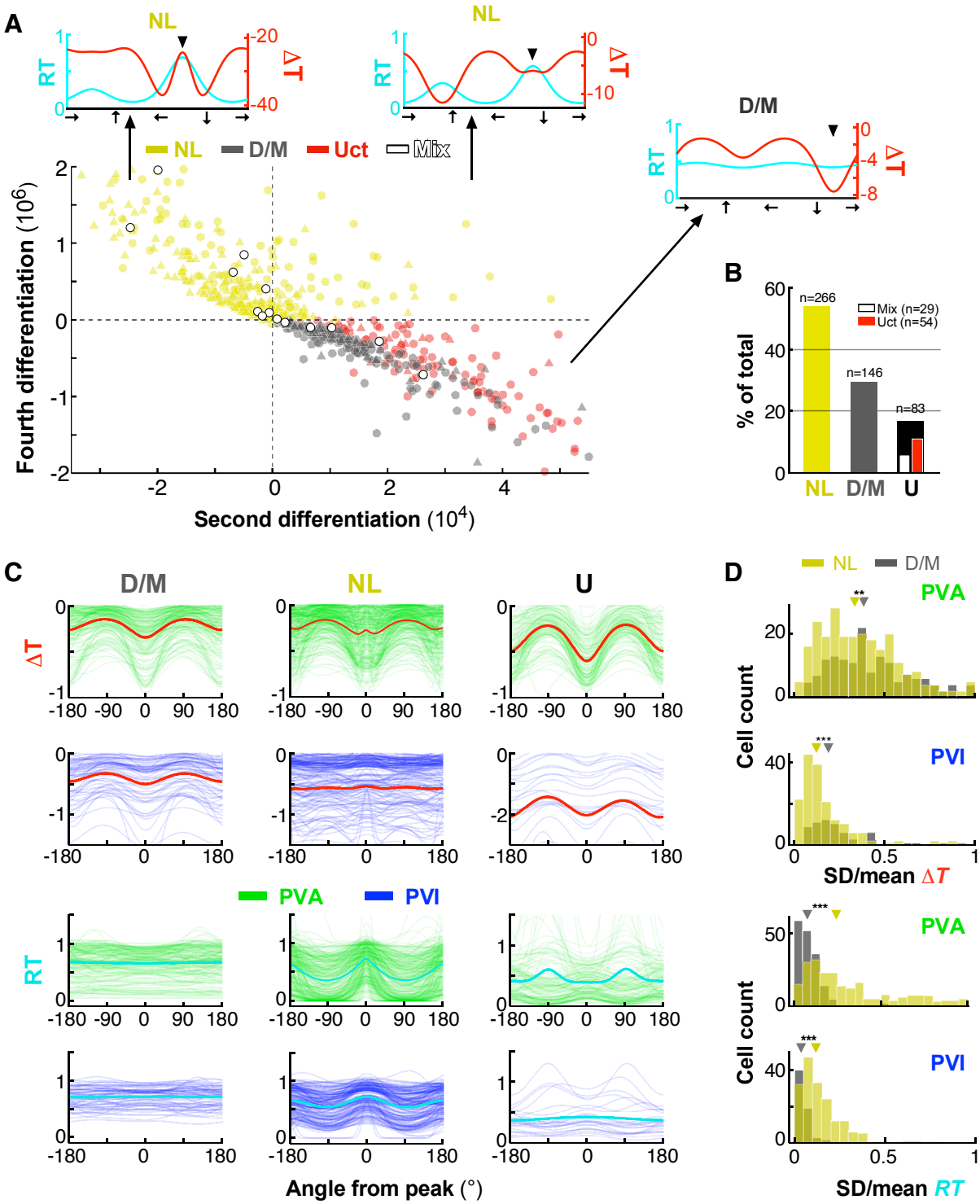

Extended Data Figure 2

Clustering of recorded units.

(A) Scatter plot of all recorded units in a 2D feature space, where the x-axis represents the second derivative, and the Y-axis the fourth derivative of the Δ*T* curve, computed at the curve's peak (see STAR Methods). *Yellow dots:* units classified as NL; *gray dots*: units classified as linear D/M; *red dots*: uncategorized units (Uct); *white dots:* mixed units (Mix). *Circles and triangles:* units recorded under PVA and PVI experiments, respectively. *Insets:* representative Δ*T* and *RT* curves in each quadrant of the 2D feature space. *Arrowheads* mark the cell's preferred orientation. **(B)** Percent of units falling into each group. Here each unit recorded at different light intensities is considered a single sample, while in (A) units recorded at different intensities are considered independent samples. Units classified as NL (*yellow bar*) or D/M (*gray bar*) showed the same effect at all intensities. Mix unclassified cells (w*hite bar*) showed D/M or NL effects at different laser intensities. *Black bar:* unclassified units that did not fit into any category (Uct). n= number of units in each group. **(C)** Top two rows: Δ*T* curves (computed from normalized tuning curves) for each individual unit under PVA (top row, *green*) and PVI (second row, *blue*) experiments, grouped by effect type (Left: D/M; Middle: NL; Right: U). *Red curves*: population averages. Bottom two rows: Same as Top two rows, but here *RT* curves are shown, instead, and *cyan curves* are population averages. **(D)** Top two rows: distribution of Coefficient of Variation (CoV=standard deviation/mean) of the Δ*T* curve across the population of NL and D/M units under PVA (top row) and PVI (second row) experiments. Most cells in both populations show large CoV values indicating lack of subtractive/additive effects of PV^{+} cell manipulation. Bottom two rows: distribution of CoV of the *RT* curve for the NL and D/M populations under PVA (top row) and PVI (second row). The D/M population shows significantly smaller CoV thatn the NL population, indicative of D/M effects.