | |

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

| PAS COURANT | -1.6113E-24 | -1.6113E-24 | 2.7089E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.858169826042e-16 with the node and degree of

freedom N573 DY

The residue of the type RESI_GLOB_MAXI is worth 5.551115123126e-16 with the

node and degree of

freedom N573 DY

Temps CPU consommé dans ce pas de temps : 0.171 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.099 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1933.15 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.953000000000e+00 for the sequence number 5953

Field stored SIEF_ELGA at time 5.953000000000e+00 for the sequence number 5953

Field stored VARI_ELGA at time 5.953000000000e+00 for the sequence number 5953

Field stored COMPORTEMENT at time 5.953000000000e+00 for the sequence number 5953

Field stored VITE at time 5.953000000000e+00 for the sequence number 5953

Field stored ACCE at time 5.953000000000e+00 for the sequence number 5953

Field stored FORC_AMOR at time 5.953000000000e+00 for the sequence number 5953

Field stored FORC_LIAI at time 5.953000000000e+00 for the sequence number 5953

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

1.000000000000e-03.

[99%] Instant calculé : 5.95300e+00, dernier instant archivé : 5.95300e+00, au numéro d'ordre :

5953

Time of computation: 5.954000000000e+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 |

| 5.95400E+00 | 0 | 1.09731E-15 | 8.88178E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6256E-24 | -1.6256E-24 | -2.7545E-46 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 1.097307172167e-15 with the node and degree of

freedom N464 DY

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

freedom N464 DY

Temps CPU consommé dans ce pas de temps : 0.172 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.100 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1933.75 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.954000000000e+00 for the sequence number 5954

Field stored SIEF_ELGA at time 5.954000000000e+00 for the sequence number 5954

Field stored VARI_ELGA at time 5.954000000000e+00 for the sequence number

5954

Field stored COMPORTEMENT at time 5.954000000000e+00 for the sequence number 5954

Field stored VITE at time 5.954000000000e+00 for the sequence number 5954

Field stored ACCE at time 5.954000000000e+00 for the sequence number 5954

Field stored FORC_AMOR at time 5.954000000000e+00 for the sequence number 5954

Field stored FORC_LIAI at time 5.954000000000e+00 for the sequence number 5954

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

1.000000000000e-03.

[99%] Instant calculé : 5.95400e+00, dernier instant archivé : 5.95400e+00, au numéro d'ordre :

5954

Time of computation: 5.955000000000e+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 | |

| 5.95500E+00 | 0 | 8.57271E-16 | 6.93889E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.5955E-24 | -1.5955E-24 | -5.8197E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.572712282553e-16 with the node and degree of

freedom N432 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.938893903907e-16 with the node and degree of

freedom N432 DZ

Temps CPU consommé dans ce pas de temps : 0.167 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1934.36 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.955000000000e+00 for the sequence number 5955

Field stored SIEF_ELGA at time 5.955000000000e+00 for the sequence number 5955

Field stored VARI_ELGA at time 5.955000000000e+00 for the sequence number 5955

Field stored COMPORTEMENT at time 5.955000000000e+00 for the sequence number 5955

Field stored VITE at time 5.955000000000e+00 for the sequence number 5955

Field stored ACCE at time 5.955000000000e+00 for the sequence number 5955

Field stored FORC_AMOR at time 5.955000000000e+00 for the sequence number 5955

Field stored FORC_LIAI at time 5.955000000000e+00 for the sequence number 5955

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

1.000000000000e-03.

[99%] Instant calculé : 5.95500e+00, dernier instant archivé : 5.95500e+00, au numéro d'ordre :

5955

Time of computation: 5.956000000000e+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 |

| 5.95600E+00 | 0 | 9.94435E-16 | 8.04912E-16 | |TANGENTE | |

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

| PAS COURANT | -1.6132E-24 | -1.6132E-24 | 1.0782E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.944346247761e-16 with the node and degree of

freedom N529 DZ

The residue of the type RESI_GLOB_MAXI is worth 8.049116928532e-16 with the

node and degree of

freedom N529 DZ

Temps CPU consommé dans ce pas de temps : 0.170 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.099 s (3 intégrations)

* Temps total factorisation matrice : 0.023 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1934.96 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.956000000000e+00 for the sequence number 5956

Field stored SIEF_ELGA at time 5.956000000000e+00 for the sequence number 5956

Field stored VARI_ELGA at time 5.956000000000e+00 for the sequence number 5956

Field stored COMPORTEMENT at time 5.956000000000e+00 for the sequence number 5956

Field stored VITE at time 5.956000000000e+00 for the sequence number 5956

Field stored ACCE at time 5.956000000000e+00 for the sequence number 5956

Field stored FORC_AMOR at time 5.956000000000e+00 for the sequence number 5956

Field stored FORC_LIAI at time 5.956000000000e+00 for the sequence number 5956

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

1.000000000000e-03.

[99%] Instant calculé : 5.95600e+00, dernier instant archivé : 5.95600e+00, au numéro d'ordre :

5956

Time of computation: 5.957000000000e+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 |

| 5.95700E+00 | 0 | 7.54399E-16 | 6.10623E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.5974E-24 | -1.5974E-24 | -1.4266E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.543986808646e-16 with the node and degree of

freedom N454 DX

The residue of the type RESI_GLOB_MAXI is worth 6.106226635438e-16 with the node and degree of

freedom N454 DX

Temps CPU consommé dans ce pas de temps : 0.165 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.094 s (3 intégrations)

* Temps total factorisation matrice : 0.023 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1935.57 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.957000000000e+00 for the sequence number 5957

Field stored SIEF_ELGA at time 5.957000000000e+00 for the sequence number 5957

Field stored VARI_ELGA at time 5.957000000000e+00 for the sequence number

5957

Field stored COMPORTEMENT at time 5.957000000000e+00 for the sequence number 5957

Field stored VITE at time 5.957000000000e+00 for the sequence number 5957

Field stored ACCE at time 5.957000000000e+00 for the sequence number 5957

Field stored FORC_AMOR at time 5.957000000000e+00 for the sequence number 5957

Field stored FORC_LIAI at time 5.957000000000e+00 for the sequence number 5957

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

1.000000000000e-03.

[99%] Instant calculé : 5.95700e+00, dernier instant archivé : 5.95700e+00, au numéro d'ordre :

5957

Time of computation: 5.958000000000e+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 | |

| 5.95800E+00 | 0 | 8.22980E-16 | 6.66134E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6031E-24 | -1.6031E-24 | 1.5411E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.229803791251e-16 with the node and degree of

freedom N529 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.661338147751e-16 with the node and degree of

freedom N529 DZ

Temps CPU consommé dans ce pas de temps : 0.175 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.103 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1936.17 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.958000000000e+00 for the sequence number 5958

Field stored SIEF_ELGA at time 5.958000000000e+00 for the sequence number 5958

Field stored VARI_ELGA at time 5.958000000000e+00 for the sequence number 5958

Field stored COMPORTEMENT at time 5.958000000000e+00 for the sequence number 5958

Field stored VITE at time 5.958000000000e+00 for the sequence number 5958

Field stored ACCE at time 5.958000000000e+00 for the sequence number 5958

Field stored FORC_AMOR at time 5.958000000000e+00 for the sequence number 5958

Field stored FORC_LIAI at time 5.958000000000e+00 for the sequence number 5958

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

1.000000000000e-03.

[99%] Instant calculé : 5.95800e+00, dernier instant archivé : 5.95800e+00, au numéro d'ordre :

5958

Time of computation: 5.959000000000e+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 | | | | | |

| 5.95900E+00 | 0 | 8.91562E-16 | 7.21645E-16 | | | | |

| | TANGENTE | | | | | | |

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

| PAS COURANT | -1.6128E-24 | -1.6128E-24 | -1.2922E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.915620773855e-16 with the node and degree of

freedom N534 DX

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

node and degree of

freedom N534 DX

Temps CPU consommé dans ce pas de temps : 0.172 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.099 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1936.78 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.959000000000e+00 for the sequence number 5959

Field stored SIEF_ELGA at time 5.959000000000e+00 for the sequence number 5959

Field stored VARI_ELGA at time 5.959000000000e+00 for the sequence number 5959

Field stored COMPORTEMENT at time 5.959000000000e+00 for the sequence number 5959

Field stored VITE at time 5.959000000000e+00 for the sequence number 5959

Field stored ACCE at time 5.959000000000e+00 for the sequence number 5959

Field stored FORC_AMOR at time 5.959000000000e+00 for the sequence number 5959

Field stored FORC_LIAI at time 5.959000000000e+00 for the sequence number 5959

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

1.000000000000e-03.

[99%] Instant calculé : 5.95900e+00, dernier instant archivé : 5.95900e+00, au numéro d'ordre :

5959

Time of computation: 5.960000000000e+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 |

| 5.96000E+00 | 0 | 1.04587E-15 | 8.46545E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6123E-24 | -1.6123E-24 | 1.1770E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 1.045870898471e-15 with the node and degree of

freedom N671 DX

The residue of the type RESI_GLOB_MAXI is worth 8.465450562767e-16 with the node and degree of

freedom N671 DX

Temps CPU consommé dans ce pas de temps : 0.167 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1937.38 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.960000000000e+00 for the sequence number 5960

Field stored SIEF_ELGA at time 5.960000000000e+00 for the sequence number 5960

Field stored VARI_ELGA at time 5.960000000000e+00 for the sequence number

5960

Field stored COMPORTEMENT at time 5.960000000000e+00 for the sequence number 5960

Field stored VITE at time 5.960000000000e+00 for the sequence number 5960

Field stored ACCE at time 5.960000000000e+00 for the sequence number 5960

Field stored FORC_AMOR at time 5.960000000000e+00 for the sequence number 5960

Field stored FORC_LIAI at time 5.960000000000e+00 for the sequence number 5960

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

1.000000000000e-03.

[99%] Instant calculé : 5.96000e+00, dernier instant archivé : 5.96000e+00, au numéro d'ordre :

5960

Time of computation: 5.961000000000e+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 | |

| 5.96100E+00 | 0 | 7.88690E-16 | 6.38378E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.5966E-24 | -1.5966E-24 | -1.2874E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.886895299949e-16 with the node and degree of

freedom N528 DX

The residue of the type RESI_GLOB_MAXI is worth 6.383782391595e-16 with the node and degree of

freedom N528 DX

Temps CPU consommé dans ce pas de temps : 0.162 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.090 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1937.98 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.961000000000e+00 for the sequence number 5961

Field stored SIEF_ELGA at time 5.961000000000e+00 for the sequence number 5961

Field stored VARI_ELGA at time 5.961000000000e+00 for the sequence number 5961

Field stored COMPORTEMENT at time 5.961000000000e+00 for the sequence number 5961

Field stored VITE at time 5.961000000000e+00 for the sequence number 5961

Field stored ACCE at time 5.961000000000e+00 for the sequence number 5961

Field stored FORC_AMOR at time 5.961000000000e+00 for the sequence number 5961

Field stored FORC_LIAI at time 5.961000000000e+00 for the sequence number 5961

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

1.000000000000e-03.

[99%] Instant calculé : 5.96100e+00, dernier instant archivé : 5.96100e+00, au numéro d'ordre :

5961

Time of computation: 5.962000000000e+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 | | | | | |

| 5.96200E+00 | 0 | 7.88690E-16 | 6.38378E-16 | | | | |

| | |TANGENTE | | | | | |

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

| PAS COURANT | -1.6069E-24 | -1.6069E-24 | 1.2703E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.886895299949e-16 with the node and degree of

freedom N580 DX

The residue of the type RESI_GLOB_MAXI is worth 6.383782391595e-16 with the

node and degree of

freedom N580 DX

Temps CPU consommé dans ce pas de temps : 0.167 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.094 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1938.59 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.962000000000e+00 for the sequence number 5962

Field stored SIEF_ELGA at time 5.962000000000e+00 for the sequence number 5962

Field stored VARI_ELGA at time 5.962000000000e+00 for the sequence number 5962

Field stored COMPORTEMENT at time 5.962000000000e+00 for the sequence number 5962

Field stored VITE at time 5.962000000000e+00 for the sequence number 5962

Field stored ACCE at time 5.962000000000e+00 for the sequence number 5962

Field stored FORC_AMOR at time 5.962000000000e+00 for the sequence number 5962

Field stored FORC_LIAI at time 5.962000000000e+00 for the sequence number 5962

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

1.000000000000e-03.

[99%] Instant calculé : 5.96200e+00, dernier instant archivé : 5.96200e+00, au numéro d'ordre :

5962

Time of computation: 5.963000000000e+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 |

| 5.96300E+00 | 0 | 8.91562E-16 | 7.21645E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6029E-24 | -1.6029E-24 | -1.1670E-44 | 0.0000E+00 | -1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.915620773855e-16 with the node and degree of

freedom N432 DZ

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

freedom N432 DZ

Temps CPU consommé dans ce pas de temps : 0.167 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1939.20 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.963000000000e+00 for the sequence number 5963

Field stored SIEF_ELGA at time 5.963000000000e+00 for the sequence number 5963

Field stored VARI_ELGA at time 5.963000000000e+00 for the sequence number

5963

Field stored COMPORTEMENT at time 5.963000000000e+00 for the sequence number 5963

Field stored VITE at time 5.963000000000e+00 for the sequence number 5963

Field stored ACCE at time 5.963000000000e+00 for the sequence number 5963

Field stored FORC_AMOR at time 5.963000000000e+00 for the sequence number 5963

Field stored FORC_LIAI at time 5.963000000000e+00 for the sequence number 5963

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

1.000000000000e-03.

[99%] Instant calculé : 5.96300e+00, dernier instant archivé : 5.96300e+00, au numéro d'ordre :

5963

Time of computation: 5.964000000000e+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 | |

| 5.96400E+00 | 0 | 8.57271E-16 | 6.93889E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6120E-24 | -1.6120E-24 | 1.2013E-44 | 0.0000E+00 | -1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.572712282553e-16 with the node and degree of

freedom N432 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.938893903907e-16 with the node and degree of

freedom N432 DZ

Temps CPU consommé dans ce pas de temps : 0.166 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.094 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1939.80 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.964000000000e+00 for the sequence number 5964

Field stored SIEF_ELGA at time 5.964000000000e+00 for the sequence number 5964

Field stored VARI_ELGA at time 5.964000000000e+00 for the sequence number 5964

Field stored COMPORTEMENT at time 5.964000000000e+00 for the sequence number 5964

Field stored VITE at time 5.964000000000e+00 for the sequence number 5964

Field stored ACCE at time 5.964000000000e+00 for the sequence number 5964

Field stored FORC_AMOR at time 5.964000000000e+00 for the sequence number 5964

Field stored FORC_LIAI at time 5.964000000000e+00 for the sequence number 5964

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

1.000000000000e-03.

[99%] Instant calculé : 5.96400e+00, dernier instant archivé : 5.96400e+00, au numéro d'ordre :

5964

Time of computation: 5.965000000000e+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 |

| 5.96500E+00 | 0 | 9.60144E-16 | 7.77156E-16 | |TANGENTE | |

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

| PAS COURANT | -1.6165E-24 | -1.6165E-24 | -1.0780E-44 | 0.0000E+00 | 7.3468E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.601437756459e-16 with the node and degree of

freedom N553 DZ

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

node and degree of

freedom N553 DZ

Temps CPU consommé dans ce pas de temps : 0.167 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1940.40 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.965000000000e+00 for the sequence number 5965

Field stored SIEF_ELGA at time 5.965000000000e+00 for the sequence number 5965

Field stored VARI_ELGA at time 5.965000000000e+00 for the sequence number 5965

Field stored COMPORTEMENT at time 5.965000000000e+00 for the sequence number 5965

Field stored VITE at time 5.965000000000e+00 for the sequence number 5965

Field stored ACCE at time 5.965000000000e+00 for the sequence number 5965

Field stored FORC_AMOR at time 5.965000000000e+00 for the sequence number 5965

Field stored FORC_LIAI at time 5.965000000000e+00 for the sequence number 5965

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

1.000000000000e-03.

[99%] Instant calculé : 5.96500e+00, dernier instant archivé : 5.96500e+00, au numéro d'ordre :

5965

Time of computation: 5.966000000000e+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 |

| 5.96600E+00 | 0 | 9.25853E-16 | 7.49401E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6062E-24 | -1.6062E-24 | 7.2812E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.258529265157e-16 with the node and degree of

freedom N535 DX

The residue of the type RESI_GLOB_MAXI is worth 7.494005416220e-16 with the node and degree of

freedom N535 DX

Temps CPU consommé dans ce pas de temps : 0.167 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1941.01 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.966000000000e+00 for the sequence number 5966

Field stored SIEF_ELGA at time 5.966000000000e+00 for the sequence number 5966

Field stored VARI_ELGA at time 5.966000000000e+00 for the sequence number

5966

Field stored COMPORTEMENT at time 5.966000000000e+00 for the sequence number 5966

Field stored VITE at time 5.966000000000e+00 for the sequence number 5966

Field stored ACCE at time 5.966000000000e+00 for the sequence number 5966

Field stored FORC_AMOR at time 5.966000000000e+00 for the sequence number 5966

Field stored FORC_LIAI at time 5.966000000000e+00 for the sequence number 5966

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

1.000000000000e-03.

[99%] Instant calculé : 5.96600e+00, dernier instant archivé : 5.96600e+00, au numéro d'ordre :

5966

Time of computation: 5.967000000000e+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 | |

| 5.96700E+00 | 0 | 7.20108E-16 | 5.82867E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6047E-24 | -1.6047E-24 | -7.3119E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.201078317344e-16 with the node and degree of

freedom N464 DY

The residue of the type RESI_GLOB_MAXI is worth 5.828670879282e-16 with the node and degree of

freedom N464 DY

Temps CPU consommé dans ce pas de temps : 0.163 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.091 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1941.61 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.967000000000e+00 for the sequence number 5967

Field stored SIEF_ELGA at time 5.967000000000e+00 for the sequence number 5967

Field stored VARI_ELGA at time 5.967000000000e+00 for the sequence number 5967

Field stored COMPORTEMENT at time 5.967000000000e+00 for the sequence number 5967

Field stored VITE at time 5.967000000000e+00 for the sequence number 5967

Field stored ACCE at time 5.967000000000e+00 for the sequence number 5967

Field stored FORC_AMOR at time 5.967000000000e+00 for the sequence number 5967

Field stored FORC_LIAI at time 5.967000000000e+00 for the sequence number 5967

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

1.000000000000e-03.

[99%] Instant calculé : 5.96700e+00, dernier instant archivé : 5.96700e+00, au numéro d'ordre :

5967

Time of computation: 5.968000000000e+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 | |

| 5.96800E+00 | 0 | 8.91562E-16 | 7.21645E-16 | |TANGENTE | |

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

| PAS COURANT | -1.6225E-24 | -1.6225E-24 | 1.1422E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.915620773855e-16 with the node and degree of

freedom N382 DX

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

node and degree of

freedom N382 DX

Temps CPU consommé dans ce pas de temps : 0.172 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.100 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1942.21 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.968000000000e+00 for the sequence number 5968

Field stored SIEF_ELGA at time 5.968000000000e+00 for the sequence number 5968

Field stored VARI_ELGA at time 5.968000000000e+00 for the sequence number 5968

Field stored COMPORTEMENT at time 5.968000000000e+00 for the sequence number 5968

Field stored VITE at time 5.968000000000e+00 for the sequence number 5968

Field stored ACCE at time 5.968000000000e+00 for the sequence number 5968

Field stored FORC_AMOR at time 5.968000000000e+00 for the sequence number 5968

Field stored FORC_LIAI at time 5.968000000000e+00 for the sequence number 5968

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

1.000000000000e-03.

[99%] Instant calculé : 5.96800e+00, dernier instant archivé : 5.96800e+00, au numéro d'ordre :

5968

Time of computation: 5.969000000000e+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 |

| 5.96900E+00 | 0 | 8.22980E-16 | 6.66134E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.5944E-24 | -1.5944E-24 | -1.5286E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.229803791251e-16 with the node and degree of

freedom N488 DY

The residue of the type RESI_GLOB_MAXI is worth 6.661338147751e-16 with the node and degree of

freedom N488 DY

Temps CPU consommé dans ce pas de temps : 0.166 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1942.82 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.969000000000e+00 for the sequence number 5969

Field stored SIEF_ELGA at time 5.969000000000e+00 for the sequence number 5969

Field stored VARI_ELGA at time 5.969000000000e+00 for the sequence number

5969

Field stored COMPORTEMENT at time 5.969000000000e+00 for the sequence number 5969

Field stored VITE at time 5.969000000000e+00 for the sequence number 5969

Field stored ACCE at time 5.969000000000e+00 for the sequence number 5969

Field stored FORC_AMOR at time 5.969000000000e+00 for the sequence number 5969

Field stored FORC_LIAI at time 5.969000000000e+00 for the sequence number 5969

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

1.000000000000e-03.

[99%] Instant calculé : 5.96900e+00, dernier instant archivé : 5.96900e+00, au numéro d'ordre :

5969

Time of computation: 5.970000000000e+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 | |

| 5.97000E+00 | 0 | 8.57271E-16 | 6.93889E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6109E-24 | -1.6109E-24 | 1.7165E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.572712282553e-16 with the node and degree of

freedom N553 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.938893903907e-16 with the node and degree of

freedom N553 DZ

Temps CPU consommé dans ce pas de temps : 0.171 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.099 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1943.43 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.970000000000e+00 for the sequence number 5970

Field stored SIEF_ELGA at time 5.970000000000e+00 for the sequence number 5970

Field stored VARI_ELGA at time 5.970000000000e+00 for the sequence number 5970

Field stored COMPORTEMENT at time 5.970000000000e+00 for the sequence number 5970

Field stored VITE at time 5.970000000000e+00 for the sequence number 5970

Field stored ACCE at time 5.970000000000e+00 for the sequence number 5970

Field stored FORC_AMOR at time 5.970000000000e+00 for the sequence number 5970

Field stored FORC_LIAI at time 5.970000000000e+00 for the sequence number 5970

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

1.000000000000e-03.

[99%] Instant calculé : 5.97000e+00, dernier instant archivé : 5.97000e+00, au numéro d'ordre :

5970

Time of computation: 5.971000000000e+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 | | | | | |

| 5.97100E+00 | 0 | 9.25853E-16 | 7.49401E-16 | | | | |

| | |TANGENTE | | | | | |

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

| PAS COURANT | -1.6151E-24 | -1.6151E-24 | -1.3978E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.258529265157e-16 with the node and degree of

freedom N553 DZ

The residue of the type RESI_GLOB_MAXI is worth 7.494005416220e-16 with the

node and degree of

freedom N553 DZ

Temps CPU consommé dans ce pas de temps : 0.166 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.094 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1944.03 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.971000000000e+00 for the sequence number 5971

Field stored SIEF_ELGA at time 5.971000000000e+00 for the sequence number 5971

Field stored VARI_ELGA at time 5.971000000000e+00 for the sequence number 5971

Field stored COMPORTEMENT at time 5.971000000000e+00 for the sequence number 5971

Field stored VITE at time 5.971000000000e+00 for the sequence number 5971

Field stored ACCE at time 5.971000000000e+00 for the sequence number 5971

Field stored FORC_AMOR at time 5.971000000000e+00 for the sequence number 5971

Field stored FORC_LIAI at time 5.971000000000e+00 for the sequence number 5971

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

1.000000000000e-03.

[99%] Instant calculé : 5.97100e+00, dernier instant archivé : 5.97100e+00, au numéro d'ordre :

5971

Time of computation: 5.972000000000e+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 |

| 5.97200E+00 | 0 | 8.22980E-16 | 6.66134E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.5972E-24 | -1.5972E-24 | 9.1626E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.229803791251e-16 with the node and degree of

freedom N516 DX

The residue of the type RESI_GLOB_MAXI is worth 6.661338147751e-16 with the node and degree of

freedom N516 DX

Temps CPU consommé dans ce pas de temps : 0.165 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.094 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1944.63 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.972000000000e+00 for the sequence number 5972

Field stored SIEF_ELGA at time 5.972000000000e+00 for the sequence number 5972

Field stored VARI_ELGA at time 5.972000000000e+00 for the sequence number

5972

Field stored COMPORTEMENT at time 5.972000000000e+00 for the sequence number 5972

Field stored VITE at time 5.972000000000e+00 for the sequence number 5972

Field stored ACCE at time 5.972000000000e+00 for the sequence number 5972

Field stored FORC_AMOR at time 5.972000000000e+00 for the sequence number 5972

Field stored FORC_LIAI at time 5.972000000000e+00 for the sequence number 5972

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

1.000000000000e-03.

[99%] Instant calculé : 5.97200e+00, dernier instant archivé : 5.97200e+00, au numéro d'ordre :

5972

Time of computation: 5.973000000000e+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 | |

| 5.97300E+00 | 0 | 8.22980E-16 | 6.66134E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6054E-24 | -1.6054E-24 | -5.7527E-45 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.229803791251e-16 with the node and degree of

freedom N392 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.661338147751e-16 with the node and degree of

freedom N392 DZ

Temps CPU consommé dans ce pas de temps : 0.169 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.099 s (3 intégrations)

* Temps total factorisation matrice : 0.023 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1945.24 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.973000000000e+00 for the sequence number 5973

Field stored SIEF_ELGA at time 5.973000000000e+00 for the sequence number 5973

Field stored VARI_ELGA at time 5.973000000000e+00 for the sequence number 5973

Field stored COMPORTEMENT at time 5.973000000000e+00 for the sequence number 5973

Field stored VITE at time 5.973000000000e+00 for the sequence number 5973

Field stored ACCE at time 5.973000000000e+00 for the sequence number 5973

Field stored FORC_AMOR at time 5.973000000000e+00 for the sequence number 5973

Field stored FORC_LIAI at time 5.973000000000e+00 for the sequence number 5973

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

1.000000000000e-03.

[99%] Instant calculé : 5.97300e+00, dernier instant archivé : 5.97300e+00, au numéro d'ordre :

5973

Time of computation: 5.974000000000e+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 |

| 5.97400E+00 | 0 | 8.57271E-16 | 6.93889E-16 | |TANGENTE | |

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

| PAS COURANT | -1.6049E-24 | -1.6049E-24 | 3.5432E-45 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.572712282553e-16 with the node and degree of

freedom N581 DY

The residue of the type RESI_GLOB_MAXI is worth 6.938893903907e-16 with the

node and degree of

freedom N581 DY

Temps CPU consommé dans ce pas de temps : 0.162 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.090 s (3 intégrations)

* Temps total factorisation matrice : 0.023 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1945.84 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.974000000000e+00 for the sequence number 5974

Field stored SIEF_ELGA at time 5.974000000000e+00 for the sequence number 5974

Field stored VARI_ELGA at time 5.974000000000e+00 for the sequence number 5974

Field stored COMPORTEMENT at time 5.974000000000e+00 for the sequence number 5974

Field stored VITE at time 5.974000000000e+00 for the sequence number 5974

Field stored ACCE at time 5.974000000000e+00 for the sequence number 5974

Field stored FORC_AMOR at time 5.974000000000e+00 for the sequence number 5974

Field stored FORC_LIAI at time 5.974000000000e+00 for the sequence number 5974

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

1.000000000000e-03.

[99%] Instant calculé : 5.97400e+00, dernier instant archivé : 5.97400e+00, au numéro d'ordre :

5974

Time of computation: 5.975000000000e+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 |

| 5.97500E+00 | 0 | 9.25853E-16 | 7.49401E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6211E-24 | -1.6211E-24 | 4.3900E-46 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.258529265157e-16 with the node and degree of

freedom N580 DX

The residue of the type RESI_GLOB_MAXI is worth 7.494005416220e-16 with the node and degree of

freedom N580 DX

Temps CPU consommé dans ce pas de temps : 0.165 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.023 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1946.45 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.975000000000e+00 for the sequence number 5975

Field stored SIEF_ELGA at time 5.975000000000e+00 for the sequence number 5975

Field stored VARI_ELGA at time 5.975000000000e+00 for the sequence number

5975

Field stored COMPORTEMENT at time 5.975000000000e+00 for the sequence number 5975

Field stored VITE at time 5.975000000000e+00 for the sequence number 5975

Field stored ACCE at time 5.975000000000e+00 for the sequence number 5975

Field stored FORC_AMOR at time 5.975000000000e+00 for the sequence number 5975

Field stored FORC_LIAI at time 5.975000000000e+00 for the sequence number 5975

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

1.000000000000e-03.

[99%] Instant calculé : 5.97500e+00, dernier instant archivé : 5.97500e+00, au numéro d'ordre :

5975

Time of computation: 5.976000000000e+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 | |

| 5.97600E+00 | 0 | 8.57271E-16 | 6.93889E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.5934E-24 | -1.5934E-24 | -5.9977E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.572712282553e-16 with the node and degree of

freedom N551 DX

The residue of the type RESI_GLOB_MAXI is worth 6.938893903907e-16 with the node and degree of

freedom N551 DX

Temps CPU consommé dans ce pas de temps : 0.166 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1947.05 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.976000000000e+00 for the sequence number 5976

Field stored SIEF_ELGA at time 5.976000000000e+00 for the sequence number 5976

Field stored VARI_ELGA at time 5.976000000000e+00 for the sequence number 5976

Field stored COMPORTEMENT at time 5.976000000000e+00 for the sequence number 5976

Field stored VITE at time 5.976000000000e+00 for the sequence number 5976

Field stored ACCE at time 5.976000000000e+00 for the sequence number 5976

Field stored FORC_AMOR at time 5.976000000000e+00 for the sequence number 5976

Field stored FORC_LIAI at time 5.976000000000e+00 for the sequence number 5976

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

1.000000000000e-03.

[99%] Instant calculé : 5.97600e+00, dernier instant archivé : 5.97600e+00, au numéro d'ordre :

5976

Time of computation: 5.977000000000e+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 |

| 5.97700E+00 | 0 | 7.88690E-16 | 6.38378E-16 | |TANGENTE | |

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

| PAS COURANT | -1.6168E-24 | -1.6168E-24 | 1.0401E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.886895299949e-16 with the node and degree of

freedom N370 DX

The residue of the type RESI_GLOB_MAXI is worth 6.383782391595e-16 with the

node and degree of

freedom N370 DX

Temps CPU consommé dans ce pas de temps : 0.162 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.090 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1947.66 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.977000000000e+00 for the sequence number 5977

Field stored SIEF_ELGA at time 5.977000000000e+00 for the sequence number 5977

Field stored VARI_ELGA at time 5.977000000000e+00 for the sequence number 5977

Field stored COMPORTEMENT at time 5.977000000000e+00 for the sequence number 5977

Field stored VITE at time 5.977000000000e+00 for the sequence number 5977

Field stored ACCE at time 5.977000000000e+00 for the sequence number 5977

Field stored FORC_AMOR at time 5.977000000000e+00 for the sequence number 5977

Field stored FORC_LIAI at time 5.977000000000e+00 for the sequence number 5977

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

1.000000000000e-03.

[99%] Instant calculé : 5.97700e+00, dernier instant archivé : 5.97700e+00, au numéro d'ordre :

5977

Time of computation: 5.978000000000e+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 |

| 5.97800E+00 | 0 | 9.25853E-16 | 7.49401E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6093E-24 | -1.6093E-24 | -1.1455E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.258529265157e-16 with the node and degree of

freedom N438 DZ

The residue of the type RESI_GLOB_MAXI is worth 7.494005416220e-16 with the node and degree of

freedom N438 DZ

Temps CPU consommé dans ce pas de temps : 0.166 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1948.26 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.978000000000e+00 for the sequence number 5978

Field stored SIEF_ELGA at time 5.978000000000e+00 for the sequence number 5978

Field stored VARI_ELGA at time 5.978000000000e+00 for the sequence number

5978

Field stored COMPORTEMENT at time 5.978000000000e+00 for the sequence number 5978

Field stored VITE at time 5.978000000000e+00 for the sequence number 5978

Field stored ACCE at time 5.978000000000e+00 for the sequence number 5978

Field stored FORC_AMOR at time 5.978000000000e+00 for the sequence number 5978

Field stored FORC_LIAI at time 5.978000000000e+00 for the sequence number 5978

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

1.000000000000e-03.

[99%] Instant calculé : 5.97800e+00, dernier instant archivé : 5.97800e+00, au numéro d'ordre :

5978

Time of computation: 5.979000000000e+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 | |

| 5.97900E+00 | 0 | 8.57271E-16 | 6.93889E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6038E-24 | -1.6038E-24 | 9.4639E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.572712282553e-16 with the node and degree of

freedom N403 DX

The residue of the type RESI_GLOB_MAXI is worth 6.938893903907e-16 with the node and degree of

freedom N403 DX

Temps CPU consommé dans ce pas de temps : 0.166 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.094 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.018 s

Mémoire (Mo) : 2056.25 / 1948.87 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.979000000000e+00 for the sequence number 5979

Field stored SIEF_ELGA at time 5.979000000000e+00 for the sequence number 5979

Field stored VARI_ELGA at time 5.979000000000e+00 for the sequence number 5979

Field stored COMPORTEMENT at time 5.979000000000e+00 for the sequence number 5979

Field stored VITE at time 5.979000000000e+00 for the sequence number 5979

Field stored ACCE at time 5.979000000000e+00 for the sequence number 5979

Field stored FORC_AMOR at time 5.979000000000e+00 for the sequence number 5979

Field stored FORC_LIAI at time 5.979000000000e+00 for the sequence number 5979

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

1.000000000000e-03.

[99%] Instant calculé : 5.97900e+00, dernier instant archivé : 5.97900e+00, au numéro d'ordre :

5979

Time of computation: 5.980000000000e+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 |

| 5.98000E+00 | 0 | 6.85817E-16 | 5.55112E-16 | |TANGENTE | | |

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

| PAS COURANT | -1.6037E-24 | -1.6037E-24 | -8.7058E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 6.858169826042e-16 with the node and degree of

freedom N435 DX

The residue of the type RESI_GLOB_MAXI is worth 5.551115123126e-16 with the

node and degree of

freedom N435 DX

Temps CPU consommé dans ce pas de temps : 0.162 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.090 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1949.47 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.980000000000e+00 for the sequence number 5980

Field stored SIEF_ELGA at time 5.980000000000e+00 for the sequence number 5980

Field stored VARI_ELGA at time 5.980000000000e+00 for the sequence number 5980

Field stored COMPORTEMENT at time 5.980000000000e+00 for the sequence number 5980

Field stored VITE at time 5.980000000000e+00 for the sequence number 5980

Field stored ACCE at time 5.980000000000e+00 for the sequence number 5980

Field stored FORC_AMOR at time 5.980000000000e+00 for the sequence number 5980

Field stored FORC_LIAI at time 5.980000000000e+00 for the sequence number 5980

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

1.000000000000e-03.

[99%] Instant calculé : 5.98000e+00, dernier instant archivé : 5.98000e+00, au numéro d'ordre :

5980

Time of computation: 5.981000000000e+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 |

| 5.98100E+00 | 0 | 7.88690E-16 | 6.38378E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6211E-24 | -1.6211E-24 | 1.2000E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.886895299949e-16 with the node and degree of

freedom N551 DX

The residue of the type RESI_GLOB_MAXI is worth 6.383782391595e-16 with the node and degree of

freedom N551 DX

Temps CPU consommé dans ce pas de temps : 0.166 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.094 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1950.07 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.981000000000e+00 for the sequence number 5981

Field stored SIEF_ELGA at time 5.981000000000e+00 for the sequence number 5981

Field stored VARI_ELGA at time 5.981000000000e+00 for the sequence number

5981

Field stored COMPORTEMENT at time 5.981000000000e+00 for the sequence number 5981

Field stored VITE at time 5.981000000000e+00 for the sequence number 5981

Field stored ACCE at time 5.981000000000e+00 for the sequence number 5981

Field stored FORC_AMOR at time 5.981000000000e+00 for the sequence number 5981

Field stored FORC_LIAI at time 5.981000000000e+00 for the sequence number 5981

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

1.000000000000e-03.

[99%] Instant calculé : 5.98100e+00, dernier instant archivé : 5.98100e+00, au numéro d'ordre :

5981

Time of computation: 5.982000000000e+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 | |

| 5.98200E+00 | 0 | 9.60144E-16 | 7.77156E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.5939E-24 | -1.5939E-24 | -1.6524E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.601437756459e-16 with the node and degree of

freedom N471 DZ

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

freedom N471 DZ

Temps CPU consommé dans ce pas de temps : 0.171 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.099 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1950.68 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.982000000000e+00 for the sequence number 5982

Field stored SIEF_ELGA at time 5.982000000000e+00 for the sequence number 5982

Field stored VARI_ELGA at time 5.982000000000e+00 for the sequence number 5982

Field stored COMPORTEMENT at time 5.982000000000e+00 for the sequence number 5982

Field stored VITE at time 5.982000000000e+00 for the sequence number 5982

Field stored ACCE at time 5.982000000000e+00 for the sequence number 5982

Field stored FORC_AMOR at time 5.982000000000e+00 for the sequence number 5982

Field stored FORC_LIAI at time 5.982000000000e+00 for the sequence number 5982

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

1.000000000000e-03.

[99%] Instant calculé : 5.98200e+00, dernier instant archivé : 5.98200e+00, au numéro d'ordre :

5982

Time of computation: 5.983000000000e+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 | | | |

| 5.98300E+00 | 0 | 8.57271E-16 | 6.93889E-16 | |TANGENTE | | |

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

| PAS COURANT | -1.6103E-24 | -1.6103E-24 | 1.8906E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.572712282553e-16 with the node and degree of

freedom N392 DX

The residue of the type RESI_GLOB_MAXI is worth 6.938893903907e-16 with the

node and degree of

freedom N392 DX

Temps CPU consommé dans ce pas de temps : 0.167 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1951.29 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.983000000000e+00 for the sequence number 5983

Field stored SIEF_ELGA at time 5.983000000000e+00 for the sequence number 5983

Field stored VARI_ELGA at time 5.983000000000e+00 for the sequence number 5983

Field stored COMPORTEMENT at time 5.983000000000e+00 for the sequence number 5983

Field stored VITE at time 5.983000000000e+00 for the sequence number 5983

Field stored ACCE at time 5.983000000000e+00 for the sequence number 5983

Field stored FORC_AMOR at time 5.983000000000e+00 for the sequence number 5983

Field stored FORC_LIAI at time 5.983000000000e+00 for the sequence number 5983

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

1.000000000000e-03.

[99%] Instant calculé : 5.98300e+00, dernier instant archivé : 5.98300e+00, au numéro d'ordre :

5983

Time of computation: 5.984000000000e+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 |

| 5.98400E+00 | 0 | 7.88690E-16 | 6.38378E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.5975E-24 | -1.5975E-24 | -1.9640E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.886895299949e-16 with the node and degree of

freedom N527 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.383782391595e-16 with the node and degree of

freedom N527 DZ

Temps CPU consommé dans ce pas de temps : 0.172 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.099 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1951.89 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.984000000000e+00 for the sequence number 5984

Field stored SIEF_ELGA at time 5.984000000000e+00 for the sequence number 5984

Field stored VARI_ELGA at time 5.984000000000e+00 for the sequence number

5984

Field stored COMPORTEMENT at time 5.984000000000e+00 for the sequence number 5984

Field stored VITE at time 5.984000000000e+00 for the sequence number 5984

Field stored ACCE at time 5.984000000000e+00 for the sequence number 5984

Field stored FORC_AMOR at time 5.984000000000e+00 for the sequence number 5984

Field stored FORC_LIAI at time 5.984000000000e+00 for the sequence number 5984

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

1.000000000000e-03.

[99%] Instant calculé : 5.98400e+00, dernier instant archivé : 5.98400e+00, au numéro d'ordre :

5984

Time of computation: 5.985000000000e+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 | |

| 5.98500E+00 | 0 | 7.54399E-16 | 6.10623E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6127E-24 | -1.6127E-24 | 2.1294E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.543986808647e-16 with the node and degree of

freedom N406 DX

The residue of the type RESI_GLOB_MAXI is worth 6.106226635438e-16 with the node and degree of

freedom N406 DX

Temps CPU consommé dans ce pas de temps : 0.170 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.099 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1952.49 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.985000000000e+00 for the sequence number 5985

Field stored SIEF_ELGA at time 5.985000000000e+00 for the sequence number 5985

Field stored VARI_ELGA at time 5.985000000000e+00 for the sequence number 5985

Field stored COMPORTEMENT at time 5.985000000000e+00 for the sequence number 5985

Field stored VITE at time 5.985000000000e+00 for the sequence number 5985

Field stored ACCE at time 5.985000000000e+00 for the sequence number 5985

Field stored FORC_AMOR at time 5.985000000000e+00 for the sequence number 5985

Field stored FORC_LIAI at time 5.985000000000e+00 for the sequence number 5985

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

1.000000000000e-03.

[99%] Instant calculé : 5.98500e+00, dernier instant archivé : 5.98500e+00, au numéro d'ordre :

5985

Time of computation: 5.986000000000e+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 |

| 5.98600E+00 | 0 | 8.22980E-16 | 6.66134E-16 | |TANGENTE | |

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

| PAS COURANT | -1.6175E-24 | -1.6175E-24 | -1.8649E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.229803791251e-16 with the node and degree of

freedom N451 DX

The residue of the type RESI_GLOB_MAXI is worth 6.661338147751e-16 with the

node and degree of

freedom N451 DX

Temps CPU consommé dans ce pas de temps : 0.166 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.094 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.018 s

Mémoire (Mo) : 2056.25 / 1953.10 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.986000000000e+00 for the sequence number 5986

Field stored SIEF_ELGA at time 5.986000000000e+00 for the sequence number 5986

Field stored VARI_ELGA at time 5.986000000000e+00 for the sequence number 5986

Field stored COMPORTEMENT at time 5.986000000000e+00 for the sequence number 5986

Field stored VITE at time 5.986000000000e+00 for the sequence number 5986

Field stored ACCE at time 5.986000000000e+00 for the sequence number 5986

Field stored FORC_AMOR at time 5.986000000000e+00 for the sequence number 5986

Field stored FORC_LIAI at time 5.986000000000e+00 for the sequence number 5986

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

1.000000000000e-03.

[99%] Instant calculé : 5.98600e+00, dernier instant archivé : 5.98600e+00, au numéro d'ordre :

5986

Time of computation: 5.987000000000e+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 |

| 5.98700E+00 | 0 | 8.91562E-16 | 7.21645E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6033E-24 | -1.6033E-24 | 1.4454E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.915620773855e-16 with the node and degree of

freedom N401 DY

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

freedom N401 DY

Temps CPU consommé dans ce pas de temps : 0.167 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1953.70 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.987000000000e+00 for the sequence number 5987

Field stored SIEF_ELGA at time 5.987000000000e+00 for the sequence number 5987

Field stored VARI_ELGA at time 5.987000000000e+00 for the sequence number

5987

Field stored COMPORTEMENT at time 5.987000000000e+00 for the sequence number 5987

Field stored VITE at time 5.987000000000e+00 for the sequence number 5987

Field stored ACCE at time 5.987000000000e+00 for the sequence number 5987

Field stored FORC_AMOR at time 5.987000000000e+00 for the sequence number 5987

Field stored FORC_LIAI at time 5.987000000000e+00 for the sequence number 5987

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

1.000000000000e-03.

[99%] Instant calculé : 5.98700e+00, dernier instant archivé : 5.98700e+00, au numéro d'ordre :

5987

Time of computation: 5.988000000000e+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 | |

| 5.98800E+00 | 0 | 9.60144E-16 | 7.77156E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6131E-24 | -1.6131E-24 | -1.1791E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.601437756459e-16 with the node and degree of

freedom N541 DZ

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

freedom N541 DZ

Temps CPU consommé dans ce pas de temps : 0.167 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1954.30 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.988000000000e+00 for the sequence number 5988

Field stored SIEF_ELGA at time 5.988000000000e+00 for the sequence number 5988

Field stored VARI_ELGA at time 5.988000000000e+00 for the sequence number 5988

Field stored COMPORTEMENT at time 5.988000000000e+00 for the sequence number 5988

Field stored VITE at time 5.988000000000e+00 for the sequence number 5988

Field stored ACCE at time 5.988000000000e+00 for the sequence number 5988

Field stored FORC_AMOR at time 5.988000000000e+00 for the sequence number 5988

Field stored FORC_LIAI at time 5.988000000000e+00 for the sequence number 5988

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

1.000000000000e-03.

[99%] Instant calculé : 5.98800e+00, dernier instant archivé : 5.98800e+00, au numéro d'ordre :

5988

Time of computation: 5.989000000000e+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 |

| 5.98900E+00 | 0 | 8.57271E-16 | 6.93889E-16 | |TANGENTE | | |

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

| PAS COURANT | -1.5974E-24 | -1.5974E-24 | 6.0430E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.572712282553e-16 with the node and degree of

freedom N671 DX

The residue of the type RESI_GLOB_MAXI is worth 6.938893903907e-16 with the

node and degree of

freedom N671 DX

Temps CPU consommé dans ce pas de temps : 0.162 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.090 s (3 intégrations)

* Temps total factorisation matrice : 0.023 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1954.91 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.989000000000e+00 for the sequence number 5989

Field stored SIEF_ELGA at time 5.989000000000e+00 for the sequence number 5989

Field stored VARI_ELGA at time 5.989000000000e+00 for the sequence number 5989

Field stored COMPORTEMENT at time 5.989000000000e+00 for the sequence number 5989

Field stored VITE at time 5.989000000000e+00 for the sequence number 5989

Field stored ACCE at time 5.989000000000e+00 for the sequence number 5989

Field stored FORC_AMOR at time 5.989000000000e+00 for the sequence number 5989

Field stored FORC_LIAI at time 5.989000000000e+00 for the sequence number 5989

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

1.000000000000e-03.

[99%] Instant calculé : 5.98900e+00, dernier instant archivé : 5.98900e+00, au numéro d'ordre :

5989

Time of computation: 5.990000000000e+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 |

| 5.99000E+00 | 0 | 7.54399E-16 | 6.10623E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.5886E-24 | -1.5886E-24 | -5.4175E-45 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.543986808647e-16 with the node and degree of

freedom N530 DY

The residue of the type RESI_GLOB_MAXI is worth 6.106226635438e-16 with the node and degree of

freedom N530 DY

Temps CPU consommé dans ce pas de temps : 0.160 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.089 s (3 intégrations)

* Temps total factorisation matrice : 0.023 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1955.52 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.990000000000e+00 for the sequence number 5990

Field stored SIEF_ELGA at time 5.990000000000e+00 for the sequence number 5990

Field stored VARI_ELGA at time 5.990000000000e+00 for the sequence number

5990

Field stored COMPORTEMENT at time 5.990000000000e+00 for the sequence number 5990

Field stored VITE at time 5.990000000000e+00 for the sequence number 5990

Field stored ACCE at time 5.990000000000e+00 for the sequence number 5990

Field stored FORC_AMOR at time 5.990000000000e+00 for the sequence number 5990

Field stored FORC_LIAI at time 5.990000000000e+00 for the sequence number 5990

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

1.000000000000e-03.

[99%] Instant calculé : 5.99000e+00, dernier instant archivé : 5.99000e+00, au numéro d'ordre :

5990

Time of computation: 5.991000000000e+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 | |

| 5.99100E+00 | 0 | 7.88690E-16 | 6.38378E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6324E-24 | -1.6324E-24 | 1.1114E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.886895299949e-16 with the node and degree of

freedom N437 DY

The residue of the type RESI_GLOB_MAXI is worth 6.383782391595e-16 with the node and degree of

freedom N437 DY

Temps CPU consommé dans ce pas de temps : 0.169 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.098 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.000 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1956.12 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.991000000000e+00 for the sequence number 5991

Field stored SIEF_ELGA at time 5.991000000000e+00 for the sequence number 5991

Field stored VARI_ELGA at time 5.991000000000e+00 for the sequence number 5991

Field stored COMPORTEMENT at time 5.991000000000e+00 for the sequence number 5991

Field stored VITE at time 5.991000000000e+00 for the sequence number 5991

Field stored ACCE at time 5.991000000000e+00 for the sequence number 5991

Field stored FORC_AMOR at time 5.991000000000e+00 for the sequence number 5991

Field stored FORC_LIAI at time 5.991000000000e+00 for the sequence number 5991

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

1.000000000000e-03.

[99%] Instant calculé : 5.99100e+00, dernier instant archivé : 5.99100e+00, au numéro d'ordre :

5991

Time of computation: 5.992000000000e+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 |

| 5.99200E+00 | 0 | 8.22980E-16 | 6.66134E-16 | |TANGENTE | |

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

| PAS COURANT | -1.6097E-24 | -1.6097E-24 | -1.4111E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.229803791251e-16 with the node and degree of

freedom N527 DY

The residue of the type RESI_GLOB_MAXI is worth 6.661338147751e-16 with the

node and degree of

freedom N527 DY

Temps CPU consommé dans ce pas de temps : 0.162 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.090 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1956.72 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.992000000000e+00 for the sequence number 5992

Field stored SIEF_ELGA at time 5.992000000000e+00 for the sequence number 5992

Field stored VARI_ELGA at time 5.992000000000e+00 for the sequence number 5992

Field stored COMPORTEMENT at time 5.992000000000e+00 for the sequence number 5992

Field stored VITE at time 5.992000000000e+00 for the sequence number 5992

Field stored ACCE at time 5.992000000000e+00 for the sequence number 5992

Field stored FORC_AMOR at time 5.992000000000e+00 for the sequence number 5992

Field stored FORC_LIAI at time 5.992000000000e+00 for the sequence number 5992

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

1.000000000000e-03.

[99%] Instant calculé : 5.99200e+00, dernier instant archivé : 5.99200e+00, au numéro d'ordre :

5992

Time of computation: 5.993000000000e+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 |

| 5.99300E+00 | 0 | 8.22980E-16 | 6.66134E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6057E-24 | -1.6057E-24 | 1.2072E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 8.229803791251e-16 with the node and degree of

freedom N464 DY

The residue of the type RESI_GLOB_MAXI is worth 6.661338147751e-16 with the node and degree of

freedom N464 DY

Temps CPU consommé dans ce pas de temps : 0.162 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.090 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1957.33 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.993000000000e+00 for the sequence number 5993

Field stored SIEF_ELGA at time 5.993000000000e+00 for the sequence number 5993

Field stored VARI_ELGA at time 5.993000000000e+00 for the sequence number

5993

Field stored COMPORTEMENT at time 5.993000000000e+00 for the sequence number 5993

Field stored VITE at time 5.993000000000e+00 for the sequence number 5993

Field stored ACCE at time 5.993000000000e+00 for the sequence number 5993

Field stored FORC_AMOR at time 5.993000000000e+00 for the sequence number 5993

Field stored FORC_LIAI at time 5.993000000000e+00 for the sequence number 5993

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

1.000000000000e-03.

[99%] Instant calculé : 5.99300e+00, dernier instant archivé : 5.99300e+00, au numéro d'ordre :

5993

Time of computation: 5.994000000000e+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 | |

| 5.99400E+00 | 0 | 7.88690E-16 | 6.38378E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.5912E-24 | -1.5912E-24 | -1.4208E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.886895299949e-16 with the node and degree of

freedom N470 DX

The residue of the type RESI_GLOB_MAXI is worth 6.383782391595e-16 with the node and degree of

freedom N470 DX

Temps CPU consommé dans ce pas de temps : 0.166 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.094 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1957.93 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.994000000000e+00 for the sequence number 5994

Field stored SIEF_ELGA at time 5.994000000000e+00 for the sequence number 5994

Field stored VARI_ELGA at time 5.994000000000e+00 for the sequence number 5994

Field stored COMPORTEMENT at time 5.994000000000e+00 for the sequence number 5994

Field stored VITE at time 5.994000000000e+00 for the sequence number 5994

Field stored ACCE at time 5.994000000000e+00 for the sequence number 5994

Field stored FORC_AMOR at time 5.994000000000e+00 for the sequence number 5994

Field stored FORC_LIAI at time 5.994000000000e+00 for the sequence number 5994

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

1.000000000000e-03.

[99%] Instant calculé : 5.99400e+00, dernier instant archivé : 5.99400e+00, au numéro d'ordre :

5994

Time of computation: 5.995000000000e+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 |

| 5.99500E+00 | 0 | 9.94435E-16 | 8.04912E-16 | |TANGENTE | |

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

| PAS COURANT | -1.6205E-24 | -1.6205E-24 | 1.8200E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.944346247762e-16 with the node and degree of

freedom N437 DY

The residue of the type RESI_GLOB_MAXI is worth 8.049116928532e-16 with the

node and degree of

freedom N437 DY

Temps CPU consommé dans ce pas de temps : 0.167 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1958.54 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.995000000000e+00 for the sequence number 5995

Field stored SIEF_ELGA at time 5.995000000000e+00 for the sequence number 5995

Field stored VARI_ELGA at time 5.995000000000e+00 for the sequence number 5995

Field stored COMPORTEMENT at time 5.995000000000e+00 for the sequence number 5995

Field stored VITE at time 5.995000000000e+00 for the sequence number 5995

Field stored ACCE at time 5.995000000000e+00 for the sequence number 5995

Field stored FORC_AMOR at time 5.995000000000e+00 for the sequence number 5995

Field stored FORC_LIAI at time 5.995000000000e+00 for the sequence number 5995

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

1.000000000000e-03.

[99%] Instant calculé : 5.99500e+00, dernier instant archivé : 5.99500e+00, au numéro d'ordre :

5995

Time of computation: 5.996000000000e+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 |

| 5.99600E+00 | 0 | 7.20108E-16 | 5.82867E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6031E-24 | -1.6031E-24 | -1.9614E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.201078317345e-16 with the node and degree of

freedom N527 DZ

The residue of the type RESI_GLOB_MAXI is worth 5.828670879282e-16 with the node and degree of

freedom N527 DZ

Temps CPU consommé dans ce pas de temps : 0.172 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.099 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1959.14 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.996000000000e+00 for the sequence number 5996

Field stored SIEF_ELGA at time 5.996000000000e+00 for the sequence number 5996

Field stored VARI_ELGA at time 5.996000000000e+00 for the sequence number

5996

Field stored COMPORTEMENT at time 5.996000000000e+00 for the sequence number 5996

Field stored VITE at time 5.996000000000e+00 for the sequence number 5996

Field stored ACCE at time 5.996000000000e+00 for the sequence number 5996

Field stored FORC_AMOR at time 5.996000000000e+00 for the sequence number 5996

Field stored FORC_LIAI at time 5.996000000000e+00 for the sequence number 5996

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

1.000000000000e-03.

[99%] Instant calculé : 5.99600e+00, dernier instant archivé : 5.99600e+00, au numéro d'ordre :

5996

Time of computation: 5.997000000000e+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 | |

| 5.99700E+00 | 0 | 9.25853E-16 | 7.49401E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6155E-24 | -1.6155E-24 | 2.0385E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 9.258529265157e-16 with the node and degree of

freedom N530 DX

The residue of the type RESI_GLOB_MAXI is worth 7.494005416220e-16 with the node and degree of

freedom N530 DX

Temps CPU consommé dans ce pas de temps : 0.171 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.099 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1959.75 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.997000000000e+00 for the sequence number 5997

Field stored SIEF_ELGA at time 5.997000000000e+00 for the sequence number 5997

Field stored VARI_ELGA at time 5.997000000000e+00 for the sequence number 5997

Field stored COMPORTEMENT at time 5.997000000000e+00 for the sequence number 5997

Field stored VITE at time 5.997000000000e+00 for the sequence number 5997

Field stored ACCE at time 5.997000000000e+00 for the sequence number 5997

Field stored FORC_AMOR at time 5.997000000000e+00 for the sequence number 5997

Field stored FORC_LIAI at time 5.997000000000e+00 for the sequence number 5997

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

1.000000000000e-03.

[99%] Instant calculé : 5.99700e+00, dernier instant archivé : 5.99700e+00, au numéro d'ordre :

5997

Time of computation: 5.998000000000e+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 | | | | | |

| 5.99800E+00 | 0 | 7.54399E-16 | 6.10623E-16 | | | | |

| | TANGENTE | | | | | | |

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

| PAS COURANT | -1.6003E-24 | -1.6003E-24 | -2.2277E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.543986808647e-16 with the node and degree of

freedom N553 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.106226635438e-16 with the

node and degree of

freedom N553 DZ

Temps CPU consommé dans ce pas de temps : 0.167 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.095 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.007 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1960.35 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.998000000000e+00 for the sequence number 5998

Field stored SIEF_ELGA at time 5.998000000000e+00 for the sequence number 5998

Field stored VARI_ELGA at time 5.998000000000e+00 for the sequence number 5998

Field stored COMPORTEMENT at time 5.998000000000e+00 for the sequence number 5998

Field stored VITE at time 5.998000000000e+00 for the sequence number 5998

Field stored ACCE at time 5.998000000000e+00 for the sequence number 5998

Field stored FORC_AMOR at time 5.998000000000e+00 for the sequence number 5998

Field stored FORC_LIAI at time 5.998000000000e+00 for the sequence number 5998

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

1.000000000000e-03.

[99%] Instant calculé : 5.99800e+00, dernier instant archivé : 5.99800e+00, au numéro d'ordre :

5998

Time of computation: 5.999000000000e+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 |

| 5.99900E+00 | 0 | 7.54399E-16 | 6.10623E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6100E-24 | -1.6100E-24 | 2.2832E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.543986808647e-16 with the node and degree of

freedom N461 DZ

The residue of the type RESI_GLOB_MAXI is worth 6.106226635438e-16 with the node and degree of

freedom N461 DZ

Temps CPU consommé dans ce pas de temps : 0.171 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.099 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1960.95 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.999000000000e+00 for the sequence number 5999

Field stored SIEF_ELGA at time 5.999000000000e+00 for the sequence number 5999

Field stored VARI_ELGA at time 5.999000000000e+00 for the sequence number

5999

Field stored COMPORTEMENT at time 5.999000000000e+00 for the sequence number 5999

Field stored VITE at time 5.999000000000e+00 for the sequence number 5999

Field stored ACCE at time 5.999000000000e+00 for the sequence number 5999

Field stored FORC_AMOR at time 5.999000000000e+00 for the sequence number 5999

Field stored FORC_LIAI at time 5.999000000000e+00 for the sequence number 5999

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

9.999999996619e-04.

[99%] Instant calculé : 5.99900e+00, dernier instant archivé : 5.99900e+00, au numéro d'ordre :

5999

Time of computation: 6.000000000000e+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 | |

| 6.00000E+00 | 0 | 7.88690E-16 | 6.38378E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6045E-24 | -1.6045E-24 | -2.0998E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3903E-10 | -1.0899E-01 | 0.0000E+00 | 5.9444E+01 |

Criterion (S) of convergence reached (S)

The residue of the type RESI_GLOB_RELA is worth 7.886895299949e-16 with the node and degree of

freedom N530 DY

The residue of the type RESI_GLOB_MAXI is worth 6.383782391595e-16 with the node and degree of

freedom N530 DY

Temps CPU consommé dans ce pas de temps : 0.171 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.099 s (3 intégrations)

* Temps total factorisation matrice : 0.024 s (1 factorisations)

* Temps construction second membre : 0.024 s

* Temps total résolution K.U=F : 0.001 s (1 résolutions)

* Temps assemblage matrice : 0.006 s

* Nombre d'itérations de recherche linéaire : 0

* Temps autres opérations : 0.017 s

Mémoire (Mo) : 2056.25 / 1961.56 / 1500.21 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 6.000000000000e+00 for the sequence number 6000

Field stored SIEF_ELGA at time 6.000000000000e+00 for the sequence number 6000

Field stored VARI_ELGA at time 6.000000000000e+00 for the sequence number 6000

Field stored COMPORTEMENT at time 6.000000000000e+00 for the sequence number 6000

Field stored VITE at time 6.000000000000e+00 for the sequence number 6000

Field stored ACCE at time 6.000000000000e+00 for the sequence number 6000

Field stored FORC_AMOR at time 6.000000000000e+00 for the sequence number 6000

Field stored FORC_LIAI at time 6.000000000000e+00 for the sequence number 6000

[100%] Instant calculé : 6.00000e+00, dernier instant archivé : 6.00000e+00, au numéro d'ordre :

6000

Temps CPU consommé dans le calcul : 17 min 21 s

dont temps CPU "perdu" dans les découpes : 0.000 s

* Nombre de pas de temps : 6000

* Nombre d'itérations de Newton : 6000

* Temps dans l'archivage : 12.066 s

* Temps dans le post-traitement : 51.584 s

* Temps total intégration comportement : 8 min 56 s (18000 intégrations)

* Temps total factorisation matrice : 2 min 18 s (6000 factorisations)

* Temps construction second membre : 2 min 19 s

* Temps total résolution K.U=F : 3.256 s (6000 résolutions)

* Temps assemblage matrice : 38.645 s

* Nombre d'itérations de recherche linéaire : 0

#1 Resolution des systemes lineaires CPU (USER+SYST/SYST/ELAPS): 141.52 10.10 141.46

#2 Calculs elementaires et assemblages CPU (USER+SYST/SYST/ELAPS): 788.00 29.68 789.80

#3 Dechargement de la memoire sur disque CPU (USER+SYST/SYST/ELAPS): 1.34 0.96 1.33

#4 Communications MPI CPU (USER+SYST/SYST/ELAPS): 0.39 0.04 0.40

Résultat commande #0047 (DYNA_NON_LINE): SIM ('<0000002c>') de type <NonLinearResult>

Dépend de :

- TIMELIST ('<0000002a>') de type <ListOfFloats>

- MATS ('<00000004>') de type <MaterialField>

- BC_0 ('<00000026>') de type <MechanicalLoadReal>

- BC_1 ('<00000027>') de type <MechanicalLoadFunction>

- BC_2 ('<00000028>') de type <MechanicalDirichletBC>

- BC_3 ('<00000029>') de type <MechanicalLoadFunction>

- INSTLIST ('<0000002b>') de type <TimeStepper>

- MODEL ('<00000003>') de type <Model>

Mémoire (Mo) : 4498.14 / 4498.14 / 3838.44 / 243.36 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0047 user+syst: 983.41s (syst: 62.63s, elaps: 1046.18s)

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```
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.. _stg1_txt507

# ------------------------------------------------------------------------
--------------------

# Commande #0048 de fort.1, ligne 507

FIN(INFO_RESU='NON',

      PROC0='OUI',

      RETASSAGE='NON')

Saving objects...

pi                              <class 'float'>

e                               <class 'float'>

tau                             <class 'float'>

inf                             <class 'float'>

nan                             <class 'float'>

MAT_0                           <class 'libaster.Material'>

MESH                            <class 'libaster.Mesh'>

MODEL                           <class 'libaster.Model'>

MATS                            <class 'libaster.MaterialField'>

F_4                             <class 'libaster.FieldOnNodesReal'>

F_0                             <class 'libaster.Formula'>

F_1                             <class 'libaster.Formula'>

F_2                             <class 'libaster.Formula'>

F_3                             <class 'libaster.FieldOnNodesReal'>

INIT_D                          <class 'libaster.FieldOnNodesReal'>

F_9                             <class 'libaster.FieldOnNodesReal'>

F_5                             <class 'libaster.Formula'>

F_6                             <class 'libaster.Formula'>
```

F_7 <class 'libaster.Formula'>

F_8 <class 'libaster.FieldOnNodesReal'>

INIT_U <class 'libaster.FieldOnNodesReal'>

F_14 <class 'libaster.FieldOnNodesReal'>

F_10 <class 'libaster.Formula'>

F_11 <class 'libaster.Formula'>

F_12 <class 'libaster.Formula'>

F_13 <class 'libaster.FieldOnNodesReal'>

INIT_A <class 'libaster.FieldOnNodesReal'>

F_22 <class 'libaster.FieldOnNodesReal'>

F_23 <class 'libaster.FieldOnCellsReal'>

F_15 <class 'libaster.Formula'>

F_16 <class 'libaster.Formula'>

F_17 <class 'libaster.Formula'>

F_18 <class 'libaster.Formula'>

F_19 <class 'libaster.Formula'>

F_20 <class 'libaster.Formula'>

F_21 <class 'libaster.FieldOnCellsReal'>

F_24 <class 'libaster.FieldOnCellsReal'>

INIT_S <class 'libaster.FieldOnCellsReal'>

F_25 <class 'libaster.Formula'>

F_26 <class 'libaster.Formula'>

F_27 <class 'libaster.Formula'>

F_28 <class 'libaster.Formula'>

BC_0 <class 'libaster.MechanicalLoadReal'>

BC_1 <class 'libaster.MechanicalLoadFunction'>

BC_2 <class 'libaster.MechanicalDirichletBC'>

BC_3 <class 'libaster.MechanicalLoadFunction'>

TIMELIST <class 'libaster.ListOfFloats'>

INSTLIST <class 'libaster.TimeStepper'>

SIM <class 'libaster.NonLinearResult'>

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 ‖ <I> <CATAMESS_89>
‖

 ‖
‖

 ‖ List of warnings emitted during the execution of computation.
‖

 ‖
‖

 ‖ Warnings which you chose to ignore of are preceded by (*).
‖

 ‖ Number of occurrences for each warning:
‖

 ‖ no warning
‖

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-

 Concepts de la base: G

 Nom Type Taille (Mo) Nombre Nombre
de

			d'objets	segments
TOTAL		3618.51	204501	234642
00000001	MATER_SDASTER	0.00	9	9
00000002	MAILLAGE_SDASTER	0.46	38	67
00000003	MODELE_SDASTER	0.20	9	14
00000004	CHAM_MATER	0.03	9	14
00000005	CHAM_NO_SDASTER	0.02	5	5
00000006	FORMULE	0.00	4	4
00000007	FORMULE	0.00	4	4
00000008	FORMULE	0.00	4	4
00000009	CHAM_NO_SDASTER	0.10	10	12
0000000a	CHAM_NO_SDASTER	0.10	10	12
0000000b	CHAM_NO_SDASTER	0.02	5	5
0000000c	FORMULE	0.00	4	4
0000000d	FORMULE	0.00	4	4
0000000e	FORMULE	0.00	4	4

0000000f	CHAM_NO_SDASTER	0.10	10	12
00000010	CHAM_NO_SDASTER	0.10	10	12
00000011	CHAM_NO_SDASTER	0.02	5	5
00000012	FORMULE	0.00	4	4
00000013	FORMULE	0.00	4	4
00000014	FORMULE	0.00	4	4
00000015	CHAM_NO_SDASTER	0.10	10	12
00000016	CHAM_NO_SDASTER	0.10	10	12
00000017	CHAM_NO_SDASTER	0.02	5	5
00000018	CHAM_ELEM	0.28	5	5
00000019	FORMULE	0.00	4	4
0000001a	FORMULE	0.00	4	4
0000001b	FORMULE	0.00	4	4
0000001c	FORMULE	0.00	4	4
0000001d	FORMULE	0.00	4	4
0000001e	FORMULE	0.00	4	4

0000001f	CHAM_ELEM	1.54	5	5
00000020	CHAM_ELEM	1.54	5	5
00000021	CHAM_ELEM	0.31	5	5
00000022	FORMULE	0.00	4	4
00000023	FORMULE	0.00	4	4
00000024	FORMULE	0.00	4	4
00000025	FORMULE	0.00	4	4
00000026	CHAR_MECA	0.03	32	37
00000027	CHAR_MECA	0.04	32	37
00000028	CHAR_CINE_MECA	0.03	4	4
00000029	CHAR_MECA	0.01	32	37
0000002a	LISTR8_SDASTER	0.05	6	6
0000002b	LIST_INST	0.05	9	9
0000002c	EVOL_NOLI	3583.26	204100	234114
&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 : 5060

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre total d'accès en lecture : 26957

Volume des accès en lecture : 21060.16 Mo.

Nombre total d'accès en écriture : 5480

Volume des accès en écriture : 4281.25 Mo.

Nombre d'identificateurs utilisés : 234652

Taille maximum du répertoire : 256000

Pourcentage d'utilisation du répertoire : 91 %

Nom de la base : VOLATILE

Nombre d'enregistrements utilisés : 181

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre total d'accès en lecture : 139018

Volume des accès en lecture : 108607.81 Mo.

Nombre total d'accès en écriture : 1493

Volume des accès en écriture : 1166.41 Mo.

Nombre d'identificateurs utilisés : 1354

Taille maximum du répertoire : 2000

Pourcentage d'utilisation du répertoire : 67 %

<I> <FIN> ARRET NORMAL DANS "FIN" PAR APPEL A "JEFINI".

<I> <FIN> MEMOIRE JEVEUX MINIMALE REQUISE POUR L'EXECUTION : 243.36 Mo

<I> <FIN> MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION : 3849.94 Mo

<I> <FIN> MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS LORS DE L'EXECUTION : 4510.34 Mo

<I> FERMETURE DES BASES EFFECTUEE

STATISTIQUES CONCERNANT L'ALLOCATION DYNAMIQUE :

TAILLE CUMULEE MAXIMUM : 3850 Mo.

TAILLE CUMULEE LIBEREE : 36397 Mo.

NOMBRE TOTAL D'ALLOCATIONS : 28805814

NOMBRE TOTAL DE LIBERATIONS : 28805794

APPELS AU MECANISME DE LIBERATION : 7

TAILLE MEMOIRE CUMULEE RECUPEREE : 2830 Mo.

VOLUME DES LECTURES : 41 Mo.

VOLUME DES ECRITURES : 2848 Mo.

MEMOIRE JEVEUX MINIMALE REQUISE POUR L'EXECUTION : 243.36 Mo

- IMPOSE DE NOMBREUX ACCES DISQUE

- RALENTIT LA VITESSE D'EXECUTION

MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION : 3849.94 Mo

- LIMITE LES ACCES DISQUE

- AMELIORE LA VITESSE D'EXECUTION

MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS : 4510.34 Mo

- COMPREND LA MEMOIRE CONSOMMEE PAR JEVEUX,

LE SUPERVISEUR PYTHON, LES LIBRAIRIES EXTERNES

<I> FIN D'EXECUTION LE : MA-21-JANV-2025 15:02:17

DeprecationWarning: PY_SSIZE_T_CLEAN will be required for '#' formats

libaster.jeveux_finalize(options)

Signature of pickled file :
9b29b531891b18e782097b991fb8fad9dacfe9463bc910999510c0b6f9ae5a81

Signature of info file :
d385a9a9c129be9a50e5ef4a3b59bf4c115982fffe4be2daa132b188e168a54e

Signature of Jeveux database:
35bef608c48c58f9530c39ac7325ad737b1964971bf0c74c3140a11cff5970ae

****

* COMMAND : USER : SYSTEM : USER+SYS : ELAPSED *

****

* DEBUT : 0.04 : 0.13 : 0.17 : 0.18 *

```
 * DEFI_MATERIAU          :       0.00 :       0.00 :       0.00 :       0.00 *
 * LIRE_MAILLAGE          :       0.01 :       0.01 :       0.02 :       0.01 *
 * DEFI_GROUP             :       0.00 :       0.00 :       0.00 :       0.01
*
 * MODI_MAILLAGE          :       0.01 :       0.00 :       0.01 :       0.00
*
 * AFFE_MODELE            :       0.01 :       0.00 :       0.01 :       0.01
*
 * AFFE_MATERIAU          :       0.00 :       0.00 :       0.00 :       0.00
*
 * CREA_CHAMP             :       0.01 :       0.00 :       0.01 :       0.00
*
 * FORMULE                :       0.00 :       0.00 :       0.00 :       0.00
*
 * FORMULE                :       0.00 :       0.00 :       0.00 :       0.00
*
 * FORMULE                :       0.00 :       0.00 :       0.00 :       0.00
*
 * CREA_CHAMP             :       0.00 :       0.00 :       0.00 :       0.01
*
 * CREA_CHAMP             :       0.01 :       0.00 :       0.01 :       0.00
*
 * CREA_CHAMP             :       0.00 :       0.00 :       0.00 :       0.00
*
 * FORMULE                :       0.00 :       0.00 :       0.00 :       0.00
*
 * FORMULE                :       0.00 :       0.00 :       0.00 :       0.01
*
 * FORMULE                :       0.00 :       0.00 :       0.00 :       0.00
*
 * CREA_CHAMP             :       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 : 0.01 : 0.00 : 0.01 : 0.00
*
 * FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
 * CREA_CHAMP : 0.00 : 0.00 : 0.00 : 0.00
*
 * CREA_CHAMP : 0.00 : 0.00 : 0.00 : 0.01
*
 * CREA_CHAMP : 0.01 : 0.00 : 0.01 : 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
*
 * FORMULE : 0.01 : 0.00 : 0.01 : 0.00
*
 * FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
 * FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*

```
 * CREA_CHAMP                :        0.01 :        0.00 :        0.01 :        0.02
*
 * CREA_CHAMP                :        0.07 :        0.00 :        0.07 :        0.07
*
 * CREA_CHAMP                :        0.01 :        0.00 :        0.01 :        0.01
*
 * FORMULE                   :        0.00 :        0.00 :        0.00 :        0.00
*
 * FORMULE                   :        0.00 :        0.00 :        0.00 :        0.00
*
 * FORMULE                   :        0.00 :        0.00 :        0.00 :        0.00
*
 * FORMULE                   :        0.00 :        0.00 :        0.00 :        0.00
*
 * AFFE_CHAR_MECA            :        0.01 :        0.00 :        0.01 :        0.01
*
 * AFFE_CHAR_MECA_F          :        0.00 :        0.00 :        0.00 :        0.00
*
 * AFFE_CHAR_CINE            :        0.01 :        0.00 :        0.01 :        0.00
*
 * AFFE_CHAR_MECA_F          :        0.01 :        0.00 :        0.01 :        0.01
*
 * DEFI_LIST_REEL            :        0.00 :        0.00 :        0.00 :        0.00 *
 * DEFI_LIST_INST            :        0.01 :        0.01 :        0.02 :        0.01 *
 * DYNA_NON_LINE             :      983.41 :       62.63 :     1046.04 :
1046.18 *
 * FIN                       :        0.81 :        0.63 :        1.44 :        1.46 *
 *    . check syntax         :        0.05 :        0.00 :        0.05 :        0.02 *
 *    . fortran              :      983.38 :       59.76 :     1043.14 :     1043.31 *
 ********************************************************************************
```

```
 * TOTAL_JOB                    :       984.49 :        63.41 :      1047.90 :      1048.05
*
 ********************************************************************************
# Mémoire (Mo) :    4510.34 /    1951.30 /    3849.94 /     243.36 (VmPeak / VmSize / Optimum / Minimum)
# Fin commande #0048      user+syst:              0.81s (syst:              0.63s, elaps:              1.46s)
# --------------------------------------------------------------------------------
End of the Code_Aster execution
Code_Aster MPI exits normally
Exited
EXECUTION_CODE_ASTER_EXIT_11=0
--------------------------------------------------------------------------------
# import code_aster
import code_aster
from code_aster.Commands import *
# import math library for functions and formula
from math import *
# import simscale macros and utilities
import simscale_macros
# Input file start
POURSUITE(
    IGNORE_ALARM=("SUPERVIS_1", "ALGORITH11_87"),
    LANG="en",
)
try:
```

```
    # reconstructing model for single-core post-processing
    MODEL = MODI_MODELE(
        DISTRIBUTION=_F(
            METHODE="CENTRALISE",
        ),
        MODELE=MODEL,
        reuse=MODEL,
    )
    TAB_ENER = simscale_macros.GET_ENERGIE(
        NOM_CMP=("TRAV_EXT", "ENER_CIN", "ENER_TOT", "TRAV_AMOR",
"TRAV_LIAI", "DISS_SCH"),
        NOM_TABLE="PARA_CALC",
        RESULTAT=SIM,
    )
    DEFI_FICHIER(
        ACCES="NEW",
        ACTION="ASSOCIER",
        FICHIER="REPE_OUT/energy-plots",
        TYPE="ASCII",
        UNITE=30,
    )
    IMPR_TABLE(
        COMM_PARA="$$",
        FORMAT="TABLEAU",
        FORMAT_R="E12.5",
        NOM_PARA=("INST", "TRAV_EXT", "ENER_CIN", "ENER_TOT", "TRAV_AMOR",
"TRAV_LIAI", "DISS_SCH"),
```

```
        SEPARATEUR=",",
        TABLE=TAB_ENER,
        UNITE=30,
)
DEFI_FICHIER(
        ACTION="LIBERER",
        UNITE=30,
)
# Derived result calculation on nodes
SIM = CALC_CHAMP(
        CONTRAINTE=("SIGM_NOEU"),
        CRITERES=("SIEQ_NOEU"),
        DEFORMATION=("EPSG_NOEU"),
        GROUP_MA=("face1", "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 : Tue Jan 21 15:02:27 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 : 5060

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre d'identificateurs utilisés : 234652

Taille maximum du répertoire : 256000

Pourcentage d'utilisation du répertoire : 91 %

Ouverture en lecture du fichier ./glob.1

Ouverture en écriture du fichier ./vola.1

End of reading (lasted 0.000001 S.)

DeprecationWarning: PY_SSIZE_T_CLEAN will be required for '#' formats

libaster.call_poursuite(syntax)

Restored objects:

pi <class 'float'>

e <class 'float'>

tau <class 'float'>

inf <class 'float'>

nan <class 'float'>

MAT_0 <class 'libaster.Material'>

MESH <class 'libaster.Mesh'>

MODEL <class 'libaster.Model'>

MATS <class 'libaster.MaterialField'>

F_4 <class 'libaster.FieldOnNodesReal'>

F_0 <class 'libaster.Formula'>

F_1 <class 'libaster.Formula'>

F_2 <class 'libaster.Formula'>

F_3 <class 'libaster.FieldOnNodesReal'>

INIT_D <class 'libaster.FieldOnNodesReal'>

F_9 <class 'libaster.FieldOnNodesReal'>

F_5 <class 'libaster.Formula'>

F_6 <class 'libaster.Formula'>

F_7 <class 'libaster.Formula'>

F_8 <class 'libaster.FieldOnNodesReal'>

INIT_U <class 'libaster.FieldOnNodesReal'>

F_14 <class 'libaster.FieldOnNodesReal'>

F_10 <class 'libaster.Formula'>

F_11 <class 'libaster.Formula'>

F_12 <class 'libaster.Formula'>

F_13 <class 'libaster.FieldOnNodesReal'>

INIT_A <class 'libaster.FieldOnNodesReal'>

F_22 <class 'libaster.FieldOnNodesReal'>

F_23 <class 'libaster.FieldOnCellsReal'>

F_15 <class 'libaster.Formula'>

F_16 <class 'libaster.Formula'>

F_17 <class 'libaster.Formula'>

F_18 <class 'libaster.Formula'>

F_19 <class 'libaster.Formula'>

F_20 <class 'libaster.Formula'>

F_21 <class 'libaster.FieldOnCellsReal'>

F_24 <class 'libaster.FieldOnCellsReal'>

INIT_S <class 'libaster.FieldOnCellsReal'>

F_25 <class 'libaster.Formula'>

F_26 <class 'libaster.Formula'>

F_27 <class 'libaster.Formula'>

F_28 <class 'libaster.Formula'>

BC_0 <class 'libaster.MechanicalLoadReal'>

BC_1 <class 'libaster.MechanicalLoadFunction'>

BC_2 <class 'libaster.MechanicalDirichletBC'>

BC_3 <class 'libaster.MechanicalLoadFunction'>

TIMELIST <class 'libaster.ListOfFloats'>

INSTLIST <class 'libaster.TimeStepper'>

SIM <class 'libaster.NonLinearResult'>

Mémoire (Mo) : 4452.71 / 4450.96 / 3796.89 / 229.91 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0001 user+syst: 1.16s (syst: 5.43s, elaps: 6.60s)

.. _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) : 4452.71 / 4450.96 / 3796.89 / 229.91 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0002 user+syst: 0.00s (syst: 0.00s, elaps: 0.00s)

.. _stg1_txt27

Commande #0003 de fort.1, ligne 27

GET_ENERGIE(NOM_CMP=('TRAV_EXT', 'ENER_CIN', 'ENER_TOT', 'TRAV_AMOR', 'TRAV_LIAI', 'DISS_SCH'),

NOM_TABLE='PARA_CALC',

RESULTAT=SIM)

Only the first 500 values are checked.

Only the first 500 values are checked.

Only the first 500 values are checked.

Only the first 500 values are checked.

Only the first 500 values are checked.

Only the first 500 values are checked.

Only the first 500 values are checked.

Résultat commande #0003 (GET_ENERGIE): '<0000002e>' de type <Table>

Mémoire (Mo) : 4459.37 / 4456.37 / 3799.83 / 229.91 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0003 user+syst: 0.17s (syst: 0.01s, elaps: 0.18s)

--

.. _stg1_txt33

--

Commande #0006 de fort.1, ligne 33

DEFI_FICHIER(ACCES='NEW',

ACTION='ASSOCIER',

FICHIER='REPE_OUT/energy-plots',

TYPE='ASCII',

UNITE=30)

Mémoire (Mo) : 4459.37 / 4455.12 / 3799.83 / 229.91 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0006 user+syst: 0.01s (syst: 0.00s, elaps: 0.00s)

--

.. _stg1_txt41

--

Commande #0007 de fort.1, ligne 41

IMPR_TABLE(COMMENTAIRE='#',

COMM_PARA='$$',

DEBUT_LIGNE='',

FIN_LIGNE='\n',

FIN_TABLE='',

FORMAT='TABLEAU',

FORMAT_R='E12.5',

IMPR_FONCTION='NON',

INFO=1,

NOM_PARA=('INST', 'TRAV_EXT', 'ENER_CIN', 'ENER_TOT', 'TRAV_AMOR', 'TRAV_LIAI', 'DISS_SCH'),

SEPARATEUR=',',

TABLE='<0000002e>',

UNITE=30)

Mémoire (Mo) : 4460.14 / 4455.37 / 3799.83 / 229.91 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0007 user+syst: 0.03s (syst: 0.00s, elaps: 0.04s)

.. _stg1_txt51

Commande #0008 de fort.1, ligne 51

DEFI_FICHIER(ACTION='LIBERER',

UNITE=30)

Mémoire (Mo) : 4460.14 / 4455.37 / 3799.83 / 229.91 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0008 user+syst: 0.00s (syst: 0.00s, elaps: 0.00s)

.. _stg1_txt57

```
# ------------------------------------------------------------------------
--------------------

# Commande #0009 de fort.1, ligne 57

SIM = CALC_CHAMP(CONTRAINTE='SIGM_NOEU',

                 CRITERE='RELATIF',

                 CRITERES='SIEQ_NOEU',

                 DEFORMATION='EPSG_NOEU',

                 GROUP_MA=('face1', 'face2', 'face3', 'region1'),

                 INFO=1,

                 PARALLELISME_TEMPS='NON',

                 PRECISION=1e-06,

                 RESULTAT=SIM,

                 reuse=SIM)

Ouverture en écriture du fichier ./vola.2

#2          Calculs elementaires et assemblages                    CPU
(USER+SYST/SYST/ELAPS):      174.57        26.98       174.63

#3          Dechargement de la memoire sur disque                  CPU
(USER+SYST/SYST/ELAPS):       10.20         7.75        10.56

Critère de destruction du fichier (1.00 %) associé à la base VOLATILE dépassé 1.12 %

  Nombre d'enregistrements utilisés : 30123

  Volume disque occupé              : 23534 Mo.

  Nombre maximum d'enregistrements  : 2684354

Ouverture en écriture du fichier ./vola.1

  DeprecationWarning: PY_SSIZE_T_CLEAN will be required for '#' formats

    return libaster.call_oper(syntax, 0)

# Résultat commande #0009 (CALC_CHAMP): SIM ('<0000002c>') de type
<NonLinearResult>

# Dépend de :
```

- TIMELIST ('<0000002a>') de type <ListOfFloats>

- MATS ('<00000004>') de type <MaterialField>

- BC_0 ('<00000026>') de type <MechanicalLoadReal>

- BC_1 ('<00000027>') de type <MechanicalLoadFunction>

- BC_2 ('<00000028>') de type <MechanicalDirichletBC>

- BC_3 ('<00000029>') de type <MechanicalLoadFunction>

- INSTLIST ('<0000002b>') de type <TimeStepper>

- MODEL ('<00000003>') de type <Model>

Mémoire (Mo) : 24915.52 / 4120.96 / 23751.55 / 303.40 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0009 user+syst: 338.52s (syst: 78.35s, elaps: 450.02s)

--

.. _stg1_txt67

--

Commande #0010 de fort.1, ligne 67

```
MESH_PP = CREA_MAILLAGE(INFO=1,
                        MAILLAGE=MESH,
                        RESTREINT=_F(GROUP_MA='region1',
                                     TOUT_GROUP_MA='NON',
                                     TOUT_GROUP_NO='NON'))
```

Vérification du maillage.

---------- MAILLAGE 0000002f - IMPRESSIONS NIVEAU 1 ----------

ASTER 15.06.10 CONCEPT 0000002f CALCULE LE 21/01/2025 A 15:10:04 DE TYPE MAILLAGE_SDASTER

NOMBRE DE NOEUDS 876

NOMBRE DE MAILLES 4005

TETRA4 4005

NOMBRE DE GROUPES DE MAILLES 1

region1 4005

Résultat commande #0010 (CREA_MAILLAGE): MESH_PP ('<0000002f>') de type <Mesh>

Dépend de :

- MESH ('<00000002>') de type <Mesh>

Mémoire (Mo) : 24915.52 / 4121.38 / 23751.55 / 303.40 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0010 user+syst: 0.01s (syst: 0.00s, elaps: 0.02s)

.. _stg1_txt75

Commande #0011 de fort.1, ligne 75

```
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 4005 mailles du maillage 0000002f, on a demandé l'affectation de 4005, on a pu en affecter

4005.

Modélisation Formulation Type maille Élément fini Nombre

3D _ TETRA4 MECA_TETRA4 4005

#2 Calculs elementaires et assemblages CPU (USER+SYST/SYST/ELAPS): 0.00 0.00 0.00

Résultat commande #0011 (AFFE_MODELE): MOD_PP ('<00000030>') de type <Model>

Dépend de :

- MESH_PP ('<0000002f>') de type <Mesh>

Mémoire (Mo) : 24915.52 / 4121.44 / 23751.55 / 303.40 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0011 user+syst: 0.02s (syst: 0.01s, elaps: 0.01s)

.. _stg1_txt92

Commande #0012 de fort.1, ligne 92

SIM_PP = EXTR_RESU(ARCHIVAGE=_F(CRITERE='RELATIF',

NOM_CHAM=('ACCE', 'DEPL', 'EPSG_NOEU', 'SIEQ_NOEU', 'SIGM_NOEU', 'VITE'),

PAS_ARCH=1,

PRECISION=1e-06),

INFO=1,

RESTREINT=_F(MODELE=MOD_PP),

RESULTAT=SIM)

STRUCTURE DU CONCEPT 00000031 CALCULE POUR 6001 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 !

! ... ! ... ! ... ! ... ! ... ! ... ! ... ! ... !

! 6000 ! DEPL_R ! DEPL_R ! DEPL_R ! SIEF_R ! SIEF_R ! EPSI_R ! COMPOR !

! ---------- !----------------!----------------!----------------!----------------!----------------!----------------!----------------!

LISTE DES NOMS DE VARIABLES D'ACCES:

INST DE TYPE R

LISTE DES NOMS DE PARAMETRES:

! ---------- !----------------!----------------!----------------!----------------!----------------!----------------!----------------!----------------!----------------!

! NUME_ORDRE ! CARAELEM ! CHAMPMAT ! MODELE ! EXCIT ! ETA_PILOTAGE ! ITER_GLOB ! CHAR_MINI ! TRAN_GENE_NOLI ! INST_PREC !

```
 ! ---------- !----------------!----------------!----------------!----------------!----------------!----------------!----------------!----------------!----------------!
 !          0 !          K8          !          K8          !          K8          !          K24          !          R          !          I          !          R          !          K24          !          R          !
 !          ... !          ...          !          ...          !          ...          !          ...          !          ...          !          ...          !          ...          !          ...          !          ...          !
 !          6000 !          K8          !          K8          !          K8          !          K24          !          R          !          I          !          R          !          K24          !          R          !
 ! ---------- !----------------!----------------!----------------!----------------!----------------!----------------!----------------!----------------!----------------!
```

Résultat commande #0012 (EXTR_RESU): SIM_PP ('<00000031>') de type <NonLinearResult>

Dépend de :

- MOD_PP ('<00000030>') de type <Model>

Mémoire (Mo) : 24915.52 / 2016.08 / 23751.55 / 440.49 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0012 user+syst: 127.86s (syst: 22.75s, elaps: 150.72s)

--

.. _stg1_txt104

--

Commande #0013 de fort.1, ligne 104

DETRUIRE(INFO=1,

NOM=(MESH, MODEL, SIM))

Suppression de la référence : 'MESH'

Suppression de la référence : 'MODEL'

Suppression de la référence : 'SIM'

Mémoire (Mo) : 24915.52 / 2016.08 / 23751.55 / 440.49 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0013 user+syst: 0.04s (syst: 0.01s, elaps: 0.04s)

.. _stg1_txt110

Commande #0014 de fort.1, ligne 110

```
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) : 24915.52 / 2868.27 / 23751.55 / 440.49 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0014 user+syst: 45.44s (syst: 19.37s, elaps: 65.38s)

--

.. _stg1_txt155

--

Commande #0015 de fort.1, ligne 155

FIN(INFO_RESU='NON',

PROC0='OUI',

RETASSAGE='NON')

Saving objects...

pi <class 'float'>

e <class 'float'>

tau <class 'float'>

inf <class 'float'>

nan <class 'float'>

MAT_0 <class 'libaster.Material'>

MATS <class 'libaster.MaterialField'>

F_4 <class 'libaster.FieldOnNodesReal'>

F_0 <class 'libaster.Formula'>

F_1 <class 'libaster.Formula'>

F_2 <class 'libaster.Formula'>

F_3 <class 'libaster.FieldOnNodesReal'>

INIT_D <class 'libaster.FieldOnNodesReal'>

F_9 <class 'libaster.FieldOnNodesReal'>

F_5 <class 'libaster.Formula'>

F_6 <class 'libaster.Formula'>

F_7 <class 'libaster.Formula'>

F_8 <class 'libaster.FieldOnNodesReal'>

INIT_U <class 'libaster.FieldOnNodesReal'>

F_14 <class 'libaster.FieldOnNodesReal'>

F_10 <class 'libaster.Formula'>

F_11 <class 'libaster.Formula'>

F_12 <class 'libaster.Formula'>

F_13 <class 'libaster.FieldOnNodesReal'>

INIT_A <class 'libaster.FieldOnNodesReal'>

F_22 <class 'libaster.FieldOnNodesReal'>

F_23 <class 'libaster.FieldOnCellsReal'>

F_15 <class 'libaster.Formula'>

F_16 <class 'libaster.Formula'>

F_17 <class 'libaster.Formula'>

F_18 <class 'libaster.Formula'>

F_19 <class 'libaster.Formula'>

F_20 <class 'libaster.Formula'>

F_21 <class 'libaster.FieldOnCellsReal'>

F_24 <class 'libaster.FieldOnCellsReal'>

INIT_S <class 'libaster.FieldOnCellsReal'>

F_25 <class 'libaster.Formula'>

F_26 <class 'libaster.Formula'>

F_27 <class 'libaster.Formula'>

F_28 <class 'libaster.Formula'>

BC_0 <class 'libaster.MechanicalLoadReal'>

BC_1 <class 'libaster.MechanicalLoadFunction'>

BC_2 <class 'libaster.MechanicalDirichletBC'>

BC_3 <class 'libaster.MechanicalLoadFunction'>

TIMELIST <class 'libaster.ListOfFloats'>

INSTLIST <class 'libaster.TimeStepper'>

TAB_ENER <class 'libaster.Table'>

MESH_PP <class 'libaster.Mesh'>

MOD_PP <class 'libaster.Model'>

SIM_PP <class 'libaster.NonLinearResult'>

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Concepts de la base: G

Nom	Type	Taille (Mo)	Nombre d'objets	Nombre de segments
TOTAL		6527.06	456655	516838
00000001	MATER_SDASTER	0.00	9	9
00000002	MAILLAGE_SDASTER	0.46	38	67
00000003	MODELE_SDASTER	0.20	9	14
00000004	CHAM_MATER	0.03	9	14
00000005	CHAM_NO_SDASTER	0.02	5	5
00000006	FORMULE	0.00	4	4
00000007	FORMULE	0.00	4	4
00000008	FORMULE	0.00	4	4
00000009	CHAM_NO_SDASTER	0.10	10	12
0000000a	CHAM_NO_SDASTER	0.10	10	12
0000000b	CHAM_NO_SDASTER	0.02	5	5
0000000c	FORMULE	0.00	4	4
0000000d	FORMULE	0.00	4	

4

0000000e FORMULE 0.00 4
4

0000000f CHAM_NO_SDASTER 0.10 10
12

00000010 CHAM_NO_SDASTER 0.10 10
12

00000011 CHAM_NO_SDASTER 0.02 5
5

00000012 FORMULE 0.00 4
4

00000013 FORMULE 0.00 4
4

00000014 FORMULE 0.00 4
4

00000015 CHAM_NO_SDASTER 0.10 10
12

00000016 CHAM_NO_SDASTER 0.10 10
12

00000017 CHAM_NO_SDASTER 0.02 5
5

00000018 CHAM_ELEM 0.28 5
5

00000019 FORMULE 0.00 4
4

0000001a FORMULE 0.00 4
4

0000001b FORMULE 0.00 4
4

0000001c FORMULE 0.00 4
4

0000001d	FORMULE	0.00	4	4
0000001e	FORMULE	0.00	4	4
0000001f	CHAM_ELEM	1.54	5	5
00000020	CHAM_ELEM	1.54	5	5
00000021	CHAM_ELEM	0.31	5	5
00000022	FORMULE	0.00	4	4
00000023	FORMULE	0.00	4	4
00000024	FORMULE	0.00	4	4
00000025	FORMULE	0.00	4	4
00000026	CHAM_MECA	0.03	32	37
00000027	CHAM_MECA	0.04	32	37
00000028	CHAM_CINE_MECA	0.03	4	4
00000029	CHAM_MECA	0.01	32	37
0000002a	LISTR8_SDASTER	0.05	6	6
0000002b	LIST_INST	0.05	9	9
0000002c	EVOL_NOLI	4749.46	276127	306147

0000002e	TABLE_SDASTER	0.64	19	19
00000031	EVOL_NOLI	1741.11	180061	210078
0000002f	MAILLAGE_SDASTER	0.42	38	52
00000030	MODELE_SDASTER	0.18	9	14
&FOZERO		0.00	2	2
&&_NUM_C		0.00	1	1
&CATA.AC		0.00	2	4
&CATA.CL		0.62	1	3
&CATA.GD		0.19	4	11
&CATA.ME		0.22	2	4
&CATA.OP		0.32	4	19
&CATA.PH		0.00	1	1
&CATA.PR		0.00	2	4
&CATA.TE		28.61	17	42
&CATA.TH		0.01	2	4
&CATA.TM		0.01	7	11

-

Nom de la base : GLOBALE

Nombre d'enregistrements utilisés : 9246

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre total d'accès en lecture : 125990

Volume des accès en lecture : 98429.69 Mo.

Nombre total d'accès en écriture : 4806

Volume des accès en écriture : 3754.69 Mo.

Nombre d'identificateurs utilisés : 516876

Taille maximum du répertoire : 1024000

Pourcentage d'utilisation du répertoire : 50 %

Nom de la base : VOLATILE

Nombre d'enregistrements utilisés : 130

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre total d'accès en lecture : 67822

Volume des accès en lecture : 52985.94 Mo.

Nombre total d'accès en écriture : 60698

Volume des accès en écriture : 47420.31 Mo.

Nombre d'identificateurs utilisés : 47382

Taille maximum du répertoire : 128000

Pourcentage d'utilisation du répertoire : 37 %

<I> <FIN> ARRET NORMAL DANS "FIN" PAR APPEL A "JEFINI".

<I> <FIN> MEMOIRE JEVEUX MINIMALE REQUISE POUR L'EXECUTION : 440.49 Mo

<I> <FIN> MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION : 23751.55 Mo

<I> <FIN> MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS LORS DE L'EXECUTION : 24915.52 Mo

<I> FERMETURE DES BASES EFFECTUEE

STATISTIQUES CONCERNANT L'ALLOCATION DYNAMIQUE :

TAILLE CUMULEE MAXIMUM : 23752 Mo.

TAILLE CUMULEE LIBEREE : 37193 Mo.

NOMBRE TOTAL D'ALLOCATIONS : 26735547

NOMBRE TOTAL DE LIBERATIONS : 26735547

APPELS AU MECANISME DE LIBERATION : 8

TAILLE MEMOIRE CUMULEE RECUPEREE : 32331 Mo.

VOLUME DES LECTURES : 4 Mo.

VOLUME DES ECRITURES : 26608 Mo.

MEMOIRE JEVEUX MINIMALE REQUISE POUR L'EXECUTION : 440.49 Mo

- IMPOSE DE NOMBREUX ACCES DISQUE

- RALENTIT LA VITESSE D'EXECUTION

MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION : 23751.55 Mo

- LIMITE LES ACCES DISQUE

- AMELIORE LA VITESSE D'EXECUTION

MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS : 24915.52 Mo

- COMPREND LA MEMOIRE CONSOMMEE PAR JEVEUX,

LE SUPERVISEUR PYTHON, LES LIBRAIRIES EXTERNES

<I> FIN D'EXECUTION LE : MA-21-JANV-2025 15:13:41

DeprecationWarning: PY_SSIZE_T_CLEAN will be required for '#' formats

libaster.jeveux_finalize(options)

Signature of pickled file :
462430e1d46fbad260fa31bc5eb132ab9b7e1024307d9963ce6aa26b3aee3c22

Signature of info file :
2430df9d0b8b6d14052313012f791712f1f9d6516d988d3e0a59f744e2e260b5

Signature of Jeveux database:
f86f7e307d34da15b9fae2a0b32e07564a6d7e85cc23b2eb7f2ee8d6cf091c7a

```
 ********************************************************************************
 * COMMAND                    :      USER :     SYSTEM :   USER+SYS :   ELAPSED *
 ********************************************************************************
 * POURSUITE                  :      1.16 :      5.43 :      6.59 :      6.60 *
 * MODI_MODELE                :      0.00 :      0.00 :      0.00 :      0.00 *
 * GET_ENERGIE                :      0.17 :      0.01 :      0.18 :      0.18 *
 * DEFI_FICHIER               :      0.01 :      0.00 :      0.01 :      0.00 *
 * IMPR_TABLE                 :      0.03 :      0.00 :      0.03 :      0.04 *
 * DEFI_FICHIER               :      0.00 :      0.00 :      0.00 :      0.00 *
 * CALC_CHAMP                 :    338.52 :     78.35 :    416.87 :    450.02 *
 * CREA_MAILLAGE              :      0.01 :      0.00 :      0.01 :      0.02 *
 * AFFE_MODELE                :      0.02 :      0.01 :      0.03 :      0.01 *
 * EXTR_RESU                  :    127.86 :     22.75 :    150.61 :    150.72 *
 * DETRUIRE                   :      0.04 :      0.01 :      0.05 :      0.04 *
 * IMPR_RESU                  :     45.44 :     19.37 :     64.81 :     65.38 *
 * FIN                        :      0.92 :      0.64 :      1.56 :      1.56 *
```

```
 *    . check syntax                :          0.05 :          0.00 :          0.05 :          0.03 *
 *    . fortran                     :        512.06 :        120.64 :        632.70 :        666.50 *
 ********************************************************************************
 * TOTAL_JOB                       :        514.18 :        126.59 :        640.77 :        674.59
*
 ********************************************************************************
# Mémoire (Mo) : 24915.52 /    1652.73 / 23751.55 /     440.49 (VmPeak / VmSize /
Optimum / Minimum)
# Fin commande #0015      user+syst:              0.92s (syst:              0.64s, elaps:
1.56s)
# --------------------------------------------------------------------------------
--------------------
End of the Code_Aster execution
Code_Aster MPI exits normally
Exited
EXECUTION_CODE_ASTER_EXIT_11=0
```

Simulation interval 6s Maximum time step length 0.001s boundary conditions 10pa