Metric	Definition
Mean bias (MB)	$\mathrm{MB} = \frac{1}{N}\sum_{i=1}^{N}(M_i - O_i)$
Mean gross error (MGE)	$\mathrm{MGE} = \frac{1}{N}\sum_{i=1}^{N}\lvert M_i - O_i\rvert$
Root mean square error (RMSE)	$\mathrm{RMSE} = \sqrt{\frac{1}{N}\sum_{i=1}^{N}(M_i - O_i)^2}$
Index of agreement (IOA)	$\mathrm{IOA} = 1 - \frac{N\cdot\mathrm{RMSE}^2}{\sum_{i=1}^{N}\left(\lvert M_i-\overline{O}\rvert+\lvert O_i-\overline{O}\rvert\right)^2}$
Pearson correlation coefficient (r)	$r = \frac{\sum_{i=1}^{N}(M_i-\overline{M})\cdot(O_i-\overline{O})}{\sqrt{\sum_{i=1}^{N}(M_i-\overline{M})^2}\cdot\sqrt{\sum_{i=1}^{N}(O_i-\overline{O})^2}}$
Mean fractional bias (MFB)	$\mathrm{MFB} = \frac{1}{N}\sum_{i=1}^{N}\frac{2\cdot(M_i-O_i)}{M_i+O_i}$
Mean fractional error (MFE)	$\mathrm{MFE} = \frac{1}{N}\sum_{i=1}^{N}\frac{2\cdot\lvert M_i-O_i\rvert}{M_i+O_i}$