

Figure S1. Relationships of (a) stand mean sap flux J_s and (b) canopy transpiration E_c with daytime (6:00–18:00) mean vapor pressure deficit D_{mean} of the bamboo stand before (2010 and July 2013) and after thinning (August–November 2013). Daily data acquired during the period from July to November of each year were analyzed. Thin and thick lines indicate regressions for data obtained before and after thinning, respectively: for the J_s vs D_{mean} relationships in (a), $y = 0.58x - 0.08$ (pre-thinning, $R^2 = 0.87$), $y = -0.30x^2 + 1.46x - 0.39$ (post-thinning, $R^2 = 0.88$); for the E_c vs D_{mean} relationships in (b), $y = 2.00x - 0.26$ (pre-thinning, $R^2 = 0.87$), $y = -0.57x^2 + 2.83x - 0.74$ (post-thinning, $R^2 = 0.88$).

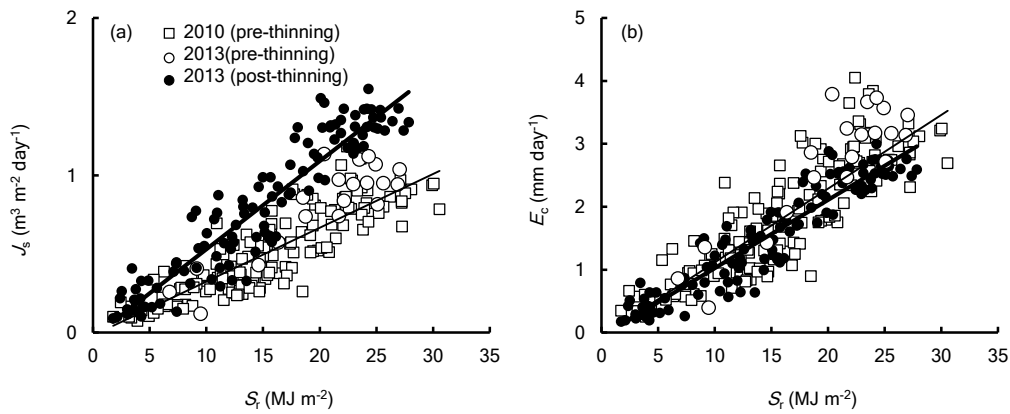


Figure S2. Relationships of (a) stand mean sap flux J_s and (b) canopy transpiration E_c with solar radiation S_r of the bamboo stand before (2010 and July 2013) and after thinning (August–November 2013). Daily data acquired during the period from July to November of each year were analyzed. Thin and thick lines indicate regressions for data obtained before and after thinning, respectively: for the J_s vs S_r relationships in (a), $y = 0.034x - 0.017$ (pre-thinning, $R^2 = 0.74$), $y = 0.056x - 0.030$ (post-thinning, $R^2 = 0.88$); for the E_c vs S_r relationships in (b), $y = 0.117x - 0.058$ (pre-thinning, $R^2 = 0.74$), $y = 0.108x - 0.059$ (post-thinning, $R^2 = 0.88$).

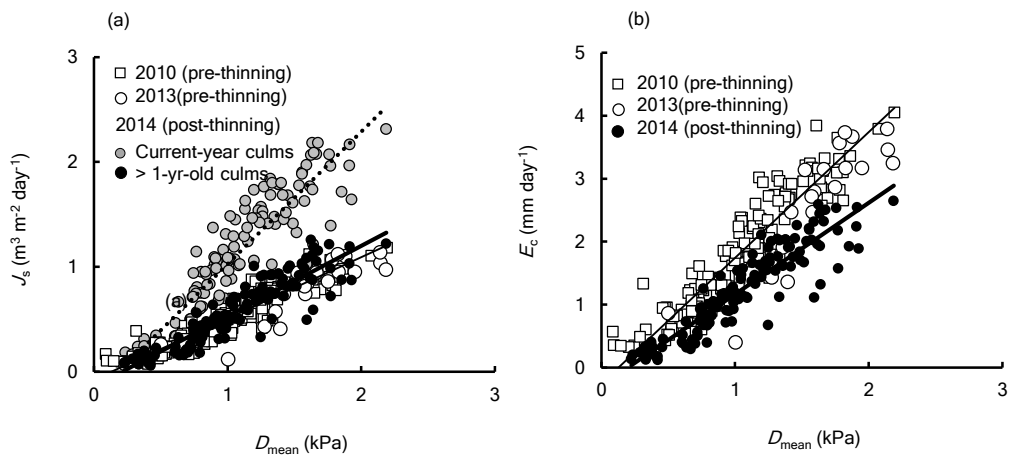


Figure S3. Relationships of (a) stand mean sap flux J_s and (b) canopy transpiration E_c with daytime (6:00–18:00) mean vapor pressure deficit D_{mean} of the bamboo stand before (2010 and July 2013) and one-year after thinning (2014). Daily data acquired during the period from July to November of each year were analyzed. Thin and thick lines indicate regressions for data obtained before and after thinning, respectively; in (a), data for current-year culms (dotted line) in 2014 were analyzed separately from older culms: for the J_s vs D_{mean} relationships in (a), $y = 1.26x - 0.23$ (current-year culms in 2014, $R^2 = 0.83$), $y = 0.67x - 0.14$ (older culms in 2014, $R^2 = 0.83$); for the E_c vs D_{mean} relationships in (b), $y = 1.45x - 0.29$ (in 2014, $R^2 = 0.84$). The data for the pre-thinning periods are similar to those shown in Figure S1.

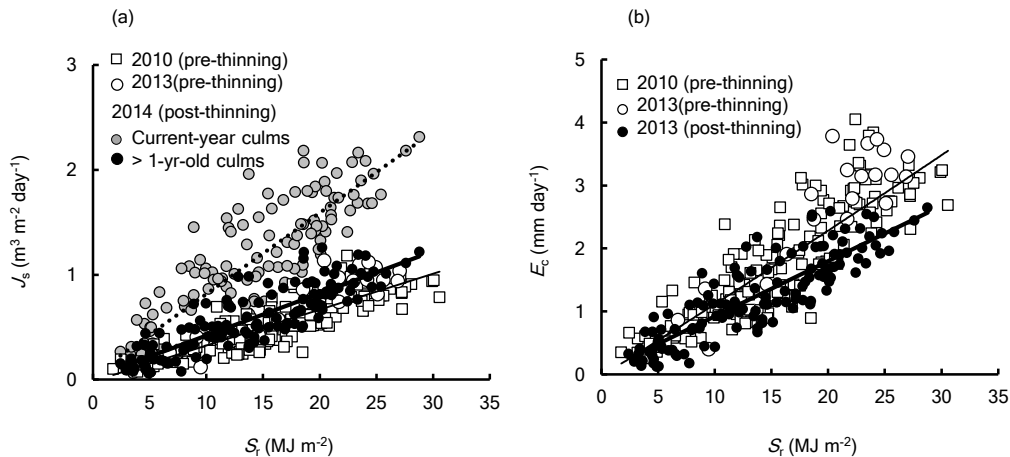


Figure S4. Relationships of (a) stand mean sap flux J_s and (b) canopy transpiration E_c with solar radiation S_r of the bamboo stand before (2010 and July 2013) and one-year after thinning (2014). Daily data acquired during the period from July to November of each year were analyzed. Thin and thick lines indicate regressions for data obtained before and after thinning, respectively; in (a), data for current-year culms (dotted line) in 2014 were analyzed separately from older culms: for the J_s vs S_r relationships in (a), $y = 0.077x - 0.041$ (current-year culms in 2014, $R^2 = 0.76$), $y = 0.040x - 0.018$ (older culms in 2014, $R^2 = 0.74$); for the E_c vs S_r relationships in (b), $y = 0.088x - 0.042$ (in 2014, $R^2 = 0.75$). The data for the pre-thinning periods are similar to those shown in Figure S2.

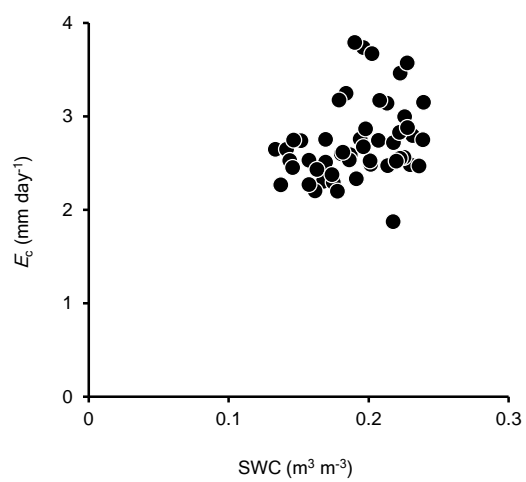


Figure S5. The relationship between canopy transpiration, E_c , and volumetric soil water content, SWC, for days with potential evaporation $E_p > 6$ mm after thinning in 2013 ($r = 0.30$, $P = 0.03$, $n = 51$)