

Individual Sleep Analysis Report

Subject ID: 40 | Healthy Control Study

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

Subject Information

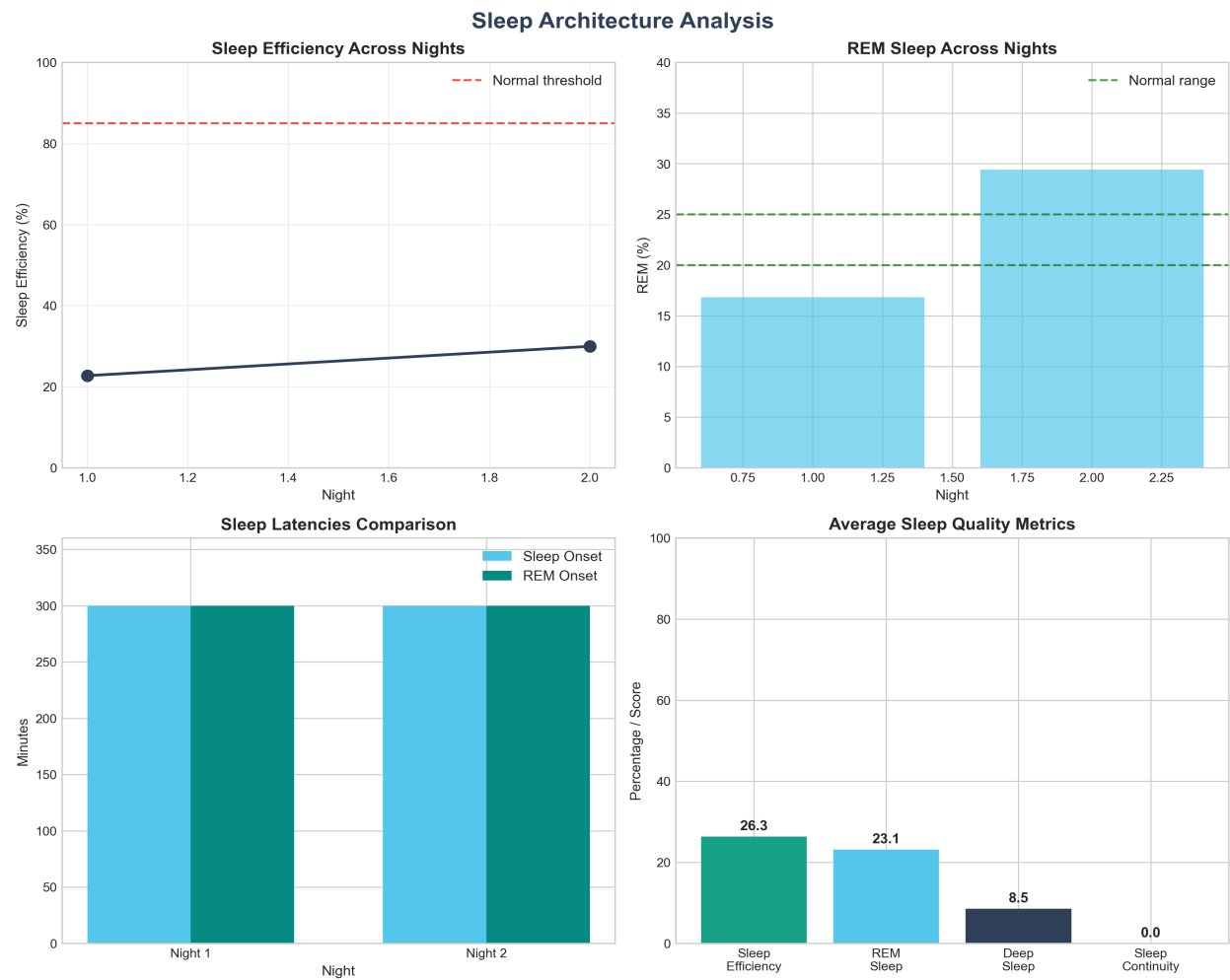
| | |
|------------------|------------------|
| Subject ID | 40 |
| Age | 67 years |
| Sex | F |
| Study Type | Healthy Controls |
| Number of Nights | 2 |
| Recording Dates | Multiple nights |

Executive Summary

This report presents a comprehensive analysis of 2 night polysomnographic recordings for Subject 40, a 67-year-old F participant from the Sleep Cassette (healthy controls) study under nan condition.

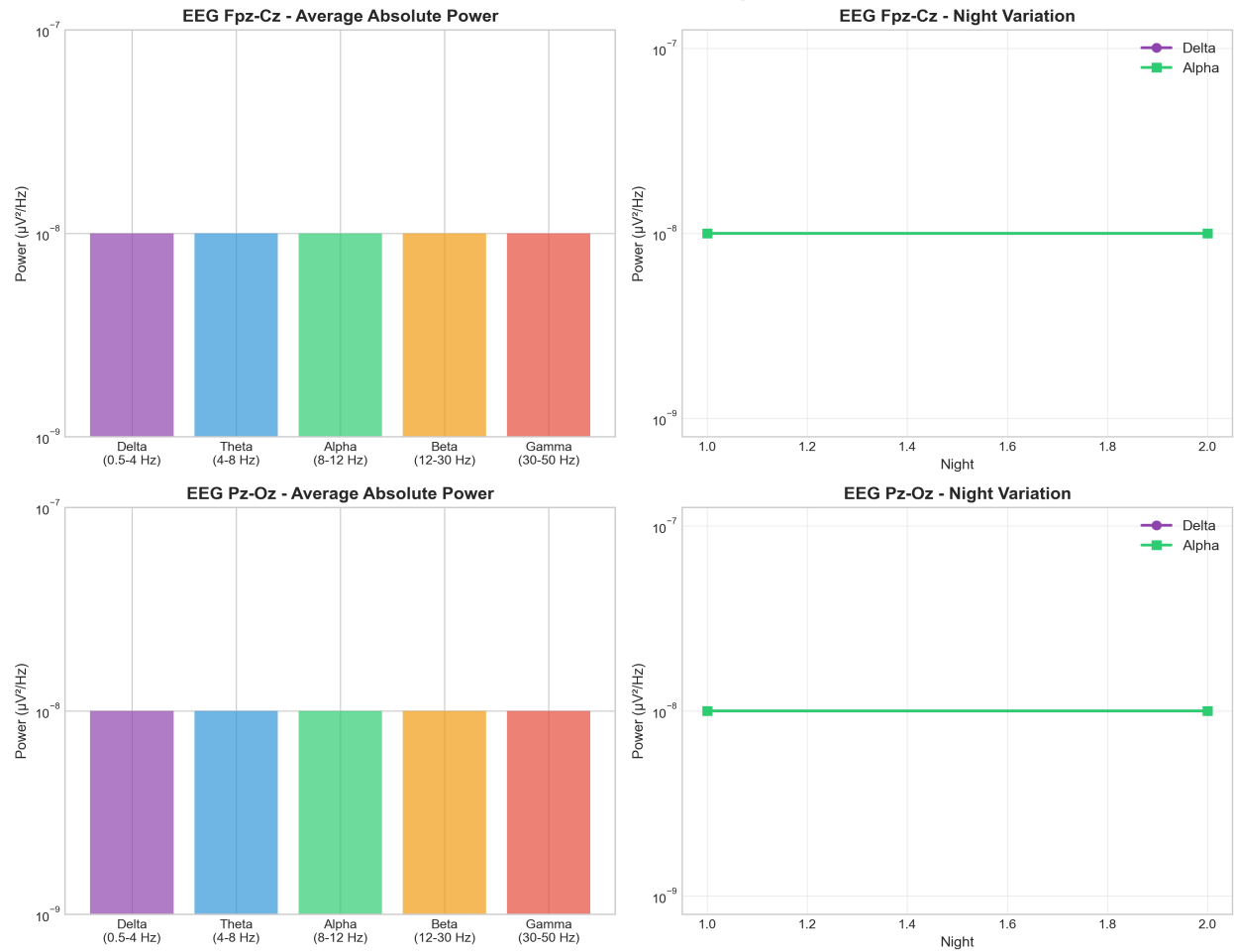
| Metric | Value | Clinical Interpretation |
|------------------------|-----------|-------------------------|
| Sleep Efficiency | 26.3% | Below Normal (<85%) |
| Sleep Latency | 483.8 min | Prolonged (>30min) |
| REM Latency | 550.8 min | Atypical |
| REM Sleep | 23.1% | Normal (20-25%) |
| Wake After Sleep Onset | 492.0 min | Elevated (>30min) |

Sleep Architecture Analysis

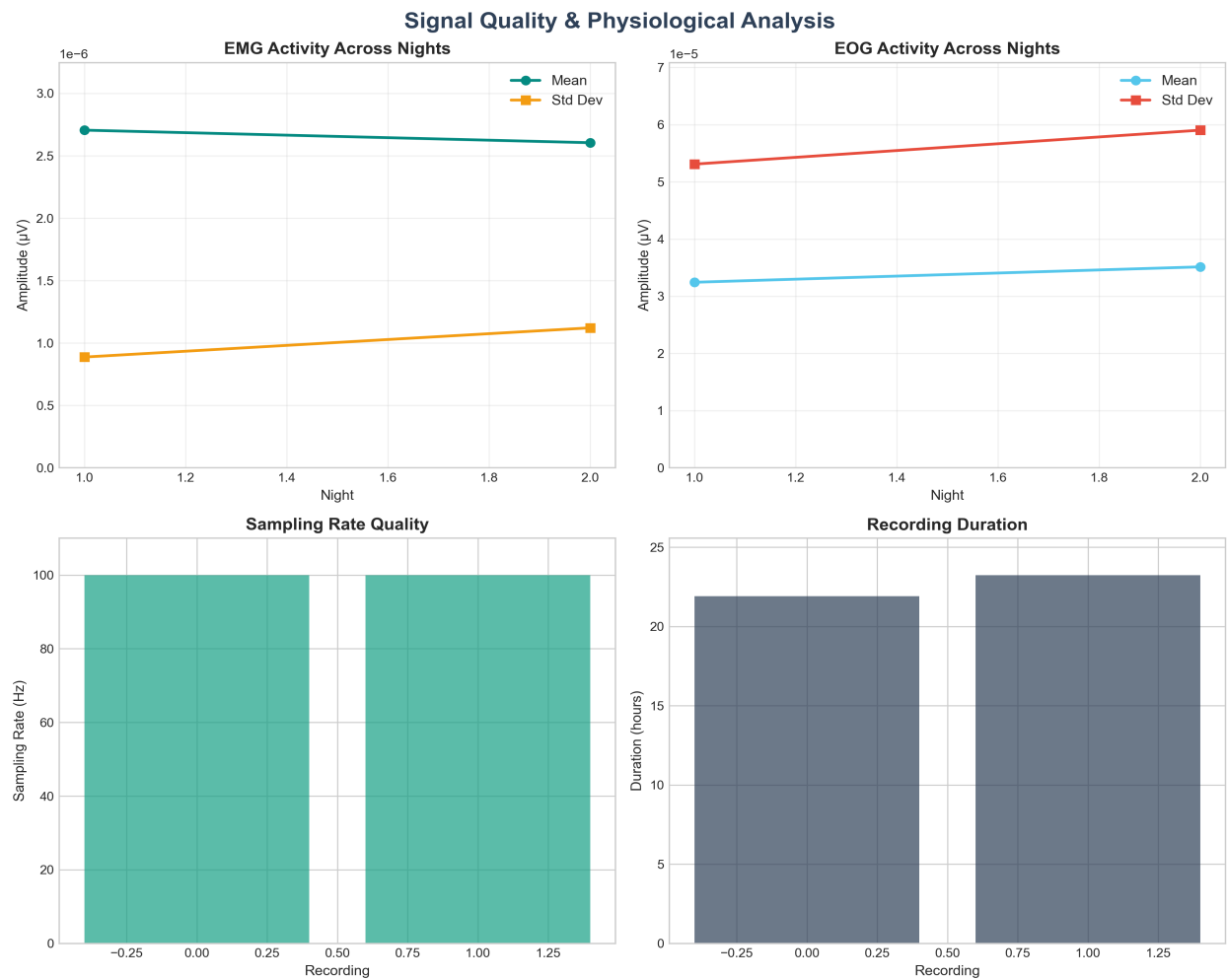


Neurophysiological Analysis - EEG Power Spectrum

EEG Power Spectral Analysis

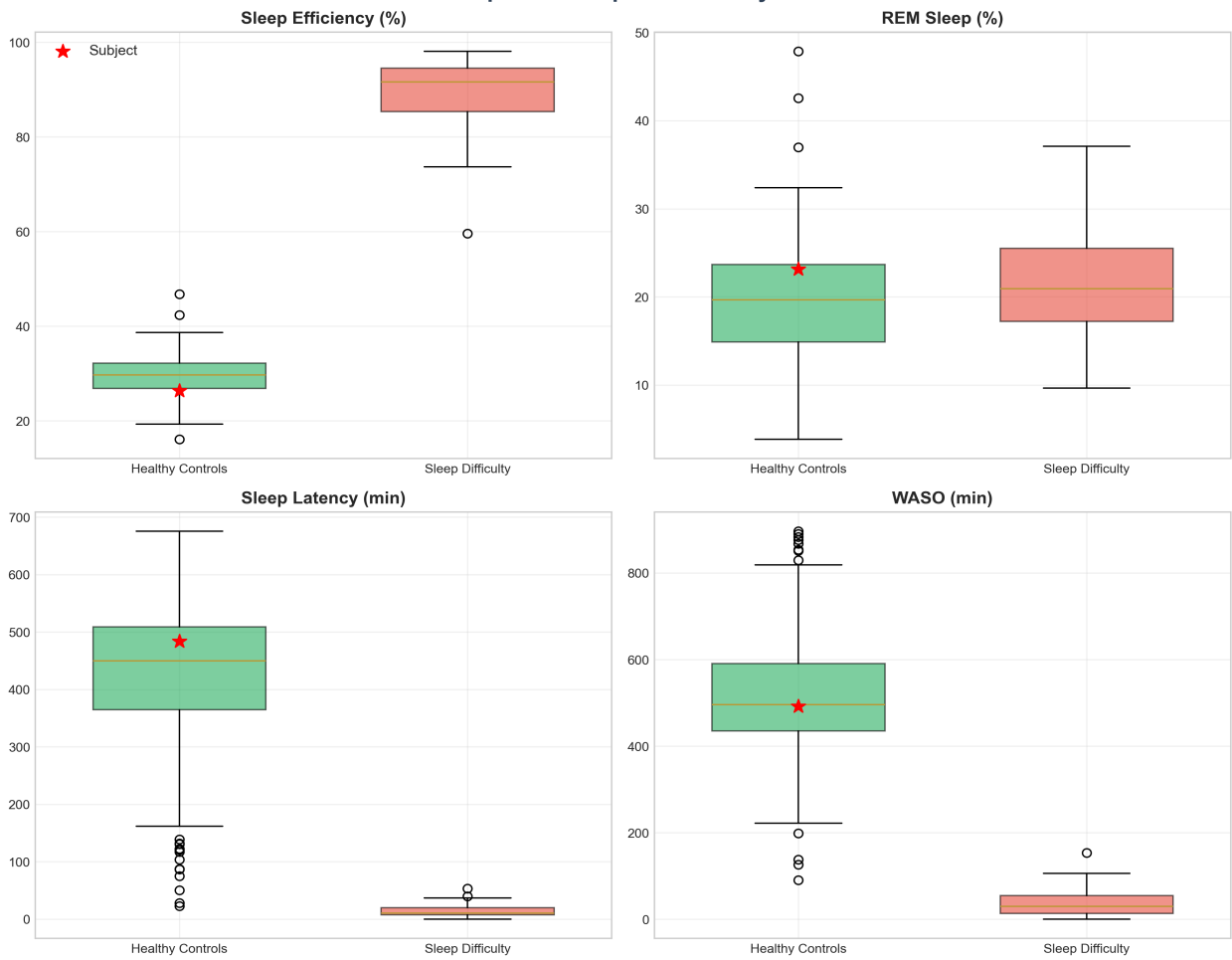


Signal Quality & Physiological Assessment



Population Comparative Analysis

Comparative Population Analysis



Clinical Interpretation & Recommendations

Overall Sleep Health Assessment

Sleep Quality Level: POOR

Poor sleep quality with multiple metrics outside normal ranges. The subject's sleep architecture shows:

- Sleep Efficiency: 26.3% (Below normal)
- REM Sleep: 23.1% (Normal)
- Deep Sleep: 8.5% (Reduced)
- Sleep Continuity: Fragmented (WASO: 492.0 min)

Key Findings

- **Reduced Sleep Efficiency:** At 26.3%, sleep efficiency is below the normal threshold of 85%, indicating potential sleep quality issues.
- **Normal REM Sleep:** REM sleep comprises 23.1% of total sleep, which is within the normal range.
- **Reduced Deep Sleep:** Deep sleep stages (N3+N4) comprise 8.5% of sleep, which may indicate reduced sleep restoration.

Recommendations

- Consider sleep hygiene counseling and evaluation of factors affecting sleep quality
- 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:

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