| Metric | Meaning | Formulation | Set |
|--------|---------|-------------|-----|
| rmse | Root mean squared error | $\sqrt{\frac{\sum (o_i - x_i)^2}{n}}$ | |
| nme | Normalised mean error | $\frac{\sum |o_i - x_i|}{\sum |o_i - \overline{o}|}$ | common |
| mbe | Mean bias error | $\sum (x_i - o_i)/n$ | common |
| sd_diff | Difference in SDs | $\left| 1 - \frac{\sigma_X}{\sigma_O} \right|$ | common |
| corr | Correlation coefficient (inverted) | $1 - \mathrm{corr}(O, X)$ | common |
| extreme_5 | Difference in 5th percentile value | $|P_5(X) - P_5(O)|$ | extremes |
| extreme_95 | Difference in 95th percentile value | $|P_{95}(X) - P_{95}(o)|$ | extremes |
| skewness | Difference in skewness | $\left| 1 - \frac{\mathrm{skew}(X)}{\mathrm{skew}(O)} \right|$ | distribution |
| kurtosis | Difference in kurtosis | $\left| 1 - \frac{\mathrm{kurtosis}(X)}{\mathrm{kurtosis}(O)} \right|$ | distribution |
| overlap | Intersection of histograms (100 bins) | $\sum (\min(\mathrm{bin}_{X,k}, \mathrm{bin}_{O,k}))$ | distribution |