

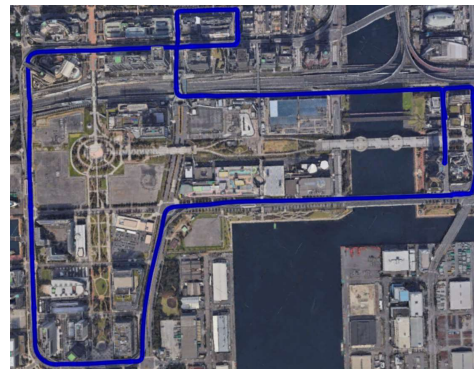
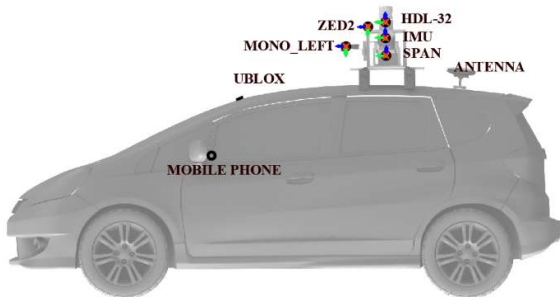
Key Experimental Results

- **Experiment Settings**

- **Compared Methods:** KF, PF, Huber KF, RKF-Gaussian, RKF-GSM
- Metrics: RMSE, MAE

- **Real-World Data: UrbanNav Urban Navigation**

- GNSS/IMU data from Tokyo urban canyon



- **Results:**

1. **90.58% RMSE reduction** vs. KF
2. **47.79% RMSE reduction** vs. RKF-GSM
3. Sustained lowest positioning error, robust to outliers

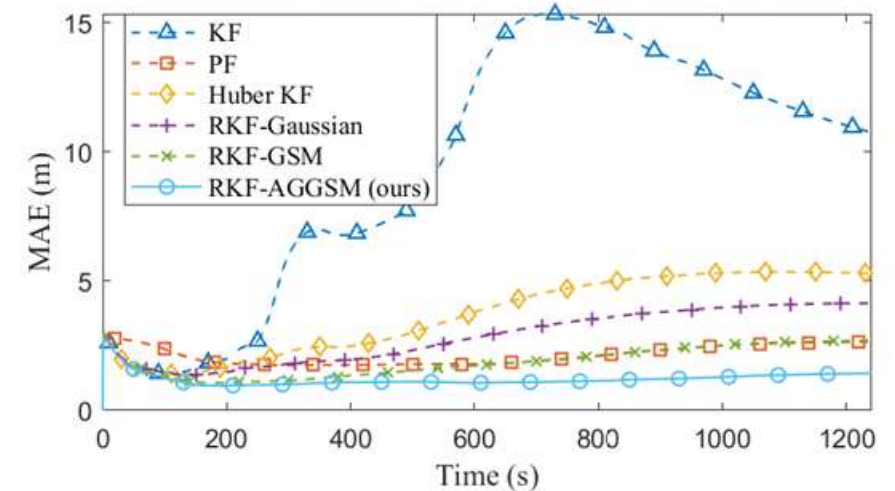
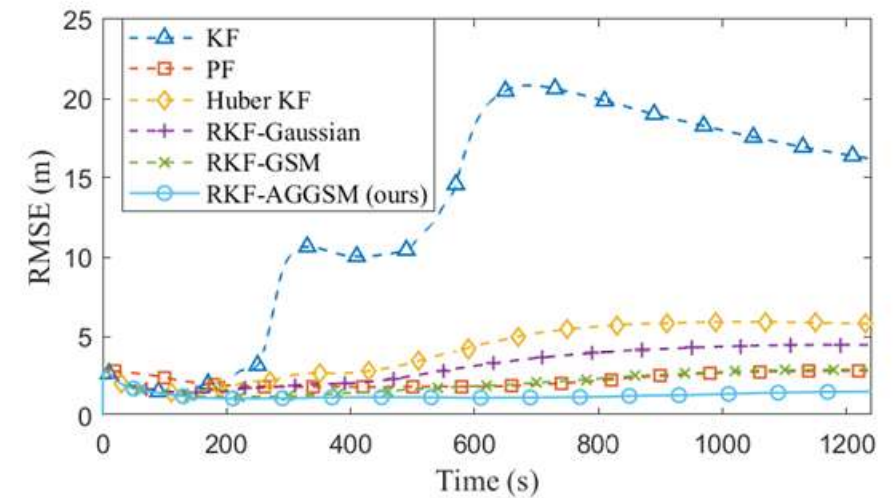


Figure: Real-time positioning errors on UrbanNav.