

Figure 7-figure supplement 1

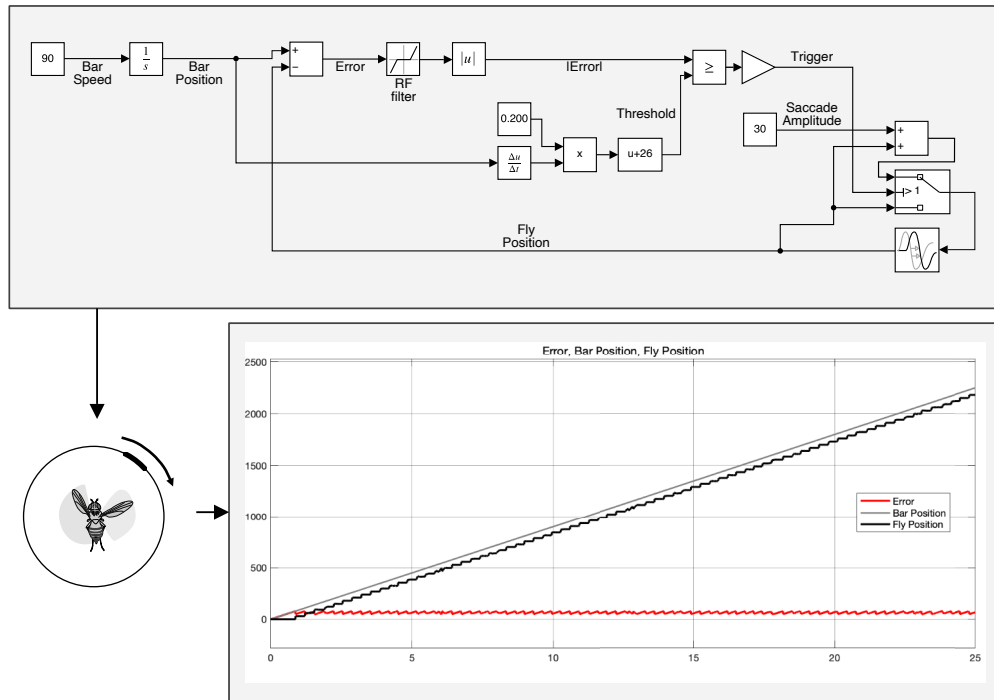


Figure 7-figure supplement 1. Control model for triggering saccades. Top: simulink (MATLAB) implementation of the physiologically-inspired model in **Figure 7**. The bar speed (90° s^{-1}) is integrated over a quite narrow time window ($\sim 200 \text{ ms}$) and the integration starts with a spatial offset with respect to the visual midline ($\sim 11^\circ$). This means that T3 neurons might encode the bar speed and a downstream partner might integrate this information over a selective amount of time, encoding the bar position and triggering a saccade when the amount of calcium reaches a specific threshold. In this model saccade amplitudes are considered a fixed parameter (30°) but in an alternative version they could be easily tuned to the bar speed. Bottom: simulation of the fly behavior (angular position) in a bar tracking task according to the control model.