

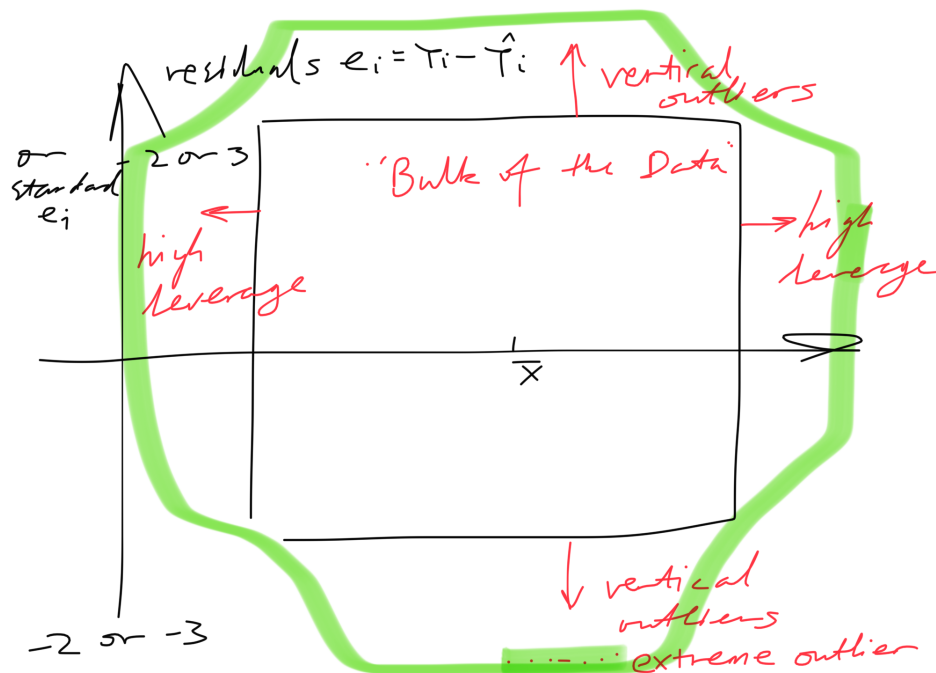
STAT6038 week 6 lecture 17

R. Q.

2017-03-30

Outlier and Influence Measures

Main residual plots



It is called the "region of possible problems" or "discordant observations"

Some of the literature bumps(?) all the "discordant observations" as "outliers", but outliers are really observations that are away from the bulk of data in some sense, i.e. there is a noticeable gap.

Cook & Weisberg Technometrics: "Outlier s"

Other literature will talk about "discordant observations" as a general term & distinguish between

- "vertical" outliers
- high leverage points
- highly influential observations (a bit of "both" of the previous)

A good measure of "both" is a relatively **Cook's Distance** (we will discuss the formula later).