

coordinate of the fiber endpoint), specified relative to bregma and the skull surface, respectively.

In the analysis of the resulting data, the mean t-statistic for the stimulation regressor fit across the VTA region of interest is found sensitive to the stimulation protocol category ($F_{1,54} = 40.26$, $p = 6.57 \times 10^{-8}$), the stimulation target depth ($F_{4,54} = 2.556$, $p = 0.049$), the stimulation target PA coordinates ($F_{3,54} = 3.963$, $p = 0.030$), but not the interaction of the depth and PA target coordinates ($F_{12,54} = 1.595$, $p = 0.16$).

The break-up by phasic and block stimulation is shown in fig. 2 and significance is evaluated accounting for the entire statistical model, consisting of categorical terms for both the stimulus category and the coordinates. The phasic and block levels of the stimulation variable yield p-values of 0.063 and 4.87×10^{-5} , respectively. Upon investigation of the t-statistic map, phasic stimulation further reveals no coherent activation pattern at the whole-brain level (fig. S2b).