

Length-weight relationship of *Squalius cephalus* from Slovenia, sampled from 20.04.2010 to 11.09.2024 (n = 21345, length range from 2.00 cm to 61.00 cm, specimen condition: mixed)

- Authors: Bojan Marčeta, Žiga Sanda, Petra Pavšič
- Data source: BIOS, Fisheries Research Institute of Slovenia
- Analysed on: 08.11.2024
- Country: SVN
- Species: *Squalius cephalus*
- Length type: TL (biometry_id = 76)
- Season: combined
- Sex: mixed
- Specimen condition: mixed
- Sampled from: 20.04.2010
- Sampled to: 11.09.2024
- n: 21345
- L min [cm]: 2.00
- L max [cm]: 61.00
- W min [g]: 0.10
- W max [g]: 3450.00
- Data transformation: natural logarithm
- a: 0.0087356
- b: 3.0705708

Statistics - summary

Linear model:

```
##
## Call:
## lm(formula = ln_w_y ~ ln_l_x, data = data_clean)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.8762 -0.0752 -0.0049  0.0722  0.9038
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept) -4.74035     0.00462   -1026   <2e-16 ***
## ln_l_x       3.07057     0.00165    1859   <2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.126 on 21343 degrees of freedom
## Multiple R-squared:  0.994, Adjusted R-squared:  0.994
## F-statistic: 3.46e+06 on 1 and 21343 DF, p-value: <2e-16
```

ANOVA:

```
##              Df      Sum Sq      Mean Sq F value Pr(>F)
## ln_l_x         1 55050.3058 5.505031e+04 3455902      0
## Residuals 21343   339.9803 1.592936e-02      NA     NA
```

Visualization

