Interactive comment on “Mars MOURA magnetometer demonstration for high resolution mapping on terrestrial analogues” by M. Diaz Michelena et al.

S. Cherkasov (Referee)

sergei_v_cherkasov@mail.ru

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Field measurements clearly demonstrate a suitability of the MOURA magnetometer for magnetic measurements. Nevertheless, when on Mars, MOURA will be not moving, but positioned at some place. So, the expected results will include: a) absolute measurements of the magnetic field (vector) at the point where the magnetometer is located; b) temporal variations of the magnetic field at the point. From the paper, it is clear that the magnetometer will provide data on the absolute magnetic vector with suitable precision. What is unclear, is the precision of the temporal variations’ measurements. The data on such variations will be of extreme value for the further analysis. I would advise the author: a) to include in the article brief information on the MOURA’s tests in the artificial magnetic field. Such tests, undoubtedly, have been executed by the author earlier, and they will demonstrate the MOURA’s suitability for the magnetic variations’ measurements; and b) in the conclusions I would recommend to underline the importance of both, the absolute level, and the variations, measurements, so a reader can better understand the goals of the research.