

EEG Norm DB Comparative Analysis Results

Name

Raja b

Analysis No.

130934

Date of Birth

21-08-1989

Measurement date

2026-02-09

Sex

Male

Eyes Closed / Eyes Open

Eyes Closed

This result is calculated using iSyncBrain, a cloud-based AI brainwave automatic analysis platform, and compared to the standards for healthy Koreans by gender and age.

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	4
	1
	5
	1
	5
	1
	6
	1
	7

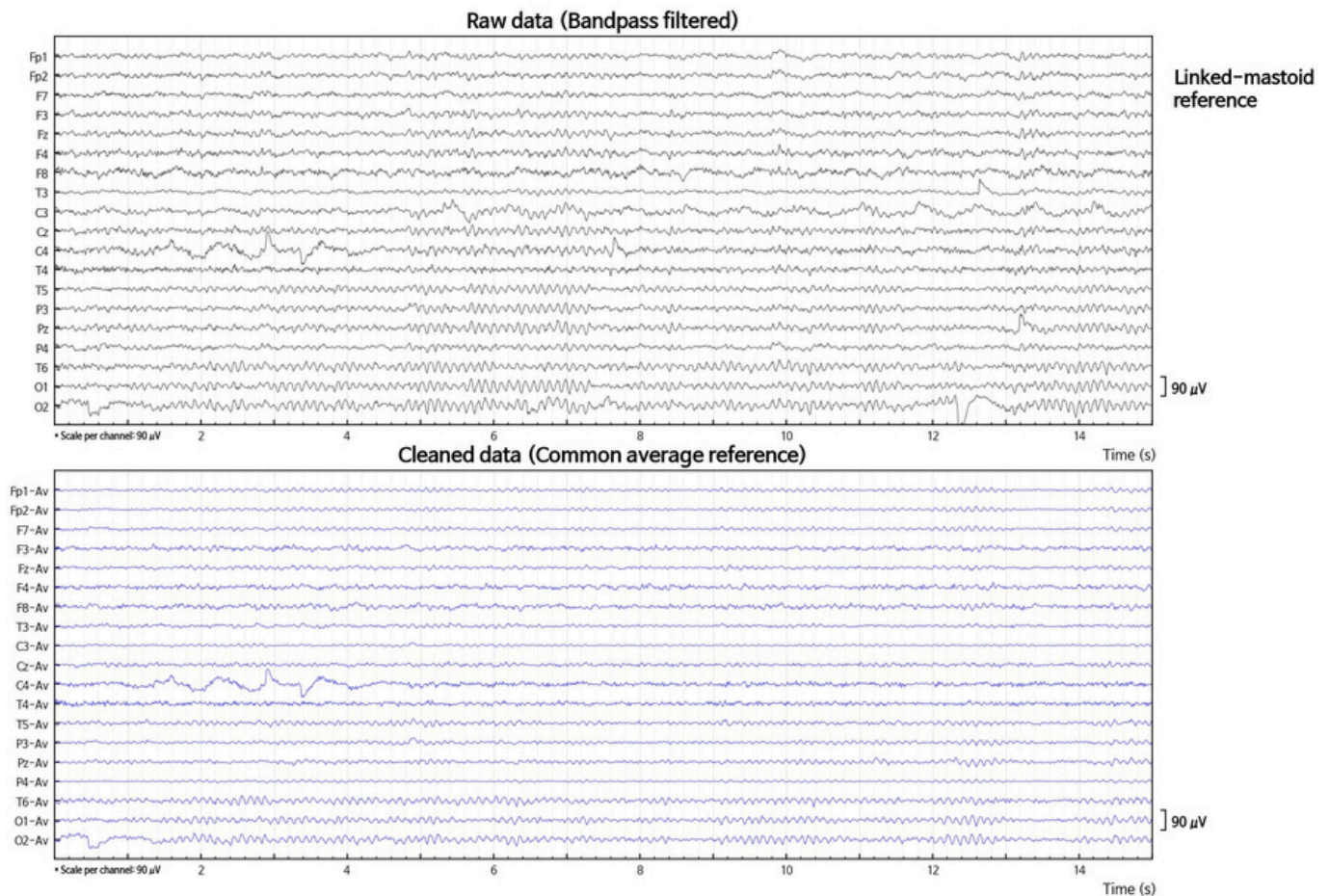
I . Personal Data

Norm DB analysis no.	Client Name	Sex	Date of Birth(age)	Measurement date	EC/EO	Handedness	Disease code
130934	Raja b	Male	21-08-2025	2026-02-09	Eyes Closed	Right-handed	-

II.EEG

1.Raw Data

EEG data is a record of the oscillations of electrical brain potentials recorded from electrodes on the human scalp (T100)(T101) (T005). The raw data in the figure below have been cleaned by the application of high-pass and low-pass filters. This markedly reduces distortions (artifacts) from common physiological sources such as face or eye muscle movements, as well as extrinsic non-physiological sources such as electrical devices, power lines, poor electrode contact.

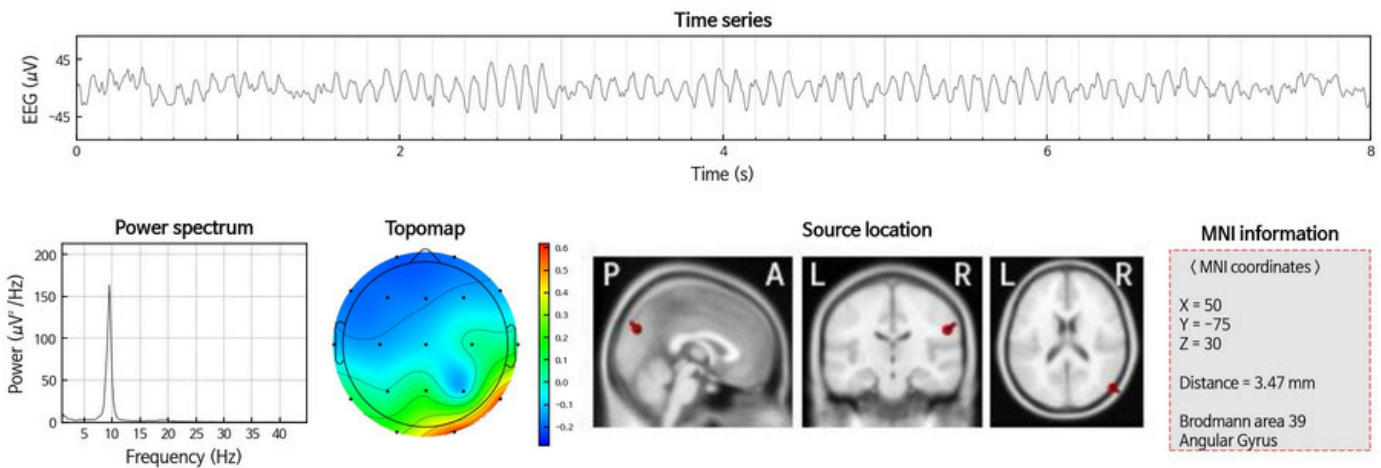


2.ICA components

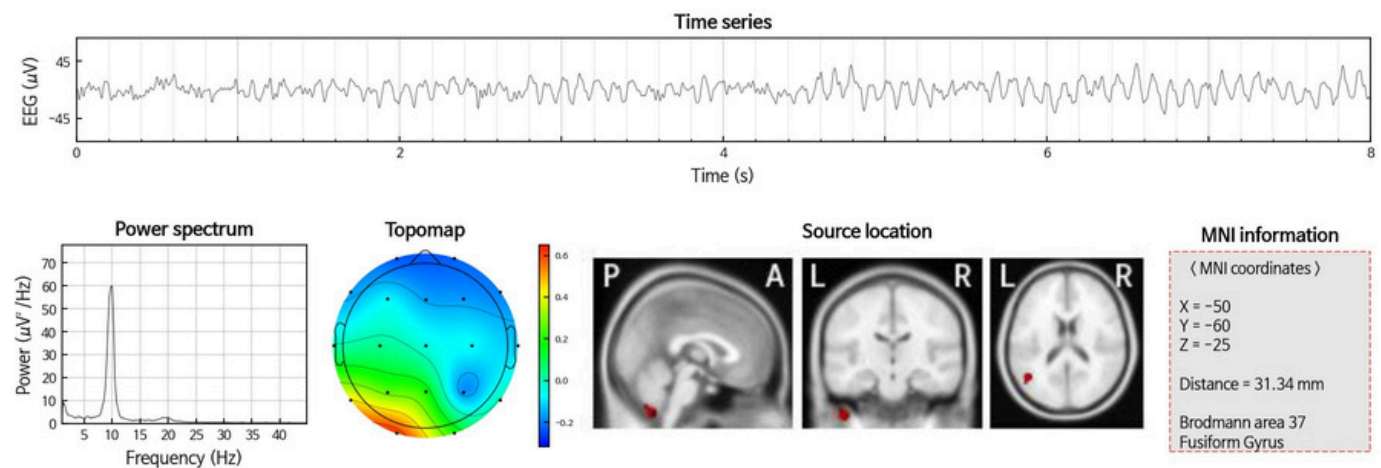
Independent component analysis (ICA) is a statistical method to separate independent sources from superimposed signals. It is the most common method that has been used in EEG data decomposition, and can be used to identify and remove the artifacts from raw EEG data. Features including time series, power spectrum density (PSD), component scalp map (Topomap), dipole source location (Source location) extracted from ICA are shown for each component.

Artifact Component No. 4,5,7,8,16,19

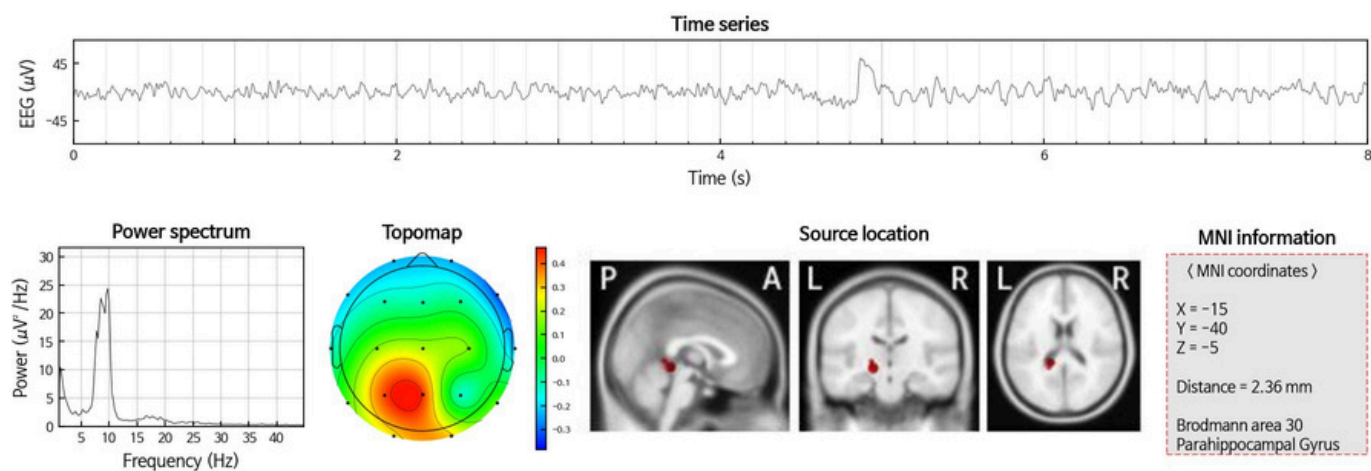
[Component 1]



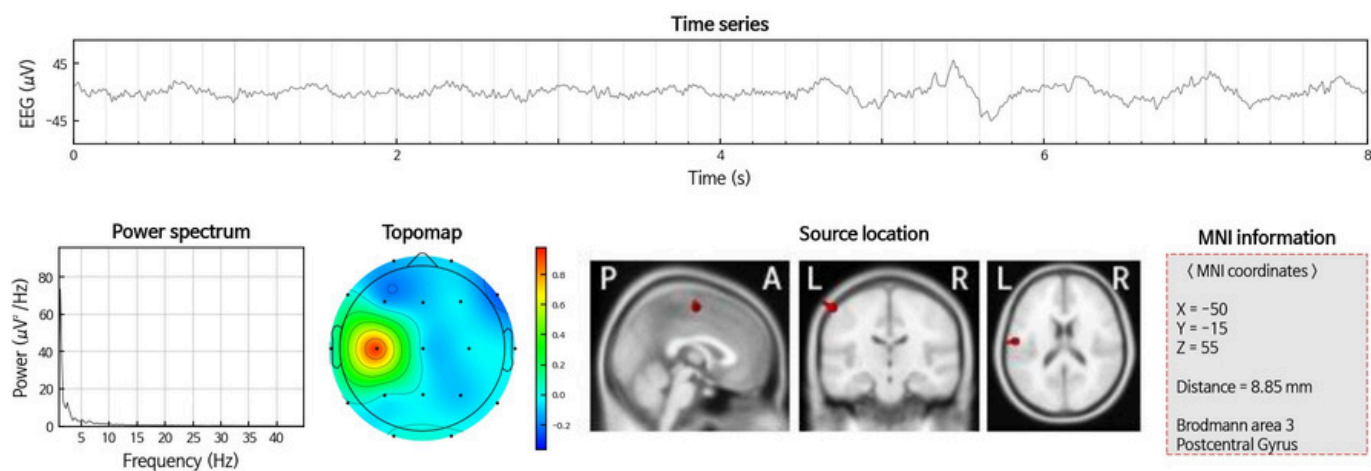
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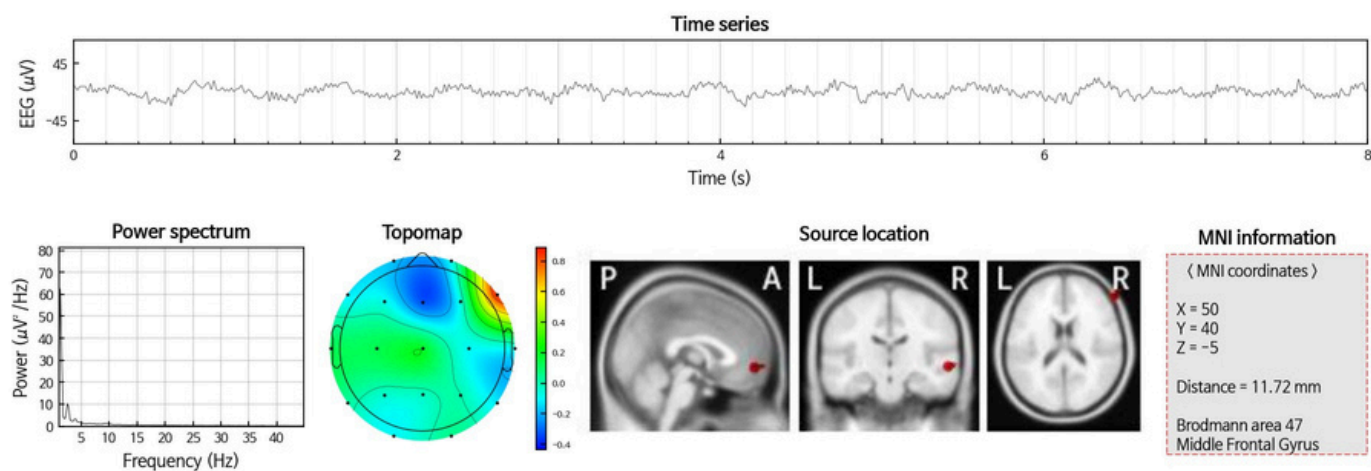
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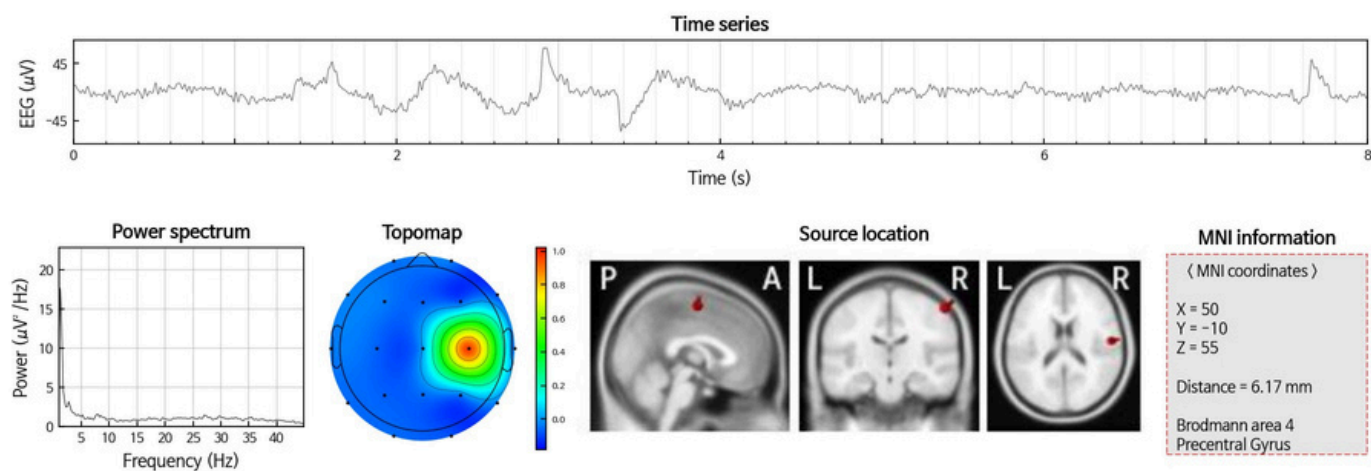
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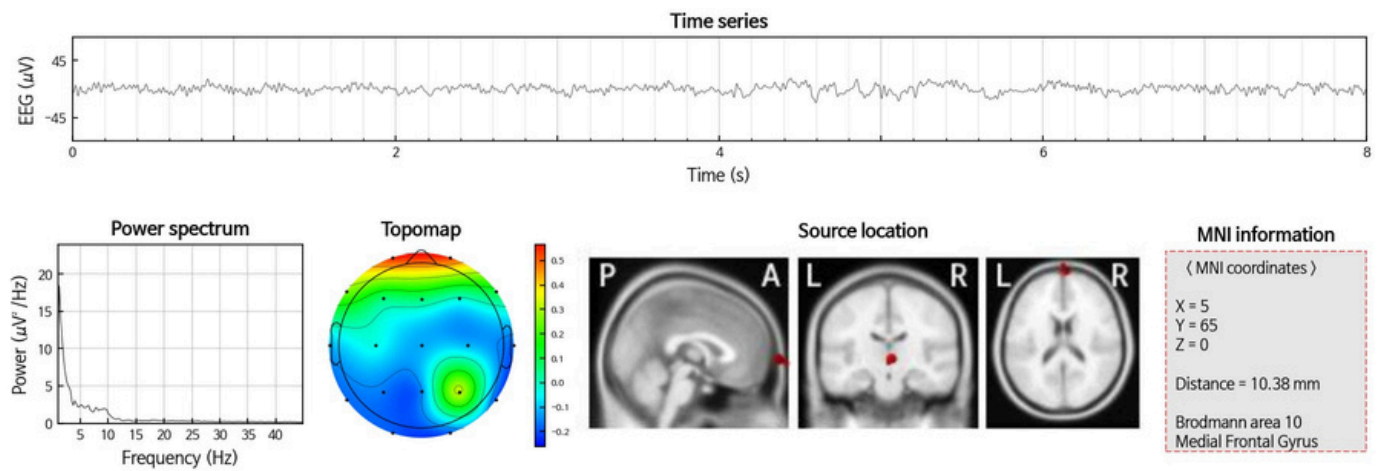
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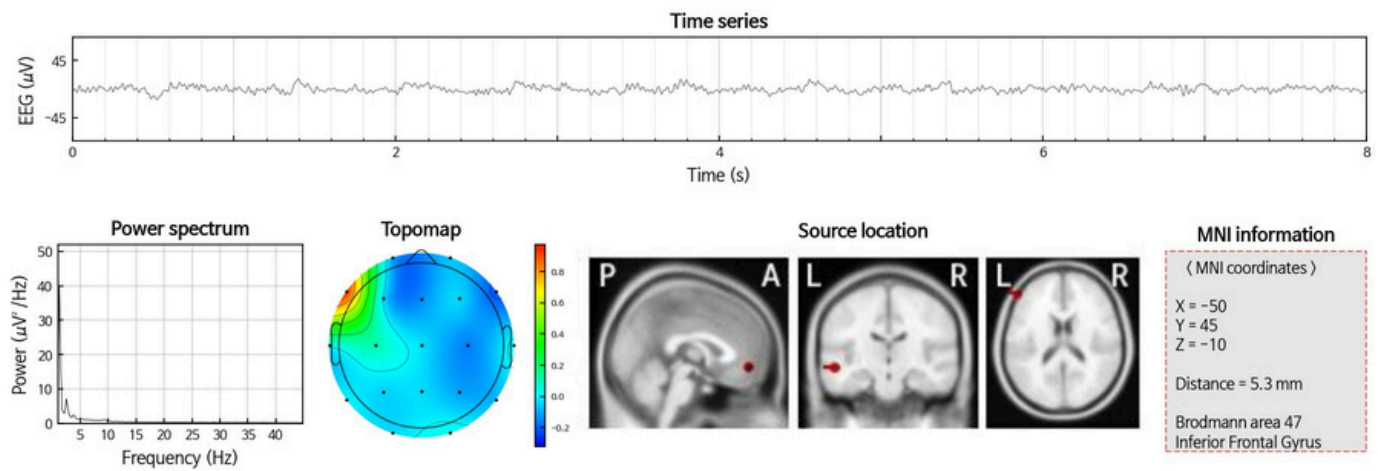
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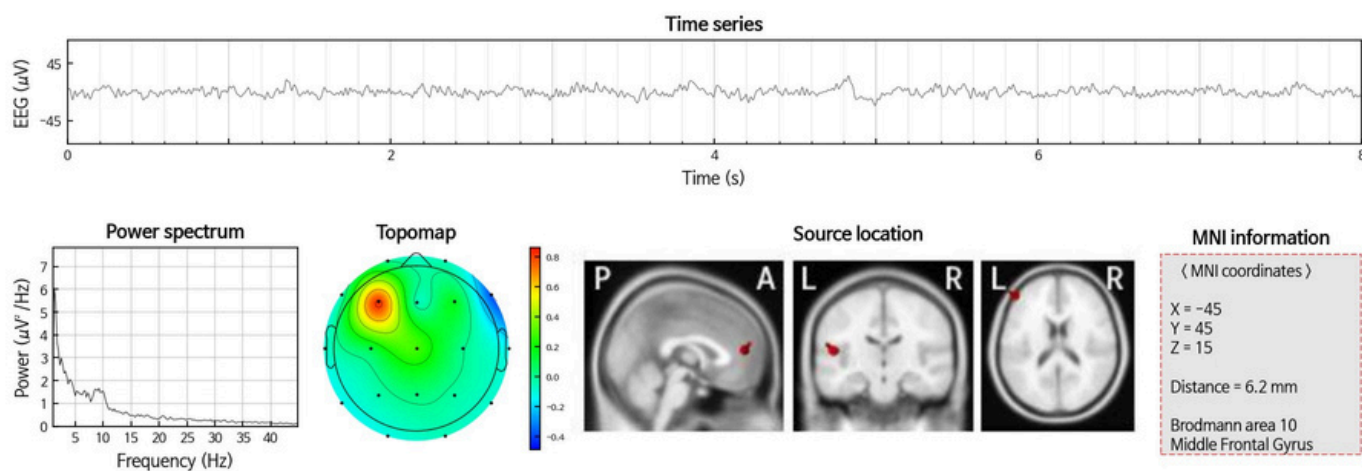
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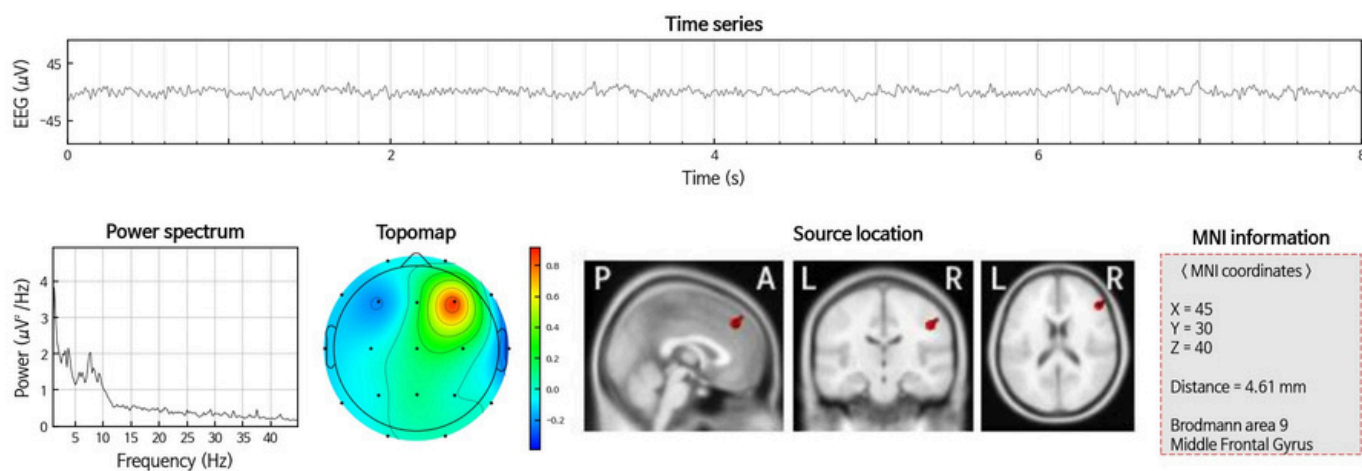
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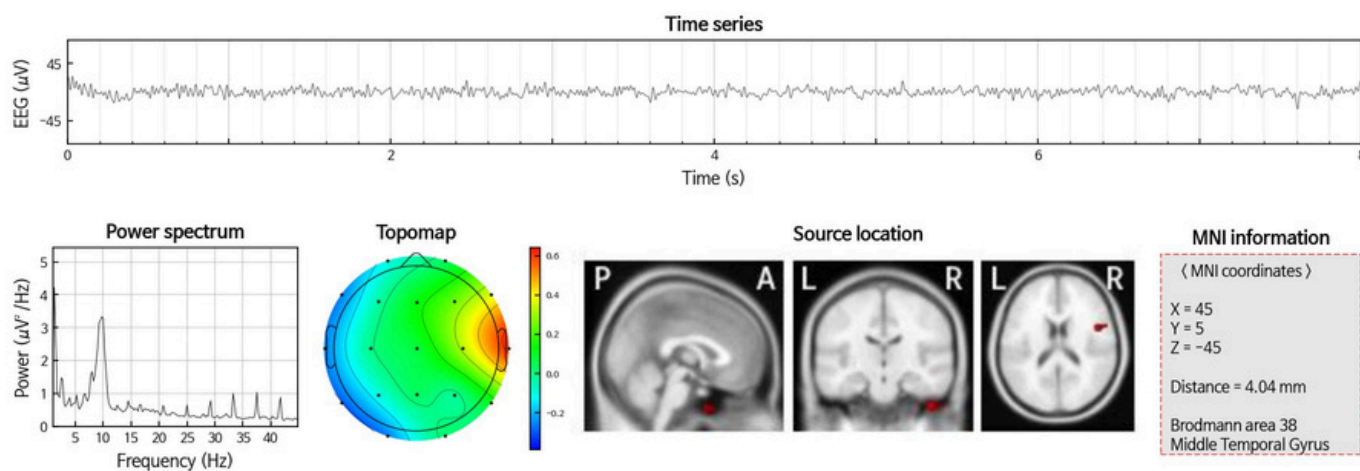
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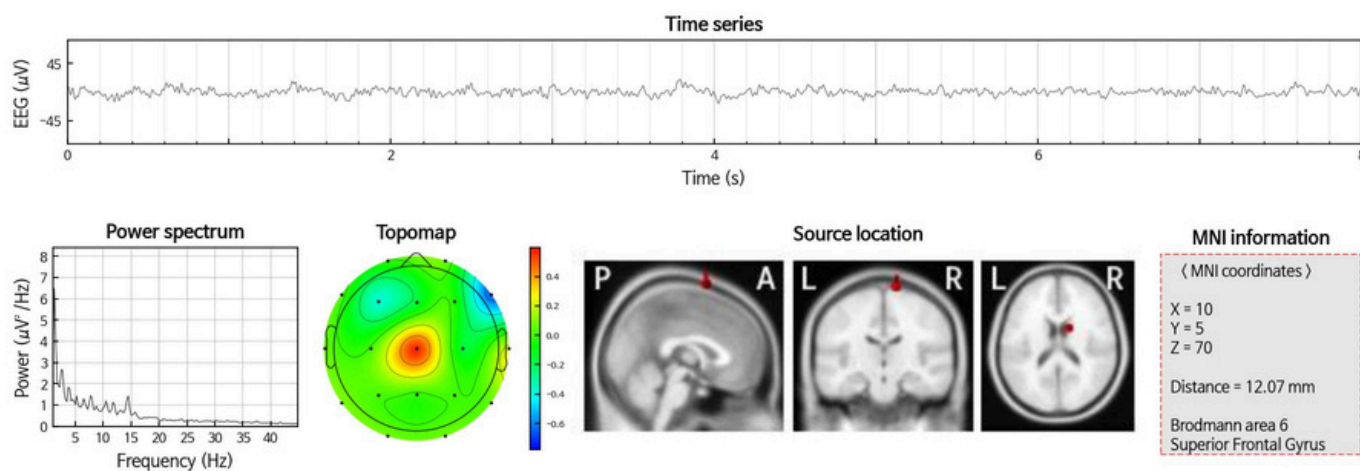
[Component 10]



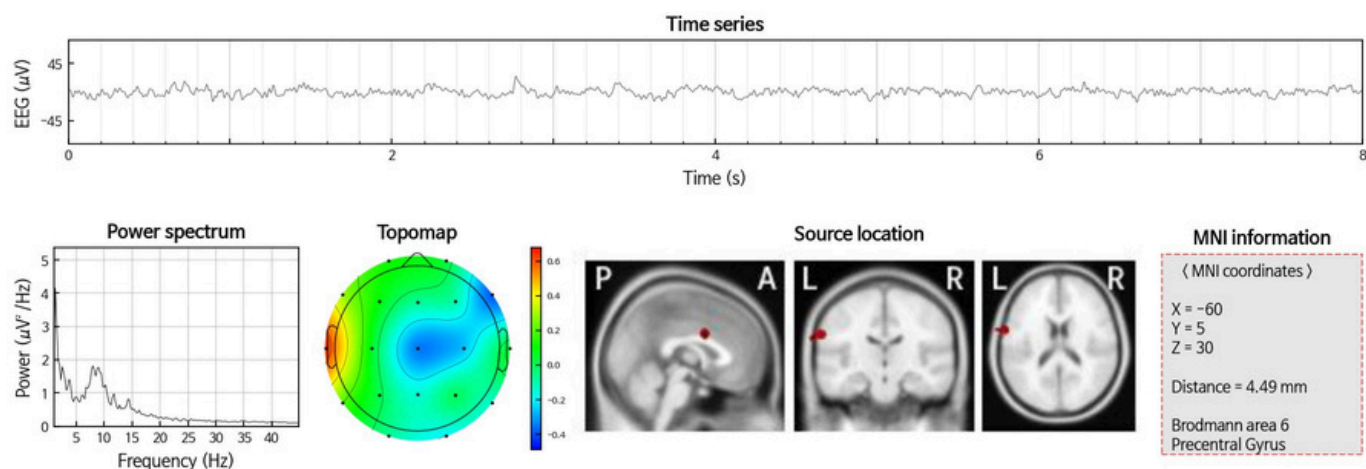
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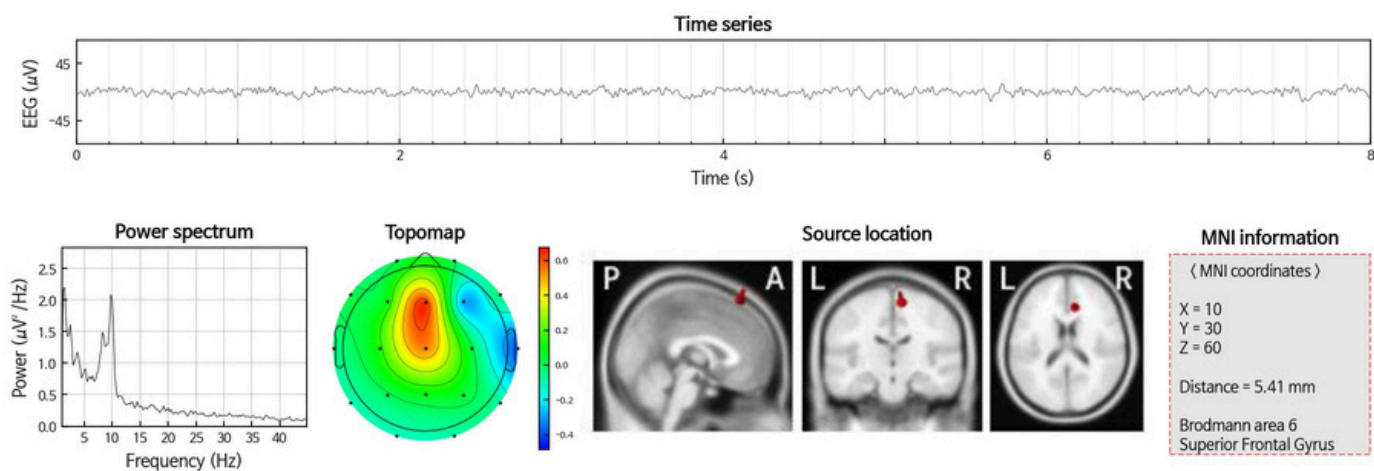
[Component 12]



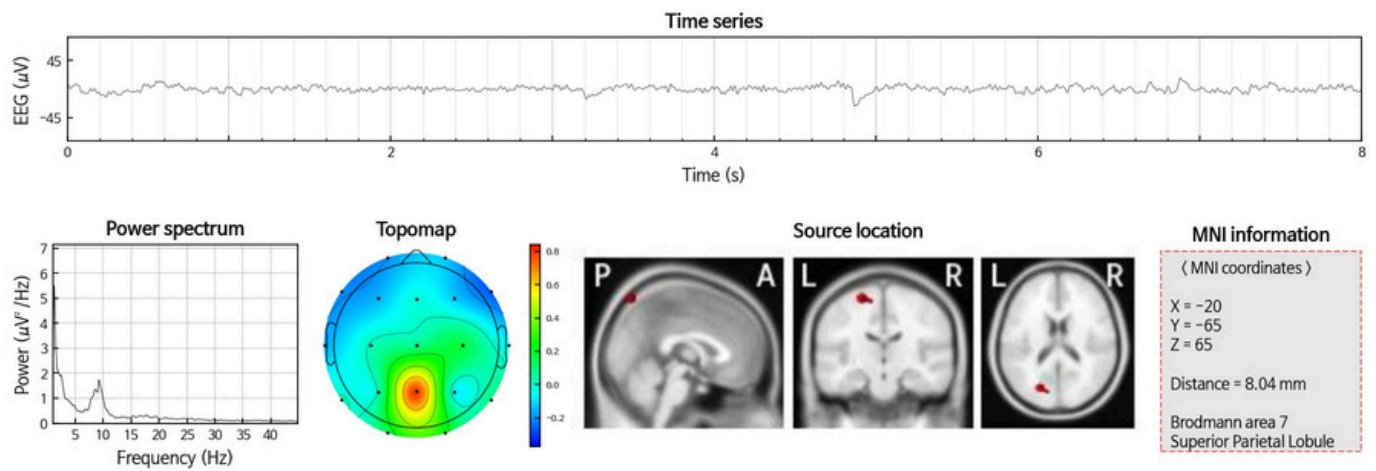
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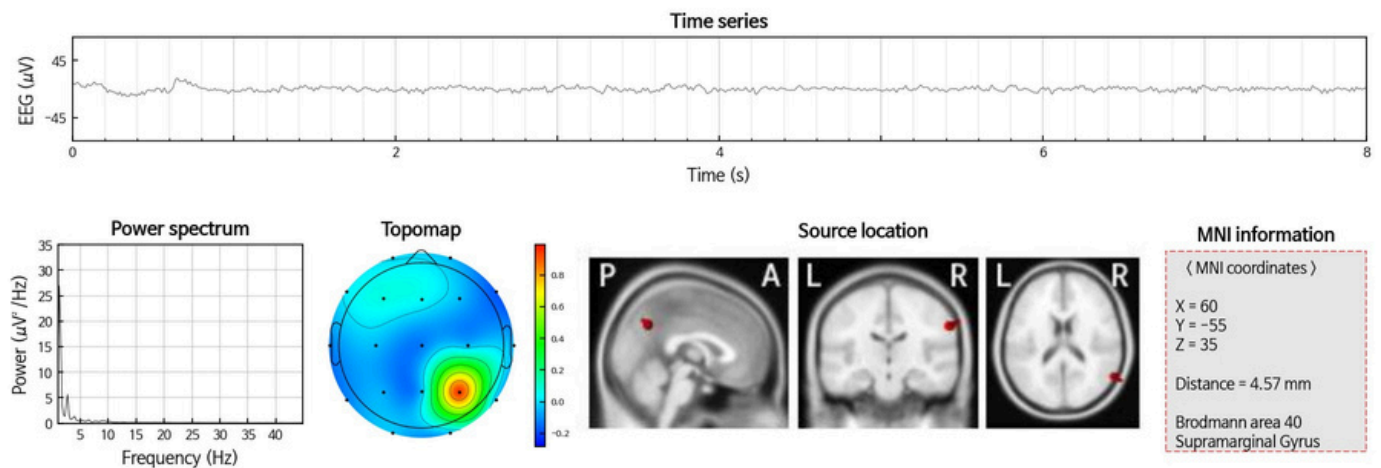
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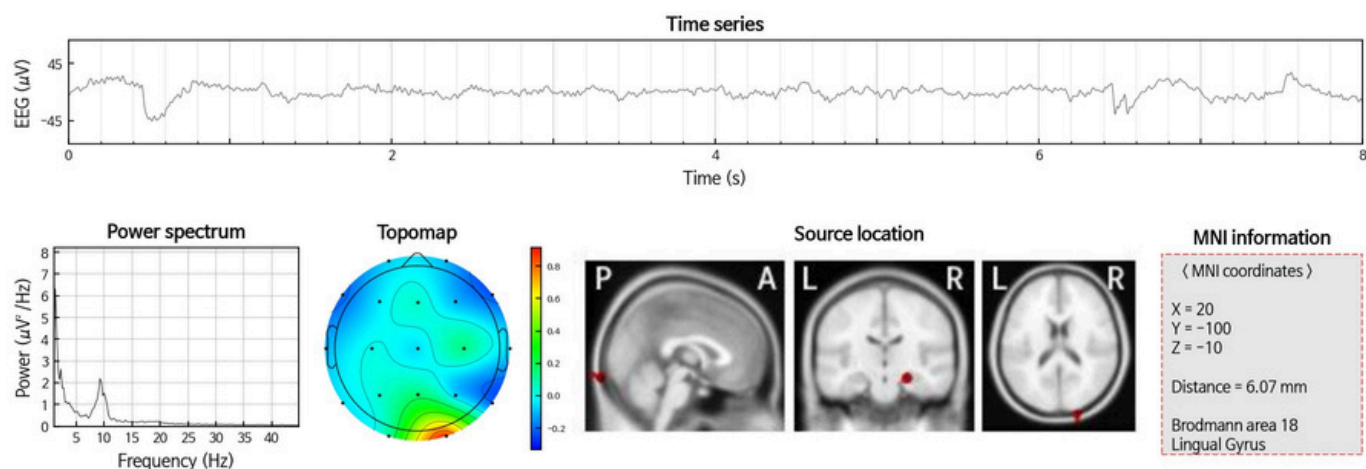
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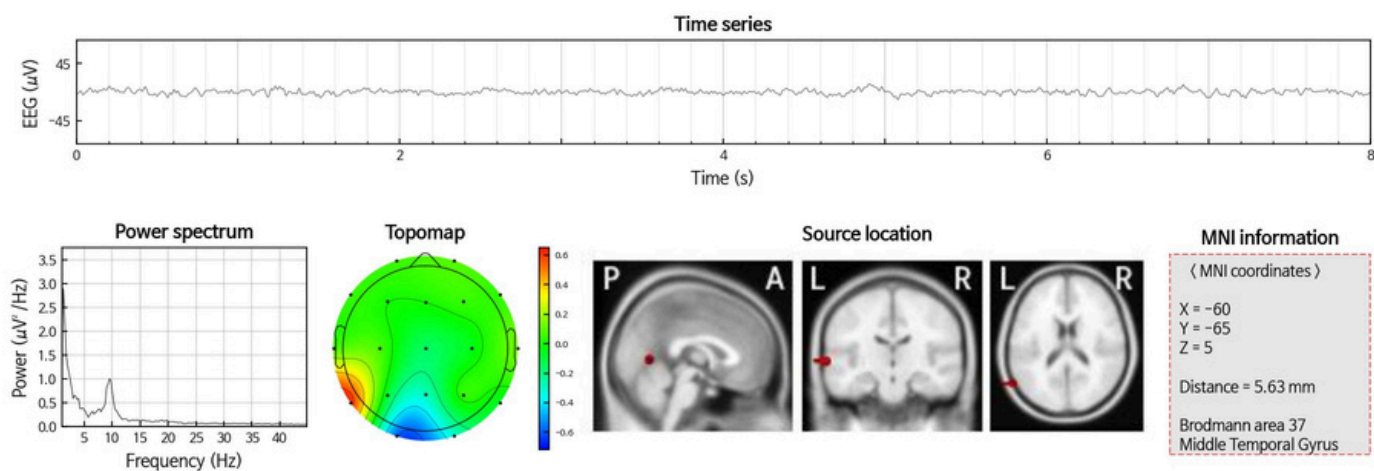
[Component 16]



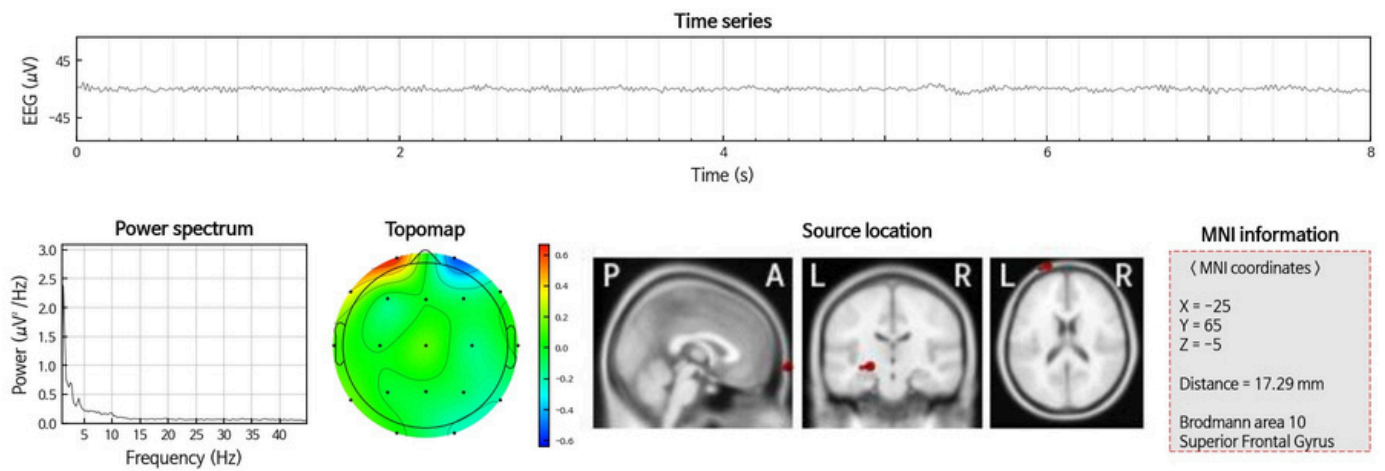
[Component 17]



[Component 18]



[Component 19]

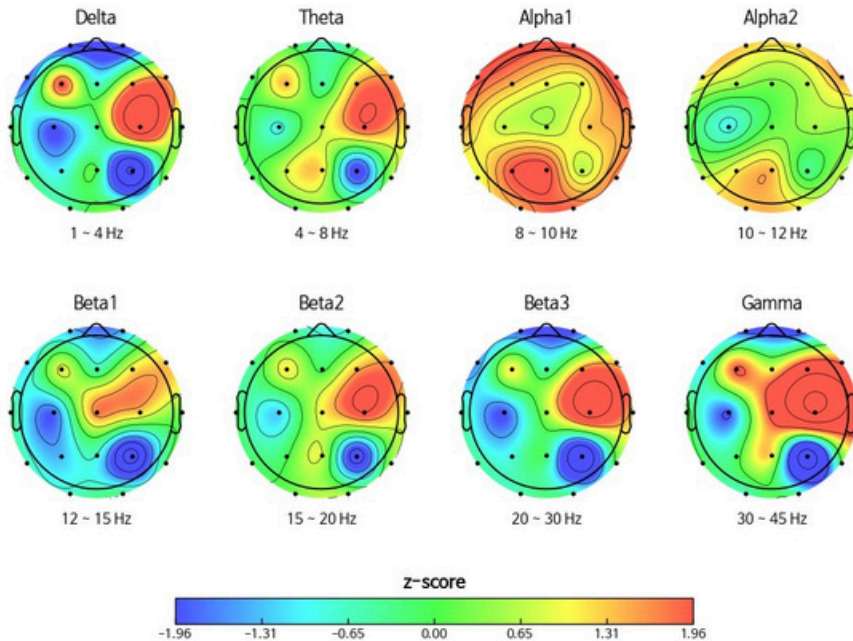


3. Band power – Topomap

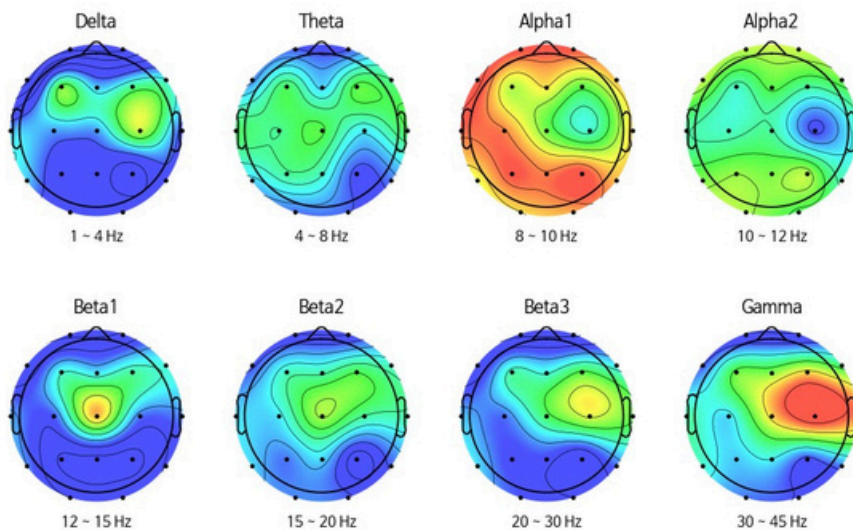
In powerspectraldensity(PSD) 2D map, topomaps of absolute and relative power in 1 Hz bins (1 - 45 Hz) as well as each frequency band are presented. Absolute power is the sum of the component powers for each frequency band. Relative power is the absolute power in a specific frequency band divided by the total power. It is advisable to compare relative power with absolute power, since absolute power reflects the individual differences due to variations in brain tissue. This feature provides absolute and relative power based on six brain regions (prefrontal, frontal, left temporal, right temporal, central, parietal, and occipital). The power spectra for each of the 19 channels are shown in the following feature, PSD spectrum (below).

3-1 Band

[Topomap (Abs. power)]

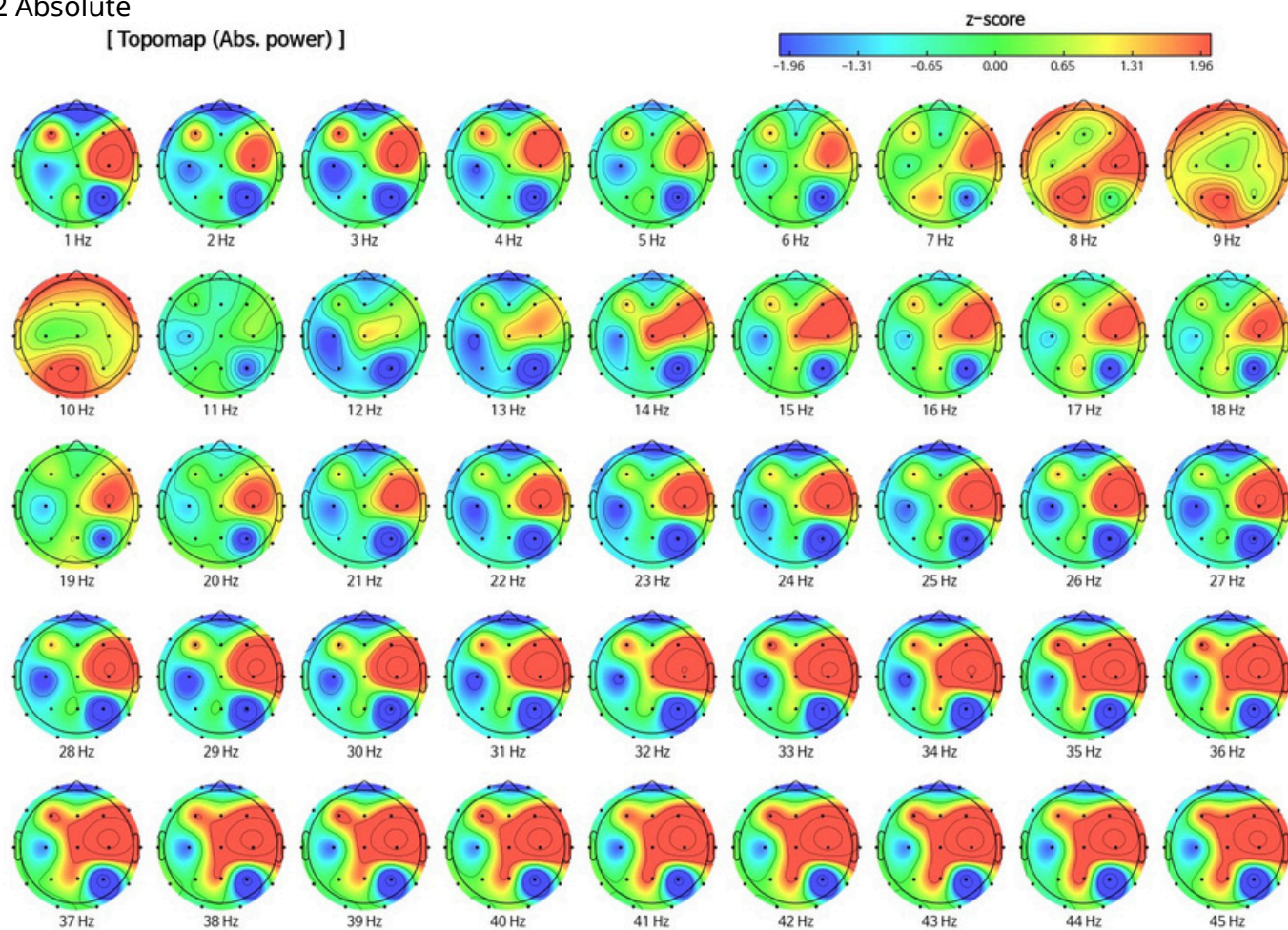


[Topomap (Rel. power)]



3-2 Absolute

[Topomap (Abs. power)]



3-3 Relative

[Topomap (Rel. power)]

