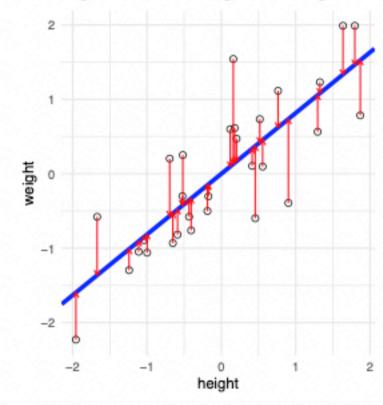
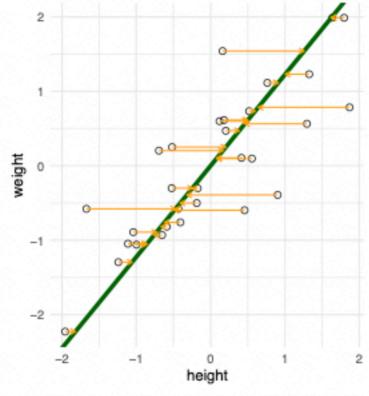
Regression of weight on height



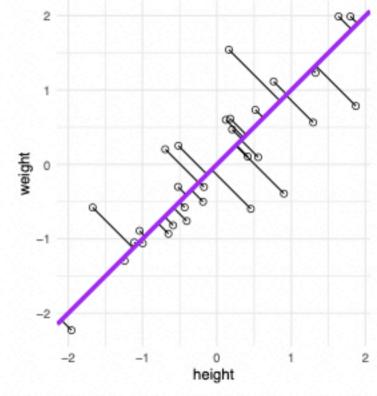
The blue line minimizes the sum of squares of the vertical residuals (in red)

Regression of height on weight



The green line minimizes the sum of squares of the horizontal residuals (in orange)

A line that minimizes distances in both directions



The purple line minimizes the sums of squares of the orthogonal projections