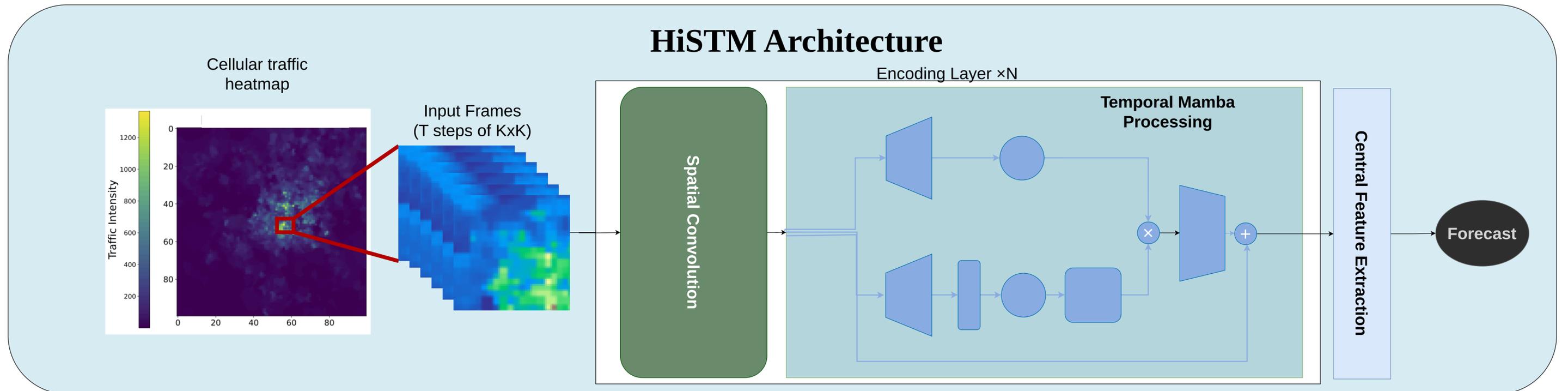
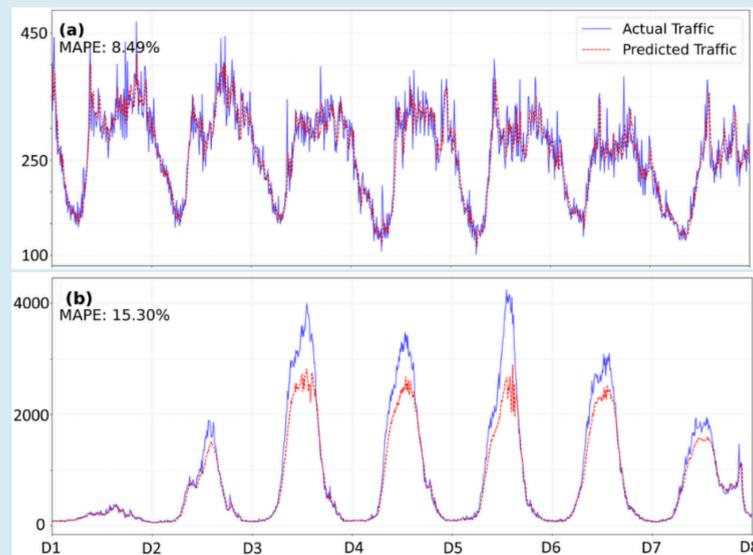


Hierarchical Mamba Models for Scalable Spatiotemporal Traffic Forecasting



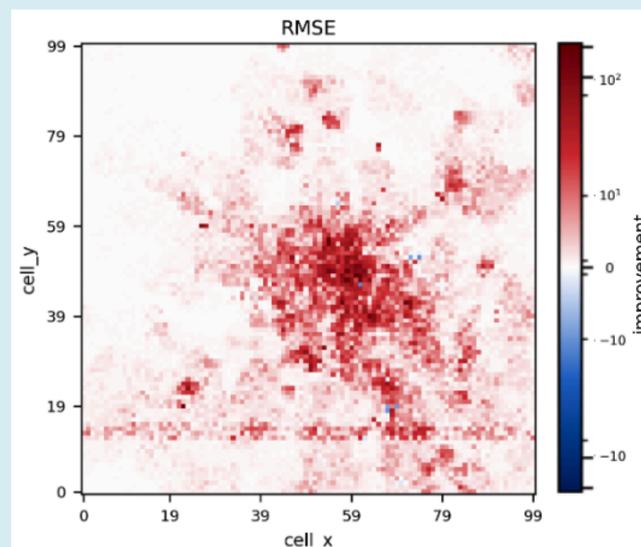
Performance:

MAPE ranges from **8.5%** (best) to **15.3%** (worst)



Scalability:

1 HiSTM outperforms 10k independent LSTMs



Conclusion: HiSTM proposes a **hierarchical design** combining spatial convolutional encoding with **Mamba-based temporal modeling** to achieve state-of-the-art accuracy in cellular traffic forecasting. The model demonstrates **exceptional efficiency and scalability**, outperforming 10,000 independently trained cell-specific LSTMs while maintaining a footprint **45× smaller** than contemporary heavy architectures.