



**Figure 3—figure supplement 4. Impact of the Force-Length Relationship in Muscles.** Predicted movement duration to a target in a reaching task when using a simplified biomechanical model with muscles having a constant active force-length relationship (instead of a bell-shaped curve as described in Millard et al. 2013). The x-axis is the index of difficulty of the reaching movement. We see that the model's mean predictions are in agreement with Fitts' law ( $R^2 = 0.94$ ). The standard deviations are not statistically correlated with the experimental data in Fig. 3A. The vertical bars are one standard deviation from the mean.