Spatial data:
- Elevation
- Rivers
- Roads
  etc.

Survey data:
- Normal interaction
- Response to rainstorm
- Response to warning
  etc.

Other data:
- Rainfall
- River discharge
- Population profile
  etc.

Dynamic exposure simulation to urban flooding

LISFLOOD-FP

Agent-based model

Urban flooding simulation

Population space–time distribution simulation

Dynamic exposure assessment of population, roads, and buildings