Advanced Geological Map Interpretation

Frank Moseley

This book is a practical introduction to the interpretation of complex geological maps. The first part consists of maps – based on actual formations collected from many parts of the world – for analysis, often with reference to particular problems such as water resources or mining potential. The second part provides solutions to the problems and detailed comment.

This book is intended for students who have already been introduced to basic principles of geological map work. Its object is to illustrate important geological concepts which students will meet in other parts of their course and to develop the practical skill of map interpretation.

The maps are new, although most derive from existing published maps, modified so that solutions are possible from interpretation of the maps alone. They have been taken from various parts of the world – most of which the author is familiar with – to illustrate a wide range of important geological principles and three-dimensional problems. These include conventional structural problems of sedimentary and low grade metamorphic terrains, ancient and modern volcanicity (illustrating the value of archaeological observations in interpreting recent volcanics), intrusive complexes, quaternary glacial deposits, hydrogeology and problems in engineering geology.

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