The file *'data_figure_4_and_5.mat'* holds all the data displayed in figures 4 & 5. The variables within this file hold all the activity data (calcium traces), labels and butanone stimulation timing.
Data can be visualised by following instructions in the file *'view_neural_activities_new.m'*. Load *'data_figure_4_and_5.mat'* into the Matlab workspace and place *'fetchData.m', 'createOverlay',* and *'view_neural_activities_new.m'* into your current folder.

Variables are as follows:

Variable name	**Description**
data_int2	Activity data for interneurons (RIA, AIA, AIY, AVA, AVE)
labels_int2	Labels for data_int_new as a cell array of strings. Col1: step (ON or OFF for butanone presentation or removal, respectively) Col2: neuron name Col3: condition Col4: animal name ON: diacetyl-to-butanone switch, OFF: butanone-to-diacetyl switch
data_sen2	Activity data for sensory and command neurons
labels_sen2	Labels for data_sencom_new as a cell array of strings. Col1: step (ON or OFF), Col2: neuron name Col3: condition Col4: animal name ON: diacetyl-to-butanone switch, OFF: butanone-to-diacetyl switch
conditions_new	Condition names used in column 3 of all labels
butanone_int_offStep2	Time course of butanone removal in interneurons
butanone_int_onStep2	Time course of butanone presentation in interneurons
butanone_sen_offStep2	Time course of butanone removal in sensory neurons and command neurons
butanone_sen_onStep2	Time course of butanone presentation in sensory neurons and command neurons
time_int2	Time variable for interneurons
time_sen2	Time variable for sensory neurons and command neurons

Note that the frame rate of data_sen2 is 2 Hz, while the frame rate of data_int2 is 3 Hz.