

Fig. 8. Comparison of the M2 DTM with the overlapping portion of the MLA profile obtained during M1 (Fig. 7). (Top) MLA ground track plotted on the orthoimage mosaic produced with DTM. (Bottom) The MLA profile (red) and the corresponding height profile extracted from the DTM (black).

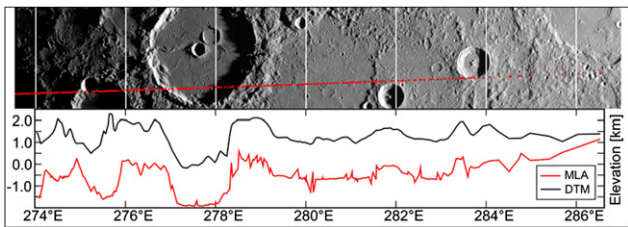


Fig. 9. Comparison of the M2 DTM with the overlapping portion of the MLA profile

over 604 km (corresponding to a mean shot spacing of 2.7 km). Unfortunately, both data sets are at their quality limits in this example. The MLA distance to the surface was 1000–1700 km, near the maximum possible range. Also, because of high incidence angles ($> 85^\circ$) and the presence of shadows, the image data were far from optimum for stereo processing. The average range offset between the MLA profile and the M2 DTM was approximately 1400 m (Fig. 9), and both data sets are noisy near the limits of their observing periods. Note that this is the only case among our

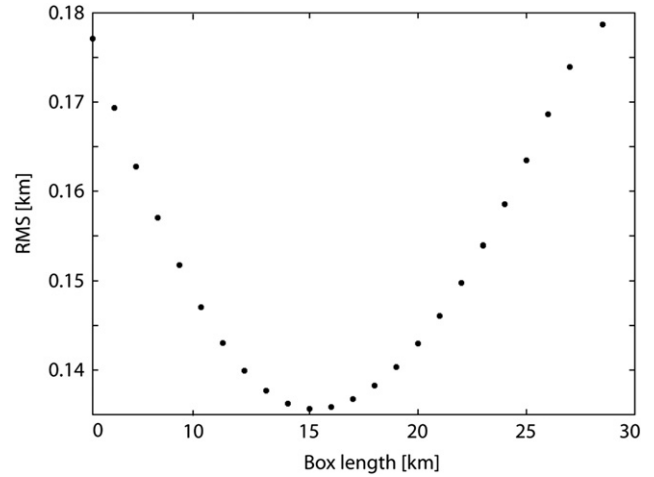


Fig. 11. RMS misfit between the M1 MLA profile and the M3 DTM plotted versus the width of the running box over which the MLA profile was smoothed by binning (see text for further explanation).

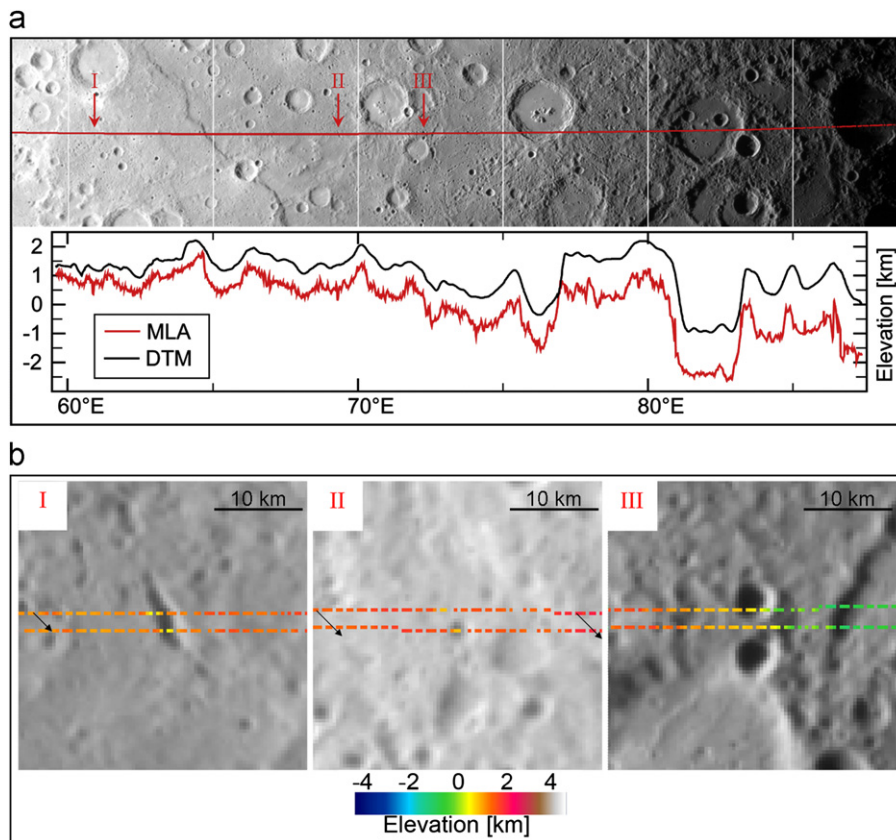


Fig. 10. (a) Comparison of the M3 DTM with the overlapping portion of the MLA profile obtained during M1. See Fig. 8 for additional details. (b) Detailed comparisons of the MLA track and the orthoimage mosaic, before and after the track has been shifted (in the direction indicated by black arrows) to best match the DTM.