

1. Record Nr.	UNINA9910437947303321
Titolo	Reading the Archive of Earth's Oxygenation : Volume 2: The Core Archive of the Fennoscandian Arctic Russia - Drilling Early Earth Project // edited by Victor Melezhik, Anthony R. Prave, Eero J. Hanski, Anthony E. Fallick, Aivo Lepland, Lee R. Kump, Harald Strauss
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2013
ISBN	9781283697446 1283697440 9783642296598 3642296599
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (574 p.)
Collana	Frontiers in Earth Sciences, , 1863-463X
Altri autori (Persone)	MelezhikVictor A PraveAnthony R
Disciplina	551.72
Soggetti	Geology Ecology Physical geography Environmental Sciences Earth System Sciences
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.
Nota di contenuto	pt. V. FAR-DEEP core archive and database -- pt. VI. FAR-DEEP core descriptions and rock atlas.
Sommario/riassunto	Earth's present-day environments are the outcome of a 4.5 billion year period of evolution reflecting the interaction of global-scale geological and biological processes punctuated by several extraordinary events and episodes that perturbed the entire Earth system. One of the earliest and arguably greatest of these events was a substantial increase (orders of magnitude) in the atmospheric oxygen abundance, sometimes referred to as the Great Oxidation Event. Volume 2: The Core Archive of the Fennoscandian Arctic Russia - Drilling Early Earth Project provides a description of the newly generated archive hosting ICDP's FAR-DEEP drill cores through key

geological formations in Russian Fennoscandia. The book contains several hundred high-quality, representative photographs illustrating 3650 m of fresh, uncontaminated core documenting a series of global palaeoenvironmental upheavals linked to the Great Oxidation Event. The core exhibits sedimentary and volcanic formations that record a transition from anoxic to oxic Earth surface environments, the first global glaciation (the Huronian glaciation), an unprecedented perturbation of the global carbon cycle (the Lomagundi-Jatulian Event), a radical increase in the size of the seawater sulphate reservoir, an apparent upper mantle oxidising event, the Earth's earliest documented sedimentary phosphates, one of the greatest accumulations of organic matter (the Shunga Event) and generation of the Earth's earliest supergiant petroleum deposit. The volume highlights the potential of the FAR-DEEP core archive for future research of the Great Oxidation Event and the biogeochemical cycles operating during that time. Welcome to the illustrative journey through one of the most exciting periods of planet Earth!
