ОСОБЕННОСТИ ГЛОБАЛЬНОГО МАГМАТИЗМА

PECULIARITIES OF THE EARTH GLOBAL MAGNETISM IN LATE PALEOZOIC, MESOZOIC AND CENOZOIC: RELATION BETWEEN PRODUCTIVITY OF VARIOUS TYPES OF VOLCANISM AND CATASTROPHIC PHENOMENA

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The authors analyzed global magnetism of the Earth in Late Paleozoic, Mesozoic and Cenozoic. Global catastrophes of the Permian — Triassic and the Cretaceous — Paleogene transitions were accompanied by dramatic weakening of cold spell factors (low activity of over subduction magmatism) and rapid activation of warming factors (episodes of continental trap magmatism). High activity of carbon dioxide, water, chlorine, fluorine and low activity of sulfur were typical for these periods. Aside from the magmatism, different factors affected environment: (1) impact evens including those associated with mass extinctions at the Cretaceous — Paleogene and the Permian — Triassic transitions; (2) dramatic sea-level variations and sea-water circulation changes. The mentioned factors jointly influenced environment, including the periods of global extinctions.

Keywords: volcanism, global catastrophe, active continental margins, trap.