

# Analyses of Reproducing Real-World Appearance on Displays of Varying Dynamic Range – Supplementary Figures

Akiko Yoshida, Rafał Mantiuk, Karol Myszkowski and Hans-Peter Seidel  
MPI Informatik, Saarbrücken, Germany

<p>This document contains additional figures that illustrate data, which has not been included in the paper because of size considerations. Refer to the original paper for details.</p>
--

## References

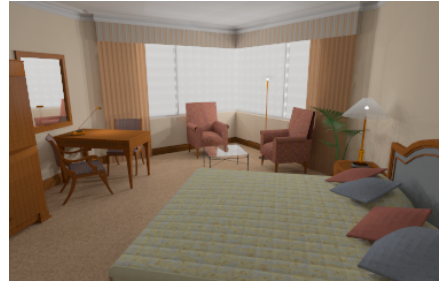
- [DMAC03] Frédéric Drago, Karol Myszkowski, Thomas Annen, and Norishige Chiba. Adaptive logarithmic mapping for displaying high contrast scenes. In P. Brunet and D. Fellner, editors, *Proceedings of Eurographics*, pages 419–426, 2003.



(a) Image 1 (3.08)



(b) Image 2 (3.93)



(c) Image 3 (2.57)



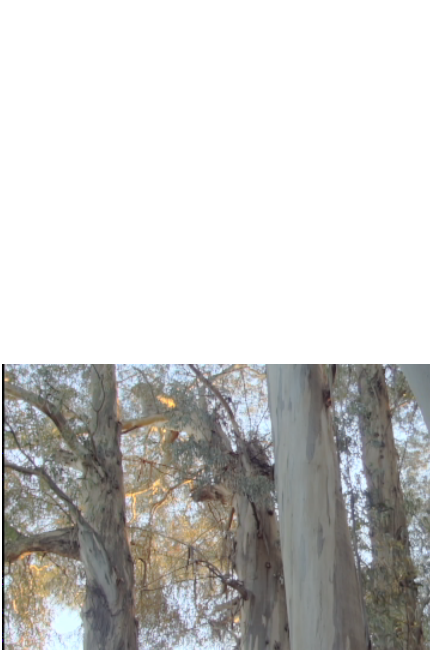
(d) Image 4 (6.21)



(e) Image 5 (4.06)



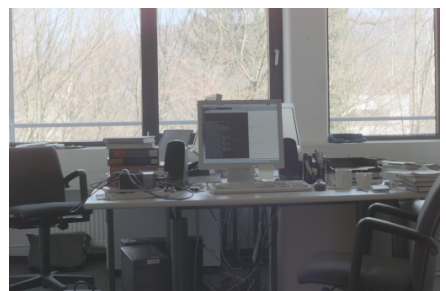
(f) Image 6 (4.51)



(g) Image 7 (2.85)



(h) Image 8 (4.88)



(i) Image 9 (3.50)

Figure 1: Images 1 – 9 for the first experiment. Their dynamic ranges in decimal-logarithmic units are shown in parentheses. All images are tone mapped using the operator proposed by Drago et al. [DMAC03].



(a) Image 10 (5.36)



(b) Image 11 (2.69)



(c) Image 12 (3.46)



(d) Image 13 (3.70)



(e) Image 14 (3.96)



(f) Image 15 (3.43)



(g) Image 16 (2.99)



(h) Image 17 (3.03)



(i) Image 18 (4.68)

Figure 2: Images 10 – 18 for the first experiment. Their dynamic ranges in decimal-logarithmic units are shown in parentheses. All images are tone mapped using the operator proposed by Drago et al. [DMAC03].





(a) Image 19 (3.54)



(b) Image 20 (2.60)



(c) Image 21 (2.98)



(d) Image 22 (4.25)



(e) Image 23 (3.84)



(f) Image 24 (3.16)



(g) Image 25 (3.48)

Figure 3: Images 19 – 25 for the first experiment. Their dynamic ranges in decimal-logarithmic units are shown in parentheses. All images are tone mapped using the operator proposed by Drago et al. [DMAC03].



(a) Image 26 (2.62)

(b) Image 27 (2.68)

(c) Image 28 (2.19)

Figure 4: Three HDR images for the second experiment. Their dynamic ranges in decimal-logarithmic units are shown in parentheses. All images are tone mapped using the operator proposed by Drago et al. [DMAC03].



(a) Setup for Images 26 and 27

(b) Setup for Image 28

Figure 5: Setup used for the second experiment.

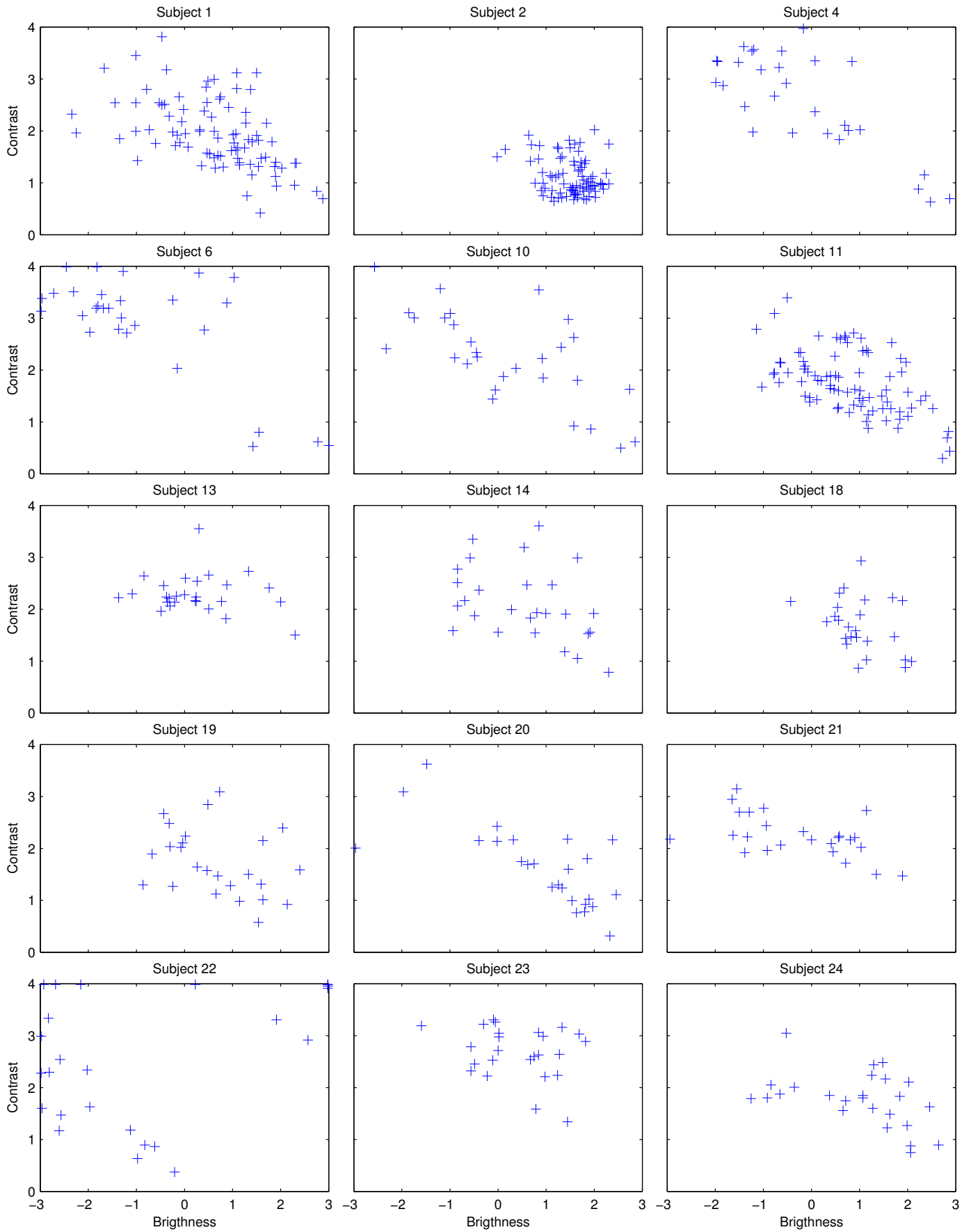


Figure 6: Brightness and contrast relations isolated for each subject. Each plot contains data for all images, both experiments and the full dynamic range of a display (1–3,000  $cd/m^2$ ).

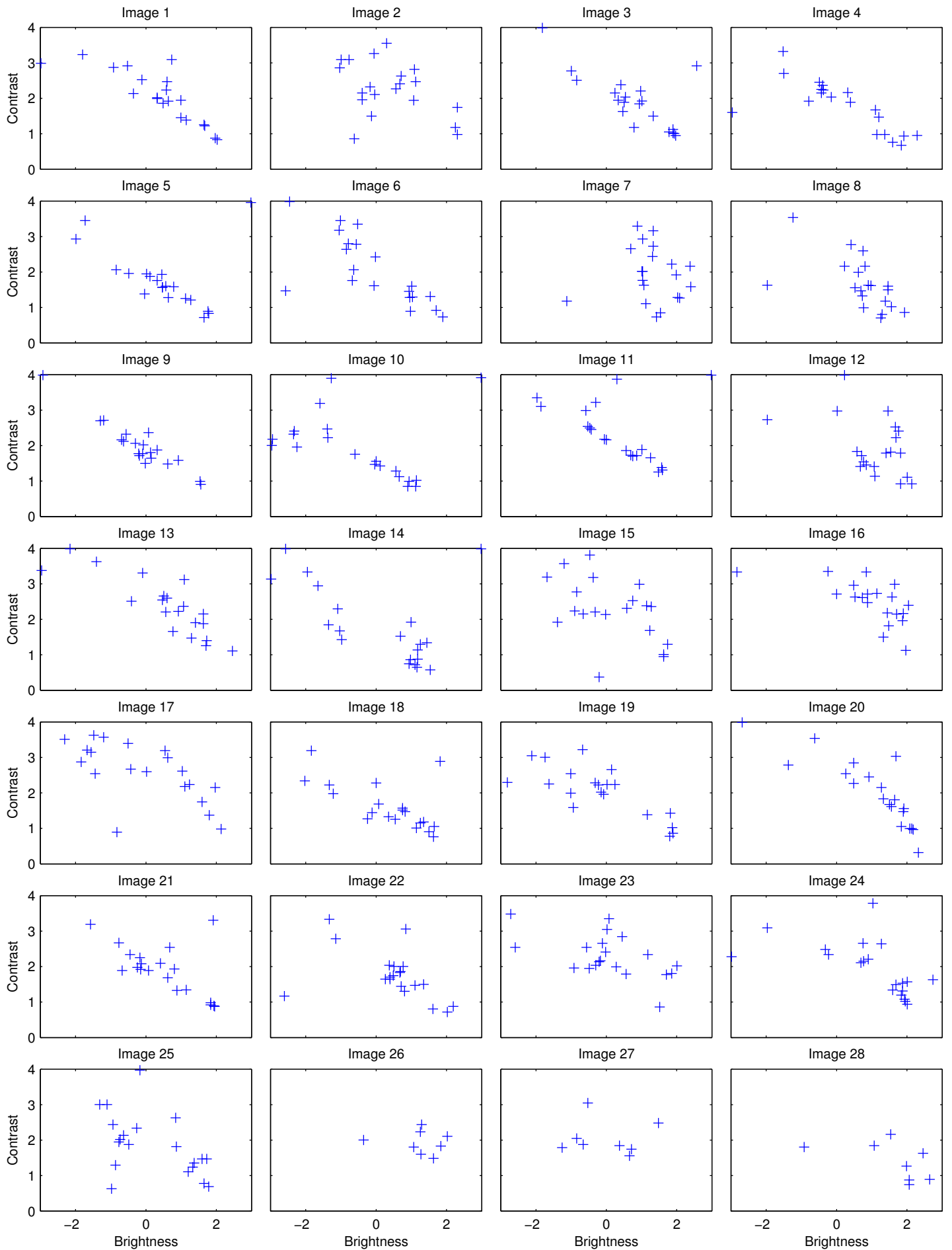


Figure 7: Brightness and contrast relations isolated for each image. Each plot contains data for all subjects, both experiments and the full dynamic range of a display (1–3,000  $cd/m^2$ ).

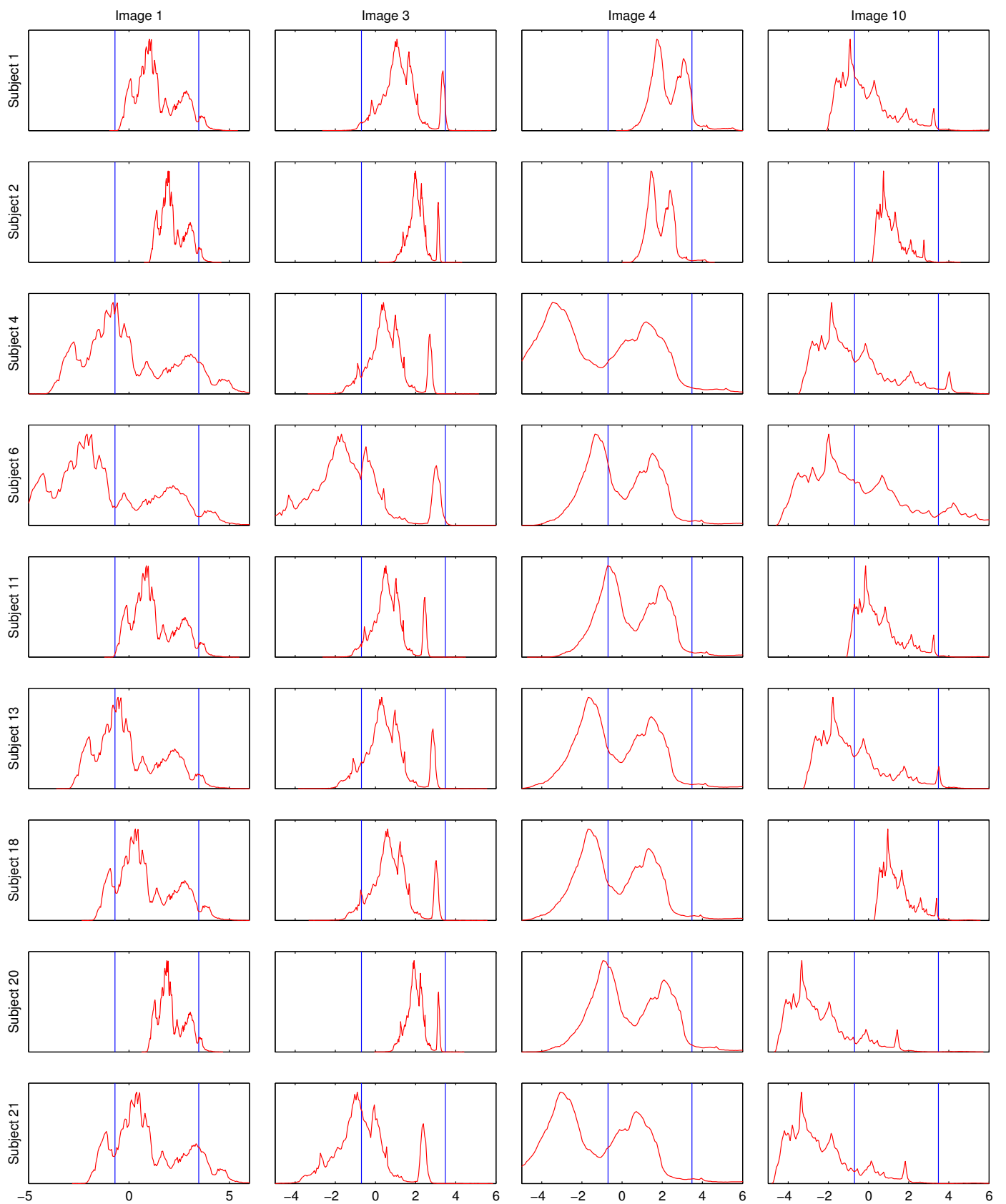


Figure 8: The histograms of the images after subject's brightness and contrast adjustments. The blue vertical lines denote display minimum and maximum luminance. The horizontal axis is scaled in log luminance units. The subjects differ in their adjustments between each other, but a single subject follows a similar style for a range of images.