# *Corrigendum to*
# "Brief communication: A double-Gaussian wake model" published in Wind Energ. Sci., 5, 237–244, 2020

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A coding error was made during the preparation of the manuscript that was eventually accepted and published in Schreiber et al. (2020). To the authors' regret, this error was not noticed until it was pointed out by two colleagues. Ironically, the article in Schreiber et al. (2020) was written to correct an error found in Keane et al. (2016).

The programming error was made in the code section computing the wake expansion at $x_0$, noted $\epsilon$ in the paper, and specifically in the implementation of Eq. (7b). Notice that none of the equations of the paper are incorrect, and the error was limited to the numerical calculation of $\epsilon$.

The coding error lead to an incorrect Fig. 2 in the published article. That figure is now replaced by Fig. 1 of the present corrigendum.

That same error also led to incorrect values in Table 1 of the published article. That same table is also affected by another unrelated small error: the identified value for $k^*$ was computed to be 0.0103791, but it was erroneously rounded off to 0.011 in the table. The erroneous values in Table 1 of the published article are now replaced by those reported in Table 1 of the present corrigendum.

Between the originally published table and the corrected one, the largest change affects parameter $x_0$, which describes the stream tube outlet position. The correct value is 1.10D, whereas it was 4.55D in the original publication. This value represents the end of the Betz stream tube, past which the wake starts recovering. The new value is closer to the expected behavior of a typical wind turbine wake (see, for example, Manwell et al., 2009, Sect. 3.13.2, p. 142, and also Zhang et al., 2011, and Sørensen, 2012).

The wake deficit was recomputed with the corrected values of $\epsilon$ and with the corresponding identified wake parameters, leading to plots that are indistinguishable from those
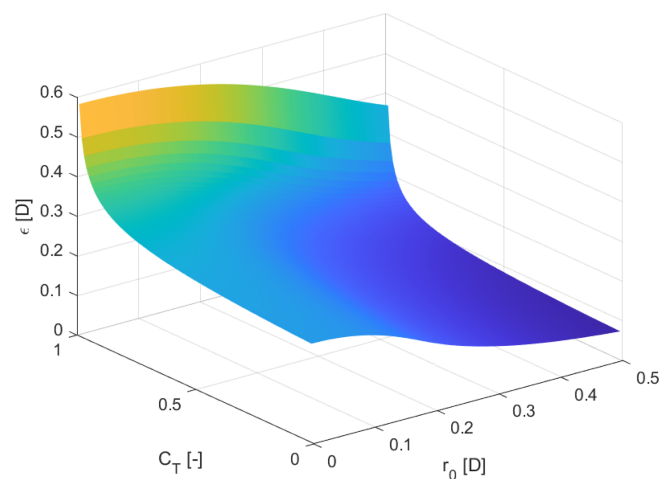


**Figure 1.** Visualization of the width of the double-Gaussian function $\epsilon$ at the stream tube outlet, as a function of the thrust coefficient $C_T$ and the position of the Gaussian extrema $r_0$. This figure replaces Fig. 2 in Schreiber et al. (2020).

**Table 1.** Identified model parameters for the G1 turbine.

| Parameters | $k^*$ (–) | $x_0$ (D) | $k_r$ (–) |
|---|---|---|---|
| Erroneous values in Schreiber et al. (2020) | 0.011 | 4.55 | 0.535 |
| Correct values | 0.0104 | 1.10 | 0.535 |

reported in Figs. 3 and 4 of the published article. Therefore, these figures are not repeated here, and they should be considered correct to all intents and purposes.

The "Competing interests" section was also incorrect in the original article, and the corrected section can be found below.

**Competing interests.** At least one of the (co-)authors is a member of the editorial board of *Wind Energy Science*. The peer-review process was guided by an independent editor, and the authors also have no other competing interests to declare.

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