

Length-weight relationship of *Cottus gobio*
 from Slovenia, sampled from 20.04.2010 to 28.10.2020
 (n = 2267, length range from 3.50 cm to 16.50 cm,
 specimen condition: mixed)

- Authors: Bojan Marčeta, Žiga Sanda
- Data source: BIOS, Fisheries Research Institute of Slovenia
- Analysed on: 19.01.2021
- Country: SVN
- Species: *Cottus gobio*
- Length type: TL (biometry_id = 76)
- Season: combined
- Sex: mixed
- Specimen condition: mixed
- Sampled from: 20.04.2010
- Sampled to: 28.10.2020
- n: 2267
- L min [cm]: 3.50
- L max [cm]: 16.50
- W min [g]: 1.00
- W max [g]: 49.00
- Data transformation: natural logarithm
- a: 0.0232010
- b: 2.7698781

Statistics - summary

Linear model:

```
##
## Call:
## lm(formula = ln_w_y ~ ln_l_x, data = data_clean)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.7503 -0.0808  0.0066  0.0894  0.6388
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  -3.7636     0.0278   -135 <2e-16 ***
## ln_l_x         2.7699     0.0124    223 <2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.139 on 2265 degrees of freedom
## Multiple R-squared:  0.957, Adjusted R-squared:  0.956
## F-statistic: 4.98e+04 on 1 and 2265 DF, p-value: <2e-16
```

ANOVA:

```
##              Df    Sum Sq    Mean Sq  F value Pr(>F)
## ln_l_x         1 964.88048 964.88047522 49824.99      0
## Residuals 2265  43.86261   0.01936539      NA      NA
```

Visualization

