

# QEEG Clinical Report

EEGLens



The QEEG report is provided by NPCindex Company, operating under the QEEGhome brand.

## Personal Data:

Name: Matin Alemi

Gender: Male

Age: 2009-08-27 - 16.2

Handedness: Right

## Clinical Data:

Initial diagnosis: ADHD

Medication: -

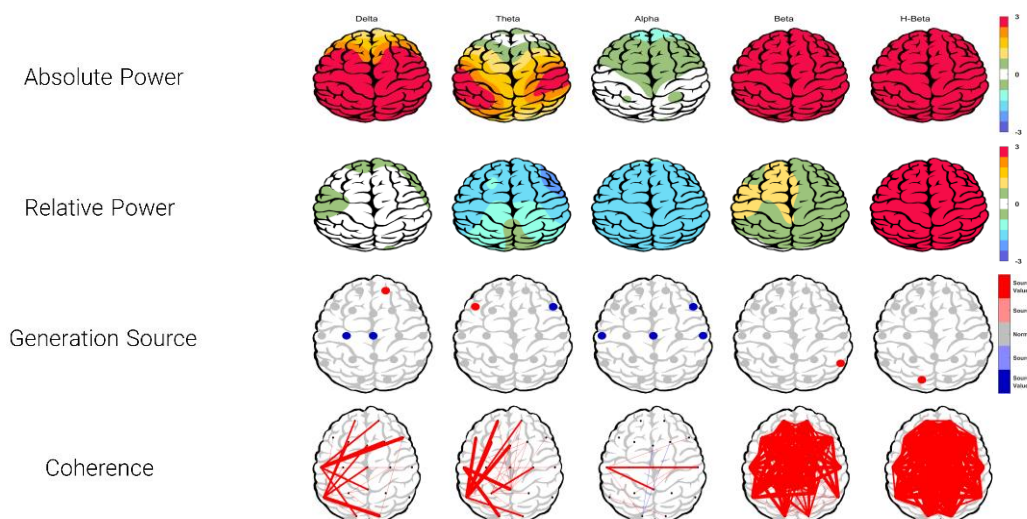
Date of Recording: 2025-10-14

Source of Referral: Dr Raisie

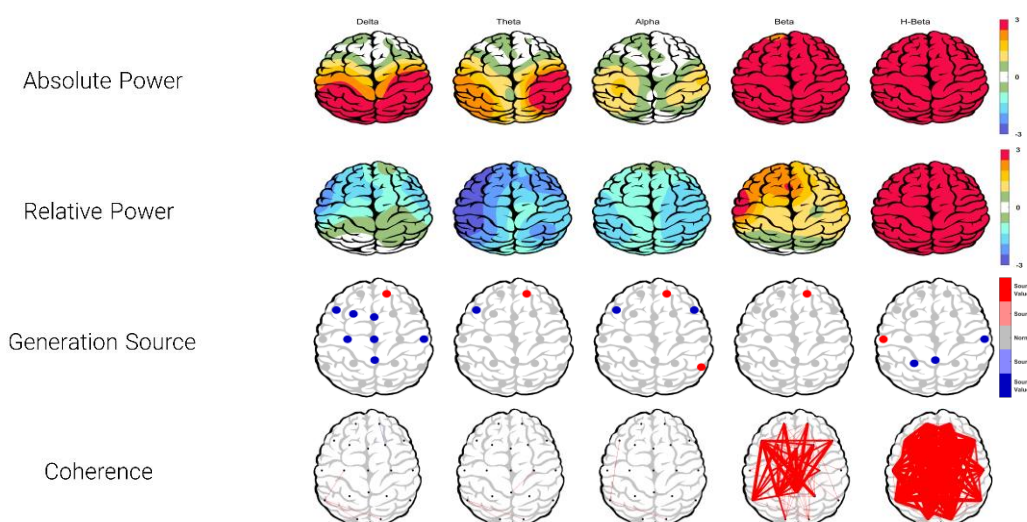
This case belongs to Dr Raisie

## Z Score Summary Information

### Eye Close

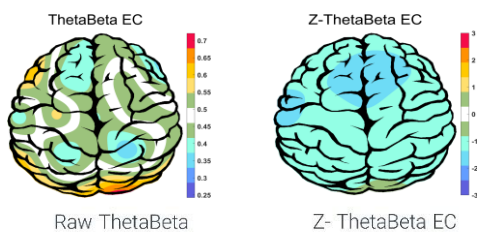


### Eye Open

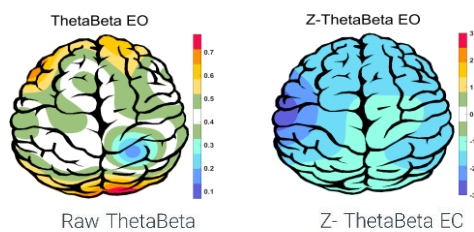


## Theta/Beta Ratio

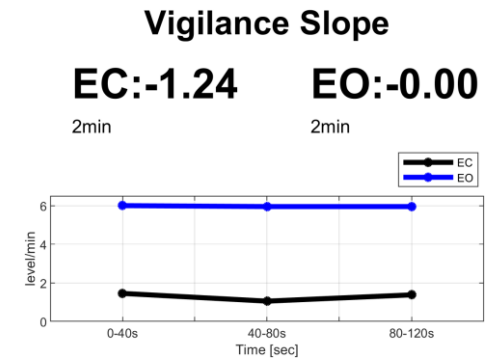
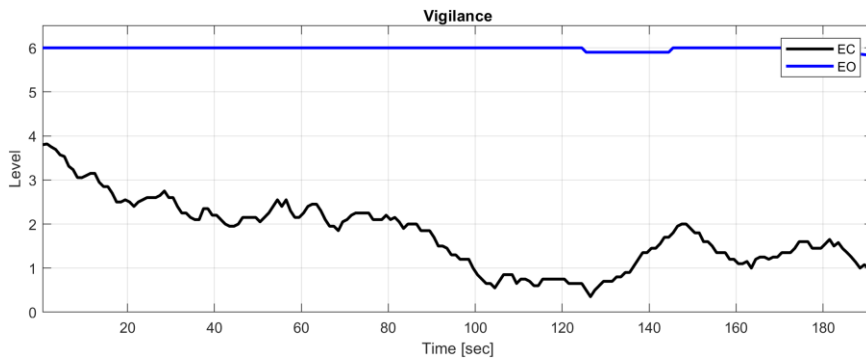
### Eye Close



### Eye Open



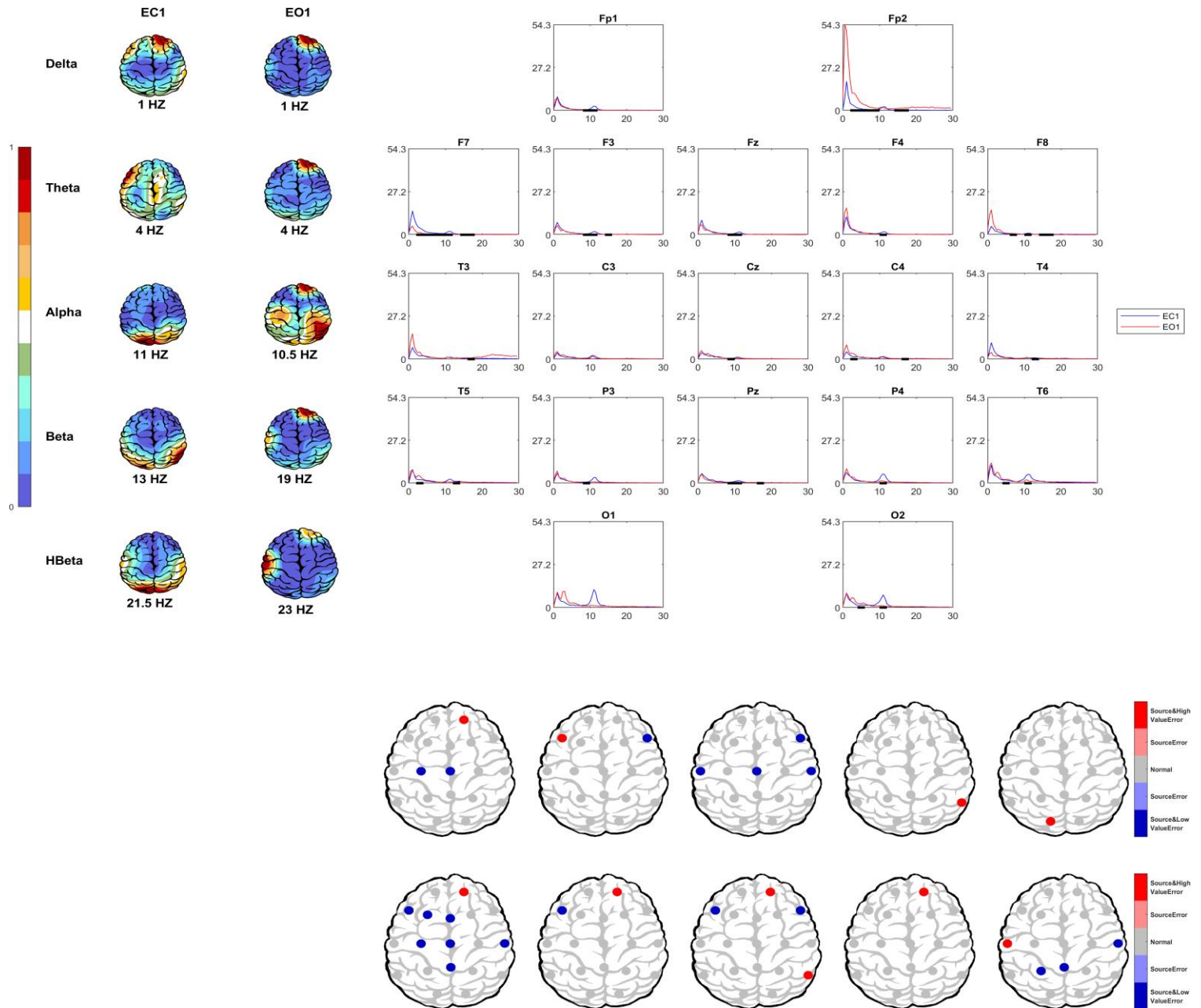
## Vigilance



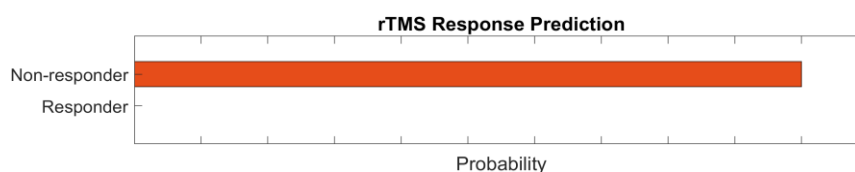
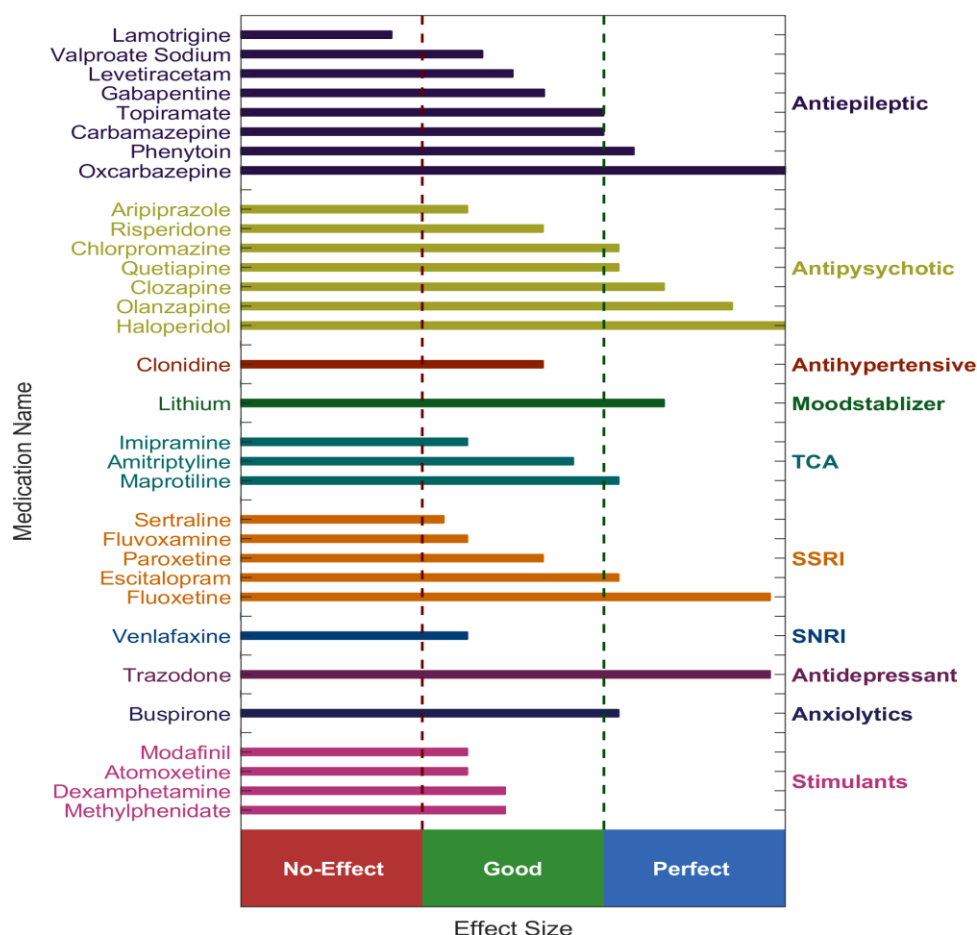
## EEG Neuromarker Values

| Neuromarker                 | Region    | Value | Assessment   |
|-----------------------------|-----------|-------|--------------|
| APF - EO                    | Frontal   | 10.33 | Normal       |
| AFP - EC                    | Frontal   | 11.00 | High         |
| APF - EO                    | Occipital | 10.25 | Normal       |
| AFP - EC                    | Occipital | 11.00 | High         |
| Alpha Asymmetry - EO        | Frontal   | -0.05 | Anhedonia    |
| Alpha Asymmetry - EC        | Frontal   | 00.00 | Anxiety      |
| Alpha Asymmetry - EO        | Occipital | 00.05 | Anxiety      |
| Alpha Asymmetry - EC        | Occipital | 00.09 | Anxiety      |
| Beta Asymmetry - EO         | Frontal   | -0.06 | Anxiety      |
| Beta Asymmetry - EC         | Frontal   | -0.02 | Anxiety      |
| Alpha Blocking              | -         | -     | Not Observed |
| Arousal Level - EO          | -         | -     | Normal       |
| Arousal Level - EC          | -         | -     | Normal       |
| Vigilance Level - EO        | -         | 06.00 | Normal       |
| Vigilance Level - EC        | -         | 02.00 | Low          |
| Vigilance Mean - EO         | -         | 05.98 | Normal       |
| Vigilance Mean - EC         | -         | 01.74 | Low          |
| Vigilance Regulation - EO   | -         | -0.00 | Normal       |
| Vigilance Regulation - EC   | -         | -1.24 | Low          |
| Vigilance 0 Stage (%) - EO  | -         | 98.96 | High         |
| Vigilance 0 Stage (%) - EC  | -         | 00.00 | Normal       |
| Vigilance A1 Stage (%) - EO | -         | 00.00 | -            |
| Vigilance A1 Stage (%) - EC | -         | 03.12 | -            |

## EEG Spectra



## QEEG Based Predicting Medication Response



### Explanation

These two tables can be considered the most important finding that can be extracted from QEEG. To prepare this list, the NPCIndex Article Review Team has studied, categorized, and extracted algorithms from many authoritative published articles on predict medication response and Pharmacology EEG studies. These articles are published between 1970 and 2021. The findings extracted from this set include 85 different factors in the raw band domains, spectrum, power, coherence, and loreta that have not been segregated to avoid complexity, and their results are shown in these diagrams. One can review details in NPCIndex.com .

### Medication Recommendation

These two charts, calculate response probability to various medications, according only to QEEG indicators. Blue charts favor drug response and red charts favor drug resistance. The longer the bar, the more evidence there is in the articles. Only drugs listed in the articles are listed. These tables present the indicators reviewed in the QEEG studies and are not a substitute for physician selection.



## Report

گزارش:

1.

نتایج تشخیصی:

1.

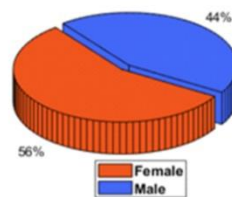
## rTMS Response Prediction

### Network Performance

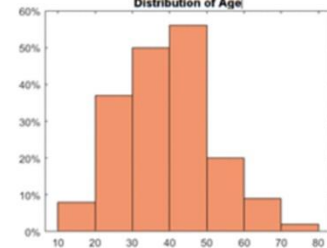
Accuracy: 92.10%  
Sensitivity: 89.13%  
Specificity: 97.47%

### Participants Information

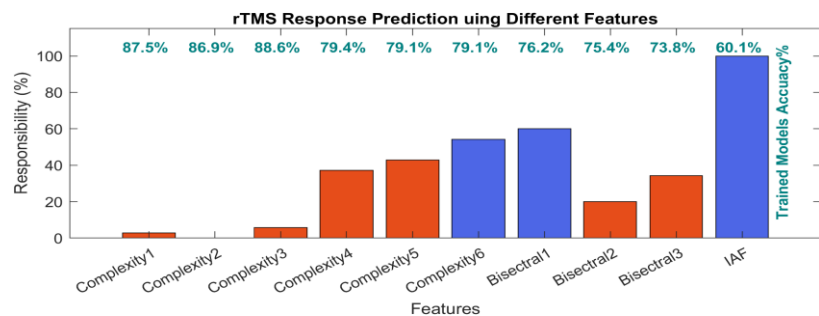
Distribution of Gender



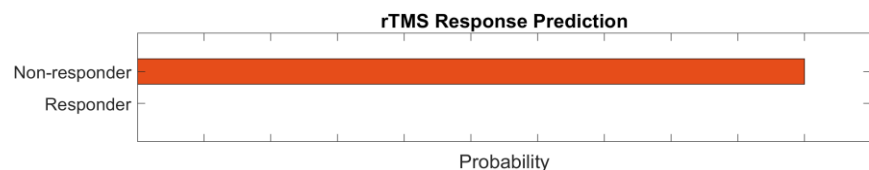
Distribution of Age



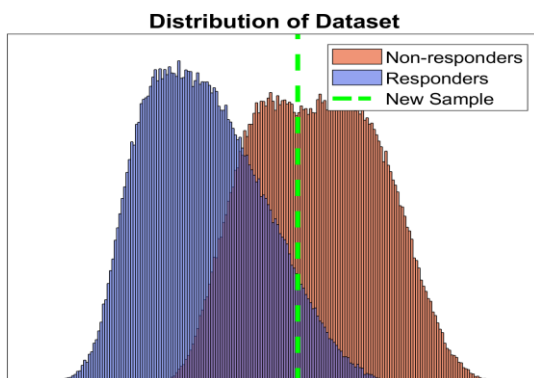
### Features Information



### Responsibility



### Data Distribution

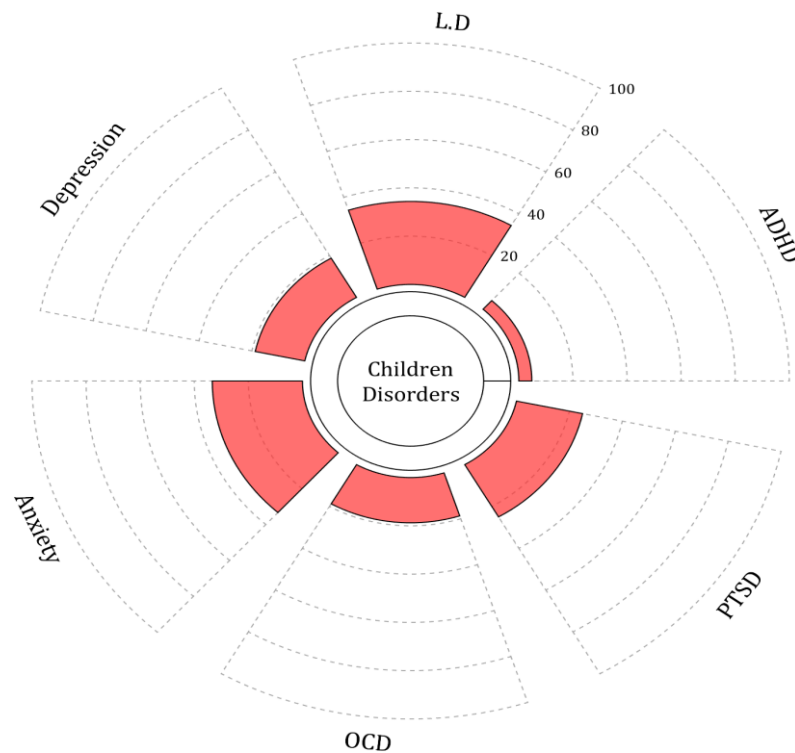


### About Predicting rTMS Response

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.

## Pathological Assessment

Main Diagnosis: Children Disorder



### ADHD Subtypes

1. Prone to moody behavior and temper tantrums. May be anxious, may be highly intelligent, need sufficient sleep, and should avoid high carbohydrate intake. Avoid stimulants,

### Description

According to the guidelines, psychiatric disorders in children (under 17 years) include *ADHD*, *learning disorder (LD)*, *PTSD*, *OCD*, *depression*, and *anxiety*. In the above graph, the red area shows the percentage of each disorder from your patient's EEG markers. Observe that each disorder marker is not unique and can be shared with others.

#### References:

Sadock, B. J., Sadock, V. A., & Ruiz, P. (Eds.). (2025). Kaplan and Sadock's comprehensive textbook of psychiatry (11th ed., Vols. 1–2). Wolters Kluwer  
 Sadock, B. J., Sadock, V. A., & Ruiz, P. (2022). Kaplan and Sadock's synopsis of psychiatry: Behavioral sciences/clinical psychiatry (12th ed.). Wolters Kluwer

### User Manual

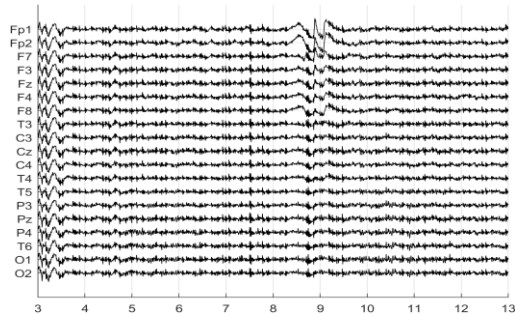




## Denoising Information

Eye Close

Raw EEG



Rejected Channel



**Total Recording Time Remaining:**

206.45 sec

**Number of Eye and Muscle Elements**

Eye: 2

Muscle: 1

Low Artifact Percentage



High Artifact Percentage

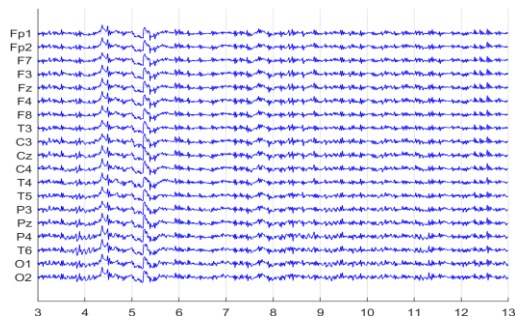


Total Artifact Percentage



**EEG Quality:** perfect

Denoised EEG

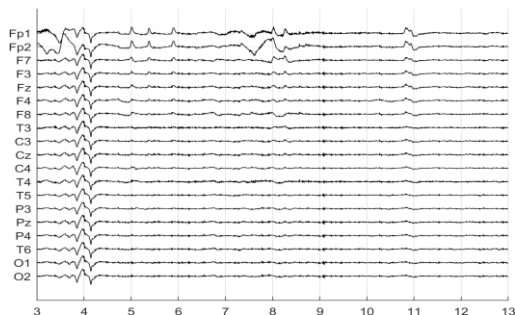


Flat Channel



Eye Open

Raw EEG



Rejected Channel



**Total Recording Time Remaining:**

192.05 sec

**Number of Eye and Muscle Elements**

Eye: 4

Muscle: 2

Low Artifact Percentage



High Artifact Percentage

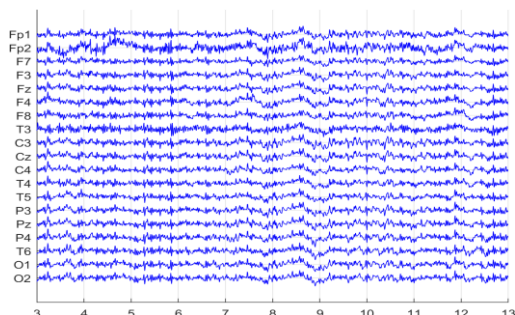


Total Artifact Percentage



**EEG Quality:** perfect

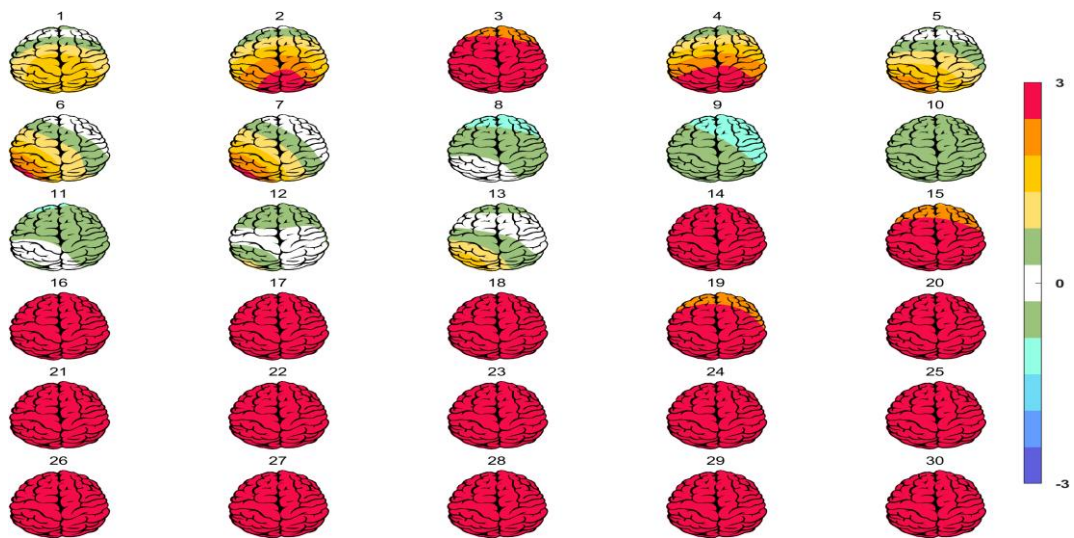
Denoised EEG



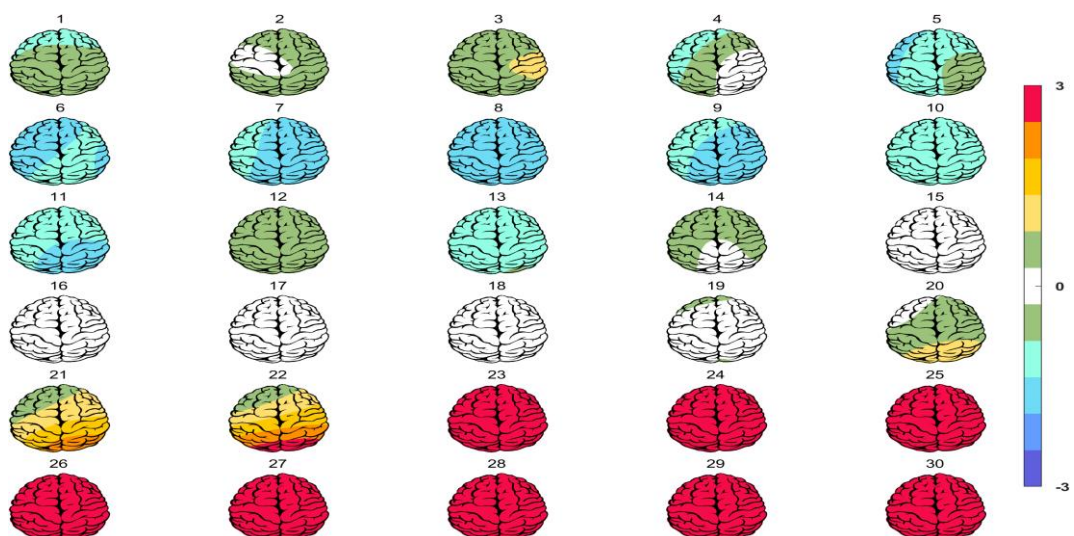
Flat Channel



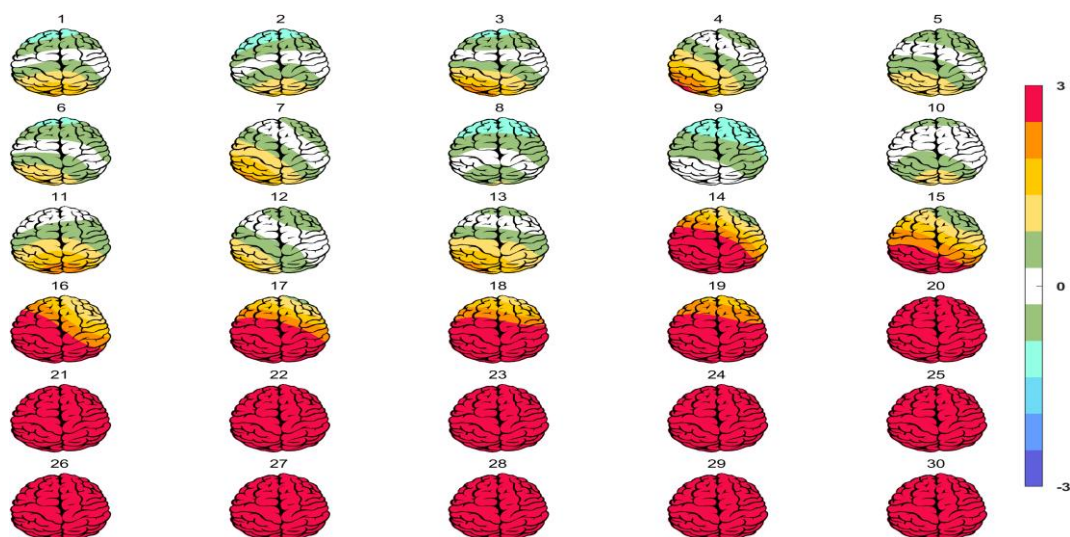
## Absolute Power-Eye Close



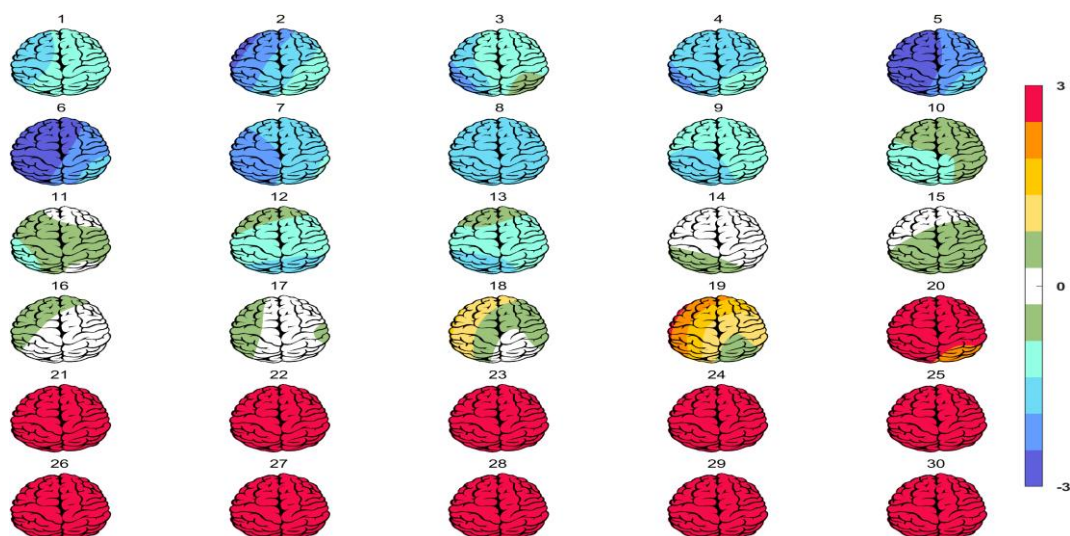
## Relative Power-Eye Close



## Absolute Power-Eye Open

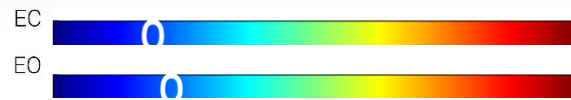


## Relative Power-Eye Open

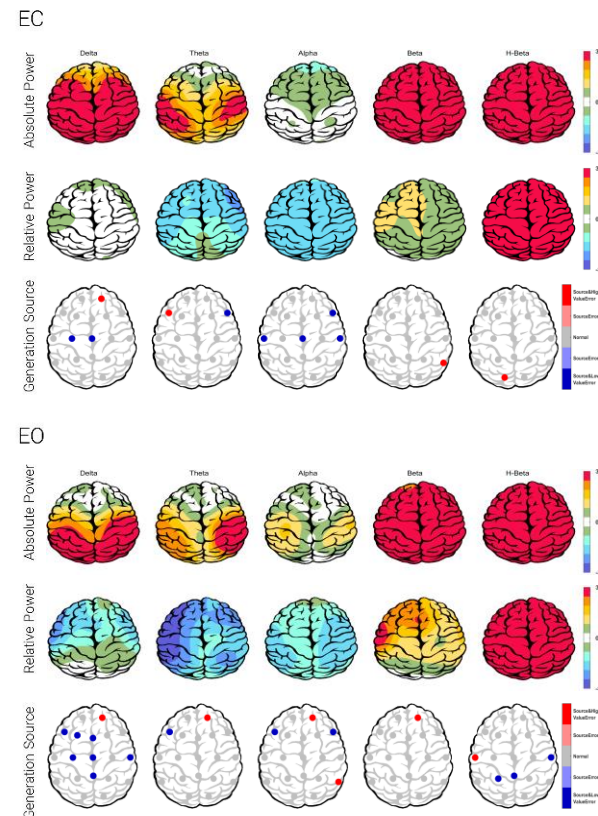




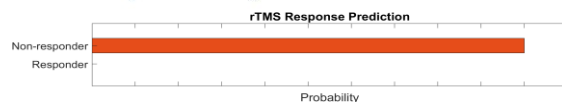
## EEG Quality



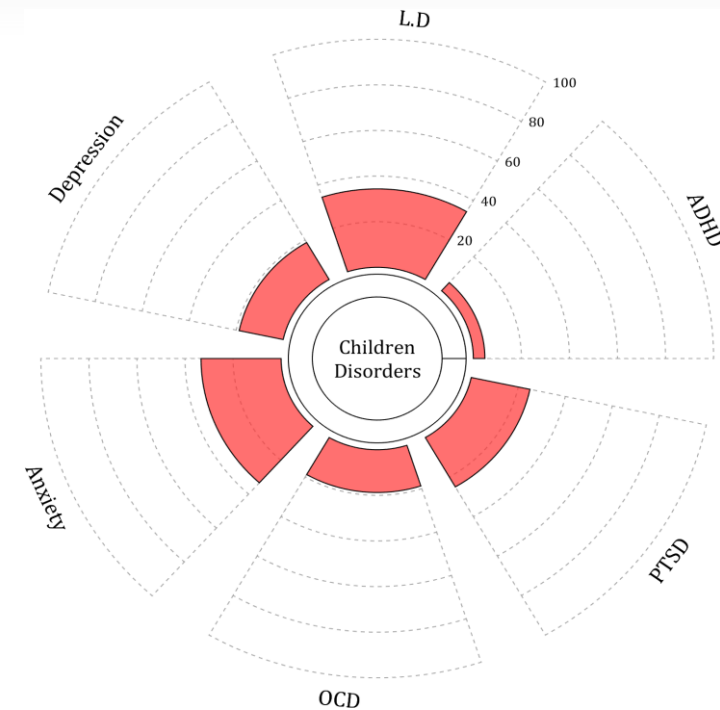
## Z-score Information



## TMS Responsibility



## Pathological Assessment



## EEG Neuromarker Values

| Neuromarker        | Region    | Value | Assessment |
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