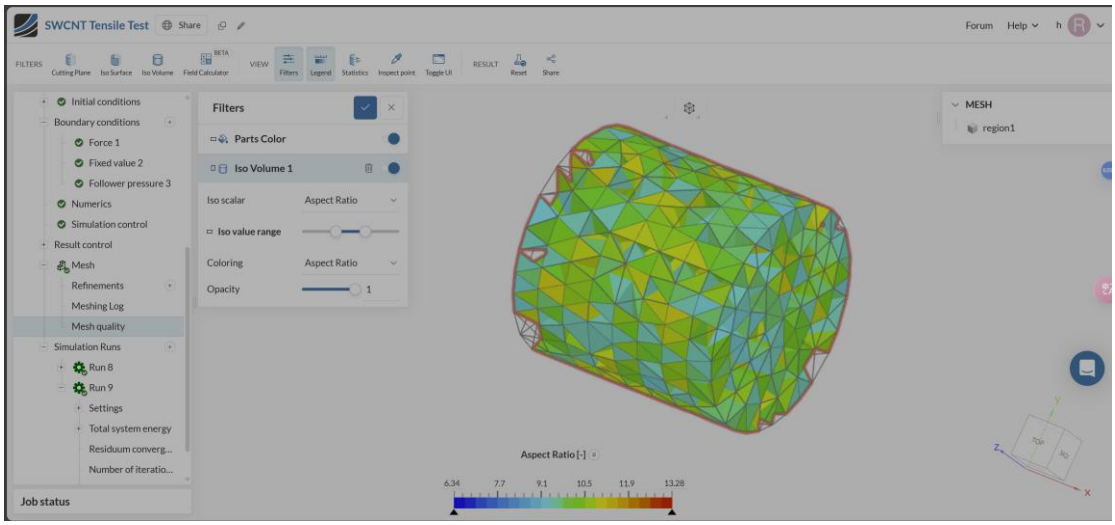
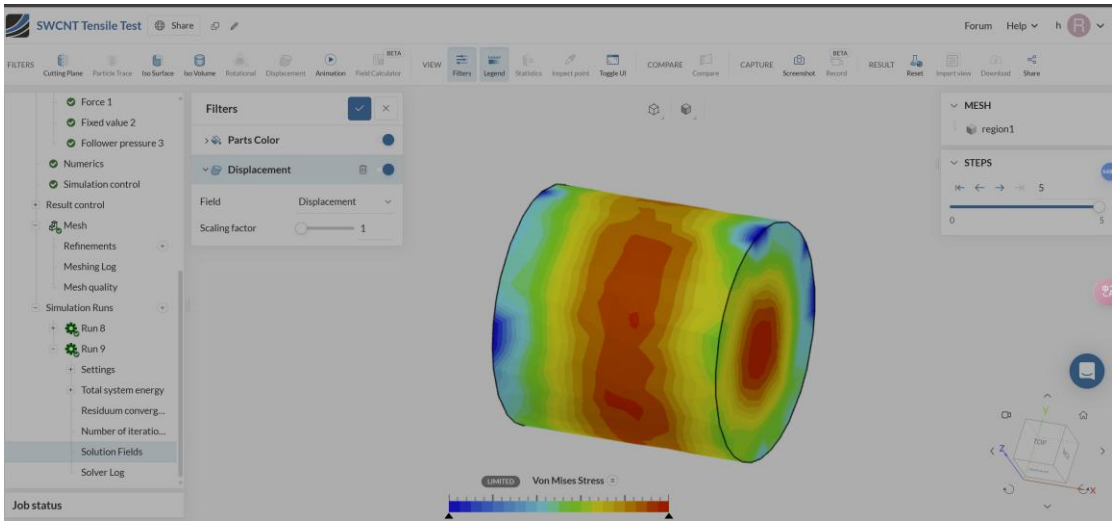
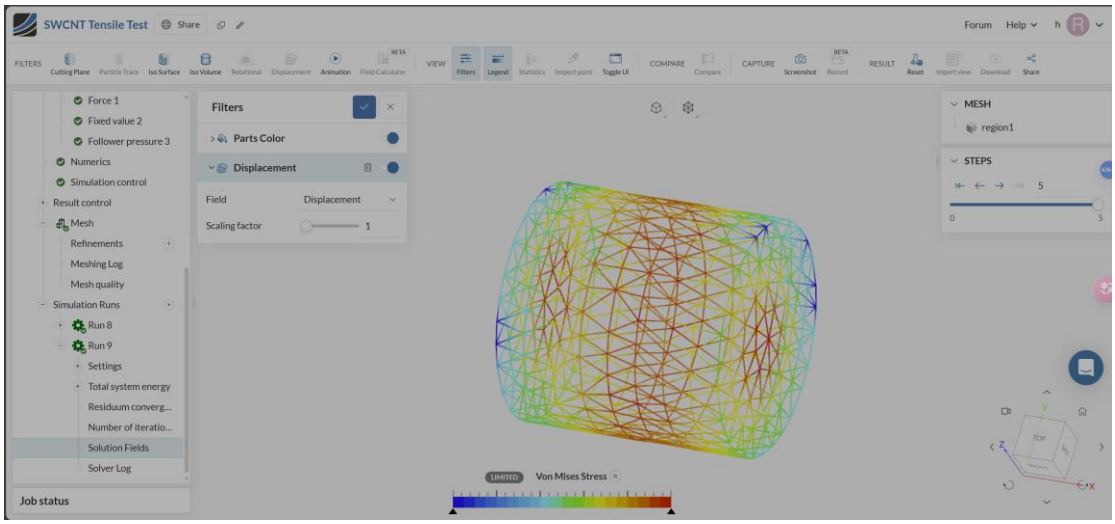


Mesh quality(Above)





Solution fields(Above)

Grid logs

****

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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

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 : 4.93200e+00, dernier instant archivé : 4.93200e+00, au numéro d'ordre :

4932

Time of computation: 4.933000000000e+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 |

| 4.93300E+00 | 0 | 7.88690E-16 | 6.38378E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6079E-24 | -1.6079E-24 | -1.3674E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 7.886895299971e-16 with the node and degree of

freedom N403 DZ

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

freedom N403 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.933000000000e+00 for the sequence number 4933

Field stored SIEF_ELGA at time 4.933000000000e+00 for the sequence number 4933

Field stored VARI_ELGA at time 4.933000000000e+00 for the sequence number 4933

Field stored COMPORTEMENT at time 4.933000000000e+00 for the sequence number 4933

Field stored VITE at time 4.933000000000e+00 for the sequence number 4933

Field stored ACCE at time 4.933000000000e+00 for the sequence number 4933

Field stored FORC_AMOR at time 4.933000000000e+00 for the sequence number 4933

Field stored FORC_LIAI at time 4.933000000000e+00 for the sequence number 4933

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 : 4.93300e+00, dernier instant archivé : 4.93300e+00, au numéro d'ordre :

4933

Time of computation: 4.934000000000e+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 | | | | | |

| 4.93400E+00 | 0 | 9.94435E-16 | 8.04912E-16 | | | | |

| | |TANGENTE | | | | | |

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

| PAS COURANT | -1.6069E-24 | -1.6069E-24 | 1.0911E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.944346247790e-16 with the node and degree of

freedom N535 DX

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

freedom N535 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.934000000000e+00 for the sequence number 4934

Field stored SIEF_ELGA at time 4.934000000000e+00 for the sequence number 4934

Field stored VARI_ELGA at time 4.934000000000e+00 for the sequence number 4934

Field stored COMPORTEMENT at time 4.934000000000e+00 for the sequence

number 4934

Field stored VITE at time 4.934000000000e+00 for the sequence number 4934

Field stored ACCE at time 4.934000000000e+00 for the sequence number 4934

Field stored FORC_AMOR at time 4.934000000000e+00 for the sequence number 4934

Field stored FORC_LIAI at time 4.934000000000e+00 for the sequence number 4934

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 : 4.93400e+00, dernier instant archivé : 4.93400e+00, au numéro d'ordre :

4934

Time of computation: 4.935000000000e+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 | | | | | |

| 4.93500E+00 | 0 | 9.25853E-16 | 7.49401E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.5945E-24 | -1.5945E-24 | -1.2731E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.258529265183e-16 with the node and degree of

freedom N455 DZ

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

freedom N455 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.935000000000e+00 for the sequence number 4935

Field stored SIEF_ELGA at time 4.935000000000e+00 for the sequence number 4935

Field stored VARI_ELGA at time 4.935000000000e+00 for the sequence number 4935

Field stored COMPORTEMENT at time 4.935000000000e+00 for the sequence number 4935

Field stored VITE at time 4.935000000000e+00 for the sequence number 4935

Field stored ACCE at time 4.935000000000e+00 for the sequence number 4935

Field stored FORC_AMOR at time 4.935000000000e+00 for the sequence number 4935

Field stored FORC_LIAI at time 4.935000000000e+00 for the sequence number 4935

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 : 4.93500e+00, dernier instant archivé : 4.93500e+00, au numéro d'ordre :

4935

Time of computation: 4.936000000000e+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 | | | | |

| | | VALEUR | | | | | |

| 4.93600E+00 | 0 | 9.25853E-16 | 7.49401E-16 | | | | |

| | |TANGENTE | | | | | |

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

| PAS COURANT | -1.6262E-24 | -1.6262E-24 | 1.7649E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.258529265183e-16 with the node and degree of

freedom N401 DY

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

freedom N401 DY

Temps CPU consommé dans ce pas de temps : 0.142 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.936000000000e+00 for the sequence number 4936

Field stored SIEF_ELGA at time 4.936000000000e+00 for the sequence number 4936

Field stored VARI_ELGA at time 4.936000000000e+00 for the sequence number 4936

Field stored COMPORTEMENT at time 4.936000000000e+00 for the sequence number 4936

Field stored VITE at time 4.936000000000e+00 for the sequence number 4936

Field stored ACCE at time 4.936000000000e+00 for the sequence number 4936

Field stored FORC_AMOR at time 4.936000000000e+00 for the sequence number 4936

Field stored FORC_LIAI at time 4.936000000000e+00 for the sequence number 4936

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 : 4.93600e+00, dernier instant archivé : 4.93600e+00, au numéro d'ordre :

4936

Time of computation: 4.937000000000e+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 | | | | | |

| 4.93700E+00 | 0 | 8.91562E-16 | 7.21645E-16 | | | | |

| | TANGENTE | | | | | | |

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

| PAS COURANT | -1.6067E-24 | -1.6067E-24 | -1.9340E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.915620773880e-16 with the node and degree of

freedom N437 DY

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

freedom N437 DY

Temps CPU consommé dans ce pas de temps : 0.142 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.937000000000e+00 for the sequence number 4937

Field stored SIEF_ELGA at time 4.937000000000e+00 for the sequence number 4937

Field stored VARI_ELGA at time 4.937000000000e+00 for the sequence number 4937

Field stored COMPORTEMENT at time 4.937000000000e+00 for the sequence

number 4937

Field stored VITE at time 4.937000000000e+00 for the sequence number 4937

Field stored ACCE at time 4.937000000000e+00 for the sequence number 4937

Field stored FORC_AMOR at time 4.937000000000e+00 for the sequence number 4937

Field stored FORC_LIAI at time 4.937000000000e+00 for the sequence number 4937

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 : 4.93700e+00, dernier instant archivé : 4.93700e+00, au numéro d'ordre :

4937

Time of computation: 4.938000000000e+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 |

| 4.93800E+00 | 0 | 8.57271E-16 | 6.93889E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6058E-24 | -1.6058E-24 | 1.8502E-44 | 0.0000E+00 | -1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.572712282577e-16 with the node and degree of

freedom N400 DZ

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

freedom N400 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.938000000000e+00 for the sequence number 4938

Field stored SIEF_ELGA at time 4.938000000000e+00 for the sequence number 4938

Field stored VARI_ELGA at time 4.938000000000e+00 for the sequence number 4938

Field stored COMPORTEMENT at time 4.938000000000e+00 for the sequence number 4938

Field stored VITE at time 4.938000000000e+00 for the sequence number 4938

Field stored ACCE at time 4.938000000000e+00 for the sequence number 4938

Field stored FORC_AMOR at time 4.938000000000e+00 for the sequence number 4938

Field stored FORC_LIAI at time 4.938000000000e+00 for the sequence number 4938

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 : 4.93800e+00, dernier instant archivé : 4.93800e+00, au numéro d'ordre :

4938

Time of computation: 4.939000000000e+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 | |

| 4.93900E+00 | 0 | 8.22980E-16 | 6.66134E-16 | | |TANGENTE | | |

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

| PAS COURANT | -1.5939E-24 | -1.5939E-24 | -1.9406E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.229803791274e-16 with the node and degree of

freedom N439 DY

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

freedom N439 DY

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.939000000000e+00 for the sequence number 4939

Field stored SIEF_ELGA at time 4.939000000000e+00 for the sequence number 4939

Field stored VARI_ELGA at time 4.939000000000e+00 for the sequence number 4939

Field stored COMPORTEMENT at time 4.939000000000e+00 for the sequence number 4939

Field stored VITE at time 4.939000000000e+00 for the sequence number 4939

Field stored ACCE at time 4.939000000000e+00 for the sequence number 4939

Field stored FORC_AMOR at time 4.939000000000e+00 for the sequence number 4939

Field stored FORC_LIAI at time 4.939000000000e+00 for the sequence number 4939

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 : 4.93900e+00, dernier instant archivé : 4.93900e+00, au numéro d'ordre :

4939

Time of computation: 4.940000000000e+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 | | | | | |

| 4.94000E+00 | 0 | 9.94435E-16 | 8.04912E-16 | | | | |

| | |TANGENTE | | | | | |

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

| PAS COURANT | -1.6247E-24 | -1.6247E-24 | 2.3319E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.944346247790e-16 with the node and degree of

freedom N437 DX

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

freedom N437 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.940000000000e+00 for the sequence number 4940

Field stored SIEF_ELGA at time 4.940000000000e+00 for the sequence number 4940

Field stored VARI_ELGA at time 4.940000000000e+00 for the sequence number 4940

Field stored COMPORTEMENT at time 4.940000000000e+00 for the sequence

number 4940

Field stored VITE at time 4.940000000000e+00 for the sequence number 4940

Field stored ACCE at time 4.940000000000e+00 for the sequence number 4940

Field stored FORC_AMOR at time 4.940000000000e+00 for the sequence number 4940

Field stored FORC_LIAI at time 4.940000000000e+00 for the sequence number 4940

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 : 4.94000e+00, dernier instant archivé : 4.94000e+00, au numéro d'ordre :

4940

Time of computation: 4.941000000000e+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 | RHO | | VALEUR |

| 4.94100E+00 | 0 | 8.57271E-16 | 6.93889E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.5925E-24 | -1.5925E-24 | -2.8179E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.572712282577e-16 with the node and degree of

freedom N472 DX

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

freedom N472 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.941000000000e+00 for the sequence number 4941

Field stored SIEF_ELGA at time 4.941000000000e+00 for the sequence number 4941

Field stored VARI_ELGA at time 4.941000000000e+00 for the sequence number 4941

Field stored COMPORTEMENT at time 4.941000000000e+00 for the sequence number 4941

Field stored VITE at time 4.941000000000e+00 for the sequence number 4941

Field stored ACCE at time 4.941000000000e+00 for the sequence number 4941

Field stored FORC_AMOR at time 4.941000000000e+00 for the sequence number 4941

Field stored FORC_LIAI at time 4.941000000000e+00 for the sequence number 4941

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 : 4.94100e+00, dernier instant archivé : 4.94100e+00, au numéro d'ordre :

4941

Time of computation: 4.942000000000e+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 |

| 4.94200E+00 | 0 | 8.22980E-16 | 6.66134E-16 | | |TANGENTE | | |

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

| PAS COURANT | -1.6221E-24 | -1.6221E-24 | 3.2153E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.229803791274e-16 with the node and degree of

freedom N556 DX

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

freedom N556 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.942000000000e+00 for the sequence number 4942

Field stored SIEF_ELGA at time 4.942000000000e+00 for the sequence number 4942

Field stored VARI_ELGA at time 4.942000000000e+00 for the sequence number 4942

Field stored COMPORTEMENT at time 4.942000000000e+00 for the sequence number 4942

Field stored VITE at time 4.942000000000e+00 for the sequence number 4942

Field stored ACCE at time 4.942000000000e+00 for the sequence number 4942

Field stored FORC_AMOR at time 4.942000000000e+00 for the sequence number 4942

Field stored FORC_LIAI at time 4.942000000000e+00 for the sequence number 4942

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 : 4.94200e+00, dernier instant archivé : 4.94200e+00, au numéro d'ordre :

4942

Time of computation: 4.943000000000e+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 | | | | | |

| 4.94300E+00 | 0 | 8.57271E-16 | 6.93889E-16 | | | | |

| | |TANGENTE | | | | | |

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

| PAS COURANT | -1.5888E-24 | -1.5888E-24 | -3.5683E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.572712282577e-16 with the node and degree of

freedom N437 DY

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

freedom N437 DY

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.943000000000e+00 for the sequence number 4943

Field stored SIEF_ELGA at time 4.943000000000e+00 for the sequence number 4943

Field stored VARI_ELGA at time 4.943000000000e+00 for the sequence number 4943

Field stored COMPORTEMENT at time 4.943000000000e+00 for the sequence

number 4943

Field stored VITE at time 4.943000000000e+00 for the sequence number 4943

Field stored ACCE at time 4.943000000000e+00 for the sequence number 4943

Field stored FORC_AMOR at time 4.943000000000e+00 for the sequence number 4943

Field stored FORC_LIAI at time 4.943000000000e+00 for the sequence number 4943

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 : 4.94300e+00, dernier instant archivé : 4.94300e+00, au numéro d'ordre :

4943

Time of computation: 4.944000000000e+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 | RHO | | VALEUR |

| 4.94400E+00 | 0 | 9.94435E-16 | 8.04912E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6283E-24 | -1.6283E-24 | 4.0941E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.944346247790e-16 with the node and degree of

freedom N464 DZ

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

freedom N464 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.944000000000e+00 for the sequence number 4944

Field stored SIEF_ELGA at time 4.944000000000e+00 for the sequence number 4944

Field stored VARI_ELGA at time 4.944000000000e+00 for the sequence number 4944

Field stored COMPORTEMENT at time 4.944000000000e+00 for the sequence number 4944

Field stored VITE at time 4.944000000000e+00 for the sequence number 4944

Field stored ACCE at time 4.944000000000e+00 for the sequence number 4944

Field stored FORC_AMOR at time 4.944000000000e+00 for the sequence number 4944

Field stored FORC_LIAI at time 4.944000000000e+00 for the sequence number 4944

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 : 4.94400e+00, dernier instant archivé : 4.94400e+00, au numéro d'ordre :

4944

Time of computation: 4.945000000000e+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 |

| 4.94500E+00 | 0 | 7.54399E-16 | 6.10623E-16 | |TANGENTE | |

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

| PAS COURANT | -1.6029E-24 | -1.6029E-24 | -4.2339E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 7.543986808668e-16 with the node and degree of

freedom N471 DZ

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

freedom N471 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.945000000000e+00 for the sequence number 4945

Field stored SIEF_ELGA at time 4.945000000000e+00 for the sequence number 4945

Field stored VARI_ELGA at time 4.945000000000e+00 for the sequence number 4945

Field stored COMPORTEMENT at time 4.945000000000e+00 for the sequence number 4945

Field stored VITE at time 4.945000000000e+00 for the sequence number 4945

Field stored ACCE at time 4.945000000000e+00 for the sequence number 4945

Field stored FORC_AMOR at time 4.945000000000e+00 for the sequence number 4945

Field stored FORC_LIAI at time 4.945000000000e+00 for the sequence number 4945

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 : 4.94500e+00, dernier instant archivé : 4.94500e+00, au numéro d'ordre :

4945

Time of computation: 4.946000000000e+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 |

| 4.94600E+00 | 0 | 7.88690E-16 | 6.38378E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6013E-24 | -1.6013E-24 | 3.8539E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 7.886895299971e-16 with the node and degree of

freedom N529 DY

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

freedom N529 DY

Temps CPU consommé dans ce pas de temps : 0.142 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.946000000000e+00 for the sequence number 4946

Field stored SIEF_ELGA at time 4.946000000000e+00 for the sequence number 4946

Field stored VARI_ELGA at time 4.946000000000e+00 for the sequence number 4946

Field stored COMPORTEMENT at time 4.946000000000e+00 for the sequence

number 4946

Field stored VITE at time 4.946000000000e+00 for the sequence number 4946

Field stored ACCE at time 4.946000000000e+00 for the sequence number 4946

Field stored FORC_AMOR at time 4.946000000000e+00 for the sequence number 4946

Field stored FORC_LIAI at time 4.946000000000e+00 for the sequence number 4946

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 : 4.94600e+00, dernier instant archivé : 4.94600e+00, au numéro d'ordre :

4946

Time of computation: 4.947000000000e+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 |

| 4.94700E+00 | 0 | 8.57271E-16 | 6.93889E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6107E-24 | -1.6107E-24 | -3.4193E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.572712282577e-16 with the node and degree of

freedom N554 DX

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

freedom N554 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.947000000000e+00 for the sequence number 4947

Field stored SIEF_ELGA at time 4.947000000000e+00 for the sequence number 4947

Field stored VARI_ELGA at time 4.947000000000e+00 for the sequence number 4947

Field stored COMPORTEMENT at time 4.947000000000e+00 for the sequence number 4947

Field stored VITE at time 4.947000000000e+00 for the sequence number 4947

Field stored ACCE at time 4.947000000000e+00 for the sequence number 4947

Field stored FORC_AMOR at time 4.947000000000e+00 for the sequence number 4947

Field stored FORC_LIAI at time 4.947000000000e+00 for the sequence number 4947

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 : 4.94700e+00, dernier instant archivé : 4.94700e+00, au numéro d'ordre :

4947

Time of computation: 4.948000000000e+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 |

| 4.94800E+00 | 0 | 9.94435E-16 | 8.04912E-16 | |TANGENTE | | |

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

| PAS COURANT | -1.6174E-24 | -1.6174E-24 | 3.1860E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.944346247790e-16 with the node and degree of

freedom N465 DY

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

freedom N465 DY

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.948000000000e+00 for the sequence number 4948

Field stored SIEF_ELGA at time 4.948000000000e+00 for the sequence number 4948

Field stored VARI_ELGA at time 4.948000000000e+00 for the sequence number 4948

Field stored COMPORTEMENT at time 4.948000000000e+00 for the sequence number 4948

Field stored VITE at time 4.948000000000e+00 for the sequence number 4948

Field stored ACCE at time 4.948000000000e+00 for the sequence number 4948

Field stored FORC_AMOR at time 4.948000000000e+00 for the sequence number 4948

Field stored FORC_LIAI at time 4.948000000000e+00 for the sequence number 4948

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 : 4.94800e+00, dernier instant archivé : 4.94800e+00, au numéro d'ordre :

4948

Time of computation: 4.949000000000e+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 | | | | | |

| 4.94900E+00 | 0 | 8.57271E-16 | 6.93889E-16 | | | | |

| | |TANGENTE | | | | | |

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

| PAS COURANT | -1.5949E-24 | -1.5949E-24 | -3.1678E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.572712282577e-16 with the node and degree of

freedom N535 DX

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

freedom N535 DX

Temps CPU consommé dans ce pas de temps : 0.142 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.949000000000e+00 for the sequence number 4949

Field stored SIEF_ELGA at time 4.949000000000e+00 for the sequence number 4949

Field stored VARI_ELGA at time 4.949000000000e+00 for the sequence number 4949

Field stored COMPORTEMENT at time 4.949000000000e+00 for the sequence

number 4949

Field stored VITE at time 4.949000000000e+00 for the sequence number 4949

Field stored ACCE at time 4.949000000000e+00 for the sequence number 4949

Field stored FORC_AMOR at time 4.949000000000e+00 for the sequence number 4949

Field stored FORC_LIAI at time 4.949000000000e+00 for the sequence number 4949

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 : 4.94900e+00, dernier instant archivé : 4.94900e+00, au numéro d'ordre :

4949

Time of computation: 4.950000000000e+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 |

| 4.95000E+00 | 0 | 7.20108E-16 | 5.82867E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6091E-24 | -1.6091E-24 | 3.0646E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 7.201078317365e-16 with the node and degree of

freedom N554 DZ

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

freedom N554 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.950000000000e+00 for the sequence number 4950

Field stored SIEF_ELGA at time 4.950000000000e+00 for the sequence number 4950

Field stored VARI_ELGA at time 4.950000000000e+00 for the sequence number 4950

Field stored COMPORTEMENT at time 4.950000000000e+00 for the sequence number 4950

Field stored VITE at time 4.950000000000e+00 for the sequence number 4950

Field stored ACCE at time 4.950000000000e+00 for the sequence number 4950

Field stored FORC_AMOR at time 4.950000000000e+00 for the sequence number 4950

Field stored FORC_LIAI at time 4.950000000000e+00 for the sequence number 4950

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 : 4.95000e+00, dernier instant archivé : 4.95000e+00, au numéro d'ordre :

4950

Time of computation: 4.951000000000e+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 |

| 4.95100E+00 | 0 | 8.22980E-16 | 6.66134E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.5994E-24 | -1.5994E-24 | -2.9121E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.229803791274e-16 with the node and degree of

freedom N530 DY

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

freedom N530 DY

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.951000000000e+00 for the sequence number 4951

Field stored SIEF_ELGA at time 4.951000000000e+00 for the sequence number 4951

Field stored VARI_ELGA at time 4.951000000000e+00 for the sequence number 4951

Field stored COMPORTEMENT at time 4.951000000000e+00 for the sequence number 4951

Field stored VITE at time 4.951000000000e+00 for the sequence number 4951

Field stored ACCE at time 4.951000000000e+00 for the sequence number 4951

Field stored FORC_AMOR at time 4.951000000000e+00 for the sequence number 4951

Field stored FORC_LIAI at time 4.951000000000e+00 for the sequence number 4951

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 : 4.95100e+00, dernier instant archivé : 4.95100e+00, au numéro d'ordre :

4951

Time of computation: 4.952000000000e+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 |

| 4.95200E+00 | 0 | 9.25853E-16 | 7.49401E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6176E-24 | -1.6176E-24 | 3.0441E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.258529265184e-16 with the node and degree of

freedom N404 DY

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

freedom N404 DY

Temps CPU consommé dans ce pas de temps : 0.142 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.952000000000e+00 for the sequence number 4952

Field stored SIEF_ELGA at time 4.952000000000e+00 for the sequence number 4952

Field stored VARI_ELGA at time 4.952000000000e+00 for the sequence number 4952

Field stored COMPORTEMENT at time 4.952000000000e+00 for the sequence

number 4952

Field stored VITE at time 4.952000000000e+00 for the sequence number 4952

Field stored ACCE at time 4.952000000000e+00 for the sequence number 4952

Field stored FORC_AMOR at time 4.952000000000e+00 for the sequence number 4952

Field stored FORC_LIAI at time 4.952000000000e+00 for the sequence number 4952

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 : 4.95200e+00, dernier instant archivé : 4.95200e+00, au numéro d'ordre :

4952

Time of computation: 4.953000000000e+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 |

| 4.95300E+00 | 0 | 7.20108E-16 | 5.82867E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.5984E-24 | -1.5984E-24 | -3.2231E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 7.201078317365e-16 with the node and degree of

freedom N580 DX

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

freedom N580 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.953000000000e+00 for the sequence number 4953

Field stored SIEF_ELGA at time 4.953000000000e+00 for the sequence number 4953

Field stored VARI_ELGA at time 4.953000000000e+00 for the sequence number 4953

Field stored COMPORTEMENT at time 4.953000000000e+00 for the sequence number 4953

Field stored VITE at time 4.953000000000e+00 for the sequence number 4953

Field stored ACCE at time 4.953000000000e+00 for the sequence number 4953

Field stored FORC_AMOR at time 4.953000000000e+00 for the sequence number 4953

Field stored FORC_LIAI at time 4.953000000000e+00 for the sequence number 4953

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 : 4.95300e+00, dernier instant archivé : 4.95300e+00, au numéro d'ordre :

4953

Time of computation: 4.954000000000e+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 |

| 4.95400E+00 | 0 | 8.57271E-16 | 6.93889E-16 | |TANGENTE | | |

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

| PAS COURANT | -1.6106E-24 | -1.6106E-24 | 3.1032E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.572712282577e-16 with the node and degree of

freedom N528 DZ

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

freedom N528 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.954000000000e+00 for the sequence number 4954

Field stored SIEF_ELGA at time 4.954000000000e+00 for the sequence number 4954

Field stored VARI_ELGA at time 4.954000000000e+00 for the sequence number 4954

Field stored COMPORTEMENT at time 4.954000000000e+00 for the sequence number 4954

Field stored VITE at time 4.954000000000e+00 for the sequence number 4954

Field stored ACCE at time 4.954000000000e+00 for the sequence number 4954

Field stored FORC_AMOR at time 4.954000000000e+00 for the sequence number 4954

Field stored FORC_LIAI at time 4.954000000000e+00 for the sequence number 4954

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 : 4.95400e+00, dernier instant archivé : 4.95400e+00, au numéro d'ordre :

4954

Time of computation: 4.955000000000e+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 | | | | | |

| 4.95500E+00 | 0 | 1.02873E-15 | 8.32667E-16 | | | | |

| | |TANGENTE | | | | | |

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

| PAS COURANT | -1.6068E-24 | -1.6068E-24 | -2.8605E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 1.028725473909e-15 with the node and degree of

freedom N470 DY

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

freedom N470 DY

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.955000000000e+00 for the sequence number 4955

Field stored SIEF_ELGA at time 4.955000000000e+00 for the sequence number 4955

Field stored VARI_ELGA at time 4.955000000000e+00 for the sequence number 4955

Field stored COMPORTEMENT at time 4.955000000000e+00 for the sequence

number 4955

Field stored VITE at time 4.955000000000e+00 for the sequence number 4955

Field stored ACCE at time 4.955000000000e+00 for the sequence number 4955

Field stored FORC_AMOR at time 4.955000000000e+00 for the sequence number 4955

Field stored FORC_LIAI at time 4.955000000000e+00 for the sequence number 4955

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 : 4.95500e+00, dernier instant archivé : 4.95500e+00, au numéro d'ordre :

4955

Time of computation: 4.956000000000e+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 | | | | | |

| 4.95600E+00 | 0 | 7.88690E-16 | 6.38378E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6154E-24 | -1.6154E-24 | 2.7486E-44 | 0.0000E+00 | 5.5101E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 7.886895299971e-16 with the node and degree of

freedom N535 DX

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

freedom N535 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.956000000000e+00 for the sequence number 4956

Field stored SIEF_ELGA at time 4.956000000000e+00 for the sequence number 4956

Field stored VARI_ELGA at time 4.956000000000e+00 for the sequence number 4956

Field stored COMPORTEMENT at time 4.956000000000e+00 for the sequence number 4956

Field stored VITE at time 4.956000000000e+00 for the sequence number 4956

Field stored ACCE at time 4.956000000000e+00 for the sequence number 4956

Field stored FORC_AMOR at time 4.956000000000e+00 for the sequence number 4956

Field stored FORC_LIAI at time 4.956000000000e+00 for the sequence number 4956

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 : 4.95600e+00, dernier instant archivé : 4.95600e+00, au numéro d'ordre :

4956

Time of computation: 4.957000000000e+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 | |

| 4.95700E+00 | 0 | 8.22980E-16 | 6.66134E-16 | | |TANGENTE | | |

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

| PAS COURANT | -1.5928E-24 | -1.5928E-24 | -2.9546E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.229803791274e-16 with the node and degree of

freedom N494 DX

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

freedom N494 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.957000000000e+00 for the sequence number 4957

Field stored SIEF_ELGA at time 4.957000000000e+00 for the sequence number 4957

Field stored VARI_ELGA at time 4.957000000000e+00 for the sequence number 4957

Field stored COMPORTEMENT at time 4.957000000000e+00 for the sequence number 4957

Field stored VITE at time 4.957000000000e+00 for the sequence number 4957

Field stored ACCE at time 4.957000000000e+00 for the sequence number 4957

Field stored FORC_AMOR at time 4.957000000000e+00 for the sequence number 4957

Field stored FORC_LIAI at time 4.957000000000e+00 for the sequence number 4957

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 : 4.95700e+00, dernier instant archivé : 4.95700e+00, au numéro d'ordre :

4957

Time of computation: 4.958000000000e+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 | | | | | |

| 4.95800E+00 | 0 | 8.22980E-16 | 6.66134E-16 | | | | |

| | TANGENTE | | | | | | |

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

| PAS COURANT | -1.6133E-24 | -1.6133E-24 | 3.1587E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.229803791274e-16 with the node and degree of

freedom N530 DX

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

freedom N530 DX

Temps CPU consommé dans ce pas de temps : 0.142 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.958000000000e+00 for the sequence number 4958

Field stored SIEF_ELGA at time 4.958000000000e+00 for the sequence number 4958

Field stored VARI_ELGA at time 4.958000000000e+00 for the sequence number 4958

Field stored COMPORTEMENT at time 4.958000000000e+00 for the sequence

number 4958

Field stored VITE at time 4.958000000000e+00 for the sequence number 4958

Field stored ACCE at time 4.958000000000e+00 for the sequence number 4958

Field stored FORC_AMOR at time 4.958000000000e+00 for the sequence number 4958

Field stored FORC_LIAI at time 4.958000000000e+00 for the sequence number 4958

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 : 4.95800e+00, dernier instant archivé : 4.95800e+00, au numéro d'ordre :

4958

Time of computation: 4.959000000000e+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 | RHO | | VALEUR |

| 4.95900E+00 | 0 | 7.88690E-16 | 6.38378E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6178E-24 | -1.6178E-24 | -2.8544E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 7.886895299971e-16 with the node and degree of

freedom N465 DX

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

freedom N465 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.959000000000e+00 for the sequence number 4959

Field stored SIEF_ELGA at time 4.959000000000e+00 for the sequence number 4959

Field stored VARI_ELGA at time 4.959000000000e+00 for the sequence number 4959

Field stored COMPORTEMENT at time 4.959000000000e+00 for the sequence number 4959

Field stored VITE at time 4.959000000000e+00 for the sequence number 4959

Field stored ACCE at time 4.959000000000e+00 for the sequence number 4959

Field stored FORC_AMOR at time 4.959000000000e+00 for the sequence number 4959

Field stored FORC_LIAI at time 4.959000000000e+00 for the sequence number 4959

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 : 4.95900e+00, dernier instant archivé : 4.95900e+00, au numéro d'ordre :

4959

Time of computation: 4.960000000000e+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 |

| 4.96000E+00 | 0 | 7.88690E-16 | 6.38378E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.5942E-24 | -1.5942E-24 | 2.1059E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 7.886895299971e-16 with the node and degree of

freedom N401 DX

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

freedom N401 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.960000000000e+00 for the sequence number 4960

Field stored SIEF_ELGA at time 4.960000000000e+00 for the sequence number 4960

Field stored VARI_ELGA at time 4.960000000000e+00 for the sequence number 4960

Field stored COMPORTEMENT at time 4.960000000000e+00 for the sequence number 4960

Field stored VITE at time 4.960000000000e+00 for the sequence number 4960

Field stored ACCE at time 4.960000000000e+00 for the sequence number 4960

Field stored FORC_AMOR at time 4.960000000000e+00 for the sequence number 4960

Field stored FORC_LIAI at time 4.960000000000e+00 for the sequence number 4960

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 : 4.96000e+00, dernier instant archivé : 4.96000e+00, au numéro d'ordre :

4960

Time of computation: 4.961000000000e+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 | |

| 4.96100E+00 | 0 | 8.22980E-16 | 6.66134E-16 | | |TANGENTE | | |

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

| PAS COURANT | -1.6243E-24 | -1.6243E-24 | -1.3289E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.229803791274e-16 with the node and degree of

freedom N470 DY

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

freedom N470 DY

Temps CPU consommé dans ce pas de temps : 0.142 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.961000000000e+00 for the sequence number 4961

Field stored SIEF_ELGA at time 4.961000000000e+00 for the sequence number 4961

Field stored VARI_ELGA at time 4.961000000000e+00 for the sequence number 4961

Field stored COMPORTEMENT at time 4.961000000000e+00 for the sequence

number 4961

Field stored VITE at time 4.961000000000e+00 for the sequence number 4961

Field stored ACCE at time 4.961000000000e+00 for the sequence number 4961

Field stored FORC_AMOR at time 4.961000000000e+00 for the sequence number 4961

Field stored FORC_LIAI at time 4.961000000000e+00 for the sequence number 4961

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 : 4.96100e+00, dernier instant archivé : 4.96100e+00, au numéro d'ordre :

4961

Time of computation: 4.962000000000e+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 | RHO | | VALEUR |

| 4.96200E+00 | 0 | 9.94435E-16 | 8.04912E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6028E-24 | -1.6028E-24 | 6.6183E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.944346247790e-16 with the node and degree of

freedom N581 DZ

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

freedom N581 DZ

Temps CPU consommé dans ce pas de temps : 0.142 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.962000000000e+00 for the sequence number 4962

Field stored SIEF_ELGA at time 4.962000000000e+00 for the sequence number 4962

Field stored VARI_ELGA at time 4.962000000000e+00 for the sequence number 4962

Field stored COMPORTEMENT at time 4.962000000000e+00 for the sequence number 4962

Field stored VITE at time 4.962000000000e+00 for the sequence number 4962

Field stored ACCE at time 4.962000000000e+00 for the sequence number 4962

Field stored FORC_AMOR at time 4.962000000000e+00 for the sequence number 4962

Field stored FORC_LIAI at time 4.962000000000e+00 for the sequence number 4962

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 : 4.96200e+00, dernier instant archivé : 4.96200e+00, au numéro d'ordre :

4962

Time of computation: 4.963000000000e+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 |

| 4.96300E+00 | 0 | 9.25853E-16 | 7.49401E-16 | |TANGENTE | | |

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

| PAS COURANT | -1.5985E-24 | -1.5985E-24 | -4.5163E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.258529265184e-16 with the node and degree of

freedom N437 DX

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

freedom N437 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.963000000000e+00 for the sequence number 4963

Field stored SIEF_ELGA at time 4.963000000000e+00 for the sequence number 4963

Field stored VARI_ELGA at time 4.963000000000e+00 for the sequence number 4963

Field stored COMPORTEMENT at time 4.963000000000e+00 for the sequence number 4963

Field stored VITE at time 4.963000000000e+00 for the sequence number 4963

Field stored ACCE at time 4.963000000000e+00 for the sequence number 4963

Field stored FORC_AMOR at time 4.963000000000e+00 for the sequence number 4963

Field stored FORC_LIAI at time 4.963000000000e+00 for the sequence number 4963

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 : 4.96300e+00, dernier instant archivé : 4.96300e+00, au numéro d'ordre :

4963

Time of computation: 4.964000000000e+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 |

| 4.96400E+00 | 0 | 7.88690E-16 | 6.38378E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6025E-24 | -1.6025E-24 | 2.3305E-45 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 7.886895299971e-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 : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.964000000000e+00 for the sequence number 4964

Field stored SIEF_ELGA at time 4.964000000000e+00 for the sequence number 4964

Field stored VARI_ELGA at time 4.964000000000e+00 for the sequence number 4964

Field stored COMPORTEMENT at time 4.964000000000e+00 for the sequence

number 4964

Field stored VITE at time 4.964000000000e+00 for the sequence number 4964

Field stored ACCE at time 4.964000000000e+00 for the sequence number 4964

Field stored FORC_AMOR at time 4.964000000000e+00 for the sequence number 4964

Field stored FORC_LIAI at time 4.964000000000e+00 for the sequence number 4964

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 : 4.96400e+00, dernier instant archivé : 4.96400e+00, au numéro d'ordre :

4964

Time of computation: 4.965000000000e+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 |

| 4.96500E+00 | 0 | 1.16589E-15 | 9.43690E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6054E-24 | -1.6054E-24 | -7.9339E-46 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 1.165888870431e-15 with the node and degree of

freedom N396 DZ

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

freedom N396 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.965000000000e+00 for the sequence number 4965

Field stored SIEF_ELGA at time 4.965000000000e+00 for the sequence number 4965

Field stored VARI_ELGA at time 4.965000000000e+00 for the sequence number 4965

Field stored COMPORTEMENT at time 4.965000000000e+00 for the sequence number 4965

Field stored VITE at time 4.965000000000e+00 for the sequence number 4965

Field stored ACCE at time 4.965000000000e+00 for the sequence number 4965

Field stored FORC_AMOR at time 4.965000000000e+00 for the sequence number 4965

Field stored FORC_LIAI at time 4.965000000000e+00 for the sequence number 4965

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 : 4.96500e+00, dernier instant archivé : 4.96500e+00, au numéro d'ordre :

4965

Time of computation: 4.966000000000e+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 | |

| 4.96600E+00 | 0 | 8.91562E-16 | 7.21645E-16 | | |TANGENTE | | |

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

| PAS COURANT | -1.6104E-24 | -1.6104E-24 | 9.9936E-46 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.915620773881e-16 with the node and degree of

freedom N398 DZ

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

freedom N398 DZ

Temps CPU consommé dans ce pas de temps : 0.142 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.966000000000e+00 for the sequence number 4966

Field stored SIEF_ELGA at time 4.966000000000e+00 for the sequence number 4966

Field stored VARI_ELGA at time 4.966000000000e+00 for the sequence number 4966

Field stored COMPORTEMENT at time 4.966000000000e+00 for the sequence number 4966

Field stored VITE at time 4.966000000000e+00 for the sequence number 4966

Field stored ACCE at time 4.966000000000e+00 for the sequence number 4966

Field stored FORC_AMOR at time 4.966000000000e+00 for the sequence number 4966

Field stored FORC_LIAI at time 4.966000000000e+00 for the sequence number 4966

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 : 4.96600e+00, dernier instant archivé : 4.96600e+00, au numéro d'ordre :

4966

Time of computation: 4.967000000000e+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 | | | | | |

| 4.96700E+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 | -2.5273E-46 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 7.543986808668e-16 with the node and degree of

freedom N657 DZ

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

freedom N657 DZ

Temps CPU consommé dans ce pas de temps : 0.142 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.967000000000e+00 for the sequence number 4967

Field stored SIEF_ELGA at time 4.967000000000e+00 for the sequence number 4967

Field stored VARI_ELGA at time 4.967000000000e+00 for the sequence number 4967

Field stored COMPORTEMENT at time 4.967000000000e+00 for the sequence

number 4967

Field stored VITE at time 4.967000000000e+00 for the sequence number 4967

Field stored ACCE at time 4.967000000000e+00 for the sequence number 4967

Field stored FORC_AMOR at time 4.967000000000e+00 for the sequence number 4967

Field stored FORC_LIAI at time 4.967000000000e+00 for the sequence number 4967

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 : 4.96700e+00, dernier instant archivé : 4.96700e+00, au numéro d'ordre :

4967

Time of computation: 4.968000000000e+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 | RHO | | VALEUR |

| 4.96800E+00 | 0 | 7.54399E-16 | 6.10623E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6123E-24 | -1.6123E-24 | 1.1173E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 7.543986808668e-16 with the node and degree of

freedom N394 DZ

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

freedom N394 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.968000000000e+00 for the sequence number 4968

Field stored SIEF_ELGA at time 4.968000000000e+00 for the sequence number 4968

Field stored VARI_ELGA at time 4.968000000000e+00 for the sequence number 4968

Field stored COMPORTEMENT at time 4.968000000000e+00 for the sequence number 4968

Field stored VITE at time 4.968000000000e+00 for the sequence number 4968

Field stored ACCE at time 4.968000000000e+00 for the sequence number 4968

Field stored FORC_AMOR at time 4.968000000000e+00 for the sequence number 4968

Field stored FORC_LIAI at time 4.968000000000e+00 for the sequence number 4968

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 : 4.96800e+00, dernier instant archivé : 4.96800e+00, au numéro d'ordre :

4968

Time of computation: 4.969000000000e+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 |

| 4.96900E+00 | 0 | 1.02873E-15 | 8.32667E-16 | |TANGENTE | | |

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

| PAS COURANT | -1.6052E-24 | -1.6052E-24 | -2.5952E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 1.028725473909e-15 with the node and degree of

freedom N400 DX

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

freedom N400 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.969000000000e+00 for the sequence number 4969

Field stored SIEF_ELGA at time 4.969000000000e+00 for the sequence number 4969

Field stored VARI_ELGA at time 4.969000000000e+00 for the sequence number 4969

Field stored COMPORTEMENT at time 4.969000000000e+00 for the sequence number 4969

Field stored VITE at time 4.969000000000e+00 for the sequence number 4969

Field stored ACCE at time 4.969000000000e+00 for the sequence number 4969

Field stored FORC_AMOR at time 4.969000000000e+00 for the sequence number 4969

Field stored FORC_LIAI at time 4.969000000000e+00 for the sequence number 4969

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 : 4.96900e+00, dernier instant archivé : 4.96900e+00, au numéro d'ordre :

4969

Time of computation: 4.970000000000e+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 | | | | | |

| 4.97000E+00 | 0 | 8.57271E-16 | 6.93889E-16 | | | | |

| | |TANGENTE | | | | | |

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

| PAS COURANT | -1.6162E-24 | -1.6162E-24 | 5.5059E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.572712282578e-16 with the node and degree of

freedom N396 DX

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

freedom N396 DX

Temps CPU consommé dans ce pas de temps : 0.142 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.970000000000e+00 for the sequence number 4970

Field stored SIEF_ELGA at time 4.970000000000e+00 for the sequence number 4970

Field stored VARI_ELGA at time 4.970000000000e+00 for the sequence number 4970

Field stored COMPORTEMENT at time 4.970000000000e+00 for the sequence

number 4970

Field stored VITE at time 4.970000000000e+00 for the sequence number 4970

Field stored ACCE at time 4.970000000000e+00 for the sequence number 4970

Field stored FORC_AMOR at time 4.970000000000e+00 for the sequence number 4970

Field stored FORC_LIAI at time 4.970000000000e+00 for the sequence number 4970

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 : 4.97000e+00, dernier instant archivé : 4.97000e+00, au numéro d'ordre :

4970

Time of computation: 4.971000000000e+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 | | | | |

| RHO | | VALEUR | | | | | |

| 4.97100E+00 | 0 | 8.91562E-16 | 7.21645E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6021E-24 | -1.6021E-24 | -8.1781E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.915620773881e-16 with the node and degree of

freedom N664 DY

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

freedom N664 DY

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.971000000000e+00 for the sequence number 4971

Field stored SIEF_ELGA at time 4.971000000000e+00 for the sequence number 4971

Field stored VARI_ELGA at time 4.971000000000e+00 for the sequence number 4971

Field stored COMPORTEMENT at time 4.971000000000e+00 for the sequence number 4971

Field stored VITE at time 4.971000000000e+00 for the sequence number 4971

Field stored ACCE at time 4.971000000000e+00 for the sequence number 4971

Field stored FORC_AMOR at time 4.971000000000e+00 for the sequence number 4971

Field stored FORC_LIAI at time 4.971000000000e+00 for the sequence number 4971

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 : 4.97100e+00, dernier instant archivé : 4.97100e+00, au numéro d'ordre :

4971

Time of computation: 4.972000000000e+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 |

| 4.97200E+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 | 6.9926E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 7.886895299971e-16 with the node and degree of

freedom N473 DX

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

freedom N473 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.972000000000e+00 for the sequence number 4972

Field stored SIEF_ELGA at time 4.972000000000e+00 for the sequence number 4972

Field stored VARI_ELGA at time 4.972000000000e+00 for the sequence number 4972

Field stored COMPORTEMENT at time 4.972000000000e+00 for the sequence number 4972

Field stored VITE at time 4.972000000000e+00 for the sequence number 4972

Field stored ACCE at time 4.972000000000e+00 for the sequence number 4972

Field stored FORC_AMOR at time 4.972000000000e+00 for the sequence number 4972

Field stored FORC_LIAI at time 4.972000000000e+00 for the sequence number 4972

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 : 4.97200e+00, dernier instant archivé : 4.97200e+00, au numéro d'ordre :

4972

Time of computation: 4.973000000000e+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 | | | | | |

| 4.97300E+00 | 0 | 9.25853E-16 | 7.49401E-16 | | | | |

| | |TANGENTE | | | | | |

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

| PAS COURANT | -1.6168E-24 | -1.6168E-24 | -3.3734E-45 | 0.0000E+00 | -1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.258529265184e-16 with the node and degree of

freedom N396 DY

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

freedom N396 DY

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.973000000000e+00 for the sequence number 4973

Field stored SIEF_ELGA at time 4.973000000000e+00 for the sequence number 4973

Field stored VARI_ELGA at time 4.973000000000e+00 for the sequence number 4973

Field stored COMPORTEMENT at time 4.973000000000e+00 for the sequence

number 4973

Field stored VITE at time 4.973000000000e+00 for the sequence number 4973

Field stored ACCE at time 4.973000000000e+00 for the sequence number 4973

Field stored FORC_AMOR at time 4.973000000000e+00 for the sequence number 4973

Field stored FORC_LIAI at time 4.973000000000e+00 for the sequence number 4973

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 : 4.97300e+00, dernier instant archivé : 4.97300e+00, au numéro d'ordre :

4973

Time of computation: 4.974000000000e+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 |

| 4.97400E+00 | 0 | 8.57271E-16 | 6.93889E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6118E-24 | -1.6118E-24 | 1.5823E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.572712282578e-16 with the node and degree of

freedom N529 DZ

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

freedom N529 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.974000000000e+00 for the sequence number 4974

Field stored SIEF_ELGA at time 4.974000000000e+00 for the sequence number 4974

Field stored VARI_ELGA at time 4.974000000000e+00 for the sequence number 4974

Field stored COMPORTEMENT at time 4.974000000000e+00 for the sequence number 4974

Field stored VITE at time 4.974000000000e+00 for the sequence number 4974

Field stored ACCE at time 4.974000000000e+00 for the sequence number 4974

Field stored FORC_AMOR at time 4.974000000000e+00 for the sequence number 4974

Field stored FORC_LIAI at time 4.974000000000e+00 for the sequence number 4974

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 : 4.97400e+00, dernier instant archivé : 4.97400e+00, au numéro d'ordre :

4974

Time of computation: 4.975000000000e+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 |

| 4.97500E+00 | 0 | 9.60144E-16 | 7.77156E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.5920E-24 | -1.5920E-24 | -5.4658E-45 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.601437756487e-16 with the node and degree of

freedom N467 DX

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

freedom N467 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.975000000000e+00 for the sequence number 4975

Field stored SIEF_ELGA at time 4.975000000000e+00 for the sequence number 4975

Field stored VARI_ELGA at time 4.975000000000e+00 for the sequence number 4975

Field stored COMPORTEMENT at time 4.975000000000e+00 for the sequence number 4975

Field stored VITE at time 4.975000000000e+00 for the sequence number 4975

Field stored ACCE at time 4.975000000000e+00 for the sequence number 4975

Field stored FORC_AMOR at time 4.975000000000e+00 for the sequence number 4975

Field stored FORC_LIAI at time 4.975000000000e+00 for the sequence number 4975

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 : 4.97500e+00, dernier instant archivé : 4.97500e+00, au numéro d'ordre :

4975

Time of computation: 4.976000000000e+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 | | | | | |

| 4.97600E+00 | 0 | 8.22980E-16 | 6.66134E-16 | | | | |

| | |TANGENTE | | | | | |

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

| PAS COURANT | -1.6043E-24 | -1.6043E-24 | 6.8968E-45 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.229803791275e-16 with the node and degree of

freedom N398 DX

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

freedom N398 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.976000000000e+00 for the sequence number 4976

Field stored SIEF_ELGA at time 4.976000000000e+00 for the sequence number 4976

Field stored VARI_ELGA at time 4.976000000000e+00 for the sequence number 4976

Field stored COMPORTEMENT at time 4.976000000000e+00 for the sequence

number 4976

Field stored VITE at time 4.976000000000e+00 for the sequence number 4976

Field stored ACCE at time 4.976000000000e+00 for the sequence number 4976

Field stored FORC_AMOR at time 4.976000000000e+00 for the sequence number 4976

Field stored FORC_LIAI at time 4.976000000000e+00 for the sequence number 4976

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 : 4.97600e+00, dernier instant archivé : 4.97600e+00, au numéro d'ordre :

4976

Time of computation: 4.977000000000e+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 | | | | | |

| 4.97700E+00 | 0 | 8.57271E-16 | 6.93889E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6227E-24 | -1.6227E-24 | -1.8715E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.572712282578e-16 with the node and degree of

freedom N405 DX

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

freedom N405 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.977000000000e+00 for the sequence number 4977

Field stored SIEF_ELGA at time 4.977000000000e+00 for the sequence number 4977

Field stored VARI_ELGA at time 4.977000000000e+00 for the sequence number 4977

Field stored COMPORTEMENT at time 4.977000000000e+00 for the sequence number 4977

Field stored VITE at time 4.977000000000e+00 for the sequence number 4977

Field stored ACCE at time 4.977000000000e+00 for the sequence number 4977

Field stored FORC_AMOR at time 4.977000000000e+00 for the sequence number 4977

Field stored FORC_LIAI at time 4.977000000000e+00 for the sequence number 4977

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 : 4.97700e+00, dernier instant archivé : 4.97700e+00, au numéro d'ordre :

4977

Time of computation: 4.978000000000e+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 |

| 4.97800E+00 | 0 | 8.57271E-16 | 6.93889E-16 | |TANGENTE | |

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

| PAS COURANT | -1.6151E-24 | -1.6151E-24 | -1.4420E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.572712282578e-16 with the node and degree of

freedom N451 DX

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

freedom N451 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.978000000000e+00 for the sequence number 4978

Field stored SIEF_ELGA at time 4.978000000000e+00 for the sequence number 4978

Field stored VARI_ELGA at time 4.978000000000e+00 for the sequence number 4978

Field stored COMPORTEMENT at time 4.978000000000e+00 for the sequence number 4978

Field stored VITE at time 4.978000000000e+00 for the sequence number 4978

Field stored ACCE at time 4.978000000000e+00 for the sequence number 4978

Field stored FORC_AMOR at time 4.978000000000e+00 for the sequence number 4978

Field stored FORC_LIAI at time 4.978000000000e+00 for the sequence number 4978

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 : 4.97800e+00, dernier instant archivé : 4.97800e+00, au numéro d'ordre :

4978

Time of computation: 4.979000000000e+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 | | | | | |

| 4.97900E+00 | 0 | 8.57271E-16 | 6.93889E-16 | | | | |

| | |TANGENTE | | | | | |

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

| PAS COURANT | -1.5965E-24 | -1.5965E-24 | -4.1200E-46 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.572712282578e-16 with the node and degree of

freedom N435 DX

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

freedom N435 DX

Temps CPU consommé dans ce pas de temps : 0.144 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.082 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.979000000000e+00 for the sequence number 4979

Field stored SIEF_ELGA at time 4.979000000000e+00 for the sequence number 4979

Field stored VARI_ELGA at time 4.979000000000e+00 for the sequence number 4979

Field stored COMPORTEMENT at time 4.979000000000e+00 for the sequence

number 4979

Field stored VITE at time 4.979000000000e+00 for the sequence number 4979

Field stored ACCE at time 4.979000000000e+00 for the sequence number 4979

Field stored FORC_AMOR at time 4.979000000000e+00 for the sequence number 4979

Field stored FORC_LIAI at time 4.979000000000e+00 for the sequence number 4979

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 : 4.97900e+00, dernier instant archivé : 4.97900e+00, au numéro d'ordre :

4979

Time of computation: 4.980000000000e+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 |

| 4.98000E+00 | 0 | 7.54399E-16 | 6.10623E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.5976E-24 | -1.5976E-24 | 1.7501E-46 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 7.543986808668e-16 with the node and degree of

freedom N710 DZ

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

freedom N710 DZ

Temps CPU consommé dans ce pas de temps : 0.145 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.082 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.980000000000e+00 for the sequence number 4980

Field stored SIEF_ELGA at time 4.980000000000e+00 for the sequence number 4980

Field stored VARI_ELGA at time 4.980000000000e+00 for the sequence number 4980

Field stored COMPORTEMENT at time 4.980000000000e+00 for the sequence number 4980

Field stored VITE at time 4.980000000000e+00 for the sequence number 4980

Field stored ACCE at time 4.980000000000e+00 for the sequence number 4980

Field stored FORC_AMOR at time 4.980000000000e+00 for the sequence number 4980

Field stored FORC_LIAI at time 4.980000000000e+00 for the sequence number 4980

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 : 4.98000e+00, dernier instant archivé : 4.98000e+00, au numéro d'ordre :

4980

Time of computation: 4.981000000000e+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 |

| 4.98100E+00 | 0 | 1.16589E-15 | 9.43690E-16 | |TANGENTE | |

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

| PAS COURANT | -1.6304E-24 | -1.6304E-24 | 5.9887E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 1.165888870431e-15 with the node and degree of

freedom N432 DX

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

freedom N432 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.981000000000e+00 for the sequence number 4981

Field stored SIEF_ELGA at time 4.981000000000e+00 for the sequence number 4981

Field stored VARI_ELGA at time 4.981000000000e+00 for the sequence number 4981

Field stored COMPORTEMENT at time 4.981000000000e+00 for the sequence number 4981

Field stored VITE at time 4.981000000000e+00 for the sequence number 4981

Field stored ACCE at time 4.981000000000e+00 for the sequence number 4981

Field stored FORC_AMOR at time 4.981000000000e+00 for the sequence number 4981

Field stored FORC_LIAI at time 4.981000000000e+00 for the sequence number 4981

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 : 4.98100e+00, dernier instant archivé : 4.98100e+00, au numéro d'ordre :

4981

Time of computation: 4.982000000000e+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 |

| 4.98200E+00 | 0 | 7.54399E-16 | 6.10623E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.5995E-24 | -1.5995E-24 | -1.0867E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 7.543986808668e-16 with the node and degree of

freedom N529 DX

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

freedom N529 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.982000000000e+00 for the sequence number 4982

Field stored SIEF_ELGA at time 4.982000000000e+00 for the sequence number 4982

Field stored VARI_ELGA at time 4.982000000000e+00 for the sequence number 4982

Field stored COMPORTEMENT at time 4.982000000000e+00 for the sequence

number 4982

Field stored VITE at time 4.982000000000e+00 for the sequence number 4982

Field stored ACCE at time 4.982000000000e+00 for the sequence number 4982

Field stored FORC_AMOR at time 4.982000000000e+00 for the sequence number 4982

Field stored FORC_LIAI at time 4.982000000000e+00 for the sequence number 4982

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 : 4.98200e+00, dernier instant archivé : 4.98200e+00, au numéro d'ordre :

4982

Time of computation: 4.983000000000e+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 | | | | |

| RHO | | VALEUR | | | | | |

| 4.98300E+00 | 0 | 8.22980E-16 | 6.66134E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.5989E-24 | -1.5989E-24 | 1.0088E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.229803791275e-16 with the node and degree of

freedom N438 DZ

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

freedom N438 DZ

Temps CPU consommé dans ce pas de temps : 0.142 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.983000000000e+00 for the sequence number 4983

Field stored SIEF_ELGA at time 4.983000000000e+00 for the sequence number 4983

Field stored VARI_ELGA at time 4.983000000000e+00 for the sequence number 4983

Field stored COMPORTEMENT at time 4.983000000000e+00 for the sequence number 4983

Field stored VITE at time 4.983000000000e+00 for the sequence number 4983

Field stored ACCE at time 4.983000000000e+00 for the sequence number 4983

Field stored FORC_AMOR at time 4.983000000000e+00 for the sequence number 4983

Field stored FORC_LIAI at time 4.983000000000e+00 for the sequence number 4983

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 : 4.98300e+00, dernier instant archivé : 4.98300e+00, au numéro d'ordre :

4983

Time of computation: 4.984000000000e+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 |

| 4.98400E+00 | 0 | 9.25853E-16 | 7.49401E-16 | |TANGENTE | | |

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

| PAS COURANT | -1.6126E-24 | -1.6126E-24 | -7.1364E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.258529265184e-16 with the node and degree of

freedom N553 DY

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

freedom N553 DY

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.081 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.984000000000e+00 for the sequence number 4984

Field stored SIEF_ELGA at time 4.984000000000e+00 for the sequence number 4984

Field stored VARI_ELGA at time 4.984000000000e+00 for the sequence number 4984

Field stored COMPORTEMENT at time 4.984000000000e+00 for the sequence number 4984

Field stored VITE at time 4.984000000000e+00 for the sequence number 4984

Field stored ACCE at time 4.984000000000e+00 for the sequence number 4984

Field stored FORC_AMOR at time 4.984000000000e+00 for the sequence number 4984

Field stored FORC_LIAI at time 4.984000000000e+00 for the sequence number 4984

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 : 4.98400e+00, dernier instant archivé : 4.98400e+00, au numéro d'ordre :

4984

Time of computation: 4.985000000000e+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 | | | | | |

| 4.98500E+00 | 0 | 6.85817E-16 | 5.55112E-16 | | | | |

| | TANGENTE | | | | | | |

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

| PAS COURANT | -1.6121E-24 | -1.6121E-24 | 5.5973E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 6.858169826062e-16 with the node and degree of

freedom N536 DX

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

freedom N536 DX

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.081 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.985000000000e+00 for the sequence number 4985

Field stored SIEF_ELGA at time 4.985000000000e+00 for the sequence number 4985

Field stored VARI_ELGA at time 4.985000000000e+00 for the sequence number 4985

Field stored COMPORTEMENT at time 4.985000000000e+00 for the sequence

number 4985

Field stored VITE at time 4.985000000000e+00 for the sequence number 4985

Field stored ACCE at time 4.985000000000e+00 for the sequence number 4985

Field stored FORC_AMOR at time 4.985000000000e+00 for the sequence number 4985

Field stored FORC_LIAI at time 4.985000000000e+00 for the sequence number 4985

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 : 4.98500e+00, dernier instant archivé : 4.98500e+00, au numéro d'ordre :

4985

Time of computation: 4.986000000000e+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 |

| 4.98600E+00 | 0 | 1.09731E-15 | 8.88178E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6005E-24 | -1.6005E-24 | -6.7061E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 1.097307172170e-15 with the node and degree of

freedom N438 DY

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

freedom N438 DY

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.986000000000e+00 for the sequence number 4986

Field stored SIEF_ELGA at time 4.986000000000e+00 for the sequence number 4986

Field stored VARI_ELGA at time 4.986000000000e+00 for the sequence number 4986

Field stored COMPORTEMENT at time 4.986000000000e+00 for the sequence number 4986

Field stored VITE at time 4.986000000000e+00 for the sequence number 4986

Field stored ACCE at time 4.986000000000e+00 for the sequence number 4986

Field stored FORC_AMOR at time 4.986000000000e+00 for the sequence number 4986

Field stored FORC_LIAI at time 4.986000000000e+00 for the sequence number 4986

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 : 4.98600e+00, dernier instant archivé : 4.98600e+00, au numéro d'ordre :

4986

Time of computation: 4.987000000000e+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 |

| 4.98700E+00 | 0 | 8.57271E-16 | 6.93889E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6129E-24 | -1.6129E-24 | 8.1332E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.572712282578e-16 with the node and degree of

freedom N392 DY

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

freedom N392 DY

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.081 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.987000000000e+00 for the sequence number 4987

Field stored SIEF_ELGA at time 4.987000000000e+00 for the sequence number 4987

Field stored VARI_ELGA at time 4.987000000000e+00 for the sequence number 4987

Field stored COMPORTEMENT at time 4.987000000000e+00 for the sequence number 4987

Field stored VITE at time 4.987000000000e+00 for the sequence number 4987

Field stored ACCE at time 4.987000000000e+00 for the sequence number 4987

Field stored FORC_AMOR at time 4.987000000000e+00 for the sequence number 4987

Field stored FORC_LIAI at time 4.987000000000e+00 for the sequence number 4987

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 : 4.98700e+00, dernier instant archivé : 4.98700e+00, au numéro d'ordre :

4987

Time of computation: 4.988000000000e+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 |

| 4.98800E+00 | 0 | 8.91562E-16 | 7.21645E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6078E-24 | -1.6078E-24 | -8.2348E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.915620773881e-16 with the node and degree of

freedom N554 DY

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

freedom N554 DY

Temps CPU consommé dans ce pas de temps : 0.142 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.988000000000e+00 for the sequence number 4988

Field stored SIEF_ELGA at time 4.988000000000e+00 for the sequence number 4988

Field stored VARI_ELGA at time 4.988000000000e+00 for the sequence number 4988

Field stored COMPORTEMENT at time 4.988000000000e+00 for the sequence

number 4988

Field stored VITE at time 4.988000000000e+00 for the sequence number 4988

Field stored ACCE at time 4.988000000000e+00 for the sequence number 4988

Field stored FORC_AMOR at time 4.988000000000e+00 for the sequence number 4988

Field stored FORC_LIAI at time 4.988000000000e+00 for the sequence number 4988

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 : 4.98800e+00, dernier instant archivé : 4.98800e+00, au numéro d'ordre :

4988

Time of computation: 4.989000000000e+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 | | | | | |

| 4.98900E+00 | 0 | 9.25853E-16 | 7.49401E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6101E-24 | -1.6101E-24 | 8.1125E-45 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.258529265184e-16 with the node and degree of

freedom N551 DZ

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

freedom N551 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.989000000000e+00 for the sequence number 4989

Field stored SIEF_ELGA at time 4.989000000000e+00 for the sequence number 4989

Field stored VARI_ELGA at time 4.989000000000e+00 for the sequence number 4989

Field stored COMPORTEMENT at time 4.989000000000e+00 for the sequence number 4989

Field stored VITE at time 4.989000000000e+00 for the sequence number 4989

Field stored ACCE at time 4.989000000000e+00 for the sequence number 4989

Field stored FORC_AMOR at time 4.989000000000e+00 for the sequence number 4989

Field stored FORC_LIAI at time 4.989000000000e+00 for the sequence number 4989

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 : 4.98900e+00, dernier instant archivé : 4.98900e+00, au numéro d'ordre :

4989

Time of computation: 4.990000000000e+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 |

| 4.99000E+00 | 0 | 7.88690E-16 | 6.38378E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.6079E-24 | -1.6079E-24 | -6.8776E-45 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 7.886895299972e-16 with the node and degree of

freedom N434 DY

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

freedom N434 DY

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.990000000000e+00 for the sequence number 4990

Field stored SIEF_ELGA at time 4.990000000000e+00 for the sequence number 4990

Field stored VARI_ELGA at time 4.990000000000e+00 for the sequence number 4990

Field stored COMPORTEMENT at time 4.990000000000e+00 for the sequence number 4990

Field stored VITE at time 4.990000000000e+00 for the sequence number 4990

Field stored ACCE at time 4.990000000000e+00 for the sequence number 4990

Field stored FORC_AMOR at time 4.990000000000e+00 for the sequence number 4990

Field stored FORC_LIAI at time 4.990000000000e+00 for the sequence number 4990

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 : 4.99000e+00, dernier instant archivé : 4.99000e+00, au numéro d'ordre :

4990

Time of computation: 4.991000000000e+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 |

| 4.99100E+00 | 0 | 8.22980E-16 | 6.66134E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.5977E-24 | -1.5977E-24 | 4.1296E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.229803791275e-16 with the node and degree of

freedom N432 DZ

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

freedom N432 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.991000000000e+00 for the sequence number 4991

Field stored SIEF_ELGA at time 4.991000000000e+00 for the sequence number 4991

Field stored VARI_ELGA at time 4.991000000000e+00 for the sequence number 4991

Field stored COMPORTEMENT at time 4.991000000000e+00 for the sequence

number 4991

Field stored VITE at time 4.991000000000e+00 for the sequence number 4991

Field stored ACCE at time 4.991000000000e+00 for the sequence number 4991

Field stored FORC_AMOR at time 4.991000000000e+00 for the sequence number 4991

Field stored FORC_LIAI at time 4.991000000000e+00 for the sequence number 4991

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 : 4.99100e+00, dernier instant archivé : 4.99100e+00, au numéro d'ordre :

4991

Time of computation: 4.992000000000e+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 |

| 4.99200E+00 | 0 | 9.60144E-16 | 7.77156E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6138E-24 | -1.6138E-24 | -2.6006E-46 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.601437756487e-16 with the node and degree of

freedom N464 DZ

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

freedom N464 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.081 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.992000000000e+00 for the sequence number 4992

Field stored SIEF_ELGA at time 4.992000000000e+00 for the sequence number 4992

Field stored VARI_ELGA at time 4.992000000000e+00 for the sequence number 4992

Field stored COMPORTEMENT at time 4.992000000000e+00 for the sequence number 4992

Field stored VITE at time 4.992000000000e+00 for the sequence number 4992

Field stored ACCE at time 4.992000000000e+00 for the sequence number 4992

Field stored FORC_AMOR at time 4.992000000000e+00 for the sequence number 4992

Field stored FORC_LIAI at time 4.992000000000e+00 for the sequence number 4992

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 : 4.99200e+00, dernier instant archivé : 4.99200e+00, au numéro d'ordre :

4992

Time of computation: 4.993000000000e+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 |

| 4.99300E+00 | 0 | 9.60144E-16 | 7.77156E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.5824E-24 | -1.5824E-24 | -5.9802E-45 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.601437756487e-16 with the node and degree of

freedom N439 DY

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

freedom N439 DY

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.993000000000e+00 for the sequence number 4993

Field stored SIEF_ELGA at time 4.993000000000e+00 for the sequence number 4993

Field stored VARI_ELGA at time 4.993000000000e+00 for the sequence number 4993

Field stored COMPORTEMENT at time 4.993000000000e+00 for the sequence number 4993

Field stored VITE at time 4.993000000000e+00 for the sequence number 4993

Field stored ACCE at time 4.993000000000e+00 for the sequence number 4993

Field stored FORC_AMOR at time 4.993000000000e+00 for the sequence number 4993

Field stored FORC_LIAI at time 4.993000000000e+00 for the sequence number 4993

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 : 4.99300e+00, dernier instant archivé : 4.99300e+00, au numéro d'ordre :

4993

Time of computation: 4.994000000000e+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 | |

| 4.99400E+00 | 0 | 8.22980E-16 | 6.66134E-16 | | | | |

| | TANGENTE | | | | | | |

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

| PAS COURANT | -1.6369E-24 | -1.6369E-24 | 1.7033E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.229803791275e-16 with the node and degree of

freedom N406 DZ

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

freedom N406 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.994000000000e+00 for the sequence number 4994

Field stored SIEF_ELGA at time 4.994000000000e+00 for the sequence number 4994

Field stored VARI_ELGA at time 4.994000000000e+00 for the sequence number 4994

Field stored COMPORTEMENT at time 4.994000000000e+00 for the sequence

number 4994

Field stored VITE at time 4.994000000000e+00 for the sequence number 4994

Field stored ACCE at time 4.994000000000e+00 for the sequence number 4994

Field stored FORC_AMOR at time 4.994000000000e+00 for the sequence number 4994

Field stored FORC_LIAI at time 4.994000000000e+00 for the sequence number 4994

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 : 4.99400e+00, dernier instant archivé : 4.99400e+00, au numéro d'ordre :

4994

Time of computation: 4.995000000000e+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 | | | | | |

| 4.99500E+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 | -2.2347E-44 | 0.0000E+00 | -1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.229803791275e-16 with the node and degree of

freedom N435 DZ

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

freedom N435 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.995000000000e+00 for the sequence number 4995

Field stored SIEF_ELGA at time 4.995000000000e+00 for the sequence number 4995

Field stored VARI_ELGA at time 4.995000000000e+00 for the sequence number 4995

Field stored COMPORTEMENT at time 4.995000000000e+00 for the sequence number 4995

Field stored VITE at time 4.995000000000e+00 for the sequence number 4995

Field stored ACCE at time 4.995000000000e+00 for the sequence number 4995

Field stored FORC_AMOR at time 4.995000000000e+00 for the sequence number 4995

Field stored FORC_LIAI at time 4.995000000000e+00 for the sequence number 4995

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 : 4.99500e+00, dernier instant archivé : 4.99500e+00, au numéro d'ordre :

4995

Time of computation: 4.996000000000e+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 |

| 4.99600E+00 | 0 | 8.22980E-16 | 6.66134E-16 | |TANGENTE | |

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

| PAS COURANT | -1.6156E-24 | -1.6156E-24 | 2.2709E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.229803791275e-16 with the node and degree of

freedom N445 DX

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

freedom N445 DX

Temps CPU consommé dans ce pas de temps : 0.142 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.996000000000e+00 for the sequence number 4996

Field stored SIEF_ELGA at time 4.996000000000e+00 for the sequence number 4996

Field stored VARI_ELGA at time 4.996000000000e+00 for the sequence number 4996

Field stored COMPORTEMENT at time 4.996000000000e+00 for the sequence number 4996

Field stored VITE at time 4.996000000000e+00 for the sequence number 4996

Field stored ACCE at time 4.996000000000e+00 for the sequence number 4996

Field stored FORC_AMOR at time 4.996000000000e+00 for the sequence number 4996

Field stored FORC_LIAI at time 4.996000000000e+00 for the sequence number 4996

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 : 4.99600e+00, dernier instant archivé : 4.99600e+00, au numéro d'ordre :

4996

Time of computation: 4.997000000000e+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 | | | | | |

| 4.99700E+00 | 0 | 9.25853E-16 | 7.49401E-16 | | | | |

| | |TANGENTE | | | | | |

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

| PAS COURANT | -1.5879E-24 | -1.5879E-24 | -2.5724E-44 | 0.0000E+00 | 3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.258529265184e-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 : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.997000000000e+00 for the sequence number 4997

Field stored SIEF_ELGA at time 4.997000000000e+00 for the sequence number 4997

Field stored VARI_ELGA at time 4.997000000000e+00 for the sequence number 4997

Field stored COMPORTEMENT at time 4.997000000000e+00 for the sequence

number 4997

Field stored VITE at time 4.997000000000e+00 for the sequence number 4997

Field stored ACCE at time 4.997000000000e+00 for the sequence number 4997

Field stored FORC_AMOR at time 4.997000000000e+00 for the sequence number 4997

Field stored FORC_LIAI at time 4.997000000000e+00 for the sequence number 4997

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 : 4.99700e+00, dernier instant archivé : 4.99700e+00, au numéro d'ordre :

4997

Time of computation: 4.998000000000e+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 | RHO | | VALEUR |

| 4.99800E+00 | 0 | 8.57271E-16 | 6.93889E-16 |
| | |TANGENTE | | |

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

| PAS COURANT | -1.6187E-24 | -1.6187E-24 | 3.0247E-44 | 0.0000E+00 | -3.6734E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.572712282578e-16 with the node and degree of

freedom N440 DZ

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

freedom N440 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.998000000000e+00 for the sequence number 4998

Field stored SIEF_ELGA at time 4.998000000000e+00 for the sequence number 4998

Field stored VARI_ELGA at time 4.998000000000e+00 for the sequence number 4998

Field stored COMPORTEMENT at time 4.998000000000e+00 for the sequence number 4998

Field stored VITE at time 4.998000000000e+00 for the sequence number 4998

Field stored ACCE at time 4.998000000000e+00 for the sequence number 4998

Field stored FORC_AMOR at time 4.998000000000e+00 for the sequence number 4998

Field stored FORC_LIAI at time 4.998000000000e+00 for the sequence number 4998

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 : 4.99800e+00, dernier instant archivé : 4.99800e+00, au numéro d'ordre :

4998

Time of computation: 4.999000000000e+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 |

| 4.99900E+00 | 0 | 8.57271E-16 | 6.93889E-16 | | |TANGENTE | |

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

| PAS COURANT | -1.5925E-24 | -1.5925E-24 | -3.2979E-44 | 0.0000E+00 | 1.8367E-40 |

| TOTAL | 5.9335E+01 | 5.3904E-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 8.572712282578e-16 with the node and degree of

freedom N554 DZ

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

freedom N554 DZ

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 4.999000000000e+00 for the sequence number 4999

Field stored SIEF_ELGA at time 4.999000000000e+00 for the sequence number 4999

Field stored VARI_ELGA at time 4.999000000000e+00 for the sequence number 4999

Field stored COMPORTEMENT at time 4.999000000000e+00 for the sequence number 4999

Field stored VITE at time 4.999000000000e+00 for the sequence number 4999

Field stored ACCE at time 4.999000000000e+00 for the sequence number 4999

Field stored FORC_AMOR at time 4.999000000000e+00 for the sequence number 4999

Field stored FORC_LIAI at time 4.999000000000e+00 for the sequence number 4999

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

9.999999999959e-04.

[99%] Instant calculé : 4.99900e+00, dernier instant archivé : 4.99900e+00, au numéro d'ordre :

4999

Time of computation: 5.000000000000e+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 | | | | | |

| 5.00000E+00 | 0 | 9.94435E-16 | 8.04912E-16 | | | | |

| | TANGENTE | | | | | | |

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

| PAS COURANT | -1.6049E-24 | -1.6049E-24 | 3.2480E-44 | 0.0000E+00 | 0.0000E+00 |

| TOTAL | 5.9335E+01 | 5.3904E-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 9.944346247790e-16 with the node and degree of

freedom N435 DY

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

freedom N435 DY

Temps CPU consommé dans ce pas de temps : 0.143 s

* Nombre d'itérations de Newton : 1

* Temps total intégration comportement : 0.080 s (3 intégrations)

* Temps total factorisation matrice : 0.019 s (1 factorisations)

* Temps construction second membre : 0.022 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 : 0.015 s

Mémoire (Mo) : 2048.98 / 1451.79 / 1500.16 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Filing of the fields

Field stored DEPL at time 5.000000000000e+00 for the sequence number 5000

Field stored SIEF_ELGA at time 5.000000000000e+00 for the sequence number 5000

Field stored VARI_ELGA at time 5.000000000000e+00 for the sequence number 5000

Field stored COMPORTEMENT at time 5.000000000000e+00 for the sequence

number 5000

Field stored VITE at time 5.000000000000e+00 for the sequence number 5000

Field stored ACCE at time 5.000000000000e+00 for the sequence number 5000

Field stored FORC_AMOR at time 5.000000000000e+00 for the sequence number 5000

Field stored FORC_LIAI at time 5.000000000000e+00 for the sequence number 5000

[100%] Instant calculé : 5.00000e+00, dernier instant archivé : 5.00000e+00, au numéro d'ordre :

5000

Temps CPU consommé dans le calcul : 14 min 8 s

dont temps CPU "perdu" dans les découpes : 0.000 s

* Nombre de pas de temps : 5000

* Nombre d'itérations de Newton : 5000

* Temps dans l'archivage : 12.865 s

* Temps dans le post-traitement : 40.136 s

* Temps total intégration comportement : 7 min 17 s (15000 intégrations)

* Temps total factorisation matrice : 1 min 49 s (5000 factorisations)

* Temps construction second membre : 1 min 55 s

* Temps total résolution K.U=F : 3.593 s (5000 résolutions)

* Temps assemblage matrice : 28.869 s

* Nombre d'itérations de recherche linéaire : 0

#1 Resolution des systemes lineaires CPU (USER+SYST/SYST/ELAPS): 112.55 12.33 112.54

#2 Calculs elementaires et assemblages CPU (USER+SYST/SYST/ELAPS): 636.48 38.56 637.17

#3 Dechargement de la memoire sur disque CPU (USER+SYST/SYST/ELAPS): 2.02 1.73 2.01

#4 Communications MPI CPU (USER+SYST/SYST/ELAPS): 0.54 0.12 0.61

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) : 3874.05 / 3874.05 / 3242.52 / 243.10 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0047 user+syst: 775.29s (syst: 77.27s, elaps: 852.67s)

--

.. _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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╟

╟ List of warnings emitted during the execution of computation.
╟

╟
╟

╟ Warnings which you chose to ignore of are preceded by (*).
╟

╟ Number of occurrences for each warning:
╟

╟ no warning
╟

╚═══
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-

Concepts de la base: G

Nom	Type	Taille (Mo)	Nombre d'objets	Nombre de segments
TOTAL		3025.61	170501	195642
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	0.04	6	6
0000002b	LIST_INST	0.04	9	9
0000002c	EVOL_NOLI	2990.37	170100	195114
&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	1742	
&CATA.TH	0.01	2	4
&CATA.TM	0.01	7	11

Nom de la base : GLOBALE

Nombre d'enregistrements utilisés : 4268

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre total d'accès en lecture : 26956

Volume des accès en lecture : 21059.38 Mo.

Nombre total d'accès en écriture : 4687

Volume des accès en écriture : 3661.72 Mo.

Nombre d'identificateurs utilisés : 195652

Taille maximum du répertoire : 256000

Pourcentage d'utilisation du répertoire : 76 %

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 : 116018

Volume des accès en lecture : 90639.06 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 : 243.10 Mo

<I> <FIN> MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION : 3252.47 Mo

<I> <FIN> MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS LORS DE L'EXECUTION : 3884.82 Mo

<I> FERMETURE DES BASES EFFECTUEE

STATISTIQUES CONCERNANT L'ALLOCATION DYNAMIQUE :

TAILLE CUMULEE MAXIMUM : 3252 Mo.

TAILLE CUMULEE LIBEREE : 30370 Mo.

NOMBRE TOTAL D'ALLOCATIONS : 24050781

NOMBRE TOTAL DE LIBERATIONS : 24050761

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 : 243.10 Mo

- IMPOSE DE NOMBREUX ACCES DISQUE

- RALENTIT LA VITESSE D'EXECUTION

MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION : 3252.47 Mo

- LIMITE LES ACCES DISQUE

- AMELIORE LA VITESSE D'EXECUTION

MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS : 3884.82 Mo

- COMPREND LA MEMOIRE CONSOMMEE PAR JEVEUX,

LE SUPERVISEUR PYTHON, LES LIBRAIRIES EXTERNES

<I> FIN D'EXECUTION LE : ME-22-JANV-2025 12:32:06

DeprecationWarning: PY_SSIZE_T_CLEAN will be required for '#' formats

libaster.jeveux_finalize(options)

Signature of pickled file :
fc30d5c4064c34e578c00f8ade7fecda0888c882090b0a38e776ec94905c43d2

Signature of info file :
d385a9a9c129be9a50e5ef4a3b59bf4c115982fffe4be2daa132b188e168a54e

Signature of Jeveux database:
e1cc55dce0cabb224f835ebce980a8dd63a0e61e0a9e3d33893f2096bf9067d1

****

* COMMAND : USER : SYSTEM : USER+SYS : ELAPSED *

****

* DEBUT : 0.03 : 0.18 : 0.21 : 0.22 *

* DEFI_MATERIAU : 0.00 : 0.00 : 0.00 : 0.00 *

* LIRE_MAILLAGE : 0.01 : 0.00 : 0.01 : 0.01 *

* DEFI_GROUP : 0.00 : 0.00 : 0.00 : 0.01 *

* MODI_MAILLAGE : 0.00 : 0.00 : 0.00 : 0.00 *

* AFFE_MODELE : 0.01 : 0.00 : 0.01 : 0.02 *

* 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 : 0.00 : 0.00 : 0.00 : 0.00
*
 * CREA_CHAMP : 0.01 : 0.01 : 0.02 : 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
*

 * CREA_CHAMP : 0.01 : 0.00 : 0.01 : 0.00
*
 * CREA_CHAMP : 0.00 : 0.00 : 0.00 : 0.01
*
 * CREA_CHAMP : 0.00 : 0.00 : 0.00 : 0.00
*
 * 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
*
 * FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
 * FORMULE : 0.00 : 0.00 : 0.00 : 0.00
*
 * CREA_CHAMP : 0.02 : 0.00 : 0.02 : 0.02
*
 * CREA_CHAMP : 0.07 : 0.00 : 0.07 : 0.07
*
 * CREA_CHAMP : 0.01 : 0.01 : 0.02 : 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 :        0.01
*
 * AFFE_CHAR_MECA             :        0.00 :        0.00 :        0.00 :        0.00
*
 * AFFE_CHAR_MECA_F           :        0.01 :        0.00 :        0.01 :        0.01
*
 * AFFE_CHAR_CINE             :        0.00 :        0.00 :        0.00 :        0.00
*
 * 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 :        0.00 :        0.01 :        0.01 *
 * DYNA_NON_LINE              :      775.29 :       77.27 :      852.56 :
852.67 *
 * FIN                        :        0.52 :        0.63 :        1.15 :        1.17 *
 *    . check syntax          :        0.07 :        0.00 :        0.07 :        0.01 *
 *    . fortran               :      774.94 :       75.36 :      850.30 :      850.49 *
 ********************************************************************************
 * TOTAL_JOB                  :      776.06 :       78.11 :      854.17 :      854.29
*
 ********************************************************************************
# Mémoire (Mo) :  3884.82 /  1697.07 /  3252.47 /   243.10 (VmPeak / VmSize /
Optimum / Minimum)
# Fin commande #0048     user+syst:          0.52s (syst:          0.63s, elaps:
1.17s)
# --------------------------------------------------------------------------
--------------------
End of the Code_Aster execution
Code_Aster MPI exits normally
Exited
```

```
EXECUTION_CODE_ASTER_EXIT_12=0
-------------------------------------------------------------------------------
-----
# import code_aster
import code_aster
from code_aster.Commands import *
# import math library for functions and formula
from math import *
# import simscale macros and utilities
import simscale_macros
# Input file start
POURSUITE(
    IGNORE_ALARM=("SUPERVIS_1", "ALGORITH11_87"),
    LANG="en",
)
try:
    # reconstructing model for single-core post-processing
    MODEL = MODI_MODELE(
        DISTRIBUTION=_F(
            METHODE="CENTRALISE",
        ),
        MODELE=MODEL,
        reuse=MODEL,
    )
    TAB_ENER = simscale_macros.GET_ENERGIE(
        NOM_CMP=("TRAV_EXT", "ENER_CIN", "ENER_TOT", "TRAV_AMOR",
"TRAV_LIAI", "DISS_SCH"),
```

```
        NOM_TABLE="PARA_CALC",
        RESULTAT=SIM,
    )
    DEFI_FICHIER(
        ACCES="NEW",
        ACTION="ASSOCIER",
        FICHIER="REPE_OUT/energy-plots",
        TYPE="ASCII",
        UNITE=30,
    )
    IMPR_TABLE(
        COMM_PARA="$$",
        FORMAT="TABLEAU",
        FORMAT_R="E12.5",
        NOM_PARA=("INST", "TRAV_EXT", "ENER_CIN", "ENER_TOT", "TRAV_AMOR",
"TRAV_LIAI", "DISS_SCH"),
        SEPARATEUR=",",
        TABLE=TAB_ENER,
        UNITE=30,
    )
    DEFI_FICHIER(
        ACTION="LIBERER",
        UNITE=30,
    )
    # Derived result calculation on nodes
    SIM = CALC_CHAMP(
        CONTRAINTE=("SIGM_NOEU"),
```

```
        CRITERES=("SIEQ_NOEU"),
        DEFORMATION=("EPSG_NOEU"),
        GROUP_MA=("face1", "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 : Wed Jan 22 12:32:17 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 : 484.91 Mo

reste pour l'allocation dynamique : 119515.09 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     :    4268

        Nombre d'enregistrements maximum      :    2684354
```

```
        Nombre d'enregistrements par fichier       :   15728
        Longueur d'enregistrement (octets)         :   819200
        Nombre d'identificateurs utilisés          :   195652
        Taille maximum du répertoire               :   256000
        Pourcentage d'utilisation du répertoire :   76 %
Ouverture en lecture du fichier ./glob.1
Ouverture en écriture du fichier ./vola.1
End of reading (lasted 0.000002 S.)
  DeprecationWarning: PY_SSIZE_T_CLEAN will be required for '#' formats
    libaster.call_poursuite(syntax)
Restored objects:
pi                              <class 'float'>
e                               <class 'float'>
tau                             <class 'float'>
inf                             <class 'float'>
nan                             <class 'float'>
MAT_0                           <class 'libaster.Material'>
MESH                            <class 'libaster.Mesh'>
MODEL                           <class 'libaster.Model'>
MATS                            <class 'libaster.MaterialField'>
F_4                             <class 'libaster.FieldOnNodesReal'>
F_0                             <class 'libaster.Formula'>
F_1                             <class 'libaster.Formula'>
F_2                             <class 'libaster.Formula'>
F_3                             <class 'libaster.FieldOnNodesReal'>
INIT_D                          <class 'libaster.FieldOnNodesReal'>
F_9                             <class 'libaster.FieldOnNodesReal'>
```

F_5 <class 'libaster.Formula'>

F_6 <class 'libaster.Formula'>

F_7 <class 'libaster.Formula'>

F_8 <class 'libaster.FieldOnNodesReal'>

INIT_U <class 'libaster.FieldOnNodesReal'>

F_14 <class 'libaster.FieldOnNodesReal'>

F_10 <class 'libaster.Formula'>

F_11 <class 'libaster.Formula'>

F_12 <class 'libaster.Formula'>

F_13 <class 'libaster.FieldOnNodesReal'>

INIT_A <class 'libaster.FieldOnNodesReal'>

F_22 <class 'libaster.FieldOnNodesReal'>

F_23 <class 'libaster.FieldOnCellsReal'>

F_15 <class 'libaster.Formula'>

F_16 <class 'libaster.Formula'>

F_17 <class 'libaster.Formula'>

F_18 <class 'libaster.Formula'>

F_19 <class 'libaster.Formula'>

F_20 <class 'libaster.Formula'>

F_21 <class 'libaster.FieldOnCellsReal'>

F_24 <class 'libaster.FieldOnCellsReal'>

INIT_S <class 'libaster.FieldOnCellsReal'>

F_25 <class 'libaster.Formula'>

F_26 <class 'libaster.Formula'>

F_27 <class 'libaster.Formula'>

F_28 <class 'libaster.Formula'>

BC_0 <class 'libaster.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) : 3830.52 / 3828.76 / 3202.44 / 229.91 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0001 user+syst: 1.19s (syst: 2.99s, elaps: 4.18s)

.. _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) : 3830.52 / 3828.76 / 3202.44 / 229.91 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0002 user+syst: 0.00s (syst: 0.00s, elaps: 0.01s)

.. _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) : 3835.06 / 3833.34 / 3204.54 / 229.91 (VmPeak / VmSize /
Optimum / Minimum)

Fin commande #0003 user+syst: 0.15s (syst: 0.00s, elaps:
0.14s)

--

.. _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) : 3835.06 / 3832.59 / 3204.54 / 229.91 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0006 user+syst: 0.00s (syst: 0.00s, elaps: 0.01s)

.. _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) : 3836.59 / 3832.84 / 3204.54 / 229.91 (VmPeak / VmSize /

Optimum / Minimum)

Fin commande #0007 user+syst: 0.03s (syst: 0.00s, elaps: 0.03s)

.. _stg1_txt51

Commande #0008 de fort.1, ligne 51

DEFI_FICHIER(ACTION='LIBERER',

UNITE=30)

Mémoire (Mo) : 3836.59 / 3832.84 / 3204.54 / 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): 150.34 33.81 151.48

#3 Dechargement de la memoire sur disque CPU (USER+SYST/SYST/ELAPS): 15.58 14.19 15.62

Critère de destruction du fichier (1.00 %) associé à la base VOLATILE dépassé 1.08 %

Nombre d'enregistrements utilisés : 28915

Volume disque occupé : 22590 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) : 16149.72 / 3534.43 / 15118.29 / 265.00 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0009 user+syst: 277.06s (syst: 88.40s, elaps:

372.69s)

--

.. _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 22/01/2025 A 12:38:34 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) : 16149.72 / 3534.89 / 15118.29 / 265.00 (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) : 16149.72 / 3536.80 / 15118.29 / 265.00 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0011 user+syst: 0.01s (syst: 0.00s, 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 5001 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 !

! ... ! ... ! ... ! ... ! ... ! ... ! ... ! ... !

! 5000 ! 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 !

! ... ! ... ! ... ! ... ! ... ! ... ! ... ! ... ! ... ! ... !

! 5000 ! K8 ! K8 ! K8 ! K24 ! R ! I ! R ! K24 ! R !

! ---------- !----------------!----------------!----------------!----------------!----------------!----------------!----------------!----------------!----

------------!

#3 Dechargement de la memoire sur disque CPU (USER+SYST/SYST/ELAPS): 0.73 0.64 0.74

Résultat commande #0012 (EXTR_RESU): SIM_PP ('<00000031>') de type <NonLinearResult>

Dépend de :

- MOD_PP ('<00000030>') de type <Model>

Mémoire (Mo) : 16149.72 / 4031.89 / 15118.29 / 300.99 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0012 user+syst: 92.11s (syst: 25.07s, elaps: 117.23s)

--

.. _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) : 16149.72 / 4031.89 / 15118.29 / 300.99 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0013 user+syst: 0.03s (syst: 0.00s, elaps: 0.03s)

--

.. _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) : 16149.72 / 4042.51 / 15118.29 / 300.99 (VmPeak / VmSize / Optimum / Minimum)

Fin commande #0014 user+syst: 37.48s (syst: 30.14s, elaps: 67.63s)

--

.. _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'>

╔══╗

║ <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
║

╚══╝

-

Concepts de la base: G

Nom Type Taille (Mo) Nombre Nombre
de

d'objets segments

TOTAL 5449.86 380655
430838

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	0.04	6	6
0000002b	LIST_INST	0.04	9	9
0000002c	EVOL_NOLI	3962.36	230127	255147
0000002e	TABLE_SDASTER	0.54	19	19
0000002f	MAILLAGE_SDASTER	0.42	38	52
00000030	MODELE_SDASTER	0.18	9	14
00000031	EVOL_NOLI	1451.12	150061	175078
&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 : 7669

Nombre d'enregistrements maximum : 2684354

Nombre d'enregistrements par fichier : 15728

Longueur d'enregistrement (octets) : 819200

Nombre total d'accès en lecture : 100115

Volume des accès en lecture : 78214.84 Mo.

Nombre total d'accès en écriture : 3883

Volume des accès en écriture : 3033.59 Mo.

Nombre d'identificateurs utilisés : 430873

Taille maximum du répertoire : 512000

Pourcentage d'utilisation du répertoire : 84 %

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 : 42509

Volume des accès en lecture : 33210.16 Mo.

Nombre total d'accès en écriture : 54697

Volume des accès en écriture : 42732.03 Mo.

Nombre d'identificateurs utilisés : 40134

Taille maximum du répertoire : 128000

Pourcentage d'utilisation du répertoire : 31 %

<I> <FIN> ARRET NORMAL DANS "FIN" PAR APPEL A "JEFINI".

<I> <FIN> MEMOIRE JEVEUX MINIMALE REQUISE POUR L'EXECUTION : 300.99 Mo

<I> <FIN> MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION : 15118.29 Mo

<I> <FIN> MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS LORS DE L'EXECUTION : 16149.72 Mo

<I> FERMETURE DES BASES EFFECTUEE

STATISTIQUES CONCERNANT L'ALLOCATION DYNAMIQUE :

TAILLE CUMULEE MAXIMUM : 15118 Mo.

TAILLE CUMULEE LIBEREE : 30302 Mo.

NOMBRE TOTAL D'ALLOCATIONS : 22185993

NOMBRE TOTAL DE LIBERATIONS : 22185993

APPELS AU MECANISME DE LIBERATION : 7

TAILLE MEMOIRE CUMULEE RECUPEREE : 24460 Mo.

VOLUME DES LECTURES : 4 Mo.

VOLUME DES ECRITURES : 23628 Mo.

MEMOIRE JEVEUX MINIMALE REQUISE POUR L'EXECUTION : 300.99 Mo

- IMPOSE DE NOMBREUX ACCES DISQUE

- RALENTIT LA VITESSE D'EXECUTION

MEMOIRE JEVEUX OPTIMALE REQUISE POUR L'EXECUTION : 15118.29 Mo

- LIMITE LES ACCES DISQUE

- AMELIORE LA VITESSE D'EXECUTION

MAXIMUM DE MEMOIRE UTILISEE PAR LE PROCESSUS : 16149.72 Mo

- COMPREND LA MEMOIRE CONSOMMEE PAR JEVEUX,

LE SUPERVISEUR PYTHON, LES LIBRAIRIES EXTERNES

<I> FIN D'EXECUTION LE : ME-22-JANV-2025 12:41:41

DeprecationWarning: PY_SSIZE_T_CLEAN will be required for '#' formats

libaster.jeveux_finalize(options)

Signature of pickled file :
8923517b9b4b228c7fdefca656fdc67e88c704808dde89ce61225ae5a7c8900b

Signature of info file :
2430df9d0b8b6d14052313012f791712f1f9d6516d988d3e0a59f744e2e260b5

Signature of Jeveux database:
c7f5608e1841497c7d1ba0acb1db14df98ace4eacf66432d39c5f118a8237fa2

****

* COMMAND : USER : SYSTEM : USER+SYS : ELAPSED *

```
 ********************************************************************************
 * POURSUITE                    :          1.19 :          2.99 :          4.18 :          4.18
*
 * MODI_MODELE                  :          0.00 :          0.00 :          0.00 :
0.01 *
 * GET_ENERGIE                  :          0.15 :          0.00 :          0.15 :          0.14 *
 * DEFI_FICHIER                 :          0.00 :          0.00 :          0.00 :          0.01 *
 * IMPR_TABLE                   :          0.03 :          0.00 :          0.03 :          0.03 *
 * DEFI_FICHIER                 :          0.00 :          0.00 :          0.00 :          0.00 *
 * CALC_CHAMP                   :        277.06 :         88.40 :        365.46 :
372.69 *
 * CREA_MAILLAGE                :          0.01 :          0.00 :          0.01 :          0.02
*
 * AFFE_MODELE                  :          0.01 :          0.00 :          0.01 :          0.01
*
 * EXTR_RESU                    :         92.11 :         25.07 :        117.18 :        117.23
*
 * DETRUIRE                     :          0.03 :          0.00 :          0.03 :          0.03 *
 * IMPR_RESU                    :         37.48 :         30.14 :         67.62 :         67.63
*
 * FIN                          :          0.94 :          1.37 :          2.31 :          2.34 *
 *    . check syntax            :          0.04 :          0.00 :          0.04 :          0.06 *
 *    . fortran                 :        407.71 :        145.71 :        553.42 :        560.75 *
 ********************************************************************************
 * TOTAL_JOB                    :        409.02 :        148.00 :        557.02 :        564.35
*
 ********************************************************************************
# Mémoire (Mo) : 16149.72 /    1475.75 / 15118.29 /     300.99 (VmPeak / VmSize /
Optimum / Minimum)
```

Fin commande #0015 user+syst: 0.94s (syst: 1.37s, elaps: 2.34s)

End of the Code_Aster execution

Code_Aster MPI exits normally

Exited

EXECUTION_CODE_ASTER_EXIT_12=0

Follower pressure 50 pa Simulation interval 5s Maximum time step length 0.001s