

Percentage Error

The formula for Percentage Error is

$$\%Error = \frac{\text{Observed, Estimated or Calculated Value} - \text{True Value}}{\text{True Value}} \times 100\%$$

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A Percentage error can be positive or negative depending on an over or underestimate/observation/calculation. Example: A plane is estimated to be 10km away when it is actually 8km away.

The percentage error is

$$\frac{\text{Estimated} - \text{True}}{\text{True}} \times 100\% = \frac{10 - 8}{8} \times 100\% = 25\%$$

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