Statistic	Formula M_i = model time series; O_i = observation time series
Number of complete data pair	n
Fraction of predictions within a factor of 2	$\text{FAC2} = 0.5 \leq \frac{M_i}{O_i} \leq 2.0$
Mean bias	$\text{MB} = \frac{1}{n}\sum_{i=1}^{N} M_i - O_i$
Mean gross error	$\text{MGE} = \frac{1}{n}\sum_{i=1}^{N} \lvert M_i - O_i \rvert$
Normalized mean bias	$\text{NMB} = \frac{\sum_{i=1}^{n} M_i - O_i}{\sum_{i=1}^{n} O_i}$
Normalized mean gross error	$\text{NMGE} = \frac{\sum_{i=1}^{n} \lvert M_i - O_i \rvert}{\sum_{i=1}^{n} O_i}$
Root mean squared error	$\text{RMSE} = \left(\frac{\sum_{i=1}^{n} (M_i - O_i)^2}{n} \right)$
Correlation coefficient	$r = \frac{1}{(n-1)} \sum_{i=1}^{n} \left(\frac{M_i - \overline{M}}{\sigma_M} \right) \left(\frac{O_i - \overline{O}}{\sigma_O} \right)$
Coefficient of efficiency	$\text{COE} = 1.0 - \frac{\sum_{i=1}^{n} \lvert M_i - O_i \rvert}{\sum_{i=1}^{n} \lvert O_i - \overline{O} \rvert}$
Index of agreement	$\text{IOA} = \begin{cases} 1.0 - \frac{\sum_{i=1}^{n} \lvert M_i - O_i \rvert}{c \sum_{i=1}^{n} \lvert O_i - \overline{O} \rvert}, & \text{when } \sum_{i=1}^{n} \lvert M_i - O_i \rvert \leq c \sum_{i=1}^{n} \lvert O_i - \overline{O} \rvert \\ \frac{c \sum_{i=1}^{n} \lvert O_i - \overline{O} \rvert}{\sum_{i=1}^{n} \lvert M_i - O_i \rvert} - 1.0, & \text{when } \sum_{i=1}^{n} \lvert M_i - O_i \rvert > c \sum_{i=1}^{n} \lvert O_i - \overline{O} \rvert \end{cases}$