



**Figure S2: Measurement of slow oscillations (SOs) and their coordination with spindles.** a) SO detection Left: Candidate (black) and detected (green) SOs in a 30s sample of the filtered (0.5-4Hz) EEG signal at Cz (inset) during N2 from a single participant. Right: Peak-to-peak amplitude distribution of candidate SOs. Waveforms in the upper 25% of the distribution (green) were defined as SOs. b) Average SO at Cz for controls and patients time-locked to the trough of the detected SOs. Eszopiclone significantly reduced SO amplitude for both groups. c) A 2s sample of N2 at Cz from a single participant centered on the peak of the spindle. Top: Coupled spindle-SO event. The detected SO and spindle are superimposed on the raw and filtered EEG signal. Middle: The EEG signal filtered at 12-15Hz and its envelope. Bottom: Phase of the SO derived from the Hilbert transform of the .5-4Hz filtered EEG signal. The black dot denotes the SO phase at the spindle peak.