

What is Data?

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*This material is part of the **statsTeachR** project*

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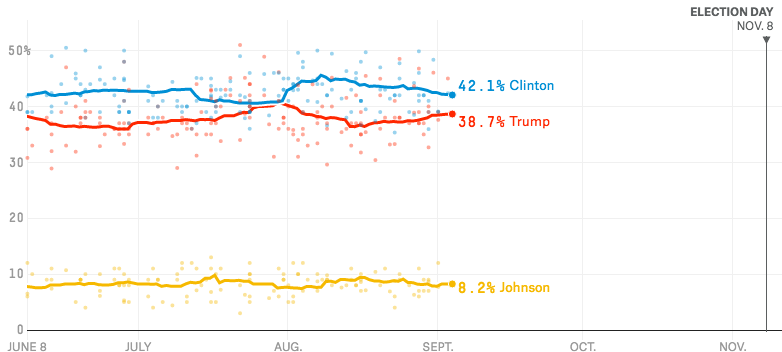
Data are measurements from our
imperfect, noisy world.

In practice, what are some sources of the noise?

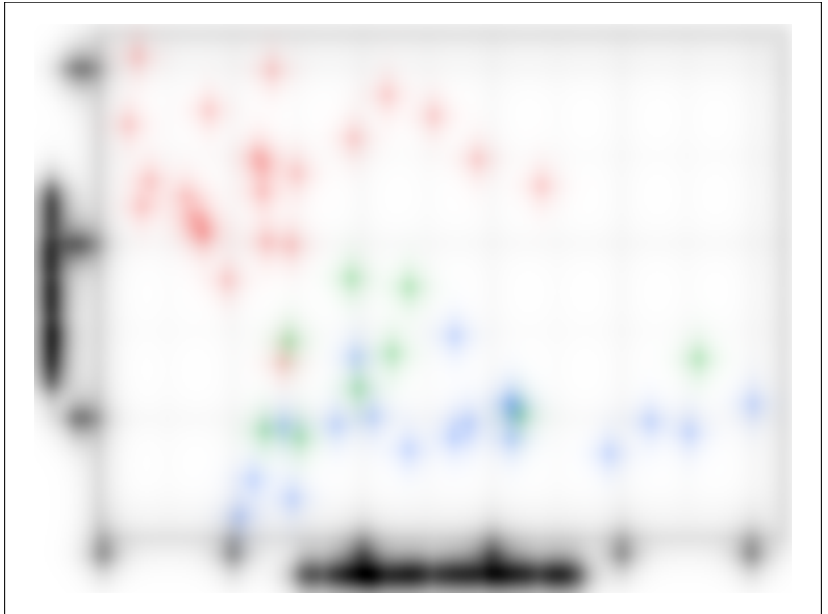
Whence the noise?

Plot of M/D heights data?

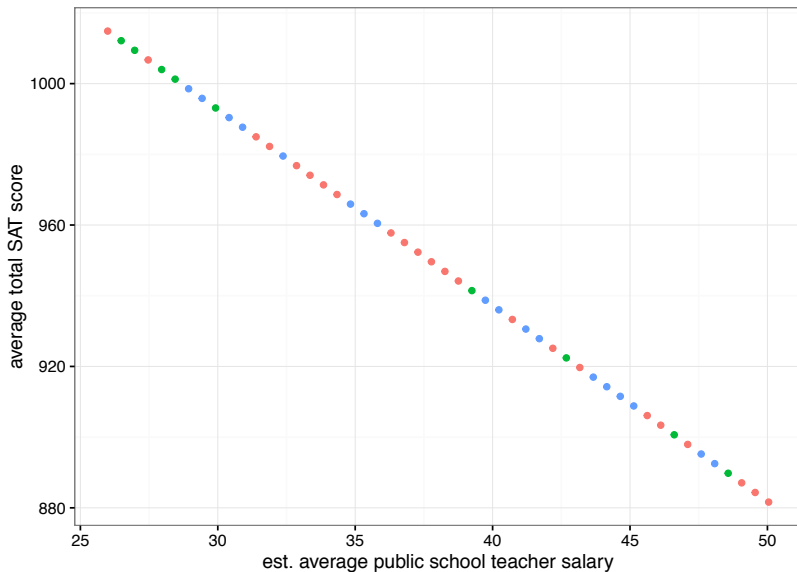
Whence the noise?



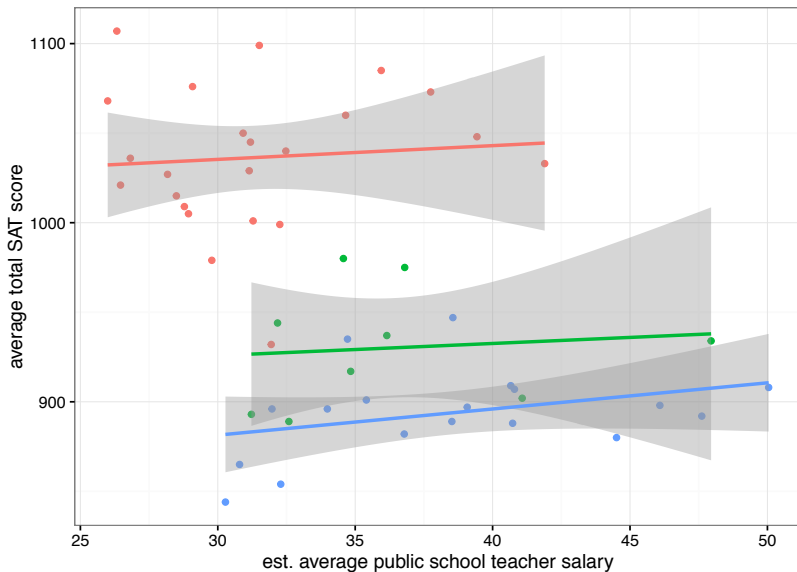
Statistics brings noisy data into focus



Statistics does not eliminate noise



Statistics speaks the language of uncertainty



What types of variables are you collecting?

Who are you collecting data on?

What population are you trying to draw conclusions about?

Sample vs. Population

Do you expect your sample to be representative of the population?
Why or why not?