Binary Mixture Model Data Processing Pipeline

November 11, 2020

1 Checklist after pre-processing

- 1. Look at each cell outline andd size visually to sort good and bad cells.
- 2. Mathematical method to do this sorting? : Plot heatmap of cell fluorescence as a function of repeated stimulus trial along with PSTH.
- 3. Sort and label cells by mutual information ranking and separately by average activity ranking
- 4. Perform spike sorting and plot similar heatmap as above for all cells
- 5. Binarize spike trains to end up with logical array of size N cells by T timebins.
- 6. Measures of Stationarity: Look at what fraction of all timebins in each stimulus block are the silent state. Plot this fraction vs block number
- 7. Plot average activity in each block averaged across all cells