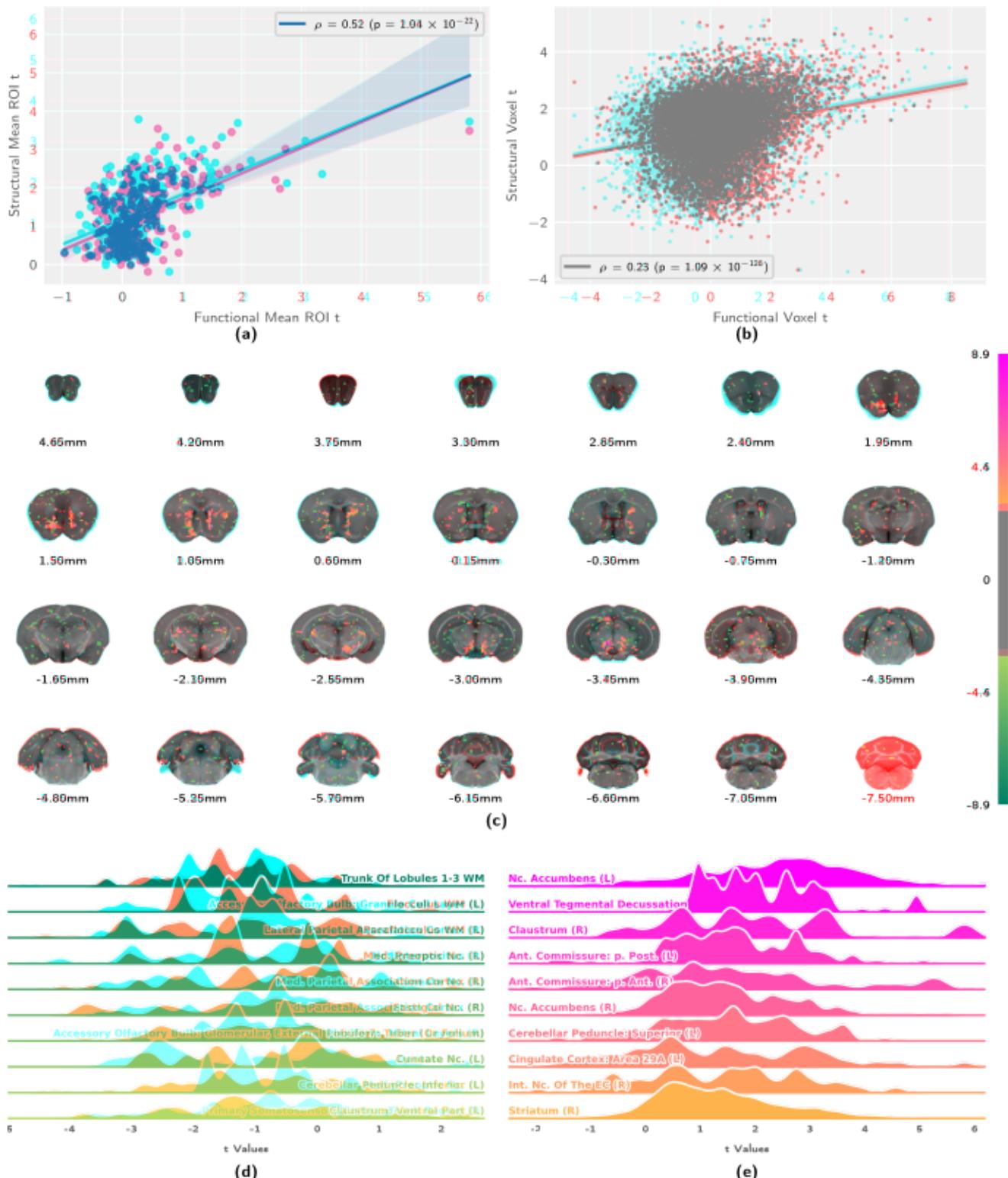


Whole-Brain opto-fMRI Map of Mouse VTA Dopaminergic Activation Reflects Structural Projections with Small but Significant Deviations



**Figure 4: Comparing VTA functional activation to structural projection data reveals good correspondence, with deviations involving the dorsomedial striatum and the contralateral ventral striatum.** Depicted are correlation analyses (a, b) of the population-level functional and structural statistic scores, alongside statistic distributions (c, d, e) for the contrast, taking into account variability across subjects. (a) Region-wise regression plot between functional and structural projection maps. Tinted area indicates the 99 % confidence interval of the regression estimate. (b) Voxel-wise regression plot between functional and structural projection maps. Tinted area indicates the 99 % confidence interval of the regression estimate. (c) Coronal slices, showing the population-level contrast t-statistic between VTA functional activation and VTA structural projections. (d) Distribution densities of t-statistics, showing the regions where VTA structural projection exceeds functional activation most strongly. (e) Distribution densities of t-statistics, showing the regions where VTA functional activation exceeds structural projection most strongly. Abbreviations: Ant. (Anterior), EC (Endopiriform Claustrum), Int. (Intermediate), Med. (Medial), Nc. (Nucleus), p. (Pars), Post. (Posterior), WM (White Matter).