CUDA KD-TREE PARALLEL KNN SEARCH

| NUMBER OF POINTS | NOT BALANCED KD-TREE | | | BALANCED KD-TREE | | |
|------------------|----------------------|--------------|------------|------------------|--------------|------------|
| | Kernel [ms] | KD-tree [ms] | Total [ms] | Kernel [ms] | KD-tree [ms] | Total [ms] |
| 1000 | 21.26 | 1 | 22.26 | 14.45 | 10 | 24.45 |
| 5000 | 40.23 | 12 | 52.23 | 29.62 | 283 | 312.62 |
| 10000 | 94.51 | 15 | 109.51 | 59.70 | 1122 | 1181.7 |



The main execution time is the sum of the kernel execution time and the execution time for KD-tree construction.



