

## Supplemental figures

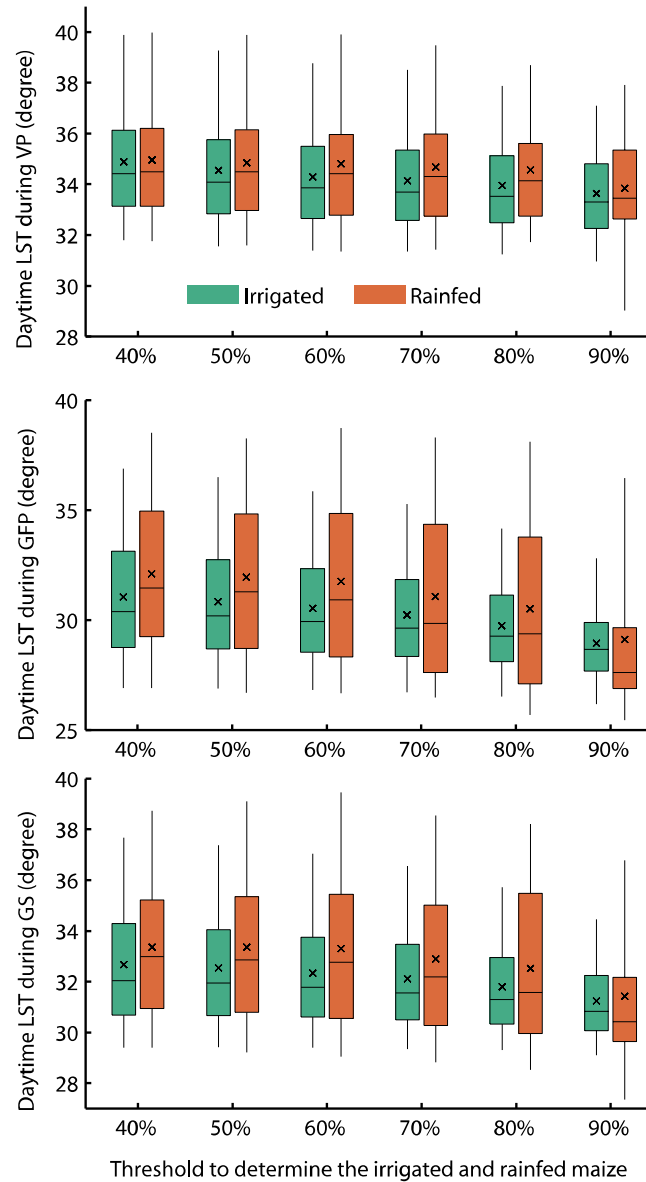


Figure S1 Boxplot of LST during VP, GFP and growing season with different thresholds to determine the irrigated and rainfed maize cropland. Boxplots indicate the mean (cross line), median (horizontal line), 25--75th percentile (box), and 5--95th percentile (whiskers) of county level LST for all year and county combinations.

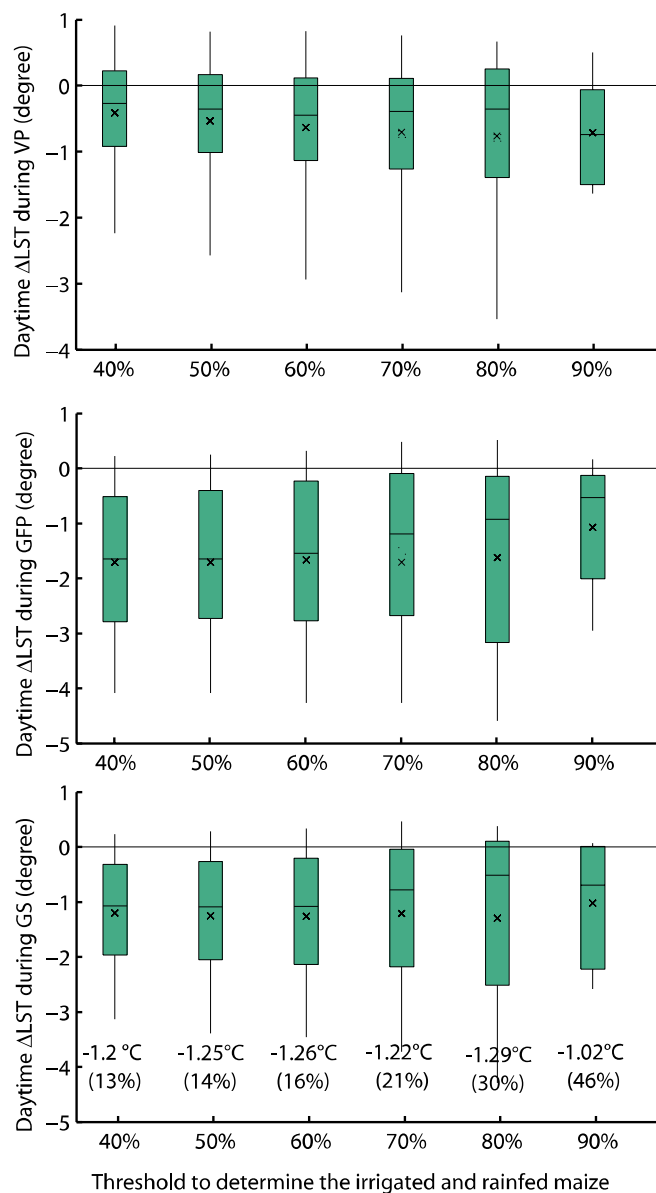


Figure S2 Boxplot of LST difference between irrigated and rainfed maize during VP, GFP and growing season with different thresholds to determine the irrigated and rainfed maize cropland. Boxplots indicate the mean (cross line), median (horizontal line), 25--75th percentile (box), and 5--95th percentile (whiskers) of county level LST difference for all year and county combinations. The numbers below the boxplot indicated the mean LST difference during GS. The numbers within parentheses indicated the percentage of counties omitted in the boxplot statistics since some counties did not have pixels satisfying the high threshold.

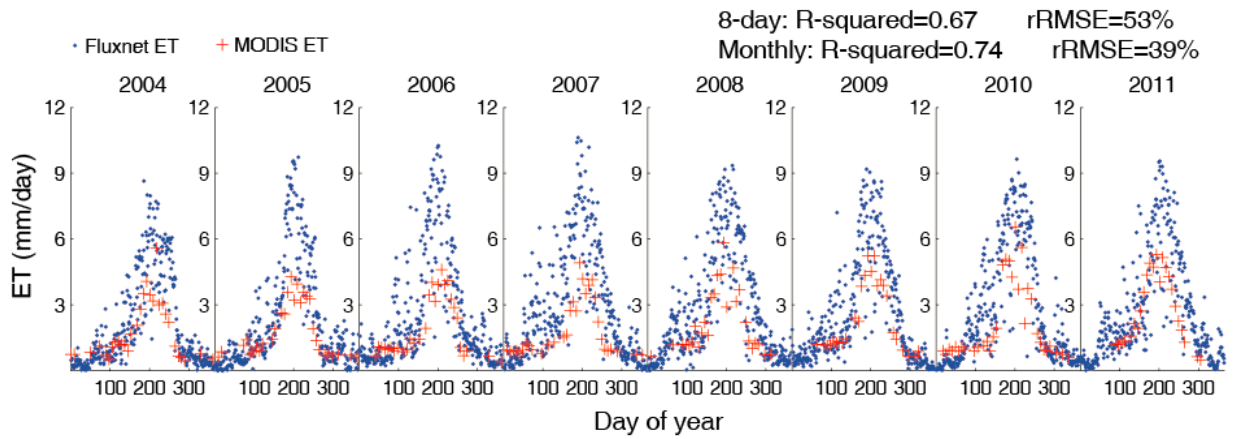


Figure S3 Comparison of MODIS ET and Fluxnet observed daily ET during 2004-2011.

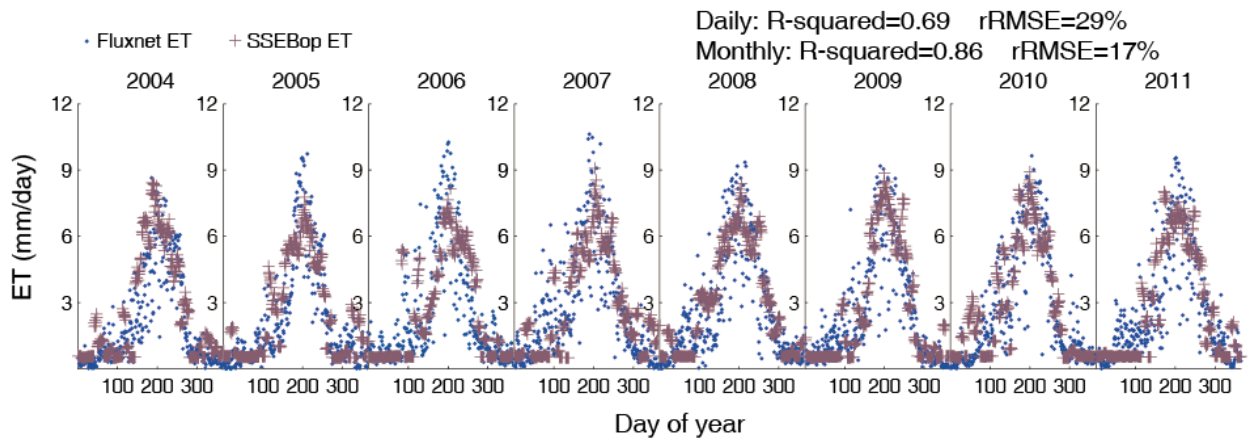


Figure S4 Comparison of SSEBop ET and Fluxnet observed daily ET during 2004-2011.

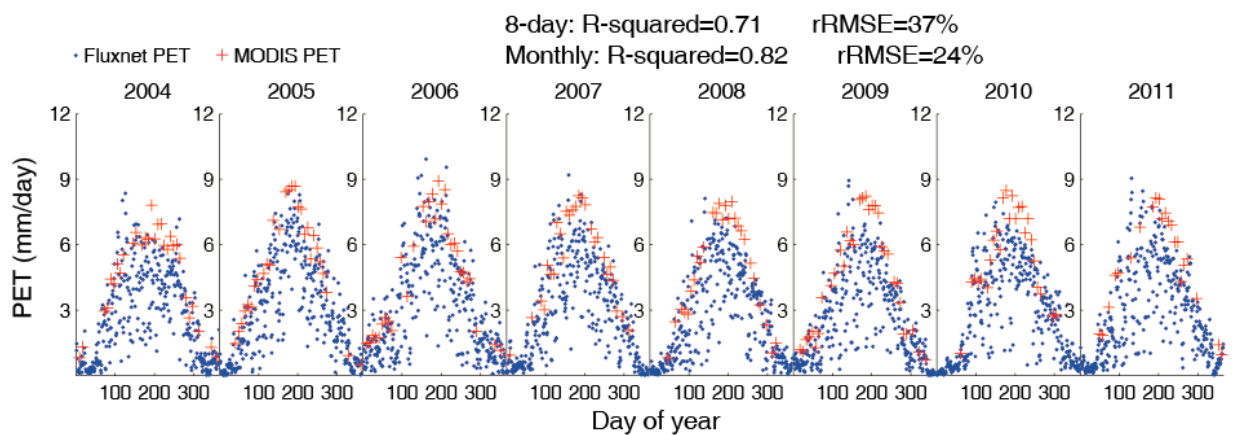


Figure S5 Comparison of MODIS PET and Fluxnet estimated daily PET during 2004-2011. Fluxnet PET is estimated with Penman–Monteith equation with site measured meteorological variables as the forcing data.