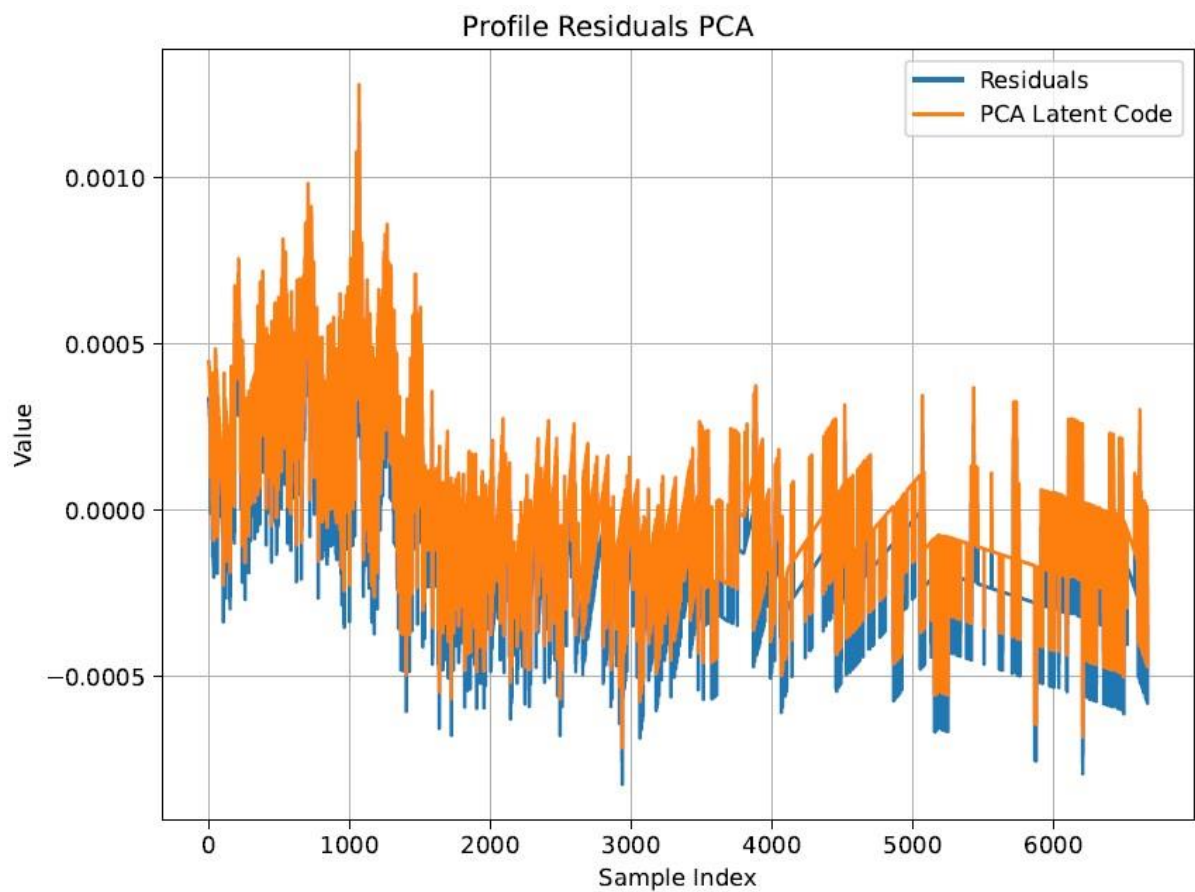
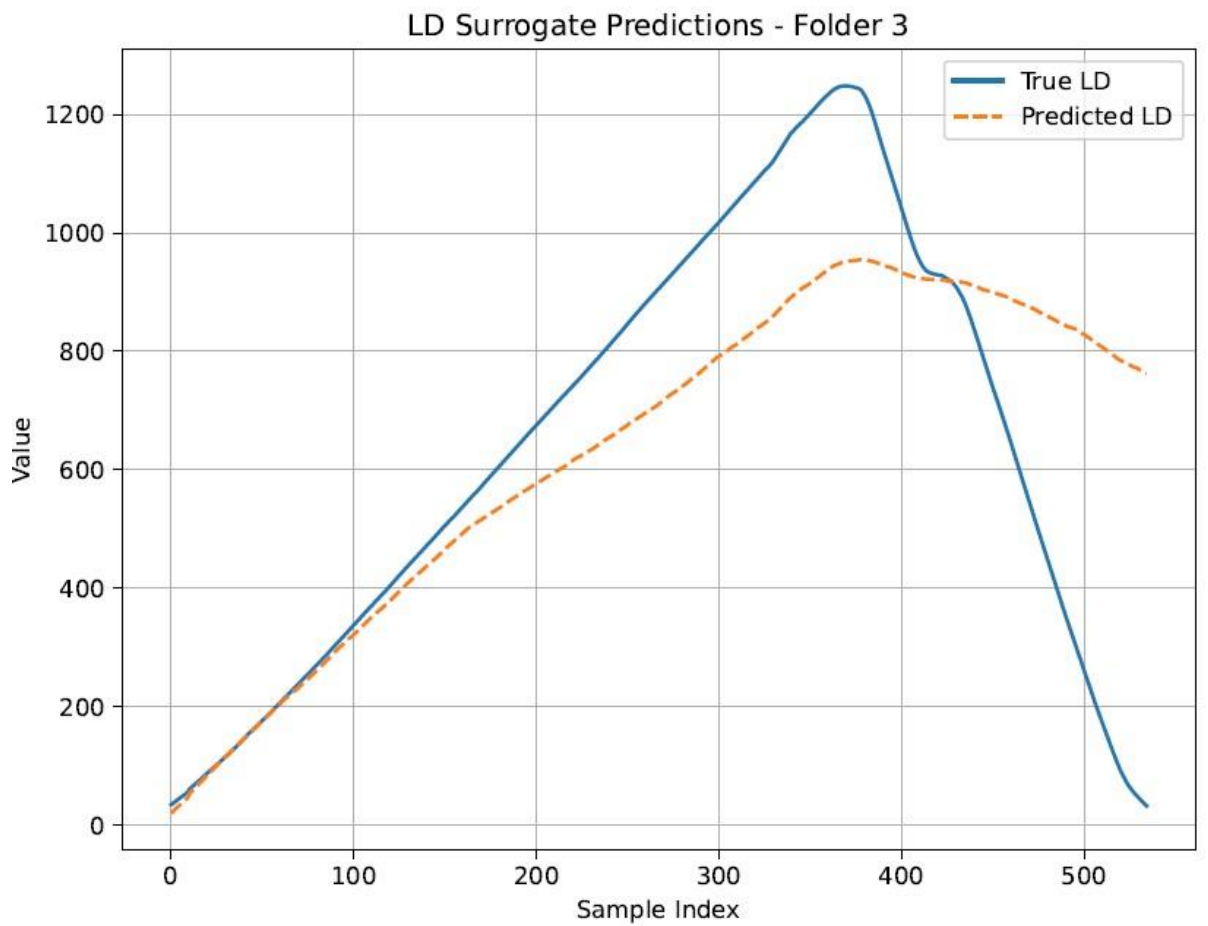


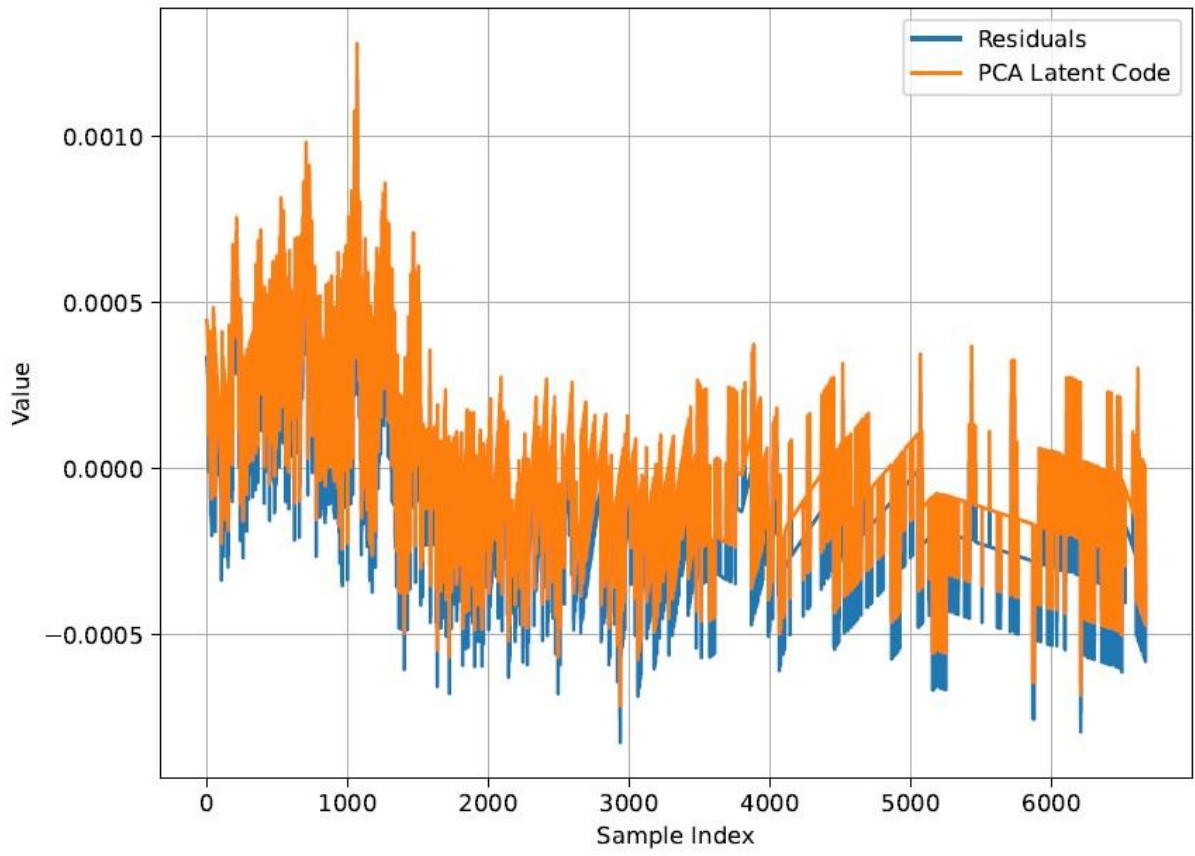
Scientific Research on PCA and Uncertainty Quantification



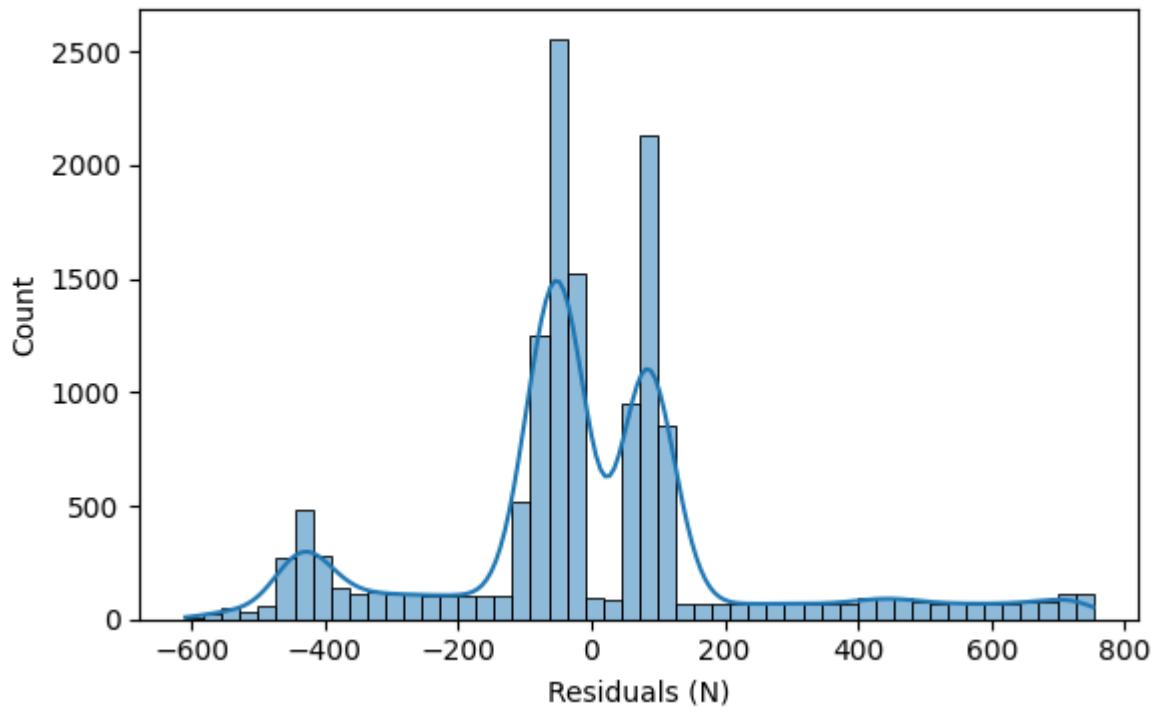
Developing a PINN surrogate to predict plasticity parameters from indentation residual profiles, using PCA for dimensionality reduction and exploring uncertainty quantification to assess model and input uncertainties in inverse problems.



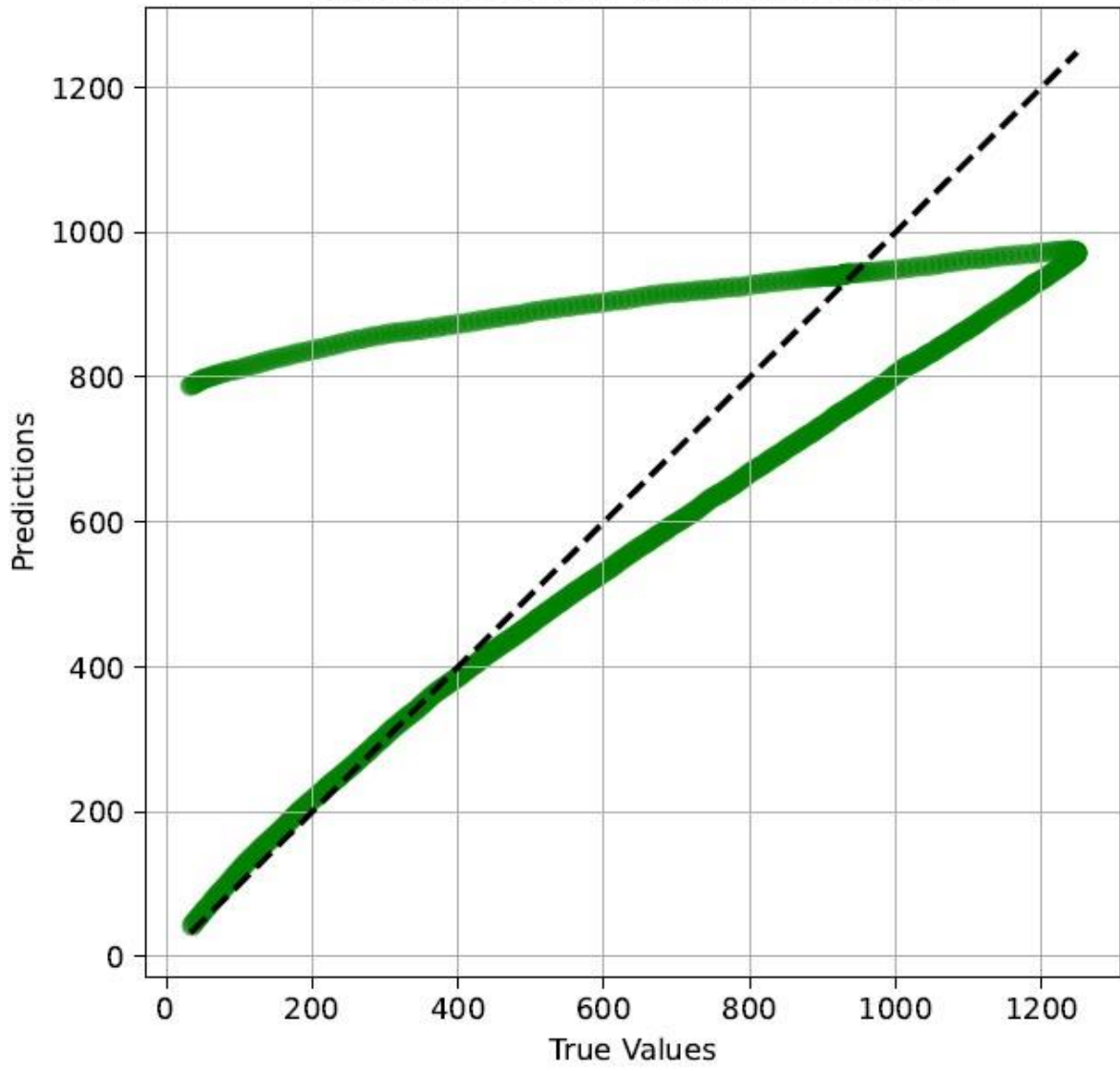
Profile Residuals PCA - Folder 3



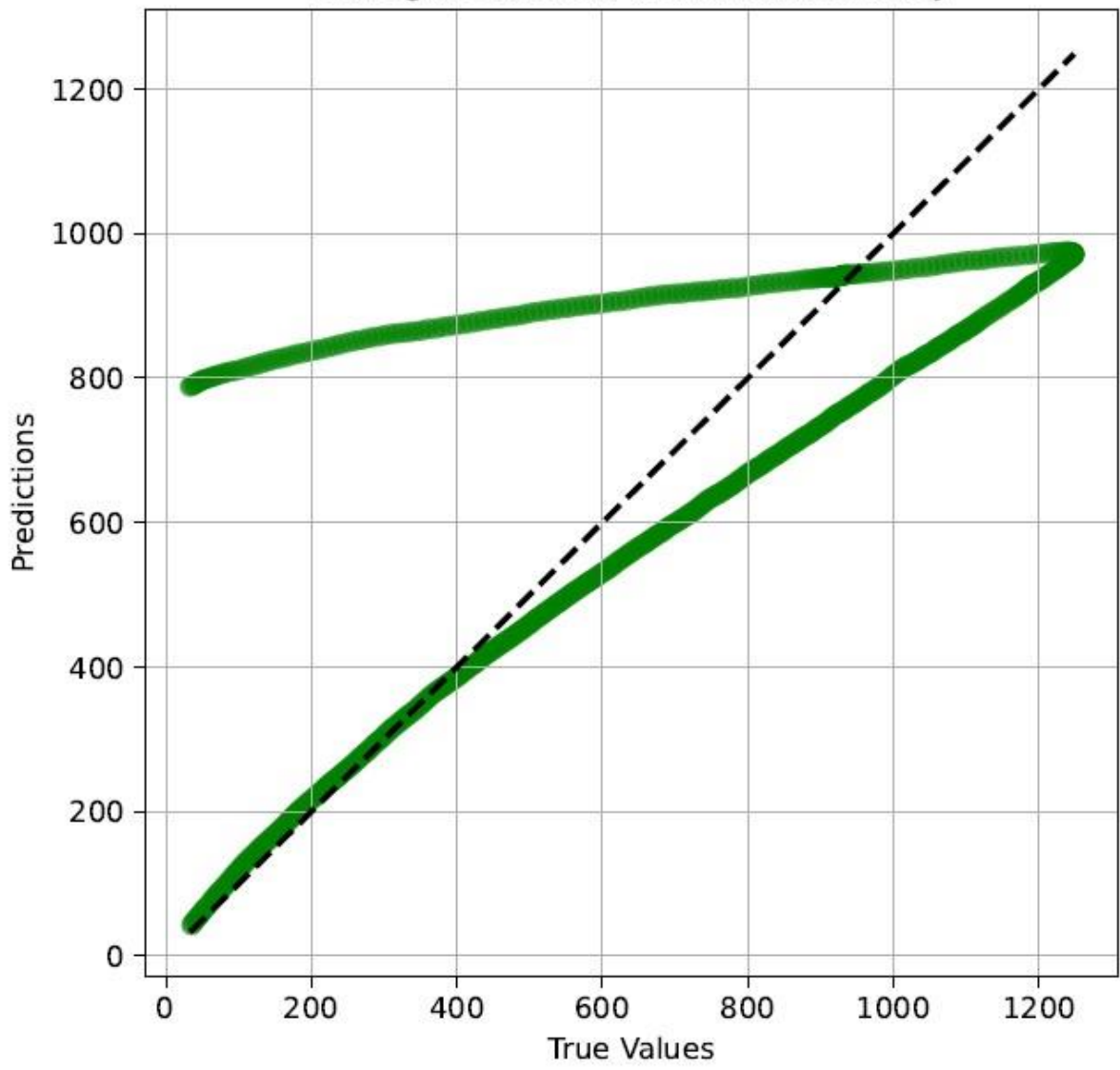
Residual Distribution - LD



Surrogate Model Prediction Accuracy



Surrogate Model Prediction Accuracy



Profile PCA Explained Variance (Cleaned Profiles)

