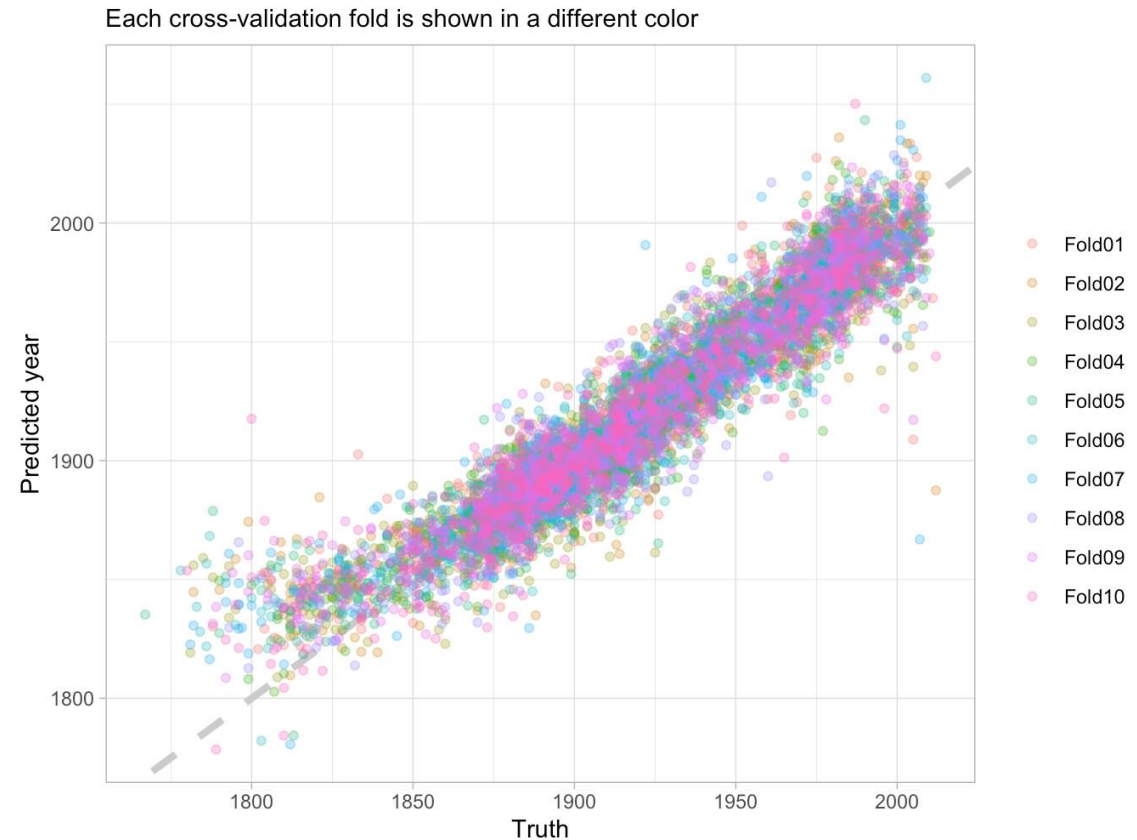
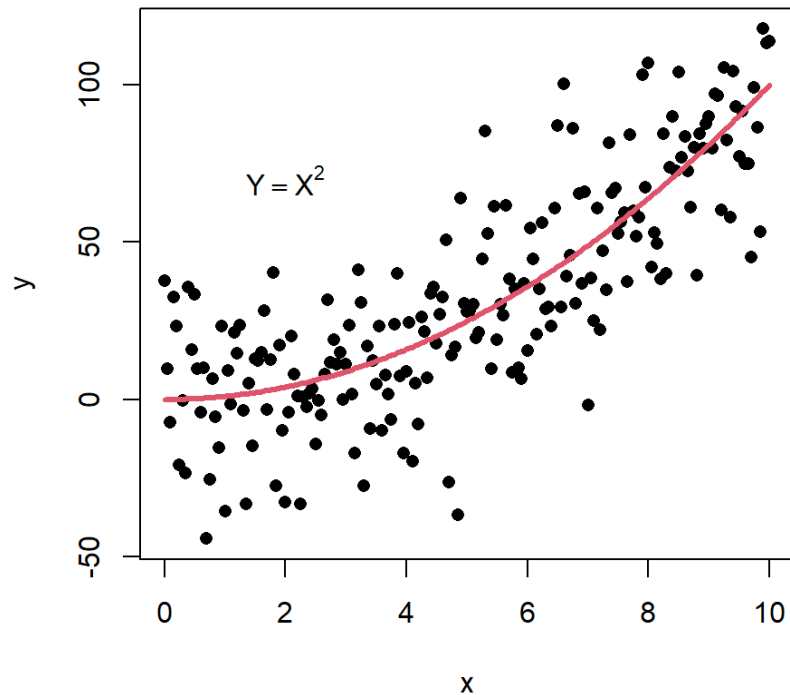


Визуализация данных



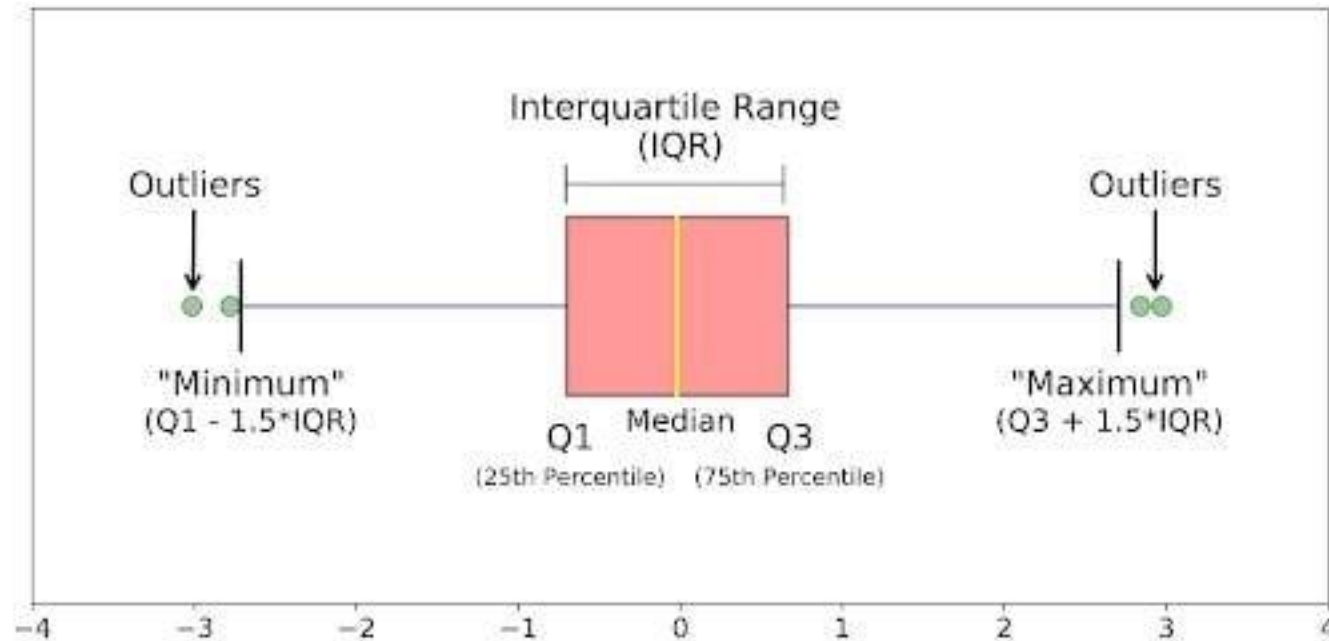
Виды графиков

- Point plot / scatter plot / график рассеяния



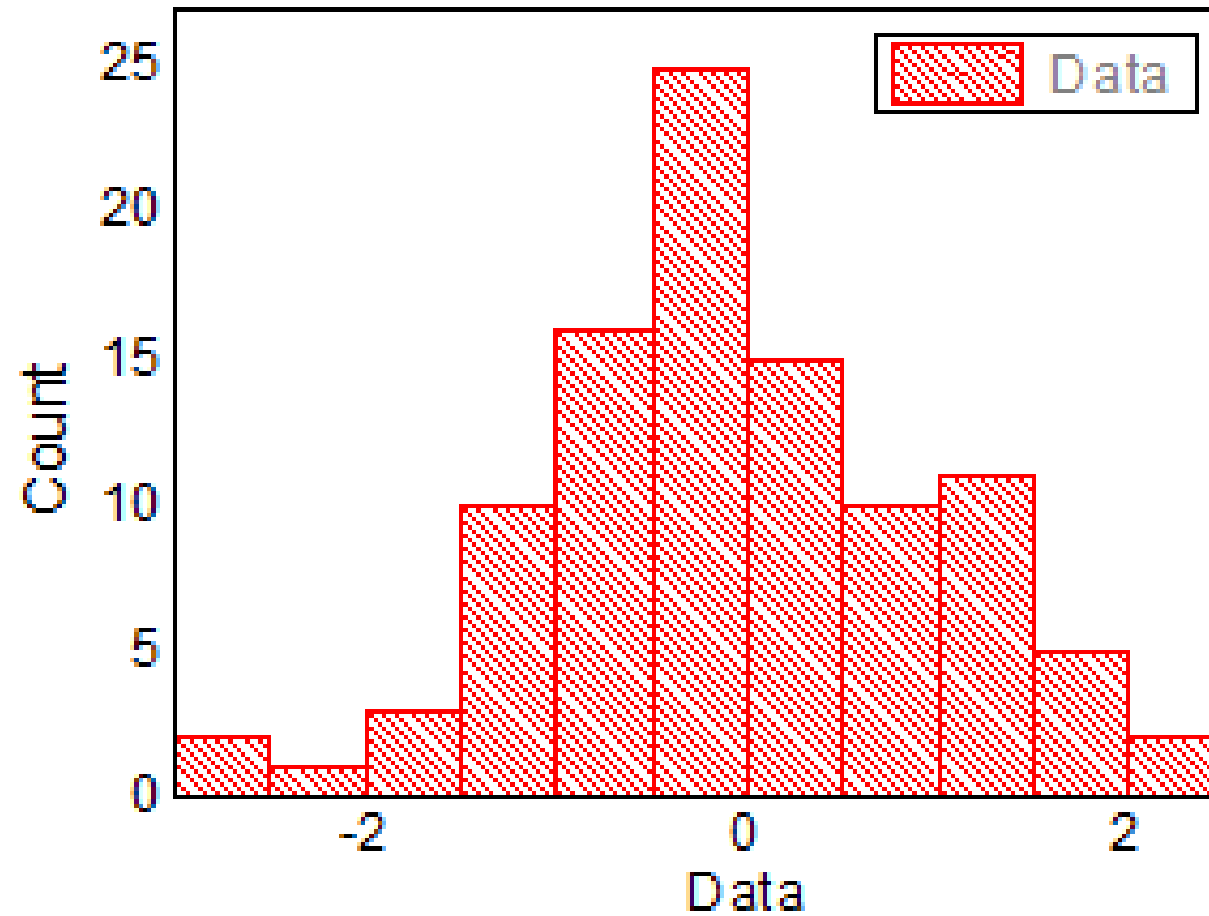
Виды графиков

- Boxplot / Ящик с усами



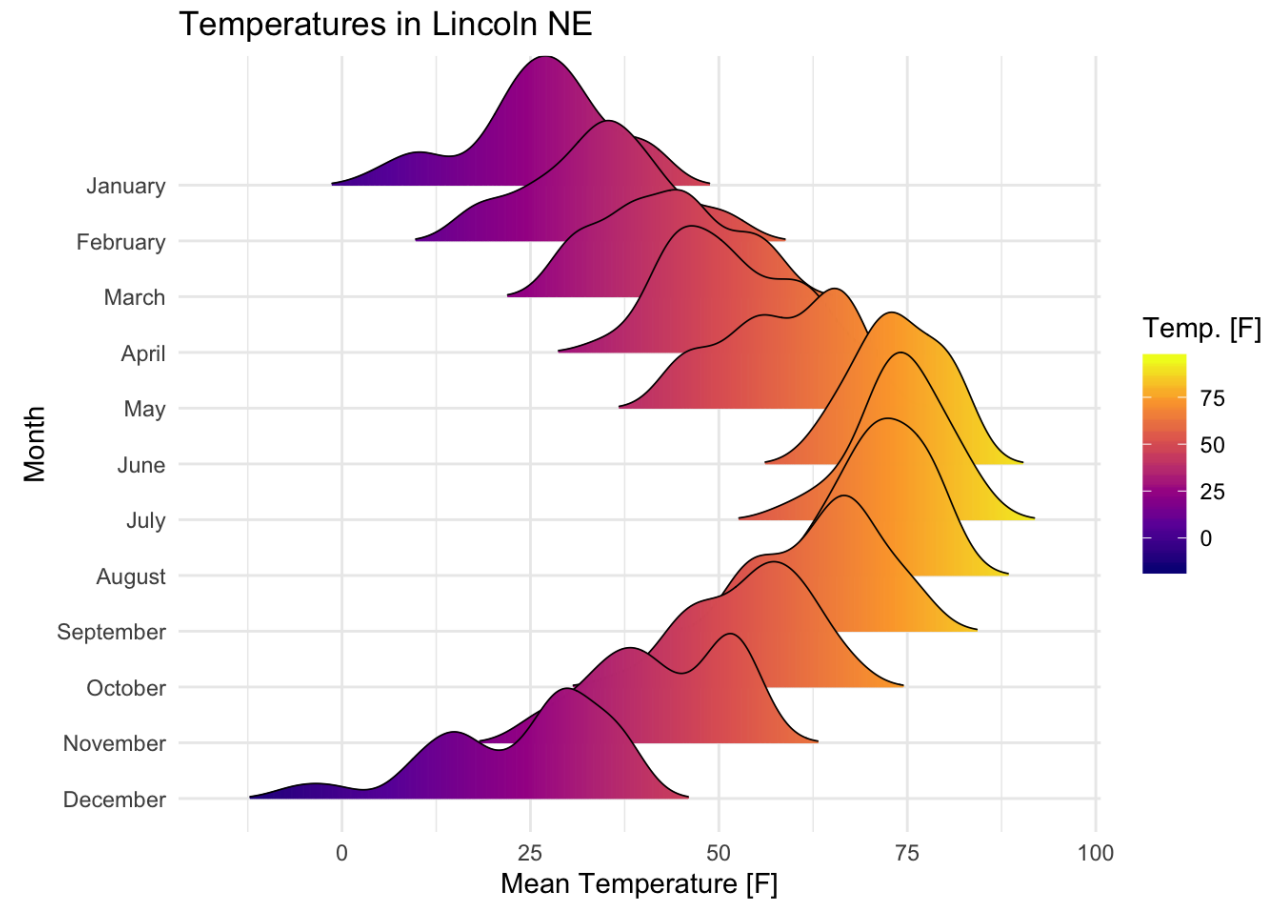
Виды графиков

- Гистограмма



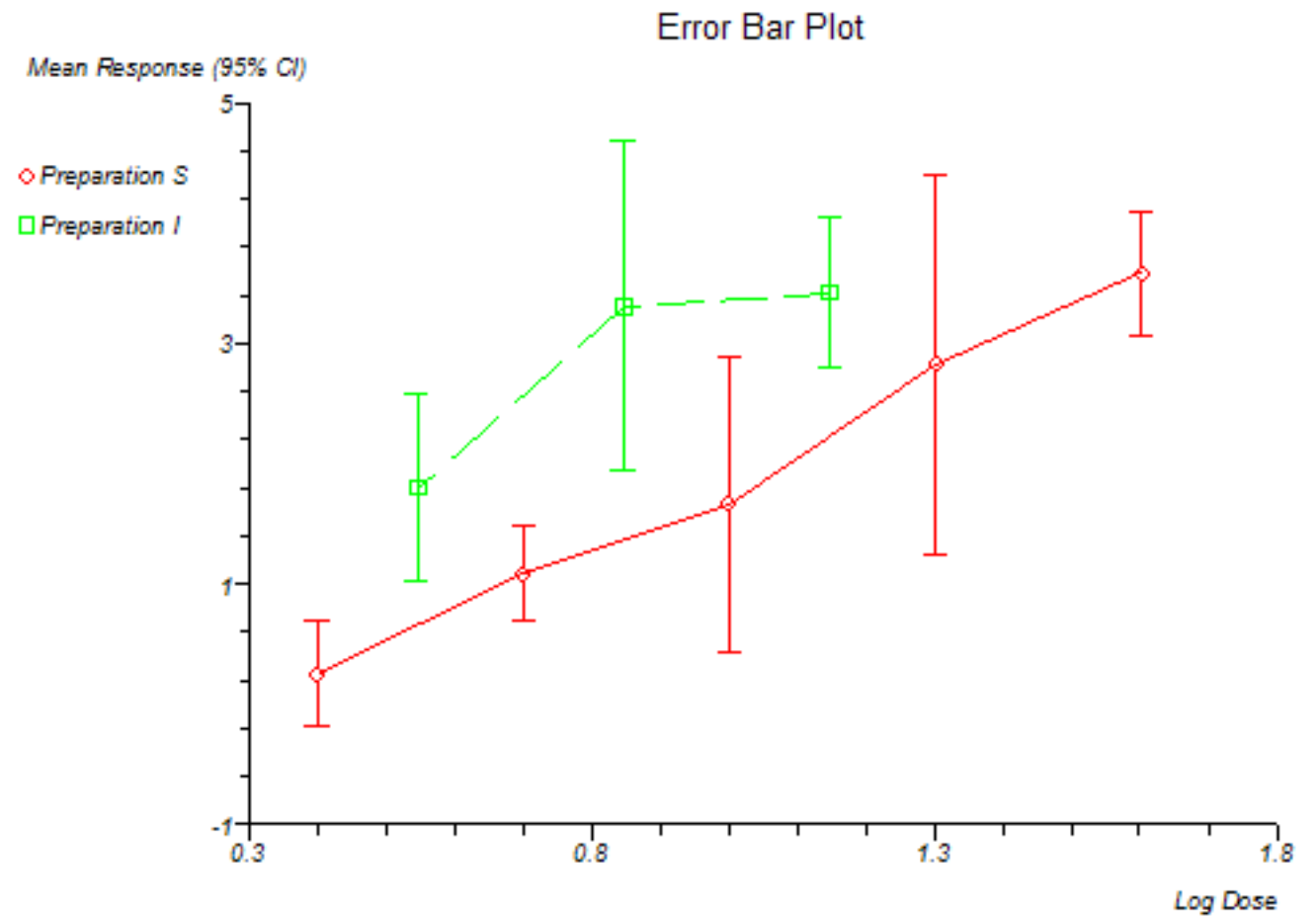
Виды графиков

- График плотности распределения



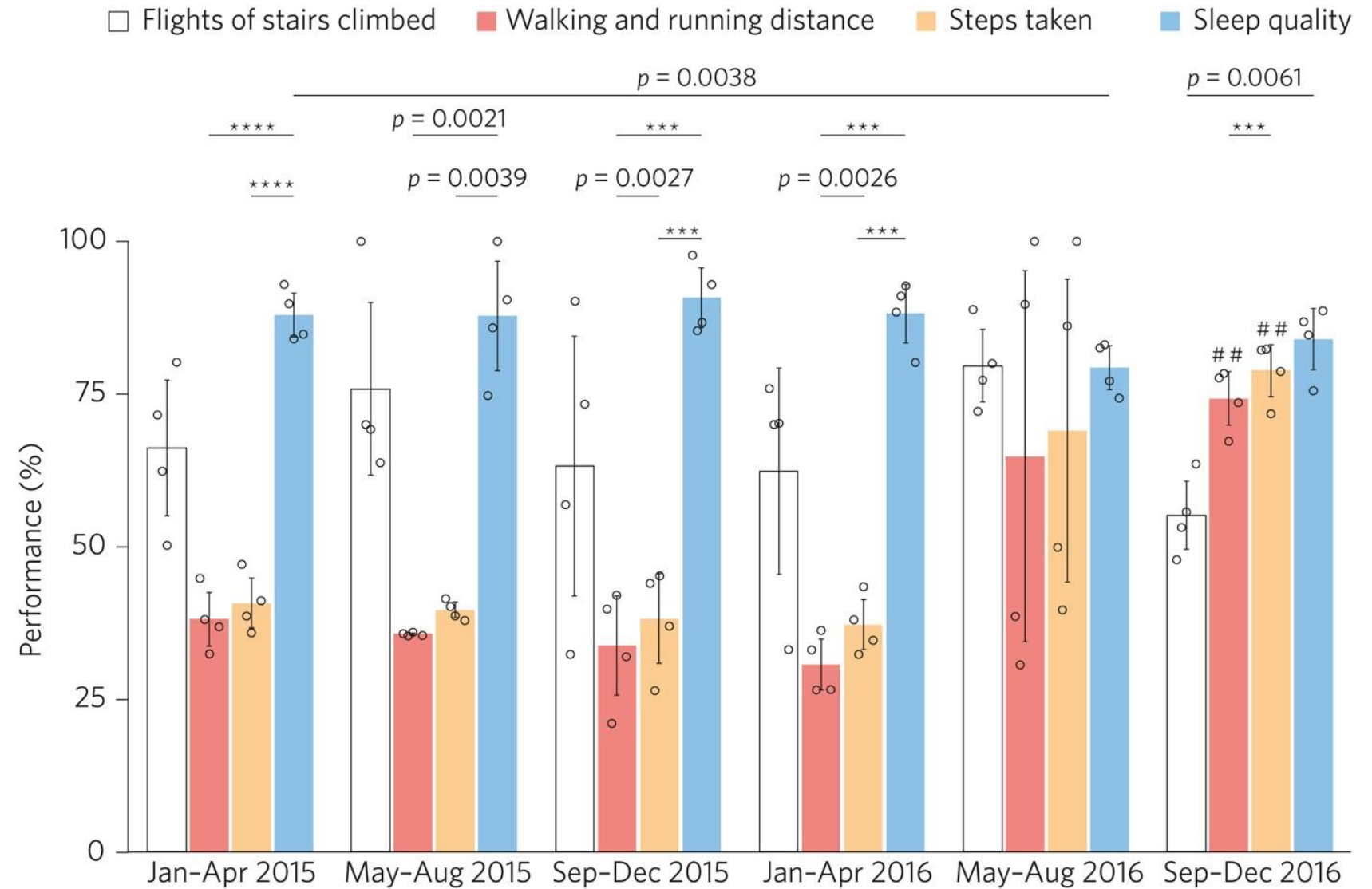
Виды графиков

- Errorbar

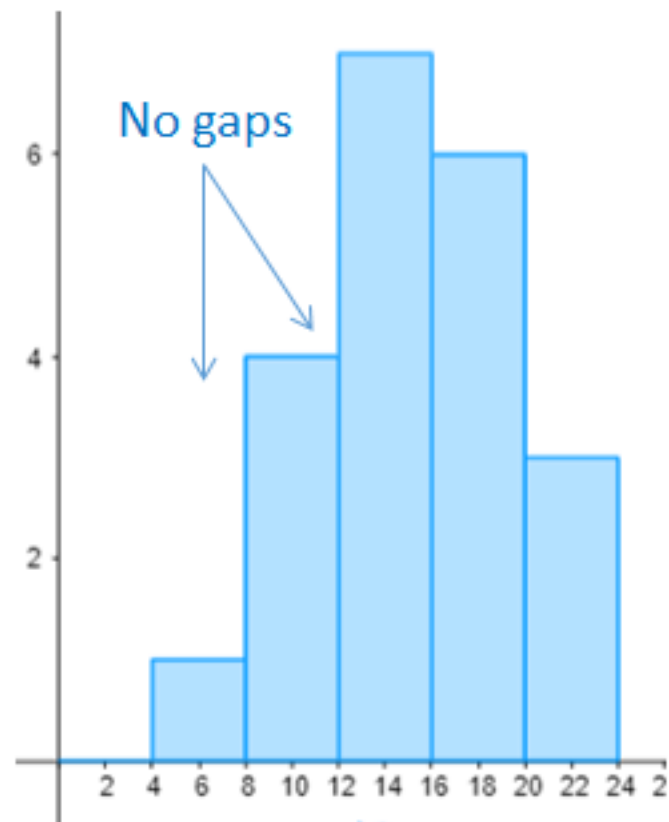


Виды графиков

- Bar plot

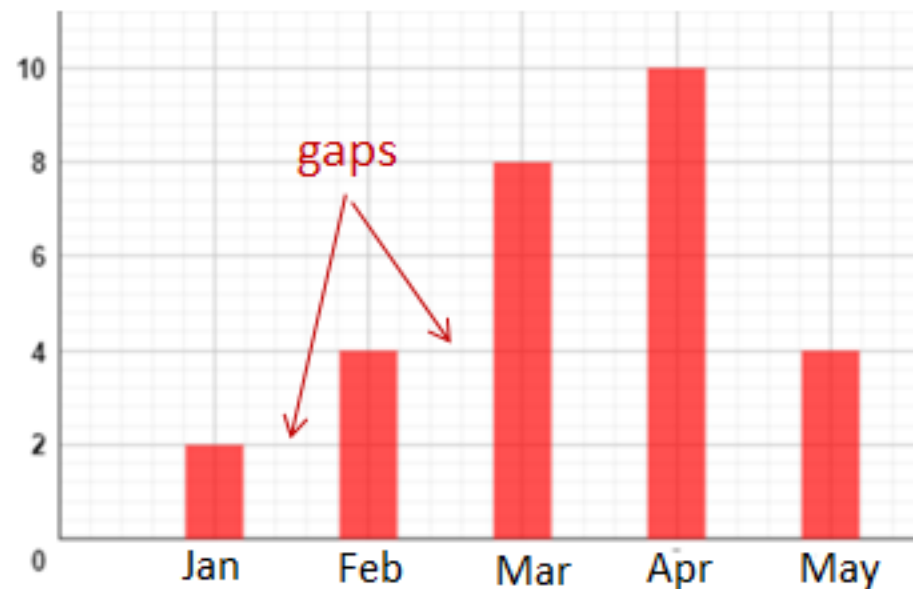


Histogram vs. Bar Chart



← Number Ranges →

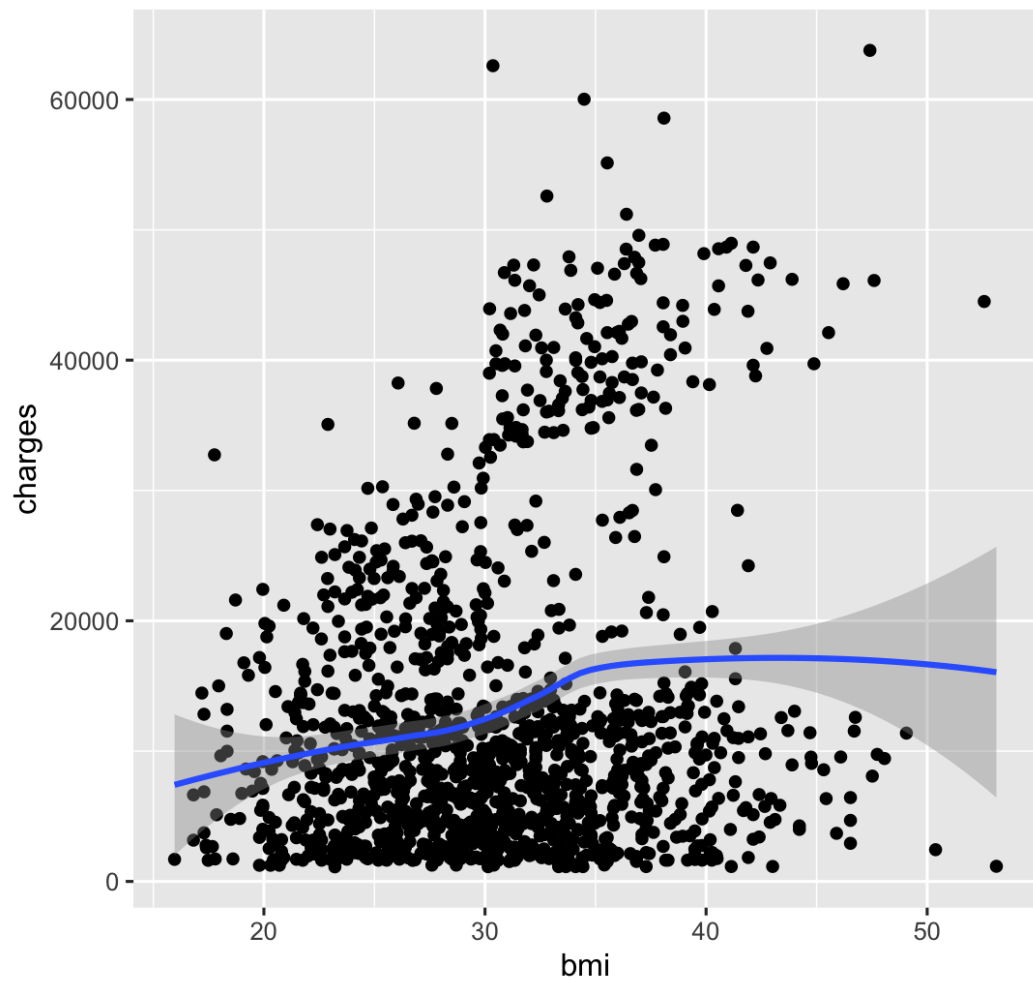
Histogram



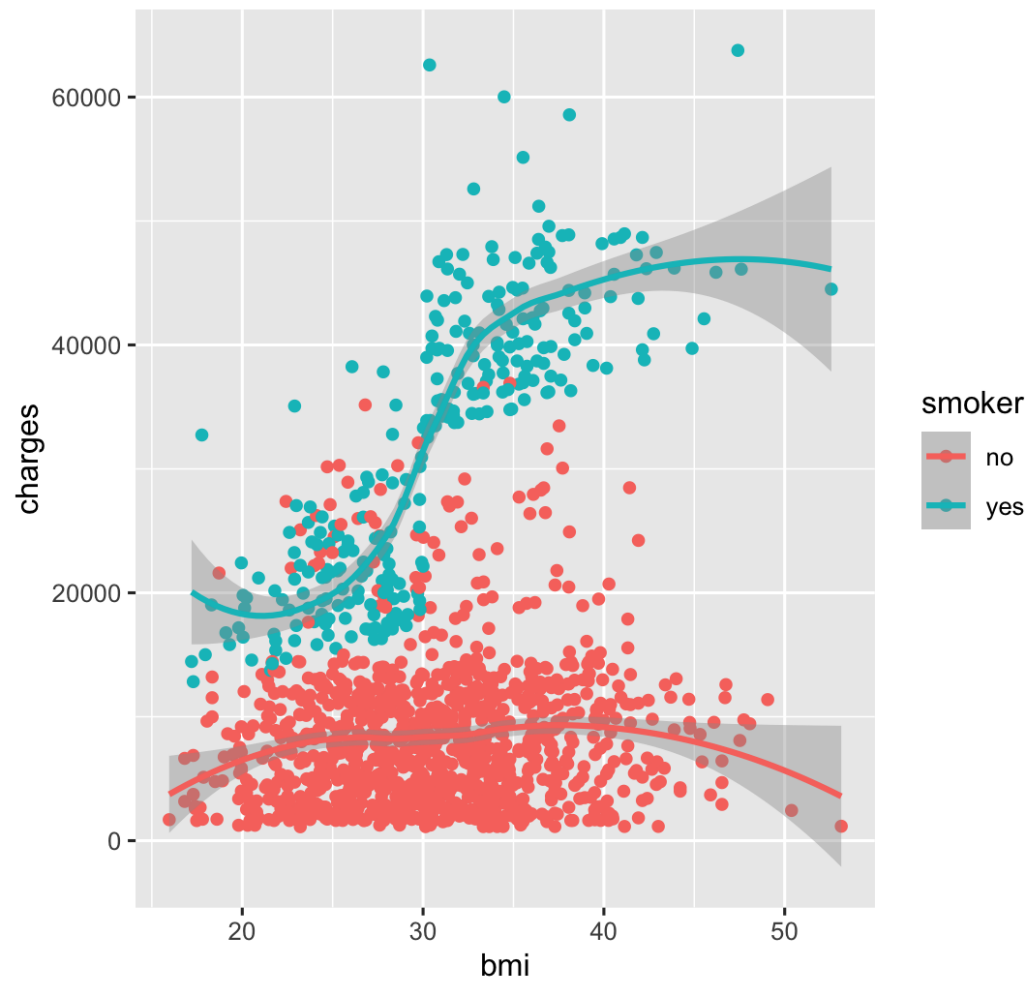
← Categories →

Bar Chart

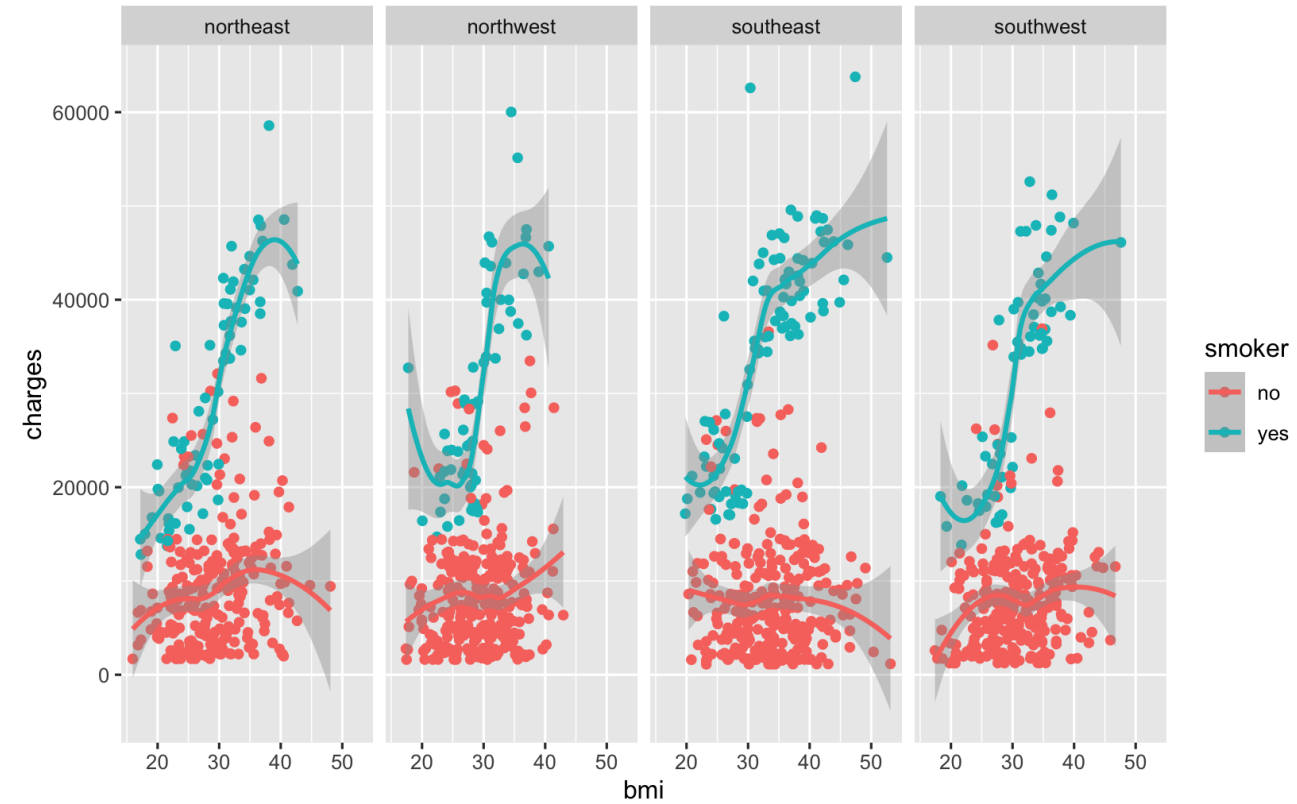
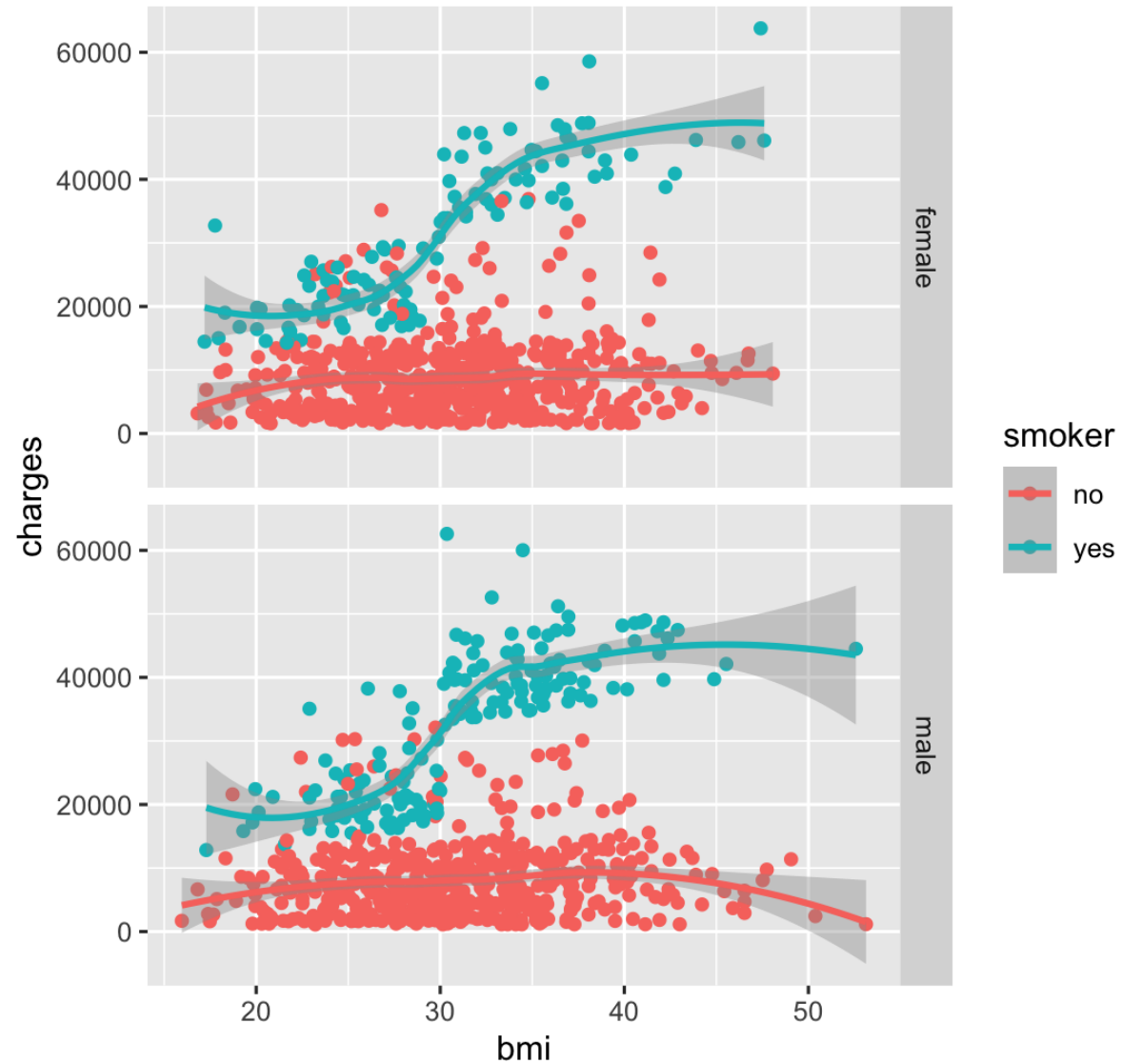
2D-graphs



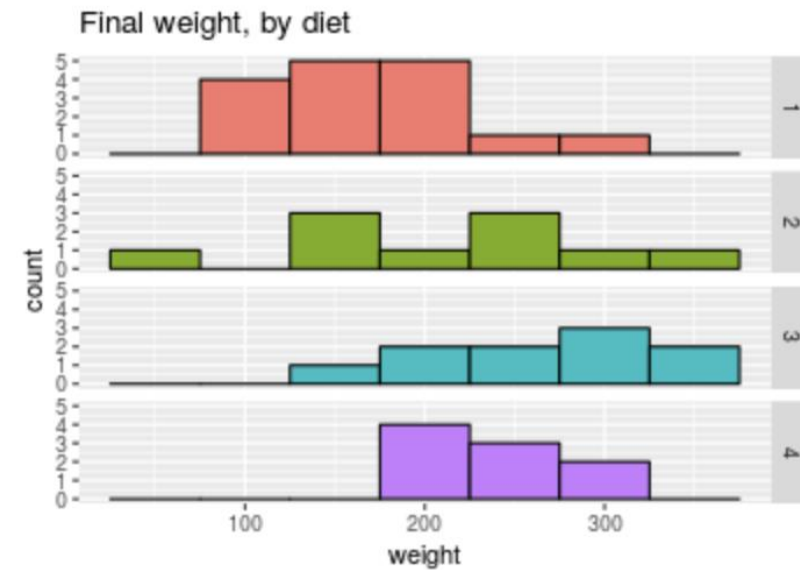
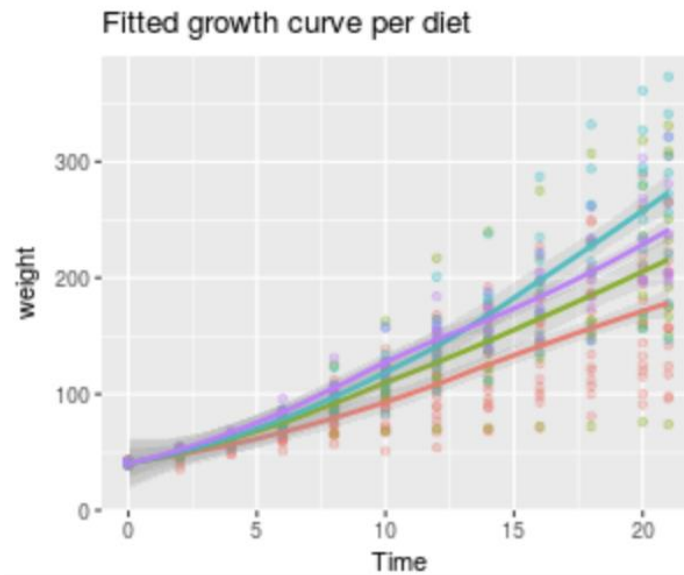
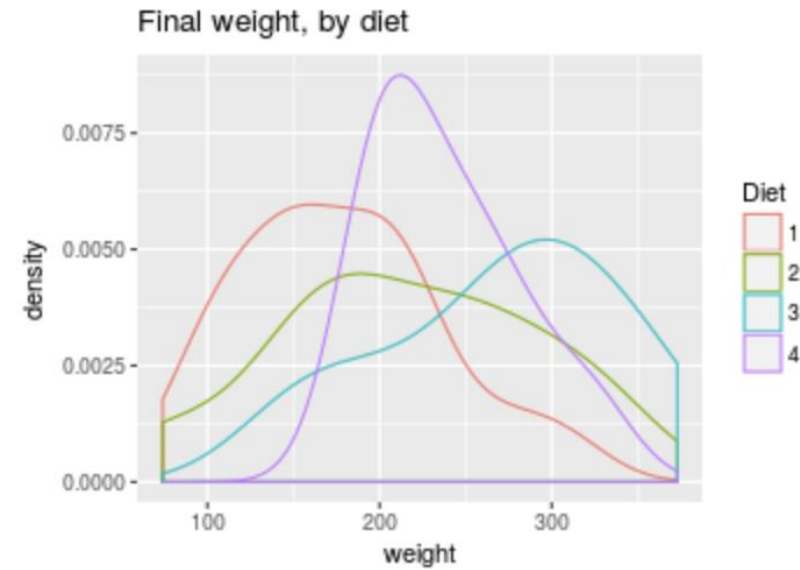
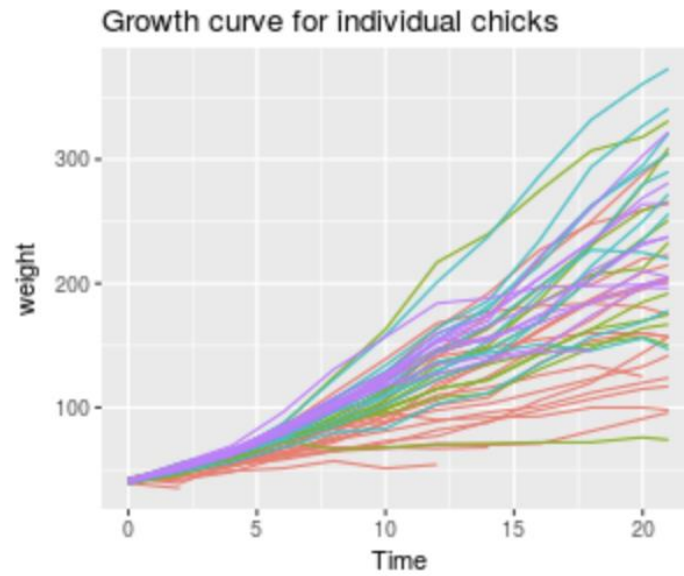
3D-graphs



4D-graphs (facets)

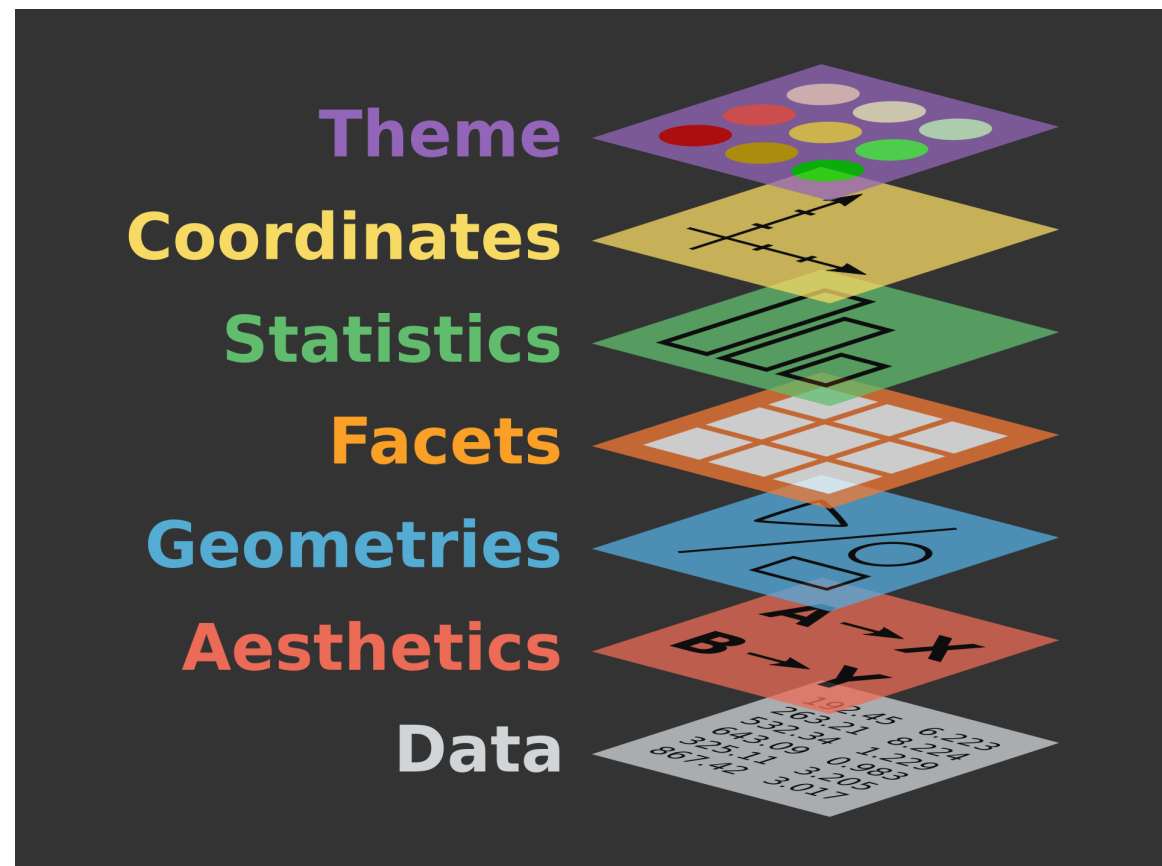
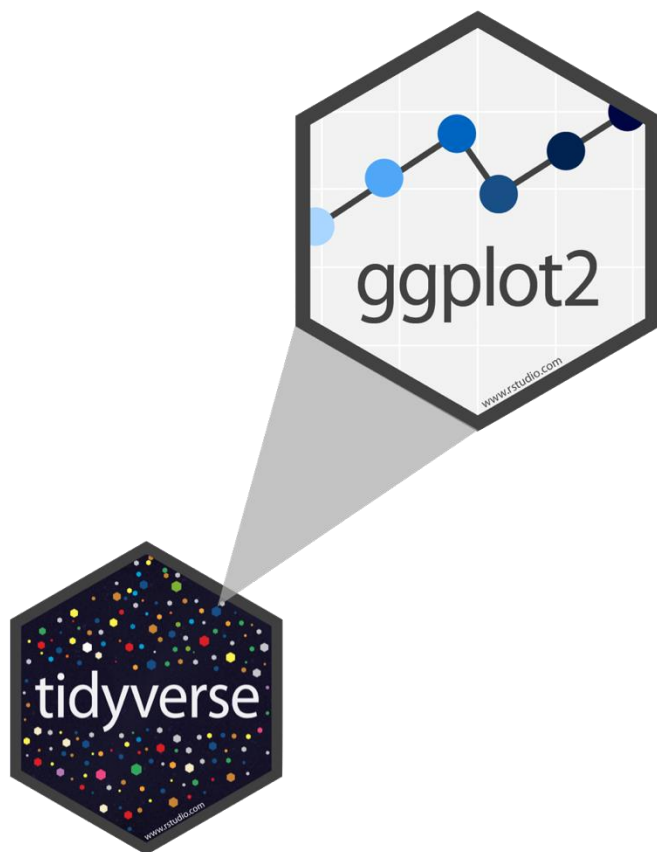


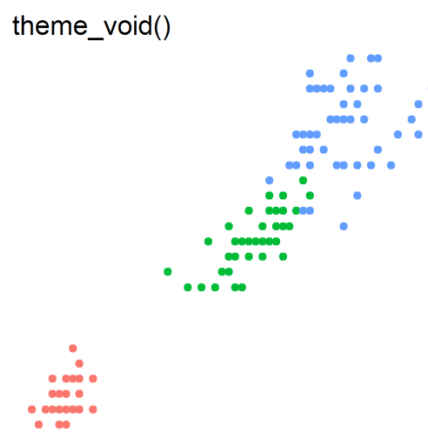
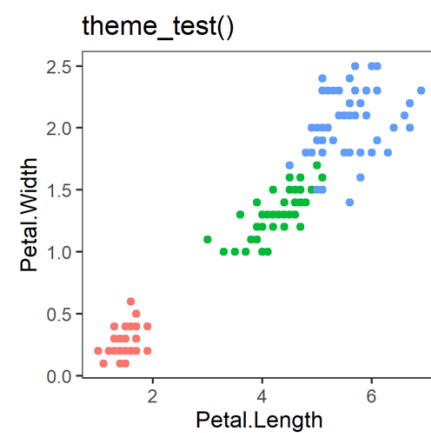
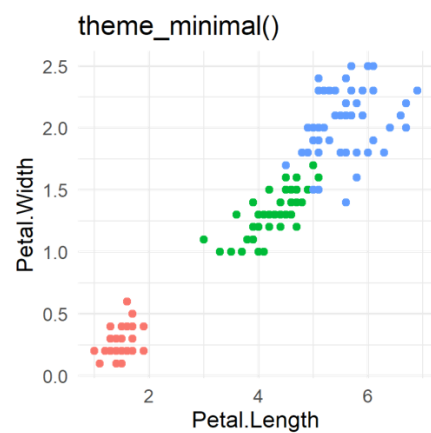
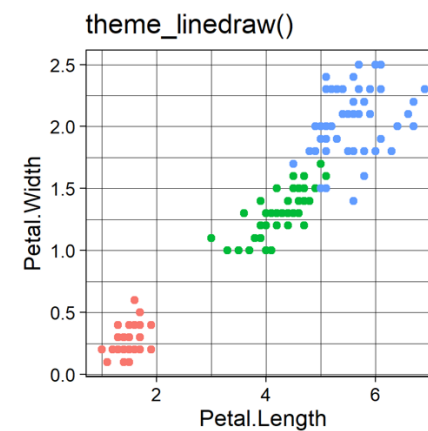
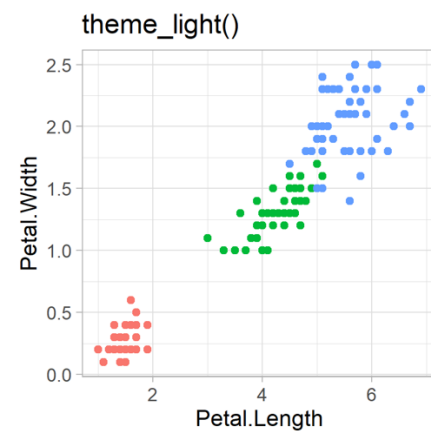
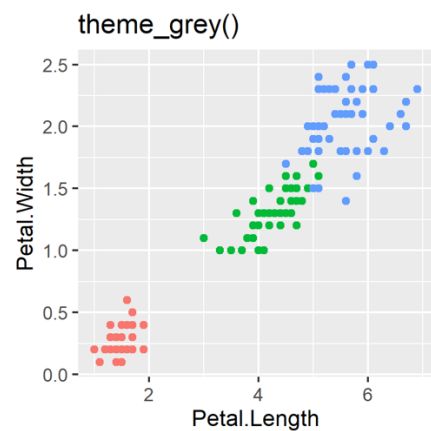
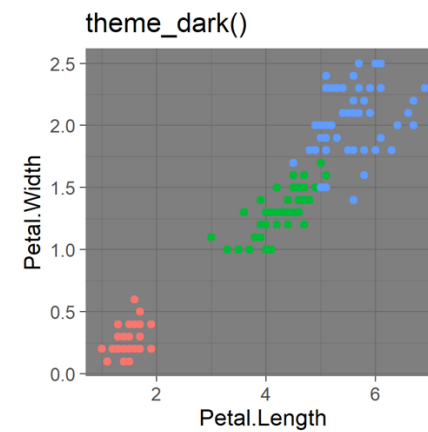
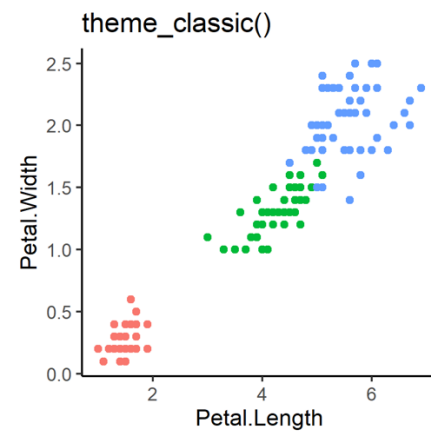
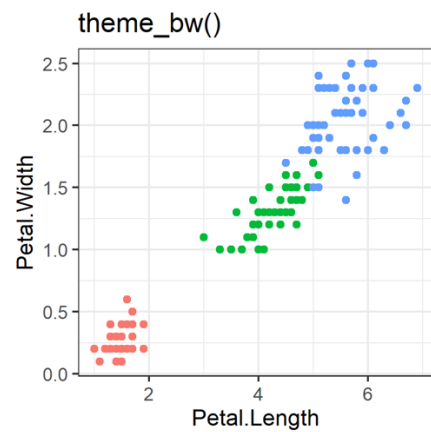
Multiple graphs



ggplot2

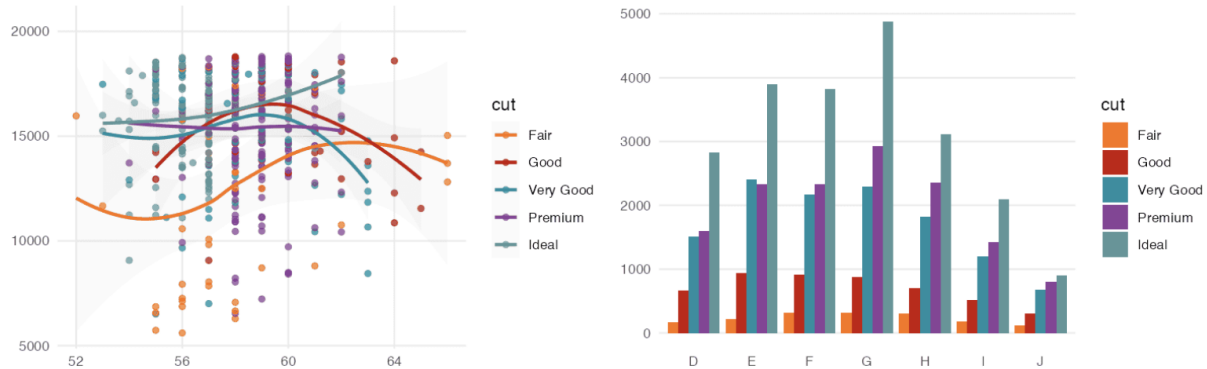
График как набор независимых слоев



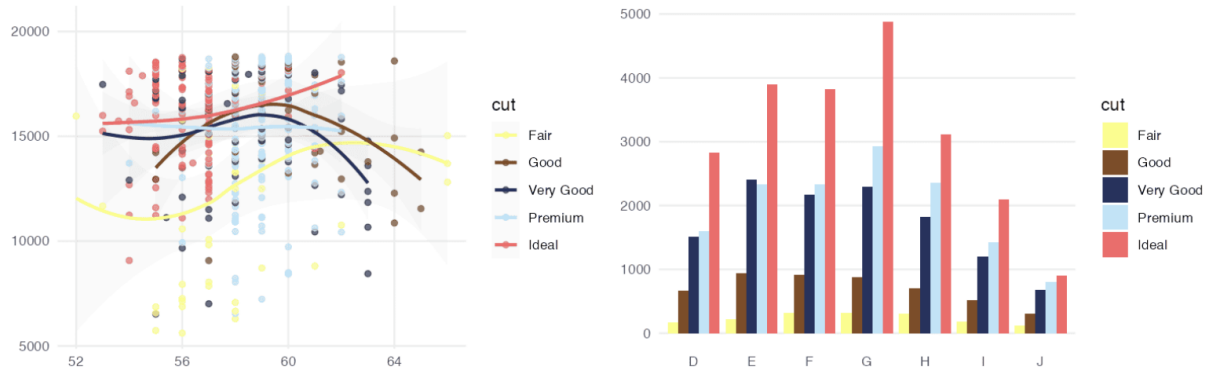


ggsci Scientific Journal and Sci-Fi Themed Color Palettes for ggplot2

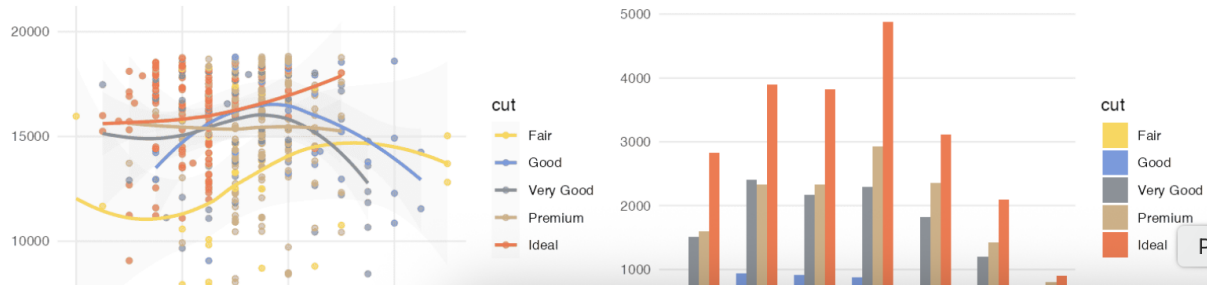
Futurama



Rick and Morty

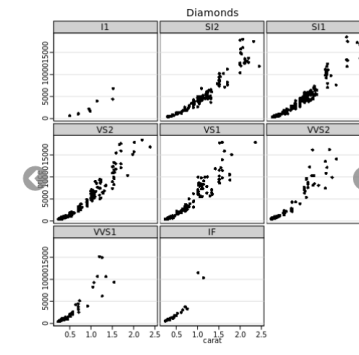
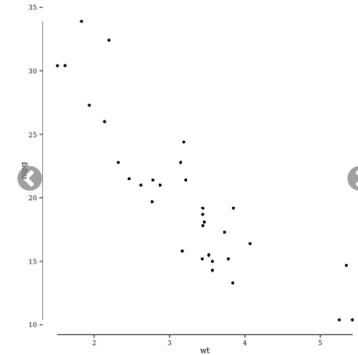
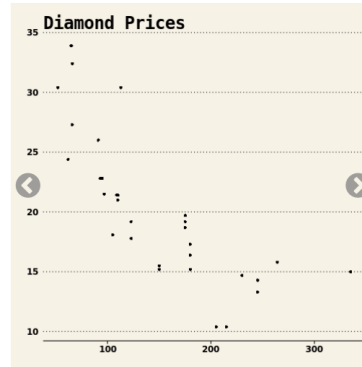


The Simpsons



ggthemes

ggthemes



theme_wsj

Wall Street Journal theme

theme_tufte

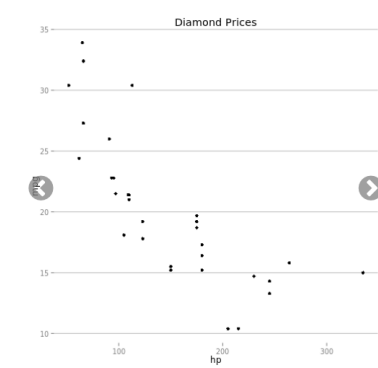
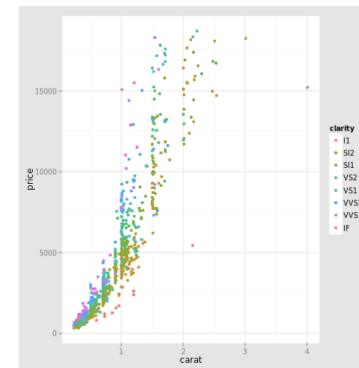
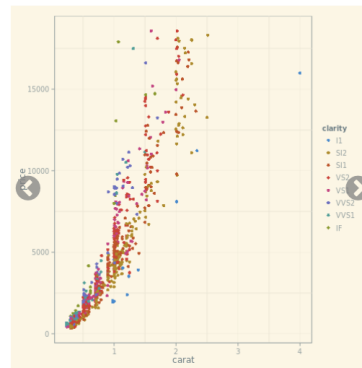
Tufte Maximal Data, Minimal Ink Theme

theme_stata

Themes based on Stata graph schemes

theme_solid

Theme with nothing other than a background color



theme_solarized

ggplot color themes based on the Solarized palette

theme_map

Clean theme for maps

theme_igray

Inverse gray theme

theme_hc

Highcharts JS theme

DATA VISUALIZATION WITH MESSY AND UNAGGREGATED DATA

EXPECTATION



REALITY



Практика на семинаре

Нарисуйте 4 графика, которые покажут:

- 1) связь между длиной, высотой и шириной бриллианта (воспользуйтесь функцией `multiplot` из [Cookbook for R](#))
- 2) распределение веса бриллианта в зависимости от огранки. Добавьте на график средний вес бриллианта каждого типа огранки
- 3) связь между глубиной бриллианта и его цветом. Добавьте на график среднюю глубину бриллианта каждого вида
- 4) как глубина бриллианта зависит от его чистоты и цвета.