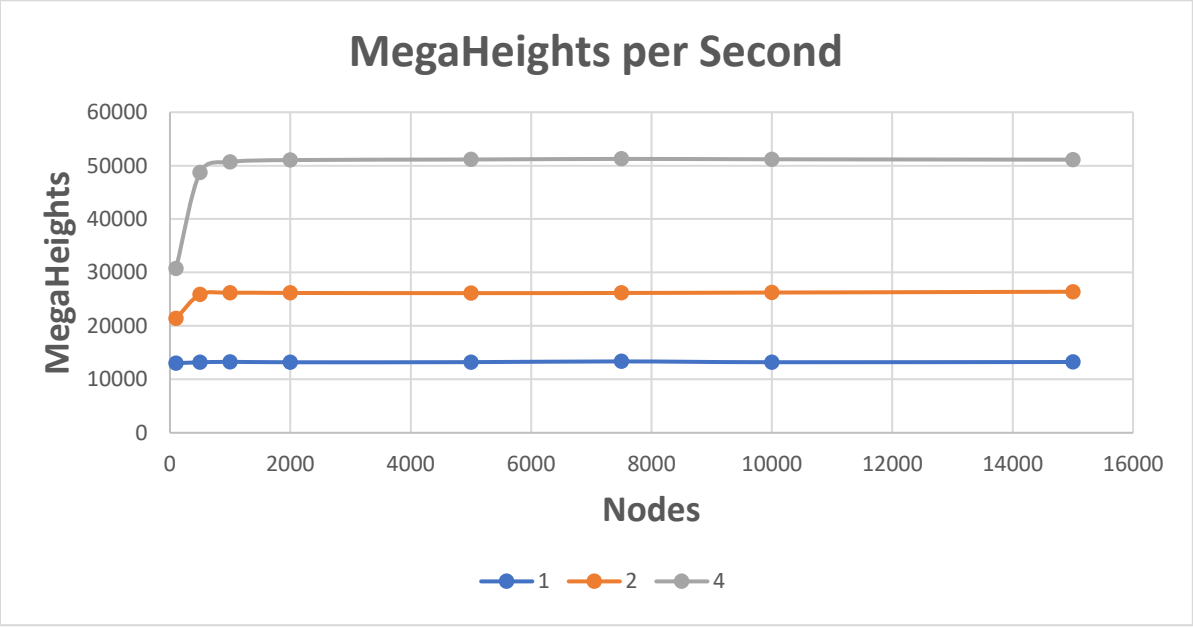
1. All tests were ran on OSU's flip server (flip2), Load average at time of tests: 2.10, 2.08, 1.84
2. As the number of nodes in the test increase the actual volume seems to be approaching **25.3125**
3.

Total Time per X Nodes (in Seconds)									
		Nodes							
		100	500	1000	2000	5000	7500	10000	15000
Threads	1	0.0007678	0.0189589	0.0753287	0.3030982	1.8905377	4.2109385	7.5706165	16.9835941
	2	0.0004674	0.0096632	0.0381476	0.1528458	0.9563699	2.1496600	3.8100713	8.5229272
	4	0.0003251	0.0051329	0.0197251	0.0783633	0.4887746	1.0973176	1.9535194	4.4010615

MegaHeights per Second									
		Nodes							
		100	500	1000	2000	5000	7500	10000	15000
Threads	1	13023.77	13186.41	13275.16	13197.04	13223.75	13358.07	13208.96	13248.08
	2	21397.38	25871.31	26213.96	26170.16	26140.51	26166.93	26246.23	26399.38
	4	30760.95	48705.02	50696.73	51044.27	51148.32	51261.37	51189.66	51124.03

	Nodes							
	100	500	1000	2000	5000	7500	10000	15000
Volume	25.313303	25.312531	25.312509	25.312503	25.312500	25.312500	25.312501	25.312499



4. The MegaHeights per second computed starts out with smaller values for smaller numbers of nodes and then levels off as the number of nodes increase. However the total time per x nodes decreases steadily as the number of threads increases. Total time per x nodes also increases as would be expected when the number of nodes increases.
5. I think the MegaHeights per second works this way because the overhead associated with using OpenMP causes it not to reach optimal efficiency until there are more values to iterate over. The total time per x nodes decreases as the number of threads increase because there are more threads to iterate over the for loop
6. Inverse Amdahl's Law: $F_p = \frac{4}{3} * \frac{16.98-4.40}{16.98} = .987$
7. max *Speedup* = $\frac{1}{1-.987} = 76.92$