

Geochemistry, Geophysics, Geosystems

Supporting Information for

Field-response of magnetic vortices in dusty olivine from the Semarkona chondrite

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Additional Supporting Information (Files uploaded separately)

Captions for Tables S1 to S10

Introduction

This supporting information provides data acquired during the MTXM experiments and micromagnetic simulations in Excel sheet format. For all MTXM and micromagnetic images, data is given as arrays of pixel intensities. The pixel intensities themselves are arbitrary, where unity signifies no change in magnetic behavior. Pixel intensities for MTXM and micromagnetic data cannot be directly compared. MTXM data have been aligned and divided by the opposite applied field, but not further processing has been done. Micromagnetic data have been converted to a regular 2D grid and divided by the opposite applied field. Raw hysteresis data for the micromagnetic simulations is also provided.

Table S1. MTXM data for Particles 1,2 and 3 imaged in the in-plane configuration.

Table S2. MTXM data for Particles 1,2 and 3 imaged in the first out-of-plane configuration.

Table S3. MTXM data for Particles 1,2 and 3 imaged in the second out-of-plane configuration.

Table S4. MTXM data for Particles 4 and 5.

Table S5. Micromagnetic data for Particle 1.

Table S6. Micromagnetic data for Particle 2.

Table S7. Micromagnetic data for Particle 3.

Table S8. Micromagnetic data for Particle 4.

Table S9. Micromagnetic data for Particle 5.

Table S10. Hysteresis data for Particles 1 – 5 simulated using micromagnetic simulations.