

# Testing out a 3-chapter dissertation as child documents

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## 1 The first chapter

### 1.1 Introduction

Some literature review.  
A reference is (Atterberg 1974).

### 1.2 Materials and Methods

Blah blah blah  
See Table 1.

### 1.3 Results and Discussion

Some results. See Figure 1

### 1.4 Conclusions

A conclusion.

Table 1: The mtcars dataset.

|                     | mpg  | cyl | disp  | hp  | drat | wt    | qsec  | vs | am | gear | carb |
|---------------------|------|-----|-------|-----|------|-------|-------|----|----|------|------|
| Mazda RX4           | 21.0 | 6   | 160.0 | 110 | 3.90 | 2.620 | 16.46 | 0  | 1  | 4    | 4    |
| Mazda RX4 Wag       | 21.0 | 6   | 160.0 | 110 | 3.90 | 2.875 | 17.02 | 0  | 1  | 4    | 4    |
| Datsun 710          | 22.8 | 4   | 108.0 | 93  | 3.85 | 2.320 | 18.61 | 1  | 1  | 4    | 1    |
| Hornet 4 Drive      | 21.4 | 6   | 258.0 | 110 | 3.08 | 3.215 | 19.44 | 1  | 0  | 3    | 1    |
| Hornet Sportabout   | 18.7 | 8   | 360.0 | 175 | 3.15 | 3.440 | 17.02 | 0  | 0  | 3    | 2    |
| Valiant             | 18.1 | 6   | 225.0 | 105 | 2.76 | 3.460 | 20.22 | 1  | 0  | 3    | 1    |
| Duster 360          | 14.3 | 8   | 360.0 | 245 | 3.21 | 3.570 | 15.84 | 0  | 0  | 3    | 4    |
| Merc 240D           | 24.4 | 4   | 146.7 | 62  | 3.69 | 3.190 | 20.00 | 1  | 0  | 4    | 2    |
| Merc 230            | 22.8 | 4   | 140.8 | 95  | 3.92 | 3.150 | 22.90 | 1  | 0  | 4    | 2    |
| Merc 280            | 19.2 | 6   | 167.6 | 123 | 3.92 | 3.440 | 18.30 | 1  | 0  | 4    | 4    |
| Merc 280C           | 17.8 | 6   | 167.6 | 123 | 3.92 | 3.440 | 18.90 | 1  | 0  | 4    | 4    |
| Merc 450SE          | 16.4 | 8   | 275.8 | 180 | 3.07 | 4.070 | 17.40 | 0  | 0  | 3    | 3    |
| Merc 450SL          | 17.3 | 8   | 275.8 | 180 | 3.07 | 3.730 | 17.60 | 0  | 0  | 3    | 3    |
| Merc 450SLC         | 15.2 | 8   | 275.8 | 180 | 3.07 | 3.780 | 18.00 | 0  | 0  | 3    | 3    |
| Cadillac Fleetwood  | 10.4 | 8   | 472.0 | 205 | 2.93 | 5.250 | 17.98 | 0  | 0  | 3    | 4    |
| Lincoln Continental | 10.4 | 8   | 460.0 | 215 | 3.00 | 5.424 | 17.82 | 0  | 0  | 3    | 4    |
| Chrysler Imperial   | 14.7 | 8   | 440.0 | 230 | 3.23 | 5.345 | 17.42 | 0  | 0  | 3    | 4    |
| Fiat 128            | 32.4 | 4   | 78.7  | 66  | 4.08 | 2.200 | 19.47 | 1  | 1  | 4    | 1    |
| Honda Civic         | 30.4 | 4   | 75.7  | 52  | 4.93 | 1.615 | 18.52 | 1  | 1  | 4    | 2    |
| Toyota Corolla      | 33.9 | 4   | 71.1  | 65  | 4.22 | 1.835 | 19.90 | 1  | 1  | 4    | 1    |
| Toyota Corona       | 21.5 | 4   | 120.1 | 97  | 3.70 | 2.465 | 20.01 | 1  | 0  | 3    | 1    |
| Dodge Challenger    | 15.5 | 8   | 318.0 | 150 | 2.76 | 3.520 | 16.87 | 0  | 0  | 3    | 2    |
| AMC Javelin         | 15.2 | 8   | 304.0 | 150 | 3.15 | 3.435 | 17.30 | 0  | 0  | 3    | 2    |
| Camaro Z28          | 13.3 | 8   | 350.0 | 245 | 3.73 | 3.840 | 15.41 | 0  | 0  | 3    | 4    |
| Pontiac Firebird    | 19.2 | 8   | 400.0 | 175 | 3.08 | 3.845 | 17.05 | 0  | 0  | 3    | 2    |
| Fiat X1-9           | 27.3 | 4   | 79.0  | 66  | 4.08 | 1.935 | 18.90 | 1  | 1  | 4    | 1    |
| Porsche 914-2       | 26.0 | 4   | 120.3 | 91  | 4.43 | 2.140 | 16.70 | 0  | 1  | 5    | 2    |
| Lotus Europa        | 30.4 | 4   | 95.1  | 113 | 3.77 | 1.513 | 16.90 | 1  | 1  | 5    | 2    |
| Ford Pantera L      | 15.8 | 8   | 351.0 | 264 | 4.22 | 3.170 | 14.50 | 0  | 1  | 5    | 4    |
| Ferrari Dino        | 19.7 | 6   | 145.0 | 175 | 3.62 | 2.770 | 15.50 | 0  | 1  | 5    | 6    |
| Maserati Bora       | 15.0 | 8   | 301.0 | 335 | 3.54 | 3.570 | 14.60 | 0  | 1  | 5    | 8    |
| Volvo 142E          | 21.4 | 4   | 121.0 | 109 | 4.11 | 2.780 | 18.60 | 1  | 1  | 4    | 2    |

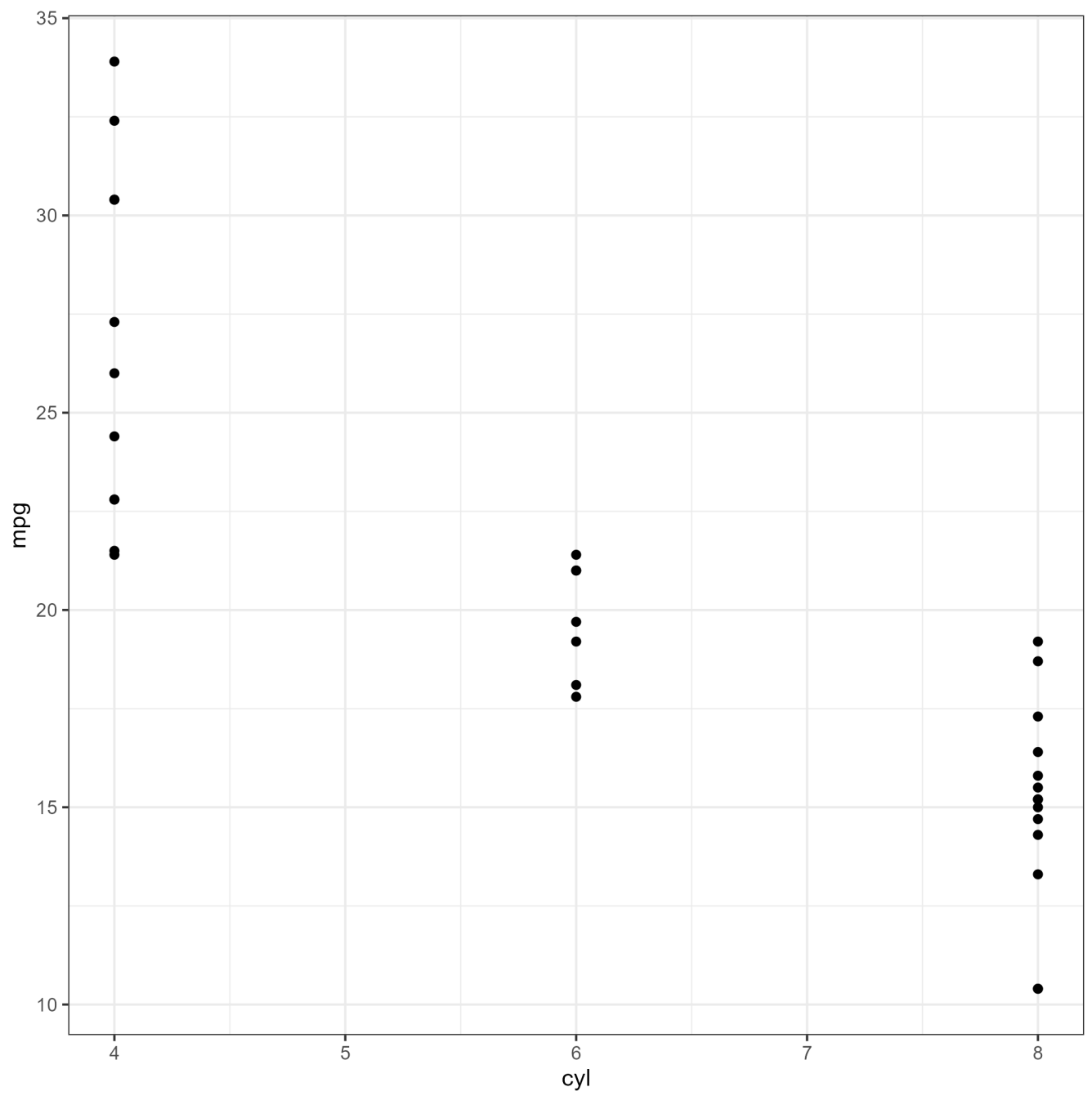


Figure 1: A plot from the mtcars dataset.

## 1.5 References

Table 2: A table regarding storms.

| name | year | month | day | hour | lat  | long  | status              | category | wind | pressure | ts_diameter |
|------|------|-------|-----|------|------|-------|---------------------|----------|------|----------|-------------|
| Amy  | 1975 | 6     | 27  | 0    | 27.5 | -79.0 | tropical depression | -1       | 25   | 1013     | NA          |
| Amy  | 1975 | 6     | 27  | 6    | 28.5 | -79.0 | tropical depression | -1       | 25   | 1013     | NA          |
| Amy  | 1975 | 6     | 27  | 12   | 29.5 | -79.0 | tropical depression | -1       | 25   | 1013     | NA          |
| Amy  | 1975 | 6     | 27  | 18   | 30.5 | -79.0 | tropical depression | -1       | 25   | 1013     | NA          |
| Amy  | 1975 | 6     | 28  | 0    | 31.5 | -78.8 | tropical depression | -1       | 25   | 1012     | NA          |
| Amy  | 1975 | 6     | 28  | 6    | 32.4 | -78.7 | tropical depression | -1       | 25   | 1012     | NA          |

## 2 The second chapter

### 2.1 Introduction

Some literature review.

A reference is (Barnes 2013).

### 2.2 Materials and Methods

Blah blah blah

See Table 2.

### 2.3 Results and Discussion

Some results. See Figure 2

### 2.4 Conclusions

A conclusion.

### 2.5 References

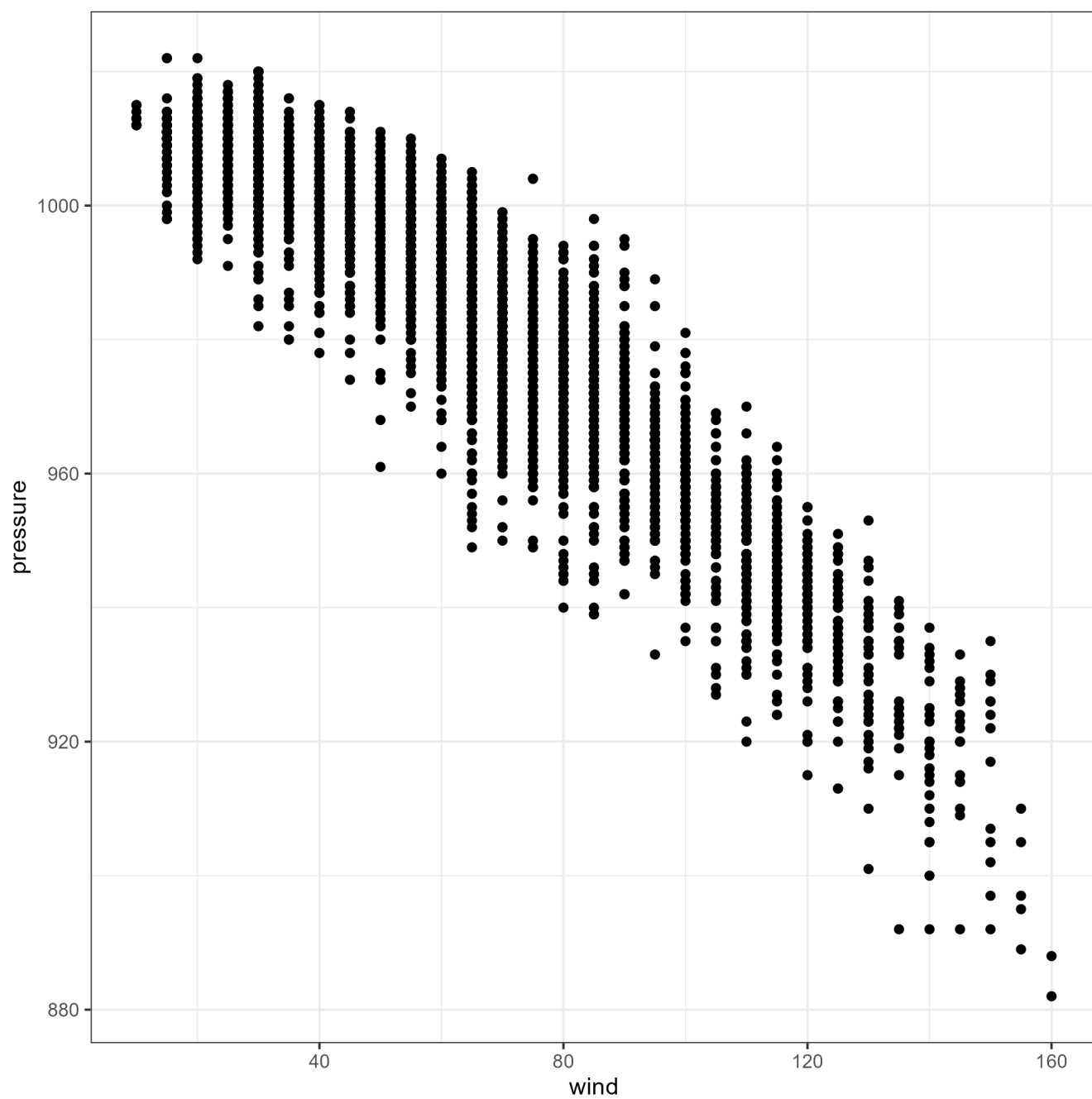


Figure 2: A plot from the storms dataset.

Table 3: Air quality data.

| Ozone | Solar.R | Wind | Temp | Month | Day |
|-------|---------|------|------|-------|-----|
| 41    | 190     | 7.4  | 67   | 5     | 1   |
| 36    | 118     | 8.0  | 72   | 5     | 2   |
| 12    | 149     | 12.6 | 74   | 5     | 3   |
| 18    | 313     | 11.5 | 62   | 5     | 4   |
| NA    | NA      | 14.3 | 56   | 5     | 5   |
| 28    | NA      | 14.9 | 66   | 5     | 6   |

### 3 The third chapter

#### 3.1 Introduction

Baseball infields must provide stable footing and predictable ball response.

A reference is (Holtz, Kovacs, and Sheahan 2010).

#### 3.2 Materials and Methods

Blah blah blah

See Table 3.

#### 3.3 Results and Discussion

Some results. See Figure 3

#### 3.4 Conclusions

A conclusion.

#### References

Atterberg, Albert. 1974. "Plasticity of Clays." Hanover, NJ: Cold Regions Research Lab.

Barnes, Graham Edward. 2013. "The Plastic Limit and Workability of Soils." University of Manchester. <https://www.escholar.manchester.ac.uk/api/datastream?publicationPid=uk-ac-man-scw:212752&datastreamId=FULL-TEXT.PDF>.

Holtz, Robert D., William D. Kovacs, and Thomas C. Sheahan. 2010. *An Introduction to Geotechnical Engineering*. New York, NY: Pearson.

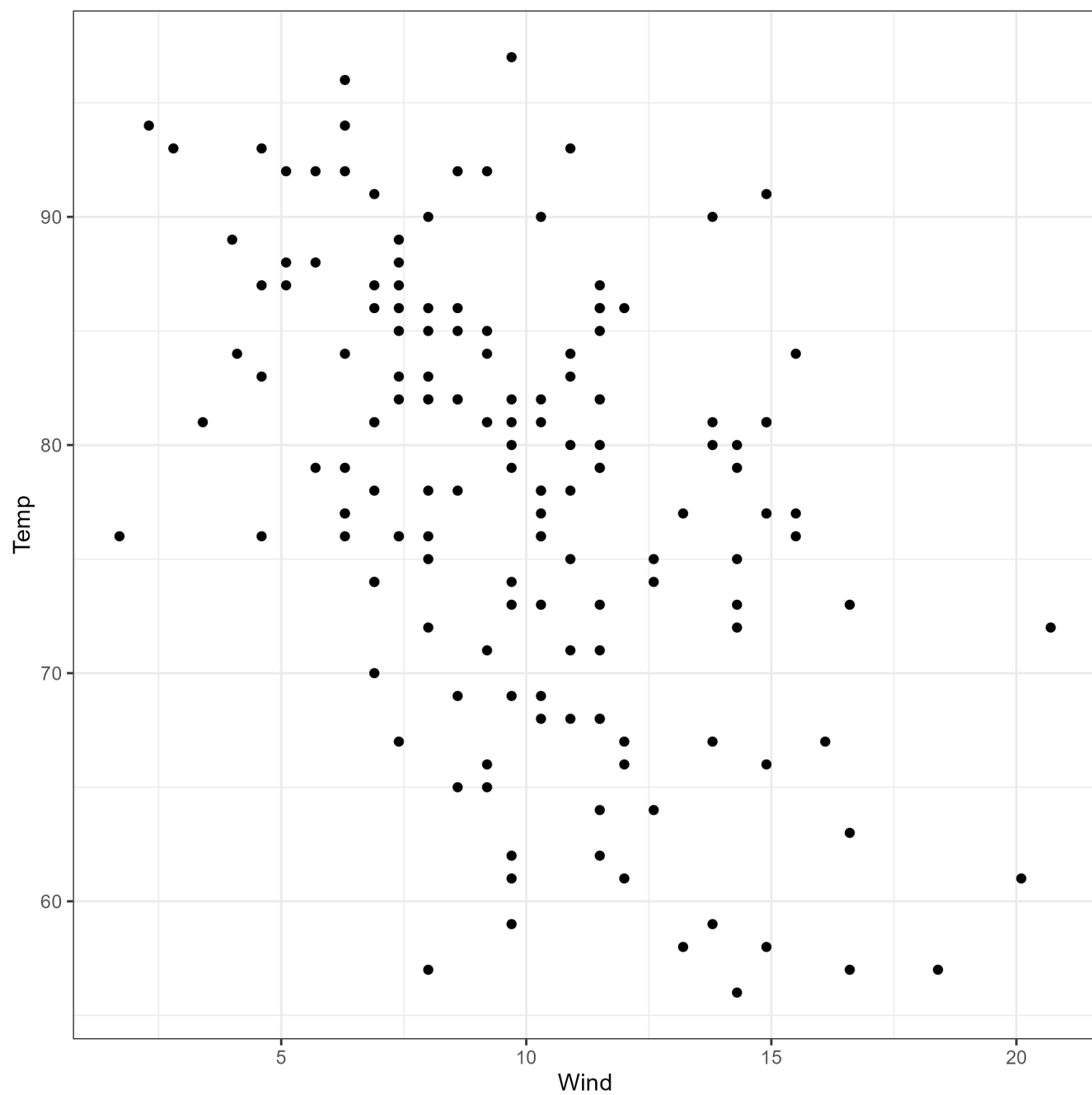


Figure 3: A plot from the airquality dataset.