

Data Wrangling

Data management and analysis in environmental sciences

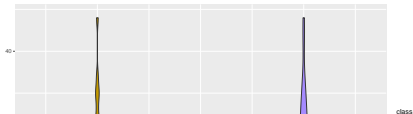
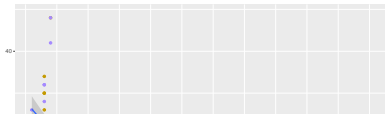
Jesse Radolinski, Johannes Ingrisch

Department of Ecology, University of Innsbruck

Last Week: Visualisation



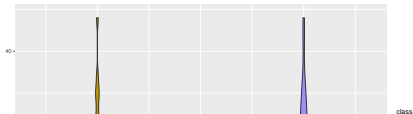
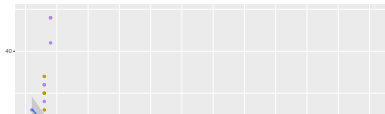
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  geom_point(aes(color = class)) +  
  geom_smooth()  
ggplot(data = mpg) +  
  geom_violin(aes(x = class, y = hwy,  
                 fill = class))
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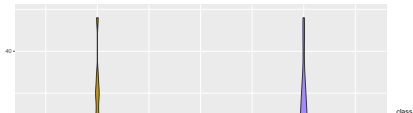
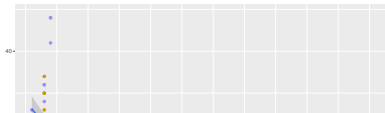
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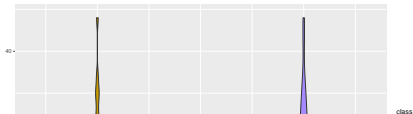
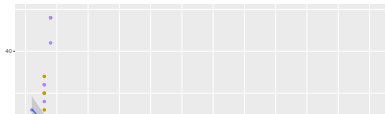
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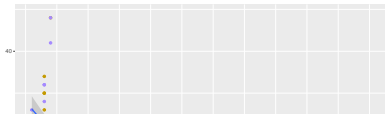
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The Pipe: %>%



R-Studio Shortcut: **Ctrl + Shift + M**

The Pipe: %>%

Passes object on the lefthand side as first argument of function on righthand side.

- $x \%>\% f(y)$ is similar to $f(x,y)$

```
filter(mpg, class == "seater" | class == "compact")
```

Part 2

Summarize data: `summarise()`

Collapses data frame to a single row ->

```
mpg %>%  
  summarise(hwy = mean(hwy))
```

```
# A tibble: 1 x 1
```

```
  hwy
```

```
<dbl>
```

```
1  23.4
```

`summarise()`

Also possible for multiple functions and variables

```
mpg %>%  
  summarise(hwy_avg = mean(hwy),
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Reading Data



Reading text files

- most general function is `read.table()` from base-R

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"dino", 51.5385, 96.0256  
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