Using	Matrix	Time / manual	Inf Norm / manual	Time / dgemm	Inf Norm / dgemm
./A2-pthreads-manual-cblas -r	50	0.001202	89,502.0	0.000275	89,502.0
./A2-pthreads-manual-cblas -r	50	0.001201	89,502.0	0.000273	89,502.0
./A2-pthreads-manual-cblas -r	50	0.001197	89,502.0	0.000279	89,502.0
./A2-pthreads-manual-cblas -r	50	0.001201	89,502.0	0.000277	89,502.0
./A2-pthreads-manual-cblas -r	50	0.001201	89,502.0	0.000211	89,502.0
./A2-pthreads-manual-cblas -r	50	0.001199	89,502.0	0.000235	89,502.0
./A2-pthreads-manual-cblas -r	100	0.001133	353,266.0	0.001979	353,266.0
./A2-pthreads-manual-cblas -r	100	0.009351	353,266.0	0.001979	353,266.0
./A2-pthreads-manual-cblas -r	100	0.009313	353,266.0	0.001989	353,266.0
./A2-pthreads-manual-cblas -r	100	0.009438	353,266.0	0.001982	353,266.0
./A2-pthreads-manual-cblas -r	100	0.009326	353,266.0	0.001982	353,266.0
./A2-pthreads-manual-cblas -r	100	0.009328	353,266.0	0.001984	353,266.0
./A2-pthreads-manual-cblas -r	50	0.001195	89,502.0	0.000277	89,502.0
./A2-pthreads-manual-cblas -r	50	0.001196	89,502.0	0.000277	89,502.0
./A2-pthreads-manual-cblas -r	50	0.001206	89,502.0	0.000277	89,502.0
./A2-pthreads-manual-cblas -r	50	0.001238	89,502.0	0.000280	89,502.0
./A2-pthreads-manual-cblas -r	50	0.001203	89,502.0	0.000278	89,502.0
./A2-pthreads-manual-cblas -r	50	0.001192	89,502.0	0.000280	89,502.0
./A2-pthreads-manual-cblas -r	100	0.009321	353,266.0	0.005735	353,266.0
./A2-pthreads-manual-cblas -r	100	0.009326	353,266.0	0.002006	353,266.0
./A2-pthreads-manual-cblas -r	100	0.009396	353,266.0	0.001986	353,266.0
./A2-pthreads-manual-cblas -r	100	0.009311	353,266.0	0.004446	353,266.0
./A2-pthreads-manual-cblas -r	100	0.009299	353,266.0	0.001986	353,266.0
./A2-pthreads-manual-cblas -r	100	0.009279	353,266.0	0.001978	353,266.0
Using	Matrix	Time / manual	Inf Norm / manual	Time / dgemm	Inf Norm / dgemm
_	IMIAUTIXI	Time/manuai	IIII Noriii / iiiaiiuai	Time / agemin	im Norm / agemin
	50	0.001950	1 695 695 0	0.000383	1 695 695 0
./A2-pthreads-manual-cblas-i	50	0.001259	1,625,625.0	0.000283	1,625,625.0
./A2-pthreads-manual-cblas -i	50	0.002391	1,625,625.0	0.000295	1,625,625.0
./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	50 50	0.002391 0.001297	1,625,625.0 1,625,625.0	0.000295 0.000287	1,625,625.0 1,625,625.0
./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	50 50 50	0.002391 0.001297 0.001232	1,625,625.0 1,625,625.0 1,625,625.0	0.000295 0.000287 0.000280	1,625,625.0 1,625,625.0 1,625,625.0
./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	50 50 50 50	0.002391 0.001297 0.001232 0.001216	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0	0.000295 0.000287 0.000280 0.000291	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0
./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	50 50 50 50 50	0.002391 0.001297 0.001232 0.001216 0.001267	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0	0.000295 0.000287 0.000280 0.000291 0.000289	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0
./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	50 50 50 50 50 50	0.002391 0.001297 0.001232 0.001216 0.001267 0.010098	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0	0.000295 0.000287 0.000280 0.000291 0.000289 0.002294	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0
./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	50 50 50 50 50	0.002391 0.001297 0.001232 0.001216 0.001267	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0	0.000295 0.000287 0.000280 0.000291 0.000289	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0
./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	50 50 50 50 50 50	0.002391 0.001297 0.001232 0.001216 0.001267 0.010098	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0	0.000295 0.000287 0.000280 0.000291 0.000289 0.002294	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0
./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	50 50 50 50 50 50 100	0.002391 0.001297 0.001232 0.001216 0.001267 0.010098 0.010646	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0	0.000295 0.000287 0.000280 0.000291 0.000289 0.002294 0.002014	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0
./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	50 50 50 50 50 100 100	0.002391 0.001297 0.001232 0.001216 0.001267 0.010098 0.010646 0.009306	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0	0.000295 0.000287 0.000280 0.000291 0.000289 0.002294 0.002014 0.004446	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0
./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	50 50 50 50 50 100 100 100	0.002391 0.001297 0.001232 0.001216 0.001267 0.010098 0.010646 0.009306	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0	0.000295 0.000287 0.000280 0.000291 0.000289 0.002294 0.002014 0.004446 0.001982	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0
./A2-pthreads-manual-cblas -i	50 50 50 50 50 100 100 100 100 100 100	0.002391 0.001297 0.001232 0.001216 0.001267 0.010098 0.010646 0.009306 0.009266 0.009307 0.009287	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0	0.000295 0.000287 0.000280 0.000291 0.000289 0.002294 0.002014 0.004446 0.001982 0.001979 0.001974	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0
./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	50 50 50 50 50 100 100 100 100 100 50	0.002391 0.001297 0.001232 0.001216 0.001267 0.010098 0.010646 0.009306 0.009266 0.009307 0.009287	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0	0.000295 0.000287 0.000280 0.000291 0.000289 0.002294 0.002014 0.004446 0.001982 0.001979 0.001974	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0
./A2-pthreads-manual-cblas -i	50 50 50 50 50 100 100 100 100 100 100 50 50	0.002391 0.001297 0.001232 0.001216 0.001267 0.010098 0.010646 0.009306 0.009266 0.009307 0.009287	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0	0.000295 0.000287 0.000280 0.000291 0.000289 0.002294 0.002014 0.004446 0.001982 0.001979 0.001974	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0
./A2-pthreads-manual-cblas -i	50 50 50 50 50 100 100 100 100 100 50	0.002391 0.001297 0.001232 0.001216 0.001267 0.010098 0.010646 0.009306 0.009266 0.009307 0.009287	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0	0.000295 0.000287 0.000280 0.000291 0.000289 0.002294 0.002014 0.004446 0.001982 0.001979 0.001974	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0
./A2-pthreads-manual-cblas -i	50 50 50 50 50 100 100 100 100 100 100 50 50	0.002391 0.001297 0.001232 0.001216 0.001267 0.010098 0.010646 0.009306 0.009306 0.009307 0.009287	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0	0.000295 0.000287 0.000280 0.000291 0.000299 0.002294 0.002014 0.004446 0.001982 0.001979 0.001974	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0
./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	50 50 50 50 50 100 100 100 100 100 100 50 50	0.002391 0.001297 0.001232 0.001216 0.001267 0.010098 0.010646 0.009306 0.009266 0.009307 0.009287	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0	0.000295 0.000287 0.000280 0.000291 0.000299 0.002294 0.002014 0.004446 0.001982 0.001979 0.001974	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0
./A2-pthreads-manual-cblas -i	50 50 50 50 50 100 100 100 100 100 100 50 50 50	0.002391 0.001297 0.001232 0.001216 0.001267 0.010098 0.010646 0.009306 0.009266 0.009307 0.009287 0.001194 0.0011662 0.001197 0.001198	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0 1,625,625.0	0.000295 0.000287 0.000280 0.000291 0.000289 0.002294 0.002014 0.004446 0.001982 0.001979 0.001974 0.000273 0.000274 0.000284 0.000284	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0 1,625,625.0
./A2-pthreads-manual-cblas -i	50 50 50 50 50 100 100 100 100 100 50 50 50	0.002391 0.001297 0.001232 0.001216 0.001267 0.010098 0.010646 0.009306 0.009266 0.009307 0.009287 0.001194 0.001662 0.001197 0.001198	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0	0.000295 0.000287 0.000280 0.000291 0.000294 0.002294 0.002014 0.004446 0.001982 0.001979 0.001974 0.000273 0.000274 0.000274 0.000273	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0
./A2-pthreads-manual-cblas -i	50 50 50 50 50 100 100 100 100 100 50 50 50 50	0.002391 0.001297 0.001232 0.001216 0.001267 0.010098 0.010646 0.009306 0.009306 0.009307 0.009287 0.001194 0.001662 0.001197 0.001198 0.001202 0.001203 0.015590	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0	0.000295 0.000287 0.000280 0.000291 0.000289 0.002294 0.002014 0.004446 0.001982 0.001979 0.001974 0.000273 0.000274 0.000273 0.000273 0.000273 0.000273	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0
./A2-pthreads-manual-cblas -i	50 50 50 50 50 100 100 100 100 100 100 50 50 50 50 50 50 100 10	0.002391 0.001297 0.001232 0.001216 0.001267 0.010098 0.010646 0.009306 0.009266 0.009307 0.009287 0.001194 0.001662 0.001197 0.001198 0.001202 0.001202 0.001203 0.015590 0.009303	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0	0.000295 0.000287 0.000280 0.000291 0.0002294 0.002294 0.00214 0.004446 0.001982 0.001979 0.000273 0.000274 0.000284 0.000274 0.000273 0.000273 0.000273 0.000273 0.000273 0.000273 0.000273 0.000273 0.000273	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0
./A2-pthreads-manual-cblas -i	50 50 50 50 50 100 100 100 100 100 50 50 50 50 50 100 10	0.002391 0.001297 0.001232 0.001267 0.010098 0.010646 0.009266 0.009307 0.009287 0.001194 0.001662 0.001197 0.001198 0.001202 0.001203 0.015590 0.009303 0.009298	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,502,500.0 25,502,500.0	0.000295 0.000287 0.000280 0.000281 0.000289 0.002294 0.002294 0.001979 0.001974 0.000273 0.000274 0.000284 0.000273 0.000273 0.000273 0.000273 0.000273 0.000277 0.001981	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0
./A2-pthreads-manual-cblas -i	50 50 50 50 50 100 100 100 100	0.002391 0.001297 0.001232 0.001267 0.010098 0.010646 0.009266 0.009307 0.009287 0.001194 0.001662 0.001197 0.001198 0.001202 0.001203 0.015590 0.009303 0.009298	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0	0.000295 0.000287 0.000287 0.000280 0.000291 0.000289 0.002294 0.002014 0.004446 0.001982 0.001974 0.000273 0.000274 0.000284 0.000273 0.000273 0.000273 0.000273 0.000273 0.000273	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0
./A2-pthreads-manual-cblas -i	50 50 50 50 50 100 100 100 100 100 50 50 50 50 50 100 10	0.002391 0.001297 0.001232 0.001267 0.010098 0.010646 0.009266 0.009307 0.009287 0.001194 0.001662 0.001197 0.001198 0.001202 0.001203 0.015590 0.009303 0.009298	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,625.0 1,525,502,500.0 25,502,500.0	0.000295 0.000287 0.000280 0.000281 0.000289 0.002294 0.002294 0.001979 0.001974 0.000273 0.000274 0.000284 0.000273 0.000273 0.000273 0.000273 0.000273 0.000277 0.001981	1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0

Using	Matrix	Time / manual	Inf Norm / manual	Time / dgemm	Inf Norm / dgemm
. /A2-pthreads-manual-cblas -r	50	0.001199	89,502.0	0.000275	89,502.0
/A2-pthreads-manual-cblas -r	50	0.001742	89,502.0	0.000279	89.502.0
/A2-pthreads-manual-cblas -r	50	0.001195	89,502.0	0.000278	89,502.0
./A2-pthreads-manual-cblas -r	100	0.009499	353,266.0	0.001992	353,266.0
./A2-pthreads-manual-cblas -r	100	0.009315	353,266.0	0.002046	353,266.0
./A2-pthreads-manual-cblas -r	100	0.009298	353,266.0	0.002074	353,266.0
./A2-pthreads-manual-cblas -r	500	3.247450	8,117,937.0	0.653315	8,117,937.0
./A2-pthreads-manual-cblas -r	500	3.119148	8,117,937.0	0.651457	8,117,937.0
./A2-pthreads-manual-cblas -r	500	3.311281	8,117,937.0	0.651434	8,117,937.0
./A2-pthreads-manual-colds -r	500	3.091983	8,117,937.0	0.652713	8,117,937.0
./A2-pthreads-manual-colus -r	1000	20.251307	31,896,067.0	5.214984	31,896,067.0
./A2-pthreads-manual-colus -r	1000	20.300947	31,896,067.0	5.213675	31,896,067.0
./A2-pthreads-manual-colas -r	1000	20.192011	31,896,067.0	5.229068	31,896,067.0
./A2-pthreads-manual-colas -r ./A2-pthreads-manual-cblas -r	1000	20.192011	31,896,067.0	5.217558	31,896,067.0
./A2-pinreaas-manuai-colas-r	1000	20.505656	31,896,067.0	5.217556	31,890,007.0
./A2-pthreads-manual-cblas -r	50	0.001194	89,502.0	0.000273	89,502.0
./A2-pthreads-manual-cblas -r	50	0.001194	89,502.0	0.000278	89,502.0
./A2-pthreads-manual-cblas -r	50	0.001135	89,502.0	0.000274	89,502.0
./A2-pthreads-manual-colds -r	100	0.001203	353,266.0	0.000273	353,266.0
./A2-pthreads-manual-colds -r	100	0.009324	353,266.0	0.001991	353,266.0
./A2-pthreads-manual-colus -r	100	0.009324	353,266.0	0.001989	353,266.0
./A2-pthreads-manual-colas -r	500		8,117,937.0	0.647558	8,117,937.0
./A2-pthreads-manual-colas -r ./A2-pthreads-manual-cblas -r	500 500	3.055617 3.079544			
./A2-pinreaas-manuai-coias -r ./A2-pthreads-manual-cblas -r			8,117,937.0	0.647640	8,117,937.0
	500	3.075784	8,117,937.0	0.647560	8,117,937.0
./A2-pthreads-manual-cblas -r ./A2-pthreads-manual-cblas -r	500	3.079752	8,117,937.0	0.646994	8,117,937.0
	1000 1000	20.499682	31,896,067.0	5.126204	31,896,067.0
./A2-pthreads-manual-cblas -r	1000	19.939184	31,896,067.0	5.101704	31,896,067.0 31,896,067.0
./A2-pthreads-manual-cblas -r		20.639626	31,896,067.0	5.305914	
./A2-pthreads-manual-cblas -r	1000	20.272806	31,896,067.0	5.207787	31,896,067.0
A2-pthreads-manual-cblas -r	1000	20.272806	31,896,067.0	5.207787	31,896,067.0 Inf Norm / dgemm
/A2-pthreads-manual-cblas -r Using	1000	20.272806 Time / manual	31,896,067.0 Inf Norm / manual	5.207787 Time / dgemm	31,896,067.0 Inf Norm / dgemm
/A2-pthreads-manual-cblas -r Using ./A2-pthreads-manual-cblas -i	1000 Matrix 50	20.272806 Time / manual	31,896,067.0 Inf Norm / manual	5.207787 Time / dgemm 0.000275	31,896,067.0 Inf Norm / dgemm
./A2-pthreads-manual-cblas -r Using ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	1000 Matrix 50 50	20.272806 Time / manual	31,896,067.0 Inf Norm / manual	5.207787 Time / dgemm	31,896,067.0 Inf Norm / dgemm
./A2-pthreads-manual-cblas -r Using ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	1000 Matrix 50 50 50	20.272806 Time / manual	31,896,067.0 Inf Norm / manual	5.207787 Time / dgemm	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0
Using Using !/A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	1000 Matrix 50	20.272806 Time / manual	31,896,067.0 Inf Norm / manual	5.207787 Time / dgemm	31,896,067.0 Inf Norm / dgemm
Using Using ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i ./A2-pthreads-manual-cblas -i	1000 Matrix 50	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348	31,896,067.0 Inf Norm / manual	5.207787 Time / dgemm	31,896,067.0 Inf Norm / dgemm
Using Using /A2-pthreads-manual-cblas -i	1000 Matrix 50 50 50 100	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267	31,896,067.0 Inf Norm / manual	5.207787 Time / dgemm	31,896,067.0 Inf Norm / dgemm
Using ./A2-pthreads-manual-cblas -r Using ./A2-pthreads-manual-cblas -i	1000 Matrix 50 50 50 100 100 100 100 500 500	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001983 0.001976 0.641401	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0
Using .[A2-pthreads-manual-cblas -r Using .[A2-pthreads-manual-cblas -i	1000 Matrix 50 50 50 100 100 100 500 500 500 500	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705	31,896,067.0 Inf Norm / manual	5.207787 Time / dgemm	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0
Using Using ./A2-pthreads-manual-cblas -i	1000 Matrix 50 50 100 100 100 500 500 500 500 500 500 500 500 100	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249	31,896,067.0 Inf Norm / manual	5.207787 Time / dgemm	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0
Using [A2-pthreads-manual-cblas -i] [A3-pthreads-manual-cblas -i] [A3-pthreads-manual-cbla	1000 Matrix 50 50 50 100 100 100 500	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249 3.081559	31,896,067.0 Inf Norm / manual	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001983 0.001976 0.641401 0.641102 0.640499 0.644471	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 25,502,500.0 25,502,500.0
Using .[A2-pthreads-manual-cblas -r Using .[A2-pthreads-manual-cblas -i .[A3-pthreads-manual-cblas -i .[A4-pthreads-manual-cblas -i .[A4-pthreads-manual-	1000 Matrix 50 50 50 100 100 500 500 500 500 1000 1000	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249 3.081559 20.073517	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001983 0.001976 0.641401 0.641102 0.640499 0.644471 5.152608 5.123747	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,687,562,500.0 250,500,250,000.0 250,500,250,000.0
Using ./A2-pthreads-manual-cblas -i	1000 Matrix 50	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249 3.081559 20.073517 20.013564	31,896,067.0 Inf Norm / manual	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001986 0.641401 0.641102 0.640499 0.644471 5.152608	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0
Using ./A2-pthreads-manual-cblas -i	1000 IMatrix I 50 50 50 100 100 500 500 500 500 1000 1000 1000 1000	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249 3.081559 20.073517 20.013564 20.607161	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0	5.207787 Time / dgemm	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 25,500,500.0 25,500,500.0 25,500,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0
Using .[A2-pthreads-manual-cblas -i	1000 IMatrix 50 50 100 100 100 500 500 500 500 1000 1000 1000	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249 3.081559 20.073517 20.013564 20.607161	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0	5.207787 Time / dgemm	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0
Using .[A2-pthreads-manual-cblas -i	1000 IMatrix 50 50 50 100 100 100 500 500 500 1000 1000 1000 1000 500 5	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249 3.081559 20.073517 20.013564 20.607161 20.096499	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 1,625,625.0 1,625,625.0	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001983 0.001976 0.641401 0.641102 0.640499 0.644471 5.152608 5.123747 5.152919 5.164086	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 1,625,625.0 1,625,625.0 1,625,625.0
Using (A2-pthreads-manual-cblas -i	1000 IMatrix I 50 50 100 100 100 500 500 500 500 1000 1000 1000 1000	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249 3.081559 20.073517 20.013564 20.607161 20.096499	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001983 0.001976 0.641401 0.641102 0.640499 0.644471 5.152608 5.123747 5.152919 5.164086	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 1,625,625.0 1,625,625.0 1,625,625.0
Using .[A2-pthreads-manual-cblas -i	1000 IMatrix 50 50 50 100 100 100 500 500 500 1000 1000 1000 1000 500 5	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249 3.081559 20.073517 20.013564 20.607161 20.096499	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 1,625,625.0 1,625,625.0	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001983 0.001976 0.641401 0.641102 0.640499 0.644471 5.152608 5.123747 5.152919 5.164086	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 1,625,625.0 1,625,625.0 1,625,625.0
Using (A2-pthreads-manual-cblas -i	1000 IMatrix I 50 50 100 100 100 500 500 500	20.272806 Time / manual	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 1,625,625.0 1,625,625.0 1,625,625.0	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001983 0.001976 0.641401 0.641102 0.640499 0.644471 5.152608 5.123747 5.152919 5.164086	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0
Using ./A2-pthreads-manual-cblas -i	1000 IMatrix I 50 50 50 100 100 500 500 500 1000 1000	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249 3.081559 20.073517 20.013564 20.607161 20.096499 0.001202 0.001200 0.001208	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 25,502,500.0 25,502,500.0 15,687,62,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001986 0.641401 0.641102 0.640499 0.644471 5.152608 5.123747 5.152919 5.164086 0.000274 0.000274 0.000278 0.001993	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0
Using (A2-pthreads-manual-cblas -i	1000 IMatrix I 50 50 50 100 100 100 500 500 500 1000 1000 1000 1000 50 50 1000 1000 1000 50 50 50 50 50 50 50 50 50 50 50 50	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249 3.081559 20.073517 20.013564 20.607161 20.096499 0.001222 0.001200 0.001208 0.009360 0.009315	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001983 0.001976 0.641401 0.641102 0.640499 0.644471 5.152608 5.123747 5.152919 5.164086 0.000274 0.000274 0.000274 0.000278 0.001993	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,500.0 250,500,500.0 25,502,500.0 25,502,500.0
Using .[A2-pthreads-manual-cblas -i	1000 IMatrix 50 50 100 100 100 500 500 500 1000 100	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080249 3.081259 20.073517 20.013564 20.607161 20.096499 0.001222 0.001200 0.001208 0.009360 0.009365 0.009289	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001983 0.001976 0.641401 0.641102 0.640499 0.644471 5.152608 5.123747 5.152919 5.164086 0.000274 0.000274 0.000278 0.001993 0.001993	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,500.0 25,502,500.0 25,502,500.0 25,502,500.0 15,687,562,500.0
Using (A2-pthreads-manual-cblas -i	1000 IMatrix I 50 50 50 100 100 100 500 500 500 1000 1000 1000 1000 50 50 1000 1000 1000 50 50 50 50 50 50 50 50 50 50 50 50	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249 3.081559 20.073517 20.013564 20.607161 20.096499 0.001220 0.001208 0.009360 0.009315 0.009289 3.041600	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 25,502,500.0 25,502,500.0 25,502,500.0 25,502,500.0 15,687,562,500.0	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001986 0.641401 0.641102 0.640499 0.644471 5.152608 5.123747 5.152919 5.164086 0.000274 0.000274 0.000278 0.001993 0.001993 0.001993 0.001993	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 15,687,562,500.0 15,687,562,500.0
Using ./A2-pthreads-manual-cblas -i	1000 IMatrix I 50 50 50 100 100 500 500 500 1000 1000	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249 3.081559 20.073517 20.013564 20.607161 20.096499 0.001222 0.001200 0.001208 0.009360 0.009315 0.009289 3.041600	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0 1,625,625.0	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001986 0.641401 0.641102 0.640499 0.644471 5.152608 5.123747 5.152919 5.164086 0.000274 0.000278 0.001993 0.001993 0.001993 0.001983 0.645565 0.644723	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0
Using ./A2-pthreads-manual-cblas -i	1000 IMatrix I 50 50 50 100 100 100 500 500 500 1000 1000 1000 1000 1000 1000 50 50 50 50 50 50 50 50 50 50 50 50	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249 3.081559 20.073517 20.013564 20.607161 20.096499 0.001222 0.001200 0.001208 0.009360 0.009315 0.009289 3.041600 3.163960 3.078707	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001983 0.001976 0.641401 0.641102 0.640499 0.644471 5.152608 5.123747 5.152919 5.164086 0.000274 0.000274 0.000274 0.000274 0.000278 0.001993 0.001991 0.001983 0.644565 0.644723 0.640226	31,896,067.0
Using .[A2-pthreads-manual-cblas -i	1000 IMatrix 50 50 50 100 100 100 500 500 500 1000 1000 1000 1000 1000 500 5	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249 3.081559 20.073517 20.013564 20.607161 20.096499 0.001222 0.001200 0.001208 0.009360 0.009360 0.009315 0.009289 3.041600 3.163960 3.078707 3.076091	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001983 0.001976 0.641401 0.641102 0.640499 0.644471 5.152608 5.123747 5.152919 5.164086 0.000274 0.000274 0.000274 0.000278 0.001993 0.001991 0.001983 0.645565 0.644723 0.640226 0.643444	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0
Using (A2-pthreads-manual-cblas -i	1000 IMatrix I 50 50 100 100 1000 500 500 500 1000 10	20.272806 Time / manual 0.001194 0.001195 0.001192 0.009297 0.009348 0.009267 3.080425 3.112705 3.082249 3.081559 20.073517 20.013564 20.607161 20.096499 0.001222 0.001200 0.001208 0.009360 0.009315 0.009289 3.041600 3.163960 3.076091 20.266145	31,896,067.0 Inf Norm / manual 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 1,625,625.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0	5.207787 Time / dgemm 0.000275 0.000277 0.000279 0.001984 0.001983 0.001976 0.641401 0.641102 0.640499 0.644471 5.152608 5.123747 5.152919 5.164086 0.000274 0.000274 0.000278 0.001993 0.001993 0.001993 0.001993 0.6445565 0.644723 0.640226 0.643444 5.121193	31,896,067.0 Inf Norm / dgemm 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 15,687,562,500.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 250,500,250,000.0 1,625,625.0 1,625,625.0 25,502,500.0 25,502,500.0 25,502,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 15,687,562,500.0 250,500,250,000.0

manual

Using	Matrix	Time / manual	Inf Norm / manual	Time / dgemm	Inf Norm / dgemm
. /A2-pthreads-manual-cblas -r	50	0.001299	89,502.0	0.000307	89,502.0
./A2-pthreads-manual-cblas -r	150	0.037241	772,112.0	0.007939	772,112.0
./A2-pthreads-manual-cblas -r	200	0.124785	1,322,244.0	0.025349	1,322,244.0
./A2-pthreads-manual-cblas -r	250	0.341618	2,081,836.0	0.064024	2,081,836.0
./A2-pthreads-manual-cblas -r	300	0.612026	3,011,393.0	0.132935	3,011,393.0
./A2-pthreads-manual-cblas -r	350	0.986115	4,095,433.0	0.222378	4,095,433.0
./A2-pthreads-manual-cblas -r	400	1.081713	5,225,598.0	0.330024	5,225,598.0
./A2-pthreads-manual-cblas -r	450	2.224804	6,598,115.0	0.469677	6,598,115.0
./A2-pthreads-manual-cblas -r	500	3.155695	8,117,937.0	0.646205	8,117,937.0
./A2-pthreads-manual-cblas -r	550	4.036771	9,746,097.0	0.856691	9,746,097.0
./A2-pthreads-manual-cblas -r	600	4.280408	11,584,750.0	1.107333	11,584,750.0
./A2-pthreads-manual-cblas -r	650	6.654927	13,574,185.0	1.407244	13,574,185.0
./A2-pthreads-manual-cblas -r	700	8.415577	15,701,890.0	1.757862	15,701,890.0
./A2-pthreads-manual-cblas -r	750	10.446816	18,100,461.0	2.172926	18,100,461.0
./A2-pthreads-manual-cblas -r	800	10.345640	20,461,090.0	2.631782	20,461,090.0
./A2-pthreads-manual-cblas -r	850	14.921297	23,321,446.0	3.154325	23,321,446.0
./A2-pthreads-manual-cblas -r	900	18.114296	25,890,261.0	3.742948	25,890,261.0
./A2-pthreads-manual-cblas -r	950	20.963989	28,863,806.0	4.391238	28,863,806.0
./A2-pthreads-manual-cblas -r	1000	20.036045	31,896,067.0	5.105140	31,896,067.0
./A2-pthreads-manual-cblas -r	50	0.001198	89,502.0	0.000277	89,502.0
./A2-pthreads-manual-cblas -r	150	0.031242	772,112.0	0.006532	772,112.0
./A2-pthreads-manual-cblas -r	200	0.094799	1,322,244.0	0.016427	1,322,244.0
./A2-pthreads-manual-cblas -r	250	0.285936	2,081,836.0	0.059638	2,081,836.0
./A2-pthreads-manual-cblas -r	300	0.597465	3,011,393.0	0.133201	3,011,393.0
./A2-pthreads-manual-cblas -r	350	0.996649	4,095,433.0	0.223727	4,095,433.0
./A2-pthreads-manual-cblas -r	400	1.081898	5,225,598.0	0.331603	5,225,598.0
./A2-pthreads-manual-cblas -r	450	2.195723	6,598,115.0	0.474050	6,598,115.0
./A2-pthreads-manual-cblas -r	500	3.051341	8,117,937.0	0.647024	8,117,937.0
./A2-pthreads-manual-cblas -r	550	4.164886	9,746,097.0	0.862614	9,746,097.0
./A2-pthreads-manual-cblas -r	600	4.426588	11,584,750.0	1.114165	11,584,750.0
./A2-pthreads-manual-cblas -r	650	6.704661	13,574,185.0	1.412377	13,574,185.0
./A2-pthreads-manual-cblas -r	700	8.479324	15,701,890.0	1.761060	15,701,890.0
./A2-pthreads-manual-cblas -r	750	10.389538	18,100,461.0	2.169991	18,100,461.0
./A2-pthreads-manual-cblas -r	800	10.622015	20,461,090.0	2.646453	20,461,090.0
./A2-pthreads-manual-cblas -r	850	15.084184	23,321,446.0	3.156021	23,321,446.0
./A2-pthreads-manual-cblas -r	900	18.183891	25,890,261.0	3.751744	25,890,261.0
./A2-pthreads-manual-cblas -r	950	21.633958	28,863,806.0	4.388081	28,863,806.0
./A2-pthreads-manual-cblas -r	1000	20.132292	31,896,067.0	5.122467	31,896,067.0

manual

Using	Matrix	Time / manual	Inf Norm / manual	Time / dgemm	Inf Norm / dgemm
./A2-pthreads-manual-cblas -i	50	0.001193	1,625,625.0	0.000272	1,625,625.0
./A2-pthreads-manual-cblas -i	150	0.062508	128,255,625.0	0.006597	128,255,625.0
./A2-pthreads-manual-cblas -i	200	0.093369	404,010,000.0	0.016680	404,010,000.0
./A2-pthreads-manual-cblas -i	250	0.352370	984,390,625.0	0.072505	984,390,625.0
. /A2-pthreads-manual-cblas -i	300	0.652539	2,038,522,500.0	0.126024	2,038,522,500.0
./A2-pthreads-manual-cblas -i	350	0.993798	3,773,030,625.0	0.218930	3,773,030,625.0
./A2-pthreads-manual-cblas -i	400	1.081100	6,432,040,000.0	0.330587	6,432,040,000.0
./A2-pthreads-manual-cblas -i	450	2.387546	10,297,175,625.0	0.476119	10,297,175,625.0
./A2-pthreads-manual-cblas -i	500	3.082533	15,687,562,500.0	0.644611	15,687,562,500.0
./A2-pthreads-manual-cblas -i	550	4.249742	22,959,825,625.0	0.858860	22,959,825,625.0
./A2-pthreads-manual-cblas -i	600	4.298823	32,508,090,000.0	1.112652	32,508,090,000.0
./A2-pthreads-manual-cblas -i	650	6.642814	44,763,980,625.0	1.421403	44,763,980,625.0
./A2-pthreads-manual-cblas -i	700	8.440308	60,196,622,500.0	1.762349	60,196,622,500.0
./A2-pthreads-manual-cblas -i	750	10.307231	79,312,640,625.0	2.180169	79,312,640,625.0
./A2-pthreads-manual-cblas -i	800	9.210082	102,656,160,000.0	2.662343	102,656,160,000.0
./A2-pthreads-manual-cblas -i	850	15.091394	130,808,805,625.0	3.157122	130,808,805,625.0
./A2-pthreads-manual-cblas -i	900	18.004254	164,389,702,500.0	3.754617	164,389,702,500.0
./A2-pthreads-manual-cblas -i	950	21.020247	204,055,475,625.0	4.394798	204,055,475,625.0
./A2-pthreads-manual-cblas -i	1000	20.269382	250,500,250,000.0	5.117270	250,500,250,000.0
./A2-pthreads-manual-cblas -i	50	0.001194	1,625,625.0	0.000273	1,625,625.0
./A2-pthreads-manual-cblas -i	150	0.031261	128,255,625.0	0.006626	128,255,625.0
./A2-pthreads-manual-cblas -i	200	0.110694	404,010,000.0	0.015637	404,010,000.0
./A2-pthreads-manual-cblas -i	250	0.293485	984,390,625.0	0.060926	984,390,625.0
./A2-pthreads-manual-cblas -i	300	0.651598	2,038,522,500.0	0.147015	2,038,522,500.0
./A2-pthreads-manual-cblas -i	350	1.101349	3,773,030,625.0	0.250406	3,773,030,625.0
./A2-pthreads-manual-cblas -i	400	1.085703	6,432,040,000.0	0.413507	6,432,040,000.0
./A2-pthreads-manual-cblas -i	450	2.180051	10,297,175,625.0	0.470420	10,297,175,625.0
./A2-pthreads-manual-cblas -i	500	3.079099	15,687,562,500.0	0.643537	15,687,562,500.0
./A2-pthreads-manual-cblas -i	550	4.220882	22,959,825,625.0	0.852399	22,959,825,625.0
./A2-pthreads-manual-cblas -i	600	4.286083	32,508,090,000.0	1.106982	32,508,090,000.0
./A2-pthreads-manual-cblas -i	650	6.674248	44,763,980,625.0	1.412180	44,763,980,625.0
./A2-pthreads-manual-cblas -i	700	8.440920	60,196,622,500.0	1.765974	60,196,622,500.0
./A2-pthreads-manual-cblas -i	750	10.329453	79,312,640,625.0	2.173019	79,312,640,625.0
./A2-pthreads-manual-cblas -i	800	9.612526	102,656,160,000.0	2.622674	102,656,160,000.0
./A2-pthreads-manual-cblas -i	850	15.167497	130,808,805,625.0	3.142448	130,808,805,625.0
./A2-pthreads-manual-cblas -i	900	17.957808	164,389,702,500.0	3.728599	164,389,702,500.0
./A2-pthreads-manual-cblas -i	950	20.988347	204,055,475,625.0	4.394569	204,055,475,625.0
./A2-pthreads-manual-cblas -i	1000	20.032625	250,500,250,000.0	5.418355	250,500,250,000.0