Supplement

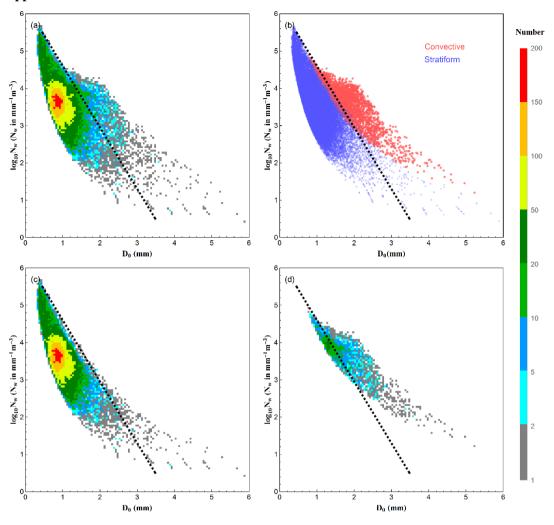


Figure S1: Scatter density plot of $\log_{10}N_w$ versus D_0 : (a) the total rainfall events; (c) stratiform events; (d) convective events. (b) is 5 the scatterplot of $\log_{10}N_w$ versus D_0 for convective (red circle dots) and stratiform (blue square dots) cases. The black dashed line is the $\log_{10}N_w - D_0$ relationship for stratiform rain reported by Thurai et al. (2016).

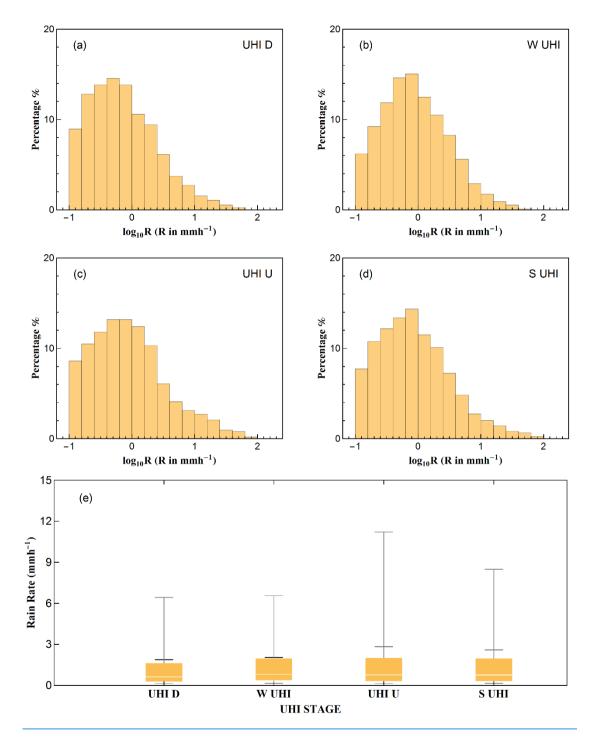
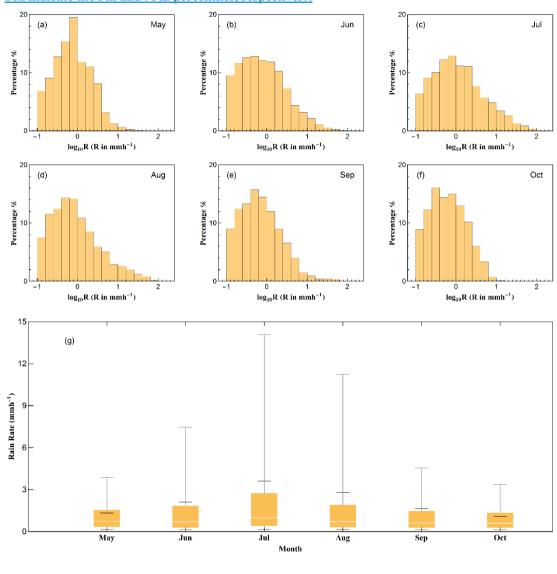


Figure S2: Histograms of rain rate $\log_{10} R$ (R in mm h⁻¹) at different UHI stages: (a) UHI down stage; (b) weak UHI stage; (c) UHI up stage; (d) strong UHI stage; (e) variation of rain rate R (mm h⁻¹) for different UHI stages. The white central lines in the boxes indicate the medians. The black central lines indicate the means, and the bottom and top lines



of the box indicate the 25th and 75th percentiles, respectively. The bottom and top lines of the vertical lines out of the box indicate the 5th and 95th percentiles, respectively.

