Week 5

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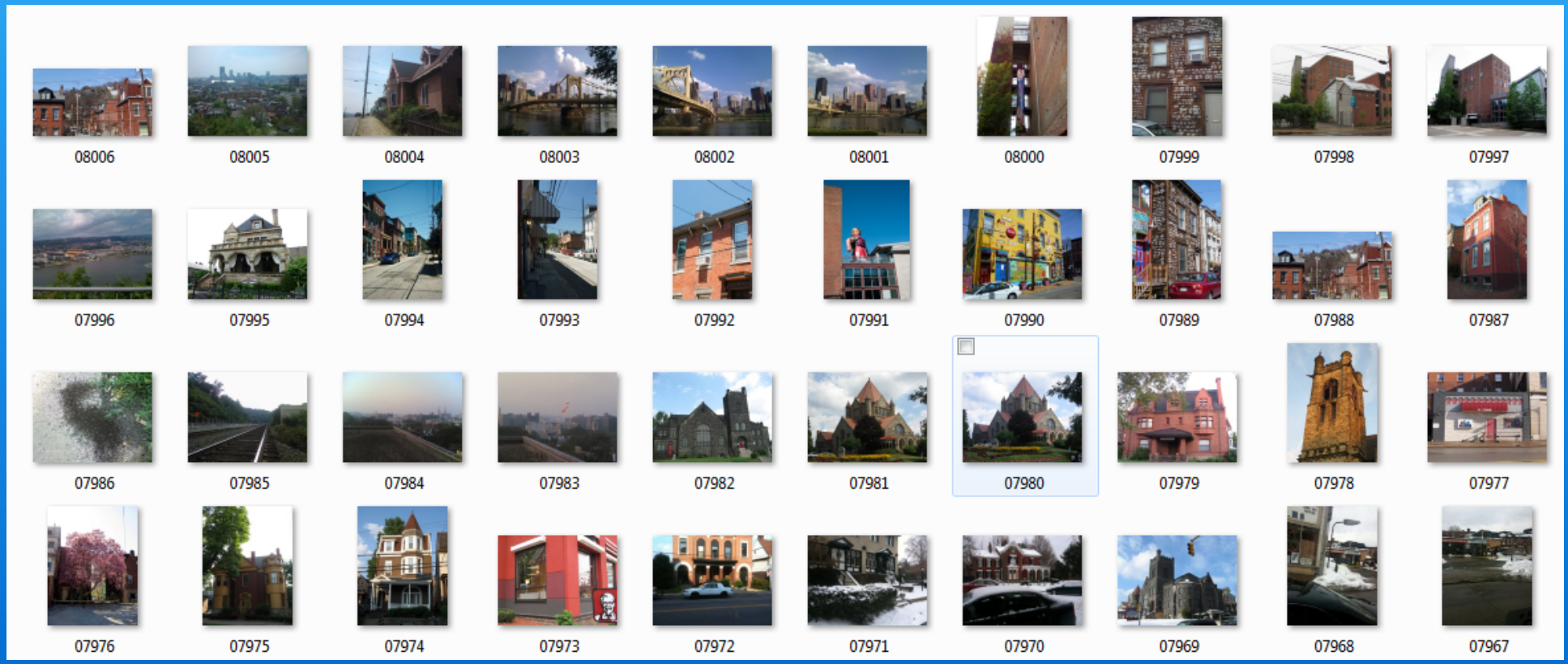
Purpose

- To replace the dataset from "Where am I?" with an unstructured dataset collected from online sources.
- Develop methods of improving these results intuitively.

Comparison of Dataset to Street View

Sample of Dataset



Sample results

Err=367.6m 04010

Err=206.6m 03833

Err=174.3m 00560

Err=308.2m 02689

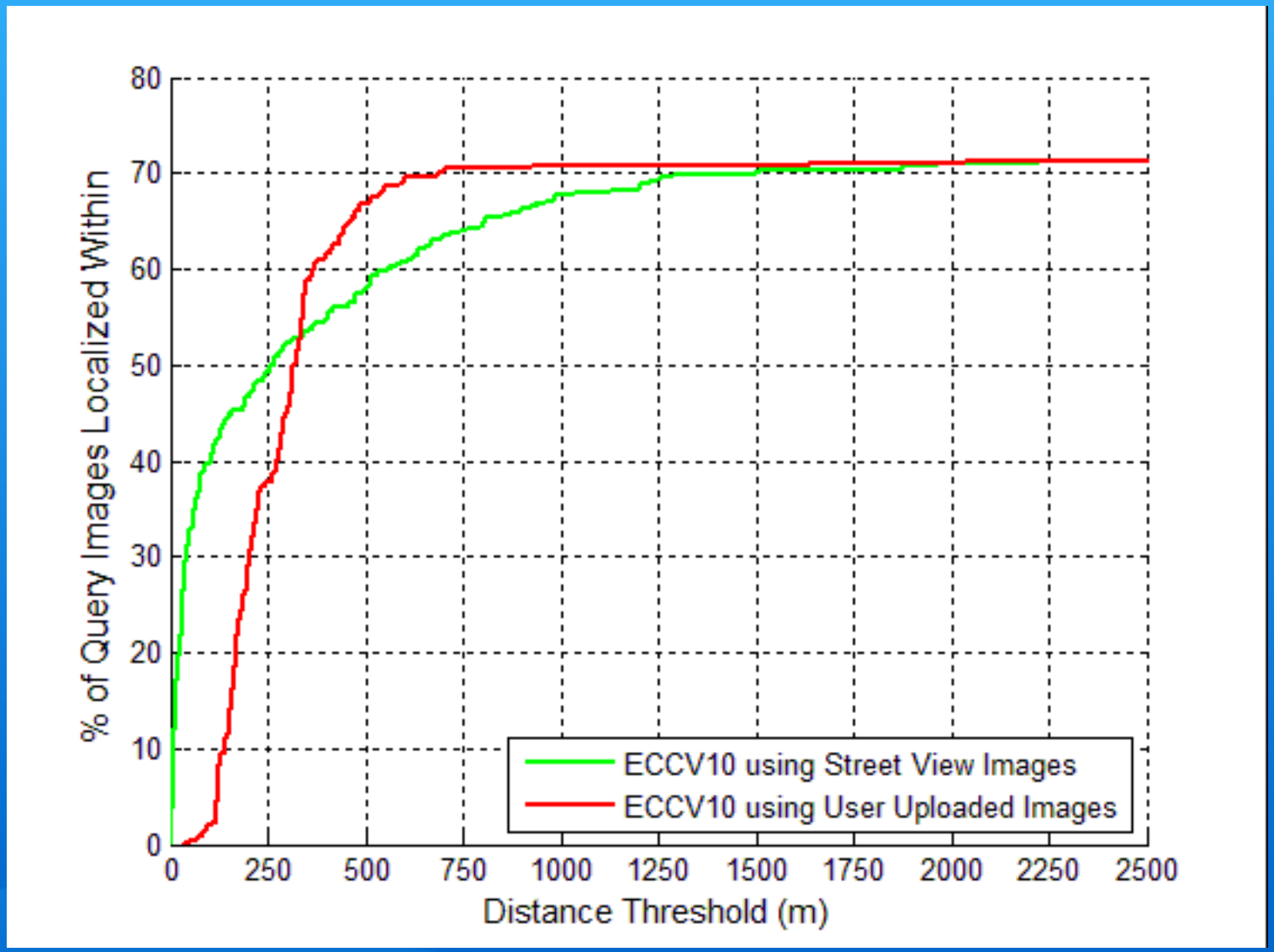
Query Number=82

Query Number=70

Query Number=103

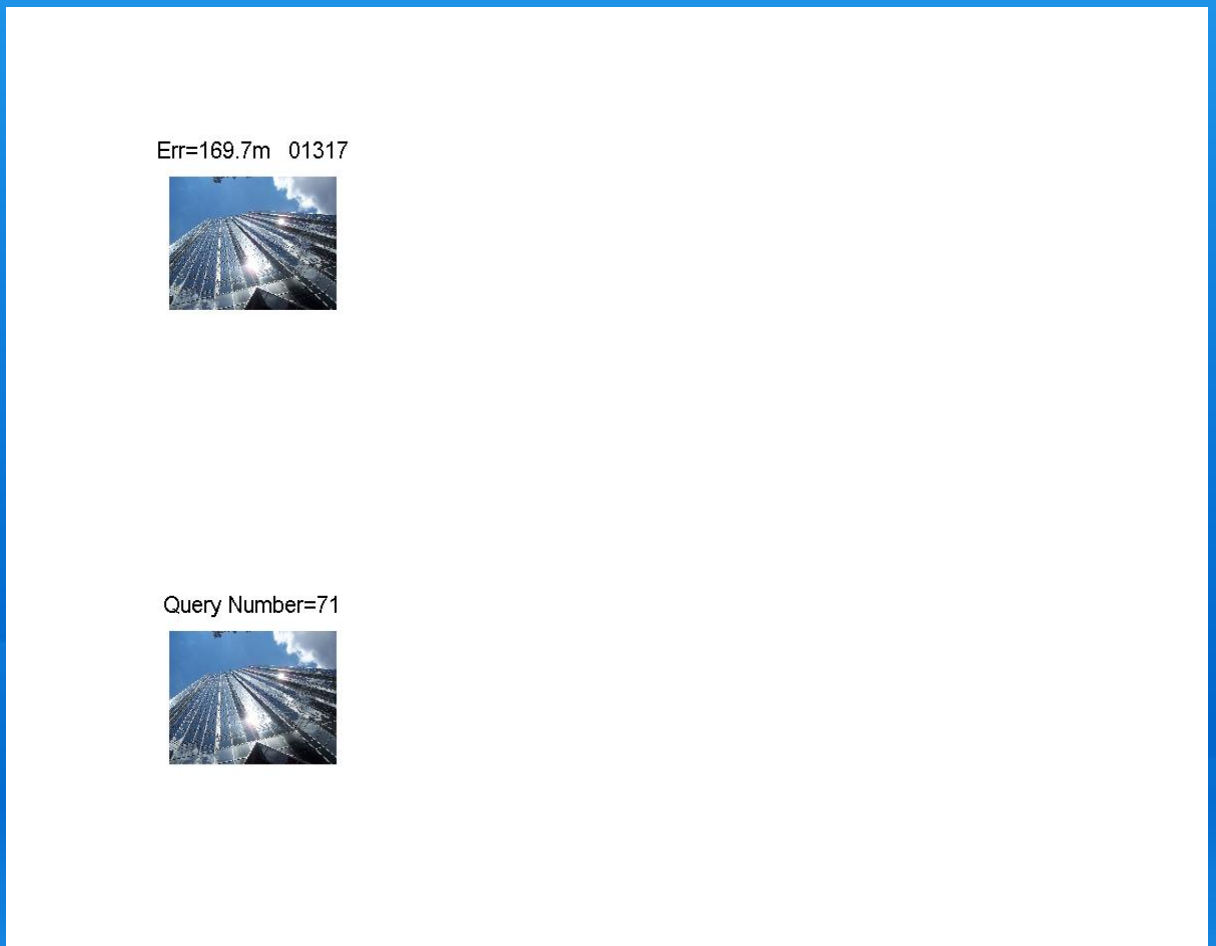
Query Number=114

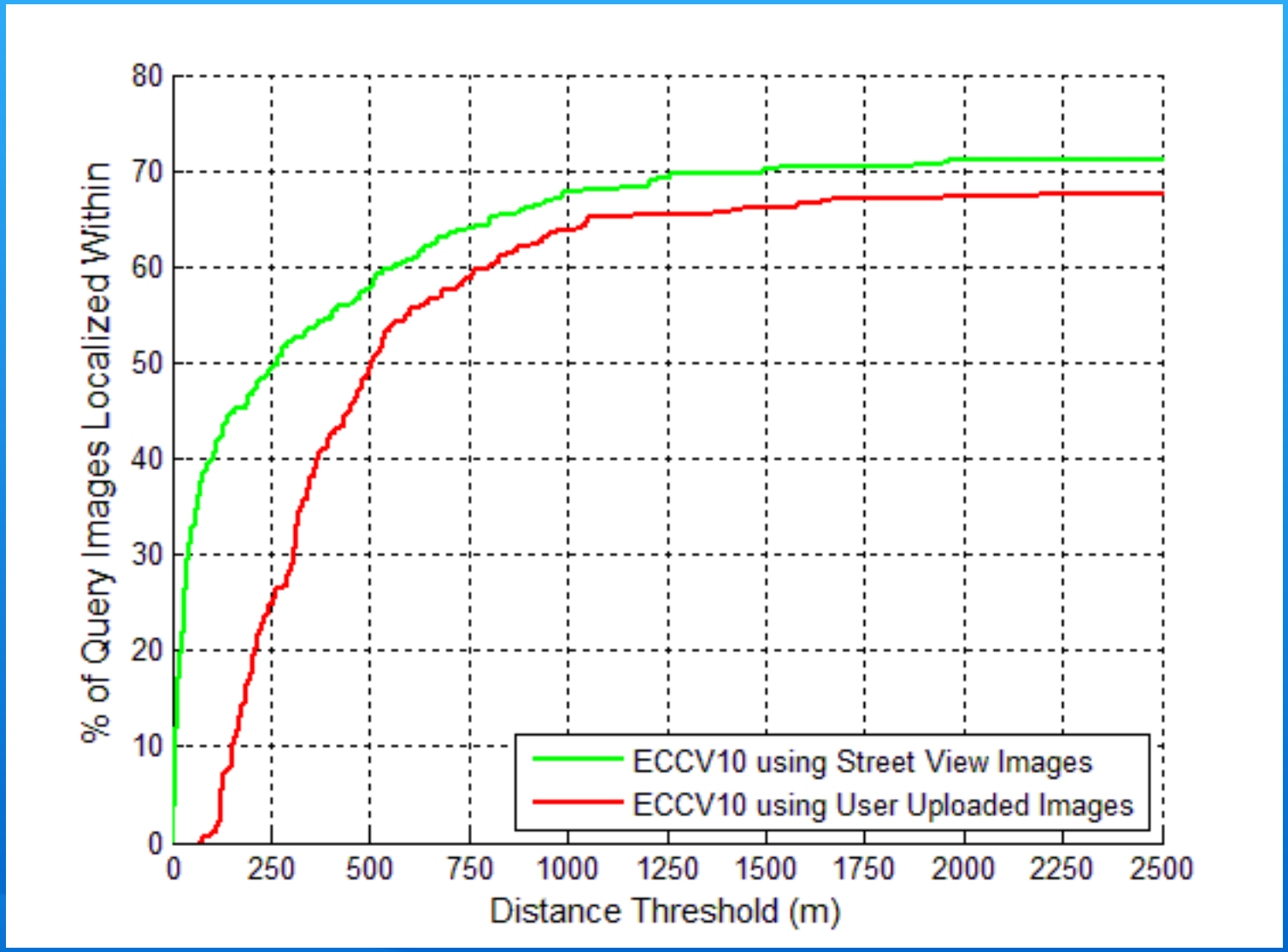
Comparison to "Where am I"

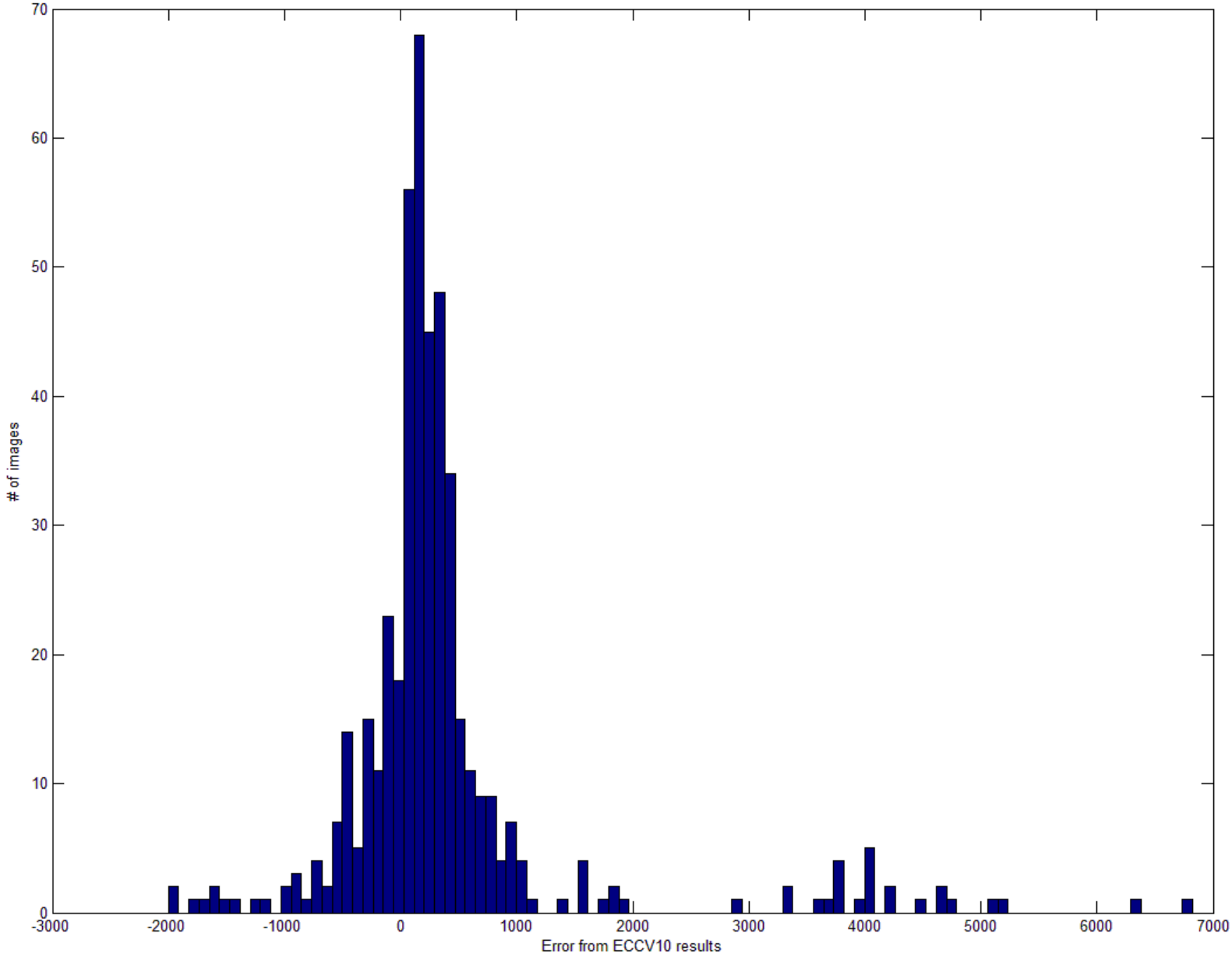


"Blacklisting"

Sometimes, queries are the same as dataset images. We excluded the identical images from dataset to actually localize, instead of match similar images.




% of Query Images Localized Within
Distance Threshold (m)
0
10
20
30
40
50
60
70
80
0
250
500
750
1000
1250
1500
1750
2000
2250
2500
ECCV10 using Street View Images
ECCV10 using User Uploaded Images


70
60
50
40
30
20
10
0
# of images
-3000
-2000
-1000
0
1000
2000
3000
4000
5000
6000
7000
Error from ECCV10 results

Problems

- Incorrect Geotagging leads to large error.
- Some images from dataset were in query set (not really a problem)

What's next?

- Check errors for image tags compared to actual images.
- Collect statistics from these results.
- Collect data from Moscow/Beijing and localize images using current methods.