

Goodness of fit

@wikipedia

The basic set of [Model Validation](#) metrics against certain dataset (could be the [Training dataset](#) or [Validation dataset](#)).

There is no complete set of numbers to define the [Goodness of fit](#) and different studies may use different sets of [Goodness of fit](#) metrics.

The most widely used set in engineering practice is summarized in the table below:

Root Mean Square Deviation (RMSD)	RMSD
Average Absolute Relative Error (AARE)	AARE
Maximum Absolute Relative Error (MAXARE)	MAXARE
Coefficient of determination (R²)	R²
Pearson correlation coefficient (ρ)	ρ
Correlation skewness	S₃
Validation Cross-Plot	

See also

[Human](#) / [Science](#) / [Formal Science](#) / [System Science](#) / [System](#) / [Model](#) / [Model Validation](#)

[[Mathematics](#) / [Statistics](#) / [Statistical Metric](#)]

[[Mean Square Deviation \(MSD\)](#) = [Mean Square Error \(MSE\)](#)]

[[Root Mean Square Deviation \(RMSD\)](#) = [Root Mean Square Error \(RMSE\)](#)]

[[Average Relative Error \(ARE\)](#) = [Average Percentage Error \(APE\)](#)]

[[Average Absolute Relative Error \(AARE\)](#) = [Average Absolute Percentage Error \(AAPE\)](#)]

[[Maximum Relative Error \(MAXRE\)](#) = [Maximum Percentage Error \(MAXPE\)](#)]

[[Maximum Absolute Relative Error \(MAXARE\)](#) = [Maximum Absolute Percentage Error \(MAXAPE\)](#)]

[[Coefficient of determination \(R²\)](#)][[Pearson correlation coefficient \(\$\rho\$ \)](#)][[Correlation skewness](#)]

[[Validation Cross-Plot](#)]