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