

residual sum of squares (RSS)

A measure of discrepancy between observed outcomes and outcomes predicted by a statistical *model* (\rightarrow *regression analysis*). It measures the part of the variance of a *random variable* or *sample* that is not explained by the given model. A small RSS value indicates a good fit of the model to the data. The RSS is computed as follows:

$$RSS = \sum_{i=1}^n (y_i - f(x_i))^2$$

where each y_i is an actual outcome and each $f(x_i)$ is an *estimate* predicted by the model f . A normalized measure of discrepancy is provided by the *coefficient of determination*.