

Geophysics is a subject of natural science concerned with the physical processes and physical properties of the Earth and its surrounding space environment, and the use of quantitative methods for their analysis. The term geophysics sometimes refers only to solid earth applications: Earth's shape; its gravitational and magnetic fields; its internal structure and composition; its dynamics and their surface expression in plate tectonics, the generation of magmas, volcanism and rock formation.[3] However, modern geophysics organizations and pure scientists use a broader definition that includes the water cycle including snow and ice; fluid dynamics of the oceans and the atmosphere; electricity and magnetism in the ionosphere and magnetosphere and solar-terrestrial physics; and analogous problems associated with the Moon and other planets.¹

In the present book, ten typical literatures about geophysics published on international authoritative journals were selected to introduce the worldwide newest progress, which contains reviews or original researches on geophysics. We hope this book can demonstrate advances in geophysics as well as give references to the researchers, students and other related people.

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¹ <https://en.wikipedia.org/wiki/Geophysics>