

Supplementary material

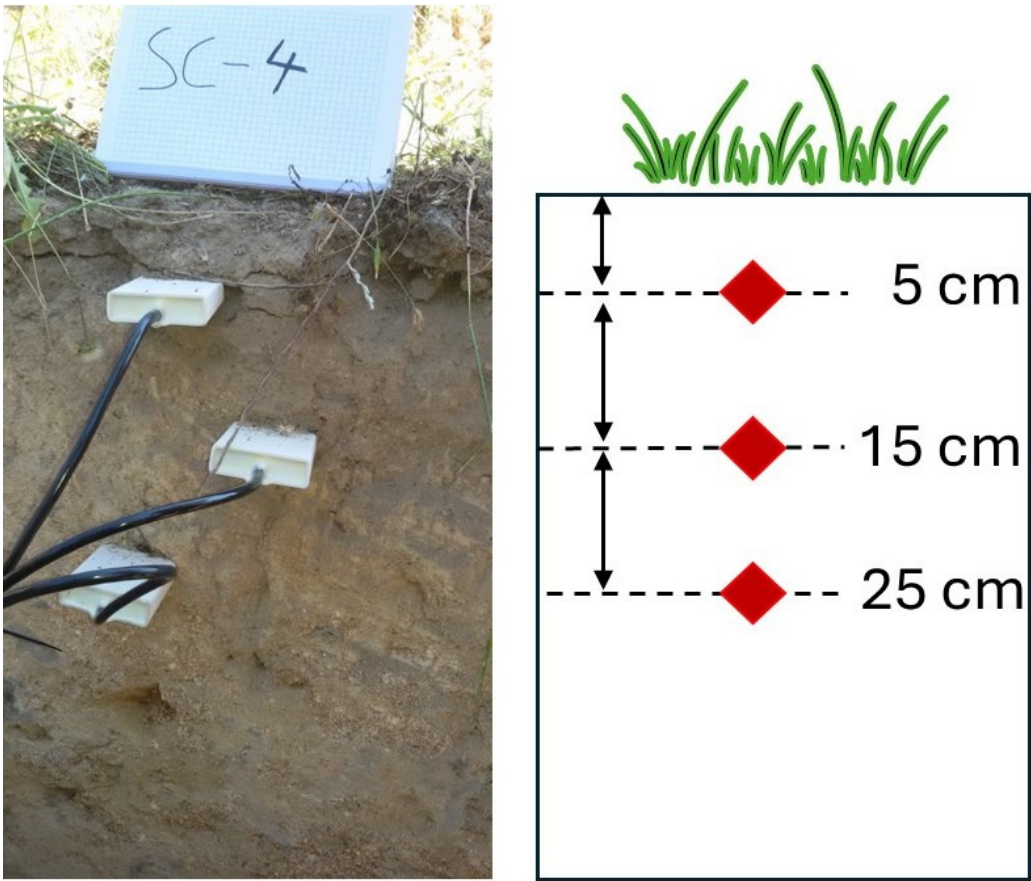


Figure S1. TDR soil moisture sensors (Campbell Scientific CS655) installed at different depths (5 cm, 15 cm, and 25 cm) in an open field

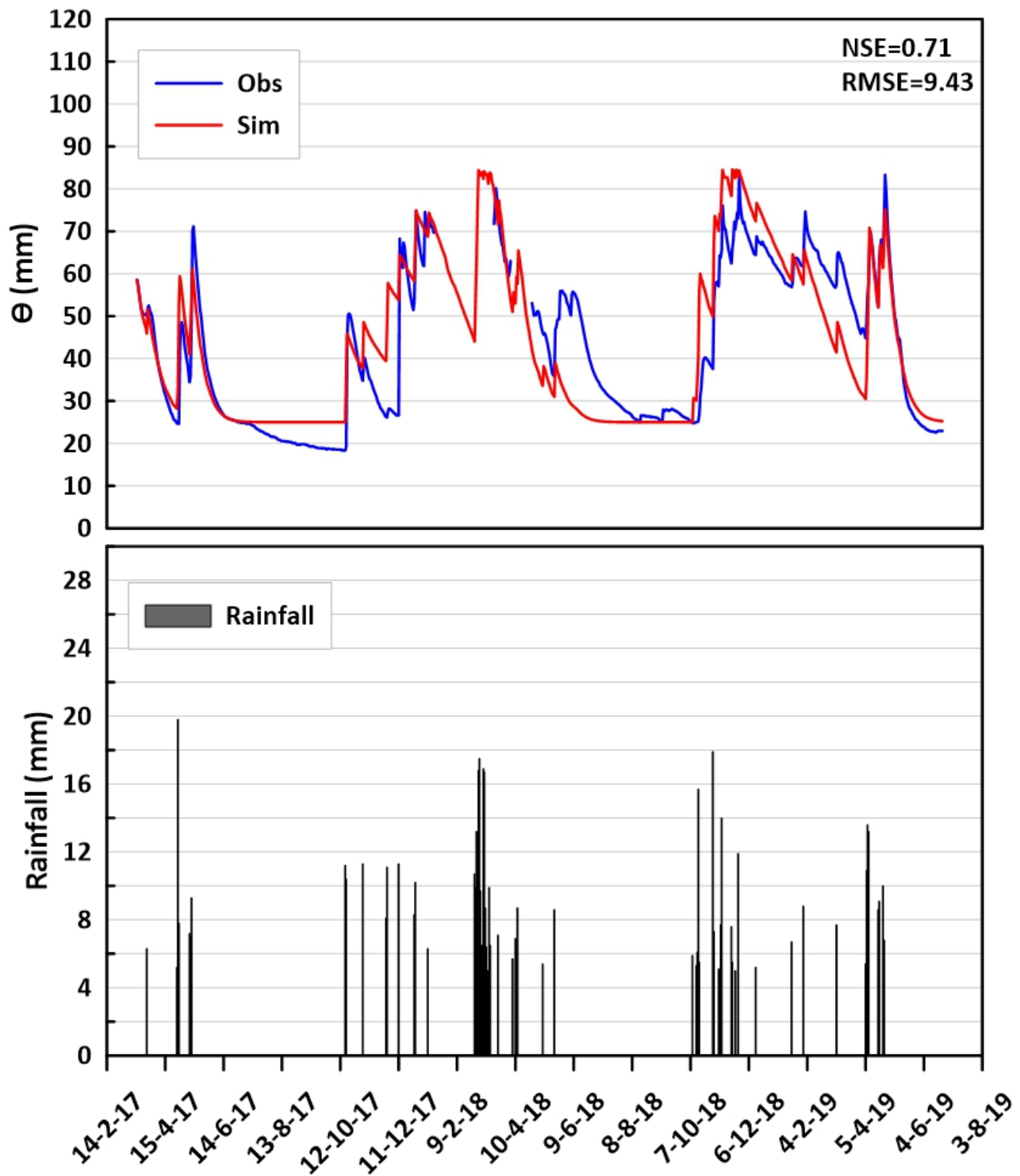


Figure S2. Soil moisture model calibration. The blue line is the observed soil moisture (mm); The red line is the modelled soil moisture (mm); Dark barchart is the rainfall (mm).

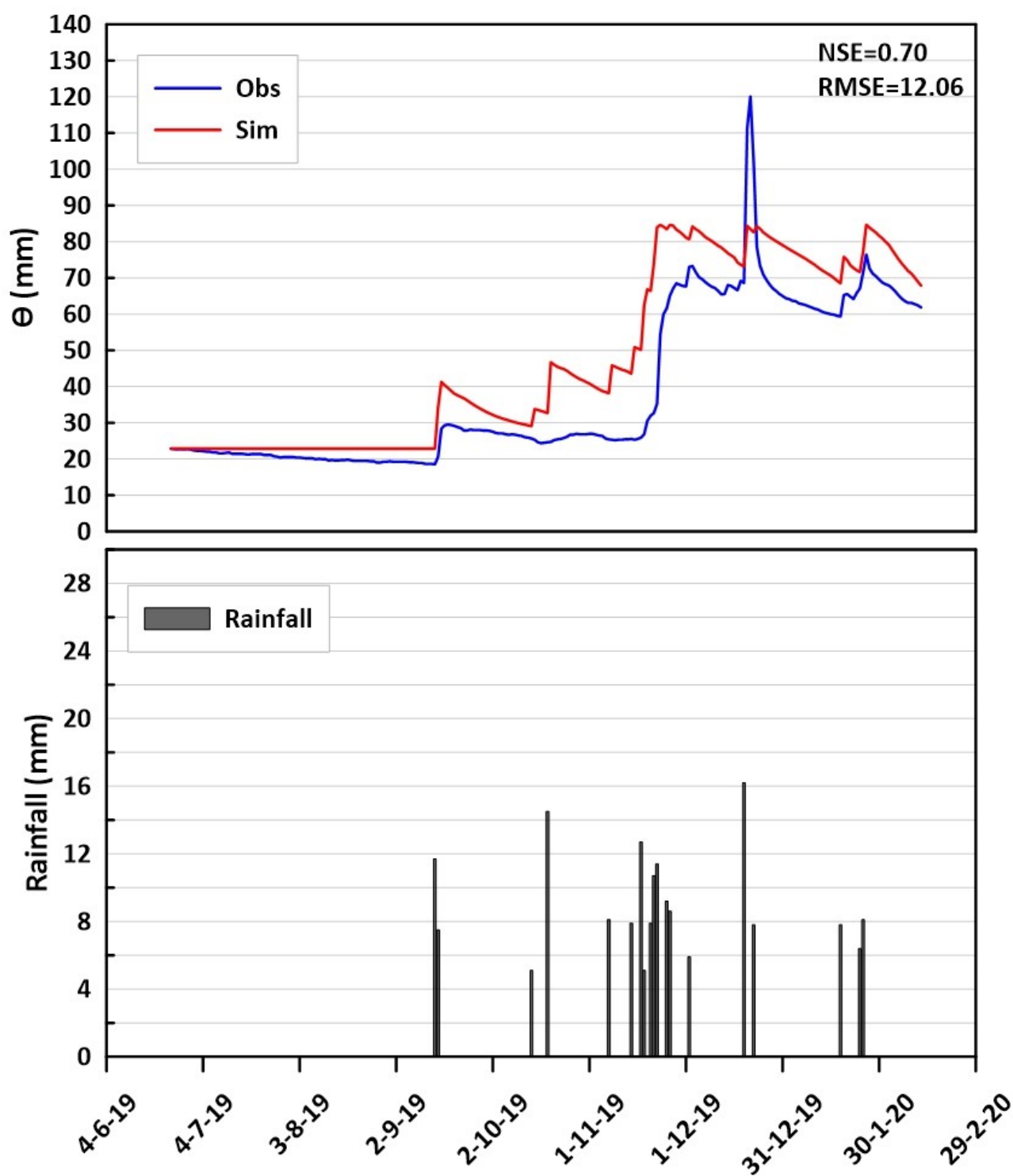


Figure S3. Soil moisture model Validation. The blue line is the observed soil moisture (mm); The red line is the modelled soil moisture (mm); Dark barchart is the rainfall (mm).

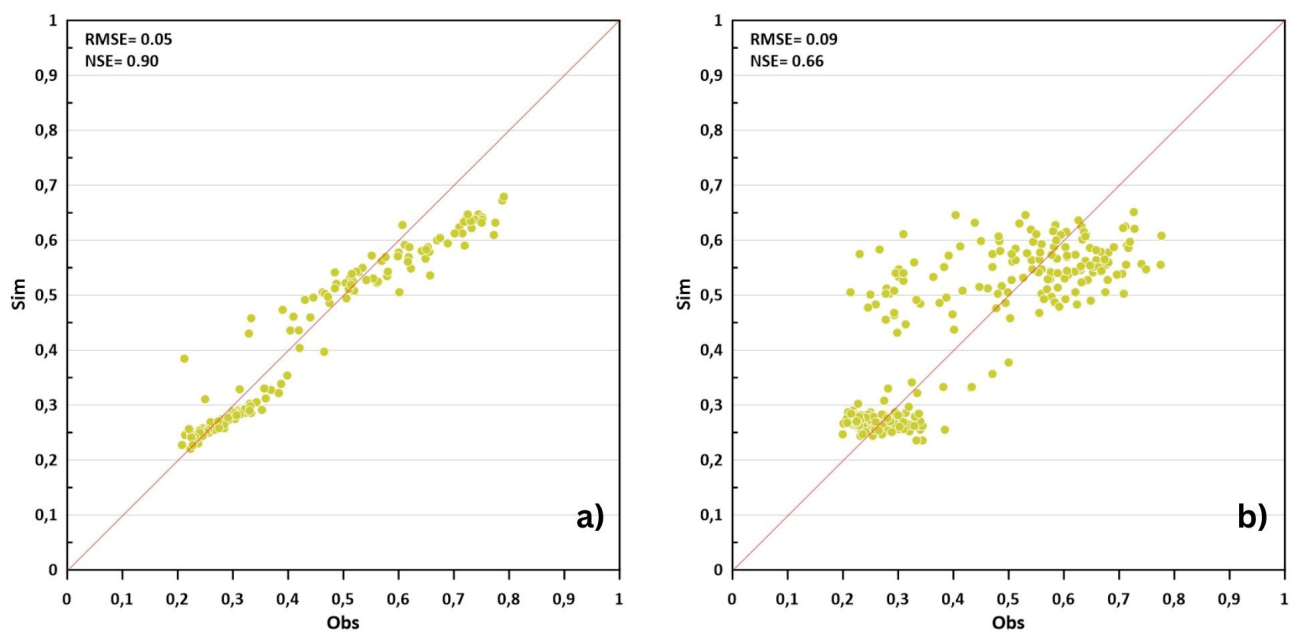


Figure S4. Training (a) and testing (b) forecasting model NDVI\_SM25 at 7 days

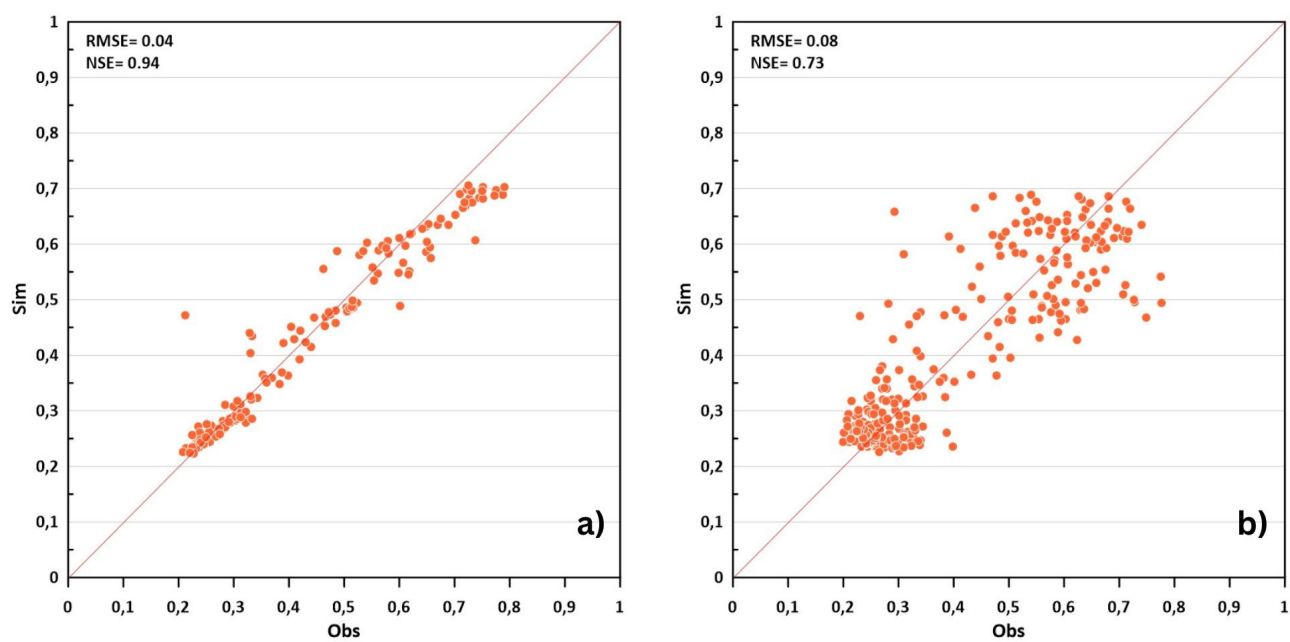


Figure S5. Training (a) and testing (b) forecasting model NDVI\_SWI at 7 days

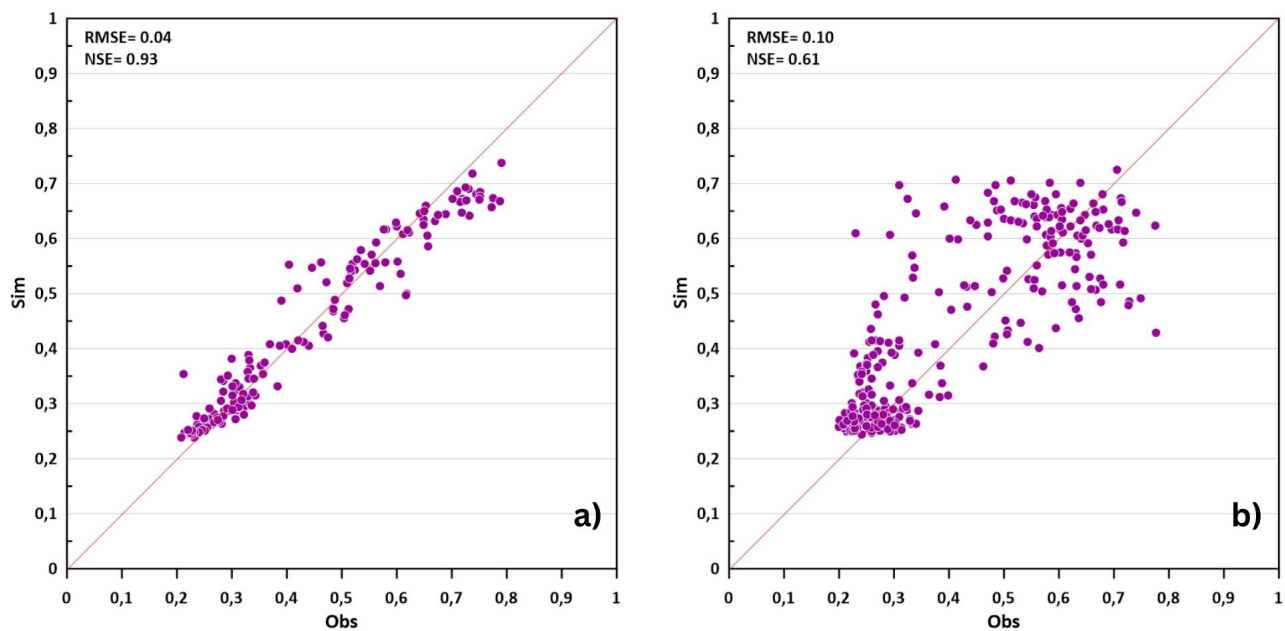


Figure S6. Training (a) and testing (b) forecasting model NDVI\_SM25 at 30 days

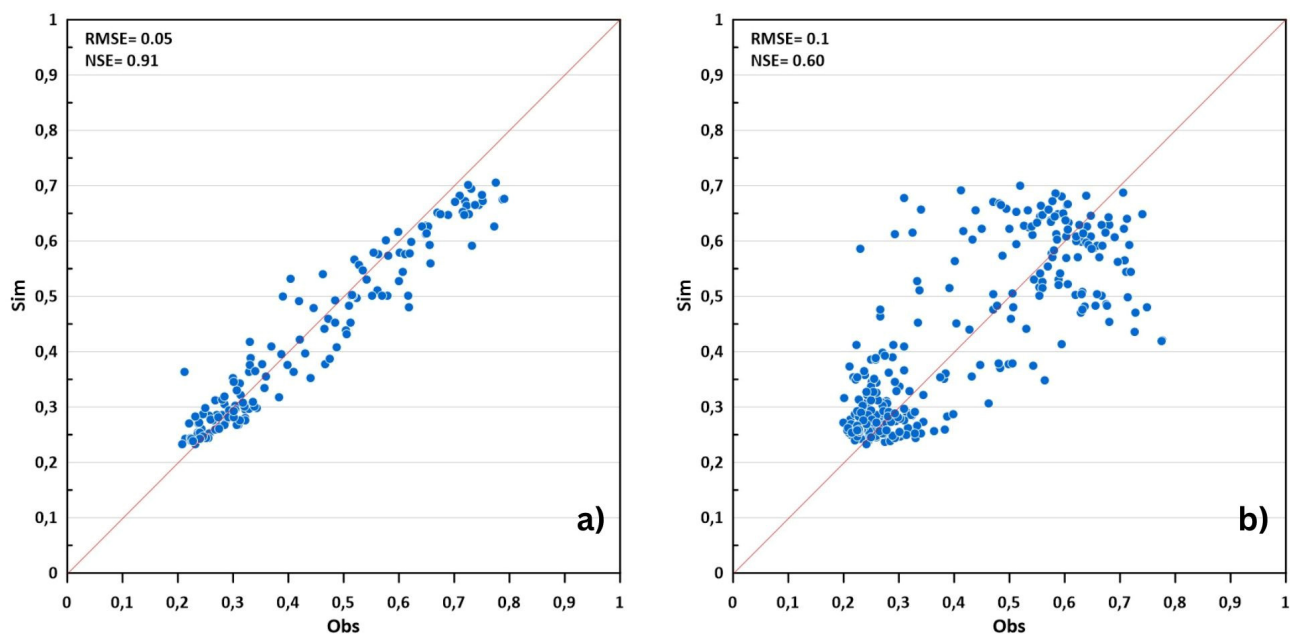


Figure S7. Training (a) and testing (b) forecasting model NDVI\_SWI at 30 days