



Geomagnetic field in the geological past

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Comparison of the global and author's data on of the ancient geomagnetic field intensity with the reversal frequency and activity of the some endogenic processes (large basalt effusions, riftogenesis cyclic) was carried out. It was found that changes of the mean values of the paleointensity for a geological century and reversal frequency in an interval 0 - 160 million years occur antiphase. The similar tendency is observed in change of the same parameters of a geomagnetic field and during the last 400 million years. It is shown that at increase of the mean values of the paleointensity for a geological century the amplitude grows and the structure of its variations varies.

Correspondence of the paleointensity and reversal frequency changes to phases of the activation riftogenesis is considered. In phases of the riftogenesis activation paleointensity grew by (15 - 30)% and the reversal frequency on the average decreased by 40%. In an interval 0 - 150 million years to large basalt effusions which are identified with plumes display on the Earth's surface precedes at first decrease and then growth of the paleointensity. Characteristic times between the beginning of change of the geomagnetic field characteristics and basalt volcanism activation usually do not exceed some millions years.