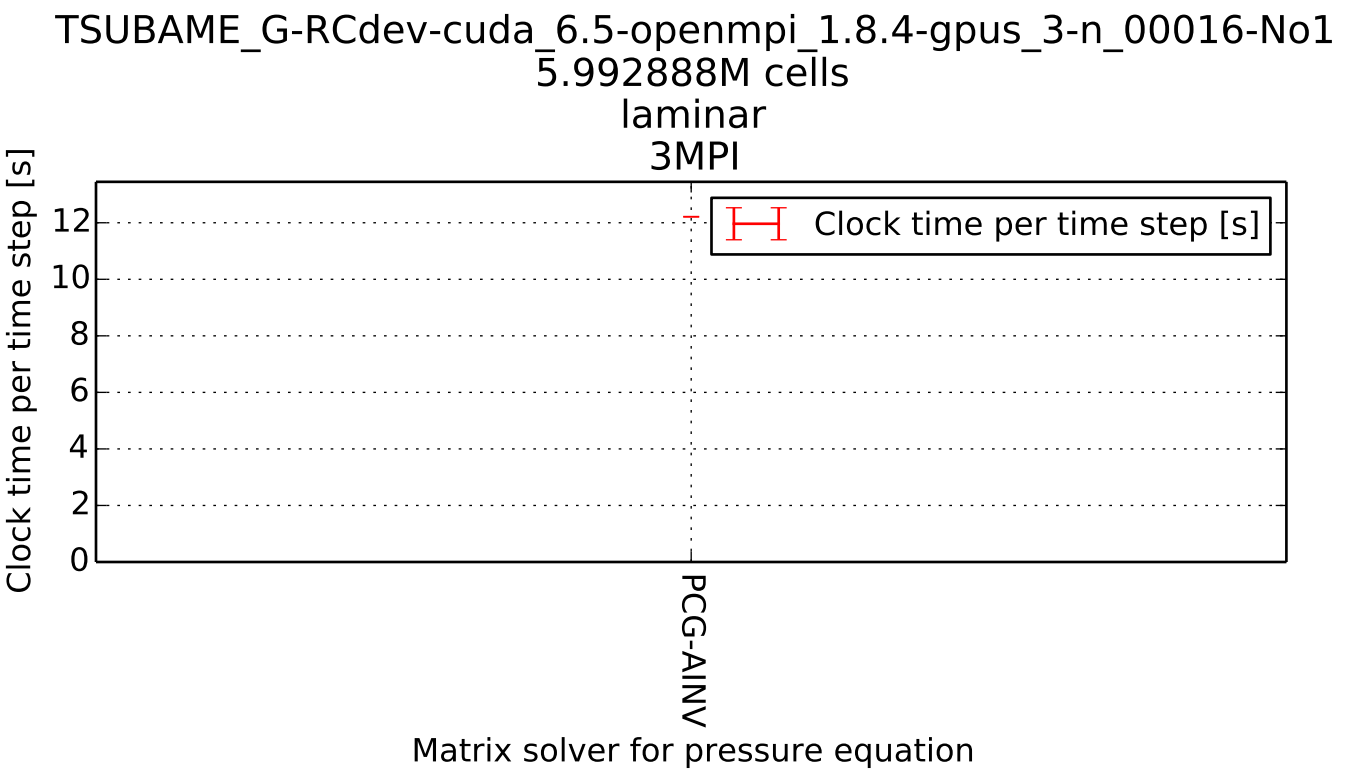
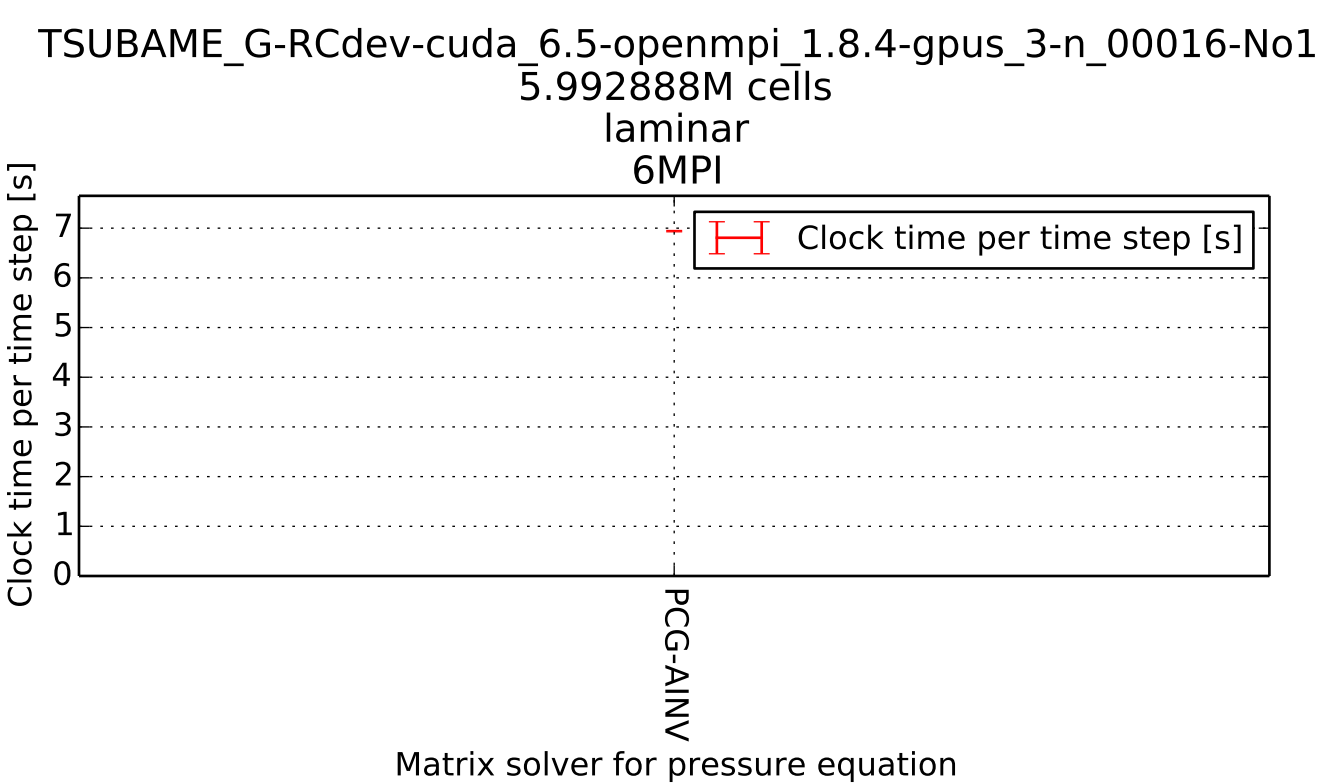
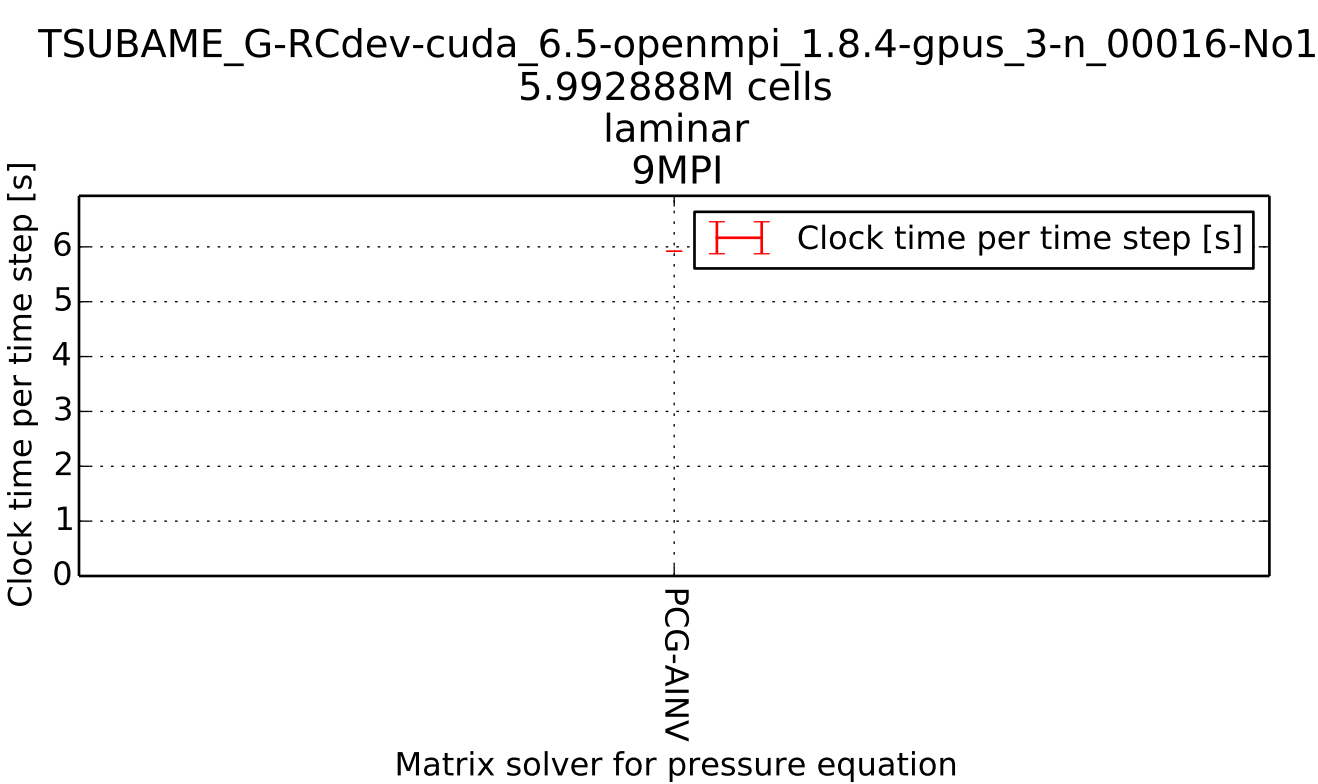
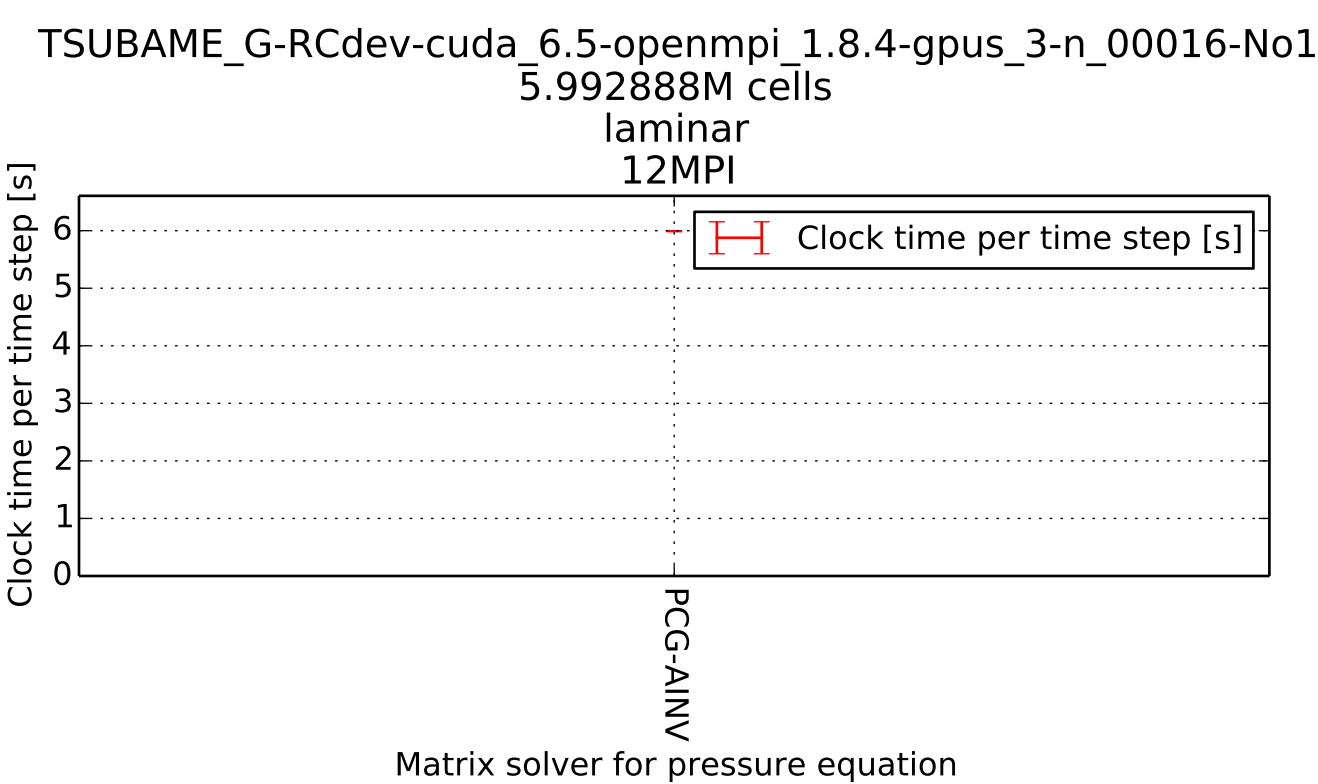
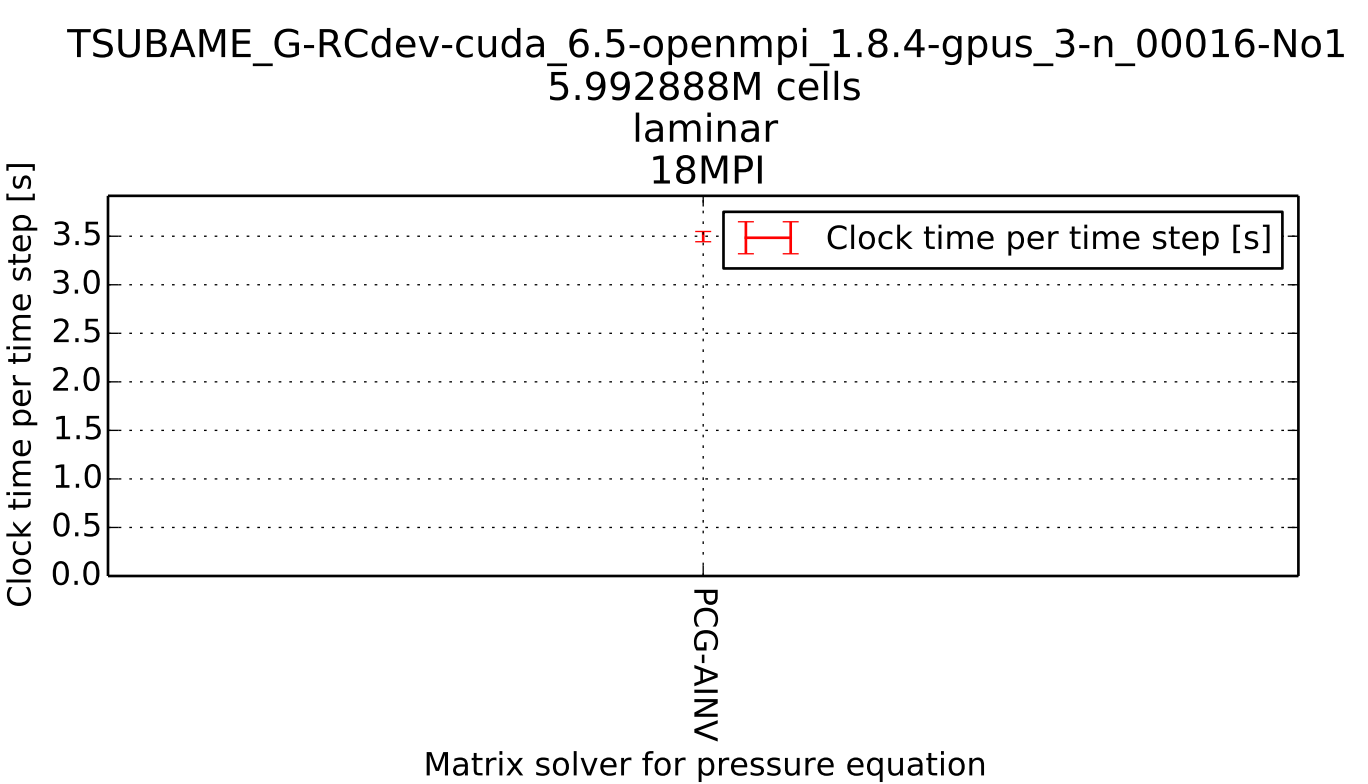
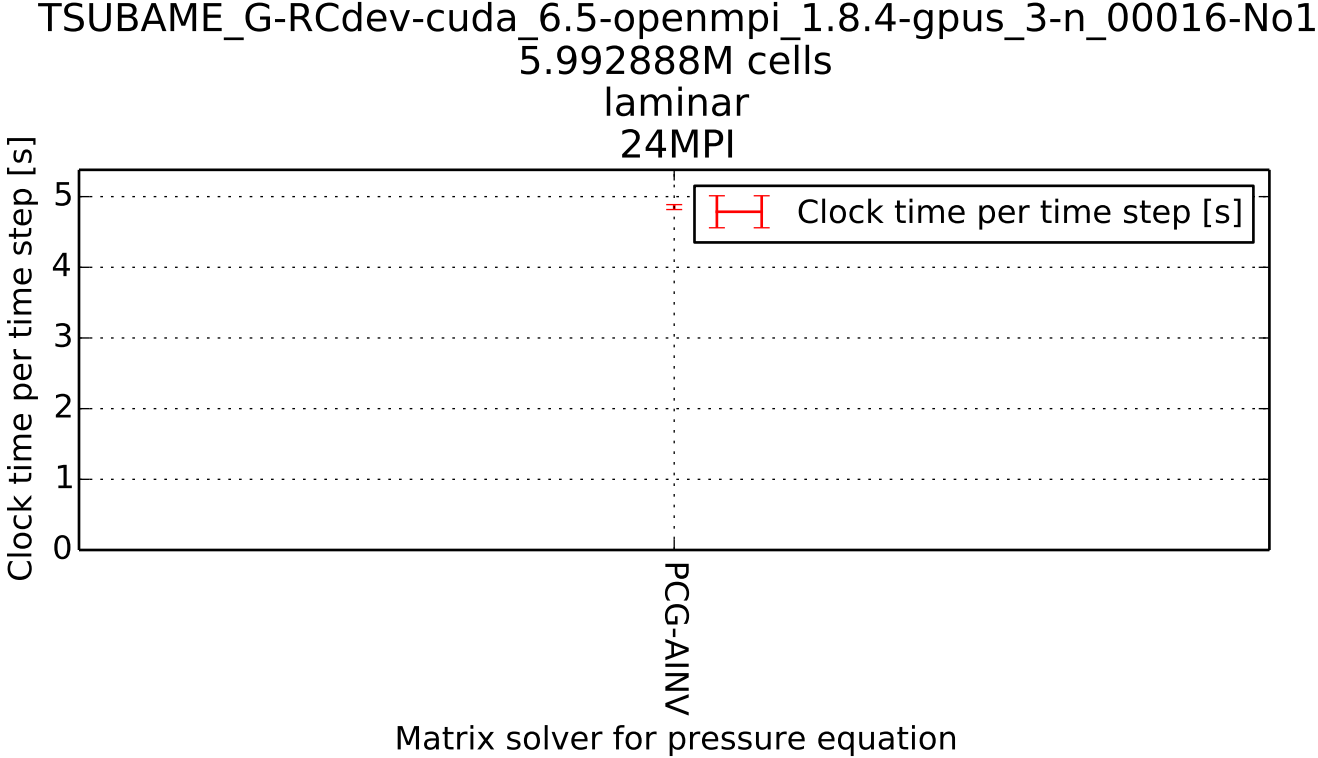

TSUBAME_G-RCdev-cuda_6.5-openmpi_1.8.4-gpus_3-n_00016-No1
5.992888M cells
laminar
3MPI
Clock time per time step [s]
0
2
4
6
8
10
12
Clock time per time step [s]
PCG-AINV
Matrix solver for pressure equation

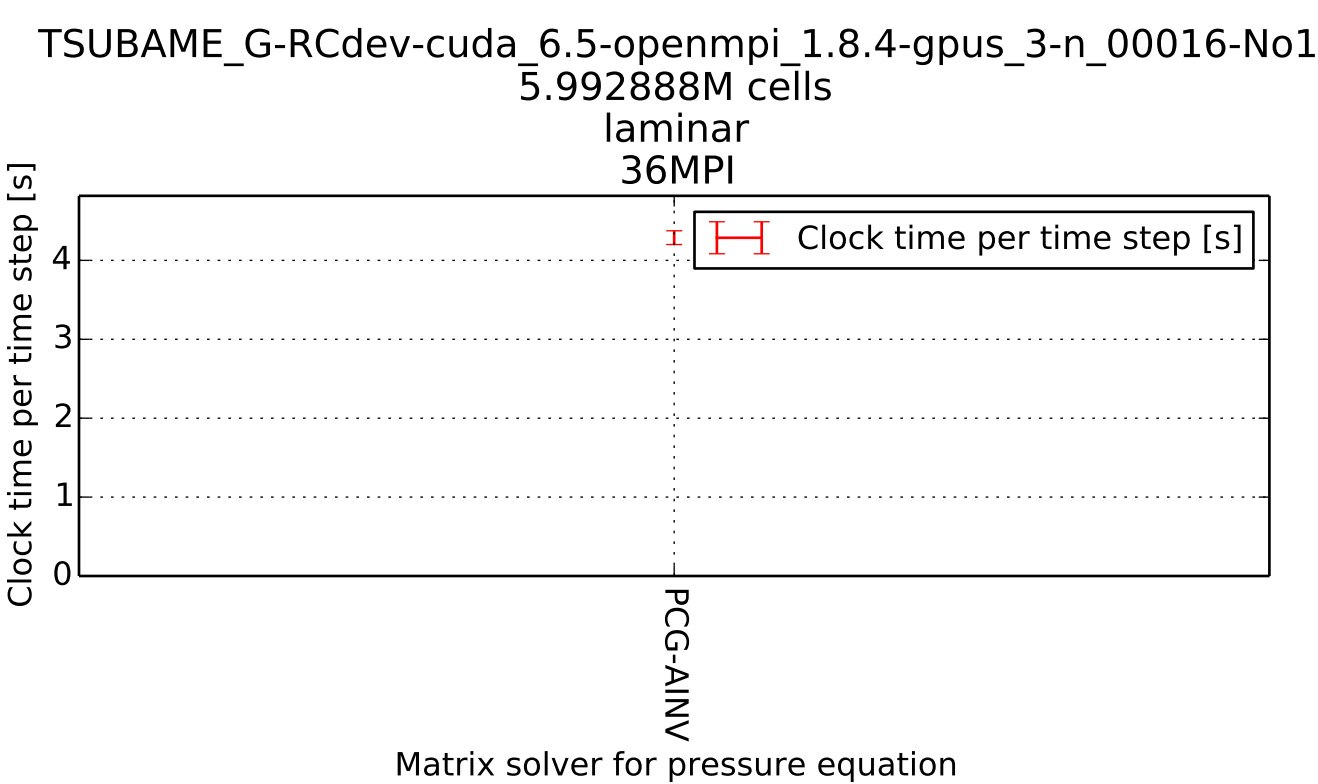

TSUBAME_G-RCdev-cuda_6.5-openmpi_1.8.4-gpus_3-n_00016-No1
5.992888M cells
laminar
6MPI
Clock time per time step [s]
0
1
2
3
4
5
6
7
Clock time per time step [s]
PCG-AINV
Matrix solver for pressure equation

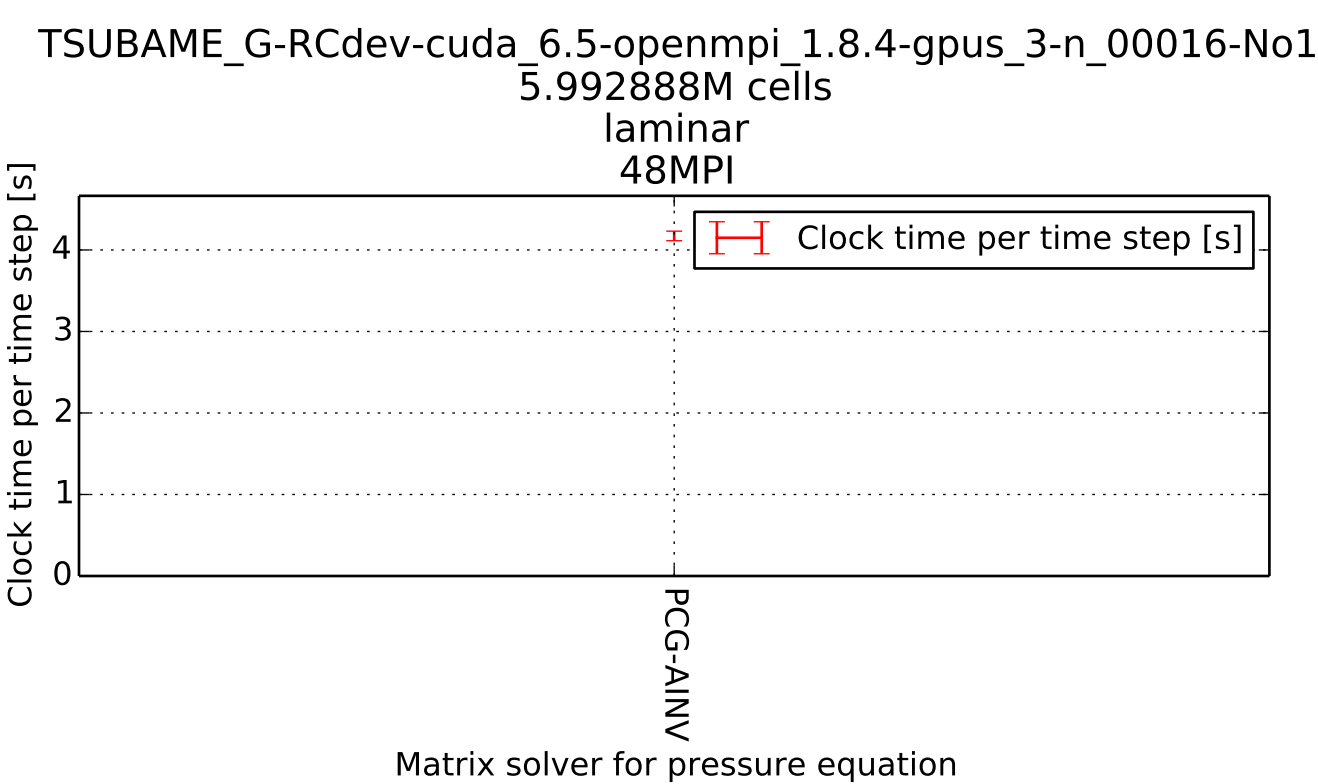

TSUBAME_G-RCdev-cuda_6.5-openmpi_1.8.4-gpus_3-n_00016-No1
5.992888M cells
laminar
9MPI
Clock time per time step [s]
0
1
2
3
4
5
6
Clock time per time step [s]
PCG-AINV
Matrix solver for pressure equation

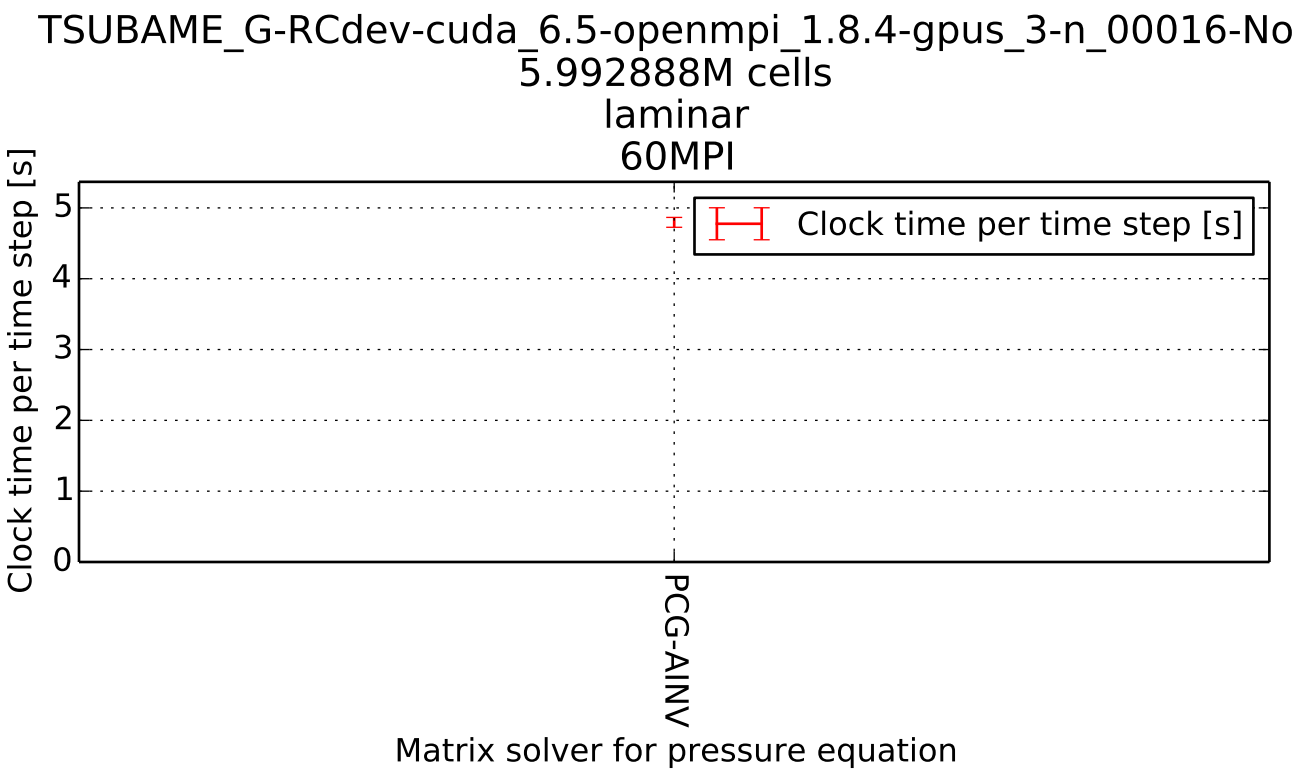

TSUBAME_G-RCdev-cuda_6.5-openmpi_1.8.4-gpus_3-n_00016-No1
5.992888M cells
laminar
12MPI
Clock time per time step [s]
0
1
2
3
4
5
6
Clock time per time step [s]
PCG-AINV
Matrix solver for pressure equation

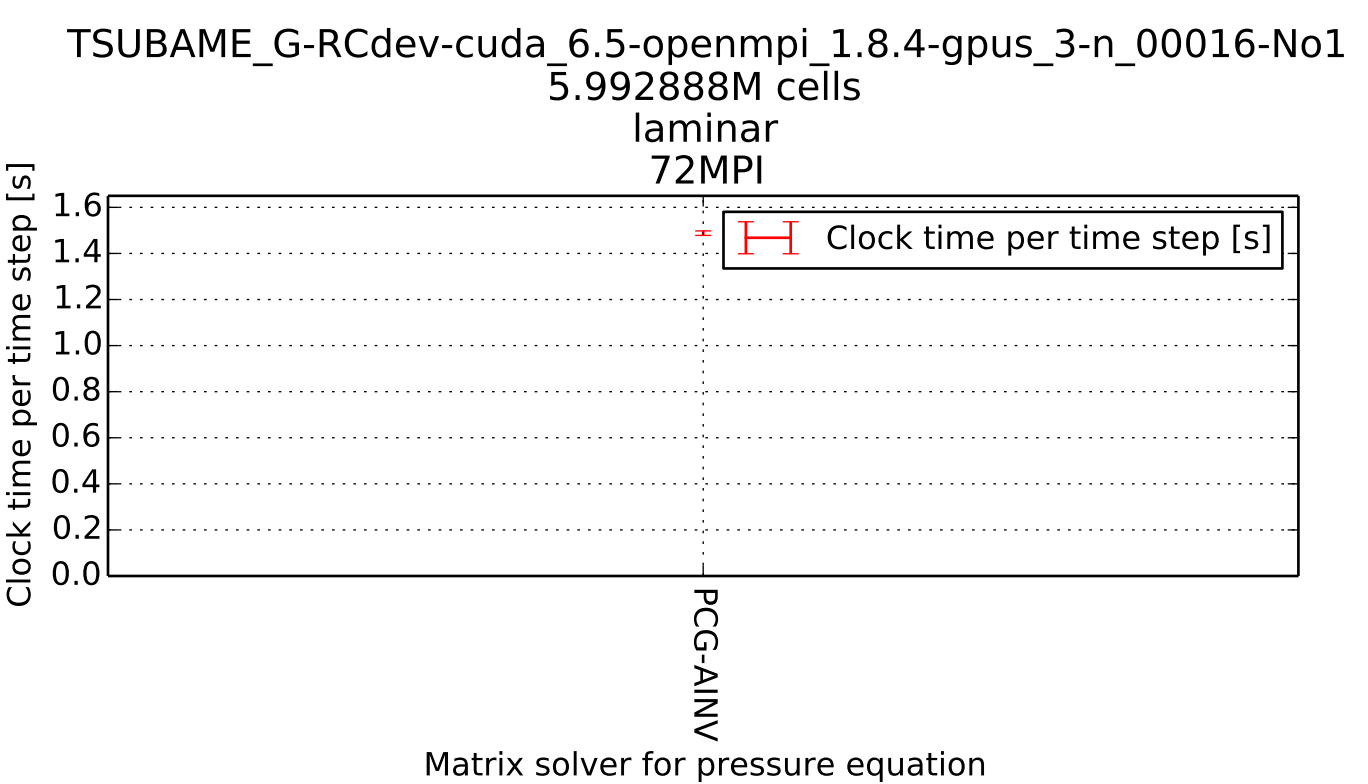

TSUBAME_G-RCdev-cuda_6.5-openmpi_1.8.4-gpus_3-n_00016-No1
5.992888M cells
laminar
18MPI
Clock time per time step [s]
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Clock time per time step [s]
PCG-AINV
Matrix solver for pressure equation

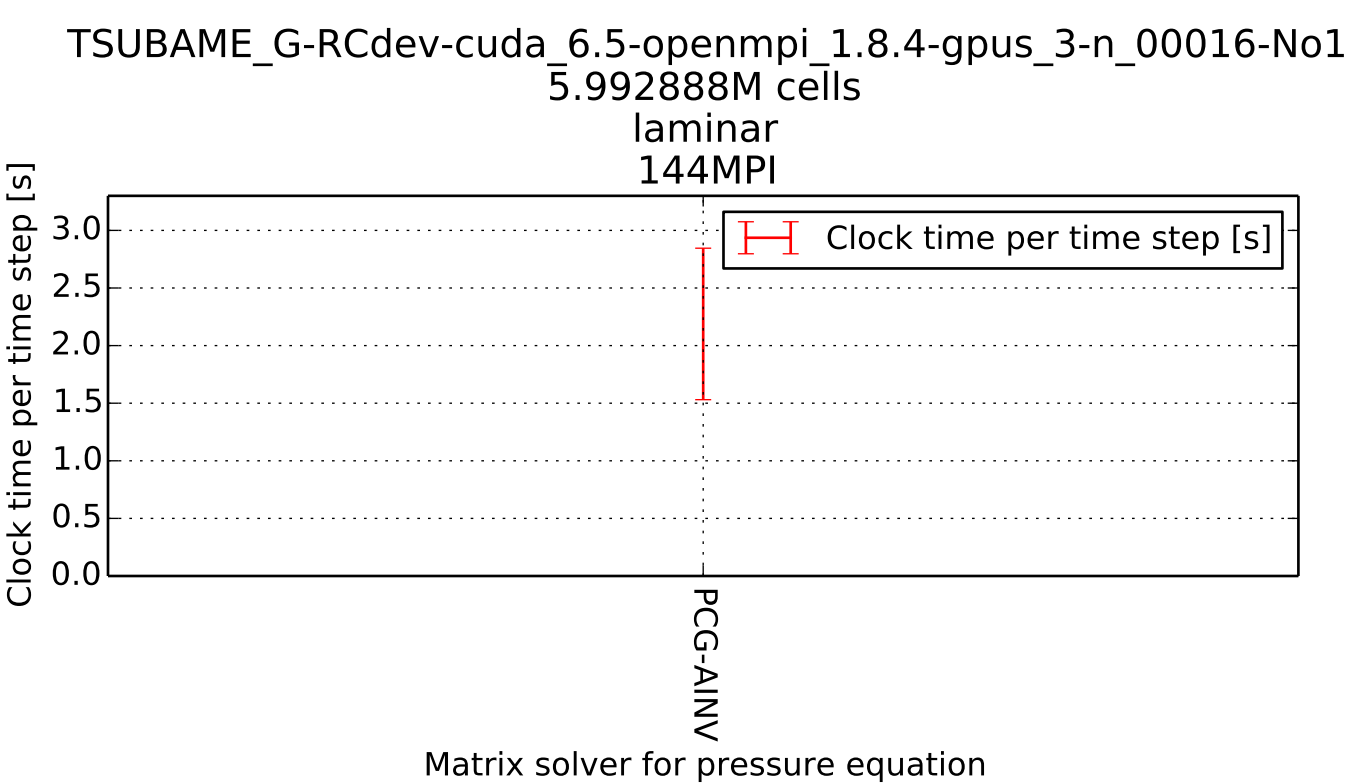

TSUBAME_G-RCdev-cuda_6.5-openmpi_1.8.4-gpus_3-n_00016-No1
5.992888M cells
laminar
24MPI
Clock time per time step [s]
0
1
2
3
4
5
Clock time per time step [s]
PCG-AINV
Matrix solver for pressure equation

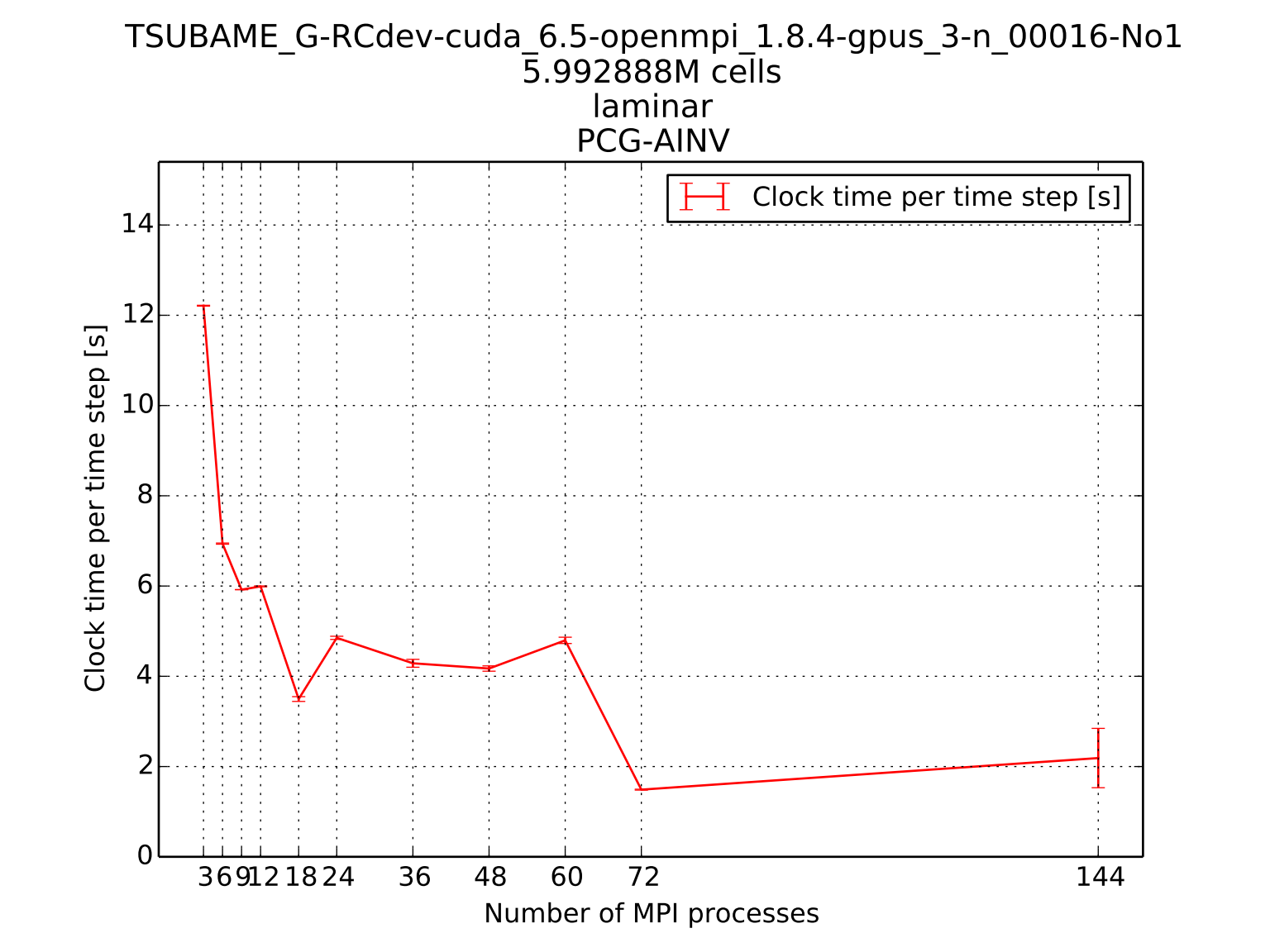

TSUBAME_G-RCdev-cuda_6.5-openmpi_1.8.4-gpus_3-n_00016-No1
5.992888M cells
laminar
36MPI
Clock time per time step [s]
Clock time per time step [s]
0
1
2
3
4
PCG-AINV
Matrix solver for pressure equation

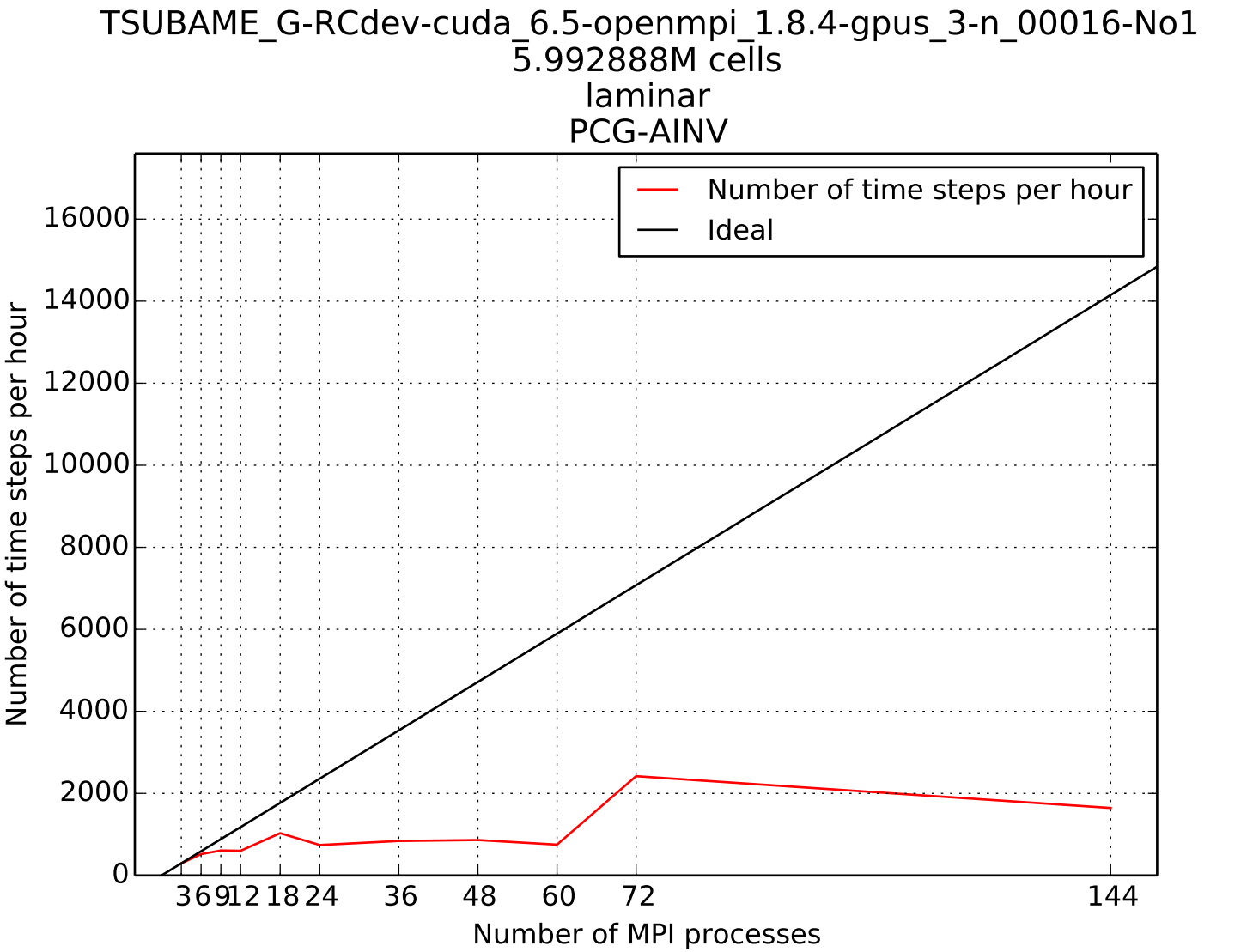

TSUBAME_G-RCdev-cuda_6.5-openmpi_1.8.4-gpus_3-n_00016-No1
5.992888M cells
laminar
48MPI
Clock time per time step [s]
Clock time per time step [s]
0
1
2
3
4
PCG-AINV
Matrix solver for pressure equation

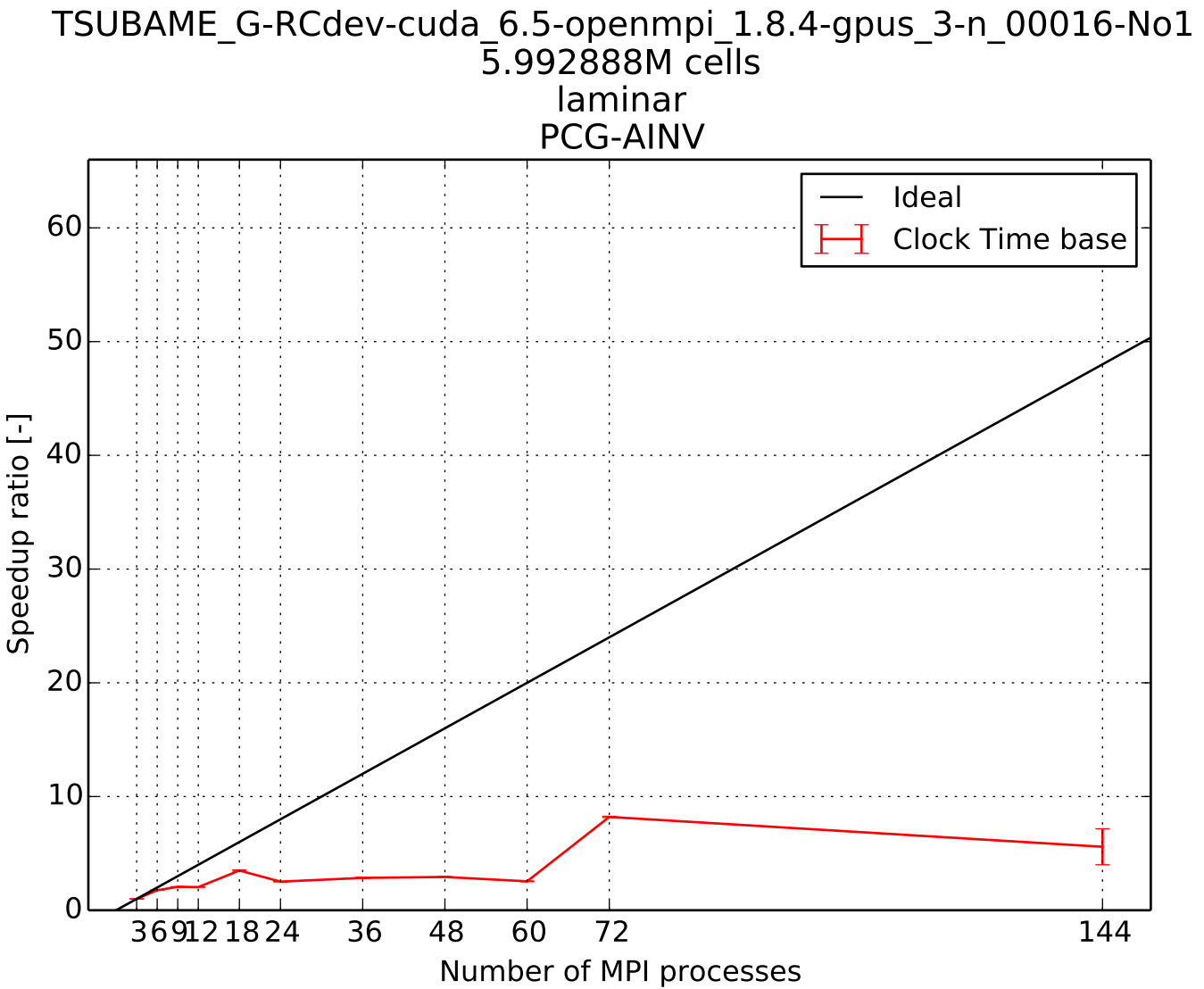

TSUBAME_G-RCdev-cuda_6.5-openmpi_1.8.4-gpus_3-n_00016-No1
5.992888M cells
laminar
60MPI
Clock time per time step [s]
0
1
2
3
4
5
Clock time per time step [s]
PCG-AINV
Matrix solver for pressure equation

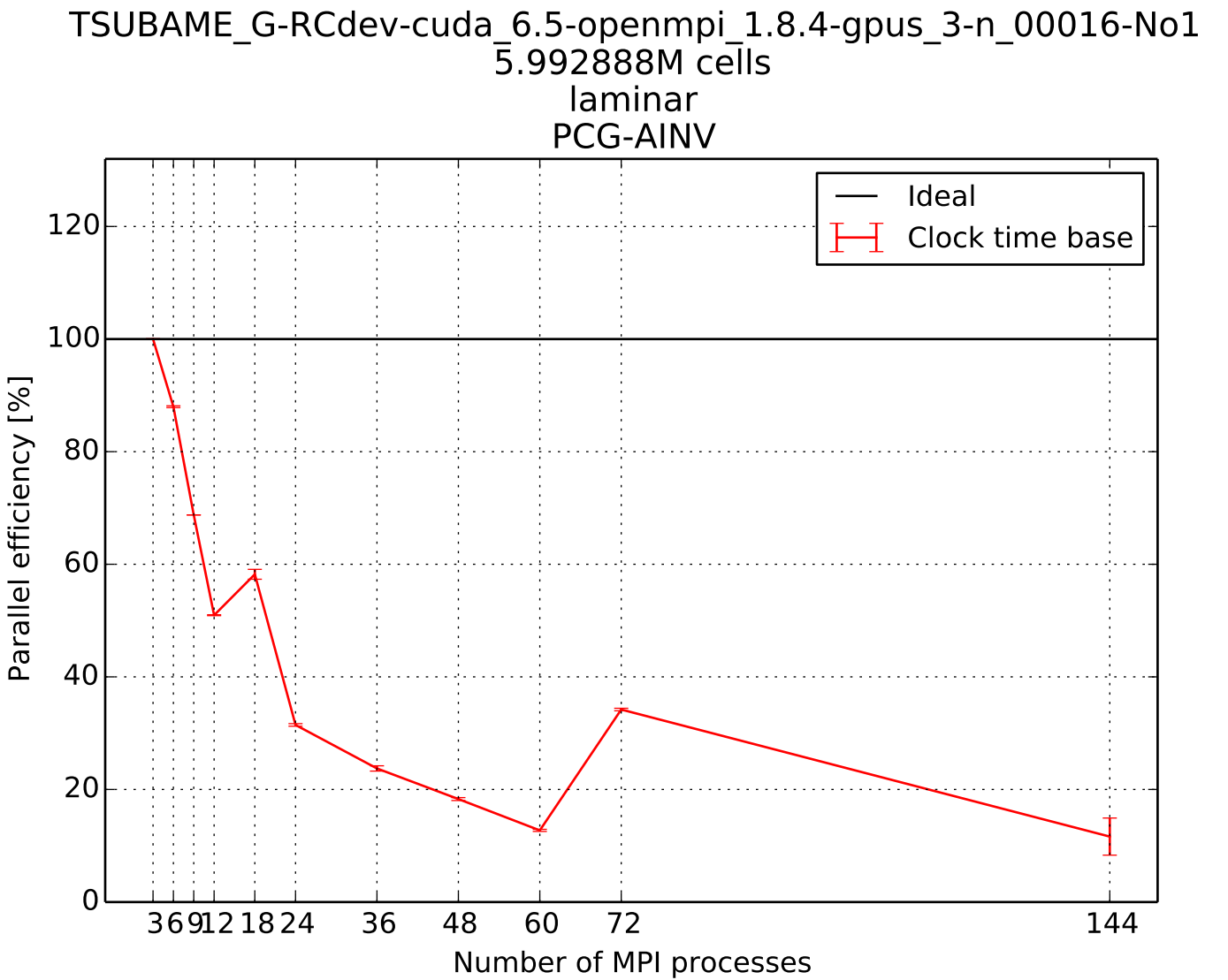

TSUBAME_G-RCdev-cuda_6.5-openmpi_1.8.4-gpus_3-n_00016-No1
5.992888M cells
laminar
72MPI
Clock time per time step [s]
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Clock time per time step [s]
PCG-AINV
Matrix solver for pressure equation


TSUBAME_G-RCdev-cuda_6.5-openmpi_1.8.4-gpus_3-n_00016-No1
5.992888M cells
laminar
144MPI
Clock time per time step [s]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Clock time per time step [s]
PCG-AINV
Matrix solver for pressure equation


TSUBAME_G-RCdev-cuda_6.5-openmpi_1.8.4-gpus_3-n_00016-No1
5.992888M cells
laminar
PCG-AINV
Clock time per time step [s]
Clock time per time step [s]
Number of MPI processes
0
2
4
6
8
10
12
14
3
6
9
12
18
24
36
48
60
72
144


TSUBAME_G-RCdev-cuda_6.5-openmpi_1.8.4-gpus_3-n_00016-No1
5.992888M cells
laminar
PCG-AINV
Number of time steps per hour
Ideal
Number of time steps per hour
0
2000
4000
6000
8000
10000
12000
14000
16000
3 6 9 12 18 24 36 48 60 72 144
Number of MPI processes


TSUBAME_G-RCdev-cuda_6.5-openmpi_1.8.4-gpus_3-n_00016-No1
5.992888M cells
laminar
PCG-AINV
Ideal
Clock Time base
Speedup ratio [-]
0
10
20
30
40
50
60
3
6
9
12
18
24
36
48
60
72
144
Number of MPI processes


TSUBAME_G-RCdev-cuda_6.5-openmpi_1.8.4-gpus_3-n_00016-No1
5.992888M cells
laminar
PCG-AINV
Ideal
Clock time base
Parallel efficiency [%]
0
20
40
60
80
100
120
3 6 9 12 18 24 36 48 60 72 144
Number of MPI processes