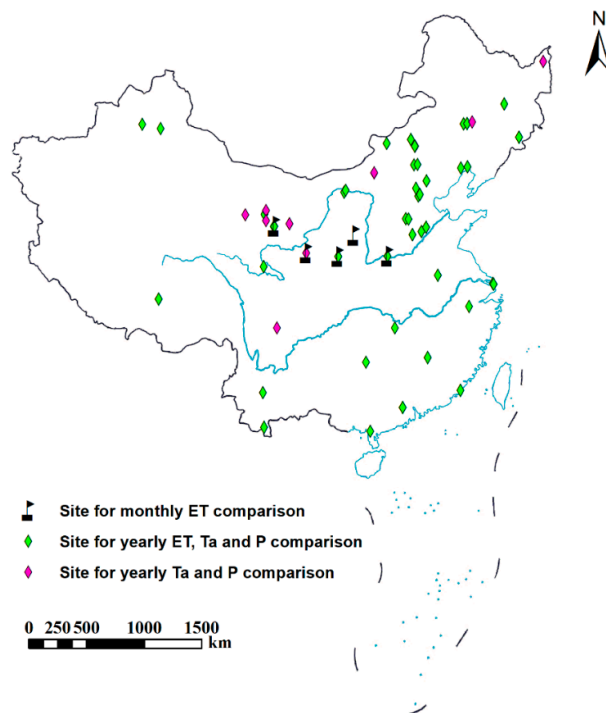
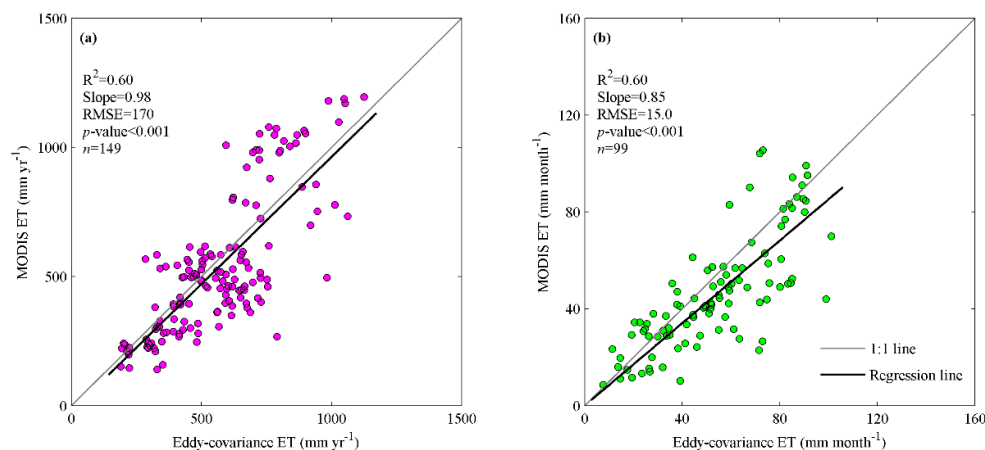


# Spatiotemporal Patterns of Terrestrial Evapotranspiration in Response to Climate and Vegetation Coverage Changes across the Chinese Loess Plateau

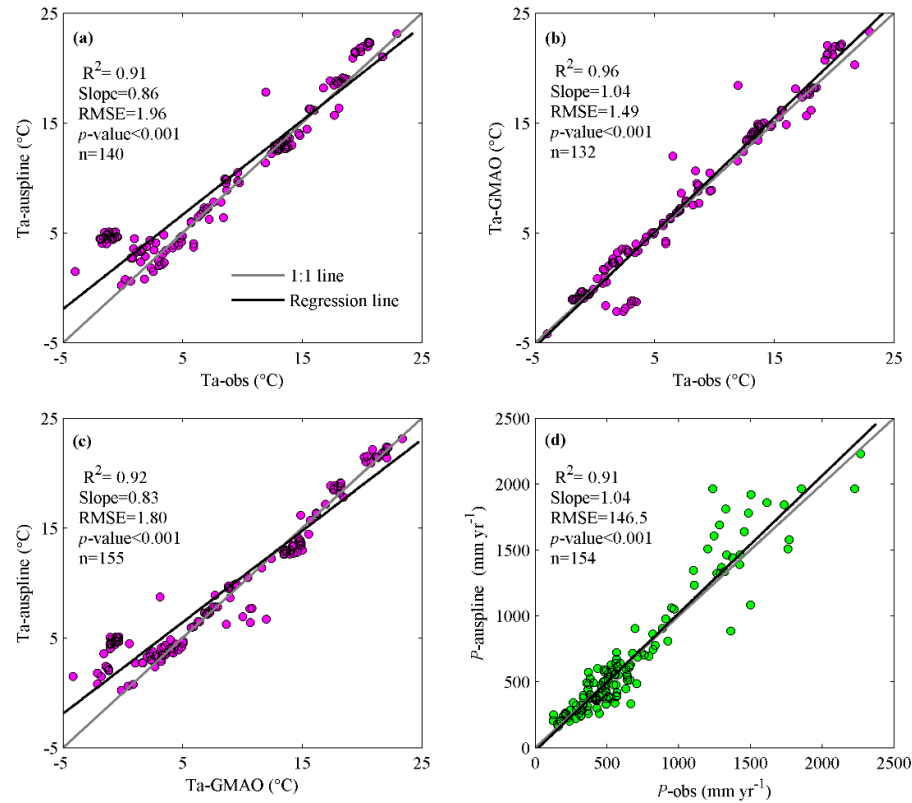
Han Zheng, Henry Lin and Xianjin Zhu



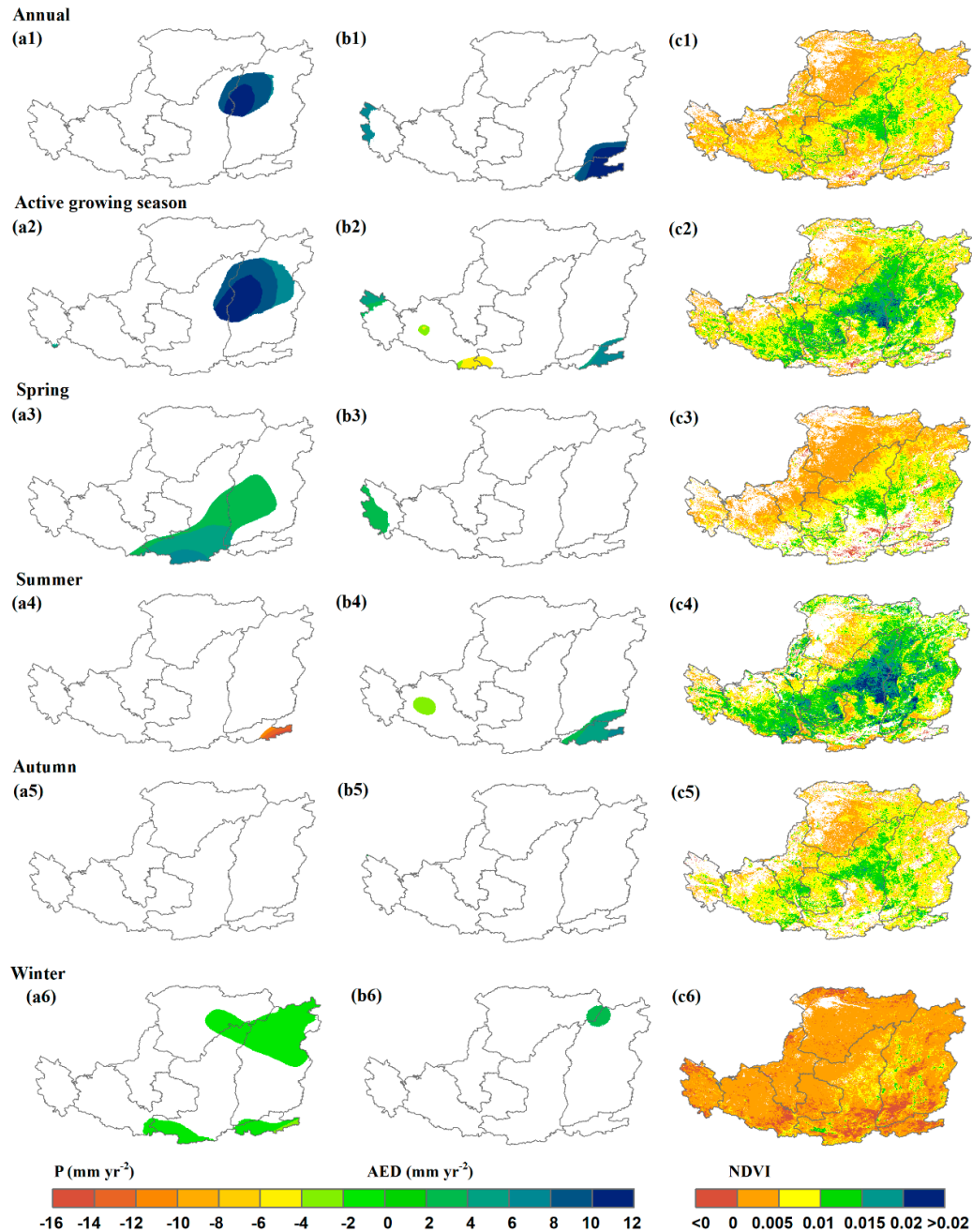
**Figure S1.** Eddy-covariance flux sites in China used for validating MODIS evapotranspiration (ET) dataset and gridded precipitation ( $P$ ) and air temperature ( $T_a$ ) datasets generated by AUSPLINE software in this study.



**Figure S2.** Comparison between eddy-covariance ET and MODIS ET at (a) annual scale in China and (b) monthly scale in the Chinese Loess Plateau.



**Figure S3.** Comparison between point-scale  $T_a$  and  $P$  observations and interpolated data from AUSPLINE software and GMAO reanalysis data. Comparison between point-scale (a)  $T_a$  and (d)  $P$  observations and interpolated data from AUSPLINE software. (b) Comparison between point-scale  $T_a$  observations and GMAO reanalysis data. (c) Comparison of  $T_a$  data between GMAO reanalysis data and AUSPLINE gridded data.



**Figure S4.** Spatial patterns of (a) precipitation ( $P$ ) trends, (b) atmospheric evaporative demand (AED) trends, and (c) NDVI trends during 2000–2014 at different timescales of (1) annual, (2) active growing season, (3) spring, (4) summer, (5) autumn, and (6) winter in the Chinese Loess Plateau. This figure only shows pixels with significant trends ( $p$ -value < 0.05).