

Supplementary material for “Non-uniform distribution of myosin-mediated forces governs red blood cell membrane curvature through tension modulation”

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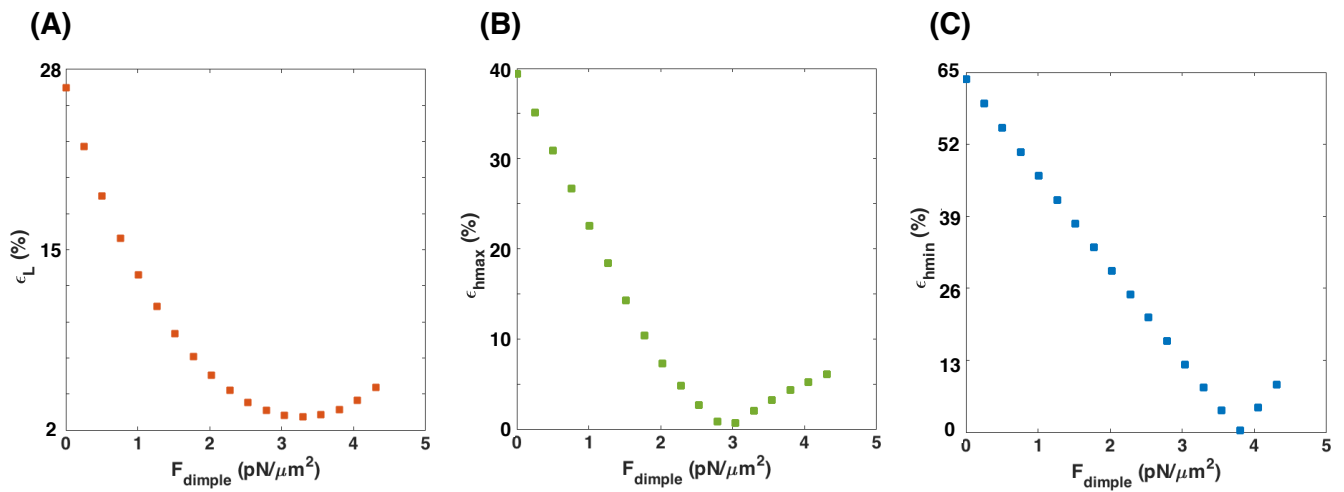


Figure S1: The error in the characteristic lengths is a nonlinear function of dimple force density (F_{dimple}). (A) Calculated error in the maximum length of the simulated RBC (ϵ_L) as a function of F_{dimple} . (B) Calculated error in the maximum height of the rim of the simulated RBC (ϵ_{hmax}) as a function of F_{dimple} . (C) Calculated error in the minimum height of the dimple of the simulated RBC (ϵ_{hmin}) as a function of F_{dimple} . In all three graphs, with increasing F_{dimple} from zero, initially the error decreases about an order of magnitude and attains a relative minimum. Any further increase in F_{dimple} toward the large dimple force density ($F_{\text{dimple}} > 4\text{pN}/\mu\text{m}^2$) leads to a larger error in all characteristic lengths.