Optimized Product Quantization for Approximate Nearest Neighbor Search
Supplementary Material

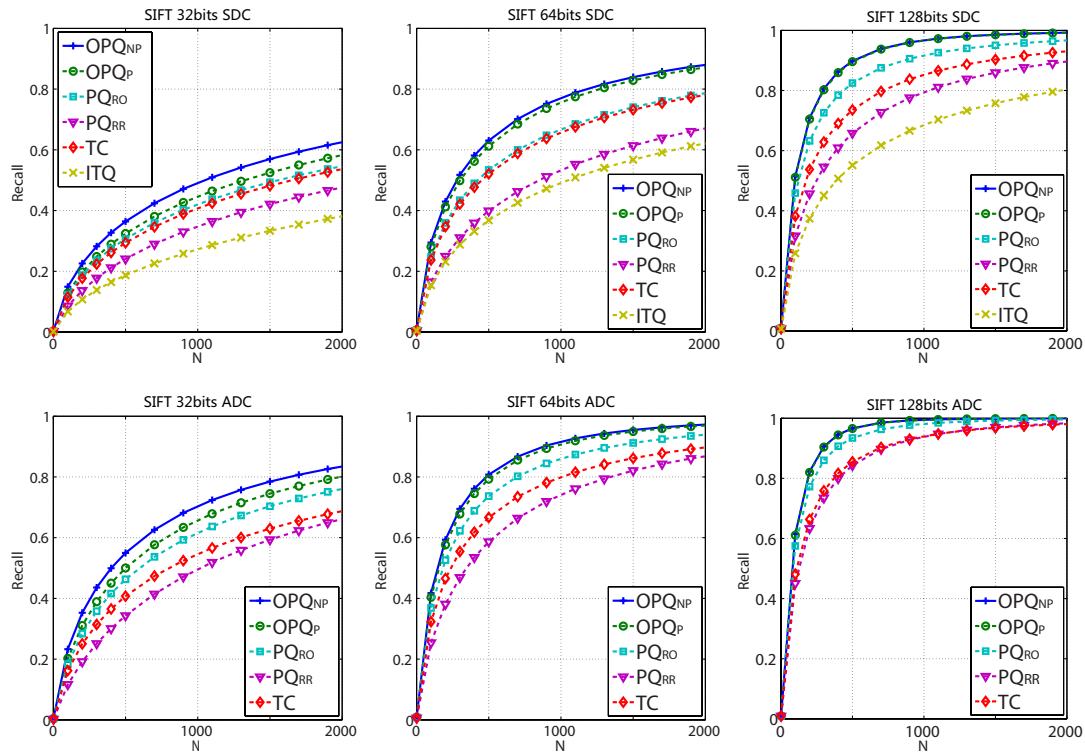Tiezheng Ge[1]   Kaiming He[2]   Qifa Ke[3]   Jian Sun[2]

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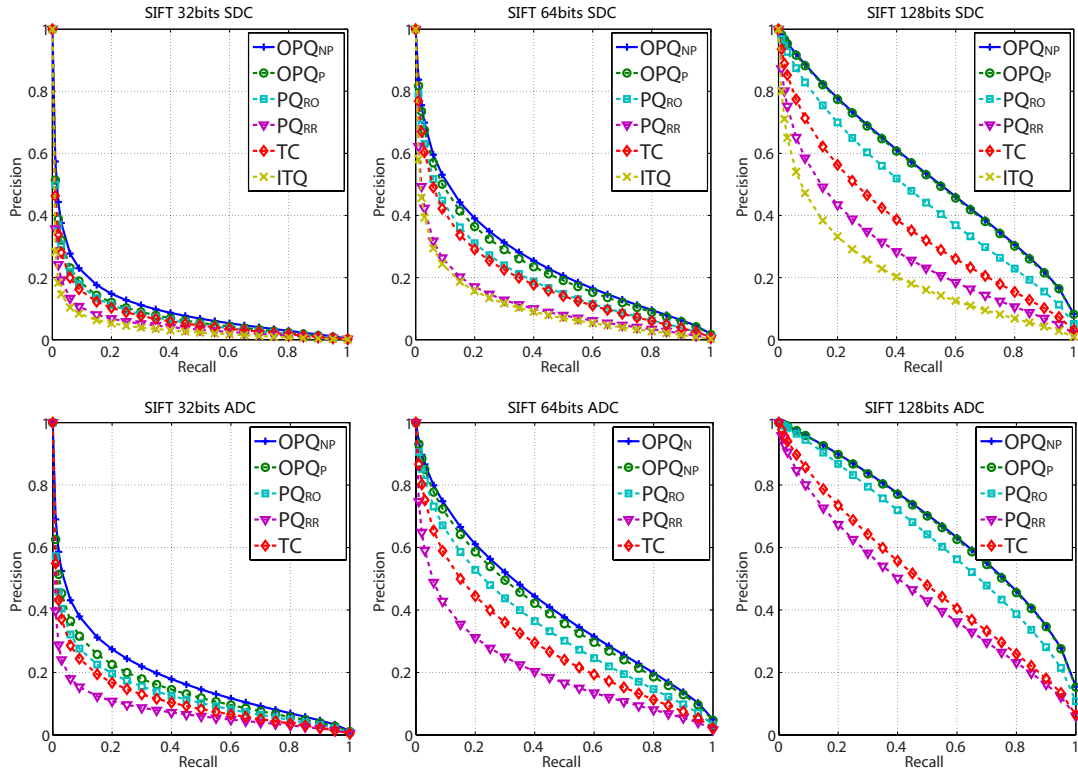
In the paper we have shown the evaluations under certain metrics (*c.f.* Fig. 4, 5, and 6 in the paper). In this supplementary material, we append the evaluations under more metrics in the SIFT1M, GIST1M, and MNIST datasets. We evaluate (i) recall vs. N, *i.e.*, the number of top ranked neighbors, and (ii) precision vs. recall. We evaluate using the code length $B = 32$, 64, or 128 bits, and use both Symmetric Distance Computation (SDC) and Asymmetric Distance Computation (ADC). The results are as follows.
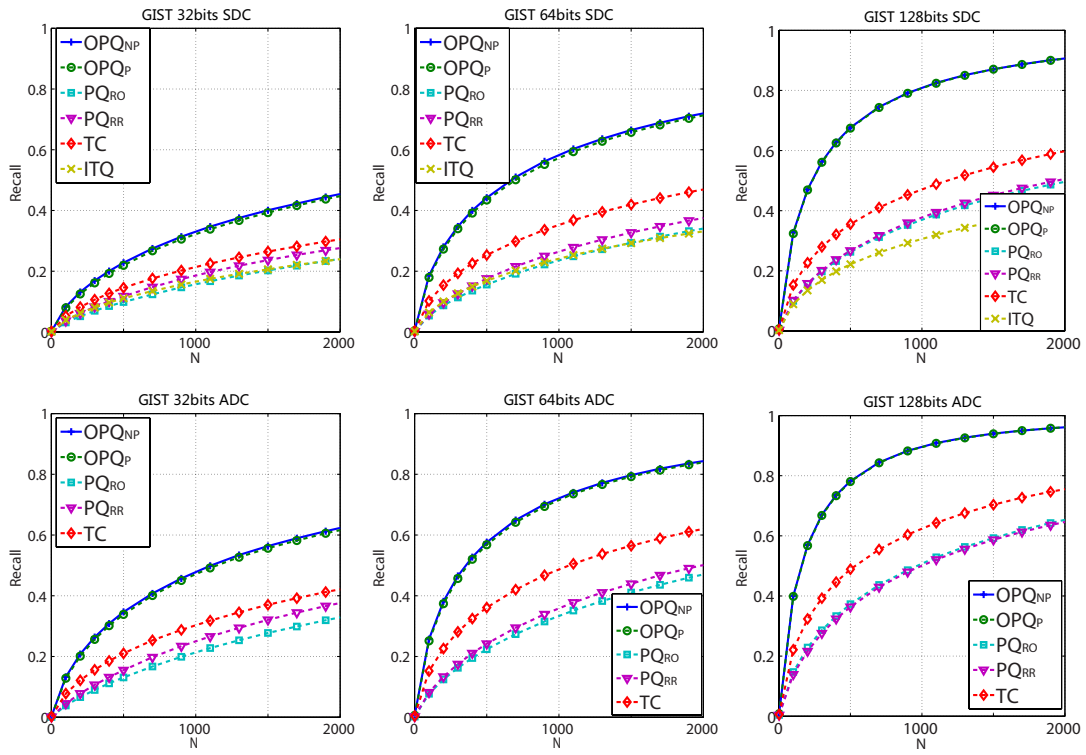
1. SIFT1M

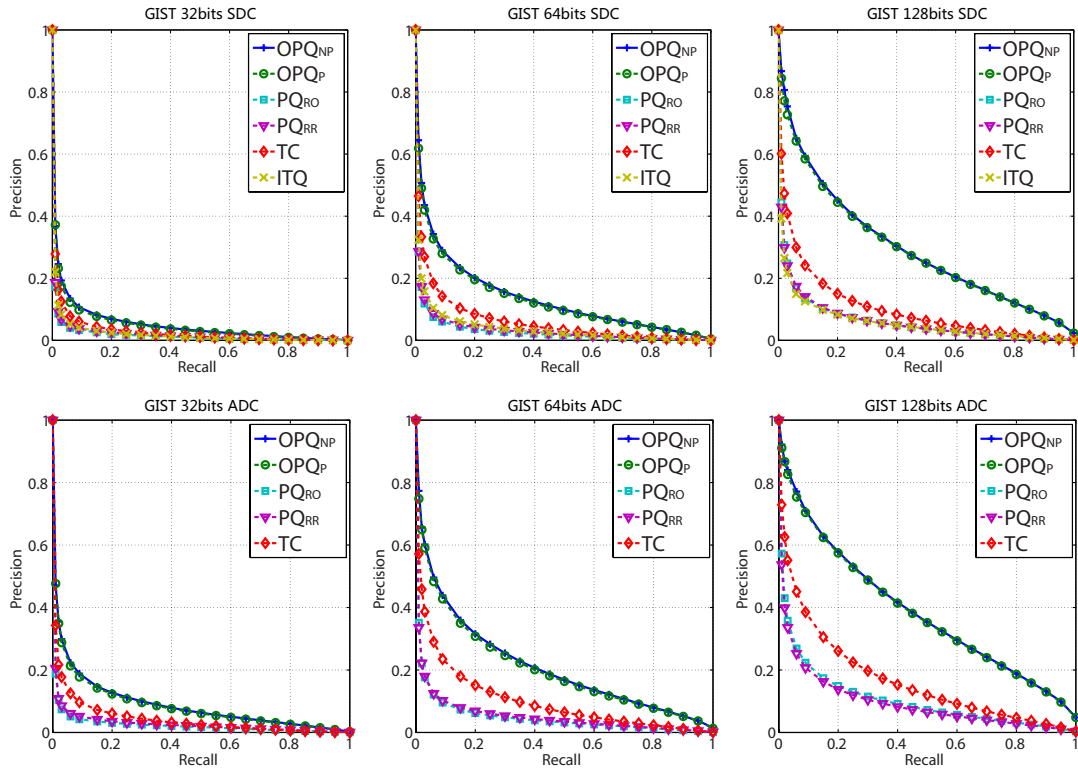### 1.1. SIFT1M Recall *vs.* N

1.2. SIFT1M Precision *vs*. Recall

2. GIST1M

2.1. GIST1M Recall *vs*. N

2.2. GIST1M Precision *vs*. Recall

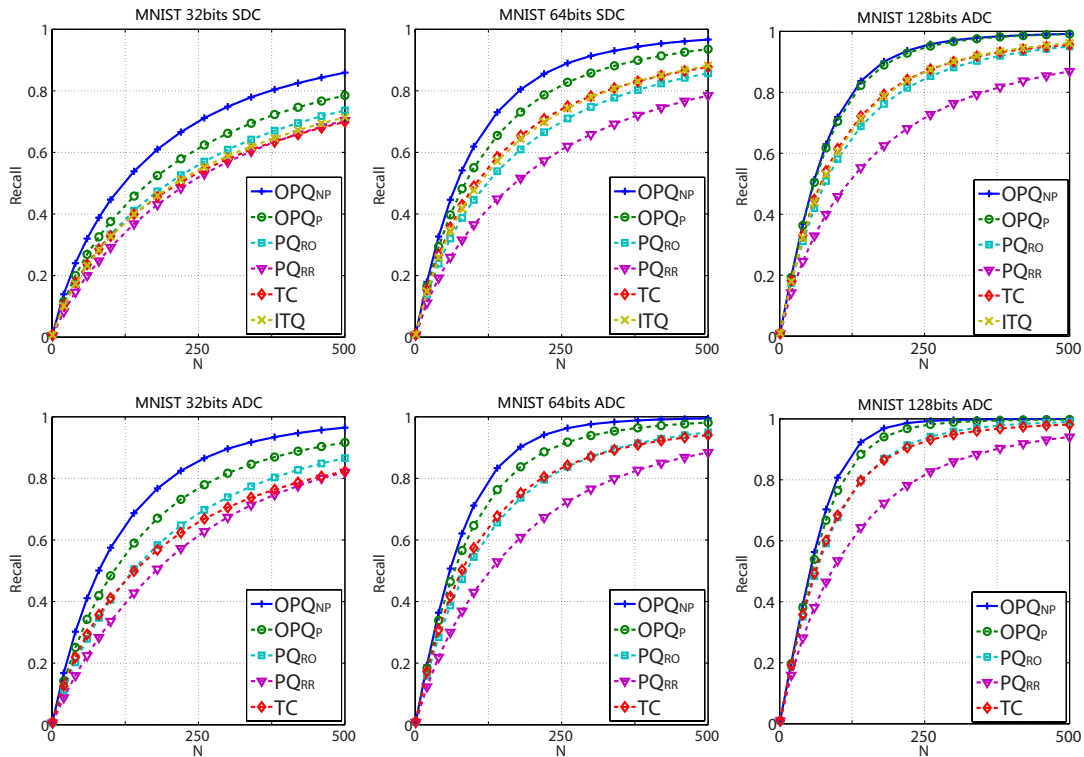## 3. MNIST

3.1. MNIST Recall *vs*. N

3.2. MNIST Precision *vs*. Recall