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	Edizione	[Second edition.]
	Descrizione fisica	1 online resource (494 pages, 4 numbered pages of plates) : illustrations (some color), map
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	Soggetti	Spatial data infrastructures - Mathematics
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	Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
	Nota di contenuto	chapter 1 The Global Spatial Data Model (GSDM) Defined -- chapter 2 Featuring the 3-D Global Spatial Data Model -- chapter 3 Spatial Data and the Science of Measurement -- chapter 4 Summary of Mathematical Concepts -- chapter 5 Geometrical Models for Spatial Data Computations -- chapter 6 Overview of Geodesy -- chapter 7 Geometrical Geodesy -- chapter 8 Geodetic Datums -- chapter 9 Physical Geodesy -- chapter 10 Satellite Geodesy and Global Navigation Satellite Systems -- chapter 11 Map Projections and State Plane Coordinates -- chapter 12 Spatial Data Accuracy -- chapter 13 Using the GSDM to Compute a Linear Least Squares GNSS Network -- chapter 14 Computing Network Accuracy and Local Accuracy Using the Global Spatial Data Model -- chapter 15 Using the GSDM—Projects and Applications.
	Sommario/riassunto	"Traditional methods for handling spatial data are encumbered by the assumption of separate origins for horizontal and vertical measurements, but modern measurement systems operate in a 3-D

spatial environment. The 3-D Global Spatial Data Model: Principles and Applications, Second Edition maintains a new model for handling digital spatial data, the global spatial data model or GSDM. The GSDM preserves the integrity of three-dimensional spatial data while also providing additional benefits such as simpler equations, worldwide standardization, and the ability to track spatial data accuracy with greater specificity and convenience. This second edition expands to new topics that satisfy a growing need in the GIS, professional surveyor, machine control, and Big Data communities while continuing to embrace the earth center fixed coordinate system as the fundamental point of origin of one, two, and three-dimensional data sets. Ideal for both beginner and advanced levels, this book also provides guidance and insight on how to link to the data collected and stored in legacy systems."--Provided by publisher.