

Supplementary Information

Title:Gaze Control in Dynamic Broadband (1/f) Noise SequencesAuthors:Christoph Rasche, Karl Gegenfurtner

Figure 1. Histograms of fixation durations (left column) and amplitudes (right column) for the free-viewing condition for 4 observers. Y-axis: Probability. X-Axis: left column: milliseconds, right column: degree. The plot title denotes the mean and standard deviation (e.g. 586ms \pm 381ms) as well as the range ([8ms – 3708ms]).



Figure 2. Histograms of fixation durations (left column) and amplitudes (right column) for a luminance-bar condition for 4 observers.



Figure 3. Selection of parameters *C* (error term) and γ (Gaussian width) for the support-vector machine classifier for one observer. Each plot shows the estimated model performance for a given patch width *w* (1 to 8 degrees) for varying *C* and γ values (both as log₁₀). (compare to figure 2 in Kienzle et al 2006).



Figure 4. Trigger patches ranked by saliency according to our model for the freeviewing condition for one observer (spatial patch width = 5 degrees). The first 8 plots (top 2 rows), show the *best* classifying patches, the plots numbered 9 to 16 show the *worst* classifying patches. The lower left two plots labeled 'optimal', show the best saliency patch according to the model. The histogram labeled 'saliency dist' shows the histogram of all saliency values. (compare to figure 4 and 5 in Kienzle et al 2006).



Figure 5. Ranking of trigger patches for another observer for the free-viewing condition. Plots as in figure before.



Figure 6. Ranking of trigger patches for the *luminance target* for one observer. Plots as in figure before.



Figure 7. Ranking of trigger patches for the *luminance target* for another observer. Plots as in figure before.