

Left: Vricon DSM. Right: Vricon DTM – a global bare earth model with 0.5m post spacing and 3m absolute accuracy, without using ground control points. The satellite-based sample shows Mexico City; terrain details are clearly visible, without buildings and vegetation.

VRICON DTM

GLOBAL BARE EARTH MODEL WITH 0.5M RESOLUTION

DIGITAL TERRAIN MODEL WITH SUPERIOR ACCURACY

Vricon DTM – Digital Terrain Model – is an accurate, high-resolution bare earth elevation data layer that is produced by industry-leading automated 3D modeling technology. The DTM is generated from fully automated processing, providing delivery speeds far beyond traditional technologies.

Superior accuracy and alignment

Vricon DTM is a derivative of Vricon 3D Surface Model and is fully aligned with Vricon True Ortho.

All Vricon data products are built from commercial satellite imagery, using the same industry-leading automated 3D production process and highest standards. The core output – Vricon 3D Surface Model – is the most accurate representation of earth. It is a 0.5m-resolution 3D product with real textures and an absolute accuracy of 3m in all dimensions, SE90. The accuracy is achieved without ground control points and is consistent on both plain areas and steep slopes.

SE90 is the abbreviation for Spherical Error 90%, which is a measure that combines the traditional LE90 and CE90 measures.

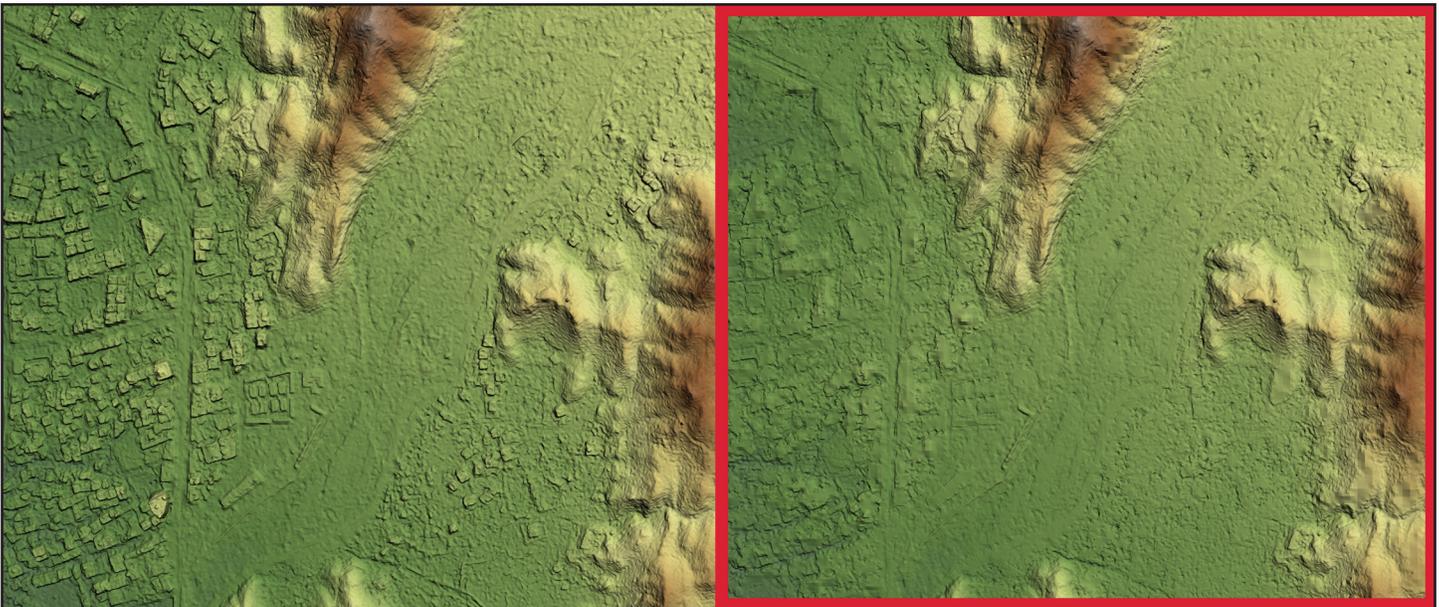
Applications

The resolution and accuracy of Vricon DTM data makes it suitable for a wide range of applications and industries, including:

- Orthorectification
- Hydrology
- Topographic mapping
- Geology
- Elevation contour generation
- Security and defense
- Radio and telecommunications
- Infrastructure and construction
- Risk and disaster management

Data exploitation

Vricon DTM is delivered in traditional formats, such as GeoTIFF, for immediate use in existing software and systems.



Left: Vricon DSM. Right: Vricon DTM – a global bare earth model with 0.5m post spacing and 3m absolute accuracy. Terrain details are clearly visible, without buildings and vegetation, in this satellite-based sample of Saudi Arabia.

Global coverage

Vricon's unique access to the largest commercial archive of high-quality satellite imagery provides a foundation for consistent global coverage.

Rapid delivery

Vricon's access to massive archives of imagery combined with its unique algorithms make DTM deliveries rapid and affordable. And Vricon's state-of-the-art high-performance computing center enables massive computation on a global scale. Current delivery time for countrywide AOIs is weeks to months.

Unique technology

Vricon's unique technology is a combination of stereophotogrammetry and big data processing. The fully automated technology is sensor agnostic and does not require ground control points.

The DTM algorithm removes trees and man-made structures from the 3D data using automated processing and access to massive source image archives.

FEATURES

- Global coverage
- Industry-leading resolution
- Superior accuracy
- Rapid deliveries
- Water flattening

ACCURACY

- Absolute: 3m LE90, 3m CE90
- Relative: 1m LE90, 2m CE90
- Valid for plain areas and steep terrain
- Valid without using ground control points
- Fully aligned with Vricon True Ortho

SPECIFICATIONS

- Post spacing: 0.5m
- File format: GeoTIFF
- Bit depth: 32-bit
- Delivery media: FTP or HDD

Other file formats are available on request.

*Version 20160622. Specifications subject to change without notice