A paleomagntic study of Neoproterozoic capcarbonate, Otavi Group, Namibia

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From 750 to 550 Ma, two huge glaciation are considered to have occurred (a snowball earth, Hoffman. 1998). There are carbonate rocks in Otavi group, Namibia, which is considered to be an evidence it. We analyze carbonate rocks and deduce the paleo-latitude.

In order to characterize rockmagnetic behavior, we experimented thermal demagnetization and measured susceptibility at every temperature. As a result, the magnetization and the susceptibility increased at 430 or 510 degree. The magnetization was about 80 times to NRM. The susceptibility was about 200 times to initial one.

It is interpreted that nonmagnetic minerals may have changed to magnetic ones, and a magnetic field may leak to the furnace. In the future, we plan the experiment to separate DRM from acquired magnetism in the furnace.