## Accepted Manuscript

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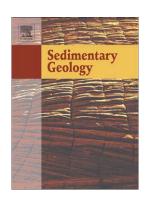
PII: S0037-0738(17)30043-X

DOI: doi:10.1016/j.sedgeo.2017.02.007

Reference: SEDGEO 5165

To appear in: Sedimentary Geology

Received date: 2 December 2016 Revised date: 14 February 2017 Accepted date: 15 February 2017



Please cite this article as: Delpomdor, Franck R.A., Devleeschouwer, Xavier, Spassov, Simo, Préat, Alain R., Stratigraphic correlations in mid- to late-Proterozoic carbonates of the Democratic Republic of Congo using magnetic susceptibility, *Sedimentary Geology* (2017), doi:10.1016/j.sedgeo.2017.02.007

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## ACCEPTED MANUSCRIPT

Stratigraphic correlations in mid- to late-Proterozoic carbonates of the Democratic Republic of Congo using magnetic susceptibility

Franck R.A. Delpomdor<sup>a</sup>, Xavier Devleeschouwer<sup>b,c</sup>, Simo Spassov<sup>d</sup>, Alain R. Préat<sup>c</sup>

<sup>a</sup>Illinois State Geological Survey, University of Illinois, Champaign 61820, United States

<sup>b</sup>Royal Belgian Institute of Natural Sciences, Geological Survey of Belgium, Brussels 1000,

Belgium

<sup>c</sup>Biogeochemistry and Modeling of the Earth System, Université libre de Bruxelles, Brussels

1050, Belgium

<sup>d</sup>Royal Meteorological Institute of Belgium, Centre de Physique du Globe, Section du

Magnétisme Environnemental, Dourbes 5670, Belgium.

Corresponding authors at: X. Devleeschouwer, xdevleeschouwer@naturalsciences.be

#### **ABSTRACT**

In this paper, we have tested the application of magnetic susceptibility measurements in Cu-Ag-Zn-Pb-(Fe)-mineralized carbonates of the BIe subgroup (Democratic Republic of Congo) as an efficient tool for regional and global high-resolution stratigraphic correlations in the Neoproterozoic marine carbonates. To achieve this goal, we integrate the low-field magnetic susceptibility (X<sub>LF</sub>) data with facies analyses, geochemistry and isotope stratigraphy. The microfacies analyses of two cores, Tshinyama#S70 and Kafuku#15, drilled in the early Neoproterozoic carbonates of the Mbuji-Mayi Supergroup reveal a deep carbonate ramp setting associated with a microbial/stromatolitic mid-ramp environment. High-resolution stratigraphic correlations using magnetic susceptibility and C-isotope curves established for

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