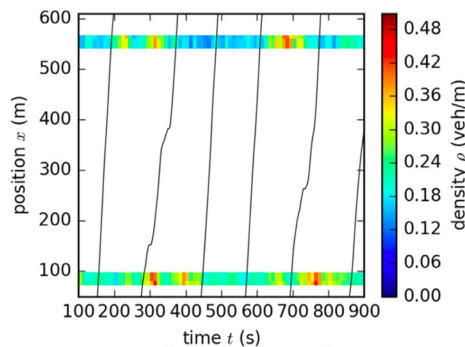
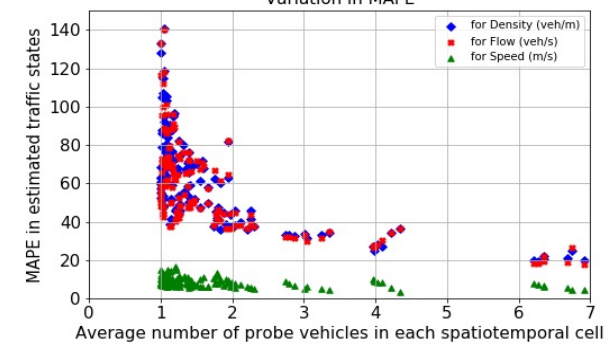
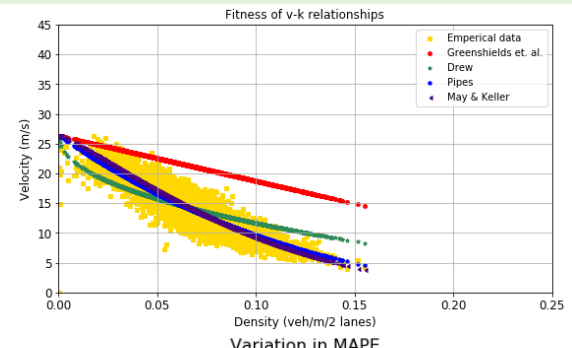


Analysis of fundamental relations and estimation methods of traffic state variables using complete trajectory data: ZTD

- Since 1935, significant contributions have been made to estimating the traffic state variables (flow q , density k , speed v) and relations between them such as Fundamental Diagram using both, traditionally stationary data and recently available data from probe vehicles. But they have not been validated to a large extent using 100% real traffic data at high spatiotemporal resolution.
- The Zen Traffic Data (ZTD) is 100% complete trajectory data, covering wide spatiotemporal domain with high temporal sampling date (0.1s). It provides meaning to validation and performance evaluation of physical models, fundamental relations and TSE methods.
- The research theme is to statistically evaluate them using ZTD and formulate TSE method to accurately estimate traffic states in complete time-space domain at finer spatiotemporal resolution & probe data with fewer penetration environment using techniques like data assimilation (DA).



TSE

