

Interactive comment on “Rock magnetic properties, magnetic susceptibility, and organic geochemistry comparison in core LZ1029-7 Lake El’gygytgyn, Far Eastern Russia” by K. J. Murdock et al.

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Both the general and specific comments made were extremely helpful. First, it was made quite apparent that the purpose of the investigation was unclear or not well-defined early in the paper. By revising portions of the introduction (and conclusion) to better explain the focus of the paper many of the problems and/or concerns will be rectified easily. Specifically, the purpose of the investigation on the short core 1029-7 was to measure a number of magnetic properties to see if a more thorough magnetic investigation would be fruitful. Several of the suggestions for additional work will be

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taken into consideration for future magnetic studies of the long cores taken from Lake El’gygytgyn, such as the verification of SP grains affecting the frequency dependent susceptibility and ARM/IRM ratios.

It should also be noted that the use of “low-frequency” susceptibility when defining χ_{lf} was a mistake and should, as noted by both referees, represent “low field” susceptibility. This also applies to χ_{hf} , which has been corrected in the manuscript to represent “high field” rather than “high-frequency” susceptibility.

Other specific comments have been taken into account. Mention of ARM and AC susceptibility measurements will be removed since they were not utilized fully for the paper. Hysteresis loops in Figure 7 represent the corrected data, not the raw data. The figure caption will be changed to reflect this. The χ_{fd} calculations will be revisited again to ensure they are correct.

Most of the minor and technical comments have been taken into account and resolved, as have the comments on the figures.

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