

# Considering K-means as a Crime Mapping Algorithm

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## Background

- Crime mapping determines patrol routes.
- The Milwaukee police department uses K-means to map crime.

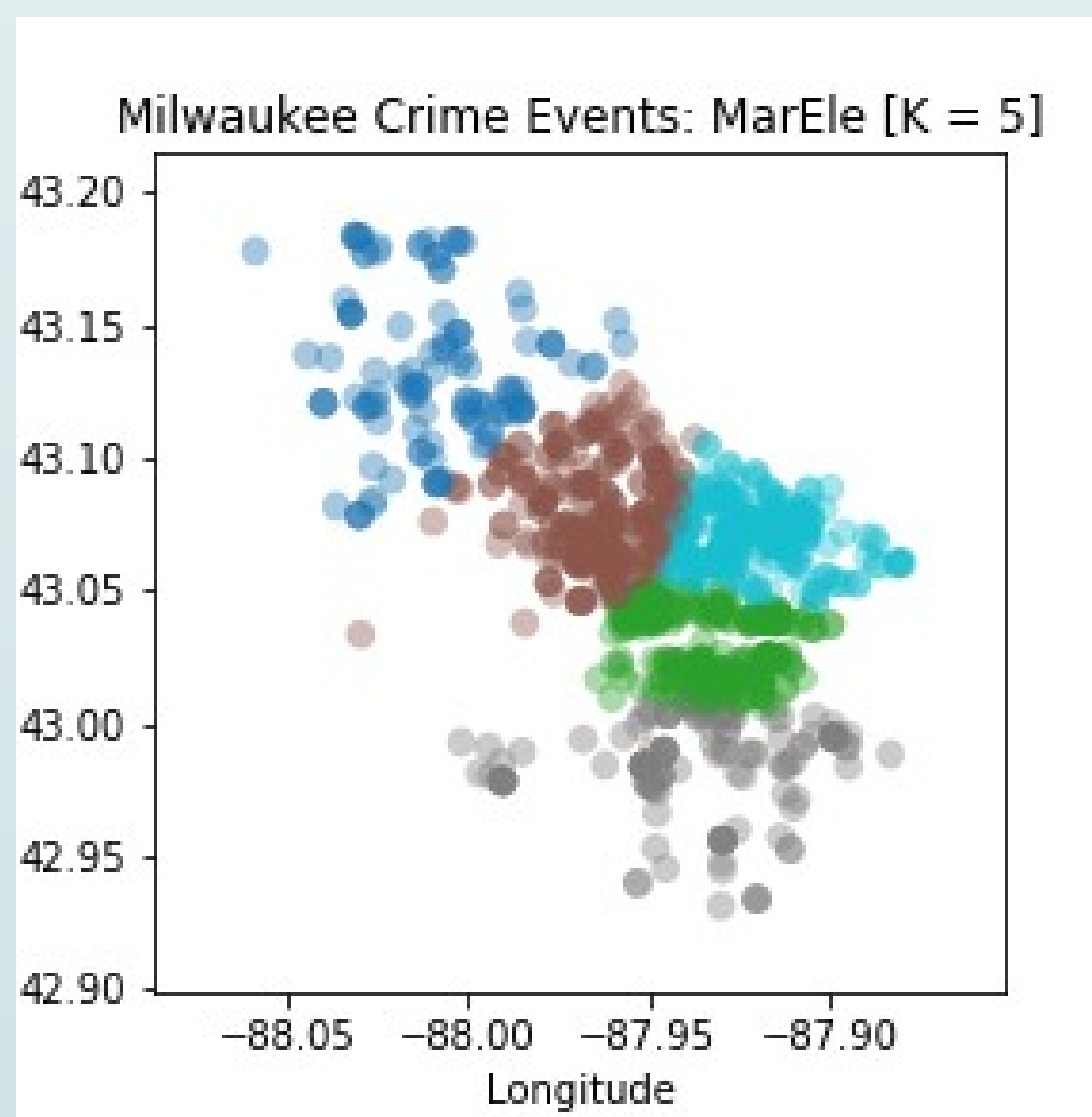
## Data

- Data from MKE Circuit and Municipal Courts (2009-2014)
- Latitude and Longitude found using Google API

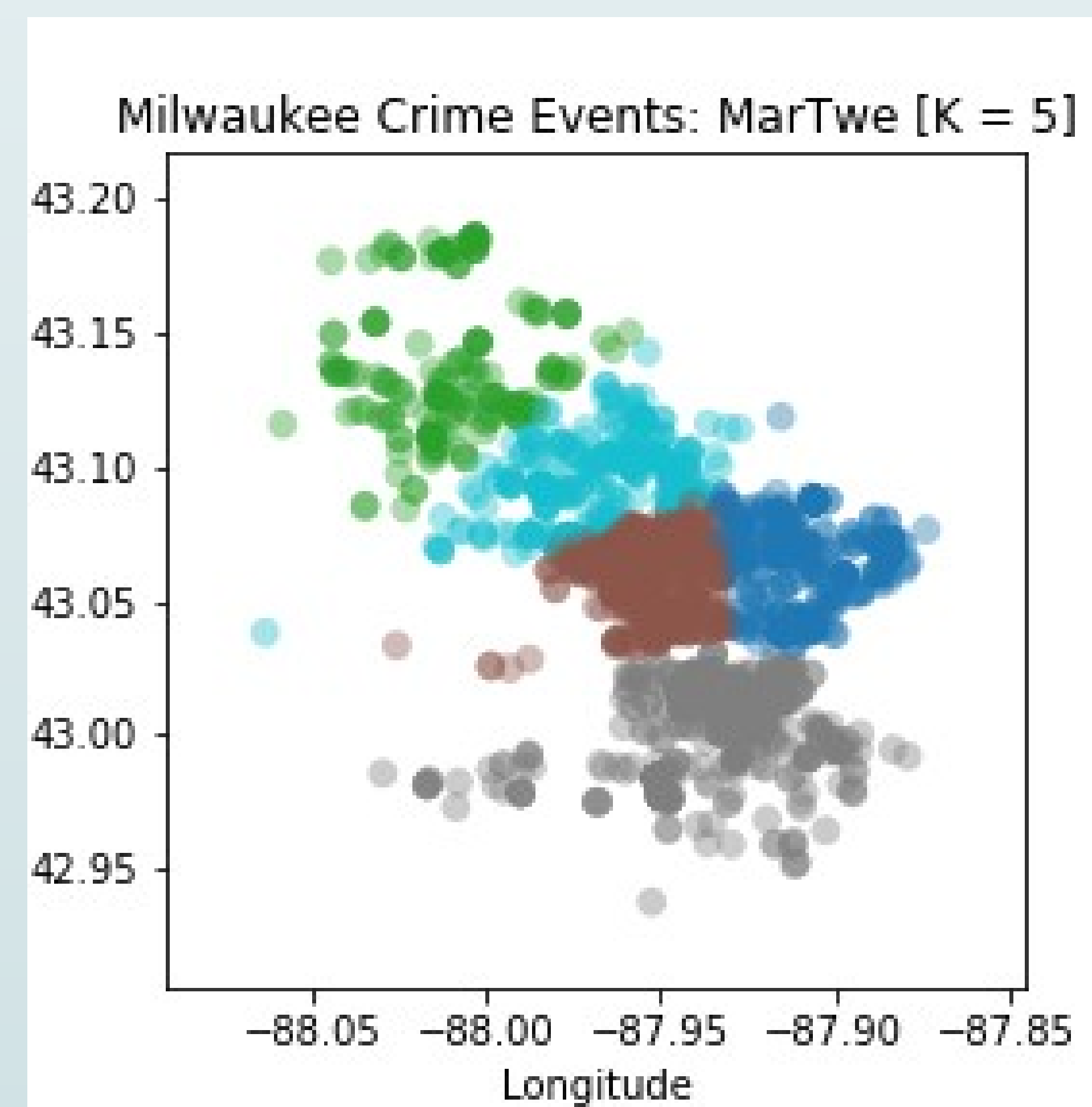
## Takeaways

- Clusters shift as time passes
- Crime plots of Milwaukee diverge as K varies.

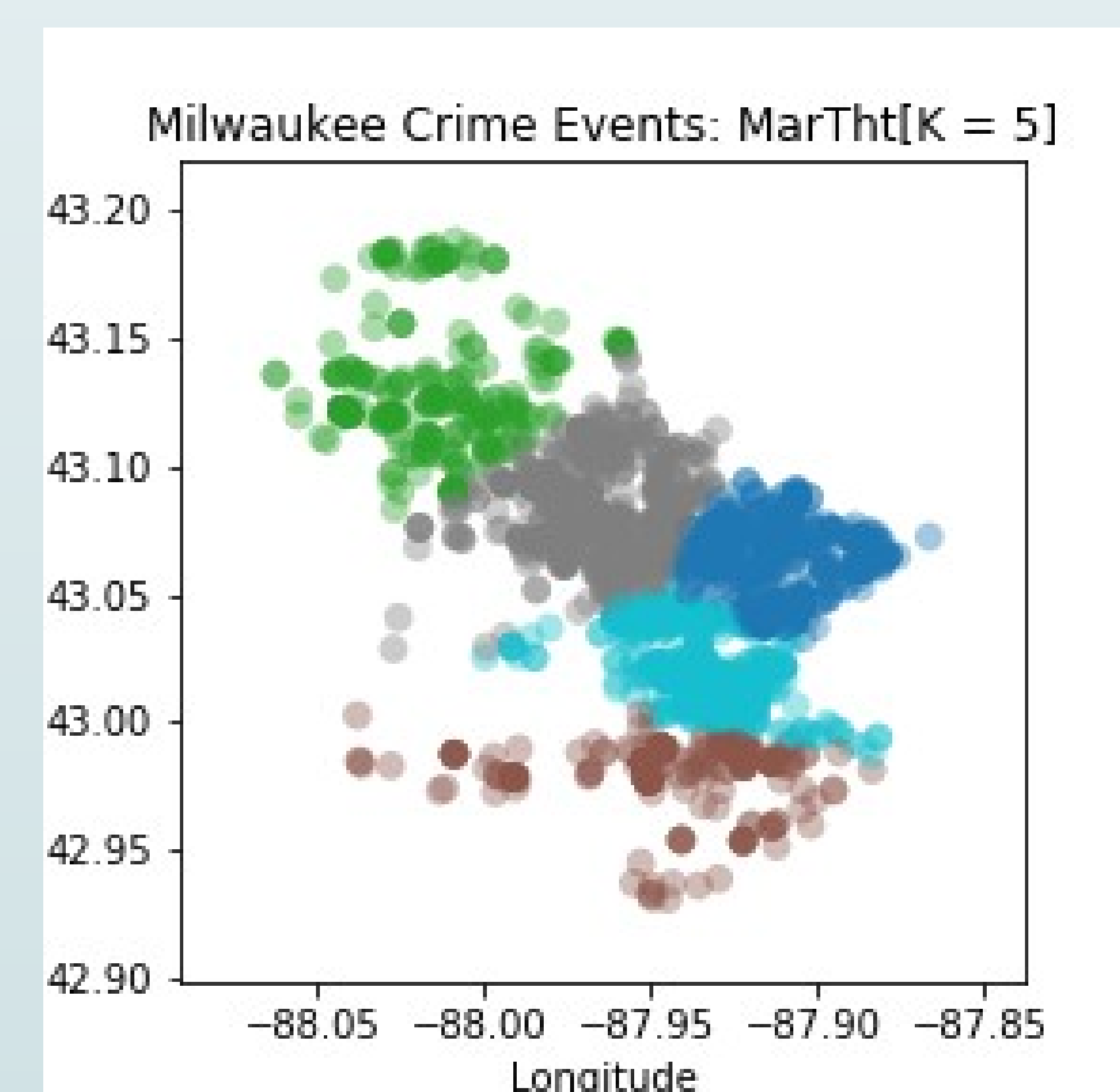
## Graphs



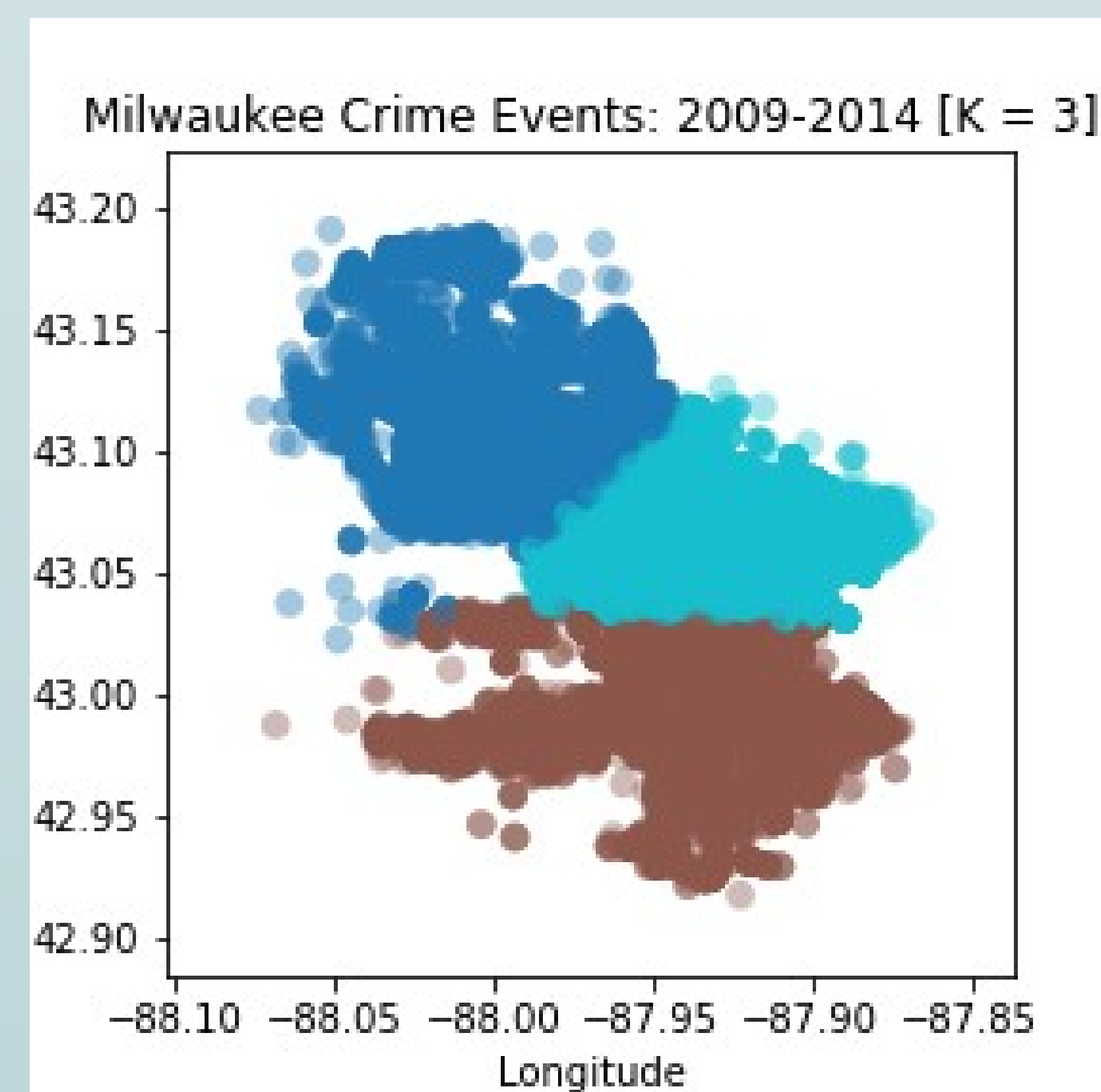
*March 2011: K = 5*



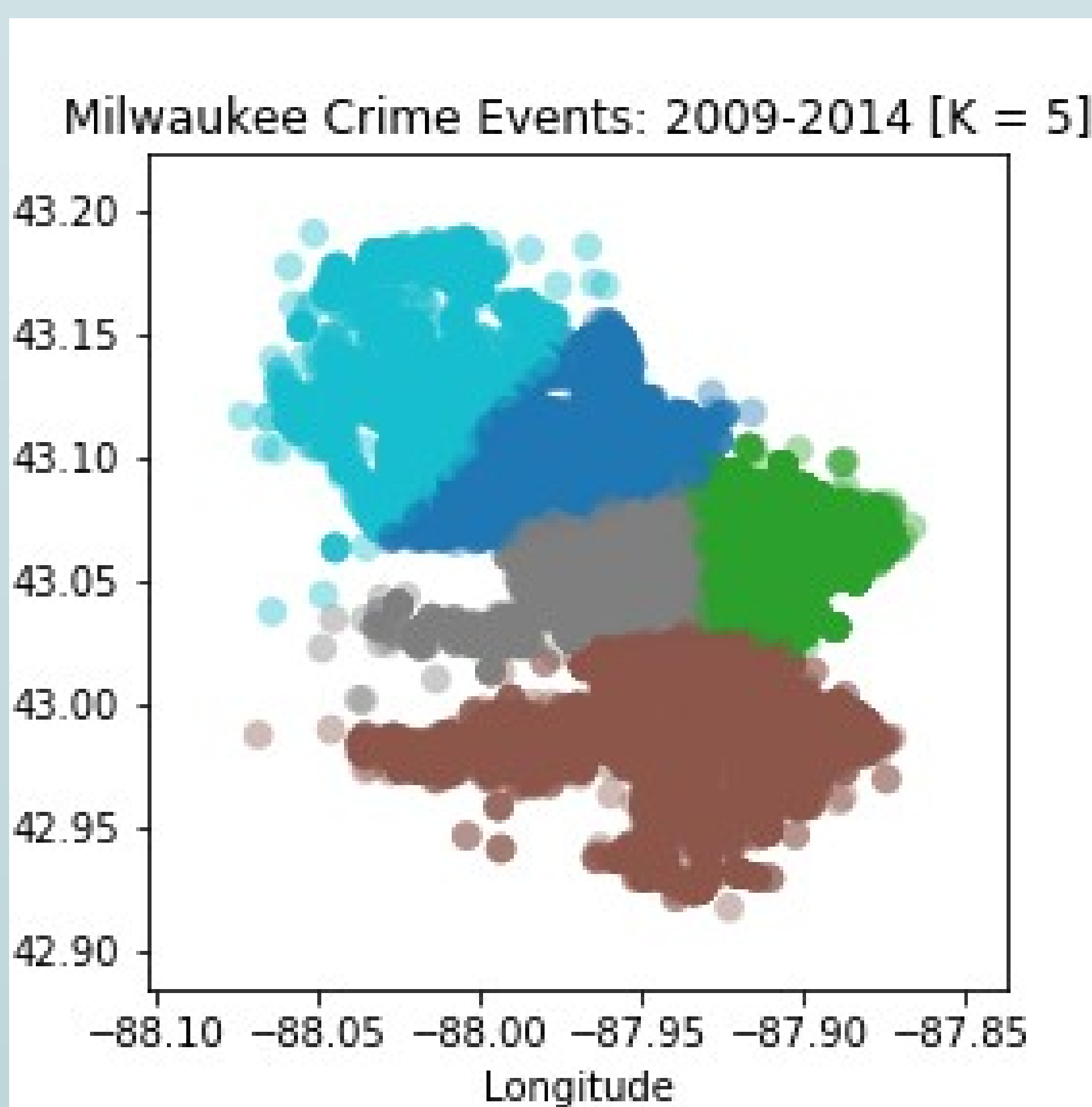
*March 2012: K = 5*



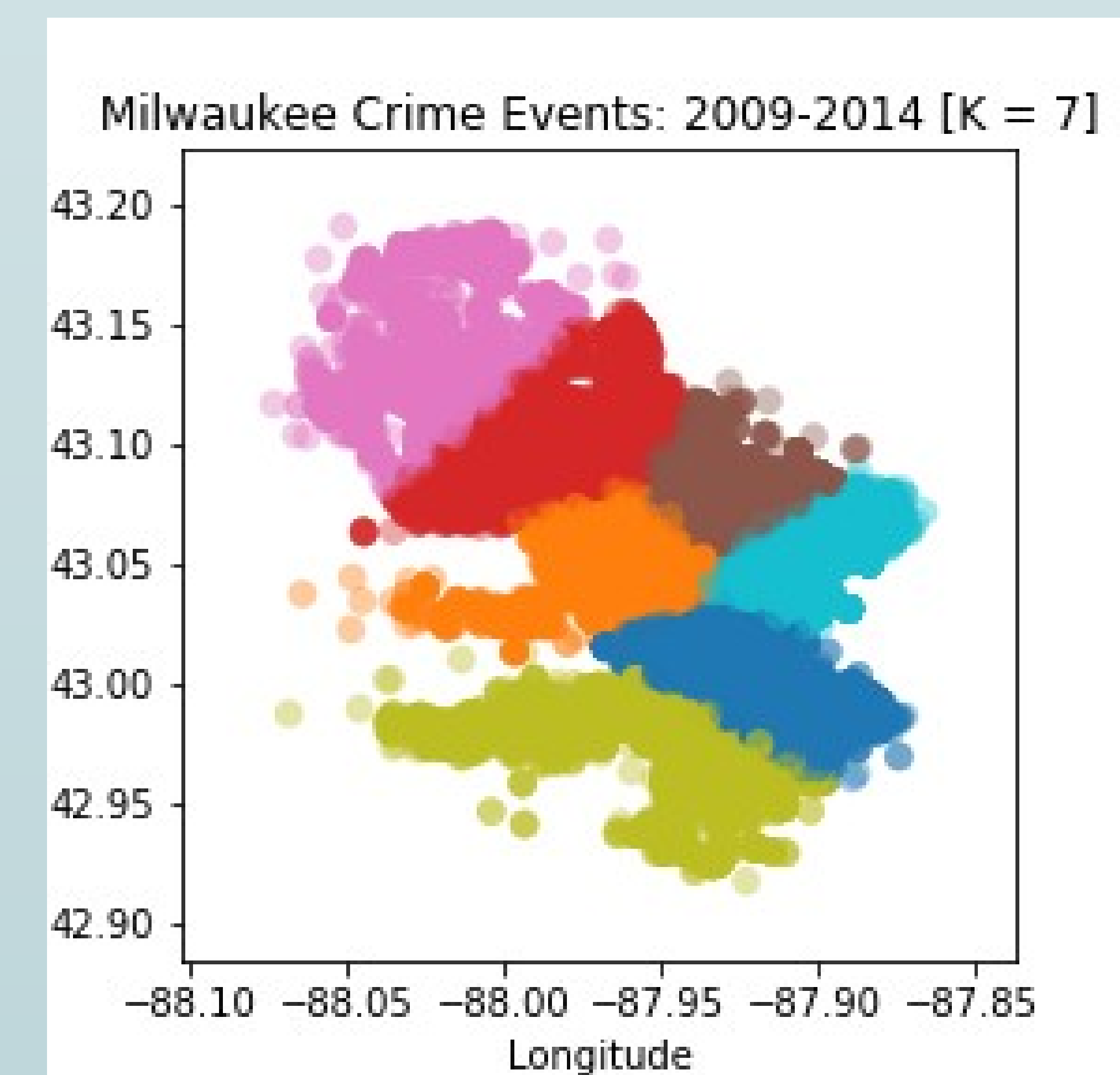
*March 2013 K = 5*



*Full Set (2009-2014) ; K = 3*



*Full Set (2009-2014) : K = 5*



*Full Set (2009-2014) : K = 7*