## Traffic Prediction – Selected Results

## 1 Clustering of speed data

The figure shows the results of k-means clustering applied to daily speed profiles for sensor E4S 58 140. Three clusters were selected based on the elbow method (Appendix F).

Cluster 1 shows stable speeds with a sharp dip between 14:00–17:00, representing typical weekday congestion. Cluster 2 represents moderately busy days with minor fluctuations, possibly weekends. Cluster 3 indicates severe congestion in the afternoon, likely corresponding to heavy traffic weekdays or incident days.

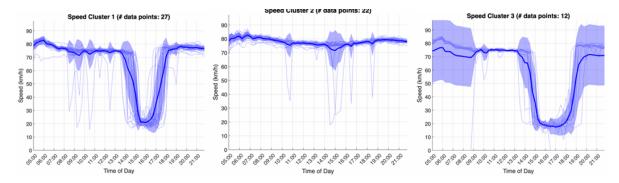


Figure 1: K-means clustering of daily speed profiles for sensor E4S 58140 (k=3).