

Length-weight relationship of *Chelidonichthys lucerna* from Slovenia, sampled from 15.07.1997 to 22.10.2024 (n = 220, length range from 7.85 cm to 44.90 cm, specimen condition: mixed)

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- Data source: BIOS, Fisheries Research Institute of Slovenia
- Analysed on: 26.11.2024
- Country: SVN
- Species: *Chelidonichthys lucerna*
- Length type: TLmax (biometry_id = 78)
- Season: combined
- Sex: mixed
- Specimen condition: mixed
- Sampled from: 15.07.1997
- Sampled to: 22.10.2024
- n: 220
- L min [cm]: 7.85
- L max [cm]: 44.90
- W min [g]: 4.82
- W max [g]: 1000.00
- Data transformation: natural logarithm
- a: 0.0081485
- b: 3.0356344

Statistics - summary

Linear model:

```
##
## Call:
## lm(formula = ln_w_y ~ ln_l_x, data = data_clean)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.2292 -0.0638  0.0050  0.0629  0.3719
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  -4.8099     0.0522   -92.2   <2e-16 ***
## ln_l_x         3.0356     0.0167   182.2   <2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.0958 on 218 degrees of freedom
## Multiple R-squared:  0.993, Adjusted R-squared:  0.993
## F-statistic: 3.32e+04 on 1 and 218 DF, p-value: <2e-16
```

ANOVA:

```
##              Df      Sum Sq      Mean Sq  F value      Pr(>F)
## ln_l_x         1 304.514036 3.045140e+02 33195.89 3.291039e-240
## Residuals    218   1.999767 9.173245e-03      NA      NA
```

Visualization

