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

Subject 103

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' (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

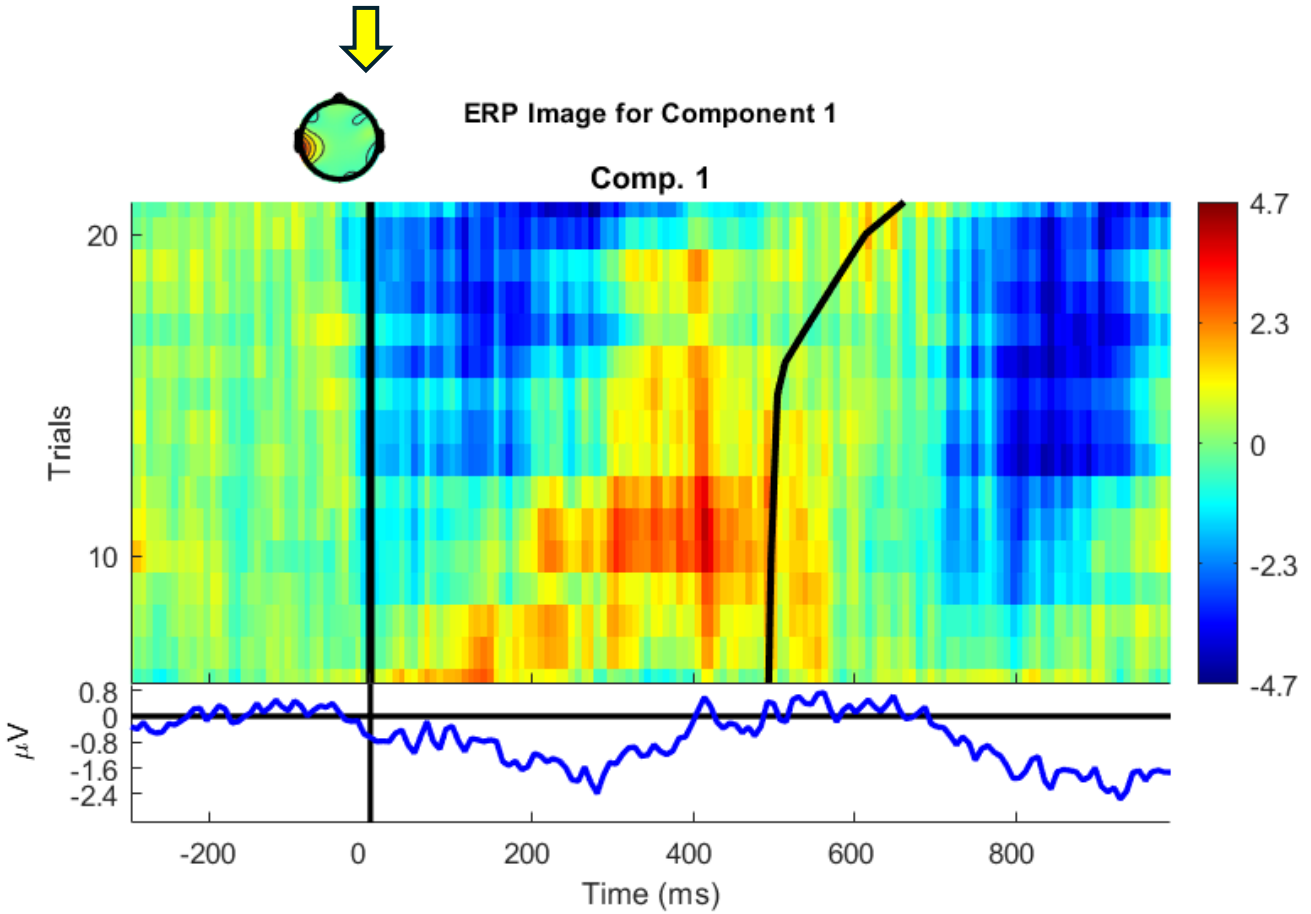
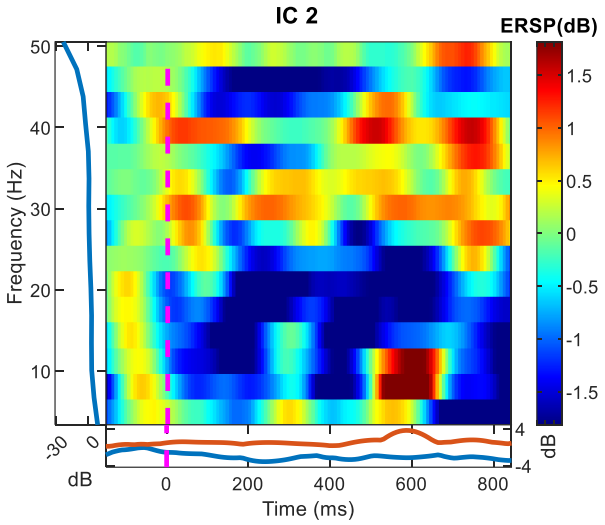
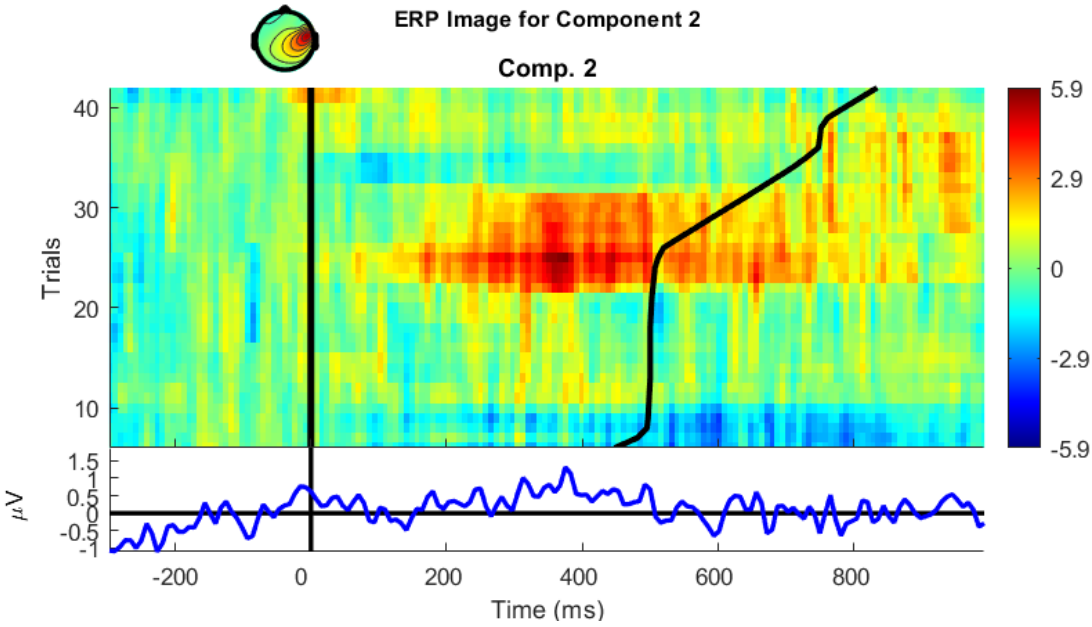


Figure 1. ERP of the 1st component for subject 104 training session 1. Event '7' is the stimulus onset when time = 0ms. Event '6' marks the car's forward movement with a black line, sorted by latency

103_1

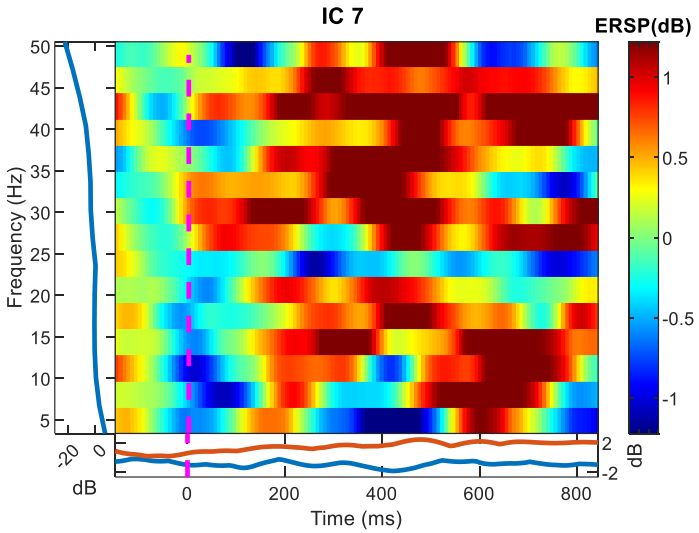
Frontal FC6		
Time(ms)	Alpha	
[-100, 50]	desync	
[500, 650]	sync	

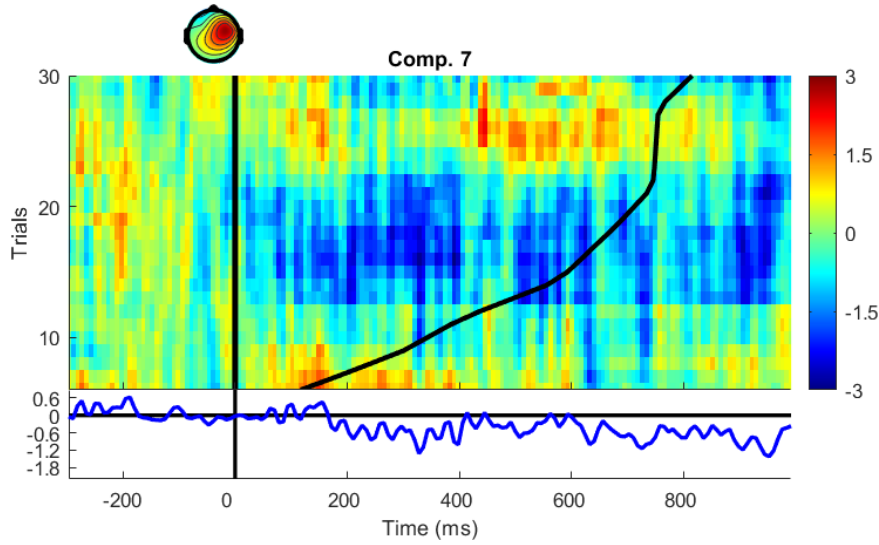




103_2

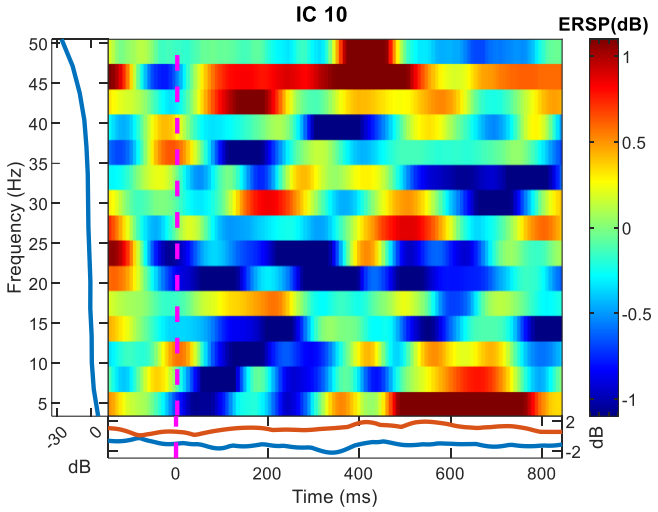
Frontal FC6		
Time(ms)	Alpha	
[-50, 100]	desync	
[500, 700]	sync	

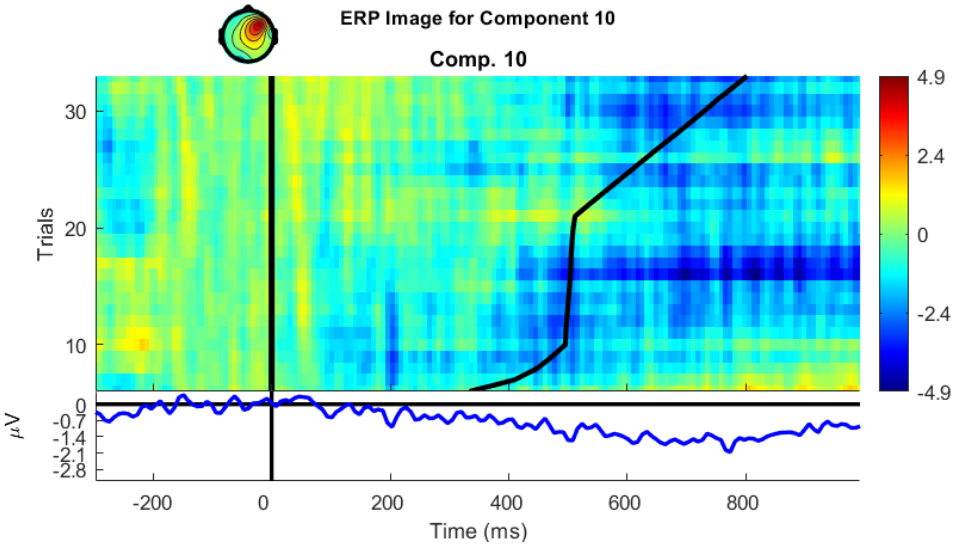




103_3

Frontal F4		
Time(ms)	Alpha	
[-50, 100]	desync	
[500, 700]	sync	

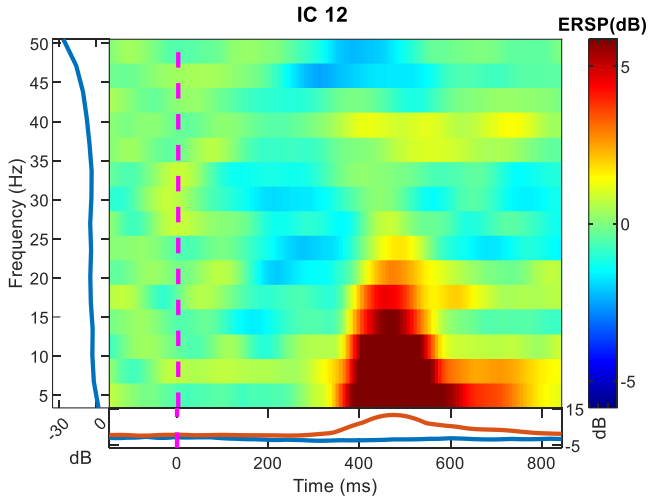


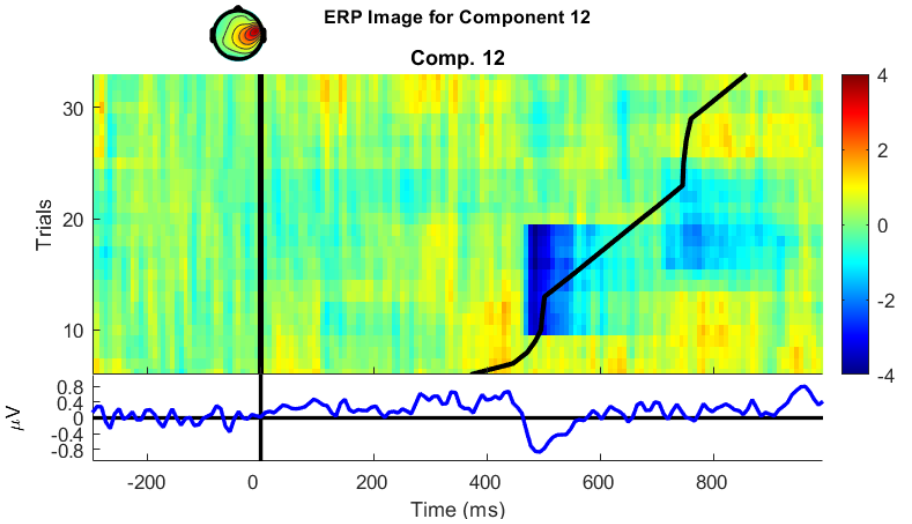


103_4

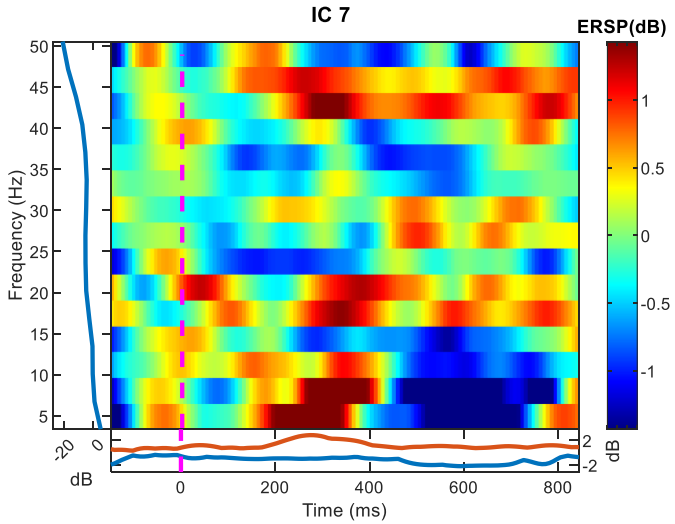
Frontal FC6		
Time(ms)	Alpha	
[-50, 100]	desync	
[400, 600]	sync	

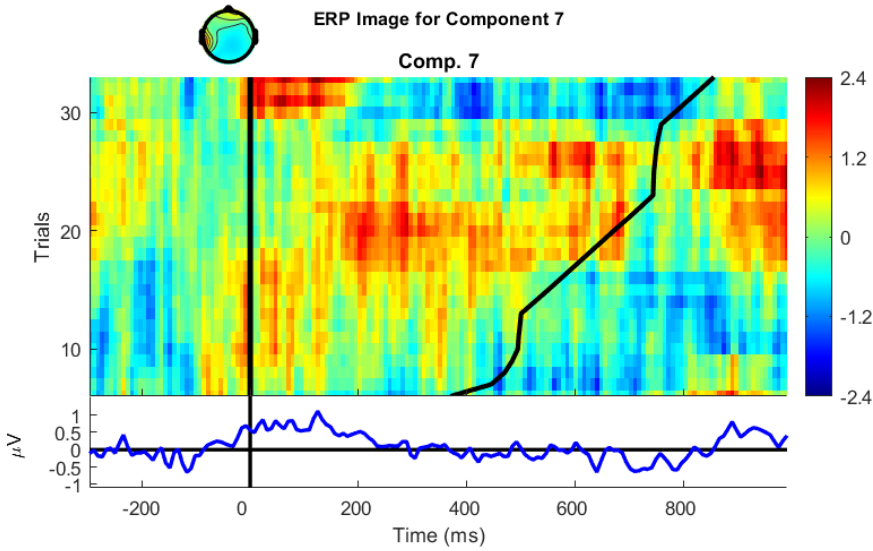
!!





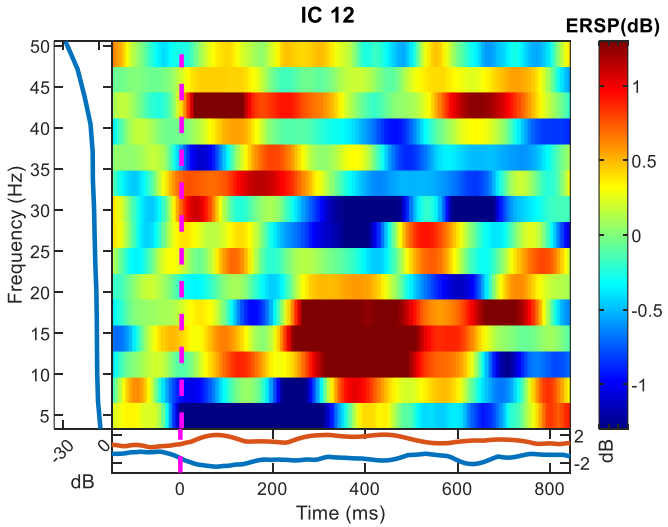
Frontal FC5		
Time(ms)	Alpha	
[-50, 100]	desync	
[350, 550]	sync	

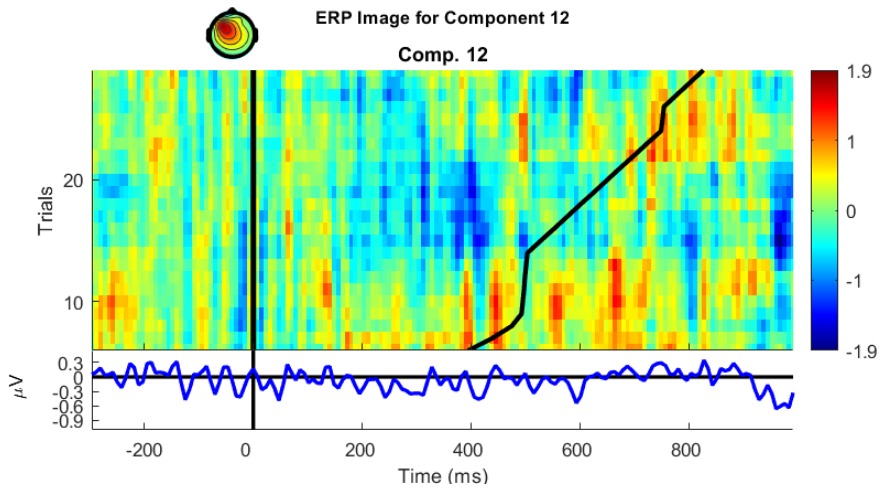




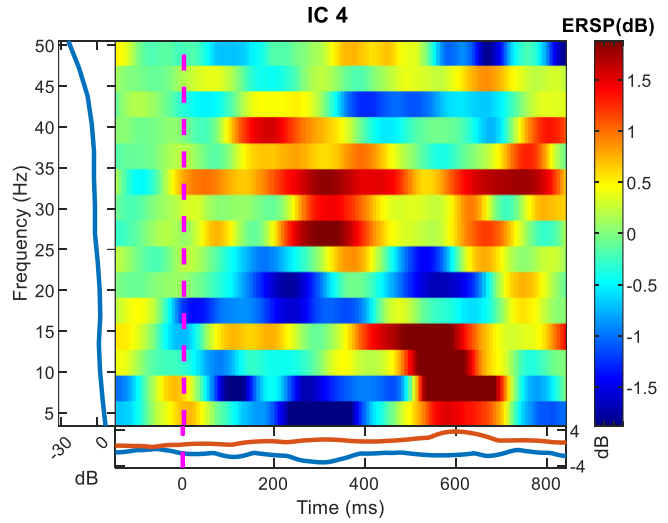
103_6

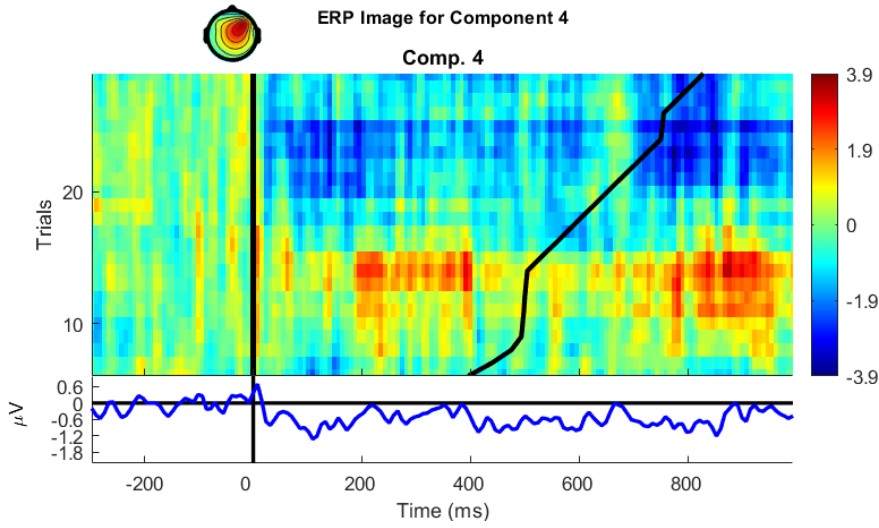
Frontal F3		
Time(ms)	Alpha	
[-50, 100]	desync	
[350, 600]	sync	





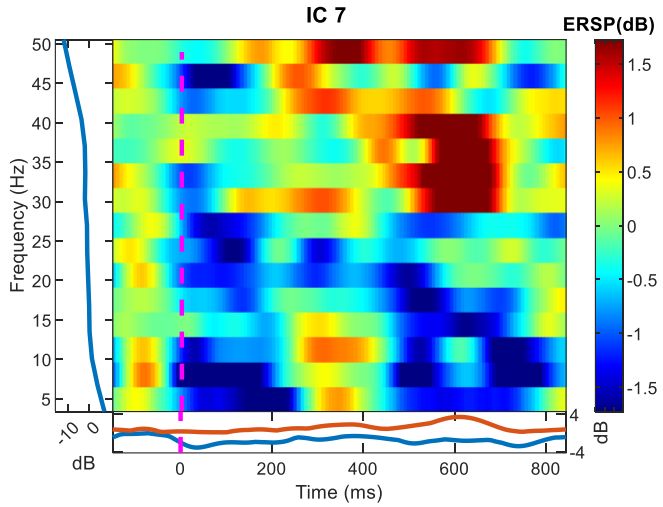
Frontal F4		
Time(ms)	Alpha	
[-50, 100]	desync	
[350, 600]	sync	

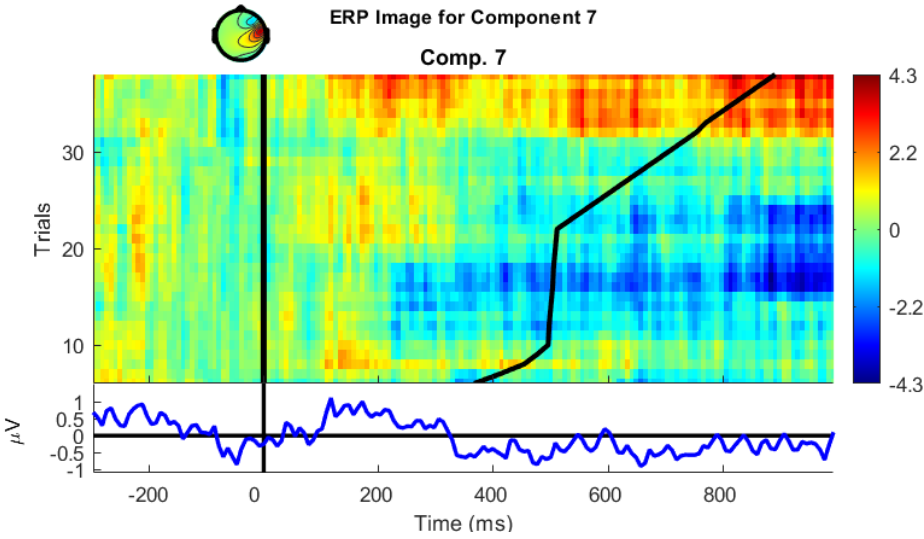




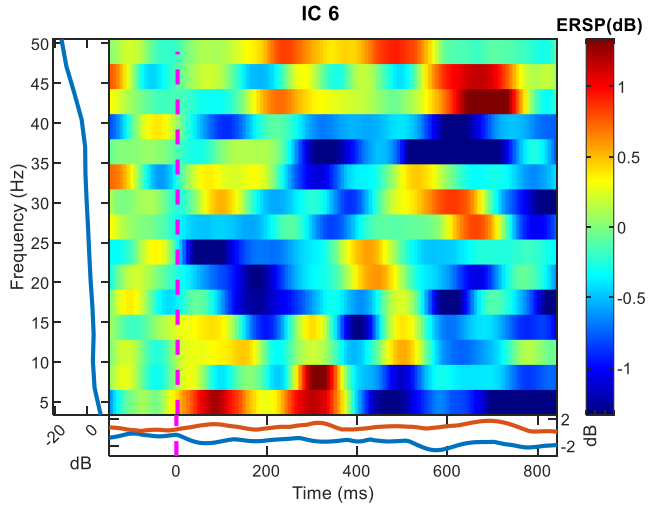
103_8

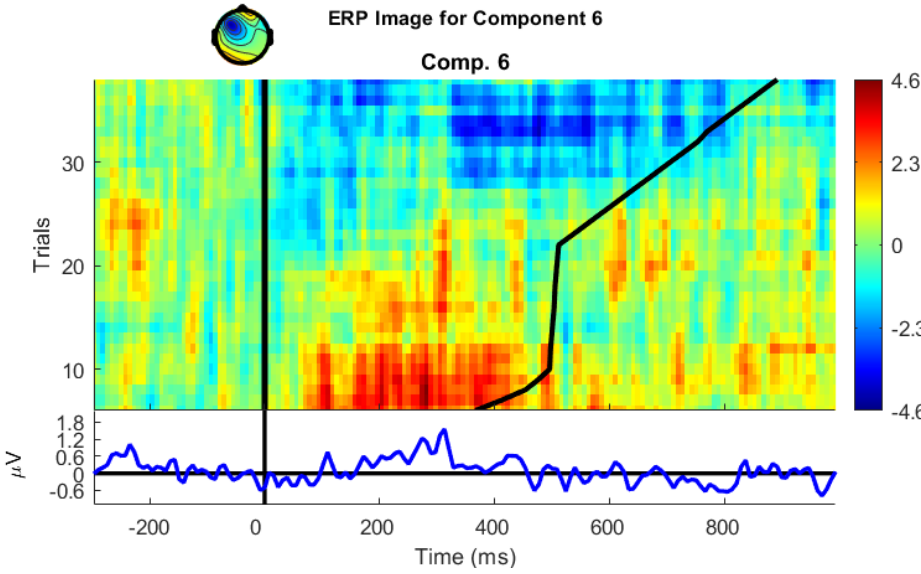
Frontal FC6		
Time(ms)	Alpha	
[-50, 100]	desync	
[400, 600]	sync	





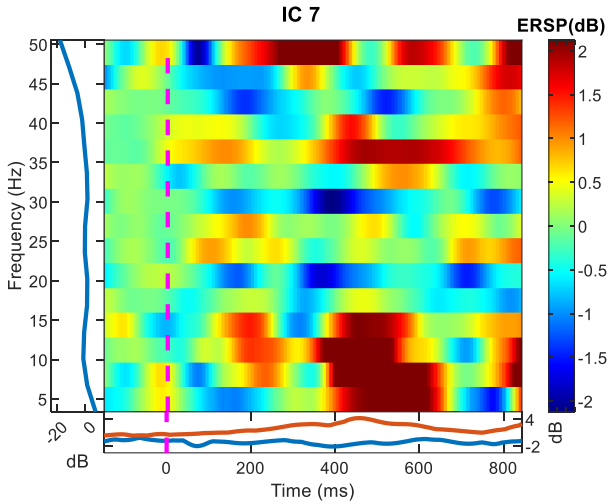
Frontal F3		
Time(ms)	Alpha	
[-50, 100]	desync	
[400, 600]	sync	

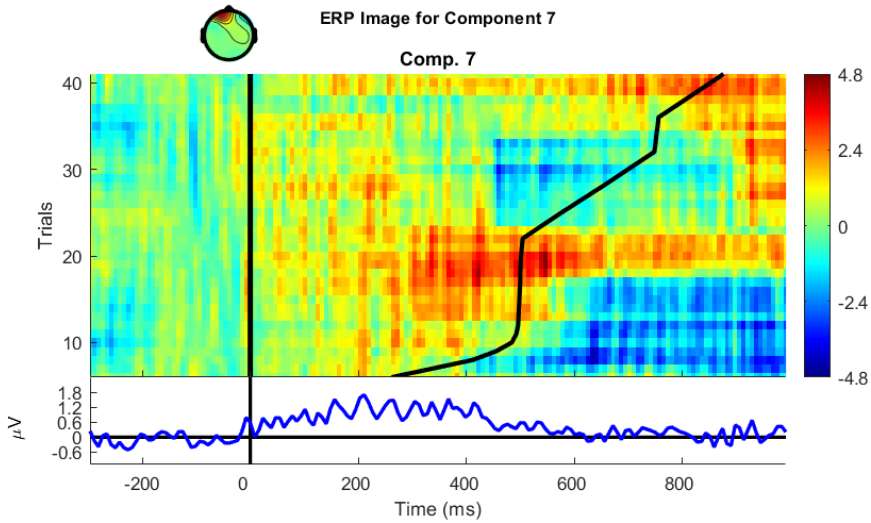




103_9

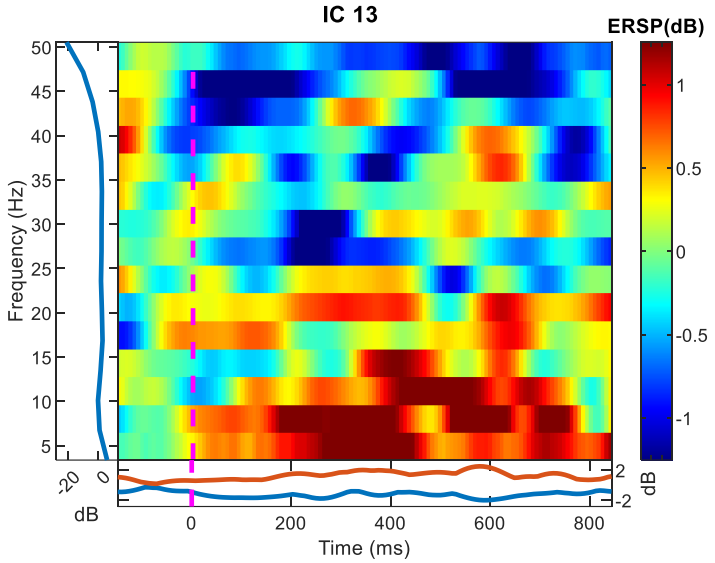
Frontal AF3		
Time(ms)	Alpha	
[-50, 100]	desync	
[500, 700]	sync	

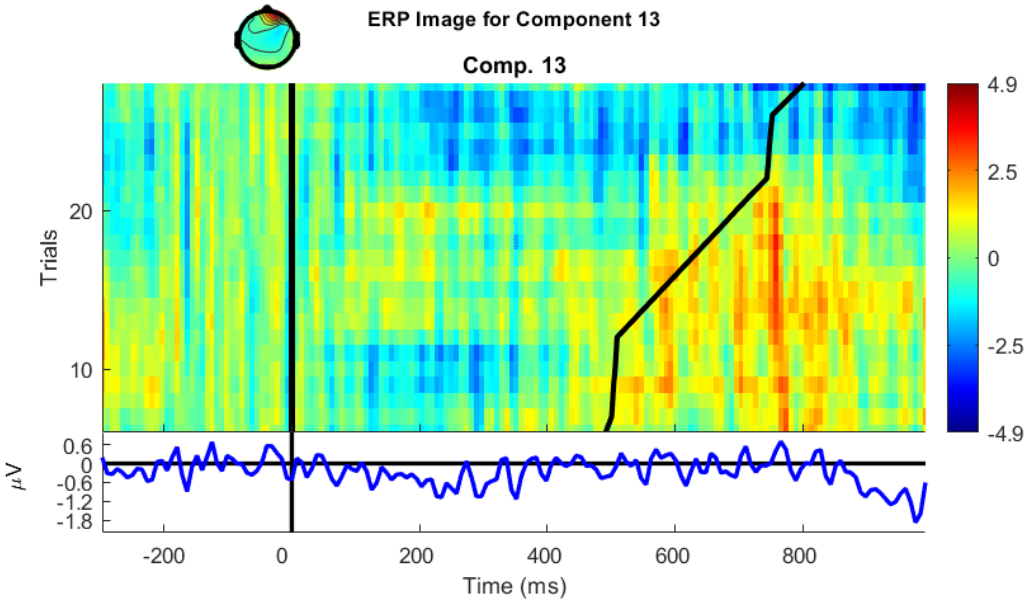




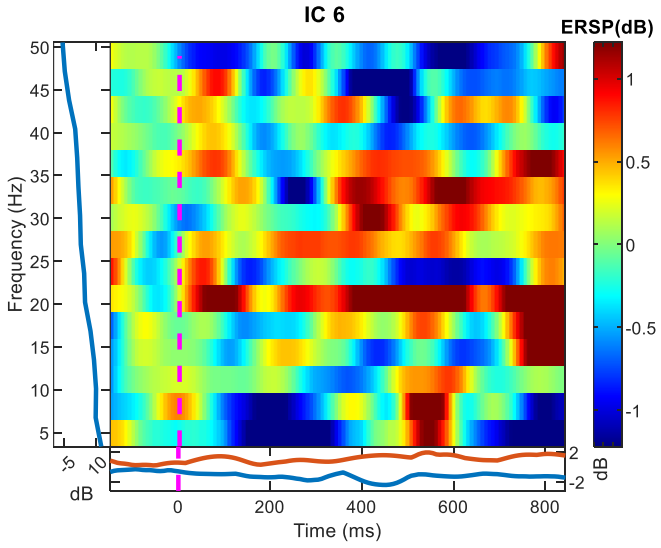
103_11

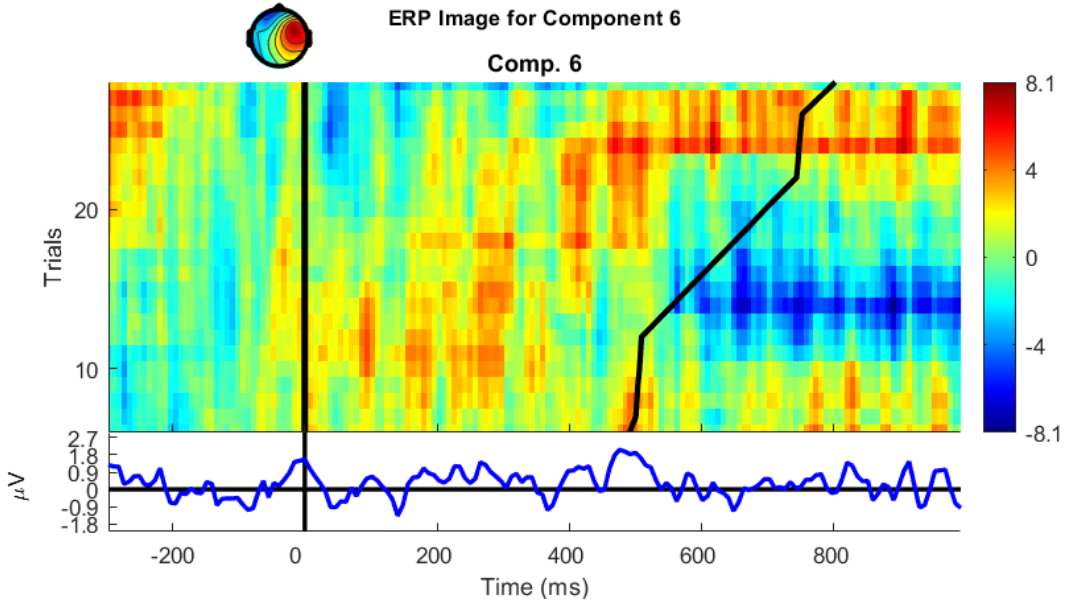
Frontal AF4		
Time(ms)	Alpha	
[-50, 100]	desync	
[400, 600]	sync	





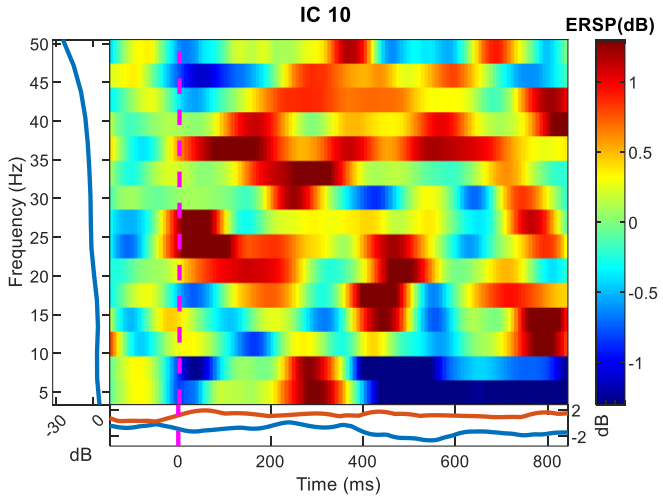
Frontal F4		
Time(ms)	Alpha	
[-50, 300]	desync	
[400, 600]	sync	

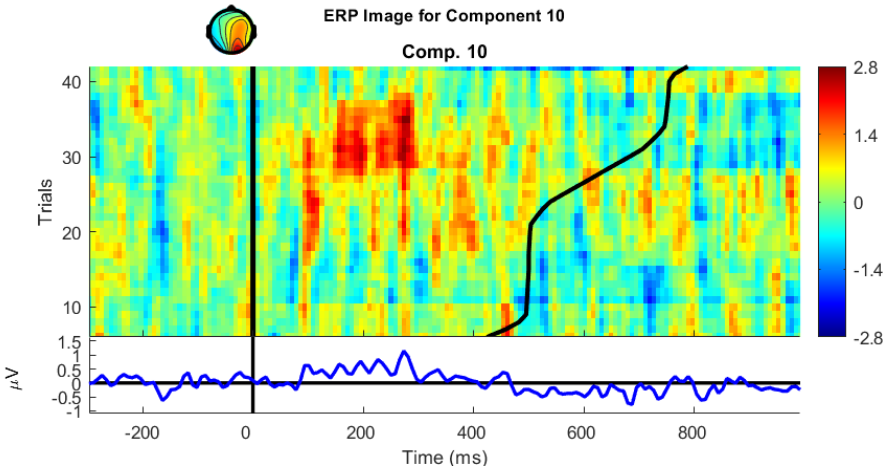




103_14

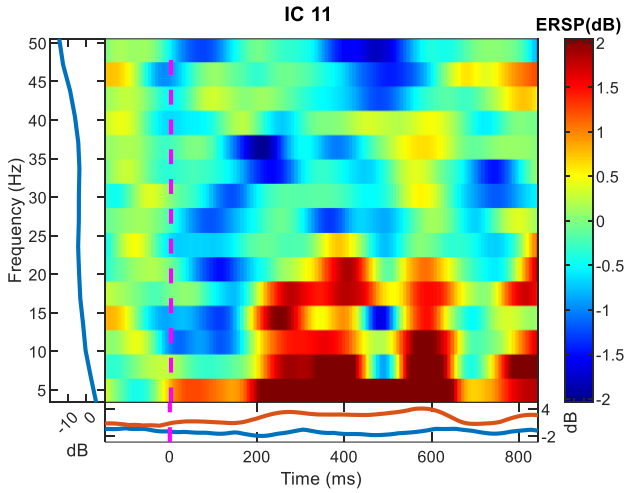
Occipital O2		
Time(ms)	Alpha	
[-50, 100]	desync	
[200, 400]	sync	

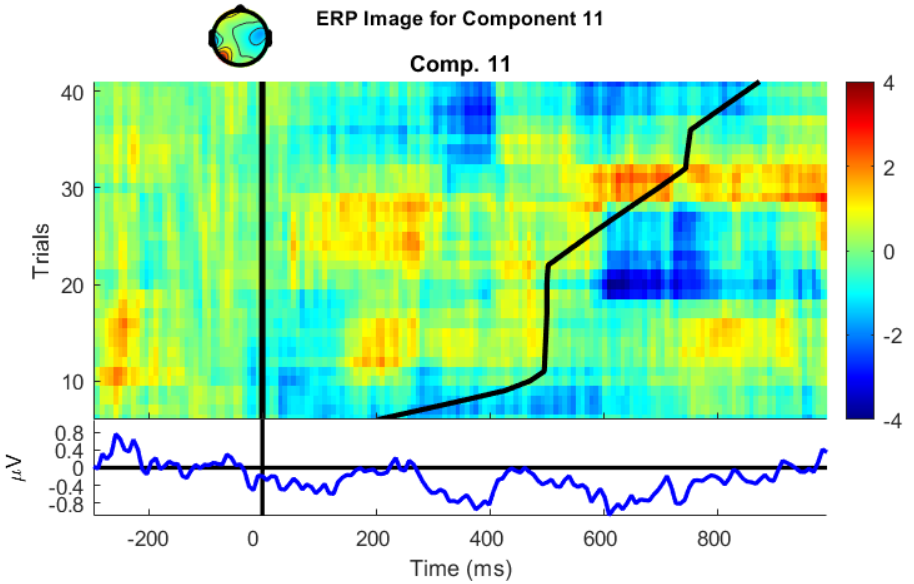




103_15

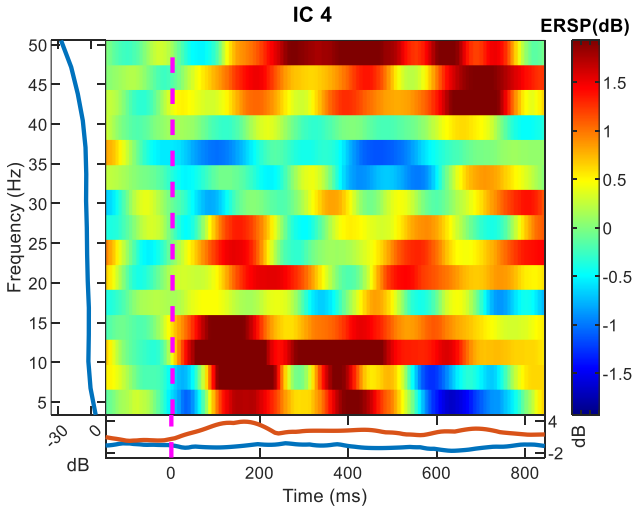
Frontal FC6		
Time(ms)	Alpha	
[-50, 100]	desync	
[350, 600]	sync	

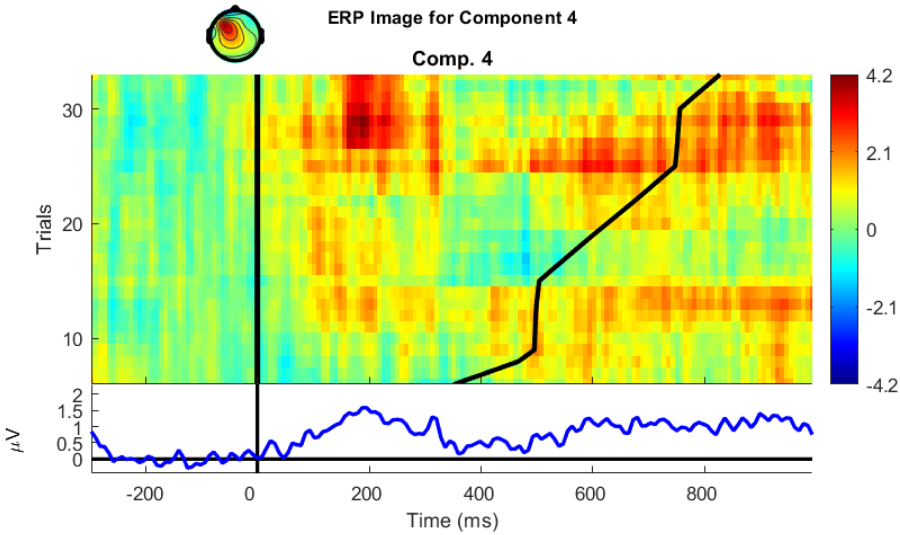




103_17

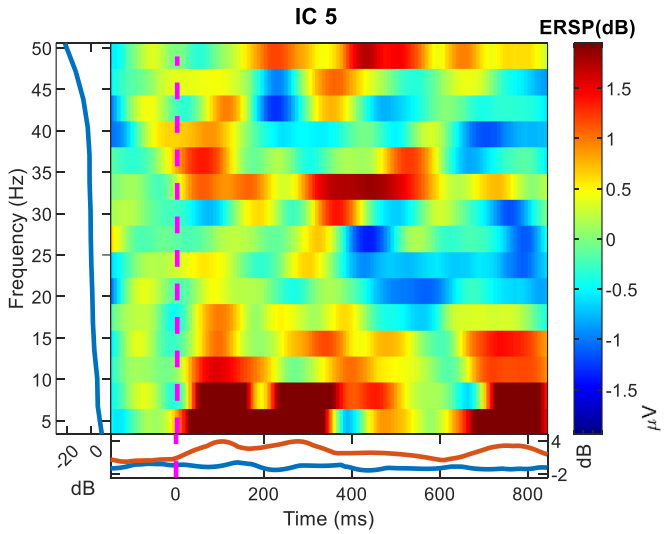
Frontal F3		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 400]	sync	

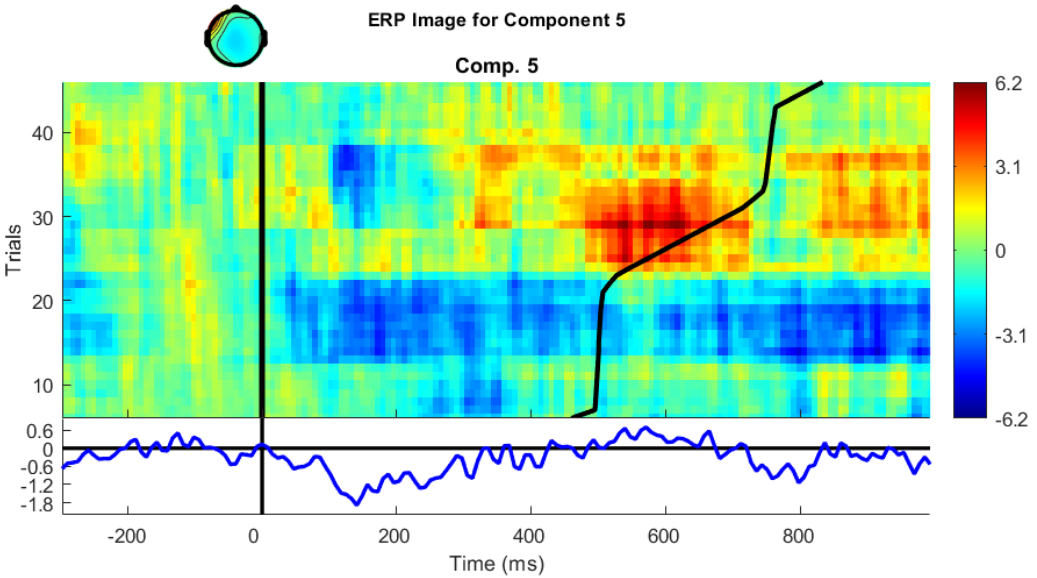




103_18

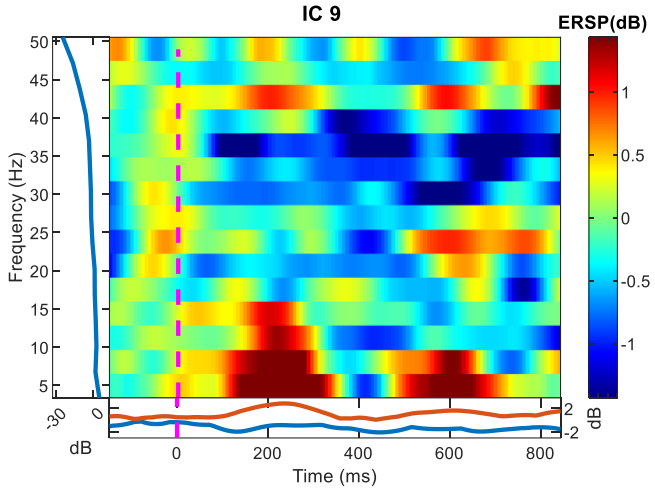
Frontal F7		
Time(ms)	Alpha	
[0, 100]	sync	
[150, 400]	sync	

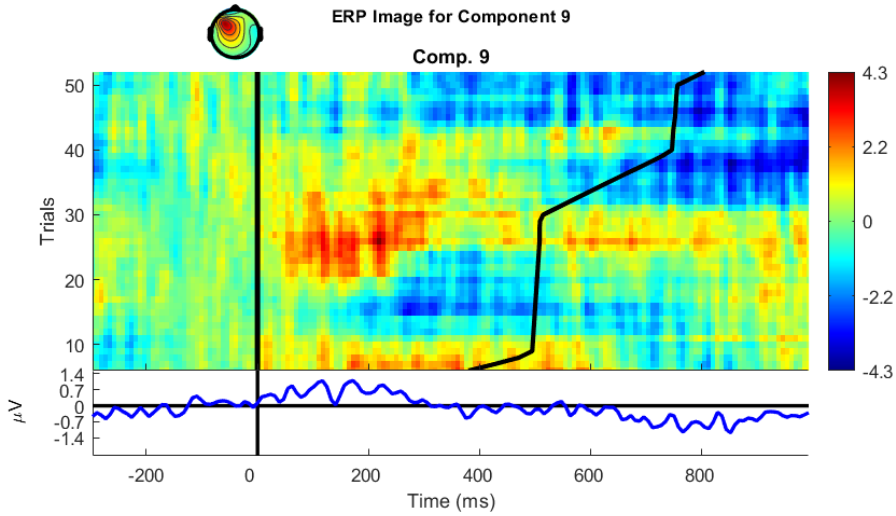




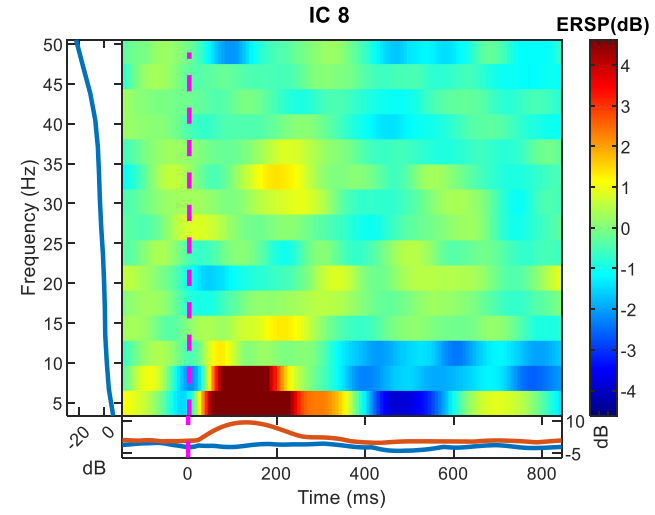
103_19

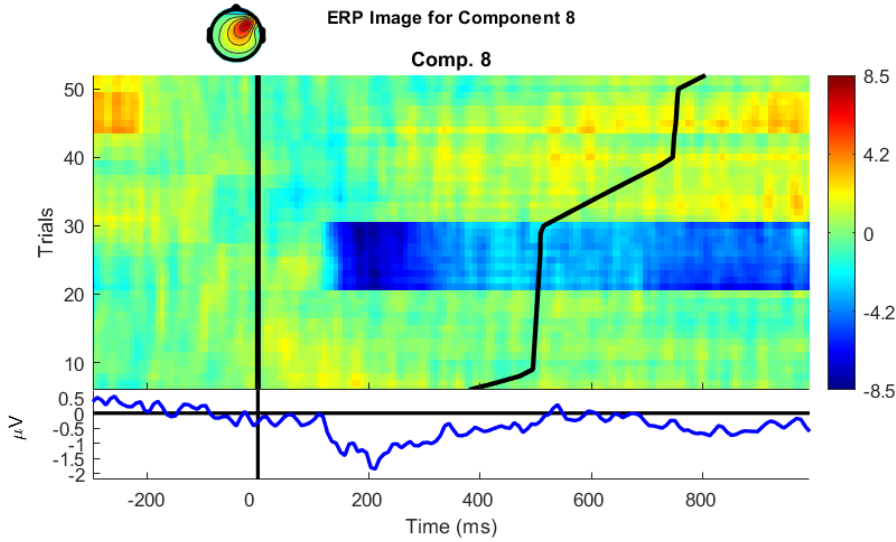
Frontal F3		
Time(ms)	Alpha	
[-50, 100]	desync	
[150, 400]	sync	





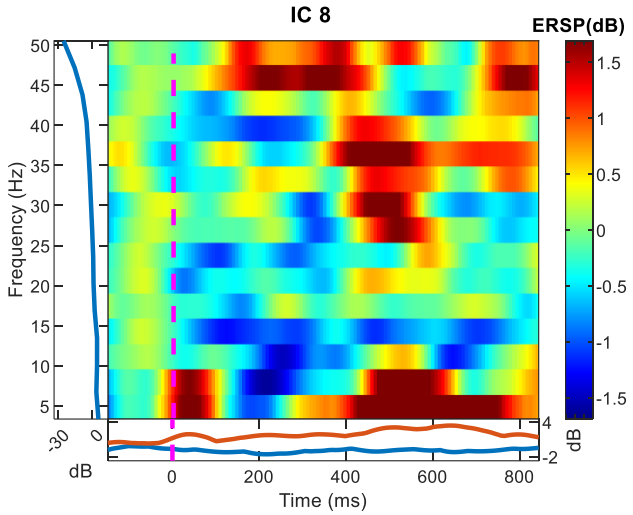
Frontal F4		
Time(ms)	Alpha	
[-50, 50]	desync	
[100, 250]	sync	

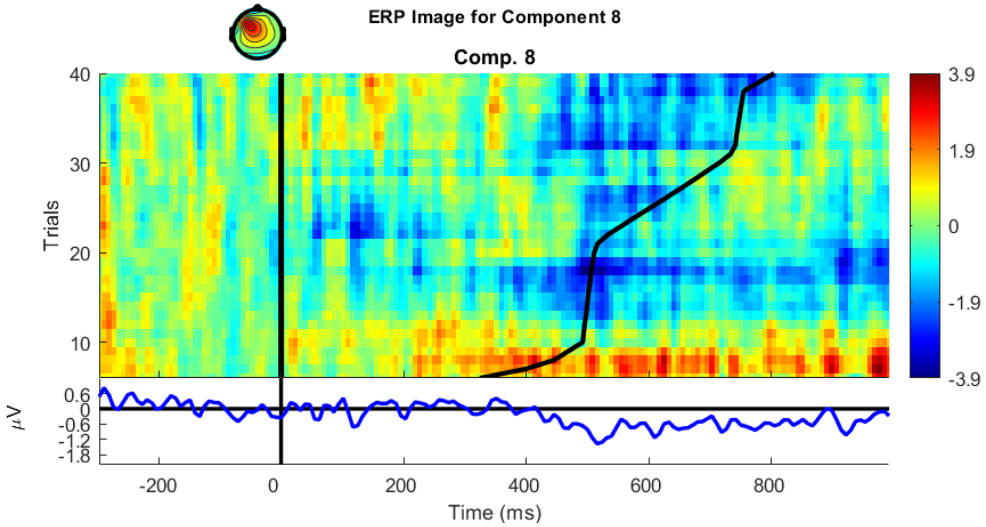




103_20

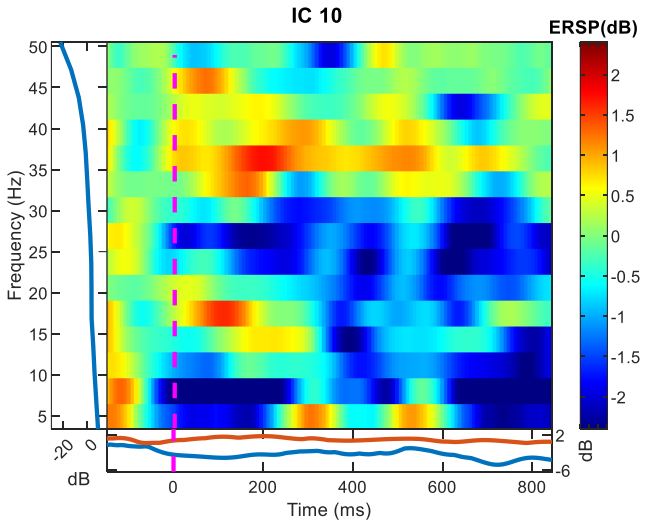
Frontal FC6		
Time(ms)	Alpha	
[-50, 100]	sync	
[400, 600]	sync	

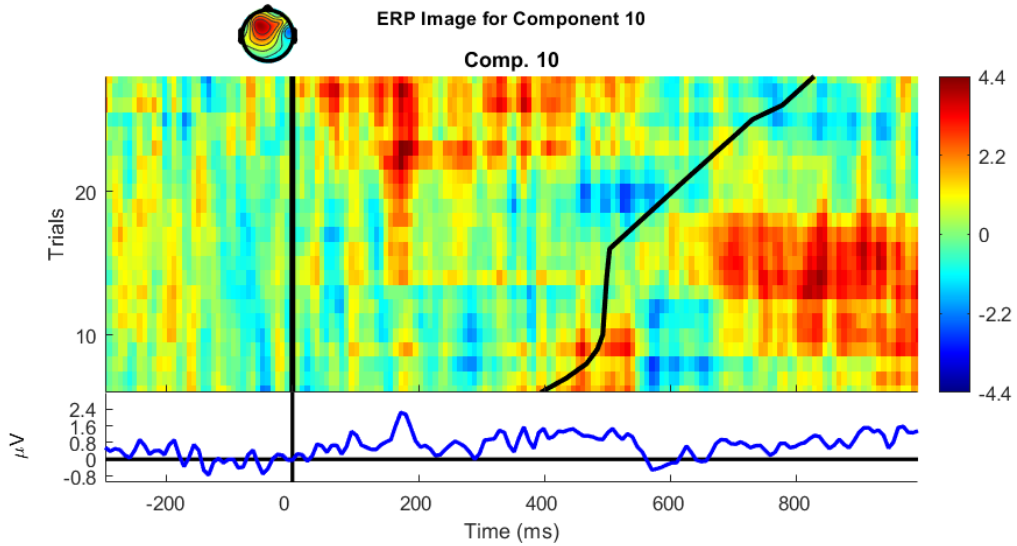




103_22

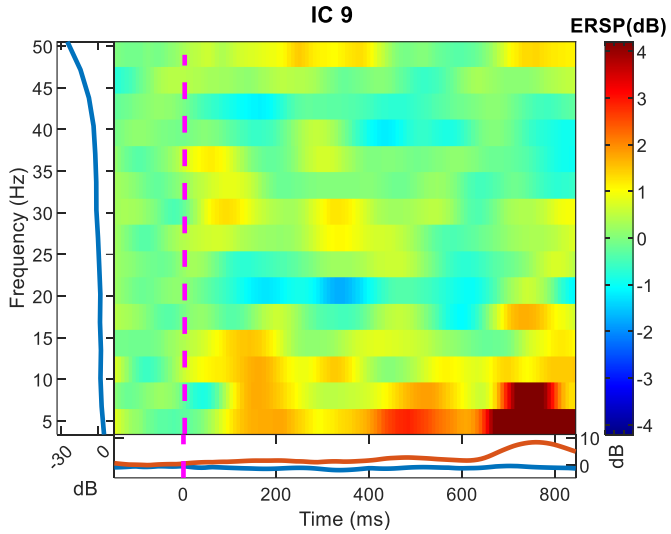
Frontal FC6		
Time(ms)	Alpha	
[-50, 150]	desync	
[200, 400]	sync	

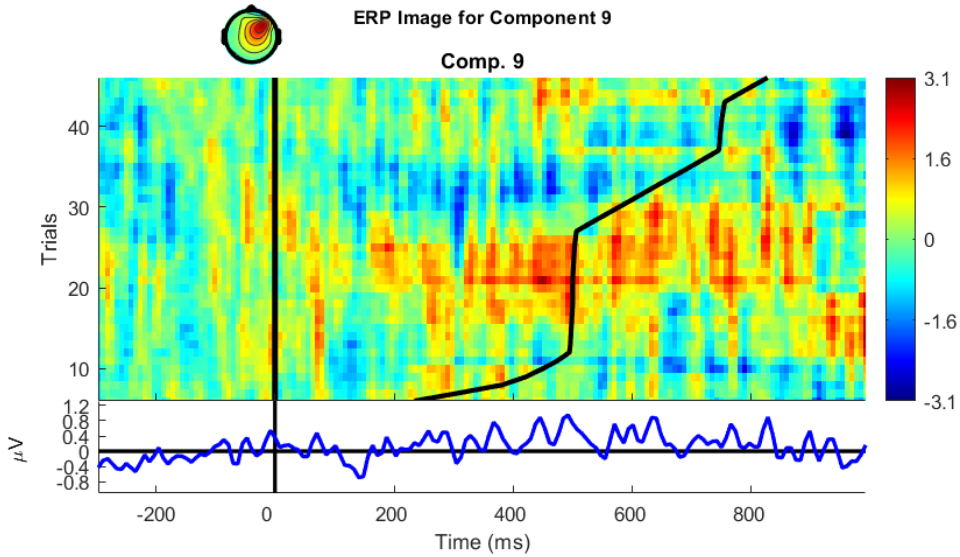




103_23

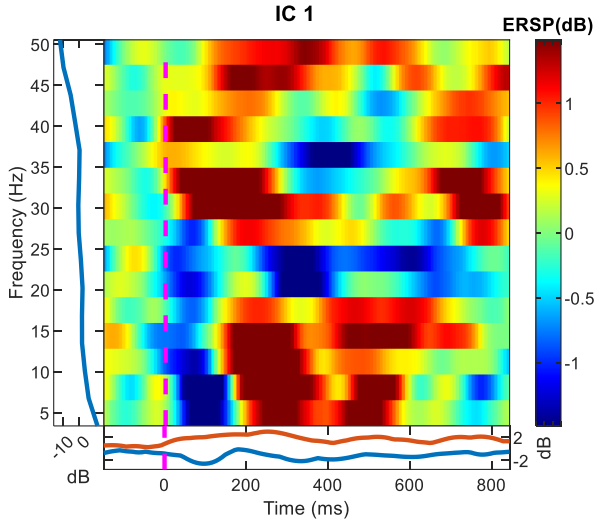
Frontal F4		
Time(ms)	Alpha	
[-50, 100]	desync	
[400, 600]	sync	

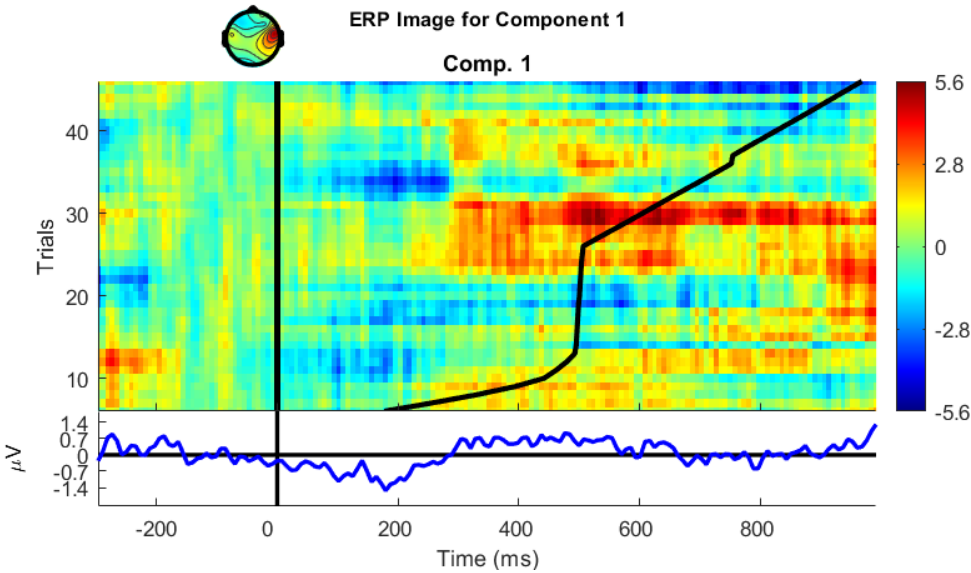




103_24

Frontal FC6		
Time(ms)	Alpha	
[-50, 100]	desync	
[200, 450]	sync	





===== All Regions Summary =====
Region: Left-Frontal
Components processed: 7
p-value (Early vs Middle): 0.0051822 (increase)
p-value (Middle vs Later): 0.52686152 (decrease)
p-value (Early vs Later): 0.00068030085 (increase)

Region: Right-Frontal
Components processed: 13
p-value (Early vs Middle): 5.3151e-05 (increase)
p-value (Middle vs Later): 0.00029327493 (decrease)
p-value (Early vs Later): 0.44043639 (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: NA
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
