



**Figure DR1.** Graph summarizing the results of experimental series 1, and showing the variation in asymmetry, width, subsidence of the rift and number of faults accommodating deformation as a function of the craton-belt strength contrast (illustrated as resistance of the belt with respect to the craton, in percentage). Asymmetry is calculated percentage of vertical throw accommodated by faults on the craton side of the rift, with respect to the total throw of boundary faults on both sides; i.e.,  $\text{Asymmetry} = [\text{mean vertical throw on the craton side} / (\text{mean vertical throw on the craton side} + \text{mean vertical throw on the belt side})] \times 100$ . The rift width and the number faults are calculated as mean values from analysis of both cross-sections and final top-view photos. Subsidence is calculated from both final DEMs and cross-sections.