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Qinyi Zhu
Zhijiang Zhang
Dan Zeng

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Qinyi Zhu, Zhijiang Zhang, Dan Zeng, "Robust and efficient method for matching features in omnidirectional images (Erratum)," *Opt. Eng.* **57**(5), 059801 (2018), doi: 10.1117/1.OE.57.5.059801.

Robust and efficient method for matching features in omnidirectional images (Erratum)

Qinyi Zhu, Zhijiang Zhang, and Dan Zeng

Shanghai University, Key Laboratory of Specialty Fiber Optics and Optical Access Networks, Shanghai, China

[DOI: [10.1117/1.OE.57.5.059801](https://doi.org/10.1117/1.OE.57.5.059801)]

This article [*Opt. Eng.* **57**(4), 043110 (2018)] was originally published on 25 April 2018. The authors wish to correct a reference that was accidentally omitted.

A new Ref. 31 has been added to the last paragraph of Sec. 2.2, and the text has been updated as:

To accelerate the computational efficiency, FAST¹³ detector combining with binary descriptor is still a better choice. SPHORB³⁰ introduces a geodesic grid used in climate modeling to detect FAST corner and construct robust BRIEF⁵ descriptor on the hexagonal sphere grid. Inspired by the great performance and efficiency of ORB⁶ in perspective image, we adjust BRIEF used in ORB to adapt the distortion of omnidirectional image. The method most similar to ours is mdBRIEF,³¹ a distorted and masked version of the BRIEF descriptor. In this method, the binary tests are distorted, thus the descriptor is adapted to different image regions.

Besides of adjusting BRIEF descriptor, we further propose new methods to distinguish true and false matches.

The new reference has been inserted in the reference list, and the last three references have been renumbered:

References

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33. J. W. Bian et al., "GMS: Grid-based motion statistics for fast, ultrarobust feature correspondence," in *IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)*, IEEE (2017).

The paper was corrected online on 15 May 2018.