npcindex www.npcindex.com 021-44 47 74 67

QEEG Clinical Report

BrainLens V0.4

Report Description

Personal & Clinical Data

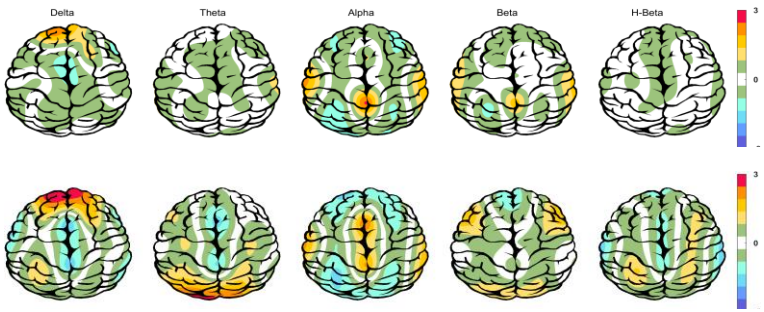
Name	Mahkame Shokri	Date of Recording	2025-07-16
Date of Birth - Age	1991-04-30 - 34.3	Gender	Female
Handedness(R/L)	Right	Source of Referral	Dr Haghi
Initial Diagnosis	ADD-Depression		
Current Medication	-		

Dr Haghi

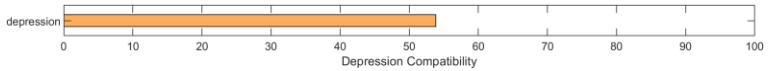
Summary Report

EEG Quality

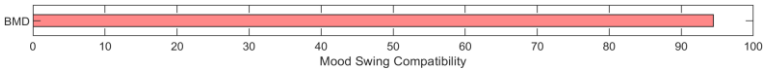
Z-score Information



Compatibility with Depression



Compatibility with Mood Swing

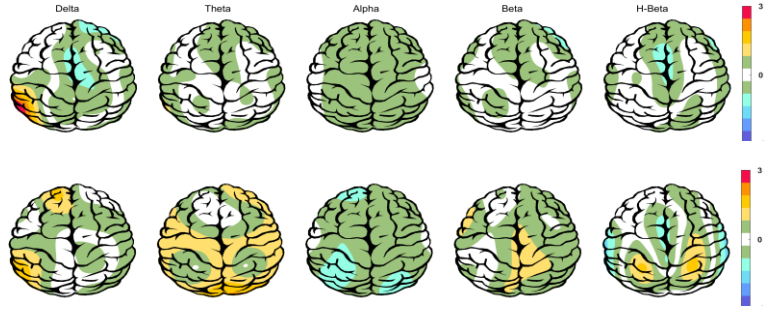


Arousal Level

APF

Posterior APF-EC= 10.50

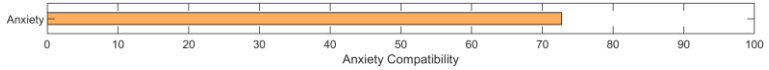
Posterior APF-EO= 11.12



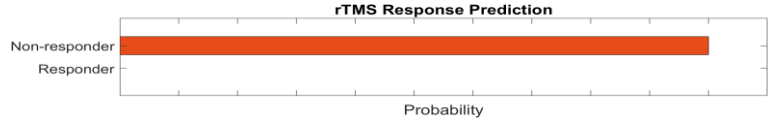
Absolute Power

Relative Power

Compatibility with Anxiety



TMS Responsibility



Cognitive Performance

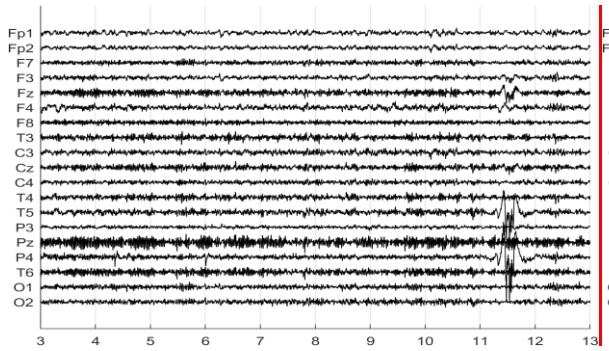
To investigate QEEG-based predicting medication response, please refer to the Report.

Mahkame Shokri\Dr Haghi

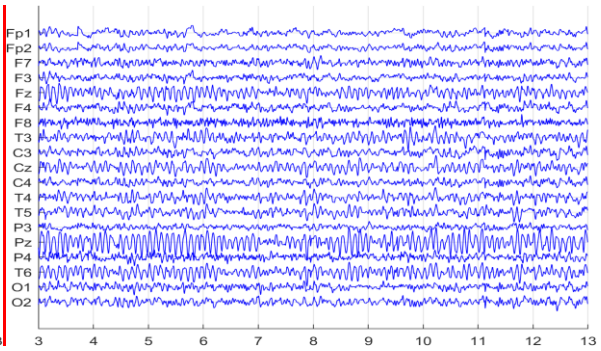
Mahkame Shokri\Dr Haghi

Denoising Information (EC)

Raw EEG



Denoised EEG



Flat Channels

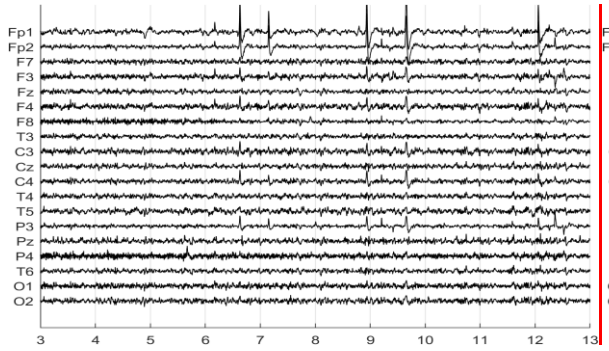
Rejected Channels

Number of Eye and Muscle Elements			
Eye	0	**Muscle**	0
Total Artifact Percentage			
EEG Quality	bad		

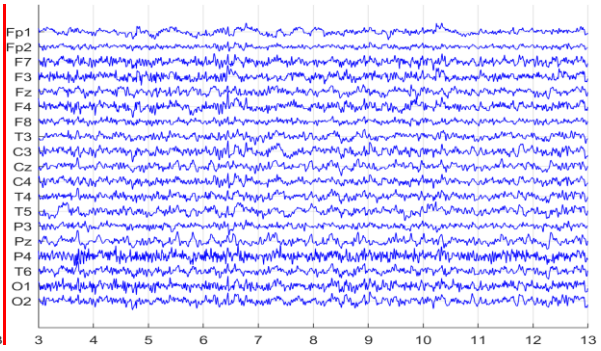
Low Artifact Percentage	
High Artifact Percentage	
Total Recording Time Remaining	256.32 sec

Denoising Information (EO)

Raw EEG



Denoised EEG



Flat Channels

Rejected Channels

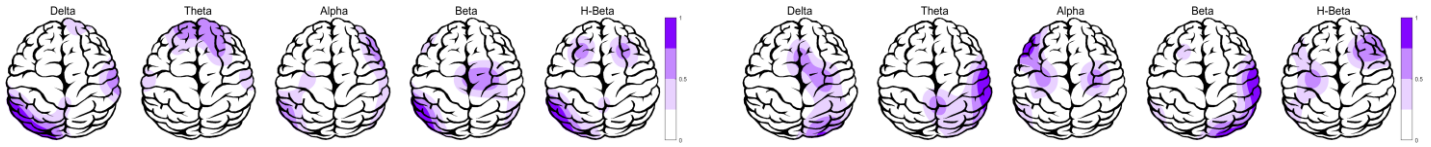
Number of Eye and Muscle Elements			
Eye	1	**Muscle**	1
Total Artifact Percentage			
EEG Quality	bad		

Low Artifact Percentage	
High Artifact Percentage	
Total Recording Time Remaining	253.86 sec

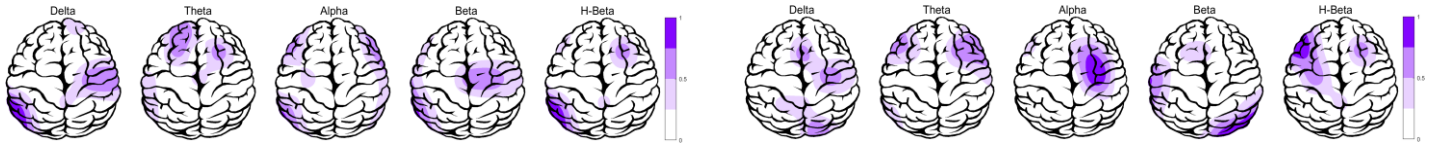
Mahkame Shokri\Dr Haghi

Pathological assessment for mood disorders and adult ADHD

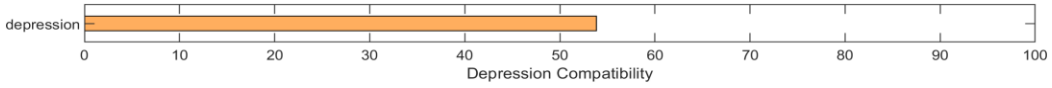
Compare to Mood Disorders Database

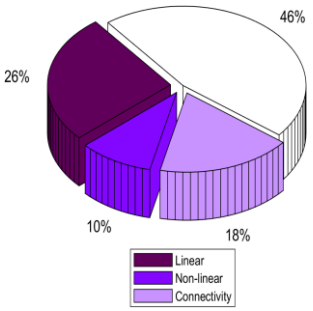


Compare to Adult ADHD Database

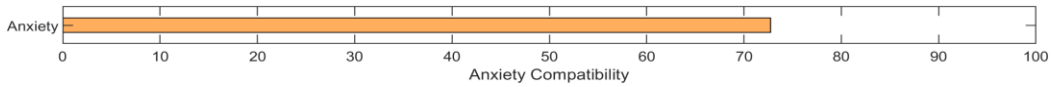


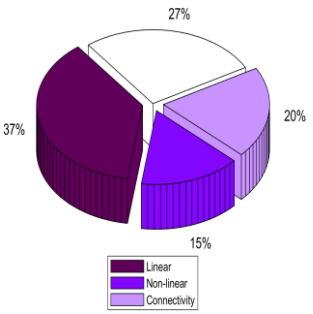
EEG Compatibility with Depression Diagnosis



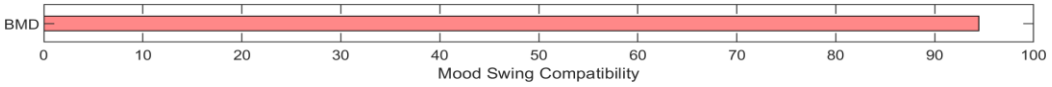


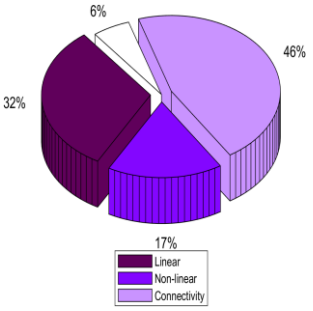
EEG Compatibility with Anxiety Diagnosis





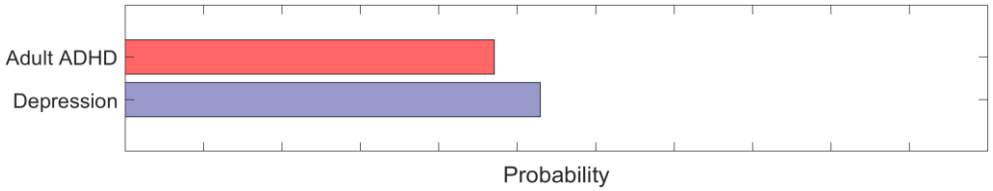
EEG Compatibility with Mood Swing Diagnosis *



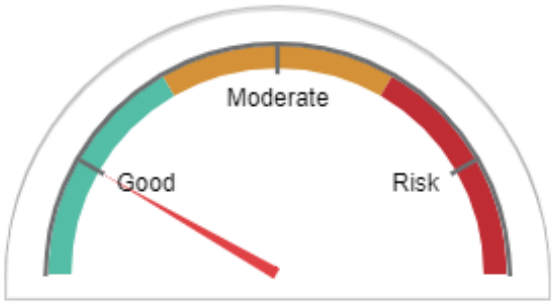


* This index can only be investigated if there are symptoms of mood swings (R/O BMD or R/O mood swings).

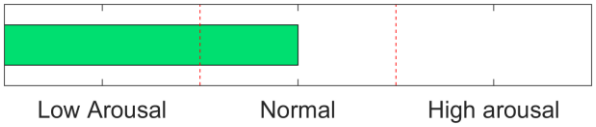
Depression and Adult ADHD Diagnosis Probabiliy



Cognitive Functions Asessment



Arousal Level Detection



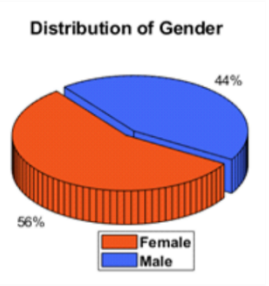
Mahkame Shokri\Dr Haghi

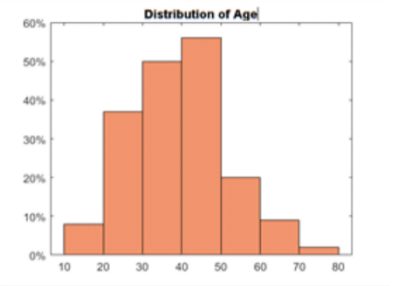
rTMS Response Prediction

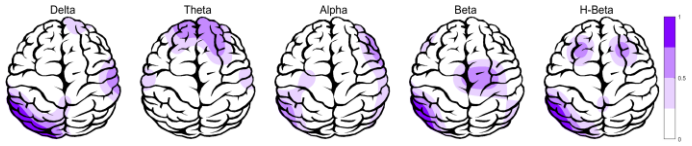
Network Performance

Accuracy: 92.1%
Sensitivity: 89.13%
Specificity: 97.47%

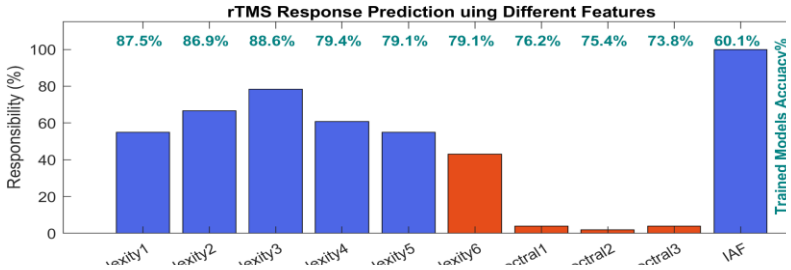
Participants Information



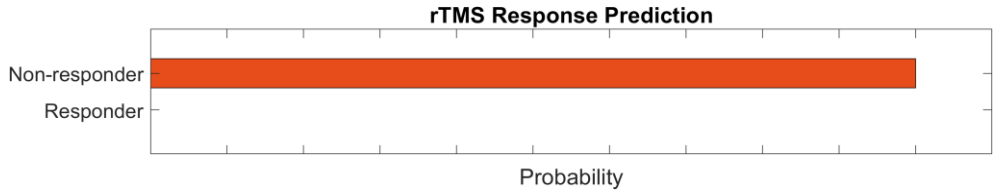




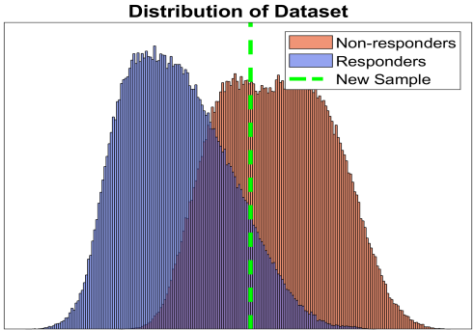
Features Information



Responsibility



Data Distribution

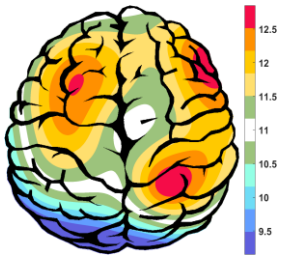


About Predicting rTMS Response

This index was obtained based on machine learning approaches and by examining the QEEG biomarkers of more than 470 cases treated with rTMS. The cases were diagnosed with depression (with and without comorbidity) and all were medication free. By examining more than 40 biomarkers capable of predicting response to rTMS treatment in previous studies and with data analysis, finally 10 biomarkers including bispectral and nonlinear features entered the machine learning process. The final chart can distinguish between RTMS responsive and resistant cases with 92.1% accuracy. This difference rate is much higher than the average response to treatment of 44%, in the selection of patients with clinical criteria, and is an important finding in the direction of personalized treatment for rTMS.

Mahkame Shokri\Dr Haghi

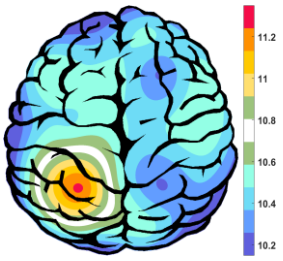
APF(EO)



Frontal APF= 11.75

Posterior APF= 11.12

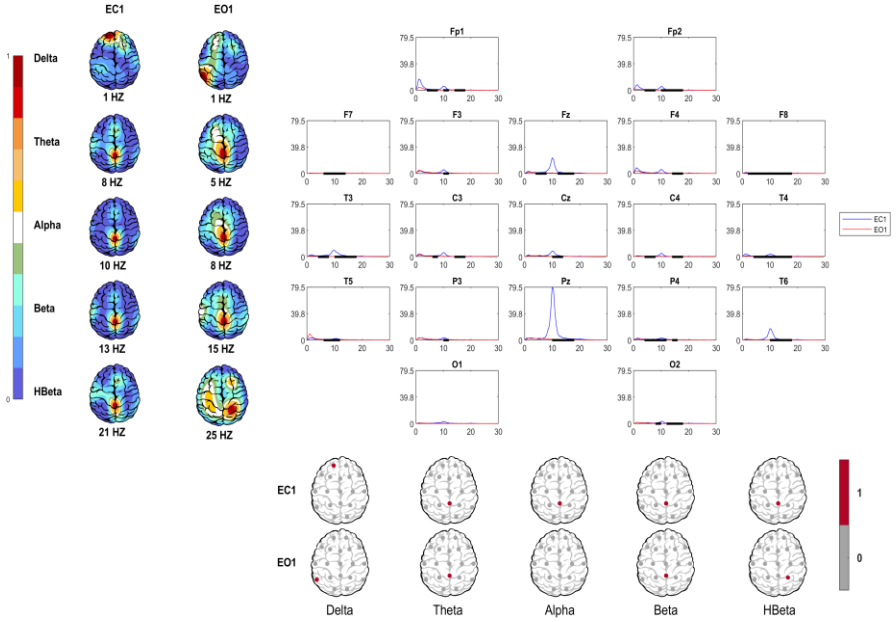
APF(EC)



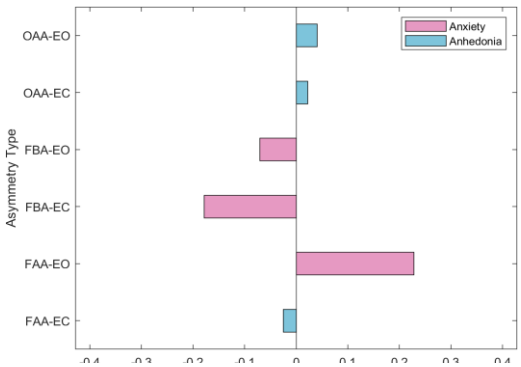
Frontal APF= 10.42

Posterior APF= 10.50

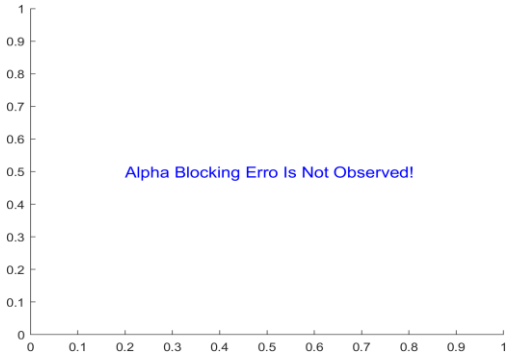
EEG Spectra



Alpha Asymmetry(AA)

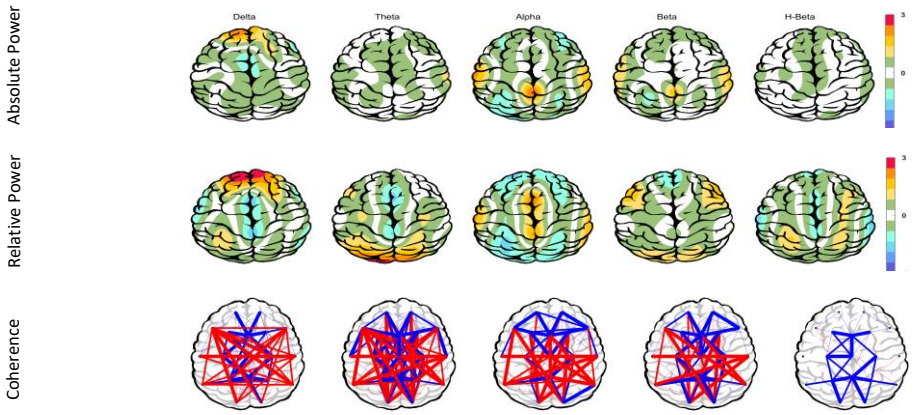


Alpha Blocking

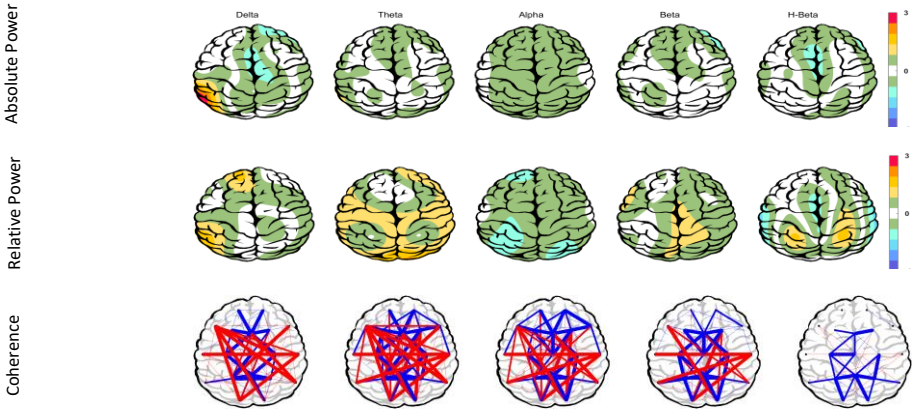


Mahkame Shokri\Dr Haghi

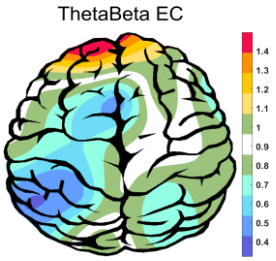
Z Score Summary Information (EC)

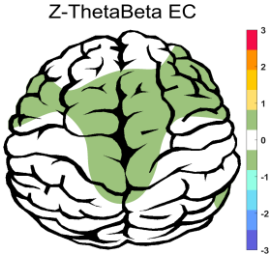


Z Score Summary Information (EO)

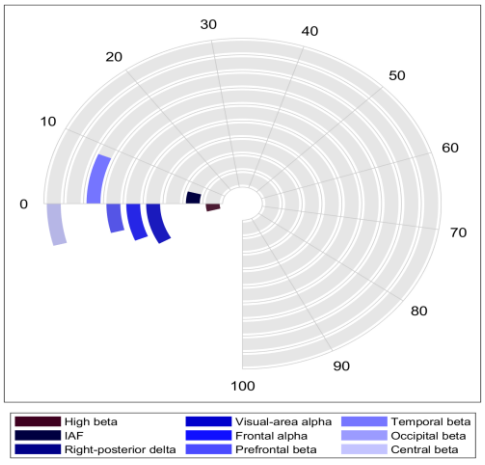


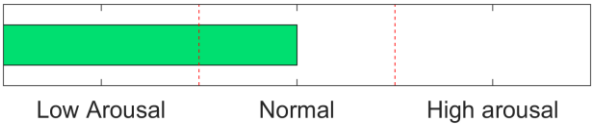
E.C.T/B Ratio (Raw- Z Score)



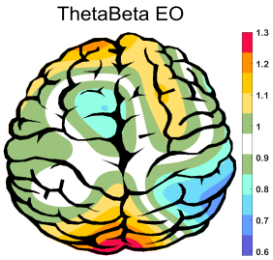


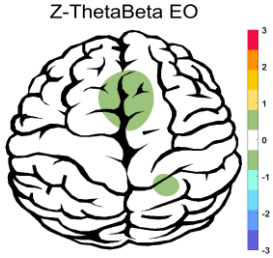
Arousal Level





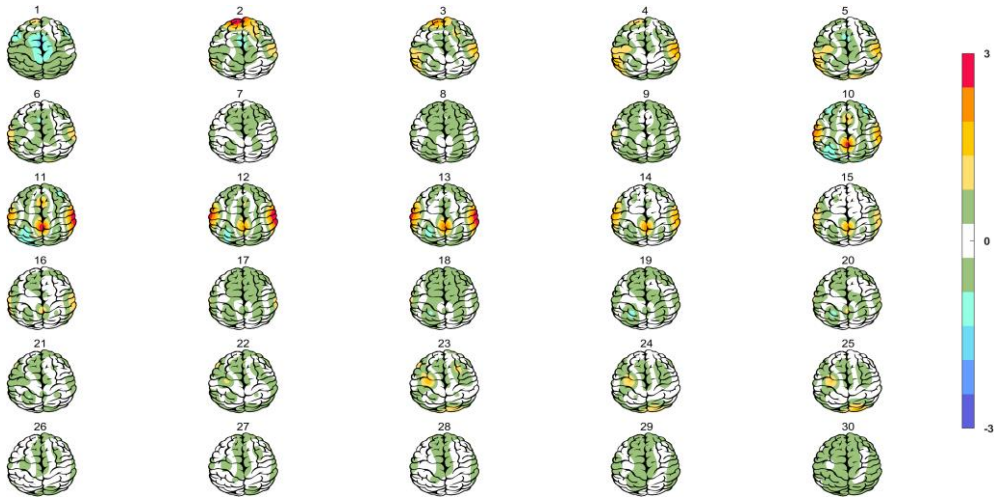
E.O.T/B Ratio (Raw- Z Score)



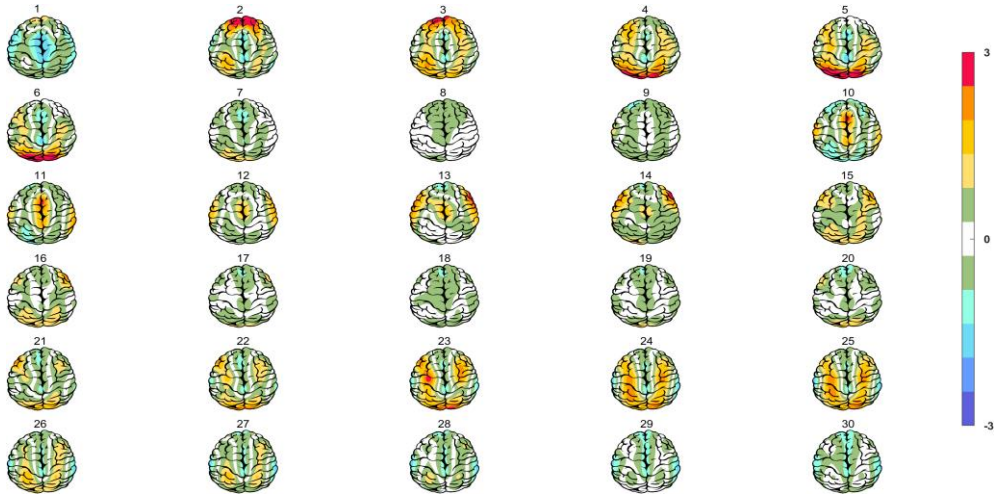


Mahkame Shokri\Dr Haghi

Absolute Power-Eye Closed (EC)

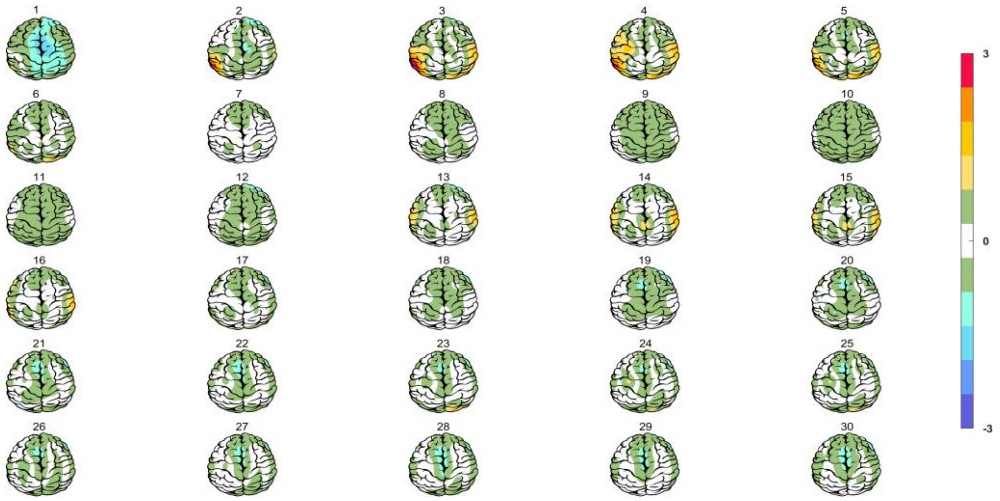


Relative Power-Eye Closed (EC)



Mahkame Shokri\Dr Haghi

Absolute Power-Eye Open (EO)



Relative Power-Eye Open (EO)