

Erratum

CORRECTIONS TO: Rokers, B., Fulvio, J. M., Pillow, J. W., & Cooper, E. A. (2018). Systematic misperceptions of 3-D motion explained by Bayesian inference. *Journal of Vision*, 18(3):23, 1–23, <https://doi.org/10.1167/18.3.23>.

The original published article contained an error in the equations describing the offset normal distribution (Equations 25–27), and one equation was missing. The correct set of equations are produced below. The online article has been corrected, and the subsequent equation numbering has been updated.

This distribution is written as

$$P(\hat{\theta} | x', z') = \frac{\phi(l)}{j\gamma_{x'}\gamma_{z'}\sqrt{2\pi}} \left[k \frac{\Phi(k)}{\phi(k)} + 1 \right], \quad (25)$$

where

$$j = \frac{\cos^2 \hat{\theta}}{\gamma_{x'}^2} + \frac{\sin^2 \hat{\theta}}{\gamma_{z'}^2} \quad (26)$$

$$k = \left(\frac{\hat{x}' \cos \hat{\theta}}{\gamma_{x'}^2} + \frac{\hat{z}' \sin \hat{\theta}}{\gamma_{z'}^2} \right) j^{-1/2} \quad (27)$$

$$l = \left(\frac{\hat{x}'^2}{\gamma_{x'}^2} + \frac{\hat{z}'^2}{\gamma_{z'}^2} \right)^{1/2} \quad (28)$$

and $\phi(\bullet)$ and $\Phi(\bullet)$ denote, respectively, the standard normal probability density function and the cumulative density function. Here, $\gamma_{x'}^2 = \alpha_{x'}^2, \sigma_{x'}^2$ and $\gamma_{z'}^2 = \alpha_{z'}^2, \sigma_{z'}^2$ are the variances of the sampling distribution of the MAP estimate for x' and z' , respectively (Equations 20A, 20B).

Citation: Rokers, B., Fulvio, J. M., Pillow, J. W., & Cooper, E. A. (2020). Corrections to: Systematic misperceptions of 3-D motion explained by Bayesian inference. *Journal of Vision*, 20(8):15, 1, <https://doi.org/10.1167/jov.20.8.15>.