

Interactive comment on “Magnetic quantification of Fe and S bound as magnetosomal greigite in laminated sapropels in deeper basins of the Baltic Sea” by M. Reinholdsson and I. Snowball

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The manuscript entitled ‘Magnetic quantification of Fe and S bound as magnetosomal greigite in laminated sapropels in deeper basins of the Baltic Sea’ by M. Reinholdsson & I. Snowball is approaching the difficult but very interesting subject of Fe and S quantification produced as magnetosomal greigite. The paper is using data (LOI and SIRM) already published elsewhere (e.g. Reinholdsson et al., 2013, EPSL) and reaches the conclusion that magnetosomal fluxes of Fe in the Baltic Sea are similar to fluxes of Fe derived from mineral magnetic studies of magnetite magnetosomes in varved fresh-water lake sediments in Sweden. This observation relates to my main comment: the

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paper is mostly using data already published. However, I appreciate the originality residing in the Fe flux calculation

I did also review their EPSL paper from 2013 and I have to say that their submission to Biogeosciences is a bit too much based on their previous results. This is my only serious concern.

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