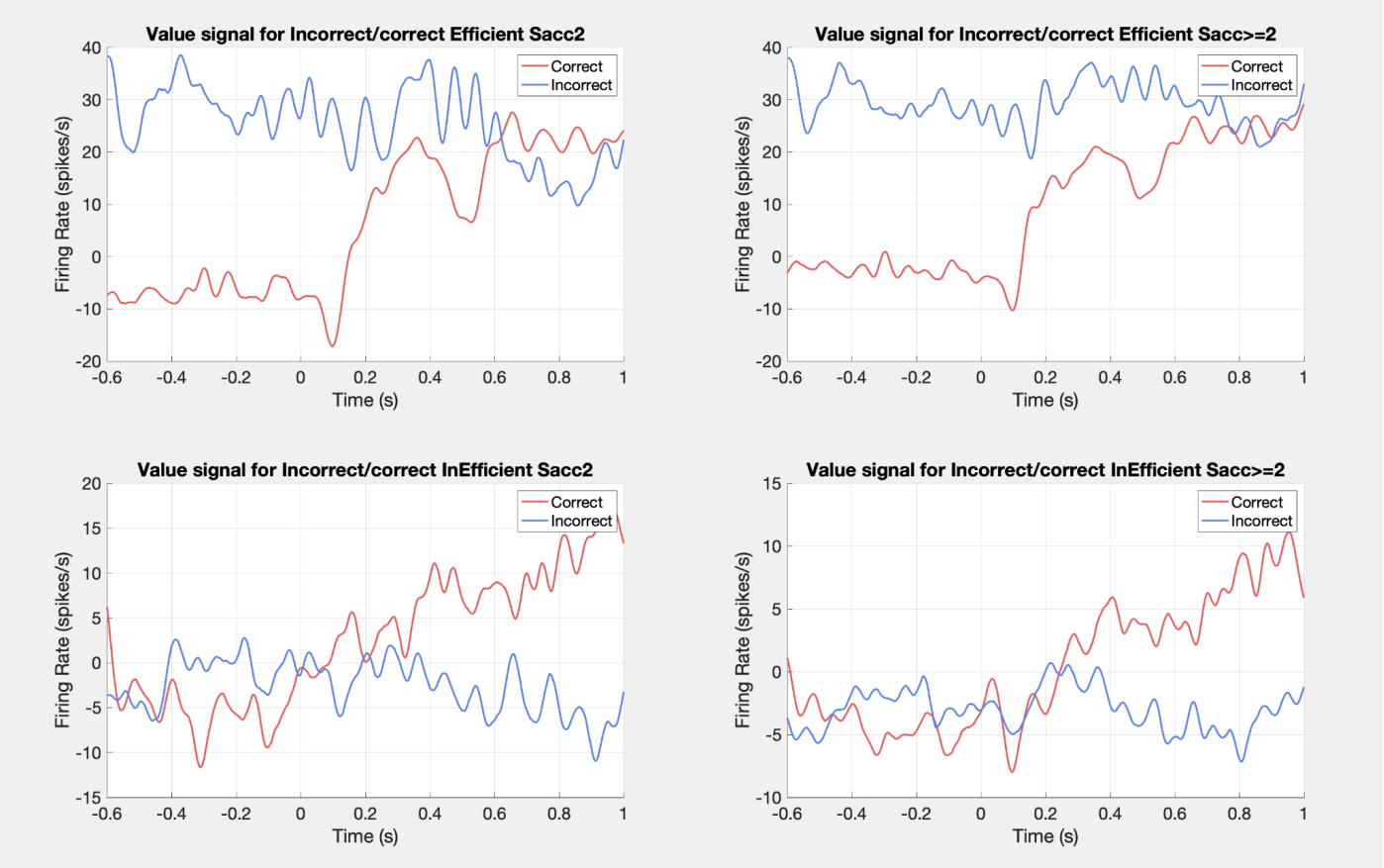
Report of PSTH Analysis In saccade conditions

New Results

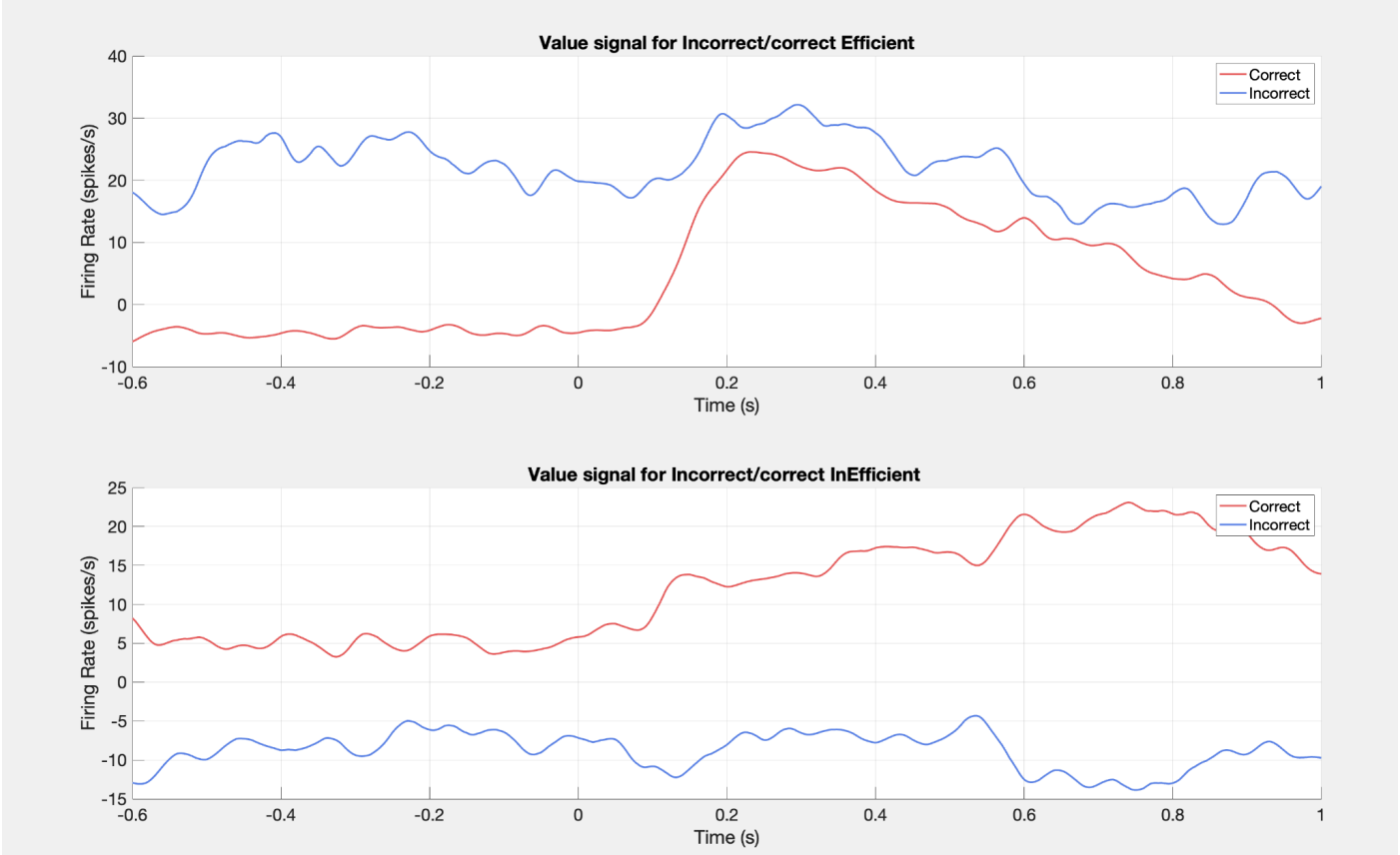
After that we studied about PSTH analysis for correct/incorrect condition along with saccade condition we realized that it is better to check value signals in some of condition and analyze it.

In the figure below you can see value signal **(TA-TP because TA>TP)** of incorrect and correct both in one plot and totally 4 plot which shows **2 Saccades** and **>1 Saccades (in each column)** and **Efficient** and **Inefficient Conditions (in each row)** :

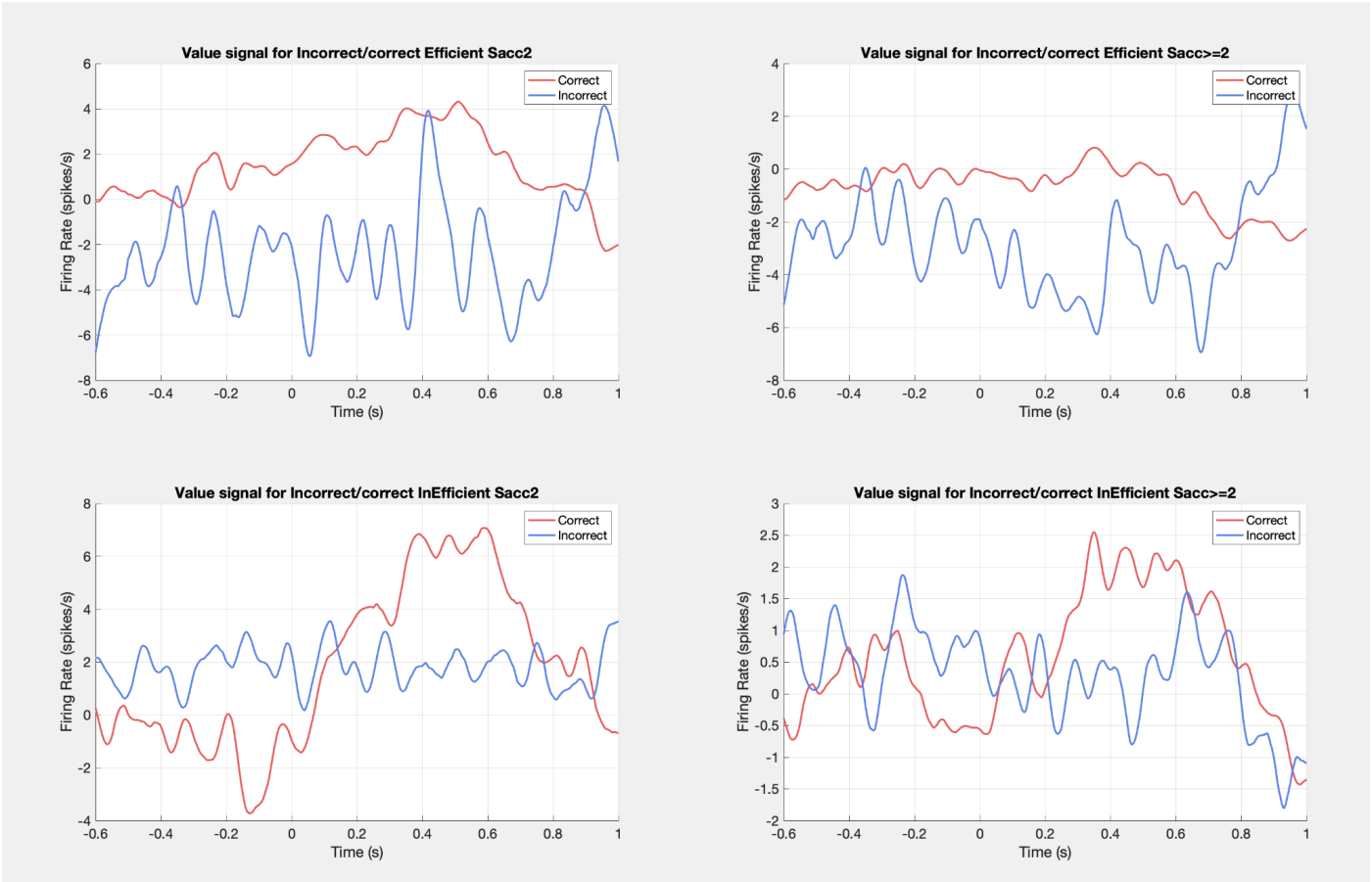


Note that In 2 conditions (Efficient-Incorrect-Saccade2 and Efficient-Incorrect-Saccade>=2) we suffer from the low number of trials. Refer to table1.

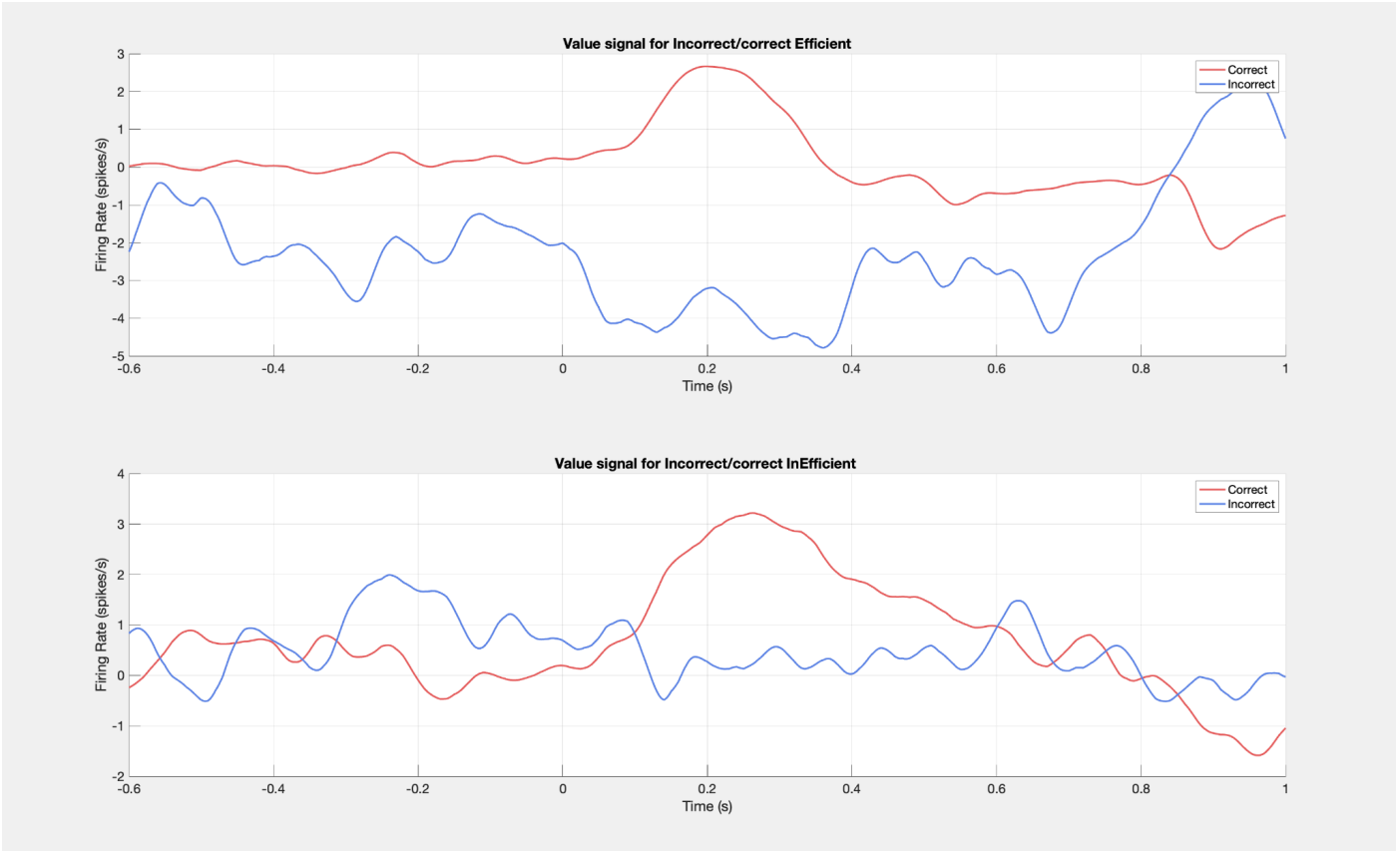
We have also plotted Correct/Incorrect comparison in Efficient and Inefficient conditions to merge saccade conditions:



Doing The same for vlPFC. First figure is comparison of **incorrect** and **correct** in **Efficient/Inefficient** and **2 Saccade/>=2 Saccade** conditions **:**



Note that irregular patterns (for example the first plot i.e. up and left) is because of the low number of trials.



Previous Study

First we report a table presenting number of trials of each saccade conditions:
*(Note! This is the total number of trials. Some of them can be **Nan** trials)*
We have separated The full data into 32 matrices based on **Eff/Ineff** and **Rej/sacc1/sacc2/sacc>1** and **TP/TA** and **correct/incorrect** . Then I wrote the number of trials and the number of unique neurons of each matrix.

Table1-Efficient

Condition Description	Number of trials	#Neurons
TP / Efficient / Reject / Correct	73	1
TP / Efficient / Reject / Incorrect	457	42
TP / Efficient / Sacc1 / Correct	4508	48
TP / Efficient / Sacc1 / Incorrect	32	9
TP / Efficient / Sacc2 / Correct	477	44
TP / Efficient / Sacc2 / Incorrect	58	19
TP / Efficient / Sacc>=2 / Correct	692	46
TP / Efficient / Sacc>=2 / Incorrect	109	21
TA / Efficient / Reject / Correct	2910	49
TA / Efficient / Reject / Incorrect	0	0
TA / Efficient / Sacc1 / Correct	14	12
TA / Efficient / Sacc1 / Incorrect	413	40
TA / Efficient / Sacc2 / Correct	673	47
TA / Efficient / Sacc2 / Incorrect	390	37
TA / Efficient / Sacc>=2 / Correct	1175	47
TA / Efficient / Sacc>=2 / Incorrect	1192	39

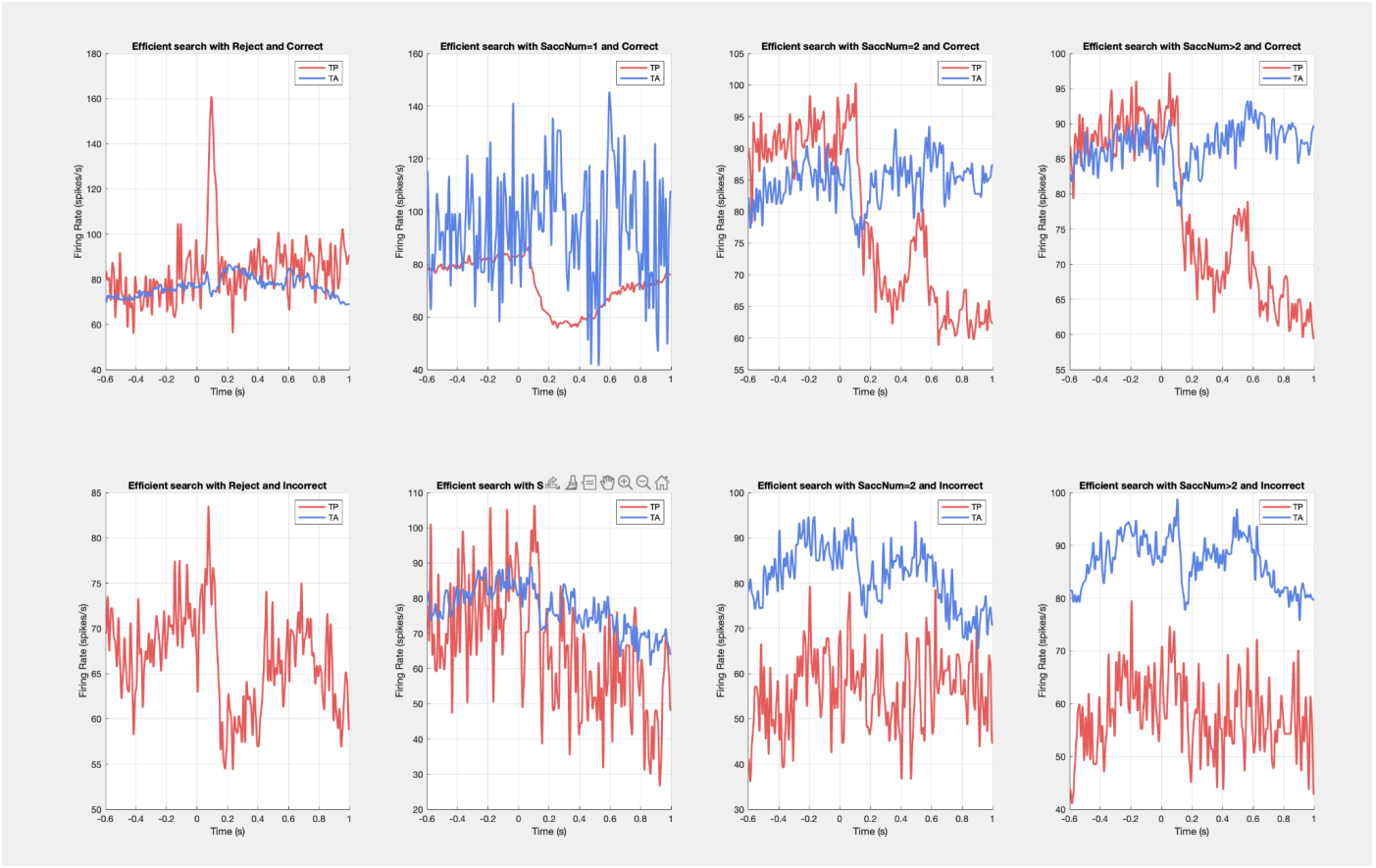
Table2-Inefficient

Condition Description	Number of trials	#Neurons
TP / InEfficient / Reject / Correct	0	0
TP / InEfficient / Reject / Incorrect	1036	45
TP / InEfficient / Sacc1 / Correct	2268	49
TP / InEfficient / Sacc1 / Incorrect	295	44
TP / InEfficient / Sacc2 / Correct	759	49
TP / InEfficient / Sacc2 / Incorrect	347	47
TP / InEfficient / Sacc>=2 / Correct	1453	49
TP / InEfficient / Sacc>=2 / Incorrect	753	48
TA / InEfficient / Reject / Correct	1956	49
TA / InEfficient / Reject / Incorrect	0	0
TA / InEfficient / Sacc1 / Correct	42	28
TA / InEfficient / Sacc1 / Incorrect	623	48
TA / InEfficient / Sacc2 / Correct	438	47
TA / InEfficient / Sacc2 / Incorrect	598	47
TA / InEfficient / Sacc>=2 / Correct	1176	49
TA / InEfficient / Sacc>=2 / Incorrect	1864	49

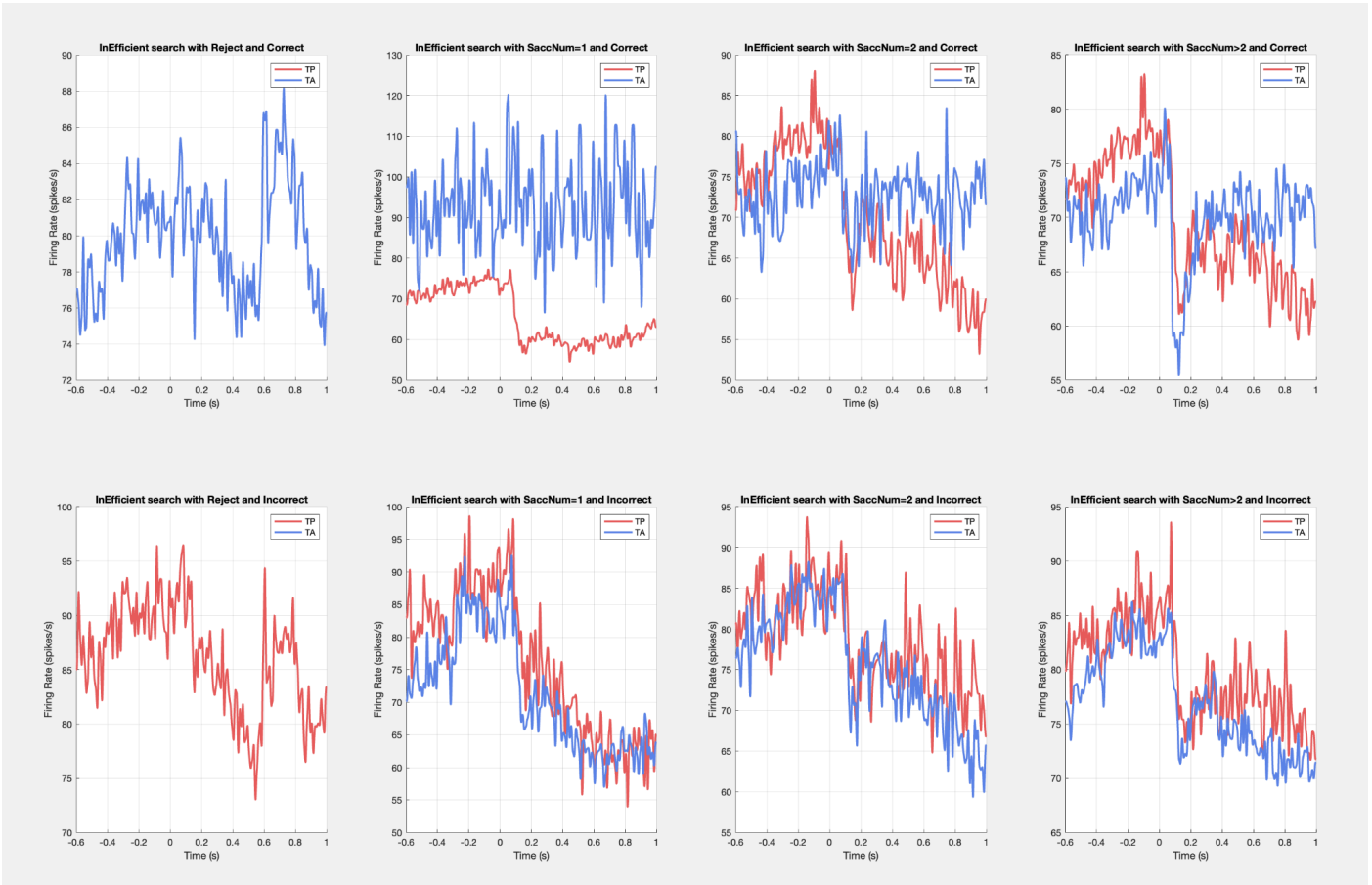
Total Number of Trials = 23041 Total Number of Neurons =51

PSTH plots for 4 Saccade conditions and 2 Accuracies / Efficient

Last column is sacc>1

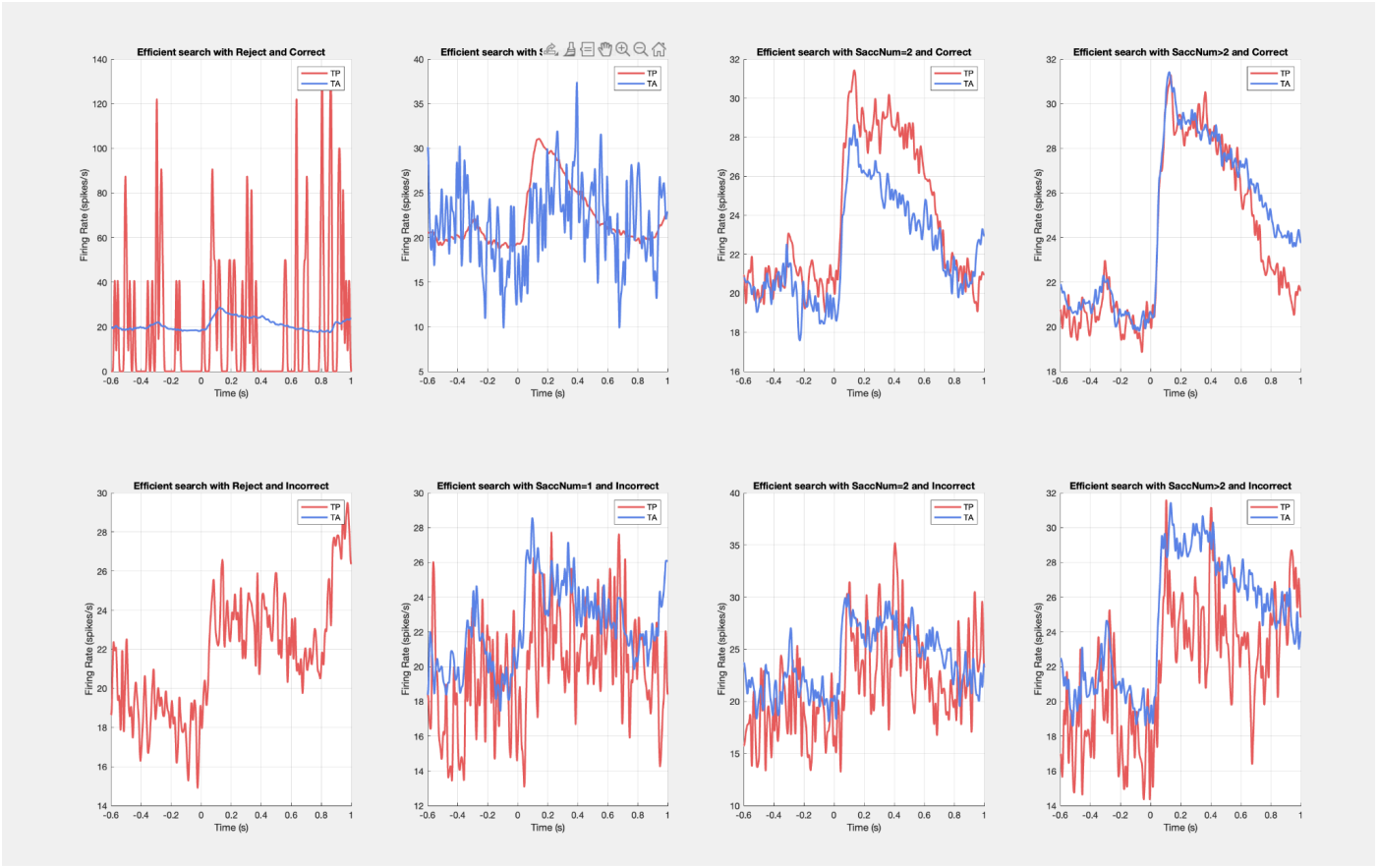


PSTH plots for 4 Saccade conditions and 2 Accuracies / Inefficient



Same Results for vlPFC

Efficient



Inefficient