'Central to successful control is the ability to suppress
actions that are no longer relevant or required. '

Subject 113

NF Task: Users look at the car and imagine driving it forward to train
alpha inhibition, aiming to enhance information suppression to
reduce falling risk in the physical world.

We will look at alpha power progression

Epoching information

- Event '7' (alpha power drop, car moves backward) is set as time = 0 ms, with epochs from [-300 1000] ms.

- Event '6' (ERSP alpha power increase, car moves forward) is plotted as a black line to show its latency relative to '7' (fig 1).

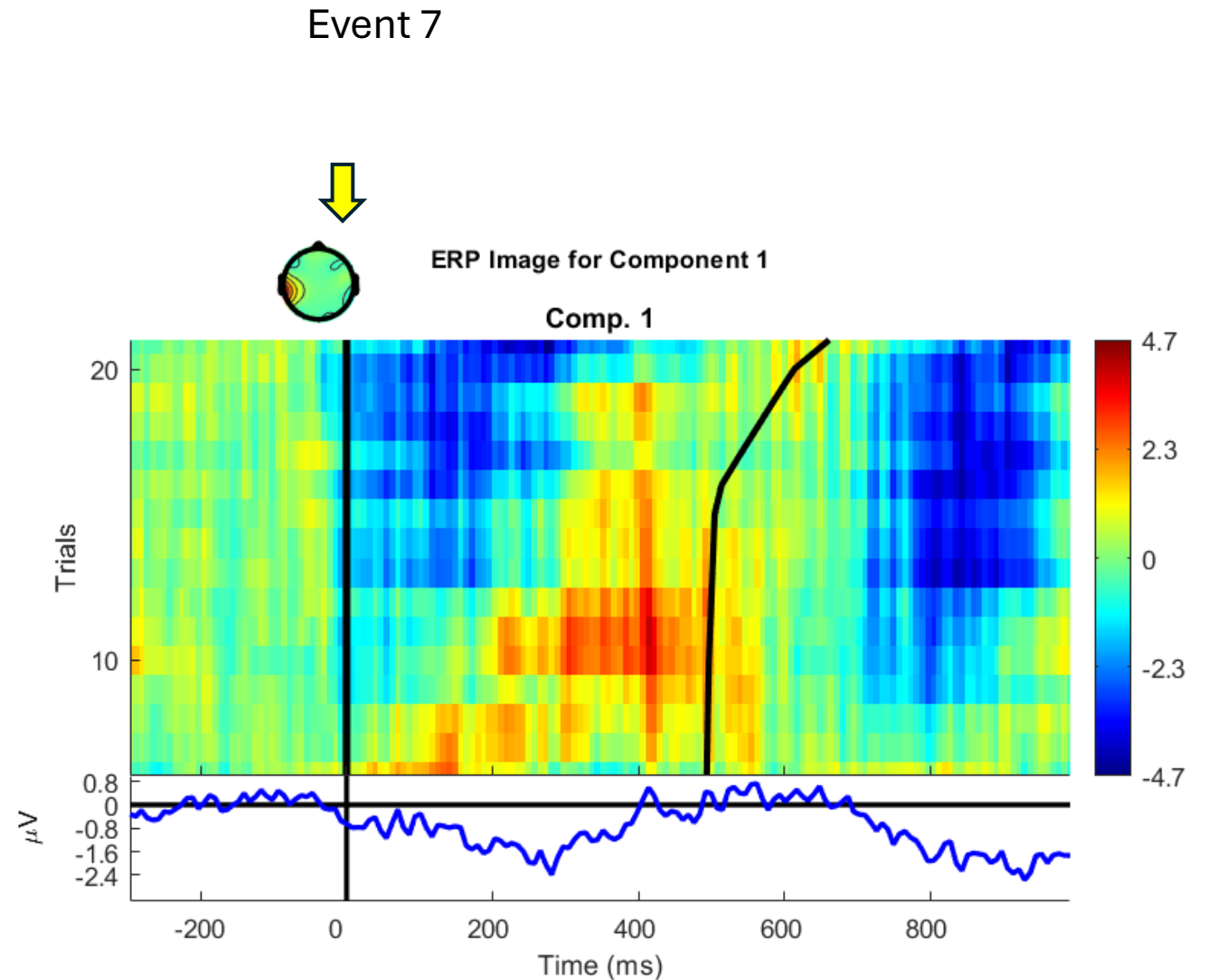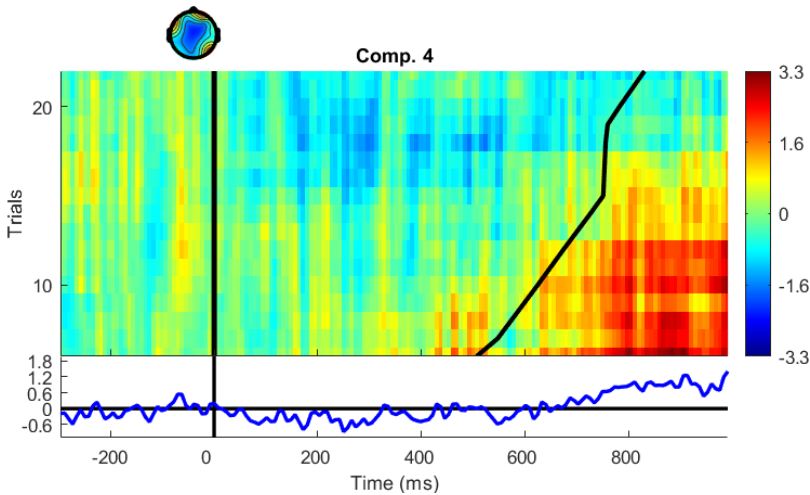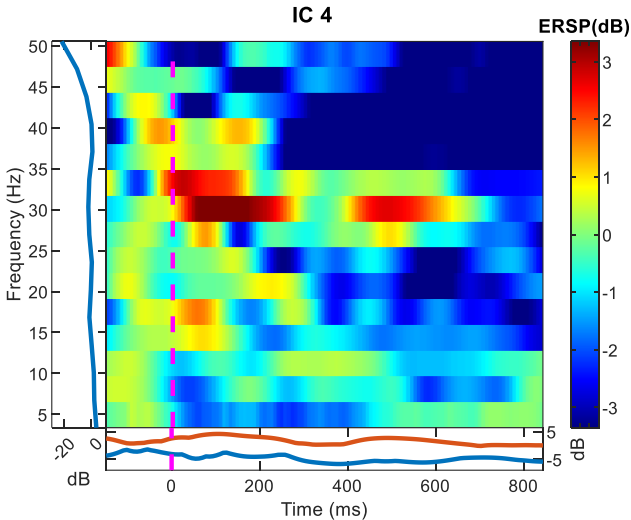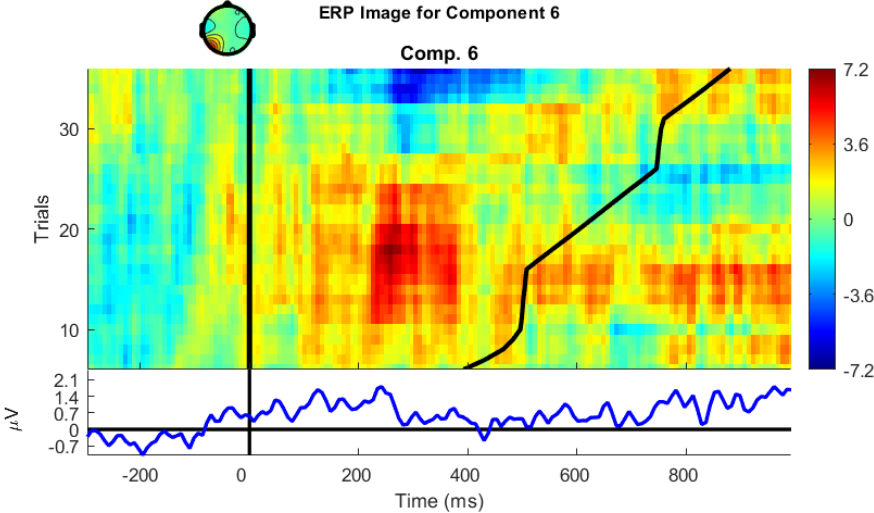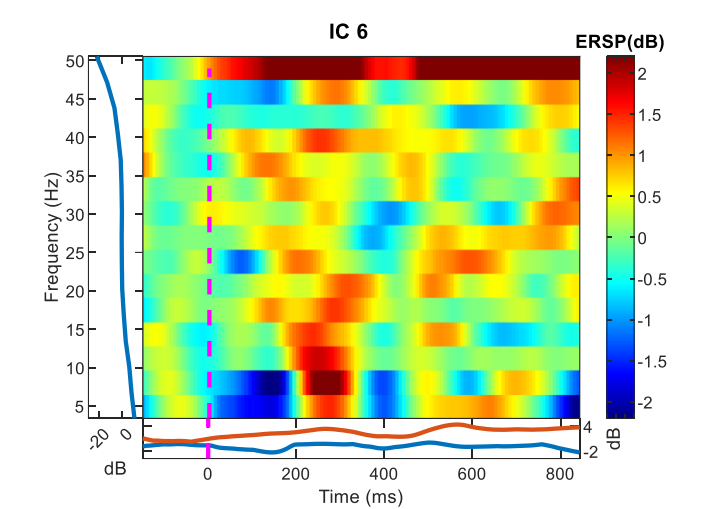- Corrects the baseline by subtracting the -290 to 0 ms mean

Event 7

Figure 1. ERP of the 1st component for subject 104 training session 1. Event '7' is the stimulus onset when time = 0ms. Event '6' marks the car's forward movement with a black line, sorted by latency
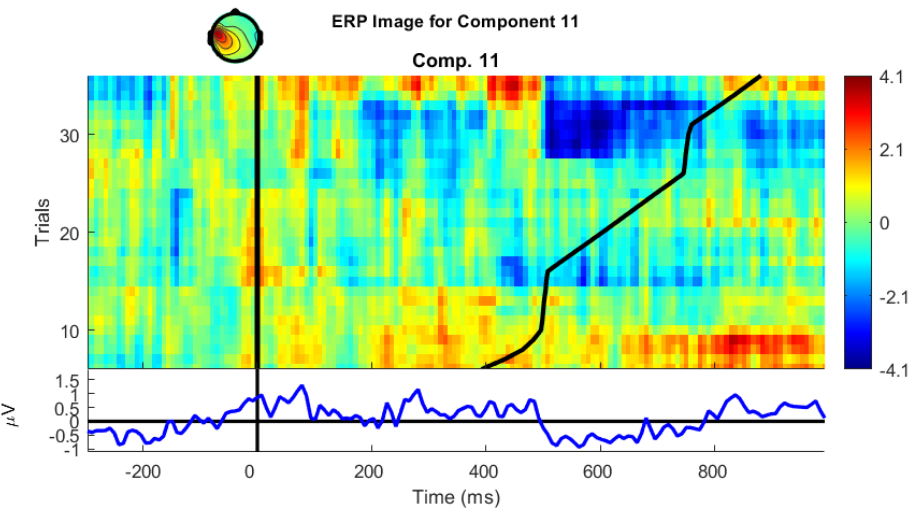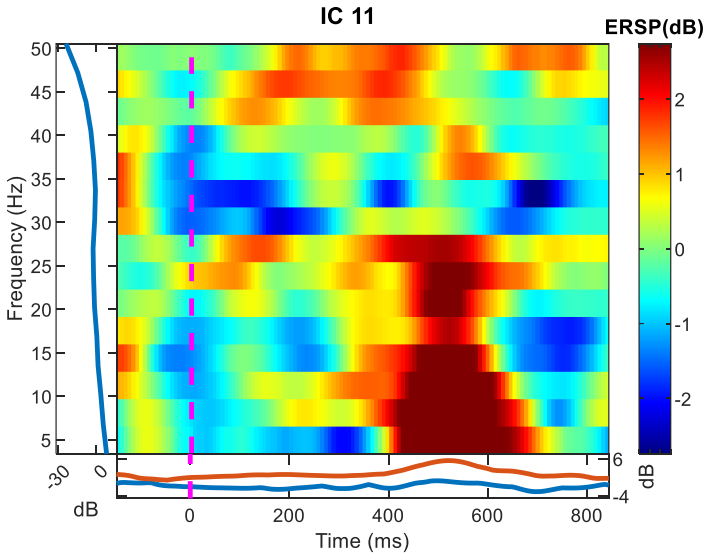
113_1

Parietal P7		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 400]	desync	

113_2

Parietal P7		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 400]	sync	

Frontal FC5		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 400]	sync	

113_4

Frontal F8		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 400]	sync	

IC 4

ERP Image for Component 4

Comp. 4

113_6
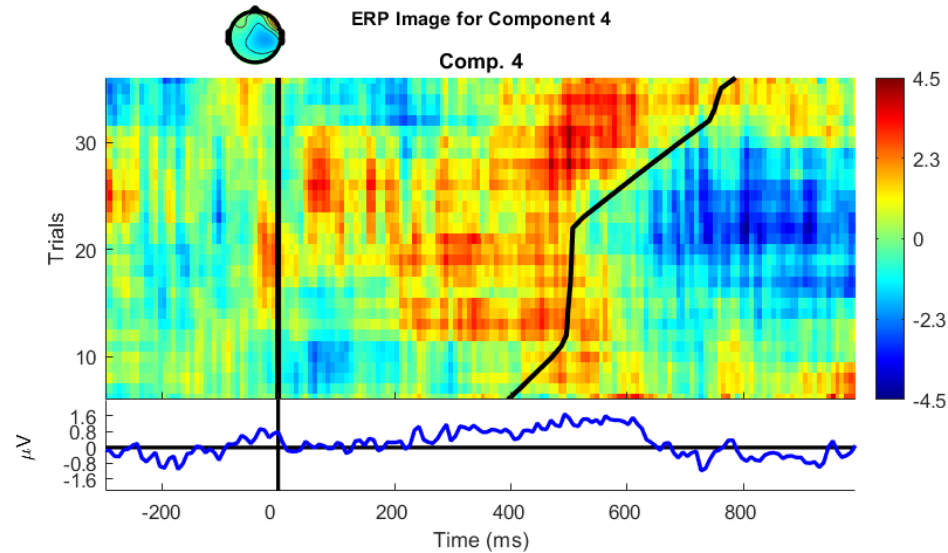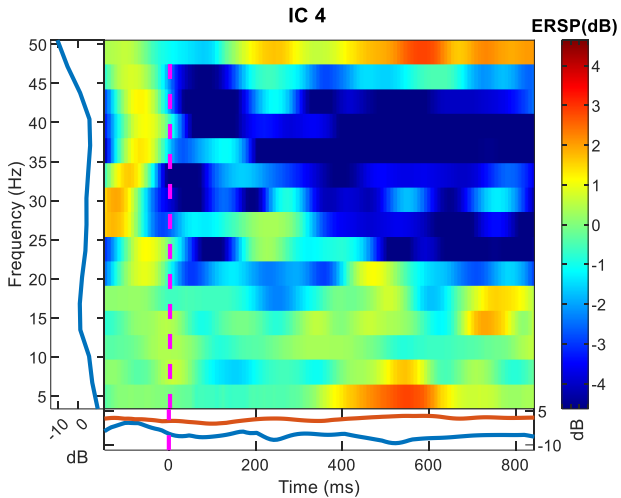
Frontal FC5		
Time(ms)	Alpha	
[200, 400]	desync	

?why
desync

113_7

Frontal FC6		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 400]	sync	

IC 14

ERP Image for Component 14
Comp. 14

113_10
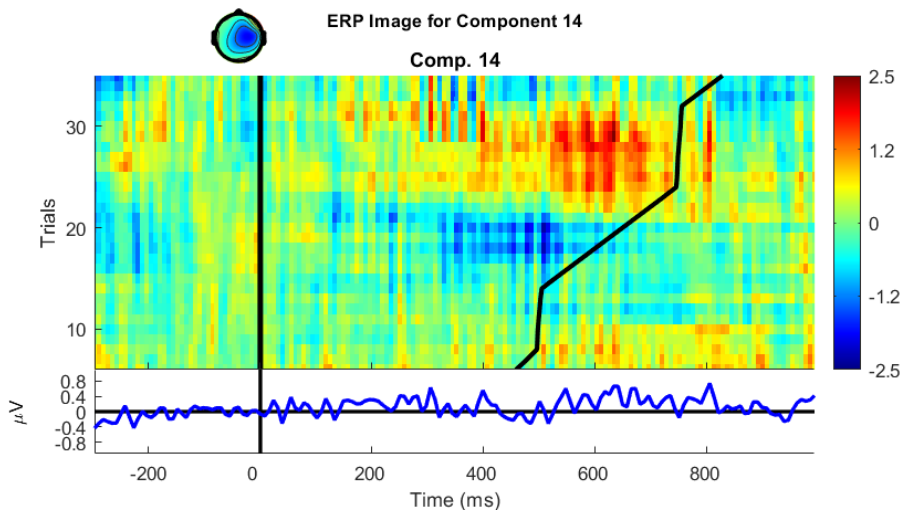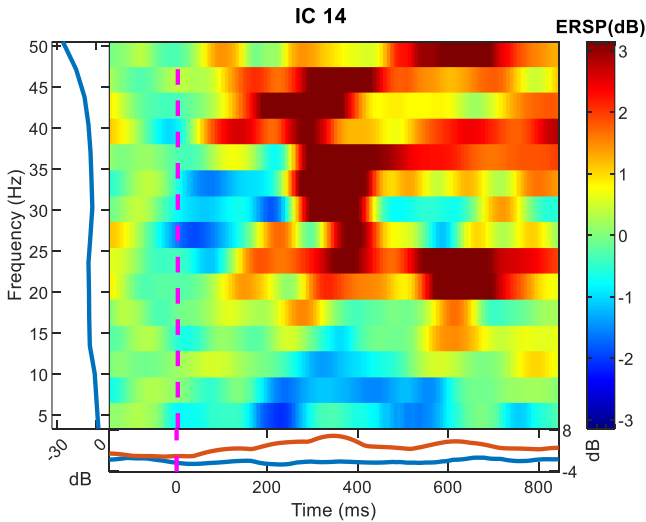
Frontal FC6		
Time(ms)	Alpha	
[0, 100]	desync	
[250, 450]	sync	

Frontal AF4		
Time(ms)	Alpha	
[0, 200]	sync	

113_13

Frontal FC5		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 400]	sync	

113_14
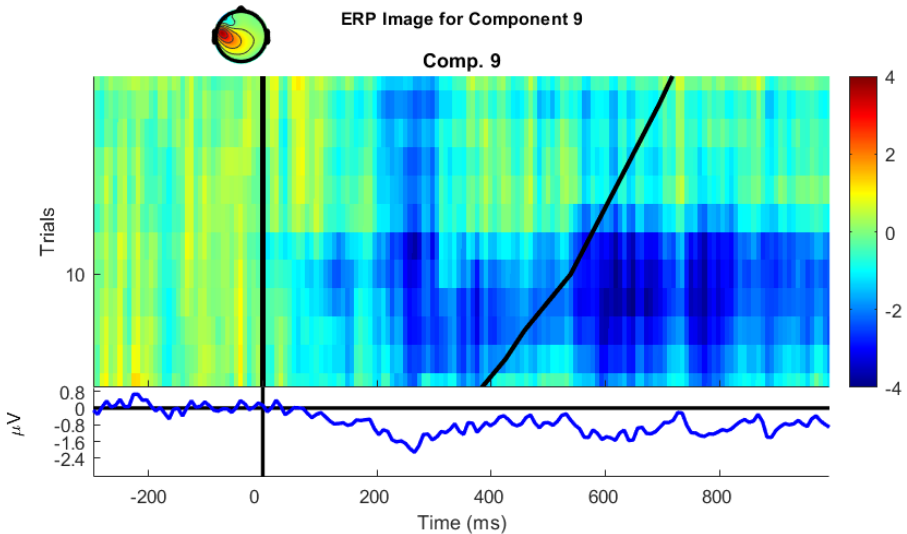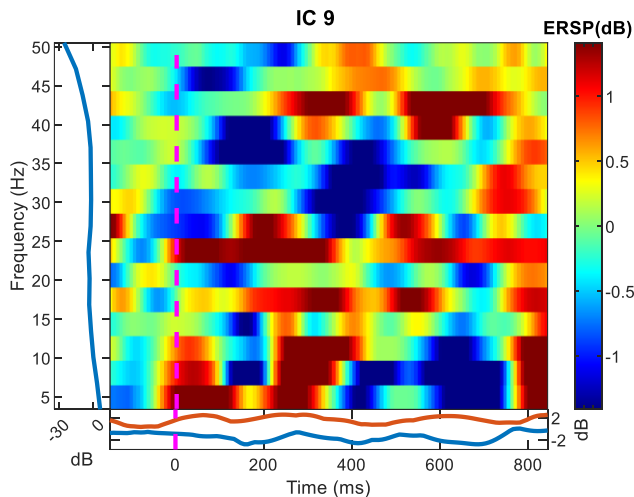
Frontal AF3		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 400]	sync	

IC 9

ERP Image for Component 9

Comp. 9

113_17
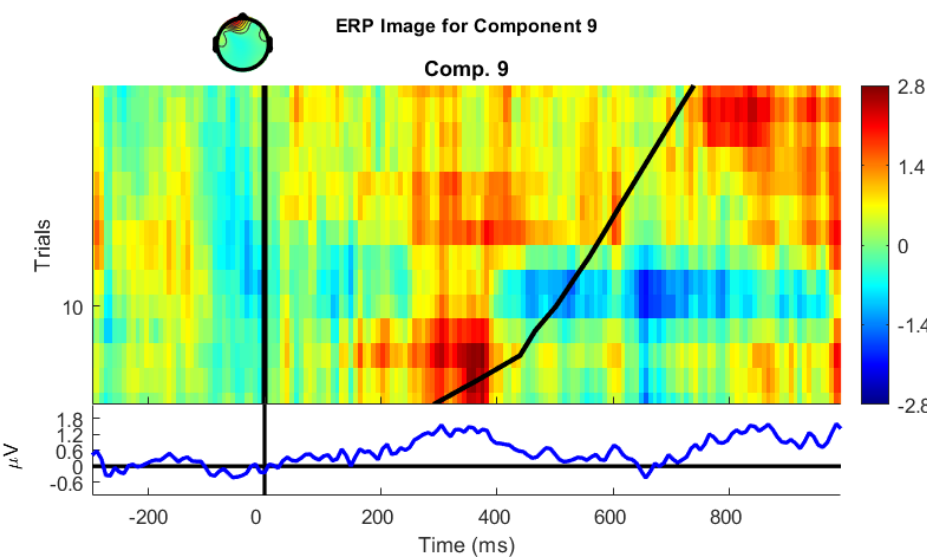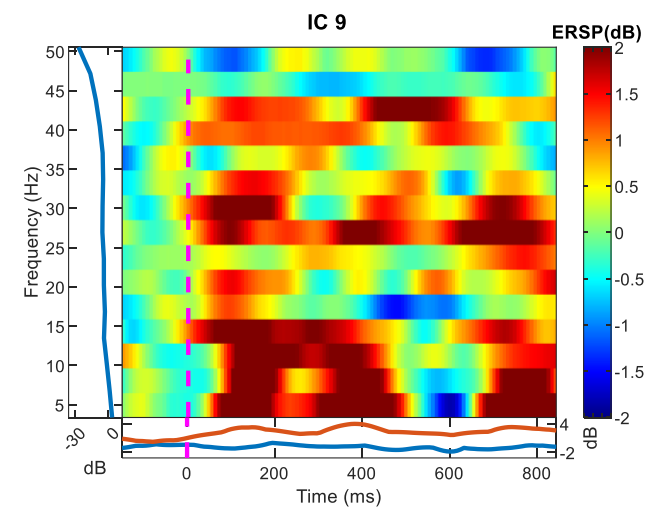
!! muscle

Frontal AF6		
Time(ms)	Alpha	
[200, 400]	sync	

113_21
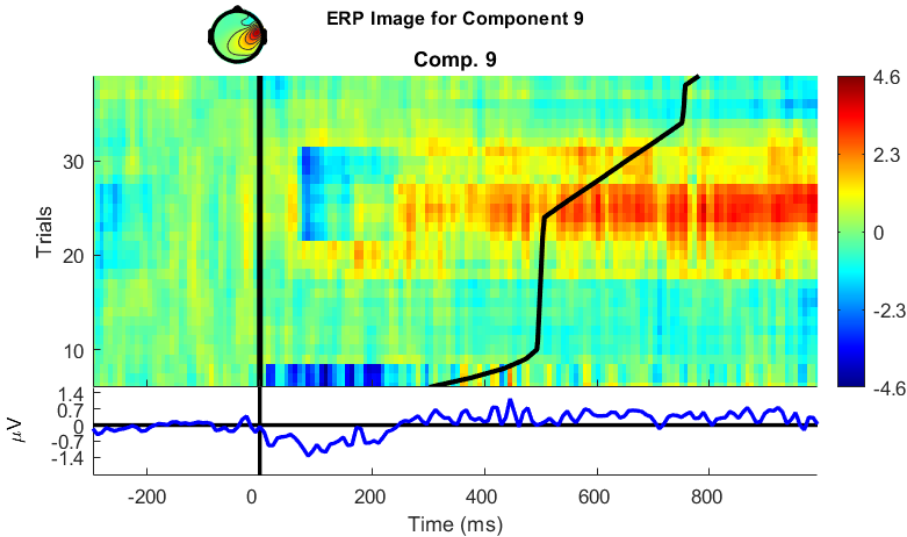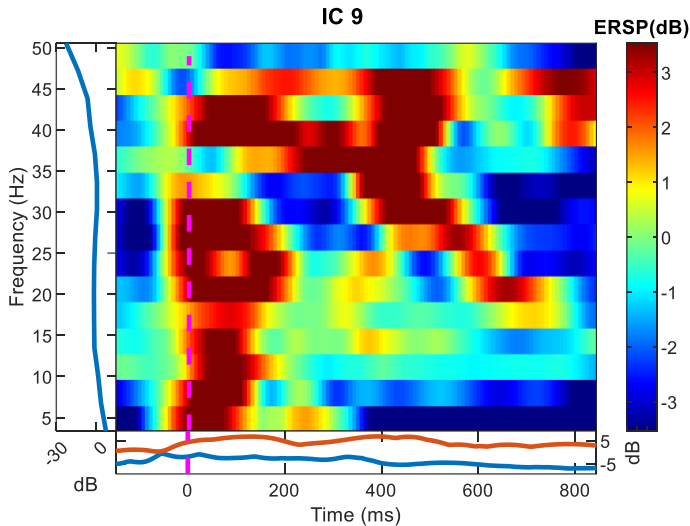
Frontal F3		
Time(ms)	Alpha	
[0, 200]	sync	

IC 14

ERP Image for Component 14

Comp. 14

113_22
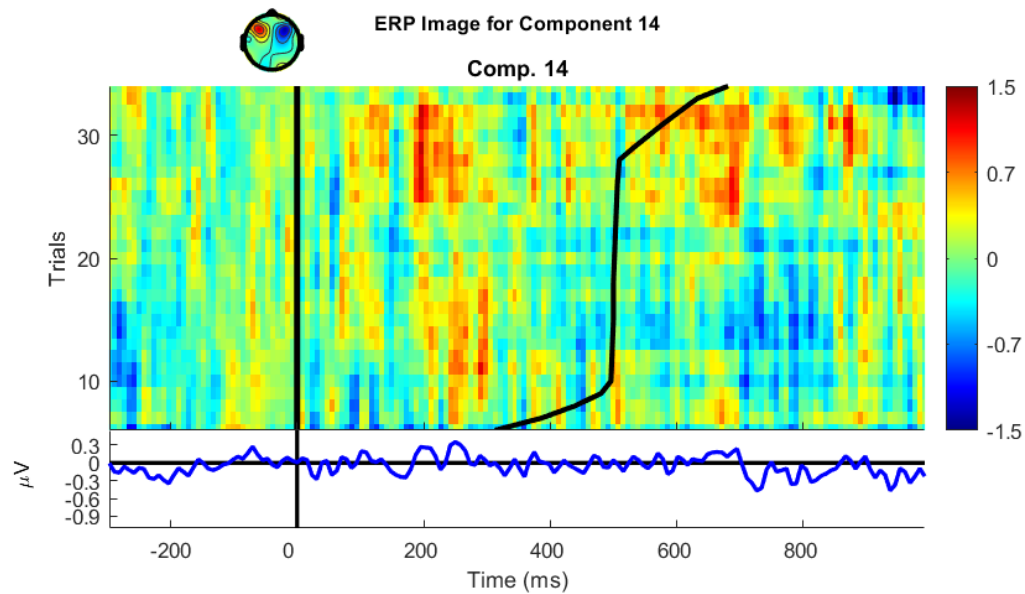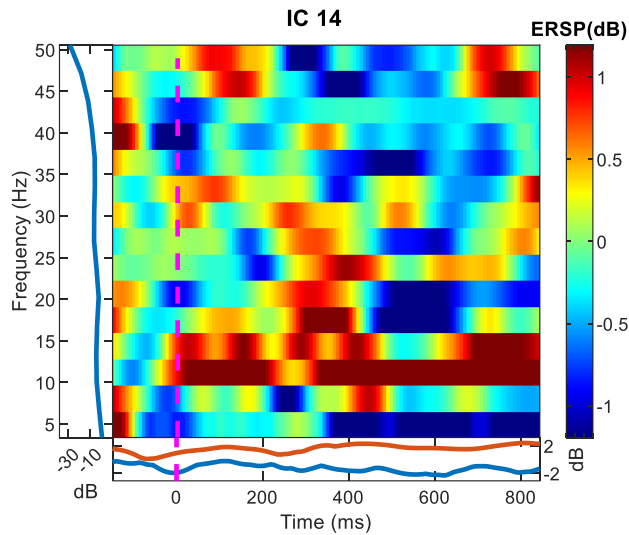
Frontal FC5		
Time(ms)	Alpha	
[0, 50]	desync	
[350, 550]	sync	

113_23
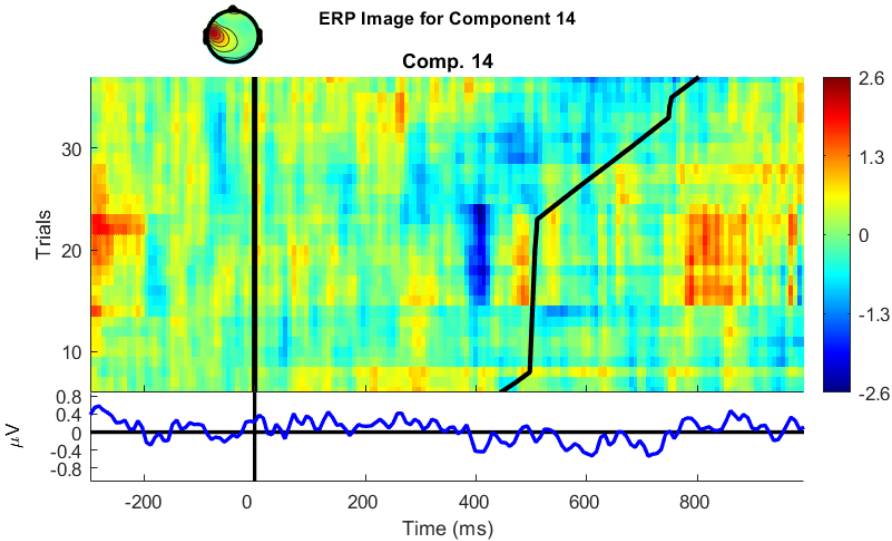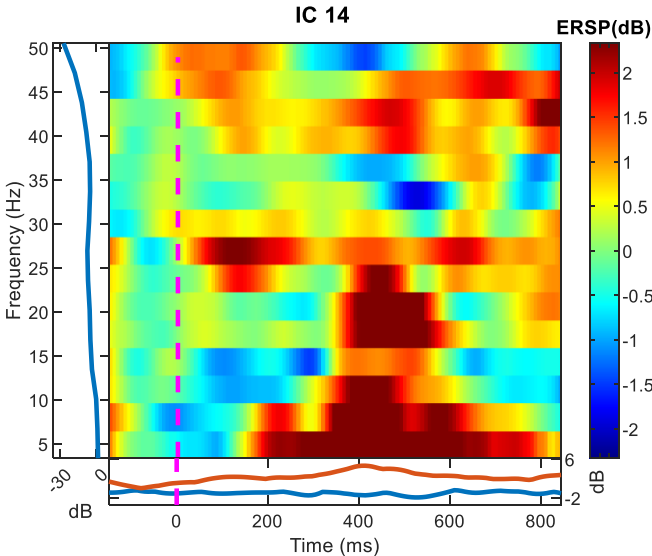
Frontal FC6		
Time(ms)	Alpha	
[190, 390]	sync	
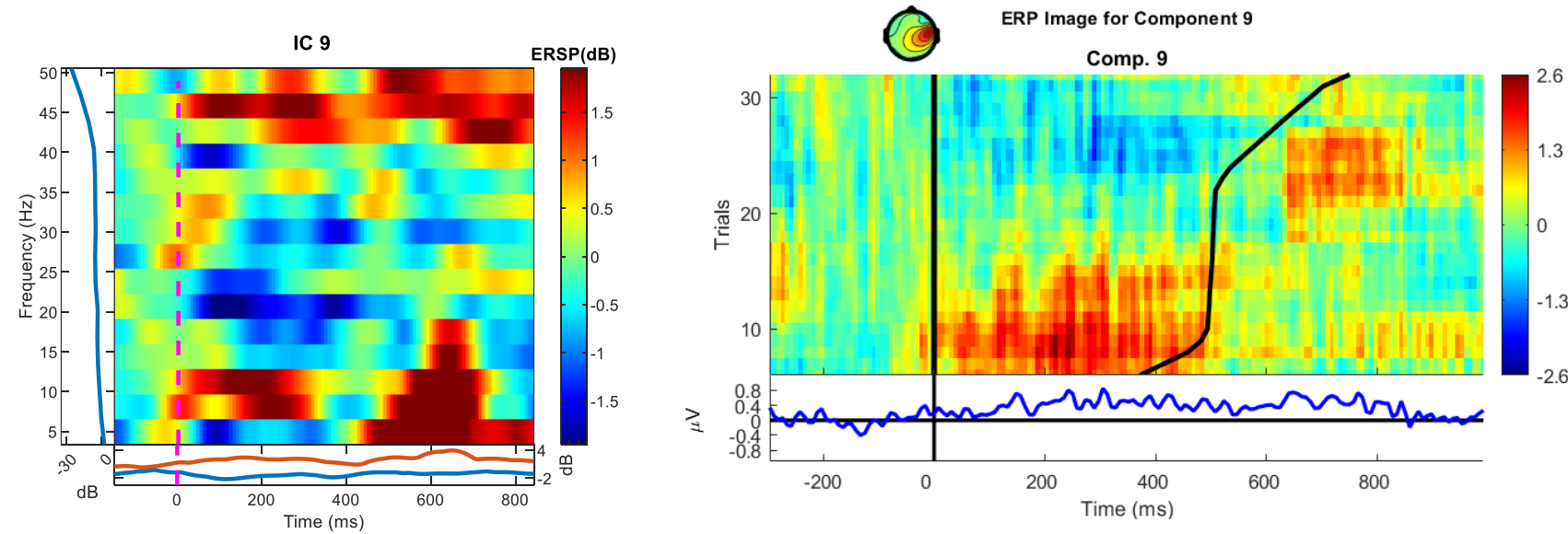
===== All Regions Summary =====
Region: Left-Frontal
Components processed: 7
<mark>p-value (Early vs Middle): 9.6861e-08 (increase)</mark>
p-value (Middle vs Later): 0.070257837 (decrease)
<mark>p-value (Early vs Later): 1.8586023e-05 (increase)</mark>

Region: Right-Frontal
Components processed: 6
p-value (Early vs Middle): 0.57241 (increase)
p-value (Middle vs Later): 0.4146855 (decrease)
p-value (Early vs Later): 0.21196459 (decrease)