Supporting Information for "On the formation of thrust-faults related landforms under low strain rate in Mercury's Northern Smooth Plains: A two-dimensional numerical simulation"

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Introduction The supporting information contains one figure (Fig S1) and one table (Table S1), which are the results of the two-dimensional simulation of the topography at the crust-mantle boundary (CrMB) of 1km. They are produced to compare the results when the surface topography at the CrMB is 1.5km.

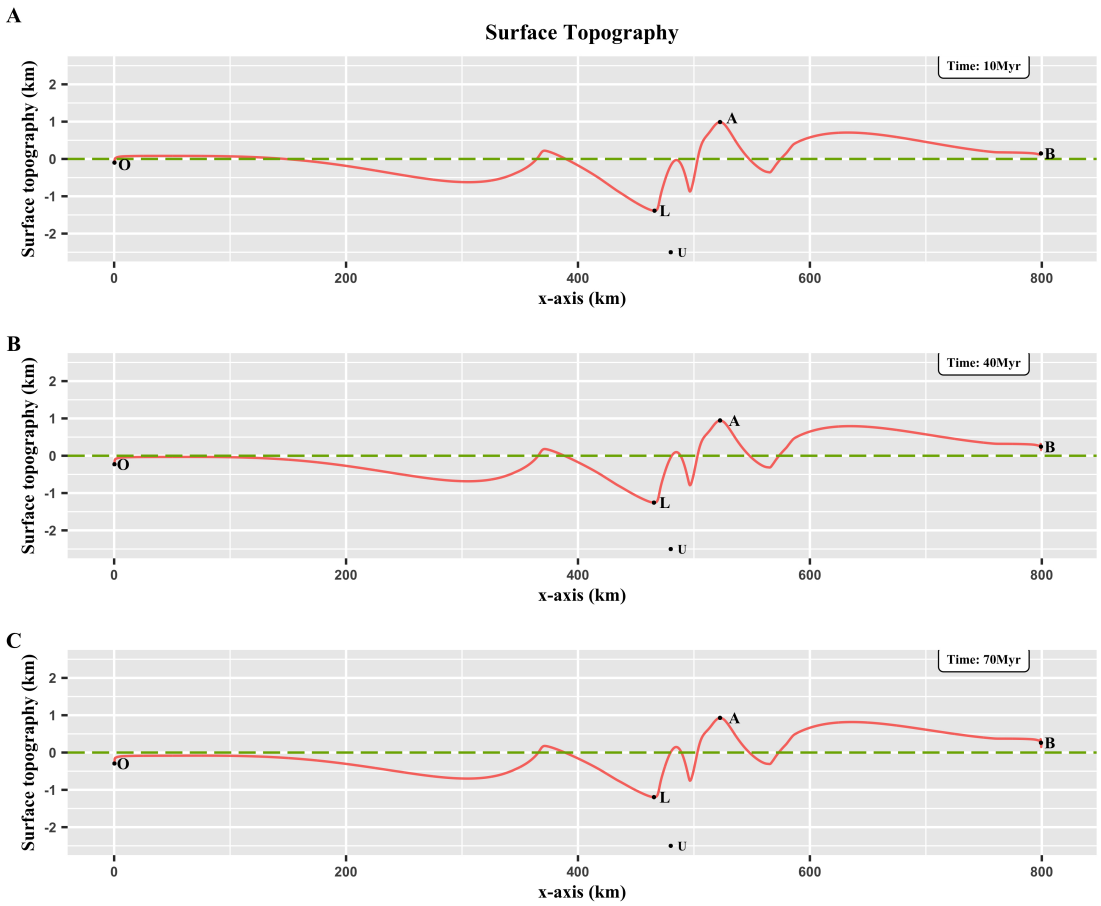

Figure S1. The surface topography (red line) at A) 10Myr, B) 40Myr and C) 70Myr with CrMB topography of 1km. The green dashed-line represents the horizon (i.e., depth = 0). The black point represents the topography indicator U, which is used to indicate the relative position of the surface topography and the topography at the CrMB. Point L and A indicates the lowest and highest surface topography.

Table S1. The precise value of surface topographical indicators over time

Symbols	10Myr	40Myr	70Myr	Units
O	-0.0980	-0.2297	-0.2934	km
L	-1.3869	-1.2566	-1.1958	km
A	0.9901	0.9465	0.9299	km
B	0.1468	0.2454	0.2627	km