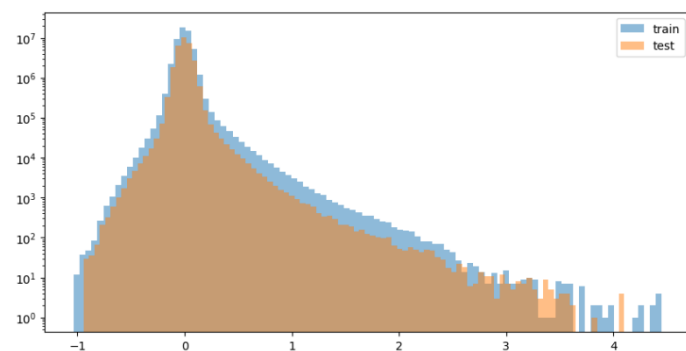


R1. Approximation of PSTH for four neurons. The red dashed line indicates the stimulus onset. Post-onset, the green curve represents the average response across training trials for a specific stimulus, the blue curve denotes the average response across test trials for the same stimulus, and the red curve illustrates the predicted average response across all test trials for the same stimulus. Panels (a) and (b) demonstrate instances where the model accurately captures the response and outperforms the PSTH baseline. Panel (c) illustrates a failure case, while panel (d) highlights a scenario where PSTH performs better, though the model prediction remains competitive.



R2. Example distributions of fluorescence values for a session, separated into training and test sets.