

Applied Statistical Methods - Exercise 2

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Problem 1: Measurement Unit

The measurement unit has an influence on the results of a regression model. This is demonstrated by changing the unit for **Breast Circumference** (BC) from centimeters to meters.

Tasks

- Read the original dataset with BC and BW for 10 animals. The dataset is available as csv-file under: https://charlotte-ngs.github.io/asmss2023/data/asm_bw_bc_reg.csv
- Convert all values of BC from centimeters to meters
- Run the regression model using `lm()`
- Compare the results with the results from the original model

Problem 2: Significance Level

Do the same type of comparison of regression modelling results when changing the measurement unit for the variable HEI in the complete dataset given in

https://charlotte-ngs.github.io/asmss2023/data/asm_bw_mult_reg.csv.

Tasks

- Run the same regression model as in Problem 1 of Exercise 1
- Convert the measurement unit for the variable HEI from centimeter to meter
- Compare the results of the two regression models with a special focus on the significance level