

BRINGING IT TOGETHER.

GeoMedia Terrain

Analyze and model terrain data

Terrain analysis and modeling are essential for many industries — from civil engineering to real estate, from commercial aviation to military deployment. Three-dimensional models and views increase the understanding of a site and communicate its features more effectively. For example, terrain knowledge allows better evaluation of construction sites and analysis of potential views, choosing a site for a home, for determining possible flight path obstructions, selecting military emplacements, and much more.

Multiple data access

GeoMedia Terrain is a powerful desktop package for basic elevation processing, terrain analysis, feature generation, and 3D visualization. It integrates elevation data from a number of sources directly into the GeoMedia workspace and accepts elevation data in all datum and projections supported by GeoMedia. Accepted elevation formats are:

- USGS Digital Elevation Model (DEM)
- USGS Spatial Data Transfer Specification (SDTS)
- Intergraph grid elevation data
- Digital Terrain Elevation Data (DTED1 and 2)
- GMT defined ASCII format
- TIN models in the .ttn file format
- GeoMedia features inserted as geomorphs

Terrain models may be edited and refined interactively.

Terrain on the desktop

With powerful capabilities and a familiar Microsoft Windows®-based interface, GeoMedia Terrain allows you to analyze and model elevation data right on your desktop.

3D Coordinate Readout — Display shows the elevation, slope and aspect based on the cursor position in a MapView.

Color-Coded Elevation — Display a color-coded representation of elevations over a selected area of a model using a full palette of 256 colors.

Shaded Relief — Display a gray-scale shaded representation of a model showing how the sun illuminates elevations.



Profile View — Generate a profile view of an elevation between two points or along a selected feature. The view can be tailored for vertical exaggeration, line colors, and weights.

Contour Generation — Create cartographic-quality contour features with user-specified intervals. Contours may include index label preferences and depression checks.

Slope Polygon Generation — Create slope polygons from user specified ranges as features in a GeoMedia warehouse. Create spatial queries to locate areas of significant slope.

Aspect Polygon Generation — Create aspect polygons as features in a GeoMedia warehouse. Create displays or queries to indicate direction of terrain slope.

Visibility Polygon Generation — Create polygons indicating both visible and invisible areas from a user-specified viewpoint. GeoMedia features may be added to the terrain model as obstructions in the visibility analysis.

Realistic terrain model generation and flythrough

GeoMedia Terrain software includes the ActiveTerrain modeling tools and real-world objects for easy desktop creation of 3D terrain models. You can generate models from elevation data, drape orthorectified imagery and maps over the model, and apply synthetic textures to create a realistic representation of the terrain.

ActiveFlight lets you view and dynamically fly through the 3D terrain models you create. You can fly through wireframe or image-draped models and 3D models of vehicles, buildings, and equipment in three different navigation modes: Free Roam, Fixed Height, or Terrain Avoidance. You can link the flythrough viewpoint to the 2D GeoMedia MapView to correlate your geographic location.

Bridge the gap between technology and productivity.

Providing a comprehensive set of services for the open computing environment, Intergraph Mapping and Geospatial Solutions helps you get the most from your investment. Intergraph's experienced staff and consultants deliver professional services that include system integration, consulting, project services, and implementation.

GeoMedia: Open from the start

As a founding and principal member of the Open GIS Consortium (OGC), Intergraph is a visible force in ongoing OGC initiatives for industry standards, and spearheads interoperability in the GIS and IT marketplace. Intergraph Mapping and Geospatial Solutions is committed to open systems solutions and data interoperability.

The Intergraph Solution

With more than 30 years of technology innovation to its credit, Intergraph Mapping and Geospatial Solutions understands the business challenges customers face every day. Our unique combination of pioneering technology and comprehensive professional services makes Intergraph the leading provider of industry-specific solutions for Geospatial Resource Management, Land Information Management, Commercial Photogrammetry and Remote Sensing, Geospatial Intelligence, and Geospatial Data Management and Cartography.

Intergraph customers can be found around the world in local, regional, and national government entities; transportation and mapping agencies; utilities and communications companies; photogrammetry organizations; the military; educational institutions; and more. Discover how Intergraph's geospatial solutions can help you solve your problems and meet your enterprise goals.



A Visibility Fan shows the visible or hidden portions of multiple Line-of-Sight rays from a specific viewpoint.

A 3D Perspective view is created by draping the contents of a MapView window over the triangulated elevation model.



Visit www.ingr.com/international/ to locate the sales office nearest you, and learn more about GeoMedia Terrain.

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