

Supporting Information for "The spectrum of slip behaviours of a granular fault gouge analogue governed by rate and state friction."

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Contents of this file

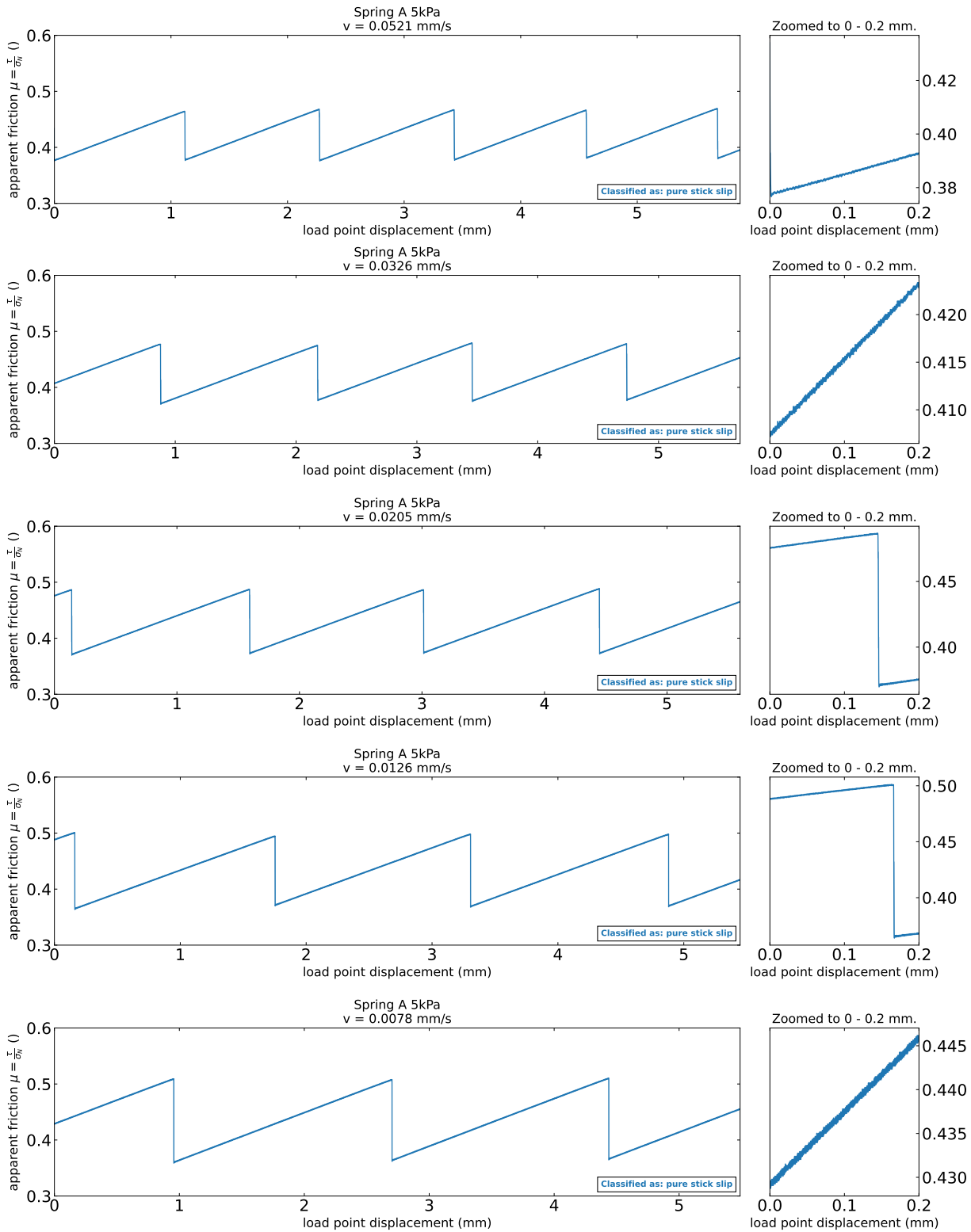
1. Figures for all main experiment series

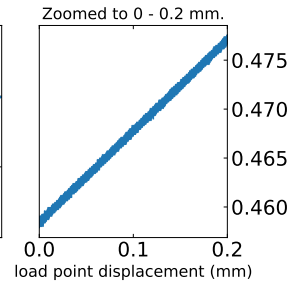
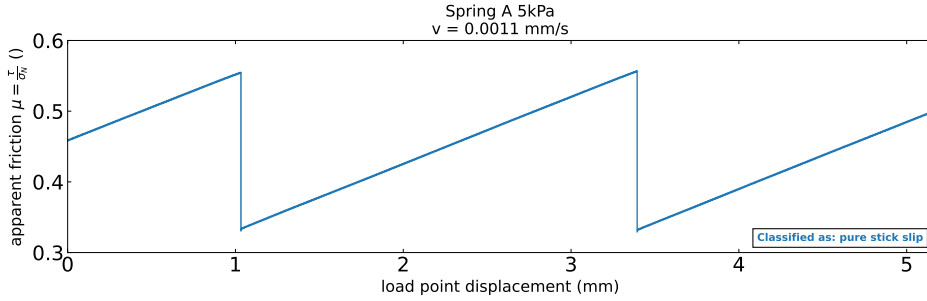
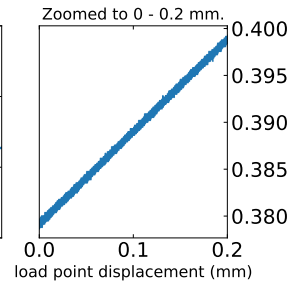
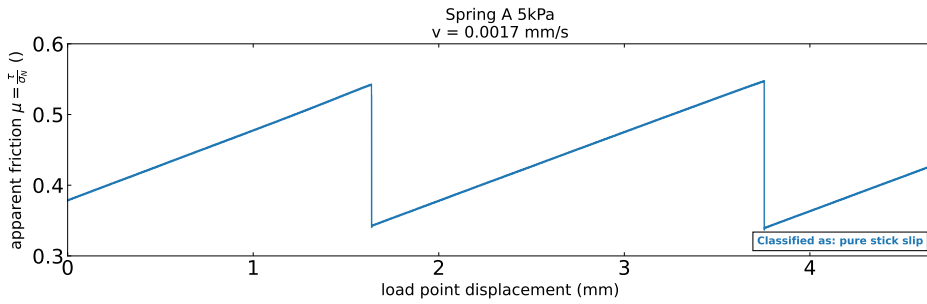
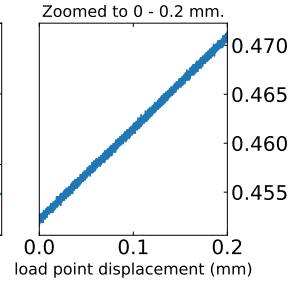
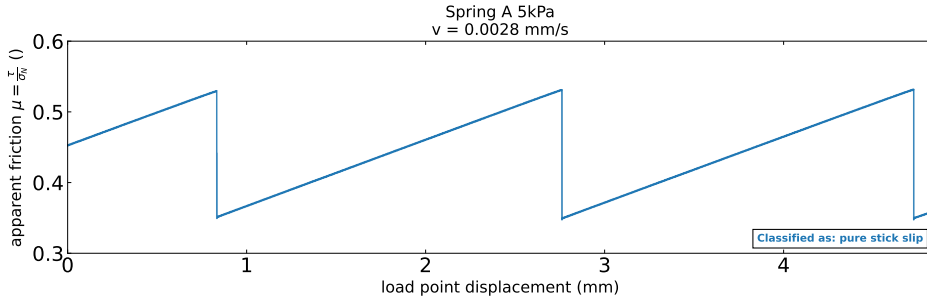
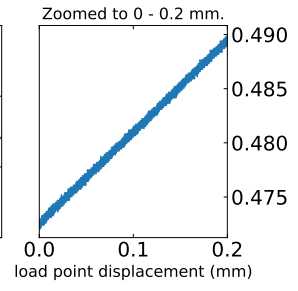
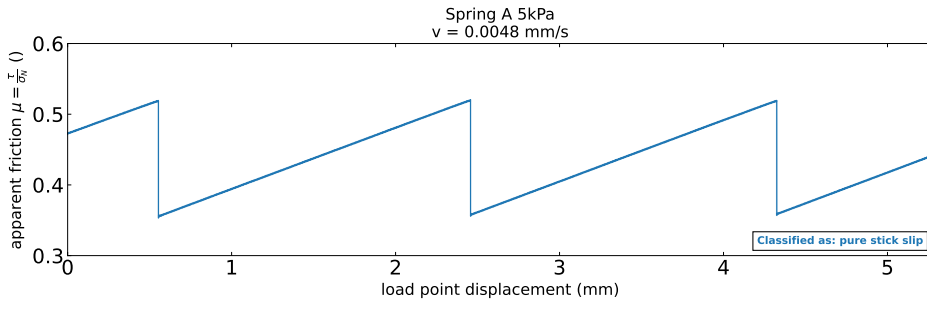
Introduction

The plots shown here are sorted according to the stiffness (Springs A-C and RST), normal stress σ_N and with decreasing loading rate v_L . The total load point displacement in each experiment is roughly the same ($\approx 5mm$). Due to manual control some time series are a bit longer, others a bit shorter. In each plot the shear stress τ is normalized by the normal stress σ_N to give the apparent friction $\mu = \frac{\tau}{\sigma_N}$. The data is not altered otherwise. The raw data and scripts to reproduce these images and all other plots in the main manuscript can be found in (Rudolf et al., in prep; Rudolf, in prep).

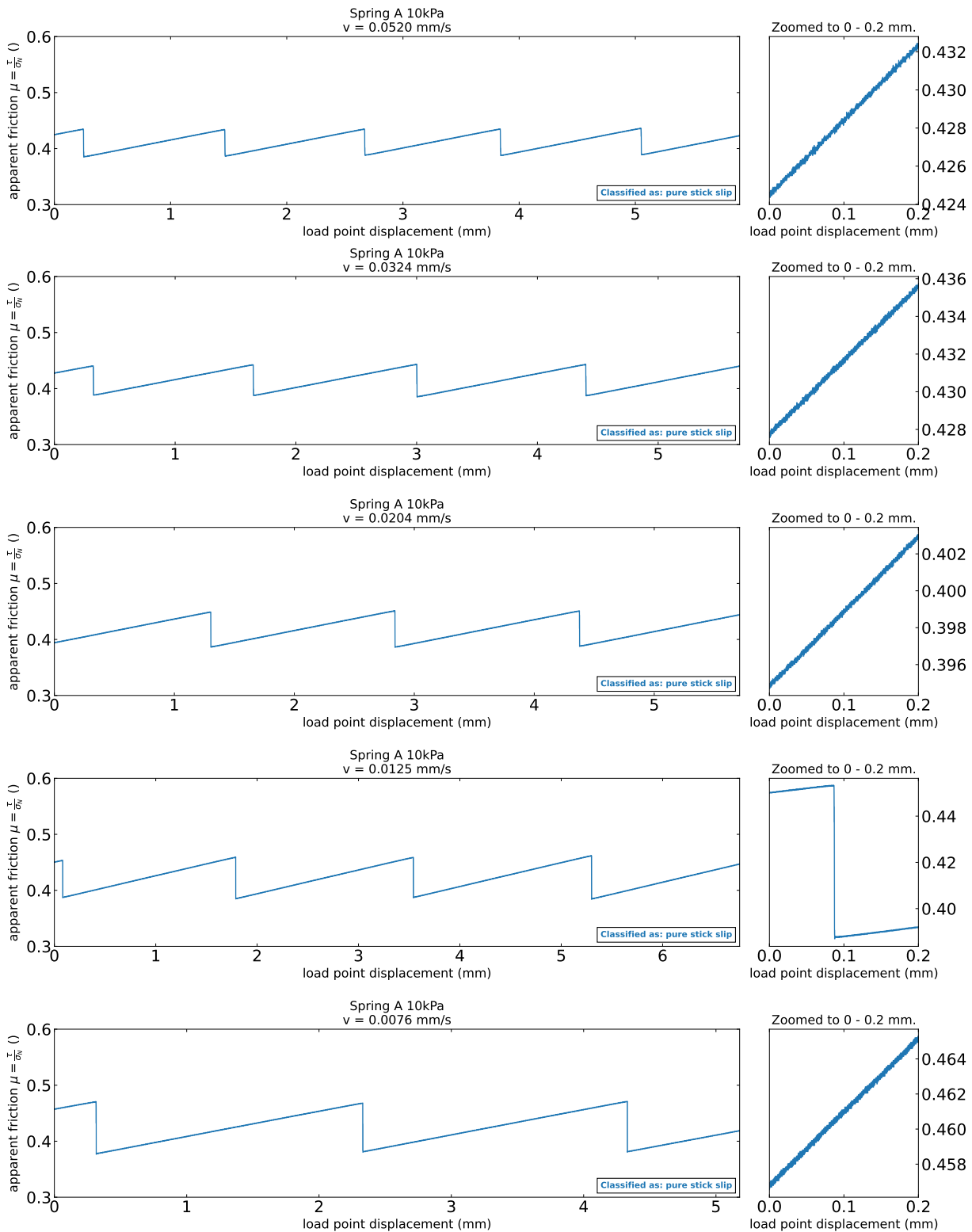
S1 - Plots of all experiments.

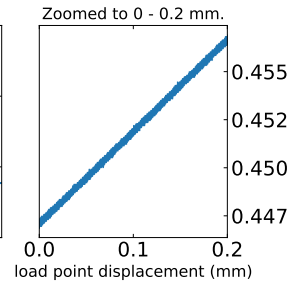
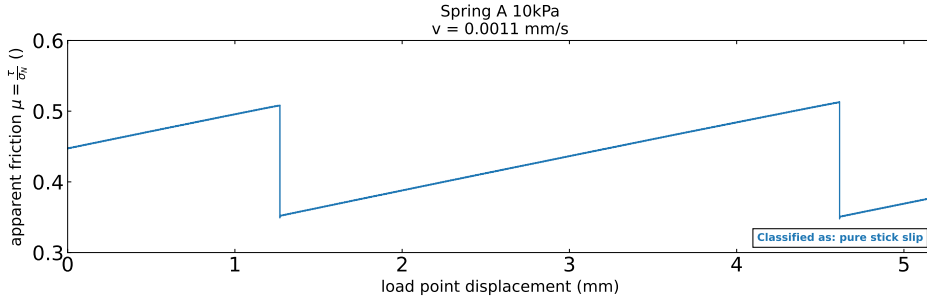
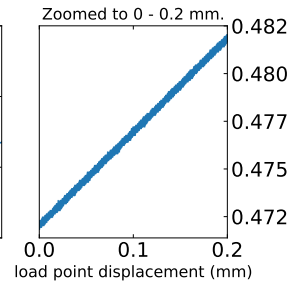
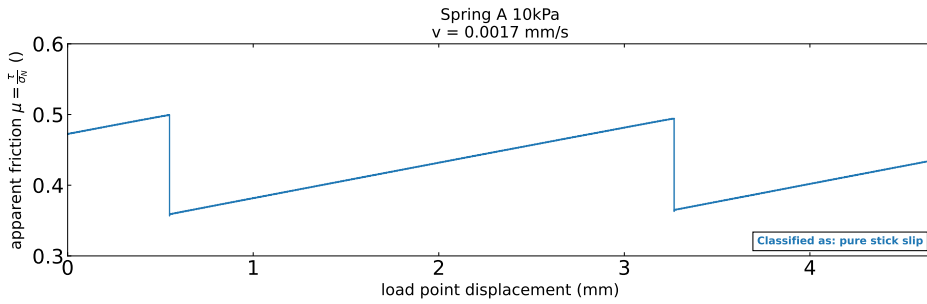
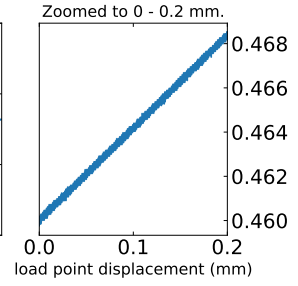
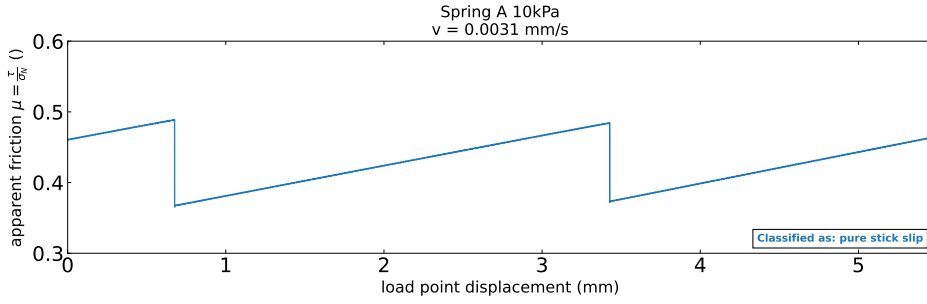
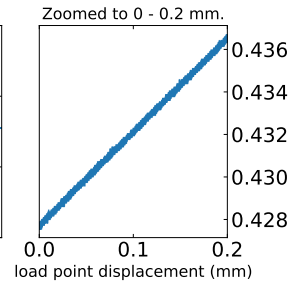
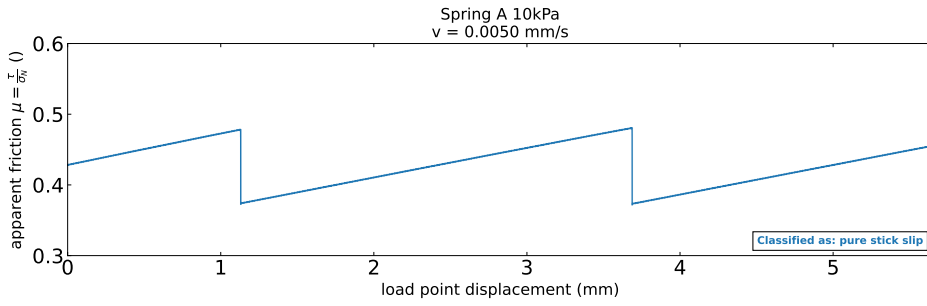
1. Spring A 5kPa



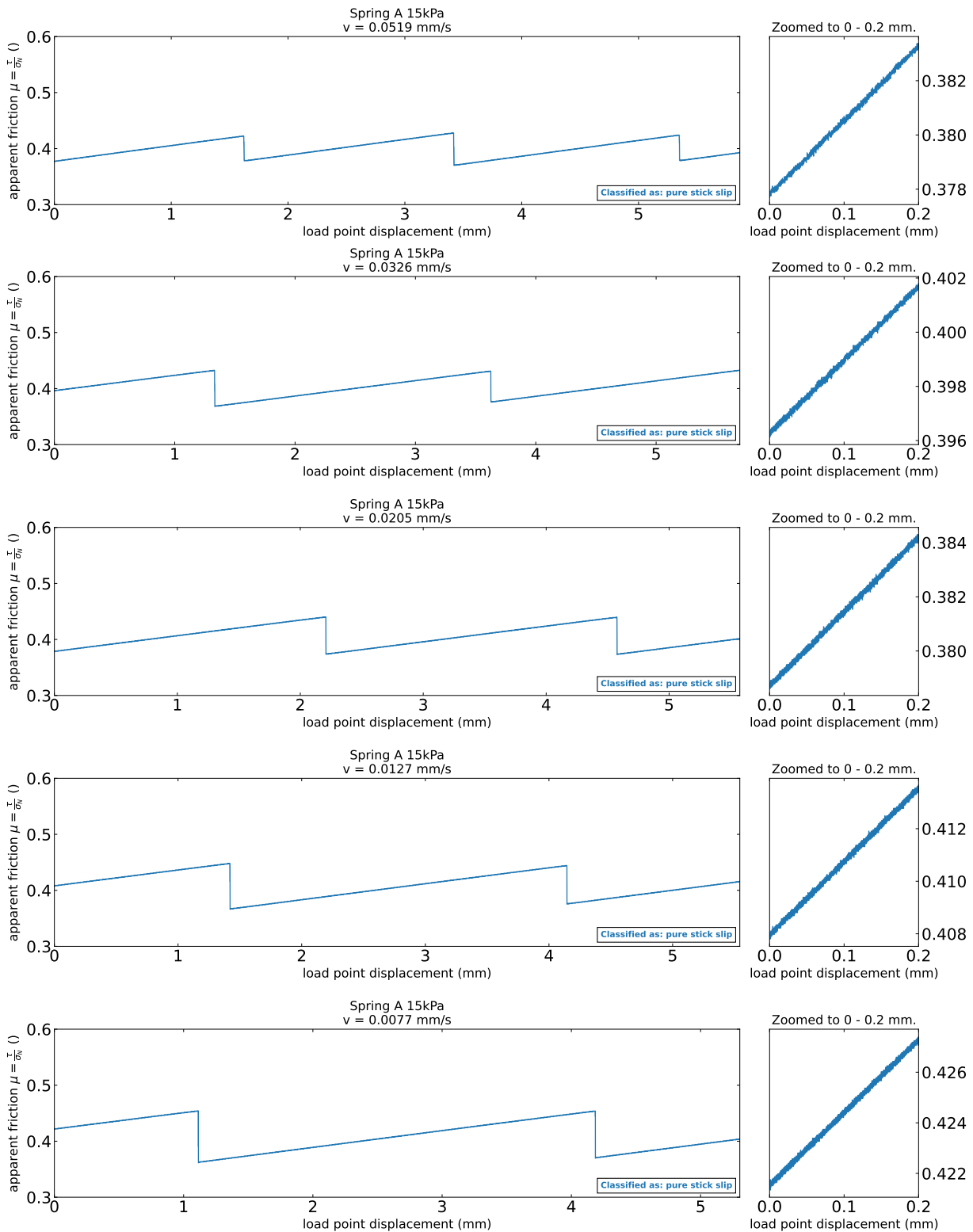


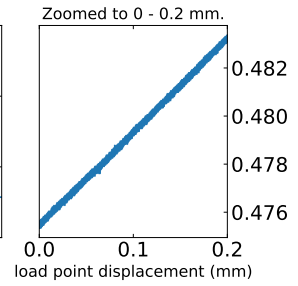
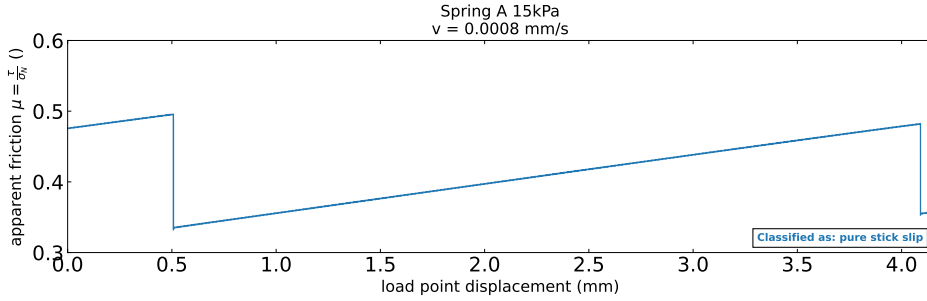
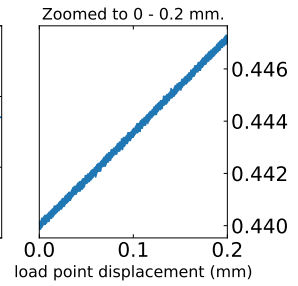
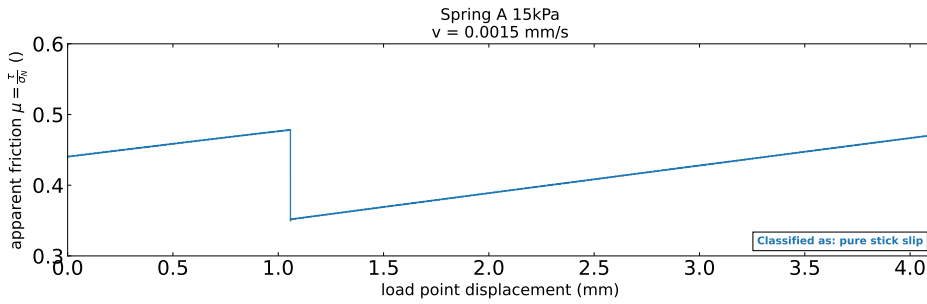
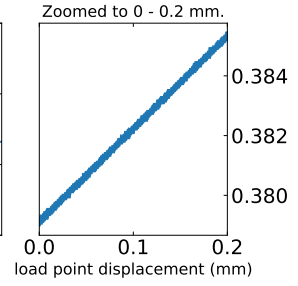
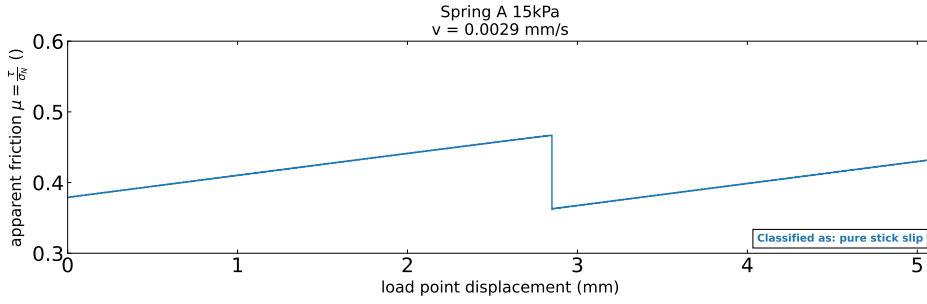
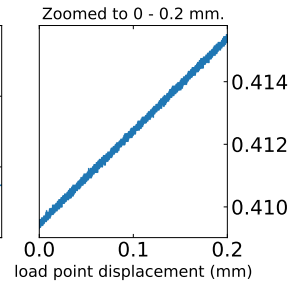
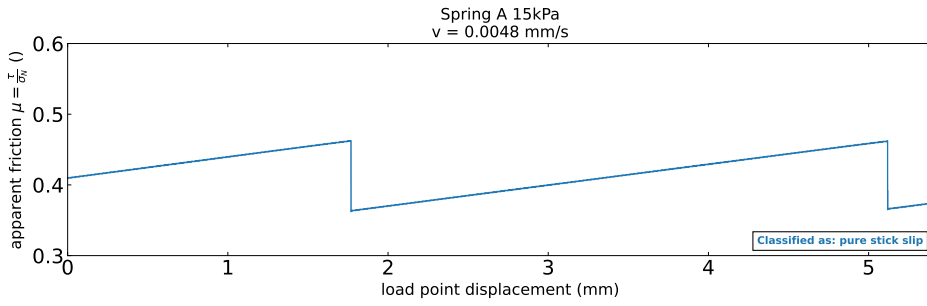
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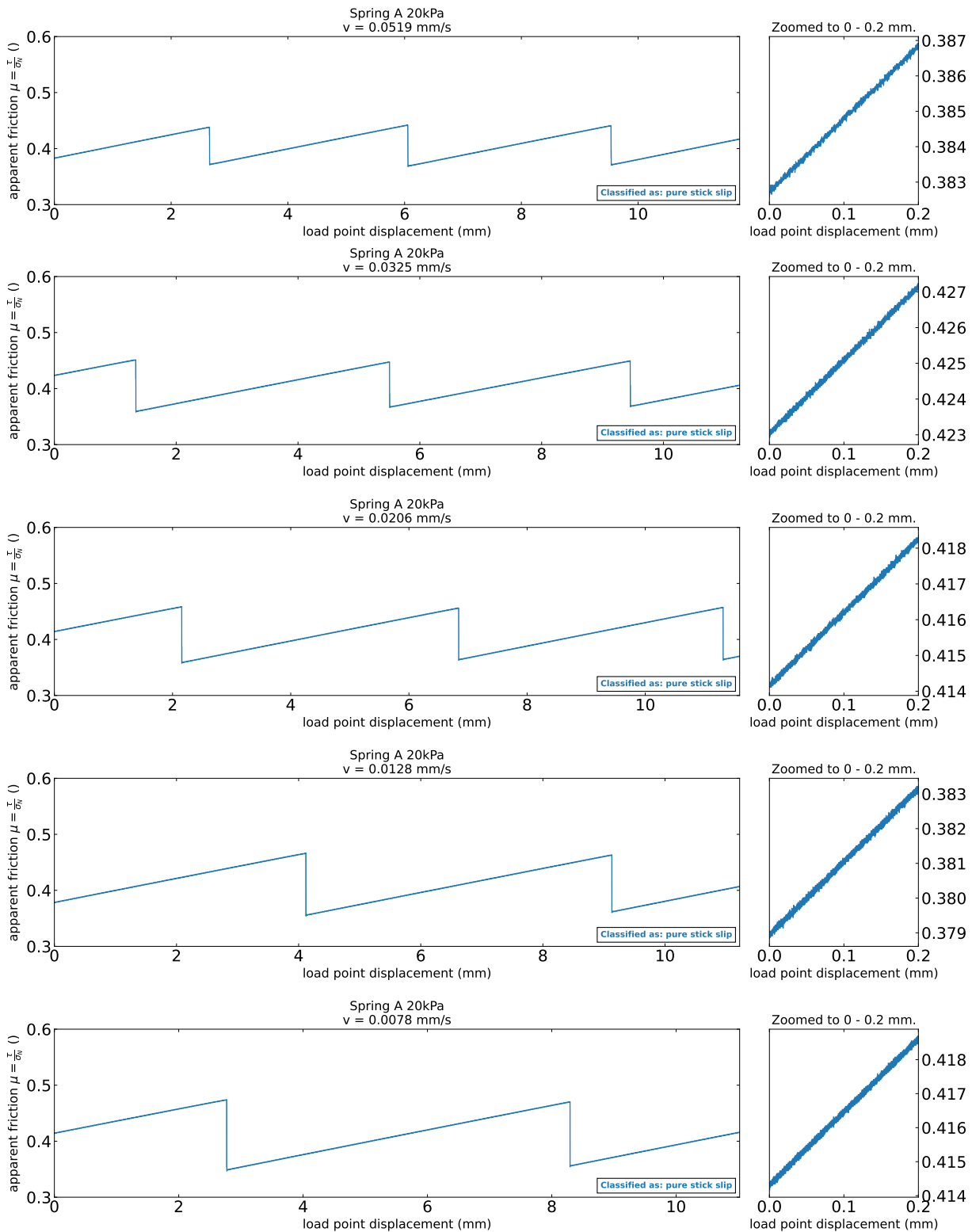


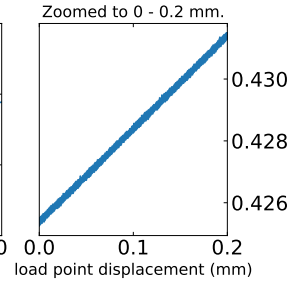
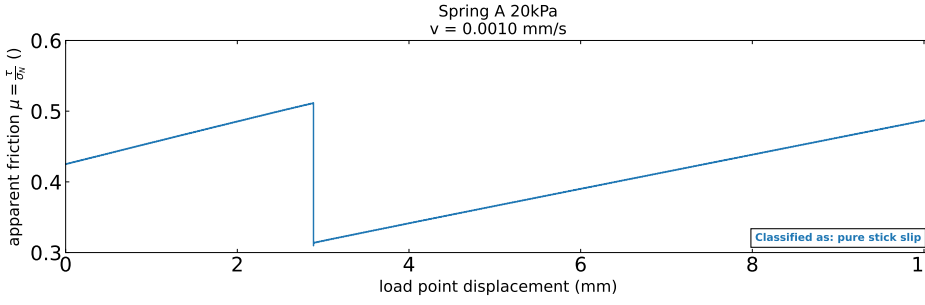
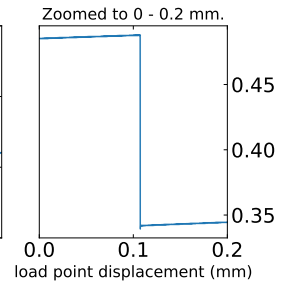
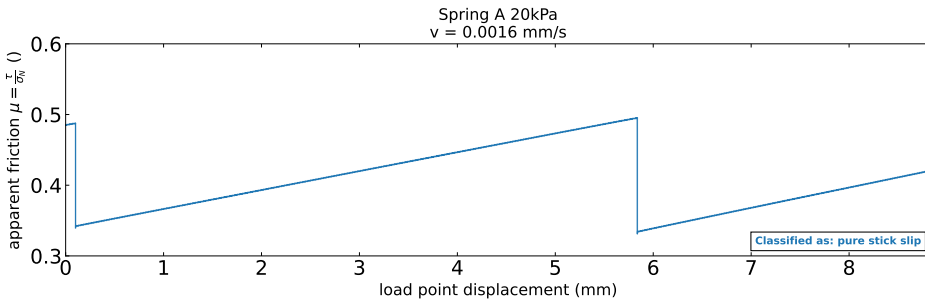
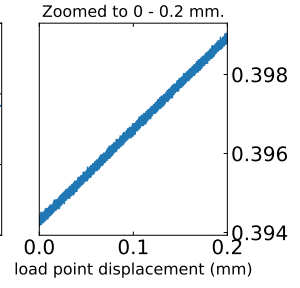
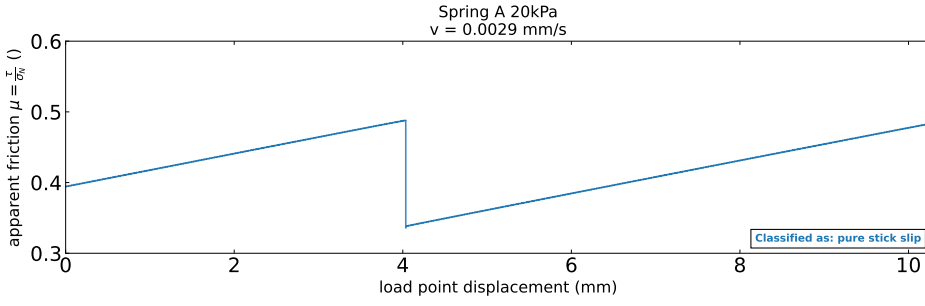
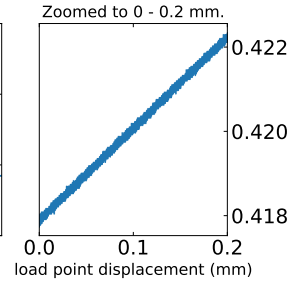
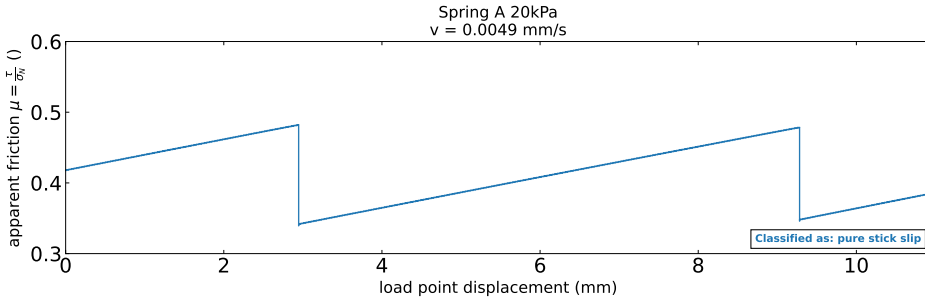
3. Spring A 15kPa



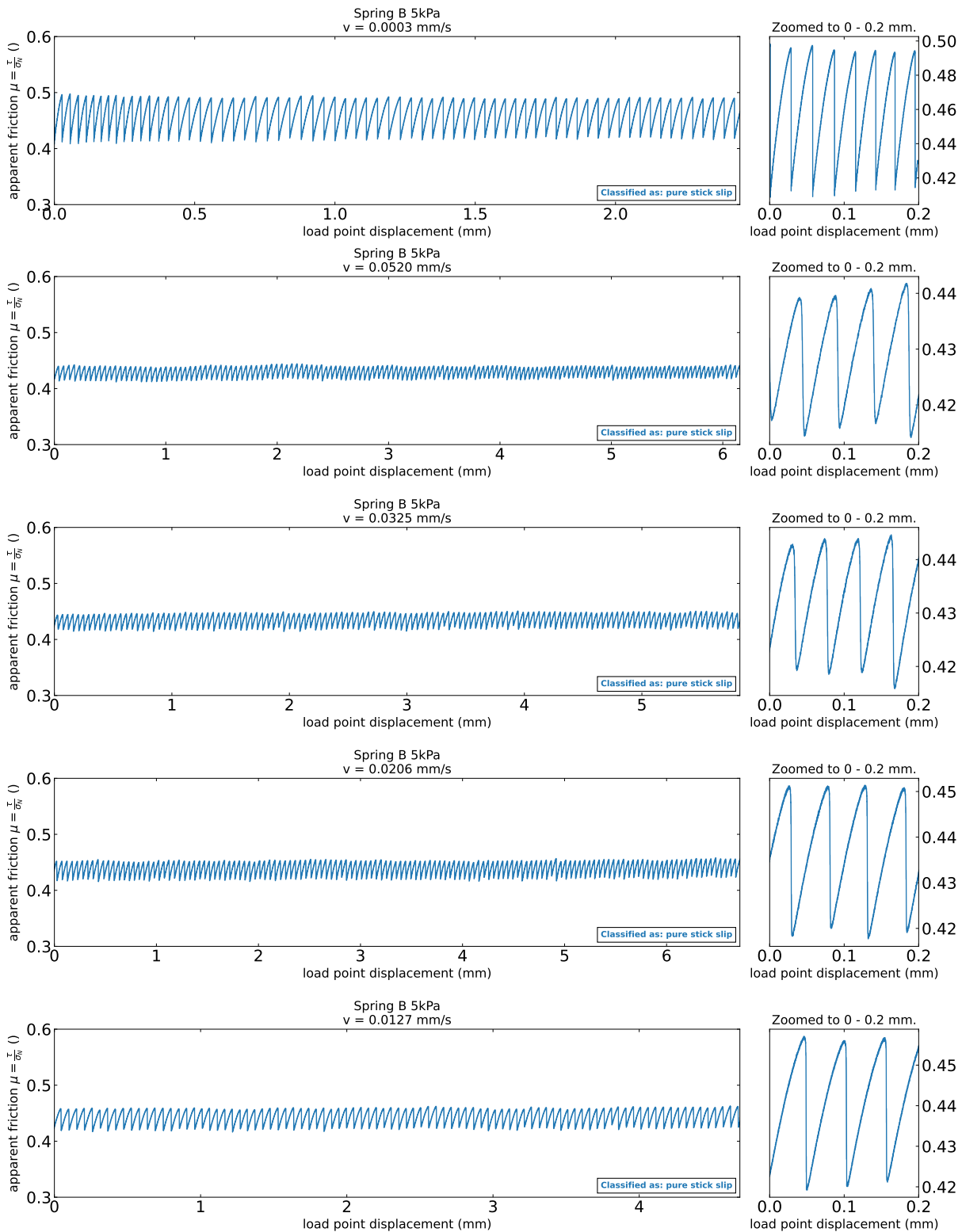


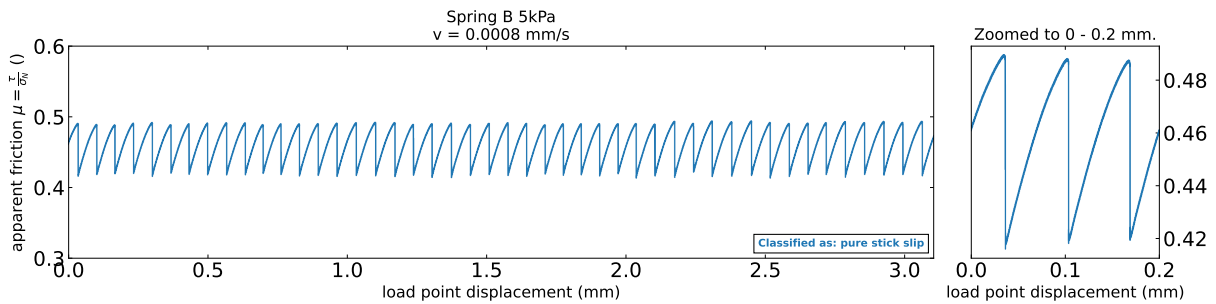
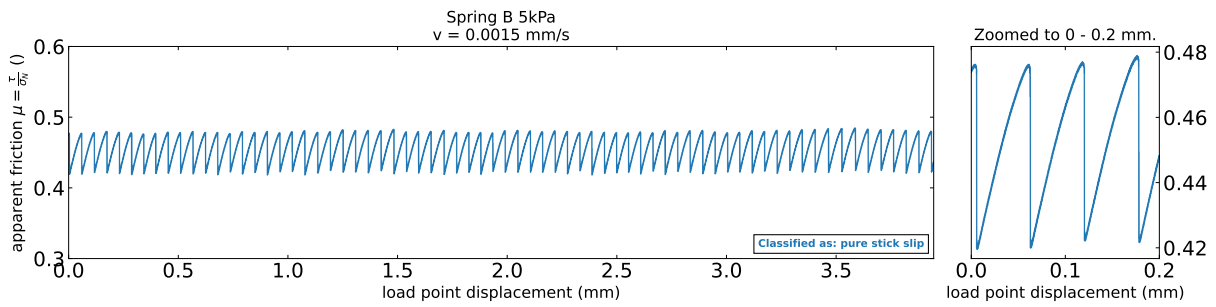
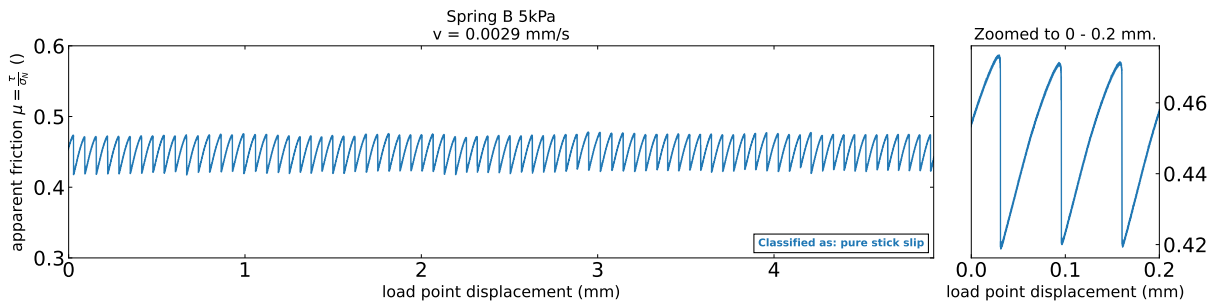
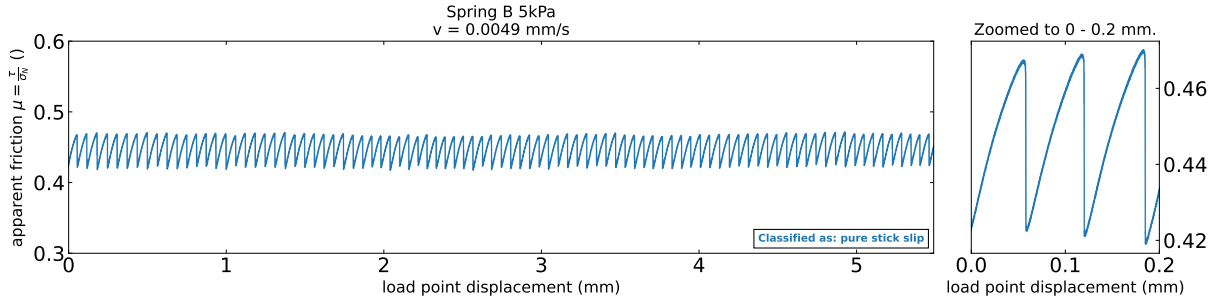
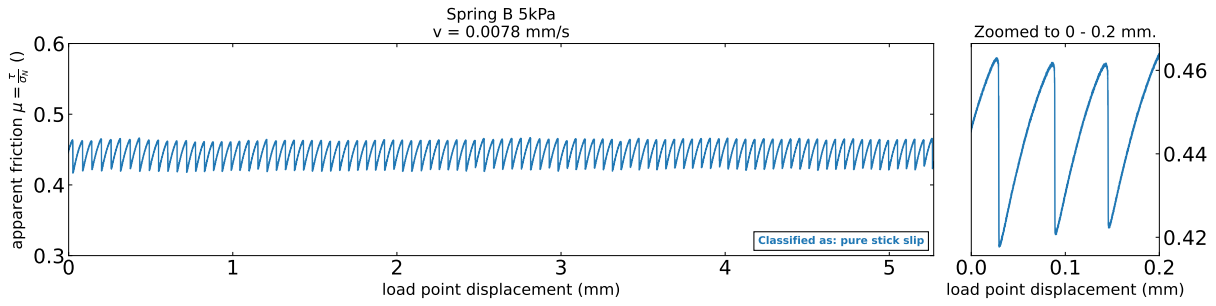
4. Spring A 20kPa



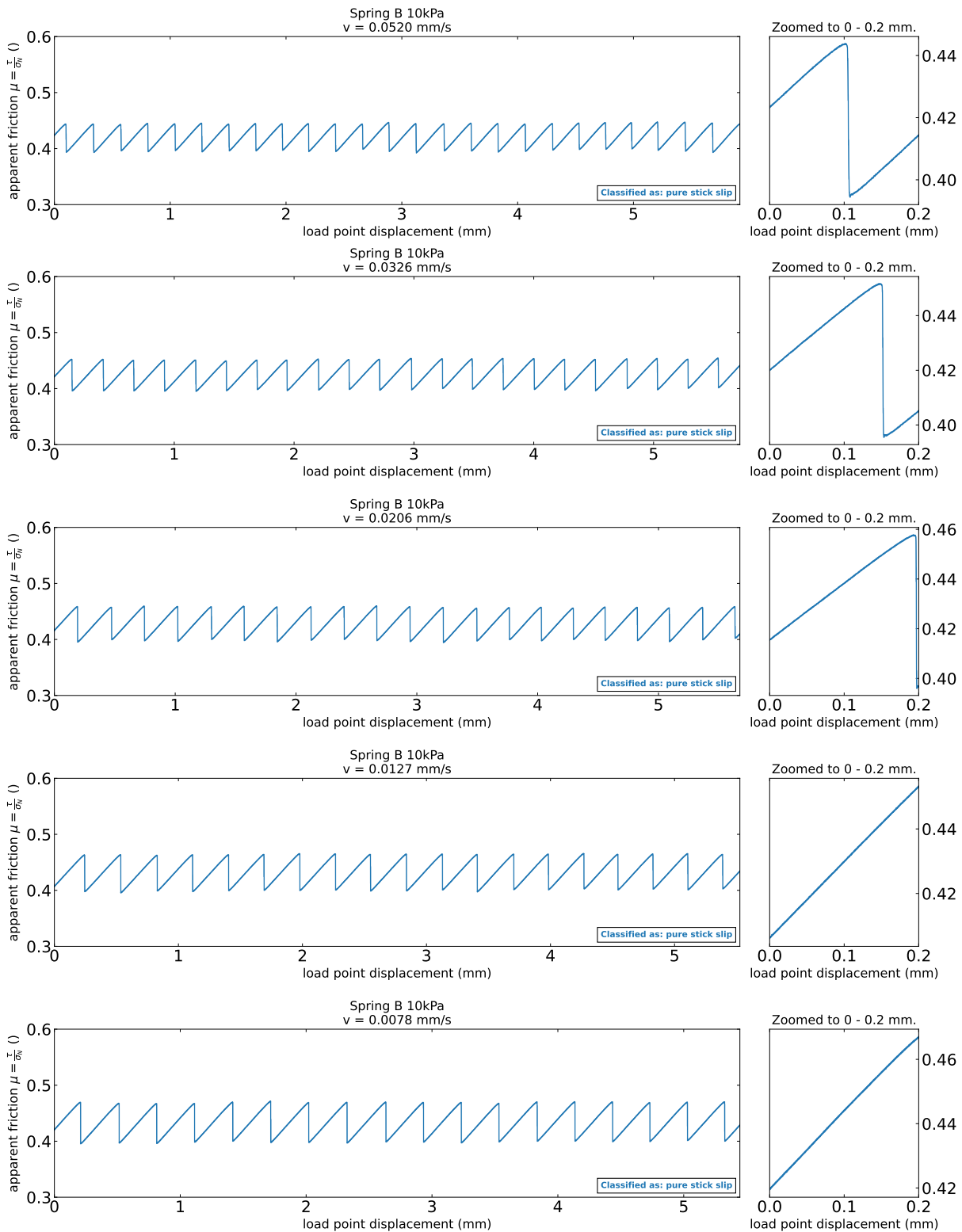


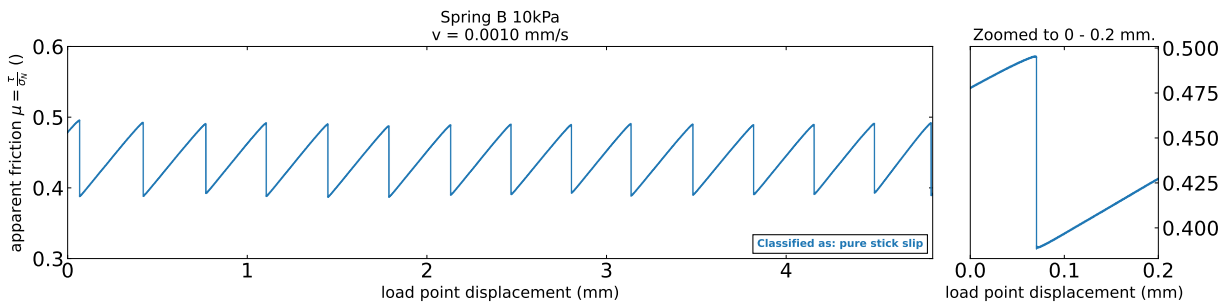
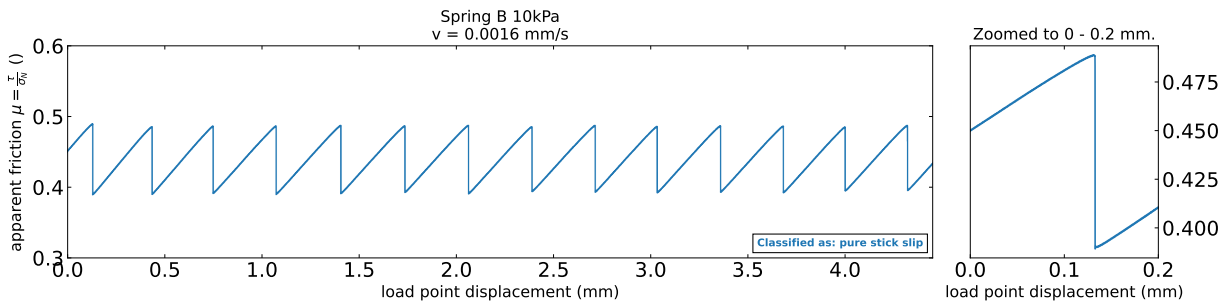
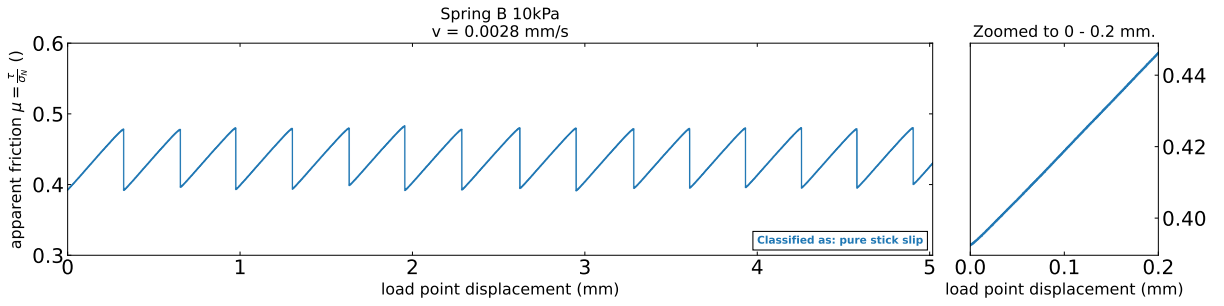
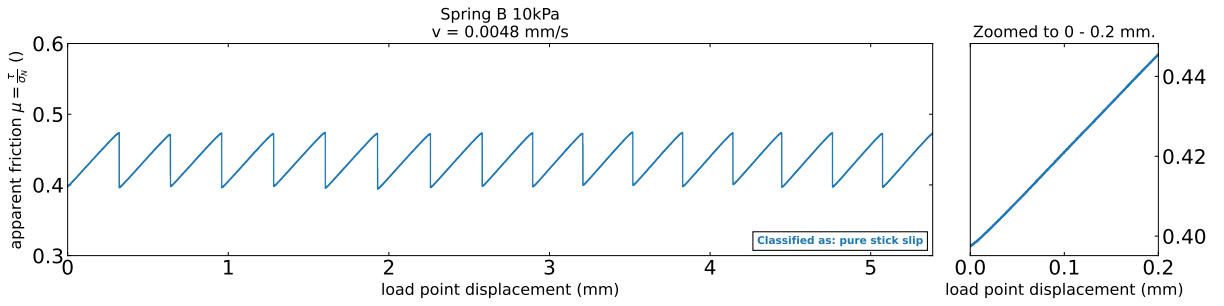
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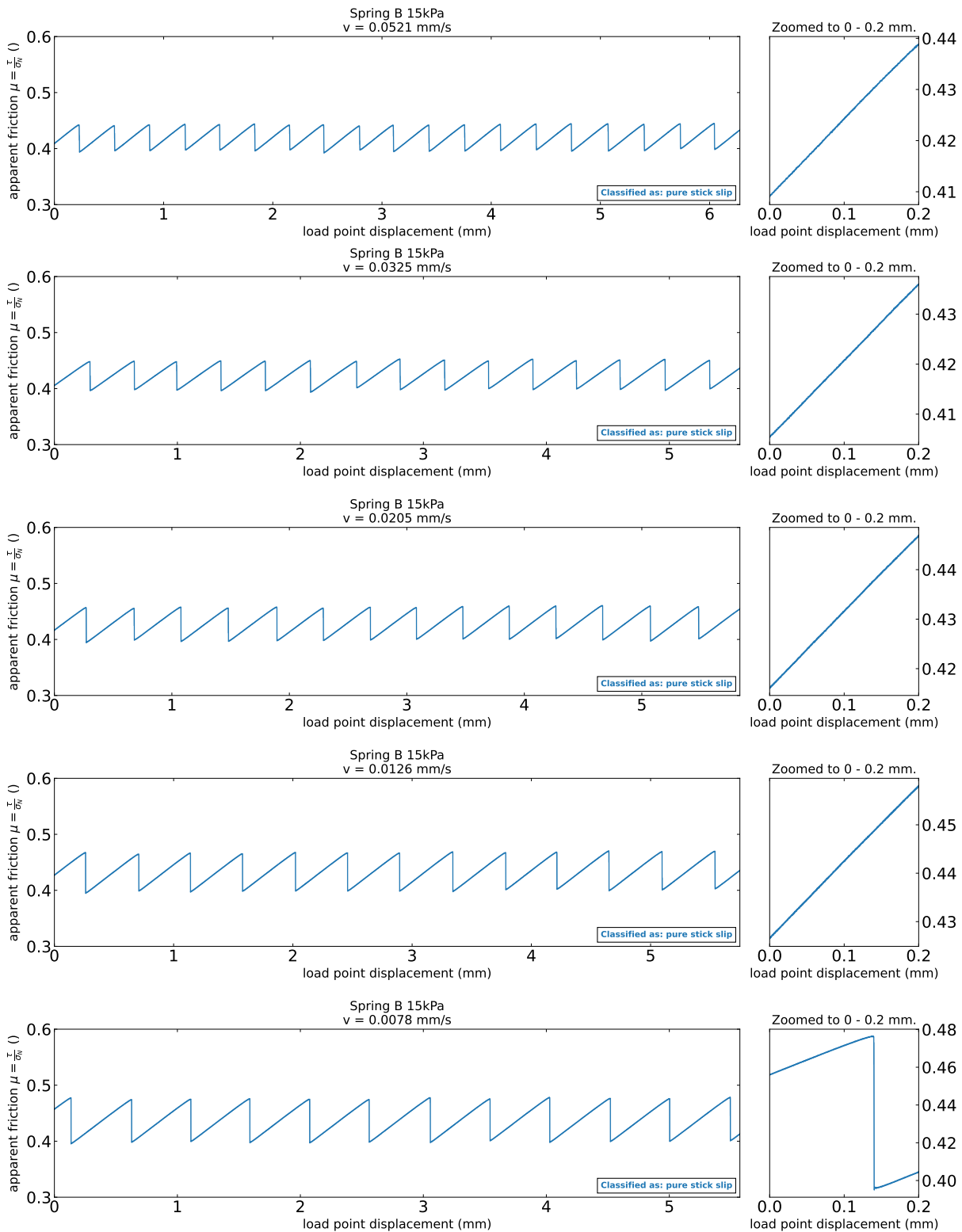


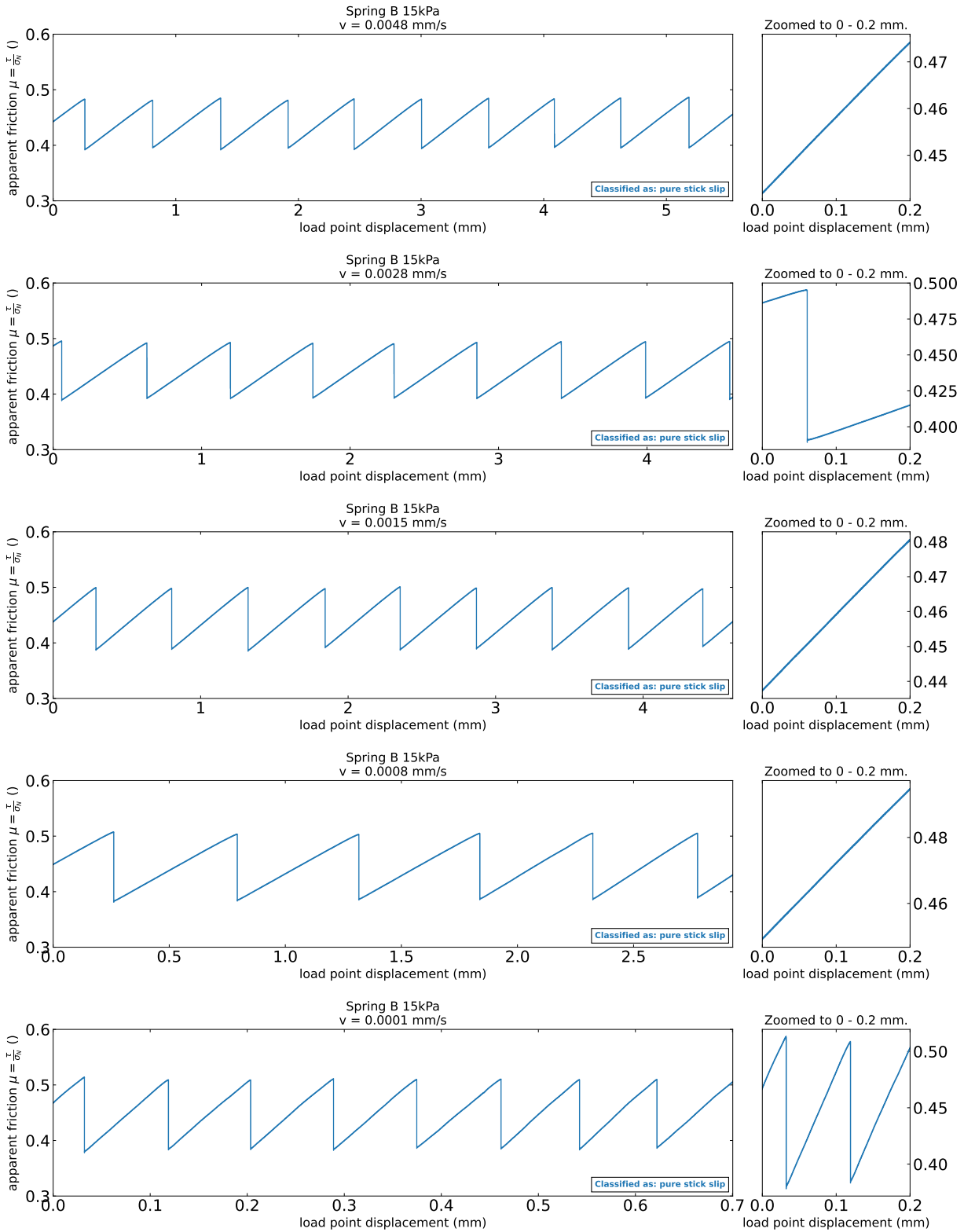
6. Spring B 10kPa



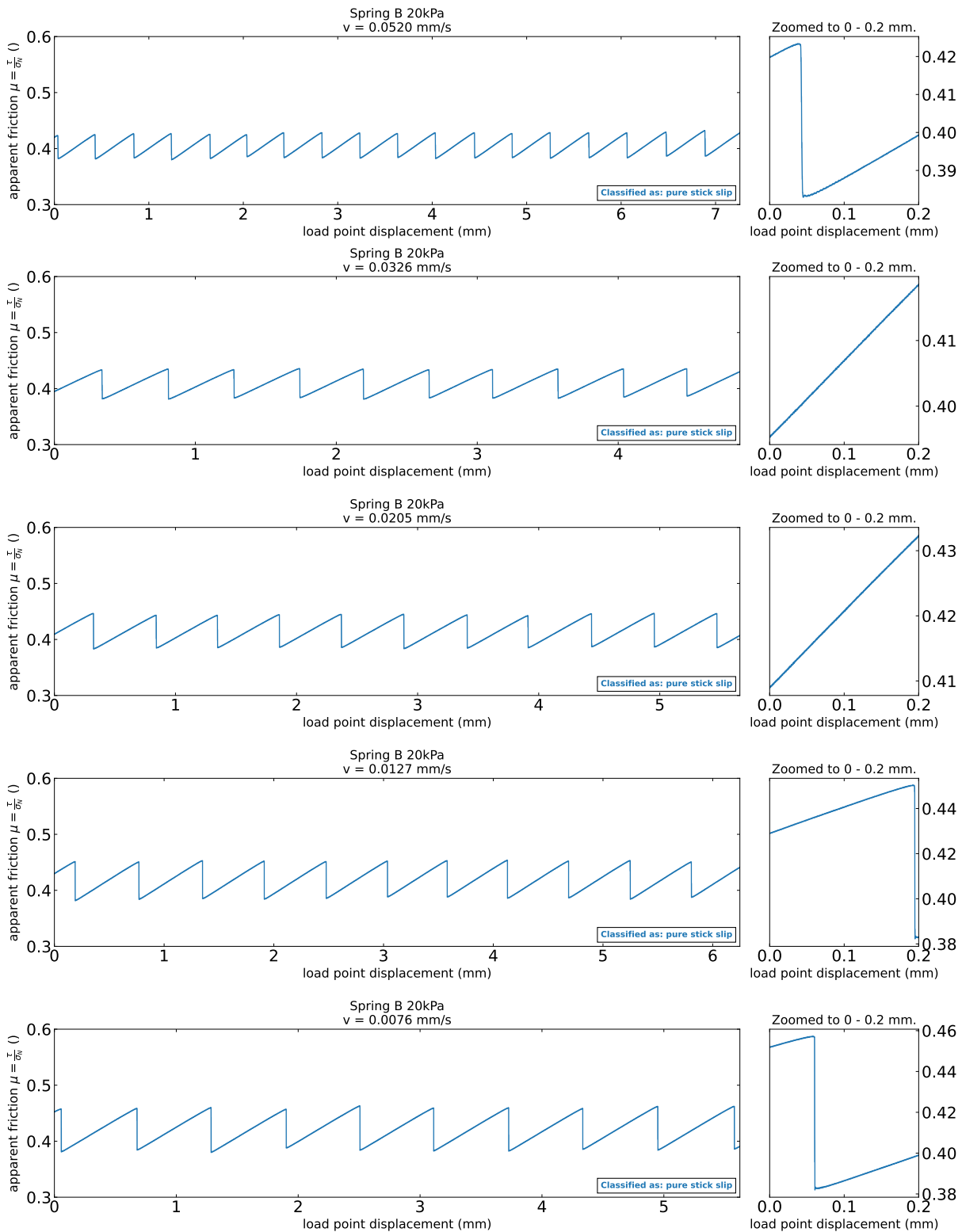


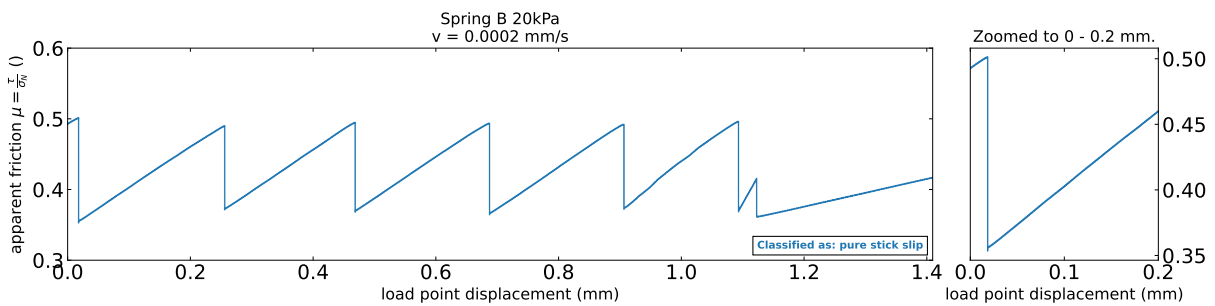
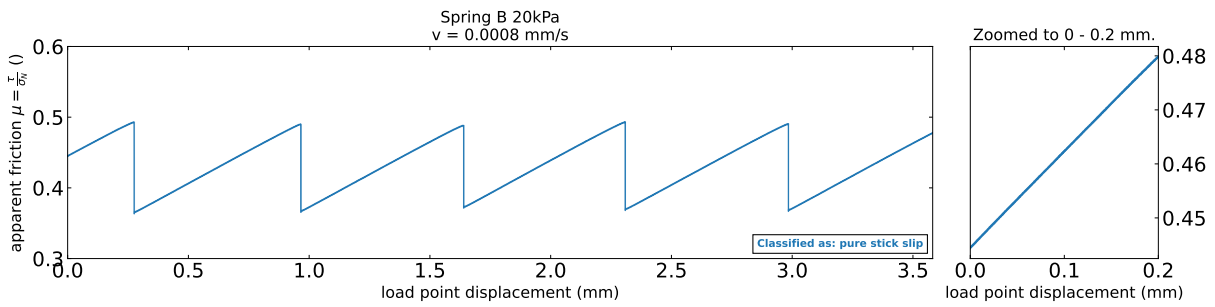
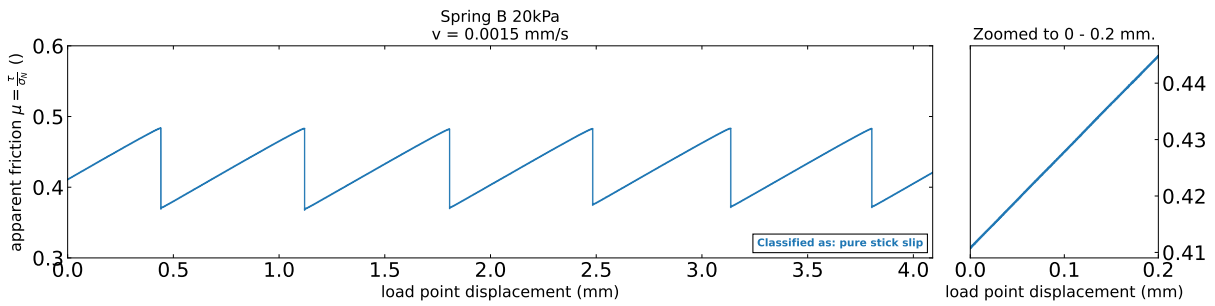
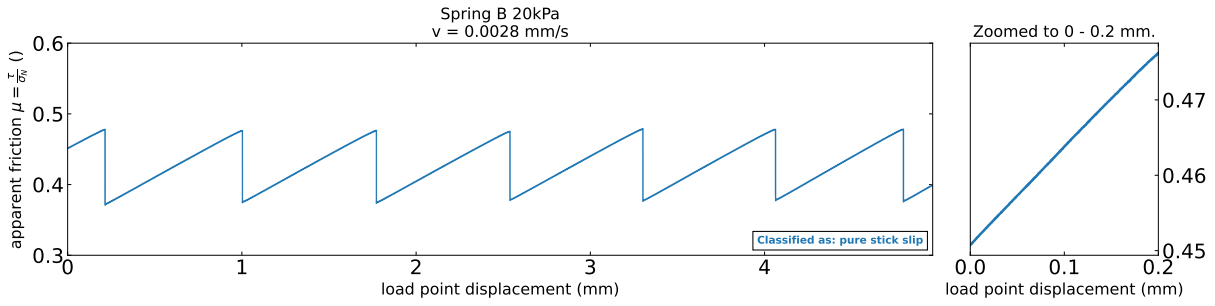
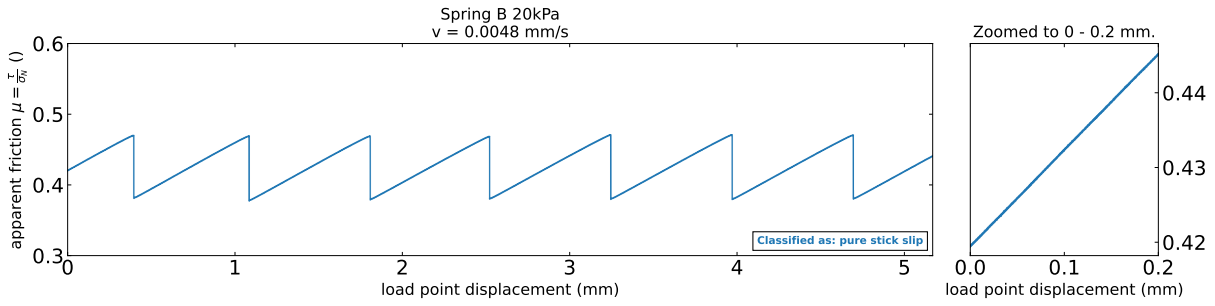
7. Spring B 15kPa



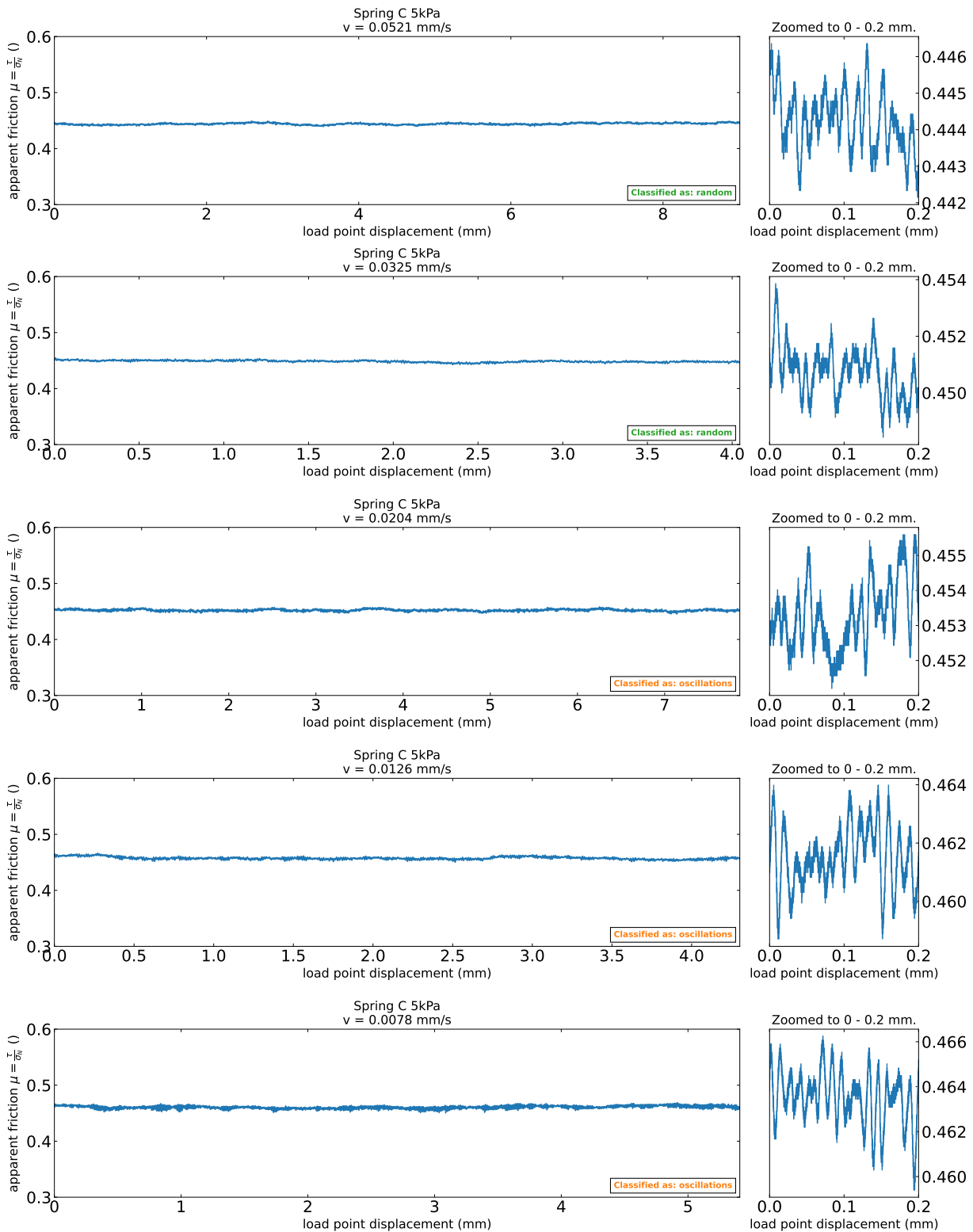


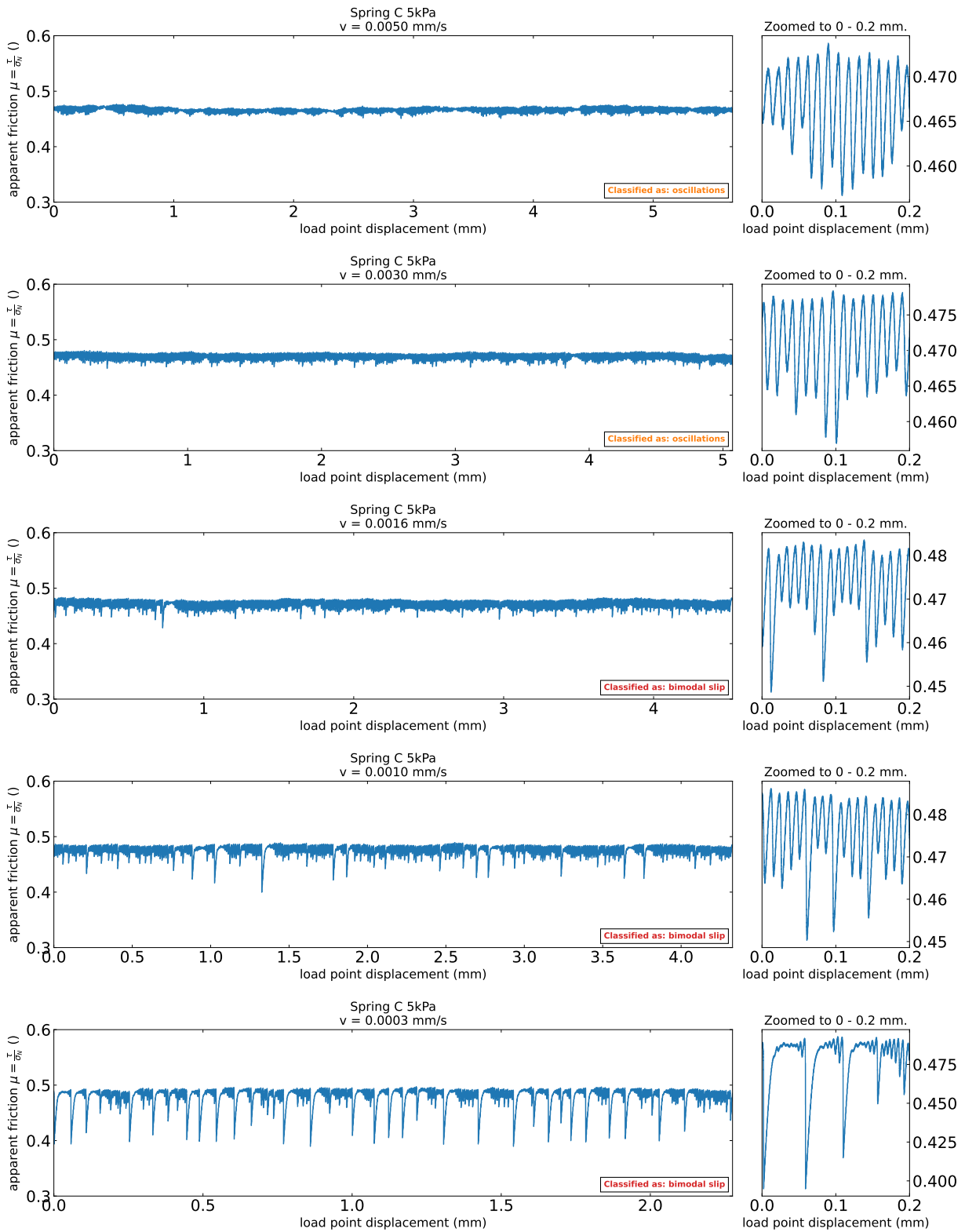
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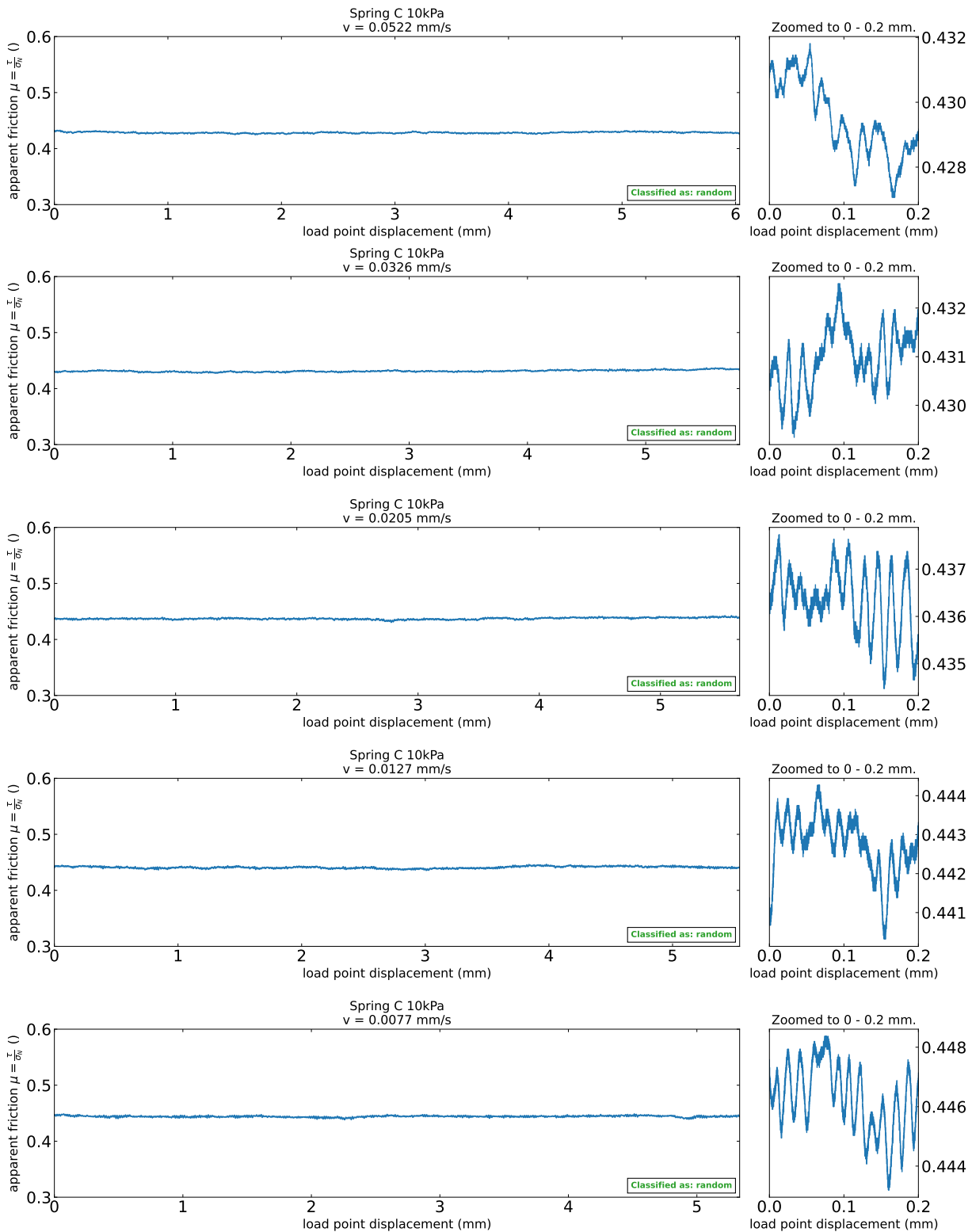


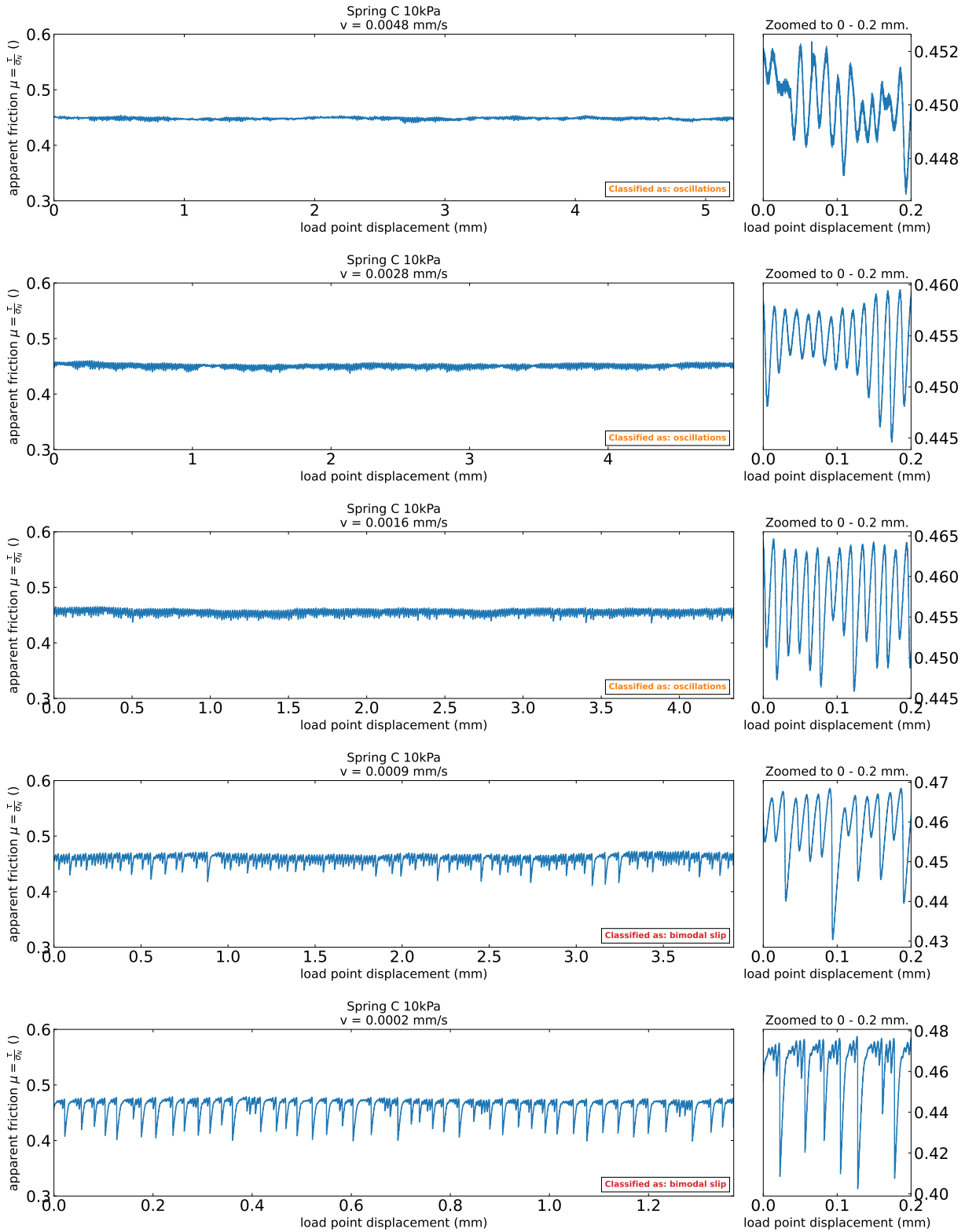
9. Spring C 5kPa



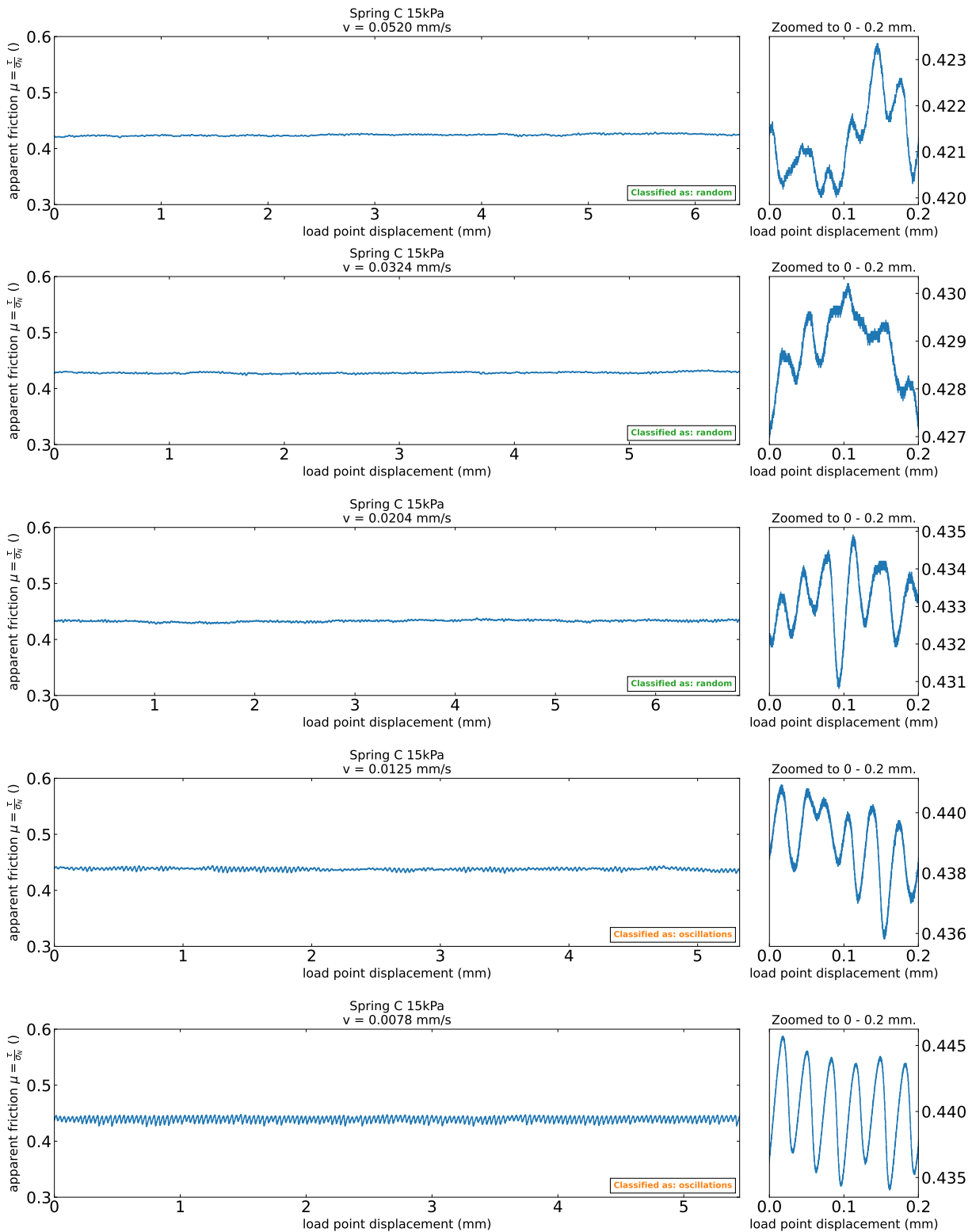


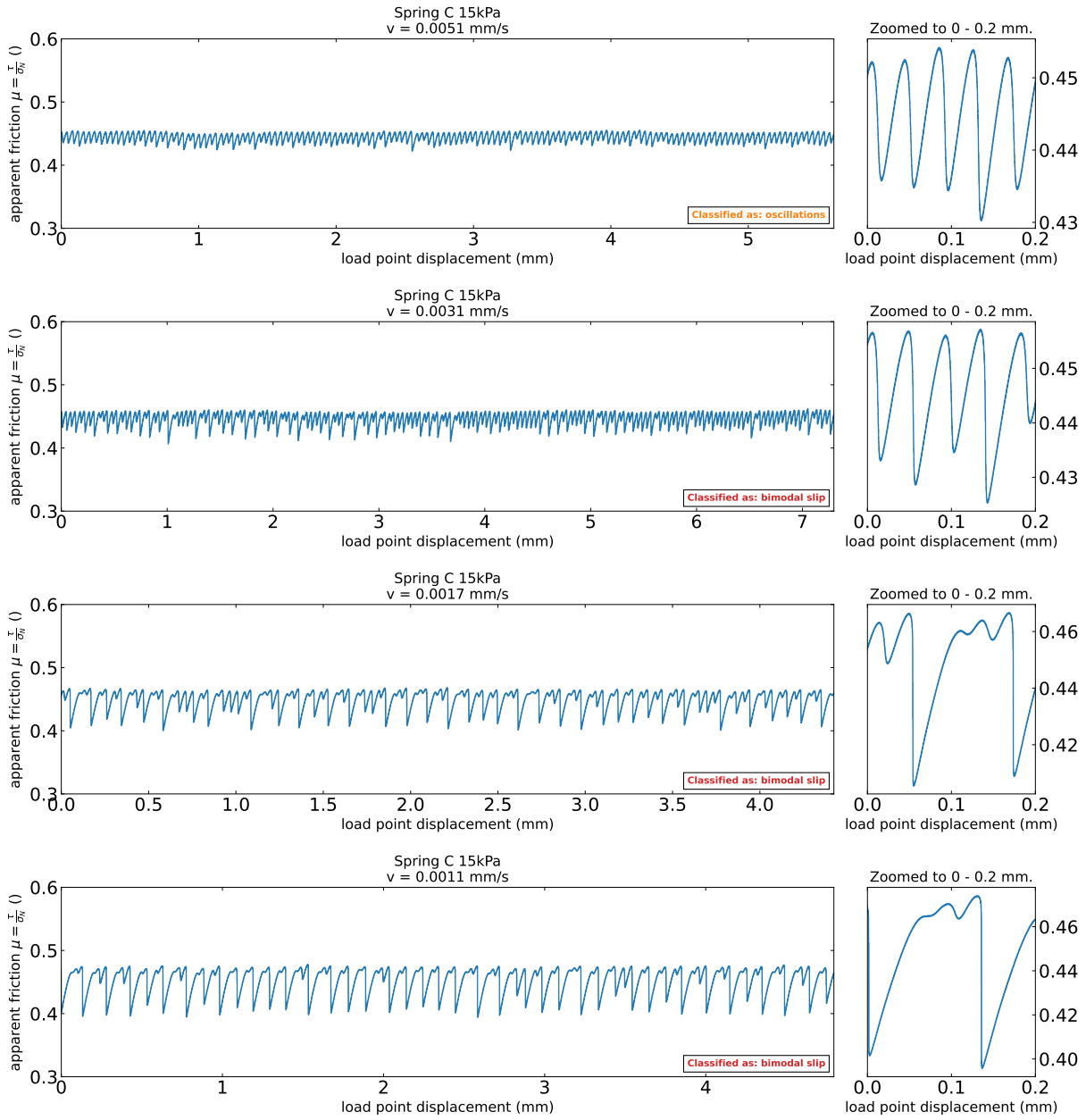
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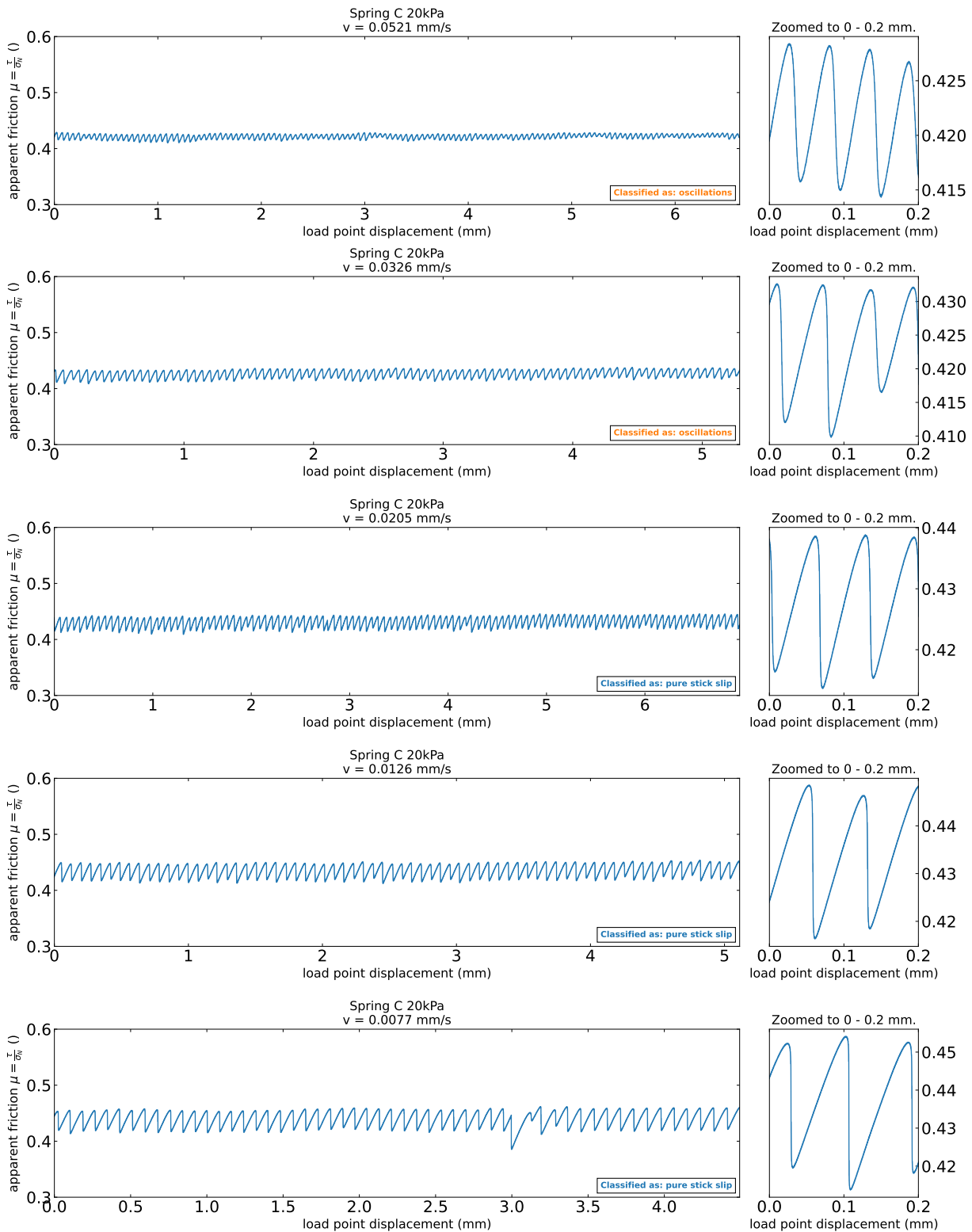


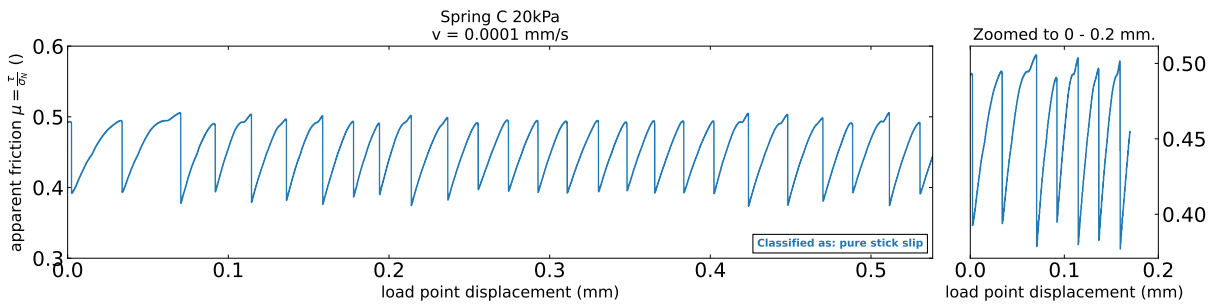
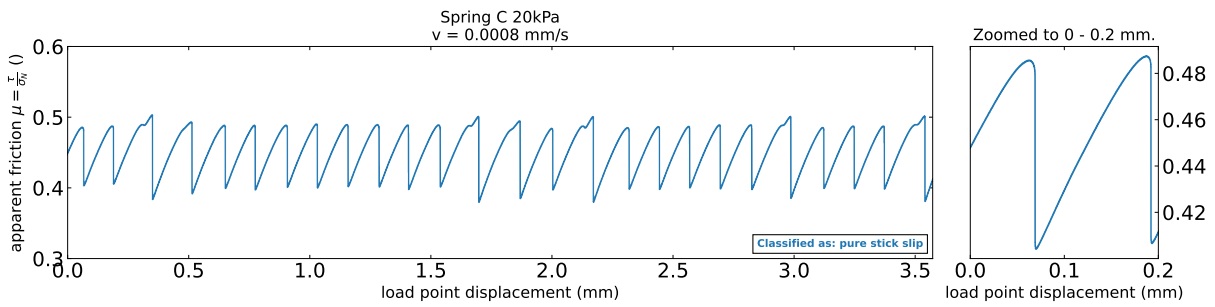
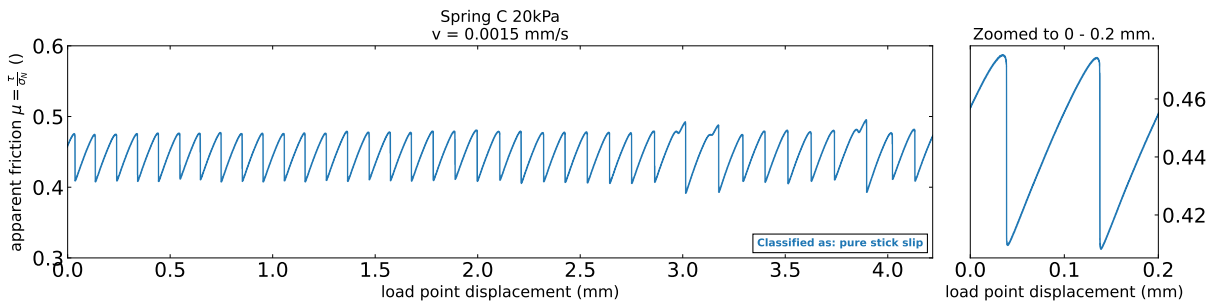
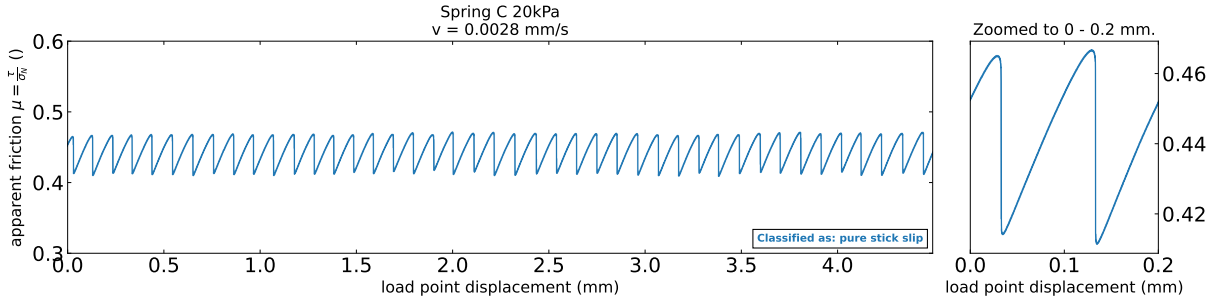
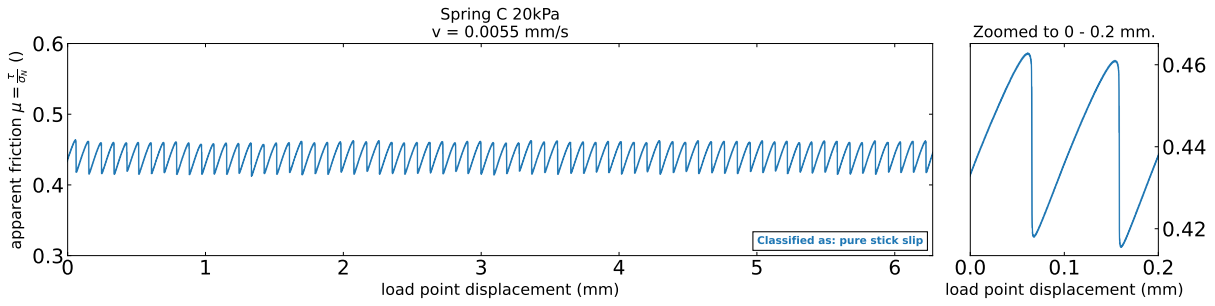
11. Spring C 15kPa



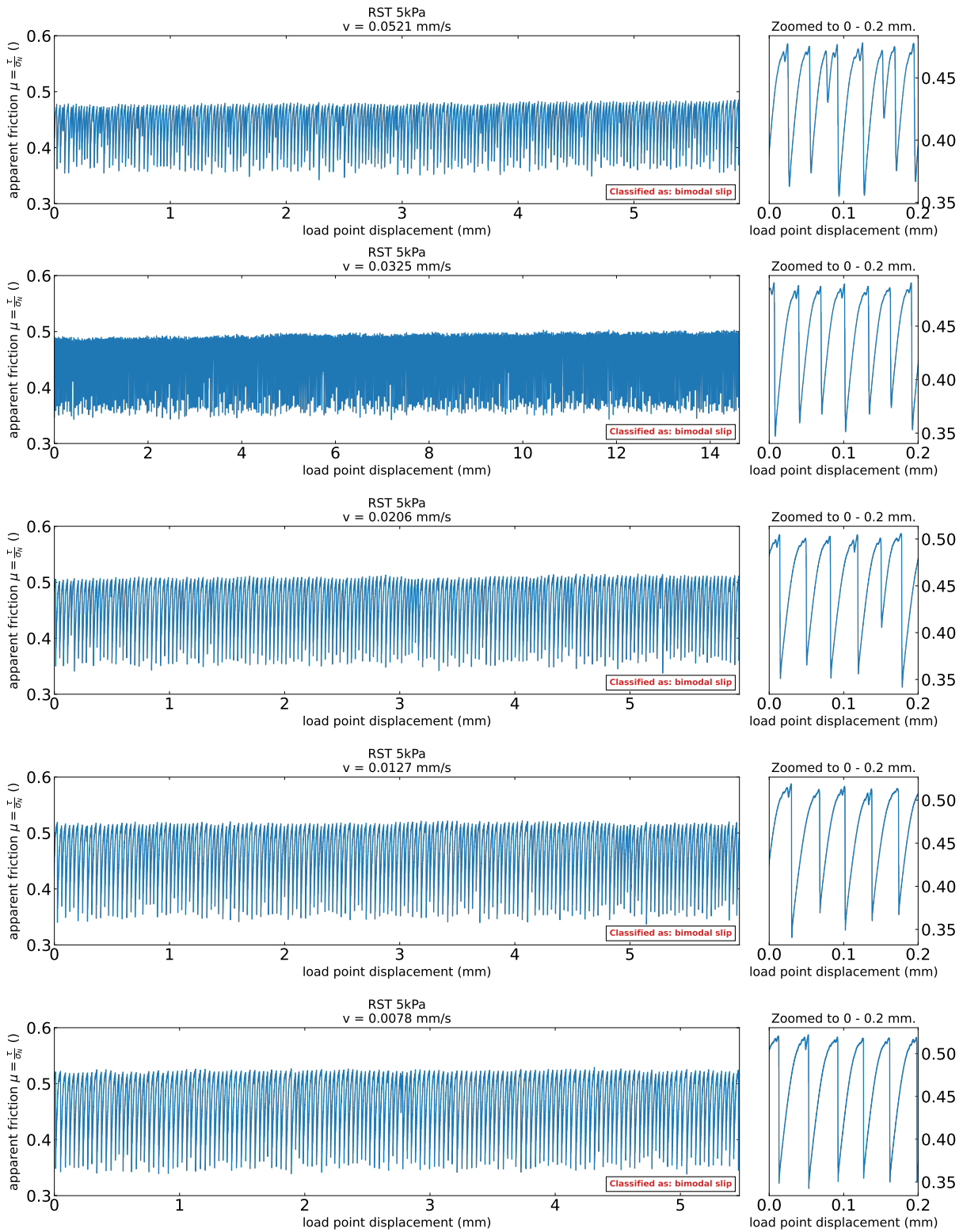


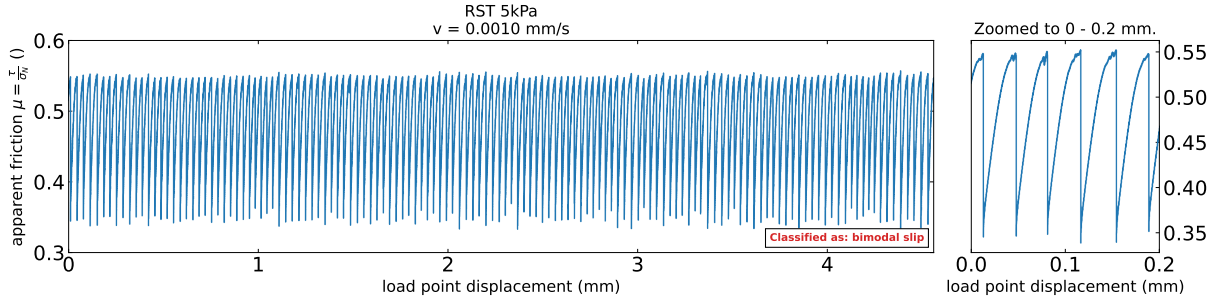
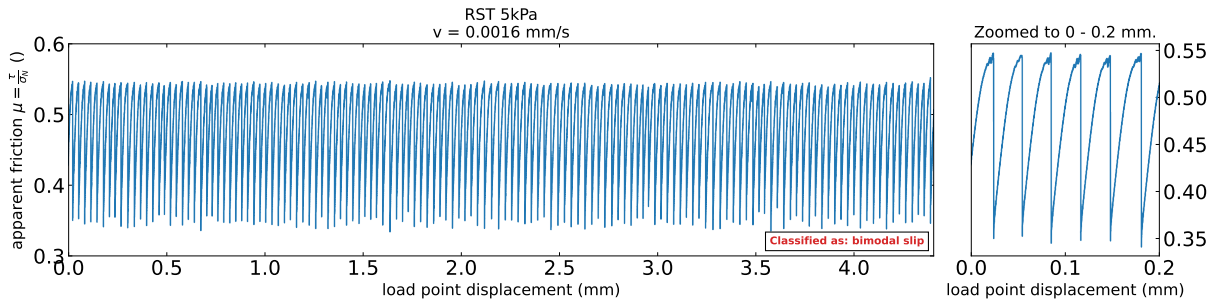
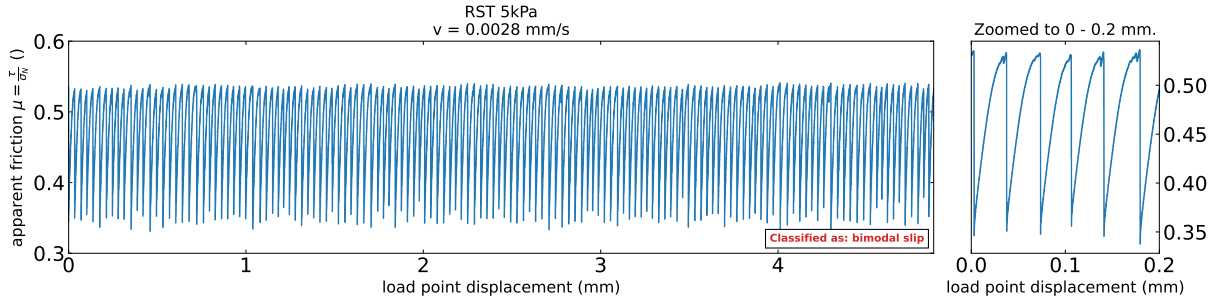
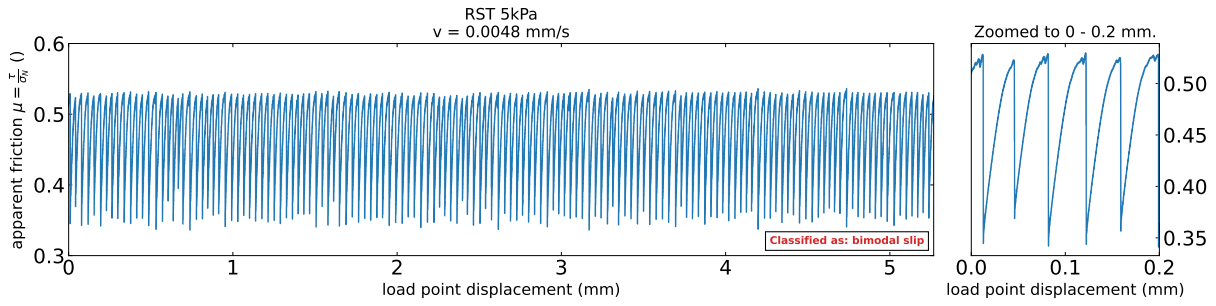
12. Spring C 20kPa



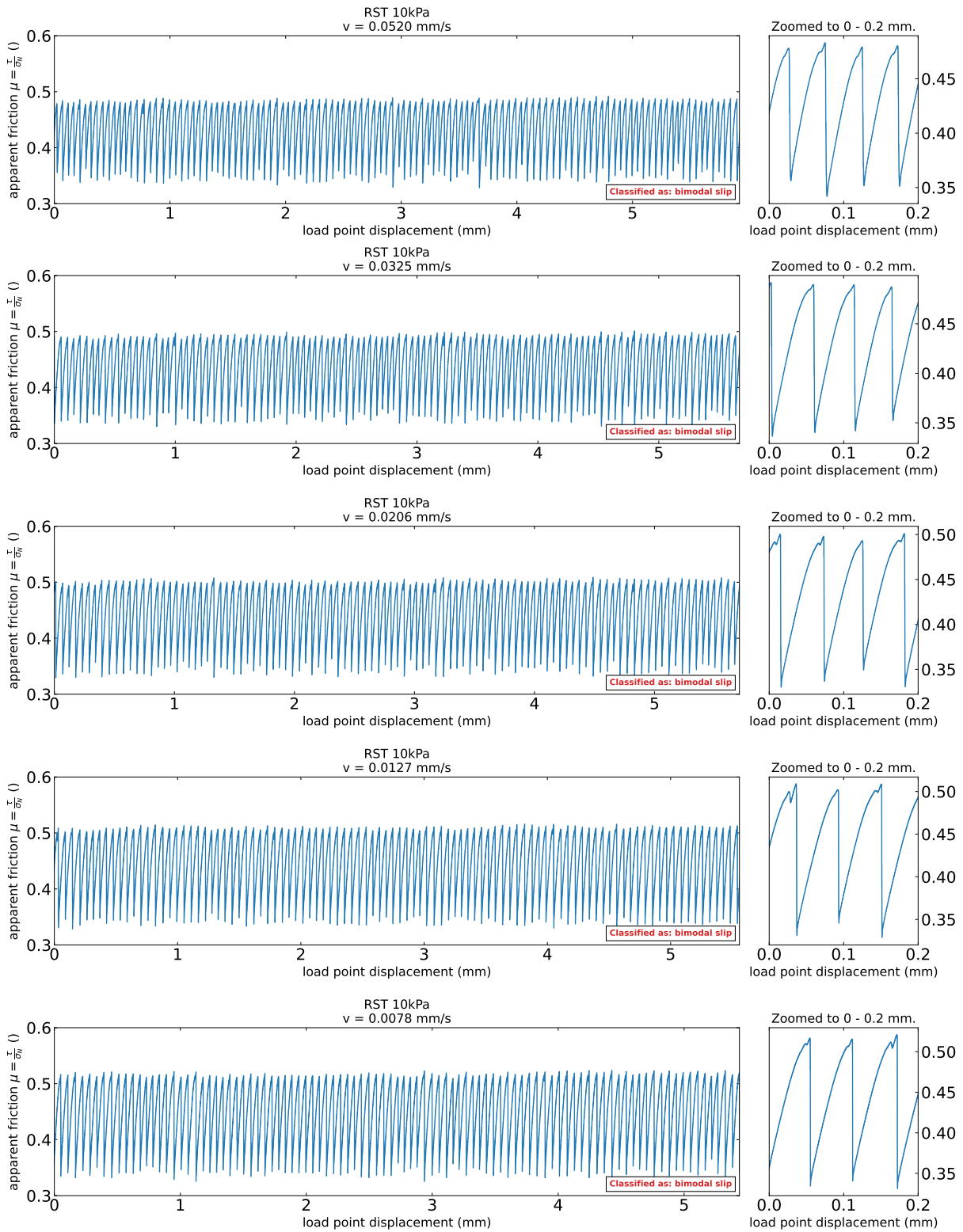


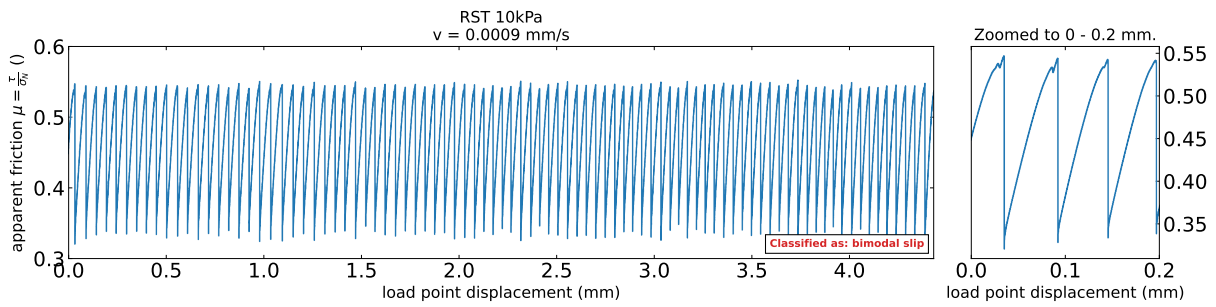
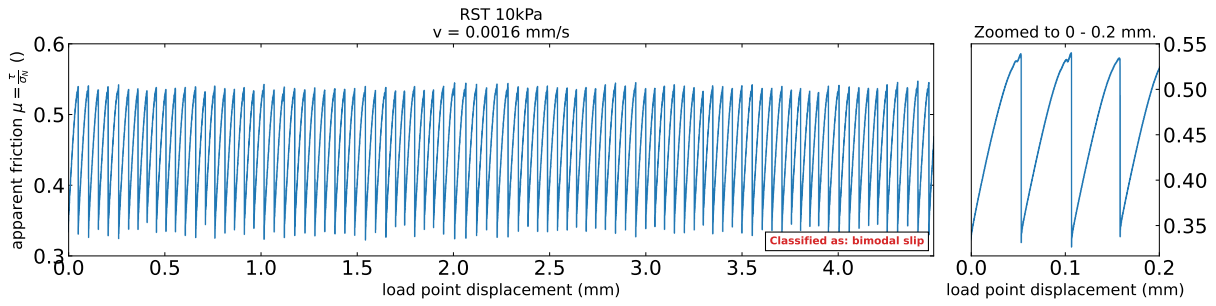
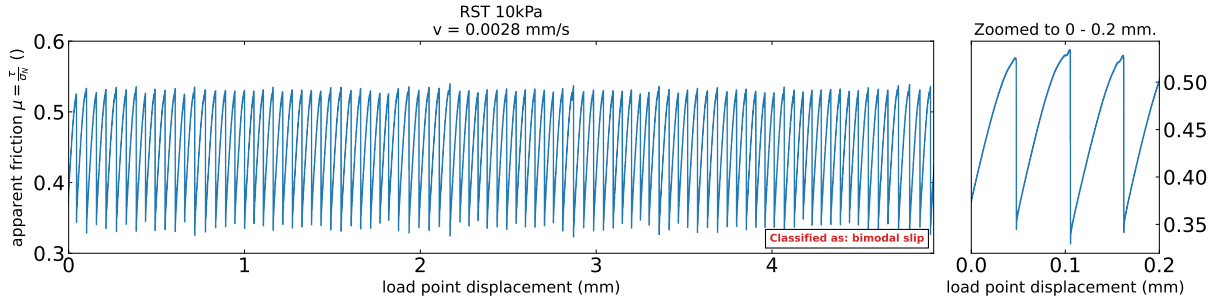
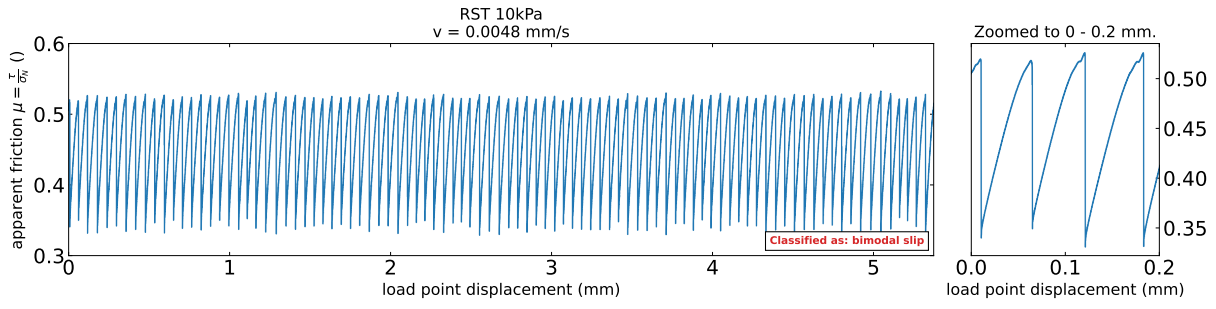
13. RST 5kPa



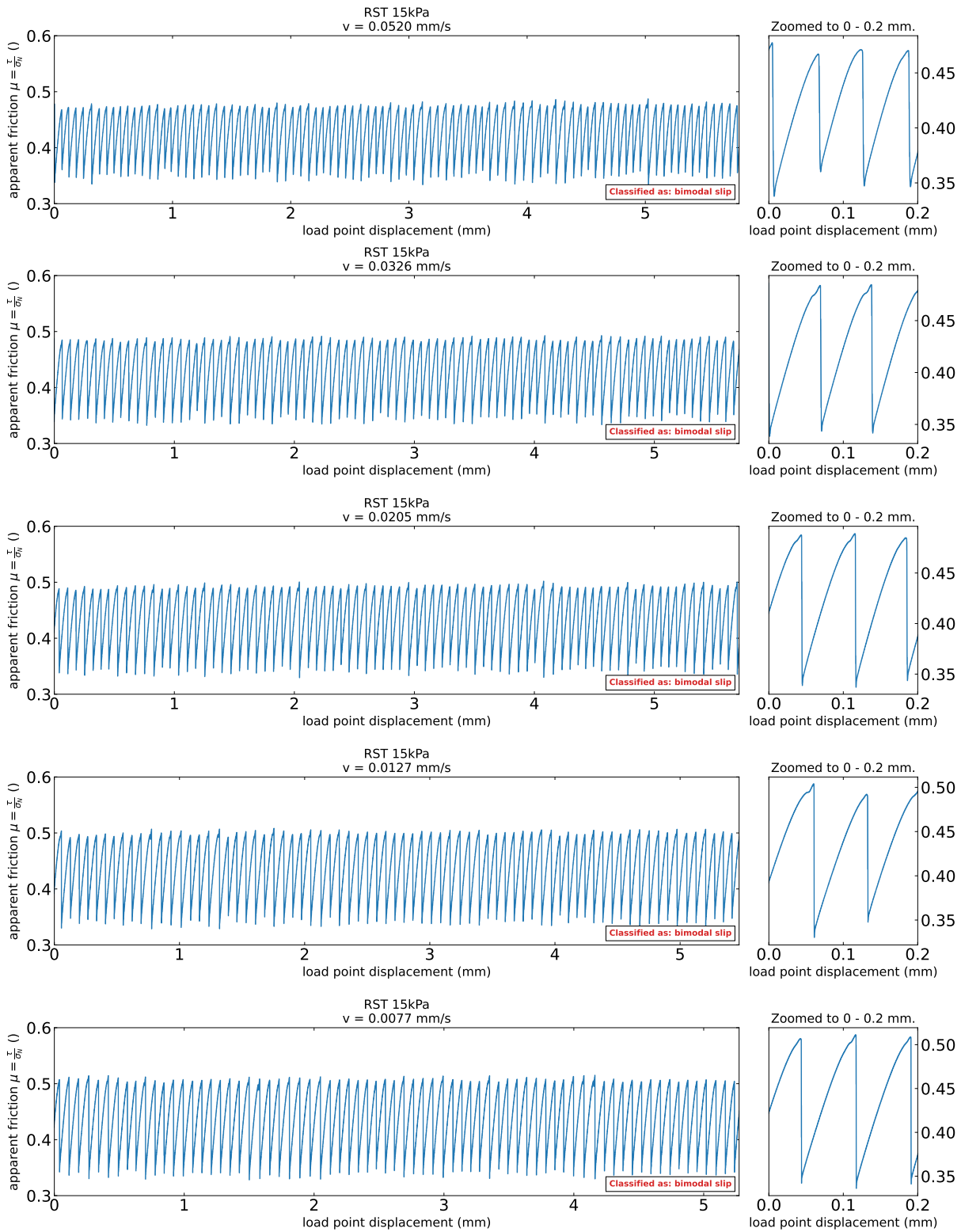


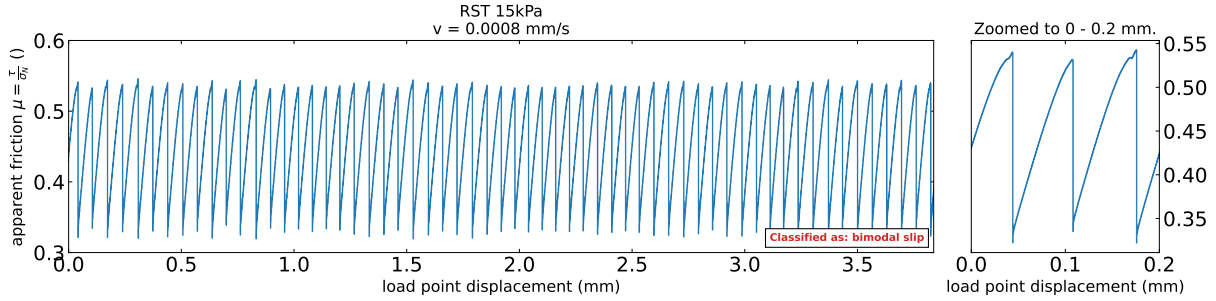
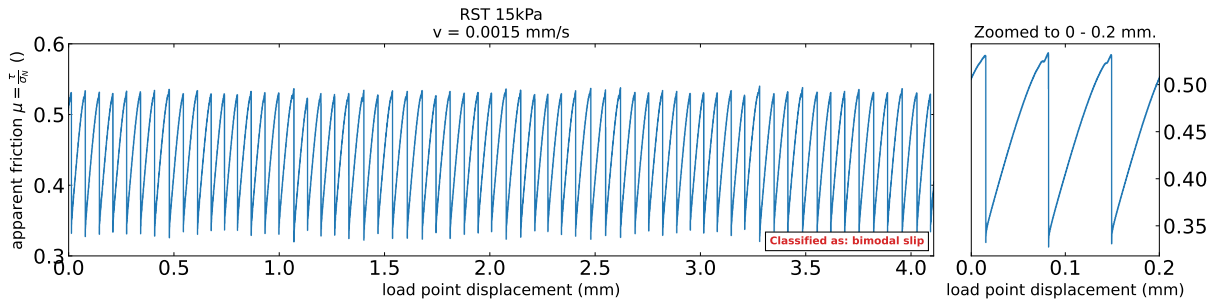
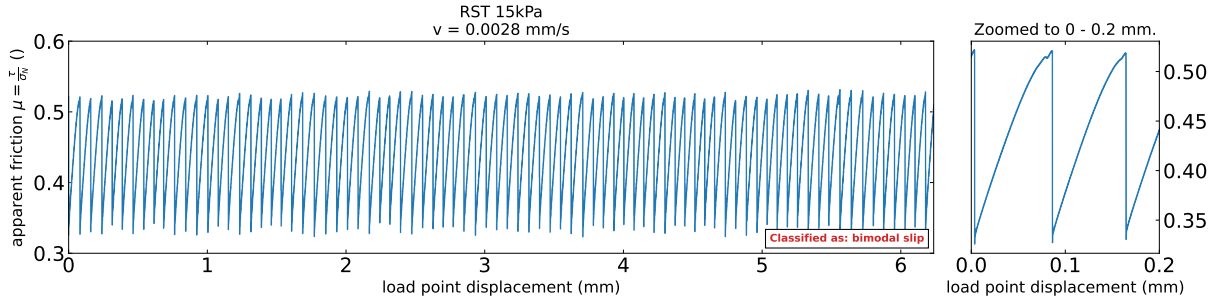
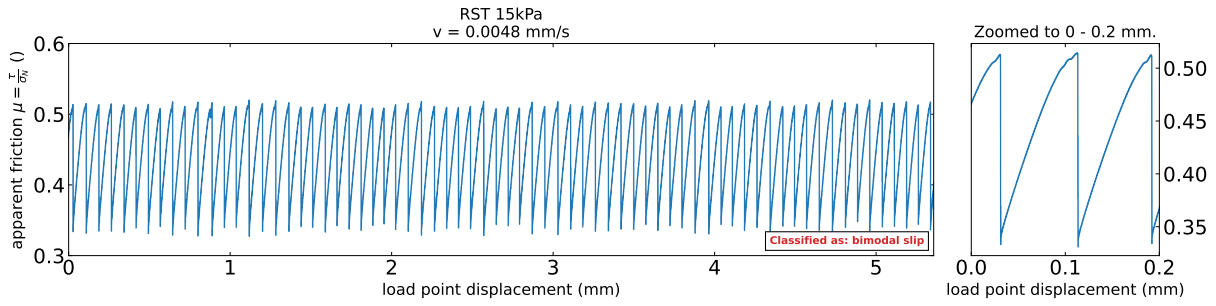
14. RST 10kPa



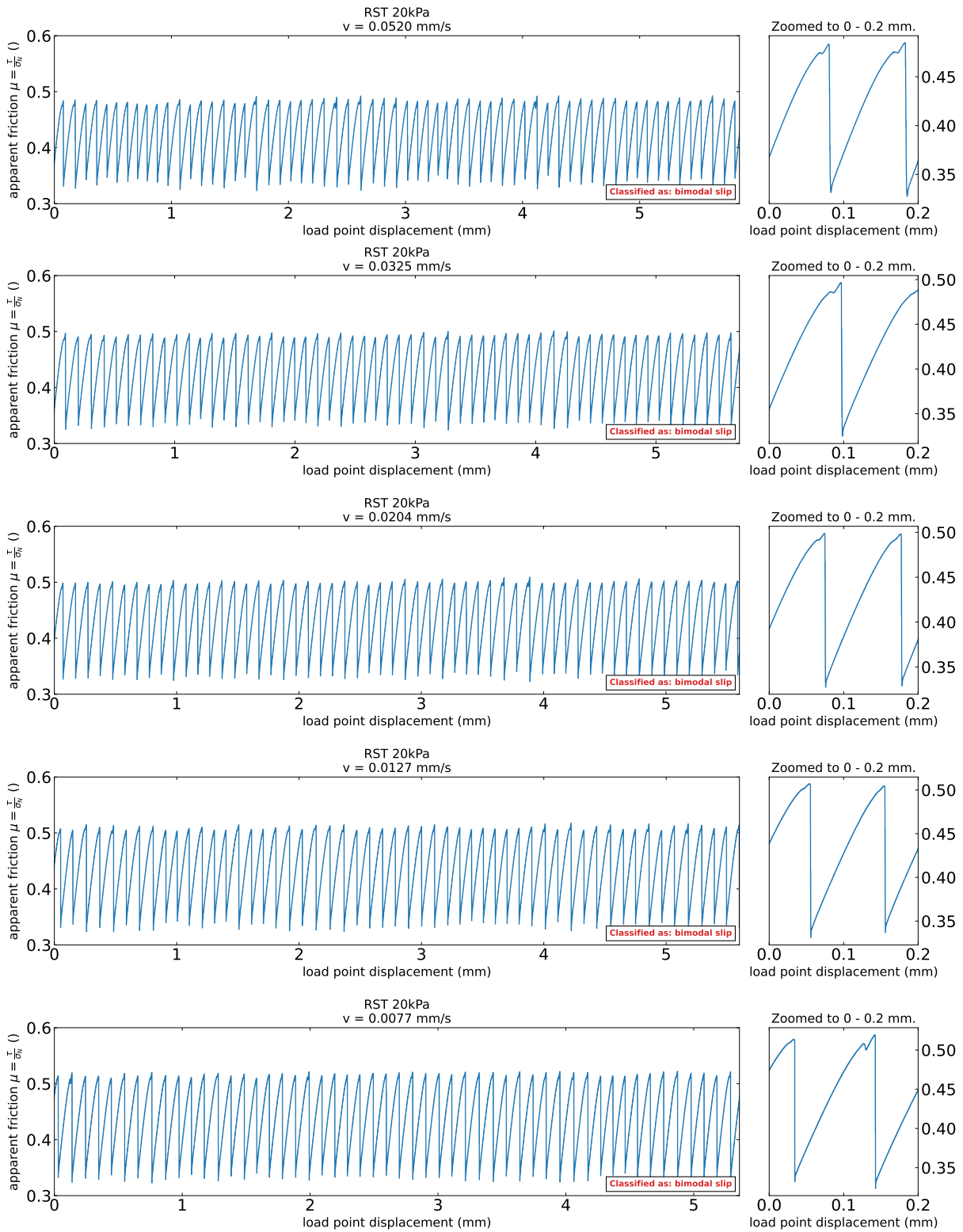


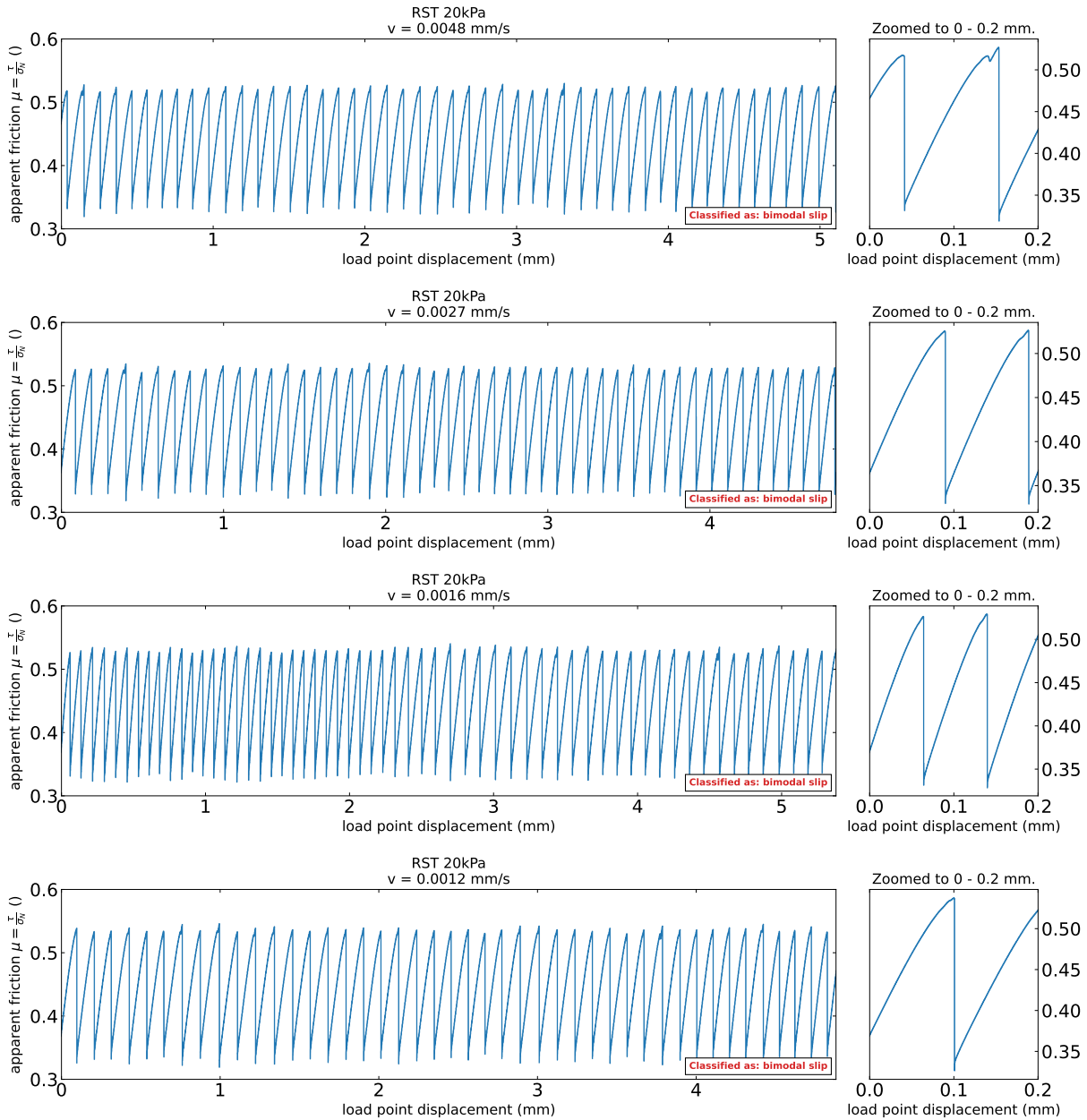
15. RST 15kPa





16. RST 20kPa





References

Rudolf, M. (in prep). Rst-stick-slip. *GitLab Repository, Helmholtz Centre Potsdam - Deutsches GeoForschungsZentrum GFZ*. GitLab-Repository. Retrieved from <https://git.gfz-potsdam.de/analab-code/rst-stick-slip>(notpublicyet)

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