

## **Material and Methods:**

*Mean Bias Error:*

$$MBE = N^{-1} \sum_{i=1}^N (P_i - O_i) \quad (1)$$

*Normalized Root Mean Square Error:*

$$NRMSE = \frac{RMSE}{\bar{O}} \quad (2)$$

*Index of Agreement / Model Efficiency Index:*

$$IA = 1 - \frac{\sum_{i=1}^N (P_i - O_i)^2}{\sum_{i=1}^N (|P_i - \bar{O}| + |O_i - \bar{O}|)^2} \quad (3)$$

*Nash-Sutcliffe Efficiency :*

$$NSE = 1 - \frac{\sum_{i=1}^N (P_i - O_i)^2}{\sum_{i=1}^N (O_i - \bar{O})^2} \quad (4)$$

*Mean Average Error:*

$$MAE = N^{-1} \sum_{i=1}^N |(P_i - O_i)| \quad (5)$$

*Root Mean Square Error:*

$$RMSE = N^{-1} \sqrt{\left( \sum_{i=1}^N (P_i - O_i)^2 \right)} \quad (6)$$

*Correlation Coefficient:*

$$Kor(P, O) = N^{-1} \frac{\sum_{i=1}^N (P_i - \bar{P}) \cdot (O_i - \bar{O})}{\sqrt{\text{var}(P) \cdot \text{var}(O)}} \quad (7)$$

*Variance:*

$$\text{var}(x) = N^{-1} \sum_{i=1}^N (x_i - \bar{x})^2 \quad (8)$$