Map of the World

An Introduction to Mathematical Geodesy

Carl Friedrich Gauss, the "foremost of mathematicians," was a land surveyor. Measuring and calculating geodetic networks on the curved Earth was the inspiration for some of his greatest mathematical discoveries. This is just one example of how mathematics and geodesy, the science and art of measuring and mapping our world, have evolved together throughout history.

This text is for students and professionals in geodesy, land surveying, and geospatial science who need to understand the mathematics of describing the Earth and capturing her in maps and geospatial data: the discipline known as mathematical geodesy. ***Map of the World: An Introduction to Mathematical Geodesy*** aims to provide an accessible introduction to this area, presenting and developing the mathematics relating to maps, mapping, and the production of geospatial data. Described are the theory and its fundamental concepts, its application for processing, analyzing, transforming, and projecting geospatial data, and how these are used in producing charts and atlases. Also touched upon are the multitude of cross-overs into other sciences sharing in the adventure of discovering what our world really looks like.

FEATURES

- Written in a fluid and accessible style, replete with exercises; adaptable for courses on different levels.
- Suitable for students and professionals in the mapping sciences, but also for lovers of maps and map making.

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MATHEMATICS

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