

Length-weight relationship of *Salmo trutta lacustris* from Slovenia, sampled from 01.09.2014 to 14.08.2024 (n = 347, length range from 18.30 cm to 67.20 cm, specimen condition: mixed)

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- Data source: BIOS, Fisheries Research Institute of Slovenia
- Analysed on: 25.11.2024
- Country: SVN
- Species: *Salmo trutta lacustris*
- Length type: TL (biometry_id = 76)
- Season: combined
- Sex: mixed
- Specimen condition: mixed
- Sampled from: 01.09.2014
- Sampled to: 14.08.2024
- n: 347
- L min [cm]: 18.30
- L max [cm]: 67.20
- W min [g]: 49.20
- W max [g]: 4500.00
- Data transformation: natural logarithm
- a: 0.0017926
- b: 3.4837096

Statistics - summary

Linear model:

```
##
## Call:
## lm(formula = ln_w_y ~ ln_l_x, data = data_clean)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.5986 -0.0709  0.0072  0.0732  0.7368
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  -6.3241     0.0971   -65.1   <2e-16 ***
## ln_l_x         3.4837     0.0261   133.6   <2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.128 on 345 degrees of freedom
## Multiple R-squared:  0.981, Adjusted R-squared:  0.981
## F-statistic: 1.78e+04 on 1 and 345 DF, p-value: <2e-16
```

ANOVA:

```
##              Df      Sum Sq      Mean Sq  F value      Pr(>F)
## ln_l_x         1 293.260676 293.26067598 17847.07 3.810466e-299
## Residuals 345    5.668994    0.01643187      NA      NA
```

Visualization

