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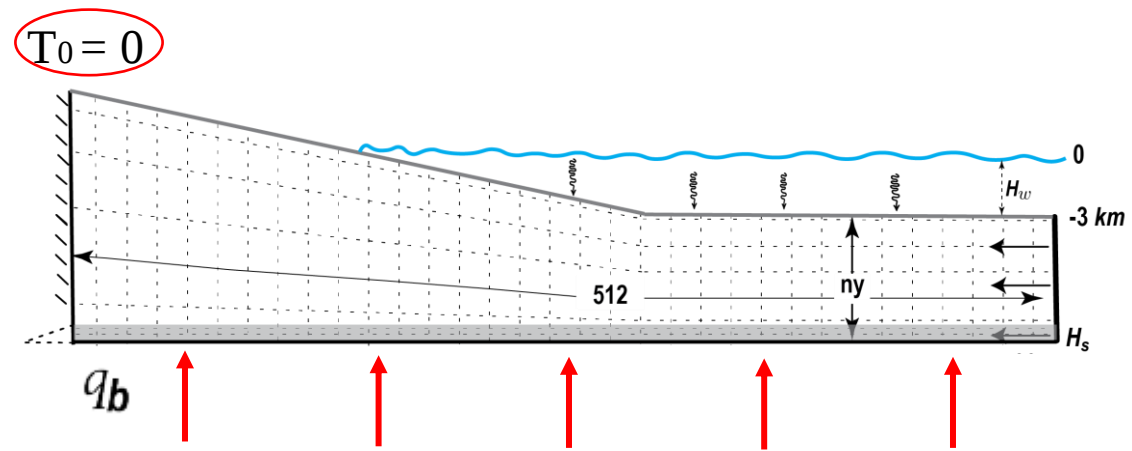
- 1.
- 2.



- Thermo-mechanical modelling

Simulation of different thermal parameters Using pTatin2D:

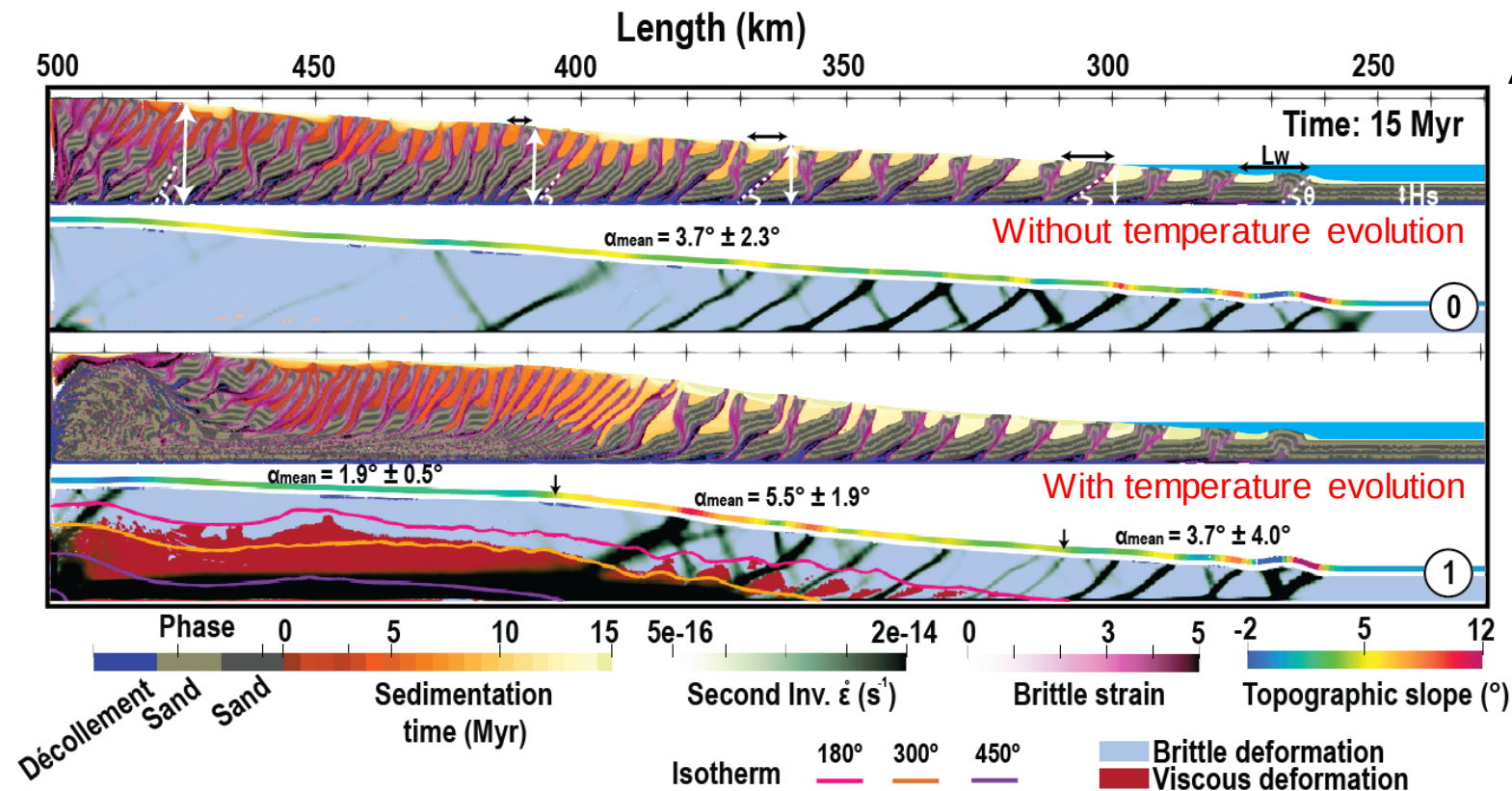
- Thermal conductivity
- Blanketing effect
- Shear heating
- Initial sediment thickness
- Erosion sedimentation rate



Impose **constant heat flow** at the base of the domain

Allows **increasing T** with **burial** and **denudation**

➡ Capture dynamics of **Br-Vis** transition

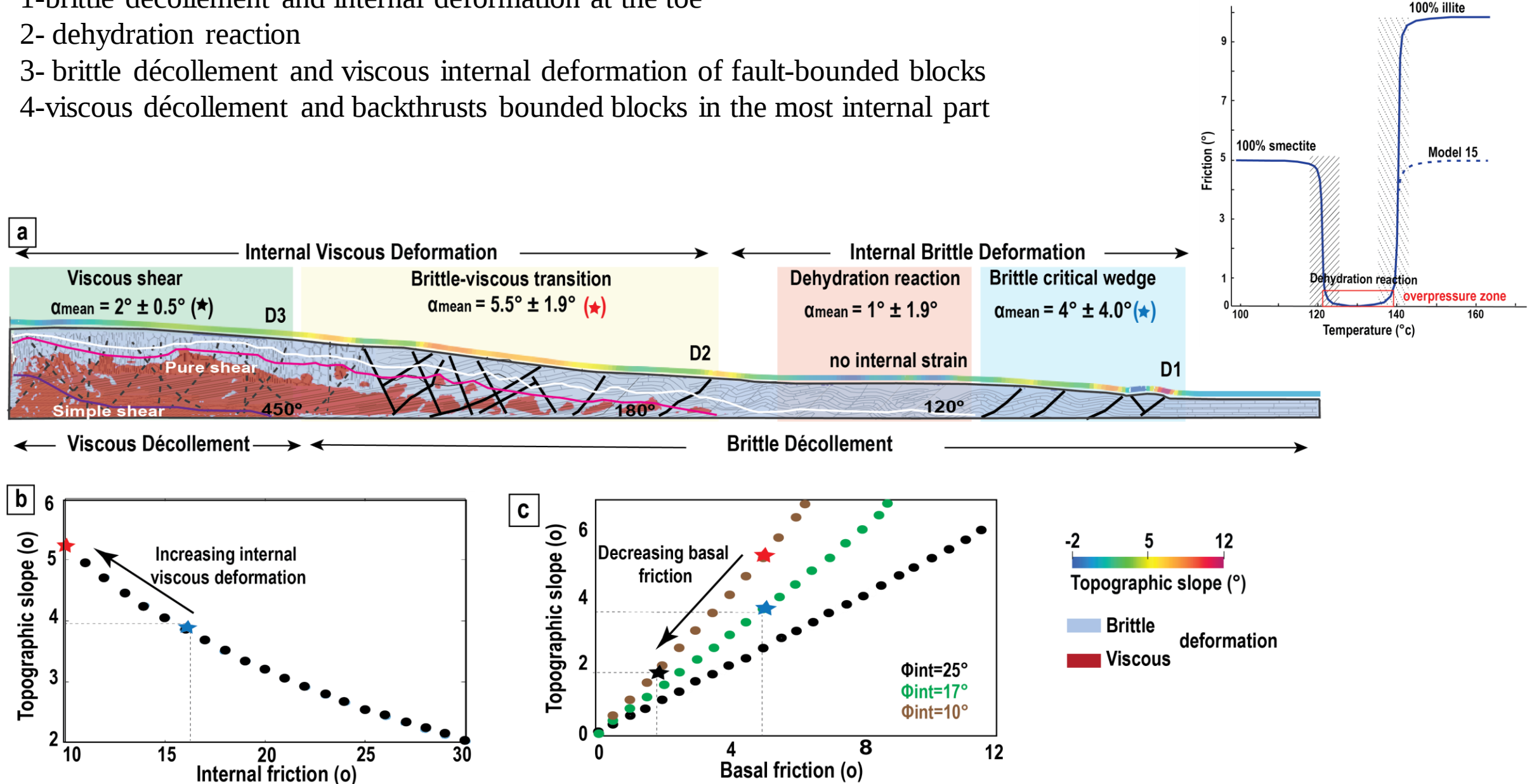


Published by journal of **Solid Earth**, 2022.
<https://se.copernicus.org/articles/13/535/2022/>
doi.org/10.5194/se-13-535-2022

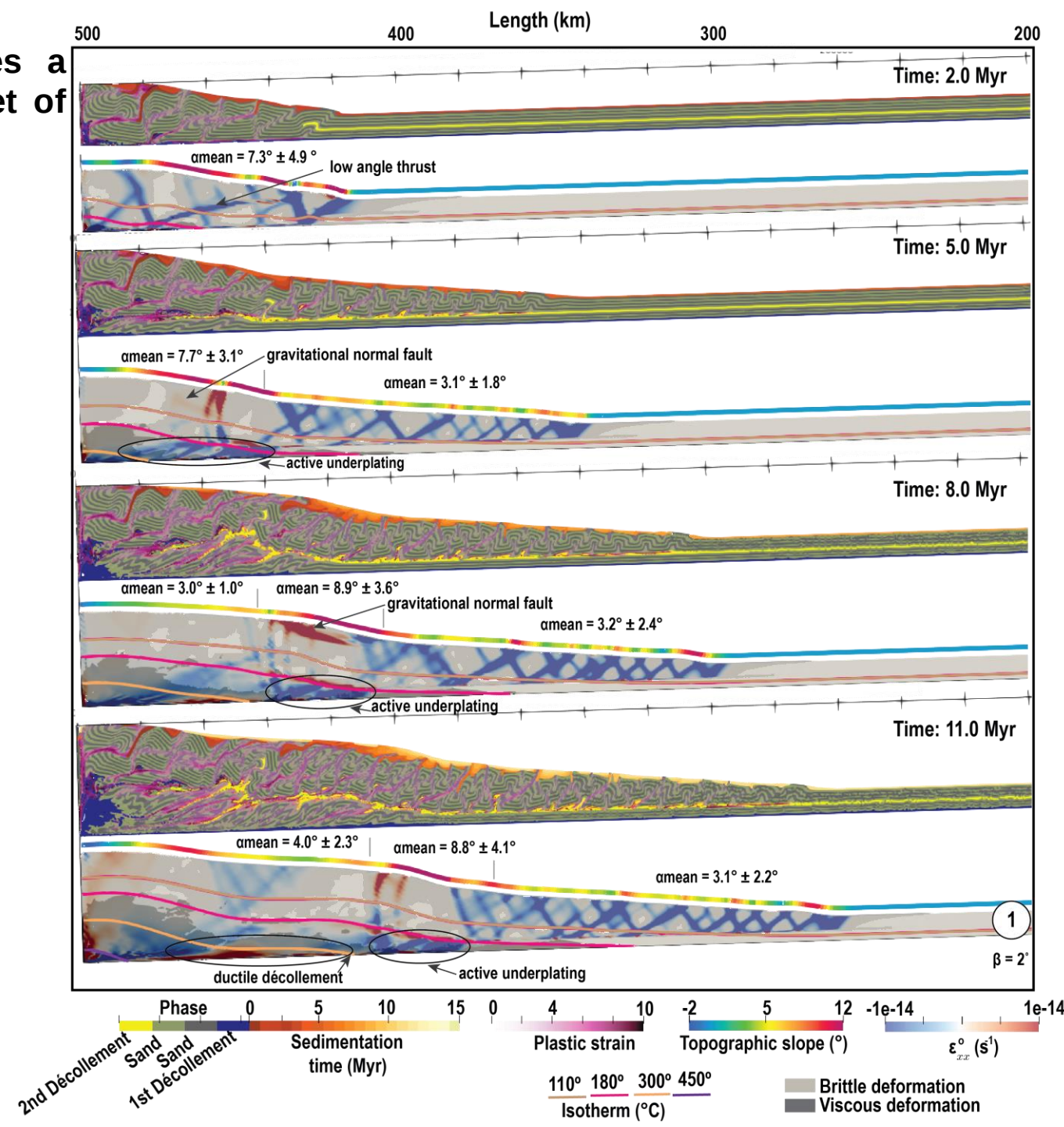
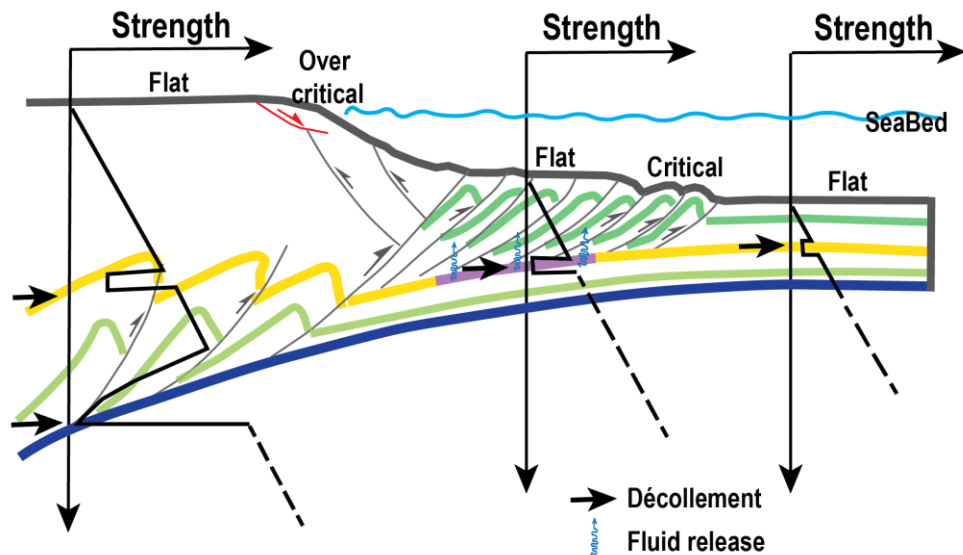
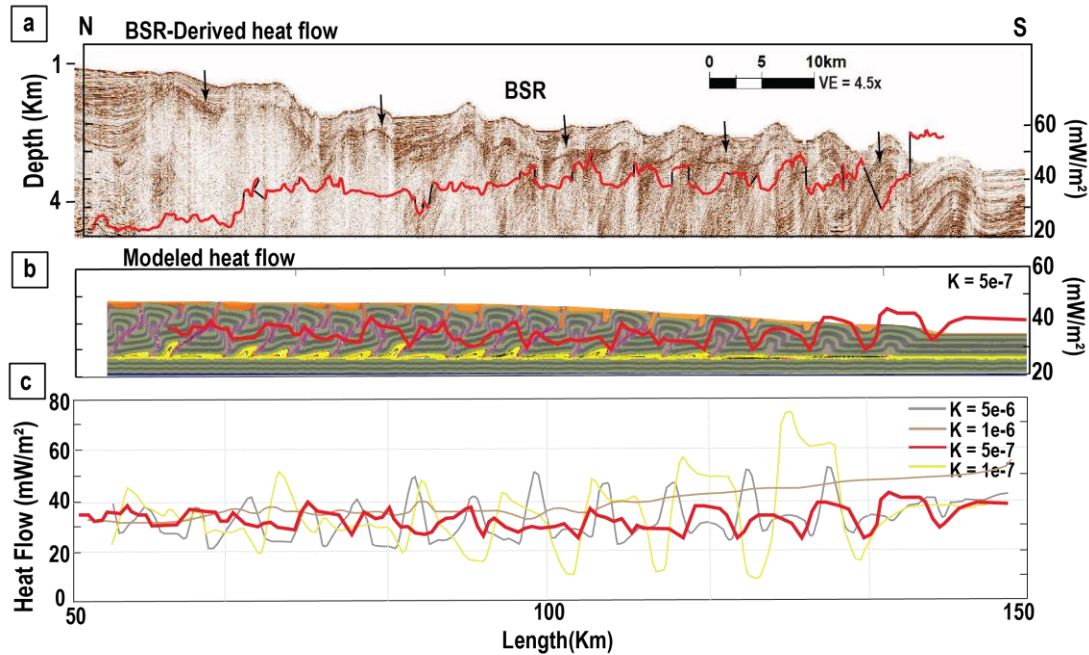
The onset of internal ductile deformation causes an increase in slope at constant basal friction

- 1- brittle décollement and internal deformation at the toe
- 2- dehydration reaction
- 3- brittle décollement and viscous internal deformation of fault-bounded blocks
- 4- viscous décollement and backthrusts bounded blocks in the most internal part

• Dehydration reaction

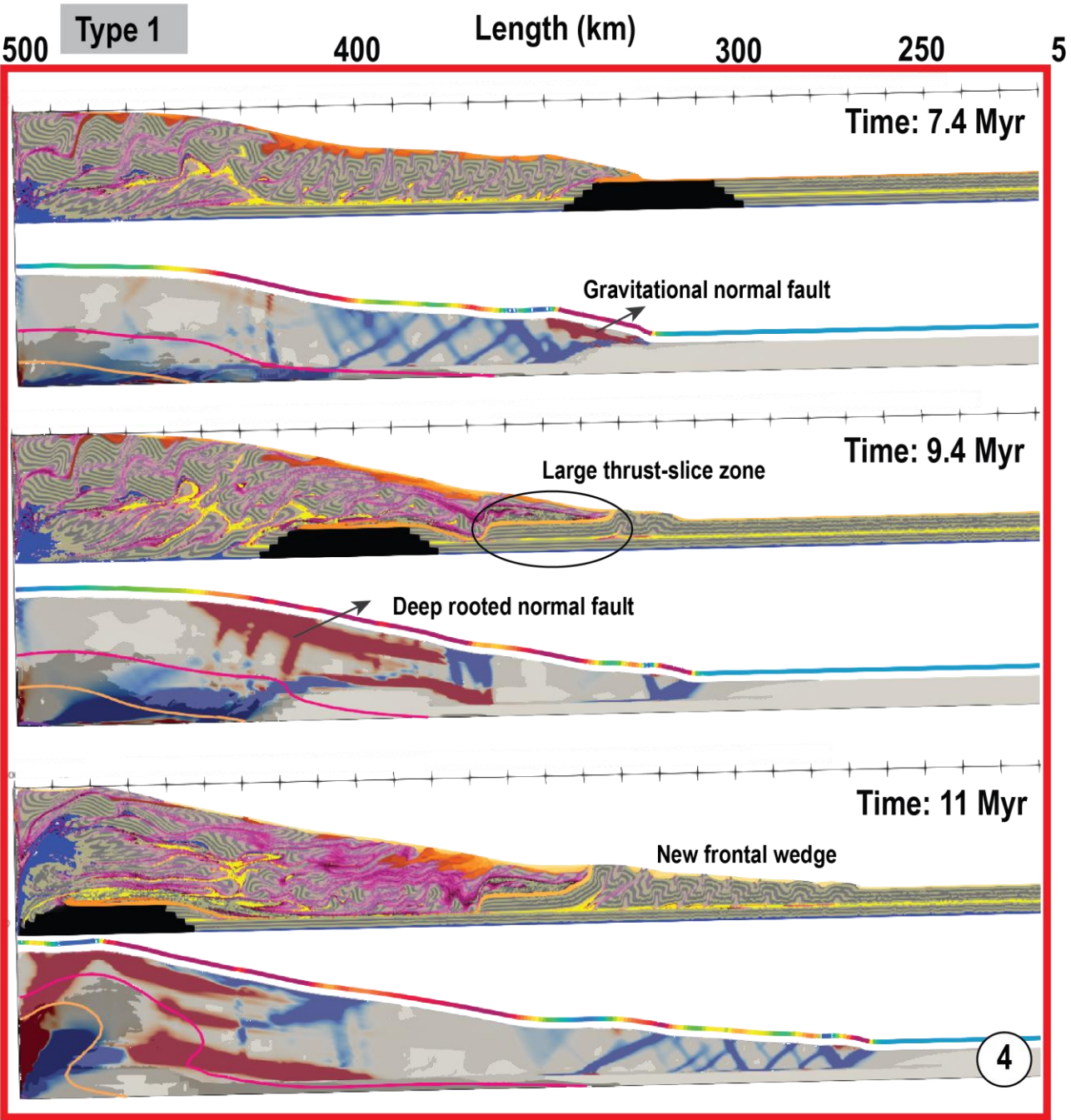
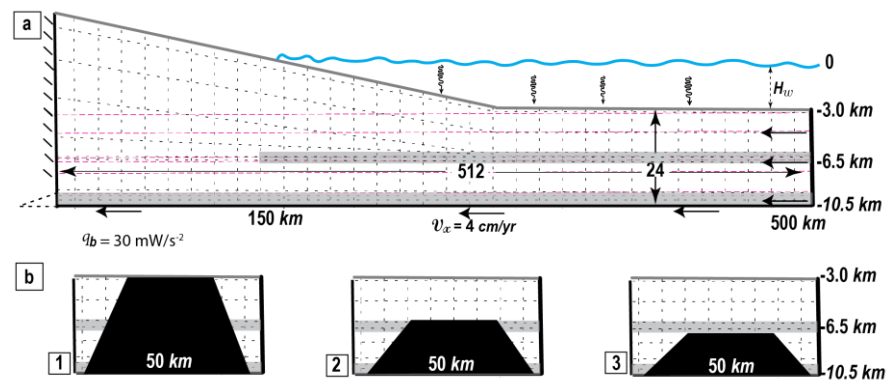


Brittle ductile transition in the tegument introduces a second décollement in the system, marking the onset of underplating and regional uplift



•Seamount subductions

Formation of large normal fault rooted on the décollement
Large slices are scars of past seamount subduction



•Proposed two crustal cross-sections across coastal Makran

