

# Individual Sleep Analysis Report

Subject ID: 45 | Healthy Control Study

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

## Subject Information

Subject ID	45
Age	66 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 45, a 66-year-old F participant from the Sleep Cassette (healthy controls) study under nan condition.

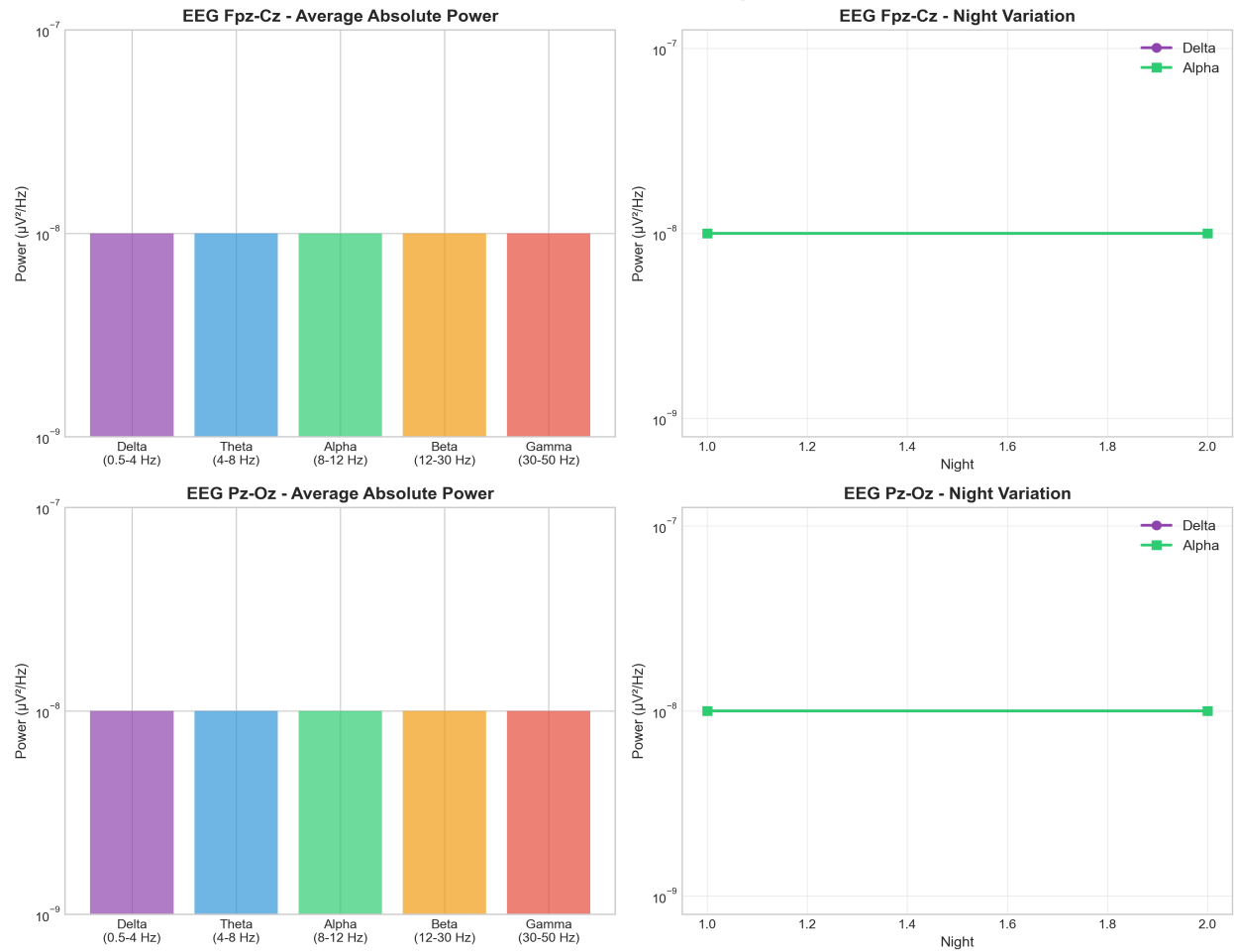
Metric	Value	Clinical Interpretation
Sleep Efficiency	33.2%	Below Normal (<85%)
Sleep Latency	572.2 min	Prolonged (>30min)
REM Latency	712.2 min	Atypical
REM Sleep	17.0%	Atypical
Wake After Sleep Onset	314.2 min	Elevated (>30min)

# Sleep Architecture Analysis

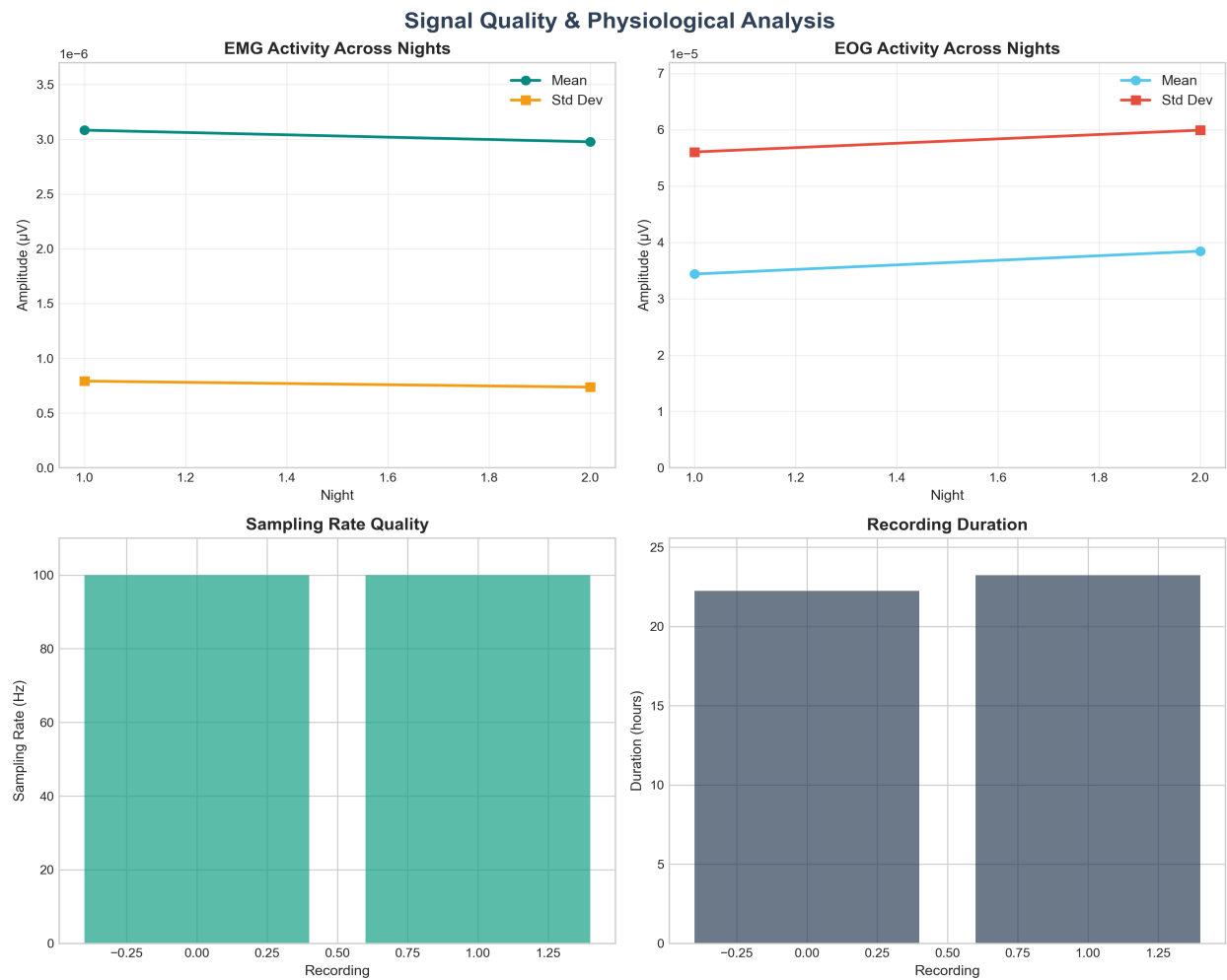


# Neurophysiological Analysis - EEG Power Spectrum

EEG Power Spectral Analysis

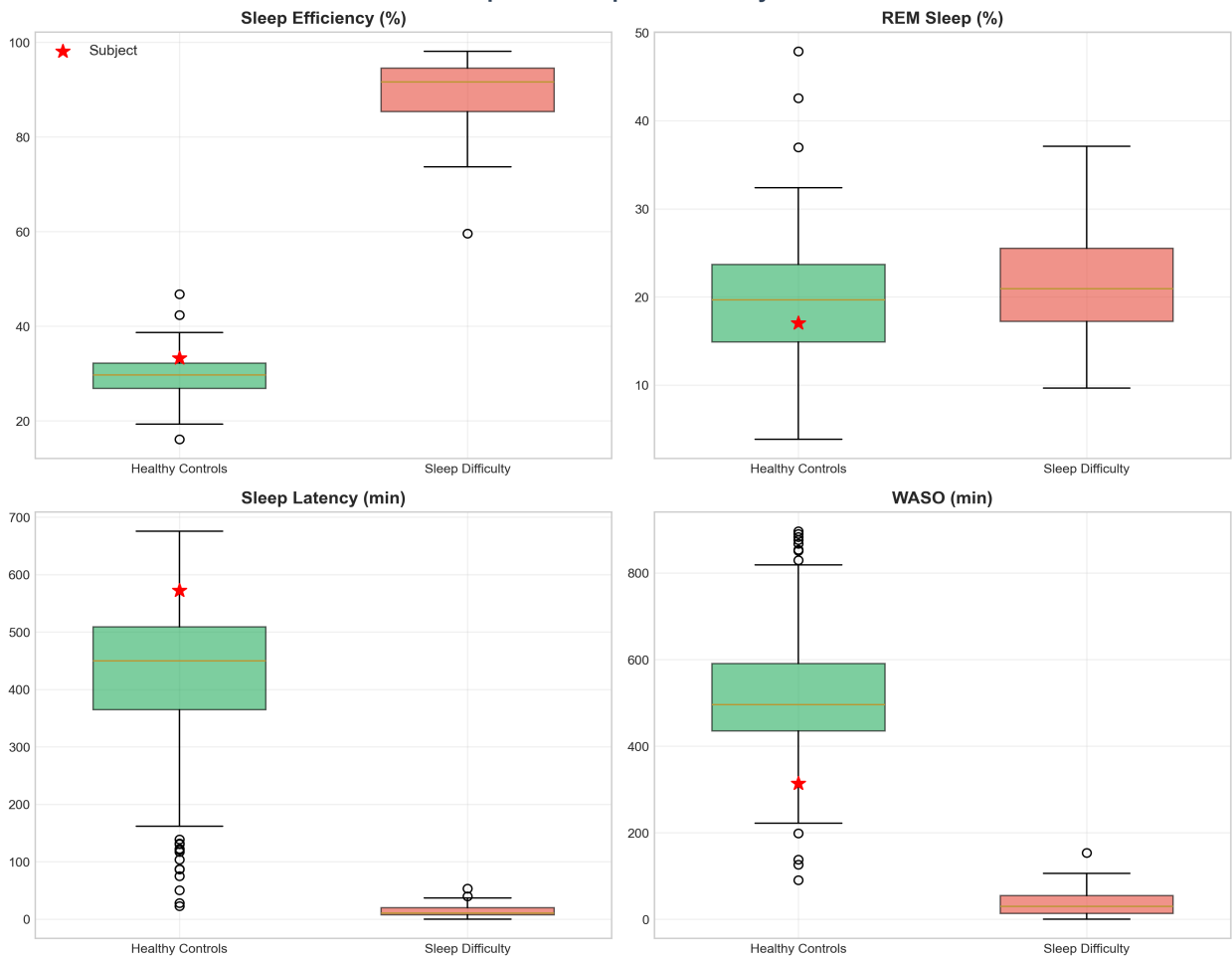


# Signal Quality & Physiological Assessment



## Population Comparative Analysis

Comparative Population Analysis



## 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: 33.2% (Below normal)
- REM Sleep: 17.0% (Atypical)
- Deep Sleep: 30.0% (Adequate)
- Sleep Continuity: Fragmented (WASO: 314.2 min)

### Key Findings

- **Reduced Sleep Efficiency:** At 33.2%, sleep efficiency is below the normal threshold of 85%, indicating potential sleep quality issues.
- **Reduced REM Sleep:** REM sleep comprises 17.0% of total sleep, which is below the normal range of 20-25%.
- **Adequate Deep Sleep:** Deep sleep stages comprise 30.0% of sleep, indicating good restorative sleep.

### Recommendations

- Consider sleep hygiene counseling and evaluation of factors affecting sleep quality
- Evaluate for potential REM sleep disorders or medications affecting REM sleep
- Investigation of factors causing sleep fragmentation may be beneficial

#### Report Analysis and Generation:

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