

Canonical ensemble with temperature: 80 K

0% Cycle time: 0s Energy: 536.388 Temperature: 83.5141  
1% Cycle time: 21s Energy: 483.568 Temperature: 80.6696  
3% Cycle time: 17s Energy: 471.6 Temperature: 79.508  
5% Cycle time: 24s Energy: 474.361 Temperature: 79.9859  
6% Cycle time: 28s Energy: 468.557 Temperature: 78.5458  
8% Cycle time: 32s Energy: 465.532 Temperature: 79.6896  
10% Cycle time: 26s Energy: 477.556 Temperature: 80.7054  
11% Cycle time: 21s Energy: 465.064 Temperature: 79.0031  
13% Cycle time: 20s Energy: 463.152 Temperature: 79.8347  
15% Cycle time: 17s Energy: 469.691 Temperature: 79.8909  
16% Cycle time: 17s Energy: 467.501 Temperature: 79.6314  
18% Cycle time: 21s Energy: 466.815 Temperature: 81.0513  
20% Cycle time: 20s Energy: 457.214 Temperature: 79.5763  
21% Cycle time: 29s Energy: 462.88 Temperature: 79.839  
23% Cycle time: 39s Energy: 461.209 Temperature: 80.5773  
25% Cycle time: 20s Energy: 466.547 Temperature: 80.7826  
26% Cycle time: 17s Energy: 464.192 Temperature: 79.4459  
28% Cycle time: 17s Energy: 465.539 Temperature: 80.4052  
30% Cycle time: 17s Energy: 460.094 Temperature: 80.0829  
31% Cycle time: 17s Energy: 459.857 Temperature: 79.9716  
33% Cycle time: 17s Energy: 468.252 Temperature: 80.2328  
35% Cycle time: 17s Energy: 458.222 Temperature: 79.9538  
36% Cycle time: 17s Energy: 447.485 Temperature: 78.4749  
38% Cycle time: 17s Energy: 461.581 Temperature: 81.0846  
40% Cycle time: 17s Energy: 447.921 Temperature: 80.3899  
41% Cycle time: 18s Energy: 452.672 Temperature: 80.7902  
43% Cycle time: 17s Energy: 453.917 Temperature: 79.3738  
45% Cycle time: 17s Energy: 455.597 Temperature: 81.1588  
46% Cycle time: 17s Energy: 444.376 Temperature: 79.6829  
48% Cycle time: 17s Energy: 453.552 Temperature: 80.1922  
50% Cycle time: 17s Energy: 464.415 Temperature: 81.6519  
51% Cycle time: 17s Energy: 463.104 Temperature: 80.9428  
53% Cycle time: 21s Energy: 459.078 Temperature: 80.6123  
55% Cycle time: 17s Energy: 454.513 Temperature: 81.0264  
56% Cycle time: 16s Energy: 451.385 Temperature: 80.938  
58% Cycle time: 16s Energy: 446.503 Temperature: 80.9837  
60% Cycle time: 17s Energy: 454.206 Temperature: 80.6205  
61% Cycle time: 17s Energy: 444.642 Temperature: 80.6477  
63% Cycle time: 16s Energy: 449.614 Temperature: 78.3526  
65% Cycle time: 16s Energy: 451.43 Temperature: 78.9918  
66% Cycle time: 17s Energy: 461.923 Temperature: 79.8274  
68% Cycle time: 17s Energy: 456.419 Temperature: 79.3172  
70% Cycle time: 17s Energy: 457.831 Temperature: 80.0116  
71% Cycle time: 17s Energy: 462.18 Temperature: 79.3319  
73% Cycle time: 17s Energy: 473.705 Temperature: 80.1834  
75% Cycle time: 17s Energy: 465.849 Temperature: 79.4641  
76% Cycle time: 17s Energy: 468.412 Temperature: 80.3723  
78% Cycle time: 17s Energy: 478.766 Temperature: 80.7061  
80% Cycle time: 17s Energy: 481.851 Temperature: 80.9305  
81% Cycle time: 16s Energy: 473.313 Temperature: 80.7947  
83% Cycle time: 17s Energy: 469.045 Temperature: 79.9081  
85% Cycle time: 16s Energy: 466.467 Temperature: 79.3154  
86% Cycle time: 16s Energy: 461.616 Temperature: 78.7822  
88% Cycle time: 16s Energy: 463.787 Temperature: 78.0271  
90% Cycle time: 17s Energy: 465.679 Temperature: 81.0321  
91% Cycle time: 17s Energy: 456.908 Temperature: 79.0105  
93% Cycle time: 17s Energy: 453.764 Temperature: 78.8215  
95% Cycle time: 17s Energy: 451.262 Temperature: 79.2505  
96% Cycle time: 17s Energy: 451.228 Temperature: 79.5394  
98% Cycle time: 17s Energy: 459.671 Temperature: 81.9225

Average energy: 462.462 Average kinetic: 514.367 Average potential: -51.9052 Average temperature: 80.0207

Canonical ensemble with temperature: 70 K

0% Cycle time: 0s Energy: 435.667 Temperature: 67.8448  
1% Cycle time: 17s Energy: 422.214 Temperature: 69.5655  
3% Cycle time: 17s Energy: 412.093 Temperature: 69.6052  
5% Cycle time: 17s Energy: 412.191 Temperature: 70.5818  
6% Cycle time: 17s Energy: 401.274 Temperature: 69.9227  
8% Cycle time: 17s Energy: 393.171 Temperature: 69.8241  
10% Cycle time: 17s Energy: 398.218 Temperature: 70.7595  
11% Cycle time: 17s Energy: 395.942 Temperature: 70.8458  
13% Cycle time: 17s Energy: 396.804 Temperature: 71.4361  
15% Cycle time: 17s Energy: 389.201 Temperature: 70.1012  
16% Cycle time: 17s Energy: 392.61 Temperature: 70.107  
18% Cycle time: 16s Energy: 392.378 Temperature: 70.5768  
20% Cycle time: 16s Energy: 400.005 Temperature: 69.7453  
21% Cycle time: 16s Energy: 399.488 Temperature: 70.6086  
23% Cycle time: 17s Energy: 391.407 Temperature: 69.631  
25% Cycle time: 17s Energy: 396.168 Temperature: 70.3547  
26% Cycle time: 17s Energy: 384.284 Temperature: 70.2413  
28% Cycle time: 17s Energy: 385.019 Temperature: 70.3432  
30% Cycle time: 17s Energy: 379.741 Temperature: 69.8903  
31% Cycle time: 17s Energy: 379.345 Temperature: 69.5456  
33% Cycle time: 17s Energy: 384.44 Temperature: 69.5132  
35% Cycle time: 17s Energy: 395.941 Temperature: 70.632  
36% Cycle time: 17s Energy: 378.698 Temperature: 69.4988  
38% Cycle time: 17s Energy: 380.038 Temperature: 68.631  
40% Cycle time: 17s Energy: 386.01 Temperature: 70.9648  
41% Cycle time: 17s Energy: 384.801 Temperature: 69.9658  
43% Cycle time: 17s Energy: 383.426 Temperature: 69.0001  
45% Cycle time: 17s Energy: 364.606 Temperature: 68.1353  
46% Cycle time: 17s Energy: 385.851 Temperature: 70.2647  
48% Cycle time: 17s Energy: 381.682 Temperature: 69.9355  
50% Cycle time: 17s Energy: 378.005 Temperature: 68.5628  
51% Cycle time: 17s Energy: 396.883 Temperature: 70.1245  
53% Cycle time: 17s Energy: 394.714 Temperature: 69.0518  
55% Cycle time: 17s Energy: 392.555 Temperature: 70.014  
56% Cycle time: 17s Energy: 379.333 Temperature: 69.3021  
58% Cycle time: 17s Energy: 393.039 Temperature: 69.8393  
60% Cycle time: 20s Energy: 387.41 Temperature: 70.0981  
61% Cycle time: 19s Energy: 388.685 Temperature: 69.8449  
63% Cycle time: 18s Energy: 378.943 Temperature: 71.8389  
65% Cycle time: 17s Energy: 372.886 Temperature: 71.0885  
66% Cycle time: 17s Energy: 373.962 Temperature: 69.5209  
68% Cycle time: 17s Energy: 379.629 Temperature: 70.7509  
70% Cycle time: 17s Energy: 374.532 Temperature: 70.65  
71% Cycle time: 17s Energy: 375.345 Temperature: 70.1021  
73% Cycle time: 17s Energy: 374.03 Temperature: 70.5015  
75% Cycle time: 17s Energy: 373.114 Temperature: 69.9851  
76% Cycle time: 17s Energy: 364.178 Temperature: 69.6273  
78% Cycle time: 17s Energy: 382.217 Temperature: 71.2471  
80% Cycle time: 17s Energy: 377.157 Temperature: 70.5457  
81% Cycle time: 25s Energy: 369.839 Temperature: 69.0927  
83% Cycle time: 17s Energy: 368.619 Temperature: 70.5548  
85% Cycle time: 17s Energy: 358.366 Temperature: 69.8413  
86% Cycle time: 17s Energy: 361.156 Temperature: 70.0074  
88% Cycle time: 22s Energy: 373.288 Temperature: 70.9298  
90% Cycle time: 17s Energy: 367.508 Temperature: 69.8507  
91% Cycle time: 22s Energy: 376.859 Temperature: 69.9361  
93% Cycle time: 17s Energy: 370.313 Temperature: 70.7594  
95% Cycle time: 17s Energy: 370.804 Temperature: 69.9444

96% Cycle time: 17s Energy: 374.559 Temperature: 70.58  
98% Cycle time: 18s Energy: 372.388 Temperature: 70.8506  
Average energy: 367.941 Average kinetic: 449.795 Average potential: -81.8532 Average temperature: 69.9751

Canonical ensemble with temperature: 395 K

0% Cycle time: 0s Energy: 2476.76 Temperature: 385.381  
1% Cycle time: 18s Energy: 2519.83 Temperature: 395.592  
3% Cycle time: 17s Energy: 2515.58 Temperature: 395.155  
5% Cycle time: 17s Energy: 2519.08 Temperature: 396.29  
6% Cycle time: 17s Energy: 2519.27 Temperature: 395.118  
8% Cycle time: 17s Energy: 2514.82 Temperature: 394.05  
10% Cycle time: 17s Energy: 2513.02 Temperature: 394.564  
11% Cycle time: 17s Energy: 2511.51 Temperature: 392.878  
13% Cycle time: 17s Energy: 2518.61 Temperature: 396.496  
15% Cycle time: 17s Energy: 2511.35 Temperature: 393.375  
16% Cycle time: 17s Energy: 2524.02 Temperature: 397.839  
18% Cycle time: 17s Energy: 2509.01 Temperature: 394.489  
20% Cycle time: 16s Energy: 2515.34 Temperature: 395.497  
21% Cycle time: 16s Energy: 2521.39 Temperature: 394.636  
23% Cycle time: 19s Energy: 2522.5 Temperature: 396.824  
25% Cycle time: 17s Energy: 2521.3 Temperature: 395.817  
26% Cycle time: 16s Energy: 2522.69 Temperature: 396.291  
28% Cycle time: 16s Energy: 2521.24 Temperature: 395.272  
30% Cycle time: 16s Energy: 2522.4 Temperature: 396.367  
31% Cycle time: 16s Energy: 2509.19 Temperature: 393.381  
33% Cycle time: 17s Energy: 2518.03 Temperature: 395.763  
35% Cycle time: 17s Energy: 2514.37 Temperature: 395.147  
36% Cycle time: 17s Energy: 2518.79 Temperature: 395.155  
38% Cycle time: 16s Energy: 2520.76 Temperature: 395.106  
40% Cycle time: 16s Energy: 2515.72 Temperature: 395.824  
41% Cycle time: 17s Energy: 2516.94 Temperature: 394.524  
43% Cycle time: 17s Energy: 2521.06 Temperature: 395.319  
45% Cycle time: 17s Energy: 2516.38 Temperature: 396.004  
46% Cycle time: 17s Energy: 2512.84 Temperature: 393.618  
48% Cycle time: 17s Energy: 2519.05 Temperature: 394.925  
50% Cycle time: 17s Energy: 2517.44 Temperature: 395.241  
51% Cycle time: 16s Energy: 2516.45 Temperature: 394.583  
53% Cycle time: 17s Energy: 2511.5 Temperature: 394.899  
55% Cycle time: 17s Energy: 2516.7 Temperature: 393.258  
56% Cycle time: 17s Energy: 2515.29 Temperature: 394.686  
58% Cycle time: 17s Energy: 2513.81 Temperature: 394.723  
60% Cycle time: 17s Energy: 2517.63 Temperature: 395.313  
61% Cycle time: 17s Energy: 2519.88 Temperature: 393.259  
63% Cycle time: 17s Energy: 2514.45 Temperature: 394.438  
65% Cycle time: 17s Energy: 2519.02 Temperature: 394.963  
66% Cycle time: 17s Energy: 2513 Temperature: 393.847  
68% Cycle time: 19s Energy: 2515.2 Temperature: 394.892  
70% Cycle time: 22s Energy: 2511.53 Temperature: 394.141  
71% Cycle time: 17s Energy: 2520.81 Temperature: 395.007  
73% Cycle time: 16s Energy: 2518.42 Temperature: 393.996  
75% Cycle time: 16s Energy: 2522.52 Temperature: 396.62  
76% Cycle time: 17s Energy: 2521.17 Temperature: 395.1  
78% Cycle time: 18s Energy: 2511.38 Temperature: 395.368  
80% Cycle time: 16s Energy: 2525.71 Temperature: 396.407  
81% Cycle time: 17s Energy: 2521.51 Temperature: 396.509  
83% Cycle time: 17s Energy: 2522.97 Temperature: 396.083  
85% Cycle time: 17s Energy: 2514.68 Temperature: 395.124  
86% Cycle time: 17s Energy: 2514.82 Temperature: 391.833  
88% Cycle time: 17s Energy: 2521.79 Temperature: 396.419  
90% Cycle time: 17s Energy: 2521.63 Temperature: 395.678  
91% Cycle time: 17s Energy: 2512.59 Temperature: 394.521

93% Cycle time: 17s Energy: 2516.87 Temperature: 395.163  
95% Cycle time: 17s Energy: 2513.97 Temperature: 395.035  
96% Cycle time: 17s Energy: 2516.13 Temperature: 395.104  
98% Cycle time: 17s Energy: 2522.09 Temperature: 394.254  
Average energy: 2517.47 Average kinetic: 2539.46 Average potential: -21.993 Average temperature: 395.067

Canonical ensemble with temperature: 405 K

0% Cycle time: 0s Energy: 2617.38 Temperature: 407.257  
1% Cycle time: 17s Energy: 2578.68 Temperature: 404.844  
3% Cycle time: 17s Energy: 2591.33 Temperature: 405.473  
5% Cycle time: 16s Energy: 2584.65 Temperature: 404.655  
6% Cycle time: 16s Energy: 2577.29 Temperature: 403.658  
8% Cycle time: 16s Energy: 2580.6 Temperature: 404.558  
10% Cycle time: 16s Energy: 2583.88 Temperature: 405.854  
11% Cycle time: 16s Energy: 2577.27 Temperature: 404.549  
13% Cycle time: 16s Energy: 2580.74 Temperature: 405.111  
15% Cycle time: 17s Energy: 2580.49 Temperature: 405.882  
16% Cycle time: 17s Energy: 2572.88 Temperature: 403.748  
18% Cycle time: 16s Energy: 2580.88 Temperature: 404.383  
20% Cycle time: 16s Energy: 2580.18 Temperature: 403.766  
21% Cycle time: 16s Energy: 2581.18 Temperature: 404.726  
23% Cycle time: 16s Energy: 2593.89 Temperature: 407.077  
25% Cycle time: 17s Energy: 2585.42 Temperature: 406.437  
26% Cycle time: 17s Energy: 2580.1 Temperature: 405.465  
28% Cycle time: 18s Energy: 2583.44 Temperature: 405.026  
30% Cycle time: 17s Energy: 2571.36 Temperature: 404.749  
31% Cycle time: 16s Energy: 2579.4 Temperature: 404.729  
33% Cycle time: 17s Energy: 2583.97 Temperature: 406.113  
35% Cycle time: 17s Energy: 2582.45 Temperature: 404.104  
36% Cycle time: 17s Energy: 2576.9 Temperature: 405.394  
38% Cycle time: 17s Energy: 2578.88 Temperature: 404.251  
40% Cycle time: 17s Energy: 2584.13 Temperature: 404.719  
41% Cycle time: 25s Energy: 2582.46 Temperature: 405.337  
43% Cycle time: 17s Energy: 2580.19 Temperature: 405.482  
45% Cycle time: 17s Energy: 2584.34 Temperature: 404.975  
46% Cycle time: 17s Energy: 2580.87 Temperature: 405.234  
48% Cycle time: 17s Energy: 2583.58 Temperature: 406.227  
50% Cycle time: 17s Energy: 2581.79 Temperature: 405.279  
51% Cycle time: 17s Energy: 2582.03 Temperature: 406.193  
53% Cycle time: 17s Energy: 2578.62 Temperature: 405.132  
55% Cycle time: 17s Energy: 2581.47 Temperature: 407.387  
56% Cycle time: 17s Energy: 2582.41 Temperature: 406.838  
58% Cycle time: 17s Energy: 2581.24 Temperature: 405.671  
60% Cycle time: 17s Energy: 2588.34 Temperature: 405.315  
61% Cycle time: 17s Energy: 2578.37 Temperature: 403.702  
63% Cycle time: 17s Energy: 2582.08 Temperature: 406.039  
65% Cycle time: 17s Energy: 2581.26 Temperature: 405.346  
66% Cycle time: 17s Energy: 2578.52 Temperature: 405.179  
68% Cycle time: 17s Energy: 2578.37 Temperature: 403.608  
70% Cycle time: 17s Energy: 2579.83 Temperature: 403.429  
71% Cycle time: 17s Energy: 2579.09 Temperature: 404.13  
73% Cycle time: 17s Energy: 2582.76 Temperature: 405.827  
75% Cycle time: 17s Energy: 2587.28 Temperature: 405.954  
76% Cycle time: 16s Energy: 2578.42 Temperature: 405.491  
78% Cycle time: 16s Energy: 2594.58 Temperature: 406.602  
80% Cycle time: 17s Energy: 2583.87 Temperature: 405.395  
81% Cycle time: 17s Energy: 2584.77 Temperature: 406.409  
83% Cycle time: 17s Energy: 2581.81 Temperature: 404.939  
85% Cycle time: 17s Energy: 2580.75 Temperature: 405.23  
86% Cycle time: 17s Energy: 2580.86 Temperature: 404.179  
88% Cycle time: 16s Energy: 2575.75 Temperature: 403.569

90% Cycle time: 16s Energy: 2581.79 Temperature: 404.989  
91% Cycle time: 17s Energy: 2587.14 Temperature: 405.368  
93% Cycle time: 17s Energy: 2589.25 Temperature: 405.547  
95% Cycle time: 17s Energy: 2577.42 Temperature: 405.115  
96% Cycle time: 18s Energy: 2577.31 Temperature: 401.68  
98% Cycle time: 17s Energy: 2578.38 Temperature: 406.026  
Average energy: 2582.14 Average kinetic: 2604.22 Average potential: -22.0737 Average temperature: 405.141