

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 JS-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

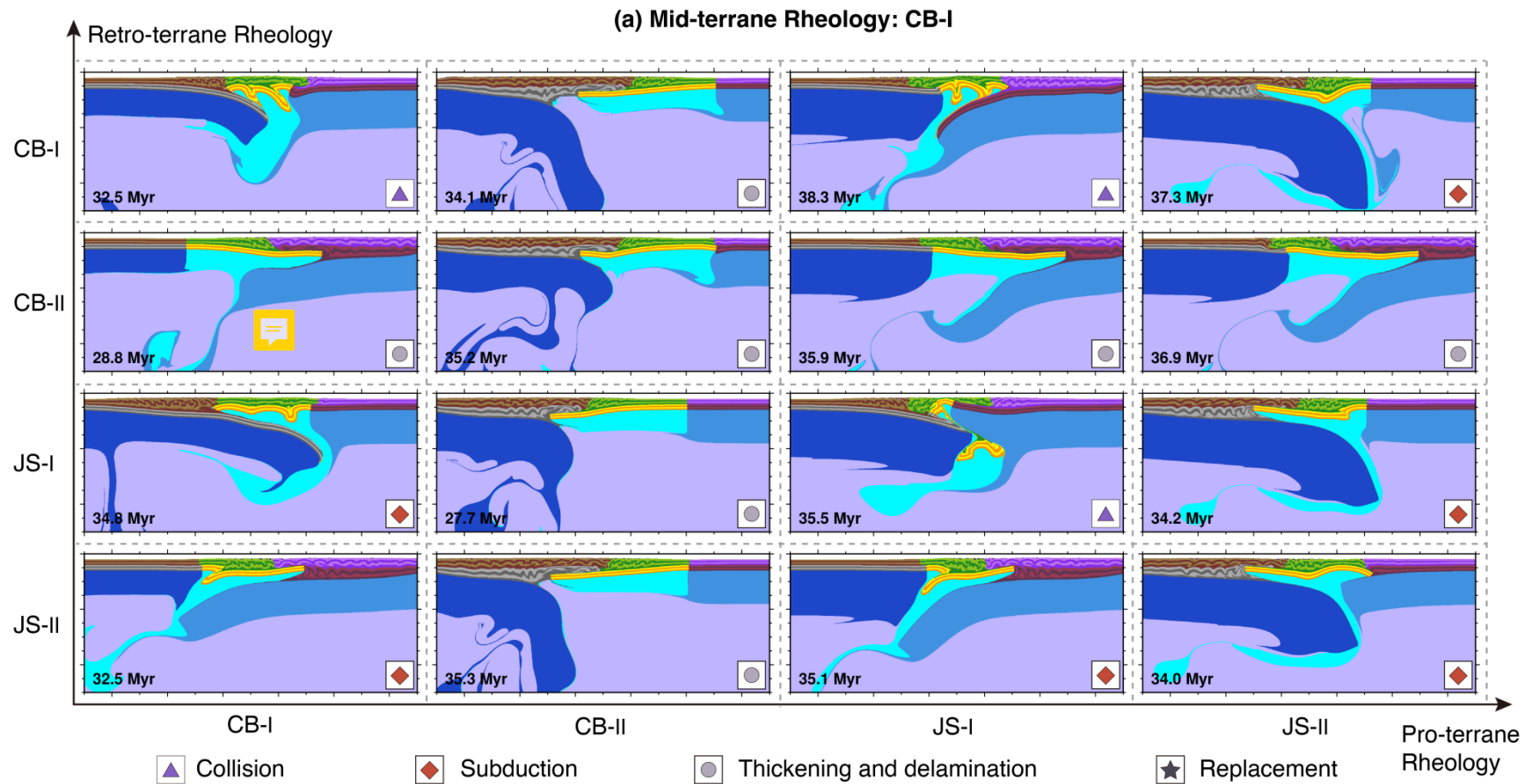


Figure S1. Simulation results display four styles of lithosphere deformation patterns. (a) – (d) Simulation results of models in which lithospheric rheology for the Mid-terrane is CB-I, CB-II, JS-I and JS-II, respectively. Different symbols indicate distinct deformation styles, including lithosphere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

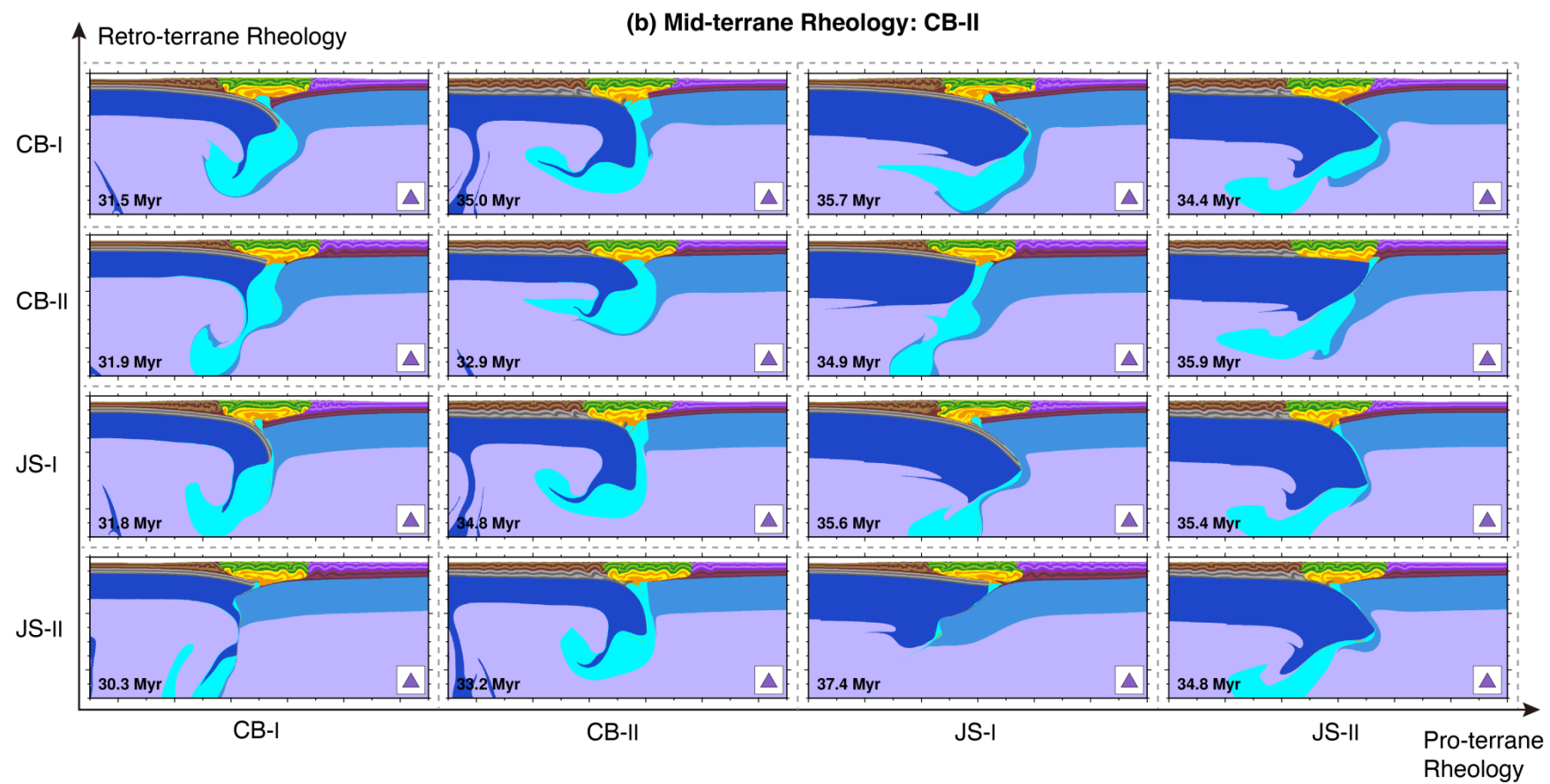


Figure S1. (Continued).

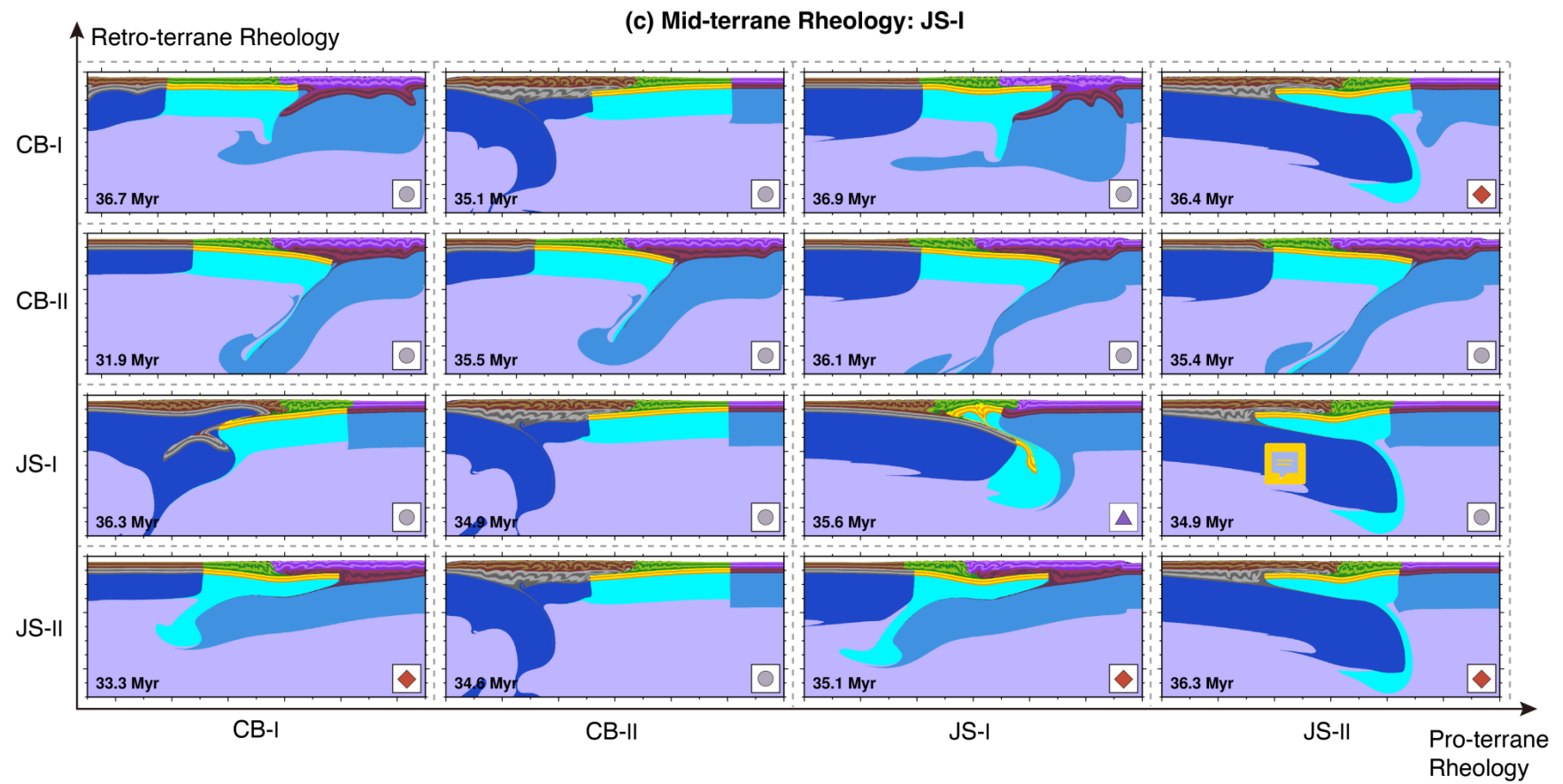


Figure S1. (Continued).

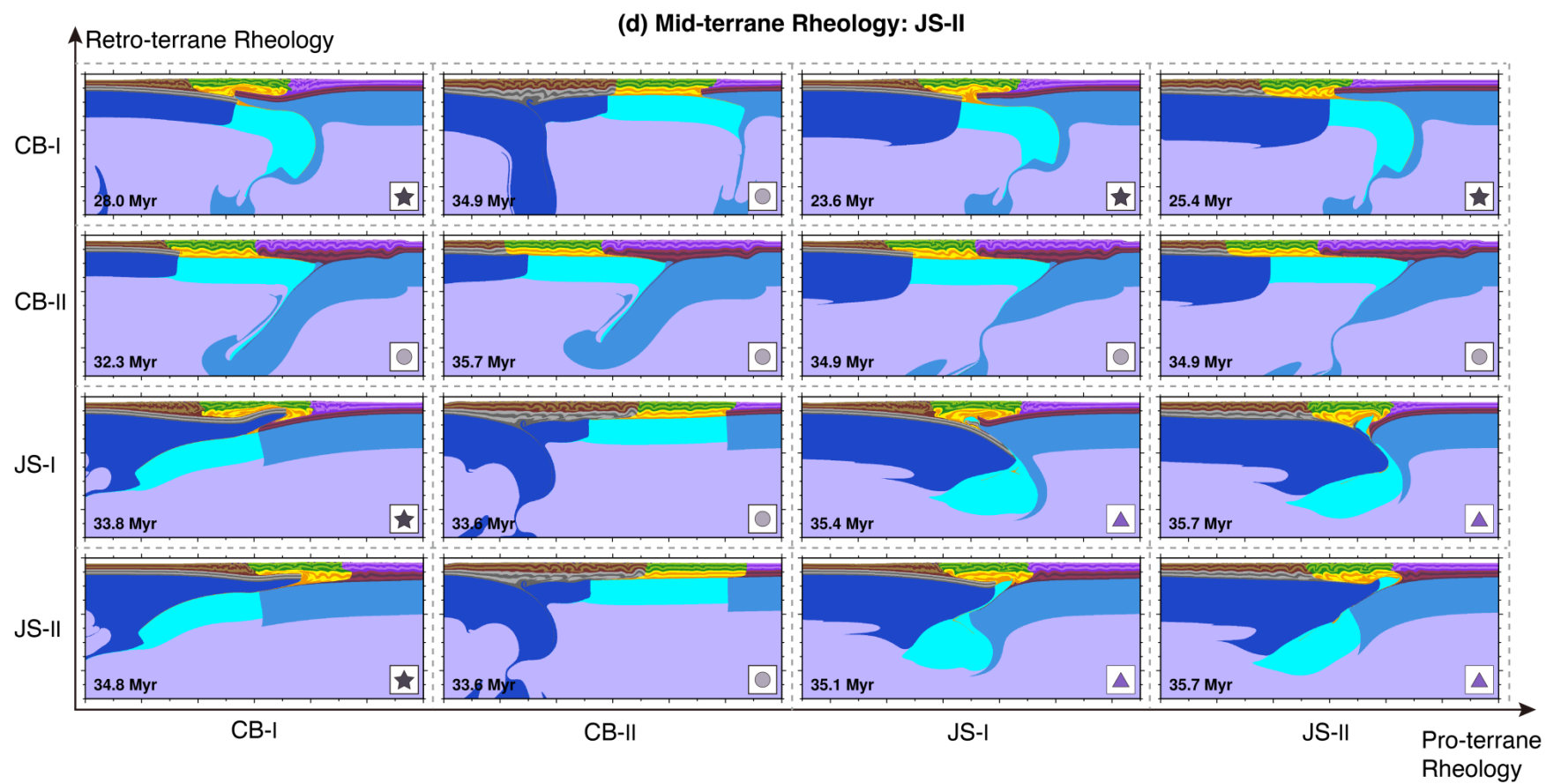


Figure S1. (Continued).

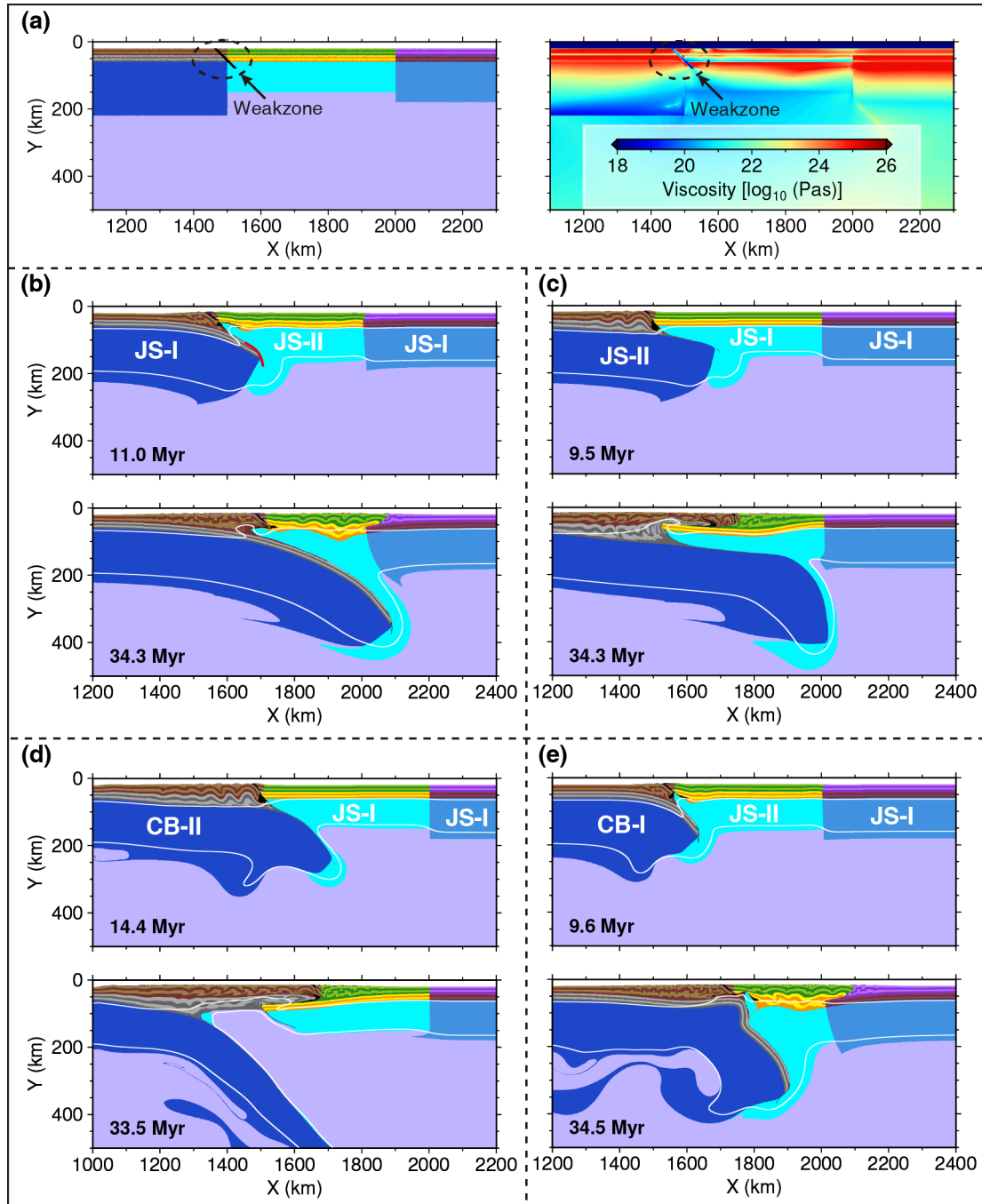


Figure S2. Effects of the local weak zone on lithosphere deformation. (a) Details about the weak zone. (b) – (e) Final simulation results of models corresponding to Cases 1 – 4, respectively.