# Data Visualization With Stata (The Basics)

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20 Jan 2021

### Introduction

99% of data visualization work seems to consist of creating bar graphs (graph bar y, over(x)) and scatterplots (twoway scatter y x). (For the sake of completeness, I am also going to mention histograms (histogram x).)

This is a quick guide to these ideas using the Palmer Penguins Data.



- . clear all
- . use "https://github.com/agrogan1/newstuff/raw/master/data-visualization-with-Stata-the-basics/pen
- > guins.dta", clear

I am not a particular fan of Stata's default graph schemes, so I am going to make use of the graph scheme entitled s1color.

. set scheme s1color // use s1color scheme

### Histogram: histogram x

. histogram body\_mass\_g, title("Body Mass of Penguins") (bin=18, start=2700, width=200)

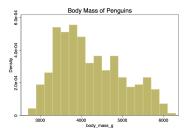


Figure 1: histogram

## Bar Graph: graph bar

#### Counting Up Numbers In Each Group: graph bar, over(x)

. graph bar, over(species) title("Penguin Species")

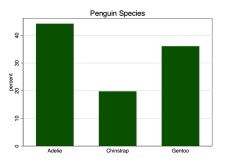


Figure 2: bar graph

### Average Of A Continuous Variable Across Groups: graph bar y, over(x)

. graph bar body\_mass\_g, over(species) title("Body Mass of Penguin Species")

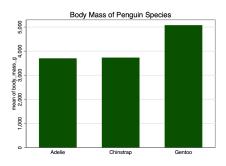


Figure 3: bar graph

## Scatterplot: twoway scatter y x

. twoway scatter culmen\_length\_mm body\_mass\_g, title("Penguin Culmen Length by Body Mass")

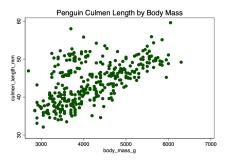


Figure 4: scatterplot