TABLE I. Time used for different number of threads in parallelization at temperature level. A quad-core, 8 thread CPU has been used for the ising model initialized with a 5×5 lattice with randomized initial spins and temperature $T = 1$ J/k_B

Number of threads	1	4	8
Time used (s)	29.12	8.42	7.32
speed up factor	1	0.29	0.25

In table I we see that parallelizing our code can reduce computation time a factor of 0.25 using 8 threads for an 8 thread CPU. We also see that a 4 thread parallelization performs well with a 0.29 reduction.

From our timing test using parallelization at temperature level we saw a great reduction in computation time when using more threads. Here it is important to notice that these timings are performed on a quad-core 8 thread CPU and can only be reproduced using a similar