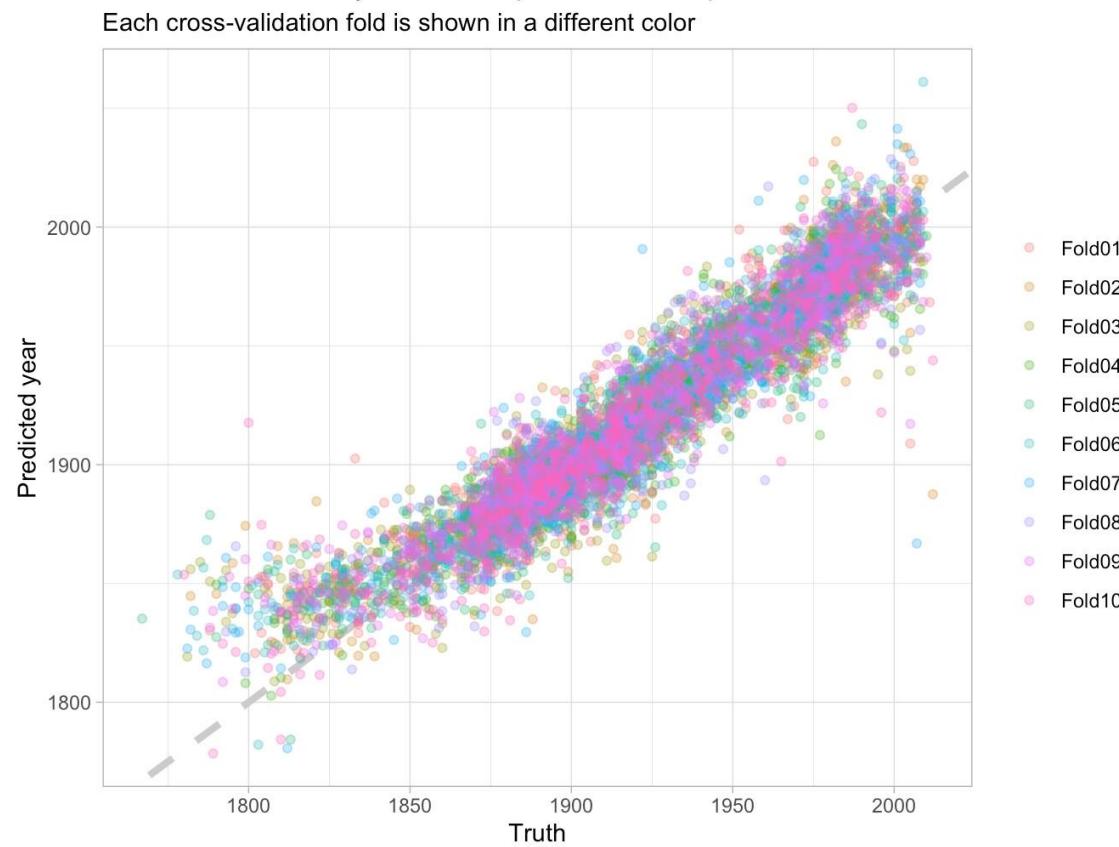
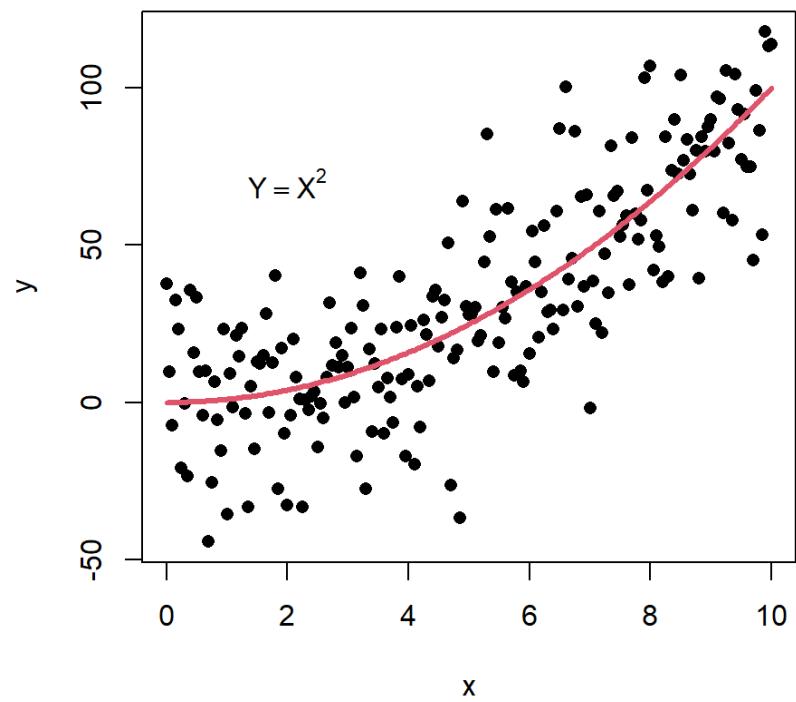


Визуализация данных



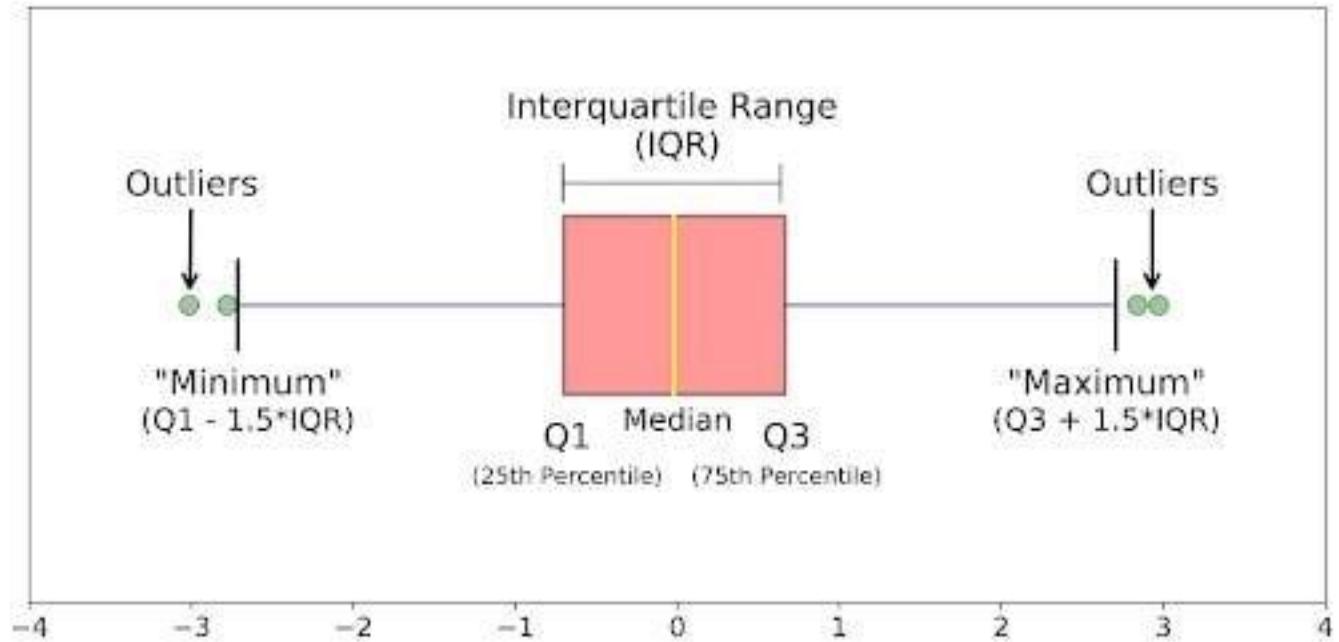
Виды графиков

- Point plot / scatter plot / график рассеяния



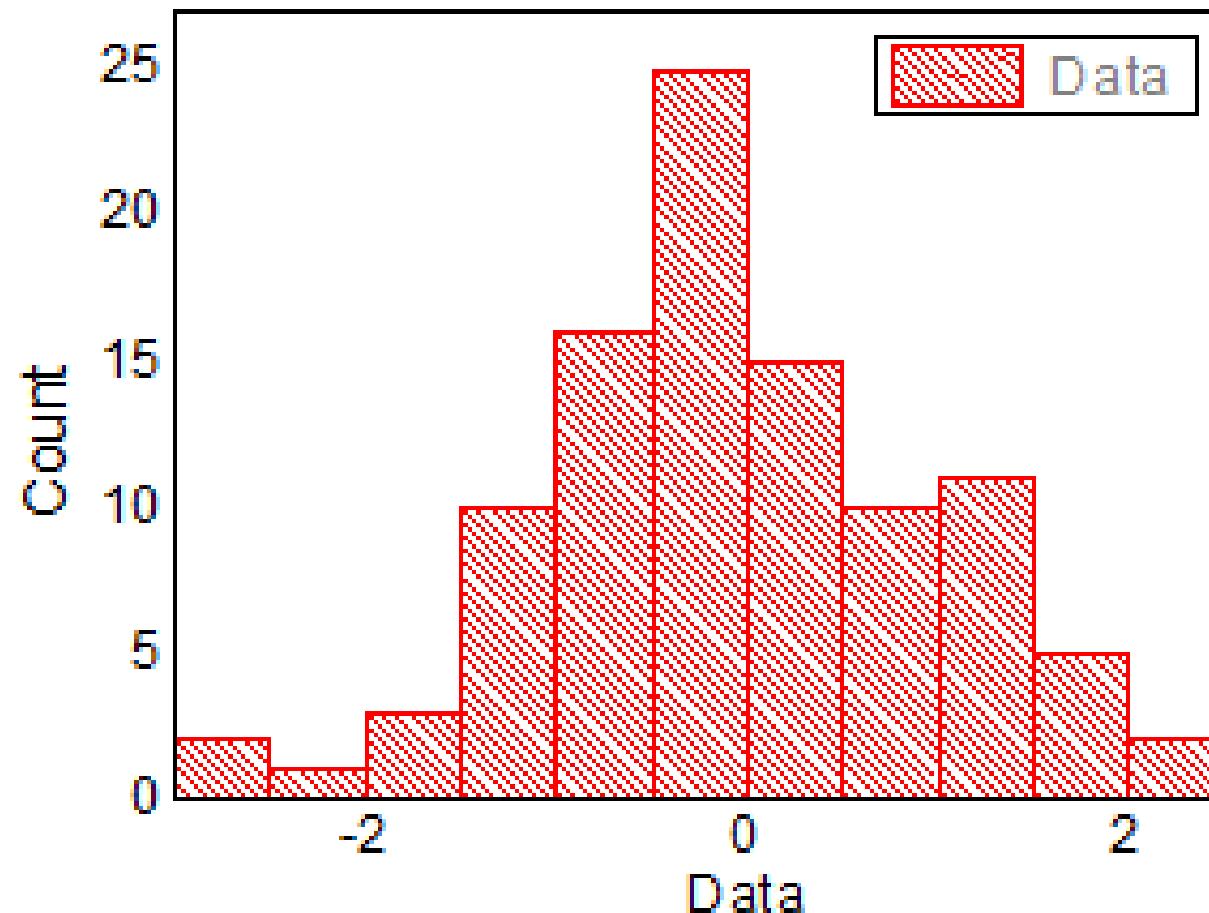
Виды графиков

- Boxplot / Ящик с усами



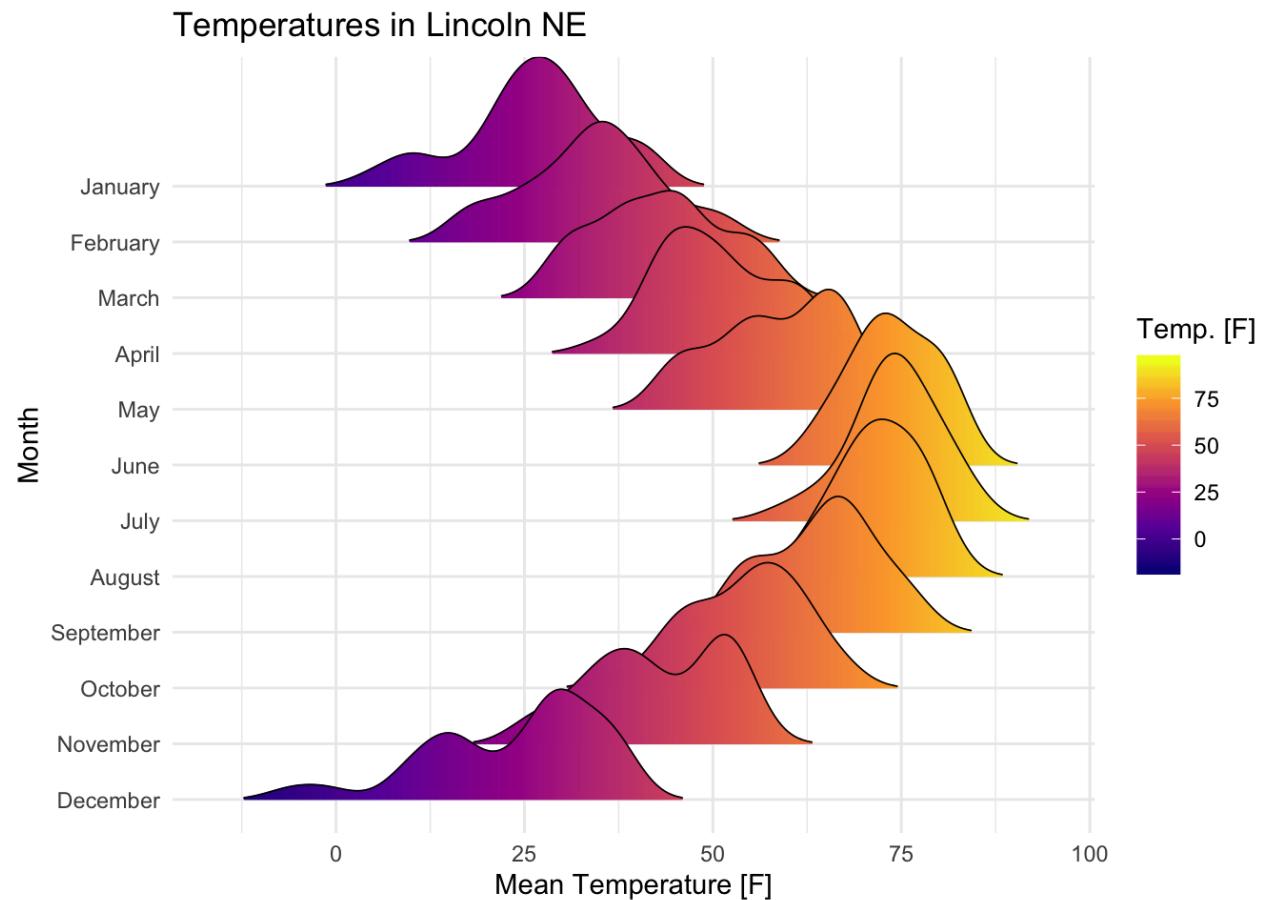
Виды графиков

- Гистограмма



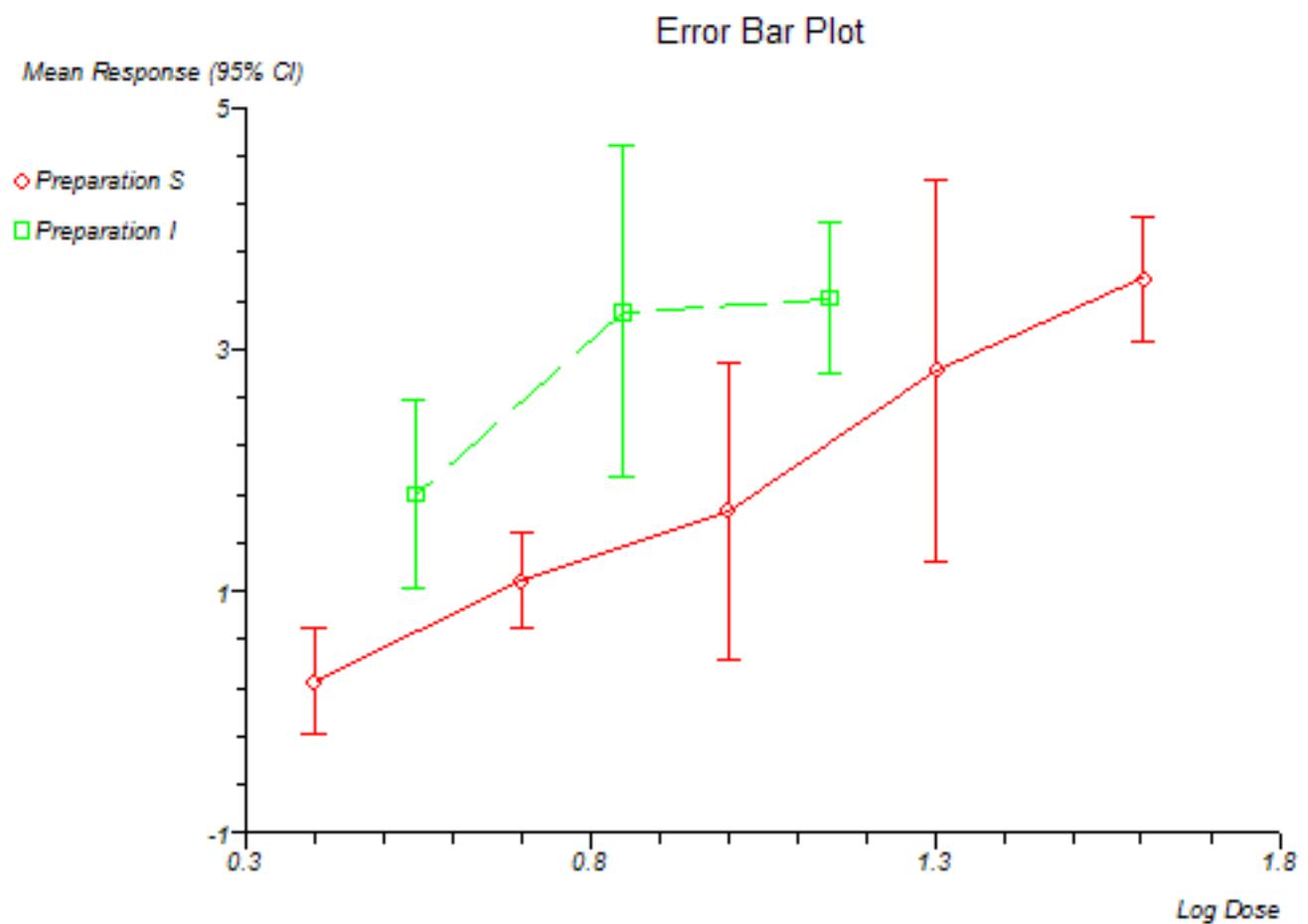
Виды графиков

- График плотности распределения



Виды графиков

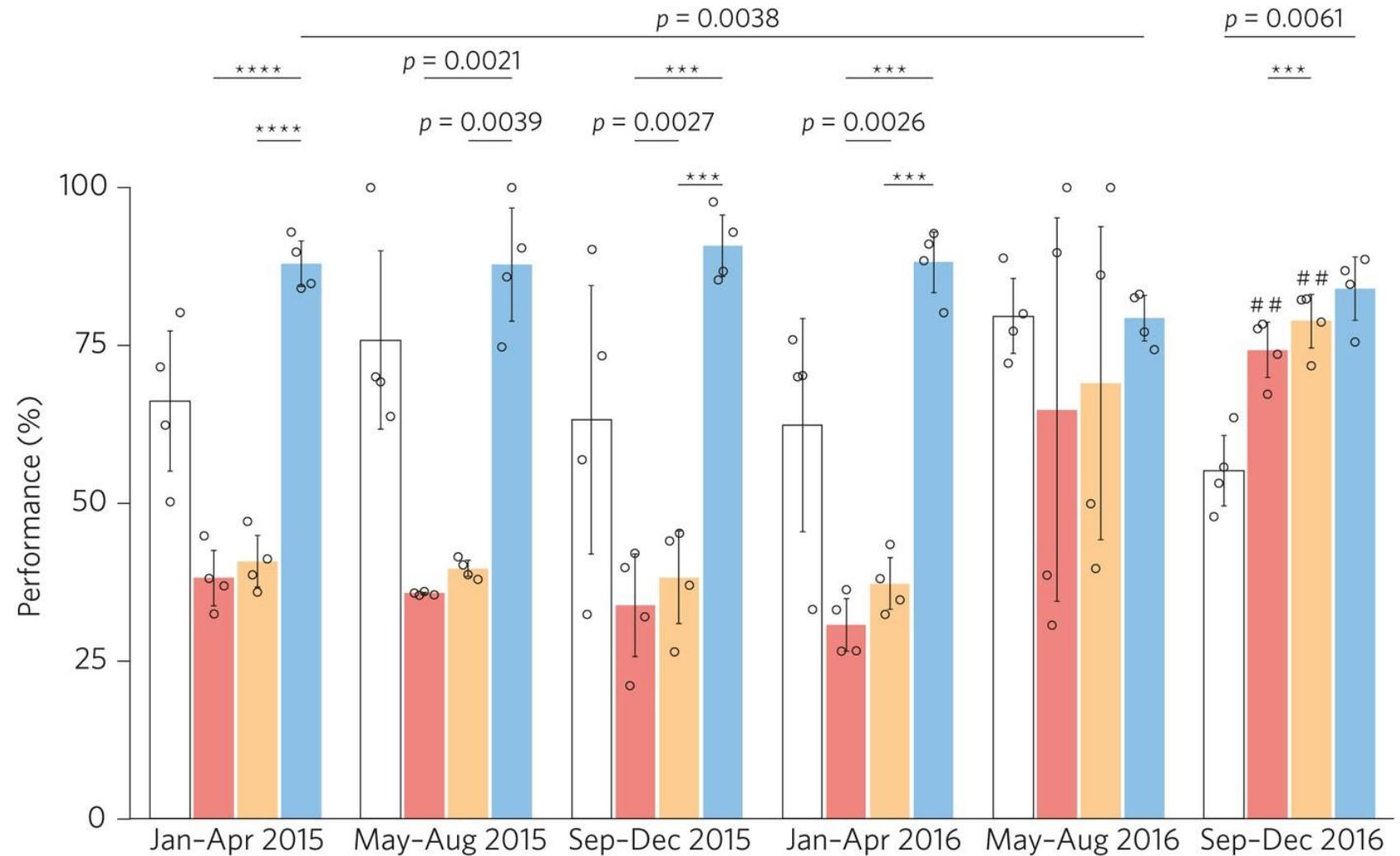
- Errorbar



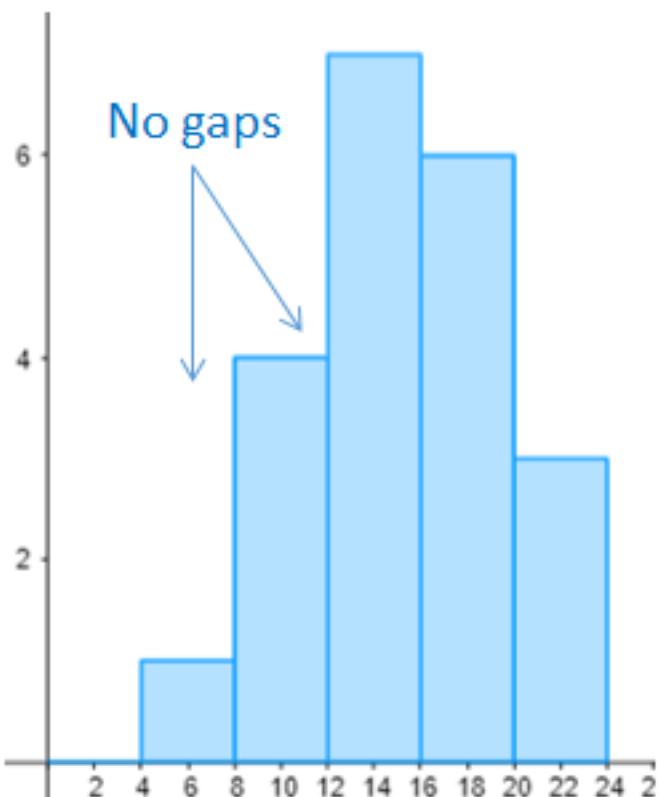
Виды графиков

- Bar plot

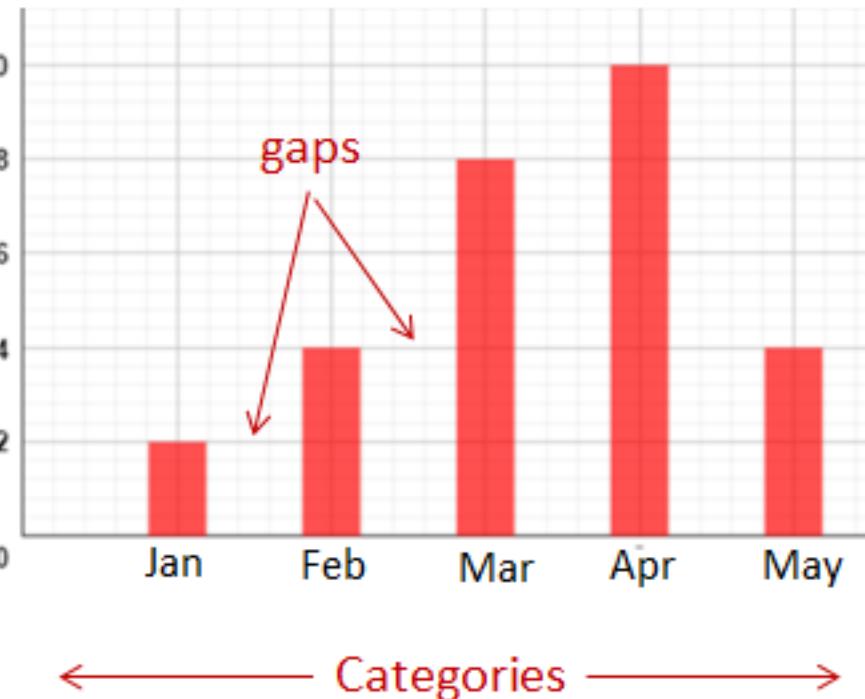
□ Flights of stairs climbed ■ Walking and running distance □ Steps taken □ Sleep quality



Histogram vs. Bar Chart

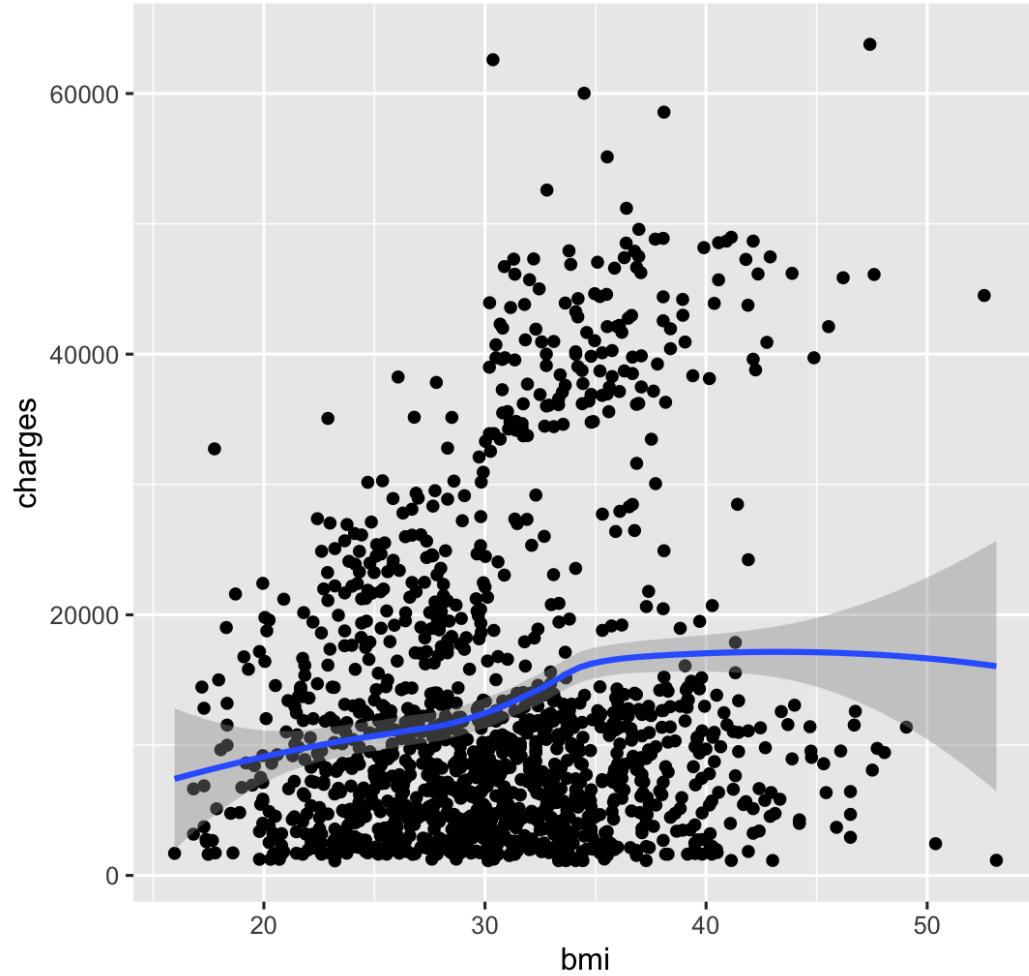


Histogram

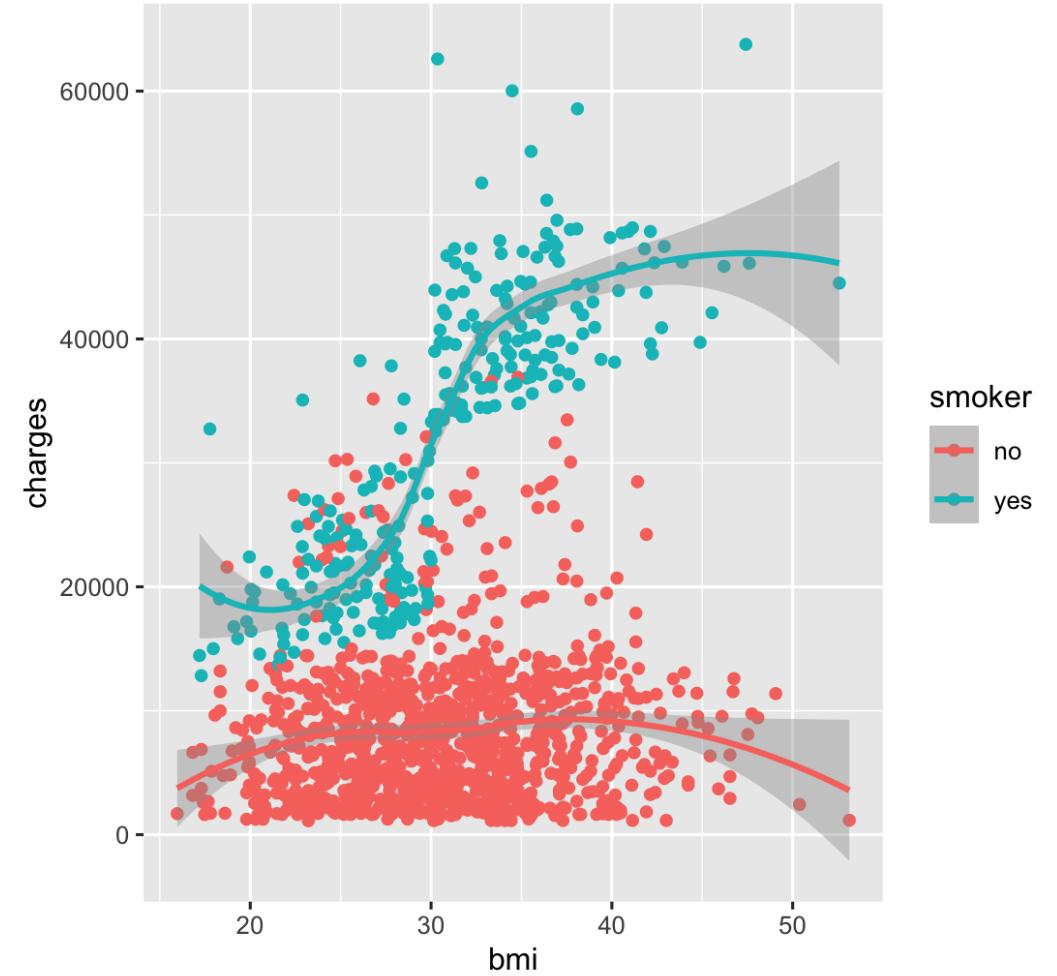


Bar Chart

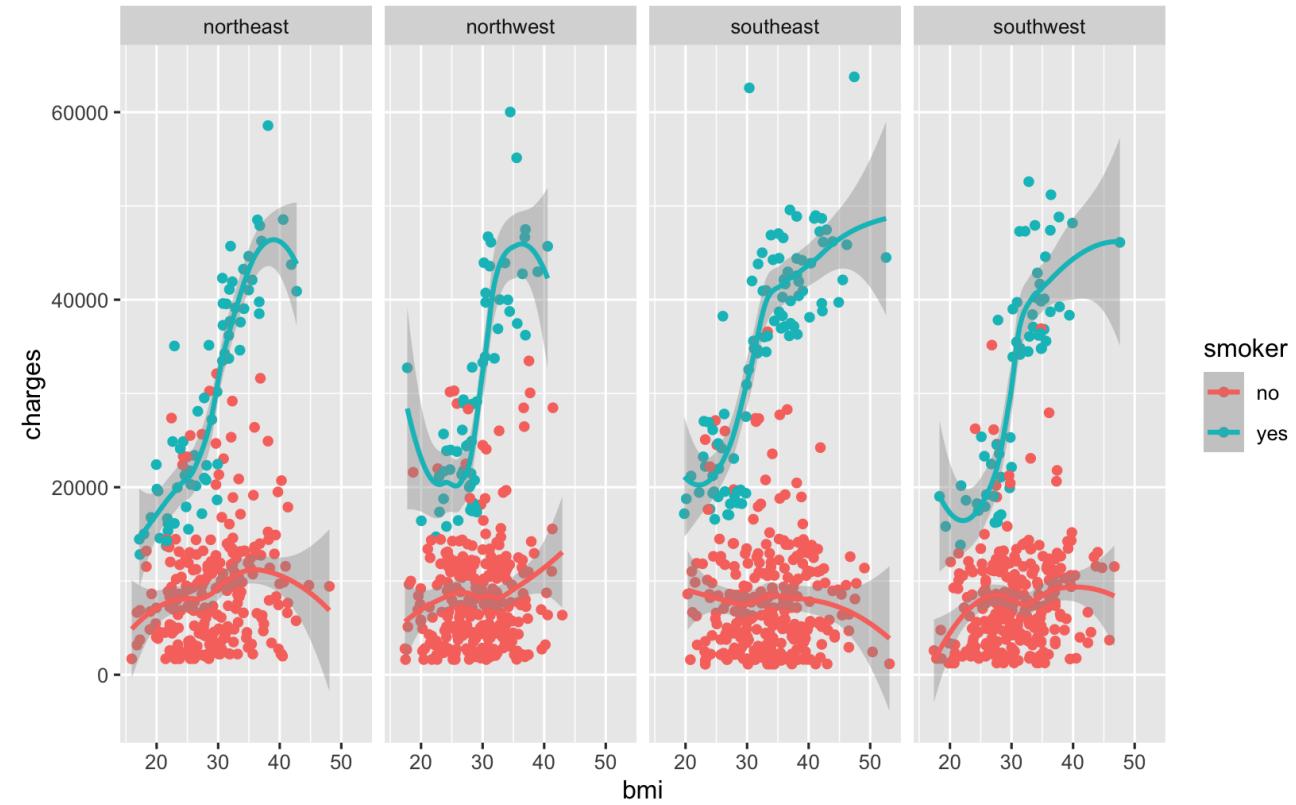
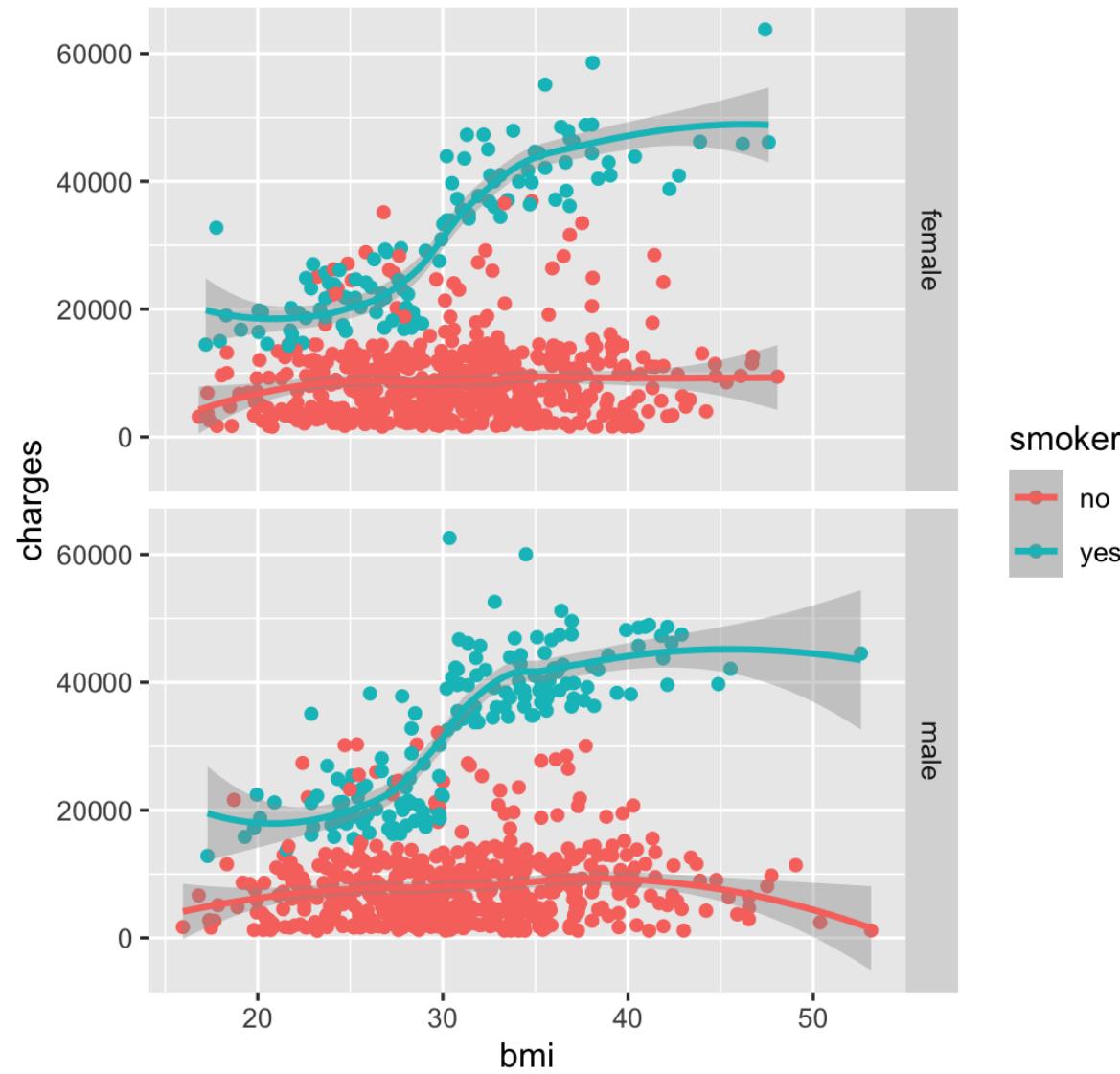
2D-graphs



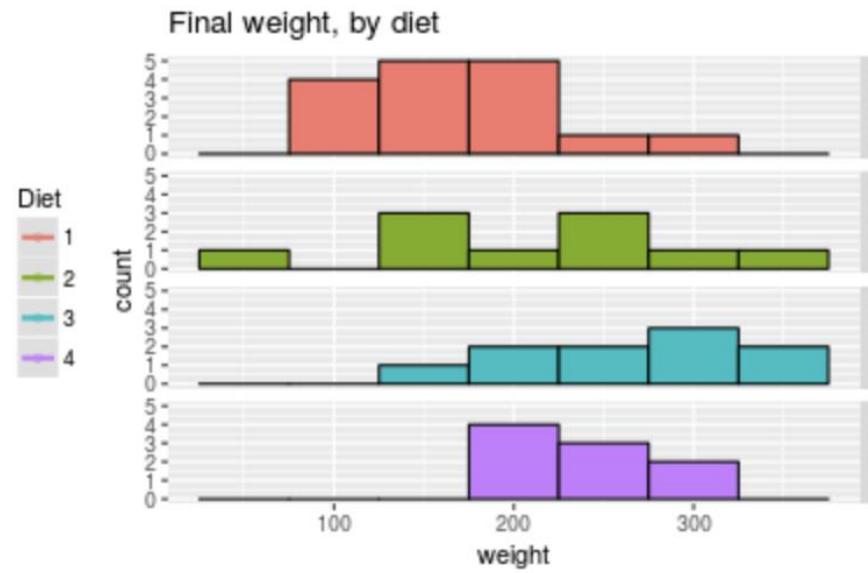
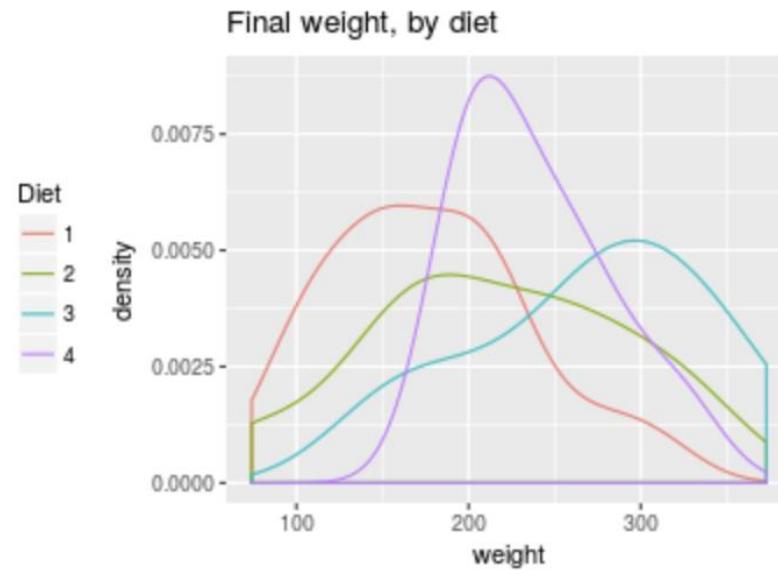
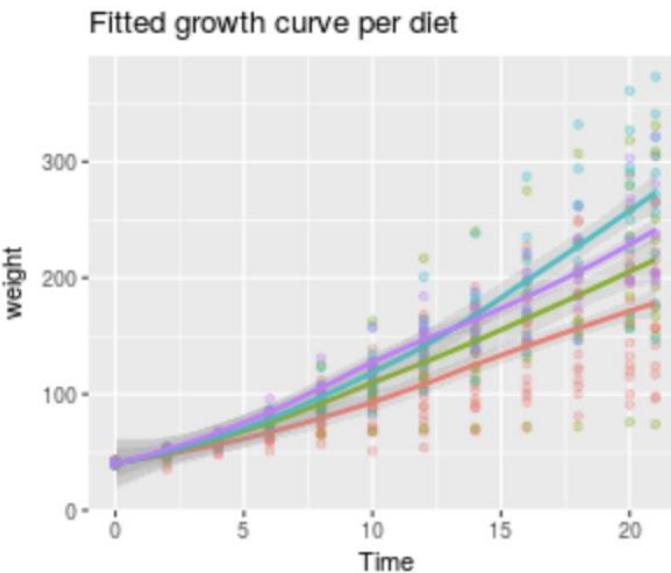
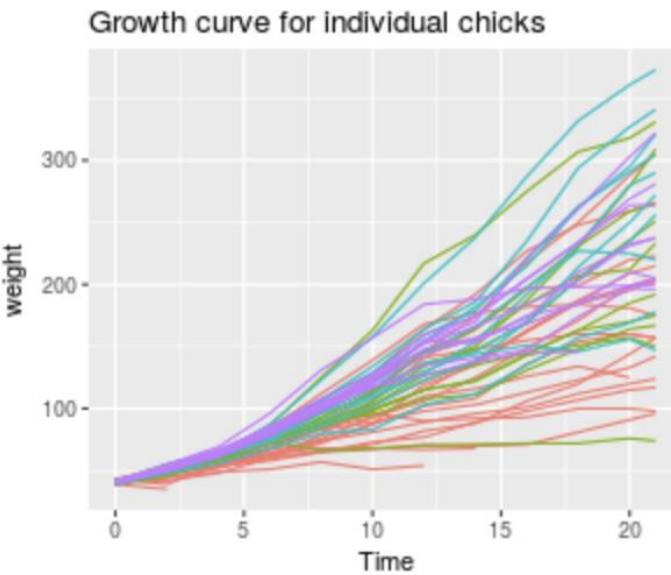
3D-graphs



4D-graphs (facets)

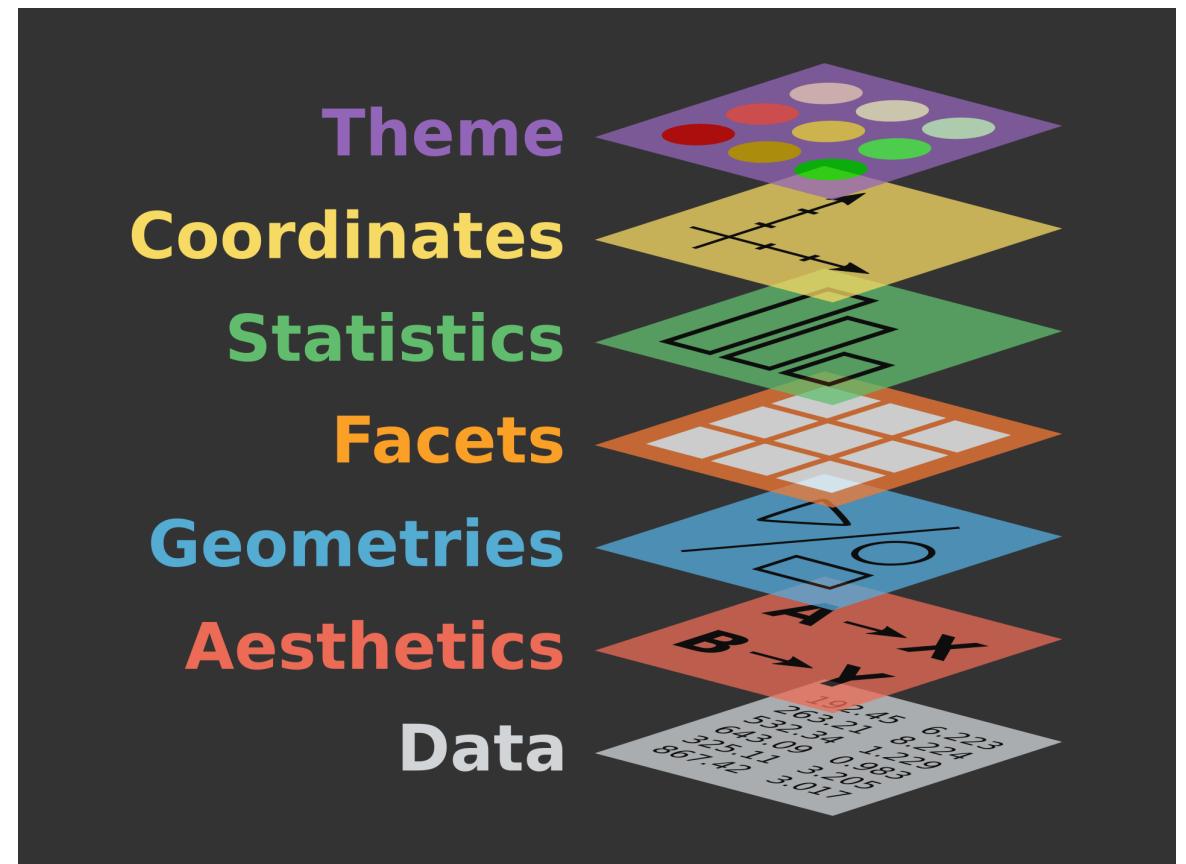
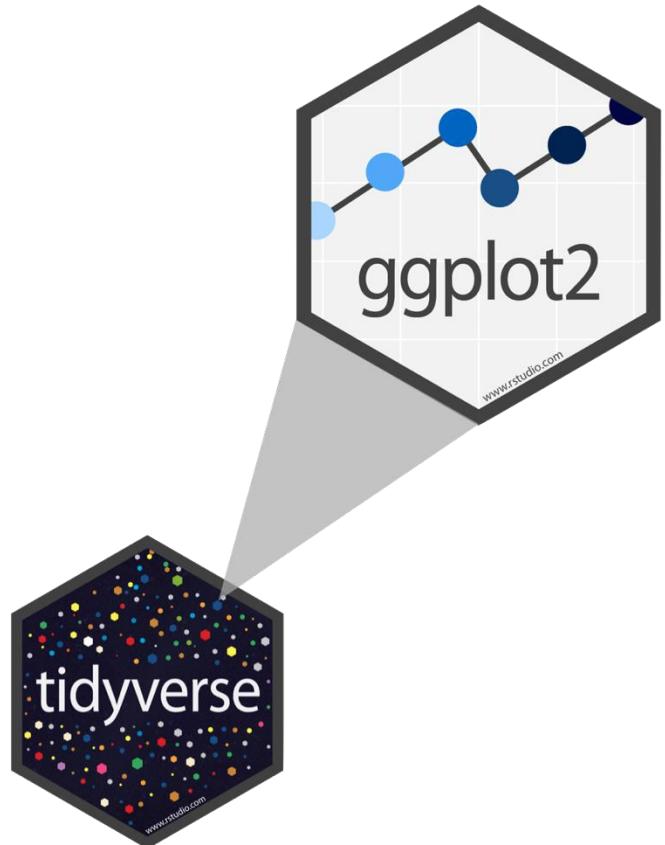


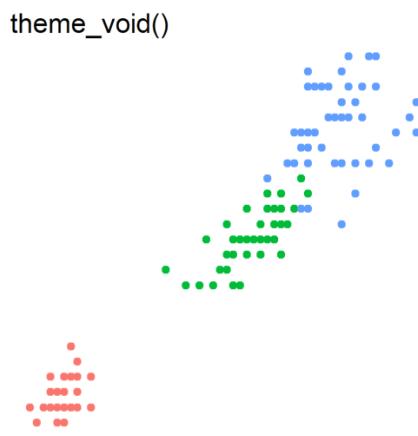
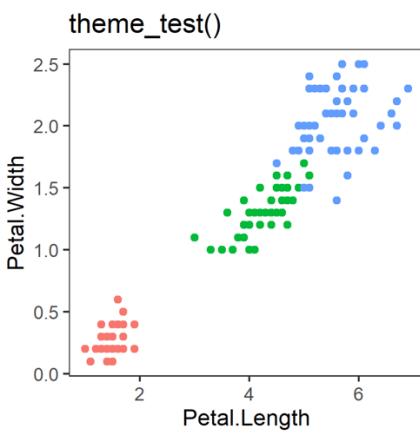
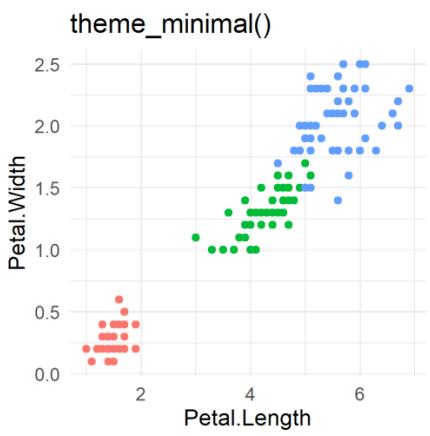
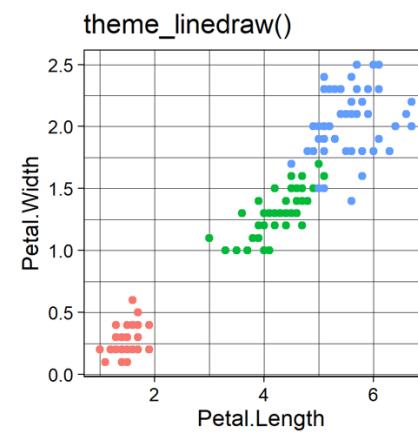
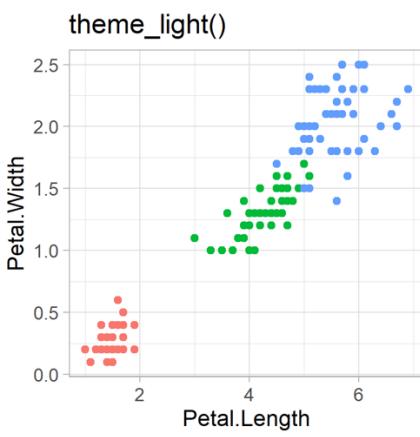
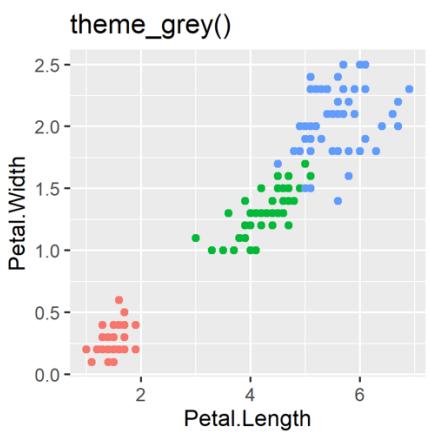
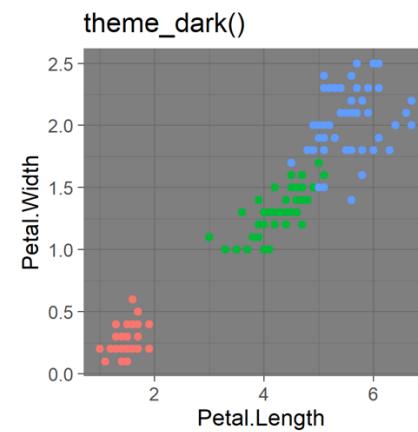
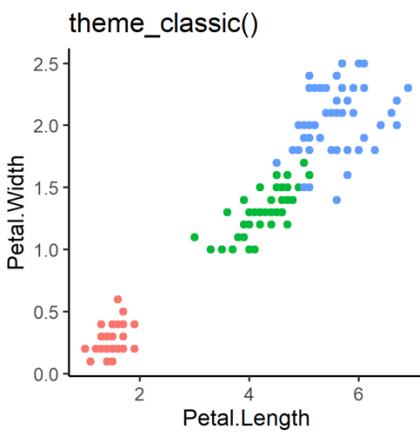
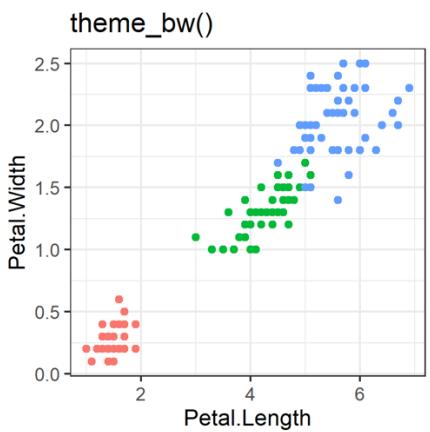
Multiple graphs



ggplot2

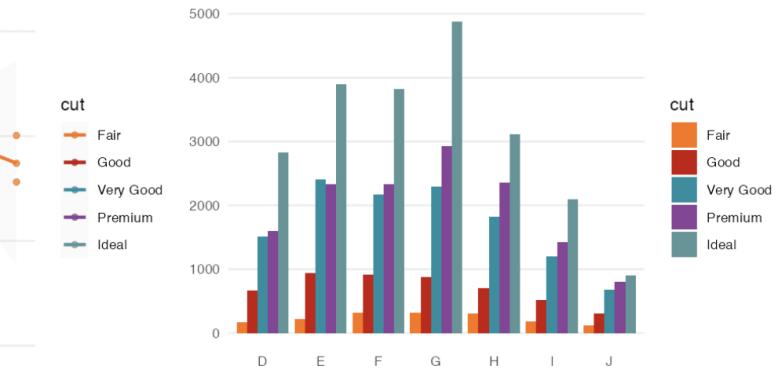
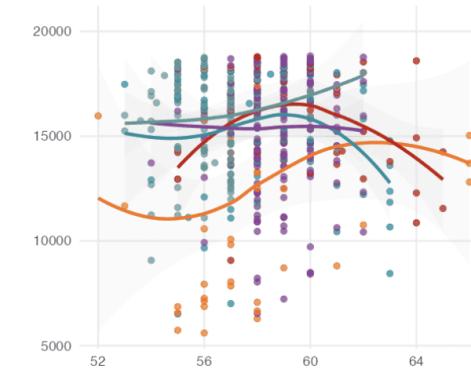
График как набор независимых слоев



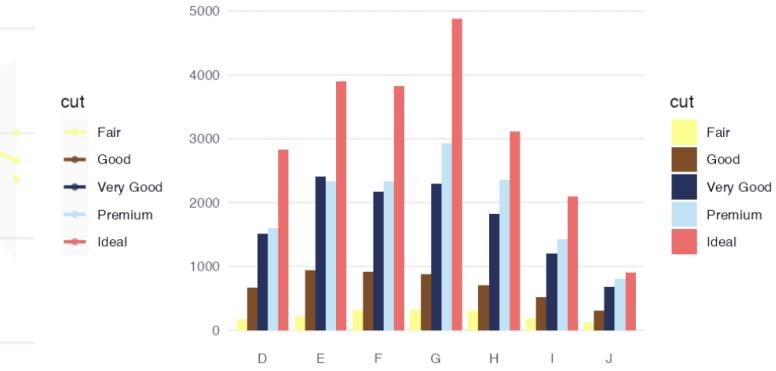
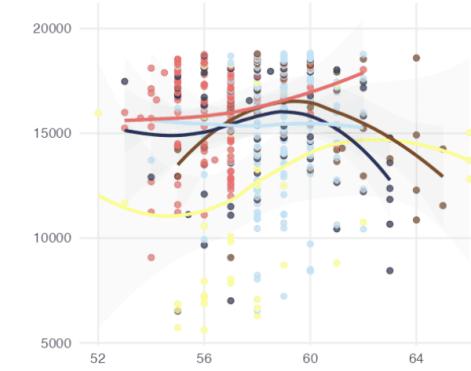


ggsci Scientific Journal and Sci-Fi Themed Color Palettes for ggplot2

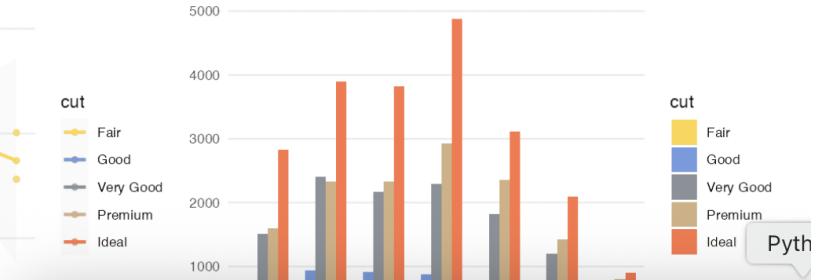
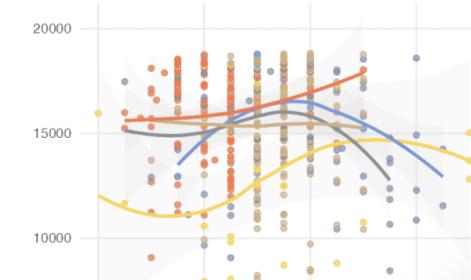
Futurama



Rick and Morty



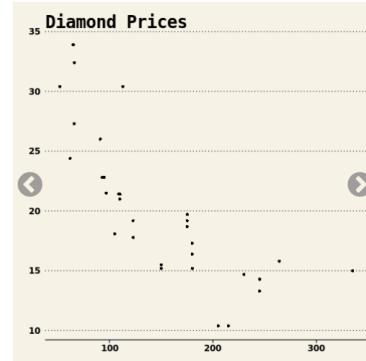
The Simpsons



Pyth

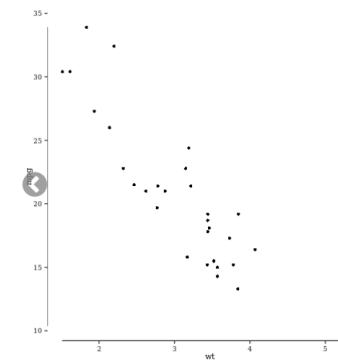
ggthemes

ggthemes



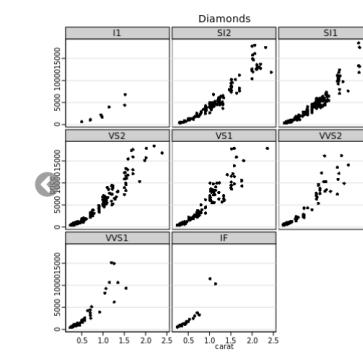
theme_wsj

Wall Street Journal theme



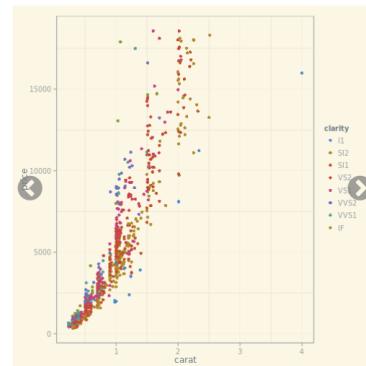
theme_tufte

Tufte Maximal Data, Minimal Ink Theme



theme_stata

Themes based on Stata graph schemes



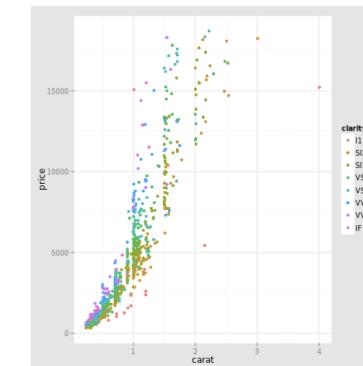
theme_solarized

ggplot color themes based on the Solarized palette



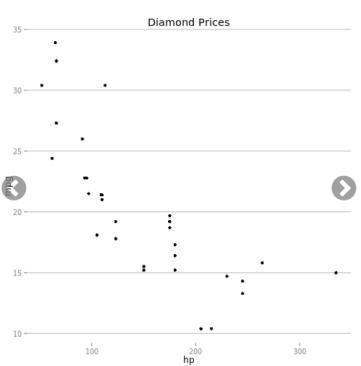
theme_map

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.