

# WHAT CAUSES THIS APPARENT PARADOX?

- Each fit is trying to minimize the distance from the points to a line by measuring the distance along an axis, but they use different axes.
- To treat each equally, the fit should minimize the perpendicular distance from the line to the points.
- This is called a “Deming fit” or “Deming regression”.
- *Never* use ordinary regression to compare measurements unless you think one of them has no error!

