

$$\overline{MAD} = \frac{1}{n} \sum_{i=1}^n median_i |x_i(t) - x_{med}(t)| \quad (2)$$

$$NSE = 1 - \left(\sum_{t=1}^n (x_{med}(t) - Q_{obs}(t))^2 / \sum_{t=1}^n (Q_{obs}(t) - \overline{Q_{obs}(t)})^2 \right) \quad (5)$$

$$Pbias = \left[\sum_{t=1}^n (x_{med}(t) - Q_{obs}(t)) / \sum_{t=1}^n Q_{obs}(t) \right] \cdot 100\% \quad (7)$$

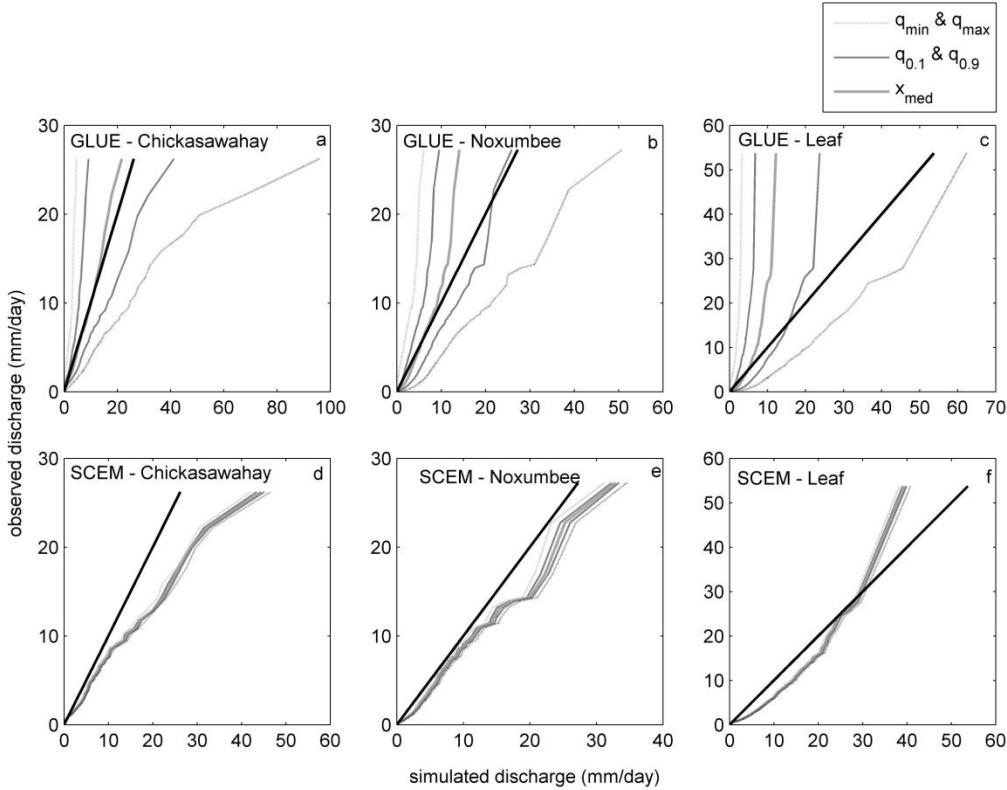


Figure 4: The joint distribution of the lowest (q_{min}), highest (q_{max}), 10th ($q_{0.1}$), and 90th ($q_{0.9}$) quantiles, and the median (x_{med} , or 50th quantile) of the discharge ensembles and the observations from the (a-c) GLUE and (d-f) SCEM parameter estimation methods for select sites. The solid black line in the figures is the 1:1 line and indicates perfect correlation between the simulated and observed discharge.