Individual Sleep Analysis Report

Subject ID: 5 | Sleep Difficulty Study

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

Subject Information

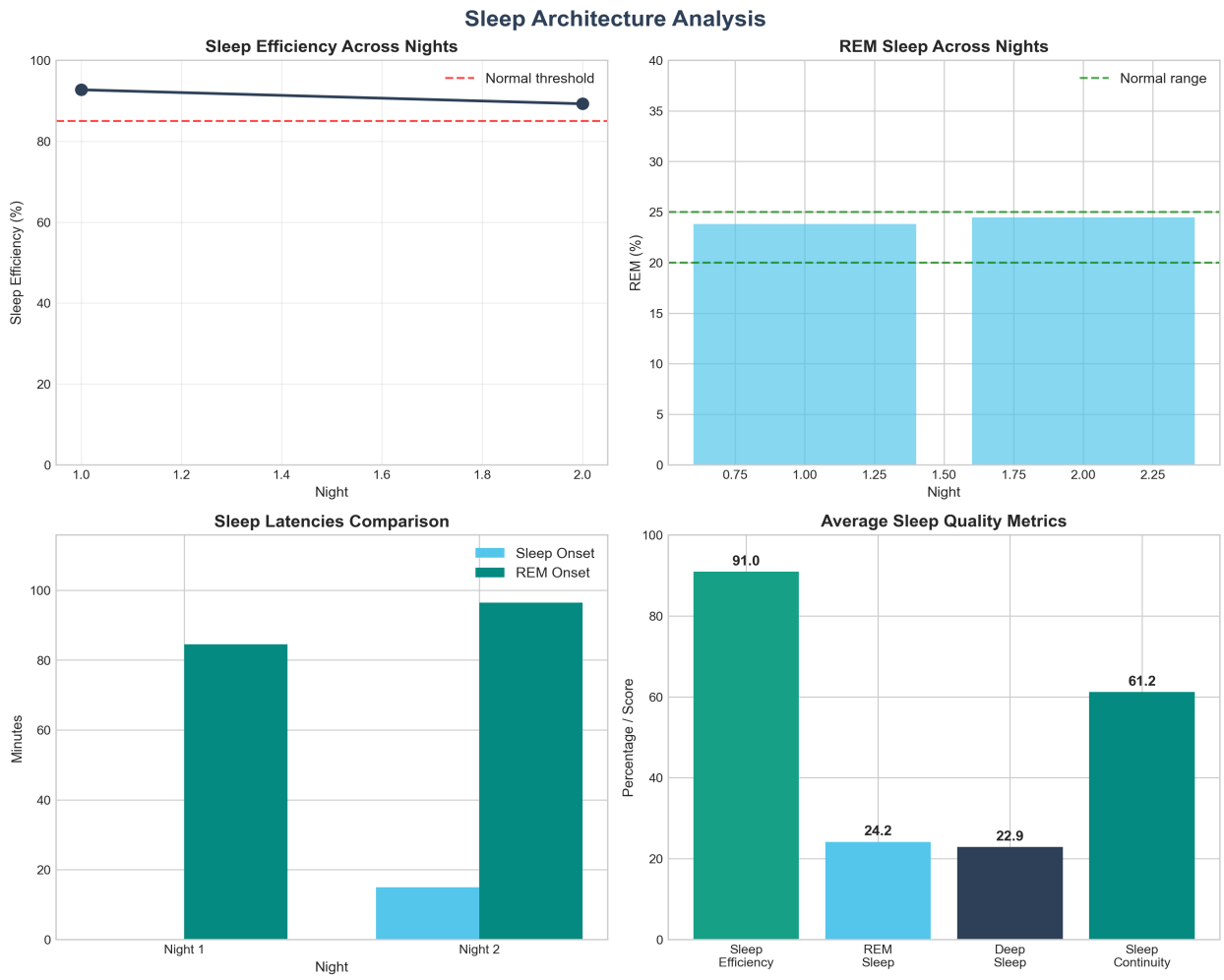
Subject ID	5
Age	32 years
Sex	F
Study Type	Sleep Difficulty
Number of Nights	2
Recording Dates	Multiple nights
Study Conditions	temazepam, placebo

Executive Summary

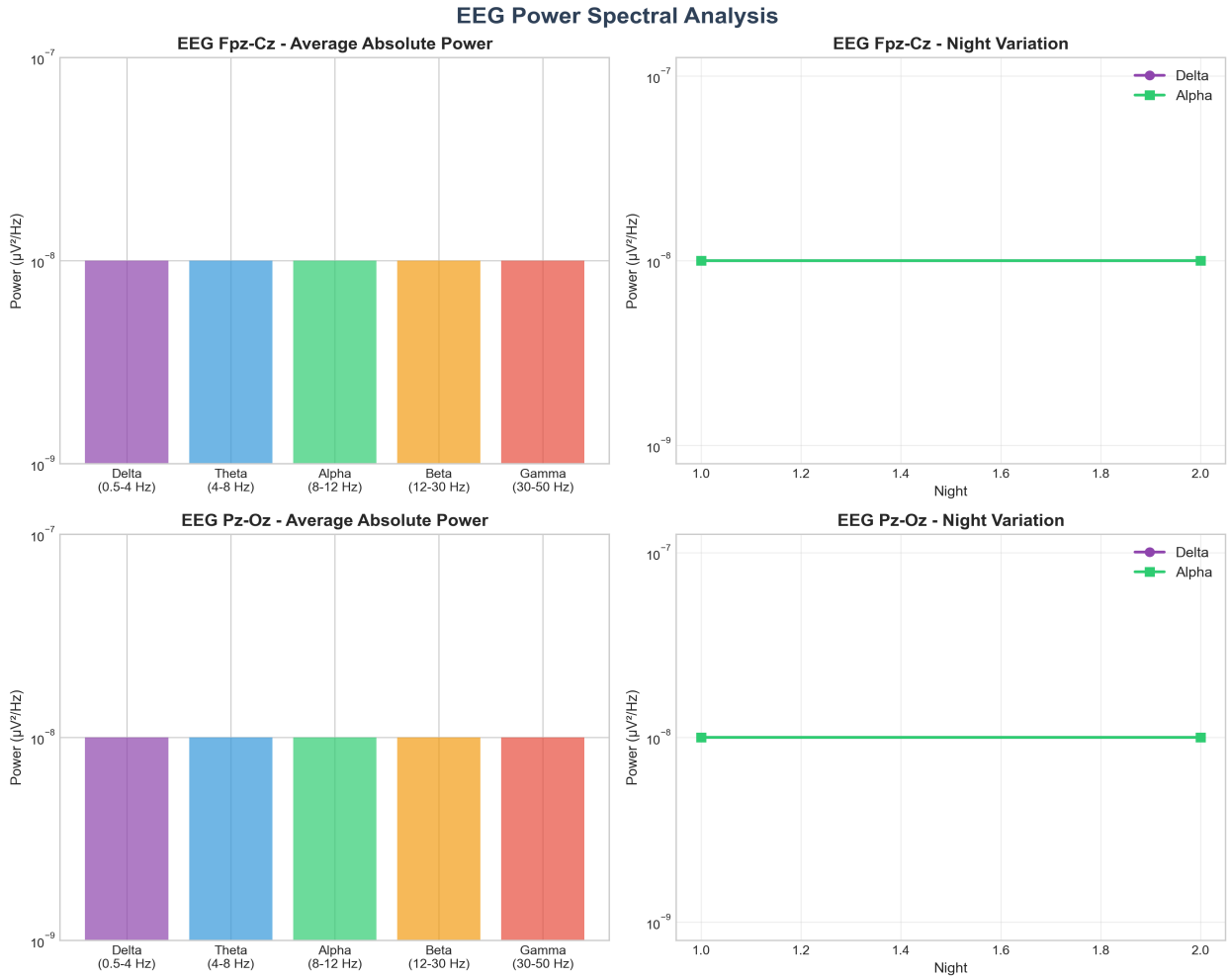
This report presents a comprehensive analysis of 2 night polysomnographic recordings for Subject 5, a 32-year-old F participant from the Sleep Telemetry (sleep difficulty) study under temazepam and placebo conditions.

Metric	Value	Clinical Interpretation
Sleep Efficiency	91.0%	Normal (≥85%)
Sleep Latency	7.5 min	Normal (≤30min)
REM Latency	90.5 min	Normal (60-120min)
REM Sleep	24.2%	Normal (20-25%)
Wake After Sleep Onset	38.8 min	Elevated (>30min)

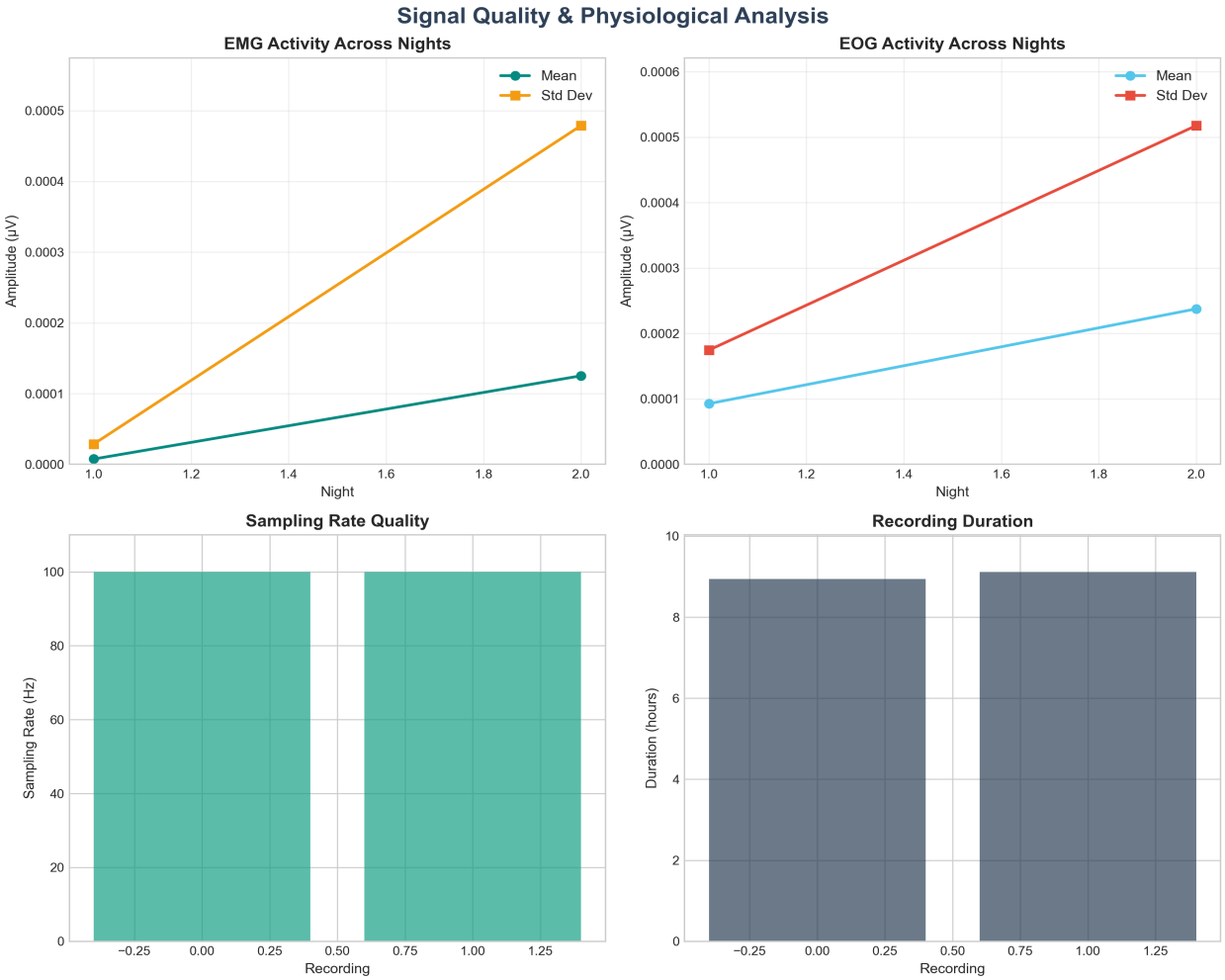
Sleep Architecture Analysis



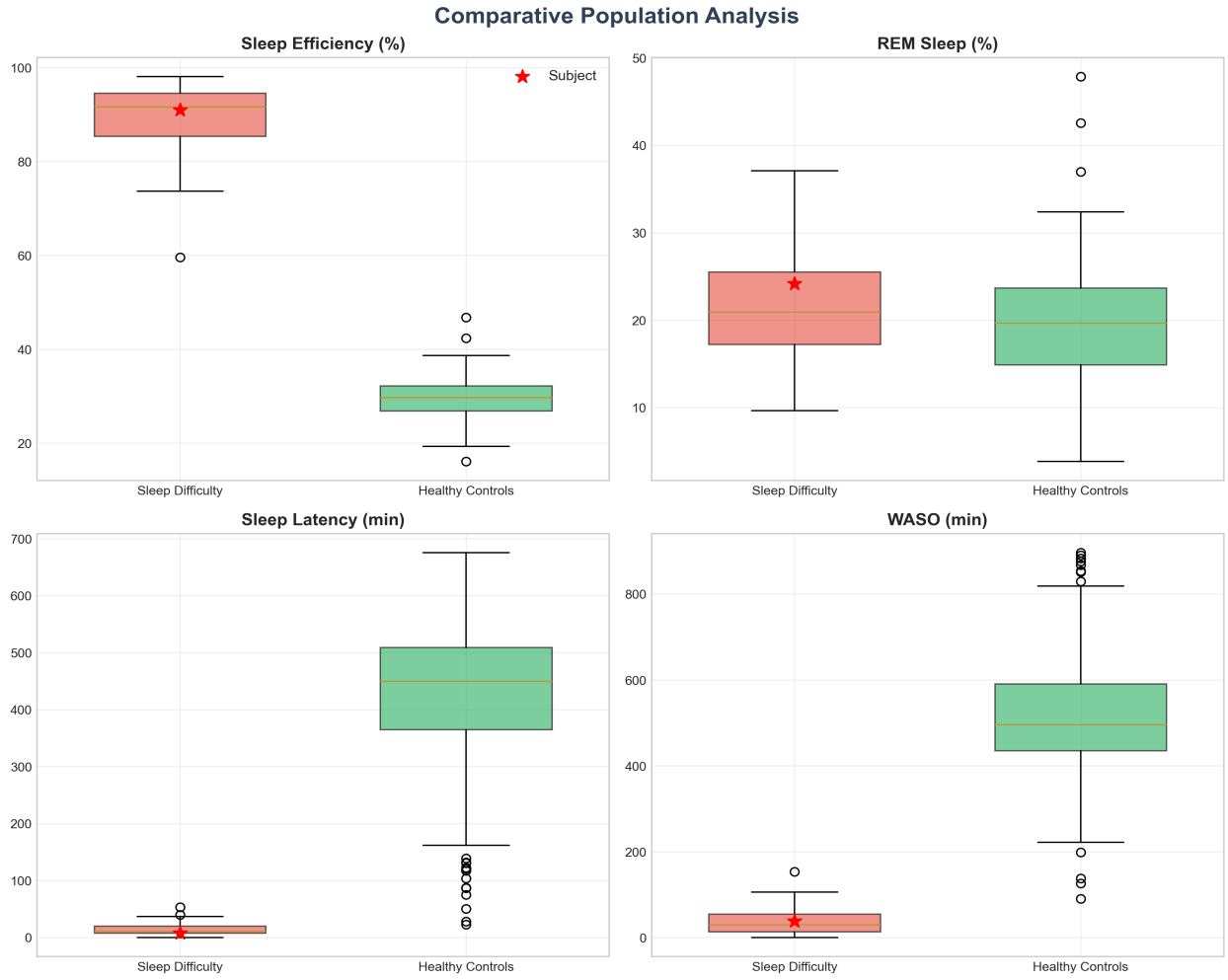
Neurophysiological Analysis - EEG Power Spectrum


EEG Power Spectral Analysis
EEG Fpz-Cz - Average Absolute Power
EEG Fpz-Cz - Night Variation
EEG Pz-Oz - Average Absolute Power
EEG Pz-Oz - Night Variation
Power (µV²/Hz)
Delta (0.5-4 Hz)
Theta (4-8 Hz)
Alpha (8-12 Hz)
Beta (12-30 Hz)
Gamma (30-50 Hz)
Night
Delta
Alpha

Signal Quality & Physiological Assessment



Population Comparative Analysis


Comparative Population Analysis
Sleep Efficiency (%)
Subject
100
80
60
40
20
Sleep Difficulty
Healthy Controls
REM Sleep (%)
50
40
30
20
10
Sleep Difficulty
Healthy Controls
Sleep Latency (min)
700
600
500
400
300
200
100
0
Sleep Difficulty
Healthy Controls
WASO (min)
800
600
400
200
0
Sleep Difficulty
Healthy Controls

Clinical Interpretation & Recommendations

Overall Sleep Health Assessment

Sleep Quality Level: GOOD

Excellent to Good sleep quality with most metrics within normal ranges. The subject's sleep architecture shows:

• Sleep Efficiency: 91.0% (Normal)
• REM Sleep: 24.2% (Normal)
• Deep Sleep: 22.9% (Adequate)
• Sleep Continuity: Fragmented (WASO: 38.8 min)

Key Findings

• **Good Sleep Efficiency**: At 91.0%, sleep efficiency is within normal range, indicating good sleep quality.
• **Normal REM Sleep**: REM sleep comprises 24.2% of total sleep, which is within the normal range.
• **Adequate Deep Sleep**: Deep sleep stages comprise 22.9% of sleep, indicating good restorative sleep.

Recommendations

• Investigation of factors causing sleep fragmentation may be beneficial

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