

Length-weight relationship of *Astacus astacus* from Slovenia, sampled from 27.05.2019 to 15.10.2024 (n = 1482, length range from 1.12 cm to 8.12 cm, specimen condition: mixed)

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- Data source: BIOS, Fisheries Research Institute of Slovenia
- Analysed on: 26.11.2024
- Country: SVN
- Species: *Astacus astacus*
- Length type: CLR (biometry_id = 233)
- Season: combined
- Sex: mixed
- Specimen condition: mixed
- Sampled from: 27.05.2019
- Sampled to: 15.10.2024
- n: 1482
- L min [cm]: 1.12
- L max [cm]: 8.12
- W min [g]: 0.36
- W max [g]: 169.25
- Data transformation: natural logarithm
- a: 0.2214573
- b: 3.1281248

Statistics - summary

Linear model:

```
##
## Call:
## lm(formula = ln_w_y ~ ln_l_x, data = data_clean)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.7122 -0.0734  0.0043  0.0683  0.9303
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept) -1.50753    0.01389   -109    <2e-16 ***
## ln_l_x       3.12812    0.00925    338    <2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.136 on 1480 degrees of freedom
## Multiple R-squared:  0.987, Adjusted R-squared:  0.987
## F-statistic: 1.14e+05 on 1 and 1480 DF, p-value: <2e-16
```

ANOVA:

```
##              Df      Sum Sq      Mean Sq  F value Pr(>F)
## ln_l_x         1 2127.25115 2.127251e+03 114350.2      0
## Residuals 1480   27.53238 1.860296e-02      NA     NA
```

Visualization

