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Sommario/riassunto	The Earth is a dynamic system. Internal processes, together with external gravitational forces of the Sun, Moon and planets, displace the Earth's mass, impacting on its shape, rotation and gravitational field. Doug Smylie provides a rigorous overview of the dynamical behaviour

of the solid Earth, explaining the theory and presenting methods for numerical implementation. Topics include advanced digital analysis, earthquake displacement fields, Free Core Nutations observed by the Very Long Baseline Interferometric technique, translational modes of the solid inner core observed by the superconducting gravimeters, and dynamics of the outer fluid core. This book is supported by freeware computer code, available online for students to implement the theory. Online materials also include a suite of graphics generated from the numerical analysis, combined with 100 graphic examples in the book to make this an ideal tool for researchers and graduate students in the fields of geodesy, seismology and solid earth geophysics. The book covers broadly applicable subjects such as the analysis of unequally spaced time series by Singular Value Decomposition, as well as specific topics on Earth Dynamics.