ERICA: Emulated Retinal Image CApture - A tool for testing, training and validating retinal image processing methods

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Supplementary materials

Supplementary Video 1 shows a sequence of 60 synthetic frames generated using ERICA that constitute a 2 second movie. Encoded in the frames are variations in image quality due to residual aberrations not corrected by the optical system, which are modeled using a a dataset of wavefront measurements captured from real eyes¹. The synthetic frames have been generated with modeled movements of the eye that include drift and tremor but no microsaccades.

References

1. Jarosz, J. *et al.* High temporal resolution aberrometry in a 50-eye population and implications for adaptive optics error budget. *Biomed. Opt. Express* 8, 2088, DOI: 10.1364/BOE.8.002088 (2017).