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Supplement of

3-D crustal density model of the Sea of Marmara

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Supplementary Information

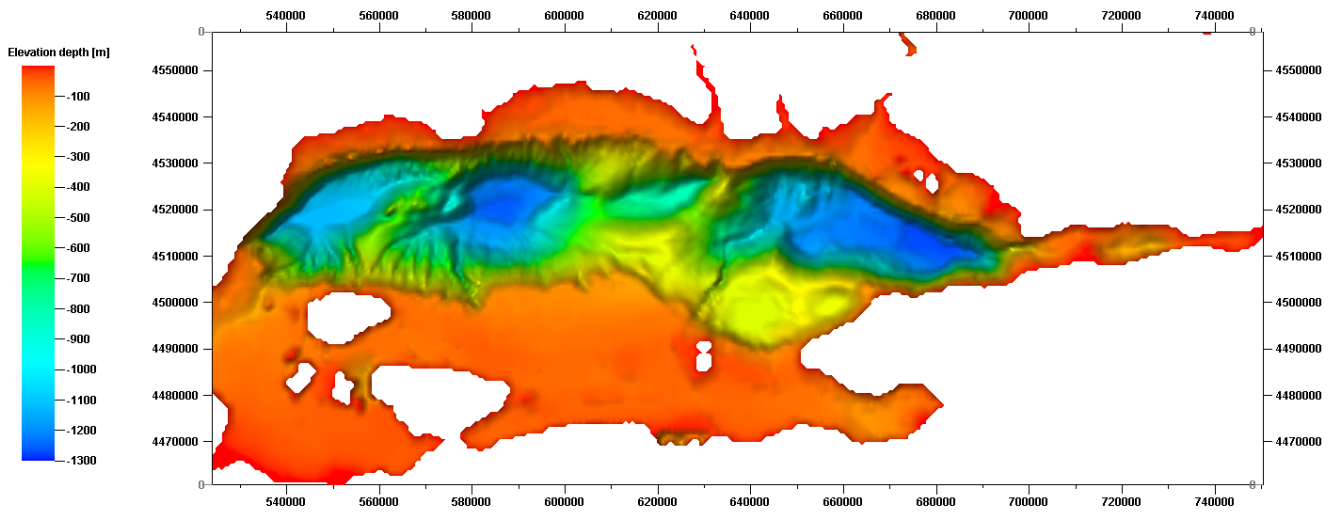
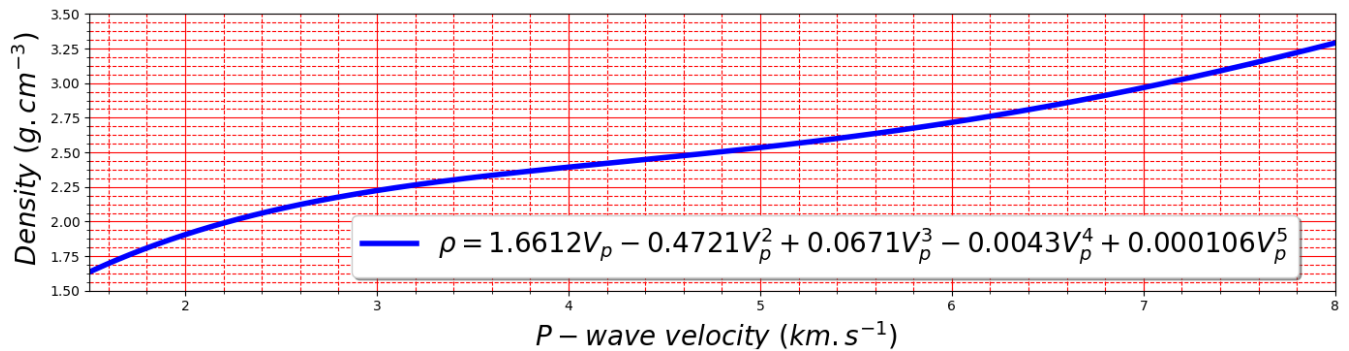


Figure S1: High resolution bathymetry within the Marmara Trough (LePichon et al., 2001).

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10 Figure S2: Polynomial regression to the Nafe–Drake Curve valid for P-wave velocities between 1.5 to 8.5 km.s⁻¹ (Brocher, 2005 after Ludwig et al., 1970).

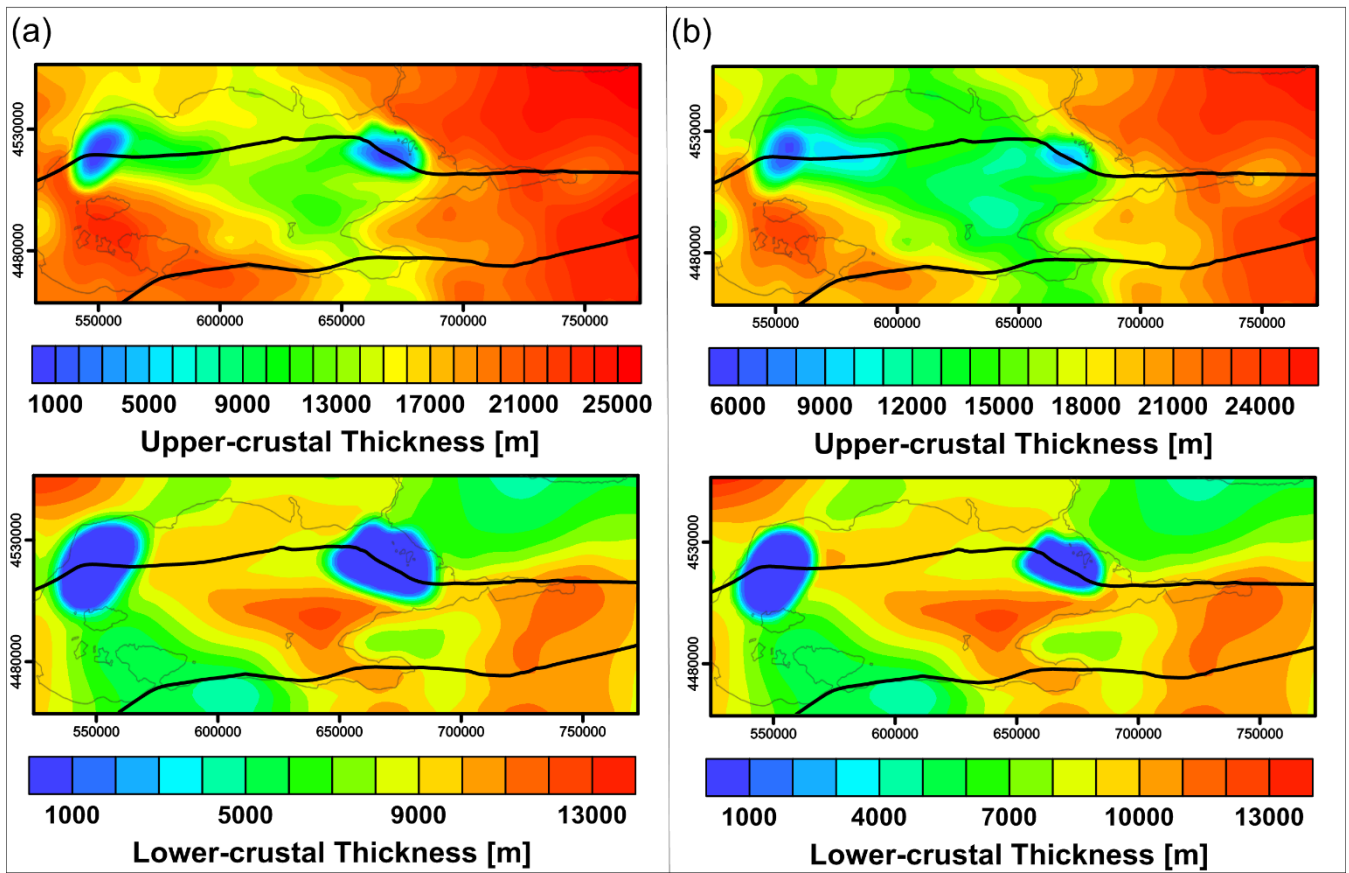


Figure S3: Upper and lower crustal thickness based on best-fit gravity models: (a) Model-I and Model-III; (b) Model-II.

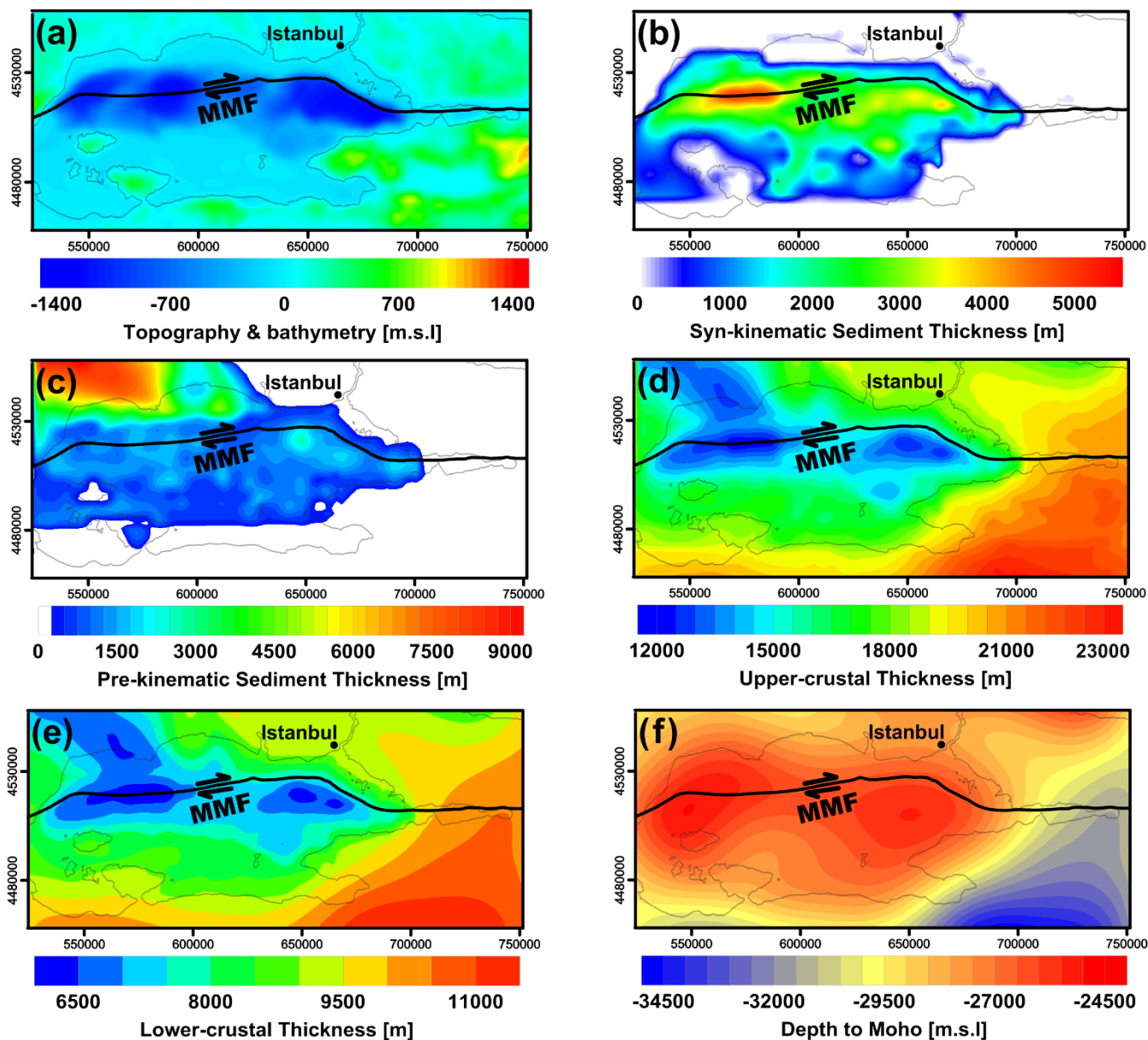


Figure S4: Density-structural model of Kende et al. (2017). Syn-kinematic sediments ($\rho = 2230 \text{ kg.m}^{-3}$), pre-kinematic sediments ($\rho = 2590 \text{ kg.m}^{-3}$), upper crust ($\rho = 2650 \text{ kg.m}^{-3}$), lower crust ($\rho = 2950 \text{ kg.m}^{-3}$), Moho ($\rho = 3330 \text{ kg.m}^{-3}$).

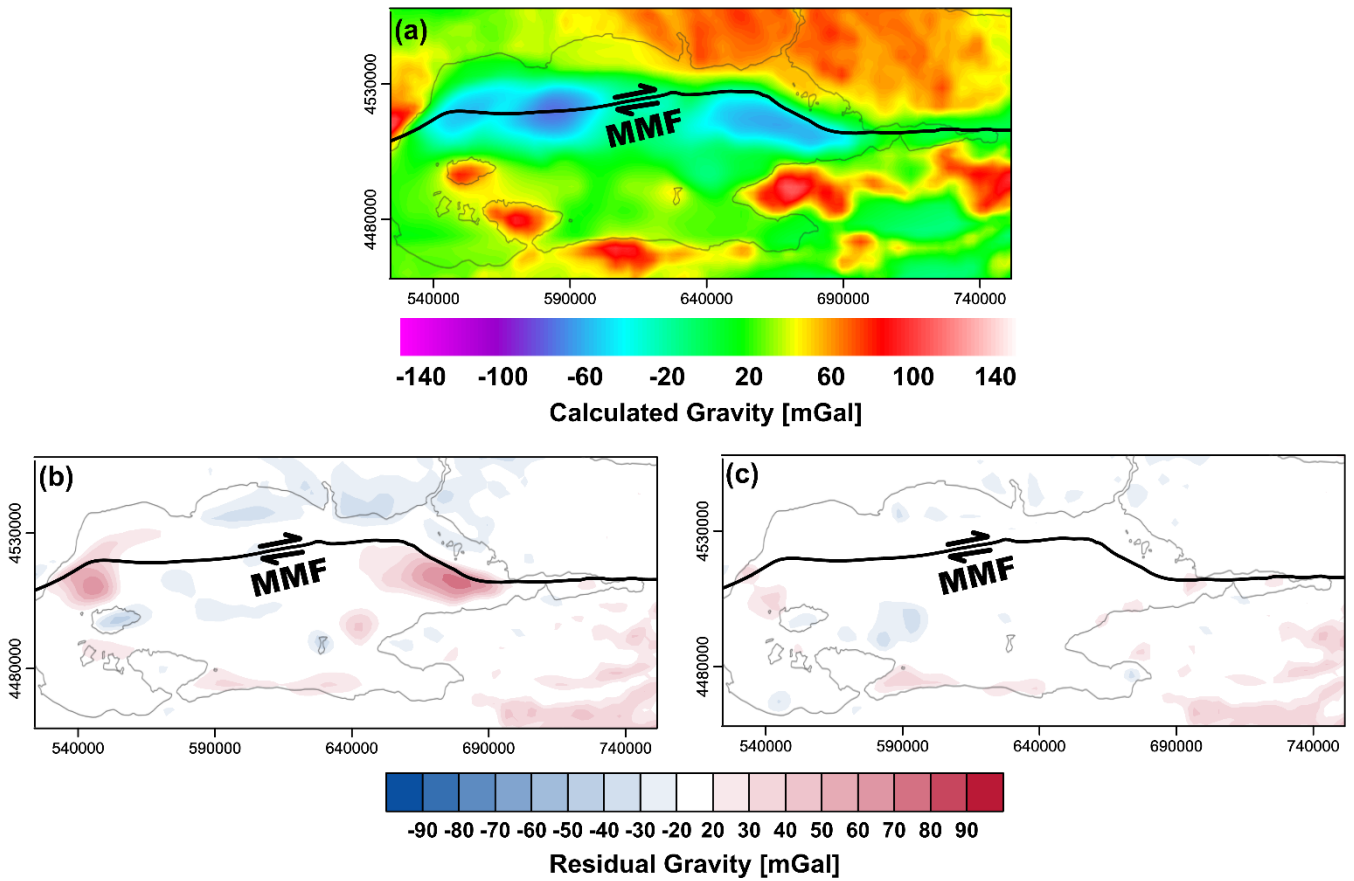


Figure S5: Gravity response and corresponding misfit to EIGEN-64C and Improved-TOPEX based on the best-fit model of Kende et al. (2017): (a) Calculated gravity corresponding to the density model in Fig. S3; (b) misfit between the calculated and the observed gravity of EIGEN-64C; (c) misfit between the calculated and the observed gravity of Improved-TOPEX.