

MPI run time:

COMM_SIZE	Size of array				
	1024	2048	4096	8192	16384
1	0.004404	0.003187	0.003538	0.003819	0.010497
2	0.004215	0.004029	0.004111	0.004111	0.003729
4	0.006386	0.005268	0.007023	0.005933	0.006814
8	0.012895	0.011319	0.010845	0.011252	0.012531
16	0.029853	0.018274	0.017299	0.018396	0.021445

MPI Speedup:

COMM_SIZE	Size of array				
	1024	2048	4096	8192	16384
1	1.0	1.0	1.0	1.0	1.0
2	1.04484	0.791015	0.860618	0.928971	2.81496
4	0.689634	0.604973	0.503773	0.643688	1.5405
8	0.341528	0.281562	0.326233	0.339406	0.837683
16	0.147523	0.174401	0.20452	0.207599	0.489485

MPI Efficiency

COMM_SIZE	Size of array				
	1024	2048	4096	8192	16384
1	1.0	1.0	1.0	1.0	1.0
2	0.52242	0.395508	0.430309	0.464486	1.40748
4	0.172408	0.151243	0.125943	0.160922	0.385126
8	0.042691	0.0351952	0.0407792	0.0424258	0.10471
16	0.00922018	0.0109	0.0127825	0.207599	0.0305928

OpenMP run time:

COMM_SIZE	Size of array				
	1024	2048	4096	8192	16384
1	0.005035	0.005475	0.003745	0.004132	0.005269
2	0.005001	0.003913	0.004693	0.005089	0.004623
4	0.004823	0.004873	0.004965	0.004512	0.005487
8	0.005476	0.004755	0.006367	0.005059	0.005021
16	0.004599	0.004533	0.004836	0.005694	0.006610

OpenMP speedup:

COMM_SIZE	Size of array				
	1024	2048	4096	8192	16384
1	1.0	1.0	1.0	1.0	1.0
2	1.00679	1.3991	0.7979	0.81194	1.1397
4	1.04395	1.1235	0.7542	0.97578	0.96002
8	0.91946	1.1514	0.5881	0.81676	1.0493
16	1.09480	1.2078	0.7744	0.72567	0.7971

OpenMP Efficiency:

COMM_SIZE	Size of array				
	1024	2048	4096	8192	16384
1	1.0	1.0	1.0	1.0	1.0
2	0.5033	0.6995	0.3989	0.4059	0.5698
4	0.2609	0.2808	0.1885	0.2289	0.24005
8	0.1149	0.1439	0.0735	0.1020	0.1311
16	0.0684	0.0754	0.0484	0.04535	0.04981