Supplemental Material

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Influence of Underlying Surface Datasets on Simulated Hydrological Variables in the Xijiang River Basin

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Supplementary

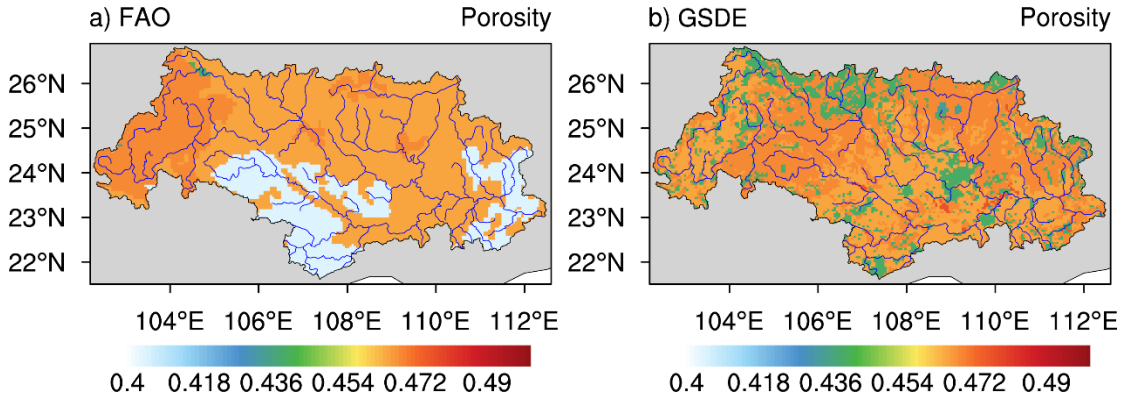

Fig. S1 Spatial patterns of porosity.

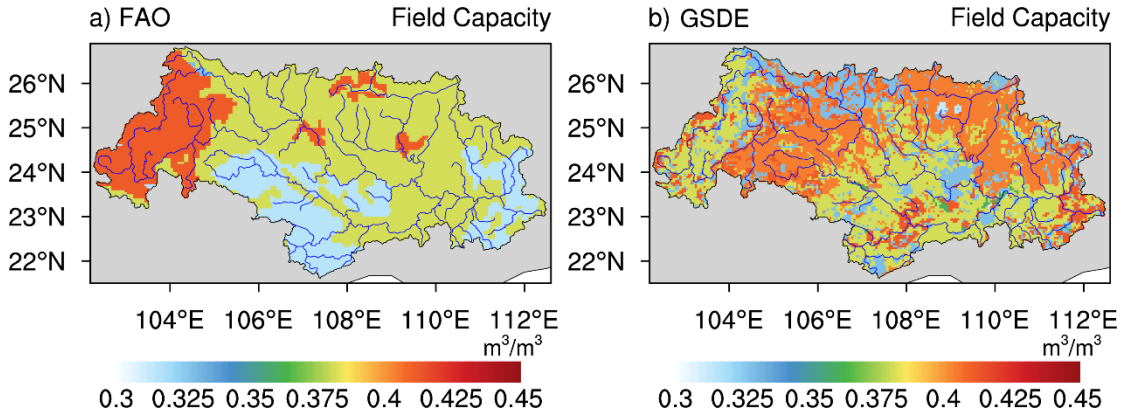

Fig. S2 Spatial patterns of field capacity (m^3/m^3).

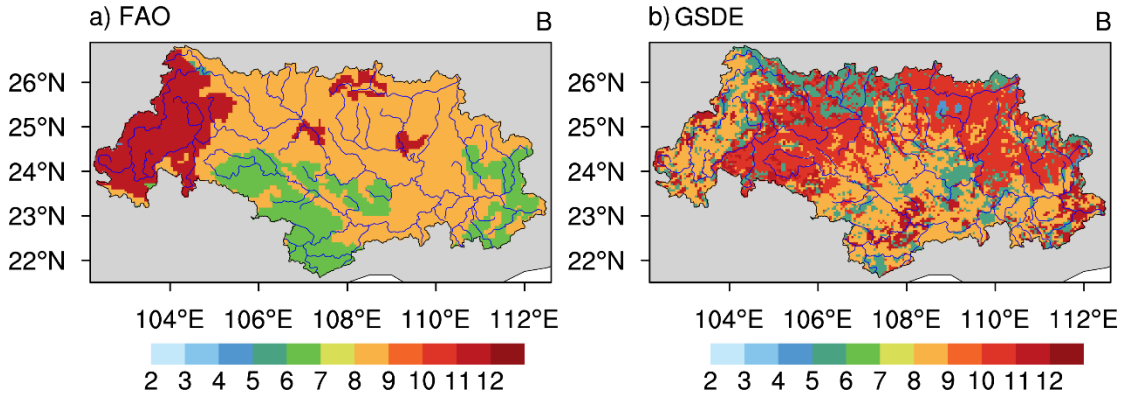

Fig. S3 Spatial patterns of parameter B.

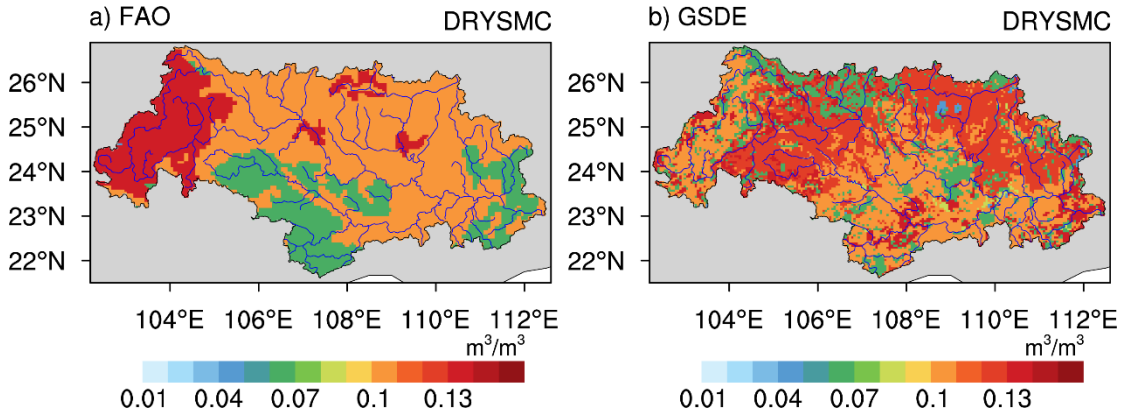

Fig. S4 Spatial patterns of dry soil moisture threshold (m^3/m^3) at which direct evaporation from top soil layer ends.

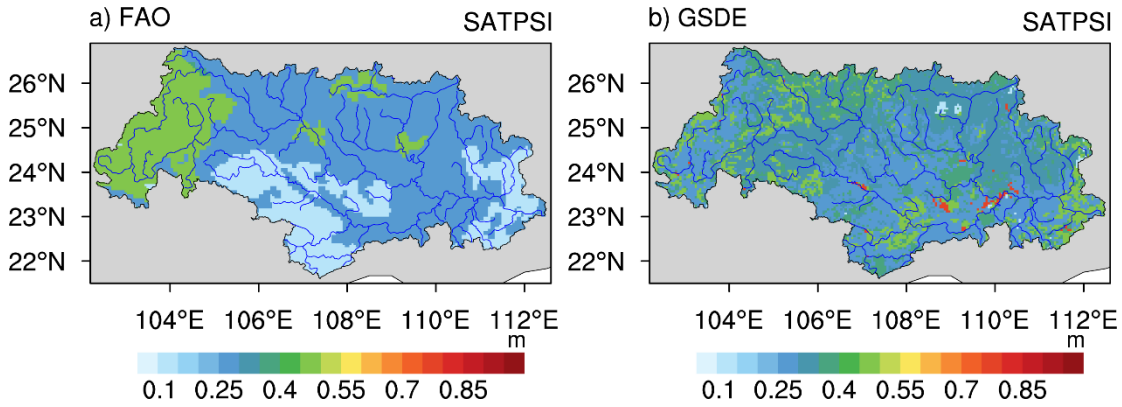

Fig. S5 Spatial patterns of saturation soil matric potential (m).

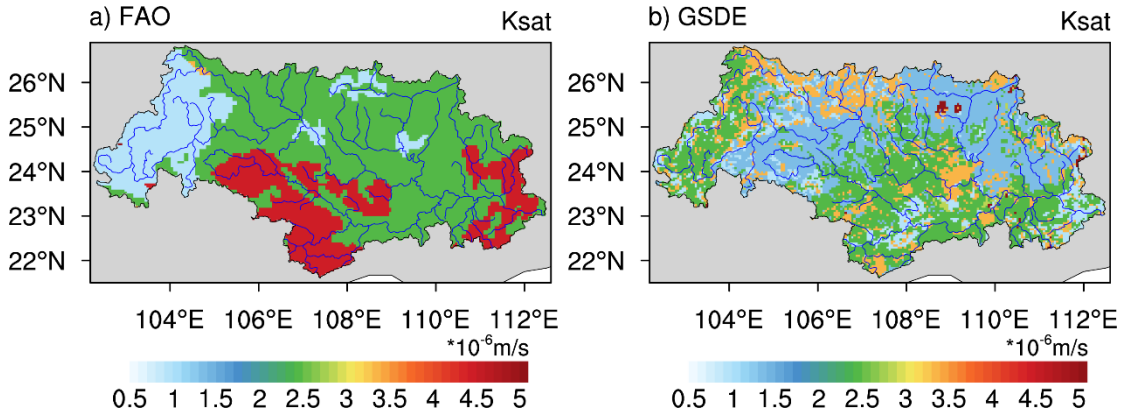

Fig. S6 Spatial patterns of saturation soil conductivity ($*10^{-6}$m/s).

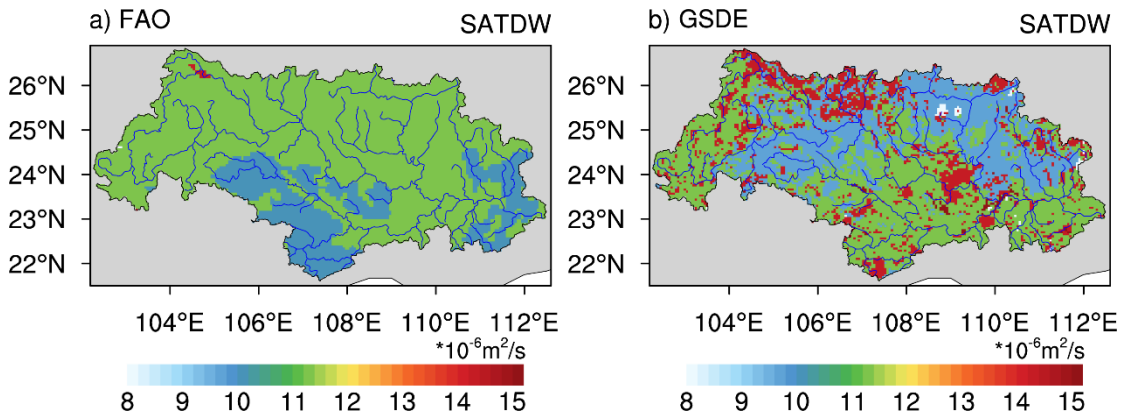

Fig. S7 Spatial patterns of saturation soil diffusivity (*$10^{-6}$$m^2$/s).

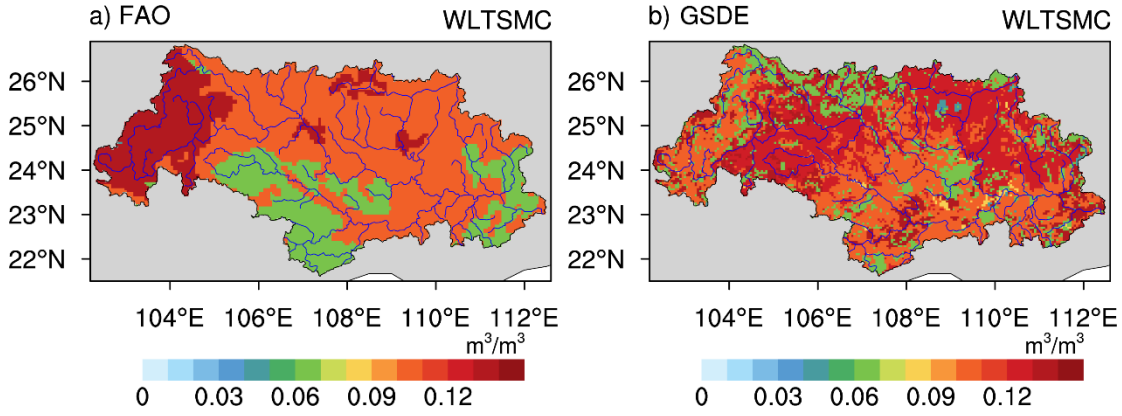

Fig. S8 Spatial patterns of wilting point (m^3/m^3) soil moisture.

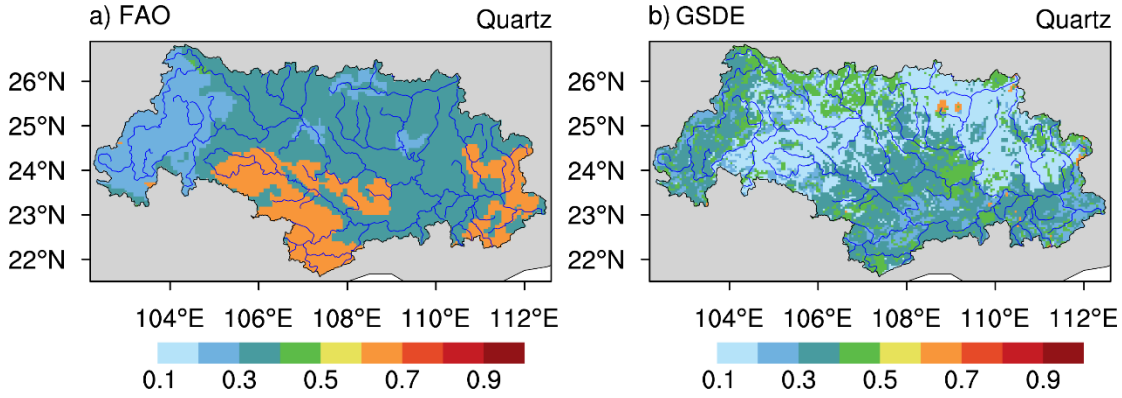

Fig. S9 Spatial patterns of soil quartz content.

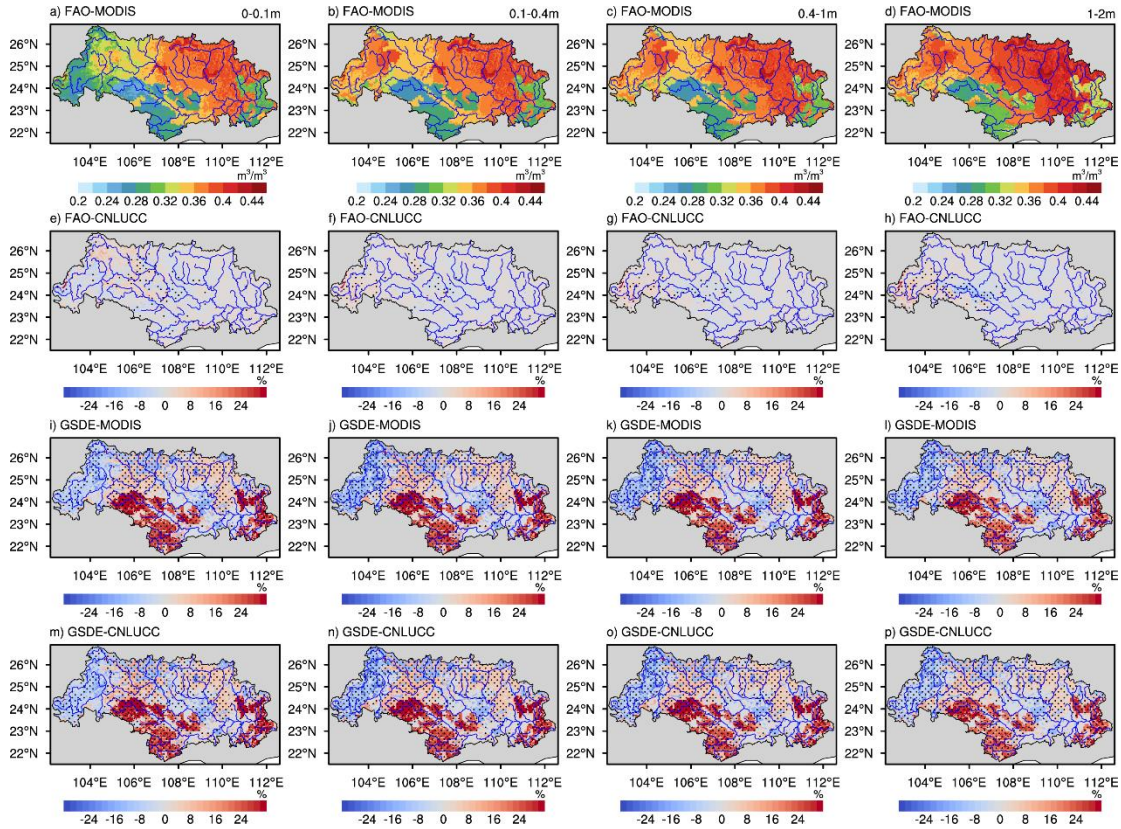

Fig. S10 Spring mean soil moisture (m^3/m^3) at different depths in FAO-MODIS (a–d), and annual mean soil moisture at different depths in other cases relative change to the spring mean soil moisture of FAO-MODIS (e–p). The dots represent statistically significant differences in monthly values at the 95% confidence interval.

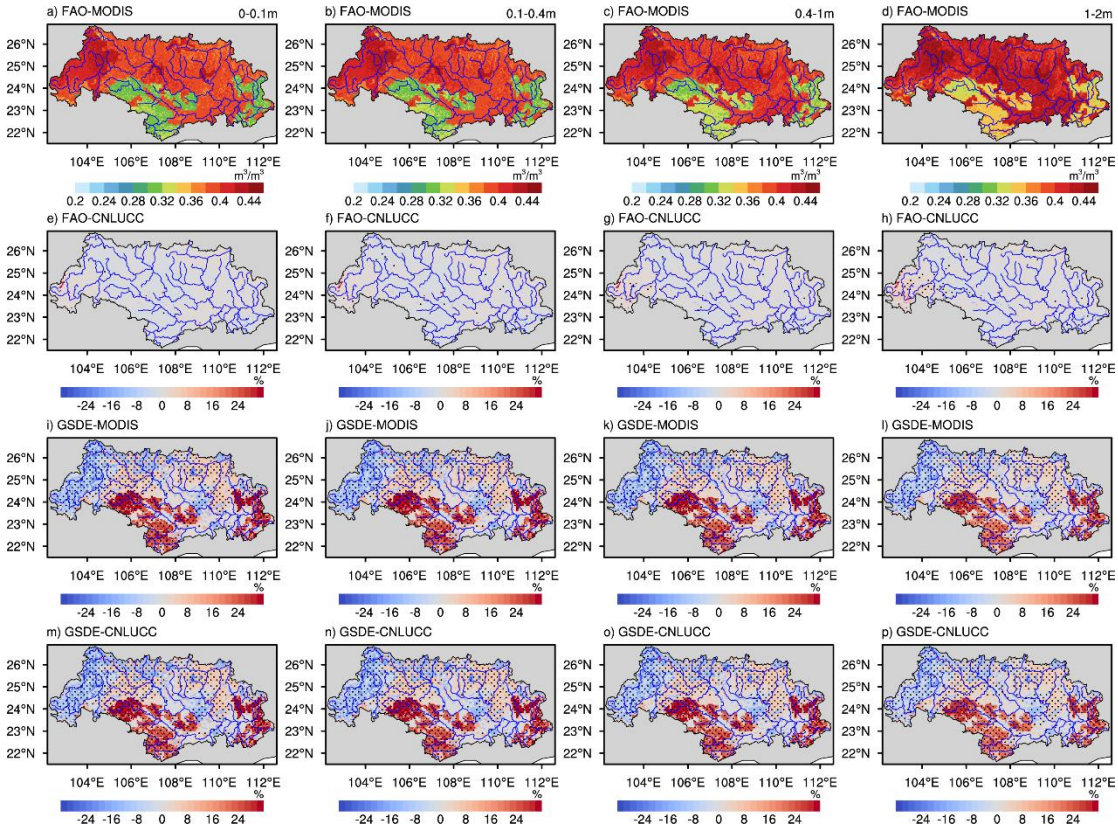

Fig. S11 Summer mean soil moisture (m^3/m^3) at different depths in FAO-MODIS (a–d), and annual mean soil moisture at different depths in other cases relative change to the summer mean soil moisture of FAO-MODIS (e–p). The dots represent statistically significant differences in monthly values at the 95% confidence interval.

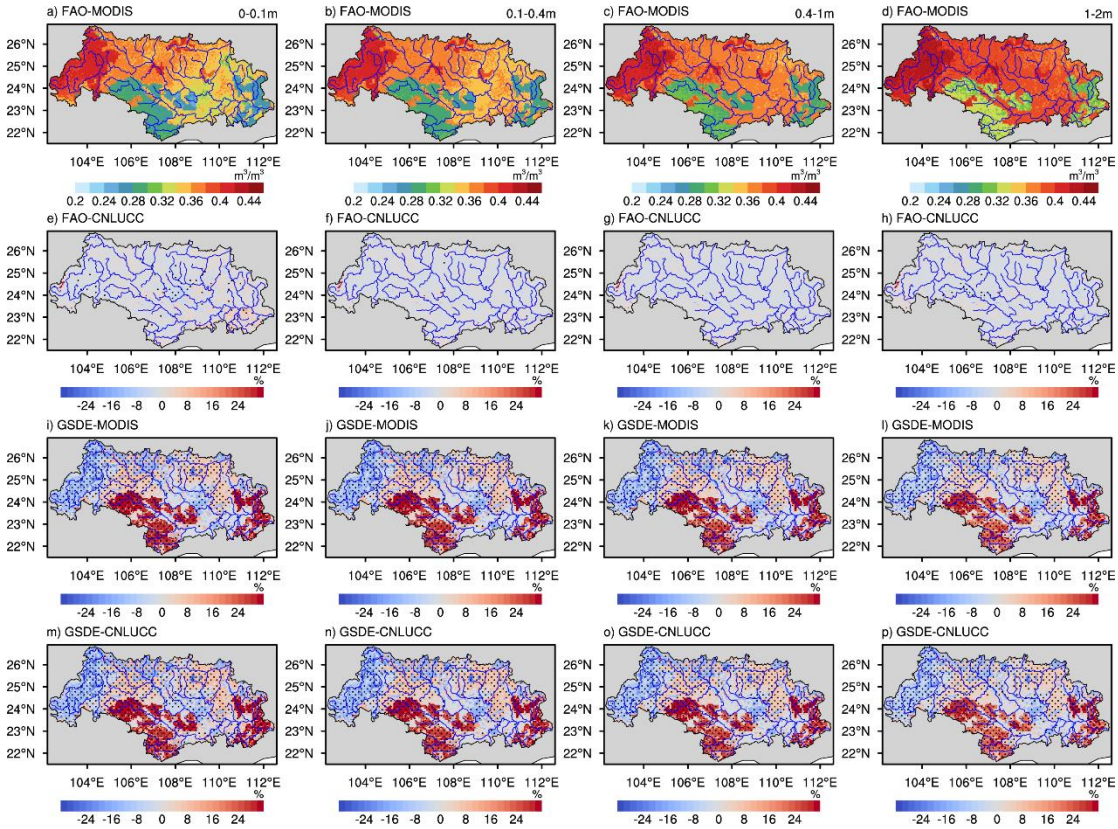

Fig. S12 Autumn mean soil moisture (m^3/m^3) at different depths in FAO-MODIS (a–d), and annual mean soil moisture at different depths in other cases relative change to the autumn mean soil moisture of FAO-MODIS (e–p). The dots represent statistically significant differences in monthly values at the 95% confidence interval.

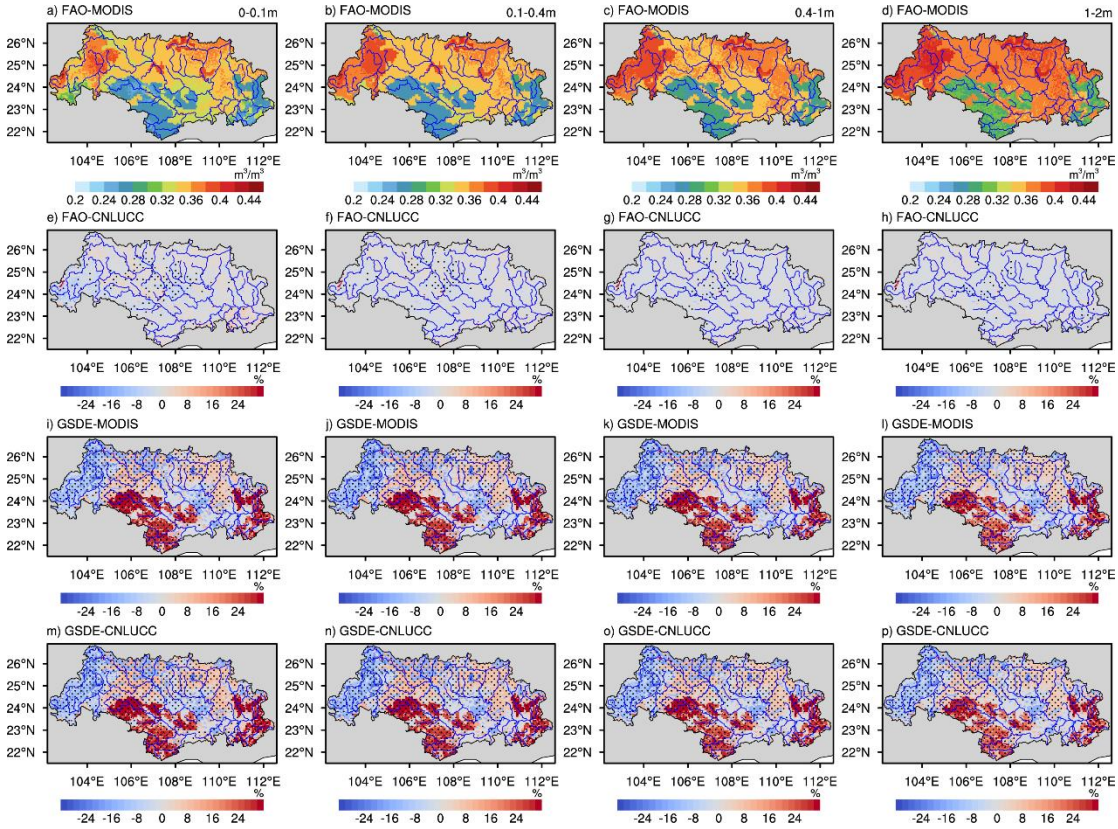

Fig. S13 Winter mean soil moisture (m^3/m^3) at different depths in FAO-MODIS (a–d), and annual mean soil moisture at different depths in other cases relative change to the winter mean soil moisture of FAO-MODIS (e–p). The dots represent statistically significant differences in monthly values at the 95% confidence interval.

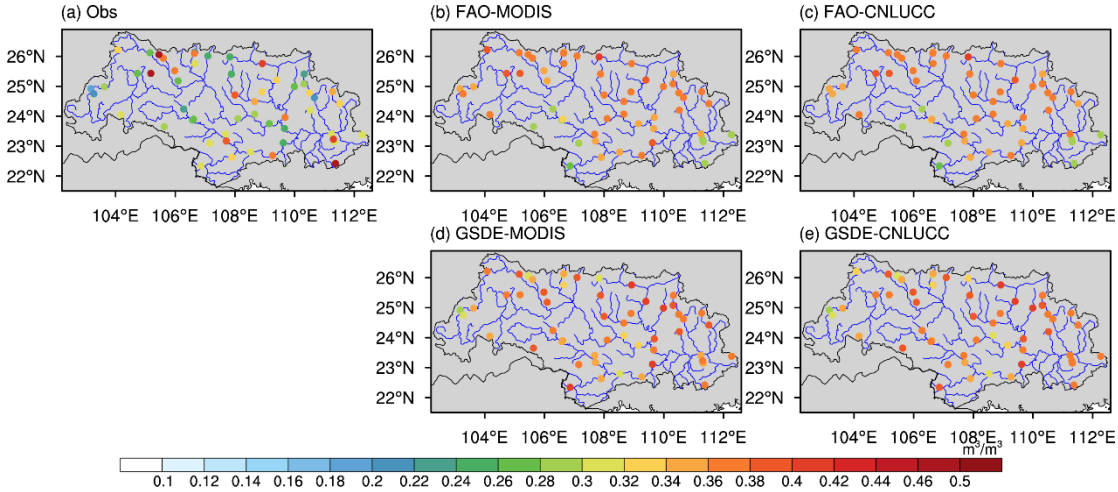

Fig. S14 Spatial distribution of annual mean (a) observed and (b-e) simulated soil moisture (m^3/m^3).

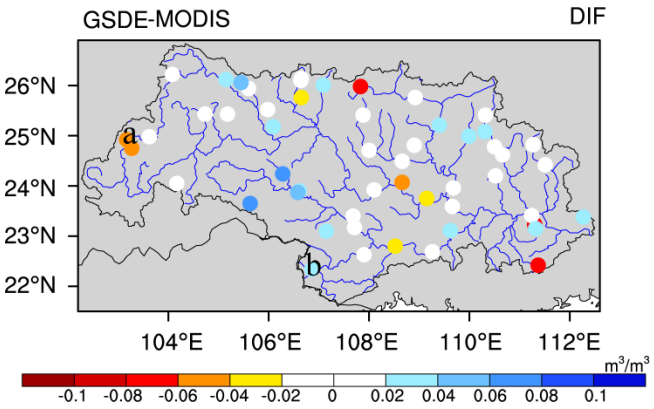

Fig. S15 The spatial distribution of the differences of RMSE (m^3/m^3) between GSDE-MODIS and FAO-MODIS, where the marked stations are the stations that are used in Fig. S16.

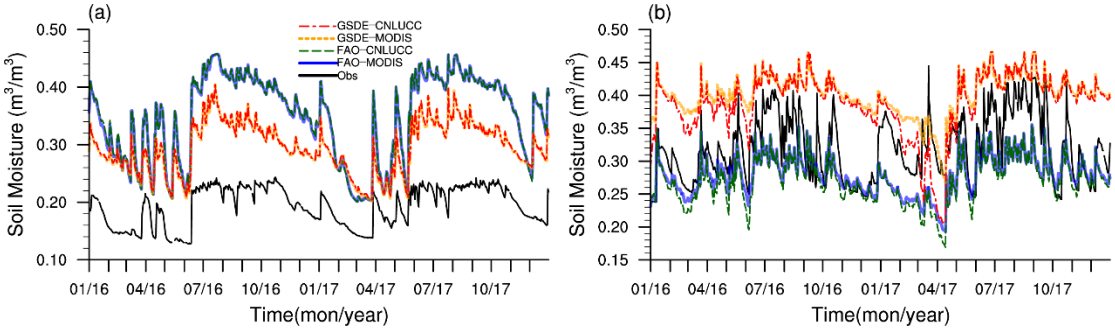

Fig. S16 The daily soil moisture (m^3/m^3) time series of the four cases and observation at two stations (stations marked in Fig. S15) in 2016-2017.