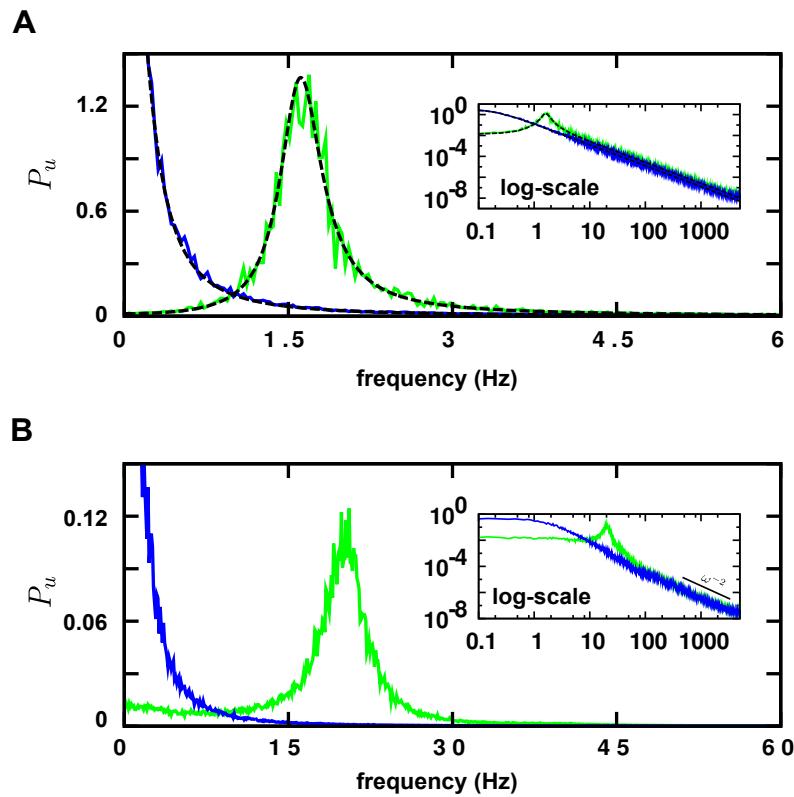


# Appendix S4 for “Stochastic Amplification of Fluctuations in Cortical Up-states”

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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 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.