



Fig. SM1: Interpreted pictures, principal stretches λ_{\max} , λ_{\min} ($\lambda = 1$ represents no length change) and strain type after 4% of along-y shortening for brittle models BI10, BI09, BI05, BI06, and BI07: shortening (red), strike-slip (green) and stretching (blue), with intermediate, oblique deformation at intermediate colors. The corresponding amount of along-x stretching is indicated at the top.