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Modeling dynamic atmospheric turbulence using temporal spectra and Karhunen-Loève decomposition (erratum)

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This article [*Opt. Eng.* **56**(7), 071508 (2017)] was originally published on 16 March 2017 with several errors, as described below:

1. In Eq. (2), p was replaced by j everywhere because p is the total number of polynomials and not the index.
2. In Eq. (14) and in the text below, p was replaced by j .
3. In Eq. (20), $1/L$ in front of the sum and dz at the end of the equation were removed. Neither of them was needed. L_q was replaced with Δ_{zq} because it is used afterwards in the manuscript to denote layer thickness.
4. Under Eq. (25), the sentence “Generating spectra for X , K-L modes takes X times longer on a standard desktop PC for a spherical-wave case compared to computing plane-wave spectra for the same simulation parameters” was replaced with “Generating spectra for one K-L mode takes around ten times longer on a standard desktop PC for spherical-wave case compared to computing plane-wave spectra for the same simulation parameters.”
5. At the bottom of page 4, “homogeneous/nonhomogeneous layer” was replaced with “homogeneous/nonhomogeneous turbulence.”
6. At the beginning of Section 3, the reference to the paper by Roddier et al., “On the origin of speckle

boiling and its effects in stellar speckle interferometry,” was erroneously placed in this context. This reference was removed. The correct reference was a paper by Roddier, “Atmospheric wavefront simulation using Zernike polynomials,” previously cited as Ref. 27. The subsequent references were renumbered.

7. On page 5, the reference at the end of the sentence “... phase at each single point in the aperture, which should follow a $-8/3$ asymptote at high frequencies,” was changed from 25 to 31.
8. In the caption to Fig. 4 and the corresponding text on the next page, the units corresponding to the parameter B were specified as meters. They were changed to $m^{-2/3}$.
9. On page 7, the reference to the equation was incorrect in the sentence “Once the C_n^2 and V profiles are modeled one can substitute them into Eq. (24)”. The reference was changed to Eq. (20).
10. Caption to Fig. 6: “overlapped” changed to “overlapping.”
11. In the biography of the second author, the word “group” was added after “research task.”

The paper was corrected online on 14 July 2017. It appears correctly in print.