Record Nr. UNINA9910299421503321 3D, 4D and Predictive Modelling of Major Mineral Belts in Europe // **Titolo** edited by Pär Weihed Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-17428-2 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (330 p.) Collana Mineral Resource Reviews, , 2365-0559 Disciplina 553.094 Soggetti Geophysics Mineral resources Structural geology Geophysics/Geodesy Mineral Resources Structural Geology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto Introduction -- ProMine Mineral Databases: New Tools to Assess Primary and Secondary Mineral Resources in Europe -- 3D and 4D Geomodelling Applied to Mineral Resources' Exploration – An Introduction -- The Vihanti-Pyhäsalmi Area -- 4D Geomodeling a Tool for Exploration – The Kupferschiefer in the Lubin region, Poland --Modelling of the Río Tinto Area -- The Ossa Morena Zone -- 3D- and 4D-Modelling of the Hellenic Belt, Greece. Sommario/riassunto This book presents the results of the major EU project Promine. For the first time there is now a European database available on mineral deposits, as well as 3D, 4D and predictive models of major mineral belts in Europe: Fennoscandia (Skellefteå and Vihanti-Pyhäsalmi), the Fore-Sudetic basin (Kupferschiefer deposits in Poland and Germany), the Hellenic belt in northern Greece, and the Iberian Pyrite belt and Ossa Morena zone in Spain and Portugal. The book also describes the modelling techniques applied and how different types of software are used for three- and four-dimensional modelling. Furthermore,

fundamental descriptions of how to build the database structure of

three-dimensional geological data are provided, and both 2D and 3D predictive models are presented for the main mineral belts of Europe.