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On the possibility of DTM densification by using satellite altimetry data over the land areas; case study: Densification of Iran

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A study on the possibility of using satellite altimetry data over the land area for densification of DTM's has been made. The geographical region of Iran has been selected as the test region and 10 years of the Topex-Poseidon satellite altimetry data are considered as the case study. The study has proven the possibilities of using repeated satellite altimetry observation along the track for the densification of DTM's. Using this technique, the existing $1km \times 1km$ DTM of Iran has been densified along the footprints of the satellite passes. The technical details and the results of the case study will be presented.