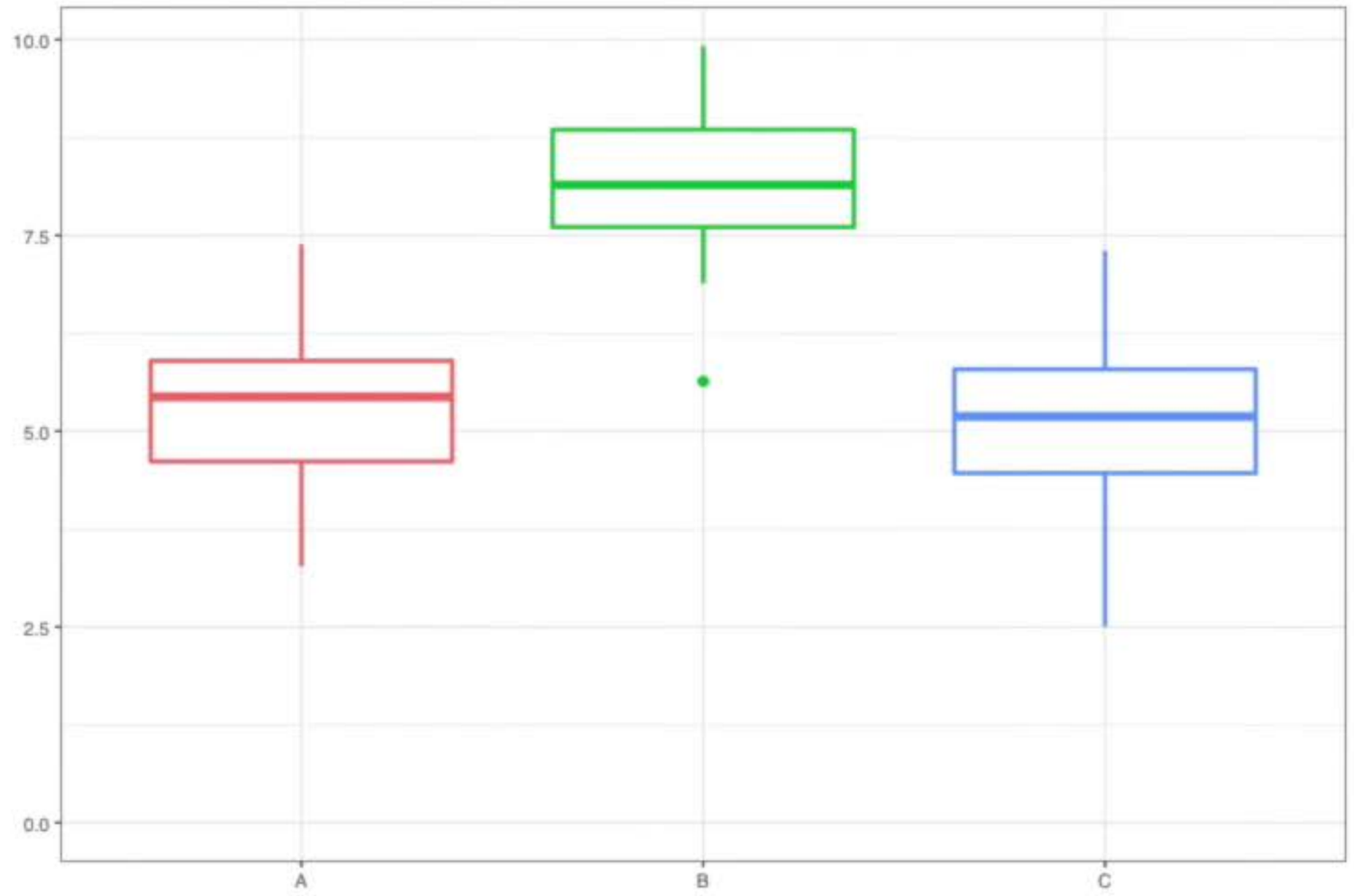
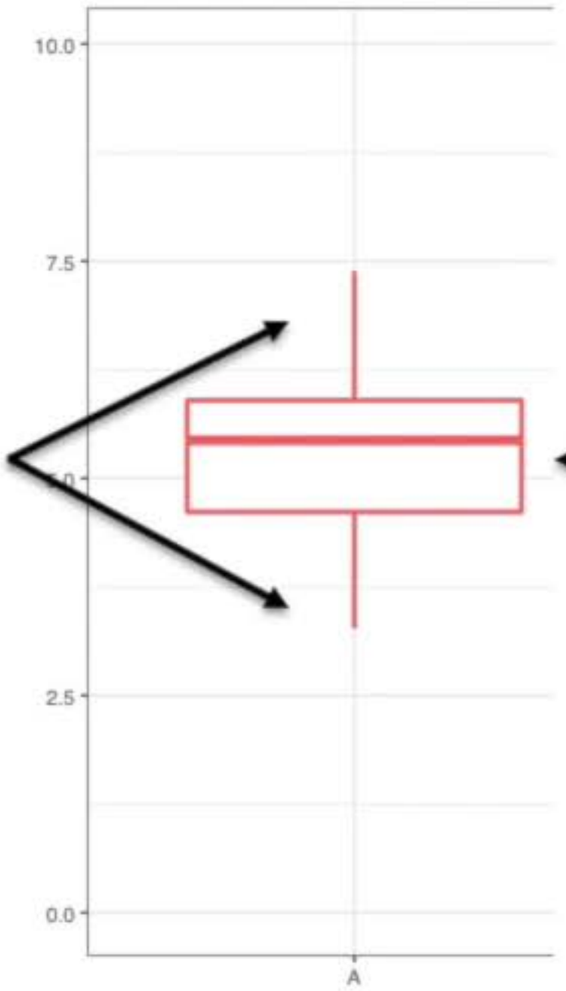
Check’em out!!!

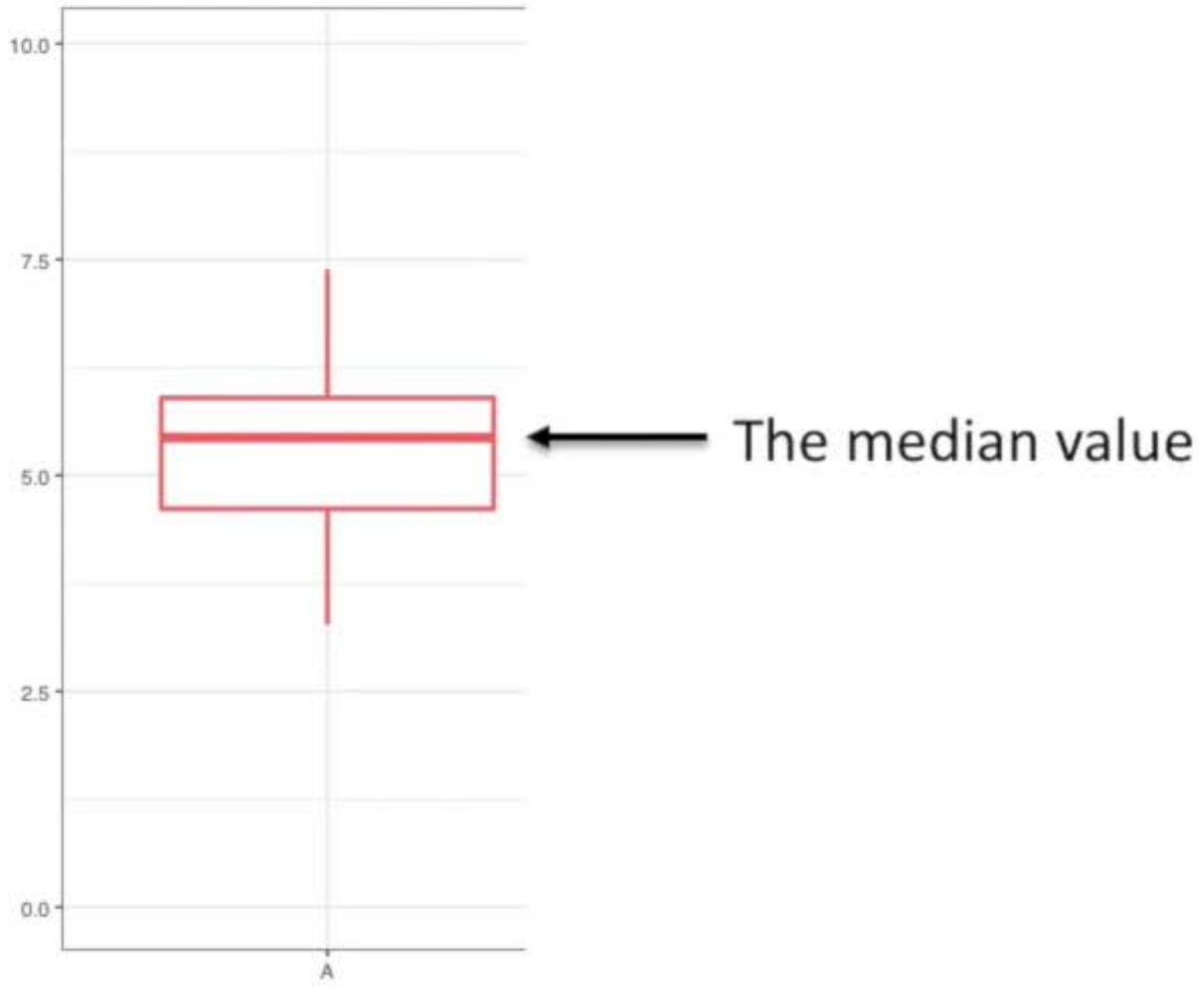


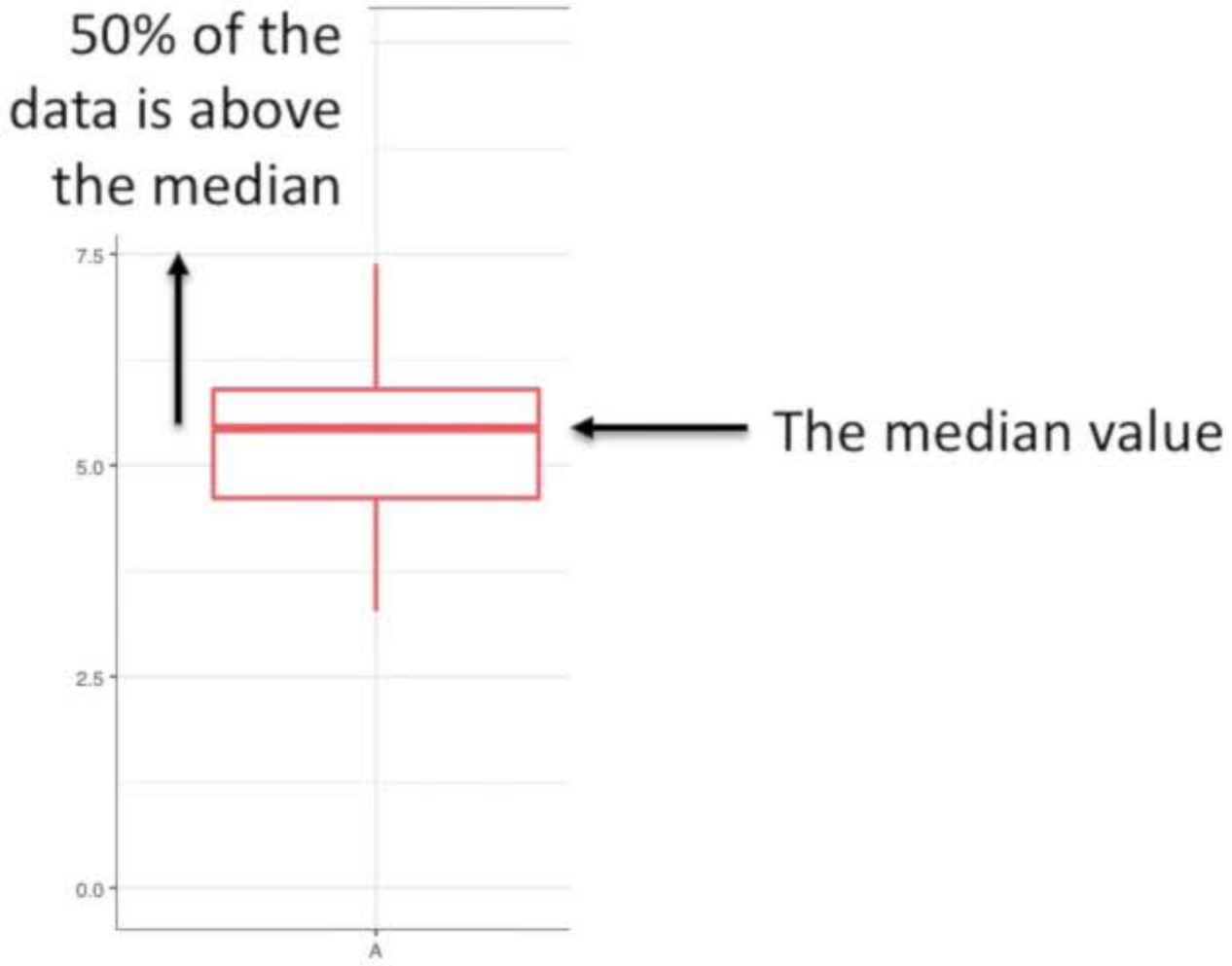
Sometimes boxplots are called “box and whisker” plots.

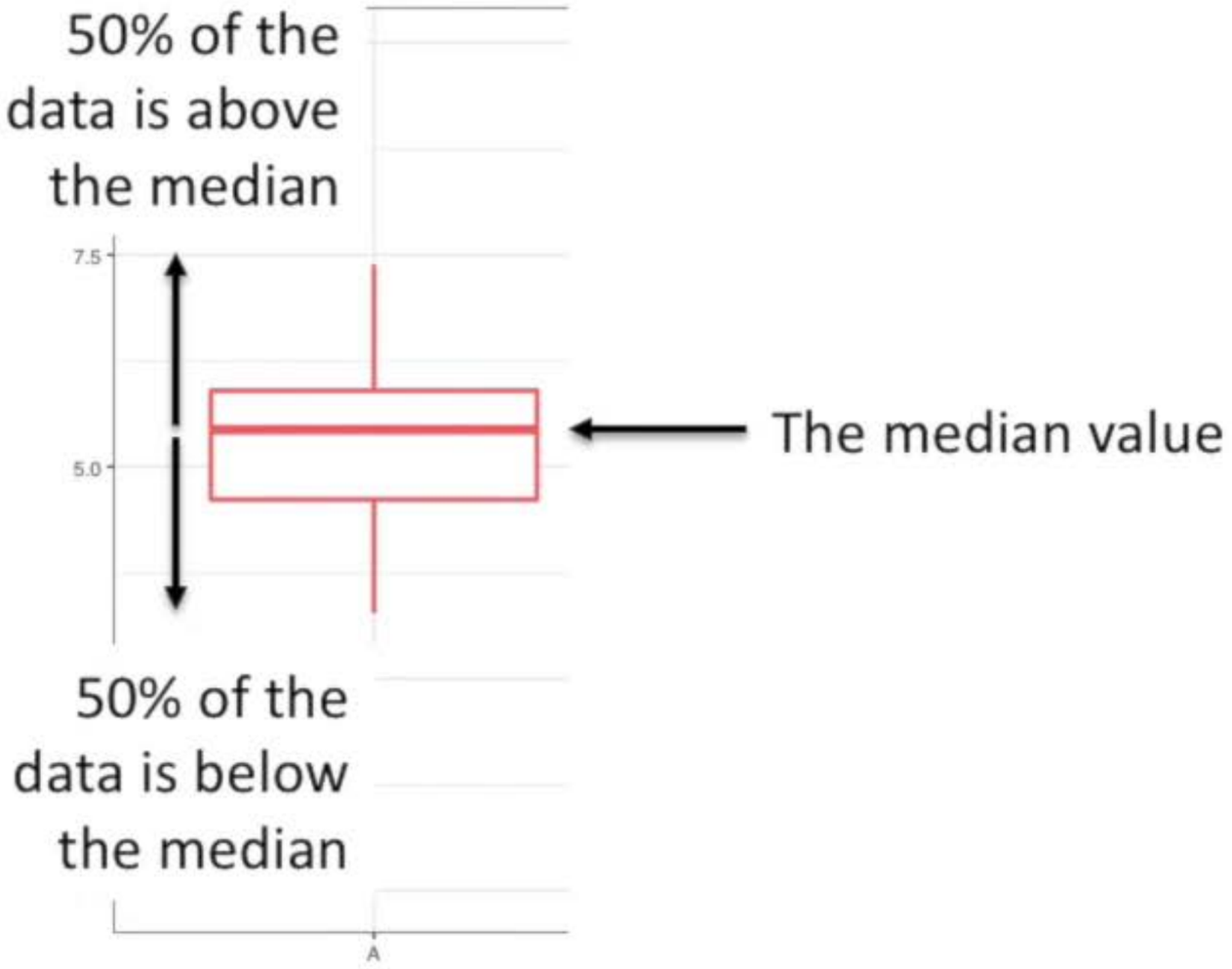
The whiskers…

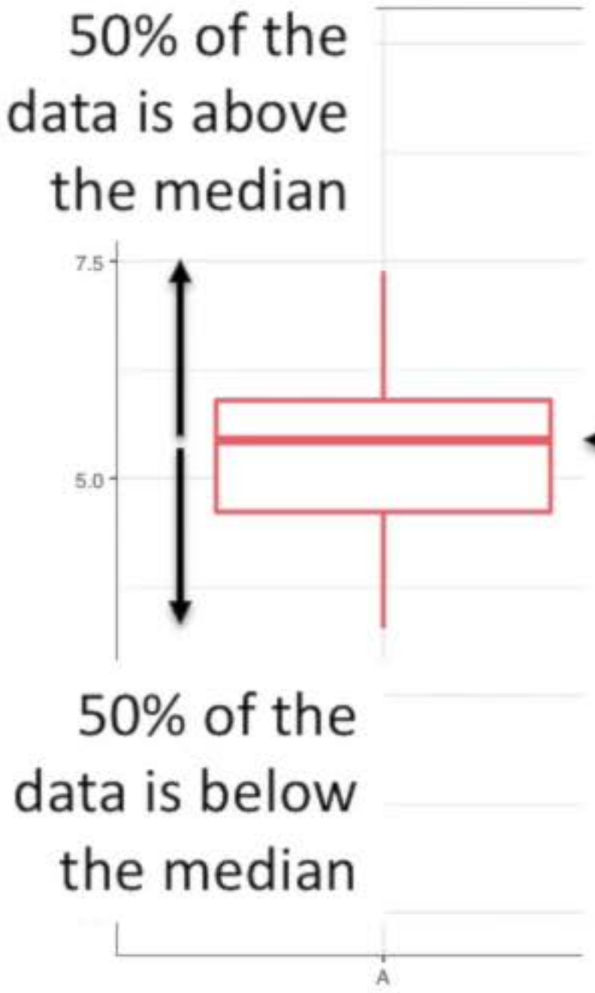


The box…


10.0
7.5
5.0
2.5
0.0
A
The median value


50% of the data is above the median
7.5
5.0
2.5
0.0
A
The median value


50% of the data is above the median
7.5
5.0
The median value
50% of the data is below the median
A



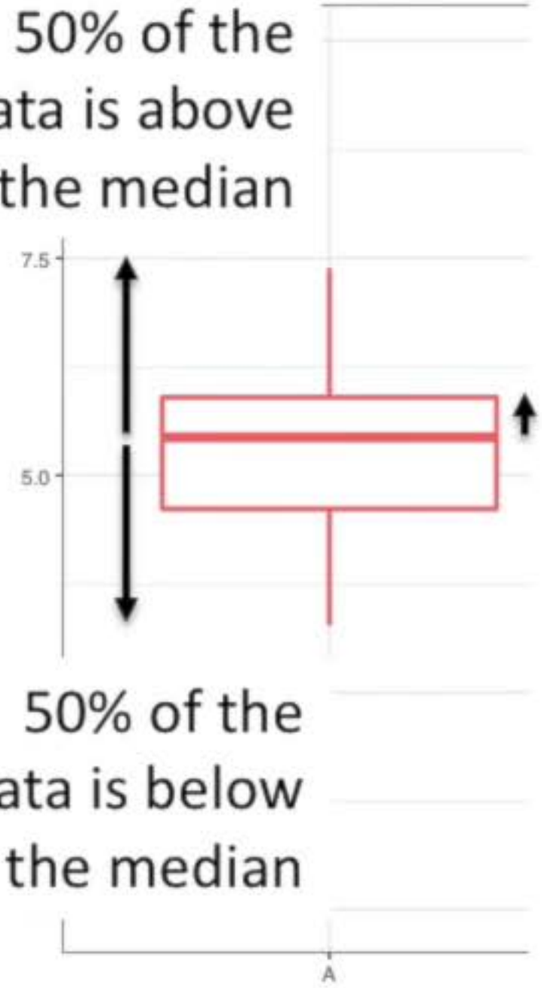
The median value

George Carlin, host of the children's television show, "Shining Time Station", once said:

"Think of how stupid the average person is, and realize half of them are stupider than that".

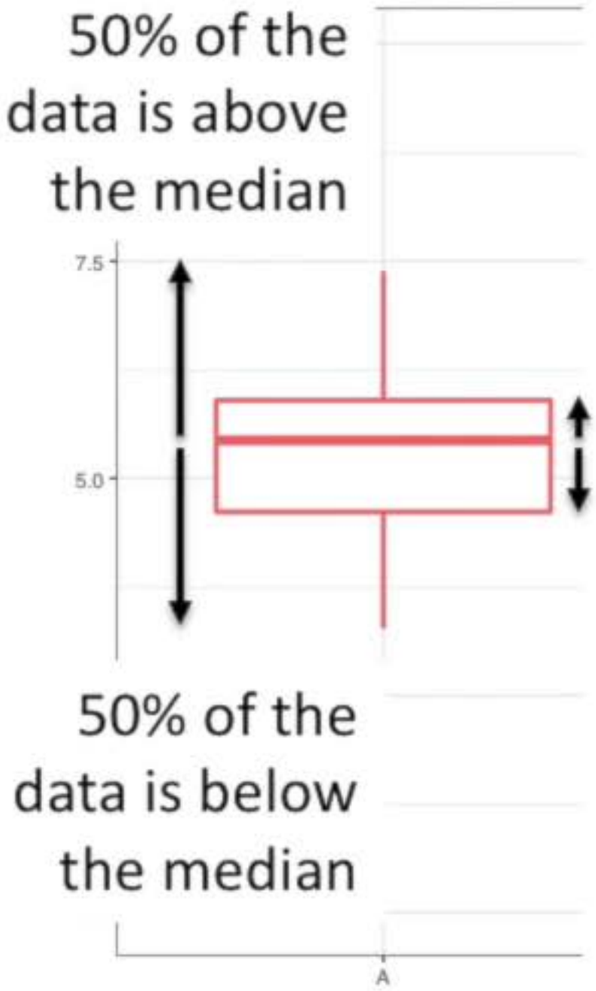
I think Mr. Carlin was referring to the median, not the average, but that's OK. It's still funny.

50% of the data is above the median



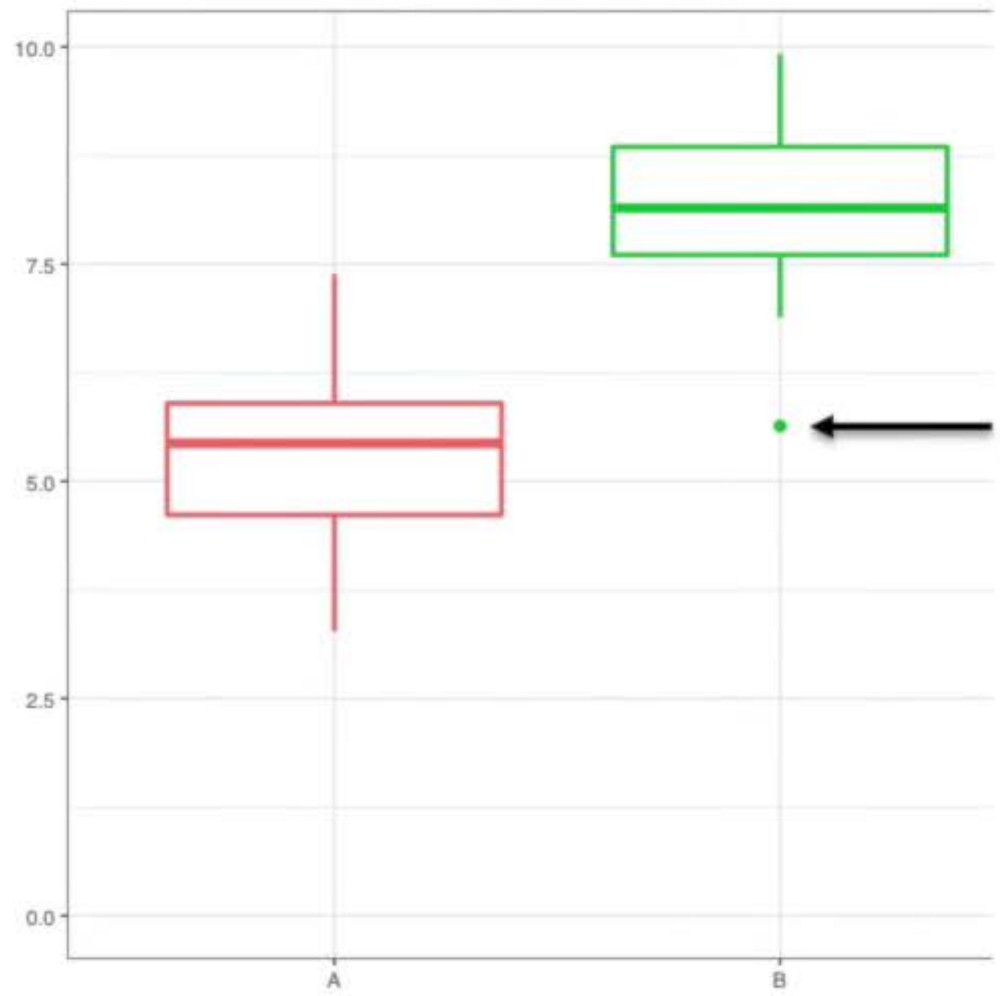
50% of the data is below the median

Within the box itself, we have 25% of the data above the median…



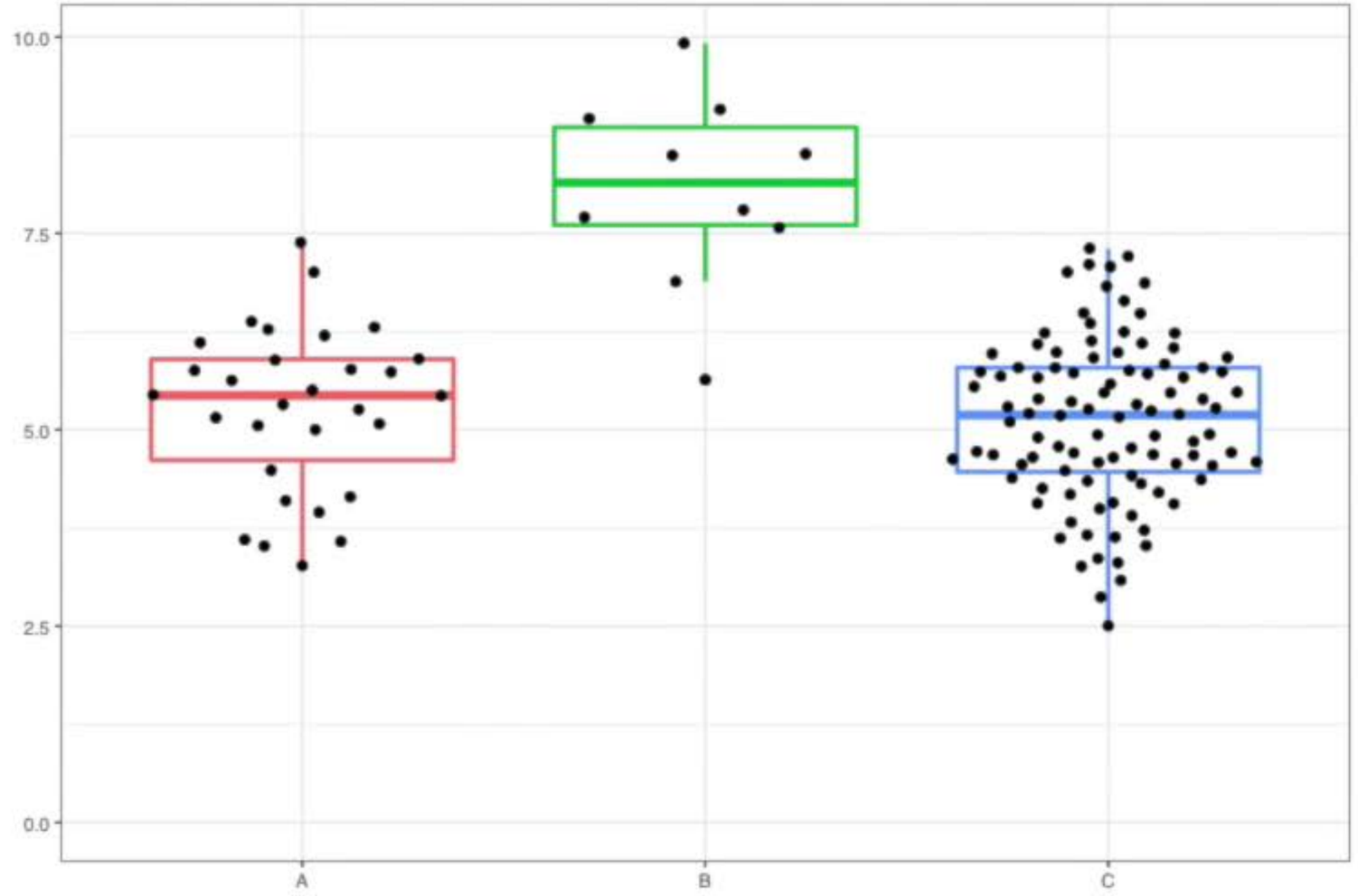
Within the box itself, we have 25% of the data above the median…

… and 25% of the data below the median

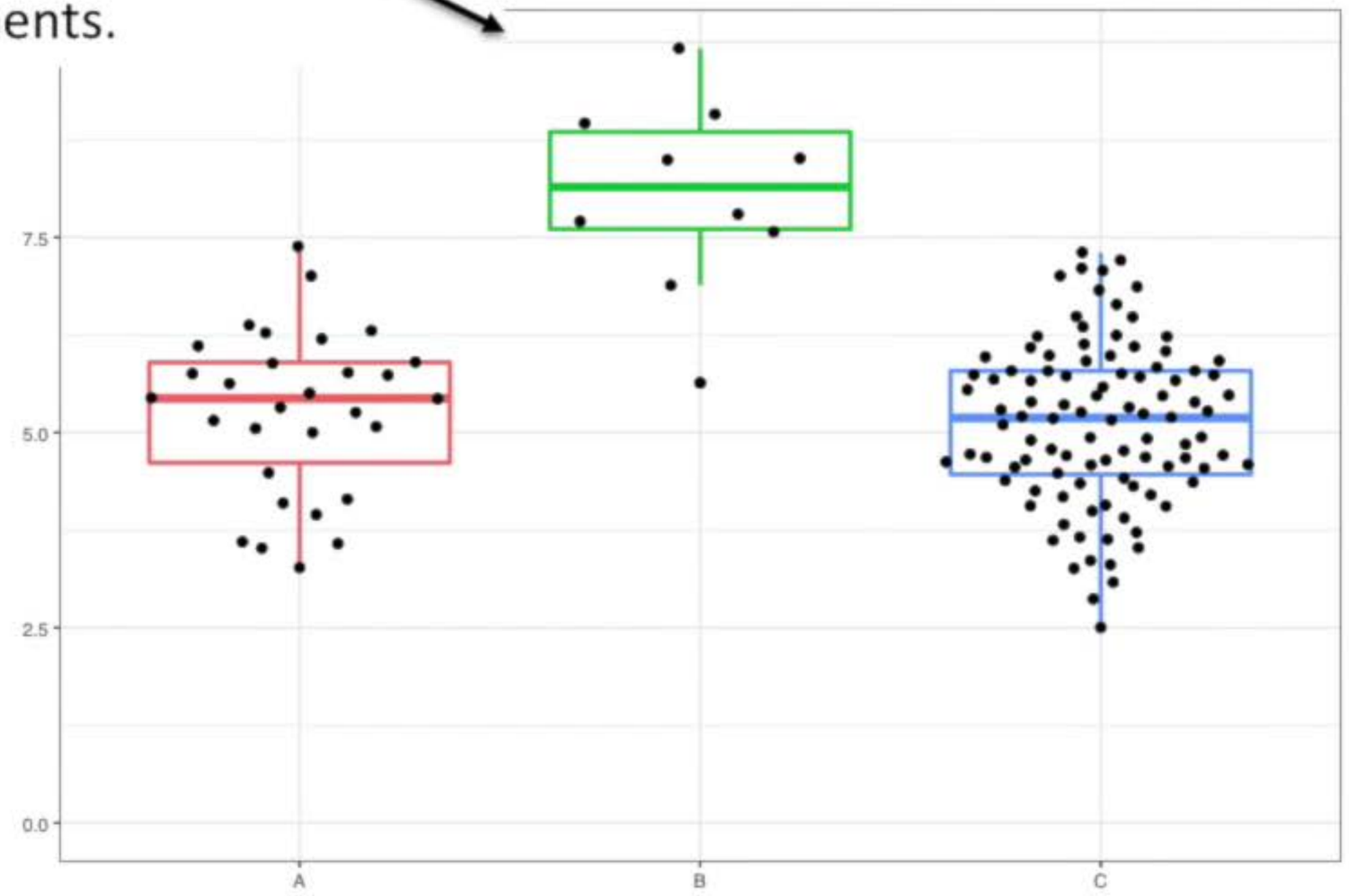


Outliers are plotted as dots beyond the “whiskers”.

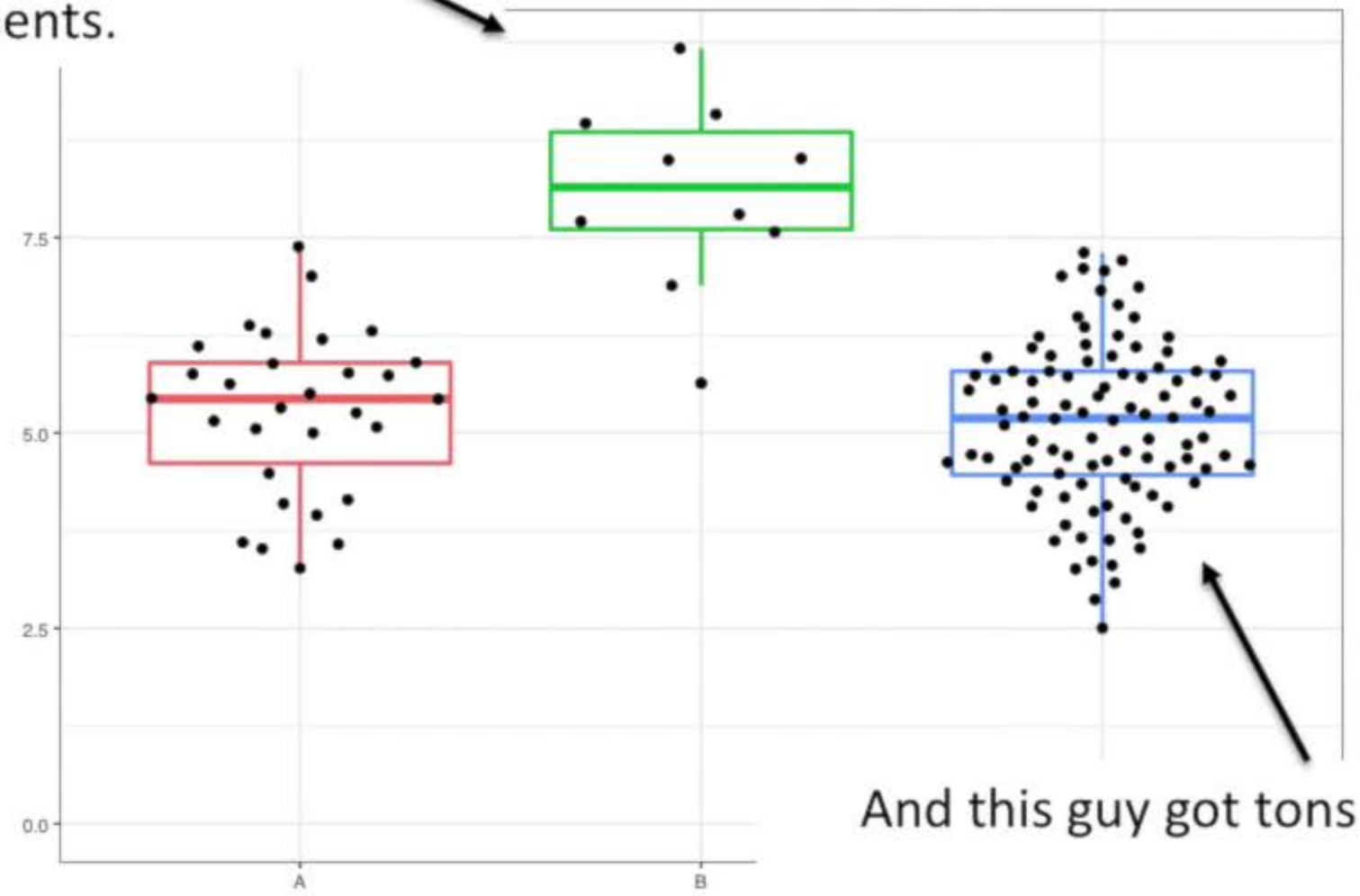
It’s common to overlay the original data onto the boxplots



Now it's easy to see that this guy didn't get many measurements.



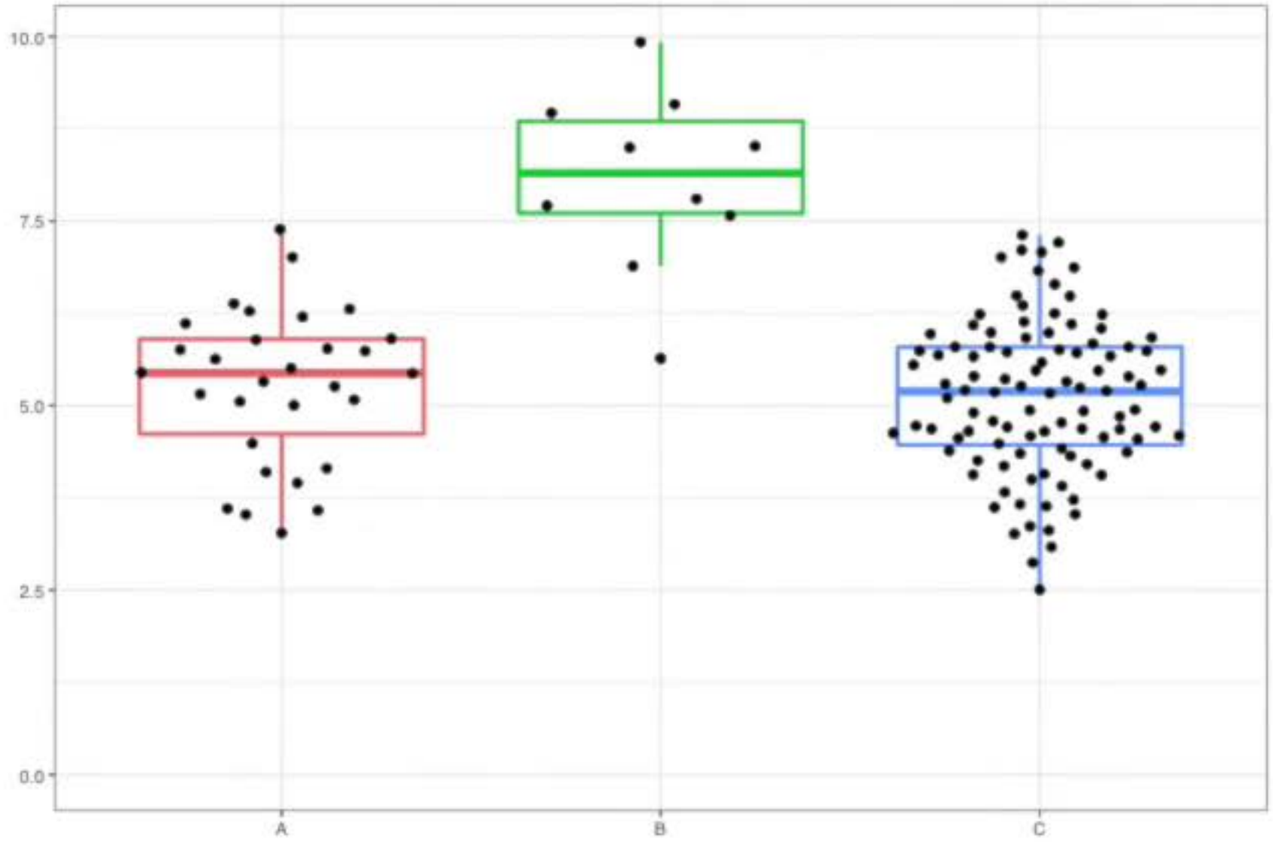
Now it's easy to see that this guy didn't get many measurements.

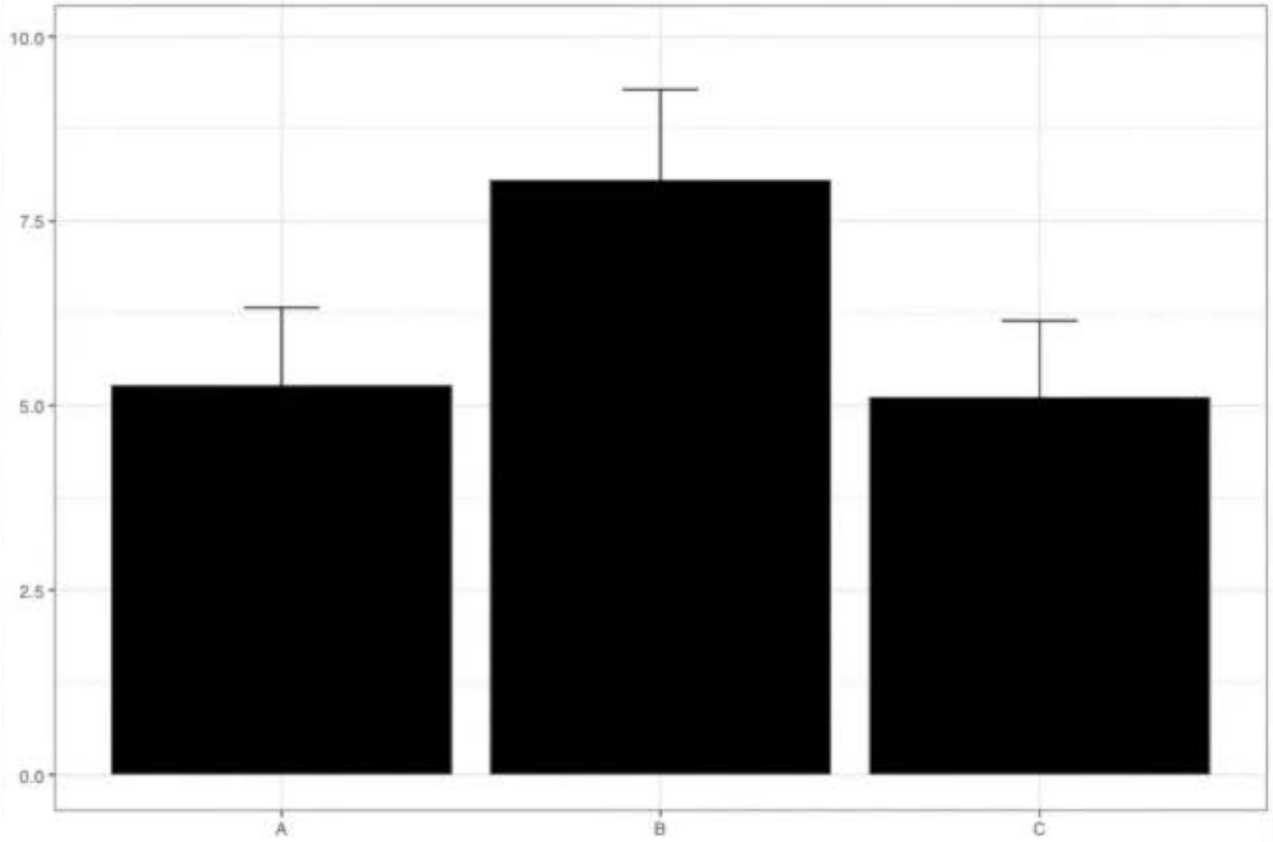


And this guy got tons of measurements.

This means we'll be more confident in the statistics calculated from this guy.

Bask in the awesomeness of boxplots compared to the traditional bar plots!!!!!





Both graphs show the exact same data!