

# SEKIMOTO LAB.

[Urban Relate Spatial Information – Science for City and People –]

Department of Human and Social Systems

Human Centered Urban Informatics

Department of Civil Engineering  
 Department of Advanced Interdisciplinary Studies  
 Center for Spatial Information Science

<http://sekilab.iis.u-tokyo.ac.jp>

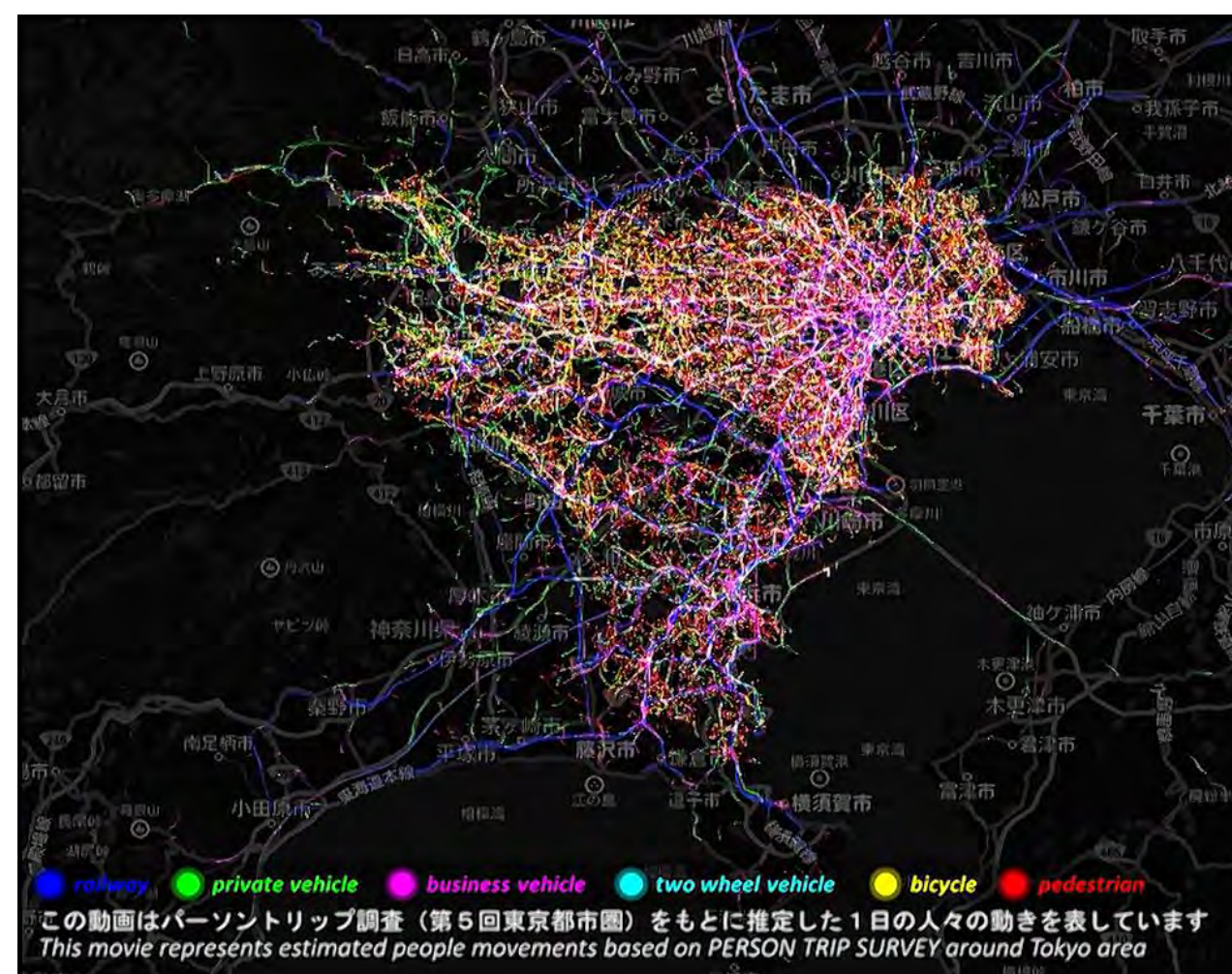
Assembling spatial information related to people, objects, and events in urban and local area helps understand past/current/future situations through compilation, analysis, and share.

We study on discovering and solving wide variety of social-issues with such spatial information.

## ➤ Estimating People Flow in Combination of Sensing and Behavior Modeling

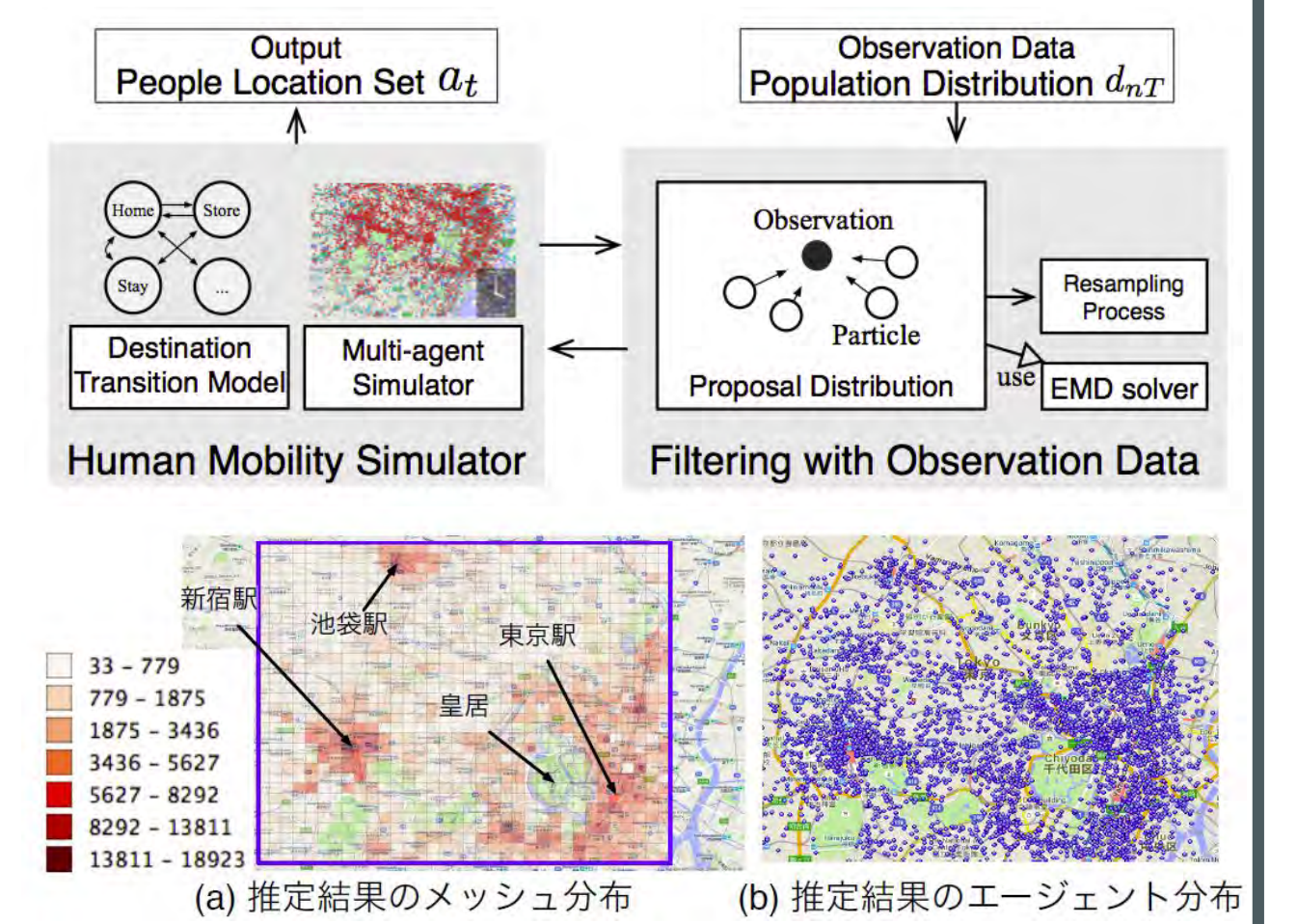
### People Flow dataset

We develop datasets for people mass movement and provide the datasets to researchers and the general public.



### Data Assimilation Method Approach

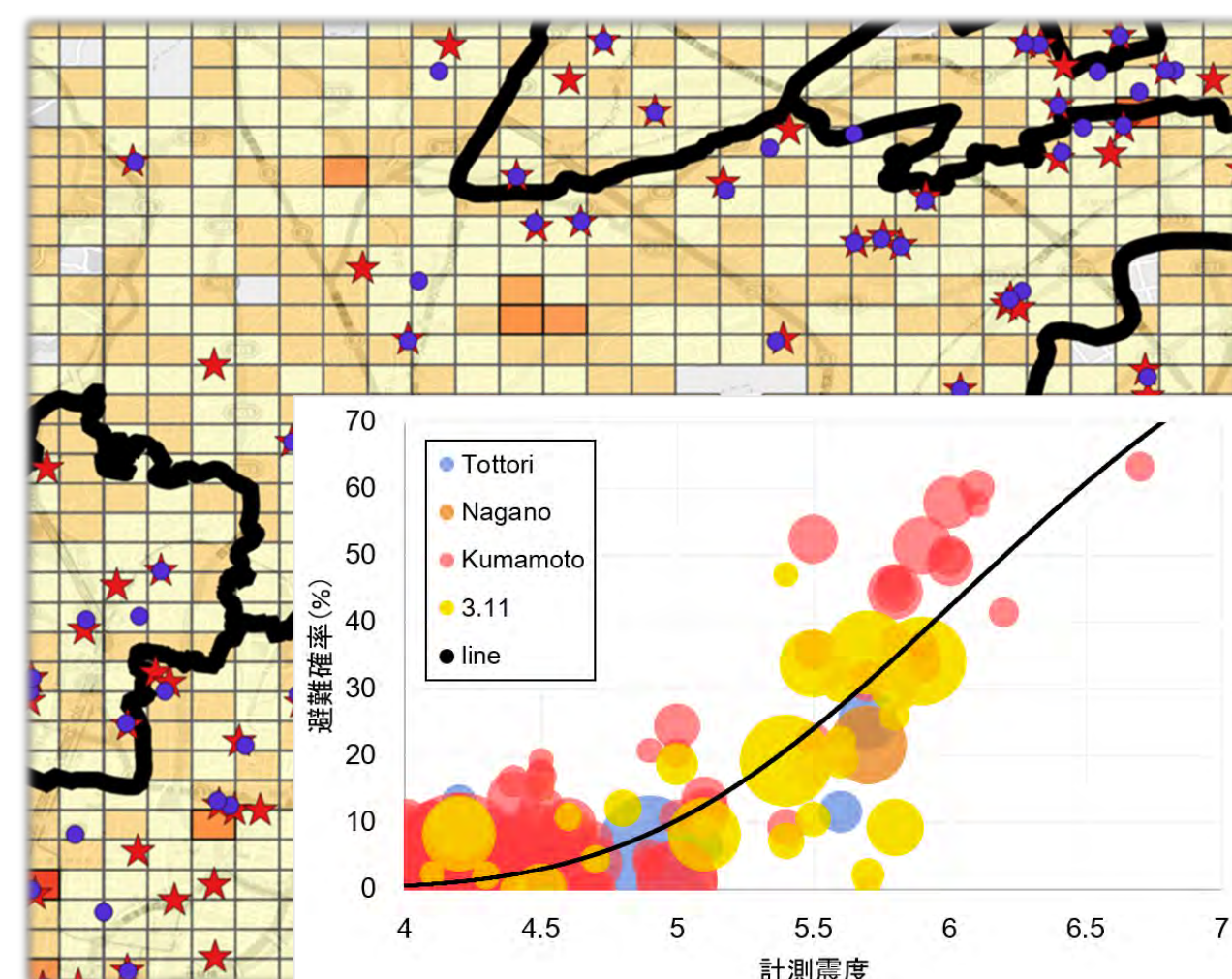
We realize highly accurate human flow estimation by assimilating observation data into behavior model.



## ➤ Unravelling People Movement in Specific Contexts

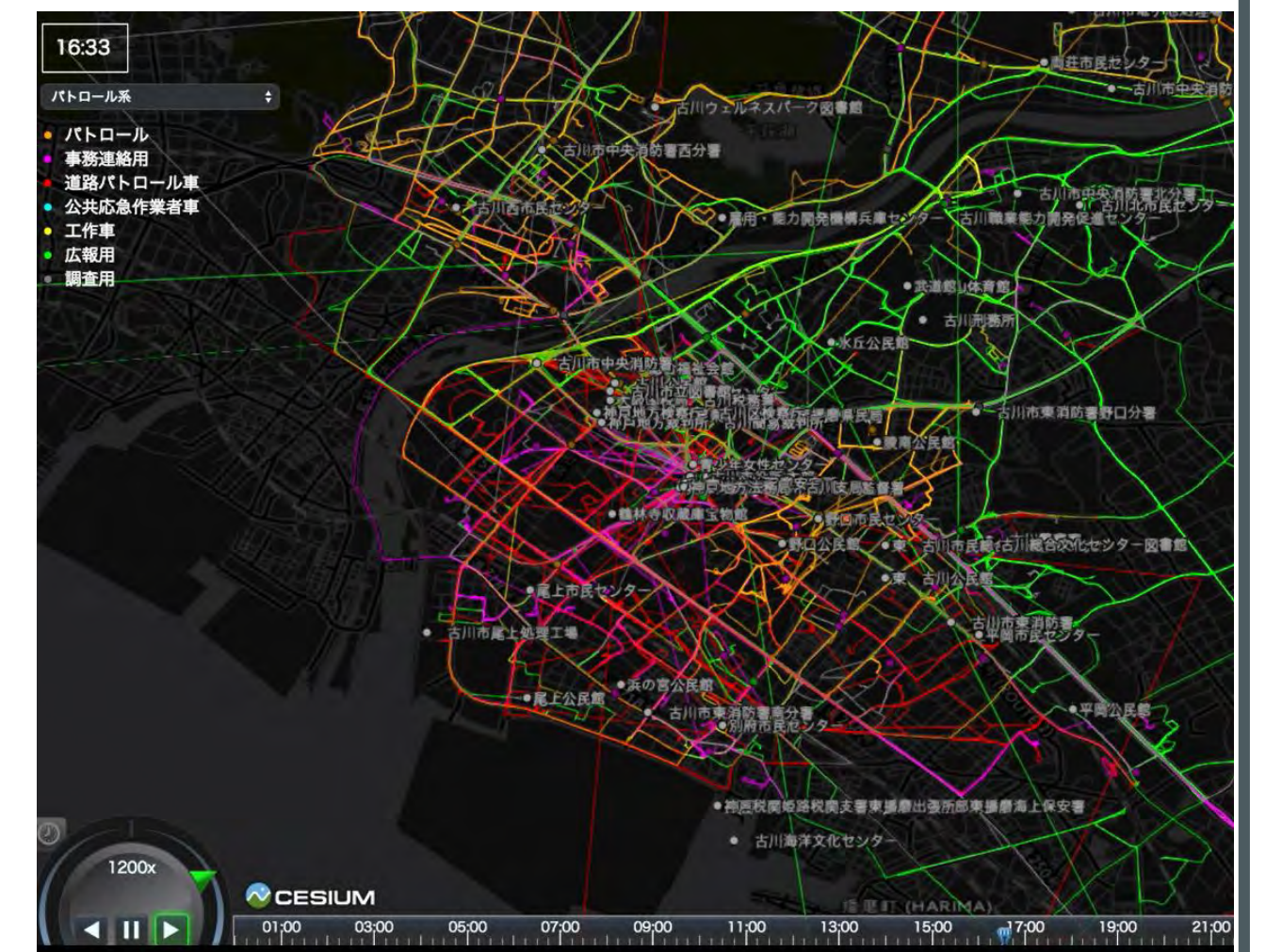
### Human Movement Analysis in Disasters

We analyze irregular human behavior after disasters using location information.



### Public Vehicle Analysis

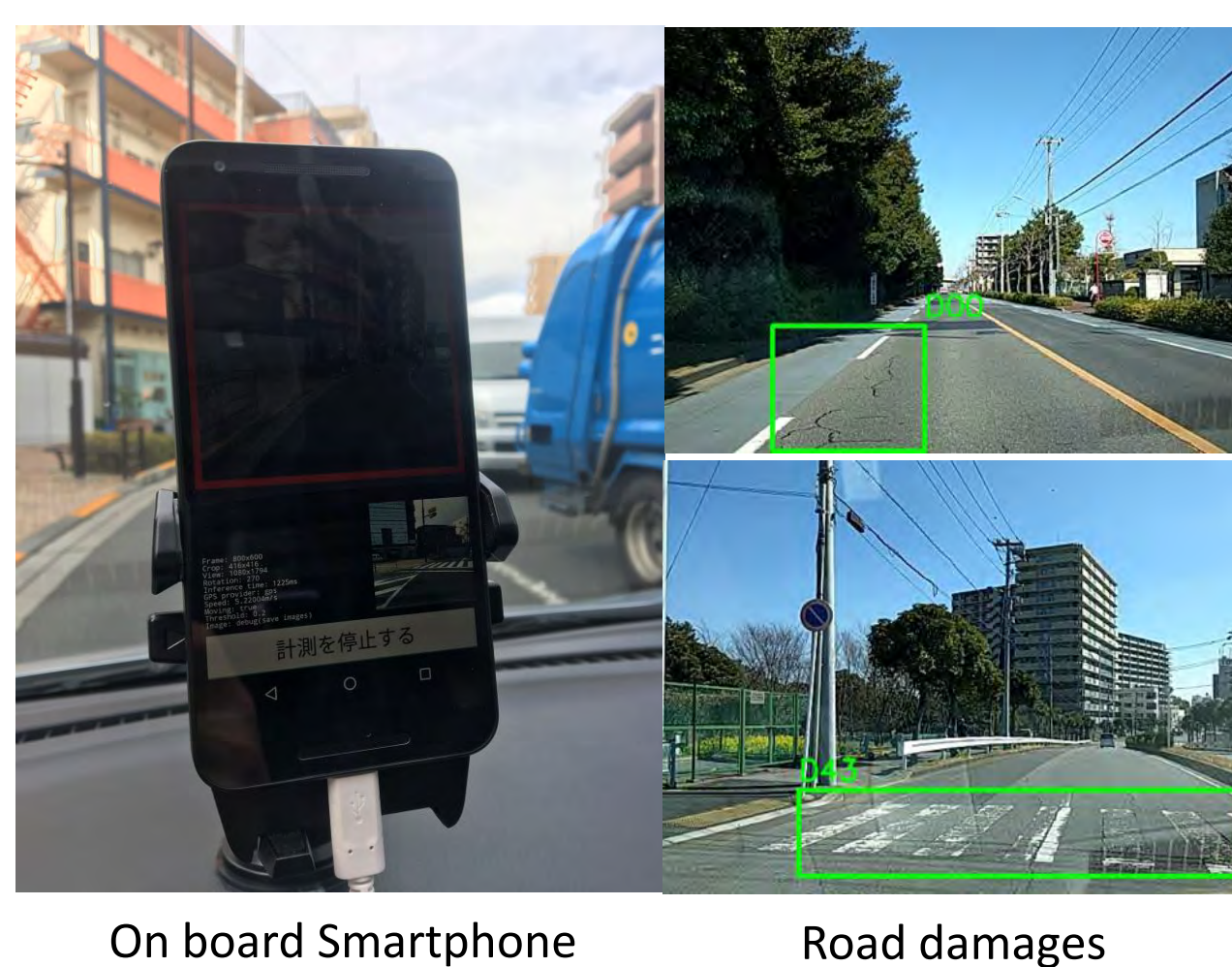
We analysis public vehicle use with GPS data and the possibility of use optimization.



## ➤ Monitoring Urban Infrastructure Rapidly and Cheaply

### Road Monitoring

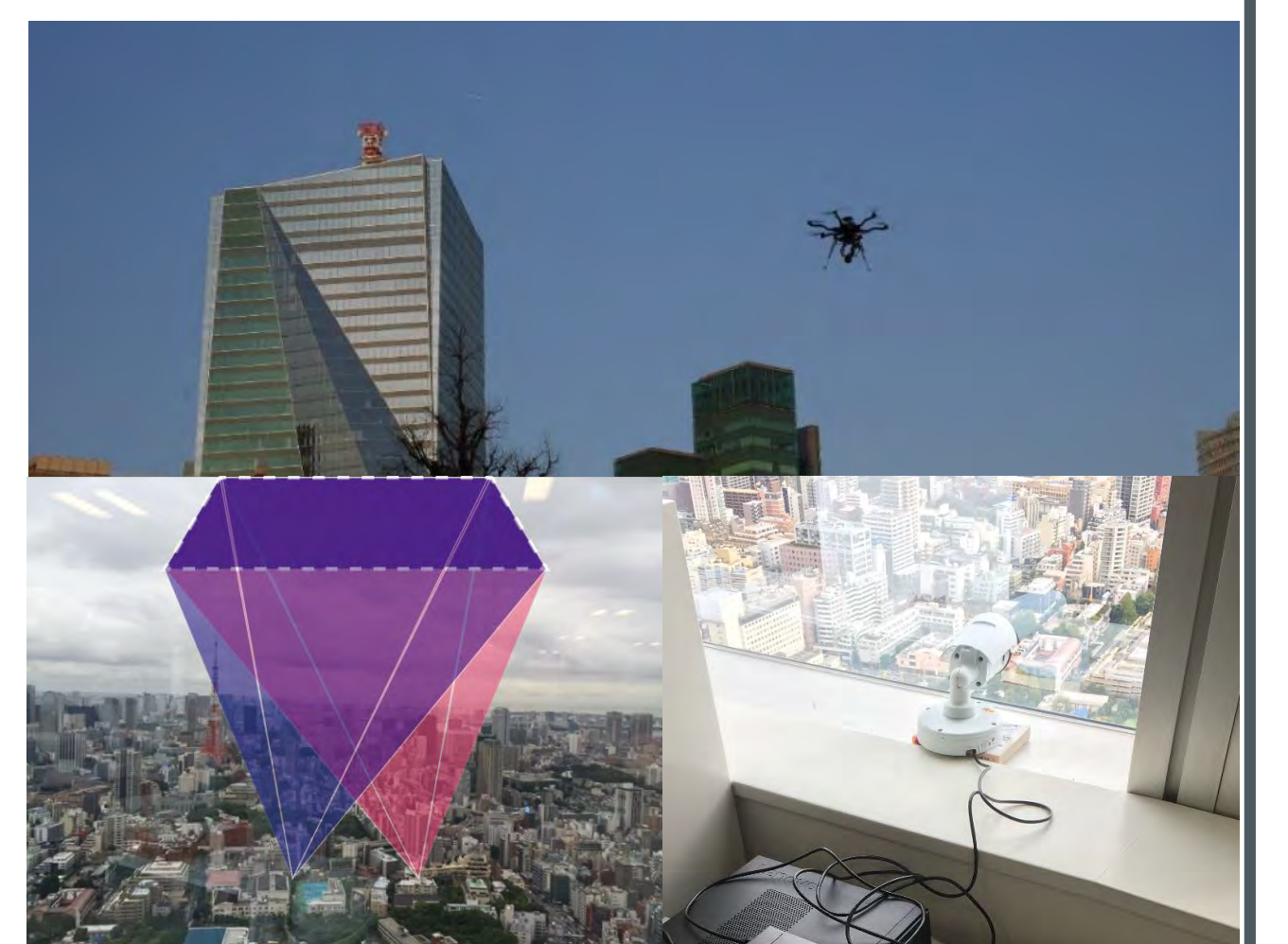
We monitor road damage by image processing using smartphone and deep learning.



On board Smartphone Road damages

### Sky Monitoring

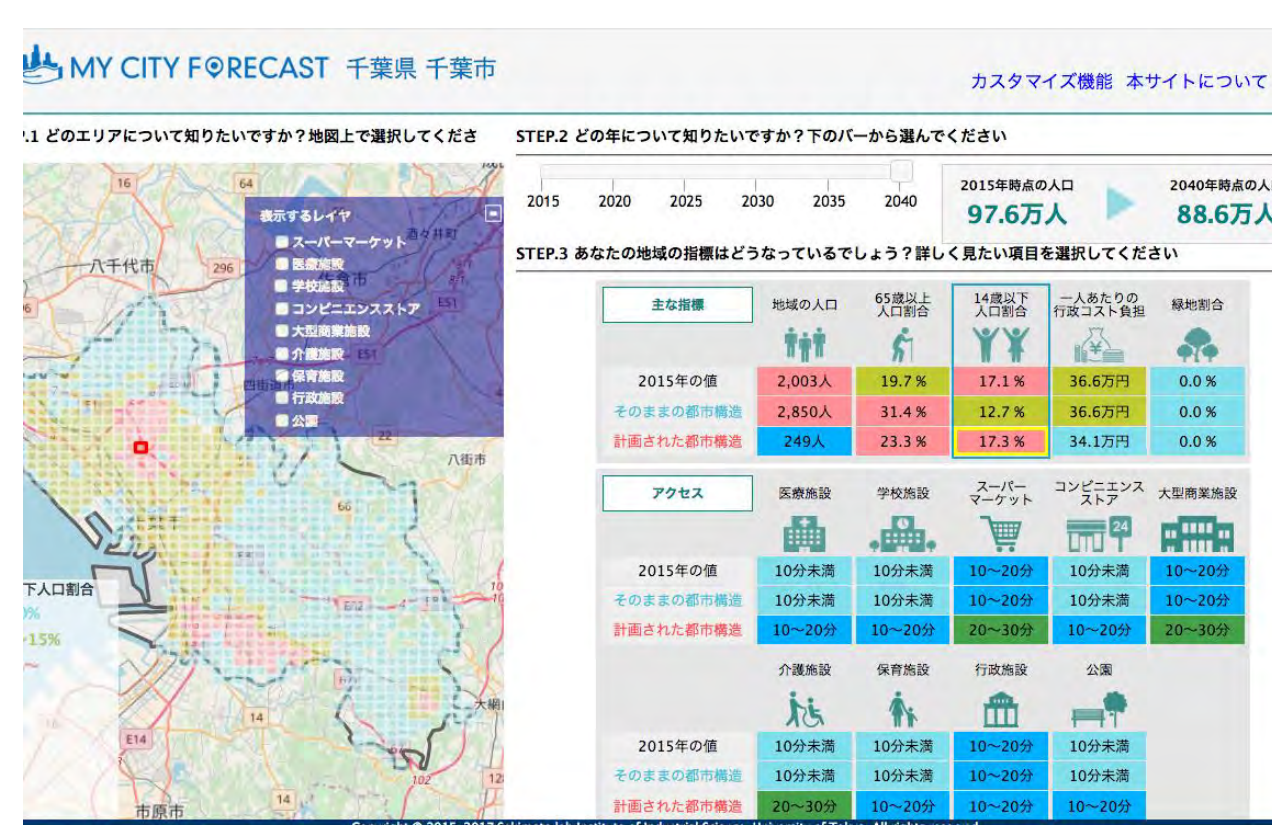
We observe the sky by image monitoring and classify flying objects.



## ➤ Operating Cities by Designing and Establishing Information Distribution

### Urban Planning Simulator

We simulate future urban structure and visualize the results with familiar indicators.



<https://mycityforecast.net>

### Distribution of Geospatial Information

We promote distribution of geospatial information held by the public and private sectors.



<https://www.geospatial.jp>