Various lithospheric deformation patterns derived from rheological contrasts between continental terranes: Insights from 2-D numerical simulations

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Table S1. Strength scaling factors for four distinct rheological models. CB-I and CB-II, Crème brûlée model with a strong and weak lower crust, respectively; JS-I and CB-II, Jelly sandwich model with a strong and weak lower crust, respectively. S_{UC}, S_{LC}, and S_{LM} are strength scaling factors for the upper and lower crust and lithospheric mantle, respectively.

Rheological model	S_{UC}	S_{LC}	S_{LM}
CB-I	1	10	0.1
CB-II	1	0.1	0.1
JS-I	1	10	1
JS-II	1	0.1	1
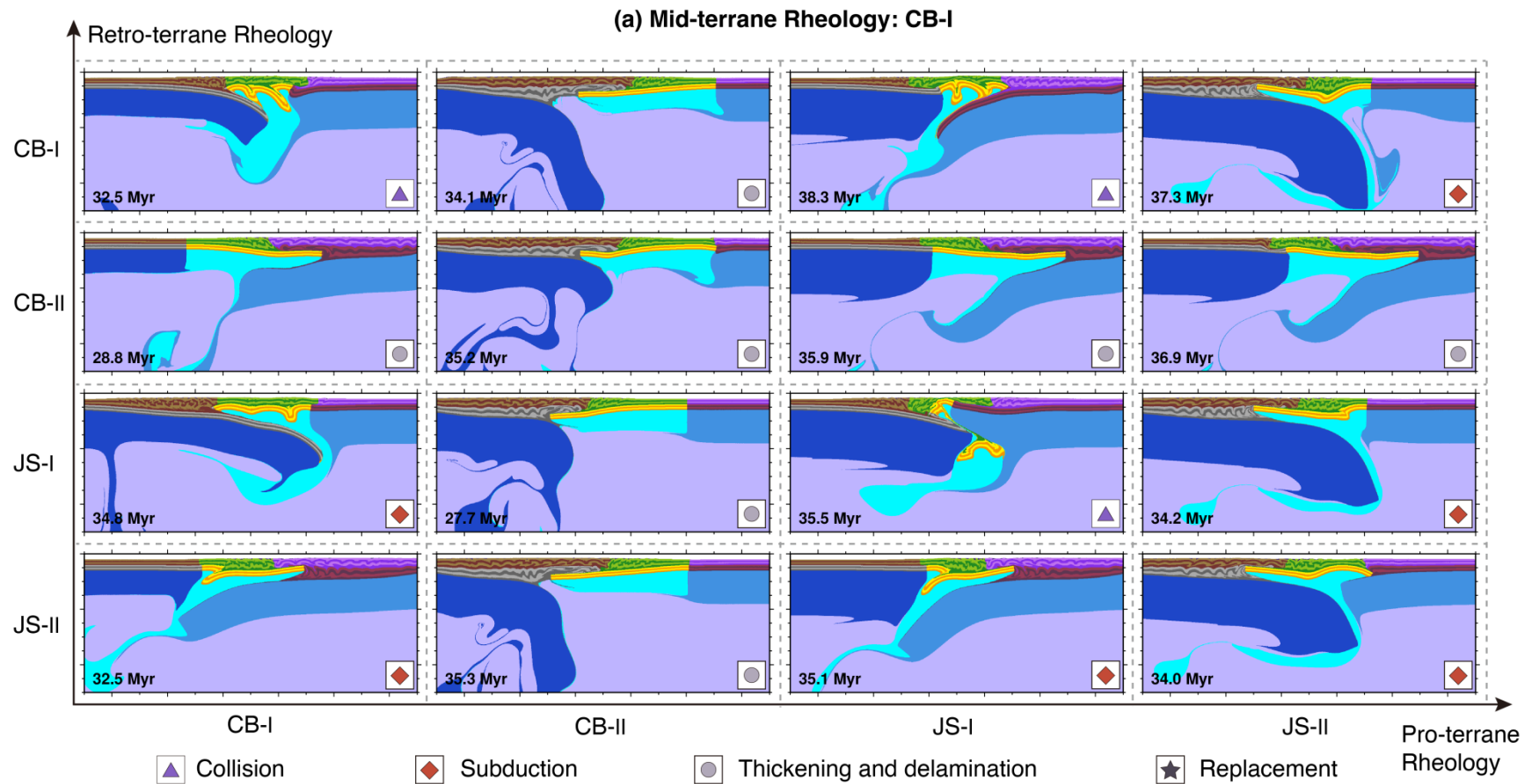
Figure S1. Simulation results display four styles of lithosphere deformation patterns. (a) – (d) Simulation results of models in which lithospheric rheology for the Mid-terrane is CB-I, CB-II, JS-I and JS-II, respectively. Different symbols indicate distinct deformation styles, including lithosphere collision, subduction, thickening and delamination, and replacement.

Figure S1. (*Continued*).

(c) Mid-terrane Rheology: JS-I
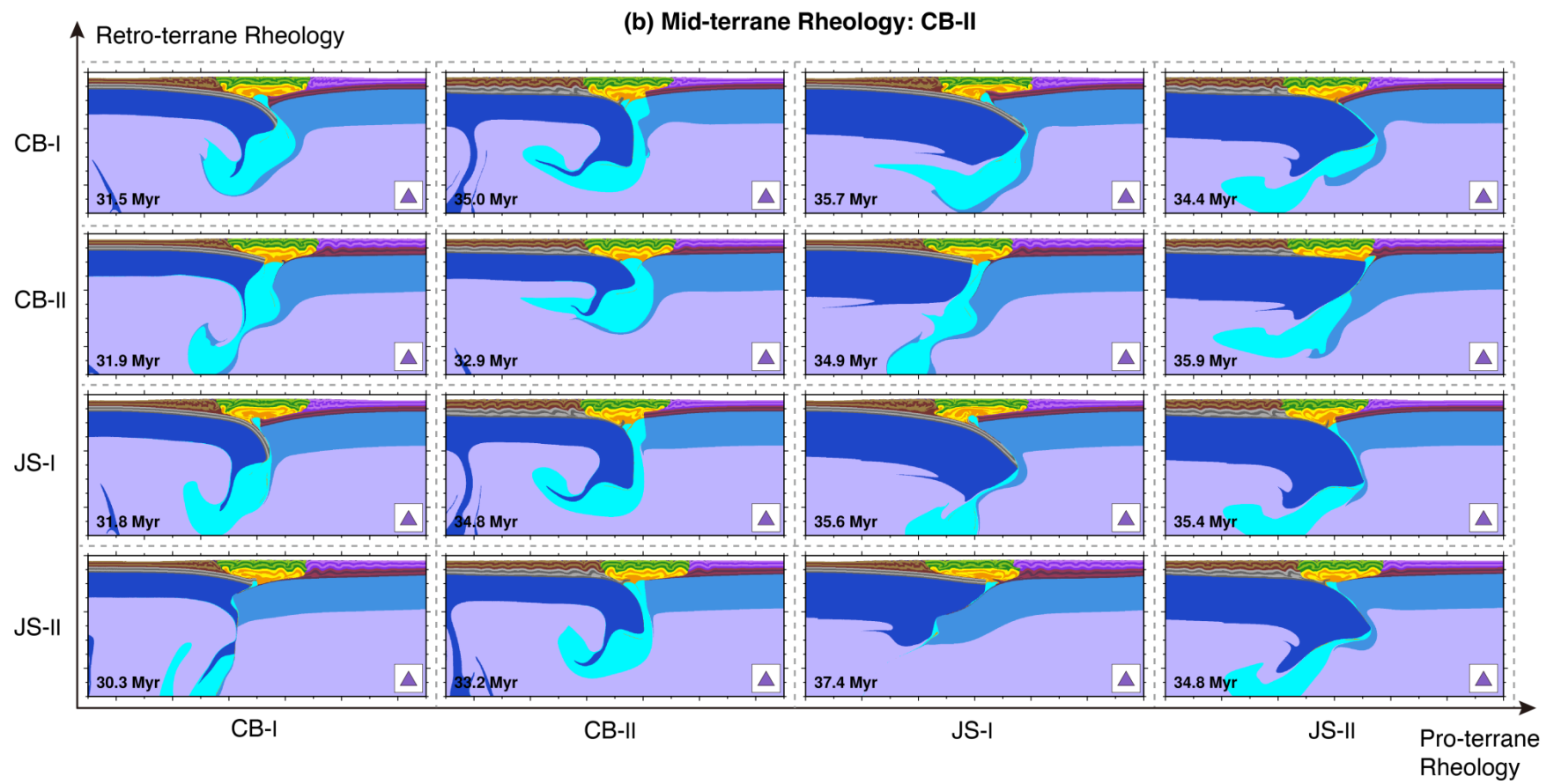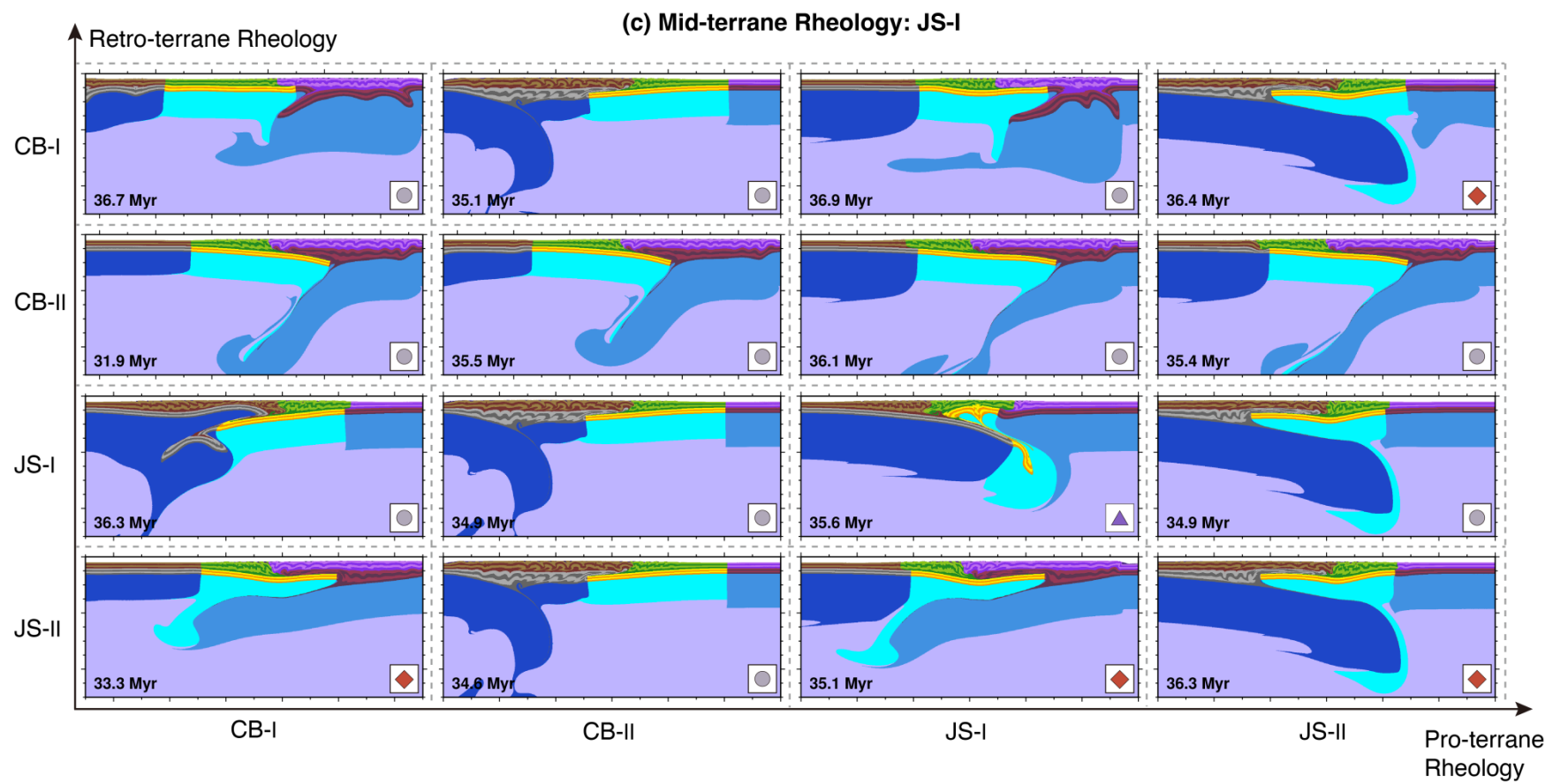
Figure S1. (*Continued*).
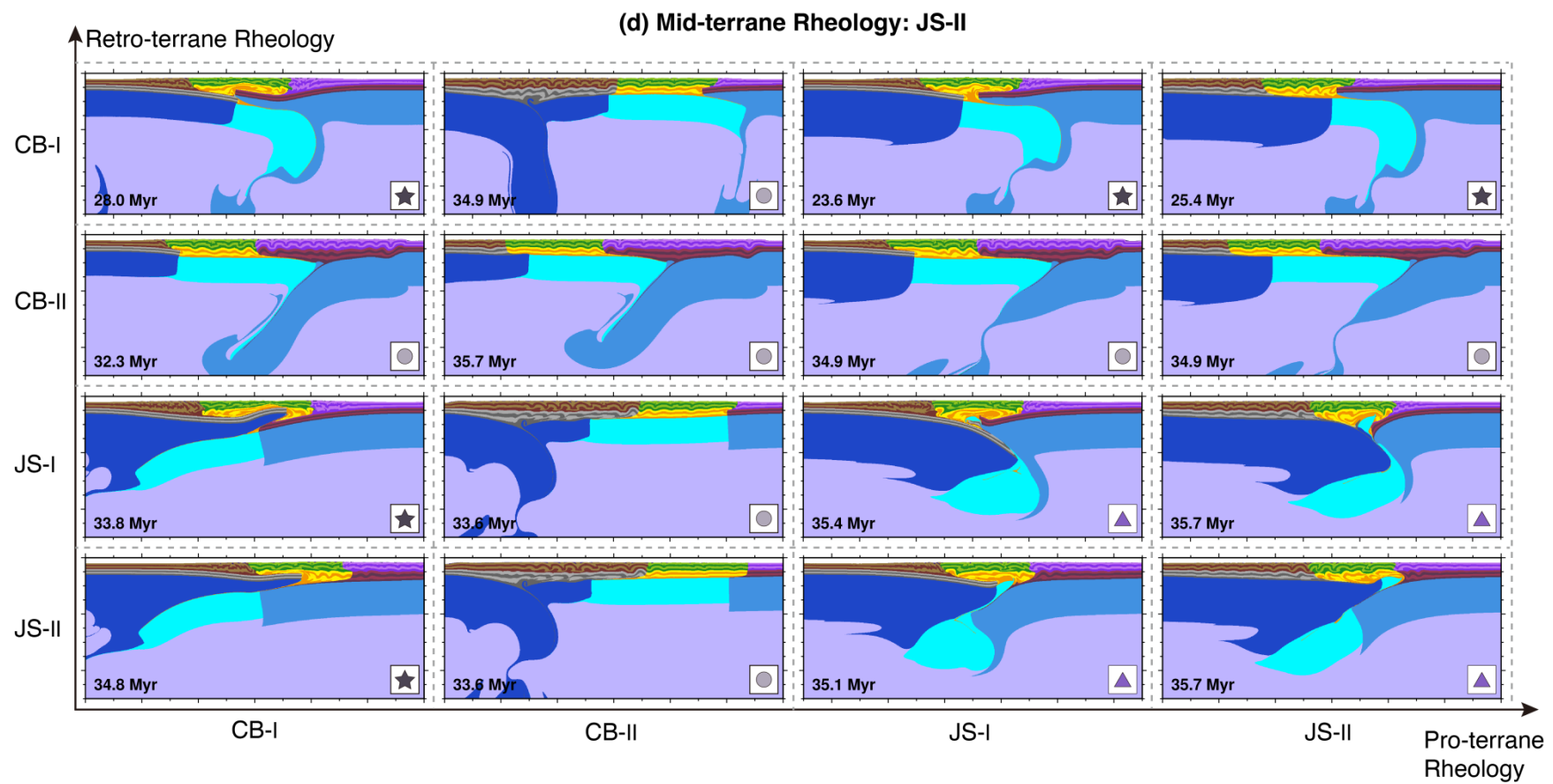
Figure S1. (*Continued*).
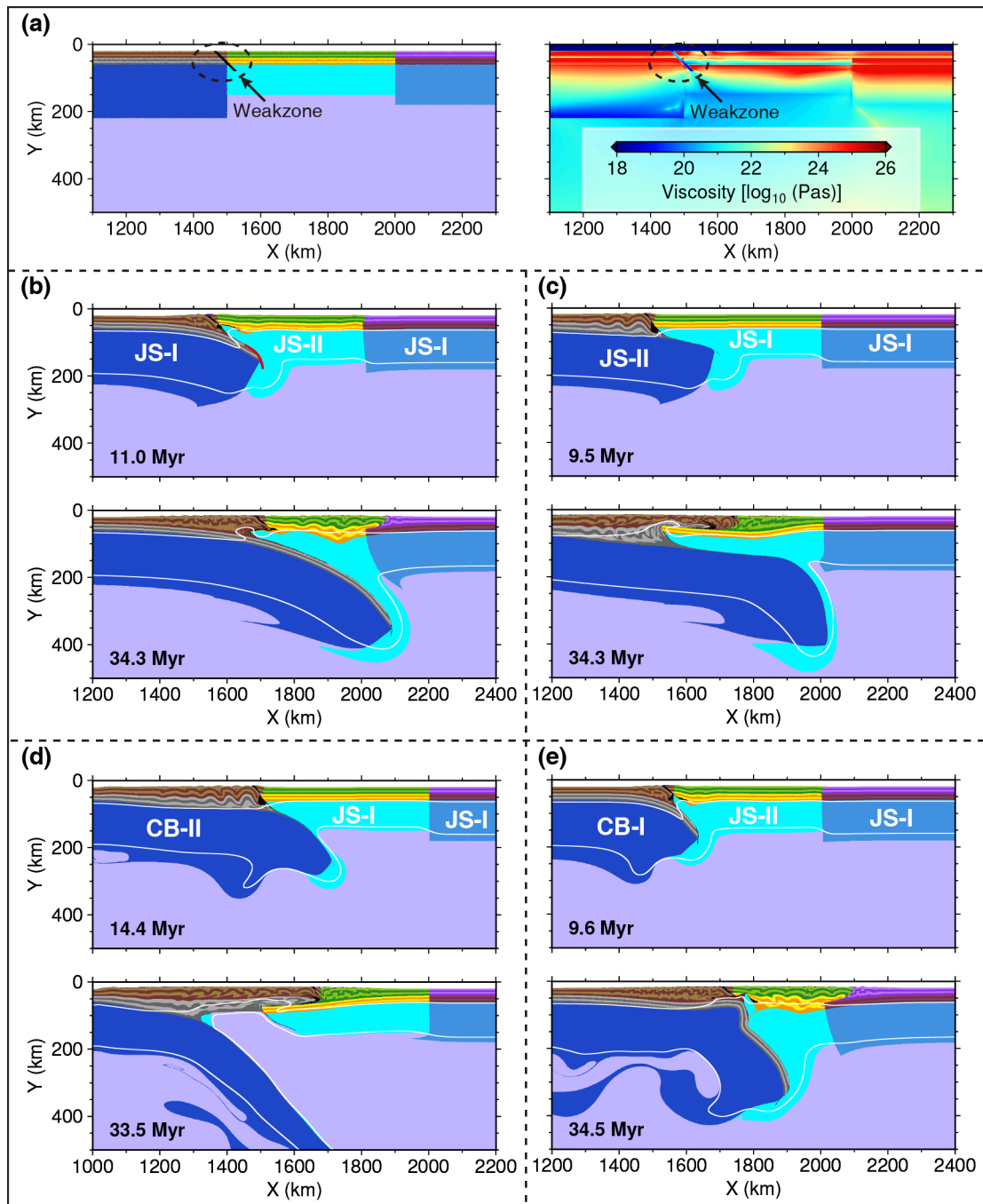
Figure S2. Effects of the local weak zone on lithosphere deformation. (a) Details about the weak zone. (b) – (e) Final simulation results of models corresponding to Cases 1 – 4, respectively.