

Figure S1. Comparison of spectral estimates obtained with different methods, Related to Figure 2.

Power spectra obtained with the factorization method used in the main text (solid lines) are compared to those obtained—at lower resolution—via a standard method for spectral estimation (Welch; dashed lines). The latter does not assume independence between eye movements and images. All spectra shown in the article were obtained by means the factorization method because, unlike Welch, it enables estimation of power at low spatial frequencies and achieves finer temporal resolution. (A) Power delivered by saccades within the bandwidth of human temporal sensitivity. The curves represent saccades with different amplitudes, as in Fig. 4C. Note the close agreement between the data obtained with the two methods of spectral estimation. The negligible differences relative to the data reported in Fig. 4C are caused by small deviations in the power spectrum of the images used in the experiments from the theoretical $1/k^2$ distribution. (B) Same as in A, after normalizing the power spectra of the images to $1/k^2$. In both panels, shaded areas represent SEM.