

SUPERMAP COMMUNICATIONS

May 2024 Issue 13
www.supermap.com



3D Real Scene Assists Precise
Urban Management

Who is SuperMap?

Founded in 1997, SuperMap is a platform software and application software manufacturer focusing on Geographic Information Software (generalized GIS) and Geospatial Intelligence (GI), and a key player in Information Technology Application Innovation Industry, Spatio-Temporal Big Data, Artificial Intelligence, and Virtual Reality. It consists of SuperMap Software (parent company, stock code: 300036), wholly-owned subsidiaries, and holding subsidiaries, as well as domestic branch offices and agencies. In 2022, the total staff number of SuperMap is more than 4,300 and the annual revenue reached 232 million USD (1.6 billion RMB).

1997
Founded

How has SuperMap performed so far?

Together with more than 3,000 Independent Software Vendor (ISV) partners and hundreds of thousands of developers, SuperMap empowers the informatization of governments and enterprises in nearly 100 industries. It has developed distributors and partners in over 50 countries and SuperMap GIS end users in over 100 countries. Now, SuperMap ranks 1st in the GIS software market in Asia and 2nd globally.

100+
Countries'
Users

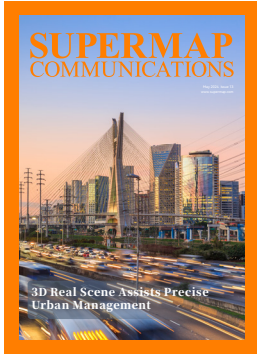
What will SuperMap be?

With “Innovate Geospatial Intelligence, Elevate IT Value” as the mission and “Light up Every Corner of the World with Geospatial Intelligence” as the vision, SuperMap will keep providing advanced GIS technologies and products to more global users.

1000+
Partners

3800+
Employees

SuperMap



SUPERMAP COMMUNICATIONS

Contents



Reach us here!

Building 107, A10 Jiuxianqiao

North Road,

Chaoyang, Beijing, 100015, China

Tel: +86-10-59896503

Fax: +86-10-59896666

Email: biz@supermap.com

www.supermap.com



<https://www.linkedin.com/company/supermap/>



<https://www.facebook.com/SuperMap/>



https://www.twitter.com/SuperMap_GIS



<https://www.youtube.com/user/SuperMapGIS/>



https://www.instagram.com/supermap_gis/

FOCUS

- 4 3D Real Scene Assists Precise Urban Management

- 5 AI+ Remote Sensing Technology Empowers 3D Real Scene China

- 8 From Data Access to Multi-Terminal Applications, See How 3D GIS Builds the Foundation of 3D Real Scene Construction

- 15 Ideas and Exploration of 3D Real Scene Application Service Capability Building (Excerpt)

- 18 Full Cycle Management of 3D Real Scene Space Planning

3D Real Scene Assists Precise Urban Management

Currently, China is comprehensively advancing the construction of a fundamental surveying and mapping system. Relying on high-precision surveying and mapping technologies and data processing capabilities, it is establishing a nationwide 3D real scene and smart city spatio-temporal big data platform.

With the rapid development of China's economy and society, the demand for spatial information has put forward new requirements in terms of spatial granularity, content granularity and time granularity. Chinese cities have changed from the original low-rise bungalows to the current high-density tall buildings. The development of cities in the vertical three-dimensional space requires to collect the three-dimensional information of the city, and integrate the urban geographic information system (GIS) and building information modeling (BIM) technology, to realize precise urban management. In addition, the highly dynamic development of the Internet of Everything in society also places more demands on digital twins. Therefore, the construction of 3D Real Scene is necessary.

In this issue, we will discuss together the 3D real scene technologies and solutions, looking forward to bringing Chinese wisdom to urban governance around the world.

AI+ Remote Sensing Technology Empowers 3D Real Scene Construction

Relying on decades of software development experience in the field of geographic information, SuperMap continues to carry out research and development innovations in technologies related to the construction of 3D real scene, and provides basic product support for the implementation of the task of building a 3D real scene through AI+remote sensing technology.

3D Real Scene

3D Real Scene is an important new national infrastructure that reflects the spatio-temporal information of human production, life and ecological space in a real, three-dimensional and time-sequential manner. It realizes real-time connection and interconnection between digital space and real space through "human-machine compatibility, Internet of Things perception and ubiquitous services", and provides a unified spatial positioning framework and analysis basis for digital China. It is an important strategic data resources and production factor for digital government and digital economy.

The construction of terrain-level 3D real scene includes: constructing terrain-level geographic scenes and basic geographic entities, obtaining other entities and IoT perception data, assembling and generating terrain-level 3D real scene products

for 3D visualization and spatial measurement, and serving the macro-planning. Among them, terrain-level geographic scenes include remote sensing image products such as digital elevation models (DEM), digital surface models (DSM), digital orthophoto map (DOM), and true orthophoto map (TDOM) at the national and local levels.

Introduction to AI GIS Technology

In 2019, SuperMap released SuperMap GIS 10i, a product based on the artificial intelligence GIS (AI GIS) technology system. After multiple versions, AI GIS technology and products are becoming more mature. Diversified products can meet the personalized needs of different users. Its core content includes:

GeoAI: Spatial analysis and processing that integrates AI. Based on basic theories and algorithms of artificial intelligence such as machine learning and deep learning, the software implements a series of GeoAI functions for fields such as natural resource monitoring and urban planning, and provides remote sensing image intelligent interpretation tools such as target detection, binary classification, land feature classification, scene classification, and object extraction based on deep learning.

AI for GIS: AI empowers GIS, that is, based on AI technology, GIS software functions are enhanced and optimized. By applying AI technology to some traditional GIS functions, the intelligent evolution of GIS software functions can be achieved. For example, the AI attribute collection function can efficiently identify business attribute data such as illegal parking, small advertisements, and manhole covers based on AI technology; the AI mapping function can provide lower-cost and more convenient indoor mapping services; AI+AR technology can integrate AR technology into the AI system to achieve a visualization effect that combines both virtual and real.

GIS for AI: GIS empowers AI, that is, based on GIS technology, AI analysis results are further processed, analyzed and spatially visualized. For example, in map visualization applications such as traffic flow monitoring, urban parts and case management, it can provide decision-makers with a more intuitive form of information expression; in addition, it can also monitor pedestrians and motor vehicles entering the bus lane based on video monitoring data through geo-fencing, video spatial computing and other technologies.

AI+ remote sensing technology empowers the production of basic geographical entities

SuperMap's artificial intelligence GIS technology system also includes the full-process technology of intelligent interpretation of remote sensing images

based on deep learning, and provides remote sensing data preprocessing tools, sample management tools, training sample production tools, model training tools, intelligent interpretation tools, post-processing tools, etc., which can effectively support the production of basic geographical entities.

Among them, intelligent interpretation tools include:

- Target detection tool: This tool uses deep learning algorithms to automatically determine and identify the category and location of one or more targets in remote sensing images, and uses vector boxes as markers to help users identify different ground entities such as ports, bridges, and electric towers.
- Scene classification tool: This tool can distinguish images with similar scene features from multiple images and assign a scene type label to each image.
- Binary classification tool: This tool is based on a deep learning network model. By analyzing the spectral information of various types of objects in remote sensing images, it can extract single land types with obvious characteristics such as buildings, roads, and rivers.
- Object classification tool: This tool classifies and identifies the feature information of remote sensing images and divides them into a series of image regions with specific semantic information.
- Object extraction tool: Based on classification, this tool can extract independent vector objects from the same category of features.



Extraction of basic geographic entities: ship and vehicle extraction (upper left); road extraction (upper right); building extraction (lower left); photovoltaic panel extraction (lower right)

From Data Access to Multi-Terminal Applications, See How 3D GIS Builds the Foundation of 3D Real Scene Construction

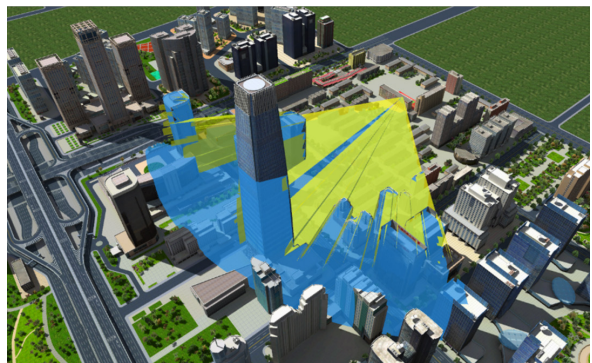
In recent years, new fundamental surveying and mapping and 3D real scene construction have developed rapidly in China. Based on the new generation 3D GIS technology, SuperMap conducts research on 3D real scene data processing, management, visualization, application and other aspects, and realizes efficient full-process management of large-scale 3D real scene data from data access, fusion processing, service release to multi-terminal applications, providing technical support for the construction of 3D real scene databases, database management systems, application service systems, etc.

2D and 3D integrated data model, building the foundation for 3D real scene construction

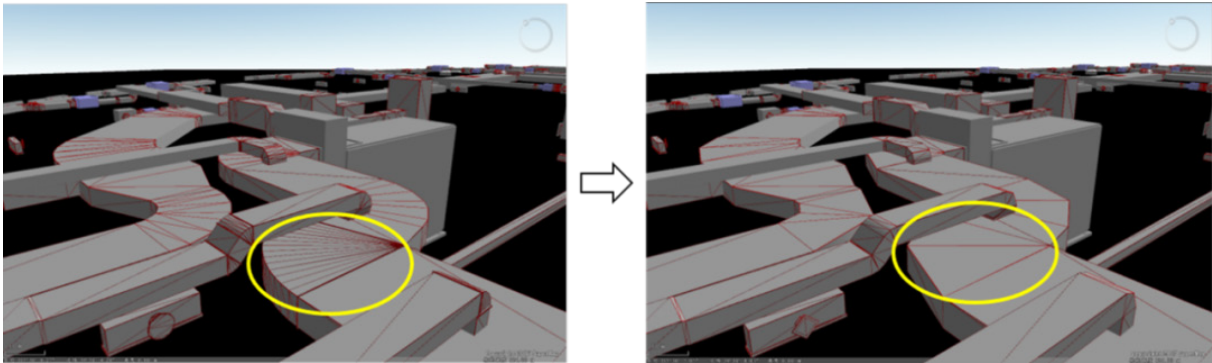
In order to realize the full spatial expression of sky/ground surface/underground integration, indoor and outdoor integration, and macro and micro integration, SuperMap GIS builds and implements a three-dimensional object data model and a three-

dimensional field data model based on the traditional spatial data model (TIM and voxel grid), thereby fully covering and supporting three types of spatial conceptual models.

The 2D and 3D integrated data model can intuitively express the 3D geometric information, rich semantic attributes and complex spatial relationships of various ground objects, and can be used for various spatial analysis (such as visual domain analysis, visibility analysis, skyline analysis, etc.) and auxiliary decision-making, laying a solid foundation for the expression, management and processing of 3D real scene data.



The 3D volume data model expresses the visible domain volume (yellow) and the invisible domain volume (blue)



Lightweight component BIM data based on LOD technology

Multi-source data fusion to achieve integrated description of the entire space

In order to achieve integrated description of the entire space, SuperMap GIS supports access to DEM/DSM, DOM/TDOM, oblique photography 3D models, laser point clouds, BIM models, vector data (2D and 3D point/line/surface, 2D and 3D network data), artificial modeling data, IoT sensing data and other 3D real scene data.

To process oblique photography 3D models and laser point cloud data, SuperMap GIS provides ID singletonization, virtual dynamic singletonization based on vector overlay and other methods, which can build a 3D model singleton and realize visual expression and object query and analysis based on 2D and 3D integration. In addition, AI technologies such as deep learning can also be applied to realize automatic singletonization processing of oblique photography 3D models.

For BIM models with various storage formats, SuperMap GIS supports access to software (formats)

such as Revit (rvt), AutoCAD/Civil3D (dwg), 3ds Max (max), Navisworks (nwd), Inventor (iam), Bentley MicroStation (dgn), CATIA (3dxml), Tekla, SketchUP (skp), PDMS (rvm), standard formats such as IFC and CityGML , and BIM models in common intermediate formats such as stl /obj/ dae / osgb /x/ fbx /3ds. Through instantiation storage and drawing, level of detail (LOD), batch drawing, lightweight BIM model and other technologies, lightweight processing and efficient rendering of massive BIM data can be achieved.

To achieve accurate matching of multi-source 3D real scene data, SuperMap GIS provides functions such as vertex-by-vertex coordinate conversion and point-of-name matching, unifying multi-source 3D real scene data such as terrain, BIM models, and oblique photography 3D models into the same coordinate system to achieve alignment of various spatial information. In addition, SuperMap GIS also provides operations such as 3D spatial data mosaic, flattening, clipping, digging, and setting gentle slopes to achieve smooth connection of multi-source 3D real scene data.

3D data processing automation tool to achieve efficient management of massive 3D real scene data

In order to meet diversified needs and improve the management and processing performance of massive 3D real scene data, SuperMap GIS combines 3D GIS software technology and distributed technology to provide a complete 3D data processing automation (GPA) tool, realizing flexible and efficient full-process management of 3D real scene data such as large-scale oblique photography 3D models, laser point cloud data, terrain/image data, artificial modeling data, BIM models and 3D field data from data access, data processing, service release to multi-end applications.

Cooperation with multiple units in the industry to develop multiple 3D standards to support the sharing and release of 3D real scene data

In order to realize the sharing and release of multi-source heterogeneous data for natural resources and other industries, SuperMap has joined forces with many upstream and downstream units in the industry chain to formulate the T/CAGIS 1-2019 "Spatial 3D Model Data Format" (S3M) standard and T/CAGIS 2-2020 "Spatial 3D Model Data Service Interface" standard, which can provide open, standard and universal data formats and data service interface specifications for 3D real scene data sharing and

interoperability between different application systems.

In order to better promote applications, the S3M drafting unit also provides a large number of free and open data reading and writing tool kits and rich data format conversion tools (open source address: <https://github.com/SuperMap/s3m-spec>). It solves the difficulty in sharing massive multi-source heterogeneous 3D real scene data such as oblique photography 3D models, laser point clouds, and BIM.

Since the official implementation of T/CAGIS 1-2019 and T/CAGIS 2-2020, the S3M data format and data service interface have been used in many domestic and foreign software platforms such as oblique photography modeling software, 3D GIS platform, 3D visualization software, BIM software, game engines, etc., solving users' practical problems in many aspects, including data generation, service release, and multiple client loading and applications.

3D interaction and visualization new technology support multi-terminal real-time application of 3D real scene data

In response to the requirement of real-time online access to 3D real scene data, SuperMap provides a "zero-client" 3D product - SuperMap iClient3D for WebGL, which supports real-time and efficient online access to large-scale multi-source heterogeneous 3D real scene data, as well as 3D space query, 3D space analysis, 3D special effects and other capabilities,

improving the application experience and providing support for the construction of online 3D real scene space.

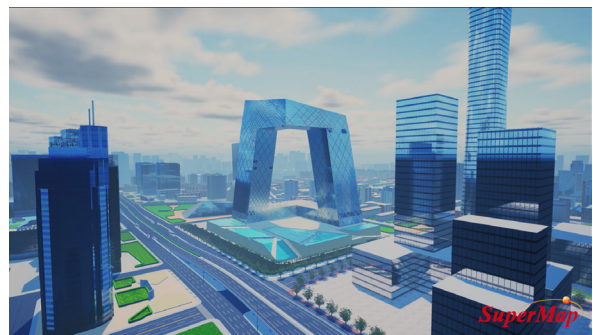
To meet the needs of real-time connection and interconnection between digital space and 3D real scene space, SuperMap GIS provides a more immersive 3D interactive method based on cutting-edge IT technologies such as virtual reality (VR), augmented reality (AR), and mixed reality (MR). It can not only vividly display real-life 3D data, but also realize the analysis and multi-terminal application of 3D real scene data based on three-dimensional GIS functions such as attribute query, sectioning, measurement, visibility analysis, and model editing.

To meet the diversified needs of high-realism publicity, consultation and display, SuperMap provides the SuperMap 3D GIS game engine development platform, which supports realistic display and real-time analysis of multi-source 3D real scene data in the game engine, and supports the construction of integrated digital twin space at indoor, outdoor, and ground level.

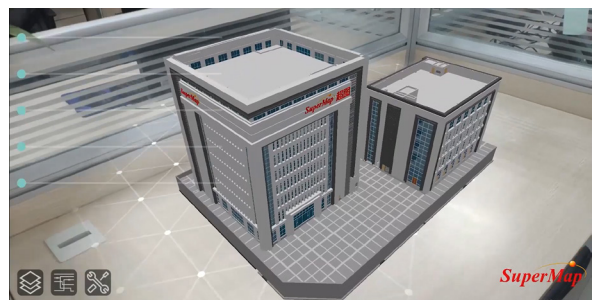
SuperMap 3D GIS game engine development platform (Unity) is used to load 3D real scene data such as terrain images, oblique photography 3D models, and BIM to build water conservancy facilities surroundings and combine them with high-reality special effects to simulate the operation effects of water conservancy facilities.

In recent years, SuperMap has continuously strengthened GIS technology innovation, improved the new generation 3D GIS technology system, and developed a full range of 3D GIS fundamental software covering from GIS server to desktop, browser and mobile terminals, which can provide IT environments that adapt to different software

and hardware, thus providing unified 3D GIS software technology and platform for 3D real scene construction, space and spatial planning, new smart cities, CIM and other applications. In the future, SuperMap will continue to innovate 3D GIS technology and continuously integrate emerging technologies such as big data, cloud computing, and artificial intelligence to contribute to 3D real scene construction.



The game engine (UE4) loads the precision model data in S3M format



The "magic" BIM model is put on the table based on AR

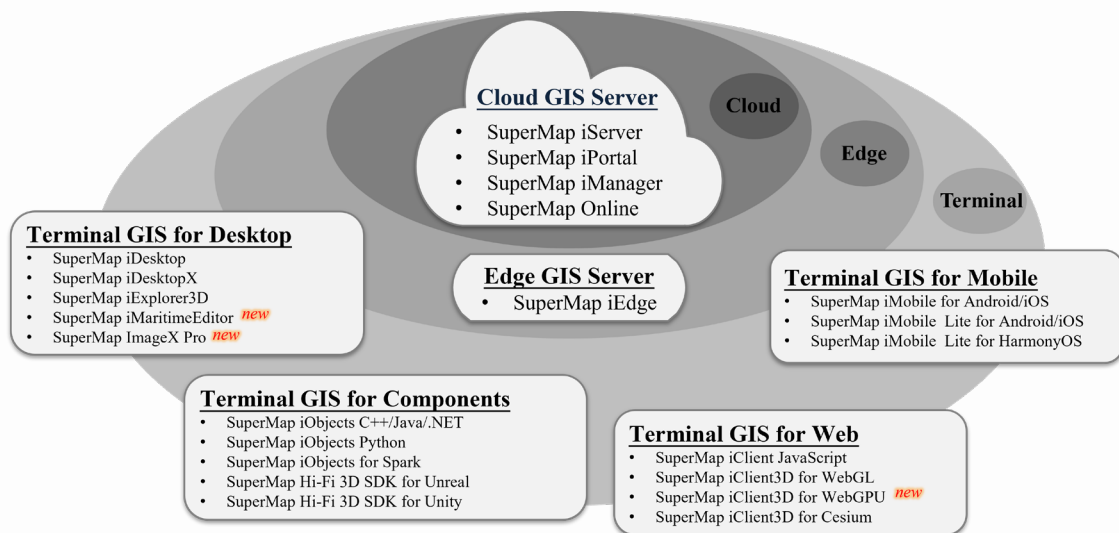


Adopting SuperMap 3D GIS game engine development platform to simulate the operation of water facilities

Products

What is SuperMap GIS

SuperMap is devoted to developing and providing the most innovative Geographic Information System (GIS) platforms and solutions for global customers. SuperMap product line includes a full range of GIS platforms, including Desktop GIS, Server/Web GIS, Mobile GIS, and Online GIS, which makes SuperMap GIS known as one of the most complete GIS software platforms.



SuperMap GIS 2023 Product Architecture

SuperMap iDesktop: Full-featured Customizable Desktop GIS

SuperMap iDesktopX: Full-featured Customizable Cross Platform Desktop GIS

SuperMap iExplorer3D: 3D Scene Browsing Software

SuperMap iObjects: Full-featured Components GIS SDKs

SuperMap iTablet: Native App for Mobile GIS

SuperMap ARSurvey: AR field surveying tools for Mobile GIS

SuperMap UAV Survey: UAV field survey and annotation software

SuperMap iMobile: Native SDKs for Mobile GIS

SuperMap iServer: Full-featured Application Server for Cloud GIS

SuperMap iPortal: Portal for Cloud GIS

SuperMap iClient: Web GIS APIs for Browsers

SuperMap iManager: Operation Manager for Cloud GIS

SuperMap iEdge: Server for Edge Computing GIS

Application Cases

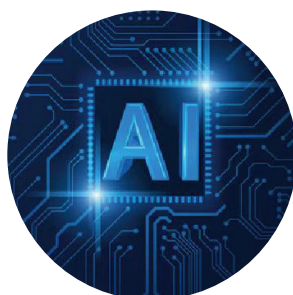
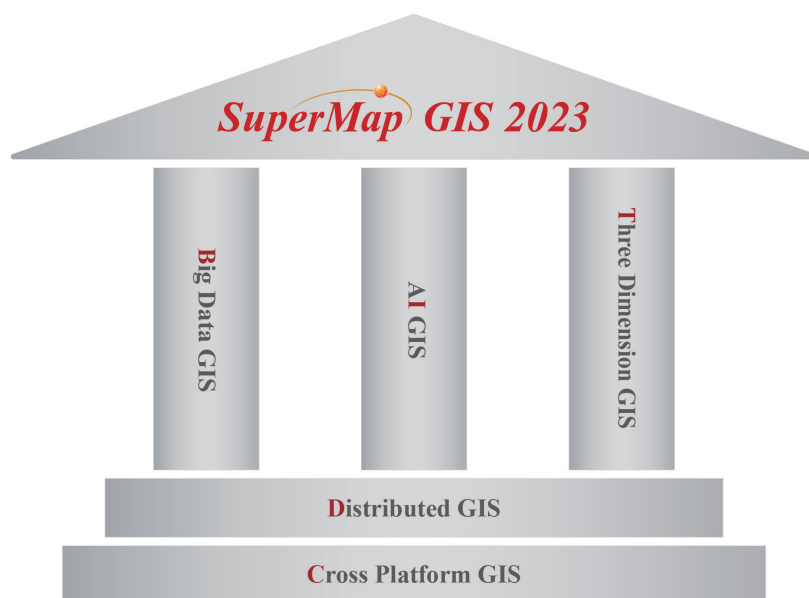
Application Cases

-  Municipality GIS for Nyköping, Sweden
-  3D Underground Pipeline Management System, Germany
-  3D Cadastral Project, Turkey
-  Mobile AI Recognition of Water Meter, South Africa
-  National Police GIS, Mauritius
-  Land Property Management System, Egypt
-  House Decision Support System, Malaysia
-  Geospatial Data Services Portal, Malaysia
-  Global IOT Management System of HITACHI, Japan
-  One Map of Ground Strength of National Residence, Japan
-  Mobile Mapping Solution for Foreclime, Indonesia
-  Big Data Spatial for Secure BaseMap System in BSSN, Indonesia
-  Nature Reservoirs Locating System, Thailand
-  Smart Agriculture Real-time Soil Monitoring System, Thailand
-  Pipeline Analysis Solution, South Korea
-  Forest Disaster Management System, South Korea
-  Flight Monitoring System for Asiana Airline, South Korea
-  Mountain Development Support System, Cuba
-  Epidemic Surveillance System, Laos



Technologies

In SuperMap GIS 2023, SuperMap has further improved the five key technologies system (BitDC) of GIS platform software, they are big data GIS, AI (artificial intelligence) GIS, new 3D GIS, distributed GIS and cross-platform GIS technology, which enriched and innovated GIS theory and technology, and empowered the informatization of various industries.



Ideas and Exploration of 3D Real Scene Application Service Capability Building (Excerpt)

Key technologies and methods in the construction of 3D real scene

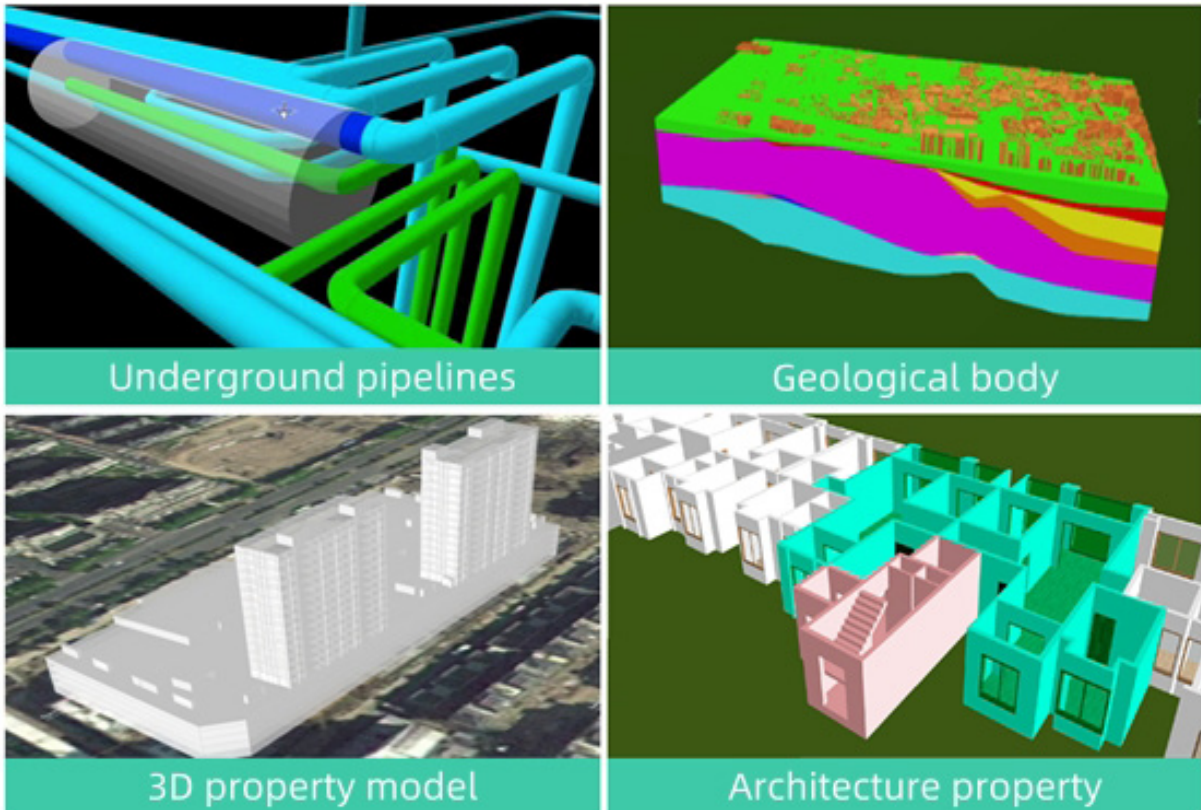
2D and 3D integrated multi-dimensional data management

In 3D real scene construction, there are problems such as huge amount of 3D model data, diverse data formats, and inconsistent time spans. How to integrate multi-source, multi-scale, multi-sequential 3D model data with 2D data to achieve integrated 2D and 3D management is a core issue that needs to be solved urgently. SuperMap has built cross-platform distributed management capabilities based on the basic land and space information platform. Through multi-angle, multi-directional, and multi-dimensional data management technology in three dimensions and time series, it combines 2D data, DEM, white models, precision models, BIM, oblique photography, geological bodies, water bodies, pipelines and other data are integrated based on a unified spatial scale to achieve integrated two- and three-dimensional data management.

3D model data lightweight processing and dynamic visual management

Traditional visualization technology has problems such as unintuitive loading of large scene data, low efficiency, and poor rendering effects. With the help of a series of data lightweight innovative technologies such as webp, block storage and subdomain technology, model slicing and cache file volumes are compressed through data compression, concurrent requests, rendering optimization and loading strategy improvements, greatly improving rendering efficiency.

Using the webp image format can reduce the size to the greatest extent while ensuring lossless image quality, and different compression methods and pyramid level settings can effectively improve data loading efficiency; the block storage method further manages small tiles into blocks to reduce network request times; subdomain technology can



3D model

increase the number of concurrent browser network requests. The combined use of multiple technologies solves the problem of dynamic loading and low rendering efficiency of 3D model data, and achieves millisecond-level loading of 3D model data. The loading efficiency is nearly 4 times higher than that of traditional methods.

3D large scene analysis and display

On the basis of realizing the dynamic visualization rendering of 2D and 3D data, SuperMap further expands its spatial analysis capability, integrates complex multi-dimensional spatial analysis

capabilities, and supports the decision-making of various business applications such as natural resources and smart cities.

Through the visual dynamic arrangement of big data analysis operators and the use of 3D real-scene rendering technology, it provides a general "instant analysis, real-time display" 3D large scene analysis and display capability, mainly including: visual domain analysis that can be used for building line of sight obstruction judgment and communication signal coverage, sunshine analysis that outputs building lighting suitability models in civil engineering, urban planning and landscape analysis, flooding analysis that simulates urban waterlogging and provides a basis for urban disaster warning and construction planning, earthwork analysis in the construction and design fields, fill and excavation analysis for

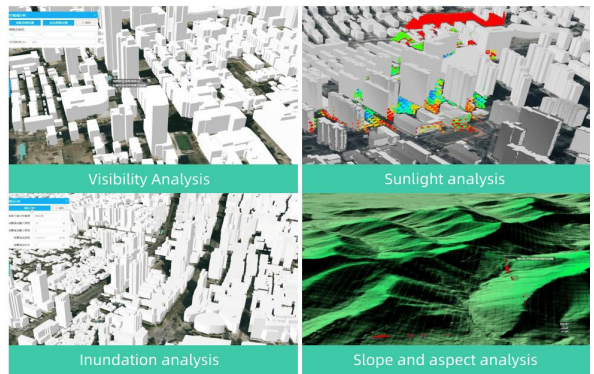


3D data rendering

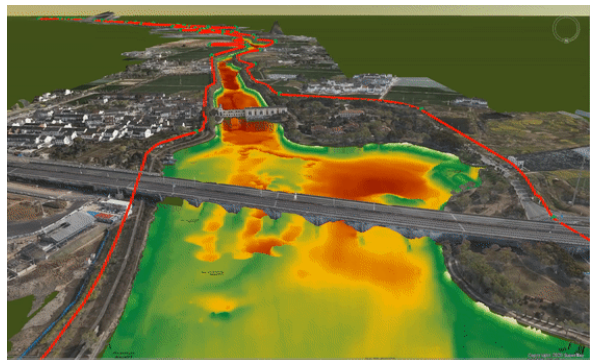
engineering cost estimates and scheme optimization, slope and aspect analysis for arable land quality evaluation, etc.

In order to solve the problems of high-fidelity display of large-scene, full-factor 3D model data and poor rendering performance, SuperMap has studied the fusion simulation technology of game rendering engine and GIS engine, and built a dual-engine visualization mode based on "game rendering + 3D GIS" to effectively improve the realism of large 3D scenes and user experience.

In the future, SuperMap will continue to optimize on the basis of existing practices, continuously promote the construction of a 3D real scene database of natural resources, carry out large-scale data production, fully support software technology innovation, thus contributing to the construction of 3D real scenes in China and beyond.



3D data rendering



Analysis of the scope of 3D water body ownership

Full Cycle Management of 3D Real Scene Space Planning

In recent years, traditional planning based on plane CAD and GIS is gradually transforming to "panoramic" national land and space planning supported by the integration of 3D real scene GIS, IoT, AI, and VR technologies. As a real, three-dimensional, and time-sequential reflection of the spatio-temporal information of human production, life, and ecological space, 3D real scene is an important new national infrastructure that can break through the constraints of two-dimensional information expression and realizes the intuitive display of various elements of national land space planning from static to dynamic.

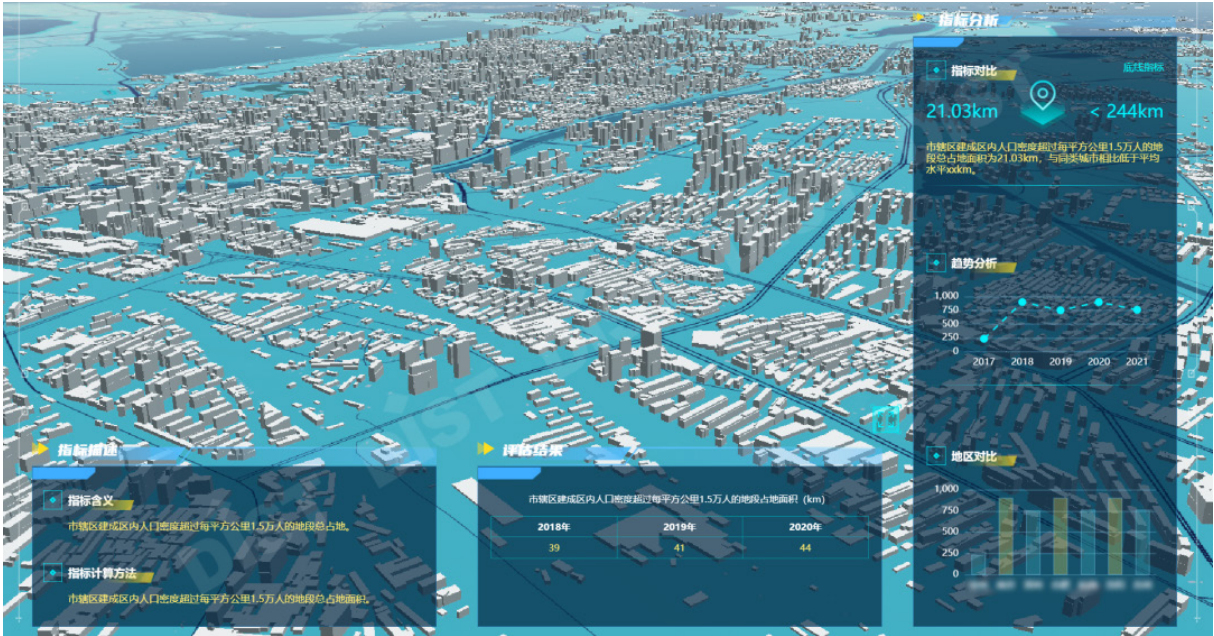
It can also provide effective support for promoting scientific planning, precise implementation of planning, full-process supervision of planning, and public wisdom participation through panoramic analysis, intelligent review, dynamic perception, and interesting interaction, so as to realize the refined and intelligent management of the whole cycle of national land space planning.

Three-dimensional panoramic analysis helps scientific planning

Two-dimensional planning has the limitation that

the amount of spatial information carried by the plane data base is limited, and it cannot intuitively display the distribution of resources on the ground, on the surface, and underground, making it difficult to make unified plans for the three-dimensional land and space. However, a 3D real scene brings together three-dimensional models of terrain, landforms, and objects, which can intuitively reflect the natural geographical pattern and natural resource conditions; combined with 3D analysis tools such as slope and aspect analysis and inundation analysis, it can scientifically identify sloping farmland and other issues, providing important support for natural resource management decision-making such as the demarcation of three zones and three lines and the protection of cultivated land.

At the same time, based on remote sensing images and 3D architectural landscape model libraries, automatic batch modeling, parametric design, and simulation can be carried out to assist planning designers to quickly build and dynamically adjust planning and design plans. In addition, the use of rich 3D scene rendering methods can more intuitively carry out spatiotemporal analysis and planning results display, and improve the degree of multi-dimensional detail presentation of planning results visualization.



Global batch modeling technology based on remote sensing image recognition

Three-dimensional intelligent review to ensure accurate implementation of planning

The traditional planning focused on compilation but neglects management, and separated the compilation from management, which has caused the planning disconnected from implementation. At the same time, the focusing on two-dimensional land use indicators and neglecting three-dimensional urban design have led to problems such as all cities look the same and the low quality of space.

Applying 3D real scenes in the planning and implementation process can expand two-dimensional development intensity indicators such as volume ratio, building density, and green space

ratio into boundary-type, indicator-type, structural-type, location-type, and directory-type control elements based on the results of land and space planning, forming a three-dimensional digital control element system. As a result, the intelligent review algorithm models can be implemented in project site selection, land approval, planning permission, and planning verification, and connect to 3D services at the graphic approval end, realizing the leap from 2D approval with drawings to 3D intelligent review.

For example, the 3D smart site selection application can not only quickly screen out plots that meet the requirements, but also provide supporting 3D analysis tools such as scheme simulation, cut and fill analysis, and sunshine analysis to better serve project investment.

In the past, the review of building plans was limited



Detailed review of 3D architectural plan

to static design texts and renderings, lacking a review of the 3D space level, which led to many projects exposing design problems only after they were implemented. With the 3D building plan review application, the computer can conduct a comprehensive and rapid review of the 3D design plan, including building spacing, building setbacks, sunshine conditions, building facades, supporting facilities, public spaces, etc., thereby improving the efficiency of approval decisions and implementing precisely.

3D dynamic perception to support full-process planning supervision

In the past, the monitoring of land development and utilization and urban construction operation was mainly carried out through satellite images,

illegal behaviors reporting, manual inspections, etc., which were of low timeliness and consumed a lot of manpower. Based on the 3D real scene national land and space, combined with satellite remote sensing, drones, video surveillance, electronic fences and other sensing equipment and technologies, a 3D monitoring network integrating "sky and ground" is created to achieve real-time monitoring in more dimensions. For example, combined with AI technology, remote sensing images and video images are analyzed to intelligently identify and warn of the "non-agriculturalization and non-grainization" of cultivated land, illegal and irregular buildings, idle land, and mine greening ; 3D real scene monitoring of geological disaster risk areas during the flood season is carried out to judge and warn of the potential risks of debris flows and landslides ; relying on 3D image data, the development and construction of industrial parks are identified, and the situations of the approved but not built and the unapproved but



"Role-playing" fun design experience

built are supervised to promote the conservation and intensive use of land.

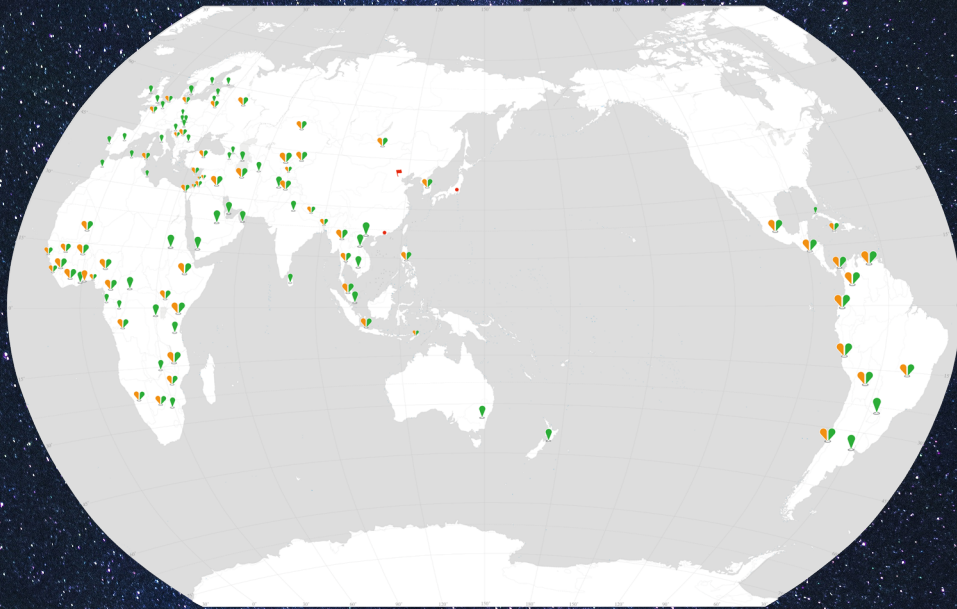
Three-dimensional fun interaction, innovative public participation

At present, public participation in planning is mainly through planning announcements, hearings, questionnaires, etc. However, these participation methods are highly professional and less intuitive, resulting in a weak public awareness of active participation in planning. In order to increase the enthusiasm of the public for participation, the 3D digital map of the city can be connected to the mobile APP, so that the public can share suggestions on urban construction and management anytime and anywhere, and realize the real-time collection

of public opinions; a three-dimensional immersive experience area can also be set up to increase citizens' interest in urban planning and management

Citizens can also experience the urban planning process through interesting "role plays", such as making planning decisions on community open space from the perspective of retired seniors or students, and simulate the design in the form of "building blocks", and the system will automatically evaluate the planning plan. This will broaden the channels for public participation in planning and implement the concept of "people's cities built by the people".

Global Distributors and Users



超图软件总部
Headquarters

超图国际&日本超图
Branch Offices

代理商
Distributors

用户
Users

SuperMap has developed distributors and partners in more than 50 countries and SuperMap GIS end users in over 100 countries. We are looking for more partners from all over the world to build a global partner eco-system.