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

Subject 109

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.

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).

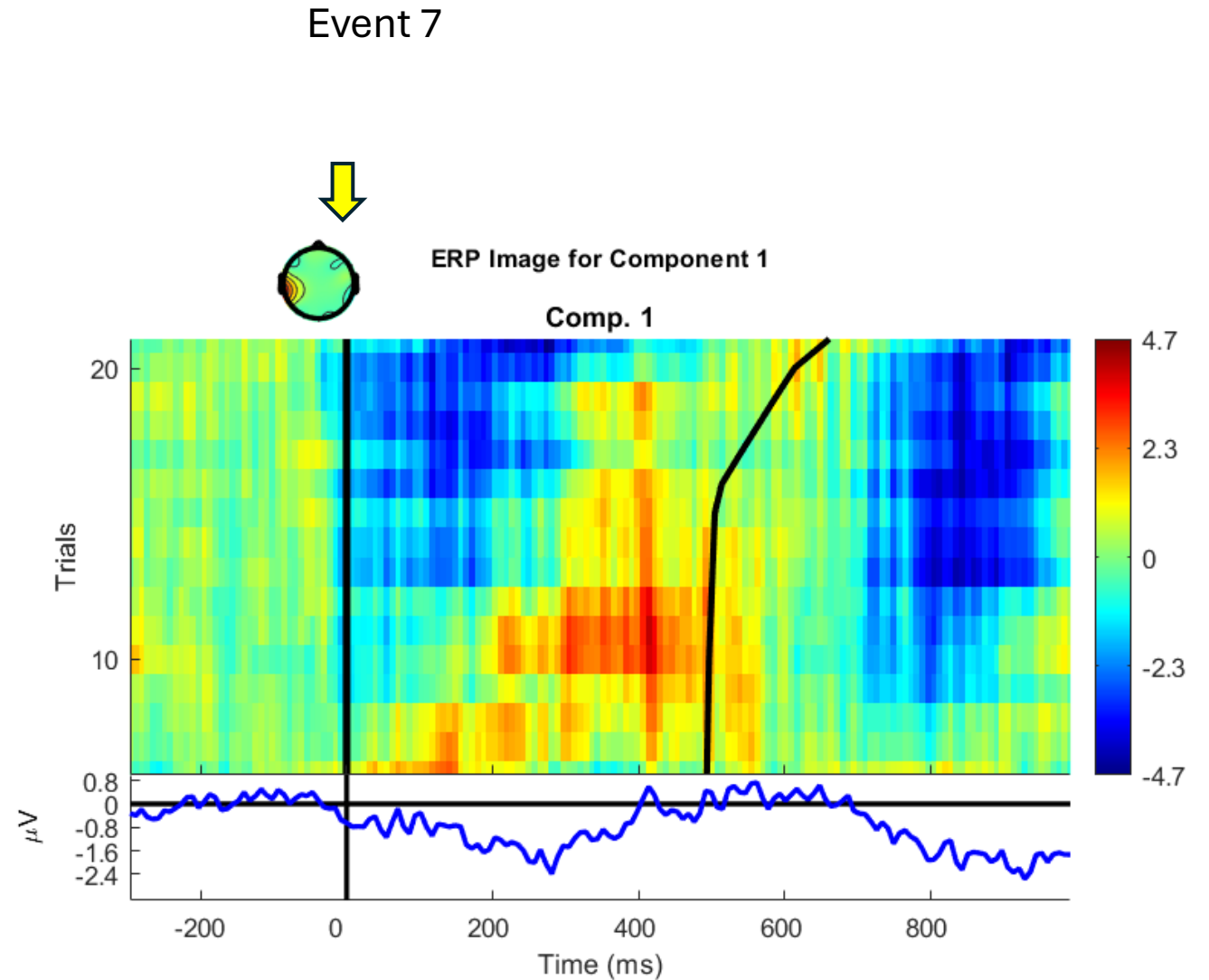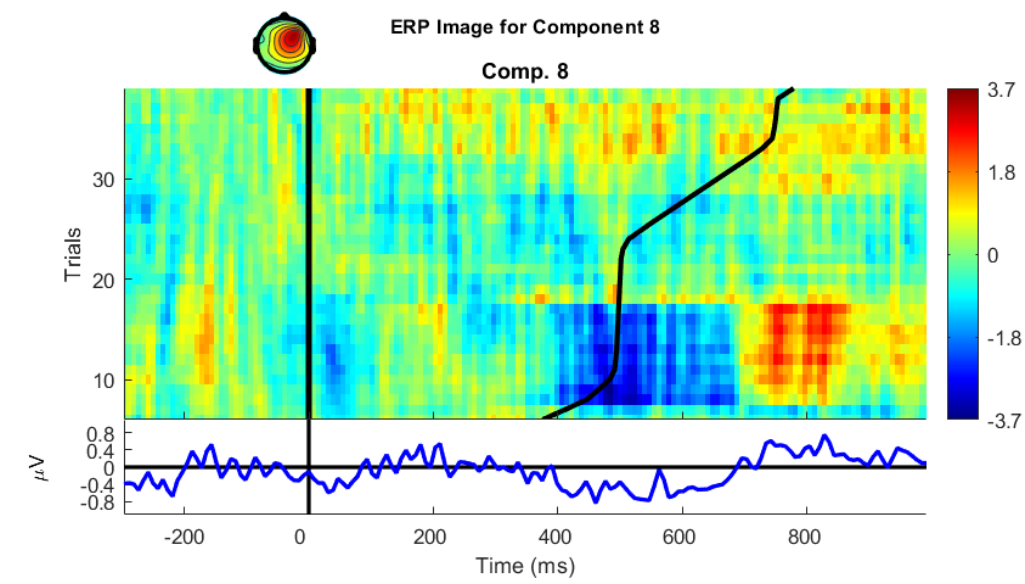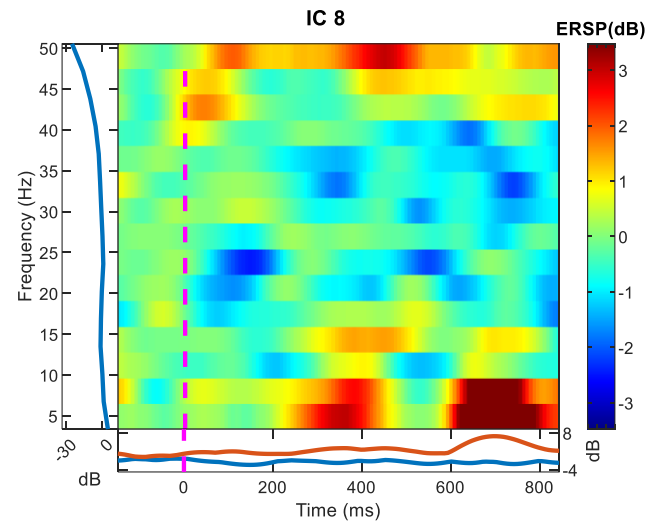- Corrects the baseline by subtracting the -290 to 0 ms mean

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
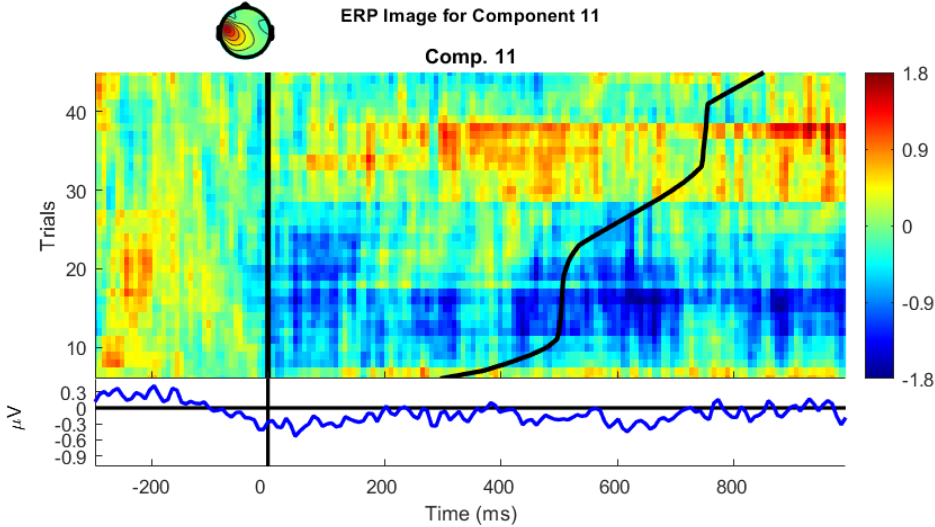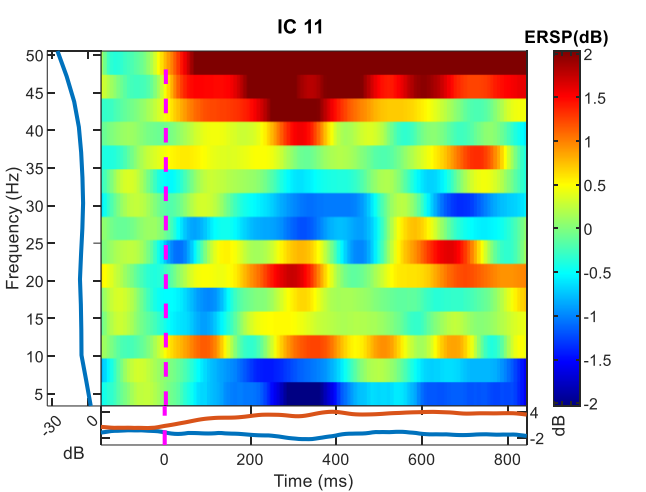
109_2

Frontal F4		
Time(ms)	Alpha	
[0, 200]	desync	
[200, 400]	sync	

IC 8

ERP Image for Component 8
Comp. 8

109_3

Muscle noise?

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

Frontal FC6		
Time(ms)	Alpha	
[0, 100]	desync	
[200, 400]	sync	

109_4
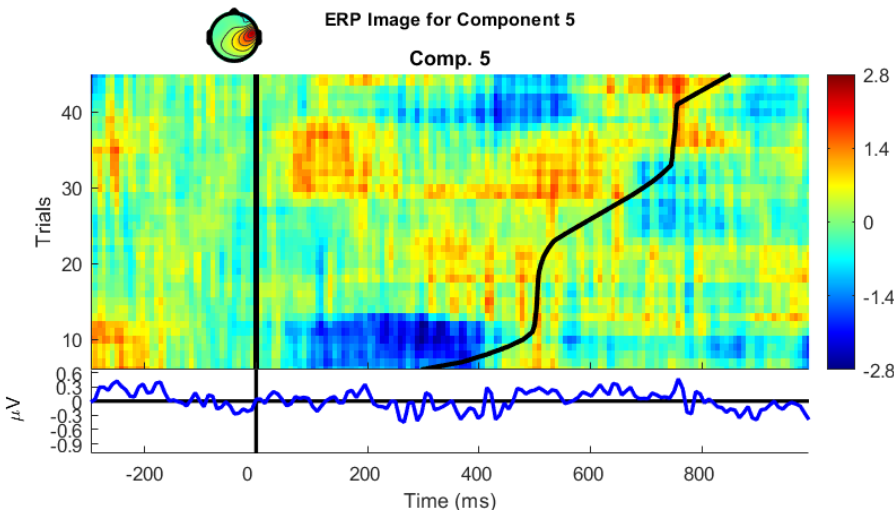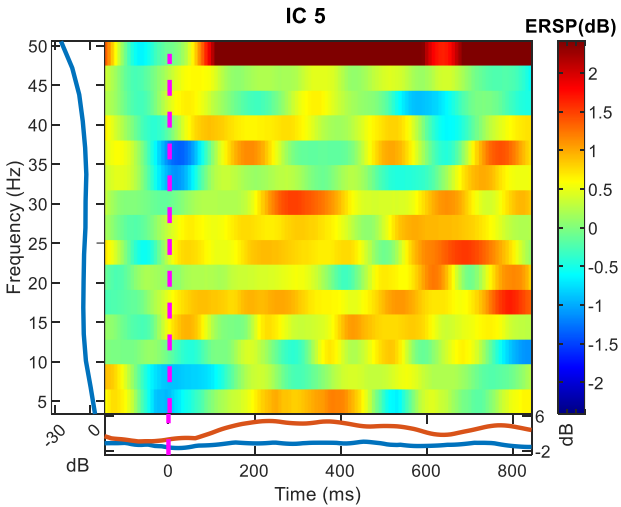
Frontal F4		
Time(ms)	Alpha	
[0, 100]	desync	
[150, 300]	sync	
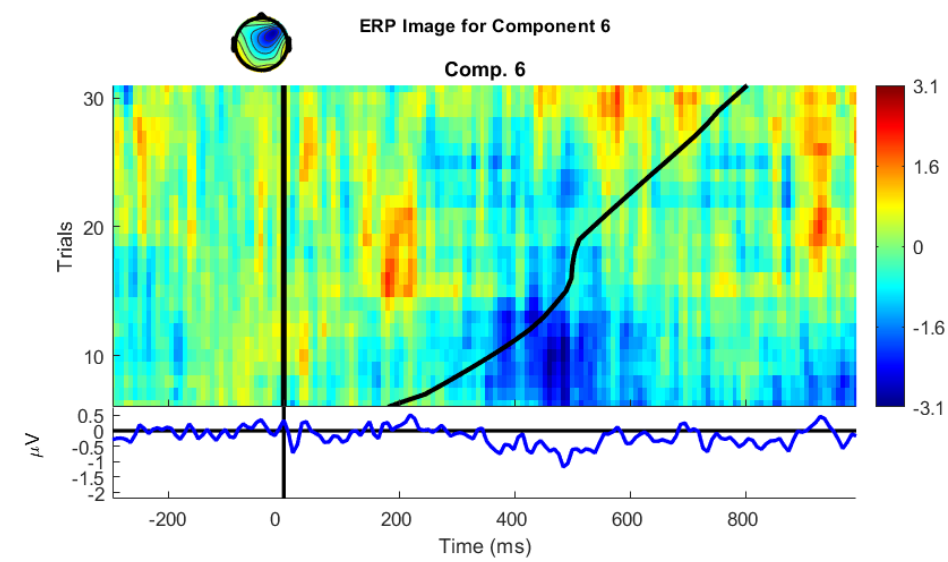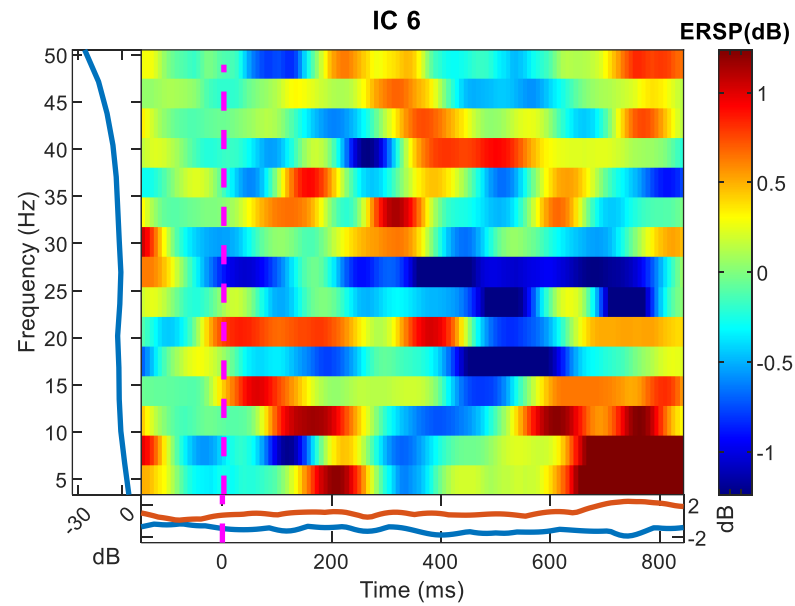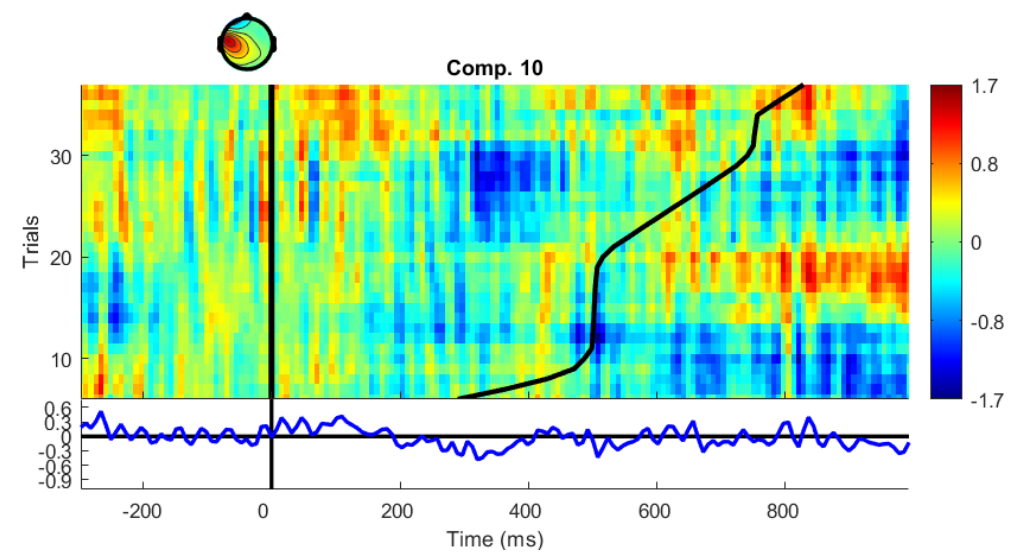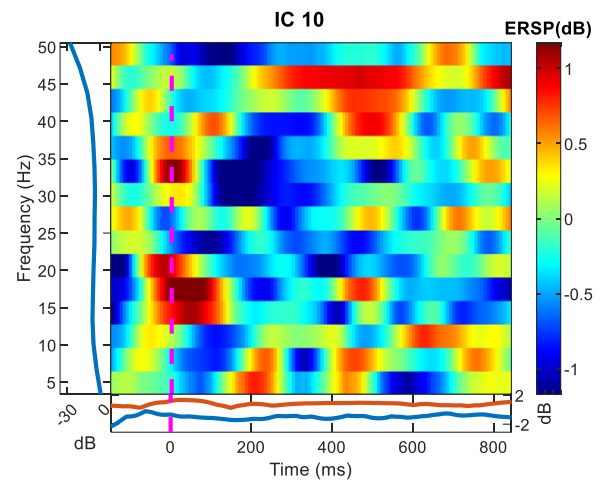
IC 6

ERSP(dB)

ERP Image for Component 6

Comp. 6

109_6

Frontal FC5		
Time(ms)	Alpha	
[0, 100]	desync	
[200, 400]	sync	

IC 10 — ERSP(dB)

Comp. 10

109_7

Frontal F4		
Time(ms)	Alpha	
[0, 100]	desync	
[200, 400]	sync	

IC 9

ERSP(dB)

ERP Image for Component 9

Comp. 9

109_8

Frontal FC5		
Time(ms)	Alpha	
[0, 100]	desync	
[150, 350]	sync	

IC 11

ERP Image for Component 11

109_13
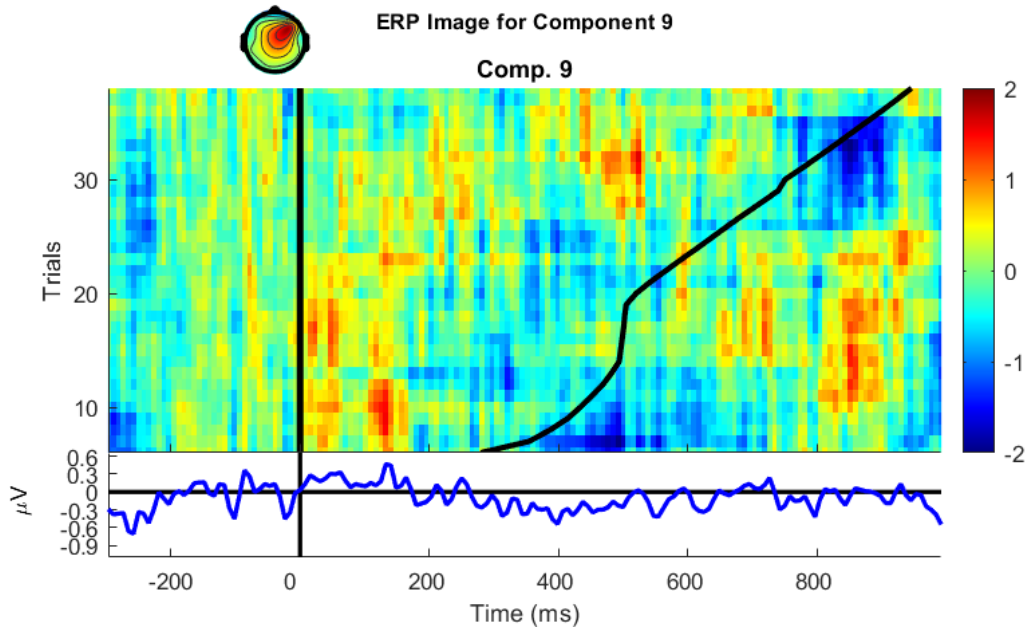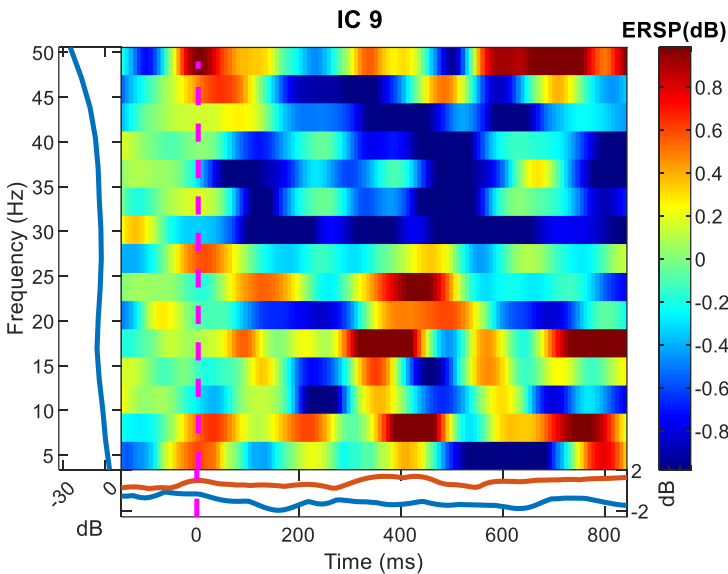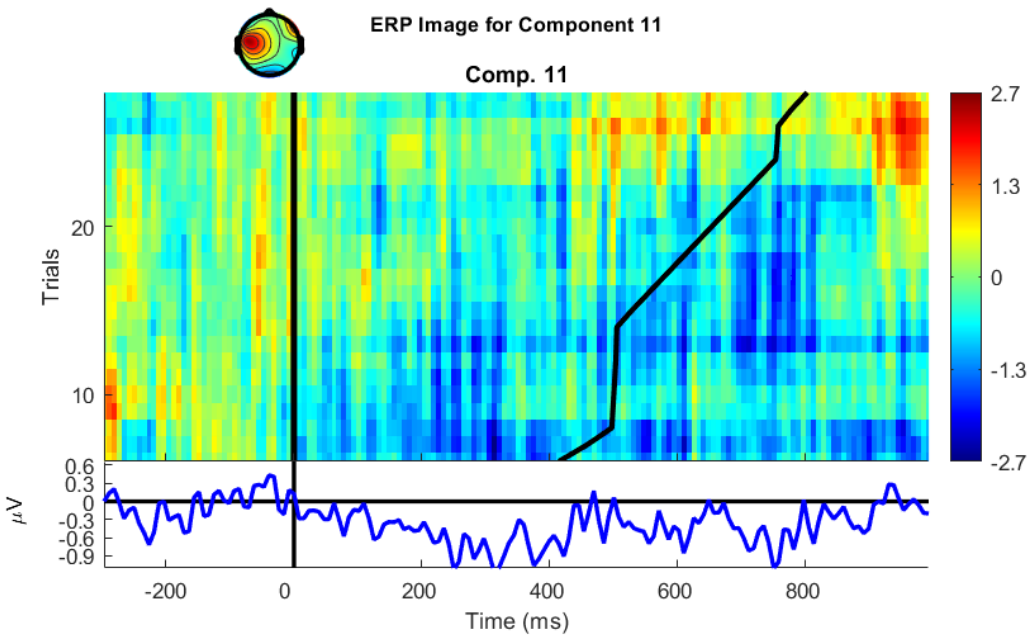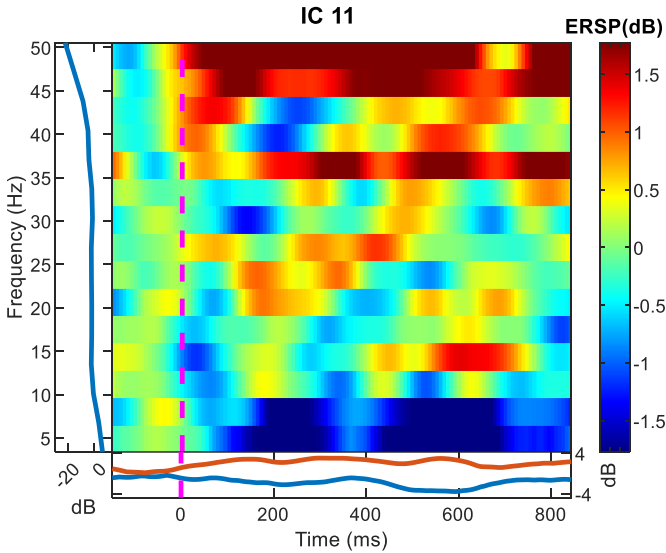
Frontal F4		
Time(ms)	Alpha	
[0, 50]	desync	
[150, 350]	sync	
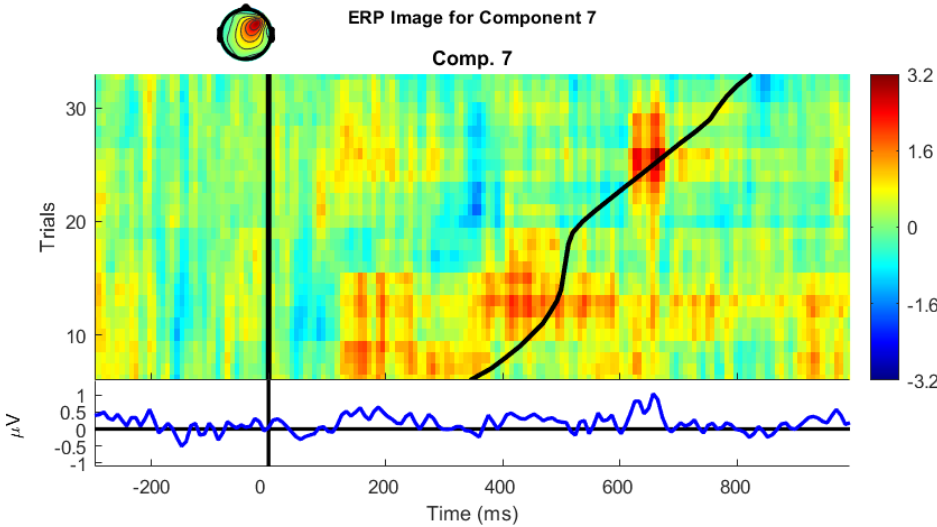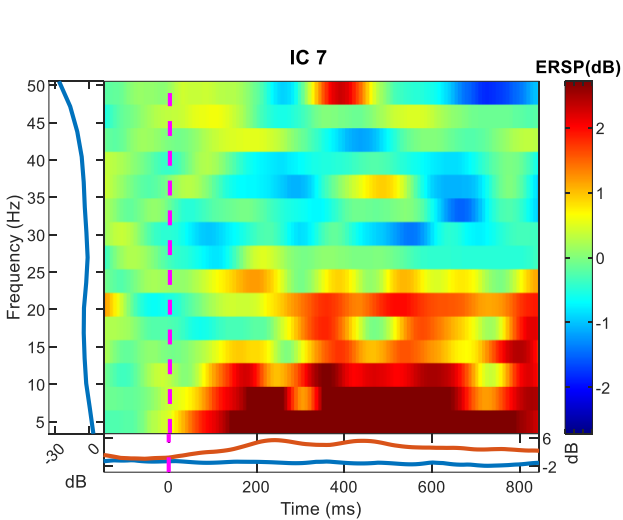
Frontal AF4		
Time(ms)	Alpha	
[0, 100]	desync	
[250, 400]	sync	

109_15
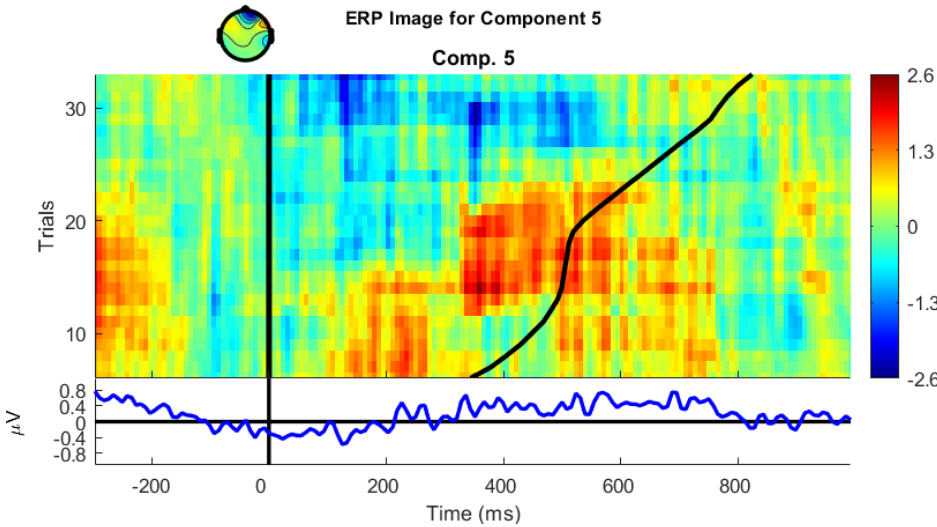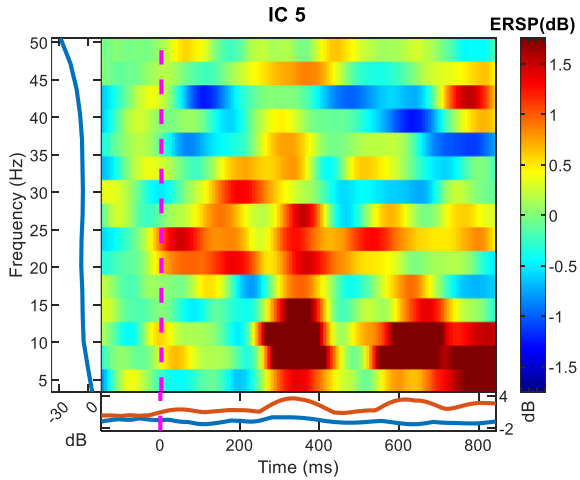
Frontal F4		
Time(ms)	Alpha	
[100, 200]	sync	

IC 5

ERSP(dB)

ERP Image for Component 5

Comp. 5

109_16
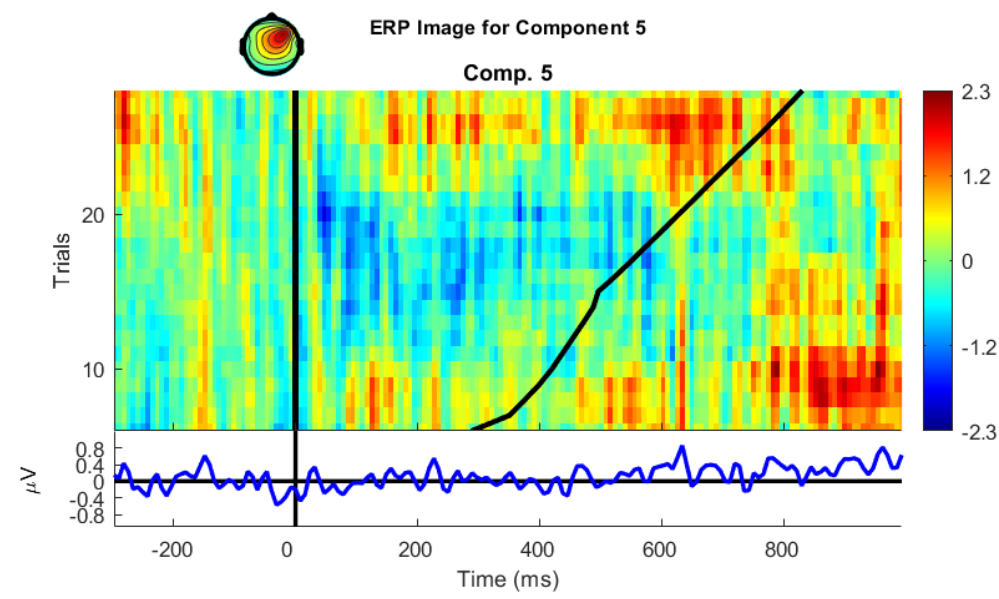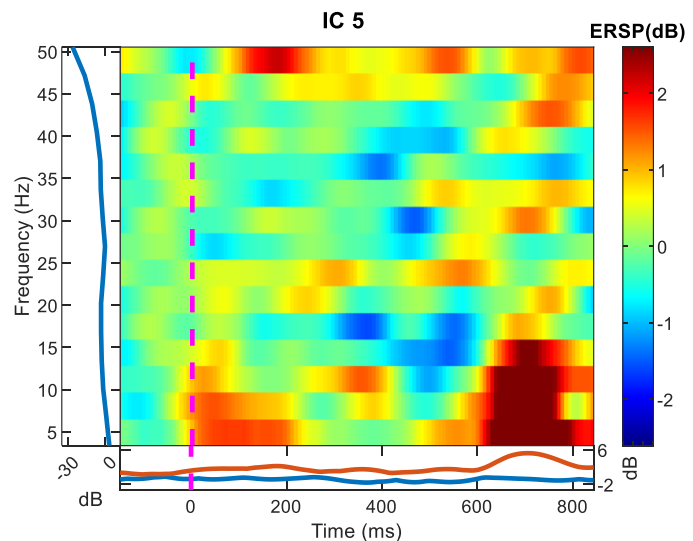
Frontal F7		
Time(ms)	Alpha	
[0, 50]	desync	
[150, 400]	sync	

IC 3

ERP Image for Component 3

109_17
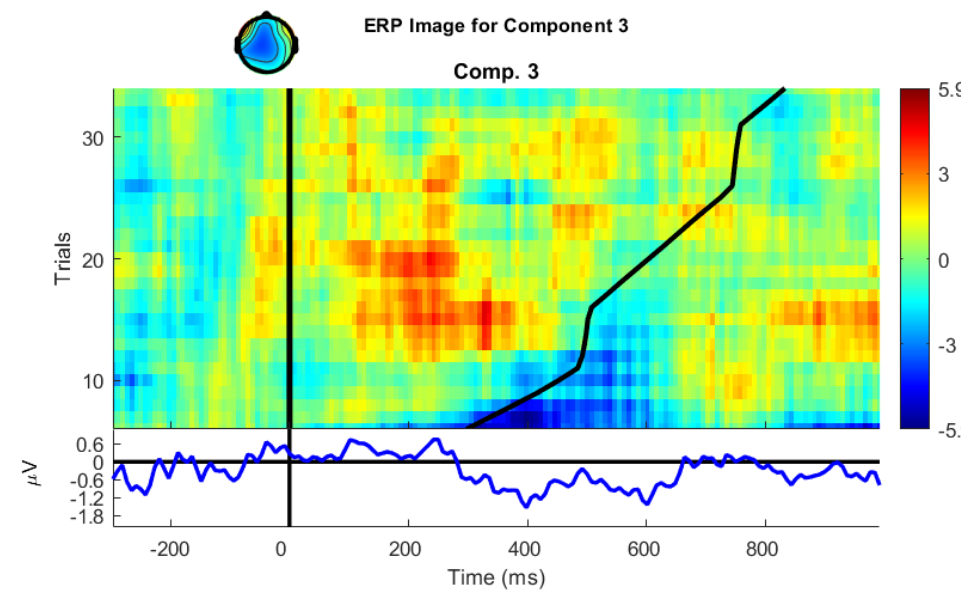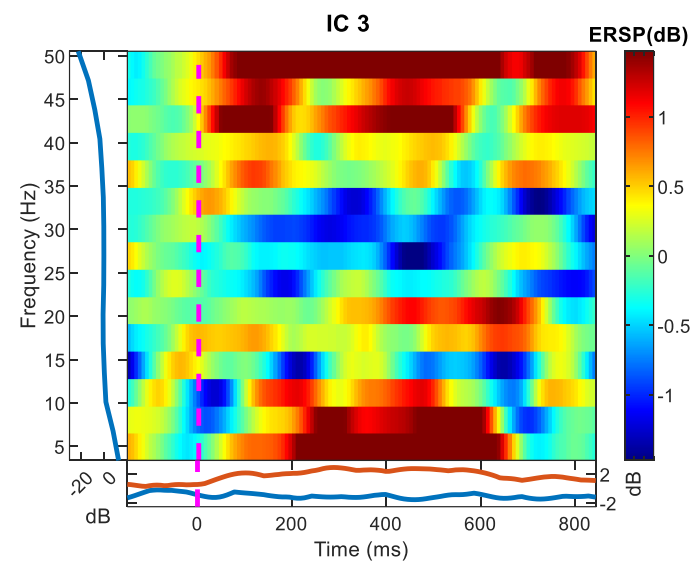
Frontal F3		
Time(ms)	Alpha	
[0, 100]	desync	
[380, 590]	sync	

IC 11

ERP Image for Component 11

109_18
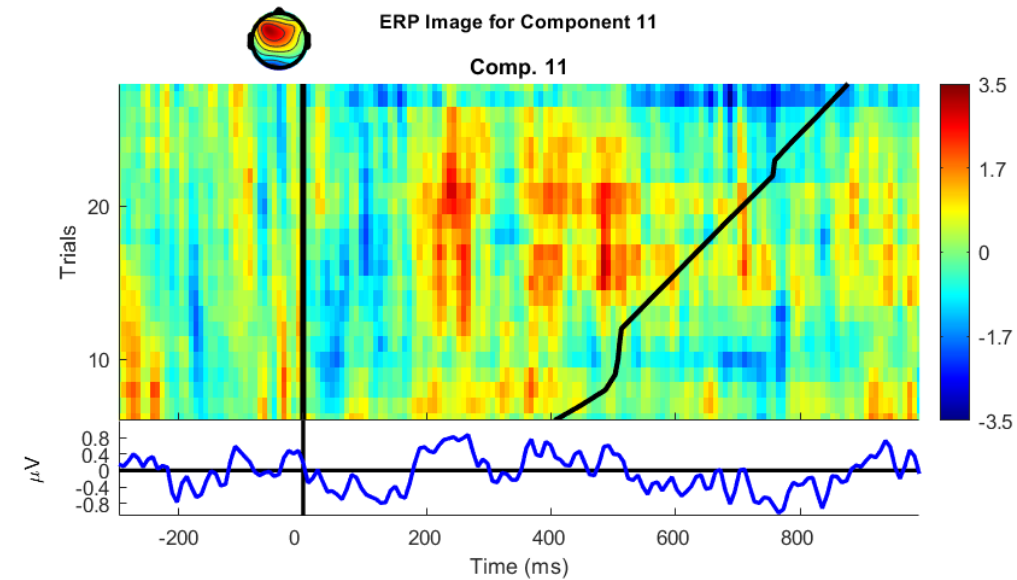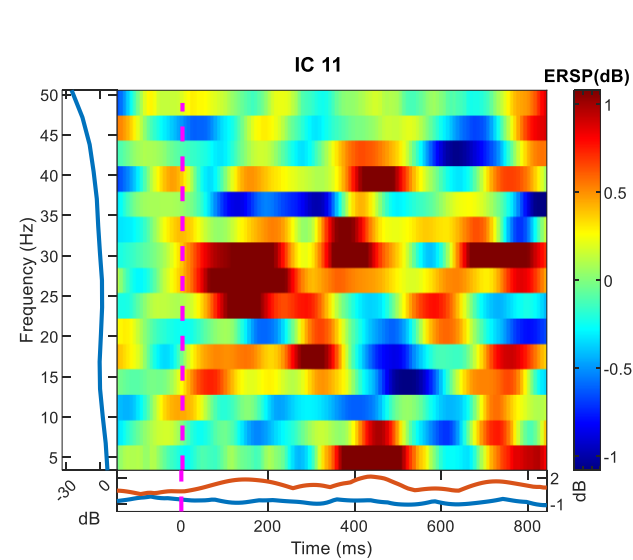
Frontal F8		
Time(ms)	Alpha	
[0, 100]	desync	
[190, 350]	sync	

IC 3

ERP Image for Component 3

109_19

Frontal FC5		
Time(ms)	Alpha	
[0, 100]	desync	
[200, 400]	sync	

IC 13

ERSP(dB)

ERP Image for Component 13

Comp. 13

109_20
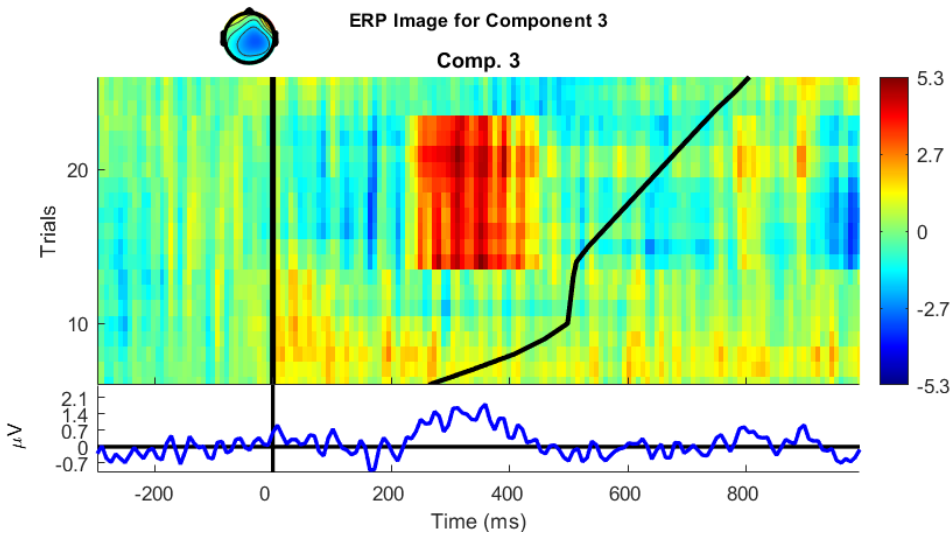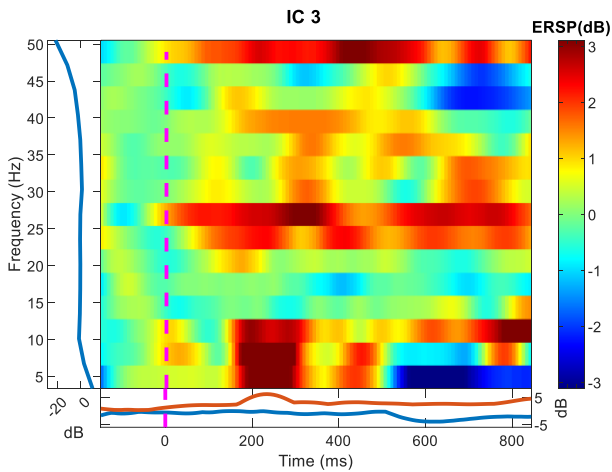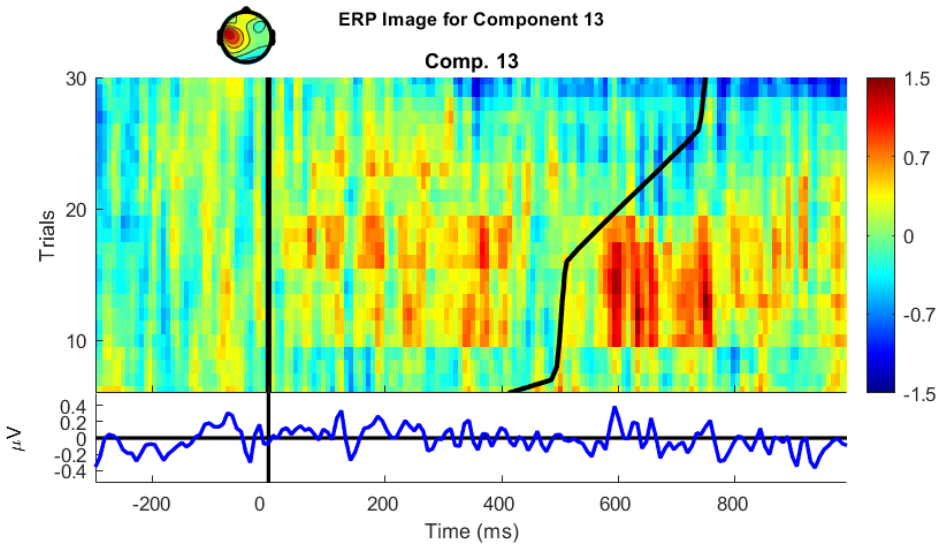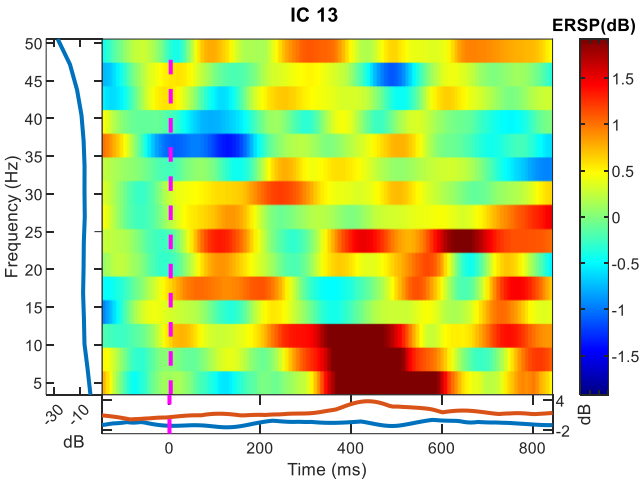
Frontal F3		
Time(ms)	Alpha	
[0, 100]	desync	
[250, 450]	sync	

IC 13

ERSP(dB)

ERP Image for Component 13

Comp. 13

109_21

Frontal F4		
Time(ms)	Alpha	
[0, 100]	desync	
[200, 400]	sync	

IC 9

ERP Image for Component 9

109_24
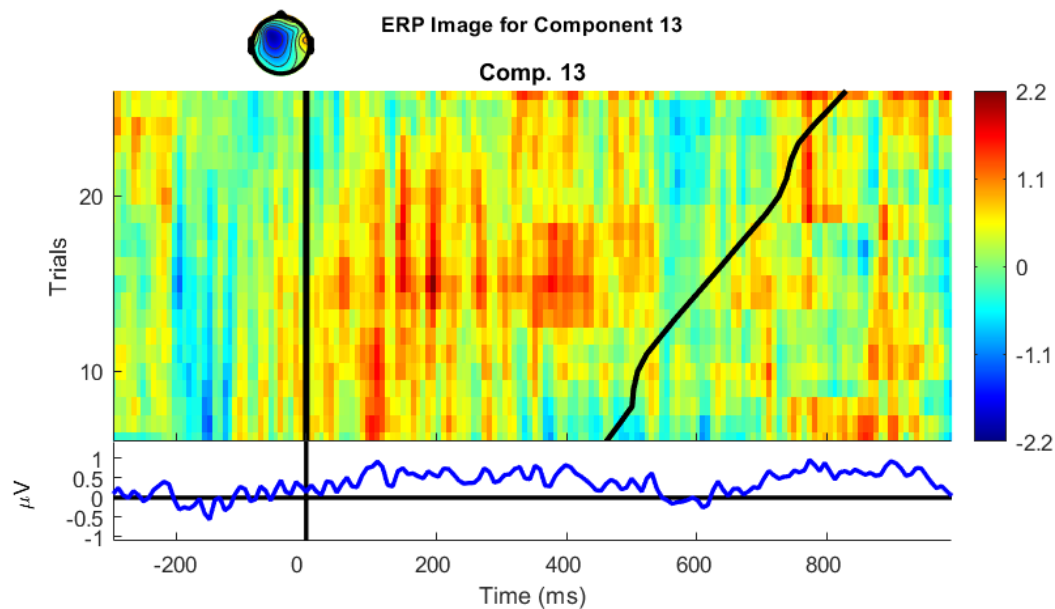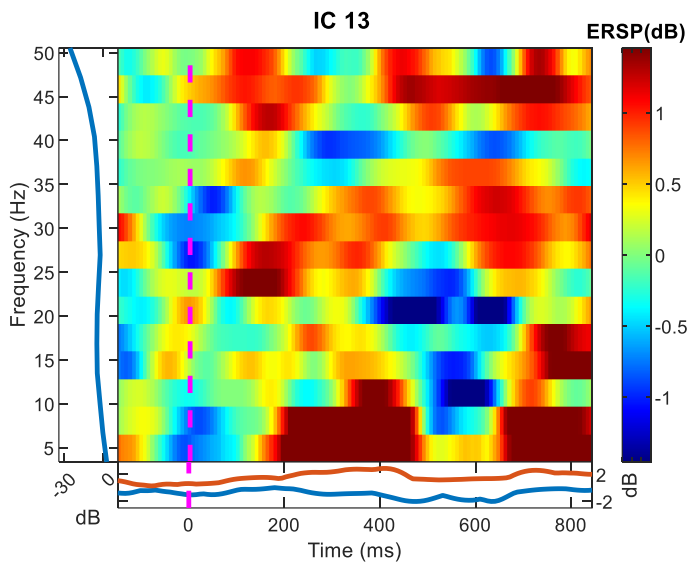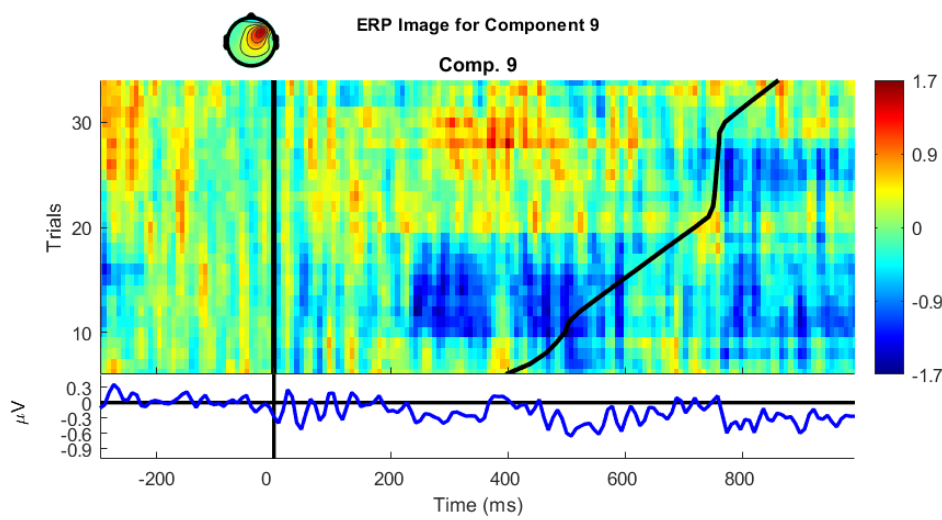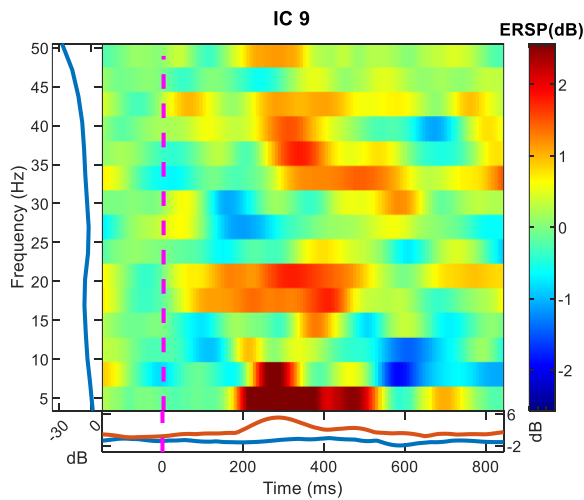
Frontal F3		
Time(ms)	Alpha	
[0, 100]	desync	
[250, 420]	sync	
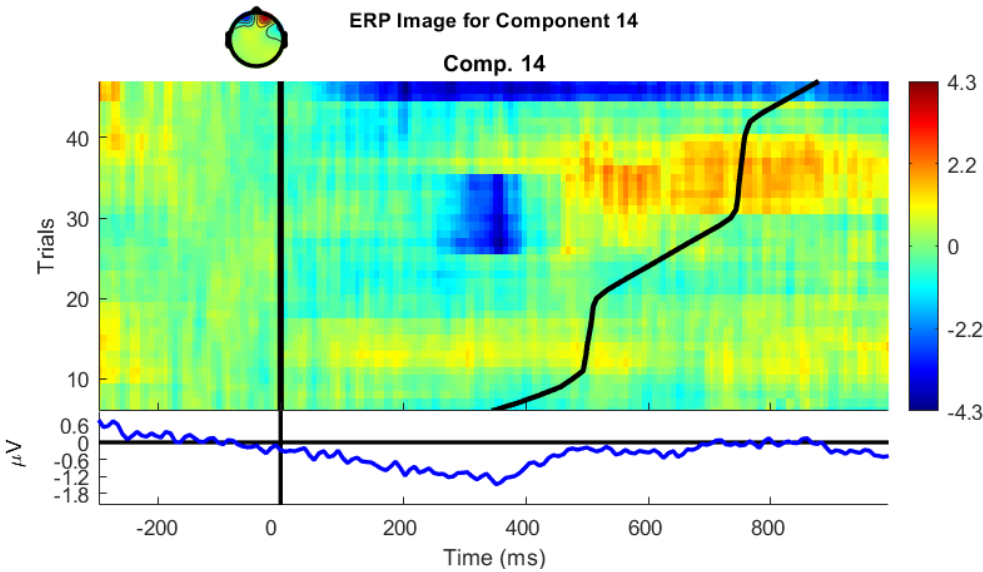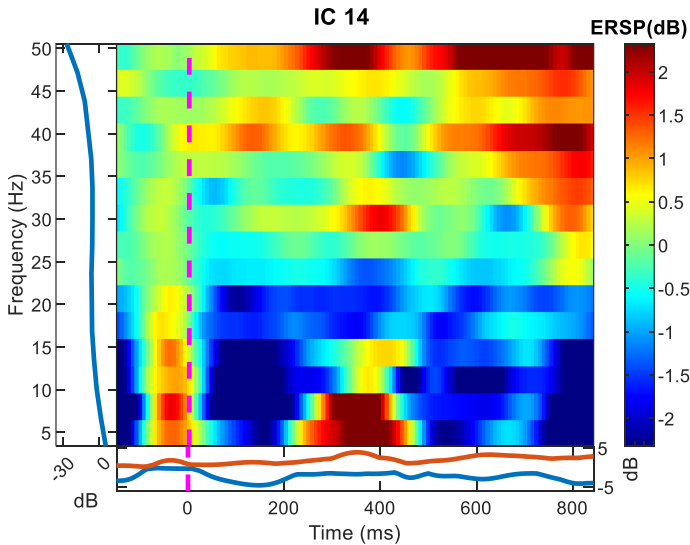
Frontal F4		
Time(ms)	Alpha	
[0, 100]	sync	
[200, 400]	sync	
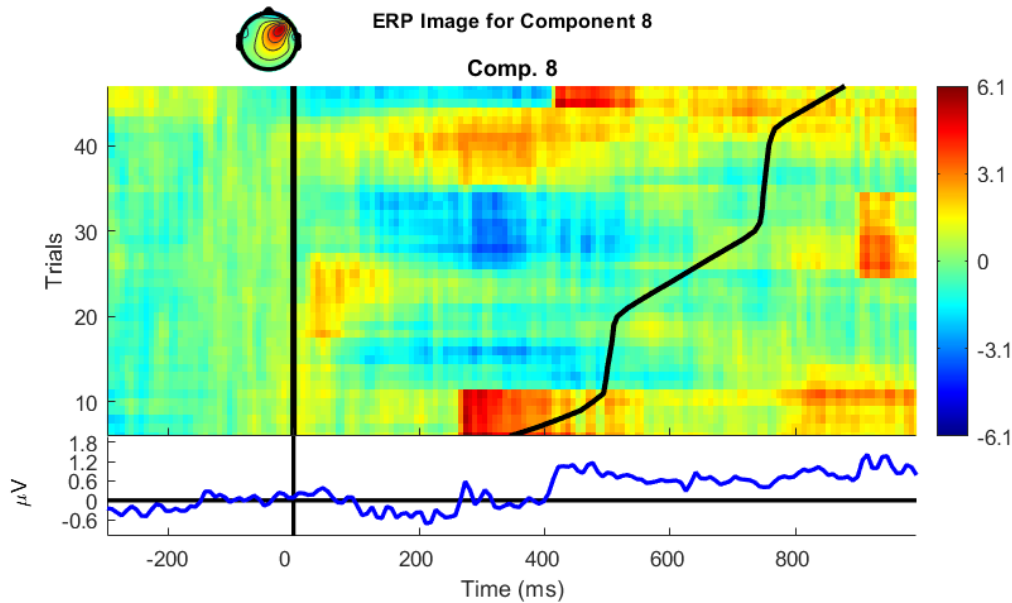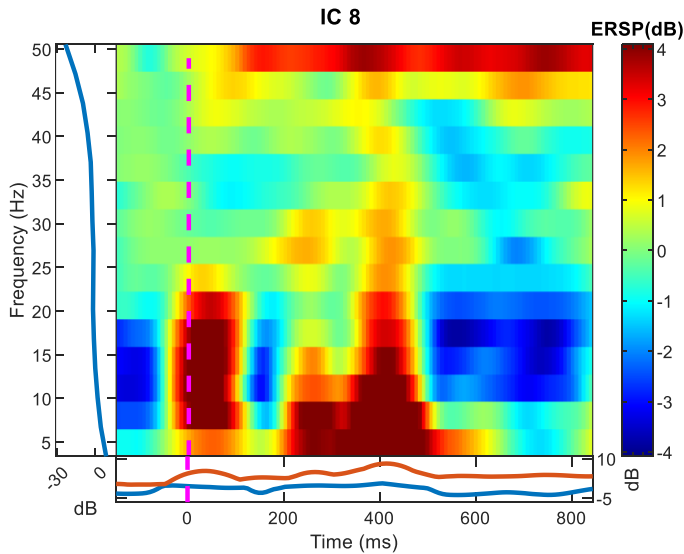
All Regions Summary =====
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Components processed: 8
==p-value (Early vs Middle): 2.0346e-07 (increase)==
p-value (Middle vs Later): 8.1096858e-07 (decrease)
p-value (Early vs Later): 0.55390095 (increase)

Region: Right-Frontal
Components processed: 11
p-value (Early vs Middle): 0.47529 (increase)
p-value (Middle vs Later): 0.021865048 (decrease)
p-value (Early vs Later): 0.058472085 (decrease)

No data available for Left-Temporal

No data available for Right-Temporal

No data available for Left-Occipital

No data available for Right-Occipital

No data available for Left-Parietal

No data available for Right-Parietal

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