SATPALDA

GEOSPATIAL EXCELLENCE

ISO 9001 : 2015

CMMI Level 3

www.satpalda.com

info@satpalda.com

ABOUT US

With more than two decades of experience and expertise, SATPALDA is a leading company in geospatial and IT/Engineering services, as well as a certified provider of advanced remote sensing solutions.

Established in 2002, SATPALDA has extensive industry experience, establishing itself as a major player in the engineering, IT, and geospatial services sectors.

Our core focus centers on leveraging the potential of satellite imagery and geospatial data to deliver bespoke solutions across diverse industries.

With expertise in fields such as forestry, urban planning, agriculture, environmental monitoring, and disaster management, SATPALDA provides comprehensive services powered by state-of-the-art technology

Our team is committed to delivering top-notch geospatial insights to clients through accurate remote sensing applications, GIS analysis, and satellite image processing. SATPALDA has a track record of successfully completing projects, showcasing our expertise and commitment to delivering customized solutions.

We have successfully executed numerous projects, demonstrating our expertise and commitment to delivering tailored solutions. Through our expertise and dedication, we continue to contribute significantly to the progress of industries by staying at the forefront of innovation in the geospatial domain.

PARTNERS

SATPALDA has forged valuable partnerships and collaborations with various organizations, institutions, and companies globally.

These associations play a crucial role in expanding SATPALDA's capabilities and offering innovative geospatial and remote sensing solutions across various industries.

These partners allow SATPALDA to integrate state-of-the-art technologies and data from a wide range of global sources.

Through these collaborations, SATPALDA can provide comprehensive, accurate, and cutting-edge geospatial and remote sensing solutions to clients worldwide.

Vantor

WYVERN

AXELSPACE

Synspective

PRODUCTS

SATELLITE IMAGERY

SATPALDA provides clear and timely insights into our ever-changing world through high-quality satellite imagery.

Our satellite images are sourced from trusted partner companies, ensuring accuracy and reliability for diverse applications.

Vantor

WorldView-1

Launched in 2007 with a resolution of 0.50 m at nadir.
Excellent panchromatic imagery with a stereo option.

WorldView-2

Launched in 2009 with a resolution of 0.46 m at nadir.
First 50 cm resolution satellite with 8 spectral bands.

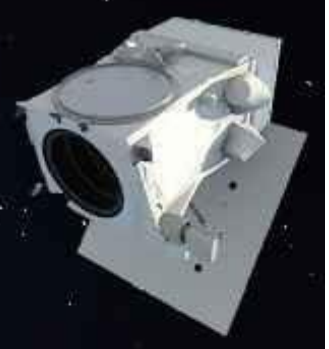
WorldView-3

Launched in 2014 with a resolution of 0.3 m at nadir.
First multi-payload, superspectral, high-resolution satellite.
Operating at an altitude of 617 km.

GeoEye-1

Launched in 2008 with a resolution of 0.41 m at nadir.
Highest accuracy in horizontal and vertical directions.

WorldView Legion

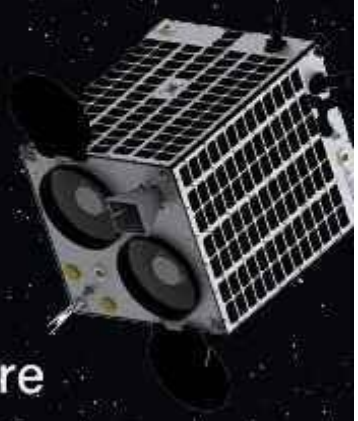


WorldView Legion satellite imagery will support valuable missions at unmatched speed, quality, and scale.
WorldView Legion brings more 30 cm-class satellite imagery to the market.

WYVERN

Wyvern provides high-resolution hyperspectral satellite imagery, capturing dozens of spectral bands for detailed material, crop, and environmental analysis. Its Dragonette constellation delivers ~5 m resolution data ideal for detecting vegetation stress, mineral signatures, and industrial anomalies. With flexible tasking, archive access, and assured capacity, Wyvern ensures fast, scalable data delivery. The system supports key sectors like agriculture, forestry, mining, climate monitoring, and defense, enabling precise and actionable insights.

AXELSPACE

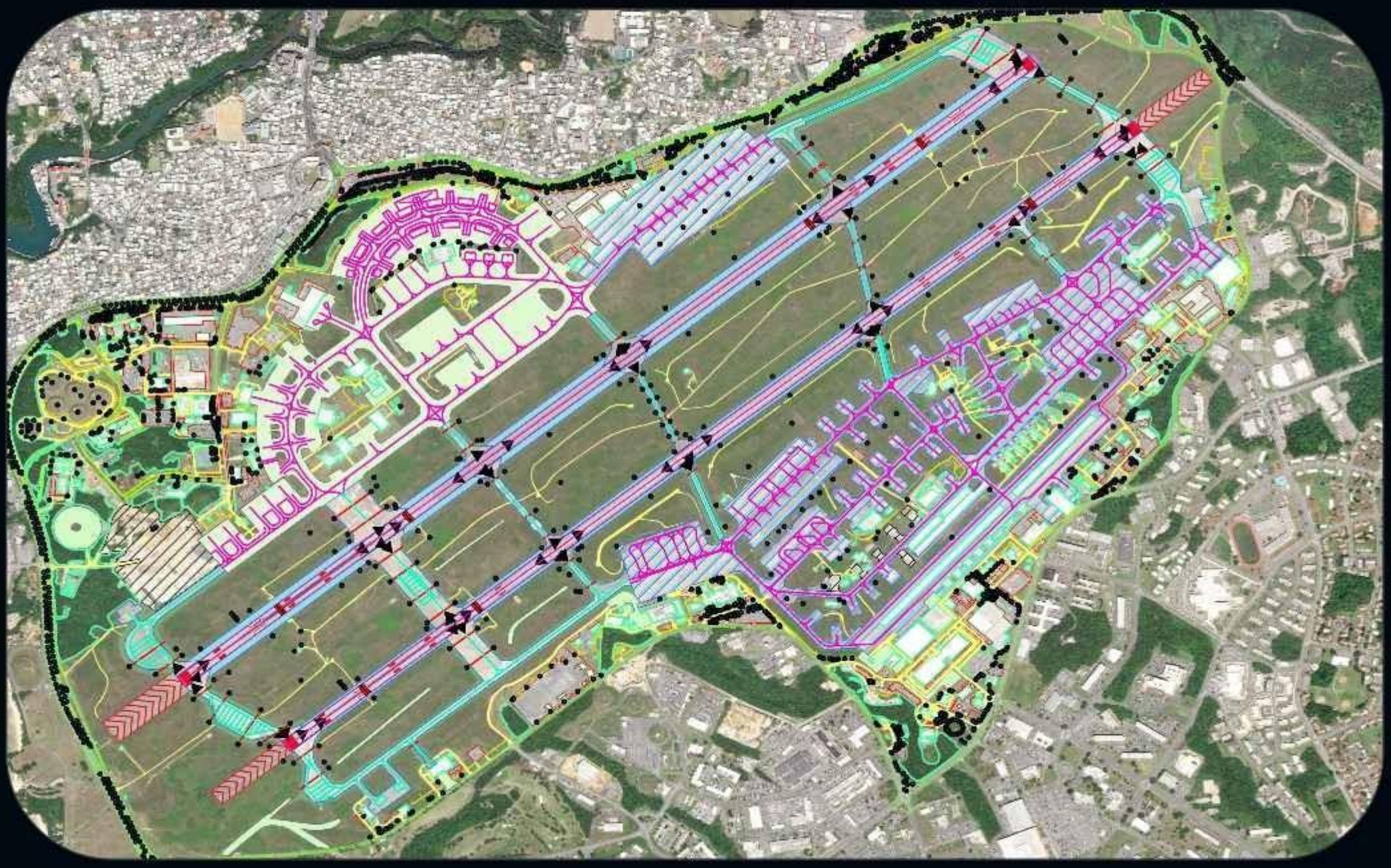


AxelGlobe Constellation: A cutting-edge Earth observation network by Axelspace, featuring multiple GRUS satellites.
Each satellite carries dual telescopes, enabling daily coverage of more than half of Earth's surface. The system delivers high-resolution 2.5 m imaging across a 55 km observation width—clear enough to spot vehicles from space.

Synspective

Synspective's STRIX series incorporates synthetic aperture radar (SAR) satellite technology with a high-precision sensor system. The satellites achieve a surface resolution of 1–3 m with an observation width of 10–30 km, enabling coverage of over 1,000 km in a single pass. The system operates with single-polarization (VV) data collection capability.

AERODROME MAPPING DATABASE (AMDB)

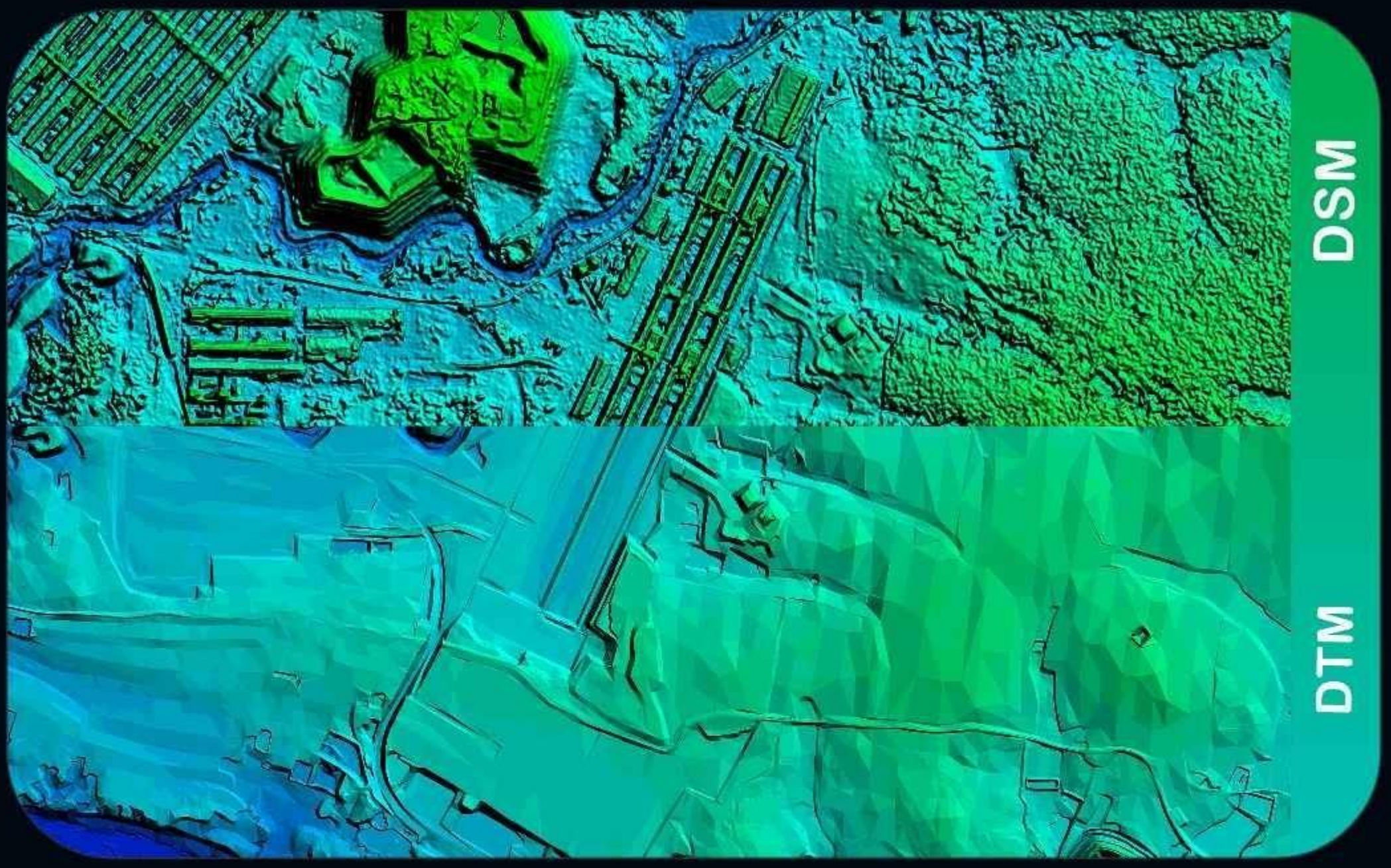


An **AMDB** is a spatial database of an airport. An AMDB dataset describes the spatial layout of an aerodrome in terms of features (e.g. runways, taxiways, and parking stands) with geometry described as points, lines, or polygons and with attributes (e.g. Surface type). Pro-geometry is described as points, lines, or polygons and is exchanged as datasets using global standards.

AMDBs are produced and exchanged as datasets using global standards and tools of mainstream **Geographic Information System (GIS) technology**.

AMDBs represent a collection of aerodrome information that is organized and arranged for ease of electronic storage and retrieval in systems that support aerodrome movements, training, charting, and planning.

3D LANDSCAPE



The 3D Landscape is SATPALDA's next-generation global 3D terrain dataset which provides seamless data up to sub-meter post spacing, enabling precise topographic analysis. This is a comprehensive worldwide offering that is available as a Digital Surface Model (DSM), Digital Terrain Model (DTM), and 3D building model.

SATPALDA can provide a DEM over an area of interest for almost anywhere around the world. Our portfolio includes customized DEM products, including DEMs derived from archived stereo imagery, or we can task a satellite to custom-collect stereo data specifically over your area of interest.

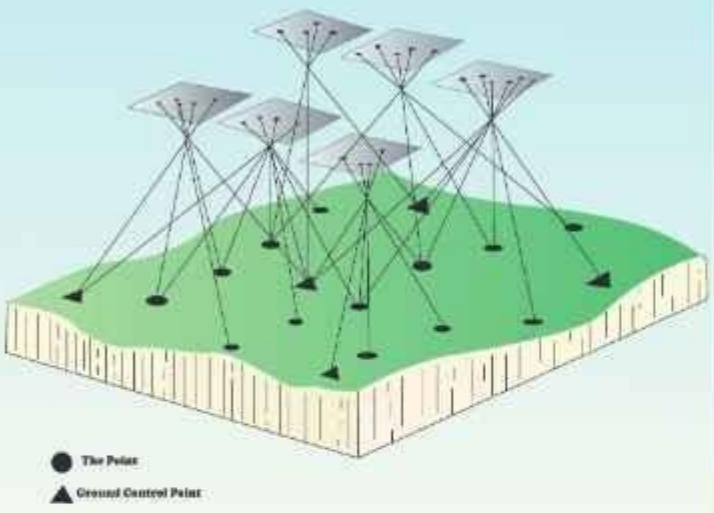
SERVICES

GIS

SATPALDA offers a wide range of **Geographic Information Systems (GIS)** services that help clients collect, analyze, manage, and visualize geospatial data.

These services are designed to support decision-making across industries such as agriculture, urban planning, environmental monitoring, infrastructure development, disaster management, and more.

We combine GIS with advanced remote sensing data, enabling clients to gain valuable insights from spatial data.



PHOTOGRAMMETRY

Photogrammetry is the science of making precise measurements and 3D models from photographs, usually obtained from aerial or satellite
imagery.

SATPALDA provides comprehensive Photogrammetry services that utilize advanced techniques in aerial imagery, satellite data, and geospatial technologies to create high-accuracy maps, 3D models, and spatial analyses.

These services are essential for applications in urban planning, infrastructure development, environmental monitoring, and surveying.

SURVEYING AND MAPPING

SATPALDA delivers precise and reliable surveying solutions for various industries using state-of-the-art technologies. Our expertise includes:

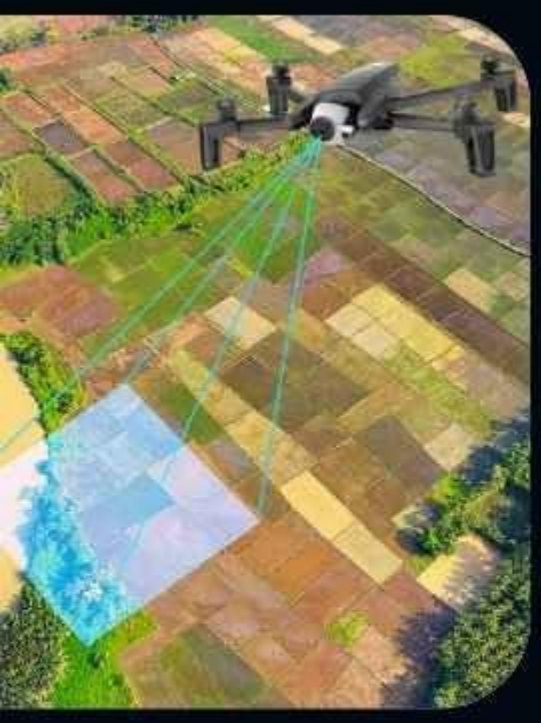
- Wetland Delineation
- Boundary & Cadastral Surveys
- As-Built & Tree Surveys
- Topographic Surveys
- Roadway & Drainage Staking
- Engineering & Urban Planning

We serve engineering firms, architectural consultants, real estate developers, and government agencies, providing highly accurate data for residential, commercial, and infrastructure projects. Our clientele includes federal and state agencies, oil and gas companies, pipeline firms, and industrial organizations.

Advanced Surveying Technologies

DGPS Surveying

SATPALDA utilizes Differential GPS (DGPS) technology to achieve centimeter-level accuracy in land surveying, construction, agriculture, and infrastructure development. Our highly accurate geospatial data enhances project planning, minimizes errors, and supports informed decision-making.



UAV/Drone Surveying

Our Unmanned Aerial Vehicles (UAVs) / Drones services offer cost-effective, high-resolution aerial mapping solutions. Equipped with **LiDAR** sensors, high-resolution cameras, and thermal imaging, our drones enable efficient data collection for land surveys, environmental monitoring, and infrastructure inspections.rogress

GPR (Ground Penetrating Radar)

SATPALDA's Ground Penetrating Radar (GPR) technology facilitates subsurface mapping for utility detection, archaeology, and geological investigations. This non-invasive technique provides precise insights into underground structures, ensuring precision in infrastructure planning and effective asset management.

By leveraging cutting-edge technology and industry expertise, SATPALDA delivers superior surveying and mapping solutions tailored to your project requirements.

WebGIS

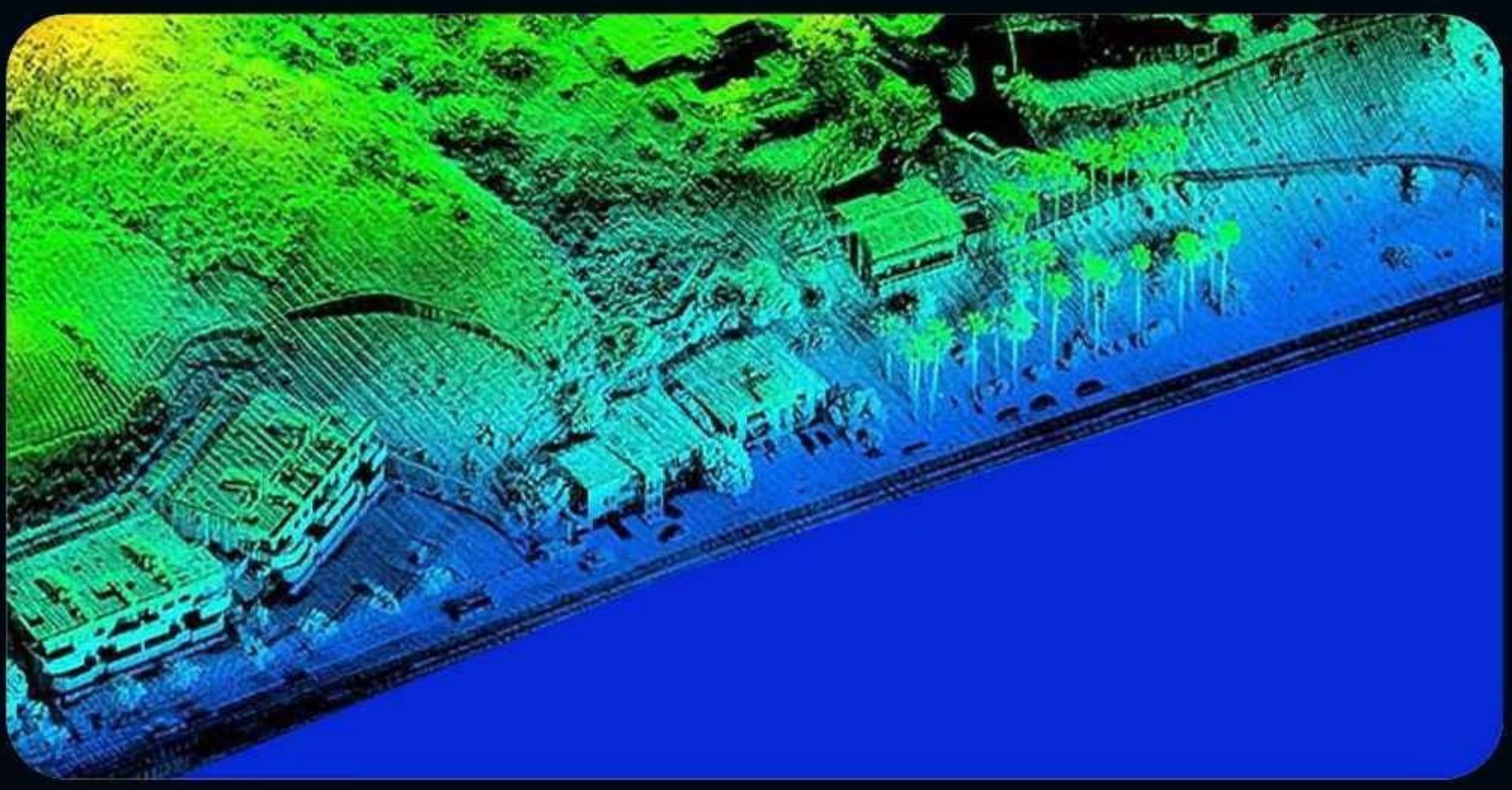
WebGIS is a pattern, or architectural approach, for implementing a

modern GIS. It's powered by web-based standard services that deliver data and capabilities and connect components. It is a type of distributed information system, comprising at least a server and a client, where the server is a GIS server and the client is a web browser, desktop application, or mobile application.

SATPALDA's WebGIS Services:

- Data Discovering & Notification Service
- Data Demand & Delivery Service
- Data Visualization & Report Generation
- Repository Management & User Administration
- Enterprise Support Service
- Subscription Service
- Professional Service
- Customized Service

LiDAR DATA Processing & Mapping



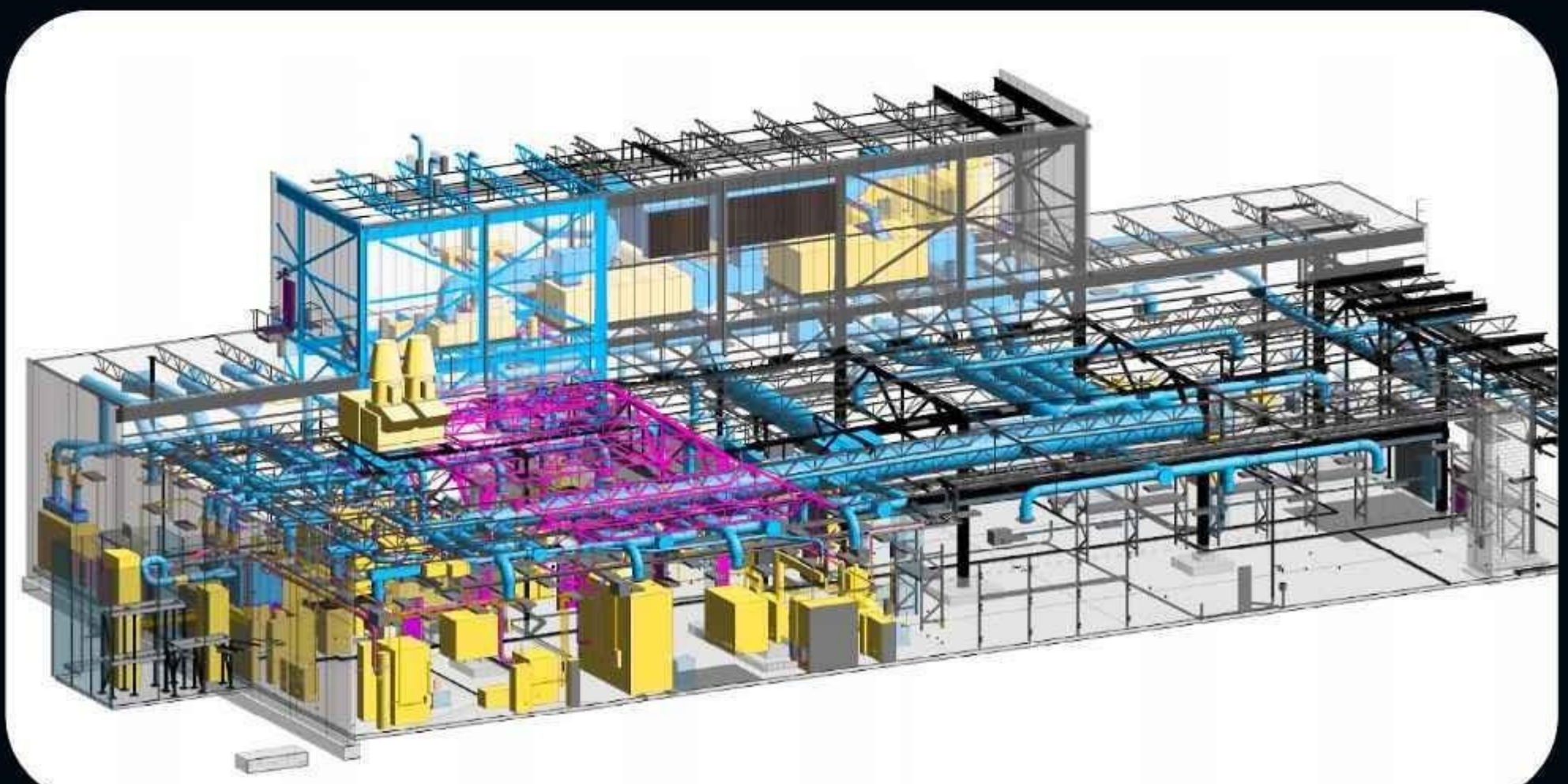
Airborne Laser Terrain Mapping (ALTM): Internationally compliant, cost-effective LiDAR services are provided by SATPALDA. We have a great deal of experience classifying LiDAR point cloud data into many classes, such as bare earth, hydrography, buildings, bridges, pylons, and low- and high-vegetation.

high-tension wires and cables, etc. Additionally, we perform planimetric mapping, advanced as built 3D modelling, and flight line correction.

Mobile/Handheld LiDAR: Mobile/Handheld through its high-resolution point cloud data, LiDAR (Light Detrection And Ranging, also known as Lasser scanning or 3D Scanning), delivers precise three-dimensional topographic

UAV LiDAR: SATPALDA is capable of processing UAV LiDAR data, including flight line correction, point cloud categorization according to feature class, and vectoring them to create 3D city modeling.

BIM

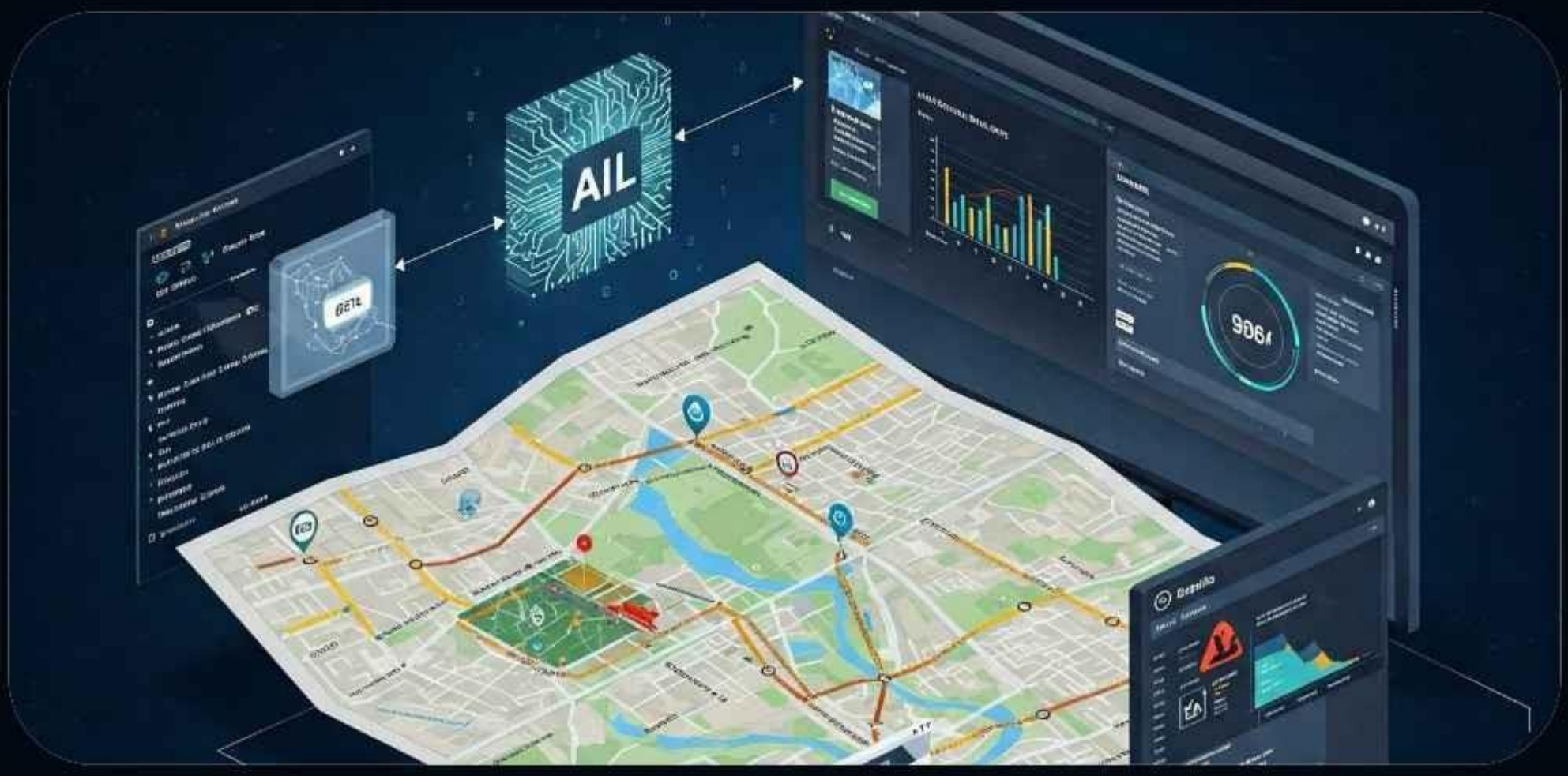


SATPALDA provides comprehensive **Building Information Modeling (BIM)** services to support the architecture, engineering, and construction (AEC) industries in creating, managing, and optimizing building projects.

BIM is aa digital representation of a building's physical and functional characteristics. It provides a centralized platform for all project stakeholders to collaborate effectively.

By leveraging BIM, SATPALDA streamlines the design, construction, and operation of buildings, ensuring accuracy, efficiency, and sustainability throughout the project lifecycle.

AI/ML



AI/ML-based GIS Services by SATPALDA leverage the power of Artificial Intelligence (AI) and Machine Learning (ML) to enhance the capabilities of Geographic Information Systems (GIS), making it possible to extract deeper insights, automate processes, and make more accurate predictions.

By integrating AI and ML technologies with GIS, SATPALDA offers innovative solutions that can handle large datasets, uncover patterns, and improve decision-making in various industries, from urban planning to environmental monitoring.

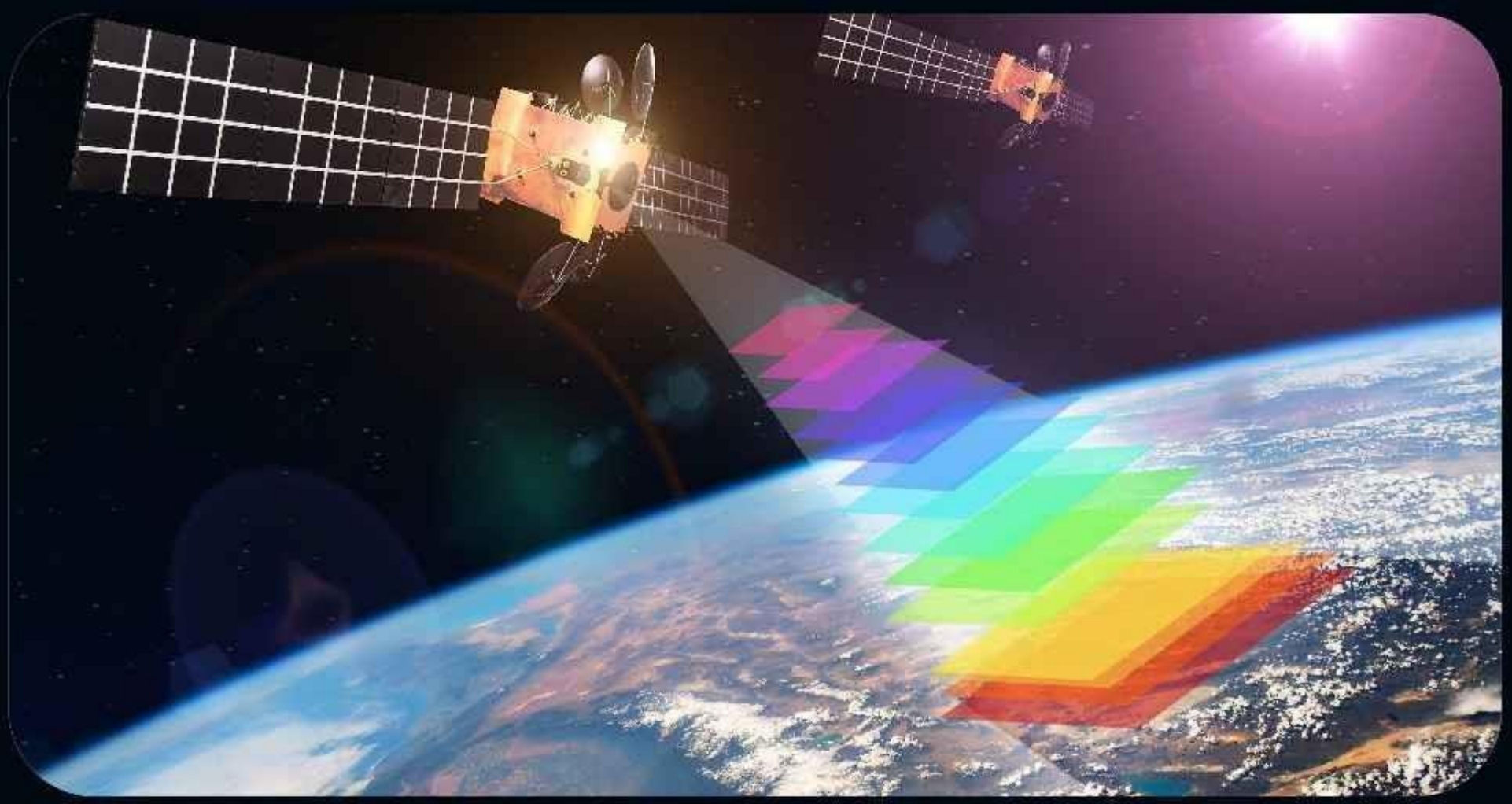
DIGITAL TWIN

Digital Twin for GIS by SATPALDA involves creating virtual replicas of physical objects, processes, or systems using Geographic Information Systems (GIS) data.

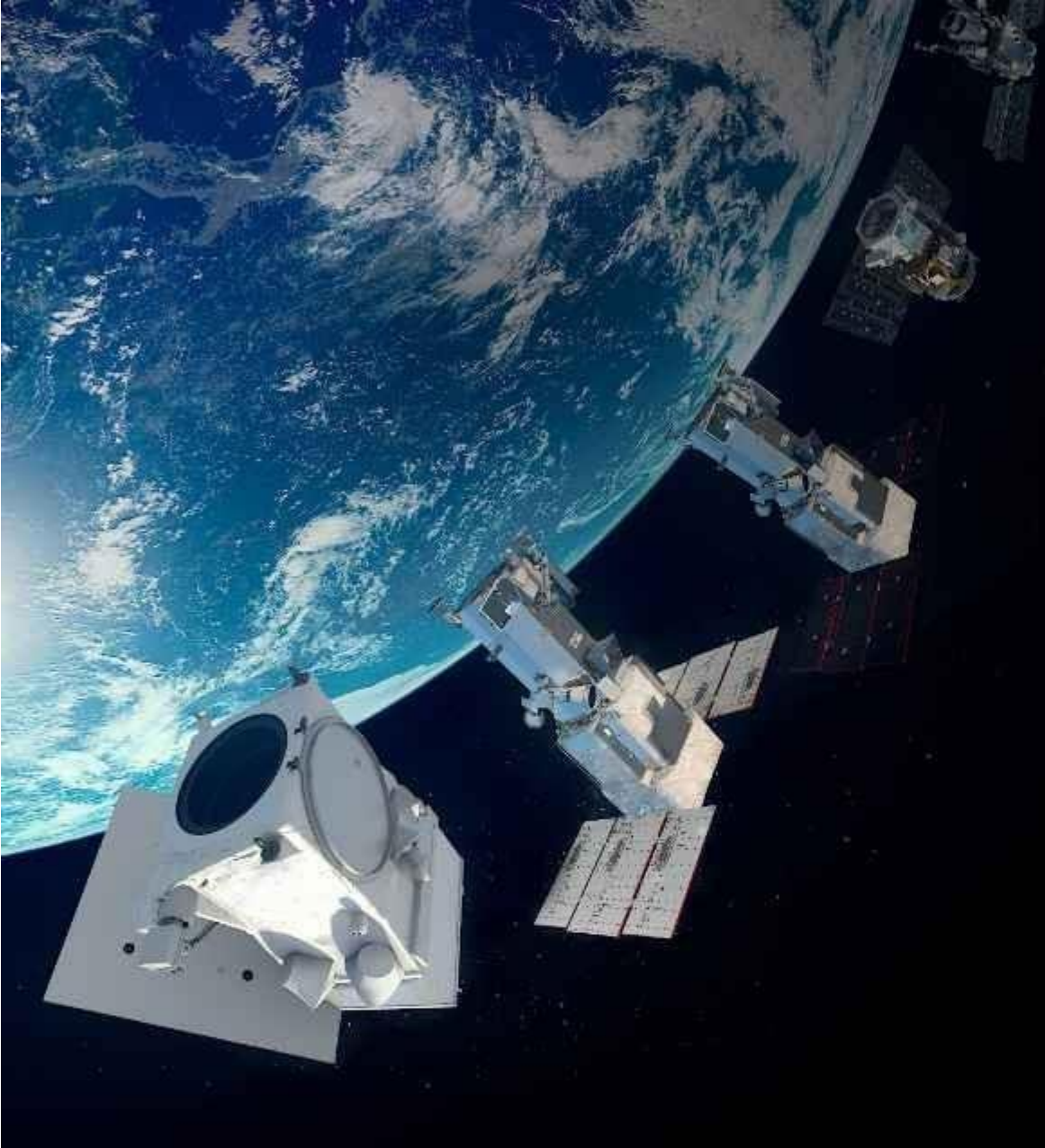
This technology is revolutionizing industries by allowing businesses and governments to monitor, simulate, and optimize real-world systems in real-time, improving decision-making, efficiency, and sustainability.

By integrating Digital Twin technology with GIS services, SATPALDA provides powerful solutions for managing urban infrastructure, environmental monitoring, smart cities, and asset management.

REMOTE SENSING



SATPALDA offers a range of remote sensing services, leveraging satellite data and advanced geospatial technologies to deliver valuable insights across various industries and applications. Our remote sensing services are designed to help clients make data-driven decisions by utilizing high-resolution satellite imagery, data processing, and analytics.



SATPALDA

GEOSPATIAL EXCELLENCE

CORPORATE OFFICE :

1006, KANCHENJUNGA BUILDING, 18, BARAKHAMBA ROAD,
NEW DELHI - 110001 (INDIA)

BRANCH OFFICE :

CP 2154, SECTOR 16A, VASUNDHARA, GHAZIABAD,
UTTAR PRADESH - 201012 (INDIA)

Ph: +91 7838 410007, 9718265000
Website: www.satpalda.com
Email: info@satpalda.com