In order to compare participants' modeling performance between sets we computed the difference between the linearly regressed reference elevation and the mean elevation for each set. The difference between the reference and mean elevation maps should show where the mean elevation values for each set are too low or too high. There were, however, systematic errors in the scanned models. Table **??** shows the vertical shift in the hand sculpted and projection augmented models caused by scanning and georeferencing. We used linear regression to account for these systematic errors in the difference calculation,

$$\Delta = (a + b * z_0) - \overline{z} \tag{1}$$

where:
Δ is the difference
z_0 is the reference elevation map
$\overline{z}$ is the mean elevation of maps in a set
a is the intercept / offset of the regression line
b is the gain / slope of the regression line.

We vertically rescaled and translated the reference elevation using the linear regression of the reference and mean elevation maps calculated with the module *r.regression.line* [**?**]. Then we calculated the difference between the linearly regressed reference elevation and the mean elevation of all maps in a set with the module *r.mapcalc* [**?**].

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$$\Delta = (a + b * x) - y \tag{2}$$

where:
Δ is the difference
x is the reference elevation map
y is the mean elevation of maps in a set
a is the offset
b is the slope.