



## **How well do we know the elevation of world's coastal areas? Distressing revelation about the Mekong delta**

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Accurate data on the relative elevation of coastal plains and deltas to local sea level is crucial to assess the impacts of relative sea-level rise in coastal areas. However, as many of world's coastlines and major deltas are located in data-sparse regions, high accuracy elevation data is often unavailable, forcing researchers to rely on 'best available' space-borne elevation data for sea-level rise impact assessments. However, due to lacking local validation data, the quality of these assessments often remains unknown. Here we address this important issue using a new, elevation dataset of the Vietnamese Mekong delta, world's third largest delta. We found that the Mekong delta appears to be elevated  $\sim 1.5\text{-}2$  m lower above local mean sea level than previously (erroneously) concluded based on global space-borne elevation models. This revelation has far-reaching implications as the delta's 18 million inhabitants are far more prone to progressive land subsidence and future sea level rise than previously anticipated. Moreover, our results demonstrate the possible major uncertainties in assumed relative elevation of coastal plains and deltas throughout the world, potentially leading to large errors in sea-level rise impact assessments.