



## The Precambrian Earth : tempos and events /

Eriksson, P. G.

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Monografía

In this book the editors strive to cover all primary (i.e. non-applied) topics in Precambrian geology in a non-partisan way, by using a large team of international authors to present their datasets and highly divergent viewpoints. The chapters address: celestial origins of Earth and succeeding extraterrestrial impact events; generation of continental crust and the greenstone-granite debate; the interaction of mantle plumes and plate tectonics over Precambrian time; Precambrian volcanism, emphasising komatiite research; evolution and models for Earth's hydrosphere and atmosphere; evolution of life and its influence on Precambrian ocean chemistry and chemical sedimentation; sedimentation through Precambrian time; the application of sequence stratigraphy to the Precambrian rock record. Each topic is introduced and a non-partisan closing commentary provided at the end of each chapter. The final chapter blends the major geological events and rates at which important processes occurred into a synthesis, which postulates a number of "event clusters" in the Precambrian when significant changes occurred in many natural systems and geological environments. Also available in paperback, ISBN: 0-444-51509-7

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**Contenido:** 1. The Early Earth. -- 2. Generation of Continental Crust. -- 3. Tectonism and Mantle Plumes through Time. -- 4. Precambrian Volcanism: an independent Variable through Time. -- 5. Evolution of the Hydrosphere and Atmosphere. -- 6. Evolution of Life and Precambrian Bio-Geology. -- 7. Sedimentation through Time. -- 8. Sequence Stratigraphy and the Precambrian. -- 9. Synthesis The early earth / editor, D.R. Nelson. Earth's formation and first billion years / D.R. Nelson. The early Precambrian stratigraphic record of large extraterrestrial impacts / B. M. Simonson, G.R. Byerly and D.R. Lowe. Strategies for finding the record of early Precambrian impact events / D. H. Abbott and J.T. Hagstrum -- Generation of continental crust / editors, D.R. Nelson and W.U. Mueller. Isua enigmas : illusive tectonic, sedimentary, volcanic and organic features of the > 3.7 Ga Isua Greenstone Belt,

southwest Greenland / J.S. Myers. Geochemical diversity in volcanic rocks of the > 3.7 Ga Isua Greenstone Belt, southern West Greenland : implications for mantle composition and geodynamic processes / A. Polat, A.W. Hofmann and P.W.U. Appel. Abitibi Greenstone Belt plate tectonics : the diachronous history of arc development, accretion and collision / R. Daigneault, W.U. Mueller and E.H. Chown. Granite formation and emplacement as indicators of Archaean tectonic processes / T.E. Zegers. Diapiric processes in the formation of Archaean continental crust, East Pilbara granite-greenstone terrane, Australia / A.H. Hickman and M.J. Van Kranendonk. Early Archaean crustal collapse structures and sedimentary basin dynamics / W. Nijman and S.T. de Vries. Crustal growth rates / N.T. Arndt -- Tectonism and mantle plumes through time / editors, P.G. Eriksson and O. Catuneanu. Precambrian superplume events / K.C. Condie. Large Igneous Province record through time / R.E. Ernst, K.L. Buchan and A. 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