

Patient ID Number:

Last Name:

First Name:

Date of Birth:

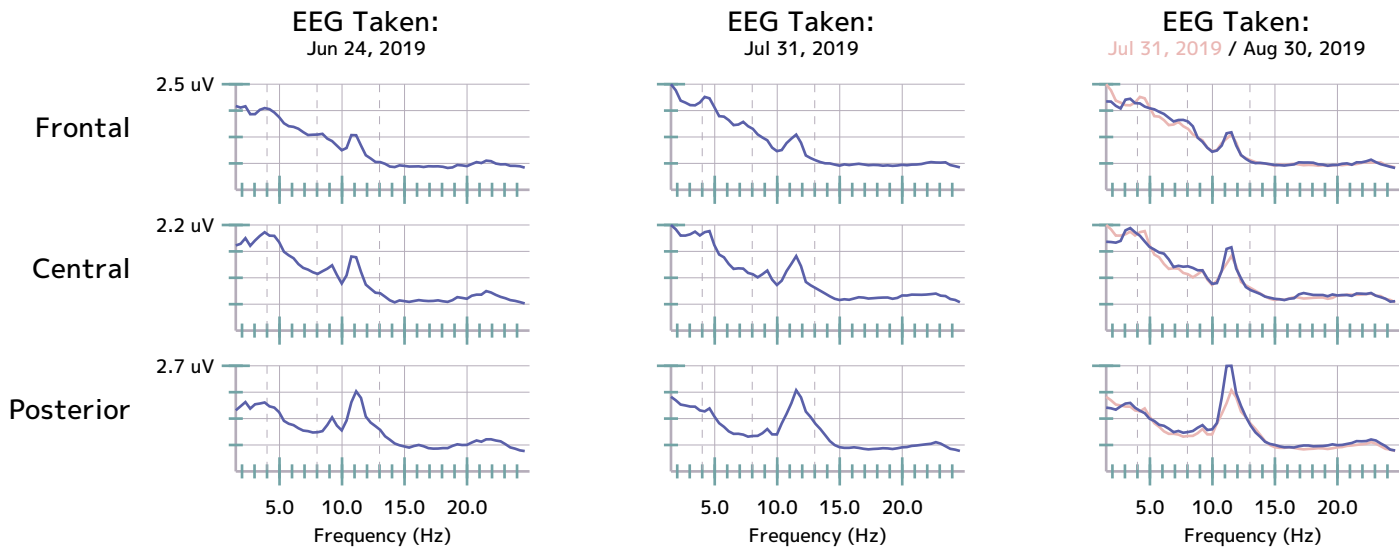
Age: 37.3 years

Gender: Male

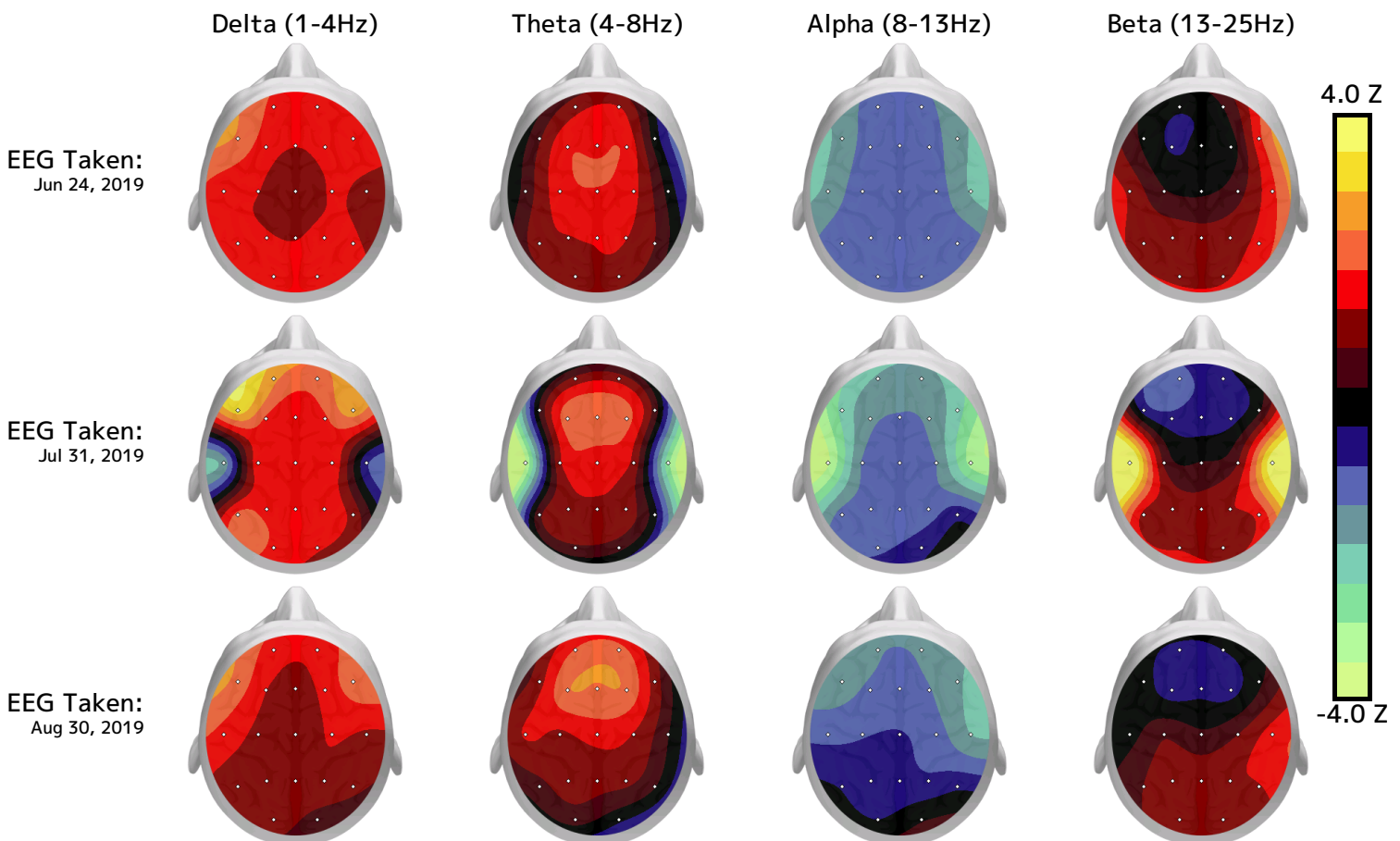
EEG Taken: August 30, 2019 14:38:29



## QEEG Magnitude Spectra



## QEEG Relative Power





## Findings

EEG Taken: Excluded channels: Fp2  
Jun 24, 2019

EEG Taken: Excluded channels: Fp1, Fp2  
Aug 30, 2019

### Current EEG activity compared to expected norms:

Relatively high EEG activity is considered to be between 1.0 and 2.0 standard deviations (Z) relative to norms. Relatively low EEG activity is considered to be between -1.0 to -2.0 Z compared to norms. Significantly high activity relative to norms is greater than or equal to 2.0 Z. Significantly lower activity relative to norms is lower than or equal to -2.0 Z.

	Significantly Lower	Relatively Lower	Relatively Higher	Significantly Higher
Delta			LF,RF	
Theta			F,C,LF,RF	
Alpha		F,C,LF,RF		
Beta				

Region Key	
F	Frontal
C	Central
P	Posterior
LF	Left Frontal
RF	Right Frontal
LP	Left Posterior
RP	Right Posterior

### Current EEG activity compared to most previous recording:

A difference of 0.5-1.0 Z is considered to be relatively changed, whereas a difference in activity greater than 1.0 Z is considered to be significantly changed.

	Significant Decr.	Relative Decr.	Relative Incr.	Significant Incr.
Delta		P,LF,LP		
Theta			LF	
Alpha			LP	
Beta				

Regions are compared to age and gender-matched controls. Standard deviation (Z) is used to measure these differences.

## NeuroRef Report

The NeuroRef report is designed to provide information about an electroencephalographic record (EEG) in comparison to a normative database. Analysis is presented on the EEG spectrum, which is generated with the following four ranges of activity- Delta (1-4 Hz), Theta (4-8 Hz), Alpha (8-13 Hz), and Beta (13-25 Hz). Each range of activity is analyzed against a normative age and gender matched database.

The EEG is conducted with the patient being in an awake eyes closed resting state. Two minutes of artifact-free EEG data is necessary for an accurate analysis. Non-EEG activity, commonly known as artifact, may be present in the record due to eye or facial movements, jaw clenching, blinking, electrical noise and more. In the awake eyes closed resting state, there are typical activity patterns associated with each of Delta, Theta, Alpha, and Beta ranges. Significant divergence from these expected activities may be associated with various symptom profiles.

- \* Delta (1-4Hz) activity is generally present during deep stages of sleep.
- \* Theta (4-8Hz) activity is generally present in early stages of sleep.
- \* Alpha (8-13Hz) activity is generally present in the eyes closed awake resting state.
- \* Beta I (13-25Hz) activity is generally present during eyes-open waking states.

This analysis provides an index of activities present within the EEG provided by the processing clinic. A consultation with a clinician is recommended to review these EEG results and their clinical correlations.

The NeuroRef report provides a non-diagnostic review of clean data provided to the EEG Laboratory. Guidelines for EEGs submitted for analysis are as follows: ten minutes of eyes-closed awake EEG is obtained from the patient. This report is not intended for diagnostic purposes and all information contained within this report should be reviewed with you by your clinician.

As of Sept 19th, 2017, frequency ranges for relative power calculations have been updated. This may be reflected by changes in the QEEG Relative Power head map color densities. All EEG analysis will reflect these changes in frequency thresholds. EEG reports can be generated on EEGs prior to this date and analyzed with updated thresholds.