

CH_ENG 8452: ADVANCED CHEMICAL ENGINEERING THERMODYNAMICS II

ASSIGNMENT 5

May 3, 2017

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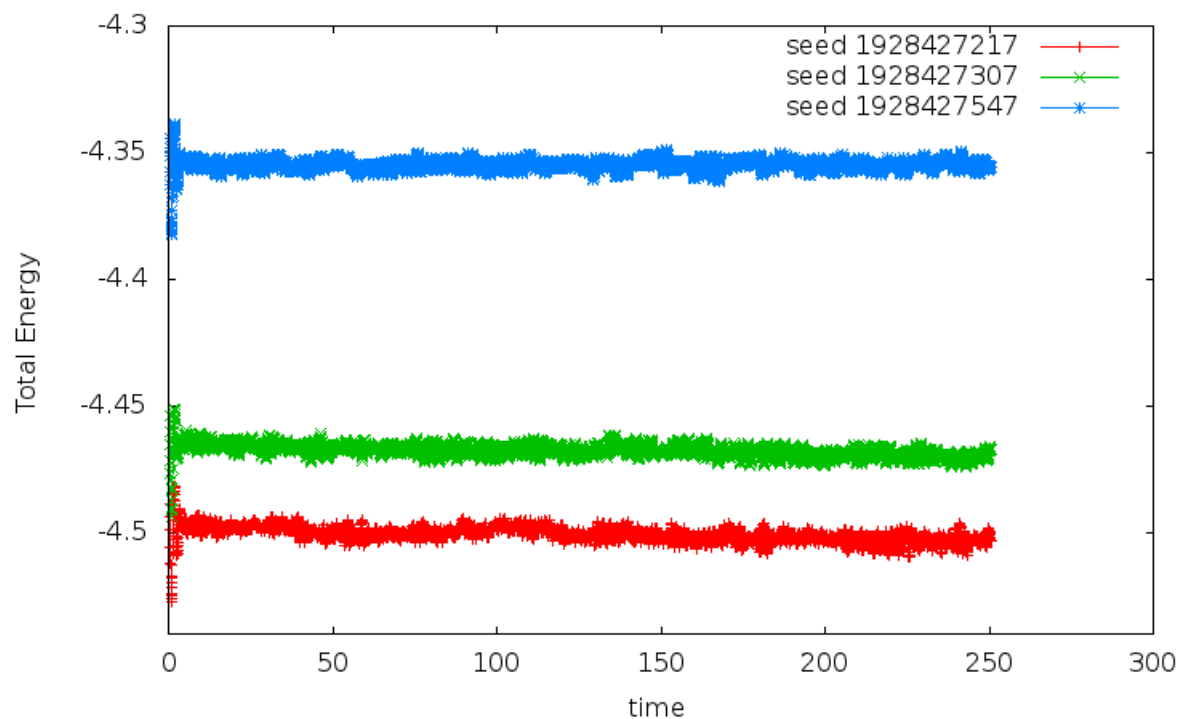


Figure 1: Energy vs time plot for LAMMPS simulation

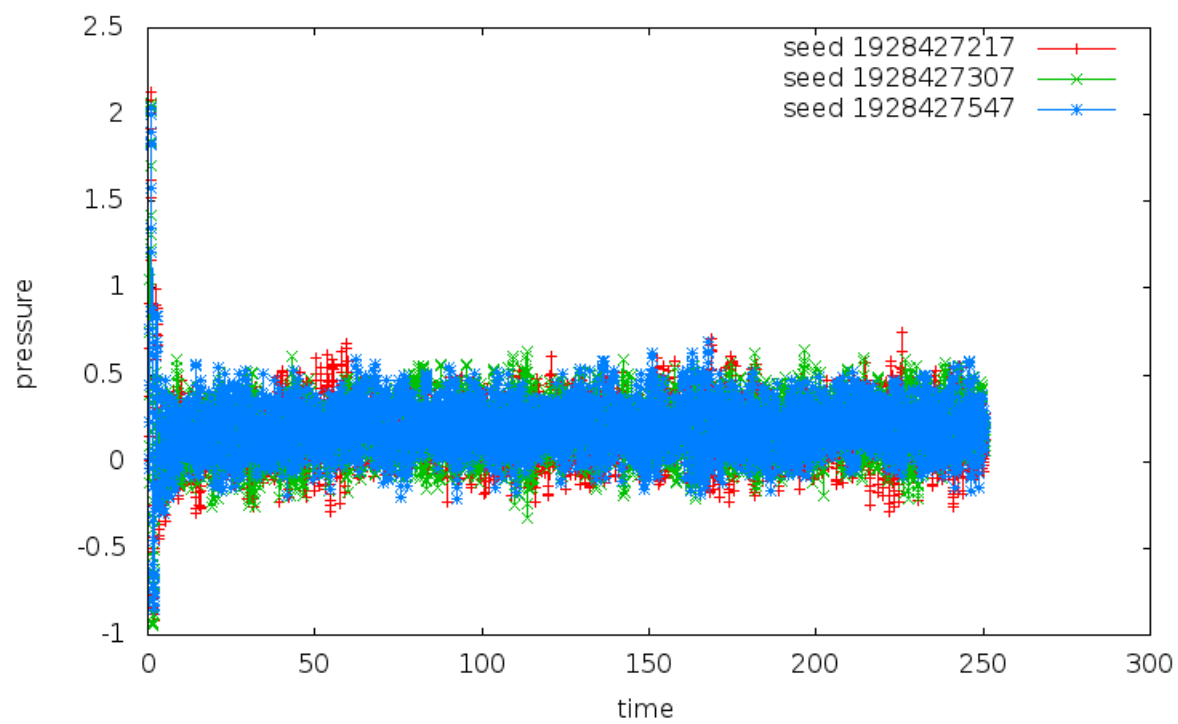


Figure 2: Pressure vs time plot for LAMMPS simulation

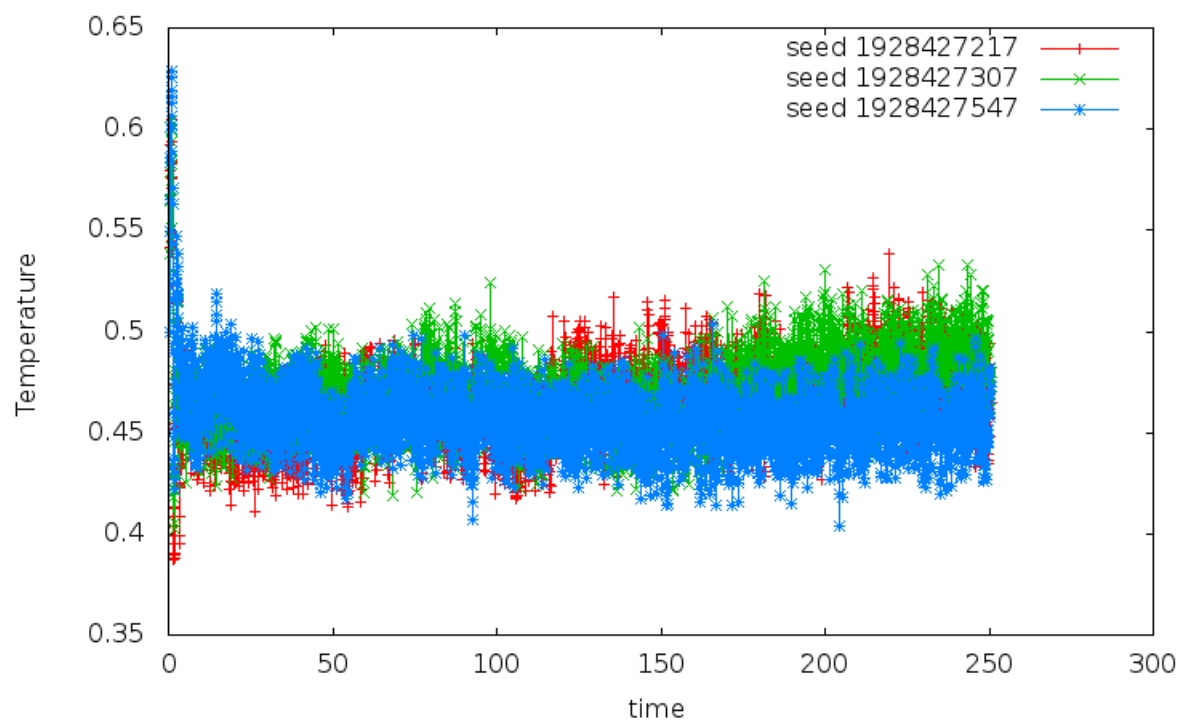


Figure 3: Temperature vs time for LAMMPS simulation

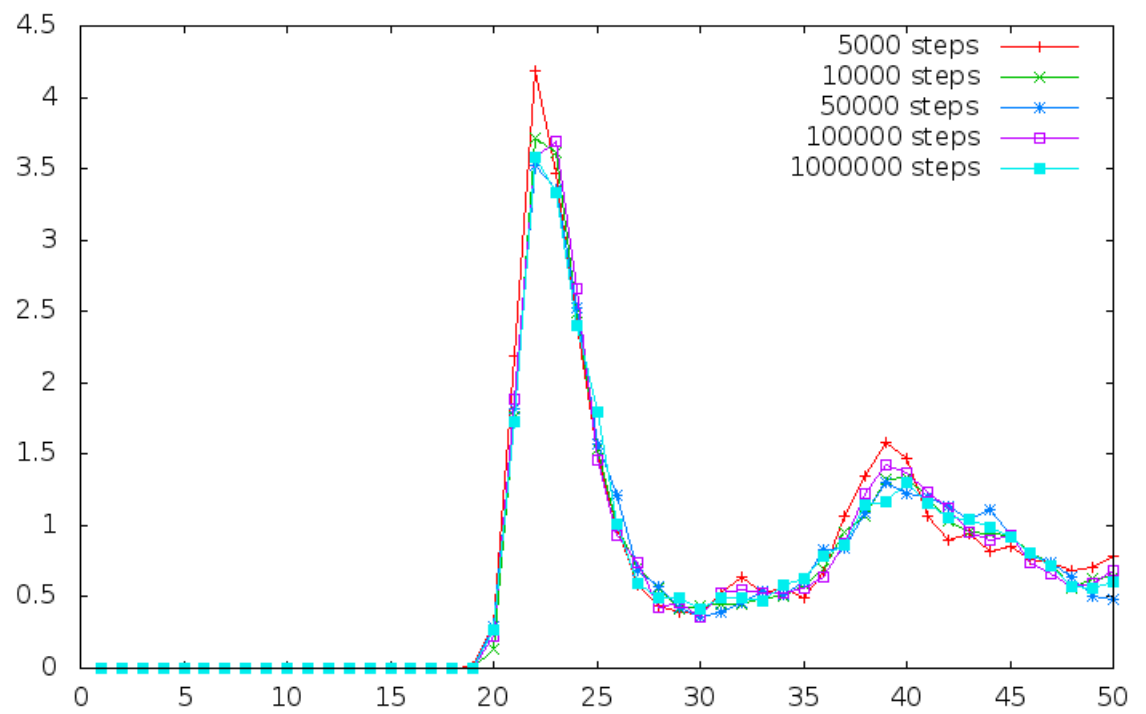


Figure 4: Radial distribution function plot from LAMMPS simulation

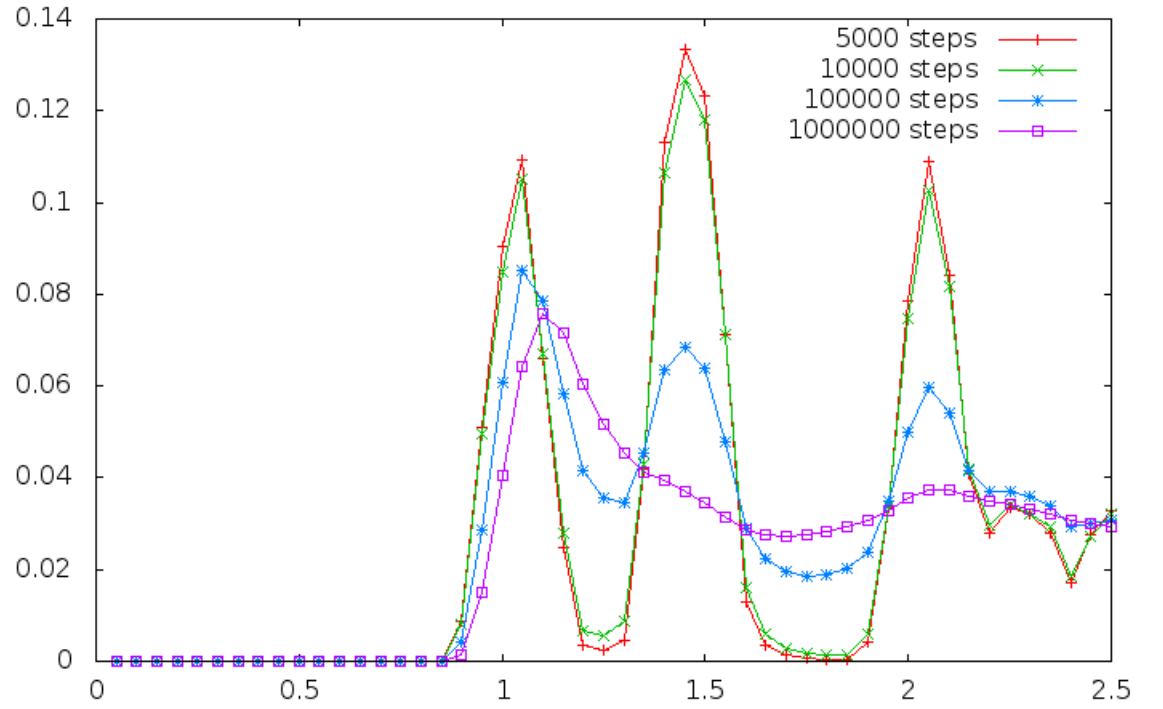


Figure 5: Radial distribution function plot from Monte Carlo program

2. Figure 1 shows the change of energy with respect to time. Energy , temperature(2) and pressure (??) plots are included in the report. Actual thermodynamic propertis (i.e energy, temperature and pressure) should be the average value of the data. Since MD simulation mainly deals with microcanonical ensemble.

1 Conclusion