

Introduction

This Supplementary Materials includes:

Text S1: Spectral response and estimation results of all JL samples under light interference;

Text S2: Spectral response and estimation results of all JL samples under soil temperature influence;

Text S3: Spectral response and estimation results of all JL samples under soil moisture influence;

Text S4: Spectral response and estimation results of all HLJ samples under soil particle size influence;

Text S1. Spectral Response and Estimation Results of all JL Samples under Light Interference

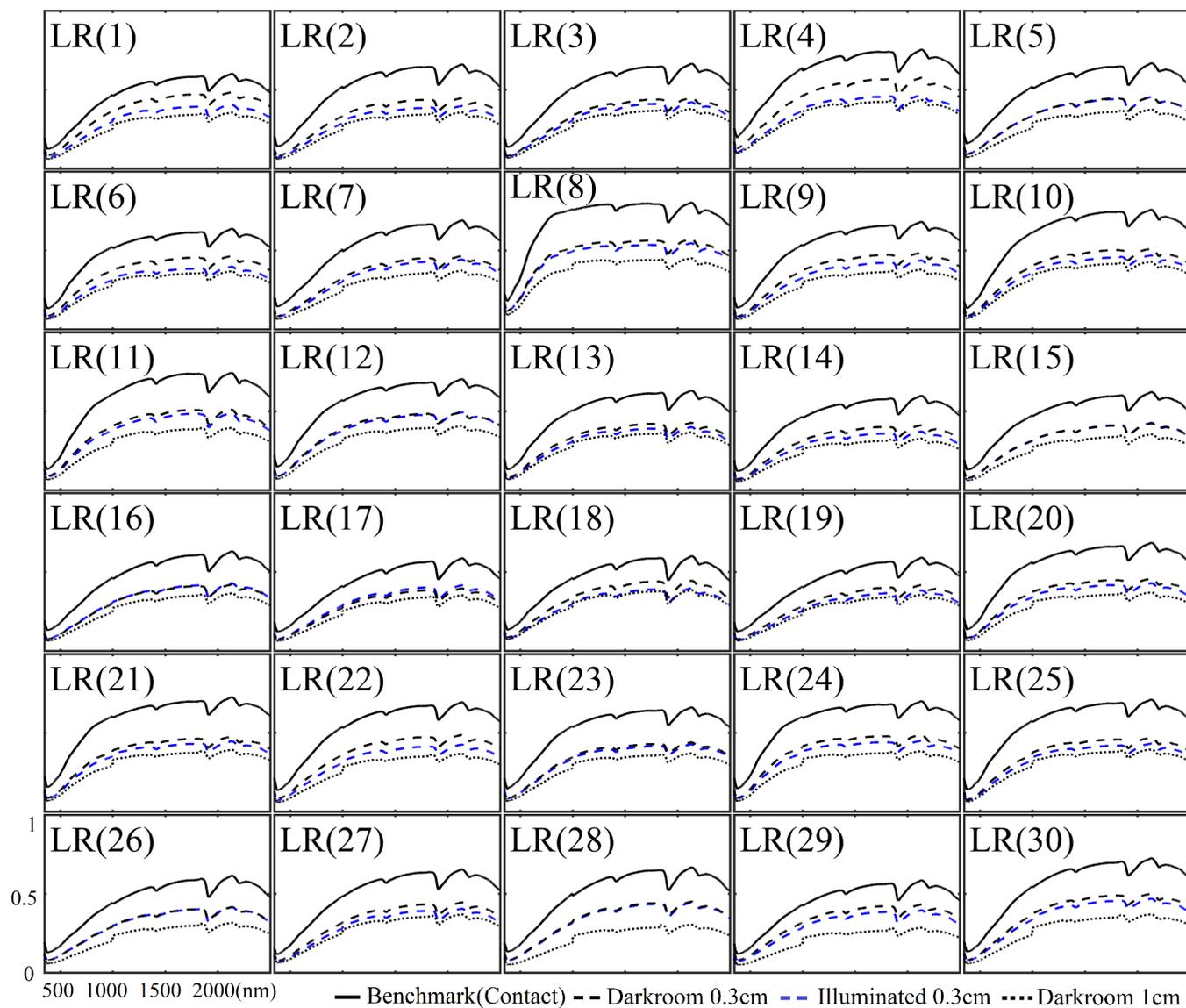


Figure S1. Spectral reflectance of Jilin samples in light interference control experiment.

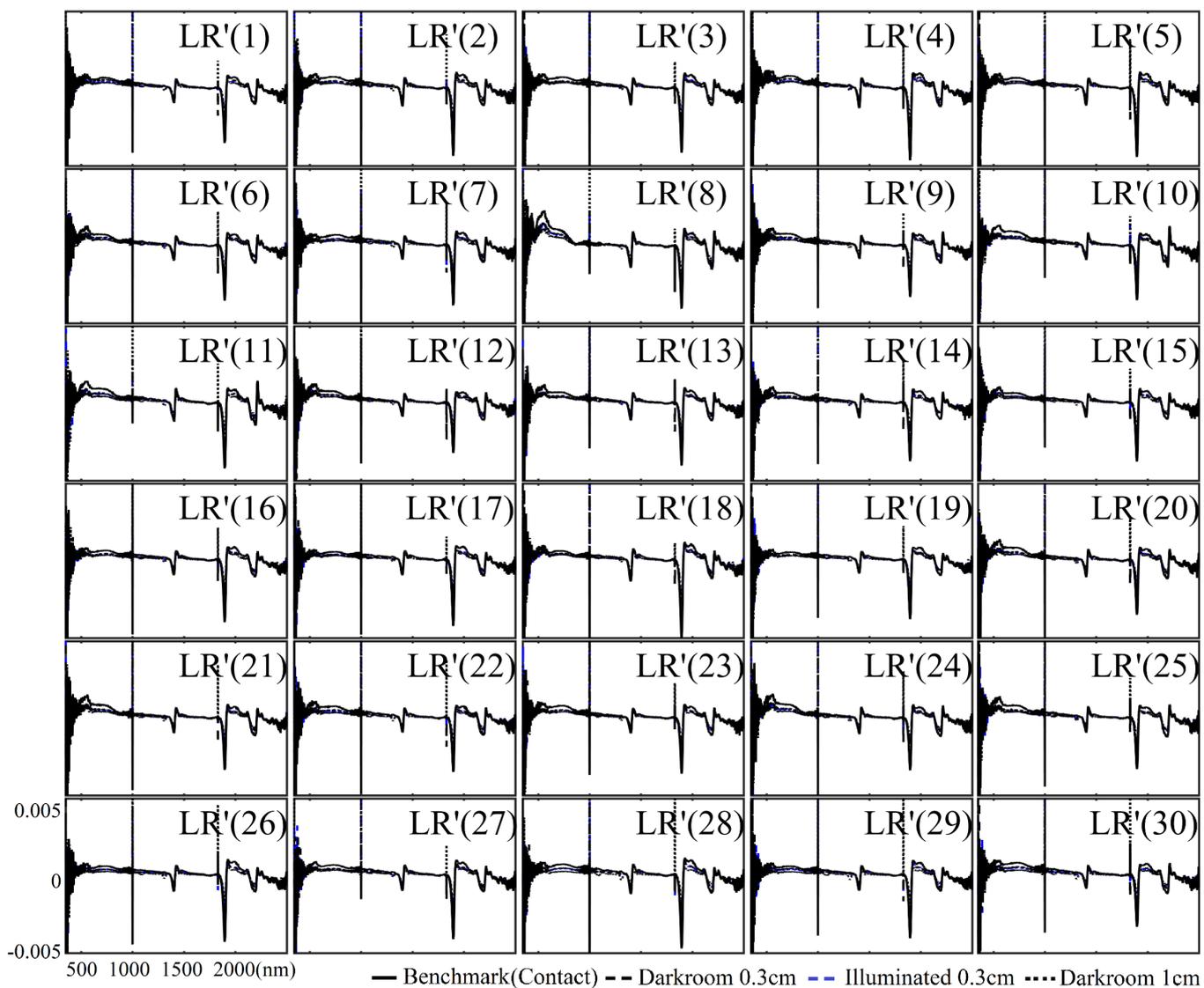


Figure S2. The first derivative of the reflectance of Jilin samples in light interference control experiment.

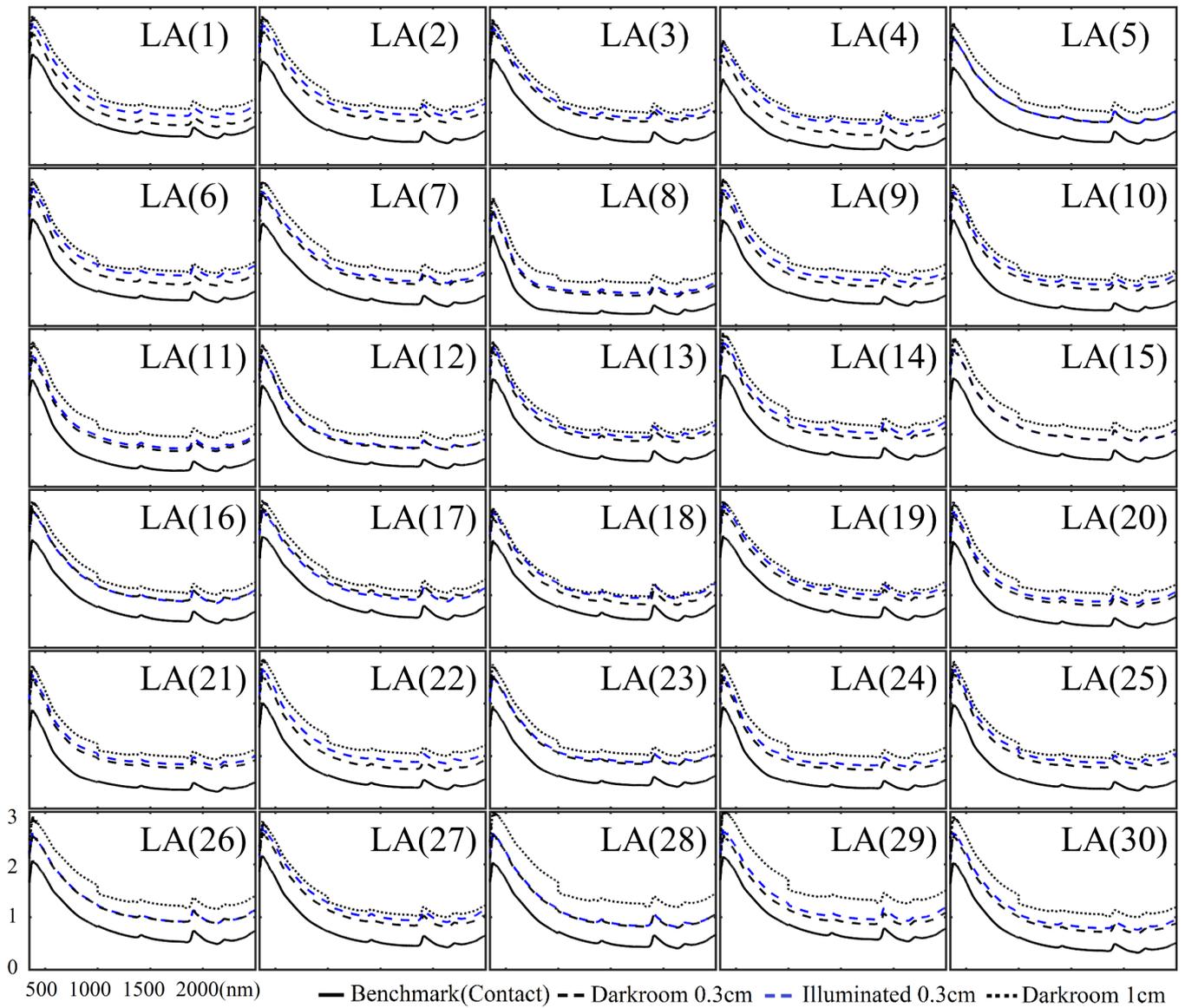


Figure S3. The spectral absorbance of Jilin samples in light interference control experiment.

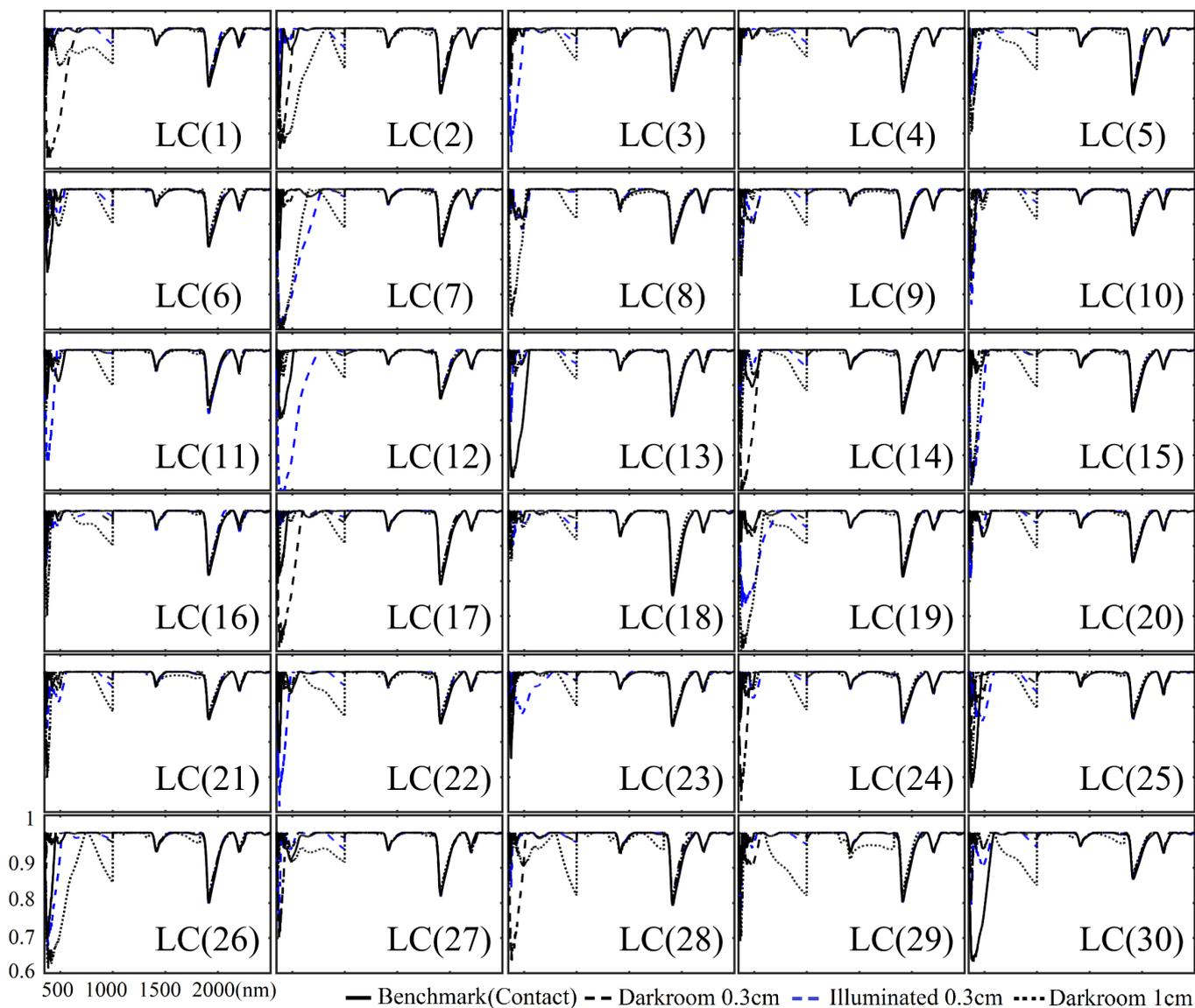


Figure S4. The continuum removal spectra of Jilin samples in light interference control experiment.

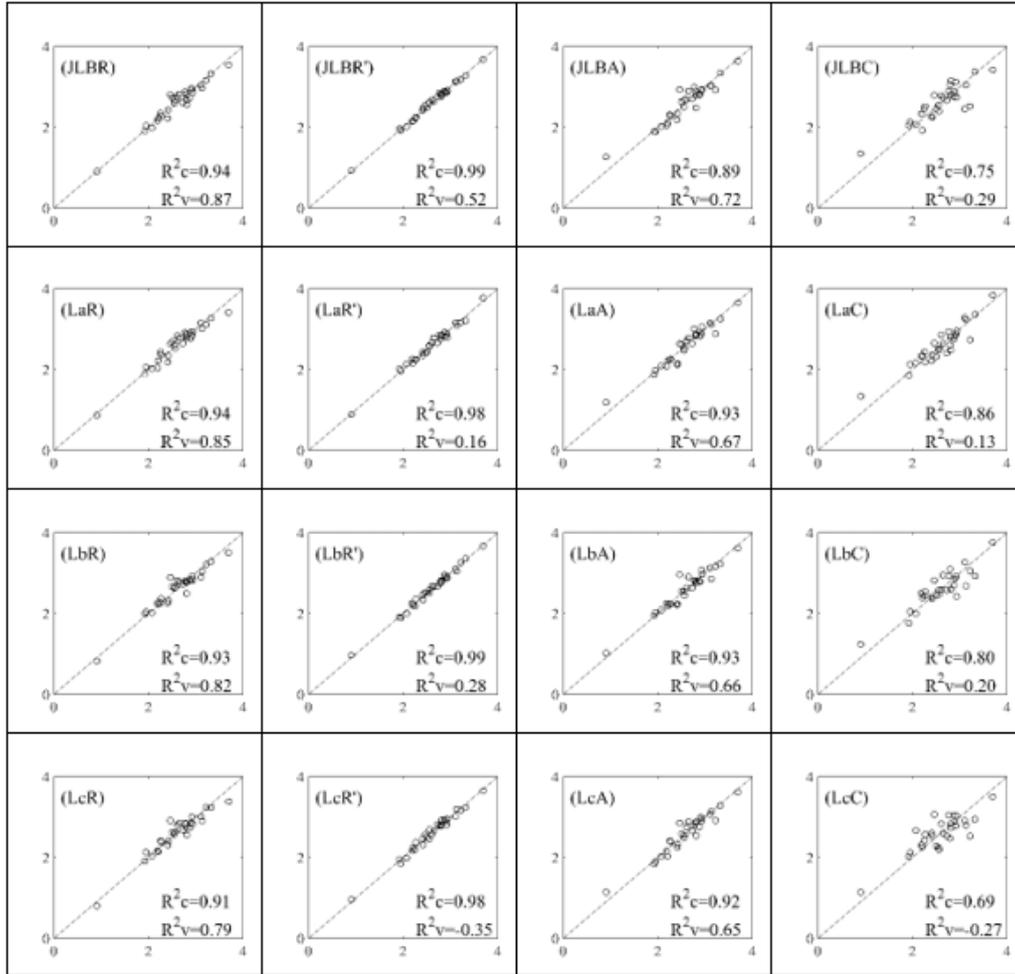


Figure S5. Estimation accuracies of the PLSR models in light interference experiment.

Text S2. Spectral Response and Estimation Results of all JL Samples under Soil Temperature Influence

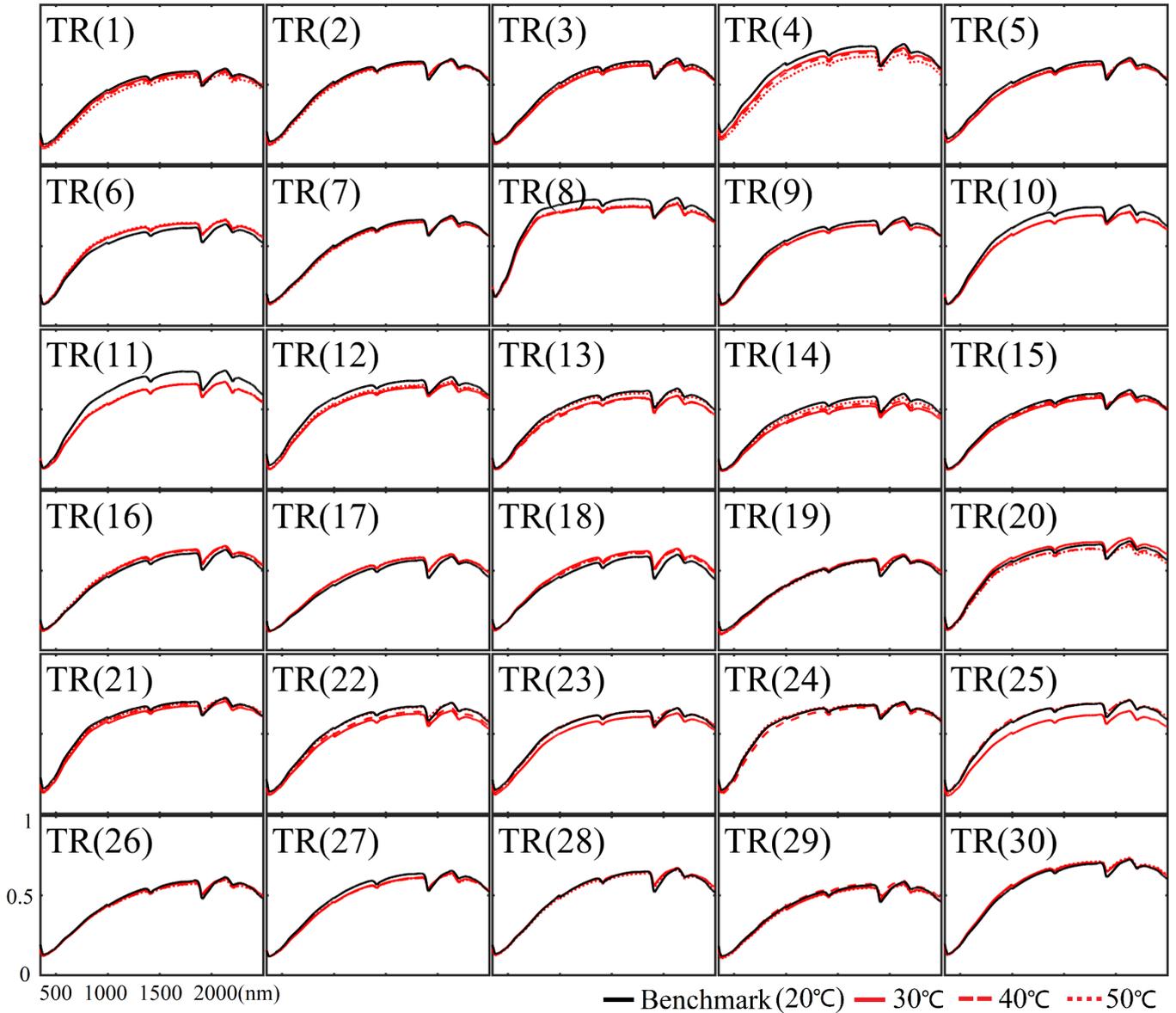


Figure S6. The Spectral reflectance of Jilin samples in soil temperature control experiment.

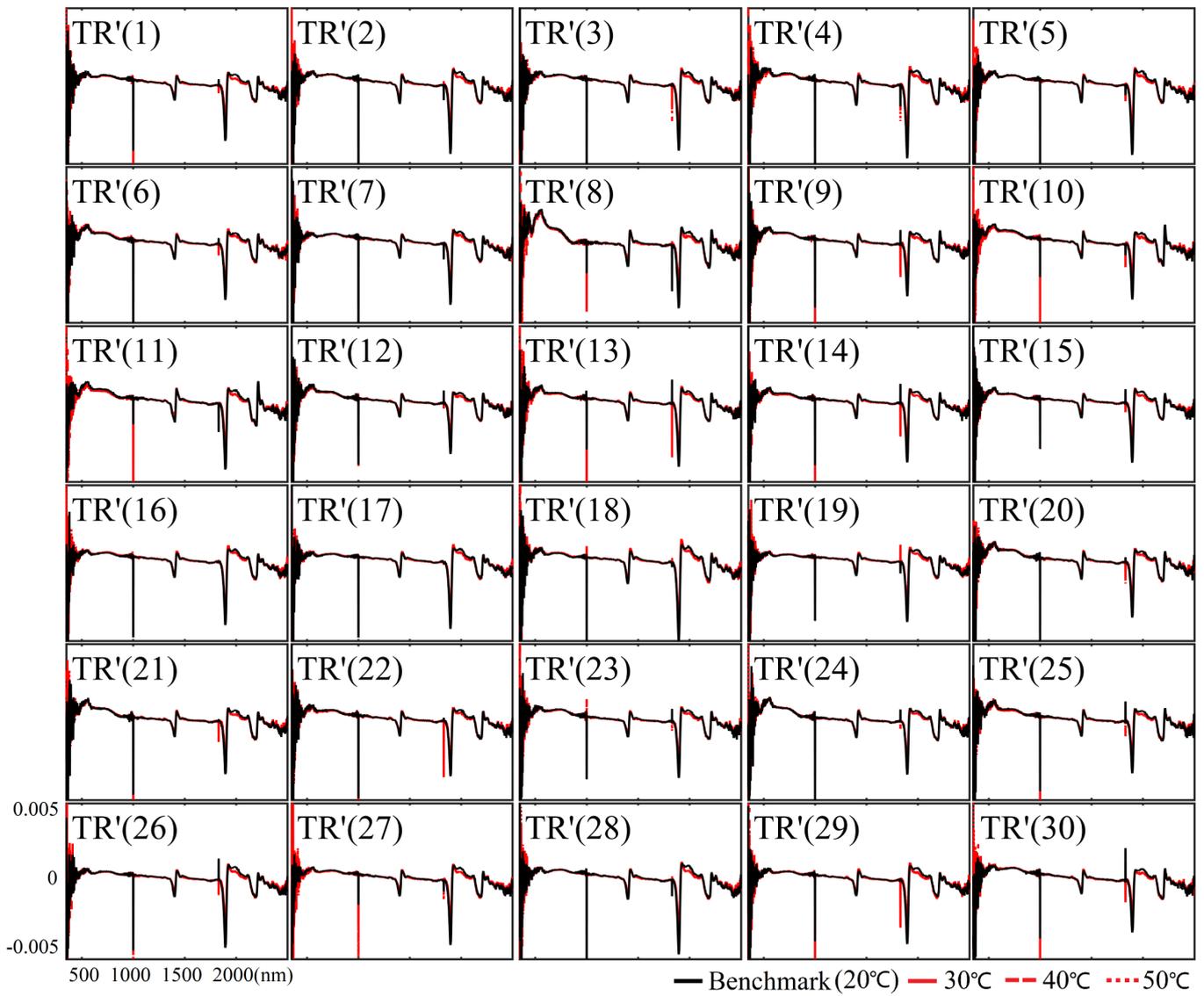


Figure S7. The first derivative of the reflectance of Jilin samples in soil temperature control experiment.

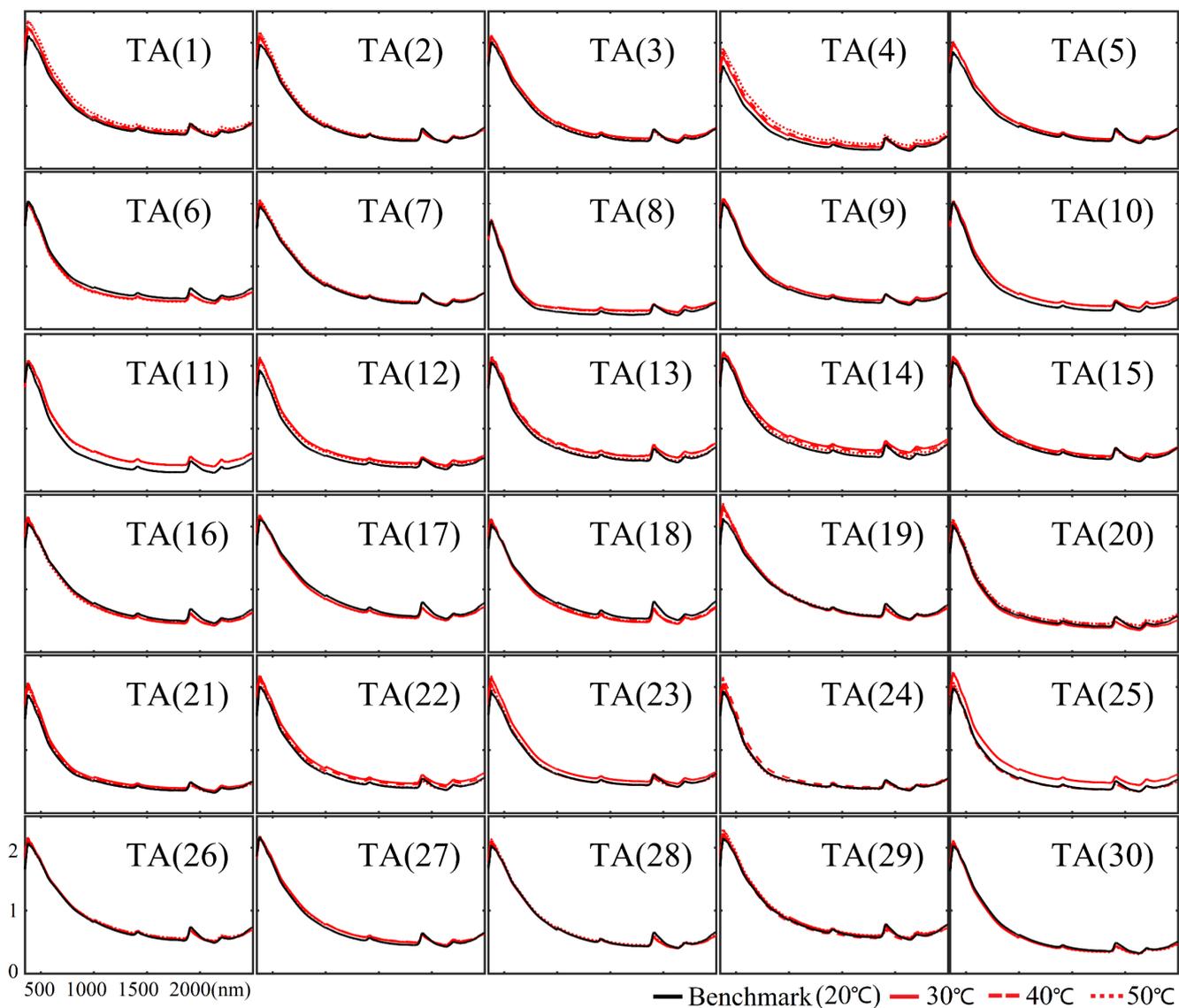


Figure S8. The spectral absorbance of Jilin samples in soil temperature control experiment.

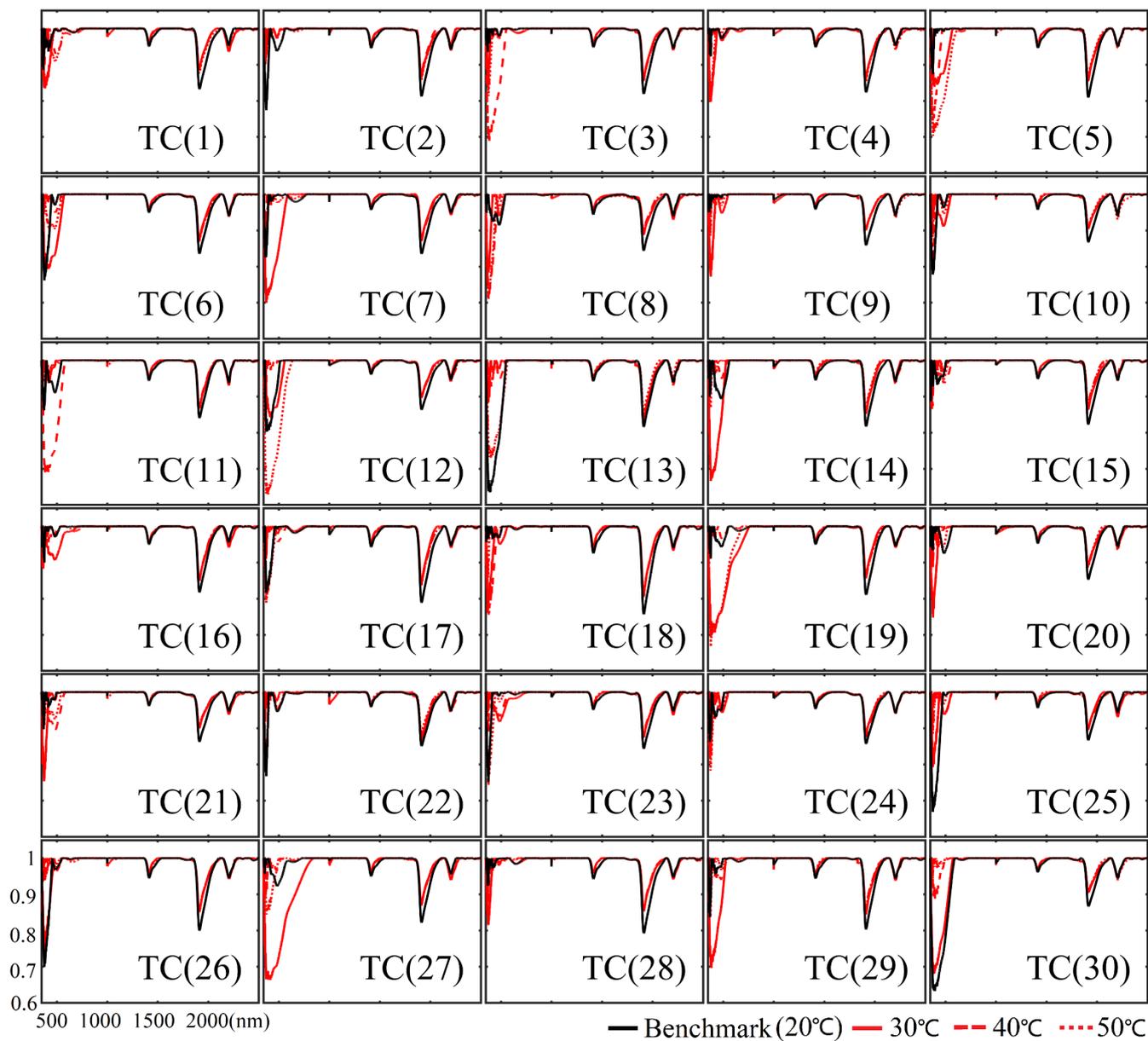


Figure S9. The continuum removal spectra of Jilin samples in soil temperature control experiment.

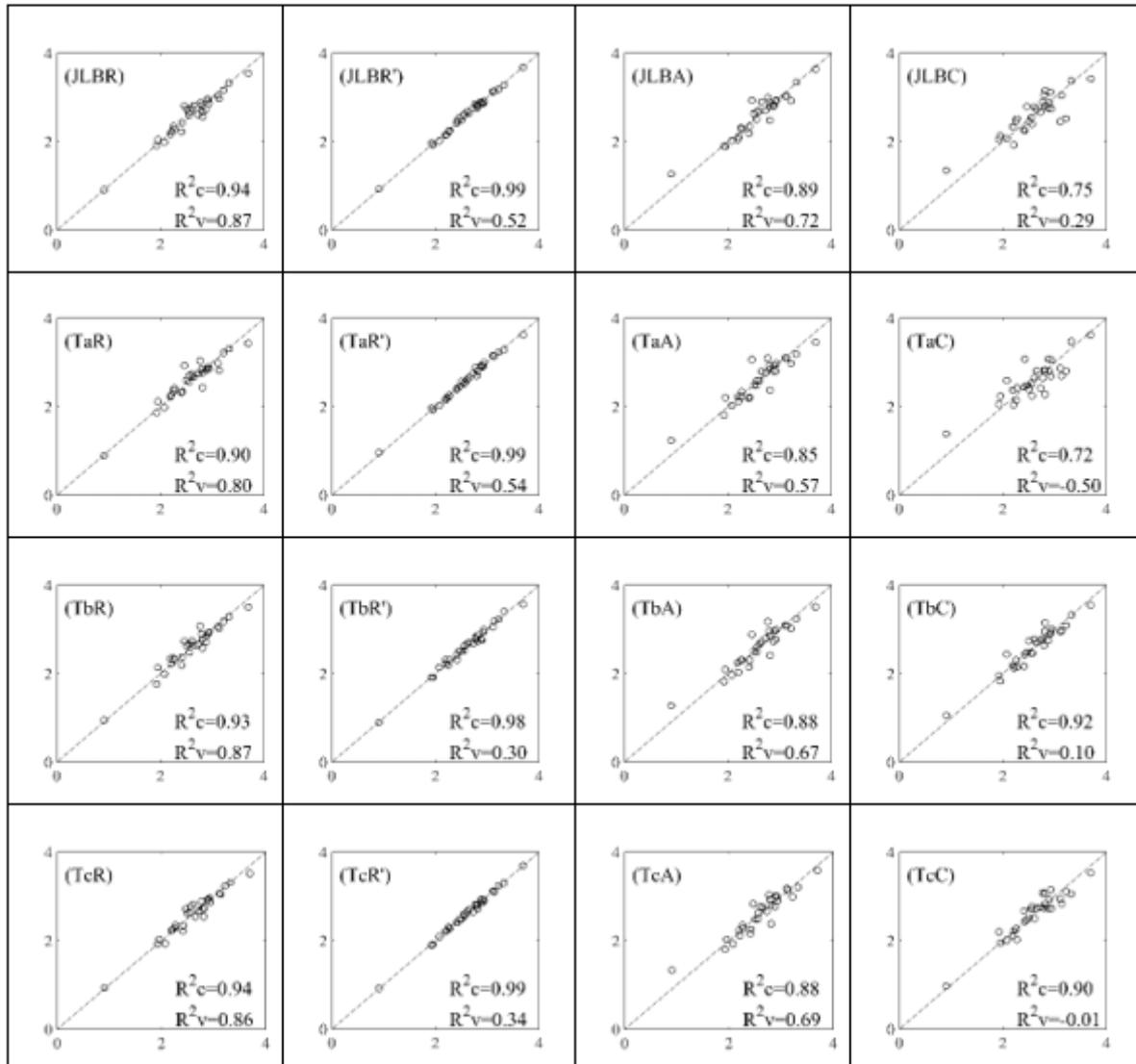


Figure S10. Estimation accuracies of the PLSR models in soil temperature control experiment.

Text S3. Spectral Response and Estimation Results of all JL Samples under Soil Moisture Influence

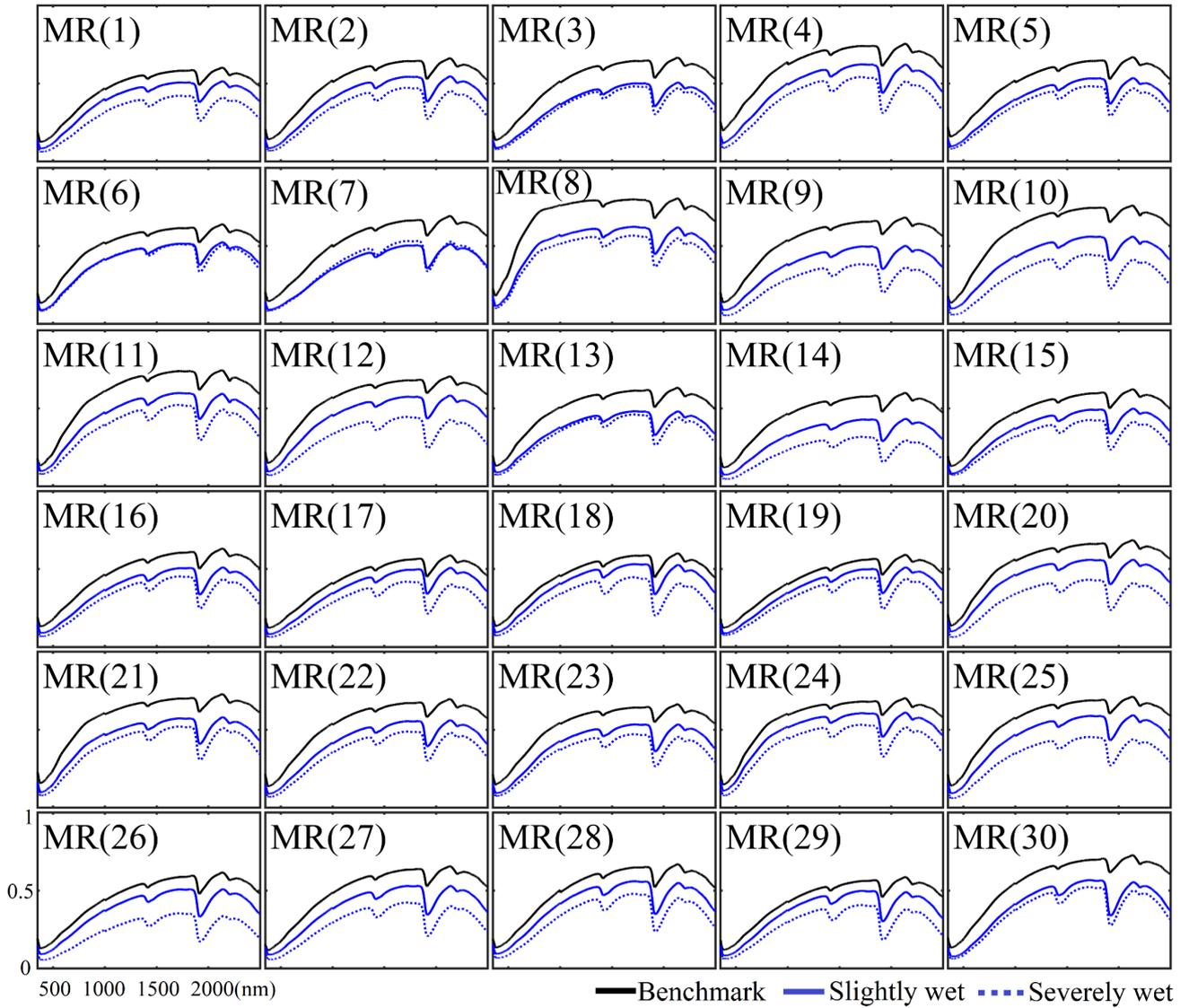


Figure S11. Spectral reflectance of Jilin samples in soil moisture control experiment.

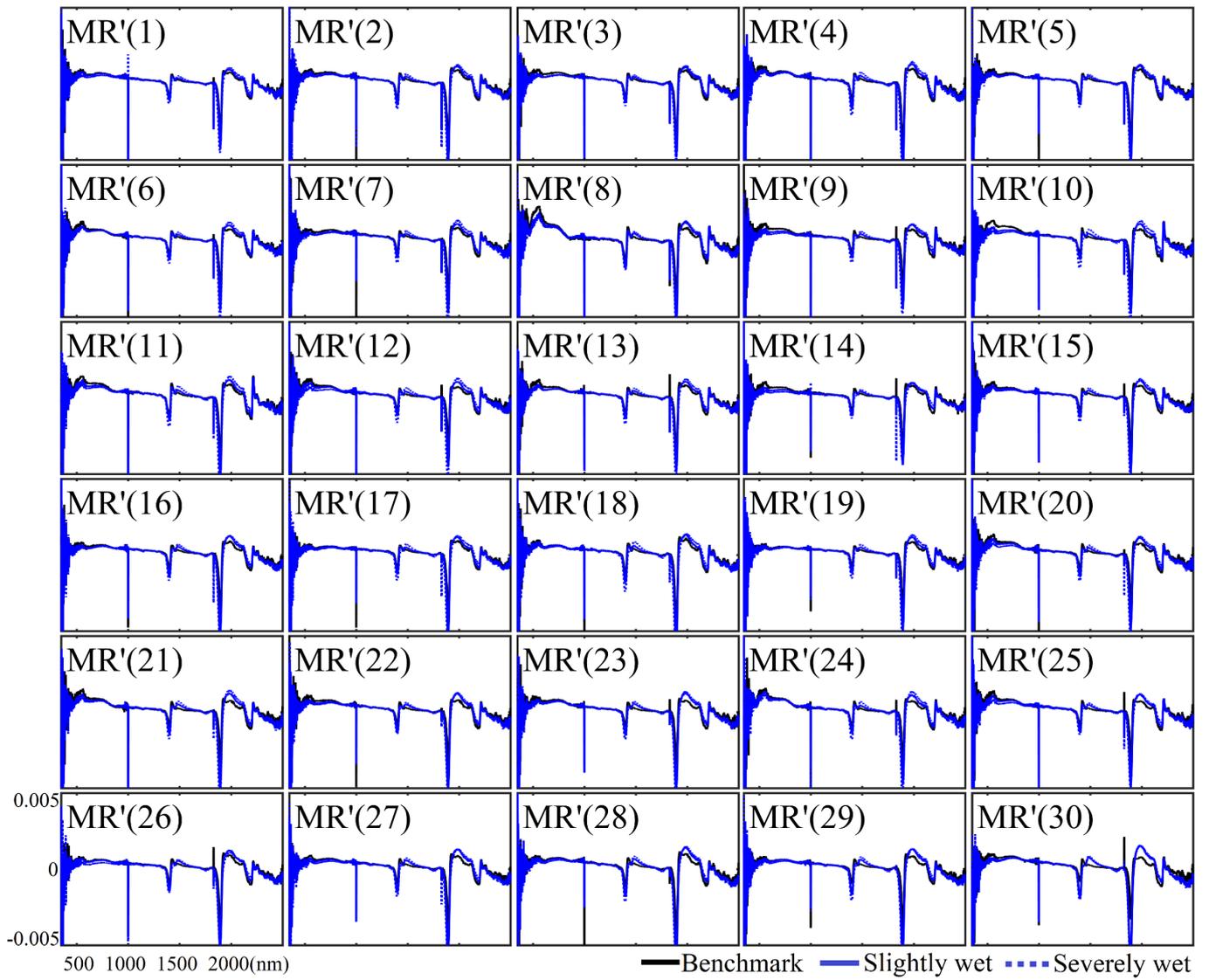


Figure S12. The first derivative of the reflectance of Jilin samples in soil moisture control experiment.

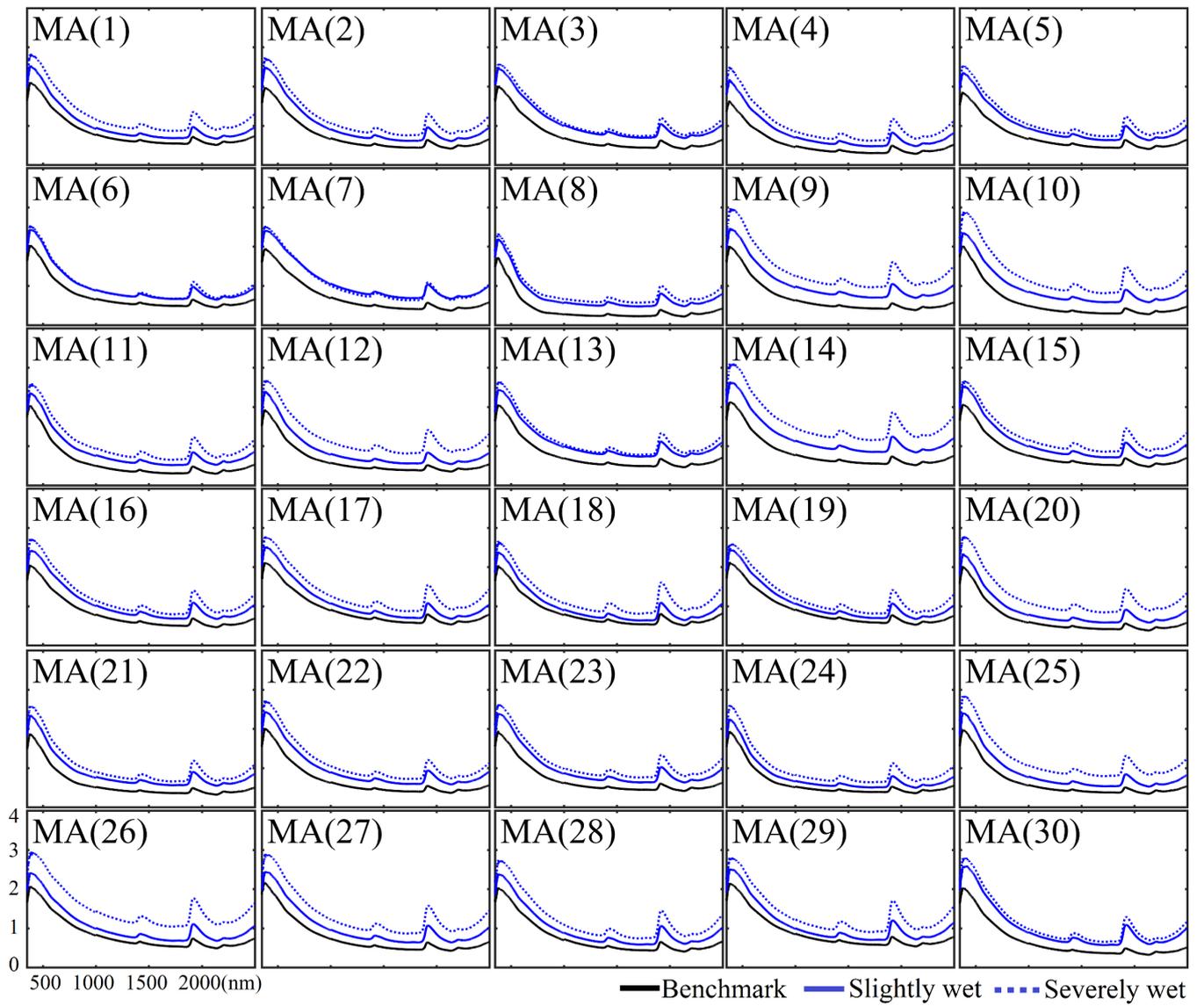


Figure S13. The spectral absorbance of Jilin samples in soil moisture control experiment.

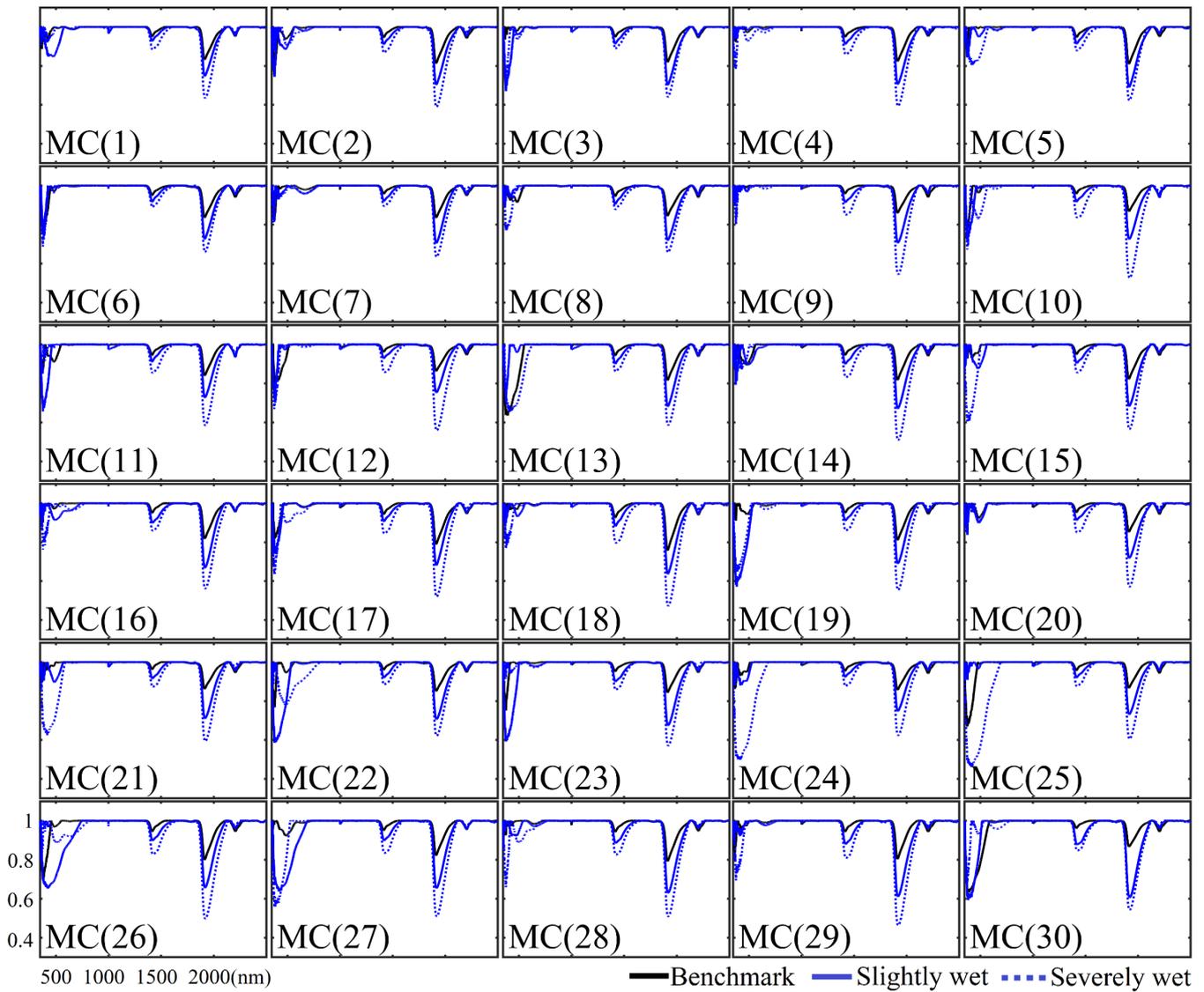


Figure S14. The reflectance continuum removal of the of Jilin samples in soil moisture control experiment.

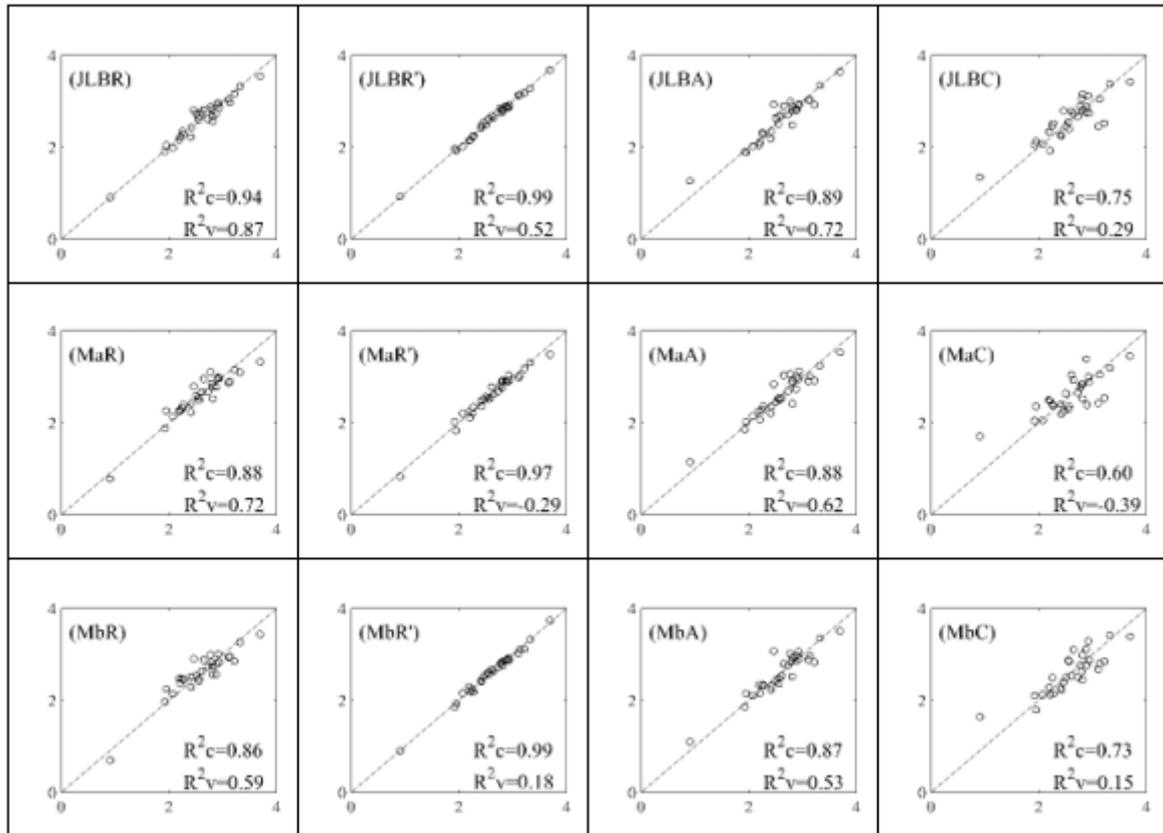


Figure S15. Estimation accuracies of the PLSR models in soil moisture control experiment.

Text S4. Spectral Response and Estimation Results of all HLJ Samples under Soil Particle size Influence

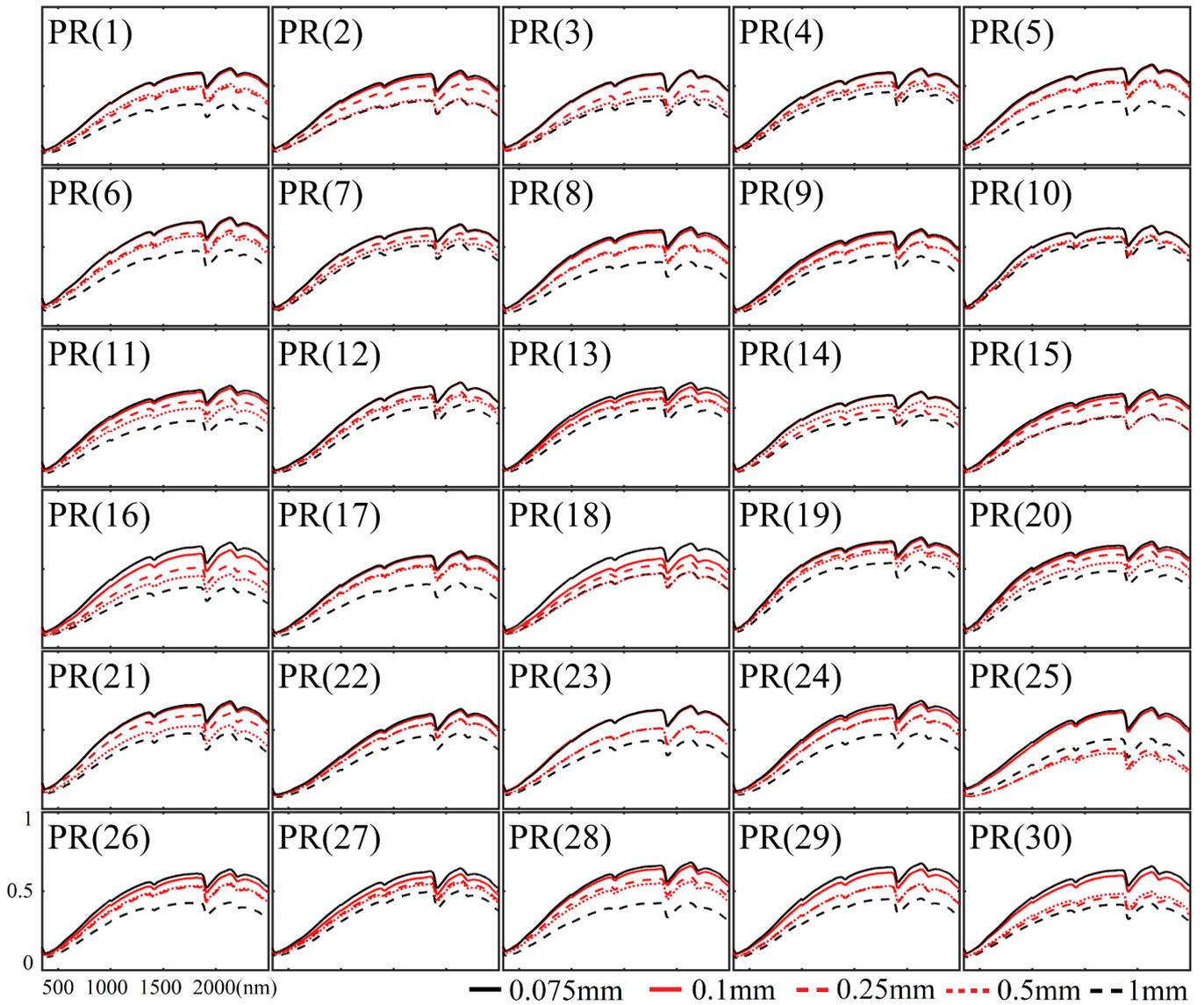


Figure S16. Spectral reflectance of HLJ samples in soil particle size control experiment.

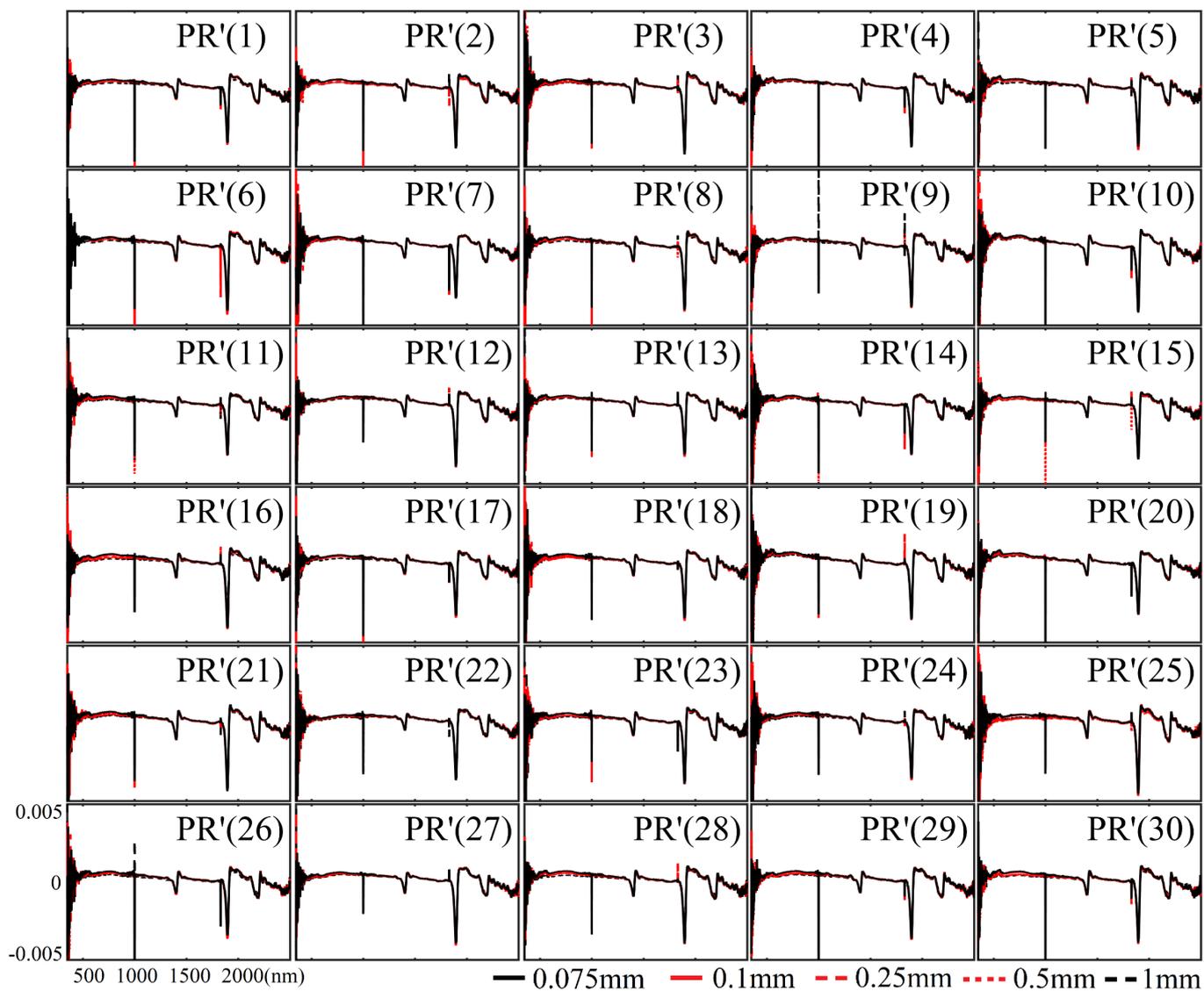


Figure S17. The first derivative of the reflectance of HLJ samples in soil particle size control experiment.

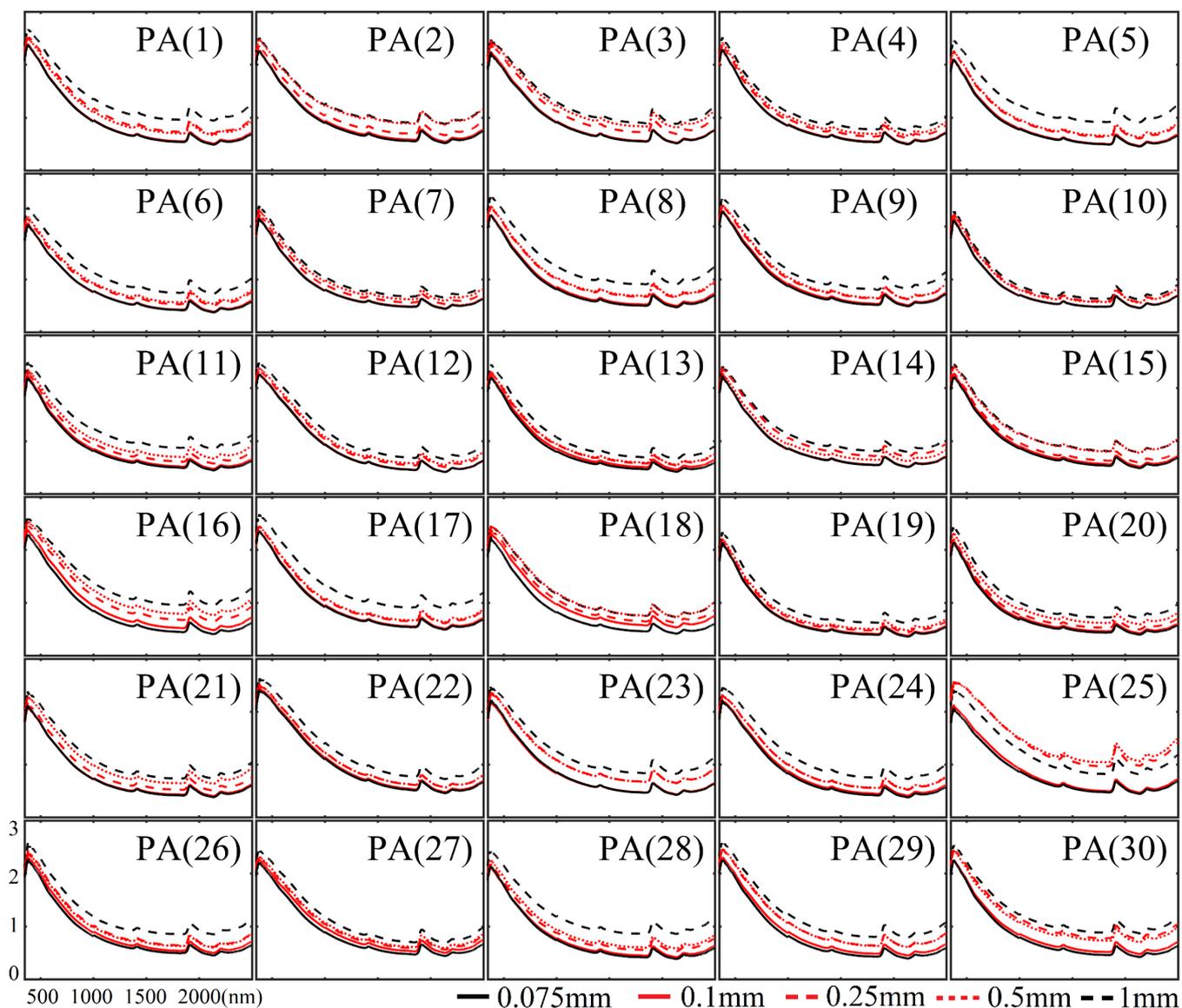


Figure S18. The spectral absorbance of HLJ samples in soil particle size control experiment.

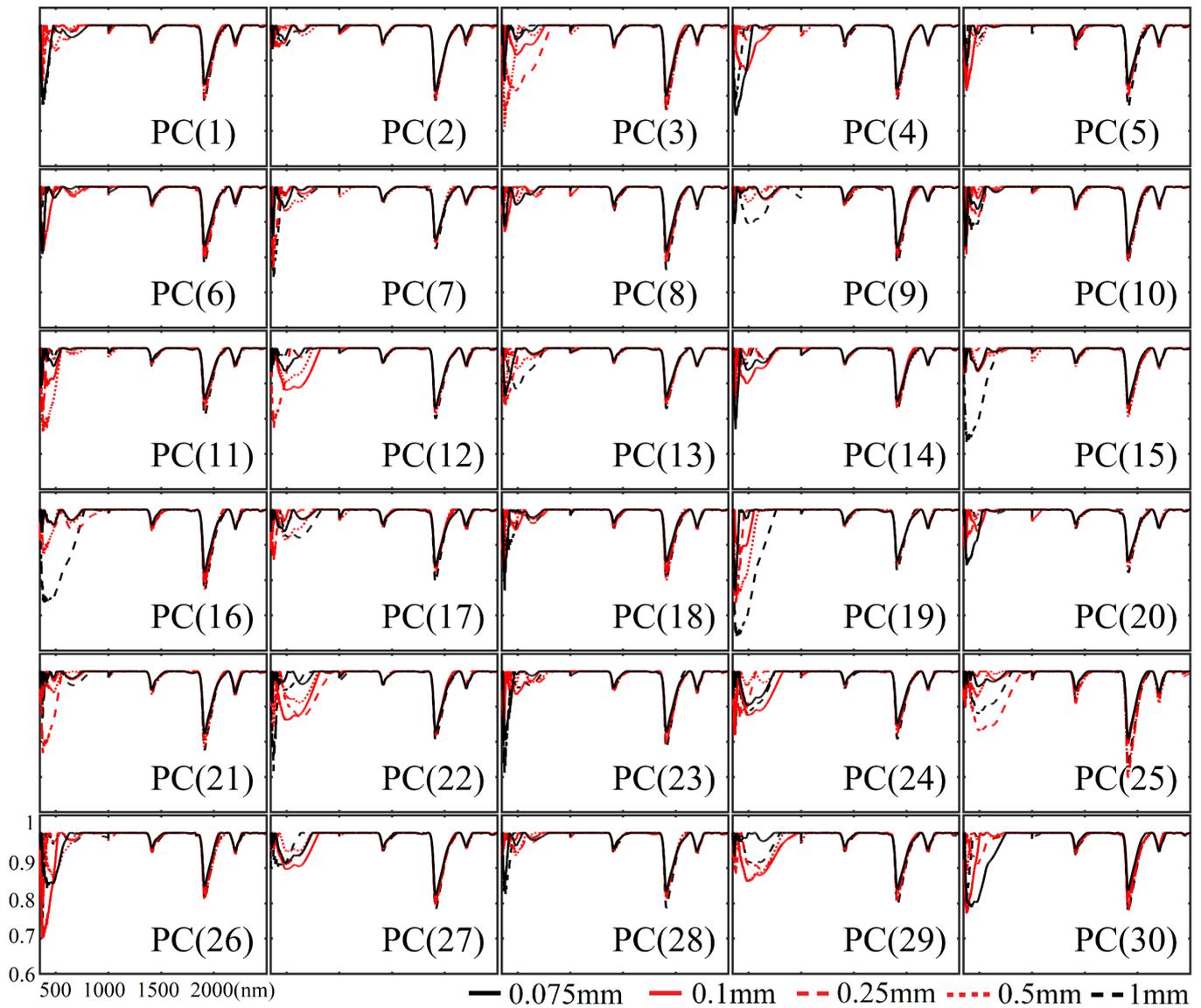


Figure S19. The continuum removal of reflectance of the of HLJ samples in soil particle size control experiment.

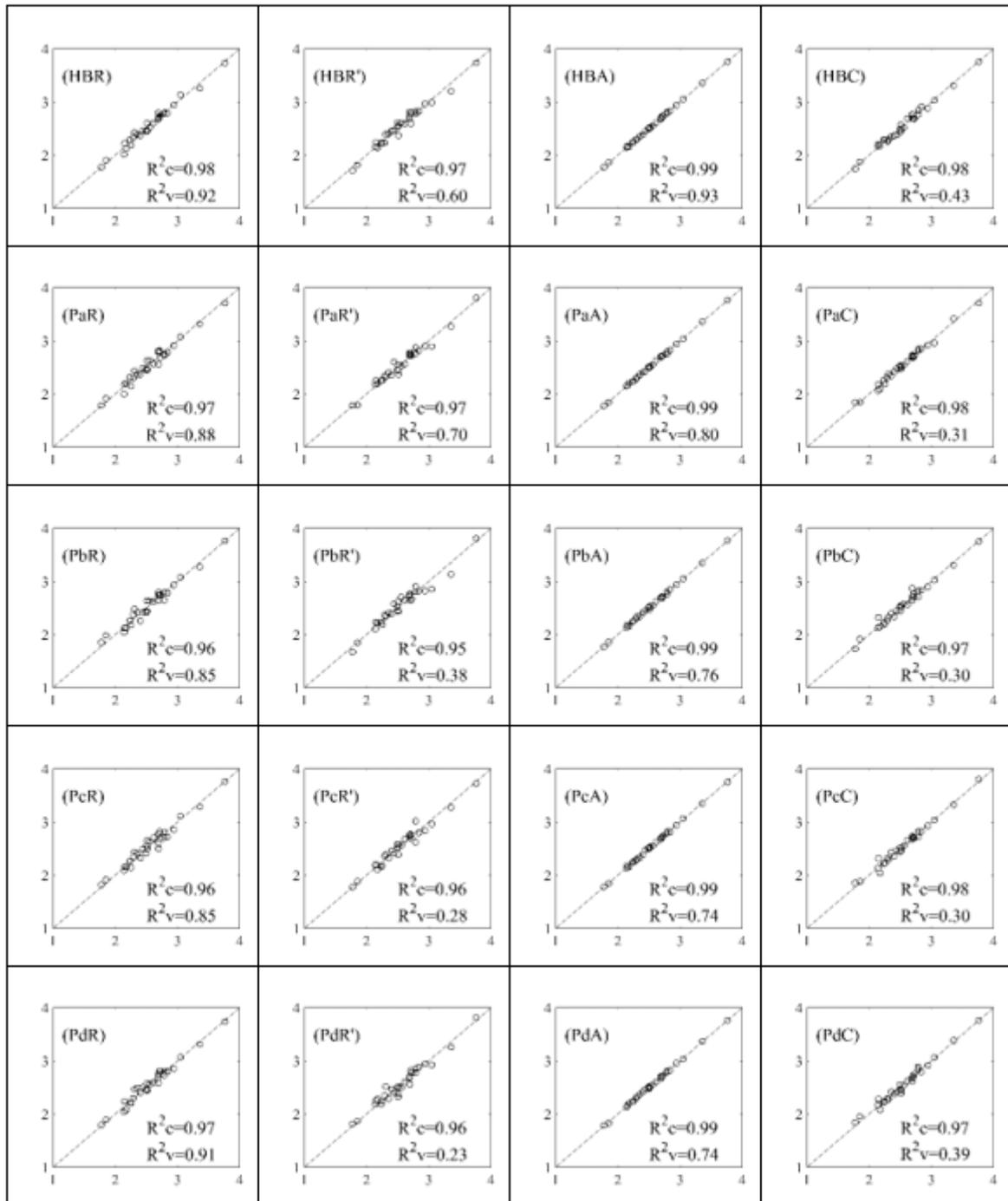


Figure S20. Estimation accuracies of the PLSR models in soil particle size control experiment.