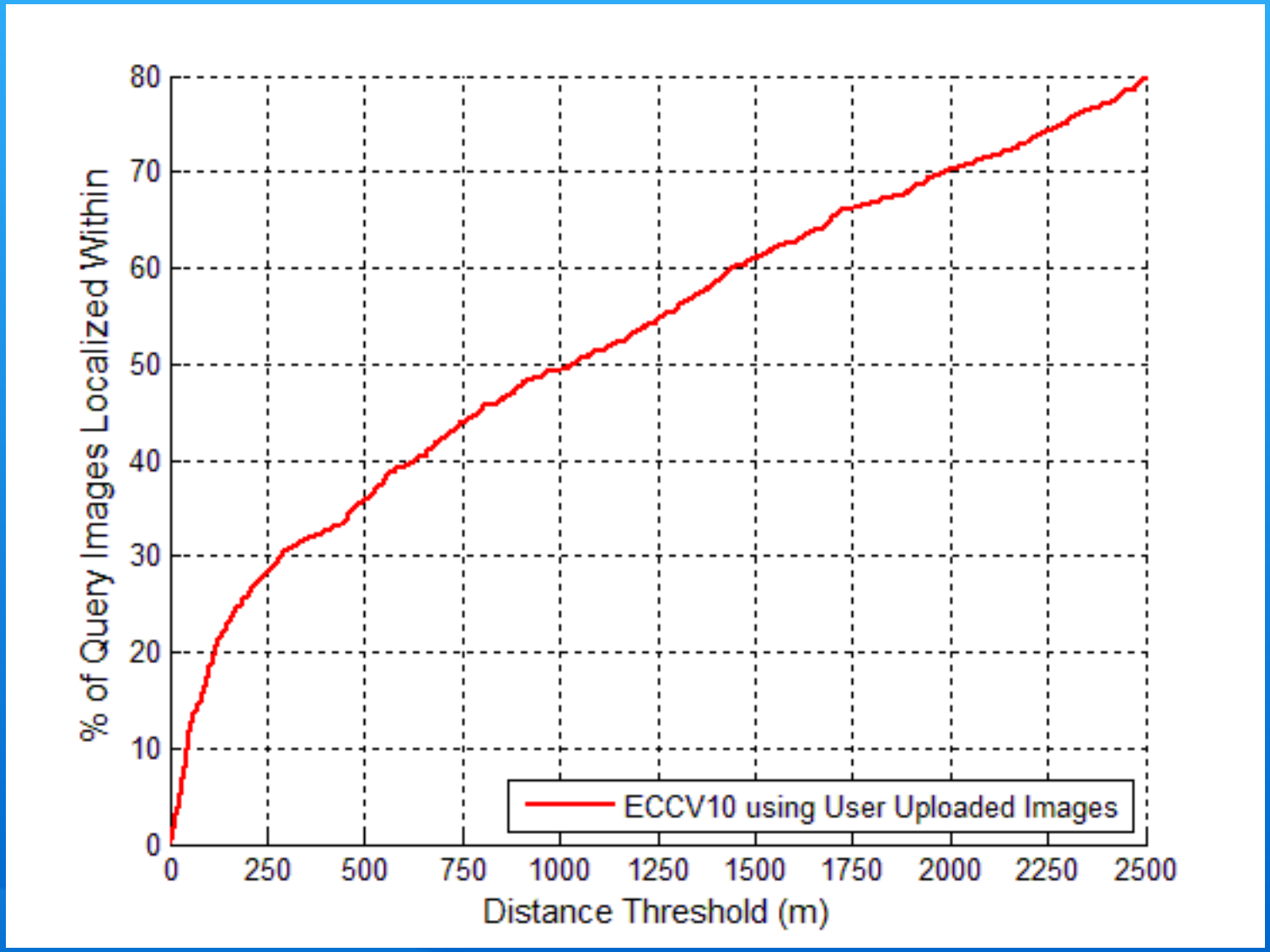
Improving Image Geotags

Week 8

Corey Pittman

Search area for Moscow

Moscow Results without Filtering



Query Number=111

Query Number=122

Query Number=162

Query Number=926

Err=50.51m

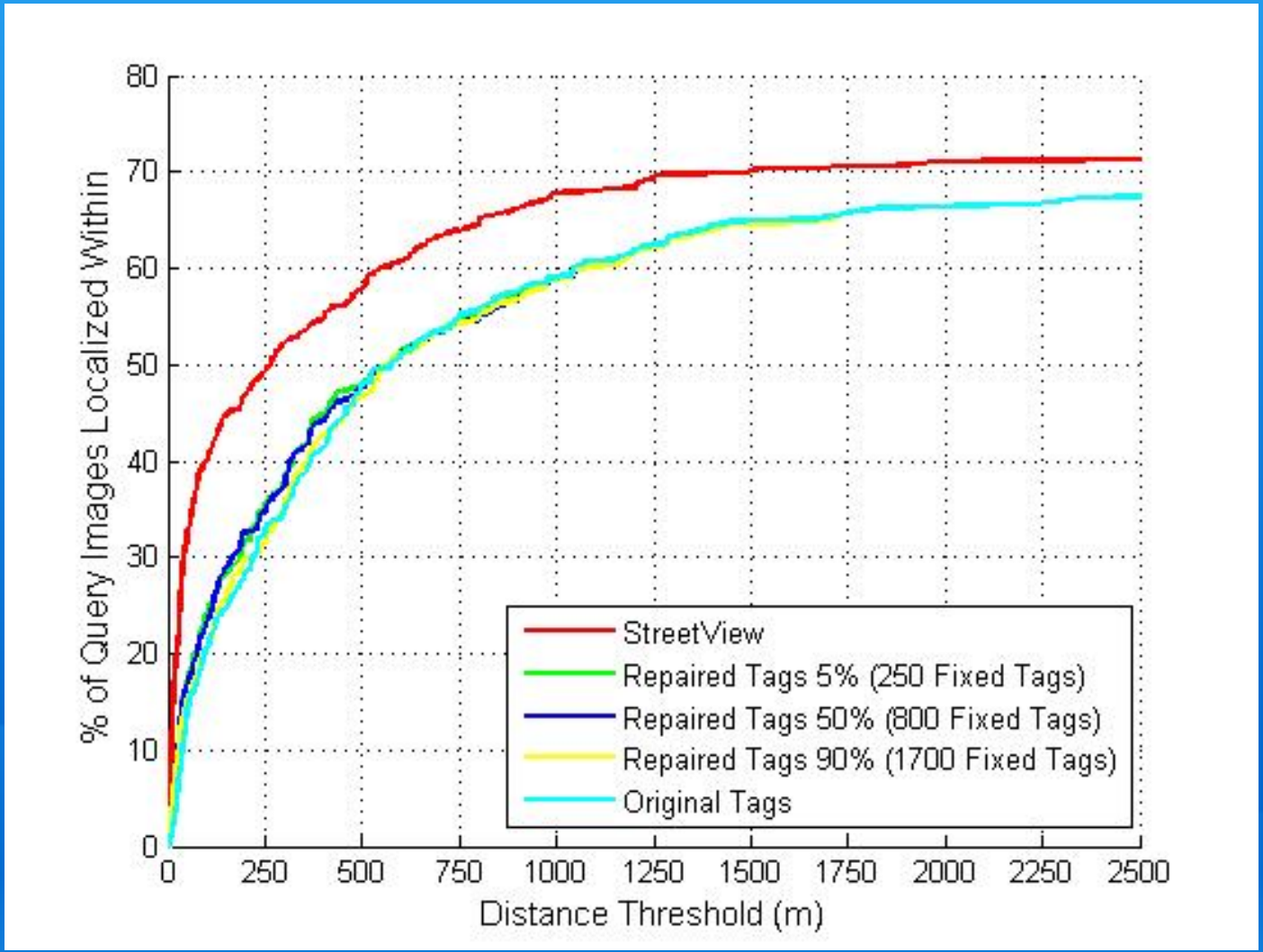
Err=25.78m

Err=126.2m

Err=960.8m

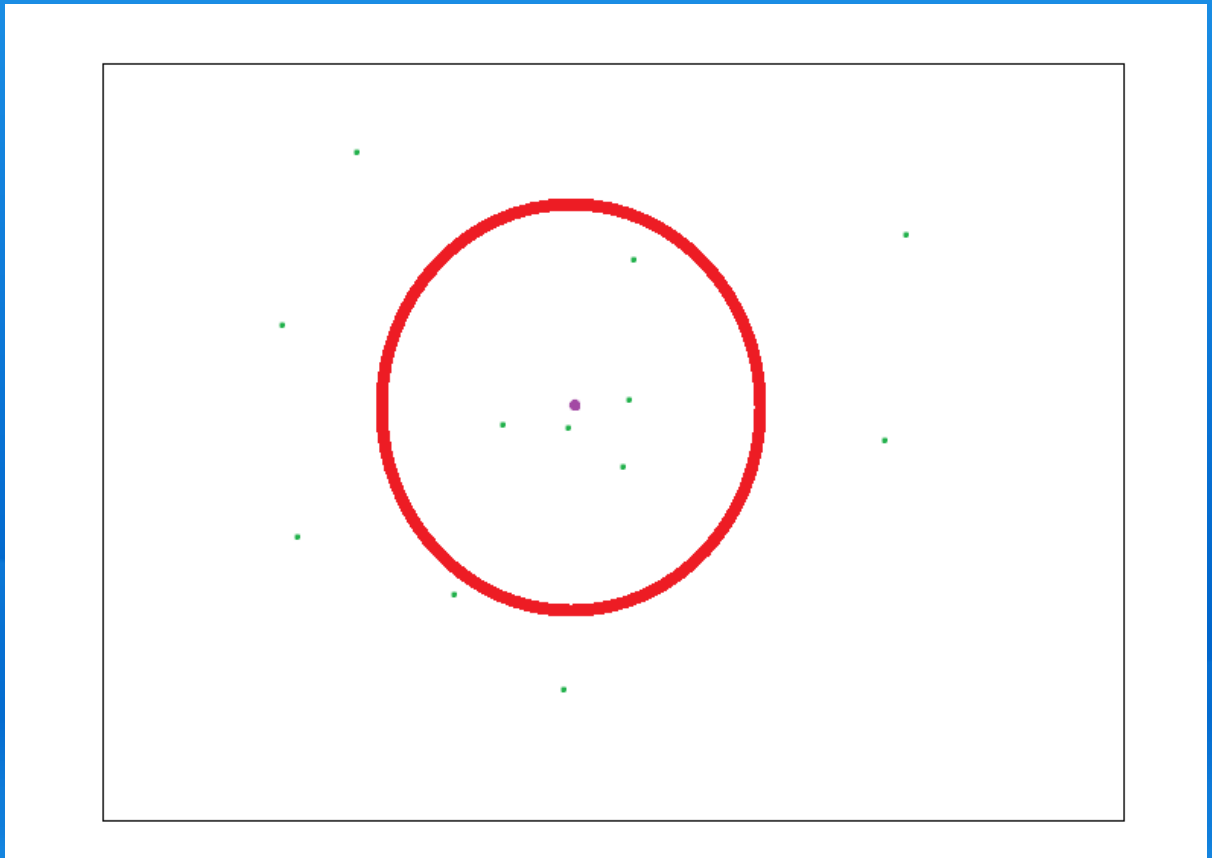
Repairing Tags

- Tried using more tag replacements.

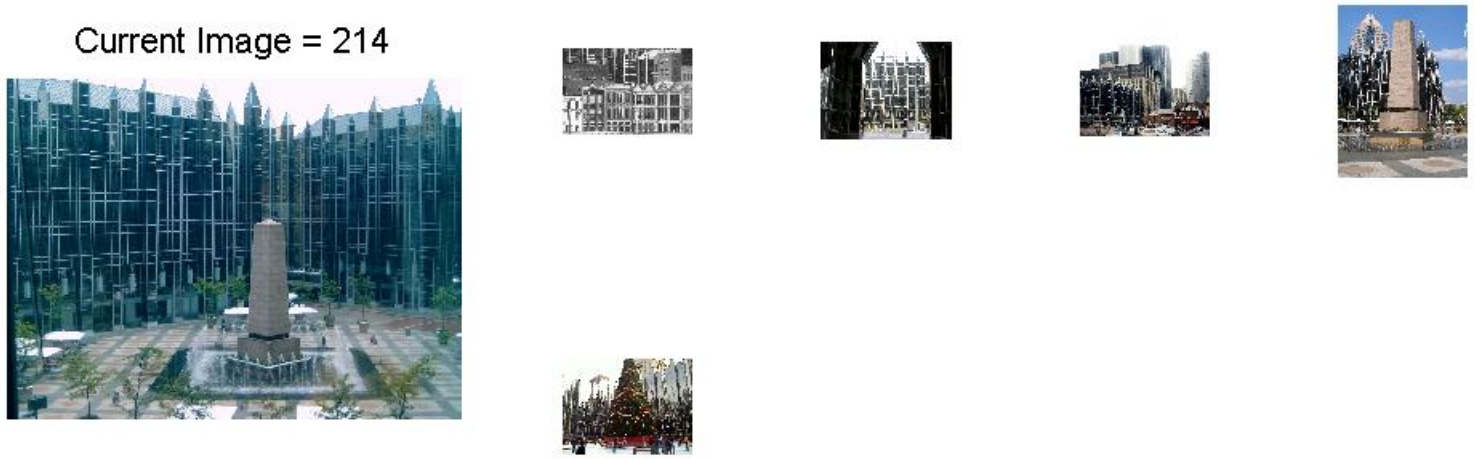


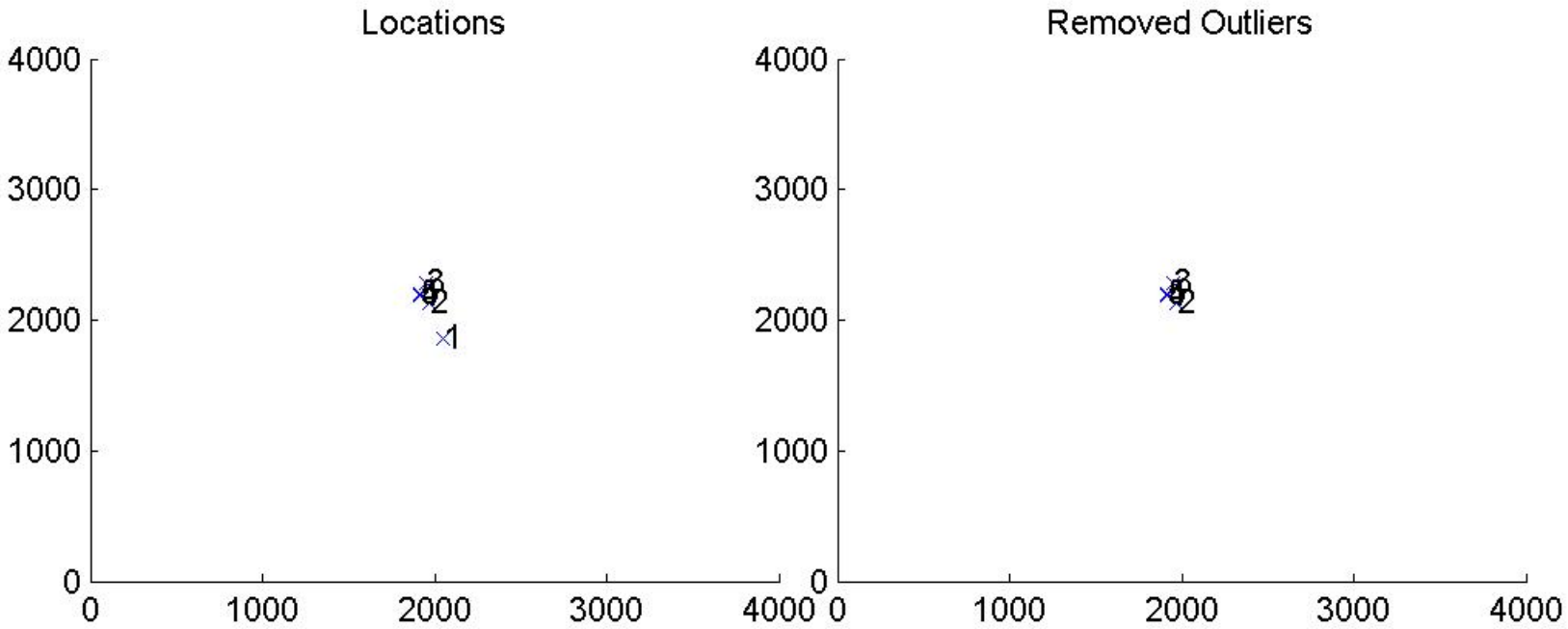
Outlier Removal

- In order to cluster images properly, outliers must be removed.
  - Calculate the 3 dimensional median of the NNs.
  - Calculate Z-Scores for each and remove those with z > 2



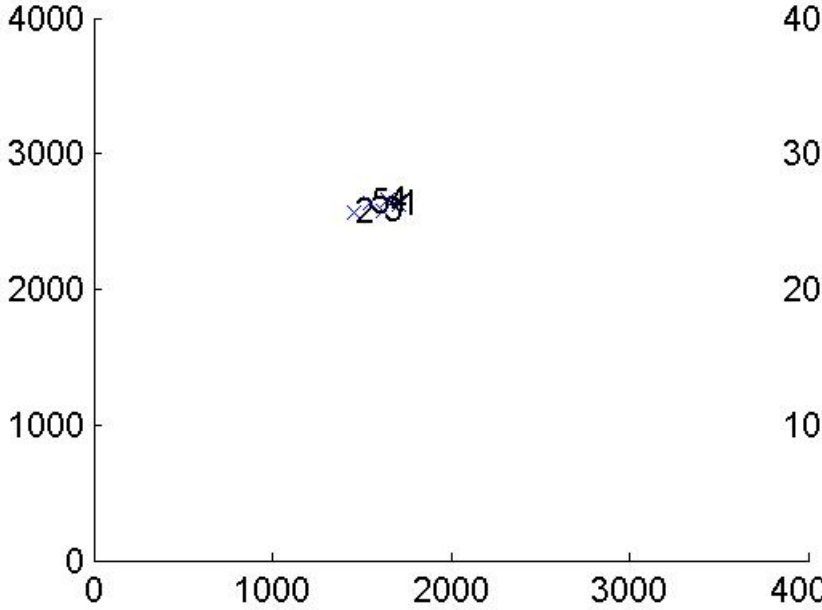
S


Current Image = 214

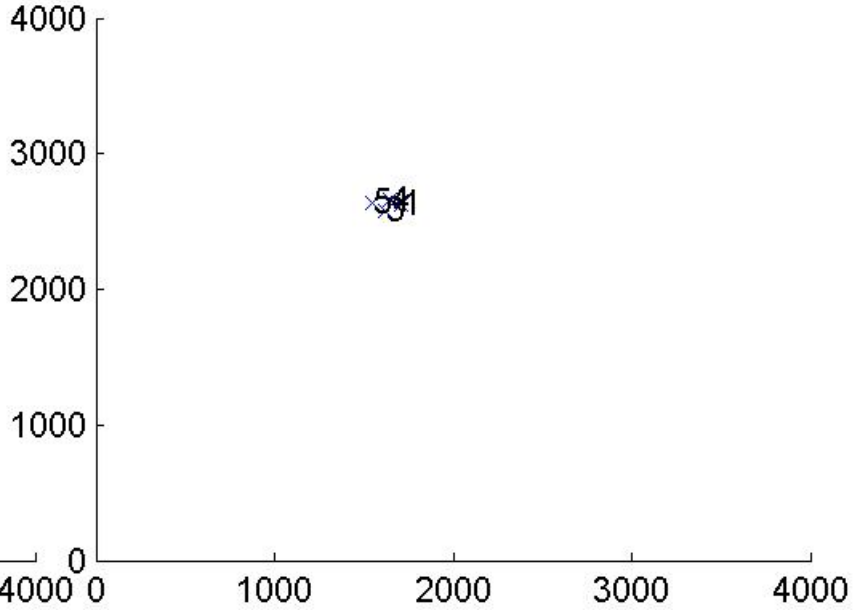

Locations
Removed Outliers
4000
3000
2000
1000
0
0
1000
2000
3000
4000
1
2
3

Current Image = 1613

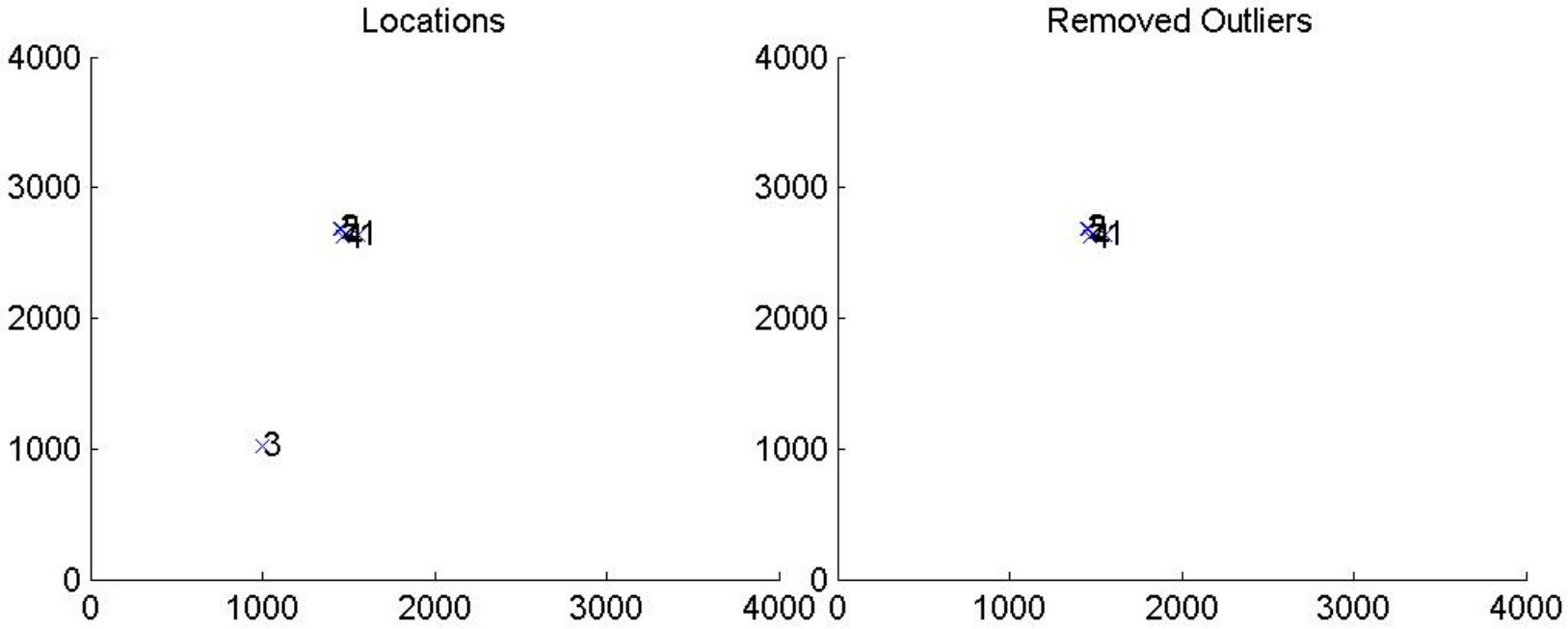
Locations



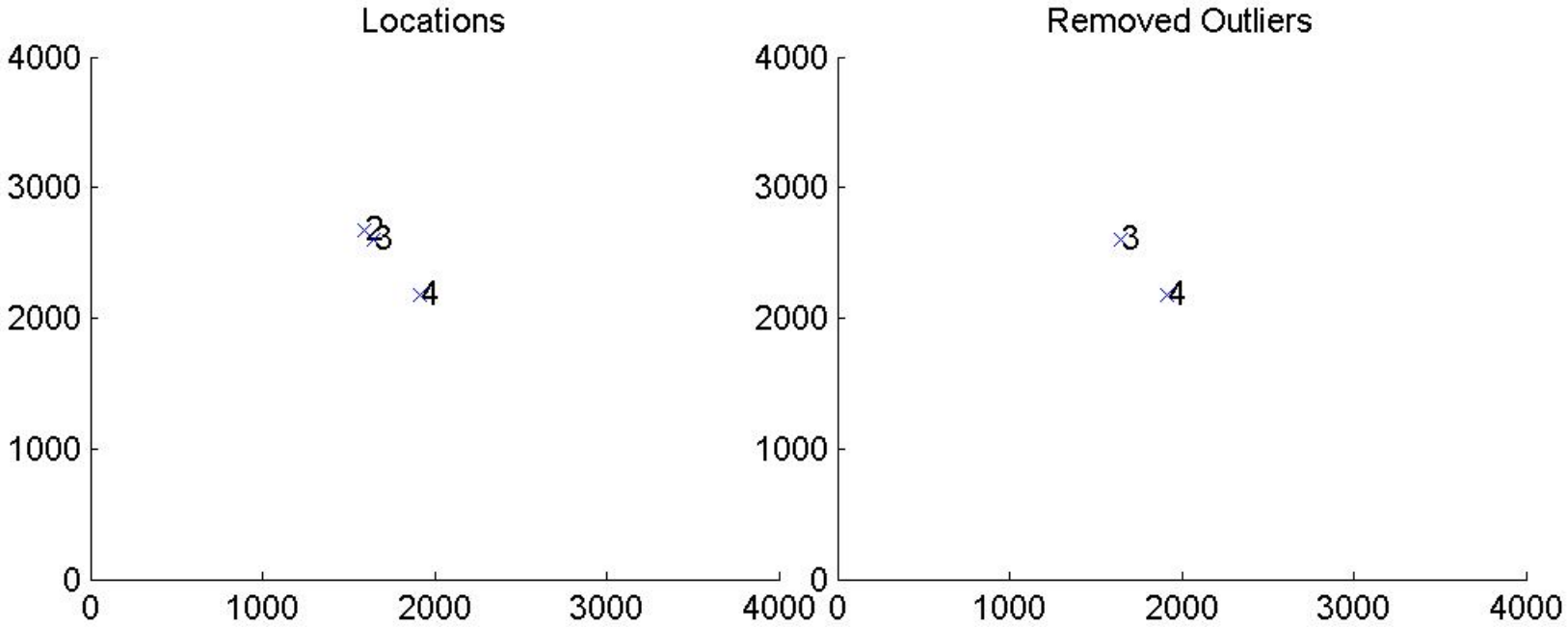
Removed Outliers



Current Image = 1618



Current Image = 3999



Next steps

- Clustering using MeanShift (Related to coordinantes)
- Clustering using relative geometry of cameras