

Isotopic compositions of carbonates and organic carbon in Neoproterozoic cap carbonate sequences in Namibia

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Isotopic compositions of carbonates and organic carbon in Rasthof cap carbonates on Otavi group in Namibia were investigated. The carbon isotope of the carbonates rose dramatically from -4.7 to 5.8 parts per mil through the Rasthof formation. The carbon isotope of organic carbon was not shifted as well as that of the carbonate carbon. In the lower, well-laminated carbonates, it fluctuated between -19 and -15 parts per mil, whereas it fluctuated between -16 and -12 parts per mil in the upper stromatolitic layer. As some of organic carbon was observed as graphite, it is possible to occur isotopic exchange between carbonate carbon and graphite.