Appendix S4 for “Stochastic Amplification of Fluctuations in Cortical Up-states”

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Power spectrum of fluctuations for the synaptic depression variable

Figure S4. Power spectrum for the variable synaptic depression variable, $u$, in Up and in Down states for (A) Model A and (B) Model B, respectively. Plots are normalized to unit area. As in Fig. 2 of main text, similar peaks appear for Up (green curves) but not for Down (blue curves): (A) $\approx 1.6$ Hz and (B) $\approx 20$ Hz. Insets present power spectra in double logarithmic scale; spectra exhibit a $\omega^{-2}$ tail indicating the presence of many different scales.