

My results from running the C version of the provided code are shown in the table below. The data is plotted on the next page.

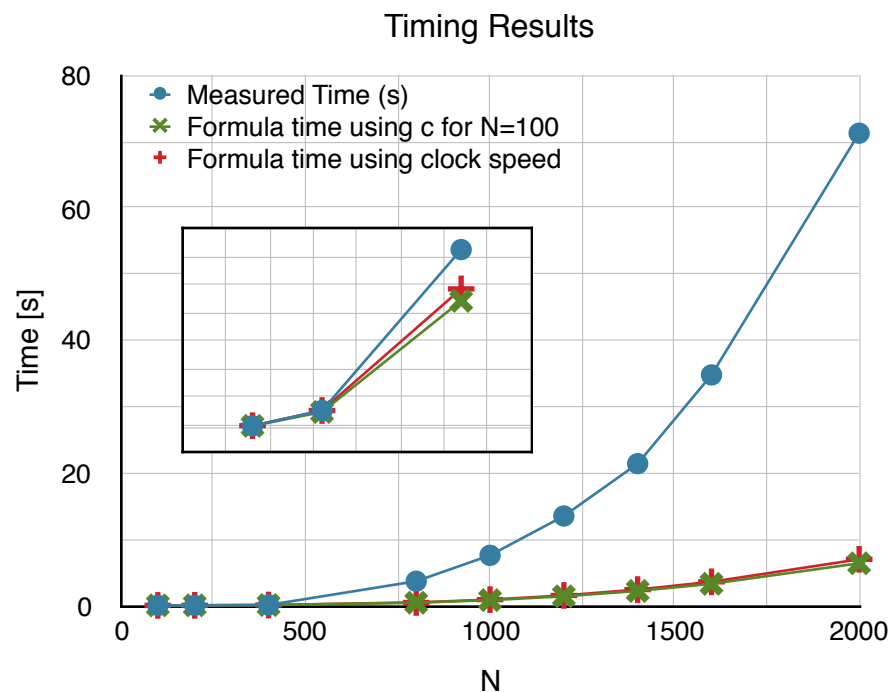
I ran this on my Mac Mini desktop with a 2.3 GHz Intel Core i7 processor.

Constants (in seconds)

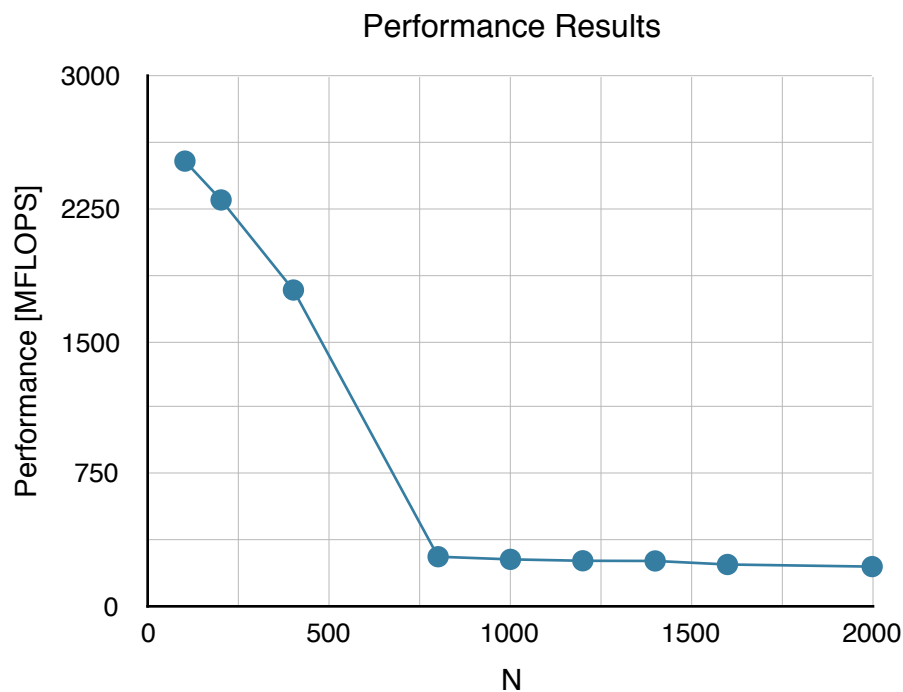
c from first value	3.9750E-10
c from clock	4.3478E-10

Results

Dimension N	Measured Time (s)	Measured Performance (MFLOP/s)	Formula time using c for N=100	Formula time using clock speed
100	7.95E-04	2.52E+03	7.95E-04	8.70E-04
200	6.95E-03	2.30E+03	6.36E-03	6.96E-03
400	7.14E-02	1.79E+03	5.09E-02	5.57E-02
800	3.65E+00	2.80E+02	4.07E-01	4.45E-01
1000	7.56E+00	2.65E+02	7.95E-01	8.70E-01
1200	1.35E+01	2.57E+02	1.37E+00	1.50E+00
1400	2.14E+01	2.56E+02	2.18E+00	2.39E+00
1600	3.48E+01	2.36E+02	3.26E+00	3.56E+00
2000	7.13E+01	2.24E+02	6.36E+00	6.96E+00

**Figure 1:**

The measured data follow the calculated data for the first three points. This is shown in the inset. After that, the measured data grow about a factor of 10 faster than the calculated data.

**Figure 2:**

The measured performance drops off dramatically between N=400 and N=800. Perhaps this is an effect of caching or memory performance.