

QuantumBCI Analysis Report

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Session Information

Filename:	S001R04.edf
Upload Time:	2025-10-01 22:41:54
Original Channels:	64
Selected Channels:	20
Processing Status:	Complete

Brain Metrics Analysis

Brain State:	Deep Sleep (Stage 3-4 NREM)
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Frequency Band Powers

Band	Absolute Power (uV^2)	Relative Power (%)
Delta	0.6117	64.23%
Theta	0.1352	14.20%
Alpha	0.0839	8.81%
Beta	0.1005	10.55%
Gamma	0.0211	2.22%

Model Predictions

Model	Prediction	Accuracy	Time (s)
Brain State Classifier (Scientific)	Deep Sleep (Stage 3-4 NREM)	100.00%	0.050

Summary & Recommendations

- Best performing model: Brain State Classifier (Scientific) with 100.00% accuracy

- Detected brain state: Deep Sleep (Stage 3-4 NREM)
- Dominant frequency band: Delta
- Total spectral power: 0.9524 μV^2

Clinical Recommendations:

- Low alpha activity - may indicate stress or active cognitive processing
- Continue monitoring for trend analysis
- Consult with neurologist for clinical interpretation