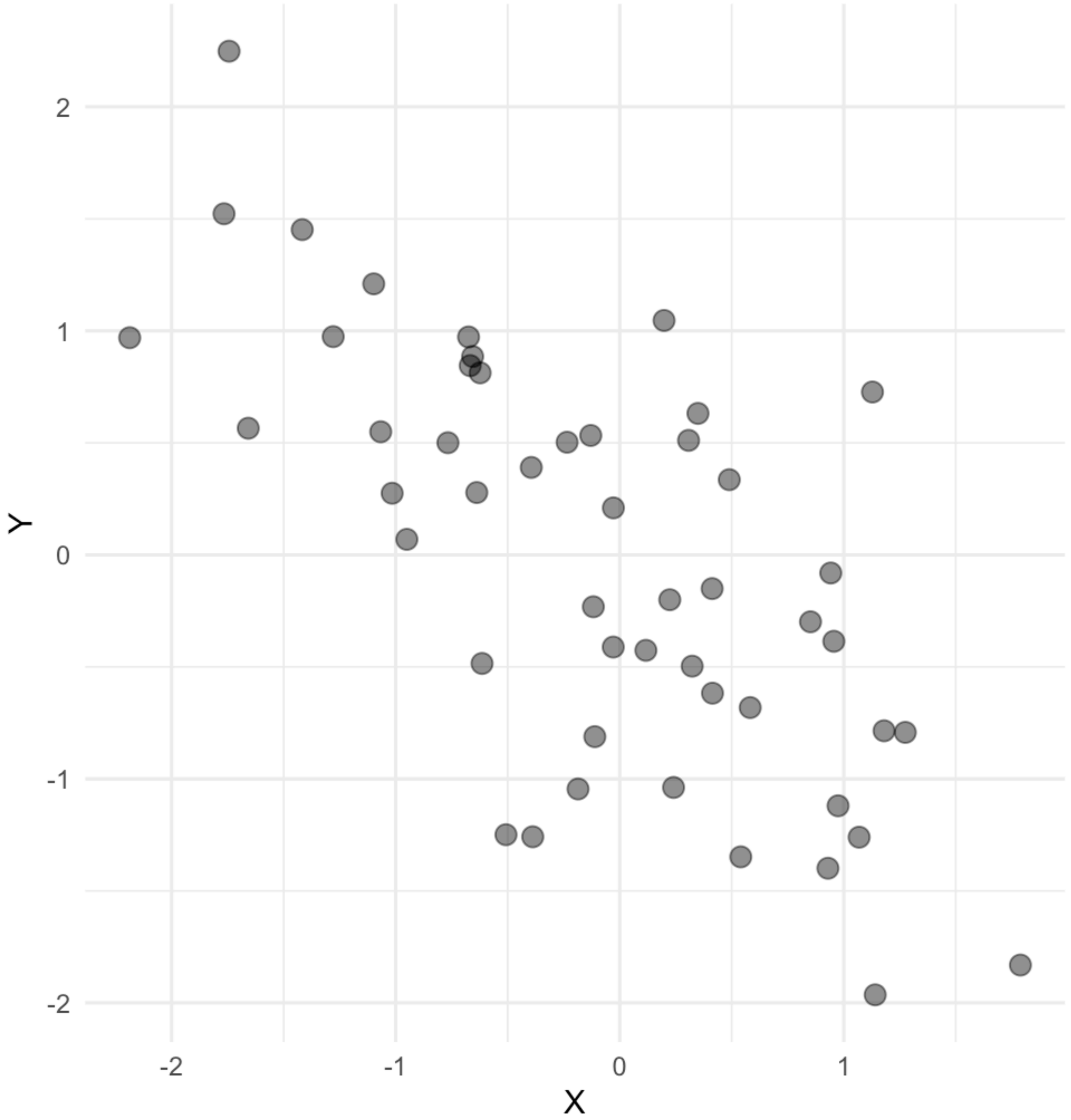
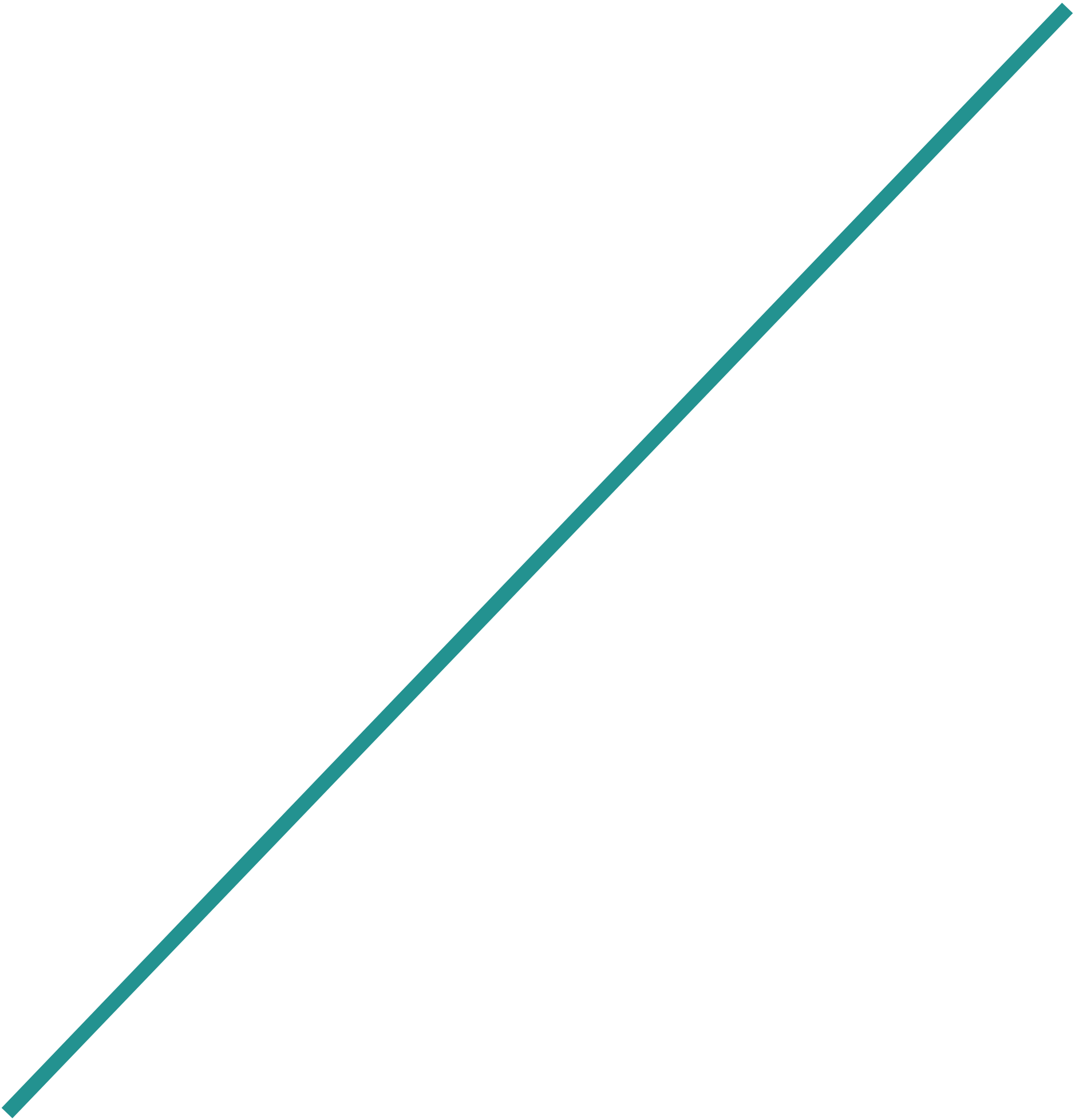
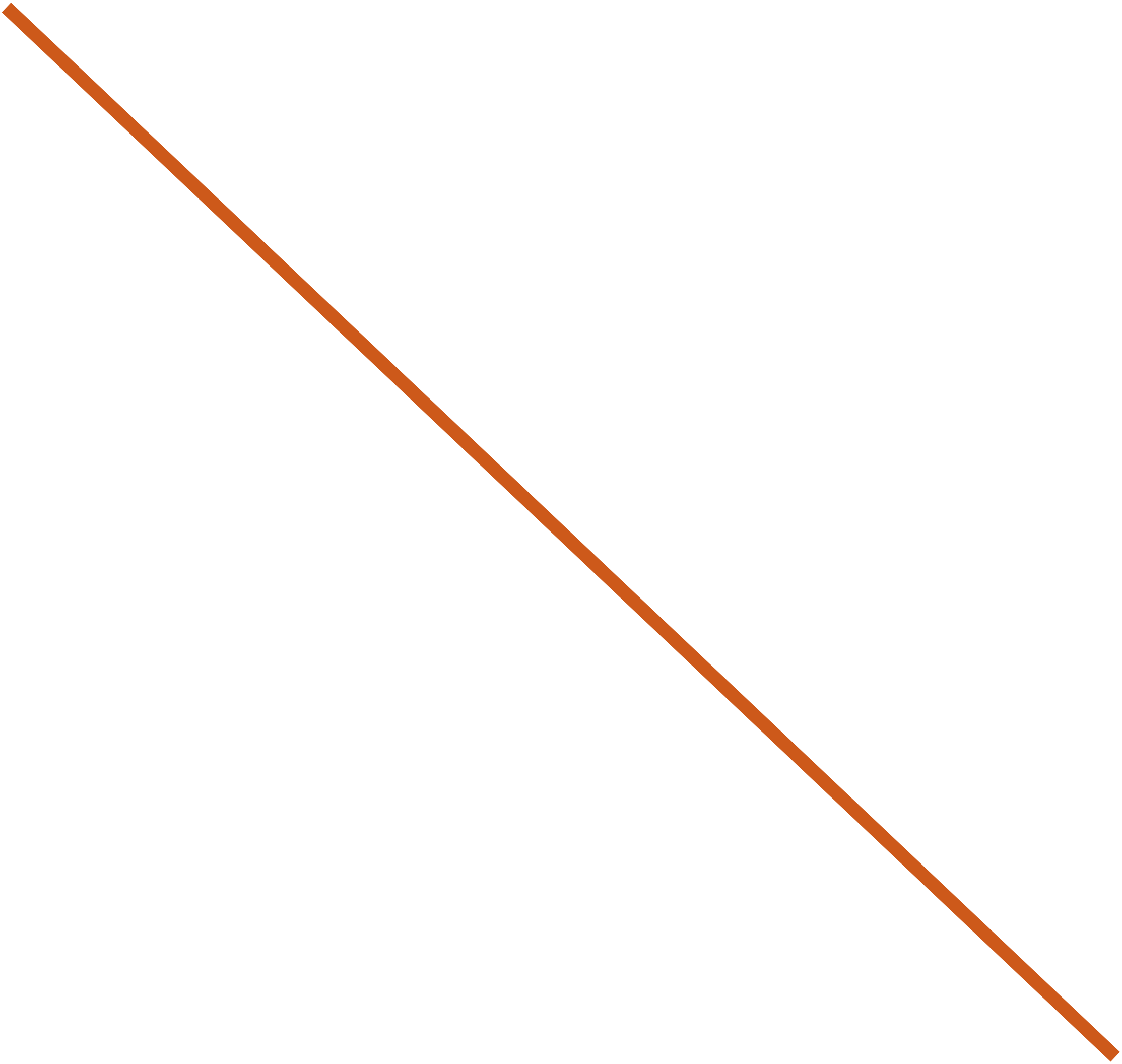
Example


2
1
0
-1
-2
Y
-2
-1
0
1
X





$$\lambda_2 = 0.32$$

$$\lambda_1 = 1.68$$

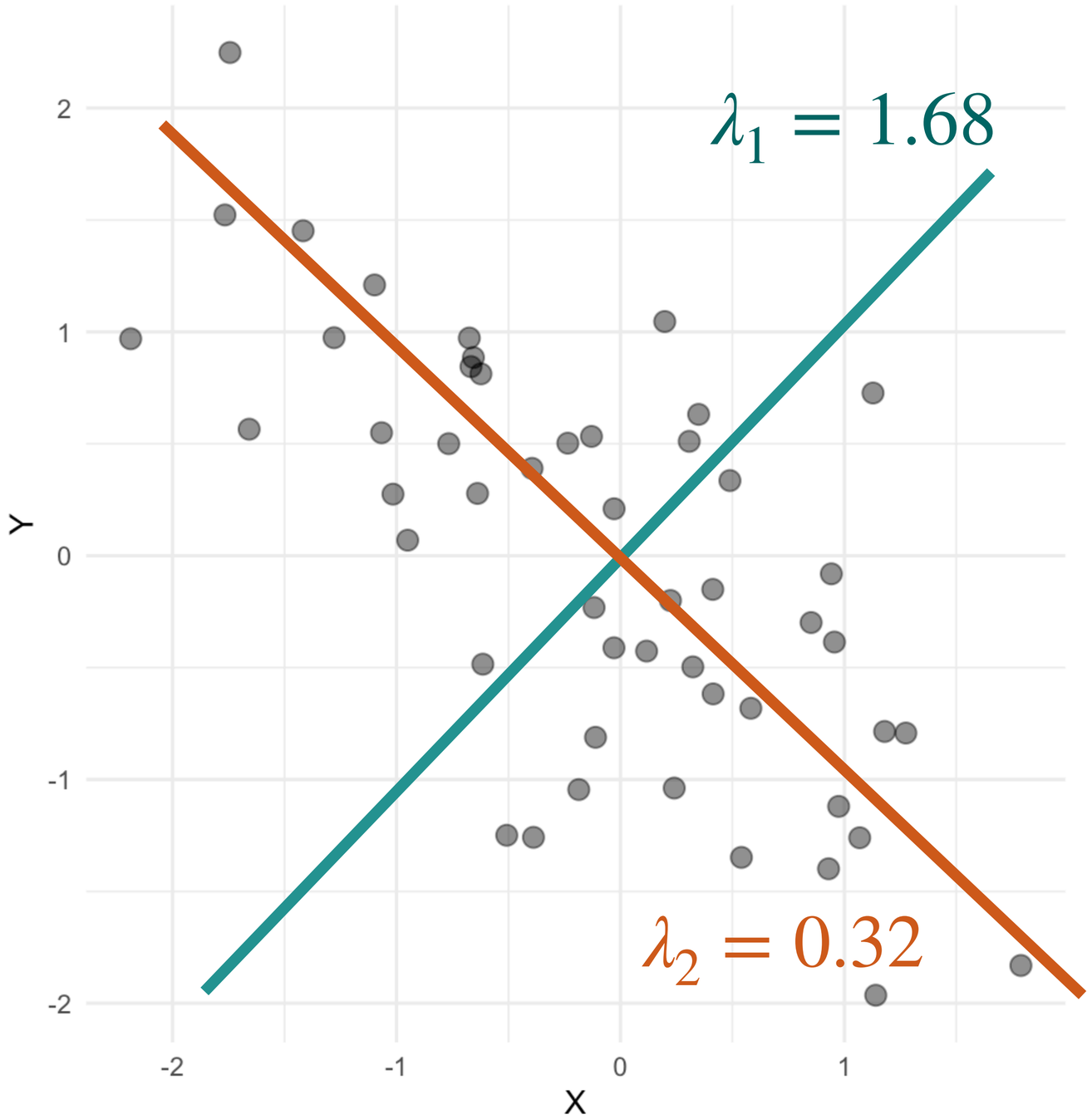
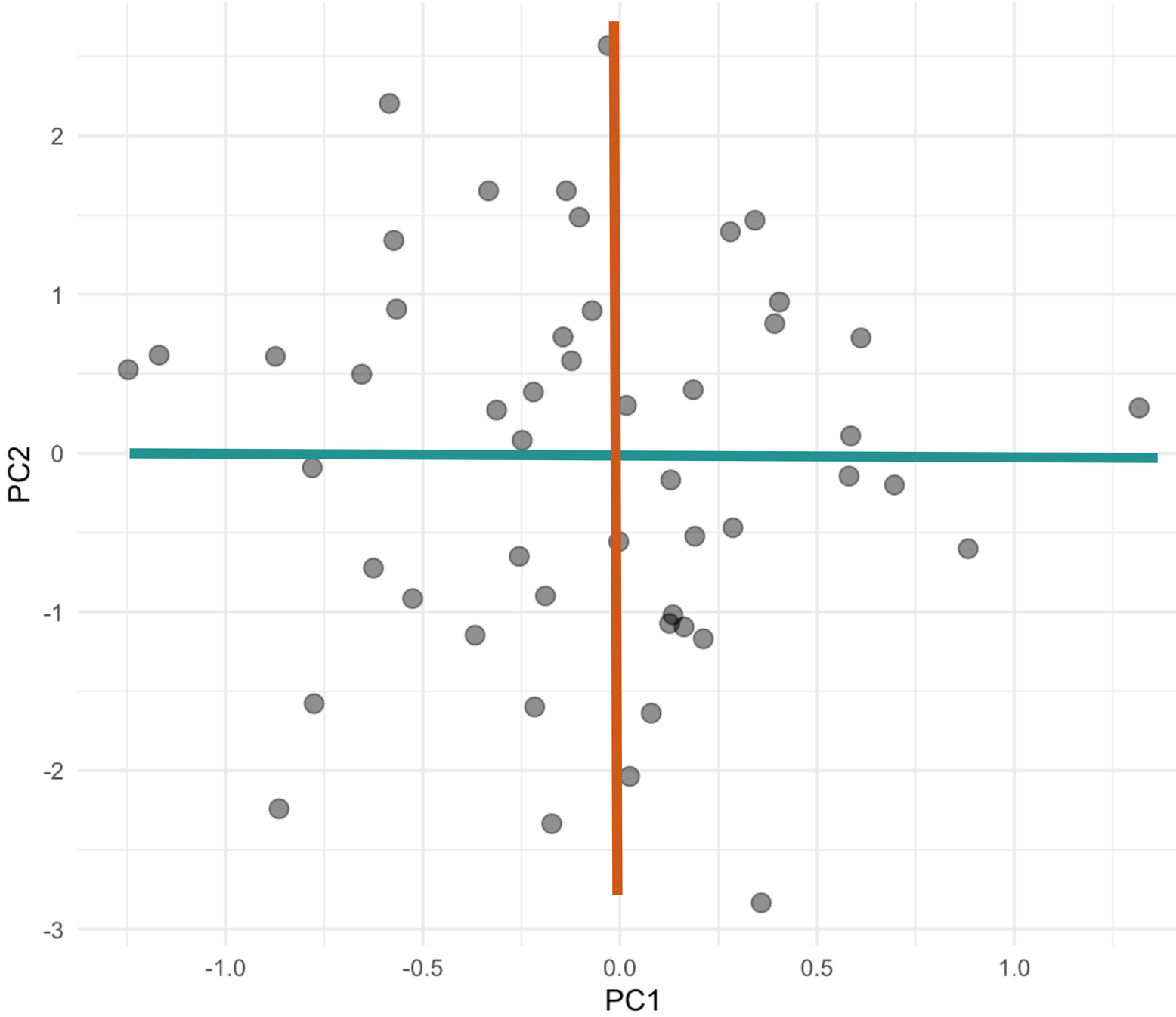
in PCA we perform eigendecomposition on the covariance matrix of the data

$$\mathrm{Cov}(\mathbf{x}) = \begin{bmatrix} 1 & -0.69 \\ -0.69 & 1 \end{bmatrix}$$

Example

in PCA we perform eigendecomposition on the covariance matrix of the data

$$\text{Cov}(\mathbf{x}) = \begin{bmatrix} 1 & -0.69 \\ -0.69 & 1 \end{bmatrix}$$



Example