Variance

@wikipedia

Synonym: Second central momentum ($_2$) = Variance

The 2nd order central momentum, characterizing the deviation of a given numerical dataset $x = \{x_1, x_2, x_3, ... x_N\}$ from its Mean Value $\mu(x)$:

$$\mu_2(x) = E[(x-\mu)^2] = \frac{1}{N}\sum_{i=1}^{N}(x_i-\mu)^2$$

where

N	dataset length
E	expectation operator

The second central momentum ($_2$) is also called variance.

It is related to standard deviation σ as: $\mu_2 = \sigma^2$.

See also

Formal science / Mathematics / Statistics / Statistical Metric / Central momentum