std\_

syntax: std(data)

purpose: Computes the standard deviation of a vector of data. The standard deviation is the square root of the variance. The formula is

$$\sqrt{\frac{1}{N-1}\sum_{i=1}^{N}(x_i-\widehat{x})^2}$$

where N is the length of the data vector,  $\hat{x}$  is the mean of the data vector, and  $x_i$  is element number i of the data vector.

std is a built-in MATLAB function.

See also: VARIANCE

This document is an excerpt from Resampling Stats in MATLAB Daniel T. Kaplan

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