

Length-weight relationship of *Merluccius merluccius* from Slovenia, sampled from 12.10.1995 to 20.06.2024 (n = 473, length range from 9.40 cm to 46.40 cm, specimen condition: mixed)

- Authors: Bojan Marčeta, Žiga Sanda, Petra Pavšič
- Data source: BIOS, Fisheries Research Institute of Slovenia
- Analysed on: 25.11.2024
- Country: SVN
- Species: *Merluccius merluccius*
- Length type: TLmax (biometry_id = 78)
- Season: combined
- Sex: mixed
- Specimen condition: mixed
- Sampled from: 12.10.1995
- Sampled to: 20.06.2024
- n: 473
- L min [cm]: 9.40
- L max [cm]: 46.40
- W min [g]: 4.70
- W max [g]: 1016.00
- Data transformation: natural logarithm
- a: 0.0040169
- b: 3.2201845

Statistics - summary

Linear model:

```
##
## Call:
## lm(formula = ln_w_y ~ ln_l_x, data = data_clean)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.6489 -0.0839 -0.0020  0.0786  0.8346
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  -5.5173     0.0788    -70    <2e-16 ***
## ln_l_x         3.2202     0.0239    135    <2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.133 on 471 degrees of freedom
## Multiple R-squared:  0.975, Adjusted R-squared:  0.975
## F-statistic: 1.81e+04 on 1 and 471 DF, p-value: <2e-16
```

ANOVA:

```
##              Df      Sum Sq      Mean Sq  F value Pr(>F)
## ln_l_x         1 321.410720 321.41071989 18145.02      0
## Residuals 471    8.343032    0.01771344      NA     NA
```

Visualization

