

## Supporting Information for “InSight constraints on the global character of the Martian crust”

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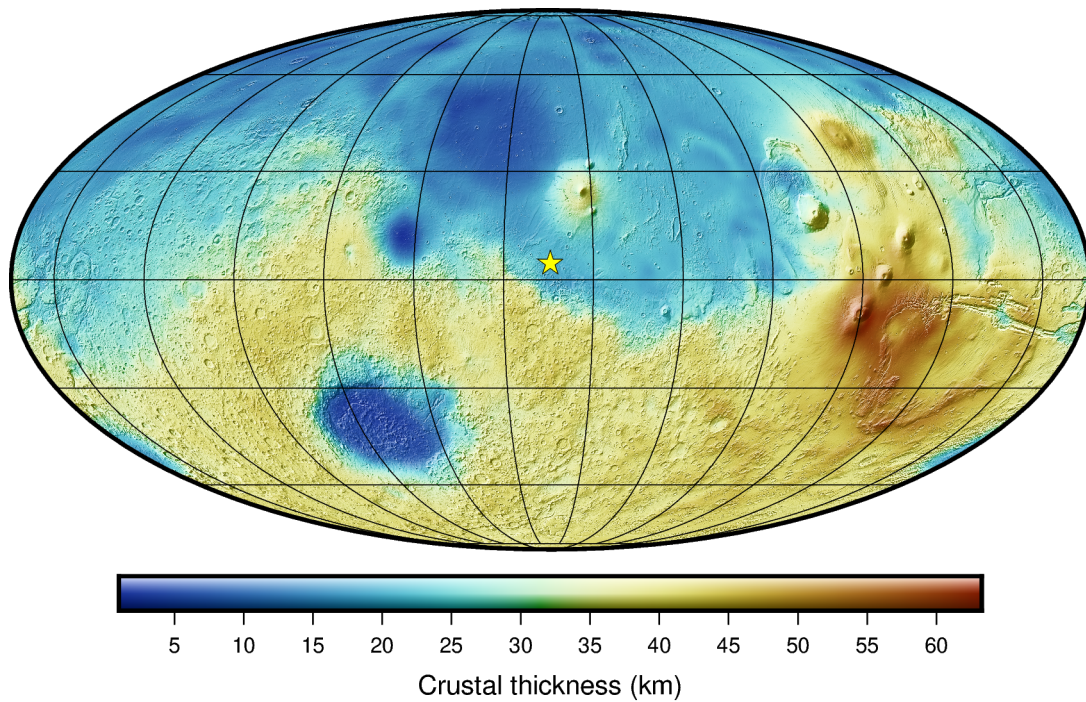
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**Figure S1.** A global crustal thickness model of Mars with a uniform density crust. For this specific model, the crustal density is everywhere  $2600 \text{ kg m}^{-3}$ , the crustal thickness is constrained to be 20 km beneath the InSight lander, and the mantle and core density is from the Khan2022 interior model. The average thickness of the crust is 30 km, the minimum thickness is 1 km in the interior of the Isidis impact basin, and the maximum thickness is 63 km in the southern region of the Tharsis plateau. The yellow star denotes the location of the InSight landing site, and to provide geologic context, the color intensities are modulated by a shaded-relief map of the surface topography. This map is presented in a Mollweide projection with a central meridian of  $136^\circ \text{ E}$  longitude. Grid lines are drawn every  $30^\circ$  of latitude and longitude.