Erratum: Influence of the Surface Viscosity on the Breakup of a Surfactant-Laden Drop [Phys. Rev. Lett. 118, 024501 (2017)]

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This Letter considered the effect of low surface shear and dilatational viscosities, leading to superficial Ohnesorge numbers C_1^S and C_2^S of the order $10^{-3} - 10^{-2}$. For this reason, the normal components of the superficial viscous stresses were expected to be much smaller than the surface tension. We forgot mentioning this approximation in the Letter. The balance of normal stresses at the free surface including those components yields

$$-p + Bz + \mathbf{n} \cdot \mathbf{T} \cdot \mathbf{n} = [\hat{\sigma} + (C_2^S - C_1^S) \nabla^S \cdot \mathbf{v}^S] \kappa + 2C_1^S [\kappa_1 (\nabla^S \mathbf{v}^S)_{11} + \kappa_2 (\nabla^S \mathbf{v}^S)_{22}], \quad (1)$$

where κ_1 and κ_2 are the curvatures along the meridians and parallels in the inward normal direction ($\kappa = \kappa_1 + \kappa_2$), respectively, and $(\nabla^S \mathbf{v}^S)_{11}$ and $(\nabla^S \mathbf{v}^S)_{22}$ are the diagonal elements of $\nabla^S \mathbf{v}^S$ along the meridians and the parallels, respectively. If one considers the neglected terms, the variation of the satellite droplet radius and surfactant concentration are around or even lower than 5%, smaller than errors due to the approximations mentioned in the Letter.