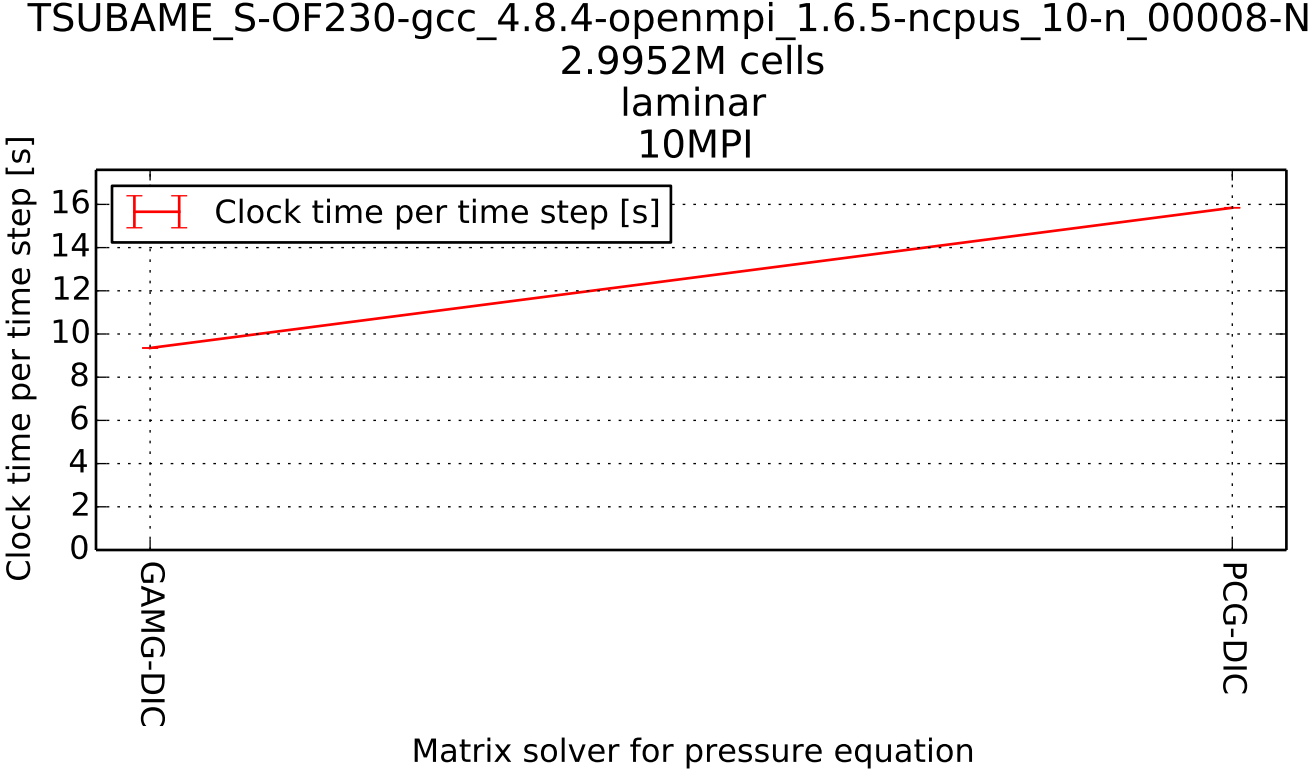
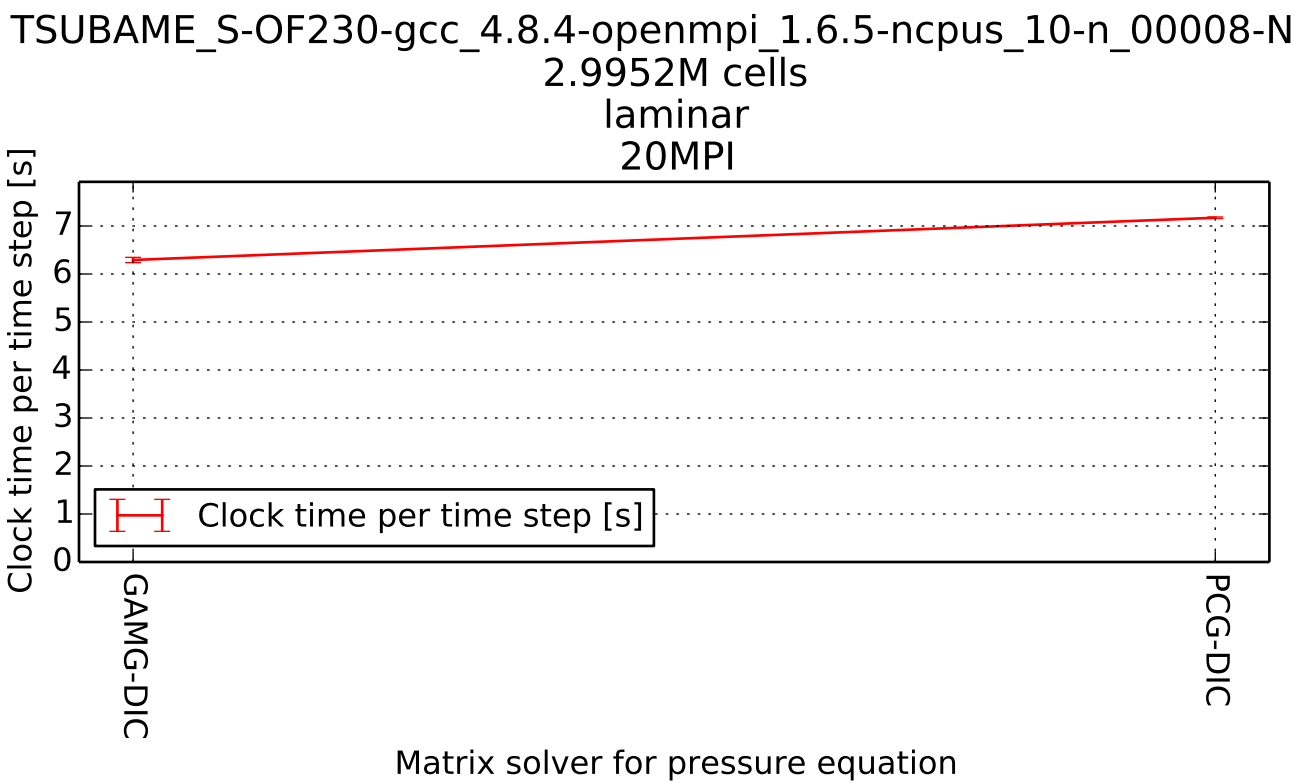
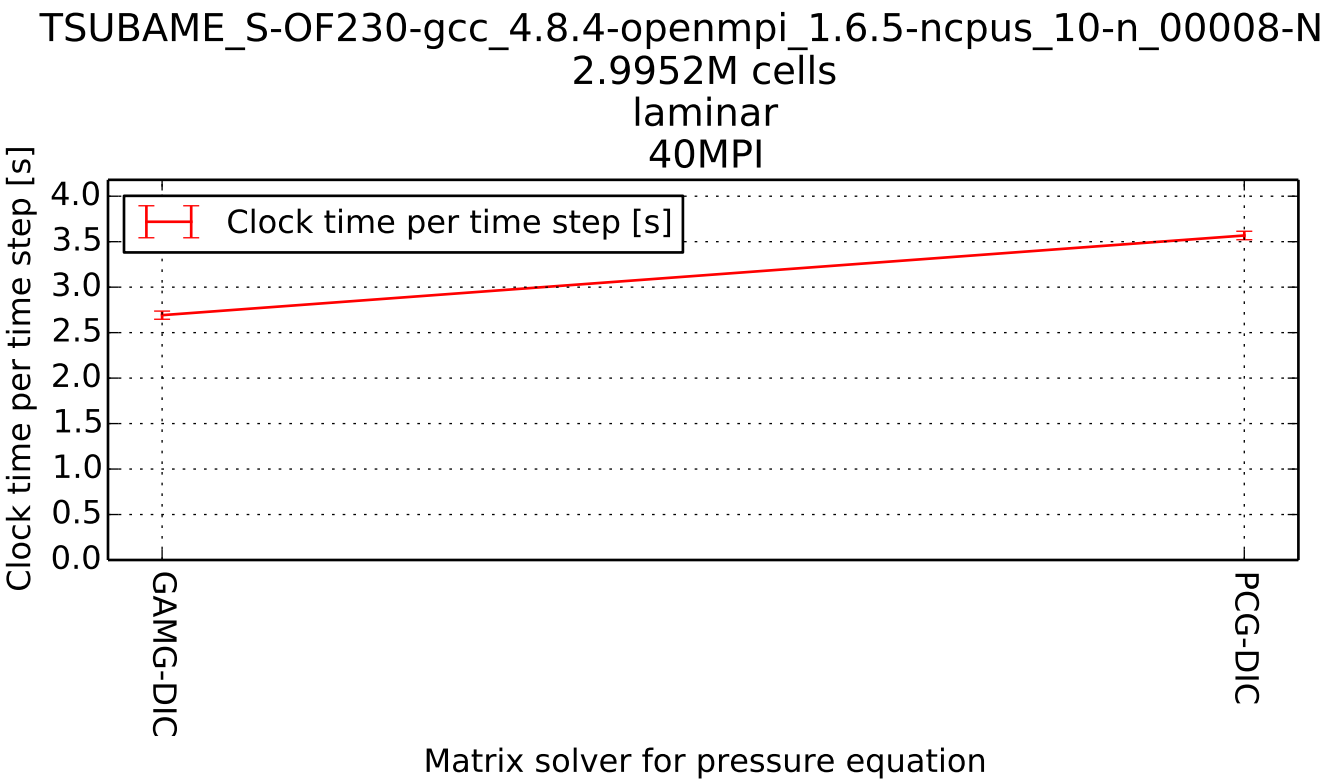
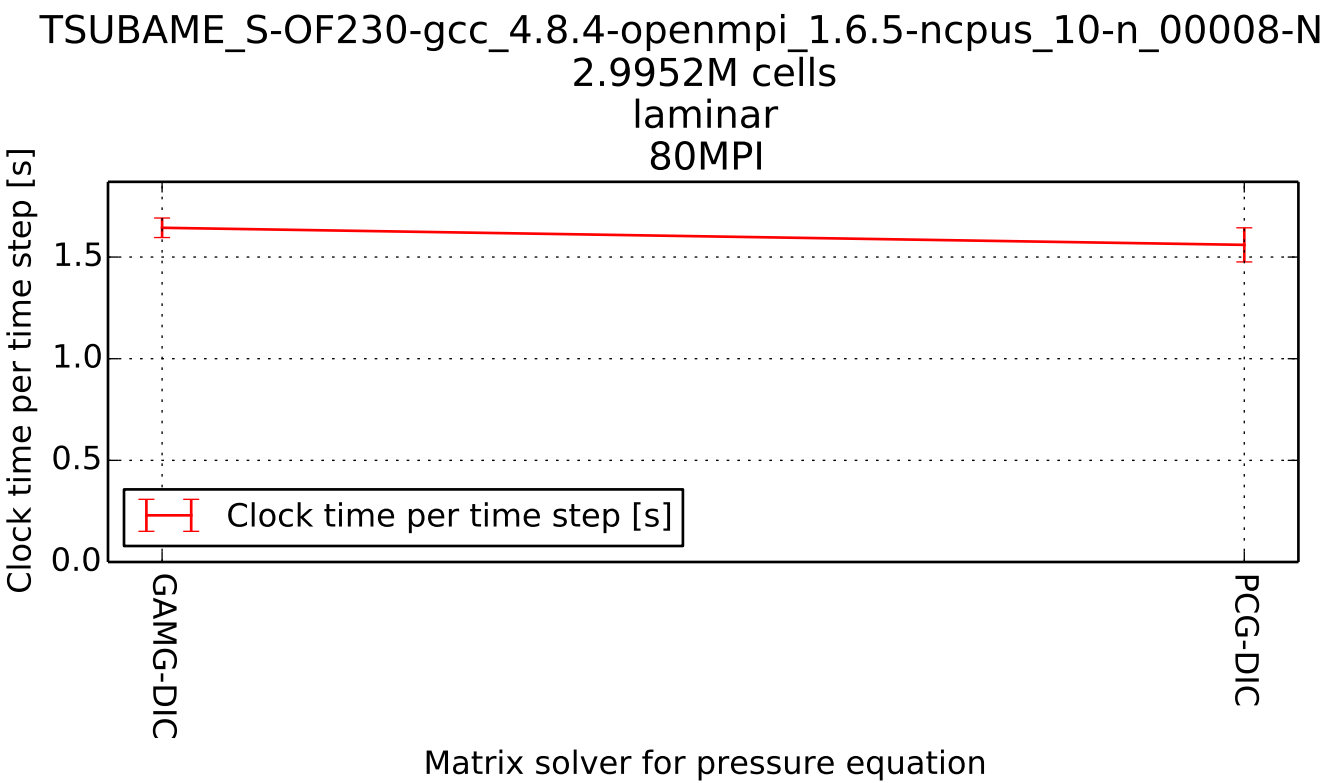
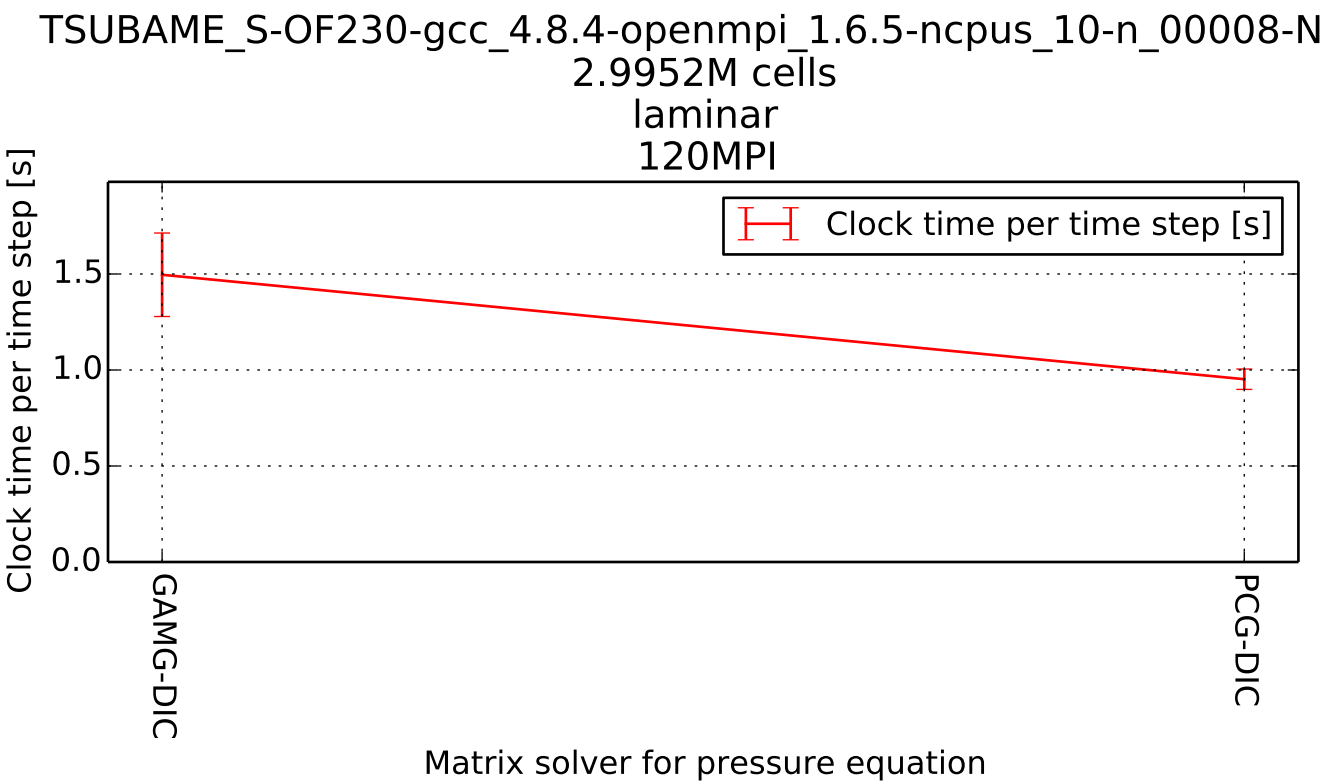
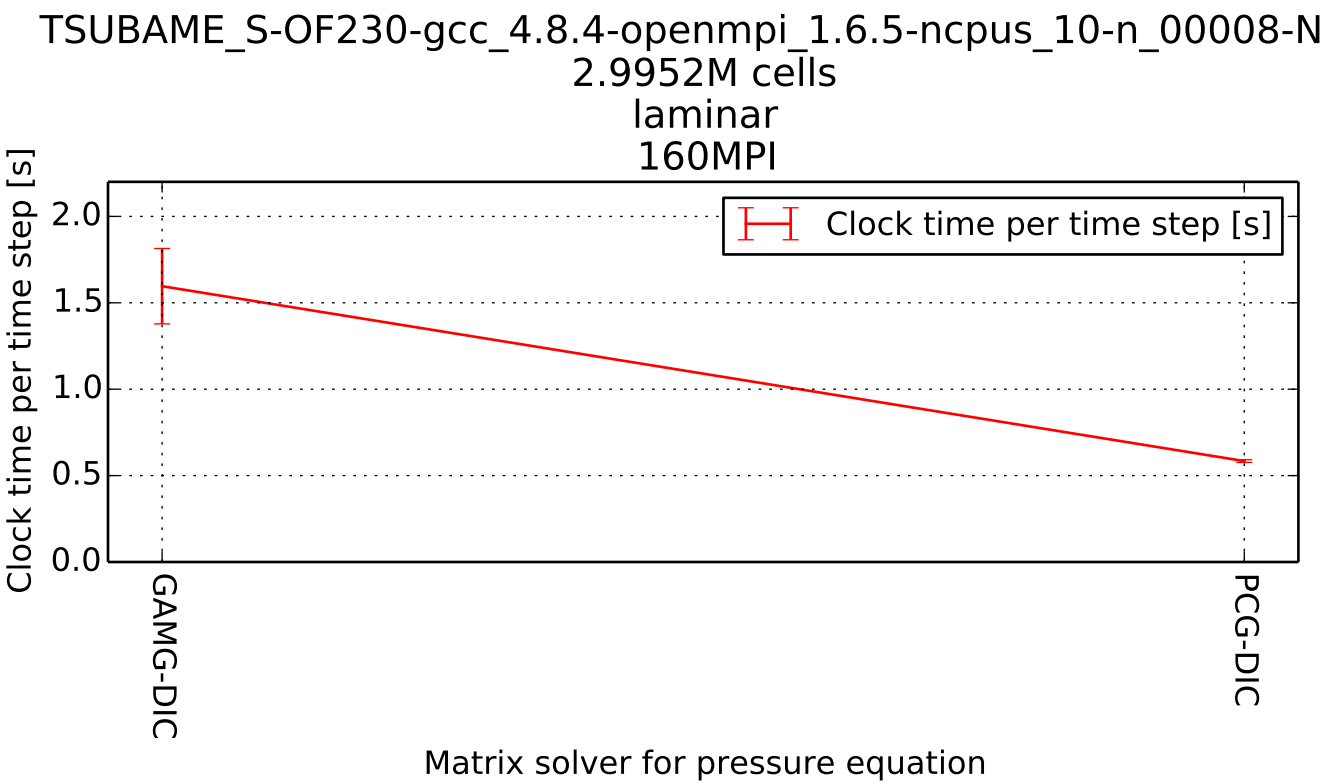

TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
10MPI
Clock time per time step [s]
Clock time per time step [s]
0
2
4
6
8
10
12
14
16
GAMG-DIC
PCG-DIC
Matrix solver for pressure equation

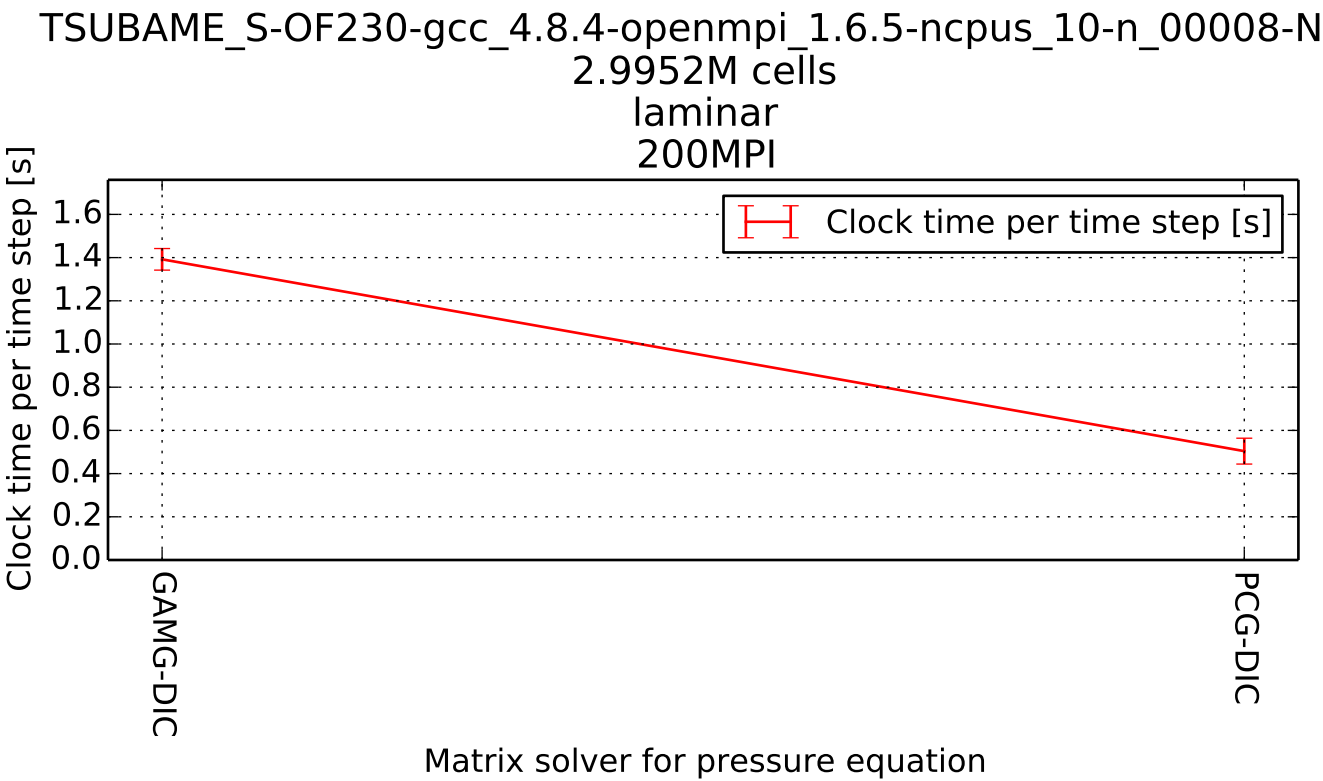

TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
20MPI
Clock time per time step [s]
0
1
2
3
4
5
6
7
Clock time per time step [s]
GAMG-DIC
PCG-DIC
Matrix solver for pressure equation

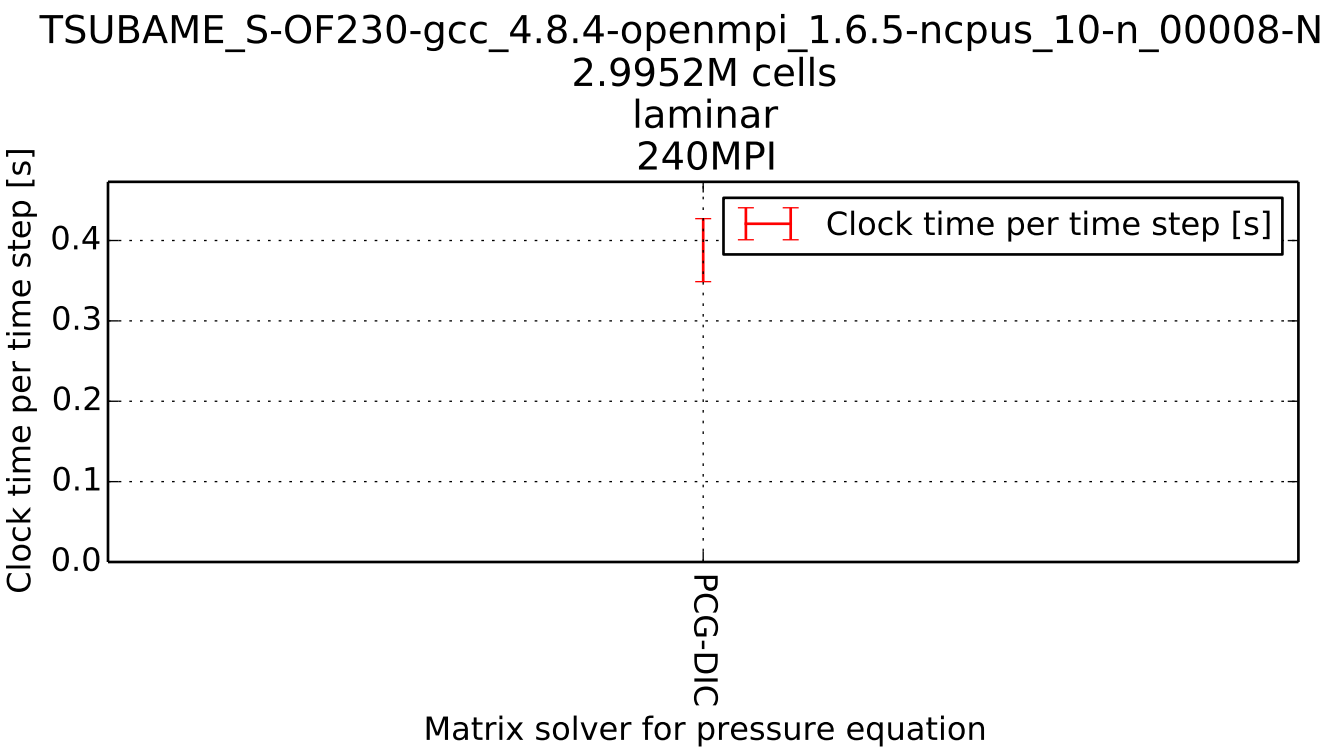

TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
40MPI
Clock time per time step [s]
Clock time per time step [s]
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
GAMG-DIC
PCG-DIC
Matrix solver for pressure equation

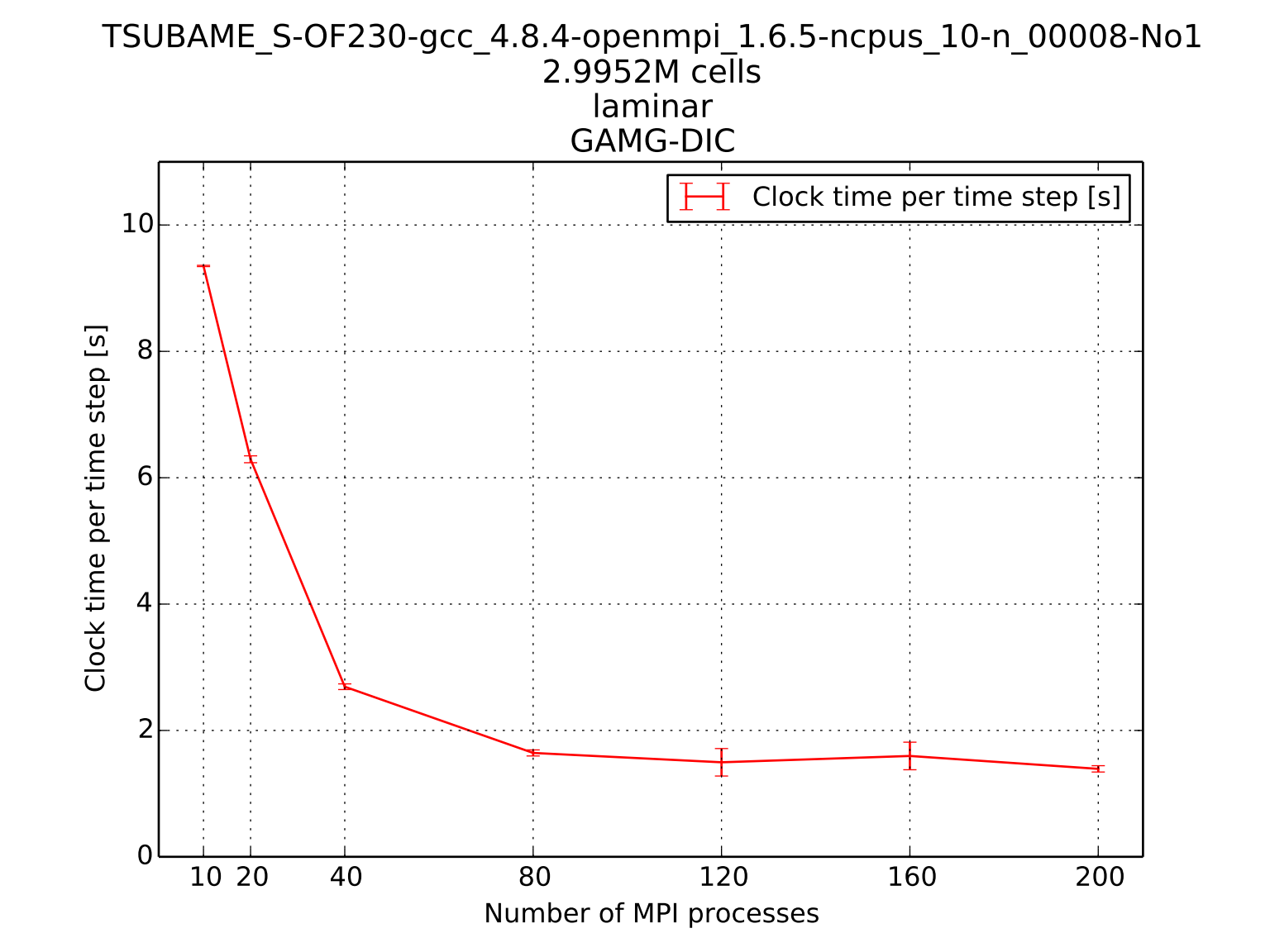

TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
80MPI
Clock time per time step [s]
1.5
1.0
0.5
0.0
Clock time per time step [s]
GAMG-DIC
PCG-DIC
Matrix solver for pressure equation

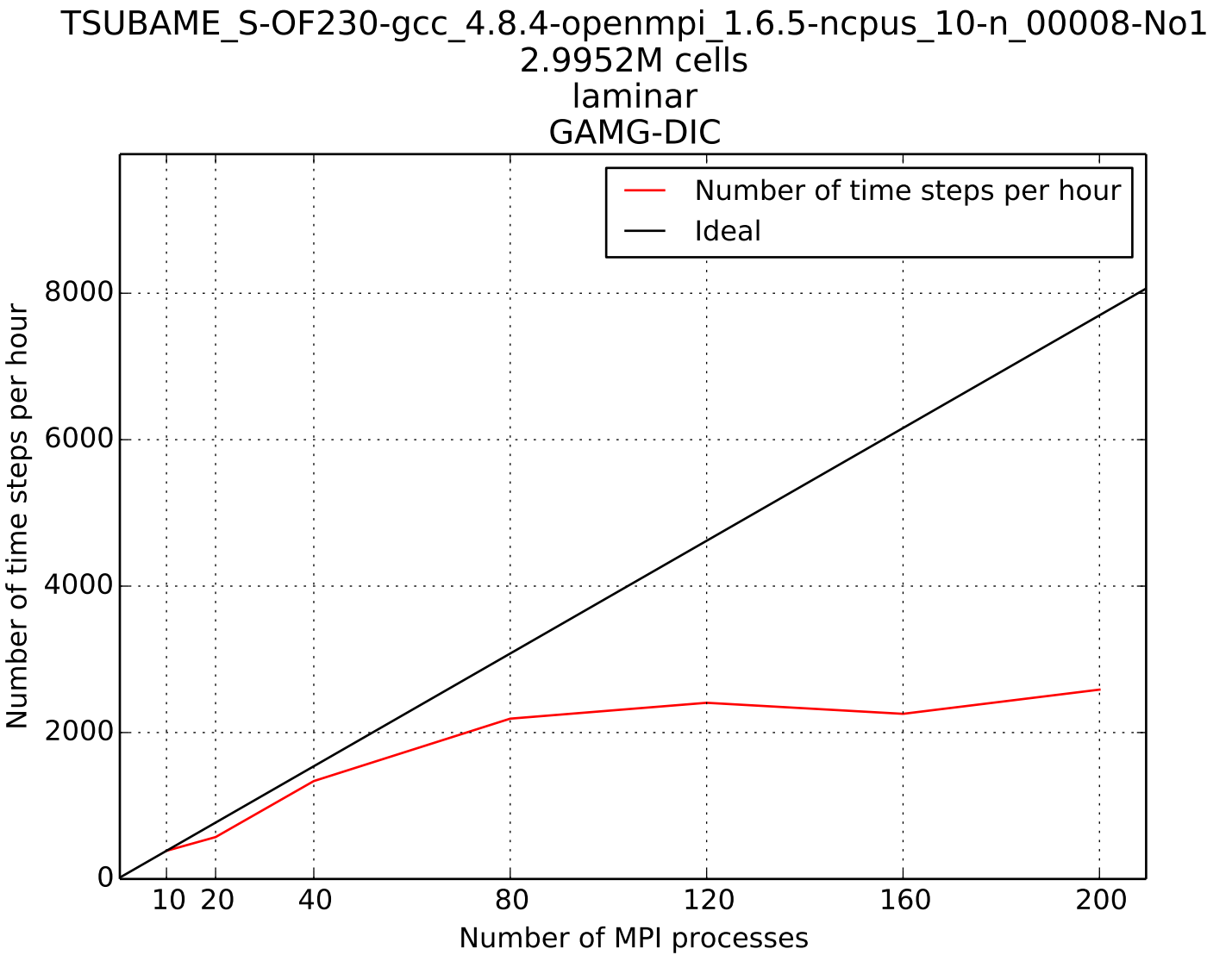

TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
120MPI
Clock time per time step [s]
Clock time per time step [s]
1.5
1.0
0.5
0.0
GAMG-DIC
PCG-DIC
Matrix solver for pressure equation

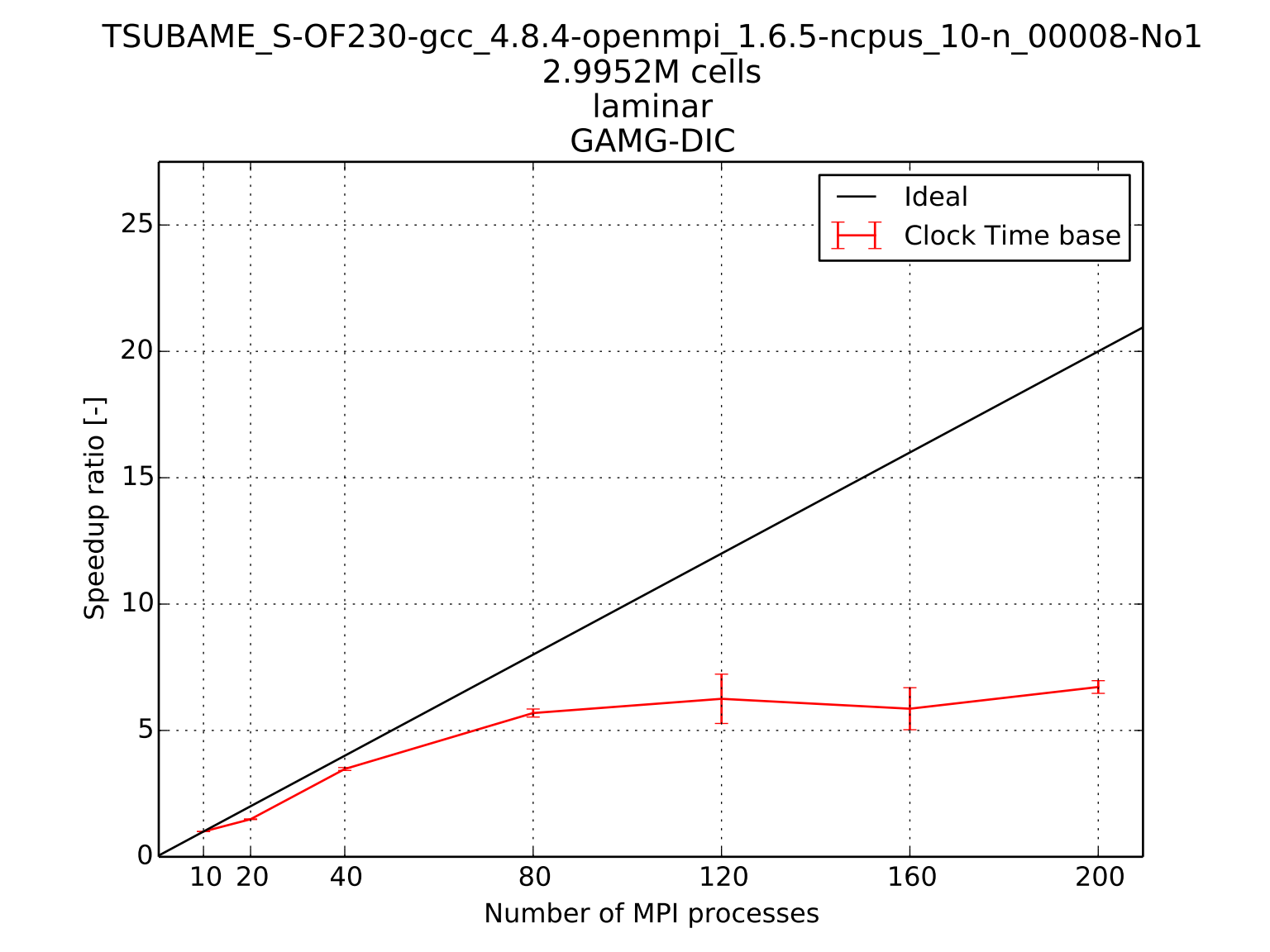

TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
160MPI
Clock time per time step [s]
2.0
1.5
1.0
0.5
0.0
Clock time per time step [s]
GAMG-DIC
PCG-DIC
Matrix solver for pressure equation

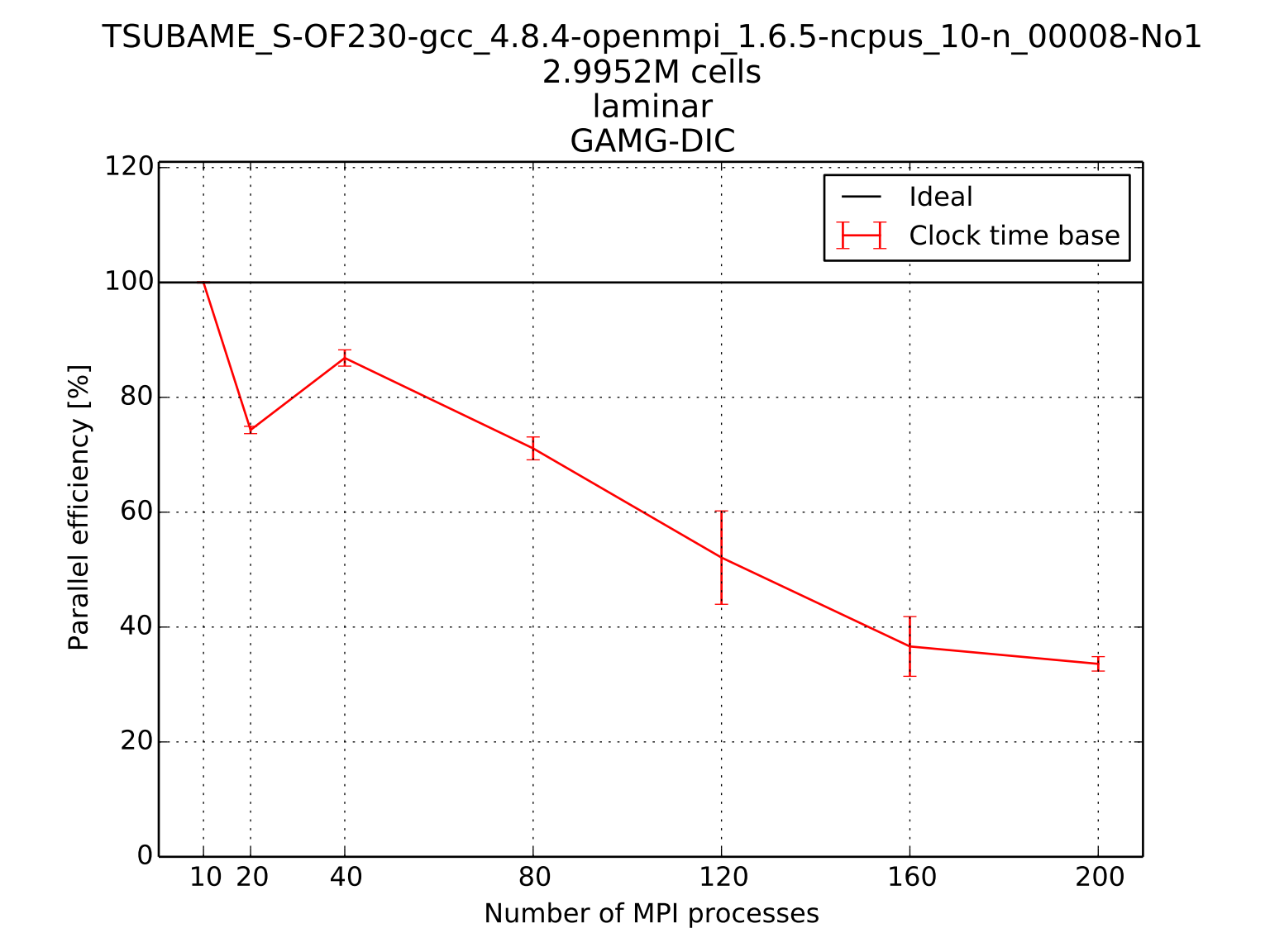

TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
200MPI
Clock time per time step [s]
Clock time per time step [s]
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
GAMG-DIC
PCG-DIC
Matrix solver for pressure equation

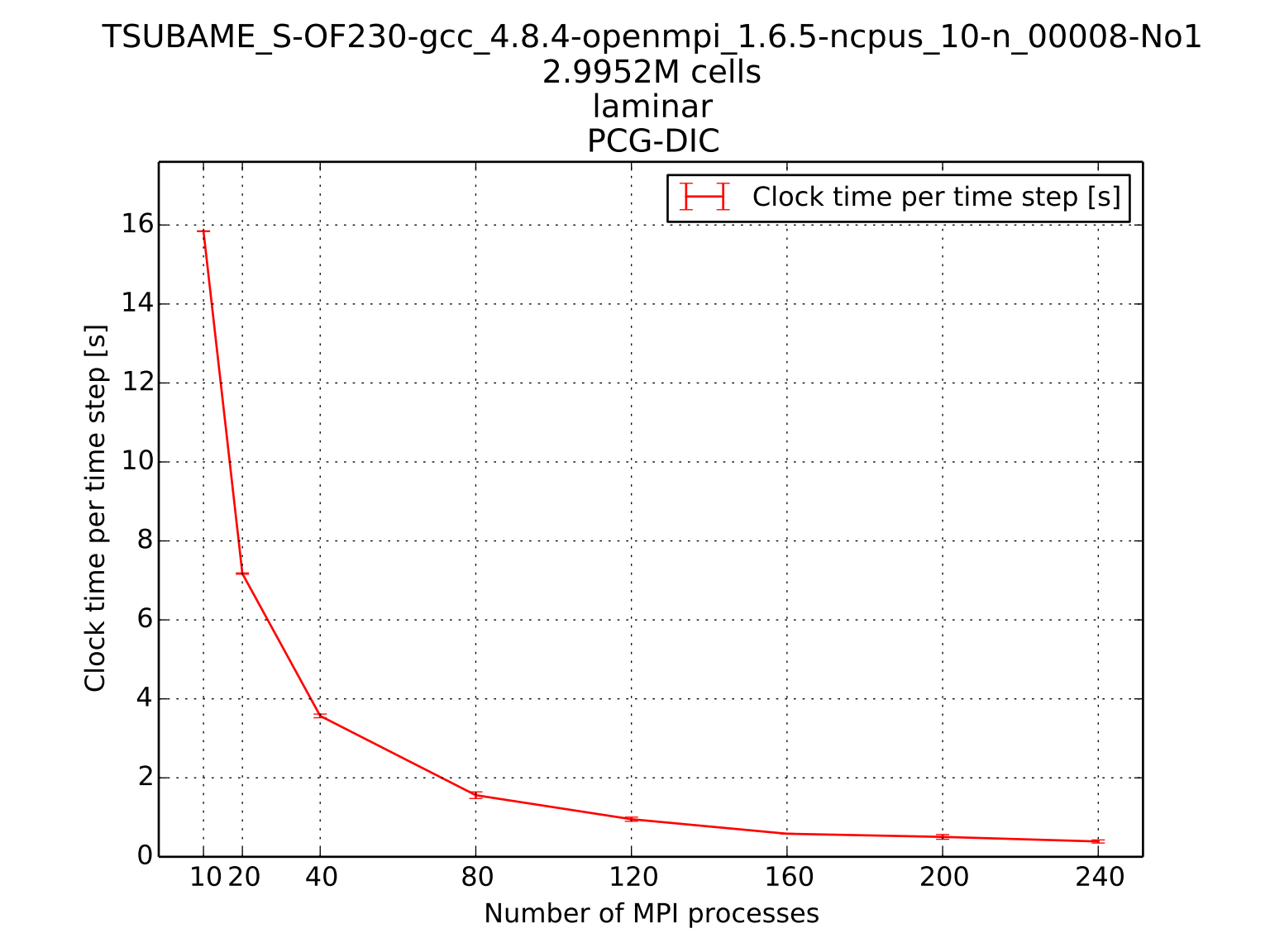

TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
240MPI
Clock time per time step [s]
0.0
0.1
0.2
0.3
0.4
Clock time per time step [s]
PCG-DIC
Matrix solver for pressure equation

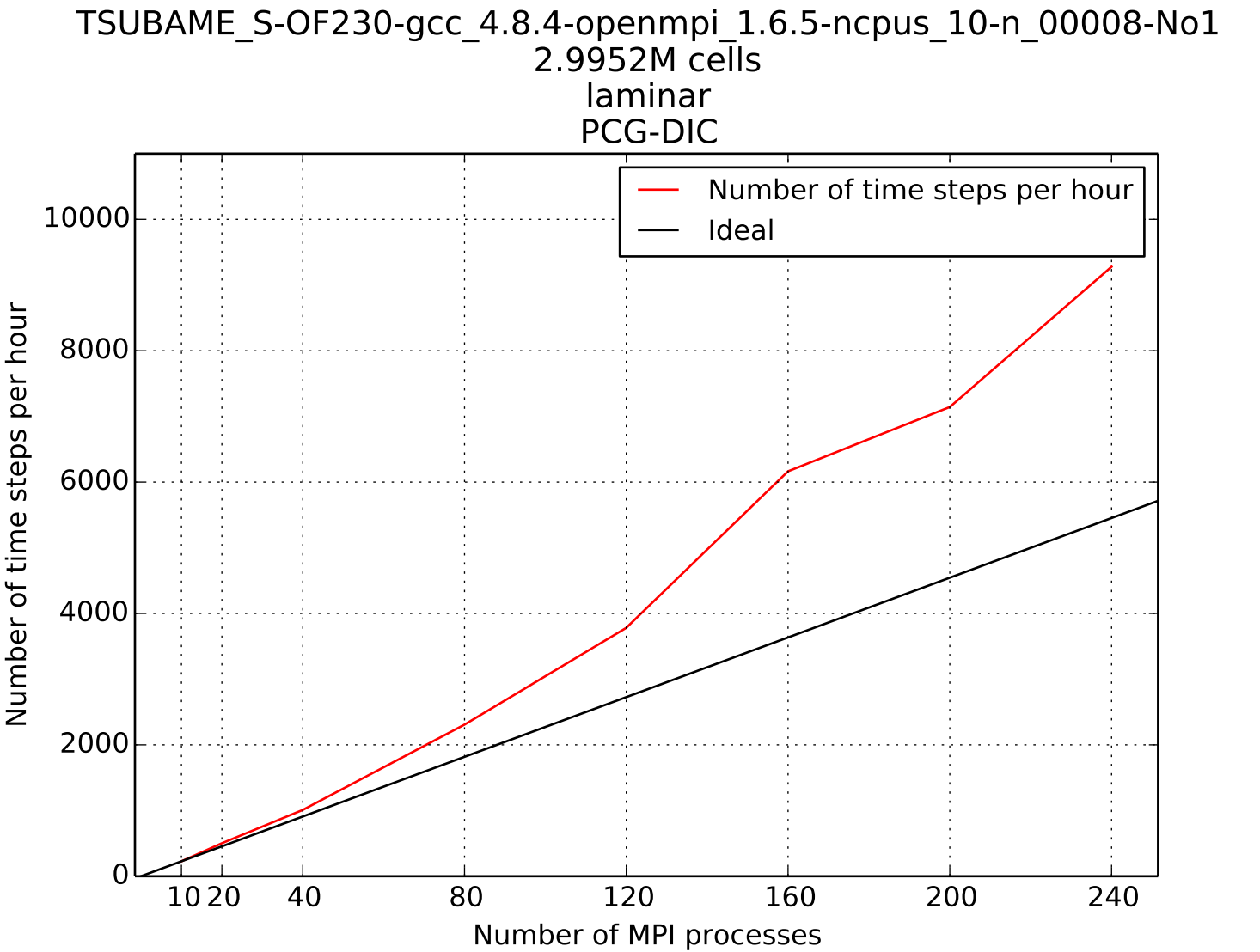

TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
GAMG-DIC
Clock time per time step [s]
Clock time per time step [s]
Number of MPI processes
0
2
4
6
8
10
10
20
40
80
120
160
200

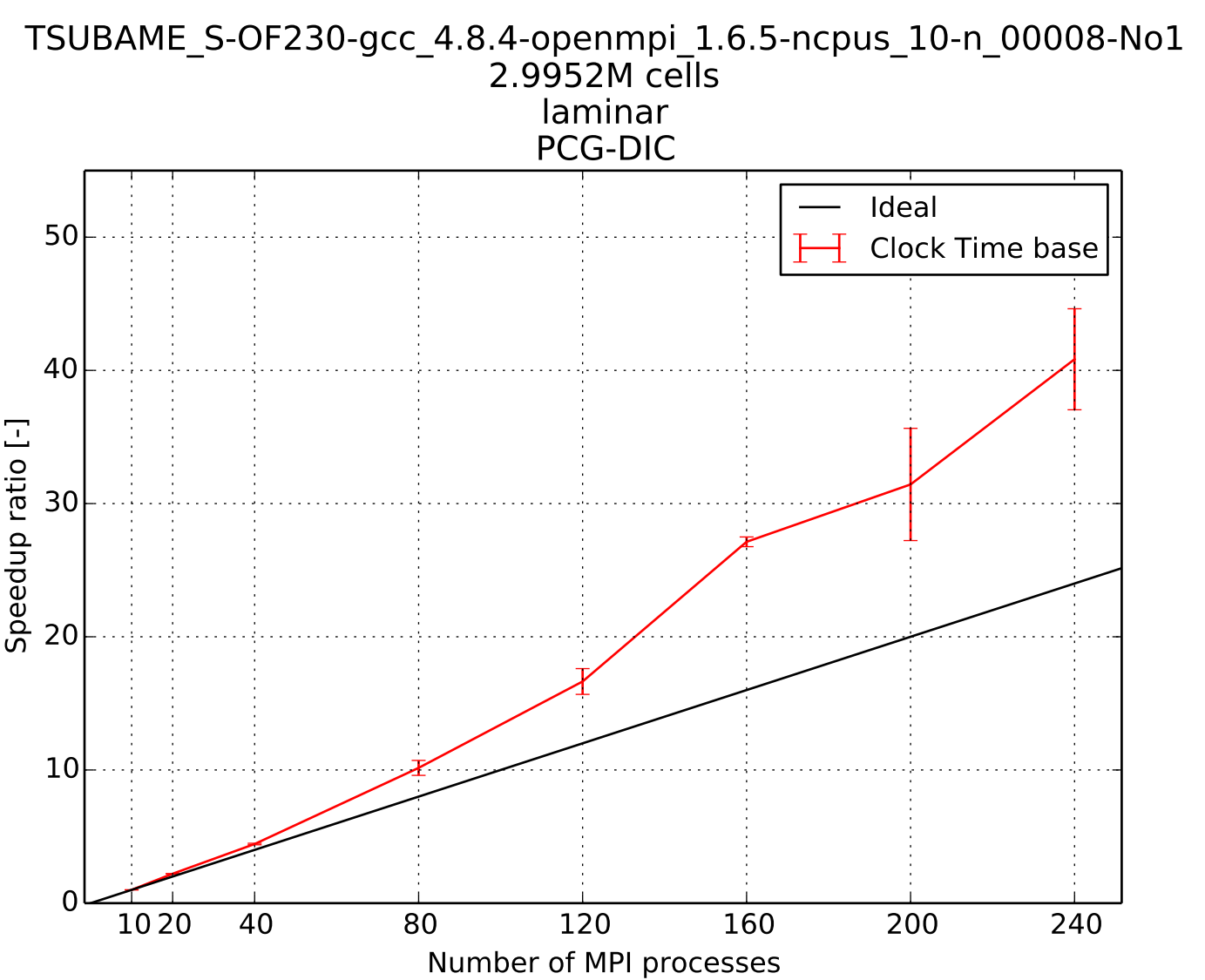

TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
GAMG-DIC
Number of time steps per hour
Ideal
Number of time steps per hour
0
2000
4000
6000
8000
10
20
40
80
120
160
200
Number of MPI processes

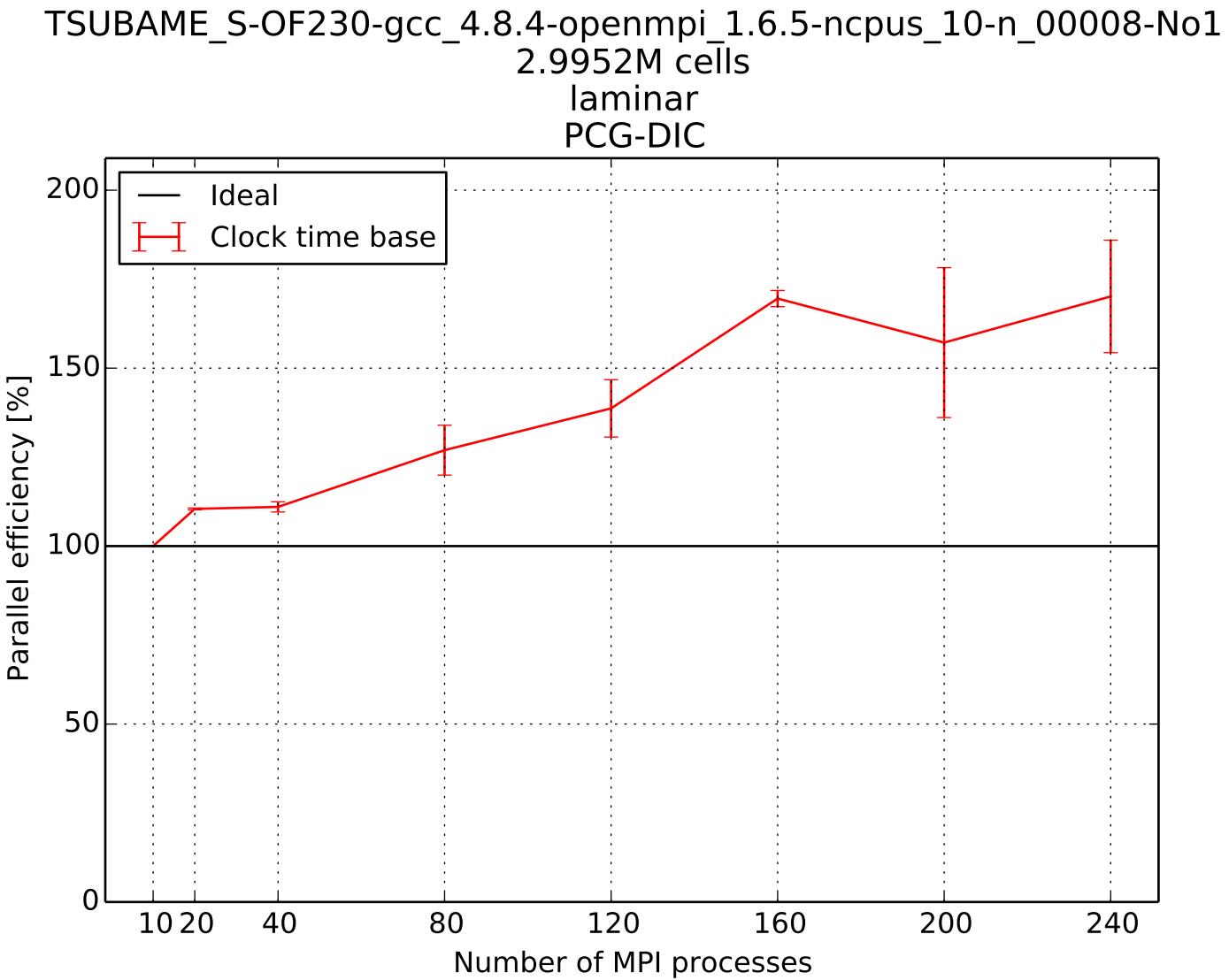

TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
GAMG-DIC
Ideal
Clock Time base
Speedup ratio [-]
0
5
10
15
20
25
10
20
40
80
120
160
200
Number of MPI processes


TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
GAMG-DIC
Ideal
Clock time base
Parallel efficiency [%]
Number of MPI processes
0
20
40
60
80
100
120
10
20
40
80
120
160
200


TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
PCG-DIC
Clock time per time step [s]
Clock time per time step [s]
Number of MPI processes
0
2
4
6
8
10
12
14
16
10
20
40
80
120
160
200
240


TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
PCG-DIC
Number of time steps per hour
Ideal
Number of time steps per hour
0
2000
4000
6000
8000
10000
10
20
40
80
120
160
200
240
Number of MPI processes


TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
PCG-DIC
Ideal
Clock Time base
Speedup ratio [-]
0
10
20
30
40
50
10
20
40
80
120
160
200
240
Number of MPI processes


TSUBAME_S-OF230-gcc_4.8.4-openmpi_1.6.5-ncpus_10-n_00008-No1
2.9952M cells
laminar
PCG-DIC
Ideal
Clock time base
Parallel efficiency [%]
Number of MPI processes
0
50
100
150
200
10
20
40
80
120
160
200
240