

1. Record Nr.	UNINA9910140014503321
Autore	Kennedy Heather
Titolo	Introduction to 3D data : modeling with ArcGIS 3D analyst and Google earth // K. Heather Kennedy
Pubbl/distr/stampa	Hoboken, N.J., : John Wiley, c2009
ISBN	1-283-02744-5 9786613027443 1-118-05986-7 0-470-54877-0
Edizione	[1st ed.]
Descrizione fisica	1 online resource (350 p.)
Disciplina	005.74/3
Soggetti	Geographic information systems Three-dimensional display systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Introduction to 3D Data: Modeling with ArcGIS 3D Analyst and Google Earth; Contents; Preface; Chapter 1: Introduction to 3D Data: Modeling with ArcGIS 3D Analyst and Google Earth; Exercise 1-1: Preview Data in ArcCatalog; Exercise 1-2: Create a Layer File in ArcCatalog; Chapter 2: 3D Display in ArcScene; Exercise 2-1: Set Background Color and Illumination in ArcScene; Exercise 2-2: Set Vertical Exaggeration in ArcScene; Exercise 2-3: :Apply a Coordinate System to a Scene; Exercise 2-4: Set 3D Layer Properties for an Elevation Raster; Exercise 2-5: Set 3D Layer Properties for a Raster Image Exercise 2-6: Set Base Heights for a 2D Vector Layer Exercise 2-7: Extrude 2D Vector Features; Challenge Exercise: View Regional Park Study Data in ArcScene; Chapter 3: 3D Navigation and Animation; Exercise 3-1: Set Targets and Observers; Exercise 3-2: Animated Rotation and the Viewer Manager; Exercise 3-3: The Fly Tool; Exercise 3-4: Create 3D Animated Films; Chapter 4: ArcGlobe; Exercise 4-1: Understanding ArcGlobe; Exercise 4-2: Explore ArcGlobe's Options, Add Data, and Redefine Layer Types; Chapter 5: Google Earth; Exercise 5-1: Navigating Google Earth's Interface, and the Planet Exercise 5-2: Create a Polygon and Edit Its Properties Through Google

Earth's Form Menu Exercise 5-3: Edit the Gardens Polygon Using KML; Chapter 6: Raster Surface Models; Exercise 6-1: Interpolate a Terrain Surface with Spline; Exercise 6-2: Interpolate Terrain with Inverse Distance Weighted and Natural Neighbors; Exercise 6-3: Calculate Hillshade and Aspect; Exercise 6-4: Calculate Slope; Exercise 6-5: Calculate Viewshed; Challenge Exercise: Calculate Viewshed and Slope Levels for Elk Park; Chapter 7: TIN Surface Models; Exercise 7-1: Create a TIN from Vector Features  
Exercise 7-2: Add Polygon Attribute Values to a TIN Exercise 7-3: Change TIN Symbology and Classification; Challenge Exercise: Create a TIN of Elk Park; Chapter 8: Terrain Surface Models; Exercise 8-1: Create a Terrain Dataset; Exercise 8-2: Rasterize a Terrain Dataset and View it in ArcGlobe; Chapter 9: 3D Features and More Surface Analysis Techniques; Exercise 9-1: Convert 2D Features to 3D, and Digitize 3D Features in ArcMap; Exercise 9-2: Draw a Line of Sight and a Cross-section Profile Graph; Exercise 9-3: Calculate Surface Area and Volume on a TIN  
Challenge Exercise: Create Multipatch 3D Features Chapter 10: SKP to Multipatch to KML: Finalize the Elk Park Project; Exercise 10-1: Convert a SketchUp File to a Multipatch Feature Class; Exercise 10-2: View the Multipatch Feature Class in ArcGlobe; Exercise 10-3: Export Layers from ArcMap to KML, and View Them in Google Earth; Challenge Exercise: Export a SketchUp Model to Google Earth; About the Tutorial Data; Index

---

## Sommario/riassunto

Render three-dimensional data and maps with ease. Written as a self-study workbook, Introduction to 3D Data demystifies the sometimes confusing controls and procedures required for 3D modeling using software packages such as ArcGIS 3D Analyst and Google Earth. Going beyond the manual that comes with the software, this profusely illustrated guide explains how to use ESRI's ArcGIS 3D Analyst to model and analyze three-dimensional geographical surfaces, create 3D data, and produce displays ranging from topographically realistic maps to 3D scenes and spherical earth-like views.

---