Individual Sleep Analysis Report

Subject ID: 4 | Sleep Difficulty Study

Analysis Date: August 16, 2025 | Nights Analyzed: 2 | Report Generated by: Sleep-EDF Analysis System

Subject Information

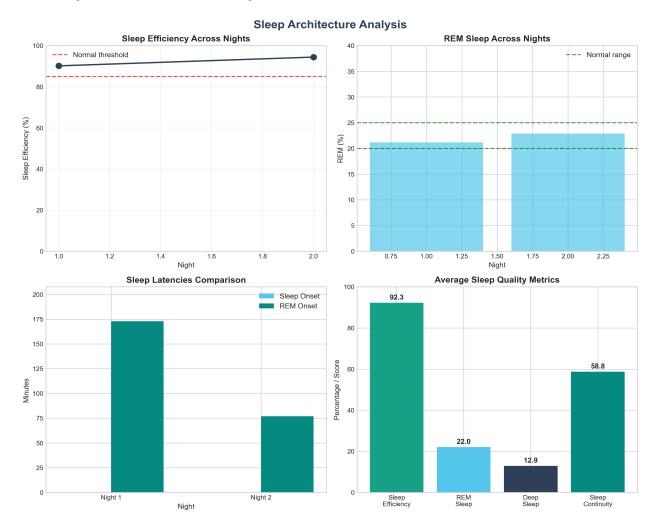
Subject ID	4	
Age	18 years	
Sex	F	
Study Type	Sleep Difficulty	
Number of Nights	2	
Recording Dates	Multiple nights	
Study Conditions	temazepam, placebo	

Executive Summary

This report presents a comprehensive analysis of 2 night polysomnographic recordings for Subject 4, a 18-year-old F participant from the Sleep Telemetry (sleep difficulty) study under temazepam and placebo conditions.

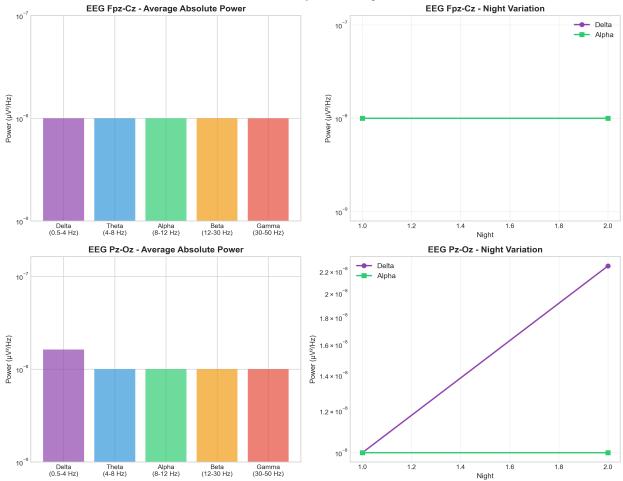
Metric	Value	Clinical Interpretation
Sleep Efficiency	92.3%	Normal (≥85%)
Sleep Latency	0.0 min	Normal (≤30min)
REM Latency	125.0 min	Atypical
REM Sleep	22.0%	Normal (20-25%)
Wake After Sleep Onset	41.2 min	Elevated (>30min)

Sleep Architecture Analysis

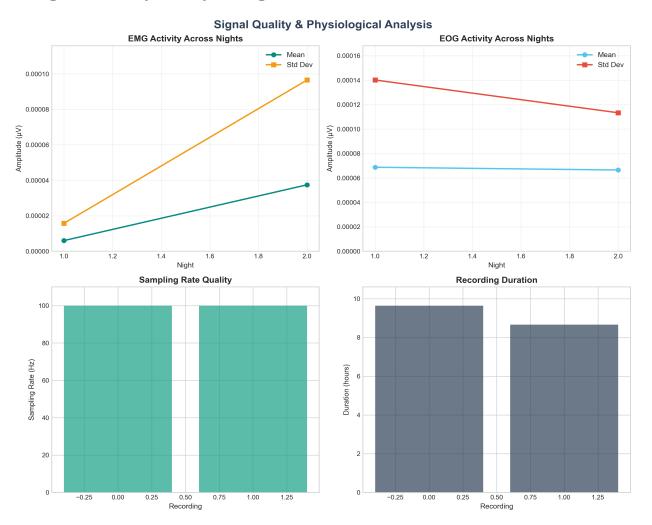


Neurophysiological Analysis - EEG Power Spectrum

EEG Power Spectral Analysis



Signal Quality & Physiological Assessment



Population Comparative Analysis

Comparative Population Analysis Sleep Efficiency (%) REM Sleep (%) ★ Subject Sleep Difficulty Healthy Controls Sleep Difficulty Healthy Controls WASO (min) Sleep Latency (min) Ö

Healthy Controls

Healthy Controls

Clinical Interpretation & Recommendations

Overall Sleep Health Assessment

Sleep Quality Level: FAIR

Fair sleep quality with some metrics outside normal ranges. The subject's sleep architecture shows:

Sleep Efficiency: 92.3% (Normal)
REM Sleep: 22.0% (Normal)
Deep Sleep: 12.9% (Reduced)

• Sleep Continuity: Fragmented (WASO: 41.2 min)

Key Findings

- **Good Sleep Efficiency**: At 92.3%, sleep efficiency is within normal range, indicating good sleep quality.
- **Normal REM Sleep**: REM sleep comprises 22.0% of total sleep, which is within the normal range.
- **Reduced Deep Sleep**: Deep sleep stages (N3+N4) comprise 12.9% of sleep, which may indicate reduced sleep restoration.

Recommendations

- Assess sleep environment and factors that may be disrupting deep sleep stages
- Investigation of factors causing sleep fragmentation may be beneficial

Report Analysis and Generation:

Report Analysed and created by the following students of IIIT Allahabad,
Part of Big Data Analytics Course:

- Aditya Singh Mertia (IIT2022125) [iit2022125@iiita.ac.in]
 - Rishabh Kumar (IIT2022131) [iit2022131@iiita.ac.in]
 - Karan Singh (IIT2022132) [iit2022132@iiita.ac.in]
 - Tejas Sharma (IIT2022161) [iit2022161@iiita.ac.in]

Report Version: 1.0 | Generated: August 16, 2025 at 09:01 PM