

## Planning 3D visualization solutions

## **Business case**

Yan Tai high-tech 3D visualization aided decision support system

## **System introduction**

In order to raise management level of city planning, improve the efficiency of urban planning management, provides the space geographic data support for the urban planning management, auxiliary decision-making , city information construction demonstration significance.

## **The scene browsing**

### **1. Roaming:**

Support the mouse drag browsing, freedom drag, the conversion angle, zoom in and out, and a variety of way on the scene.

### **2. Scene reset**

Implement scenario to return to the initial position when into the system.

### **3. Circled flight**

Implement scenario around browsing around the center, when the mouse to click the stop.

### **4. Route flight**

Set a line, automatic scene along the light path, and needn't drag scenes browsing. At the same time can also be in view of the set path for altitude, speed, to change the state of browsing.

## Query position function

The system can provide multiple positioning of the query methods: including through coordinate interest points, fuzzy query, attribute, layer, panel to locate, by clicking the view object properties, and so on.

### 1. Coordinate positioning

By entering the coordinates, the scene automatically jump to the coordinates the actual position, thereby accurately positioning. The system supports both latitude and longitude coordinates and projection coordinates.



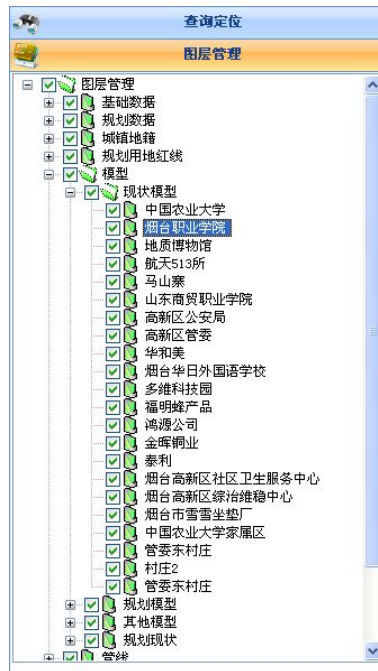
### 2. Fuzzy query

According to query the keywords, for all data included in the system.



### 3. Layer orientation

Data in the scene are managed in the system in the form of layers, by double-clicking on layer of data, make the scene to jump to the location of data.



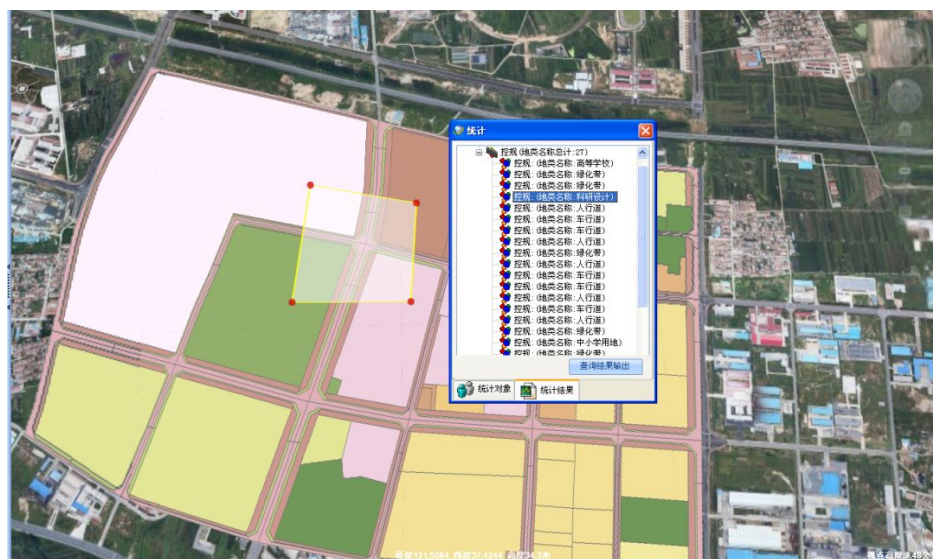
#### 4. Interest point positioning

Interest of images, kept in a panel is interested in the scene point location index, match with the position the thumbnail images at the same time. By double-clicking the picture, the scene can jump to that location.



#### 5. Click query

Click planning of cadastral data, pop-up screen attribute information.



2. Pipeline statistical

Pipeline cross-sectional analysis



Pipeline vertical-sectional analysis



## Auxiliary decision-making function

Include the program contrast, sunshine analysis, visibility analysis, status of planning and other auxiliary decision-making functions.

### 1. Program contrast

Realize double screen display, intuitive comparison of buildings.



### 2. Sunshine analysis

Scenarios can be in different period, different time points, to simulate the situation of the sun building shadow changes over time. Through

the sun simulation, can help decision makers to plan the height of buildings, location of intuitive judgment.



### 3. Visibility analysis

Determine whether there is a barrier between two points.



### 4. scheme adjustment

It can adjust the model location, height, angle and size of the Scenarios, make a plan set more reasonable.

**模型编辑**

编辑模型名称 专家公寓2号楼

位置

经度 121.495810

纬度 37.433629

高度 17.52

旋转(单位度) 0.0

模型放大倍数 1.0000

高度抬升比例 1.0000

关闭

## 5. Planning Situation Analysis

Through the switch between planning model and the status quo of model, were analyzed.





## Analysis of the underground pipeline

Underground pipeline is an important part of business planning, for key sections and intersections of pipeline analysis is shown in figure:



## GIS function

Including the distance measurement, area measurement, height measurement function.

Distance measurement: measure the distance between two points.



Area measurement: measure the value of the area of certain limits.



Height measurement: measure the height of buildings.



## The results output

The results output including images and animation output function, the scene in the form of two kinds of graphics and animation using output do other ways.