NIR predictions of HPLC measurements II

Key words: Randomized Blocks, Paired design, missing values

Description

In a pharmaceutical company the use of NIR (Near Infrared Reflectance) spectroscopy was investigated as an alternative to the more cumbersome (and expensive) HPLC method to determine the content of active substance in tablets.

Number of observations: 20 tablets

Missing values: 5 on each variable.

Variable	Description
hplc	The HPLC measurement
nir	The NIR predicted value

Source

Brockhoff and Thierry-Carstensen (2003). Test set validation using simple statistical methods. Submitted to: *Journal of Chemometrics*.

Analysis

Randomized block design analysis: ANOVA with random tablet effect and fixed method (NIR/HPLC) effect.