

Binomial GLM worksheet

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The length, sex and maturity status of 2,899 were measured during the Irish Groundfish Survey. The data are in the file `data/haddock_maturity.csv` here.

Our main scientific question is whether the probability of being mature varies with length?

1. Read the data into R.
2. Plot the data in an informative way - use colours!
3. Use the `glm` function to fit a binomial GLM to with maturity as the response and fish length as the explanatory variable - remember to supply a matrix (one column for number of successes, another for the number of failures) for the binomial GLM in R.
4. Plot the fitted values over your data plot.
5. Bonus: Include sex in the model, refit and plot.