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

Subject 107

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.

Event 7

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

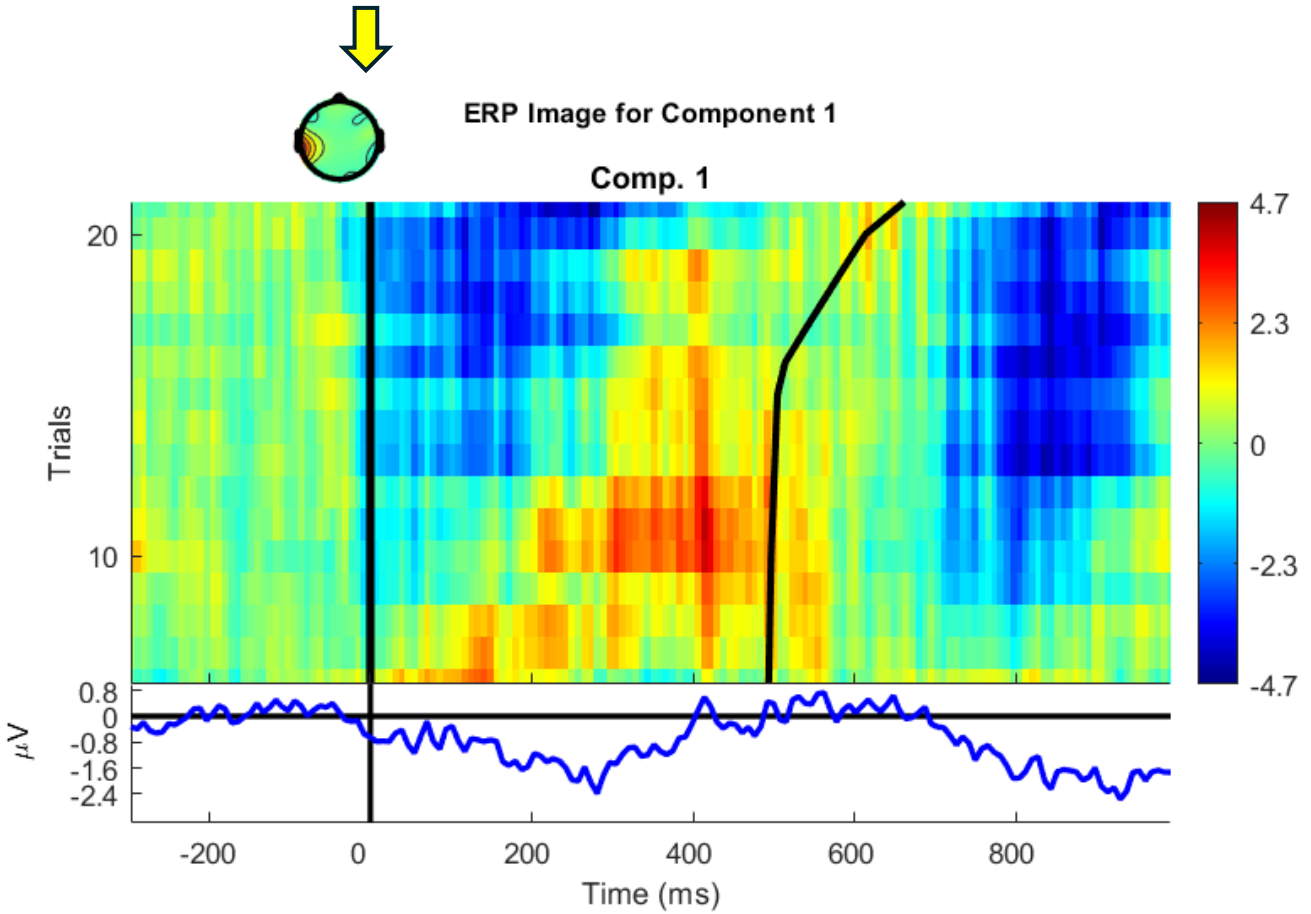
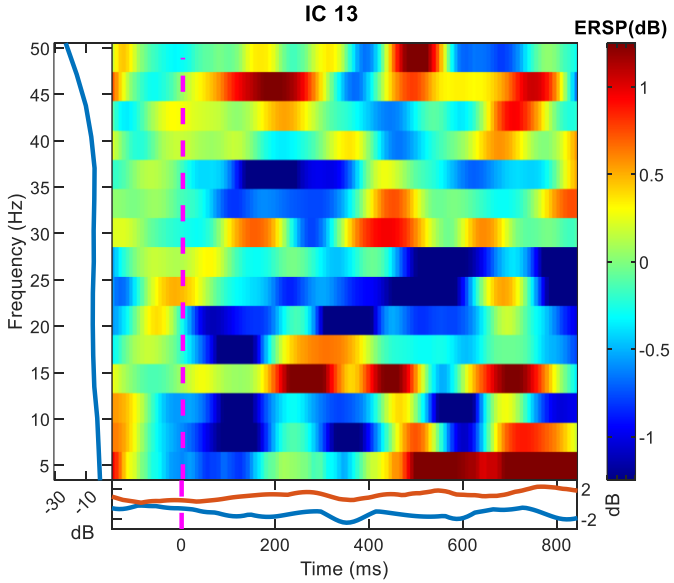
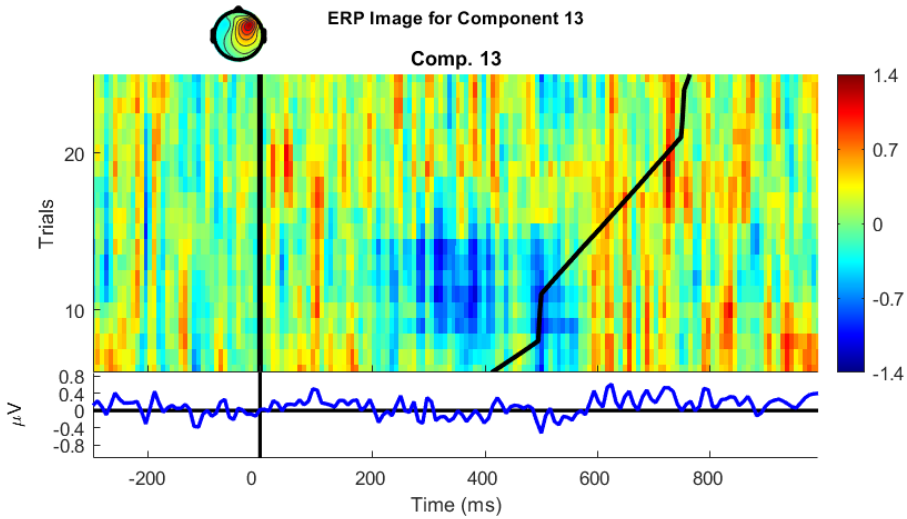


Figure 1. ERP of the 1st component for subject 104 training session 1. Event '7' is the stimulus onset when time = 0ms. Event '6' marks the car's forward movement with a black line, sorted by latency

107_2

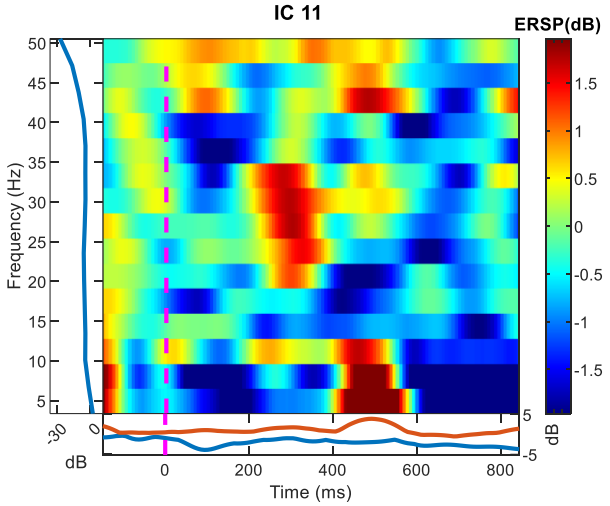
Frontal F4		
Time(ms)	Alpha	
[-50, 100]	desync	
[200, 400]	sync	

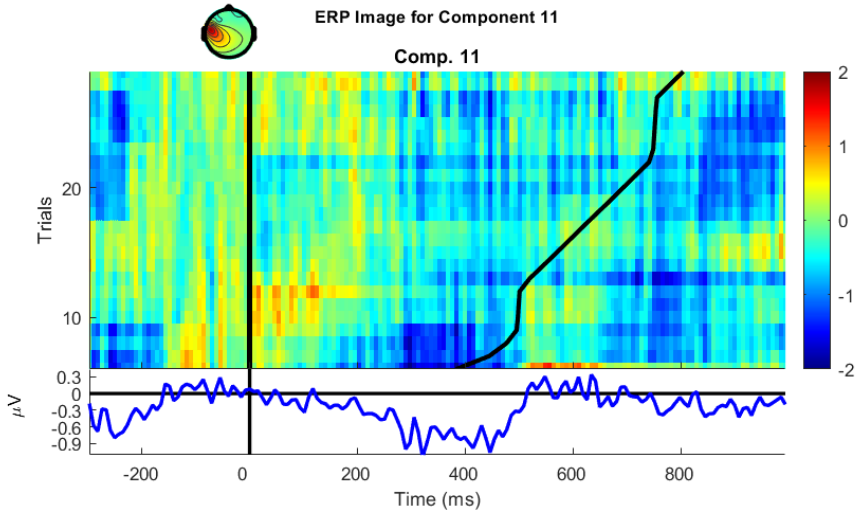




107_4

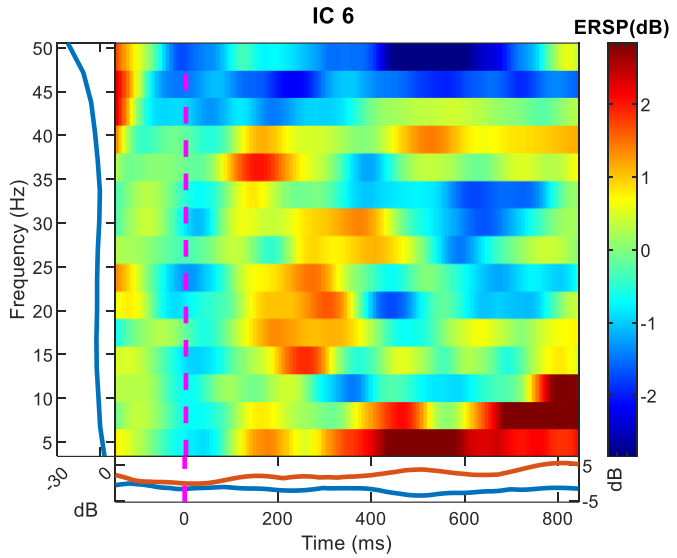
Frontal FC5		
Time(ms)	Alpha	
[-50, 100]	desync	
[200, 400]	sync	

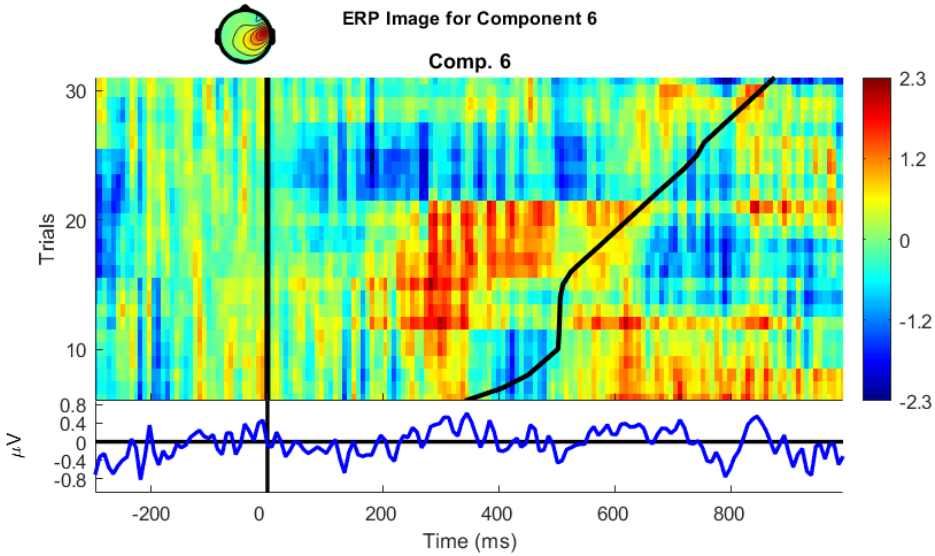




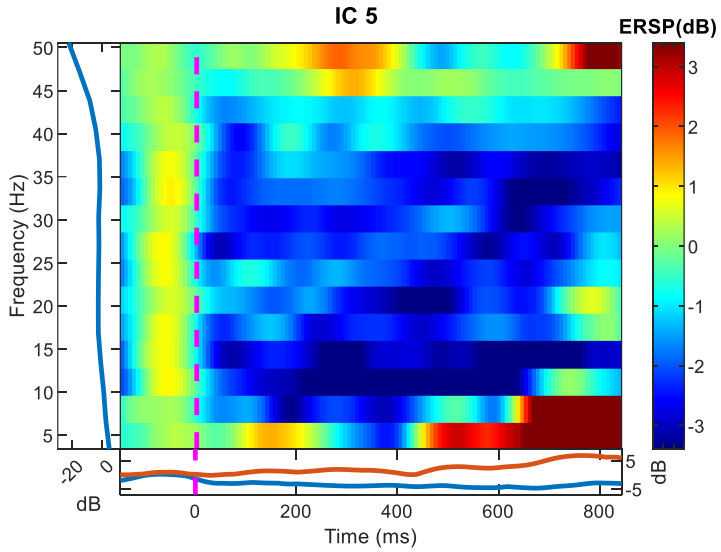
107_5

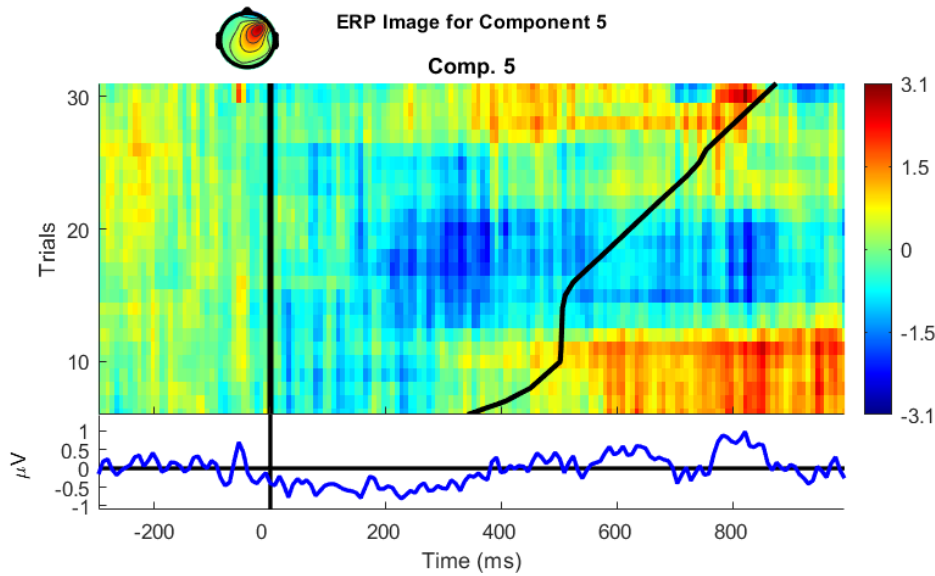
Frontal FC6		
Time(ms)	Alpha	
[-50, 100]	desync	
[150, 390]	sync	





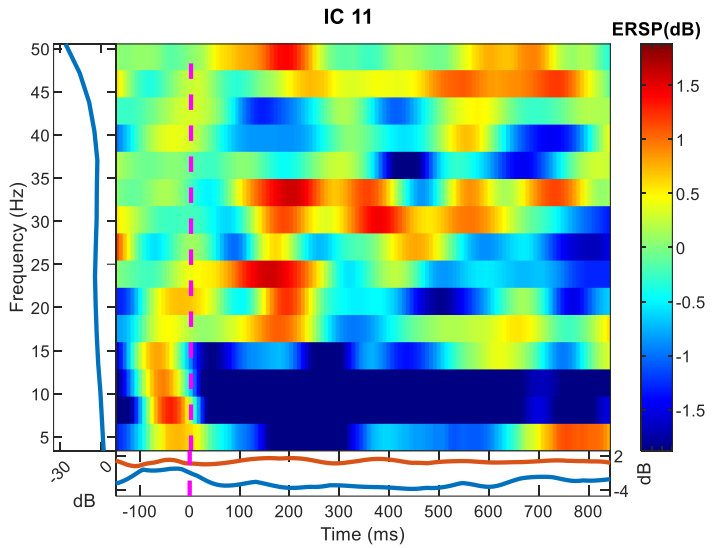
Frontal F4		
Time(ms)	Alpha	
[-50, 100]	desync	
[200, 400]	desync	

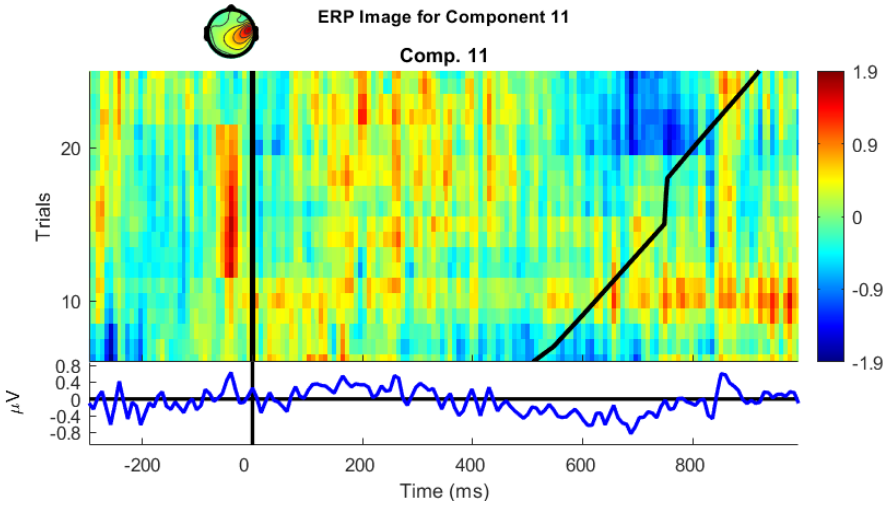




107_6

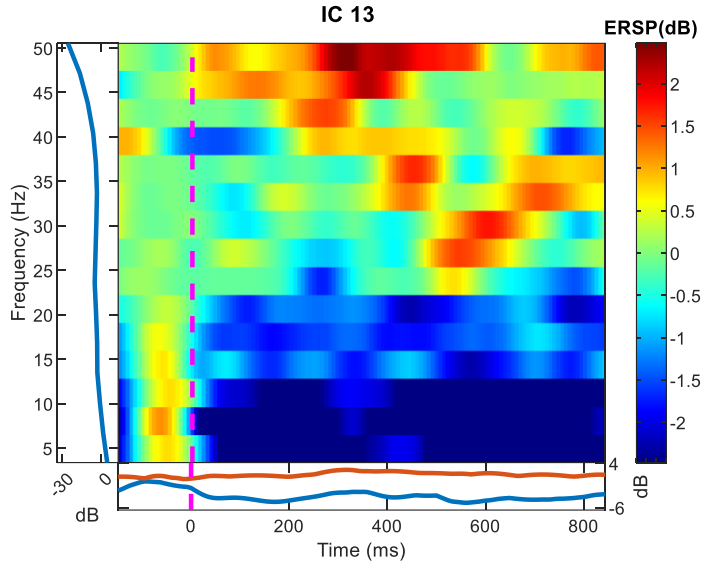
Frontal FC6		
Time(ms)	Alpha	
[0, 100]	desync	
[200, 400]	desync	

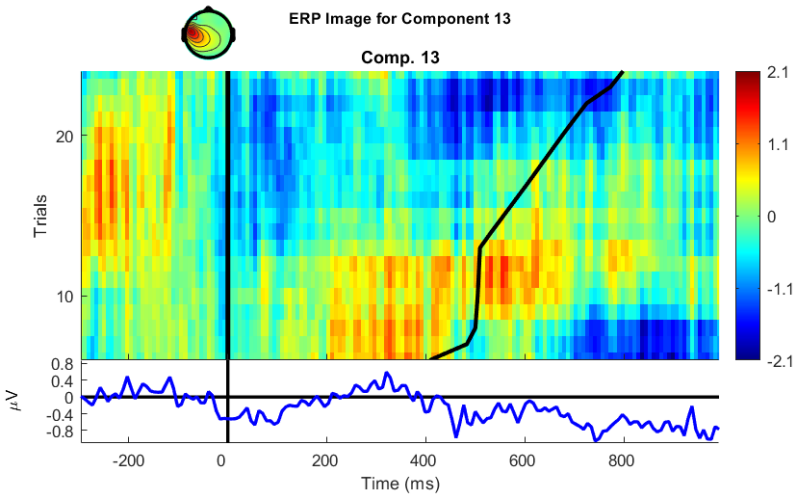




107_7

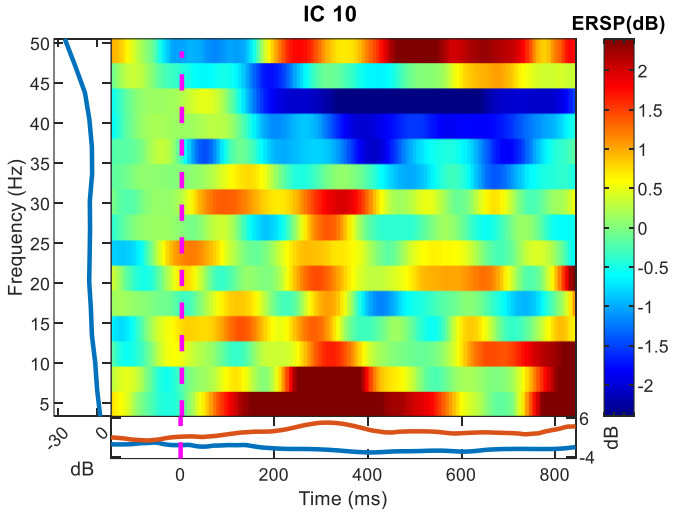
Frontal FC5		
Time(ms)	Alpha	
[0, 100]	desync	
[200, 400]	desync	

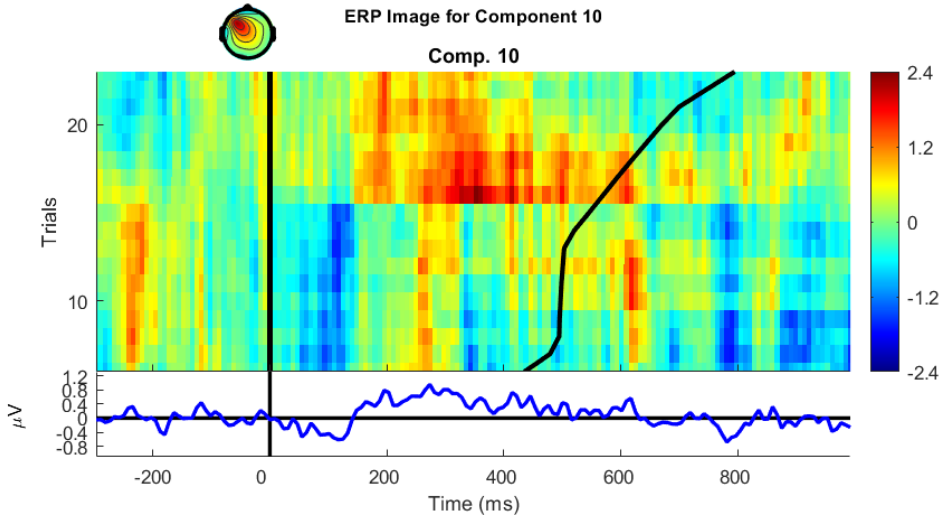




107_10

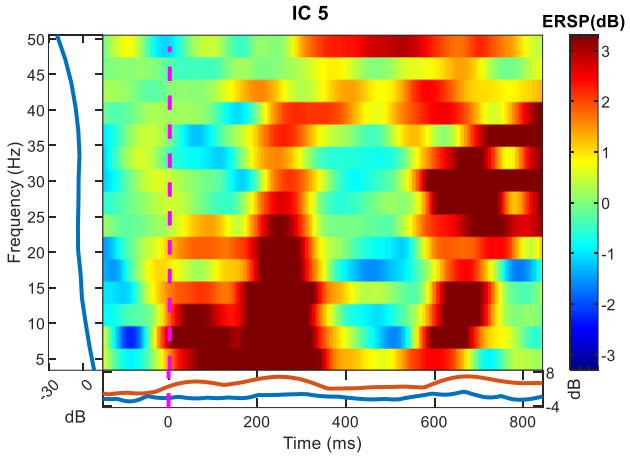
Frontal F3		
Time(ms)	Alpha	
[-50, 50]	desync	
[200, 400]	sync	

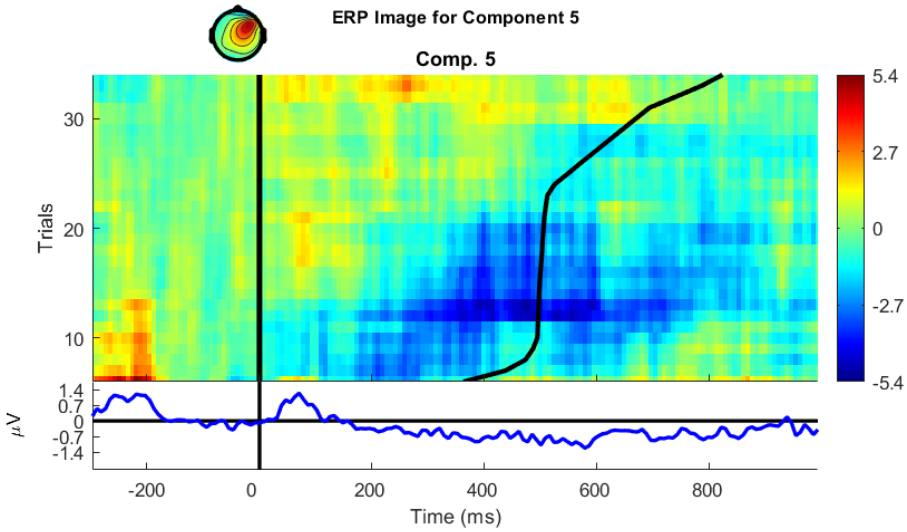




107_11

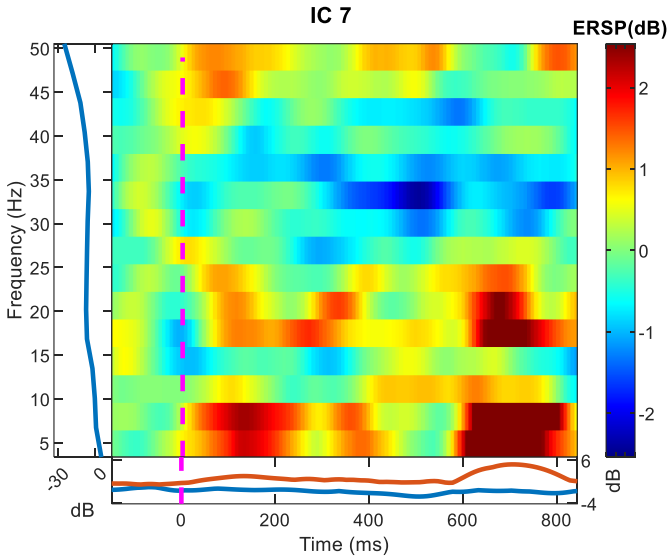
Frontal F4		
Time(ms)	Alpha	
[0, 100]	sync	
[200, 400]	sync	

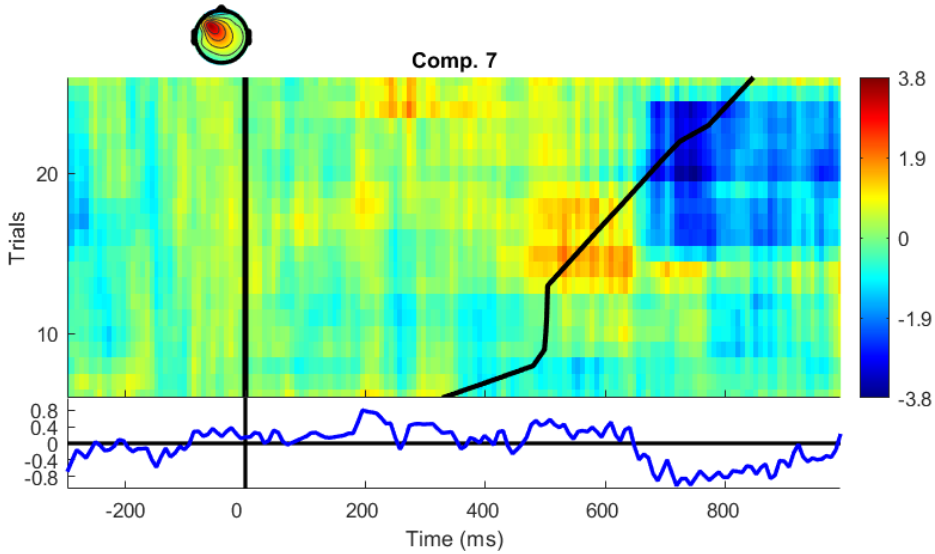




107_12

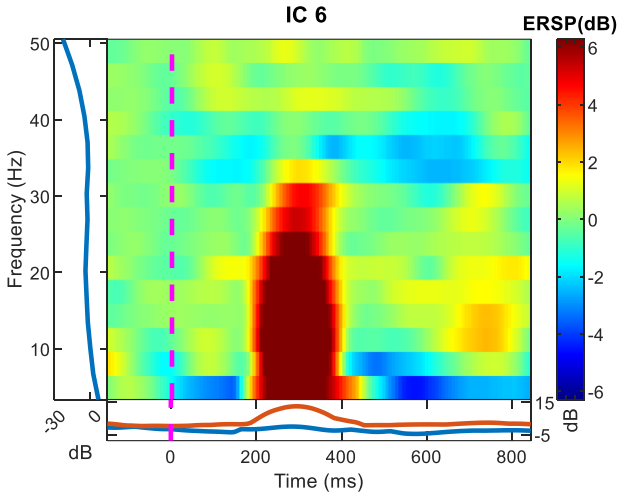
Frontal F3		
Time(ms)	Alpha	
[0, 200]	sync	
[200, 400]	sync	

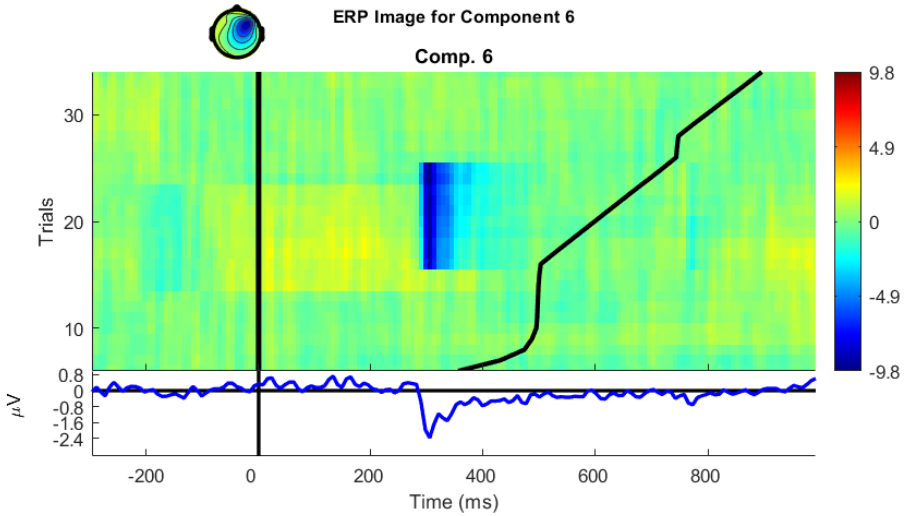




107_13

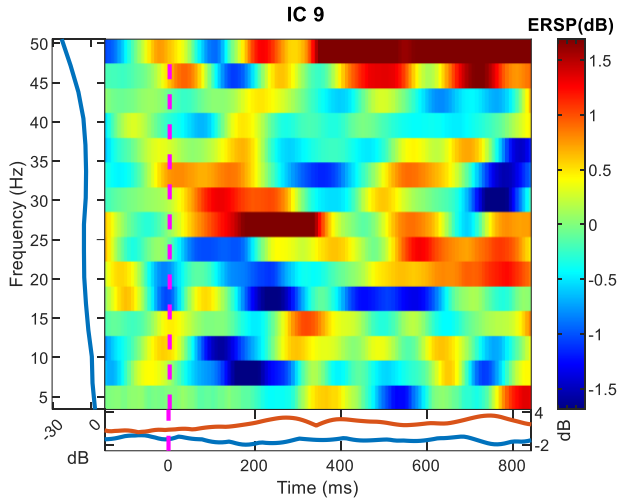
Frontal F4		
Time(ms)	Alpha	
[0, 100]	desync	
[200, 400]	sync	

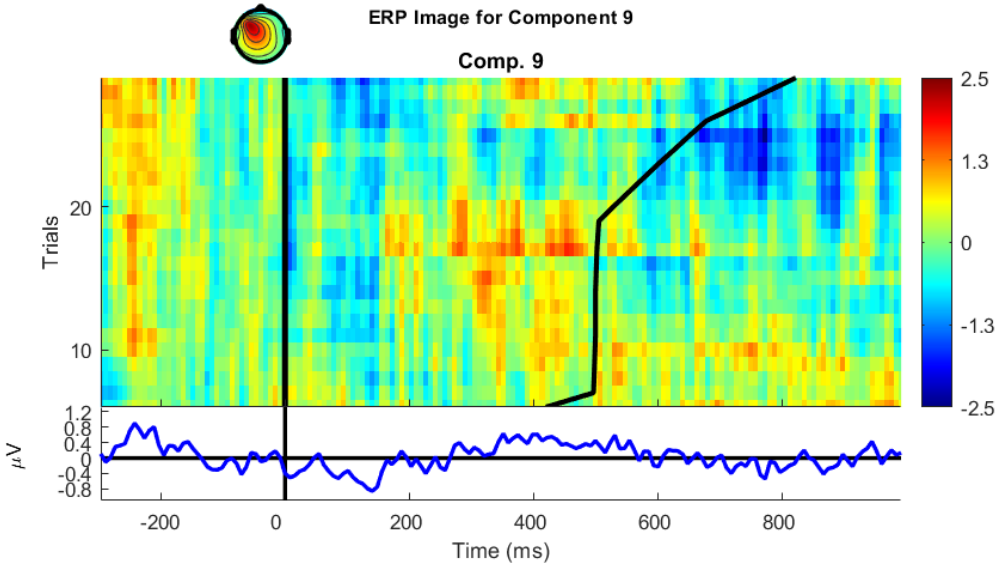




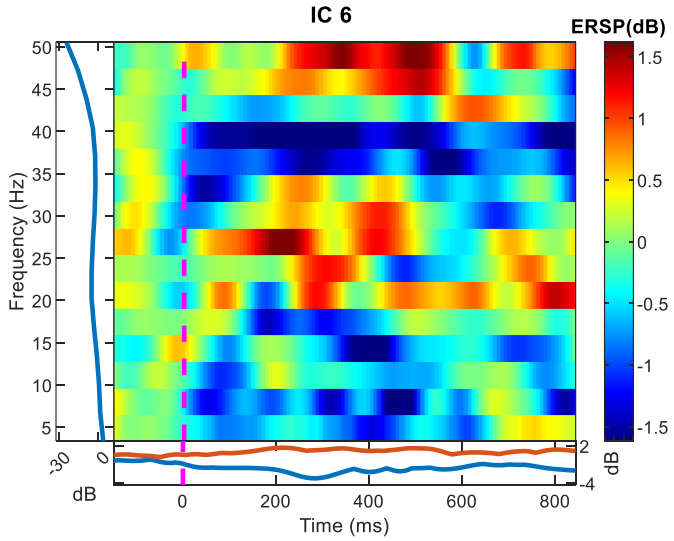
107_18

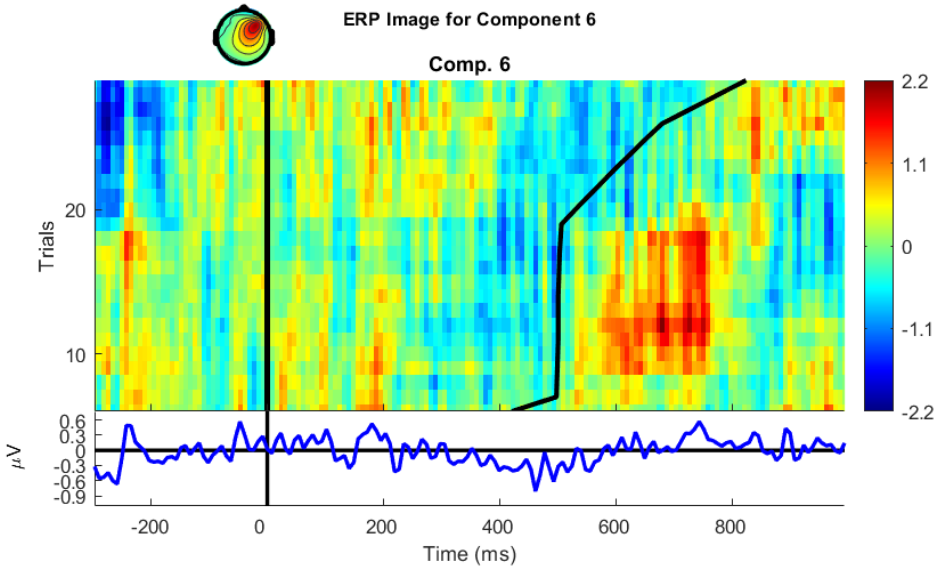
Frontal F3		
Time(ms)	Alpha	
[0, 100]	desync	
[300, 500]	sync	





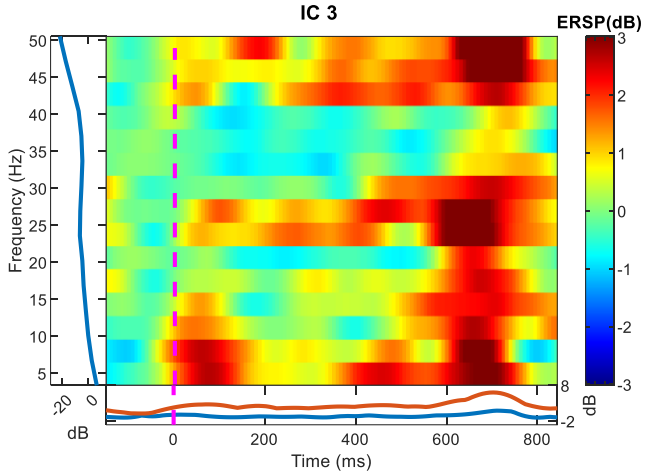
Frontal F4		
Time(ms)	Alpha	
[0, 100]	desync	
[200, 400]	sync	

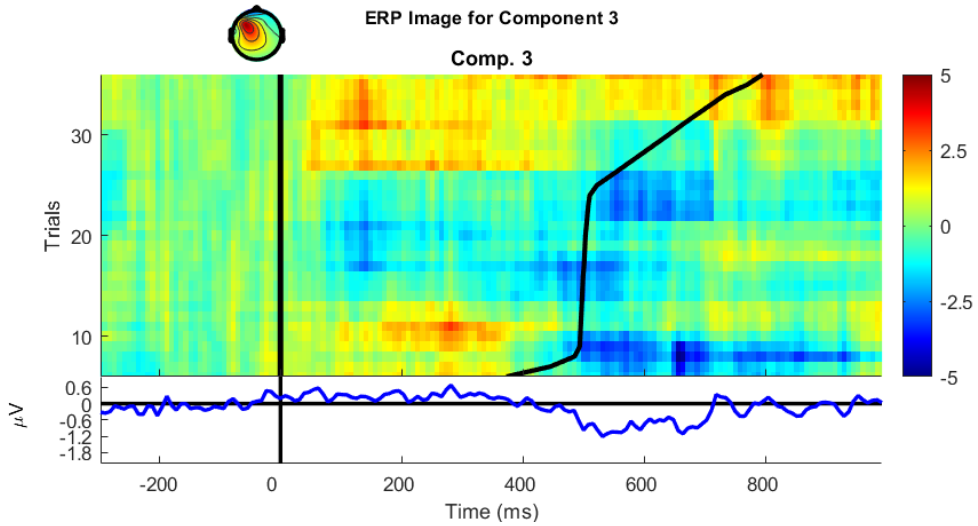




107_21

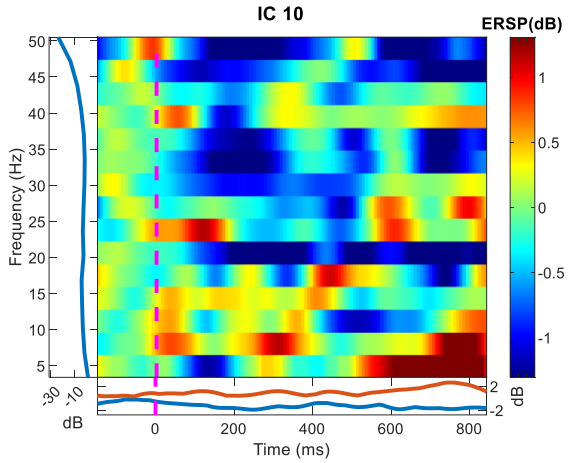
Frontal F3		
Time(ms)	Alpha	
[0, 200]	sync	
[400, 800]	sync	

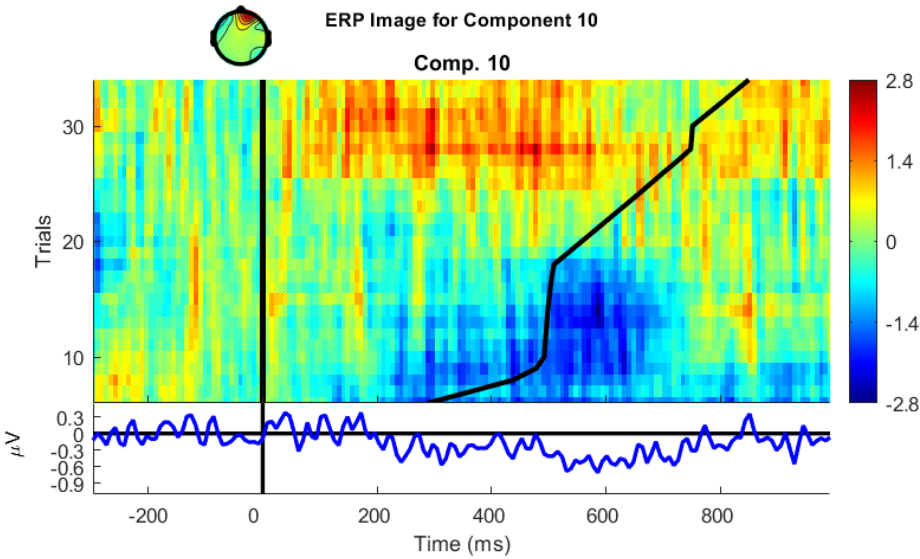




107_24

Frontal AF4		
Time(ms)	Alpha	
[-50, 100]	desync	
[200, 400]	sync	





===== All Regions Summary =====
Region: Left-Frontal
Components processed: 6
p-value (Early vs Middle): 0.0078223 (increase)
p-value (Middle vs Later): 0.0015537354 (decrease)
p-value (Early vs Later): 0.57339117 (decrease)

Region: Right-Frontal
Components processed: 9
p-value (Early vs Middle): 0.0010182 (decrease)
p-value (Middle vs Later): 0.004624703 (increase)
p-value (Early vs Later): 0.86550305 (increase)

Region: Left-Temporal
Components processed: 0
p-value (Early vs Middle): NA
p-value (Middle vs Later): NA
p-value (Early vs Later): NA

Region: Right-Temporal
Components processed: 0
p-value (Early vs Middle): NA
p-value (Middle vs Later): NA
p-value (Early vs Later): NA

Region: Left-Occipital
Components processed: 0
p-value (Early vs Middle): NA
p-value (Middle vs Later): NA
p-value (Early vs Later): NA

Region: Right-Occipital
Components processed: 0
p-value (Early vs Middle): NA
p-value (Middle vs Later): NA
p-value (Early vs Later): NA

Region: Left-Parietal
Components processed: 0
p-value (Early vs Middle): NA
p-value (Middle vs Later): NA
p-value (Early vs Later): NA

Region: Right-Parietal
Components processed: 0
p-value (Early vs Middle): NA
p-value (Middle vs Later): NA
p-value (Early vs Later): NA
