

# Organization and Application of 3D Data

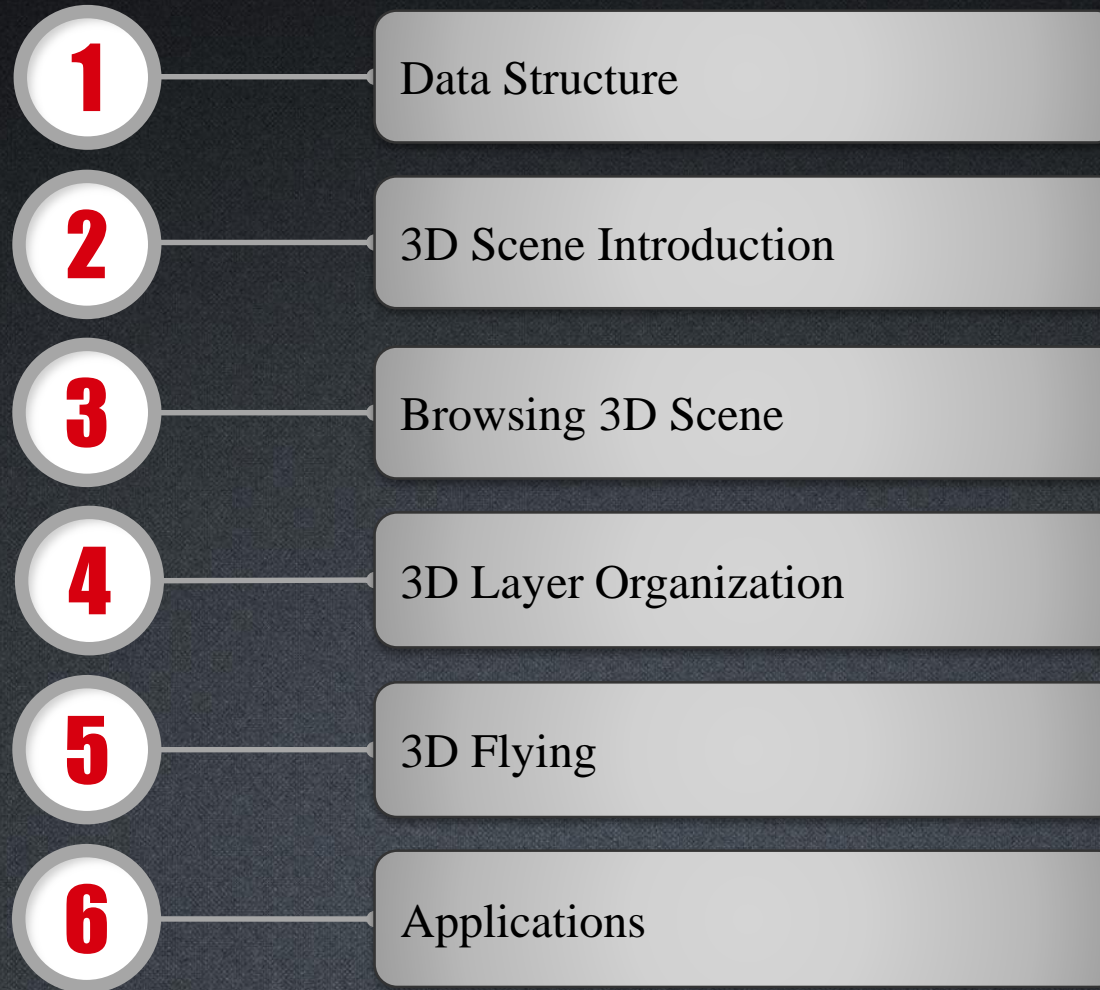
SuperMap Software Co., Ltd.

The SuperMap logo features the word "SuperMap" in a white, italicized serif font. A white dot is positioned above the letter "a", and a white arc curves over the letters "p" and "a".

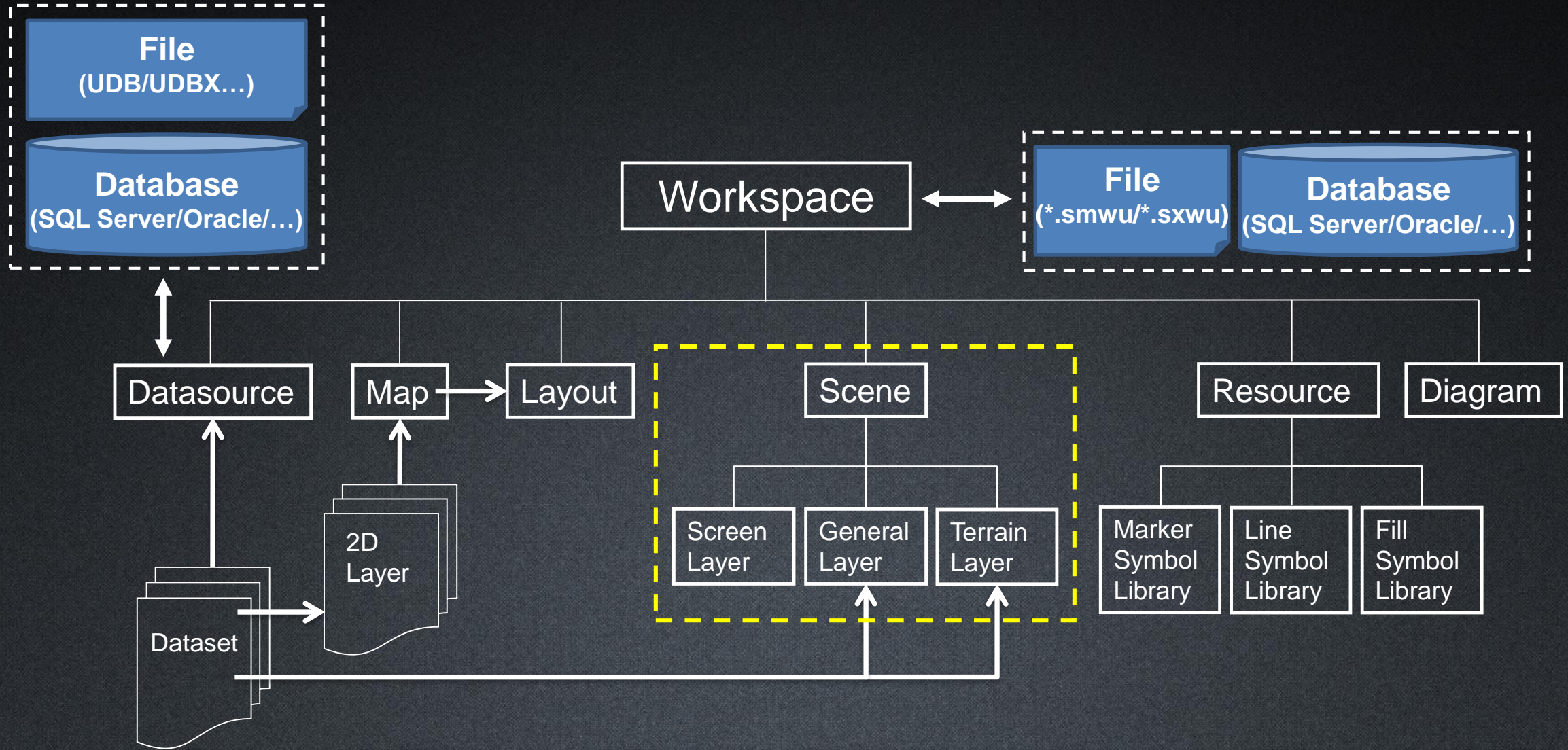
*SuperMap*

TO BE THE GLOBAL LEADING GIS

# Overview

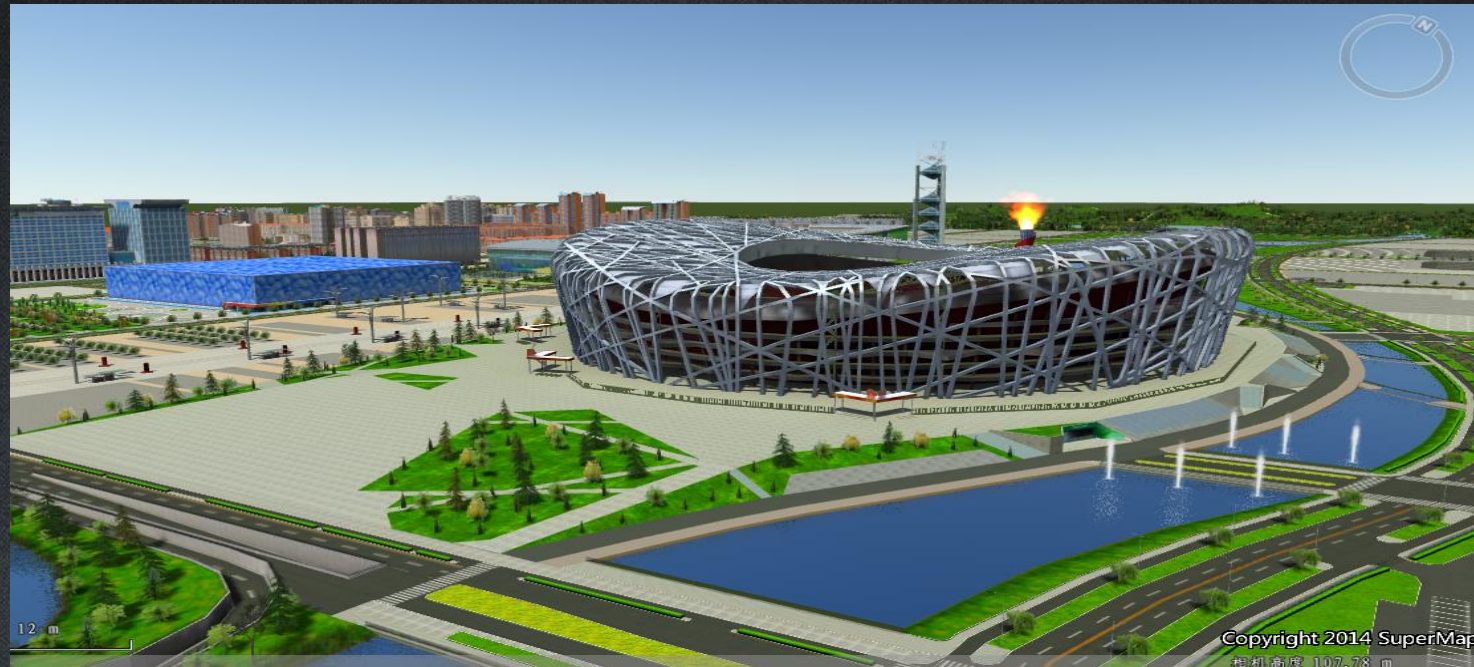


# Data Structure



# 3D Scene Introduction

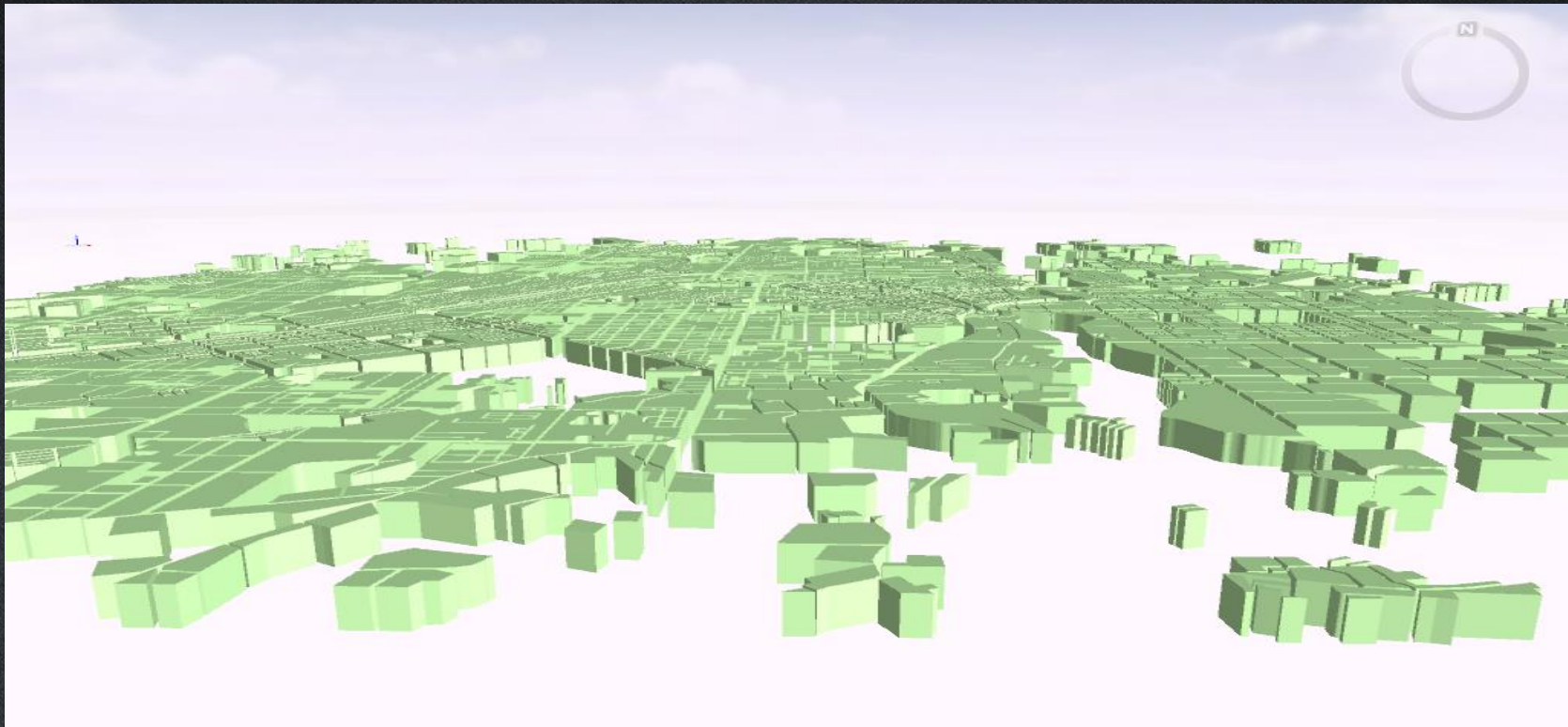
- The 3D scene uses virtualized technology to simulate various geographic features and their spatial relationships in the real world.



- There are two view modes of 3D scene, a plane scene and a spherical scene.

# Plane Scene

- The surface of the earth is spread out into a plane to load and display features.
  - Planar Coordinate System data and Projected Coordinate System data are supported
  - To display the ocean, atmosphere, graticule or graticule label are **not supported**



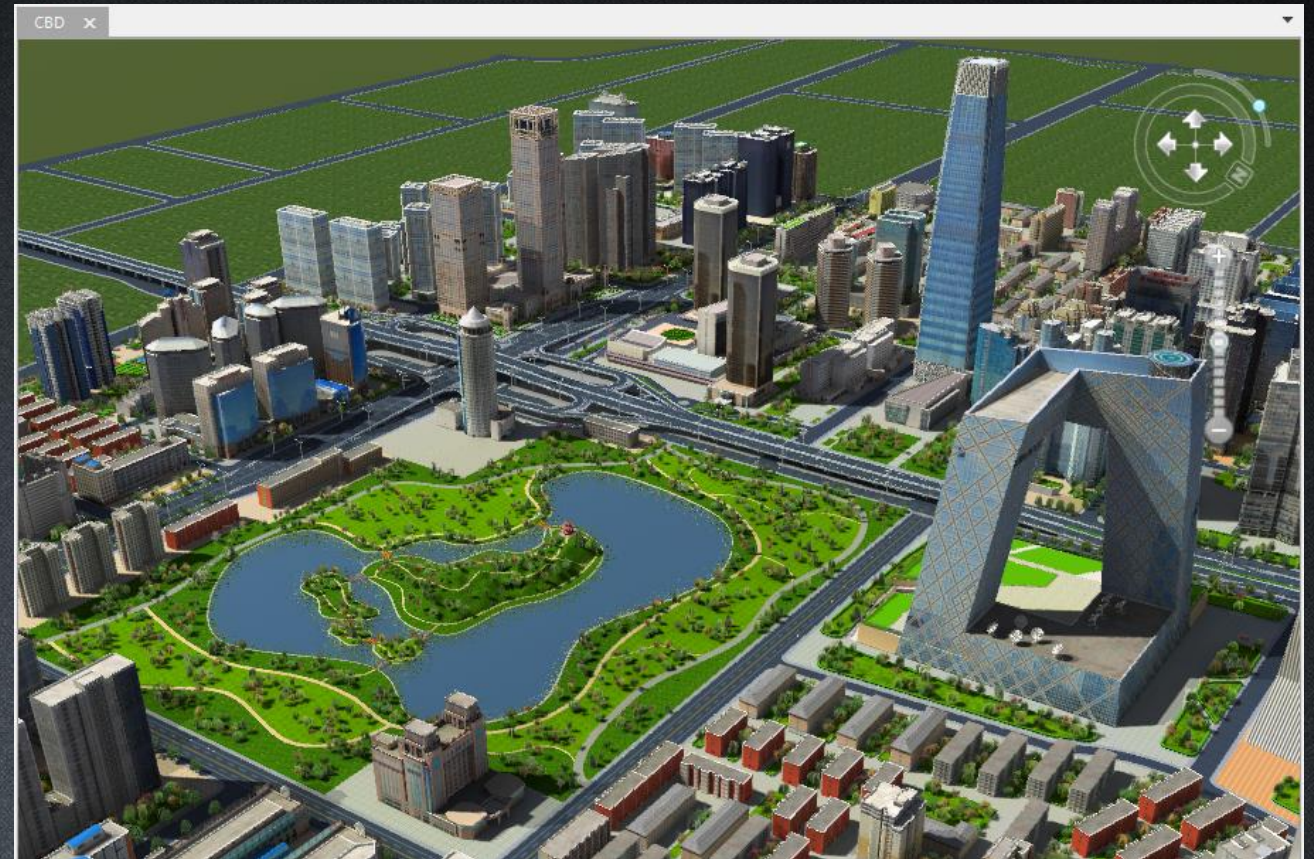
# Spherical Scene

- The spherical scene simulates the surface of the earth with a sphere.



# Browsing 3D Scene

- Use compass, keyboard or mouse
- Control the display scene elements
- Browse features' properties
- Measure in the scene



# 3D Layer Organization

- Screen Layer
  - Static graphics such as logo, descriptions...
- General Layer
  - 2D data (point, line, polygon, text, CAD, map...)
  - 3D data (3D point, 3D line, 3D polygon, model, image, grid...)
  - Cached data (image, grid, vector, map, model and OSGB cache...)
  - Service layer
  - KML layer
- Terrain Layer
  - DEM, grid, terrain cache



# Adding Screen Layer

- Watermark, logo, label, etc.
- Supported format
  - \*.PNG, \*.JPG, \*.JPEG, \*.BMP
- Use screen coordinates
  - No geographic meaning
  - Static relative to 3D window
- Exercise
  - Add the logo of SuperMap



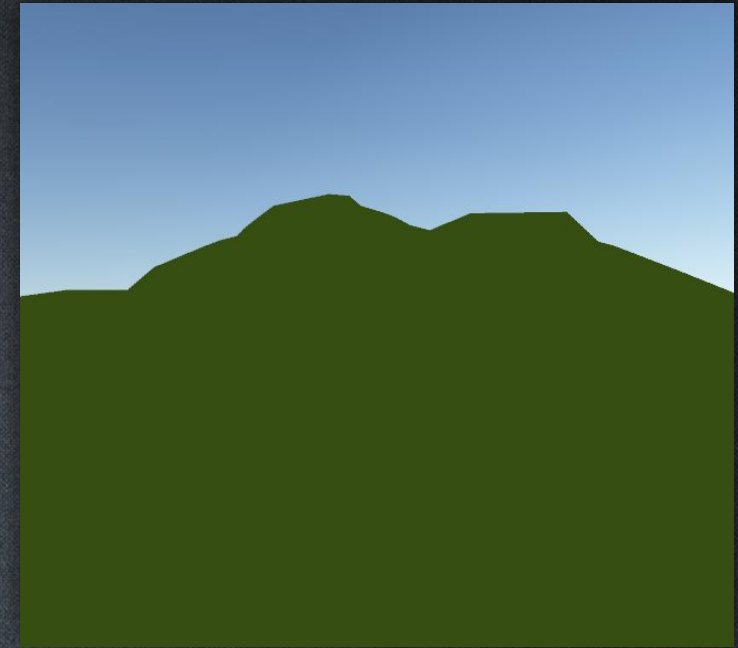
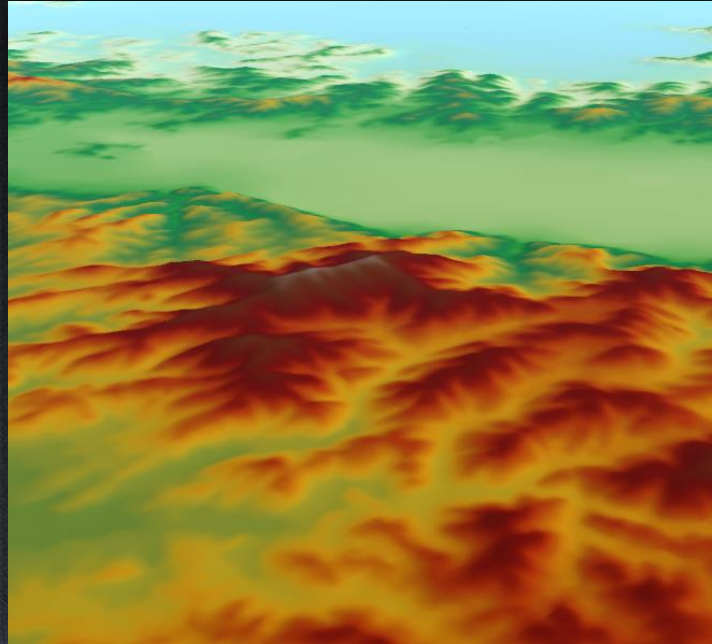
# Adding General Layer

- Exercise
  1. Map
  2. Model
  3. OSGB cache
  4. image dataset
  5. KML file



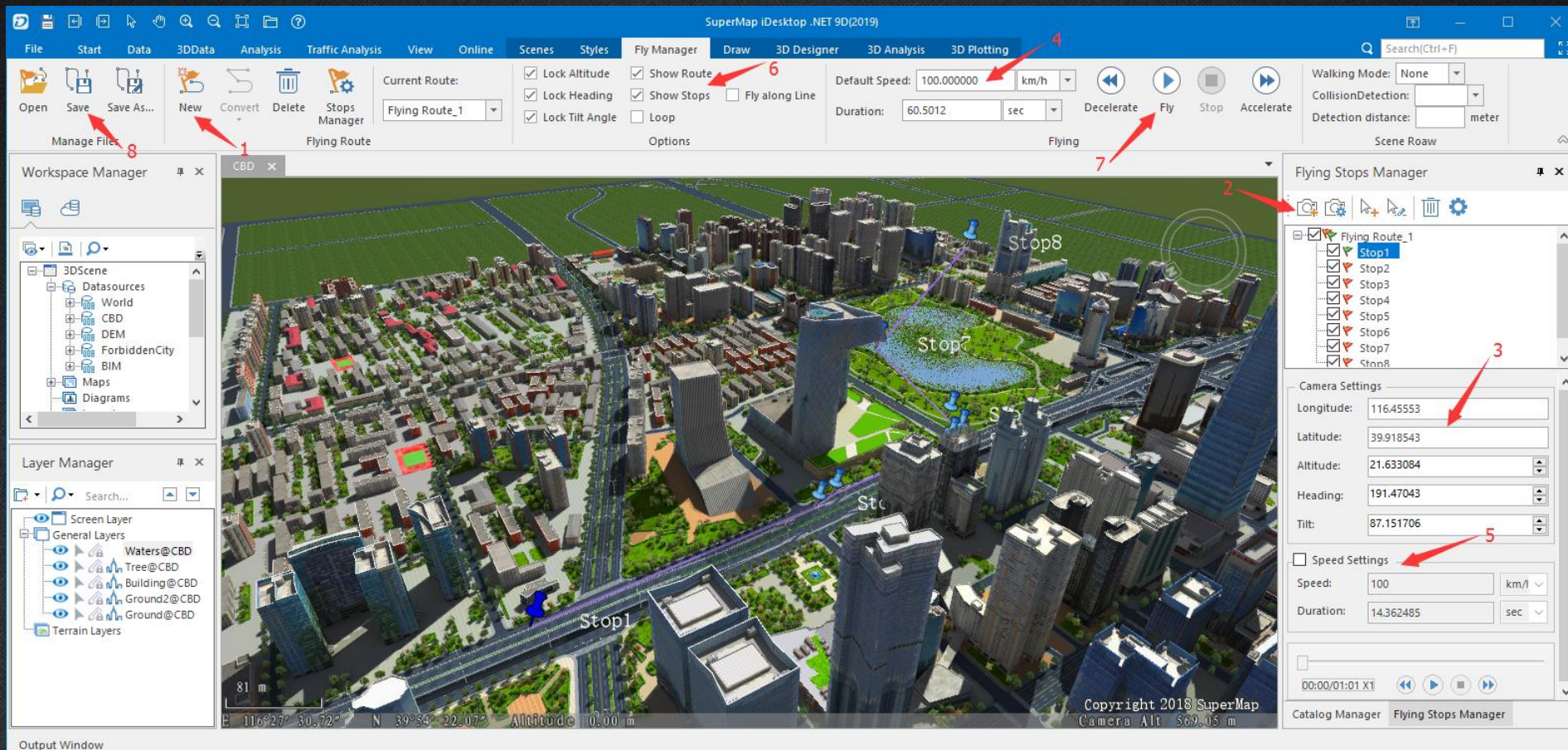
# Adding Terrain Layer

- Exercise
  - Grid
  - Terrain cache



# 3D Flying

- Exercise
  - Add a new flying route in a 3D scene, edit it, start to fly, decelerate, accelerate, pause, stop and save it



# Applications

海南省住房和城乡建设厅 整治违法建筑信息平台 违建展示综合信息系统 琼海市

### 数据图

2016-09 — 2016-10

违建统计	万平方米/m <sup>2</sup>
违建量	693
拆除量	424
增加量	693

区划	违建/万m <sup>2</sup>	拆除/万m <sup>2</sup>	存量/万m <sup>2</sup>
海南省	693	424	693
海口	0	0	0
三亚	0	0	0
儋州	9	9	9
文昌	0	0	0
琼海	684	415	684
五指山	0	0	0

700  
600  
500  
400  
300  
200  
100  
0

201609

已处理 已拆除  
已核实 未核实

上报数据 图斑数据 举报数据

### 违建项目信息

违建地点:	嘉积镇沿河路万泉河广场	联系电话:	
违建单位:	海皇海鲜	建成年份:	
违章情况说明:			
建设进度:	竣工	结构类型:	钢结构

影像对比

### 专题图

- 总规
- 控规
- 定点放线

#### 新增建筑

- 新增201606

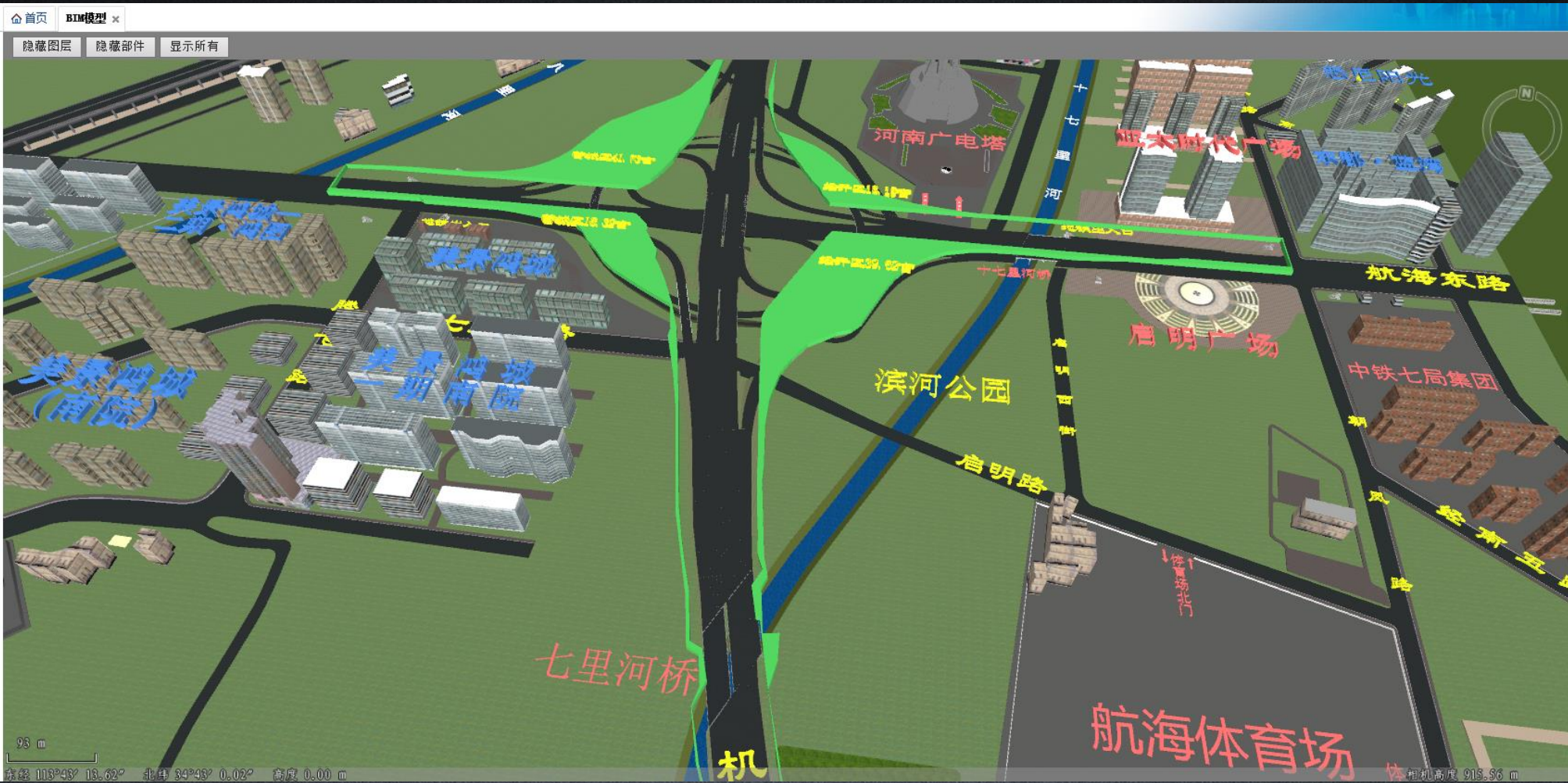
#### 疑似违建

- 疑似201606

#### 卫星影像

- 影像201101
- 影像201406
- 影像201606

# Applications



# Applications

三维可视化展示与会商平台

工程管理 电力生产 公共安全 梯级调度 征地移民 环保水保 帮助文档 退出系统

环保水保

沙盘功能 典型视角 锦屏一级

- 锦屏一级分层取水
- 锦屏一级增殖放流
  - 锦屏一级增殖放流监控

锦屏一级增殖放流监控

- 一号车间北
- 一号车间南
- 二号车间北
- 二号车间南
- 三号车间北
- 三号车间南
- 二级平台南
- 二级平台中
- 二级平台北
- 三级平台管理楼旁
- 管理楼楼梯口
- 管理楼楼顶
- 三级平台环形鱼池

运行原理 附图信息 运行信息 统计信息 设施信息

尾水水温

测量时间： 一号机组状态：发电态(2016-05-24 11:08:47.062)

尾水水温： 二号机组状态：发电态(2016-05-24 11:56:48.229)

三号机组状态：发电态(2016-05-24 11:56:48.317)

四号机组状态：发电态(2016-05-24 11:40:47.927)

五号机组状态：发电态(2016-05-24 11:40:48.016)

六号机组状态：发电态(2016-05-24 11:48:48.254)

经纬: 101°36' 36.33" 北纬: 28°10' 55.86" 高度: 0.00 m 相机高度: 2.21 km

# Thank You!

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