Regatta:

Building with:
xlc_r -qsmp=omp -qarch=pwr4 -q64 -o p redb_2d_parallel_no_red.c
ompsubmit -n <n_cores> p

SIZE = 66. NO REDUCTION
-n 4

66 size; 4 thread(s)
  S = 65043.930759
0.006339 time taken.

-n 8

66 size; 8 thread(s)
  S = 65043.930759
0.221467 time taken.

-n 2

66 size; 2 thread(s)
  S = 65043.930759
0.007494 time taken.

-n 1

66 size; 1 thread(s)
  S = 65043.930759
0.010543 time taken.

SIZE = 128. NO REDUCTION
-n 4

128 size; 4 thread(s)
  S = 576348.018216
0.013537 time taken.

-n 8

128 size; 8 thread(s)
  S = 576348.018216
0.069819 time taken.

-n 2

128 size; 2 thread(s)
  S = 576348.018216
0.020546 time taken.

-n 1

128 size; 1 thread(s)
  S = 576348.018216
0.036369 time taken.

SIZE = 256.

-n 4

256 size; 4 thread(s)
  S = 5086480.542925
0.042912 time taken.

-n 8

256 size; 8 thread(s)
  S = 5086480.542925
0.262872 time taken.

-n 2

256 size; 2 thread(s)
  S = 5086480.542925
0.073046 time taken.

-n 1

256 size; 1 thread(s)
  S = 5086480.542925
0.140957 time taken.

SIZE = 512.

-n 4

512 size; 4 thread(s)
  S = 42684876.237322
0.158211 time taken.

-n 2

512 size; 2 thread(s)
  S = 42684876.237322
0.282715 time taken.

-n 1

512 size; 1 thread(s)
  S = 42684876.237324
0.596054 time taken.

SIZE = 1024.

-n 4

1024 size; 4 thread(s)
  S = 349634702.521531
0.695536 time taken.

-n 2

1024 size; 4 thread(s)
  S = 349634702.521531
0.695536 time taken.

-n 1

1024 size; 1 thread(s)
  S = 349634702.521546
2.547066 time taken.

SIZE = 2048.

-n 4

2048 size; 4 thread(s)
  S = 2830070590.844272
6.353501 time taken.

-n 2

2048 size; 2 thread(s)
  S = 2830070590.843337
9.557622 time taken.

-n 1

2048 size; 1 thread(s)
  S = 2830070590.823280
16.333615 time taken.

-n 8

2048 size; 8 thread(s)
  S = 2830070590.844154
6.379928 time taken.

2048 size; 16 thread(s)
  S = 2830070590.844100
2.658260 time taken.