



How Drones with Advanced Technologies can be used for Geospatial Infrastructure and Urban Planning and Development



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DRONIX TECHNOLOGIES PVT LIMITED



DESIGN, DEVELOP &
MANUFACTURE
DRONES IN INDIA



PROVIDE DRONE
BASED SERVICES ON
A TURNKEY BASIS
AND TRAINING



OFFER END-TO-END
SOLUTIONS INCLUDING
SOFTWARE, AI BASED
ANALYTICS & REPORTING



DRONE AND SOME ADVANCED TECHNOLOGIES



Drone

As a tool for geospatial infrastructure and urban development

Along with



MAPPING CAMERAS



MULTISPECTRAL CAMERAS



THERMAL CAMERAS



LIDAR



GROUND PENETRATION RADAR



HYPERSPECTRAL

RGB Mapping



Sony A6100



Sony RX1R II



Oblique



ADTI 24MP



ADTI 42MP



ADTI 61MP

Thermal



FLIR Vue Pro 336



FLIR Vue Pro 640

Multispectral



Parrot Sequoia



MicaSense Rededge P

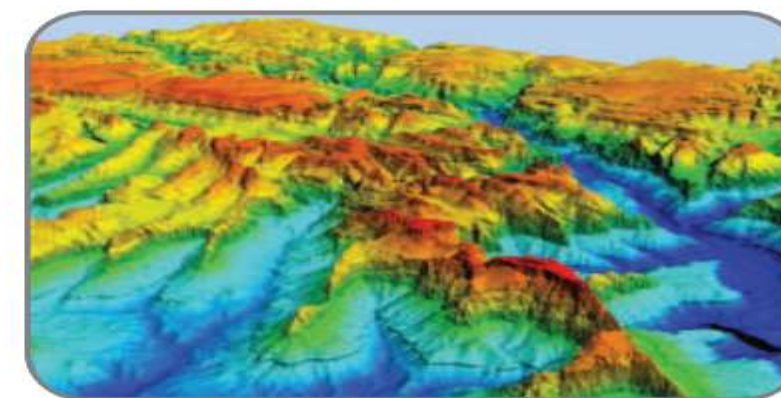
DATA OUTPUTS



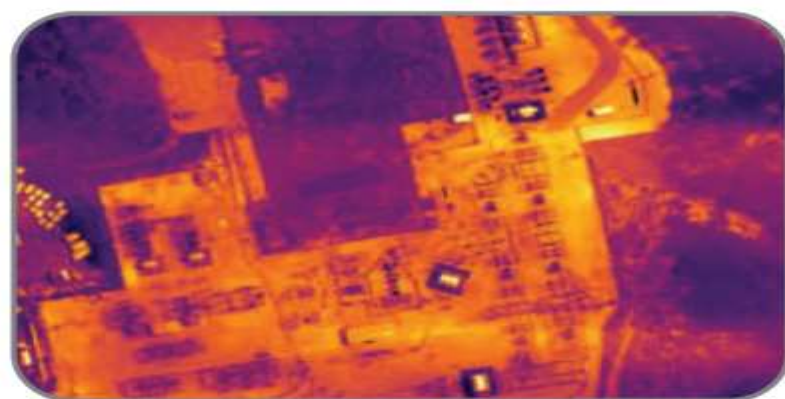
Orthomosaic maps



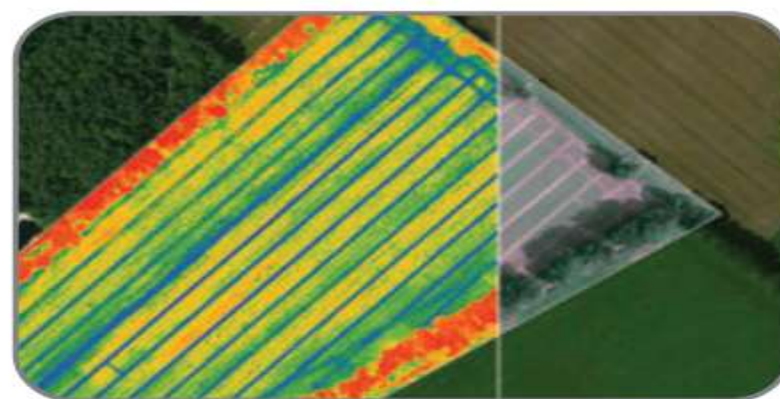
3D point clouds



Digital surface models (DSM)



Thermal map



Multispectral map



Oblique Camera Map

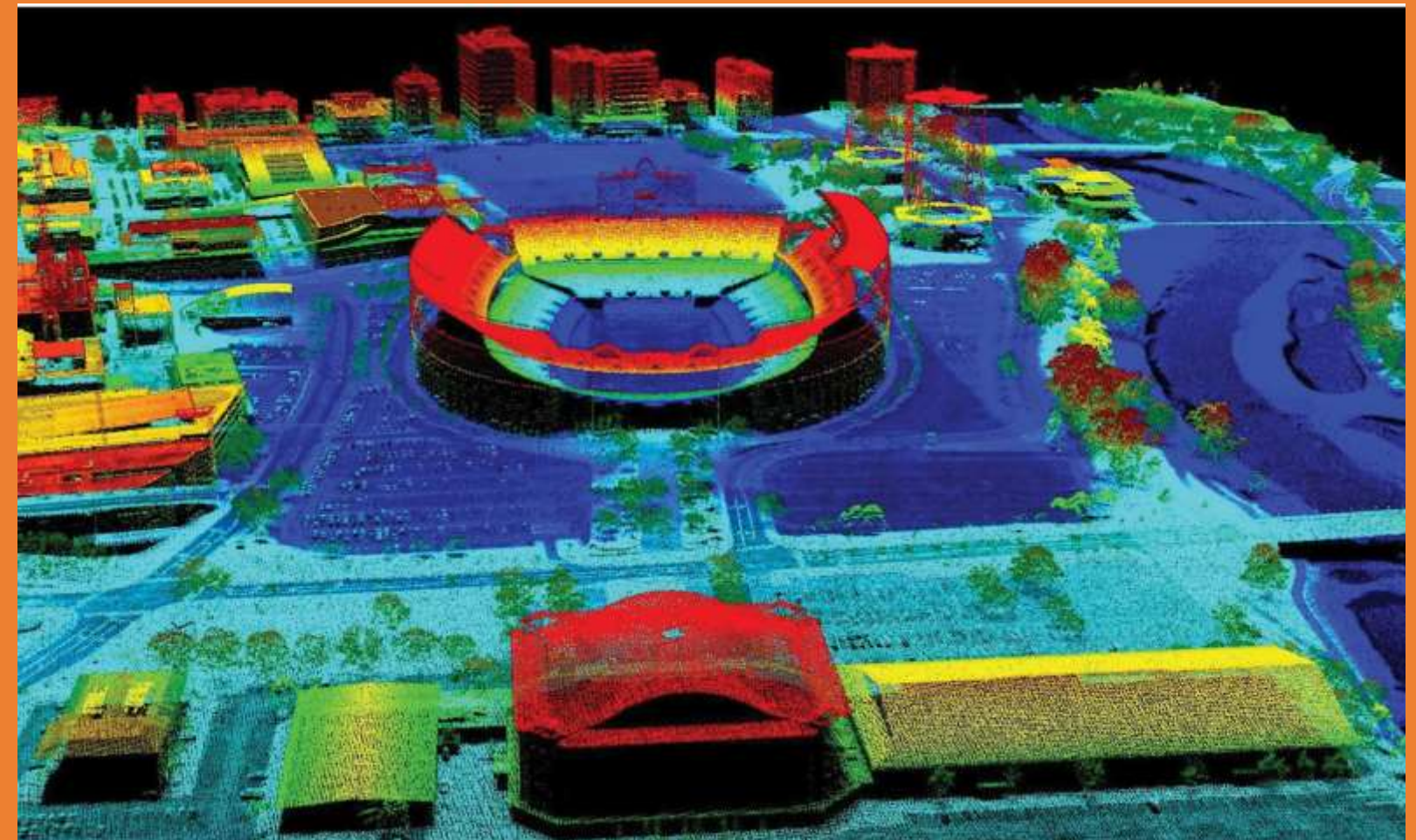
Use of LIDAR-equipped drones in Urban Development.

LIDAR



LIDAR-equipped drones provide high-resolution, three-dimensional data that can be used for various aspects of urban planning and development.

Outputs



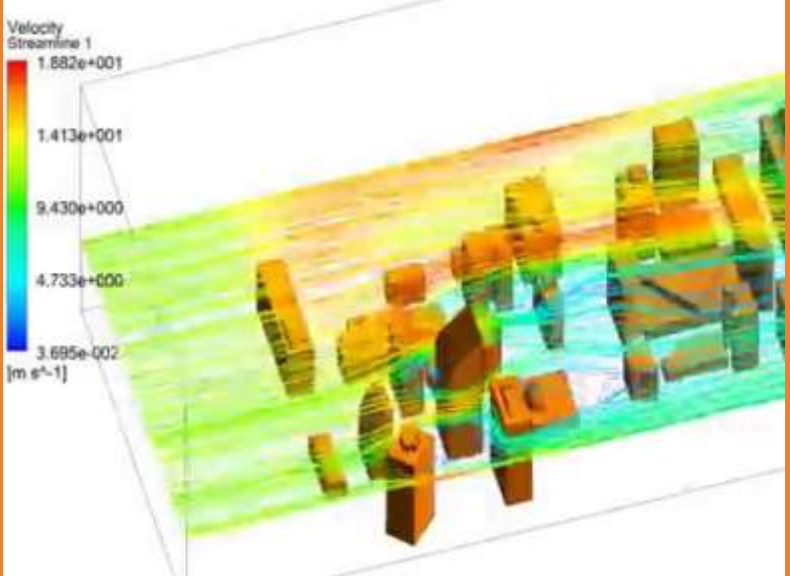
Here's how LIDAR with drones can be used in urban development



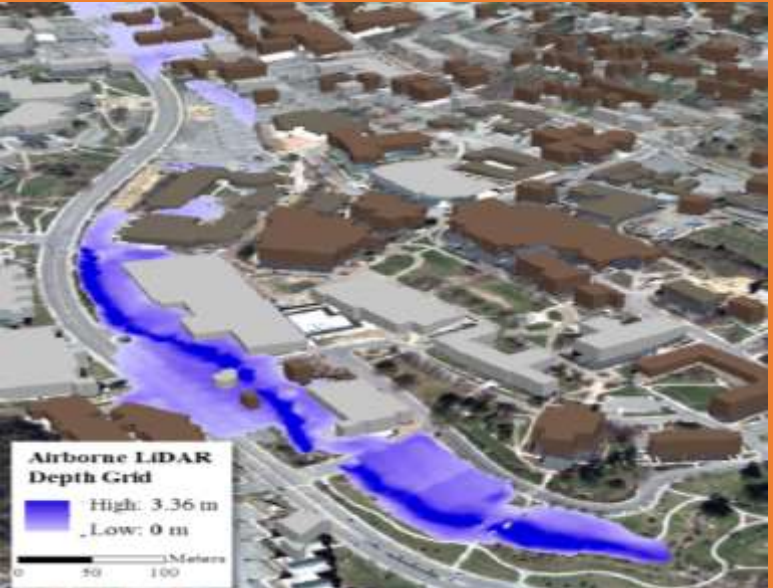
Topographic Mapping



Utility and Infrastructure Planning & Maintenance



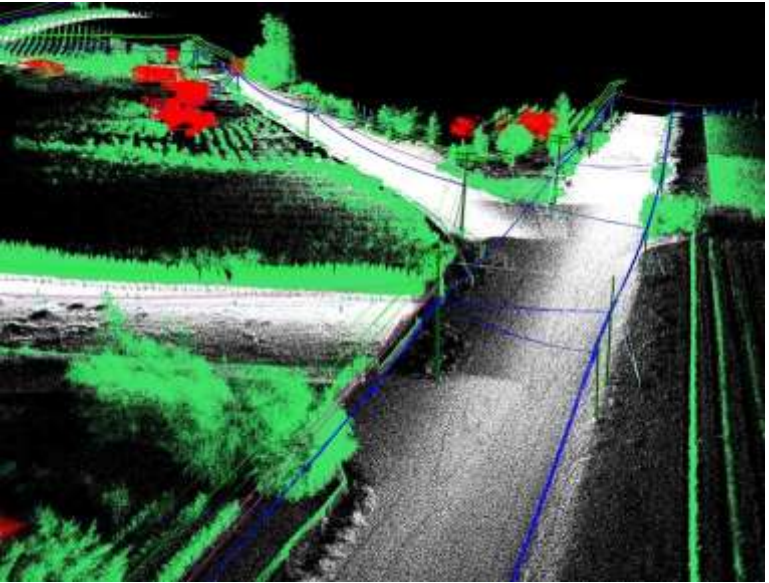
Disaster Risk Assessment



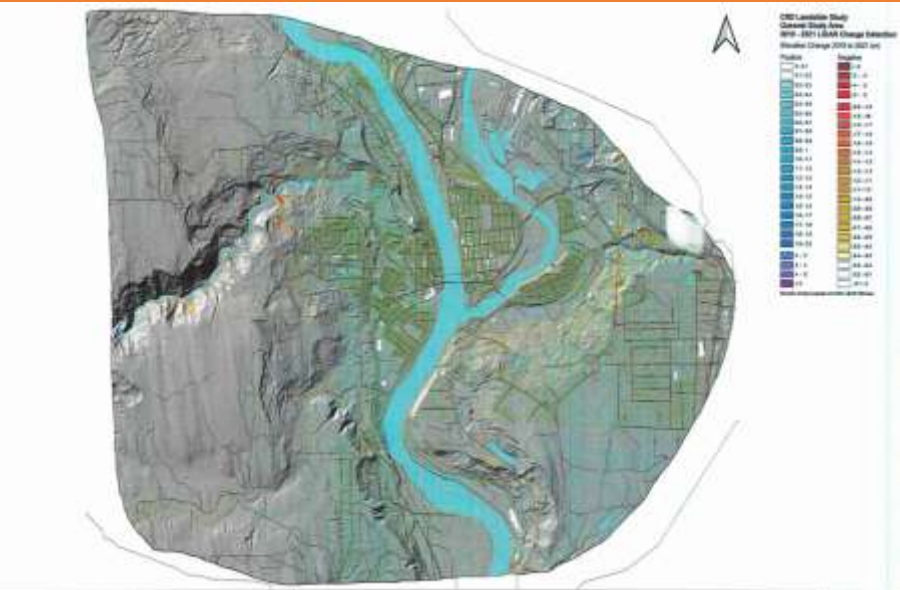
Flood and Drainage Analysis



Urban Planning Visualization



Traffic and Transportation Planning



Slope and Stability Analysis



Urban Vegetation Management

Use of Hyperspectral-equipped drones in Urban Development.

HYPER SPECTRAL

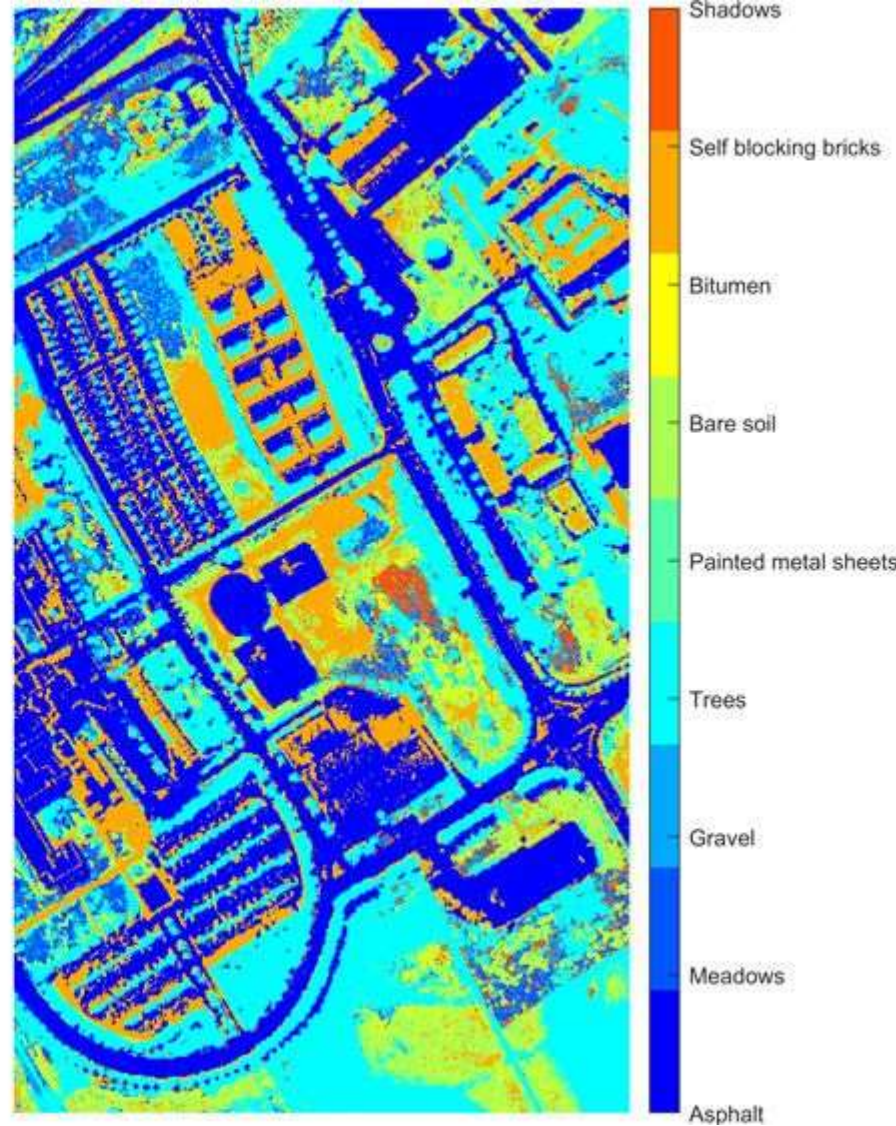
Hyperspectral imaging technology captures information across a wide range of electromagnetic wavelengths, allowing for the identification of materials, objects, and environmental conditions with a high degree of precision



Use of Hyperspectral-equipped drones in Urban Development.

OUTPUTS

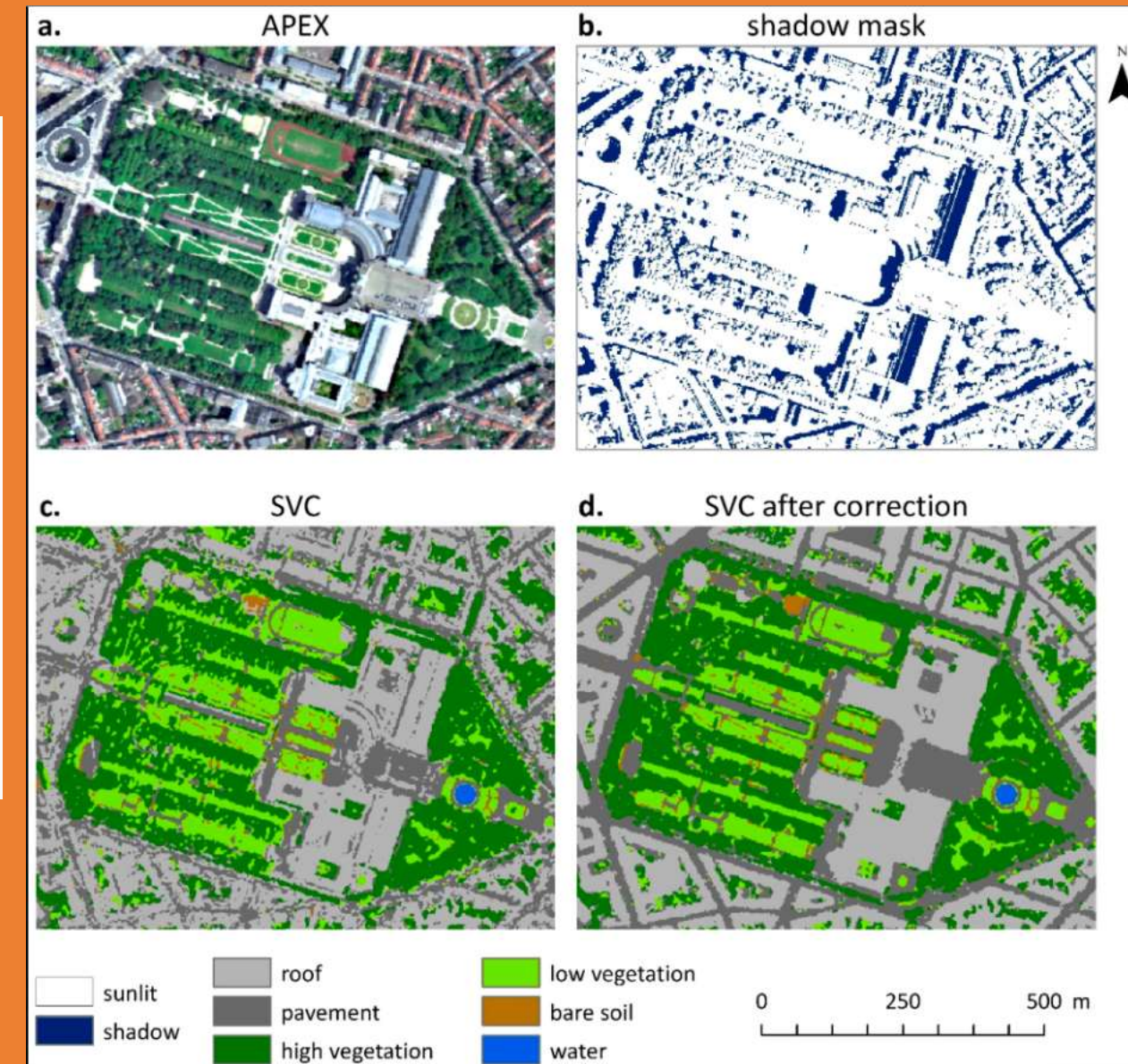
HYPER SPECTRAL



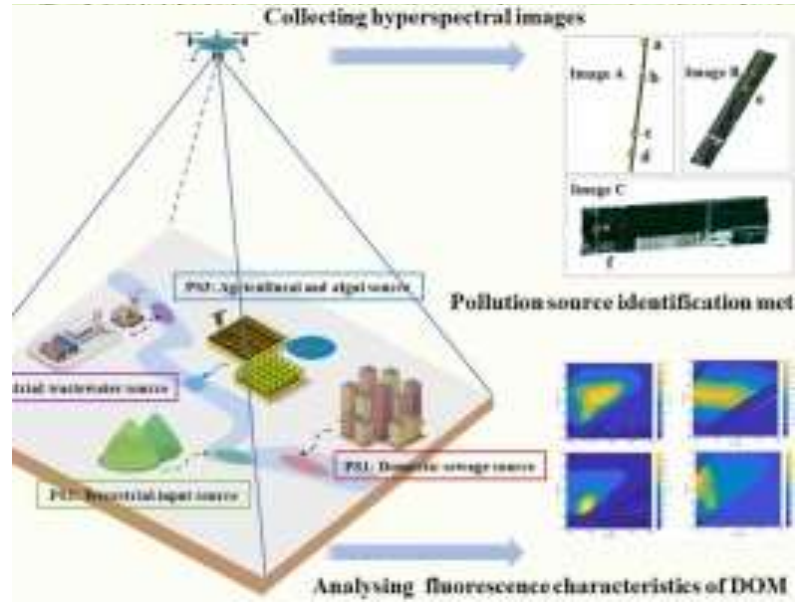
NEWS

Hyperspectral Imaging to Analyse Building Material Strengths

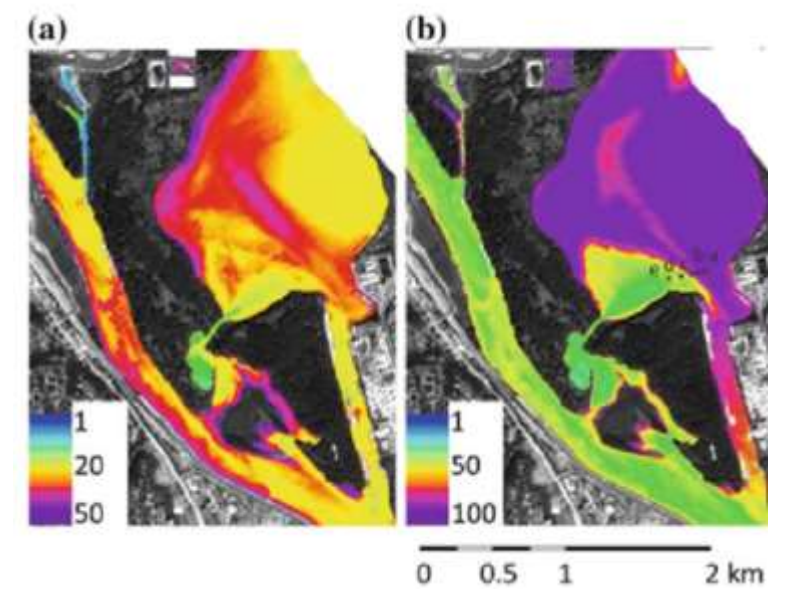
September 5, 2018



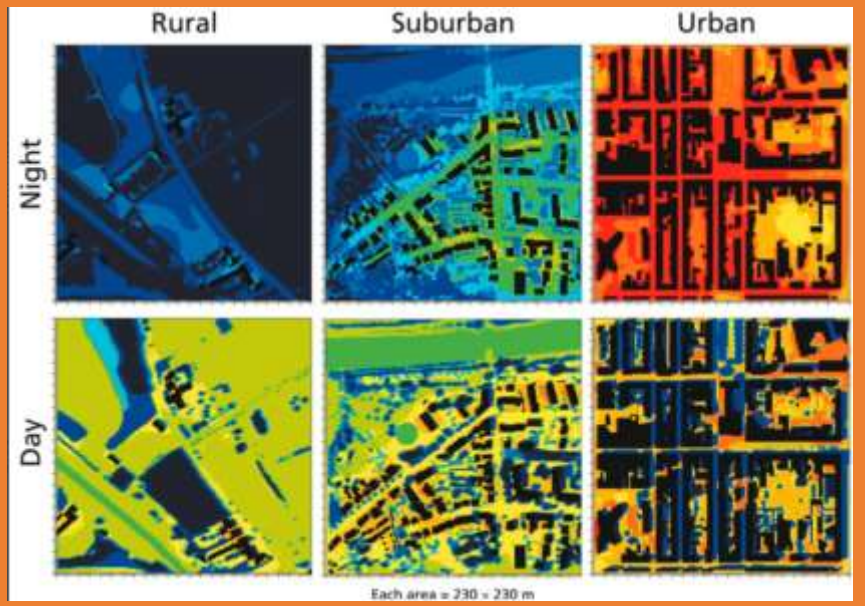
Here's how HYPERSPETRAL with drones can be used in urban development



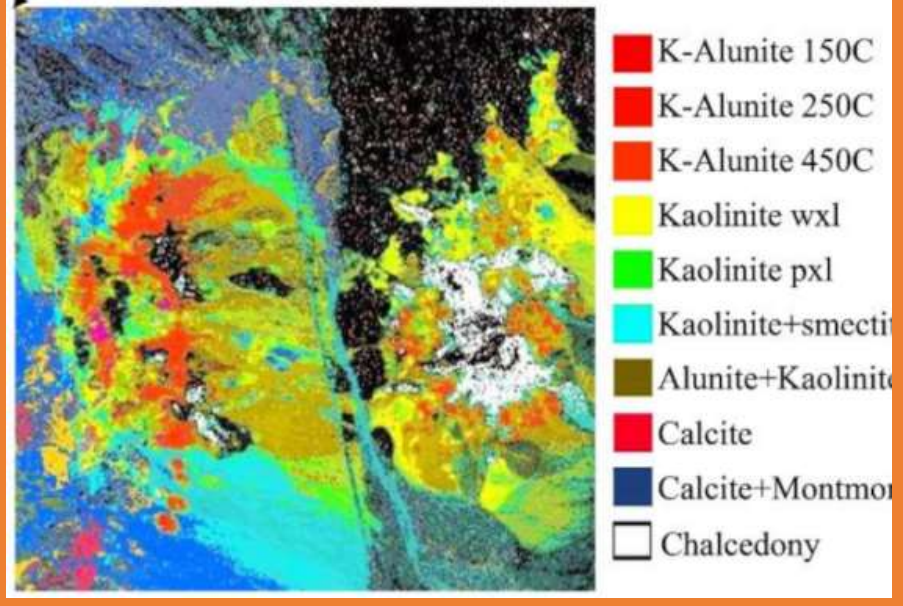
Environmental Quality Monitoring



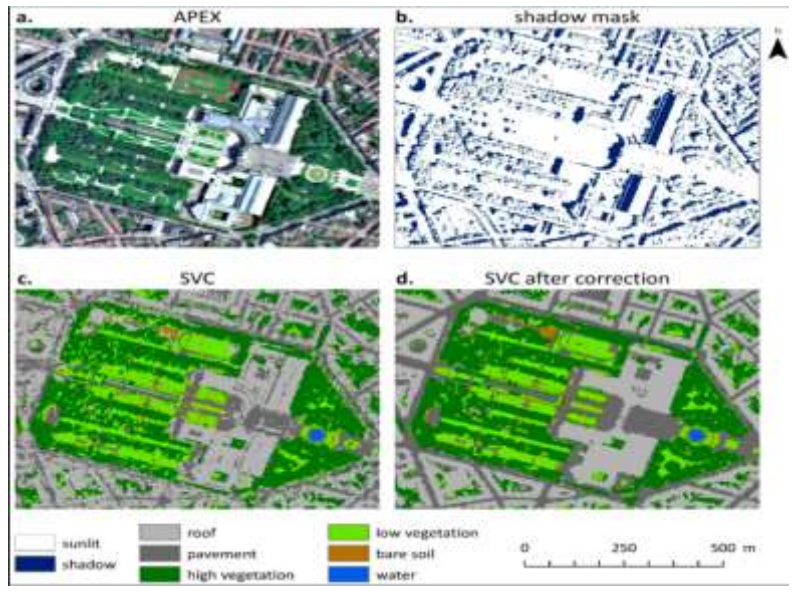
Water Resource Management



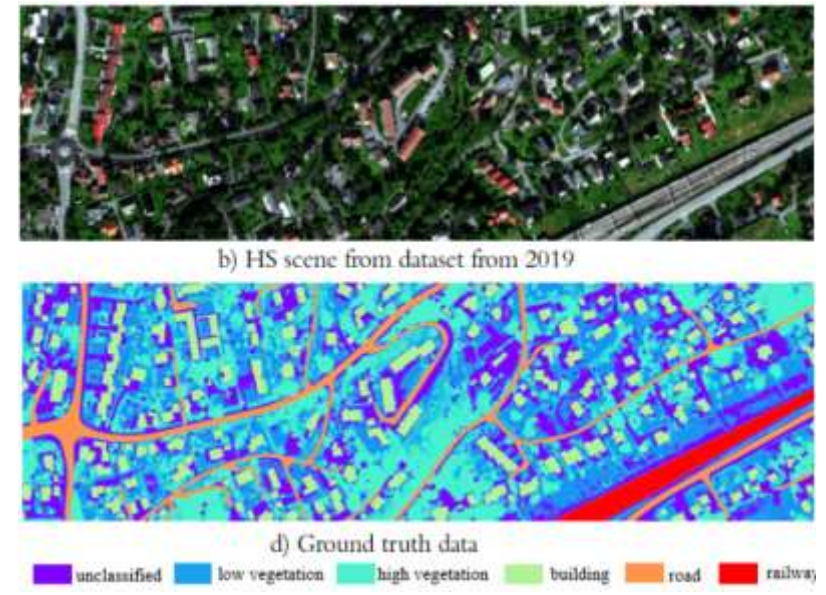
Building Heat Efficiency



Geological and Geotechnical Surveys



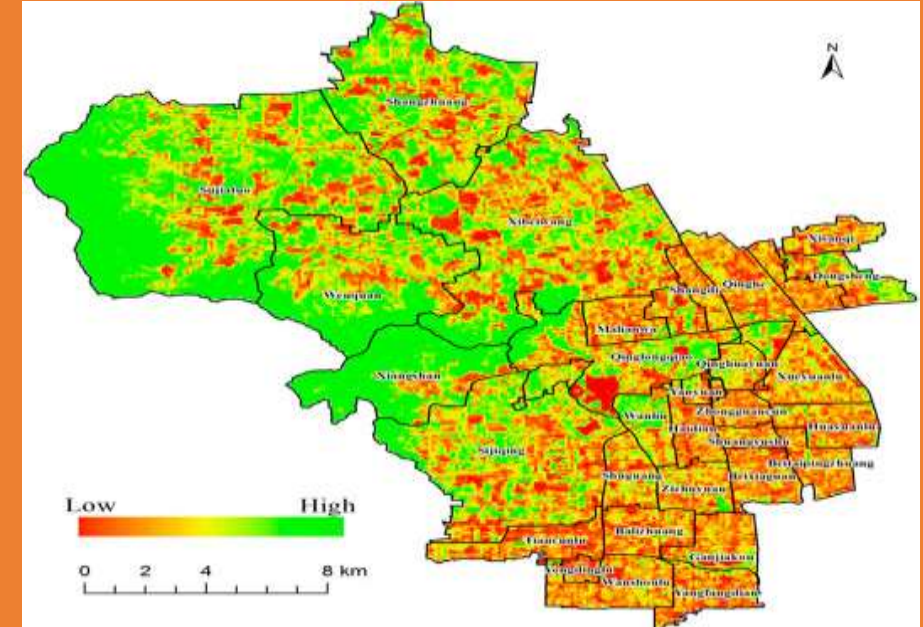
Land Use Planning



Vegetation Health Assessment



Rooftop Solar Potential



Environmental Impact Assessments

Use of GPR-equipped drones in Urban Development.

GROUND

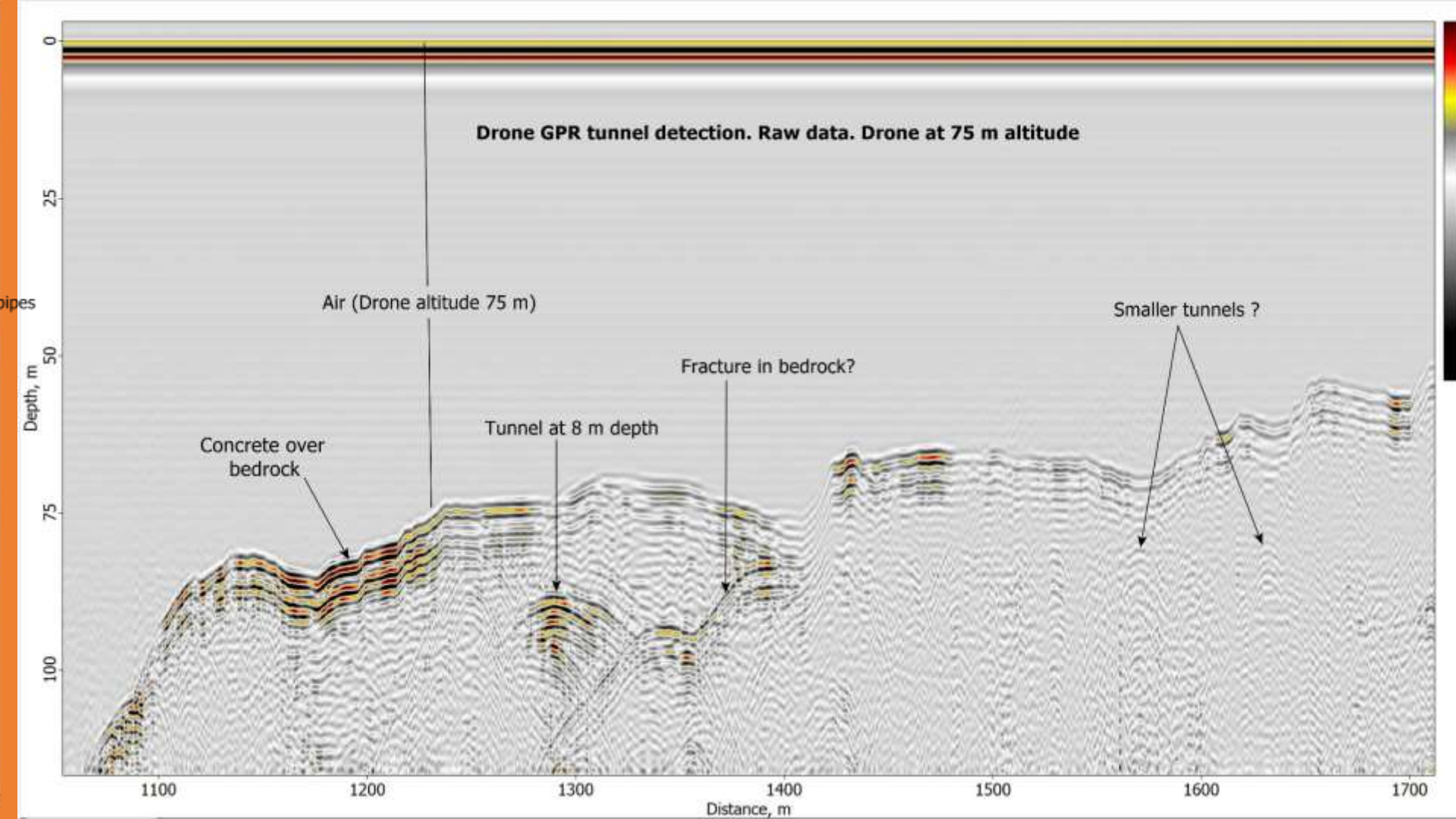
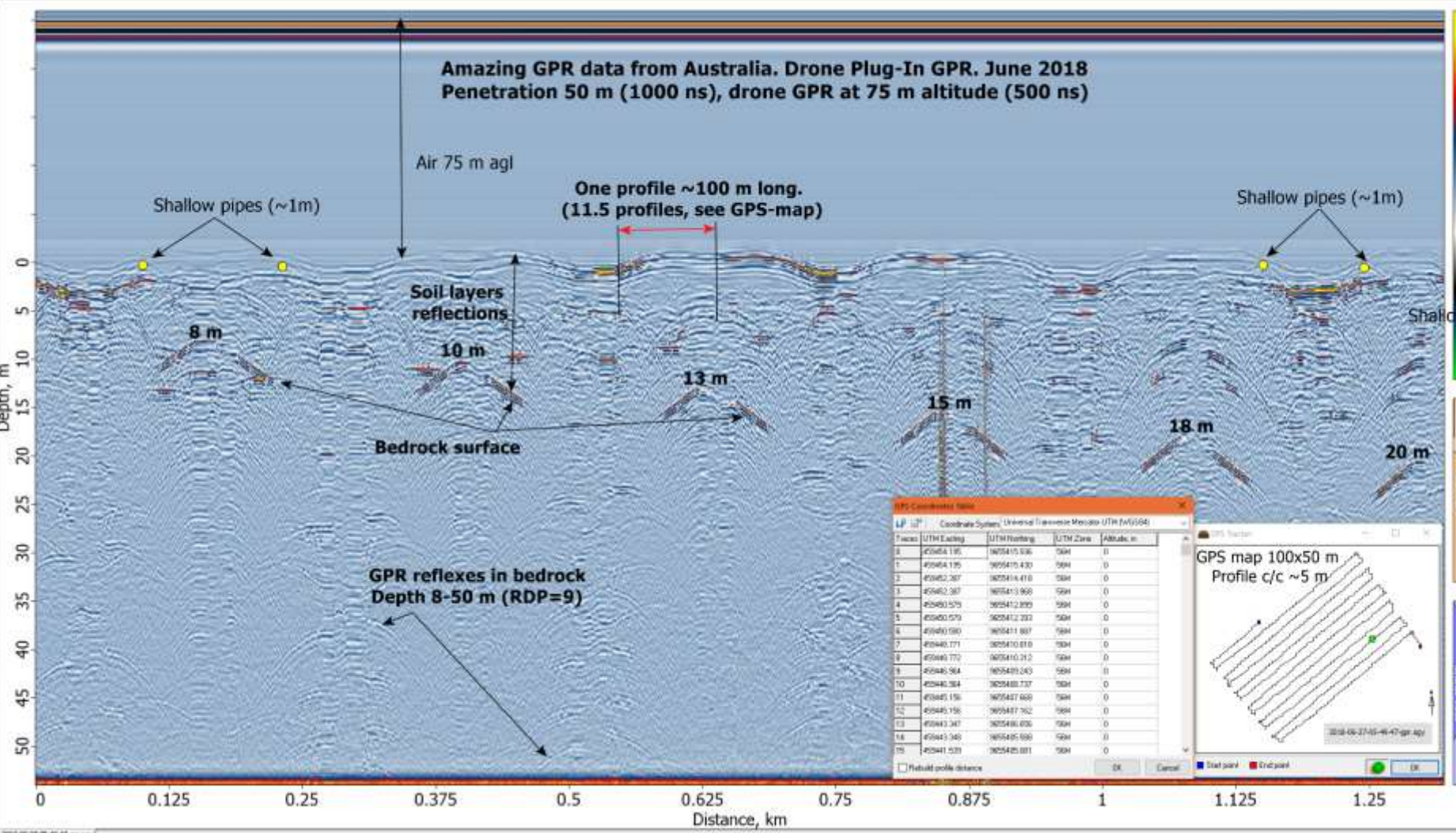
PENETRATING

RADAR

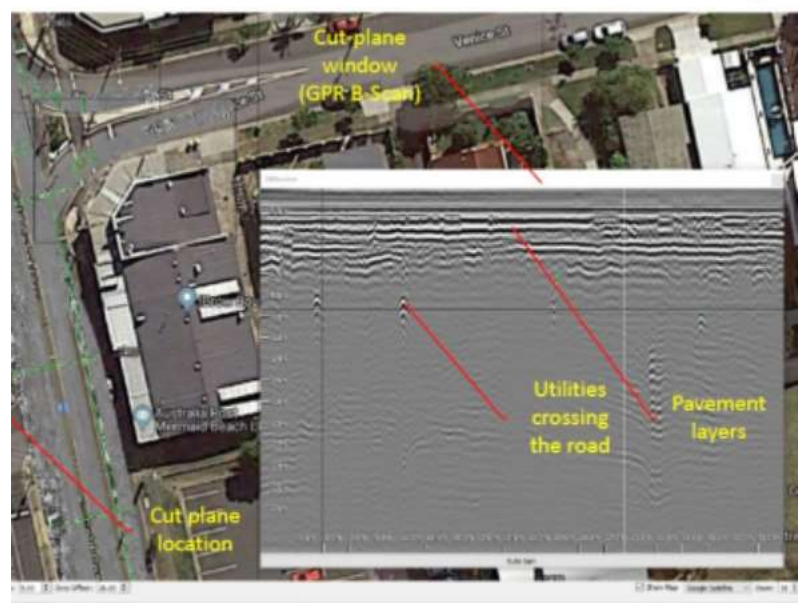
GPR-equipped drones can provide critical data and insights for urban planners, construction companies, and infrastructure development projects



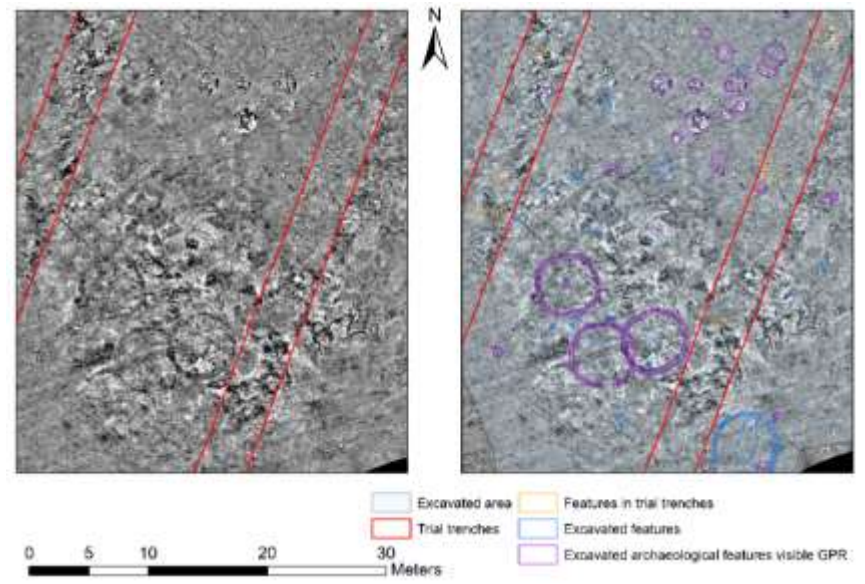
Outputs



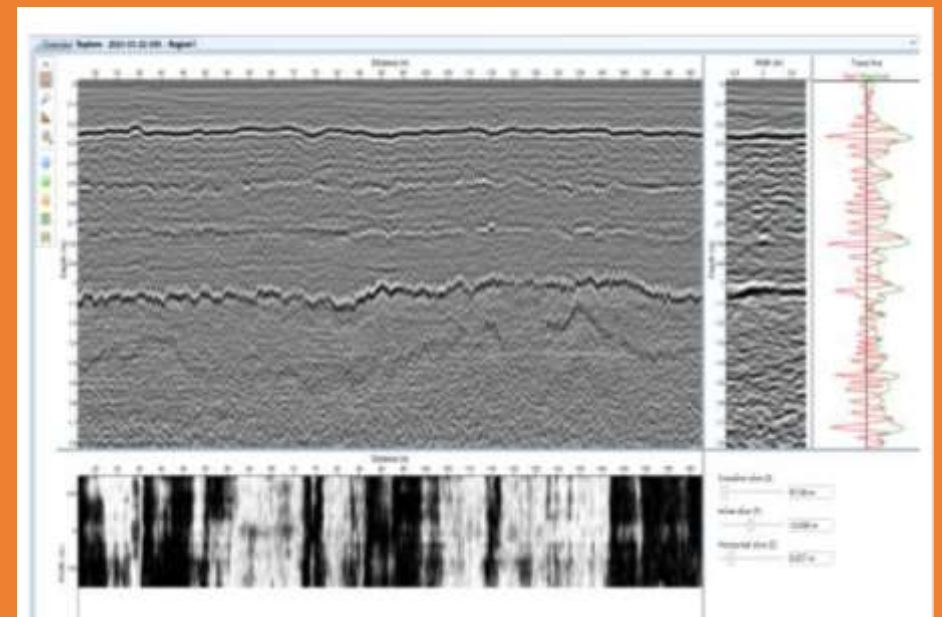
Here's how GPR with drones can be used in urban development



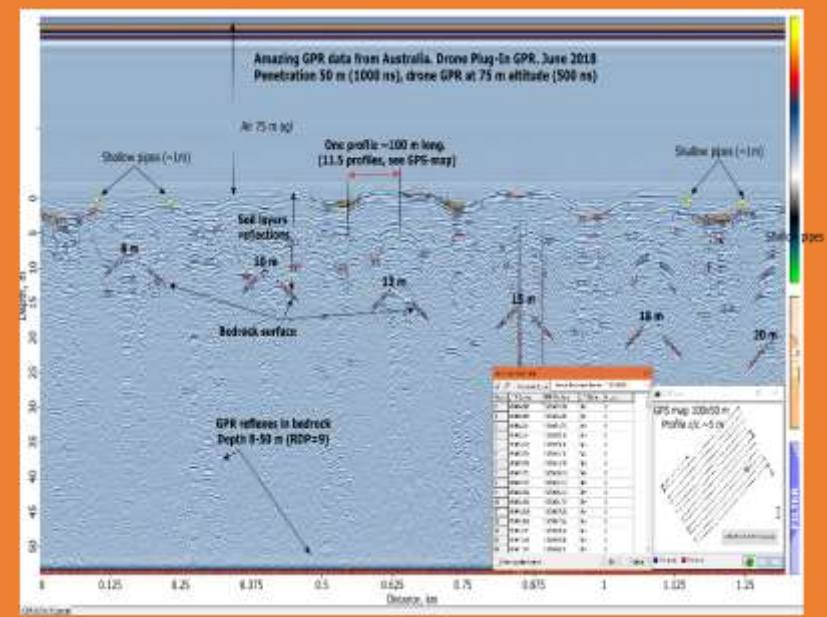
Subsurface Imaging and Utility Mapping



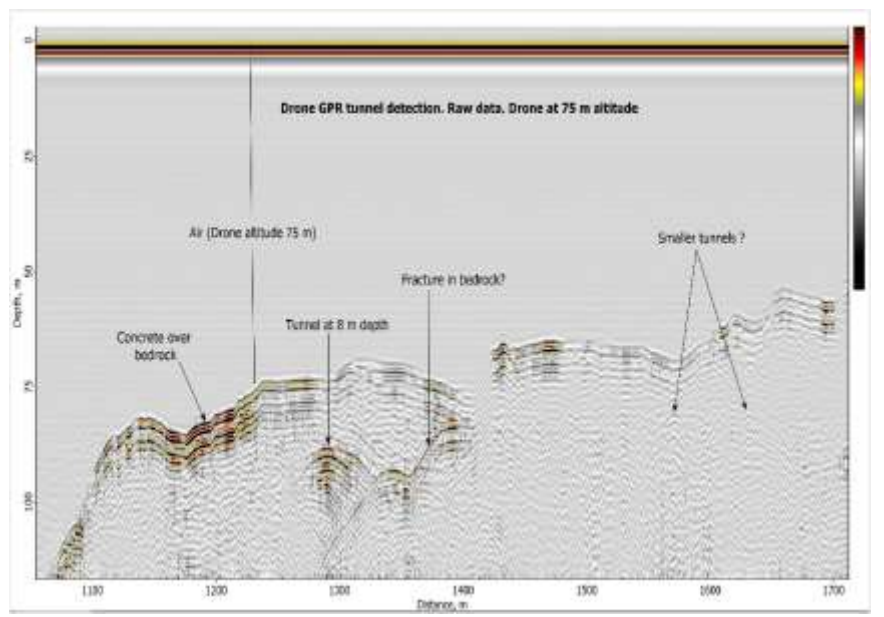
Archaeological and Historical Site Surveys



Assessment of Pavements and Roads



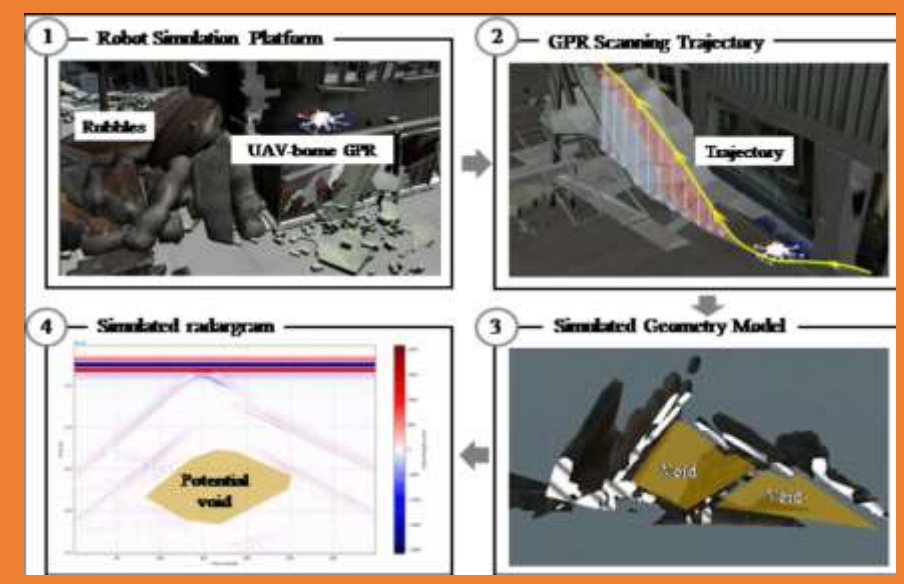
Site Selection and Evaluation



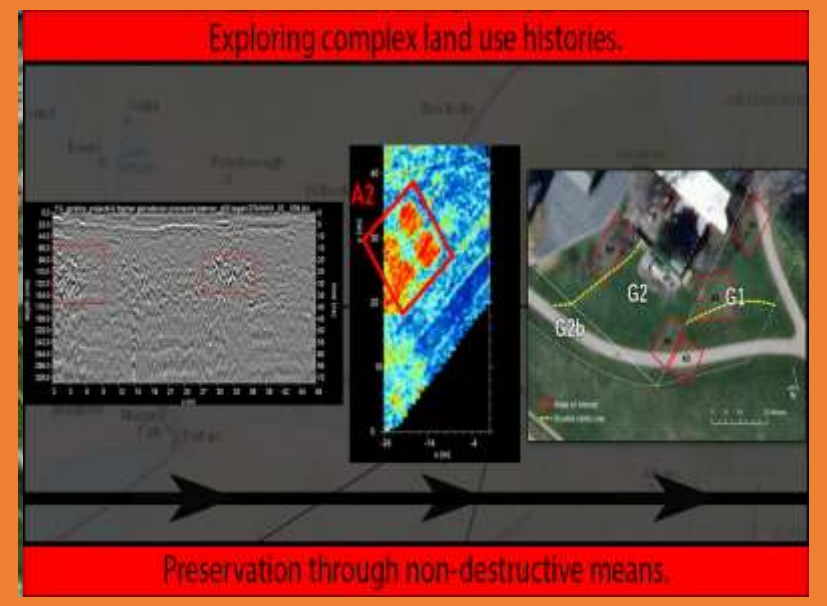
Tunnel and Subway Construction



Monitoring Underground Infrastructure



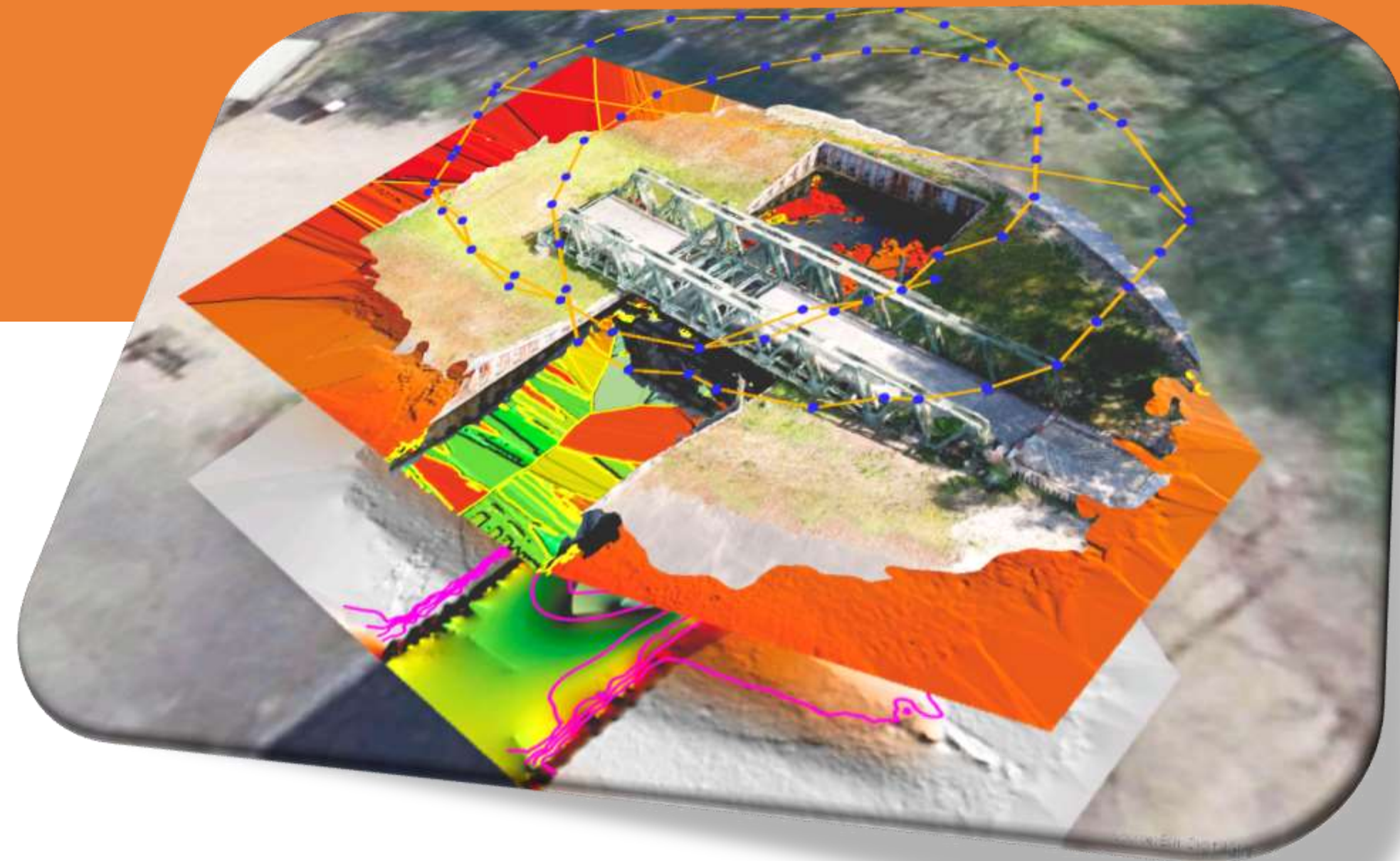
Disaster Preparedness and Response



Land Use and Zoning Studies



OUR SOLUTIONS





ASTRA

Unyielding Eyes in the Skies

-  60 mins
Max Flight Time
-  Upto 15 kms
Operational Range
-  2 kg
Payload Capacity



VAJRA

Redefining Aerial Security

-  30 mins
Max Flight Time
-  Upto 5 kms
Operational Range
-  500 gm
Payload Capacity



BHIMA

Ultimate Payload Powerhouse Drone

-  60 mins
Max Flight Time
-  Upto 15 kms
Operational Range
-  15 kg
Payload Capacity



VYOMA

Skyward Precision, Infinite Perspectives

-  150 mins
Max Flight Time
-  15 - 50 kms
Operational Range
-  2 kg
Payload Capacity

DRONES EQUIPPED WITH ADVANCED SENSORS



VYOMA WITH LIDAR



ASTRA WITH LIDAR



BHIMAWITH GPR

**BHIMAWITH
HYPER SPECTRAL**



INDUSTRIES WE SERVE



GEOSPATIAL &
REMOTE SENSING



FORESTRY



MINING



AGRICULTURE



INFRASTRUCTURE



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THANK YOU!