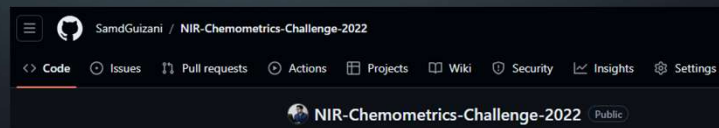


SOME IDEAS ABOUT CHEMOMETRICS MODEL TRANSFER

SAMD GUIZANI

AUG-2024

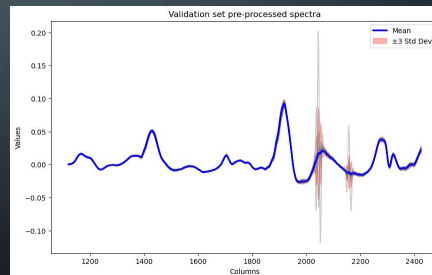
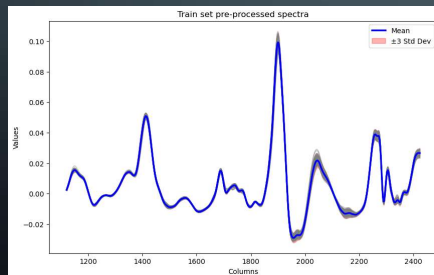
Project Python scripts at: <https://github.com/SamdGuizani/NIR-Chemometrics-Challenge-2022>



1

WHAT'S THE CHALLENGE?

- Chemometrics model training developed on a given spectrometer (train set = 400 samples, test set = 100 samples)
- Need to be transferred on a new instrument (validation set = 80 samples measured on new instrument)
- **QUESTION:** Will the model perform well, despite visible differences between the spectra? (noise, location and intensity of peaks...)



2



3



4

A POSSIBLE SOLUTION TO THIS CHALLENGE? COMBINE THEM!

- Mean of predicted values from 4 models fits better the observations on the new instrument

