GeoVision®

Enhance your location analytics with detailed building and landscape data

Overview

Geoscape® is a ground-breaking initiative from PSMA that takes location data to a new level. Using information from satellite imagery and linking this to location data, Geoscape captures the characteristics of a built environment in Australia at a scale that has never been achieved before. Location characteristics, such as building footprints and heights, land cover, tree heights, rooftop materials, swimming pools and solar panels, are captured and linked to geocoded address and property data. GeoVision from Precisely is an enhanced version of PSMA's Geoscape suite, designed to simplify and enhance the experience of using this nationally important dataset.

Achieve a single view of Australia's built environment

See all of the detail with ease

Geoscape is Australia's only nationwide representation of the built environment. GeoVision simplifies and enhances the experience of Geoscape. Now, you can get a complete picture of every building at an unprecedented level of accuracy and detail including height and roofing information. Details of land cover and trees as well as presence of solar panels and swimming pools make GeoVision a critical data resource for many sectors.

Derive immediate insights

GeoVision includes all of the functionality provided by PSMA's Geoscape product, plus the following enhancements for improved usability and immediate impact.

- **Compression:** Large imagery files have been compressed into smaller, more manageable files using the new Multi Resolution Raster format (compatible with MapInfo® Pro 64-bit versions). MapInfo Pro Advanced is recommended for optimum performance.

- **Simplicity:** The structure of Geoscape has been simplified so that it can be utilised immediately without the need for complex queries or data linkages.

- **Enhancements:** GeoVision adds a number of modeled attributes such as primary building, building heights for rural buildings and estimated internal floor area.

Benefits

GeoVision provides detailed information about the built environment, enabling both government and commercial organisations to improve:

- Service delivery
- Urban and regional planning and management
- Risk estimation
- Policy making
- Emergency response
- Network planning

Usage examples

GeoVision® provides insights that, until now, were not possible for many organisations. They include but are not limited to:

- **Local government:** Flood modelling and identifying illegal building developments and unregistered pools.

- **State government:** Identifying fire and flood risk for emergency management as well 3D modelling of buildings and vegetation for better planning.

- **Insurance:** Determining risk for a new property based on factors such as building height, roof material, distance and height of nearby trees.

- **Telco:** Line of sight calculations for determining ideal locations for new phone towers, by taking into account buildings, trees, landform, and more.

- **Utilities:** Accurate building locations and outlines help to better manage customer connections.

- **Real estate:** Valuation, marketing, farm mapping and asset evaluation.

- **Service providers:** Location of buildings, swimming pools, solar installations.

GeoVision provides detailed information for each building including building height, roof area, roof material, solar panel indicator and residential land use indicator.

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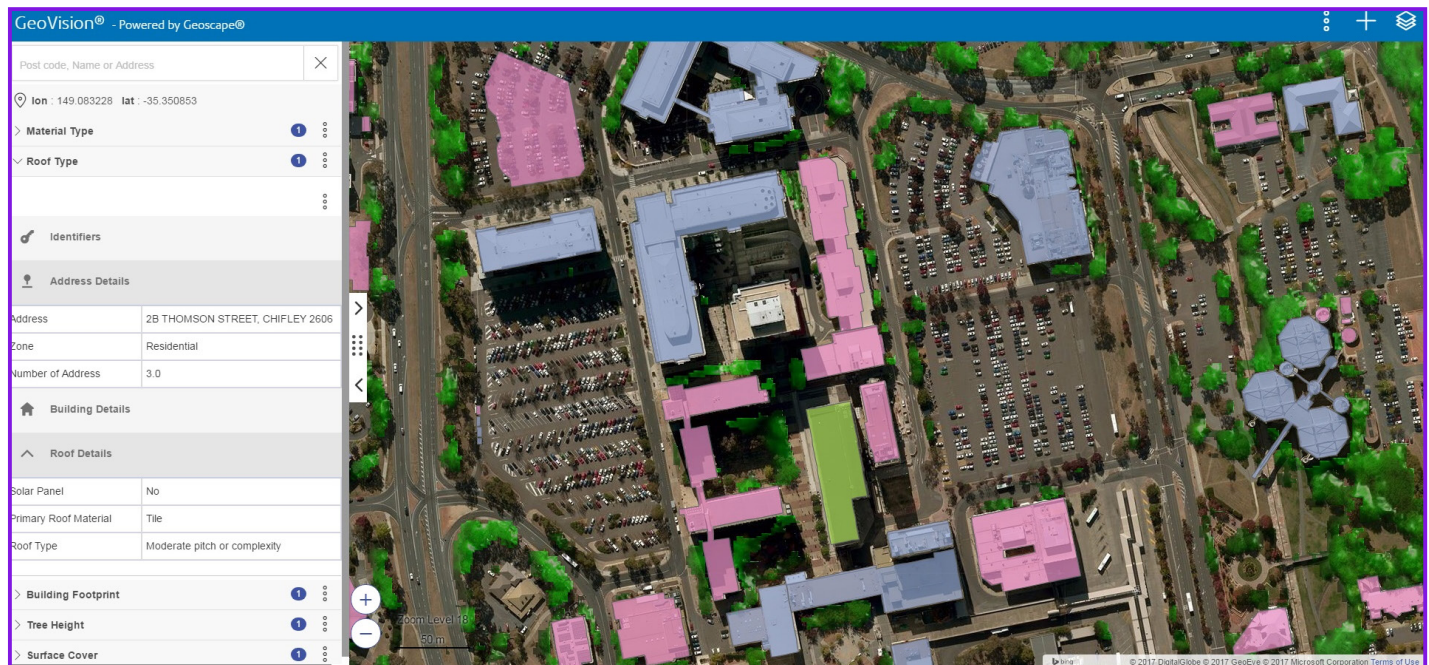
Roof type information is available for all buildings which is critical for insurance, roofing and solar companies.

Specifications

GeoVision provides building footprints with the following attributes:

- Roof area
- Roof pitch/complexity
- Maximum height of adjacent trees
- Number of roof vertices
- Ground level building centroid
- Maximum roof height
- Swimming pool indicator
- Roof material
- Solar panel indicator
- Residential land use indicator
- Primary building indicator
- Estimated number of levels
- Estimated internal floor area

GeoVision also provides details on land cover and vegetation including:

- Impervious surfaces: Built-up areas, roads and paths, bare earth and buildings
- Vegetation: Tree coverage, grass coverage, unspecified vegetation
- Water