

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

Subject 110

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

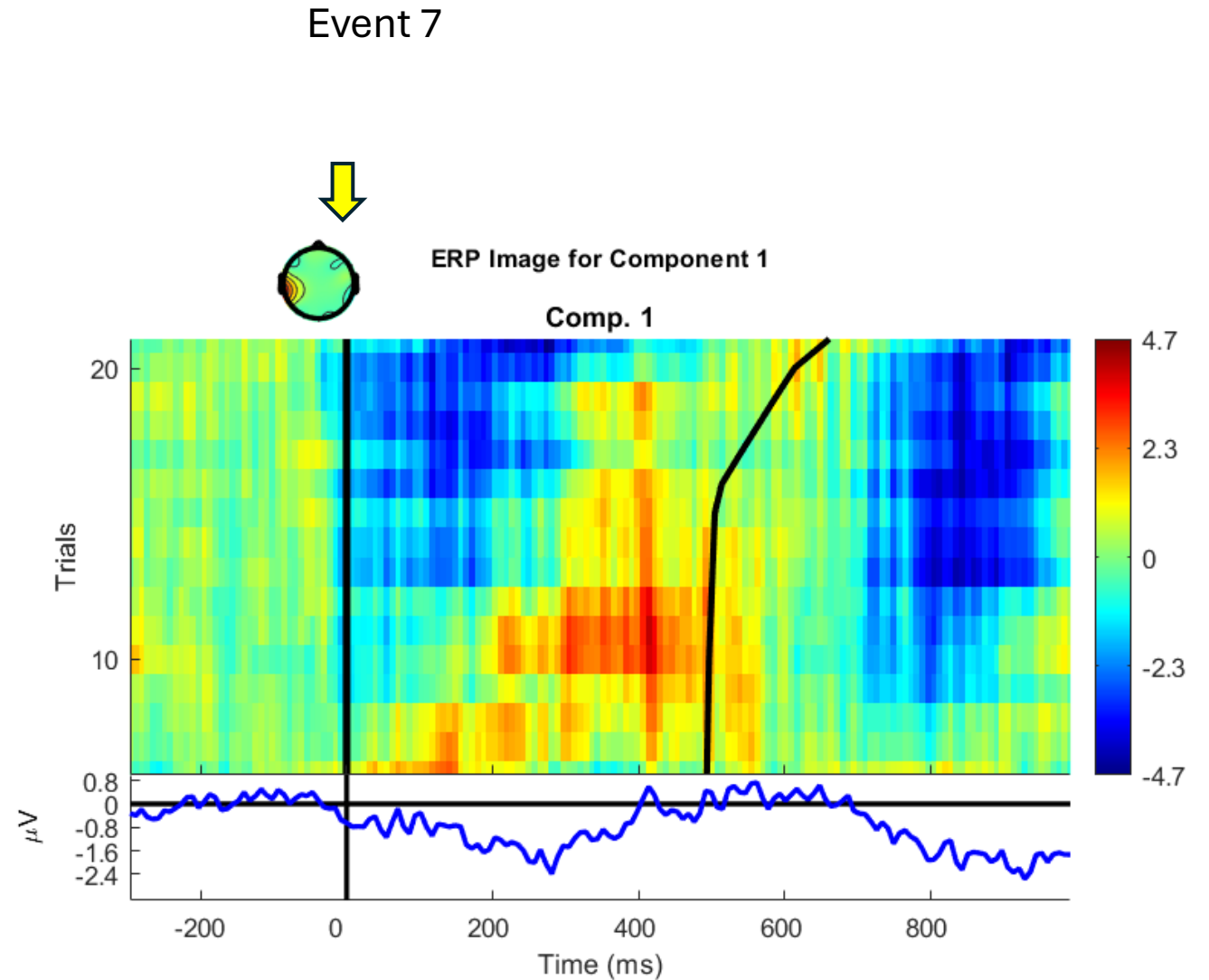
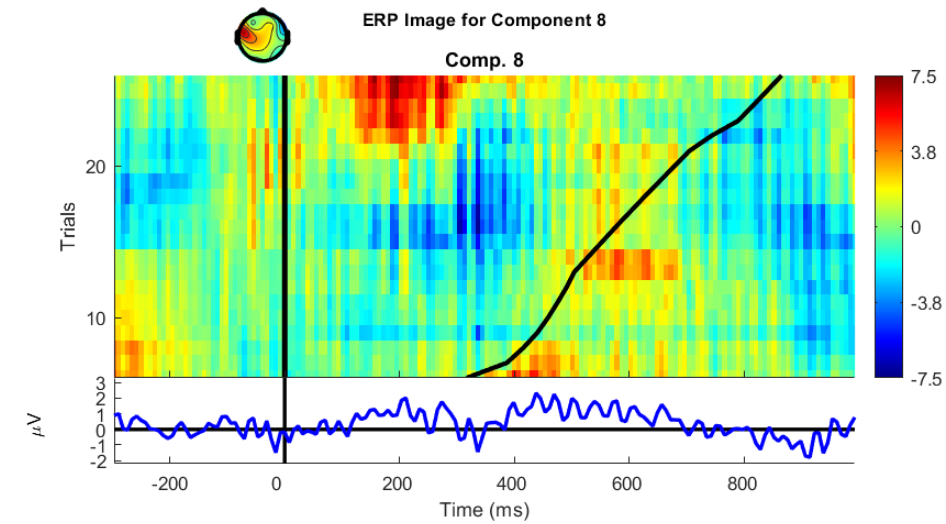
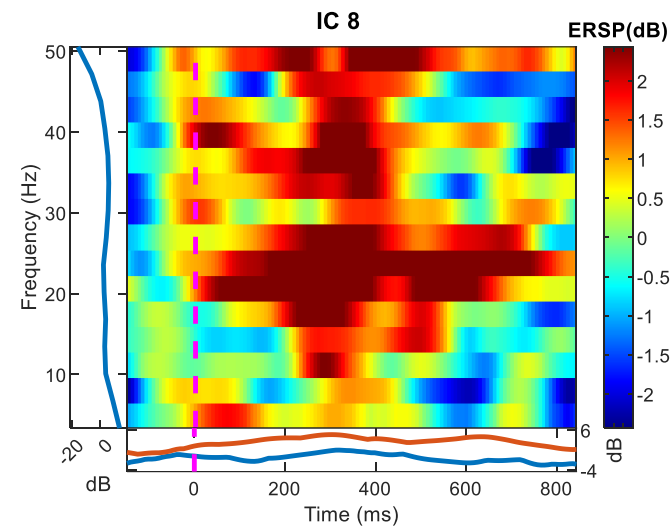
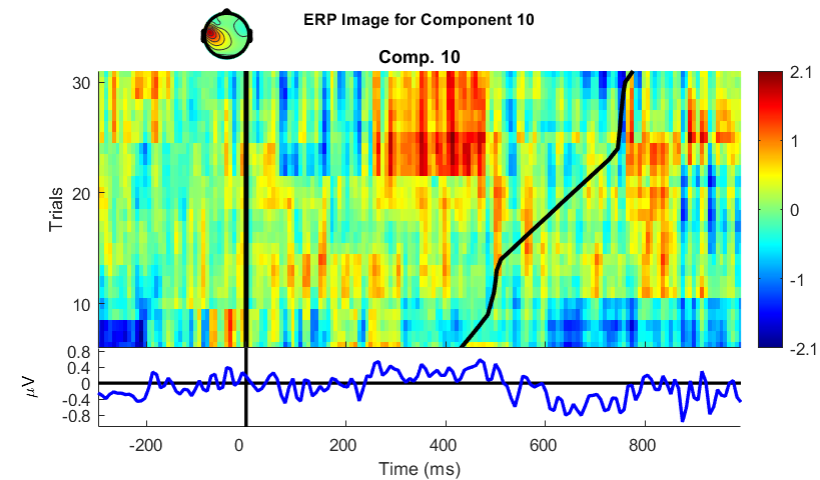
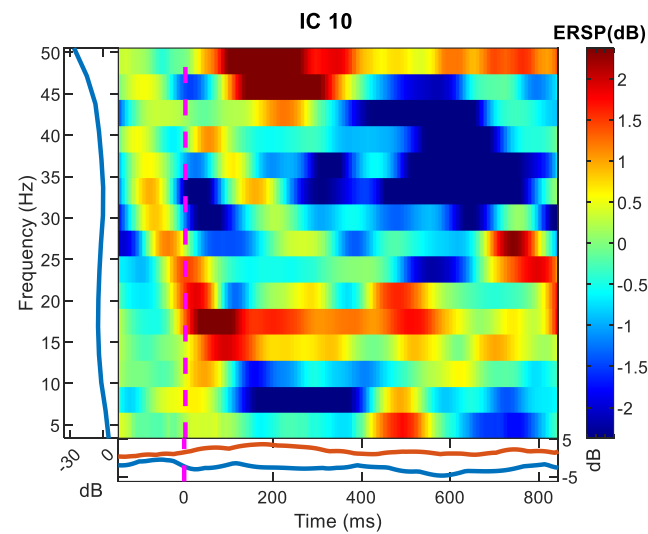


Figure 1. ERP of the 1st component for subject 104 training session 1. Event '7' is the stimulus onset when time = 0ms. Event '6' marks the car's forward movement with a black line, sorted by latency

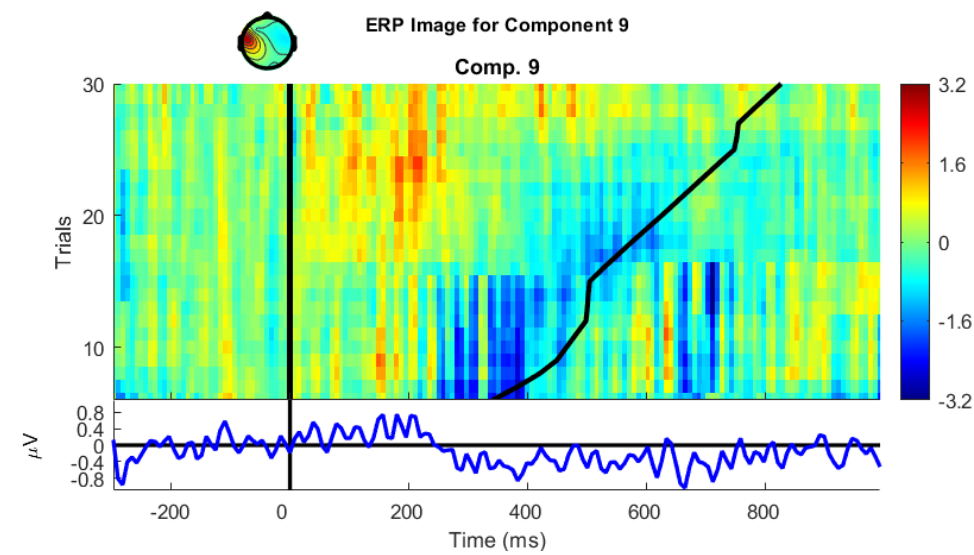
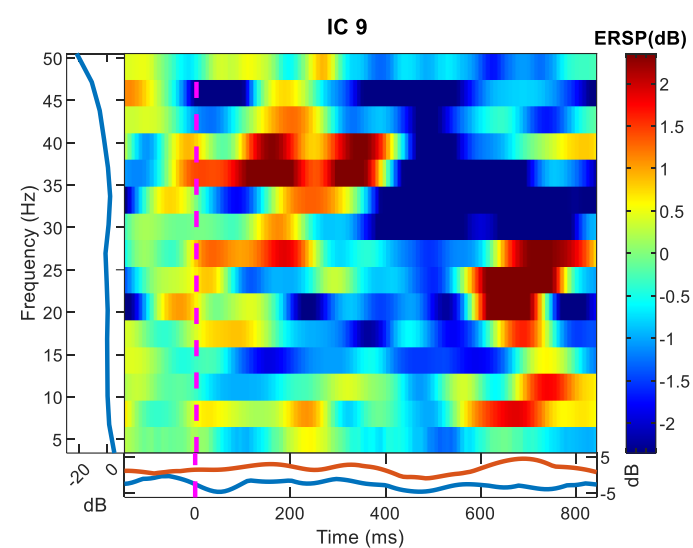
Frontal FC5		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 300]	sync	



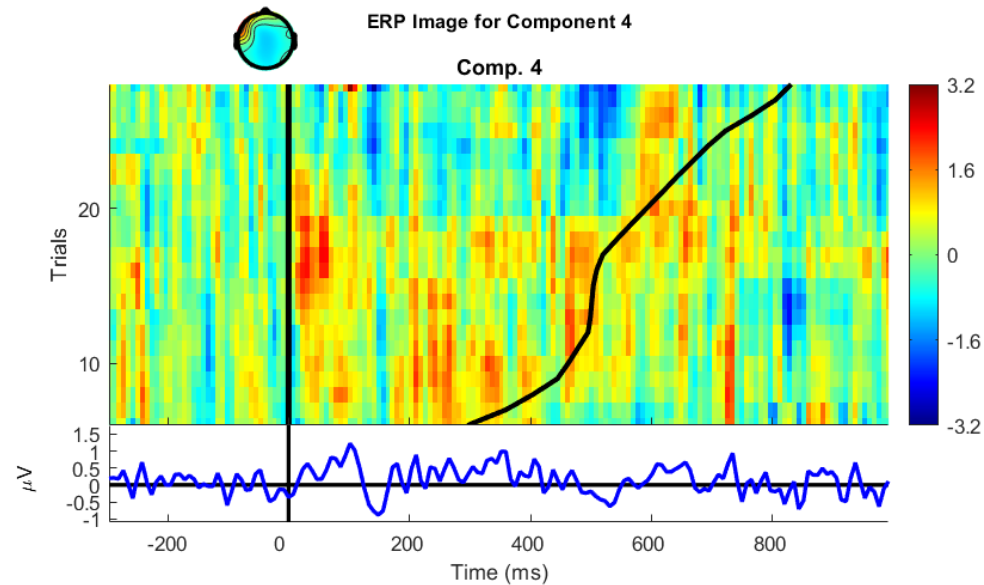
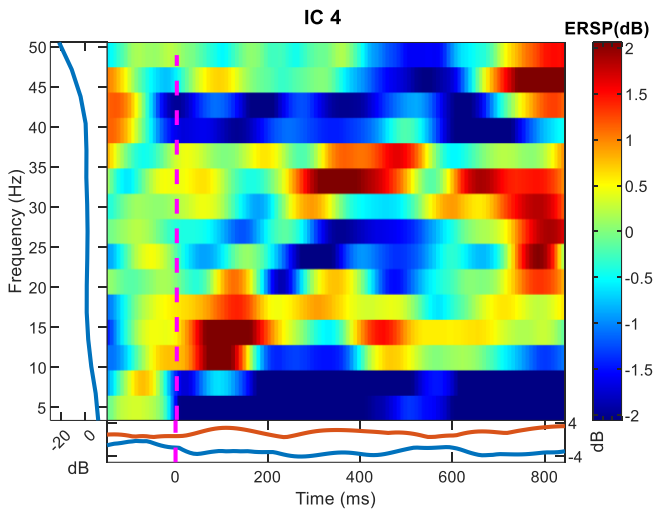
Frontal FC5		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 400]	sync	



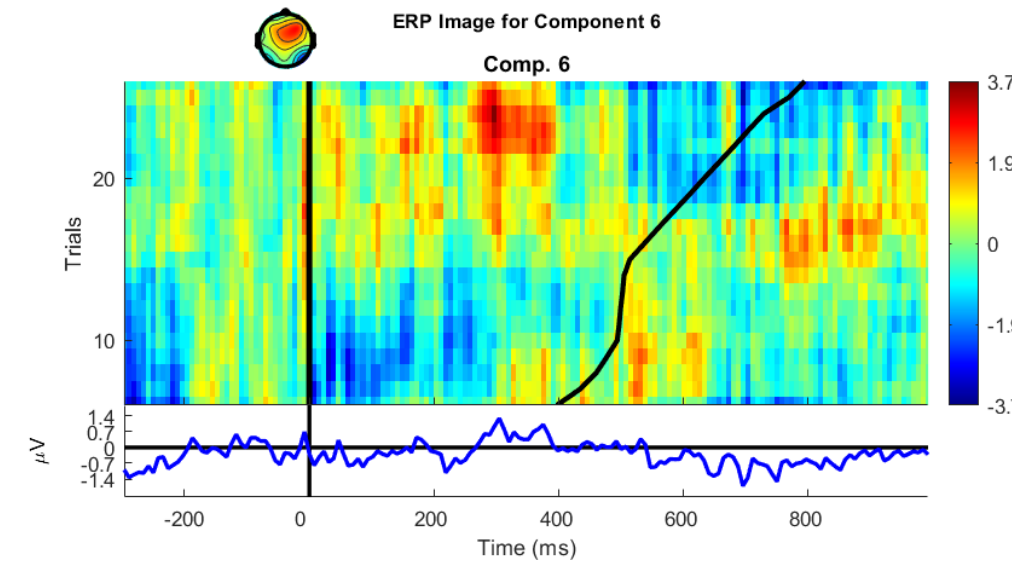
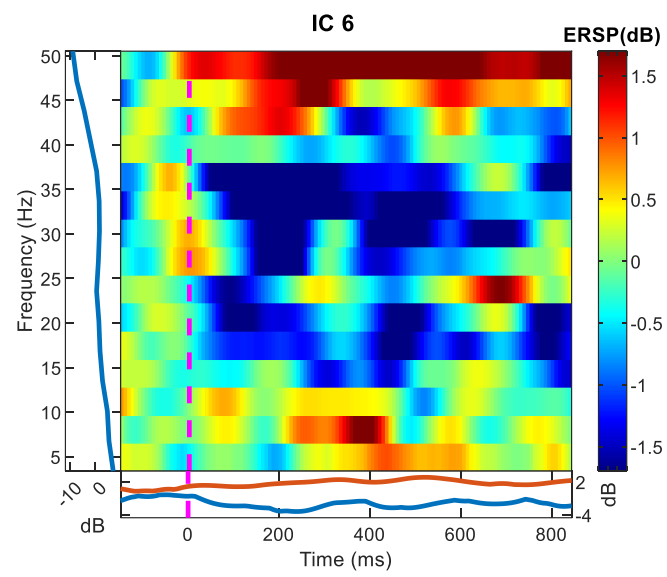
Frontal FC5		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 400]	sync	



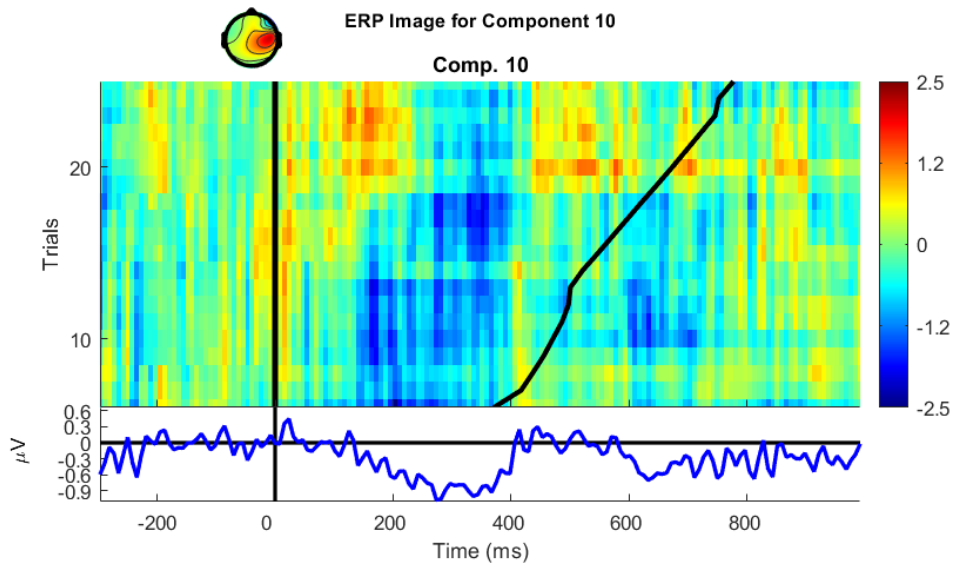
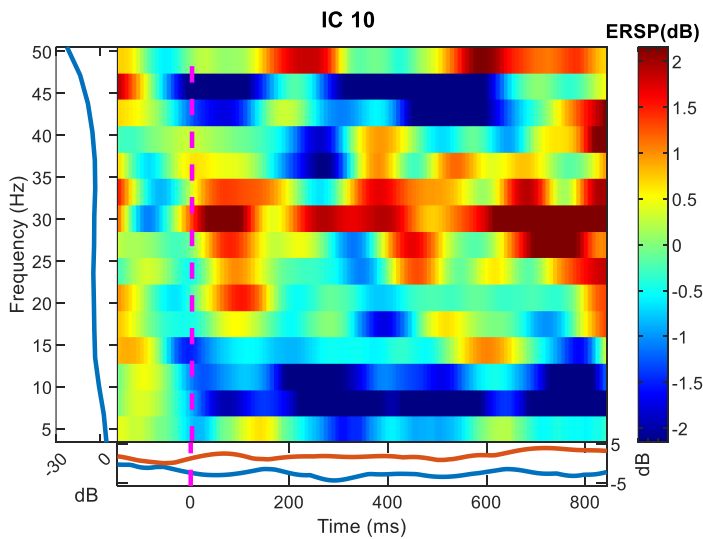
Frontal F7		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 400]	desync	



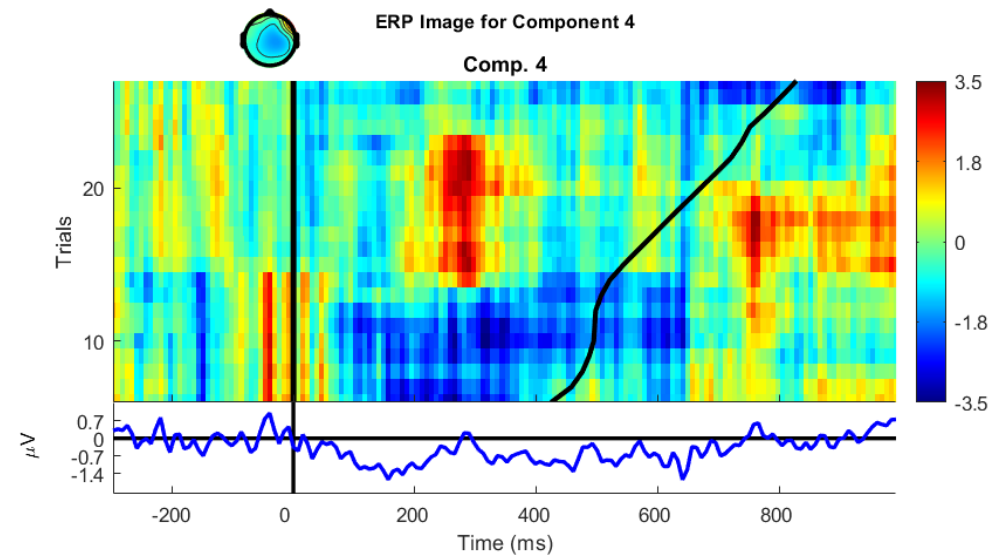
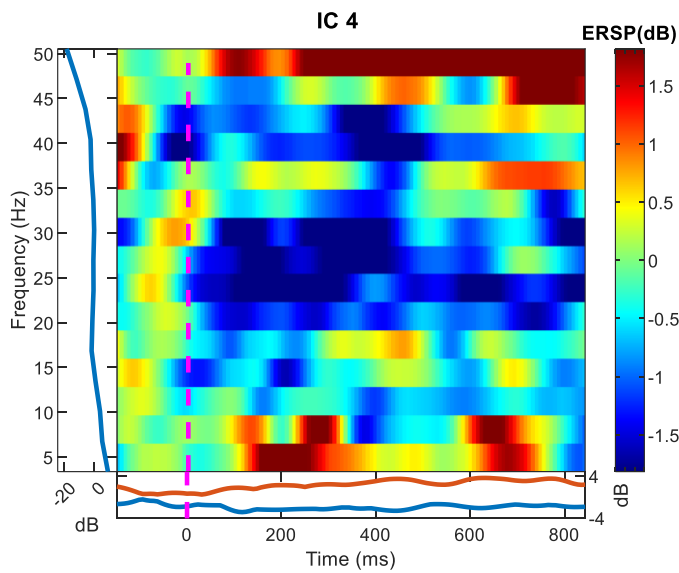
Frontal F4		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 400]	sync	



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

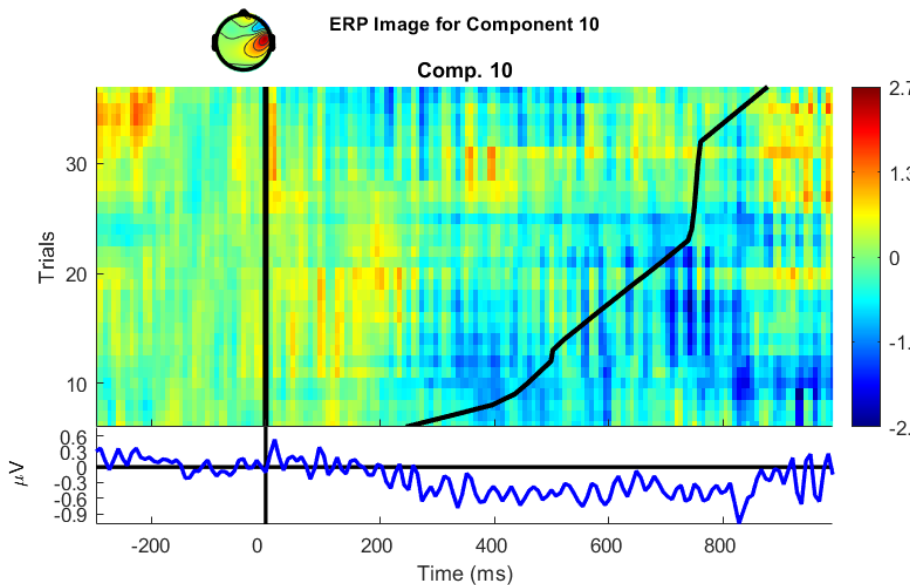
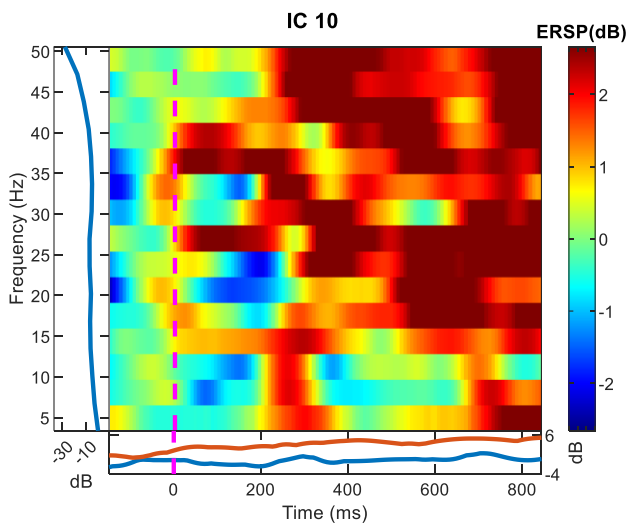


Frontal F8		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 350]	sync	

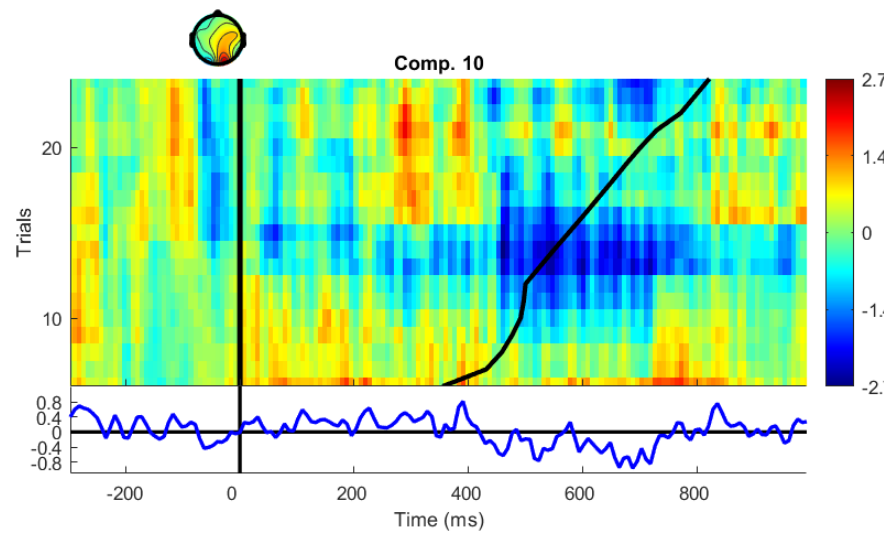
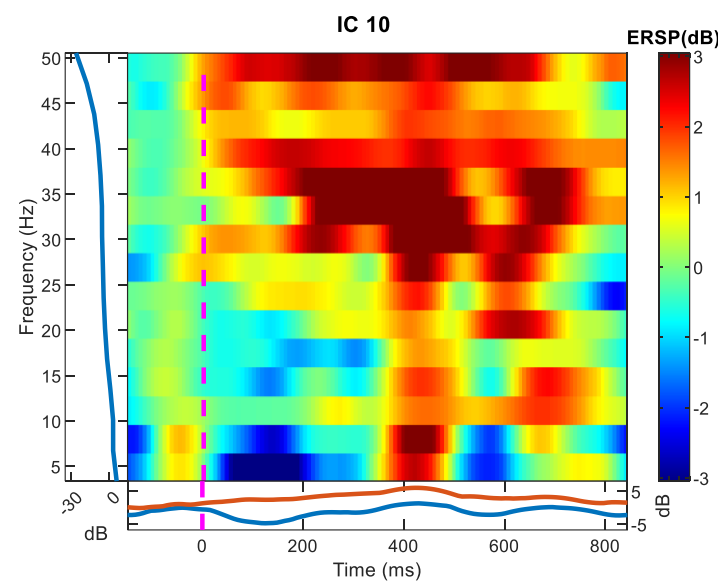


Very noisy signal!

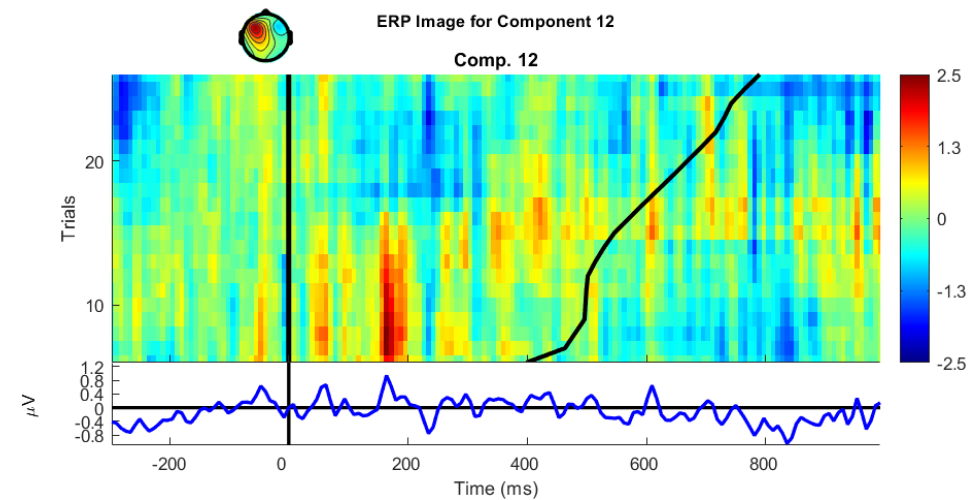
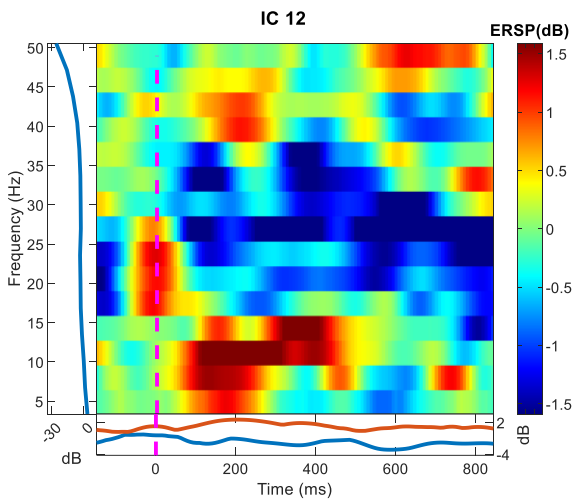
Frontal FC5		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 400]	sync	



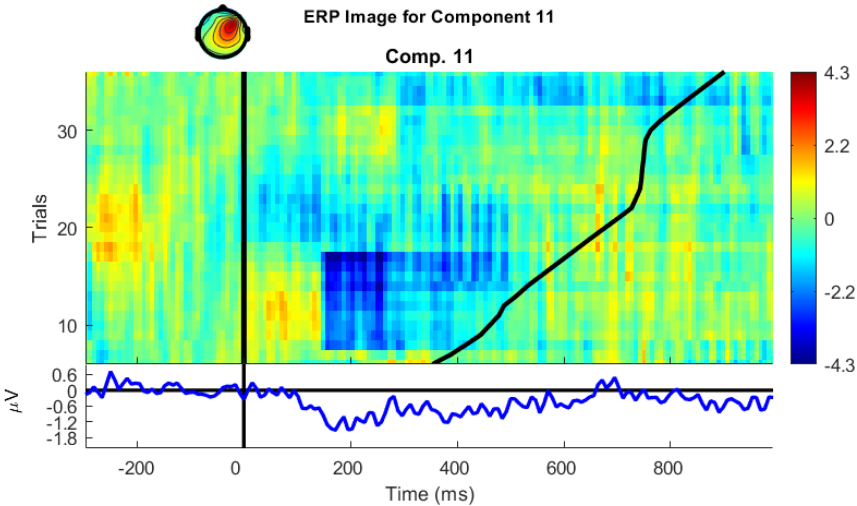
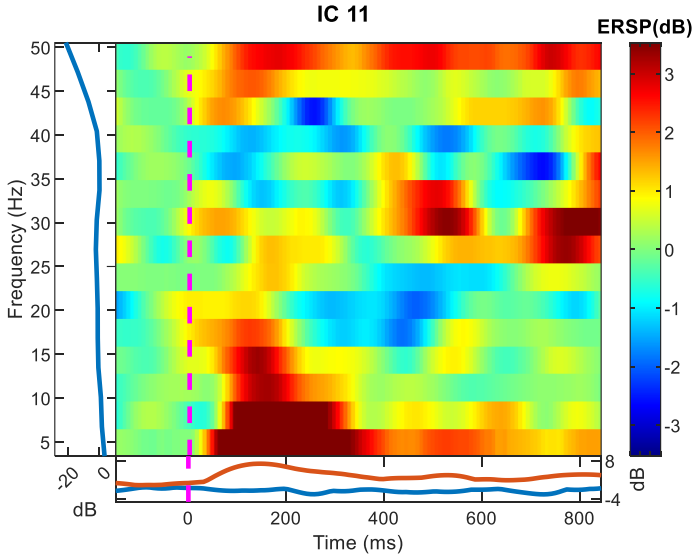
Frontal FC6		
Time(ms)	Alpha	
[0, 50]	desync	
[350, 500]	sync	



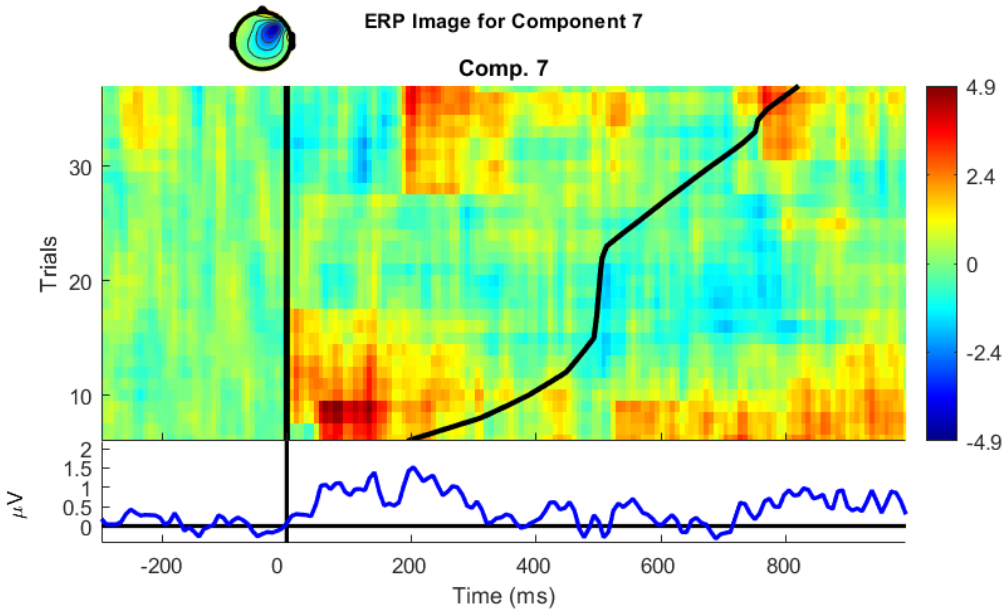
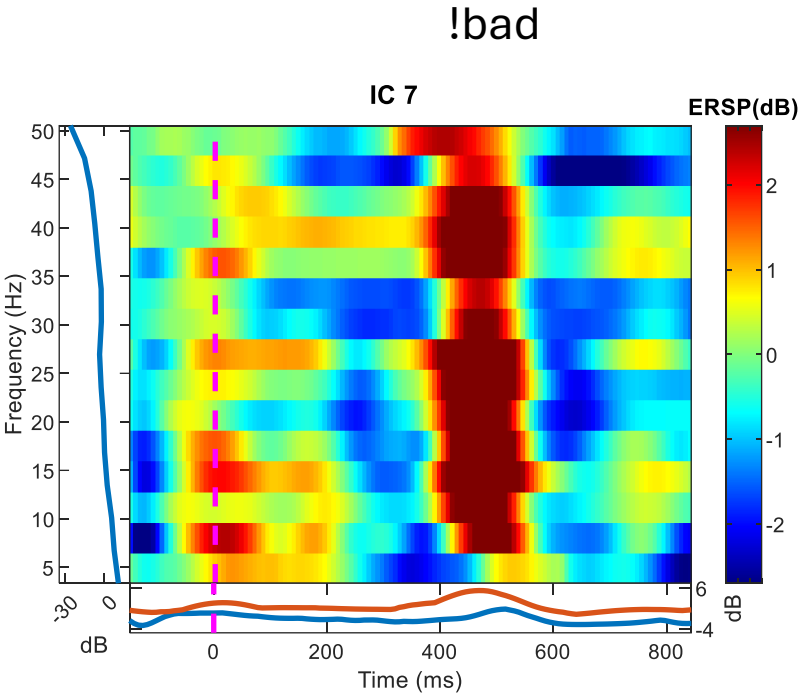
Frontal F3		
Time(ms)	Alpha	
[0, 50]	desync	
[150, 300]	sync	



Frontal F4		
Time(ms)	Alpha	
[0, 50]	desync	
[150, 350]	sync	

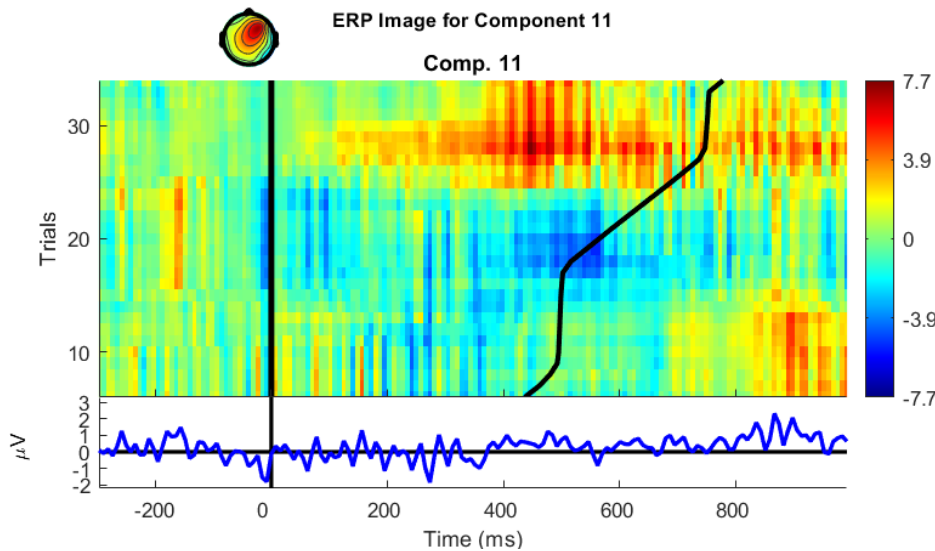
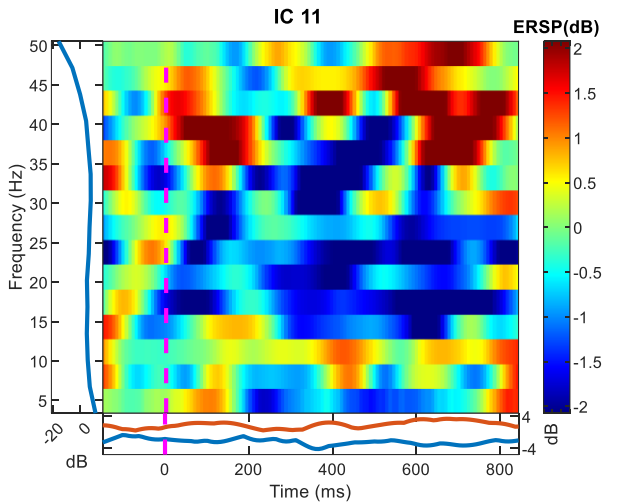


Frontal F4		
Time(ms)	Alpha	
[0, 200]	sync	

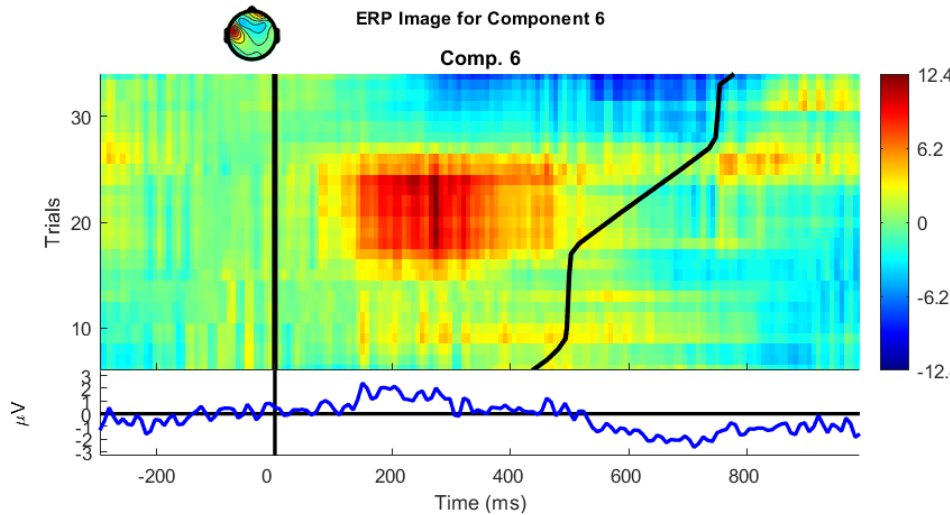
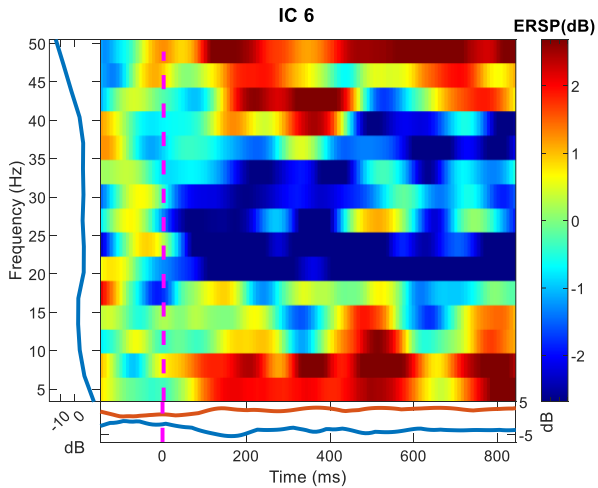


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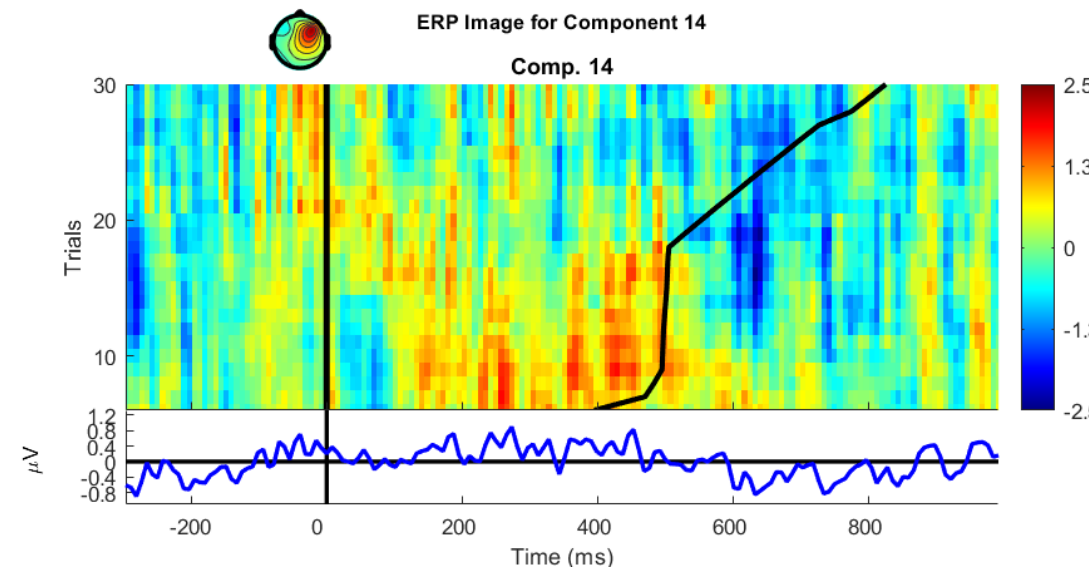
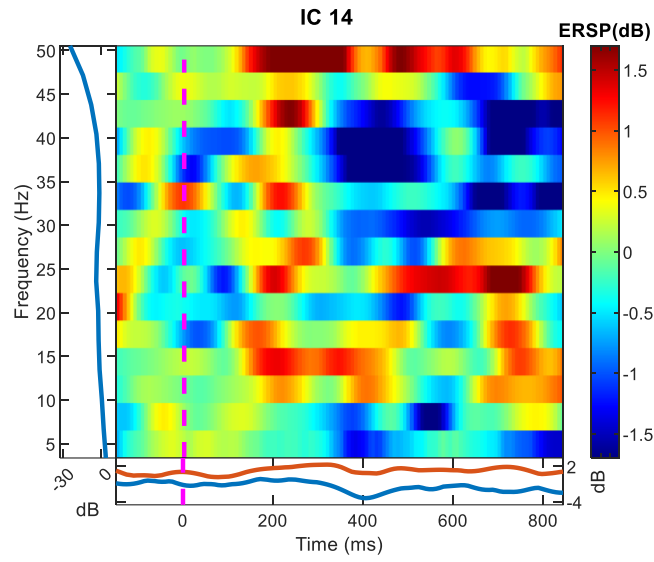
Frontal F4		
Time(ms)	Alpha	
[0, 50]	desync	
[200, 400]	sync	



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



Frontal F4		
Time(ms)	Alpha	
[0, 50]	desync	
[150, 350]	sync	



===== All Regions Summary =====

Region: Left-Frontal

Components processed: 7

p-value (Early vs Middle): 0.87521 (increase)

p-value (Middle vs Later): 4.5880889e-10 (increase)

p-value (Early vs Later): 1.6155241e-12 (increase)

Region: Right-Frontal

Components processed: 7

p-value (Early vs Middle): 0.013529 (decrease)

p-value (Middle vs Later): 0.21151887 (increase)

p-value (Early vs Later): 0.056659643 (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