

Interactive comment on “Precessional and half-precessional climate forcing of Mid-Devonian monsoon-like dynamics” by D. De Vleeschouwer et al.

Anonymous Referee #2

Received and published: 14 October 2011

This study does an extensive spectral analysis - which nicely presented and illustrated - of a magnetic susceptibility (MS) profile of a ~100 m carbonate-siliclastic section of Devonian age that reveals peaks ascribed to Milankovich (and sub-Milankovich) climate forcing. This could be, but one wonders if such a facies and proxy are good windows on Paleozoic climate change considering the likelihood of lateral changes, crude time control, and diagenesis. In this regard, the authors should provide one or two examples in more modern and/or well-dated situations where such facies and methods yield expected results. This is not to doubt that the Devonian world responded to orbital climatic forcing – it surely did - but the fidelity of the specific record needs to be better established. The authors should also provide a description of how the MS signal

C1606

was measured and about the repeatability of the curve – the values seem rather low. Some more information is also needed about the source of the magnetization, for example, how can diagenetic effects occurring long after deposition (and unrelated to depositional environment) be excluded.

Interactive comment on Clim. Past Discuss., 7, 1427, 2011.